

Competition Concerns in Cross-border E-Commerce

Implications for Developing Countries

Philippe Brusick

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Authored by:

Philippe Brusick

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Rue de Vermont 37-39
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www.cuts-geneva.org

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Table of Contents

| | |
|---|-----------|
| Abstract | 4 |
| Abbreviations | 5 |
| Glossary..... | 8 |
| Introduction..... | 11 |
| 1. E-Commerce, Main Types of Businesses Involved and Participation of Selected Developing Countries in the Digital Economy | 13 |
| 1.1 E-commerce Business Models | 13 |
| 1.2 Overview of the value chain..... | 16 |
| 1.3 Selected developing and developed country participation in e-commerce by regions..... | 17 |
| 1.4 A first glance at developing country e-commerce platforms..... | 25 |
| 2. Potential Benefits and Challenges of the Digital Economy for Smaller Developing Countries | 28 |
| 2.1 Potential benefits | 28 |
| 2.2 Key challenges for developing countries..... | 29 |
| 3. Main Issues Related to Anticompetitive Practices by Digital Economy Firms..... | 34 |
| 3.1 Horizontal restraints | 34 |
| 3.2 Vertical restraints..... | 37 |
| 3.3 Abuse of dominance and unilateral conduct | 41 |
| 3.4 Concentrations..... | 51 |
| Lessons Learnt and Recommendations for Smaller Developing Countries .. | 56 |
| References..... | 63 |

Abstract

This paper looks at the rapid emergence of the digital revolution in the world economy and the way in which developing countries, in particular smaller developing economies in Africa, Asia and the Pacific, are getting involved in e-commerce. These countries are for the greatest part ill-equipped to face the challenge posed by giant international e-commerce platforms and will need to rapidly join the bandwagon of national and regional competition authorities' efforts to come to grips with this new type of business models.

After looking at the characteristics of the main types of businesses involved in the digital economy, the paper examines broadly the potential benefits and challenges these firms bring to smaller developing countries, particularly in Africa, Asia and the Pacific regions. It then covers the main anticompetitive practices that may take place in e-commerce, including collusion in hard-core cartels, vertical restraints and abuse of dominance, as well as concentrations, whereby large businesses might eliminate small start-ups or larger competitors in domestic markets of smaller developing countries.

In conclusion, this paper examines the main lessons learnt and draws attention to the urgent need for all countries to come to grips with the anticompetitive challenges posed by the imminent conglomeration of the digital economy in each and every sector of our lives. While most developed competition authorities (CAs) need to reach consensus on their enforcement practices with regard to this type of businesses, more advanced developing countries CAs should cooperate with smaller developing economies, to ensure they are able to enforce competition rules in a proper way, avoiding actions which might stifle innovation and the spread of benefits of competition, while ensuring that they are able to control anticompetitive harm. Special concertation and cooperation efforts are also recommended for regional competition authorities, such as those of regional Free Trade Areas, which must rapidly take the lead in ensuring that e-commerce is not hampered by anticompetitive practices.

Abbreviations

| | |
|---------|--|
| ACCC | Australian Competition and Consumer Commission. |
| ACFTA | ASEAN-China Free Trade Area. |
| AI | Artificial intelligence (see in Glossary). |
| ASEAN | Association of Southeast Asian Nations. |
| BATX | Bandu, Alibaba, Tencent, Xiaomi (Chinese platforms, equivalents to GAFAs). |
| CAs | Competition authorities |
| CCCS | Competition and Consumer Commission of Singapore. |
| CCI | Competition Commission of India. |
| CMA | Competition and Markets Authority (UK). |
| CMS | Content Management System. |
| COFECE | Federal Economic Competition Commission of Mexico. |
| COMESA | Common Market for Eastern and Southern Africa. |
| CCOPOLC | Competition and Consumer Policy and Law Committee, established in 2009 to implement the SADC cooperation in competition & consumer policy. |
| COMCO | Swiss competition commission. |
| CUTS | Consumer Unity & Trust Society |
| CPTPP | Comprehensive and Progressive Agreement for Trans-Pacific Partnership. |
| DoJ | US Department of Justice (US antitrust watchdog, togetherwith USFTC) |
| EAC | East African Community. |
| EACCA | EAC Competition Authority. |
| EC | European Commission (EU's competition authority). |
| ECA | Egyptian Competition Authority. |
| ECOWAS | Economic Community of West African States. |

| | |
|----------|--|
| EEA | European Economic Area. Includes EU member States plus Iceland, Lichtenstein and Noeway. |
| ERCA | ECOWAS Regional Competition Authority. |
| ETLS | ECOWAS Trade Liberalisation Scheme. |
| EU | European Union |
| FTA | Free Trade Association. |
| ICT | Information and Communication Technologies. |
| INDECOPI | Instituto Nacional de Defensa de la Competencia y de la Propiedad Intelectual (Peru' s competition authority). |
| IPRs | Intellectual Property Rights. |
| JFTC | Japan Fair Trade Commission (Japan's CA). |
| KCA | Kenyan Competition Authority. |
| KPPU | Indonesia's competition authority. |
| GAFAM | Google, Amazon, Facebook, Apple, Microsoft. |
| LDC | Lease Developed Countries. |
| M&As | Mergers and acquisitions; M&As, including takeovers and joint ventures result in "Concentrations". |
| MFN | please see in Glossary |
| MSME | Micro, Small and Medium Enterprises |
| OECD | Organisation for Economic Cooperation and Development. |
| OTCC | Office of Trade Competition Commission (Thailand's competition authority). |
| PCW | Price comparison website |
| RPM | Resale (or Retail) Price Maintenance. |
| US DOJ | US Department of Justice (US antitrust body). |
| US FTC | US Federal Trade Commission |
| UNCTAD | United Nations Conference on Trade and Development. |
| SAARC | South Asian Association for Regional Cooperation. |

| | |
|-------|---|
| SADC | Southern African Development Community. |
| VCCA | Vietnam Competition and Consumer Authority. |
| WAEMU | West African Economic and Monetary Union (UEMOA in French). |

Glossary

Algorithms : represent a sequence of logic commands executed very rapidly by a computer to carry out a given task, such as solving a mathematical problem. One can distinguish between ordinary, « non-learning algorithms » and « deep-learning algorithms » : (i) A « *non-learning algorithm* » is one where the user defines the relevant parameters and the formula applied ; (ii) A « *deep-learning algorithm* », which is part of artificial intelligence (AI), is able to make decisions to a large extent independently from pre-set rules and parameters.

Artificial intelligence (AI) : The output which deep learning algorithms produce over time can be hard to predict or steer even for those who have developed or implemented them. Not only are the programs much faster and more efficient in identifying patterns and corresponding strategies than human brains, they can also find patterns a human brain could not detect. Moreover, deep-learning algorithms may present themselves as “black boxes” the workings and interactions of which are hard or impossible to decipher.

Barriers to market entry : costs borne by a firm that seeks to enter a market, but is not borne by firms already in the market.

Black Box : Artificial intelligence (AI)'s Black Box problem refers to the inability to see inside of an algorithm and understand how it arrives at a decision. As AI might choose collusion among competitors, without any human intent, the question comes to know how to deal with machine decisions that may be illegal.

Brick and mortar company : A firm that does not conduct business online, but only through ‘traditional’ offline channels (e.g. in physical shops).

Brokers: they bring buyers and sellers together and facilitate transactions. Brokers play a frequent role in business-to-business (B2B), business-to-consumer (B2C), or consumer-to-consumer (C2C) markets. Usually a broker charges a fee or commission for each transaction it enables. The formula for fees can vary. Brokerage models include:

- *Auction Broker* : a platform that conducts auctions for sellers (individuals or merchants). The broker may charge the seller a listing fee and/or a commission as a share of the value of the transaction. Some brokers provide their services for free, charging advertisers, the other side of the platform (e.g. Amazon, Alibaba subsidiary Taobao in China).
- *Transaction Broker* : provides a third-party payment mechanism for buyers and sellers to settle a transaction (e.g. Pay Pal, ApplePay, TWINT, etc.)

Bundling can be either pure or mixed :

- *Pure bundling* occurs when products are sold jointly in fixed proportions, while
- *mixed bundling* (also referred to as multi-product rebate) occurs when products are available separately as well as bundled, but the bundled products are cheaper than those sold separately.

Click and Mortar company : A firm that conducts business online and also through ‘traditional’ offline brick-and-mortar channels.

Digital butlers : they assist consumers by performing web-searches or comparing prices, and most advanced ones can make independent

decisions based on data revealing consumer's preferences. Based on the user's preferences, the digital butler can look for an appropriate purchase or other type of transaction and independently execute the transaction on its own.

Forking : taking the source code from an open source software program (OSP) and developing an entirely new application. For instance, Android forks are based on the Android open source project (AOSP).

GAFAMs = Google, Apple, Facebook, Amazon and Microsoft. The large superpowers or « unicorns » of the digital economy.

Geo-blocking is a discriminatory practice that prevents online customers from accessing and purchasing products or services from a website based in another country or region. For example, in order to remove this barrier within EU member countries, the EU has adopted a geo-blocking regulation.

Hub and Spoke cartels do not conform to the classic hard core cartel type of horizontal price-fixing, bid-rigging or market allocation agreement, in which competitors at the same level of the supply-distribution chain collude. In a Hub and Spoke cartel, the horizontal cartellists (the spokes) rely on a third party (the hub) who has an interest in the collusion, to provide information on prices and sales conditions. In this type of cartel, it is the exchange of price information among competitors through a third party (the hub) that is likely to lead to collusion.

ICT : Information and communication technologies

Margin squeeze occurs typically in vertically integrated markets. For example, when a big brand retail store or a dominant digital marketing platform controls the value-chain, it can "squeeze" the profit margins of its suppliers, by

requiring high access prices and fixing low retail prices.

MFN Clause, also called **Price Parity Clause** can be « wide » or « narrow » :

- A « *wide MFN* » is a vertical restraint that ensures that no other competitor will be given more favourable terms by a supplier/ customer/platform. For example, under wide MFN, a hotel, agrees not to offer better conditions to customers on competing website booking platforms.
- A « *narrow MFN* » restricts a firm from setting a lower price in its own store, but it is free to agree to a lower price with a competing store. For example, a hotel that enters a *narrow MFN* agreement with a hotel booking platform, cannot set a price on its own website lower than the price on the booking platform, but it can agree to lower prices on competing platforms.

Multi-homing: refers to the user's capacity to use many platforms to best serve his interest. A supplier might prefer using many platforms in order to reach more potential buyers, even if this might increase his entry or other cost. On the other side of the platform, a consumer might like to consult many platforms in order to widen his choice and obtain more competitive offers.

Multi-sided market : A two- or multi-sided market is one in which distinct but related customer groups are connected by a common platform. Each side of a multi-sided market typically gives rise to externalities which impact the other side, and this can affect the way in which firms set their pricing structures.

Multi-sided platform : A website which facilitates transactions between different types of users in a multi-sided market. Such platforms typically have the feature that at least one type of user value the platform more when there are more users of

another type using the same platform. For example, a newspaper connects readers and advertisers; a hotel booking website connects hotels with travellers.

Network effects arise where a user's benefit from a product or service increases with the number of other users on that network. Network effects are particularly important in multi-sided markets, where users on each side of the market derive a positive effect from the expansion of customers on the other side. For example, as the number of users on one side of a platform increases exponentially, the interest of suppliers of services on the other side of the platform explodes as well and are increasingly willing to enter the market, thus increasing the revenues and potential valuation of the platform.

Open Source v. Closed Source ecosystem: Google's Android is an open source software program, which allows Android forks based on the Android open source project (AOSP). In contrast, Apple's iOS is an entirely closed system which does not allow users to get applications other than those that come from Apple's App Store. For Apple, the closed ecosystem gives Apple full control of every application they accept from software developers, which ensures strict quality and content check and allows Apple to get a commission based on the volume of sales of each application sold by App Store.

Price comparison website (PCW): A service enabling consumers to compare between different rank offerings based on criteria such as price, availability of certain features, or review scores. Users can follow a link to purchase a good or service from the website of their selected provider.

Price Parity clause : see MFN clause

SMEs : Small and medium-sized enterprises

SSNIP Test : Small but Significant Non-transitory Increase in Price. A test used for defining the

relevant product market in traditional offline markets.

Switching costs : For the user of a platform or a network, switching to another platform may incur costs in terms of subscription fee to enter a new application, or simply time spared to learn how to use the new system, re-entering required information and studying application notices, danger of losing advantages provided by the former system, etc. Switching costs may refrain a users from switching.

Two- sided platforms : see multi-sided platforms.

Tying is a situation where customers willing to purchase a good or service from a dominant firm are required to purchase another product or other products in order to be allowed to acquire the good or service initially sought by them.

Introduction

The digital economy is a major driver of economic growth in the 21st century and is fuelled by the rapid emergence of digital innovations. These innovations lie at the heart of the digital economy. The digital economy is characterised by big data, Artificial Intelligence (AI), platform-based business models, multi-sided markets, network effects and deep pockets. They present novel and complex competition concerns with both pro-competitive and anti-competitive outcomes.

In the growing e-commerce sector, whereby products are bought and sold online, competition issues may be more complex than those found in traditional brick-and-mortar retail markets. Indeed, the sector has unique features such as:

- The emergence of leading online platform operators which conduct business across multiple product segments and which may cover most regions of the world ;
- Greater transparency in price and quality of goods or services available;
- Network effects, whereby the larger the platform the more value attached to it;
- The increasing importance of data collection and use etc.

While e-commerce may foster competition and innovation through more products and market players, some of its characteristics can also give rise to anticompetitive practices such as hard-core cartels, vertical restraints and unilateral conduct by dominant firms. They may for instance disrupt established practices, pose entry barriers, exhibit market concentration, and undermine competition in the economy.

Prevailing challenges and available solutions may differ in smaller developing countries, endowed with less advanced market, regulatory and competition structures. Yet, little research in this area has focused on the particular situation, challenges and available capacities of these countries.

Against this backdrop, this paper is a first attempt by CUTS at informing governments from smaller developing countries about typical competition-related concerns they may face in cross-border e-commerce, their impacts on their firms' participation in B2B and B2C e-commerce, and possible responses suited to their level of development. In the pages below, an attempt is made to respond, broadly, to the following questions:

- What are the typical competition-related concerns faced by smaller developing countries for their integration in global e-commerce?
- Which challenges do these competition-related concerns lead to for developing country firms aspiring to sell abroad through B2B and B2C e-commerce?
- Given the limited available capacities in these countries, what are realistically implementable policy and regulatory responses at the national, regional and international levels to mitigate the harm caused by such competition-related concerns on their economy?

In order to respond to these three important questions for developing countries, - in particular smaller developing economies- willing to benefit from e-commerce in domestic and export

markets, while limiting the challenges posed by anti-competitive practices in this rapidly growing field, this paper covers the following issues:

First, what is covered by the term e-commerce, which are the main types of digital firms involved, and to what extent are developing countries taking part in this trade?

Second, what are the potential benefits of e-commerce for smaller developing economies and what are the potential negative aspects of such trade?.

Third, what are the main concerns found in developed countries and large developing economies in particular, with respect to competition law and policy enforcement in the digital economy?

Finally, what are realistically implementable policy and regulatory responses at the national, regional and international levels to mitigate anti-competitive harm to the economies of smaller developing countries?

SECTION 1

E-Commerce, Main Types of Businesses Involved and Participation of Selected Developing Countries in the Digital Economy

A broad definition of e-commerce would encompass all business activities occurring over electronic networks, including the sale and delivery of goods, supply of services, the transfer of funds, online marketing activities, including advertising, and the collection and processing of data. A narrower definition focuses primarily on the provision of consumer goods and services through online sales channels. E-commerce, by definition, is inextricably linked to and dependent upon the growth of the internet and the emergence of the digital economy.

The development of e-commerce is thus contingent upon both retailers and customers having adequate internet access, with a positive correlation between rates of online shopping and internet penetration rates in the developing countries concerned. It is important to note that e-commerce includes the sale and purchase of goods and services using mobile smartphones. This is an important consideration in developing countries as the growth in smartphone usage is outstripping access through computers and laptops.

For developing countries, especially smaller and less developed economies, lack of efficient telecommunications infrastructure, (Internet access being slow and often limited to the capital

city) and the low rate of formal banking and credit card use are two essential reasons restraining the growth of e-commerce.

1.1 E-commerce Business Models

Three broad categories of products that are commonly sold online might be identified :

The first category involves the sale and delivery of tangible consumer goods; common types sold online include clothing and footwear, cosmetics and healthcare products, consumer electronics, hard-copy books, DVDs, CDs, etc. E-commerce in goods necessarily involves physical delivery, whether through the ordinary postal system, via specialised courier services, delivery to dispersed collection points more conveniently located for the customer (for example the Amazon Locker service) or, in effect, “self-delivery” through click-and-collect services whereby the customer completes the purchasing transaction online but subsequently picks up the item at a brick-and-mortar store. Innovation will soon include the use of drones to deliver the goods directly to remote places.

The second category involves the sale and delivery of services for offline consumption. Common types of services sold online include transport (e.g. plane or train tickets), accommodation (e.g. hotel bookings), tourist services (e.g. museum tickets) and cultural events (e.g. concert or cinema tickets). Although the online sale of services may involve physical delivery of the hard-copy ticket or other relevant proof of purchase, service providers increasingly make use of e-ticket mechanisms sent by email. This also includes secure payments services, such as Paypal or major credit cards. Nonetheless, the services themselves are almost invariably delivered offline: the customer physically takes the train, stays in the hotel, attends the concert, etc.

The third category involves the sale and online dissemination of digital content services. Common examples include films, television programmes, e-books and recorded music. Here, the entire transaction including delivery occurs online through the internet.

| Provider of goods & services | Business using inputs | Final consumer |
|------------------------------|-----------------------|----------------|
| Business | B2B | B2C |
| Government | G2B | G2C |
| Consumer | C2B | C2C |

The table above synthesizes the various interactions that take place between the main e-commerce players: Business, Government and Consumers.

B2B includes transactions between a manufacturer and a wholesaler and those between a wholesaler and a retailer. This includes the manufacturer's transactions with the online platform, dealing with consumers (Amazon,

Alibaba, etc., which themselves could be classified as B2B2C).

B2C involves transactions between a business and a consumer. Businesses usually trade with consumers either through an online platform like Amazon etc., which would classify as B2B2C, or directly through their own B2C website. They might also sell through traditional shops along with online B2C or B2B2C.

G2B concerns commercial transactions between Government and Business. This may include government procurement, which can be online or offline; or a combination of both.

G2C includes transactions between government and individual consumers, e.g. online in delivery of a license or a visa upon payment.

C2B refers to commercial transactions where individual consumers offer products and services to businesses.

C2C, where consumers offer goods or services to consumers through a two or multi-sided platform (e.g. second hand auto sales, housewears, toys, etc.)

Scale of online transactions

The B2B and B2C online transactions are the two most significant ones in terms of market value. B2B was valued approximately USD 22,3 trillion globally in 2015. B2C markets were relatively smaller, totalling around USD 2.2 trillion globally that same year¹.

¹ UNCTAD, E-commerce measurement@unctad, 27 April 2017 https://unctad.org/meetings/en/Presentation/dtl_eWeek2017p25_TorbjornFredriksson_en.pdf

Types of business models on the web

For an established traditional brick-and-mortar store, having a website and selling online, in addition to normal offline business, can be an interesting option to increase its sales, especially if the store in question is well known locally at least, and can count on a good base of customers who might choose to purchase online instead of having to go to the shop in person. This single or one-sided online service may be complemented (or replaced) by entering a two-sided or multi-sided platform, where competition with other similar suppliers may exist, but the size of the network reached by the platform is so much larger, that the newcomer might find it profitable, even after paying for entry fees and commissions due to the platform. Existing giant platforms, such as Amazon, eBay, Alibaba and many others, benefit enormously from their « network effect » - that is, the size of the worldwide markets reached, which constitute the basis of attractiveness to customers on both sides of the platform, and hence, the source of their market power.

Classifying internet business models is not easy, especially as new platforms are invented practically every minute. A simple approach, presented by the Mexican competition authority (COFECE)², in one of its recent studies on competition in the digital economy suggests considering three basic types of platform based business models :

- The Subscription model : in which a supplier offers a service and a group of users pay a subscription to access it (e.g. Netflix and others, where users watch

movies in exchange for a monthly fee, or Spotify and many others, where users pay a monthly fee to have access to music) ;

- The Advertisement model, where services are offered to consumers free of charge, and the platform gets revenues indirectly, by charging advertisers who place ads and benefit from market information (e.g. Big data revealing customers' consumer habits and tastes, etc.) allowing advertisers to target their adds more effectively. (e.g. Facebook etc.) ; and
- The Open access model, in which the platform functions as a market, connecting suppliers of goods or applications with users, who may or may not have to pay for the service provided. The platform may charge suppliers or buyers, for buying/selling goods or applications via the platform. (e.g. App Store connects content developers such as Twitter or You Tube with users that download the applications).

Others, such as Professor Michael Rappa, of North Carolina State University,³ list more web business model categories, as including : Brokerage, Advertising, Infomediary, Merchant, Manufacturer (Direct), Affiliate, Community, Subscription and Utility models.

Dynamic sector with constant innovations

New generations of business models emerge constantly. Recently, « brokerage systems » have been launched, such as the « aggregator », which displays a range of related content. Such business models have a three tier architecture as the

² COFECE : COFECE (Mexico) : Rethinking competition in the digital economy https://www.cofece.mx/wp-content/uploads/2018/03/EC-EconomiaDigital_web_ENG_letter.pdf#pdf

³ Rappa, Michael « Business Models on the web » <http://digitalenterprise.org/models/models.html>

platform is intermediating the more conventional B2C model to become B2B2C.

Also, some brokerage systems are a little harder to classify. An example is Airbnb. It could be argued that Airbnb is a C2C « two-sided market » with a brokerage platform in the middle that takes a commission for the facilitation service it renders. However, hotels and small businesses also use the Airbnb platform, therefore the market could also be classified as B2B2C. Both B2B2C and B2B2B are based on the idea of automation. Inefficiencies in the two-sided C2C architecture can be overcome by replacing the process of manually selecting individual preferences with an algorithm (B2C) that automatically compares prices and product information across various websites.

B2B2C applications are common in the travel and accommodation sectors, (e.g. Expedia and Trivago). Businesses in the centre of this three-tier architecture are often referred to as platforms, operating in « two- or multi-sided markets ».

It may also be difficult to classify a given platform into a single model. For example, the two leading online C2C platforms eBay (US) and Taobao (China) use very different revenue models: eBay.com uses a brokerage model, in which sellers pay eBay on a transaction basis, whereas Taobao.com uses an advertising model, in which sellers can use the basic platform service for free and pay Taobao for advertising services to increase their exposure.

1.2 Overview of the value chain

Each business model described above has a specific supply-distribution, or value chain (i.e. the end-to-end process from where the transaction commences to where it finishes). The key elements of the B2C supply-distribution chain

are: (i) Supply of goods or services ; (ii) Customer demand ; (iii) Delivery of physical products; and (iv) After sales service and return of goods.

Supply of goods and services

Traditional brick-and-mortar supply-distribution chain usually goes from manufacturer (producer) to customer through a complex chain of distribution, involving wholesales, eventually importer, and retailers. Wholesalers and, to a lesser extent, retailers, must have merchandise available for delivery in warehouses and stores. Part of this process includes managing its supply chain in terms of inbound logistics and inventories. With e-commerce, businesses can potentially avoid warehousing and storage costs by acting directly between the manufacturer and the final customer. For an e-commerce retailer trading physical goods, efficiency is enhanced by placing an order with the manufacturer to be delivered just in time when the product needs to be shipped to the final customer, thus by-passing wholesaler and retailer, and storage or warehousing costs.

Customer demand

Customers can access internet information on goods and/or services offered on the market, choose their selected products and pay for the transaction through secured digital facilities (credit card, PayPal, etc.). The customer may interact directly with the producer's website or through a publicly available third party platform (e.g. Amazon). Transactions through third party platforms are referred to as B2B2C, reflecting the fact that the platform serves as a link between the supplier and the customer. In case the customer is not a final consumer, but a business, the transaction would be referred to as B2B2B.

For new suppliers, especially if they are unknown and originating from developing countries, it may be valuable to join a well-known third party platform, providing assurances of security and

efficiency for customers and thus providing access to a wider range of customers for the supplier. Although integrating a third party platform obviously has a cost, it may provide wider opportunities of access to a worldwide market. Depending on the conditions of entry into the third party platform, trading outside of that platform may be restricted.

Delivery of physical products

Online platforms enable access to global markets, but the challenge of delivering physical products to their customers may be more problematic for developing countries. Delivery requires reliable infrastructure to be in place, and this might pose serious problems to producers in remote places in developing countries in terms of cost of transportation, time needed for door-to-door delivery and risk of damage and theft.

After sales service and return of goods

For developing country suppliers after sales servicing such as repairs and return of goods may still represent a more serious problem, as return of goods is often provided free of charge by online suppliers. This may entail additional charges and losses for smaller manufacturers and suppliers overseas.

1.3 Selected developing and developed country participation in e-commerce by regions

This paper is addressed primarily at smaller developing economies in Eastern and Southern Africa (COMESA, EAC), Western Africa (ECOWAS), South and Southeast Asia (ASEAN) and Pacific (CPTPP) countries. Experience in e-commerce of larger economies of these regions are of great utility to enlighten the needs of smaller economies. Information collected below therefore concerns all countries of these regions.

ECOWAS

The Economic Community of West African States (ECOWAS) comprises fifteen countries: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. Its mission as per the ECOWAS Treaty is to promote economic integration in “all areas of economic activity, in particular, in industry, transport, telecommunications, energy, agriculture, natural resources and commerce, as well as taking into consideration monetary, financial, social and cultural issues...” ECOWAS promotes a free trade area among its members, with its trade liberalisation scheme (ETLS).⁴

The ECOWAS recognises ICT not only as a priority for its regional integration programs, but also as a

⁴ Trading in the ECOWAS FTA
<https://www.giz.de/en/downloads/giz2012-en-ecowas-trade-liberization.pdf>

tool for the realisation of the ECOWAS Vision 2020.⁵

In Africa, e-commerce has long been hampered by low overall levels of Internet penetration compared with other regions, especially at broadband speed. This situation is rapidly improving however, as undersea fibre-optic cables have encircled African coastlines and begun the long journey inland. Telecommunications providers are investing in 3G and subsidising smartphone ownership. At the same time, digital payment services are becoming available and various online marketplaces are spreading. The strong uptake of mobile phone use in the sub-region's market has

given rise to a boom in mobile money deployments. As of February 2015, there were 52 such deployments in ECOWAS, 19 of which were in Nigeria⁶. In several African countries, mobile solutions represent the most viable infrastructure for e-services due-card infrastructure.

Table 1, below, shows the extent of internet penetration on 31 December 2017 in each ECOWAS member country, and the extent to which these countries have adopted a competition law and have a competition authority for enforcing the law.

Table 1: Internet penetration in ECOWAS Countries

| Country | Population (million) | Internet penetration | Competition law | Competition authority |
|---------------|----------------------|----------------------|--|--|
| Benin | 11,4 | 33,1% | Competition Act No.2016-25 | WAEMU Commission |
| Burkina Faso | 19,7 | 18,8% | Competition Act No.2017-16 | Commission Nationale de la Concurrence et de la Consommation (WAEMU) |
| Cote d'Ivoire | 24,9 | 26,3% | WAEMU Competition rules (2002) | WAEMU Commission |
| Cabo Verde | 0,7 | 47,1% | Law on Competition (2003) | General Directorate of Trade and Competition Council |
| Gambia | 2,1 | 18,1% | Competition Act 2007 | Gambia Competition & Consumer Protection Commission (GCCPC) |
| Ghana | 29,4 | 34,3% | Protection Against Unfair Competition Act 2000 | N.A. |
| Guinea | 13,0 | 12,3% | N.A. | N.A. |
| Guinea Bissau | 1,9 | 6,3% | N.A. | N.A. |
| Liberia | 4,8 | 8,1% | Competition Law 2017 | Ministry of Commerce & Industry |
| Mali | 19,2 | 65,3% | Competition Law 2016-06 | National Competition Commission under Ministry of Commerce (WAEMU) |
| Niger | 22,3 | 4,3% | WAEMU Competition rules | WAEMU Commission |

⁵ ECOWAS reviews ICT strategy for development <http://www.ecowas.int/ecowas-reviews-strategy-for-ict-growth-and-development/>

⁶ Source : World Bank Data <https://data.worldbank.org/indicator/it.net.user.zs?end=2012&start=1960>

| | | | | |
|--------------|-------|-------|-----------------------------------|--|
| Nigeria | 195,9 | 50,2% | FCCP law (2017) | Federal Competition and Consumer Protection Commission (to be established in 2018) |
| Senegal | 16,3 | 59,8% | Competition Act No. 94-63 (1994) | WAEMU Commission |
| Sierra Leone | 7,7 | 11,7% | N.A. | N.A. |
| Togo | 8,0 | 11,3% | Competition Act No. 99-011 (1999) | Commission Nationale de la Concurrence et de la Consommation |

Source : Internet World Stats

As can be seen in Table 1, Internet penetration in six out of 14 member countries was extremely weak, limiting e-commerce to a few privileged centres, mostly within capital cities. Only Benin, Cote d'Ivoire, Cabo Verde, Ghana, Mali, Nigeria and Senegal had relatively higher penetration rates, Nigeria, Senegal and Mali having by far the highest. According to the same source, average Internet penetration in the whole of Africa on 31 December 2017 was 35,2%, as compared to a total world average of 54,4% and other world average (excluding Africa) of 58,4%.

If we now look at which of these countries have competition laws and competition authorities enforcing these laws, Nigeria, by far the largest economy of the region, has adopted a competition law in 2017, and is due to establish its competition authority during 2018. ECOWAS has established a Regional Competition Authority (ERCA) in July 2018, headquartered in Gambia⁷. Ghana, which has a law on Unfair competition, does not have any law or authority enforcing antitrust rules as such. Three other countries, Guinea, Guinea Bissau and Sierra Leone do not have a competition law nor a CA. In addition, WAEMU (UEMOA in French), the West African Economic and Monetary Union, which comprises eight French-speaking member countries (Benin,

Burkina Faso, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo) which are all members of ECOWAS, has adopted regional competition rules and although some member countries such as Senegal and Mali have national competition law and competition authority, all depend on the WAEMU Commission for enforcement of competition, since 2000⁸. In other words, national CAs in these countries are deprived of enforcement of competition laws regarding cartels, vertical restraints and abuse of dominance, which is the exclusive responsibility of the WAEMU Commission.

In consequence, of these 15 countries, only Nigeria has a competition law dating of 2017 and a CA about to commence its activity. At the ECOWAS regional level, however, a ECOWAS Regional Competition Authority has been set up with headquarters in Bijilo, Gambia. At the 17th inter-institutional meeting between ECOWAS and WAEMU, it was agreed to harmonize rapidly the two institutions' competition laws.⁹

COMESA, EAC and SADC

COMESA member States include : Burundi, Comoros, DR Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi,

⁷ ECOWAS REGIONAL COMPETITION AUTHORITY (ERCA) <http://www.gambiatradinginfo.org/trade-news/ecowas-regional-competition-authority>

⁸ see Avis 003-2000 of WAEMU Court of Justice, for example in <http://www.iosriournals.org/iosr-ijhss/papers/Vol.%2022%20Issue4/Version-3/B2204030828.pdf>

⁹ ECOWAS and UEMOA spur an new momentum of inter-institutional cooperation in the region 5 June 2018, <http://www.ecowas.int/ecowas-and-uemoa-spur-a-new-momentum-of-inter-institutional-cooperation-in-the-region/>

Mauritius, Rwanda, Seychelles, Somalia, Sudan, Swaziland, Tunisia, Uganda, Zambia, Zimbabwe. It should be noted that Tanzania, which was a member of COMESA, withdrew in 2000¹⁰ to avoid applying regional FTA. Therefore, apart from Tanzania, the other members of the East African Community (EAC), namely Burundi, Kenya, Uganda, and Rwanda are also members of COMESA.

As for the Southern African Development Community (SADC), its membership includes : Angola, Botswana, Comoros, D.R. Congo,

Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland (Eswatini), Tanzania, Zambia and Zimbabwe. Comoros, DR Congo, Madagascar, Malawi, Mauritius, Seychelles, Swaziland, Zambia and Zimbabwe are members of both SADC and COMESA.

Therefore, Table 2, below, examines internet penetration of all member countries of COMESA, EAC and SADC on 31 December 2017, and the extent to which they have competition laws and a competition authority enforcing the law.

Table 2: Internet penetration in COMESA, EAC and SADC

| Country | Population (million) | Internet penetration | Competition law | Competition authority |
|------------|----------------------|----------------------|--|---|
| Angola | 31,7 | 19,3% | Law 5/18 (2018) | Competition Regulatory Authority (CRA) |
| Botswana | 2,3 | 39,6% | Competition Act 2009 | Botswana Competition Authority |
| Burundi | 11,2 | 5,5% | Law 2010-06 | National Competition Commission to be established |
| Comoros | 0,8 | 15,7% | Law No 13-014 | To be established |
| D.R. Congo | 84,0 | 6,1% | Organic law 18-020 (Competition Act 2018) | New Competition Commission |
| Djibouti | 0,97 | 18,1% | Law on Competition & Consumer Protection 2008 | N.A. |
| Egypt | 99,4 | 49,5% | Law No 3 of 2005 | Egyptia Competition Authority (ECA) |
| Eritrea | 5,2 | 1,4% | N.A. | N.A. |
| Ethiopia | 107,5 | 15,3% | Trade Competition and Consumer Protection Proclamation (No 813/2013 (2014) | Trade Competition & Consumer Protection Authority (TCCPA) |
| Kenya | 51,0 | 85,0% | Competition Act No 12 of 2010 | Competition Authority of Kenya (CAK) |
| Lesotho | 2,2 | 27,7% | N.A. | N.A. |
| Libya | 6,5 | 58,7% | N.A. | N.A. |
| Madagascar | 26,3 | 7,2% | Loi 2005-020 sur la concurrence | Conseil de la Concurrence et DG au Ministère de l'Economie, Commerce et Industrie |

¹⁰ BBC news, 2 September 2000 : Tanzania quits COMESA trading block <http://news.bbc.co.uk/2/hi/africa/908008.stm>

| | | | | |
|--------------|-------|-------|---|--|
| Malawi | 19,2 | 9,5% | Competition and Fair Trading Act 1998 | Competition and Fair Trading Commission of Malawi (CFTC) |
| Mauritius | 1,2 | 63,4% | Competition Act 2007 | Competitin Commission of Mauritius |
| Mozambique | 30,5 | 17,3% | Competition Act 2013 | Competition Regulatory Authority (ARC) |
| Namibia | 2,6 | 30,8% | Competition Act No 2 of 2013 | Namibian Competition Commission |
| Rwanda | 12,5 | 29,8% | Competition & Consumer Protection Act (2017) | Rwandal Inspectorate and Competition Authority (RICA) |
| Seychelles | 0,095 | 70,5% | Fair Competition Act 2010 | Fair Trading Commission (FTC) |
| Somalia | 15,2 | 7,9% | N.A. | N.A. |
| South Africa | 57,4 | 53,7% | Competition Act No 89 of 1998 | Competition Commission Competition Tribunal |
| Sudan | 41,5 | 28,5% | Competition organization and Monopoly Prevention Act 2009 | Sudan Competition and Antitrust Council |
| Swaziland | 1,4 | 32,1% | Competition Act No.8 of 2007 | Swaziland Competition Commission |
| Tanzania | 59,1 | 38,9% | Fair Competition Act 2003 | Fair Competition Commission |
| Tunisia | 11,6 | 67,7% | Competition Act i 2015-36 | Competition Council DG at Ministry of Commerce |
| Uganda | 44,3 | 42,9% | N.A. | N.A. |
| Zambia | 17,6 | 41,2% | Competition and Consumer Protection Act No.24 of 2010 | Competition and Consumer Protection Commission (CCPC) |
| Zimbabwe | 16,9 | 40,2% | Competition Act (Chapter14-28) | Competition & Tariff Commission |

Source : Internet World Stats

As can be seen from the above table, Burundi, DR Congo, Eritrea, Madagascar, Malawi and Somalia had a very low rate of Internet penetration by the end of 2017. In terms of population, these countries together account for 141,9 million people, for a total of 902,7million people for the whole region. The big champions are Kenya, Mauritius and Seychelles, followed by countries like Egypt, Libya and South Africa.

In terms of competition law and enforcement, Botswana, Egypt, Ethiopia, Kenya, Malawi, Mauritius, South Africa, Swaziland, Tanzania,

Tunisia, Zambia and Zimbabwe have long established competition authorities and a few others (Angola, Ethiopia, Mozambique, Namibia, Rwanda) have more recent laws and authorities. Djibouti, Eritrea, Lesotho, Libya, Somalia and Uganda have no competition enforcement so far.

At the regional level, 19 member countries COMESA have signed a FTA, and COMESA has established a regional Competition Commission in 2004, which is headquartered in Malawi¹¹. As for the EAC, the EAC Competition Authority (EACCA) has been established in Arusha (Tanzania) in

¹¹ COMESA Competition Commission <http://www.comesacompetition.org>

2016, as provided by Section 38(6) of the EAC Competition Act, 2006¹². SADC for its part, has agreed in 2009 to establish a standing Competition and Consumer Policy and Law Committee (CCOPOLC) to implement the SADC cooperation in this field.¹³

not part of the trans-pacific FTAs, it was felt useful to include China in this review of Asian developing countries and LDCs. These are examined in Table 3, below.

South Asia (SAARC and China)

Members of SAARC include Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri-Lanka. China being the other giant with India in Asia, and given China's preponderance in the digital economy and e-commerce area, as well as the fact that it is so far

Table 3: Internet penetration in South Asia and China

| Country | Population (million) | Internet penetration | Competition law | Competition authority |
|-------------|----------------------|----------------------|--|---|
| Afghanistan | 36,4 | 15,7% | Draft Competition Act | Competition Directorate at Ministry of Commerce & Industries |
| Bangladesh | 166,4 | 48,4% | Competition Act 2012 | Competition Commission not established yet |
| Bhutan | 0,8 | 45,3% | N.A. | N.A. |
| China | 1415,0 | 54,6% | Antimonopoly Law (AML) | Antimonopoly Bureau of MOFCOM ; National Development and Reform Commission (NDRC) and State Administration for Industry and Commerce (SAIC) |
| India | 1354,0 | 34,1% | Competition Act 2002 | Competition Commission of India (CCI) |
| Maldives | 0,4 | 76,5% | N.A. | N.A. |
| Nepal | 29,6 | 54,7% | Competition Promotion and Market Protection Act 2063 of 2007 | N.A. |
| Pakistan | 200,8 | 22,2% | The Competition Act 2010 | Competition Commission of Pakistan (CCP) |

¹² EAC Press Release <https://www.eac.int/press-releases/605-1048-346-five-commissioners-of-the-eac-competition-authority-sworn-in-at-the-eac>

¹³ SADC Declaration on Regional cooperation in competition and consumer policies https://www.sadc.int/files/4813/5292/8377/SADC_Declaration_on_Competition_and_Consumer_Policies.pdf

| | | | | |
|-----------|------|-------|----------------------------------|--|
| Sri-Lanka | 20,9 | 32,0% | Fair Trading Commission Act 1987 | Consumer Affairs Authority under Ministry of Industry & Commerce |
|-----------|------|-------|----------------------------------|--|

Source : Internet World Stats

These are, except for Bhutan, Maldives and Nepal, large to very large economies, China and India being by far the biggest in the world. The level of internet penetration is relatively high, and except for Afghanistan and the smaller economies, Bhutan, Maldives and Nepal, which have at present no competition authority in place, Bangladesh has passed a competition law in 2012, but still has to establish its competition authority. China, India and Pakistan have strong competition law enforcement experience, and Sri-Lanka has a consumer Affairs Authority, which does not fully cover antitrust issues at this time, although it did so in the past, a decade or so earlier. China and India are worth special mention, as the two giants are important digital economies and at the same time have extensive competition enforcement history. According to Cina People’s Daily, China’s digital economy reached 22.58 trillion yuan in 2016, ranking second globally and accounting for 30.3 percent of the national GDP¹⁴.

ASEAN and CPTPP

ASEAN includes Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. It should be noted also, that an ASEAN-China Free trade area (ACFTA) has been signed in 2004 and was to be effective for all member countries by early 2018.¹⁵

As for CPTPP, following US withdrawal from Trans-Pacific Trade Partnership Agreement (TPPA), the remaining eleven countries, Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam, have agreed to continue under the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)¹⁶. In addition, it is reported that Thailand, Indonesia, Colombia, the Republic of Korea, and Taiwan (China), as well as the UK after Brexit, would be interested in joining the CPTPP.¹⁷

Both ASEAN and CPTPP member countries are examined in Table 4 below.

¹⁴ China People’s Digest, 11 December 2017
<http://en.people.cn/n3/2017/1211/c90000-9302950.html>

¹⁵ see ASEAN-China Free Trade Area
<https://www.asean.org/wp-content/uploads/images/2015/October/outreach-document/Edited%20ACFTA.pdf>

¹⁶ Quartz, October 28, 2018 : The new huge trans pacific trade deal is about to kick-off without the US

<https://qz.com/1441027/the-cptpp-trade-deal-is-ready-to-go-into-effect/>

¹⁷ The Voice of Vietnam, 20 July 2018 : CPTPP countries to start accession talks for new members in 2019.
<https://english.vov.vn/economy/cptpp-countries-to-start-accession-talks-for-new-members-in-2019-379467.vov>

Table 4: Internet penetration in ASEAN and CPTPP

| Country | Population (million) | Internet penetration | Competition law | Competition authority |
|-------------|----------------------|----------------------|----------------------------------|---|
| Australia | 24,7 | 87,8% | | ACCC |
| Brunei | 0,4 | 94,6% | Brunei Competition Order 2015 | Competition Commission (2017) |
| Cambodia | 16,2 | 49,3% | Draft law (2018) | N.A. |
| Canada | 36,9 | 89,9% | Competition Act | Competition Bureau |
| Chile | 18,2 | 77,5% | Law 19.911 | New Competition Tribunal (TDLC) and Fiscalía Nacional Economica (FNE) |
| Indonesia | 266,8 | 53,7% | Law No5 (1999) | KPPU |
| Japan | 127,2 | 93,3% | Antimonopoly Act | JFTC |
| Lao PDR | 6,9 | 35,0% | Competition Law 2015 | Lao Competition Commission (LCC) |
| Malaysia | 32,0 | 78,3% | Competition Act 2010 | Malaysia Competition Commission (MyCC) |
| Mexico | 130,7 | 65,0% | Federal Economic Competition Law | Federal Economic Competition Commission (COFECE) 2013 |
| Myanmar | 53,8 | 33,4% | Myanmar Competition Act 2017 | Myanmar Competition Commission (2018) |
| New Zealand | 4,7 | 88,1% | Commerce Act 1986 | Commerce Commission |
| Peru | 32,5 | 67,6% | Ley de Defensa de la Competencia | INDECOPI |
| Philippines | 106,5 | 62,9% | Competition Act No 10667 | Competition Commission |
| Singapore | 5,8 | 83,6% | Competition Act (2004) | Competition & Consumer Commission of Singapore (CCCS) |
| Thailand | 69,2 | 82,4% | Trade Competition Act | Office of Trade Competition Commission (OTCC) |
| Vietnam | 96,5 | 66,3% | Competition Law amended in 2018 | Vietnam Competition & Consumer Authority (VCCA) |

Source : Internet World Stats and country information

This group of countries is clearly the one with best internet penetration in the list of countries examined in this paper. All, except for Cambodia have competition laws and a competition authority to enforce it. Only Myanmar is new in this field, having passed its law in 2017 and created its competition authority in 2018. This group includes many leading competition authorities, such as Australia's ACCC, Canada's Competition Bureau, Chile's Competition Tribunal, Indonesia's KPPU, Japan FTC, Malaysia's MyCC, Mexico's COFECE, New Zealand's Commerce Commission, Peru's

INDECOPI, Singapore's CCCS, Thailand's OTCC and Vietnam's VCCA. No doubt these authorities, along with US and European ones, as well as India's CCI, China's three authorities, South Africa's Competition Commission and Tribunal, Kenya's KCA and Egypt's ECA and a few others are at the forefront of competition enforcement, and should lead the way in enlightening all other competition authorities in developing knowledge in effective enforcement in the digital economy.

As the digital revolution spreads at exponential speed around the world, one can expect that all

countries, including today's poorest and most remote areas in these countries will soon be faced with the benefits and challenges of the digital economy. Consequently, e-commerce can be expected to reach all developing countries and be an important lever of growth and development. Of course, even for countries with low rates of Internet penetration, such as some African and a few Asian countries, firms interested to go online to reach export markets or big e-commerce platforms, can do so provided they have appropriate access.

1.4 A first glance at developing country e-commerce platforms

Most literature on e-commerce and the digital economy is involved with mostly US companies, such as the Google and Facebooks (GAFAMs). This section tries to shed some light on other platforms in China and in developing countries such as South Africa, Nigeria, India and Singapore.

China first, as it is classified as a developing country, but it is also the second power in the digital economy, closely rivaling the US market, which it might overtake in no time. The top Chinese tech giants, Baidu, Alibaba, Tencent and Xiaomi (collectively referred to as BATXs), have as strong an influence on the Chinese stock market as the GAFAMs have in the United States. All three BATXs are among the world's top 10 Internet companies by market capitalization¹⁸.

Baidu is the most popular search engine in China, both on desktop and mobile devices. It covers

more than 80% of the Chinese market. Like Google, Baidu also provides maps, translation, and cloud storage services, ride-hailing services and is currently developing a self-driving car. In 2014, it invested in Uber China. However, Baidu faces very strong competition from its Chinese rivals Alibaba, Tencent and many others. Baidu has been criticised for not being able to diversify its income sources, and although its revenues from video service provider iQiyi reached 1.6 bn USD in 2017, Baidu is still losing money, as its profits rely heavily on advertising. While so far 99% of its revenues originate from China, Baidu claims its services already extend to many countries, with a preference for Southeast Asia, South America, and the Arabic-speaking world¹⁹.

Alibaba, often referred to as « the Amazon of China » has been largely driven by its e-commerce business, complemented by cloud services. But Alibaba has a more complex platform ecosystem than Amazon, including Taobao.com (C2C), Tmall.com (B2C), 1688.com (B2B), and aliexpress.com (international portal). In addition to its direct e-commerce sites, Alibaba also owns a dominant player in the online and mobile payment market, Alipay. In addition, Alibaba's Yu'e Bao allows consumers to save and invest money "left over" in digital wallets into a market fund and earn interest. With Ant Financial, the company also provides access to credit for consumers and small businesses via Sesame Credit – which calculates credit scores based on shopping transactions. About 60% of Alibaba's revenues come from its advertising platform Alimama. As both Alibaba and Amazon look to expand overseas into similar markets, competition between the two will inevitably intensify. Recently, Alibaba released the new Tmall Genie – a voice-controlled smart home assistant – as a

¹⁸ IMD : The Chinese digital giants-coming to a store near you. Europe and North America, be aware of the BATs, Baidu, Alibaba and Tencent. <https://www.imd.org/research->

[knowledge/articles/the-chinese-digital-giants-coming-to-a-store-near-you/](https://www.imd.org/research-knowledge/articles/the-chinese-digital-giants-coming-to-a-store-near-you/)
¹⁹ id

direct challenge to Amazon's echo. Similarly, Amazon's blockbuster purchase of Whole Foods could be viewed as an attempt to change the entire grocery shopping experience, much like Alibaba's Hema has done for fresh food in China. The next battleground is expected to be in Southeast Asia, where the e-commerce market is still fragmented and believed to be relatively untapped²⁰.

Tencent is known for its instant messaging and social media platforms – Wechat and QQ, which have almost one billion active accounts each. Like Facebook, Tencent has diversified its services beyond social media and chat apps. Its online payment service Tenpay is rapidly closing the gap with market leader Alipay. Tencent's web-based entertainment portal QQ.com is one of the largest web portals in China. Tencent is expanding Wechat's ecommerce platform and has become a major shareholder in JD.com, the country's second-largest e-commerce firm. While a majority of Facebook's revenue is from advertising, and mostly from its mobile settings, more than half of Tencent's revenue is generated from online gaming. Tencent's advertising makes up only about 14% of its total revenue – including ads from other Tencent companies, such as QQ video. Tencent's Chinese MOBA game "Honour of Kings" is the most profitable game worldwide in the mobile segment. Tencent is also spending heavily to acquire game developers globally. Back in 2013, Tencent invested in EPIC Games. In June of 2016, it bought an 84% stake in Supercell, the maker of Clash of Clans, for 8.6 bn USD, setting a new record for the acquisition of a video game maker²¹.

As the BATXs start to saturate the Chinese market, they will look elsewhere for growth. Their first moves have been to South East Asia and India. However, they will no doubt soon compete on the large and lucrative markets of Europe and North America.

Among the fastest growing Chinese online social media platforms, there is RED/Little Red Book ; Miaopai, which is a part of the largest Chinese social media holding – Sina Weibo ; Wechat, Telcent's subsidiary ; and Weibo, one of the most popular micro-blogging platforms in China. Sina Weibo partnered up with a few other media platforms, such as Easub and Miaopai and removed its 140-character limit after US media reported that Twitter is considering removing its 140-character limit²².

In India, a retailer looking to get onto the e-commerce bandwagon may chose between going in for a hosted platform, such as Shopify or Zepo, or opt for a Content Mangement System (CMS), such as Magento. Largest CMS in India are reported to include Bigcommerce (17,08% market share in 2018), Volusion (16,68%), Miva Merchant (15,33%), Demandware (11,68%) and Shopify (10,74%). Best hosted e-commerce platforms in 2018 include Shopify, Bogcommerce, Volusion, which has over 90% of its market share in the US ; Mumbai based Zepo ; and Delhi based KartRocket.²³ India's largest online retail group is reported to be Flipkart, with its subsidiaries Myntra and Jabong, which has recently been takeover by US giant Walmart for approximately 16 bn USD.²⁴

In Singapore²⁵, many domestic and foreign-owned e-commerce platforms are present, as well

²⁰ id

²¹ id

²² Hi-Com: The four big social media platforms in China in 2017 <https://www.hicom-asia.com/the-4-big-social-media-platforms-in-china-in-2017/>

²³ Source : Social Beat : 10 best e-commerce platforms for your online store <https://www.socialbeat.in/blog/ecommerce-platform-for-online-store/>

²⁴ see Inside LLM com, August 3, 2016 : Flipkart, Myntra and Jabong ; A story of consolidation <https://insideiim.com/flipkart-myntra-jabong-story-consolidation/>

²⁵ see ASEAN Up : Top Ten ecommerce sites in Singapore 2018 <https://aseanup.com/top-e-commerce-sites-singapore/>

as in many South-Asian markets. Qoo10 is the e-commerce leader in Singapore, which was rebranded Qoo10 in 2012, after Giosis, a joint venture with eBay, acquired the South Korean site Gmarket. Second by size, Lazada was acquired in 2016 by Chinese e-commerce giant Alibaba. It is present in Malaysia, Indonesia, the Philippines, Thailand and Vietnam. Carousell Singapore, originally a mobile platform, has developed a web shopping site and allows brands or individuals to take pictures of their products with a phone, sell easily through its platform and chat with the sellers to buy directly. It is also present in Malaysia, the Philippines, Indonesia, Taiwan, Australia and Hong Kong.

EBay Singapore, subsidiary of US e-commerce giant eBay, caters to all general product categories. EZbuy, another online shopping platform present in Singapore, is primarily involved in clothing, family, home, beauty, sports, automotive and electronics and is especially focused on Korean, Taiwanese and American products. It is also present in Malaysia, Thailand and Indonesia. Zalora, the largest e-commerce site specialised in fashion in Southeast Asia, is present in Singapore, Indonesia, Malaysia and Brunei, the Philippines, Thailand, Vietnam, Hong Kong and Taiwan. Shopee is a leading platform throughout Southeast Asia, primarily through its mobile application also present in Malaysia, the Philippines, Thailand, Indonesia, Vietnam, and Taiwan. RedMart, which was acquired in 2016 by Alibaba subsidiary Lazada, is the leader in online groceries shopping platform in Singapore.

In Africa, numerous e-commerce platforms have flourished, following the booming internet penetration and availability of smartphones in the

region. Jumia, for instance, launched in 2012 in Nigeria, is a platform where small, medium and large African companies link with their potential market. It is now present in 23 African countries with a network of over half a million sellers spanning across the retail, food and hospitality, talent recruitment, concierge and hotel and catering markets²⁶. Another Nigerian platform, Konga, established in 2012, as a Lagos-only e-commerce site specialised in baby and beauty care, has turned into a major online retailer, often dubbed « the Amazon of Africa », after Naspers, one of Africa's biggest digital companies, acquired a 50% stake in Konga, in 2014. In 2015, Konga joined forces with leading Nigerian banks to launch KongaPay, an online payment system, which was the first one in Africa to create a payment system integrated with international banks, thus eliminating the sharing of sensitive information during payments²⁷.

South Africa's Takealot is a platform established in 2002, where customers can shop anything from books to games, computers and TVs. Takealot is also 53,5% owned by Naspers, and 34% by US investment firm Tiger Global Management. Another South African online platform is Bidorbuy, where customers do not only purchase what they want, but they can also make a bid for products, Bidorbuy functioning also like an online auction place. Over the years since inception in 1999, Bidorbuy has made a number of acquisitions, including popular sites such as online jobs portal Jobs.co.za and e-commerce company uAfrica.com. As for Kenya's largest online shopping mall Kilimall, it was launched in 2014, and has now established presence in other countries, including Nigeria and Uganda²⁸.

²⁶ See Smallstarters.com <http://www.smallstarter.com/know-the-basics/the-biggest-players-in-africas-fast-growing-e-commerce-market/>

²⁷ Id.
²⁸ Id.

SECTION 2

Potential Benefits and Challenges of the Digital Economy for Smaller Developing Countries

2.1 Potential benefits

According to a recent OECD report on e-commerce and competition²⁹, “The growth of e-commerce has the potential to increase competition within retail markets, to greatly enhance consumer choice, and to prompt and facilitate innovation in product distribution ».

Six mutually reinforcing pro-competitive benefits of e-commerce include³⁰ : (i) more efficient cost-reducing distribution, (ii) wider geographic markets, (iii) better consumer choices, (iv) more supplier information, (v) lowering barriers to entry (vii) contributing to lower prices and increased innovation. These are explained below :

More efficient cost-reducing distribution

E-commerce allows more efficient distribution of goods and services, as suppliers may streamline their production-distribution chain, creating direct contact with final customers (B2C), or through a digital platform (B2B2C), thus eliminating the need for certain types of intermediaries (wholesalers and brick-and-mortar retailers). Streamlined distribution also reduces cost of

wearhousing and maintaining stocks in distant locations.

Wider geographic markets

The size of geographic markets is increased practically without limits, since the cost for customers to visit a website is independent of geographic distance. Online shoppers have access to an infinite range of suppliers of goods and services anywhere in the world. For digital goods such as music and entertainment, or financial, insurance services and the like that can be downloaded electronically, the geographic boundaries are no-more physical, except for legal limitations such as intellectual property rules which might create entry barriers. For tangible goods, the cost of transportation and customs procedures may hamper e-commerce, but globally, such barriers are on the decline. It nevertheless remains that e-commerce provides the means to compensate small domestic markets, an advantage that could be useful for smaller developing countries.

Better consumer choices

Wider markets means increased offer and possibility for better choices for customers. New

²⁹ OECD Implications of E-commerce for Competition Policy, Background Note. 6 June 2018

[https://one.oecd.org/document/DAF/COMP\(2018\)3/en/pdf](https://one.oecd.org/document/DAF/COMP(2018)3/en/pdf)

³⁰ Denton Rodik : The benefits and harms of e-commerce on competition

https://dentons.rodyk.com/en/insights/alerts/2017/april/5/the-benefits-and-harms-of-ecommerce-on-competition-law?utm_source=Mondaq&utm_medium=syndication&utm_campaign=View-Original

products may be introduced faster on the market, customers are better informed about quality and variety of products on offer and price comparisons facilitated by price comparator websites.

More supplier information

Increased in-time data on consumer demand and wishes allows suppliers to shift faster to changes in fashion and consumer demand and personalising the shopping experience for each customer, thus reducing costs of keeping outmoded stocks and inventories.

Lowering barriers to entry

As e-commerce lowers barriers to entry for potential suppliers, establishing an on-line presence becomes cheaper than investing in a brick-and-mortar physical shop, especially if the latter is to be situated abroad. Also, taking advantage of a market network platform usually offers small retailers, including in developing countries, a more effective way to reach overseas markets.

Lower prices and increased innovation

Increased competition and lowering costs in the supply-distribution chain generally contributes to lowering prices and encouraging innovation.

2.2 Key challenges for developing countries

Among the key challenges faced by developing countries are patchy internet connectivity due to underdeveloped infrastructure, a general lack of awareness about the benefits that e-commerce

offers, a lack of trust among retailers considering to go online and lack of confidence by customers in delivery and payments systems.

Internet connectivity

As seen above, in the previous section, there are still many developing countries where internet penetration is very weak. Although mobile phones have reached the majority of African citizens, for example, smartphones, and especially internet connectivity is still the privilege of the rich. Moreover, a broadband divide exists in many countries between the metropolitan cities that have better internet coverage, and the rural regions that have very limited or no connectivity at all. This, along with other problems, such as security in the online payments system, limits suppliers' ability to sell online, and consumers' access to e-commerce markets.

Cybersecurity

In many smaller developing countries and in remote regions, there is a lack of trust among customers when completing transactions online, for instance with regards to banking fraud, data protection, unfulfilled deliveries, and the inability to return products. As well as the current level of technological infrastructure in the region, the regulatory and legal environment across many regions has failed to protect transactions from hackers and cyber-threats. In order to build trust among customers and allow e-commerce to flourish in the regions under review, UNCTAD³¹ highlights coordination in regulations tackling cybercrime, consumer protection and recognition of electronic signatures as critical requirements, in addition to the establishment of a regional online dispute resolution facility.

³¹ UNCTAD (2013) Harmonizing cyberlaws and regulations : The experience of the East African Community https://unctad.org/en/PublicationsLibrary/dtlstict2012d4_en.pdf

Customs and taxes

Consumers and businesses are often discouraged from purchasing goods from overseas firms because of uncertainty and a lack of awareness of customs and tax rules. There are also variations in the import duties and taxes payable when purchasing goods from other developing countries. The degree to which foreign companies are able to compete with domestic players therefore varies across the region. As a result of import duties and non tariff barriers, exporters from smaller developing countries are often placed at a disadvantage in comparison to large multi-market platforms, aware of the intricacies of trade and able to deal with such border differences. Complex technical, sanitary and phytosanitary measures, including certification and pre-shipment and price control measures, are particularly prevalent barriers to trade in general, but to e-commerce in particular. Progress in the declared objectives of regional integration agreements such as those examined in the previous section of this paper, which aim at establishing full-fledged FTAs and Customs Unions, would be essential in this respect.

Problems of delivery/return of goods

Delivery remains another key challenge to the development of e-commerce in smaller developing countries. Online platforms can enable access to global markets, but the physical challenge of delivering products to final customers still remains. Delivery can involve interactions between different types of firms, such as logistics companies or postal services. Delivery also requires reliable infrastructure to be in place

including customs procedures and local delivery. The costs associated with delivery and the time it takes for consumers to receive goods shopped online presents a key challenge for businesses to overcome as they compete on customer experience. In addition, with large scale e-commerce most platforms guarantee return of goods free of charge. This might entail big problems in cross-border transactions with less developed countries having foreign exchange controls.

Lack of consumer confidence in payments systems

Like most of Africa, Nigeria's e-commerce market has long been hampered by lack of customer trust, Internet connections hiccups and other issues. Despite the challenges, in 2014, Paypal, international payment platform launched its operations in Nigeria, joining other leading online retailers like Jumia, Konga, DealDey, and others. By the end of 2015, Nigeria became the third largest Paypal mobile e-commerce market in the world, with transactions by mobile phones worth 610million USD³².

Disruption in the traditional brick-and-mortar commerce

Brick-and-mortar businesses such as travel agencies and retail stores suffer from competition from online platforms. A good example of disruption of brick-and-mortar offline business resulting from online competition in selected fields of business in the ASEAN countries is provided below, from a table included in the ASEAN handbook on e-commerce and competition³³.

³² Source : Business A. M. <https://www.businessamlive.com/nigerias-12bn-e-commerce-market-seen-driver-growth-near-term/>

³³ see Handbook on E-Commerce and Competition in ASEAN

Key impacts from E-commerce in the five disrupted industries within ASEAN

| Industry Key | Impacts and consequences | Examples of significant players in ASEAN |
|-------------------------------|--|--|
| Accommodation booking | Increase in independent providers, increased price competition, new audiences for traditional hoteliers. | Agoda, Trivago, Expedia Booking.com, Hilton, Intercontinental, Hyatt, Airbnb |
| Flight booking | Increased price competitiveness, lower price dispersion, demise of independent travel agents. | Expedia, Skyscanner, Asia Travel, Flight Centre, Flight World, Hello World |
| Land transport | Increased innovation, reshaping of markets, more sensitive pricing strategies. | Uber, ComfortDelGro, GoJek, Grab |
| Cosmetics and beauty products | Increased price competition and competition on product selection, demise of brick-and-mortar companies | Luxola, Hermo, Bellabox |
| Fashion | Increased product choice for consumers, growth in consumer expectations. | Zalora, Clozette, VanityTrove, Lelong.my, Fashion Valet, ASOS, Shopbop.com |

Source: PwC Analysis

Digitalisation and unemployment

Apart from disruption in traditional brick-and-mortar commerce, advances in robotics, artificial intelligence and machine learning are accused of rapidly accelerating the rate at which automation is displacing workers and creating unemployment³⁴. In addition, the digital economy has given rise to very large network companies (GAFAMs) that are accused of taking advantage of the network effects to grow exponentially while employing relatively limited staff³⁵. While online platforms may be costly to launch, expanding them is relatively inexpensive and does not require as many employees as in the offline industry. As a result, the digital economy is unable to replace jobs lost, and constitutes one of the greatest challenges to employment first in developed countries, but sooner than later in developing countries as well.

Barriers to market entry

Barriers to entry into a given market may exist both in brick-and-mortar and online markets, but there are differences in the prevalence and magnitude of some of these barriers between online and offline sales channels. In e-commerce, the costs of making a website accessible in a new location are relatively low, compared to a brick-and-mortar investment. However, the ability to spread marketing costs over a larger quantity of goods sold remains a constraint for online retailers seeking to grow or enter new markets in comparison to larger incumbent firms. In addition, access to supporting infrastructure, such as logistics, inventory and payment systems may also constitute a barrier to entry for developing country digital businesses. Vertical integration by an incumbent platform or single-sided firm may affect other firms' ability to gain access to these systems.

³⁴ see in this respect David Autor, David Dorn, Lawrence F. Katz, Christina Patterson, and John Van Reenen.

³⁵ Id.

In addition, the quantity of data collected by giant e-commerce platforms may provide them with considerable market power, allowing them for example to subsidise one side of the market (providing services to customers below cost, or for free), which increases the platforms' attractiveness on that side of the market, hence attracting a rapidly growing number of customers while at the same time making advertisement through the other side of the platform more worthy, since it will concern so many more customers. Hence the so-called network effect, of the growth of one side of the platform) which increases the net worth of the platform on the other side of the market (advertisers willing to pay more because they will have access to more potential customers).

Big Data and network effects

Prof. Ariel Ezrachi³⁶ argues that the *volume* of data; the *velocity* at which the data is collected, used and disseminated; the *variety* of information aggregated and the *value* of the data- commonly characterize Big Data. He further writes that the use and value of Big Data has increased with the rise of Big Analytics: the ability to design algorithms that can access and analyze vast amounts of information. Amazon, an online shopping platform, for instance uses computer algorithms to adjust pricing automatically rather than manually. These algorithms scoop personal and market data to match the best prices for the products available on shelf.

This could lead to a scenario of 'data advantage' amongst companies in order to harvest greater profits in the market. As the online sellers would begin to rely on artificial intelligence and algorithmic pricing, it is likely that their rivals will be tempted to develop 'smart' algorithmic pricing in order to sustain the competitive pressure. The possible use of sophisticated pricing algorithms

and artificial intelligence to enter into collusion or which may lead to conscious parallelism and their effect on competition in the virtual market increasingly becomes a policy concern. In particular, there are growing concerns about the emergence of dominant online platform operators, which conduct business across multiple product segments and benefit from network effects and significant data collection advantages.

Switching costs

Switching costs for customers also make it harder for new entrants and smaller firms to compete with large incumbent players. For the user of a platform or a network, switching to another platform may incur costs in terms of subscription fee to enter the new application, or simply time spared to learn how to use the new system, re-enter required information and study application notices and risk of losing advantages provided by the former platform. Even if some of such costs do not materialise in practice, they may still deter customers from switching providers. It should also be noted that switching costs may be created or increased voluntarily by incumbent firms in order to restrict the entry and expansion of smaller firms. For example, loyalty reward schemes (advantages lost for departing customers) may be designed to increase discourage customers from switching to alternative providers.

Legal barriers

Legal advantages such as intellectual property rights that limit the number of market participants, can also constitute barriers to entry. IPRs such as patents for applications and copyright laws prohibiting forking (i.e. the freedom to develop new applications from existing ones) may block potential inventors and new

³⁶ see Ariel Ezrachi & Maurice E. Stucke, 'Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy', Harvard University Press (2016).

entrants and smaller firms from entering an on-line market.

Differences in enforcement of competition laws

Differences in approaches to the application of competition policy and law may also pose challenges to firms looking to operate overseas. This is particularly important with respect to the use of vertical restraints by firms operating in online markets (i.e. when a restraint may be deemed anticompetitive by authorities. International differences in approaches to applying competition policy and law gives rise to an additional burden for e-commerce, as suppliers may need to adapt their conduct depending on the different approach adopted in the different territories where they wish to conduct their business.

The intrusion of e-commerce in developing countries makes it unavoidable that cases will

have to be decided by national competition authorities of developing countries. A case in point is the way in which disruptive ride-sharing platforms such as Uber have been challenged by taxi services providers and the fact that a growing number of national competition authorities are required to advise or to decide on such issues. A non-exhaustive list of national competition authorities which have issued statements on Uber, for example, includes Australia, Brazil, Canada, Colombia, Finland, France, Italy, Mexico, Norway, Poland, Portugal, Singapore, Spain, the UK and the US³⁷.

³⁷ See OECD, « Taxi : ride-sourcing and ride-sharing services » - Background Note by the Secretariat, 4 June 2018

SECTION 3

Main Issues Related to Anticompetitive Practices by Digital Economy Firms

The advent of Internet shopping platforms allows consumers to quasi-instantly perform « window shopping » worldwide and to be informed about virtually all goods and services available on the net, different qualities on offer and their price in different geographic markets. In the same way as consumers, businesses can also have instant access to the web, and easily get price/quality information about every competing product they are interested in. In addition, price comparison websites (PCWs) facilitate the task of consumers as well as businesses willing to compare prices. While price transparency is useful and « pro-competitive » for consumers, it may also serve « anti-competitive » bias of businesses, increasing potential collusion and facilitating the use of resale price maintenance.

Price-tracking software enables businesses to track instantly the prices charged by their competitors and to take advantage of price-setting algorithms which automatically reacts to price changes by competitors. By so doing, businesses may be tempted to consciously collude, or it might be the software that automatically establishes price-parallellism. Algorithms may also serve as the hub for virtual « hub-and-spoke » cartels. A step further could be reached by artificial intelligence (AI) « deep-learning algorithms »,

which could potentially collude, independently from any conscious human intervention.

Algorithms and PCWs also greatly increases businesses' capacity to monitor resale price maintenance (RPM), by easily identifying retailers who do not align their prices or sales conditions to those prescribed.

The rapidly growing use of algorithms in e-commerce has recently been confirmed by a preliminary EU Commission e-commerce inquiry³⁸, which revealed that 53% of the retailers approached indicated they track online prices of competitors, 67% of which said they do the tracking by way of software, and 78% confirmed adjusting their prices on the basis of the tracking results.

3.1 Horizontal restraints

Hard-core cartels

Horizontal price-fixing, market allocation and bid rigging cartels are generally considered to be the most harmful, and therefore the most strictly sanctioned anti-competitive practices. At the same time, uncovering hard core cartels and collecting required evidence in order to sanction collusion, is one of the most challenging tasks of

³⁸ Source : Commission Staff Working Document, Preliminary Report on the E-commerce Sector Inquiry, Brussels, 15.9.2016, SWD(2016) 312 final, Part 1/2, n125,

<http://ec.europa.eu/transparency/regdoc/rep/10102/2016/EN/SWD-2016-312-F1- EN-MAIN-PART-1.PDF>.

competition authorities. As with brick-and-mortar cases, hard core cartels within e-commerce would imply a secret agreement among suppliers or among retailers, at the same level of the supply-distribution chain. Computer algorithms may serve to facilitate information exchange by monitoring the cartel activities. This would allow executives from cartel member firms to fix prices, allocate markets or bids, or to reduce output, and the cartel would then be enforced and monitored by the algorithm software. In such case, the algorithms are mere intermediaries to the 'per se' illegality of the agreed upon actions of the human agents. Hence, where evidence exists of such practices, enforcement action can be taken by competition authorities.

One example may be provided by the very recent enquiry of the Swiss Competition authority COMCO alledging that a number of Swiss banks illegally colluded to exclude ApplePay and SamsungPay systems from their local payments system TWINT³⁹. Following « dawn raids » at offices of UBS, Credit Suisse, PostFinance, Swisscard AECS, and Aduno Holding, the investigation is proceeding.

In practice, however, uncovering robust evidence of collusion in e-commerce is often complicated by the specific characteristics of e-commerce markets, including the high degree of price transparency described above, and the rapidly expanding use of algorithms in the retail price-setting process⁴⁰. In fact, algorithms might take-over the running of retail cartels away from humans to computers, which are tasked with determining cartel prices and monitoring deviations between participating firms in the

cartel. Such a scenario makes the task of competition authorities ever more difficult as they may need new investigative tools and additional resources to uncover and gather sufficient evidence of collusive behaviour in e-commerce markets.

One step further may be reached by artificial intelligence (AI) and « deep-learning algorithms », that can develop collusive strategies autonomously, i.e. without the strategy being encoded in the algorithm from the outset. Furthermore, deep-learning algorithms may present themselves as “black boxes” the workings and interactions of which are hard to decipher in detail. In theory, AI can make strategic decisions in complete isolation from the ‘human’ element. With no express instructions to collude, no anti-competitive agreement and no human interference, it might be difficult to figure out how competition law could be enforced against AI. Some authors go as far as assuming that as nobody could be held responsible, no legal action could be taken, and the adverse impact on consumer welfare might be an inevitable fallout of AI⁴¹. Others⁴² consider that under EU law at least, in a theoretical case where AI made it impossible for its designer or user to foresee its anticompetitive character, the Commission can prohibit the practice without imposing a fine and, if necessary, impose periodic penalty payments until the infringement is brought to a halt.

While the issue will still be debated for some time, it is clear that existing legislation might not be adapted to the types of challenges faced by competition authorities in the digital economy.

³⁹ COMCO Press notice of 15 November 2018 : COMCO launches investigations into several Swiss financial institutions https://www.wbf.admin.ch/wbf/en/home/dokumentation/nsb-news_list.msg-id-72928.html

⁴⁰ see in particular Ezrachi and Stucke, 2016, OECD, 2017, and Janka and Uhler, 2018.

⁴¹ Nidhi Singh, Weidenfeld-Hoffman Scholar, MSc Law and Finance, « Virtual competition : challenges for competition

policy in an algorithm driven market », in University of Oxford, September 11, 2018. .

<http://competitionlawblog.kluwercompetitionlaw.com/2018/09/11/virtual-competition-challenges-competition-policy-algorithm-driven-market/>

⁴² Jan Blockx : Antitrust in digital markets in the EU: policing price bots Paper for the Radboud Economic Law Conference, 9 June 2017

While more experienced jurisdictions are struggling to catch-up with an ever-evasive and highly dynamic process in e-commerce, only few competition authorities from developing countries such as those of India, Singapore and South Africa have made some insights in this area⁴³. As will be seen below, the large majority of cases relating to the digital economy have been performed by developed country competition authorities, and in many cases, these authorities also face the challenge of trial and error in their decision-making.

Hub-and-spoke collusion

Another type of cartel that can take place in e-commerce and that may be difficult to detect for competition authorities, is the so-called « hub and spoke cartel », whereby horizontal collusion may take place through parallel vertical restraints. In other words, collusion is coordinated by the e-commerce platform (acting as « the hub »), which ensures that various suppliers and distributors (« the spokes ») follow identical practices in their (vertical) transactions with their customers. Insofar as alignment of competitor behaviour is achieved through a series of apparently freestanding vertical restraints, the hub-and-spoke cartel renders direct horizontal collusion unnecessary and more difficult to detect. In order to challenge hub and spoke cartels, competition authorities have to uncover sufficient evidence of horizontal coordination by an e-commerce platform arising from the vertical restraints detected in the market.

An example of hub and spoke cartel can be provided by the Apple (e-Books) case in the United States⁴⁴, where Apple had adopted a

standard model for e-book sales by major book publishing companies (the « Big Six », namely Hachette, HarperCollins, Macmillan, Penguin, Random House and Simon & Schuster,) through its online e-commerce platform. The US Department of Justice (US DOJ) concluded that the coordination by Apple of the sales policies of the six book publishers resulted into a horizontal price-fixing cartel, by « by orchestrating a conspiracy among five major publishing companies to raise the retail prices of digital books, known as “ebooks.” » by Apple’s platform. This decision was upheld by the US Court of Appeals for the Second Circuit⁴⁵.

Conscious parallelism or tacit collusion

As algorithms increase capacity to collect and analyse large amounts of data in no time, they allow competitors to automatically adjust to price changes and new business strategies, and thus tend to favor parallel behaviour or « tacit collusion ». Each firm operating through their own pricing algorithm, they might reach similar pricing conclusions that are not explicitly negotiated among them. However, the fact that each firm is aware of the use of similar pricing algorithms by the others that results in tacit collusion or conscious parallelism, such collusion could in principle be prosecuted on the basis of the anticompetitive intent of the competitors. Circumstantial evidence, however, is difficult to establish given the complex nature of the algorithms used and difficulty in identifying the human perpetrator⁴⁶.

In most competition jurisdictions, parallel pricing is not considered an offence. In fact, banning tacit

⁴³ See for example...ASEAN Handbook, op cit.

⁴⁴ *United States of America v. Apple Inc., et al.*, 12 Civ. 2862 (DLC)

⁴⁵ US Court of Appeals for the Second Circuit, Case 13-3741, Document 373-1, 06/30/2015, 1543162, Page2 of 117 .

<https://www.justice.gov/atr/case-document/file/624326/download>

⁴⁶ Nidhi Singh, Weidenfeld-Hoffman Scholar, MSc Law and Finance, « Virtual competition : challenges for competition policy in an algorithm driven market », in University of Oxford, September 11, 2018.

collusion may inhibit market players from constantly adapting their prices and other sales conditions to those of their competitors, which are key components of pro-competitive behaviour. In addition, it was suggested that the likelihood of tacit collusion was traditionally limited to oligopolistic markets, for homogenous products, in markets where entry barriers were high and transparency was low. That is why competition law and policy deemed it acceptable to refrain from sanctioning this type of conduct.

Some experts note that if, however, the intensive use of algorithms were to make tacit collusion more frequent in all markets by removing the relevance of traditional conditions for its successful implementation, the traditional approach towards tacit collusion may have to be reconsidered. In their view, more empirical research is needed to quantify increased tacit collusion risks and identify vulnerable market areas. Without the results of such research, they recommend that competition law and policy should avoid radical changes in their treatment of tacit collusion.⁴⁷

3.2 Vertical restraints

While horizontal agreements are considered as the most harmful, vertical restraints are looked upon by competition authorities much more leniently. Apart from RPM, which represents a vertical form of price fixing and is prohibited in many jurisdictions, even in the US, the other vertical restraints, in the absence of market power, or abuse of dominance, give rise to application of the « rule of reason », the balancing of their potentially pro-competitive effects with the anti-competitive ones. On the positive side, vertical restraints frequently generate important welfare-enhancing efficiencies, such as

encouraging competition by maintaining high quality outlets by fighting free-riders, guaranteeing high standards for sales and after-sales services, undertaking to implement warranties, etc ...

On the negative side, however, EU Article 101(1) TFEU, proscribes vertical restraints which aim at segmenting the internal market. The existence of market power held by one or more of the contracting parties is a major determinin factor in assessing anti-competitive effects. As we will see in the next section dealing with unilateral conduct by dominant firms, this entails the determination of the existence of dominance, after having defined the relevant market. Another important restraint examined above under horizontal agreements, is the extent to which a number of similar vertical restraints within a relevant market contributes to restricting competition upstream or downstream, in what is defined as a hub and scope cartel discussed above.

In the digital age, most vertical restraints that may raise antitrust concerns originate in the efforts of manufacturers to limit or control the online resale of their products by wholly separate retailers. These may involve exclusive or selective distribution arrangements, including outright online sales bans, PCW bans, imposition of resale price maintenance (RPM), dual pricing, price-parity (MFN) clauses, etc.

Exclusive and selective distribution

Exclusive distribution refers to a vertical arrangement whereby a manufacturer agrees to sell his products exclusively through a single distributor (wholesaler or retailer) within a given territory. Obviously, such agreements restrict

⁴⁷ Picht/Freund : Competition law in the era of algorithms, in Max Planck Institute for innovation and competition research paper No 18-10, page 8.

intra-brand competition, by limiting the wholesale or retail outlets from which retailers or customers can purchase the supplier's products. Manufacturers may use exclusive distribution channels both in brick-and-mortar shops (offline) and through the Internet (online). However, in certain cases, they might choose to sell only offline and prohibit online sales. Sometimes, the reverse might happen, obliging exclusive distribution to take place only online.

Selective distribution refers to a vertical arrangement whereby a manufacturer fixes specific requirements for admission to its distribution network. As with exclusive distribution, selective distribution can take place both offline and online. With the rapid adoption of e-commerce, suppliers have increased the use of selective distribution channels, often including "*internet addendums*" for on-line sales, such as obligations for the retailers to maintain approved websites of specified standards, and to prohibit certain functionalities, such as PCW.

Both exclusive dealing and selective distribution arrangements are perfectly normal business practices which are very commonly found in real world offline as well as online markets. It is only in some limited cases, including resale price maintenance and especially when the supplier can be found to abuse a dominant position of market power that competition authorities may oppose these practices.

Resale Price Maintenance (RPM)

RPM, by which manufacturers or wholesalers impose restraints on resale prices or on sales conditions by retailers, is the vertical restraint which most frowned upon by many competition jurisdictions. This is because by banning any possibility of discounts by the retailer, RPM constitutes one of the most evident barriers to intra-brand competition. Therefore, the imposition of minimum or fixed resale prices is frowned upon by most competition authorities. The practice of

indicative price recommendations have been accepted by some, for as long as there is no obligations attached to such lists, but others reject it because recommended prices inevitably induce distributors to tacitly align to the recommendations for fear of retaliation, and hence still may limit intra-brand competition in the same way as outright RPM. Finally, the indication of maximum retail prices by the manufacturer might induce distributors to align to these prescriptions.

In practice, businesses are tempted to control resale prices of their distributors for a number of reasons, among which free-riding by customers is perhaps the most important. For items which are available through different sources, it is often the case that consumers will first consult a brick-and-mortar outlet, where sales-persons are available and they can get free advice as to which product responds best to their needs, and then actually buy the product on the internet, or at a discount shop, where such counsel is absent. For brands wishing to ensure quality stores where brick-and-mortar retailers engage into the expenses of having specialised teams of well-trained sellers, free-riding represents a serious threat both to continued existence of such specialised sales service, but also to the actual survival of the brick-and-mortar store. In addition, if discounts are available off-line and on-line in deep discount malls and on the internet, the prestige of the brand in question might be eroded.

Accordingly, some brands may impose online sales bans. For the same reasons, some brands may also ban inclusion of their products in PCWs. On the business' side, the advent of price monitoring algorithms which instantly detect on-line market price variations may facilitate the imposition of RPM. In their defense, businesses may therefore argue that without such downstream restraints as RPM, on-line and PCW bans, quality stores might rapidly disappear, hence reducing competition in the prestige

higher-level brands. In the US, RPM along with other vertical restraints, are subject to the rule of reason, and evaluated on a case by case basis. The appropriate balancing of such procompetitive and anticompetitive arguments belongs to the discretionary decision making of competition authorities.

Dual online/offline pricing policies

A related issue is the practice of dual pricing, whereby a supplier charges different prices for on-line compared to off-line distribution channels. While logically on-line prices should be cheaper, the reverse might sometimes be imposed by the producer, as a sort of subsidy in favor of the higher costs involved in the brick-and-mortar channel. While arguably dual pricing might aim at compensating for free-riding, such policies might negate the pro-competitive advantages associated with e-commerce by raising on-line retailers' costs and dissuading them from using on-line sales channels. As discussed above for RPM, the difficult challenge for competition authorities in such case is to make the right balance between restrictive practices which pursue legitimate goals such as prevention of anticompetitive free-riding, and those circumstances where such claims are a mere argument in defence of an anticompetitive practice.

Price discrimination

A new feature arising from the rapid use of algorithms in e-commerce, is the fact that businesses are now able to get detailed information on the habits and preferences of customers, including their ability to pay.

Businesses are thus increasingly able to individualise their pricing policies, capable of fixing different prices for the same products according to the individual consumer. Personalised pricing raises the possibility of price discrimination between similarly situated customers. While price discrimination can be pro-competitive by offering lower prices to less solvent customers, thus increasing overall sales and revenues, businesses might do the reverse, by offering lower prices to higher income individuals, depending on the amounts this discount in prices will allow them to reap as additional revenues. So far, however, individual price discrimination in the absence of some degree of market power from the part of the supplier has not been found to be illegal, as otherwise it is easy for customers who are targeted with high prices to switch to competitors that offer access to a more favourable price bracket.

A related price discrimination according to geographical localisation of customers is a more traditional type of price discrimination. Consumers in Switzerland, for example, are used to suffering higher prices than those living in close-by European markets. This situation evolves from the fact that customers in Switzerland are perceived by many businesses as enjoying higher income per capita, thus being less regarding on price levels. In e-commerce, therefore, website shoppers may be blocked from shopping abroad and their demand re-routed to a local website applying local sales conditions. This type of price discrimination has been regulated by the EU under its recently introduced Geo-blocking regulation⁴⁸. As a result, EU customers, will be able to shop online without being blocked from the retailers' EU websites, or without being automatically re-routed to a website aimed at their country of residence, location or nationality. This,

⁴⁸ Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018 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, OJ L 60I, 2.3.2018, p. 1–15.

of course, relates to EU customers and possibly to Swiss nationals, through bilateral trade agreements. However, for other countries, in particular developing country residents, the EU geo-blocking rules do not apply.

Price Parity (MFN) clauses

Price parity clauses (commonly called « MFN clauses ») are typically applied by platforms in order to prevent free-riding on investment by suppliers. For example, in the Booking.com case, the hotel accommodation platform specifically obliges hotels to abstain from providing better conditions than those offered on the e-commerce platform. In this case, the concern is that hotels may use internet platforms to reach customers, yet subsequently offer customers to share the commission (approximately 15-20%) that the platform requires from the hotel. Under such clauses, the hotel undertakes explicitly not to offer lower prices to customers who contact the hotel directly.

Two types of MFN clauses can be defined in this case : the « narrow MFN clause », which guarantees that the supplier will not charge any lower price than that which is offered by the supplier in his own website or off-line ; and the « wide MFN clause », by which the supplier undertakes to refrain from providing better conditions on any other platform. Both types have been found by competition authorities to restrain competition. In particular, wide MFN is considered to restrain competition between different platforms (e.g. Booking.com v. Expedia), for example on commission rates they charge to suppliers, and to block entry by potential low-cost retail platforms, thus keeping prices high and

having cartel-like effects, and furthermore, to facilitate or encourage horizontal price-fixing between the platforms and/or between the suppliers, by creating a mechanism aimed at controlling and sanctioning implementation.

This explains why price-parity or MFN clauses have been challenged in many jurisdictions, in particular, but not only, in the on-line travel agency sector. In December 2015, for example, the German Bundeskartellamt prohibited Booking.com from implementing clauses which prevented hotels from offering lower prices on platforms competing with Booking.com (wide MFN) as well as clauses preventing hotels from offering lower room rates than those offered by Booking.com on their own website (narrow MFN). Following the German decision, the French, Italian and Swedish competition authorities in coordination with the European Commission, obtained commitments from Booking.com to abandon for a 5 year period all MFN clauses in the hotel booking market as well⁴⁹, irrespective of the fact that Booking.com had argued that narrow MFN obligations are required to prevent hotels from free-riding. The United Kingdom Competition and Markets Authority (CMA) subsequently decided that Booking.com and Expedia must remove their wide MFN clauses, but permitted the use of narrow MFNs⁵⁰. In its view, narrow MFNs do not have a significant effect on competition and are likely to be necessary to ensure the benefits that online platforms offer consumers, such as the ease of comparing prices and switching between providers.

In August 2017, the Japan Fair Trade Commission ("JFTC") received voluntary

⁴⁹ Communiqué du 21 avril 2015 : L'Autorité de la concurrence, en coordination avec la Commission européenne et les autorités italienne et suédoise, obtient de Booking.com des engagements particulièrement étendus pour stimuler la concurrence entre plateformes de réservation en ligne et redonner aux hôtels davantage de liberté en matière commerciale et tarifaire.

http://www.autoritedelaconcurrence.fr/user/standard.php?lang=fr&id_rub=606&id_article=2534

⁵⁰ CMA closes online booking investigation
<https://www.gov.uk/government/news/cma-closes-hotel-online-booking-investigation>

commitments from Amazon Services International, Inc. ("ASII"), whereby ASII undertook to remove the parity (or MFN) clauses of publishers or distributors in the e-books delivery business on the Amazon.co.jp website, and to report annually to JFTC on the implementation of these contractual changes⁵¹.

3.3 Abuse of dominance and unilateral conduct

As in brick-and-mortar markets, dominant firms in e-commerce can engage in unilateral anti-competitive conduct by abusing their dominant position of market power in relevant markets in many ways (i) to exclude rivals ; and (ii) to exploit their market power. For example, a dominant firm may abuse its position of market power by refusing to supply essential goods or services in order to foreclose competitors from a given market. Dominant firms can also foreclose competitors by selling at abusively low prices (predatory prices), by using tying or budling practices, by offering fidelity rebates to their distributors, or by squeezing the margins of their suppliers or distributors. The list of abusive practices is not exhaustive, and is only provided as examples.

But before analysing the main unilateral practices which may constitute an abuse of dominance on digital markets, we first need to determine how to measure dominance on a given market, and for this we need to start with the definition of the relevant market.

Definition of the relevant market

The traditional method of defining a relevant market consists of determining first which is the

product market, and second, which are its geographical boundaries. Product market definition applies as well to goods as to services. For example, one might wish to define the relevant market for non-alcoholic beverages, or for credit cards. The first step is for the competition authority to analyse to what extent the products that constitute a given market are substitutable. For many competition authorities, defining the relevant market involves implementing the SSNIP test (small but significant and non-transitory increase in price) or hypothetical monopolist test. This test involves establishing whether a hypothetical monopolist in a given market (non alcoholic beverages or credit cards in our example), could profitably raise prices by small percentages, such as 5%, then 10% for a sustained period of time and investigate how consumers would react. With a price increase of 5% in the price of soft drinks, some might switch to water bottles, with a price hike of 10% on both, they might switch to beer ; the relevant product market may therefore include beer, as well as water bottles and soft drinks. The analysis will have to take into account both supply-side constraints in different hypothesis, as well as relevant competitive constraints, such as entry barriers into the market, potential competition by new entrants if the price increases, etc.

The SSNIP test approach has been developed to apply to traditional product markets and, as such, it can be applied to single-sided on-line markets (a B2C or B2B platform). In the case of single-sided markets (a firm selling cement to customers both on-line and off-line), if prices of cement were to rise, say by 5%, then by 10% in the brick-and-mortar stores but not on-line, would customers automatically switch on-line ? If the contrary would happen, would they quite automatically switch off-line ? In case there were no major

⁵¹ Japan FTC Press release 15 August 2017 : Report on e-Books Agreements from Amazon Services International, Inc

(ASII) <https://www.jftc.go.jp/en/pressreleases/yearly-2017/August/170815.html>

constraints to switching one way or the other, the conclusion would easily be that the relevant product market for selling cement is both off-line and on-line markets. However, if we consider an LDC with relatively poor and expensive internet penetration, market barriers for entry into the on-line market might be too high for easily switching one way or another. Therefore, on-line and off-line markets may be two distinct, separate markets in that case.

Following the definition of the relevant product market, the next step should lead on to define the geographic boundaries of the relevant market under consideration. One would expect this dimension of the relevant market to be wider in on-line markets, given the ability to substitute purchases with on-line stores from remote areas in a way that was simply not possible in a traditional brick-and-mortar store. However, other factors, such as geographic restrictions on access to the website may affect this. Hence, as for traditional market analysis, the geographic scope of the relevant on-line market should be determined on a case-by-case basis.

While traditional assessments of substitutability still appear fit to tackle on-line single-sided markets, the emergence and growth of the digital economy has posed challenges to competition authorities in defining markets in instances where the interaction between suppliers and consumers deviates from traditional models⁵². Given the dynamic characteristic of the digital economy, moved by rapid innovation and technological progress, two-sided platforms may rapidly become multi-sided, either through internal growth, or through mergers and acquisitions. Most on-line markets are therefore inevitably multi-sided in nature, and such platforms may rapidly face competitive constraints from outside their initial core market.

With dual-, and especially multi-sided platforms, the standard SSNIP test is unlikely to apply, because the underlying single market assumptions are no longer valid. First, if applying a SSNIP test, competition authorities must consider on which side or sides of the platform the SSNIP test can be applied, and what the relative distribution of this price increase should be among different sides. Second, in some instances users of a platform do not pay a price per transaction, but rather an entrance fee to have access to the platform, which makes any estimate of a price per transaction impossible. Third and perhaps most important, some markets in dual or multi-sided platforms benefit from network effects, i.e. the mere size of that market increases the over-all value of the platform and attract more customers willing to pay more on other sides of the platform. This means that in order to attract customers, the platform may be willing to price the goods or services offered on one market below cost or for free, in order to attract many customers, thus increasing value on another side of the platform.

Accordingly, a platform setting price above marginal cost for one side of its market and below marginal cost for the other as a result of externalities between the two sides, could theoretically be accused of predatory pricing on one side, and excessive pricing on the other. This point demonstrates that, when assessing alleged harm, competition authorities should at least consider the network effects between distinct sides of a multi-sided platform and any additional feedback effects.

Lets consider for example the combined Facebook/WhatsApp platform: Facebook was willing to pay 19 bn USD for WhatsApp although revenues of WhatsApp were far below that price, especially as WhatsApp had a policy of refusing to have an advertising side to its platform. The

⁵² ASEAN Handbook

response may be in the fact that WhatsApp's fast-rising 450 bn user network was considered worth the price by Facebook. In conducting its investigations with respect to the Facebook-WhatsApp merger in 2014, the EC examined three markets of the future combined platform: (i) consumer communications services, (ii) social networking services, and (iii) online advertising services⁵³.

Concerning the market for consumer communications services, the EC focussed its assessment on applications for smartphones, as WhatsApp is not available for other devices. It found that Facebook Messenger and WhatsApp are not close competitors, because for WhatsApp, access to the service is provided through phone numbers while for Facebook Messenger, a Facebook profile is required. The EC also took into account the fact that this is a very dynamic market with several competing applications available on the market, such as Line, Viber, iMessage, Telegram, WeChat and Google Hangouts⁵⁴.

The EC also noted that this market is characterised by network effects, whereby the value of the service to its users increases with the number of other users. It was recalled that Network effects may allow the entity which enjoys a large network to keep its competitors out of the market. However, given their popularity, both WhatsApp and Facebook Messenger already had large customer bases, and a number of factors mitigated the network effects in this particular case. The EC came to the conclusion that the consumer communications apps market is fast growing and characterised by short innovation cycles in which market positions are often reshuffled. Moreover, launching a new app is fairly easy and does not require significant time and investment. Finally, customers can and do

use multiple apps at the same time and can easily switch from one to another⁵⁵.

With respect to networking services, the EC's market investigation showed that their boundaries are continuously evolving. There are numerous alternative service providers, including other consumer communications apps, such as Line and WeChat. Further, even in the event of an integration between WhatsApp and Facebook such that Facebook's position in social networking services could be strengthened, the net gain in terms of new members of the social network would be limited, since the user base of WhatsApp already overlaps to a significant extent with that of Facebook. Hence, no matter what the precise boundaries of the market for social networking services are and whether or not WhatsApp is considered a social network, the EC considered that competition was unlikely to be negatively affected by the merger for networking services⁵⁶.

Finally, with respect to the online advertising market, the EC examined whether the transaction could strengthen Facebook's position in that market and hamper competition, although WhatsApp is not active in online advertising. In particular, the Commission examined the possibility that Facebook could (i) introduce advertising on WhatsApp, and/or (ii) use WhatsApp as a potential source of user data for improving the targeting of Facebook's advertisements. The Commission concluded that, regardless of whether Facebook would introduce advertising on WhatsApp and/or start collecting WhatsApp user data, the transaction would not raise competition concerns, because after the merger, there would continue to be a sufficient number of alternative providers to Facebook for the supply of targeted advertising, and a large

⁵³ EC Press Release : Commission approves acquisition of WhatsApp by Facebook, 3 October 2014 http://europa.eu/rapid/press-release_IP-14-1088_en.htm

⁵⁴ Id.

⁵⁵ Id.

⁵⁶ Id

amount of internet user data that are valuable for advertising purposes were not within Facebook's exclusive control⁵⁷.

Both WhatsApp and Skype offer free communications services, but the models are different. WhatsApp's philosophy has been right from the beginning to apply very low or zero application fees, without earning money through another side of the platform, such as an advertising side. Skype, in contrast, offers free video communication to attract consumers, while offering many upgrade services and advertisements on the other side of the platform. The 2011 takeover of Skype by Microsoft is further discussed below, in the Section on mergers.

In concluding this section on defining the relevant market or markets, one can retain that SSNIP tests are usually not applicable to dual- or multi-sided platforms, as such platforms link different markets which interact with each-other, and competition authorities therefore face the challenge in deciding whether to define separate relevant markets on each side of a given platform, or one relevant market comprising all sides of the multi-sided platform. It might be necessary for competition authorities to consider both the case of separate relevant markets as well as a combined market including all sides, in order to be able to define the relevant markets as closely as possible.

Determination of dominance

In general, a wide definition of the relevant market will provide an escape route for firms as their share of the market and relative market power is more limited in such case, while a narrow definition of the relevant market, closely related to

the incumbent firm's activity, will more easily result in determining dominance by a competition authority.

For example, after Google and Yahoo signed a so-called « Ad search pact » in June 2008, whereby Google would supply Yahoo with search ads, the US Department of Justice (DoJ) took action to prevent the deal, which in its view, would have blocked a large percentage of the search. Ultimately, the Department of Justice threatened action against Google under Sherman Act section 2, which led to Google abandoning the deal rather than engaging in a « protracted legal battle »⁵⁸.

What is interesting here, with respect to a « narrow » versus a « wider » relevant market definition, is to focus on the considerations with respect to defining the relevant market in this case. After estimating that Google had 70% of the search advertising market, while Yahoo had 20%, the DoJ considered that the deal would give advertisers less leverage to negotiate ad rates, and that they would end up paying more. In order to arrive at that conclusion, however, the DoJ decided that the relevant market was advertising directed to placing online advertisements on Web Pages that show results from search engine queries (search advertising). This is a relatively narrow definition compared to other plausible market definitions such as « online advertising as a whole » or « the advertising industry generally ».

Obviously, including within the market definition other forms of *online* advertising would have considerably reduced Google's market share. The DoJ defined the market as online search advertising where the underlying technology was Google's extremely successful search-advertising technology. However, the Author⁵⁹ notes that

⁵⁷ Id

⁵⁸ Chris Butts : The Microsoft Case 10 Years Later : Antitrust and New Leading « New Economy » Firms, in Northwestern University Journal of Technology and Intellectual Property, Vol.8, No.5, Spring 2010

<https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1105&context=njitip>

⁵⁹ Id.

« broader definitions of the markets were not only extremely plausible but likely correct ». The narrow market definition in each case, at the very least, may imply that the underlying technology influenced the determined definition of the market size.

Because market definitions are hard to determine, especially when analyzing new and evolving industries, courts and regulating bodies must be aware of this potential dependency on the underlying technology when analyzing new economy firms and be careful to define the market according to the true competitive landscape⁶⁰.

EU competition law defines dominance as relating 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. Such a position does not preclude some competition, which it does where there is a monopoly or quasi-monopoly, but enables the undertaking, which profits by it, if not to determine, at least to have an appreciable influence on the conditions under which that competition will develop, and in any case to act largely in disregard of it so long as such conduct does not operate to its detriment ⁶¹ ». In the United States, Article 2 of the Sherman Act defines « monopoly power » as the power to control prices or exclude competition.

Once the relevant markets of a multi-sided platform have been determined, the CA needs to evaluate the relevant market share the incumbent platform detains in the given markets, compared to its existing competitors, in addition to other determinant factors of dominance, including barriers to entry or expansion in those markets ;

credibility and timing of possible entry by potential competitors or expansion by existing ones; customers' ease to switch quickly to competing platforms ; financial strength of the platform concerned and conglomerate links with other platforms.

Conglomerate links with other platforms is worth noting here, because of the growing trend towards combining direct e-commerce activity such as free on-line search for goods and services, with trade-related services such as on-line advertising, payments, transport and delivery platforms, as well as with additional facilities such as social networking, hardware and software developments, including kitchen electronic devices, home security systems, taxi services and self-driving cars, etc... All such links are bound to amplify existing market power, generating a so-called « bottleneck effect » that affects access to a broader universe beyond that of a platform's own products and services.

With respect to potential unilateral conduct, CAs may wish to examine the extent to which dominance within any single product or geographic market of a multi-sided platform may trigger relatively superior market power in other markets. Given the importance of links or externalities between various sides of a platform, dominance or market power on only one side of the platform may give the platform a strong position in the other sides, including the overall markets as a whole.

As a note of caution in this respect, the OECD notes, however, in one of its recent reports⁶² that although the e-commerce sector includes some of the world's largest and most prominent companies, including the so-called "GAFAM" (Google, Amazon, Facebook, Apple and Microsoft), « Yet the mere fact that a firm may be

⁶⁰ id.

⁶¹ ECJ in *United Brands and Hoffmann Laroche*

⁶² « Implications of E-commerce for Competition Policy » - Background Note- page 27, para. 92. OECD, 4 May 2018, [https://one.oecd.org/document/DAF/COMP\(2018\)3/en/pdf](https://one.oecd.org/document/DAF/COMP(2018)3/en/pdf)

a large and economically powerful company is not necessarily equivalent to market power in the competition law sense »⁶³. In most competition regimes, even dominant defendants have the possibility of highlighting objective reasons for some restraints, be it for fighting free-riding, as referred to in the discussion relating to vertical restraints, or other reasons which may provide efficiencies and procompetitive advantages shared with consumers.

Such arguments may be of high relevance in the digital economy, where the accelerated pace of innovation has delivered considerable consumer gains and where companies having market power during a given period of time may be completely displaced by other companies, based on new and innovative technical advances. In assessing market power in e-commerce markets, CAs should therefore also consider the long-term dynamics of markets in addition to static market share analyses.

The specter of existing platforms being displaced in their core market by so-called dynamic competition from neighbouring online platforms operating in a different market, incentivises incumbent firms to continually innovate to ensure they maintain their position in the market. In e-commerce digital markets, entering new or adjacent markets can be much easier than in traditional brick-and-mortar markets, as technologies may be easily adapted to serve a similar purpose in a related online market.

For example, Google, Amazon, Alibaba, Apple and Facebook all offer a range of services based on a set of adaptable technologies and capabilities. Entry by these firms into markets that are being led by another of these global players either by internal growth or through mergers is quite common : Google entered the social media market with Google Plus ; Amazon expanded

from its core competency as a retail marketplace to produce devices such as the Kindle and Fire in competition with Apple's iPad ; Alibaba expanded its presence in on-line marketplaces, electronic payment services and cloud computing ; and Facebook tookover adjacent firms like Instagram and WhatsApp. Therefore, if an on-line firm were to try to take advantage of its strong market power in a particular market, for example by charging higher prices or by reducing quality of its service, firms operating in adjacent markets based on similar technologies may easily enter and quickly displace the incumbent. Consequently, when analysing market power of existing on-line platforms, competition authorities should consider potential competition by online rivals which may be defined at present as outside of the relevant market, but which can still impose a competitive constraint on the incumbent as potential entrants.

Predatory pricing

In traditional brick-and-mortar single-sided markets, as well as in online single-sided platforms, pricing below average variable cost is be considered predatory pricing, and in many jurisdictions pricing below cost is outright prohibited. In multi-sided online markets, however, as seen earlier in this note, below-cost or zero-pricing on one side of a platform is a common strategy employed by most online firms to attract users on another side of a platform, who in turn, are attracted by network effects.

For example, online search and social media services (Google, Yahoo, Bing) are offered free of charge for their customers in order to rapidly reach high volumes of users, who may then be very attractive for advertisers or suppliers of other remunerated services on the other sides of the platform. This practice should not considered

⁶³ Id.

anticompetitive. For one thing, without such gratuities, some markets would not exist at all, hence eliminating competition from the overall market.

In assessing predatory practices in multi-sided markets, competition authorities need therefore to look at the price charged on all sides of a platform, and costs incurred in serving all markets linked to the platform, to assess whether there might be an exclusionary intent in charging below marginal costs. This could be done by comparing the total price charged to all sides of a platform per transaction to determine if below cost on one side is recouped by payments made to the platform by the other sides. As in traditional one-sided markets, the competition authority may then assess whether the dominant firm has a reasonable prospect of recouping profits by charging a higher total price in the future on all sides of the platform, once competing platforms have been excluded.

Examples of alleged exclusionary predatory pricing include Uber, which is alleged to unfairly undercut regulated taxi fares in markets in which it operates. In November 2016, Uber was sued in San Francisco, its headquarter city, by a Taxi company, claiming that Uber used its financial power to undercut competitors by losing money on every UberX and UberXL ride in San Francisco "with the expectations of reaping extraordinary future returns." The accusation went on to say that "Left unchecked, Uber is likely to succeed in establishing complete domination of the market by forcing out all competitors through its predatory pricing practices," "Once its competitors have been removed, Uber, free of the constraints of competition, will be free to implement unfettered price increases for its services, and consumers

will be left with no choice but to pay the prices – however exorbitant – demanded by Uber." At the time of writing, the case was still pending. At present, however, Uber faces competition from taxi firms and other ride-sharing services like Lyft, but also public transportation and large technology firms like Google and Tesla, as well as the largest US car manufacturers in Detroit. In those circumstances, whether an antitrust lawsuit could succeed in the light of such intense competition remains to be seen⁶⁴.

Allegations of predatory pricing by Amazon, which engages in deep discounting for certain consumer goods, particularly best-selling items is also a case in point. Amazon, like other multi-side platforms allegedly create incentives for companies to pursue growth over profits, a strategy that investors reward. It is therefore highly rational for online companies to engage in predatory pricing, as Amazon does⁶⁵. Ms. Khan contends that contemporary antitrust laws « cannot cognize the potential harms to competition posed by Amazon's dominance if we measure competition primarily through pricing and output...current doctrine under-appreciates the risk of predatory pricing and how integration across distinct business lines may prove anticompetitive."

Conversely, it might be argued that pricing below average cost to certain customers should be permitted to the extent it enhances consumer welfare overall. In retail markets, where the e-commerce giants like Amazon exercise significant buyer power that reduces their wholesale costs, those firms are permitted to pass on such efficiencies to consumers in the form of lower prices, even if dominant. In markets for digital content distribution or online intermediation

⁶⁴ Uber sued for predatory pricing by San Francisco Taxi Company, in Forbes, Nov 2, 2016. See also CUTS, Analysis of Competition cases against Uber across the Globe, March 2017 [http://www.cuts-ccier.org/pdf/Analysis of Competition Cases Against Uber A cross the Globe.pdf](http://www.cuts-ccier.org/pdf/Analysis%20of%20Competition%20Cases%20Against%20Uber%20Across%20the%20Globe.pdf)

⁶⁵ see Lina M. Khan: « Amazon's Antitrust Paradox » in The Yale Law Review (January 2017, Volume 126, Number 3, pp. 710-805) <https://www.yalelawjournal.org/note/amazons-antitrust-paradox>

services, the marginal cost of adding additional users to a platform may be low. Thus, an unfairly low price, from the perspective of a disadvantaged rival, does not necessarily constitute a predatory one from the perspective of an efficient dominant operator⁶⁶.

This issue arose in a private enforcement case pursued against Google by a French mapping provider, Evermaps, formerly called Bottin Cartographes, which alleged that the free provision of Google maps to consumers amounted to below-cost pricing. Although successful at first instance, the decision was ultimately overturned by the Paris Court of Appeal, which, on the advice of the French Competition Authority, ruled that Google's revenues from other sources including advertising had to be considered⁶⁷.

Refusal to deal

Refusal to deal, which includes refusal to supply or to purchase, is a common business practice, occurring for example in exclusive or selective distribution, whereby, by definition, some distributors are selected at the exclusion of others, with whom the manufacturer or wholesaler refuses to deal. Refusal to deal may also occur with respect to essential facilities, where for example, the incumbent telecommunications firm who owns the lines refuses to provide access to its network to newcomers in the market, or at least, fixes exorbitant interconnexion prices.

Within e-commerce, refusal to deal might arise for example, with respect to:⁶⁸ (i) access to online marketplaces or PCWs, as discussed above, under exclusive and selective distribution ; (ii) access to physical delivery networks, developed independently by larger e-commerce retailers such as Amazon, which allow lower cost delivery

as a result of economies of scale; and (iii) access to big data on consumer habits, generated by large multi-sided platforms, which allows profitable targeting of customers based on their past consumption habits and preferences.

The extent to which big data may constitute an “essential facility” is highly doubtful. Critics of such an approach argue that claims for mandatory access effectively enable free-riding by new entrants, and query the utility of data sharing as opposed to the innovative—and proprietary—uses made by digital platforms. Moreover, it may be virtually impossible for a firm to obtain the sorts of data necessary to build a successful on-line platform before actually operating within that marketplace in the first place.

Finally, even if access to data were objectively necessary to compete effectively in an adjacent product market, competition authorities should consider whether a policy of forced sharing might not prove counterproductive in the long term. In the highly-dynamic digital context, where e-commerce is an important driver of ever-increasing innovation, it may be legitimately questioned whether a forced sharing policy that substantially decreases the return on investment is likely to enhance consumer welfare in the long term⁶⁹.

Tying and bundling

Tying refers to a vertical restraint, whereby the supplier requires the purchaser (a wholesaler, a retailer or a final consumer) to purchase additional goods or services, as a pre-condition to purchase a given product. Full-line-forcing, is a type of tying whereby a manufacturer obliges a retailer to hold his full line of products for sale. Bundling occurs where products are sold jointly,

⁶⁶ OECD « Implications of E-commerce for Competition Policy », op. cit.

⁶⁷ Autorité de la Concurrence : Avis n° 14-A-18 du 16 décembre 2014 rendu à la cour d'appel de Paris

concernant un litige opposant la société Bottin Cartographes SAS aux sociétés Google Inc. et Google France

⁶⁸ OECD « Implications of E-commerce for Competition Policy », op. cit.

⁶⁹ Id.

for example, by the dozen, and cannot be purchased separately. So-called « mixed bundling » is a situation where both bundled and separate items are available, generally with a quantity rebate for the bundled products.

Obviously, tying and bundling are not anti-competitive if the customer can easily switch to a competitor when faced with tying or bundling. However, if the supplier holds market power or a dominant position, it might not be easy to switch to another supplier. The firm might use tying and bundling to extend its dominance in one market to another market which would otherwise be subject to competition.

There may be economic benefits to tying and bundling, for instance if the firm doing so makes substantial savings in its production, distribution and transaction costs. The firm may argue that these savings are in good part re-distributed to his customers by way of cheaper prices or better quality, and are therefore welfare-enhancing. Since there may be both pro- and anti-competitive effects associated with the bundling and tying of goods and services, it is sensible for competition authorities to conduct a full analysis of the effects in order to assess such practices on a case by case basis.

Bundling and tying strategies are commonly found in both online and offline markets. Google, for instance, has been investigated for a series of alleged abuses of dominance in a number of jurisdictions. The European Commission, for example, investigated Google on a number of instances. In april 2018, the EC fined Google approximately 5 bn USD, for abusing its dominant position in three separate types of practices, « which all had the aim of cementing Google's dominant position in general internet search »⁷⁰ :

(i) Illegal tying of Google's search and browser

apps ; (ii) Illegal payments conditional on exclusive pre-installation of Google Search ; and (iii) Illegal obstruction of development and distribution of competing Android operating systems.

With respect to illegal tying, the EC concluded that Google had engaged (i) in the tying of Google search app, by ensuring that its search app is pre-installed on practically all Android devices sold in the European Economic Area (EEA) ; and (ii) in the tying of the Google Chrome browser, by ensuring that its mobile browser is installed in practically all Android devices sold in the EEA.

The EC decision concluded that the tying practices ensured the pre-installation of Google's search engine and browser on practically all Google Android devices and the exclusivity payments strongly reduced the incentive to pre-install competing search engines. Google also obstructed the development of Android forks, which could have provided a platform for rival search engines to gain traffic. This strategy has also prevented rival search engines from collecting more data from smart mobile devices, including search and mobile location data, which helped Google to cement its dominance as a search engine. Furthermore, by preventing other mobile browsers from competing effectively with the pre-installed Google Chrome browser, Google's practices also harmed competition and further innovation in the wider mobile space, beyond just internet search. Finally, Google obstructed the development of Android forks (derived algorithms), which could have provided a platform also for other app developers to thrive⁷¹.

⁷⁰ EC Press release 18 July 2018 « Antitrust: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search

engine». http://europa.eu/rapid/press-release_IP-18-4581_en.htm

⁷¹ Ibid

Price discrimination by dominant firms

As discussed earlier with respect to vertical restraints in general, price discrimination within e-commerce markets may be of particular concern insofar as widespread personal data-collection and use of price-setting algorithms enable online retailers to offer customers personalised pricing, which takes account of a customer's past shopping habits and perceived willingness to pay. The result is that some customers pay more than others for the same product, enabling retail platforms to earn higher profits on certain sales in comparison with others.

Sustainable price differentiation arguably requires some degree of market power as, otherwise, it is easy for customers to switch to competitors that do not individualise their prices or offer access to a more favourable price bracket. In practice, therefore, competition authorities express concern when distortionary price discrimination occurs with a dominant firm upstream, as it can result in higher prices being charged to final consumers. In this situation, the actions of a dominant upstream firm can lead to a downstream firm paying higher prices for their inputs, which are then passed on to customers.

One of the key issues for competition authorities with respect to price discrimination by dominant firms is to prevent price discrimination that strategically excludes rivals. Exclusionary price discrimination of this nature can create, build and protect market power at the expense of consumers. CAs should focus on instances where price discrimination is used as a means to exclude a rival which does not require the firm to sacrifice profits, like fidelity rebates and loyalty discounts.

Excessive pricing and margin squeeze

The final object of all types of unilateral conduct by dominant firms is obviously the maximisation of profit. Akin to monopolists, dominant firms have the possibility to impose higher than competitive prices on their customers and thus to extract higher revenues from their customers. If there is sufficient competition, customers can easily switch to another supplier who offers better conditions, but if switching is difficult, costly or simply impossible, then customers will be captive and will have to accept paying excessive prices. In the same way, if the supermarket chain or the online multi-sided platform is dominant or has sufficient market power, it can squeeze its independent suppliers who depend on it to access final customers through its retail stores or e-commerce platform by fixing high access prices (access fees or commission) while imposing low retail prices, thus squeezing their suppliers' margin. By squeezing the margins of their independent suppliers, integrated firms have the possibility of eliminating downstream competitors, or at least, of keeping them under strict control.

An interesting case in this connection, is *Apple Inc. v. Robert Pepper*, a class action, initiated in 2011 in California by four Apple iPhone owners, claiming that Apple had stifled competition and driven up prices on its App Store by locking out third-party apps and by signing a five-year exclusivity agreement with AT&T. While the AT&T claim was struck by a court decision in 2013, the class action case has focused purely on the App Store and in 2014, Apple won a judgment against Pepper, and the complaint was dismissed. However, the Ninth Circuit Court of Appeals reversed that decision in early 2017, and Apple

has appealed to the US Supreme Court, which is about to rule on this case at the time of writing⁷².

The lawsuit said Apple violated federal antitrust laws by requiring apps developed by independent « developers » to be sold through the company's App Store and then taking a 30 percent commission from the purchases. Apple denied the claim that its closed ecosystem is an unlawful monopoly, arguing that users can buy apps on other platforms, and that by definition, opening the App Store in 2008 created new competitive opportunities. Moreover, Apple argued that under the « Illinois Brick » doctrine of 1977⁷³, the US Supreme Court had established at that time that “indirect purchasers” (i.e. App Store customers in this case) cannot sue a company for antitrust damages.

Pepper's lawsuit portrays Apple as directly selling iOS apps to users at a markup, while Apple claims that iOS users are essentially buying apps from developers, who are buying Apple's software distribution services, which would make *developers* the only direct purchasers with the right to sue Apple. Though developers set the prices of their apps, Apple collects the payments from iPhone users, keeping the 30 percent commission on each purchase. One area of dispute in the case is whether app developers recoup the cost of that commission by passing it on to consumers. According to Apple, developers earned more than \$26 billion in 2017, a 30 percent increase over 2016, proof that they are not suffering from the closed Apple ecosystem⁷⁴.

Apple, which is backed by Republican President Donald Trump's administration and by the U.S. Chamber of Commerce business group, has

argued that a ruling siding with the iPhone users who filed the lawsuit would threaten the burgeoning field of e-commerce, which generates hundreds of billions of dollars annually in U.S. retail sales. Yet, if the Supreme Court upholds the Ninth Circuit's decision, this will just send the case back to a lower court, where the dispute is likely to keep going on⁷⁵.

Fidelity rebates and loyalty discounts

Fidelity rebates and loyalty discounts occur when a dominant supplier offers a more favourable price, rebate or financial advantage to the buyer, on the condition that the buyer (a wholesaler or a retailer) engages not to purchase products from competitors. Fidelity rebates are common in e-commerce as firms provide customers with financial incentives in return for feedback, or reviews on a recent purchase. Offering rebates to customers is not in itself anti-competitive, as such practices can intensify competition amongst suppliers. However, what competition authorities usually frown upon, is where offering fidelity rebates or loyalty discounts is a means for a dominant firm to eliminate competitors by excluding them from the market.

3.4 Concentrations

Concentrations may occur through mergers and acquisitions, or takeovers, including in most jurisdictions, through joint venture agreements. Concentrations which cause major concern with competition authorities are generally horizontal mergers, in which direct competitors in the same markets are involved and their markets overlap

⁷² see for example The Verge, Nov 26, 2018 : What happens if Apple loses its Supreme Court App Store antitrust appeal? <https://www.theverge.com/2018/6/20/17479480/supreme-court-apple-vs-pepper-antitrust-lawsuit-standing-explainer>

⁷³ see Illinois Brick Co. v. Illinois, 431 U.S. 720 (1977), <https://supreme.justia.com/cases/federal/us/431/720/>

⁷⁴ REUTERS Nov 26, 2018 : U.S. top court leans towards allowing Apple App Store antitrust suit <https://www.reuters.com/article/us-usa-court-apple-idUSKCN1NV175>

⁷⁵ The Verge, op.cit.

each-other. Vertical concentrations, i.e. upstream or downstream integration may be challenged, but are considered less of a problem, if thriving competition can be demonstrated between direct competitors after the merger takes place. Finally, conglomerate mergers, that is between firms operating in completely different markets usually do not pose competition problems.

Thresholds

In the digital world, however, as seen earlier with respect to definition of the relevant market and determination of dominance, potential anticompetitive effects of multi-sided platforms are much more difficult to evaluate. First, usual merger control by competition authorities is usually limited by one or more thresholds, the most common being a minimum market share, sometimes accompanied by a minimum turnover threshold, with a view to avoid over-burdening the competition authority's limited staff on the one hand, while avoiding excessive interference into markets, where mergers and acquisitions are a normal result of effective competition. In e-commerce, some markets may simply not meet the existing legal thresholds because, as seen earlier, multi-sided platforms often attract customers on the one side of the platform (e.g. the search engine or the social network) for free, making big money on another side of the platform (e.g. lucrative advertising market contracts) powered by the millions of the customers that may be reached thanks to network effects.

This explains, for example, that when Facebook took over WhatsApp in September 2014, the

mobile messaging application was valued 19bn USD, while the numbers in relation to its earnings did not match. Thanks to WhatsApp's powerful network effects, the company being valued many times more than its actual earnings to sales volume. The takeover was approved by US⁷⁶ and European competition authorities⁷⁷, while the EC subsequently fined Facebook 110 million euros for providing false information during the Commission's investigation of the deal in 2014⁷⁸.

Given the fact that market share and turnover thresholds are often insufficient to catch big digital market concentrations, an increasing number of competition authorities, for example in Germany and Austria, have amended their respective merger notification thresholds, adding a transaction value (400 million euros in Germany and 200 million euros in Austria) to the existing thresholds⁷⁹. Recommendations to make similar amendments were made, for example, with respect to the thresholds governing mergers in India.⁸⁰

Conglomerate mergers & acquisitions

Second, as was also mentioned earlier in this note, as a result of network effects, online platforms grow to such an extent that they are able to churn considerable earnings from multi-side markets, allowing them to have very deep pockets which make possible all gigantic takeovers into seemingly unrelated markets. The rapid conglomeration is worth noting here, because of the growing trend towards combining

⁷⁶ FTC Notifies Facebook, WhatsApp of Privacy Obligations in Light of Proposed Acquisition <https://www.ftc.gov/news-events/press-releases/2014/04/ftc-notifies-facebook-whatsapp-privacy-obligations-light-proposed>

⁷⁷ EC Press Release : Commission approves acquisition of WhatsApp by Facebook, 3 October 2014 http://europa.eu/rapid/press-release_IP-14-1088_en.htm

⁷⁸ EC Press Release. Mergers: Commission fines Facebook €110 million for providing misleading information about WhatsApp takeover. Brussels, 18 May 2017 http://europa.eu/rapid/press-release_IP-17-1369_en.htm

⁷⁹ Bundeskartellamt and Bundes Wettbewerbs Behörde : Guidance on Transaction Value Thresholds for Mandatory Pre-merger Notification (Section 35 (1a) GWB and Section 9 (4) KartG) https://www.bwb.gv.at/fileadmin/user_upload/Downloads/standpunkte/2018-07_Guidance_Transaction_Value_Thresholds.pdf

⁸⁰ see Nisha Kaur Uberoi « How CCI should look at M&A deals in digital economy » April 12, 2018 <https://www.livemint.com/Opinion/R2jJb12xH9BX9heTYleESK/How-CCI-should-look-at-MA-deals-in-digital-economy.html>

direct e-commerce activity such as free on-line search for goods and services, with trade-related services such as on-line advertising, payments, transport and delivery platforms, with additional facilities such as social networking, gameboxes, music and film streamlining, hardware and software developments into the « internet of things » linking home electronic devices, security systems, taxi services, self-driving cars, etc... Such conglomeration of markets will considerably amplify existing market power of large multi-sided platforms, generating huge network effects and bottlenecks affecting access to a broader universe beyond that of a platform's initial markets.

A striking example in this respect is the race by a multitude of competitors, including e-commerce platforms like Google (through its parent company Alphabet's Waymo division), Lyft, Uber along with automobile manufacturers like Ford, Honda, Toyota, Volkswagen and Tesla into the self-driven automobile market⁸¹.

Vertical integration

Another interesting development with Google is that it is now integrating vertically, by entering the smartphone market, as it has started to produce its own smartphones, having acquired a slice of smartphone producer HTC's hardware business for 1.1 bn USD in september 2017⁸². Vertical integration into smartphone business was also attempted by Microsoft in 2013, when it acquired the Finnish company Nokia, for 7,2bn USD.⁸³

This vertical integration trend was likely aimed at matching Apple, which is fully integrated and « retains full control over every aspect of its mobile operating system iOS, from drawing board to software, from software to hardware, and from hardware to retail and distribution »⁸⁴, as Apple devices come pre-installed exclusively with its own apps, all developed in-house. In 2016, however, Microsoft sold Nokia to Finland's ICT company HMD Global.⁸⁵

Dynamism and disruptive nature of digital markets

Finally, it should be noted that the very dynamic nature of digital markets make it extremely difficult for competition authorities to be able to imagine the future landscape of competition, as market leaders of today may be completely wiped-off by rapid emergence of new unforeseen technologies and applications. The list of once highly dominant firms having been wiped out by competing new applications is astounding. For example, MySpace, in 2005, was acquired by News Corp. for \$580 million, followed by a \$900 million advertising deal with Google in 2007. However, MySpace lost its preminance as its customers shifted to Facebook, and the platform was ultimately sold in 2011 for \$35 million to Specific Media, an advertising targeting firm⁸⁶. Snapchat, which has seen its main competitor, Instagram (which was taken over by Facebook in 2012⁸⁷) double its customer base, while its own

⁸¹ Forbes, September 21, 2018 : Key Milestones of Waymo - Google's self-driving cars.
<https://www.forbes.com/sites/bernardmarr/2018/09/21/key-milestones-of-waymo-googles-self-driving-cars/#4ad2a2215369>

⁸² TC « Google completes its 1.1B deal to buy a chunk of ITC's smartphone division.
<https://techcrunch.com/2018/01/29/google-htc/amp/>

⁸³ see Trevir Nath : Why Microsoft's acquisition of Nokia makes sense, Investopedia,
<https://www.investopedia.com/articles/investing/120314/why-microsofts-acquisition-nokia-makes-sense.asp>

⁸⁴ Patrick Todd « Why is Google entering the smartphone industry with its Pixel devices ? »
<https://medium.com/@patricktodd/why-google-is-entering-the-smartphone-industry-with-its-pixel-devices-484404918762>

⁸⁵ Quartz : The two-year old company that makes Nokia phones is now worth over 1bn USD <https://qz.com/1283670/the-two-year-old-company-that-makes-nokia-phones-is-now-worth-over-1-billion/>

⁸⁶ The Guardian, June 30, 2011
<https://www.theguardian.com/technology/2011/jun/30/myspace-sold-35-million-news>

⁸⁷ Kashmir Hill : « Ten reasons why Facebook bought Instagram », in Forbes, April 11, 2012.

was plunging and the company accumulated losses⁸⁸. This demonstrates the transitory and dynamic nature of the digital markets, where the new innovations can rapidly change market dynamics.

Illustrative of the dynamic nature of digital markets is the cautious approach taken by the Competition Commission of India (CCI). In June 2017, CCI has authorised several transactions relating to e-commerce marketplaces, including the merger of Flipkart and eBay India⁸⁹. CCI noted that in the overall B2C market in India (including both offline and online segments), Flipkart and eBay India had a market share of 0-5% each, while at the level of the online market in India, Flipkart had a market share of 15-20% and eBay India 0-5%. Again in 2018, CCI had to decide on the takeover of Flipkart by Walmart⁹⁰ for 16bn USD. While approving these mergers, CCI indicated that this notice may be revoked at any time, if this information is found to be incorrect.

CCI has emphasized in its orders that there exist numerous relevant markets within e-commerce, each having competition dynamics unique to itself. It has also noted that innovation cycles are progressing at a fast pace in the digital economy disrupting and reshuffling long-established positions. In this context, it has emphasized that public intervention in such markets should be targeted and proportionate and must not inhibit innovation. CCI is therefore adopting « a cautious approach wherein any uncertainty surrounding any new business model is not viewed from prism of an anticompetitive lens, but rather is examined on its merits »⁹¹.

The Mexican competition authority (COFECE)⁹² provides a good summary of the pros and cons of disruptive innovation with respect to competition in the table below.

How does disruptive innovation favor competition?

- Disruptive innovation allows small entrepreneurs to compete with larger companies by promoting better purchasing conditions and the creation of new markets.
- A context of disruptive innovation motivates potential competitors and incumbents to create new business models and transform existing ones to win (or not lose) market shares.
- Digital platforms give suppliers more flexibility to decide when and how to provide services or goods better suited to accommodate the needs of each consumer.
- Platforms reduce the cost of matching buyers and sellers, which expands markets by allowing a greater number of suppliers to serve new consumers.

<https://www.forbes.com/sites/kashmirhill/2012/04/11/ten-reasons-why-facebook-bought-instagram/#26bcd42d1b1>

⁸⁸ « Snapchat loses 3 million users as competition with Snapchat heats up », Independent, <https://www.independent.co.uk/news/business/news/snapchat-user-numbers-down-instagram-stories-competition-snap-q2-results-a8482241.html>

⁸⁹ CCI Notice of 7 June 2017 https://www.cci.gov.in/sites/default/files/Notice_order_document/C-2017-05-505O.pdf

⁹⁰ CCI, Notice of 8 August 2018 https://www.cci.gov.in/sites/default/files/Notice_order_document/Walmart%20PDF.pdf

⁹¹ OECD Implications of E-commerce for Competition Policy - Note by India 6 June 2018 DAF/COMP/WD(2018)52 [https://one.oecd.org/document/DAF/COMP/WD\(2018\)52/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2018)52/en/pdf)

⁹² COFECE (Mexico) : Rethinking competition in the digital economy https://www.cofece.mx/wp-content/uploads/2018/03/EC-EconomiaDigital_web_ENG_letter.pdf#pdf

How could it harm competition?

- Given the winner-take-all effect (either as a result of being the first to market or for successfully disrupting it); a firm may acquire greater market power and use it to block market entry or the permanence of its competitors in an anticompetitive manner.
- The existence of barriers (regulatory or otherwise) that hinder potential competitor's market access, may provide few incentives for the companies that have market power to increase their efficiency through innovation because there will be a low threat of competition.

Source : COFECE : Rethinking competition in the digital economy

CONCLUSION

Lessons Learnt and Recommendations for Smaller Developing Countries

In roughly 20 years, the digital economy has revolutionised B2B, B2C and even G2C relations. Most advanced countries in this race to the top are likely to become the dominant powers in e-commerce and in business relations in general. While the digital revolution has spread at exponential speed, national jurisdictions in general, but especially in smaller developing economies have been very slow, or have still to react. As we have seen, competition in the digital economy is only very recently placed on the agenda of big regional FTAs, such as ESCAP, COMESA and ECOWAS. The competition concerns in e-commerce may be seen in two dimensions for smaller developing countries. The first is how can domestic firms accede to e-commerce at home. In domestic trade, digital platforms can rapidly become dominant and in the same way as brick-and-mortar companies, they can distort or eliminate competition through cartel agreements, by abusing market power, or by merging to create monopolies or dominant firms. In addition, foreign digital giants will sooner or later wish to enter the domestic market by merging or taking over domestic e-commerce platforms. This raises concern as to the need for competition and consumer protection for domestic markets, including control of concentrations.

The second concern, is with respect to local exporters wishing to reach overseas markets through e-commerce. They may go online directly, or they may reach agreement with large

multi-sided platforms that will give them more visibility and wider reach in international markets. It is however easy to imagine that those who go online on their own, or those who go through established multi-sided platforms may fall prey to anticompetitive practices. For example, conditions of membership agreements with foreign e-commerce giants might not be equitable, as foreign giant digital platforms might easily abuse their market power. While in domestic markets competition may be protected by national CAs, where they exist and are able to enforce competition law in digital markets, the matter gets more complicated with respect to foreign markets, where it is up to foreign CAs to enforce their national competition law if they have such legislation and if they are able and willing to take action. Apart from bilateral cooperation among national CAs, anticompetitive practices taking place within regional FTAs could be sanctioned at the regional level by regional competition authorities, as exist for example, in COMESA and ECOWAS.

Emergence of Digital FTAs

In order to thrive in full liberty, markets need FTAs. The emergence of African, Asian and Trans-Pacific FTAs are a pre-condition for success of digital platforms exporting goods and services to all markets in the world. Exports from developing countries would be hampered first by trade (cross-border) barriers, second by restrictive business practices that also distort competition

both nationally and internationally. While regional FTAs create better conditions for cross-border e-commerce and most countries improve their internet penetration rates, conditions in all countries of the world are rapidly evolving to facilitate the growth of e-commerce in all regions. In addition to traditional free trade agreements, regional integration schemes such as COMESA, ECOWAS and APEC, have decided to engage in digital market FTAs, in order to facilitate and encourage the development of e-commerce within these regions.

Transnational reach of e-commerce platforms

As developed markets start getting saturated, giant e-commerce platforms of developed countries including China (GAFAMs and BATXs) enter markets of more advanced developing countries, rivaling local platforms and taking-over many such local firms or merging with them. As more advanced developing country markets gradually start to be saturated, this trend will reach less developed and smaller developing countries, in search of further growth. Large foreign e-platforms will therefore inevitably spread into smaller, less developed countries, first gobbling local competitors and then exploiting these markets in the same way as they do in more advanced markets. Hence, the imperative need for CAs in all potential target countries to be in a position to take effective remedial action.

Lack of preparedness of smaller developing countries

As we have seen in this paper, while in the most advanced developing countries, CAs are studying the rise of the digital economy and its potential for anticompetitive practices, in a great majority of less advanced developing countries throughout Africa and Asia, the issue is still very far from being a priority of Governments. They have been

slow to realise the dangers of anticompetitive practices by TNCs and domestic monopolies, many are very recently in the process of adopting traditional competition law and taking time to establish corresponding competition authorities. Moreover, in many smaller developing countries, CAs, even when they exist, are largely unprepared to face the challenge posed by the new digital economy. Nevertheless, urgent action needs to be taken for them to realise the enormous task that lies before them and to undertake the necessary efforts to build capacities in order to be in a position to tackle the problems, without at the same time, falling into the pitfalls of stifling procompetitive developments which are specific to digital markets.

Now, with the exponential rise of the digital age, these countries may further be distanced from effective enforcement capacity, including the risk that over-regulation might hamper procompetitive innovation and sustainable development.

Slow legal action in a fast changing digital economy

Of great concern, however, even for countries or regions having established CAs, is the enormous gap, or mismatch between “law time” (how long it takes for a CA to investigate a case, make a decision and often for the case to be reviewed), compared to the digital economy’s striking development and rise. This is deeply troubling, because litigation of antitrust cases in the new economy might drag on for so long that the conditions of the industry might ultimately change and be fully irrelevant, the litigation itself risking to have devastating effects on competition by making investment riskier and stifling innovation.

Need for CAs of smaller developing economies to adapt to digital economy

As explained in this paper, the digital economy is highly dynamic, in the sense that it is constantly evolving as a result of rapid technological advances giving rise to new startups and constantly changing business models. There is rapid emergence of new digital platforms that connect suppliers with consumers of goods and services under new, uncharted business models. New CAs in less-advanced developing countries should take into consideration the fact that new challenges will be faced by them, and that they should act very cautiously so as not to stifle innovation and competitive forces which are transforming existing structures. For example, it can be expected that offline brick-and-mortar stores will complain about « unfair » competition originating from online competitors. It is important that Governments of these countries do not fall into extremes to try to block competition from digital markets. Traditional stores will have to respond to such competition by establishing their own online facilities, without requesting undue protection from the CA or from politically motivated regulators.

Another characteristic of digital markets is their relative instability. Online platforms have the potential to rapidly create new market conditions, new ideas and technological progress giving rise to rapid changes in the business models proposed on digital markets. Existing monopolies or dominant platforms may be rapidly dislodged by a newcomer, the so-called « disruptor ». Where the disruptor or winner in a first round obtains a temporary dominant position, he benefits from a « winner takes all » advantage (i.e. his customers grow rapidly and this affords him with increased market power) ; however, such market power in digital markets is constantly challenged by potential new entrants who may completely

displace him in the next round of innovation. This constant contestability of digital markets is effectively procompetitive, and forces the incumbent to constantly look for innovations to keep his advantage over possible rivals.

Accordingly, market leaders will usually choose every strategy at their disposal to keep ahead of rivals, including by creating walls of intellectual property rights (IPRs), such as registration of patents, industrial designs and other proprietary means, in order to keep rivals from copying or from « forking » their own algorithms or digital applications. While the use of IPRs to protect proprietary innovations may be fully licit, the use of other means to exclude rivals may not.

Need for appropriate M&A thresholds in developing countries

As the Amazons and Alibabas, Uber and Didi Chuxings rapidly grow and spillover into other countries, this may occur through internal growth, but most likely by acquiring or merging with local competitors. CAs therefore, will need to have appropriate merger legislation for controlling digital market concentrations. This implies that their thresholds for notification and control of M&As should be adapted to the e-commerce multi-sided platforms. As discussed earlier in this paper, many countries are now including new thresholds such as valuation of concentrations in order to be able to control large digital deals which might otherwise escape their screening efforts.

Lack of consensus on competition enforcement in e-commerce

Another concern is the fact that many CAs in the world do not have clearly defined approaches towards specific anticompetitive practices. Developed country authorities themselves have sometimes made contradictory decisions with respect to anticompetitive practices of digital firms. Some of these decisions have been outright

criticized by authorities of countries whose firms have been sanctioned by foreign authorities. It could be that large countries engaged in planetary rivalry in the digital economy, might refrain from acting against their national firms, for fear of weakening them in the face of competition with other rivals who may not enforce their laws in order not to inhibit their incumbent firms' market power. In this connection, heavy handed action by the European Commission may be considered highly inappropriate and controversial by some. Others may argue that compared to the deep pockets of some digital giants, the high-level fines imposed may prove to be too weak to be effective.

Given the possibility of divergences of views concerning enforcement in the field of competition, it may happen that potentially anticompetitive cases would be treated differently by different jurisdictions. There might even be need for dispute settlement mechanisms to be adopted with respect to competition enforcement.

Competition enforcement should be adapted to the digital economy

Given the novelty of digital markets and highly dynamic evolution of markets, subject to rapidly dislocating innovations, opinions diverge as to the potential anticompetitive effects of prohibitions and harsh sanctions that are being imposed on such rapidly evolving markets which dynamism is considered procompetitive in itself. Even developed country CAs apply their competition laws in this field in a manner which is subject to trial and errors. Giving too much emphasis on vertical restraints, for example, in markets where market power is temporary might not be the right solution. For example, some European CAs prohibited all price-parity or MFN clauses, while the UK CMA only prohibited « wide » MFN, and allowing « narrow » MFN. This shows that in many cases, there is no full consensus as to what should be authorised, prohibited, and sanctioned. Even developed country authorities are still in the

« trial and error » stage with respect to competition in the digital economy.

For developed economies going through « trial and error » in this field, jurisprudence may be useful for successful, undisputed enforcement measures ; however by fixing once and for all what has been decided in earlier cases, jurisprudence might perpetuate mistakes and could harm future competition in such instable markets as exist in the digital economy.

Competition issues are mainly economic issues, weighing benefits versus harm of anticompetitive practices is above all an economic exercise. Excessive power given to judges might not be the right solution, especially in novel areas such as e-commerce and rapidly evolving dynamic digital economy. It is recommended that in deciding about such cases the CAs take great care and value arguments concerning future economic outcomes and the need to take care not to apply existing laws in a too rigid way which might end up by stifling competition in the long run instead of promoting effective and sustainable competition.

Hard-core cartels are strictly prohibited by competition law and may take the form of hub and spoke cartels or conscious parallel pricing or tacit collusion resulting from increased transparency in e-commerce platforms. As discussed above with respect to tacit collusion, the use of algorithms might make such indirect collusion more frequent, thus removing the relevance of traditional leniency with respect to parallel pricing, the traditional approach towards tacit collusion may have to be reconsidered.

Vertical restraints are normally considered more leniently than horizontal agreements by most jurisdictions, in that the rule of reason may be applied to weigh the pros and cons of such restraints with respect to competition. The main issue in this case is market power of the incumbent, which may result in unilateral

conduct to exclude rivals or to unduly exploit the market. In this field, we have seen that many types of restraints exist, and some have been sanctioned, even where the firms in question had limited market power in the relevant market.

Control of concentrations is the other important competition measure. We have seen few horizontal concentrations being prohibited so far, although in competition terms, these are expected to be the ones that cause major concern. Many cases of vertical and especially conglomerate concentrations take place all the time, and CAs around the world seem to authorise them quite generously. Some experts, however, consider that the big platforms use their deep pockets to swallow all possible competitors, so that their own market power goes uncontested. Moreover, the larger the conglomerate grows and the greater its network effects become, adding considerable value to the platform, in terms of big data and sources of revenue. The trend towards conglomeration therefore creates super giants, able to control every single aspect of everybody's life. Apart from obvious privacy questions, this inevitably leads to extreme market power by few giants, able to control every aspect of ordinary people's lives and, why not, even the essence of votes and democracy. Adding the case of AI, whereby nobody may be held responsible for collusion and global monopolization, the case for protecting competition and consumer rights becomes alarming.

It is therefore urgent for CAs in the world to get their minds together to better consider how to proceed with respect to anticompetitive practices in the digital age. Concentration of wealth in a few hands makes the role of Government ever more difficult. Haphazard trial and error will not work in this new dimension of anticompetitive practices. Legislation will always lag behind business which gets exponentially accelerated by the digital economy.

Smaller developing countries need intensive capacity building

Some of the developing countries listed in the tables contained in Section 2 of this paper have adopted competition legislation very recently, in 2017 or 2018, for example, and a few are just in the process of establishing their CA. A non-negligible number of developing and LDCs do not have such laws, or their laws and enforcement are inactive.

A growing list of developing countries, however, have developed experience in competition law enforcement, and some of the most advanced in this field, are giving serious attention to anticompetitive threats in e-commerce and the digital economy.

Smaller developing countries need to be guided by the trial and errors of developed countries, but also keep close contact with developing countries having more experience in the competition field. A number of developing country competition authorities have issued handbooks or « reflections » on e-commerce and digital markets, but few have taken effective action in sanctioning anti-competitive practices of large multi-sided platforms as yet. Even with respect to digital business concentrations, competition authorities from developing countries have been relatively cautious not to enter in conflict with multi-jurisdictional mergers or takeovers.

It is therefore recommended to establish continuous exchanges of experience among competition authorities on issues related to competition in the digital markets. More advanced developing countries should maintain close contacts with more advanced developed authorities, while smaller developing countries should consult with each-other and seek capacity building and technical assistance especially directed to e-commerce business conduct and the new digital economy. This is an area where

extensive cooperation and consensus-building is essential.

In this regard, international cooperation is needed to coordinate the necessary investigation procedures (dawn raids, subpoenas, information requirements, among others) to prove that an anticompetitive conduct has taken place in a country other than the one where the investigation is based. It might also be needed where interagency coordination is difficult, for example if a firm applies for leniency in one country and not in another, either because such programs do not exist, or if existing leniency is different in the other country. Moreover, if there is no cooperation among CAs, authorities may have little incentive to investigate practices that affect other jurisdictions.

A major role for regional CAs to protect competition in e-commerce

While this paper has looked into all aspects of e-commerce in domestic and international markets, it is important to look at how firms of developing countries can be protected from anticompetitive practices when exporting in overseas markets. If the markets in question belong to Regional FTAs to which the exporting country is a member, there is strong chance that intra-regional cooperation among national CAs may work in order to cooperate in solving such cases. Another avenue, is for the exporting country to lodge a complaint to the regional CA, and get support in remedying the case. It should be recalled that according to the effects principle, national CAs can only act effectively if the effects of an anticompetitive practice reaches the national territory. For exporters, affected by practices taking place abroad, i.e. through e-commerce, it is for the CAs of the foreign countries to take action.-if they so wish.

Part of the solution should come from regional integration and FTA initiatives on the digital economy, such as COMESA, ESCWA and APEC. COMESA and ESCWA, including WAEMU, that have established regional competition authorities. These CAs urgently need to set up reflection groups on establishing Digital FTAs including regional level competition rules and enforcement capabilities. As we have seen throughout this paper, giant e-commerce platforms such as Amazon and Alibaba or Tencent are rapidly spreading their offer around the world. First markets aimed at are the more advanced developing countries of Asia and Africa, but less advanced countries will also be invaded quite rapidly.

The giants improve their offer by merging and taking over local e-platforms as they seek to control all markets. While the benefits of e-commerce are fully recognised, it is essential that e-commerce should not be monopolised by a few international giants. It is now that competition authorities need to be able to effectively streamline the pro-competitive developments and challenge the anti-competitive strategies of digital firms. As the regulatory world is always lagging behind economic change, the challenge of the digital economy's striking uprise poses the biggest threat to competition authorities. Action at the national, regional and multilateral levels to elaborate consensus on competition policy's approach towards the digital economy in general and e-commerce in particular is needed as a matter of urgency.

Imperative need for coordinated action and consensus building at regional and multilateral levels

For potential e-commerce exporters from smaller developing countries, there is need for consensus

building and coordinated action first at the national and regional levels, and preferably at the multilateral level. Realization of the importance of the digital economy is recent in many regional integration schemes, such as COMESA and ESCWA. ESCAP and CPTPP may be more advanced, as a result of more advanced member countries' CAs. However, for most smaller developing economies, more time and efforts might be needed. In particular, a special effort from all developed countries, from ICN and from

International organisations such as OECD, WTO and UNCTAD will be needed in this respect. A new effort might be possible to launch negotiations on competition and e-commerce in WTO. Civil society institutions active in promoting competition law and policy in developing countries, particularly in Asia and Africa, like CUTS, might be able to organise training and capacity building programs in the field of competition in a digitalised world.

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