



United Nations Conference on Trade and Development

Distr.: General
1 May 2019

Original: English

Trade and Development Board
Trade and Development Commission
Intergovernmental Group of Experts on Competition Law and Policy
Eighteenth session
Geneva, 10–12 July 2019
Item 3(a)(i) of the provisional agenda

Competition issues in the digital economy

Note by the UNCTAD secretariat¹

Executive summary

Large technology companies have penetrated many aspects of people's lifestyles, from shopping to social interaction. Amazon, Apple, Facebook and Google have replaced oil and gas and telecommunications firms among the top 10 global companies based on market capitalization in 2018. Such digital platforms provide many benefits, but have also gained significant control of consumer data, which confers market power. This has raised not only competition-related concerns, but also concerns related to consumer protection and privacy. Many countries are studying the negative effects of the market power of these platforms and seeking ways to deal with the related challenges.

This note focuses on the features specific to digital platforms and their implications for competition law and policy. It identifies the areas of competition law in which there is need for adaptation, to deal with negative outcomes that may arise from dominant digital platforms. The note presents some policy options for protecting and promoting competition in the digital economy.

¹ Note: Mention of any firm or licenced process does not imply the endorsement of the United Nations.



I. Introduction

1. Technological developments have provided consumers with new products and services, often provided free of charge. Digital platforms are at the centre of such developments and have had disruptive effects in many economic sectors. The platforms provide a digital infrastructure for a variety of services, including marketplaces (Amazon), application stores (Apple), social networking sites (Facebook) and search engines (Google). Platformization has implications not only for the nature of transactions in certain economic sectors but also for the ability of firms to scale rapidly, thereby affecting the structure of sectors.² Large technology companies have changed the global business landscape. The top 10 global companies by market capitalization in 2009 included only one technology company and three oil and gas companies; in 2018, the list included five technology companies and two consumer services companies that are both large online marketplaces (tables 1 and 2).

Table 1
Top 10 global companies, 31 March 2009
(Billions of dollars)

<i>Rank</i>	<i>Company</i>	<i>Industry</i>	<i>Market capitalization</i>
1	Exxon Mobil	Oil and gas	337
2	Petro China	Oil and gas	287
3	Walmart	Consumer services	204
4	Industrial and Commercial Bank of China	Financials	188
5	China Mobile	Telecommunications	175
6	Microsoft	Technology	163
7	AT and T	Telecommunications	149
8	Johnson and Johnson	Health care	145
9	Royal Dutch Shell	Oil and gas	139
10	Procter and Gamble	Consumer goods	138

Source: PricewaterhouseCoopers, 2018, *Global Top 100 Companies by Market Capitalization: 31 March 2018 Update* (London).

² UNCTAD, forthcoming, *Digital Economy Report* (United Nations publication, Geneva).

Table 2
Top 10 global companies, 31 March 2018
 (Billions of dollars)

<i>Rank</i>	<i>Company</i>	<i>Industry</i>	<i>Market capitalization</i>
1	Apple	Technology	851
2	Alphabet*	Technology	719
3	Microsoft	Technology	703
4	Amazon.com	Consumer services	701
5	Tencent Holdings	Technology	496
6	Berkshire Hathaway	Financials	492
7	Alibaba	Consumer services	470
8	Facebook	Technology	464
9	JPMorgan Chase	Financials	375
10	Johnson and Johnson	Health care	344

Source: PriceWaterhouse Coopers, 2018.

* Alphabet has been the parent company of Google since 2015.

2. With regard to specific sectors, Amazon held an over 90 per cent share in five different product markets in the first quarter of 2018, Facebook is the leading social networking site, with a 68.95 per cent share as at February 2019 and Google dominates the search engine market, with an 89.95 per cent share as at January 2019.³ A preliminary report on an inquiry into digital platforms by the Australian Competition and Consumer Commission has found that, in Australia, 50 per cent of traffic to Australian news media websites comes from Facebook or Google.⁴ The market power and dominance in certain markets of key platforms affect small innovative companies and their access to and survival in these markets. Dominant platforms such as Amazon, Apple and Google may own and operate infrastructure or provide a service on which traders and developers depend, and they must compete with the service provider in these markets. Given this context, this note focuses on competition concerns arising from big technology.

II. Specific features of digital platforms

3. The European Commission has defined an online platform as “an undertaking operating in two (or multi)sided markets, which uses the Internet to enable interactions between two or more distinct but interdependent groups of users so as to generate value for at least one of the groups”.⁵ Platforms involve services and activities such as marketplaces, social networking, search engines, payment systems and video sharing.

4. Digital platforms have new business models and function with algorithms, which are designed to collect and process data, with decisions made based on that data. Such platforms require high up-front sunk costs and have low marginal costs. The technologies required to store and process data can be costly but, once a system is operational, the

³ See <https://marketingland.com/amazon-owns-more-than-90-market-share-across-5-different-product-categories-report-241135>, <http://gs.statcounter.com/social-media-stats> and <https://www.statista.com/statistics/216573/worldwide-market-share-of-search-engines/>.

⁴ Australian Competition and Consumer Commission, 2018, *Digital Platforms Inquiry: Preliminary Report* (Canberra).

⁵ See the survey at <https://ec.europa.eu/digital-single-market/en/news/public-consultation-regulatory-environment-platforms-online-intermediaries-data-and-cloud>.

marginal costs related to additional data are low, and the data can help improve the algorithms to provide better and more personalized services to consumers. This cost structure “is characterized by high economies of scale and scope and can therefore facilitate market concentration of big data in the hands of a few players”.⁶

5. Data-driven network effects are one of the features that characterize digital platforms. A network effect “refers to the effect that one user of a good or service has on the value of that product to other existing or potential users”.⁷ For example, people may wish to use Facebook for social networking simply because their friends do so. The value of using digital platforms directly depends on the number of users. Such platforms benefit from two user feedback loops, as follows: “on the one hand, a company with a large base of users is able to collect more data to improve the quality of the service [and], this way, to acquire new users [and] on the other hand, companies are able to explore user data to improve ad[vertising] targeting and monetize their services, obtaining additional funds to invest in the quality of the service and attracting again more users; these interminable loops can make it very difficult for any entrant to compete against an incumbent with a large base of customers”.⁸ For example, over 75 per cent of online consumers in the United States of America shop on Amazon most of the time.⁹ Data is a crucial component of the business models of digital platforms, and control of data confers market power to such platforms.

6. Economies of scale and scope, data-driven network effects and control of data create high barriers to entry. For example, Google can use the search data of users to improve its search engine algorithms; new entrants to the market do not have this advantage. Establishing a successful platform that can attract sufficient online traffic is a significant challenge for newcomers. Even if start-ups enter the market, they soon face competitive pressure and may eventually be acquired by dominant platforms. Google has acquired 212 business entities since its founding in 1998 and the value of these acquisitions exceeds \$17 billion.¹⁰

7. Digital platforms have challenged the neoclassical approach to doing business, which defined the goal of a private company as maximizing profits. The new business models prioritize growth over profits in the short to medium terms, that is, the maximization of the number of users rather than profits. Dominant platforms can afford such a business strategy given leeway to incur losses by investors. For example, Amazon was permitted by investors to grow without pressure to show profits, and thereby expanded its business and entrenched its dominance as an electronic commerce (e-commerce) marketplace.¹¹

8. Dominant platforms have also expanded into other related businesses, with the objective of accessing more data. For example, Google gives its Android operating system free of charge to mobile telephone manufacturers, thereby enabling it to collect user data.¹² In addition, Google provides many other services, including video sharing, price comparison, cloud computing and online payment system services, and these have provided additional consumer data, increasing the quality of, on the one hand, its search engine services, and on the other hand, the value of data sold to advertisers for better-targeted advertising. This makes Google attractive for both users and advertisers, and increases its advertising revenues. Facebook and Google are the dominant digital advertising companies, and had a combined share of 58 per cent of the \$111 billion market in the United States in 2018; Amazon, the world’s largest online retailer, has a 4.2 per cent market share.¹³ These

⁶ Organization for Economic Cooperation and Development (OECD), 2016, Big data: Bringing competition policy to the digital era, DAF/COMP(2016)14, Paris, 27 October.

⁷ Economic Commission for Latin America and the Caribbean, 2018, *Data, Algorithms and Policies: Redefining the Digital World* (United Nations publication, Santiago).

⁸ OECD, 2016.

⁹ See <https://www.cnbc.com/2017/12/19/more-than-75-percent-of-us-online-consumers-shop-on-amazon-most-of-the-time.html>.

¹⁰ See <https://acquiredby.co/google-acquisitions/>.

¹¹ L Khan, 2017, Amazon’s antitrust paradox, *The Yale Law Journal*, 126(3):564–907.

¹² See <https://www.businessinsider.com/chart-why-google-gives-away-android-2013-12?r=US&IR=T>.

¹³ See <https://www.bloomberg.com/news/articles/2018-09-19/amazon-increases-ad-market-share-at-expense-of-google-facebook>.

figures highlight the key linkages between control of data, market power and the increasing monetization of data through digital advertising in the business models of digital platforms.

9. Research on behavioural tendencies shows that there is a cognitive cost in switching platforms, in terms of time, effort, energy and the concentration and sustained thought required; competition is therefore not “one click away”.¹⁴ This further reinforces dominant platform market power and dominance. Given a handful of dominant platforms that do not face any competition, consumers have few choices and almost no control over the collection and use of their data. This has raised competition and consumer protection concerns worldwide.

III. How to protect and promote competition in the digital economy

A. Adapting of the antitrust framework to digital challenges

10. The quick pace of technological development has changed the nature of markets and business models. This has posed some challenges for competition law and policy, which need to be adapted to the new market realities and business models. This is crucial to ensure competitive and contestable markets.

11. The current dominant approach in antitrust is the consumer welfare standard, which is based on measuring benefits or harm to consumers in the form of lower or higher prices, respectively. Under this framework, there is no concern over practices such as predatory pricing, which is a key element of the business strategy of dominant platforms providing an online marketplace, to grow and monopolize their market. This practice results in lower prices for consumers in the short to medium terms, until competitors are driven out of the market. Afterwards, prices may increase, and choice decreases due to there being less or no competition. However, such practices do not come under antitrust scrutiny since, given the lower prices, they seem to be to the benefit of consumers at the start. Another difficulty with the consumer welfare standard is that it may not be easy to conduct price analyses of online platforms providing marketplace infrastructure due to rapid price fluctuations and personalized pricing facilitated by algorithms. Further, price is not the most appropriate criterion in competition analysis involving online platforms, as many services are offered for free, although, in fact, consumers pay through the provision of personal data. Certain practices by dominant platforms or in mergers may thus still give rise to consumer harm in forms other than price. Consumer welfare should therefore be broadened to include other criteria such as consumer privacy and choice, personal data protection, switching costs and the lock-in effects of dominant platforms.

12. Some scholars have proposed a new approach to competition investigations that focus on the anticompetitive effects of the control of personal data by platforms, and others have suggested reforms of privacy and competition policy, considering the relationship between market share and the control of data.¹⁵ Khan (2017) notes how the consumer welfare-based approach fails to detect and deter anticompetitive harm in the digital economy and stresses the need to adopt a process-based approach to digital platforms, which would focus on entry barriers, conflicts of interest, the emergence of gatekeepers and bottlenecks, the use and control of data and the dynamics of bargaining power.¹⁶

13. Adjustments to the antitrust framework and tools need to be made to be able to address twenty-first century challenges. The competition process is important in this regard, as follows: “One overarching idea has unified these three concerns (distrust of power,

¹⁴ A Candeub, 2014, Behavioural economics, Internet search and antitrust, *I/S: A Journal of Law and Policy for the Information Society*, 9(3):407–434; see <https://www.wired.com/2012/10/google-gets-closer-to-a-court-date/>.

¹⁵ See N Newman, 2014, Search, antitrust and the economics of the control of user data, *Yale Journal on Regulation*, 31(2):401–454, and F Pasquale, 2013, Privacy, antitrust and power, *George Mason Law Review*, 20(4):1009–1024.

¹⁶ Khan, 2017.

concern for consumers and commitment to opportunity for entrepreneurs); competition as process. The competition process is the preferred governor of markets.”¹⁷

B. Competition law enforcement

1. Definition of the relevant market

14. Digital platforms are characterized by their network effects and by being multisided, as well as by having high switching costs, economies of scale and levels of control of data, all of which are pertinent in the definition of the relevant market. With regard to platforms such as Facebook and Google, there is consensus that each side should be defined as a separate market as long as consumers, advertisers, content providers and any other agents involved do not engage in transactions with each other, because products are perceived to have different degrees of substitutability on each side of a platform; for example, social networks and search engines may be regarded as substitutes by advertisers but not by consumers.¹⁸ Small but significant non-transitory increase in price and hypothetical monopoly tests rely on price mechanisms and may therefore not be appropriate tools for providing a relevant market definition in cases involving digital platforms, as the latter provide free products or services in exchange for data. To define a multisided market, competition authorities need to consider not only monetary transactions but also data flows that may be observed in the market.¹⁹

15. Competition authorities need to employ additional criteria for the definition of the relevant market in digital sectors. For example, Germany revised its competition law in 2017 to adapt its legal framework and tools to the new features of the digital economy, and introduced a provision recognizing free products or services provided by platforms as a market, stating that “the assumption of a market shall not be invalidated by the fact that a good or service is provided free of charge” (section 18(2a)).²⁰ In a recent decision with regard to Facebook, the Federal Cartel Office defined the relevant product market as a “private social network market” and its market definition analysis included considering the various online services referred to as social media and their competitive relationships, as well as direct network effects and the extent to which digital platforms shaped by network effects can show flexibility in adapting the products they offer, and the case summary noted that “it is not sufficient to have a ‘critical mass’ of users or technical, financial and personal expertise in order to be able to enter neighbouring markets and be as successful as on the original market... a service cannot expect to have the same reach when providing a different type of service, due to strong direct network effects”.²¹

2. Abuse of market power assessment

16. Market power assessment in the context of digital platforms requires analysing different criteria. Access to and control of data is crucial and confers market power, and this feature is further reinforced by network effects. Firms therefore “compete *for* the market instead of competing *in* the market, leading to ‘winner takes all’ outcomes”.²²

17. The revised competition law in Germany has a new provision on the criteria to consider in assessing the market position of an undertaking in the case of multisided markets and networks, which include direct and indirect network effects; the parallel use of services from different providers and the switching costs for users; the undertaking’s economies of scale arising in connection with network effects; the undertaking’s access to data relevant for competition; and innovation-driven competitive pressure (section 18(3a)).

¹⁷ EM Fox, 1981, Modernization of antitrust: A new equilibrium, *Cornell Law Review*, 66(6):1140–1192.

¹⁸ OECD, 2016.

¹⁹ Ibid.

²⁰ See https://www.gesetze-im-internet.de/englisch_gwb/englisch_gwb.html#p0024.

²¹ Federal Cartel Office, Germany, 2019a, Facebook, exploitative business terms pursuant to section 19(1) GWB [German Competition Act] for inadequate data processing, Case summary, 15 February.

²² OECD, 2016.

18. Digital platform market power is further entrenched through vertical integration. Dominant platforms such as Amazon and Apple have engaged in expanding their businesses vertically into upstream and downstream markets, and become competitors to traders or application developers that use their platforms. Such expansion improves their capacities to collect more data and increase their competitiveness and confers on them the role of gatekeepers of online stores and application markets, in which they are both owners and users. This situation may at any time give rise to abusive and exclusionary conduct by dominant platforms. For example, Amazon started as an online bookstore but later diversified, and sells music, audiobooks and other consumer goods, and has also moved into manufacturing and retailing its own brands, competing with other traders on its marketplace, thereby making it possible for the dominant platform to discriminate against independent traders that are its clients and competitors at the same time. Sellers have become dependent on Amazon to the extent that they perform most of their sales on Amazon despite fees of 6–50 per cent.²³ Amazon's quasi-monopoly position could potentially give rise to abusive conduct through, for example, predatory pricing and discrimination against rivals at the retail level.

19. The European Commission and the Federal Cartel Office in Germany have initiated investigations of Amazon. The Commission's investigation is focused on Amazon's treatment of third-party retailers and whether the company uses sellers' data to gain an advantage for the products it sells directly.²⁴ The Cartel Office initiated its investigation in November 2018, and is focused on whether the terms of business and practices of Amazon towards sellers on its German marketplace are abusive. Amazon has a dual role as the largest online retailer and marketplace in Germany, and is therefore in a position to potentially impose disadvantageous terms and conditions on sellers competing with its products on its platform. The relevance of such conduct under German competition law is in the dominance of Amazon and the dependence of online sellers on Amazon.²⁵ To establish dominance, the relevant market needs to be defined as online marketplace services and, if the Cartel Office makes a finding based on this relevant market, it will be the first time that online marketplace services are recognized as a market by a competition authority.²⁶ This will set a precedent for investigations in other jurisdictions.

20. A recent example of similar conduct is a complaint against Apple filed with the European Commission in March 2019 by Spotify, an online platform providing music streaming services, which states that Apple limits choice and stifles innovation by acting as both a player and referee, thereby obtaining an unfair advantage and posing disadvantages to other application developers.²⁷

21. Wu (2010), who coined the term “network neutrality”, has highlighted the corrupting effects of vertically integrated power in the history of the telecommunications industry in the United States, and concludes that “a strong stake in more than one layer of the industry leaves a firm in a position of inherent conflict of interest”.²⁸ The validity of this observation from the telecommunications sector with regard to digital platforms, in particular those that have a vertically integrated business model, can be easily seen.

22. Recent cases point to a more flexible approach in the assessment of abuse of dominance in the digital economy. For example, the decision of the Federal Cartel Office prohibiting Facebook from combining user data from different sources established links between antitrust violation and other principles and laws, such as data protection. Facebook was found to be dominant in the national market for social networks in Germany, with a market share exceeding 95 per cent; the Cartel Office also considered other relevant factors

²³ See <https://www.wsj.com/articles/sellers-need-amazon-but-at-what-cost-1421278220>.

²⁴ Federal Cartel Office, Germany, 2018, Bundeskartellamt initiates abuse proceeding against Amazon, Press release, 29 November.

²⁵ Ibid.

²⁶ See <https://www.out-law.com/en/articles/2018/december/amazon-competition-case-germany/>.

²⁷ See <https://newsroom.spotify.com/2019-03-13/consumers-and-innovators-win-on-a-level-playing-field/>.

²⁸ T Wu, 2010, *The Master Switch: The Rise and Fall of Information Empires* (Alfred A Knopf, New York).

in its market power assessment, such as access to competitively relevant data, economies of scale based on network effects, user behaviour and the power of innovation-driven competitive pressure.²⁹ Consumer harm lay in the loss of control over the use of personal data for profiling purposes and, on the other side of the market, competitive harm was identified with regard to advertising services, whereby advertising customers and competitors were faced with a dominant supplier of advertising space in social networks, as Facebook became more and more indispensable for advertising customers, reflected in the rapid increase in its turnover in recent years.³⁰ The Cartel Office categorized this case as one of “exploitative business terms” and, notably, based its decision on data protection principles embedded not only in German law but also in the general data protection regulation of the European Union while, according to the case law of the German Federal Court of Justice, civil law principles can be applied in determining whether business terms are exploitative.³¹ The Cartel Office applied data protection principles in its assessment of Facebook’s terms and conditions; according to data protection legislation, users should be able to decide freely and without coercion how their personal data are used, and Facebook did not obtain effective consent for its processing of data, as user consent would only be effective if the provision of its services were not made subject to this consent.³² Facebook noted that this should have been considered a data privacy matter, thereby coming under the remit of another regulator.³³ In this regard, the Federal Cartel Office noted the following:

in the digital economy the collection and processing of data and the relevant terms and conditions represent an entrepreneurial activity that is highly relevant for competition. Access to data, above all in the case of online platforms and networks, has been classified as a relevant factor for market dominance under section 18(3a) of the German Competition Act. Monitoring the data processing activities of dominant companies is therefore an essential task of a competition authority, which cannot be fulfilled by data protection officers. In cases of market dominance, a competition authority must take into account data protection principles, in particular in the assessment of whether terms and conditions for the processing of data are appropriate. In this respect there is an interface between competition law and data protection law.³⁴

23. This case highlights two important points. First, it is essential to ensure that the particularities of digital platforms are either reflected in competition law or considered in competition law enforcement. Secondly, competition law and enforcement need to integrate the interface between competition law, consumer protection and data protection. These areas have become more intertwined due to market power, which consumer data provides for digital platforms. There is a need for a more flexible approach to abuse of dominance assessments in the data-driven digital economy.

24. In 2017, the European Commission fined Google €2.42 billion for abusing its dominant position by giving its own comparison shopping service an “illegal advantage”, and stated that Google gave “prominent placement in its search results only to its own comparison shopping service, whilst demoting rival services”.³⁵ The Commission found that Google stifled competition on the merits in comparison shopping markets, thereby breaching European Union competition rules, according to which market dominance as such is not illegal, yet “dominant companies have a special responsibility not to abuse their powerful market position by restricting competition, either in the market where they are dominant or in separate markets”.³⁶ The decision ordered Google to “comply with the

²⁹ Federal Cartel Office, Germany, 2019a.

³⁰ Federal Cartel Office, Germany, 2019b, Bundeskartellamt prohibits Facebook from combining user data from different sources, Background paper, 7 February.

³¹ Ibid.

³² Ibid.

³³ See <https://www.bbc.com/news/amp/technology-47146431>.

³⁴ Federal Cartel Office, Germany, 2019b.

³⁵ European Commission, 2017, Antitrust: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service, Press release, 27 June.

³⁶ Ibid.

simple principle of giving equal treatment to rival comparison shopping services and its own service”.³⁷ This is similar to the neutrality principle in telecommunications markets and the network neutrality principle that applies to Internet service providers. The Australian Competition and Consumer Commission adds to the special responsibility requirement the need for additional scrutiny of firms with market power.³⁸

25. This case has led to debate between competition lawyers. Akman (2017) analysed the facts to see whether they fit into the three most likely theories of abuse, that is, refusal to deal, discrimination and tying, with regard to article 102 of the Treaty on the Functioning of the European Union and the relevant case law, and found that, “without entirely disregarding some of the fundamental concepts and rules underlying the existing framework for these abuses, the facts of [the case] do not fit into these categories of abuse”.³⁹ This shows the potential shortcomings of existing criteria for abuse of dominance analysis with regard to the digital economy, whereby even the definition of the relevant market may be contested. As these are multisided platforms, dominance on one side usually leverages anticompetitive conduct on another side. In the Google case, dominance was found in the search engine market, while the abusive conduct was in the comparison shopping services market. The features of digital platforms make it difficult even for more experienced competition authorities to define the relevant market or establish a theory of harm or determine the type of abuse under current legal frameworks on competition.

3. Merger review

26. An important ex ante method of addressing potential competition concerns that might arise from platform market power is through merger analysis. However, at present in most jurisdictions, only mergers fulfilling a turnover or asset threshold are subject to review. This does not take into account the value of data and its control by merging parties. In the digital economy, data are important and confer power to businesses that control data. Since in most jurisdictions, merger notifications are based on certain thresholds, usually of turnover or assets, digital companies and start-ups may not be captured by the notification criteria as they often do not reach the relevant turnover thresholds, despite having great value.

27. Such concerns led the German Federal Cartel Office to add, in German competition law, a new threshold for the notification requirement with regard to merger control, in addition to the worldwide turnover threshold and the first domestic turnover threshold. Transactions will be subject to merger control if the consideration for the acquisition exceeds €400 million, in other words, if the purchase price and assumed liabilities attain more than this amount (section 35(1(a))). Therefore, the Cartel Office should now be notified of takeovers of small but innovative and promising companies by large platforms, even if the smaller company does not reach the relevant domestic turnover threshold of €5 million, which might often occur in the digital economy.

28. Ideally, competition authorities need to detect and eliminate the potential competition restraints from mergers at the start, rather than trying to correct anticompetitive outcomes ex post, as the latter may be difficult once a firm has monopolized the market. The attempts of relatively younger competition agencies in South-East Asia to address competition concerns following the completion of a merger are detailed in the box. The transaction did not meet notification requirement thresholds in the relevant jurisdictions and was therefore not notified to competition authorities. However, it raised competition concerns in the region, and agencies had to examine and address these concerns ex post. Such cases show the challenges in addressing competition concerns arising from a completed merger, as well as the possibility of investigating the competition-related impacts following a merger.

³⁷ Ibid.

³⁸ See <https://www.accc.gov.au/media/video-audio/digital-platforms-inquiry-media-conference>.

³⁹ P Akman, 2017, The theory of abuse in Google Search: A positive and normative assessment under EU [European Union] competition law, *Journal of Law, Technology and Policy*, 2017(2):301–374.

Case study of a merger review in South-East Asia

On 26 March 2018, Grab, a ride-hailing company in Singapore, acquired the operations and assets of the ride-hailing company Uber in South-East Asia, including in Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam. As part of the transaction, Uber gained a 27.5 per cent share in Grab and its chief executive officer joined the board of directors of Grab. The parties did not notify the competition agencies in the countries involved because the transaction did not meet the mandatory notification thresholds or because there was no merger notification requirement, for example in Singapore.

In Indonesia, the competition authority decided that the transaction was an asset acquisition without any transfer of control from Uber Indonesia to Grab Indonesia, and was therefore not a merger, since the legal entity of Uber Indonesia still existed separately from that of Grab Indonesia.

The Malaysia Competition Commission decided to closely monitor the online ride-hailing market ex post, together with the Land Public Transport Commission, to ensure that competition in ride-hailing services was not disrupted by the transaction.

The Competition Commission in the Philippines reviewed the transaction to assess whether it would lead to a substantial lessening of competition, and imposed an interim measures order applicable during the merger review period, to preserve market conditions. The Commission cleared the transaction in the Philippines in August 2018, subject to service quality and pricing standards requirements. The remedies were aimed at addressing competition concerns, including price increases and service deterioration arising from the transaction, and also intended to ensure new entries to the market. The Commission appointed impartial third-party trustees to independently monitor the compliance of Grab with its commitments. In October 2018, the Commission imposed a fine of Pts 16 million on Grab Philippines and Uber Philippines for violating key provisions of the interim measures order during the merger review period. In January 2019, the Commission imposed a fine of Pts 6.5 million on Grab Philippines for submitting deficient, inconsistent and incorrect data for the monitoring of compliance with its commitments.

The Competition and Consumer Commission of Singapore initiated an investigation on 27 March 2018 into the transaction to analyse whether it infringed the Competition Act. According to the Act, merging parties are not required to notify the Commission of a merger but should conduct a self-assessment to decide whether notification is necessary. The Commission found that the transaction substantially lessened competition in ride-hailing services in Singapore. Following the transaction, Grab held 80 per cent of the market share and increased prices once its closest competitor, Uber, was out of the market. Strong network effects prevented new entrants from reaching a viable scale and expanding in the market. Further, Grab had imposed exclusivity obligations on taxi companies, car rental partners and drivers, thereby hampering the ability of potential competitors to access the drivers and vehicles necessary for expansion in the market. The Commission imposed some remedies on Grab, requiring that it remove its exclusivity obligations on taxi companies and drivers and that it maintain its pre-transaction pricing algorithm. To prevent Grab and Uber from absorbing other vehicles to prevent access to a vehicle fleet by a new competitor, the Commission required Uber to sell these vehicles to any potential competitor and prevented Uber from selling them to Grab without the prior approval of the Commission. Finally, the Commission imposed a fine of S\$13 million on both Grab and Uber, to deter completed, irreversible mergers that harm competition.

The Viet Nam Competition Council initiated an investigation into the transaction in May 2018, and stated in December 2018 that Grab might have a post-acquisition market share of more than 50 per cent in Viet Nam and should therefore have notified the merger to the Authority in accordance with competition law. In February 2019, the Council referred the file to the competition and consumer protection department of the Ministry of Industry and Trade for further investigation.

Sources: Carmudi Insider, 2019, Grab P[hilippines] fined 6.5 million by local antitrust office for submitting wrong data, 29 January; Competition Commission, Malaysia, 2018, Malaysia Competition

Commission to ensure e-hailing market remains competitive, Press statement, 28 March; Competition Commission, Philippines, 2018, PCC [Competition Commission, Philippines] binds Grab to service quality, price conditions for Uber takeover, Press release, 10 August; KPPU [Competition Commission], Indonesia, 2018, The acquisition of Uber assets in Indonesia, 26 April; Viet Nam Plus, 2019, Vietnamese authorities to probe Grab-Uber deal again, 14 February.

29. A recent report of the Select Committee on Communications of the House of Lords in the United Kingdom of Great Britain and Northern Ireland suggests considering the implementation of a public interest test for data-driven mergers and acquisitions, stating as follows: “On the one hand, it would create uncertainty around the acquisition of companies which might discourage foreign direct investment. On the other, it would give the CMA [Competition and Markets Authority] greater flexibility to make a judgment in the public interest. Whereas at present case law and the law on consumer welfare might prevent the CMA [Competition and Markets Authority] from intervening in an acquisition even if it were concerned about the accumulation of too much data by a platform.”⁴⁰

C. Regulation

30. There are growing concerns about the abuse of market power by key platforms, the extent of their control of data and the harm not only to consumers but also to society. Some of these platforms have become dominant and almost indispensable to consumers, who have little choice, tend to use the same platforms and show an unwillingness to switch. Such platforms are often compared to utilities in the sense that users feel they cannot do without them and so have limited choice but to accept their terms of service.⁴¹ There is a need for further reflection on whether competition law enforcement is the most appropriate or best placed tool to address concerns arising from digital platforms. It may be more effective to regulate such platforms to ensure open and fair access for all businesses and provide for a level playing field rather than trying to address competition problems *ex post* under competition law.

31. Another concern with dominant digital platforms is neutrality. One way to ensure neutrality may be to apply the essential facilities doctrine to dominant platforms, similar to the regulation of the telecommunications sector, in which an incumbent firm usually owns or operates the infrastructure and has its own telephone and/or mobile telephone operator, yet is required to provide access to other telecommunications operators at a fair rate. Application of the essential facilities doctrine could help prevent the abuse of dominance by platforms operating similar infrastructures, such as the Apple application store or Amazon marketplace, while allowing them to maintain the benefits of scale.⁴²

32. Wu (2010) states that antitrust laws alone are inadequate for the regulation of information industries; one reason is that the application of such laws is triggered by the manipulation of consumer prices and other particular abuses of market power, and Wu states that these are not the most problematic aspects.⁴³ Wu suggests that, as such *ex post* intervention is unsuited to the information industry, a constitutional approach may be used to deal with the concentration of power in the information economy, referring to “a regime whose goal is to constrain and divide all power that derives from the control of information”, based on the separations principle, that is, “the creation of a salutary distance between each of the major functions or layers in the information economy”.⁴⁴ According to this principle, “those who develop information, those who own the network infrastructure on which it travels and those who control the tools or venues of access must be kept apart from one another”, and Wu’s formulation includes sector regulation, antitrust enforcement

⁴⁰ Select Committee on Communications, United Kingdom, 2019, Regulating in a digital world, Second report of session 2017–19, 9 March.

⁴¹ *Ibid.*

⁴² Khan, 2017.

⁴³ Wu, 2010.

⁴⁴ *Ibid.*

and self-regulation based on corporate norms as the three pillars of implementation of the principle.⁴⁵

33. A stricter approach would be to restrict a dominant platform from operating in a market in which it provides the infrastructure and competing with businesses that depend on it.⁴⁶ For example, Amazon sells on its own store and competes with independent sellers, and is therefore able to exclude or drive out competitors through predatory pricing or showing sellers to a disadvantage in search results.

34. There are similar proposals at the national and regional levels from Governments and competition authorities. The European Parliament has called upon the European Commission to “consider proposals aimed at unbundling search engines from other commercial services”.⁴⁷ In France, the National Digital Council proposed prohibiting discrimination towards suppliers not justified by quality of service and/or legitimate economic reasons, and the Government adopted a law imposing an obligation of platform fairness, which does not prohibit discrimination but requires platforms to provide fair, transparent and clear information.⁴⁸

35. Many competition authorities have conducted market inquiries into the digital economy, seeking to better understand how these markets function. The preliminary report of the Australian Competition and Consumer Commission’s inquiry into digital platforms outlines the Commission’s concerns about the market power of key platforms such as Facebook and Google and their impact on businesses in Australia, and the Commission considers that their strong market position “justifies a greater level of regulatory oversight”.⁴⁹ The Commission proposes addressing key platform market power by taking such measures as preventing Google’s Internet browser from being installed as a default browser on mobile devices, computers and tablets; preventing Google’s search engine from being installed as a default search engine on Internet browsers; giving a new or existing regulatory authority the task of investigating, monitoring and reporting on how large digital platforms rank and display advertisements and news content; and strengthening merger laws.⁵⁰

36. In the context of digital markets, the Government of the United Kingdom is reviewing the effectiveness of its competition tools in responding to new digital challenges. The House of Lords report states that self-regulation by online platforms is failing, that the current regulatory framework is out of date and that, without intervention, the largest technology companies “are likely to gain more control of technologies which... extract data from [individuals] or make decisions affecting people’s lives”.⁵¹ The report refers to the lack of incentives that online platform service providers have to address concerns about data misuse and online harm, including to society, and recommends putting special obligations on platforms to ensure that they act fairly to users and other companies and in the interests of society; and setting up a regulator to enforce the obligations.⁵²

⁴⁵ Ibid.

⁴⁶ Khan, 2017.

⁴⁷ European Parliament, 2014, Motion for a resolution on supporting consumer rights in the digital single market, available at http://www.europarl.europa.eu/doceo/document/B-8-2014-0286_EN.html?redirect.

⁴⁸ Conseil National du Numérique, 2015, *Ambition numérique: Pour une politique française et européenne de la transition numérique* [report to the Prime Minister] (Paris:58–61); Law No. 2016-1321 of 7 October 2016, article 49, available at https://www.legifrance.gouv.fr/affichTexteArticle.do;jsessionid=6D0091B86AC5EB08737D2E1A0AF5539D.tplgfr37s_3?cidTexte=JORFTEXT000033202746&idArticle=LEGIARTI000033205188&dateTexte=20161009.

⁴⁹ Australian Competition and Consumer Commission, 2018, ACCC [Australian Competition and Consumer Commission] releases preliminary report into Google, Facebook and Australian news and advertising, Media release, 10 December.

⁵⁰ Ibid.

⁵¹ Select Committee on Communications, United Kingdom, 2019.

⁵² Ibid.

37. One much-debated idea is to break up dominant digital platforms, including large technology companies, to mitigate the concentration of power in a single platform.⁵³ This subject has moved beyond competition circles to, for example, election campaigns in some countries, with proposals for breaking up large technology companies to promote competition and safeguard small businesses.⁵⁴

D. Other policy measures

38. Policy measures such as specific legislation adopted by ministries in charge of trade and the economy may have a positive effect on competition in the digital economy. For example, the Government of India introduced new e-commerce rules in 2018 to promote competition and prevent restrictive practices by online e-commerce platforms such as Amazon and Flipkart. The new rules, which came into effect on 1 February 2019, prohibit e-commerce platforms from selling products from companies in which they have an equity interest; platforms are required to provide services, including fulfilment, logistics, warehousing, advertisement and marketing, payments and financing to sellers on the platform at arm's length and in a fair and non-discriminatory manner; and platforms are not permitted to mandate any seller to sell any product exclusively in their marketplaces.⁵⁵ These rules were established following complaints from retailers and traders that large e-commerce platforms used their control of inventory from their affiliates and through exclusive sales agreements to create an unfair marketplace that allowed them to sell some products at low prices.⁵⁶ The new rules are expected to prevent anticompetitive and abusive practices, as well as predatory pricing by large e-commerce platforms to the detriment of local small and medium-sized online traders.

IV. Challenges specific to developing countries and possible responses

39. Most developing countries have relatively young and small competition authorities with limited resources for taking on competition cases in an increasingly concentrated global economy. If the rules of the game for platforms are clearly set out through regulation, there may be less need for ex post competition law enforcement by competition authorities, as regulations should have pre-empted some of the competition concerns ex ante. Considering the limited resources of competition authorities, in particular in developing countries, it is worth reflecting on such a policy response. For example, given the growth of e-commerce, if appropriate e-commerce policies and regulations are put in place in developing countries, as for example through the new rules in India, to ensure open access to platforms under fair terms and conditions by local small and medium-sized enterprises, they could derive more benefits from the digital economy. Small and medium-sized enterprises will have more chances to grow if they have fair and equal access to e-commerce platforms.

40. Another challenge in developing countries relates to supporting local start-ups in a digital world where the small usually end up being acquired by the large. Developing countries could join together at the regional level within trade and economic frameworks. Such regional arrangements could facilitate intraregional trade and help ensure larger markets for local companies. E-commerce, competition and consumer protection policies and rules at the regional level may be more effective in dealing with abusive practices by global digital platforms and the mergers of digital companies and ensuring that dominant

⁵³ See D Dayen, 2017, Big tech: The new predatory capitalism, *The American Prospect*, 26 December, and T Wu, 2018, *The Curse of Bigness: Antitrust in the New Gilded Age* (Columbia Global Reports, New York).

⁵⁴ See <https://www.bloomberg.com/news/articles/2019-03-08/warren-has-plan-to-split-tech-cos-like-amazon-n-y-times-says>.

⁵⁵ Ministry of Commerce and Industry, India, 2018, Review of the policy on foreign direct investment in e-commerce, Press note No. 2.

⁵⁶ *Reuters*, 2018, India tightens e-commerce rules, likely to hit Amazon, Flipkart, 26 December.

platforms remain fair and open to local and regional companies under fair terms and conditions. In Africa, there is momentum for considering these issues within the framework of the Agreement Establishing the African Continental Free Trade Area. In Asia, the Association of Southeast Asian Nations could provide a forum and framework for developing regional competition rules. The Caribbean Community has a regional authority, the Competition Commission, in charge of implementing regional competition rules. Finally, in Latin America, the Andean Community and the Southern Common Market can facilitate regional action with regard to challenges in the digital economy.

41. Dominant platforms and online marketplaces are global and act globally. Efforts at the regional level would therefore be more commensurate with the scale of the impact of online platforms on economies. Regional frameworks could facilitate the exchange of experiences between more experienced competition agencies and younger agencies within a region. Further, networks such as the International Competition Network and international organizations such as UNCTAD, through the Intergovernmental Group of Experts on Competition Law and Policy, can provide additional assistance and support.

V. Conclusion

42. Recent competition cases show that competition law frameworks and enforcement need to be adapted to the features and business models of digital platforms. Traditional antitrust cases involve price competition and competition for higher market shares in the same or upstream or downstream markets, while in the digital economy, the scale and scope of data confers market power and erects entry barriers for competitors. Digital platforms controlling consumer data have a responsibility to ensure privacy and respect individual rights to data protection and privacy. There is a need, therefore, to adapt the competition framework by broadening the consumer welfare standard beyond price and market share considerations, as consumer welfare involves not only lower prices but also choice, privacy, data protection and innovation.

43. Competition authorities may first consider the need to adapt the framework they apply to competition cases, then consider whether their tools and analyses are fit to address the competition challenges arising from dominant platforms. The use of surveys and market inquiries may provide deeper insight into competition issues in the markets. Agencies should consider how relevant algorithms function, and may therefore need to develop and expand expertise in data analytics and algorithms.

44. Competition law enforcement, abuse of dominance assessments and merger controls and remedies need to be adapted to address the special features of digital platforms. Many developing countries began to adopt competition laws in the 1990s, and included public interest clauses, to be able to consider other development objectives in enforcing competition law and, in particular, in reviewing mergers. Competition laws may now need similar clauses to facilitate the addressing of challenges arising from the digital economy. For example, as highlighted in the present note, Germany has included some features of the digital economy, such as platforms and free services, in its revised competition law, along with new merger thresholds to capture mergers between digital companies; and in the United Kingdom, a report to the House of Lords suggests considering the implementation of a public interest test for data-driven mergers and acquisitions.

45. Digital platforms are compared to utilities in the sense that users feel they cannot do without them and have limited choice, so they accept the terms and conditions. There is increasing consideration being given to the regulation of digital platforms. There is also an argument for breaking up the big technology companies to reduce entry barriers and eliminate competition bottlenecks, similar to unbundling in the energy sector, although incumbents in the latter may have been State monopolies, while dominant digital platforms are technology companies that grew to become private monopolies by increasing their power through the use of consumer data. There are alternative policy options that Governments may consider.

46. Monopolization in the digital economy may not only harm economies but also societies and democracies. Competition authorities in both developed and developing

countries need to be vigilant and forward-looking. Digitalization will continue and penetrate all economic sectors. Digital platforms are global and affect the everyday lives of citizens worldwide. There is a pressing need, therefore, for cooperation between competition authorities at the bilateral, regional and international levels, to address the challenges posed by the digital economy and to deal with any negative outcomes that may arise from digital platforms.
