



THE PROHIBITION OF SELF-PREFERENCING IN THE DMA

ISSUE PAPER

November 2022

Martin Peitz



As provided for in CERRE's bylaws and procedural rules from its “Transparency & Independence Policy”, all CERRE research projects and reports are completed in accordance with the strictest academic independence.

This paper is part of a larger CERRE project entitled ‘Effective and Proportionate Implementation of the DMA’ which is a collection of nine papers focusing on the trade-offs around the different possible interpretations of the regulation. The project, within the framework of which this report has been prepared, received the support and/or input of the European Commission and the following CERRE member organisations: Apple, Arcep, ARCOM, Booking.com, Comreg, DuckDuckGo, Google, Mediaset, Meta, Microsoft, Ofcom, Qualcomm, Spotify, TikTok, Vodafone. However, they bear no responsibility for the contents of this report. The views expressed in this CERRE report are attributable only to the authors in a personal capacity and not to any institution with which they are associated. In addition, they do not necessarily correspond either to those of CERRE, or of any sponsor or of members of CERRE. The author would like to thank Alexandre de Streel, Richard Feasey, Amelia Fletcher, Jens-Uwe Franck, Matthias Hunold, Jan Krämer, Giorgio Monti, and Julian Wright for useful comments on an earlier draft.

© Copyright 2022, Centre on Regulation in Europe (CERRE)

info@cerre.eu – www.cerre.eu



TABLE OF CONTENTS

ABOUT CERRE.....	3
ABOUT THE AUTHORS.....	4
1. INTRODUCTION	5
2. SELF-PREFERENCING IN THE DMA	6
2.1 The Prohibition of Self-Preferencing	7
2.2 What is a Separate Service or Product under Article 6(5)?	8
2.3 What is a First-Party Offer and What is a Third-Party Offer?	8
2.4 How to Determine the Absence of Self-Preferencing?	11
3. SELECTED INTERNATIONAL COMPARISON : APPROACHES TO DEAL WITH SELF-PREFERENCING.....	14
3.1 Self-Preferencing in the German Competition Act (GWB)	14
3.2 Self-Preferencing According to the CMA.....	15
3.3 A Look Across the Atlantic.....	15
4. CASES OF SELF-PREFERENCING IN EU AND MEMBER STATES.....	17
4.1 Cases at the European Commission	17
4.2 Cases in Member States	18
5. INTERPRETING THE DMA PROHIBITION: THE ECONOMICS OF SELF-PREFERENCING	21
5.1 First- and Third-Party Offers: The Economics of the Dual Mode.....	21
5.2 Competitive Effects of Self-Preferencing.....	23
5.3 Economists Empirically Assessing Self-Preferencing in the Real World	25
6. CONCLUSION	28
REFERENCES	29



ABOUT CERRE

Providing top quality studies and dissemination activities, the Centre on Regulation in Europe (CERRE) promotes robust and consistent regulation in Europe's network and digital industries. CERRE's members are regulatory authorities and operators in those industries as well as universities.

CERRE's added value is based on:

- its original, multidisciplinary and cross-sector approach;
- the widely acknowledged academic credentials and policy experience of its team and associated staff members;
- its scientific independence and impartiality;
- the direct relevance and timeliness of its contributions to the policy and regulatory development process applicable to network industries and the markets for their services.

CERRE's activities include contributions to the development of norms, standards and policy recommendations related to the regulation of service providers, to the specification of market rules and to improvements in the management of infrastructure in a changing political, economic, technological and social environment. CERRE's work also aims at clarifying the respective roles of market operators, governments and regulatory authorities, as well as at strengthening the expertise of the latter, since in many Member States, regulators are part of a relatively recent profession.



ABOUT THE AUTHORS



Professor **Martin Peitz** is a CERRE Research Fellow and Professor of Economics at the University of Mannheim. He is also a Director of the Mannheim Centre for Competition and Innovation.

His policy research focuses on digital markets, regulation, and competition economics.

Martin holds a PhD in Economics from the University of Bonn.



1. INTRODUCTION

In the years preceding the adoption of the Digital Markets Act (DMA), the issue of self-preferencing has appeared in the context of e-commerce platforms (Amazon), search engines (Google Search, Google Shopping), and mobile app stores (Google and Apple), but it is of broader concern. Self-preferencing can be seen as part of the platform's design decision (Belleflamme and Peitz, 2021, chap. 6), how a platform manages its ecosystem, which includes decisions about the treatment of third-party products and services relative to its own products and services.

Article 6(5) of the DMA prohibits the practice of self-preferencing by gatekeeper platforms when self-preferencing is understood to be a more favourable treatment *in ranking and related indexing and crawling* of first-party products and services than third-party offers.

The issue of self-preferencing by intermediaries does not only arise in the digital world. Retailers such as supermarkets and department stores also have to decide how to allocate shelf space to private labels and manufacturer brands, and being hidden in a dark corner in a shop may come close to delisting. In the digital world, the dark corners of the shop correspond to being demoted to page two or three in the listing of offers. What is different? One may argue that the sheer size of some digital platforms and the enormous power they hold over their users constitutes the difference between the physical and the digital world.

This issue paper elaborates on the prohibition of self-preferencing in Article 6(5) of the DMA, focusing on interpretation issues. It identifies some discussion points, which need clarification, and draws on the economics literature to elaborate on the implications of a prohibition of self-preferencing. The paper argues that economic analysis should be used to define the scope of the prohibition and to assess the proportionality of interventions.



2. SELF-PREFERENCING IN THE DMA

The DMA has two overarching aims: contestability and fairness. Recital 7 states that the DMA aims at *“contestability and fairness for the markets in the digital sector in general, and for business users and end users of core platform services provided by gatekeepers in particular.”* The DMA focuses on digital services that feature *“extreme scale economies, very strong network effects, an ability to connect many business users with many end users through the multi-sidedness of these services, lock-in effects, a lack of multi-homing or vertical integration”* (Recital 13). While this is a potpourri of certain market characteristics (which are partly determined by the decisions of the economic actors), it provides the context for which services are to be addressed. The concern about gatekeeper platforms stems from the claim that undertakings providing certain core platform services have *“gained the ability to easily set commercial conditions and terms in a unilateral and detrimental manner for their business users and end users”* (Recital 13). While several commercial conditions have differential impacts on business users and end users (Belleflamme and Peitz, 2021, chapter 6), self-preferencing is a candidate for harming third-party sellers and end users alike.

Contestability – The DMA aims to rectify weak contestability where contestability is defined in Recital 32 as *“the ability of undertakings to effectively overcome barriers to entry and expansion and challenge the gatekeeper on the merits of their products and services.”* The emphasis on contestability can be seen as reflecting the German ordo-liberal school of economic thought according to which the State has to protect or restore the well-functioning of markets. The same recital continues with two statements: *“The features of core platform services in the digital sector, such as network effects, strong economies of scale, and benefits from data have limited the contestability of those services and the related ecosystems. Such a weak contestability reduces the incentives to innovate and improve products and services for the gatekeeper, its business users, its challengers and customers and thus negatively affects the innovation potential of the wider online platform economy.”* While these statements deserve some qualifications, they reflect the spirit in which the DMA was written.

Favouring first-party products and services can be seen as distorting the competition between the various undertakings in a sector and may limit the contestability of the market. For example, if a gatekeeper reduces the visibility of superior third-party offers, third-party sellers have weaker incentives to provide such quality in the first place. Similarly, if any effort in cost reduction by a third-party seller is offset by an equivalent increase in fees charged by the gatekeeper, third-party sellers do not have an incentive to reduce their costs. This shows that the prohibition of self-preferencing can be derived from the overarching aim of contestability.

Fairness – As stated in Recital 7, the DMA is concerned with both end users and business users. However, regarding fairness, Recital 33 states more specifically that *“for the purpose of this Regulation, unfairness should relate to an imbalance between the rights and obligations of business users where the gatekeeper obtains a disproportionate advantage.”*¹

¹ In some contexts, such as social networks, there is no clear dividing line between business users and end users.



A differential treatment of first-party and third-party offers may be deemed unfair. While there are different notions of fairness and self-preferencing should primarily be seen as a contestability issue, it may also be argued that fairness is violated if business users could not fully anticipate a differential treatment when making their participation or investment decisions.² Then, rules against self-preferencing protect vulnerable providers of third-party content (when transparency obligations as part of Article 5 of the DMA and the EU Regulation on platform-to-business relations (P2B Regulation) are deemed insufficient to protect those providers).³

2.1 The Prohibition of Self-Preferencing

Articles 5 and 6 of the DMA specify the general obligations of gatekeepers. Article 6(5) deals explicitly with self-preferencing.

Article 6(5)

The gatekeeper shall not treat more favourably, in ranking and related indexing and crawling, services and products offered by the gatekeeper itself than similar services or products of a third party. The gatekeeper shall apply transparent, fair and non-discriminatory conditions to such ranking and related indexing and crawling.

When implementing the prohibition of self-preferencing, its scope will have to be defined. The obligation spelled out in the second sentence arguably applies to ranking (and related indexing and crawling) in cases when the gatekeeper offers first-party services or products. **The DMA has a broad notion of rankings, which includes, but is not restricted to algorithmic rankings.** Article 2(22) defines it: “‘Ranking’ means the relative prominence given to goods or services offered through online intermediation services, online social networking services, video-sharing platform services or virtual assistants, or the relevance given to search results by online search engines, as presented, organised or communicated by the undertakings providing online intermediation services, online social networking services, video-sharing platform services, virtual assistants or online search engines, irrespective of the technological means used for such presentation, organisation or communication and irrespective of whether only one result is presented or communicated.”

The DMA (Article 6(1)) also addresses self-preferencing in a broader sense, as it is concerned with the privileged access and use of data as way to treat first-party products and services more favourably.⁴ Furthermore, the required use of choice screens by a gatekeeper’s operating system

² An example for an investment in an e-commerce setting is the long-term rental of a storage facility.

³ Such rules may even help the gatekeeper platform in the long run as it may solve a gatekeeper’s self-commitment problem. In other words, it may help the gatekeeper to maintain a healthy and attractive eco-system, as it protects third-party users from unfair treatment. The problem with such asymmetric regulation in the case of self-commitment problems is that entrants offering substitutes to core platform services are not subject to this regulation and, therefore, are in a worse position to convince third-party providers to join. Such a self-commitment problem exists if a platform cannot credibly promise third-party sellers that it presents first-party products and services more favourably. Absent such self-commitment, there is the risk that such regulation increases entry costs for firms offering substitutes to core platform services. This would work against contestability of platform services.

⁴ Recital 46 of the DMA says: “In certain circumstances, a gatekeeper has a dual role as an undertaking providing core platform services, whereby it provides a core platform service, and possibly other services provided together with, or in support of, that core platform service to its business users, while also competing or intending to compete with those same business users in the provision of the same or similar services or products to the same end users. In those circumstances, a gatekeeper can take advantage of its dual role to use data, generated or provided by its business users in the context of activities by those business users when using the core platform services or the services provided together with, or in support of, those core platform services, for the purpose of its own services or products. The data of the



(regarding online search engine, virtual assistant and web browser in Art 6(3)(iii) and software applications and software application stores in Art 6(4)(i)) are provisions against self-preferencing by the gatekeeper (as explained in the CERRE companion issue paper switching tools and choice screen). In this issue paper, we acknowledge self-preferencing practices in a broad sense, but focus on the provision in Article 6(5).⁵

2.2 What is a Separate Service or Product under Article 6(5)?

The first question for Article 6(5) is what constitutes a separate service or product. There is no definition in the DMA that helps in answering this question. Where may ambiguities arise? Consider the Google search engine. Its purpose is to present (and thereby rank) search results after a systematic search of the internet in response to a user's web search query. The general question becomes: should only material presented in the organic search results be considered as a product or service or should also material such as Google's knowledge panels (information boxes that appear on the Google search engine after certain search queries for people, places, and organisations, for instance) count as a gatekeeper's product or service for the purposes of the DMA?

To assess whether a particular offer by the gatekeeper is subject to the Article 6(5), the following specific questions may be helpful:

- Does the offer have a **distinct destination** (such as an app)?
- Are there **alternative providers that make a comparable offer on a self-standing basis** (or have there been such instances in the past or would they be likely to emerge in the future)? To assess whether an alternative offer is a comparable offer, one would have to understand whether the user experience with the offer can be seen as comparable to the one with alternative offers.

2.3 What is a First-Party Offer and What is a Third-Party Offer?

A broad interpretation of Article 6(5) would be that the prohibition of a more favourable treatment of a gatekeeper's products or services compared to third-party offers **applies both on the end user and the business user side** since no specific statement is made about the users receiving the offer.⁶

- Regarding end users, an example would be a more favourable treatment of AmazonBasics products compared to third-party offers in the ranking presented to them (scenario 1). Here,

business user can also include any data generated by or provided during the activities of its end users. This can be the case, for instance, where a gatekeeper provides an online marketplace or a software application store to business users, and at the same time provides services as an undertaking providing online retail services or software application. To prevent gatekeepers from unfairly benefitting from their dual role, it is necessary to ensure that they do not use any aggregated or non-aggregated data, which could include anonymised and personal data that is not publicly available to provide similar services to those of their business users. That obligation should apply to the gatekeeper as a whole, including but not limited to its business unit that competes with the business users of a core platform service." Discriminatory access to data such that data are used in the provision of first-party products that cannot be used by third-party sellers can be considered to be self-preferencing in a broad sense.

⁵ We mention contributions in the economics literature about self-preferencing related to data advantages.

⁶ While it is useful to distinguish the different sides of a multi-sided platform, it is important to keep in mind that neither end users nor business users are necessarily a homogeneous group. In particular, there may exist different types of business users whose interest may not be aligned.



the gatekeeper offers its own services or products to end user and operates a gatekeeper for end users to reach these services or products as well as similar services and products provided by other business users.

- Regarding business users, if an e-commerce platform operates as a pure marketplace in a particular product category, self-preferencing may play out as follows: it may offer its own fulfilment (or payment) service as well as third-party fulfilment (or payment) services. If it treats its own service more favourably than third-party fulfilment services in its ranking given to the sellers on the platform this can also be seen as an instance of self-preferencing and thus fall under Article 6(5) (scenario 2).
- The more favourable treatment of the gatekeeper's services that are offered to business users may also happen indirectly through self-preferencing on the end user side (scenario 3): if a seller on a marketplace knows that its offer will receive a more favourable ranking if it uses fulfilment by the gatekeeper (such as Amazon), this may also be seen as an instance of self-preferencing and fall under Article 6(5) because a vertically integrated service is treated more favourably than a third-party service. For example, this would be the case if a seller is more likely to appear in the buy box of Amazon when it uses the 'Fulfilment by Amazon' service.

These three scenarios are illustrated in Figure 1, where vertically integrated offers are shown as a square and substitute third-party offers as a circle. Scenario 1 applies to products or services offered to end users and is clearly within the scope of Article 6(5); scenarios 2 and 3 feature products or services that the gatekeeper offers to business users, which are offered to them as part of a bundle with their own product or service to end users.

When implementing the DMA, the **European Commission will have to decide whether to include also scenarios 2 and 3. An argument against including scenarios 2 could be that first-party and third-party services are offered to business users, and end users are not exposed to "manipulated" rankings.** However, in this scenario end users are still clearly part of the picture given that the business users are active on the platform only because they can reach end users.

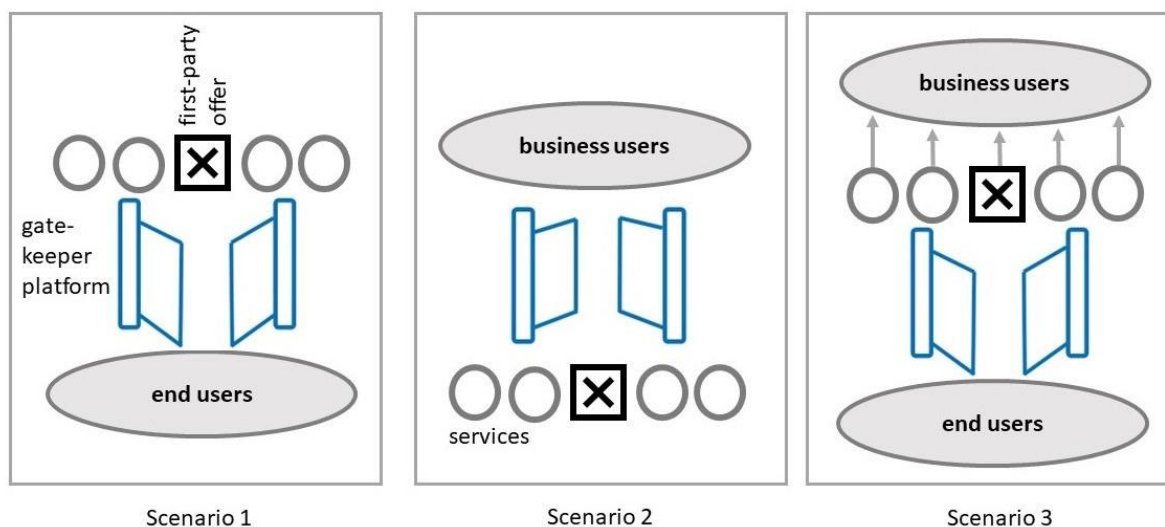


Figure 1: Scenarios with self-preferencing

The use of self-preferencing and other forms of steering can **also be seen as means for the platform to indirectly ensure a certain behaviour of business users when directly imposing such behaviour is prohibited elsewhere in Articles 5 or 6 of the DMA** (in particular, Article 5(3-8)). For example, Recital 43 states that:

“In order to avoid a situation in which gatekeepers indirectly impose on business users their own services provided together with, or in support of, core platform services, gatekeepers should also be prohibited from requiring end users to use such services, when that requirement would be imposed in the context of the service provided to end users by the business user using the core platform service of the gatekeeper.”

Self-preferencing and other distortions of recommendations as a means to enforce a certain behaviour by business users fall under Article 13 of the DMA that deals with “anti-circumvention”. In particular, Article 13(6) says:

“The gatekeeper shall not degrade the conditions or quality of any of the core platform services provided to business users or end users who avail themselves of the rights or choices laid down in Articles 5, 6 and 7, or make the exercise of those rights or choices unduly difficult, including by offering choices to the end-user in a non-neutral manner, or by subverting end users and business user's autonomy, decision-making, or free choice via the structure, design, function or manner of operation of a user interface or a part thereof.”

A final consideration for distinguishing a first-party and a third-party offer is the ownership of a company. A fully vertically integrated offer by a gatekeeper clearly constitutes a service or product “*offered by the gatekeeper itself.*” Suppose instead that a gatekeeper platform holds a stake in another undertaking that competes with third parties without any cross ownership. Under which conditions does the gatekeeper’s more favourable treatment of the former relative to the latter fall under Article 6(5)? According to Recital 52 the prohibition of self-preferences applies to “*products or services it*



offers itself or through a business user which it controls.” This requires an understanding of what constitutes control.

2.4 How to Determine the Absence of Self-Preferencing?

A more favourable treatment of first-party products or services may mean that the gatekeeper charges different fees or uses non-price strategies to treat them differently from third-party products or services.

Differential fees (conditional on the ranking position) indicate differential treatment. Even if the same fee is charged, this does not necessarily imply that this creates a level-playing field, as first-party fees are transfers within the same company. Hence, while self-preferencing consisting of lower fees for first-party content is, in principle, easy to observe, it is not obvious whether symmetric fees should be seen as sufficient to be compliant with the prohibition of self-preferencing with respect to the price dimension. It could indeed be argued that symmetric high fees charged to third parties are a means to steer users to first-party offers.

Overall, it is unclear to what extent fees associated with rankings are subject to Article 6(5) and, if so, whether charging high symmetric fees could be a violation of Article 6(5). The Commission will have to clarify whether and to what extent a gatekeeper’s pricing of ranked items falls within the meaning of Article 6(5). While high or differential fees may fall under different provisions of the DMA, **Article 6(5) could be restricted to the design of rankings as a non-price strategy** (which does not preclude the possibility that a third party has to make a payment to be ranked).

The application of Art. 6(5) to non-price strategies is facilitated by Recital 51:

“Gatekeepers are often vertically integrated and offer certain products or services to end users through their own core platform services, or through a business user over which they exercise control which frequently leads to conflicts of interest. This can include the situation whereby a gatekeeper provides its own online intermediation services through an online search engine. When offering those products or services on the core platform service, gatekeepers can reserve a better position, in terms of ranking, and related indexing and crawling, for their own offering than that of the products or services of third parties also operating on that core platform service.”

The recital provides specific examples, which are possibly motivated by abuse cases at the European Commission.

“This can occur for instance with products or services, including other core platform services, which are ranked in the results communicated by online search engines, or which are partly or entirely embedded in online search engines results, groups of results specialised in a certain topic, displayed along with the results of an online search engine, which are considered or used by certain end users as a service distinct or additional to the online search engine.”

In addition to search engines, the recital also refers to application stores, content platforms (video sharing, for example), social networks and e-commerce platforms.



“Other instances are those of software applications which are distributed through software application stores, or videos distributed through a video-sharing platform, or products or services that are given prominence and display in the newsfeed of an online social networking service, or products or services ranked in search results or displayed on an online marketplace, or products or services offered through a virtual assistant. Such reserving of a better position of gatekeeper’s own offering can take place even before ranking following a query, such as during crawling and indexing. For example, already during crawling, as a discovery process by which new and updated content is being found, as well as indexing, which entails storing and organising of the content found during the crawling process, the gatekeeper can favour its own content over that of third parties.”

Noteworthy is that Article 6(5) mentions not only rankings but also *“related indexing and crawling.”* As Recital 51 suggests, this has been done because self-preferencing may be achieved through indexing and crawling. To take an extreme example, if Google Search does not crawl or index sites that are rivals to its own then these rivals’ sites will not be ranked. However, outside such an extreme case, how will the European Commission be able to assess whether indexing and crawling is transparent, fair, and non-discriminatory?

The general concern appears to be that self-preferencing puts third-party providers at a disadvantage, which may lead to a lack of contestability regarding third-party content and services.

Recital 61 notes:

“In those circumstances, the gatekeeper is in a dual-role position as intermediary for third party undertakings and as undertaking directly providing products or services. Consequently, such gatekeepers have the ability to undermine directly the contestability for those products or services on those core platform services, to the detriment of business users which are not controlled by the gatekeeper.”

Recital 52 of the DMA continues:

“... the gatekeeper should not engage in any form of differentiated or preferential treatment in ranking on the core platform service, and related indexing and crawling, whether through legal, commercial or technical means, in favour of products or services it offers itself or through a business user which it controls. To ensure that this obligation is effective, the conditions that apply to such ranking should also be generally fair and transparent. Ranking should in this context cover all forms of relative prominence, including display, rating, linking or voice results and should also include instances where a core platform service presents or communicates only one result to the end user. To ensure that this obligation is effective and cannot be circumvented, it should also apply to any measure that has an equivalent effect to the differentiated or preferential treatment in ranking...”

Including instances in which only one result is presented, fits the Amazon Buy Box as well as voice assistants, where it is rather cumbersome for end users to be presented more than one choice at a time.



It is worth noting, however, that **it can be challenging to detect self-preferencing bias as opposed to legitimate differential treatment**. Differential treatment may be legitimate because of quality or match value differences between first-party and third-party offers. Detection can be particularly challenging when rankings are based on self-learning algorithms. Digital platforms may benefit from guidance by the European Commission about what kind of evidence is required to justify differential treatment of similar offers. For example, Amazon may be able to provide evidence that end users typically prefer products from sellers that use 'Fulfilment by Amazon'. To what extent would such evidence justify more favourable treatment of products with 'Fulfilment by Amazon' (when assigning the buy box) and thus show its compliance with Article 6(5)?

To summarise, when applying Art 6(5), the **European Commission must make a judgement on the meaning and scope of self-preferencing; and has a discretionary power as to which possible/potential violations of the prohibition it will examine at all**. Moreover, since gatekeeper platforms have to show compliance, the European Commission may want to provide guidance on practices that are, and those that are not, compliant. Even though Article 6(5) is framed as a general prohibition, **economic analysis can help to distinguish between self-preferencing bias and legitimate differential treatment of different offers**. Economic analysis **may also play a useful role when considering the specification of the prohibition**, by evaluating the effects of different measures and whether they are in line with the overall objectives of the DMA. This is in line with the principles of proportionality and effectiveness, as some restrictions are more severe than others and may lead to worse outcomes for third-party business users, end users, and society at large. At the same time, the use of economics to specify the DMA prohibition does not imply the re-introduction of an antitrust efficiency defense, which has been explicitly excluded under the DMA.⁷

⁷ DMA, Recital 10.



3. SELECTED INTERNATIONAL COMPARISON: APPROACHES TO DEAL WITH SELF-PREFERENCING

The issue of self-preferencing has appeared in several jurisdictions. Most noteworthy is the new competition tool in Section 19a of the German Competition Act that came into force at the beginning of 2021, which opens the way to prohibit self-preferencing practices by platforms considered to be of “paramount significance for competition across markets” on a case-by-case basis. In the UK, while competition law has not been modified, through the use of market studies and market investigations⁸ there is a competition policy tool available to address self-preferencing (that does not require running an abuse case). The market study on mobile ecosystems is mentioned below as an example. Finally, we comment on the US.

3.1 Self-Preferencing in the German Competition Act (GWB)

An interesting comparison is the treatment of self-preferencing in the quasi-regulatory tool of Section 19a in the German Competition Act regarding platforms that are of “paramount significance for competition across markets”. According to Section 19a, subsection (2) of the GWB,

“the Bundeskartellamt may prohibit such undertaking from

1. favouring its own offers over the offers of its competitors when mediating access to supply and sales markets, in particular

a) presenting its own offers in a more favourable manner;

b) exclusively pre-installing its own offers on devices or integrating them in any other way in offers provided by the undertaking”⁹

Presenting own offers more favourably is regarded as a (potentially) abusive foreclosure because this may prevent third-party providers from developing and marketing innovative offers and thus restricts ‘competition on the merits’ (Franck and Peitz, 2021, p. 519).

If a behaviour falls under this category of self-preferencing, this indicates an anticompetitive potential, but does not fall under a per se prohibition. It must **only be prohibited on a case-by-case basis after a careful balancing of potential competitive and welfare effects** (Franck and Peitz, 2021, p. 521). As Franck and Peitz (2021, p. 526) conclude, “the appropriate application of section 19a of the Competition Act requires a detailed case-by-case analysis, including a thorough evaluation of the market position and the scrutinised conduct of the addressed undertaking and, more specifically, allows the latter to justify its behaviour and to invoke an efficiency defence in doing so.”

⁸ For institutional details, see e.g. Whish (2022).

⁹ The pre-installation of apps is covered by Art. 6(3) in the DMA (see also recitals 49-53), which differs from Section 19a, subsection (2)(b) GWB.



3.2 Self-Preferencing According to the CMA

In its **market study on mobile ecosystems**, the **Competition and Markets Authority (CMA)** develops a **broad definition of self-preferencing** practices in the context of such ecosystems and expresses the following concerns:

“The main ways in which Apple and Google may be able to self-preference their own apps or services are:

- *biasing consumer choice: using choice architecture to make consumers more likely to choose their products;*
- *giving their own products a non-replicable quality advantage: either by degrading rivals’ quality or by improving their own products in ways that are not accessible to rivals (e.g. better integration with the platform);*
- *raising rivals’ costs: through the fees charged for use of their platforms (which they don’t pay themselves) or through making it more costly in other ways to access the platform compared to their own products; and*
- *using information gained from app developers by virtue of their positions as gatekeepers: which may in the long run harm third-party developers’ incentives to innovate.”* (CMA, 2022, p. 185)

The third type of practice concerns the gatekeeper’s price decision, the other three relate to non-price strategies. However, this is not a general definition of self-preferencing practices but is context-specific. Article 6(5) of the DMA corresponds to biasing consumer choice.

3.3 A Look Across the Atlantic

In the United States, there is an **ongoing debate in Congress on whether to prohibit the dual mode for certain platforms**, which would be a clean, but draconian intervention in response to self-preferencing. The Ending Platform Monopolies Act was introduced in the U.S. House of Representatives in June 2021. According to this Act, large platforms will be prohibited from selling first-party products or apps in competition with third-party sellers or developers on their marketplaces. The American Innovation and Choice Online Act (AICO),¹⁰ introduced in the U.S. Senate, would **restrict self-preferencing practices** of large digital platforms. The Open App Markets Act (OAMA), also introduced in the U.S. Senate, targets mobile app stores and operating systems,

¹⁰ American Innovation and Choice Online Act, S. 2992, 117th Cong., version from February 3, 2022. Available at: <https://www.congress.gov/bill/117th-congress/senate-bill/2992/text>. Several types of self-preferencing practices are considered unlawful in this act. This includes the following practices: “*preference the products, services, or lines of business of the covered platform operator over those of another business user on the covered platform in a manner that would materially harm competition*” (Sec. 3.a.1) and “*in connection with any covered platform user interface, including search or ranking functionality offered by the covered platform, treat the products, services, or lines of business of the covered platform operator more favorably relative to those of another business user than under standards mandating the neutral, fair, and nondiscriminatory treatment of all business users*” (Sec. 3.a.9).



prohibits some specific self-preferencing practices, and goes against “walled gardens” in which all app transactions must run through a single app store.¹¹ For a critical assessment, see Hovenkamp (2022).

Self-preferencing has also received some attention in antitrust proceedings both by the agencies and private lawsuits. In 2013, the **FTC settled with Google in its investigation of Google Search**. It found that: *“A key issue for the Commission was to determine whether Google changed its search results primarily to exclude actual or potential competitors and inhibit the competitive process, or on the other hand, to improve the quality of its search product and the overall user experience [...] The totality of the evidence indicates that, in the main, Google adopted the design changes [...] to improve the quality of its search results, and that any negative impact on actual or potential competitors was incidental to that purpose.”*¹² (Later in this issue paper we provide some examples from Europe.)

An example of a private lawsuit is the ongoing case brought by online video platform **Rumble against Google** in which the former alleges that Google is engaged in anticompetitive behaviour by self-preferencing own content in its organic search: Rumble claims that Google manipulates *“algorithms (and/or other means and mechanisms) by which searched-for-video results are listed, Google [...] [ensures] that the videos on YouTube are listed first, and that those of its competitors, such as Rumble, are listed way down the list on the first page of the search results, or not on the first page at all.”*¹³ Google’s motion to dismiss the case was denied on July 29, 2022.

¹¹ Open App Markets Act, S. 2710, 117th Cong., amendment from February 22, 2022. Available at: <https://www.congress.gov/bill/117th-congress/senate-bill/2710/text>. According to the Act, “A covered company shall not provide unequal treatment of apps in an app store through unreasonably preferencing or ranking the apps of the covered company or any of its business partners over those of other apps in organic search results ... Unreasonably preferencing (A) includes applying ranking schemes or algorithms that prioritize apps based on a criterion of ownership interest by the covered company or its business partners; and (B) does not include clearly disclosed advertising.”

¹² Federal Trade Commission, Statement of the Federal Trade Commission Regarding Google’s Search Practices, In the Matter of Google Inc., FTC File number 111-0163; January 3, 2013, https://www.ftc.gov/sites/default/files/documents/public_statements/statement-commission-regarding-googles-search-practices/130103brillgooglesearchstmt.pdf.

¹³ U.S. District Court Northern District of California, Rumble v. Google, Order Denying Motion to Dismiss and Strike, Case No. 21-cv-00229-HSG, p.2.



4. CASES OF SELF-PREFERENCING IN EU AND MEMBER STATES

The prohibition of self-preferencing has been motivated by past experiences.¹⁴ In the impact assessment study commissioned by the European Commission, Sunderland et al. (2020, Annex 1) give several examples of self-preferencing in rankings and listings as unfair practices, which are reported in Table 1.¹⁵

Table 1: Examples of self-preferencing according to Sunderland et al. (2020)

AMAZON	<ul style="list-style-type: none"> Investigation by the Italian National Competition Authority (NCA) (influencing listings for companies using Amazon fulfilment)
APPLE	<ul style="list-style-type: none"> Preferential display/advertising of Apple Music
GOOGLE	<ul style="list-style-type: none"> Google shopping case (influencing listings), job search feature, concerns over travel listings Pre-installation of Chrome on Android Refusal to list competing app on auto services (Italian NCA)

This illustrates the concern with self-preferencing from the outset, but sheds little light on what exactly is the issue and what are meaningful remedies. To see concrete examples of self-preferencing in practice and how agencies have dealt with them under competition law, it is useful to mention a few cases in the EU as examples (this is not a complete list).

4.1 Cases at the European Commission

A few competition cases at the European Commission address self-preferencing. What are they about?

In 2017 the European Commission fined Google with 2.4 billion Euro for hampering competition through **self-preferencing its Google Shopping offers** (case COMP/AT.39740). The European Commission wrote: *“Google has systematically given prominent placement to its own comparison shopping service: Google’s comparison shopping results are displayed, in a rich format, at the top of the search results, or sometimes in a reserved space on the right-hand side. They are placed above the results that Google’s generic search algorithms consider most relevant. This happens whenever a consumer types a product-related query into the Google general search engine, in relation to which*

¹⁴ For a discussion of case law in the EU, see Ibáñez Colomo (2020).

¹⁵ The authors wrote: “The prevalence of unfair practices by large gatekeeper platforms is evidenced not only in the number of cases that have been investigated by competition and other authorities, but also from common themes raised by interviewees and in case studies prepared in the context of this study.”



*Google wants to show comparison shopping results. This means that Google's comparison shopping service is not subject to Google's generic search algorithms.*¹⁶ They continue as follows: “Evidence shows that even the most highly ranked rival comparison shopping service appears on average only on page four of Google's search results, and others appear even further down. In practice, this means consumers very rarely see rival comparison shopping services in Google's search results.” The European Commission thus considers Google's self-preferencing behaviour to be anticompetitive leverage of its dominant position in general search into comparison shopping.¹⁷

In November 2020 the European Commission started an antitrust proceeding against **Amazon regarding self-preferencing when assigning its buy box** (case COMP/AT.40703). The Commission is concerned about the “conditions and criteria that govern the selection mechanism of the Buy Box that prominently shows the offer of one single seller for a chosen product on Amazon's websites, with the possibility for consumers to directly purchase that product”¹⁸ Amazon may favour its own products or third-party sellers that make use of the ‘Fulfilment by Amazon’ (FBA) service. In July 2022 Amazon made a commitment proposal to the European Commission that addressed, among others, the Commission's concern about self-preferencing when assigning the buy box, which Amazon calls a Featured Offer. Amazon offers the following: “if a Featured Offer is displayed, Amazon will apply non-discriminatory conditions and criteria for the purposes of determining which Offer, whether from Amazon Retail or Sellers (including Sellers using FBA), will be displayed as the Featured Offer [...] Amazon will remove Prime as a relevant criterion for the selections of the Featured Offer.”¹⁹ This case shows that in a standard antitrust proceeding it is possible to obtain a commitment offer as a remedy to address alleged self-preferencing. However, some questions remain. First, it is unclear how effective such a commitment will be. Here, one may argue that the DMA offers better monitoring possibilities. And second, it is also unclear whether Amazon would have been equally forthcoming if the DMA was not about to be enacted.

4.2 Cases in Member States

Several EU Member States have run or are running their own investigations that include concerns about self-preferencing practices. The Amazon case initiated by the European Commission applies to the whole European Union except Italy, the reason being that Italy initiated its own case against Amazon earlier. The **Italian NCA reached a decision in its case against Amazon** in November 2021.²⁰

The directly affected parties are Amazon.it, third-party sellers on the marketplace, and independent logistics service providers offering its services to third-party sellers. As Lombardi (2022) puts it, “currently, a third-party seller active on Amazon can manage the logistics of its products in two ways. It can independently operate the storage, logistics, and delivery; or outsource it to an independent operator. This operator can be Amazon itself, or another firm. If the seller decides to use Amazon's

¹⁶ Quote from “Antitrust: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service – factsheet,” 27 July 2017. https://ec.europa.eu/commission/presscorner/detail/en/MEMO_17_1785

¹⁷ For some discussion including the effectiveness of the remedies, see Bourreau and Krämer (2019).

¹⁸ Quote from https://ec.europa.eu/competition/antitrust/cases/dec_docs/40703/40703_67_4.pdf

¹⁹ Amazon, Case COMP/AT.40462 and Case COMP/AT-40703. Commitment Proposal. July 7, 2022.

²⁰ Italian Antitrust Authority decision A528, 30 November 2021. This case is summarised by Lombardi (2022).



logistics network (ALN), they are requested to purchase a service called 'Fulfilled by Amazon' (FBA). If they entrust an independent logistics firm instead, Amazon defines the operation as a 'Merchant Fulfilment Network' (MFN). FBA is an integrated logistics service that includes: (i) warehousing and inventory management for retailers at Amazon's distribution centres; (ii) fulfilment of orders received on Amazon.it, including packaging and labelling; (iii) shipping, transportation, and delivery; (iv) returns management; and (v) customer service." In more general terms, Amazon engages in mixed bundling, as third-party sellers can access the marketplace by buying the bundle of marketplace access and FBA or just buying marketplace access from Amazon and logistics services elsewhere. The issue of self-preferencing arises in the way Amazon treats third-party sellers with FBA compared to those without it. Lombardi (2022) writes: *"The advantages of FBA are, in particular: (i) non-application of performance metrics to third-party sellers; (ii) obtaining the Prime badge; (iii) higher probability of being awarded the buy box; (iv) possibility to participate in special events and offers; and (v) eligibility for 'Free Shipping via Amazon'."* With those advantages afforded to third-party sellers opting for FBA, Amazon might leverage its dominant power as a marketplace provider to monopolize the market for e-commerce logistics services. This may also make entry and scaling up of competing marketplaces more difficult.

In 2018, the **German Bundeskartellamt also opened proceedings against Amazon** for a number of reasons (Case B2 – 88/18); the case was closed in 2019 after Amazon changed some of its practices, including some which fall under the label of self-preferencing.²¹ In light of the question how to deal with the prohibition of self-preferencing, the following statement by the Bundeskartellamt is noteworthy: *"The Bundeskartellamt sees that there is a considerable risk of misuse, misrepresentation and manipulation of ratings, which is detrimental to both customers and for competing sellers. Amazon has shown a strong and justifiable interest in combating such inauthentic reviews ("fake reviews"). The Office has therefore refrained from making further demands ..."* A possible conclusion is that a careful assessment of practices that may treat first-party and third-party offers differently is needed and that it is to be avoided that a prohibition of self-preferencing increases the problem of fake reviews.²²

In 2019, the **Dutch NCA completed a market study on mobile app stores** and several instances of self-preferencing are mentioned in the report.²³ As documented in that report, Apple claims that *"... favouring their own apps over third-party apps would not be rational, even though they pre-install their own apps on their own devices. If a third-party offers a higher quality app, Apple has no incentive to hinder the app in any way. Apple earns the majority of its money from devices, and therefore wants to offer the best services possible to its users."* (p. 84) While discriminatory pre-installation and access

²¹ In its case summary, the Bundeskartellamt writes (own translation) : "With regard to product reviews, sellers have criticised the fact that product reviews obtained via third-party providers – so-called review clubs – are no longer posted or deleted from the platform, while the reviews generated by Amazon itself via its own review programme "Vine" continue to be published, although here too the reviewers are not paid directly but at least receive the test product free of charge. Since the Vine programme has so far only been Vendors, i.e. the suppliers of Amazon Retail, the Office saw this as a disadvantage for the marketplace dealers and a leverage effect to supply Amazon Retail. This applies in particular to new products for which no other for which no other admissible customer reviews – e.g. via verified purchases – are available. At the instigation of the Bundeskartellamt, Amazon will therefore promptly open the Vine programme for marketplace traders who are trademark right holders or authorised representatives and gradually expand the capacities required for this."

²² In 2020 the Bundeskartellamt completed a sector inquiry on reviews and ratings. However, self-preferencing was not part of the investigation.

²³ Netherlands Authority for Consumers & Markets, Market study into mobile app stores. Case no.: ACM/18/032693, April 11, 2019.



to APIs can be seen as self-preferencing practices in a broad sense, they do not fall under Article 6(5) of the DMA, but can be addressed by other DMA obligations, particular Articles 6(3) and 6(4) (and they do fall under the broader provision of Section 19a of the German Competition Act). The report also mentioned the importance of the visibility of apps in the app store but did not dig deeper.

Lastly, in June 2022, the German Bundeskartellamt opened proceedings under Section 19a against Apple about its tracking rules that appear to discriminate between first-party and third-party apps within its “App Tracking Transparency Framework”. According to the Bundeskartellamt, *“Apple’s rules have raised the initial suspicion of self-preferencing and/or impediment of other companies.”*²⁴

²⁴ Bundeskartellamt, press release “Bundeskartellamt reviews Apple’s tracking rules for third-party apps,” 14 June 2022.



5. INTERPRETING THE DMA PROHIBITION: THE ECONOMICS OF SELF-PREFERENCING

The case against self-preferencing may look clear from a theory point of view to the extent that it amounts to unequal treatment of equal offers. As such, **several economists have taken the view that self-preferencing should, in general, be prohibited**. For instance, Cabral et al. (2021, p. 14) have written: *“We would suggest that any form of discrimination against third parties be deemed unlawful. In other words, we believe self-preferencing is a natural candidate for the ‘blacklist’ of practices to be deemed anti-competitive and ‘per se’ disallowed.”* Such an unequivocal statement from a diverse set of academic economists is quite remarkable.²⁵ In their report to Commissioner Vestager, another group of academics (only one of whom is an economist) are more careful: *“In a market with particularly high barriers to entry and where the platform serves as an intermediation infrastructure of particular relevance, we propose that, to the extent that the platform performs a regulatory function, it should bear the burden of proving that self-preferencing has no long-run exclusionary effects on product markets.”* (Crémer et al., 2019, p. 7)

Economists have provided formal frameworks that allow to assess the incentives of platforms to enter the dual mode and the welfare effect of such a change of business model. Furthermore, formal frameworks can help to understand the platform’s incentives to favour certain sellers (including first-party products and services) and what are the competitive and welfare effects of such practices. Earlier work on tying and refusals to deal can also shed light on the effects of self-preferencing. Furthermore, empirical work can identify instances of practice that may be classified as self-preferencing (it partly has done so) and, possibly, work out what have been the consequences of such behaviour.

5.1 First- and Third-Party Offers: The Economics of the Dual Mode

Before taking a look at self-preferencing as a non-price strategy, it is useful to reflect on the role of first-party offers in shaping competition on the platform.

If the platform sells first-party products it is said to operate in *dual mode*. In the policy debate, sometimes the prohibition of this dual mode has been advocated (for instance, Khan, 2017, 2019) and this has received some support in the House in the US.²⁶ With such a prohibition in place, the platform has to either become a pure retailer or drop first-party offers and become a pure marketplace. An analysis of the economic forces at play reveals that **a prohibition increases consumer welfare under some conditions but does the opposite under others**.

Consider a setting in which a platform charges sellers for the transactions on a platform. A possible defence for the practice of introducing first-party offers is that a platform may want to provide an anchor for retail prices of third-party sellers. This is of particular relevance in markets with little

²⁵ The same set of authors acknowledge difficulties when trying to implement such a prohibition.

²⁶ According to the Ending Platform Monopolies Act, which was introduced in the U.S. House of Representatives in June 2021, large platforms will be prohibited from selling first-party products or apps in competition with third-party sellers or developers on their marketplaces.



competition between third-party sellers.²⁷ In this case, the platform as a guardian of the ecosystem may be worried about consumers receiving a bad deal and therefore introduce a first-party product to stimulate competition. This may be a more attractive option for the platform than lowering fees charged to sellers; in particular, if such fee reductions are not fully passed through to consumers. In such a case, a platform is particularly inclined to introduce those first-party offers for which it has a cost or quality advantage over third-party sellers.

Economic theory has looked at a number of market environments. Take the formal setting proposed by Anderson and Bedre-Defolie (2021), as it delivers a clear-cut result. A monopoly firm can operate as a pure retailer, as a platform running a marketplace with third-party sellers, or as a platform in dual mode running a marketplace on which it also sells products as a retailer itself. A platform in dual mode sets the retail price of its own product and a percentage transaction fee; third-party sellers observe these prices and decide whether to enter and, if so, set their retail prices; finally, buyers make purchasing decisions. In that setting, prohibiting the dual mode increases consumer surplus if and only if the prohibition leads to a pure marketplace.²⁸

If the marketplace operates for product categories in which innovative sellers may appear, the marketplace helps with the discovery process by consumers and limits the market power of an innovative seller. In the formal model developed by Hagiu et al. (2022), this implies that the dual mode always gives higher consumer welfare than the pure marketplace. Furthermore, a ban on the dual mode never increases consumer welfare.²⁹ While the prohibition of the dual mode is not considered in the DMA, burdensome remedies to combat self-preferencing and legal risks may lead platforms to opt out of the dual mode altogether.³⁰

Instead of prohibiting the dual mode, a regulator may prefer to impose a cap on the fee the platform can charge to sellers.³¹ Such an intervention is common practice in a number of network industries and may be worth considering in the case of gatekeeper platforms.³² While less intrusive than a prohibition of the dual mode, it is a challenge for the regulator to appropriately choose the rate, as the optimal rate differs across product and service categories. What is more, the platform may be able to circumvent this cap by imposing charges somewhere else in the value chain – creating a whack-a-mole problem – it may use non-price instruments and direct consumers to more profitable sellers if

²⁷ Take as an extreme case a situation of full seller collusion and step demand, which implies that sellers will charge the monopoly price that is independent of the level of the fee charged by the platform.

²⁸ In recent empirical work, Crawford et al. (2022) empirically assess the effect of Amazon's retail entry competing against third parties offering the same product. They find that entry is correlated with high growth and a low degree of competition. Overall, they read their findings as Amazon internalizing externalities, which makes the platform more attractive to consumers. A different market expansion effect can arise if a platform invites entry of successful offline brands (see Jin et al., 2022).

²⁹ Other contributions include Hagiu and Spulber (2013) and Etro (2021a). Etro (2021b) and Jeon and Rey (2021) investigate how the platform's monetization model affects its incentives to enter with first-party content and the incentives of third-party developers.

³⁰ Short of abandoning the dual mode, the gatekeeper may replace factor-based ratings by ratings that are determined via a payment-based mechanism (if this is seen as compliant); for example, Amazon's buy box could be assigned via an auction. Such a change raises challenges of its own, see Feasey and Krämer (2019, Section 4.3).

³¹ Fee regulation as a remedy to competition concerns in dual mode has been formally investigated by Hervás-Drane and Shelegia (2022) and Wang and Wright (2022).

³² As an instance of selective fee regulation applied to digital platforms, several US cities capped fees charged to independent restaurants by on-demand delivery platforms at 15%. See Li and Wang (2021) for details.



fee regulation is applied selectively;³³ and it may change its business model and rely more on advertising. These regulation-induced changes may thus play out to the detriment of consumers. At this point, the DMA does not explicitly mention price regulation. However, two qualifications are due. First, Article 6(12) of the DMA imposes FRAND access to app stores, online search engines, and social networks, which is a weak form of price regulation. Second, regulatory pressure on transaction fees may come from abuse cases and thereby, rest within the competition policy realm. It is worth noting that any public pressure on the fees a platform can charge to sellers increases the incentives of platforms to engage in practices of self-preferencing using non-price instruments.

When operating in the dual mode, the platform may use information on the success of third-party sellers to decide in which product category to enter.³⁴ Some researchers have looked at the dynamic effects this might have. First, a third party may anticipate the platform's imitation decision in case of high demand and hide information related to demand (Jiang et al., 2011). Alternatively, third-party sellers may reduce investment³⁵ or opt for product categories in which it is known that demand is low so that the risk of the platform entering with a first-party product is also low. To address the concern of underinvestment and distorted entry by third-party sellers because of the imitation threat, a possible remedy is to ban the platform (or at least its first-party division) from having access to any private information generated by the third-party seller (see Hagiu et al., 2022). However, a platform with access to this information may operate more efficiently and just banning the first-party division from accessing this information may be difficult to enforce. Another possible remedy is to prohibit the platform from entering new product categories with first-party products for a certain amount of time (see Madsen and Vellodi, 2022, for a formal analysis). While relevant in the broad context of self-preferencing, these insights have no bearing in relation to Article 6(5).

5.2 Competitive Effects of Self-Preferencing

Recent contributions of economic theory have shed light on the incentives of platforms to steer consumers to first-party products.³⁶ When we talk of favouring own products and services it is important to define what a neutral platform practice (that is, a neutral ranking or neutral recommendation) would be. If end user benefit is the ultimate goal, the consumer welfare standard applied to end users appears to be the right criterion to follow.³⁷ Then, **the prohibition of self-preferencing would mean that a platform is prohibited from using practices that steer users to first-party products when this is not in the interest of end users.** For example, if a consumer could get a lower price for the same service quality from a third-party seller, then steering consumers towards a first-party product would violate the self-preferencing prohibition. The issue gets more complicated

³³ In the case of fee caps for independent restaurants on on-demand delivery platforms, Li and Wang (2021) find that chain restaurants, which after the introduction of caps continue to pay high fees, benefit from this intervention, while independent restaurants that were supposed to benefit from the regulation, lose. This can be seen as an indication that the platform responded by favouring chain restaurants after the regulation took effect and, thus, steering more consumers towards chain restaurants.

³⁴ Platforms such as Amazon marketplace generate information which products or product categories are particularly successful. Zhu and Liu (2018) provide empirical evidence that Amazon is more likely to enter as a first-party seller into more-successful product spaces.

³⁵ For some evidence in the mobile app market, see Wen and Zhu (2019).

³⁶ The literature started with de Cornière and Taylor (2014). More recent contributions include Drugov and Jeon (2017), Bourreau and Gaudin (2022), de Cornière and Taylor (2019), Padilla et al. (2022), Zennyo (2022).

³⁷ The consumer welfare standard is not limited to taking only price effects into account.



when products or services are differentiated, and consumers have different tastes about those products or services. For example, if some consumers have a strong taste for quick delivery, while others do not, it becomes difficult to assess when actual recommendations violate the self-preferencing prohibition (see also Section 2). What is more, what is in the interest of consumers in the short run may not be in their long-run interest: By recommending new products and services (which may be first-party or third-party offers) the platform may learn about correlations in consumer tastes (Che and Hörner, 2018). When the platform deviates from consumer-optimal rankings and recommendations given the current information, consumers may overall benefit due to the additional information gathering by platforms. This begs the question how to define neutral rankings and recommendations and, thus, the absence of self-preferencing.

Absent any restriction on fees, before trying to figure out when and how platforms engage in self-preferencing and what are the effects on consumer welfare, one may ask in the spirit of the Chicago School why at all there could be consumer welfare-reducing self-preferencing. Suppose that a platform in dual mode sells its own products and runs a marketplace for third-party sellers. Clearly, this platform has the option to drop the marketplace and operate under full vertical integration. In this case it would earn monopoly rents on its vertically integrated products. Thus, if it decides to open a marketplace (even when heavily using self-preferencing), the platform must gain from this (at least in the long run). Operating in dual mode, the platform may guide consumers to its own product more often than what is in the interest of consumers, at given prices. We would call this self-preferencing. However, the platform could also increase its fee charged to sellers.³⁸ Sellers will at least partially pass this fee increase on to consumers. By doing so, the platform reduces the degree of self-preferencing when keeping its recommendation policy unchanged and increases its profit.

The **trade-off faced by the platform** can be explained differently. Suppose that the platform aims at offering an expected net benefit to a consumer. It has **three instruments** to do so: **the retail price of its own product; the fee charged to sellers; and its steering policy that can be thought of as affecting the visibility of third-party products**. With reduced visibility of third-party products, consumers will sometimes buy the first-party product even though, at given prices, consumers would prefer to buy from a third-party seller. When further reducing visibility, which increases the profit from selling the first-party product, but reduces the profit that stem from the fee charged to sellers, the platform has to compensate the consumer somehow to keep the consumer's net benefit unchanged.

Why would a platform in dual mode “manipulate” recommendations when it could increase its fee charged to sellers? Economists have engaged formal models to better understand the incentives of a platform to provide recommendations.³⁹ **Incentives for self-preferencing are particularly strong in**

³⁸ For a related discussion, see Feasey and Krämer (2019, sections 2.2 and 2.3).

³⁹ Several contributions provide formal arguments that platforms as pure intermediaries may provide recommendations that are not in the best interest of consumers. For work in the context of search engines, see Hagiu and Jullien (2011, 2014) and de Cornière and Taylor (2014). More broadly, see Heidhues et al. (2020), Lee (2021), and Peitz and Sobolev (2022). For overviews that address the incentives of a platform which recommendations to give, see Belleflamme and Peitz (2018, 2021). Hagiu et al (2022) provide a formal argument in the dual mode setting (used e.g. by Amazon and Apple App Store). They show that self-preferencing allows the platform to address the problem of bypass that otherwise limits the fees it can charge third parties. Thus, they show that self-preferencing can result in higher fees and prices.



cases in which the platform is not free to change the fee it charges to sellers. Most obviously, this is the case if that fee is zero. An example is the Google Shopping case (see above) in which there are no fees for organic search results and, therefore, strong incentives for Google to bias organic search results in favour of first-party offers.

An important observation is that even a platform that only runs a marketplace and does not provide own products and services does not necessarily provide recommendations in the best interest of consumers (of course, it will not ignore consumer benefits altogether). This is most easily seen when the platform does not charge users directly and only extracts some of the surplus generated by sellers. In the context of search engines, this has been noted by Brin and Page in 1998: *“we expect that advertising funded search engines will be inherently biased towards the advertisers and away from the needs of the consumers”* (Brin and Page, 2012, p. 3832). Furthermore, sellers may differ in their ability to extract rents from consumers (who will be active on the platform in any case) and therefore a platform may favour those sellers that are better at extracting such surplus. Hence, it is an illusion to think that prohibiting the platform favouring its own products will necessarily result in recommendations that are in the best interest of consumers.

5.3 Economists Empirically Assessing Self-Preferencing in the Real World

Few economic studies have gathered evidence on self-preferencing. While more empirical work is needed, **there are strong indications that some platforms engage in practices that may be called self-preferencing, but that this is not always consumer welfare detrimental.** These and future works may help the European Commission in developing a more refined view on which practices it will eventually classify to constitute self-preferencing (by distinguishing between which practices are harmful and which ones are beneficial to consumers).

Chen and Tsai (2022) look at Amazon’s recommendations through its ‘Frequently Bought Together’ algorithm distinguishing between products sold by Amazon as a retailer, by sellers as part of the ‘Fulfilment by Amazon’ (FBA) program, and non-FBA sellers. The authors conclude that the steering via Amazon’s FBT algorithm is driven by seller identity rather than consumer preference. In other words, Amazon manipulated the FBT algorithm in such a way that a given product is more likely to be recommended if it is available through Amazon as a retailer (controlling for seller characteristics).

Other work has looked at Amazon’s algorithm that assigns a particular offer to its buy box, which is a powerful instrument to guide consumers.⁴⁰ Lee and Musolff (2021) empirically evaluate the effect of Amazon’s use of the buy box on consumer welfare using high-frequency data with the help of a structural model. They do find evidence of self-preferencing by Amazon. However, this self-preferencing increases consumer welfare because, everything else given, consumers appear to prefer the product sold by Amazon instead of a third-party seller. Lee and Musolff (2021) also endogenize

⁴⁰ According to the U.S. Senate Judiciary Committee, “Amazon can give itself favorable treatment relative to competing sellers. It has done so through its control over the Buy Box.”



the entry and exit of sellers and find that, in the long-run, the impact of self-preferencing on consumer welfare is negligible relative to the short-run effect (it remains positive though).

Overall, Lee and Musolff (2021) find strong evidence of self-preferencing, which may be seen as water on the mills of policy makers and competition authorities going after Amazon. However, as they clearly show, self-preferencing may be a good thing for consumers.

An interesting feature is that Amazon does not always assign the buy box. Lee and Musolff (2021) attribute this to situations in which no attractive offers are available, which can be seen as a mechanism to encourage third-party sellers to make more attractive offers. Hunold et al. (2022) take a closer look at this buy box suppression. They observe that the buy box is always assigned when Amazon is one of the sellers, while this is not the case in 39% of all instances in which only third-party sellers offer the product. As they infer, Amazon's algorithm in charge of assigning the buy box has the feature that the associated probability is higher when third-party sellers that offer a certain quality are present and when the best price is lower. The key finding is that, if Amazon were to apply the same standard to itself, it should not assign the buy box in about 13% of instances when it is present.

Self-preferencing has also been found in the context of hotel booking. This has appeared at two layers of the value chain. First, self-preferencing has been shown in the way meta search engines such as TripAdvisor recommend hotel offers on different hotel booking portals. The issue of self-preferencing arises in this context because several meta search engines are owned by hotel booking portals (Booking.com acquired Kayak in 2013, for instance). Cure et al. (2022) find that the online hotel-booking portals belonging to the holding company of Booking.com have a higher probability to be visible in the meta search and to be highlighted than competing portals.⁴¹

Second, self-preferencing may refer to the way hotel booking platforms rank different hotels. Hunold et al. (2020) provide empirical evidence that hotels rank worse on hotel booking portals if their price is lower on competing channels (on hotel website or competing hotel booking portals).⁴² Here, the ranking algorithm appears to respond to the fact that consumers are more likely to bypass the portal and book elsewhere if they find lower prices outside the portal. The portal offers consumers discovery tools and a booking service and charges hotels for transactions between hotel and consumer. A hotel that is more expensive elsewhere (and, in the extreme, exclusive to the platform) is attractive for the portal because for (almost) any hotel booking the portal's own booking service will be consumed. By contrast, a hotel that offers better terms elsewhere is less attractive for the portal, because with a positive probability the portal's booking service will not be consumed. Thus, by favouring the former over the latter hotel, the portal increases the likelihood that its own booking service will be consumed. This amounts to self-preferencing (similar to Amazon favouring FBA sellers), and such differential treatment of different hotels is not in the best interest of consumers.

⁴¹ This is the outcome of linear regressions with fixed effects. Furthermore, the authors find that hotels appear on average about eight positions further down the list in the Kayak search results when the hotel price is lowest on an online hotel-booking portal belonging to the Expedia conglomerate.

⁴² For a discussion, see Belleflamme and Peitz (2021, pp. 208-209).



It is important to note that recommendations based on conversion rates may lead to such an outcome. In general, a higher conversion rate suggests that a hotel is a better match and thus recommending products with higher conversion rates appears to benefit consumers. However, when consumers find lower prices for a hotel elsewhere, a low conversion rate does not indicate that consumers are less interested in this hotel. An algorithm that works in the best interest of consumers would have to take such lower-priced offers outside the platform into account and rank hotels with such offers better than an algorithm that is only based on conversion rates.⁴³

Yet another instance of a platform as a recommender that affects consumer choice is Spotify. As Aguiar and Waldfogel (2021) empirically show, Spotify's popular playlists (some of them algorithmic, others curated) have a strong influence on music streaming. Apart from other reasons for biased recommendations, self-preferencing could be of concern given that major music labels hold minority stakes in Spotify. However, Aguiar and Waldfogel do not find evidence that Spotify is biasing music consumption towards major labels.

⁴³ As this example demonstrates, when deciding whether a practice constitutes self-preferencing, the European Commission may have to take a stance whether a gatekeeper platform can be forced to use certain data as input in their recommendation algorithm (in the concrete example, this would be the prices charged by hotels outside the platform).



6. CONCLUSION

Self-preferencing sounds wrong. Stating that an interested party should not be the referee sounds obvious. However, **platforms in dual mode are concerned about the well-functioning of the ecosystem they manage. A regulator imposing a certain behaviour on platforms, which may amount to picking a particular market design, runs the risk of not acting in the best interest of consumers, especially in the long term, which is the ultimate goal of market contestability.**

The prohibition on self-preferencing as formulated in Article 6(5) of the DMA requires context. The European Commission and the courts would therefore be well-advised **not to use this prohibition as carte blanche and engage in mechanistic enforcement.** Instead, the DMA could be **used to identify those acts of self-preferencing that are likely to be against market contestability and the long-term interest of consumers, and use guidance from economics to specify adequately, under Article 8 of the DMA, the self-preferencing prohibition.**⁴⁴ This requires an understanding of when consumers consider a first-party offer superior to similar third-party offers. Giving prominence to a superior first-party offer should not be seen in conflict with Art 6(5), as such behaviour coincides with the one of a gatekeeper who acts in the best interest of consumers. Recent cases under competition law may provide further insights about possible harms and benefits, as well as the appropriate choice of remedies, and economic analysis can provide a better understanding of which practices under which circumstance are likely to be consumer welfare decreasing.

Platforms can make life difficult for third-party sellers by **using price and non-price instruments.** Thus, in the context of self-preferencing, an effective policy against foreclosure and refusal to deal may **require a combination of Articles 6(5) and 6(12).** Specific commitments must be seen in a broader context to avoid circumvention through other means.

⁴⁴ For a discussion of remedies, see Feasey and Krämer (2019). As explained above, the use of economics to specify the DMA prohibition does not imply the re-introduction of an antitrust efficiency defense which is explicitly excluded under the DMA.



REFERENCES

- Aguiar, L. and J. Waldfogel (2021). Platforms, power, and promotion: Evidence from Spotify playlists. *Journal of Industrial Economics*, 69, 653-691.
- Anderson, S. and Ö. Bedre-Defolie (2021). Hybrid platform model. CEPR Discussion Paper No. DP5694.
- Belleflamme, P. and M. Peitz (2018). Inside the engine room of digital platforms: Reviews, ratings and recommendations. In: J. J. Ganuza and G. Llobet (eds.). *Economic Analysis of the Digital Revolution*, Funcas Social and Economic Studies nº 4, Funcas.
- Belleflamme, P. and M. Peitz (2021). *The Economics of Platforms: Concepts and Strategy*. Cambridge University Press.
- Bourreau, M. and G. Gaudin (2022). Streaming platform and strategic recommendation bias. *Journal of Economics & Management Strategy*, 31, 25-47.
- Brin, S. and L. Page (2012). Reprint of 'The anatomy of a large-scale hypertextual web search engine'. *Computer Networks*, 56, 3825-3833.
- Cabral, L., J. Haucap, G. Parker, G. Petropoulos, T. Valletti, and M. Van Alstyne (2021). The EU Digital Markets Act: A Report from a panel of economic experts. Publications Office of the European Union, JRC122910.
- Che, Y.-K. and J. Hörner (2018). Recommender systems as mechanisms for social learning. *Quarterly Journal of Economics*, 133, 871-925.
- Chen, N. and H.-T. Tsai (2022). Steering via algorithmic recommendations. Unpublished manuscript.
- CMA (2022). *Mobile Ecosystem: Market Study Final Report*. 10 June 2022.
- Crawford, G., M. Courthood, R. Seibel, and S. Zuzek (2022). Amazon entry on Amazon Marketplace. CEPR Discussion Paper DP17531.
- Crémer, J., Y.-A. de Montjoye, and H. Schweitzer (2019). *Competition Policy of the Digital Era - Final Report*. Publications Office of the European Union.
- Cure, M., M. Hunold, R. Kesler, U. Laitenberger, and T. Larrieu (2022). Vertical integration of platforms and product prominence. *Quantitative Marketing and Economics*, published online.
- de Cornière, A. and G. Taylor (2014). Integration and search engine bias. *Rand Journal of Economics*, 45, 576-597.
- de Cornière, A. and G. Taylor (2019). A model of biased intermediation. *Rand Journal of Economics*, 50, 854-882.
- Drugov, M. and D.-S. Jeon (2017). Vertical integration and algorithm bias. Unpublished manuscript.



Etro, F. (2021a). Product selection in online marketplaces. *Journal of Economics & Management Strategy*, 30, 1-25.

Etro, F. (2021b). Device-funded vs ad-funded platforms. *International Journal of Industrial Organization*, 75, 102711.

Feasey, R. and J. Krämer (2019). Implementing effective remedies for anti-competitive intermediation bias on vertically integrated platforms. CERRE report.

Fletcher, A. (2022). DMA switching tools and choice screens. CERRE issue paper.

Franck, J.-U. and M. Peitz (2021). Digital platforms and the new 19a tool in the German Competition Act. *Journal of European Competition Law & Practice* 12, 513-528.

Hagiu, A. and B. Jullien (2011). Why do intermediaries divert search? *Rand Journal of Economics*, 42, 337-362.

Hagiu, A., and B. Jullien (2014). Search diversion and platform competition. *International Journal of Industrial Organization*, 33, 48–60.

Hagiu, A. and D. Spulber (2013). First-party content and coordination in two-sided markets. *Management Science*, 59, 933-949.

Hagiu, A., T.-H. Teh, and J. Wright (2022). Should platforms be allowed to sell on their own marketplaces? *Rand Journal of Economics*, 53, 297-327.

Heidhues, P., M. Köster, and B. Kőszegi (2020). Steering fallible consumers. Unpublished manuscript.

Hervas-Drane, A. and S. Shelegia (2022). Retailer-led marketplaces. CEPR Discussion Paper No. DP17351.

Hovenkamp, E. (2022). Proposed antitrust reforms in Big Tech: What do they imply for competition and innovation? *CPI Antitrust Chronicle*, July 13, 2022.

Hunold, M., R. Kesler, and U. Laitenberger (2020). Rankings of online travel agents, channel pricing, and consumer protection. *Marketing Science*, 39, 92-116.

Hunold, M., U. Laitenberger, and G. Thébaudin (2022). Bye-box: An analysis of non-promotion on the Amazon marketplace. Unpublished manuscript.

Ibáñez Colomo, P. (2020). Self-preferencing: Yet another epithet in need of limiting principles. *World Competition*, 43, 417-446.

Jeon, D.-S. and P. Rey (2021). Platform competition, ad valorem commissions and app development. Unpublished manuscript, Toulouse School of Economics.

Jiang, B., K. Jerath, and K. Srinivasan (2011). Firm strategies in the “mid tail” of platform-based retailing. *Marketing Science*, 30, 757-775.



Jin, G. Z., Z. Lu, X. Zhou and L. Fang (2022). Flagship entry in online marketplaces. Unpublished manuscript.

Khan, L. (2017). Amazon's antitrust paradox. *Yale Law Journal*, 126, 710-805.

Khan, L. (2019). The separation of platforms and commerce. *Columbia Law Review*, 119, 973-1093.

Lee, C. (2021). Optimal recommender system design. Unpublished manuscript, University of Pennsylvania.

Li, Z. and G. Wang (2021). Regulating powerful platforms: Evidence from commission fee caps in on-demand services. Unpublished manuscript.

Lombardi, C. (2022). The Italian Competition Authority's Decision in the Amazon Logistics Case: Self-preferencing and Beyond. CPI Column, April 11, 2022.

Madsen, E. and N. Vellodi (2022). Insider imitation. Unpublished manuscript.

Padilla, J., J. Perkins, and S. Piccolo (2022). Self-preferencing in markets with vertically integrated gatekeeper platforms. *Journal of Industrial Economics*, 70, 371-395.

Peitz, M. and A. Sobolev (2022). Inflated recommendations. CEPR Discussion Paper No. DP17260.

Sunderland, J., F. Herrera, S. Esteves, I. Godlovitch, L. Wiewiorra, S. Taş, P. Kroon, M. Stronzik, D. Baischew, L. Nett, S. Tenbrock, S. Strube Martins, A. de Streel, J. Kalliala, J. Huerta Bravo, W. Maxwell, and A. Renda (2020). Digital Markets Act Impact Assessment support study. Publications Office of the European Union.

Wang, C. and J. Wright (2022). Regulating platform fees. Unpublished manuscript.

Whish, R. (2022). Market investigations in the UK and beyond. In: M. Motta, M. Peitz, and H. Schweitzer (eds.). *Market investigations: A new competition tool for Europe?* Cambridge University Press.

Wen, W. and F. Zhu (2019). Threat of platform-owner entry and complementor responses: Evidence from the mobile app market. *Strategic Management Journal*, 40, 1336-1367.

Zenno, Y. (2022) Platform encroachment and own-content bias. *Journal of Industrial Economics*, forthcoming.

Zhu, F. and Q. Liu (2018). Competing with complementors: An empirical look at Amazon.com. *Strategic Management Journal*, 39, 2618-2642.

cerre

Centre on Regulation in Europe



Avenue Louise 475 (box 10)
1050 Brussels, Belgium
+32 2 230 83 60
info@cerre.eu
www.cerre.eu
🐦 @CERRE_ThinkTank
🌐 Centre on Regulation in Europe (CERRE)
📺 CERRE Think Tank