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Summary of Discussion of the Hearing on Big Data

ANNEX TO THE SUMMARY RECORD OF THE 126th MEETING OF THE COMPETITION COMMITTEE HELD ON 29-30 NOVEMBER 2016

29-30 November 2016

This document prepared by the OECD Secretariat is a detailed summary of the discussion held during the 126th meeting of the Competition Committee on 29-30 November 2016.

More documentation related to this discussion can be found at

www.oecd.org/competition/big-data-bringing-competition-policy-to-the-digital-era.htm.

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SUMMARY OF DISCUSSION OF THE HEARING ON BIG DATA

By the Secretariat

The Competition Committee held a Hearing on Big Data in the afternoon of 29th November 2016 chaired by Professor Frédéric Jenny. The discussion was based on the background note Big Data: Bringing Competition Policy to the Digital Era prepared by the OECD Secretariat, with the support of Professor Maurice Stucke. The discussion benefitted from presentations by a panel of experts from academia, private sector and public agencies:

- **Maurice Stucke** (Professor of Law at the University of Tennessee and co-founder of the Konkurrenz Group)
- **Hal Varian** (Chief Economist at Google and Professor at Berkeley School of Information)
- **Geoffrey Manne** (Executive Director of the International Centre for Law and Economics and member of the FCC's Consumer Advisory Committee)
- **Annabelle Gawer** (Professor of Digital Economy at the University of Surrey)
- **Alec Burnside** (Managing Partner at Cadwalader)

The Hearing on Big Data aimed at identifying some of the competition challenges from the increasing use of consumer data for business purposes, and to discuss possible reactions by competition authorities and other agencies. The chairman opened the roundtable by introducing the panellists and organised the session in three parts: a first part on the impact of Big Data on innovation and market power; a second part about the implications of big data for competition law enforcement; and a short third part about whether other regulations should be applied or even substitute the role of competition policy.

1. Impact of Big Data on innovation and market power

After introducing the economics of platforms, **Professor Annabelle Gawer** explained that while Big Data is a new concept, not all competition problems raised by Big Data are necessarily new. Indeed, traditional platforms facing high fixed costs and serving as an interface between multiple products benefit from economies of scale and scope. Likewise, multi-sided markets pre-dating the digital revolution already gave rise to network effects. It is also a common misconception that network effects necessarily lead to winner-takes-all markets, as there are many counterexamples of markets with network effects that have not been monopolised.

However, unlike traditional markets involving simple money transactions between consumers and suppliers, Big Data has blurred the line between agents operation on the demand side and on the supply side of the market, allowing users of an online service to behave simultaneously as consumers and suppliers of data. In turn, that data can be

immediately used by the service provider to improve the quality of the service, leading to a real-time feedback loop that was not observed before.

Next the floor was given to **Professor Hal Varian**, who argued that data does not necessarily act as a barrier to entry since, regardless of its size, data is nowadays very cheap to collect, can be easily generated by small companies through multiple mechanisms (point of sale cash registers, weblogs, sensors…) and faces decreasing returns to the number of observations.

Professor Varian also claimed that the so called user feedback loops resemble a supply phenomenon known as learning-by-doing, which is present in virtually all industries. Data is generally useless unless it can be turned into knowledge and action using data analytics, which requires heavy investment in complementary assets such as hardware, software and expertise. Due to cloud computing and open source tools, some of the fixed costs of these investments have been converted into variables costs, allowing small companies to enter the market more easily. Therefore, data is not valuable per se; instead, business success depends more on the ability of high technology companies to develop new predictive algorithms, incorporate new regressors into the analysis and attract labour with expertise.

Finally, Professor Varian noted that in digital markets we can usually observe incumbents competing across several products, as well as a dynamic competitive pressure exerted by entrants that are constantly coming with new ideas.

2. Implications for competition law enforcement

In the second part of the discussion on competition law enforcement, **Professor Maurice Stucke** noted that one objective is to examine whether market forces will always provide consumers with mechanisms to protect their privacy interests. He argued that while market forces allow for an increasing number of free products and services, consumers feel that they have lost control over their own data. As Professor Stucke explained, data-driven networks effects may enable companies to exert market power in quality competition, such as the reduction of consumer privacy (for instance, by acquiring sensitive data or using data in ways that are contrary to consumers' wishes). These network effects are not inherently good or bad, as they can also improve the quality of the product, but they should still be considered as part of the competitive analysis. Since firms with market power can degrade privacy protection below levels that many consumers prefer, we cannot assume the online markets are self-correcting. Competition officials, however, are increasingly acknowledging privacy protection can be a parameter of quality competition.

A second question is whether the competition agencies have the tools to assess the implications of Big Data on competition. Unfortunately, most competition tools, including the SSNIP test, are centred on price effects, and we still lack the sophisticated analytical tools to access non-price parameters. Alternative tools such as the SSNDQ test (for a small but significant and non-transitory decrease in quality) were proposed in an

earlier OECD roundtable, but they are still hard to implement in the absence of good quality measures. Professor Stucke concluded his presentation with some recommendations for competition authorities, such as identifying intersections between privacy and competition policy, stronger cooperation between different regulatory agencies, developing new tools to measure quality effects and tackling data-related exclusionary practices. Another challenge with data-driven mergers is that they can defy the conventional antitrust categories (horizontal, vertical or conglomerate).

Differently from Professor Stucke's view, **Mr. Geoffrey Manne** submitted that antitrust law is not well suited to promote privacy rights, which should be a matter of consumer protection law. As Mr. Manne explained, firms do not need to have market power in order to violate privacy rights and, even if they do, it would still be necessary to prove that such conduct would amount to an abuse of dominance.

He also pointed out that not all product characteristics are necessarily relevant for a competitive analysis: despite the claims that consumers value privacy, there is evidence that consumers are usually willing to disclose sensitive information for a small reward, suggesting that the value of privacy is lower than what it is usually considered. Therefore, incorporating privacy into antitrust has the risk of increasing the level of subjectivity in competition law enforcement, due to the inherent difficulties of measuring consumers' willingness to pay for privacy and, eventually, it could prevent companies from using data to actually improve the quality of their products.

Finally, in order to respond to the frequent concern that data could be used to monopolise an industry, Mr. Manne reinforced Professor Varian's arguments that data is cheap and can be collected from many alternative sources, particularly due to the massive size of the data broker industry.

The intervention of the last panellist, **Mr. Alec Burnside**, supported instead the views of Professor Stucke concerning the nexus between competition policy and privacy, even though he recognised that, in many situations, violations of privacy rights should not raise antitrust concerns (for instance, when undertaken by a small firm in a competitive market). However, Mr. Burnside suggested that privacy law alone may not suffice, since we observe in digital markets constant violations of the fundamental principle that data should be only used for the purposes that the individual (data subject) consented.

Finally, Mr. Burnside noted the importance of consistency between competition policy and consumer protection, referring to the recent work of the European Data Protection Supervisor on that subject.

At this stage, the chairman opened the floor to the delegates whose jurisdictions had previous experience with some of the issues discussed by the panellists, turning first to BIAC, and then to Germany, France, the European Union and the United States.

BIAC gave the floor to Chris Meyers, Associate General Counsel of Antitrust from Microsoft, who reinforced Professor Varian's remarks that data is abundant and has only value when properly structured and categorised. He then moved on to share Microsoft's perspective that many of the existing antitrust tools, analytical frameworks and theories of harm can be applied to the analysis of data-driven mergers and unilateral conducts, while still recognizing the importance of considering the specificities of data environments.

BIAC added three further points. Firstly, as a result of the many consumer gains involved, Big Data does not systematically cause harm and should not thus be subject to per se treatment. Secondly, regardless of network effects or feedback loops that might lead to

dominance, Big Data should not give rise to competition law enforcement absent some anticompetitive exclusionary conduct. Thirdly, BIAC argued that the effect of data gathering and dissemination on non-traditional dimensions of competition, such as privacy, should be dissociated from competition law and addressed by other public bodies with specific expertise in that area.

Germany discussed the experience of the Bundeskartellamt in the analysis of the digital economy, referring to its paper on platforms and to the joint study on Big Data with the French Autorité de la Concurrence, as well as to some of its groundwork. Germany argued that, when dealing with competition cases, data can be an important parameter to assess market power. Germany noted that network effects may result in winner-takes-all outcomes and therefore suggested that agencies should adapt the theories of harm to the developments in the industry. As an example, during an ongoing investigation, the Bundeskartellamt considered data as a potential factor for market power when assessing a dominant position, and is currently examining whether terms of service that reduce data protection may be a form of exploitative abuse. Finally, while competition agencies have already started dealing with personal data, new challenges may arise in the future due to the fact that indispensable data is starting to be produced and exchanged by machines.

The intervention of **France** focused on two points about the role of data on competition. Firstly, the collection of consumer data has brought a price for the use of online platforms that used to be free in the past. Hence, in the same way mergers are assessed based on their potential effects on prices, merger review should also account for the risk of increased transfers of data. For that, traditional factors should be considered, such as whether there are potential entrants exerting competitive pressure and whether firms compete, in fact, on privacy / confidentially dimensions. Secondly, Big Data may modify the nature of competition between digital operators, by creating lock-in to suppliers that control personal data, increasing thus switching costs and raising barriers to entry. Competition authorities should then carefully examine on a case-by-case basis to what extent business performance depends on the ability to collect data; evaluate the degree of substitutability between different datasets; and identify the amount of data required for an entrant to compete.

After noting that the Big Data debate has been extremely broad in terms of potential theories of harm, the **European Commission** identified two essential claims about the implications of data for competition law enforcement. The first claim is that online companies do not provide the level of privacy that consumers want. On this matter, the European Commission argued that data protection as a measure of quality can potentially be an important aspect of competition policy, though it is not necessarily an aspect that matters for all consumers. Despite the common concerns that many of the personal data issues arise in zero price markets, these markets have been covered in multiple cases by EU data protection law, consumer protection law and competition law. The second claim is that some online service providers collect large amounts of data to improve their products, accumulating an insurmountable advantage over competitors. In this case, the European Commission suggests treating data as any other input: for instance, in vertical mergers, one should consider the risks of foreclosure; and, in exclusionary abuses, one should weight carefully remedies such as requirements to share data. But before any such interventions, it is crucial to identify whether data is a key element for product success, whether data is replicable or available from other sources, and how quickly data becomes outdated.

The Federal Trade Commission of the **United States** discussed some reasons for the great interest on Big Data in the antitrust community. While companies have been collecting data for a long time, they are increasingly collecting large amounts of private information from consumers using cross-device tracking, in part enabled by the development of the internet of things, artificial intelligence and virtual reality. Also, the modern tools of data analytics provide companies with a substantial power to make inferences and predictions. In term of implications for competition agencies, the FTC stated that a key issue is to analyse whether data is enhancing market power. For instance, in a former investigation of a notified merger, the FTC analysed whether the combination of the databases of both parties would enhance market power of the merged entity. The FTC also recognised effects on privacy as a potential issue, but unless there is evidence that competition takes place on privacy dimensions, those concerns should be left to a data protection authority to address. In other words, despite the importance of understanding how firms are using Big Data and to consider new theories of harm, any actions by competition agencies should be justified by harm to the competitive process.

3. Data regulation and competition policy

The chairman moved to the third part of the roundtable to discuss whether and how data regulation could be used either as an alternative or a complement to competition law enforcement in addressing some of the concerns previously identified. The chairman gave the floor first to the European Protection Data Supervisor and then to the United Kingdom.

The representative of the European Data Protection and Privacy Supervisor (EDPS) of the **European Union** emphasised that the combination of market power with personal information and data analytics may affect fundamental human rights, not only privacy, but also consumer choice, freedom of speech and non-discrimination. Whereas the EDPS agreed that competition law is not meant to address violations of privacy and data protection law, it recognised that, within some limits, competition law enforcement could address failures in digital markets. In particular, in merger control and abuse of dominance cases, competition authorities may look at other dimensions of competition such as quality choice and innovation; and consider theories of harm involving the use of covert tracking and massive collection of personal data with the purpose to exclude competitors. The EDPS also discussed in a recently published paper that competition and privacy enforcement have very similar goals, which could be better achieved through cooperation and a close dialogue between the different agencies. The new data protection rules on data portability are an important example of regulation that may enhance both competitiveness and privacy protection. The EDPS has hence been in contact with a number of regulatory agencies across jurisdictions, to promote the sharing of information and cooperation in enforcement decisions.

After recognizing the benefits of the data economy for businesses and consumers, the **United Kingdom** expressed concerns that firms may have few incentives for transparency in the absence of some regulatory response, and that a lack of confidence by

consumers may eventually undermine the market. In this context, the Competition and Market Authority has undertaken a call for information on the commercial use of consumer data and analysed the design of some regulations of online markets. In particular, there seems to be an area for improvement in the regulatory framework of online cookies (currently regulated under the 2003 EU directive), as consumers still have substantial difficulties in opting out or removing cookies.

4. Closing remarks

The chairman turned again to the invited experts, asking for their closing remarks.

In his final intervention, **Professor Hal Varian** discussed the high level of data protection and security offered by some online companies, as it can be seen from all sorts of sensitive questions that consumers are willing to ask to search engines as compared to the information they would be willing to reveal elsewhere.

Mr. Alec Burnside submitted that while consumers frequently reveal sensitive information online, that suggests that most individuals are not fully aware of the private information they give away. Also, even consumers who take actions to protect their privacy might still be traced online.

Professor Annabelle Gawer discussed the great economic value that has been created by new business models in the digital economy, alerting though to the importance of adapting rules and governance in order to take better advantage of the new technologies and to promote collective interests.

Professor Geoffrey Manne remarked that there is still a lot to learn in this area and, as result, it is important to do further investigation before introducing new theories of harm or changing the principles of competition law enforcement.

Professor Maurice Stucke argued that competition policy can play an important role in responding to the anti-competitive risks posed by Big Data, which have become too big to be ignored. He added that another important issue not discussed at the Hearing is how algorithms and Big Data may enable firms to collude in novel ways.

The chairman concluded that the current concerns about Big Data are not a fad and he identified two fundamental ways through which Big Data can be incorporated into competition law enforcement: data can be treated as an asset/input that enables anti-competitive practices; and as a quality element of competition that increases customization but reduces privacy. While the discussion suggested that it may be enough to adapt existing tools in order to address Big Data as an asset, there is more work to do in order to incorporate data as a quality/performance issue into competitive analysis. The chairman proposed as future work the analysis of lock-in effects and highlighted the importance of cooperation between competition authorities and other agencies of consumer protection, in order to reduce any systemic risk of trust that could undermine the functioning of digital markets.

Before closing the session, the chairman gave the floor to the OECD Secretariat of the **Directorate for Science, Technology and Innovation (DSTI)**, in order to present the OECD's horizontal project, Going Digital: Making the Transformation Work for Growth & Well-being.

DSTI presented the horizontal project that it is currently co-ordinating in partnership with 8 other core Directorates as well as SGE/NAEC and SGE/Foresight. It includes 14 "core" Committees, one of which is the Competition Committee. This project, whose objective is to provide policy makers with the tools they need to help their economies prosper, has three main pillars. The first pillar involves the creation of an integrated policy framework for making the digital transformation work for growth and well-being, which would involve all core committees. The second pillar consists in the analysis of specific policy areas, including competition policy, using the work developed through the committee process. Finally, the third pillar involves addressing challenging policy questions that intersect with several policy areas, using a multidisciplinary approach. DSTI emphasised the importance of the participation and feedback of the Competition Committee along this process.