

**UNIVERSITY OF ROMA TRE**



**Doctoral dissertation in Economic and Consumer Law**

**Governing markets in the Data Driven Economy (DDE). An analysis of the Digital Single Market (DSM) strategy through theory of regulation: a critical approach**

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A Marta, per esserci.



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## Foreword

The Data Driven Economy (DDE) has dramatically changed the way we live. It delivered a wide range of highly valuable services at very competitive rates or even “for free” to consumers. Transaction costs are lower than ever. Any connected mobile device provides the opportunity to plan a cross-border trip in a few minutes. Thanks to mobile navigation systems, we don’t get lost in our cities anymore and we know how to avoid traffic jams. Most of the papers denouncing Google’s excessive degree of market power that have been used to write this research have been retrieved on the internet through Google search engine and Google Chrome browser. Books against Amazon are sold on amazon.com. So far – we can agree – Big Tech have mainly behaved as rational economic agents (at times, we will see, a bit too wisely). All in all, they shouldn’t be demonized.

However, the DDE is also rising significant concerns in the global community.

Due to the economic features of digital markets – which, thanks to economies of scale and scope, to the exploitation of Big Data & Analytics (BDA) and to strong network effects, can lead to tipping in a very short time – in a single decade of DDE the overall level of market concentration has increased significantly. This trend suggests that competition may not be “a click away”: at the moment, large dominant players – often referred to as “GAFAM” (Google, Amazon, Facebook, Apple and Microsoft), “Datapolists” or “Big Techs” – appear very hard to dislodge.

Moreover, policymakers are quite nervous about the amount of information held by Big Techs, which may lead to Orwellian scenarios of mass surveillance by few powerful private groups. This poses serious threats to privacy (free meals do not exist; rather, people pay services with their personal data) and, in the last instance, to the democratic process itself, as the Cambridge Analytica scandal demonstrated.

In a recent interview, Edward Snowden declared: “to understand why the Internet has become what it is today, we need to think in terms of public service. You pay for water, and water companies don’t think about how you use it. The same applies to electricity. But when it comes to the Internet, or any form of communication that uses the Internet, such as smart TVs, they don’t let you use an ordinary Internet

connection they can't control"<sup>1</sup>. Tim Berners-Lee, inventor of the World Wide Web, is working on an ambitious project ("Solid")<sup>2</sup>, aimed at re-decentralizing the web to the benefit of the individuals' right to self-determination.

On June 18<sup>th</sup>, 2019, Facebook has announced the launch of "Libra", a cryptocurrency saved, sent and spent through the digital wallet "Calibra" and governed by the independent Libra Association, based in Geneva. The (not hidden) objective of this project is to launch a "global currency" specifically addressed for those (many) who still are "unbanked", with a clear view to compete with (and, in under-developed countries, to anticipate) sovereign powers. In parallel, Facebook is installing wireless and broadband networks in rural areas of countries such as Nigeria and Peru.

In this global scenario, the EU has lost the battles for cloud computing (in which the Silicon Valley leads), for hardware (China is very close to quantitative computing) and for cryptography (Russian cybersecurity systems currently are cutting-edge).

However, EU leads in rule-setting, as the GDPR experience shows. Which can also be explained by the fact that most of the population of the West countries lives here. Therefore, the European market is a must-have for U.S. based Big Techs.

Furthermore, the EU is trying to reposition itself in the global economy setting with a clear industrial policy idea in mind.

The main objectives have been programmatically announced in the recent Communications from the Commission "*Shaping Europe's Digital Future*", "*A European strategy for data*" and "*White Paper on Artificial Intelligence*". In particular, the development of a European model of "ethical" AI, compliant with the fundamental rights protected in the Union and strong enough to affirm itself as a worldwide standard will be supported. Additionally, the EU will encourage and

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<sup>1</sup> Roberto Saviano and Edward Snowden: "*I'm fighting for the Internet to be free again. Zuckerberg? He'll repent*", translated by Luis E. Moriones, available at [https://www.repubblica.it/esteri/2019/09/13/news/roberto\\_saviano\\_edward\\_snowden\\_interview-235883649/](https://www.repubblica.it/esteri/2019/09/13/news/roberto_saviano_edward_snowden_interview-235883649/) (accessed 13.9.19).

<sup>2</sup> <https://solid.mit.edu/>: "Solid (derived from «social linked data») is a proposed set of conventions and tools for building decentralized social applications based on Linked Data principles. Solid is modular and extensible and it relies as much as possible on existing W3C standards and protocols". On the topic, see Verborgh R., *Re-decentralizing the Web, for good this time*, in Seneviratne O. - Hendler J. (eds.), *Linking the World's Information: Tim Berners-Lee's Invention of the World Wide Web*, ACM, forthcoming 2020.

coordinate industrial efforts in AI, along with cloud computing, interoperability and standards, supercomputing and the creation of a highly skilled working class.

The final goal of such planned actions has been unveiled. The Commission estimates data economy to dramatically evolve over next five years. The Internet of Things (IoT) will lead the transition from centralized data centres to decentralized environments, where the performance of the algorithms and of the overall functioning of the network will be more key than the dataset. Therefore, the winners of today may not be the winners of tomorrow.

However, we all know the limits of the European non-federal model: Member States will likely continue to act independently. At the same time, the private sector is not left completely free to react to extra-EU players. The Alstom/Siemens case fuelled a vigorous political debate on the need to amend the merger control regulation (EUMCR) to support the rise of “European Champions”. In this context, the Franco-German manifesto (later on joined by Poland and Italy) proposed allowing the Council to overwrite Commission’s blocking decisions when the rise of strategic players is at stake.

Refraining from ideologically routed solutions, this research deals exclusively with competition policy.

With this view, the research adopted a quite classical approach.

In Part I the main ICT and economic features of the DDE and of digital platforms are introduced, along with an overview on the main legal issues posed by the disruptive business models at stake.

Part II sets the scene for the following analysis, which is EU-centric. The European economic constitution is described, trying to provide a comprehensive reading of the Treaties. The main goals of European competition law and its relationship with economic regulation are identified.

Part III describes all the legislative acts and initiatives so far implemented as part of the Digital Single Market (DSM) strategy. It also introduces the next actions planned by the newly established Commission, as well as the findings of the reports recently

issued by national competition authorities and appointed groups of experts on digital platforms.

Part IV focuses on the enforcement stage, conducting the analysis along three different vectors: Personal Data intensive Markets (e.g. social networks), Markets prone to Gatekeeping (e.g. e-commerce marketplaces) and Non-Personal Data Intensive Markets (e.g. manufacturing and agriculture).

Part V moves from the preceding analysis of the recent enforcement interventions in digital markets to assess whether the application of the new legislative framework to hypothetical future scenarios of the same kind will be consistent with the European economic constitution and, especially, whether it will bring to efficient outcomes or not. Room for improvements is identified with reference to Personal Data intensive Markets and Markets prone to Gatekeeping. To this end, a set of targeted policy proposals is put forward. Conversely, the research concludes that it is too early to provide a judgement on the DSM approach to Non-Personal Data Intensive Markets (which, subject to further research, appears *prima facie* correct). Finally, some remarks on the best institutional design to pursue are offered, with a view of safeguarding basic principles of EU administrative law, such as the rule of law, legal certainty and the *ne bis in idem* principle.

The main findings of the research are summarized in Part. VI.





## Part I - Data Driven Economy (DDE)

### § 1. From Data Intensive Science to Data Driven Economy

In the daily debate when we refer to the Data Driven Economy (“DDE”)<sup>3</sup> – a model of economy and which relies on the massive exploitation of data – it is impossible not to mention the Big Data & Analytics (“BDA”) techniques.

But where does this expression come from?

The term “Big Data” – which today has become quite a buzzword – shyly started to appear in some scientific publication of the late nineties.

In referring to the growing trend of scientists to capture from nature, through instruments and sensors, a high number of data in order to discover new physical and experimental constants, two NASA researchers used the expression “big data collections”<sup>4</sup> to describe “aggregates of many data sets”. These data sets were recognized to be typically “multi-source”, often “multi-disciplinary”, generally “distributed among multiple physical sites” and normally “multi-database” (that is, “stored in disparate types of data repositories”)<sup>5</sup>. Datasets were partially fed also on data generated through simulations.

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<sup>3</sup> With the Communication from the Commission “Towards a thriving data-driven economy”, 2.7.2014, COM(2014) 442 final the EU launched its first action plan aimed to promote the DDE, followed by the broader project, launched with the Communication from the Commission “Digital Single Market Strategy for Europe”, 6.5.2015, COM(2015) 192 final.

<sup>4</sup> The nineties were also the years of the advent of the world wide web (WWW). According to some economics lecturers, “the explosive growth of data and the development of big data analytics” depended on this innovation. In particular, the assumption is for “Big Data 1.0” to coincide “with the rising of e-commerce in 1994, during which time online firms were the main contributors of the web content” (see Len I., *Big data: Dimensions, evolution, impacts, and challenges*, in *Business Horizons*, Vol. 60(2017), 296). However, as far as it is known, the term “Big Data” has not been immediately used in the context of e-commerce emergence, differently from what happened in the scientific field.

<sup>5</sup> Cox M. – Ellsworth D., *Managing Big Data For Scientific Visualization*, MRJ/NASA Ames Research Center, May 1997, available at [https://www.researchgate.net/profile/David\\_Ellsworth2/publication/238704525\\_Managing\\_big\\_data\\_for\\_scientific\\_visualization/links/54ad79d20cf2213c5fe4081a/Managing-big-data-for-scientific-visualization.pdf](https://www.researchgate.net/profile/David_Ellsworth2/publication/238704525_Managing_big_data_for_scientific_visualization/links/54ad79d20cf2213c5fe4081a/Managing-big-data-for-scientific-visualization.pdf) (accessed 4.11.17).

Soon, the term “Big Data” started to expand from the scientific field to other disciplines, first of all computer science<sup>6</sup>.

Far from what we are experiencing in the current age, at the time technology was not yet able to efficiently support (big) data management, which still relied on a number of unconnected hardware<sup>7</sup>.

A decade later progress made possible a real “change of paradigm”, which led to the transition from “Computational Science” (the third paradigm of science after “Experimental Science” and “Theoretical Science”) to “Data Intensive Science”<sup>8</sup>.

Indeed, “the techniques and technologies for such data-intensive science are so different that it is worth distinguishing data-intensive science from computational science as a new, fourth paradigm for scientific exploration”<sup>9</sup>.

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<sup>6</sup> See Weiss S.M. – Indurkha N., *Predictive Data Mining: A Practical Guide*, Morgan Kaufmann Publishers Inc., San Francisco (CA), 1998, where it was already noted: “Very large collections of data [...] are now being compiled into centralized data warehouses, allowing analysts to make use of powerful methods to examine data more comprehensively. In theory, «Big Data» can lead to much stronger conclusions for data-mining applications, but in practice many difficulties arise”.

<sup>7</sup> Cox M. – Ellsworth D., *Managing Big Data* cit.: “At any one site, the size of the data may exceed the capacity of fast storage (disk), and so data may be partitioned between tape and disk. Any single data object or data set within the collection may be manageable by itself, but in aggregate, the problem is difficult. To accomplish anything useful, the scientist must request information from multiple sources, and each such request may require tape access at the repository. Over many scientists, the access patterns may not be predictable, and so it is not always obvious what can be archived on faster storage (disk) and what must be off-loaded to tape. In addition, there are the standard data management problems (but aggravated) of consistency, heterogeneous database access, and of locating relevant data”.

<sup>8</sup> Hey T. – Tansley S. – Tolle K., *The Fourth Paradigm: Data-Intensive Scientific Discovery*, Microsoft Research, Redmond (WA), 2009, available at <https://www.microsoft.com/en-us/research/wp-content/uploads/2009/10/Fourth-Paradigm.pdf> (accessed 4.11.17), xvii-xix: “Originally, there was just experimental science, and then there was theoretical science, with Kepler’s Laws, Newton’s Laws of Motion, Maxwell’s equations, and so on. Then, for many problems, the theoretical models grew too complicated to solve analytically, and people had to start simulating. These simulations have carried us through much of the last half of the last millennium. At this point, these simulations are generating a whole lot of data, along with a huge increase in data from the experimental sciences. People now do not actually look through telescopes. Instead, they are «looking» through large-scale, complex instruments which relay data to datacenters, and only then do they look at the information on their computers”. In this scenario, “the new model is for the data to be captured by instruments or generated by simulations before being processed by software and for the resulting information or knowledge to be stored in computers”, so that “scientists only get to look at their data fairly late in this pipeline”.

<sup>9</sup> *Ibidem*.

Nowadays – as it is well known – the application of the “data intensive paradigm” has become much wider, embracing the whole economic and social environment.

Hence the beginning of this research.

## § 2. The generation of data: “Datification”

The eruption of Big Data would not have been possible in the absence of a parallel process of proliferation of data to be captured<sup>10</sup>.

According to ISO/IEC 2382-1, data can be defined as “a reinterpretable representation of information in a formalized manner, suitable for communication, interpretation or processing”.

In the year of 2015 there were around 10,000 exabytes digital data being generated: following this digital data explosion, the size of big data expects to surpass 40,000 exabytes in 2020.

Even though reality is much more complex (as different features can often be combined), macro-categorizing we can identify five groups of primary data sources<sup>11</sup>, the first three of them relying on a common set of technologies and the last two of them characterized by a common goal but relying on the cross-utilization of different technologies.

In particular, we can identify the following primary data sources:

- Web and Social Media;
- Machine-to-Machine (M2M) systems, the Internet of Things (IoT), Cyber-Physical Systems (CPS) and, in this automatized landscape, Industry 4.0.
- Sensing;

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<sup>10</sup> The Economist, *Data, data everywhere* (interview to Kenneth Cukier), in *Special report: Managing information* (Print edition February 27<sup>th</sup>, 2010), available at <https://www.economist.com/node/15557443> (accessed 5.1.18).

<sup>11</sup> The classification of “data sources” proposed in this research originates from the one of Abaker A. – Hashem T. – Yaqoob I. – Badrul Anuar N. – Mokhtar S. – Gani A. – Ullah Khan S., *The rise of “big data” on cloud computing: Review and open research issues*, in *Information Systems*, Vol. 47 (2015), 100, Figure 2, first column, and further develops it.

- Transactions (legal currency-based; transactions, either token-based or non token-based, recorded on a shared distributed ledger, *i.e.* Blockchain);
- Public Sector Information (“PSI”) or Open Data.

Artificial intelligence (“AI”)<sup>12</sup> and machine learning (“ML”) are often considered “data sources” as well<sup>13</sup>.

Nonetheless, to the extent of this research it will be assumed that AI and ML are “secondary” data sources.

Indeed, they can be viewed as two particular sub-categories of the data analytics techniques<sup>14</sup> characterized by the peculiarity that they not only show the ability to extract insights, patterns and correlations from the dataset, but also allow to enlarge the dataset itself by generating new (secondary) data starting from the (primary) dataset the algorithms run on.

A fundamental contribution to the “boom” of these data sources has been played mainly by two factors.

First, the large decrease in Internet access costs over the last 25 years and by the development of more efficient networks, protocols over which to exchange data locally (Wi-Fi, Bluetooth, etc.) and faster broadband access (via fixed or mobile<sup>15</sup> termination), as well as by the growing usage of smart devices.

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<sup>12</sup> According to Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI*, available at <https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai> (accessed 15.9.19), 8, “Artificial intelligence (AI) systems are software (and possibly also hardware) systems designed by humans that, given a complex goal, act in the physical or digital dimension by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on the knowledge, or processing the information, derived from this data and deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behaviour by analysing how the environment is affected by their previous actions”.

<sup>13</sup> See for instance recital 9 of Regulation 2018/1807/EU on a framework for the free flow of non-personal data in the European Union.

<sup>14</sup> See below § 4.3 of Part I.

<sup>15</sup> On the launch of 5G, see for example Webb W., *5G is Coming... But What is it?*, in *European Business Review*, January 17<sup>th</sup>, 2018, available at <http://www.europeanbusinessreview.com/5g-is-coming-but-what-is-it/>; Communication from the Commission “5G for Europe: An Action Plan”, 14.9.2016, COM(2016) 588 final; art. 54 of Directive 2018/1972/EU of 11 December 2018 “establishing the European Electronic Communications Code (Recast)”.

Second, the progress meanwhile achieved in the field of data storage, largely attributable to the rise of cloud computing<sup>16</sup>.

## § 2.1 Web and Social Media

It is undisputable that today the more discussed (for its social and economic implications) data source is the Web and Social Media, a network by which people generate and exchange billions of data per second.

This increasing level of on-line traffic has been convincingly explained by the evolution of Web itself<sup>17</sup>.

In 1994 – around three years after the World Wide Web (WWW) had been launched<sup>18</sup> – most websites were just a collection of static HTML web pages primarily providing information about product and services to be sold via e-commerce.

After a while, web pages started to be created also on the fly from the content stored on databases, thus enabling developers to deliver customized information to visitors (“deep web” or “dynamic web”).

In both cases, the browsing experience was still limited to one-way interaction, where users were just information-takers (“**Web 1.0**” - “*read-only web*”).

Last few years were characterized by the emergence of Service Oriented Application (“**Web 2.0**” - “*read-write web*”). The main innovation is in the possibility for users to generate and edit on their own content through smart interfaces and built-in facilities, by which they can now collaborate and share information on-line (social media)<sup>19</sup>. This allows a global enrichment of the on-

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<sup>16</sup> On cloud computing see § 4.1 of Part I.

<sup>17</sup> The following reconstruction has been proposed, *inter alia*, in Kale V., *Big data computing: a guide for business and technology managers*, CRC Press - Taylor & Francis Group, Boca Raton (FL), 2017, 359-363.

<sup>18</sup> Before the advent of web technologies, whose main novelty was in the possibility of linking documents, the Internet was conceived to interconnect computers and transmit messages.

<sup>19</sup> According to Gandomi A. – Haider M., *Beyond the hype: Big data concepts, methods, and analytics*, in *International Journal of Information Management*, Vol. 35 (2015), Issue 2, 137-144, Social media can be divided in Social networks (e.g. Facebook, LinkedIn), Blogs (e.g. BlogSpot, WordPress), Microblogs (e.g. Twitter, Tumblr), Social news (e.g. Digg, Reddit), Social bookmarks (e.g. Delicious, StumbleUpon), Media sharing (e.g. Instagram, YouTube),

line content, whose circulation is facilitated by the proliferation of websites with Application Programming Interfaces (“APIs”). Although much more performing, Web 2.0 has its limits: differently from humans, computers still cannot manipulate natural language information on the web meaningfully.

On this grounds, the new, ongoing evolution is the Semantic Web (“**Web 3.0**” - “*read-write-execute web*”), that is an extension of the current web in which information will be given a well-defined meaning. For instance, in 2015 Google launched its AI semantic search algorithm “Rankbrain”<sup>20</sup>. The ultimate goal of the semantic web is “to support machine-facilitated global information exchange in a scalable, adaptable, extensible manner, so that information on the web can be used for more effective discovery, automation, integration, and reuse across various applications”<sup>21</sup>.

Observers see “**Web 4.0**” as a “*mobile web*” which “connects all devices in the real and virtual world in real-time”<sup>22</sup>: basically, it is the web of IoT.

The real change of paradigm is associated to the “**Web 5.0**” (“*symbiotic web*” or “*emotional web*”) <sup>23</sup>.

Here, neurotechnology will enable emotional interaction between humans and computers.

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Wiki (e.g. Wikipedia, Wikihow), Question-and-answer sites (e.g. Yahoo! Answers, Ask.com), Review sites (e.g. Yelp, TripAdvisor).

<sup>20</sup> Barysevich A., *Semantic Search: What It Is & Why It Matters for SEO Today*, in *Search Engine Journal (SEJ)*, September 6, 2018, available at <https://www.searchenginejournal.com/semantic-search-seo/264037/#close> (accessed 10.4.2019).

<sup>21</sup> Kale V., *Big data* cit.

<sup>22</sup> See *Digital Evolution. Past, Present and future outlook of digital technology*, available at <https://flatworldbusiness.wordpress.com/digital-evolution/> (accessed 30.11.19) and Aghaei S. - Ali Nematbakhsh M. - Khosravi Farsani H., *Evolution of the World Wide Web: from Web 1.0 to Web 4.0*, in *International Journal of Web & Semantic Technology*, Vol. 3 (2012), Issue 1, available at <http://airccse.org/journal/ijwest/papers/3112ijwest01.pdf> (accessed 23.4.16).

<sup>23</sup> Benito-Osorio D. - Peris-Ortiz M. - Armengot C.R. – Colino A., *Web 5.0: the future of emotional competences in higher education*, in *Global Business Perspectives*, Vol. 1 (2013), 274 et seq.

## § 2.2 Machine-to-Machine (M2M), The Internet of Things (IoT), Cyber-Physical Systems (CPS) and the rise of Industry 4.0

According to the IEEE, the Internet of Things (IoT)<sup>24</sup> or Cyber-Physical Systems (CPS) can be defined as “any systems of interconnected people, physical objects, and IT platforms, as well as any technology to better build, operate, and manage the physical world via pervasive data collection, smart networking, predictive analytics, and deep optimization”<sup>25</sup>.

As scholars pointed out, even if connected products are nothing really new (as industrial equipment has been supervised remotely for many years), the novelty associated with IoT “stems from its potential for widespread application as technical barriers associated with automated surveillance have been gradually eroding, drastically decreasing the associated costs in its wake”<sup>26</sup>.

IoT is powered by a multitude of smart devices and/or sensors connected to each other via smart networks, such as smart phones, smart grids, smart meters, smart vehicles and so on<sup>27</sup>.

The peculiarity of IoT is in the fact that it allows direct communication between the interconnected objects, “thereby creating opportunities for more

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<sup>24</sup> As far as it is known, in 1999 Kevin Ashton coined this expression while making a presentation about Radio Frequency Identification Devices (RFID) technology at Procter&Gamble.

<sup>25</sup> IEEE Standards Association (IEEE-SA), *Internet of Things (IoT) Ecosystem Study*, 2015, available at <http://standards.ieee.org/innovate/iot/study.html> (accessed 8.5.18), 3.

<sup>26</sup> Saarikko T. – Westergren U.H. – Blomquist T., *The Internet of Things: Are you Ready for What's Coming?*, in *Business Horizons*, Vol. (60) 2017, 668.

<sup>27</sup> According to the OECD, “other smart devices are proliferating even faster [than smart phones]. Smart meters, for example, increasingly collect and transmit real-time data on energy, and smart automobiles are now able to transmit real-time data on the state of the car’s components and environment. Many of these smart devices are based on sensor and actuator networks that sense, and may be able to interact with, their environment over mobile networks. The sensors and actuators exchange data through wireless links enabling interaction between people or computers and the surrounding environment”. See OECD, *Exploring Data-Driven Innovation as a New Source of Growth: Mapping the Policy Issues Raised by “Big Data”*, OECD Digital Economy Papers, No. 222, OECD Publishing, Paris (FR), 2013, 8-9.

direct integration between the physical world and computer-based systems and resulting in improved efficiency, accuracy, and economic benefit”<sup>28</sup>.

Consultants estimated that around 20-25 billions devices will be connected in 2020.

Focusing on the possible applications of IoT technologies, it is possible to distinguish<sup>29</sup> between “Consumer- Facing IoT Applications”<sup>30</sup>, “Government- Facing IoT Applications”<sup>31</sup> and “Enterprise- Facing IoT and Industrial IoT Applications”<sup>32</sup>.

Within this last group, Industry 4.0 is undoubtedly to be, in the near future<sup>33</sup>, the main Industrial IoT Application.

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<sup>28</sup> Rayes A. – Salam S., *Internet of Things – From Hype to Reality. The Road to Digitization*, Springer Int., Cham (SW), 2017, 2.

<sup>29</sup> This distinction has been proposed by Geng H., *Internet of things and data analytics handbook*, Wiley, Hoboken (NJ), 2017, 12-13.

<sup>30</sup> Like Smart home (energy management, water management, home and chore automation, home robots, safety and security, air quality); Connected vehicles (autonomous vehicle, navigation, logistics routing, operations management, condition-based maintenance); Healthcare (illness monitoring and management, personal fitness and wellness); Life and entertainment (hobby, gardening and water, music, smart pet).

<sup>31</sup> Like Smart city (power and lighting, adaptive traffic management, parking meter, surveillance, events control, natural or human- made disaster management, emergency response system, resource management); Smart transportation (fleet management, connected car, roadway, rail, aviation, port); Smart grid (demand response, power line efficiency); Smart water (domestic waterworks and waste water management); Smart infrastructure (SHM); Environment (environmental monitoring, air quality, landfill and waste management).

<sup>32</sup> Like Energy (for oil/gas, solar, wind, etc.: rigs and wells predictive maintenance, operating management, spill accident management); Smart healthcare (hospital, emergency ambulance service, emergency room, clinic, lab diagnosis, surgery, research, home care, elder care, billing, industrial IoT equipment efficiency, asset management); Smart retails (digital signage, self- checkout, in- store offers, loss prevention, layout optimization, beacon routing, inventory control, customer relationship management); Smart agriculture (wireless sensor on water, tracking cattle, organic food certification); Smart banking (ATM machine, e- statement, online car, or home mortgage); Smart building (energy and water conservation, environment health and safety, security, operating efficiency, equipment maintenance); Smart construction (health, safety, security, inventory control); Smart education (distributed online learning, deep learning); Smart insurance (accident claims, natural disaster claims); Smart logistics (real-time routing, connected navigation, shipment tracking, flight navigation); Smart manufacturing (IIoTs, smart factory, robotics, industrial automation, asset management, energy management, operations management, predictive maintenance and equipment optimization).

<sup>33</sup> This is the opinion of Drath R. – Horch A., *Industrie 4.0: hit or hype?*, in *IEEE Industrial Electronics Magazine*, Vol 8(2014), Issue 2, 56-58, where it is also observed that “despite some overeager marketing messages, Industry 4.0 is still in the future”.



The neologism has been coined in the German manufacturing field and stands for the technical integration of CPS into manufacturing and logistics and for the use of the Internet of Things and Services in industrial processes<sup>34</sup>.

Since it relies on Cyber-Physical System (CPS) technology, Industry 4.0 requires:

- i) (physical) objects where sensors and actuators are embedded in;
- ii) data models of the mentioned (physical) objects in a (cyber) network infrastructure;
- iii) services based on the data thus generated, collected and analyzed<sup>35</sup>.

Bringing ICT into manufacturing, Industry 4.0 creates an environment where machines, equipment, logistics and products directly communicate and cooperate with each other (“smart factories”)<sup>36</sup>.

Over time, sensors and actuators will enable a real-time digitalization of the supply chain management<sup>37</sup>, where each operation – from inbound logistics to production, marketing, outbound logistics and service<sup>38</sup> – will “born digital”; that is, with no need of a subsequent (and burdensome) conversion into a

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<sup>34</sup> See the Kagermann H. – Wahlster W. – Helbig J., Report “*Implementation of recommendations for the future project Industrie 4.0*”, April 2013, available at <https://www.din.de/blob/76902/e8cac883f42bf28536e7e8165993f1fd/recommendations-for-implementing-industry-4-0-data.pdf> (accessed 7.3.20), 14. The report has been drafted by the Working Group “Industrie 4.0”, set up by the German Ministry of Education and Research in the context of the Action Plan “High-tech strategy 2020”, launched in 2006 by the Federal Government in order to promote innovation and sustainable growth. Similar projects were launched also in other States, like “Smart Industry (NL), Catapults (UK) and Industrie du Futur (FR)” (for this - non exhaustive - list see the Communication of the Commission “Digitising European Industry – Reaping the Full Benefits of a Digital Single Market”, COM(2016) 180 final, April 19<sup>th</sup>, 2016, 4).

<sup>35</sup> See Drath R. – Horch A., *Industrie 4.0* cit.

<sup>36</sup> *What is Industrie 4.0?*, available at <http://www.plattform-i40.de/I40/Navigation/EN/Industrie40/WhatIsIndustrie40/what-is-industrie40.html> (accessed 21.3.18).

<sup>37</sup> Supply chain management has been defined as the discipline that studies “the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole” (Mentzer J.T. – DeWitt W. – Keebler J.S. – Min S. – Nix N.W. – Smith C.D. – Zacharia Z.G., *Defining supply chain management*, in *Journal of Business Logistics*, Vol. 22(2001), Issue 2, 1 et seq.).

<sup>38</sup> Sanders N.R., *How to Use Big Data to Drive Your Supply Chain*, in *California Management Review*, Vol. 58 (2016), Issue 3, exhibit 1, shows a supply chain where all the stages (“source”, “make”, “move”, “sell”) are managed through BDA.

digital output. By doing so, the huge amount of data generated by supply chains will be easily turned into intelligence through analytics<sup>39</sup>.

Over time, Industry 4.0 assumed a broader meaning and is now intended as a “digitalized approach” adaptable to all kinds of industry, not only manufacturing.

As we will see<sup>40</sup>, there is a large consensus that the combination of IoT and Blockchain (and, in particular, smart contracts) will significantly increase the potential for growth of Industry 4.0.

### § 2.3 Sensing

Despite front pages of newspapers pay much more attention to users’ personal data “stolen” from the Web & Social Media, it is worth noting that, on a quantitative standpoint, Sensing Data will dominate by factors 10-to-20 times that of Social Media<sup>41</sup>.

In brief, we can define as Sensing Data all those data which are collected by sensors interacting with the real world.

Sensors can interact:

- i)* with nature (Earth-based or Space-based remote sensing);
- ii)* with machines;
- iii)* (via installed, wearable or mobile devices) with humans, animals or plants.

Sensors are often part of an internet network which facilitates the exchange and fusion of information among the connected elements; in such cases the distinction between Sensing Data and IoT might be very tiny and can tend to disappear if the sensor is embedded in a device.

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<sup>39</sup> *Ibidem.*

<sup>40</sup> See § 2.4 of Part I.

<sup>41</sup> This view is expressed in Yang C. – Xu X. – Ramamohanarao K. – Chen J. – *A Scalable Multi-Data Sources based Recursive Approximation Approach for Fast Error Recovery in Big Sensing Data on Cloud*, in *IEEE Transactions on Knowledge and Data Engineering*, 2019, 1.

That said, sensors interacting with nature – already discussed in introducing the concept of “Computational Science”<sup>42</sup> and technically known in the scientific field as “Remote Sensing Data”<sup>43</sup> – can be either Earth-based or Space-based and consist in the capture of data directly from the natural environment<sup>44</sup>.

Sensors interacting with machines typically belong to engine-intensive industries. For instance, aviation companies started to install thousands of sensors on their aircrafts in order to monitor and to improve key production factors such as performance and safety standards<sup>45</sup> (a further example to mention is railway industry, which is moving in the same direction<sup>46</sup>).

The third group concerns the installation of sensors on living beings (plants, humans, animals).

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<sup>42</sup> As said, the advent of Computational Science is attributable to the central role assigned to Remote Sensing Data starting from the seventies and, already in the nineties, reached a remarkable level of maturity: just think about sophisticated dissertations such as Benediktsson J.A. – Swain P.H. – Ersoy O.K., *Neural Network Approaches Versus Statistical Methods in Classification of Multisource Remote Sensing Data*, in *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 28 (1990), Issue 4, 540 et seq.

<sup>43</sup> As explained in Zhang J., *Multi-source remote sensing data fusion: status and trends*, in *International Journal of Image and Data Fusion*, Vol. 1 (2010), Issue 1, 5: “remote sensing data fusion, as one of the most commonly used techniques, aims to integrate the information acquired with different spatial and spectral resolutions from sensors mounted on satellites, aircraft and ground platforms to produce fused data that contains more detailed information than each of the sources”.

<sup>44</sup> Such data can be turned into intelligence, also for e-Government purposes: see Steering Committee on Space Applications and Commercialization, Space Studies Board Division on Engineering and Physical Sciences and Ocean Studies Board - Division on Earth and Life Studies, *Transforming Remote Sensing Data into Information and Applications*, National Academies Press, Washington (WA), 2001.

<sup>45</sup> This trend is well described in Marr B., *That's Data Science: Airbus Puts 10,000 Sensors in Every Single Wing!*, April 9<sup>th</sup>, 2015, available at <https://www.datasciencecentral.com/profiles/blogs/that-s-data-science-airbus-puts-10-000-sensors-in-every-single> (accessed 25.2.19).

<sup>46</sup> See for instance Jensen T. – Chauhan S. – Haddad K. – Song W. – Junge S., *Monitoring Rail Condition Based on Sound and Vibration Sensors Installed on an Operational Train*, in Nielsen J. et al. (eds), *Noise and Vibration Mitigation for Rail Transportation Systems* (Proceedings of the 11th International Workshop on Railway Noise, Uddevalla, Sweden, 9–13 September 2013), in *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, Vol 126 (2015), 205 et seq.; Zhang S.L. – Koh C.G. – Kuang K. S. C., *Train Wheel Condition Monitoring by Rail Pad Sensor*, in *Proceedings of the 10th International Workshop on Structural Health Monitoring 2015*, available at [https://www.researchgate.net/profile/K\\_Kuang/publication/301376248\\_Train\\_Wheel\\_Condition\\_Monitoring\\_by\\_Rail\\_Pad\\_Sensor/links/5767612008aedbc345f5f87a.pdf](https://www.researchgate.net/profile/K_Kuang/publication/301376248_Train_Wheel_Condition_Monitoring_by_Rail_Pad_Sensor/links/5767612008aedbc345f5f87a.pdf) (accessed 10.5.19).

Agriculture (and in particular “Precise Agriculture – PA”) is the economic sector which, most of all, tends to benefit from the dissemination of sensors throughout fields and agricultural vehicles<sup>47</sup>. PA is also showing the ability to turn Earth-based data (belonging to the first group of the proposed categorization) into a productive input exploitable to usefully manage agricultural activities<sup>48</sup>.

Moreover, Sensing Data are proliferating also thanks to the growing development of human-centric mobile or wearable devices<sup>49</sup>.

For example, “smartphones [together with smartwatches and other similar devices] have become ubiquitous mobile sensing units as they are equipped with multiple built-in sensors. Various mobile sensing apps have been investigated and developed based on sensor readings that provide new dimensions to interpret and interact with the living world”<sup>50</sup>.

As it is well known, many of such apps show also the ability to collect health-related data<sup>51</sup> (which can pose significant data protection issues<sup>52</sup>).

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<sup>47</sup> This process is well explained in the review offered by Ojha T. – Misra S. – Raghuwanshi N.S., *Wireless sensor networks for agriculture: The state-of-the-art in practice and future challenges*, in *Computers and Electronics in Agriculture*, Vol. 118 (2015), 68: “For example, consider a precision agriculture environment where WSNs are deployed throughout the field to automate the irrigation system. All these sensors determine the moisture content of the soil, and further, collaboratively decide the time and duration of irrigation scheduling on that field”.

<sup>48</sup> See for instance the project “Digital Northern Great Plains (DNGP)” launched in the US Northern Great Plains area by the Upper Midwest Aerospace Consortium (UMAC), described in Zhang X. – Seelan S. – Seielstad G., *Digital Northern Great Plains: A Web-Based System Delivering Near Real Time Remote Sensing Data for Precision Agriculture*, in *Remote Sensing*, Vol. 2 (2010), 861 et seq.

<sup>49</sup> One of the first overviews on the subject has been provided by Campbell A. T. – Eisenman S. B. – Lane N. D. – Miluzzo E. – Peterson R.A. – Lu H. – Zheng X. – Musolesi M. – Fodor K. – Ahn G.-S., *The rise of people-centric sensing*, in *IEEE Internet Computing*, Vol. 12 (2008), Issue 4, 12 et seq.

<sup>50</sup> Zhang X. – Yang Z. – Shangguan L. – Liu Y. – Chen L., *Boosting Mobile Apps under Imbalanced Sensing Data*, in *IEEE Transactions on Mobile Computing*, Vol. 14 (2015), Issue 6, 1151.

<sup>51</sup> There are thousands of health-related Sensing Data examples. A survey on specified applications is provided in Kart Ö. – Mevsim V. – Kut A. – Yürek İ. – Altın A.Ö. – Yılmaz O., *A mobile and web-based clinical decision support and monitoring system for diabetes mellitus patients in primary care: a study protocol for a randomized controlled trial*, in *BMC Medical Informatics and Decision Making*, Vol. 1 (2017), 154 et seq.; Denning T. – Andrew A. – Chaudhri R. – Hartung C. – Lester J. – Borriello G. – Duncan G., *Balance: Towards a usable pervasive wellness application with accurate activity inference*, in *Proceedings. IEEE Workshop on Mobile Computing Systems and Applications*, 2009; Zhan A. – Chang M. – Y.

## § 2.4 Transactions (legal currency-based; transactions, either token-based or non-token-based, recorded on a shared distributed ledger, *i.e.* Blockchain)

Transaction data consist in all those data that are generated in the context of a transaction: good/service offered (different goods/services can often be part of a single transaction, in such cases the combination of assets transferred/exchanged might also be valuable); price, if applicable; identity of the parties; date and place of the transaction (in case of distance contracts, the location of both the parties can be relevant), and so on.

In the DDE era such information is normally collected and then turned into intelligence.

For Business-to-Consumer (B2C) transactions this mainly happens with the purpose of (monitoring and) forecasting supply and demand trends, identifying the consumers' willingness to pay (depending on the accuracy of the dataset, the cluster can either be the single consumer or, more frequently, a group of consumers), displaying targeted advertising on the consumers' devices, etc.

In the context of Business-to-Business (B2B) transactions – and, above all, of Industry 4.0 – such data are tracked with the main purpose of increasing the efficiency of the supply chain management and/or its transparency and accountability.

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Chen – Terzis A., *Accurate caloric expenditure of bicyclists using cellphones*, in *Proceedings of the 10<sup>th</sup> ACM Conference on Embedded Network Sensor Systems*, Toronto (CA), 6–9 November 2012, 71 et seq.

<sup>52</sup> The GDPR defines “*data concerning health*” as “*personal data related to the physical or mental health of a natural person, including the provision of health care services, which reveal information about his or her health status*” (Art. 4, n. 15) and “*biometric data*” as “*personal data resulting from specific technical processing relating to the physical, physiological or behavioural characteristics of a natural person, which allow or confirm the unique identification of that natural person, such as facial images or dactyloscopic data*” (Art. 4, n. 14).

## § 2.4.1 Legal Currency-based transactions

Legal Currency-based transaction data can probably be considered as the most “hybrid” data source: even in the context of a simple brick and mortar activity the set of payment systems made available to end-customers is becoming everyday wider.

Moreover, each payment system can rely on a different technology.

In short, if we exclude cash, cheques and other material-based payment systems, we can identify:

- credit/debit/pre-paid cards, usable either via the internet (distance contracts) or via pos machines (typically located in brick and mortar shops and working through SIM cards or fixed telephone line);
- a wide range of IoT-based services<sup>53</sup>.

## § 2.4.2 Transactions, either token-based or non token-based, recorded on a shared distributed ledger

The list of Transaction Data sources recently got longer with the rise of a new, disruptive technology which is literally changing the scene: Blockchain<sup>54</sup>.

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<sup>53</sup> There is a general consensus on the fact that the number of IoT applications in the field of payment services will largely increase. Indeed, thanks to IoT, “payment systems may become simpler and faster. Instead of the traditional coins, drivers may use NFC technology enabled mobile phones to pay for parking, and electronic RFID-based system for toll collection or public transport/ticket payment” (Borgia E., *The Internet of Things vision: Key features, applications and open issues*, in *Computer Communications*, 54 (2014), 10). A perspective analysis on the topic is provided by Cheng J., *Toward the Internet of Value: The Internet of Things and the Future of Payment Systems*, available, in draft version, at <https://cdn.ripple.com/wp-content/uploads/2016/08/Toward-the-Internet-of-Value.pdf> (accessed 22.1.2019). See also Secure Technology Alliance, *IoT and Payments: Current Market Landscape*, Version 1.0, November 2017, available at <https://www.securetechalliance.org/wp-content/uploads/IoT-Payments-WP-Final-Nov-2017.pdf> (accessed 22.1.2019).

<sup>54</sup> Haber S. - Scott Stornetta W., *How to time-stamp a digital document*, in *Journal of Cryptology*, Vol. 3 (1991), Issue 2, 99 et seq. is considered the first work on a cryptographically secured chain of blocks, but the first conceptualization of a decentralized system is attributable to the work of a person (or a group of people) using the name Satoshi Nakamoto (see the “white paper” *Bitcoin: A Peer-to-Peer Electronic Cash System*, issued in

In sum, Blockchain is about the exchange of value, being “intended to enable individuals to exchange currency and other assets with one another without relying on a third party to manage the contracts and transactions”<sup>55</sup>. Significantly, it has also been termed “Internet of Transactions”<sup>56</sup>, “Internet of Value”<sup>57</sup> or, similarly, “Internet of Value-Exchange”<sup>58</sup>.

The object of the exchange can either be a real-world asset<sup>59</sup> or a token<sup>60</sup>, which can be defined as a digital representation of a real-world asset.

At times, both non token-based or token-based transactions can be programmed to run automatically in the presence of specified circumstances (“Smart Contracts”<sup>61</sup>).

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2008), whose goal was to design a secured environment for the payment token named “Bitcoin”.

<sup>55</sup> Mulligan C., *Blockchain will kill the traditional firm*, October 16<sup>th</sup>, 2017, in <https://www.imperial.ac.uk/business-school/knowledge/finance/blockchain-will-kill-the-traditional-firm/> (accessed 15.12.18).

<sup>56</sup> See for instance *Blockchain: The Internet of Transactions*, March 28<sup>th</sup>, 2017, <https://www.equibitgroup.com/blogchain/post/blockchain-the-internet-of-transactions> (accessed 13.1.19).

<sup>57</sup> For this expression, see, *inter alia*, Mailheau R., *Blockchain and The Internet of Value*, <https://www.versatek.com/blog/blockchain-the-internet-of-value/> (accessed 22.1.2019).

<sup>58</sup> For this alternative expression, see Deloitte, *Blockchain. Enigma. Paradox. Opportunity*, available at <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Innovation/deloitte-uk-blockchain-full-report.pdf> (accessed 22.1.19), 8.

<sup>59</sup> In this research it will be assumed that in the DDE pure information can be *per se* considered as an asset. Therefore, the proposed definition, which emphasizes the aspect of the exchange of value, seems to work also for non token-based blockchain networks designed to simply record information flows.

<sup>60</sup> Tokens can be distinguished in:

- “payment tokens” (e.g. Bitcoin), representing a store of value and a unit of measurement and acting like a kind of (non-official) peer-to-peer currency;
- “utility tokens” (e.g. StorjCoin), representing a right to a good and/or service and similar to a gift card (at times we find the further distinction between “utility tokens”, representing a right to a service, and “asset-backed” tokens, representing a right to a good);
- “security tokens” (e.g. tZERO) or “investment tokens”, representing equity or equity like investment in a company, which attribute to its holder the right to the company’s future profits;
- “token+” (Labelled Token LB), a financial asset destined to secondary markets and representing an evolution of the Initial Coin Offering (ICO)/Initial Token Offering (ITO), not divisible, connected to a set of metadata and, differently from the current coins/tokens, existing in digital form (*file*).

<sup>61</sup> According to a functional definition, “smart contracts are digital contracts allowing terms contingent on decentralized consensus that are self-enforcing and tamper-proof through automated execution” (see Cong L.W. – He Z., *Blockchain Disruption and Smart Contracts*, in *The Review of Financial Studies*, Vol. 32 (2019), Issue 5, 1754 et seq.).

On a technical standpoint, Blockchain is a combination of already existing technologies centered on the innovative idea of distributed ledger technology (DLT).

The “record book” metaphor adopted, *inter alia*, by the OECD<sup>62</sup> can help to better understand how this technology works.

Imagine a “record book” shared (that is: distributed) between all the parties of the network and controlled by themselves.

The trustworthiness of each transaction recorded on such distributed ledger (“record book”) does not come from the control of a central authority (as it typically happens with legal currency-based transactions: just think about banks) but rather from the fact that an identical copy of the ledger is held by all users on the network (so-called nodes<sup>63</sup>).

Indeed, the ledger (“record book”) is identically copied in all nodes and is composed by a series of blocks (“pages”), each of them including a group of transactions from the same time period.

No block can be added to the ledger without the prior approval from specified (or a certain number of) nodes in the network.

Each blockchain network has its own consensus mechanism ensuring that every block is valid and all participants approve and maintain the same version of the ledger.

Each couple of subsequent, approved blocks (“pages”) is chained up by a hash (“binding”).

Indeed, along with its own hash, each block stores the hash of the block before it.

A hash is like a digital fingerprint unique to each piece of data on the blockchain: “users put information regarding their transaction (name of receiver and sender along with the [asset] transferred) into a cryptographic hashing algorithm – a complex mathematical formula – and receive a set of

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<sup>62</sup> *The OECD Blockchain Primer*, in <https://www.oecd.org/finance/OECD-Blockchain-Primer.pdf> (accessed 25.1.19).

<sup>63</sup> A node is a computer on the blockchain network that stores the ledger.



letters and numbers that is distinct to that transaction. The specific input, if unchanged, will always produce the same exact hash. If, however, any part of the data input is changed (for example a malicious actor changes the amount transferred), the hash would change to an entirely different set of characters and make it incompatible with the rest of the chain”<sup>64</sup> (so-called cryptographic security).

Therefore, once recorded the transaction becomes immutable, unless a new consensus is achieved between the members of the network.

Blockchain networks can vary in their architecture.

It is possible to make a first distinction between “public blockchain” (e.g. Bitcoin), where all the records can be viewed and read by everyone, and “private blockchains”, which can only be viewed by a chosen group of people. A second possible distinction is between “permissioned blockchains”, where just a select group of users are entitled to edit and verify the transactions, and “permissionless blockchains”, which do not provide such restrictions.

Blockchained transactions can take place over the web & social media and between machines equipped with IoT systems.

At this latter regard it can be imagined that the chances of success of Industry 4.0 appear to will be directly proportional to the level of integration that will be achieved between IoT and Blockchain<sup>65</sup>.

Indeed, if we consider that, on the one hand, supply chain management calls for transparency, accountability and trust and, on the other hand, Industry 4.0

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<sup>64</sup> *OECD Primer* cit. See also the explanation provided in Hutt R., *All you need to know about blockchain, explained simply*, June 17<sup>th</sup>, 2016, in <https://www.weforum.org/agenda/2016/06/blockchain-explained-simply/> (accessed 10.1.1019): “Using cryptography to keep exchanges secure, blockchain provides a decentralized database, or «digital ledger», of transactions that everyone on the network can see. This network is essentially a chain of computers that must all approve an exchange before it can be verified and recorded”.

<sup>65</sup> Data Scientists are working to conceptualize sophisticated models of IoT-based smart contracts: see for instance Zhang Y. – Kasahara S. – Shen Y. – Jiang X. – Wan J., *Smart Contract-Based Access Control for the Internet of Things*, February 13<sup>th</sup>, 2018, in [arXiv:1802.04410](https://arxiv.org/abs/1802.04410) (accessed 14.2.19); Fotiou N. – Siris A.V. – Polyzos G.C., *Interacting with the Internet of Things using smart contracts and blockchain technologies*, January 23<sup>rd</sup>, 2019, in <https://arxiv.org/abs/1802.04410v1> (accessed 14.2.19).

calls for disintermediation, automatization and agility, then we can easily understand why Blockchain, especially through smart contracts, can provide a solution to the first problem and IoT can solve the second one and, most of all, why such facilities show their best in combination<sup>66</sup>.

Not for nothing several IT companies have started to offer blockchained solution to manage supply chains across multiple industries, such as, for instance, logistics<sup>67</sup>, financial sector<sup>68</sup> and agri-food<sup>69</sup>.

In sum, it is reasonable to forecast that, should Blockchain reveal an effective ability to “scale”, managing to penetrate a wide range of economic sectors, there will be room for an even stronger development of BDA<sup>70</sup>.

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<sup>66</sup> See Christidis K. - Devetsikiotis M., *Blockchains and Smart Contracts for the Internet of Things*, in *IEEE Access*, Vol. 4 (2016), version June 3<sup>rd</sup>, 2016, 2301: “Smart contracts allow us to automate complex multi-step processes. The devices in the IoT ecosystem are the points of contact with the physical world. When all of them are combined we get to automate time-consuming workflows in new and unique ways, achieving cryptographic verifiability, as well as significant cost and time savings in the process”.

<sup>67</sup> For instance, IBM’s strategy is well described in Popper N. – Lohr S., *Blockchain, A Better Way to Track Pork Chops, Bonds, Bad Peanut Butter?*, March 4<sup>th</sup>, 2017, in <https://www.nytimes.com/2017/03/04/business/dealbook/blockchain-ibm-bitcoin.html> (accessed 13.1.2019). Looking at the current evolution of the market, the forthcoming development might probably be – as above said – making smart contracts directly “run” via sensors connected to an IoT network. Try to imagine a community of trade, transport and logistics enterprises where all parties agree to automatically execute and monitor clauses such as Incoterms 2010 (e.g. DDP – Delivered Duty Paid, defined as a “multimodal incoterm extending on DAT, to deliver goods at named destination”; CFR – Cost and Freight, which occurs when “seller delivers goods to destination and is responsible for all transport insurance”, etc.), for example through sensors embedded in cargo containers, trucks, boats, warehouses and so on. In this scenario, sensors might automatically dialogue with each other and generate a digital stamp secured by cryptography and recorded in a distributed ledger.

<sup>68</sup> At present one of the leading solutions in the banking and financial sector is for example the Corda platform powered by R3: see [www.r3.com](http://www.r3.com).

<sup>69</sup> See for instance the research Barile M., *Blockchain per l’Agrifood. Scenari, applicazioni, impatti*, in Giordano A. (ed.), *I quaderni di RuralHack*, Societing4.0 – Accademia di Management Mediterraneo, Napoli, 2019 and the project “IBM food trust” (as described in the presentation “About IBM Food Trust”, available at <https://www.ibm.com/downloads/cas/EX1MA1OX>, accessed 12.5.19).

<sup>70</sup> Mallon S., *6 Big Data Blockchain Projects You Should Know About*, August 29<sup>th</sup>, 2018, available at <https://www.smartdatacollective.com/6-big-data-blockchain-projects-you-should-know-about/> (accessed 31.1.19) provides a list of the first attempts of integration between BDA and Blockchain.

## § 2.5 Public Sector Information (PSI) or Open Data

We can define as Public Sector Information (“PSI”) or Open Data such datasets that – regardless of the techniques used to collect the raw data (Physical archives, Web & Social Media, Sensing, IoT/M2M/CPS, Transactions) – are gathered throughout Governmental and E-Governmental (e.g. smart-cities) activities and then disclosed to citizens and enterprises.

Since the adoption of Directive 2003/98/EC<sup>71</sup>, the European Union encouraged the disclosure of data in the domain of public institutions, setting minimum rules for the reuse of public sector information throughout the Union.

From the moment the global economy started to move toward a data driven dimension, the European Institutions understood that this minimum standard was not enough to keep the single market competitive.

The European Commission – aware of its delicate role of first guardian of the EU Law – gave a virtuous example by adopting guidelines on the reuse of information gathered throughout its missions<sup>72</sup> and by launching a wider “open data” project<sup>73</sup>.

Indeed, “public sector information is an important source of potential growth of innovative online services through value-added products and services. Governments can stimulate content markets by making public sector information available on transparent, effective and non-discriminatory terms”<sup>74</sup>.

The chances of success of the open data policies are strictly related to the degree of development of e-Government: the more digitalization of public

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<sup>71</sup> Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 “on the re-use of public sector information”, revised by Directive 2013/37/EU.

<sup>72</sup> See Euratom, European Commission decision 2006/291/EC, April 7<sup>th</sup>, 2006 “on the reuse of Commission information”; European Commission decision “on the reuse of Commission documents” (2011/833/EU), December 12, 2011.

<sup>73</sup> The open data agenda started with the Communication from the Commission “*Open data. An engine for innovation, growth and transparent governance*”, (COM(2011) 882 final). The main output of the project is in the creation of open source data portals, such as <https://data.europa.eu/euodp/en/home> (where, under section “About”, all Member States’ portals are linked) and <https://www.europeandataportal.eu/>.

<sup>74</sup> Recital 3 of the EC decision 2011/833/EU.

administration will grow, the more open data archives will be, as a result, enriched.

In this light, open data and e-Government can be viewed as complementary tools of a circular model where the use of “digital technologies as an integrated part of governments’ modernization strategies can unlock further economic and social benefits for society as a whole”<sup>75</sup>.

The existence of a strong connection between the building of a thriving EU Digital Single Market and the empowerment of Open Data policies is confirmed by the decision to include the revision of the Directive on the re-use of PSI in the DSM strategy<sup>76</sup>.

### **§ 3. The exploitation of data: Big Data & Big Analytics (“BDA”)**

In few words, Big Data & Big Analytics (“BDA”) is an expression by which we describe the automated extraction of insights from huge amounts of data, whose final objective is to facilitate a tailored decision-making process.

Several papers tried to define the phenomenon focusing on its main structural and technical characters.

The limit of this approach is in that: as technology evolves, definitions need to be updated too, resulting in what we can call the “Vs multiplication” effect.

For this reason, the adoption of a functional definition of BDA seems to be more appropriate.

Sanders’ (2016) considerations appear suitable to this extent: “Big data without analytics is just a massive amount of data. Analytics without big data are simply mathematical and statistical tools and applications. Many of these tools have been around for decades, such as correlation and regression analysis. It is the combination of big data and analytics, fueled by today’s computing power,

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<sup>75</sup> Communication from the Commission “*EU eGovernment Action Plan 2016-2020. Accelerating the digital transformation of government*”, (COM(2016) 179 final).

<sup>76</sup> See Part III.

which creates the ability to extract meaningful insights and turn information into intelligence”<sup>77</sup>.

Once adopted this (advisable) functional definition, it is possible to briefly explore the main technical aspects of BDA.

The core qualities of BDA are the high Volume, the high Velocity, and/or the high Variety of the information assets managed (3 Vs definition)<sup>78</sup>.

Over time, a fourth “V” has been added. Depending on the definitions, it consisted either in the ability of the dataset to allow the extraction of economic Value<sup>79</sup>, or in its Variability<sup>80</sup> or, more frequently, in its Veracity<sup>81</sup> (that is, the credibility of the source and the suitability of data for its target audience, attribute which is expected to significantly increase with the upcoming marriage between blockchain and BDA<sup>82</sup>).

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<sup>77</sup> Sanders N.R., *How to Use Big Data* cit., 28.

<sup>78</sup> According to Laney D., *3D data management: Controlling data volume, velocity, and variety. Technical report*, META Group, February 6<sup>th</sup>, 2001, available at <https://blogs.gartner.com/doug-laney/files/2012/01/ad949-3D-Data-Management-Controlling-Data-Volume-Velocity-and-Variety.pdf> (accessed 20.2.18) and, similarly, to Gartner IT Glossary, *Big Data*, available at <https://www.gartner.com/it-glossary/big-data> (accessed 20.2.18): “Big data is high volume, high velocity, and/or high variety information assets that require new forms of processing to enable enhanced decision making, insight discovery and process optimization”.

<sup>79</sup> For example: Gantz J. – Reinsel D., *Extracting value from chaos*, IDCiView, June 2011, available at <https://www.emc.com/collateral/analyst-reports/idc-extracting-value-from-chaos-ar.pdf> (accessed 20.2.18), 6: “Big data technologies describe a new generation of technologies and architectures, designed to economically extract value from very large volumes of a wide variety of data, by enabling high-velocity capture, discovery, and/or analysis”; OECD, *Exploring Data-Driven* cit., 2013, 11-12.

<sup>80</sup> See NIST Big Data Interoperability Framework, Volume 1, Definitions, Final Version 1, available at <https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1500-1.pdf> (accessed 21.5.18), 5: “Big Data consists of extensive datasets – primarily in the characteristics of volume, variety, velocity, and/or variability – that require a scalable architecture for efficient storage, manipulation, and analysis”.

<sup>81</sup> According to Kale V., *Big data computing* cit., 312, veracity “is closely related to trust; listing veracity as one of the dimensions of big data amounts to saying that data coming into the so-called big data applications have a variety of trustworthiness, and therefore before we accept the data for analytical or other applications, it must go through some degree of quality testing and credibility analysis. Many sources of data generate data that is uncertain, incomplete, and inaccurate, therefore making its veracity questionable”.

<sup>82</sup> According to Weinberger M., *They were meant to be together! Can blockchain really make big data better?*, June 27<sup>th</sup>, 2018, available at <https://jaxenter.com/blockchain-big-data-146218.html> (accessed 31.1.19), BDA trustworthiness could highly increase in the presence of blockchained datasets, given the following characters of blockchain: “1) Security: Blockchain architecture ensures that data is almost impossible to corrupt or tamper with; 2) Integrity:

Today, the most common definitions stress five Vs, namely Volume, Variety, Velocity, Veracity and Value<sup>83</sup>.

As correctly noticed, the novelty of BDA is not in the collection and analysis of data itself, but rather in the specific challenges raised by the Vs management<sup>84</sup>, which require data scientists to cope with variables like size, scope, time, accuracy and cost-effectiveness.

#### § 4. The BDA value chain

The value chain metaphor works also with information systems if we consider information flow as a series of steps needed to generate value and insights from data<sup>85</sup>.

BDA has carried to its extreme consequences this concept, designing a multi-phase process able to extract an economically valuable meaning from “raw data”.

Provided that all of these processes require as a pre-condition a prior activity of “data creation” or “data generation”<sup>86</sup> (data sources)<sup>87</sup>, many models of BDA

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*Blockchain data offers audit trails, certainty of origin, and guaranteed integrity; 3) Value: Blockchain-generated data is structured and complete; its value is rarely questionable*”. For instance, a good example of integrated application of BDA and Blockchain for safety purposes could be the in the “real-time fraud detection” techniques usable in the context of money transfers (see Low C., *Blockchains Could Be Every Data Scientist’s Dream*, May 3<sup>rd</sup>, 2017, available at <https://dataconomy.com/2017/05/blockchains-data-scientist-dream/>, accessed 31.1.19, who reports that “a consortium of 47 Japanese banks signed up with a company called Ripple to allow money transfers between bank accounts using blockchain”).

<sup>83</sup> Elragal A., *ERP and Big Data: The Inept Couple*, in *Procedia Technology*, 16(2014), 242-249, Fig. 1.5; Fosso Wamba S. – Gunasekaran A. – Akter S. – Ji-fan Ren S. – Dubey R. – Childe S.J., *Big data analytics and firm performance: effects of dynamic capabilities*, in *Journal of Business Research*, Vol. 70 (2017), 356-365: “BDA is defined as a holistic approach to managing, processing and analyzing the 5 V data-related dimensions (i.e., volume, variety, velocity, veracity and value) to create actionable ideas for delivering sustained value, measuring performance and establishing competitive advantages”.

<sup>84</sup> Curry E., *The Big Data Value Chain: Definitions, Concepts, and Theoretical Approaches*, in Cavanillas J.M. – Curry E. – Wahlster W., *New Horizons for a Data-Driven Economy. A Roadmap for Usage and Exploitation of Big Data in Europe*, Springer Int., Cham (SW), 2016, 30: “Big data brings together a set of data management challenges for working with data under new scales of size and complexity. Many of these challenges are not new. What is new however are the challenges raised by the specific characteristics of big data related to the [...] Vs”.

<sup>85</sup> Rayport J.F. – Sviokla J.J., *Exploiting the virtual value chain*, in *Harvard Business Review*, Vol. 73 (1995), 75 et seq.

value chain have been proposed<sup>88</sup>, quite different as for the intermediate steps but all having in common the outer stages of the chain, recognized to be data collection and decision making.

Chen-Zhang (2014) proposed a shareable “knowledge discovery process”<sup>89</sup>, composed of the following steps:

- Data Recording (Collection and Storage);
- Data Cleaning/Integration/Representation (so-called “Data Curation”);
- Data Analysis;
- Data Visualization/Interpretation;
- Decision making.

Algorithms play a key role in the second, third and fourth stages of the value chain.

From a more economic perspective, many descriptions (and, among them, the one adopted by the EU Institutions<sup>90</sup>) include in the BDA value chain also a “Marketing and Distribution” stage, generally following the Data Analysis phase and preceding the Data Visualization/Interpretation one.

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<sup>86</sup> For instance, in OECD, *Exploring Data-Driven* op. cit., 7, Fig. 1 “Data Generation” is represented before “Data Collection”. As a general rule, in this research it will be assumed that Data Generation is located outside the data end-user’s value chain. Indeed, normally enterprises adopting BDA strategies collect data externally rather than creating them on their own (“data takers”). In this context, Industry 4.0 can be seen as an exception, because it can lead enterprises to create, collect and analyze on their own, in full or in part, the data produced throughout the supply chains.

<sup>87</sup> See § 2 of Part I.

<sup>88</sup> According to OECD, *Exploring Data-Driven* cit., 7, Fig. 1, the main stages of the BDA value chain are Generation, Collection, Storage, Processing, Distribution and Analytics; according to Curry E., *The Big Data Value Chain* cit., 31-33, the main stages are Data Acquisition, Data Analysis, Data Curation, Data Storage and Data Usage; according to Manyika J. – Chui M. – Brown B. – Bughin J. – Dobbs R. – Roxburgh C. – Hung Byers A., *Big data: The next frontier for innovation, competition, and productivity*, McKinsey Global Institute, available at [https://www.mckinsey.com/~media/McKinsey/Business%20Functions/McKinsey%20Digital/Our%20Insights/Big%20data%20The%20next%20frontier%20for%20innovation/MGI\\_big\\_data\\_full\\_report.ashx](https://www.mckinsey.com/~media/McKinsey/Business%20Functions/McKinsey%20Digital/Our%20Insights/Big%20data%20The%20next%20frontier%20for%20innovation/MGI_big_data_full_report.ashx) (accessed 13.2.18), 2011, 106, the main stages are Generate data, Aggregate data, Analyze data, Consume data and derive value.

<sup>89</sup> Philip Chen C.L. – Zhang C.Y., *Data-intensive applications, challenges, techniques and technologies: A survey on Big Data*, in *Information Sciences*, Vol. 275 (2014), 318, Fig. 3.

<sup>90</sup> See in particular recital 2 of Regulation 2018/1807/EU cit.: “Data value chains are built on different data activities: data creation and collection; data aggregation and organisation; data processing; data analysis, marketing and distribution; use and re-use of data”.

In the light of the above, the complete BDA value chain should be represented as follows: Data Creation or Generation; Data Recording (Collection and Storage); Data Cleaning/Integration/Representation (also said “Data Curation”); Data Analysis; Marketing and Distribution; Data Visualization/Interpretation; Decision making.

That said, the following sub-paragraphs will focus only on the technical steps, as identified by Chen-Zhang (2014): Data Recording (Collection and Storage); Data Cleaning/Integration/Representation (so-called “Data Curation”); Data Analysis; Data Visualization/Interpretation; Decision making.

## § 4.1 Data Recording

Data Recording stage consists in two – strictly interconnected – phases, Collection and Storage (also named “Warehousing”), which can be described as the activity of “gathering data from distributed information sources with the aim of storing them in scalable, big data-capable data storage”<sup>91</sup>.

As for the first aspect it must be considered that data collected are not all the same and can vary in their structure. Indeed, it is possible to distinguish<sup>92</sup> between:

- i) “Structured data”: data with a defined format and structure<sup>93</sup>;
- ii) Semi-Structured Data: textual data files with a flexible structure that can be parsed<sup>94</sup>;
- iii) Quasi-Structured Data: textual data with erratic data formats<sup>95</sup>;
- iv) Unstructured Data: data that have no inherent structure<sup>96</sup>.

As for Data Storage, various architectures of datastores have been identified<sup>97</sup>:

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<sup>91</sup> See Lyko K. – Nitzschke M. – Ngonga Ngomo A.C., *Big Data acquisition*, in Cavanillas J.M. et al., *New Horizons* cit., 39- 51.

<sup>92</sup> The following classification has been proposed in Sakr S., *Big Data 2.0 Processing Systems. A Survey*, Springer Int., Cham (SW), 2016, 5.

<sup>93</sup> E.g.: CSV files, spreadsheets, traditional relational databases, etc.

<sup>94</sup> E.g.: Extensible Markup Language-XML data files with its self-describing information.

<sup>95</sup> E.g.: web clickstream data that may contain inconsistencies in data values and formats.

<sup>96</sup> E.g.: text documents, images, PDF files and videos.



- i) Document-oriented: datastores mainly designed to store and retrieve collections of documents or information and support complex data forms in several standard formats<sup>98</sup>;
- ii) Column-oriented: a database storing its content in columns, with attribute values belonging to the same column stored contiguously;
- iii) Graph database: a database designed to store and represent data that utilize a graph model with nodes, edges, and properties related to one another through relations<sup>99</sup>;
- iv) Key-value: an alternative relational database system that stores and accesses data designed to scale to a very large size<sup>100</sup>.

Due to the necessity to invest in new generation datastores, with a scalable dimension and extremely powerful processors, Data Storage used to be considered as a relevant fixed cost that enterprises have to face to adopt a BDA strategy.

Cloud computing<sup>101</sup> is gradually changing the scene, by making it possible to design a business model where Storing and Processing are externalized, through decentralized servers<sup>102</sup>. From a business perspective, this technology

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<sup>97</sup> The following classification has been proposed in Abaker A. – Hashem T. – Yaqoob I. – Badrul Anuar N. – Mokhtar S. – Gani A. – Ullah Khan S., *The rise of “big data”* cit., 102, Table 2.

<sup>98</sup> E.g.: JSON, XML, and binary forms, like PDF and MSWord. A few examples of column-oriented databases are MongoDB, SimpleDB and CouchDB.

<sup>99</sup> For example: Neo4j.

<sup>100</sup> Some examples are: Dynamo (used in some of Amazon’s services), Apache Hbase, Apache Cassandra and Voldemort.

<sup>101</sup> The US National Institute of Standards and Technology (NIST) defined cloud computing as “a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction”: see Mell P. – Grance T., *The NIST Definition of Cloud Computing*, NIST Special Publication 800-145, October 2011, 2, available at <https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-145.pdf> (accessed 23.5.18). According to Sakr S., *Big Data* cit., 2-3, cloud computing enables: i) reduced time-to-market by removing or simplifying the time-consuming hardware provisioning, purchasing, and deployment processes; ii) Reduced monetary cost by following a pay-as-you-go business model; iii) Unlimited (virtually) computing resources and scalability by adding resources as the workload increases.

<sup>102</sup> Cloud computing services are managed through three different service models: Infrastructure as a Service (IaaS), where the user is provided with processing, storage, network

is “turn[ing] what was previously a fixed cost of computing into a variable cost and [is] lower[ing] the barriers to entry for working with big data”<sup>103</sup>.

## § 4.2 Data Cleaning/Integration/Representation (so-called “Data Curation”)

At the second stage of the BDA value chain we find a set of activities that, by whatever name they might be known<sup>104</sup>, have all in common the goal to “refine” the data collected before entering the “analytics” phase (so-called “Data Curation”).

Scholars have well stressed the strong connection between such stage and the Veracity dimension of BDA, observing that “data curation provides the methodological and technological data management support to address data quality issues maximizing the usability of the data”<sup>105</sup>.

## § 4.3 Data Analysis

To date, the two main processing methodologies used to handle the Data Analysis stage are “Batch” and “Real Time”<sup>106</sup>.

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and other fundamental computing resources and is allowed to run arbitrary software; Platform as a Service (PaaS), where the user is entitled to deploy onto the cloud infrastructure its (acquired or created) applications supported by the provider; Software as a Service (SaaS), where the consumer is allowed to use the provider’s applications running on a cloud infrastructure over the internet. According to Becker T., *Big Data Usage*, in Cavanillas J.M. et al., *New Horizons* op. cit., 160, Fig. 8.3, at least in the medium run, Big Data as a Service – BDaaS can represent a further possible development brought by cloud computing.

<sup>103</sup> Varian H.R., *Big Data: new tricks for econometrics*, in *Journal of Economic Perspectives*, Vol. 28 (2014), Issue 2, 3.

<sup>104</sup> For example, Abaker A. et al., *The rise of “big data”* cit., 102, Table 2, refers to “Data Staging” to describe activities like “Cleaning” (that is: the process of identifying incomplete and unreasonable data), “Transform” (that is: the process of transforming data into a form suitable for analysis) and “Normalization” (that is: the method of structuring database schema to minimize redundancy); whereas Freitas A. – Curry E., *Big Data curation*, in Cavanillas J.M. et al., *New Horizons* op. cit., 87-88 uses the expression “Data Curation”.

<sup>105</sup> *Ibidem*.

<sup>106</sup> Again, see Abaker A. et al., *The rise of “big data”* cit., 102, Table 2. According to Philip Chen C.L. – Zhang C.Y., *Data-intensive* cit., 321, “interactive analysis” represents the third processing tool available. In particular, interactive analysis consists in a mix of batch and real time techniques, where “query-like programming extensions” are added on MapReduce along

The first one includes the MapReduce-based systems, typically relying on the processing of large clusters of data<sup>107</sup>. Although improved by new applications and releases, batch processing has some endemic inefficiencies. On the one hand, it requires all of the input data to be completely available on the store before any computation is started. On the other hand, its results are available only when the computation process has been completed.

Therefore, the usage of Real Time solutions is currently much wider, as they allow, differently from Batch techniques, the continuous processing of an unbounded flow of data<sup>108</sup> (so-called “data streaming”<sup>109</sup> or “nowcasting”<sup>110</sup>).

In both cases, a remarkable number of disciplines, alone or combined, contribute to the data analytics implementation<sup>111</sup>:

*i)* Data mining: the extraction of valuable information (“patterns”) from data, including clustering analysis, classification, regression and association rule learning;

*ii)* Machine learning (ML): a subjection of artificial intelligence (AI) which is aimed to design algorithms that allow computers to evolve behaviours based on empirical data and, finally, to discover knowledge and make intelligent decisions automatically. AI and ML might be intelligence-based (greater emphasis on the algorithm) or dataset-based (greater emphasis on the dataset): in both cases, data act as a necessary input, because their gathering and accurate labelling is fundamental for the best training of the algorithm;

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with a process of “query optimization”. See also Chen Y. – Alspaugh S. – Katz R., *Interactive analytical processing in big data systems: a cross-industry study of Map Reduce workloads*, in *Proceedings of the VLDB Endowment*, Vol. 5 (2012), 1802 et seq.

<sup>107</sup> On the subject, *ex multis*, see Goudarzi M., *Heterogeneous Architectures for Big Data Batch Processing in MapReduce Paradigm*, in *IEEE Transactions on Big Data*, 2017.

<sup>108</sup> An overview on the topic is given by Shahrivari S., *Beyond Batch Processing: Towards Real-Time and Streaming Big Data*, in *Computers*, Vol. 3 (2014), 117 et seq.

<sup>109</sup> The typical example of Real Time processing is Simple Scalable Streaming System (S4).

<sup>110</sup> Gupta S., *Big Data: Big Deal or Big Hype?*, in *European Business Review*, May 22<sup>nd</sup>, 2015, available at <http://www.europeanbusinessreview.com/big-data-big-deal-or-big-hype/>.

<sup>111</sup> For the following overview, see Philip Chen C.L. – Zhang C.Y., *Data-intensive cit.*, 322-23.

iii) Artificial neural network (ANN): a set of techniques generally based on statistical estimations, classification, optimization and control theory, with a wide range of applications (e.g.: pattern recognition, image analysis, adaptive control) and whose accuracy in the results is related to how many layers and nodes are located in the neural network. For instance, Generative adversarial networks (GANs) use two neural networks, pitting one against the other (thus the “adversarial”) in order to generate new, synthetic instances of data that can pass for real data (they are used widely in image generation, video generation and voice generation);

iv) Social Network Analysis (SNA): a technique that recreates social relationships in terms of network theory by the use of nodes and ties<sup>112</sup>, via social system design, human behaviour modelling, social network visualization, social networks evolution analysis and graph query and mining.

## § 4.4 Data Visualization/Interpretation

Data Visualization/Interpretation plays a fundamental role in the preparation of the (final) stage of Decision making, being it finalized to display/represent as simply as possible the findings of the analytics, by creating tables, images, diagrams and other intuitive figures that can help to understand the outcomes (so-called “data rendering”<sup>113</sup>). Naturally, the Data Visualization/Interpretation activities become more challenging as the number of data to be represented increases.

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<sup>112</sup> SNA has several applications in modern sociology anthropology, biology, communication studies, economics, geography, history, information science, organizational studies, social psychology, development studies and sociolinguistics.

<sup>113</sup> See Philip Chen C.L. – Zhang C.Y., *Data-intensive cit.*, 323, where it is quoted also Geng B. – Li Y. – Tao D. – Wang M. – Zha Z.J. – Xu C., *Parallel lasso for large-scale video concept detection*, in *IEEE Transactions on Multimedia*, Vol. 14 (2012), Issue 1, 55 et seq.

## § 4.5 Decision Making

Data Visualization/Interpretation and Decision Making are so strictly connected that, in many papers, they have been considered as part of a single stage of the BDA value chain.

Indeed, it is quite common to find holistic definitions where decision making is jointly considered with visualization aspects like reporting, exploration of data (browsing and lookup) and exploratory search (finding correlations, comparisons, what-if scenarios, etc.)<sup>114</sup>.

As a rule, Decision Making is considered, most of all, the area of BDA where humans still can make the difference. Nonetheless, in the context of certain economic activities “fully automated decision making” can be imagined<sup>115</sup>.

## § 5. How BDA is changing the economy: towards a Fourth Industrial Revolution?

Between 1760-1780 and 1830 the entrance of steam engines into textile manufacturing and metallurgical factories of the United Kingdom lead to the First industrial revolution<sup>116</sup>.

From 1870 to 1914 the rise of electrification<sup>117</sup> and product line determined the birth of mass production, which reached its climax with the realization, in

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<sup>114</sup> This is the view of Becker T., *Big Data Usage* cit., 143-145. A clear example of this trend is offered by Procter & Gamble. The Company set up a number of meeting spaces (“Business Spheres”) equipped with large screens that display data concerning the sales realized by P&G around the world. Senior managers can use such spaces to drill-down on the data at any level of detail in real time to make quick decisions (see Davenport T. – Iansiti M. – Sereis A., *Competing with Analytics at Procter & Gamble*, in *Harvard Business School*, Case # 613-045, April 2013, quoted by Gupta S., *Big Data* cit.).

<sup>115</sup> Agrawal A. – Gans J. – Goldfarb A., *Prediction Machines. The Simple Economics of Artificial Intelligence*, Harvard Business Review Press, Boston (U.S.), 2018, 111-119.

<sup>116</sup> James Watt’s Steam Engine Patent No. 913 of 1769 (“*Watt’s Method of Lessening the Consumption of Steam & Fuel in Fire Engine*”), created in order to pump water from mines, is conventionally seen as the pillar of the First industrial revolution.

<sup>117</sup> In Oct. 21, 1879 Thomas Alva Edison lighted the first carbon-filament lamp; in 1860 Antonio Pacinotti invented the first electrical generator able to create direct current using a commutator (dynamo); in 1878 the world’s first hydroelectric project was used to power a single lamp in the Cragside country house in England. Four years later, the first plant to serve a system of private and commercial customers was opened in Wisconsin (U.S.), and, within a decade, hundreds of hydropower plants were in operation.

1908, of the first Ford Model T vehicle at the Ford Piquette Avenue Plant in Detroit (Second Industrial Revolution).

In 1969 was released Modicon 084<sup>118</sup>, the first Programmable Logic Controller (PLC) enabling digital programming of automation systems. This invention is considered the milestone of the Third Industrial Revolution and the first significant application of “information technologies” (IT) to production processes.

Nowadays, the question posed in several economic papers is: are we experiencing the dawn of a Fourth industrial revolution, driven by BDA technologies?

The terms of the debate are well represented by the “dispute” between Cukier – Mayer-Schöenberger (2013)<sup>119</sup> and Huberty (2015)<sup>120</sup>.

The first authors think that there is something revolutionary in BDA, namely in the underlying idea that “we can learn from a large body of information things that we could not comprehend when we used only smaller amounts”. If we accept that “many aspects of life are probabilistic, rather than certain” and, thus, that thousands of data (amongst which “a bit of inaccuracy can be tolerated”)<sup>121</sup> are more trustworthy than a small amount of (as accurate as possible) samples, we literally change the perspective from which we observe reality, moving “from causation to correlation”. Indeed, if through the “datification” process the entire reality can be captured, then the whole (“All”)

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<sup>118</sup> The Modicon Company (which stood for MOdular DIgital CONtroller), currently owned by Schneider Electric SE, had been incorporated in Massachusetts by a group of engineers (Bedford Associates) who developed, for the automatic transmission division of General Motors, a proposal for an electronic replacement for hard-wired relay systems based on a white paper written by engineer Edward R. Clark.

<sup>119</sup> Cukier K. – Mayer-Schöenberger V., *The rise of Big Data: how it's changing the way we think about the world*, in *Foreign Affairs*, Vol. 92 (2013), Issue 3, 28 et seq.

<sup>120</sup> Huberty M., *Awaiting the Second Big Data Revolution: From digital noise to value creation*, in *Journal of Industry, Competition and Trade*, Vol. 15 (2015), 35 et seq.

<sup>121</sup> This assumption becomes even more realistic if we think about the emergence of self-correction techniques purely based on predictive and statistic tools: see on the topic Yang C. – Xu X. – Ramamohanarao K. – Chen J. – *A Scalable Multi-Data* cit.

becomes the sample (“N”) – that is: “N = All”<sup>122</sup> – and the risk of fallacies in the context of random samples disappears.

Huberty counter-argued that, for a number of reasons, “N ≠ All”.

Firstly, most of the data collected through BDA comes from “digital exhaust”<sup>123</sup>, so that “the N covered by that data concerns only those who use these services – not society at large”.

Secondly, many of the activities which feed the “digital exhaust” – such as online commerce, social media and search – show a high “rate of change”, leading to conclude that not necessary “what works today will work tomorrow”.

Thirdly, many behavioral researches pointed out a significant number of inconsistencies that can be found, with reference to the same identity, between online and offline actions.

Fourth, in a constantly evolving environment any attempt to “map” what we have today to predict what will happen tomorrow might end in a failure, if we consider that people change, and technological systems too.

Fifth, if we look at the business models adopted by the data driven firms, we find out that they are not so “disruptive” as it appeared to many, differing just “in degree, but not kind, from a newspaper or a large department store when it comes to make money”<sup>124</sup>.

As it is often the case, reality stands in the middle.

If we recognize that some circumstances assumed by Mayer-Schöenberger were still in the future in the year 2013 but, conversely, many counter-arguments advanced by Huberty in the year 2015 have fallen down in the meantime or are likely to fall down in the next years, then the two (apparently)

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<sup>122</sup> This vocabulary typically belongs to statisticians.

<sup>123</sup> «Digital “exhaust data”» means that data “are created as a by-product of other activities”: see Manyika J. et al., *Big data* cit., executive summary, 1.

<sup>124</sup> In particular, the author explains that the success of firms like Google, Amazon and Facebook is strictly linked to the adoption of a “self-referential” business model, where N = All sample works as long as “All” consists, respectively, in “data about how people search, shop or socialize online”. Of course, the efficiencies produced by the BDA strategies implemented by such companies is relevant too.

compelling opinions expressed on the capacity of BDA methods to revolution the (social and) industrial landscape appear closer than what we can expect.

Indeed, even though online behaviours are different from the offline ones, in the next few years almost the totality of our actions will be taken over the internet; even though online behaviours are divergent from the offline ones, the previous can be considered as more fitting to our personality, in so far as they are drained of any form of conditioning deriving from social censure; even though online behaviours show a high “rate of change” and, due to the fact that people and technologies change, mapping what happens tomorrow in order to predict tomorrow could appear barely useful, it must be considered that “real-time” analytics techniques have almost completely replaced “batch” processing, thus making the problem disappear; even though advertised-supported media are nothing really new from newspapers, there are decades of BDA further applications, that at the moment we might also ignore.

Otherwise, the “data (and analytics) rush” we are assisting at would make little sense and, similarly, the recurring use of impressive slogans such as data as the “new oil”<sup>125</sup>, the “new gold”<sup>126</sup> or the “new currency”<sup>127</sup> would be hard to explain<sup>128</sup>.

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<sup>125</sup> *Inter alia*, see van't Spijker A., *The New Oil: Using Innovative Business Models to turn Data Into Profit*, Technics Publications, Basking Ridge (NJ), 2014 and Rotella P., *Is Data The New Oil?*, in *Forbes*, April 2<sup>nd</sup>, 2012, available at [www.forbes.com/sites/perryrotella/2012/04/02/is-data-the-new-oil/](http://www.forbes.com/sites/perryrotella/2012/04/02/is-data-the-new-oil/) (accessed 17.2.18).

<sup>126</sup> Berners Lee T. – Shadbolt N., *There's gold to be mined from all our data*, in *The Times*, December 31<sup>st</sup>, 2011, available at <https://www.thetimes.co.uk/article/theres-gold-to-be-mined-from-all-our-data-s3qffdkz7kq> (accessed 17.2.18).

<sup>127</sup> Zax D., *Is Personal Data the New Currency?*, in *MIT Technology Review*, November 30<sup>th</sup>, 2011, available at [www.technologyreview.com/view/426235/is-personal-data-the-new-currency/](http://www.technologyreview.com/view/426235/is-personal-data-the-new-currency/) (accessed 17.2.2018); Bruder J., *What if Web Users Could Sell Their Own Data?*, in *The New York Times*, October 2<sup>nd</sup>, 2012, available at <https://boss.blogs.nytimes.com/2012/10/02/what-if-web-users-could-sell-their-own-data/> (accessed 17.2.18); Bean R. – Koeppl H., *Big Data Analytics: The Currency of the 21st Century Enterprise*, September 10<sup>th</sup>, 2012, available at <https://www.information-management.com/news/big-data-analytics-the-currency-of-the-21st-century-enterprise> (accessed 17.2.18); Eggers W.D. – Hamill R. – Ali A., *Data as the new currency: Government's role in facilitating the exchange*, in *Deloitte Review*, Issue 13, July 24<sup>th</sup>, 2013, available at <https://www2.deloitte.com/insights/us/en/deloitte-review/issue-13/data-as-the-new-currency.html#endnote-7> (accessed 17.2.2018).

<sup>128</sup> According to Wixom B.H. – Ross J.W., *How to Monetize Your Data*, in *MIT Sloan Management Review*, Vol. 58 (2017), Issue 3, 10-13, available at



Moreover, it seems quite clear that, once effectively in place, Industry 4.0 will rapidly set the scene for a (real) Fourth industrial revolution<sup>129</sup>.

Just focus on the manufacturing industry. Consider “leaness”, a productive dimension of the supply chain describing the attempt to reduce all waste to the minimum, from raw materials to final products and time. Then consider “agility”, a productive indicator representing, in markets becoming day by day more volatile, the level of responsiveness shown by producers to demand variations and the ability of manufacturers to deliver customized products in short time. Traditionally, “a decoupling point separates the supply chain into an upstream planning part (lean) and a customer facing part (agile)”<sup>130</sup>.

Nonetheless, the growing demand for customized products in combination with decreasing products lifecycles asks for a general re-thinking of organization structures<sup>131</sup>.

In a not too distant future Industry 4.0 may fulfil this need, allowing to re-position the decoupling point where the customer places its order, that is, allowing to align the planning part and the customer facing part at the same level of the supply chain (“leagile”). More in detail, “future digital supply chains [...] will evolve the leagile strategy to the extreme, where the decoupling point will be a production machine with a batch size of one arranged in a dispersed network deployed near customer markets. A set-up time of virtually zero and batch size of one [will maximize] throughput,

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<https://sloanreview.mit.edu/article/how-to-monetize-your-data/> (accessed 18.2.18), data can be monetized in three different ways: “(1) improving internal business processes and decisions, (2) wrapping information around core products and services, and (3) selling information offerings to new and existing markets”.

<sup>129</sup> *Nomen omen*: 4.0 stands for Fourth (Industrial Revolution).

<sup>130</sup> Cit. Gravier M. – Roethlein C. – Visich J., *The Competitive Advantages of the Digital Economy Require a Digital Mentality*, January 20<sup>th</sup>, 2018, in *European Business Review*, available at <http://www.europeanbusinessreview.com/the-competitive-advantages-of-the-digital-economy-require-a-digital-mentality/>.

<sup>131</sup> This need has been recognized in Brettel M. – Friederichsen N. – Keller M. – Rosenberg M., *How Virtualization, Decentralization and Network Building Change the Manufacturing Landscape: An Industry 4.0 Perspective*, in *International Journal of Information and Communication Engineering*, Vol 8 (2014), Issue 1, 37 et seq.

allowing a single finished part to be shipped directly to the customer rather than waiting for a batch to be completed, reducing lead times”<sup>132</sup>.

According to economists, this revolutionary approach may have three main output. First, a change from product- to service-orientation, even in traditional industries like manufacturing<sup>133</sup>; second, cost reduction, despite the (massive) individualized production<sup>134</sup>; third, the increased flexibility of workers<sup>135</sup>.

Moreover, one has to keep in mind that Industry 4.0 is not limited to manufacturing. On the contrary, day after day it is encompassing a growing number of economic sectors.

Last but not least, Blockchain – as said: a technology strictly connected to BDA – is pushing the Fourth Industrial Revolution also from another direction<sup>136</sup>.

Indeed, there is something revolutionary in its ability to remove intermediaries: this allows a redefinition of the optimal size of the enterprise, due to “the opportunity for entrepreneurs to work as individuals and coordinate economic exchanges of work and currency with one another in even large scale projects rather than needing the boundary of a ‘firm’ at all”, which makes it possible to orchestrate the entrepreneurial activity “via a blockchain through removing the complexity of multiple contract negotiations”<sup>137</sup>.

## § 6. Legal (and social) issues posed by BDA

The historical, technical and economical overview on the DDE offered in §§ 1-5 might help to understand why the change of paradigm brought by the phenomenon at stake has stimulated a re-thinking of several consolidated legal concepts and social schemes.

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<sup>132</sup> Gravier M. – Roethlein C. – Visich J., *The Competitive Advantages* cit..

<sup>133</sup> Lasi H. – Fettke P. – Kemper H.G. – Feld T. – Hoffmann M., *Industry 4.0*, in *Business & Information Systems Engineering*, Vol 6 (2014), Issue 4, 239 et seq.

<sup>134</sup> *What is Industrie 4.0?* cit.

<sup>135</sup> Drath R. – Horch A., *Industrie 4.0: hit or hype?* cit.

<sup>136</sup> Although relevant also for Business-to-Consumer (B2C) transactions, we believe that in the years to come Blockchain is destined to play a leading role especially in the context of Business-to-Business (B2B) transactions taken in an *in fieri* Industry 4.0 environment.

<sup>137</sup> Mulligan C., *Blockchain will kill the traditional firm* cit.

Indeed, the DDE is challenging concepts like ownership (of the algorithm through which the dataset is processed to run analytics, of the dataset, of the output derived from such operation), access (to the dataset and/or to the algorithm and/or to the analytics), liability (for damages caused by the robot without human intervention), control (over personal and non-personal data), democracy and freedom of expression, welfare, market power, etc.

The list might be far longer, as the legal implications of the DDE are countless<sup>138</sup>.

Being aware on the limits of such an attempt, it appears nonetheless to identify the following principal legal (and social) issues posed by the DDE.

## § 6.1 Algorithm-related issues

### § 6.1.1 Algorithm and IP rights: patentability of the algorithm and of AI-generated inventions; Copyright on AI-generated creations

The central role played by algorithms in the BDA value chain – namely in the second, third and fourth stages (Data Curation; Data Analysis; Data Visualization/Interpretation) – has already been stressed<sup>139</sup>.

**6.1.1.1** Hence the question whether the algorithm can be patented.

Here, the standard answer follows the general rules: patent shall be registered only as long as the algorithm is “*susceptible of industrial application*”, provided that “*discoveries, scientific theories and mathematical methods*” can’t be patented “*as such*”<sup>140</sup>.

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<sup>138</sup> An attempt to identify ten legal areas of interest of BDA is made in Zeno-Zencovich V. – Giannone Codiglione G., *Ten legal perspectives on the “big data revolution”*, in Di Porto F. (ed.), *Big Data e concorrenza*, in *Concorrenza e mercato*, Vol. 23 (2016), 29 et seq.

<sup>139</sup> See above § 4 of Part I.

<sup>140</sup> Art. 52, §§ 1-3 of the European Patent Convention (“EPC”).

On these grounds, it has been remarked that algorithms could be patented, for instance, when they constitute “a tool embedded in a larger claim”, to be used “in an applied field [e.g. healthcare], defined via technical effects”<sup>141</sup>.

In the light of the above, the general opinion is that algorithms can’t be patented as such.

**6.1.1.2** The answer appears less clear for AI-generated inventions, where the “inventive step” is largely attributable to the “machine” and occurs without human intervention in the so-called black box stadium.

As it is known, the “inventive step” set forth in art. 51, § 1 and 56 EPC requires to satisfy both the “problem and solution approach”<sup>142</sup> and the “non-obviousness”<sup>143</sup> conditions.

On this narrower issue the approach of scholars and policymakers stands in the middle between the awareness of the strategic relevance of AI for growth and well-being (which calls for legal protection of AI’s by-products and for incentives to invest in these technologies) and the general consensus on the need to change (or at least to adapt to this phenomenon<sup>144</sup>) the existing IP legal principles.

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<sup>141</sup> Cit. *Patenting Artificial Intelligence. Conference summary*, May 30<sup>th</sup>, 2018, EPO Munich, 6. This finding follows the general principles laid down by the EPO and confirmed by case law: see for instance Boards of Appeal of the European Patent Office, decision dated 21.9.2012 on case T- 1784/06 (*Comptel Corp.*).

<sup>142</sup> EPO Guidelines for Examination, Chapter VII, § 5: “*In order to assess inventive step in an objective and predictable manner, the so-called «problem-solution approach» is applied. In the problem-solution approach, there are three main stages: (i) determining the «closest prior art», (ii) establishing the «objective technical problem» to be solved, and (iii) considering whether or not the claimed invention, starting from the closest prior art and the objective technical problem, would have been obvious to the skilled person*”.

<sup>143</sup> According to art. 56, § 1, first sentence of the EPC: “*an invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art*”.

<sup>144</sup> This is the position of Ramalho A., *Patentability of AI-Generated Inventions – Is a Reform of the Patent System Needed?*, Summary of the Report published under the 2017 Collaborative Research Project on Harmonization of Industrial Property Right Systems under a Commission from the Japan Patent Office, March 2018, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3168703](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3168703) (accessed 15.06.2018), which recommends the adoption of common guidelines in the different jurisdictions rather than changing laws.

In this context, some degree of *favor* can be indirectly retrieved in the existing literature on the topic<sup>145</sup>, so that an upcoming acceptance of the patentability of AI-generated inventions may be reasonably expected.

Should this be the case, another connected issue to be explored would be the allocation of such an IP right<sup>146</sup>.

**6.1.1.3** Debated is also the question whether AI creations shall be protected by copyright.

The discussion often starts with the example of the Obvious Collective, which helps to understand to what extent AI can evolve in art.

Indeed, through the information system GAN (Generative Adversarial Network), based on the “Goodfellow” algorithm, the work of art “Edmond de Bellamy”<sup>147</sup> has seen the light and has been sold on 25 October 2018 for \$ 432.500 at the New York auction house Christie’s<sup>148</sup>.

As it is known, to date Member States of the EU, following principles laid down in Berne<sup>149</sup> and Rome<sup>150</sup> Conventions, unanimously link “originality” to individuals<sup>151</sup>. Consistently, harmonization EU laws protecting photographs<sup>152</sup> and databanks<sup>153</sup> refer to “*author’s own intellectual creation*”. The same goes

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<sup>145</sup> Ramalho A., *Patentability of AI-Generated Inventions* cit. and Schuster W.M., *Artificial Intelligence and Patent Ownership*, in *Washington and Lee Law Review*, Vol. 75 (2018), Issue 4, Article 5, 1945 et seq. share this view. The question is left open in World Economic Forum (WEF) – Centre for the Fourth Industrial Revolution, *White Paper Artificial Intelligence Collides with Patent Law*, April 2018, available at [http://www3.weforum.org/docs/WEF\\_48540\\_WP\\_End\\_of\\_Innovation\\_Protecting\\_Patent\\_Law.pdf](http://www3.weforum.org/docs/WEF_48540_WP_End_of_Innovation_Protecting_Patent_Law.pdf) (accessed 18.6.2019), 9-10 and in *Patenting Artificial Intelligence. Conference summary* cit.

<sup>146</sup> For instance, following a Coasean analysis Schuster W.M., *Artificial Intelligence and Patent Ownership* cit., 2004, concludes that the patent shall be allocated on AI users.

<sup>147</sup> The extended title of the work of art is “*min G max D Ex [log D (x)] + Ez [log(1 – D(G(z)))]*”, Portrait of Edmond de Belamy, from La Famille de Belamy”.

<sup>148</sup> More information on <https://www.christies.com/features/A-collaboration-between-two-artists-one-human-one-a-machine-9332-1.aspx> (accessed 19.6.19).

<sup>149</sup> Berne Convention for the protection of literary and artistic works, 1886.

<sup>150</sup> International Convention for the protection of performers, producers of phonograms and broadcasting organizations (Rome Convention), 1961.

<sup>151</sup> See for example art. 8 of the Italian Copyright Law.

<sup>152</sup> See art. 6 of Directive 2006/116/EC “on the term of protection of copyright and certain related rights”.

<sup>153</sup> See Art. 3, § 1 of the Directive 96/9/EC “on the legal protection of databases”.

for the US, whose Copyright Office refuses to register “*works that lack human authorship*”<sup>154</sup>.

Now, the question posed by AI creation is whether human authorship can be linked to the phase of editing and/or launching the algorithm or not.

And on that specific issue a shared view still hasn’t been achieved<sup>155</sup>.

## § 6.1.2 Liability for damages caused by AI, autonomous systems, advanced robots and Internet of Things systems

Liability for the damages which might be caused by AI, autonomous systems and advanced robots/IoT-systems represents another relevant area of legal issues<sup>156</sup>.

## § 6.1.3 Algorithmic collusion

It is undisputable that when two or more firms jointly decide to implement algorithms and/or use software which allow them to collude automatically a cartel shall be ascertained<sup>157</sup>.

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<sup>154</sup> US Copyright Office, *Compendium of U.S. copyright office practices*, 3<sup>rd</sup> ed., Chapter 300, § 313.2, 16.

<sup>155</sup> Meaningfully, during the Annual Convention “*Intelligenza artificiale e proprietà intellettuale*”, Convegno AIDA, Milan, September 21<sup>st</sup>, 2018, Ana Ramalho, presenting the relation “*Creatività dell’opera dell’ingegno «creata» dall’IA*”, concluded that, due to the lack of authorship, AI creations shall belong to public domain; whereas Silvia Guizzardi, presenting the relation titled “*L’opera dell’ingegno «creata» dall’IA*”, argued that, similarly to what provided for collective works of art under art 7 of the Italian Copyright Law, authorship might be linked to the person “organizing and directing” the work, namely the AI user (rather than the AI programmer).

<sup>156</sup> See Part III, § 4.2.2.

<sup>157</sup> On April 6<sup>th</sup>, 2015 the US DOJ filed a one-count felony charge in the U.S. District Court of the Northern District of California in San Francisco against Mr. Topkins for violation of Title 15 of the United States Code, Section 1 (case n. CR 15-00201 WHO). Namely, defendant and his co-conspirators agreed to fix the prices of certain posters sold online through Amazon Marketplace by adopting specific pricing algorithms with the goal of coordinating changes to their respective prices (§ 8.c) and by writing computer codes that instructed algorithm-based software to set prices in conformity with this agreement (§ 8.d). In the press release dated April 6<sup>th</sup>, 2015 Assistant Attorney General Bill Baer of the Department of Justice’s Antitrust Division declared: “We will not tolerate anticompetitive conduct, whether it occurs in a smoke-filled room or over the Internet using complex pricing algorithms. American consumers have

That said, the issue becomes trickier when it comes to parallel unilateral practices.

Indeed, the boundary line between concerted practice (unlawful under art. 101 of TFEU) and conscious parallelism (falling outside the scope of that provision) has historically been very thin<sup>158</sup>.

Algorithms tend to erode such boundary line even more, as they increase the number of markets in which it is possible for firms to coordinate their behaviour without apparently entering into an agreement or being party to a concerted practice in the sense of art. 101 of TFEU.

For instance, just think about algorithms able to unilaterally and dynamically track-and-adjust prices depending on competitors' pricing policies<sup>159</sup>: the e-

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the right to a free and fair marketplace online, as well as in brick and mortar businesses” (<https://www.justice.gov/opa/pr/former-e-commerce-executive-charged-price-fixing-antitrust-divisions-first-online-marketplace>, accessed 20.6.19). The parties reached a plea agreement on April 30<sup>th</sup>, 2015. Price algorithm and its coding acted in this case as a mere implementing tool of a strategy that had been already agreed in conversations and communications (§§ 8.a and 8.b). Similarly, in 2016 the UK CMA has found that Trod and GBE participated in an agreement and/or concerted practice that where there was no cheaper third party seller on the online retail platform Amazon UK, they would not undercut each other on prices for licensed sport and entertainment posters and frames sold by both parties on Amazon UK (Case n. 50233 – *Online sales of posters and frames*, final decision of August 12<sup>th</sup>, 2016, available at <https://assets.publishing.service.gov.uk/media/57ee7c2740f0b606dc000018/case-50223-final-non-confidential-infringement-decision.pdf>, accessed 20.6.19). More in detail, the CMA ascertained that the parties put in force the cartel also through the software implemented by Trod (see § 3.62 et seq.). In this case like in the U.S. Topkins case, evidence showed that the parties had put in place an arrangement (§ 3.51) and had maintained contact in relation to its implementation, by providing reassurance to each other regarding their ongoing compliance with the arrangement (§§ 3.94-3.97). Therefore, the software acted in this case only as a tool to enact and monitor the arrangement already entered by the parties.

<sup>158</sup> The difference is well stressed, *inter alia*, in Jones A., *Woodpulp: Concerted Practice and/or Conscious Parallelism?*, in *European Competition Law Review*, Vol. 6 (1993), 273 et seq. Wish R. – Bailey D., *Competition Law*, 7<sup>th</sup> ed., Oxford (UK) – New York, 2012, 563 prefer to use the expression “tacit coordination” rather than “conscious parallelism” (generally used by lawyers) or “tacit collusion” (generally used by economists). In the case law, see ECJ, Fifth Chamber, *Gencor Ltd c. Commission*, 25.3.1999, case T-102/96, § 276. “Affinity of reaction” in an oligopoly context is also explained in Frenz W., *Handbook of EU Competition Law*, Springer, Heidelberg (GE) - New York (U.S.) - Dordrecht (NE) - London (U.K.), 2016, 805, § 2330.

<sup>159</sup> Possible algorithmic collusion scenarios are described in Autorité de la Concurrence – Bundeskartellamt, *Competition Law and Data*, May 10<sup>th</sup>, 2016, available at [https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?\\_\\_blob=publicationFile&v=2](https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2) (accessed 7.7.19), 15: “first, even in the absence of explicit horizontal coordination, the use of similar pricing algorithms, for instance if these algorithms are provided by the same company, could attenuate competition by reducing uncertainty and

commerce sector enquiry conducted by the Commission found out that “53 % of the respondent retailers track the online prices of competitors, out of which 67 % use automatic software programmes for that purpose. Larger companies have a tendency to track online prices of competitors more than smaller ones. The majority of those retailers that use software to track prices subsequently adjust their own prices to those of their competitors (78 %)”<sup>160</sup>.

Shall these behaviours be prosecuted? If yes, how<sup>161</sup>?

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behavioural biases favourable to price competition. Second, data-based algorithms could also limit competition by integrating in their price-fixing mechanisms the competitors’ reactions, drawn from data collected in past experiences of price variations. For instance, even algorithms designed by different companies could be unilaterally targeted to follow competitors’ price increases, punish deviations, etc. Alternatively, tacit collusion could also be the result of sophisticated machine-learning. All in all, prosecuting such conducts could prove difficult: first, market transparency is generally said to benefit consumers when they have – at least in theory – the same information as the companies and second, no coordination may be necessary to achieve such supra competitive results”.

<sup>160</sup> Commission Staff Working Document SWD(2017) 154 final accompanying the document “*Report from the Commission to the Council and the European Parliament Final report on the E-commerce Sector Inquiry*” {COM(2017) 229 final}, § 149.

<sup>161</sup> According to Maggiolino M., *I Big Data e il Diritto Antitrust*, Egea, Milano (IT), 2018, 298, the “meeting of algorithms” might be considered as a “meeting of minds”, but this might probably require a modification of Art. 101 TFEU. Mannoni S. – Stazi G., *Is Competition A Click Away? Sfida al Monopolio nell’Era Digitale*, Editoriale Scientifica, Naples (IT), 2018, 53-55 share this view and add that this is one of those cases where the law shall adapt to reality, not the other way around. Otherwise, conscious parallelism might not allow, especially in the presence of machine learning, to prosecute alignment to competitors’ behavior through algorithms independently developed and set, which might lead to a sort of collusive equilibrium (OECD, *Algorithms and Collusion. Competition Policy in the Digital Age*, Paris (FR), 2017, 39-40; *Id.*, *Big data: bringing competition policy to the digital era, Background note by the Secretariat*, DAF/COMP(2016)14, 29-30 November 2016, 22-23).

More deeply on the topic, see Ezrachi A. – Stucke M.E., *Virtual Competition. The promise and perils of the algorithm-driven economy*, Harvard University Press, Cambridge (MA)-London (UK), 2016 (in particular 56-81); *Id.*, *Artificial intelligence & collusion: when computers inhibit competition*, in *University of Illinois Law Review*, Vol. 2017, 1175 et seq.; *Id.*, *How Pricing Bots Could Form Cartels and Make Things More Expensive*, in *Harvard Business Review*, October 27<sup>th</sup>, 2016, available at <https://hbr.org/2016/10/how-pricing-bots-could-form-cartels-and-make-things-more-expensive> (accessed 27.11.2016); Calvano E. – Calzolari G. – Denicolò V. – Pastorello S., *Algorithmic Pricing: What Implications for Competition Policy?*, in *The Industrial Organization Society*, Vol. 55 (2019), Issue 1, 155 et seq.; Deng A., *What Do We Know About Algorithmic Tacit Collusion?*, in *Antitrust*, Vol. 33 (2018), Issue 1, 88 et seq.; Goetyen G., *Algorithms and artificial intelligence and the risk of collusion*, in *Concurrences*, Vol. 4 (2017), 12 et seq.



## § 6.2 BDA-related issues

### § 6.2.1 BDA and IP rights: copyright protection on databases and *sui generis* right

Intellectual property issues have arisen not only with respect to algorithms (§ 7.1.1) but also, with respect to BDA, that is considering the value chain above described as a whole<sup>162</sup>.

**6.2.1.1** In particular, provided that under art. 3, § 1 of the Directive 96/9/EC “*databases which, by reason of the selection or arrangement of their contents, constitute the author’s own intellectual creation shall be protected as such by copyright*”, the question is whether such an intellectual creation can be envisaged in the presence of a BDA process.

The most persuasive answer is that, excepted few cases, as a rule there should be no room for such a protection on BDA. Indeed, in order to recognize an author’s own intellectual creation for the purposes of Directive 96/9/EC “we need a *quid pluris* which may distinguish the dataset from a mere compilation, without it being necessary to achieve the threshold of the artistic or aesthetic value”<sup>163</sup>.

Moreover, BDA datasets differ from traditional databanks, because the first ones are finalized to exploit, often in real time, aggregated, analysed and anonymized data, whereas the latter ones aim to methodically store information in order to allow a targeted consultation and extraction of the single data included in the banks<sup>164</sup>.

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<sup>162</sup> See above § 4 of Part I.

<sup>163</sup> Cit. Falce V., *Copyrights on data and competition policy in the digital single market strategy*, in *Italian Antitrust Review*, Vol. 1 (2018), 38.

<sup>164</sup> This difference is pointed out in Prosperetti E., *Algoritmi dei Big Data: temi regolamentari, responsabilità, concorrenza*, in Falce V. – Ghidini G. – Olivieri G. (eds.), *Informazione e Big Data tra innovazione e concorrenza*, Giuffrè, Milan (IT), 2018, 303 et seq. (in particular, see 308).

A revision of the Database Directive in the light of the challenges posed by BDA has been seen as possible by the Commission<sup>165</sup>.

**6.2.1.2** Another IP-related issue is whether BDA might be protected by the *sui generis* right under art. 7, § 1 of the Directive 96/9/EC, conditioned – as known – to “*qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents*”<sup>166</sup>.

Scholars appear divided on this point.

Some experts have recognized that “the author of an interactive and dynamic machine-generated dataset, which is the result of qualified investments, [shall be] entitled to invoke the *sui generis* right”<sup>167</sup>.

Conversely, others have adopted a pragmatic standpoint, objecting that “in typical big data scenarios, the investments of ‘producers’ of sensor or machine-generated data of all kinds will be excluded from the *sui generis* right because in most practical cases, such investments would have to be regarded as investments in the ‘creation’ of data”<sup>168</sup>. Going back to the above described BDA value chain<sup>169</sup> this means that, following a strict interpretation of the Directive, the *sui generis* right would protect only raw data (Data Recording) and data refined (Data Curation) but would not extend its protection to

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<sup>165</sup> Communication from the Commission “A European strategy for data”, (COM(2020) 66 final), 13.

<sup>166</sup> “Member States shall provide for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database”.

<sup>167</sup> Falce V., *Copyrights on data and competition policy* cit., 39-40, and other literature here mentioned. The Author also observes that the allocation of this right to a Big Tech might constitute a (further) potential barrier to entry, because the protected firm may refuse/limit access to the database to the harm of competitors. Hence the initial proposal of the European Commission to abrogate the *sui generis* right (albeit we know that art. 24 of the Directive 2019/790/EU did not abrogate it). Anyway, should the *sui generis* right apply to BDA, competition enforcers might still object an abuse of right and/or an abusive refuse to license/deal under art. 102 TFEU.

<sup>168</sup> See for instance Leistner M., *Big Data and the EU Database Directive 96/9/EC: Current Law and Potential for Reform*, in Lohsse S. – Schulze R. – Staudenmayer D. (eds.), *Trading Data in the Digital Economy: Legal Concepts and Tools*, Nomos, Baden-Baden (DE), 2017, 25 et seq.

<sup>169</sup> Again, see above § 4 of Part I.

Analytics (Data Analysis) and to “secondary” data, like those created, as by-products of the primary sources data, through AI.

### § 6.2.2 Ownership Vs. Access

The opportunity to introduce a **data producer right** in order to ensure legal certainty and, so on, to allow a more trusted circulation of data within the DSM, has been compared to the possibility of regulating **data access**<sup>170</sup>.

#### 6.2.3 (Personal and Non-Personal) Data protection: Privacy, Trade Secrecy, Cybersecurity

Provided data in the DDE data has become a sort of new “currency”, on the consumers’/customers’ side, and a productive input and a valuable asset, on the traders’/commercial partners’ side, the need to ensure high standards of protection on personal and non-personal data has accordingly increased, thus posing significant issues in the field of Privacy, Trade Secrecy and Cybersecurity.

**7.2.3.1** Personal data protection is probably the area of the Digital Single Market strategy where the EU, following the entry in force of the General Data Protection Regulation (“GDPR”)<sup>171</sup>, has sorted its greatest success. Nonetheless, the application of the GDPR to BDA might appear problematic for many aspects<sup>172</sup>.

**6.2.3.2** While under certain conditions it seems possible to qualify algorithms as a “trade secrecy” under art. 2, § 1 of the Directive 2016/943/EU<sup>173</sup>, it is questioned whether the same protection shall be granted to data.

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<sup>170</sup> Part III, § 4.2.1.

<sup>171</sup> Regulation 2016/679/EU “*on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)*”.

<sup>172</sup> See Part III, § 3.4.1.

<sup>173</sup> This is the opinion of Maggiolino M., *EU Trade Secrets Law and Algorithmic Transparency*, March 31<sup>st</sup>, 2019, *Bocconi Legal Studies Research Paper No. 3363178*, available at <https://ssrn.com/abstract=3363178> (accessed 12.7.19), in particular § 4.

Provided that granular data can hardly qualify as a trade secret (especially if the unit at stake consists in a personal data), the Directive might apply when it comes to protect the whole dataset<sup>174</sup>.

If we accept this interpretation of the Directive, then its (relative) protection might help to secure, at least in part, the efforts made by the firm to develop and manage the entire BDA value chain. Nonetheless, also this interpretation would not be conclusive. Indeed, since the trade secrecy Directive is based on the preservation of factual secrecy, “once secrecy is lost, legal protection is lost as well”<sup>175</sup>.

The Commission mentioned the possible clarification of the application of the Trade Secrets Protection Directive among the actions to be considered in the context of the DSM strategy<sup>176</sup>.

**6.2.3.3** Of course, no legal protection on (both personal and non-personal) data can exist without strong Cybersecurity, that is a set of technical measures designed to prevent hacking and cybercrime<sup>177</sup>.

For this reason, provided that “*the magnitude, frequency and impact of security incidents are increasing, and represent a major threat to the functioning of network and information systems*”<sup>178</sup>, and given that “*network and information systems, and primarily the internet, play an essential role in facilitating the cross-border movement of goods, services and people*”<sup>179</sup>, the EU, following a 2016 Communication from the Commission<sup>180</sup>, has adopted a legislative act imposing measures for a high common level of security of network and

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<sup>174</sup> Drexler J. – Hilty R.M. – Desautettes L. – Greiner F. – Kim D. – Richter H. – Surblytè G. – Wiedemann K., *Position Statement of the Max Planck - Data Ownership and Access to Data*, available at [https://www.ip.mpg.de/fileadmin/ipmpg/content/stellungnahmen/positionspaper-data-eng-2016\\_08\\_16-def.pdf](https://www.ip.mpg.de/fileadmin/ipmpg/content/stellungnahmen/positionspaper-data-eng-2016_08_16-def.pdf) (accessed 5.6.2018), 7-8.

<sup>175</sup> Wiebe A., *Protection of industrial data* cit., 4.

<sup>176</sup> Communication “A European strategy for data” cit., 13.

<sup>177</sup> See the report of the Center for Strategic and International Studies (CSIS) in partnership with McAfee, *Economic Impact of Cybercrime - No Slowing Down*, February 2018, available at <https://www.csis.org/analysis/economic-impact-cybercrime> (accessed 12.7.19).

<sup>178</sup> Directive 2016/1148/EU, recital 2.

<sup>179</sup> Directive 2016/1148/EU, recital 3.

<sup>180</sup> Communication from the Commission “*Strengthening Europe’s Cyber Resilience System and Fostering a Competitive and Innovative Cybersecurity Industry*” (COM(2016) 410 final).

information systems across the Union (NIS Directive<sup>181</sup>), further enhanced by the subsequent Cybersecurity Act (CSA)<sup>182</sup>.

### § 6.2.3 Democracy, freedom of expression and geopolitics

The DDE undermines values such as democracy and freedom of expression and, especially in certain areas of the world, risks to reshape the geopolitical equilibrium.

**6.2.4.1** The Cambridge Analytica scandal<sup>183</sup> has shined a light on the serious threats that the DDE can pose to democracy.

Indeed, if social networks represent the digital arena where the circulation of individuals' opinions takes place and if the search engines constitute the vehicle to retrieve information used to build such opinions, then it appears immediately clear that online platforms have found the key to figure out individuals' socio-political profiles<sup>184</sup>.

Of course, the possession by few players of what might be defined as the *passepartout* to individuals' core identity has serious implications in terms of democracy<sup>185</sup>.

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<sup>181</sup> Directive 2016/1148/EU “concerning measures for a high common level of security of network and information systems across the Union”: see Part III, § 3.2.

<sup>182</sup> Regulation 2019/881/EU “on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology cybersecurity certification and repealing Regulation (EU) No 526/2013 (Cybersecurity Act)”: see Part III, § 3.2.

<sup>183</sup> The scandal has been denounced by the New York Times Report edited by Rosenberg M. – Confessore N. – Cadwalladr C., *How Trump Consultants Exploited the Facebook Data of Millions*, March 17<sup>th</sup>, 2018, available at <https://www.nytimes.com/2018/03/17/us/politics/cambridge-analytica-trump-campaign.html?module=inline> (accessed 13.7.19).

<sup>184</sup> On the subject-matter, see Cheney-Lippold J., *We Are Data*, New York University Press, New York, 2017.

<sup>185</sup> UK Information Commissioner's Office (ICO), *Democracy disrupted? Personal information and political influence*, July 11<sup>th</sup>, 2018, available at <https://ico.org.uk/media/action-weve-taken/2259369/democracy-disrupted-110718.pdf> (accessed 10.2.19); Ainis M., *Il regno dell'uroboro. Benvenuti nell'era della solitudine di massa*, La Nave di Teseo, Milan (IT), 2018; Benvenuti E., *Upholding Democracy Amid the Challenges of New Technology: What Role for the Law of Global Governance?*, in *The European Journal of International Law*, Vol. 29 (2018), Issue 1, 9 et seq.; Casini L., *Googling Democracy? New Technologies and the Law of Global Governance: Afterword to Eyal Benvenuti's Foreword*, in *The European Journal of International Law*, Vol. 29 (2018), Issue 4,

The singular aspect of this trend is that, differently from what happened with Rockefeller and Carnegie, Big Techs managed to “monopolize” also people’s blessing, being praised and appreciated by the majority of the users<sup>186</sup>. This dynamic strengthens their position in terms of public opinion and, at the same time, weakens the one of regulators, whose intervention might be deemed to lack of social acceptance.

**6.2.4.2** In this context, a very hot topic is the proper regulatory approach to address the fake news problem<sup>187</sup>. Such an intervention, albeit very important, shall be carefully balanced with the concomitant need to ensure freedom of expression. This is the reason why designing adequate policies in this field is recognized to be a very delicate task.

A further issue strictly connected to fake news is how to ensure information pluralism in the DDE era.

Indeed, algorithms might well influence the ranking criteria of news, so that information pluralism might result seriously harmed if the ranking algorithm is non-neutral. But ranking tends to be *per se* non-neutral, due to the so-called “filter bubbles” or “echo chambers”, a particular effect that occurs when the algorithms make the users browse within a personalised ecosystem where the output to their queries is targeted on their own profiles, commercial preferences and socio-political beliefs, thus creating “confirmation biases” and “echo

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1071 et seq. On the topic see also O’Neil C., *Weapons of Math Destruction. How Big Data Increases Inequality and Threatens Democracy*, Penguin, UK, 2017 and the contributions included in Section 3 of Moore M. – Tambini D. (eds.), *Digital Dominance. The Power of Google, Amazon, Facebook and Apple*, Oxford University Press, New York, 2018, 265 et seq.

<sup>186</sup> This is the view expressed by Bartlett J., *The People vs. Tech. How the Internet is Killing Democracy (and How we Save it)*, Ebury Press, London, 2018, 159. According to Srnicek N., *Platform Capitalism*, Polity Press, Cambridge, 2017, 92, Big Tech monopolists hold (not only strong market power but also) the social infrastructure. Moving from these positions, Mannoni S. – Stazi G., *Is Competition A Click Away?* cit., 105 conclude that individual can be viewed as the main beneficiary and the main victim of the Fourth Industrial Revolution.

<sup>187</sup> Pizzetti F., *Fake news e allarme sociale: responsabilità, non censura*, in *Rivista di diritto dei media*, Vol. 1 (2017), 48 et seq.; Pitruzzella G. – Pollicino O. – Quintarelli S., *Parole e potere. Libertà d’espressione, hate speech e fake news*, Egea, Milano (IT), 2017; Martusciello A. – Petti R., *Il caos dell’informazione*, Società Dante Alighieri, Florence (IT), 2019.

chambers”. In this way “filtered users” will never exit from what we might call the “self mirror” or “ego comfort-zone”<sup>188</sup>.

**6.2.4.3** By exploiting their strong brand and popularity, Big Techs can compete, especially in BRICS countries, even at a higher level: sovereignty<sup>189</sup>. Historically, minting coins has been considered the maximum expression of sovereignty.

Well, on June 18<sup>th</sup>, 2019 Facebook has announced<sup>190</sup> the launch in 2020 of “Libra”<sup>191</sup>, a cryptocurrency that will be saved, sent and spent through the digital wallet “Calibra”.

The key factors of this currency will be: i) trust (Libra will be built on a secure, scalable, and reliable blockchain technology); ii) stable value (Libra will be backed by a reserve of assets that help keep its value stable<sup>192</sup>); iii) independent governance (Libra will be governed by the independent Libra Association<sup>193</sup>, tasked with evolving the ecosystem and based in Geneva).

The (not hidden) objective of this project is to launch a “global currency” – and the use of this expression in the White paper appears self-explanatory – specifically conceived for those (many) who still remain “unbanked”<sup>194</sup>.

The plan is clear: trying to substitute (and, in BRICS countries, to anticipate) sovereignty, through a communication strategy suggesting the equivalence

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<sup>188</sup> Sumpter D., *Outnumbered. From Facebook and Google to Fake News and Filter Bubbles – The Algorithms that Control Our Lives*, Bloomsbury, London (UK), 2018, 141.

<sup>189</sup> Rampini F., *Rete padrona. Amazon, Apple, Google & co. Il volto oscuro della rivoluzione digitale*, Feltrinelli, Milano (IT), 2014 emphasizes also the Big Techs’ attitude to tax avoidance, which can well be considered a further anti-establishment conduct.

<sup>190</sup> <https://newsroom.fb.com/news/2019/06/coming-in-2020-calibra/> (accessed 24.7.19).

<sup>191</sup> More information are available at <https://libra.org/en-US/> and in the White paper from the Libra Association Members “An Introduction to Libra”, downloadable by the same website.

<sup>192</sup> Such a reserve will be constituted and maintained by a group of investors.

<sup>193</sup> “Libra Association is governed by diverse businesses, nonprofit and multilateral organizations, and academic institutions. Organizations join the association by running a validator node on the network and serving in governance” (<https://libra.org/en-US/partners/>, accessed 24.7.19).

<sup>194</sup> See again <https://newsroom.fb.com/news/2019/06/coming-in-2020-calibra/>: “For many people around the world, even basic financial services are still out of reach: almost half of the adults in the world don’t have an active bank account and those numbers are worse in developing countries and even worse for women”.

between the concepts of “On-line Community” and “Nation”, supported, at least in the short term, by tangible benefits for the people more in need.

## **§ 7 From BDA to digital platforms: common characters and economic features**

Much of the ongoing debate on the DDE focuses on the status achieved by large digital platforms, often referred to as “Big Techs”, “Datapolist” or “GAFA(M)”<sup>195</sup>.

Digital platforms fully understood the potential for economic growth associated to BDA and tailored their business models and ITC architectures around this digital asset.

So far, a single normative definition of digital platform is not given.

According to the Commission<sup>196</sup>, online platforms share some important and specific characteristics:

- they have the ability to create and shape new markets, to challenge traditional ones, and to organise new forms of participation or conducting business based on collecting, processing, and editing large amounts of data;
- they operate in multisided markets but with varying degrees of control over direct interactions between groups of users;
- they benefit from network effects;
- they often rely on information and communications technologies to reach their users, instantly and effortlessly;
- they play a key role in digital value creation, notably by capturing significant value (including through data accumulation), facilitating new business ventures, and creating new strategic dependencies.

Examples of activities falling within this description include online search engines, social media and creative content outlets, online marketplaces,

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<sup>195</sup> Google, Amazon, Facebook, Apple and Microsoft.

<sup>196</sup> Communication from the Commission “*Online Platforms and the Digital Single Market. Opportunities and Challenges for Europe*” (COM(2016) 288 final), § 2.



platforms for the collaborative economy, price comparison websites, communications services, payment systems and app stores.

The great argument with digital platform is that their attempt to disrupt has been too successful.

Concerns for the quasi natural inclination of digital markets toward concentration are on top of the agenda of almost all policymakers.

The reports recently issued on the topic unanimously share the view that digital markets are affected by serious and structural market failures, often summarized with the two metaphors of the “winner-takes-all” (or, more realistically, “winner-takes-most”<sup>197</sup>) dynamic and of the “hard to dislodge” large incumbent player<sup>198</sup>.

To start with, in the digital economy the cost of production is much less than proportional to the number of customers served. While the concept of economy of scale is always been present in mass production industries, digital markets pushes this phenomenon to the extreme. On the supply-side, just think about the marginal cost of copying and online distributing additional units of an already developed digital product or service; similarly, remaining within the BDA value chain, think about the marginal cost of storing one more data, which will be very low in the presence of scalable architectures. On the demand-side, economies of scale are strictly related to the upward

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<sup>197</sup> Digital Competition Expert Panel (chaired by Furman J.), *Unlocking digital competition*, Report for the Government of the United Kingdom, March 2019, available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/785547/unlocking\\_digital\\_competition\\_furman\\_review\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf) (“UK Digital Competition Expert Panel Report”), 35, § 1.81.

<sup>198</sup> Crémer J. - de Montjoye Y.-A. - Schweitzer H., *Competition Policy for the digital era*, Final report for European Commission - Directorate-General for Competition, April 4<sup>th</sup>, 2019, available at <https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf> (“Report for the European Commission”), 36; UK Digital Competition Expert Panel, 41, § 1.112; Stigler Committee for the Study of Digital Platforms, Market Structure and Antitrust Subcommittee, *Final Report*, September 2019, available at <https://research.chicagobooth.edu/stigler/events/single-events/antitrust-competition-conference/digital-platforms-committee> (“Stigler Report”), 8; UK Competition and Markets Authority (CMA), *Online Platforms and Digital Advertising*, Market Study Interim Report, December 18<sup>th</sup>, 2019, available at [https://assets.publishing.service.gov.uk/media/5dfa0580ed915d0933009761/Interim\\_report.pdf](https://assets.publishing.service.gov.uk/media/5dfa0580ed915d0933009761/Interim_report.pdf) (“UK CMA Interim Adv Report”), 11.

discontinuity in demand when the price reaches zero (“zero effect”)<sup>199</sup>. Moreover, digital platforms face drastically lower distribution costs than brick and mortar firms and enjoy a global reach<sup>200</sup>. Last but not least, AI-driven business models exponentially benefit from scale, because the more data are collected, the more the AI algorithm will be trained, the more it will become efficient and accurate, thus generating secondary data, in a never ending circular process<sup>201</sup>. A bidirectional relationship exists between quality and

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<sup>199</sup> Report for the European Commission, 20, where it is further noticed that, due to said extreme returns of scale, no firm, unless armed with a much superior and cheaper technology, would be willing to enter a market dominated by an incumbent, even when this incumbent is making large profits, because in that scenario both of them would have the incentive to lower their price to steal the other’s clients. See also UK Digital Competition Expert Panel, 32, § 1.68 et seq.; Schallbruch M. - Schweitzer H. - Wambach A. (Commission “Competition Law 4.0”), *A new competition framework for the digital economy*, September 2019, available at [https://www.bmwi.de/Redaktion/EN/Publikationen/Wirtschaft/a-new-competition-framework-for-the-digital-economy.pdf?\\_\\_blob=publicationFile&v=3](https://www.bmwi.de/Redaktion/EN/Publikationen/Wirtschaft/a-new-competition-framework-for-the-digital-economy.pdf?__blob=publicationFile&v=3), Report for the German Federal Ministry for Economic Affairs and Energy (“German 4.0 Report”), 21; Stigler Report, 11; UK CMA Interim Adv Report, 39, Box 2.2; Italian Competition Authority – Italian National Regulatory Authority for Electronic Communications – Italian Data Protection Authority, *Indagine Conoscitiva su Big Data*, February 2020, available at [https://www.agcm.it/dotcmsdoc/allegati-news/IC\\_Big%20data\\_imp.pdf](https://www.agcm.it/dotcmsdoc/allegati-news/IC_Big%20data_imp.pdf); <https://www.agcom.it/documents/10179/4409501/Documento+generico+10-02-2020+1581346981452/39c08bbe-1c02-43dc-bb8e-6d1cc9ec0fcf?version=1.0> and <https://www.garanteprivacy.it/documents/10160/0/Indagine+conoscitiva+sui+Big+Data.pdf/58490808-c024-bf04-7e4e-e953b3d38a9a?version=1.0> (“IT Joint Sector Enquiry”), 14 and 71; Australian Competition and Consumer Commission (ACCC), *Digital platforms inquiry*, June 2019, available at <https://www.accc.gov.au/publications/digital-platforms-inquiry-final-report> (“Australian Adv Report”), 73.

<sup>200</sup> See Stigler Report, 12.

<sup>201</sup> To give an example, in the (cleared) Microsoft/Yahoo merger the U.S. Department of Justice noted that “*The transaction will enhance Microsoft’s competitive performance because it will have access to a larger set of queries, which should accelerate the automated learning of Microsoft’s search and paid search algorithms and enhance Microsoft’s ability to serve more relevant search results and paid search listings, particularly with respect to rare or «tail» queries. The increased queries received by the combined operation will further provide Microsoft with a much larger pool of data than it currently has or is likely to obtain without this transaction. This larger data pool may enable more effective testing and thus more rapid innovation of potential new search-related products, changes in the presentation of search results and paid search listings, other changes in the user interface, and changes in the search or paid search algorithms. This enhanced performance, if realized, should exert correspondingly greater competitive pressure in the marketplace*” (see *Statement of the Department of Justice Antitrust Division on Its Decision to Close Its Investigation of the Internet Search and Paid Search Advertising Agreement Between Microsoft Corporation and Yahoo! Inc. Investigation Shows That Agreement Not Likely to Reduce Competition*, February 18<sup>th</sup>, 2010, available at <https://www.justice.gov/opa/pr/statement-department-justice-antitrust-division-its-decision-close-its-investigation-internet>, accessed 28.4.2017). In that case, the

quantity of data<sup>202</sup>: a ML algorithm will be most optimal to achieve its given objective if it is provided with relevant data<sup>203</sup>.

In addition, once they manage to achieve a certain critical mass of users, solving the “chicken and egg” problem, digital platforms can exploit powerful network effects<sup>204</sup>, which can be both direct and/or indirect<sup>205</sup>. As a by-product of network effects, positive loops or positive feedbacks are generated<sup>206</sup>. Direct network effects can be viewed as “demand side economies of scale”<sup>207</sup> and can be observed within a single product market: the more the customer base of a certain product (e.g. video communications service) will enlarge, the more new customers will be attracted to use that product. Conversely, indirect network effects occur when a company creates value by matching customers with complementary needs, as typically happens in platform economy. Such positive loops are generated when the value to participants in each market (more properly, in each “side” of the two-sided<sup>208</sup> or multi-sided<sup>209</sup> matched by

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merger has not been blocked especially because of the competitive pressure which the merged entity was expected to exert on Google.

<sup>202</sup> Here the BDA definition Vs for “volume” and “veracity” play a fundamental role: see above Part I, § 3.

<sup>203</sup> Kathuria V., *Greed for data and exclusionary conduct in data-driven markets*, in *Computer Law & Security Review*, Vol. 35 (2019), Issue 1, 91.

<sup>204</sup> The essential economics of the theory of network effects have been shown in Rohlfs J., *A theory of interdependent demand for a communications service*, in *Bell Journal of Economics and Management Science*, Vol. 5 (1974), Issue 1, 16 et seq.

<sup>205</sup> As explained in the European Commission’s decision C(2004)900 final of 24.03.2004 in Case COMP/C-3/37.792 *Microsoft*, § 420, footnote 536: “a product market is said to exhibit network effects when the overall utility derived by consumers who use the product in question is dependent not only on their private use of the product, but also on the number of other consumers who use the product. Such a network effect is a direct network effect. An indirect network effect occurs when the value of a good to a user increases as the number and variety of complementary products increase”.

<sup>206</sup> Indeed, the accumulation of data can lead to significant improvements of data-driven services which in turns can attract more users, leading to even more data that can be collected. As explained in Shapiro C. – Varian H.R., *Information Rules: A Strategic Guide to the Network Economy*, Harvard Business Press, Boston (MA), 1999, 175, such “positive feedback makes the strong get stronger and the weak get weaker, leading to extreme outcomes”.

<sup>207</sup> OECD, *Data-driven Innovation for Growth and Well-being. Interim synthesis report*, October 2014, available at <https://www.oecd.org/sti/inno/data-driven-innovation-interim-synthesis.pdf> (accessed 17.2.18), 29.

<sup>208</sup> The first formal modeling of two-sided market is attributable to Rochet J.C. – Tirole J., *Platform competition in two-sided markets*, in *Journal of the European Economic Association*, Vol. 1 (2003), 4, 387 et seq.

the platform) depends on the number of participants in the other (side of the) market, and vice versa. Network effects or externalities can act as a significant barrier to entry, thus preventing a superior platform from overtaking an inferior one<sup>210</sup>.

Economists have observed that when extreme returns of scale meet network externalities undertakings compete “for” the market rather than “in” the market<sup>211</sup>. Hence the conclusion that digital markets are “prone to tipping”<sup>212</sup> and almost structurally originate a “winner-takes-most” dynamic.

The “data advantage”<sup>213</sup> complements the setting. Indeed, the cross-interrogation of large, constantly updated datasets allows Big Techs to achieve significant economies of scope<sup>214</sup>, fostered by machine learning<sup>215</sup>. Because of the non-rivalrous nature of data, the firm controlling such input is in the position to use it in a downstream or conglomerate market. This economic representation of the underlying raw material seems to corroborate the OECD’s view<sup>216</sup> that “most data (not all) are «shared means to many ends» and satisfy

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<sup>209</sup> See for instance Evans D.S. – Schmalensee R., *The Antitrust Analysis of Multi-Sided Platform Businesses*, Coase-Sandor Institute for Law & Economics Working Paper No. 623, 2012, available at [https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1482&context=law\\_and\\_economics](https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1482&context=law_and_economics) (accessed 12.12.2017).

<sup>210</sup> See Report for the Commission, 19 and 28; UK Digital Competition Expert Panel, *supra* note 1, 35, § 1.80 et seq.; Stigler Report, 12; German 4.0 Report, 16; UK Competition and Markets Authority, *supra* note 1, 39, Box 2.2; IT Joint Sector Enquiry, 71; Australian Competition and Consumer Commission, *supra* note 1, 66-68. Perhaps, network effects may also be beneficial to newcomers if they are able to attract a high number of users for other reasons (e.g. innovative feature): see Autorité de la concurrence – Bundeskartellamt, (2016) *Competition Law and Data*, [https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?\\_\\_blob=publicationFile&v=2](https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2) (accessed 10 December 2016), 28.

<sup>211</sup> See Report for the Commission, 36.

<sup>212</sup> See Stigler Report, 12.

<sup>213</sup> UK Digital Competition Expert Panel, 32, § 1.71.

<sup>214</sup> See Report for the Commission, 19 and 33; German 4.0 Report, 14; IT Joint Sector Enquiry, 71-72; Australian Adv Report, 73 (with a special focus on search engines) and 79 (with a special focus on social networks).

<sup>215</sup> See Stigler Report, 14.

<sup>216</sup> OECD, *Data-driven Innovation for Growth and Well-being* cit., 24.

Frischmann's three criteria<sup>217</sup> set down to identify an infrastructure. Therefore, "data can in principle be considered as infrastructural resources"<sup>218</sup>. The data advantage allows Big Techs to attain significant portfolio effects<sup>219</sup>. The combination of said factors, along with a strategic investment policy<sup>220</sup> and the existence of sunk costs<sup>221</sup>, leads to the emergence of leading "digital ecosystems"<sup>222</sup>. Within the ecosystem, certain services, such as for instance operating systems, social networks and search engines, are considered of strategic importance, because they represent the main entrance to the bottleneck<sup>223</sup>.

A circular relationship exists between network effects, the data advantage and portfolio effects, which, in their reciprocal interaction, design the perimeter of the digital ecosystem. The more users are attracted to the platform, the more the platform is considered valuable, the more data are collected, the more the service provided can be improved (either by means of a higher level of personalization or by means of a wider range of services offered to the logged user), the more the user is encouraged to stay within to the digital ecosystem and discouraged to try the competing services.

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<sup>217</sup> According to Frischmann B.M., *Infrastructure: The Social Value of Shared Resources*, Oxford University Press, Oxford-New York, 2012, infrastructure resources are "shared means to many ends", which have to satisfy the following three criteria: 1. The resource may be consumed non-rivalrously for some appreciable range of demand (*i.e.* non-rivalrously criteria); 2. Social demand for the resource is driven primarily by downstream productive activities that require the resource as an input (*i.e.* capital good criteria); 3. The resource may be used as an input into a wide range of goods and services, which may include private goods, public goods, and social goods (*i.e.* general purpose criteria).

<sup>218</sup> This theoretical background is the economic rationale of the debate arisen on the issue of data access.

<sup>219</sup> German 4.0 Report, 19.

<sup>220</sup> UK Digital Competition Expert Panel, 40, § 1107 et seq.

<sup>221</sup> For instance, with specific reference to the market for search engine services, see Australian Adv Report, 73. However, it must be here recalled that, according to Varian H.R., *Big Data: new tricks for econometrics* cit., cloud computing is turning what was previously a fixed cost of computing into a variable cost and is lowering the barriers to entry for working with big data.

<sup>222</sup> See Report for the Commission, 33; UK Digital Competition Expert Panel, 40, § 1.106; Stigler Report, 49; German 4.0 Report, 18. This dynamic has been observed also by the Financial Stability Board (FSB), (2019) *FinTech and market structure in financial services: Market developments and potential financial stability implications*, <https://www.fsb.org/wp-content/uploads/P140219.pdf> (accessed 1010.19), 2.

<sup>223</sup> IT Joint Sector Enquiry, 77.

Once a digital ecosystem is established, it growingly attracts hardware, devices, software, apps, websites and a various range of complementary services. This centripetal force facilitates the creation of “ecosystemic” technical standards, which can pose serious protocol interoperability problems and, in so doing, increase switching costs and lock-in scenarios<sup>224</sup>. Lack of interoperability can also act as a technical barrier to the exercise of the right to data portability<sup>225</sup> and force the data subject to single homing.

In this context, digital platforms understood the importance to also provide ICT services (cloud computing; web analytics; transaction processing; authentication services via proprietary APIs, etc.)<sup>226</sup>. More in general, a strict connection exists between the described network effects, infrastructural capacity and the data advantage. Implementing and hosting a large platform requires massive resources (servers, data storage and/or outsourced cloud service, machine learning, payment systems and so on). Thanks to their tangible resources, Big Techs show the ability to achieve a further economy of scope, by taking on other markets and/or renting out capacity and/or know-how to other firms. In so doing, they gain back valuable aggregated data<sup>227</sup> and monitor investment opportunities, even in the light of evaluating possible “killer acquisitions”<sup>228</sup>.

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<sup>224</sup> See Report for the Commission, 58-60; UK Digital Competition Expert Panel, 36, § 1.87; Stigler Report, 40; German 4.0 Report, 30; IT Joint Sector Enquiry, 78.

<sup>225</sup> As we will see, Art. 20, § 2 GDPR provides that the data subject holds the right to data portability “*where technically feasible*”: Part III, § 3.4.1.

<sup>226</sup> IT Joint Sector Enquiry, 18.

<sup>227</sup> For instance, Amazon’s cloud business line named AWS (Amazon Web Services) allows the owner of the “infrastructure” (*i.e.* the cloud platform) to access to aggregate data on their many start-up clients. This ensures early intelligence on which of them might be a competitive threat and/or an investment opportunity and, at the same time, offers to the hosting platform the possibility of collecting valuable data concerning potential market to enter in (economies of scope).

<sup>228</sup> In the DDE, start-ups tend to generate very modest profits in their early stage. This is mainly because, in order to solve the chicken-and-egg problem, at the beginning they run the business with a well-defined target: reaching a critical mass, conveying user-base (in one-sided markets), matching demand and offer (in multi-sided markets). To do so, low rates or even free of charge services are usually supplied. When the attempt is successful, at a certain point Big Techs compete to acquire the start-up: bids, like the WhatsApp case demonstrates, can also be billionaire. Nonetheless, based on the above described business strategy of such innovative start-ups, the turnover of the target will be in contrast quite low, so that the EUMCR radars (as

The multi-layered technical architecture above described is fostered by a deep knowledge of users' behaviours<sup>229</sup>, especially when it comes to the commercial use of their personal data and attention<sup>230</sup>. Empirical researches revealed the widespread inability of consumers to take care of their interests in a way which is consistent with their declared preferences (privacy paradox<sup>231</sup>), in part because of informational asymmetry, in part because of behavioural biases. Namely, digital platforms show the ability to inspire customer loyalty<sup>232</sup> and to steer demand leveraging on a wide range of sophisticated techniques, including consumers' stickiness with default settings (status quo or confirmation bias),

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well as many national jurisdictions) will fail to detect and attract the transaction (so-called "killer acquisitions"). Some Member States have recently revised their national competition laws: in UK, see amendments on the Enterprise Act 2002 (Share of Supply Test) (Amendment) Order 2018 (SI 2018/578) and (Turnover Test) (Amendment) Order 2018 (SI 2018/593), as explained in Competition and Markets Authority (CMA), *Guidance on changes to the jurisdictional thresholds for UK merger control*, June 11<sup>th</sup>, 2018, available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/715167/guidance\\_on\\_changes\\_to\\_the\\_jurisdictional\\_thresholds\\_for\\_uk\\_merger\\_control.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/715167/guidance_on_changes_to_the_jurisdictional_thresholds_for_uk_merger_control.pdf) (accessed 10.2.19); in Germany and Austria, see Bundeskartellamt – Bundeswettbewerbsbehörde (BWB), *Guidance on Transaction Value Thresholds for Mandatory Pre-merger Notification (Section 35 (1a) GWB and Section 9 (4) KartG)*, July 2018, available at [https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Leitfaden/Leitfaden\\_Transaktionschwelle.pdf?\\_\\_blob=publicationFile&v=2](https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Leitfaden/Leitfaden_Transaktionschwelle.pdf?__blob=publicationFile&v=2) (accessed 3.10.18).

This setting is seen as problematic, because Big Techs show the ability to monitor market trends and to acquire any innovative maverick before it can become a competitive threat. This happens regardless of whether the start-up is in direct competition or not with the big Tech. On the problem of "killer acquisitions", see UK Digital Competition Expert Panel, 45, 1.137; Stigler Report, 53; German 4.0 Report, 17 and 62; IT Joint Sector Enquiry, 81; Australian Adv Report, 75-76. According to the Report for the Commission, 117-118, when the acquired innovative start-up is integrated into the ecosystem, the transaction has little to do with pharmaceutical "killer acquisitions", because the merger is likely to show an efficiency rationale. In such cases, the assessment becomes more complex.

<sup>229</sup> Candeub A., *Behavioral Economics, Internet Search, and Antitrust*, in *I/S: A Journal of Law and Policy for the Information Society*, Vol. 9 (2014), 407 et seq.

<sup>230</sup> UK Competition and Markets Authority, (2015) *The commercial use of consumer data*, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/435817/The\\_commercial\\_use\\_of\\_consumer\\_data.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/435817/The_commercial_use_of_consumer_data.pdf) (accessed 14 December 2016).

<sup>231</sup> Bundeskartellamt, case B6 22/16, decision of 6 February 2019, § 384 (see Part IV); IT Joint Sector Enquiry, 94-95.

<sup>232</sup> German 4.0 Report, 18.

the free-effect, addiction, ever-greater use, short-term gratification, salience or impatience<sup>233</sup>.

Big Tech's ability to take advantage of such behaviours significantly limits multi-homing and further increases barriers to entry.

Finally, when digital platforms become economic (and social)<sup>234</sup> gatekeepers<sup>235</sup>, they also behave as regulators, due to their rule-setting role within the ecosystem<sup>236</sup>. For instance, digital platforms develop ranking algorithms, determine the conditions under which a business user can enter the network, and fix the criteria governing the suspension, delisting, dimming or termination of their accounts and of the associated goods/services sold via the platform. This background is perceived as particularly threatening whenever the Big Tech enjoys a dual role, acting as both an intermediary and a trader operational on-platform.

Additional factors driving this process have been identified<sup>237</sup>.

First, the nature of “experience goods” of many digital products and services (that is: users need to try them and learn about them and value of the product or

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<sup>233</sup> Stigler Report, 37; Report for the Commission, 47-48; UK Digital Competition Expert Panel, 109, § 3.152; UK Competition and Markets Authority, *supra* note 1, 81, § 3.84; IT Joint Sector Enquiry, 30, 93-96 and 101; Australian Adv Report, 10.

<sup>234</sup> This is the concern of Lynskey O., *Regulating 'Platform Power'*, LSE Law, Society and Economy Working Papers 1/2017, available at [http://eprints.lse.ac.uk/73404/1/WPS2017-01\\_Lynskey.pdf](http://eprints.lse.ac.uk/73404/1/WPS2017-01_Lynskey.pdf) (accessed 2.1.18).

<sup>235</sup> This expression is widely used: see Report for the Commission, 48; UK Digital Competition Expert Panel, 41, § 1.117; UK Digital Competition Expert Panel, 98; German 4.0 Report, 47; IT Joint Sector Enquiry, 76; UK Competition and Markets Authority, *supra* note 1, 169, § 5.65 (with specific regard to search engines); Australian Adv Report, 6 (with specific regard to search engines and social networks).

<sup>236</sup> For the definition of digital platforms as “regulators”, see for instance Report for the European Commission, 60-63, German 4.0 Report, 47-48, and Autorité de la concurrence, *Contribution to the debate on competition policy and digital challenges*, February 19<sup>th</sup>, 2020, available at [https://www.autoritedelaconcurrence.fr/sites/default/files/2020-03/2020.03.02\\_contribution\\_adlc\\_enjeux\\_numeriques\\_vf\\_en\\_0.pdf](https://www.autoritedelaconcurrence.fr/sites/default/files/2020-03/2020.03.02_contribution_adlc_enjeux_numeriques_vf_en_0.pdf) (accessed 4.3.20) (“French contribution”), 7.

<sup>237</sup> Barwise P. – Watkins L., *The Evolution of Digital Dominance. How and Why We Got to GAFA*, in Moore M. – Tambini D. (eds.), *The Power of Google, Amazon, Facebook and Apple* cit., 21 et seq. Adopting a West-centered perspective, the chapter mainly focus on the so-called “GAFA” Big Techs (Google, Amazon, Facebook and Apple), but the models here described can be extended also to other companies, first of all to China's “Big Four” (Tencent for mobile messaging and other content and services; Alibaba for e-commerce, digital entertainment and cloud; Baidu for search and AI; Huawei for mobile devices).



service improves with usage) leads to strong user brands and habitual usage, which amounts to a switching cost. Consequently, the inclination of the user to switch to a rival product or service will be inversely proportional to the amount of time spent to learn how to use the unfamiliar service (“brand-specific consumer human capital”)<sup>238</sup>.

Attractiveness to talent employee<sup>239</sup> and corporate cultures<sup>240</sup> make the rest.

Overall, digital markets evolve at an unprecedented speed (remember the “V” for velocity in the BDA definitions<sup>241</sup>).

In conclusion, digital platforms show the ability to acquire remarkable market power in a short period (fast-moving winner-takes-most dynamic). Moreover, once the tipping point is achieved, the market fails to deliver a different allocation of assets and resources, due to high (technical, financial and behavioural) barriers to entry and to the consequently low contestability of the market.

All these features are perceived as structural: economic theory suggests that they belong to the natural order of digital markets.

## § 8 Scope of this research

The advent of Big Techs has generated a huge debate on the ability of (U.S. antitrust laws and of) EU competition laws to effectively and properly detect and tackle market power, abuses of dominant position and cartels in the DDE.

This debate involves a multitude of topics, such as the ultimate goals and objectives of competition law, data as a source of market power, merger control, data as an essential facility, the intersection between competition law

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See Klemperer P., *Markets with Consumer Switching Costs*, in *Quarterly Journal of Economics*, Vol. 102 (1987), Issue 2, 375 et seq.; Ratchford B., *The Economics of Consumer Knowledge*, in *Journal of Consumer Research*, Vol. 27 (2001), Issue 4, 397 et seq.

<sup>239</sup> Big Techs show the ability to attract the best technical, managerial and commercial talent.

<sup>240</sup> The “stay foolish, stay hungry” watchword repeatedly echo at the Big Tech’s premises and CEOs are constantly on the look for emerging threats and opportunities.

<sup>241</sup> Above Part I, § 3.

and data protection law and the annexed possibility of exploring progressist theories of harm, the role of consumer protection, and algorithmic collusion.

It becomes even more complex if the observation point moves from “competition law enforcement” to “competition policy”, which can be identified as a broader branch of the EU law, encompassing also economic regulation sorting pro-competitive effects<sup>242</sup>.

By adopting an EU-centric perspective, this research will try to follow the latter approach.

In so doing, it will be assumed that public intervention shall try to fully understand the complexity of reality but shall not accept to overwrite well-established legal principles, which, especially in this “institutional downturn” era, shall remain a cornerstone of the EU Public Law.

## **Part II - Competition policy in the European Economic Constitution**

### **§ 1. Back to the future?**

It was the Autumn of 2000 when Judge Posner, experiencing the early stage of the Internet revolution, asked himself whether U.S. Antitrust Laws were sufficiently equipped to effectively tackle what he termed “the new economy”: manufacture of computer software; Internet-based businesses (Internet access providers, Internet service providers, Internet content providers); communications services and equipment designed to support the first two markets<sup>243</sup>.

He gave a dual answer to this question.

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<sup>242</sup> See Part II, § 7.1.4 et seq.

<sup>243</sup> Posner R.A., *Antitrust in the New Economy*, John M. Olin Program in Law and Economics Working Paper No. 106/2000, available at [https://chicagounbound.uchicago.edu/law\\_and\\_economics/58/](https://chicagounbound.uchicago.edu/law_and_economics/58/) (accessed 30.9.19) and later published also in *Antitrust Law Journal*, Vol. 68 (2001), Issue 3, 925 et seq.

The first one, theoretical, was positive: Antitrust Laws were flexible enough to adapt themselves to the renewed scene.

The second one, institutional, was negative (or at least more sceptical): in his opinion, Agencies and Courts did not have adequate technical resources to engage this battle on equal terms with tech companies and appeared to be ill suited to cope with the issues posed by these very complex and fast-moving markets.

Twenty years later, the same question is posed once again.

This time, however, the emphasis on the question mark is much stronger, being the implications of the technological revolution at stake way more disruptive than one could expect twenty years ago.

After having introduced the DDE (Part I), this research needs to define the role of competition policy within the European economic constitution (Part II) in order to verify, subsequently, whether the Digital Single Market strategy (DSM) under construction is consistent with the constitutional framework (Parts III and IV) and to explore whether possible areas of improvement exist (Part V).

## **§ 2. The concept of Economic constitution and the European economic constitution.**

One of the first definitions of the concept of “economic constitution” has been given by the ordoliberal Franz Böhm.

In his Schmittian echoing definition<sup>244</sup>, he explained that the economic constitution is a comprehensive decision (*Gesamtentscheidung*) concerning the nature (*Art*) and form of the process of socio-political cooperation<sup>245</sup>.

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<sup>244</sup> Schmitt C., *Verfassungslehre*, Verlag von Duncker und Humblot (Dunker & Humblot), Munich-Leipzig (GE), 1928, 20 described “Constitution” as a comprehensive decision (*Gesamtentscheidung*) concerning the nature and form of the political unit.

<sup>245</sup> Böhm F., *Wettbewerb und Monopolkampf. Eine Untersuchung zur Frage des wirtschaftlichen Kampfrechts und zur Frage der rechtlichen Struktur der geltenden Wirtschaftsordnung*, Carl Heymann, Berlin (GE), 1933, 107.

As observed by Gerber, the economic constitution acted as “the means by which ordoliberalism integrated legal and economic thought”<sup>246</sup>.

According to Hatje the “economic constitution lies at the intersection between economy and jurisprudence”; it “can be understood as the political choices determining the order of national economy”. “The core issue is the control and restriction of power by law, a power which can be exercised by the state as well as by private actors. The solution to the question of power, which belongs to the fundamental tasks of every constitution, is therefore the key to understanding the economic constitution’s legal function”<sup>247</sup>.

It has been also noted that “the notion of ‘economic constitution’ [...] can in general be understood as the combination of foundational principles and norms that govern the rights and obligations of both governments and economic actors in the [...] economic sphere. [...] Ultimately, the economic constitution protects individual economic freedom against both market-power and state-power”<sup>248</sup>.

The European economic constitution has two parts: a micro-economic one, which includes competition law, and a macro-economic one, built around the Monetary Union (EMU)<sup>249</sup>.

According to Hatje, its founding elements are the following:

- Private autonomy;
- Co-ordination through Trade on the Open Markets: showing a neo-classical vision of economics, he hypothesizes a status of balance

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<sup>246</sup> See Gerber D.J., *Constitutionalizing the Economy: German Neo-liberalism, Competition Law and the “New” Europe*, in *American Journal of Comparative Law*, Vol. 42 (1994), Issue 1, 42.

<sup>247</sup> Hatje A., *The Economic constitution within the Internal Market*, in von Bogdandy A. – Bas J. (eds.), *Principles of European Constitutional Law*, Hart Publishing – Verlag CH Beck, Oxford (U.K.) – Munich (GE), II ed., 2010, 590-91, where it is further remarked that the concept of economic constitution is the “engine” of the EU integration process (593).

<sup>248</sup> Gerbrandt A., *Rethinking Competition Law within the European Economic Constitution*, in *Journal of Common Market Studies*, Vol. 57 (2019), Issue 1, 128.

<sup>249</sup> Tuori K., *European Social Constitution: Between Solidarity and Access Justice*, in Purnhagen K. - Rott P. (eds.), *Varieties of European Economic Law and Regulation. Liber Amicorum for Hans Micklitz*, Springer International Publishing Switzerland, Basel (CH), 2014, 371 et seq.

between supply and demand of scarce goods and services achieved through “anonymous co-ordination” between individuals.

This optimal condition would require:

i) Assured Availability of Products and Services (through protection of private property of the means of production and stable currency);

ii) Reduction of Market Barriers through the Fundamental Freedoms (the free movement of goods, persons, services and capitals);

iii) Freedom of Communication (he sees advertising as an annex of economic freedom);

iv) Limited External Access (common market as internal freedom and external unity).

➤ Competition as an Instrument of said Co-ordination, through:

i) undistorted competition;

ii) (partial or total) exclusions (e.g. agriculture or defence);

iii) regulatory intervention for market “malfunction”.

He concludes that, in sum, the European economic constitution, and the way it evolved over years, “puts an end to the discussion of planned economic models. However, considerable scopes of discretion are left to the respective institutions of the Union and its Member States, allowing for the pursuit of different regulatory aims”<sup>250</sup>.

### **§ 3. The Rising Communities as a multifaceted blend of influential economic theories**

It is a common statement that the idea of social market economy (ascribable to Müller’s *Soziale Marktwirtschaft*<sup>251</sup>) today embodied by art. 3, § 3 TEU has been influenced by a blend of different XX<sup>th</sup> century economic theories, with a

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<sup>250</sup> Hatje A., *The Economic constitution* cit., 622.

<sup>251</sup> Müller-Armack A., *Wirtschaftslenkung und Marktwirtschaft*, Kastell, Hamburg (GE), 1946, 65 et seq., described as the “Cologne School” only to stress, regardless of the affinity of thought, his formal extraneity from the ordoliberal movement.

special mention for the ordoliberal movement<sup>252</sup>, an evolution of the Freiburg school<sup>253</sup>.

Born out of the ashes of Weimar crisis and Nazi Germany, the ordoliberal vision sought to mitigate the fundamental individual economic freedom with a *de minimis* (but still necessary and pro-active) level of State intervention, thus differing from the Austrian area liberal vision<sup>254</sup>, more familiar to the Smithian idea of market self-correction through the “invisible hand”<sup>255</sup>.

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<sup>252</sup> Among the most influential studies we can mention Röpke W., *Civitas humana. A humane order of society*, William Hodge and Company Ltd., London-Edinburgh-Glasgow (U.K.), 1948 (English translation of *Civitas Humana. Grundfragen der Gesellschafts und Wirtschaftsreform*, 1944) and *A Humane Economy: The Social Framework of the Free Market*, Regener Publishing, Chicago (U.S.), 1960 (English translation of *Jenseits von Angebot und Nachfrage*, 1958). An accurate historical reconstruction of the ordoliberal movement is provided by Gerber D.J., *Law and Competition in the Twentieth Century Europe. Protecting Prometheus*, Oxford University Press, New York (U.S.), 1998, 232 et seq.

<sup>253</sup> Eucken W., *The Foundations of Economics. History and Theory of Economic Reality*, William Hodge and Company Ltd., London-Edinburgh-Glasgow (U.K.), 1950 (English translation of *Grundlagen der Nationalökonomie*, 1940) and *This Unsuccessful Age or The Pains of Economic Progress*, William Hodge and Company Ltd., London-Edinburgh-Glasgow (U.K.), 1951 (English translation of *Unser Zeitalter der Mißerfolge. Fünf Vorträge zur Wirtschaftspolitik*, 1951).

<sup>254</sup> von Hayek F., *Competition as a Discovery Procedure*, in *The Quarterly Journal of Austrian Economics*, Vol. 5 (2002), Issue, 9 et seq. (English translation by Marcellus S. of Hayek’s lecture *Der Wettbewerb als Entdeckungsverfahren*, 1968) explains why public interventions aimed at achieving an equilibrium of perfect competition are not desirable. In a purely micro-economics perspective, this would indeed reduce individuals’ incentives to unlock progress through their attempts and their failures (methodological individualism approach). In this neo-Austrian liberal vision, as far as possible State intervention should not take place at all (self-organization market). Conversely, in the (less optimistic) view of Schumpeter J.A., *Capitalism, Socialism, and Democracy*, Harper & Brothers, London (U.K.) – New York (U.S.), 1942, 83 competition between individuals (and, more broadly, Capitalism as such) can be defined as a process of “creative destruction” (*schöpferische Zerstörung*): “The opening up of new markets, foreign or domestic, and the organizational development from the craft shop to such concerns as U.S. Steel illustrate the same process of industrial mutation - if I may use that biological term - that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism”). In the long run, Schumpeter predicted the replacement of Capitalism by Corporativism and, as a further consequence, social democratic parties to be elected to Parliaments and to introduce welfare States limiting or even abolishing Capitalism.

<sup>255</sup> In the “Classic Economics” invisible hand view, State intervention in economy is not desirable at all, because the individuals’ interests, if not constrained or conditioned by State action, will lead to a natural order by self-regulating and self-correcting each other. See Smith A., *An Inquiry Into the Nature and Causes of the Wealth of Nations* (Cannan E. ed.), Vol. I, Methuen, London (U.K.), 1776, 453-471, bringing the example of the merchant who, even in the absence of import restrictions, would still prefer to support domestic industry, being him “led by an invisible hand to promote an end which is no part of his intention” and from which society at large will take advantage.

More to the point, the core assumption of ordoliberals was for economy to be governed because, in the absence of State intervention, the opposing forces on the market would bring to self-destruction and, so on, to socially undesirable outcomes; at the same time, in order to safeguard the open market principle, public intervention functional to the establishment of the “order”<sup>256</sup> had to be carefully dosed, by applying a subsidiarity and strict proportionality principle<sup>257</sup>, still nowadays summarized in the “rule-exception principle”<sup>258</sup>. In reaction to the freedom paradox as described by Karl Popper (in sum: my freedom, if unlimited and uncontrolled, will limit yours), ordoliberals intended to protect both the freedom of economic activity of all market participants and the freedom of competition itself<sup>259</sup>.

Despite in the years immediately following the Second World War many informed observers saw Europe’s future as socialist, predicting a high degree of State control of economy and a decreasing sphere of operation for personal freedom and competition<sup>260</sup>, it must be noticed that in the post-War Germany the concept of the social market economy assumed a meaning opposite to socialism, social democracy and Keynesianism and, more in general, was alternative to direct redistribution and economic control or intervention by the State. Quoting a pamphlet for the Christian Democratic Union of Germany (CDU) and Christian Social Union in Bavaria (CSU) Düsseldorf Conference in July 1949, first Chancellor of the Federal Republic of Germany Konrad Adenauer explained: “[social market economy] is a conception linked to the social, an economy in which the outcomes of the work of free and capable men are harmonized into an order bringing maximum economic profit and social

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<sup>256</sup> This was the idea suggested by the famous “ORDO Journal”, founded in 1948 by Eucken and Röpke.

<sup>257</sup> De Pasquale P., *L’economia sociale di mercato nell’Unione europea*, in *Studi sull’integrazione europea*, Vol. 4 (2014), 265 et seq., 268.

<sup>258</sup> Hatje A., *The Economic constitution* cit., 620.

<sup>259</sup> Drexler J., *Competition Law as Part of the European Constitution*, in von Bogdandy A. - Bast J. (eds.), *Principles of European Constitutional Law*, II ed., Hart Publishing – Verlag CH Beck, Oxford (U.K.) – Munich (GE), 2010, 660.

<sup>260</sup> Gerber D.J., *Constitutionalizing the Economy* cit., 25.

justice to all. This system is radically opposed to that of the planned economy we reject, whether its directives derive from centralized or decentralized, official or private bodies. It is likewise opposed to the so-called «free economy» and it is in order to prevent a return to it that independent control of monopolies is necessary so as to ensure healthy competition”<sup>261</sup>.

Indeed, purely redistributive social transfers were not considered as a viable option<sup>262</sup>. Rather, the ultimate goal of public intervention was the creation of equal opportunities within a stable and predictable economic framework; once achieved this minimum (and at the same time maximum) result, the ordoliberal doctrinal belief was for the State to stop its action because social improvements would then follow almost automatically.

It must be remarked that equal opportunities meant something more than just “level playing field”. It meant, in the Ordoliberal movement likewise in the Cologne School, “an «activist» (but neither protectionist nor *dirigiste*) public policy”<sup>263</sup>.

In other words, “a «third way» between democracy and socialism, between the American «West» and the Soviet «East»”<sup>264</sup>.

As said, there is a large consensus that the ordoliberal doctrine strongly influenced the rise of European Competition Law, which entered the TEEC especially due to the German pressure<sup>265</sup>.

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<sup>261</sup> Adenauer K., *Memoirs 1945-1953*, Weidenfeld & Nicolson, London (U.K.), 1966. See also Young B., *German Ordoliberalism as Agenda Setter for the Euro Crisis: Myth Trumps Reality*, in *Journal of Contemporary European Studies*, Vol. 22 (2014), Issue 3, 277-278,

<sup>262</sup> Siems M. - Schnyder G., *Ordoliberal Lessons for Economic Stability: Different Kinds of Regulation, Not More Regulation*, in *Governance*, Vol. 27 (2014), Issue 3, 381-382.

<sup>263</sup> This is the opinion of Libertini M., *A “Highly Competitive Social Market Economy” as a Founding Element of the European Economic Constitution*, in *Concorrenza e Mercato*, 2011, 491 et seq., who further observes: “In other words, the difference between S.M.E. and liberism is not on the role and the competitiveness of the markets, but on the role of the State (also in supporting efficient markets, by means an active antitrust politics)”.

<sup>264</sup> Gerber D.J., *Constitutionalizing the Economy* cit., 35, referring to the expression used in Clark J.M., *Alternative to Serfdom*, Alfred A. Knopf, New York (U.S.), 1948.

<sup>265</sup> Bayliss B. – El Agra A., *Competition and Industrial Policies with Emphasis on Competition Policy*, in El Agra A. (ed.), *Economics of the European Community*, St. Martin’s Press, New York (U.S.), 1990, 140-141.



The Anglo-Saxon free-market capitalism model, which after the II Worldwide War had exerted a significative impulse to the implementation of the first national laws on competition<sup>266</sup>, lacked political legitimation to give a clear imprinting to the rising Communities<sup>267</sup>.

Conversely, in the context of the founding debate the ordoliberal paradigm had to coexist with the inclination towards a “Jean Monnet-inspired”<sup>268</sup> economic *dirigisme*, historically attributed to France.

## § 4. How did the “constitutional” foundations of competition policy change From Rome (1957) to Lisbon (2007).

### § 4.1 Ancient Competition law

The early Europe<sup>269</sup> experienced a stronger influence of the *dirigiste* approach. Schuman’s project to proceed per stages, achieving first the internal market<sup>270</sup> and then, once it was established, undistorted competition within such arena, has been for long curbed by the mainstream political view of the time.

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<sup>266</sup> As reported by Gerber D.J., *Law and Competition in the Twentieth Century* cit., 164: “In the years after the Second World War, as European politicians and bureaucrats faced the problems of economic reconstruction and the new and sometimes resented hegemony of the United States, this perception both influenced and justified key decisions about whether to enact competition laws and what shape they should take”.

<sup>267</sup> Indeed, Britain joined the EEC only on 1<sup>st</sup> January 1973 and the U.S. antitrust laws were born to address very different concerns (on top of the list, the need to dismantle few giant industrial groups in order to limit the threats to economy and democracy connected to their growing market power).

<sup>268</sup> For this expression, see Claassen R. – Gerbrandy A. – Princen S. – Segers M., *Rethinking the European Social Market Economy: Introduction to the Special Issue*, in *Journal of Common Market Studies*, Vol. 57 (2019), Issue 1, 6. *Contra*, see Mioche P., *Le plan Monnet. Genèse et élaboration (1941-1947)*, Publications de la Sorbonne, Paris (FR), 1987, 99-103, according to which Monnet was liberal and anti-planning. In his (minoritarian) idea, the plan Monnet shall be considered more properly as an indicative plan based on empirics rather than *dirigisme*. Though, it has been remarked that “the S.M.E. [social market economy] protects the markets, not the undertakings; whereas dirigism protects the existing undertakings, not the markets in themselves” (Libertini M., *A “Highly Competitive Social Market Economy”* cit.).

<sup>269</sup> Gerber D.J., *Law and Competition* cit.

<sup>270</sup> Schuman Declaration, 1950: “*In contrast to international cartels, which tend to impose restrictive practices on distribution and the exploitation of national markets, and to maintain high profits, the organization will ensure the fusion of markets and the expansion of production*”.

Under the European Coal and Steel Community (ECSC), at the very beginning of the European integration process, the ability of national governments to influence the economic process appeared quite marked: notably, lacking of an adequate level of independence, the High Authority failed to effectively enforce its powers in the field of the sectorial competition law of the time<sup>271</sup>.

Moreover, competition rules themselves embodied elements of planned or semi-planned economy.

Notably, just to bring a meaningful example, where the private or public company held responsible for an abuse of dominant position did not comply to the High Authority's recommendation within a reasonable timeframe, the High Authority, following a consultation with the concerned national government, had the power to fine the infringement and, above all, to set the price and/or quantity and/or to plan production<sup>272</sup>.

Although all references to such *dirigiste* powers disappeared from its provisions, to a certain extent such approach seemed to condition also the first years of application of the TEEC by the Commission and the Courts<sup>273</sup>.

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<sup>271</sup> Namely, with exclusive reference to activities falling within the scope of the coal and steel sectors, the Treaty of Paris (1950) attributed to the High Authority the power to ban and declare void cartels (Art. 66, § 4 ECSC, similar to Art. 101, § 1 TFEU); to temporarily exempt restrictive agreements with beneficial outcomes (Art. 66, § 2 ECSC, similar to Art. 101, § 3 TFEU), to fine any infringements to the aforementioned provisions (Art. 66, § 5 ECSC, similar to Art. 23, § 2 of the EC Reg. n. 1/2003), to prohibit an abuse of dominant position (Art. 66, § 7 ECSC, vaguely similar to art. 102 TFEU); to clear or block a merger (Art. 66, § 1 ECSC, similar to Art. 2, §§ 2-3 EUMCR, hereinafter "EUMCR").

<sup>272</sup> Art. 66, § 7 ECSC: "*If the High Authority finds that public or private undertakings which, in law or in fact, hold or acquire in the market for one of the products within its jurisdiction a dominant position shielding them against effective competition in a substantial part of the common market are using that position for purposes contrary to the objectives of this Treaty, it shall make to them such recommendations as may be appropriate to prevent the position from being so used. If these recommendations are not implemented satisfactorily within a reasonable time, the High Authority shall, by decisions taken in consultation with the Government concerned, determine the prices and conditions of sale to be applied by the undertaking in question or draw up production or delivery programmes with which it must comply, subject to liability to the penalties provided for in Articles 58, 59 and 64*".

<sup>273</sup> Warloutzet L., *The Rise of European Competition Policy, 1950-91: A Cross-Disciplinary Survey of a Contested Policy Sphere*, Robert Schuman Centre for Advanced Studies (RSCAS) Working Papers, n. 80 (2010), available at [https://cadmus.eui.eu/bitstream/handle/1814/14694/RSCAS\\_2010\\_80.pdf?sequence=1&isAllowed=y](https://cadmus.eui.eu/bitstream/handle/1814/14694/RSCAS_2010_80.pdf?sequence=1&isAllowed=y) (accessed 1.10.18).

Art. 2 TEEC identified the establishment of a “*common market*” as a task or objective of the Community.

In the list of the EU “*activities*” necessary to achieve such objectives, Art. 3 TEEC mentioned, under let. g), “*a system ensuring that competition in the common market is not distorted*”.

The 1986 Single European Act<sup>274</sup> did not change the described general setting but fixed the 31 December 1992 as the (programmatic) deadline to establish the “*internal market*” (often referred as “*single market*”)<sup>275</sup>, to be seen as an evolution of the early “*common market*”.

In reviewing the first competition cases, the EECJ showed to consider competition so strictly connected to the common market *mantra* that, at least on a factual standpoint, it has benefited from the same level of protection.

In so doing, competition turned to be an “*objective*” of the EEC, deserving protection “*as such*”, due to its “*close relativeness*” relationship with market integration.

Notably, the first two competition cases brought to the Court concerned sole distributorship contracts able to foreclose parallel import<sup>276</sup> and thus to affect trade between the Member States under art. 85 EEC (*Consten*<sup>277</sup>) and the “*nationalization*” of electric energy as both a state aid incompatible with the common market (artt. 92-93 TEEC) and a new monopoly to be prohibited under art. 37, § 2 TEEC in so far as introducing a new case of discrimination regarding the conditions under which goods are procured and marketed (*Costa v. Enel*<sup>278</sup>).

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<sup>274</sup> Luxembourg, 1986.

<sup>275</sup> Art. 13 of the SEA introduced art. 8a in the TEEC: “*The Community shall adopt measures with the aim of progressively establishing the internal market over a period expiring on 31 December 1992*”.

<sup>276</sup> Vertical agreements foreclosing parallel imports were viewed as a threat to the market integration objective, because they were able to re-introduce *iure privatorum* what had been removed *iure imperii* through the European Customs Union officially established in 1968, that is: separation between national markets.

<sup>277</sup> CEECJ, 13 July 1966, joined cases C-56 and 58/64, *Établissements Consten S.à.R.L. and Grundig-Verkaufs-GmbH v. Commission of the European Economic Community*.

<sup>278</sup> CEECJ, 15 July 1964, case C-6/64, *Flaminio Costa v. E.N.E.L.*

In sum, those were the years of the so-called “embedded competition”<sup>279</sup>.

Under this first period – commonly known as “ancient competition” – the Commission was not required to bring the (burdensome) demonstration of an effective harm to consumers and/or to competitors as a (direct or indirect) consequence of the objected conducts.

This entitled the Commission to adopt a vigorous approach by which re-shaping markets and industry accordingly to its “structuralist” vision (at times – it has been critically observed – also with the double aim of limiting market power of extra-Communitarian undertakings).

The *Continental Can* case is a prominent example of the structuralist approach, as it identified the sole entering of a merger as an abuse of dominant position. No further conducts (and related effects) were investigated and objected<sup>280</sup>.

The EECJ upheld this approach, ruling that Article 86 TEEC (current 102 TFEU) “*is not only aimed at practices which may cause damage to consumers directly, but also to those which are detrimental to them through their impact on an effective competition structure, such as is mentioned in Article 3(f) of the Treaty*”<sup>281</sup>.

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<sup>279</sup> Or “concorrenza soffocata”: see Malaguti M.C., *I valori della concorrenza e del mercato nell’Unione Europea: da Roma, a Maastricht, a Lisbona*, in *Moneta e Credito*, Vol. 68 (2015), 406.

<sup>280</sup> Continental Can, a New York manufacturer of metal containers and other packages, which held close to ninety percent of a German company (SLW), specialized in metal packaging for food. In 1969, Continental Can agreed with the Dutch firm Thomassen & Drijver Verblifa (TDV) and the British firm Metal Box to set up a new European holding company, Europemballage Corporation. The new firm would then purchase the majority shares of TDV, which, like SLW, specialized in packaging for preserved food, as well as in metal caps for glass containers. Continental Can prevailed on the merits. The Court confirmed the EEC’s wide understanding of art. 86 TEEC but, on the merit, found that the Commission had failed to prove that the relevant market should be narrowed to the specialized one of light metal packages for preserved food rather than the larger market for metal packaging in general.

<sup>281</sup> EECJ, 21 February 1973, case C-6/72, *Europemballage Corporation and Continental Can Company Inc. v Commission*, § 26. For a better understanding of this quite expansive approach of the EECJ a brief explanation of the historical backgrounds appears of vital importance: “The period of American-Soviet détente sparked European anxiety over the American commitment to NATO, and the dollar crisis of the late 1960s and 1970s led to the formation of the European Monetary System in 1978. Charles De Gaulle had resigned the French Presidency in 1969, which, in turn, facilitated Great Britain’s entry into the Community in 1973. The Paris Summit of 1974 created the European Council, under whose auspices heads of state would meet several times a year and ordered a high-level report on the potential for political union” (cit. Schwartz

Further demonstrations of the structural approach can be retrieved in the *United Brands*<sup>282</sup>, *Hoffmann La Roche*<sup>283</sup> and *Michelin*<sup>284</sup> cases.

Due to the strong push toward the realization of the internal market exerted by the 1985 Commission's White book<sup>285</sup> and by the Single European Act, the EECJ started to uphold a number of Commission's decision ascertaining the violation of the principle of sincere cooperation under art. 10 TEEC (4, § 3 TEU) in combination with either art. 85 TEEC (101 TFEU) or 86 TEEC (101 TFEU) in relation to national measures restricting competition<sup>286</sup>.

Although it is undisputable that said shift (from focusing on just private to focusing on both private and public activities) helped to strengthen and develop competition law as an autonomous discipline, the underlying final goal still was the removal of the barriers interposed by the Member States to the full expansion of the four freedoms of movement.

Consistently with the "ancillary role" played by competition law at the time, the Commission's calls for the introduction of a merger control system, first with a memorandum dated 1966<sup>287</sup> and then with the 1973 proposal for a

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E., *Politics as Usual: The History of European Community Merger Control*, in *Yale Journal of International Law*, Vol. 18 (1993), Issue 2, 616-617).

<sup>282</sup> EECJ, 14 February 1978, case C-27/76, *United Brands Company and United Brands Continentaal BV v Commission*, § 63.

<sup>283</sup> EECJ, 13 February 1979, case C-85/76, *Hoffmann La Roche v Commission*, § 125.

<sup>284</sup> EECJ, 9 November 1983, case C-322/81, *Nederlandsche Band en Industrie Michelin v Commission*, § 29.

<sup>285</sup> *Completing the internal market*, White Paper from the Commission to the European Council, COM(85) 310 final, Brussels, 14 June 1985. "Member States also increasingly sought to protect national markets and industries through the use of public funds to aid and maintain non-viable companies" (§ 6). "The Commission recognises, however, that certain national protective measures do not in all their aspects fall within the scope of the Treaty" (§ 29).

<sup>286</sup> See for instance EECJ, 16 November 1977, case C-13/77, *SA G.B.-Inno-B.M. v Association des détaillants en tabac (ATAB)*, §§ 31-33. Such an approach has been criticized by Gerard D., *EU Competition Policy after Lisbon: Time for a Review of the 'State Action Doctrine'?*, in *Journal of European Competition Law & Practice*, Vol. 1 (2010), Issue 3, 202 et seq., according to which the provisions of the Treaties intended to protect the internal market (TFEU, Part Three, art. 26 et seq.) and, especially, the four freedoms of movement would suffice to ban such national measures, whereas competition law shall not apply.

<sup>287</sup> *Memorandum on the problem of concentration in the common market*, in *Competition series*, Study No 3 (Brussels, 1966), whereby the EEC Commission noticed that while in relation to joint ventures ending up with the concerned parties remaining on the market post-merger it was possible to apply article 85 CEE (current 101 TFEU) to assess whether the concerned parties were entering agreements or concerted practices (§§ 14-15), such a

regulation<sup>288</sup>, ended up with a failure. Indeed, although the European Parliament endorsed the draft, the proposed regulation failed the test before the member states in Council<sup>289</sup> (as it is well known, the Commission had to wait 16 more years to have its first merger control regulation<sup>290</sup>).

## § 4.2 Modern competition law.

### § 4.2.1 From Common to Single and Internal Market: the emancipation of competition law from market integration

In the light of the above, it seems correct to assert that the gradual process of emancipation of competition law from the common market, first, and single or internal market, then, could experience a more vigorous acceleration only starting from the end of 1992, deadline fixed in the Single European Act to establish the internal market.

A great push toward this emancipation has been given by the subsequent Treaties of Maastricht (1992) and Amsterdam (1997).

With the 1992 Maastricht Treaty, Art. 2 TEEC (from then on TEC) broadened its scope. First, it mentioned within the Community's tasks also the establishing of an "economic and monetary union" (EMU); second, it replaced the (trade law sounding) expression "stricter connections between Member

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possibility was precluded in relation "to agreements whose purpose [was] the acquisition of total or partial ownership of enterprises or the reorganization of the ownership of enterprises (merger, acquisition of holdings, purchase of part of the assets)" (§ 58). In addition, the application of article 85 CEE to mergers was sub-optimal, because, depending on the cases, the provision appeared either over-inclusive or under-inclusive.

<sup>288</sup> Proposal for a Regulation (EEC) of the Council on the control of concentrations between undertakings, COM (73) 1210 final, Brussels, 18 July 1973. Seeds of *dirigisme* were present also in this draft proposal. Indeed, the Commission attempted to resolve the pure-competition-versus-industrial-policy debate by allowing for the exemption of concentrations in EC economic sectors designated for "priority treatment": article 1, § 3 provided for derogation from the rules governing incompatibility as regards concentrations which, although caught by article 1, were indispensable to the attainment of an objective which is given priority treatment in the common interest of the Community, allowing to take account of certain necessities of industrial, technological, social and regional policies applied at Community level.

<sup>289</sup> Schwartz E., *Politics as Usual: The History of European Community* cit., 623.

<sup>290</sup> Regulation 4064/89/EEC on the control of concentrations between undertakings.

States” with the (wider) sentence “economic and social cohesion and solidarity among Member States”. Third, it introduced in the Community’s objectives also “respecting the environment, a high degree of convergence of economic performance, a high level of employment and of social protection”<sup>291</sup>.

From Maastricht until Nice (2002), “undistorted competition” remained listed among the “activities” necessary to fulfil the tasks set out under Art. 2 TEC, simply moving from let. f) to let. g)<sup>292</sup>.

The Treaty of Maastricht inserted a new article (Art. 3a TEC; from the Treaty of Amsterdam on Art. 4 TEC) according to which, “for the purposes set out in Article 2 [TEC], the activities of the Member States and the Community shall include [...] the adoption of an economic policy which is [...] conducted in accordance with the principle of an open market economy with free competition”<sup>293</sup>.

Notably, at the second sentence the newly inserted Art. 102a TEC (renumbered as Art. 98 TEC by the Treaty of Amsterdam) read as follows: “the Member States and the Community shall act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources, and in compliance with the principles set out in Article 3a [TEC]”<sup>294</sup>.

The 1997 Treaty of Amsterdam enriched Art. 2 TEC by meaningfully inserting “a high degree of competitiveness” to the EC’s tasks<sup>295</sup>. It was explicitly specified that the newly introduced objective had to be achieved “by establishing a common [*recte*: internal] market”. Hence, the internal market acted here as a tool to achieve (*inter alia*) “competitiveness” (of the industry).

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<sup>291</sup> Art. G, b), § 2 TEU.

<sup>292</sup> Art. G, b), 3 TEU modified Art. 3, § 1, f) TEEC in Art. 3, § 1, g) TEC.

<sup>293</sup> Art. G, § 4 TEU.

<sup>294</sup> Art. G, § 25 TEU, which also inserted Art. 105 TEC, where the same is provided for the European System of Central Banks (ESCB).

<sup>295</sup> Art. 2, § 2 Treaty of Amsterdam. Starting from Maastricht, “*the strengthening of the competitiveness of Community industry*” was listed also among the EC “*activities*” (Art. 3, § 1, l Maastricht TEC; Art. 3, § 1, m Amsterdam TEC).

Since “undistorted competition” remained an activity by which the EC realized the objectives set out under Art. 2 TEC, by protecting “*competition* [between undertakings] *in the internal market*” (Art. 3, § 1, g TEC) the EC sought to increase “*competitiveness*” of the whole industry.

Thinking this way, it became possible to consider competition law as an autonomous discipline and not anymore as a tool exclusively addressed to establish the internal market.

At the apex of this ascendant climax, Art. 1-3, § 2 of the draft project of the Treaty establishing a European Constitution mentioned “*free and undistorted competition*” as one of the EU’s “*objectives*”<sup>296</sup>.

Case law seemed to follow this direction too.

Although three years later, in the renewed “after Lisbon” setting, the CJEU overruled this part of the decision<sup>297</sup>, the full emancipation of undistorted competition from the internal market paradigm had been clearly shown by the Court of First Instance in the *Glaxo* case<sup>298</sup>.

It concerned contractual clauses whose combined effect resulted in a limitation to parallel import of certain medicines.

The CFI acknowledged that, under the well-established case law, “*agreements which ultimately seek to prohibit parallel trade must in principle be regarded as having as their object the prevention of competition*”<sup>299</sup>.

Without prejudice to the fact that where such a restrictive object is confirmed, the prohibition of the conduct does not require the demonstration of restrictive effects<sup>300</sup>, the Court found that the Commission had been wrong to “*rely on the mere fact that* [such clauses] *established a system [...] intended to limit*

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<sup>296</sup> “*The Union shall offer its citizens an area of freedom, security and justice without internal frontiers, and an internal market where competition is free and undistorted*”.

<sup>297</sup> ECJ, Third Chamber, 6 October 2009, cases C-501/06 P, C-513/06 P, C-515/06 P and C-519/06 P, *GlaxoSmithKline Services Unlimited v. Commission*, §§ 62-63.

<sup>298</sup> CFI, Fourth Chamber, Extended Composition, 27 September 2006, case T- 168/01, *GlaxoSmithKline Services Unlimited v. Commission*.

<sup>299</sup> *Id.*, § 115.

<sup>300</sup> *Id.*, § 111.



*parallel trade as the basis for its conclusion that that provision had as its object the restriction of competition*<sup>301</sup>.

Indeed, also the demonstration of a restrictive object would have required a deep assessment of “*the legal and economic context*”<sup>302</sup>. More in detail, since “*the objective assigned to Article 81(1) EC [...] is to prevent undertakings, by restricting competition between themselves or with third parties, from reducing the welfare of the final consumer of the products in question*”<sup>303</sup>, then “*the application of Article 81(1) EC to the present case [could] not depend solely on the fact that the agreement in question [was] intended to limit parallel trade in medicines or to partition the common market, [...] but also require[d] an analysis designed to determine whether it ha[d] as its object [...] the prevention, restriction or distortion of competition on the relevant market, to the detriment of the final consumer*”<sup>304</sup>. Which, according to the CFI, was not in that specific case<sup>305</sup>.

Regardless of the outcome, this decision appears important at least for two reasons.

First, it considered competition as an autonomous discipline, not necessarily linked to the internal market.

Second, in so doing it embraced the rule of reason method endorsed by the more economic approach (§ 4.2.1).

This is the very essence of what has been termed “modern competition”.

## **§ 4.2.2 The more economic approach**

### **§ 4.2.2.1 The Chicago School long tide**

The U.S. antitrust laws were born to address a freedom and democracy problem.

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<sup>301</sup> *Id.*, § 117.

<sup>302</sup> *Id.*, § 111 and 117.

<sup>303</sup> *Id.*, § 118.

<sup>304</sup> *Id.*, § 119.

<sup>305</sup> *Id.*, § 122.

At the end of the XIX<sup>th</sup> century few large industrial groups (“trusts”) belonging a small group of families (so called “Robber Barons”) controlled most of the economy and of key productive infrastructures.

Their market power was politically perceived as a threat to both small medium enterprise and to democracy<sup>306</sup>.

In response to that, in 1890 the Sherman Act was enacted. Consistently, in its early years antitrust enforcement has been shaped in the light of an underlying political objective: dismantle bigness, break up monopolies.

Albeit in this period the first-generation Harvard “structuralist” School, moving from the industrial economics scheme “Structure, Conduct, Performance”<sup>307</sup>, had tried to conceptualize and model antitrust policy<sup>308</sup>, from mid of the 60’s on a fundamental criticism started to be raised to such an approach: by considering economic conducts through socio-political lens, antitrust used to serve a multitude of goals, which caused a loss of legal certainty and often

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<sup>306</sup> Peritz R.J.R., *Competition Policy in America 1888-1992. History, Rhetoric, Law*, Oxford University Press, New York (U.S.), 1996; Amato G., *Antitrust and the bounds of power. The dilemma of liberal democracy in the history of the market*, Hart Publishing, Oxford, 1997; Collins W.D., *Trusts and the Origins of Antitrust Legislation*, in *Fordham Law Review*, Vol. 81 (2013), Issue 5, 2279 et seq.

<sup>307</sup> Under the SCP test it is argued that market structure influences firm’s conduct and, therein, economic performance: see Chamberlin E.H., *The Theory of Monopolistic Competition*, in *The Economic Journal*, Vol. 43 (1933), Issue 172, 661 et seq.; Robinson J., *The economics of Imperfect Competition*, Macmillan & Co., Ltd., London (U.K.), 1933, models both refined and developed in Bain J.S., *Structure versus Conduct as Indicators of Market Performance: The Chicago-School Attempts Revisited*, in *Antitrust Law & Economics Review*, Vol. 18 (1986), 17 et seq. and Scherer F.M. - Ross D.R., *Industrial Market Structure and Economic Performance*, Houghton Mifflin, Boston (U.S.), III ed., 1990. For an overview on the subject matter, see Ferguson P.R. – G.J. Ferguson, *Industrial Economics: Issues and Perspectives*, Palgrave, London (U.K.), II ed., 1988, and in particular Chapter 2 (“*The Structure-Conduct-Performance Paradigm*”), 13 et seq. On these grounds, the Harvard School believed that antitrust enforcement should necessarily take in account also market structure.

<sup>308</sup> Among the first-generation Harvard School representatives we can mention Clark J.M., *Towards a concept of workable competition*, in *American Economic Review*, Vol 30 (1940), Issue 2, 241 et seq.; *Id.*, *Competition as a Dynamic Process*, The Brooking Institutions, Washington (U.S.), 1961; Mason E.S., *The Current Status of the Monopoly Problem in the United States*, in *Harvard Law Review*, Vol. 62 (1949), 1265 et seq.; *Id.*, *Monopoly in Law and Economics*, in *Yale Law Journal*, Vol. 47 (1937), Issue 1, 34 et seq.; *U.S. v. Aluminum Co. of America (Alcoa)*, 148 F.2d 416, 430 (2d Cir. 1945), 428-29: “*great industrial consolidations are inherently undesirable, regardless of their economic results*”.

degenerated in arbitrary intrusion in freedom of action. Moreover – it was remarked – “when everything is relevant, nothing is dispositive”<sup>309</sup>.

Here came the Chicago School.

Standing on the shoulders of the influential Bork’s<sup>310</sup> and Posner’s<sup>311</sup> studies, this movement went back to a neo-liberal understanding of the (self-correcting) market and substituted the presumption of liability of the big players with the presumption of efficiency of their actions.

This shift relied on the background ideas that markets are “robust”, that actors are rational and that “false positives” (type 1 errors) are more harmful for the market than “false negatives” (type 2 errors), so that, following a purely Law and Economics perspective, under-enforcement shall be favoured to over-enforcement.

From the *Continental T.V. Inc. v. Gte Sylvania Inc.*<sup>312</sup> case on, the Supreme Court constantly adopted a rule of reason approach. Such an approach, as it is well known, requires the full entry of economics into the competitive assessment. In the *Reiter v. Sonotone Corp.* case the Supreme Court explicitly endorsed the Chicago doctrine. Here, quoting Bork, it ruled that “Congress designed the Sherman Act as a ‘consumer welfare prescription’”<sup>313</sup>.

More debated is what meaning should be in practice assigned to Bork’s expression “consumer welfare”<sup>314</sup>.

The mainstream position is for the adoption of a “total (or overall) welfare” (assuming that no prohibition can intervene where, after having outweighed

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<sup>309</sup> Easterbrook F.H., *The Limits of Antitrust*, in *Texas Law Review*, Vol. 63 (1984), Issue 1, 12.

<sup>310</sup> Bork R.H. – Bowman W.S., Jr., *The Crisis in Antitrust*, in *Fortune*, December 1963 and August 1964, afterwards republished, in its expanded version, in *Columbia Law Review*, Vol. 65 (1965), Issue 3, 363 et seq.; Bork R.H., *The Antitrust Paradox: a policy at war with itself*, Basic Books, New York (U.S.), 1978.

<sup>311</sup> Posner R.A., *Antitrust Law: an economic perspective*, University of Chicago Press, Chicago (U.S.), 1976.

<sup>312</sup> *Continental T.V. Inc. v. Gte Sylvania Inc.*, 433 U.S. 36 (1977).

<sup>313</sup> *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979).

<sup>314</sup> From a methodological standpoint, a radical rejection of Bork’s efficiency perspective is offered in Glick M., *The Unsound Theory Behind the Consumer (and Total) Welfare Goal in Antitrust*, in *The Antitrust Bulletin*, Vol. 63 (2018), Issue 4, 455 et seq.

allocative efficiency and productive efficiency, an overall surplus is gained)<sup>315</sup>, but other positions, also in the name of its greater “administrability”, have favoured a “consumer surplus” or, more commonly, “consumer welfare” approach (where the consequences of the conduct on final price and output represents the main benchmark of the analysis, but quality might matter too)<sup>316</sup>. According to other scholars, Bork’s “consumer welfare” simply equated to “competition” itself<sup>317</sup>.

More pragmatic positions have considered the debate concerning antitrust goals as misleading and, to the best, barely useful<sup>318</sup>.

Over time, the Chicago School model has evolved in the (more sophisticated) Post Chicago approach<sup>319</sup> and seemed to converge<sup>320</sup> with the second-generation Harvard School<sup>321</sup>.

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<sup>315</sup> Easterbrook F.H., *Predatory Strategies and Counterstrategies*, in *University of Chicago Law Review*, Vol. 48 (1981), Issue 2, 263 et seq. and *Vertical Arrangements and the Rule of Reason*, in *Antitrust Law Journal*, Vol. 53 (1984), Issue 1, 135 et seq.; Posner R.A., *The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Legality*, in *University of Chicago Law Review*, Vol. 48 (1981), 6 et seq.; Williamson O.E., *Economies As an Antitrust Defense: The Welfare Tradeoffs*, in *The American Economic Review*, Vol. 58 (1968), Issue 1, 18 et seq. (recognizing, in merger control, the importance of the efficiency defence).

<sup>316</sup> Hovenkamp H., *Whatever Did Happen to the Antitrust Movement?*, in *Notre Dame Law Review*, Vol. 94 (2018), Issue 2, 589; *Id.*, *Implementing Antitrust’s Welfare Goals*, in *Fordham Law Review*, Vol. 81 (2013), Issue 5, 2471 et seq.

<sup>317</sup> Orbach B., *How Antitrust Lost Its Goal*, in *Fordham Law Review*, Vol. 81 (2013), Issue 5, 2253 et seq.

<sup>318</sup> Under the “Institutional Perspective” pursued by Hyman D.A. – Kovacic W.E., *Institutional Design, Agency Life Cycle, and the Goals of Competition Law*, in *Fordham Law Review*, Vol. 81 (2013), Issue 5, 2163 et seq., reality is much more nuanced than the academic debate and, in practice, competition agencies, depending on the case and to on the economic context, try to promote different goals. According to Fox E.M., *Against Goals*, in *Fordham Law Review*, Vol. 81 (2013), Issue 5, 2157 et seq. the final objective of antitrust should simply be the safeguard of “robust markets”, that is “the right mix of business freedom, and prohibitory rules and standards”.

<sup>319</sup> Post-Chicago challenged the neo-classical model of the Chicago School, which assumed all economic actors to be perfectly rational, introducing complex game-theory aspects in the competitive assessment: Jacobs M.S., *An essay on the Normative Foundations of Antitrust Economics*, in *North Carolina Law Journal*, Vol. 74 (1995), 219 et seq.; Makovsky L. – Ostroy J.M., *Perfect Competition and the Creativity of the Market*, in *Journal of Economic Literature*, 2001, 479 et seq. Other Post-Chicago scholars argue that the scope of antitrust laws is not limited to consumer welfare but encompasses also other economic ends, including the protection of consumer choice and the prevention of unfair transfers of wealth from consumers to producers: see Lande R.H., *Wealth Transfers As the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, in *Hastings Law Journal*, Vol. 34 (1982), Issue 9, 65 et seq.; Lande R.H. – Averitt N., *Using the “Consumer Choice” Approach to*

Moreover, the Chicago School approach has been partially criticized also by the so-called Market-Egalitarian<sup>322</sup> positions.

Last but not least, a more radical criticism is currently addressed to the Chicago School: the New Brandeisians<sup>323</sup> movement<sup>324</sup> (so-called Hipster Antitrust<sup>325</sup>)

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*Antitrust Law*, in *Antitrust Law Journal*, Vol. 74 (2007), Issue 1, 175 et seq. (they argue that “consumer welfare” should equal to “consumer welfare,” rather than “efficiency”, as it is generally intended in Bork’s perspective) and *Consumer Sovereignty. A Unified Theory of Antitrust and Consumer Protection*, *Antitrust Law Journal*, Vol. 65 (1997), 713 et seq. The consumer choice approach has been criticized in Wright J.D. – Ginsburg D.H., *The Goals of Antitrust: Welfare Trumps Choice*, in *Fordham Law Review*, Vol. 81 (2013), Issue 5, 2405 et seq. (who to this extent focuses their analysis on cases involving nonprice competition and innovation).

<sup>320</sup> This is the view of Kovacic W.E., *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, in *Columbia Business Law Review*, Vol. 1 (2007), 1 et seq. (of course, he describes only a general trend towards convergence, acknowledging that areas of disagreement still exist: 74-75).

<sup>321</sup> Exponents of the second-generation of the Harvard School are Turner D.F., *The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal*, in *Harvard Law Review*, Vol. 65 (1962), 663 et seq.; Areeda P. – Turner D.F., *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, in *Harvard Law Review*, Vol. 88 (1965), 697 et seq.

<sup>322</sup> Fox E.M., *The Modernization of Antitrust: A New Equilibrium*, in *Cornell Law Review*, Vol. 66 (1981), 1140 et seq.; *Id.*, *The Efficiency Paradox*, in Pitofsky R. (ed.), *How the Chicago School Overshot the Market: The Effect of Conservative Economic Analysis on U.S. Antitrust*, Oxford University Press, Oxford (U.K.), 2008, 77 et seq. She argues that “economic efficiency” is a controversial concept used to hide a “conservative economics” background. Dynamic efficiency shall rather be promoted, like in Europe: “we face the Efficiency Paradox: Modern antitrust [...] is meant to help us reach efficiency. However, by trusting dominant firm strategies and leading firm collaborations to produce efficiency, modern U.S. antitrust protects monopoly and oligopoly, suppresses innovative challenges, and stifles efficiency” (78). “The Efficiency Paradox is that, in the name of efficiency, economically conservative U.S. antitrust law protects inefficient conduct by dominant and leading firms and thus protects inefficiency” (88). Conversely, “The European Union values openness, access, rivalry, and the and the competitive structure of markets as mechanisms to produce economic welfare, competitiveness, innovation, and market integration” (86). Moreover, Hyman D.A. – Kovacic W.E., *Institutional Design, Agency Life Cycle* cit., 2164, fn. 5 highlight that in its interpretation of the Celler-Kefauver amendments to the Clayton Act’s merger provision, the Supreme Court in 1962 said “[w]e cannot fail to recognize Congress’ desire to promote competition through the protection of viable, small, locally owned business” (*Brown Shoe Co. v. United States*, 370 U.S. 294, 344 (1962)). A similar position is held by Kirkwood J.B., *The Essence of Antitrust: Protecting Consumers and Small Suppliers from Anticompetitive Conduct*, in *Fordham Law Review*, Vol. 81 (2013), Issue 5, 2425 et seq.

<sup>323</sup> From the name of Justice Brandeis, as a tribute to his dissenting opinion in case *Louis K. Liggett Co. v. Lee*, 288 U.S. 517, 580 (1933): “There is a widespread belief that [...] by the control which the few have exerted through giant corporations, individual initiative and effort are exerted through giant corporations, individual initiative and effort are being paralyzed, creative power impaired and human happiness lessened; that the true prosperity of our past came not from big business, but through the courage, the energy and the resourcefulness of small men; that only by releasing from corporate control the faculties of the unknown many, only by the opening to them of the opportunities for leadership, can confidence in our future be

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restored and the existing misery be overcome; and that only through participation by the many in the responsibilities and determinations of business, can Americans secure the moral and intellectual development which is essential to the maintenance of liberty”.

<sup>324</sup> Stucke M.E., *Reconsidering Antitrust’s Goals*, in *Boston College Law Review*, Vol. 53 (2012), Issue 2, 551 et seq.; *Id.*, *Should Competition Policy Promote Happiness?*, in *Fordham Law Review*, Vol. 81 (2013), Issue 5, 2575 et seq.: “competition policy promotes fair competition while preserving economic freedom, with the ultimate aim of increasing total well-being” (2586). “The literature suggests that competition policy in a post-industrial wealthy country would be more efficacious (in terms of increased wellbeing) in promoting economic, social, and democratic values, rather than simply promoting a narrowly defined consumer welfare objective” (2602). “A competition policy’s consumer welfare standard in theory should inhibit the transfer of wealth from consumers to firms with significant market power. Income and wealth inequality, however, have increased” (2613). In post-industrial economies, “increasing consumer surplus will not always increase total well-being. The happiness economics literature shows that after one’s basic needs are met, increasing income does not significantly after one’s basic needs are met, increasing income does not significantly increase experienced, day-to-day happiness” (2626). “A competition policy that promotes materialism and a consumption culture will likely reduce, rather than increase, well-being” (2637). “Antitrust’s moral, social, and political values, which Congress emphasized, must return to the analysis” (2638). “Competition policy can maintain a competitive market structure by, *inter alia*, lessening regulatory entry barriers, enjoining mergers to monopoly, and arresting trends toward concentration at their incipiency. In doing so, antitrust’s structural remedies disperse not only economic power but political power with fewer monopolies to regulate and less rents to capture” (2641). “A competitive market structure promotes economic opportunity and personal autonomy—a key predictor of well-being” (2642). “Greater consumer surplus, greater productive efficiency, and less deadweight welfare loss are important objectives but are hardly determinative in well-developed, post-industrial economies like the United States. Consumer surplus should be viewed, not as the aim of competition policy, but instead as one incidental byproduct of a competitive process that promotes economic opportunity and freedom” (2645); Stucke M.E. – Ezrachi A., *The Rise, Fall, and Rebirth of the U.S. Antitrust Movement*, in *Harvard Business Review*, December 15<sup>th</sup>, 2017, available at <https://hbr.org/2017/12/the-rise-fall-and-rebirth-of-the-u-s-antitrust-movement> (accessed 10.7.2018): “When monopolies are recognized is an inevitable, permanent part of the economic order, President Woodrow Wilson warned, our last, unwelcome recourse is regulation, where the government invariably will be captured. If we continue going down this path, we may find ourselves with a competitive process that benefits the few at the expense of many and a compromised regulatory framework. Start-ups, small- and mid-sized firms, and many citizens will be left to the beneficence or spite of a few powerful, but arbitrary, corporations. Luckily, this trend is reversible — if we restore antitrust as a primary condition for effective competition”; Wu T., *The Curse of Bigness: Antitrust in the New Gilded Age*, Columbia Global Reports, New York (U.S.), 2018; Tepper J. – Hearn D., *The Myth of Capitalism. Monopolies and the Death of Competition*, Wiley, Hoboken (U.S.), 2018; Khan L.M. – Vaheesan S., *Market Power and Inequality: The Antitrust Counterrevolution and Its Discontents*, in *Harvard Law & Policy Review*, Vol. 11 (2017), 235 et seq. conclude that “[their] argument is not that antitrust should embrace redistribution as an explicit goal, or that enforcers should harness antitrust in order to promote progressive redistribution. Instead [they] hold that the failure of antitrust to preserve competitive markets contributes to regressive wealth and income distribution and—similarly that restoring antitrust is likely to have progressive distributive effects” (294); Khan L.M., *The Ideological Roots of America’s Market Power Problem*, in *The Yale Law Journal Forum*, June 4, 2018, 960 et seq. (in particular at 973: “although the heightened role of economic expertise is justified as bringing greater certainty and objectivity to the law, the rule of reason regime has rendered the law unpredictable and indeterminat”); Horton T.J., *Rediscovering Antitrust’s Lost Values*, in *University of New Hampshire Law Review*, Vol. 16 (2018), Issue 2, 179 et seq.

holds it responsible for the excessive level of concentration characterizing current American markets<sup>326</sup> and calls for a return to antitrust's (structuralist) origins.

This notwithstanding, it seems possible to conclude that still today the Chicago echoing "efficiency" paradigm, although deprived of the more orthodox dogma<sup>327</sup>, appears the predominant line of thought before the U.S. Courts<sup>328</sup>

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<sup>325</sup> For an impressive synthesis of the debate, see Pardolesi R., *Hipster Antitrust e Sconvolgimenti Tettonici: Back to the Future?*, in *Mercato, Concorrenza, Regole*, Vol. 21 (2019), Issue 1, 81 et seq., representing the Chicagoan orthodox faith in the market as much "populist" as the "hipster antitrust" movement (86).

<sup>326</sup> See Council of Economic Advisor's report authored by Jason Furman "*The United States and Europe: Short-Run Divergence and Long-Run Challenges*", May 2016, available at [https://obamawhitehouse.archives.gov/sites/default/files/page/files/20160511\\_cea\\_bruegel\\_us\\_europe.pdf](https://obamawhitehouse.archives.gov/sites/default/files/page/files/20160511_cea_bruegel_us_europe.pdf) (accessed 15.10.2017). The Report shows that comparing the economic situation in the U.S. before and after 1980 one finds several significant changes: in the later period concentration was higher, there was less entry, job creation declined, wages declined, and real investment declined among other changes. The Report does not explicitly deal with the evolution of U.S. Antitrust enforcement following the Chicago School advent around end of 70's, but meaningfully identifies 1980 as a turning point and considers, *inter alia*, that "product market policies also have an important role to play" and that "traditional antitrust enforcement is one aspect of this, although it is important that such actions be based on what is best for consumers and not simply a penalty for success" (16).

<sup>327</sup> Hovenkamp H., *Whatever Did Happen* cit., 597 highlights that on issues such as vertical restraints and vertical mergers as well as predatory pricing the Supreme Court nearly always dismissed the Chicago orthodox view of the "*per se* legality" and rather adopted the "rule of reason" position of the Harvard School, according to which in such circumstances a competitive harm, although unlikely, is still possible.

<sup>328</sup> For a recent case, see the U.S. Court of Appeals for the District of Columbia Circuit, February 26, 2019, No. 18-5214, *U.S. v. AT&T, Inc. et al.* Section 7 of the Clayton Act prohibits mergers "*where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition*". Although it requires more than a "mere possibility" of competitive harm, it does not require proof of certain harm. To this extent, especially in the context of vertical mergers blocking, the government must make a "fact-specific" showing that the proposed merger is "likely to be anticompetitive". In this specific case the government's increased leverage theory was that "by combining Time Warner's programming and DirecTV's distribution, the merger would give Time Warner increased bargaining leverage in negotiations with rival distributors, leading to higher, supracompetitive prices for millions of consumers". The DoJ also submitted the expert opinion of Professor Carl Shapiro on the likely anticompetitive effect of the proposed merger. Upholding the first instance decision, the Court, also in the light of the burden-shifting framework, rejected the DoJ's appeal, because the government failed to bring evidence of the claimed loss of welfare. In doing so, the Court of Appeals implicitly adopted – consistently with the efficiency defence characterizing mergers assessment – a total welfare perspective (see p. 33: "*the district court did not weigh increased prices for consumers against cost savings for consumers, [but only because it] found that the government had not shown at the first level that the merger was likely to lead to any price increases for consumers because of the failure to show that costs for rival MVPDs would increase as a result of Turner Broadcasting's increased leverage in affiliate negotiations after the merger*").

and finds a remarkable number of supporters in the academia<sup>329</sup>. It generally adopts a total welfare standard<sup>330</sup>.

#### § 4.2.2.2 The European version of the Chicagoan more economic approach

Around the end of the 80's similar concerns were raised against European "ancient competition law": over the first decades of enforcement the Commission and the Courts had pursued a multitude of different goals, which didn't help predictability and resulted in a too broad and ambiguous line of intervention.

To address this problems, European competition law "shifted from a legalistic based approach to an interpretation of the rules based on sound economic principles"<sup>331</sup>.

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<sup>329</sup> Hovenkamp H., *Whatever Did Happen* cit., 594: contrary to what he terms "Technical Antitrust", "movement antitrust [that is: "Hipster Antitrust"] often makes claims that are impossible to deliver, or adopts speculative, unprovable theories about competitive harm" (although his conservative position, at 624 Hovenkamp acknowledges that "merger policy needs to become more aggressive to keep higher product prices in check"); Sokol D.D., *Antitrust, Industrial Policy, and Economic Populism*, in Gerard D. - Lianos I. (eds.), *Reconciling Efficiency and Equity: A Global Challenge for Competition Policy*, Cambridge University Press, Cambridge (U.K.), 2019, 289: "Antitrust is better off today in the United States and Europe than in the past. The system is predictable, based on a (more or less) clear standard of economic harm and actual economic effects. [... Other] values are better actualized through broader legislation outside of antitrust for which democratic accountability can better mesh with larger policy goals"; Shapiro C., *Antitrust in a time of populism*, in *International Journal of Industrial Organization*, Vol. 61 (2018), 714 et seq.; Brennan T.J., *Should Antitrust Go Beyond "Antitrust"?*, in *The Antitrust Bulletin*, Vol. 63 (2018), Issue 1, 49 et seq. still believes in the economic efficiency mission and leaves open the possibility to move, at most, from a total welfare standard to a consumer welfare standard; Wright J.D. - Dorsey E. - Klick J. - Rybnicek J.M., *Requiem for a Paradox: The Dubious Rise and Inevitable Fall of Hipster Antitrust*, in *Arizona State Law Journal*, Vol. 51 (2019), Issue 1, 364: "Under a «public interest» or «citizen interest» approach, a transaction that would reduce prices to consumer, increase output, or spur innovation may be prohibited under the antitrust laws for failing to satisfy any number of other vague factors, including failing to leave some arbitrary number of competing firms in the market despite the clear presence of competition or create a more efficient albeit consolidated supply chain". They just claim for sole efficiency considerations in the competitive assessment, but they don't take a clear position on the standard (consumer or total) welfare to be adopted: what really matters is the adoption of an "economic welfare" opposed to "socio-political" or "multi-dimensional" approaches (see 304, nt. 38), which, according to the same authors, would bring to undesirable outcomes (regulatory capture, rent seeking) also in terms of Public Choice: *Hipster Antitrust Meets Public Choice Economics: the Consumer Welfare Standard, Rule of Law, and Rent Seeking*, in *CPI Antitrust Chronicle*, April 2018, 1 et seq.

<sup>330</sup> Blair R.D. - Sokol D.D., *Welfare Standards in U.S. and E.U. Antitrust Enforcement*, in *Fordham Law Review*, Vol. 81 (2013), Issue 5, 2497 et seq., although they acknowledge that U.S. merger control system assesses efficiencies under a consumer welfare standard.



The change of paradigm is commonly known as “more economic approach”<sup>332</sup> (or effect-based approach”).

The following legislative reforms and policy interventions are commonly used to demonstrate such a shift:

- the adoption of the first regulation on merger control<sup>333</sup>;
- the design of the Commission Reg. 2790/1999/EC “*on the application of Article 81(3) to categories of vertical agreements and concerted practices*” and of the Commission notice “*Guidelines on Vertical Restraints*” (2000/C 291/01)<sup>334</sup>, as well of the Guidelines on horizontal cooperation agreements<sup>335</sup> and of the block exemption on technologic transfer agreements<sup>336</sup>;
- the fact that in 2002 the Commission created the position of a Chief Economist;
- the “modernization and decentralization reform” brought by Regulation 1/2003/EC “*on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty*”<sup>337</sup> (repealing Regulation

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<sup>331</sup> These are the words of Commissioner for Competition Mario Monti (1999-2004) in his speech *EU Competition Policy after May 2004*, 24 October 2003, SPEECH/03/489, available at [https://europa.eu/rapid/press-release\\_SPEECH-03-489\\_en.htm](https://europa.eu/rapid/press-release_SPEECH-03-489_en.htm) (accessed 3.4.2018): “the Commission has in recent years revised the totality of its block exemptions regulations and produced guidelines on main types of business practices and agreements that can be caught by competition rules. In making this revision, we have shifted from a legalistic based approach to an interpretation of the rules based on sound economic principles”. See also Monti M., *European Competition for the 21st Century*, in *Fordham International Law Journal*, Vol. 24 (2000), Issue 5, 1602 et seq. According to Drexler J., *Competition Law as Part of the European Constitution* cit., 670 the more economic approach represented “a real shift in paradigms. [...] This means that a given agreement might be illegal in situation «X» but could be legal in situation «Y»”.

<sup>332</sup> Communication from the Commission “*A proactive Competition Policy for a Competitive Europe*”, 20 April 2004, (COM(2004) 293), § 3.1: “*competition rules as well as their enforcement in individual cases will be based on a more economic effects based approach*”.

<sup>333</sup> Regulation n. 4064/89/EEC “*on the control of concentrations between undertakings*”.

<sup>334</sup> See § 7: “*In applying the EC competition rules, the Commission will adopt an economic approach which is based on effects on the market*”.

<sup>335</sup> Commission Notice “*Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements*” (2001/C 3/02).

<sup>336</sup> Commission Regulation 2004/772/EC “*on the application of Article 81(3) of the Treaty to categories of technology transfer agreements*”.

<sup>337</sup> Vogelaar F., *Modernisation of EC competition law, economy and horizontal cooperation between undertakings*, in *Intereconomics*, Vol. 37 (2002), Issue 1, 19 et seq. The European

17/1962/EEC), which abolished the Commission's centralized competence to apply art. 81, § 3 TEC (art. 101, § 3 TFEU) as well as the legal exception system (indeed, under art. 1, § 2 a prior notification of the agreement is not required anymore); moreover, under artt. 5-6 of the Modernization Regulation NCAs and National Courts are now entitled to directly apply artt. 81 and art. 82 TEC (101 and 102 TFEU). Having merged the assessment of art. 101, §§ 1 and 3 TFEU within the same authority helped to develop an effect-based test on cartels more familiar (but not equal<sup>338</sup>) to the U.S. rule of reason approach;

- Art. 2, § 3 EUMCR “*on the control of concentrations between undertakings*” introduced the criterion of “*significant impediment of effective competition*” (SIEC-test) and mentioned the market dominance-test only as a possible example of such an impediment. This means that in theory a merger can be prohibited also in the absence of a dominant position where non-coordinated unilateral effects are expected to play a prominent role (recital 25)<sup>339</sup>. In addition, recital 29 explicitly allows an “efficiency defence”, which is basically intended to investigate whether post-transaction the new and larger player will be able to produce at lower costs;
- since the economic approach sees (neither punishment nor compensation, but rather) deterrence as the primary function of

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Competition Network (ECN) established by Reg. 2003/1/EC has been recently reinvigorated by the directive 2019/1/EU “*to empower the competition authorities of the Member States to be more effective enforcers and to ensure the proper functioning of the internal market*” (ECN+).

<sup>338</sup> As noticed by Whish R. - Bailey D., *Competition Law*, Oxford University Press, Oxford (U.K.), IX ed., 2018, 142-144 the CJEU, although interpreting “reasonably” Artt. 101 and 102 TFEU, did not “import” the rule of reason as experienced in the U.S.

<sup>339</sup> This is a reaction to the fact that in 2002 (*annus horribilis*) the Court of First Instance had annulled three prohibition merger decisions which had failed to demonstrate that in the oligopolistic post-transaction scenario coordinated effects (that is: collective dominance or coordination between the merged entity and the remaining undertakings) were likely to occur (Court of First Instance, Fifth Chamber (extended composition), 6 June 2002, case T-342/99, *Airtours plc v. Commission*; First Chamber, 25 October 2002, case T-5/02, *Tetra Laval BV v. Commission*; First Chamber, 22 October 2002, case T-77/02, *Schneider Electric SA v Commission of the European Communities*).

competition enforcement, the modifications to the system of fines<sup>340</sup>, the introduction of a European leniency programme<sup>341</sup> and private enforcement in follow on actions<sup>342</sup> have been regarded in the light of the principle of full effectiveness;

- starting from the 90's the Commission fostered its interpretation of Art. 90, § 2 TEEC (then Art. 86 TEC, now Art. 106, § 2 TFEU), according to which “*undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in the Treaties, in particular to the rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them*”. As a direct consequence, the Commission started to enact its legislative power laid down under para. 3 of the same provision<sup>343</sup>: here came the liberalizations (after the successful attempt with Telecommunications; Energy; Postal services; Railways have been liberalized by simply using the approximation power laid down under Art. 95 TEC, now Art. 114 TFEU).

Although the advent of the more economic approach undoubtedly had (and still today has) an impact on European competition law, it is quite a common statement that “normative theories”, that is doctrines where values such as

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<sup>340</sup> See § 4 of Commission Guidelines “*on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation No 1/2003*” (2006/C 210/02) (“*the Commission must ensure that its action has the necessary deterrent effect*”) as well as EECJ, 7 June 1983, joined cases 100 to 103/80, *SA Musique Diffusion française and others v. Commission*, § 106.

<sup>341</sup> Commission Notice “*on Immunity from fines and reduction of fines in cartel cases*” (2006/C 298/11).

<sup>342</sup> Before Directive 2014/104/EU “*on certain rules governing actions for damages under national law for infringements of the competition law provisions of the Member States and of the European Union*”, see already ECJ, 20 September 2001, case C-453/99, *Courage Ltd v. Bernard Crehan and Bernard Crehan v. Courage Ltd et al.*, § 27.

<sup>343</sup> Art. 90, § 3 TEEC (86 TEC, 106 TFEU): “*The Commission shall ensure the application of the provisions of this Article and shall, where necessary, address appropriate directives or decisions to Member States*”.

“competition as such”, “competitive structure” and “market integration” might at times deserve protection, did never leave completely the scene.

Even the Commission itself, the leading institution of the transition process, acknowledged that allocative efficiency is not always the answer.

In the DG Competition “*discussion paper on the application of Article 82 of the Treaty to exclusionary abuses*” of December 2005<sup>344</sup>, although the Economic Advisory Group for Competition Policy (EAGCP), relying on the assumption that competing with rivals is the very essence of competition law, had advised to apply art. 82 TEC only where likely consumer harm was proven, the Commission based its analysis on the “foreclosure-effect”<sup>345</sup> rather than on a “direct consumer-effect”, thus embracing a medium-long term and dynamic perspective and favouring free entry of new-comers. Meaningfully, the discussion paper makes clear that “the essential objective of Article 82 [EC] when analysing exclusionary conduct is the protection of competition on the market *as a means* of enhancing consumer welfare and of ensuring an efficient allocation of resources”<sup>346</sup>. The same view has been expressed in the subsequent Guidance on the application of Article 82 of the EC Treaty to exclusionary abuses<sup>347</sup>. This did not prevent the Commission from admitting efficiency defences aimed at demonstrating that the likely efficiencies of the

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<sup>344</sup> DG Competition “*discussion paper on the application of Article 82 of the Treaty to exclusionary abuses*”, December 2005, available at <https://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf> (accessed 4.7.19).

<sup>345</sup> See section 5.1.

<sup>346</sup> § 54 (added emphasis).

<sup>347</sup> Communication from the Commission “*Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings*” (2009/C 45/02), §§ 5 (“Consumers benefit from competition through lower prices, better quality and a wider choice of new or improved goods and services. The Commission, therefore, will direct its enforcement to ensuring that markets function properly and that consumers benefit from the efficiency and productivity which result from effective competition between undertakings”); 6 (“The emphasis of the Commission’s enforcement activity in relation to exclusionary conduct is on safeguarding the **competitive process** in the internal market”, added emphasis) and 19 (“The aim of the Commission’s enforcement activity in relation to exclusionary conduct is to ensure that dominant undertakings do not impair effective competition by foreclosing their competitors in an anti-competitive way, **thus** having an adverse impact on consumer welfare, whether in the form of higher price levels than would have otherwise prevailed or in some other form such as limiting quality or reducing consumer choice”, added emphasis).

conduct outweigh any likely negative effects on competition and consumer welfare in the affected markets<sup>348</sup>, being clear that to this extent the burden of proof is entirely borne by the dominant undertaking.

A deeper scepticism has been shown by the CJEU with respect to the more economic approach<sup>349</sup>.

Indeed, in several decisions the Court has rejected a number of “reasonable” arguments brought by either the Commission or the parties to demonstrate, depending on the cases, that the conduct at stake had to be considered unlawful/lawful due to its direct effects on consumer or total welfare.

In so doing, the Court ruled that when certain conditions are met the Treaties don’t require such a proof, because one might presume that harming the competitive process will indirectly harm consumers too.

This conclusion has been reached with respect to both Artt. 101 (meaningfully in cases involving infringements “by object”)<sup>350</sup> and 102 TFEU<sup>351</sup>.

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<sup>348</sup> See § 30 for price-based exclusionary abuses and § 86 for refusal to deal.

<sup>349</sup> For an analysis on the different approach shown by the Commission and the ECJ/CJEU, see Witt C., *Public policy goals under EU competition law. Now is the time to set the house in order*, in *European Competition Journal*, Vol. 8 (2012), Issue 3, 443 et seq. See also, with special reference to Art. 102 TFEU, van Rompuy B., *The Impact of the Lisbon Treaty on EU Competition Law: A Review of Recent Case Law of the EU Courts*, in *CPI Antitrust Chronicle*, Vol. 1 (2011), 6-8: “the implementation of an effects-based approach that looks directly to consumer welfare effects does not sit well with the formalistic case law of the EU courts. The judicial interpretation of Article 102 TFEU prioritizes the protection of the structure of competition as such. It does not focus on the analysis of competitive effects in terms of output and price, as U.S. antitrust law tends to do. [...] While not immune to consumer welfare considerations, the EU courts have recently reiterated the pre-Lisbon case law which, based on the principle of undistorted competition in the internal market, established that a restraint of competition requires no more than harm to the competitive structure”.

<sup>350</sup> CJEU, Third Chamber, 4 June 2009, case C-8/08, *T-Mobile Netherlands and others v Raad van Bestuur van de Nederlandse Mededingingsautoriteit*, §§ 38-39: “Article 81 EC, like the other competition rules of the Treaty, is designed to protect not only the immediate interests of individual competitors or consumers but also to protect the structure of the market and thus competition as such. Therefore, [...] in order to find that a concerted practice has an anti-competitive object, there does not need to be a direct link between that practice and consumer prices”; CJEU, Third Chamber, 6 October 2009, cases C-501/06 P, C-513/06 P, C-515/06 P and C-519/06 P, *GlaxoSmithKline Services Unlimited v. Commission*, §§ 62-63: “there is nothing in [Article 81(1) EC] to indicate that only those agreements which deprive consumers of certain advantages may have an anti-competitive object. Secondly, it must be borne in mind that [...], like other competition rules laid down in the Treaty, Article 81 EC aims to protect not only the interests of competitors or of consumers, but also the structure of the market and, in so doing, competition as such. Consequently, for a finding that an agreement has an anti-competitive object, it is not necessary that final consumers be deprived

On a methodological standpoint, many scholars have raised criticism about the more economic approach.

The main arguments are that it would be “blind eye to some pressing societal concern”<sup>352</sup> and that, ultimately, it would result counterproductive. Indeed, by referring to something very difficult to assess and to measure (consumers’ harm), the more economic approach would increase “transaction costs” of public enforcement (thus turning anti-economic), lower legal certainty and reduce consumer welfare<sup>353</sup>. Moreover, it would not consider that since

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*of the advantages of effective competition in terms of supply or price*”; CJEU, Grand Chamber, 4 October 2011, joined cases C-403/08 and C-429/08, *Football Association Premier League Ltd. and Others v. QC Leisure and Others and Karen Murphy v. Media Protection Services Ltd.*, § 139: “in accordance with the Court’s case-law, an agreement which might tend to restore the divisions between national markets is liable to frustrate the Treaty’s objective of achieving the integration of those markets through the establishment of a single market. Thus, agreements which are aimed at partitioning national markets according to national borders or make the interpenetration of national markets more difficult must be regarded, in principle, as agreements whose object is to restrict competition within the meaning of Article 101(1) TFEU”.

<sup>351</sup> ECJ, III Chamber, 15 March 2007, case C-95/04 P, *British Airways plc v. Commission*, § 106: “Article 82 EC is aimed not only at practices which may cause prejudice to consumers directly, but also at those which are detrimental to them through their impact on an effective competition structure, such as is mentioned in Article 3(1)(g) EC”; ECJ, Grand Chamber, 16 September 2008, cases C-468/06 to C-478/06, *Sot. Lelos kai Sia EE and others v. GlaxoSmithKline AVEE Farmakeftikon Proïonton*, § 68: “in the light of the Treaty objectives to protect consumers by means of undistorted competition and the integration of national markets, the Community rules on competition are also incapable of being interpreted in such a way that, in order to defend its own commercial interests, the only choice left for a pharmaceuticals company in a dominant position is not to place its medicines on the market at all in a Member State where the prices of those products are set at a relatively low level”; CJEU, First Chamber, 2 September 2011, case C-52/09, *Konkurrensverket v. TeliaSonera Sverige AB*, § 24: “article 102 TFEU must be interpreted as referring not only to practices which may cause damage to consumers directly [...], but also to those which are detrimental to them through their impact on competition”; CJEU, Grand Chamber, 27 March 2012, *Post Danmark A/S v Konkurrencerådet*, Case C-209/10, § 44: “In order to assess the existence of anti-competitive effects in circumstances such as those of that case, it is necessary to consider whether that pricing policy, without objective justification, produces an actual or likely exclusionary effect, to the detriment of competition and, thereby, of consumers’ interests”.

<sup>352</sup> Gerbrandy A., *Rethinking Competition Law* cit., 131.

<sup>353</sup> According to Drexl J., *Competition Law as Part of the European Constitution* cit., 679-682, The more economic approach tends to lower legal certainty and thus to increase transaction costs: “the more economic approach does not yet seem sufficiently «economic»”. “However, advances in economics can be helpful in improving predictions on the future effects”. He would welcome less modelling and more fact checking by the Commission and by the Courts. Finally, he concludes that “it is easier to predict the effects on the competitive process than on the final consumers. Those who favour the requirement of a demonstration of consumer harm, beyond the mere damage of the competitive process, make it more difficult to effectively

competition shall take place on the merits, individuals are not indifferent to the way a certain result has been obtained. Therefore, process matters too, and the consumer welfare standard is unable to detect it<sup>354</sup>.

## § 5. Competition Policy after Lisbon

### § 5.1 The Negotiations and Sarkozy's claimed *coup*

In the context of Lisbon negotiation French President Sarkozy, in line with the *filo-dirigiste* approach historically attributed to the country he represented, claimed to have achieved a great political success, by having removed the reference to “free and undistorted competition” from the section of the Treaty dedicated to the Union’s tasks and objectives. The importance of such modification would derive from the failed attempt of the Treaty establishing a European Constitution to identify competition law as an objective/task of the EU.

Although quite sceptical about the practical relevance of the redrafting, “for avoidance of doubt” the English delegation, with the support of the Finns and others, asked and obtained to secure a new protocol on the internal market and competition (n. 27).

This did not prevent President Sarkozy to publicly assert that he had secured a “major orientation of the EU’s objectives” such that “competition will no longer be an objective in itself but a way of serving the EU and organizing the

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protect competition and ultimately the consumers”. Libertini M., *Il diritto della concorrenza dell’Unione europea*, Giuffrè, Milano (IT), 2014, 27-28, criticizes the more economic approach because it proceeds per models forgetting that Competition Law is a Social Science and cannot be reduced to a mathematical formula (27-28). Therefore, it is better to use economics as a benchmark to test the outcomes of normative theories. In addition, the more economic approach wrongly assumes that human (both consumers and entrepreneurs) are perfectly rational actors, which is not (*Id.*, 39).

<sup>354</sup> See Denozza F. – Toffoletto A., *Contro l’utilizzazione dell’“approccio economico” nell’interpretazione del diritto antitrust*, in *Mercato Concorrenza Regole*, Vol. 3 (2006), 563 et seq. and the response paper Pardolesi R., *Chi ha paura dell’interpretazione economica del diritto antitrust?*, in *Mercato Concorrenza Regole*, Vol. 1 (2007), 119 et seq.

internal market”. He also added that “for the first time, the European Union has to ensure protection of citizens”<sup>355</sup>.

Albeit methodologically questionable, this statement shed a light on a broader unsolved debate: what shall we mean with the term “competition”? Did something really change after Lisbon?

We will deal with this issue (§ 5.3) after having briefly recalled the main changes brought by the Reform Treaty (§ 5.2).

## § 5.2 Minor or major changes?

As seen, from the 1957 Treaty of Rome to the 2004 (failed) project of Treaty establishing a European Constitution, competition law gained a growing relevance within the European economic constitution.

The rejection of the draft European Constitution by French and Dutch voters in May and June 2005, all along with the rise of the financial and economic crisis, led in 2007 to the (more modest) Reform Treaty of Lisbon<sup>356</sup>.

With respect to the “constitutional” foundations of European competition law, the main novelties are the following.

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<sup>355</sup> For an extended explanation of the negotiations and of the following interviews and public announcements, see Phinnemore D., *The Treaty of Lisbon. Origins and Negotiation*, Palgrave Macmillan, New York (NY), 2013, 119-120: “The UK government had also been successful in countering Sarkozy’s supposedly last-minute ‘coup’ to remove ‘free and undistorted’ competition from the EU’s objectives contained in the text of the Constitutional Treaty. In fact, the ‘removal’ – or more precisely the non-transfer from the Constitutional Treaty – had already been signalled and then confirmed in the draft IGC mandate produced on 19 June. Nevertheless, given the media storm that broke out around the issues, it was felt necessary to counter the non-transfer. So, following demands from his Chancellor and soon-to-be successor, Brown, that he secure guarantees that the status of competition within the EU would not be affected by the ‘coup’, Blair, with the support of the Finns and others, secured a new protocol on the internal market and competition. This was needed ‘for the avoidance of doubt’ that the existing status of competition in the treaties was not being undermined (Interview: 30 March 2010)”. At endnote n. 16 he further observes that: “This did not prevent Sarkozy claiming that he had secured a ‘major orientation of the EU’s objectives’ such that ‘competition will no longer be an objective in itself but a way of serving the EU and organizing the internal market. For the first time, the European Union has to ensure protection of citizens’. Within a fortnight, however, Sarkozy acknowledged that the change was symbolic and political rather than legal, nevertheless insisting that it provided an opportunity to debate the perceived neo-liberal bias of the EU”.

<sup>356</sup> Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community.



The former hierarchy between tasks/objectives (art. 2 TEC) and activities (Art. 3 TEC) tends to disappear.

Indeed, Art. 2 TEU provides a programmatic and very broad list of fundamental “values” of the Union<sup>357</sup>, to be necessarily read in conjunction with other provisions of the Treaties, namely with Art. 3, § 3 TEU.

The Treaty itself classifies Art. 3 TEU as the former Art. 2 TEC: it lists the EU’s “tasks”. Conversely, we don’t find a provision specular to the former Art. 3 TEC. Therefore, the EU’s “activities” are now to be retrieved all along the Treaties.

Quite surprisingly, the fact that Art. 3, § 3 TEU does not mention “free and undistorted competition” has been strongly emphasized by President Sarkozy<sup>358</sup> and, afterwards, has also been highlighted by a number of scholars<sup>359</sup>.

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<sup>357</sup> It states that “*the Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail*”.

<sup>358</sup> According to Drexl J., *Competition Law as Part of the European Constitution* cit., 661 et seq., such modifications might even result counter-productive and lead to an outcome opposed to that claimed in Sarkozy’s *coup*. Indeed, the strict connection between undistorted competition (Art. 3 TEC) and the Community’s tasks (Art. 2 TEC) in past years allowed a “structuralist” and “formalistic” interpretation of art. 82 TEEC/TEC (as well as art. 81), where competition was protected as such, irrespective to the effects of the behaviours passed on consumers (*Continental Can, British Airways*). The more economic approach criticized such finding. Now that this link is less obvious, economic theories of competition might have even more room to prevail.

<sup>359</sup> According to Riley A., *The EU Reform Treaty and the Competition Protocol: undermining EC Competition Law*, in *Centre for European Policy Studies Brief*, Vol. 142 (2007), 2: “No mere protocol can achieve the same interpretative status as the preamble and the first few articles. Any close examination of the case law demonstrates the fundamental nature of Article 3(1)(g) in making competition an objective of the Community legal order, most notably in *Continental Can* where the Court ruled that ‘If Article 3(f) [now Article 3(1)(g)] provides for the institution of a system ensuring that competition in the Common Market is not distorted, then it requires *a fortiori* that competition must not be eliminated. This requirement is so essential that without it numerous provisions of the Treaty would be pointless”. Similarly, Gerbrandy A., *Rethinking Competition Law* cit., 138 proposes to “(re) conceptualize the economic constitution as part of furthering the EU’s goal of a social market economy. Re-embed competition law in its social context. Be responsive to the changed reality of the interplay between the state and the market. Re-connect to the other building blocks of the internal market. Use the legal tools present in European competition law to come to an actual balancing. [...] It means allowing multiple goals of competition law. In that way competition law can be linked back to notions of sustainability and solidarity, and ultimately, freedom and democracy, and serve a social market economy”. Albeit less straightforward, Weitbrecht A.,

But the benchmark of the assessment must necessarily be positive law (namely: Art. 2 TEC), not “virtual” law (Art. 1-3, § 2 of the Treaty establishing a European Constitution, which didn’t go beyond a mere draft status).

And Art. 2 TEC never mentioned free and undistorted competition as one of the EC’s objectives.

In replying to a piece issued on the financial times<sup>360</sup>, Commissioner Petite wrote: “competition is not currently one of the objectives of the European Community set out in Article 2 of the EC Treaty: the reference to «undistorted competition» appears only in Article 3 on the Community activities to be implemented to attain those objectives. Clearly, an objective that does not exist cannot be lost!”<sup>361</sup>.

The very same view has been expressed by the European Commissioner for Competition Policy Kroes<sup>362</sup>.

As said, for avoidance of doubt Protocol 27 expressly recognizes that “the internal market as set out in Article 3 [TEU] includes a system ensuring that competition is not distorted”, adding that “to this end, the Union shall, if

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*From Freiburg to Chicago and Beyond—The First 50 Years of European Competition Law*, in *European Competition Law Review*, Vol. 2 (2008), 88 seems to share the same view and concludes that “while the current Competition Commissioner has sought to downplay the significance of this change as one of mere semantics, this revision may well turn out to be the starting point for a different role of competition in the European Union over the next 50 years”.

<sup>360</sup> Münchau W., *Europe’s drift to mercantilism*, June 24, 2007, available at <https://www.ft.com/content/c5e340e4-2281-11dc-ac53-000b5df10621> (accessed 1.10.19).

<sup>361</sup> Response letter to the editor of Petite M., *EU Commitment to Competition Policy is Unchanged*, Financial Times, June 27<sup>th</sup>, 2007, where he also added: “The fact that competition is a means and not an objective of the Community has not – over the past 50 years or so – prevented the European institutions, and in particular the European Commission and the European Court of Justice, from taking effective action against any restriction or distortion of competition within the internal market, whether resulting from initiatives taken by undertakings or by member states’ public authorities. The text of the ‘Constitutional Treaty’ provided for a substantial reworking of the above provisions, with an explicit reference to «free and undistorted competition» linked to the ‘internal market’ objective”.

<sup>362</sup> Kroes N., *A renewed commitment to competition policy in Europe*, Speech at the Conference on the Place of Competition Law in the Future Community Legal Order, Brussels, 8 November 2007, available at [https://europa.eu/rapid/press-release\\_SPEECH-07-689\\_en.htm?locale=en](https://europa.eu/rapid/press-release_SPEECH-07-689_en.htm?locale=en) (accessed 1.10.19).

necessary, take action under the provisions of the Treaties, including under Article 352 [TFEU]”<sup>363</sup>.

Art. 52 TEU provides that “the Protocols [...] to the Treaties shall form an integral part thereof”.

On these grounds, several scholars<sup>364</sup> as well as the CJEU in the *TeliaSonera Sverige AB*<sup>365</sup> and *Commission v. Italian Republic*<sup>366</sup> decisions concluded for the irrelevance of the move of “undistorted competition” from Art. 3, § 1, g) TEC to Protocol 27 of the Lisbon Treaty.

After all, a list of activities is not provided at all in the TEU ... just to make an example, shall we presume that after Lisbon, along with competition, also “a contribution to the strengthening of consumer protection” (former Art. 3, § 1, t) TEC), now as well placed only in the TFEU, has been degraded too? The proactive consumer protection policies implemented after Lisbon do not support this view.

One could even argue something more.

If we forget about the mere repositioning of the relevant provisions and we focus on the contents, we can appreciate that according to Protocol 27 “*undistorted competition*” has now become an integral part (“... *includes* ...”) of an EU’s “objective”, that is “*internal market*”. We couldn’t find such an explicit statement in former Art. 3, § 1, g) TEC.

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<sup>363</sup> According to Art. 352 TFEU (former 308 TEC), “if action by the Union should prove necessary [...] to attain one of the objectives set out in the Treaties, and the Treaties have not provided the necessary powers, the Council, acting unanimously on a proposal from the Commission and after obtaining the consent of the European Parliament, shall adopt the appropriate measures”. For instance, such provision has been applied to adopt the 1989 and 2004 Merger Regulations.

<sup>364</sup> Van Rompuy B., *The Impact of the Lisbon Treaty* cit., 4-5, and many more.

<sup>365</sup> ECJ, 17 February 2011, First Chamber, case C-52/09, *Konkurrensverket v. TeliaSonera Sverige AB*, § 20, where art. 3(3) TEU and Protocol 27 have been read in conjunction (“Article 3(3) TEU states that the European Union is to establish an internal market, which, in accordance with Protocol No 27 on the internal market and competition, annexed to the Treaty of Lisbon [...], is to include a system ensuring that competition is not distorted”).

<sup>366</sup> CJEU, Third Chamber, 17 November 2011, case C-496/09, *Commission v. Italian Republic*, § 60, where it is acknowledged that “Protocol No 27 on the internal market and competition [...] forms an integral part of the Treaties in accordance with Article 51 TEU [...] and states that the internal market includes a system ensuring that competition is not distorted”.

One could oppose that the autonomy of competition from market integration, as formerly suggested by the wording introduced by the Treaty of Amsterdam (“*competitiveness*” of the industry as a task to be achieved by establishing an internal market), becomes less obvious.

But the principle of an “open market economy with free competition” (former art. 4, § 1 TEC) is still affirmed, namely by art. 119, § 1 TFEU<sup>367</sup>, thus ensuring an additional constitutional basis to undistorted competition. The fact that the provision moved from Part I (“*Principles*”) of the “founding” Treaty (TEC) to Title VIII (“*Economic and monetary policy*”) of the Treaty on the functioning (TFEU) is not relevant<sup>368</sup>.

Finally, former Art. 98 TEC is still in place under Art. 120 TFEU.

In the light of the above it is possible to draw a first conclusion: the repositioning of the TEC provisions along the Lisbon Treaties did not downgrade, as such, the constitutional role of competition law.

Conversely, the “substance” of the text seems to deserve a more careful assessment, given the fact that Art. 3, § 3 TEU adopted a completely different wording from Art. 2 TEC.

Indeed, Art. 3, § 3 TEU reads as follows: “*the Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. It shall combat social exclusion and discrimination, and shall promote social justice and protection, equality between women and men, solidarity between generations and protection of the rights of the child. It shall promote economic, social and territorial cohesion,*

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<sup>367</sup> “For the purposes set out in Article 3 of the Treaty on European Union, the activities of the Member States and the Union shall include, as provided in the Treaties, the adoption of an economic policy which is based on the close coordination of Member States’ economic policies, on the internal market and on the definition of common objectives, and conducted in accordance with the principle of an open market economy with free competition”.

<sup>368</sup> Drexler J., *Competition Law as Part of the European Constitution* cit., 661 et seq.

*and solidarity among Member States. It shall respect its rich cultural and linguistic diversity, and shall ensure that Europe's cultural heritage is safeguarded and enhanced*<sup>369</sup>.

Setting for the moment aside the fact that listing “*scientific and technological advance*”<sup>370</sup> and the “*respect [of the EU's] rich cultural and linguistic diversity*” and “*cultural heritage*”<sup>371</sup> within the EU's tasks might play a role, respectively, to enhance the concept of dynamic efficiency and in the competitive assessment of media markets, the more debated novelty is undoubtedly related to the meaning to be assigned to the expression “*a highly competitive social market economy*”, especially in the light of the deepening of the “*common market*” in “*internal market*” and of the introduction of Art. 6, §§ 1<sup>372</sup> and 3<sup>373</sup> TEU.

### § 5.3 “A highly competitive social market economy”

To summarize it in few words, the debate concerning the meaning of the “highly competitive social market economy” paradigm deals with the following question: “Which Europe shall be expected after Lisbon, more social integration and less modern competition?”.

Someone argued that no inherent Copernican revolution can be attributed to the Lisbon Treaty, because social orientation was already embodied by Art. 2 TEC<sup>374</sup>.

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<sup>369</sup> Added emphasis.

<sup>370</sup> Formerly mentioned among the “activities” under Art. 3, § 1, n) TEC.

<sup>371</sup> New insertion.

<sup>372</sup> “The Union recognises the rights, freedoms and principles set out in the Charter of Fundamental Rights of the European Union of 7 December 2000”.

<sup>373</sup> “Fundamental rights, as guaranteed by the European Convention for the Protection of Human Rights and Fundamental Freedoms and as they result from the constitutional traditions common to the Member States, shall constitute general principles of the Union's law”.

<sup>374</sup> According to Hatje A., *The Economic constitution* cit., 595 “The lack of reference [in the TEC] to social orientation is not to be equated with an indifference of the Treaty [itself] to these protected goods. This aspect of European economic policy [was] already firmly anchored in Article 2 EC, according to which a high level of social protection is aspired. [...] Consequently, the Treaty of Lisbon does not contain a new economic constitutional direction,

However, most of the positions acknowledge a repositioning (depending on the cases, less or more nuanced) of competition law in the European constitutional order after Lisbon.

Following the undistorted competition imperative devote to the establishment of the “common market” pursued by the EEC/EC, and following the financial and economic crisis, Art. 3, § 3 TEU seems to allow a shift towards stronger European integration<sup>375</sup>. The turning point is emphasized also in the Report for the European Commission “*A new strategy for the single market*”, issued in 2010 by Mario Monti<sup>376</sup>.

The Commission made clear that the transition from the “common” to the “single” and “internal” market is not merely linguistic. It is substantial: it means deepening and enriching the integration process, which over years moved from a purely economic perspective (free trade within the common market) to the establishment and the protection of a minimum set of shared values within the “single” and “internal” market<sup>377</sup>.

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but rather has a different emphasis”. Consistently, the A. concludes that “no fundamental reorientation of the economic political concept of competition law can be noticed” (601).

<sup>375</sup> De Pasquale P., *L'economia sociale di mercato* cit., 269.

<sup>376</sup> Monti M., *A new strategy for the single market. At the service of Europe's economy and society*, Report to the President of the European Commission José Manuel Barroso, 9 May 2010, available at <https://ec.europa.eu/docsroom/documents/15501/attachments/1/translations/en/renditions/pdf> (accessed 10.1.2018). As a result, for instance in the field of public procurement one might expect environmental aspects to gain relevance for assessing technical offers under the concept of “*most economically advantageous tender*” (MEAT) (see recital 89 of Directive 2014/24/EU “*on public procurement and repealing Directive 2004/18/EC*”).

<sup>377</sup> Communication from the Commission “*Towards a Single Market Act For a highly competitive social market economy. 50 proposals for improving our work, business and exchanges with one another*” (COM(2010) 608 final): “*Sharing a common economic and social space while respecting diversity, the wish to be nourished together and consolidated by the wisdom of standing together: that was, and still is, the aim of the big European market. Common Market, Single Market, Internal Market: the changes to the name over the years reflect the dual phenomena of the deepening and enriching of the big European market. While it deepened around the four major freedoms of movement of persons, goods, services and capital, it was also complemented and enriched by the consolidation of economic integration, the creation of a single currency and the development of the cohesion policy. A cohesion policy to support the single market is essential to ensure that all citizens, regardless of where they live, can benefit from and contribute to it*”.

Moreover, article 6, § 1 TEU now expressly assigns “*the same legal value as the Treaties*”<sup>378</sup> to the Charter of Fundamental Rights<sup>379</sup>.

This status enlarges the scope of Art. 3, § TEU, as the Charter protects a set of social rights<sup>380</sup>. Moreover, under Art. 6, § 3 TEU “*fundamental rights, as guaranteed by the European Convention for the Protection of Human Rights and Fundamental Freedoms and as they result from the constitutional traditions common to the Member States, shall constitute general principles of the Union’s law*”<sup>381</sup>.

In the light of the above, within the internal market free trade and undistorted competition are not considered anymore as the final goal to be achieved, but form part of a broader and more ambitious integration process<sup>382</sup>.

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<sup>378</sup> According to Dougan M., *The Treaty of Lisbon 2007: Winning Minds, not Hearts*, in *Common Market Law Review*, Vol. 45 (2008), 617 et seq., the decision to remand to a separate Charter would represent “another victim of the European Council’s decision to abandon the ‘constitutional concept’”.

<sup>379</sup> Nice, 7 December 2000.

<sup>380</sup> Art. 8 on Protection of Personal Data; Art. 16 on the Freedom to Conduct a Business; Art. 21, § 1 Prohibition to Discriminate (here discrimination based on “Property” reminds about price discrimination); Art. 28 on the Right of Collective Bargaining and Action; Art. 36 on Access to SGEIs; Art. 37 on Environmental Protection; Art. 38 on Consumer Protection. Albeit someone stressed the difference between the (just programmatic) economic and social rights and the (immediate and absolute) civil and political rights listed in the Charter in order to reduce the actual relevance of art. 6, § 1 TEU within the European economic constitution (Lord Goldsmith Q.C., *A Charter of Rights, Freedoms and Principles*, in *Common Market Law Review*, Vol. 38 (2001), 1201 et seq.), “the new legal status acquired by the Charter after Lisbon could reinforce its role as a shield, *i.e.* as a balancing factor against the disruptive impact of EU law on domestic welfare institutions” (Costamagna F., *The internal market and the welfare state: anything new after Lisbon?*, in Trybus M. - Rubini L. (eds.), *After Lisbon: The Impact of the New Treaty on the European Union and the Treaty on the Functioning of the European Union*, Edward Elgar, Cheltenham (UK) – Northampton (U.S.), 2012, 391, who quotes for a similar view Damjanovic D. - De Witte B., *Welfare Integration through EU Law: The Overall Picture in the Light of the Lisbon Treaty*, in Neergaard U. - Nielsen R. - Roseberry L.M. (eds.), *Integrating Welfare Functions into EU Law*, Djøf Publishing, Copenhagen (DE), 2009, 53 et seq.).

<sup>381</sup> The fact that Art. 10, § 2 of the ECHR recognizes the possibility to limit freedom of expression might play a role in the competitive assessment and in the economic regulation of media markets.

<sup>382</sup> Tesaro G., *Il diritto dell’Unione europea*, CEDAM, Padova (IT), VI<sup>th</sup> ed., 2010, 394: “La disciplina del mercato interno, in definitiva, nonché le politiche che vi si riconducono, costituiscono il nucleo centrale di un ordinamento articolato e tendenzialmente completo, nel cui ambito trovano riconoscimento non soltanto le libertà economiche fondamentali (libertà di concorrenza e libertà degli scambi), ma anche l’insieme delle istanze (tutela e promozione del lavoro, delle donne e dei giovani, dell’ambiente, della cultura, delle aeree sfavorite) che sono patrimonio comune e caratteristico delle moderne democrazie”.

Therefore, “competition is not a value in itself, but only a means”<sup>383</sup>.

Art. 3, § 3 TEU does not regard competition in the perspective of its possible contrast with other compelling social values. On the contrary, “*a highly competitive social market economy*”, more than a mere hendiadys, acts like a holistic synthesis formula which meaningfully reminds to the name of an economic doctrine<sup>384</sup> (the aforementioned Müller’s *Soziale Marktwirtschaft*). Such economic theory – as further developed by the ordoliberal movement – assigns to both undistorted competition and social cohesion<sup>385</sup> a well-defined hierarchy.

In particular, the relationship is of complementarity: politics has the primacy, but such primacy works bottom-up.

The first attempt always belongs to the market.

Only when the market fails, and subject to a principle of subsidiarity and strict proportionality, “S.M.E. recognizes the necessity of State active intervention in order to secure monetary stability, economic growth, social security, sustainable development, environmental protection. Furthermore, S.M.E. recognizes that there are fundamental needs that can be satisfied only by public goods and other needs that can be satisfied only by regulated markets (apt to warrant supply of universal service)”<sup>386</sup>.

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<sup>383</sup> Libertini M., *A “Highly Competitive Social Market Economy”* cit., according to whom competition has never been, in history of the Union, an objective as such. This notwithstanding, after Lisbon its instrumental role has become more evident.

<sup>384</sup> Libertini M., *A “Highly Competitive Social Market Economy”* cit.: “the S.M.E., as determined in the history of ideas, is not simply a particular «value», to be balanced with others, but rather a whole doctrine, *i.e.* a true political ideology”.

<sup>385</sup> Libertini M., *Competition and Social Cohesion*, in *Italian Antitrust Review*, Vol. 1 (2014), 39: “«social cohesion» can be defined as the mutual recognition of a common membership of a society, which may be closed or open but is linked by common values, a common heritage and ties of solidarity, despite the possibility that there are differences, which may also be substantial, in the roles and living conditions of individuals”.

<sup>386</sup> Libertini M., *A “Highly Competitive Social Market Economy”* cit. Moreover, Libertini M., *Il diritto della concorrenza* cit., 49-51 further highlights that the Lisbon model is structured like art. 41, § 3 of the Italian Constitution.



Such graduated approach is codified in the SGEIs discipline under Art. 106, § 2 TFEU<sup>387</sup>.

These are the principles.

When it comes to their application, the framework becomes less obvious, because the rule of law and the principle of conferral (with the annexes subsidiarity and proportionality principles) play a role: they curb excessively broad and evolutionary interpretations of the rules on competition.

Leaving for the moment aside pro-competitive economic regulation (*infra* § 7), the most sharable opinion is that competition shall be limited and/or postponed for social purposes only by Legislative Power (not by competition agencies)<sup>388</sup>.

In the area of social rights, the principle of conferral (Art. 5, § 1 TEU) leads to Member States<sup>389</sup>.

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<sup>387</sup> There is no inherent contradiction in protecting both competition and SGEIs and social rights at the same time: Almunia J., *How competition policy contributes to competitiveness and social cohesion*, 14 January 2011, Lisbon, SPEECH/11/17, available at [https://ec.europa.eu/rapid/press-release\\_SPEECH-11-17\\_en.htm?locale=en](https://ec.europa.eu/rapid/press-release_SPEECH-11-17_en.htm?locale=en) (accessed 7.10.2017). According to Malaguti M.C., *I valori della concorrenza e del mercato* cit., 414, after Lisbon SGEIs can play a major role, also considering that the principle of access to SGEIs is now codified not anymore as a mere “limiting factor” to the application of competition law, but also as positive provision under Protocol 26.

<sup>388</sup> Libertini M., *Il diritto della concorrenza* cit., 49-50.

<sup>389</sup> Communication from the Commission “A *Quality Framework for Services of General Interest in Europe*” (COM(2011) 900 final), at 3 makes clear that “[Services of General Interest (SGI)] are services that public authorities of the Member States classify as being of general interest and, therefore, subject to specific public service obligations (PSO). The term covers both economic activities [...] and non-economic services. [Non-economic SGIs] are not subject to specific EU legislation and are not covered by the internal market and competition rules of the Treaty”.

Conversely, EU law (namely, competition and freedom of establishment) can apply, subject to the limits set forth in Art. 106, § 2 TFEU (“... *in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them ...*”: see ECJ, Sixth Chamber, 23 April 1991, Case C-41/90, *Klaus Höfner and Fritz Elser v Macrotron GmbH*, § 24), to the Services of General Economic Interest (SGEIs). In this context, Art. 14 TFEU provides that “*the Union and the Member States, each within their respective powers and within the scope of application of the Treaties, shall take care that [...] services [of general economic interest] operate on the basis of principles and conditions, particularly economic and financial conditions, which enable them to fulfil their missions. The European Parliament and the Council, acting by means of regulations in accordance with the ordinary legislative procedure, shall establish these principles and set these conditions without prejudice to the competence of Member States, in compliance with the Treaties, to provide, to commission and to fund such services*”. In this field, while EU laws act only as a limit, Member States play a central and pro-active role. Indeed, Protocol 26 of the Lisbon Treaty emphasizes “*the essential role and the wide discretion of national, regional and local*

Indeed, albeit in past someone called for a “more social” Europe<sup>390</sup>, the EEC, first, and the EC, then, reflected the Member States’ jealousy to guard their “social sovereignty” against any external intrusion<sup>391</sup>.

In the context of the negotiations of the 1957 Treaty of Rome establishing the EEC, the final decision was to exclude almost any possibility for the new super-national subject to intervene in the social field, except to the extent of what strictly necessary to ensure the functioning of the internal market<sup>392</sup>. This led to a decoupling of the social and the economic spheres, leaving the former in Member States’ hands, while opening the latter to the intervention of the EEC<sup>393</sup>. The emergence of the notion of “important projects of common

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*authorities in providing, commissioning and organising services of general economic interest as closely as possible to the needs of the users*”. Member States have a wide margin of discretion (Communication from the Commission “*on the application of the European Union State aid rules to compensation granted for the provision of services of general economic interest*” (2012/C 8/02), § 46), so that the Commission’s competence in this respect is limited to checking whether the Member State has made a manifest error when defining the service SGEIs (CFI, Third Chamber, extended composition, 12 February 2008, Case T-289/03, *British United Provident Association Ltd (BUPA), BUPA Insurance Ltd and BUPA Ireland Ltd v. Commission*, §§ 166-169 and 172; Second Chamber, extended composition, 15 June 2005, *Fred Olsen SA v. Commission*, Case T-17/02, § 216).

The very same framework is established for Social Services of General Interest (SSGI), which can be both economic and non-economic. Insofar as they are “*economic*”, competition law and freedom of establishment apply. In case of non-economic SSGIs, Artt. 153 and 156 TFEU do not allow the EU to do more than “*support and complement*” the activities of the Member States in the fields of labour and social security law. Like for SGIs, also for SSGIs Member States, subject to a principle of subsidiarity and proportionality, have “*to define what they mean by [...] social services of general interest. Within the Member States, the public authorities, at the appropriate level, define the obligations and missions of general interest of these services, and how they are to be organised. On the other hand, the [EU] framework [only] requires Member States to take certain rules into account when they determine the arrangements for applying the objectives and principles they have established*” (Communication from the Commission “*Implementing the Community Lisbon programme: Social services of general interest in the European Union*” (COM(2006) 177 final), 3).

<sup>390</sup> Hatzopoulos V., *A (More) Social Europe: A Political Crossroad or a Legal One-Way? Dialogue Between Luxembourg and Lisbon*, in *Common Market Law Review*, Vol. 42 (2005), 1599 et seq.

<sup>391</sup> Latham R., *Social Sovereignty*, in *Theory, Culture and Society*, Vol. 17 (2000), Issue 4, 1 et seq.

<sup>392</sup> Scharpf F., *The European Social Model: Coping with the Challenges of Diversity*, in *Journal of Common Market Studies*, Vol. 40 (2002), 645 et seq.

<sup>393</sup> Costamagna F., *The internal market and the welfare state* cit., 381-382.

European interest” (IPCEIs)<sup>394</sup> under Art. 107, § 3, let. b) TFEU does not change the scene, because it is always for the Member State(s) to evaluate (and, in case, to launch) such a project.

This general setting helps to understand why – albeit the possibility of limiting the principle of undistorted competition for social purposes had been already recognized in early times (*Albany case*<sup>395</sup>) – as a rule the ECJ adopted the “hierarchical equivalence” criterium set forth starting from the *Ghebard case*<sup>396</sup>, according to which “*a restriction on [any economic] freedom [recognized under the EU law] can be accepted only if it pursues a legitimate aim compatible with the Treaty and is justified by overriding reasons of public interest*”<sup>397</sup>.

This basically reflects the distribution of attributions between the EU and Member States, given that the former has an exclusive competence in competition law and the latter maintain the sovereignty on social welfare.

It has been argued that after Lisbon, without prejudice to said decouple, something could have changed, at list from a hermeneutical standpoint.

Indeed, given the “predominantly defensive character” of article 3, § 3 TUE, where social objectives are seen more as a limit to the application of internal market rules (including competition law), rather than targets to be pursued through the adoption of specific legislative measures, the ultimate aim of the complex re-drafting could be “to reassess the relative character of th[e] principle [of undistorted competition] *vis-à-vis* other conflicting objectives. In

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<sup>394</sup> See Communication from the Commission “*Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest*” (2014/C 188/02).

<sup>395</sup> ECJ, 21 September 1999, case C-67-96, *Albany International BV c. Stichting Bedrijfspensioenfonds Textielindustrie*.

<sup>396</sup> ECJ, 30 November 1995, case C- 55/94, *Reinhardem Gebhard c. Consiglio dell’Ordine degli Avvocati e Procuratori di Milano*, § 37.

<sup>397</sup> ECJ, Grand Chamber, 11 December 2007, case C-438/05, *International Transport Workers’ Federation and Finnish Seamen’s Union c. Viking Line ABP and OÜ Viking Line Eesti*, § 75. See De Pasquale P., *L’economia sociale di mercato* cit., 276, further considering, quoting the EECJ’s decision, that “even if that were the case, it would still have to be suitable for securing the attainment of the objective pursued and must not go beyond what is necessary in order to attain it”.

other words, these are modifications that seem directed more to the EU Court of Justice than to the European law-making institutions”<sup>398</sup>.

The General Court<sup>399</sup> and the Commission<sup>400</sup> have expressly rejected this view.

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<sup>398</sup> Costamagna F., *The internal market and the welfare state* cit., 388-389; Lianos I., *Competition Law in the EU After Lisbon*, in Ashiagbor D. - Countouris, N. - Lianos I. (eds.), *The European Union after the Treaty of Lisbon*, Cambridge University Press, Cambridge (U.K.) 2012, 264-269. Differently from Costamagna, Lianos sees the social market economy as a “broad horizontal integration provision” and believes that the concept may help the Commission and the Court, especially when applying Art. 101, § 3 TFEU, to reconcile different EU policies (he quotes the interests to be taken in account under Art. 9 TFEU) rather than EU competition law and national welfare measures. He argues that after Lisbon the Commission and the Courts might achieve a “more social” Europe through the interpretation of key concepts such as “undertaking” and “economic activity” (e.g. in the *Albany* case the EECJ found that collective agreements between management and labour fall out the scope of Art. 101 TFEU).

<sup>399</sup> General Court, Eighth Chamber (Extended Composition), 20 May 2015, case T-456/10, *Timab Industries and Cie financière et de participations Roullier (CFPR) v. Commission*, §§ 211-212: “the applicants submit that competition is no longer one of the objectives of the European Union, but is only mentioned in Protocol 27 on the internal market and competition, annexed to the Treaty on the European Union and to the Treaty on the Functioning of the European Union, as a component of the internal market. According to them, that change, more than ever, calls on the Commission to take account, in its assessment of anti-competitive practices and associated penalties, of the situation of the individual undertakings concerned and their specificities, both financial but also economic and social, in the light of the EU objectives as defined in Article 3 TEU. In that regard, it is sufficient to state that Article 3 TEU, read in conjunction with Protocol No 27 on the internal market and competition, has changed neither the purpose of Article 101 TFEU nor the rules for the imposition of fines. Therefore, the complaint that the Commission, by not taking into account the economic and social constraints of CFPR and the significant drop in its turnover, infringed the combined provisions of Article 3 TEU and Protocol No 27 on the internal market and competition cannot be upheld”.

<sup>400</sup> See Commission decision (under Art. 8, § 2 EUMCR) of 21 March 2018 in Case M.8084 – *Bayer/Monsanto*, §§ 3005 et seq. During the procedure some members (of national and) of the European Parliament and representatives of civil society organisations expressed concerns about the transaction’s effects on the protection of the environment, public health, food safety and other public interest considerations. A petition to the Commission expressing similar concerns was signed by more than one million citizens. A number of non-governmental organisations intervened in the proceedings as interested third parties. The Commission followed a strict rule of law approach and, by applying the principle of conferral, explained in its decision that it has not been empowered by Union law to intervene against a merger on grounds other than the protection of competition (Recital 23 and, *a contrario*, Art. 21, § 4 EUMCR).

## § 6. Making sense of European Competition law goals: toward a functional proposal

### § 6.1 European competition law as a multipurpose or multivalued sponge-like discipline

The preceding storyline attempted to retrace the origins and the main developments of European competition law.

The analysis shows that over time competition assumed a multifaceted dimension, in part because of the described legislative reforms and of the sharpening of technical competition law, in part because of the progressive widening and deepening of the political project pursued by the Union.

Due to its responsiveness to the *Zeitgeist*, competition law has been efficaciously described as a sponge-like discipline<sup>401</sup>, able to absorb multiple values and objectives from the variable external context and, so on, to assume multiple personalities<sup>402</sup>.

Not for nothing, the EECJ meaningfully used the open-ended expression “*workable competition*”, that is to say “*the degree of competition necessary to ensure the observance of the basic requirements and the attainment of the*

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<sup>401</sup> Ezrachi A., *Sponge*, in *Journal of Antitrust Enforcement*, Vol. 5 (2017), Issue 1, 50: “the sponge-like characteristics of competition law make it inherently pre-disposed to a wide range of values and considerations. Its true scope and nature are not ‘pure’ nor a ‘given’ of a consistent objective reality, but rather a complex and, at times, inconsistent expression of many values”.

<sup>402</sup> Parret L., *The multiple personalities of EU competition law: time for a comprehensive debate on its objectives*, in Zimmer D., *The goals of competition law*, Edward Elgar, Cheltenham (U.K.) – Northampton (U.S.), 2012, 61 et seq., concludes at 81 that “a unitary goal is not desirable and not realistic. [...] Creating a hierarchy between different values or goals would be preferable from a legal point of view but will not be possible without major changes to the legal framework. A clear distinction between ultimate goals and intermediate goals, however, would be beneficial and a first essential step towards creating more clarity”. Similarly, see Van den Bergh R. – Camesasca P., *European Competition Law and Economics: A Comparative Perspective*, Sweet & Maxwell, London (U.K.), 2006, 39 and Whish R. - Bailey D., *Competition Law* cit., 19 (“historically there has not been one single, unifying, policy underpinning the competition laws of the EU [...]. In particular, competition does not exist in a vacuum: it is an expression of the current values and aims of society and is as susceptible to change as political thinking generally. Because views and insights shift over a period of time, competition law is infused of tension”).

*objectives of the Treaty, in particular the creation of a single market achieving conditions similar to those of a domestic market*<sup>403</sup>.

Being aware of the (in a way, immovable) multivalued character of European competition law, we believe that the attempt to draw some coordinates can still turn useful, at least to identify a methodological guidance to be followed to decode and understand policymakers', agencies' and Courts' interventions.

In this vein, after a brief overview on the key economic definitions relevant to this extent (§ 6.2), the more relevant existing theories on the goal(s) of European Competition law will be explored (§ 6.3). The paragraph will then try to enter this debate by proposing a functional definition (§ 6.4).

## **§ 6.2 Key definitions: Static and Dynamic Efficiency; Consumer and Total (or Overall) Welfare**

At the outset, it seems useful to provide a short overview on the key economic concepts commonly used to frame the debate concerning the goal(s) of European competition law<sup>404</sup>.

### **§ 6.2.1 Static efficiency**

Static efficiency has two components: Allocative efficiency and Productive efficiency.

#### **§ 6.2.1.1 Allocative efficiency**

Allocative efficiency is paired with consumer surplus.

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<sup>403</sup> EECJ, 25 October 1977, case C- 26/76, *Metro SB-Grossmärkte GmbH & Co. KG*, § 20. “*The powers conferred upon the Commission under Article 85 (3) [TEEC] show that the requirements for the maintenance of workable competition may be reconciled with the safeguarding of objectives of a different nature and that to this end certain restrictions on competition are permissible, provided that they are essential to the attainment of those objectives and that they do not result in the elimination of competition for a substantial part of the Common Market*” (§ 21).

<sup>404</sup> The following definitions are provided by Kaplow L., *On the choice of welfare standards in competition law*, in Zimmer D., *The goals of competition law* cit., 4 and by Whish R. - Bailey D., *Competition Law* cit., 2018, 4 et seq.

Consumer surplus refers to the difference between consumers' willingness to pay for a certain good or service and the price they are actually required to pay for that good or service.

When the price paid by consumers is lower than their willingness to pay, consumer surplus is achieved.

#### **§ 6.2.1.2 Productive efficiency**

Producer surplus or Productive efficiency identifies the difference between the price producers are paid for what they sell and the cost of production.

If such difference is a positive value, then productive efficiency is achieved.

#### **§ 6.2.2 Dynamic efficiency**

Competition stimulates dynamic efficiency.

Indeed, the competitive pressure incentivizes producers to innovate new products as part of the continual battle of striving for consumers.

The prospect of monopoly profits stimulates technological research and development and represents the engine of the never-ending Schumpeterian process of creative destruction.

#### **§ 6.2.3 Welfare Standards: Total (or Overall) Welfare and Consumer Welfare**

*Total (or Overall) Welfare* is the sum of consumer surplus and producer surplus and combines allocative efficiency and productive efficiency.

Relatedly, the term deadweight loss refers to the sacrifice in total surplus due to price being elevated above marginal cost and amounting to the number of units not purchased due to said price elevation.

From this perspective, lost consumer surplus is the sum of deadweight loss and of the amount of surplus transferred from consumers to producers.

The (quite naïve<sup>405</sup>) neo-classical economic theory assumes that consumer surplus and total surplus are at their largest under “perfect competition” conditions.

Here, goods and services would be allocated between consumers according to the price they are prepared to pay, and, in the long run, price would equal the marginal cost of production.

Allocative efficiency would be achieved under perfect competition because the producer would expand its production until marginal revenue equals marginal cost.

Conversely, the *Consumer Welfare* standard focuses only on Consumer Surplus and thus embraces the sole allocative efficiency model.

As a general rule, Total and Consumer welfare tend to coincide.

But there can also be cases where a certain merger or conduct will lower consumer surplus and increase productive efficiency: in such circumstances, if productive surplus outweighs the consumer surplus loss, under a Total welfare standard the merger or conduct should not be blocked or prohibited, whereas under a Consumer Welfare standard it should.

### **§ 6.3 The goals of European competition law so far identified**

The several attempts to identify the goals of European competition law can be divided in two groups: the “normative” ones and the “economic” ones.

The former ones proceed per legal judgements (if event “A” occurs, then “B” will be the consequence), the latter ones focus on the economic outcome of the conduct in terms of efficiency (event “A” shall be blocked or prohibited only if it produces the effect “B”).

As seen above, normative theories found more space in the context of “ancient competition” (§ 4.1), whereas the economic ones have found more room with the advent of “modern competition” (§ 4.2).

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<sup>405</sup> Whish R. - Bailey D., *Competition Law* cit., 2018, 8 et seq. bring a number of arguments to demonstrate the fallacies of the assumptions the neo-classic economic theory relies on.



As also shown, normative theories are still today part of the case law, so that the proposed distinction between ancient and modern competition is not conclusive, so that it can at most be used to identify a historical trend.

### § 6.3.1 Normative theories

#### § 6.3.1.1 Protecting competitive structure and competitive process

European Competition law, especially in its early stage (§ 4.1), has shown to intend “*effective competition structure*” as a juridical value to be protected as such.

Here, the aspect of “*damage to consumers*” is not absent but relies on a legal presumption: it is assumed that harming the competitive structure will in the long run (indirectly) harm consumers too<sup>406</sup>. This line of thought is still present in the CJEU judgements<sup>407</sup> on the Commission’s decisions ascribable to the “modern competition” era and survived the Reform Treaty. Therefore, normative theories are still part of the framework.

Such an approach appears familiar to the concept of dynamic efficiency endorsed by Libertini<sup>408</sup> and Hauser<sup>409</sup>, on one side, and Drexl<sup>410</sup>, on the other side.

The first two proposed a combination between the social market economy and the ordoliberal view<sup>411</sup> and the Austrian liberal approach (the latter embraced a

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<sup>406</sup> EECJ, *Continental Can* cit., § 26; *United Brands* cit., § 63; *Hofmann LaRoche* cit., § 125; *Michelin* cit., § 29.

<sup>407</sup> ECJ/CJEU, *T-Mobile* cit., §§ 38-39; *Glaxo* cit., §§ 62-63; *Football Association Premier League* cit., § 139; *British Airways* cit., § 106; *Sot. Lelos* cit., § 68; *TeliaSonera* cit., § 24; *Post Danmark* cit., § 44.

<sup>408</sup> Libertini M., *A “Highly Competitive Social Market Economy”* cit.; Libertini M., *Il diritto della concorrenza* cit.

<sup>409</sup> Hauser S., *Die ökonomische und soziale Dimension der Sozialen Marktwirtschaft*, in von Hauff M. (ed.), *Die Zukunftsfähigkeit der Sozialen Marktwirtschaft*, Metropolis-Verlag, Marburg (GE), 2007, 71 et seq.

<sup>410</sup> Drexl J., *Competition Law as Part of the European Constitution* cit.

<sup>411</sup> According to Libertini M., *Il diritto della concorrenza* cit., 30-31, the ordoliberals have a sharable idea that competition is not a natural order. Instead, it is an artificial order built by public power.

more dynamic concept of competition<sup>412</sup>, as opposed to the ordoliberal idea of “full competition”, devoted to the neo-classical idea of – static – “perfect competition” as a tool to ensure allocative efficiency<sup>413</sup>).

According to Libertini, the guiding criterion of the analysis should be the standard Consumer Welfare<sup>414</sup>, which in practice he interprets in the sense of protecting consumer choice<sup>415</sup>. Indeed, this theory can entrench progress (dynamic efficiency) insofar as undertakings compete “on the merits”<sup>416</sup> (*Leistungswettbewerb*, opposed to *Behinderungswettbewerb*) and “an anonymous jury made of the consumers” is called to reward such merits, thus realizing a “consumers’ sovereignty” as part of the European Social Market Economy model and as an element of “economic democracy”<sup>417</sup>. In order to do

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<sup>412</sup> While the Austrian liberals linked the achievement of dynamic efficiency to the competitive process led by individuals, Libertini M., *Il diritto della concorrenza* cit., 31 argues that competition takes place among complex organizations, *i.e.* undertakings, not among individuals.

<sup>413</sup> According to Libertini M., *Il diritto della concorrenza* cit., 52-53, in principle the more economic approach might also be correct. What is not correct is linking it to neoclassical paradigms of (static) competition, which fail to catch the complexity of the dynamic power of markets.

<sup>414</sup> Libertini M., *Il diritto della concorrenza* cit., 19, fn. 36, arguing that total welfare pretends to compare individuals’ benefits, (*i.e.* consumers’), with complex organizations’ ones (*i.e.* undertakings’).

<sup>415</sup> Libertini M., *Il diritto della concorrenza* cit., 42. See also Drexler J., *Die Wirtschaftliche Selbstbestimmung des Verbrauchers*, Tübingen, Mohr (GE), 1998; Cseres K.J., *Competition Law and Consumer Protection*, Kluwer, Deventer (ND), 2005; in the U.S., Averitt N.W. – Lande R. H., *Consumer Sovereignty* cit. and *Using the “Consumer Choice” Approach to Antitrust Law* cit.

<sup>416</sup> The utility of this concept is challenged by Ghidini G., “*Competition on the merits*”: a pseudo-concept?, in *Luiss Law Review*, Vol. 1 (2018), 84 et seq. Similar doubts are also expressed in OECD, *What is Competition on the Merits?*, in Policy Brief, June 2006, available at <http://www.oecd.org/competition/mergers/37082099.pdf> (accessed 27.9.19), 2 and in Ullrich H., *Anti-Unfair Competition Law and Anti Trust Law: A Continental Conundrum?*, in *EUI Working Papers*, n. 1/2005, available at <https://cadmus.eui.eu/bitstream/handle/1814/2832/law05-01.pdf> (accessed 27.9.19). However, the ECJ referred to this concept: see CJEU, *Post Danmark* cit., § 22: “not every exclusionary effect is necessarily detrimental to competition [...]. Competition on the merits may, by definition, lead to the departure from the market or the marginalisation of competitors that are less efficient and so less attractive to consumers from the point of view of, among other things, price, choice, quality or innovation”.

<sup>417</sup> Libertini M., *Il diritto della concorrenza* cit., 40-41.

this, consumer protection shall be fully granted, given its circular and indirect relevance for the competitive dynamic process<sup>418</sup>.

Protecting consumer welfare by ensuring dynamic efficiency means being strict with foreclosure and with exclusionary conducts, as well as with exclusivity clauses, lock-in, bundling and tying. In addition, it means focusing not only on goods and services but also on the so-called innovation markets (R & D systems)<sup>419</sup>. In the context of merger review, protecting dynamic efficiency requires to focus the post-transaction analysis on the loss of dynamic efficiency which might derive from the exit of the merged entity from the market. If the merged undertaking is a lively and sharp competitor, then the notifying parties shall bear the burden to bring evidence of the efficiency gains expected from the transaction<sup>420</sup>. Finally, according to Libertini the need to protect dynamic efficiency is further confirmed by its “*ante litteram*” carnation offered by IPRs<sup>421</sup>, which are a founding part of European competition Law<sup>422</sup>. According to Drexl, Art. 81, § 3 TEC (now 101, § 3 TFEU) serves dynamic efficiency rather than static allocative efficiency, namely because the consumer is required to participate the efficiency gains and competition may not be substantially eliminated. At the end of his broad analysis he concludes that “the

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<sup>418</sup> According to Libertini M., *Il diritto della concorrenza* cit., 46, it would be not a case for (civil) unfair competition to have largely evolved in administrative law (unfair commercial practices directive n. 2005/29/EC) where a central role is played by the general clause of “professional diligence”. To this extent, it must be kept in mind that “the obsession with protecting the consumer [Artt. 12 and 169 TFEU] can also be considered short-sighted since, in the longer run, the producer might choose to abandon the market altogether rather than comply with an unreasonable competition law; short-term benefits will then be outweighed by long-term harm to consumer welfare” (Whish R. - Bailey D., *Competition Law* cit., 2018, 20).

<sup>419</sup> Libertini M., *Il diritto della concorrenza* cit., 39-40.

<sup>420</sup> Libertini M., *Il controllo antitrust delle concentrazioni e i “campioni” nazionali ed europei*, in *Astrid Rassegna*, n. 7/2019, 7.

<sup>421</sup> Libertini M., *Il diritto della concorrenza* cit., 47-49.

<sup>422</sup> Ghidini G., *Intellectual Property and Competition Law. The Innovation Nexus*, Edward Elgar, Cheltenham (U.K.) – Northampton (U.S.), 2006; Curley D., *Balancing Intellectual Property Rights and Competition Law in a Dynamic, Knowledge-based European Economy*, in Perez Pugatch M. (ed.), *The Intellectual Property Debate*, Edward Elgar, Cheltenham (U.K.) – Northampton (U.S.), 2006, 213 et seq.; Drexl J., *Intellectual Property Rights as Constituent Elements of a Competition-based Market Economy*, in Ghidini G. – Genovesi L.M. (eds.), *Intellectual Property and Market Power. ATRIP Papers 2006-2007*, Eudeba, Buenos Aires (AR), 2008, 167 et seq.; Hovenkamp H., *Antitrust and Innovation: Where We Are Now and Where We Should Be Going*, in *Antitrust Law Journal*, Vol. 77 (2011), 749 et seq.

legal analysis of the Treaty provisions only supports indirect protection of consumer interest by effective protection of the competitive process as an expression of dynamic competition<sup>423</sup>.

### § 6.3.1.2 Protecting market integration

A further normative approach to the issue at stake is the one that considers competition as a tool to achieve and to protect market integration.

For instance, a set of contractual clauses limiting parallel importation might introduce an undue partitioning of national markets, incompatible with the internal market objective.

If one considers competition law as a tool to achieve and to protect the single market, then a system which introduces a ban or limit to parallel trade will be likely considered as a restriction by object under Art. 101, § 1 TFEU and, consequently, no demonstration of an appreciable distortion of competition will be required in terms of effects<sup>424</sup>.

Market integration is still today one of the main concerns of European competition law<sup>425</sup>. Downgrading its relevance only because the internal market has been meanwhile established would represent a serious mistake<sup>426</sup>.

Not for nothing, the EU's (shared) competence in this area is extended to both the "*establishment*" and the "*functioning*" of the internal market<sup>427</sup>.

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<sup>423</sup> Drexl J., *Competition Law as Part of the European Constitution* cit., 687 et seq., where he further observes that the more economic approach shall be used to demonstrate the prejudice to the competitive process. Namely, it could be usefully addressed to protect "freedom of action" (enhanced after Lisbon: art. 6, § 1 TEU - 16 Charter of Fundamental Rights), of "freedom of competition" or "market openness" under art. 119, § 1 TFEU (which might appear a vague provision but still helps to protect competition "as an institution" and to consider competition in the light of dynamic efficiency: to this extent, consumer choice shall also be safeguarded) and of "market integration".

<sup>424</sup> E.g. ECJ, *Glaxo* cit., §§ 62-63.

<sup>425</sup> Vestager M., *The values of competition policy*, Keynote speech at CEPS Corporate breakfast "one year in office", 13 October 2015, available at [https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/values-competition-policy\\_en](https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/values-competition-policy_en) (accessed 12.10.2017): "The founding fathers of Europe understood that there would be no genuine integration without a Single Market – and no functioning Single Market without a strong competition policy enforced by a central competition authority".

<sup>426</sup> Drexl J., *Competition Law as Part of the European Constitution* cit., 687 et seq.

<sup>427</sup> Art. 114, § 1 TFEU.

### § 6.3.1.3 Protecting fairness

Many scholars have considered the protection of fairness as a fundamental objective of European competition law<sup>428</sup>.

In other positions such emphasis has been reduced, highlighting that the fair competition paradigm might at times turn out to be even counterproductive and might so distort the process of competition<sup>429</sup>.

A more balanced approach is to consider fairness as a “guiding principle”<sup>430</sup> not enforceable as such but which might help to shape market behaviours in combination with the concept of competition on the merits and the relevant provisions of the Treaties.

### § 6.3.1.4 Protecting Small and Medium Enterprise (SME)

Protecting Small and Medium Enterprise (SME) might be considered as an appendix of protecting dynamic efficiency, market structure and market integration.

Such approach unveils a background political idea: pluralism is the engine of progress. Therefore, by protecting SMEs, the competitive process and market structure will be protected too.

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<sup>428</sup> Marco Colino S., *The Antitrust F Word: fairness considerations in competition law*, The Chinese University of Hong Kong Faculty of Law Research Paper n. 9/2018, draft October 2018, available at <https://ssrn.com/abstract=3245865> (accessed 6.6.2019), 21: the objective of pursuing fair competition “is [...] manifest in the EU, where the main competition law provisions are rooted in an unprecedented integration project with strong economic and social values, the blueprint of which explicitly refers to combatting inequality and ensuring fair competition”; Parret L., *The multiple personalities of EU competition law* cit., 74: “The concept of fairness [...] is also related to the term distributive or social justice. [...] Fairness has been and still is one of the cornerstones of the European competition regime. [It] has a lot to do with the fundamental principle of non-discrimination”.

<sup>429</sup> Whish R. - Bailey D., *Competition Law* cit., 23: “there is a risk that seeking to achieve fairness as between one market participant and another with itself distort the process of competition”.

<sup>430</sup> Laitenberger J. (DG COMP Director General), *Fairness in EU competition law enforcement*, 20 June 2018, available at [https://ec.europa.eu/competition/speeches/text/sp2018\\_10\\_en.pdf](https://ec.europa.eu/competition/speeches/text/sp2018_10_en.pdf) (accessed 10.10.18): “while ‘fairness’ is a guiding principle, it is not an instrument that competition enforcers can use off the shelf to go about their work in detail. In each and every case the Commission looks into, it must dig for evidence; conduct rigorous economic analysis; and check findings against the law and the guidance provided by the European Courts”. This view is shared also in Gerard D., *Fairness in EU Competition Policy: Significance and Implications*, in *Journal of European Competition Law & Practice*, Vol. 9 (2018), Issue 4, 211-212.

Albeit not applicable to hardcore restrictions<sup>431</sup>, the *de minimis* Commission Notice<sup>432</sup> can be seen as a demonstration of the general *favor* of European competition law for SMEs.

## § 6.3.2 Purely economic theories

### § 6.3.2.1 Overall welfare

A number of scholars found out that European competition law has been conceived as a discipline aimed at maximizing Total Welfare<sup>433</sup> or at least better served by such standard<sup>434</sup>.

Other scholars stressed that, regardless of the claimed consumer welfare objective, in reality current EU (and US) policies would pursue total welfare<sup>435</sup>. The same scholars argue that, from a purely economic perspective, the adoption of a total welfare standard appears desirable.

Indeed, models demonstrate that, starting from a competitive price, a modest price elevation will produce a significant marginal loss in terms of consumers welfare, whereas the marginal loss will be negligible under a total welfare standard.

Conversely, where the base price of a certain good or service is high, a further price elevation will be almost neutral under a consumer welfare standard, because “the quantity demanded is lower at a higher base price, so the price

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<sup>431</sup> Under § 11 the *de minimis* exemption shall “*not apply to agreements containing any [...] hardcore restrictions*”.

<sup>432</sup> Commission Notice “*on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty (de minimis)*” (2001/C 368/07).

<sup>433</sup> Akman P., *Searching for the Long-Lost Soul of Article 82 EC*, in *Oxford Journal of Legal Studies*, Vol. 29 (2009), Issue 2, 267 et seq. concludes from the analysis of the TEEC *travaux préparatoires* that European competition law was not influenced by the ordoliberal doctrine (which in his opinion would be incompatible with the subsequent adoption of a consumer welfare standard) and embedded from its very early origins efficiency considerations, so that the shift to a total welfare standard would be certainly possible.

<sup>434</sup> According to Motta M., *Competition Policy: Theory and Practice*, Cambridge University Press, New York (U.S.), 2004, 21 et seq. when the gains in productive efficiency outbalance what is lost on the allocative efficiency the undertaking may easily compensate consumers by charging lower prices, by investing in R & D or by increasing the value of the shares hold and of dividends, by feeding pension funds and by contributing to taxation.

<sup>435</sup> Kaplow L., *On the choice of welfare standards* cit., 21 et seq.

increase applies on a smaller base”. On the other hand, with total welfare “the higher is the initial price elevation, the greater is the loss in total surplus (increase in deadweight loss) from a given further increment to price”<sup>436</sup>.

In sum, consumer welfare would encourage intervention in the presence of small increases on a competitive price (with the annexed risk of false positives and overenforcement) and would discourage it in the presence of price elevations concerning a high base price (with the annexed risk of false negatives and underenforcement).

Total welfare would work exactly the other way around.

### § 6.3.2.2 Consumer welfare

Albeit European competition law took care of the consumers starting from its very beginning<sup>437</sup>, the rise of the standard consumer welfare as a measurable concept is attributable to the advent of the more economic approach.

We can quote here the words of Commissioner Kroes, in charge after Mario Monti and great supporter of the shift toward “modern competition”:  
“Consumer welfare is now well established as the standard the Commission applies when assessing mergers and infringements of the Treaty rules on cartels and monopolies. Our aim is simple: to protect competition in the market as a means of enhancing consumer welfare and ensuring an efficient allocation of resources”<sup>438</sup>.

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<sup>436</sup> *Id.*, 21-23: “Suppose that consumer welfare is the objective. In that case, competition authorities should be reluctant to allow modest price increases to slip by since they are still fairly harmful from the consumer welfare perspective. However, modest price elevations are more difficult to detect, and there is a greater risk of false positives when attempting to target such increases. Similarly, if modest elevation is taken to be a serious problem, enforcers should be aggressive against ambiguous practices that might facilitate coordinated price elevation, which has attendant false positive risks. Now suppose instead that the goal is to maximize total welfare. Since deadweight loss is very small for modest price elevations, it would not be important to target such cases, and they might best be avoided due to false positive risks (except when price fixing is obvious). Instead, enforcement would concentrate on large elevations. Such cases pose much less risk of false positives and attendant chilling costs”.

<sup>437</sup> EECJ, 20 June 1978, Case 28/77, *Tepea BV v. Commission*, §§ 56 and 67.

<sup>438</sup> Kroes N., *Delivering Better Markets and Better Choices*, SPEECH/05/512, 15 September 2005, available at [https://europa.eu/rapid/press-release\\_SPEECH-05-512\\_en.htm](https://europa.eu/rapid/press-release_SPEECH-05-512_en.htm) (accessed 17.10.2017). Odudu O., *Wider Concerns of Competition Law*, in *Oxford Journal of Legal Studies*, Vol. 30 (2010), Issue 3, 599 et seq. shares this view. *Contra*, see Drexler J., *Competition*

This programmatic sentence has been translated in official Commission's statements in both the Guidelines on the application of Art. 101, § 3 TFEU<sup>439</sup> and of exclusionary abuses under Art. 82 TEC (102 TFEU)<sup>440</sup>.

From a distributive standpoint, it has been remarked that “a total efficiency standard is reconcilable with great inequality”, whereas “a more acceptable outcome-focused formulation is the protection of consumer welfare”<sup>441</sup>.

The consumer welfare objective has been explicitly endorsed – at times in a non-technical way<sup>442</sup> – also in some judgements of the CJEU<sup>443</sup>.

To a certain extent, the reading of the Treaties might legitimate the recourse to the standard consumer welfare. Indeed, during the years of the more economic approach eruption, the (1992) Maastricht Treaty introduced the current Art. 120 TFEU, whose second sentence – as already said – reads as follow: “*the*

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*Law as Part of the European Constitution* cit., 687 e seq.: “it is [...] only possible to justify consumer welfare as one goal of European competition law without any exclusivity or any priority in relation to other potential goals”. Moreover, “even if one accepted the promotion of consumer welfare as the objective of the European competition law, this would not automatically require the demonstration of consumer harm as the legal test for a restraint of competition”, as the Court of Justice used several times the concept of “indirect protection of the consumers” by protecting the “structure of competition”. In conclusion, “Community law does not support consumer welfare either as an exclusive objective of competition law or as a criterion of efficiency”.

<sup>439</sup> Commission Guidelines “*on the application of Article 81(3) of the Treaty*” (2004/C 101/08), § 13.

<sup>440</sup> Guidance “*on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings*” (2009/C 45/02), § 19.

<sup>441</sup> Dunne N., *Competition Law and Economic Regulation. Making and Managing Markets*, Cambridge University Press, Cambridge (U.K.), 2015, 27-28.

<sup>442</sup> See Kaplow L., *On the choice of welfare standards* cit., 4, nt. 2: “unfortunately, the term consumer welfare, which naturally denotes the welfare of consumers, is often used to refer to total welfare, specifically including producers' surplus”. In addition, “many favor tests for predatory pricing and other potentially abusive practices that ask whether equally or more efficient producers would be eliminated from the market, an orientation that seems more appropriate if the objective of competition law is not consumer welfare, or even total welfare, but rather producer welfare” (19). Case law seems to support this view: see for instance ECJ, III Chamber, 15 March 2007, case C-95/04 P, *British Airways plc v. Commission*, § 86, where the Court held that in the “*assessment of the economic justification for a system of discounts or bonuses established by an undertaking in a dominant position [...] has to be determined whether the exclusionary effect arising from [the conduct], which is disadvantageous for competition, may be counterbalanced, or outweighed, by advantages in terms of efficiency which also benefit the consumer. If the exclusionary effect of that system bears no relation to advantages for the market and consumers, or if it goes beyond what is necessary in order to attain those advantages, that system must be regarded as an abuse*”. In that specific case, “*those systems were not based on any objective economic justification*” (§ 87).

<sup>443</sup> E.g. CJEU, *Post Danmark* cit., § 42.



*Member States and the Community shall act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources, and in compliance with the principles set out in [119 TFEU]” (namely “internal market” and “the principle of an open market economy with free competition”)*<sup>444</sup>.

### § 6.3.3 Goals not included in European competition law

#### § 6.3.3.1 Industrial Policy

Industrial policy objectives are relevant to the EU (Artt. 151, § 2; 173, 189 and 195 TFEU all refer to “*competitiveness*”) but the price to be paid to achieve them can’t be the softening of European competition law rules.

The point has been made clear in the recent decision of the Commission blocking the *Siemens/Alstom* merger<sup>445</sup>.

Albeit the great political pressure exerted by France and Germany, the Commission applied without exceptions the rules on merger control and found that the notifying parties failed to demonstrate efficiency gains capable to overtake the significant impediment to effective competition (SIEC) which the transaction at stake was expected to produce under Art. 2, § 3 EUMCR<sup>446</sup>. Therefore, industrial policy objective (in the specific case: creating a “European champion” able to tackle foreign players, namely Chinese ones, at a global level), unless falling within the scope of Art. 21, § 4 EUMCR<sup>447</sup>, cannot benefit from any exemption and are equally subject to competition law rules<sup>448</sup>.

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<sup>444</sup> Conversely, the reference to “consumers” made by Art. 101, § 3 TFEU has been mostly considered as a provision which “does not refer to the end user” (Parrett L., *The multiple personalities of EU competition law* cit., 76), but to “any purchaser (including industrial purchasers)” (Zimmer D., *The basic goal of competition law: to protect the opposite side of the market*, in Id. (ed.), *The goals of competition law*, Edward Elgar, Cheltenham (U.K.) – Northampton (U.S.), 491).

<sup>445</sup> Commission decision 6 February 2019 (under Article 8, § 3 EUMCR) in Case M.8677 - *SIEMENS/ALSTOM*.

<sup>446</sup> See §§ 1262 et seq.

<sup>447</sup> “Member States may take appropriate measures to protect legitimate interests other than those taken into consideration by this Regulation and compatible with the general principles and other provisions of Community law.

This conclusion appears consistent with the allocation of powers within the Union: while the EU holds an exclusive competence in the field of competition law, it has marginal (promotion) powers in the area of industrial policy<sup>449</sup>, historically belonging to the Member State's sovereignty (*infra* § 7.2).

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*Public security, plurality of the media and prudential rules shall be regarded as legitimate interests within the meaning of the first subparagraph.*

*Any other public interest must be communicated to the Commission by the Member State concerned and shall be recognised by the Commission after an assessment of its compatibility with the general principles and other provisions of Community law before the measures referred to above may be taken. The Commission shall inform the Member State concerned of its decision within 25 working days of that communication”.*

<sup>448</sup> Even though this is not the first case in the European history where a merger is blocked unless its possible outcomes in terms of industrial policy [in the field of aviation and marine gas turbine manufacturing and connected service, see Commission decision (under Art. 8, § 3 TEC of Reg. 4064/89/EC) of the 3 July 2001 in Case M.2220 - *GENERAL ELECTRIC/HONEYWELL*; in the field of cash and derivatives markets see Commission decision (under Art. 8, § 3 TEC EUMCR) of the 1<sup>st</sup> July 2012 in Case M.6166 - *DEUTSCHE BÖRSE / NYSE EURONEXT*], the Siemens/Alstom decision elicited a great debate. The European Political Strategy Centre, in its Study *EU Industrial Policy after Siemens-Alstom. Finding a new balance between openness and protection*, 18 March 2019, available at [https://ec.europa.eu/epsc/sites/epsc/files/epsc\\_industrial-policy.pdf](https://ec.europa.eu/epsc/sites/epsc/files/epsc_industrial-policy.pdf) (accessed 24.4.19), defended the Commission's decision, whereas the Bundesministerium für Wirtschaft und Energie and the Ministère de l'Économie et des Finances issued a joint document (“*A Franco-German Manifesto for a European industrial policy fit for the 21st Century*”, 19 February 2019, available at [https://www.bmwi.de/Redaktion/DE/Downloads/F/franco-german-manifesto-for-a-european-industrial-policy.pdf? blob=publicationFile&v=2](https://www.bmwi.de/Redaktion/DE/Downloads/F/franco-german-manifesto-for-a-european-industrial-policy.pdf?blob=publicationFile&v=2), accessed 24.4.19), where, among the proposals to adapt the regulatory framework to the challenges posed by the globalized economy, the two Ministries mention: *i*) “to take greater account of competition at the global level, potential future competition and the time frame when it comes to looking ahead to the development of competition to give the European Commission more flexibility when assessing relevant markets”; *ii*) “[to] consider whether a right of appeal of the Council which could ultimately override Commission decisions could be appropriate in well-defined cases, subject to strict conditions” (the latter proposal appears similar to what provided in the field of State aids under Art. 108, § 2 TFEU). According to Motta M. - Peitz M., *Competition policy and European firms’ competitiveness*, in *VOX, CEPR Policy Portal*, February 20<sup>th</sup>, 2019, available at <https://voxeu.org/content/competition-policy-and-european-firms-competitiveness> (accessed 24.4.19), “there is nothing in European merger control that prevents the creation of European (or, for that matter, national) champions, provided that the merger brings about sufficiently strong synergies and complementarities. But in the Siemens/Alstom case, there is no public information that points to such synergies, and the European Commission stated that the parties have not substantiated any such efficiency claims. Absent efficiencies from the merger, the elimination of competition between two firms has likely anticompetitive effects both in the short and in the long term. [...] Europe needs more efficient, competitive, and innovative firms. Sponsoring mergers which remove competition would achieve the opposite”. On the topic, see also Libertini M., *Il controllo antitrust delle concentrazioni* cit., 1 et seq.

<sup>449</sup> Art. 173, § 3 TFEU.

### § 6.3.3.2 (Non-economic) Well-being

Pairing in a way the concerns expressed in U.S. by the New-Brandeisians, also a number of European scholars proposed a more inclusive approach to competition law, where non-economic aspects of well-being are integrated into the competitive assessment, thus evolving the standard consumer welfare in a sort of wider consumer well-being standard<sup>450</sup>.

In this broader setting, one might imagine a merger or an agreement leading to the implementation of labour-saving technologies to be blocked or prohibited

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<sup>450</sup> Lianos I., *The Poverty of Competition Law. The Long Story*, CLES Research Paper Series, n. 2/2018, available at [https://www.ucl.ac.uk/cles/sites/cles/files/cles\\_2-2018.pdf](https://www.ucl.ac.uk/cles/sites/cles/files/cles_2-2018.pdf) (accessed 1.3.2019), 97-98: “focus on consumer well-being in markets where this makes sense from a complex equality perspective, where we know that most of the consumers (or people), affected will be among the lower income strata, or that monopolistic control of the specific social good may lead to the emergence of dominance that can be converted and extended more easily in other markets and other social spheres (outside market exchange). In other situations we may want to take a broader perspective, for instance by considering broader public interests that would preserve fairness and stability, even if this is at the price of some reduction in economic efficiency. This could include effects on employment and the interests of workers and the unemployed, the protection of privacy, the democratic process and media pluralism, or environmental concerns, to the extent that these effects result from restrictions of competition, systemic resilience becoming the driving force of competition law. New tools may also be added to the competition law toolkit box. It is clear that market definition with its emphasis on price competition may fail to represent the various forms of competitive interaction that take place in the digital economy, and the various other values than lower prices that may animate public policy in specific markets. [...] The realisation that for societies to stay stable, they need to stand on two legs: economic efficiency but also fairness, may call for a limited redesign of competition law. This should not only be focusing on efficiency (and consumer surplus or welfare), but also on guaranteeing complex equality. This «complex equality—driven» competition law may opt for some of the reforms suggested above by the proponents of «populist» antitrust. However, to the difference of the views put forward by the populists, the boundaries of competition law enforcement should also be clear and limiting principles to state intervention developed in order to avoid the dominance of politics over the marketplace, considered as a separate sphere of justice”. Similarly, Townley C., *Article 81 EC and Public Policy*, Hart Publishing, Oxford (U.K.), 2009, 3, argued that an efficiency-only interpretation of European competition law would be only sustainable if you “read the competition rules in isolation”. When you “read the Treaty holistically” it is impossible to exclude non-efficiency concerns. He fosters this conclusion by assigning a key role to the policy-linking clause under Art. 7 TFEU (“*The Union shall ensure consistency between its policies and activities, taking all of its objectives into account and in accordance with the principle of conferral of powers*”). *Contra*, see Odudu O., *Wider Concerns of Competition Law* cit., 607-613, where it is objected that this argument would require the policy-linking provision to have direct effect, which is not. Indeed, due to the principle of conferral mentioned in Art. 7 TFEU itself, “principle dispositions” such as, in the field of human health protection, Art. 168 TFEU cannot be taken in account to limit the direct application of European Competition law. He concludes that “no claim is made that wider goals should not be pursued; rather the wider goals must be pursued outwith competition law adjudication”.

regardless of the productive efficiency and of the consequent allocative efficiency expected to gain by way of lowering prices. Assuming competition law is entitled to assess labour aspects, this would require a very delicate trade-off between protection of the level of employment and low prices.

As said, both the General Court<sup>451</sup> and the Commission<sup>452</sup> have expressly rejected this approach.

## § 6.4 A functional and positivist holistic proposal: reasoning per macro-types of conduct

At least from a methodological point of view, the starting point of the proposal here framed is the German area theory of competition as a tool to “protect the other side of the market”<sup>453</sup>.

The advantage associated to this theory is in the fact that it enables reasoning per macro-types of conduct.

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<sup>451</sup> General Court, *Timab Industries* cit., §§ 211-212.

<sup>452</sup> Commission decision in Case M.8084 – *Bayer/Monsanto* cit., §§ 3005 et seq.

<sup>453</sup> Zimmer D., *The basic goal of competition law* cit., 486 et seq. argues that protecting the competitive process, that is maintaining certain “living conditions”, is “an intermediate and not the final goal”. In abstract, said final objective can be consumer welfare, total welfare or protecting the opposite side of the market. His analysis concludes for the latter. Therefore, “if sellers are intending to exploit their customers by means of a seller cartel *or* by abusing their dominant position as seller *or* by creating a cartel *or* by abusing their dominant position by means of a merger, competition law is called upon to prevent this effect. However, in the case of firms that are intending to form purchaser cartels *or* to exploit their buyer power *or* to achieve buyer power through a merger, competition law serves to prevent such effects. In these cases, competition law does not serve consumer interests but producer or respectively seller interests”. After having clarified that this proposal does not equal to total welfare, because here productive and allocative efficiency are regarded alternatively, Zimmer concludes that this criterion has a “protective” nature, whilst consumer and total welfare have an “utilitarian” one. This distinction is relevant because “the protective approach – that is, competition law protects the opposite side of the market – would constitute the rule; the efficiency justification or defence would form the exception”. A similar view has been expressed in Kerber W., *Should competition law promote efficiency?*, in Drexl J. – Idot L. – Monéger J. (eds.), *Economic Theory and Competition Law*, Edward Elgar, Cheltenham (U.K.) – Northampton (U.S.), 2009, 101: “Since the beginning of modern competition policy, the fight against cartels, monopolies and firms with market power has been largely motivated by the goal to impede the exploitation of individuals and firms on the opposite market side through market power, especially consumers through firms with market power on the supply side”.

This method appears the only unifying factor capable to make sense of the multiple goals pursued by European competition law.

Indeed, the core assumption of the proposal here framed is that in order to identify the goal(s) of competition law one has necessarily to look first at the conduct under examination.

### § 6.4.1 Merger control

To put the story very simple, the European merger review system may be divided in two stages<sup>454</sup>.

The first one, aimed at investigating whether the transaction will lead to “*the creation or strengthening of a dominant position*”<sup>455</sup>, represents only a preliminary step and commonly starts, especially in the context of horizontal mergers (but also in the context of vertically integrated markets), with the assessment of market shares and with the analysis of possible overlaps between the merged entities.

Although a SIEC might well be ascertained also in the absence of a dominant position and although the concept of dominance itself might well depend on factors others than market shares<sup>456</sup>, this simplistic representation of the first stage of merger review helps to identify its main objectives: it deals with market structure and, so on, with dynamic efficiency.

The second stage of the merger assessment, to be run only in cases where the first stage highlighted possible competitive concerns, is more devoted to the efficiency paradigm and, not for nothing, is generally based on the so-called efficiency defence.

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<sup>454</sup> Such stages should not be confused with the procedural stages of the investigation (phase 1 and, eventually, phase 2).

<sup>455</sup> Art. 2, § 3 EUMCR.

<sup>456</sup> The dominant position referred to in Article 102 TEU relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of the consumers (EECJ, *Hoffmann-La Roche* cit., § 38).

Here, depending on the positions, the goal to be achieved will be consumer welfare (allocative efficiency) or total welfare (allocative + productive efficiency > 0).

Indeed, both the horizontal<sup>457</sup> and non-horizontal<sup>458</sup> guidelines made an explicit choice for the standard consumer welfare.

This conclusion has been challenged by scholars, especially in the context of horizontal mergers, where the Commission – this is the argument – seems in practice to favour a total welfare standard<sup>459</sup>.

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<sup>457</sup> See Commission Guidelines “on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings” (2004/C 31/03), §§ 79-84: “79. The relevant benchmark in assessing efficiency claims is that consumers will not be worse off as a result of the merger. For that purpose, efficiencies should be substantial and timely, and should, in principle, benefit consumers in those relevant markets where it is otherwise likely that competition concerns would occur. 80. Mergers may bring about various types of efficiency gains that can lead to lower prices or other benefits to consumers. For example, cost savings in production or distribution may give the merged entity the ability and incentive to charge lower prices following the merger. In line with the need to ascertain whether efficiencies will lead to a net benefit to consumers, cost efficiencies that lead to reductions in variable or marginal costs are more likely to be relevant to the assessment of efficiencies than reductions in fixed costs; the former are, in principle, more likely to result in lower prices for consumers. Cost reductions, which merely result from anti-competitive reductions in output, cannot be considered as efficiencies benefiting consumers. 81. Consumers may also benefit from new or improved products or services, for instance resulting from efficiency gains in the sphere of R & D and innovation. A joint venture company set up in order to develop a new product may bring about the type of efficiencies that the Commission can take into account. 82. In the context of coordinated effects, efficiencies may increase the merged entity's incentive to increase production and reduce prices, and thereby reduce its incentive to coordinate its market behaviour with other firms in the market. Efficiencies may therefore lead to a lower risk of coordinated effects in the relevant market. 83. In general, the later the efficiencies are expected to materialise in the future, the less weight the Commission can assign to them. This implies that, in order to be considered as a counteracting factor, the efficiencies must be timely. 84. The incentive on the part of the merged entity to pass efficiency gains on to consumers is often related to the existence of competitive pressure from the remaining firms in the market and from potential entry. The greater the possible negative effects on competition, the more the Commission has to be sure that the claimed efficiencies are substantial, likely to be realised, and to be passed on, to a sufficient degree, to the consumer. It is highly unlikely that a merger leading to a market position approaching that of a monopoly, or leading to a similar level of market power, can be declared compatible with the common market on the ground that efficiency gains would be sufficient to counteract its potential anti-competitive effects”.

<sup>458</sup> Commission Guidelines “on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings” (2008/C 265/07), § 21: “in its assessment, the Commission will consider both the possible anti-competitive effects arising from the merger and the possible pro-competitive effects stemming from substantiated efficiencies benefiting consumers”. In so doing, the Commission will apply, in so far as compatible, the efficiency criteria set forth under §§ 79-84 of the Horizontal Guidelines.

Inevitably, since merger control is “forward looking”, in both cases the impact of the transaction on (consumer or total) welfare will heavily rely on a number of assumptions inferred by market structure and by the competitive process in the affected markets, as meaningfully acknowledged in Recital 6 of the EUMCR<sup>460</sup>.

Yet, in the second stage of merger control dynamic efficiency might play a relevant role as well.

In the *Dow/Dupont* case, the impact of the transaction on the innovation markets has been specifically considered by the Commission, which conditioned the clearance on the implementation of commitments supposed to neutralize the raised concerns<sup>461</sup>.

Furthermore, in the *GE/Honeywell* case the Commission blocked the merger even though it had admitted the benefits for the consumers in the short run, because of the adverse consequences in the foreseeable future<sup>462</sup>.

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<sup>459</sup> This is the opinion of Kaplow L., *On the choice of welfare standards* cit., 24. Indeed, “the notion is that, the worse is the initial situation, the less we should tolerate further deterioration”. As he demonstrates, in the presence of high base price (“worse initial situation”), a post-transaction small increase in price would have negligible consequences under consumer welfare and more relevant effects under total welfare. “By contrast, if consumer welfare were the objective, priorities should be reversed. For a given price elevation, scrutiny should be the toughest where the initial price elevation is low and progressively weaker as the initial price elevation is large”. And – Kaplow concludes – this is far distant from the current policy.

<sup>460</sup> “A specific legal instrument is therefore necessary to permit effective control of all concentrations in terms of their effect on the structure of competition”.

<sup>461</sup> Commission decision (under Art. 8, § 2 EUMCR) of 27 March 2017 in Case M. 7932 - *Dow/DuPont*, Section VIII, §§ 1955 et seq. and in particular § 1991: “a merger may deprive consumers of these benefits through an increase of market power, which [...] is defined as the ability of one or more firms to profitably increase prices, reduce output, choice or quality of goods and services, **diminish innovation** or otherwise influence parameters of competition” (added emphasis). Here the Commission Guidelines “on the assessment of horizontal mergers” cit., § 8 is reminded as well. Thus, “the analytical framework for the assessment of non-coordinated effects in the Horizontal Merger Guidelines is not exclusively restricted to the appraisal of price effects, but is also applicable to innovation” (§§ 1993 et seq.). The transaction has been cleared subject to the implementation of a proper set of commitments (“Final commitments” package), which addressed, *inter alia*, also the concerns raised with respect to “innovation competition in the crop protection industry” (§ 4018).

<sup>462</sup> Commission decision of 3 July 2001 in Case No COMP/M.2220 - *General Electric/Honeywell*, § 449: “airlines will have a very limited incentive to exert countervailing buying power since they cannot really afford to deny themselves short-term benefits even if they are associated with adverse consequences in the foreseeable future”.

## § 6.4.2 Restrictions by object

According to the well-established case-law, for the purposes of applying Article 101, § 1 TFEU there is no need to take account of the actual effects of an agreement or concerted practice or decision by associations of undertakings once it appears that its aim is to prevent, restrict or distort competition within the common market<sup>463</sup> (so-called restrictions “by object”).

When this is the case, normative theories apply and the (consumer or total) welfare reduction can be legally inferred from the serious breach of the competitive rules ascertained<sup>464</sup>.

This conclusion is not contradicted by the fact that an evidence-based approach is required for the Commission to conclude that the conduct at stake, having regard to all context-specific factors, is restrictive by object<sup>465</sup>.

What it is here stressed is that, once the Commission has successfully achieved such a burden of proof, welfare considerations become irrelevant.

## § 6.4.3 Foreclosing cartels (causing a restriction by effect) and exclusionary abuses

In the context of foreclosing infringements producing a restriction by effect – which might include the elimination of an existing competitor, the weakening of an existing competitor, the prevention of an existing competitor from expanding on the market and the deterrence of a potential competitor entering

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<sup>463</sup> EECJ, 13 July 1966, joined cases C-56 and 58/64, *Établissements Consten S.à.R.L. and Grundig-Verkaufs-GmbH v. Commission of the European Economic Community*, p. 342.

<sup>464</sup> The distinction between restrictions by object and by effect under Art. 101 TFEU appears quite similar to the distinction between “per se rule” and “rule of reason” developed by the U.S. case law in the decisions applying Section 1 of the Sherman Act (see *Continental T.V. Inc., et al. v. GTE Sylvania Inc.*, 433 US 36 (1977), 49-50).

<sup>465</sup> The CJEU made clear that the “restrictive aim” consists in the objective purpose of the behaviour (which might differ from the subjective intent of the parties). Content and objectives of the conduct as well as legal and economic context are normally relevant for the assessment, which should be evidence-based and economic-based (CJEU, Third Chamber, 11 September 2014, *Groupement des cartes bancaires (CB) v. Commission*, Case C- 67/13 P, § 53).



the market<sup>466</sup> – market structure can well play a role, because factors such as market power might turn out to be essential to assess the “appreciably” of the foreclosing effects connected to the behaviour at stake<sup>467</sup>.

This seems consistent with the aforementioned theory of competition as a tool to protect the opposite side of the market: when it comes to foreclosing cartels, the other side is represented by (actual or potential) competitors, and not, at least in the first instance, by consumers.

This trend is even more evident in the context of exclusionary abuses.

Here, the perspective adopted by the Commission is by definition of medium-long run because it tends not to consider the short-term beneficial effects connected to practices such as discounts<sup>468</sup> or predatory prices<sup>469</sup> but, conversely, tends to consider the harm that will be suffered by consumers after the dominant undertaking has dislodged (or pre-empted the entry on the market or blocked the expansion of) one or more actual or potential competitors.

Therefore, dynamic efficiency and market structure play here, at least in the first instance, a predominant role compared to consumer or total welfare<sup>470</sup>.

Meaningfully, the discussion paper makes clear that “the essential objective of Article 82 [EC] when analysing exclusionary conduct is the protection of

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<sup>466</sup> Bailey D. - Elizabeth John L. (eds.), *Bellamy & Child. European Union Law of Competition*, VIII ed., Oxford University Press, Oxford (U.K.), 2018, 157-158, § 2132. For an example of an infringement by effect put in place by means of foreclosing access to the market, see EECJ, 28 February 1991, *Stergios Delimitis v Henninger Bräu AG*, Case C-234/89, § 24.

<sup>467</sup> GC, Ninth Chamber (Extended Composition), 12 December 2018, *Servier SAS et al. v Commission*, Case T-691/14, § 1711.

<sup>468</sup> See for instance ECJ, *British Airways* cit., § 86.

<sup>469</sup> CJEU, First Chamber, 2 April 2009, Case C-202/07 P, *France Télécom SA v. Commission*, § 105.

<sup>470</sup> CFI, Fifth Chamber (extended composition), 30 January 2007, *France Télécom SA v. Commission*, Case T-340/03, § 195: “As regards the conditions for the application of Article 82 EC and the distinction between the object and effect of the abuse, it should be pointed out that, for the purposes of applying that article, showing an anti-competitive object and an anticompetitive effect may, in some cases, be one and the same thing. If it is shown that the object pursued by the conduct of an undertaking in a dominant position is to restrict competition, that conduct will also be liable to have such an effect”; CFI, Third Chamber, 30 September 2003, *Manufacture française des pneumatiques Michelin v. Commission*, Case T-203/01, § 239: “For the purposes of establishing an infringement of Article 82 EC, it is sufficient to show that the abusive conduct of the undertaking in a dominant position tends to restrict competition or, in other words, that the conduct is capable of having that effect”.

competition on the market *as a means* of enhancing consumer welfare and of ensuring an efficient allocation of resources”<sup>471</sup>. The same view has been expressed in the subsequent Guidance on the application of Article 82 of the EC Treaty to exclusionary abuses<sup>472</sup>. Consequently, the welfare argument might be invoked by the dominant undertaking only in the second instance, to allege that the productive surplus achieved by way of the showed efficiencies will be passed on consumers (*Post Denmark*<sup>473</sup>).

Notably, in prosecuting exclusionary abuses Art. 102 TFEU shows to favour an anticipatory approach and seeks to prevent (irreversible) damages to the market structure. On a systematic standpoint, decisions ordering interim measures confirm this concern.

This conclusion is not contradicted by *Intel*<sup>474</sup>.

Here, the CJEU just made clear that the more economic approach applies also to foreclosure<sup>475</sup>. Therefore, where the undertaking concerned submits, during the administrative procedure, on the basis of supporting evidence, that its conduct was not capable of producing the alleged foreclosure effects, the Commission is not only required to analyse, first, the extent of the undertaking’s dominant position on the relevant market and, secondly, the share of the market covered by the challenged practice, as well as the content

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<sup>471</sup> DG Competition “*discussion paper on the application of Article 82 of the Treaty* cit., § 54 (added emphasis).

<sup>472</sup> Communication from the Commission “*Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty* cit., §§ 5, 6 and 19.

<sup>473</sup> For a bright example, see CJEU, *Post Danmark* cit., §§ 41-42: “[The] undertaking may demonstrate, for that purpose, either that its conduct is objectively necessary [...], or that the exclusionary effect produced may be counterbalanced, outweighed even, by advantages in terms of efficiency that also benefit consumers [...]. In that last regard, it is for the dominant undertaking to show that the efficiency gains likely to result from the conduct under consideration counteract any likely negative effects on competition and consumer welfare in the affected markets, that those gains have been, or are likely to be, brought about as a result of that conduct, that such conduct is necessary for the achievement of those gains in efficiency and that it does not eliminate effective competition, by removing all or most existing sources of actual or potential competition”.

<sup>474</sup> CJEU, Grand Chamber, 6 September 2017, *Intel Corporation Inc. v. Commission*, Case C- 413/14 P, §§ 29 et seq.

<sup>475</sup> The rationale appears similar to the case law on restrictions by object: *Groupement des cartes bancaires (CB)* (see above § 6.4.2).

and nature of such practice (in that case: conditions and arrangements for granting the rebates, their duration and their amount). It is also required to assess the possible existence of a strategy aiming to exclude competitors that are at least as efficient as the dominant undertaking from the market (so-called AEC test)<sup>476</sup>. Here, the Court ruled that Art. 102 TFEU's purpose is not “*to ensure that competitors less efficient than the undertaking with the dominant position should remain on the market*”<sup>477</sup>.

More to the point, the *Intel* decision dealt with the relationship between the formalistic approach (*per se rule*) and the more economic approach (*rule of reason*) to foreclosure, and it ruled in favour of the latter.

However, in this case, too, welfare considerations are in the first instance irrelevant. Therefore, if, following the described evidence/economic-based analysis, foreclosure is successfully alleged by the Commission, it is for the undertaking to submit that the exclusionary effect arising from the practice, which is disadvantageous for competition, may be counterbalanced, or outweighed, by advantages in terms of efficiency which also benefit the consumer<sup>478</sup>. And this would typically be a daunting argument for the firm under investigation.

Therefore, welfare considerations can be evaluated only in the second instance and the related burden of proof is entirely allocated on the undertaking.

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<sup>476</sup> Communication from the Commission “*Guidance on the Commission’s enforcement priorities in applying Article 82 cit., §§ 23, 25, 26 and 67*”. The Commission recently held that, depending on the specific circumstances at stake, it may also be exempted from entering an AEC test: see Summary of Commission Decision of 18 July 2019, Case AT.39711 — *Qualcomm (predation)*, (2019/C 375/07), § 14. By referring to this decision, DG Commissioner Vestager has declared: “Qualcomm itself presented us with an as efficient competitor test. But there were serious problems with the way it was done, which meant it didn’t actually prove that the rebates couldn’t harm competition”: see *Fairness and competition*, Speech of 25 January 2018, available at [https://wayback.archive-it.org/12090/20191129212135/https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/fairness-and-competition\\_en](https://wayback.archive-it.org/12090/20191129212135/https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/fairness-and-competition_en).

<sup>477</sup> *Intel*, §§ 133-134.

<sup>478</sup> *Intel*, § 139; *British Airways*, § 86.

## § 6.4.4 Coordination cartels (causing a restriction by effect) and exploitative abuses

Finally, the consumer welfare standard appears the best goal to prosecute both coordination cartels (causing a restriction by effect) and exploitative abuses.

As for coordination cartels which fail to materialize a restriction by object, the anti-competitive effects are generally investigated with a rule of reason on aspects such as price, output, quality and innovation, facilitated by the joint application of §§ 1 and 3 of Art. 101 TFEU<sup>479</sup>. This *modus agendi* appears more familiar to a standard consumer welfare<sup>480</sup>.

The same goes for exploitative abuses, whose effects are by definition passed directly (or indirectly, via the over-charged customers) on consumers<sup>481</sup>.

## § 7 Competition policy in the European Economic Constitution

Part II of this research meaningfully titles “Competition policy in the European Economic Constitution”.

It seeks to circumscribe the scope of the research, which is not limited to competition law, but encompasses also (pro-competitive) economic regulation (in the strict sense).

To our extent, the combination of the two will be termed “competition policy”.

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<sup>479</sup> CJEU, Third Chamber, 11 September 2014, Case C- 382/12 P, *MasterCard Inc. et al. v. Commission*, §§ 236-237 and 241-242.

<sup>480</sup> Although in the assessment of the “appreciable adverse impact on the parameters of competition” market structure might still be relevant (see Commission decision 19 December 2007 on Cases COMP/34579 *Mastercard*, Comp.36518 *EuroCommerce* and COMP.38.580 *Commercial Cards*, § 105; EECJ, 30 June 1966, *Société Technique Minière (L.T.M.) v. Maschinenbau Ulm GmbH (M.B.U.)*, Case C-56/65, p. 250).

<sup>481</sup> See Opinion of Advocate General Wahl, 6 April 2017, Case C- 177/16, *Biedrība ‘Autortiesību un komunikēšanās konsultāciju aģentūra – Latvijas Autoru apvienība’ v. Konkurences padome*, § 101: “when a dominant undertaking applies prices above competitive levels, there is an inefficient allocation of resources and consumer welfare is reduced (part of the welfare is transferred to the dominant company, whereas part is simply lost)”.

## § 7.1 The boundaries of economic regulation: theory and practice

### § 7.1.1 Technical justifications for regulation (at large)

Broadly speaking, “regulation” (at large) might be defined as “State intervention in market allocations of resources in order to direct market behaviour towards the public interest”<sup>482</sup>.

Several technical justifications for regulation have been identified.

A good approximation might be the following<sup>483</sup>:

1) monopolies and natural monopolies<sup>484</sup>; 2) windfall profits (or economic rent or excess profit); 3) externalities; 4) information inadequacies; 5) continuity and availability of the service; 6) anti-competitive behaviour and predatory pricing; 7) public goods and moral hazard; 8) unequal bargaining power; 9) scarcity and rationing; 10) distributional justice and social policy; 11) rationalization and coordination; 12) planning.

### § 7.1.2 Regulatory strategies

Depending on the regulatory strategy, regulation can take different forms.

Scholars<sup>485</sup> conceptualized the following ones:

1) command & control; 2) self-regulation and enforced self-regulation, as well as co-regulation and enforced co-regulation; 3) market-harnessing controls: i) competition laws; ii) franchising (competition *for* the market); iii) regulation by

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<sup>482</sup> Koenig C. – von Wendland B., *The Art of Regulation. Competition in Europe - Wealth and Wariness*, Edward Elgar Publishing, Cheltenham (U.K.) – Northampton (U.S.), 2017, 123.

<sup>483</sup> Baldwin R. – Cave M., *Understanding Regulation. Theory, Strategy and Practice*, Oxford University Press, New York (U.S.), 1999, 9 et seq.

<sup>484</sup> As far as it is known, the term “monopoly” (from ancient Greek: “single seller”) has been used (with a negative meaning) for the first time in history in the “Thales the Milesian anecdote” narrated by Aristotle, *Politics* (English translation by Benjamin Jowett available at <https://jim.com/arispol.htm>), 350 B.C., Book 1, Chapter 11.

<sup>485</sup> From n. 1 to n. 7, see Baldwin R. – Cave M., *Understanding Regulation* cit., 35 et seq., for n. 8, see Dunne N., *Competition Law and Economic Regulation* cit., 39.

contract (e.g. Compulsory Competitive Tendering for contracting out of local authorities<sup>486</sup>; mandatory minimum salary to contract with public bodies, etc.); iv) tradeable permits; 4) disclosure; 5) direct action in economy; 6) allocation of rights and liabilities; 7) public compensation/social insurance schemes; 8) incentives.

### 7.1.3 “Social regulation” and “economic regulation” (in the broad sense)

The heterogeneity of the list of technical justifications for regulation above provided led scholars to identify two sub-species of regulation: “social regulation” and “economic regulation”<sup>487</sup>.

Prominent examples of said categories might be, respectively, distributional justice and social policy, on one side, and monopolies and natural monopolies, on the other side.

Yet, the distinction tends to be at times liquid, because the qualification of a certain regulation as “economic” does not prevent it to (also) be finalized to address social concerns: a good example, here, might be continuity and availability of the service (typically, the universal service).

This depends on the fact that regulation is often multipurpose and meets a multitude of technical justifications<sup>488</sup>.

### § 7.1.4 Competition policy as economic regulation in the broad sense

The scope of this research is limited to “competition policy”.

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<sup>486</sup> E.g. directive 2014/24/EU “*on public procurement*”.

<sup>487</sup> Dunne N., *Competition Law and Economic Regulation* cit., 34-37.

<sup>488</sup> For instance, the Italian Council of State has reminded that the “Telecoms Package” adopted in 2002 had two coexistent objectives: protecting the competitive structure of the market through a gradual liberalization and opening to full competitive market; protecting “users” (both undertakings and consumers) suffering informational asymmetries (Council of State, VI Chamber, n. 7296 of 25 October 2019).

Competition policy will be considered as one of the three subsections of “economic regulation in the broad sense”, together with indirect redistributive policies (taxation<sup>489</sup>) and direct action of the State in the economy (the last resort of planned economy).

To our extent, competition policy encompasses both “competition law” and “economic regulation (in the strict sense)” (here on referred as “economic regulation”).

Acting in combination, they respectively prohibit and/or require certain market conducts<sup>490</sup>.

Considering competition law as a form of economic regulation (in the broad sense) appears consistent with the above discussed ordoliberal idea, peculiar to the European area, according to which the competitive process does not belong to a natural order but requires a (minimum, subsidiary and proportional) degree of corrective State intervention.

In this light, “competition law can be understood as a mechanism of market supervision that addresses a particular variety of market failure, namely the problem of monopoly”<sup>491</sup>.

As we will see, economic regulation might be used to face the market power problem<sup>492</sup>.

Therefore, competition law and economic regulation have, at least in part, overlapping scope of application<sup>493</sup>. Indeed, “the terms «competition law» and

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<sup>489</sup> Taxation might be viewed as a hybrid model in between social regulation (see Heer C., *Taxation as an Instrument of Social Control*, in *American Journal of Sociology*, Vol. 42 (1937), Issue 4, 484 et seq.) and economic regulation, especially when enacted to address negative externalities and spill-overs (Barnett A.H. - Yandle B., *Regulation by Taxation*, in Backhaus J.G. - Wagner R.E. (eds.), *Handbook of Public Finance*, Springer, Boston (U.S.), 2005, 217 et seq.).

<sup>490</sup> Dunne N., *Competition Law and Economic Regulation* cit., 9.

<sup>491</sup> Dunne N., *Competition Law and Economic Regulation* cit., 14.

<sup>492</sup> Below § 7.1.5.

<sup>493</sup> Dunne N., *Competition Law and Economic Regulation* cit., 3.

«economic regulation» are simple labels that relate to wavering ideas and a dynamic maze of diverse and overlapping phenomena”<sup>494</sup>.

#### § 7.1.4 Definition of Economic regulation (in the narrow sense)

For the purpose of this research, Dunne’s definition will be adopted: economic regulation is “any State-imposed, positive, coercive alteration of or derogation from the operation of the free market in a sector, typically undertaken in order to correct market defects of an economic nature, and to be distinguished from regulation that pursues a predominantly ‘social’ aim. Competition law and economic regulation may thus be viewed as separate mechanisms of market supervision: regulation supplants the market, whereas competition law supplements it”<sup>495</sup>.

#### § 7.1.5 Market defects addressed by economic regulation

Economic regulation is typically required in the presence of “market failures” or, as more “honestly”<sup>496</sup> labelled, “market defects”<sup>497</sup>.

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<sup>494</sup> Maggiolino M., *The Regulatory Breakthrough of Competition Law: Definitions and Worries*, in Drexl J. – Di Porto F., *Competition law as regulation*, Edward Elgar Publishing, Cheltenham (U.K.) – Northampton (U.S.), 2015, 3; Cassetti L., *La cultura del mercato fra interpretazioni della Costituzione e principi comunitari*, Giappichelli, Torino (IT), 1998, 241; Handler M., *Regulation Versus Competition*, in *Antitrust Law Journal*, Vol. 43 (1973-1974), 277: competition and economic regulation are often “complementary instruments for the societal control of business”.

<sup>495</sup> Dunne N., *Competition Law and Economic Regulation* cit., 40.

<sup>496</sup> Koenig C. – von Wendland B., *The Art of Regulation* cit., 124 argue that the term “market failure” commonly used to justify both market and non-market regulation is not so “honest”, because at times it would be more correct to affirm that the social implications of unadulterated market dynamics are not politically bearable (e.g. think about universal service: it is not completely true that the market would not provide a service of general economic interest also in the deep countryside, but rather that the price charged in such areas would not meet the local consumers’ willingness to pay).

<sup>497</sup> This term is used, *inter alia*, by Dunne N., *Competition Law and Economic Regulation* cit., 5 and 13. A broader concept of market “failure”, encompassing socially undesirable outcomes, is proposed also in Breyer S.G., *Antitrust, Deregulation and the Newly Liberated Marketplace*, in *California Law Review*, Vol. 75 (1987), 1006.



The admission of a certain level of State intervention does not contradict the adoption of a free-market model<sup>498</sup>: history has demonstrated that the neo-classical mantra of market's "efficiency and integrity" is not far from a myth<sup>499</sup>.

According to Tirole, economic regulation addresses six prototypes of market defects<sup>500</sup>:

- 1) the exchange can affect third parties, who are, by definition, not consenting (e.g. pollution negative externalities or spill-overs);
- 2) the exchange may not take place with full knowledge and consent (informational asymmetry);
- 3) buyers can become victims of their own actions (e.g. consumers' overestimation of their own investment capacity might call for "paternalistic" behaviour of the financial consultant, ensured by tailored disclosure information obligations, at times to be targeted on the consumers' behaviour<sup>501</sup>);
- 4) implementing the exchange may exceed the individual's capacities (e.g. consumers may want to withdraw their bank deposit or receive their pay out from the insurance company, but the contracting partner may declare bankruptcy. It would be extremely complex for a consumer to monitor the

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<sup>498</sup> Dunne N., *Competition Law and Economic Regulation* cit., 6.

<sup>499</sup> Tirole J., *Economics for the Common Good* (translation by Rendall S.), Princeton University Press, Princeton (U.S.) - Oxford (U.K.), 2017, 160, remarking that "a comparison of standards of living in planned and market economies at the time of the fall of the Berlin Wall in 1989 (or of South Korea's living standard today, more than ten times higher than North Korea's) leaves little doubt as to the benefits of economic freedom".

<sup>500</sup> Tirole J., *Economics for the Common Good* cit., 160 et seq. The Italian Competition Authority, in its Notification to the Government under Art. 21 of Law n. 287/1990 "AS226 - *Riforma della regolazione e promozione della concorrenza ("Reform of regulation and promotion of competition")*", 14 January 2002, 2, identified a shorter list, composed by: 1) market power and monopoly (Tirole's n. 5); 2) (positive or negative) externalities or spill-overs (Tirole's n. 1); 3) informational asymmetry (Tirole's n. 2); 4) universal service (in a way, Tirole's n. 6).

<sup>501</sup> See the "suitability requirements" provided by directive 2014/65/EU "on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU" (MiFID II) and ESMA Guidelines "on certain aspects of the MiFID II suitability requirements", Supporting Guidelines nn. 16-18.

economic performance of such players: that's why minimum reserve requirements, risk management and public regulators exist);

5) businesses can have market power (monopoly or monopoly power);

6) although the market improves efficiency, there is no reason it will deliver equity (e.g. acknowledging that information kills insurance, many countries prohibit conditioning medical insurance fees to information regarding the individual concerned).

### § 7.1.6 Narrowing the scene: market defects addressed by this research

Most of the market defects addressed by economic regulation<sup>502</sup> call for a multi-purpose regulatory approach, where pro-competitive objectives are balanced with a set of coexistent social objectives to be in parallel pursued.

A prominent example is represented by media markets, where competition and the efficiency paradigm need to be reconciled with values such as pluralism and freedom of expression<sup>503</sup>.

In order to narrow its scope, this research, after having introduced the Digital Single Market (DSM) strategy<sup>504</sup>, in drawing the conclusions<sup>505</sup> will in the first place consider those market defects which exhibit a closer connection with the competitive process: market power<sup>506</sup>, informational asymmetry<sup>507</sup> and buyers inability to take care of their own interests<sup>508</sup>.

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<sup>502</sup> Above § 7.1.5.

<sup>503</sup> On the topic, see recently Drexl J., *Economic Efficiency versus Democracy: On the Potential Role of Competition Policy in Regulating Digital Markets in Times of Post-Truth Politics*, in Gerard D. - Lianos I. (eds.), *Reconciling Efficiency and Equity: A Global Challenge for Competition Policy*, Cambridge University Press, Cambridge (U.K.), 2017, 241 et seq.

<sup>504</sup> Parts III and IV.

<sup>505</sup> Part V.

<sup>506</sup> Tirole above, n. 5.

<sup>507</sup> Tirole above, n. 2.

<sup>508</sup> Tirole above, n. 3.

## § 7.1.7 Comparing competition law and economic regulation: scope, time horizon, impact and trade-offs

Lawyers and economists have made considerable efforts to conceptualize the dichotomy between competition law and economy<sup>509</sup>.

There is nothing clearer than a table to summarize the output of such efforts.

Competition law	Economic regulation	Trade-offs
General	Sector-specific	Deregulation and general principles Vs. Technical specialization
Backward looking ( <i>ex post</i> )	Forward looking ( <i>ex ante</i> )	Intervention only where deemed necessary (dynamic application) but when the unlawful behaviour has already taken place Vs. Intervention every time certain conditions are met (static application) but before the unlawful conduct has taken place <sup>510</sup>
Proscribe (negative)	Prescribe (positive obligations <sup>511</sup> )	Less intrusive impact on the market but uncertain outcome,

<sup>509</sup> A useful synthesis is provided by Dunne N., *Competition Law and Economic Regulation* cit., 34-46.

<sup>510</sup> According to Koenig C. – von Wendland B., *The Art of Regulation* cit., 130, promptness of the intervention is key: in network industries competition law generally fails to ensure sustainable competitive access to “defected” markets, because *ex post* control (under Art. 102 TFEU) will not prevent irrecoverable harm to a newcomer or maverick in time.

<sup>511</sup> Yet, Cassese S., *Dalle regole del gioco al gioco con le regole*, in *Mercato Concorrenza Regole*, Vol. 2 (2002), 267 remarked that such rules, unlike State intervention (which he terms “disciplina o ingerenza pubblica”), are normally “conditional”, in the sense that they follow the scheme “if ... than”.

prohibitions)		because negative and reaction
Assists the market process to arrive at the most efficient outcome	Emulates the competitive outcome	orders leave room for ambiguity and argument being broadly and imprecisely drawn. Moreover, they don't identify the remedies to be implemented to cease the conduct and to remove the connected effects Vs. More intrusive/heavy-handed impact on the market but higher legal certainty (positive orders identify the requested behaviour). Furthermore, more effective at addressing competition problems that result from structural market difficulties, involve exploitative rather than exclusionary conduct, or necessitate quasi-regulatory remedies requiring on-going implementations and monitoring. Risk of regulatory cheating or regulatory capture and regulatory gaming
Presents a purely economic rationale	Can present both an economic rationale (maximise economic efficiency, correct spill-over costs or	More predictable and measurable enforcement if it remains limited in scope Vs. Greater discretion of the Regulator and wider scope

	address information inadequacies) and social rationale (distributional issues; opportunity; etc.)	
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The preceding comparison is of great value for the lawyer, because it suggests a theoretical pattern to strive for.

Yet, reality is much more complex, because in the “application moment” many of the distinctions conceptualized tend to blend with each other.

In sum, two factors contribute at confusing the scene:

- i) the move towards an always more regulatory competition law (we can here mention the “forward looking” approach followed in merger control decisions; commitment decisions<sup>512</sup>; remedies<sup>513</sup>, etc.)<sup>514</sup>;
- ii) the symmetrical move of economic regulation towards competition law, favoured by “competition for regulation” as part of the deregulatory agenda and/or by the search for more effective regulation<sup>515</sup>.

In the light of the above, a greater level of convergence of competition law and economic regulation is today evident<sup>516</sup>, making their relation “both untenable yet inevitable”<sup>517</sup>.

<sup>512</sup> For instance, Noce A., *Antitrust e Regolazione nelle Decisioni con Impegni in Materia di Energia*, in *Mercato Concorrenza Regole*, Vol. 2 (2011), 333 et seq. argues that commitment decisions can be viewed as a form of economic regulation on the specific case. Their trade-off with sector-specific regulation is that they tend to provide solution to a specific problem (and not to systemic and structural problems affecting the whole sector), at the same time, due to their “procedural fast lane”, they are capable to anticipate (and maybe also to guide) sector-specific regulation.

<sup>513</sup> Recital 12 of Regulation 1/2003/EC “make[s] explicit provision for the Commission’s power to impose any remedy, whether behavioural or structural, which is necessary to bring the infringement effectively to an end, having regard to the principle of proportionality”: see Art. 7, § 1.

<sup>514</sup> Dunne N., *Competition Law and Economic Regulation* cit., 69 et seq.

<sup>515</sup> Dunne N., *Competition Law and Economic Regulation* cit., 139 et seq.

<sup>516</sup> Parcu P.L., *On the convergence of antitrust and regulation*, in *Concorrenza e Mercato*, Vol.1 (2013), 321 et seq.; Prosperetti L., *I rapporti tra regolazione e tutela della concorrenza*.

There is nothing to be scared about: as shown, competition law and economic regulation form part of the same family (competition policy, as a pillar of economic regulation in the broad sense).

It follows that, insofar as the rule of law and the principle of conferral are satisfied, this trend seems not capable to seriously undermine the described theoretical relationship between competition law and economic regulation.

Yet, it is important for policy makers to keep in mind at least the basic distinctions.

This need is particularly urgent in the ongoing debate on competition policy and digital platforms, which is repositioning the break-even point between competition law and economic regulation<sup>518</sup>.

## § 7.2 Legal basis of European competition policy

The competences of the Union are constrained by the principle of conferral<sup>519</sup> and by the annexed principles of proportionality and, limited to the competences shared with Member States, subsidiarity<sup>520</sup>.

Competition policy does not make exception to this well-established constitutional framework, so that a brief overview on the main legal basis relevant to our extent appears useful.

### § 7.2.1 Legal basis of European competition law

The EU has exclusive competence in the area of competition law (Art. 3, §, let. b TFEU<sup>521</sup>).

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*Teoria economica ed esperienze recenti*, in *Mercato Concorrenza Regole*, Vol. 2 (2002), 277 et seq.; Di Porto F., *La regolazione “geneticamente modificata”: c’è del nuovo in tema di rapporti tra regolazione e concorrenza*, in *Rivista Italiana di Diritto Pubblico comunitario*, Vol. 6 (2006), 947 et seq.

<sup>517</sup> Dunne N., *Competition Law and Economic Regulation* cit., 317.

<sup>518</sup> Below, § 9, Part III, § 6.1 and Part V, § 3.3.

<sup>519</sup> Art. 5, § 1 TEU.

<sup>520</sup> Art. 5, §§ 1 and 4 TEU; Protocol n. 2 “on the application of the principles of subsidiarity and proportionality”.

Under Art. 103 TFEU the Union is entitled to enact “*the appropriate regulations or directives to give effect to the principles set out in Articles 101 and 102 [TFEU]*”<sup>522</sup>.

Art. 103, § 2, let. c) it allows such regulations and directives “*to define, if need be, in the various branches of the economy, the scope of the provisions of Articles 101 and 102*”.

### § 7.2.2 Legal basis of European economic regulation

European economic regulation largely relies on the shared competence conferred by Art. 4, § 2, let. a) TFEU in the area of the “internal market” and on the connected approximation power laid down under Art. 114 TFEU<sup>523</sup>.

A set of “quasi-competition provisions”<sup>524</sup> completes the toolbox.

On the one hand, the legislative power (exceptionally) conferred to the Commission under Art. 106, § 3 TFEU<sup>525</sup>, which acted at the end of the 80’s as the engine of the telecommunication liberalization. As said, such competence remains limited to the extent of what strictly necessary to achieve the internal

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<sup>521</sup> “*The Union shall have exclusive competence in the following areas: [...] (b) the establishing of the competition rules necessary for the functioning of the internal market*”.

<sup>522</sup> For instance, Art. 103 TFEU has provided the legal basis for the modernization reform (Reg. 1/2003/EC) and for the ECN+ directive (2019/1/EU).

<sup>523</sup> “*Save where otherwise provided in the Treaties, [...] for the achievement of the objectives set out in Article 26 [establishing or ensuring the functioning of the internal market,] the European Parliament and the Council shall, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee, adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market*”.

<sup>524</sup> Dunne N., *Competition Law and Economic Regulation* cit., 23.

<sup>525</sup> “*The Commission shall ensure the application of the provisions of this Article and shall, where necessary, address appropriate directives or decisions to Member States*”. Such provision was added (under Art. 90, § 3 TEC) only with the 1992 Maastricht Treaty (and from the 1997 Treaty of Amsterdam on, renumbered as Art. 86, § 3 TEC). Indeed, in the context of the negotiations of the 1957 Treaty of Rome Member States remained quite jealous about this key infrastructural competence: see Thatcher M., *Unione Europea: lo scambio tra governi nazionali e Commissione*, in Pontarollo E. – Aglietti A., *Regole e regolatori nelle telecomunicazioni europee*, il Mulino, Bologna (IT), 2003, 264 et seq.

market (liberalization and approximation power), whereas the competence to shape and identify SIEGs is maintained by Member States (Protocol 26).

On the other hand, a variety of legislative powers is (exclusively) allocated on the EU in the area of State aids<sup>526</sup>.

Finally, under Art. 173, §§ 1 and 3 TFEU the Union is entitled to “*decide on specific measures in support of action taken in the Member States*” to “*ensure that the conditions necessary for the competitiveness of the Union’s industry exist*”, “*excluding any harmonisation of the laws and regulations of the Member States*”<sup>527</sup>. Therefore, also in the area of industrial policy Member States hold a remarkable level of sovereignty.

The closing of the circle of the EU’s competences is represented by the subsidiary powers laid down under Art. 352 TFEU (flexibility clause)<sup>528</sup>.

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<sup>526</sup> Art. 107, § 3, let. e) TFEU: “*The following may be considered to be compatible with the internal market: [...] e) such other categories of aid as may be specified by decision of the Council on a proposal from the Commission*”; Art. 108, § 4 TFEU: “*The Commission may adopt regulations relating to the categories of State aid that the Council has, pursuant to Article 109, determined may be exempted from the procedure provided for by paragraph 3 of this Article*”; Art. 109 TFEU: “*The Council, on a proposal from the Commission and after consulting the European Parliament, may make any appropriate regulations for the application of Articles 107 and 108 and may in particular determine the conditions in which Article 108(3) shall apply and the categories of aid exempted from this procedure*”.

<sup>527</sup> “*1. The Union and the Member States shall ensure that the conditions necessary for the competitiveness of the Union’s industry exist.*

*For that purpose, in accordance with a system of open and competitive markets, their action shall be aimed at:*

- *speeding up the adjustment of industry to structural changes,*
- *encouraging an environment favourable to initiative and to the development of undertakings throughout the Union, particularly small and medium-sized undertakings,*
- *encouraging an environment favourable to cooperation between undertakings,*
- *fostering better exploitation of the industrial potential of policies of innovation, research and technological development*”.

<sup>528</sup> “*If action by the Union should prove necessary [...] to attain one of the objectives set out in the Treaties, and the Treaties have not provided the necessary powers, the Council, acting unanimously on a proposal from the Commission and after obtaining the consent of the European Parliament, shall adopt the appropriate measures*”. Art. 352 TFEU, together with Art. 103 TFEU, constituted the legal basis of the 1989 and 2004 EUMCRs.



## § 8. Concluding remarks: the proper balance of competition law and economic regulation within the European constitution

In this Chapter we introduced the “*highly competitive social market economy*” (Art. 3, § 3 TEU) as a concept capable, at least from Lisbon on, to identify a doctrine, to shape the whole European economic constitution<sup>529</sup>.

Indeed, the idea of a highly competitive social market economy embodies both the competition-controlled economy and the social-market economy.

Though, it would be a mistake to consider this expression as a hendiadys: rather, it is a holistic conception which assigns to those models a well-defined hierarchy.

Social aspects will prevail at the final stage, but still the limitation of competition rules represents an option of last resort.

The system works bottom-up: the first attempt always belongs to the market.

Market to be controlled, first of all through competition law. Indeed, it has been empirically observed that effective competition leads to lower prices, better quality (for existing products and services) and innovation (in new products and services)<sup>530</sup>. In accordance with the proportionality test, economic regulation, when necessary, should leave as much room as possible to competition law.

Competition law, in its multi-faceted dimension<sup>531</sup>, changes the emphasis on its goals depending on the type of conduct under examination<sup>532</sup>.

It never addresses distributive concerns, nor should it promote non-economic welfare (“happiness”) or can it be overwritten by industrial policy objectives.

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<sup>529</sup> See above § 5.3.

<sup>530</sup> UK CMA, *Regulation and Competition. A Review of the Evidence*, 2020, available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/857024/Regulation\\_and\\_Competition\\_report\\_-\\_web\\_version.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/857024/Regulation_and_Competition_report_-_web_version.pdf), (accessed 10 January 2020), §§ 1.3 and 2.4.

<sup>531</sup> See above § 6.1.

<sup>532</sup> As above proposed in § 6.4.

Only if the market is defected, in exceptional circumstances the seriousness of the defects at stake and the relevance of the public interests involved might lead to a total exclusion of competition rules (e.g. defence).

In all the remaining circumstances, the limitation of competition rules is only partial (e.g. common agricultural policy) and we enter a grey area where economic regulation fills the gaps and improves welfare.

Classical theories propose a gradual approach: “when faced with market imperfections competition law is the option of first resort, regulation the option of second resort, and comprehensive central planning the path of last resort”<sup>533</sup>.

In this context, not only does the proportionality principle condition the choice among economic regulation and antitrust; once the former has been favored, it also affects the way economic regulation can impact the market.

For instance, economic regulation should refrain from introducing artificial barriers to entry such as excessive compliance and administrative costs<sup>534</sup>; moreover, it should be transitory in time and in scope<sup>535</sup> and, in dynamic markets, it should be as flexible as possible, for example by introducing sunset clauses<sup>536</sup>.

Provided that in a perfect scenario economic regulation should leave as much room as possible to antitrust, the relationship among the two market harnessing measures is of complementarity rather than alternativity.

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<sup>533</sup> Dunne N., *Competition Law and Economic Regulation* cit., 55, acknowledging that although this approach might appear over-simplistic, it still can be useful to give orientation and direction. In a way similarly, Hovenkamp H., *Progressive Antitrust*, in *University of Illinois Law Review*, Vol. 1 (2018), 112 and Blair R.D. - Sokol D.D., *Welfare Standards in U.S. and E.U.* cit., 2505.

<sup>534</sup> UK CMA, *Regulation and Competition* cit., §§ 1.13 and 4.63.

<sup>535</sup> Namely, economic regulation is seen as a tool transitory in time and in scope, as a vehicle to guide “pre-competitive markets” towards “fully competitive markets”, via the intermediate stage of “emerging competitive market”: see Baldwin R. – Cave M., *Understanding Regulation* cit., 220. As correctly remarked by Chiti E., *I “Sistemi Comuni” Europei di Pubblici Poteri Indipendenti*, in Battini S. – Vesperini G. (eds.), *Lezioni di diritto amministrativo europeo*, Giuffrè, Milano (IT), 2006, 18-19, when economic regulation takes in account (also) social aspects (e.g. food safety; universal service, etc.), the interplay of regulation and competition is not transitory and is destined to last over time.

<sup>536</sup> CMA (2020), *Regulation and Competition* cit., §§ 1.16 and 4.65.

In the most puritan and orthodox view, economic regulation is envisaged as a tool transitory in time and in scope, as a vehicle to guide “pre-competitive markets” towards “fully competitive markets”, via the intermediate stage of “emerging competitive market”<sup>537</sup>.

Reality is much more complex, as economic regulation is prone to multi-purpose reasoning. This often leads to economic regulations encompassing social aspects; when this is the case, the overlap with competition law is only limited and economic regulation is destined to last over time<sup>538</sup>.

The Lisbon Treaty put a greater emphasis on social aspects but did not change the principle of conferral.

Today like yesterday, welfare and social concerns belong to Member States.

On a factual standpoint, this distribution of competences influences the order of priorities in the European agenda: first competition (exclusive competence), second approximation through economic regulation (shared competence), third, Member States to exercise their sovereignty to address distributive and social concerns.

In the light of the above, in practice the old-fashioned underlying idea of the transition from planned economy to open competition via economic regulation seems not so distant from the rationale of the highly competitive social market economy laid down under Art. 3, § 3 TEU: we want socio-economic

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<sup>537</sup> Baldwin R. – Cave M., *Understanding Regulation* cit., 220. The Baldwin and Cave intermediate concept of “emerging competitive market” might be equated to the concept of “mercato conformato” used in Cardi E., *Mercati e Istituzioni in Italia*, IV ed., Giappichelli, Torino (IT), 2018, 201 et seq. to describe markets artificially sectioned by the regulator, so that some activities are open to the market and others are still subject to monopolies and special rights (typically, the production, distribution and retail macro-activities in the energy sector). Cassese S., *Regolazione e concorrenza*, in Tesauro G. – D’Alberti M., *Regolazione e concorrenza*, il Mulino, Bologna (IT), 2000, 13 argues (unlike Baldwin and Cave) that (economic) regulation is something different from competition. Yet (in a way similarly, here, to Baldwin and Cave), he also argues that regulation pre-exists the (competitive) market, being functionally oriented at establishing it. Thus, economic regulation would act as a transitory alternative to the full competitive market.

<sup>538</sup> As correctly remarked by Chiti E., *I “Sistemi Comuni” Europei di Pubblici Poteri Indipendenti*, in Battini S. – Vesperini G. (eds.), *Lezioni di diritto amministrativo europeo*, Giuffrè, Milano (IT), 2006, 18-19, when economic regulation takes in account (also) social aspects (e.g. food safety; universal service, etc.), the interplay of regulation and competition is not transitory and is destined to last over time.

integration, but it shall be achieved subject to progressivity, subsidiarity and strict proportionality with EU competition law rules.

The combination of competition law and economic regulation designs competition policy.

Competition law and economic regulation are part of the same family – economic regulation in the broad sense – and their overlap is only limited. Therefore, also for this reason they can't be viewed as substitutes<sup>539</sup>, but rather as complements<sup>540</sup>.

This finding is of particular interest even because the risks of regulatory capture<sup>541</sup>, as framed by private-interest and public choice theories<sup>542</sup>, and of regulatory gaming (or regulatory cheating)<sup>543</sup> can be neutralized by competition law. Being aware of such risks, the CJEU – departing from the

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<sup>539</sup> Ogus A., *Regulation: Legal Form and Economic Theory*, Clarendon Press, Oxford (U.K.), 1994, 30; Breyer S.G., *Antitrust, Deregulation* cit., 1007 defined regulation as “a heroic cure reserved for a serious disease”.

<sup>540</sup> Baldwin R. – Cave M., *Understanding Regulation* cit., 210 et seq.; Zito A., *Mercati (regolazione dei)*, in *Enciclopedia del Diritto*, Annali III, Giuffrè, Milano (IT), 2010, 815; Siragusa M. – Caronna F., *A reassessment of the relationship between competition law and sector-specific regulation*, in Drexel J. – Di Porto F., *Competition law as regulation*, Edward Elgar Publishing, Cheltenham (U.K.) – Northampton (U.S.), 2015, 153 et seq.; Dunne N., *Competition Law and Economic Regulation* cit., 54-58: “The difference between these concepts is one of form or degree, but in substance they are essentially the same. [...] Competition law and regulation therefore apply in tandem to the extent that economic activity falls within the scope of both. [...] The optimal solution may therefore involve a bundled approach, with the mix determined by the market defect to be remedied”; Schwartz L.B., *Some Additional Safeguards for the Newly Liberated Marketplace*, in *California Law Review*, Vol. 75 (1987), 1051; Bavasso A.F., *Electronic Communications: A New Paradigm for European Regulation*, Vol. 41 (2004), in *Common Market Law Review*, 87 et seq.

<sup>541</sup> Ogus A., *Regulation: Legal Form and Economic Theory* cit., 57-58.

<sup>542</sup> Ogus A., *Regulation: Legal Form and Economic Theory* cit., 58 et seq.

<sup>543</sup> Dogan S.L. and Lemley M.A., *Antitrust Law and Regulatory Gaming*, in *Texas Law Review*, Vol. 87 (2009), 687, bringing the example of the pharmaceutical industry, argue that even the most competition-conscious regulatory structure cannot guarantee against abuses of that structure, since the very regulatory structure that exists to promote competition can create gaming opportunities for rivals bent on achieving anticompetitive goals. In CJEU, 6 December 2012, Case C-457/10 P, *AstraZeneca v. European Commission*, § 134, the Court has stated that a dominant undertaking cannot use regulatory procedures in such a way as to prevent or make more difficult the entry of competitors on the market.

U.S. Supreme Court *Trinko* framework<sup>544</sup> – uphold several interventions of the Commission in regulated markets<sup>545</sup>.

When economic regulation seeks to correct the same market defect of competition law (market power) and when it attempts to reduce informational asymmetry, through command & control, disclosure regulation and at times also by allocating rights and liabilities, its mission is to create a “level playing field”, an arena where competition (on the merits) can take place.

The described relationship between competition law and economic regulation allows to take a step forward.

This research deals with the problem of market power in the DDE: an emergent (more properly: completely emerged) model of economy where data and, among them, personal data are considered as highly valuable commercial assets.

When it comes to control on their personal data in the on-line environment, consumers and data subjects suffer remarkable informational asymmetries and biases<sup>546</sup>.

Which equals to market defects.

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<sup>544</sup> In application of a “plain repugnancy” standard, U.S. antitrust laws have for long played a prominent role over regulation (see *United States v. Trans-Missouri Freight Association*, 166 U.S. 290 (1897); *United States v. Philadelphia National Bank*, 374 U.S. 321 (1963); *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973)). However, more recently the U.S. Supreme Court has shifted the balance suggesting antitrust deference in the face of regulation due to expertise and costs concerns (*NYNEX Corp. v. Discon Inc.*, 525 U.S. 128 (1998); *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004); *Credit Suisse Securities (USA) LLC v. Billing*, 551 U.S. 264 (2007); *Pacific Bell Tel. Co. v. linkLine Commc’ns, Inc.*, 555 U.S. 438 (2009)). For a critic to the *Trinko* framework, see Brunnell R.M., *In Regulators We Trust: The Supreme Court’s New Approach to Implied Antitrust Immunity*, in *Antitrust Law Journal*, Vol. 78 (2012), 279 et seq.; U.S. Federal Trade Commission, *Is There Life After Trinko and Credit Suisse? The Role of Antitrust in Regulated Industries*, Statement before the United State House of Representatives, 2010, available at [https://www.ftc.gov/sites/default/files/documents/public\\_statements/prepared-statement-federal-trade-commission-courts-and-competition-policy-committee-judiciary-united/100615antitrusttestimony.pdf](https://www.ftc.gov/sites/default/files/documents/public_statements/prepared-statement-federal-trade-commission-courts-and-competition-policy-committee-judiciary-united/100615antitrusttestimony.pdf) (accessed 18 January 2020); Shelanski H.A., *The Case for Rebalancing Antitrust and Regulation*, in *Michigan Law Review*, Vol. 109 (2011), 683 et seq.

<sup>545</sup> CJEU, 14 October 2010, Case C-280/08 P, *Deutsche Telekom v. European Commission*, §§ 80-85; CJEU, 10 July 2014, Case C- 295/12 P, *Telefónica SA and Telefónica de España SAU v European Commission*; GC, 13 December 2018, Case T-851/14, *Slovak Telekom v. European Commission*.

<sup>546</sup> Part I, § 7; Part V, Section I, § 2.1.

The unavoidable consequence is for consumer protection<sup>547</sup> and privacy<sup>548</sup> to be considered (also) as an essential part of (pro-competitive) economic regulation<sup>549</sup>.

### **Part III - The Digital Single Market (DSM) strategy: the law-making process**

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<sup>547</sup> Under Artt. 4, § 2, let. f) and 169, § 2, let. a) TFEU the Union holds a shared competence in consumer protection, to be enacted through approximation acts under Art. 114 TFEU. See also Artt. 6, § 1 TEU and 38 of the Charter of Fundamental Rights.

<sup>548</sup> Art. 16 TFEU; Artt. 6, § 1 TEU and 8 of the Charter of Fundamental Rights.

<sup>549</sup> For a confirmation of such approach, see IT Joint Sector Inquiry, 58 and 75 as for the pro-competitive effect of data protection legislation; 101, recommendations 4 (116) and 10 (119-120) as for the pro-competitive effect of consumer protection.

## § 1. The European political agenda and the genesis of the DSM strategy

Around 2010 policymakers became convinced that the times were mature for the UE to adopt a Digital agenda.

A fundamental industrial policy concern drove the process: Europe was moving at a slower speed than the US<sup>550</sup>, and the rise of the DDE, together with the advent of the annexed disruptive technologies, made clear that in the absence of serious and prompt investments this trend would have dramatically increased in a short time horizon.

In the “Europe 2020” Communication the European Commission tried to suggest a possible line of action<sup>551</sup>.

Of course, a relevant part of the envisaged plan required (direct or indirect) support to the economy<sup>552</sup>. But here – we saw<sup>553</sup> – the competences conferred to the EU by Art. 173 TFEU are quite weak.

Hence, the real “infrastructure” to invest on was recognized to be the single (or internal) market, to be upgraded to a “digital single market”, namely by establishing, mainly by way of the approximation power under Art. 114 TFEU, a stable regulatory environment able to boost a responsible growth<sup>554</sup>.

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<sup>550</sup> Monti M., *A new strategy for the single market* cit., 44.

<sup>551</sup> Communication from the Commission “*EUROPE 2020. A European strategy for smart, sustainable and inclusive growth*” (COM(2010) 2020).

<sup>552</sup> *Id.*, 12: “At EU level, the Commission will work: – To provide a stable legal framework that stimulate investments in an open and competitive high speed internet infrastructure and in related services; – To develop an efficient spectrum policy; – To facilitate the use of the EU’s structural funds in pursuit of this agenda; [...] – To reform the research and innovation funds and increase support in the field of ICTs so as to reinforce Europe’s technology strength in key strategic fields and create the conditions for high growth SMEs to lead emerging markets and to stimulate ICT innovation across all business sectors; – To promote internet access and take-up by all European citizens, especially through actions in support of digital literacy and accessibility”.

<sup>553</sup> Part II, § 7.2.2.

<sup>554</sup> *Id.*, 12: “At EU level, the Commission will work: [...] – To create a true single market for online content and services (i.e. borderless and safe EU web services and digital content markets, with high levels of trust and confidence, a balanced regulatory framework with clear rights regimes, the fostering of multi-territorial licences, adequate protection and remuneration for rights holders and active support for the digitisation of Europe’s rich cultural heritage, and to shape the global governance of the internet”.

The Council, in its conclusions of October 2013, fully supported this view and called for EU action to provide the right framework conditions for a single market for BDA and cloud computing<sup>555</sup>.

Consequently, the Commission adopted the Communications “*Towards a thriving data-driven economy*”, aimed at identifying the main opportunities and challenges posed by the DDE<sup>556</sup>.

This framework generated a methodologic debate, still ongoing, on whether, and if so to what extent, online platforms and, more in general, the DDE should be regulated<sup>557</sup> or not<sup>558</sup>.

After around one year of further discussion, the answer to this question was affirmative and the fundamental priorities of the “*Digital Single Market Strategy*” (DSM strategy) could be finally shaped in a Communication from the Commission of May 2015<sup>559</sup>, consistent with President Juncker’s Political Guidelines of July 2014<sup>560</sup>.

The DSM strategy has three pillars, below analysed from § 2 to § 5:

- i) “*Better access for consumers and businesses to online goods and services across Europe*” (from now on: Access);
- ii) “*Creating the right conditions for digital networks and services to flourish*” (from now on: Environment);

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<sup>555</sup> Council, Conclusions 24-25 October 2013 (EUCO 169/13), available at <http://data.consilium.europa.eu/doc/document/ST-169-2013-INIT/en/pdf> (accessed 6.11.2018).

<sup>556</sup> COM(2014) 442 final.

<sup>557</sup> In the affirmative, see Valero J., *Tirole: Brussels must level the playing field for online platforms*, in *Euractiv.com*, October 15<sup>th</sup>, 2015, available at <https://www.euractiv.com/section/digital/news/tirole-brussels-must-level-the-playing-field-for-online-platforms/> (accessed 3.1.2017).

<sup>558</sup> In the negative, see Kennedy J.V., *Why Internet Platforms Don’t Need Special Regulation*, October 2015, available at <http://www2.itif.org/2015-internet-platforms.pdf> (accessed 3.1.2017) and released by the U.S.-based think tank Information Technology & Innovation Foundation (ITIF).

<sup>559</sup> Communication from the Commission “*Digital Single Market Strategy for Europe*” (COM(2015) 192 final).

<sup>560</sup> See President Juncker’s Political Guidelines “*A New Start for Europe: My Agenda for Jobs, Growth, Fairness and Democratic Change*”, presented before the European Parliament on July 15<sup>th</sup>, 2014, available at [https://ec.europa.eu/commission/sites/beta-political/files/juncker-political-guidelines-speech\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/juncker-political-guidelines-speech_en.pdf) (accessed 6.11.18).



iii) “*Maximising the growth potential of our European Digital Economy*” (from now on Economy & Society).

In the early days of her presidency, Ursula von der Leyen gave a personal imprinting to the newly established Commission, putting forward an ambitious action plan to complement the DSM strategy<sup>561</sup>.

## § 2. The first pillar: Access

### § 2.1 The copyright and related rights Directive

Since its 2015 Communication on the topic, the Commission considered copyright protection as a fundamental part of the DSM strategy<sup>562</sup>.

Without prejudice to the existing directives on copyright, the long-awaited directive n. 790/2019 seeks to balance the necessity to protect rightholders with the coexistent need to promote the online circulation of content<sup>563</sup>, thus ensuring “*legal certainty [...] for both rightholders and users, as regards certain uses, including cross-border uses, of works and other subject matter in the digital environment*”<sup>564</sup>.

The copyright reform addresses the market power problem<sup>565</sup> and reconciles it with the industrial policy objective to promote economic growth and cross-border circulation of content; this mainly happens by means of allocating proportionate rights and obligations.

Neighbouring rights are granted for online use of press publishers (Art. 15)<sup>566</sup>, with mechanisms of fair compensation (Art. 16) to the benefit of rightholders.

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<sup>561</sup> Below § 6.

<sup>562</sup> Communication from the Commission “*Towards a modern, more European copyright framework*” (COM(2015) 626 final).

<sup>563</sup> Directive 2019/790/EU “*on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC*”.

<sup>564</sup> Recital 3.

<sup>565</sup> Part II, § 7.1.5, n. 5.

<sup>566</sup> For a (critic) comment on the draft proposals, see, with a specific focus on press publications, Colangelo G. - Torti V., *Copyright, online news publishing and aggregators: a law and economics analysis of the EU reform*, in *International Journal of Law and Information Technology*, Vol. 27 (2019), 75 et seq.

Moreover, a system of prior authorization (Art. 17)<sup>567</sup> accompanied by appropriate and proportionate remuneration to the benefit of authors and performers (Art. 18) is now introduced for the use of protected content by online content-sharing platforms. In this context, the functioning of the system will on a large extent depend on the success of collective management (Art. 12)<sup>568</sup>.

At the same time, a list of possible areas (to be specified by Member States, if necessary, following a stakeholder dialogue pursuant to Art. 11) of exemptions/limitation to copyright and related rights is provided under Artt. 4-6.

In addition, in order to promote the online circulation of knowledge by means of innovative technologies, a mandatory exemption is provided “*for reproductions and extractions made by research organisations and cultural heritage institutions in order to carry out, for the purposes of scientific research, text and data mining*<sup>569</sup> of works or other subject matter to which they have lawful access”<sup>570</sup>.

Finally, online platforms and aggregators are now charged by a general transparency obligation towards authors and performers (Art. 19) and by a duty to grant revocation of the transfer-license agreement on an exclusive basis in case of lack of exploitation (Art. 22).

The legislative package is complemented by a directive (2019/789/EU) on the exercise of copyright and related rights applicable to certain online

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<sup>567</sup> In order to facilitate newcomers, start-up companies are exempted by the obligation to obtain the authorization to the online use of the protected content: recital 67 and Art. 17, § 6.

<sup>568</sup> Recitals 44-45 explicitly acknowledge the importance of Directive 2014/26/EU “*on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market*”. Indeed, “*given the nature of some uses, together with the usually large amount of works or other subject matter involved, the transaction cost of individual rights clearance with every rightholder concerned is prohibitively high. As a result, it is unlikely that, without effective collective licensing mechanisms, all the transactions in the areas concerned that are required to enable the use of such works or other subject matter would take place*”.

<sup>569</sup> Art. 2, § 2 defines text and data mining as “*any automated analytical technique aimed at analysing text and data in digital form in order to generate information which includes but is not limited to patterns, trends and correlations*”.

<sup>570</sup> Art. 3 and Recital 11.

transmissions of broadcasting organisations and retransmissions of television and radio programmes<sup>571</sup>.

## § 2.2 The Digital Contracts package

Cross-border transactions historically represented one of the most important integration tools to achieve the single (or internal) market; accordingly, the establishment of the DSM would not be possible in the absence of a thriving cross-national e-commerce: this is, in sum, the idea that inspired the Communication of 2015 on digital contracts<sup>572</sup>, leading to the initiation of two parallel legislative procedures: one concerning contracts for the supply of digital content<sup>573</sup> (§ 2.2.1) and the other one on the sale of goods<sup>574</sup> (§ 2.2.2).

In both cases, the legislative acts address the informational asymmetry problem<sup>575</sup>.

This mainly happens by means of disclosure regulation and of allocation of (proportionate) rights and obligations.

### § 2.2.1 The Digital Content and Digital Service Directive

Directive 2019/770/EU on digital content<sup>576</sup> “*aims to strike the right balance between achieving a high level of consumer protection and promoting the competitiveness of enterprises*”<sup>577</sup>.

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<sup>571</sup> Directive 2019/789/EU “*laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes, and amending Council Directive 93/83/EEC*”.

<sup>572</sup> Communication from the Commission “*Digital contracts for Europe - Unleashing the potential of e-commerce*” (COM(2015) 633 final).

<sup>573</sup> Proposal for a directive “*on certain aspects concerning contracts for the supply of digital content*” (2015/0287 (COD)).

<sup>574</sup> Amended proposal for a directive “*on certain aspects concerning contracts for the online and other distance sales of goods, amending Regulation (EC) No 2006/2004 of the European Parliament and of the Council and Directive 2009/22/EC of the European Parliament and of the Council and repealing Directive 1999/44/EC of the European Parliament and of the Council*” (2015/0288 (COD)).

<sup>575</sup> Part II, § 7.1.5, n. 2.

Consistently with the claimed objectives, it adopts a full harmonization perspective<sup>578</sup>, enhanced by the mandatory nature of its provisions<sup>579</sup>.

Indeed, uniform rules across the EU will enhance legal certainty and so on reduce transaction costs (particularly relevant for SMEs)<sup>580</sup>; at the same time, the creation of standard provisions all over the EU should overcome the fact that “*consumers are not always confident when buying cross border and especially when it is done online*”<sup>581</sup>.

The directive on digital content adopts a future-proof technological neutrality approach, applying to different categories of digital content, digital services, and their supply, independently of the medium used for the transmission of, or for giving access to, the digital content or digital service<sup>582</sup>.

It is complemented by directive 2019/771/EU on the sale of goods (Goods Directive)<sup>583</sup> and, for all the aspects not covered by the directive, by directive 83/2011/EU (*Consumer Rights*)<sup>584</sup>.

In particular, Goods Directive should apply also to contracts for the sale of goods including digital elements, that is goods that incorporate or are inter-connected with digital content or a digital service in such a way that the

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<sup>576</sup> Directive 2019/770/EU “*on certain aspects concerning contracts for the supply of digital content and digital services*”.

<sup>577</sup> Recital 2.

<sup>578</sup> Recital 6.

<sup>579</sup> Art. 22.

<sup>580</sup> Recitals 3 and 4.

<sup>581</sup> Recital 5.

<sup>582</sup> Recital 19: “*this Directive should cover, inter alia, computer programmes, applications, video files, audio files, music files, digital games, e-books or other e-publications, and also digital services which allow the creation of, processing of, accessing or storage of data in digital form, including software-as-a-service, such as video and audio sharing and other file hosting, word processing or games offered in the cloud computing environment and social media*”.

<sup>583</sup> Below § 2.2.2.

<sup>584</sup> Directive 2011/83/EU “*on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council*”.

absence of that digital content or digital service would prevent the goods from performing their functions<sup>585</sup>.

In contrast, when the digital content is not incorporated or inter-connected with the good but can be independently chosen and installed by the consumer (regardless of the fact that the seller itself might intermediate a given digital contract<sup>586</sup>), the two contracts will be considered as separate and the directive on the digital content or service will apply only on the digital aspects<sup>587</sup>.

In line with the shift towards technological neutrality, the directive makes clear that, albeit not falling within the definition of “digital content” or “digital service”, digital representations of value such as electronic vouchers, e-coupons or even virtual currencies (e.g. Bitcoin), to the extent that they are recognised by national law, should be considered as a method of payment, without possibility of unreasonably differentiate depending on the methods of payment<sup>588</sup>.

Above all, for the first time a legislative act of the Union explicitly codifies a principle long invoked by national and supranational enforcers: indeed, by applying to contracts where the trader supplies, or undertakes to supply, digital content or a digital service to the consumer, and the consumer provides, or undertakes to provide, personal data, the directive acknowledges that personal data, albeit not considerable as a commodity<sup>589</sup>, can at least act as consideration<sup>590</sup>. In any event, the directive clearly states that this is without

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<sup>585</sup> Recital 21, which brings the example of the smart-tv advertised as including a particular video application or of the smart-watch.

<sup>586</sup> E.g. if the consumer downloads a game application from an app store onto a smart phone.

<sup>587</sup> Recital 22.

<sup>588</sup> Art. 2, n. 7 and Recital 23. This principle complements the full liberalization of payment systems pursued by the PSD 2 Directive: see below Part III, § 5.2.

<sup>589</sup> See Part V, § 1.1.2.

<sup>590</sup> Art. 3, § 1, II sentence and Recital 24: “*For example, this Directive should apply where the consumer opens a social media account and provides a name and email address that are used for purposes other than solely supplying the digital content or digital service, or other than complying with legal requirements*”. Nonetheless, pursuant to recital 40 “*the consequences for the contracts covered by this Directive in the event that the consumer withdraws the consent for the processing of the consumer’s personal data [...] should remain a matter for national law*”.

prejudice to relevant European data protection laws, which, in case of contrast, should prevail over the directive<sup>591</sup>.

The directive should not apply to situations where the trader only collects metadata, such as information concerning the consumer's device or browsing history (e.g. cookies), except where this situation is treated as a contract under national law<sup>592</sup>. Unless otherwise provided by Member States, it should also not apply to situations where the consumer, without having concluded a contract with the trader, is exposed to advertisements exclusively in order to gain access to digital content or a digital service (e.g. websites where no registration is required to access).

Conversely, the directive applies to over the top (OTT) number-independent interpersonal communications services (e.g. Facebook Messenger)<sup>593</sup>, whereas OTT number-dependent communications services are regulated by the European Code of Electronic Communications (ECEC)<sup>594</sup>. Finally, it does not apply to financial services<sup>595</sup>, to healthcare products and services requiring a medical prescription<sup>596</sup>, to services other than digital services provided in full or in part by digital means<sup>597</sup> and to “editable” open source software freely accessible<sup>598</sup>.

The digital content or digital service should comply with the requirements agreed between the trader and the consumer in the contract (“conformity”)<sup>599</sup>, including the security, functionality, compatibility, interoperability and other features described in the pre-contractual information (which, in accordance with Directive 2011/83/EU, forms an integral part of the contract and should

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<sup>591</sup> Art. 3, § 8.

<sup>592</sup> Recital 25.

<sup>593</sup> Recital 28.

<sup>594</sup> See below § 3.1.

<sup>595</sup> Art. 3, § 5, let. e) and recital 30.

<sup>596</sup> Art. 3, § 5, let. c).

<sup>597</sup> Art. 3, § 5, let. a): e.g. legal or architectural services.

<sup>598</sup> Art. 3, § 5, let. f) and recital 32.

<sup>599</sup> Artt. 7 and 8.

prevail in case of contrast with the contractual clauses)<sup>600</sup>. In this light, the conformity of the product encompasses also a diligent release and supply of the updates, if provided so by the contract<sup>601</sup>, for a reasonable period<sup>602</sup>. On a technical standpoint, significant interruptions of the supply of digital content or service<sup>603</sup> as well as an incorrect integration of it with consumer's hardware or software environment<sup>604</sup> can be both viewed as a lack of conformity.

The trader should specifically inform the consumer, before she or he is bound by the contract, about any eventual restriction which might limit (for instance for IP rights and annexed territorial restrictions) the use of the digital content or digital service<sup>605</sup>.

The trader shall be liable for any failure to supply the digital content or digital service in accordance with the principle of conformity<sup>606</sup>.

Consistently, remedies are granted to the consumer in case of failure to supply the digital content or service<sup>607</sup> or of lack of conformity<sup>608</sup>.

Due to the strong informational asymmetry between trader and consumer, in case of a dispute the burden of proof on the conformity of the digital content or service to the contract should be borne by the former<sup>609</sup>.

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<sup>600</sup> Recital 42.

<sup>601</sup> Recital 44, which does not consider the (opposite) hypothesis of software updates that might cause serious troubles and/or reduce functionality of devices. This conduct might be prohibited under the UPCD directive (2005/29/EC): see for instance the two complex investigations of the Italian Competition Authority against Samsung and Apple, concluded with the finding of the violation of Articles 20, 21, 22 and 24 of the Italian Consumer Code (press release available at <https://en.agcm.it/en/media/press-releases/2018/10/Apple%20and%20Samsung%20fined%20for%20software%20updates%20that%20have%20caused%20serious%20troubles%20and/or%20have%20reduced%20functionality%20of%20some%20mobile%20phones>, accessed 30.12.2018).

<sup>602</sup> Recital 47.

<sup>603</sup> Recital 51.

<sup>604</sup> Art. 9 and recital 52.

<sup>605</sup> Recital 53.

<sup>606</sup> Art. 11.

<sup>607</sup> Art. 13.

<sup>608</sup> Art. 14 lists the rights to have the digital content or digital service brought into conformity, to receive a proportionate reduction in the price or to terminate the contract.

<sup>609</sup> Recital 59.

Immediate reduction of price or termination of the contract is possible where bringing digital content or a digital service into conformity is legally or factually impossible or where the trader refuses to bring the digital content or digital service into conformity because to do so would impose disproportionate costs on the trader, or where the trader has failed to bring the digital content or digital service into conformity within a reasonable time, free of charge and without causing significant inconvenience to the consumer<sup>610</sup>.

In order to promote the free flow of personal data within the internal market, the Art. 20 GDPR introduced the (personal) data portability right<sup>611</sup>. This directive goes a step beyond: having understood that, especially in the context of social networks, the perspective of losing the content provided to or generated on the platform might well discourage the consumer from exercising remedies for lack of conformity and/or to terminate the contract, a special right to user-provided (e.g. tracks imported on a music app) or user-generated (e.g. posts issued on a fan page) content portability is introduced<sup>612</sup>.

In addition, the consumer should be informed of any modifications of the contract in a comprehensible manner and on a durable medium<sup>613</sup>. Anyway, where such a modification negatively impacts the access or use of the digital content or digital service by the consumer, the consumer should enjoy the right to terminate the contract free of any charge. Alternatively, the trader can decide to enable the consumer to maintain access to the digital content or digital service at no additional cost, without the modification and in conformity<sup>614</sup>.

Finally, Member States shall ensure that adequate and effective means exist to ensure compliance with the directive<sup>615</sup>.

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<sup>610</sup> Recital 65.

<sup>611</sup> Below § 3.4.1.

<sup>612</sup> Art. 16, § 4 and recital 70.

<sup>613</sup> Recital 76.

<sup>614</sup> Art. 19 and recital 77.

<sup>615</sup> Art. 21.



## § 2.2.2 The Goods Directive

As anticipated, the “Digital Contracts” package is completed by the Goods Directive (2019/771/EU)<sup>616</sup> and by the (ancillary in scope) Regulation “*on cross-border parcel delivery services*” (2018/644/EU)<sup>617</sup>.

Objectives and concerns are the same: removing regulatory barriers to cross-trade to the benefit of SMEs and legal certainty; enhancing trust and consumer protection.

Nonetheless, in practice the Goods Directive appears less innovative, because its primary objective is to grant uniform application to a set of provision which, at least to a large extent, were already in force in several Member States<sup>618</sup>.

More to the point: the *Consumer Rights* directive (2011/83/EU) adopts a full harmonization approach<sup>619</sup> and regulates certain aspects of distance contracts (hence, it applies also to e-commerce); nonetheless, before the Goods Directive was enacted other aspects (such as lack of conformity and the annexed remedies) remained regulated by the directive 1999/44/EC (now repealed by Good Directive), whose minimum harmonization approach<sup>620</sup> led to fragmented national rules.

Therefore, Goods directive complements the Consumer Rights directive<sup>621</sup> and adopts a full harmonization approach<sup>622</sup>.

Insofar as they act for purposes relating to their own business and as the direct contractual partner of the consumer for the sale of goods, platform providers could be considered to be sellers under the directive. Thus, derogating the full

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<sup>616</sup> Directive 2019/771/EU “*on certain aspects concerning contracts for the sale of goods, amending Regulation (EU) 2017/2394 and Directive 2009/22/EC, and repealing Directive 1999/44/EC*”.

<sup>617</sup> Regulation 2018/644/EU “*on cross-border parcel delivery services*”, implemented by Commission Regulation 2018/1263/EU “*establishing the forms for the submission of information by parcel delivery service providers pursuant to Regulation (EU) 2018/644 of the European Parliament and of the Council*”.

<sup>618</sup> E.g. Italy.

<sup>619</sup> Recitals 5 and 7 and Art. 4.

<sup>620</sup> See recital 4 and Art. 8.

<sup>621</sup> Recital 11.

<sup>622</sup> Recital 10 and Art. 4.

harmonization approach Member States are entitled to extend the application of the directive to platform providers that do not fulfil the requirements for being considered a seller<sup>623</sup>.

Should such a guarantee be offered to the consumer, comprehensive information about the commercial guarantee should be provided before the contract becomes binding<sup>624</sup>.

In line with Art. 3 of the Digital Content and Digital Service Directive, Art. 3, § 3, the Goods Directive states that the directive “*shall not apply to contracts for the supply of digital content or digital services. It shall, however, apply to digital content or digital services which are incorporated in or inter-connected with goods [...] and are provided with the goods under the sales contract, irrespective of whether such digital content or digital service is supplied by the seller or by a third party. In the event of doubt [...], the digital content or digital service shall be presumed to be covered by the sales contract*”.

The principle of conformity of the goods is introduced<sup>625</sup>, together with the consequent liability of the seller for its lack<sup>626</sup> and the annexed remedies.

As to the burden of proof, to facilitate the consumer it is provided that any lack of conformity which becomes apparent within one year of the time when the goods were delivered shall be presumed to have existed at the time when the goods were delivered, unless proved otherwise (or unless this presumption is incompatible with the nature of the goods or with the nature of the lack of conformity)<sup>627</sup>.

In order to have the goods brought into conformity, the consumer may choose between repair and replacement (where not unreasonable, disproportionate for the seller compared to the other remedy or impossible)<sup>628</sup> or, in the alternative,

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<sup>623</sup> Recital 23.

<sup>624</sup> Recital 62.

<sup>625</sup> Artt. 5-7 and recital 35.

<sup>626</sup> Art. 10.

<sup>627</sup> Art. 11.

<sup>628</sup> Art. 13, § 2.

either a proportionate reduction of the price or the termination of the sales contract<sup>629</sup>.

The provisions of the directive are mandatory and cannot be modified *in pejus* by the trader<sup>630</sup>.

Finally, Member States shall ensure that adequate and effective means exist to ensure compliance with the directive<sup>631</sup>.

### § 2.3 The Geo-blocking Regulation

A further measure enacted to grant consumers with equal access to the DSM is the Geo-blocking Regulation (2018/302/EU)<sup>632</sup>.

Here, the risk that market will not delivery equity<sup>633</sup> and harming the integration process by means of discriminatory practices is mainly addressed, namely through a command & control scheme.

In a way consistently with the dated ECJ case law (according to which agreements limiting or prohibiting parallel import could under certain conditions – typically: restrictions on passive sales – be considered unlawful under Art. 81 TEC because re-introducing on a private basis the very same obstacles to the free movement of goods and services that had been abolished through the establishment of the common market), the regulation seeks to impede that traders operating in one Member State can block or limit access to their online interfaces, such as websites and apps, by customers from other Member States wishing to engage in cross-border transactions (online geo-blocking), or can apply different general conditions of access to their goods

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<sup>629</sup> Art. 13, § 4.

<sup>630</sup> Art. 21.

<sup>631</sup> Art. 19.

<sup>632</sup> Regulation 2018/302/EU “*on addressing unjustified geo-blocking and other forms of discrimination based on customers’ nationality, place of residence or place of establishment within the internal market and amending Regulations (EC) No 2006/2004 and (EU) 2017/2394 and Directive 2009/22/EC*”.

<sup>633</sup> Part II, § 7.1.5, n. 6.

and services with respect to customers from other Member States (both online and offline geo-blocking)<sup>634</sup>.

In certain circumstances this practice might be justified by factors non depending on the trader's will, especially when it comes to SMEs (e.g. divergent legal environments and associated risks as regards the applicable consumer protection laws; environmental or labelling laws; taxation and fiscal issues; delivery costs or language requirements)<sup>635</sup>.

The regulation is solely addressed to unjustified geo-blocking<sup>636</sup>, which typically (but not exclusively) takes place by means of general terms<sup>637</sup> and should always be prohibited, both online<sup>638</sup> and offline<sup>639</sup>.

Namely, the regulation aims to further clarify Article 20 of Directive 2006/123/EC by defining the situations where different treatment based on nationality, place of residence or place of establishment cannot be justified under that provision<sup>640</sup>.

Differently from the Digital Contracts package, the regulation applies to both “consumers” (B2C)<sup>641</sup> and, limited to microenterprises and SMEs, “customers” (B2B)<sup>642</sup>, unless they purchase a good or a service for subsequent resale, transformation, processing, renting or subcontracting<sup>643</sup>. Moreover, it applies regardless of whether a trader is established in a Member State or in a third country<sup>644</sup>.

The regulation does not prevent traders to set targeted offers and differing general conditions of access, including through the setting-up of country-specific online interfaces; rather, it prevents traders to treat their consumers and

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<sup>634</sup> Recital 1.

<sup>635</sup> Recital 2.

<sup>636</sup> Recital 3.

<sup>637</sup> Recital 15.

<sup>638</sup> Art. 3.

<sup>639</sup> Art. 4.

<sup>640</sup> Recital 4.

<sup>641</sup> Art. 2, n. 12.

<sup>642</sup> Art. 2, n. 13.

<sup>643</sup> Recital 16.

<sup>644</sup> Recital 17.

customers in a discriminatory manner in such situations, by arbitrary associating said detrimental treatment to their nationality or their place of residence or place of establishment<sup>645</sup>.

The regulation does not affect the application of the rules on competition<sup>646</sup>.

Furthermore, it completes the PSD 2<sup>647</sup> liberalization process by prohibiting discrimination for reasons related to payment<sup>648</sup>.

Member States should introduce measures effective, proportionate and dissuasive to tackle geo-blocking<sup>649</sup>.

## § 2.4 A New Deal for consumers: the Omnibus Directive

In its Communication of 2015 on a New Deal for Consumers<sup>650</sup> the Commission, following the revision of the Consumer Protection Cooperation (CPC) Regulation<sup>651</sup>, suggested a general modernization of the consumer *acquis*.

Four macro-areas have been identified to drive the modernization process: i) new tools for consumers (e.g. individual remedies and representative actions

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<sup>645</sup> Recital 27.

<sup>646</sup> Art. 6 and recital 34: “*In particular, this Regulation, and specifically its provisions on access to goods or services, should not affect agreements restricting active sales within the meaning of Commission Regulation (EU) No 330/2010. Agreements imposing obligations on traders not to engage in passive sales in respect of certain customers or groups of customers in certain territories are generally considered to restrict competition and cannot normally be exempted from the prohibition laid down in Article 101(1) TFEU. Where, however, such an exemption applies, or where contractual restrictions are not covered by Article 101 TFEU, there is a risk that they could be used to circumvent the provisions of this Regulation. The relevant provisions of such agreements should therefore be automatically void where they impose obligations on traders to act in breach of the prohibitions laid down in this Regulation regarding access to online interfaces, access to goods or services and payment. Those provisions concern, for example, contractual restrictions that prevent a trader from responding to unsolicited requests from individual customers for the sale of goods, without delivery, outside the trader’s contractually allocated territory for reasons related to customers’ nationality, place of residence or place of establishment*”.

<sup>647</sup> See below § 5.2.

<sup>648</sup> Art. 5.

<sup>649</sup> Art. 7.

<sup>650</sup> Communication from the Commission “*A New Deal for Consumers*” (COM(2018) 183 final).

<sup>651</sup> Regulation 2017/2394/EU “*on cooperation between national authorities responsible for the enforcement of consumer protection laws and repealing Regulation (EC) No 2006/2004*”.

for the protection of the collective interests); ii) more transparency for consumers in online marketplaces; iii) extending protection of consumers to “free services” and iv) removing disproportionate burdens for businesses (e.g. means of communications).

The output of the Communication is a dual proposal of directives: the first one on representative actions for the protection of the collective interests of consumers<sup>652</sup>, the second one<sup>653</sup>, which led to the adoption of the Omnibus Directive<sup>654</sup>, on better enforcement and modernisation of EU consumer protection rules.

This paragraph will focus on the latter.

The Omnibus Directive seeks to address the informational asymmetry problem<sup>655</sup>, with a blend of disclosure regulation, command & control and of allocation of (proportionate) rights and obligations.

#### **i) Enhancing individual protection and individual remedies**

The Omnibus Directive considers that a clear framework for individual remedies would facilitate private enforcement. To this extent, the consumer should have access to compensation for damage and, where relevant, a price reduction or termination of the contract, in a proportionate and effective manner<sup>656</sup>.

Moreover, by completing the Geo-blocking Regulation (which addresses the problem of unjustified price discrimination depending on consumer’s localization), the Omnibus Directive, following a Commission Notice on Dual

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<sup>652</sup> Proposal for a directive “*on representative actions for the protection of the collective interests of consumers, and repealing Directive 2009/22/EC*” (2018/089 (COD)).

<sup>653</sup> Proposal for a directive “*amending Council Directive 93/13/EEC of 5 April 1993, Directive 98/6/EC of the European Parliament and of the Council, Directive 2005/29/EC of the European Parliament and of the Council and Directive 2011/83/EU of the European Parliament and of the Council as regards better enforcement and modernisation of EU consumer protection rules*” (2018/0090(COD)).

<sup>654</sup> Directive 2019/2161/EU “*amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules*”.

<sup>655</sup> Part II, § 7.1.5, n. 2.

<sup>656</sup> Recital 16.

Quality of food products<sup>657</sup>, makes clear that marketing across Member States of goods as being identical when, in reality, they have a significantly different composition or characteristics, may mislead consumers and cause them to take a transactional decision that they would not have taken otherwise. Thus, under certain circumstances this behaviour might be relevant under directive 2005/29/EC (UPCD Directive)<sup>658</sup>. This introduces a broader problem of quality discrimination, which not only might depend on consumer's localization but also on her or his profile, as inferred through BDA<sup>659</sup>.

Moreover, the Omnibus Directive allows Member States to adopt rules in accordance with which the withdrawal period of 14 days (*ius poenitendi ex Art. 9 of Consumer Right Directive*) is extended to 30 days for “aggressive sales”, like for instance contracts concluded in the context of unsolicited visits by a trader to a consumer's home<sup>660</sup>.

#### **ii) Increasing online platforms' transparency**

Probably for the purpose of preventing new cases similar to Google Shopping<sup>661</sup>, it is proposed to amend Annex I to UPCD Directive by including in the list of “*in all circumstances misleading practices*” also the (direct or indirect) payment of the trader to the provider of the online search functionality for a higher ranking of a product within the search results, insofar as such provider fails to inform consumers of that fact in a concise, easily accessible and intelligible form<sup>662</sup>.

Moreover, traders enabling consumers to search for goods and services, such as travel, accommodation and leisure activities, offered by different traders or by consumers should inform consumers at least about the default main parameters determining the ranking of offers presented to the consumer as a result of the

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<sup>657</sup> Commission Notice “*on the application of EU food and consumer protection law to issues of Dual Quality of products — The specific case of food*” (2017/C 327/01).

<sup>658</sup> Recital 52.

<sup>659</sup> On this specific matter, see UK Competition and Markets Authority (CMA), *The commercial use of consumer data* cit., 93, §§ 3.71 and 3.72.

<sup>660</sup> Art. 4, § 8, let. a).

<sup>661</sup> See below Part IV, § 2.1.2.

<sup>662</sup> Recital 20.

search query and their relative importance as opposed to other parameters<sup>663</sup>; in any case, traders should not be required to disclose the detailed functioning of their ranking mechanisms, including algorithms<sup>664</sup>.

In the context of B2B relationships, transparency requirements<sup>665</sup> are complemented by the P2B Regulation<sup>666</sup>.

A technological neutral definition of “online marketplace” is proposed: not necessary a “website”, but a “software” (which might include a website, part of a website or an application, operated by or on behalf of the trader)<sup>667</sup>.

The Omnibus Directive addresses also the issues posed by the sharing economy: since the laws on consumer protection do not apply to peer-to-peer transactions, the online platform should clearly inform consumers whether the third party offering goods, services or digital content is a trader or non-trader, based on the declaration made to them by the third party. When such third party declares its status to be that of a non-trader, providers of online marketplaces should provide a short statement to the effect that the consumer rights stemming from Union consumer protection law do not apply to the contract concluded. Furthermore, consumers should be informed of how obligations related to the contract are shared between third parties offering the goods, services or digital content and providers of online marketplaces. The information should be provided in a clear and comprehensible manner, without prejudice to the principle of proportionality, which should be observed not to hamper competitiveness of the European online environment<sup>668</sup>.

Member States should be able to adopt or maintain (proportional and non-discriminatory) specific additional measures for that purpose<sup>669</sup>.

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<sup>663</sup> Art. 3, § 4, let. b) and recital 22.

<sup>664</sup> Recital 23.

<sup>665</sup> Recital 21.

<sup>666</sup> See below § 3.3.

<sup>667</sup> Art. 3, § 1, b) and recital 25.

<sup>668</sup> Art. 3, § 4, let. a), n. ii) and recital 27.

<sup>669</sup> Recital 29.



BDA techniques may enable traders to personalise the price of their offers for specific consumers or specific categories of consumer based on automated decision-making and profiling of consumer behaviour allowing traders to assess the consumer's purchasing power. Without prejudice to the possible relevance of the behaviour under Art. 102 TFEU, a consumer protection measure is proposed for price discrimination. Indeed, consumers should be clearly informed when the price presented to them is personalised on the basis of automated decision-making, so that they can take into account the potential risks in their purchasing decision. Consequently, a specific information requirement should be added to Directive 2011/83/EU to inform the consumer when the price is personalised on the basis of automated decision-making<sup>670</sup>. Specific measures are proposed also with respect to online platforms providing consumer reviews of products or services, which should be obliged to inform consumers whether processes or procedures are in place to ensure that the published reviews originate from consumers who have actually used or purchased the products. If such processes or procedures are in place, traders should provide information on how the checks are made in practice<sup>671</sup>. In this context, Traders should also be prohibited from submitting fake consumer reviews and endorsements, such as “likes” on social media, or commissioning others to do so in order to promote their products, as well as from manipulating consumer reviews and endorsements, such as publishing only positive reviews and deleting the negative ones<sup>672</sup>.

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<sup>670</sup> Art. 4, § 4, let. a), n. ii) and recital 45 (which do not apply to techniques such as dynamic or real-time pricing that involve changing the price in a highly flexible and quick manner in response to market demands when those techniques do not involve personalisation based on automated decision-making). This solution had been envisaged also in Cappai M., *Social economy, gestione dei dati e tutela della concorrenza*, in Bassan F. – Rabitti M. (eds.), *Consumerism 2017. Dalla sharing alla social alla data economy*, available at <http://www.consumersforum.it/files/ricerche/Consumerism2017.pdf> (accessed 30.12.17), 47, where the need to accordingly amend the pre-contractual informational obligations under Artt. 5 and 6 of the Consumer Rights Directive had been highlighted.

<sup>671</sup> Recital 47.

<sup>672</sup> Recital 49, but see also the ICA investigation for unfair commercial practices against Tripadvisor (see press release *PS9345 - Half a million fine against Tripadvisor*, available at <https://en.agcm.it/en/media/press-releases/2014/12/alias-2178>).

The Omnibus Directive addressed also the problem of “secondary ticketing”, which might be facilitated by the combination of inadequate controls by “primary ticketing” over technological means (e.g. bots) capable to automatically buy several tickets per time, thus avoiding quantitative restrictions imposed, and the re-selling at a higher price of the extra tickets so purchased on secondary ticketing markets<sup>673</sup>. Indeed, the introduction of a ban on traders to resell to consumers tickets to cultural and sports events acquired by using software such as “bots”<sup>674</sup>.

### **iii) Extending protection of consumers to “free services”**

Closing the circle opened by the Digital Contracts package, the Omnibus Directive provides that the Consumer Rights Directive should cover also contracts under which the digital service is supplied by the trader versus the provision of consumer’s personal data<sup>675</sup>, excepted where the trader only collects metadata (e.g. cookies)<sup>676</sup>.

### **iv) Removing disproportionate burdens for traders**

In certain circumstances (e.g. when the contract is concluded by means such as telephone or voice operated shopping assistant and it may not be technically feasible in a user-friendly way on other means of distance communication), the provision of the withdrawal form is impossible, outdated, disproportionate and barely useful. Consequently, in such situations its provisioning should not be considered mandatory<sup>677</sup>.

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<sup>673</sup> See for instance the ICA’s investigation for unfair commercial practices against Ticketone and four players on the secondary (press release *Online concert ticket sales: Ticketone and four players on the secondary market fined 1,7 million euros*, available at <https://en.agcm.it/en/media/press-releases/2017/4/alias-2373>).

<sup>674</sup> Recital 50.

<sup>675</sup> Art. 4, § 2, lt. b) and recital 33.

<sup>676</sup> Recital 35.

<sup>677</sup> Recital 41.

## § 3. The second pillar: Environment

### § 3.1 The European Code of Electronic Communications

The pivotal element of the DSM strategy is the double-faced European Code of Electronic Communications (ECEC), aimed at unifying in a single act (hence the term “Code”) and to modernize the relevant sector-specific directives<sup>678</sup>.

In this multipurpose act many market defects are addressed: above all, market power<sup>679</sup>, informational asymmetry<sup>680</sup> and inequality and universal service<sup>681</sup>; this mainly happens by means of command & control, disclosure, market-harnessing controls and allocation of (proportionate) rights and obligations. Moreover, the problem of externalities or spill-overs<sup>682</sup> is addressed, basically by means of command & control requirements on the security of the networks<sup>683</sup>.

On the one hand, the ECEC promotes the investments seen as necessary to enhance EU’s worldwide competitiveness<sup>684</sup> (broadband access, 5G, etc.); on the other hand, it makes sure that in this transitional process nobody will be left behind, neither undertakings nor consumers.

Since BDA, AI, cloud computing and IoT would not be possible in the absence of a strong and secure environment of electronic communications, the ECEC might be considered as the qualifying factor or enabler of the DSM strategy<sup>685</sup>.

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<sup>678</sup> A comprehensive overview on the rise of the EU’s electronic communications policy is provided in Bassan F., *Concorrenza e Regolazione nel Diritto Comunitario delle Comunicazioni Elettroniche*, Giappichelli, Torino (IT), 2002.

<sup>679</sup> Part II, § 7.1.5, n. 5.

<sup>680</sup> Part II, § 7.1.5, n. 2.

<sup>681</sup> Part II, § 7.1.5, n. 6.

<sup>682</sup> Part II, § 7.1.5, n. 1.

<sup>683</sup> Art. 1, § 2, let. a) and recitals 94-98, complemented by the NIS Directive (below § 3.2).

<sup>684</sup> Art. 173 TFEU.

<sup>685</sup> Just to make an example, Member States shall promote over-the-air provisioning, where technically feasible, to facilitate switching of providers of electronic communications networks or services by end-users, in particular providers and end-users of machine-to-machine services (Art. 93, § 6 and recital 249).

Consistently with its “infrastructural” scope, the ECEC does not deal with “content” distributed by means of electronic communications, such as copyrighted products<sup>686</sup> and audiovisual<sup>687</sup>.

Accordingly, following a strictly literal interpretation, the ECEC should *prima facie* not apply to BDA.

Indeed, the scope<sup>688</sup> of the directive is limited to the regulation of electronic communications networks<sup>689</sup>, electronic communications services<sup>690</sup>, associated facilities<sup>691</sup> and associated services<sup>692</sup>, and certain aspects of

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<sup>686</sup> See above § 2.1.

<sup>687</sup> See Directive 2018/1808/EU “amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities”.

<sup>688</sup> Art. 1, § 1.

<sup>689</sup> Art. 2, n. 1: “«electronic communications network» means transmission systems, whether or not based on a permanent infrastructure or centralised administration capacity, and, where applicable, switching or routing equipment and other resources, including network elements which are not active, which permit the conveyance of signals by wire, radio, optical or other electromagnetic means, including satellite networks, fixed (circuit- and packet-switched, including internet) and mobile networks, electricity cable systems, to the extent that they are used for the purpose of transmitting signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed”.

<sup>690</sup> Art. 2, n. 4: “«electronic communications service» means a service normally provided for remuneration via electronic communications networks, which encompasses, with the exception of services providing, or exercising editorial control over, content transmitted using electronic communications networks and services, the following types of services: (a) internet access service as defined in point (2) of the second paragraph of Article 2 of Regulation (EU) 2015/2120; (b) interpersonal communications service; and (c) services consisting wholly or mainly in the conveyance of signals such as transmission services used for the provision of machine-to-machine services and for broadcasting”.

<sup>691</sup> Art. 2, n. 10: “«associated facilities» means associated services, physical infrastructures and other facilities or elements associated with an electronic communications network or an electronic communications service which enable or support the provision of services via that network or service, or have the potential to do so, and include buildings or entries to buildings, building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes, and cabinets”.

<sup>692</sup> Art. 2, n. 11: “«associated service» means a service associated with an electronic communications network or an electronic communications service which enables or supports the provision, self-provision or automated-provision of services via that network or service, or has the potential to do so, and includes number translation or systems offering equivalent functionality, conditional access systems and electronic programme guides (EPGs), as well as other services such as identity, location and presence service”.

terminal equipment<sup>693</sup>, and those definitions benefit only to a limited amount BDA.

From an institutional standpoint, the ECEC enhances the coordination and harmonization role<sup>694</sup> of the Commission and of the BEREC<sup>695</sup>, without downgrading, according to the subsidiarity principle, the role played by NRAs, which remains central<sup>696</sup>.

In order to promote the realization of cutting-edge infrastructures capable to unlock welfare all over the Union, the ECEC encourages forms of co-investment<sup>697</sup> and co-use (e.g. for 5G<sup>698</sup> and broadband<sup>699</sup> networks), also by allowing the allocation of special rights on the investors<sup>700</sup>, provided that the costs borne are not discriminatory passed on interconnected users by the vertically integrated undertaking<sup>701</sup>.

In this context, policymakers sought to avoid the “digital divide” by introducing broadband internet access within the boundaries of universal

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<sup>693</sup> Art. 2, n. 41: “«terminal equipment» means terminal equipment as defined in point (1) of Article 1 of Commission Directive 2008/63/EC”.

<sup>694</sup> See for instance the obligation of NRAs to submit draft measures under recital 83 and the obligation of NRAs to take utmost account of guidelines, opinions, recommendations, common positions, best practices and methodologies adopted by BEREC when adopting their own decisions for their national markets under Art. 10, § 2.

<sup>695</sup> Regulation 2018/1971/EU “establishing the Body of European Regulators for Electronic Communications (BEREC) and the Agency for Support for BEREC (BEREC Office), amending Regulation (EU) 2015/2120 and repealing Regulation (EC) No 1211/2009”.

<sup>696</sup> According to Bassan F., *Potere dell’algoritmo e resistenza dei mercati in Italia. La sovranità perduta sui servizi*, Rubbettino, Catanzaro (IT), 2019, 131-150, the system is bottom-up: NRAs should develop best practices, then harmonized by the Commission and the BEREC with soft law or legislative acts.

<sup>697</sup> Art. 76 and recitals 26-28 and 56.

<sup>698</sup> To understand the key role that 5G is expected to play in the DDE, especially in the light of IoT services, see the Communication from the Commission “5G for Europe: An Action Plan” (COM(2016) 588 final).

<sup>699</sup> Communication from the Commission “Connectivity for a Competitive Digital Single Market - Towards a European Gigabit Society” (COM(2016) 587 final).

<sup>700</sup> Recitals 122 and 133.

<sup>701</sup> Recitals 145 and 146.

service<sup>702</sup>, without prejudice to and in compliance with the open internet access Regulation<sup>703</sup>.

Acknowledging that in the context of certain business models consumers' personal data might act as consideration<sup>704</sup>, publicly available number-based interpersonal OTT communications services<sup>705</sup> (e.g. WhatsApp) are now required to obtain the general authorisation of electronic communications networks and of electronic communications services<sup>706</sup>, as opposed to publicly available number-independent interpersonal OTT communication services<sup>707</sup> (such as Facebook Messenger), which anyway fall within the scope of the Digital Content and Digital Service Directive<sup>708</sup> and still are subject to appropriate security requirements in accordance with their specific nature and economic importance<sup>709</sup>, thus benefitting of a lighter regulatory regime.

Overall, in terms of regulatory burdens the equivalence between telco's and OTT appears thus limited<sup>710</sup>.

Un-bundling of vertical integrated undertakings is incentivized through a set of provisions addressed to wholesale-only undertakings<sup>711</sup>. Of course, this structural measure does not prevent Artt. 101 and 102 TFEU to apply, but might well lower competition risks, so that, according to the proportionality principle, *“the regulatory response should therefore be commensurately less intrusive”*<sup>712</sup>.

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<sup>702</sup> Art. 84, § 1.

<sup>703</sup> Art. 1, § 3, let. d) and recital 215: *“The requirements of Union law on open internet access, in particular of Regulation (EU) 2015/2120, should apply to any adequate broadband internet access service”*. See Report from the Commission *“on the implementation of the open internet access provisions of Regulation (EU) 2015/2120”* (COM(2019) 203 final).

<sup>704</sup> Recital 16.

<sup>705</sup> Art. 2, n. 6.

<sup>706</sup> Art. 12, § 2 and recital 42.

<sup>707</sup> Art. 2, n. 7 and recital 44.

<sup>708</sup> See above § 2.2.1.

<sup>709</sup> Recital 95.

<sup>710</sup> Mannoni S. – Stazi G., *Is Competition A Click Away? Sfida al Monopolio nell'Era Digitale* cit., 68-71 describe this choice as a missed opportunity which lead to “digital disappointment”.

<sup>711</sup> Art. 80 and recital 155.

<sup>712</sup> Recital 208.

In addition, stronger infrastructural access regimes are provided, albeit the rationale for regulatory intervention has not substantially changed. To this extent, it is still possible to conclude that under the ECEC “well-targeted access regulation on upstream markets [...] serves as an efficient driver for service-based competition in the downstream retail market”<sup>713</sup>. Therefore, also in the ECEC the underlying idea remained that *ex ante* regulation is, as a matter of principle, only proportionate on wholesale markets, in order to enable full competition can take place on the services<sup>714</sup>, whereas regulatory measures on retail services are considered as a last resort solution<sup>715</sup>.

As a rule, obligations are imposed only to undertakings with significant market power (USMP)<sup>716</sup>. NRAs shall designate a USMP if, “*either individually or jointly with others, it enjoys a position equivalent to dominance, namely a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers*”<sup>717</sup>.

Where an undertaking has significant market power on a specific market, it may also be designated as having significant market power on a closely related market, where the links between the two markets allow the market power held on the specific market to be leveraged into the closely related market, thereby strengthening the market power of the undertaking. Consequently, remedies aiming to prevent such leverage may be applied in the closely related market<sup>718</sup>.

In order to identify USMPs, NRAs shall follow both the Commission’s Recommendation on Relevant Product and Service Markets (which shall identify those product and service markets within the electronic communications sector the characteristics of which may be such as to justify

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<sup>713</sup> Koenig C. – von Wendland B., *The Art of Regulation* cit., 136.

<sup>714</sup> *Id.*, 138

<sup>715</sup> Art. 83.

<sup>716</sup> Art. 63.

<sup>717</sup> Art. 63, § 2.

<sup>718</sup> Art. 63, § 3.

the imposition of regulatory obligations set out in the ECEC, without prejudice to markets that may be defined in specific cases under competition law)<sup>719</sup> and Commission's guidelines on market analysis<sup>720</sup>.

A market may be considered to justify the imposition of regulatory obligations in the presence of a) high and non-transitory structural, legal or regulatory barriers to entry;

b) a market structure which does not tend towards effective competition within the relevant time horizon, having regard to the state of infrastructure-based competition and other sources of competition behind the barriers to entry; c) failure of competition law alone to adequately address the identified market failure(s)<sup>721</sup>.

If the analysis of the NRA covers a market that is included in the Commission's Recommendation, it shall consider that the three conditions justifying the imposition of regulatory obligations have been met, unless otherwise determined by the NRA itself. The Recommendation is without prejudice to the power of NRAs to identify further relevant markets: in this case, the draft measures published and communicated to the Commission, to BEREC, and to other NRAs<sup>722</sup> are required to demonstrate that the three conditions are met<sup>723</sup>.

Where the NRA identifies a market requiring regulatory obligations and designates one or more USMP, it should impose on such undertaking(s)

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<sup>719</sup> Art. 64, §§ 1-3. Currently, the Commission still hasn't implemented Art. 64, § 1, so that – it shall be presumed – its Recommendation “*on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services*” (2014/710/EU) shall apply.

<sup>720</sup> Art. 64, §§ 2-3. Also in this case, the Commission still hasn't implemented Art. 64, § 2, so that – it shall be presumed too – former Guidelines “*on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services*” (2018/C 159/01) do apply.

<sup>721</sup> Art. 67, § 1.

<sup>722</sup> Art. 67, § 5 and 32.

<sup>723</sup> *A contrario*, Art. 67, § 1.



appropriate specific regulatory obligations *ex* Art. 68 or, should they already exist, maintain or amend such obligations<sup>724</sup>.

In compliance with the proportionality principle, the NRA shall choose the least intrusive way of addressing the problems identified in the market analysis<sup>725</sup>, selecting, in ascending order, one or more of the following instruments: i) obligation of transparency<sup>726</sup>; ii) obligations of non-discrimination<sup>727</sup>; iii) obligation of accounting separation<sup>728</sup>; iv) access to civil engineering<sup>729</sup>; v) obligations of access to, and use of, specific network elements and associated facilities<sup>730</sup>; vi) Price control and cost accounting obligations<sup>731</sup>; vii) functional separation<sup>732</sup>.

Notably, NRAs might impose access obligations also with respect to application programming interfaces (APIs) and electronic programme guides (EPGs)<sup>733</sup>.

Finally, in exceptional circumstances NRAs might address access and/or interconnection obligations also to undertakings subject to general authorization but lacking SMP<sup>734</sup>, provided that such obligations are objective, transparent, proportionate and non-discriminatory<sup>735</sup>.

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<sup>724</sup> Art. 67, § 4.

<sup>725</sup> Art. 68, § 2.

<sup>726</sup> Art. 69.

<sup>727</sup> Art. 70.

<sup>728</sup> Art. 71.

<sup>729</sup> Art. 72.

<sup>730</sup> Art. 73.

<sup>731</sup> Art. 74.

<sup>732</sup> Art. 77.

<sup>733</sup> Recital 153: “National regulatory authorities should be able, to the extent necessary, to impose obligations on undertakings to provide access to the facilities referred to in an annex to this Directive, namely application programming interfaces (APIs) and electronic programme guides (EPGs)”; Annex II “Conditions for access to digital television and radio services broadcast to viewers and listeners in the Union”, Part II.

<sup>734</sup> Art. 61, §§ 2-3 and recitals 152 and 157.

<sup>735</sup> Art. 61, § 5.

## § 3.2 The network and information systems (NIS) directive and the Cybersecurity Act (CSA)

The main purpose of the network and information systems directive (NIS Directive)<sup>736</sup> is to address the problem of externalities or spill-overs<sup>737</sup> by means of command & control requirements on the security of the networks.

The different levels of preparedness shown by Member States<sup>738</sup> represent an obstacle to the flourishing of a thriving DDE.

Indeed, since network and information systems, and primarily the internet, play an essential role in facilitating the cross-border movement of goods, services and people, substantial disruptions of those systems, whether intentional or unintentional and regardless of where they occur, can affect individual Member States and the Union as a whole. The security of network and information systems is therefore essential for the smooth functioning of the internal market<sup>739</sup>.

In this light, the NIS Directive establishes the European cyber-crisis cooperation, a Cooperation Group, composed of representatives of Member States, the Commission, and the European Union Agency for Network and Information Security<sup>740</sup> (“ENISA”), established in 2013<sup>741</sup>. In addition, it requests Member States to have well-functioning Computer security incident response teams (CSIRTs)<sup>742</sup>, complying with essential requirements to

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<sup>736</sup> Directive 2016/1148/EU “concerning measures for a high common level of security of network and information systems across the Union”, preceded by the Communication from the Commission “Strengthening Europe’s Cyber Resilience System” cit., (COM(2016) 410 final).

<sup>737</sup> Part II, § 7.1.5, n. 1.

<sup>738</sup> Recital 5.

<sup>739</sup> Recital 3.

<sup>740</sup> Recital 4.

<sup>741</sup> The European Union Agency for Network and Information Security (ENISA) has been established by Regulation 526/2013/EU “concerning the European Union Agency for Network and Information Security (ENISA) and repealing Regulation (EC) No 460/2004”.

<sup>742</sup> Art. 9. CSIRTs are often referred as computer emergency response teams (“CERTs”).

guarantee effective and compatible capabilities to deal with incidents and risks and ensure efficient cooperation at Union level<sup>743</sup>.

The network of national CIRTs is established as well<sup>744</sup>.

Acknowledging that most network and information systems are privately operated, the NIS Directive seeks to promote cooperation between the public and private sectors<sup>745</sup>.

While hardware and software producers are already subject to product liability rules<sup>746</sup>, the NIS Directive is particularly addressed to digital service providers, who are requested to self-assess, in compliance with the freedom of action and proportionality principles, the levels of risk they face and, consequently, the seriousness and complexity of the measures to be implemented<sup>747</sup>. Member States shall ensure that digital service providers notify without undue delay the competent authority or the CSIRT of any incident having a substantial impact on the provision of the service that they offer within the Union<sup>748</sup>. Micro and small enterprises are exempted<sup>749</sup>.

Digital service providers<sup>750</sup> should be subject to light-touch and reactive *ex post* supervisory activities justified by the nature of their services and operations<sup>751</sup>.

Conversely, the “operators of essential services”<sup>752</sup> which are identified by Member States among the subjects operational in vital sectors such as energy, transport, drinking water supply and distribution, banking, financial market

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<sup>743</sup> Recital 34.

<sup>744</sup> Art. 12. According to § 2, “*the CSIRTs network shall be composed of representatives of the Member States’ CSIRTs and CERT-EU. The Commission shall participate in the CSIRTs network as an observer. ENISA shall provide the secretariat and shall actively support the cooperation among the CSIRTs*”.

<sup>745</sup> Recital 35.

<sup>746</sup> Recital 50.

<sup>747</sup> Art. 16 and recital 49.

<sup>748</sup> Art. 16, § 3.

<sup>749</sup> Art. 16, § 11 and recital 53.

<sup>750</sup> Art. 4, n. 6.

<sup>751</sup> Recital 60.

<sup>752</sup> Art. 4, n. 4.

infrastructures, healthcare and digital infrastructure<sup>753</sup> are bound by security and notification requirements regardless of whether they perform the maintenance of their network and information systems internally or outsource it<sup>754</sup>. An enterprise is considered as an operator of essential services where<sup>755</sup> a) it provides a service which is essential for the maintenance of critical societal and/or economic activities; b) the provision of that service depends on network and information systems; and c) an incident would have significant disruptive effects<sup>756</sup> on the provision of that service.

Specific obligations are also addressed to key “digital service providers”<sup>757</sup> such as search engines, cloud computing services and online marketplaces<sup>758</sup>.

When personal data are compromised as a result of incidents, competent authorities should cooperate with data protection authorities and exchange information on all relevant matters<sup>759</sup>.

Undertakings compete on innovation on security requirements. The right balance between dynamic efficiency and uniformity might be to accompany the market-driven process of standardisation of security requirements, first, and to encourage compliance or conformity with such standards, then<sup>760</sup>.

The NIS Directive acts as a framework regulation and is without prejudice to sector-specific security requirements (e.g. GDPR), provided that they are at least equivalent<sup>761</sup>.

Member States should introduce penalties for the infringements of the NIS Directive<sup>762</sup>.

BDA technologies clearly fall within the scope of the NIS Directive<sup>763</sup>.

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<sup>753</sup> All. II.

<sup>754</sup> Art. 1, § 2, let. d) and recital 52.

<sup>755</sup> Art. 5, § 2.

<sup>756</sup> The concept of “*significant disruptive effects*” is defined under Art. 6.

<sup>757</sup> Art. 4, n. 6.

<sup>758</sup> Art. 7 and Annex III.

<sup>759</sup> Recital 63.

<sup>760</sup> Art. 19 and recital 66.

<sup>761</sup> Art. 1, § 7.

<sup>762</sup> Art. 21.

The framework has been complemented by the Cybersecurity Act (CSA)<sup>764</sup>, which is supposed to pursue two major objectives.

First, in the light of the increased cybersecurity challenges faced by the Union, the CSA builds a comprehensive set of measures by which further increasing the capabilities and preparedness of Member States and businesses, as well as improving cooperation, information sharing and coordination across Member States and Union institutions, bodies, offices and agencies. Furthermore, given the borderless nature of cyber threats, the CSA seeks to increase European capabilities that could complement the action of Member States in cases of large-scale cross-border incidents and crises. Consequently, the financial and human resources allocated to the ENISA are increased to reflect its enhanced role and tasks<sup>765</sup>.

Second, the CSA establishes European cybersecurity certification schemes for the purpose of ensuring an adequate level of cybersecurity for ICT products, ICT services and ICT processes in the Union, as well as for the purpose of avoiding the fragmentation of the internal market<sup>766</sup>.

### § 3.3 Platform to Business (P2B)

Online platforms “*play a prominent role in the creation of «digital value» that underpins future economic growth in the EU and consequently are of major importance to the effective functioning of the digital single market*”<sup>767</sup>.

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<sup>763</sup> See in particular Art. 4, § 1, let. b) (“*any device or group of interconnected or related devices, one or more of which, pursuant to a program, perform automatic processing of digital data*”) and 4, § 1, let. c) (“*digital data stored, processed, retrieved or transmitted by elements covered under points (a) [that is, relying on a “network information system”, to be intended as “an electronic communications network”] and (b) for the purposes of their operation, use, protection and maintenance*”).

<sup>764</sup> Regulation 2019/881/EU “*on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology cybersecurity certification and repealing Regulation (EU) No 526/2013 (Cybersecurity Act)*”.

<sup>765</sup> Recitals 6 and 19, Art. 1, § 1, let. a).

<sup>766</sup> Art. 1, § 1, let. b).

<sup>767</sup> Communication from the Commission “*Online Platforms and the Digital Single Market Opportunities*” cit., 1.

Not surprisingly, the Commission acknowledged that, here like in other relevant areas of the DDE, creating a level playing field should be the general principle for the establishment of a digital single market<sup>768</sup>.

In this context, several soft law acts and strategical projects have been launched by the Commission to make platforms' growth consistent with the internal market values: we can here mention the "Algorithmic-Awareness Project"<sup>769</sup>, the "Illegal Content" Communication<sup>770</sup> and Recommendation<sup>771</sup> and the Communication on "Online Disinformation"<sup>772</sup>.

The Platform to Business Regulation (P2B Regulation)<sup>773</sup> completes the scene. Acting in combination with the Directive on Digital Content or Digital Service<sup>774</sup>, which is designed to protect consumers (B2C), the P2B Regulation deals with relationships between undertakings (B2B).

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<sup>768</sup> *Ib.*, 6.

<sup>769</sup> See <https://ec.europa.eu/digital-single-market/en/algorithmic-awareness-building> (accessed 28.7.2019).

<sup>770</sup> Communication from the Commission "Tackling Illegal Content Online. Towards an enhanced responsibility of online platforms" (COM(2017) 555 final). On October 2013, the European Court of Human Rights (ECHR) ruled in the case that the Estonian news website Delfi was liable for not having removed defamatory comments by users in an article, so that no breach of the right to freedom of expression under Art. 10 of the Convention could be found. According to the Court, "the applicant company, by publishing the article in question, could have realised that it might cause negative reactions against the shipping company and its managers and that, considering the general reputation of comments on the Delfi news portal, there was a higher-than-average risk that the negative comments could go beyond the boundaries of acceptable criticism and reach the level of gratuitous insult or hate speech"; therefore, "the applicant company was expected to exercise a degree of caution in the circumstances of the present case in order to avoid being held liable for an infringement of other persons' reputations" (First Chamber, 10 October 2013, case *Delfi AS v. Estonia*, Application no. 64569/09, § 86; the case was referred to the Grand Chamber which delivered judgment in the case on 16 June 2015).

<sup>771</sup> Commission recommendation of 1.3.2018 "on measures to effectively tackle illegal content online" (C(2018) 1177 final).

<sup>772</sup> Communication from the Commission "Tackling online disinformation: a European Approach" (COM(2018) 236 final), following the Report of the independent High level Group on fake news and online disinformation (Directorate-General for Communication Networks, Content and Technology) "A multi-dimensional approach to disinformation", March 2018, available at <https://ec.europa.eu/digital-single-market/en/news/final-report-high-level-expert-group-fake-news-and-online-disinformation> (accessed 4.6.2018).

<sup>773</sup> Regulation 2019/1150/EU "on promoting fairness and transparency for business users of online intermediation services".

<sup>774</sup> See above § 2.2.

A long debate (in the form of stakeholder consultations and commissioned reports)<sup>775</sup> preceded the enactment of the P2B regulation.

In line with scholars' suggestion<sup>776</sup>, the P2B Regulation predominantly adopted a transparency approach: in sum, platforms are obliged to disclose information in a clear manner.

Conversely, command & control rules on platform neutrality are absent: should it be necessary, competition law rules should come in support.

Therefore, in this first stage the P2B Regulation will mainly address, at least until the planned review<sup>777</sup>, the informational asymmetry<sup>778</sup> problem, namely by means of imposing disclosure obligations.

On a doctrinal standpoint, a further market defect inspires, as a lighthouse, the whole regulation: market power<sup>779</sup>.

Yet, not in its typical feature of “dominance” or “significant market power”.

Rather, here the defect calling for correction seems to be “economic dependence”<sup>780</sup>. Indeed, “*the growing intermediation of transactions through*

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<sup>775</sup> Renda A. et al., *Study on the Legal Framework covering Business-to-Business Unfair Trading Practices in the Retail Supply Chain. Final Report*, February 26<sup>th</sup>, 2014, prepared for the European Commission, DG Internal Market, available at <https://op.europa.eu/en/publication-detail/-/publication/c82dc8c6-ec15-11e5-8a81-01aa75ed71a1/language-en> (accessed 6.7.2018); Ecorys, *Business-to-Business relations in the online platform environment (FWC ENTR/300/PP/2013/FC-WIFO). Final Report*, May 22<sup>nd</sup>, 2017, prepared for the European Commission, DG Internal Market, available at <https://op.europa.eu/en/publication-detail/-/publication/04c75b09-4b2b-11e7-aea8-01aa75ed71a1/language-en> (accessed 6.7.18); EY, *Study on contractual relationships between online platforms and their professional users (FWC JUST/2015/PR/01/0003/Lot1-02). Final Report*, April 23<sup>rd</sup>, 2018, prepared for the European Commission, DG Connect, available at <https://ec.europa.eu/digital-single-market/en/news/study-contractual-relationships-between-online-platforms-and-their-professional-users> (accessed 6.7.18); Hausemer P. (VVA) - Rabuel L. (VVA) - Graux H. (time.lex), *Study on data in platform-to-business relations. Final Report*, November 2017, prepared for the European Commission, DG Internal Market, available at <https://ec.europa.eu/digital-single-market/en/news/study-data-platform-business-relations> (accessed 6.7.18).

<sup>776</sup> For instance, see Krämera J. – Schnurr D., *Is there a need for platform neutrality regulation in the EU?*, in *Telecommunications Policy*, Vol. 42 (2018), 514 et seq.

<sup>777</sup> To be started by 13 January 2022 pursuant to Art. 18.

<sup>778</sup> Part II, § 7.1.5, n. 2.

<sup>779</sup> Part II, § 7.1.5, n. 5.

<sup>780</sup> On the topic, for a comparative exam of the “economic dependence” concept from both a tort law and competition law perspective in Italy (63 et seq.), Germany (113 et seq.), France (116 et seq.), Greece, Portugal, Spain and Check Republic (119 et seq.) and EU (121 et seq.), see Colangelo G., *L'Abuso di Dipendenza Economica tra Disciplina della Concorrenza e*

*online intermediation services, fuelled by strong data-driven indirect network effects, leads to an increased dependence of such business users, particularly micro, small and medium-sized enterprises (SMEs), on those services in order for them to reach consumers”*<sup>781</sup>.

As a consequence, the P2B Regulation is horizontal in scope: based on a legal presumption (the observed dependence of users from those platforms), it applies to all platforms facilitating or initiating a transaction with a consumer, irrespective to their dominance or significant market power (and to their actual capability of exercising an economic dependence); thus, it is not based on asymmetrical measures and it does not require enforcers to engage the (burdensome) activity of market definition nor of assessing, under a tort law perspective, the global contractual agreements in order to establish whether a dependent position exists<sup>782</sup>.

Consistently, the P2B Regulation adopts a light touch standard of intervention and seeks to create a minimum common floor.

In other words, differently from the approach followed in the ECEC, here the European legislator decided to solve the regulatory trade-off by favouring a less incisive regulation with broader scope and at lower transaction costs to a more intrusive regulation addressed to less players and showing higher transaction costs.

In conjunction with the disclosure obligations aimed at addressing the informational asymmetry problem, a targeted set of mandatory rules (command

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*Diritto dei Contratti. Un'analisi Economica e Comparata*, Giappichelli, Torino (IT), 2004. Italian tort law regulates abuse of economic dependence under Art. 9 of law n. 192/1998. Starting from law n. 57/2001, private enforcement is strengthened by a cumulative public enforcement power conferred to the ICA. Such power remained for long un-enforced. For its first application, see ICA, decision November 26<sup>th</sup>, 2016, n. 26251, commented by Medici C., *Abuso di dipendenza economica: la prima volta dell' Autorità*, in *Mercato Concorrenza Regole*, Vol. 18 (2016) Issue 3, 593 et seq.

<sup>781</sup> Recital 2. See also recital 12 (“*dependent position of business users has been observed principally in respect of online intermediation services that serve as a gateway to consumers in the form of natural persons*”) and recital 32 (“... *imbalances of bargaining power ...*”).

<sup>782</sup> A similar approach has been followed in the agri-food sector: see Directive 2019/633/EU “*on unfair trading practices in business-to-business relationships in the agricultural and food supply chain*” and, in Italy, Art. 62 of law decree n. 1/2012.



& control prohibition of identified clauses) seeks to address the market power problem, namely by establishing a fair, predictable, sustainable and trusted online business environment within the DSM<sup>783</sup>.

In sum, the Regulation “ensure that business users of online intermediation services and corporate website users in relation to online search engines are granted appropriate transparency, fairness and effective redress possibilities”<sup>784</sup>.

The P2B Regulation should apply to providers of “online intermediation services” and “online search engines”, regardless of whether they are established in a Member State or outside the Union, provided that i) the business users or corporate website users are established in the Union, and ii) the business users or corporate website users, through the provision of those services, offer their goods or services to consumers located in the Union at least for part of the transaction<sup>785</sup>.

“Online intermediation services”<sup>786</sup> include information society services aiming to facilitate the initiating of direct transactions between business users and consumers<sup>787</sup>, irrespective of whether on where the transactions are ultimately concluded<sup>788</sup>. They include platforms such as e-commerce marketplaces (including collaborative ones, to the extent that business users are active too, e.g. Airbnb), online software applications services (e.g. application stores), online social media services, etc.<sup>789</sup>.

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<sup>783</sup> Recital 7.

<sup>784</sup> Art. 1, § 1.

<sup>785</sup> Art. 1, § 2 and recital 9.

<sup>786</sup> Art. 2, n. 2.

<sup>787</sup> As according to CJEU, Grand Chamber, 20 December 2017, *Asociación Profesional Élite Taxi v. Uber Systems Spain SL*, case C- 434/15, § 42, Uber provides (mainly) a transportation service, such platform falls out the scope of the P2B Regulation. In the Impact Assessment, Uber has been mentioned among the main addressee of the Proposal for a P2B Regulation (SWD(2018) 138 final, PART 1/2, available at <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/1161-Fairness-in-platform-to-business-relations> (accessed 10.1.19), 6).

<sup>788</sup> Recital 10. Moreover, online intermediation services are defined in a technologically-neutral manner: for instance, they encompass also services provided by means of voice assistant technology.

<sup>789</sup> Recital 11.

Without prejudice to the remaining clauses, non-compliant terms and conditions should be null and void, that is, deemed to have never existed, with effects *erga omnes* and *ex tunc*<sup>790</sup>.

Terms and conditions should be drafted in plain and intelligible language<sup>791</sup> and should be easily available at all stages of the commercial relationship<sup>792</sup>.

In principle, if this possibility is clearly prefigured in the terms and conditions<sup>793</sup>, a provider of online intermediation services might have legitimate reasons to decide to restrict, suspend or terminate the provision of its services to a given business user, including by delisting individual goods or services to the detriment of that business user, by effectively removing the pertaining search results, by demoting or by negatively affecting a business user's appearance (so-called "dimming"). However, this should be subject to a prior statement of reasons for that decision, notified on a durable medium to the interested party, which should be allowed to clarify its position<sup>794</sup>.

The P2B Regulation addresses situations of imbalances in bargaining power, in order to ensure that contractual relations are conducted in good faith and on the basis of fair dealing, granting predictability and transparency to business users<sup>795</sup>.

In this light can be viewed a set of restriction concerning clauses commonly imposed by platforms:

i) a minimum notice of 30 days should be granted by the online intermediation service provider before termination of the service, in order to allow the business user to back up essential information which would otherwise be lost<sup>796</sup>;

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<sup>790</sup> Recital 20.

<sup>791</sup> Art. 3, § 1, let. a) and recital 15.

<sup>792</sup> Art. 3, § 1, let. b).

<sup>793</sup> Art. 3, § 1, let. c).

<sup>794</sup> Art. 4 and recital 22.

<sup>795</sup> Recital 32.

<sup>796</sup> Recital 23.

ii) business users should be fully informed of any access that providers of online intermediation services maintain, after the expiry of the contract, to the information that they have provided or generated using the online intermediation services<sup>797</sup>;

iii) any changes to terms and conditions should be notified on a durable medium to business users concerned within a set notice period which is reasonable and proportionate in light of the specific circumstances and which is at least 15 days<sup>798</sup>. In the absence of said notice, changes *in pejus* should be considered null and void as well<sup>799</sup>. In any case, changes should not be retroactive<sup>800</sup>.

Since the ranking of goods and services by the providers of online intermediation services has a crucial impact on consumer choice and, consequently, on the commercial success of the business user, providers should outline in advance the main parameters for ranking, in order to allow predictability and comparability of the service provided along different platforms<sup>801</sup>.

This includes an explanation of any possibility for business users to actively influence ranking against remuneration<sup>802</sup>.

At times providers of online intermediation services might directly or indirectly offer certain goods or services to consumers through their own online intermediation services. For instance, Amazon acts both as a (two-sided) marketplace and as a (one-sided) retailer. In such a circumstance the provider will compete with other business users of its online intermediation services. This might give the provider an economic incentive and the ability to use its control over the platform to provide technical or economic advantages to its

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<sup>797</sup> Art. 8, let. c) and recital 32.

<sup>798</sup> Art. 3, § 2 and recital 18.

<sup>799</sup> Recital 20.

<sup>800</sup> Art. 8, let. a) and recital 32.

<sup>801</sup> Art. 5, § 1 and recital 24.

<sup>802</sup> Artt. 5, § 3 and 7, § 3 let.) b) and c); recital 25.

own offering, which it could deny to competing business users. Such behaviour could distort competition and restrict consumer choice<sup>803</sup>.

In order to prevent this outcome or at least to make the business strategy accountable, the P2B Regulation provides that the platform should act in a transparent manner and provide an appropriate description of any possible differentiated treatment, whether through legal, commercial or technical means<sup>804</sup>.

Thus, discrimination is not prohibited as such: the P2B Regulation only requires that, where this possibility exists, it should be clearly displayed.

Similarly, providers of online intermediation services offering goods or services to consumers that are ancillary to a good or service sold by a business user on their platform (e.g. insurance offered by OTAs), should set out in their terms and conditions a description of the type of ancillary goods and services being offered, regardless of whether the ancillary good or service is being provided by the provider itself or by a third party on its behalf<sup>805</sup>.

In the same vein, when providers of online intermediation services have access to certain categories of data provided or generated by the business user, they should provide business users with a clear description of the scope, nature and conditions of such access and re-use<sup>806</sup>.

The description should enable business users to understand whether they can access and use the data provided or generated by their own on the platform to enhance value creation<sup>807</sup>, including by possibly accessing and retaining third-party data in aggregated form<sup>808</sup>.

The combined effect of these provisions appears remarkable: as long as this is explained in a transparent manner, the P2B Regulation does not prevent platforms to access business users' data, to share those data with third parties

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<sup>803</sup> Part V, Section II, § 3.

<sup>804</sup> Art. 7, § 1 and recital 30.

<sup>805</sup> Art. 6 and recital 29.

<sup>806</sup> Artt. 7, § 1, let. a) and 9, § 2, let. a).

<sup>807</sup> Art. 9, § 2, let. b).

<sup>808</sup> Art. 9, § 2, let. c).

and, at the same time, to deny access of business users even to the data generated or provided by themselves.

It is easy to understand that said obligation of transparency becomes paramount in all those cases where online intermediation service providers (directly or indirectly) offer their products or services, even ancillary, on the platform.

Similarly, business users should be able to understand whether the provider shares with third parties any data which has been provided or generated through the use of the intermediation service; if so, they should also be able to know whether the possibility of opting-out exists<sup>809</sup>.

In line with its general setting, also in all those cases the P2B Regulation does not ban such conducts: it merely imposes transparency obligations.

Similarly – and without prejudice to the application of Artt. 101 and 102 TFEU – the grounds for the exclusivity clauses which might be imposed on business users should be merely explained by the platform<sup>810</sup>.

Business users should be provided by the platform with internal complaint-handling systems<sup>811</sup>.

Coming to “*search engines providers*”<sup>812</sup>, here the obligations imposed are less intrusive, since a contractual relationship with corporate websites is normally absent.

Yet, search engine providers has to clearly explain the rationales and criterions used for the ranking of websites (namely, those websites through which undertakings offer goods and services to consumers), given the important impact on consumer choice and the commercial success of corporate website users that search engines show<sup>813</sup>.

Reasonably, due to the lack of any contractual relationship between the search engine provider and the corporate website user, the former cannot be expected to notify to the latter a change in ranking order or a delisting due to a third-

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<sup>809</sup> Art. 9, § 2, let. d) and recital 34.

<sup>810</sup> Art. 10.

<sup>811</sup> Art. 11 and recital 37.

<sup>812</sup> Art. 2, nn. 5 and 6.

<sup>813</sup> Art. 5, § 2 and recital 26.

party notification<sup>814</sup>. Nevertheless, a corporate website user should be able to inspect the contents of the notification that has led to the change in ranking order<sup>815</sup>.

Where a provider of an online search engine itself (directly or indirectly) offers certain goods or services to consumers through its own online search engine (e.g. Google Shopping), it might compete directly with other corporate website users of its online search engine which are not controlled by the provider. When this is the case, it is important that the platform acts in a transparent manner and provides a description of any differentiated treatment<sup>816</sup>.

It is important to underline that the transparency obligations laid down under the P2B Regulation does not require neither providers of online intermediation services nor providers of online search engines to disclose the detailed functioning of their ranking mechanisms, including algorithms<sup>817</sup>.

The Commission shall accompany the transparency requirements set out for ranking with guidelines<sup>818</sup>.

Finally, the light touch approach is confirmed by the fact that P2B Regulation encourages Codes of conduct (drawn up either by the service providers concerned or by organisations or associations representing them<sup>819</sup>) and welcomes<sup>820</sup> but does not oblige Member States to provide for *ex officio* enforcement or to impose fines<sup>821</sup>.

### § 3.4 Data protection

European data protection law represents a cornerstone of the DSM strategy.

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<sup>814</sup> Art. 5, § 4.

<sup>815</sup> Recital 26.

<sup>816</sup> Art. 5, § 3 and recital 33; Art. 7, § 2.

<sup>817</sup> Art. 5, § 6 and recital 27.

<sup>818</sup> Art. 5, § 7.

<sup>819</sup> Art. 17 and recital 48.

<sup>820</sup> Art. 15, § 2.

<sup>821</sup> Art. 1, § 2 GDPR.

To the extent of this research, it will be considered as economic regulation falling within the scope of competition policy.

More to the point: although it is undisputable that, on a constitutional standpoint, data protection relates to fundamental rights<sup>822</sup>, not to economic rights and freedom of action, it is equally undisputable that, as a matter of fact, in the DDE personal data might *also* act as consideration (otherwise, the rise of the so-called economics of privacy would make little sense).

In the conclusive part of this research, we will argue that this double identity qualifies personal data, at most, as a “quasi-commodity” (for sure not as a full commodity), explaining the meaning and the implications of this concept<sup>823</sup>.

It is here enough to underline that since personal data play *also* an economic role, any possible market defect involving data processing should be corrected by means of economic regulation.

It is in this light that both the GDPR (§ 3.4.1) and the e-Privacy proposal (§ 3.4.2) will be thus examined.

In particular, they will be considered as multi-purpose economic regulation coping with the problems of informational asymmetry (e.g. notice and consent scheme)<sup>824</sup>, externalities or spill-overs (e.g. security measures)<sup>825</sup>, buyers tending to become victims of their own actions<sup>826</sup> (e.g. by underestimating the value of their personal data) and market power (e.g. data portability remedy)<sup>827</sup>; this, by means of a blend of command & control requirements<sup>828</sup>,

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<sup>822</sup> Art. 8 Charter of Fundamental Rights of the European Union.

<sup>823</sup> Part V, § 1.1.2.

<sup>824</sup> Part II, § 7.1.5, n. 2.

<sup>825</sup> Part II, § 7.1.5, n. 1.

<sup>826</sup> Part II, § 7.1.5, n. 4.

<sup>827</sup> Part II, § 7.1.5, n. 5. As made clear under recitals 5-7 of GDPR, the free flow of personal data is the main objective of the GDPR after the main one: granting control over personal data.

<sup>828</sup> E.g. Art. 33.

market harnessing<sup>829</sup>, disclosure<sup>830</sup>, allocation of rights and obligations<sup>831</sup>, self-regulation<sup>832</sup>, enforced self-regulation<sup>833</sup>, incentive<sup>834</sup>, etc.

### § 3.4.1 The General Data Protection Regulation (GDPR)

The General Data Protection Regulation (GDPR) is probably the more prominent example of how policymakers might successfully shape markets: due to its extra-territorial scope<sup>835</sup> and due to the fact that Europe, when compared to the U.S., represents a remarkable market in terms of inhabitants (and so, of “data subjects”), the GDPR became a sort of worldwide benchmark, as the California Consumer Privacy Act (CCPA) demonstrates<sup>836</sup>.

Before starting the analysis, it should be clarified that the GDPR – given its “general” nature – has not been conceived for BDA; therefore, the application to new technologies of some rules and principles thereby provided might appear at times problematic and might require a certain degree of interpretative adjustment<sup>837</sup>.

First of all, the notion of “personal data” itself appears viscous.

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<sup>829</sup> E.g. Art. 20.

<sup>830</sup> E.g. Artt. 13 and 14.

<sup>831</sup> E.g. Artt. 15-18 and 20.

<sup>832</sup> E.g. Artt. 40 and 42.

<sup>833</sup> E.g. Binding corporate rules under Art. 47.

<sup>834</sup> E.g. Artt. 24, § 3 and 35, § 8.

<sup>835</sup> Under Art. 3, it applies when the controller and/or the processor are established in the EU, irrespective to the place where the processing takes place, and in all those cases where the data processing takes place abroad but the data subject is located in the EU.

<sup>836</sup> California Consumer Privacy Act of 2018, Civil Code of the State of California, §§ 1798.100 et seq. (CCPA).

<sup>837</sup> Guidance on the intersection between BDA-based technologies and privacy is provided, *ex multis*, in Tene O. – Polonetsky J., *Privacy and Big Data: making ends meet*, in *Stanford Law Review Online*, Vol. 66 (2013), 25 et seq.; Jain P. – Gyanchandani M. – Khare N., *Big data privacy: a technological perspective and review*, in *Journal of Big Data*, Vol. 3 (2016), 1 et seq.; Executive Office of the President - President’s Council of Advisors on Science and Technology (PCAST), Report to the President B. Obama, *Big data and privacy: a technological perspective*, May 2014, available at <https://obamawhitehouse.archives.gov/the-press-office/2015/11/16/fact-sheet-pcast-report-big-data-and-privacy-technological-perspective> (accessed 28.12.2016); Pizzetti F. (ed.), *Intelligenza artificiale, protezione dei dati personali* cit. Totally changing the perspective, Lerman J., *Big Data and its exclusions*, in *Stanford Law Review Online*, Vol. 66 (2013), 55 et seq. highlights the losses in terms of consumer welfare which the data subject excluded from the “net” of Big Data might suffer.



Indeed, by exploiting AI and ML, firms might derive a wide subset of personal data starting from a single, “consented” personal data, or even by a set of non-personal data (for instance by creating clusters of aggregated data which are so accurate that they allow the firm to infer that any person, under certain conditions, will make certain commercial choices).

As pointed out by scholars, in principle the definition of personal data provided by the GDPR, by making reference to persons “directly or indirectly” “identifiable”<sup>838</sup>, is wide enough to capture this kind of “by-produced” personal data<sup>839</sup>. This view seems to be confirmed also by the definition of “*profiling*”, which “*means any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person, in particular to analyse or predict aspects concerning that natural person*”<sup>840</sup>.

Nonetheless, on a practical standpoint compliance with the notice-and-consent scheme laid down by the GDPR might be complex, because “Big data often constitutes aggregated data from various sources that are not necessarily identifiable. There is thus no process to request the consent of a person for the resulting data, which is often more personal than the set of data the person would consent to give”<sup>841</sup>.

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<sup>838</sup> Art. 4, n. 1: *personal data “means any information relating to an identified or identifiable natural person (‘data subject’); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person”*.

<sup>839</sup> Pizzetti F., *La Protezione dei Dati Personali e la Sfida dell’Intelligenza Artificiale*, in *Id.* (ed.), *Intelligenza Artificiale* cit., 42: “data from data” fall within the scope of the GDPR as long as they allow to identify, either directly or indirectly, a natural person.

<sup>840</sup> Art. 4, n. 4, added emphasis.

<sup>841</sup> Cit. Kshetri N., *Big data’s impact on privacy, security and consumer welfare*, in *Telecommunications Policy*, Vol. 38 (2014), 1141, who quotes on the specific issue Pirlot A., *Big data: A tool for development or threat to privacy?*, available at <https://privacyinternational.org/blog/1434/big-data-tool-development-or-threat-privacy> (accessed 4.7.19).

Relatedly, pseudonymized data, being processed in a way that the personal data is not attributed to an identified or identifiable natural person<sup>842</sup>, should not be considered as personal data under the GDPR.

Conversely, there are no remarkable issues with the notion of “processing”, as it has been defined in a technological-neutral manner by the GDPR<sup>843</sup>.

The “*consent*” of the data subject – where required by the GDPR<sup>844</sup> – should consist in a “*freely given, specific, informed and unambiguous indication of the data subject’s wishes by which he or she, by a statement or by a clear affirmative action, signifies agreement to the processing of personal data relating to him or her*”<sup>845</sup>.

Consent encompasses the right to withdraw the consent at any time, being clear that such withdrawal will not affect the lawfulness of processing based on consent before its withdrawal<sup>846</sup>.

When assessing whether consent is freely given, utmost account shall be taken of whether, *inter alia*, the performance of the contract is conditional on consent

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<sup>842</sup> Art. 4, n. 5: “‘pseudonymisation’ means the processing of personal data in such a manner that the personal data can no longer be attributed to a specific data subject without the use of additional information, provided that such additional information is kept separately and is subject to technical and organisational measures to ensure that the personal data are not attributed to an identified or identifiable natural person”.

<sup>843</sup> Under Art. 4, n. 2: “‘processing’ means any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction”.

<sup>844</sup> Consent is not required if processing is “*necessary for the performance of a contract to which the data subject is party or in order to take steps at the request of the data subject prior to entering into a contract*” (Art. 6, § 1, let. b); if “*processing is necessary for compliance with a legal obligation to which the controller is subject*” (Art. 6, § 1, let. c); if “*processing is necessary in order to protect the vital interests of the data subject or of another natural person*” (Art. 6, § 1, let. d); if “*processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller*” (Art. 6, § 1, let. e); if “*processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party, except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child*” (Art. 6, § 1, let. f).

<sup>845</sup> Art. 4, n. 11.

<sup>846</sup> Art. 7, § 3.

to the processing of personal data that is not necessary for the performance of that contract<sup>847</sup>.

The GDPR is supported by solid principles, holistically and programmatically listed under Art. 5, which acts as a lighthouse for the interpretation of the whole legislative act.

First, it provides the principle of “lawfulness, fairness and transparency” of the processing<sup>848</sup>.

Second, it provides the principle of “purpose limitation”, which requires personal data to be “*collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes*”<sup>849</sup>.

It is evident that BDA might challenge the full compliance with the latter<sup>850</sup>, as it allows, by definition, multiple reuse of each single data.

A balanced solution might be to interpret the principle of purpose limitation strictly in its first part (“*collected for specified, explicit and legitimate purposes*”) and more broadly and flexibly in its second part (“*not further processed in a manner that is incompatible with those purposes*”)<sup>851</sup>. To a certain extent, this interpretation might be confirmed by Art. 13, § 3, according to which “*where the controller intends to further process the personal data for a purpose other than that for which the personal data were collected, the controller shall provide the data subject prior to that further processing with information on that other purpose*”.

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<sup>847</sup> Art. 7, § 4.

<sup>848</sup> Artt. 5, § 1, let. a) and 6.

<sup>849</sup> Art. 5, § 1, let. b).

<sup>850</sup> See on the topic Forgò N. – Hanod S. – Schütze, *The Principle of Purpose Limitation and Big Data*, in Corrales M. – Fenwick M. – Forgó N. (eds.), *New Technology, Big Data and the Law*, Springer, Singapore (SI), 2017, 17 et seq.

<sup>851</sup> Waldman A., *Privacy as Trust: Information Privacy for an Information Age*, Cambridge University Press, Cambridge (U.K.), 2018, 83-86.

The very same argument might be brought with reference to the principle of “data minimization”<sup>852</sup>, according to which data processing should be “*limited to what is necessary in relation to the purposes for which they are processed*”.

Coming to the principle of “data accuracy”<sup>853</sup>, according to which data processed should be “*accurate and, where necessary, kept up to date*”, it is self-evident that first-generation BDA techniques based on “trawl fishing”<sup>854</sup> appear outdated and not sustainable anymore.

In this light, the BDA value chain stage of “Data Curation”<sup>855</sup> can play a central role in designing second-generation BDA techniques compatible with the GDPR.

Under the principle of “storage limitation”<sup>856</sup> personal data should be “*kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed*”.

Therefore, the data controller should not keep the collected data *sine die*, awaiting new possible forms of processing (which would also contravene the principle of purpose limitation, by allowing an *ex post* definition of the purpose of the collection and processing<sup>857</sup>).

Nonetheless, the prohibition might turn out to be *de facto* ineffective in all those cases where the purpose of the processing is “profiling”: indeed, if such cases data processing will necessarily be prolonged.

The principle of “integrity and confidentiality”<sup>858</sup>, which aims at preventing possible data breaches<sup>859</sup>, requires personal data to be “*processed in a manner*

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<sup>852</sup> Art. 5, § 1, let. c).

<sup>853</sup> Art. 5, § 1, let. d). In addition, “*every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay*”.

<sup>854</sup> Pizzetti F., *La Protezione dei Dati Personali e la Sfida dell’Intelligenza Artificiale* cit., 61.

<sup>855</sup> Part I, § 4.2.

<sup>856</sup> Art. 5, § 1, let. e).

<sup>857</sup> Carey P., *Data Protection: A Practical Guide to UK and EU Law*, 5th ed., Oxford University Press, Oxford (U.K.), 2018, 39.

<sup>858</sup> Art. 5, § 1, let. f).

*that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures”.*

Finally, all the listed principles are complemented by the key principle of “accountability”<sup>860</sup>. It provides that “*the controller shall be responsible for, and be able to demonstrate compliance*” with the former principles.

The controller should take appropriate measures to provide any communication and information in a concise, transparent, intelligible and easily accessible form, using clear and plain language<sup>861</sup>. Moreover, the controller shall facilitate the exercise of data subject rights<sup>862</sup>, taking action on any request without undue delay<sup>863</sup>.

The proportionality principle re-balances the exposed allocation of obligations and rights: “*where requests from a data subject are manifestly unfounded or excessive, in particular because of their repetitive character, the controller may either: a) charge a reasonable fee taking into account the administrative costs of providing the information or communication or taking the action requested; or b) refuse to act on the request*”<sup>864</sup>.

In order to be free, consent should also be informed. Hence the specific rules on information to be provided where personal data are collected from the data subject<sup>865</sup> and where personal data have not been obtained from the data subject<sup>866</sup>: the identity and the contact details of the controller<sup>867</sup> (and, where

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<sup>859</sup> Art. 4, n. 12: “*‘personal data breach’ means a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to, personal data transmitted, stored or otherwise processed*”.

<sup>860</sup> Art. 5, § 2.

<sup>861</sup> Art. 12, § 1.

<sup>862</sup> Art. 12, § 2.

<sup>863</sup> Art. 12, § 3.

<sup>864</sup> Art. 12, § 5.

<sup>865</sup> Art. 13.

<sup>866</sup> Art. 14.

<sup>867</sup> Artt. 13, § 1, let. a) and 14, § 1, let. a).

applicable, of the DPO<sup>868</sup>); the categories of personal data concerned<sup>869</sup>; the purpose of the processing<sup>870</sup>; the recipients or categories of recipients of the personal data, if any<sup>871</sup>; the period for which the personal data will be stored, or if that is not possible, the criteria used to determine that period<sup>872</sup>; the existence of the rights granted by the GDPR<sup>873</sup>; the existence of automated decision-making processing, including profiling<sup>874</sup>; when data have not been obtained from the data subject, from which source the personal data originate, and if applicable, whether it came from publicly accessible sources<sup>875</sup>.

The data subject should be granted the rights of access<sup>876</sup>, of rectification<sup>877</sup> of erasure (so-called right to be forgotten<sup>878</sup>, originated by the Google Spain case<sup>879</sup>), of restriction of processing<sup>880</sup> (in case of non compliance with the

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<sup>868</sup> Artt. 13, § 1, let. b) and 14, § 1, let. b).

<sup>869</sup> Art. 14, § 1, let. d).

<sup>870</sup> Artt. 13, § 1, let. c) and 14, § 1, let. c).

<sup>871</sup> Artt. 13, § 1, let. e) and 14, § 1, let. d).

<sup>872</sup> Artt. 13, § 2, let. a) and 14, § 2, let. a).

<sup>873</sup> Art. 13, § 2, let. b) to d); Art. 14, § 2, let. c) to e).

<sup>874</sup> Art. 13, § 2, let. f); Art. 14, § 2, let. g).

<sup>875</sup> Art. 14, § 2, let. f).

<sup>876</sup> Art. 15.

<sup>877</sup> Art. 16.

<sup>878</sup> Art. 17. The right to erasure (or to be forgotten) applies, *inter alia*, when “*the personal data are no longer necessary in relation to the purposes for which they were collected or otherwise processed*” (Art. 17, § 1, let. a) or when “*the data subject withdraws consent on which the processing is based [...] and where there is no other legal ground for the processing*” (Art. 17, § 1, let. b). It seems interesting to note that, in any case, erasure is not automatic: it requires the data subject’s request (of course, the data minimization and storage limitation principles remain valid). Moreover, under Art. 19, where the request for erasure follows a consent withdrawal, “*the controller shall communicate any [...] erasure of personal data [...] to each recipient to whom the personal data have been disclosed*”. Nonetheless, the scope of this obligation is subject to the proportionality principle (“*unless this proves impossible or involves disproportionate effort*”) and so it might be sufficient for the controller to “*inform the data subject about those recipients [who was not possible or disproportionate to ask erasure for] if the data subject requests it*” (Art. 19).

<sup>879</sup> CJEU, Grand Chamber, 13 May 2014, *Google Spain SL and Google Inc. v. Agencia Española de Protección de Datos (AEPD) and Mario Costeja González*, case C-131/12. The complex problems raised by this case echo in Art. 17, § 2: “*where the controller has made the personal data public and is obliged pursuant to paragraph 1 to erase the personal data, the controller, taking account of available technology and the cost of implementation, shall take reasonable steps, including technical measures, to inform controllers which are processing the personal data that the data subject has requested the erasure by such controllers of any links to, or copy or replication of, those personal data*”.

<sup>880</sup> Art. 18.

principles of accuracy, minimization, and lawfulness, fairness and transparency); right to object<sup>881</sup>.

In addition to the preceding, the right to data portability deserves particular attention. It allows the data subject to receive upon request the personal data concerning him or her, which he or she has provided to a controller, in a structured, commonly used and machine-readable format and to transmit those data to another controller without hindrance from the former controller, where the processing has been based on consent and the processing has been carried out by automated means<sup>882</sup>.

As mentioned before, the right to data portability can be in a way considered as a market opening measure. Indeed, not only does it allow the data subject to have effective control over his personal data, but it *also* sorts a pro-competitive effect by preventing “retentions” and lock-in effects to the benefit of the controller and to the detriment of its potential competitors, namely by lowering switching costs through the allocation of rights and obligations on the data subject and on the controller<sup>883</sup>.

According to the WP 29<sup>884</sup>, the data portability right does not apply to personal data “*inferred*” by the undertaking, but only to data “*provided*” by the data subject (that is, “*data actively and knowingly provided by the data subject*” and “*observed data provided by the data subject by virtue of the use of the service or the device*”).

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<sup>881</sup> Art. 21.

<sup>882</sup> Art. 20.

<sup>883</sup> On the topic, see De Hert P. – Papakonstantinou V. – Malgieri G. – Baslay L. – Sanchez I., *The Right to Data Portability in the GDPR: Towards User-Centric Interoperability of Digital Services*, in *Computer Law & Security Review*, Vol. 34 (2018), 193 et seq.; Lynskey O., *Aligning Data Protection Rights with Competition Law Remedies? The GDPR Right to Data Portability*, in *European Law Review*, Vol. 42 (2017), 793 et seq.; Graef I. – Husovec M. – Purtova N., *Data Portability and Data Control: Lessons for an Emerging Concept in EU Law*, in *German Law Journal*, Vol. 19 (2018), Issue 6, 1359 et seq.; Weber R.H., *Data Portability and Big Data Analytics. New Competition Policy Challenges*, in Di Porto F. (ed.), *Big Data e concorrenza*, in *Concorrenza e mercato*, Vol. 23 (2016), 59 et seq.

<sup>884</sup> Art. 29 WP, *Guidelines on the Right to Data Portability*, December 13<sup>th</sup>, 2016 (last revised April 5<sup>th</sup>, 2017), available at [https://ec.europa.eu/newsroom/document.cfm?doc\\_id=44099](https://ec.europa.eu/newsroom/document.cfm?doc_id=44099) (accessed 10.7.19), 9-10.

Moreover, the data portability right does not include the right to real-time data access by the third party (data interoperability)<sup>885</sup>.

Finally, pursuant to Art. 20, § 2 GDPR, the data portability right can be exercised only “*where technically feasible*”, so that protocol interoperability problems can be easily alleged by the solicited undertaking.

Before engaging automated individual decision-making, including profiling, which produces legal or other relevant effects concerning the data subject, the controller should obtain an explicit consent (excepted where such a consent is necessary for entering into, or performance of, a contract and where it is authorised by Union or Member State law)<sup>886</sup>.

The controller shall implement appropriate technical and organisational measures to ensure and to be able to demonstrate that processing is performed in accordance with the GDPR<sup>887</sup>.

The GDPR codified the principle of “privacy by design and by default”<sup>888</sup>.

Privacy by design means that, taking into account the state of the art, the cost of implementation and the nature, scope, context and purposes as well as the risks for rights and freedoms of natural persons posed by the specific processing, the controller shall, both at the time of the determination of the means for processing and at the time of the processing itself, implement appropriate technical and organizational measures (e.g. pseudonymization), which are designed to implement data-protection principles (e.g. data minimization) in an effective manner<sup>889</sup>.

Privacy by default means that the controller shall implement appropriate technical and organisational measures for ensuring that, by default, only

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<sup>885</sup> In this light, Google, Microsoft, Twitter and Facebook launched in 2018 the *Data Transfer Project*.

<sup>886</sup> Art. 22.

<sup>887</sup> Art. 24, § 1.

<sup>888</sup> Art. 25; recitals 75-78. Westin A.F., *Privacy and Freedom*, Ig Publishing, New York (U.S.), 1967, 176-184 might be seen as the forerunner of privacy by design and by default, having him proposed to design computers' architecture in a privacy-sustainable way, due to the potential loss of control connected to the exponential collection of data.

<sup>889</sup> Art. 25, § 1.



personal data which are necessary for each specific purpose of the processing are processed<sup>890</sup>.

The main actors of the GDPR are, together with the data subject, the controller<sup>891</sup> (and joint-controllers<sup>892</sup>), the processor<sup>893</sup> (whose relationships and obligations with the controller or joint-controllers shall be regulated by a contract<sup>894</sup>) and the DPO<sup>895</sup>.

In both cases, an approved certification mechanism may be used as an element to demonstrate compliance with the requirements<sup>896</sup>.

Moreover, the accountability principle is ensured also by obliging controllers to keep a record of processing activities under its responsibility<sup>897</sup> (SMEs<sup>898</sup> are exempted, unless their processing is likely to result in a risk to the rights and freedoms of data subjects, the processing is not occasional, or the processing includes special categories of data<sup>899</sup>).

By integrating and specifying the NIS Directive, the GDPR requires controllers to implement “*appropriate technical and organisational measures to ensure a level of security appropriate to the risk*”<sup>900</sup>.

Data breaches should be promptly notified to the supervisory authority<sup>901</sup> and should be communicated to the concerned data subject when the personal data breach is likely to result in a high risk to her or his rights and freedoms<sup>902</sup>.

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<sup>890</sup> Art. 25, § 2, where it is added that such “*obligation applies to the amount of personal data collected, the extent of their processing, the period of their storage and their accessibility. In particular, such measures shall ensure that by default personal data are not made accessible without the individual's intervention to an indefinite number of natural persons*”.

<sup>891</sup> Art. 24.

<sup>892</sup> Art. 26.

<sup>893</sup> Art. 28.

<sup>894</sup> Art. 28, § 3. Pursuant to Art. 28, § 5, “*adherence of a processor to an approved code of conduct as referred to in Article 40 or an approved certification mechanism as referred to in Article 42 may be used as an element by which to demonstrate sufficient guarantees*”.

<sup>895</sup> Art. 37.

<sup>896</sup> Artt. 25, § 3 and 42.

<sup>897</sup> Art. 30.

<sup>898</sup> Namely, enterprises or organizations employing less than 250 persons.

<sup>899</sup> Art. 30, § 5.

<sup>900</sup> Art. 32, § 1. In this case, too, adherence to codes of conduct (Art. 40) or certifications (Art. 42) might be used as an element by which to demonstrate compliance with the requirements on security measures (Art. 32, § 3).

In the DDE this appears necessary to effectively protect (not only personal data but also) “digital identities”<sup>903</sup>.

Where a type of processing, taking into account its nature, scope, context, purposes, and especially the technologies adopted, is likely to result in a high risk to the rights and freedoms of natural persons, the controller shall, prior to the processing, carry out an assessment of the impact of the envisaged processing operations on the protection of personal data<sup>904</sup>. Prior impact assessment is particularly important in case of a systematic and extensive evaluation of personal aspects which is based on automated processing, including profiling, and on which decisions are based that produce legal or other relevant effects concerning the natural person<sup>905</sup>.

Should the impact assessment indicate that the processing would result in a high risk in the absence of mitigating measures, the controller shall consult the supervisory authority prior to processing (prior consultation)<sup>906</sup>.

Supervisory authorities are granted investigative powers<sup>907</sup>, corrective powers (including imposing administrative fines)<sup>908</sup>, authorisation and advisory

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<sup>901</sup> Art. 33. For instance, the UK Information Commissioner’s Office (ICO) has issued a notice of its intention to fine British Airways £183.39M for infringements of the GDPR because of a cyber incident notified by British Airways itself in September 2018: see the press release available at <https://ico.org.uk/about-the-ico/news-and-events/news-and-blogs/2019/07/statement-ico-announces-intention-to-fine-british-airways/> (accessed 12.7.19). A more detailed analysis of these issues is provided in Yeoh P., *The Fourth Industrial Revolution: Technological Impact and Privacy and Data Security Issues*, in *Business Law Review*, Vol. 38 (2017), Issue 1, 9 et seq.

<sup>902</sup> Art. 34

<sup>903</sup> Knight A. – Saxby S., *Identity Crisis: Global Challenges of Identity Protection in a Networked World*, in *Computer Law & Security Review*, Vol. 30 (2014), 614 et seq. On the notion of “digital identity” (and on the further notion of “transaction identity”), see Alpa G., *L’Identità Digitale e la Tutela della Persona. Spunti di Riflessione*, in *Contratto e impresa*, Vol. 3 (2017), 723 et seq. and Regulation 910/2014/EU “on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC”.

<sup>904</sup> Art. 35, § 1. In this case, too, adherence to codes of conduct and certifications might be relevant (Art. 35, § 8).

<sup>905</sup> Art. 35, § 3, let. a).

<sup>906</sup> Art. 36.

<sup>907</sup> Art. 58, § 1.

<sup>908</sup> Art. 58, § 2.

powers<sup>909</sup> and are supposed to cooperate<sup>910</sup> and to provide each other mutual assistance<sup>911</sup>, also by engaging joint operations<sup>912</sup>. In order to promote the creation of a uniform legal environment within the DSM supervisory authorities, excepted where derogation is allowed pursuant to the urgency procedure<sup>913</sup>, should normally act according to the consistency mechanism<sup>914</sup>. The European Data Protection Board is established to facilitate the achievement of the objectives pursued by the GDPR<sup>915</sup>.

The system is completed by a set of tort law rules addressed to the data subject who suffered material or non-material damages as a result of an infringement of the Regulation<sup>916</sup> and who should be granted the right to an effective judicial remedy against the controller and/or the processor<sup>917</sup>.

### § 3.4.2 The e-Privacy Regulation Proposal

Before the data protection reform was initiated as part of the DSM strategy, EU data protection rules were provided by Privacy Directive<sup>918</sup> and by e-Privacy Directive<sup>919</sup>, whose scope is limited to *“the processing of personal data in connection with the provision of publicly available electronic communications services in public communications networks in the Community, including*

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<sup>909</sup> Art. 58, § 3.

<sup>910</sup> Art. 60.

<sup>911</sup> Art. 61.

<sup>912</sup> Art. 62.

<sup>913</sup> Art. 66.

<sup>914</sup> Art. 63.

<sup>915</sup> Art. 68.

<sup>916</sup> Art. 82.

<sup>917</sup> Art. 79.

<sup>918</sup> Directive 95/46/EC *“on the protection of individuals with regard to the processing of personal data and on the free movement of such data”*, amended by Regulation 1882/2003/EC.

<sup>919</sup> Directive 2002/58/EC *“concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications)”*, amended by Directive 2006/24/EC and Directive 2009/136/EC.

*public communications networks supporting data collection and identification devices*”<sup>920</sup>.

The Commission’s intent was to enact the GDPR first (repealing the Privacy Directive<sup>921</sup>) and to review the e-Privacy Directive in rapid succession, in order to achieve the deserved level of consistency between the two acts<sup>922</sup>.

Nonetheless, the e-Privacy Regulation Proposal (from now on: “e-Privacy Proposal”)<sup>923</sup> is still under discussion at the first reading stage before the Council.

This leaves room for legal uncertainty, at least from a dual perspective.

The first one is the fact that Over-the-Top communications services (“OTTs”) are formally excluded by the scope of e-Privacy Directive. This appears to be the best anti-historical, if one considers that from a consumer perspective those products are substitutable to traditional services (with the remarkable difference that they do not have to comply with the same set of rules)<sup>924</sup>.

Indeed, the e-Privacy Directive has created a sort of “legal grey zone” between electronic communications services and information society services (and, among them, OTTs communications service providers): currently, only the former are bound by the specific obligations on the transmitted “contents”

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<sup>920</sup> Art. 3.

<sup>921</sup> Art. 94 GDPR.

<sup>922</sup> See recital 173 GDPR: “[the GDPR] *should apply to all matters concerning the protection of fundamental rights and freedoms vis-à-vis the processing of personal data which are not subject to specific obligations with the same objective set out in [e-Privacy Directive], including the obligations on the controller and the rights of natural persons. In order to clarify the relationship between this Regulation and [e-Privacy Directive], that Directive should be amended accordingly. Once this Regulation is adopted, [e-Privacy Directive] should be reviewed in particular in order to ensure consistency with this Regulation*” and Art. 95 GDPR: “[the GDPR] *shall not impose additional obligations on natural or legal persons in relation to processing in connection with the provision of publicly available electronic communications services in public communication networks in the Union in relation to matters for which they are subject to specific obligations with the same objective set out in [e-Privacy Directive]*”.

<sup>923</sup> Proposal for a Regulation “*concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC (Regulation on Privacy and Electronic Communications)*” (2017/0003 (COD)). The proposal has been preceded by a wide consultation carried out by the DG Connect (see *Synopsis Report of the Public Consultation on the Evaluation and Review of the ePrivacy Directive*, available at <https://ec.europa.eu/digital-single-market/en/news/full-report-public-consultation-eprivacy-directive>, accessed 10.09.19).

<sup>924</sup> Recital 6 e-Privacy Regulation Proposal.

which are laid down by the e-Privacy Directive. In this context, communications service providers are only allowed to use metadata revealing the location, time and persons involved in the communication, subject to consent of the concerned user or subscriber (and limited to marketing and “value added services” beyond the provision of the communications service itself)<sup>925</sup>.

The same does not go for OTTs communications service providers.

Ultimately, until the e-Privacy Directive is in force, OTTs may argue that there is no need to ask permission - consent - from individuals to use their most private information<sup>926</sup>.

The e-Privacy Proposal specifically deals with this problem and seeks to include OTTs communications services within its scope<sup>927</sup>, as well as machine-to-machine communications (IoT)<sup>928</sup>.

Here, one might try to argue, not without grounds, that the meanwhile occurred inclusion of OTTs within the scope of the enacted ECEC might lead, regardless of the conclusion of the ongoing legislative procedure, to the automatic extension of the e-Privacy Directive to those services, namely by means of a broad interpretation of its Art. 3.

The second issue posed by the slowdown of the legislative procedure involves the treatment of metadata and, among them, cookies.

Indeed, when processing takes place for legitimate purposes, such as facilitating information society services<sup>929</sup>, such service providers are not

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<sup>925</sup> Art. 6, § 3 and recital 26 e-Privacy Directive.

<sup>926</sup> The point has been raised by EDPS Buttarelli G., *The Urgent Case for a New ePrivacy Law*, October 19<sup>th</sup>, 2018, available at [https://edps.europa.eu/press-publications/press-news/blog/urgent-case-new-eprivacy-law\\_en](https://edps.europa.eu/press-publications/press-news/blog/urgent-case-new-eprivacy-law_en) (accessed 20.10.2018), who added: “this is precisely the uncertainty which must be avoided”.

<sup>927</sup> Art. 4, § 1, let. b) and recital 11 e-Privacy Regulation Proposal.

<sup>928</sup> Recital 12 e-Privacy Regulation Proposal.

<sup>929</sup> Art. 5, § 3 e-Privacy Directive: the general rule of consent “*shall not prevent any technical storage or access [...] as strictly necessary in order for the provider of an information society service explicitly requested by the subscriber or user to provide the service*”. The WP29 included within this category user-input cookies, authentication cookies, user-centric security cookies, multimedia content player cookies, load-balancing cookies, user-interface customisation cookies and third-party social plug-in content-sharing cookies (Opinion 4/2012

required to seek consent for using communications data, so that an “*information and right to refuse*” (opt-out) scheme, in derogation to the consent (opt-in) mechanism, is generally considered sufficient<sup>930</sup>.

This approach remains in place also with the e-Privacy proposal<sup>931</sup>.

However, criticalities arose in the event of processing not taking place for legitimate purposes: in these circumstances, the notion of “consent” relevant under e-Privacy Directive has been for long considered compatible with light-touch technical solutions, such as, for instance, pre-flagged banners<sup>932</sup>.

This amounted to a remarkable regulatory gap, given that cookies might well enable enterprises to figure out an analytic set of personal data, as recognized also by the GDPR<sup>933</sup>.

The e-Privacy Proposal deals also with this problem, by introducing an opt-in scheme and by considering explicit and specific consent always required (by

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“*on Cookie Consent Exemption*”, June 7<sup>th</sup>, 2012, available at [https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2012/wp194\\_en.pdf](https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2012/wp194_en.pdf), accessed 4.10.2019).

<sup>930</sup> Art. 5, § 3 and recital 25 e-Privacy Directive: “*where [...] cookies [...] are intended for a legitimate purpose, such as to facilitate the provision of information society services, their use should be allowed on condition that users are provided with clear and precise information in accordance with [Privacy Directive, now Artt. 13 and 14 GDPR] about the purposes of cookies or similar devices so as to ensure that users are made aware of information being placed on the terminal equipment they are using. Users should have the opportunity to refuse to have a cookie or similar device stored on their terminal equipment*”.

<sup>931</sup> Art. 8, § 1, let. c) e-Privacy Regulation Proposal.

<sup>932</sup> For instance, see Italian Data Protection Authority, *Simplified Arrangements to Provide Information and Obtain Consent Regarding Cookies*, may 8<sup>th</sup>, 2014, § 4 (available at <https://www.gpdp.it/web/guest/home/docweb/-/docweb-display/docweb/3167654>, accessed 20.10.2018): “*With a view to simplifying information arrangements, the DPA considers that an effective solution [...] consists in envisaging a two-tiered approach. On accessing a website, users must be shown an initial «short» notice in an overlay banner on the home page (or on any other landing page). This short notice must be supplemented by an «extended» notice to be accessed via a clickable hyperlink. To achieve meaningful simplification, it is necessary that the consent request to the use of cookies is included in the banner displaying the short information notice. If a user wishes to get additional, more detailed information and make more granular choices with regard to the individual cookies stored by the website being visited, he or she can access other website pages providing tools to make more specific selections in addition to the extended information notice*”.

<sup>933</sup> Recital 30 GDPR: “*Natural persons may be associated with online identifiers provided by their devices, applications, tools and protocols, such as internet protocol addresses, cookie identifiers or other identifiers such as radio frequency identification tags. This may leave traces which, in particular when combined with unique identifiers and other information received by the servers, may be used to create profiles of the natural persons and identify them*”.

means of a “*clear affirmative action*”<sup>934</sup>) every time that metadata are not processed for a legitimate purpose<sup>935</sup>.

In a recent judgement of the CJEU such a conclusion has been achieved regardless of the ongoing legislative procedure.

Indeed, the CJEU has recently made clear that “*the consent referred to in [...] Article 5(3) of [e-Privacy Directive], read in conjunction with Article 2(h) of [Privacy Directive], is [...] not validly constituted if the storage of information, or access to information already stored in an website user’s terminal equipment, is permitted by way of a checkbox pre-ticked by the service provider which the user must deselect to refuse his or her consent*”<sup>936</sup>.

Moreover – added the Court – this interpretation should apply “*a fortiori*” in the light of the entry in force of GDPR<sup>937</sup>.

The CJEU will be likely called to intervene again, as the proposal for an e-Privacy Directive seems out of the political agenda.

#### **§ 4. The third pillar: Economy & Society**

The third pillar of the DSM strategy, Economy & Society, has a propulsive role: its mission is to boost growth, to be the engine of the transition towards the DDE.

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<sup>934</sup> Recital 24 and Art. 6, § 2, let. c) e-Privacy Regulation Proposal.

<sup>935</sup> Recitals 17 and 20 e-Privacy Regulation Proposal. At the same time, in order to improve the browsing experience, the cookies used for the legitimate purpose of enabling the use of the specific service explicitly requested by the end-user shall not go beyond a mere information (recital 21 e-Privacy Regulation Proposal) and web browsers may be used as gatekeepers, introducing the possibility to express consent by using the appropriate settings of a browser or other application (Art. 9, § 2 and recital 22 e-Privacy Regulation Proposal). The choices made by end-users when establishing its general privacy settings of a browser or other application should be binding on, and enforceable against, any third parties. To this extent, in compliance with the privacy by design and by default principle, “*end-users should be offered a set of privacy setting options, ranging from higher (for example, ‘never accept cookies’) to lower (for example, ‘always accept cookies’) and intermediate (for example, ‘reject third party cookies’ or ‘only accept first party cookies’)*” (recital 23 and Art. 10, § 1 e-Privacy Regulation Proposal).

<sup>936</sup> CJEU, Grand Chamber, 1<sup>o</sup> October 2019, *Bundesverband der Verbraucherzentralen und Verbraucherverbände — Verbraucherzentrale Bundesverband eV v. Planet49 GmbH*, in case C- 673/17, § 57.

<sup>937</sup> *Ib.*, § 60.

Therefore, while the first pillar mainly focuses on “equal opportunities” and the second pillar put a stronger emphasis on “control” and “accountability” aspects, here the main objective is “development”.

This is to be achieved through a two-fold strategy:

- i) creating a new-generation class of digital skilled employees, researchers and entrepreneurs (Society)<sup>938</sup>;
- ii) digitizing European industry<sup>939</sup>, by favouring and promoting the emergence of new business models and the development of best digital practices (Economy).

The next paragraphs focus on the latter.

## § 4.1 AI Plan for Europe

Artificial Intelligence (AI) is recognized to be the main fork of the future: it represents both a great opportunity and a threat to well-established European legal principles.

Being aware of the importance of the ranking of the EU in the global “AI rush”, the Commission launched an AI Action Plan<sup>940</sup>, involving both public and private actors, then refined in a “Coordinated Action Plan” on AI<sup>941</sup>.

The challenge is to participate the global rush by “*support[ing] an ethical, secure and cutting-edge AI made in Europe*”<sup>942</sup>.

The direction to be followed has been programmatically indicated in the Ethics Guidelines for Trustworthy AI issued by the Independent Group of Experts

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<sup>938</sup> Communication from the Commission “*A new skills agenda for Europe. Working together to strengthen human capital, employability and competitiveness*” (COM(2016) 381 final).

<sup>939</sup> Communication from the Commission “*Digitising European Industry. Reaping the full benefits of a Digital Single Market*” (COM(2016) 180 final).

<sup>940</sup> Communication from the Commission “*Artificial Intelligence for Europe*” (COM(2018) 237 final).

<sup>941</sup> Communication from the Commission “*Coordinated Plan on Artificial Intelligence*” (COM(2018) 795 final).

<sup>942</sup> *Ib.*, 2.



appointed by the Commission<sup>943</sup> and in the Communication on Human-Centric AI<sup>944</sup>.

## § 4.2 Building a European Data Economy

The Communication “*Building a European Data Economy*”<sup>945</sup> opened a discussion on four macro areas: i) regulating and promoting the free flow of non-personal data; ii) liability; iii) portability, interoperability and standards; iv) strengthening access to Public Sector Information (PSI) and to scientific information.

### § 4.2.1 Free Flow of Non-Personal Data Regulation

While exploring the best tools and solutions to enhance the tradability of non-personal or anonymised machine-generated data, part of the stakeholders has proposed the introduction of a data producer right.

The movement for “data property” (in German *Dateneigentum*) had its champion in European Commissioner Günther Oettinger, who until 2016 led the DG Connect<sup>946</sup>.

The debate has been stimulated by the common consensus on the unsuitability of the existing Intellectual Property rights to protect Big Data<sup>947</sup> and on the background idea that more protection and trust could lead to the flourishing of thriving data markets.

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<sup>943</sup> Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* cit.

<sup>944</sup> Communication from the Commission “*Building Trust in Human-Centric Artificial Intelligence*”, COM(2019) 168 final.

<sup>945</sup> Communication from the Commission “*Building a European Data Economy*” (COM(2017) 9 final), followed by Communication from the Commission “*Towards a common European data space*” (COM(2018) 232 final).

<sup>946</sup> This insight is given by Bernt Hugenholtz P., *Data Property: Unwelcome Guest in the House of IP*, in *Better Regulation for Copyright. Academics meet Policy Makers*, 2017, available at [https://juliareda.eu/wp-content/uploads/2017/09/2017-09-06\\_Better-Regulation-for-Copyright-Academics-meet-Policy-Makers\\_Proceedings.pdf](https://juliareda.eu/wp-content/uploads/2017/09/2017-09-06_Better-Regulation-for-Copyright-Academics-meet-Policy-Makers_Proceedings.pdf) (accessed 13.02.2018), 65.

<sup>947</sup> See Part I, § 6.2.1.

Depending on the positions, such a data producer right has been built up as a “right *in rem*”<sup>948</sup> or as “a set of purely defensive rights”<sup>949</sup>.

Consistently with the IP law consolidated principle that ideas and information shall remain free, object of such a legal protection would be the “syntactical”, not the “semantic”, level of the data<sup>950</sup>.

The Commission has actively explored this regulatory option in the Communication under analysis<sup>951</sup> and in its accompanying document<sup>952</sup>.

Nonetheless, based on the outcome of the public consultation launched in 2017<sup>953</sup> and considering the diverging view expressed by the OECD<sup>954</sup> and well-placed scholars<sup>955</sup>, all along with the outcomes of the legal studies funded

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<sup>948</sup> See Zech H., *Information as a tradable commodity*, in De Franceschi A. (ed.), *European Contract Law and the Digital Single Market*, Interstentia, Cambridge (UK), 2016, 51 et seq..

<sup>949</sup> Kerber W., *A New (Intellectual) Property Right for Non-Personal Data? An Economic Analysis*, in *GRUR Int. (German Association for the Protection of Intellectual Property)*, 2016, 989. This option would follow the choice made in the design of the protection given to know-how by the Trade Secrets Protection Directive (n. 2016/943/EU). Its objective would be to enhance the sharing of data by giving at least the defensive elements of an *in rem* right, *i.e.* the capacity for the *de facto* data holder to sue third parties in case of illicit misappropriation of data. This approach thus equates to a protection of a *de facto* “possession” rather than to the concept of “ownership”.

<sup>950</sup> As explained by Ramalho A., *Data Producer’s Right: Powers, Perils and Pitfalls*, in *Better Regulation for Copyright. Academics meet Policy Makers*, 2017, available at [https://juliareda.eu/wp-content/uploads/2017/09/2017-09-06\\_Better-Regulation-for-Copyright-Academics-meet-Policy-Makers\\_Proceedings.pdf](https://juliareda.eu/wp-content/uploads/2017/09/2017-09-06_Better-Regulation-for-Copyright-Academics-meet-Policy-Makers_Proceedings.pdf) (accessed 13.02.2018), 52 – who challenged the introduction of a data producer right – “this means that the object of protection is at the level of signs (such as sequences of 0 and 1), not at the level of content of the information”.

<sup>951</sup> Communication from the Commission “*Building a European Data Economy*” cit., 13.

<sup>952</sup> Commission SWD (2017) 2 final “*on the free flow of data and emerging issues of the European data economy*”, 33-35.

<sup>953</sup> See Commission *Synopsis Report Consultation on the ‘Building a European Data Economy’ Initiative*, available at <https://ec.europa.eu/digital-single-market/en/news/synopsis-report-public-consultation-building-european-data-economy> (accessed 16.06.18), 5-6.

<sup>954</sup> OECD, *Data-Driven Innovation: Big Data for Growth and Well-Being*, OECD Publishing, Paris, 2015, 195 et seq.

<sup>955</sup> Drexel J. – Hilty R.M. – Desautnettes L. – Greiner F. – Kim D. – Richter H. – Surblytè G. – Wiedemann K., *Position Statement of the Max Planck Institute for Innovation and Competition of August 16, 2016. On the current debate on exclusive rights and access rights to data at the European level*, 2-3; Wiebe A., *Protection of industrial data – a new property right for the digital economy?*, in *Journal of Intellectual Property Law & Practice*, Vol. 12 (2017), Issue 1, 62 et seq.; Ciani J., *Property rights model v. contractual approach: how protecting non-personal data in cyberspace?*, in *Diritto del Commercio Internazionale*, Vol. 4 (2017), 831 et seq.

by the Commission itself<sup>956</sup>, the Commission has finally decided to take a different approach and to promote the free flow of non-personal data by trying to favour opening up data access (so-called “contractual approach”).

Taking aside more possibilistic positions<sup>957</sup>, the general belief is indeed that competition law appears ill suited to promote an obligation to grant access, as the requirements set forth in Article 102 TFEU (namely, under the sub-category of the refuse to deal known as the “essential facility doctrine”) are quite hard to fulfil in data intensive markets<sup>958</sup>.

Here came the Free Flow of Non-Personal Data Regulation (from now on “FF Regulation”)<sup>959</sup>, that, by removing the existing barriers to the circulation of data, indirectly seeks to promote data access.

It acts in combination with the Private-to-Private (P2P) and Private-to-Government (P2G) Guidance<sup>960</sup>, that, by adopting non-mandatory horizontal principle based soft-law rules, tries to encourage the rise of data sharing platforms and of other trusted exchange channels apt to foster (non-personal) data flow within the DSM<sup>961</sup>.

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<sup>956</sup> Osborne Clarke LLP, *Legal study on Ownership and Access to Data. Final report*, 2016; Duch-Brown N. – Martens B. – Mueller-Langer F., *The economics of ownership, access and trade in digital data*, Digital Economy Working Paper 2017-01, in *JRC Technical Reports*; Deloitte, *Study on emerging issues of data ownership, interoperability, (re-)usability and access to data, and liability. Final report*, 2017.

<sup>957</sup> Graef I., *EU Competition Law, Data Protection and Online Platforms: Data as Essential Facility*, Kluwer Law International, Alphen aan den Rijn (NL), 2016.

<sup>958</sup> *Inter alia*, see Drexl J., *Designing Competitive Markets for Industrial Data. Between Propertisation and Access*, in *Journal of Intellectual Property, Information Technology and Electronic Commerce Law*, Vol. 8 (2017), 257 et seq.; Borgogno O. – Colangelo G., *Data Sharing and Interoperability Through APIs: Insights from European Regulatory Strategy*, Stanford-Vienna European Union Law Working Paper No. 38/2018, last revised: 26 Apr 2019, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3288460](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3288460), 30-33.

<sup>959</sup> Regulation n. 2018/1807/EU “on a framework for the free flow of non-personal data in the European Union”. See also Commission Guidance “on the Regulation on a framework for the free flow of non-personal data in the European Union” (COM(2019) 250 final), pursuant to Art. 8, § 3 FF Regulation.

<sup>960</sup> Commission Guidance “on sharing private sector data in the European data economy” (SWD(2018) 125 final), accompanying the document Communication from the Commission “Towards a common European data space” cit.

<sup>961</sup> This regulatory choice is regarded as reasonable in Richter H. – Slowinski P.R., *The Data Sharing Economy: On the Emergence of New Intermediaries*, in *International Review of Intellectual Property and Competition Law*, Vol. 50 (2019), Issue 1, 4 et seq. Borgogno O. –

Since data portability of personal data is governed by Art. 20 GDPR, the FF Regulation applies “*to the processing of electronic data other than personal data in the Union*”<sup>962</sup> and, in the case of a data set composed of both personal and non-personal data, “*to the non-personal data part of the data set*”<sup>963</sup>.

The FF Regulation deals with the following market defects: data localisation requirements put in place by Member States’ authorities (and the consequent lack of competition between cloud service providers) in the Union, on one side; vendor lock-in practices in the private sector<sup>964</sup>, on the other side.

Consistently, the provisions are addressed to both Member States and private sector vendors.

Indeed, the combination of these market defects led to a serious lack of data mobility and to the need of creating a level playing field<sup>965</sup>.

The regulatory approach is principle-based and seeks to achieve, through cooperation among Member States and self-regulation, the level of flexibility necessary to consider the evolving needs of users, service providers and national authorities in the Union. Moreover, in line with the light-touch regulatory approach pursued, it consciously avoids establishing detailed technical rules<sup>966</sup>.

The FF Regulation applies to data processing in the broadest sense, covering data storage (Infrastructure-as-a-Service (IaaS)), the processing of data on

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Colangelo G., *Data Sharing and Interoperability Through APIs* cit., 40-41 argue that APIs are the technologic means implicitly envisaged by the Commission as the vehicle to enable data access and data sharing. Nonetheless – following the complex implementation of the XS2A rule introduced by the PSD2 (see below § 5.2) – they underline that “when it comes to data sharing, the technicalities enacted by market players are crucial for its success”. Moreover, they stress that APIs standardization might be the way to increase interoperability. However, based on the Standard Essential Patents (SEPs) experience, they are skeptical about the fact that fair, reasonable and non-discriminatory (FRAND) licensing terms designed by Standard-Setting Organizations (SSOs) might provide a conclusive solution, having FRAND solutions proven to be highly controversial, leading to a “wave of disputes” (see 37-39).

<sup>962</sup> Art. 1, § 1.

<sup>963</sup> Art. 1, § 2, where it is further provided that “*where personal and non-personal data in a data set are inextricably linked, this Regulation shall not prejudice the application of Regulation (EU) 2016/679*”.

<sup>964</sup> Recitals 2 and 6.

<sup>965</sup> Recital 7.

<sup>966</sup> Recital 11.

platforms (Platform-as-a-Service (PaaS)) or in applications (Software-as-a-Service (SaaS))<sup>967</sup>.

Arbitrary and disproportionate data localisation requirements requested by Member States represent a clear barrier to the free provision of data processing services across the Union. Being them able to harm market integration, such requirements should fall within the scope of the notion of “public security” provided under Art. 52 TFEU<sup>968</sup> and comply with the proportionality principle<sup>969</sup>.

In this light, Member States should immediately communicate to the Commission any draft act that introduces a new data localisation requirement or modifies an existing data localization requirement<sup>970</sup> as well as the data localization requirements which are already in place and which they intend to maintain<sup>971</sup>: in both cases, consistently with the conferral principle, the Commissions can’t go beyond comments and recommendations<sup>972</sup>.

Moreover, to facilitate both investors and the Commission, Member States should publish information on such requirements on a national online single information point, to be regularly updated<sup>973</sup>.

Vendors lock-in should be prevented by improving transparency of the terms of use<sup>974</sup>. In particular, operational requirements for data porting should be defined by market players through self-regulation, encouraged, facilitated and monitored by the Commission, in the form of Union codes of conduct which might include model contractual terms and conditions<sup>975</sup>. Such codes of conduct should cover at least the key aspects that are important during the

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<sup>967</sup> Recital 17 and Art. 3, n. 2.

<sup>968</sup> Recital 18.

<sup>969</sup> Art. 4, § 1: “*Data localisation requirements shall be prohibited, unless they are justified on grounds of public security in compliance with the principle of proportionality*”.

<sup>970</sup> Art. 4, § 2 and recital 20.

<sup>971</sup> Art. 4, § 3 and recital 21.

<sup>972</sup> Recital 21.

<sup>973</sup> Recital 23.

<sup>974</sup> Art. 6, § 1.

<sup>975</sup> Recital 30.

process of porting data<sup>976</sup>, should make clear that vendor lock-in is not an acceptable business practice, should provide for trust-increasing technologies, and should be regularly updated in order to keep pace with technological developments<sup>977</sup>. Finally, certification schemes that facilitate the comparison of data processing products and services for professional users should be encouraged too<sup>978</sup>.

### § 4.2.2 Civil Liability

A further area of relevant legal issues can be retrieved in the field of civil liability for the damages which might be caused by AI, autonomous systems and advanced robots/IoT-systems<sup>979</sup>.

This lack amounts to a dead loss in terms of welfare.

Indeed, legal uncertainty and divergences in national liability regimes slow down the flourishing of such technologies, resulting in the fact that “the development and uptake of the IoT, robotics and autonomous systems in the EU is hampered by deficiencies in liability legislation”<sup>980</sup>.

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<sup>976</sup> Such as “the processes used for, and the location of, data back-ups; the available data formats and supports; the required IT configuration and minimum network bandwidth; the time required prior to initiating the porting process and the time during which the data will remain available for porting; and the guarantees for accessing data in the case of the bankruptcy of the service provider”: recital 31 and Art. 6, § 1, let. b).

<sup>977</sup> Recital 31.

<sup>978</sup> Art. 6, § 1, let. c).

<sup>979</sup> On the topic, see Massolo A., *Responsabilità Civile e IA*, in Pizzetti F. (ed.), *Intelligenza Artificiale, Protezione dei Dati Personali e Regolazione*, Giappichelli, Torino (IT), 2018, 373 et seq.

<sup>980</sup> Cit. Deloitte, *Study on emerging issues of data ownership* cit., 102. Deloitte makes clear that “the devices and robots under examination in this study are [...] data-driven, not in the sense that they are programmed – which would be true for deterministic robots as well, but in the sense that they are dependent on sensors or external data sources to provide information to them. They then actuate this information in their environment based on nondeterministic pre-programmed routines. This creates attribution challenges: to which entity (human or company) is the behaviour of a robot or device assigned, and who is to be required to bear the liability for any damage caused?” (105).

The Commission<sup>981</sup> understood the described relationship between legal certainty/harmonization and growth, by actively promoting workshops and roundtables to address the issue.

This led to the adoption of a Recommendation by the European Parliament<sup>982</sup>.

### § 4.2.3 Interoperability and standards

Acknowledging that “*common standards ensure the interoperability of digital technologies and are the foundation of an effective Digital Single Market*”, the Commission adopted a Communication on “*ICT Standardisation Priorities for the Digital Single Market*”<sup>983</sup>. It seeks to further detail the objectives pursued by the Regulation “*on European standardisation*”<sup>984</sup> and the framework created with the setting up of the “*European multi-stakeholder platform on ICT standardisation*”<sup>985</sup>.

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<sup>981</sup> See the Final Report of the *Workshop on liability in the area of autonomous systems and advanced robots and Internet of Things systems*, Brussels (BE), July 13<sup>th</sup>, 2017, available at <https://ec.europa.eu/digital-single-market/en/news/workshop-liability-area-autonomous-systems-and-advanced-robots-and-internet-things-systems> (accessed 18.6.19). As in the business-to-business area questions of liability currently seem to be addressed by contracts, the workshop has focused on damages incurred by natural persons.

<sup>982</sup> European Parliament resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)).

<sup>983</sup> COM(2016) 176 final.

<sup>984</sup> Regulation 1025/2012/EU “*on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council*”.

<sup>985</sup> Commission decision of 28 November 2011 “*Setting up the European multi-stakeholder platform on ICT standardisation*” (2011/C 349/04).

#### § 4.2.4 Access to Public Sector and Scientific Information

Finally, the pro-active boost to data flow within the DSM is complemented by the new directive on access to Public Sector Information (PSI)<sup>986</sup> and by the Commission Recommendation on access to Scientific Information<sup>987</sup>.

#### § 4.3 European Cloud Initiative

The third leg of the “Economic” part of the third pillar of the DSM strategy, together with the AI Plan (§ 4.1) and with the set of measures that followed the Building a European Data Economy Communication (§ 4.2), is the European Cloud Initiative<sup>988</sup>, whose objectives include promoting, also by means of Public-Private Partnerships, a competitive technological environment driven by High Performance Computing<sup>989</sup>, increasing legal certainty by means of fair contract terms and conditions<sup>990</sup>, facilitating interoperability by means of Cloud Standardization<sup>991</sup> and fostering European Cloud Infrastructures<sup>992</sup>.

### § 5. Sector-specific data access provisions

The GDPR and the FF Regulation establish a horizontal framework applicable to all economic sectors.

Due to their horizontal scope, they can be further detailed by sector-specific regulations when tailored rules become necessary in order to address market defects affecting a particular industry.

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<sup>986</sup> Directive 2019/1024/EU “on open data and the re-use of public sector information (recast)”.

<sup>987</sup> Commission Recommendation 2018/790/EU “on access to and preservation of scientific information”.

<sup>988</sup> Communication from the Commission “European Cloud Initiative - Building a competitive data and knowledge economy in Europe” (COM(2016) 178 final).

<sup>989</sup> SWD(2016) 106 “Implementation of the Action Plan for the European High-Performance Computing strategy”.

<sup>990</sup> <https://ec.europa.eu/digital-single-market/en/news/cloud-stakeholder-working-groups-start-their-work-cloud-switching-and-cloud-security> (accessed 10.7.19).

<sup>991</sup> <http://csc.etsi.org/> (accessed 10.7.19).

<sup>992</sup> <https://www.eudat.eu/> (accessed 10.7.19).



Insofar as data access proves necessary to ensure the tasks of the Welfare State, under the European economic constitution it is for Member States to impose specified, justified and proportioned obligations to grant access<sup>993</sup>.

This paragraph focuses only on EU-wide sector-specific regulations.

## **§ 5.1 Access provisions already in place and modernized in the context of the DSM strategy: Chemicals, Repair and Maintenance Motor Vehicles, ITS, Through-Ticketing Transportation Systems, Smart Meters**

A set of EU sector-specific access provisions was already in place before the advent of the DSM strategy.

This is the case of “Chemicals” Regulation, which tries to solve the clash between commercial interests of undertakings and human health and environment protection to the benefit of citizens by imposing a (targeted and proportionate) obligation to grant access to specified information<sup>994</sup>.

Other sector-specific access provisions have been modernized (or are currently under review) in the context of the DSM strategy.

We can here mention access to vehicle repair and maintenance information finalized to reduce pollution from motor vehicles<sup>995</sup> and access to vehicle on-

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<sup>993</sup> For instance, in France see the notion of “*données d'intérêt général*” introduced under Section 2 of Law n. 1321 of October 7<sup>th</sup>, 2016 “*pour une République numérique*”.

<sup>994</sup> See recital 117 and Artt. 118 and 119 of Regulation 1907/2006/EC “*concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC*” (consolidated version June 2009).

<sup>995</sup> See recital 8 and Art. 6 of Regulation 715/2007/EC “*on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information*” (consolidated version May 2012) and recital 11 of the Proposal for a Regulation “*amending Regulation (EC) No 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information*” (2019/0101 (COD)).

board diagnostic (OBD) information<sup>996</sup>; the clear *favor* for multimodality expressed by the reviewed Directive on the deployment of Intelligent Transport Systems (ITS)<sup>997</sup>; the Directive promoting through-ticketing transportation systems by means of interoperability and non-discrimination rules, which assigns a gateway role to railway undertakings<sup>998</sup>; the Directive promoting access and portability of the users to energy-consumption data collected on their smart meters<sup>999</sup>.

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<sup>996</sup> Art. 61 of Regulation 2018/858/EU “*on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC*”.

<sup>997</sup> See Artt. 3-6 and Annex I of Directive 2010/40/EU “*on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport*” (as amended by Commission decision 2017/2380/EU) and Commission delegated Regulation 2017/1926/EU “*supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of EU-wide multimodal travel information services*”. Said Annex I includes within the priority areas and actions of the EU “*the definition of the necessary requirements to make EU-wide multimodal travel information services accurate and available across borders to ITS users, based on: — the availability and accessibility of existing and accurate road and real-time traffic data used for multimodal travel information to ITS service providers without prejudice to safety and transport management constraints, — the facilitation of the electronic data exchange between the relevant public authorities and stakeholders and the relevant ITS service providers, across borders, — the timely updating of available road and traffic data used for multimodal travel information by the relevant public authorities and stakeholders, — the timely updating of multimodal travel information by the ITS service providers*”.

<sup>998</sup> See Art. 13a of Directive 2012/34/EU “*establishing a single European railway area*”, introduced by Directive 2016/2370/EU “*amending Directive 2012/34/EU as regards the opening of the market for domestic passenger transport services by rail and the governance of the railway infrastructure*”: “*Member States may require railway undertakings operating domestic passenger services to participate in a common information and integrated ticketing scheme for the supply of tickets, through-tickets and reservations or give the power to competent authorities to establish such a scheme*”. See also recitals 30 and 31 of the amending Directive.

<sup>999</sup> See recital 55 (“*the smart metering systems that are deployed should not represent a barrier to switching supplier, and should be equipped with fit-for-purpose functionalities that allow consumers to have near real-time access to their consumption data, to modulate their energy consumption and, to the extent that the supporting infrastructure permits, to offer their flexibility to the network and to electricity undertakings and to be rewarded for it, and to obtain savings in their electricity bills*”) and Art. 20, let. e) of Directive 2019/944/EU “*on common rules for the internal market for electricity and amending Directive 2012/27/EU (recast)*”.

## § 5.2 Newly established access provisions: the PSD2 Directive access to account (XS2A) rule

Starting from September 14<sup>th</sup>, 2019, the PSD 2 Directive<sup>1000</sup> has opened up the EU payment market to companies offering new generation payment services such as “*payment initiation services*”<sup>1001</sup> (PISs) and “*account information services*”<sup>1002</sup> (AISs), both consumer and business-oriented<sup>1003</sup>, based on access to information about the “*payment account*”<sup>1004</sup> (XS2A rule).

Access is subject to a dual condition: i) the payment account of the payer should be accessible online<sup>1005</sup>; ii) the payer should have given explicit consent<sup>1006</sup> for a payment to be executed<sup>1007</sup> or for the account information services to be provided<sup>1008</sup>.

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<sup>1000</sup> Directive 2015/2366/EU “*on EU-wide payment services, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC*”. The PSD 2 Directive is complemented by Regulation 2015/751/EU “*on interchange fees for card-based payment transactions*”, which puts a cap on interchange fees charged between banks for card-based transactions.

<sup>1001</sup> Art. 4, n. 15, PSD 2 Directive: “*a service to initiate a payment order at the request of the payment service user with respect to a payment account held at another payment service provider*”.

<sup>1002</sup> Art. 4, n. 16, PSD 2 Directive: “*an online service to provide consolidated information on one or more payment accounts held by the payment service user with either another payment service provider or with more than one payment service provider*”.

<sup>1003</sup> According to Art. 4, n. 8 PSD 2 Directive “*‘payer’ means a natural or legal person who holds a payment account*”.

<sup>1004</sup> Art. 4, n. 12, PSD 2 Directive: “*an account held in the name of one or more payment service users which is used for the execution of payment transactions*”.

<sup>1005</sup> See Art. 66 PSD 2 Directive for PISs and Art. 67 PSD 2 Directive for AISs.

<sup>1006</sup> See art. 94, § 2, PSD 2 Directive. In a letter dated 5 July 2018 the EDPS made clear that the notion of “*explicit consent*” under “*Art. 94(2) of PSD should be interpreted in the sense that when entering a contract with a payment service provider under PSD2, data subjects must be made fully aware of the purpose for which their personal data will be processed and have to explicitly agree to these clauses. Such clauses should be clearly distinguishable from the other matters dealt with in the contract and would need to be explicitly accepted by the data subject. The concept of explicit consent under Article 94(2) of PSD2 is therefore an additional requirement of a contractual nature and is therefore not the same as (explicit) consent under the GDPR. Further processing of personal data for other purposes, not necessary for the performance of the contract, could be based on consent laid out in Article 7 and Article 4 (11) GDPR are fully respected*”. The rationale of the additional requirement stands in the fact that “*the consent under the GDPR is reversible decision and that a data subject can exercise control over these processing activities*”, whereas the consent provided under the PSD 2 is not reversible for the transaction already executed or the account information service already occurred, because it follows a contractual obligation (see Art. 87 PSD 2) and is thus equivalent

Of course, the process should be without prejudice to the security of the payment system environment (especially with reference to the payer's personalised security credentials<sup>1009</sup>).

Although – differently from data protection law – the XS2A rule applies also to legal persons, in order to prevent the uncontrolled opening up of accounting information, the minimization and purpose limitation GDPR principles are anyway used as a lighthouse of the whole discipline.

In this vein, the PIS and the AIS providers should not request from the payment service user any data other than those necessary to provide the (payment initiation or account information) service required<sup>1010</sup>; moreover, they should not use, access or store any data for purposes other than for the provision of the (payment initiation or account information) service explicitly requested by the payer<sup>1011</sup>.

There is a kind of consensus, in the short-run, for the PSD 2 access requirements to be sufficiently tailored to promote the rise of innovative Fin-Tech business models without harming financial stability<sup>1012</sup>.

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to the processing necessary for the performance of the contract under Art. 6, § 1, let. a) GDPR: see [https://edpb.europa.eu/sites/edpb/files/files/file1/psd2\\_letter\\_en.pdf](https://edpb.europa.eu/sites/edpb/files/files/file1/psd2_letter_en.pdf) (accessed 6.7.18).

<sup>1007</sup> Art. 66, § 2.

<sup>1008</sup> Art. 67, § 2, let. a).

<sup>1009</sup> Artt. 66, § 2, let. b) and 67, § 2, let. b).

<sup>1010</sup> Artt. 66, § 3, let. f) and 67, § 2, let. e).

<sup>1011</sup> Artt. 66, § 3, let. g) and 67, § 2, let. f).

<sup>1012</sup> Colangelo G. – Borgogno O., *Data, Innovation and Transatlantic Competition in Finance: The Case of The Access to Account Rule*, in European Union Law Working Papers, n. 35/2018, last revised: June 5<sup>th</sup>, 2019, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3251584&download=yes](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3251584&download=yes), 6 observe that “from an antitrust perspective, the FinTech revolution holds the key to unlocking competition within the retail banking sector. Indeed, this industry has been affected worldwide by lock-in problems, low elasticity of demand, abuse of market power by incumbents and high barriers to entry. As a result, large, longer-established players have been able to not only maintain high and stable market shares, but also engage in product-tying practices to the detriment of new market entrants and consumer welfare as a whole”. They highlight that front-end payment service providers will take greater advantage benefit from the PSD 2 opening up measure, in the light of their inherent dependence on account-servicing payment service (differently from end-to-end payment service providers, which appear less exposed to foreclosure strategies by traditional incumbents). Nonetheless, it is still unclear whether banks can charge a fee in exchange for the access granted to front-end third-party providers, namely by seeking compensation of a proportioned part of the fixed amount regularly charged by the bank, as it happens, *mutatis mutandis*, with standard essential patents that are licensed under FRAND

Nonetheless, major issues have been raised if the attention is turned from Fin-Techs to Big Techs and if the time-horizon moves from short-period to long-period.

More to the point, there is a kind of concern that firms controlling huge amounts of personal data might use payment systems as a point of access to the banking sector<sup>1013</sup>. In the long run – it is argued – this might lead to a further market concentration<sup>1014</sup> and even harm the stability of the whole European economy<sup>1015</sup>.

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terms (*Ib.*, 11). Overall, “the introduction of the XS2A rule should be appreciated since the need to guarantee safe and stable access to a newly arising vertically interconnected multitude of players is beyond the scope of the existing antitrust toolbox” (*Ib.*, 27).

<sup>1013</sup> According to specialized press, this scenario is not unlikely: see Soldavini P., *Google Guida la Carica: Big tech all'Assalto delle Banche Globali*, November 17th, 2019, available at [https://www.ilsole24ore.com/art/google-guida-carica-big-tech-all-assalto-banche-globali-ACXVivy?refresh\\_ce=1](https://www.ilsole24ore.com/art/google-guida-carica-big-tech-all-assalto-banche-globali-ACXVivy?refresh_ce=1) (accessed 18.11.19).

<sup>1014</sup> The counter-productive effects of the reform on the long run are envisaged by Bassan F., *Potere dell'Algoritmo* cit., 106-107 and by Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG), *30 Recommendations on Regulation, Innovation and Finance*, Final Report to the European Commission, December 2019, available at [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/191113-report-expert-group-regulatory-obstacles-financial-innovation\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/191113-report-expert-group-regulatory-obstacles-financial-innovation_en.pdf) (accessed 10.1.2020), 80. They both see the XS2A rule as a double-edged sword: by liberalizing payment services consumers will benefit in the short run from a wider choice of services at lower prices; however, in the medium-long run consumers might be supplied by few large (digital-born) players. A possible resilient strategy of the market might be for the financial institutions to develop blockchain platforms dedicated to access (e.g. R3 Corda; Consortium CBI – ABI + Nexi, etc.) in order to avoid uncontrolled access to account data. In a similar vein, see Report for the Commission, 33, where the concept of “competition between ecosystems” is developed. The argument follows the Financial Stability Board (FSB) analysis “*FinTech and market structure in financial services* cit., 1-2 (“The competitive impact of BigTech may be greater than that of FinTech firms. BigTech firms typically have large, established customer networks and enjoy name recognition and trust. In many cases, these companies could also use proprietary customer data generated through other services such as social media to help tailor their offerings to individual customers’ preferences. Combined with strong financial positions and access to low-cost capital, BigTech firms could achieve scale very quickly in financial services. This would be particularly true where network effects are present, such as in payments and settlements, lending, and potentially in insurance. Cross-subsidisation could allow BigTech firms to operate with lower margins and gain greater market share. Hence, while BigTech firms could represent a source of increased competition for incumbent financial institutions, in some scenarios, their participation may not result in a more competitive market over the longer term”).

<sup>1015</sup> The point is raised by Argentati A., *Le Banche nel Nuovo Scenario Competitivo. Fin-Tech, il Paradigma Open Banking e la Minaccia delle Big Tech Companies*, in *Mercato Concorrenza Regole*, Vol. 20 (2018), Issue 3, 454-460, who underlines that the XS2A rule will lead to the loss of exclusivity in the relationship bank-user and envisages a possible paradox in the fact that by opening up a relatively tiny market (payment services) the reform might over-write

## § 6. A Europe Fit for the Digital Age

In her Political Guidelines for the next European Commission 2019-2024, President von der Leyen<sup>1016</sup> committed to put forward, in her first 100 days in office, legislative initiatives for a coordinated European approach on the human and ethical implications of Artificial Intelligence<sup>1017</sup> and, above all, to adopt “a new Digital Services Act [to] upgrade our liability and safety rules for digital platforms, services and products, and complete our Digital Single Market”.

Appointed to an (unprecedented) second term as the EU’s competition commissioner, from September 2019 Margrethe Vestager parallelly oversees EU digital policy, holding the job title of “executive vice-president, Europe fit for the digital age”<sup>1018</sup>. Vestager has also been assigned the “poisoned chalice” of digital taxation<sup>1019</sup>.

The first action of the von der Leyen Commission for the DSM strategy consists in a package of two Communications and one White Book released on February 19<sup>th</sup>, 2020.

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power relationships in the whole banking sector, by allowing leveraging of Big Tech such as Google, Facebook, Microsoft, Amazon, Apple and Alibaba. In sum, competition enforcers might soon experience a clash between a possible foreclosure abuse of (individual or collective) dominance by banks and a coexistent possible leveraging abuse of (individual or collective) dominant position by Big Techs. On these grounds, Colangelo G. – Borgogno O., *Data, Innovation and Transatlantic Competition in Finance* cit., 25-26 see “partnering with FinTechs [as a strategy that] may allow incumbent banks to better face the increasingly competitive landscape by developing new capabilities in a limited time frame”. Commenting Fin-Tech as a general phenomenon, they further observe that “alongside opportunities, [in a way it] may [also] raise concerns for consumers, trigger financial vulnerabilities and cause a slump in investor confidence, thus generating substantial threats to industry welfare and the payment system stability as whole” (4).

<sup>1016</sup> President von der Leyen U., *A Union that strives for more. My agenda for Europe. Political Guidelines for the next European Commission 2019-2024*, presented before the European Parliament on July 16<sup>th</sup>, 2019, available at [https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission_en.pdf) (accessed 23.9.19).

<sup>1017</sup> See above § 4.1

<sup>1018</sup> Rankin J., *Margrethe Vestager gets second term in EU competition job*, September 10<sup>th</sup>, 2019, available at <https://www.theguardian.com/world/2019/sep/10/margrethe-vestager-gets-second-term-in-eu-competition-job> (accessed 10.9.19).

<sup>1019</sup> Rios B. - Stolton S., *Vestager wins Parliament support after smooth-sailing hearing*, in *Euractiv.com*, October 9<sup>th</sup>, 2019 (updated: 17.10.2019), available at <https://www.euractiv.com/section/digital/news/vestager-wins-parliament-support-after-smooth-sailing-hearing/> (accessed 17.10.19).

## § 6.1 Shaping Europe’s digital future: the approach of the Commission to digital platform’s “intermediation power”

The first initiative of the von der Leyen Commission in the DSM strategy find itself in the middle of a thrilling discussion.

Namely, the structural and perhaps endemic failures showed by digital markets and their almost natural inclination toward concentration<sup>1020</sup>, together with the hurdles faced by antitrust enforcers to detect and prohibit conducts occurred on digital markets using the traditional toolkit<sup>1021</sup>, are fuelling a sharp debate on the enduring primacy of competition law over economic regulation<sup>1022</sup>.

A brand-new type of dominance is indeed emerging: many digital platforms are almost unanimously defined, depending on the cases, as gatekeepers holding significant “intermediation power”, as “unavailable trading partners” or as firms with a “strategic market status”<sup>1023</sup>.

As we will see<sup>1024</sup>, the described phenomenon suggested striking a new balance between competition law and economic regulation.

According to the report prepared for the Commission and to the G7 Common Understanding, a vigorous competition policy regime should still represent the optimal policy choice. However, the report prepared for the Commission acknowledges that, in order this conclusion to be workable, competition rules shall be reshaped and made more fitting to digital markets’ features<sup>1025</sup>.

Conversely, almost all the other reports have embraced a various range of regulatory or quasi-regulatory approaches<sup>1026</sup>.

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<sup>1020</sup> Part I, § 6.

<sup>1021</sup> Part IV.

<sup>1022</sup> See Part II, § 8.

<sup>1023</sup> See more in detail Part V, Section II, § 1.

<sup>1024</sup> Part V, Section II, § 2.1.2.

<sup>1025</sup> See Report for the Commission, 14, but this view is shared also by the U.S. Council of Economic Advisers, *Economic Report of the President*, February 2020, available at <https://www.whitehouse.gov/wp-content/uploads/2020/02/2020-Economic-Report-of-the-President-WHCEA.pdf> (accessed 10.2.20), 222.

<sup>1026</sup> Benelux Joint Memorandum; UK CMA Interim Adv Report, 231, § 6.12 and 268, § 6.165; UK Digital Competition Expert Panel, 57, § 2.17; German 4.0 Report, 24-25 and 49 et seq.;

At a certain point of the dispute, the Commission had to provide some guidance.

Here came the Communication “Shaping Europe’s digital future”<sup>1027</sup>.

On the one hand, and in a way consistently with the report prepared for it, the Commission remarked that the rules on competition<sup>1028</sup> are currently under revision to be more fitting to the digital economy<sup>1029</sup>. In this vein, one might expect no regulatory intervention to be required if the market analysis shows that such reshaping is enough to solve the reported market defects.

On the other hand, the Commission is concerned that competition policy alone may not address all the systemic problems that can arise in the platform economy, so that additional ex ante rules under Art. 114 TFEU may be needed to ensure contestability, fairness and innovation and the possibility of market entry, as well as the safeguard of public interests that go beyond purely economic considerations<sup>1030</sup>. This evaluation will be part of the planned Digital Services Act initiative<sup>1031</sup>.

The announced Digital Services Act package is also supposed to increase and harmonise the responsibilities of online platforms and information service providers and to reinforce the oversight over platforms’ content policies in the EU<sup>1032</sup>. Indeed, under the current e-Commerce Directive framework digital platforms face substantially no responsibility other than following the notice-and-takedown procedure for the illegal content uploaded or shared by its users on-platform (indirect or secondary liability)<sup>1033</sup>.

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Stigler Report, 78-79 and 83-92; Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG), *30 Recommendations on Regulation* cit., 80.

<sup>1027</sup> Communication from the Commission “*Shaping Europe’s digital future*”, COM(2020) 67 final.

<sup>1028</sup> Reviews are already underway of the rules governing horizontal and vertical agreements and of the market definition notice, as well as various state aid guidelines.

<sup>1029</sup> Communication from the Commission “*Shaping Europe’s digital future*” cit., 8 and 10.

<sup>1030</sup> Communication from the Commission “*Shaping Europe’s digital future*” cit., 9.

<sup>1031</sup> Communication from the Commission “*Shaping Europe’s digital future*” cit., 10.

<sup>1032</sup> Communication from the Commission “*Shaping Europe’s digital future*” cit., 11-12

<sup>1033</sup> Directive 2000/31/EC “*on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market*”, provides, under Art.15, that when certain conditions are fulfilled Internet Service Providers (ISPs) who act as mere conduit (Art.



Finally, the Commission proposes to foster trust in the online world by making people able to control their online identity, when authentication is needed to access certain online services. To this end, a universally accepted public electronic identity (eID) is necessary for consumers to have access to their data and securely use the products and services they want without having to use unrelated platforms to do so and unnecessarily sharing personal data with them<sup>1034</sup>.

## § 6.2 European Data Strategy

The second Communication of the Commission is fully focused on data<sup>1035</sup>, the fuel of the DDE.

So far, the Commission has approached the issue of data access in a sectoral way: a mandate to data access has been considered appropriate only in those sectors where particularly pronounced lock-in effects exist (as for instance in the context of the PSD2 and Smart-Metering Directives)<sup>1036</sup> or where the protection of a highly ranked public interest such as environment or healthcare was at stake<sup>1037</sup>.

Overall, this path has been confirmed also by the Commission's Communication on Data, but in this case the project is more ambitious.

The urgency to establish a data-agile framework derives from the political will to become a world-wide regulatory model in a downturn era.

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12), caching (Art. 13) or hosting (Art. 14) services providers are not responsible for the information they transmit or host. According to Bassan F., *Potere dell'algoritmo e resistenza dei mercati in Italia* cit., 131-150, the growing market power of digital platforms derives from a fundamental flaw: the liability exemption under Art. 15 of the Electronic Commerce directive, which would amount, in practice, to an *ante litteram* and *sine die* sandbox. Indeed, since for ISPs it was enough to follow the "notice and take down" procedure, the same had to go for OTTs, which operated over such services.

<sup>1034</sup> Communication from the Commission "*Shaping Europe's digital future*" cit., 11.

<sup>1035</sup> Communication from the Commission "*A European strategy for data*" (COM(2020) 66 final).

<sup>1036</sup> Above, §§ 5.1 (Smart Metering) and 5.2 (PSD2).

<sup>1037</sup> See for instance mandatory access to vehicle repair and maintenance information finalized to reduce pollution from motor vehicles (above § 5.1). In the same vein, see also Drexl J., *Designing Competitive Markets for Industrial Data* cit.; IT Joint Sector Enquiry, 109-111.

The Commission observes that the way in which data is stored and processed will change dramatically over the coming 5 years: while today 80% of the processing and analysis of data takes place in data centers and centralized computing facilities, and the remaining 20% in smart connected objects, such as cars, home appliances or manufacturing robots, and in computing facilities close to the user ('edge computing'), by 2025 these proportions are likely to be inverted<sup>1038</sup>. Therefore, even though currently a small number of Big Tech firms hold a large part of the world's data, the opportunities to be unlocked by IoT indicate that the winners of today will not necessarily be the winners of tomorrow<sup>1039</sup>.

To address cross-sectorial issues and to promote and support the emergence of Common European Data Spaces, prioritizing interoperability requirements and standards within and across sectors<sup>1040</sup>, the Commission will propose a light-touch enabling legislative framework, deliberately abstaining from overly detailed, heavy-handed ex ante regulation and promoting, instead, a data-agile approach to governance that favours experimentation (such as regulatory sandboxes), iteration, and differentiation<sup>1041</sup>. In parallel, a Data Act<sup>1042</sup> will further incentivize data sharing, in the wake of the GDPR data portability right and of the Regulation on the free flow of non-personal data<sup>1043</sup>. In this framework, governance structures should take into account the need for sectoral authorities to specify sectoral requirements<sup>1044</sup>. Only where a market failure in a given sector is identified/can be foreseen, which competition law

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<sup>1038</sup> Namely, A large part of the data of the future will come from industrial and professional applications, areas of public interest or internet-of-things applications in everyday life, areas where the EU is strong.

<sup>1039</sup> Communication from the Commission "A European strategy for data cit., 2-3.

<sup>1040</sup> Communication from the Commission "A European strategy for data cit., 8: "The application of standard and shared compatible formats and protocols for gathering and processing data from different sources in a coherent and interoperable manner across sectors and vertical markets should be encouraged through the rolling plan for ICT standardisation and (as regards public services) a strengthened European Interoperability Framework".

<sup>1041</sup> Communication from the Commission "A European strategy for data cit., 12.

<sup>1042</sup> Communication from the Commission "A European strategy for data cit., 13.

<sup>1043</sup> Communication from the Commission "A European strategy for data cit., 17.

<sup>1044</sup> Communication from the Commission "A European strategy for data cit., 12.

cannot solve, a sector-specific data access right should be made compulsory, where appropriate under fair, transparent, reasonable, proportionate and/or non-discriminatory conditions<sup>1045</sup>. In this framework, governance structures should take into account the need for sectoral authorities to specify sectoral requirements<sup>1046</sup>. In complement to the horizontal framework, the Commission will promote the development of common European data spaces in strategic economic sectors and domains of public interest (industrial-manufacturing, environment, mobility, healthcare, finance, energy, agriculture, public administration, skills)<sup>1047</sup>, avoiding one-size-fits-all approaches and looking for specific technical solutions across the data value chain<sup>1048</sup>.

The main novelty comes from the unveiled readiness of the Commission to explore asymmetric and additional data access regulation solely addressed to gatekeeping platforms holding remarkable intermediation power or unavoidable trading partner positions<sup>1049</sup>. Indeed, as part of the forthcoming Data Act initiative and in the context of the Commission's work on the Digital Services Act package, the Observatory of the Online Platforms Economy established with the P2B Regulation will assess whether, under the broader fact-finding around the high degree of market power of certain platforms, systemic issues related to platforms and data should call for ex ante regulation to ensure that markets stay open and fair via advanced forms of data access such as data interoperability or protocol interoperability<sup>1050</sup>.

Finally, the Communication promotes the development of innovative tools that may make more easy for the data subject to exercise the rights granted by the GDPR, such as for instance consent management tools, personal information management apps, including fully decentralised solutions building on

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<sup>1045</sup> Communication from the Commission "A European strategy for data cit., 13.

<sup>1046</sup> Communication from the Commission "A European strategy for data cit., 12.

<sup>1047</sup> Communication from the Commission "A European strategy for data cit., Appendix.

<sup>1048</sup> Communication from the Commission "A European strategy for data cit., 21-24.

<sup>1049</sup> Above, § 6.1.

<sup>1050</sup> Communication from the Commission "A European strategy for data cit., 14.

blockchain, as well as personal data cooperatives or trusts acting as novel neutral intermediaries in the personal data economy (eID)<sup>1051</sup>.

### § 6.3 Excellence and trust in artificial intelligence: the White Book on AI

The package of Communications dated February 2020 is complemented by the White Book on AI<sup>1052</sup>.

In the wake of the AI Plan for Europe<sup>1053</sup> and of the political guidelines of President von der Leyen, who announced a coordinated European approach on the human and ethical implications of AI as well as a reflection on the better use of BDA for innovation, the Communication stresses once again how vital it is that “*European AI is grounded on our values and fundamental rights such as human dignity and privacy protection*”<sup>1054</sup>.

The need for Europe to become a worldwide leader on AI is strictly related with the foreseen “boom” of IoT<sup>1055</sup>, so that the continent – which lost the battle for digital platforms and cloud computing – may reposition itself in the global economy.

In order for this to be possible, a set of targeted interventions accompanying national industrial policies are proposed: the creation of excellence and testing centres<sup>1056</sup>, investing on research and skills on AI<sup>1057</sup>, the establishment of at

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<sup>1051</sup> Communication from the Commission “*A European strategy for data*” cit., 10.

<sup>1052</sup> Communication from the Commission “*White Paper On Artificial Intelligence - A European approach to excellence and trust*” (COM(2020) 65 final).

<sup>1053</sup> See above § 4.1.

<sup>1054</sup> Communication from the Commission “*White Paper On Artificial Intelligence*” cit., 2.

<sup>1055</sup> Communication from the Commission “*White Paper On Artificial Intelligence*” cit., 4.

<sup>1056</sup> Communication from the Commission “*White Paper On Artificial Intelligence*” cit., 6, Action 2.

<sup>1057</sup> Communication from the Commission “*White Paper On Artificial Intelligence*” cit., 7, Action 3.

least one digital innovation hub per Member State<sup>1058</sup>, the set up of a PPI on AI<sup>1059</sup>.

As for the legal framework, many Member States have already taken action on AI<sup>1060</sup>. Therefore, if the EU fails to provide an EU-wide approach, there is a real risk of fragmentation in the internal market, which would undermine the objectives of trust, legal certainty and market uptake<sup>1061</sup>.

The forthcoming EU-wide legal framework should be risk-based<sup>1062</sup>. Prior conformity assessment systems should be mandatory for “high-risk AI applications”. The prior conformity assessment could include procedures for testing, inspection or certification. Any prior conformity assessment should be without prejudice to monitoring compliance and ex post enforcement by competent national authorities<sup>1063</sup>.

The introduction of voluntary labelling for “no-high risk ai applications” should also be considered. In particular, while participation in the labelling scheme would be voluntary, once the developer or the deployer opted to use the label, the requirements would be binding<sup>1064</sup>.

Sending a clear message to firms engaging in AI-decision making practices (and, why not, among them to those firms adopting track-and-adjust pricing algorithms), the Commission remarks the importance of human oversight, concluding that the objective of trustworthy, ethical and human-centric AI can

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<sup>1058</sup> Communication from the Commission “*White Paper On Artificial Intelligence* cit., 7, Action 4.

<sup>1059</sup> Communication from the Commission “*White Paper On Artificial Intelligence* cit., 7, Action 5.

<sup>1060</sup> The German Data Ethics Commission has called for a five-level risk-based system of regulation that would go from no regulation for the most innocuous AI systems to a complete ban for the most dangerous ones. Denmark has just launched the prototype of a Data Ethics Seal. Malta has introduced a voluntary certification system for AI.

<sup>1061</sup> Communication from the Commission “*White Paper On Artificial Intelligence* cit., 10.

<sup>1062</sup> Communication from the Commission “*White Paper On Artificial Intelligence* cit., 17.

<sup>1063</sup> Communication from the Commission “*White Paper On Artificial Intelligence* cit., 23.

<sup>1064</sup> Communication from the Commission “*White Paper On Artificial Intelligence* cit., 24.

only be achieved by ensuring an appropriate involvement by human beings in relation to high-risk AI applications<sup>1065</sup>.

## **Part IV - Moving the analysis from law-making to enforcement: the DSM strategy in action**

### **Introduction on the method**

This part of the research will focus on the enforcement of the DSM strategy.

To start with, the main interventions will be described (§ 2), sub-dividing the analysis per macro areas:

- i) Personal Data intensive markets (“zero price” or “attention” markets<sup>1066</sup>): markets where digital platform’s business models are centred on keeping the user on-platform as long as possible and on generating addiction (and, therefore, where the intersection between competition law and data protection becomes more evident), such as for instance social networks and consumer communications apps (below Section I);
- ii) Markets prone to gatekeeping: markets where digital platforms provide an efficient intermediation service between two or more sides of the market and match demand and offer by exploiting extreme economies of scale and scope as well as strong indirect network effects, also acting as “rule-setters” or “regulators” within the ecosystem and often showing a dual role (platform + seller), thus gaining “intermediation power” or becoming “unavoidable trading

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<sup>1065</sup> Communication from the Commission “*White Paper On Artificial Intelligence* cit., 21.

<sup>1066</sup> Wu T., *Blind Spot: The Attention Economy and the Law*, in *Antitrust Law Journal*, Vol. 82 (2019), Issue 3, 771 et seq., defined digital platforms supported by targeted advertising as “attention brokers”.

partner” or firm with “strategic market status”, such as for instance search engines, marketplaces and OTAs (below Section II);

iii) Non-Personal Data intensive markets: every industry whose supply chain is, in full or to a significant extent, digitized, but where the value chain is not (or at least, not predominantly) fuelled by personal data, such as for instance manufacture or agriculture (below Section III).

Each case analysis will be concluded with a comment box. The box tries to foresee the impact of the legislative acts implemented as part of the DSM strategy<sup>1067</sup> on hypothetical future scenarios equivalent to the ones already addressed by enforcers.

It should be also noted that the distinction here introduced (among Personal Data intensive markets, Markets prone to Gatekeeping and Non-Personal Data intensive Markets) represents only a proxy and has no solid theoretical background.

This approach is only adopted to better highlight the different features of the DDE.

It is acknowledged that reality is much more complex than this, as business models combining more of these aspects do often exist.

However, once the rationales of the main problems at stake have been identified, it will be possible to combine the findings of this research as well.

## **Section I - The DSM strategy in action: an overview on the enforcement in Personal Data intensive markets**

### **Setting the scene**

This paragraph is centred on the enforcement of the DSM strategy in Personal Data intensive markets.

To the extent of this paragraph, we will consider as Personal Data intensive markets all those markets commonly known as “zero price” or “attention”

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<sup>1067</sup> Part III.

markets, that is markets where digital platform's business models are centred on keeping the user on-platform as long as possible and on generating addiction.

By definition, in these markets the exploitation of personal data is stronger, because consumers voluntarily accept to barter personal data and attention versus the service or content provided.

Typical examples are social networks and consumer communications apps.

## **§ 1 The Commission's approach: static more economic approach meets the DDE**

Before starting the analysis of the main European interventions in the field of Personal Data intensive markets, it is worth highlighting the theoretical background which seems to have inspired and guided the whole enforcement in such markets.

So far, the Commission's approach appeared quite classical: in applying a (static) more economic approach, it relied on three basic assumption.

### **➤ First assumption: tight market definition based on product and service functionalities on the consumers' side**

The first assumption that the Commission seems to rely on is that, also in the context of the DDE, there is no reason to abandon tight market definition.

Since multi-sidedness and the lack of a monetary price make difficult the use of the SSNIP test, and since the SSNDQ test<sup>1068</sup> has proven to be quite complex when it comes to the practice, to date the Commission has defined markets assessing service functionalities of the platform<sup>1069</sup>.

More to the point, given that in Personal Data intensive markets a variety of advertising supported services are made available to consumers, product

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<sup>1068</sup> See Part V, Section I, § 2.3.2.1.

<sup>1069</sup> According to Report for the European Commission, 45 – “while product and service functionalities have always been the starting point for determining substitutability relationships, they lack the same degree of theoretical rigour that the SSNIP test has introduced; however, they may well be all we have in the case of multi-sided platforms”.



market is generally defined focusing on usability features of the concerned “product” on the consumers’ side.

Conglomerate effects are evaluated in the same vein: two “products” are seen as complementary only when, based on the functionalities of the product or service at stake, there are “*possibilities for exclusionary bundling or tying practices that could disadvantage or foreclose competitors*”<sup>1070</sup>.

➤ **Second assumption: personal data as a commodity**

The second assumption that the Commission seems to rely on is that the competitive assessment should be centered on personal data, since they act as both consideration and input to provide a better user-experience (on the consumers’ side) and a more targeted advertising (on the advertisers’ side).

To date, the position of the Commission has been straight: in so far as personal data are used as consideration by consumers and in so far as they can be collected along many channels in the on-line environment, they equal, in fact, to a “commodity”.

More to the point, the DG Competition’s view is that in circumstances where “*information [...] is [...] also available to a large extent to [actual or potential competitors]*” and where “*these players are already using this information to provide targeted advertising or are in the process of developing these activities*”, since “*customers generally tend to give their personal data to many market players*” (that is: they multi-home), “*this type of data is generally understood to be a commodity*”<sup>1071</sup>.

If one adopted a static perspective, this reasoning would not be without grounds.

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<sup>1070</sup> Commission decision of 7 October 2011 in case COMP/M.6281 - *Microsoft/Skype*, § 141; European Commission “*Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings*” (2008/C 265/07), § 15.

<sup>1071</sup> Commission decision of 4 September 2012 in case COMP/M.6314 - *Telefonica UK/Vodafone UK/Everything Everywhere*, § 543.

From a practical standpoint, it is not questionable that individuals accept to receive (apparently) free content or services versus their personal data or attention.

Excepted what provided with respect to special categories of personal data<sup>1072</sup>, the GDPR has increased the “control” of the data subject over her or his personal data. This empowerment has further encouraged the emergence of the so-called Economics of Privacy: from 1970’s-80’s on scholars understood that the choice between protection or disclosure exhibits trade-offs with tangible economic dimensions and decided to engage with such analysis<sup>1073</sup>.

Thus, it appears possible to treat personal data (also) as a tangible and valuable good.

At the same time, the application of classic economic theories to personal data lead to the conclusion that they can’t be considered as a scarce resource.

As already discussed<sup>1074</sup>, focusing on the “personal datum” as a unit, one will find out that each unit can be used by many players at the same time and for different purposes.

In the economic literature this kind of “goods” are often referred as “non-rivalrous” (consumption of the unit by “A” will not prevent consumption of the same unit by “B”) and as “shared means to many ends”, like “infrastructures”<sup>1075</sup> (with the sole exception that, in the context of Machine Learning - ML, data are not always fungible, because they can be relevant in certain industry sectors, but not in others<sup>1076</sup>).

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<sup>1072</sup> Here, a paternalistic approach can still be recognized: see Art. 9 GDPR.

<sup>1073</sup> See for further explanation Part V, Section I, § 2.2.

<sup>1074</sup> See Part I, § 7.

<sup>1075</sup> More to the point, according to OECD, *Data-driven Innovation for Growth and Well-being* cit., 24, data fulfil the three cumulative conditions established by Frischmann B.M., *Infrastructure: The Social Value of Shared Resources* cit. to identify an “infrastructure”: 1) the resource can be consumed non-rivalrously for some appreciable range of demand (*i.e.* non-rivalrously criteria); 2) social demand for the resource is driven primarily by downstream productive activities that require the resource as an input (*i.e.* capital good criteria); 3) the resource can be used as an input into a wide range of goods and services, which may include private goods, public goods, and social goods (*i.e.* general purpose criteria).

<sup>1076</sup> Commission decision of 6 December 2016 in case COMP/M.8124 - *Microsoft/LinkedIn*, § 263.

➤ **Third assumption: privacy-related issues are part of the competitive assessment in so far as undertakings compete on privacy in the relevant market**

In the context of zero-price markets, quality, along with innovation, is a significant parameter of competition<sup>1077</sup>.

Privacy-related concerns do not affect, as such, competition law<sup>1078</sup>.

They can enter the competitive assessment only to the extent that, in the context of (product) market definition, there is enough evidence that consumers value privacy, so that a loss of data protection level will amount to quality degradation.

When this is not the case (that is: companies do not compete on privacy), the assessment “*refers exclusively to the appraisal of [the compliance of the notified] operation [or of the conduct at stake] with Community rules on competition*”, but the EUMCR<sup>1079</sup> [and Artt. 101-102 TFEU] are “*without prejudice to the obligations imposed onto the parties by Community legislation in relation to the protection of individuals and the protection of privacy with regard to the processing of personal data*”<sup>1080</sup>.

In this vein, in the *Apple/Shazam* case not only has the Commission denied a possible negative impact of the transaction in terms of privacy, but it has even stated that both the GDPR and the e-Privacy rules<sup>1081</sup> (together with Android’s<sup>1082</sup> and Spotify’s<sup>1083</sup> terms of use, which Shazam had to comply

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<sup>1077</sup> Commission decision of 7 October 2011 in case COMP/M.6281 - *Microsoft/Skype*, § 81.

<sup>1078</sup> ECJ, Third Chamber, 23 November 2006, C-238/05, *Asnef-Equifax, Servicios de Información sobre Solvencia y Crédito, SL and Administración del Estado v. Asociación de Usuarios de Servicios Bancarios (Ausbanc)*, § 63: “any possible issues relating to the sensitivity of personal data are not, as such, a matter for competition law, they may be resolved on the basis of the relevant provisions governing data protection”.

<sup>1079</sup> Recital 36.

<sup>1080</sup> Commission decision of 11 March 2008 in case No COMP/M.4731 – *Google/DoubleClick*, § 368; similarly, see Commission decision of 23 February 2016 in case M.7813 – *Sanofi/Google/DMI JV*, § 70.

<sup>1081</sup> Commission decision of 6 September 2019 in case No COMP/M.8788 – *Apple/Shazam*, §§ 231-234 and 314. In that case, the fact that Apple had stated its plans to change Shazam’s data collection practices to bring them in line with Apple’s industry leading-positions on privacy played a role too in the assessment of privacy-related concerns (§ 245).

<sup>1082</sup> § 236.

with) would have constrained Apple in the post-merger processing of personal data collected by Shazam.

➤ **Overall effect of the three assumptions**

The three assumptions appear consistent with the increased relevance of static models under modern competition.

Especially following the advent of the more economic approach, if something can't be measured, it should not gain relevance in the competitive assessment.

Hence the importance of identifying the “benchmark unit”, in this case the personal datum, within a well-defined area, the relevant market.

Quality can be part of the assessment, but only to the extent that consumers value this parameter.

As the next paragraphs will try to demonstrate, this approach has a limit: by failing to consider market dynamics, it tends to underestimate the effective impact of the conducts at stake on the competitive process.

Indeed, the above described assumptions lead to underrate market power and to perceive lower barriers to entry (the argument being that, due to multi-homing and to the non-rivalrous nature of data, the possession of a huge dataset of personal data would not confer an undue competitive advantage).

Furthermore, by assigning to competition law a narrow, well-defined static role, the assumptions encourage non-coordinated enforcement, impeding competition law to synergistically act in combination with (horizontal and sector-specific) regulations accompanying the DSM strategy, in a holistic, progressive and consistent perspective.

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<sup>1083</sup> § 237.

## § 2 Merger review: the paradigmatic sample of the Facebook/WhatsApp case

Albeit referring also to other cases, this paragraph will use the *Facebook/WhatsApp* transaction as the master sample of EU merger review policy in the context of Personal Data intensive markets.

On 3 October 2014, the Commission unconditionally approved in first phase the acquisition of WhatsApp by Facebook<sup>1084</sup>.

The transaction had not EU dimension<sup>1085</sup> and has been scrutinized by the Commission due to the case referral mechanism, following a pre-notification referral request by Facebook to benefit from the one-stop-shop review<sup>1086</sup> (otherwise the company would have to notify the merger in Portugal, Spain and the UK, given that in such jurisdictions national laws on merger control provide thresholds based on market share).

Indeed, although WhatsApp exhibited great potential for growth, at the time it did not generate a remarkable turnover (in the nine months preceding September 2014, it generated revenue of 1.289.000 \$).

Namely, it adopted a subscription model (depending on the countries, around 1 \$ per year or *una tantum*) and was advertising-free and privacy friendly.

Hence, WhatsApp was born as a consumer communications app with no secondary use of the personal data processed, a single-sided market prone to direct network effect (*i.e.* the increase in the number of users of the service directly benefits the same users) but where indirect network effects were absent.

Regardless of the (modest) turnover generated by WhatsApp, Facebook bid 19 billion \$ for acquiring the company<sup>1087</sup>.

The Commission examined the transaction in line with the three assumptions above described.

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<sup>1084</sup> Commission decision of 3 October 2014 in Case COMP/M.7217 - *Facebook/WhatsApp*.

<sup>1085</sup> Thresholds set forth in Article 1, §§ 2 and 3 EUMCR were not met.

<sup>1086</sup> Art. 4, § 5 EUMCR.

<sup>1087</sup> See Part I, § 7 for an introduction to the issue of “killer acquisitions”.

To start with, it dealt with market definition.

Consistently with the first assumption, market definition was carefully tailored on the usage features of the involved services on the consumer side.

While it was clear from the outset that consumer communications apps and general purpose mobile telecoms services show a low level of substitutability<sup>1088</sup>, the trickier question here was whether consumer communications apps and social networking services could be considered part of the same product market or not (and, so, whether the transaction under examination was horizontal or not)<sup>1089</sup>.

Some overlaps between apps and social networking services were recognized to be present, for instance in the functionalities offered, as both enable users to exchange text and audio messages, photos and videos. However, significant differences between those services in terms of richness of the social experience<sup>1090</sup>, speed of communications<sup>1091</sup> and size of the audience<sup>1092</sup> were found, so that the conclusion for the absence of horizontal effects appeared more likely<sup>1093</sup>.

Supply-side substitutability has been considered in the competitive assessment, but not in the context of market definition. Additionally, in the competitive

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<sup>1088</sup> Apps offer a much richer overall experience than mobile telecoms services; in addition, apps are usually offered free of charge and, if not, they don't charge per message, regardless of the type of message (text or multimedia) and the location of the recipient. By contrast, telecom operators still usually apply different tariffs for SMS and MMS, and for messages to other countries or messages from abroad (while roaming). These elements suggested that the relationship between consumer communications apps and traditional telecoms services was one of complementarity or one-way substitutability (i.e. apps being substitutes to telecoms services but not vice versa). In case COMP/M.6281 - *Microsoft/Skype* cit. the Commission dealt with the question of substitutivity between enterprise communications services (Microsoft's Lync) and Consumer communications services (Skype), excluding a significant overlap between such services.

<sup>1089</sup> Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit., §§ 20-34 and 36-44.

<sup>1090</sup> Only on social networks users can create extensive online profiles.

<sup>1091</sup> Apps tend to be used for instant real-time conversations to a greater extent than postings on social networks, whereas in social networks one might expect interaction on a post within a week or more.

<sup>1092</sup> Audience is typically broader on social networking services, because posts can normally be seen by all friends (interaction one-to-all; in contrast, in consumer communication apps interaction is one-to-one or one-to-closed group).

<sup>1093</sup> Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit., § 165.

assessment the Commission has scrutinized the ability of WhatsApp to enter the market for online advertising, but not the ability of WhatsApp to provide social network services<sup>1094</sup>.

Ultimately, because these services are constantly evolving the Commission chose to leave open the question of a possible distinction between consumer communications apps and social networks. Therefore, the effects of the transaction were assessed both assuming a wide and a narrow product market. As to the geographic market, the one for consumer communications apps was found to be EEA-wide or global, whereas the one for social network services market was found to be national.

The competitive assessment moved from the consideration that the market for consumer communications apps is prone to direct network effect.

As a general rule, direct network effects can entrench the position of a strong market player and can prevent competitors from gaining customers, especially when a lack of interoperability with the products of competitors (*i.e.* resulting in a walled-off network of the winner) and high switching costs (*i.e.* monetary, contractual, know-how, etc.) exist.

Nonetheless, a number of mitigating factors were recognized to be present in the specific case: a) traditional barriers to entry, in terms of entry time and costs, are relatively low for communications apps<sup>1095</sup>; b) users tend to multi-home and switching between communications apps are facilitated by particular features of these apps<sup>1096</sup>; c) vertical integration was at the time absent, as neither Facebook nor WhatsApp controlled any mobile operating system, mobile phones, smart devices or other essential parts of the network.

In the light of the above, direct network effects did not constitute an insurmountable barrier to entry.

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<sup>1094</sup> Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit., §§ 168 et seq.

<sup>1095</sup> COMP/M.6281 - *Microsoft/Skype* cit., §§ 89-90, where the example of Viber has been brought.

<sup>1096</sup> See also COMP/M.6281 - *Microsoft/Skype* cit., §§ 91-92, explaining that consumers tend to have daily conversation with 2-6 people (so-called “inner circle”), so that coordinating switching, in addition to multi-homing, is not so difficult.

Coming to the assessment of market power, the Commission noted that the consumer communications sector was a recent and fast-growing sector characterised by frequent market entry and short and disruptive innovation cycles<sup>1097</sup>. In the light of the above, large market shares may turn out to be ephemeral and did not identify, as such, strong and stable market power<sup>1098</sup>.

Only after this static analysis of the relevant markets, defined according to usability features of the involved services, the Commission dealt with the question whether, by acquiring WhatsApp, Facebook could collect data from the latter in order to improve targeted advertising on the social network platform.

In this case, the findings of the Commission are perfectly consistent with the (second) assumption too.

Indeed, the DG Competition argued that, even if the merged entity were to do so, the amount of data available to competitors would have remained still considerable<sup>1099</sup>. Hence, personal data (intended as productive units or inputs) and the alleged ease of retrieving them on the internet constituted the focus of the assessment.

In the last instance, privacy-related concerns have been considered.

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<sup>1097</sup> General Court, Fourth Chamber, 11 December 2013, T-79/12, *Cisco Systems and Messagenet v. Commission*, § 69; COMP/M.6281 - *Microsoft/Skype* cit., § 122.

<sup>1098</sup> Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit., § 25.

<sup>1099</sup> Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit., §§ 180-189, but in a similar vein see Commission decision of 4 September 2012 in Case COMP/M.6314 – *Telefónica UK/Vodafone UK/Everything Everywhere/JV*; Commission decision of 9 January 2014 in case COMP/M.7023 – *Publicis/Ommicom*; COMP/M.8124 – *Microsoft/LinkedIn* cit. In case No COMP/M.4731 – *Google/DoubleClick* cit., § 365, while assessing whether the combination of informational assets of the merged entities could lead to a foreclosure effect, the Commission found out that “*the combination of data about searches with data about users’ web surfing behaviour is already available to a number of Google’s competitors today. For instance, both Microsoft and Yahoo! run search engines and offer ad serving. Competitors may also purchase data or targeting services from third parties such as comScore, a global internet information provider which maintains extensive proprietary databases that provide a measurement of the various ways in which the internet is used. Data is also available from internet service providers, which can track all of the online behaviour of their users, following them to every website they visit. Several companies offer appliances for «deep packet inspection» of network traffic routed through internet service providers in order to extract information that is meaningful for ad targeting*”.



The impact of the (third) assumption on this part of the assessment is particularly evident.

According to the Commission, “*any privacyrelated concerns flowing from the increased concentration of data within the control of Facebook as a result of the Transaction do not fall within the scope of the EU competition law rules but within the scope of the EU data protection rules*”<sup>1100</sup>.

Namely, privacy is not relevant as such, but can be regarded as one of the possible parameters of competition between consumer communications apps, the others being price, reliability of the service, functionalities offered, size of the underlying network, trendiness, etc.

In the specific case, the market analysis showed that, while an increasing number of users declared to value privacy and security, the majority of the consumer communications apps providers (e.g. Facebook, Skype, WeChat, Line, etc.) at the time did not compete (at least, not fiercely) on privacy<sup>1101</sup>. Therefore, even in the case of quality degradation put in place by the merged entity by means of lowering levels of data protection, no significant departure from the *status quo ante* could be envisaged.

In sum, in so far as firms do not actually compete on privacy on the concerned relevant market, data protection issues fall outside the scope of competition law.

Basically, this depends on the characters of demand in the involved market (see, for instance, the opposite case of professional social network services, where privacy has been recognized to be a relevant parameter of competition<sup>1102</sup>).

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<sup>1100</sup> Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit., § 164.

<sup>1101</sup> Namely, although the user base appeared increasingly concerned about the level of data protection (§ 87), such a parameter of competition still wasn't determinant, as privacy aspects of the service could be easily outweighed by the “coolness” of a larger network (§§ 88-89) and by the attractiveness of zero-pricing policies (§ 90). In any case, would Facebook have decided to merge the datasets (which appeared, at the time, unlikely: § 185), users valuing privacy would have switched to competing services (§ 186): see Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit.

<sup>1102</sup> For instance, in case COMP/M.8124 – *Microsoft/LinkedIn* cit. the market analysis showed that professional social network (PSN) users value privacy.

Moreover, also the fact that in the context of the investigation Facebook declared that it was not in its plans to combine the datasets, and that such a combination would have been technically complex and demanding, played a role in the competitive assessment.

Above all, it must be here recalled the well-established Commission's approach to privacy-related issues which, in its opinion, do not affect the competitive assessment. As remarked in the Microsoft/LinkedIn case, "*any such data combination could only be implemented by the merged entity to the extent it is allowed by applicable data protection rules*"<sup>1103</sup>. Indeed, according to the *Google/Double Click* case, merger control is without prejudice to the application of EU data protection rules post-merger.

In the light of the above, the transaction has been unconditionally approved in first phase.

#### **Hypothetical evaluation of the case in the light of the supervened DSM**

##### **Strategy:**

The DSM strategies strengthened EU data protection rules, but it did not update EU competition laws. Despite the wishes of EDPS Buttarelli, a real comprehensive approach to privacy, consumer protection and competition did not intervene (the fact that the Commission enforces only the latter did not help the process) and, to date, such disciplines are applied by agencies as monoliths. Therefore, it is unlikely that a new assessment of the merger would lead, today, to a different outcome.

### **§ 3 After the Facebook/WhatsApp merger: regulatory disorder and the Facebook saga**

As in part predictable, following the acquisition of WhatsApp Facebook started a restyling of the merged consumer communications app.

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<sup>1103</sup> COMP/M.8124 – *Microsoft/LinkedIn* cit., § 177.

Since 2016, WhatsApp has been completely free for everyone<sup>1104</sup>.

With the same timing, Menlo Park started to rethink WhatsApp's business model, originally designed as an ad-free and privacy-friendly service provided upon subscription fee.

The first step in this direction was to match Facebook IDs with mobile telephone numbers associated to WhatsApp accounts, based on a simple notice to the users of the app, who were assigned a limited timeframe to opt-out from this process of combination, and without apparent possibility of opting-out for new users.

After a while, around 2018, Jan Koum, the founder of WhatsApp, publicly stated that he was in disagreement with the decision of Facebook not respecting their users' privacy and left the company<sup>1105</sup>.

Regulatory disorder followed.

### **§ 3.1 The Commission's approach: incorrect or misleading information during the merger control investigation**

The Commission imposed to Facebook a 110 million € fine for having “*at least negligently supplied* [during the merger investigation of 2014] *incorrect or*

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<sup>1104</sup> See *Making WhatsApp free and more useful*, posted on January 18<sup>th</sup>, 2016 and available at <https://blog.whatsapp.com/615/Making-WhatsApp-free-and-more-useful?lang=en> (accessed 14.6.2018): “Naturally, people might wonder how we plan to keep WhatsApp running without subscription fees and if today’s announcement means we’re introducing third-party ads. The answer is no. Starting this year, we will test tools that allow you to use WhatsApp to communicate with businesses and organizations that you want to hear from. That could mean communicating with your bank about whether a recent transaction was fraudulent, or with an airline about a delayed flight. We all get these messages elsewhere today – through text messages and phone calls – so we want to test new tools to make this easier to do on WhatsApp, while still giving you an experience without third-party ads and spam”.

<sup>1105</sup> Dvoskin E., *WhatsApp founder plans to leave after broad clashes with parent Facebook*, April 30<sup>th</sup>, 2018, available at [https://www.washingtonpost.com/business/economy/whatsapp-founder-plans-to-leave-after-broad-clashes-with-parent-facebook/2018/04/30/49448dd2-4ca9-11e8-84a0-458a1aa9ac0a\\_story.html?noredirect=on](https://www.washingtonpost.com/business/economy/whatsapp-founder-plans-to-leave-after-broad-clashes-with-parent-facebook/2018/04/30/49448dd2-4ca9-11e8-84a0-458a1aa9ac0a_story.html?noredirect=on) (accessed 13.10.19).

*misleading information*” with respect to the ability to match Facebook IDs automatically with WhatsApp users’ mobile phone numbers<sup>1106</sup>.

This decision was without prejudice to the approval of the merger and was not followed by new actions against the merged entity.

NCAs followed a different road and, enlarging the object of the analysis, started two separate and autonomous lines of investigation, the first one based on consumer protection rules (Italy), the second one based on national competition law rules (Germany).

The behaviours at stake overlapped only in part with the facts punished by the Commission and showed a wider scope.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

Given the reported failure of the DSM strategy to achieve a comprehensive approach to privacy, consumer protection and competition, it is unlikely that a new assessment of the conduct would lead, today, to a different outcome

### § 3.2 The Italian approach: consumer protection

In October 2016 the Italian Competition Authority (ICA) – who is in charge for the public enforcement of both competition law and consumer protection in Italy – opened two parallel investigations concerning alleged infringements of the Consumer Code (which implemented the UCP Directive) by WhatsApp.

In both cases, the rationale of the intervention was that, in the context of “zero price” markets, where the data subject typically pays with her or his personal data, the controller is also a “trader” under Art. 2, let. b) UCP Directive

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<sup>1106</sup> Commission decision No 3192 of 17 May 2017 “*imposing fines under Article 14(1) of Council Regulation (EC) No. 139/2004 for the supply by an undertaking of incorrect or misleading information*” (Case No. M.8228 – *Facebook/WhatsApp*), § 92.

(accordingly, the data subject becomes also a “consumer” pursuant to Art. 2, let. a UCP Directive<sup>1107</sup>).

In the first one the ICA has ascertained that WhatsApp had *de facto* forced its new users to accept in full the new Terms of Use (namely, the provision to share their personal data, such as their mobile telephone number, with Facebook), by inducing them to believe that without granting such consent they would not have been able to use the service anymore<sup>1108</sup>.

The consumers that already hold an account on the date the Terms of Use were modified could instead decide not to give their consent to share the information and still be able to use the app if they had opted-out within an assigned timeframe.

The technical default solutions implemented by the trader to handle this modification did not help consumers to give an informed and free consent<sup>1109</sup>: therefore, an interesting intersection between the concepts of “privacy by default” under Art. 25 GDPR and “aggressive commercial practices” pursuant to Art. 8 UCP Directive has been proposed in this case.

In the second investigation the ICA declared void a number of unfair contractual clauses<sup>1110</sup> included in WhatsApp’s Terms of Use<sup>1111</sup>.

On November 2018 the ICA punished Facebook for both misleading and aggressive commercial practices under Artt. 6 and 8 UCP Directive<sup>1112</sup>,

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<sup>1107</sup> Ratti M., *Personal-Data and Consumer Protection: What Do They Have in Common?*, in Bakhom M. – Conde Gallego B. – Mackenrodt M.-O. – Surblytė-Namavičienė G., *Personal Data in Competition, Consumer Protection and Intellectual Property Law. Towards a Holistic Approach?*, Springer, Berlin (GE), 2018, 377 et seq.

<sup>1108</sup> Italian Competition Authority (ICA) decision n. 26597 of May 11, 2017 in case PS10601 - *WHATSAPP-TRASFERIMENTO DATI A FACEBOOK*.

<sup>1109</sup> In particular, the practice has been implemented through: a) an in-app procedure for obtaining the acceptance of the new Terms of Use characterized by an excessive emphasis placed on the need to subscribe to the new conditions within the following 30 days or lose the opportunity to use the service; b) an inadequate information on the possibility of denying consent to share with Facebook the personal data on WhatsApp account; c) the pre-selection of the option to share the data; d) finally, the difficulty of effectively activating the opt-out option once the Terms of Use were accepted in full.

<sup>1110</sup> Directive 93/13/EEC.

<sup>1111</sup> Italian Competition Authority (ICA), decision n. 26596 of May 11, 2017, in case CV154 - *WHATSAPP-CLAUSOLE VESSATORIE*.

imposing the maximum of the fine allowed (5 million €) for each of the two conducts.

As for the first practice, Facebook was found responsible for having emphasized the free nature of the service but not the commercial objectives that underlie the provision of the social network service, thus inducing users into making a transactional decision that they would not have taken otherwise (*i.e.*, to register in the social network and to continue using it).

The information provided was in fact too vague and incomplete.

By failing to adequately distinguish between the use of data to improve the user-experience and to personalize the service and the use of data to carry out targeted advertising, Facebook was found guilty for both misleading actions and misleading omissions (Artt. 6 and 7 UCP Directive).

It is interesting to note that in this second case the point of intersection between data protection and consumer protection has been identified in the duty to inform under Art. 13 GDPR: where the information to be provided under the GDPR, by failing to make consent “informed” and “unambiguous” (in breach of Art. 4, n. 11 GDPR), are “deceptive” too (in breach of Art. 6 UCP Directive), the controller, who in zero price markets acts also as a trader, can be held responsible for unfair commercial practices.

The ICA also found that Facebook, in violation of Articles 8 and 9 of the UCP Directive, carried out an aggressive practice.

In this case, the regulatory interplay was between the notion of “undue influence” (Art. 8 UCP Directive) and the notions of “freely given” and “unconditioned” consent (Artt. 4, n. 11 and 7, § 4 GDPR).

Indeed, the objection was for Facebook to exert undue influence on registered consumers, who suffered, in the absence of a lawful consent, the transmission

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<sup>1112</sup> Italian Competition Authority (ICA), decision n. 27432 of November 29, 2018, in case PS11112 - *FACEBOOK-CONDIVISIONE DATI CON TERZI*.

of their data from Facebook to third-party websites/apps for commercial purposes, and vice versa<sup>1113</sup>.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

The conducts challenged by the ICA's would fall within the scope of both the Digital Content and Digital Service Directive and the Omnibus Directive.

By referring (also) to the EU data protection rules, such directives leave room to integrate privacy-related issues within the consumer protection enforcement.

The decisional practice of the ICA anticipated this framework.

Additionally, the proposal for an eID would reduce consumers' incentives to log in or to enter transactions on third parties' web pages/apps via their "digital ecosystem" account<sup>1114</sup>.

Nowadays, the outcome of the investigation would not be different, but legal certainty would be increased as a result of the legislative reforms.

### § 3.3 The German case: abuse of dominant position

On February 2019 the Bundeskartellamt (BKT) – which, contrary to the ICA, does not hold public enforcement powers in the field of data protection – adopted the final decision of the investigation for abuse of dominant position opened against Facebook on March 2016<sup>1115</sup>.

Although the conducts at stake were in principle capable to affect trade between Member States under Art. 102 TFEU, the BKT decided to apply

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<sup>1113</sup> The undue influence was caused by the pre-selection by Facebook of the broadest consent to data sharing. When users decided to limit their consent, they suffered significant restrictions on the use of the social network and third-party websites/apps, which induced them to maintain or restore the pre-selected choice.

<sup>1114</sup> Communication from the Commission "*Shaping Europe's digital future* cit., 11 (above Part III, § 6.1).

<sup>1115</sup> Bundeskartellamt, case B6 22/16, decision of 6 February 2019.

national law<sup>1116</sup>, whose rules on market definition had been recently revised in the light of the DDE<sup>1117</sup>.

Two conducts were at the centre of this long-lasting investigation.

Firstly, Facebook made the use of the social network conditional on the collection (not only of personal data generated on the platform, but also) of personal data (and cookies) eventually generated by private users on other corporate services (WhatsApp, Oculus, Masquerade and Instagram). Therefore, by subscribing to both Facebook and its corporate services, the user could not avoid the data generated on (or provided to) such corporate services to be automatically combined with the ones associated to the Facebook account.

Secondly, Facebook made the private use of the social network also conditional on the combination of information saved on the Facebook account with information collected on websites visited or third-party mobile apps used via Facebook APIs.

Conversely, the investigation did not deal with information collected *on* the social network.

Facebook was found to be dominant in the national market for private social network services. The BKT assessed dominance through a user-based market share (which, taking in account daily active users, exceeded 95%). This marked share appeared quite stable, due to difficulties associated with switching to other social networks (Art. 20 GDPR was not in force at the time of the facts) and to the possession by Facebook of competitively relevant data. Such barriers to entry were not mitigated by multi-homing, which, based on the market analysis, appeared limited.

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<sup>1116</sup> Section 19(1) GWB.

<sup>1117</sup> Under Art. 18, § 2a GWB “*the assumption of a market shall not be invalidated by the fact that a good or service is provided free of charge*”. Moreover, under Art. 18, § 3a GWB “*in the case of multi-sided markets and networks, in assessing the market position of an undertaking account shall also be taken of:*

- 1. direct and indirect network effects,*
- 2. the parallel use of services from different providers and the switching costs for users,*
- 3. the undertaking’s economies of scale arising in connection with network effects,*
- 4. the undertaking’s access to data relevant for competition,*
- 5. innovation-driven competitive pressure”.*



The complex and sophisticated theory of harm relies on the general clause of Section 19(1) GWB, which can be compared to unfair terms under Art. 102, let. a) TFEU, although it is more broadly applied by German case-law (as known, the ECN Regulation does not preclude Member States “*from adopting and applying on their territory stricter national laws which prohibit or sanction unilateral conduct engaged in by undertakings*”<sup>1118</sup>).

In particular, the BKT gave a vigorous and far-reaching interpretation of the “normative causality” theory developed by German Courts.

In the *VBL-Gegenwert* cases<sup>1119</sup>, the Federal Court of Justice ruled that the agreement of general business terms inadmissible under the legal principles of Sections 307ff. of the German Civil Code may amount to an abuse of dominant position as long as such terms are applied as a manifestation of market power or superior power of the party using these terms. In the *Pechstein* case the Federal Court of Justice held that in the context of this assessment it is important to safeguard constitutionally protected rights<sup>1120</sup>.

The BKT inferred from this case law the necessity to examine the conduct of dominant companies also in terms of their data processing procedures. The European data protection principles set forth in the GDPR guided the BKT’s analysis<sup>1121</sup>.

In this context, Facebook defended itself by arguing, *inter alia*, that processing was lawful, because it was “*necessary for the performance of [the] contract to which the data subject is party*”<sup>1122</sup>.

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<sup>1118</sup> Art. 3, § 2, II sentence of Reg. 1/2003/EC.

<sup>1119</sup> FCJ, 6 November 2011, Case KZR 58/11, *VBL-Gegenwert I*, § 65 and 24 January 2017, Case KZR 47/14, *VBL Gegenwert II*, § 35.

<sup>1120</sup> FCJ, 7 June 2016, Case KZR 6/15, *Claudia Pechstein/International Skating Union*, § 48.

<sup>1121</sup> However, the BKT did not ascertain the breach of specific provisions of the GDPR. Rather, the BKT derived the relevant legal principles from the GDPR’s *esprit* and from the Constitution. The reason is twofold. First, the GDPR was not applicable, *ratione temporis*, to the relevant facts; second, the BKT would not have been empowered, anyway, to apply the GDPR rules (jurisdictional rules probably would have led to the Irish data protection Authority).

<sup>1122</sup> Art. 6, § 1, let. b) GDPR.

The BKT – whose investigation did not include processing of user data generated on the Facebook platform (because it is reasonable that data processing is necessary to provide high quality user-experience on the social network) – counter-argued that, with respect to added data, the legal basis for the processing should have been user’s consent<sup>1123</sup>.

In the specific case – concluded the BKT – Facebook privacy terms were structured as a “take it or leave all”: no real alternatives were made available to the individual asking for subscription.

Moreover, the users’ evaluation was biased from the so-called “privacy paradox”: users attach great value to the protection of their privacy, but generously share their personal data when using internet services<sup>1124</sup>.

In sum, “*no real or free choice*” was granted, so that users “*only accept[ed] data processing because they would otherwise be unable to avail themselves of [the] service*”<sup>1125</sup>.

The BKT decision decided not to impose a fine to Facebook. Rather, it prohibited the implementation of the Terms of Service<sup>1126</sup> and, above all, imposed far-reaching remedial measures<sup>1127</sup>.

The Higher Regional Court of Düsseldorf suspended the decision, expressing serious concerns about its legal foundations<sup>1128</sup>.

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<sup>1123</sup> Art. 6, § 1, let. a) GDPR.

<sup>1124</sup> § 384: “*The primary problem is that when consumers share their personal data, they are hardly able to judge which and how much data are being collected by which company, to whom their data will be transmitted and what are the implications of giving consent to process their data. This could partially explain the privacy paradox which describes the phenomenon that users attach great value to the protection of their privacy, but generously share their personal data when using internet services*”.

<sup>1125</sup> § 646. Under Art. 4, n. 11 GDPR consent should be “*freely given, specific, informed and unambiguous indication of the data subject’s wishes by which he or she, by a statement or by a clear affirmative action, signifies agreement to the processing of personal data relating to him or her*”.

<sup>1126</sup> §§ 940 et seq.

<sup>1127</sup> §§ 946 et seq.

<sup>1128</sup> Higher Regional Court of Düsseldorf (Oberlandesgericht Düsseldorf) in interim proceedings, 26 August 2019, Case VI-Kart 1/19 (V). More to the point, following a summary review, the annulment of the contested decision was deemed predominantly probable. For a comment of the preliminary decision, see Colangelo G., *Facebook and Bundeskartellamt’s Winter of Discontent*, in *Competition Policy International*, September 23<sup>rd</sup>, 2019, available at

In particular, the Court ruled that neither an exploitative abuse to the detriment of consumers participating in the social network (theory of harm which played a prominent role in the proposed theories of harm) nor an exclusionary abuse to the detriment of an actual or potential competitor of Facebook could be envisaged in the suspended decision.

It is worth noting that the Court did not quash Facebook's dominance, which appeared, at least following a preliminary assessment, likely.

In a way similarly to the EECJ *United Brands* judgement<sup>1129</sup>, the Court found that the objected unfair terms (by means of "excessive" disclosure of data, each of them might be assigned a certain market value), has not been accurately demonstrated by the BKT.

In sum, the alleged "loss of control" of users over their personal data has not been demonstrated, given that in no way the completeness and overall clarity of Facebook's privacy terms has been challenged by the BKT decision. Hence, it was hard to argue that consent was not freely given under the data protection rules (nor the BKT has specifically identified the allegedly unlawful terms).

One might argue that coupling consents might likely be in violation to data protection rule, but what is relevant under competition law is that consumers were not *forced* to give consent to the processing of the additional data.

However, the salient part of the judgement is that, even taking aside privacy-related issues, the Court disagreed on the very essence of the theory of harm.

In particular, according to the High Regional Court neither the *VBL-Gegenwert* nor the *Pechstein* cases would allow to derive such a far-reaching theory of normative causality: even when the dominant undertaking infringe a normative provision, section 19 GWB equally presupposes conduct that damages competition, so that an infringement of a law can't be sufficient, as such, to constitute an offence.

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<https://www.competitionpolicyinternational.com/facebook-and-bundeskartellamts-winter-of-discontent/> (accessed 16.11.19).

<sup>1129</sup> EECJ, 14 February 1978, case C-27/76, *United Brands Company and United Brands Continental BV v. Commission*.

In other words, section 19 GWB (as well as Art. 102 TFEU<sup>1130</sup>) requires a causal link between dominance and the competitive harm.

In order to demonstrate that such a link exists, a competition authority has the burden of proving that the same terms would not have been formed in a hypothetical competitive scenario (counter-factual scenario).

According to the Court, the investigation (whose market analysis outcomes would have been overestimated by the BKT) revealed that the failure of users to take notice was not based on Facebook's market power, but rather on the indifference or convenience of the average Facebook user in the case of a realistic appraisal.

In the light of the above, the fact that coupling consents might amount to a violation of data protection law does not equal, *per se*, to an abuse of dominant position<sup>1131</sup>.

The so-called privacy-paradox does not change this conclusion: the unread acceptance of the privacy terms for the additional data was not an expression of user dependence or of Facebook's market power, but the result of an individual assessment of the very same users, which autonomously decided to value participation in the social network more than privacy degradation.

Indeed, the survey compiled during the investigation had shown that almost all users did not read the General Terms and Conditions because they would have to accept them anyway. In the Court's view, this was a clear sign for privacy not to gather a relevant role in assessing possible quality degradation practices in the relevant market for social network services in Germany.

Finally, although it is not clear whether the BKT explored this theory of harm or not, the Court ruled that the suspended decision failed to ascertain an exclusionary abuse.

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<sup>1130</sup> According to Nazzini R., *The Foundations of European Union Competition Law. The Objective and Principles of Article 102*, Oxford University Press, Oxford (U.K.), 2011, 178, a causal link must exist between dominance and competitive harm.

<sup>1131</sup> The Court adds that, from the point of view of competition, the only decisive factor is whether the consent required of consumers is so determined due to Facebook's dominant market position.

Since exclusionary abuses require the threat of foreclosure effects to be actual, the BKT had to demonstrate that Facebook's conducts would have made it difficult or impede the market entry (or expansion) of potential (or actual) competitors; whether and to what extent the additional data collected through the conducts at stake increased the quality of Facebook's already existing database with regard to its algorithm-based evaluation; whether the conducts were able to facilitate leveraging in other markets or not.

According to the Court, the suspended decision lacked this analysis.

**Hypothetical evaluation of the case in the light of the supervened DSM Strategy:**

The enactment of the proposal for an eID would reduce consumers' incentives to log in or to enter transactions on third parties' web pages/apps via their "digital ecosystem" account<sup>1132</sup>, thus reducing the social networking platforms' "data advantage" too.

Such a regulatory response would be without prejudice to the application of competition rules.

Given the reported failure of the DSM strategy to achieve a comprehensive approach to privacy, consumer protection and competition, it is unlikely that a new assessment of the conducts would lead, today, to a different outcome.

## **Section II – The DSM strategy in action: an overview on the enforcement in markets prone to gatekeeping**

### **Setting the scene**

The combination of economies of scale and scope and indirect network effects allows online platforms to aggregate and match massive amounts of users on both sides of the market, reaching a tipping point where, in the light of the

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<sup>1132</sup> Communication from the Commission "*Shaping Europe's digital future* cit., 11 (above Part III, § 6.1).

winner takes most dynamic and of the existing barriers to entry, dislodging the Big Tech becomes very difficult.

As seen, it is a common statement that, when such conditions are met, platforms:

- i) become the market (competition *for* the market);
- ii) constitute the point of access to that market (platforms as *gatekeepers*);
- iii) contribute, at least *de facto*, to fix the rules to operate within that market (platform as *regulators*).

Often, platforms are vertically integrated and, in addition to providing the intermediation service, they offer products and/or services on the business side of the market.

This dual role is quite insidious because it might lead to conflict of interest and to neutrality problems, broadly defined as “self-preferencing”.

Albeit it has been argued that self-preferencing theories of harm would be well-established in the European competition law<sup>1133</sup>, dating back to the Microsoft case<sup>1134</sup>, a deeper analysis shows that this type of infringement is becoming relevant with the advent of the DDE, as the growing attention to the topic reveals.

Scholars<sup>1135</sup> has subdivided self-preferencing in pure self-preferencing<sup>1136</sup>, pure secondary line self-preferencing<sup>1137</sup> and hybrid self-preferencing<sup>1138</sup>.

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<sup>1133</sup> According to Report for the European Commission, 66: “According to a well-established case law, the owner of an essential facility must not engage in self-preferencing. However, self-preferencing by a dominant firm can be abusive even below this threshold where it is not justified by a pro-competitive rationale and is likely to result in a leveraging of market power. In other words: self-preferencing is not abusive *per se*, but should be subject to an effects test”.

<sup>1134</sup> They quote CFI, Great Chamber, 17 September 2007, Case T-201/04, *Microsoft v. Commission*, § 1088, dismissing the appeal on Commission Decision 2007/53/EC of 24 March 2004 (Case COMP/C-3/37.792 - *Microsoft*).

<sup>1135</sup> Graef I., *Differentiated Treatment in Platform-to-Business Relations: EU Competition Law and Economic Dependence*, in *Yearbook of European Law*, yez008, <https://doi.org/10.1093/yel/yez008>, in particular 5-6.

<sup>1136</sup> A vertically integrated platform treats its affiliated services more favourably than non-affiliated services (e.g. the more prominent display of Google’s comparison shopping service in its general search results as compared to rival comparison shopping services).

<sup>1137</sup> A non-vertically integrated platform engages in differentiated treatment among non-affiliated services in a market in which it is not active itself (e.g. a hotel booking platform providing hotels that pay more commission fees with a higher ranking). According to Graef,

The first hypothesis is exclusionary in nature and could gain a wider scope if the Commission will decide to follow, for example in the ongoing Amazon investigation<sup>1139</sup>, proposals to extend a “less efficient competitor” test, as applied in the case *Post Danmark II*<sup>1140</sup>, to pure self-preferencing<sup>1141</sup>.

The second hypothesis is exploitative in nature and might be more controversial, given the need to show negative effects on consumer welfare and the low incentives of non-vertically integrated platforms to engage in such a practice<sup>1142</sup>. Moreover, in the field of pure secondary line self-preferencing neutrality aspects are more evident, so that economic regulation is said to be better placed to intervene rather than competition law.

The third hypothesis combines exclusionary and exploitative aspects.

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because a platform normally will not have incentives to differentiate between non-affiliated businesses with which it does not compete, the category of pure secondary line differentiation is least suspicious from a competition law perspective.

<sup>1138</sup> A platform engages in differentiated treatment among non-affiliated services in an effort to favour its own business (e.g. platform blocking an app that interferes with its ability to gain revenues through advertising would be an example).

<sup>1139</sup> See below.

<sup>1140</sup> Case C-23/14, *Post Danmark II* cit., § 60, the rationale being that “*the presence of a less efficient competitor might contribute to intensifying the competitive pressure on that market and, therefore, to exerting a constraint on the conduct of the dominant undertaking*”.

<sup>1141</sup> Laitenberger J. (Director-General for Competition), *Competition Enforcement in Digital Markets: Using our Tools Well and a Look at the Future*, Speech of January 31<sup>st</sup>, 2019, 5, available at [http://ec.europa.eu/competition/speeches/text/sp2019\\_03\\_en.pdf](http://ec.europa.eu/competition/speeches/text/sp2019_03_en.pdf) (accessed 14.3.19); Graef I., *Differentiated Treatment* cit., 37.

<sup>1142</sup> See Opinion of Advocate General Wahl delivered on 20 December 2017, Case C-525/16, *MEO – Serviços de Comunicações e Multimédia SA v. Autoridade da Concorrência*: “*where the undertaking in a dominant position is not vertically integrated [...] it is reasonable to wonder what benefit such an undertaking might hope to derive from discrimination aimed at placing one of its trading partners on the downstream market at a disadvantage. Indeed, such an undertaking has every interest in that market being highly competitive, so that it can maintain its negotiating power in its capacity as seller of the goods or services in question. If, as in the main proceedings, the undertaking in a dominant position is not in competition with its customers on the downstream market, it is not easy to determine the reasons which might lead that undertaking to apply discriminatory prices, other than the direct exploitation of its customers. It would therefore seem somewhat irrational for it to reduce the competitive pressure which exists among its trading partners on the downstream market*”.

## § 1 The Google Saga

### § 1.1 Setting the scene: light touch merger review policy

Many observers believe that the concentration of the market for search engine services (as well as the one of the markets for related services, such as search-ads), which appeared already remarkable at the time, became almost irreversible around 2007, when the FTC<sup>1143</sup>, first, and the Commission<sup>1144</sup>, then, cleared the merger *Google/Double Click*. Indeed, the situation did not substantially improve with the following clearance of a series of mergers aimed at favouring the emergence of a strong competitor of Google<sup>1145</sup>.

*Ex post* intervention has been more vigorous in Europe.

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<sup>1143</sup> Federal Trade Commission, December 20<sup>th</sup>, 2007, case 071-0170 - *Google/Double Click*. The main argument which led to the approval was the competitive pressure exerted on Google: “a number of Google’s competitors have at their disposal valuable stores of data not available to Google. For instance, Google’s most significant competitors in the ad intermediation market, Microsoft, Yahoo!, and Time Warner have access to their own unique data stores. These firms own popular search engines, and will have access to consumer information from their internal ad servers, ad intermediation services, other web properties, and software. The entry and expansion of these well-financed competitors has transformed the ad intermediation marketplace over the last six months. All of these firms are vertically integrated, and all appear to be well-positioned to compete vigorously against Google in this new marketplace” (pp. 12-13). As to privacy-related concerns (Double Click possessed highly personalized datasets, being specialized in targeted advertising), the FTC concluded that their assessment in the context of merger review was neither possible nor desirable: “not only does the Commission lack legal authority to require conditions to this merger that do not relate to antitrust, regulating the privacy requirements of just one company could itself pose a serious detriment to competition in this vast and rapidly evolving industry” (p. 2). In her dissenting opinion, Commissioner Pamela Harbour’s feared that the transaction would have combined not only the two firms’ products and services, but also their vast troves of data about consumer behaviour on the Internet. Thus, the transaction reflected an interplay between traditional competition and consumer protection issues. The FTC was uniquely situated to evaluate the implications of this kind of data merger, from a competition as well as a consumer protection perspective. Therefore, the FTC should have maximized its opportunity to do so, given that, following the transaction, the merged firm would have been capable of dominating the “Database of Intentions” (p. 4). Absent intervention, she expected data foreclosure as a result of the merger (§ 359). More deeply, see Harbour P.J. – Koslov T.I., *Section 2 in a Web 2.0 World: an Expanded Vision of Relevant Product Markets*, in *Antitrust Law Journal*, vol. 76 (2010), Issue 3, 769 et seq.

<sup>1144</sup> COMP/M.4731 – *Google/DoubleClick* cit.

<sup>1145</sup> See for example Commission decisions of 18 February 2010 in Case No COMP/M.5727 - *Microsoft/Yahoo! Search Business*, § 192 and of 21 December 2016 in case No M.8180 - *Verizon/Yahoo!*.



## § 1.2 The Google Shopping case

The first episode of the Google saga is the *Google Shopping* case<sup>1146</sup>.

It concerned an exclusionary abuse enacted through a leveraging strategy from the (dominated) national markets for general search services<sup>1147</sup> into the national markets for comparison shopping services<sup>1148</sup>.

Leveraging took place by means of (pure) self-preferencing.

In practice, Google granted a more favourable positioning and display, in its general search results pages, of its own comparison shopping service (“Google Shopping”) when compared to the one assigned to competing comparison shopping services, which were positioned and displayed in the following search pages.

This conduct gave an undue competitive advantage to Google’s comparison shopping service, as the empirical analysis ran by the Commission demonstrated that it is quite hard for search engine users to scroll more than 2-3 search pages.

Google was found to be dominant in the (national) markets for general search services for a number of reasons: i) it has enjoyed strong and stable (volume)

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<sup>1146</sup> Commission case No COMP/AT.39740 of 27 June 2017 - *Google Search (Shopping)*. It seems interesting to note that in 2013 the FTC closed a similar investigation concluding that Google did not change its search results primarily to exclude actual or potential competitors but to improve the quality of its search results: see Statement of the FTC Regarding Google’s Search Practices, In the Matter of Google Inc., FTC File Number 111-0163, January 3<sup>rd</sup>, 2013, available at <http://ftc.gov/os/2013/01/130103googlesearchstmtofcomm.pdf> (accessed 24.12.2016).

<sup>1147</sup> Like in the Commission decision of 18 February 2010 in case COMP/M.5727 - *Microsoft/Yahoo! Search Business*, the Commission defined the relevant product market for general search services as separate from “vertical” Internet search (*i.e.* search services focused on specific segments of online content such as for example legal, medical, or travel search engines). Despite that users are offered these services without paying a monetary price, the provision of general search services constitutes an economic activity for three main reasons: i) users “pay” with their personal data; ii) service is funded by the advertising side of the market, to whom such data are provided; iii) search engines compete with each other (§§ 157-160).

<sup>1148</sup> Comparison shopping services are specialised search services that: i) allow users to search for products and compare their prices and characteristics across the offers of several online retailers and merchant platforms; ii) provide links that lead to the websites of such online retailers or merchant platforms. Comparative shopping services are substitutable neither with the services offered by online search advertising platforms nor with merchant platforms embedding searching tools which allow to search items within the marketplace (such as Amazon and eBay).

market shares across the EEA since 2008<sup>1149</sup>; ii) no effective entry in any EEA countries has occurred during that period; iii) this is due to significant barriers to expansion and entry (the establishment of a fully-fledged general search engine requires significant financial investments, even considering the linguistic barriers existing along different countries; in order to refine the relevance of general search results pages, the provider needs to receive a certain volume of queries to compete viably and to improve the relevance of its results for uncommon queries: in sum, strong economies of scale and scope and strong indirect network effects, enhanced by positive feedback effects on both sides of the two-sided platform, exist<sup>1150</sup>).

Competing comparison shopping services' results were demoted by at least two different algorithms, which were first applied by Google in 2004 and 2011.

Nonetheless, the Commission did not deal with the algorithm code as such, which, admittedly, would have been quite burdensome, due to the necessity of assessing a very large number of factors.

Rather, it relied on the “tangible evidence” found out in the context of testing the foreclosure effect. Therefore, the Commission did not have to enter the “black box”.

Indeed, the Commission managed to demonstrate that, in conjunction with the launch or modification of such algorithms, a significant decrease of traffic to competing comparison shopping services (and an inversely proportional increase of traffic to Google's own comparison shopping service) could be seen.

The traffic diverted accounted for a large proportion of traffic to competing comparison shopping services, which in turn, due to Google's dominant position in the upstream market, were not able to effectively replace Mountain View's general search services by other viable sources.

Google was fined for 2.42 billion €.

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<sup>1149</sup> Double Click was acquired the same year.

<sup>1150</sup> §§ 292-296.

Discussions on the correct implementation of the behavioural remedies imposed are still ongoing.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

Recital 20 of the Omnibus Directive made clear that such a conduct may fall within the scope of the UCP Directive, namely as a “*in all circumstances misleading practice*”, in case of failure of the search engine provider to inform the user about the ranking criteria.

Moreover, the P2B Regulation would apply to such conducts too.

Yet, its contribution would be modest. Not only because the regulation leaves open the questions about market definition, dominance, competition harm and causal link, but especially because: i) it does not prevent the provider from distorting the rankings, but it simply requires the provider to clearly inform in advance its business users (in addition to consumers) about this circumstance, explaining the underlying criteria; ii) it might support competition law investigation, by exempting the Commission and NCAs from the burdensome understanding of the algorithm (to date, this assessment has been based on “tangible evidence”), because the platform will have to disclose its ranking criteria; iii) as a consequence of the institutional renounce to enter the “black box”, competition law will rely to a great extent on self-declarations (“failure to understand”).

### § 1.3 The Google Android case

The second episode of the Google saga is the *Google Android* case<sup>1151</sup>.

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<sup>1151</sup> Commission decision of 18 July 2018 in case No COMP/AT.40099 - *Google Android*. For a similar case in the U.S., see *Feitelson v. Google Inc.*, 80 F. Supp. 3d 1019, 1022 (N.D. Cal., February 20<sup>th</sup>, 2015), where the Californian District Court rejected the complaint because the plaintiff was unable to demonstrate the foreclosure effect due to the exclusivity agreements concerning the pre-installation of Google’s apps. On the topic, see Newman J.M., *Antitrust in Zero-Price Markets: Applications*, in *Washington University Law Review*, Vol. 94 (2016),

Google was found dominant in each of the three relevant markets affected by the abuse:

- i) (national) markets for general search services;
- ii) (worldwide<sup>1152</sup>) market for licensable<sup>1153</sup> smart mobile OSs<sup>1154</sup>;
- iii) (worldwide<sup>1155</sup>) market for app stores for the Android mobile OS<sup>1156</sup>.

The theory of harm had for object an overall exclusionary strategy pursued through tying, exclusive pre-installation and obstruction of development and distribution of competing Android OSs (“forks”).

In particular, foreclosure was achieved through the following conducts:

- 1) Google offered its mobile apps and services to device manufacturers as a mandatory bundle: in order to obtain the “must have” Play Store, the Google Search app and the Google Chrome browser had to be mandatory pre-installed too;
- 2) Google granted significant financial incentives to some of the largest device manufacturers as well as mobile network operators on condition that they exclusively pre-installed<sup>1157</sup> Google Search across their entire portfolio of Android devices;

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Issue 2, 101. For a comment to the European decision, see Kathuria V., *Greed for data and exclusionary conduct* cit.

<sup>1152</sup> Excluding China.

<sup>1153</sup> According to the Commission, Android does not compete with operating systems exclusively used by vertically integrated developers (such as Apple iOS or Blackberry). Indeed, third party manufacturers of smart mobile devices can only license and run Android on their devices (not IOS and Blackberry OS). As the Microsoft saga teaches, OSs are prone to strong direct and indirect network effects.

<sup>1154</sup> Google bought the original developer of the Android mobile OS in 2005, further developed it and finally launched it, publishing the source code of each new version to allow third parties to modify this code in order to create the so-called Android “forks”.

<sup>1155</sup> Excluding China.

<sup>1156</sup> Google’s app store, the Play Store, accounted for more than 90% of apps downloaded on Android devices. Therefore, Google’s “Play Store” is considered a “must have” by device manufacturers. High barriers to entry were present, due to network effects. No constraints could be exerted by Apple’s App Store, which is only available on iOS devices. The openly accessible Android source code covers basic features of a smart mobile OS but not Google’s proprietary Android apps and services, such as the “must have” Play Store.

<sup>1157</sup> As a general rule, pre-installation can be beneficial to the consumers, because it can reduce search costs. Nonetheless, it becomes anticompetitive to the extent that pre-installation is imposed by the dominant firm and not freely and autonomously proposed by the downstream

3) Google has prevented device manufacturers from using any alternative version of Android (“forks”) that was not approved by Google. In order to be able to pre-install on their devices Google’s proprietary apps, including the Play Store and Google Search, manufacturers had to commit not to develop or sell even a single device running on an Android fork.

As observed by scholars, at first sight the first two conducts might appear benign, as it takes a short time for consumers to download competing search apps or browser from the internet<sup>1158</sup>.

However, the same scholars also stressed that such a conclusion would not consider the *status quo* bias: faced with alternative options, individuals tend to stick to the *status quo* position even if it is not the optimal choice<sup>1159</sup>.

It must be noted that in past the relevance of “end-users’ inertia” has been acknowledged in a number of Commission’s decisions<sup>1160</sup>: therefore, it is not so infrequent for behavioural economics to be applied in the context of the competitive assessment.

This decision represents a further (useful) step towards a reasonable mitigation of the neoclassical economics assumption that market participants always make rational and logical decisions that maximize their utility.

The Commission imposed a fine of 4.34 billion € to Google.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

The P2B regulation would apply to such conducts, with the same limits above described.

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manufacturer (CFI, Grand Chamber, 17 September 2007, case T-201/04, *Microsoft Corp v. Commission*, § 923).

<sup>1158</sup> Kathuria V., *Greed for data and exclusionary conduct* cit., 95.

<sup>1159</sup> Samuelson W. – Zeckhauser R., *Status Quo Bias in Decision Making*, in *Journal of Risk and Uncertainty*, Vol. 1 (1988), 7 et seq.

<sup>1160</sup> COMP/C-3/37.792 *Microsoft* cit., § 870; Case M.8124, *Microsoft/Linkedin* cit., § 309.

## § 1.4 The Google AdSense case

The third episode of the Google saga is the *Google AdSense* case<sup>1161</sup>.

Google was found to be dominant in the (EEA-wide) market for online search advertising intermediation<sup>1162</sup>.

The investigation concerned exclusivity clauses applied to publishers starting from 2006 and “Premium Placement” clauses applied starting from 2009 (the latter were also accompanied by an obligation of publishers to submit a written request to the dominant firm before changing the placement and display of rivals’ advertising on their own websites).

This complex form of exclusive dealing foreclosed entry and expansion of Google’s competitors in the market for online search advertising intermediation.

The competitive harm was found to be appreciable. Indeed, since it was not possible for competitors in online search advertising (such as Microsoft and Yahoo) to sell advertising space in Google’s own search engine results pages, third-party websites represented an important entry point for fostering competition (at least) in the separate market for online advertising brokering.

The Commission has fined Google 1.49 billion €.

### **Hypothetical evaluation of the case in the light of the supervened DSM**

#### **Strategy:**

The DSM strategy would have little impact on such a case, which concerned a classic exclusionary abuse implemented through exclusive dealing.

<sup>1161</sup> Commission decision of 20 March 2019 in case No COMP/AT.40411 - *Google Search (AdSense)*.

<sup>1162</sup> In the *Google/Double Click* merger, the Commission had left open the question whether the overall online advertising market or its two segments (search and non-search ads) had to be further subdivided into direct sales on the one hand and intermediated sales on the other. Online search advertising intermediation services work as follows. Websites such as newspaper websites, blogs or travel sites aggregators (so-called “publishers”) often have a search function embedded. When a user searches using this search function, the website delivers both search results and search adverts, which appear alongside the search result. If publishers decide to outsource the search function of their websites, the providers of such service act as advertising broker between advertisers and publishers that want to profit from the space around their search results pages.

## § 1.5 The ongoing Google Android (Italian) case

On May 2019, the ICA opened an investigation against Google for an alleged abuse of dominant position under Art. 102 TFEU<sup>1163</sup>.

Google would have allegedly abused its dominant position in the market for licensable OSs, where it is operational with Android, namely by having refused to integrate the app “Enel X Recharge” into the Android Auto environment.

Since this app has been developed by Enel to provide end users with information and services for recharging electric car batteries, it is possible that the refusal to deal was finalized at defending and strengthening the business model of its proprietary Google Maps app.

Indeed, Google Maps shows a partial usability overlap with Enel’s app, as they are both able to provide end-users with information on the location of columns for charging electric cars and directions on how to reach them.

**Hypothetical evaluation of the case in the light of the supervened DSM Strategy:**

In principle, the P2B Regulation may apply to such conduct, with the same limits above described. Nonetheless, the theory of harm at stake – an extreme form of pure self-preferencing where, with regard to a single aspect of the service provided, the vertically integrated platform refuses to deal at all – seems more close to the essential facility doctrine than to self-preferencing, so that, at least in theory, the *Bronner* indispensability requirement should apply, unless one applies the constructive refusal to deal or margin squeeze doctrines, where the indispensability threshold is not present<sup>1164</sup>.

<sup>1163</sup> Italian Competition Authority (ICA) decision n. 27771 of 8 May 2019, initiating case A529 - *GOOGLE/COMPATIBILITÀ APP ENEL X ITALIA CON SISTEMA ANDROID AUTO*. Press release available at <https://en.agcm.it/en/media/press-releases/2019/5/ICA-investigation-launched-against-Google-for-alleged-abuse-of-a-dominant-position> (accessed 10.6.19).

<sup>1164</sup> Graef I., *Differentiated Treatment* cit., 30.

## § 1.6 The French Google case

On December 2019<sup>1165</sup> the French Autorité de la concurrence has fined Google for € 150 million for having abused its dominant position in the search advertising market<sup>1166</sup> in breach of Art. 102 TFEU.

The French watchdog considered that Google Ads (previously, Google AdWords) operating rules unilaterally imposed by Google on advertisers were established and applied under non-objective, non-transparent and discriminatory conditions. The opacity and lack of objectivity of these rules made it very difficult for advertisers to comply with them, even because Google had all the discretion to modify its interpretation of the rules in a way that was difficult to predict. This allowed Google to apply its rules in a discriminatory or inconsistent manner<sup>1167</sup>.

More in detail, the French Authority held Google responsible for having implemented unclear rules, for having changed position several times in the interpretation of the rules, for not having transmitted to the sites the changes of the rule and for having applied its rules in a discriminatory manner<sup>1168</sup>.

Quite interestingly, the charge seems to be almost completely built on the breach of the duty of the digital platform to be “neutral” and “fair”. Indeed, the (long) decision is almost fully focused, also in terms of pages, to these aspects. Conversely, only few paragraphs are dedicated to the theory of harm, which is identified in Art. 102, let. a) TFEU (“*directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions*”)<sup>1169</sup>.

Unfair trading conditions are not limited to price-related conducts but to any contractual term<sup>1170</sup>. Moreover, differently from cases based on Art. 102, let. c) TFEU, the unfair trading conditions at stake would not require the objected

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<sup>1165</sup> French Competition Authority decision 19-D-26 of 19 December 2019 “relative à des pratiques mises en œuvre dans le secteur de la publicité en ligne liée aux recherches”.

<sup>1166</sup> See decision 19-D-26 of 19 December 2019 cit., 83, § 309 of the decision.

<sup>1167</sup> See decision 19-D-26 of 19 December 2019 cit., 28-73, §§ 93-247 of the decision.

<sup>1168</sup> Several sites were suspended while others, with similar content, were not.

<sup>1169</sup> Decision 19-D-26 of 19 December 2019 cit., 91-92, §§ 345-353.

<sup>1170</sup> Decision 19-D-26 of 19 December 2019 cit., 91, § 346.



conducts to put the customers of the dominant firm at a competitive disadvantage<sup>1171</sup>. The *Alsatel* case<sup>1172</sup> is mentioned to support this view. However, in such case the Court simply ruled that, in principle, unfair clauses able to jeopardize market integration (e.g. by way of restricting imports) can be prohibited as such whenever they are able to “*hinder the economic interpenetration intended by the Treaty*”<sup>1173</sup> (as said, those were the years of “ancient competition law” or “embedded competition”<sup>1174</sup>).

Said reading of Art. 102, let. a) TFEU allows the French Authority to be very short as to the effects of the conducts at stake on competition<sup>1175</sup>.

First, the “inequalities” produced by Google would be more widespread than a discrimination under Art. 102, let. c) TFEU, because the former affect all the customers, whereas the latter would affect only the discriminated customers<sup>1176</sup>.

Second, the quasi-monopolistic position of Google determines that said inequalities condition the functioning of almost the entire relevant market<sup>1177</sup>.

Third, in so far as the dominant firm unfairly or inconsistently applies its terms and conditions to its customers, the proper functioning of the downstream market is distorted<sup>1178</sup>, for the same reasons that make discrimination unlawful

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<sup>1171</sup> Decision 19-D-26 of 19 December 2019 cit., 92, § 353: “*À la différence des dispositions du c) du deuxième alinéa de l’article 102, applicables aux cas de discriminations (voir ci-dessous), celles du a) relatives aux conditions de transaction non équitables ne prévoient pas spécifiquement que les pratiques en cause infligent un désavantage dans la concurrence*”.

<sup>1172</sup> EECJ, Sixth Chamber, 5 October 1988, Case C-247/86, *Société alsacienne et lorraine de télécommunications et d’électronique (Alsatel) and SA Novasam v. Commission*.

<sup>1173</sup> *Id.*, § 11: “*The first condition for the application of [Art. 102, let. a TFEU] is that trade between Member States must be affected. The interpretation of that condition, which is set out in Articles 85 and 86 of the Treaty, must be based on its purpose, which is to determine the scope of application of Community competition law. Community law applies to any [conduct] which may influence, directly or indirectly, actually or potentially, patterns of trade between the Member States and thereby hinder the economic interpenetration intended by the Treaty. That condition would be satisfied, in particular, if the contractual clauses referred to above had the effect of restricting imports of telephone equipment from other Member States, thereby partitioning the market*”.

<sup>1174</sup> Part II, § 4.1.

<sup>1175</sup> Decision 19-D-26 of 19 December 2019 cit., 93-96, §§ 354-375.

<sup>1176</sup> Decision 19-D-26 of 19 December 2019 cit., 93, § 356.

<sup>1177</sup> Decision 19-D-26 of 19 December 2019 cit., 93, § 357.

<sup>1178</sup> Decision 19-D-26 of 19 December 2019 cit., 93, § 358.

pursuant to Art. 102, let. c) TFEU<sup>1179</sup>. Therefore, by having behaved unfairly and inconsistently, Google would have (indirectly) produced discrimination in the downstream market for online advertising. In so far as a sufficient interdependence exists between the dominated market and the downstream markets where the distortion of competition occurs, a causal link might be established between the conduct and the restriction of trade<sup>1180</sup>. According to the *Meo* framework<sup>1181</sup>, the competitive disadvantage may also be merely potential<sup>1182</sup>.

The French Authority held that – contrary to Google’s defence – the demonstration of a “disproportionate advantage” to the benefit of the dominant firm is not mandatory to establish exploitative abuses<sup>1183</sup>. In any case, the fact that Google would not have made profits from these conducts would be questionable, because evidences could be found that the firm is the first beneficiary of the inappropriate content displayed by its advertiser (and not duly filtered by Google AdS)<sup>1184</sup>. Moreover, by being less unfair to advertisers offering products or services free of charge, Google would have in a way promoted and supported such business models, to the harm of consumers<sup>1185</sup>.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

The P2B Regulation may fully apply to such conducts. Nonetheless, to no extent would the P2B Regulation help to ascertain a dominant position and to elaborate a fact-finding theory of harm (which seems extremely poor and formalistic in the French decision)

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<sup>1179</sup> Decision 19-D-26 of 19 December 2019 cit., 93, §§ 359-360.

<sup>1180</sup> Decision 19-D-26 of 19 December 2019 cit., 94, § 365.

<sup>1181</sup> CJEU, Second Chamber, 19 April 2018, *MEO/Serviços de Comunicações e Multimédia v. Autoridade da Concorrência*, case C-525/16.

<sup>1182</sup> Decision 19-D-26 of 19 December 2019 cit., 94, §§ 362-363.

<sup>1183</sup> 95, § 369.

<sup>1184</sup> 96, § 374.

<sup>1185</sup> 96, § 375.

## § 2 The Amazon saga (Commission, BKT-BWB, ICA)

Following a formal request for information (RFI) addressed on September 2018<sup>1186</sup>, on July 2019 the Commission launched an investigation against Amazon to assess whether the online marketplace, in its dual role of online platform and retailer, has put in place (along with independent sellers which are part of its network) anticompetitive agreements under Art. 101 TFEU and/or has abused its (alleged) dominant position (in the market for online intermediation of e-commerce) under Art. 102 TFEU<sup>1187</sup>.

According to the press release, the Commission will focus its assessment on:

- the standard agreements between Amazon and marketplace sellers, which allow Amazon's retail business to analyse and use third party seller data. In particular, the Commission will focus on whether and how the use of accumulated marketplace seller data by Amazon as a retailer affects competition;
- the role of data in the selection of the winners of the "Buy Box" and the impact of Amazon's potential use of competitively sensitive marketplace seller information on that selection. The "Buy Box" is displayed prominently on Amazon and allows customers to add items from a specific retailer directly into their shopping carts. Winning the "Buy Box" seems key for marketplace sellers as a vast majority of transactions are statistically finalized through it. Therefore, it seems paramount to understand the underlying algorithmic mechanism.

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<sup>1186</sup> See Höppner T. – Westerhoff H., *The EU's competition investigation into Amazon Marketplace*, in *Kluwer Competition Law Blog*, November 30<sup>th</sup>, 2018, available at <http://competitionlawblog.kluwercompetitionlaw.com/2018/11/30/the-eus-competition-investigation-into-amazon-marketplace/> (accessed 15.12.18), and, for a critical analysis, Ibanez Colomo P., *On the Amazon probe: neutrality everywhere (or the rise of common carrier antitrust)*, in *Chillin' Competition*, September 25<sup>th</sup>, 2018, available at <https://chillingcompetition.com/2018/09/25/on-the-amazon-probe-neutrality-everywhere-or-the-rise-of-common-carrier-antitrust/> (accessed 5.10.18).

<sup>1187</sup> Case AT.40462 - *Amazon Marketplace*, started on 17 July 2019. Press release available at [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_19\\_4291](https://ec.europa.eu/commission/presscorner/detail/en/IP_19_4291) (accessed 20.7.19).

Complementary investigations have been launched in Germany, Austria and Italy.

The first two led Amazon to propose amendments to its general terms for business. Following this unilateral proposal, both the Bundeskartellamt (BKT) and the Bundeswettbewerbsbehörde (BWB) adopted a commitment decision and closed the investigation<sup>1188</sup>.

Similarly to the Facebook case, the BKT had objected the violation of national abuse control regulations<sup>1189</sup>, whereas the BWB left open the question whether Art. 102 TFEU or national law should have applied<sup>1190</sup>.

That said, both the agencies had challenged various aspects of Amazon's general terms of business as well as certain practices towards sellers<sup>1191</sup>.

More to the point, the investigations concerned aspects such as: i) the lack of transparency of the terms of business; ii) the unexpected termination and blocking of sellers accounts, at times not substantiated or substantiated only by

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<sup>1188</sup> Bundeskartellamt, decision of July 17<sup>th</sup>, 2019 in case B2 - 88/18; Bundeswettbewerbsbehörde, Case Report available at [https://www.bwb.gv.at/fileadmin/user\\_upload/Fallbericht\\_20190911\\_en.pdf](https://www.bwb.gv.at/fileadmin/user_upload/Fallbericht_20190911_en.pdf) and press release available at [https://www.bwb.gv.at/en/news/detail/news/bwb\\_informs\\_amazon\\_modifies\\_its\\_terms\\_and\\_conditions-1/](https://www.bwb.gv.at/en/news/detail/news/bwb_informs_amazon_modifies_its_terms_and_conditions-1/) (both accessed 20.7.19).

<sup>1189</sup> In particular, the BKT objected the violation of provisions and case-law on qualitative exploitative abuse (Section 19(1)(2), nn. 2 and 3 GWB) and the so-called “Anzapfverbot”, i.e. the prohibition to demand unjustified benefits from suppliers (Section 19(2) n. 5 GWB). For some of the accusations a potential violation of the regulation on exclusionary abuse (Section 19(2) n. 1 GWB) was taken into consideration as well. The *VBL- Gegenwert I* and *Pechstein* cases have been explicitly mentioned in the English case summary as relevant case-law, together with the BKT's decisional practice followed in the *Facebook* case (see [https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Missbrauchsaufsicht/2019/B2-88-18.pdf?\\_\\_blob=publicationFile&v=5,7](https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Missbrauchsaufsicht/2019/B2-88-18.pdf?__blob=publicationFile&v=5,7)).

<sup>1190</sup> According to § 5 of Austrian Federal Cartel Act, an abuse of a dominant position may consist in particular in “demanding purchasing or selling prices or other business terms which differ from those which would be very likely to arise if effective competition existed”. The BWB has carried out a market enquiry and has sent out questionnaires to the 400 largest Austrian sellers on the Amazon.de marketplace. The market survey has come to the conclusion that Amazon.de marketplace holds a dominant position as an online retail intermediary for Austrian sellers. Moreover, the concept of relative market dominance, which takes account of a company's predominant market position in relation to its customers or suppliers, is a feature of Austrian cartel law too.

<sup>1191</sup> See Gassler M., *National and International Developments: The Austro-German Proceedings against Amazon and its Online Marketplace*, in *Journal of European Competition Law & Practice*, 2019, lpz061, <https://doi.org/10.1093/jeclap/lpz061>.

standard phrases; iii) the lack of possibilities for sellers to enforce a contractual obligation on Amazon and clarify matters of dispute; iv) the disadvantage of sellers in customer reviews; v) the obligation for sellers to transfer the rights to use product information (especially images) to Amazon; vi) the obligation for sellers to bear the costs of obviously unjustified customer returns and various other rules and practices on the marketplace; vii) pressure to use further Amazon Services; viii) the unequal treatment of sellers who do not use Amazon's logistics service.

Focusing on the latter conduct, the ongoing Italian investigation concerns a leveraging strategy allegedly put in place by Amazon in breach of Art. 102 TFEU<sup>1192</sup>.

Amazon would have discriminated on its e-commerce platform in favour of third-party merchants who use Amazon's logistics services.

This happened by means of granting improved visibility of the seller's offerings, higher search rankings and better access to consumers on Amazon.com only to third-party sellers that subscribe to "Amazon Logistics" or "Fulfilment by Amazon" (FBA).

According to ICA, such privileged treatment seems to be connected to the sole subscription to Amazon's FBA programme (rather than on quality and efficiency shown by the seller).

In this light, such behaviour could amount to (hybrid) "self-preferencing"<sup>1193</sup>.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

- Commission case:

i) Art. 101 TFEU: the DSM strategy did not intervene on the framework on vertical restraints (a revision of the VBER is ongoing). Therefore, classic

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<sup>1192</sup> ICA, decision n. 27623 of 10 April 2019, initiating case A528 - *FBA AMAZON* (English press release available at <https://en.agcm.it/en/media/press-releases/2019/4/Amazon-investigation-launched-on-possible-abuse-of-a-dominant-position-in-online-marketplaces-and-logistic-services>).

<sup>1193</sup> See § 82.

rules on exchange of information and hub & spoke appears sufficient. From the press release it is hard to understand whether the investigation may concern a possible algorithmic collusion scenario with reference to the Buy Box, but, based on the evidence at disposal, this seems unlikely.

ii) Art. 102 TFEU: The P2B regulation would apply to such conducts, with the same limits above described.

- BKT-BWB cases:

i) P2B regulation addresses many of those concerns;

ii) The fake reviews problem is addressed by the Omnibus Directive and will now on fall within the scope of the UCP Directive;

iii) Parity requirement clauses (according to which material in the highest quality used by independent sellers in other sales channels had to be mandatory provided to Amazon, with the indirect restriction on sellers to publish more extensive or higher quality product material on their own shop websites) fall within the scope of EU framework on vertical restraints (currently under revision, but see NCAs Booking saga).

- ICA case:

The P2B regulation would apply to such conducts, with the same limits above described.

### § 3 The Apple saga: Spotify's complaint against Apple and the ACM's investigation

According to specialized press, Spotify has filed an official EU complaint against Apple before the Commission. Rumours have been confirmed by Margarethe Vestager<sup>1194</sup>.

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<sup>1194</sup> Yun Chee F., *EU wants to hear from Apple over Spotify complaint*, June 3<sup>rd</sup>, 2019, available at <https://www.reuters.com/article/us-eu-apple-antitrust/eu-wants-to-hear-from-apple-over-spotify-complaint-idUSKCN1T41TZ> (accessed 20.11.19); *EU: Commission wants to hear from Apple over Spotify complaint*, in *CPI*, June 3<sup>rd</sup>, 2019, available at

According to Spotify, Apple’s policy of charging digital content providers a 30 % fee for using its in-app purchase system, which allows it to charge digital content for subscriptions sold in its App Store (“Apple Store”), would amount to an abuse of dominant position.

Indeed, such a fee would discriminatory apply to apps selling digital content (and among them, of course, Spotify), but not to other apps, such as Uber and Deliveroo, not competing with Apple’s apps (it must be reminded that Apple is operational in the same downstream market of Spotify with Apple Music<sup>1195</sup>). Following its market study into mobile app stores<sup>1196</sup>, the Autoriteit Consument & Markt (ACM) launched an investigation for abuse of dominant position against Apple.

Namely, it is investigating, among other aspects, whether Apple gave preferential treatment to its own apps<sup>1197</sup>.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

In theory, the P2B Regulation may apply to such conducts, with the same limits above described.

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<https://www.competitionpolicyinternational.com/eu-commission-wants-to-hear-from-apple-over-spotify-complaint/> (accessed 20.11.19).

<sup>1195</sup> Apple Music was launched in 2015, a year after Apple’s acquisition of Beats Electronics costed 3 billion \$. Apple Music’s value for Apple may also be followed from its acquisition of Shazam (see M.8788 - *Apple/Shazam* cit.).

<sup>1196</sup> ACM, *Report on Market Study into Mobile App Stores*, April 11<sup>th</sup>, 2019, available at <https://www.acm.nl/sites/default/files/documents/2019-04/marktstudies-appstores.pdf> (accessed 7.7.19).

<sup>1197</sup> Press release available at <https://www.acm.nl/en/publications/acm-launches-investigation-abuse-dominance-apple-its-app-store> (accessed 7.7.19). In the U.S. a group of consumers sued Apple arguing that its “walled garden” for apps is anti-competitive. The Court ruled that customers could sue Apple over the 30 per cent commission it charges developers who want to sell apps through its App Store. The Supreme Court paved the way for a landmark antitrust lawsuit filed by the iPhone owners (U.S. Supreme Court, *Apple Inc. v. Pepper et al.*, No. 17–204, May 13<sup>th</sup>, 2019). Therefore, plaintiffs can proceed with their case in District Court. The Federal Antimonopoly Service of the Russian Federation (FAS) is carrying a similar investigation following a complaint by an antivirus app (press release available at <http://en.fas.gov.ru/press-center/news/detail.html?id=54248>).

## **Section III - The DSM strategy in action: an overview on the enforcement in Non-Personal Data intensive markets**

### **Setting the scene**

As shown in Part I, The BDA revolution affected also traditional industries, such as manufacturing and agriculture.

Supply chains are experiencing a growing digitalization, and this trend has an impact on the economic process.

Here, the dynamics are different and deserve a separate assessment.

Personal data leave the scene to production data, which play a predominant role.

Technological convergence calls for the creation of a minimum shared cross-sectorial vocabulary. At the same time, each sector maintains its peculiar features.

Hence, competition policy should design the general framework, leaving room for sector-specific intervention, where necessary to address peculiar market defects.

In recent years the Commission had to deal with a growing number of Non-Personal Data intensive mergers.

A quick overview on them will help to understand the different approach shown in this area of intervention.

### **§ 3.1 The Thomson/Reuters merger**

On 19 February 2008, after an in-depth investigation, the Commission cleared the Thomson/Reuters merger transaction subject to commitments<sup>1198</sup>.

The case concerned the acquisition by Thomson of sole control over Reuters. Thomson and Reuters are both global providers of financial information,

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<sup>1198</sup> Commission decision of 19 February 2008 in case No COMP/M.4726 - *Thomson Corporation/Reuters Group*.



integrated with software tools and applications, to financial professionals (banks, investment funds, wealth managers, corporations, etc.).

The relevant markets were:

A) in the area of sales & trading, the (at least EEA-wide) markets for: i) real-time market data sold through desktop products/workstations; ii) real-time datafeeds (direct and consolidated datafeeds); iii) market data platforms; iv) transaction platforms for fixed-income securities; v) news;

B) in the area of research & asset management, the (at least EEA-wide) markets for:

vi) broker research reports; vii) earning estimates; viii) fundamentals; ix) time series of economic data; x) ownership data; xi) deals data; xii) other content sets (profiles of managers, public filings, other time series).

The Commission found that the merger raised competition concerns in the following areas of research and asset management: a) aftermarket broker research reports; b) earning estimates; c) fundamentals; d) time series of economic data.

Significant horizontal effects have been foreseen as a result of the merger. Vertical effects on the downstream market (for desktop solutions) were expected to aggravate the competitive assessment.

With specific reference to time series of economic data (d), the Commission noticed that barriers to entry were considerable: compiling a content set from raw data requires a number of years of effort along with significant resources and substantial investment in personnel and infrastructure in order to collect raw data of sufficient scope (data recording stage<sup>1199</sup> of the BDA value chain) and to normalize them into meaningful compiled data (data cleaning or data curation stage<sup>1200</sup> of the BDA value chain). Furthermore, a reputation for high-quality data delivery is vital for any vendor wishing to gain a sufficient footprint in the market (again, data cleaning or data curation).

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<sup>1199</sup> Part I, § 4.1.

<sup>1200</sup> Part I, § 4.2.

In the light of the concerns raised by the Commission, the notifying parties submitted a robust set of commitments, composed of:

- i) selling a copy of the databases for each of the four content areas where competition concerns had been identified;
  - ii) allowing the purchaser of the fundamentals and estimates databases to recruit key personnel and other personnel currently operating the databases on a daily basis (in particular for carrying out the standardisation/normalisation needed for these databases);
  - iii) assigning customer contracts for direct datafeeds from the Thomson Fundamentals and Reuters Estimates databases to the purchaser(s) of such databases;
  - iv) making reasonable best efforts to assist the purchaser(s) in obtaining the necessary content owner (brokers') consents (particularly relevant for aftermarket research and earning estimates);
  - v) providing transitional technical support services for a certain period of time.
- The Thomson/Reuters case is a bright demonstration of the competitive dynamics in Non-Personal Data intensive markets: (both raw and refined) data can act as key productive inputs, insomuch as know-how and hiring of highly qualified employees.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

The FF Regulation would act as *ex ante* regulation seeking to prevent market defects such as the ones which led the parties to submit commitments. However, as it simply encourages best practices, it would not be conclusive.

The planned enabling legislative framework and the annexed Common European Data Space on Finance<sup>1201</sup>, potentially fostered by a Data Act, would have provided guidance and sectoral *ex ante* rules to handle the involved financial data.

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<sup>1201</sup> Communication from the Commission “A European strategy for data cit., Appendix (above Part III, § 6.2).

In the presence of such a regulatory environment the notifying parties may have been exempted from the submission of such a robust set of structural and behavioural commitments

### § 3.2 The TomTom/Tele Atlas and Nokia/Navteq merger

On May and July 2008 the Commission dealt with two vertical mergers where the manufacturers of Portable Navigation Devices (PNDs)<sup>1202</sup> and of mobile handsets<sup>1203</sup> decided to embed digital maps in the devices manufactured in order to provide their customers with navigation solutions.

In both cases the upstream market has been defined as the (worldwide) market for navigable digital map databases.

A digital map is a compilation of digital data and typically includes (i) geographic information containing the position and shape of each feature on a map, (ii) attributes containing additional information associated with features on the map (e.g. street names, addresses, driving directions, turn restrictions and speed limits) and (iii) display information<sup>1204</sup>. Maps are said to be navigable when they include sufficient functionalities to provide navigation services, such as real-time turn-by-turn navigation.

The Commission found that the merged entities had no incentive to foreclose their downstream competitors by increasing prices or degrading quality/delaying access for some competing PND manufacturers.

To the extent of this analysis, it is important to underline that the competitive assessment (also) relied on the appraisal of barriers to switching<sup>1205</sup> (for customers) and to entry (for competitors)<sup>1206</sup>.

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<sup>1202</sup> Commission decisions of 14 May 2008 in case No COMP/M.4854 - *TomTom/Tele Atlas*.

<sup>1203</sup> Commission decisions of 2 July 2008 in case No COMP/M.4942 - *Nokia/Navteq*.

<sup>1204</sup> In addition to the core database, several layers of add-on information are provided by the suppliers of digital map databases.

<sup>1205</sup> Barriers to switching were found to be not substantial: *Tom Tom/Tele Atlas*, §§ 99-106; *Nokia/Navteq* §§ 179-186.

Moreover, the investigation showed that in the context of navigable digital maps confidentiality concerns could be considered as similar to “product degradation” in that the perceived value of the map for downstream manufacturers would have been lower if they feared that their confidential information could be revealed to the merged entity<sup>1207</sup>.

Similarly, although the merged entities could have an incentive to delay access to updated map databases to the detriment of their competitors in the downstream markets<sup>1208</sup>, the Commission concluded that the merged entities would lack incentives to foreclose their competitors in such a way<sup>1209</sup>.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

The planned enabling legislative framework and the annexed Common European Data Space on Mobility<sup>1210</sup>, potentially fostered by a Data Act, may have provided additional guidance and sectoral ex ante rules to handle the involved data.

In the presence of such a regulatory environment the notifying parties may have enjoyed an even lighter competitive assessment

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<sup>1206</sup> While marginal entry was not excluded, the Commission concluded that entry into the upstream markets would have been, at least in a EEA-wide coverage, neither timely, nor sufficient with regards to its scope and magnitude to deter or defeat any potential anti-competitive effects of the notified mergers: *Tom Tom/Tele Atlas*, § 161; *Nokia/Navteq*, § 232.

<sup>1207</sup> *Tom Tom/Tele Atlas*, § 274, but similarly also *Nokia/Navteq*, § 389. In the specific cases, post-merger the notifying parties had no incentives to engage this kind of quality degradation, as they would have otherwise faced switching of their customers from their navigation system to a competing one.

<sup>1208</sup> This was the case of the first merger (*Tom Tom/Tele Atlas*, § 212), whereas the ability of the merged entity to delay access in such a way has been considered unclear in the second case (*Nokia/Navteq*, § 328).

<sup>1209</sup> *Tom Tom/Tele Atlas*, § 212.

<sup>1210</sup> Communication from the Commission “A European strategy for data cit., Appendix (above Part III, § 6.2).

### § 3.3 The Bayer/Monsanto merger

On 21 March 2018, the Commission approved, subject to conditions, the acquisition of Monsanto by Bayer<sup>1211</sup>.

Bayer is a leading player in crop protection, particularly in Europe. Monsanto was the leading seed supplier worldwide, with its main markets in the Americas. The acquisition of Monsanto by Bayer created the biggest integrated agrochemical, trait and seed player worldwide.

The seeds and pesticides industries are characterised by high concentration levels, with few global integrated players active in R&D remaining on the market. Moreover, barriers to entry and expansion are high and such few players are to an appreciable extent linked by R&D cooperation agreements.

The competitive assessment mainly dealt on the effects of the merger on product and innovation competition in: (i) seeds, (ii) traits, (iii) nonselective herbicides, (iv) other pesticides, and (v) digital agriculture (or precise agriculture – PA).

Within PA, digitally-enabled prescriptions refer to recommendations or advice on the selection and application of agronomic inputs (e.g. fungicides). This advice is provided at a geographically increasingly granular level (e.g. field, field-zone or narrower) for a farmer, and it is generated by an analytic agronomic engine based on large sets of public and proprietary data.

Hence, PA is a Non-Personal Data intensive industry.

At the time Monsanto offered digitally-enabled prescriptions of seeds (mainly in the U.S., yet operating also in the EEA), whereas Bayer already was a leading digital agriculture player in the EEA.

The Commission concluded that the transaction would have likely led to the elimination of important potential competition in the relevant market. Innovation would have been hampered too.

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<sup>1211</sup> Commission decision of 21 March 2018 in Case M.8084 – *Bayer/Monsanto*.

In this light, the notifying parties, after having explored a (behavioural) commitment based on licensing of Bayer’s digital farming assets, committed to (structurally) divest them (to the benefit of BASF).

The Bayer/Monsanto merger demonstrates that, in the context of Non-Personal Data intensive markets, digital assets (including datasets, sensors and know-how), depending on the sector involved, can represent a scarce, rivalrous and non-ubiquitous resource and a non-replicable productive input.

**Hypothetical evaluation of the case in the light of the supervened DSM**

**Strategy:**

The FF Regulation would act as *ex ante* regulation finalized to prevent market defects such as the ones that led the notifying parties to submit commitments. However, as it simply encourages best practices, it would not be conclusive.

The FF Regulation would act as *ex ante* regulation seeking to prevent market defects such as the ones which led the parties to submit commitments. However, as it simply encourages best practices, it would not be conclusive.

The planned enabling legislative framework and the annexed Common European Data Space on Agriculture<sup>1212</sup>, potentially fostered by a Data Act, would have provided guidance and sectoral *ex ante* rules to handle the involved agricultural data, especially in the light of a possible “*neutral platform for sharing and pooling agricultural data, including both private and public data*”<sup>1213</sup>.

In the presence of such a regulatory environment the notifying parties may have been exempted from the submission of a structural commitment to

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<sup>1212</sup> Communication from the Commission “A European strategy for data cit., Appendix (above Part III, § 6.2).

<sup>1213</sup> Communication from the Commission “A European strategy for data cit., Appendix, 31-32, where it is further observed that “*this could support the emergence of an innovative data-driven ecosystem based on fair contractual relations as well as strengthen the capacities for monitoring and implementing common policies and reducing administrative burden for government and beneficiaries*”.

divest Bayer's digital farming assets

## **Part V - Proposals for a sounder DSM strategy: adjusting the aims**

### **§ Introduction**

The conclusive part of this research will test the consistency and the effectiveness of the ongoing DSM strategy.

This will take place by trying to apply the legislative acts implemented as part of the strategy<sup>1214</sup> to hypothetical scenarios equivalent to the ones recently addressed by European enforcers<sup>1215</sup>.

In line with the preceding analysis on the enforcement (and in line with the above introduced methodological caveat<sup>1216</sup>), the research question will be separately posed for Personal Data intensive Markets (e.g. social networks), Markets prone to Gatekeeping (e.g. e-commerce marketplaces) and Non-Personal Data Intensive Markets (e.g. manufacturing and agriculture).

Moreover, the assessment will be conducted taking also into account the action plan tabled in February 2020<sup>1217</sup> by the newly established Commission and the proposals advanced in the reports recently issued on digital platforms<sup>1218</sup>.

Where there is room to do so, targeted proposals for improvement will be finally identified.

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<sup>1214</sup> Part III.

<sup>1215</sup> Part IV.

<sup>1216</sup> Part IV, Introduction on the method.

<sup>1217</sup> Communications from the Commission “*A European strategy for data*” cit.; “*A European strategy for data*” cit.; “*White Paper On Artificial Intelligence*” cit.

<sup>1218</sup> Report for the European Commission; UK Digital Competition Expert Panel Report; Stigler Report; UK CMA Interim Adv Report; German 4.0 Report; IT Joint Sector Enquiry; Australian Adv Report; Benelux Joint Memorandum; French contribution.

## **Section I - Fostering the DSM strategy in Personal Data intensive markets**

### **§ 1 Questioning the three assumptions that the DG Competition seemed to rely on in its early enforcement**

It seems possible to question, at least in part, all the three assumptions that the DG Comp seemed to rely on in the early enforcement of the DSM strategy in Personal Data intensive markets.

#### **§ 1.1. Questioning the first assumption (rigorous market definition based on product and service functionalities on the consumers' side)**

In the Facebook/WhatsApp merger the Commission faced the impossibility of applying a SSNIP test to a zero-price market and the difficulty of running a SSNDQ test<sup>1219</sup>. Therefore, it defined the relevant markets by carefully assessing product and service functionalities on the consumers' side.

Since the overlap between the two services (consumer communications apps and social networking services) was only partial, the Commission left open product market definition.

In any case, the market for consumer communications apps was considered contestable, since, for a number of reasons, direct network effects acted here as a not insurmountable barrier to entry.

This approach has been criticized.

Stressing the economies of scope shown by BDA, scholars proposed to assign more relevance to supply-side substitutability. Indeed, by exploiting their data sets and digital architecture, Big Techs may be able to enter a certain market (that is: to supply a certain service or product) in short time and with small efforts. In this vein, it is argued that the DG Comp approach to the

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<sup>1219</sup> See below Section I, § 2.3.2.1.



Facebook/WhatsApp merger would have underestimated Facebook's economies of scope and, in particular, the ability to integrate WhatsApp in its business model<sup>1220</sup>.

The idea that the assessment of supply-side substitutability is a paramount step in the evaluation of BDA mergers is fully sharable.

Yet, the supply-side substitutability criterion, although undoubtedly useful, may not suffice to get the full picture, being still "product/service-oriented".

In other words, it simply requires assessing whether, in the short-medium run, the merging entity would be capable to supply the very same product or service supplied by the acquired business also in the absence of the transaction; therefore, it doesn't really change the perspective, because the analysis will always start with rigorous market definition based on product and service functionalities on the consumers' side, simply adding a further research question (absent the transaction, would the merging entity be able to supply the product or service supplied by the target?).

It follows that the proposal to assign more importance to supply-side substitutability in the context of BDA mergers is not, as such, conclusive.

Enlarging the perspective, the Report for the European Commission has proposed to care less about market definition and to pay more attention to "interdependence" of the sides of the market matched by the platform; the idea being that, in Personal Data intensive markets, firms compete to bring consumers into comprehensive ecosystems ("competition among ecosystems")<sup>1221</sup>.

Indeed, the main objective of the platforms is becoming the "access point" of consumers' digital life<sup>1222</sup>.

As well stressed also in the Stigler Report, this "access point position" enable the platform to become the market ("competition for the market"), because

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<sup>1220</sup> E.g. Özcan M. – Clemens G., *The Relevance of Supply-Side Substitutability for "Big Data"*, in *Concurrences*, Vol. 4 (2018).

<sup>1221</sup> Part I, § 7.

<sup>1222</sup> Report for the European Commission, 46-49.

once the critical mass of users has been achieved (tipping), the platform, thanks to the economies of scale and scope facilitated by the personal data collected and, more important, by the “human assets” acquired, will extend to adjacent markets, at times also for the sole purpose of keeping the user “on-platform” (that is: within the digital environment) and, in so doing, to avoid disintermediation<sup>1223</sup>.

If this is the case, then subtle distinctions between product or service functionalities may not be diriment, even if one considers supply-side substitutability.

**First counter-assumption:** in the context of Personal Data intensive markets, rigorous market definition based on product or service functionalities on the consumers’ side might fail to capture the full picture, even if supported by a careful assessment of supply-side substitutability.

## § 1.2 Questioning the second assumption (personal data as a “commodity”)

In the Facebook/WhatsApp merger the Commission found that, even if the datasets held by the merged entities were combined<sup>1224</sup>, the “commodity” personal data would still be abundantly available to competitors, so that no serious theory of harm could be envisaged.

This paragraph will first try to reverse the perspective, demonstrating that personal data are not a commodity.

This preliminary conclusion suggests great caution in the assessment of the competitive dynamics in Personal Data intensive markets, because it implies

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<sup>1223</sup> Stigler Report, 60-64.

<sup>1224</sup> During the investigation, Facebook declared that there were technical obstacles to said combination.

that, from a legal standpoint, restorative *ex post* remedies could be very hardly imposed with reference to personal data.

Secondly, the paragraph will try to highlight that, regardless to the legal implications above mentioned, any *ex post* restorative remedy centred on access to personal data would result, in practice, unable to re-balance market power.

### § 1.2.1 Reversing the perspective: Personal Data as a non-commodity

There are serious reasons to doubt that personal data can be qualified as a “commodity”.

Indeed, the proprietary conception of personal data can’t be reconciled with the free and unconditioned revocability of the consent by the data subject<sup>1225</sup>.

Some examples will support this finding.

Provided that “*digital content or digital services are often supplied also where the consumer does not pay a price but provides personal data to the trader*”, the Digital Content and Digital Service Directive makes it clear that “*the protection of personal data is a fundamental right and that therefore personal data cannot be considered as a commodity*”<sup>1226</sup>.

The same Directive provides a bright example of why personal data cannot be considered as a commodity.

As a rule, “*where the consumer terminates the contract, the trader should reimburse the price paid by the consumer[, but,] upon termination, the consumer should only be entitled to the part of the price paid that corresponds and is in proportion to the length of time during which the digital content or digital service was not in conformity*”<sup>1227</sup>.

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<sup>1225</sup> This is the view expressed by the Italian Data Protection Authority in the IT Joint Sector Inquiry, 59.

<sup>1226</sup> Recital 24.

<sup>1227</sup> Recital 69.

However, “where personal data are provided by the consumer to the trader, the trader should comply with the obligations under [the GDPR]”<sup>1228</sup>.

It follows that, in case of termination of the contract, the data subject “shall have the right to obtain from the controller the erasure of personal data concerning him or her without undue delay”, since – it can be reasonably argued – “the personal data are no longer necessary in relation to the purposes for which they were collected or otherwise processed”<sup>1229</sup>.

This approach mirrors the one followed by the New Deal Omnibus Directive.

Indeed, the latter provides that the Consumer Rights Directive should also cover contracts under which the digital content or service is supplied by the trader versus the provision of consumer’s personal data<sup>1230</sup>.

Again, the “barter” is without prejudice to the application of the GDPR<sup>1231</sup>, with the conclusion that the consumer will be entitled to ask for the erasure of his personal data in case of withdrawal<sup>1232</sup>.

Both the Digital Content and Digital Service Directive and the Omnibus Directive provide a departure from general contract law principles, which would qualify such a request for erasure as an *unjust enrichment* to the benefit of the data subject.

Furthermore, the main character of a commodity is in the fact that, once it has been transferred, in principle it can be re-traded and exchanged on the market without limitations<sup>1233</sup>.

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<sup>1228</sup> Recital 69 and Art. 16, § 2. Moreover, “in the event of conflict between the provisions of [Digital Content and Digital Service Directive] and [GDPR and e-Privacy Directive], the latter prevails”.

<sup>1229</sup> Art. 17, § 1, let. a) GDPR.

<sup>1230</sup> Art. 4, § 2, let. b) and recital 33.

<sup>1231</sup> Art. 4, § 10 Omnibus Directive introduced § 4 in Art. 13 Consumer Rights Directive (which regulates obligations of the trader in the event of withdrawal). It reads as follow: “In respect of personal data of the consumer, the trader shall comply with the obligations applicable under Regulation (EU) 2016/679”.

<sup>1232</sup> The preceding applies in so far as the object of the (distance or off-premises) contract is digital content supplied on a tangible medium or a digital service performed, upon consumer’s request, during the period of withdrawal (Artt. 7, § 3 or 8, § 8 Consumer Rights Directive). In contrast, when the consumers’ consideration is monetary, Art. 14, § 3 of Consumer Rights Directive requires the consumer to “pay to the trader an amount which is in proportion to what has been provided until the time the consumer has informed the trader of the exercise of the right of withdrawal”.

In contrast, the data controller is entitled to transfer personal data to third parties only upon data subject's consent<sup>1234</sup>, even when such data constitute the “price” paid by the consumer to enter the contract.

In the light of the above, excepted where the data subjects voluntarily decide to exercise the right to data portability, data protection rules act as a legal barrier to data sharing<sup>1235</sup>.

To overcome such obstacle to the free flow of personal data, scholars have proposed, in the absence of the data subject's consent, to identify Art. 6, § 1, let. c) GDPR as the possible basis of the “lawful” processing<sup>1236</sup>. It is argued that the need to comply with a commitment decision, with an interim measure or with a prohibition decision adopted by a competition authority, whose final effect is to oblige the dominant undertaking to grant access (either by means of imposing remedies or as an indirect consequence of banning a refusal to deal), might be considered as a “*legal obligation*” to which the data controller has to comply with<sup>1237</sup>.

Alternatively, the Expert Group appointed by the Commission have proposed to consider Art. 6, § 1, let. f) GDPR<sup>1238</sup> as the possible basis for a “lawful” processing, arguing that – in the presence of competitive concerns – data sharing with (or data transfers to) competitors might be considered “*necessary for the purposes of the legitimate interests pursued by the controller or by a*

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<sup>1233</sup> Commodity is defined as “a reasonably interchangeable good or material, bought and sold freely as an article of commerce” (see <http://www.businessdictionary.com/definition/commodity.html>).

<sup>1234</sup> Art. 6, § 1, let. a) GDPR.

<sup>1235</sup> See Colangelo G. – Maggiolino M., *Data access and AI: Antitrust vs. Regulation*, available at [https://ec.europa.eu/competition/information/digitisation\\_2018/contributions/giuseppe\\_colangelo\\_mariateresa\\_maggiolino.pdf](https://ec.europa.eu/competition/information/digitisation_2018/contributions/giuseppe_colangelo_mariateresa_maggiolino.pdf) (accessed 10.7.19), 5-6 and *Big data as misleading facilities*, in *European Competition Journal*, Vol. 13 (2017), Issue 2-3, 280.

<sup>1236</sup> “*Processing is necessary for compliance with a legal obligation to which the controller is subject*”.

<sup>1237</sup> Graef I., *EU Competition Law, Data Protection and Online Platforms* cit., Chapter 9, § 5, 323 (for clarity's sake: she does not explicitly endorse this reasoning; she simply states that – subject to certain procedural conditions – this might be feasible); Mannoni S. – Stazi G., *Is Competition A Click Away? Sfida al Monopolio nell'Era Digitale*, Editoriale Scientifica, Napoli (IT), 2018, 81.

<sup>1238</sup> Report for the European Commission, 79-80.

*third party*”<sup>1239</sup>. In order to make this assessment, one should “*give particular consideration to the nature of the personal data, the purpose and duration of the proposed processing operation or operations*”<sup>1240</sup>.

Both the proposals, although interesting in theory, seem extremely difficult to be successfully put in practice.

Let’s focus on the first one, which sees Art. 6, § 1, let. c) GDPR as the possible basis of a lawful “consentless” processing in the name of competition.

In the *Engie* case the Autorité de la concurrence has imposed interim measures ordering to the energy sector incumbent that had allegedly abused its dominant position to give competitors access to certain customer data (including the customers’ names, addresses, telephone numbers and consumption profiles)<sup>1241</sup>.

Nevertheless, since the concerned data were protected under the *Loi Informatique et Libertés*, the dominant company, in line with the opinion issued by the Commission Nationale de l’Informatique et des Libertés (CNIL), has been required to inform its customers that competitors would be able to request access to their personal data and that they had the possibility to refuse such access (opt-out). Moreover, this case is not very probative to this extent of this research, because here the competition authority managed to handle the remedies stage with relative small effort. Indeed, the case concerned an energy provider, not a Big Tech operational in Personal Data Intensive markets.

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<sup>1239</sup> “*Except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child*”.

<sup>1240</sup> Recital 113 and Art. 49, § 1, last sentence GDPR.

<sup>1241</sup> Autorité de la concurrence, decision n° 14-MC-02 September 9<sup>th</sup>, 2014, *relative à une demande de mesures conservatoires présentée par la société Direct Energie dans les secteurs du gaz et de l’électricité*, 52-53. This decision has been substantially upheld by the Appeal Court of Paris (Pôle 5 – Chambre 5-7, October 31<sup>st</sup>, 2014, n. 157). It must be remarked that in this case the data at stake were derived by a special right granted to the incumbent and were by definition non-contestable: the objection was the undue exploitation of the database of customers (exclusively) supplied by the incumbent on regulated tariff to offer them gas and electricity market-based contracts in the special context of a market opening up to competition (final decision: n° 17-D-20 September 7<sup>th</sup>, 2017, *relative à des pratiques mises en oeuvre par la société ENGIE dans le secteur de l’énergie*). Definitely, although interesting for the interim measures imposed, this case has nothing to do with BDA.

Therefore, “consentless” data transfer did not take place in the French case. Considering Art. 6, § 1, let. f) GDPR as the legal basis of the processing appears problematic too, at least for two reasons.

First, one might wonder if competition can represent, *a priori*, a *passé-partout* always capable, as such, to justify a limitation of data protection, acting as a “*legitimate interests pursued by the controller or by a third party*”.

Beware, the question here posed is not whether, in principle, balancing data protection and competition is possible or not.

In theory, the answer to the latter question should be affirmative. Indeed, although somebody tried to argue the predominance of civil and political rights on social and economic rights<sup>1242</sup>, a formalistic approach should be favoured: since both the rights to conduct a business and the right to data protection are recognized within the same Charter of Fundamental Rights (respectively, under Artt. 16 and 8) and without provisions regulating a possible clash, no hierarchical supremacy on the latter should be assigned to the former<sup>1243</sup>.

This means that, in theory, such rights might well be balanced, either by the law or by the case-law.

As to the legislative balancing, the GDPR does not deal explicitly with the relationship between competition and privacy.

Yet, one might argue that within the GDPR the public interest for competition has been balanced with data protection from the outset.

Indeed, in the GDPR competition is indirectly promoted through the right to data portability under Art. 20<sup>1244</sup>, and such indirect promotion is here subject to

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<sup>1242</sup> Lord Goldsmith Q.C., *A Charter of Rights* cit.

<sup>1243</sup> On the topic, see Bifulco R. – Cartabia M. – Celotto A. (eds.), *L'Europa dei diritti. Commento alla Carta dei diritti fondamentali dell'Unione europea*, il Mulino, Bologna (IT), 2001. Notably, in the Italian Constitution the right to healthcare is the only one expressly described as “fundamental” (Art. 32). This notwithstanding, according to the Italian Constitutional Court all rights (included the one to healthcare) should be read in conjunction, otherwise one might experience the maximum dilatation of a (“despot”) right to the detriment to the others (Constitutional Court, n. 85/2013).

<sup>1244</sup> Recitals 5-7.

the fact that the data subject does not lose control over his personal data, since data portability is always upon his request.

In this light, an obligation under 6, § 1, let. f) GDPR to transfer or to grant access to personal data without the consent of the data subject seems unlikely to be imposed, even in the name of competition, by the Commission and might be brought to Court if imposed by a national competition authority (with further legal uncertainty, as in certain countries, such as Germany and Italy, decisions affecting privacy and competition should be brought before different Courts).

As to the case-law, in a number of judgements the CJEU accepted data protection to be balanced with rights others than Art. 16 of the Charter (e.g. copyright, which can be seen as a both patrimonial and personal right, as it protects individuals' creations, therefore encouraging freedom of expression<sup>1245</sup>) or with other legitimate interests (e.g. transparency to grant widespread public oversight on the use of public funds<sup>1246</sup>). In all those cases, limitation of data protection has been recognized to be possible, in so far as that limitation is reasonable, proportionated and non-discriminatory.

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<sup>1245</sup> CJEU, Grand Chamber, 29 January 2008, C-275/06, *Productores de Música de España (Promusicae) v. Telefónica de España SAU*, § 70; Eighth Chamber, order of 19 February 2009, C-557/07, *LSG-Gesellschaft zur Wahrnehmung von Leistungsschutzrechten GmbH v. Tele2 Telecommunication GmbH*, § 41; Third Chamber, 16 February 2012, C-360/10, *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v. Netlog NV*, §§ 42 and 47-48; Third Chamber, 19 April 2012, C-461/10, *Bonnier Audio AB et al. v. Perfect Communication Sweden AB*, § 56.

<sup>1246</sup> With reference to directive 95/46/EC, EU case law admitted the limitation of data protection to the benefit of transparency, subject to a proportionality test (ECJ, 20 May 2003, in joined Cases C-465/00, C-138/01 and C-139/0120, *Österreichischer Rundfunk and others*, § 86), to be ascertained by the national courts (*ib.*, § 88). For example, the Italian Constitutional Court used a proportionality test to evaluate an Italian transparency law that imposed a duty to publish fiscal data concerning income, assets, and involvement and shares in companies concerning all managers working for the public administrations, irrespective of their position and extending to their spouses and relatives up to the second degree. The Court found that, albeit its legitimate purpose (to grant widespread public oversight on the use of public funds and carrying out of public functions, as an anti-corruption measure) the provision failed the test of proportionality in the part in which it placed the duty to publish the full range of data (which formerly applied only to political positions accountable to voters) on all public managers without distinction. The Court found that the indiscriminate application of duties to publish such an extensive quantity of data, which could, depending on the position in question, be irrelevant for the legitimate purpose at stake, was inherently unreasonable (Constitutional Court, n. 20/2019).



The prevalence of “legitimate interests” on data protection (which might derive, at least in principle, by the need to protect the competitive process) would have to be assessed case by case, taking account of “*the nature of the personal data, the purpose and duration of the proposed processing operation or operations*”<sup>1247</sup>. As remarked by the Italian Data Protection Authority<sup>1248</sup>, the notion of “legitimate interest” under Art. 6, § 1, let. f) GDPR requires a careful balancing of the alleged legitimate interests and the (fundamental) right to data protection, as clarified also by the Art. 29 WP<sup>1249</sup>. In this context, the Italian DPA also noted that the protection of personal data should override, as a rule, economic interests<sup>1250</sup>.

Moreover, on a practical standpoint this case-by-case assessment seems very demanding if one considers BDA features: first, the firm obliged to grant access will process personal data of different kind; second, such personal data may be accessed by a multitude of firms which may process them for a multitude of different purposes.

In the light of the above, the first preliminary conclusion is that, since data protection constitute a legal barrier to data transfer and to data sharing/access<sup>1251</sup>, in personal data intensive markets any restorative *ex post* remedy centred on personal data will be unlawful or, to the best, very difficult to implement.

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<sup>1247</sup> Recital 113.

<sup>1248</sup> IT Joint Sector Inquiry, 57 and 59.

<sup>1249</sup> Art. 29 WP, Opinion 6/2014 “*on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC*”, 844/14/EN WP 217, available at <https://www.dataprotection.ro/servlet/ViewDocument?id=1086> (accessed 4.10.19).

<sup>1250</sup> CJEU, Grand Chamber, May 13, 2014, case C- 131/12, *Google Spain SL and Google Inc. v. Agencia Española de Protección de Datos (AEPD) and Mario Costeja González*, § 97: “*those rights override, as a rule, not only the economic interest of the operator of the search engine but also the interest of the general public in finding that information upon a search relating to the data subject’s name*”.

<sup>1251</sup> See also the position of the Italian Competition Authority in the IT Joint Sector Inquiry, at 90-91. According to the ICA, Articles 5 and 6 GDPR act as a limit to personal data “tradability”. This is because personal data can’t be compared to any “material good”.

### § 1.2.2 Adjusting the perspective: personal data show little value without the data subject. Therefore, *ex post* restorative remedies centred on personal data access would fall short

An even more serious impediment to effective *ex post* restorative remedies centred on personal data transfer or access should be highlighted.

Suppose that, regardless of the legal and practical hurdles above described, a competition authority manages to impose a lawful obligation to transfer or to grant access to personal data.

There is sound economic evidence that such remedy might not rebalance market power.

Behavioural economics allows Big Techs to extract emotional data from user-experience. This information is both used to increase consumer's engagement and to display the right advertising or content at the right time<sup>1252</sup>. Indeed, “framing, nudges, and defaults can direct a consumer to the choice that is most profitable for the platform. A platform can analyze a user's data in real time to determine when she is in an emotional «hot state» and then offer targeted sales”<sup>1253</sup>.

For these behavioural data to be exploited, real-time observation of consumers' behaviour is necessary.

This upgrade from information-based analytics to real time behavioural-based analytics explains why Big Techs are on a rush to expand on complements (also when this expansion appears at first sight not profitable) and to enlarge their digital environment: to keep the user “on-platform” for as long as possible and to avoid disintermediation by means of portfolio effects.

At the same time, it also makes clear that personal data show modest value without the simultaneous control of the related data subject<sup>1254</sup>.

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<sup>1252</sup> See Part I, § 7 and below, Section I, § 2.1.

<sup>1253</sup> Stigler Report, 30. The need to consider behavioural economics insights about the strength of consumers' biases towards default options and present gratification is also stressed in Report for the European Commission, 50 and UK adv Report, 119-149.

<sup>1254</sup> In principle, APIs would enable real-time access by competitors. Nonetheless, even the more sophisticated APIs would disclose a fragmented set of information to competitors and would fail to represent the “full picture”.

Big Techs have already understood this concept. Market trends show that behavioural information will soon be complemented by physical information<sup>1255</sup>, thanks to the increasing use of health-related apps installed on smart-devices and wearables<sup>1256</sup>. Indeed, “the Fourth Industrial [...] is characterised by a fusion of technologies – such as artificial intelligence, gene editing and advanced robotics – that is blurring the lines between the physical, digital and biological worlds”<sup>1257</sup>.

In conclusion, the real point of access is destined to become, more and more every day, the individual (rather than his personal data).

The next step of this evolutionary route will be Web 5.0 (“*symbiotic web*” or “*emotional web*”)<sup>1258</sup>: digital butlers such as Alexa represent a first move in that direction<sup>1259</sup>.

As it will be argued below, this finding might play a role in market definition and in the competitive assessment of conducts.

**Second counter-assumption:** In personal data intensive markets any restorative ex post remedy centred on personal data access will be unlawful or, to the best, very difficult to implement. In any case, such a remedy would not

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<sup>1255</sup> It must be clarified that physical information should be treated separately from biological and sensitive health-care data, that are subject to remarkable regulatory constraints and, consequently, seem very unlikely to be commercially exploited by Big Techs. So far, when involved in health-care projects, Big Techs have always acted as the technological partner of the e-medicine platform: for instance, see Commission (non-opposition) decision of 23 February 2016 in case M.7813 - *SANOFI/GOOGLE/DMI JV*.

<sup>1256</sup> Kuchler H., *Google runs into data fears over \$2.1bn Fitbit deal*, November 22<sup>nd</sup>, 2019, available at <https://www.ft.com/content/50e1f042-06f3-11ea-a984-fbbacad9e7dd> (accessed 22.11.19). Meaningfully, press revealed that the mystery bidder who competed with Google was Facebook: see Newman P., *SEC filing reveals Facebook was the mystery bidder against Google to acquire Fitbit, and it shows tech giants see huge growth potential for smartwatches*, November 26<sup>th</sup>, 2019, available at <https://www.businessinsider.com/facebook-bid-against-google-for-fitbit-2019-11?IR=T> (accessed 26.11.19).

<sup>1257</sup> U.K. Secretary of State for Business, Energy and Industrial Strategy, *Regulation for the Fourth Industrial Revolution. White Paper*, CP11, June 2019, available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/807792/regulation-fourth-industrial-strategy-white-paper-web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/807792/regulation-fourth-industrial-strategy-white-paper-web.pdf) (accessed 4.8.19).

<sup>1258</sup> Part I, § 2.1.

<sup>1259</sup> On the welfare effects connected to digital butlers, see Ezrachi A. – Stucke M.E., *The Welfare Effects of Digital Butlers – All That Glitters Is Not Gold*, in *Concurrences*, Vol. 4 (2017), 18 et seq.

re-balance the market, as the real point of access to valuable information is destined to become, more and more every day, the individual (rather than his personal data)

### § 1.3 Questioning the third assumption (privacy-related issues are part of the competitive assessment only in so far as undertakings compete on privacy in the relevant market)

Assuming that privacy-related issues should be part of the competitive assessment only in so far as undertakings compete on privacy in the relevant market reflects a static paradigm of competition.

By considering data protection as one of the possible qualitative parameters of competition<sup>1260</sup>, subject to demand trends, this approach appears unsuitable to deal with the challenges posed by the DDE.

First, it might hamper the rule of law and legal certainty, because it may allow a competition authority to use the concept of special responsibility under Art. 102 TFEU to provide progressive readings of the GDPR and, at the same time, it may determine a departure from competition law objectives, as the Bundeskartellamt investigation against Facebook seems to suggest (risk of false positives and over-enforcement).

Second, by shifting the attention on quality aspects, it fails to detect a series of conducts which in contrast may well be, at least under certain conditions, anticompetitive (risk of false negatives and under-enforcement).

To date, the debate has been centred on the *aut-aut* choice between two extreme approaches: the first one sees competition law as a flexible discipline

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<sup>1260</sup> Grunes A.P., *Another look at privacy*, in *George Mason law review*, Vol. 20 (2013), Issue 4, 1107 et seq.; Almunia J., Speech/12/860 of 26 November 2012, available at [https://ec.europa.eu/commission/presscorner/detail/en/SPEECH\\_12\\_860](https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_12_860) (accessed 7.10.17); Tucker D.S., *The proper role of privacy in merger review*, in *CPI Antitrust Chronicle*, Vol. 2 (2015); Vezzoso S., *The interface between competition policy and data protection*, in *Journal of European Competition Law & Practice*, Vol. 3 (2012), 225.

able to address privacy concerns associated to BDA, if necessary using the concept of “special responsibility” to go beyond what is strictly provided under the GDPR, especially if one considered aspects such as fairness and happiness as the ultimate goals of competition; in contrast, the second one wants data protection to be taken apart from competition<sup>1261</sup>, because market defects related to personal data can be better addressed through *ex ante* horizontal regulation (data protection and/or consumer protection legislation) rather than through *ex post* individual enforcement (as it typically happens with competition)<sup>1262</sup>.

Moving from the analysis of the German Facebook case, supporters of this latter argument concluded that a mere privacy violation by a dominant firm should not automatically amount to an antitrust violation. The Higher Regional Court of Düsseldorf fully shared this view in its interim decision<sup>1263</sup>.

From a methodological standpoint, this position deserves approval.

Nevertheless, it should only represent the starting point of the analysis, not its last stop.

Indeed, if one adopted a competition policy perspective and accepted the idea that in the context of DDE data protection (along with consumer protection) should be treated as pro-competitive economic regulation<sup>1264</sup>, a significant step forward would be required to put in place in a consistent way the (shareable)

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<sup>1261</sup> Burnside A.J., *No such thing as a free search. Antitrust and the pursuit of privacy goals* and Manne G.A. - Sperry R.B., *The problems and perils of bootstrapping privacy and data into an antitrust framework*, both in *CPI Antitrust Chronicle*, Vol. 2 (2015); Maggiolino M., *I Big Data e il Diritto Antitrust* cit., 161; Ohlhausen M.K. - Okuliar A.P., *Competition, consumer protection, and the right [approach] to privacy*, in *Antitrust Law Journal*, Vol. 80 (2015), 121 e ss.; Schepp N.P. - Wambach A., *On Big Data and its relevance for market power assessment*, in *Journal of European Competition Law & Practice*, Vol. 7 (2016), Issue 2, 120 et seq.

<sup>1262</sup> Colangelo G., *Privacy and antitrust: An overview of EU and national case law*, in *Concurrences*, 17 January 2019, n. 88800; Colangelo G. - Maggiolino M., *Data Accumulation and the Privacy-Antitrust Interface: Insights from the Facebook case*, in *International Data Privacy Law*, Vol. 8 (2018), 224 et seq.; *Id.*, *Data Protection in Attention Markets: Protecting Privacy Through Competition?*, in *Journal of European Competition Law and Practice*, Vol. 8 (2017), 363 et seq.

<sup>1263</sup> Part IV, § Section I, § 3.3.

<sup>1264</sup> Part III, § 8.

warning of the EDPS Buttarelli for the urgent need to pursue a comprehensive and progressive application of the three statutes<sup>1265</sup>.

To this end, understanding market dynamics in Personal Data intensive markets appears the pre-condition to submit a set of targeted proposals for improvements, by which:

- i) modernizing consumer protection and data protection law;
- ii) assigning to competition law a useful meaning, which can happen only if its provisions are used, without changing their ultimate goals, to tackle conducts which might not be prosecuted under the consumer and data protection laws<sup>1266</sup>. Otherwise, competition law will become a (not only dangerous, but even) useless duplicate of such statutes.

**Third counter-assumption:** In the context of Personal-Data intensive Markets, privacyrelated issues may well be part of the competitive assessment without departing from competition law ultimate goals and standards of evaluation

## § 2 Reconciling economic regulation and competition law in Personal Data Intensive markets

### § 2.1 Setting the scene: digital platforms and the behavioural divide

It has been already introduced<sup>1267</sup> the ability of Big Techs to inspire customer loyalty<sup>1268</sup> and to steer “audience” and “attention” from consumers leveraging

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<sup>1265</sup> EDPS Preliminary Opinion n. 9/2014 on “*Privacy and competitiveness in the age of big data: The interplay between data protection, competition law and consumer protection in the Digital Economy*”, March 26<sup>th</sup>, 2014, available at [https://edps.europa.eu/sites/edp/files/publication/14-03-26\\_competition\\_law\\_big\\_data\\_en.pdf](https://edps.europa.eu/sites/edp/files/publication/14-03-26_competition_law_big_data_en.pdf) (accessed 10.1.17).

<sup>1266</sup> These scenarios are described below at § 2.3.

<sup>1267</sup> Part I, § 7.

<sup>1268</sup> German 4.0 Report, 18.

on a wide range of sophisticated techniques, including consumers' stickiness with default settings (status quo or confirmation bias), the free-effect, addiction, ever-greater use, short-term gratification, salience or impatience<sup>1269</sup>. Additionally, and closely related to the preceding remark, Big Techs' strategy to secure the individual (rather than his personal data) within the digital ecosystem has been unveiled too<sup>1270</sup>.

This complex strategy is implemented in three stages.

First, Big Techs keep the user "on-platform" via a wide range of complementary services, for the sole purpose of avoiding disintermediation<sup>1271</sup>.

Second, once the consumer is attracted to the digital ecosystem, the digital platform tries to maximize addiction to said environment. This dynamic is in a way coessential to the idea of attention market itself. Due to its business model, any advertising supported platform will have a powerful incentive to try and keep users online for another minute in order to show more ads. These profits push platforms to design their firms around "engagement", an obsession with keeping users on-platform for as much time, and with as much attention, as possible<sup>1272</sup>.

Third, following engagement and addiction, extraction of welfare takes place. Indeed, platforms show the ability to analyse consumers' behaviours to exploit their biases by framing choices to make certain information salient, designing a status quo that is profitable, inducing addictive behaviours, generating sales

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<sup>1269</sup> Stigler Report, 37; Report for the European Commission, 47-48; UK Digital Competition Expert Panel, 109, § 3.152; UK Competition and Markets Authority, *supra* note 1, 81, § 3.84; IT Joint Sector Enquiry, 30, 93-96 and 101; Australian Adv Report, 10.

<sup>1270</sup> Above Part V, Section I, § 1.2.2.

<sup>1271</sup> Stigler Report, 30: "In addition to *de novo* entry, platforms fear disintermediation by a partner or complement. If a platform's partner is able to directly access and serve the platform's customers, it might take them off the platform entirely, reducing the platform's profit. A platform that has total control of demand due to control over framing of consumer choices, policies for complements, and technical standards can steer customers to content and complements of most benefit to it. [...]. To the extent that consumers single-home, they may not be aware of such steering, or may not have competitive alternatives to which they can turn if they are aware".

<sup>1272</sup> Stigler Report 62.

through impulsive consumption, and exploiting consumers' disinclination to search<sup>1273</sup>.

Most importantly, all these stages can take place automatically, given the use of sophisticated AI-driven strategies relying on Artificial neural network (ANN) and Social Network Analysis (SNA) analytics techniques<sup>1274</sup>.

## § 2.2 The role of economic regulation: pursuing the *effet utile* of data protection and consumer protection

Since 1970's-80's scholars understood that the choice between protection or disclosure of personal data can show trade-offs with tangible economic dimensions. Hence the emergence of the Economics of Privacy<sup>1275</sup>, whose relevance over time grown as data protection laws were implemented and updated, allowing individuals to enjoy an increasingly effective control on their personal data.

However, in order the marketplace for personal data to work well, theory of regulation requires transactions to be implemented by contractual parties acting rationally, fully informed about their mutual rights and obligations and conscious of the consequences of their choices.

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<sup>1273</sup> Stigler Report, 58 and 66.

<sup>1274</sup> Part I, § 4.3. For instance, according to Stigler Report, 64, "the creators of digital products have benefited from social science and neuroscience findings that concern, for example, how certain colors or mechanics can feed a user's dopamine, much as nicotine does".

<sup>1275</sup> See Stigler G.J., *An introduction to privacy in economics and politics*, in *The Journal of Legal Studies*, Vol. 9 (1980), Issue 4, 623 et seq. and Posner R.A., *The economics of privacy*, in *The American Economic Review*, Vol. 71 (1981), Issue 2, 405 et seq. With the advent of Information technologies, first, and of BDA, then, this branch of studies has been further developed: Hui K.-L. – Png I.P.L., *Economics of Privacy*, in Hendershott T. (ed.), *Handbooks in Information Systems: Vol. 1, Economics and Information Systems*, Elsevier, Amsterdam (NL), 2006, 471 et seq.; Brandimarte L. – Acquisti A., *The Economics of Privacy*, in *The Oxford Handbook of the Digital Economy*, Oxford-New York, 2012, 547 et seq.; Acquisti A. – Taylor C. – Wagman L., *The Economics of Privacy*, in *Journal of Economic Literature*, Vol. 52 (2016), Issue 2, 1 et seq.; Jerome J.W., *Buying and selling privacy: Big Data's different burdens and benefits*, in *Stanford Law Review Online*, Vol. 66 (2013), 47 et seq. Farrel J., *Can Privacy be Just Another Good?*, in *Journal on Telecommunications and High Technology Law*, Vol. 10 (2012), Issue 2, 251 et seq. A review of the literature on the topic has been provided by Arpetti J., *Economia della privacy: una rassegna della letteratura*, in *Rivista di diritto dei media*, Vol. 2 (2018), 1 et seq.



If we read the behavioural biases above explained<sup>1276</sup> through the lens of theory of regulation, we immediately understand that Economics of Privacy suffers serious market defects.

Typically, structural market defects finds economic regulation better placed than competition law<sup>1277</sup>. Of course, to no extent does the mere existence of a regulatory framework prevent ex post competition enforcement<sup>1278</sup>.

### **§ 2.2.1 What has so far been done as part of the DSM strategy to foster data protection and consumer protection**

It is undisputable that great efforts have been made under the DSM strategy to empower the individual as both a “data subject” and a “consumer”.

As to data protection<sup>1279</sup>, the first GDPR ex post impact assessment shows that remarkable results are on the way in terms of number of data subjects exercising their rights. Furthermore, the Regulation has become a global standard<sup>1280</sup>.

There are ongoing discussions as to whether AI privacy-related issues require a dedicated set of provisions or not<sup>1281</sup>. So far, the response given by the Commission seems to be limited to the set of (both binding and soft) risk-based provisions implemented as part of the AI Plan<sup>1282</sup> and tabled as part of the White Book on AI<sup>1283</sup>.

Instead, the Commission’s Proposal for an e-Privacy Directive<sup>1284</sup> seems out of the political agenda.

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<sup>1276</sup> Part I, § 7; Part V, Section I, §§ 1.2.2 and 2.1.

<sup>1277</sup> Part II, § 8.

<sup>1278</sup> Below, Section I, § 2.3.

<sup>1279</sup> Part III, § 3.4.1.

<sup>1280</sup> Communication from the Commission “Data protection rules as a trust-enabler in the EU and beyond – taking stock” (COM(2019) 374 final).

<sup>1281</sup> Chivot E. – Castro D. (Center for Data Innovation), *The EU Needs to Reform the GDPR to Remain Competitive in the Algorithmic Economy*, May 13<sup>th</sup>, 2019, available at <https://www.datainnovation.org/2019/05/the-eu-needs-to-reform-the-gdpr-to-remain-competitive-in-the-algorithmic-economy/> (accessed 13.6.19).

<sup>1282</sup> Part III, § 4.1.

<sup>1283</sup> Part III, § 6.3.

<sup>1284</sup> Part III, § 3.4.2.

As to consumer protection, the Digital Content and Digital Service Directive<sup>1285</sup>, the Goods Directive<sup>1286</sup> and the New Deal Omnibus Directive<sup>1287</sup> have brought several benefits to consumers and, more in general, to legal certainty, as certain of the conducts prohibited under the new framework had already been blocked on the basis of a wide interpretation of the legislation already in force<sup>1288</sup>.

In this context, specific provisions can have a particularly pronounced pro-competitive effect.

First, going beyond the right to data portability established by the GDPR, the right to “content portability” introduced under the Digital Content and Digital Service Directive<sup>1289</sup> to the benefit of the consumer willing to exercise remedies for lack of conformity of the product or service and/or to terminate the contract, might at least reduce the switching costs associated to the nature of “experience goods” of digital products or services<sup>1290</sup>.

Second, by introducing an obligation of the trader to inform the consumer before he is charged a personalized price<sup>1291</sup> - which appears by the way consistent with the rationale of Art. 22 GDPR<sup>1292</sup> - the Omnibus Directive might close the ongoing discussion on the possible relevance of personalized prices under Art. 102, let. a) TFEU. Indeed, said debate highlighted ambiguous

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<sup>1285</sup> Part III, § 2.2.1.

<sup>1286</sup> Part III, § 2.2.2.

<sup>1287</sup> Part III, § 2.4.

<sup>1288</sup> Part IV, Section I, § 3.2.

<sup>1289</sup> Art. 16, § 4 and recital 70.

<sup>1290</sup> Part I, § 7.

<sup>1291</sup> Pursuant to Art. 4, § 4, let. a), n. ii) and recital 45 of the Omnibus Directive, consumers should be clearly informed when the price presented to them is personalised on the basis of automated decision-making, so that they can take into account the potential risks in their purchasing decision. Consequently, a specific information requirement should be added to Directive 2011/83/EU to inform the consumer when the price is personalised on the basis of automated decision-making. This solution had been proposed also in Cappai M., *Social economy, gestione dei dati e tutela della concorrenza* cit., 47.

<sup>1292</sup> “The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her”.

effects of this practice on consumer welfare<sup>1293</sup>, so that, having removed any possible threat to consumer choice<sup>1294</sup>, an exploitative theory of harm may lack the deserved solidity<sup>1295</sup>.

Third, the Commission's proposal to introduce an electronic identity (eID) for consumers<sup>1296</sup> deserves approval. By complementing the eIDAS Regulation<sup>1297</sup>, which is mandatory only for the public administration, such a measure would reduce consumers' incentives to log in or to enter transactions on third parties' web pages/apps via their "digital ecosystem" account and, so on, the data advantage of the digital platforms.

Fourth, the Commission's intention to take action, in the context of the planned Digital Services Act initiative<sup>1298</sup>, to modernize (and, namely, to fit to platform economy) the e-Commerce Directive framework on ISPs responsibilities<sup>1299</sup> may sort a pro-competitive effect, if we accept the idea that the widespread dissemination of fake news, hate speech and illegal content online increase negative reactions and, so on, user addiction to the platform<sup>1300</sup>. To this respect, it seems worth highlighting that, at least with specific reference to the P2C relationships, the transformation of the indirect responsibility of the platform

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<sup>1293</sup> According to IT Joint Sector Inquiry, 106, tackling personalized prices would be a quite hard (and maybe not desirable at all) mission, due to the controversial impact of said conduct on efficiency and distributive aspects. Indeed, from a static standpoint personalized prices can increase the overall level of transactions (and, so on, social welfare); from a dynamic standpoint, personalized prices can foster innovation, pushed by the expected incomes associated to said techniques. Finally, from a distributional standpoint personalized prices can appear controversial, because on the one hand they can increase producer surplus to the detriment of consumers; on the other hand it might differently impact on different groups of consumers (namely, by favouring the less wealthy ones). Based on consumers' preferences, Maggiolino M., *Big data e prezzi personalizzati*, in Di Porto F. (ed.), *Big Data e concorrenza*, in *Concorrenza e mercato*, Vol. 23 (2016), 95 et seq. concludes that consumer protection seems the best-placed statute to address the problem of personalized prices. Conversely, Woodcock R.A., *Big Data, Price Discrimination, and Antitrust*, in *Hastings Law Journal*, 68 (2017), 1371 et seq. and Mannoni S. - Stazi G., *Is Competition A Click Away?* cit., 39-40 hold that under certain circumstances personalized prices may amount to an exploitative abuse.

<sup>1294</sup> Part II, § 6.3.1.1.

<sup>1295</sup> Part II, § 6.4.4.

<sup>1296</sup> Part III, § 6.1.

<sup>1297</sup> Regulation 910/2014/EU "on electronic identification and trust services for electronic transactions in the internal market (eIDAS)".

<sup>1298</sup> Part III, § 6.1.

<sup>1299</sup> Art. 15 Directive 2000/31/EC.

<sup>1300</sup> Above Section I, § 2.1.

under Art. 15 ECD into a joint and several (or even sole and direct) liability for the misleading, inappropriate, false or illegal content uploaded on-platform may well occur via public enforcement of the consumer protection laws (Art. 5 UCPD)<sup>1301</sup>, especially following the enactment of the Digital Content and Digital Service Directive and of the Omnibus Directive.

### **§ 2.2.2 What is still missing from the DSM strategy: the fundamental flaw of the overconfidence on the notice-and-consent model and on disclosure regulation**

The articulated set of regulatory interventions enacted as part of the DSM strategy, albeit certainly useful to increase the level of protection granted to the online user, missed the main target.

If we focus on their the far-reaching and ambitious founding principles, EU data protection and consumer protection laws appear, now more than ever, robust and detailed.

However, if we focus on the effectiveness of said provisions, something is still missing.

Again, the main lesson comes from behavioural economics.

The “privacy-paradox” combines both a rational and an irrational element.

As to the rational matrix, the question to be posed is the following: if individuals accept to receive (apparently) free services in turn of their attention/personal data because in this way they will avoid to enter a monetary transaction (which is costly and takes time), why should them accept to “lose time” by reading dozens of privacy policies per day?

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<sup>1301</sup> For instance, see the investigation launched by the Italian Competition Authority against several marketplaces found responsible for having allowed the selling on-platform of “amuchina gel” disinfectant at unreasonably high prices and along with misleading information about the claimed therapeutic qualities in preventing COVID 19 infections (investigation PS11705, press release of February 27<sup>th</sup>, 2020 available at <https://www.agcm.it/media/comunicati-stampa/2020/2/PS11705>).

More to the point, if the equation works well (and it does), then a waste of time will amount to a loss of money<sup>1302</sup>, which would in fact obliterate the benefits of having avoided a monetary transaction.

As for the irrational matrix, Kahneman's theory of human action can be here usefully recalled. The 2002 Nobel Prize divides the mechanisms for the control of human action between the automatic and involuntary ("System 1") and the effortful, deliberate, conscious, and introspective ("System 2"). System 2 is more "costly" in terms of time, effort, and energy, and its capacities for concentration and sustained thought. By contrast, System 1 consists in largely automatic processes that are instinctual or habitual. People can execute them with minimal use of cognitive effort<sup>1303</sup>. People often prefer System 1, avoiding situations that require effortful reasoning under System 2. Scholars applied the System 1 scheme to online platforms, concluding that "the extent to which System 1-guided decision making leads us not to make perfectly rational decisions that we might otherwise make [...] is an empirical question"<sup>1304</sup>.

The (apparent) disproportion of what individuals give in terms of privacy and what they get in turn can thus be viewed as the result of the combined effect of purely economic evaluations (*i.e.* reading privacy policies as a costly "waste of time") and of cognitive biases (*i.e.* under-estimation of personal data value).

A quite drastic (but unavoidable) conclusion can be drawn: in the absence of corrective tools, the notice-and-consent model that has been recently confirmed by the GDPR, will fail to deliver the aims pursued by the Regulation itself: in the daily experience, truly explicit, free and informed consents will most of times be not found across the online world.

The very same argument can be put forward for consumer protection.

Here, the level of legal protection appears *prima facie* substantial too.

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<sup>1302</sup> McDonald A.M. – Cranor L.F., *The Cost of Reading Privacy Policies*, in *I/S: A Journal of Law and Policy for the Information Society*, Vol. 4 (2008), Issue 3, 543 et seq.

<sup>1303</sup> Kahneman D., *Thinking, Fast and Slow*, Farrar Straus & Giroux, New York (U.S.), 2013 (re-edition).

<sup>1304</sup> Candeub A., *Behavioral Economics, Internet Search, and Antitrust* cit., 433-434 notes that this natural inclination of consumers toward System-1 decision-making would require a rethinking of antitrust law, which should embrace behavioural economics to a greater extent.

However, in most of the cases (this is particularly evident for the obligations to provide pre-contractual information set forth in the Consumer Rights and the Content and Digital Service Directives), the approach is of disclosure regulation<sup>1305</sup>: insofar as the consumer is provided with all the (often over-detailed) relevant information in a clear manner and on a durable medium, the trader has fulfilled its obligation. Nevertheless, in the context of Personal Data Intensive Markets – as seen – this will not suffice to grant effective empowerment to the consumer. Rather, empirical studies suggest that the latter will often tend to be victim of his own actions, even if provided with all the relevant information<sup>1306</sup>.

On these grounds, a group of scholars has started to consider abandoning (or at least correcting) the model of “disclosure regulation”<sup>1307</sup> to the benefit of a more “cognitive-based regulation”<sup>1308</sup>, which can take place by way of operational empowerment options and of nudging strategies<sup>1309</sup>.

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<sup>1305</sup> A remarkable exception can be found under Art. 22 of Directive 2011/83/EU (Additional payments), where the Consumer Rights Directive, in order to avoid consumer’s stickiness to change the status quo, expressly prohibits opt-out default settings.

<sup>1306</sup> This conclusion is fully confirmed by Ardivino O. – Arpetti J. – Delmastro M., *Regulating AI: do we need new tools?*, arXiv preprint arXiv:1904, available at <https://arxiv.org/ftp/arxiv/papers/1904/1904.12134.pdf> (accessed 6.3.20), 14: “The idea appears indeed inaccurate that transactional distortions could simply be sorted out through enhanced transparency obligations: such distortions would indeed still feature transactions, as long as strong and structural asymmetric information issues cannot be wiped out by simple transparency rules and individuals are characterized by bounded rationality. The individuals’ impulsiveness in the provision of their own data would indeed stay, due to the marked information asymmetry as to such data value and their potential primary and secondary uses, leading individuals not to weigh in costs and benefits associated to data transactions and disregard their consequences. Overall, these mechanisms lead to socially inefficient outcomes, where a disproportionate amount of individual data is used for commercial businesses”.

<sup>1307</sup> Disclosure regulation is seen as an intermediate stage between (the more heavy-handed) Command & Control regulation and (the lighter) soft-regulation/incentives (see above Part II, § 7.1.2). Due to its ubiquity, the utility of disclosure regulation is questioned since the ‘50s: see Simon H.A., *A Behavioural Model of Rational Choice*, in *The Quarterly Journal of Economics*, Vol. 69 (1955), 99-100. The debate has gained a growing relevance starting from an influential paper of 2011 and Ben-Shahar O. – Schneider C.E., in *University of Pennsylvania Law Review*, Vol. 159 (2011), 647 et seq.

<sup>1308</sup> See Di Porto F. – Rangone N., *Cognitive-Based Regulation: New Challenges for Regulators?*, in *Federalismi.it*, Vol. 20 (2013), 1 et seq. and Di Porto F., *La regolazione degli obblighi informativi. Le sfide delle scienze cognitive e dei big data*, Editoriale Scientifica, Napoli (IT), 2017.

<sup>1309</sup> Nudging means altering people’s behaviour in a predictable way without forbidding any option or significantly changing economic incentives can be used to help people make better

A growing consensus is being achieved on this point, so that a set of (sharable) proposals has been proposed.

First, the Communication from the Commission “*A European Strategy for Data*” promotes the development of innovative tools that may make more easy for the data subject to exercise the rights granted by the GDPR, such as for instance consent management tools, personal information management apps, including fully decentralised solutions building on blockchain, as well as personal data cooperatives or trusts acting as novel neutral intermediaries in the personal data economy (eID)<sup>1310</sup>. As already said<sup>1311</sup>, such proposals should be fully supported, because they allow effective control over personal data via single interfaces. In this case, the concept of “experience good”<sup>1312</sup> might be used in a positive sense, by referring it to the ability of users to become day by day more confident and skilled in the use of a set of compliance tools enabling control over personal data and information (rather than referring it to the stickiness of consumers to switch to competing digital products or services after having improved over time the user-experience). In so doing, this intervention may prevent or at least reduce the emergence of scenarios such as the ones addressed by the Bundeskartellamt in the German Facebook investigation. Moreover, such trust service providers would strengthen consumers’ control over their personal data, by making it possible to have a global overview on the processed data via a single interface. At the same time, it would favour an effective application of the data minimization principle ,

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decisions. On the topic, see Thaler R.H. – Sunstein C.R., *Nudge. Improving Decisions About Health, Wealth, and Happiness*, Yale University Press, New Heaven (U.S.), 2008; The Behavioural Insights Team, *EAST. Four simple ways to apply behavioural insights*, April 11<sup>th</sup>, 2014, available at [https://www.bi.team/wp-content/uploads/2015/07/BIT-Publication-EAST\\_FA\\_WEB.pdf](https://www.bi.team/wp-content/uploads/2015/07/BIT-Publication-EAST_FA_WEB.pdf) (accessed 4.11.19); Halpern D., *Inside the Nudge Unit: How small changes can make a big difference*, W.H. Allen, London (U.K.), 2015; Mathis K. - Tor A. (eds.), *Nudging - Possibilities, Limitations and Applications in European Law and Economics*, Springer, Cham (HR), 2016.

<sup>1310</sup> Communication from the Commission “*A European strategy for data*” cit., 10.

<sup>1311</sup> See Part III, § 6.2

<sup>1312</sup> Part I, § 7.

because it would allow only the data truly necessary to get the service or the product at stake to be processed.

In addition, the IT Joint Sector Inquiry recommendation to support the development of new categories of “privacy intermediates”, able to represent users and to negotiate privacy policies with Big Techs on their behalf, should be fully encouraged and promoted<sup>1313</sup>.

While markets work to provide these solutions, one might also try to achieve the principle of *effet utile* of the current legal framework by making more user-friendly and “customized” the model of disclosure regulation, at least in digital markets. In this vein, the Codes of conducts provided under both the GDPR<sup>1314</sup> and the UCPD<sup>1315</sup> may promote the establishment of testing centres where representatives of the firms and of hi-tech specialized consumer associations meet to emulate together the use of a given digital product or service, which is cross-examined in all its aspects at the presence of all the involved organizations. In case of agreement, the output of such a joint test may consist in a “negotiated” (and simplified) privacy policy and/or in a brief pre-contractual flyer, both to be attached to the terms & conditions. Here, using a set of widely accepted and certified graphic symbols (to be developed over time by the trade and consumers associations which are part of the Code of conduct) together with the summary of the proposal, the main contents of the privacy policy and/or of the contract at stake may be described easily and in plain language<sup>1316</sup>. This output may increase consumers’ trust and may reduce informational asymmetries, thanks to the expertise provided by consumers and trade associations, which would act here as trusted intermediaries.

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<sup>1313</sup> IT Joint Sector Inquiry recommendation 4 (p. 116).

<sup>1314</sup> See Art. 40 GDPR.

<sup>1315</sup> See Art. 10 ECPD.

<sup>1316</sup> See Cappai M., *Misurare la modernità dell’attuale diritto dei consumi*, in Bassan F. – Rabitti M. (eds.), *Consumerism 2019. Dal codice del consumo al Digital Service Act. Quella dal consumatore al cittadino digitale è vera evoluzione?*, available at [http://www.consumersforum.it/files/eventi/2019/CF\\_Consumerism-2019.pdf](http://www.consumersforum.it/files/eventi/2019/CF_Consumerism-2019.pdf) (accessed 1.1.20), 14-15.



### § 2.2.3 Reconciling data protection and consumer protection under EU administrative law principles

The provided overview on data protection<sup>1317</sup> and consumer protection<sup>1318</sup> legislative interventions implemented as part of the DSM strategy reveals close family ties between the two disciplines.

The rule of law, along with the principles of legal certainty and predictability, of good administration and of *ne bis in idem* – which shape the whole European administrative law – require the boundaries and the interactions between those disciplines (and their enforcement) to be clearly identified from the outset.

As dramatically showed by the Italian saga on the distribution of powers between the national consumer protection authority and the national regulatory authority for electronic communications<sup>1319</sup>, in the absence of a clear guiding criterion the enforcement will be likely confused and inconsistent.

In this light, it is worth identifying a rationale governing the interplay between data protection and consumer protection.

First, as a rule the informational duties and form requirements to be borne by the “Data Controller” and by the “Trader” under the data protection and consumer protection statutes should be jointly applied and enforced, regardless to the partial overlap shown. In case of an insurmountable conflict of disciplines (“clash”), the GDPR shall prevail.

Second, when said disciplines are applied in a dynamic way – that is, when enforcers put into practice the general clauses laid down under Artt. 5 (professional diligence, average consumer, etc.)<sup>1320</sup> 6 and 7 (misleading actions

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<sup>1317</sup> Part III, § 3.4.

<sup>1318</sup> Part III, §§ 2.2-2.4.

<sup>1319</sup> CJEU, Second Chamber, 13 September 2018, joined cases C-54/17 and 55/17, *Vodafone and Wind v. AGCM*. The debate was centred on the interpretation of Art. 3, § 4 Directive n. 2005/29/EC (“*In the case of conflict between the provisions of this Directive and other Community rules regulating specific aspects of unfair commercial practices, the latter shall prevail and apply to those specific aspects*”).

<sup>1320</sup> According to Garde A., *Can the UCP directive really be a vector of legal certainty?*, in van Boom W.– Garde A. – Akseli O. (eds.), *The European unfair commercial practices directive. Impact, enforcement strategies and national legal systems*, Routledge, Farnham (UK) -

or omissions) and 8 (aggressive commercial practices) of the UCPD, on the one hand, and under Artt. 4, n. 11 (freely given, specific, informed and unambiguous consent) and 5 (principles) of the GDPR, on the other hand – the risk of overlap becomes quite a certainty.

In this event, the UCPD appears better placed whenever the conduct at stake not only infringes data protection laws, but *also* materially distorts (or is likely to materially distort) the economic behaviour of the consumer<sup>1321</sup>. In this event, the data protection authority (DPA) should cooperate with the consumer protection authority (CPA) to provide guidance on the application of privacy laws to the specific circumstances, for instance rendering an opinion. In case of dual proceedings on the same conduct, procedural rules consistent with the *A & B. v. Norway* framework<sup>1322</sup> on the *ne bis in idem* principle (Art. 4, Protocol 7 ECHR) should be introduced<sup>1323</sup>.

### **§ 2.3 The role of competition: reconciling competition law, data protection and consumer protection under the European economic constitution**

Competition law should be assigned a well-defined role in the European economic constitution.

In this research it has been proposed that role being protecting the other side of the market, which, depending on the conduct at stake, will consist in either competitors or consumers. This approach has the advantage to allow changing the ultimate goals of competition law depending on the type of infringement

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Burlington (USA), 2014, 111, “the general unfairness clause and the two sub-clauses remain open to interpretation: what should be the standard of special skill and care to be expected from a trader? What constitutes an honest market practice and conduct in good faith?”.

<sup>1321</sup> Art. 5, § 2, let. b) UCPD. This reading of Art. 3, § 4 UCPD has been recently provided by the Italian Administrative Court, First Chamber, decisions nn. 260 and 261 of 10 January 2020 on the Italian investigations against Facebook (Part IV, Section I, § 3.2).

<sup>1322</sup> ECHR, Grand Chamber, 15 November 2016, *A. & B. v. Norway*, applications nos. 24130/11 and 29758/11.

<sup>1323</sup> See below, Section IV.

under examination, without having to abandon the fact-based economic approach currently applied<sup>1324</sup>.

Ideally, merger control takes place in two stages<sup>1325</sup>. The first one, aimed at investigating whether the transaction will lead to “*the creation or strengthening of a dominant position*”<sup>1326</sup>, consists in a preliminary assessment of market structure and on the competitive process<sup>1327</sup>. The second stage of the merger assessment, to be run only in those cases where the first stage highlighted possible competitive concerns, is more open to the efficiency paradigm and, not for nothing, is generally based on the so-called efficiency defence. Both the horizontal<sup>1328</sup> and non-horizontal<sup>1329</sup> guidelines made an explicit choice for the standard consumer welfare, but this conclusion has been challenged by some scholars<sup>1330</sup>. In any case, since merger control is “forward looking”, in both the scenarios the impact of the transaction on (consumer or total) welfare will heavily rely on a number of assumptions inferred by market structure and by the competitive process in the affected markets, as meaningfully acknowledged in Recital 6 of the EUMCR<sup>1331</sup>. Consistently with the idea of protecting the competitive process, the impact of the notified transaction on the innovation markets<sup>1332</sup> as well as its adverse consequences in the long run<sup>1333</sup> are part of the assessment too. Overall, this setting seems to favour a deeper focus on market structure and on dynamic efficiency rather than on static efficiency tested on the foreseen short-run welfare effects.

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<sup>1324</sup> Part II, § 6.4.

<sup>1325</sup> Such stages should not be confused with the procedural stages of the investigation (phase 1 and, eventually, phase 2).

<sup>1326</sup> Art. 2, § 3 EUMCR.

<sup>1327</sup> It must be here recalled that a SIEC might well be ascertained also in the absence of a dominant position. Additionally, the concept of dominance itself might well depend on factors others than market shares.

<sup>1328</sup> See Commission Guidelines “*on the assessment of horizontal mergers*” cit., §§ 79-84.

<sup>1329</sup> See Commission Guidelines “*on the assessment of non-horizontal mergers*” cit., § 21.

<sup>1330</sup> This is the opinion of Kaplow L., *On the choice of welfare standards* cit., 24.

<sup>1331</sup> “*A specific legal instrument is therefore necessary to permit effective control of all concentrations in terms of their effect on the structure of competition*”.

<sup>1332</sup> Commission decision of 27 March 2017 in Case M. 7932 - *Dow/DuPont* cit., § 1991.

<sup>1333</sup> Commission decision of 3 July 2001 in Case No COMP/M.2220 - *General Electric/Honeywell* cit., § 449.

As for restrictions by object (Art. 101 TFEU), once the fact-based economic approach has led to establish the hard-core distortion of competition, normative theories apply and the effective harm to competition will be legally presumed.

As to foreclosing cartels (causing a restriction by effect) and exclusionary abuses, competition law protects competitors and the competitive process. Therefore, once the fact-based economic approach has led to ascertain the foreclosure or the exclusionary strategy<sup>1334</sup>, normative theories will make that conduct unlawful regardless of the welfare considerations, because the exclusion of efficient competitors is perceived as a threat in the long run.

As to coordination cartels (causing a restriction by effect) and exploitative abuses, competition protects consumers. Here, the harm to competition should be measured adopting a standard consumer welfare.

Market defects that do not harm the competitive process in the above explained meaning of the term should be addressed by economic regulation.

The German case against Facebook failed to bring a solid theory of harm, as also ruled by the Düsseldorf Court in its preliminary decision<sup>1335</sup>. In the absence of a clear impact of the conduct on the market, data protection or consumer protection would be better-off, as the Italian investigations against Facebook demonstrate<sup>1336</sup>. However, according to the GDPR's enforcement mechanism, in that specific case the Irish data protection supervisor would have been responsible for scrutinizing Facebook's data policies. Additionally,

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<sup>1334</sup> CJEU, Grand Chamber, *Intel Corp. v. European Commission*, case C-413/14 P cit., 138.

<sup>1335</sup> Part III, Section I, § 3.3.

<sup>1336</sup> Part III, Section I, § 3.2. On this point, see Pezzoli A., *“With a little help from my friends”*: *quale politica della concorrenza per l'economia digitale?*, in *Economia Italiana*, Vol. 1 (2019), 20-22 and IT Joint Sector Inquiry, recommendation 4 (p. 116) and recommendation 10 (pp. 119-120), where it is noted that consumers' empowerment should take place enhancing data protection and consumer protection laws, which can act as pro-competitive regulation, to the extent that they create a level playing field by reducing informational asymmetry. The development of new categories of “privacy intermediates”, able to represent users and to negotiate with Big Techs on their behalf, should be encouraged and promoted. Consumer protection is well placed to cope with misleading privacy policies and opt out schemes relying on the status quo bias, to the extent that such practices can (also) affect consumer choice.

Even before an investigation is launched, inspection powers of consumer protection and privacy protection authorities shall be enhanced

Germany lacks a system of public enforcement of consumer protection laws, which is part of the problem<sup>1337</sup>.

Regardless to the specific issues posed by the German case, the argument here framed is not that privacy-related conducts should always be irrelevant under competition law.

Rather, the point here raised is that the European economic constitution wants all the pieces of competition policy (economic regulation and competition law) to stay at the right place and to respect their role. And competition law should intervene only when its peculiar theories of harm are satisfied.

Moreover, the idea that competition law may automatically apply whenever the rules on data protection are infringed by the dominant firm (normative link causality) may even turn out to be counterproductive. Indeed, a look at the wider picture shows that such an approach may likely lead to under-enforcement.

An example might help to get the point.

**Example 1:** Imagine that a digital platform holding a dominant position in the market for social network (e.g. Facebook) offers to its consumer base (P2C) aged 16-18 a targeted and dedicated option to get 3 sponsored posts per month. Imagine that such a supplementary service is offered at a dual pricing policy: i) for free, if the consumer gives his consent to granular data sharing towards advertisers; ii) at a fair price, say 1 €/month, with no need to give such a consent to data sharing. In this event, behavioural economics suggests that almost the totality of the targeted consumers will choose the first option (free-effect; System 1 decision-making), also in the view of satisfying their irrational desire of “self-affirmation” through an increased visibility of their posting activity. This inclination is particularly strong for people aged 16-18. Imagine now that, as a result of said pricing policy, the social platforms makes a huge profit, because the personal information shared with advertisers is highly valuable and because the number of advertisers the information is disclosed to

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<sup>1337</sup> See below Section IV.

is enormous. In the meantime, young users are incentivized to single-home and not to switch to maverick services, which may have showed in their early launch a remarkable rate of penetration among young people (e.g. TikTok). In theory, a break-even point might be detected on the market trend, so that a competition authority may be willing, depending on the scenarios, to ascertain whether an exploitative or, more likely<sup>1338</sup>, exclusionary effect can be associated to such a pricing strategy. However, suppose also that the consumers have been provided, in plain language and in a neutral way, all the relevant information necessary to take their decision, without suggesting default options or pre-flagging the “free” price. In this event, the consent should be considered freely given under the GDPR, because information has been clearly provided and displayed and because the performance of the contract has not made conditional on consent to the processing of personal data that is not necessary for the performance of that contract<sup>1339</sup>. Indeed, to this latter regard it shall be considered that the consumer would have had the opportunity of getting the performance of the very same supplementary service at a reasonable price. Finally, and safe otherwise provided by Member States, under the GDPR people aged at least 16 hold the legal capacity to give their consent to data processing without the authorization by the holder of parental responsibility over them<sup>1340</sup>.

In the hypothetical scenario above described, the adoption of a “normative causality” theory would lead to the impossibility to take action under Art. 102 TFEU. The GDPR would not have been infringed, because it is designed to protect fundamental rights in an ex ante and horizontal perspective, not to react ex post to behaviours tacking advantage of biases observed through the lens of Economics of Privacy.

Hence the need to conceptualize new theories of harm.

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<sup>1338</sup> Below, § 2.3.2.2.

<sup>1339</sup> Art. 7, § 4 GDPR.

<sup>1340</sup> Art. 8, § 1 GDPR.

To this end, behavioural economics (rather than data protection as such) should enter the competitive assessment<sup>1341</sup>.

Indeed, behavioural economics has become a well-established and tested discipline, so that its inclusion in competition enforcers' toolkit should be seriously considered<sup>1342</sup>, especially in the context of Personal Data Intensive markets.

In the latter respect, a serious inconsistency of EU competition law should be stressed.

In a not negligible number of cases on pre-installation practices (of software or apps), the concepts of “end-user inertia” and of “status quo bias”<sup>1343</sup> have already been used by the Commission<sup>1344</sup>. Moreover, it has also been recognized by the CFI<sup>1345</sup> and recently reaffirmed by the Commission itself in the Google Android case<sup>1346</sup>.

Quite surprisingly, the “privacy paradox” has been so far observed in a “passive” way.

First example. Although the decision of the Higher Regional Court of Düsseldorf appears fully sharable where it has required the demonstration of a competitive harm to ascertain an abuse of dominant position, it was wrong on an aspect. It ruled that no causal link could in any event be established between the conduct at stake and the alleged competitive harm, because a correct

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<sup>1341</sup> Below, §§ 2.3.2.1 and 2.3.2.2.

<sup>1342</sup> Stigler Report, 45: “Given the prevalence of behavioral effects in the digital economy, the measurement of consumer welfare must be carried out very carefully. As we have mentioned, behavioral economics is now a well-established discipline that can help sort different online behaviors and business practices. Incorporating this knowledge into the legal practice’s toolbox may help develop better measures of output and quality”.

<sup>1343</sup> Samuelson W. – Zeckhauser R., *Status Quo Bias* cit.

<sup>1344</sup> E.g. COMP/C-3/37.792 *Microsoft*, § 870; Case M.8124, *Microsoft/LinkedIn*, § 309.

<sup>1345</sup> CFI, Grand Chamber, 17 September 2007, case T-201/04, *Microsoft Corp v. Commission*, § 923: “if OEMs and consumers were able to obtain Windows without Windows Media Player, that would not mean that they would choose to obtain Windows without a streaming media player. OEMs follow consumer demand for a pre-installed media player on the operating system and offer a software package including a streaming media player that works with Windows, the difference being that that player would not necessarily be Windows Media Player”.

<sup>1346</sup> Kathuria V., *Greed for data and exclusionary conduct in data-driven markets* cit., 96 et seq.

reading of the market analysis carried out by the Bundeskartellamt would have revealed that the failure of users to take notice was not based on Facebook's market power, but rather on the indifference or convenience of the average Facebook user in the case of a realistic appraisal (privacy paradox)<sup>1347</sup>.

Second example. In the Facebook/WhatsApp merger the Commission recalled the problem of the status quo bias suffered by consumers facing a pre-installation of apps and software on their devices and OEMs<sup>1348</sup>. Quite ironically, when it came to privacy-related issues, the very same decision has portrayed a completely informed consumer, perfectly able to take care about his personal data in a social network environment<sup>1349</sup>.

In sum, EU competition law has so far avoided to deal with behavioural biases affecting the allocation of personal data across the DSM.

Besides, there are serious reasons to be concerned about that, since the effects of anti-competitive infringements impacting on Personal Data Intensive markets, as explained above<sup>1350</sup>, would be very hardly removed from the market.

Indeed, remarkable legal barriers to the design of restorative ex post data access remedies exist<sup>1351</sup>. Moreover, such remedies would in any case fail to effectively to re-balance the market, given the fact that individuals (rather than their personal data) have become "the new oil"<sup>1352</sup>.

These peculiar features of attention markets call for great caution in the competitive assessment.

Even if this does not appear necessary, to increase legal certainty a Commission notice (or even a regulation under Art. 103, § 2, let. c) TFEU) may provide guidance to handle personal data-related cases, according to the proposals that are put forward below.

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<sup>1347</sup> Part IV, Section I, § 3.3.

<sup>1348</sup> Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit., § 111.

<sup>1349</sup> Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit., § 186.

<sup>1350</sup> Above Section I, § 1.2.

<sup>1351</sup> Above, § 1.2.1.

<sup>1352</sup> Above, § 1.2.2.



### § 2.3.1 Merger control

It has been argued that, without prejudice to the possibility of the notifying parties to propose an efficiency defence, aspects such as market structure, competitive process and dynamic efficiency and long-term effects of the transaction are of primary importance in the context of merger review.

In this vein, instead of focusing on short-period efficiency gains on consumer welfare<sup>1353</sup>, the Commission may correct its early approach on merger control in Personal Data Intensive Markets in a way which is consistent with the concept of digital ecosystem.

Indeed, there is a wide consensus on the fact that digital ecosystems try to keep the user on-platform as much as possible. Moreover, they provide a wide range of services, often to the sole purpose of avoiding disintermediation. If we focus on rigorous market definition based on the usability features of the concerned services and, in particular, on their level of substitutability and complementarity, even in the view of a classical conglomerate strategy, we might miss something.

In Personal Data Intensive Markets, firms do not compete to become leader in a well-defined product market<sup>1354</sup>, nor to collect personal data as such. Rather, they compete for individuals<sup>1355</sup>.

Therefore, the very same concept of relevant market and market share shall be revised.

It is not proposed, here, to abandon the fundamentals on market definition, which are currently under revision<sup>1356</sup> but that will likely preserve their basic rationale.

Instead, the proposal is to introduce a second level of competitive assessment, to be entered only when the first level of assessment has been completed with a “green light”.

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<sup>1353</sup> Part IV, Section I, § 2.

<sup>1354</sup> Above Section I, § 1.1.

<sup>1355</sup> Above Section I, § 1.2.1.

<sup>1356</sup> Part III, § 6.1.

We believe that there is room to argue that, in the context of attention markets, the product market might be also tailored solely on the demand side, by exclusively focusing on the average categories of consumers making use of the concerned digital products or services, without paying attention to the similarities or complementarities shown.

The rationale for that proposal is simple.

Personal data are ubiquitous and non-rivalrous, people are not, and their amount of spare time neither. Therefore, market power might require a further assessment stage, addressed at identifying specific clusters of users actually or potentially spending their (limited) time by using the concerned digital products or services.

In so far as post-merger such customer-base will be likely to significantly increase the overall amount of time spent on the digital ecosystem, competitive concerns should be raised.

Elements to start this discussion can be retrieved in the Commission practice itself.

In the Facebook/WhatsApp case<sup>1357</sup> the merging entity proposed to measure market power in terms of volume in consumer communications apps and social networking services, using metrics based on “reach” data, which measure the penetration rate of an app among users (i.e. the percentage of panelled users who have used a certain consumer communications app over 30 days). The Commission ultimately found that, all in all, this metric represented the best available tool for measuring market positions.

Similarly, in the Apple/Shazam merger<sup>1358</sup> the Commission used information on monthly average time spent by users on the app as a proxy to understand the user engagement with a certain service (and thus the speed at which data is collected on the app).

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<sup>1357</sup> Commission decision in Case COMP/M.7217 - *Facebook/WhatsApp* cit.

<sup>1358</sup> Commission decision in case No COMP/M.8788 – *Apple/Shazam* cit.

Finally, in the Microsoft/Skype merger<sup>1359</sup> the Commission found that in the digital economy market shares in volume constitute better indicators than market shares in value<sup>1360</sup>.

The best indicator – we can add here – would be the amount of time spent on-platform by the actual or potential cluster of consumers using the concerned digital products and services. If we adopt this perspective, market trends becomes clearer: just to make a meaningful example, the UK population spent around 4 billion hours online per month in 2018, of which more than 1.4 billion hours were spent on Facebook and Google sites combined<sup>1361</sup>.

In the light of the above, the introduction of such an additional level of assessment should be considered in the underway revision of the Commission notice on market definition.

### **§ 2.3.2 Abuse of dominant position**

The role of competition in Personal Data Intensive Markets has been clarified: less attention should be paid on data protection as such, while more attention should be paid on digital platform's leveraging strategies based on behavioural biases<sup>1362</sup>.

The analysis moves from Example 1.

#### **§ 2.3.2.1 Exploitative theories of harm**

The ban to engage in exploitative abuses is designed to protect consumers.

The standard consumer welfare is here adopted.

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<sup>1359</sup> Commission decision in case COMP/M.6281 - *Microsoft/Skype* cit.

<sup>1360</sup> § 80.

<sup>1361</sup> UK Digital Competition Expert Panel Report, 18, § 1.6.

<sup>1362</sup> Above, Section I, § 2.3.

### § 2.3.2.1.1 Exploitation on the consumer-side of the market

Considering that in attention markets personal data act as consideration<sup>1363</sup>, one might wonder whether in the scenario addressed by Example 1 the platform is charging to the consumer an excessive price under Art. 102, let. a) TFEU.

Having said that the strategy adopted by the Big Tech does not seem to infringe privacy laws, the question here posed is whether, under a purely quantitative perspective, a serious imbalance between the value of the service provided (3 sponsored posts per month) and the price actually paid for it (huge data sharing of the platform with advertisers) may be identified.

In this vein, one would have to identify the benchmark privacy policy (competitive price) and to demonstrate that under the Example 1 scenario the number of data shared by the digital platform with third parties would have been “consistently” and “persistently” above said benchmark price<sup>1364</sup>.

On a purely theoretical standpoint, the answer to this question might also be affirmative<sup>1365</sup>.

However, exploitative abuses require a high level of “accuracy” in the identification of the consumer harm, which should be fact-checked and supported by strong economic evidence on the actual effect of the practice on consumer welfare<sup>1366</sup>.

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<sup>1363</sup> Langhanke C. - Schmidt-Kessel M., *Consumer data as consideration*, in *Journal of European Consumer and Market Law (EuCML)*, Vol. 6 (2015), 218 et seq.

<sup>1364</sup> AG Wahl Opinion delivered on 6 April 2017 in case C-177/16, *Autortiesību un komunikēšanās konsultāciju aģentūra/Latvijas Autoru apvienība v. Konkurences padome*, § 106.

<sup>1365</sup> Graef I., *Blurring Boundaries of Consumer Welfare How to Create Synergies Between Competition, Consumer and Data Protection Law in Digital Markets*, in Bakhoum M. - Conde Gallego B. - Mackenrodt M.-O. - Surblytė-Namavičienė G. (eds.), *Personal Data in Competition, Consumer Protection and Intellectual Property Law. Towards a Holistic Approach?*, Springer-Verlag, Berlin (GE), 137: “Since personal data replaces price as a type of currency in the online environment, exploitative abuse may relate to the excessive collection of information about consumers instead of to the monetary price charged for a product or service”; EDPS, *Preliminary Opinion* cit., 29: exploitative abuse may occur if “*the «price» paid through the surrender of personal information [is] to be considered excessive in relation to the value of the service consumed*”.

<sup>1366</sup> ECJ, 14 February 1978, case C-27/76, *United Brands Company and United Brands Continentaal BV v. Commission*, § 267.

And in the case under examination, it would be almost impossible for the competition authority to meet such a standard of proof<sup>1367</sup>.

Furthermore, the enforcer would also have to overcome the fact that consumers value “free-services” provided by large digital platforms up to several thousand dollars a year<sup>1368</sup> and that, in many cases, it would be quite hard to question the significant “efficiency gains” brought, at least in the short-term, by digital platforms<sup>1369</sup>.

Remaining in a quantitative perspective, other scholars have tried to propose a SSNIC test. Moving from the assumptions that “individuals’ information remains confidential when its release or use was not bargained for as part of a voluntary exchange” and that consequently - under modern antitrust laws, which “seeks to protect the competitive process, thereby promoting consumer welfare” - the right protected shall not be “Warren and Brandeis’s general right of the individual to be let alone”, but rather “the right to receive the best possible products in exchange for the least possible amount of information”<sup>1370</sup>, they conclude that a SSNIC test may be elaborated<sup>1371</sup>. However, the same proposals acknowledge the difficulty to implement, in practice, such a test.

The alternative proposed in many papers is to consider privacy as a qualitative parameter of competition. Indeed, one might argue that by encouraging or even imposing the disclosure of a higher number of personal data the platform is

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<sup>1367</sup> IT Joint Sector Inquiry, 102-103.

<sup>1368</sup> UK Digital Competition Expert Panel Report, 19, § 1.14: “According to research published in 2018, a typical adult in the United States values digital services for which they frequently pay no monetary price such as internet search engines, email, and digital maps, at several thousand dollars a year. Access to video streaming and e-commerce were each assigned lower, but still significant values. There is no reason to suppose UK consumers value these services any less”.

<sup>1369</sup> Communication from the Commission “*Online Platforms*” cit., § 2: “Online platforms facilitate efficiency gains, and act as a magnet for data-driven innovation. They increase consumer choice, thereby contributing to improved competitiveness of industry and enhancing consumer welfare”.

<sup>1370</sup> Newman N., *Antitrust in Zero-Price Markets: Foundations*, in *University of Pennsylvania Law Review*, Vol. 164 (2015), 205-206, where it is further observed that “. Abandoning oversight of zero-price markets to privacy law simply because information (instead of money) is the relevant currency would be a grave error. The objection risks harming the very consumers whom privacy law is meant to protect, and it should be rejected accordingly”.

<sup>1371</sup> Newman N., *Antitrust in Zero-Price Markets: Applications* cit., 49 et seq.

essentially degrading the quality of the content offered in a way that present-biased human beings find engaging<sup>1372</sup>.

However, in this case, too, it would be quite hard for a competition authority to implement a meaningful SSNDIQ test<sup>1373</sup>.

In addition, the services provided in the online environment may be so complex or user-specific that they would require a situation- or user-dependent evaluation of the value of the service in question. Heterogeneous preferences of consumers towards data protection may call for a user-specific analysis<sup>1374</sup>.

Facing these hurdles, a competition authority may be incentivized to link the “quality degradation” to a breach of data protection laws, so that the theory of harm would be ready-for-use (normative causality).

In this event, the very same critics above raised would apply, because normative causality would be used as a short cut to elude the standard of proof required for exploitative abuses.

#### § 2.3.2.1.2 Exploitation on the Ad-side of the market

Exploitation may also occur on the Ad-side of the platform.

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<sup>1372</sup> Stigler Report, 40. Patterson M., *Antitrust Law in the New Economy*, Harvard University Press, Cambridge (U.S.), 2017, 146 challenges the mainstream argument that dominant platforms would have no disincentives at degrading quality, due to the negative impact that this strategy would have on reputation. Indeed, in the era of “confusopoly” no reputational harm would be likely suffered by the platform as a result of quality-degrading practices.

<sup>1373</sup> OECD, *Policy Roundtables: The Role and Measurement of Quality in Competition Analysis*, October 28<sup>th</sup>, 2013, available at <http://www.oecd.org/competition/Quality-in-competition-analysis-2013.pdf> (accessed 10.4.2018), 164 and 9: SSNDQ test “in practice is unworkable” given “the inherent difficulties of measuring quality alongside the existing complications of the applying the SSNIP test itself within real market situations”. According to Stucke M.E. - Grünes A.P., *Big Data and competition policy*, Oxford University Press, Oxford (UK), 2016, 120 et seq., it would be hard for consumers to detect a small, but significant, degradation in privacy protection; however, room exists for a competition authority to engage in this test. In the Qihoo 360 v. Tencent litigation, the Chinese Supreme People Court embraced a theory of harm based on the SSNDQ test: see Evans D.S. – Yanhua Zhang M., *Qihoo 360 v Tencent: First Antitrust Decision by the Supreme Court*, in *Competition Policy International*, October 20<sup>th</sup>, 2014, available at <https://www.competitionpolicyinternational.com/qihoo-360-v-tencent-first-antitrust-decision-by-the-supreme-court/> (accessed 10.4.18).

<sup>1374</sup> Zimmer D. – Kollmann D. – Nöckler T. – Wambach A. – Westerwelle A. (German Monopolkommission), *Competition policy: The challenge of digital markets*, Special Report No 68/2015 pursuant to section 44(1)(4) of the Act Against Restraints on Competition, available at [https://www.monopolkommission.de/images/PDF/SG/s68\\_fulltext\\_eng.pdf](https://www.monopolkommission.de/images/PDF/SG/s68_fulltext_eng.pdf) (accessed 10.10.16), 78, § 329.

In 2014, the World Federation of Advertisers (WFA) estimated that publishers received only 40% of advertiser investments, while intermediaries shared 60% of investments<sup>1375</sup>.

Indeed, the more time a user stays on the platform, the more ads the platform can sell, and the more it can charge per Ad<sup>1376</sup>.

Example 1 may well induce the consumer to stay on-platform, due to the increased visibility of his sponsored posts.

This might lead to higher Ad prices, fewer Ads being sold to entrants, and lower consumer welfare in the upstream industries<sup>1377</sup>.

Moreover, as an indirect consequence of said practice, publishers may at times be forced or induced to increase the price of their products or services in the downstream market, which would harm final consumers too.

In such scenarios, the trickiest challenges would not come from the intersection between privacy and competition, but rather from the hurdles associated to every case objecting exploitation<sup>1378</sup>.

### § 2.3.2.2 Exclusionary theories of harm

It has been argued that when EU competition law prohibits exclusionary abuses, it protects, in the first instance, competitors and the competitive process. Therefore, once the fact-based economic assessment has identified an exclusionary strategy, normative theories will make that conduct presumably unlawful, subject to an efficiency defence.

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<sup>1375</sup> Autorité de la concurrence, Opinion no. 18-A-03 of 6 March 2018 “*on data processing in the online advertising sector*”, available at [https://www.autoritedelaconcurrence.fr/sites/default/files/integral\\_texts/2019-10/avis18a03\\_en.pdf](https://www.autoritedelaconcurrence.fr/sites/default/files/integral_texts/2019-10/avis18a03_en.pdf) (accessed 7.3.19), 40, § 82, specifying that Media agencies and trading desks took 5% and 15% of investments, respectively. DSPs, data providers and data mining services and exchange platforms took 10%, 25% and 5% of investments.

<sup>1376</sup> Stigler Report, 38.

<sup>1377</sup> Prat A. – Valletti T., *Attention Oligopoly*, May 30<sup>th</sup>, 2019, available at <https://ssrn.com/abstract=3197930>.

<sup>1378</sup> The demonstration of excessive prices have been considered as a “daunting, if not, impossible task” in Evans D.S. - Padilla A.J., *Excessive Prices: Using Economics to Define Administrable Legal Rules*, in *Journal of Competition Law & Economics*, Vol. 1 (2005), Issue 1, 118.

This framework may help to support an investigation under Art. 102 TFEU in Personal Data Intensive markets, due to the more nuanced relevance of welfare aspects<sup>1379</sup>.

In the Example 1 scenario, TikTok, the rival social network platform (or even different models of targeted ad-supported platforms), may allege to be pre-empted or excluded by the competition for the selling of targeted advertising on people aged 16-18 as a result of the pricing strategy of the dominant firm, which would steer most of the demand for target advertising intermediation. This exclusionary strategy may have a long-run impact on the market, as keeping young people on the dominant platform may stop the indirect network effect which had been stimulated by the maverick. Moreover, due to the nature of “experience good” of such services<sup>1380</sup> and to the greater inclination of young people to try new socials, it is possible to argue that securing the most young cluster of demand existing on the market may significantly limit TikTok’s opportunities of penetration.

In this case, we would expect the dominant player to submit an unorthodox as-efficient-competitor (AEC) defence (remember: we are in a zero-price market)<sup>1381</sup>. It would likely argue that, according to the *Intel* framework, Art. 102 TFEU’s purpose is not “*to ensure that competitors less efficient than the undertaking with the dominant position should remain on the market*”<sup>1382</sup>. Therefore, the AEC test should stop the investigation, since the Big Tech – as

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<sup>1379</sup> In general, scholars appears more optimistic about the possibility of prohibiting personal data-intensive conducts of this kind under exclusionary theories of harm: Drexl J., Intervention to the roundtable “*Trade-off fra concorrenza e innovazione nell’economia digitale*”, Seminar “Politiche della concorrenza ed economia digitale: a che punto siamo?”, Rome, Luiss University, November 25<sup>th</sup>, 2019 (in his speech, Drexl supported the German Facebook case but also argued that the theory of harm would have been better-off under an exclusionary setting); Almunia J., *Competition and personal data protection* cit.: a “single dominant company could of course think to infringe privacy laws to gain an advantage over its competitors”; Prat A. – Valletti T., *Attention Oligopoly* cit., 4: “if the attention of the consumer is controlled by a limited number of platforms, an exclusionary strategy is easier to carry out: ad supply is low and captured mostly by incumbents”.

<sup>1380</sup> Part I, § 7.

<sup>1381</sup> Communication from the Commission “*Guidance on the Commission’s enforcement priorities in applying Article 82*” cit., §§ 23, 25 and 26.

<sup>1382</sup> CJEU, Grand Chamber, *Intel Corp. v. European Commission*, case C-413/14 P cit., §§ 133-134.



said – would only be acting efficiently on the market, taking advantage of the existing rent opportunities.

However, two counterarguments may be opposed to such a defence.

First, it is not always indispensable to enter an AEC test<sup>1383</sup>.

Due to digital markets' features<sup>1384</sup>, in Personal Data Intensive Markets the “less-efficient-competitor” (LEC) test might be at times applied. According to the LEC test, in certain circumstances a less efficient competitor may also exert a constraint which should be evaluated when considering whether the conduct leads to anti-competitive foreclosure. To this end, the Commission shall take a dynamic view of that constraint, given that in the absence of an abusive practice such a competitor may benefit from “*demand-related advantages, such as network and learning effects, which will tend to enhance its efficiency*”<sup>1385</sup>. As shown, demand-related advantages of this kind are very pronounced in digital markets<sup>1386</sup>.

Second, and regardless to the possibility of adopting a LEC test, a more challenging argument can be opposed to the AEC defence: it deals with dynamic efficiency, with competition on the merits.

Suppose we accept to enter the (as said: unorthodox) AEC test.

What would the concerned firms be competing on?

To a significant extent, around engagement, addiction, obsession. Features which keep the consumer on-platform, to steer as much attention and personal data as possible.

Until here, there is nothing strange nor scaring: loyalization has always existed in brick-and-mortar contexts.

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<sup>1383</sup> According to CJEU, case C-23/14, *Post Danmark II* cit., § 59 “*applying the as-efficient-competitor test is of no relevance inasmuch as the structure of the market makes the emergence of an as-efficient competitor practically impossible*”.

<sup>1384</sup> Part I, § 7.

<sup>1385</sup> Communication from the Commission “*Guidance on the Commission’s enforcement priorities in applying Article 82*” cit., § 24.

<sup>1386</sup> See also Graef I., *Differentiated Treatment in Platform-to-Business Relations* cit., 37; Laitenberger J., *Competition Enforcement in Digital Markets* cit., 5.

However, in “attention markets” a case to be concerned may arise whenever the addiction is pursued at any (economic and social) cost, bringing out the worst in people. In Example 1, one may argue that the practice engaged by the dominant platform is of particular concern for the building of the self-affirmation of the young individual in the off-line world. A further meaningful example can be brought. Empirical researches reveal that “content that instantly engages most effectively is content that generates outrage, not necessarily content that is truthful or thoughtful”<sup>1387</sup>. It is thus not surprisingly that an anti-Facebook manifesto edited by an early investor of the company denounces that in 2014 the company set out to learn whether it could make its users sad and angry on purpose, because this would have generated more posting, sharing and reading<sup>1388</sup>.

In this environment, firms abstaining from doing so may be driven out of the market<sup>1389</sup>. This explains why digital players are strongly investing in addiction techniques<sup>1390</sup>.

But according to the proposed reading of the European economic constitution, dynamic efficiency should serve competition on the merits<sup>1391</sup>.

There are serious reasons to doubt that innovation focusing on exploiting consumers’ biases will have a positive effect on competition on the merits.

Competition on the merits would require investing in a constructive way, for instance in improving aspects such as entertainment, valuable contents, user experience and faster communication (the rise of Netflix in the audiovisual industry can be mentioned as a positive example: addiction is here obtained

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<sup>1387</sup> Stigler Report, 40.

<sup>1388</sup> McNamee R., *Zucked. Waking Up to the Facebook Catastrophe*, Penguin Press, London (U.K.), 2019. It should be specified that there is no evidence about the effective implementation of this strategy by Facebook. However, this example appears meaningful to support the reasoning on a theoretical standpoint.

<sup>1389</sup> Stigler Report, 37.

<sup>1390</sup> Stigler Report, 42.

<sup>1391</sup> Part II, § 6.3.1.1.

through a wide-range of audiovisual content supplied on a user-friendly<sup>1392</sup> interface and at a reasonable price).

In this research it has been argued that consumer protection and personal data protection belongs to competition policy<sup>1393</sup>, due to their pro-competitive effect.

This premise is true only in so far as firms truly compete on the merits.

Otherwise, the wide principles and general clauses of the GDPR and of the revised UCPD could not be reconciled with competition law. If one accepted that firms compete on behavioural biases, then even the more intrusive and far-reaching economic regulation on data and consumer protection would be deprived of a truly useful effect.

The GDPR encourages the development of new technologies such as AI, provided that they respect the fundamental right to protection of personal data<sup>1394</sup>. The open in scope concepts of “privacy by design” and “privacy by default” represent the lighthouse guiding the innovation process which is expected by the Union. The same goes for the UCPD’s key concept of “professional diligence”. At the same time, such general clauses are designed to allow a responsible and sustainable growth of the market. Indeed, according to both data and consumer protection laws, while large companies are supposed to deliver best practices to the market, start-ups and SMEs face more nuanced regulatory constraints<sup>1395</sup>.

The comprehensive reading here proposed would not harness the market in a disproportionate manner. As said, normative causation theories are rejected, so that the competition authority will always be required to carry on rigorous and fact-checked investigation, establishing the conduct, the harm to competition and the causal link between the two.

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<sup>1392</sup> It must be specified that according to many observers Netflix would achieve such a user-friendly interface by way of intrusive privacy policies. This research does not deal with this question.

<sup>1393</sup> Part II, § 8.

<sup>1394</sup> Communication from the Commission “*Data protection rules as a trust-enabler*” cit., 9.

<sup>1395</sup> Of course, should small firms engage in serious violations of the legal framework, regulation would call for intervention, regardless of the size of the enterprise.

## Section II – Fostering the DSM strategy in Markets prone to gatekeeping

### § 1. Setting the scene: gatekeepers and the rule-setter problem

To the extent of this research, “markets prone to gatekeeping” are markets where digital platforms provide an efficient intermediation service between two or more sides of the market and match demand and offer by exploiting extreme economies of scale and scope as well as strong indirect network effects<sup>1396</sup>. Search engines, e-commerce marketplaces and OTAs provide some examples.

As anticipated<sup>1397</sup>, a brand-new type of dominance is emerging in the DDE: many digital platforms are almost unanimously defined, depending on the cases, as gatekeepers<sup>1398</sup> holding significant “intermediation power”, as “unavailable trading partners” or as firms with a “strategic market status”<sup>1399</sup>, or, again, as firms holding “structuring” platforms<sup>1400</sup>. Intermediation power can exist even where the market share is significantly below 40%<sup>1401</sup>.

When digital platforms become economic (and social)<sup>1402</sup> gatekeepers, they also behave as regulators, due to their rule-setting role within the ecosystem<sup>1403</sup>.

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<sup>1396</sup> Part IV, Introduction.

<sup>1397</sup> Part I, § 7 and Part III, § 6.1.

<sup>1398</sup> This expression is widely used: see Report for the European Commission, 48; UK Digital Competition Expert Panel, 41, § 1.117; German 4.0 Report, 47; IT Joint Sector Inquiry, 76; UK CMA Interim Adv Report, 169, § 5.65 (with specific regard to search engines); Australian Adv Report, 6 (with specific regard to search engines and social networks).

<sup>1399</sup> German 4.0 Report, 50; UK Digital Competition Expert Panel, 55, § 2.10; UK CMA Interim Adv Report, 231, § 6.12.

<sup>1400</sup> According to French contribution, 4, structuring platform “have considerable market power in the market in which they are primarily active, but also in neighbouring markets because of their status as ‘gatekeeper’”.

<sup>1401</sup> See Report for the European Commission, 70. At 121-122 they further argue that, in the context of merger control, the SIEC test should be accordingly revised. The same view is expressed, as for the CMA merger assessment guidelines, in the UK Digital Competition Expert Panel, 95-97.

<sup>1402</sup> This is the concern of Lynskey O., *Regulating ‘Platform Power’* cit.

<sup>1403</sup> For the definition of digital platforms as “regulators”, see for Report for the European Commission, 60-63 and German 4.0 Report, 47-48.

For instance, digital platforms develop ranking algorithms, determine the conditions under which a business user can enter the network, and fix the criteria governing the suspension, delisting, dimming or termination of their accounts and of the associated goods/services sold via the platform.

This background is perceived as particularly insidious whenever the Big Tech enjoys a dual role, acting as both an intermediary and a trader operational on-platform, because in such circumstance it may have the incentive to discriminate to its benefit (self-preferencing).

## **§ 2 Reconciling economic regulation and competition law in markets prone to gatekeeping**

### **§ 2.1 The role of regulation**

#### **§ 2.1.1 What has so far been done as part of the DSM strategy**

As part of the DSM strategy, the EU has intervened to address the gatekeeper problem in both platform-to-consumer (P2C) and platform-to-business (P2B) relationships.

On the former aspect, the EU implemented a wide range of legislative acts addressed at boosting e-commerce development with a contextual empowerment of consumers' rights. The Geo-Blocking Regulation<sup>1404</sup>, the Goods Directive<sup>1405</sup> and the Digital Product and Digital Service Directive<sup>1406</sup> provide bright examples.

In addition, the Omnibus Directive<sup>1407</sup> seeks to reduce informational asymmetry between consumers and digital platforms by way of including in the list of “*in all circumstances misleading practices*” (Annex I to UPCD) also the (direct or indirect) payment of the trader to the provider of the online search

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<sup>1404</sup> Part III, § 2.3.

<sup>1405</sup> Part III, § 2.2.2.

<sup>1406</sup> Part III, § 2.2.1.

<sup>1407</sup> Part III, § 2.4.

functionality for a higher ranking of a product within the search results, insofar as such provider fails to inform consumers of that fact in a concise, easily accessible and intelligible form.

Moreover, traders enabling consumers to search for goods and services, such as travel, accommodation and leisure activities, offered by different traders or by consumers should inform consumers at least about the default main parameters determining the ranking of offers presented to the consumer as a result of the search query and their relative importance as opposed to other parameters; in any case, traders should not be required to disclose the detailed functioning of their ranking mechanisms, including algorithms<sup>1408</sup>.

As to the business-to-business relationships, the P2B Regulation<sup>1409</sup> addresses situations of imbalances in bargaining power, in order to ensure that contractual relations are conducted in good faith and based on fair dealing, granting predictability and transparency to business users<sup>1410</sup>.

In this light, platforms are prevented from imposing a various set of clauses which were widespread on the market (e.g. termination of the service without proper notice and consequent loss of data<sup>1411</sup>, access of the platform to user-generated data without advice<sup>1412</sup>; unilateral changes to terms and conditions without notice<sup>1413</sup>).

Furthermore, since the ranking of goods and services by the providers of online intermediation services has a crucial impact on consumer choice and, consequently, on the commercial success of the business user, providers should outline in advance the main parameters for ranking, in order to allow predictability and comparability of the service provided along different

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<sup>1408</sup> Omnibus Directive, recitals 20, 22 and 23; Artt. 3, § 4, let. b and Art. 3, § 7, let. a).

<sup>1409</sup> Part III, § 3.3.

<sup>1410</sup> Recital 32.

<sup>1411</sup> Recital 23.

<sup>1412</sup> Art. 8, let. c) and recital 32.

<sup>1413</sup> Art. 3, § 2 and recital 18.

platforms<sup>1414</sup>. This includes an explanation of any possibility for business users to actively influence ranking against remuneration<sup>1415</sup>.

In cases where the platform acts in a dual-role, in order to prevent self-preferencing (or at least to make that business strategy accountable), the P2B Regulation provides that the platform should act in a transparent manner and provide an appropriate description of any possible differentiated treatment, whether through legal, commercial or technical means<sup>1416</sup>.

Neither the Omnibus Directive nor the P2B prohibit discrimination as such. Moreover, they both provide that their provisions are without prejudice to the application of competition law.

### **§ 2.1.2 What should not be done as part of the DSM strategy**

U.S. Senator Elizabeth Warren proposed to designate large tech companies as “platform utilities” which should be prevented from competing on their own platforms<sup>1417</sup>.

The way Warren Team’s website works suggests that this solution may neither be realistic nor desirable.

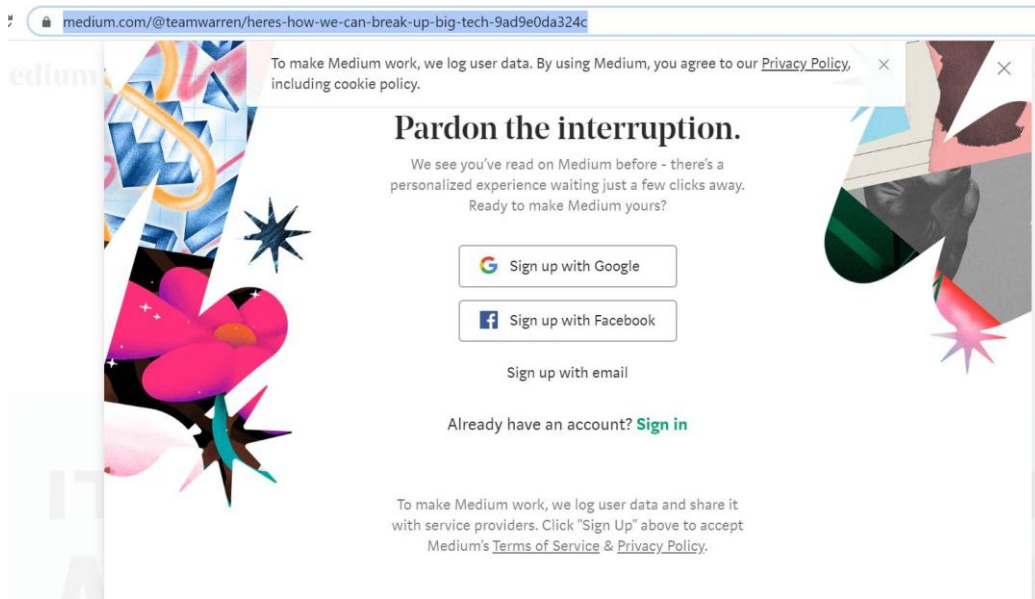
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<sup>1414</sup> Art. 5, § 1 and recital 24.

<sup>1415</sup> Artt. 5, § 3 and 7, § 3 let.) b) and c); recital 25.

<sup>1416</sup> Art. 7, § 1 and recital 30.

<sup>1417</sup> Warren E., *Here’s how we can break up Big Tech*, 2019, available at <https://medium.com/@teamwarren/heres-how-we-can-break-up-big-tech-9ad9e0da324c> (accessed 3 March 2020). In this line of thought, see also the and Kahn L., *The Separation of Platforms and Commerce*, in *Columbia Law Review*, Vol. 119 (2019), 973 et seq.



With specific reference to Google, similar concerns have been raised by the European Parliament<sup>1418</sup>.

However, a careful reading of the reports recently issued on digital platforms reveals that - even for Google, currently the most powerful gatekeeper in the world - structural separation is never endorsed<sup>1419</sup>.

Less heavy-handed regulatory solutions have been put forward to address market defects affecting markets prone to gatekeeping.

The rationales of these position have been already introduced<sup>1420</sup> and are further explained below.

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<sup>1418</sup> European Parliament resolution on supporting consumer rights in the digital single market (2014/2973(RSP), § 10: the European Parliament “call[ed] on the Commission to consider proposals aimed at unbundling search engines from other commercial services as one potential long-term means of achieving [contestable markets]”.

<sup>1419</sup> In its preliminary findings on online advertising, the UK CMA has considered remedies such as full ownership separation, operational (or management) separation and accounting separation to address structural defects affecting the market for intermediated display advertising: see UK CMA Interim Adv Report, 267-271, §§ 6.158-6.174. It noticed that the first remedy would be highly critical. This view is shared also in Australian Adv Report, 116-117. Unlike, the CMA found feasible, subject to further inquiry, operational (or management) separation of Google’s ad server (which would also allow separating data from analytics) and/or between sell-side-platform (SSP) and demand-side-platform (DSP) businesses. Finally, accounting separation may complement the second one.

<sup>1420</sup> Part III, § 6.1.



First, long-lasting ex post antitrust investigations would appear ill-suited to effectively face the fast-moving dynamics of digital markets<sup>1421</sup>. Moreover, current antitrust remedies would often be ineffective in the digital landscape<sup>1422</sup> and, in any case, they would lack the same reach and the degree of legal certainty and predictability associated to ex ante regulation<sup>1423</sup>.

Second, and strictly related to the first, there is a growing consensus on the fact that – despite the straight opinion expressed in the G7 Common Understanding

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<sup>1421</sup> See UK Digital Competition Expert Panel, 57, § 2.17: “given the challenges to antitrust in fast-moving yet highly complex markets where cases are always likely to take years to conclude and issues may be specific to a given case, the procompetition approach is to agree rules upfront, providing clarity to businesses in the market about the rules of the game”; Belgian Competition Authority - Dutch Authority for Consumers & Markets - Luxembourg Conseil de la Concurrence, *Joint memorandum on challenges faced by competition authorities in a digital world*, October 2<sup>nd</sup>, 2019, available at <https://www.belgiancompetition.be/en/about-us/publications/joint-memorandum-belgian-dutch-and-luxembourg-competition-authorities> (“Benelux Joint Memorandum”), 5: “One drawback of the current enforcement toolkit is that ex-post enforcement can be too slow in digital and other fast moving markets. When such markets are characterised by winner-takes-most dynamics, strong network effects, high barriers to entry due to data collection and consumer lock-in, there is a risk that ex-post enforcement comes too late to keep markets competitive and contestable”; Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG), *30 Recommendations on Regulation* cit., 80.

<sup>1422</sup> According to the UK Digital Competition Expert Panel, 58, § 2.19, remedies for abuse of dominance are required to be proportional, which is an incentive for competition authorities to narrow the scene and to focus on a backward-looking perspective. Furthermore, this conclusion can be inferred from the proposals to update the remedies policy (art. 7 of Regulation EC/1/2003) put forward by the German 4.0 Commission – where a greater use of flexible, targeted remedies, with a particular focus on restorative remedies is seen as necessary, along with a new procedure in which companies and authorities can cooperate in their mutual interest and experiment with different solutions, combined with deadlines and criteria for the evaluation of effectiveness of a given regime (German 4.0 Report, 73-75) – and by the Benelux area position paper – where the use of non-punitive ex ante remedies, to be accompanied by “guidance letters” or “comfort letters” is recommended (Benelux Joint Memorandum, 5-6). Botta M. – Wiedemann K., *EU Competition Law Enforcement Vis-À-Vis Exploitative Conducts in the Data Economy Exploring the Terra Incognita*, Max Planck Institute for Innovation & Competition Research Paper No. 18-08, 2018, available at <http://dx.doi.org/10.2139/ssrn.3184119> (accessed 10 September 2019), 73-87 consider behavioural commitments under Art. 9 of Regulation EC/1/2003 as a suitable tool to cope with the above described market failures. They argue in particular that, because of their flexibility, behavioural commitments may promote cooperation between undertakings and competition authorities and increase (individual) legal certainty in the context of investigations for exclusionary abuses where innovative theories of harm, based on the intersection between competition and data protection laws, are explored by public enforcers.

<sup>1423</sup> In general, on the topic see Monti G., *Managing the intersection of utilities regulation and EC competition law*, in *Competition Law Review*, Vol. 4 (2008), 121 et seq.

(DG Competition included)<sup>1424</sup> – the current antitrust toolkit is not well-equipped to face the disruptive business models at stake.

These challenges have been approached in a twofold way.

As we will see<sup>1425</sup>, according to the G7 Common Understanding, to the report prepared for the Commission and to the U.S. Council of Economic Advisers, a vigorous competition policy regime (although to be fine-tuned, according to the report for the Commission) should still represent the optimal policy choice.

Conversely, almost all the other reports have embraced a various range of regulatory or quasi-regulatory approaches, also proposing to establish digital authorities or digital units to implement and enforce such ex ante strategies.

The UK Digital Competition Expert Panel recommends establishing a digital platform Code of conduct<sup>1426</sup>, based on a set of core principles identified through a participative regulatory model<sup>1427</sup>. The UK CMA<sup>1428</sup> and the Australian Competition and Consumer Commission<sup>1429</sup> welcome this proposal with specific reference to advertising-supported platforms. Such Codes should be only applied to digital platforms that have been designated as having a strategic market status<sup>1430</sup>. They should be principles-led in order to strike the

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<sup>1424</sup> According to G7 Competition Authorities (Italy, France, Germany, Canada, United Kingdom, United States of America, European Commission Union and Japan), *Common Understanding on competition and the digital economy*, Paris, 5<sup>th</sup> June, 2019, available at [https://www.autoritedelaconcurrence.fr/sites/default/files/2019-07/g7\\_common\\_understanding.pdf](https://www.autoritedelaconcurrence.fr/sites/default/files/2019-07/g7_common_understanding.pdf) (accessed 10.6.19) (“G7 Common Understanding”), the challenging issues posed by digital markets are not beyond the reach of competition law, as many of the features of digital markets (including the existence of platforms, network effects, economies of scale/scope, industry concentration, and zero-priced offers) can be successfully addressed by competition authorities under existing toolkits. This would also represent the optimal choice in terms of competition policy, because antitrust ensures a flexible framework, fact-based analysis, cross-sector application and technology-neutral nature, whereas regulation can harm competition by increasing the cost of entry and entrenching incumbents.

<sup>1425</sup> Below, § 2.2.

<sup>1426</sup> UK Digital Competition Expert Panel, 57, § 2.17. This proposal is intended to contribute to the proper implementation of the codes of conduct promoted under Art. 17 and recitals 48 of P2B Regulation.

<sup>1427</sup> UK Digital Competition Expert Panel, 61, § 2.37.

<sup>1428</sup> UK Competition and Markets Authority, 231, § 6.12.

<sup>1429</sup> Australian Competition and Consumer Commission, 138-142 and 255-257.

<sup>1430</sup> UK Digital Competition Expert Panel, 59.

right balance between legal certainty and flexibility<sup>1431</sup>. The enshrined principles should ensure that business users are: i) provided with access to designated platforms on a fair, consistent and transparent basis; ii) provided with prominence, rankings and reviews on designated platforms on a fair, consistent, and transparent basis; iii) not unfairly restricted from, or penalised for, utilising alternative platforms or routes to market<sup>1432</sup>. Self-preferencing is included among the likely unfair conducts to be addressed by the Code<sup>1433</sup>. The Codes may extend beyond the reach of existing competition law<sup>1434</sup>. A newly established Digital Markets Unit should monitor and enforce this set of rules (enforced co-regulation)<sup>1435</sup>.

In addition to suggesting good practices (such as a wider use of guidance papers on hot topics and of case-by-case guidance letters), the Benelux joint memorandum proposes to introduce an ex ante intervention mechanism to prevent anti-competitive behaviour by dominant companies acting as gatekeepers<sup>1436</sup>. Namely, competition authorities should be equipped with the power to intervene on dominant platforms without establishing the infringement, by imposing proportionate remedies, behavioural and non-punitive in nature<sup>1437</sup>. Rebuttable presumptions on the proportionality of certain remedies would be appropriate, as well as a punitive mechanism for companies which do not abide with the imposed remedies.

The German Commission 4.0 holds that an EU Platform Regulation providing “rules of conducts” (instead of economic “standards”) that both fleshes out<sup>1438</sup>

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<sup>1431</sup> UK Digital Competition Expert Panel, 60, § 2.34.

<sup>1432</sup> UK Digital Competition Expert Panel, 61, § 2.38.

<sup>1433</sup> UK Digital Competition Expert Panel, 60-61, § 2.36.

<sup>1434</sup> UK Digital Competition Expert Panel, 62, § 2.45.

<sup>1435</sup> UK Digital Competition Expert Panel, 55, § 2.9 and 62, § 2.46

<sup>1436</sup> Benelux Joint Memorandum, 5-6.

<sup>1437</sup> Perhaps, according to the Strasbourg Court a severe punitive reaction may not be necessary to make an administrative decision fall within the scope of a “criminal charge” under Art. 6 ECHR: see on the topic Allena M., *La sanzione amministrativa tra garanzie costituzionali e principi CEDU: il problema della tassatività-determinatezza e la prevedibilità*, in *Federalismi.it*, Vol. 4 (2017), 1 et seq.

<sup>1438</sup> Article 103 TFEU would provide a legal basis for “fleshing out” provisions.

and supplements<sup>1439</sup> competition law shall be enacted. The proposed rules of conduct would substantially exceed the transparency obligations set out in the P2B Regulation, but their scope of application would be limited to dominant platforms with a minimum level of revenues or a minimum number of users<sup>1440</sup>. This far-reaching proposal would for instance encompass a specific ban on unjustified self-preferencing and on unjustified refuse of real-time access (data interoperability)<sup>1441</sup>. Instead of adopting an effect-based approach<sup>1442</sup>, the Platform Regulation suggests conducts of this kind to be prohibited, subject to objective justification from the digital platform<sup>1443</sup>. On 7 October 2019 Germany's Ministry of Economics has published its draft for the 10th amendment of the German competition act, the Gesetz gegen Wettbewerbsbeschränkungen ("GWB"). Section 19a of the act proposes implementing a competition-oriented regulation for "undertakings with paramount significance for competition across markets" ("UPSCAM"), whose contents are quite similar to the ones envisaged by the German Commission 4.0.<sup>1444</sup>

In a similar vein, the French Autorité de la Concurrence suggested drawing up a non-exhaustive list of practices that raise concerns specific to "structuring digital platforms", including self-preferencing.<sup>1445</sup> In the event that one of the listed practices is implemented by a "structuring platform" and likely to raise competition concerns, it would be up to the companies in question to demonstrate, if they do not wish to submit commitments or to cease the conduct, that their practices can be justified objectively by efficiency gains.

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<sup>1439</sup> Article 114 TFEU would provide a legal basis for "supplementing" provisions.

<sup>1440</sup> German 4.0 Report, 24-25 and 49.

<sup>1441</sup> Real time access to data goes beyond the scope of Art. 20 GDPR.

<sup>1442</sup> The Google Shopping case (European Commission, Decision of 27 June 2017, AT.39740 – *Google Search (Shopping)*) is mentioned as a prominent "precedent for an effect-based assessment of the abusive nature of self-preferencing by a dominant hybrid platform".

<sup>1443</sup> German 4.0 Report, 24-25 and 49-52.

<sup>1444</sup> An English (unofficial) translation of the proposal is available at <https://www.d-kart.de/wp-content/uploads/2019/11/RefE-GWB10-dt-engl-%C3%9Cbersicht-2019-11-15.pdf> (accessed 6.3.20).

<sup>1445</sup> French contribution, 7-8.

Indeed, “reversing the burden of proof in this way would save time so that any distortion of competition could be resolved as quickly as possible after it occurred”.

Focusing on antitrust litigation, the Stigler report suggests relaxing the proof requirements imposed upon plaintiffs in appropriate cases or to reverse burdens of proof<sup>1446</sup>. At the same time, the report suggests establishing a Digital Authority to provide a valuable complement to antitrust enforcement<sup>1447</sup>.

Finally, the Expert Group on Regulatory Obstacles to Financial Innovation recommends to the Commission the introduction of ex ante rules to prevent large, vertically integrated platforms from discriminating against product and service provision by third parties in financial markets<sup>1448</sup>.

In the meanwhile, the Italian National Regulatory Authority for Electronic Communications (AGCom) has started a proceeding to establish the existence of dominant position(s) (and, more in general, of positions which might jeopardize pluralism) in the online advertising market(s)<sup>1449</sup>. Should the AGCom ascertain one or more dominant positions, it might impose behavioural and structural remedies to the dominant company/companies<sup>1450</sup>.

Although the concerns addressed by all the above described proposals appear fully sharable in principle, there are two main reasons to question such approach.

First, the EU-wide debate around a public utilities-style regulatory framework for Big Techs may in a way encourage Member States to intervene on their

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<sup>1446</sup> See Stigler Report, 77-78, where it is also observed that such a reshaping of antitrust litigation would require a statutory intervention and might be accompanied by the establishment of specialized Courts.

<sup>1447</sup> See Stigler Report, 78-79 and 83-92.

<sup>1448</sup> See Expert Group on Regulatory Obstacles to Financial Innovation, *30 Recommendations* cit., 80.

<sup>1449</sup> AGCom decision n. 356/19/CONS “Avvio del procedimento volto all’individuazione del mercato rilevante nonché all’accertamento di posizioni dominanti o comunque lesive del pluralismo nel settore della pubblicità on line, ai sensi dell’art. 43, comma 2, del decreto legislativo 31 luglio 2005, n. 177”.

<sup>1450</sup> Art. 43, § 5 of Legislative decree n. 177/2005 (“*Testo unico dei servizi di media audiovisivi e radiofonici*”. Bassan F., *Potere dell’algoritmo e resistenza dei mercati in Italia* cit., 79 and 131-150, had already remarked that NRAs hold the power to identify new relevant markets. These platforms represent intermediaries, because the algorithm is by definition non-neutral.

own, qualifying platforms as services of general economic interest (SGEIs) and regulating their activity. In this event, the EU would have little to do but applying Art. 106, § 2 TFEU in order to avoid disproportionate and unnecessary restrictions of competition<sup>1451</sup>. Indeed, Member States hold a wide discretion in the identification of what is service of general economic interest and what is not<sup>1452</sup>. Consistently, the Commission's competence in this respect is limited to checking whether the Member State has made a manifest error when defining SGEIs<sup>1453</sup>. This scenario would likely result in high legal uncertainty and in a fragmentation of the online markets. Exactly the opposite of the objectives pursued by the DSM strategy<sup>1454</sup>.

Second, although it is likely that the proposed ex ante regulation would harness digital markets and hamper innovation, there is no certainty around the ability of such a policy strategy to effectively re-balance the market. Indeed, by admitting an efficiency defence, such proposals merely postpone the real problem: the hurdles associated to the true understanding of market dynamics<sup>1455</sup>.

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<sup>1451</sup> Part II, § 5.3.

<sup>1452</sup> Art. 14 TFEU and Protocol 26 of the Lisbon Treaty.

<sup>1453</sup> CFI, 12 February 2008, *British United Provident Association Ltd (BUPA), BUPA Insurance Ltd and BUPA Ireland Ltd v. Commission* cit., §§ 166-169 and 172; 15 June 2005, *Fred Olsen SA v. Commission* cit., § 216.

<sup>1454</sup> The point here raised is that regulating platforms “as such” would pose serious threats to the success of the DSM strategy. However, in the name of national general economic interests (e.g. media pluralism) and of common European interests (e.g. financial stability), it seems possible (and desirable) to regulate how Big Techs performs certain well-defined activities. For instance, according to Bassan F., *Potere dell’algoritmo e resistenza dei mercati in Italia* cit., 126-130, InsurTech led to disruptive products such as Usage-based insurances (UBIs). At first sight, this innovative product design might appear efficient, because it eliminates the problem of informational asymmetries and of free riding. Nonetheless, on a large scale it may undermine the very essence of the insurance sector: the principle of mutuality. With the result that vulnerable social groups will find too expensive the access to insurance. This is seen as problematic with respect to mandatory insurances and to insurances connected to fundamental rights (e.g. healthcare). Hence the proposal to ban or limit profiling at least for such products, creating a sort of insurance universal service.

<sup>1455</sup> Below, § 3.2.

### § 3. The role of competition

As seen, to date digital platforms do not suffer insurmountable regulatory constraints while they act as rule-setter and enjoy at the same time a dual role<sup>1456</sup>.

In the absence of a specific regulatory ban on conducts such as self-preferencing and refusal to grant access to data, the rules on competition may fill the gaps and intervene where the market delivers anti-competitive outcomes.

Here, the orthodox view is that the economic features of markets prone to gatekeeping suggest caution in assessing the impact of regulatory intervention. Indeed, in turn of a certain level of data processing, the consumer will often get a valuable service at low intermediation rates. Moreover, in the presence of dual-role scenarios, the framework on vertical and conglomerate integration would apply. As a rule, vertical and conglomerate strategies provide substantial scope for efficiencies<sup>1457</sup>. Integration may also decrease transaction costs and allow for a better co-ordination in terms of product design, the organisation of the production process, and the way in which the products are sold. Similarly, portfolio effects may give rise to customer benefits such as one-stop-shopping<sup>1458</sup>.

#### § 3.1 What has so far been done as part of the DSM strategy and what is under examination

The authorities of the European Competition Network have launched a remarkable number of investigations in markets prone to gatekeeping<sup>1459</sup>.

Almost all of them dealt (or are dealing) with the dual role played by large digital platforms<sup>1460</sup>.

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<sup>1456</sup> See above, § 2.1.1.

<sup>1457</sup> European Commission, *Guidelines on the assessment of non-horizontal mergers* cit., § 13.

<sup>1458</sup> European Commission, *Guidelines on the assessment of non-horizontal mergers* cit., § 14.

<sup>1459</sup> Part IV, Section II.

Sophisticated debates are underway in the antitrust community around the risk associated to this trend. Moving from the assumption that in principle, as said, vertical integration and conglomerate strategies deliver efficiency gains that the consumers can benefit from, there is somehow the concern that a departure from the more economic approach may occur as a result of the “more regulatory approach” under discussion. In particular, the application of the essential facility doctrine framework and of its debated implications (e.g. passive refusal to deal vs. constructive refusal to deal; indispensability of the facility v. mere utility) to markets prone to gatekeeping would pose a number of issues. Therefore, the emerging vibe is that, unless progressive readings of the Treaty are explored<sup>1461</sup>, when faced with conducts of this kind, Art. 102 TFEU would strive, at best, to establish solid theories of harm under an effect-based approach to foreclosure<sup>1462</sup>.

Additionally, almost all the recalled investigations have taken (or are taking) many years.

In this context, the urgency to readily intervene in markets which are prone to fast-moving winner-takes-most dynamics<sup>1463</sup>, along with the described hurdles to build solid cases under the traditional framework of Art. 102 TFEU, has led to a twofold approach.

The first one, above described, unveils a move toward a more regulatory approach<sup>1464</sup>.

The second one, here analysed, holds that competition law would still represent the optimal policy choice and has been maintained by the G7 competition

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<sup>1460</sup> Part IV, Section II, §§ 1.2, 1.5, 2 and 3.

<sup>1461</sup> Graef I., *Differentiated Treatment in Platform-to-Business Relations* cit.

<sup>1462</sup> Ibáñez Colomo P., *Indispensability and Abuse of Dominance: From Commercial Solvents to Slovak Telekom and Google Shopping*, in *Journal of European Competition Law & Practice*, Vol. 10 (2019), Issue 9, 532 et seq.; Dunne N., *Dispensing with Indispensability*, September 11<sup>th</sup>, 2019, LSE Law, Society and Economy Working Papers 15/2019, available at <http://dx.doi.org/10.2139/ssrn.3476938> (accessed 4.1.20).

<sup>1463</sup> Part I, § 7.

<sup>1464</sup> Above, § 2.1.2.



authorities (DG Competition included), the report prepared for the European Commission and the U.S. Council of Economic Advisers<sup>1465</sup>.

However, in the report prepared for the Commission it is also acknowledged that, in order this conclusion to be workable, competition rules need to be reshaped and fitted to digital markets' features<sup>1466</sup>.

The main change of paradigm shall reside in the new balance of error costs and in the prevalence, at least in the first instance, of legal testing over the effect-based approach<sup>1467</sup>. In sum, a revival of ancient competition<sup>1468</sup>.

The starting assumption is that, due to the economic features of digital markets, under-enforcement would be of particular concern in the DDE. It follows that even if the consumer harm cannot be precisely measured, certain conducts shall be considered anti-competitive until otherwise proven by the platform.

Apparently – here like for the “more regulatory approach” proposals – an unprecedented application of the precautionary principle<sup>1469</sup> to competition law might be soon experienced<sup>1470</sup>. A remarkable parallelism can be identified: the main effect of the precautionary principle is a shift of the burden of proof<sup>1471</sup>, and, quite in the same vein, the proposals here at stake clearly go in the direction of qualifying certain conducts as anti-competitive until proven otherwise.

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<sup>1465</sup> Report for the European Commission, 14; U.S. Council of Economic Advisers, *Economic Report* cit., 222; G7 Common Understanding cit.

<sup>1466</sup> According to Amato G., *The Neo-Antitrust. Between Ends and Means*, in *Italian Antitrust Review*, 2019, 1 et seq., antitrust laws would be flexible enough to be adapted to the new challenges. However, such adaption should not go beyond the tasks specifically assigned. The rule of law does not allow judicial and administrative authorities to freely expand the means for the sake of whatever noble and even constitutional as long as the intervention is not supported by a legal basis.

<sup>1467</sup> Report for the European Commission, 56.

<sup>1468</sup> Part II, § 4.1. This reading is in a way confirmed in de Streeck A., *Should digital antitrust be ordoliberal?*, in *Concurrences*, Vol. 1 (2020), 2 et seq.

<sup>1469</sup> Art. 191, § 2 TFEU; EECJ, 5 May 1988, *UK v. Commission*, case C-180/96, § 100.

<sup>1470</sup> This parallelism appears consistent with the observed development of the precautionary principle, from principle applicable to areas such as environment, healthcare, agriculture and consumer protection, into a general principle of the EU law: see Craig P., *EU Administrative Law*, II edition, Oxford University Press, Oxford (UK), 2012, 641 et seq.

<sup>1471</sup> Communication from the Commission “*on the precautionary principle*”, (COM(2000) 1 final), § 6.4.

For instance, in cases of vertically integrated dominant digital platforms in markets with particularly high barriers to entry, where the platform acts as a gatekeeper and thus represents an unavoidable trading partner, the platform should bear the burden of proving that self-preferencing has no long-run exclusionary effects on product markets<sup>1472</sup>.

As said, with the Communication “Shaping Europe’s digital future”<sup>1473</sup> the Commission hasn’t taken a clear position: on the one hand, it declared that a revision of competition rules is currently ongoing; on the other hand, it also announced that in the context of the Digital Services Act initiative the introduction of ex ante regulation will be considered<sup>1474</sup>.

### § 3.2 What should be done to (really) foster the DSM strategy

There is room to argue that the ongoing debate on the best policy route to follow in markets prone to gatekeeping is at best misleading.

Indeed, both the proposals at stake (ex ante regulation v. competition law fostered by a revised toolkit), so as drafted, seem unable to truly address the market defects at stake.

It was the Autumn of 2000 when Judge Posner, experiencing the early stage of the Internet revolution, asked himself whether U.S. antitrust laws were sufficiently equipped to effectively tackle what he termed “the new economy”.

He gave a dual answer to this question.

The first one, theoretical, was positive: antitrust laws were flexible enough to adapt themselves to the renewed scene.

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<sup>1472</sup> Report for the European Commission, 66. Here, the legal test clearly substitutes, at least in the first instance, the case-by-case effect-based analysis. According to German 4.0 Report, 49, this shift would amount to a transition from an “infringement by effect” to an “infringement by object” rule of Art. 102 TFEU, which hardly can be achieved through a soft-law instrument such as, for instance, a Commission Notice.

Indeed, according to the case-law, when the infrastructure is not essential, self-preferencing may infringe Art. 102 TFEU only subject to an effects test, that is when the practice engaged is not justified by efficiency gains and is likely to result in a leveraging of market power

<sup>1473</sup> Communication from the Commission “*Shaping Europe’s digital future*” cit.

<sup>1474</sup> Part III, § 6.1.

The second one, institutional, was negative (or at least more sceptical): in his opinion, Agencies and Courts did not have adequate technical resources to engage this battle on equal terms with tech companies and appeared to be ill suited to cope with the issues posed by these very complex and fast-moving markets<sup>1475</sup>.

We believe that, 20 years later, the situation is quite similar.

Market concentration may of course well be, in principle, alarming.

However, the (im)balance of power between private sector and public sector is a way more important problem.

And today there is an evident “know-how imbalance” between Big Techs and competition enforcers.

Competition law, even in markets prone to gatekeeping, should focus on solid and fact-checked theories of harm.

To do so, a full and quick understanding of market dynamics and of Big Tech’s strategies is required.

Focusing on what has so far been done as part of the DSM enforcement agenda, one will immediately perceive how much the competition authorities have struggled to come to an end their investigations. In some cases, after long-lasting proceedings, neither was this end exciting (see, regardless of what will the Courts rule, the German case against Facebook and the French one against Google).

Why so many difficulties?

A great problem is that nowadays investigations do almost entirely rely on external factors: complaints<sup>1476</sup>, RFIs (answered by the firm under investigation itself)<sup>1477</sup>, internal documents<sup>1478</sup>, tangible evidence.

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<sup>1475</sup> Posner R.A., *Antitrust in the New Economy* cit., quoted at Part II, § 1.

<sup>1476</sup> E.g. Part IV, Section II, § 3.

<sup>1477</sup> E.g. Part IV, Section II, § 2.

<sup>1478</sup> Commissioner Vestager highlighted how internal documents have shaped the Commission’s assessment in recent cases and announced her intention to publish a set of best practices on requests for internal documents in merger investigations. The Commission has indeed shown an increasing reliance on internal documents in its recent merger practice, and now seems to devote a substantial part of its investigation efforts to the gathering and review of

Google Shopping provides a particularly relevant example in that latter regard. Here, the Commission did not deal with the algorithm code as such, which, admittedly, would have been quite troubling, due to the necessity of assessing a very large number of factors. Rather, it relied on the “tangible evidence” found out while testing the foreclosure effect. Therefore, the Commission did not have to enter Google’s “black box”. Indeed, the Commission managed to demonstrate that, in conjunction with the launch or modification of a given algorithm, a significant decrease of traffic to competing comparison shopping services (and an inversely proportional increase of traffic to Google’s own comparison shopping service) could be seen on the market<sup>1479</sup>.

Building a case “from the outside”, as happened in the Google Shopping case, is challenging and can take a lot of time. Additionally, by following this burdensome approach many anti-competitive practices may remain undetected for a long time, maybe even for good.

In this light, one might maliciously think that the transparency obligations on the use of ranking algorithms laid down under the P2B and the Omnibus Directive seem more likely addressed to help competition enforcers rather than business users and consumers.

Nor would the described proposals for a “more regulatory approach” or for a “more fitting” competition law provide a conclusive solution to the raised problem of the “imbalance of know-how” between Big Techs and enforcers.

Indeed, both the identified routes leave space to a case-by-case efficiency defence of the digital platform. In addition, and here the Google Shopping case provides a bright example of how difficult this stage can be, to no extent do

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these: see Vestager M., *Fairness and Competition*, Speech of 25 January 2018, available at [https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/fairness-and-competition\\_en](https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/fairness-and-competition_en) (accessed 9.9.19), where internal documents are treated as “evidence” and the related comment of de Solà-Morales J., *Beyond Internal Documents: The Commission’s Recent Assessment of Conglomerate Mergers*, in *Journal of European Competition Law & Practice*, Volume 10 (2019), Issue 5, 304 et seq.

<sup>1479</sup> The traffic diverted accounted for a large proportion of traffic to competing comparison shopping services, which in turn, due to Google’s dominant position in the upstream market, were not able to effectively replace Mountain View’s general search services by other viable sources: see Part IV, Section II, § 1.2.

they help the competition authority at identifying the proper remedies to be imposed to remove the effects of the unlawful behaviour from the market.

It follows that the proposals currently under consideration in the DSM strategy framework do not provide a solution to the problem, but simply postpone the moment the enforcers will have to face it.

At this point, one might wonder what should be in practice done to solve the reported “know-how imbalance” problem.

The proposal here framed is to make effective the (nowadays: vacuum) concept of “competition by design”<sup>1480</sup>, which has been so far used mainly with reference to the problem of algorithmic collusion.

The way to do so is, naturally, to evolve the concept of “compliance antitrust”<sup>1481</sup> into the concept of “algorithmic compliance antitrust”<sup>1482</sup>.

Although it is acknowledged that blockchain, if further improved, can provide safe solutions<sup>1483</sup>, algorithmic compliance antitrust programmes should be technologically neutral. The proposal here framed is neither regulating<sup>1484</sup> nor accounting<sup>1485</sup> the algorithm; it is more modest and less heavy-handed.

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<sup>1480</sup> Vestager M., *Algorithms and competition*, Speech of 16 March 2017, available at [https://wayback.archive-it.org/12090/20191129221651/https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/bundeskartellamt-18th-conference-competition-berlin-16-march-2017\\_en](https://wayback.archive-it.org/12090/20191129221651/https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/bundeskartellamt-18th-conference-competition-berlin-16-march-2017_en) (accessed 3.1.18): “antitrust compliance by design. That means pricing algorithms need to be built in a way that doesn't allow them to collude”.

<sup>1481</sup> See DG Competition, *Compliance matters. What companies can do better to respect EU competition rules*, available at <https://op.europa.eu/en/publication-detail/-/publication/78f46c48-e03e-4c36-bbbe-aa08c2514d7a/language-en> (accessed 10.4.19).

<sup>1482</sup> Deng A., *From the Dark Side to the Bright Side: Exploring Algorithmic Antitrust Compliance*, January 12<sup>th</sup>, 2020, available at <https://ssrn.com/abstract=3334164> (accessed 10.3.19).

<sup>1483</sup> Finck M., *Blockchain Regulation and Governance in Europe*, Cambridge University Press, Cambridge (U.K.), 2019 maintains that blockchain is a “malleable” technology which may unlock many opportunities if consistently corrected intervening in the early stage of its development.

<sup>1484</sup> Fitsilis F., *Imposing Regulation on Advanced Algorithms*, Springer, Cham (HR), 2019.

<sup>1485</sup> Sandvig C. – Hamilton K. – Karahalios K. – Langbort C., *Auditing Algorithms: Research Methods for Detecting Discrimination on Internet Platforms*, available at <http://www-personal.umich.edu/~csandvig/research/Auditing%20Algorithms%20--%20Sandvig%20--%20ICA%202014%20Data%20and%20Discrimination%20Preconference.pdf> (accessed 4.11.19).

Indeed, on a practical standpoint, a holistic approach on single algorithms released by digital platforms should be avoided. Not only for the “regulatory cost” of this strategy, but even because more advanced algorithms show the ability to evolve through learning processes that take place both in-house (beta testing) and in the outside<sup>1486</sup>.

Especially with AI-driven decision-making, what is key for an algorithm is how it behaves “in the outside”, how it evolves when it interacts with the external world and with other algorithms.

An interesting proposal put forward is abandoning the idea of “ethical” algorithms programmed not to infringe competition law (since AI is not rule-based, this kind of default setting would be by definition impossible) and embracing the one of Generative adversarial networks (GANs) models. In this type of model, while one algorithm tries to generate some content (say, an image), the adversarial algorithm tries to identify it as a computer-generated fake. A compliant [...] algorithm could have a similar actor-critic/adversarial structure<sup>1487</sup> and would have to randomly monitor the outcomes of the AI-driven decision-making process.

This architecture may be usefully adopted to design and to correct the algorithm.

However, due to its “in house” nature, said solution would not grant that the algorithm will always perform correctly when in contact with the external world and, hence, with unpredictable variables.

A possible strategy may be to outsource part of the “testing” stage of algorithmic compliance antitrust to “trusted algorithm acceleration centres”.

Such bodies should not be held responsible for the assessment of the competitive risk associated to tested algorithms. Nor should they release

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<sup>1486</sup> Vezzoso S., *Competition by Design*, in Lundqvist B. – Gal M.S. (eds.), *Competition Law for the Digital Economy*, Edward Elgar Publishing, Cheltenham (UK) - Northampton (US), 2019, 93 et seq.

<sup>1487</sup> Deng A., *From the Dark Side to the Bright Side* cit., 9-10.

certifications of any kind. Compliance antitrust, even when algorithmic, should continue to rely on self-assessment.

The role of trusted algorithm acceleration centres should be limited to launching tests simulated by way of an “algorithm bank”. The algorithm bank would store the main algorithms operational at the time, divided per line of business.

The trusted algorithm acceleration centres would then make the tested algorithms interact with the algorithms of the concerned markets according to specific queries submitted by the customer (algorithm acceleration process). Following the performance of its task, the appointed body would issue a report, where the results of the test will be displayed without making any reference to the origin of the other algorithms used in the test, which are anonymized once introduced in the algorithm bank.

Trusted algorithm acceleration centres should be regulated in order to make sure that their activity is fully compliant with the Trade Secrecy Directive, the NIS Directive and the Cybersecurity Act (CSA), the IPRs and the data protection laws.

Should the enabling legislative framework envisage a public interest in the mission pursued by trusted algorithm acceleration centres, said bodies may have the obligation to interconnect the algorithm banks, in order to make testing more effective and to make trusted bodies compete on the quality of the service rather than on the size of the algorithm bank (excessive concentration of information shall always be avoided).

Testing would take place in a way which is fully respectful of the “black box” secrets.

Neither the customer nor the trusted algorithm acceleration centre should have access to the “code”.

To avoid hub & spoke collusive scenarios, when the customer is operational in an oligopoly market, the data bank should be enriched with a series of

hypothetical algorithms belonging to the same product market but received by trusted centres established in a different geographical market.

In the White Book on AI<sup>1488</sup> the Commission planned to support the creation of excellence and testing centres<sup>1489</sup>, also by way of setting up of a PPI on AI<sup>1490</sup>. The proposal put forward in this paragraph may therefore find its place in these actions.

Trusted algorithm acceleration centres should be a shared facility for both the private and the public sector.

Therefore, competition enforcers should have access to said services. By making their ICT skilled employees interact with trusted algorithm acceleration centres, competition enforcers may significantly reduce the average time of their investigations on conducts involving digital platforms.

Firms under investigation may be mandated to provide their involved algorithms to the trusted algorithm acceleration centres. In this event, the test should take place at the presence of skilled representatives of both the firm and the competition authority.

Finally, the legal effects of the proposal under examination should be consistent with the existing case law on compliance antitrust programmes.

Whenever a digital platform will be found responsible of anti-competitive behaviours, the competition authority will consider the implementation of a serious algorithmic antitrust compliance programme as a mitigating circumstance<sup>1491</sup>, hence reducing the amount of the fine.

Conversely, if the firm under investigation operates in market conditions that are critical under competition law and it failed to adopt an algorithmic compliance antitrust programme, such player should face a severe aggravating

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<sup>1488</sup> Part III, § 6.3.

<sup>1489</sup> Communication from the Commission “*White Paper On Artificial Intelligence*” cit., 6, Action 2.

<sup>1490</sup> Communication from the Commission “*White Paper On Artificial Intelligence*” cit., 7, Action 5.

<sup>1491</sup> European Commission, “*Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation No 1/2003*” (2006/C 210/02), § 29.



circumstance, proportional to the level of anti-competitive risk faced by the firm<sup>1492</sup>.

### **Section III – The DSM strategy in Non-Personal Data Intensive Markets ... work in progress**

It is too early to make a grounded judgement on the consistency of the European DSM strategy in Non-Personal Data Intensive Markets, such as for instance manufacturing and agriculture.

Here, policy interventions are still at an early stage, and enforcement activity as well, if we exclude a group of mergers that has been reviewed by the Commission<sup>1493</sup>.

In part, this depends on the fact that much of the challenges to come are associated to the full development of IoT<sup>1494</sup> and Industry 4.0<sup>1495</sup>.

However, forecasting a boom of such enabling technologies, boosted by the combination of AI and blockchain, the Commission has already taken action to establish a legal framework which might support the creation of a European model of smart, interconnected economy.

Indeed, the Commission has estimated that while today 80% of the processing and analysis of data takes place in data centers and centralized computing facilities, and the remaining 20% in smart connected objects, such as cars, home appliances or manufacturing robots, and in computing facilities close to the user (“edge computing”), by 2025 these proportions are likely to be inverted, as a large part of the data will come from industrial and professional applications, areas of public interest or internet-of-things applications in everyday life<sup>1496</sup>.

Provided that the existing IPRs, trade secret and copyright laws, all along with the de facto protection ensured by the material possession of the dataset,

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<sup>1492</sup> European Commission, “*Guidelines on the method of setting fines*” cit., § 28.

<sup>1493</sup> Part IV, Section III, §§ 3.1-3.3.

<sup>1494</sup> Part I, § 2.4.

<sup>1495</sup> Part I, § 2.2.

<sup>1496</sup> Communication from the Commission “*A European strategy for data*” cit.

discouraged the introduction of a “data producer’s right”<sup>1497</sup>, the Commission followed the data access policy option.

In doing so, it reasoned in a sector specific way<sup>1498</sup>, either improving data access regimes already in force (e.g. Chemicals, Repair and Maintenance Motor Vehicles; ITS; Through-Ticketing Transportation Systems; Smart Meters<sup>1499</sup>) or introducing new sector-specific provisions (e.g. PSD2)<sup>1500</sup>. At times, data access regimes have been justified by market failures and the need to open-up the market (e.g. PSD2); other times by the need to safeguard a highly ranked public interest such as environment or healthcare<sup>1501</sup>.

In parallel, the Regulation on the free flow of non-personal data (FF Regulation)<sup>1502</sup> dealt with the issues of data localization and lock-in practices in the private sector. In addition, it sought to “*encourage and facilitate the development of self-regulatory codes of conduct at Union level, in order to contribute to a competitive data economy, based on the principles of transparency and interoperability and taking due account of open standards*”<sup>1503</sup>.

This legislative act encourages the creation of a thriving DSM. However, due to the soft-law approach adopted, it might not appear enough, alone, to reach this goal in those industries where “market failures” are more likely to occur. For instance, precision agriculture (PA) heavily relies on sensing data<sup>1504</sup>: therefore, in such sector the control of lands and of agricultural means can ensure also the control of the main data source.

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<sup>1497</sup> Part III, § 4.2.1.

<sup>1498</sup> A case by case approach to data access is also proposed in Autorité de la concurrence (FR) – Bundeskartellamt (DE), *Competition Law and Data* cit.

<sup>1499</sup> Part III, § 5.1.

<sup>1500</sup> Part III, § 5.2.

<sup>1501</sup> See for instance mandatory access to vehicle repair and maintenance information finalized to reduce pollution from motor vehicles (above § 5.1). In the same vein, see also Drexel J., *Designing Competitive Markets for Industrial Data* cit.; IT Joint Sector Enquiry, 109-111.

<sup>1502</sup> Part III, § 4.3.1.

<sup>1503</sup> Art. 6.

<sup>1504</sup> Part I, § 2.3.

On these grounds – and in a way following the indications of scholars<sup>1505</sup> – the newly established Commission planned a twofold strategy.

First, the Commission proposes cross-sectorial issues, prioritizing interoperability requirements and standards within and across sectors<sup>1506</sup>, to be governed by a light-touch enabling legislative framework.

Only where a market failure in a given sector is identified/can be foreseen, which competition law cannot solve, a sector-specific data access right should be made compulsory, where appropriate under fair, transparent, reasonable, proportionate and/or non-discriminatory conditions<sup>1507</sup>.

The enabling legislative package should promote and support the emergence of Common European Data Spaces in strategic economic sectors and domains of public interest (industrial-manufacturing, environment, mobility, healthcare, finance, energy, agriculture, public administration, skills)<sup>1508</sup>.

Common European Data Spaces would introduce a bottom-up “regulatory circle”, where national regulatory authorities will enact the subsidiarity principle by accompanying the markets towards the best solutions (co-regulation and self-regulation), creating a set of regulatory rules able to identify best practices, then transformed, if necessary, in Commission’s decisions or EU legislative proposals<sup>1509</sup>.

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<sup>1505</sup> According to Drex J., *Data Access and Control in the Era of Connected Devices*, Study on Behalf of the European Consumer Organisation (BEUC), 2018, available at [https://www.beuc.eu/publications/beuc-x-2018-121\\_data\\_access\\_and\\_control\\_in\\_the\\_area\\_of\\_connected\\_devices.pdf](https://www.beuc.eu/publications/beuc-x-2018-121_data_access_and_control_in_the_area_of_connected_devices.pdf) (accessed 10.4.19), data access regimes should preferably be adopted for specific sectors. Yet, the study recognises the benefits of a generally applicable data access regime. Hence, the study finally identifies key elements of legislation on a general data access regime, which can also be used as guidelines for more targeted sector-specific data access legislation.

<sup>1506</sup> Communication from the Commission “A European strategy for data cit., 8: “The application of standard and shared compatible formats and protocols for gathering and processing data from different sources in a coherent and interoperable manner across sectors and vertical markets should be encouraged through the rolling plan for ICT standardisation and (as regards public services) a strengthened European Interoperability Framework”.

<sup>1507</sup> Communication from the Commission “A European strategy for data cit., 13.

<sup>1508</sup> Communication from the Commission “A European strategy for data cit., Appendix.

<sup>1509</sup> Bassan F., *Potere dell’algoritmo e resistenza dei mercati in Italia* cit., 55-56, who concludes that this is the only way for an upgrade from “the code is law” to “the law is code”.

One one-size-fits-all approaches should be avoided and looking for specific technical solutions across the data value chain should represent the paradigm<sup>1510</sup>.

Such reference to the data value chain seems to imply that ex ante regulation may be tuned in different ways depending on the specific market defects at stake.

If this assumption is correct, then one might imagine different regulatory strategies at each stage of the value chain.

For instance, one can imagine the imposition of a duty to share, upon request, raw data (data Recording phase<sup>1511</sup>) at cost-based conditions (because here the firms holding the dataset would act as data-takers with an effortless competitive advantage); the imposition of a duty to share refined data (data Cleaning/Integration/Representation phase<sup>1512</sup>) at FRAND conditions (because here a minimum level of investment is present to refine the raw data); the tradability of the insights extracted from such datasets at the conditions freely set by the undertaking owning the dataset (data analytics phase<sup>1513</sup>) (as the ability to develop efficient algorithms belongs to the “business acumen” of the single company, which should remain, as a rule, intangible by competition law)<sup>1514</sup>.

Based on the (few) information at disposal, at the time it is not possible to evaluate the effectiveness and the consistency of the DSM strategy in Non-Personal Data Intensive markets.

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<sup>1510</sup> Communication from the Commission “A European strategy for data cit., 21-24.

<sup>1511</sup> Part I, § 4.1.

<sup>1512</sup> Part I, § 4.2.

<sup>1513</sup> Part I, § 4.3.

<sup>1514</sup> Colangelo G., *Big data, piattaforme digitali e antitrust*, in *Mercato, Concorrenza, Regole*, Vol. 3 (2016), 425 et seq.

## Section IV – Institutional Design

Proposals to establish Digital Markets Units<sup>1515</sup> or even to create an ex novo Digital Authority<sup>1516</sup> have been put forward, as part of the wider concern of finding appropriate and targeted solutions for digital platforms.

The outcomes of this research suggests avoiding this regulatory governance option, for at least two reasons.

First, the findings of the research indicate that neither a “more regulatory approach”<sup>1517</sup> nor a “special competition law”<sup>1518</sup> should be introduced, at least in the first instance. It follows that no institutional design interventions should be considered.

Second, there is a remarkable risk of unsystematic, uncoordinated and inconsistent intervention if we consider the (unavoidable) overlap that will occur between the newly established Digital Units or Digital Authorities, NCAs, NRAs, DPAs and the “sectoral authorities to specify sectoral requirements” to data access, as mentioned in the Commission’s Communication “*A European Strategy for Data*”<sup>1519</sup>. To this latter respect, it seems important to stress that any Digital Authority or Digital Unit would necessarily be cross-sectorial in scope, as every kind of product or service performed via a digital platform would be likely attracted to their jurisdiction.

Against this background, the holistic approach to data protection, consumer protection and competition law that has been proposed in this research<sup>1520</sup> may call for a different kind of intervention on institutional design.

To start with, it is highly recommended to introduce in every Member State a public enforcement system for consumer protection law (and, possibly, to confer such power to national competition authorities).

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<sup>1515</sup> UK Digital Competition Expert Panel Report, 55, § 2.9 and 62, § 2.46; Australian Adv Report, 138-142 and 255-257.

<sup>1516</sup> Stigler Report, 78-79 and 83-92.

<sup>1517</sup> Above, Section II, § 2.

<sup>1518</sup> Above, Section II, § 3.

<sup>1519</sup> Communication from the Commission “*A European strategy for data*” cit., 12.

<sup>1520</sup> Above, Section I, §§ 2.2.3 and 2.3; Section II, § 2.1.

At the same time, since in digital markets many conducts may fall, in principle, within the scope of at least four statutes (data protection, consumer protection, competition, electronic communications), rather than confusing the scene by introducing new institutional players, it would be way more useful considering the establishment of a “Jurisdictional Office for digital affairs”.

This goes beyond the proposal to establish a permanent coordination between concerned authorities and agencies<sup>1521</sup>.

In particular, each Member State should identify its Jurisdictional Office. The Board of such Office should be composed by one representative for each of the four mentioned disciplines (data protection, consumer protection, competition, electronic communications).

This would allow achieving an unprecedented One-Stop-Regulatory-Shop, that both consumers and firms would benefit from. Parallel and coordinated investigations may under exceptional circumstances also be carried out, as the Jurisdictional Office would allow enforcers to cooperate in a way which is consistent with the *A & B. v. Norway* framework<sup>1522</sup>.

In parallel, each Member State should allow its enforcers to exercise inspection powers even before an investigation is formally launched<sup>1523</sup>.

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<sup>1521</sup> IT Sector Inquiry, recommendation 11 (pp. 120-121): due to the family ties existing among the four disciplines (antitrust, sector-specific regulation on electronic communications, consumer protection and privacy), a close and permanent coordination between the involved agencies is required, on both enforcement and advocacy activities and officialised, if necessary, by a memorandum of understanding.

<sup>1522</sup> According to ECHR, Grand Chamber, 15 November 2016, *A. & B. v. Norway*, applications nos. 24130/11 and 29758/11, the conduct of dual administrative proceedings, with the possibility of a combination of different penalties, does not infringe the ne bis in idem principle (Art. 4, Protocol 7 ECHR) insofar as it had been foreseeable for the applicants, who must have known from the outset that criminal prosecution was possible, or even likely, on the facts of their cases. The Court observed that in the case at stake the administrative and criminal proceedings had been conducted in parallel and were interconnected. The facts established in one of the sets of proceedings had been relied on in the other set and, as regards the proportionality of the overall punishment, the sentence imposed in the criminal trial had taken account of the administrative fine.

<sup>1523</sup> IT Joint Sector Inquiry, recommendation 10 (pp. 119-120).

## Part VI - Findings of the research

The conclusive part of this research tested the consistency and the effectiveness of the ongoing DSM strategy. This took place by trying to apply the legislative acts implemented as part of the strategy<sup>1524</sup> to hypothetical scenarios equivalent to the ones recently addressed by European enforcers<sup>1525</sup>.

In line with the preceding analysis on the enforcement, the research question has been separately posed for Personal Data intensive Markets (e.g. social networks), Markets prone to Gatekeeping (e.g. e-commerce marketplaces) and Non-Personal Data Intensive Markets (e.g. manufacturing and agriculture). The tripartite distinction introduced in this research represents only a proxy and has no solid theoretical background. It is acknowledged that reality is much more complex than this, as business models often combine more of these aspects. However, the rationales of the findings are wide enough to be adapted to the multifaceted features of reality.

The assessment has been conducted taking also into account the action plan tabled in February 2020 by the newly established Commission<sup>1526</sup> and the proposals advanced in the reports recently issued on digital platforms<sup>1527</sup>.

Where there was room to do so, targeted proposals for improvement have been identified.

### Personal Data Intensive markets

The early enforcement of the DSM strategy in Personal Data Intensive markets<sup>1528</sup> seemed to rely on three assumptions.

First assumption: even in the context of Personal Data Intensive markets, there is no reason to abandon rigorous market definition. So far, the Commission has

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<sup>1524</sup> Part. III.

<sup>1525</sup> Part. IV.

<sup>1526</sup> Communications from the Commission “A European strategy for data cit.; “A European strategy for data cit.; “White Paper On Artificial Intelligence cit.

<sup>1527</sup> Report for the European Commission ; UK Digital Competition Expert Panel Report; Stigler Report; UK CMA Interim Adv Report; German 4.0 Report; IT Joint Sector Enquiry; Australian Adv Report; Benelux Joint Memorandum; French contribution.

<sup>1528</sup> Part. IV, Section I, § 1.

defined markets assessing service functionalities of the platform on the consumers' side, because multi-sidedness and the lack of a monetary price make difficult running a SSNIP test, and because the SSNDQ test has proven to be quite complex when it comes to the practice.

Second assumption: in so far as personal data are used as consideration by consumers and as productive input by platforms, and in so far as they can be collected along many channels in the on-line environment, they are tantamount, in fact, to a "commodity".

Third assumption: privacy-related issues do not affect, as such, competition law; they could do so only to the extent that, in the relevant market, consumers value privacy as a qualitative parameter of competition.

In this research it has been argued that all three of the assumptions may be challenged.

First counter-argument: in the context of Personal Data intensive markets, rigorous market definition based on product or service functionalities on the consumers' side may fail to capture the full picture (even when supported by a careful assessment of supply-side substitutability and of the conglomerate effects, as long as those tests rely on service functionalities too)<sup>1529</sup>. In Personal Data Intensive Markets firms do not compete to become leader in a well-defined product market, nor to collect personal data as such. Rather, they compete for individuals' attention. The ongoing revision of the Commission's notice on market definition should consider this aspect and introduce a second level of assessment, to be entered only when the first one has been completed with a "green light". We believe that there is room to argue that, in the context of attention markets, the product market might be also tailored solely on the demand side, by exclusively focusing on the categories of consumers making use of the concerned digital products or services; therefore, without need to pay attention to the similarities or complementarities shown among the concerned products or services. Indeed, Personal data are ubiquitous and non-rivalrous,

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<sup>1529</sup> Part. V, Section I, § 1.1.



while people and their amount of spare time are not. Therefore, in so far as post-merger the average customer of the merging platform will be likely to significantly increase the overall amount of time spent on the digital ecosystem, competitive concerns may be raised<sup>1530</sup>.

Second counterargument: a comprehensive reading of the data protection and consumer protection laws suggests that personal data can't be treated as a commodity. On closer examination, privacy acts as a *de facto* legal barrier to entry or to expansion. It follows that in personal data intensive markets any restorative ex post remedy centred on personal data access will be unlawful or, to the best, very difficult to implement. In any case, since digital ecosystems strive to secure users (rather than to collect their personal data), it is very likely that such data access based remedies, even when successfully imposed, would not be able to effectively re-balance the market<sup>1531</sup>. These features suggest great caution in assessing competition investigations in Personal Data Intensive markets.

Third counterargument: in the context of Personal-Data intensive Markets, privacy-related issues may well be part of the competitive assessment, with no need to depart from competition law ultimate goals and standards of evaluation<sup>1532</sup>. Assuming that, only in so far as undertakings compete on privacy in the relevant market, privacy-related issues should be part of the competitive assessment, reflects a static paradigm of competition. If one adopted a dynamic efficiency perspective, competition law may be reconciled with data protection and consumer protection, that, especially in the context of Personal Data Intensive markets, should be treated as pro-competitive economic regulation.

In this setting, the role of privacy and consumer protection would be creating a level playing field by safeguarding consumer choice.

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<sup>1530</sup> Part. V, Section I, § 2.3.1.

<sup>1531</sup> Part. V, Section I, § 1.2.

<sup>1532</sup> Part. V, Section I, § 1.3.

However, the research points out that both the disciplines are not actually effective, given the incapacity of dealing with behavioural economics.

Hence a quite drastic (but unavoidable) conclusion: in the absence of corrective tools, the “notice-and-consent” model that has been recently confirmed by the GDPR, as well as the “disclosure regulation” approach that largely permeates consumer protection law, will fail to effectively achieve the founding principles of the respective statutes.

Therefore, a targeted set of “nudging” additional corrective tools is proposed to reconcile the DSM strategy approach to privacy and consumer protection with the *effect utile* principle<sup>1533</sup>. In addition, it is assumed that consumer protection appears better placed than privacy whenever the conduct at stake not only infringes data protection laws, but *also* materially distorts (or is likely to materially distort) the economic behaviour of the consumer<sup>1534</sup>. In this event, the data protection authority (DPA) should cooperate with the consumer protection authority (CPA) to provide guidance on the application of privacy laws to the specific circumstances, for instance rendering an opinion.

As to the role of competition in Personal Data Intensive markets, it has been argued that, in the absence of a clear impact of the conduct on the market, data protection and/or consumer protection would be better-off, as the Italian investigations against Facebook demonstrate.

The idea that competition law may automatically apply whenever the rules on data protection are infringed by the dominant firm (normative link causality) may even turn out to be counterproductive<sup>1535</sup>. Indeed, a look at the wider picture shows that such approach is likely to lead to under-enforcement. Namely, there are hypothetical scenarios where the adoption of a “normative causality” theory would lead to the impossibility to take action under Art. 102 TFEU for data-related conducts that are problematic under competition law even without infringing data protection laws. To this end, behavioural

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<sup>1533</sup> Part. V, Section I, § 2.2.2.

<sup>1534</sup> Part. V, Section I, § 2.2.3.

<sup>1535</sup> Part. V, Section I, § 2.3.

economics (rather than data protection as such) should enter the competitive assessment. On the specific point, the research noted that in a not negligible number of competition cases on pre-installation practices (Google Android included), the concepts of “end-user inertia” and of “status quo bias” have already been used by the Commission (and confirmed by the CFI). Quite surprisingly, the “privacy paradox” has so far been observed in a “passive” way.

In sum, EU competition law is not currently dealing with behavioural biases affecting the allocation of personal data across the DSM, which is of particular concern if one considers that, as already explained, in Personal Data Intensive markets ex post remedies centred on personal data access would face legal barriers and, even when successfully imposed, would barely be useful for competitors.

Hence the proposal to adapt existing theories of harm to the new scenarios.

Exploitation has been considered on both the consumer and advertiser sides of the platform: while in the first case it would be quite complex, on a practical standpoint, to run a reliable SSNDQ (or SSNIC) test<sup>1536</sup>; more room to intervene would in principle exist in the second scenario, but the very strict case-law on exploitative abuses would still apply<sup>1537</sup>.

Exclusionary theories of harm appear more fitting<sup>1538</sup>, because in the first instance (and subject to an efficiency defence) they only require a (fact-checked) demonstration of the harm to the competitive process, without dealing with short-run welfare considerations. Furthermore, dynamic efficiency plays a stronger role. The argument here framed is that, should the defendant engage in an efficiency defence based on an as-efficient-competitor (AEC) test (“unorthodox”, because applied to zero-price markets), the enforcer may refer to the less-efficient-competitor (LEC) framework and, moreover, may oppose an even more persuasive counterargument. In so far as competition law allows

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<sup>1536</sup> Part. V, Section I, § 2.3.2.1.1.

<sup>1537</sup> Part. V, Section I, § 2.3.2.1.2.

<sup>1538</sup> Part. V, Section I, § 2.3.2.2

firm to compete on addiction and obsession, there would be room to conclude that dynamic efficiency would not serve competition on the merits<sup>1539</sup>. More to the point, competition on the merits would require firms investing in a constructive way, for instance improving aspects such as entertainment, valuable contents, user experience and faster communication. In the absence of this comprehensive reading of the Treaties, the wide provisions of the GDPR and of the UCPD could not be reconciled with competition law and the overall consistency of European competition policy would be undermined.

### Markets prone to gatekeeping

The research dealt then with markets prone to gatekeeping, that is markets in which digital platforms provide an efficient intermediation service between two or more sides of the market and match demand and offer by exploiting extreme economies of scale and scope, as well as strong indirect network effects, often acting in the dual role of intermediary and seller (e.g. e-commerce marketplaces and OTAs).

After having introduced the regulatory interventions so far implemented as part of the DSM strategy<sup>1540</sup>, the research coped with the ongoing discussion about the best policy option to address structural defects affecting those markets.

Two factors are almost unanimously seen as problematic by the recent reports on digital platforms.

First, long-lasting ex post antitrust investigations would appear ill-suited to effectively face the fast-moving dynamics of digital markets. Moreover, current competition law remedies would often be ineffective in the digital landscape and, in any case, they would lack the same reach and the degree of legal certainty and predictability associated to ex ante regulation.

Second, and strictly related to the first, there is a growing consensus on the fact that – despite the straight opinion expressed in the G7 Common Understanding

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<sup>1539</sup> Part. V, Part. II, § 6.3.1.1.

<sup>1540</sup> Part. V, Section II, § 2.1.1.

– the current antitrust toolkit is not well equipped to face the disruptive business models at stake.

The problem has been approached in a twofold manner.

According to a first position, ex ante regulation would represent the more viable policy option. In this context – as we will see below – proposals to establish Digital Markets Units or even to create an ex novo Digital Authority have been put forward<sup>1541</sup>.

On closer examination, such proposals do not show a purely regulatory design, because they all allow the Big Tech to demonstrate that, in the specific circumstance, the conduct *prima facie* qualified as unlawful is beneficial to the market. In this sense, it seems possible to envisage a move toward a “more regulatory approach” to competition law rather than a move toward traditional economic regulation.

According to a second position, a vigorous competition policy regime should still represent the optimal policy choice<sup>1542</sup>.

However, the report prepared for the European Commission called for a significant reshaping of the toolkit.

This acknowledged inadequacy of the toolkit moves from the assumption that, unless progressive readings of the Treaty are explored, when faced with conducts of this kind (such as for instance gatekeepers acting in a dual role engaging in self-preferencing practices), Art. 102 TFEU would strive to establish solid theories of harm under an effect-based approach to foreclosure. This, in particular, due to the efficiencies that are often annexed to vertical and conglomerate integration and, especially, to the questionable “indispensability” of the platform, to be both assessed case-by-case.

Additionally, almost all of the investigations considered in this research have taken (or are taking) many years.

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<sup>1541</sup> Part. V, Section II, § 2.1.2.

<sup>1542</sup> Part. V, Section II, § 2.1.3.

Against this background, fast-moving markets prone to tipping would require prompt intervention and, in the same vein, avoiding, at least in the first instance, sophisticated (and long-lasting) disputes around the effective impact of the exclusionary strategy on the competitive process.

To address those concerns, the report prepared for the European Commission<sup>1543</sup> proposed to identify a new balance of error costs and to assign a prominent role, at least in the first instance, to legal testing rather than to effect-based approaches. In sum, a step back towards “ancient competition”<sup>1544</sup>, mitigated by the fact that – also in this proposal – the digital platform should have the right to allege an efficiency defence.

With the Communication “*Shaping Europe’s digital future*”, the Commission hasn’t taken a clear position: on the one hand, it declared that a revision of competition rules is currently ongoing; on the other hand, it also announced that in the context of the Digital Services Act initiative the introduction of ex ante regulation will be considered<sup>1545</sup>.

This research suggests that the both policy strategies are problematic.

As for the proposal to adopt a more regulatory approach, it has been argued that the emergence of an EU-wide debate around a public utilities-style regulatory framework for Big Techs may, in a way, encourage Member States to intervene on their own, qualifying platforms as services of general economic interest (SGEIs) and regulating their activity. In this event, while the EU would have limited room to intervene under Art. 106, § 2 TFEU – given the wide discretion enjoyed by Member States in the definition of SGEIs (Protocol 26 of the Lisbon Treaty) – the ultimate goal of the DSM strategy itself, which is to make the “internal market” evolve into a “digital single market”, would be undermined, due to high legal uncertainty and to legal fragmentation.

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<sup>1543</sup> The Stigler Report finds itself in a grey area between the (legislative) modification of the error-cost test (for U.S. antitrust litigation) and the establishment of a Digital Authority with ex ante powers (to support and accompany the market).

<sup>1544</sup> Part. II, § 4.1.

<sup>1545</sup> Part. III, § 6.1.

The proposal to adjust the competition law toolkit by way of rebalancing the error costs test is problematic too. It provides a significant departure from modern competition<sup>1546</sup>, according to which vertical and conglomerate integration should be deemed lawful until otherwise proven.

Since both the proposals show remarkable negative effects, the research tried to assess the benefits that may be reasonably expected from them.

It found that they would be quite modest when compared to the “regulatory cost” of the intervention.

Market concentration can of course be alarming for competition.

However, the (im)balance of power between private sector and public sector is a way more important problem.

And today there is an evident “know-how imbalance” between Big Techs and competition enforcers. This asymmetry of knowledge, rather than the viability of the competition toolkit, represents the problem, as Posner had the opportunity to note twenty years ago, commenting the rise of the world wide web and of what he termed the “new economy”<sup>1547</sup>.

The investigations so far conducted did almost entirely rely on external factors: complaints, requests for information (RFIs), internal documents, tangible evidence.

Google Shopping provides a bright example in that latter respect: the Commission did not deal with the algorithm code as such (which, admittedly, would have been quite troubling, due to the necessity of assessing a very large number of factors). Rather, it relied on the “tangible evidence” found out while testing the theory of foreclosure. Such analysis took quite a long time. In this

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<sup>1546</sup> Part. I, § 4.2.

<sup>1547</sup> It was the Autumn of 2000 when Judge Posner, experiencing the early stage of the Internet revolution, asked himself whether U.S. antitrust laws were sufficiently equipped to effectively tackle what he termed “the new economy”. He gave a dual answer to this question. The first one, theoretical, was positive: antitrust laws were flexible enough to adapt themselves to the renewed scene. The second one, institutional, was negative (or at least more sceptical): in his opinion, Agencies and Courts did not have adequate technical resources to engage this battle on equal terms with tech companies and appeared to be ill suited to cope with the issues posed by these very complex and fast-moving markets. We believe that, 20 years later, the situation is quite similar: see Posner R.A., *Antitrust in the New Economy* cit., quoted at Part. II, § 1.

light, one may maliciously think that the transparency obligations laid down under the P2B Regulation and the Omnibus Directive will more likely help competition enforcers rather than business users and consumers. But again, these transparency obligations will still rely on (unaccountable) self-declarations.

We believe that this “know-how imbalance” will not be solved by the proposals above considered, because they all allow an efficiency defence on a case-by-case basis and, above all, they do not provide guidance for the handling of the remedies, which should represent the key stage of the investigation in such fast-moving markets. Therefore, these policy strategies simply postpone the problem, without apparently solving it.

That being said, the research acknowledges the importance of keeping digital markets open and contestable.

To this end, it tries to pro-actively put forward proposals to reduce said know-how imbalance<sup>1548</sup>.

Namely, the vacuum concept of “competition by design” has been filled with the concept of “algorithmic compliance antitrust”, the natural evolution of antitrust compliance programmes<sup>1549</sup>. Although it is acknowledged that blockchain can provide safe solutions, algorithmic compliance antitrust programmes should be technologically neutral.

AI models based on Generative adversarial networks (GANs)<sup>1550</sup>, which provide an actor-critic/adversarial structure, may provide a useful tool to design the programme.

To be more effective, the algorithmic compliance antitrust may then be tested by the firm, with the assistance of “trusted algorithm acceleration centres”.

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<sup>1548</sup> Part. V, Section II, § 3.2.

<sup>1549</sup> The effective implementation of said algorithmic compliance antitrust programmes should be evaluated in the context of an investigation, either to discharge the firm or, more likely, to mitigate the fine); or to consider the failure to implement them as an aggravating circumstance for the firm engaging in potentially “risky” activities, such as dual role.

<sup>1550</sup> Part. I, § 4.3.



According to specific queries submitted by the customer (who shall remain solely responsible for the self-assessment), trusted algorithm acceleration centres would make the tested algorithm(s) randomly run and interact with other algorithms commonly used on the relevant market.

Due to their systemic relevance, such bodies should be regulated to ensure full compliance with the Trade Secrecy Directive, the NIS Directive and the Cybersecurity Act (CSA), the IPRs and the data protection laws.

Trusted algorithm acceleration centres should be a shared facility for both the private and the public sector. Therefore, competition enforcers should have access to the service provided, with the same limitations above described for private customers. By making their ICT skilled employees cooperate with trusted algorithm acceleration centres, competition enforcers may significantly reduce the average time of their investigations on conducts involving digital platforms.

Competition authorities should have the power to mandate firms under investigation to submit their involved algorithms to the trusted algorithm acceleration centres.

The described initiative may be consistent with the Commission's commitment to support, also by way of a Public-Private Partnerships (PPPs) on AI, the rise of high-quality testing centres (action planned in the context of the "*White Book on AI*").

### **Non-Personal Data Intensive markets**

The research has subsequently focused on the DSM strategy on Non-Personal Data Intensive markets (e.g. manufacturing or agriculture)<sup>1551</sup>.

The analysis showed that it is too early to make a grounded judgement on the consistency of the policy choices so far followed by the EU.

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<sup>1551</sup> Part. V, Section III.

In this field, policy interventions are still at an early stage, as well as enforcement activity as well, if we exclude a group of mergers which has been reviewed by the Commission<sup>1552</sup>.

In part, this depends on the fact that much of the challenges to come are associated to the full development of IoT<sup>1553</sup> and Industry 4.0<sup>1554</sup>, still in progress.

However, having foreseen the eruption of such enabling technologies in next five years, boosted by the combination of AI and blockchain, in its Communication on data<sup>1555</sup> the Commission has already taken action to establish a horizontal soft legal framework which may enable the creation of a European model of smart, interconnected economy, thus supporting the creation of Common European Data Spaces in strategic economic sectors and domains of public interest.

At first sight, and subject to further research, the direction indicated deserves approval, because it creates a harmonized framework but at the same time it refrains from one-size-fits-all approaches.

## **Institutional design**

Finally, the research focused on the issue of institutional design.

It discouraged establishing Digital Authorities or Digital Units. Given the ongoing “platformization” process of many businesses, such bodies would risk becoming omnibus agents, giving rise to significant overlaps among regulators and, therefore, to “institutional disorder” (which, again, would hamper the fulfilment of the DSM strategy objectives).

Instead, the research recommends introducing in every Member State a public enforcement system for consumer protection law (and, possibly, to confer such power to the national competition authority).

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<sup>1552</sup> Part. IV, Section III, §§ 3.1-3.3.

<sup>1553</sup> Part. I, § 2.4.

<sup>1554</sup> Part. I, § 2.2.

<sup>1555</sup> Part. III, § 6.2.

At the same time, since in digital markets many conducts may fall, in principle, within the scope of at least four statutes (data protection, consumer protection, competition, electronic communications), rather than confusing the scene by introducing new institutional players, it would be way more useful considering the establishment of a “Jurisdictional Office for digital affairs”, solely entrusted with the identification of the “leading enforcer”, also in the view of attaining efficient “One-Stop-Regulatory-Shop” solutions across the DSM<sup>1556</sup>.

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<sup>1556</sup> Part. V, Section IV.

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## Annex I - The “constitutional” foundations of European competition law

<b>The “constitutional” foundations of European competition law</b>				
Main patterns	Objectives - Tasks	Activities	Involvement of Member States	Efficiency Paradigm
<b>“Ancient” competition law</b>				
<b>Schuman declaration (1950)</b>	“In contrast to international cartels, which tend to impose restrictive practices on distribution and the exploitation of national markets, and to maintain high profits, the organization will ensure the fusion of markets and the expansion of production”			
<b>ECSC (1951)</b>	Art. 2: “The European Coal and Steel Community shall have as its task to contribute, in harmony with the general economy of the Member States and through the establishment of a common market as provided in Article 4, to economic expansion, growth of employment and a rising standard of living in the Member States. The Community shall progressively bring about conditions which will of themselves ensure the most rational distribution of production at the highest possible level of productivity, while safeguarding continuity of employment and taking care not to provoke fundamental and persistent	Art. 3: A set of activities limited to Coal and Steel production to achieve market integration in through a semi-planned economy model (e.g. Art. 66, § 7 ECSC)	/	/

	disturbances in the economies of Member States”			
<b>EEC and EAEC</b> (Rome, 1957)	Art. 2 EEC: “The Community shall have as its task, by establishing a common market and by progressively approximating the common economic policies of Member States, to promote throughout the Community a harmonious development of economic activities, sustainable and non-inflationary growth, a higher degree of stability, the raising of the standard of living and quality of life, and stricter connections among Member States”	Art. 3 EEC: “For the purposes set out in Article 2, the activities of the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein: [...] (g) a system ensuring that competition in the common market is not distorted”	/	/
<b>Single European Act</b> (Luxemburg, 1986)	Art. 13 introduced art. 8a in EEC: “The Community shall adopt measures with the aim of progressively establishing the internal market over a period expiring on 31 December 1992”			
<b>“Modern” competition law</b>				
<b>TEU (Maastricht, 1992):</b>  I pillar: TEC (EC, ECSC, EAEC);  II pillar: Common Foreign and Security Policy (CFSP);  III pillar: Justice and Home Affairs (JHA)	Art. G.b.2 TEU replaces Art. 2 TEEC ( <i>recte</i> : TEC) as follows: “The Community shall have as its task, by establishing an internal market <b>and an economic and monetary union</b> and by implementing the common policies <b>or activities referred to in Articles 3 and 3a</b> , to promote throughout the Community a harmonious <b>and balanced</b> development of economic activities, sustainable and non-inflationary growth <b>respecting the environment</b> , a high degree of <b>stability convergence of economic performance, a high level of employment and of social protection</b> , the raising of the standard of living and quality of life, and <del>stricter—connections</del> <b>economic and social cohesion and solidarity</b> among Member States”	Art. G.b.3 TEU modifies Art. 3, § 1, f) TEEC in Art. 3, § 1, g) TEC	Art. G, § 4 TEU inserts Art. 3a TEC: “For the purposes set out in Article 2, the activities of the Member States and the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein, the adoption of an economic policy which is based on the close coordination of Member States’ economic policies, on the internal market and on the definition of common objectives, and conducted in accordance with the principle of an open market economy with free competition”	Art. G, § 25 TEU inserts Art. 102a TEC, which at the second sentence reads as follows: “The Member States and the Community shall act in accordance with the principle of an open market economy with free competition, favouring an <b>efficient allocation of resources</b> , and in compliance with the principles set out in Article 3a”  Art. G, § 25 TEU inserted Art. 105 TEC, where the same is provided for the European

				System of Central Banks (ESCB)
<b>Treaty of Amsterdam, 1997</b>	Art. 2.2 modifies Art. 2 TEC as follows: “The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common policies or activities referred to in Articles 3 and 4, to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, equality between men and women, sustainable and non-inflationary growth, a high degree of <b>competitiveness</b> and convergence of economic performance, a high level of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States”	Undistorted competition still under 3, § 1, g) EC	Art. 3.a TEC is just renumbered as Art. 4 TEC	Art. 102a TEC is just renumbered as Art. 98 TEC  Art. 105 TEC does not change position
<b>Treaty of Nice, 2002</b>	No relevant changes			
<b>Treaty establishing the European Constitution (Rome, 2004 - abandoned in 2007)</b>	Art. 1-3, § 2 mentions free and undistorted competition as one of the EU’s tasks/objectives: “The Union shall offer its citizens an area of freedom, security and justice without internal frontiers, and an internal market where competition is free and undistorted”			
<b>After Lisbon</b>				
<b>Reform Treaty (TEU and TFEU, Lisbon, 2007)</b>	The hierarchy between tasks/objectives and activities tends to disappear. Indeed, Art. 2 TEU provides a programmatic and very broad list of fundamental “values” of the Union, to be read in conjunction with other provisions of the Treaties and, in particular, with Art. 3, § 3. It states that “The Union is founded on the <b>values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail</b> ”.	Activities (Art. 3 TEC) are not listed anymore.  Pursuant to Art. 52 TEU “the Protocols [...] to the Treaties shall form an integral part thereof”.  Protocol 27 makes clear that “the internal market as set out in Article 3 [TEU] includes a system ensuring that competition is not distorted”, adding that “to this end, the Union shall, if necessary, take action under the provisions of the Treaties, including under Article 352 [TFEU]”.  According to Art. 352 TFEU (former 308 TEC), “if action by the Union should prove necessary [...] to attain one of the objectives set out in the Treaties, and the Treaties	Art. 4, § 1 TEC was included in Part I (“Principles”) of the founding Treaty, whereas it has now moved to Title VIII (“Economic and monetary policy”) of the Treaty on the functioning, namely under Art. 119, § 1 TFEU.  As to its contents, modifications are just formal and limited to mere	Art. 98 TEC becomes Art. 120 TFEU
	Art. 3, § 3 TEU completely redrafted EU’s tasks/objectives			

	<p>previously listed under Art. 2 EC as follows: “The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. It shall combat social exclusion and discrimination, and shall promote social justice and protection, equality between women and men, solidarity between generations and protection of the rights of the child. It shall promote economic, social and territorial cohesion, and solidarity among Member States. It shall respect its rich cultural and linguistic diversity, and shall ensure that Europe’s cultural heritage is safeguarded and enhanced”</p> <p>+</p> <p>EMU is still an objective/task of the Union, but it is now mentioned under Art. 3, § 4 TEU</p> <p>+</p> <p>Under Art. 6, § 1 TEU “the Union recognises the rights, freedoms and principles set out in the Charter of Fundamental Rights of the European Union of 7 December 2000”.</p> <p>+</p> <p>Under Art. 6, § 3 TEU “Fundamental rights, as guaranteed by the European Convention for the Protection of Human Rights and Fundamental Freedoms and as they result from the constitutional traditions common to the Member States, shall constitute general principles of the Union’s law”.</p> <p>+</p> <p>“Competitiveness” is not considered anymore as an objective of the EU, but it is still relevant under Artt. 151, § 2; 173, 189 and 195 TFEU</p> <p>Comparing Art. 2 EC and Art. 3, § 3 TEU, the main novelties,</p>	<p>have not provided the necessary powers, the Council, acting unanimously on a proposal from the Commission and after obtaining the consent of the European Parliament, shall adopt the appropriate measures”.</p>	<p>coordination among the new provisions: “For the purposes set out in <del>Article 2</del> [TEC] Article 3 [TEU], the activities of the Member States and the <del>Community Union</del> shall include, as provided in the <del>Treaties</del> and <del>in accordance with the timetable set out therein</del>, the adoption of an economic policy which is based on the close coordination of Member States’ economic policies, on the internal market and on the definition of common objectives, and conducted in accordance with the principle of an open market economy with free competition”</p>	
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	<p>listed by order of importance, are the following:</p> <ul style="list-style-type: none"> <li>- a “highly competitive social market economy” model is explicitly adopted by the Union to shape the economic constitution;</li> <li>- consistently, the “common market” becomes the “internal market”;</li> <li>- “scientific and technological advance” is a new task;</li> <li>- The EU “shall respect its rich cultural and linguistic diversity, and shall ensure that Europe’s cultural heritage is safeguarded and enhanced”</li> </ul>			
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