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Article — Published Version

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Journal of Business Economics

Provided in Cooperation with:

Springer Nature

Suggested Citation: Rösch, Jürgen (2023): Market entry as a marketplace owner: when and why should you sell on your marketplace?, Journal of Business Economics, ISSN 1861-8928, Springer, Berlin, Heidelberg, Vol. 94, Iss. 3, pp. 525-541, https://doi.org/10.1007/s11573-023-01174-4

This Version is available at: https://hdl.handle.net/10419/318088

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ORIGINAL PAPER



Market entry as a marketplace owner: when and why should you sell on your marketplace?

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Accepted: 25 July 2023 / Published online: 18 August 2023 © The Author(s) 2023

Abstract

The new Digital Market Act (DMA) of the European Union imposes stricter rules on gatekeeper platforms. While this affects only a few very large platforms, the discussion surrounding the implementation of the DMA offers valuable insights into the strategic behaviors of those gatekeeper platforms. A gatekeeper platform, for example, may enter its platform as a supplier, which may hurt existing third-party suppliers and restrict fair competition on the platform. This paper flips the academic discussion on whether marketplace owners should be allowed to sell on their marketplaces. It illustrates why this behavior is profitable for gatekeepers and how marketplace owners can apply this knowledge to improve their business models. The paper identifies five situations in which becoming a supplier in one's marketplace can be profitable, but it also proposes alternative solutions to entering the market.

Keywords Digital platforms · Digital Market Act · Self-preferencing · Marketentry · Marketplaces

JEL classification M21 · M30 · M13 · L26 · L15

1 Introduction

Digital platforms and marketplaces¹ create on-platform markets. These serve to connect business users and end consumers. The owners are responsible for well-functioning and liquid on-platform markets. The creators of such markets need to



¹ In this paper, we use "platform" or "digital platform" for the general concept of a two-sided market. Marketplaces are a subcategory of digital platforms that create markets where third-party suppliers and

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intervene and readjust their conditions when and where necessary as their success depends to a large extent on the quality of user interactions and transactions (e.g., Belleflamme and Peitz 2021; Choudary 2015). Therefore, participating as suppliers in their own marketplaces is common for many marketplace owners. With the European Union (EU) now regulating gatekeeper platforms, this so-called dual mode has recently received considerable attention.

The Digital Market Act (DMA) aims to limit the ability of digital gatekeepers to abuse their market power (e.g., Cabral et al. 2021). The act is designed to protect consumers and (re-)establish a level playing field in digital markets within the EU. Hence, it introduces duties for gatekeeper platforms, such as giving users the right to unsubscribe as quickly as they subscribe or providing interoperable instant-messaging services, at least as a base functionality. The DMA also prohibits certain practices, such as preventing users from uninstalling preinstalled apps, imposing unfair conditions on third-party sellers, and practicing self-preferencing—that is, the practice of favoring one's products by a platform owner who also acts as a supplier (EU, 2022).

The discussion around the DMA has mainly focused on some companies' potential abuse of market power. This may show the platform economy in a bad light. The number of gatekeeper platforms is relatively low. Only very large tech corporations (e.g., Google, Amazon, Apple, Microsoft, and Meta) and some other platforms (e.g., Airbnb and Zoom) will be directly affected by the DMA (Mariniello and Martins 2021). According to Crunchbase (Crunchbase 2023), 23,850 marketplaces have been founded between 2000 and 2022, with a peak of 2,237 new ones in 2015 and almost 4,000 since the COVID-19 pandemic started in 2020. Most of these digital platforms and marketplaces will not be regulated directly. Furthermore, the practices discussed in the DMA will not necessarily be abused by those smaller marketplaces but can be reasonable measures to manage and scale their platforms.

Our paper contributes to this discussion on the DMA. However, instead of focusing on policies to regulate gatekeeper platforms, we look at the managerial implications for non-gatekeeper platforms, that is, marketplaces not affected by the DMA. We show how the economic literature can help find solutions for managing quality in the marketplace, stimulating supply, or finding new revenue sources. The paper, therefore, addresses marketplace owners and offers clear suggestions for management. It also shows that solutions other than those found in the DMA might lead to similar results. This can be achieved by sharing knowledge with third parties and implementing mechanisms whereby marketplace owners grant third-party suppliers protection from unfair competition. Doing so keeps incentives for innovations in the marketplace high. For this reason, the paper also addresses policymakers.

Marketplace owners may find it difficult to decide whether to become a supplier. On the one hand, actively participating in the market brings many advantages, including higher quality, lower prices, and increased transparency for demand-side users, as will be discussed further (e.g., Etro 2021; Hagiu et al. 2022; Lee and Musolff 2021). On the other hand, the marketplace depends on satisfied third parties that provide high-quality products at low prices and bring new products to the platform. An entry by the marketplace owner increases competition for third parties and makes

demand-side users meet and trade.



supplying or innovating less attractive for them (e.g., Bougette et al. 2022; Hagiu et al. 2022). If third parties suffer from this market entry, they may leave the market-place; consequently, network effects cannot be used efficiently because the value for the demand side decreases. If demand-side users also leave, it becomes even less attractive for third parties to enter. This can lead to negative self-reinforcing effects (e.g., Belleflamme and Peitz 2021.).

In the next section, to answer the question of when and why a marketplace owner should consider entering the marketplace as a supplier, we discuss why regulators are concerned about what happens in marketplaces and how this relates to platform owners' interests in managing their platforms. We then present the three regulatory measures typically put forward to prevent marketplace owners from abusing their market power and how these measures influence platform management. Based on this influence, we identify five situations in which a marketplace owner should consider becoming a supplier. We also examine alternative solutions to achieve the same goal. We then discuss the findings before concluding with final remarks on the limitations of this study and avenues for future research.

2 Regulation and platform management

To deal with the question whether marketplace owners should be allowed to participate as suppliers in their marketplaces, the DMA prohibits gatekeeper platforms from engaging in self-preferencing—that is, the promotion of one's services over those of one's competitors (e.g., Bougette et al. 2022; Caro de Sousa 2020; EU, 2022; Padilla et al. 2020; Tirole 2020). This practice is relatively common, for example, supermarkets regularly promote their private labels (Tirole 2020). The DMA, however, considers self-preferencing intrinsically harmful (e.g., Cabral et al. 2021). The reason is that gatekeeper platforms could use their dominant position to enter and occupy profitable product categories, drive out the competition (third-party suppliers), and strengthen their already dominant market position. Antitrust legal cases against gatekeeper platforms aimed at protecting fair competition on platform markets are often tedious and lengthy. Therefore, the DMA intends to prevent behaviors such as self-preferencing with a per se prohibition in order to avoid drawn-out lawsuits, which can be too burdensome for small, third-party sellers to maintain their businesses (e.g., Cabral et al. 2021).

Behind the issue of self-preferencing is the question whether marketplace owners should be allowed to become suppliers in their marketplaces. This is a particularly interesting question because it deals with fair competition on digital platforms. Both the authorities and marketplace owners are interested in fair competition insofar as they want well-functioning on-platform competition and on-platform innovation (e.g., Belleflamme and Peitz 2021; Choudary 2015). Demand-side users benefit from competing third parties, as these lead to lower prices, broader product offerings, and potentially higher quality. However, the position of the competition authorities differs from that of the marketplace owners because the latter can potentially profit from participating in the marketplace. The owner of a marketplace possesses superior knowledge (e.g., Condorelli and Padilla 2020; Hagiu et al. 2022), which it can use to



earn extra revenue in very profitable categories, thus threatening the established business of third-party competitors (e.g., Bougette et al. 2022). Third parties may have built up a new product category on the platform; once this is successfully operating, the marketplace owner could enter it and reap the profits.

Moreover, marketplace owners may use their superior knowledge to develop better products (e.g., Condorelli and Padilla 2020; Hagiu et al. 2022). This knowledge can be obtained by gathering and analyzing data generated in the marketplace. The owner can access more and better data than each participant (e.g., Condorelli and Padilla 2020; Hagiu et al. 2022; Rösch and Baccarella 2022). While each participant has access only to the data about their interactions, the marketplace owner can observe and analyze every transaction on the platform. This meta perspective allows the owner to identify trends and detect supply gaps, product categories with (excessively) high prices and (too) little competition, quality problems with existing suppliers, and typical reasons for complaints from demand-side users. With this knowledge, the marketplace owner can decide to intervene as a supplier and compete with or even crowd out others (e.g., Etro 2021; Hagiu et al. 2022; Padilla et al. 2020).

While competition is worth protecting, competitors are not (e.g., Motta 2004). Third parties would always prefer to have a monopoly on a specific product category, with no competitors and without having to compete with the marketplace owner, in order to maintain prices high and make large profits. However, this is not in the interest of demand-side users, who might benefit from an entry by the owner that might lower prices and improve quality (e.g., Bougette et al. 2022; Hagiu et al. 2022; Lee and Musolff 2021). Scholars have shown that forbidding the marketplace owner from acting as a supplier does not necessarily lead to higher overall welfare (e.g., Hagiu et al. 2022; Lee and Musolff 2021).

The theoretical literature on whether marketplace owners should be allowed to participate in their marketplaces aims to find the best solutions for regulating digital markets and creating a fair market environment (e.g., Bougette et al. 2022; Hagiu et al. 2022). In contrast, platform and marketplace owners are more interested in building up their businesses and finding competitive advantages (e.g., Belleflamme and Peitz 2021; Cusumano et al. 2019; Parker et al. 2016). However, marketplace owners also want to create a vivid and liquid market on their platforms where demand is reliably met and supply quickly liquidated (e.g.,Choudary 2015). The literature discusses this under the rather broad term of "platform management." Belleflamme and Peitz (2021) define platform management as the task of actively managing the network effects found among the participants and "put[ting] in place conditions for agents to benefit the most (or suffer the least) from their common presence on the platform" (Belleflamme and Peitz 2021, p. 108).

Choudary (2015) identifies three platform management measures for running a successful platform. First, platforms need to promote the creation of supply. Platforms will fail if they do not provide enough supply or if they do not provide the right quality of supply. Second, platforms will fail if the value on the demand side is not high enough because there is insufficient supply, low quality of supply, or excessively high prices. Third, if a platform does not invest enough in curation, the cost of searching on it will be too high, and participants will not find the right match. In sum, platform management is about managing liquidity and ensuring that sufficient value



is created for supply and demand, that demand is reliably met, and that suppliers find buyers quickly (Choudary 2015). This also requires mechanisms for quality control, which means that the platform owner needs to separate the good participants from the bad ones and encourage active involvement from the supply side to continuously develop the offerings (Choudary 2015). Another important factor is the use of data to increase value for existing participants, bring new products and services to the platform, and tap into new markets (e.g., Belleflamme and Peitz 2021; Condorelli and Padilla 2020).

3 Regulation and marketplaces

In this section, we analyze the economic literature on whether marketplace owners should be allowed to sell on their marketplaces (e.g., Anderson and Bedre-Defolie 2021; Bougette et al. 2022; Hagiu et al. 2022; Lee and Musolff 2021; Tirole 2020; Zennyo 2022). We combine this literature with the platform management perspective and show that the literature provides valuable insights into when and why it might be profitable for marketplace owners to become suppliers. Based on the previous section, we argue that a successful platform (profit maximization) needs to create sufficient supply (innovation, lack of supply gaps), make the platform interesting enough for consumers (low prices, wide choice), and lower transaction costs to bring together supply and demand in the easiest way (transparency). Doing so leads to a lively onplatform market (competition) with high liquidity and quality management. In this section, we draw on the theoretical model of Hagiu et al. (2022), who analyze three solutions to deal with the problem of gatekeeper platforms potentially abusing their market power by becoming sellers in their marketplaces. The first solution is the ban on the dual model. This is the most intrusive measure, which prohibits gatekeeper platforms from becoming suppliers in their marketplaces. The second approach is the ban on imitation. This measure is less intrusive as it allows the owner to become a supplier in their marketplace but only for products not provided by third-party suppliers. The third solution is the ban on self-preferencing. In this case, the marketplace owner can act on the platform and imitate the products of third parties but not prefer their own products (e.g., Bougette et al. 2022; Etro 2021; Hagiu et al. 2022; Padilla et al. 2020).²

3.1 Ban on the dual mode

Without acting as a supplier on the platform, the marketplace owner cannot close supply gaps, compete with existing suppliers, or directly address quality issues. This complete ban mainly benefits third-party suppliers, protecting them from a potentially superior competitor. By entering the marketplace, the owner can effectively increase on-platform competition (e.g., Condorelli and Padilla 2020; Hagiu et al. 2022). However, this comes at the expense of incumbent suppliers and can affect future market entrance by third parties as well as their innovation incentives. Bring-

² This section builds on the analysis of (Hagiu et al. 2022) as does the broader idea of this paper.



ing a new product to the marketplace always bears some risk for third parties. If successful, however, the third-party supplier can enjoy some on-platform market power and potentially higher prices. Unfortunately for the innovative third party, marketplace owners have an unfair competitive advantage regarding knowledge (data on all activities) and costs (no commission fee) (e.g., Condorelli and Padilla 2020; Hagiu et al. 2022; Jiang et al. 2011). Marketplace owners can observe successful third-party entries and decide to enter the new product category. Furthermore, they can directly monitor the new product's profitability and react quickly. In sum, the threat of market entry by the marketplace owner reduces the incentives for third parties to innovate (e.g., Bougette et al. 2022; Hagiu et al. 2022).

Banning the dual mode has ambiguous effects. A third-party supplier would benefit as it would be safe from efficient competition. On the contrary, demand-side users would suffer due to higher prices and potentially lower quality (e.g., Etro 2021; Hagiu et al. 2022). This could lead to lower retention as users may not find the right price and quality. The network effect might also be impacted, as the marketplace owner could not directly address high prices and potentially insufficient quality despite having the information to produce a better and cheaper product (Hagiu et al. 2022). Users might switch to another marketplace, which would harm third-party suppliers. Moreover, the marketplace might increase the commission fee to compensate for missed platform revenue (Kittaka 2020). This could lead to less product variety and lower total value for all the players (Anderson and Bedre-Defolie 2021). It is also worth mentioning that while the marketplace owner reaps some profit from their dual operation, this situation does not typically result in the complete exclusion of third parties (e.g., Bougette et al. 2022; Dewenter and Rösch 2016; Hagiu et al. 2022).

In an extreme case when marketplace owners are not allowed to participate, they might decide to refrain from being a marketplace and become a third-party supplier. This can happen when it is more attractive to supply the platform than to be the platform. This also holds for platforms with strong infrastructure layers, such as smartphones, when the on-platform revenues from supplying become more attractive than those from the hardware and the platform itself (Hagiu et al. 2022; Padilla et al. 2020). This "platform-to-pipeline" case currently seems unrealistic (e.g., MIT 2022), but it points to the fact that some sort of market maker and organizer is necessary to enable businesses to operate on the platform. This role in the platform ecosystem is essential for all participants to benefit from same-side and cross-side network effects. Without it, all the parties are worse off (e.g., Armstrong 2006; Belleflamme and Peitz 2021; Evans and Schmalensee 2016). Therefore, the ban on the dual mode creates potential disadvantages for the whole marketplace. Table 1 summarizes these findings.

3.2 Ban on imitation

This potential regulation allows the entrance of the marketplace owner but keeps innovation incentives for third-party suppliers high. Marketplace owners are allowed to act as suppliers but not to compete with existing third parties. Imitating an existing supplier can increase competition and lead to higher quality—for example, if the new product by the marketplace owner addresses regular complaints (e.g., Condorelli and Padilla 2020; Hagiu et al. 2022). The ban on imitation limits the mar-



 Table 1 Overview of potential regulatory measures and their consequences for marketplaces and different

user groups					
Regulatory	Potential consequences	Potential effects on			Influence
measures		Demand-side users	Third-party suppliers	Marketplace owners	on platform management
Ban on dual mode	Prices may be too high Quality may be too low Fewer choices	May pay too much (Etro 2021; Hagiu et al. 2022) May lead to dissatisfaction (Anderson and Bedre-Defolie 2021) May lead to lower consumption (Hagiu et al. 2022)	• May enjoy market power (Etro 2021; Hagiu et al. 2022) • May have high innovation incentives (Bougette et al. 2022; Hagiu et al. 2022)	• May lead to less demand (Anderson and Bedre-Defolie 2021) • May lower retention (Etro 2021; Hagiu et al. 2022) • May lead to lost profit po- tential (Hagiu et al. 2022; Padilla et al. 2020)	Reduced control over quality in the marketplace Less control of competition and liquidity in the marketplace Unused profit potential
Ban on imitation	Prices may be too high Lower quality Insufficient choice	May pay too much (Etro 2021; Hagiu et al. 2022) May lead to dissatisfaction (Anderson and Bedre-Defolie 2021)	• May enjoy market power (Etro 2021; Hagiu et al. 2022) • May have high innovation incentives (Bougette et al. 2022; Hagiu et al. 2022)	• May lead to less demand (Anderson and Bedre-Defolie 2021) • May lead to lower retention (Etro 2021; Hagiu et al. 2022)	ity in the marketplace • Less control over compe- tition and li-
Ban on self-preferencing	Inefficient curation	Higher search costs (De Corniere and Taylor 2019; Lee and Musolff (2021) Lower satisfaction (Lee and Musolff 2021)	• May by protected from unfair ranking in the market- place (e.g., Bougette et al. 2022; Cabral et al. 2021)	• May lead to less demand (Hagiu et al. 2022) • Lower com- petitive advan- tage (Lee and Musolff 2021	Restricted ability to create transparency and curate interactions

ketplace owner that wants to enter the existing product category to capture some of the profit of the existing supplier, which would also result in lower user prices. Third-party suppliers benefit from forbidding imitation as the incentive to innovate increases (remains high), and they may obtain some market power (high prices) on the platform (e.g., Hagiu et al. 2022).

Limiting the options of the marketplace owner to intervene on the platform comes at a price. First, reduced competition and the lack of threat of competition for third-



party suppliers lead to higher prices for demand-side users (e.g., Hagiu et al. 2022; Lee and Musolff 2021). Second, with better information about demand-side user needs, the owner could design better products. Therefore, users benefit from a ban on imitation only if third-party products are always better than those of the marketplace owner (e.g, Condorelli and Padilla 2020; Hagiu et al. 2022).

Let us suppose that the owner knows that the product of an existing supplier does not fulfill the demand-side users' needs (e.g., it breaks too soon and too often) and that users send it back because it does not meet their expectations. The marketplace owner can try to convince the third party to improve its product, or they can use their knowledge to build a superior product. In the first case, the owner can only indirectly address quality issues; in the second case, quality is entirely under their control. If the marketplace owner accepts bad quality, users will eventually choose a different marketplace, making the one in question less attractive for third-party suppliers. Again, network effects will be negatively impacted. Digital platforms, however, also have other options. Jiang et al. (2011) found that platforms may prefer not to imitate and instead earn more money with higher commission fees. In this case, the marketplace owner also benefits from higher prices, leading to higher revenues per transaction. This could even lead to the platform investing in a third party to enhance innovation (Jiang et al. 2011). Table 1 summarizes these results.

3.3 Ban on self-preferencing

The third regulatory option allows the marketplace owner to enter the platform and imitate existing products but not favor their products. The drawback of this option is that it partly prevents the owner from leveraging their ability to decide how products and suppliers are presented and how search queries are answered. As marketplaces are the choice architects (e.g., Choudary 2015; Thaler and Sunstein 2008), they need to decide how search queries are answered, how the algorithms work, what results are shown at the top of the list, what default option is preselected, and how the results are presented. Each of these decisions can be, and often is, designed to influence demandside users' choices and can be employed for self-preferencing (e.g., Bougette et al. 2022; Caro de Sousa 2020; Padilla et al. 2020; Tirole 2020).

Prohibiting self-preferencing comes with some caveats. The economic literature agrees that the practice should be banned in most scenarios and that self-preferencing by companies such as Amazon impedes market entry and innovation on the platform (e.g., Bougette et al. 2022; Cabral et al. 2021). However, there is also evidence that self-preferencing might be beneficial in some cases (e.g., De Corniere and Taylor 2019). The marketplace owner can use the extra revenue to lower the commission fees for all third parties, leading to more market entry (Zennyo 2022). Lee and Musolff (2021) showed that Amazon's self-preferencing leads to statistically significant welfare gains as consumers prefer the products that the company promotes. Hence, customers face lower transaction and search costs and enjoy higher product quality if the price increase stays small. In this case, self-preferencing can help consumers to solve the choice paradox (Schwartz 2004), which states that more choice is not always better for customers because it increases their search and decision costs.



If they do not practice self-preferencing, the marketplace owners can act on the platform and imitate products. Hence, demand-side users still benefit from potentially lower prices and better products. This is only partially beneficial for third parties, as a successful new entry into the marketplace threatens the incentive to innovate. The value to all users (i.e., total welfare) remains unchanged compared to the situation when self-preferencing is not prohibited (Hagiu et al. 2022). Despite the many positive aspects of banning this practice, the ability to create transparency and curate the optimal matching of supply and demand might be restricted.

Table 1 presents an overview of the three measures to ensure fair competition in digital marketplaces. It shows that third parties mainly benefit, while demand-side users and marketplace owners might suffer. Examining different regulatory schemes allows us to identify the various managerial goals affected by each option. While the analysis shows the advantages and disadvantages of different regulatory measures, it remains open how a desirable on-platform competition looks like and how marketplace owners can achieve it.

4 Marketplaces and market entry

The analysis shows that regulatory measures influence certain aspects of platform management. By drawing on this analysis, we can answer the question of how market entry as a supplier by a marketplace owner can positively impact platform management. First, it can help to ensure high-quality offerings. Second, it can increase competition and keep prices low. Third, it can ensure entry into untapped categories and niches. Fourth, it creates transparency on the demand side, thus reducing search costs. Fifth, it can stimulate the profitability of the marketplace. Table 2 presents an overview of the five situations when the owner can consider entering their marketplace as a supplier.

4.1 Control quality

The quality of a marketplace depends on the value that each interaction creates for the users. Marketplaces need to set rules and standards that govern user behavior (e.g., Choudary et al. 2015; Cusumano et al. 2019; Parker et al. 2016). Based on this governance, the marketplace owner observes the interactions and intervenes in case of potentially harmful ones. Airbnb, for example, scans every transaction based on hundreds of different signals to prevent a mismatch between hosts and travelers. The marketplace owner, therefore, can acquire superior knowledge about demand and quality requirements. A participant in the market has information only about their business. The owner of the marketplace has a cross-supplier view of all offerings and transactions (e.g., Condorelli and Padilla 2020; Rösch and Baccarella 2022). They also see the feedback concerning quality and how many products have been returned. If the marketplace owner enters the market with a product to address customer con-



³ https://news.airbnb.com/airbnb-announces-global-party-ban/.

Situation	Potential effects of market entry by marketplace owner		Concerns	Affected by	Alternative solutions
	Entry	No entry			
Control quality	Usage of superior knowledge to design high-quality products	Lower quality for users and loss of users	Unfair competi- tion for third parties	Ban on dual mode and ban on imitation	Share knowledge with third parties; lower commission fees as an innovation incentive
Enhance competition	Effective and potentially superior competitor	High prices for consumers and fewer choices; potential emigration of users	Unfair competi- tion for third parties	Ban on dual mode and ban on imitation	Create trans- parency in a competitive situation; provide knowledge for third-party innovation
Fill supply gaps	Prevention of emi- gration of demand- side users	Lower attractive- ness for demand- side users	Reduced incentives to innovate for third parties	Ban on dual mode	Share knowledge with third parties; launch challenges and competitions
Create transparency	Provision of reliable recommendations	Increased search and decision costs; emigration of users	Unfair competi- tion for third parties	Ban on self-preferencing	Create strong quality signals (e.g., marketplace trademarks)
Maximize profit	Additional revenue for marketplace owner	Higher revenues for third parties; potential emigration of users	Unfair competi- tion for third parties	Bans on dual mode, imitation, and self-preferencing	Negotiate revenue share contracts with third parties

cerns, low-quality third-party suppliers might suffer, but the demand side will benefit from higher quality and lower transaction costs (e.g., Hagiu et al. 2022).

4.2 Alternative approaches

Developing and producing new products can be costly. The marketplace owner can also provide their knowledge to existing or potential third parties. This can happen either for free or as a paid service. The aim of giving third parties access to this information is to ensure quality and stimulate new market entrants for the necessary product categories. In addition to providing information, the marketplace owner can offer a lower commission fee for a certain time if a third party fills the quality gap (e.g., Jiang et al. 2011). For example, Amazon provides a listing quality score (LQS) in their opportunity finder on Amazon Jungle Scout. The LQS is an algorithm-based score that measures the quality of the listing and gives (potential) third-party suppli-



ers an indication of business opportunities. An LQS below three, for example, combined with high demand and low competition, indicates a good chance of competing with incumbent firms.⁴

4.3 Increase competition

The marketplace owner can enter the market to compete with high-priced third parties or bring better quality to the product category. In both cases, this can be an advantage for the demand side. Competition drives consumer prices down and increases pressure on suppliers to offer better products (Motta 2004). The more suppliers there are in one product category, the more choices the demand side has to select a product that fits its needs best. Of course, suppliers would prefer lower competition to realize higher prices, but users and the whole market benefit from a vivid on-platform competition (e.g., Hagiu et al. 2022). Furthermore, through network effects, third parties indirectly benefit as more suppliers attract more demand-side users (e.g., Armstrong 2006; J.-C. Rochet and Tirole 2003).

4.4 Alternative approaches

As was the case for quality control, marketplace owners can provide their knowledge to third parties. However, here the focus is on providing information about the competitive situation in each category or for certain keywords. This should tell third-party sellers where moderate competition allows them to earn profits and, hence, where market entry is profitable.

4.5 Fill supply gaps

Marketplaces actively curate supply and demand to match the best partners. This also includes observing unsuccessful interactions—that is, when users search for an item that does not exist, or when the product is available but the quality is insufficient (e.g., Choudary 2015; Condorelli and Padilla 2020). The owner can observe the demand requirements of the marketplace and identify missing products or categories. The search strings and the demand side's search behavior reveal the users' preferences. Only the owner can add these preference-revealing elements (e.g., search bars) to the user interface and access information on what products are missing and how demand is evolving in the marketplace (e.g., Belleflamme and Peitz 2021; Parker et al. 2016). Depending on the attractiveness of the identified gap, the marketplace owner can decide to fill it with their product offering.

4.6 Alternative approaches

The owner's main advantage is to insert elements in the user interface thanks to which users can show what they are looking for. As mentioned above, the market-

⁴https://support.junglescout.com/hc/en-us/articles/360008617394-Understanding-the-Listing-Quality-Score-LQS-.



place owner can share this knowledge with third parties. One way to get suppliers interested in the missing category could be to launch competitions or hackathons, provide information to existing third parties, or actively search for existing solutions. The decision to make or find supply eventually depends on how critical the missing product is for the attractiveness of the marketplace.

Granting on-platform patents could be a new way for marketplace owners to incentivize innovation on the platform and commit to protecting innovation on the platform, at least for a time. Third parties may hesitate to innovate as the marketplace owner can quickly enter once the new product is successful. On-platform patents can, be a credible signal that the owner will not enter and will accept high profits and high prices for a limited time, thereby earning higher commission fees (Jiang et al. 2011). This also supports the network effect as the owner encourages more suppliers to join the marketplace.

4.7 Create transparency

Competition and market entry may lead to a choice paradox (e.g., Iyengar and Lepper 2000; Schwartz 2004). While the wide range of goods attracts many customers and competition drives down prices, demand-side users may increasingly need assistance in selecting the right product and supplier. Gatekeeper platforms have been successful in helping users to choose quickly and significantly reduce search costs by promoting their products and services (Lee and Musolff 2021). Acting as a supplier helps the marketplace owner to guarantee the right quality—price ratio for each user's need. As the owner has complete control over the quality and characteristics of their goods, they can safely recommend them to users. This may lower the costs of assessing the quality and need-fit of the products of other suppliers (Lee and Musolff 2021).

4.8 Alternative approaches

The goal of the marketplace owner is to help demand-side users reduce search and decision costs. Trademarks are an established solution for protecting intellectual property. They allow consumers to distinguish high-quality goods from potentially low-quality ones. By applying this tool to the marketplace, the owner can grant on-platform trademarks to certain suppliers based on prior performance. While some marketplaces use badges (e.g., Amazon Choice and Fiverr Choice), the effectiveness of this system is unclear (Chen and Xie 2017; Moreno-Izquierdo et al. 2019; Teubner et al. 2017). The marketplace owner needs a strong and trustworthy signal. On-platform trademarks must be challenging to require and obtain via a robust assessment by the owner. A more difficult process to receive the on-platform trademark increases the cost for the third party, which can lead to a reliable indication that the right quality is being supplied. Therefore, the owner must compare the costs of creating and maintaining a strong signal with those of becoming a supplier and preferring their products.

⁵ For a general discussion of the economics of trademarks and patents see Economides (1988) and Stiglitz (2007), among others.



4.9 Maximize profit

Marketplace owners curate and orchestrate interactions and transactions on their platforms (Belleflamme and Peitz 2021; Choudary 2015). The platform business model is currently receiving significant publicity (MIT 2022), and it is important that long-term profitability is guaranteed. Acting as a supplier can give the marketplace owner enough incentive to run and manage the platform. Owners of software- and hardware-based marketplaces might have the incentive to abandon being market organizers and become only actors on the platform (Hagiu et al. 2022; Padilla et al. 2020). With knowledge of supply gaps, high-margin categories, and trending products, owners can become suppliers and unlock additional revenue potential while maintaining the marketplaces.

4.10 Alternative approaches

To maintain innovation incentives, marketplace owners can grant on-platform patents to protect the efforts of third parties to create new goods and product categories. Alternatively, the owner can use their knowledge to assist a third party in entering the market and establishing a profitable business and then benefit from the success of the innovation through a revenue share agreement. The trade-off between opportunistic behavior and harm to the network effect is most noticeable in this case. While it might be tempting to reap some of the supplier's profit, protecting its business might be even better to keep the marketplace attractive for third parties and, in turn, for demand-side users.

5 Discussion

When entering the market as suppliers, marketplace owners face a trade-off. The owner needs to satisfy demand-side users and third-party suppliers, as the network effects depend on the numbers of both actors (e.g., Armstrong 2006; J.-C. Rochet and Tirole 2003; J. C. Rochet and Tirole 2006). For an on-platform market to be dynamic, the owner must ensure constant innovation and new products by filling supply gaps or expanding the offerings (e.g., Choudary 2015; Parker et al. 2016). Furthermore, competition among suppliers lowers prices for users and gives them alternatives should their quality expectations be unmet.

This paper contributes a new perspective to the discussion concerning the DMA. Regulating the small number of very powerful gatekeeper platforms has many advantages. At the same time, though, most digital platforms and marketplaces must strive to grow in order to create and maintain a competitive environment in digital markets. The theoretical models show how marketplace owners should behave—they should generate superior knowledge by observing and analyzing what is happening in the market; identify gaps in supply, quality problems, or lack of competition among suppliers, which result in excessively high prices; and be aware of the problems faced by demand-side users in making decisions (Hagiu et al. 2022). The comparison of the three regulatory schemes above shows why these aspects are essential for market-



place owners. Section 4 complements these insights with suggestions on how owners can actively apply this knowledge to their marketplace.

The proposed alternatives show that marketplace owners always have different options to achieve the identified goals. Therefore, the observations derived from the DMA have a broader application than the question whether an owner should enter the marketplace. Gatekeeper platforms already use different approaches to achieve the goals listed in Table 1. For example, if there is a quality problem on Amazon, developing and producing the product in question is not necessarily the first or only thing the company will do. Through the Jungle Scout service, Amazon actively helps third parties to find and use business opportunities to increase competition and quality on the platform. Amazon benefits in several ways from providing this service. First, the goals of controlling quality, increasing competition, and filling supply gaps are tackled (see Table 1). Second, the company earns more commission fees when new suppliers come to the marketplace and sell their goods so that demand-side users can find the right product. Third, Amazon also earns money by providing access to the service. Therefore, becoming a supplier is only one of several options. To choose the best one, the marketplace owner needs to look at the costs of each possibility and the prospected revenue. One of the critical lessons to be learned is how to leverage the superior knowledge of the owner and who can access it.

6 Conclusions

There are some good reasons why marketplace owners should sell on their marketplaces. There are also good reasons why the EU closely monitors this practice. For non-gatekeeper marketplaces, the discussion regarding the DMA offers valuable insights into the strategic behaviors of the most successful businesses of our time. The owner's intervention in the marketplace can benefit, directly and indirectly, demand-side users through an increased product range and network effects (e.g., Choudary 2015; Parker et al. 2016; Zhu and Iansiti 2019). This does not mean that the owner always needs to become a supplier.

The literature on the relevant potential regulatory measures can be seen as a benchmark for how a well-functioning on-platform market operates. The main advantage of the marketplace owner is their cumulative knowledge of all the activities inside the marketplace. The owner can use a combination of sharing, creating incentives to innovate, protecting the business of third-party suppliers (e.g., with on-platform patents), and creating competition to lower prices and ensure quality for demand-side users.

This paper has clear managerial implications for non-gatekeeper marketplace owners concerning when and why entering the market as a supplier can be profitable. The paper shows that a market entry can solve specific problems, such as low quality, excessively high prices, and supply gaps. It also explains how marketplace owners can achieve similar results with alternative measures. While some of these measures might be abused by an owner with significant market power, for many smaller mar-

⁶https://www.junglescout.com/.



ketplaces, they are reasonable in the effort to manage the market and increase value for both supply and demand.

The paper also provides valuable insights for policymakers. Most digital platforms are distant from the thresholds required to qualify as gatekeeper platforms. They also probably do not have access to the same capabilities as those of big tech companies—for example, market designers with a background in economics (e.g., Athey and Luca 2019). Therefore, an equally promising, complementary approach to regulation is to enhance the capabilities of smaller competitors and foster the growth of emerging platforms. The DMA protects smaller participants, but its goal is not to promote them.

This paper has some limitations. First, the results of theoretical models may not be directly applicable to real-world problems. They can only be seen as normative guidelines for an optimal decision and how this would affect demand-side users, thirdparty suppliers, and profits in a hypothetical world with limited influencing factors. Second, the five situations examined here are not mutually exclusive; for instance, promoting competition can affect quality. Also, creating transparency typically leads to better information and, thus, to a more competitive environment (Motta 2004). However, the goal of increasing competition differs greatly from that of improving quality. Separating the various goals allows for overlapping solutions. Third, other situations exist where the marketplace owner might find it profitable to enter the market. A classic entry strategy is to act as a supplier on the platform in order to create value for demand-side users regardless of third-party involvement (e.g., Choudary 2015; Gassmann et al. 2022; Parker et al. 2016). Moreover, a platform owner may occupy valuable positions on their platform to protect network effects and generate additional data without necessarily monetizing this extra service; this is called private policy tying and is a special form of platform envelopment (e.g., Condorelli and Padilla 2020).

Future studies regarding the paper's central theme could investigate whether entering as a supplier or stimulating, for example, quality or competition are alternative strategies, or if they are more likely to complement each other. Furthermore, other DMA rules could be examined; for instance, those concerning the preinstallation of certain apps or the reuse of personal data generated in one service for another service (see e.g., Condorelli and Padilla 2020). To conclude, this paper has identified a gap between the economic research on the regulation of digital platforms and business applications. Both sides could benefit from a closer understanding and intensified exchanges—general goals of business economics.

Funding Open Access funding enabled and organized by Projekt DEAL.

Data availability Data sharing is not applicable in the case of this article as no datasets were generated or analyzed during the study. The number of marketplaces was derived from Crunchbase, which is not publicly available, but this data was only used to demonstrate that most marketplaces are not affected by the DMA.

Ethics declarations

The author declares no competing interests.



The author certifies that he has no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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References

Anderson SP, Bedre-Defolie Ö (2021) Hybrid platform model. CEPR Discussion Papers

Armstrong M (2006) Competition in two-sided markets. RAND J Econ 37(3):668-691

Athey S, Luca M (2019) Economists (and economics) in tech companies. J Economic Perspect 33(1):209-230

Belleflamme P, Peitz M (2021) The Economics of Platforms. Cambridge University Press

Bougette P, Budzinski O, Marty F (2022) Self-preferencing and competitive damages: a focus on exploitative abuses. Antitrust Bull, 0003603X221082757

Cabral L, Haucap J, Parker G, Petropoulos G, Valletti TM, Van Alstyne MW (2021) The EU digital markets act: a report from a panel of economic experts. Cabral, L, Haucap, J, Parker, G., Petropoulos, G, Valletti, T., and Van Alstyne, M., The EU Digital Markets Act, Publications Office of the European Union, Luxembourg

Caro de Sousa P (2020) What Shall We Do About Self-Preferencing? Competition Policy International, June Chronicle

Chen Y, Xie K (2017) Consumer valuation of Airbnb listings: a hedonic pricing approach. Int J Contemp hospitality Manage 29(9):2405–2424

Choudary SP (2015) Platform scale: how an emerging business model helps startups build large empires with minimum investment. Platform Thinking Labs

Choudary SP, Parker GG, Van Alstyne M (2015) Platform scale: how an emerging business model helps startups build large empires with minimum investment. Platform Thinking Labs

Condorelli D, Padilla J (2020) Harnessing platform envelopment in the digital world. J Competition Law Econ 16(2):143–187

Crunchbase (2023) Marketplace - Date Founded

Cusumano MA, Gawer A, Yoffie DB (2019) The business of platforms: strategy in the age of digital competition, innovation, and power. Harper Business New York

De Corniere A, Taylor G (2019) A model of biased intermediation. RAND J Econ 50(4):854-882

Dewenter R, Rösch J (2016) Net neutrality and the incentives (not) to exclude competitors. Rev Econ 67(2):209-229

Economides NS (1988) The economics of trademarks. Trademark Rep 78:523

Etro F (2021) Product selection in online marketplaces. J Econ Manag Strategy 30(3):614-637

EU. The Digital Markets Act: ensuring fair and open digital markets. Retrieved from https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en

Evans DS, Schmalensee R (2016) Matchmakers: the new economics of multisided platforms. Harvard Business Review Press

Gassmann O, Wortmann F, Jung S (2022) Der Plattform-Navigator: 88 Karten für die erfolgreiche Entwicklung und Umsetzung von Plattform-Geschäftsmodellen. Carl Hanser Verlag GmbH & Co. KG

Hagiu A, Teh T-H, Wright J (2022) Should platforms be allowed to sell on their own marketplaces? RAND J Econ 53(2):297–327

Iyengar SS, Lepper MR (2000) When choice is demotivating: can one desire too much of a good thing? J Personal Soc Psychol 79(6):995



Jiang B, Jerath K, Srinivasan K (2011) Firm strategies in the "mid tail" of platform-based retailing. Mark Sci 30(5):757–775

Kittaka Y (2020) Dual role of the platform and search order distortion. Available at SSRN 3736574

Lee KH, Musolff L (2021) Entry into two-sided markets shaped by platform-guided search. Retrieved from

Mariniello M, Martins C (2021) Which platforms will be caught by the Digital Markets Act? The 'gatekeeper'dilemma. Bruegel Blog, 14

MIT DE (2022) *Riding the Platform Wave*. Retrieved from Ideas made to matter: https://www.yumpu.com/en/document/read/67215236/mit-platform-report-2022

Moreno-Izquierdo L, Ramón-Rodríguez AB, Such-Devesa MJ, Perles-Ribes JF (2019) Tourist environment and online reputation as a generator of added value in the sharing economy: the case of Airbnb in urban and sun-and-beach holiday destinations. J Destination Mark Manage 11:53–66

Motta M (2004) Competition policy: theory and practice. Cambridge University Press

Padilla J, Perkins J, Piccolo S (2020) Self-preferencing in markets with vertically-integrated gatekeeper platforms. Available at SSRN 3701250

Parker GG, Van Alstyne MW, Choudary SP (2016) Platform revolution: how networked markets are transforming the economy and how to make them work for you. WW Norton & Company

Rochet J-C, Tirole J (2003) Platform competition in two-sided markets. J Eur Econ Assoc 1(4):990–1029 Rochet JC, Tirole J (2006) Two-sided markets: a progress report. RAND J Econ 37(3):645–667

Rösch J, Baccarella C (2022) The Platform-of-Platforms Business Model: Conceptualizing a Way to Maximize Valuable User Interactions on Social Media Platforms Paper presented at the Social Computing and Social Media: Design, User Experience and Impact

Schwartz B (2004) The paradox of choice: Why more is less

Stiglitz JE (2007) Economic foundations of intellectual property rights. Duke LJ 57:1693

Teubner T, Hawlitschek F, Dann D (2017) Price determinants on Airbnb: how reputation pays off in the sharing economy. J Self-Governance Manage Econ 5(4):53–80

Thaler R, Sunstein C (2008) Nudge: improving decisions about health, wealth, and happiness. In: Springer Tirole J (2020) Competition and the industrial challenge for the digital age. paper for IFS Deaton Review on Inequalities in the Twenty-First Century

Zennyo Y (2022) Platform encroachment and own-content bias. J Ind Econ 70(3):684-710

Zhu F, Iansiti M (2019) Why some Platforms Thrives... and others don't what Alibaba, Tencent, and Uber teach us about networks that flourish. The five characteristics that make the difference. Harvard Business Rev 97(1):118–125

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