

European Commission:  
Shaping competition policy in the era of digitisation

**Ecosystems – New challenges for  
competition law enforcement**

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## Introduction

Digital platforms – especially the FAAMG-companies, i.e. Facebook, Amazon, Apple, Microsoft, and Google – are phenomena which have managed to become an integral part of our daily lives, whether it be Google starting as an Internet search engine and expanding its reach into online advertising, online shopping, operating systems for mobile phones etc., Apple managing to introduce one of the world's most popular mobile phone while establishing a sophisticated media service universe, Facebook accompanying social communication, or Amazon, starting as an online book retailer, becoming the world's most powerful retail hub, and expanding its reach into further areas such as music, videos, cloud computing and payment services, or even insurances.

While the product and service portfolios of these companies may differ, their strategic approach is similar. Starting from a central product or service platform, they strive to become autarkic "**ecosystems**" that expand into adjacent, upstream, and/or downstream markets – through vertical integration and/or conglomerate growth – to exclusively manage and satisfy the customers' entire needs in certain parts of life or business.

*Lim*, Tech Wars: Return of the Conglomerate – Throwback or Dawn of a New Series for Competition in the Digital Era?, 2017, page 11; *Petit*, Technology Giants, the "Moligopoly" Hypothesis and Holistic Competition: A Primer, 2016, page 15 et seqq.; *Podzsun*, Dismembering producers from customers: The Google/Sanofi joint venture, CPI Antitrust Chronicle, February 2018; Monopolkommission, 22. Hauptgutachten, 2018, para 396; see also *Schweitzer, Haucap, Kerber, Welker*, Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen, 29 August 2018, pages 84 et seq., a study commissioned by the German Federal Ministry of Economics in order to establish whether in light of digital platform developments competition law instruments are in need of revision.

Amazon, for instance, basically started with offering books and CD's but rapidly transformed into an online trading platform which – either itself or through thousands of independent retailers active on "Amazon Marketplace" – practically offers all imaginable consumer goods. Fee-based premium services ("Amazon Prime") include fast delivery and add-on services such as access to video and music on demand ("Prime Video" and "Prime Music"), or e-books. For retailers Amazon not only operates the marketplace as an online trading platform, but offers also comprehensive logistics, payment and cloud computing services such as e.g. website hosting ("Amazon Web Services").

Ecosystems, like Amazon's one-stop shop retail hub rendering also adjacent services, may make our lives easier short-term. **In the long run, ecosystems threaten effective competition and consumer welfare.** Accordingly, both the European Commission and national competition agencies have repeatedly expressed antitrust concerns regarding business practices of ecosystems, e.g. of Google's attempt to transfer the market power of Google Search to its online retail business Google Shopping. However, these investigations were initiated after the respective platform had already succeeded in evolving into an ecosystem dominating an entire industry.

European Commission, decision dated 18 July 2018, COMP/40099 "Google Android"; European Commission, decision dated 27 June 2017, COMP/39740 "Google Search"; the European Commission is conducting a further examination with regard to "Google AdSense", COMP/40411; cf. the European Commission's probe on the use of third-party merchant data by

Amazon, [https://app.parr-global.com/intelligence/view/prime-2710163?src\\_alert\\_id=284940](https://app.parr-global.com/intelligence/view/prime-2710163?src_alert_id=284940), and European Commission, decision dated 28 July 2017, COMP/40153 "Amazon e-books"; former decisions involved Microsoft: European Commission decision dated 24 March 2004, COMP/37792 "Windows Media Player" and European Commission, decision dated 16 December 2009, COMP/39530 "Internet Explorer"

While competition authorities so far objected on market specific, potentially abusive practices the generally market-transcending effects of ecosystems do not appear to be at the centre of antitrust enforcement.

This paper explores whether competition law enforcement needs to be adjusted to adequately address competitively relevant practices of digital ecosystems. Against this background, we define the term ecosystem (A.), describe Amazon as an example of how ecosystems work (A.I.) and explore why ecosystems put effective competition at risk (A.II.). Finally, we consider potential adjustments of competition law enforcement in order to effectively protect competition (B.).

## A. Ecosystems

The term ecosystem refers to conglomerates covering customer needs in certain areas of life/business having the ability to transfer market power from one central market to adjacent, upstream or downstream markets, for instance through integration, bundling, or predatory pricing strategies, in order to establish themselves as focal point of the customers' and/or businesses' needs in certain areas. Although the practical relevance of conglomerates' harm to competition has already been discussed, digital ecosystems warrant a closer assessment.

cf. with respect to the U.S. Antitrust law *Khan*, Amazon's Antitrust Paradox, Yale L. J. 126 (2017), 710, 717 et seqq.; cf. European Commission, Non-horizontal Merger Guidelines, para 91 et seqq.

Digital ecosystems, unlike industry conglomerates of the past, exhibit a tendency to develop systems that connect different needs in order to become an interface between supply and demand and an integral part of the customers' daily routines in a specific area while ousting stand-alone suppliers. Accordingly, different authors have already addressed potentially anticompetitive practices of ecosystems.

*Khan*, Amazon's Antitrust Paradox, Yale L. J. 126 (2017), 710; *Lim*, Tech Wars: Return of the Conglomerate – Throwback or Dawn of a New Series for Competition in the Digital Era?, 2017; *Petit*, Technology Giants, the "Moligopoly" Hypothesis and Holistic Competition: A Primer, 2016; *Podzsun*, Dismembering producers from customers: The Google/Sanofi joint venture, CPI Antitrust Chronicle, February 2018; *Schweitzer*, *Haucap*, *Kerber*, *Welker*, Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen, 29 August 2018

## I. Amazon

A prominent ecosystem is Amazon. While Amazon's current position as the central online retail hub might be competitively relevant for several reasons, we focus on the competitive implications of Amazon Prime.

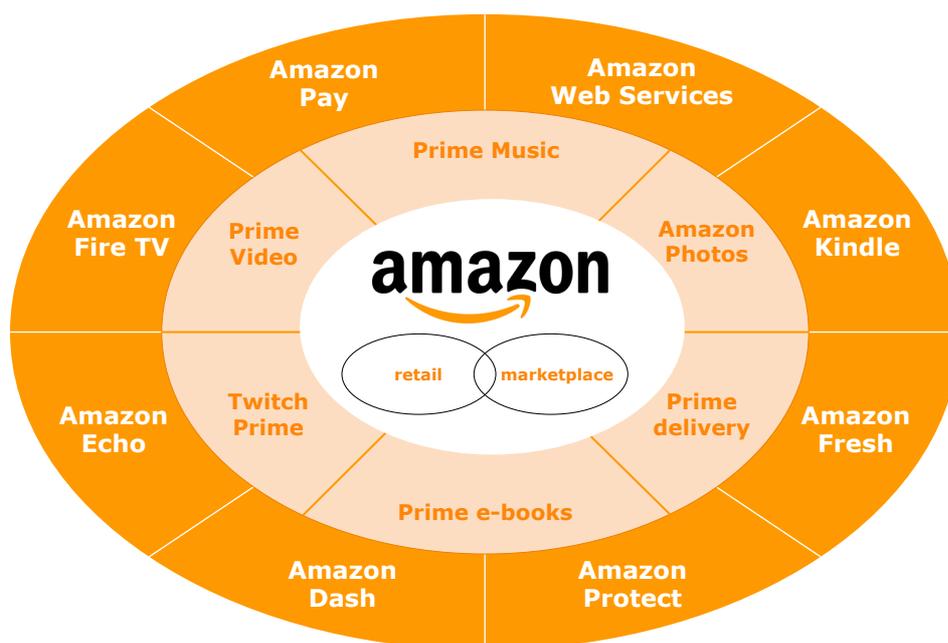
Amazon Prime effectively connects Amazon's retail (platform) business to numerous additional markets thereby constituting one of Amazon's biggest growth factors.

cf. *Khan*, Amazon's Antitrust Paradox, Yale L. J. 126 (2017), 710, 750; cf. the European Commission's probe on the use of third-party merchant data by Amazon, [https://app.parr-global.com/intelligence/view/prime-2710163?src\\_alert\\_id=284940](https://app.parr-global.com/intelligence/view/prime-2710163?src_alert_id=284940)

Amazon Prime initially started as a fee-based subscription service providing users with access to prompt delivery as an add-on to Amazon's own retail business as well as for products of Amazon Marketplace retailers. Since then Amazon has bundled in additional valuable products and services without actually raising the price for Amazon Prime, except for minor adjustments. Now, Amazon Prime comprises a broad range of "free" services on top of prompt delivery including e.g. Prime Video, which basically provides free video streaming, Prime Music, which allows free streaming of songs and playlists, renting e-books, and Amazon Photos offering storage space for pictures.

In the U.S., following the acquisition of the food retailer "Whole Foods", Amazon is now supplementing its Prime Services with special "Whole Food" deals, e.g. 10% off certain products, for Amazon Prime subscribers.

Moreover, Amazon complements its Prime Services with own hardware offerings. Prime Video or Prime Music can e.g. be played on Amazon's Fire TV, a streaming device, e-books can be read on Amazon's Kindle, and Amazon's Echo is a virtual personal assistant. The following diagram illustrates the most relevant components of Amazon's ecosystem established on the basis of its retail platform, the Prime universe and adjacent products and services:



Three aspects of Amazon Prime need to be emphasised:

- Individual products/services of Amazon Prime cannot be acquired separately. Accordingly, a customer wishing to use, for instance, Prime Delivery is necessarily equipped with Prime Video, Prime Music, and the remaining components of Amazon Prime.
- The annual fee to be paid by consumers for Amazon Prime is estimated to be significantly lower than Amazon's actual costs for rendering premium delivery services and providing especially video and music streaming offerings.

cf. *Khan*, Amazon's Antitrust Paradox, Yale L. J. 126 (2017), 710, 751 et seqq.

- Amazon has the readiness, willingness, and ability to forego profits in the short to middle run in order to establish itself as the leading supplier of the aforementioned services in the long run.

## II. Anticompetitive potential of ecosystems

While it is outside the scope of this paper to scrutinize Amazon's strategy in detail, it appears that Amazon is a good example for the effects of ecosystems. **Amazon effectively uses Amazon Prime as a vehicle to leverage market power from market to market**, i.e. from its position as an operator of a dominant retail platform, to markets for VoD-services or music streaming etc., thereby marginalising stand-alone competitors. As a retroactive effect, Amazon's position on platform and retail markets is strengthened, as Amazon Prime users are locked-in with little incentive to switch to alternative retail platforms or to online shops or retailers. Such market transcending business strategies warrant a deeper competition law analysis, especially with a view to the European Commission's approach in applying Article 102 TFEU to bundling (including multi-product rebates) and predatory pricing.

cf. European Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the Treaty, para 50 et seqq., 60 et seqq., 63 et seqq.

Amazon is, *inter alia*, active on the **market for the operation of multisided online retail platforms** which simultaneously serve (at least) two different customer groups, namely retailers (including Amazon's own retail business) offering their products on Amazon Marketplace and end-customers buying from these retailers. According to a recent market study **46% of e.g. the entire German online retail trade** is processed through Amazon.de. Regarding online-trade in the EU, current figures are not publicly available. However, Amazon's share of the entire online-trade in EU was estimated at 20% already in 2015 so that it is likely to be higher today when taking account of the development of the German market.

HDE, Online Monitor 2018 [https://www.einzelhandel.de/index.php?option=com\\_attachments&task=download&id=9449](https://www.einzelhandel.de/index.php?option=com_attachments&task=download&id=9449); European Commission, JRC Technical Reports, The Competitive Landscape of Online Platforms, 2017, S. 31; *Khan*, Amazon's Antitrust Paradox, Yale L. J. 126 (2017), 710, 755 who cites a study mentioning that Amazon controls 46% of the entire e-commerce in the United States; cf. FCO, case report dated 9 December 2013, B6-46/12 "Amazon"

If Amazon's share of the total German online retail trade amounts to 46%, its market share for operating online retail platforms is necessarily higher because online trade is not only managed by platforms, but also by the retailers' (independent) online shops. Given its immense user base encompassing its own retail customers as well as Amazon Marketplace customers, Amazon thus operates a **dominant online retail platform** and, accordingly, appears to be an addressee of Art. 102 TFEU. Customers can hardly distinguish between Amazon's and the Marketplace retailers' offerings as the latter are integrated into Amazon's online presence and additionally can make use of Amazon's logistics (making them eligible for Prime delivery which raises the attractiveness of Amazon Prime due to the increasing number of products available for prompt delivery), and payment services.

Cf. *Khan*, Amazon's Antitrust Paradox, Yale L. J. 126 (2017), 710, 775 et seqq. who ascribes the origins of Amazon's logistics services to the fact that Amazon – due to its size – was able to achieve advantageous terms with logistics providers such as UPS, which in turn put smaller competitors at a competitive disadvantage and hence created their need to rely on Amazon's logistic services.

In addition, the properties of Amazon Marketplace as a multisided platform safeguard Amazon's market position due to **indirect network effects**. Accordingly, the attractiveness for retailers increases with the number of end-customers and *vice versa*. In addition, Amazon's retail platform also displays **direct network effects** between end-customers as the individual user's trust in the platform increases with the number of overall users and their experience e.g. expressed through (positive) customer evaluations.

Amazon's dominance is also shielded by data, on the one hand customer data (shopping preferences, taste etc.) collected through its different business lines enabling it to strategically improve and tailor future services to actual consumer needs, on the other hand information about competitors using Amazon Marketplace or Amazon's cloud computing services. Accordingly, Amazon has huge advantages as compared to stand-alone competitors who at best are able to collect data regarding their individual businesses.

cf. *Khan*, Amazon's Antitrust Paradox, Yale L. J. 126 (2017), 710, 780, 785 et seq.; *Schweitzer, Haucap, Kerber, Welker*, Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen, 29 August 2018, pages 84 et seqq.; cf. the European Commission's probe on the use of third-party merchant data by Amazon, European Commission, [https://app.parr-global.com/intelligence/view/prime-2710163?src\\_alert\\_id=284940](https://app.parr-global.com/intelligence/view/prime-2710163?src_alert_id=284940)

## 1. Bundling

Its immense customer base is the starting point for Amazon's market transcending business approach. Amazon expands its ecosystem, *inter alia*, through Amazon Prime, thereby raising bundling concerns.

- Amazon is the dominant provider of online retail platform services and thus holds a dominant position if a general retail platform market is defined.
- Besides, it seems plausible to define a separate market for premium (delivery) subscriptions for online platforms. Under these premium delivery subscriptions end-customers are offered free and prompt delivery of products purchased on the platform during the subscription period, in consideration of a (monthly or annual) fee. These premium delivery subscriptions of online platforms might constitute a product market on their own (and thus do not pertain to the markets for consumer goods sold online) as they have an own price and can be subscribed to independently from a product purchase. For online platforms, offering such premium delivery subscriptions is attractive as it locks in consumers that subsequently will tend to place future orders with the platform.
- However, as Amazon's market position appears to be dominant irrespective of the precise market definition it can be left open whether a general retail platform market or a market for fee-based premium delivery subscriptions or other premium platform services have to be delineated.
- Amazon can attract the entirety of the users of its platform as potential Amazon Prime subscribers. While an Amazon Prime subscription is not mandatory in order to use Amazon's retail platform it appears evident that a regular customer will opt for Amazon Prime if the number of products eligible for prompt delivery and the customer's online needs are sufficiently large.
- Every Amazon Prime subscriber opting for the subscription will in turn be equipped with the additional Amazon Prime services, i.e. Prime Video, Prime Music etc. However, these services relate to completely different markets, e.g. for VoD, music streaming, and other product and services markets.
- The additional Amazon Prime offerings can be used free of extra charge from the consumers' perspective that already opted for Amazon Prime to get prompt delivery (bundling). This strategy triggers the transfer of

Amazon's platform dominance because Amazon Prime subscribers that automatically have access to Amazon's VoD or music streaming will only have a reduced incentive to choose alternative offerings of stand-alone suppliers that are therefore put at a competitive disadvantage. Such suppliers would need to provide an offer that is able to overcome consumer inertia ("status quo bias") and that can either compete with the advantages of Amazon Prime (in its entirety), or that justifies multi-homing. Accordingly, at least a large share of e.g. potential VoD-consumers is effectively foreclosed due to Amazon's strategy.

This approach resembles Microsoft's bundling practices regarding its Internet Explorer and Media Player. In both cases Microsoft exploited its dominance concerning operating systems for home computers by using the pre-installed operating system as a distribution means unavailable to competitors. For stand-alone competitors in order to compete successfully it was necessary to overcome consumer inertia owed to the fact that a large share of consumers were already equipped with and had no need to switch although competing products were partly free of charge and "only one click away". Insofar, Microsoft's strength with regard to Internet browsers or media players was not owed to the products' qualities, but to the superior means of distribution as compared to stand-alone suppliers.

European Commission decision dated 24 March 2004, COMP/37792 "Windows Media Player"; European Commission, decision dated 16 December 2009, COMP/39530 "Internet Explorer"

Google applied a similar strategy with respect to its search (Google Search) and browser apps (Chrome). Since Google enjoyed a dominant position with regard to app stores (Play Store) for the mobile operating system Android, it required manufacturers to pre-install Google Search and Chrome as a condition for licensing Google's app store. Again, competitors were faced with the dilemma to overcome the consumers' status quo bias in order to compete with Google's products on an equal footing.

cf. European Commission, Press release dated 18 July 2018, IP/18/4581

Regarding Amazon, it appears justified to conclude that its strength, e.g. in video streaming – **in Germany, for instance, Prime Video is considered to be the strongest VoD-platform** –, is not owed to the fact that Amazon's content or service are superior compared to its stand-alone competitors, but that Amazon simply exploited the potential of its retail customer base in order to transfer its dominant retail platform position to VoD-services.

Amazon is considered to have a market share of between 30-40% in terms of SVoD, cf. Monopolkommission, 22. Hauptgutachten, 2018, para 998 et seq. citing a current study; *Adam Levy*, Streaming Competition Isn't Hurting Netflix or Amazon, available at <https://www.fool.com/investing/2018/05/11/streaming-competition-isnt-hurting->

[netflix-or-amaz.aspx](#): 74% of Amazon Prime Video users in the United States indicate that the reason they use the service is that it was included in the Prime bundle.

**In turn, Amazon Prime also strengthens Amazon's retail business.** First, the decision to subscribe to Amazon Prime locks customers in: Advantages of Amazon Prime lead to a decrease in the incentives to buy on other retail platforms or in individual online shops. Second, consumers that opt for Amazon Prime Video, for instance due to a specific series or movies being available on Amazon Prime only, necessarily are equipped with the other Amazon Prime components, including prompt delivery. This again provides ample reason to use Amazon as main retail platform in order to reap the full benefits of the given Amazon Prime subscription. This lock-in does not only entail adverse effects on competitors, but also on consumers: Amazon has started to increasingly behave independently e.g. with regard to personalized pricing strategies or price variations contingent upon the quality of the consumers' online interfaces etc.

## 2. Predatory Pricing

Ecosystems can also apply predatory pricing strategies to leverage market power and oust competitors. Regarding Amazon Prime, for instance, the uphill battle of stand-alone competitors becomes all the more difficult as Amazon Prime appears to be priced below costs as a result of the inclusion of different services basically free of charge.

cf. *Woo*, Amazon "Primes" Pump for Loyalty, 14 November 2011, available at <https://www.wsj.com/articles/SB10001424052970203503204577036102353359784>; *Khan*, Amazon's Antitrust Paradox, Yale L. J. 126 (2017), 710, 751, 757 et seq.; cf. article in the journal *Business Insider Deutschland* dated 16 May 2018, available at <https://www.businessinsider.de/amazon-prime-membership-should-cost-785-2018-5?r=US&IR=T>; cf. *Schweitzer, Haucap, Kerber, Welker*, Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen, 29 August 2018, page 112, who argue that in modern platform economics attention should be paid to a form of "predatory pricing" in which products or services are added to an existing product or service below cost.

In addition, as a result of the willingness to forego profits in order to support Amazon's long-term business strategy, Amazon has an immense potential for pricing below costs in order to achieve growth and force competitors out of the market. Against this background the "deep pocket doctrine", i.e. the relevance of financial power for competition, might be in need of reconsideration as well. While financial strength alone is rarely a decisive factor in competition law analysis it appears that due to the willingness to forego profits the superior financial abilities of today's Internet ecosystems may actually pose a threat to competition. It is, however, only rational to forego profits in the short to middle run in order establish an unassailable platform with a firmly entrenched market position allowing to recoup losses in the long run.

Cf. *Khan*, Amazon's Antitrust Paradox, Yale L. J. 126 (2017), 710, 786 et seqq.; *Podzsun*, Dismembering producers from customers: The Google/Sanofi joint venture,

CPI Antitrust Chronicle, February 2018, pages 5 et. seq.; cf. *Schweitzer, Haucap, Kerber, Welker*, Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen, 29 August 2018, pages 60, 63

## B. Conclusion

The young and extraordinarily successful history of ecosystems demonstrates that competition law intervention regularly is too late to effectively prevent impediments to competition. When investigations against Google, Amazon, Facebook, Microsoft etc. were initiated the damage had already been done. This is partly owed to the fact that Article 102 TFEU requires the finding of an abuse of an existing dominant position and that it takes a long time from initiating proceedings to final decisions. In the meantime, dominant ecosystems can grow, explore new fields of activities, develop new strategies, and gain market shares. **Insofar, ecosystems regularly appear to be a step ahead of competition law enforcement.**

Against this background, politicians and jurists increasingly call for market regulation including unbundling obligations. While such drastic claims might be appropriate for ecosystems that already have become unassailable, the discussion should rather focus on the question of how competition law enforcement can intervene preventively and curtail the suction effect of ecosystems, which tend to oust competing market players thereby limiting customer choice.

It appears that competition law already disposes of important tools required to effectively protect competition in the digital era. All agreements that restrict competition or abusive practices of dominant undertakings are forbidden and mergers that impede effective competition can be prohibited. However, the case law does not yet reflect the characteristics of digital ecosystems adequately. It therefore needs cases to enhance the application of competition law to digital industries and to explore where competition law requires a new approach to protect competition against the threat of digital ecosystems.

Regarding **merger control**, what precisely is a significant impediment on digital markets and why should the forecast horizon be limited to 3-5 years and not take account of long-term developments such as the tipping potential of a market? Is it adequate to require the same degree of probability for prohibition decisions irrespective of the industry in question although the potential of digital ecosystems is apparent? Moreover, it appears to be warranted to put much more emphasis on conglomerate effects – to take account of the clear incentive and ability of platforms to link products and services and to apply bundling and/or predatory pricing strategies in order to build conglomerate ecosystems – rather than predominantly concentrating on competitive effects market by market.

A case in point considering the subsequent convergence of different products and services might be European Commission, decision dated 3 October 2014, COMP/M.7217 "Facebook/WhatsApp"; *Podzsun*, Dismembering producers from customers: The Google/Sanofi joint venture, CPI Antitrust Chronicle, February 2018, page 4

Regarding the **notion of dominance**, an important question is how EU competition law could take account of the specifics of digital markets in order to facilitate the application of the prohibition of abusive practices to digital companies, or more precisely, what is dominance on digital (platform) markets?

cf. Schweitzer, Haucap, Kerber, Welker, Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen, 29 August 2018

With a view to **enforcement**, a major issue has been that investigations took too long. Competition authorities have the ability to order interim measures. According to Article 8 Reg. 1/2003 interim measures can be ordered "*in cases of urgency due to the risk of serious and irreparable damage to competition.*" Although ecosystems have the potential to seriously and irreversibly harm competition, neither the European Commission nor national competition agencies make use of this important instrument. Whereas effective enforcement and fast proceedings are also a matter of capacities, the question arises if capacities and expertise in digital economies need to be increased.

It appears to follow from the example of how Amazon's ecosystem works that ecosystems generally need to be monitored more closely to prevent competition from being distorted instead of "rectifying" concerns once they have manifested. In essence, competition authorities may need to reconsider their approaches towards conglomerate power in digital industries in order to be equipped for what lies ahead.

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