

Competition, contestability, and fairness in EU digital markets: an economic perspective on recent enforcement and challenges ahead

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Abstract:

Network effects and data feedback in digital markets, increasingly complex business models and anti-competitive behaviour by dominant players have resulted in entrenched market power, where a few large incumbent platforms can set unfair trading conditions and abuse their market power. To protect competition to the benefit of consumers, ensuring contestability and fairness, over the last years the European Commission has pioneered antitrust investigations in digital markets and adopted the Digital Markets Act (DMA). This article aims at providing an overview of these efforts, highlighting the need and role for economic analysis.

Keywords:

Competition policy, EU digital markets, contestability, fairness, DMA.

Códigos JEL:

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1. Introduction: Competition and digital markets

There is a prominent and growing literature on the rising trends in industry concentration, markups, and profits, presenting evidence of increased exercise of market power and reduced market contestability.² These developments can be partly attributed to globalisation, technological progress and digitalisation.

Globalization has expanded markets, enabled complementarities, and generated allocative efficiencies. Technological progress has delivered great value to firms and consumers, creating new processes, services and products that have contributed to increasing productivity and welfare. As such, concentration and rising markups could be seen as manifestation of efficiency and superior technology.³ However, they can also be related to evolving market features and business conduct, notably in digital markets, characterised by steep scale economies, network effects and data feedback:⁴

- Steep economies of scale occur when the average cost of providing services declines rapidly as the number of customers increases. While the concept of economies of scale is not new, these effects can be particularly pronounced in the digital economy. Here, the cost reductions associated with scaling up are often much more significant due to the low marginal cost of replicating digital products or services once they are developed. This can lead to substantial advantages for incumbent firms, as they can serve larger user bases without meaningful increases in costs, creating a strong competitive advantage.
- Network effects occur where the value and convenience of using an online service or product increase as more users adopt it. For digital platforms, these externalities exist not only among users on the same side of a platform but also across different sides, such as between business users and consumers. This can create significant barriers to entry, making it difficult for entrants to compete, even if they are more efficient or offer higher quality. The incumbent platform's large user base and the associated benefits through network effects can solidify its entrenched market power, limiting the success of new entrants.
- Further, the role of data and data feedback loops has become increasingly significant in the digital economy. With advancements in technology, companies are now able to collect and analyse vast amounts of data. Such data can be useful for optimizing online services and processes, for developing innovative products as well as more generally for informing business decisions, thus presenting an important competitive advantage. As data-driven business models continue to evolve, the importance of leveraging this resource to improve digital products and services will likely grow further.

A consequence of such market characteristics are winner-takes-most dynamics, where digital markets can tip towards one or a few platforms that gain large market shares, markets be-

² See European Commission (2024) that explore the state of competition in the EU.

³ Miller (2024) reviews industry studies that examine market power over long time horizons, showing that a common theme emerging from these studies is that technological advancements matter a great deal for the evolution of economic outcomes. By contrast, the studies do not point to weak antitrust enforcement as contributing to greater market power.

⁴ Crémer (2019)'s report for the European Commission on "*Competition policy for the digital era*" discusses these characteristics in more detail.

come less contestable, and market power gets entrenched. As these winning platforms grow, it becomes increasingly difficult for new entrants to compete unless they offer considerably different value or innovation.

While market power appears to have increased not only in the digital sector, but also in more traditional sectors that are not driven by technological progress, digital platforms are today amongst the largest companies globally with an exceptional ability to set trading conditions on other market operators and exercise market power. Some authors view growing market power as one of the main reasons for increased profit margins and the concomitant decrease in labour's share of GDP,⁵ while others have illustrated the connection between entrenched market power, economic power and political power, where corporate lobbying can inefficiently and unfairly interfere in public policy making to favour their private interests.⁶

In this context, it has been ever more important to have effective tools to protect competition and prevent the abuse and entrenchment of market power, to the benefit of consumers and as an integral part of a competitiveness strategy for the EU.⁷ Antitrust enforcement over the last decade has been confronted with significant challenges due to the complexity of new business models and new types of non-pricing conducts,⁸ the asymmetries of information and resources between large industrial players and competition authorities, and the speed of technological progress compared with the duration of antitrust investigations. The European Commission (EC) has pioneered bringing forward numerous antitrust investigations in digital markets, developing new theories of harm, adopting the Digital Markets Act and launching an

⁵ Gutiérrez and Philippon (2023) and Grullon, Larkin, and Michaely (2019) view rising concentration as the result of a lack of antitrust enforcement implying higher margins and more profitable M&As, with no evidence of increased efficiency. De Loecker, Eeckhout and Unger (2020) and De Loecker and Eeckhout (2018), and Calvino et al. (2018) report large heterogeneity in concentration trends (increases driven by firms at the top of the distribution, and higher in digital-intensive sectors), but also view market power as one of the main reasons for increased margins.

⁶ The influence of special interest groups on public policy and regulation has long been studied in the field of political economy. The work by Grossman and Helpman (2005) provides a framework to analyze how special interest groups seek to influence the policy-making process, with concrete applications to trade policy. Zingales (2017) and Cowgill, Prat, and Valletti (2022) show how increase industrial concentration can increase political power on top of market power, where the latter investigates the effect of mergers on the political activity of merging firms. Related to this is the recent work of Akcigit, Baslandze, and Lotti (2023) studying the impact political connections on economy's business dynamism and innovation, showing that market leaders are much more likely to be politically connected, but much less likely to innovate.

⁷ Effective competition in domestic markets contributes to the global competitiveness of firms, by incentivizing them to be more efficient and innovative. Preventing inefficient exercise of market power benefits final consumers as well as firms that have access to inputs of higher quality at lower costs. Pro-competitive industrial policies are required to realize the competitive potential of EU firms, notably in the areas of innovation, technological adoption, and decarbonization, characterized by externalities, miscoordination, public goods, and uncertainty. Effective competition enforcement in digital markets and pro-competitive industrial policies are complementary in fostering competitiveness and economic growth. See Piechucka, Sauri and Smulders (2024) for a discussion of the complementary nature of competition and industrial policies.

⁸ Network effects and data feedback loops facilitate a strategy of pricing at zero to maximize user acquisition and engagement. At the same time, digital platforms can monetize on the business user side through revenues such as for advertising, fuelled by data collected on the consumer side, but without directly charging the consumers. Dimakopoulos and Sudaric (2018) analyse platform competition where user data is collected to improve ad-targeting, showing that the equilibrium level of data collection can be distorted.

ongoing reflection about improved guidance on antitrust enforcement against exclusionary conduct.⁹ This article aims at providing an economic overview of these efforts.

The remainder of this article is structured as follows: Chapter 2 discusses the antitrust enforcement by the EC in digital markets, focussing on the economics of recent antitrust cases in digital, challenges in digital antitrust enforcement, and the draft guidelines on exclusionary abuses. Chapter 3 covers the Digital Market Act, discussing from an economic perspective its objectives, complementarities with antitrust enforcement, compliance, first cases, and potential enforcement challenges. Chapter 4 concludes, highlighting the role of economics in digital antitrust and DMA enforcement.

2. Recent antitrust enforcement by the EC in digital markets

Antitrust enforcement has evolved remarkably over the last decade, especially in digital markets, with new theories of harm that capture the exclusionary and exploitative behaviours of dominant firms in settings where network effects and non-price competition are prevalent. The EC has taken a pioneering role worldwide in the enforcement of competition law to digital markets, contributing remarkably in at least three ways:

- First, by leading the way on an area in which today the question is no longer whether to enforce, but how to enforce.
- Second, by contributing to identify problematic business conducts in digital markets that call for public intervention.
- Third, by showing that we needed better, complementary tools to protect competition, contestability and fairness in digital markets.

The EC responded to this need, on the one hand, with the launch of new guidelines on exclusionary abuse of dominance and, on the other hand, with the new Digital Markets Act.

In this section we provide an overview of digital antitrust cases of the EC over the last decade, describe some common features of those cases, and spell out the most salient aspects of the new guidelines on exclusionary abuse of dominance.

Recent antitrust cases in digital markets

Self-preferencing in the Google Shopping case

On the 27 June 2017, the EC fined Google €2.42 billion for abusing its market dominance as a search engine through a self-preferencing strategy that gave an illegal advantage to another

⁹ The new draft guidelines on exclusionary abuses elaborated by the European Commission respond to this need, keeping an effects-based approach aimed at protecting competition and consumer welfare, while building on the experience of the last years to improve the effectiveness of antitrust enforcement. This includes looking at potential effects of conducts from a dynamic perspective, establishing rebuttable presumptions informed by economics, recognizing the limits of price–cost tests in nonprice-based conducts, and providing better guidance on legal tests considering the recent jurisprudence of the EU Courts. See https://competition-policy.ec.europa.eu/public-consultations/2024-article-102-guidelines_en, accessed on 1 August 2024.

Google product, its comparison shopping service.¹⁰ This strategy leveraged Google's dominance in general internet search to gain a competitive advantage in shopping markets:

Google systematically gave prominent placement to its own comparison shopping service: when a consumer entered a query into the Google search, results from Google's comparison shopping service were displayed at or near the top. Google demoted rival comparison shopping services through Google's generic search algorithms, that included criteria disfavouring rival comparison shopping services. Google's comparison shopping service was much more visible to consumers than rival comparison shopping services.

Evidence showed that consumers click far more often on results that are ranked on top and on the first pages, and hence more visible. Evidence showed that this could not just be explained by the fact that the first result was more relevant. This meant that by giving prominent placement only to its own comparison shopping service and by demoting competitors, Google gave its own comparison shopping service a significant competitive advantage compared to rivals. As Google's search engine was an important source of traffic given its dominant position, the self-preferencing strategy resulted in an increase in traffic to Google's comparison shopping service, whilst rivals suffered substantial losses of traffic on a lasting basis, reducing choice and incentives to innovate, to the detriment of consumers' welfare in the EU.

On this basis, the EC concluded that Google's practices amounted to an abuse of Google's dominant position in general internet search that undermined competition in comparison shopping markets in the EU.

On the 10 November 2021, the EU General Court upheld the decision of the EC, dismissing for the most part the appeal by Google.¹¹ The General Court recognised the anticompetitive nature of Google's practices, considered that the EC correctly found harmful effects and ruled out any objective justifications for Google's conduct.

On the 10 September 2024, the European Court of Justice upheld the judgement of the General Court and dismissed Google's appeal.¹² In particular, the Court of Justice explained that while self-preferencing cannot be considered as abusive irrespective of the circumstances of the case, the General Court correctly established that, in the light of the characteristics of the market and the specific circumstances of the case, Google's conduct constituted an abuse.¹³

¹⁰ Case AT.39740—Google Search (Shopping)—Commission decision of 27 June 2017. See https://ec.europa.eu/commission/presscorner/detail/en/ip_17_1784 (last accessed on 3 February 2025).

¹¹ Case T-616/17—Google and Alphabet v Commission (Google Shopping)—Judgment of the General Court of 10 November 2021. See <https://curia.europa.eu/jcms/upload/docs/application/pdf/2021-11/cp210197en.pdf> (last accessed on 3 February 2025).

¹² Case C48/22T—Google and Alphabet v Commission (Google Shopping)—Judgment of the Court of Justice of 10 September 2024. See <https://curia.europa.eu/jcms/upload/docs/application/pdf/2024-09/cp240135en.pdf> (last accessed on 3 February 2025).

¹³ The judgement also clarifies a number of relevant aspects regarding the inapplicability of the conditions in Bronner where a dominant undertaking gives access to its infrastructure but makes that access subject to unfair conditions, the fact that competition on the merits may lead to the disappearance or marginalisation of less efficient undertakings, the use of counterfactual analysis for the establishment of a causal link, or that the as-efficient competitor test was not mandatory and, in the circumstances of the present case, not relevant.

Tying in the Google Android case

On the 18 July 2018, the EC fined Google €4.34 billion for imposing illegal restrictions on Android device manufacturers and mobile network operators to consolidate its dominant position in general internet search.¹⁴ In particular, Google engaged in three types of practice that were assessed by the EC:

- Tying of Google's search and browser apps

Google offered its mobile apps and services to device manufacturers as a bundle, which included the Google Play Store, the Google Search app and the Google Chrome browser. Google's licensing conditions made it impossible for manufacturers to pre-install some apps but not others. Device manufacturers confirmed that the Play Store was a "must-have" app that users expected to find pre-installed on their devices. By tying its Google Search app and the Google Chrome browser to the Play Store, Google ensured that its search app and browser were pre-installed on practically all Android devices sold in the EEA. Pre-installation can create a status quo bias, with users sticking to pre-installed apps, as the available evidence confirmed. The EC considered that these practices of tying reduced the incentives of manufacturers to pre-install competing search and browser apps, as well as the incentives of users to download such apps. This hampered rivals' ability to compete effectively with Google.

- Payments conditional on exclusive pre-installation of Google Search

Google granted significant financial incentives to large device manufacturers as well as mobile network operators on condition that they exclusively pre-installed the Google Search app across their entire portfolio of Android devices. The EC considered, amongst other factors, the conditions under which the incentives were granted, their amount, the share of the market covered by these agreements and their duration. Evidence showed that a rival search engine would have been unable to profitably compensate a device manufacturer or mobile network operator for the loss of the revenue share from Google across all devices.

- Obstruction of development and distribution of competing Android operating systems

Google made the pre-installation of Google's proprietary apps conditional on the commitment by device manufacturers not to use any alternative version of Android that was not approved by Google, so-called Android forks. This practice reduced the opportunity for devices running on Android forks to be developed and sold, and allowed Google to close off an important channel for competitors to introduce apps and services, in particular general search services, which could be pre-installed on Android forks.

The EC considered that Google's practices harmed competition and innovation by reducing incentives to pre-install rival search engines and mobile browsers and obstructing the development of Android forks, which could have provided a platform for rival search engines to gain traffic and access to data. Hence, the EC concluded that each of these three practices

¹⁴ Case AT.40099—Google Android—Commission decision of 18 July 2018. See https://ec.europa.eu/commission/presscorner/detail/en/ip_18_4581 (last accessed on 3 February 2025).

constituted an abuse of Google's dominant position and were part of an overall strategy by Google to consolidate its dominance in general internet search, at a time when mobile internet was growing significantly.

On the 14 September 2022, the EU General Court largely confirmed the EC's decision that Google imposed unlawful restrictions on manufacturers of Android mobile devices and mobile network operators in order to consolidate the dominant position of its search engine.¹⁵ In particular, the General Court confirmed the findings of the EC that the tying through pre-installation conditions was abusive and that the clauses restricting the use of Android forks strengthened Google's dominant position, limiting variety and deterring innovation. The General Court confirmed that the conditional payments constituted exclusivity agreements but concluded that the as-efficient-competitor test did not support the finding of an abuse and annulled this part of the EC decision.

Google appealed the judgement of the General Court to the European Court of Justice in September 2022.¹⁶

Exclusive dealing in the Google AdSense case

On the 20 March 2019, the EC fined Google €1.49 billion for imposing restrictive clauses in contracts with third-party websites which prevented Google's rivals from placing their search adverts on these websites.¹⁷

When users use the search function embedded in many websites, the search engine delivers both search results and search adverts, generating revenues for owners of websites. Through AdSense for Search, Google provides these search adverts to owners of websites, acting as an intermediary between them and advertisers. The EC found that Google had a dominant position in online search advertising intermediation in the EEA, with market shares above 70% from 2006 to 2016.

It is not possible for competitors in online search advertising such as Microsoft and Yahoo to sell advertising space in Google's own search engine results pages. Therefore, third-party websites represent an important entry point for these other suppliers of online search advertising intermediation services to grow their business and try to compete with Google.

The EC reviewed many individual agreements between Google and owners of websites and found that Google initially included exclusivity clauses prohibiting owners of websites from placing any search adverts from competitors on their search results pages. Later Google gradually replaced the exclusivity clauses with alternative restrictive clauses reserving the most profitable space on the websites for Google's adverts and requesting a minimum number

¹⁵ Case T-604/18—Google and Alphabet v Commission (Google Android)—Judgment of the General Court of 14 September 2022. See <https://curia.europa.eu/jcms/upload/docs/application/pdf/2022-09/cp220147en.pdf> (last accessed on 3 February 2025).

¹⁶ See <https://www.mlex.com/mlex/articles/2087347/google-pursues-appeal-against-android-sanction-at-top-eu-court> (last accessed on 3 February 2025).

¹⁷ Case AT.40411—Google Search (AdSense)—Commission decision of 20 March 2019. See https://ec.europa.eu/commission/presscorner/detail/en/ip_19_1770 (last accessed on 3 February 2025).

of Google adverts, as well as clauses requiring written approval from Google before making changes to the way in which any rival adverts were displayed. The EC found that Google's restrictive clauses covered over half the market by turnover throughout most of the period under investigation, and that Google's rivals were not able to effectively compete.

The EC concluded that Google's restrictive clauses through AdSense amounted to an abuse of its dominant position in the online search advertising intermediation market that undermined competition, stifled innovation and harmed consumers. Google's rivals were unable to grow and offer alternative services, while owners of websites had limited options and were exposed to Google's abusive exercise of market power. The EC concluded that Google did not demonstrate that the clauses were justified by any efficiencies.

On the 18 September 2024, the EU General Court annulled the EC decision. Although the General Court confirmed most of the EC's findings, it ultimately concluded that the EC failed to take into consideration all the relevant circumstances in its assessment of the duration of the contract clauses deemed abusive and concluded it had not been established that those clauses could have produced a foreclosure effect.

The EC appealed the judgement of the General Court to the European Court of Justice in December 2024.¹⁸

Self-preferencing and unfair trading conditions in the Amazon Marketplace and Buy Box / Prime cases

On the 20 December 2022, the EC Commission accepted commitments by Amazon to refrain from anticompetitive use of marketplace seller data and to ensure equal access to Buy Box and Prime.¹⁹ These commitments put an end to two parallel investigations:

- First, the EC opened in July 2019 a formal investigation that led to the adoption of the Statement of Objections of November 2020 in which the EC preliminarily found that Amazon took advantage of its dominant position in the provision of online marketplace services to third-party sellers to use marketplace sellers' non-public business data to calibrate its retail decisions, distorting fair competition on its platform and preventing effective competition.
- Second, the EC opened in November 2020 a formal investigation to assess whether the criteria that Amazon set to select the winner of the Buy Box and to enable sellers to offer products under its Prime programme led to preferential treatment of Amazon's retail business or of the sellers that use Amazon's logistics and delivery services. The EC preliminarily found that Amazon's rules and criteria for the Buy Box and Prime unduly favoured its own retail business, as well as marketplace sellers that used Amazon's logistics and delivery services.

¹⁸ See <https://www.mlex.com/mlex/articles/2289071/eu-commission-s-appeal-of-google-s-win-in-adsense-case-published-by-top-eu-court> (last accessed on 3 February 2025).

¹⁹ Case AT.40462—Amazon Marketplace—Commission decision of 20 December 2022 and Case AT.40703—Amazon—Buy Box—Commission decision of 20 December 2022. See https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7777 (last accessed on 3 February 2025).

To address the EC's competition concerns in relation to both investigations, Amazon initially offered commitments that were later strengthened upon request by the EC following market testing and consultation with all interested third parties. The final commitments included specific measures to ensure that Amazon no longer uses non-public data from independent sellers' activities on its marketplace to gain an undue competitive advantage, changes to the Buy Box ranking and interface to ensure that alternative offers gain prominence, modification of the Prime terms and conditions to allow Prime sellers to freely choose and negotiate with any carrier for their logistics and delivery services, amongst others.

The EC concluded that these final commitments addressed its competitive concerns and made them legally binding for Amazon under EU antitrust rules. The final commitments cover all Amazon's current and future marketplaces in the EEA and will remain in force for seven years in relation to Prime and the display of the second competing Buy Box offer, and five years for the remaining parts of the commitments. Under supervision of the EC, an independent trustee is in charge of monitoring the implementation and compliance with the commitments.

Unfair trading conditions in the Apple Store Practices (music streaming) case

On the 4 March 2024, the EC fined Apple over €1.8 billion for abusing its dominant position on the market for the distribution of music streaming apps to iPhone and iPad users ('iOS users'). Apple did so through the application of restrictions on app developers preventing them from informing iOS users via in-app communication about alternative and cheaper music subscription services available outside of Apple's App store.²⁰

These contractual restrictions are called 'anti-steering provisions' and included several bans: on informing iOS users about the prices of subscription offers available on the internet outside of Apple's App store, on informing them about the price differences between in-app subscriptions sold through Apple's App store and elsewhere, and on including links to websites on which alternative subscriptions could be bought. The EC found that Apple, as sole provider of an App Store for distribution of apps to iOS users, could set the terms and conditions for developers to be present on the App Store and reach iOS users, and hence was able to impose such anti-steering provisions.

The EC considered that these anti-steering provisions were not necessary and proportionate for the protection of Apple's legitimate commercial interests and that they were contrary to the interest of iOS users, because they prevented them from making informed choices about their music streaming services. Consequently, Apple's anti-steering provisions may have led many iOS users to pay significantly higher prices for music streaming subscriptions and degraded user experience by increasing search costs and possibly preventing iOS users from making optimal choices according to their preferences.

²⁰ Case AT.40437—Apple – App Store Practices (music streaming)—Commission decision of 04 March 2024. See https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1161 (last accessed on 3 February 2025).

Hence, the EC concluded that Apple's anti-steering provisions constituted an abuse of dominant position and amounted to unfair trading conditions. Apple appealed the EC decision to the EU General Court in May 2024.²¹

Refusal to supply in the Apple Mobile Payments case

On the 11 July 2024 the EC accepted commitments by Apple to provide rivals adequate access to standard technology used for contactless payments with iPhones in stores.²² These commitments put an end to the formal investigation opened in June 2020 and that led to the adoption of the Statement of Objections of May 2022 in which the EC preliminarily found that Apple abused its dominant position on the in-store mobile wallet market on iOS by refusing to supply the Near-Field-Communication (NFC) input on iOS to competing mobile wallet developers, while reserving such access only to its own mobile wallet, Apple Pay. The EC preliminarily concluded that Apple's refusal excluded Apple Pay's rivals from the market and led to less innovation and choice for iPhone mobile wallets users.

To address the EC's competition concerns in relation to both investigations, Apple initially offered commitments that were later strengthened upon request by the EC following market testing and consultation with all interested third parties. The final commitments included specific measures to allow third-party wallet providers access to the NFC input on iOS devices free of charge²³, to apply a fair, objective, transparent and non-discriminatory procedure and eligibility criteria to grant NFC access to third-party mobile wallet app developers, to enable users to easily set an HCE payment app as their default app for payments in stores and to use relevant functionalities (such as Field Detect, Double-click, Touch ID, Face ID, and device passcode), to extend the possibility to initiate payments with HCE payment apps at other industry-certified terminals, to remove the requirement for developers to have a licence as a Payment Service Provider ('PSP') or a binding agreement with a PSP to access the NFC input, to allow NFC access for developers to pre-build payment apps for third party mobile wallet providers, to update the HCE architecture to comply with evolving industry standards, amongst others.

The EC concluded that these final commitments addressed its competitive concerns and made them legally binding for Apple under EU antitrust rules. The final commitments apply throughout the EEA and will remain in force for ten years. Under supervision by the EC, an independent trustee is in charge of monitoring the implementation and compliance with the commitments.

Tying in the Facebook Marketplace case

On the 14 November 2024, the EC fined Meta €797.72 million for abusing its dominant position by tying its online classified ads service Facebook Marketplace to its personal social network

²¹ See <https://www.mlex.com/mlex/articles/2174181/apple-files-eu-court-appeal-over-eur1-8-billion-music-streaming-antitrust-fine> (last accessed on 3 February 2025).

²² Case AT.40452—Apple Mobile Payments—Commission decision of 11 July 2024. See https://ec.europa.eu/commission/presscorner/api/files/document/print/fin/ip_24_3706/IP_24_3706_EN.pdf (last accessed on 3 February 2025).

²³ Apple committed to enable access to NFC in Host Card Emulation mode ('HCE'). HCE allows to securely store payment credentials and complete transactions using NFC, without relying on an in-device secure element.

Facebook and by imposing unfair trading conditions on other online classified ads service providers.²⁴

The EC found that Meta is dominant in the market for personal social networks in the EEA, as well as in the national markets for online display advertising on social media, and that it abused this dominance in two ways:

- By tying its online classified ads service Facebook Marketplace to its personal social network Facebook, Meta ensured that all Facebook users automatically have access and get regularly exposed to Facebook Marketplace. The EC found that this automatic exposure gave Facebook Marketplace a substantial distribution advantage which competitors could not match and that, given the importance of the link between the tying and tied markets, could lead to their foreclosure.
- By unilaterally imposing unfair trading conditions on other online classified ads service providers who advertise on Meta's platforms, in particular on its social networks Facebook and Instagram. Meta used ads-related data generated by other advertisers for the sole benefit of Facebook Marketplace.

Consequently, the EC concluded that Meta abused its dominant position through tying and unfair trading conditions. Meta appealed the EC decision to the EU General Court in January 2025.²⁵

Self-preferencing in the Google Adtech and Data-related practices case

On 14 June 2023, the EC sent a Statement of Objections to Google informing of its preliminary view that the company breached EU antitrust rules by distorting competition in the advertising technology industry ('adtech').²⁶

The EC observed that Google's main source of revenue comes from online advertising activities, including the sale of advertising space on its own websites and apps, and intermediation between advertisers and online publishers (for instance, third-party websites and apps) that can supply such space. Online advertisers and publishers rely on the adtech industry for the placement of real time ads not linked to a search query, such as banner ads in websites of newspapers ('display ads'). Three digital tools are relevant in this context: publisher ad servers used by publishers to manage the advertising space on their websites and apps; ad buying tools used by advertisers to manage their automated advertising campaigns; and ad exchanges where publishers and advertisers meet in real time, typically via auctions, to buy and sell

²⁴ Case AT.40684—Facebook Marketplace—Commission decision of 14 November 2024. See https://ec.europa.eu/commission/presscorner/detail/en/ip_24_5801 (last accessed on 3 February 2025).

²⁵ See <https://www.mlex.com/mlex/antitrust/articles/2290370/meta-files-broad-appeal-to-eu-court-over-facebook-marketplace-fine> (last accessed 3 February 2025).

²⁶ Case AT.40670—Google Adtech and Data-related practices—Commission Statement of Objections of 14 July 2024. See https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3207 (last accessed on 3 February 2025).

display adds. Google provides each of these three digital tools, including a publisher ad server, “DoubleClick For Publishers” or “DFP”; two ad buying tools, “Google Ads” and “DV 360”; and an ad exchange, “AdX”.

In the Statement of Objections, the EC preliminarily found that Google is dominant in the EEA markets for publisher ad servers with its service ‘DFP’; and for programmatic ad buying tools for the open web with its services ‘Google Ads’ and ‘DV360’. The EC also preliminarily found that Google systematically favoured its own ad exchange AdX. For instance, through its publisher ad server DFP, by informing AdX in advance of the value of the best bid from competitors which it had to beat to win the auction; or through its ad buying tools Google Ads and DV360, by avoiding competing ad exchanges and mainly placing bids on AdX.

The EC preliminarily concluded that Google’s conduct gave AdX a competitive advantage and may have foreclosed rival ad exchanges, resulting in a reinforced market position of Google’s AdX and ability to charge higher fees for its service, to the detriment of competing providers of advertising technology services, advertisers and online publishers. The EC also preliminarily concluded that, in this case, a behavioural remedy is likely to be ineffective to address the competitive concerns, and that only the mandatory divestment by Google of part of its services would effectively address such concerns.

Tying in the Microsoft Teams case

On the 25 June 2024, the EC sent a Statement of Objections to Microsoft informing of its preliminary view that the company breached EU antitrust rules by tying its communication and collaboration product Teams to its popular productivity applications included in its suites for businesses Office 365 and Microsoft 365.²⁷

The EC preliminarily found that Microsoft is dominant worldwide in the market for productivity applications for professional use offered as Software as a Service (SaaS). The EC also preliminarily found that, at least since 2019, Microsoft tied Teams with its core SaaS productivity applications, leveraging its dominant position in the latter to the former, ensuring a competitive advantage for Teams compared to rival communication and collaboration products. This advantage may have been strengthened by interoperability limitations between Teams’ rivals and Microsoft’s productivity applications. The EC is concerned that this tying conduct may have prevented Teams’ rivals from competing, and in turn innovating, to the detriment of customers in the EEA.

After the EC opened proceedings in July 2023, Microsoft started offering some productivity suites without Teams. The Commission preliminarily found that these changes were insufficient to address its concerns.

²⁷ Case AT.40721—Microsoft Teams and Case AT.40873—Microsoft Teams II—Commission Statement of Objections of 25 June 2024. See https://ec.europa.eu/commission/presscorner/detail/en/ip_24_3446 (last accessed on 3 February 2025).

Challenges in digital antitrust enforcement

The overview of recent digital antitrust cases illustrates how the features of digital markets shape the business strategies as well as the abusive practices of digital dominant players. Out of ten digital antitrust cases summarised in the previous section: three cases refer to self-preferencing practices (Google Shopping, Amazon Buy Box/Prime, and Google Adtech), another three cases refer to tying practices (Google Android, Facebook Marketplace, and Microsoft Teams), two cases refer to unfair trading conditions (Amazon Marketplace, Apple Store and Facebook Marketplace), one case refers mainly to refusal to supply (Apple Pay), while another one refers mainly to exclusive dealing (Google AdSense). All of them refer mainly to non-price-based conducts, reflecting that during the past decade price competition appears to have become less focal in digital markets, where network effects and data feedback loops facilitate zero-pricing on the consumer side, and the access to and use of user data becomes a crucial dimension of competition.

The role of the largest digital incumbents that often both control intermediation platforms and offer services or products on these, with privileged access to private data of business and non-business users, is the enabler of the abusive non-price-based conducts observed. The use of data obtained by dominant digital firms as intermediaries is often a key element of anticompetitive strategies, like self-preferencing and unfair trading. The imposition of unfair trading conditions, refusal to supply and exclusivity clauses by dominant digital firms is facilitated by their ability to set the rules of the game on the platforms that they manage. These situations are characterised by extreme asymmetries between platform owners and users, in terms of access to crucial inputs like data and of bargaining power.

The pervasiveness of digital technologies, with potential to generate efficiencies and added value across many products and services, has led to increasing complementarities across products and services that before were seen as independent (for example, online communication and office products). While this has created new opportunities to better satisfy the needs and preferences of business and non-business users, it has also increased the opportunities to leverage market power across markets, for instance through tying, as well as the risks to produce situations of entrenched market power in broader digital ecosystems. These contexts generate opportunities for multi-dimensional anticompetitive strategies where market power is abused through a combination of practices at different points of the ecosystem.

Moreover, the rapid evolution of digital technologies, markets and business strategies, imposes the need for tools allowing for timely and effective enforcement. This means speeding-up antitrust enforcement but also anticipating potential anticompetitive effects before they take place irreversibly, especially before markets tip and market power is further entrenched.

Consumer welfare remains at the heart of antitrust enforcement. Especially in digital markets, where innovation and dynamic efficiency are so relevant, antitrust enforcement needs to be able to distinguish when a conduct can effectively harm consumer welfare and when not. At the same time, this notion of consumer welfare must encompass all dimensions that are valued by consumers, including price, quality, variety, and innovation, with a dynamic perspective on the relation between such dimensions over time, not just the short-term impacts.

The experience from the last years has also shown that, in order to prevent rather than regret anticompetitive effects, antitrust enforcement must take an ex-ante perspective on effects, not just ex-post. Enforcers must be able to intervene based on the capability of a conduct to produce anticompetitive effects in the specific context in which it takes place. At the same time, such capability of effects and the subsequent consumer harm should not be merely hypothetically or negligible.

Assessing the capability of conducts to produce anticompetitive effects requires identifying the incentives at play and understanding the mechanism through which these incentives can translate into anticompetitive effects and consumer harm. This understanding improves progressively through case practice and in the interaction between practitioners and scholars, leading to the formulation of new theories of harm that are rooted in sound economics and on the facts of the case, with an ability to explain the competitive interactions at play in specific settings.

The increasing relevance of non-price-based conducts means that a broader set of evidence must be considered in the assessment of potential effects, including qualitative evidence like documentary evidence, business strategies and consumer surveys, as well as interviews and behavioural experiments. In this context, traditional tools like price-cost tests are less likely to be sufficiently informative about the anticompetitive nature of such non-price-based, multi-dimensional conducts.

Draft guidelines on exclusionary abuses of dominance

Already in 2008, the Guidance paper clearly set the path for a consumer-welfare, effects-based approach to antitrust enforcement on exclusionary abuse of dominance.²⁸ Since then, the EC and national competition agencies have adopted numerous decisions, and the Courts have exercised the necessary judicial review. The case law has developed, increasingly taking on board economic insight and thinking in terms of effects on consumers' welfare.

On the 1 August 2024, the EC launched a public consultation inviting all interested parties to comment on draft Guidelines on exclusionary abuses of dominance. These draft Guidelines aim at taking stock, bringing together the learnings from the last 15 years, notably reflecting the EC's interpretation of the EU case law on exclusionary abuses, the application of economic analysis to antitrust cases, and the EC's case practice. Competition policy is about law and economics, by its very nature, and the draft Guidelines aim at reflecting this. They also aim at making antitrust enforcement timelier and more effective, notably in view of the new challenges posed by digital markets.

In particular, the draft Guidelines provide guidance on various key issues, including:²⁹

- The purpose of antitrust enforcement and the concept of consumer welfare in relation to exclusionary abuses.

²⁸ Official Journal C 45, 24.2.2009, p. 7–20: “Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings.”

²⁹ European Commission (2024): “Draft Guidelines on the application of Article 102 of the Treaty on the Functioning of the European Union to abusive exclusionary conduct by dominant undertakings.” See https://ec.europa.eu/commission/presscorner/detail/en/ip_24_3623 (last accessed on 3 February 2025).

- The application of general principles to determine if a conduct by a dominant company is likely to constitute an abuse and, in particular, on the concepts of “competition on the merits” and “exclusionary effects”.
- The evidence necessary to show whether a conduct is not competition on the merits and capable of producing exclusionary effects.
- The analytical framework applicable to certain types of conduct by dominant companies, distinguishing between conduct subject to a specific legal test set out in EU case law and conduct not subject to a specific legal test.
- The general principles applicable to the assessment of objective justifications.

3. The Digital Markets Act

Objectives of the DMA

The Digital Markets Act (DMA) aims at ensuring contestability and fairness on digital markets. It entered into force in November 2022 and targets large online platforms that control access to digital markets (gatekeepers), imposing on them a set of stricter rules (obligations). The DMA is the outcome of an extensive reflection process initiated in response to the growing concerns about insufficient competition in digital markets and systemic practices that may arise in digital markets, manifesting in several ways which the DMA aims to address.

The first issue is the absence of contestability in certain digital markets. Contestable markets are those in which new entrants can effectively compete with incumbents, ensuring that competition remains strong, and market outcomes are favourable for both consumers and business users. Contestability tends to stimulate long-term positive effects, notably sustained incentives to innovate. When contestability is lacking, these benefits are diminished. For example, the incentives for incumbent platforms to improve their quality are weaker, as they face little to no pressure from potential competitors.

A second issue is the prevalence of unfair practices by platforms that have entrenched market power, particularly towards business users and end users who rely on these platforms as gateways to their economic activity. In many cases, these dominant platforms use their control over access to essential services or markets to impose terms that can be detrimental to users. Whether through excessive fees, restrictive terms, or biased ranking and visibility practices, these platforms can undermine the competitive dynamics that are crucial for innovation and fairness.

It is important to note that contestability and fairness are deeply intertwined. The lack of contestability in a market often enables a platform to engage in unfair practices, as it faces no substantial threat from potential entrants. Conversely, unfair practices by a platform can reduce the ability of new competitors to challenge the incumbent’s dominance, thereby further entrenching its position in the market. As such, these two issues are mutually reinforcing and require a comprehensive regulatory approach that addresses both simultaneously.

The DMA ultimately seeks also to promote innovation as well as high quality and choice of digital products and services. Through more contestability and fairness, incentives to innovate are strengthened. On the one hand, creating opportunities for new entrants to succeed by innovating and providing better solutions. These entrants are more likely to thrive in a market where barriers to entry are lowered and fair conditions are established. On the other hand, as new competitors enter the market, incumbent platforms must continuously innovate and enhance their services to remain competitive.³⁰

Complementarity between the DMA and antitrust enforcement

Entrenched market power and unfair practices can be the result of inherent digital market characteristics, but they can also stem from strategic anti-competitive conduct that distorts competition and reinforces the market power of dominant players. This understanding has formed the basis for shaping the EU's regulatory response in the form of the DMA, as a complement to its antitrust enforcement.

As discussed in section 2, the EC's antitrust enforcement in the digital sector over the past years has pioneered in identifying problematic behaviours as well as in showing the scope for complementary tools such as regulatory measures. In this sense, the DMA must be seen as a complement to antitrust enforcement, addressing the need for a quicker, more proactive and *ex-ante* approach.

While both tools aim to achieve similar policy objectives, they operate through different mechanisms. Antitrust enforcement typically involves case-by-case assessments of potential effects of past (and on-going) practices on market outcomes and consumer welfare. This approach relies on investigating specific instances of anti-competitive conduct and determining their potential impact on market outcomes. While this method can be effective in addressing specific cases, it often requires significant time and resources to gather evidence and establish a clear link between conduct, competition and potential consumer harm. On the other hand, regulation, as exemplified by the DMA, operates more on an *ex-ante* basis, setting out clear rules and obligations for market participants, ideally before any potential harm occurs. This aims at quicker intervention, particularly in fast-moving digital markets where the pace of innovation and the risk of market distortions are high.

The complementarity of antitrust enforcement and regulation is not new and has already proven useful in other sectors, such as energy or telecoms. In energy markets, issues like capacity withholding have raised concerns about potential market manipulation by dominant players to artificially inflate prices. The EU has implemented the REMIT³¹, which provides for regulatory

³⁰ It is important to note that market power rents in themselves are not a reliable source of incentives to innovate. In cases where market power results from anti-competitive conduct or is shielded by significant barriers to entry, the incentives to innovate are severely limited. While the original innovation effort may have been remarkable, the current entrenched market power may no longer be conducive to further innovation. Instead, it can lead to a situation where dominant players exploit their position to the detriment of consumers and competitors alike.

³¹ Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency.

intervention to prevent such conduct. Also in telecom markets, regulatory obligations such as for access to networks or charges aim to address potential competition concerns ex-ante. At the same time, competition law continues to apply, and companies can and have been prosecuted for anti-competitive practices such as capacity withholding or margin squeeze. This dual approach, combining regulatory oversight with competition law enforcement, is hence not unique to the digital sector.

Scope of the DMA and gatekeeper designation

Next, we turn to the implementation of the DMA. The first step is the definition of its scope. The DMA applies only to certain digital services, specifically those that qualify as core platform services. This targeted approach ensures that the DMA addresses the platforms and services that have the most significant impact on competition and market fairness within the digital economy, such as online intermediation services (e.g., marketplaces), online search engines, online social network services or operating systems.

The next step is the designation of so-called gatekeepers, which must comply with the specific obligations foreseen by the DMA. The main path for undertakings to be designated as gatekeepers is based on three quantitative criteria, which are used as a proxy for market power, and which typically facilitate the creation of entrenched market positions as well as unfair business practices.

- The first criterion for gatekeeper designation is about significant impact on the internal market. For this, a quantitative threshold based on turnover or market capitalisation is used. High turnover typically reflects economic relevance of the platforms, making them more capable of affecting market dynamics and of individually setting commercial terms and conditions as well as controlling access to their ecosystems.
- The second criterion considers whether a core platform is an important gateway for business users to reach end users. This is measured through the number of business users and end users. Large platforms with many users often function as intermediaries, controlling essential channels through which businesses and customers connect, as well as flows of information.
- The third criterion is whether a core platform service enjoys an entrenched and durable position. For this, it matters whether the above two thresholds have been continuously met over three years. Hence, there is a focus on services that demonstrate a sustained, longer-term ability to maintain their entrenched position and are more likely to have sustained market power, which can distort competition.

While some core platform services may not meet all the quantitative thresholds, they can still be designated as gatekeepers on a qualitative basis. For this process, the EC is empowered to conduct a market investigation and consider various qualitative factors that are closely related to the previously discussed market characteristics, such as network effects, scale and scope effects or behavioural biases.

The first six gatekeepers were designated by the EC under the DMA in September 2023 – Alphabet, Amazon, Apple, ByteDance, Meta, and Microsoft.³² Further extending the gatekeeper list, Booking was designated in May 2024.³³ In total, 23 core platform services provided by these gatekeepers have now been designated.

Compliance with the DMA obligations

The DMA sets out a clear obligation framework of “dos” and “don’ts” for gatekeepers, which reflect the core objectives of facilitating market contestability and fairness, while preventing conduct that undermines such contestability and fairness. On the one hand, the obligations encourage actions that enable greater competition, such as promoting interoperability or enabling multi-homing (i.e. allowing users to engage with multiple platforms simultaneously). On the other hand, the obligations aim to curb practices that harm contestability and unfair behaviours such as self-preferencing, where gatekeepers favour their own services over those of competitors, or the use of business user data for competing own services.

The obligations are defined ex ante, reflecting the economics of the business practices they refer to. In fact, the principles of the obligations are grounded in solid understanding of the economics of digital markets and the potential of certain conducts to undermine contestability and fairness, also drawing on the EC’s accumulated experience with antitrust cases. By focusing on the compliance of gatekeepers’ conduct with clear ex-ante rules informed by law and economics, the DMA reduces the case-by-case evidence gathering and assessment required in antitrust proceedings, hence allowing for a more efficient enforcement.

When it comes to the burden of proof, the DMA is clear that gatekeepers must ensure and demonstrate compliance. The EC is monitoring the compliance and is actively engaging with gatekeepers to guide their compliance efforts. To facilitate compliance implementation, gatekeepers are required to submit detailed compliance reports covering each applicable obligation. These reports must include comprehensive explanations and supporting information on how the gatekeeper meets the obligations, including for example internal documents, details on measures taken, or market analyses. The EC scrutinises these reports to verify whether the gatekeeper successfully complies with the obligations. In addition to the full compliance report, gatekeepers must provide a detailed and non-confidential summary. These public reports help third parties operating within the same markets to provide feedback and offer valuable insights. All these inputs are crucial for monitoring compliance and detecting potential non-compliance.³⁴

Continuous compliance and monitoring address the need for timely and effective intervention in digital markets. In this sense, the DMA complements antitrust enforcement and embraces a more continuous and ex-ante market monitoring approach, improving legal certainty for stake-

³² See EC press release from 6 September 2023: https://digital-markets-act.ec.europa.eu/commission-designates-six-gatekeepers-under-digital-markets-act-2023-09-06_en (last accessed 3 February 2025).

³³ See EC press release from 13 May 2024: https://digital-markets-act.ec.europa.eu/commission-designates-booking-gatekeeper-and-opens-market-investigation-x-2024-05-13_en (last accessed 3 February 2025).

³⁴ Crémer et al. (2023) discuss the important role of the gatekeeper’s compliance reports and how to incentivize gatekeepers to write useful reports.

holders. Such approach is consistent with the regulatory nature of the DMA, which is designed to be more forward-looking and preventive than competition law.

First EC decisions and preliminary findings under the DMA

Gatekeeper designations and openings of non-compliance investigations

Since March 7, 2024, the first six gatekeepers, designated in September 2023, must fully comply with the specific obligations of the DMA (the seventh gatekeeper, Booking, designated in May 2024, must fully comply as of November 2024). So far, the EC initiated multiple non-compliance investigations vis-a-vis certain gatekeepers, namely Alphabet, Apple, and Meta, regarding several of their core platform services. The EC is concerned that certain measures that these gatekeepers put in place fall short of effective compliance with their obligations under the DMA, such as those on anti-steering, self-preferencing, choice screens, and user consent for the combination or cross-use of users' personal data.³⁵

Apple: steering rules

In June 2024, the EC informed Apple of its preliminary findings that the company's App Store rules are in breach of the DMA.³⁶ The EC preliminarily found that Apple's App Store anti-steering rules prevent app developers from freely steering consumers to alternative channels for offers and content³⁷. In April 2025, the EC adopted a non-compliance decision finding that Apple breached its anti-steering obligation under the DMA, and fined Apple with €500 million. The EC found that due to a number of restrictions imposed by Apple, app developers cannot fully benefit from the advantages of alternative distribution channels outside the App Store. Similarly, consumers cannot fully benefit from alternative and cheaper offers as Apple prevents app developers from directly informing consumers of such offers. As part of the decision, the EC ordered Apple to remove the technical and commercial restrictions on steering and to refrain from perpetuating the non-compliant conduct in the future, which includes adopting conduct with an equivalent object or effect.³⁸

Apple: contract terms

Further in June 2024, the EC opened a non-compliance investigation against Apple over concerns that its new contractual requirements for third-party app developers and app stores, including Apple's new 'Core Technology Fee', fall short of ensuring effective compliance with Apple's obli-

³⁵ See EC press release from 25 March 2024: https://digital-markets-act.ec.europa.eu/commission-opens-non-compliance-investigations-against-alphabet-apple-and-meta-under-digital-markets-2024-03-25_en (last accessed 3 February 2025).

³⁶ See EC press release from 24 June 2024: https://digital-markets-act.ec.europa.eu/commission-sends-preliminary-findings-apple-and-opens-additional-non-compliance-investigation-2024-06-24_en (last accessed 3 February 2025).

³⁷ In March 2024, the EC had already fined Apple over EUR 1.8 billion for similar behaviour, tackled under EU anti-trust rules, with regard to music streaming apps. See section 2.

³⁸ See https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1085 (last accessed 7 July 2025).

gations under the DMA. In April 2025, the EC informed Apple of its preliminary view that Apple's contract terms concerning alternative app distribution breach the DMA. The EC took the preliminary view that Apple failed to comply with the obligation to allow third party app stores on iOS and apps to be downloaded to the iPhone directly from the web, in view of the conditions it imposes on app (and app store) developers. According to the EC's preliminary findings, developers wanting to use alternative app distribution channels on iOS are disincentivised from doing so as this requires them to opt for business terms which include a new fee (Apple's Core Technology Fee).³⁹

Apple: interoperability

In September 2024, the EC initiated two specification proceedings to assist Apple in complying with its obligations under Article 6(7) of the DMA to provide free and effective interoperability to third party developers and businesses with hardware and software features controlled by Apple's operating systems iOS and iPadOS.⁴⁰ In the context of these specification proceedings, in December 2024, the EC addressed its preliminary findings to Apple, including proposed measures for Apple.⁴¹ In March 2025, the EC adopted two decisions under the DMA specifying the measures that Apple has to take to comply with certain aspects of its interoperability obligation.⁴²

Apple: user choice

In April 2025, the EC decided to close its investigation into Apple's user choice obligations under the DMA. Following a constructive dialogue between the EC and Apple, Apple changed its browser choice screen, streamlining the user experience of selecting and setting a new default browser on iPhone. Apple also made it easier for users to change default settings for calling, messaging, call filtering, keyboards, password managers, and translation services on iPhones. A new menu now allows users to adjust their default settings in one centralised location, streamlining the customisation process.⁴³

Meta: 'consent or pay' model

In July 2024, the EC sent preliminary findings to Meta regarding its 'consent or pay' advertising model.⁴⁴ The EC's preliminary view is that this model fails to comply with the DMA's requirements

³⁹ See https://digital-markets-act.ec.europa.eu/commission-closes-investigation-apples-user-choice-obligations-and-issues-preliminary-findings-rules-2025-04-23_en (last accessed 7 July 2025).

⁴⁰ See EC press release from 19 September 2024: https://digital-markets-act.ec.europa.eu/commission-starts-first-proceedings-specify-apples-interoperability-obligations-under-digital-2024-09-19_en (last accessed 9 February 2025).

⁴¹ See https://digital-markets-act.ec.europa.eu/commission-seeks-feedback-measures-apple-should-take-ensure-interoperability-under-digital-markets-2024-12-19_en (last accessed 9 February 2025).

⁴² See https://digital-markets-act.ec.europa.eu/commission-provides-guidance-under-digital-markets-act-facilitate-development-innovative-products-2025-03-19_en (last accessed 7 July 2025).

⁴³ See https://digital-markets-act.ec.europa.eu/commission-closes-investigation-apples-user-choice-obligations-and-issues-preliminary-findings-rules-2025-04-23_en (last accessed 7 July 2025).

⁴⁴ See EC press release from 1 July 2024: https://digital-markets-act.ec.europa.eu/commission-sends-preliminary-findings-meta-over-its-pay-or-consent-model-breach-digital-markets-act-2024-07-01_en (last accessed 3 February 2025).

under Article 5(2) because it does not allow users to opt for a service that uses less of their personal data but is otherwise equivalent to the ‘personalised ads’ based service and does not allow users to exercise their right to freely consent to the combination of their personal data. In April 2025, the EC adopted a non-compliance decision, finding that Meta breached the DMA obligation to give consumers the choice of a service that uses less of their personal data, and fined Meta with €200 million. Under Meta’s binary ‘consent or pay’ advertising model, introduced in November 2023, EU users of Facebook and Instagram had a choice between consenting to personal data combination for personalised advertising or paying a monthly subscription for an ad-free service. The EC found that this model is not compliant with the DMA, as it did not give users the required specific choice to opt for a service that uses less of their personal data but is otherwise equivalent to the ‘personalised ads’ service, and it also did not allow users to exercise their right to freely consent to the combination of their personal data.⁴⁵

Alphabet: Google Search and Google Play

In March 2025, the EC sent two sets of preliminary findings to Alphabet for failing to comply with the DMA, regarding two of their services. Firstly, the EC took the preliminary view that certain features and functionalities of Google Search treat Alphabet’s own services more favourably compared to rival ones, thus not ensuring the transparent, fair and non-discriminatory treatment of third-party services as required by the DMA. The EC took the preliminary view that, in particular, Alphabet treats its own services, such as shopping, hotel booking, transport, or financial and sports results, more favourably in Google Search results than similar services offered by third parties.

Secondly, the EC preliminarily found that Alphabet’s app marketplace Google Play does not comply with the DMA, as app developers are prevented from freely steering consumers to other channels for better offers. The EC expressed concerns that Alphabet technically prevents certain aspects of steering, for instance, by preventing app developers from steering customers to the offers and distribution channels of their choice. Further, the EC expressed concerns that whilst Alphabet can receive a fee for facilitating the initial acquisition of a new customer by an app developer via Google Play, the fees charged by Alphabet go beyond what is justified.⁴⁶

Potential enforcement challenges for the DMA

Enforcing the DMA can present several challenges related to specific aspects of its implementation, such as the assessment of compliance and the proportionality of its enforcement. We discuss some of these challenges and point to the role economics can play in potentially addressing them.⁴⁷

⁴⁵ See https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1085 (last accessed 7 July 2025). Further note that, in November 2024, Meta introduced another version of the free personalised ads model, offering a new option that allegedly uses less personal data to display advertisements. The EC is currently assessing this new option.

⁴⁶ See https://ec.europa.eu/commission/presscorner/detail/en/ip_25_811 (last accessed 7 July 2025).

⁴⁷ For further background on the effective use of economics in the DMA, see Fletcher et al. (2024).

First, despite the precise and directly applicable obligations set out by the DMA, operationalising and enforcing its provisions requires careful assessment. There is a risk that gatekeepers may employ subtle techniques to circumvent the intent of the regulation and frustrate its objectives. In such cases, the role of economic analysis can become particularly important, within the conduct-based approach of the DMA. When conduct is complex or potentially disguised as compliant, assessing its alignment with the DMA obligations may require economic and financial analysis to assess whether the solutions proposed by the gatekeepers are effective in ensuring compliance.

Second, another challenge in enforcing the DMA could arise from the fact that several of its obligations may directly affect the business models of gatekeepers, to the extent that these are built on practices that the DMA seeks to regulate. For example, DMA provisions affecting data usage, self-preferencing or facilitation of third-party services can impact monetization strategies of gatekeepers. The gatekeepers' business models are often based on platform practices that create competitive advantages, which may be difficult to be dismantled without impacting the gatekeepers' processes of profit creation. Consequently, enforcing effective compliance with the DMA may trigger questions about whether certain measures might undermine gatekeepers' ability to extract profits and affect incentives to innovate. This balance between achieving the regulatory objectives of promoting contestability and fairness while ensuring overall proportionality of the enforcement can raise economically and financially interesting questions and trade-offs.⁴⁸

Third, the full effects of the DMA on digital market structures will materialize gradually. The DMA primarily creates opportunities for market participants, rather than prescribing specific market outcomes. The scale of the DMA's impact will depend on how effectively these newly created opportunities are embraced by market players and how users respond, potentially shifting to alternative services. As such, the regulatory process initiated by the DMA is still in the early stages of its implementation and its full transformative impact cannot yet be observed. Approaches to measure and assess the effective impact of the DMA in terms of market outcomes will require careful consideration of the appropriate outcome variables, identification strategies and data requirements – to mention just a few examples.

Finally, the DMA has been one of the first regulatory frameworks of its kind in the global digital economy, setting a pioneering precedent for other jurisdictions. In this regard, it is critical not only to ensure the complementarity between the DMA regulation and antitrust enforcement within the EU, but also to continue collaborating with competition and regulatory authorities globally. The increasing trend towards the introduction of ex-ante digital regulation (for example, in the UK or Japan) reflects a broader international dialogue and growing consensus across jurisdictions on the high-level principles of digital market oversight. While the frameworks are distinct across jurisdictions, this evolution is a promising sign of a more coordinated global approach to regulating digital markets, which will be essential for addressing the complex and transnational nature of digital ecosystems.

⁴⁸ In Article 9, the DMA explicitly foresees the possibility for the EC to suspend, in whole or in part, specific obligations, if the gatekeepers demonstrate that compliance would endanger the economic viability of its operations in the EU.

4. Conclusion

Scale economies, network effects and data feedback in digital markets lead to winner-takes-most dynamics, where digital markets can tip towards one or a few platforms that gain large market shares, markets become less contestable, and market power gets entrenched. As these winning platforms grow, it becomes increasingly difficult for new entrants to compete unless they offer considerably different value or innovation. Anticompetitive practices by dominant platforms further aggravate this, resulting in entrenched market power, where a few large incumbent platforms can set unfair trading conditions and abuse their market power. To protect competition to the benefit of consumers, ensuring contestability and fairness, over the last years the European Commission has pioneered by leading the way on an area in which today the question is no longer whether to enforce, but how to enforce; by contributing to identify problematic business conducts in digital markets that call for public intervention; and by showing the need for complementary tools to protect competition, contestability and fairness in digital markets.

Antitrust enforcement in digital markets has evolved remarkably over the last decade, with new theories of harm that capture the exclusionary and exploitative behaviours of dominant digital platforms. The EC has investigated and fined digital platforms for abusing their dominant position through anticompetitive self-preferencing, tying, unfair trading conditions, exclusivity clauses, and refusal to supply. When assessing these practices, antitrust enforcement needs to be able to distinguish when a conduct can effectively harm consumer welfare and when not. Case investigations and the interaction between practitioners and scholars has contributed to identify the economic mechanism through which these practices can translate into anticompetitive effects and consumer harm. An effects-based, timely antitrust enforcement oriented to protect competition and consumer welfare is ever more necessary in a context of increased concentration and market power. The ongoing exercise of the EC to produce new guidelines on exclusionary abuses of dominance is part of the effort to make antitrust enforcement more effective, based on the experience gained over the last years.

The implementation of the DMA complements antitrust enforcement by providing clear rules and obligations for digital gatekeepers. Its targeted approach focusses on the platforms and services that have the most significant impact on competition and market fairness within the digital economy. On the one hand, the obligations encourage actions that enable greater competition. On the other hand, the obligations aim to curb practices that harm contestability and fairness. Despite the precise and directly applicable obligations set out by the DMA, operationalising and enforcing its provisions require careful economic assessment, notably regarding compliance, circumvention and viability.

The rapid evolution of digital technologies, markets, and business models continuously pose new economic questions and challenges. Economic analysis has contributed, both through theories of harm and empirical evidence, to digital antitrust enforcement and to the design and early implementation of the DMA and is called to continue doing so.

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