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Is Amazon The Next Google?

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Abstract: Dominant or apparently dominant internet platform increasingly become subject to both antitrust investigations and further-reaching political calls for regulation. While Google is currently in the focus of the discussion, the next candidate is already on the horizon – the ubiquitous online trading platform Amazon. Competitors and suppliers but also famous economists like Paul Krugman unite in criticizing Amazon's market power and alleged abuse of it. In this paper, we collect the multitude of allegations against Amazon and categorize them according to types of potential anticompetitive conduct or types of market failure. We provide an economic analysis of these allegations based upon economic theory as well as publicly available information and data. As one of our main results, we find that the most severe allegations against Amazon do not hold from an economic perspective and, consequently, do not warrant regulation or other drastic interventions (like breaking the company up). However, several areas of conduct, in particular, the use of best price clauses and the (anti-) competitive interplay of Amazon and the major publishers in the e-book market require competition policy action. The standard antitrust instruments, enriched with modern economic theory, should suffice to disincentivize the identified anticompetitive conduct for now.

Keywords: antitrust, internet, platform economics, media economics, competition policy, innovation, Amazon, Google, e-books, book industry, best-price clauses, abuse of dominance, pricing, regulation

JEL-Codes: K21, L41, L42, L81, K23, L50, L82, L12, D40, L25, Z11, B52, L86, M21

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I. Introduction

In October 2014, the Nobel memorial prize laureate and famous economist *Paul Krugman* (2014) called for antitrust action against Amazon, arguing that Amazon had reached a powerful position comparable to Rockefeller's Standard Oil in the 1900s. He vehemently and most clearly voiced his concerns that Amazon is only starting to abuse this power, that this will be detrimental to suppliers, customers and society – and that therefore society must take action. Or, as his central message reads in his own words: "Amazon.com, the giant online retailer, has too much power, and it uses that power in ways that hurt America" (*Krugman* 2014). Krugman may be the most famous name, but he is not alone in voicing concerns about market power, undue business dominance and anticompetitive behavior by Amazon in various markets and various instances. Influential Berkeley professor of public policy *Robert Reich* (2015) considers what he calls "big tech platforms" to be "way too powerful", claiming, inter alia: "Meanwhile, Amazon is now the first stop for almost a third of all American consumers seeking to buy *anything*. Talk about power." And very recently, for instance, the American authors' guild called for antitrust action against Amazon, presenting a position paper with a long list of allegations of anticompetitive practices (*Authors United* 2015a,b). In summary, the authors' collective emphasizes "Amazon has used its dominance in ways that we believe harm the interests of America's readers, impoverish the book industry as a whole, damage the careers of (and generate fear among) many authors, and impede the free flow of ideas in our society" (*Authors United* 2015a: 1). Furthermore, a large number of economic and business journalists as well as representatives of competitors, suppliers and customers from various parts of the world have echoed these allegations and added numerous more. The range of concerns covers, inter alia, squeezing of suppliers, deterrence and predation of competitors, destruction of local stores as well as various types of unfair treatment. Since many of these concerns have predominantly been raised outside academia (with some notable exceptions, see above), we have tried to sort them and connect them to economic concepts that may indeed reflect anticompetitive arrangements or behavior. In doing so, we identified five groups of concerns or allegations repeatedly raised against Amazon's competitive behavior, namely the creation of negative externalities by destroying the local business culture (see III.1), predation and monopolization (see III.2), being a natural monopoly that requires regulation (see III.3), unfair competition (see III.4), and vertical abuse of dominance in the e-book market at the expense of publishers and authors (see III.5).

In the light of the recent antitrust activity regarding online platforms in Europe[1], we analyze in this paper, whether Amazon qualifies as 'the next Google', i.e. the next online platform that requires intensive antitrust scrutiny due to various concerns and complaints. The topic of potentially anticompetitive actions by dominant online platforms is currently high on the political agenda. The European Commission started a sector inquiry into online commerce in 2015 (*European Commission* 2015c) and already in late 2014, the European Parliament voted in favor of splitting-up dominant online platforms. In the aftermath, talks about instituting a new regulator supervising online platforms à la Google, Facebook, Amazon, etc. surfaced and – despite receiving criticism from Competition Comissioner Vestager[2] – have not fallen silent since. In June 2015, the Commission opened a formal investigation into Amazon's e-book distribution arrangements (*European Commission* 2015d). This investigation relates to the concerns and allegations we address in sections III.2 and III.5 in this paper. Although the concentration of online markets has recently raised fears of possible misconduct of dominant companies, economic analysis shows that many publicly expressed concerns and allegations are either unjustified or do not warrant competition policy interventions. However, we also identify several areas of concern where competition authorities need to monitor

[1] As of writing, the European Commission has issued a statement of objections against Google claiming that the search engine market leader abuses market power by biasing search results in favor of its own comparison shopping service and at the expense of its competitors (*European Commission* 2015a,b). Further investigations into more search bias concerns as well as into allegations of scraping (preview windows showing content of searched-for websites to an extent that searchers do not need to visit these websites anymore), into anticompetitive restrictions on advertisers (ad-portability, blocking clauses regarding rival sites, exclusivity contracts, etc.) and into bundling Android operating systems with other Google software and service products are still ongoing. Other jurisdictions like India have also started similar investigations, whereas the U.S. closed its investigation against rather mild commitments from Google in 2013. Beyond Google, hotel booking platforms as well as online taxi services face diverse antitrust investigations by national competition authorities in several European countries.

[2] See http://www.nasdaq.com/article/eu-competition-chief-warns-against-new-regulations-for-internet-companies-20150618-00141 (retrieved 2015-09-07).

Amazon's strategies closely or where antitrust investigations might be justified. Notwithstanding, we remain rather skeptical towards Krugman's assessment.

In order to discuss the various concerns and allegations from the perspective of economics (section III), we first give a short overview of the business model of Amazon and the various markets where it is active (section II). As we have to rely on publicly available data, we often cannot provide exact market definitions and shares, however, the general structure of the relevant markets will become visible in an operational way (for our purposes). After we assessed the different concerns and allegations (section III), we discuss potential competition policy and regulatory remedies (section IV) before we draw conclusions (section V).

II. The Business of Amazon

Founded in 1994, Amazon of Seattle, Washington, U.S., has become the largest electronic commerce company worldwide in merely two decades, selling, inter alia, books, music & movies, consumer electronics, games & toys, beauty & care, home & garden, clothing, sports & outdoor, and much more. Today, it combines two business models:

(i) Amazon acts as an online retailer, buying products from producers and reselling them to consumers.

(ii) Amazon provides an online marketplace where it intermediates sellers (producers, shops) and buyers of products.

The decision what products are sold via classical retailing and what products are traded via the marketplace is made by Amazon based on profit considerations and varies frequently. Furthermore, Amazon offers streaming and cloudcomputing platforms, data processing and networking services, produces consumer electronics (e-book reader Kindle, tablet Kindle Fire, smartphone Fire Phone, etc.), business electronics (credit card readers), digital content (games, e-books, etc.), and is currently looking to enter the software markets for emailing and booking services (WorkMail, Amazon Destinations, etc.). According to founder Jeffrey P. Bezos, however, the core business of Amazon is individualized consumption pattern data (*Packer* 2014).

Besides internal growth, Amazon expands internationally through company takeovers, e.g. Abebooks, an online marketplace for used, rare and out of print book titles, in 2008, robots technology company Kiva Systems for US$ 775 million in 2012, social reading service Goodreads in 2013, and Twitch, a video game streaming service, in 2014.

Due to its worldwide presence and relevance, Amazon is often characterized as being dominant. From an economic perspective, dominance relies on a sound delineation of markets and needs to be analyzed market by market. In the case of Amazon, this task would exceed the space of this paper. Moreover, the data necessary to provide detailed market delineations is not publicly available. An exception is Germany where the national competition authority calculated market shares for 2012 for a large number of product markets. According to their estimation, Amazon was leading these German online trading markets with an average market share of about 30-40 per cent (*Bundeskartellamt* 2013c). Beyond that, there is another problem: does the delineation of single-by-single product markets appropriately grasp the real effects on competition? Or does Amazon actually act on a (single) market for online superstores and would that capture the competitive situation more accurately? Furthermore, the marketplace part of Amazon's business displays the characteristics of a two-sided or platform market (*Evans* & *Schmalensee* 2007; *Haucap* & *Heimeshoff* 2014), which makes market delineation notoriously difficult (*Filistrucchi* et al. 2014; *Kehder* 2013; *Dewenter* et al. 2014). Since we cannot answer these questions in this paper, we will distinguish in the following section between a scenario in which Amazon is dominant and one where it faces effective competition.

Out of the many markets that Amazon is competing on, the markets for books – both print books and e-books – is of particular concern from an antitrust perspective. Therefore, we report at least some market share information for this industry. According to *Authors United* (2015b: 5-6), Amazon accumulates in the U.S. up to 75 per cent of online sales of physical books, more than 65 per cent of e-book sales, about 40 per cent of total sales of newly published books, and up to 85 per

cent of e-book sales of self-published authors.[3] They expect these shares to keep on increasing in the coming years, despite competition from Apple and Google (*Authors United* 2015b: 6). In Germany, Amazon controls approximately 80 per cent of online books sales whereas its market share of the total book market (print- and e-books) is about 25 per cent (*Haucap* 2014). In 2014, Amazon's market share of e-book sales in Germany was 'only' about 39 per cent. Market leader was the so-called Tolino alliance (consisting of large bookstore chains like Thalia, Hugendubel and others as well as relevant reading clubs like Weltbild, DerClub) with a share of 45 percent (*Börsenblatt* 2014). However, the members of the Tolino alliance are independent companies that merely cooperate on providing a common e-book reader under the Tolino brand. In terms of single company shares, Amazon (39 per cent) leads the German e-book market from Thalia (20 per cent) and Weltbild (12 per cent). No other competitor exceeds a share of 3 per cent (*Börsenblatt* 2014).
While it is true that market shares alone do not suffice to identify dominance, in particular in online markets and markets trading digital products, these numbers do show that Amazon is the biggest player in online book selling and in e-book retailing by some margin.

III. Concerns about Amazon's Strategies and their Assessment from an Economic Perspective

1. Negative Externalities: Destruction of Traditional Retailing Business

The first allegation is predominantly put forward in the public discussion. The claim is that Amazon destroys traditional offline business by offering a retailing service offline competitors cannot compete with. Thus, Amazon causes a negative externality on offline business companies. This allegation relates to all of Amazon's retailing activities and is not limited to books although the destruction of offline bookstores is a frequently used example.[4] Probably, this is because books – along with recorded music – were the first products that Amazon sold. Consequently, the effects on offline bookstores became visible before Amazons business practices had time to affect dealers in product categories it entered later.

[3] These figures approximately stand in line with other publicly available figures.
[4] We address the peculiarities of the market for books in section III.5.

From an economic perspective, however, the character of the claimed externality needs to be qualified. Economic theory distinguishes pecuniary externalities from technological externalities. While the first are transferred via a market relation or process, the second hits parties that are unrelated in a market sense to the originator of the externality. This distinction is important because only technological externalities distort the market and may lead to market failure warranting intervention or regulation. Pecuniary externalities, in contrast, are normal and necessary market effects: if a company offers a better product, then demand will shift away from its competitors and towards the company offering the product that serves consumer interests in a superior way. This is particularly true in the case of fundamental innovations: the invention of motor cars harmed the business of manufacturers of horse-drawn carriages and train services as well as the invention of personal computers harmed the business of typewriter producers. These pecuniary externalities are an inherent phenomenon of economic dynamics and contribute to economic welfare because allocation is driven towards products and businesses that provide more consumer welfare.

The alleged negative externality on offline business represents such a pecuniary externality: consumers switch away from offline shopping towards online shopping because they draw more utility from online shopping (convenient shopping from home, no restrictions on opening hours, comfortable delivery, lower searching costs, etc.), i.e. it serves their preferences better. So, Amazon may be "guilty" of providing a better shopping service than other retailers but this cannot be held against Amazon. From an economic perspective, this allegation is unjustified and does not warrant any intervention or regulation.

Moreover, it is questionable whether the allegation that Amazon destroys offline business is plausible and can be supported by empirical evidence. If the activity offline shopping creates an additional utility (seeing and touching the goods, shopping as an event, socializing, etc.) then it appears to be implausible that it will be 'destroyed'. By now, it certainly cannot be claimed that offline business is about to disappear. *If* comprehensive destruction of offline business occurred, then a negative external effect on society values might be possible in terms of wasteland downtowns, loss of societal communication, negative cultural effects, perhaps even lack of individual motion, etc. However, Amazon leading to wasteland downtowns appears to be quite a stretch and such a doomsday scenario is not realistically on the horizon.

In summary, the allegation of creating negative externalities on offline business must be rejected from an economic perspective.

2. Predatory Pricing and Monopolization

A second allegation claims that Amazon monopolizes its markets by eliminating its competitors through predatory pricing strategies. In Amazon's case, predatory pricing is said to consist of direct below-cost pricing, anticompetitive discounts, and/or free additional services like delivery. Allegedly, Amazon deliberately forgoes profits by setting predatory prices in order to first monopolize the markets and then raise prices to exploit dependent customers (*Authors United* 2015b: 3). This is sometimes viewed to be the reason behind the fact that Amazon does not have a great history of making significant profits so far but still receives a strong and increasing valuation from the stock markets (ibid.: 3).

a. Predatory Pricing, Bundling and Tying in the Retailing Business

Modern economics view rational predatory pricing as a strategy that requires the existence of market power (*Fudenberg* & *Tirole* 1986; *Bolton* & *Scharfstein* 1990; *Baumol* 1996; *Bolton et al.* 2000). Furthermore, standard predatory pricing theory does not apply to platform markets (theory of two-sided markets; *Rochet* & *Tirole* 2002; *Evans* & *Schmalensee* 2007) where anticompetitive exclusion through pricing strategies is possible but requires different circumstances (*Motta* & *Vasconcelos* 2012). As a consequence, the application of standard predatory pricing theory focuses on the classical retailing business. It is important to note, however, that undercutting competitors' prices does not automatically imply that Amazon is engaging in predatory pricing strategies. Lower prices may be due to lower costs because of a more efficient organization, advantages of online retailing, or a number of other reasons. Undercutting the competition in prices is, of course, not per se anti-competitive. Instead, it is an inherent element of welfare-increasing price competition that more efficient companies undercut the prices of less efficient companies. Suspicions about predatory pricing only surface when prices are set below costs and sufficiently high entry barriers offer scope for a post-predation recoupment period.

There is a controversial academic discussion when exactly prices are below costs or what cost categories are relevant here, inter alia, due to the problem of how to allocate overhead costs of retailing companies to specific products they sell. However, it is safe to infer below-cost pricing when selling prices of a retailer are below its purchasing prices. To our best knowledge there is no indication that Amazon sells below purchasing prices with the exception of the market for e-books where its selling prices sometimes undercut purchasing prices by up to 30 per cent (*Kirkwood* 2014; *Vezzoso* 2015).[5] Consequently, and in the absence of contradicting empirical evidence, predatory pricing allegations are limited to the e-book market. E-books are sold by Amazon according to a standard retailing model, not via the marketplace concept. At first sight, therefore, no platform market defense applies. Furthermore, a focus on e-books corresponds to the e-book retailing market being one of the markets with the highest probability of Amazon enjoying market power (see section II). Eventually, direct network effects may constitute entry barriers (although the amount and effectiveness is controversial, see section III.3).

However, three more things require consideration. First, Amazon offers a wide range of e-books and an even wider range of other products. This opens scope for loss-leading strategies: generally, multi-product retailers may sell some products below-cost in order to attract customers in the hope that – once they are "visiting" the store – they will not only buy the special offers but also other products that are priced above costs, so that the total margin for the multi-product retailer remains

[5] In the U.S., there are also reports about sales of print books below purchasing prices (see *Petrocelli* 2012).

positive. Loss-leading strategies are not per se anticompetitive and do not necessarily constitute predatory pricing; they merely represent a case of a mixed calculation (hybrid costing) over several products or product categories. *Kirkwood* (2014: 49-54) reports that investigations by the Antitrust Division of the U.S. Department of Justice found a positive margin over all e-book sales of Amazon, which points towards a loss-leading strategy rather than towards predatory pricing.[6] Probably, this is even more true considering the entire product range of Amazon. There might be a special case, however, if Amazon sets below-cost prices for a subgroup of its product range, which roughly matches the total product range of its competitors in the relevant product market of that subgroup. For instance, if Amazon sold all books below costs and cross-subsidized the consequent losses by the profits of its beauty & care products, thus, it might drive pure bookstores without the option to cross-subsidize out of the market. In this special case, a predatory strategy in order to monopolize the market for this selected range of products may exist and would be anticompetitive. We are not aware of empirical evidence for such a case, though.

Secondly, interaction effects with the market for e-book readers must be considered. With its Kindle e-book reader, Amazon entered the reading device market in 2007 and reached a market-leading position in the market for specialized e-reading devices in many countries. For instance in Germany, Amazon's Kindle held a market share of 43 per cent in 2014, clearly leading from Tolino reading devices (12 per cent), Sony (11 per cent) and Trekstor (11 %).[7] Reported figures for the UK range between 50 per cent and 95 per cent.[8] Since e-books and e-readers are complements, bundling and tying strategies may be anticompetitive if the bundling company has a dominant position or market power in one of the two markets. It may

6 See also Plaintiffs' Pretrial Memorandum of Law, US vs. Apple, Case 1:12-cv-02826-DLC, www.justice.gov/atr/cases/f296700/296794.pdf, 6-7.

7 http://de.statista.com/statistik/daten/studie/183611/umfrage/marktanteile-von-e-readern-in-deutschland/ (retrieved 2015-09-21, 22:59).

8 See http://www.publishingtechnology.com/2014/10/kindle-is-the-king-of-mobile-reading-platforms-but-ibooks-is-catching-up-fast/ (2015-09-24; 14:06) and http://goodereader.com/blog/electronic-readers/amazon-controls-95-of-the-ebook-market-in-the-uk (2015-09-24; 14:08). Note, however, that e-books may often be read on tablet computers as well.

then abuse its power by leveraging it to monopolize the other market. For instance, Amazon may sell e-books below-cost in order to induce customers to buy the Kindle e-reader and, thus, create a path-dependency: if a customer has the Kindle e-reader, she may be more prone to continue buying e-books from Amazon. This effect is reinforced if different e-reading systems are incompatible to each other, i.e. if e-books bought from Amazon can only be read on the Kindle device and on no other, competing devices, while e-books bought from other retailers cannot be read on the Kindle device. In such a scenario, an anticompetitive lock-in of consumers may result, which offers Amazon the option to raise e-book prices above the competitive level once the consumers are "caught" in and locked-into Amazon's exclusive format. The other way around, Amazon may offer its Kindle device below-cost[9] in order to lock-in consumers in a similar way. This anticompetitive story, however, rests on the incompatibility between e-reading devices. If consumers can freely interchange e-books and e-readers (i.e. freely combine contents and devices), then no anticompetitive lock-in should arise. Quite in contrast, loss leading offers of devices or contents may then contribute to the diffusion of a new technology, creating midterm consumer welfare. While there is indication that Amazon's bundling and tying strategies may have been anticompetitive at times, these concerns should be alleviated with the introduction of compatibility apps since 2009 (several times enhanced since then) that allows for Amazon content to be read on non-Kindle devices (*De los Santos* & *Wildenbeest* 2014). Still, the lack of reverse compatibility – allowing reading non-Amazon content on Kindle-devices – does *ceteris paribus* not support consumer welfare.[10]

Thirdly, despite their convenience for risk- and/or transaction cost-adverse consumers, flatrate tariffs for e-books may represent another issue and concern because of distortive effects on incentive structures and efficiency (see *Köhler* 2015: ch. 4.2.4.9 and 5.3.6 for an analysis).

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9 There are press reports that Amazon indeed sold its e-reader below costs some years ago (*Petrocelli* 2012).

10 Calibre, a free and open source e-book library management application, offers compatibility service in both directions, however, only for content without copy-protection technology or digital-rights management systems.

b. Pricing Restrictions in the Marketplace Business

Amazon's pricing strategies raise antitrust concerns also in the marketplace line of its business where Amazon acts as a two-sided platform matching sellers (e.g. shops) and buyers (e.g. consumers) similar to a virtual shopping mall. Here the allegation is that Amazon harms competition by setting best-price clauses for marketplace suppliers, i.e. shops selling at Amazon Marketplace are required to sell for the same or higher prices at other platforms (but *not* for lower prices) and/or to inform Amazon about its pricing at other distribution channels.

In general, best-price clauses may harm price competition (i) when hassle costs are low via stabilizing a collusive equilibrium and (ii) when hassle costs are high via foreclosure as well as monopolization/abuse of dominance (inter alia, *Moorthy* & *Winter* 2006; *Kretschmer* & *Budzinski* 2011; *Baake* & *Schwalbe* 2013; *Boik* & *Corts* 2013). In the first case (low hassle costs), best-price clauses (and their relatives under various names[11]) harm price competition among platforms or sellers because easily detectable deviations facilitate price convergence and eventually establish uniform online prices. This process is effective if either a sufficient number of relevant marketplaces employs best-price clauses (cartel-like collusive equilibrium) or if a must-supply platform (i.e. sellers cannot afford not to sell via this platform) enforces such clauses. Furthermore, best-price clauses may unilaterally hamper the growth – or successful entry – of (hitherto smaller) competing maverick platforms because if direct and indirect network effects are sufficiently strong, mavericks and newcomers depend on being able to significantly undercut the incumbents in terms of pricing. Thus, a double strategy of reducing competition between incumbents and deterring mavericks and newcomers becomes possible. Obviously, the price a market under best price clauses converges to need not be a 'low' price in absolute terms, i.e. the price under effective price competition. Instead, it will typically be a higher price in the midterm (*Buccirossi* 2008; *Salop* & *Scott Morton* 2013).

[11] For instance, most-favored-customer clauses, most-favored-nation clauses (even though no nations are involved), meet-the-competition clauses, platform most-favored-customer agreements, platform most-favored-customer clauses, etc. (see *Köhler* 2015, ch. 4.1.2.4 and 4.3 for a comprehensive differentiation).

For our purposes, we can limit out analysis to this low hassle cost case (and do not need to dwell into the high hassle cost world). Online markets are characterized by comparably low hassle costs because price comparisons between online platforms (or other online distribution channels) create considerably lower search costs than comparisons between offline shops. Therefore, the low hassle costs scenario is relevant for the Amazon case. Due to the comparatively low hassle costs, the anticompetitive character of best-price clauses (and related arrangements) tends to be stronger online than offline. In the special case of Amazon, an additional factor aggravating the anticompetitive effect is that due to its hybrid business model Amazon also acts as a horizontal competitor of the marketplace sellers. This strengthens the price collusion effect (*Bundeskartellamt* 2013c).

From 2010 on, Amazon required sellers on its marketplace to accept a best-price clause relating to all other non-physical sales channels (i.e. online sales and catalogue sales). Offline shops were not included. Despite the limitation of the clauses to online sales, the Federal Cartel Office of Germany found a price-increasing effect, thus establishing anticompetitive effects through cartel-like price collusion (*Bundeskartellamt* 2013c). If Amazon's marketplace additionally represents a must-supply platform for online businesses, then the harm to price competition is further increased. Consequently, several national competition authorities in Europe addressed this issue under the umbrella of the European Competition Network and forced Amazon to stop its best-price clause policy in Europe (*Bundeskartellamt* 2013a, b, c). Very recently, the European Commission started an investigation into similar clauses applied in Amazon's e-book distribution system (*European Commission* 2015d).

In summary, there is little available indication that Amazon engages in predatory pricing in its 'classic' retailing business. However, competition agencies need to keep an eye on possible bundling and tying effects between the markets for e-readers (device market) and for e-books (content market). Strategic incompatibilities between contents and devices from different suppliers constrain competition and decrease consumer welfare. Mutual compatibility would also intensify platform competition (*Haucap* & *Heimeshoff* 2014), should the e-book market move towards a two-sided market structure in the future (see also below section 5). With respect to the marketplace business but also to wholesale retailing, best-price clauses and their relatives represent a concern for price competition and consumer welfare from an economic perspective. This led to successful interventions of several national competition authorities in Europe. Altogether, allegations of anticompetitive pricing and monopolization strategies require a differentiated assessment. Low(er) prices alone are no indication of anticompetitive and welfare-reducing behavior – quite in contrast, they represent scope for increasing consumer welfare though efficiencies and intensified competition.

3. Natural Monopoly: One Platform for Everything?

The economics of platforms include strong (direct and indirect) network effects that may under certain conditions promote dominant positions or even monopolies on efficiency grounds. As a consequence, online markets may 'naturally' tend towards monopolies (*Dewenter* & *Rösch* 2010). This motivates calls for a regulation of the monopoly platform as if it was a sort of a public utility (inter alia, *DeThier* 2014). In this context, Amazon may be viewed as a dominant or even monopolistic gatekeeper for commercial trading of many products. The idea would be that every producer or shop needs to have (non-discriminated) access to Amazon's marketplace in order to be able to stay in business.

Compared to offline businesses, online retailing platforms like Amazon are characterized by different cost structures when it comes to (virtual) "stocking" and presenting the goods as well as regarding related services (payment systems, administration, etc.): variable costs are comparatively lower in relation to fixed costs. Note, however, that the fashionable notion of the "zero marginal cost economy" merely relates to digital content (if at all), whereas the majority of Amazon's business concerns trade of physical products where marginal costs remain relevant. The literature about online platforms has developed a set of criteria to assess whether an online market is likely to be characterized by one dominant company or whether competition among platforms may be sustainable (*Evans* & *Schmalensee* 2007, 2015; *Haucap* & *Heimeshoff* 2014). Even though this literature refers to two-sided markets – hence, in our case the marketplace business model – these criteria are also useful to evaluate the tendency to monopoly in 'classic' online retailing.

The first aspect relates to the strength of the direct and indirect network effects. It represents a rather specific issue of two-sided markets, i.e. the marketplace business model. Here, the utility of both market sides – shops and customers – increases with a higher participation of their own group (direct network effect) and of the other group (indirect network effect). The marketplace brings suppliers and customers together and facilitates their matching by reducing transaction costs. This may drive market concentration up to the point that a single platform represents the efficient structure. For this to happen the direct and indirect network effects need to be sufficiently strong and the (transaction) costs of alternative matching sufficiently high. It appears to be plausible that the marginal utility of an additional seller or buyer for the respective other side will decrease after the platform has reached a sustainable size, thus limiting the pro-concentration effect long before the market volume has been reached. Furthermore, alternative matching of sellers and buyers with non-prohibitive transaction costs (direct sale via suppliers' homepages, 'classic' offline shopping and shopping malls, etc.) is available, further limiting the network-effect tendency towards a monopoly platform.

Secondly, problems of congestion or overload may limit the growth (and ability to achieve persistent market dominance) of platforms. In contrast to offline business, congestion problems of online retailers as well as online marketplaces are considerably less relevant. Note, however, that notwithstanding the lesser relevance of congestion, X-inefficiencies (*Leibenstein* 1966, 1992) remain a limiting factor for the growth of both online retailers and marketplaces.

Thirdly, an important aspect relates to the behavior of users, namely whether they engage in multi-homing or in single-homing. The latter describes a situation where users – consumers in the classic retailing model and suppliers/shops and customers in the marketplace model – limit themselves to one platform. A preference for one-stop shopping, i.e. customers prefer to buy as much of their products as possible from one online retailer, may favor single-homing in both models. Similarly, in the marketplace model, sellers may prefer single-homing if they are small (and lack capacity to administer shops on several marketplaces), sell unique items, or if reputation is both platform-specific and comparatively costly. Single-homing promotes a tendency towards one dominant retailer or marketplace. On the other hand, if consumers prefer to diversify their online shopping or sellers prefer to diversify their distribution channels, then multi-homing favors competitive coexistence of several platforms and retailers. Switching costs play an important role: if switching from one marketplace (retailer) to another does not involve significant costs, multi-homing of customers and sellers is probable. While switching costs between online trading platforms may not be zero (platform-specific accounts, specific handling knowledge, individualized recommendations and advertising if that is welcome, etc.), they appear to be negligible for customers (e.g. buy-without-account-options, standardized payment systems, etc.) but may be more relevant for sellers, in particular for small shops.

Fourthly, the homogeneity or heterogeneity of supply and demand matters. With increasing homogeneity of demand, a single platform or retailer becomes more likely. However, for a product range as comprehensive as Amazon's, demand is characterized by strong heterogeneity. Consequently, an inevitable ('natural') trend towards one platform for everything and everyone appears to be rather unlikely. Quite in contrast, in addition to present competitors like the (nowadays commercialized) Ebay marketplace, financially strong companies like WalMart, Macy's or John Lewis are currently investing billions of US$ to create and establish competing e-commerce platforms. Furthermore, recent news and rumors that platforms such as YouTube and GoogleShopping as well as Twitter are introducing or are considering introducing direct buy opportunities ("buy buttons") in their services point towards a dynamic differentiation of commercial online trading.

Fifth, a higher intensity of innovation (inter alia, creating and maintaining heterogeneity of supply) decreases the tendency towards monopoly. Since online markets are still rather young, the innovation dynamics are rather likely to remain very high.
In summary, an inherent, 'natural' trend towards an Amazon retailing and marketplace monopoly cannot be derived from an economic perspective. While there are factors favoring a stronger market concentration online compared to offline, many countervailing factors exist, in particular, multi-homing and the heterogeneity of supply and demand. As it is now, Amazon is not in the position of being a dominant gatekeeper to commercial online trading and producers or shops are not depending on access to Amazon in order to be able to compete. Consequently, a public-utility-like regulation of Amazon cannot not be justified from an economic perspective.

4. Unfair Competition

Another allegation brought forward in the press claims that Amazon deceives consumers into shopping by misleading price information and biased or manipulated 'customer' reviews. Indeed, there are documented cases where Amazon compared its price to a faked higher reference price or producer price recommendation that never existed as such. In doing so, Amazon made the price difference or the discount look much larger than it actually was. Such misleading price information is clearly anticompetitive. It triggered action by the respective authorities. For instance, Amazon was sentenced by a German court in such a case in 2014.[12] According to the available evidence, these cases apparently are exceptions, though, and not the rule.

The issue of biased 'customer' reviews relates to faked reviews or to biased rankings of reviews in order to promote sales by giving the customer a better impression of the product in question. While this clearly would be anticompetitive, there is no empirical evidence that Amazon has or is engaging in such practices (to our

[12] Landgericht Köln (district court of Cologne), judgment from 2014-10-02, Az.: 81 O 74/14.

best knowledge). Some suppliers on Amazon's marketplace[13], however, have done so and were sued accordingly by Amazon as well as delisted from the marketplace. Altogether, there is not much empirical evidence to support this allegation, with the exception of single cases of marketplace suppliers followed by swift action from Amazon's side against the perpetrators.

According to *Authors United* (2015b: 17, ft. 30-31), Amazon deceives the consumer regarding its search service for finding goods (such as books) on its platform. While search rankings and related recommendations appear to be 'neutral' and 'objective' to the customer, Authors United claims that they are up for sale and Amazon 'encourages' publishers and even authors to pay for higher ranking positions. If sponsored search results are pretending to follow purely relevance criteria, then the consumer may be misled in her buying decision, which would be anticompetitive and reduce consumer welfare. Note that sponsored search results or rankings are not *per se* a problem, but Amazon needs to be transparent about it and must not pretend to rank according to conjectured consumer preferences only.[14] To our best knowledge, independent empirical evidence on this allegation is not available at the time of writing.

5. Abuse of Dominance in the E-Book Market

a. A Long List of Allegations

Among the most widespread complaints about anticompetitive behavior by Amazon are allegations that Amazon is abusing its market power in book retailing by imposing anticompetitive ('squeezing') conditions on book publishers – with consequent negative effects for authors and consumers. For instance, *Authors United* (2015b: 6) present the following list of how Amazon exploits its position:

- blocking or curtailing the sale of certain authors' books, causing damage to those authors' careers,

[13] Sometimes, these suppliers commissioned specialized product rating promotion agencies who then engaged in rating biasing strategies.
[14] See *Dewenter* & *Lüth* (2015) on a consumer preference based approach to the concept of search neutrality (in the context of Google).

- imposing (under the threat of punishment) higher margins for itself on publishers, directly and indirectly through the imposition of creative fees[15],
- charging readers higher (compared to a more open and competitive market) prices for many scarce and obscure books,
- generating fear in and stifling the free expression of authors, agents, editors, publishers, and others who do not cooperate with the company, and
- steering readers toward buying books published by Amazon and away from books published by other companies.

The allegations are detailed in the respective position paper (*Authors United* 2015b: 7-18). These and further allegations can be categorized into four main groups of exploitative abuse:

(i) Amazon allegedly abuses its buyer power to acquire anticompetitive *rents* from publishers (vertical effect).

(ii) Amazon allegedly uses anticompetitive *means* to abusively enforce its buyer power (vertical effect).

(iii) Amazon allegedly abuses its buyer power to improve the market position of its own publishing subsidiaries at the expense of independent publishers (vertical abuse with horizontal effects on the upstream market).

(iv) Amazon allegedly abuses its dominant retailer position by charging supracompetitive prices and limiting output and diversity of books.

Even though these allegations are interrelated, we will tackle them separately for analytical reasons.

b. Prices, Margins, and the Retailing Model of E-Books

So, before we discuss whether the means that Amazon employs are anticompetitive (section c), we analyze whether Amazon's price and margin targets squeeze

[15] Similar allegations fuel a brand new case recently brought to the Federal Cartel Office of Germany and to the European Commission by the association of German booksellers in September 2015 regarding the German audio books market (http://www.reuters.com/article/2015/09/21/amazoncom- germany-antitrust-idUSL5N11R2DE20150921; retrieved 2015-09-24, 17:30).

publishers. Since the 2010s, Amazon simultaneously demands lower wholesale or purchase prices for and a higher share of the revenue from e-books. In countries like Germany where the law mandates resale price maintenance for books[16], Amazon demands lower consumer prices instead of lower wholesale prices (and also a higher share of the revenues).

At the heart of this discussion lies the price relation between print books and e-books. While the (major) publishers seek to keep e-book prices on a level similar or close to the print book prices, Amazon targets e-book prices significantly below this level.

From an economic perspective, two aspects support Amazon's position in this controversy. First, the cost structure of e-books significantly differs from that of print books. Several cost elements like printing costs and related costs, stocking costs, and delivery costs do not exist for e-books. From an allocative efficiency point of view, it therefore appears to be justified that e-books prices should be considerably lower than printed book prices. Second, lower e-book prices promote and accelerate the diffusion of the new technologies surrounding 'digital books and electronic reading', thus, giving rise to dynamic efficiency gains (innovation). Actually, there may be indication that major publishers seek to decelerate the change towards e-books in order to preserve rents and/or acquire additional rents by keeping prices up despite decreasing costs. Such a scenario would imply a collusive equilibrium on the oligopolistic (major) publishers market with Amazon being a procompetitive force employing its countervailing power to break up this collusive equilibrium. U.S. competition authorities did find evidence that major publishers colluded (among each other and with Apple) in order to preserve higher prices.[17] On the other hand, one must consider that the book industry is characterized by considerable fixed

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[16] The German *Buchpreisbindungsgesetz* (law on book pricing maintenance) mandates that publishers must set final consumer prices for all new titles (not older than 18 months, counting separately for every edition) in German Language or dedicated to the German market (with few exceptions). Following a recent court judgment from Landgericht Wiesbaden (2015-01-14), this includes e-books and print-books according to dominant legal thought. Notwithstanding, an amendment to the Buchpreisbindungsgesetz to explicitly include e-books is currently under consideration.

[17] US vs. Apple, Inc. et al., Case No. 1:12-cv-02826-DLC.

costs (in particular the creative act of writing the book) that need to be recovered even if marginal costs of additional copies are very low. Otherwise, the incentive to produce new content may be harmed at the expense of consumers and society. With the help of publicly available information, we cannot estimate whether Amazon's price targets merely reflect decreasing costs of e-books (compared to print books) or squeeze into the recoupment of fixed costs. However, from an economic perspective, it is reasonable that e-book prices should be lower than print book prices *ceteris paribus*.

The e-book pricing controversy relates to the choice of the retail model because the latter reflects the different positions. Amazon favors the classic retailing model, the wholesale model, because it offers the retailer more freedom to negotiate buying conditions and to set consumer prices. In contrast, the (major) publishers advocate the so-called agency model, where all prices are set by the publisher, much like in the mandatory resale price maintenance model of Germany. This was also at the heart of the Apple-publishers collusion case:[18] Apple and a group of major publishers agreed to sell e-books in the U.S. via Apple's iTunes platform via the agency model with resale price maintenance and best-price clauses (see for the latter section III.2.b). In doing so, they attempted to force Amazon to accept this model as well.[19] In 2015, the 2nd U.S. Circuit Court of Appeals upheld a lower court judgment that sentenced the collusion with fines of US$ 20-25 millions for the participating publishers, US$ 450 million for Apple and, inter alia, a prohibition of resale price maintenance and best-price clauses for a five year period.[20] This case triggered a number of economic papers analyzing the welfare effects of the two different models in e-book markets. While some studies find positive short-term effects of the agency model (*de los Santos* & *Wildenbeest* 2014), other models reveal positive midterm effects of the wholesale model (*Gaudin* & *White* 2014, *Johnson*

[18] US vs. Apple, Inc. et al., Case No. 1:12-cv-02826-DLC.

[19] See for more comprehensive discussions of this case *Kirkwood* (2014), *Köhler* (2015) and *Vezzoso* (2015) as well as the case decision US vs. Apple, Inc. et al., Case No. 1:12-cv-02826-DLC.

[20] See http://www.reuters.com/article/2015/06/30/us-apple-ebooks-decision-idUSKCN0PA1RS20150630. As of writing, Apple is considering an appeal to the U.S. Supreme Court, asking it to overturn the affirmative decision of the Federal Court (http://appleinsider.com/articles/15/09/17/apple-appeals-to-supreme-court-in-e-books-price-fixing-antitrust-case; 2015-09-24, 17:35).

2014). Looking at this literature as a whole (adding *Jullien* & *Rey* 2007, *Foros* et al. 2014) shows that the crucial factor for the derived effects is the intensity of competition on the two vertical levels, the upstream publisher level and the downstream retailing level. If competition is less intense on the publisher level than on the retailer level – be it through collusion or because of concentration – then the wholesale model is advantageous in terms of welfare since, in tendency, it weakens the power of the publishers. Vice versa, if competition is less intense on the retailing level than on the publisher level – be it through dominance or through collusion – then the agency model is advantageous from a welfare perspective.

Transferring the insight from economic theory literature to market reality consequently requires an assessment of the relative competition intensities. In the traditional offline world, the competition intensity on the publisher level was certainly lower than on the retailing level, which was in most countries characterized by a rather dispersed structure of bookshops and chains. This picture, however, has clearly changed and it can hardly be denied that Amazon is much more powerful than any bookstore chain has ever been. This may indicate a reversal of the situation, namely that now and/or in the near future, the competition intensity on the retailing level could become less intense than on the publisher level, favoring agency models for the sale of e-books. However, this would require an in-depth analysis including not only Amazon's actual market position (indeed characterized by high market shares, although not universally so, see section II) but also the contestability of the market as well as the threat of potential entrants. Recent entry activities – Apple's iBook Store, Microsoft in cooperation with Barnes & Noble, several cooperative projects of bookseller associations in different countries, Google Play, etc. – support the existence of considerable contestability.

Notwithstanding, follow-up effects of mutual attempts to create countervailing power on both stages of the vertical relation do present a concern: "Amazon's power over book sales also has been a major factor in causing publishers to combine to increase their ability to resist Amazon's demands. The most extreme such merger took place in 2013, with the combination of the biggest two of the 'Big Six' publishers, Random House and Penguin. Given that sales of Random House and Penguin equal those of the next four trade publishers together, many expect the remaining trade publishers will follow suit, until we see the ranks of top tier publishers trimmed to three or even two giant corporations. Such mergers further harm the interests of readers, authors, and the citizenry at large" (*Authors United* 2015b: 7). Thus, concentration problems may arise on both the upstream and the downstream market and certainly warrant attention of competition agencies regarding further mergers and acquisitions activities.

c. The Means Employed By Amazon

While economic analysis finds (limited and conditional) support of Amazon's e-book pricing policy, some of the means with which Amazon tries to enforce its stance are difficult to justify as procompetitive, except if one reverts to a radical effects-based approach, advocating a 'the-end-justifies-all-means' position. Then, if the outcome is efficient, it does not matter how it is reached. However, the economic concepts of distinguishing between competition on the merits (performance competition) and handicap competition (impediment competition, related also to raising rivals costs) imply that even if the target is justified in terms of efficiency, the means to achieve it still should not include strategies that handicap and (in absolute terms) deteriorate the performance of the competitors (*Eucken* 1952, 2006; *Budzinski* 2008).

If Amazon and a publisher cannot agree on terms of wholesale delivery, then of course it is Amazon's entrepreneurial freedom to delist those titles from its platform or shop. This may differ if Amazon was actually an incontestable monopolist, which however can hardly be substantiated for the national general book markets in most countries as it is now. However, in several cases where publishers did not agree to changes of contractual conditions by Amazon (for example Melville House 2005, Hachette 2014 and Bonnier 2014[21]), Amazon employed means seeking to penalize the 'non-compliant' publisher and hurt its business and that of its authors

[21] See *Köhler* (2015, ch. 5.3.5) for more information on these cases.

beyond a simple delisting. These rather obviously handicapping means included, inter alia,

- an artificial increase of delivery times (from the usual few days to many weeks or even several months),
- deactivating buy-buttons,
- biasing search results,
- placing pop-up advertisement for titles of 'compliant' publishers or from Amazon's own publishing services over selected titles,
- as well as other means along these lines.

These means are dishonest towards the consumer (and as such harming consumer welfare), discriminatory and inappropriate. Also, the artificial creation of intransparency over sales numbers, turnovers and invoices towards publishers does not serve any efficiency effect and plainly and simply harms the business of the affected publishers. Amazon introduced this type of supplier treatment in the context of the so-called 'gazelle project' seeking to discipline smaller publishers such as, for instance, Melville House (*Foer* 2014).

It represents an interesting question, however, whether the mere fact that Amazon thinks it can afford to employ such means is already an indication that it indeed enjoys considerable market power vis-à-vis the publishers.

d. Horizontal Effects from Vertical Conduct

Amazon is not only active on the retailing level but also has own business interests on the publisher level (Amazon's publishing services). This further complicates the case. In theory, a dominant position on the retailer level may enable Amazon to leverage market power upstream to the publisher level. In other words, Amazon may favor its own publishing services at the expense of competing publishers (for instance, through demanding different conditions of supply, but also through more indirect means like biasing its search service) and, thus, anticompetitively increase its market share in the publishers market (*Authors United* 2015b: 14-15).

Irrespective of the problem, whether Amazon actually has sufficient market power to successfully enforce such an anticompetitive leveraging, it appears to be questionable whether it actually experiences sufficient incentives to do so. Amazon's publishing activities focus on so-called self-publishing services, which are considerably different to the services offered by major 'traditional' publishers as the self-publishing services do not include "virtually no (.) editing, designing, or vetting the books for accuracy and quality" (*Authors United* 2015b: 15). This can be viewed as indication that Amazon's publishing services address different authors – and perhaps even different readers – than the traditional publishing houses. The market for books generally represents a strongly heterogeneous and segmented market. Unless empirical evidence displays a strong substitution elasticity between either authors or readers of both types of publishers – to our best knowledge there is no such study so far – an anticompetitive leveraging effect does not appear to be plausible.

e. Diversity, Quality, and Consumer Harm

According to some critics, Amazon's practices lead to a decrease in published titles and, thus, less diversity. "In a well-documented trend, publishers have responded not just by cutting advances, but by publishing fewer titles and by focusing more on books by established bestselling authors and celebrities. Some authors who would otherwise be published can no longer attract the financial support they need to write their books. Readers are presented with fewer books that espouse unusual, quirky, offbeat, or politically risky ideas, as well as books from new and unproven authors" (*Authors United* 2015b: 16). Thus, the diversity of book publications may be endangered and the reduction of book titles may be biased against particularly innovative contents. This touches upon an issue that reaches beyond purely economic considerations of consumers' preference satisfaction and involves fundamental aspects of society. If the claim of Authors United is empirically true, then this represents an area of concern.

However, at the same time, the combination of digital content, broadband internet, and increasing self-publishing options as well as easier access to a wider range of books due to decreasing transaction and stocking costs may counterbalance this effect: there may actually be more possibilities to publish and access book-like contents now than ever before. Note that to some extent, this interacts with the horizontal effects discussed in the preceding section: Amazon's self-publishing services have certainly broadened the diversity of available books, in particular with regard to non-mainstream ideas and content. Especially, authors that could not find a traditional publisher for their ideas now contribute to and enrich the diversity of titles whereas their works remained unpublished and unavailable in former times. The changes in publishing and reading opportunities and behavior may well imply that traditional business models need to adapt and come under pressure if they fail to do so. However, this is neither anticompetitive nor *a priori* anti-diversity.

A different but related complaint criticizes exactly the increasing diversity through self-publishing by pointing to a lack of quality control. While traditional publishing houses carefully assess the quality of book offers before deciding what to publish, self-publishing houses (as well as alternative online publishing options) often merely exclude law-violating contents. Quality of contents is notoriously difficult to evaluate. While the authors published by traditional publishing houses (like Authors United) represent the insider view of the 'traditional' system, outsider authors may have very different views on this type of quality control. From an economic perspective, it requires empirical evidence that is not restricted to major publishers and/or transparent and independent quality definitions and standards to support claims of a problematic loss of diversity.

In line with the modern economic theory of media bias and diversity (inter alia, *Dewenter* 2007; *Gentzkow* & *Shapiro* 2010; *Anderson* & *McLaren* 2012), a threat to pluralism may surface if a monopolistic retailer does not exclusively pursue profit (maximization) goals but also a political or cultural agenda for which she is willing to sacrifice some profits. For instance, a monopolistic retailer may navigate customers around certain books by means of its recommendation and searching service so that they never see or find them (*Authors United* 2015b: 18). This may also happen in competition, and it can happen with (human merchandisers of) offline retailers as well. However, competition among retailers just like competition among publishers significantly reduces the biasing effects of such strategies. Thus, there may be an increasing justification for regulation with increasing market power of a dominant retailer if this retailer also pursues other than purely economic interests.

IV. Potential Remedies: What Should Be Done – and What Not!

The preceding analysis of the manifold allegations against Amazon regarding anti-competitive strategies yields limited areas of conduct where presently concerns are justified from an economic perspective. Some widespread allegations cannot be supported. Market failure due to negative externalities appears to be very unlikely in any scenario (section III.1) and also an inherent and inevitable trend towards an Amazon retailing monopoly – like a natural monopoly, monopolistic gatekeeper or an essential facility – requires very strong and rather unrealistic assumptions (section III.3). Allegations of anticompetitive pricing strategies (section III.2), unfair business practices (III.4) and vertical abuse of market power in the e-book market (section III.5) cannot be dismissed in total and their analysis leads to a differentiated picture. While there is little evidence and indication for traditional predatory pricing, some best-price-clause practices are likely to harm competition and create entry barriers, in particular if Amazon enjoys market power. Moreover, Amazon did engage in cases of misleading price information, whereas there is no evidence or indication that biasing customer reviews has been relevant. Eventually, vertical relations in the fast growing e-book market warrant concerns about competition. The power gamble between major publishers and Amazon's power as a retailer is ongoing and requires careful theoretical and empirical analysis to identify and isolate anticompetitive behavior and arrangements on *both* the upstream and the downstream market. Here, Amazon appears to be both conducting and facing anticompetitive action. Preserving competition on both market stages will be a challenging task for the competition authorities.

In terms of remedies, our analysis clearly shows that the calls for strong regulatory interventions are not appropriate and may, in contrast, risk destroying positive welfare and efficiency effects from Amazon's business. Putting Amazon – together with other internet platforms with high market shares like Google, Facebook, etc. – under the reigns of a special sectoral regulatory agency treating it like a public utility would be wide off the mark. Such a regulatory agency's task of providing (detailed) access regulation is unnecessary because the monopolistic gatekeeper claims and doomsday scenarios of all-conquering negative externalities (sections III.3 and III.1) have to be rejected from an economic perspective. Furthermore, negative effects on allocative and dynamic efficiency would be difficult to avoid given the limitations and inherent bureaucracy mechanisms of powerful regulatory agencies. Such agencies typically do not possess the necessary knowledge to provide efficient market or (access) price structures. Moreover, they experience incentives to extend and detail their regulatory tasks in order to maximize budget and power (economics of bureaucracy; *Niskanen* 1968). This would severely harm Amazon's abilities to provide efficient and innovative online commercial services. Therefore, such a regulation would be against and at the expense of the welfare of the consumers.

Similarly, the European Parliament's initiative to break up or unbundle powerful internet platforms (admittedly targeting Google and not so much Amazon) should not be extended to commercial trading platforms.[22] For most of Amazon's business, this would either make no sense or would not heal the (remaining) problems. Unbundling Amazon as a retailer from Amazon as a marketplace would indeed reduce some negative horizontal effects from best-price clauses, however, not all – and, thus, would be considerably less effective than the much milder competition policy intervention prohibiting these clauses. Furthermore, an unbundling of Amazon's marketplace and retailing business might lead to efficiency losses due to a lower degree of indirect network effects on the platform side of the business. Separating Amazon's retailing activities in the book market from its publishing services would indeed erase any scope for vertical leveraging effects. However, they merely become possible in very specific and not very likely scenarios (see section III.5), therefore, forced unbundling with all its legal (violation of property rights, etc.) and economic problems (governmental or administrative design of market structures;

[22] And it is also highly doubtful whether unbundling Google's search services from its other commercial activities would be procompetitive and welfare increasing.

pretence of knowledge[23], frustration of innovation, etc.) represents an inadequate and inappropriate intervention.

Instead applying the existing competition rules represents a much more effective and appropriate tool for addressing the competition concerns regarding Amazon that survive a sound economic analysis. With respect to consumer protection related infringements like misleading price information (see section III.4), this has already worked well. Regarding the more complex concerns like best-price clauses, vertical abuse of dominance, etc., competition authorities are well equipped to investigate and handle these issues. They first require sound in-depth analysis of data (which is publicly not available but which competition authorities can access in the course of investigations) in order to identify the right scenario – existence and extend of market power of Amazon, possible countervailing power, etc. – and consequently apply the appropriate economic conclusions. Applying the competition policy framework, moreover, offers scope for tailor-made remedies addressing precisely the issues causing anticompetitive effects and minimizing collateral damages – in stark contrast to more ambitious regulatory interventions.

Of course, competition policy does not get every case right and this is particularly true for comparatively new, innovative and quickly changing markets in the context of the digital economy. However, this further corroborates the advantages of competition policy over alternative regulations: by focusing on preventing evidently anticompetitive strategies and arrangements, it does not overly restrict the dynamics of the markets. In the case of Amazon, competition policy investigations – and (if found necessary) subsequent interventions – presently appear to be justified regarding best-price clauses and generally into the book market, in particular e-books and audio books. Insofar, Krugman's call for antitrust action is justified to some extent. However, the scope for necessary investigations is rather limited compared to Amazon's diverse business activities. In the e-book market, for instance, it is not completely clear that Amazon is the only offender from a competition economics

[23] See *Hayek* (1975).

perspective. Therefore, we do not agree with Krugman about the extent and degree of violations of competition by Amazon.

V. Conclusion

Amazon has been impressively successful in establishing an online commercial trading platform across most of consumer goods categories. Without doubt, this success is due to innovation and efficiency, i.e. due to performance competition, and nets considerable welfare advantages for consumers. Along with the success, Amazon had achieved an impressive size, impressive market shares and in some markets positions of dominance (or at least not far away from dominance). Success in business competition is typically accompanied by obtaining market power – and once power is there, incentives to abuse this power for future success kick in, irrespective of hitherto merits of the powerful company. As a consequence, strategies of competing on the merits may get mixed with or even replaced by strategies of handicap competition. Therefore, it is natural that leading market positions come along with critical attention of competitors, suppliers, customers, experts, and antitrust authorities. Not surprisingly, complaints about the competitive behavior of Amazon are becoming more frequent, be it from publishers, authors, or from famous economists. And also competition authorities are starting to monitor and investigate Amazon.

Against this background, we collect allegations of anticompetitive behavior by Amazon as well as anticompetitive effects from Amazon's success story in this paper. For the purpose of providing an economics-based cross-check on the plausibility and vindication, we categorize these public allegations in five categories: negative externalities (III.1), predatory pricing and monopolization (III.2), natural monopoly (III.3), unfair competition (III.4), and vertical abuse of dominance (III.5). Our discussion identifies several areas of anticompetitive concern, namely the (price-) competition-lessening effects of best-price clauses, consumer-misleading price and search information, and the competitive relations in the book market, in particular, in the e-book submarket. These aspects warrant competition policy investigation and may warrant (depending on the results[24]) subsequent antitrust action. However, even if Amazon was offending competition rules in all these cases (which is far from certain), it would hardly justify the doomsday scenarios put out by some of its critics. Even *Krugman*'s (2014) assessment that Amazon is the worst threat to competition since Standard Oil appears to be over-exaggerating.

The rather modest findings of anticompetitive concerns (compared to the allegations in the public and the media) correspond to calling for caution when it comes to remedies and interventions. Calls for breaking-up successful and powerful internet platforms like Amazon as well as concepts of implementing special regulatory authorities significantly restricting Amazon's entrepreneurial freedom are both inappropriate and pose considerable danger to consumer welfare. Limiting Amazon's creative potential regarding innovation and efficiency goes along with significant and severe harm to dynamic welfare and would require an essential-facility-type of quasi-monopolistic gatekeeper position of Amazon for online commercial trade to be seriously considered (and even then many pitfalls remain). Today, Amazon clearly is not in such a position and it appears to be implausible that this should change in the near future (see sections III.3 and IV). There are relevant alternative ways for producers and shops to access consumers and the number of online competitors appears to be growing rather than shrinking. Thus, it is important not to revert to 'global' regulatory instruments but instead to identify concrete markets, arrangements and modes of behavior that display anticompetitive effects and remedy accordingly. Competition policy is definitely better up to this task than regulatory alternatives.

Of course, the future may bring new challenges and considerably change today's assessment. The role of data is likely to increase also in terms of competition effects (next to more fundamental privacy issues that are not addressed in this paper). The availability of individualized consumption patterns from its data base may allow

[24] Since we can only work with publicly available information and data, we cannot draw definite conclusions here.

Amazon to successfully establish individualized or personalized pricing strategies.[25] Then, every consumer would face a different price of a given product on her consumer screen depending on her individual past consumption pattern combined with demographic, geographic and other personal data. Perhaps, this could allow Amazon to implement (close-to) perfect first degree price discrimination, i.e. pricing each consumer according to her individual willingness-to-pay. While this would increase producers' rents, it would reduce consumers' rents – and also the total economic effect may be negative because the perfectly skimmed consumers' rent cannot be used for additional consumption activities anymore. However, individualized pricing in online commerce requires economic research. Welfare as well as competition effects – positive and negative ones – need to be carefully analyzed and assessed.

So, is Amazon the next Google? The answer is 'yes' because competition policy will focus intensively on it in the upcoming years. The answer is also 'yes' because public fears and (sometimes) hysteria go well beyond actual threats to competition. And, eventually, another 'yes' relates to the necessity of frustrating abuses of market power in order to induce these internet 'giants' to keep focusing on innovative and efficient strategies. In terms of detailed competition analysis, the answer is 'no', however, because the markets and the characteristics of Amazon's business differ significantly from Google's business – at least for now.

[25] First attempts have already been ongoing.

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