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Implications of E-commerce for Competition Policy - Background Note

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More documentation related to this discussion can be found at

http://www.oecd.org/daf/competition/e-commerce-implications-for-competition-policy.htm

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Implications of E-Commerce for Competition Policy

Background note by the Secretariat*

E-commerce – broadly, buying and selling online – is an expanding distribution mechanism across OECD countries. Although e-commerce is effectively a question of retail competition, the dynamics at play differ significantly from more traditional brick-and-mortar retail markets. Notable features include the emergence of leading online platform operators which conduct business across multiple product segments, greater transparency, the increasing importance of data collection and exploitation, and the use of algorithmic competition mechanisms. 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. Yet certain dynamics may also prompt or facilitate anticompetitive coordinated and unilateral conduct by economic operators, which is reflected in the increasing levels of antitrust enforcement in e-commerce markets within OECD countries. This background paper provides a wide-ranging consideration of potential competition law concerns within e-commerce markets. It focuses, in particular, on vertical restraints and abusive dominant conduct, with brief consideration of horizontal collusion and merger control issues. The paper concludes with an examination of possible regulatory solutions beyond the realm of competition law, encompassing sector-specific, consumer protection and data privacy oriented approaches.

* This background note was prepared for the OECD Secretariat by Niamh Dunne, Assistant Professor at the Law Department of the London School of Economics. It benefitted from comments and inputs from Antonio Capobianco and Pedro Gonzaga from the OECD Competition Division.

Table of contents

Figures

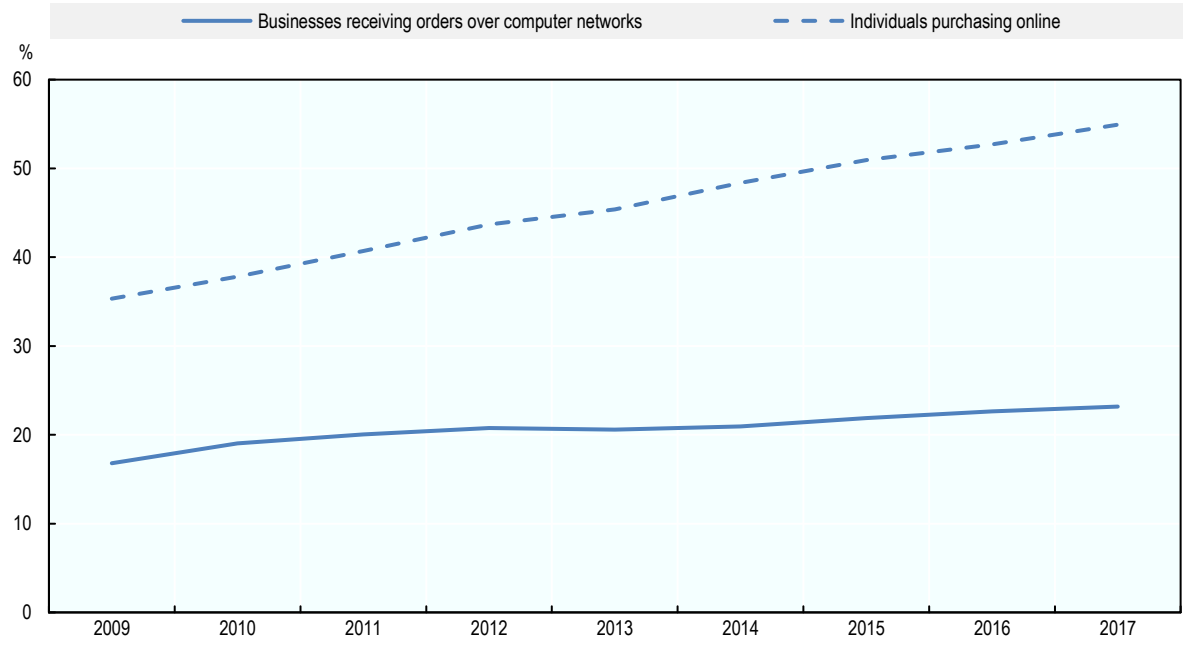
Boxes

1. Introduction

1. E-commerce – broadly, buying and selling online – is a global phenomenon and an important expanding distribution mechanism across OECD countries. During the last decade, e-commerce activities have been growing both in the demand and supply side, as seen by the increasing number of individuals purchasing online, which exceeded 50% of the population in 2017, as well as the steadily growing number of businesses receiving orders over computer networks (Figure 1). 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.

2. On the other hand, certain dynamics within e-commerce markets may prompt or facilitate anticompetitive collusive and unilateral conduct by economic operators. In particular, there are growing concerns about the emergence of dominant online platform operators, which conduct business across multiple product segment and benefit from, *inter alia*, network effects and significant data collection advantages. In addition, the increasing transparency and use of automated tools in e-commerce markets may pose additional risks for competition among online retailers.

Figure 1. Growth of e-commerce in OECD countries



Note: Orders received over computer networks include order received via the internet and EDI-type messages. No data is available for the US and Chili.
Source: OECD (2018), "ICT Access and Usage by Households and Individuals", OECD Telecommunications and Internet Statistics (database), http://dx.doi.org/10.1787/b9823565-en. OECD (2018), "ICT Access and Use by Businesses (Edition 2017)", OECD Telecommunications and Internet Statistics (database), http://dx.doi.org/10.1787/58897a61-en.

3. Competition agencies across OECD countries are increasingly involved in both enforcement and advocacy efforts relating to e-commerce markets. The European Commission's *E-Commerce Sector Inquiry*, which concluded in May 2017 with an extensive report outlining the dynamics of competition in e-commerce markets within the

EU, highlighted the growing importance of e-commerce within the retail sector, but also the potential competition concerns that this may generate.[1] Other jurisdictions have followed suit: for example, in 2017 the Federal Commission for Economic Competition (COFECE) launched an investigation into the potential competition problems within e-commerce markets in Mexico.[2] Other agencies have moreover investigated and sanctioned certain conducts in e-commerce markets that encompass the entire spectrum of antitrust enforcement, from horizontal collusion to vertical restraints and unilateral conduct.

4. In light of these developments, the topic of e-commerce appears to be ripe for reconsideration by the Competition Committee. This background paper considers the dynamics of competition in contemporary e-commerce markets, potential competition law concerns that may arise in such areas and alternative regulatory solutions extending beyond the antitrust context. It also builds upon existing work by the OECD in this and related areas, such as multi-sided markets (2018), algorithmic collusion (2017), big data (2016a), price discrimination (2016b), cross-platform agreement (2015a) and vertical restrains on online sales (2013).

5. Within competition law enforcement, it is in the area of vertical restraints that we see the most consistent enforcement in e-commerce markets to date. Frequent restrictions include the use of selective distribution mechanisms by suppliers, as well as price parity clauses applied by online retail platforms. A more complex concern is the extent to which apparently vertical arrangements may disclose elements of horizontal collusion, thus constituting "hub and spoke" cartels. Our discussion also identifies various hurdles to the successful application of unilateral conduct rules in e-commerce markets, although it by no means rules out this possibility.

6. Consideration is furthermore given to legal mechanisms outside the antitrust sphere by which competition problems concerning e-commerce may be addressed, including sector-specific regulation, consumer protection and data privacy laws. Each brings its own advantages when compared with competition law, in terms of tackling distinct forms of market dysfunction, yet none provides a perfect substitute for antitrust enforcement.

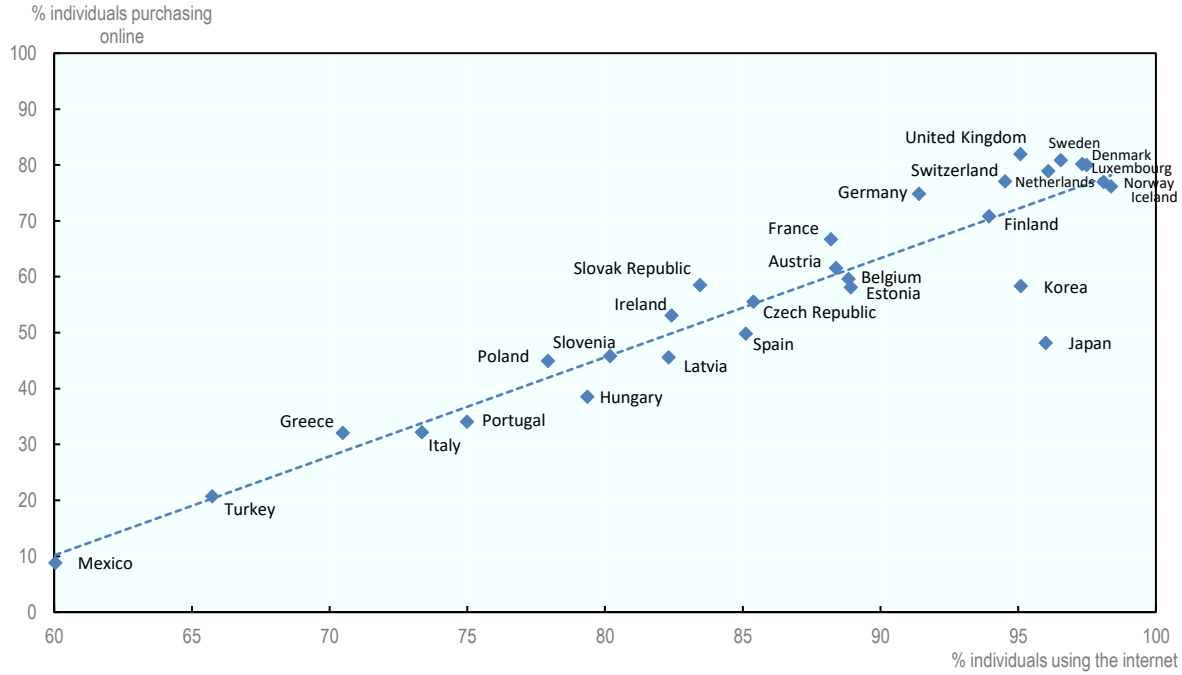
7. This introductory section explores the typical parameters of competition in e-commerce markets. First, the concept of e-commerce is defined and discussed in greater detail. Second, recurrent features of e-commerce markets are identified, with an emphasis on the resulting implications for competitive dynamics within such sectors. Third, consideration is given to the specific characteristics of multisided online e-commerce platforms, which link to wider debates regarding the distinctive competition challenges posed by the emergence of the digital platform economy.

1.1. Definition and varieties of e-commerce

8. The term e-commerce refers to the activities of buying and selling products online (Murray, 2016). A broad definition of e-commerce would encompass all business activities occurring over electronic networks, including the sale of goods and services, the transfer of funds, online marketing activities, and the collection and processing of data. A narrower definition focuses primarily on the provision of consumer goods and services through online sales channels. For the purposes of this background paper, the emphasis is on e-commerce retail value chains which result, ultimately, in the sale of products for consumption by final consumers.[3]

9. E-commerce, by definition, is inextricably linked to and dependent upon the growth of the internet and the emergence of the digital economy. Its development 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 being identified in OECD countries (Figure 2).[4] The e-commerce sector is moreover significantly affected by the ongoing switch from desktop to mobile computing: an increasing percentage of e-commerce is now conducted not merely online but also "on the go" in the sense that it takes place via mobile devices such as smartphones (Evans, 2016).

Figure 2. E-commerce and internet penetration in OECD countries in 2017



Note: No data is available for Australia, Canada, Chili, Israel, New Zealand and the United States.
Source: OECD (2018), "ICT Access and Usage by Households and Individuals", OECD Telecommunications and Internet Statistics (database), http://dx.doi.org/10.1787/b9823565-en.

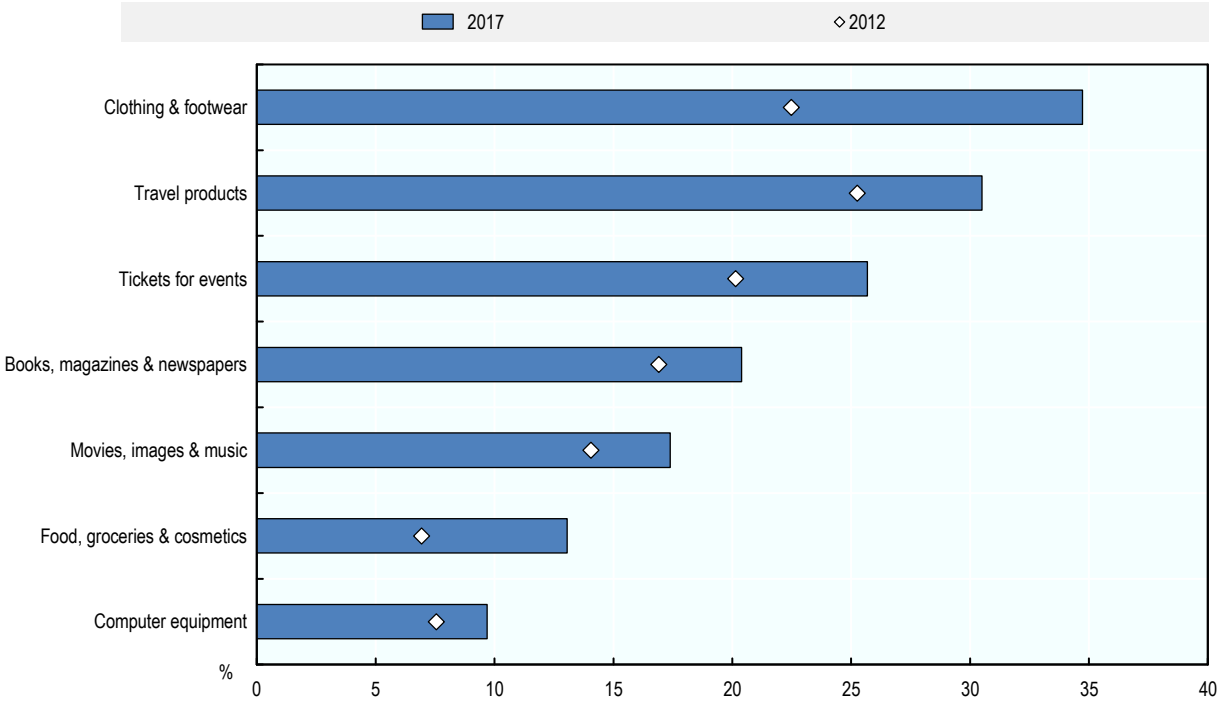
10. Three broad categories of products that are commonly sold online might be identified. The first category is **tangible consumer goods**; common types sold online include clothing and footwear, cosmetics and healthcare products, and consumer electronics. E-commerce in goods necessarily involves some form of physical delivery, whether through the ordinary postal system, via specialised courier services, delivery to dispersed collection points more conveniently located for the customer (an example is 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.

11. The second category involves the sale 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. Nonetheless, the services themselves are almost invariably delivered offline: the customer physically takes the train, stays in the hotel, attends the concert, etc.

12. The third and final 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 – so-called "complete digital distribution" (Hovenkamp, 2016) – where the service is transmitted using the packet switching protocol standard used on the internet.[5] The same content may also be delivered physically in the form of hard-copy books, DVDs, CDs, etc., in which case it comes within the first category.

Figure 3. Share of individuals purchasing online by product category in OECD countries



Note: For some online activities data is not available for all OECD countries. In those cases, we use a sample of at least 31 countries.
Source: OECD (2018), "ICT Access and Usage by Households and Individuals", OECD Telecommunications and Internet Statistics (database), http://dx.doi.org/10.1787/b9823565-en.

13. Besides the wide variety of goods and services that come under the umbrella of e-commerce today, an equally wide range of different business models and e-commerce channels can be discerned. Manufacturers and service providers may choose, in effect, to vertically integrate, operating their own online stores which offer goods or services directly to the consumer. There is evidence that the growth in e-commerce has prompted a concomitant expansion into the online retail sphere by manufacturers, including many manufacturers without an equivalent brick-and-mortar retail presence.[6] Vertical integration is particularly straightforward and cost-efficient for service providers who do not require a physical delivery network (Hovenkamp, 2016). Vertical integration provides manufacturers and service providers with the greatest measure of control over online

sales – in particular, over price – but may take a business far from its core activity, with additional responsibilities for marketing, delivery, customer service, etc.

14. For goods or services sold online through (non-integrated) retailers, outlets can take very different forms. Many established brick-and-mortar retailers today have expanded to include an online presence, meaning that the e-commerce component of their business is simply an extension of the traditional instore shopping experience. The rapid expansion of the internet over the past couple of decades nonetheless led to the emergence of many purely online retailers, or e-tailers. Some such e-tailers transformed from prior mail order businesses or much smaller physical stores. Other e-tailers begun as online-only operations, sometimes expanding to include one or more brick and mortar location as the business grows.[7]

15. Online retail businesses may, alternatively, take the form of so-called marketplaces. These comprise digital multisided platforms that bring together numerous retailers, providing a forum by which to access customers and which facilitates transactions between sellers and buyers. Marketplaces can accordingly be viewed as brokers, offering a platform to connect buyers and sellers, in contrast to the resellers which populate more traditional retail markets (Friederiszick and Glowicka, 2016). Marketplaces also often provide services to advertisers, such as enhanced rankings within any search facility in the site.

16. A marketplace may operate solely as an intermediary, simply hosting listings for third party sellers (a prominent example is eBay) or it may operate a hybrid model, having its own retail offerings while providing intermediary services for other retailers (Amazon marketplace presenting perhaps the best-known example). A distinction can also be drawn between open marketplaces, which accept all third-party listings (within the confines of the law), and closed sites, whereby a retailer requires pre-approval to list its products on the marketplace.[8]

17. Finally, the definition of e-commerce outlined above overlaps substantially with that of the sharing or collaborative economy. The latter is premised upon the under-utilisation of durable goods or other assets – or in the context of the "gig economy", man-hours – which generates excess capacity that can be rented out (Horton and Zeckhauser, 2016). Sharing economy businesses bring new products, assets and suppliers into the market, using technology to reduce transaction costs that would otherwise inhibit marketisation (Stallibrass and Fingleton, 2016 and FTC, 2016).

18. Insofar as the intermediation services that facilitate the emergence of the sharing economy are provided almost exclusively online, such businesses – offering for example ridesharing services or a spare room for rent – fall all within the ambit of e-commerce, broadly construed. However, the peer-to-peer nature of most sharing economy transactions differs markedly from the business-to-consumer models that are more typical within the e-commerce sphere. While this asymmetry has led some commentators to argue that sharing economy *service providers* should be excluded from antitrust scrutiny, in order to facilitate collective action in pursuit of better working conditions (e.g. Lao, 2018a), such concerns rarely extend to the online intermediation platforms which underpin such transactions, many of which are large, profitable and prominent economic operators (FTC, 2016).

1.2. Competition dynamics in e-commerce markets

19. This brings us to the specific competition dynamics that arise within e-commerce markets. E-commerce is, at its core, effectively a question of retail competition. Yet the dynamics at play in such markets and the consequences, both negative and positive, for consumers, are notably different from more traditional brick-and-mortar retail competition (Friederiszick and Glowicka, 2016).

20. Most obviously, the growth of e-commerce greatly expands consumer choice. Consumers are no longer limited to retailers located within a convenient geographic reach, but instead may source from any online retailer, whether national or international, whose delivery network extends to their location. Notably, the Commission's Sector Inquiry revealed that consumers in smaller EU Member States are more likely to engage in cross-border online shopping,[9] suggesting that e-commerce provides a means of compensating for smaller domestic markets.

21. Yet it is not merely the absolute number of retailers available which is of relevance; the increased availability of information and transparency of e-commerce markets also functions to reduce search costs, and thus increase consumer choice and buying power (Friederiszick & Glowicka, 2016).[10] On the one hand, the recurrent use of consumer reviews and rating systems within online retail platforms increases the *ex-ante* information available to potential customers, thus increasing confidence levels in both the retailer and the underlying product. On the other, there is much greater price transparency between different retailers, making price comparisons more straightforward. The use of price comparison websites, which collate price information for discrete products across a variety of online retailers, and often provide for consumer reviews, further augments both dynamics.[11]

22. Neither of these market features is without its downsides, however. From a consumer perspective, an *excess* of information may also prove problematic by once again increasing search costs, requiring customers to make use of multiple online tools in order to sort and select the information available. Individual consumer reviews also remain inherently subjective, and indeed at least one prominent review website has had recurrent difficulties with both allegedly fraudulent and libellous reviews.[12]

23. Likewise, greater price transparency not only facilitates "shopping around" by consumers, but it also enables other retailers to track more effectively the prices charged by their rivals and allows suppliers to monitor retail pricing (in particular, to identify deep discounting). The former raises concerns to the extent that it may facilitate collusion between retailers, whether explicit or tacit, while the latter may enable monitoring and enforcement of – explicit or tacit – resale price maintenance policies. The risks of either arising are enhanced by ever-greater use of price-tracking software, as well as price-setting algorithms which automatically adjust a retailer's own prices in response to price changes by competitors. These concerns are discussed further in section 4.1.

24. Although online sales channels can be particularly effective at providing presales information, a recurrent debate about optimal e-commerce regulation centres on services which are allegedly better provided through personal interactions at brick-and-mortar locations. A frequent argument in this context is thus the threat of free-riding by online retailers, which take advantage of the expensive services offered *ex ante* by traditional offline rivals while undercutting physical locations on cost (Friederiszick & Glowicka, 2016).

25. Free-riding brings with it two dangers for the optimal retail distribution of products: first, that offline retailers cease to provide valuable pre-sales services in order to avoid appropriation of their investments; and second, vigorous price competition might drive traditional retailers out of the market entirely, thus diminishing customer choice in the retailer experience (Hughes, 2017). However, free-riding may also work in the opposite direction, that is, some customers may prefer to search online and yet opt to purchase from traditional physical retailers.[13]

26. Robust empirical evidence on levels of free-riding is, in practice, rather limited (Friederiszick and Glowicka, 2016). Yet a desire to prevent perceived free-riding by online retailers motivates some of the more restrictive distribution arrangements currently in place within e-commerce markets, such as limitations on resale pricing freedom and restrictions of online retail operations. The challenge for competition authorities is to distinguish between apparently restrictive practices which pursue legitimate goals related to the prevention of welfare-reducing free-riding, and those circumstances where claims of free-riding are a mere pretence.

27. Another key feature of the e-commerce sector, one which it shares with digital markets more generally, is the centrality of consumer data as a crucial input (Graef, 2015, Shelanski, 2013 and OECD, 2016a). In the e-commerce context, access to such data enables a more effective, targeted tailoring of shopping services to consumer preferences. Although brick and mortar retailers are hardly indifferent to their customers' shopping habits, the online environment provides a much more granular picture of consumer behaviour: not merely what products are bought together by consumers, but also how the consumer arrives at the online store, what products they consider before making their ultimate purchase, alongside a consumer's purchasing history over a longer time horizon (Graef, 2015). This detailed picture of the habits and preferences of individual customers enables, ultimately, the personalisation of retail offerings towards specific consumers: from more effective recommendations for future purchases to, potentially, individualised pricing, based on a consumer's perceived willingness to pay (Shelanski, 2013).

28. The antitrust implications of data collection remain a much-contested question (a nuanced discussion is Costa-Cabral and Lynskey, 2017). Personalised pricing, for instance, raises the spectre of price discrimination between similarly situated customers. Control over gatekeeper or bottleneck data could, potentially, give a dominant platform the ability to exclude competitors from related market segments, a feature of the prominent *Google Search (Shopping)* case. At the very least, the large-scale accumulation of consumer data by successful platforms, which facilitates the iterative improvement and more effective targeting of retail offering towards, may function as a barrier to entry into the e-commerce sector (Shelanski, 2013).

29. A related consideration is the central role of advertising in e-commerce, and the digital economy more generally. Again, the use of advertising by retailers to attract customers is not confined to the e-commerce sector, yet it plays a particularly interesting and important role here. First, the data collection activities outlined above similarly permit a closer targeting and personalisation of advertising efforts. A prominent example is cookie-based custom ads, based on a shopper's browsing history, which seemingly follow the user around the internet as he or she interacts with unrelated platforms.

30. Second, supplier-imposed restrictions on advertising, such as minimum advertising price policies, appear to be increasingly common within e-commerce markets. The recurrent use of such restraints may function to negate the price transparency that drives aggressive competition within e-commerce markets, yet many commentators argue

against their automatic condemnation given the particular characteristics of the online retail sector (e.g. Hughes, 2017 and Asker and Bar-Isaac, 2018).

31. Third, advertising provides a crucial link between e-commerce – what might be described as the key *monetised* element of the digital economy – and other central components which are less obviously lucrative, such as social networks and online search (Evans, 2016 and Graef, 2015). The latter, which are presented to consumers as zero-price services, are generally funded by online advertising, including click-through links to the relevant e-commerce site (Newman, 2015). Moreover, as digital companies evolve, the link between e-commerce and other services becomes both more integrated and more subtle (for example, the introduction of "shoppable" Instagram posts). Accordingly, e-commerce does not merely represent the evolution of retail in the twenty-first century, but is indeed a central component of the digital economy ecosystem more broadly.

32. It is worth noting, however, that many of the more high-level critiques arguing against the application of competition law in digital markets debatably have lesser relevance in the e-commerce context (an example of the former is Manne and Wright, 2010). First, rarely do we encounter the sorts of ostensibly free digital products that complicate market definition and skew perceptions of consumer welfare-enhancing behaviour (Evans, 2011, and Gal and Rubinfeld, 2016). Indeed, extracting actual cash payment from consumers is arguably the primary purpose of e-commerce.

33. Second, digital innovation typically plays a more marginal role (on the conventional critique, see Shelanski, 2013). Although it can improve the sales experience from the perspectives of both buyers and sellers – through improved searching functions, for example, or making payment systems more secure –, such improvements rarely impact upon the goods or services that are the subject-matter of the underlying transaction. As an illustration, optimising e-commerce mechanisms from a technological perspective cannot itself save the customer from the noisy hotel room or shoddily-manufactured shoes, although, of course, more effective review mechanisms may save future customers from making similar mistakes.

34. Finally, the arms-length nature of e-commerce transactions compared with more traditional retail experiences increases the reliance placed on the supporting infrastructure for e-commerce. Two further pivotal components, beyond the examples already discussed above (e.g. search engines, price comparison websites, online marketplaces), are the electronic payment system and the delivery network used by the seller. Typically, these activities are outsourced to third parties, although further vertical integration into delivery activities in particular has occurred with large e-commerce retailers. Consumer anxiety over both security online and the reliability of delivery structures may push certain consumers, at least, towards the more well-established (branded) e-tailers and marketplaces, insofar as reputation functions as a proxy for reliability (Marsden and Whelan, 2010). Indeed, increased consumer confidence online had been one of the key drivers of increased rates of e-commerce participation within the EU.[14]

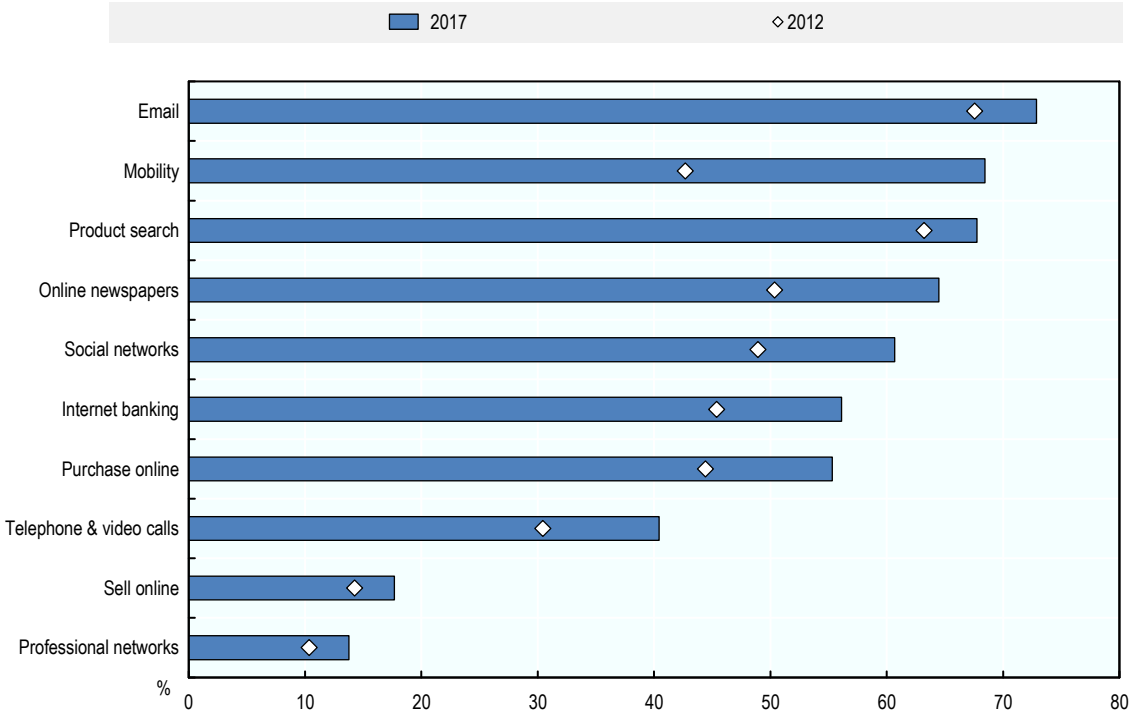
1.3. Multisided platforms in the e-commerce sector

35. Thus far, this paper has described business models and competition dynamics that arise within e-commerce markets generally. The final portion of this introductory section considers briefly a specific category of e-commerce actors, namely multisided retail platforms. The challenges posed, in competition policy terms, by the emergence of the platform economy and the recognition of the "multisided" nature of such markets are

well-documented (Evans, 2016, Auer and Petit, 2015, Sokol and Ma, 2017, Gurkaynak et al, 2017 and Collyer et al, 2017), including in the recent work of the OECD (2018).

36. In the e-commerce context, marketplaces present an archetypal example of multisided platforms, uniting diverse retailers seeking customers, buyers seeking (often competing) products, and advertisers seeking "eyeballs" and "clicks". Nonetheless, the inherent link between e-commerce channels and the funding of the digital economy more generally means that other multisided models are also relevant, such as the connection between retail advertising and online search (Shelanski, 2013). The role of multisided platforms becomes even more evident when considering a broad definition of e-commerce, as seen by the increasing number of individuals using the internet for a wide range of online activities that fundamentally rely on multi-sided business models (Figure 4).

Figure 4. Share of individuals using the internet by online activity in OECD countries



Note: For some online activities data is not available for all OECD countries. In those cases, we used a sample of at least 28 countries.
Source: OECD (2018), "ICT Access and Usage by Households and Individuals", OECD Telecommunications and Internet Statistics (database), http://dx.doi.org/10.1787/b9823565-en.

37. While it is not the intention of this paper to rehash the increasingly extensive literature considering optimal approaches to antitrust issues in multisided markets, the central role of online platforms in supporting or engaging in e-commerce activities means that the subject of any competition investigation is often a multisided operator. Accordingly, several key characteristics of online platforms ought to be borne in mind (we draw principally from Evans, 2016). These issues are also considered further in section 3on the possibility of finding dominance in the e-commerce sector.

38. First, the central innovation of the theory of multisided markets is the existence of several discrete though interlinked customer groups which interact through the platform, each with its own individual demand. An online retail marketplace, for instance, provides services for third party retailers, for retail customers, and for advertisers. Such demands are, nonetheless, interdependent, meaning that a price increase or quality decrease for one group of participants may have feedback effects, reducing demand not only for the group that is directly affected but also for other participants using the platform.

39. Second, multisided platforms typically involve cross-subsidies between participants, whereby the use of the platform is set at a low or zero price for one group, while any profits earned by the platform are made through charges to other participants. For example, many online marketplaces charge fees to retailers which list their products on the platform and to advertisers which purchase advertising space, but do not charge additional fees to customers for purchases made through the platform. Similarly, services like online search engines and social networking sites are provided to users at zero price,[15] because the cost of providing such services is covered by advertising revenues, linking back more obliquely to the e-commerce context. Typically, the existence of an unequal payment structure within online platforms reinforces the interdependencies between different user groups, insofar as the presence of the "free" participants is vitally important to attracting for-profit participants to the platform. It similarly means that conventional approaches to market definition and the assessment of market power, in particular the SSNIP or hypothetical monopolist test, may be less effective or precise in the multisided context.

40. Third, online platforms are subject to both frequent incremental innovation, seeking to improve their services in order to attract more participants to all sides of the platform, and more occasional disruptive innovation, whereby leading platforms are displaced by alternative business models. As argued above, dynamic competition is arguably less pivotal to e-commerce than other areas of the digital economy, such as social media, insofar as the underlying product purchased is distinct from the digital purchasing environment. Yet the interconnectedness of the digital ecosystem means that dynamic considerations must be borne in mind, not least because the relatively low switching costs or ability to multi-home, which drive innovation within the digital sector, are also pervasive in e-commerce.

41. This introductory section has described the broad range of products and business models present within the evolving e-commerce sector. The following sections consider the potential for anticompetitive behaviour to arise within such markets, focusing on two primary concerns – vertical restraints and unilateral conduct by monopoly or dominant firms – alongside brief consideration of other potential antitrust issues – collusion and merger control issues. Possible theories of harm that have either arisen in practice or which are recognised within the existing literature are identified, alongside discussion of both the remaining open questions and the future enforcement challenges faced by competition agencies.

2. Vertical restraints

42. One of the more notable effects of the growth in importance of e-commerce markets has been the (re-)emergence of vertical restraints as a pressing concern of competition law, at least within certain jurisdictions. To date, it is the area of vertical restraints that has seen the greatest quantity of antitrust enforcement within e-commerce

markets, while the continuing expansion of online sales channels has prompted numerous competition authorities to reconsider their approach to vertical restraints, including most recently the Japan Fair Trade Commission[16] and the Turkish Competition Authority.[17]

43. The case for a more benign treatment of vertical restraints under the antitrust rules, in comparison with horizontal collusion, is well-recognised: vertical restrictions involve no direct limitation of competition and frequently generate significant welfare-enhancing efficiencies. Yet there is no "one size fits all" approach to the assessment of vertical restraints from a competition law perspective. In its well-known *Leegin* decision from 2007,[18] the US Supreme Court ruled that all vertical restraints should be assessed under the "rule of reason" standard, which involves a balancing of likely anticompetitive and procompetitive impacts, thus precluding the possibility of holding such restrictions to be *per se* illegal under §1 of the Sherman Act (see also Sokol, 2014).

44. By contrast, in several equally-debated decisions which followed soon after,[19] the Court of Justice of the European Union reaffirmed the "by object" treatment of certain vertical restrictions under Article 101(1) TFEU, particularly those which aim at segmenting the internal market. Importantly, however, EU law retains the possibility of justifying *prima facie* restrictive coordination by reference to countervailing efficiencies under Article 101(3) TFEU, an exception rule of arguably greatest relevance in the context of vertical restraints.[20] Moreover, recent case-law arguably calls into question any unduly reflexive recourse to the "object box", suggesting a more nuanced and contextual approach which is likely to have greatest impact in relation to the treatment of vertical restrictions.[21]

45. For vertical restraints that escape *per se* or "by object" condemnation, a context-specific and resource-intensive analysis of the probable competitive impacts of the restriction in practice is required. In conducting this assessment, the primary indicator that a vertical restraint is likely to result in a non-negligible restriction on competition, thus harming consumer welfare, is the existence of market power held by one or more of the contracting parties.[22] The existence of multiple similar vertical restraints across a sector is another key consideration in determining whether the set of parallel restrictions as a whole contributes to the closing off of competition in the upstream or downstream markets.[23]

46. As an increasing number of manufacturers are choosing to operate their own e-commerce sites, i.e. to vertically integrate, their distribution agreements are removed from the purview of the competition rules governing anticompetitive agreements.[24] For many manufacturers, the motivation behind the choice to integrate is precisely to obtain greater levels of control over distribution in terms of both quality and price.[25] Vertical restraints contained within genuine agency arrangements, whereby the supplier as principal appoints an e-tailer as agent to operate an e-commerce outlet on its behalf, similarly lie outside competition law in most jurisdictions.[26]

47. Thus, 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. Such efforts are frequently motivated by a desire either to restrict online sales entirely, or to limit differentiation between offline and online sales channels. Another important category of potential vertical restrictions in the e-commerce sector involves contractual limitations imposed by online retail platforms, such as exclusivity obligations or requirements that sellers must offer their lowest prices through the platform.

48. In what follows, this section identifies and discusses vertical restraints that are commonly found in the online environment. Both the business rationale and potential restrictive impacts of each form of restraint are considered, alongside the antitrust treatment to date of such restrictions. Particular attention is directed to the treatment of online vertical restraints under EU competition law, which is reflective of the increasing priority granted to competition enforcement in this area by both the European Commission and certain Member State authorities. Finally, it should be emphasised, as noted above, that a *prima facie* finding of breach of Article 101(1) TFEU represents merely the first half of the assessment; defendant undertakings retain the possibility of justifying apparently restrictive vertical arrangements by reference to the Article 101(3) TFEU efficiency criteria.

2.1. Exclusive and selective distribution models

49. Many suppliers utilise a variety of different distribution models and potentially restrictive clauses across the online environment, which differ depending upon, for instance, the products at issue, the geographic area and the nature of the retailer.[27] A first question is thus whether the underlying distribution model utilised by a manufacturer for online sales may restrict competition. Two models are of specific relevance: **exclusive distribution** and **selective distribution**.

2.1.1. Exclusive distribution model

50. Exclusive distribution refers to vertical arrangements by which a supplier contracts to sell their goods to one single distributer within a specific territory. Self-evidently, exclusive distribution restricts intra-brand competition, by limiting the wholesale outlets from which retailers can obtain consumer goods or the retail outlets from which final consumers can purchase items. Exclusive distribution is used by manufacturers in both offline and online sales channels, although it is by no means the predominant model of distribution in all markets.[28]

51. Manufacturers may employ exclusive distribution on a case-by-case for a variety of reasons, including:

- To launch and establish a brand in a new market
- To achieve economies of scale in distribution
- To encourage and preserve the incentives of distributors to invest in facilities and training related to sale of that manufacturer's products.[29]

52. Despite the potential for restrictions on intra-brand competition, exclusive distribution is not an automatic "by object" restrictions under Article 101(1) TFEU. This reflects the view, first articulated by the Court of Justice when considering vertical restraints in its well-known *Metro* decision in 1977, that "*although price competition is so important that it can never be eliminated it does not constitute the only effective form of competition or that to which absolute priority must in all circumstances be accorded*."[30]

53. The early EU law case of *STM* established that exclusive distribution, as such, does not fall within the "object box", although depending upon the circumstances an exclusive distribution arrangement may be held to have the effect of restricting competition in practice.[31] In *STM*, the Court noted in particular the potential necessity for exclusivity in order to launch a product within a new territory, suggesting that in such

circumstances the apparent restriction should not be viewed as a genuine "*interference with competition*".[32]

2.1.2. Selective distribution model

54. Selective distribution refers to vertical arrangements by which a supplier defines minimum standards for admission to its distribution network, agreeing to supply all distributors which meet these requirements (Marsden and Whelan, 2010 and Buccirossi, 2015). Typically, suppliers are under no legal obligation to make public their selection criteria.[33] Again, selective distribution is utilised by suppliers for both offline and online sales. Yet one of the more notable impacts of the growth of e-commerce has been greater recourse by suppliers to selective distribution mechanisms, often through inclusion of so-called "internet addendums" which introduce more restrictive conditions for online sales.[34]

55. Suppliers adopt selective distribution, typically, in an effort to ensure a sufficiently high-quality retail experience for their products. More specifically, reasons advanced for selective distribution include:

- To protect a product's market positioning
- To preserve brand image or reputation
- To guarantee provision of effective or individualised pre- and after-sales services to consumers
- To ensure a more homogenous presentation of products across multiple individual retailers.[35]

56. Pursuit of such goals is reflected in common selection criteria for admission to a distribution network, including control over marketing activities by retailers, obligations with respect to customer service provision and limitations on sale of competing products. For offline sales, suppliers have traditionally imposed specifications on retailers relating to geographic location criteria, minimum size and quality requirements. Suppliers increasingly seek to impose broadly equivalent obligations with respect to online sales, requiring a retailer to maintain its own website, and to provide or prohibit certain functionalities, with potential pre-approval by the supplier of the site's look.[36] Sometimes authorised distributors are required to maintain one or more brick-and-mortar sales outlets, at least for premium lines, even where online sales are not prohibited as such.[37]

57. Selective distribution is assessed under EU law by reference to the so-called "*Metro* criteria",[38] reaffirmed in the recent *Pierre Fabre*[39] and *Coty*[40] judgments, which exclude such arrangements from the scope of the Article 101(1) TFEU prohibition where certain cumulative conditions are satisfied (Box 1). Where one or more these criteria are not satisfied, *Pierre Fabre* suggests that distribution arrangements constitute a "by object" restriction of competition,[41] although the point is not incontestable (Jones and Sufrin, 2016).

Box 1. The "Metro" criteria for selective distribution models

In the well-known "Metro" case, the European Court of Justice recognised the legality of selective distribution systems that satisfy the four following cumulative criteria:

1. Resellers must be chosen based on objective criteria of a qualitative nature.
2. The selection criteria must be laid down uniformly for all potential resellers and not applied in a discriminatory fashion.
3. The characteristics of the product in question must necessitate such a network in order to preserve its quality and ensure its proper use.
4. The selection criteria applied must not go beyond what is necessary (a proportionality test).

Several aspects of the Metro criteria are worthy of further consideration. First, the selection criteria for permissible arrangements under Article 101(1) TFEU can encompass only qualitative criteria. This precludes quantitative criteria, meaning that a supplier cannot legitimately seek to limit simply the number of retail outlets supplied in absolute terms. Notably, this contrasts with the approach under the 2010 Vertical Block Exemption Regulation (VBER), which affords a blanket exemption for selection distribution regardless of the selection criteria, provided that such arrangements do not contain any "hard-core" restrictions of competition and that the market share thresholds are met (30% or less on all affected markets).

Second, and again this limitation is not reflected in the VBER, selective distribution is permissible only where the "characteristics" of the relevant product justify a higher-quality retail experience. Generally speaking, this criterion is interpreted as requiring either products of a technically-complex or luxury nature (Marsden and Whelan, 2010). Metro itself involved consumer electronic equipment, well-recognised as falling within the former category; while the recent case of Coty, involving restrictions on the use of online marketplaces within a selective distribution system, confirmed that high-end perfumes benefit from the latter.

In opposition, in the preceding case of Pierre Fabre, also involving de facto restrictions on online sales, the Court of Justice suggested that 'cosmetics and personal care products' do not constitute luxury goods for this purpose, even though the brands at issue would typically be viewed as premium ones. Similarly, the German Bundeskartellamt, in a case subsequently confirmed by the Federal Court of Justice, has taken the view that sports and running shoes do not constitute luxury products in order to benefit from the Metro exemption for selective distribution.

Sources: Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices (OJ L 102/1, 23.4.2010). European Commission, Guidelines on Vertical Restraints. Bundeskartellamt Press Release, "ASICS dealers allowed to use price comparison engines – Federal Court of Justice confirms Bundeskartellamt's decision", http://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2018/25_01_2018_Entscheidung_Asics.html.

58. It should be emphasised, however, that although it is possible to classify exclusive and selective distribution systems as compatible with Article 101(1) TFEU, the inclusion of additional vertical restraints may bring otherwise permissible systems into conflict

with that prohibition. A classic example is the *Consten & Grundig* case, decided shortly after *STM*, in which the Court of Justice contrarily held that an exclusive distribution system constituted a "by object" restriction of competition. The key distinguishing factor between *STM* and *Consten* was the additional assignment of intellectual property rights in the latter, which gave the appointed distributor the ability to exclude unauthorised parallel imports from its territory, thus granting absolute territorial protection (i.e. protection from both active and passive third-party sales).

59. Importantly, unsolicited online sales are viewed as passive selling under EU law,[42] meaning that outright restrictions on internet sales, whether explicit or *de facto*, are viewed with great suspicion, a point discussed further in section 2.3. In the context of selective distribution, additional restrictions on competition are assessed under the proportionality limb of the *Metro* criteria, which asks whether the specific restraint is both appropriate and necessary to achieve the pro-competitive objectives underlying the distribution system.[43]

60. The remainder of this section examines common vertical restraints that arise in the online environment, which may be coupled with exclusive or selective distribution arrangements – or, alternatively, which may constitute freestanding restrictions within an otherwise open distribution network.

2.2. Price-based restraints: RPM and dual pricing

61. Vertical price-based restraints typically involve efforts by manufacturers to influence the prices charged for their products by online retailers to final customers (OECD, 2008). As many other vertical restrictions, price-based restraints can generate efficiencies, but often constitute one of the most immediate limitations of intra-brand competition. This section discusses retail price maintenance (RMP) and dual pricing, which each present difficult questions within contemporary antitrust law.

2.2.1. Retail price maintenance (RPM)

62. RPM is a type of vertical restraint through which an upstream firm, such as a producer or wholesaler, restricts the retail price or other terms of sales set by a downstream company (OECD, 2008). This restriction can take different format, including maximum RPM (upper ceiling for the retail price), minimum RPM (lower bound for the retail price) and fixed RPM (exact value that a retailer must charge for the product). Sometimes, instead of engaging in RPM, wholesalers set recommended resale prices, which serve as a non-binding recommended price that retailers may choose to adopt or ignore.

63. On the one hand, maximum RPM and recommended resale prices usually do not constitute a *per se* violation of competition law, falling outside the object category. This more favourable legal treatment is explained by the fact that these price restrictions do not prevent retailers from discounting and engaging in inter-brand price competition, while they might still be efficiency enhancing by solving, for instance, the "multiple marginalisation problem". However, manufacturers must take care to ensure that ostensible recommendations do not become fixed prices in practice.[44]

64. On the other hand, in most jurisdictions fixed and minimum RPM constitute "by object" restrictions of competition,[45] including in the UK where the Competition and Markets Authority has been actively engaged in prosecuting RPM cases (Box 2).[46] The main exception is the United States, where antitrust law assesses all vertical price

restraints by reference to the rule of reason.[47] While the "by object" treatment of fixed and minimum RPM in most countries has been criticised, the 2010 VBER and Vertical Guidelines continue to endorse such an approach,[48] due to the risks of RPM dampening inter-brand competition and facilitating horizontal collusion either between manufacturers or retailers (OECD, 2008).

Box 2. Enforcement against RPM in the United Kingdom.

In the United Kingdom, the Competition and Markets Authority (CMA) has pursued numerous enforcement actions against RPM in the online sector in recent years, each taking a slightly different form.

In 2016, the CMA fined a commercial catering equipment manufacturer which had maintained a minimum advertised pricing policy for online sales, which was held to constitute a de facto minimum pricing policy given the specific characteristics of the e-commerce environment. The same year it also sanctioned a bathroom fittings supplier which maintained an ostensible recommended pricing policy for online sales, yet which was transformed into a minimum policy through threats of delisting higher prices for non-complying retailers and withdrawal of a retailer's ability to use the manufacturer's images online. Additionally, in 2017, the CMA fined a light-fitting supplier for imposing minimum RPM requirements on retailers for online sales, hidden behind ostensible "internet licensing agreements".

The 2017 case led CMA to issue an open letter to suppliers and resellers, outlining specifically the "do's and don'ts" of vertical pricing restraints in the online sector:

"If you are a supplier:

- *You must not dictate the price at which your products are sold, either online or through other sales channels.*
- *Policies that set a minimum advertised price for online sales can equate to RPM and are usually illegal.*
- *You must not use threats, financial incentives or take any other action, such as withholding supply or offering less favourable terms, to make resellers stick to recommended resale prices.*
- *You cannot hide RPM agreements - restrictive pricing policies in business-to-business arrangements are illegal whether verbal or written. Equally you cannot try to use apparently legitimate policies (e.g. image licensing) to conceal RPM practices." CMA (2017).*

Sources: CMA Press releases: "Fridge supplier fined £2.2 million for restricting online discounts", https://www.gov.uk/government/news/fridge-supplier-fined-22-million-for-restricting-online-discounts, "Bathroom supplier fined £826,000 for restricting online prices", https://www.gov.uk/government /news/bathroom-supplier-fined-826000-for-restricting-online-prices., "Lighting company fined £2.7 million for restricting online prices", https://www.gov.uk/government/news/lighting-company-fined-27-million-for-restricting-online-prices.
CMA (2017), "Restricting resale prices: an open letter to suppliers and resellers", https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/620454/resale-price-maintenance-open-letter.pdf

65. In the e-commerce sector, the use of minimum or fixed RPM is often motivated by manufacturer concerns about free-riding on offline service provision, as well as by concerns about aggressive discounting in online distribution channels that could diminish the perceived prestige or market position of a brand. As a result, the use of pricing restraints may serve to minimise the impact of quick online price erosion, thereby protecting both wholesale price levels and retail price margins.[49] However, the free-riding argument in particular has been challenged, given evidence of free-riding in both directions (Lao, 2010).

66. Antitrust scepticism of RPM, at least outside the US, means that manufacturers are more likely to recommend than mandate online retail prices.[50] Nonetheless, despite the nominally non-binding nature of recommended prices, retailers are often prepared to follow such indications, whether because they find it profitable, because they do not wish to damage long-standing business relations, or following more explicit threats of retaliation for non-compliance.[51] Increasing use of price monitoring software, which enables manufacturers to detect deviations from recommended prices by online retailers, may strengthen the *de facto* fixed or minimum quality of price recommendations.[52]

67. Another area of controversy is the extent to which supplier-mandated restrictions on minimum *advertised* prices in the online environment, without prejudice to the actual prices that may be charged, should be treated as equivalent to fixed or minimum RPM policies (Hughes, 2017, and Asker and Bar-Isaac, 2018).

2.2.2. Dual pricing

68. A more difficult issue is whether a dual pricing policy, whereby a manufacturer charges different wholesale prices for products depending upon whether these are sold through offline or online sales channels, should constitute a hard-core vertical restriction. Dual pricing policies are nominally intended to compensate offline retailers for the higher costs associated with brick-and-mortar outlets, included attendant pre- and after-sales service provision. Yet such policies might also function to negate the aggressive price competition associated with the growth of e-commerce by raising online retailers' costs, or to dissuade retailers from pursuing online sales channels.

69. The question of whether dual pricing should be treated as automatically suspect from an antitrust perspective remains open to dispute. Fundamentally, although higher wholesale prices for online sales may make e-commerce a less lucrative business, dual pricing neither prohibits online sales nor does it prevent discounting by online retailers; albeit the latter must pass on to consumers a larger share of their profit margins in order to offer the same deals. On the other hand, if the difference between the wholesale prices set for products sold through online and offline channels is substantial and largely exceeds the extra costs incurred by the brick-and-mortar outlet, dual pricing can act as a *de facto* outright restriction on internet sales.

70. For that reason, while accepting that manufacturers are generally free to charge different wholesale prices to different retailers, the European Commission currently takes the view that dual pricing policies constitute hard-core restrictions within Article 4(b) of the VBER, and arguably by implication, object restrictions under Article 101(1) TFEU.[53] The German Bundeskartellamt (2013) had, accordingly, pursued numerous enforcement actions against manufacturers which maintain formal or implicit dual pricing structures.

71. An interesting example is the Bundeskartellamt's investigation into the discount practices of Lego, the toy manufacturer. Lego previously provided discounts to retailers

based on various discount factors, including the amount of shelf space dedicated to Lego products within retail outlets measured in metres. The Bundeskartellamt condemned the practice as involving a structural disadvantage for online retailers which could never benefit from this particular discount factor, thus treating it as a *de facto* dual pricing policy. The case was ultimately settled on the basis of commitments given by the defendant undertaking.[54]

2.3. Online sales bans

72. Outright bans on internet sales constitute the most obvious vertical obstacle to e-commerce: such clauses impose a straightforward contractual prohibition on resale of the relevant product in the online environment. With respect to EU law, the *Pierre Fabre* case clearly established such prohibitions as "by object" violations of Article 101(1) TFEU.[55] In fact, *Pierre Fabre* did not involve an explicit online sales ban, but instead a requirement within a selective distribution system that a qualified pharmacist must be present at the physical retail sales point of the products concerned (cosmetics and other hygiene products). This the Court construed as a *de facto* ban on internet sales, and, accordingly, an object restriction, holding that:

> *"… by excluding de facto a method of marketing products that does not require the physical movement of the customer, the contractual clause considerably reduces the ability of an authorised distributor to sell the contractual products to customers outside its contractual territory or area of activity. It is therefore liable to restrict competition in that sector." Pierre Fabre (para.38)*

The "by object" treatment of online sales bans arguably makes greatest sense in the context of the developing Digital Single Market within the EU, whereby the prohibition of online sales has a disparate impact on potential customers from other Member States, who are denied perhaps the only practicable means to source goods and services cross-border.[56] This is consistent with the approach of the European Commission towards other restrictions to e-commerce, such as the so-called geo-blocking, which is the subject of recent EU secondary legislation largely prohibiting such practices.[57] A rather different approach has been advocated in Australia to what is termed "international price discrimination": the national Competition Policy Review argued that such concerns are better addressed through consumer education as opposed to any legislative solution (Commonwealth of Australia, 2015).

73. Outside the market integration context, a deep scepticism of online sales bans can still be defended, nonetheless, insofar as such prohibitions represent a disproportionate limitation of intra-brand competition in order to achieve legitimate efficiencies, such as protecting retailer investment, ensuring provision of beneficial services and solving the problem of free-riding –Box 3. According to Marsden and Whelan (2010), these efficiencies can typically be secured through less restrictive means. In particular, a requirement that online retailers must also maintain at least one brick and mortar outlet, in order to ensure adequate provision of in-person customer services, is generally compatible with Article 101(1) TFEU.[58] Outright online sales bans have accordingly been held unlawful by various national competition authorities, including in the United Kingdom[59] and France.[60]

Box 3. Online sales bans as a potential solution to the problem of free-riding

Lao (2010) provides an interesting perspective about the potential of online sale bans as a solution to solve the problem of online businesses free-riding on brick-and-mortar stores, as least when compared with more anti-competitive alternatives. She argued, in effect, that a supplier ban on internet sales may represent the lesser evil in some circumstances.

Specifically, in order to avoid the need for RPM, and thus a direct limitation of retail price competition, she advocated a supplier policy of exclusion of online retailers from the distribution network, thus removing concerns about online free-riding on offline services (though not, of course, free-riding by other brick and mortar retailers). With the growing importance of e-commerce, moreover, Lao (2010) argued that any such policy would have a self-limiting character: a manufacturer would be obliged to weigh carefully the benefits but also potential disadvantages of restricting access to its products through an increasingly popular retail channel.

Writing in the US context post-Leegin, Lao was unencumbered by any per se rules against vertical restraints, a very different legal landscape to EU competition law. Yet her account offers an interesting challenge to the orthodoxy of the latter, suggesting that online sales are not indispensable to healthy retail competition, particularly where the trade-off is more buoyant or responsive offline competition. The ever-increasing growth of e-commerce indicates, however, a concomitant decreasing pool of retail markets for which online sales can be definitively characterised as suboptimal.

2.4. Online marketplace bans

74. Online marketplace bans represent a less all-encompassing variety of online sales ban: instead of a blanket prohibition of e-commerce channels, retailers are contractually prevented from reselling goods through online marketplaces operated by third party intermediaries. Conversely, retailers are generally permitted to sell through their own online outlets. The principal reason why manufacturers wish to restrict sales through third party online platforms relates to brand image and positioning: manufacturers may be concerned that association with an online marketplace may diminish consumers' perceptions of the quality or value of its products.[61] Other identified concerns include a desire to combat the sale of counterfeit products, the need to ensure adequate provision of specific pre- and after-sales services, the prevention of free-riding on existing distribution channels and a lack of customer service interaction at platform-level.[62]

75. The question of how such restrictions should be approached under competition law is much debated (Oxera, 2017). Ezrachi (2017), arguing for a "by object" condemnation and equivalent classification of such clauses as hard-core restrictions under the VBER, emphasised the pivotal role of online marketplaces in sustaining the vigorous competitive dynamics which mark the e-commerce sector today. Such platforms lower barriers to entry for online retailers, while simultaneously increasing price transparency and reducing search costs for customers.

76. This scepticism is visible in several decisions taken at national level within the European Union, particularly within Germany.[63] The Bundeskartellamt's investigation of Adidas provides a useful illustration. Adidas had prohibited retail resale via "open" marketplaces, including those which facilitated peer-to-peer transactions, the sale of

second-hand goods, or which accepted listings of the same product by several sellers. The German competition authority, taking the view that the prohibition could not constitute a qualitative criterion for the purposes of the *Metro* criteria governing selective distribution under EU law, reached a preliminary conclusion that it breached Article 101 TFEU and the equivalent domestic provision. The case was ultimately settled by the defendant, which changed its conditions of distribution.[64]

77. The wider view, however, is that online marketplace bans are generally defensible under competition law to the extent that these do not preclude online sales more broadly (Witt, 2016, and Colangelo and Torti, 2018). This is consistent with the findings of the European Commission's *E-Commerce Sector Inquiry*, which argued against any *per se* condemnation of clauses on the basis that marketplace bans do not restrict either active or passive sales, nor do they aim at segmentation of the digital single market.[65] This viewpoint is further evident in the recent judgment of the Court of Justice in *Coty* (Box 4).

Box 4. The *Coty* Case

In its preliminary ruling in Coty, the Court of Justice of the European Union was faced with the question of whether a contractual ban on resale of high-end perfumes through online marketplaces, contained within a selective distribution agreement, amounted to a violation of Article 101(1) TFEU or a hard-core restriction under Article 4 of the VBER. The Court took a nuanced approach, distinguishing marketplace bans from more comprehensive online sales bans, while noting that sales through third-party platforms deny manufacturers the opportunity to monitor compliance with the qualitative criteria underpinning any selective distribution system. Notably, the Court invoked the findings of the E-Commerce Sector Inquiry, indicating that the vast majority of e-commerce retailers operate their own online stores either in addition to or instead of using online marketplaces, to support its conclusion that a ban on sales through third-party platforms did not constitute a disproportionate restriction within Coty's selective distribution arrangements.

The judgment can be seen a relatively strong rejection of the reflexive condemnation of all vertical restraints limiting e-commerce. The European Commission, nonetheless, has emphasised that an absence of "by object" condemnation is not equivalent to per se legality, and argues that such a ban may be considered restrictive by effect depending upon market conditions (the precise nature of the restriction, the importance of online marketplaces as a sales channel in the sector concerned, the credibility of brand protection or free-riding claims, etc.).

Source: Coty, paras. 47-49, 52-58. European Commission, E-Commerce Sector Inquiry, paras. 513.

2.5. Price comparison tool bans

78. Price comparison tools assist consumers in locating the best online deals, increasing market transparency and driving price competition within the e-commerce sector. The pricing information that is aggregated and ranked by price comparison tools is, typically, provided by the online retail outlets themselves, which moreover usually pay a per-click fee to the comparison site for each customer that subsequently accesses their website.

79. Many manufacturers view price comparison sites as generally beneficial to their businesses, enhancing brand visibility and consumer information regarding their products.[66] In some occasions, however, suppliers seek to limit retailer engagement with price comparison tools, primarily on the basis that such sites over-emphasise the importance of price competition, thus diminishing other important features of the retail offering, which may have knock-on negative effects for the supplier's brand image.[67]

80. The question of whether restricting access to price comparison tools is compatible with competition law remains largely unanswered. In contra-distinction to its relatively benign approach to marketplace bans, the European Commission declined to adopt a position either for or against such restraints in its *E-Commerce Sector Inquiry*.[68] It noted that price comparison tools do not represent a distinct online retail channel, but instead aim to optimise consumers' interactions with existing channels. Denying access does not therefore restrict a retailer's ability to form a direct relationship with specific customers, but may make it more difficult for retailers to attract customers initially, or for customers to locate appropriate retailers.[69]

81. Conversely, to the extent that ban on recourse to price comparison tools is intended primarily to suppress price competition, an analogy may be drawn to price-hardening effects of indirect forms of RPM, which result ultimately in higher prices to consumers. This concern is discernible in the Bundeskartellamt's enforcement action against ASICS for maintaining a prohibition on dealer use of price comparison engines, subsequently upheld by the highest national court. The infringement decision emphasised the harm to consumers especially that follows from denial of access to such sites: consumers lose the ability to filter out the most suitable offer that is available online.[70]

2.6. "Most-favoured nations" clauses

82. The final key category of vertical restraints frequently utilised in the e-commerce sector concerns so-called "most-favoured nation" (MFN) or online parity clauses. Such restrictions arise sometimes in contractual agreements between online platforms and suppliers that offer goods or services through such platforms.[71] MFN clauses guarantee to a platform that the prices or terms and conditions quoted by suppliers on that platform will be as favourable as those offered on the supplier's own website (the *narrow* clause) or on any other platform (the *wide* clause).

83. MFN clauses differ from the supplier-imposed restraints discussed above, insofar as these typically are utilised by platforms in order to prevent free-riding on investment by *suppliers*. In particular, there is a concern that suppliers may use online platforms to attract customers yet subsequently switch demand to their direct or other sales channels by undercutting prices (Engels et al., 2017). MFNs offer thus some protection to online platforms, by reducing the risk that consumers use the platform to look for information (for instance to compare prices or look for consumer reviews), while buying the product at a lower price on the supplier's website or a competing platform.

84. Nonetheless, MFN clauses raise also a variety of competition concerns, as they are claimed to (1) reduce the incentives for platforms to compete on the commission charged to suppliers (intra-brand competition) or to compete on quality dimensions; (2) to restrict the entry by low-cost retail platform models prices; and (3) to facilitate horizontal collusion between either the suppliers or the platforms, by creating a mechanism to monitor and punish deviators (OECD, 2015). As a result, MFNs might limit innovation and investment by platforms and drive prices up, due to an absence of competition

pressure (Ezrachi, 2015). The risk of harm appears to be particularly accentuated when MFN clauses are *wide* and applied by dominant players. The antitrust considerations also differ depending upon whether the theory of harm advanced is premised upon horizontal or vertical restrictive effects.

85. At the same time, it has been argued that the efficiency effects of MFNs could be achieved through less restrictive means. For instance, the Bundeskartellamt suggests that the free-riding problem could be circumvented through alternative remuneration models based on the charging of a fixed or two-part tariff to suppliers using the platform, or by charging a service fee to consumers that use the platform to seek for information (OECD, 2015). Other alternative remuneration models would include a pay-for-visualisations system, compensating platforms for sales conducted outside the platform or creating a "freemium" model where consumers pay to access a premium service.

86. For all these reasons, and in spite of any efficiency-enhancing effects, online MFN clauses have been subject to repeated antitrust interventions in multiple jurisdictions. Perhaps the most prominent enforcement efforts have occurred in the online travel agency sector, including high profile efforts against prominent platforms Booking.com and Expedia (Akman, 2016, and Caccinelle and Toledano, 2017).

87. Competition agencies have differed in their approaches to the acceptability of MFN clauses. In April 2014, for instance, Booking.com reached a settlement with the competition agencies of France, Italy and Sweden, agreeing to remove wide MFN clauses from its contracts with hotels.[72] The following year, however, Germany's Bundeskartellamt declared equivalent narrow "best price" clauses to conversely constitute a breach of EU and domestic competition law.[73] The Turkish Competition Authority has similarly held Booking.com's practices to constitute a breach of the rules against anticompetitive agreements.[74]

88. In a more recent case, the European Commission successfully pursued Amazon's use of MFN clauses in its own contractual relationship with e-book publishers, which had required publishers to offer Amazon similar terms as those offered to other competitors. The Commission was concerned that these clauses could make it more difficult for other platforms to compete with Amazon by reducing their ability and incentives to develop alternative distribution services.[75] The case was concluded without a formal finding a breach, on the basis of commitments by Amazon to remove MFN clauses from existing and future agreements.[76] A similar investigation into price parity clauses, conducted by the Japan Fair Trade Commission, was closed after Amazon voluntarily altered its business practices to resolve the identified concerns.[77]

89. The general academic view would appear to treat narrow clauses rather more benignly that wide MFN requirements, with greater scope for invoking the efficiency justification provided by Article 101(3) TFEU. Akman (2016) has argued that assessing MFN clauses under antitrust rules governing dominant *unilateral* conduct may present a more legally appropriate approach, insofar as it shifts the focus of inquiry to the existence and exercise of market power. This was the approach taken, for example, by the Turkish Competition Authority in its 2016 infringement decision regarding abusive MFN clauses applied by Yemek Sepeti, an online food services platform.[78]

3. Unilateral conduct by dominant firms

90. Unilateral anticompetitive behaviour occurring within the e-commerce sector typically falls within the purview of competition law only where the defendant holds significant market power (also referred to as dominance or monopoly power). A finding of breach of the unilateral conduct rules thus requires, first, the existence of such market power and, second, anticompetitive behaviour falling within, or sufficiently analogous to, one of the recognised categories of market abuse.

91. The definition of dominance for the purposes of EU competition law refers to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and consumers.[79] Similarly, monopoly power for the purposes of §2, Sherman Act has been defined as the power to control prices or exclude competition.[80]

92. Within the e-commerce sphere, although in theory any relevant economic actor can hold a position of dominance or monopoly power – including manufacturers or retail service providers – attention to date has focused on the question of whether and when online retail platforms can be said to have, in fact, such market power. The e-commerce sector involves some of the world's largest and most prominent companies, including so-called "GAFAM" (Google, Amazon, Facebook, Apple and Microsoft). Yet the mere fact that a firm may be a large and economically powerful company is not necessarily equivalent to market power in the competition law sense.

93. Moreover in most jurisdictions unilateral conduct abuses do not constitute *per se* violations of antitrust law, but instead defendant undertakings retain the possibility of excusing *prima facie* infringements by references to objective reasons, efficiencies or other legitimate business justifications. This possibility is arguably of heightened relevance in the digital context, where constant innovation has delivered significant consumer gains. Indeed, even if e-commerce activities are not quite at the cutting edge of dynamic digital competition, online retail provides much of the funding for innovation activities. As the *Google Search (Shopping)* case illustrates, however, the mere fact that allegedly abusive activities occur within the fast-moving digital sphere provides no guarantee that claimed objective justifications will be accepted by antitrust authorities.

94. This section starts by discussing the exercise of defining a market and measuring market power within the e-commerce context. Then, the section addresses different categories of abuse of dominance that might be observed in e-commerce markets, including exclusionary practices (predatory pricing, refusal to supply, tying or bundling, margin squeeze, forced free-riding and discriminatory leveraging) and exploitative practices (price discrimination and excessive pricing), discussing for each their potential anti-competitive and efficiency effects.

3.1. Market definition within e-commerce

95. An assessment of market power might begin with the task of market definition, the purpose of which is to define the boundaries of competition between firms.[81] Section 1.3 described the common distinguishing characteristics of multisided platforms, which represent paradigmatic examples in e-commerce markets. For the purpose of market definition, of central importance is the existence of multiple independent sources of demand, alongside the fact that pricing significantly above or below marginal cost on one

or more sides of the platform may provide a poor indication of market power (Thepot, 2013).

96. The discussion of how to adapt standard market definition tools, such as the hypothetical monopolist (SSNIP) test, to the particular peculiarities of multi-sided platforms was addressed in detail in OECD (2018). This considered whether platforms such as online marketplaces require the definition of a single multi-sided market, or separate but interlinked markets for each of the sides where the platform operates. In any case, the hypothetical monopolist test should always be adapted to account for the cross externalities between the different groups of users participating in the platform.

97. The result of a market definition exercise can have fundamental implications on the products and, hence, on the types of business models that are considered as competing in the same market. For instance, a narrow definition of a market for services delivered through an online intermediation platform might suggest that platforms only compete with other platforms providing comparable services – that is, Amazon competes with Ebay, Booking.com with Expedia, etc. In comparison, a broad market definition might imply that for certain services the market extends beyond e-commerce intermediation and includes also the direct provision of underlying services – as for example might be the case for ride-sourcing platforms that allegedly compete with taxi services providers (Box 5).

98. A broader consideration when engaging in market definition, to which no definitive answer yet exists, is the extent to which online retailers compete with traditional brick-and-mortar sellers of the same product (Mandrescu, 2017). As Friederiszick & Glowicka (2016) argue, in practice the extent to which offline and online retail channels are substitutable requires a case-by-case analysis, depending upon consumer preferences, product characteristics, and technological and business innovation. The fact that many traditional retailers today maintain an online presence illustrates well this tension: does it make sense to argue that the same product, being sold by the same retailer, generally at the same price, sits in a different product market depending upon whether the customer opts to complete the transaction online or instore?

99. Yet online and offline sales can satisfy different consumer needs – in particular, one or other may be markedly more convenient, depending upon the customer's personal circumstances – and individual consumers may have strong preferences for certain retail channels. Moreover, the "one stop shop" offered by large digital platforms may have no equivalent within the brick and mortar world (Thepot, 2013). From a retailer perspective, offline and online operators typically deploy very different technologies of distribution, which affect, in particular, their distribution costs (Hovenkamp (2016).

Box 5. The Uber Spain case

In the ride-sourcing industry, a broad market definition appears to be implied by the judgment of the Court of Justice of the European Union in Uber Spain. In this case, Advocate General Szpunar (who was not undertaking a market definition exercise) distinguished Uber's intermediation services from those of "mere intermediary" platforms, such as websites which facilitate hotel or flight bookings, suggesting that the former may be indissociable from the tangible product sales underpinning its business model. With mere intermediaries, service providers (hotels, airlines, etc.) function independently, using the platform simply as another way to access consumers; providers set their own terms and conditions of service, including price; and platforms offer consumers a choice between different providers with distinct offerings.

Conversely, Uber drivers pursue an economic activity that exists solely because of its platform; which is presented to customers as a single transport service; and where Uber "exerts control over the key conditions governing the supply". The Court itself adopted the "decisive influence" criterion, well-established in the context of the single economic entity doctrine within EU competition law, to govern determination of whether online intermediation should be aligned with the underlying consumer product; of particular relevance here was the fact that Uber controls the conditions under which transport services are provided by affiliated drivers.

The result was that Uber was treated as a transport services provider, and not merely an intermediation services provider. Although the case concerned EU free movement as opposed to competition law, the logic is arguably transferable to the antitrust context, at least for the perhaps limited subset of online intermediaries which exercise decisive influence over the market activities of dependent retailers/service providers.

Sources: Opinion in Case C-434/15 Asociación Profesional Elite Taxi EU:C:2017:364; Judgment in Case C-434/15 Asociación Profesional Elite Taxi EU:C:2017:981.

3.2. Measuring market power within e-commerce

100. The question of whether the relevant market is narrow or broad is important insofar as it may prove determinative of whether a platform is found dominant or to hold monopoly power. The primary purpose of market definition is to enable calculation of market shares, which function as an initial proxy for market power.[82] Certain commentators have argued against placing undue emphasis on the technical and abstract exercise of market definition and the subsequent calculation of market shares, however, suggesting that greater weight should be given to the more readily demonstrable existence of anticompetitive effects within the market from which market power can be inferred (Kaplow, 2010).

101. Adapting antitrust to the digital economy arguably requires both a reduced emphasis on market definition and market structure, and an increased focus on innovation (Shelanski, 2013). In the e-commerce context, more specifically, it has been suggested that giving undue weight to short-term price effects fails to consider the broader risks, in social welfare terms, of increasing integration and the emergence of online platforms as critical infrastructure within the modern digital economy (Khan, 2017). Conversely, as Hovenkamp (2016) emphasised, in multisided markets it is necessary to consider both the

market shares in any zero-priced segment alongside the firm's share in markets in which it earns its revenues (e.g. advertising).

102. While market shares give a picture of existing competition, competitive constraints sufficient to deny dominance may arise from credible threats of expansion by current competitors or entry by new ones, or countervailing buyer power.[83] At the same time, the existence of significant barriers to entry potentially strengthens the argument that significant market power can arise in digital platform markets (Thepot, 2013).

103. Barriers to entry in platform markets include, first, indirect network effects, whereby the value of a platform to its users increases with increased levels of participation on the other side, e.g. retailers are more willing to pay to list their products on a marketplace with a higher customer base (Shelanski, 2013). Relatedly, advertising revenues provide established e-commerce retailers with an additional income source (Graef, 2015), which can be used to fund service improvements and to reduce retail prices to consumers.

104. Customer lock-in provides a second possible hurdle for potential new entrants (Thepot, 2013). As noted, exclusivity requirements are an uncommon feature of online distribution agreements, while multi-homing by customers is straightforward due to increasing price transparency. Yet consumer inertia may be a concern, especially when platforms make repeated sales easy (e.g. "one click" shopping, whereby the e-tailer retains the customer's payment and delivery details for future visits) and implement loyalty programmes (e.g. Amazon's Prime subscription service, which provides shoppers with free delivery and access to digital content for a yearly fee). Technological locks that prevent switching are a further concern (Hovenkamp, 2016), although such problems may be more prevalent in other areas of the digital economy.

105. Thirdly, access to large quantities of consumer data may provide established online platforms with a competitive advantage (Graef, 2015 and Shelanski, 2013), by facilitating a more successful targeting of services to relevant consumers and better ad targeting. While data is a non-rivalrous good, it is difficult for a potential new entrant to acquire *ex ante* the quantity and type of detailed data required to provide the most effective services to consumers. Accordingly, even if the accumulation of consumer data by an online platform cannot be construed as an *unfair* advantage, it may in certain circumstances constitute a further barrier to entry (Graef, 2015). The extent to which data is a relevant antitrust consideration in digital markets is, however, a disputed question (Lerner, 2014).

106. A related question is whether access to important consumer data, alone, may be sufficient to generate relevant market power in an antitrust sense. While emphasising that any determination is highly context-specific, Graef (2015) identified several explicitly non-exhaustive circumstances which may indicate the existence of market power in a market defined around data. These include circumstances where (1) data is a significant input into the service delivered by the online platform; (2) the incumbent relies upon IP law to deny access to the relevant dataset; (3) there are no or few substitutes available to potential new entrants; and (4) it is unviable for competitors to self-collect data to build a competing dataset.

107. Finally, an important feature of the leading contemporary digital platforms is an increasing conglomeration of functions. Many platforms now operate across multiple product segments, which may combine direct e-commerce activity (e.g. direct retail sales), more oblique e-commerce services (e.g. online advertising), ostensibly zero-price

digital services (e.g. social networking, online search), hardware and software development (e.g. consumer electronic devices, computer operating systems, self-driving cars) and even traditional brick-and-mortar businesses (e.g. Amazon's 2017 acquisition of conventional grocery retailer, Whole Foods).[84]

108. This conglomeration of business activities might amplify existing market power, to the extent that such platforms now function as crucial gateways to the digital economy, generating what Shelanski (2013) described as a bottleneck effect that affects access to a broader universe beyond that of a platform's own products and services. For the purposes of the unilateral conduct rules, it also raises questions of the extent to which dominance within any single product or geographic market may be sufficient to trigger a "*special responsibility*"[85] restraining that firm from anti-competitive behaviour within adjacent or even unrelated markets. For the purposes of EU competition law at least, it is accepted that dominance abuse and anticompetitive effects may all arise in distinct markets yet still constitute a single breach of Article 102 TFEU.[86]

109. This discussion has outlined how and when an online platform operator may be said to hold sufficient market power to potentially trigger application of the antitrust rules governing unilateral conduct. It leaves open the question of whether dominance is likely to arise in any relevant segment of the e-commerce sector. To the extent that online retailers compete with conventional brick and mortar outlets, however, it may be doubted whether sufficient market concentration is likely to arise in practice to sustain dominance, at least in the short-to-medium term. Accordingly, although the discussion to follow considers potential unilateral theories of antitrust harm, such considerations are relevant *only if* a would-be defendant holds sufficient market power independently to trigger application of competition law.

3.3. Predatory pricing

110. Predation entails pricing below a relevant measure of a dominant's firm costs, in an effort to undercut rivals and drive them from the market (OECD, 2004). Predatory pricing, as a theory of antitrust harm, is premised upon the irrationality of loss-making commercial conduct: a dominant firm which *voluntarily* incurs on-going losses is considered to have no plausible reason for such behaviour *except* exclusionary intent. The presumed ultimate objective of any successful predation strategy is to entrench dominance by excluding rivals and then raise prices to supra-competitive levels, although jurisdictions differ as to whether a likelihood of recoupment is a necessary element of the legal test for predatory pricing.[87] Antitrust scholars disagree, however, about the prospect of genuine successful predation strategies arising in practice.[88]

111. Claims of predatory conduct have been one of the most frequent critiques levelled against e-commerce businesses, although popular concern has not been matched by public antitrust enforcement efforts. Two firms, in particular, stand out for accusations of "charging too little": Amazon, which engages in deep discounting for certain consumer goods, particularly best-selling items;[89] and Uber, which is claimed to unfairly undercut regulated taxi fares in markets in which it operates.[90]

112. Khan (2017) laid out the case against Amazon, by building a theory of harm premised upon (1) foregone profits through loss-leading sales; (2) a strategy of undercutting and then acquiring rivals; (3) the leveraging of market power from the retail to delivery sectors, enabling it to benefit from economies of scale and scope; and (4) so-called "forced free-riding," which is discussed in section 3.7. Khan (2017) does not

engage rigorously with the question of whether Amazon in fact holds a monopoly market position, although much of the author's critique is directed against the neo-classical price theory which underpins conventional approaches to determining market power.

113. The case of Uber is more complex, as the ride-sourcing company has continued to make substantial annual losses to date,[91] while it has faced repeated claims of under-payment by nominally self-employed drivers seeking to earn at least the minimum wage.[92] Again, however, the question of dominance may be doubtful given the existence of multiple substitutes for Uber cab services.

114. Nevertheless, what both the Amazon and Uber examples have in common is, on the one hand, the use of technology to give firms an perceived unfair advantage over "analogue" rivals; while, on the other, sympathetic victims run out of business by (overly)-aggressive competition: the local bookstore going bust, the black cab driver unable to make ends meet. Whether such examples may rise to the level of predatory pricing *as a matter of competition law*, however, is more complex.

115. First, the multisided nature of online platforms, whereby cross-subsidies between participant groups are an efficient feature of the business model, complicates the predation analysis. To the extent that such pricing is considered legitimate, the mere fact that the platform charges below marginal cost on one side cannot provide decisive evidence of predation.[93] This issue arose in a private enforcement case pursued against Google by a French mapping provider, 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 (e.g. advertising) had to be considered (Ronzano, 2015).

116. Second, the dynamic nature of pricing practices within e-commerce markets – whereby prices may fluctuate daily and prices actually offered at a single point may differ between customers – means that it may be difficult to identify the effective price level. Moreover, insofar as price discrimination can be efficient, it might be argued that pricing below average cost to certain customers should be permitted to the extent it enhances consumer welfare overall. The counterargument, of course, is that selective price cuts are more sustainable as part of an ongoing anticompetitive strategy.[94]

117. Third, the test for predation is premised upon a relevant measure of the *defendant's* costs, as opposed to those of its smaller rivals. In retail markets, where the e-commerce giants may exercise significant buyer power which brings down 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 services, the marginal cost of adding additional users to a platform may be low (Hovenkamp, 2016). 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 operator.

118. Finally, in many jurisdictions, predatory pricing is a concern only if dominant firms may subsequently raise prices to supra-competitive levels and earn inflated profits, unchallenged, for an extended period. In e-commerce markets, it remains to be seen whether recoupment is feasible in practice (Khan, 2017). The aggressive nature of price competition online may render e-commerce consumers particularly price-sensitive, while overlap between online and offline retail channels might push consumers back to brick-

and-mortar outlets in response to online price rises. Considerations may differ, however, for predatory practices involving more specialist intermediation services.

3.4. Refusal to supply

119. A second potential theory of harm involves the possibility that certain privately-owned infrastructure or technology within the e-commerce sphere may be deemed "*essential*" to effective competition, with the effect that a refusal to grant access to competitors may constitute monopoly behaviour. Refusal to supply is, generally, a narrowly construed category of abuse, reflecting both a default respect for property rights and concerns regarding the potentially counterproductive impact of any overly-broad duty to deal on innovation incentives of dominant firms (OECD, 2007). Yet most jurisdictions recognise a limited obligation to supply access to indispensable or bottleneck infrastructure or intangible property, where failure to do so would restrict most or all competition in a related market.[95]

120. In the e-commerce context, claims of refusal to supply might potentially arise with respect to at least three aspects of the online retail ecosystem: (i) access to online marketplaces or price comparison tools, which provide a direct gateway by which consumers may access diverse retail offerings (Khan, 2017); (ii) access to physical delivery networks, developed independently by larger e-commerce retailers, which allow lower cost delivery as a result of economies of scale (Khan, 2017); and (iii) access to consumer data, generated by users of an existing e-commerce retail outlet (marketplace or e-tailer), which facilitates more effective tailoring of retail offerings to specific customer preferences (Mandrescu, 2017).

121. There is, however, a general scepticism about the prospects of applying competition law to provide effective solutions to refusals to supply in the e-commerce context (Gal and Elkin-Koren, 2017). A principal objection might be raised concerning whether any of the identified categories might and should be deemed so "indispensable" to effective competition so as to generate a potential duty to deal. Within EU law, the concept of indispensability is defined narrowly, encompassing only circumstances where there is:

> *"no actual or potential substitute on which competitors in the downstream market could rely so as to counter – at least in the long-term – the negative consequences of the refusal. In this regard, the Commission will normally make an assessment of whether competitors could effectively duplicate the input produced by the dominant undertaking in the foreseeable future".* Enforcement Priorities, para. 83.

122. In *Oscar Bronner*, the Court of Justice also emphasised that indispensability is not simply a matter of greater convenience for the rival requesting access, nor is it relevant that duplication would be economically unviable for that undertaking alone due to its small size.[96] The clearest circumstances in which this criterion would thus be satisfied involve natural monopoly infrastructure, facilities that were built with large public subsidies, or property protected by a legal monopoly (including, controversially, IP protection).[97]

123. Returning to the categories above, it may be difficult to argue that this criterion is satisfied in any case. The discussion of the Court of Justice in *Coty* highlighted the limited competitive impact of denying access to online marketplaces (and, by analogy, price comparison tools). Such services comprise merely discrete and limited components of the overarching e-commerce ecosystem. A denial of access may make life more

difficult for competing retailers, but is unlikely to foreclose the possibility of effective competition overall.

124. Plenty of reasonable substitutes exist, too, for the private delivery networks operated by large e-commerce operators. Indeed, *Oscar Bronner* itself involved a request for mandatory access to the regional home-delivery network operated by a newspaper publisher, and was rejected on the grounds precisely that its smaller publishing rival had numerous albeit imperfect substitutes available to it, including sales through magazine kiosks and delivery via the ordinary postal system.[98]

125. The extent to which data may constitute an "essential facility" is highly-disputed. Critics of such an approach emphasise the non-rivalrous nature of data collection, argue that claims for mandatory access effectively enable free-riding by new entrants, and query the utility of data transfers as such as opposed to the innovative—and proprietary—uses made of it by successful digital platforms. On the other hand, it may be virtually impossible for a firm to obtain the sorts of data necessary to build a successful online platform without actually operating within that marketplace, creating a "chicken and egg" problem that could, in some instances, tip access to consumer data into the category of indispensability (Schepp and Wambach, 2016, Graef, 2016 and Lundquist, 2017).

126. Finally, even where access is objectively necessary to compete effectively in an adjacent product market, it remains important to consider whether a policy of forced sharing might prove counterproductive in the long term. As the European Commission's Enforcement Priorities guidance notes, a valid objection may be found in the fact that "*a refusal to supply is necessary to allow the dominant undertaking to realise an adequate return on the investments required to develop its input business, thus generating incentives to continue to invest in the future, taking the risk of failed projects into account.*"[99] 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 term.

3.5. Tying or bundling

127. Tying or bundling refers to sales practices whereby customers are either required or incentivised to buy two or more distinct products as a combined sales package. Tying or bundling may harm competition through the extension of market power from one market segment to another, thereby foreclosing the latter. Particularly where a firm holds significant market power in one product market, it may have the ability to distort competition in adjacent, otherwise-competitive segments, by coercing customers to also favour its products in the latter, in essence leveraging power from one market to another. Yet tying or bundling practices may also generate significant welfare-enhancing efficiencies, rendering any *per se* condemnation inappropriate (Hovenkamp and Hovenkamp, 2015).

128. Claims of tying or bundling practices have arisen on various occasions in digital markets, most notably the enforcement actions taken in the US and EU against Microsoft concerning the technical tying of its Internet Explorer product.[100] In the e-commerce context, tying or bundling cases appear to be less frequent and not always to result in an antitrust violation. For example, a 2007 investigation by the Dutch Competition Authority considered whether Apple was unlawfully tying music services provided via its online music store iTunes to its portable music player iPod, but the case was closed without the

finding of a breach.[101] A recently-closed investigation by the Turkish Competition Authority into alleged tying of Google's search engine and contextual advertising services similarly took the preliminary view that no tying had occurred (Dogan, 2018).

129. While some concerns might arise in respect of dominant platform operators offering multiple services – such as online marketplaces offering both retail listing and delivery services or price comparison sites offering both ranking and advertising services (Mandrescu, 2017) – there are several complications in establishing unlawfully tying in e-commerce markets:

- The first is the treatment of zero-price services, and the question of whether these should constitute discrete services for the purposes of any antitrust tying analysis (Newman, 2015 and Sousa Ferro, 2017).
- A second related question is whether superficially similar online products from a consumer demand perspective should be treated as discrete for the purposes of tying analysis. A prominent example, much discussed prior to the *Google Search (Shopping)* decision, is the treatment of general versus comparison shopping online search services (contrast the very different approaches of Edelman, 2015 and Akman, 2017).
- A third issue is that of coercion. Returning to the online search example, are customers really "forced" to consume unrequested additional services supplied alongside the general search results that were sought? For Akman (2017), the initial provision of search results in no way precludes subsequent consumer choice about which service ultimately to prefer. Edelman (2015), by contrast, emphasised the importance of prominence in the online environment, suggesting that a more favourable placement of a firm's own products may effectively make the consumer's choice for them. Yet Akman counters that it is not inconceivable that customers choose the preferred links, not because they are forced to do so, but because this reflects what is, objectively, the best product.

130. Finally, there is the question of efficiencies, which can in theory provide an objective justification for *prima facie* restrictive tying.[102] An obstacle here, however, is the existence of numerous customer groups within multisided markets. It can thus be asked whether a practice which might cause detriment to one consumer group (through, for example, higher prices in the longer term) can be excused by reference to efficiencies which generate benefits primarily for a distinct group of consumers.

3.6. Margin squeeze

131. Margin squeeze is an abuse which hinges on vertical integration. In essence, where the integrated firm operates as wholesale-level access provider upstream and as retail-level rival, it has the ability to "squeeze" the profit margins of its downstream competitors, through a combination of high access prices and low retail prices. Although well-recognised as a theory of harm within utilities regulation, the status of margin squeeze under competition law remains controversial (OECD, 2009). While EU law recognises margin squeeze as a potential violation of Article 102 TFEU where the dominant firm maintains an unfair spread between wholesale and retail prices which would exclude an as-efficient competitor,[103] margin squeeze does not constitute a standalone abuse contrary to §2 of the Sherman Act, absent evidence of predation or a constructive refusal to deal.[104]

132. The archetypal circumstance in which margin squeeze arises is that of liberalised public utilities, where potentially competitive market segments are opened to competition, yet where the former incumbent monopolist retains control over certain essential infrastructure. Yet the legal test for margin squeeze within EU law is of potentially much broader application, and does not require the presence of either an essential facility or regulatory duty to deal.[105] Thus, margin squeeze might become a potential concern in the e-commerce sector if and when online platform operators extend their business activities into new vertically-related segments (Bostoen, 2017). Where, for instance, an online marketplace competes at the retail level with third party retailers which access final consumers via its platform, this creates at least the *possibility* of margin squeeze.

133. Margin squeeze is problematic from an antitrust perspective to the extent that it forecloses competition on the downstream market by rivals that are equally efficient as the dominant firm. By artificially manipulating the profits to be earned downstream by its competitors, the integrated firm renders their continued market participation ultimately unviable, regardless of whether the downstream rivals are effective or efficient economic operators. Crucially albeit controversially,[106] EU law does not require a finding of indispensability of the upstream input to ground liability for margin squeeze.[107] Thus, breach of Article 102 TFEU could arise even where third party retailers have other viable options in terms of marketing their goods to consumers. EU law does require a finding of anticompetitive harm, however, which is arguably unlikely to arise unless the relevant online marketplace occupies a preeminent market position, benefitting from significant network effects, brand recognition, etc.

3.7. Forced free-riding

134. Forced free-riding is defined by Shelanski (2013) as occurring "*when a platform appropriates innovation by other firms that depend on the platform for access to consumers*."[108] The principal objection to forced free-riding from an antitrust perspective is the extent to which the process of appropriating the developments of downstream rivals discourages future downstream innovation (Shelanski, 2013). Forced free-riding may of course raise intellectual property concerns (Carrier, 2013), although such an approach is dependent upon the existence of patents or other IP protections.

135. A prominent example of forced free-riding from the wider digital economy context involved allegations of content "scraping" by Google, which was claimed to have "*misappropriated the content of certain competing websites, passed this content off as its own, and then threatened to delist these rivals entirely from Google's search results when they protested the misappropriation of their content*."[109] An investigation by the US Federal Trade Commission into these and other practices was subsequently discontinued, following commitments by Google to refrain from such conduct.

136. In the e-commerce context, forced free-riding could potentially encompass copying by an online marketplace operator of the design of popular goods sold by third party retailers through the platform (Khan, 2017). Platform operators have an information advantage here, insofar they can easily identify which goods are bestsellers and, potentially, have the ability to favour their own products in subsequent advertising efforts and search rankings (concerns about discriminatory leveraging are further discussed in section 3.8).

137. The extent to which forced free-riding may constitute a unilateral conduct abuse from an antitrust perspective remains an open question (Shelanski, 2013). Although the FTC's investigation into alleged scraping of content concluded without any finding of breach, three of the five Commissioners involved nonetheless expressed "strong concerns" about Google's practices in this regard.[110] Under EU competition law, it is clear that the indicative list of potential abuses provided by Article 102 TFEU is non-exhaustive, so that forced free-riding by a dominant undertaking could potentially violate that prohibition where it results in anticompetitive foreclosure of efficient competitors.

3.8. Discriminatory leveraging

138. A recurrent feature of the modern platform economy is the fact that successful platforms tend to be active in numerous distinct, yet interlinked, market segments. Accordingly, a firm that is dominant in one product market may seek to extend or "leverage" its dominance into an adjacent segment, by giving discriminatory treatment to its own subsidiary products against other trading partners. Many of the potential theories of harm discussed above are premised, in some sense, upon foreclosure of complementary or vertically related product segments in which the dominant undertaking does not yet possess significant market power.

139. However, the European Commission's infringement findings against Google in June 2017 suggest a stricter or more refined understanding of what constitutes what might be termed "discriminatory leveraging" in e-commerce markets.[111] The *Google Search (Shopping)* decision concerned two sets of adjacent markets: national markets within the EEA for online search services, in which Google was found to hold a series of dominant positions; and comparison shopping services, a category of specialised online search services in which Google competes against numerous other providers. The availability of comparison shopping services has the effect of rendering e-commerce markets more transparent and thus more competitive from a consumer perspective.

140. The European Commission found that Google had, for almost a decade, applied the algorithms underpinning its general search services in order to give a more prominent placement to its own comparison shopping services, while systematically demoting the listing of competing shopping services. It took the view that this manipulation of its general search product provided an "*illegal advantage*"[112] to Google's own product in an adjacent but separate market, which amounted to violation of Article 102 TFEU. A fine of €2.42 billion, the largest ever levied on a single undertaking, was imposed on Google for its violation.

141. The crux of the claim would appear to be access to essential digital infrastructure – Google's online search engine – meaning that the less favourable treatment of other comparison shopping services constituted a constructive refusal to deal. Yet the Commission explicitly declined to apply the legal test outlined in *Oscar Bronner*, on the basis that the *remedy* enforced "*does not involve imposing a duty on the dominant undertaking to transfer an asset or enter into agreements with persons with whom it has not chosen to contract*."[113] *Bronner* itself, however, gives no indication that the criteria outlined relate solely to a particular remedy and there are robust policy reasons for retaining a relatively firm grasp on refusal to deal jurisprudence.

142. The Commission also rejected claims regarding the alleged novelty of the abuse, holding that "*conduct consisting in the use of a dominant position on one market to extend that dominant position to one or more adjacent markets… constitutes a well-*

established, independent, form of abuse falling outside the scope of competition on the merits."[114] This claim appears to put on notice any digital platform, active in multiple markets and dominant in a least one, about the antitrust risks of any commercial strategy favouring that platform's own services at the expense of those of its competitors. Whether this represents a sensible approach for competition law to adopt, given the specific characteristics of digital economy markets, remains a disputed question (Wiethaus, 2015).

143. The findings in this case has generated some controversy, in part due to the difficulty of fitting Google's conduct in a traditional category of exclusionary abuse (Nazzini, 2016, Akman, 2017, and Vesterdorf and Fountoukakos, 2018), and the decision has been appealed.[115] Equivalent preliminary investigations by the US Federal Trade Commission[116] and Turkish Competition Authority (Dogan, 2018), among others, were closed without any finding of breach.

144. Following on from the European Commission's decision, however, the Polish Office of Competition and Consumer Protection (UOKiK) is currently investigating a similar claim. It is alleged that Allegro, a large e-commerce operator headquartered in Poland, has systematically favoured its own product listings and those of larger online sellers, at the expense of smaller or independent retailers. The press release announcing the investigation made reference to the decision in *Google Search (Shopping)*, although it also cautioned that the investigation was at a purely preliminary stage.[117]

3.9. Exploitative practices

145. Finally, it is worth noting the possibility that exploitative concerns might arise in e-commerce markets, in the forms of price discrimination, excessive pricing or slotting allowances. Exploitative harms are not typically considered to be an enforcement priority in contemporary competition law systems,[118] and indeed fall outside the ambit of the unilateral conduct provisions within some jurisdictions. A growing concern with fairness and inequality within the antitrust context (Lamadrid de Pablo, 2017, and Ezrachi and Stucke, 2018), however, may merit greater application of such prohibitions going forward.

146. First, price discrimination involves, in essence, the charging of different prices for the same product to similarly-situated groups of consumers (OECD, 2016b). Price discrimination is a particular concern within e-commerce markets insofar as widespread personal data-collection and use of price-setting algorithms enables online retailers to offer customers personalised pricing, which takes account of a customer's past shopping habits and perceived willingness to pay (Maggiolini, 2017). 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 (Townley et al., 2017).

147. Second, excessive pricing involves the charging of what are deemed to be unfairly high prices to consumers compared with the perceived value of the product concerned.[119] The increasingly vigorous retail price competition driven by the growth of e-commerce arguably makes it relatively implausible that excessive pricing is a significant problem in digital markets. As competition matures, and if dominant retailers emerge, however, excessive pricing could become a concern. Moreover, the e-commerce sector is host to many intermediate markets (such as online marketplace services, advertising, etc.), where excessive pricing may be a more immediate issue (Mandrescu, 2017).[120] Where online firms have a high ratio of fixed to variable costs, however, it may be necessary to

consider pricing over a longer time horizon in order to avoid false positives which fail to reflect product development costs (Hovenkamp, 2016).

148. Third, in retail markets in particular, claims of exploitation arise not only in respect of consumers, but also of smaller suppliers of large retailers, subject to monopsony buying power. In particular, suppliers complain about access payments (also known as slotting allowances, pay-to-stay, listing fees or reverse-fixed payments), whereby manufacturers are required to make payments to retailers in order to have their goods stocked within a retail outlet. Access payments may also come within the competition rules governing vertical agreements, although such arrangements are typically viewed as unproblematic in the absence of market power.[121]

149. The effects on competition of access payments are much disputed (Klein and Wright, 2007, and OFT, 2013), suggesting that *per se* condemnation of such practices even by dominant firms would be inappropriate. Yet, particularly where access to a specific retail outlet is considered indispensable to competition within the relevant upstream market, the extraction of very high fees from suppliers might be viewed as an unfair or exploitative practice by dominant retailers. The Japan Fair Trade Commission, for example, is currently investigating claims that Amazon has breached the antitrust rules prohibiting abuse of superior bargaining power, through a practice of requiring suppliers to cover the cost of discounting their products sold directly by Amazon through its e-commerce platform.[122]

4. Other antitrust issues in the e-commerce sector

4.1. Horizontal collusion

150. Horizontal collusion is widely recognised as one of, if not *the*, principal concerns and thus priorities of competition law enforcement. In the e-commerce context, horizontal collusion implies, in effect, a cartel between competing suppliers or retailers. Despite claims about the ostensible exceptionality of the digital economy, such fears do not extend to condoning or excusing hard-core cartel behaviour. Accordingly, where evidence exists of secret price-fixing, market-sharing or other hard-core conduct, such collusion should fall within the *per se* antitrust prohibition of cartels (Hovenkamp, 2016).

151. In practice, however, uncovering robust evidence of collusion is complicated by the specific dynamics of e-commerce markets, including the high degree of transparency and the widespread use of algorithms in the retail price-setting process (Ezrachi and Stucke, 2016, OECD, 2017, and Janka and Uhsler, 2018). In effect, price-tracking and price-setting software can outsource the running of retail cartels to computers, which are tasked with determining supra-competitive pricing and monitoring deviations between competitors. Competition authorities may accordingly require new investigative tools and additional resources to uncover and gather sufficient evidence of collusive behaviour in e-commerce markets. An example is the recent establishment of a Data Analytics Unit within the Australian Competition and Consumer Commission.[123]

152. Where there is sufficient evidence of an underlying agreement or concerted practice between rival retailers, even if the day-to-day implementation of the cartel has been delegated to the algorithms used by individual retailers, it is relatively uncontroversial that this price-setting activity should fall within the cartel prohibition. An example is the case of *United States v. Topkins*, in which an individual was successfully

prosecuted by the US Department of Justice for a price-fixing cartel involving the sale of posters on Amazon Marketplace (Mehra, 2016). Crucially, the cartel was implemented through coordination of the relevant retailers' automatic price-setting algorithms, using computer code written by the defendant. A similar case was pursued by the UK's Competition and Markets Authority, involving two defendants which sold posters and frames again via Amazon Marketplace, which resulted in the first ever director disqualification issued by the CMA.[124] As the CMA's press release reported, "*[t]he agreement was implemented by using automated repricing software which the parties each configured to give effect to the illegal cartel*."[125]

153. The key challenge in such cases, unsurprisingly, is to establish concrete evidence of collusion between competitors over and above the mere existence of parallel price-setting algorithms. Although the latter generally provides evidence of tacit collusion, in most competition systems purely oligopolistic behaviour falls outside the ambit of the cartel prohibition, at least in the absence of plus factors confirming the existence of anticompetitive coordination. While some commentators have called for a rethinking of the antitrust approach to tacit collusion given the specific challenges posed by algorithmic price-setting (Gal and Koren-Elkin, 2017), for others strong policy arguments continue to lean against undue interference in the legitimate freedom of businesses to adapt their commercial behaviour in relation to that of their rivals (Lindsay and McCarthy, 2017).

154. In the absence of evidence of anticompetitive intention yet where parallel pricing policies have obvious anticompetitive effect, Blockx (2017) suggested that taking antitrust enforcement against the relevant behaviour, but without imposing any penalties, might provide a compromise solution. Such an approach appears more pragmatic than principled, however, insofar as it fails to address the fundamental problem that tacit collusion typically fails to evince sufficient evidence of *actual* collusion to trigger application of the competition rules.

4.2. Hub-and-spoke collusion

155. A second issue of potential concern in e-commerce markets is the possibility of horizontal collusion taking place through parallel vertical restraints: the so-called "hub-and-spoke" cartel.[126] To give effect to a hub-and-spoke cartel, typically the e-commerce platform takes on the *de facto* roles of cartel organiser and enforcer, coordinating the commercial behaviour of various suppliers or retailers which either provide goods or services to, or contract with customers via its platform. A hub-and-spoke cartel renders direct horizontal collusion largely unnecessary, insofar as alignment of competitor behaviour can be achieved instead through a series of apparently freestanding vertical commitments between the platform and third parties.

156. The core of any successful antitrust enforcement against a hub-and-spoke cartel is to demonstrate sufficient evidence of *horizontal* coordination arising from the nominally *vertical* restraints that are visible within the market. Several recent cases involving e-commerce markets demonstrate when and how this might be the case under competition law.

157. The *Apple (E-Books)* case, pursued by the US Department of Justice, concerned anticompetitive effects arising from Apple's adoption of an agency model for e-books sold through its online e-commerce platform. The key antitrust concern was the opportunity this afforded to the six major book publishing companies within the US to coordinate their wholesale pricing behaviour. Specifically, the negotiation and

implementation of this market-wide pricing model was construed as a horizontal price-fixing conspiracy, "*orchestrated*" by Apple through a series of vertical contracts with its suppliers. Importantly, this meant that the conspiracy constituted a *per se* violation of §1 of the Sherman Act, an approach upheld by the Second Circuit on appeal.[127]

158. The appropriateness of the *per se* condemnation of this ostensibly vertical arrangement, despite the Supreme Court's earlier holding in *Leegin*, is disputed. Hovenkamp (2016), for example, emphasised the extent to which the restraints, in substance, constituted a "naked" restriction of competition. Klein (2017), by contrast, has argued that the vertical components of the arrangement had no effect in facilitating the horizontal conspiracy, and thus *per se* condemnation was inappropriate.

159. Enforcement action was likewise pursued in this instance by the European Commission under Article 101 TFEU.[128] Although the case was concluded by negotiated settlement, thus precluding any formal finding of breach, the Commission similarly took the preliminary view that the series of vertical negotiations occurring between Apple and book publishers could have horizontal implications, insofar as the platform operator kept individual publishers informed of the status of equivalent negotiations with rivals.

160. The Competition Bureau of Canada has also investigated pricing practices within the e-books sector, subsequently entering into a series of consent agreements with various publishers individually which prevented each of them from impeding retailer discounting.[129] Notably, these consent agreements were repeatedly challenged by Kobo, an e-reader manufacturer and e-book retailer, on the basis that it had suffered significant financial detriment as a result, although its most recent challenge was rejected in February 2018.[130]

161. An interesting aspect of the various *E-Books* cases is the fact that the distribution arrangements were prompted originally by Apple's entry into the e-book market with the launch of the iPad in 2010, challenging the then market-leading position of Amazon as online e-book retailer. The agency model moreover reflected significant supplier dissatisfaction with Amazon's low pricing policies, which publishers considered to have a detrimental effect on the health and sustainability of the book publishing sector (Klein, 2017). The circumstances in which low – or "predatory" – pricing by online retailers might constitute a standalone competition concern was considered in section 3.3.

162. Specifically in the context of Article 101 TFEU, the judgment of the Court of Justice in *ETURAS* similarly addressed the question of when bilateral vertical contacts via an internet platform might constitute horizontal coordination between platform users.[131] Here, a travel booking platform contacted travel agencies by email to inform them of a platform-wide policy to reduce the maximum permissible discount rate for retail customers. Although agencies were not prohibited from granting discounts above the specified rate, additional technical steps were required to do so.

163. Reaffirming that passive modes of participation can establish anticompetitive coordination under Article 101(1),[132] the Court of Justice held that mere receipt of the message could demonstrate horizontal concertation where:

1. The agencies were aware of its contents, and could be regarded as having tacitly assented to the common anticompetitive practice
2. They subsequently engaged in anticompetitive conduct
3. A relationship of cause and effect between concertation and conduct could be established.[133]

164. Where the first element was not satisfied, however, the mere fact that the agencies participated in an online platform that incorporated anticompetitive technical restrictions was insufficient to establish coordination. Thus, tacit assent to the anticompetitive action – in effect, participation in the cartel – had to be demonstrated by other evidence.[134]

165. The key takeaway from *ETURAS* is that participation in an online platform that imposes restrictions intended to suppress competition between service providers *can* be conceptualised as indirect coordination between service providers under EU competition law, but only where it is established that service providers both knew of the restriction and acted accordingly. Moreover, the Court emphasised the highly fact-specific nature of such an assessment, making it largely impossible to determine, in the abstract, whether a specific business model or form of restraint might constitute horizontal coordination.

166. Two further recent cases dealing with Article 101 TFEU outside the e-commerce context add to our understanding of when apparent online hub-and-spoke collusion may violate EU competition law. *VM Remonts* involved allegations of bid-rigging through an independent consultant who prepared tender submissions for several rival undertakings, sharing commercially sensitive information in doing so. The Court of Justice held that a competitor could not be found to have participated in horizontal coordination if it was wholly unaware that the consultant would use its information in this manner.

167. To establish a cartel, it was necessary to demonstrate either that the defendant had directed the consultant to act anti-competitively, that it was aware of the anticompetitive conduct of the consultant and its rivals and had intended to contribute to their objective with its own behaviour, or that it could have reasonably foreseen such conduct and was prepared to take the risk.[135] The *VM Remonts* case thus emphasises that horizontal cooperation effected through a vertical conduit requires at least some awareness and acceptance by the service provider of the fact that it is, in effect, participating in a cartel with competitors.

168. Even where the necessary requirements to establish *horizontal* coordination are satisfied, the *vertical* nature of the arrangement, and thus the involvement of the platform operator, remains relevant to liability. Specifically, where an online platform operator functions in effect as "*cartel facilitator*",[136] even if not itself active on the market concerned, *AC-Treuhand* confirms that it can be found to have participated in the cartel and thus liable for breach of Article 101(1).[137] It is necessary to establish that the platform operator was aware of the downstream cartel activity, or at least could have reasonably foreseen the possibility, and that it intended to contribute to realisation of the anticompetitive objectives of the cartelists by its conduct.[138]

169. In *AC-Treuhand*, those requirements were satisfied where the defendant, with full knowledge, provided administrative services such as organising cartel meetings and collecting data on adherence, with the purpose of achieving the anticompetitive objectives underpinning the cartel.[139] Thus, if a platform operator knowingly facilitates anticompetitive coordination between service providers, it can be held liable as if it participated itself in the horizontal conspiracy. Such reasoning is also reflected in the injunction issued against Apple in the US *E-Book* case, preventing it, *inter alia*, from entering into agreements with the relevant publishers that restricted its own ability to set retail prices for e-books.

4.3. Merger control

170. Finally, brief consideration is given to merger control issues which may arise in e-commerce markets. To date, few proposed or completed large mergers have raised significant competition concerns directly from an e-commerce perspective, although ancillary services such as payment systems[140] and online advertising[141] have been considered in concluded transactions. As the sector matures, however, it is to be expected that greater numbers of cases will arise.

171. Again, the two-sided nature of online platform markets, the increasing centrality of technology-driven competition and the competitive constraints posed by offline competition are all relevant considerations for any merger assessment. Mergers between close competitors are likely to prove problematic even in the digital context, as the Swedish Competition Authority's decision to block a merger involving two competing online real estate platforms demonstrates.[142] Increased recourse to mechanisms of algorithmic competition is furthermore relevant here, and indeed merger control may present one of the better tools available to address the oligopolistic market dynamics that can arise.

172. An increasingly important concern of merger control in the digital context is the accumulation of consumer data (Lao, 2018b). As discussed, data functions as an important input for many e-commerce business models, and thus its large-scale acquisition may operate as a barrier to entry. Overlapping data collection activities may generate horizontal dimensions to a transaction that, at first glance, appears to involve merely complementary or vertically-related activities (Shelanski, 2013). Yet to the extent that significant accumulations of consumer data may be viewed as an "indispensable" input, this may have implications for both horizontal and non-horizontal merger analysis. Data protection has also been recognised as a potential parameter of quality-based competition within merger control, a development of relevance to any e-commerce operator which collects and makes use of user data.[143]

173. A controversial question is the extent to which increasing conglomeration within the digital economy, including within e-commerce retail platforms, should be a cause for concern in merger proceedings (Khan, 2017). This question came to a head in 2017 with the acquisition by Amazon of offline grocery retailer Whole Foods, a transaction granted apparently straightforward regulatory approval by the US Federal Trade Commission,[144] yet subject to considerable political and popular opposition.[145]

174. While conglomerate issues in merger control are treated as almost invariably unproblematic, the unique and rapidly developing characteristics of digital markets may merit further scrutiny. Ultimately, however, such concerns may have less to do with market power in the antitrust sense and may instead reflect wider social or political concerns about, e.g., equality, democracy or globalisation. The extent to which ostensible competition issues may be better served by recourse to regulatory mechanisms other than competition law is the focus of the next section.

5. Competition and regulation of e-commerce

175. Potential solutions to market problems arising within the e-commerce sector extend beyond the realm of competition law. While many commentators insist that the existing antitrust framework retains sufficient flexibility to meet the specific challenges

posed by the digital economy (Iacovides and Jeanrond, 2017), as the above discussion has illustrated, many of the claimed market problems that arise lie at or in fact exceed its established parameters. Indeed, to the extent that gaps exist within the current competition law framework governing allegedly anticompetitive conduct in e-commerce markets, a more principled approach may be to look outside antitrust for appropriate regulatory solutions (Lindsay and McCarthy, 2017).

176. Discussing specifically the context of platform competition, Ezrachi (2015) has cautioned that a distinction should be drawn between competition law analysis and state intervention through legislation or regulation, which frequently reflect an alternative, though legitimate, political or social agenda. The latter may be required if competition analysis reveals an absence of cognisable harm in the technical antitrust sense, yet where the state is concerned with wider distributional or other consequences. Three such alternative regulatory avenues will be surveyed here: issue-specific legislation; consumer protection and data protection laws; and quasi-utilities regulation of online platforms.

5.1. Issue-specific regulation

177. A first option is to enact issue-specific legislation, which prohibits or regulates practices of particular concern within the e-commerce sector. One example is the Geo-blocking Regulation, recently enacted by the European Union, which straightforwardly prohibits certain business-to-consumer practices which would prevent the sale of goods or services through e-commerce channels cross-border.[146] Another example is the French legislator's decision to ban the use of all MFN clauses within the French hotel sector, known as the "Law Macron", which departs from the approach of the French competition authority which had viewed narrow MFN clauses as permissible from an antitrust perspective (Ezrachi, 2015).

178. Such legislation also finds an offline analogue in the grocery sector codes of practice found in various jurisdictions, which impose restrictions on how grocery retailers may deal with their suppliers[147] – an approach which takes practices such as access payments, discussed in section 3.9, outside the necessary purview of competition law.

179. Issue-specific legislation removes ambiguity regarding the applicable scope of the antitrust rules in e-commerce markets, generating certainty and clarity for e-commerce businesses, and ensuring adequate protection for their customers. As the Law Macron demonstrates, where necessary such legislation may depart from the existing scope of competition law, thus enabling legislators to prioritise values other than efficiency, such as fairness or market pluralism.

180. On the other hand, issue-specific legislation may sacrifice the flexibility of the competition rules, reducing the possibility to revisit the ambit of the relevant prohibition as markets or economic thinking evolves, a limitation which may be of marked relevance in fast-moving digital markets. It also depends upon generating adequate political support to pass the relevant legislation – and thus sidestepping often considerable lobbying efforts which seek to curtail what regulation, if any, pertains to the digital economy.

5.2. Consumer and data protection law

181. A second option is to strengthen consumer protection laws or data protection laws as these relate to e-commerce channels. Consumer protection rules potentially regulate almost all aspects of an e-commerce transaction, from pre-purchase (e.g. advertising,

information requirements, unfair commercial practices), to purchase (e.g. unfair contract terms, online payment security) and to post-purchase (e.g. dispute resolution, redress requirements) (see UNCTAD, 2017). Data protection is often treated as a subset of consumer protection (UNCTAD, 2017), although its particular importance in this context merits discrete consideration.

182. An absence of harmonisation in consumer and data protection law has been identified as a key barrier to cross-border online sales (Von Rompuy, 2017). Uncertainty exists regarding the extent to which domestic consumer protection laws, for instance, bind retailers established in other jurisdictions or apply to online intermediaries (e.g. marketplaces) which facilitate but do not participate in online consumer transactions, or even non-professional sellers operating under a sharing economy model (Busch et al., 2016). Consumer trust in e-commerce channels is an apparent prerequisite for, or at least a driver of, increased levels of online retail activity (Cardona et al., 2015), meaning that a strengthening or at least clarifying the ambit of online consumer protection may subsequently increase the effectiveness of competition within the sector.

183. Consumer protection may also provide a more effective or suitable response to alleged antitrust violations in e-commerce markets. This includes certain exploitative practices, such as price discrimination through personalised pricing strategies (CERRE, 2017). Likewise, comparing the identified concerns in the *Google Search (Shopping)* case to a form of deception, Hovenkamp (2016) argued that requiring greater provision of consumer information offered a more appropriate response: that is, making users aware of when Google priorities its own services, thus enabling consumers to make an informed choice about the reliability of the recommendations therein.

184. An interesting application of consumer protection law in this context is the Competition Bureau of Canada's pursuit of Amazon for misleading pricing practices, specifically its failure to verify the accuracy of manufacturer "list prices" against which Amazon measured its claimed lower retail prices. Although the case was pursued under the Competition Act, the Competition Bureau invoked specific provisions regulating truth in advertising, thus falling outside the purview of competition law as such.[148]

185. While in general e-commerce transactions fall within the purview of ordinary consumer protection law, the extent to which countries make specific provision for e-commerce, however, differs considerably across OECD countries. Korea, for example, has since 2002 had a specific Act on Consumer Protection in Electronic Commerce, enforced by the Korea Fair Trade Commission, which provides a series of consumer protection rights that apply specifically in the e-commerce context (Sohn, 2016). More recently, the European Commission has pushed for a strengthening of national consumer protection laws within the EU as a key component of its Digital Single Market Strategy.[149]

186. In 2016, the OECD Council issued a comprehensive recommendation on consumer protection in e-commerce, identifying numerous key principles that should underpin policy frameworks for the protection of consumers in e-commerce, including:

- Transparent and effective protection
- Fair business, advertising and marketing practices
- Clear, accurate and accessible online disclosures about the business, the products concerned and the transaction itself
- Fair confirmation processes

- Adequate online security and protection of consumer privacy.[150]

187. In the absence of hard law, voluntary self-regulation is an option, such as the Code of Good Practice for Electronic Commerce developed by the Chamber of Commerce of Santiago, Chile (Prieto Saldivia, 2016).

188. A related option, of relevance to e-commerce businesses which rely upon the collection and manipulation of consumer data, is to strengthen specific data protection laws in order to restrict the data that may be collected by online retailers and platforms and the commercial uses to which it may be put. Ohlhausen and Okuliar (2015), exploring the boundaries between antitrust and consumer privacy laws, argue that the former should take precedence where the alleged harm relates to a diminution of economic efficiency, whereas the latter are more appropriate if the potential harm undermines the terms of the bargain between a company and its individual consumer.

189. E-commerce operators are, of course, subject to ordinary data privacy requirements, although these vary considerably between jurisdictions. An interesting open question is whether the increased use of techniques like predictive analytics within the e-commerce sphere may require more intensive regulation, whether from a data privacy or consumer protection perspective (Spencer, 2015). Zuiderveen Borgesius (2015), for example, has argued that personalised pricing generally entails the processing of personal data. Since data protection law requires firms to inform customers about the purpose of processing their personal data, he suggests that, at a minimum, users must be told if online retailers personalise prices. Strengthening the rules governing the *portability* of non-personal data, moreover, could potentially serve to overcome some of the barriers to entry presented by large-scale data collection by established e-commerce operators.[151]

190. The trade-off, however, is that both consumer protection and data privacy laws are costly, both in terms of the actual costs to businesses of compliance with such regimes and in terms of potential competition and innovation foregone in order to avoid potential breaches. Such costs are almost inevitably passed on, ultimately, to consumers, making it vitally important to strike the right balance between necessary regulation and unnecessary gold-plating.

191. Both types of laws, moreover, have significant gaps in terms of coverage. Consumer protection laws typically do not apply to business-to-business transactions, meaning that unfair or anticompetitive practices by online intermediaries against traders using their services are unlikely to be prohibited. Similarly, data privacy protections often extend only to natural persons. Moreover, this focus on protection of final consumers arguably renders both areas of law relatively inapt in terms of the pursuit of open and undistorted competition within e-commerce markets. To achieve the latter goal, competition law itself may present a more appropriate tool.

5.3. Quasi-utilities regulation

192. A third option would be for "essential" online platforms to be regulated, *ex ante*, along the same lines as traditional public utilities (Ezrachi and Stucke, 2016 and Khan, 2017). If implemented, platforms would become subject to positive requirements of market conduct, for example relating to pricing, mandatory access or investment (Khan, 2017). Such an approach revolves around the critical role played by certain platforms as gatekeepers to the digital economy more broadly, including access to e-commerce markets. It is, moreover, consistent with the underlying logic of decisions such as *Google Search (Shopping)*, the *Apple (E-Books)* investigations and the online travel agency cases,

each of which is premised upon the ability of significant online platforms to distort competition within the e-commerce sector more broadly.

193. The extent to which such a solution is necessary or even desirable is deeply disputed (O'Connor, 2016). Utilities regulation, generally, has come under sustained attack since the 1970s as a costly and unnecessary enterprise, allegedly prone to capture by regulated entities, and generating outcomes that are almost invariably perceived to be suboptimal to those of the free market. Moreover, even if regulation continues to be tolerated within conventional public utilities sectors (Baldwin et al., 2011), the justification for its extension to the "new" economy, marked as it is by rapid innovation, is arguably less clear.

194. Several relatively uncontentious observations can hopefully be made. First, although it is possible to apply the ordinary competition rules to capture many market problems arising within the e-commerce sector (Iacovides and Jeanrond, 2017), sometimes antitrust may be a poor fit (Kjølbye et al., 2015). As the above discussion illustrated, this is particularly the case in relation to unilateral conduct, which is the area of antitrust with the greatest overlap with utilities regulation.

195. In addition, online platforms raise difficult questions across the entire legal spectrum, and have proven adept at escaping many of the conventional legal regimes designed to regulate equivalent social and economic issues within more analogue settings (Cohen, 2017). Yet, as Lynskey (2017) argued, insofar as regulators are increasingly concerned with so-called "platform power", this is not a precisely equivalent concept to "market power" as the latter is deployed in conventional antitrust analysis. Accordingly, to the extent that quasi-utilities regulation is deemed appropriate for e-commerce or adjacent markets, it is important to understand that the compelling public interests at issue encompass more than the simple control of monopoly power, in the sense of an ability to raise prices significantly above marginal costs.

196. At present, leaving aside largely non-economic issues like fake news, the prospects for the wide-scale regulation of online platforms as quasi-utilities appear relatively remote. In its 2016 Communication on the regulation of online platforms, for example, the European Commission rejected suggestions for the wholesale regulation of even leading online platforms, and moreover recommended greater deregulation of more conventional markets to match the unencumbered digital economy where possible.[152] Yet the idea has received considerable recent public attention,[153] suggesting a general unease with the developing dynamics of competition in digital markets, and also perhaps reflective of the increasingly pervasive role that such platforms play in almost all areas of contemporary society.

6. Concluding remarks

197. E-commerce presents an interesting hybrid in the context of the evolving online economy. It is an intrinsically digital sector, being inherently reliant upon the internet both to attract customers and conclude transactions, and moreover it functions as one of the key "monetised" components of the digital ecosystem. Yet e-commerce operators continue to compete against brick and mortar retailers and service providers, and there remain limits to the extent to which online innovation can improve offline customer experiences of the products ultimately purchased. The unique dynamics of e-commerce markets, however – marked by significant transparency, aggressive competition, and

increasing recourse to algorithmic mechanisms to direct economic behaviour – sets the sector apart from conventional retail competition.

198. The potential competition concerns described in this background paper merit attention and, occasionally, close scrutiny by competition agencies, but do not necessarily present an automatic prescription for antitrust intervention. Furthermore, as e-commerce continues to develop rapidly across OECD countries, the identified market dynamics are likely to shift, and new competition concerns may emerge. As with other areas of the digital economy, enforcers considering action within e-commerce markets should balance, on the one hand, the potential need for a more flexible application of the antitrust rules to address novel forms of abuse, against, on the other, the rationale for regulatory restraint in quickly-evolving markets in which innovation plays a central role. Policymakers should also bear in mind the breadth of the regulatory toolbox available: if competition law cannot provide a satisfactory solution, then consumer protection, data privacy or sector-specific approaches may provide a more appropriate legal remedy.

Endnotes

[1] European Commission, *Final Report on the E-Commerce Sector Inquiry* (COM(2017) 229 final), published Brussels, 10 May 2017.

[2] See, e.g. Reuters, "Mexico anti-trust regulator probes e-commerce abuses," 1 February 2018.

[3] This excludes most financial services activity, from spot trading to online retail banking, and internet-focused services, such as cloud computing or website-hosting services.

[4] European Commission*, E-Commerce Sector Inquiry*, para.8.

[5] See European Commission, *E-Commerce Sector Inquiry*, para.75.

[6] For example, 92% of manufacturers of consumer goods surveyed by the European Commission's *E-Commerce Sector Inquiry* reported sales via their own websites, although this did not preclude sales through other channels, both offline and online (para.93, and further discussion at paras.179-81).

[7] European Commission, *E-Commerce Sector Inquiry*, paras.189.

[8] European Commission, *E-Commerce Sector Inquiry*, paras.99-118.

[9] European Commission, *E-Commerce Sector Inquiry*, para.14.

[10] European Commission, *E-Commerce Sector Inquiry*, paras.147-57.

[11] European Commission, *E-Commerce Sector Inquiry*, paras.116-126.

[12] See, e.g., *Financial Times*, "Beware online words that can lead to a libel charge," 14 July 2015, and *The Telegraph,* "Garden shed becomes top-rated London restaurant on TripAdvisor after site tricked by fake reviews," 6 December 2017.

[13] European Commission, *E-Commerce Sector Inquiry*, para.310.

[14] European Commission, *E-Commerce Sector Inquiry*, para.164.

[15] Certain commentators, however, disagree with the zero-price label, arguing that users effectively pay for services by sacrificing personal data or offering attention to advertisers (Newman, 2015, and Gal and Rubinfeld, 2016).

[16] Japan Fair Trade Commission, *Guidelines Concerning Distribution Systems and Business Practices under the Antimonopoly Act*, revised version issued 16 June 2017, English translation available online at: http://www.jftc.go.jp/en/legislation_gls/imonopoly_guidelines.files/DistributionSystemsAndBusinessPractices.pdf.

[17] Gönenç Gürkaynak, "One Step Closer to EU Approach: Amended Guidelines on Vertical Agreements," *Chambers and Partners*, published 3 April 2018, available online at https://www.chambersandpartners.com/article/3439/one-step-closer-to-eu-approach-amended-guidelines-on-vertical-agreements.

[18] *Leegin Creative Leather Products, Inc. v. PSKS, Inc.,* 551 U.S. 877 (2007).

[19] Cases C-501/06 P *GlaxoSmithKline Services and Others v Commission and Others* EU:C:2009:610 and C-439/09 *Pierre Fabre Dermo-Cosmétique SAS v Président de l'Autorité de la concurrence and Ministre de l'Économie, de l'Industrie et de l'Emploi* EU:C:2011:649.

[20] See, e.g., European Commission, *Guidelines on Vertical Restraints* (OJ C 130/1, 19.5.2010), paras.106-9 in particular.

[21] See, e.g., Cases C-345/14 *SIA „Maxima Latvija" v Konkurences padome* EU:C:2015:784, paras.19-24 in particular.

[22] European Commission, *Guidelines on Vertical Restraints*, paras.6 & 97.

[23] See, e.g., *Maxima*, para.29.

[24] This holds true under both US and EU competition law: see *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752 (1984) and Case C-73/95 *Viho Europe BV v Commission of the European Communities* EU:C:1996:405.

[25] European Commission, *E-Commerce Sector Inquiry*, paras.181.

[26] See, e.g., Case C-279/06 *CEPSA Estaciones de Servicio SA v LV Tobar e Hijos SL.* EU:C:2008:485, and Bennett (2013).

[27] See, e.g., the discussion in European Commission, *E-Commerce Sector Inquiry*, paras.188-93.

[28] European Commission, *E-Commerce Sector Inquiry*, paras.213.

[29] European Commission, *E-Commerce Sector Inquiry*, paras.209-12.

[30] Case C-26/76 *Metro SB-Großmärkte GmbH & Co. KG v Commission of the European Communities* EU:C:1977:167, para.21.

[31] Case C-56/65 *Société Technique Minière v Maschinenbau Ulm* EU:C:1966:38,

[32] *STM*, p.250.

[33] *Ibid*, para.259.

[34] European Commission, *E-Commerce Sector Inquiry*, paras.222-26 & 248.

[35] *Ibid*, paras.234.

[36] European Commission, *E-Commerce Sector Inquiry*, para.241.

[37] European Commission, *E-Commerce Sector Inquiry*, para.245.

[38] *Metro*, para.20.

[39] *Pierre Fabre*, para.41.

[40] Case C-230/16 *Coty Germany GmbH v Parfümerie Akzente GmbH* EU:C:2017:941, para.24.

[41] *Pierre Fabre*, para.39.

[42] European Commission, *Guidelines on Vertical Restraints*, para.52.

[43] *Coty*, in particular paras.37-58.

[44] European Commission, *Guidelines on Vertical Restraints*, para.48.

[45] Based on a literal reading of Article 101(1)(a) TFEU, which prohibits agreement to "directly or indirectly fix purchase or selling prices": see Case C-243/83 *SA Binon & Cie v SA Agence et messageries de la presse* EU:C:1985:284, paras.44-45.

[46] In the EU, minimum and fixed RPM require justification by contracting parties by reference to the demanding Article 101(3) TFEU exemption criteria. Guidance on this task is provided in European Commission, *Guidelines on Vertical Restraints*, para.225.

[47] See Jones (2008), Hovenkamp (2010), Elzinga and Mills (2010), Moore (2011), and Gundlach and Krotz (2015).

[48] Fixed and minimum RPM is treated as a 'hardcore' restriction under Article 4(a), VBER; see also European Commission, *Guidelines on Vertical Restraints*, paras.48 & 223-35.

[49] European Commission, *E-Commerce Sector Inquiry*, para.988.

[50] Ibid, para.557.

[51] Ibid, paras.582-588.

[52] Ibid, paras.573-581.

[53] European Commission, *E-Commerce Sector Inquiry*, para.597; Brenning-Louko et al. (2010).

[54] Bundeskartellamt Press Release, "LEGO changes its discount system—Fairer conditions for online sales," published 18 July 2016, available online at https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2016/18_07_2016_Lego.html; see also Silke Heinz, "No toying around—the FCO makes Lego change its discount system to better accommodate online sales," Kluwer Competition Law Blog, published 23 July 2016, available online at http://competitionlawblog.kluwercompetitionlaw.com/2016/07/23/no-toying-around-the-fco-makes-lego-change-its-discount-system-to-better-accommodate-online-sales/.

[55] *Pierre Fabre*, para.47

[56] In this sense, the *Pierre Fabre* judgment is in keeping with the similar vertical decisions in the *FA Premier League* and *GlaxoSmithKline* cases.

[57] See Council of the European Union Press Release, "Geo-blocking: Council adopts regulation to remove barriers to e-commerce," published 27 February 2018, available online at http://www.consilium.europa.eu/en/press/press-releases/2018/02/27/geo-blocking-council-adopts-regulation-to-remove-barriers-to-e-commerce/.

[58] European Commission, *Guidelines on Vertical Restraints*, paras.52-54.

[59] Competition and Markets Authority Press release, "CMA fines Ping £1.45m for online sales ban on golf clubs," published 24 August 2017, available online at https://www.gov.uk/government/news/cma-fines-ping-145m-for-online-sales-ban-on-golf-clubs.

[60] Décision n° 12-D-23 du 12 décembre 2012relative à des pratiques mises en œuvre par la société Bang & Olufsen dans le secteur de la distribution sélective de matériels hi-fi et home cinema, available online at http://www.autoritedelaconcurrence.fr/pdf/avis/12d23.pdf.

[61] European Commission, *E-Commerce Sector Inquiry*, para.478-80.

[62] *Ibid*, paras.481-87.

[63] See, e.g., decision of the Berlin appeals court in Berlin Appellate Court, *An authorised dealer v. Alfred Sternjakob GmbH & Co. KG*, 2 U (Kart) 8/09, 19 September 2013.

[64] See Bundeskartellamt, "Adidas abandons ban on sales via online marketplaces," Decision B3-137/12, published 27 June 2014.

[65] European Commission, *E-Commerce Sector Inquiry*, paras.506-9.

[66] *Ibid*, para.534.

[67] *ibid*, paras.515-18 & 535-37.

[68] *Ibid*, para.542.

[69] *Ibid*, paras.543-55.

[70] See Bundeskartellamt, Case Summary: Unlawful restrictions of online sales of ASICS running shoes, Decision B2-98/11, published 25 January 2016, available online at https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2016/B2-98-11.pdf?__blob=publicationFile&v=2.

[71] See OECD (2015a), Ezrachi (2015), Akman (2016), Caccinelle and Toledano (2017), Baker and Scott Morton (2018), and Mantovani et al. (2018).

[72] See, e.g., *Financial Times*, "Booking.com in European settlement over hotel prices," published 21 April 2014.

[73] See Bundeskartellamt, Case Summary: 'Best price' clause of online hotel portal Booking also violates competition law, Decision B9-121/13, published 9 March 2016, available online at http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Kartellverbot/2016/B9-121-13.pdf?__blob=publicationFile&v=2 .

[74] *CPI Competition Policy International*, "Turkey: Competition board fines Booking.com," published 16 January 2017, available online at: https://www.competitionpolicyinternational.com/turkey-competition-board-fines-booking-com/.

[75] European Commission Press Release, "Antitrust: Commission accepts commitments from Amazon on e-books," published 4 May 2017, available online at http://europa.eu/rapid/press-release_IP-17-1223_en.htm.

[76] Commission Decision of 4 May 2017 in Case AT.40153—*E-book MFNs and related matters (Amazon)*, summary at OJ C 264/7, 11.8.2017.

[77] Japan Fair Trade Commission Press Release, "Closing the Investigation on the Suspected Violation of the Antimonopoly Act by Amazon Japan G.K.," published 1 June 2017, available online at: http://www.jftc.go.jp/en/pressreleases/yearly-2017/June/170601.html.

[78] OECD, *Annual Report for Competition Policy Developments in Turkey*, DAF/COMP/AR(2017)17, published 30 may 2017, p.10.

[79] Case 27/76 *United Brands Company and United Brands Continentaal BV v Commission of the European Communities* EU:C:1978:22, para.65.

[80] *US v. E. I. du Pont de Nemours*, 351 U.S. 377 (1956), 391.

[81] European Commission, *Notice on the Definition of the Relevant Market for the purposes of Community Competition Law* (OJ C 372/5, 9.12.1997) para.2.

[82] Under EU law, a share of 50% or above creates a rebuttable presumption of dominance (see Case C-62/86 *AKZO* EU:C:1991:286, para.60), while shares below 40% are considered "not likely" to sustain dominance (see European Commission, *Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings* (OJ C45/7, 24.2.2009), para.14). The threshold within US antitrust is higher: while a 90% share is sufficient to constitute a monopoly, a share of 65% is "*doubtful*" (*Alcoa*, 148 F.2d, 424).

[83] European Commission, *Enforcement Priorities*, para.12.

[84] See, e.g., *The New York Times*, "Conglomerates Didn't Die. They Look Like Amazon," 19 June 2017.

[85] To use the language of Case C-322/81 *Michelin (I)* EU:C:1983:313, para.57.

[86] Case T-83/91 *Tetra Pak v Commission* EU:T:1994:246.

[87] Contrast the approaches under US and EU competition law. Under §2 of the Sherman Act, it is necessary to show that the defendant had "*a dangerous probability of recouping its investment in below-cost prices*": *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp*., 509 U.S. 209 (1993), 224. By contrast, the Court of Justice in Case C-202/07 P *France Télécom SA v Commission of the European Communities* EU:C:2009:214 explicitly rejected the argument that

"*proof of the possibility of recoupment of losses suffered by the application, by an undertaking in a dominant position, of prices lower than a certain level of costs constitutes a necessary precondition to establishing that such a pricing policy is abusive*" under Article 102 TFEU, although it did note that such evidence may be relevant to, *inter alia*, claims of objective justification (paras.110-11).

[88] See, for instance, the contrasting positions of Crane (2005) and Hemphill and Weiser (2018)

[89] See, e.g., *MLEx Market Insight*, "Amazon critics press for US antitrust probe as e-commerce giant's market share grows," 29 November 2016, available online at https://mlexmarketinsight.com/insights-center/editors-picks/antitrust/north-america/amazon-critics-press-for-us-antitrust-probe-as-e-commerce-giants-market-share-grows.

[90] See, e.g. *The Spectator*, "Sadiq Khan threatens crackdown on Uber, saying allowing its taxis was a 'mistake'," 1 March 2016, and *The Guardian*, "What if Uber kills off public transport rather than cars?" 13 January 2017.

[91] *Financial Times*, "Uber pares quarterly losses and lifts revenues," 14 February 2018.

[92] *The Guardian*, "Uber drivers often make below minimum wage, report finds," 6 March 2018.

[93] See Evans (2016) and Thepot (2013), Newman (2015) and Fletcher (2007).

[94] European Commission, *Enforcement Priorities*, para.72.

[95] See, e.g., in the EU, Cases C-7/97 *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG.* EU:C:1998:569, and T-201/04 *Microsoft Corp. v Commission of the European Communities* EU:T:2007:289, and in the US, *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.,* 472 U.S. 585 (1985), and *Verizon Communications v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004).

[96] *Oscar Bronner*, paras.43-47.

[97] European Commission, *Enforcement Priorities*, para.82.

[98] *Oscar Bronner*, para.43.

[99] *Enforcement Priorities*, para.89.

[100] See *United States v. Microsoft Corporation*, 253 F.3d 34 (D.C. Cir. 2001) and Commission Decision 2007/53/EC of 24 March 2004 in Case COMP/C-3/37.792—*Microsoft* (OJ 2007 L 32, p. 23), respectively.

[101] Netherlands Competition Authority Press Release, "NMa: no tying of sales Apple iPod and iTunes services," 6 September 2007, available online at https://www.acm.nl/en/publications/publication/6191/NMa-no-tying-of-sales-Apple-iPod-and-iTunes-services.

[102] *Enforcement Priorities*, para.62.

[103] Case C-28008 P *Deutsche Telekom AG v European Commission* EU:C:2010:603.

[104] *Pacific Bell Telephone Co. v. linkLine Communications, Inc.*, 555 U.S. 438 (2009).

[105] Case C-52/09 *Konkurrensverket v TeliaSonera Sverige AB* EU:C:2011:83.

[106] An alternative approach was indeed advocated by the European Commission in its *Enforcement Priorities*, paras.80-81.

[107] *TeliaSonera Sverige AB*

[108] Shelanski (2013), 1699.

[109] See Statement of the Federal Trade Commission Regarding Google's Search Practices *In the Matter of Google Inc*., FTC File Number 111-0163, 3 January 2013, fn.2.

[110] *Ibid*.

[111] Decision of 27 June 2017 in Case AT.39740—*Google Search (Shopping)*, available at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39740/39740_14996_3.pdf.

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

[113] *Google Search (Shopping)*, para.651.

[114] *Google Search (Shopping)*, para.649.

[115] Pending Case T-612/17 *Google and Alphabet v Commission*.

[116] Statement of the Federal Trade Commission Regarding Google's Search Practices *In the Matter of Google Inc*., FTC File Number 111-0163, 3 January 2013

[117] Office of Competition and Consumer Protection Press Release, "Competition authority searches premises of Grupa Allegro," published 7 July 2017, available online at: https://uokik.gov.pl/news.php?news_id=13332.

[118] See, e.g., the deliberate omission of exploitative abuses from the European Commission's *Enforcement Priorities*, para.7.

[119] EU law, for instance, deploys the well-known *United Brands* test: "*the questions to be determined are whether the difference between the cost actually incurred and the price actually charged is excessive, and, if the answer to that question is in the affirmative, whether a price has been imposed which is either unfair in itself or unfair when compared with competing products*" (Case C-27/76 *United Brands and United Brands Continentaal v Commission* EU:C:1978:22, para.252).

[120] Still, where online firms have a high ratio of fixed to variable costs, it may be necessary to consider pricing over a longer time horizon in order to avoid false positives which fail to reflect product development costs (Hovenkamp (2016).

[121] See, e.g., European Commission, *Guidelines on Vertical Restraints*, paras.203-8.

[122] *MLex Market Insight*, "Amazon Japan raided by JFTC on suspicions of abuse of dominance," published 15 March 2018, available online at: https://mlexmarketinsight.com/insights-center/editors-picks/antitrust/asia/amazon-japan-raided-by-jftc-on-suspicions-of-abuse-of-dominance.

[123] ACCC Press Release, "New competition laws a protection against big data e-collusion," published 16 November 2017, available online at: https://www.accc.gov.au/media-release/new-competition-laws-a-protection-against-big-data-e-collusion.

[124] Competition and Markets Authority Press Release, "CMA secures director disqualification for competition law breach," published 1 December 2016.

[125] Competition and Markets Authority Press Release, "Online seller admits breaking competition law," published 21 July 2016.

[126] Note that Ezrachi & Stucke (2016, 46-55) use the term "hub and spoke" collusion to refer to competitor coordination occurring through parallel use of algorithms, regardless of whether horizontal cooperation is the underlying objective or an unintentional side effect. It is used here,

by contrast, in its more traditional sense to denote deliberate horizontal collusion occurring through a vertical conduit.

[127] *United States v Apple, Inc*., 791 F. 3d. 290 (ad Cir. 2015).

[128] Case COMP/AT.39847—*E-Books* (OJ C 73/17, 13.3.2013).

[129] Competition Bureau Press Releases, "Competition Bureau takes action to promote competition for ebooks," 7 February 2014, available online at http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/03658.html, and "Competition Bureau reaches settlement with HarperCollins in ebooks case," 9 January 2018, available online at https://www.canada.ca/en/competition-bureau/news/2018/01/competition_bureaureachessettlementwithharpercollinsinebookscase.html.

[130] *Rakuten Kobo Inc. v. Canada (Commissioner of Competition)* 2018 FC 64.

[131] Case C-74/14 *ETURAS* EU:C:2016:42.

[132] *Ibid*, para.28.

[133] *Ibid*, paras.42 & 44.

[134] *Ibid*, para.45.

[135] Case C-542/14 *VM Remonts* EU:C:2016:578, paras.30-33.

[136] Opinion in Case C-74/14 *ETURAS* EU:C:2015:493, para.42.

[137] Case C-194/14 *AC-Treuhand* EU:C:2015:717.

[138] *Ibid*, para.30.

[139] *Ibid*, paras.37-38.

[140] See, e.g., Case No. COMP/M.6956—*Telefonica/Caixabank/Banco Santander* (Joint Venture), decision of 14 August 2013.

[141] See, e.g., Case No. COMP/M.4731—*Google/ DoubleClick*, decision of 11 March 2008.

[142] Konkurrensverket (Swedish Competition Authority) Press Release, "Blocket will not acquire Hemnet," 14 July 2016, available online at http://www.konkurrensverket.se/en/news/blocket-will-not-acquire-hemnet/.

[143] See, e.g., Case M.8124–*Microsoft / LinkedIn*, decision of 6 December 2016.

[144] Statement of Federal Trade Commission's Acting Director of the Bureau of Competition on the Agency's Review of Amazon.com, Inc.'s Acquisition of Whole Foods Market Inc., published 23 August 2017, available online at https://www.ftc.gov/news-events/press-releases/2017/08/statement-federal-trade-commissions-acting-director-bureau.

[145] See, e.g., *The New York Times*, "Amazon bites off even more monopoly power," Op-ed by Lina M. Khan, published 21 June 2017.

[146] See European Commission, Proposal for a Regulation of the European Parliament and of the Council on addressing geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (COM(2016) 289 final), published 25 May 2016.

[147] For example, the UK's Groceries (Supply Chain Practices) Market Investigation Order, 2009, and Ireland's Consumer Protection Act 2007 (Grocery Goods Undertakings) Regulation 2016.

[148] Competition Bureau of Canada Press release, "Competition Bureau statement regarding its inquiry into Amazon's price advertising in Canada," 11 January 2017, available online at http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04187.html.

[149] See, e.g., Proposal for a Regulation of the European Parliament and of the Council on cooperation between national authorities responsible for the enforcement of consumer protection laws (COM(2016) 283 final), published 25 May 2016, now enacted by Parliament and Council and awaiting entry into force.

[150] OECD (2016), *Consumer Protection in E-commerce: OECD Recommendation*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264255258-en.

[151] See, e.g., European Commission, *Staff Working Document on the free flow of data and emerging issues of the European data economy. Accompanying the document 'Building a European data economy'* (COM(2017) 9 final), published 10 January 2017.

[152] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Online Platforms and the Digital Single Market. Opportunities and Challenges for Europe* (COM(2016) 288 final), published 25 May 2017. A useful discussion is provided by Oxera, "When should online platforms be regulated? Oxera's initial analysis of the European Commission's thinking," published 7 June 2016.

[153] See, e.g. *The Telegraph*, "There is no justification for regulating online giants as if they were public utilities," 4 August 2017; *The Economist*, "What if large tech firms were regulated like sewage companies?" 23 September 2017; and *Financial Times*, "Why we need to regulate the tech platforms," 5 November 2017.

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