

MONOPOLISATION, MOAT BUILDING AND ENTRENCHMENT STRATEGIES

OECD Roundtables on Competition Policy Papers

*This paper is part of the series “OECD Roundtables on Competition Policy Papers”,
<https://doi.org/10.1787/20758677>.*

This document was originally released on O.N.E. as an unclassified document under the reference code: DAF/COMP/WP3(2024)1.

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Member countries of the OECD.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Cover illustration: © Kittiporn Kumpang | iStock - Getty Images Plus.

© OECD 2024

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <https://www.oecd.org/termsandconditions>.

Foreword

Competition authorities have already acquired significant knowledge about the concept of market power and dominance as well as practical experience when assessing anticompetitive practices. However, the introduction of potential new concepts, such as economic moats and entrenchment, may complicate this analysis and blur further the lines between lawful and unlawful practices.

This paper discusses the relation between economic moats and entrenchment with market power and calls for further reflections among competition authorities and practitioners on the challenges these concepts may pose.

To address these potential challenges, this paper explores several possible options, including incentivising the use of investigative and analytical techniques as well as strengthening regulatory and enforcement tools.

This paper was prepared by Giorgio Castaldo from the OECD Competition Division who is currently seconded to the OECD from the European Commission (Directorate General for Competition). The paper benefited from comments by Ori Schwartz, Antonio Capobianco and Richard May from the OECD Competition Division and research by Tal Arnon and Manuela Sánchez Parra from the OECD Competition Division. It was prepared as a background note for discussions on “Monopolisation, Moat Building and Entrenchment Strategies” taking place at the June 2024 session of the OECD Competition Committee’s Working Party No. 3 on Co-operation and Enforcement, <https://www.oecd.org/competition/monopolisation-moat-building-and-entrenchment-strategies.htm>. The opinions expressed and arguments employed herein are those of the authors and do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

Table of contents

Foreword	3
1 Introduction	5
2 Defining economic moats and entrenchment	7
2.1. The concept of economic moat	7
2.2. The concept of entrenchment	8
2.3. The relationship between economic moats, entrenchment and market power	10
2.4. Rising market power across industries: the example of the digital economy	11
3 Economic moats and entrenchment: antitrust analysis and potential enforcement challenges	14
3.1. Assessing market definition, dominance and barriers to entry	14
3.2. Theories of harm: leveraging and exclusion	15
3.3. Examples of exclusionary practices	16
3.4. Potential enforcement challenges	22
4 Policy options on how to address moats and entrenchment	25
4.1. Investigative and analytical tools	25
4.2. Strengthening the current regulatory tools	29
4.3. Strengthening the current enforcement tools	30
5 Conclusions	34
References	35
Boxes	
Box 2.1. Examples of the use of the term entrenchment by competition authorities	9
Box 3.1. Self-preferencing in Brazil	17
Box 3.2. Acquisition of VMware by Broadcom: a multijurisdictional approach to interoperability and entrenchment	18
Box 3.3. Recent examples of conglomerate mergers with potential entrenchment effects	20
Box 3.4. A recent acquisition of a nascent competitor challenged in Europe and in the US: the acquisition of Figma by Adobe	22
Box 4.1. Examples of recent market studies linked to economic moats and entrenchment	26
Box 4.2. Market investigations power and examples of recent trends across jurisdictions	28
Box 4.3. Examples of recent legal framework adjustments in unilateral conduct to reflect market dynamics	31

1 Introduction

Assessing market power to determine whether a firm is dominant is not an easy task for competition authorities (OECD, 2022^[1]) and can become even more challenging when concepts such as economic moats and entrenchment are involved in this assessment.

Economic moats and entrenchment add complexity to this assessment and risk blurring further the lines between lawful and unlawful practices. They gained significant attention among competition authorities and practitioners in recent times, particularly in the context of market power and competition in digital markets, even if these concepts cannot be limited to these markets but can have wider applications.

For the purpose of this paper, economic moats refer to structural competitive advantages that allow a firm to protect its market power and profitability from rivals on a long-term basis (Gallant, 2023^[2]). Conversely, entrenchment is more of a dynamic process focusing on strategic actions and measures adopted by a dominant firm to maintain its competitive advantages and discourage entry from rivals (P. Starr, 2023^[3]) (P. Starr, 2019^[4]). This can be achieved through various means including by broadening and deepening economic moats (Kanter, 2022^[5]).

The relationship between economic moats, entrenchment, and market power is complex. Both economic moats and entrenchment may contribute to increasing and maintaining a firm's market power but in a different and complementary way. While these concepts may overlap and be considered just as modern labels for traditional concepts and existing practices, they may be subject to a different and more comprehensive interpretation in the context of competition law, particularly when linked to the indicators of market power. Firms operating in markets with wide and deep economic moats and firms engaging in entrenchment strategies seem to be more prone to achieve and maintain over time substantial market power in the market and become the dominant player (Kanter, 2022^[5]).

With the decrease in the intensity of competition and the increase in market power that has been detected in recent times, economic moats and entrenchment across various industries have gained importance for competition authorities, especially in the digital sector (Calvino, 2019^[6]) (OECD, 2024^[7]). Online platforms differ from the more traditional markets and businesses in numerous ways, often leading to increased concentration in platform markets, high barriers to entry and durable market power over time. This makes digital markets particularly prone to tipping in favour of a single, dominant firm, so even effective antitrust enforcement is unlikely to foster market segmentation and fair competition, at least in the short term (OECD, 2022^[1]), (Stigler, 2019^[8]).

Economic moats and entrenchment can generally be considered legitimate business strategies, intended throughout this paper as lawful and procompetitive, which may be beneficial for businesses, investors and consumers resulting in higher quality and innovative products, better services and lower prices (Kismet, 2023^[9]). However, in some circumstances, they may reduce the degree of competition if built and maintained through anticompetitive practices leading to consumer harm (Kanter, 2022^[5]).

Between these two strategies, a middle area can be identified referring to legitimate economic moats and entrenchment strategies held by dominant (and non-dominant) firms that are gradually shifting into practices which may be considered anticompetitive. These entrenchment strategies, falling short of traditional abuses of dominance, raise a policy question as to whether they could or should be addressed under the existing competition tools. Even in case of a positive answer to these questions, they remain

complex to assess by competition authorities and raise potential enforcement challenges, often leading to a significant uncertainty.

For example, in recent years, incorporating dynamic concepts related to digital markets into legal frameworks has proven to be a key challenge for competition authorities, often assessed only after the relevant markets have been defined and applied to a more static methodology and assumptions. The analysis may be equally challenging when dealing with economic moats and entrenchment that supports innovation and consumer welfare as opposed to those that could potentially lead to significant and durable market power and to non-contestable markets (W. H. Rooney, 2023^[10]). Balancing potential benefits and risks of moats and entrenchment strategies represents the real challenge for competition authorities wishing to ensure that markets remain open and contestable in order to prevent business practices leading to consumer harm in the long term.

To discuss these potential challenges, this paper explores several possible solutions under the current legal framework. These include (i) incentivising the use of investigative and analytical tools, such as market studies and market investigation powers, and (ii) strengthening regulatory tools, notably through sector-specific regulations, both in the context of structural economic moats, as well as (iii) strengthening enforcement tools by adjusting antitrust analysis to consider entrenchment.

This paper is organised as follows: **section 2** describes the concept of economic moats and entrenchment and their relationship with market power; **section 3** examines potential enforcement challenges with economic moats and entrenchment in case analysis; **section 4** presents possible options to address these potential enforcement challenges identified in the current legal framework; **section 5** concludes.

2 Defining economic moats and entrenchment

This section describes the concept of economic moats and entrenchment, examining their relationship with the relevant factors contributing to achieving and sustaining market power. The aim is not to provide strict definitions of these terms but rather to explore the use these terms may have in the context of competition law, particularly in relation to a firm's market power.

2.1. The concept of economic moat

The metaphoric term economic or business moat, popularised by the investor Warren Buffett,¹ refers to a **structural competitive advantage** that allows a firm to protect its market power and profitability from rivals over the long term (Gallant, 2023_[2]).

Similar to a medieval castle protected by a moat surrounding it, according to Buffet, the castle is the business and the moat is the competitive advantage that protects the firm from rivals. The wider and deeper the moat, the more easily the castle may be defended against invaders (Khanna, 2016_[11]).

The main purpose of an economic moat is to create a financially successful business and attract investors. Identifying a firm's economic moat and determining its competitive advantage, especially its durability, becomes therefore crucial for investors (FasterCapital, 2023_[12]).

According to Morningstar,² there are five key sources that provide economic moats to firms, namely: (i) low-cost production: a firm's ability to produce goods or services at a lower costs than rivals, eventually undercutting them on prices, (ii) switching costs: when it becomes too expensive and inconvenient for customers switching to a competitor's product, (iii) network effects: when the value of a product or service of a firm increases for both new and existing customers as more people use it, (iv) intangible assets: when strong brands, patents, proprietary technology, regulatory licenses prevent or make it more difficult for rivals to duplicate a firm's product, (v) efficient scale: firms operating in a niche market served by one or only few players where returns on investment for potential new entrants would fall below the cost of capital (Morningstar, 2023_[13]).³

¹ Warren Buffet is an American businessman, investor and philanthropist, currently serving as co-founder, Chairman and CEO of Berkshire Hathaway, an American multinational conglomerate holding company, headquartered in Omaha, Nebraska, United States - [Warren Buffett's Investment Strategy \(investopedia.com\)](https://www.investopedia.com/warren-buffett-investment-strategy/).

² Asset management firm founded in 1984 and headquartered in Chicago, USA. It provides investment information worldwide and its clients include, for example, investors, financial advisors, asset managers and pension plan providers - [Morningstar, Inc. - Wikipedia](https://www.morningstar.com/).

³ Examples of competitive advantages which are not considered economic moats that may sustain high returns over a long period of time may include: the size of a firm, high market shares, management, replicable technology and hot products - [The Morningstar Economic Moat Rating \(vaneck.com\)](https://www.vaneck.com/moat-rating/).

Some of these moats, such as low-cost production, may be more easily identified as legitimate business features (i.e. lawful and procompetitive), often guidance principles for firms, investors and consumers (Kismet, 2023^[9]). In this context, the competitive advantages of a firm over rivals would stem from market dynamics and the natural consequence of a firm's superior and innovative product or service, ultimately leading to a positive impact on market structure, innovation and consumers (Z. Qureshi, 2019^[14]). Conversely, other sources, such as switching costs, while still lawful, may have a higher tendency to become anticompetitive.

Economic moats can be of different width depending on the size and strength of the competitive advantage (VanEck, 2023^[15]):

- **Wide moat.** Wide moats rely on several competitive advantages (broad and substantial), lasting at least twenty years, and constituting a high barrier to entry for new entrants to duplicate or existing competitors to gain market shares.
- **Narrow moat.** This type of moat refers to a small competitive advantage of the firm and is usually temporary.

To build a wide or narrow moat rating, firms generally need to satisfy two key requirements, namely (i) the potential to make above average returns on capital and (ii) some competitive advantage that prevents these returns eroding rapidly (M. Holt, 2017^[16]).

Finally, as will be discussed later in more detail, the term economic moat may be considered closely linked to the concept of market power (J. Klement, 2021^[17]) that is the ability of a firm to profitably maintain prices above a competition level potentially harming consumers (OECD, 2022^[1]). The sources of economic moats, when identified as barriers to entry, may potentially overlap with some of the common indicators of market power. Such overlap is reflected in the ability of a firm to protect its market power and profitability over time from potential rivals - see section 2.3 (Gallant, 2023^[2]) (Morningstar, 2023^[13]).

2.2. The concept of entrenchment

The concept of entrenchment is not novel and has gained significance throughout the years in various contexts including military, legal and political fields.

In the military context, this strategy refers to the practice of soldiers digging trenches for defence against enemies' attack (P. Starr, 2019^[4]). **Legally**, it refers to the protection of laws and rights which become durable and more difficult to change with the aim to increase legal stability (Barber, 2016^[18]). **At the political level**, when political privileges were in danger, governments would seek any form of entrenchment to protect their political power. In that case, entrenchment refers to "*any process whereby an institution [...] becomes resistant to pressures for change*" (P. Starr, 2019^[4]).

Entrenchment is also known in corporate governance and described as a situation where top managers are able to increase their power through specific strategies and reactions thereby controlling the entire system (i.e. management entrenchment) (J. J. M. Rodrigues, 2010^[19]).

In each of these contexts, the term entrenchment is closely related to the idea of control, stability, durability and resistance to change. While this can be beneficial, it can also present challenges for institutions seeking potential reforms and innovation.

The same concept may apply also to competition law. While there is no standardised definition codified, the term entrenchment is more related to a **behavioural and dynamic process**, often associated to specific actions and measures adopted by a firm to maintain and solidify its dominant market position over time (P. Starr, 2023^[3]; 2019^[4]).⁴ These behaviours may also need to be adapted over time to market

⁴ Market characteristics may also contribute to the entrenchment of a firm's market power.

changes as opposed to economic moats which may remain rather stable (M. Gale, 2022^[20]). An entrenched market position therefore implies a degree of durability in a dominant position and resistance to changes (CMA, 2020^[21]) (P. Starr, 2019^[4]).

Competition authorities have recently started to use the term entrenchment both in the enforcement and regulatory contexts.

Box 2.1. Examples of the use of the term entrenchment by competition authorities

US Department of Justice and Federal Trade Commission

In the Revised Mergers Guidelines of 2023 (the “Guidelines”), the Department of Justice and Federal Trade Commission (together the “Agencies”) explain how mergers can “**entrench or extend a dominant position**” even in relation to uncertainty of future competition (Guideline 6). Both Agencies seek to prevent specific transactions that raise barriers to entry when an already dominant firm is involved. The Guidelines explain that barriers can increase by (i) increasing switching costs, (ii) interfering with the use of competitive alternatives and (iii) depriving rivals of scale economies or network effects.

The Agencies emphasise that the persistence of market power of a firm can indicate that barriers exist, and that further **entrenchment of an already dominant** firm may create a monopoly and lessen competition.

Source: <https://www.justice.gov/d9/2023-12/2023%20Merger%20Guidelines.pdf>

European Commission

In the EU Digital Markets Act, one of the criteria to qualify an undertaking as a gatekeeper is when it “**enjoys an entrenched and durable position, in its operations, or it is foreseeable that it will enjoy such a position in the near future**”. As a result, once a gatekeeper is identified, the undertaking holds or will possibly hold an **entrenched market position**.

By identifying firms holding an entrenchment position, early intervention can be made to either prevent the lessening of competition or that the qualified gatekeepers achieve an **entrenched and durable market position** in its operations by unfair means. The European Commission also defines the existence of entrenchment when the ability to challenge the position of the firm providing the main platform is limited.

Source: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R1925>.

UK Competition Market Authority

In the Advice of the Digital Markets Taskforce, the Competition Market Authority (“CMA”) expressed the need for an *ex-ante* regime preventing firms with “**substantial and entrenched market power**” to exploit their market position. The CMA emphasised that entrenched market power, in at least one digital activity, can provide the firm with a *strategic market status* (“SMS”). Firms holding SMS may inhibit rivals’ ability to market entry and undermine effective competition resulting from their entrenched market power.

Some of the features that digital firms may use to **entrench their position** are (i) network effects and economies of scale; (ii) consumer decision making and the power of defaults, (iii) unequal access to user data, (iv) lack of transparency, (v) the importance of ecosystems of complementary products that can isolate core services from competition, and (vi) vertical integration resulting in conflict of interests.

The CMA acknowledges that existing laws are not enough to enforce against firms with entrenched market power. Therefore, it introduces a set of recommendations in the framework of the Digital Markets Unit objectives. For example, in one of their recommendations, the CMA explains how digital mergers can deepen the entrenchment of existing market power as well as lead to a loss of competition.

Source: https://assets.publishing.service.gov.uk/media/5fce7567e90e07562f98286c/Digital_Taskforce_-_Advice.pdf.

German Bundeskartellamt

The 11th amendment of the German Act Against Restraints of Competitions provides the Federal Cartel Office (“FCO”) with an additional power of intervention to improve the competitive landscape in **“entrenched and encrusted sectors with structural problems”**. This additional power may arise in the form of remedial measure, including unbundling orders that will be possible to conduct even if the firms in the relevant sector have been fully compliant with all antitrust laws.

The aim of the amendment is to increase competition in distorted markets. The FCO intervention will therefore take place after identifying a significant and persistent market distortion identified in a sector investigation. In addition to the discretionary remedial measures, the FCO can require individual firms to notify any merger in the sector under investigation, if future concentration can impede effective competition in Germany.

Source: <https://www.luther-lawfirm.com/en/newsroom/press-releases/detail/11th-amendment-german-competition-act-federal-cartel-office-intervention>.

2.3. The relationship between economic moats, entrenchment and market power

Market power is a key concept in competition law and policy, where it is often associated to dominance (or substantial market power). It implies a level of control on prices above and beyond simple market power.⁵

The terms economic moats and entrenchment are not specifically related to the concept of market power itself, but mostly associated with the factors contributing to achieving and sustaining it over time (e.g. barriers to entry, switching costs). The relationship between economic moats and entrenchment with these elements of market power is complex and may be subject to different interpretations.

First, economic moats and entrenchment may be considered as not entirely new concepts under competition law, but rather as modern labels for traditional concepts and existing practices of firms to create, maintain and preserve their market power. For example, the source of various economic moats, such as economies of scale or network effects, by acting as a barrier of protection, may be understood to equate with the traditional structural factors creating barriers to entry which are already part of the analysis of competition authorities when assessing market power and dominance (Gallant, 2023^[2]). Similarly, entrenchment may be considered as another way to actively maintain dominance, relating to firms’ deliberate and strategic actions of which competition authorities have already acquired significant knowledge and practical experience when assessing potential anticompetitive practices (P. Starr, 2023^[3]; 2019^[4]).

By accepting this interpretation, economic moats and entrenchment can be considered as concepts that correspond to the elements contributing to market power, and most likely would not widen the scope of potential abusive practices under the current legal framework.

⁵ See, for example, European Court of Justice case 26/76, *United Brands v. Commission* [1978] E.C.R. 207, and *Hoffmann-La Roche v. Commission*, 85/76, [1079] E.C.R and *United States v. E. I. du Pont de Nemours & Co. and Eastman Kodak Co. v. Image Technical Servs., Inc.*

On the other hand, while some of the sources of economic moats and entrenchment may clearly overlap with the indicators of market power, these concepts may be interpreted as a new terminology, primarily intended to analyse and present existing concepts (i.e. indicators of market power) in a way that may appear more comprehensive and dynamic. For example, this may include considering how businesses and markets features may evolve over time, potential technological developments and the rationale behind a firm's long-term strategy.

Network effects which refer to the value of a firm's product or service increasing as more people use it, may represent a wide economic moat and positive competitive advantage for a firm with a large customer base (Morningstar, 2023^[13]). At the same time, network effects may lead to both a flywheel effect through which anticompetitive conduct can be self-reinforcing and, if they are strong, to a winner-takes-all/most effect, including a narrow scope for differentiation and high costs related to multi-homing (OECD, 2016^[22]), (Kanter, 2022^[23]).

Similarly, in the context of entrenchment and a firm behaviour, **vertical integration** may allow a firm to increase control in the supply chain, providing valuable efficiencies to the vertically integrated firm and offering distinct value to consumers (Benchmark International, 2023^[24]). At the same time, vertical integration may increase firms' market power, for example by transferring their dominance in adjacent markets, as well as protect the vertically integrated firm from new entrants (OECD, 2022^[1]) and decrease the firm's incentive to innovate compared to independent innovators (G. Cai, 2023^[25]).

Identifying when exactly network effects or vertical integration transition from being beneficial for consumers to being potentially anticompetitive factors may be relevant for competition authorities when assessing a firm's structural economic moats and entrenchment behaviour and their impact on competition.

In any event, regardless of whether there is a consensus on the different interpretations, what may be relevant for the purpose of this paper is the role they may play for competition authorities when assessing the relevant factors contributing to market power and the potential anticompetitive practices.

When analysing the relationship between economic moats and entrenchment with the elements of market power, it is also important to consider the effect that both terms may have on the different degrees of market power exercised by a firm. On one side of the spectrum, there would be a firm with no market power and on the opposite side a monopolist. Firms exercising different degrees of market power may be in-between (Bailey, 2015^[26]). As a result, placing a firm with entrenched market power, obtained by means of wide economic moats, within this range of market positions (or even above), may be another way to explore the use that these terms may have in competition law. This interpretation would also be in line with the economic concept of market power which is related not to a "zero-one matter" but associated to the concept of "a continuum" (D. Geradin, 2005^[27]).

In sum, the structural competitive advantages arising from economic moats together with the strategic actions and defensive measures implemented by a firm to protect and maintain its dominance over existing and potential competitors may also reflect market dynamics and be the result of a firm's strategy offering a superior product, better services and attractive prices for the benefit of consumers (Z. Qureshi, 2019^[14]). However, economic moats, entrenchment and market power can be subject to antitrust scrutiny if established or maintained through anticompetitive practices (see section 3).

2.4. Rising market power across industries: the example of the digital economy

Globalisation, technological developments and the recent Covid-19 crisis had a significant impact on the market economy of many jurisdictions resulting in an increase of market power and reduced competition across various industries, particularly in digital markets (UN, 2022^[28]), (ECB, 2021^[29]). In this context, they may also contribute to reinforcing economic moats by enhancing competitive advantages of a firm over

rivals (Mckinsey, 2016^[30]) as well as creating entrenched market positions in the longer period, ultimately protecting digital platforms' monopoly (OECD, 2020^[31]).

Empirical evidence overall confirmed this trend emphasising how market power, firm concentration and markups are on the rise at global level, and particularly in the US (OECD, 2019^[32]), (Promarket, 2021^[33]). Whereas evidence generally shows an increase of concentration and markup across industries, the question remains whether it also supports an increase in market power and a decrease in competition (OXERA, 2019^[34]), (OECD, 2019^[32]). While this debate among academics and practitioners is still ongoing, notably focusing on the effective ways to measure the magnitude of this potential increase of market power, there is generally a consensus that market power has increased in recent years across industries and in particular for the digital sector (OXERA, 2019^[34]).

The De Loecker, Eeckout and Unger study of 2020 on the United States reports that markups have generally increased across all industries and the aggregate global markups increased from 21% above marginal costs in 1980 to 61% in 2016.⁶ (J. De Loecker, 2020^[35]).

Similarly, the Federico J. Díez, Jiayue Fan, Carolina Villegas-Sánchez study of 2021 confirmed an increase of market power based on new evidence at global level. The study also reported average markups increase by about 6% over the 2000-2015 period across sectors and most likely to be found in industries where digital technologies are used more intensively (F. J. Díez, 2021^[36]).⁷

A more recent OECD report of (2024^[7]) further contributes to the economic literature and the above findings by providing new evidence on the state of market competition across a number of OECD countries over the period 2000-2019.⁸ The main results of the report confirm the recent trends of the main competition proxies, such as an increase in concentration and markups for market power since the year 2000, ultimately leading to an average competition decrease.

First, industry concentration increased on average by five percentage points, corresponding to approximately 20%, over the 2000-2019 period and across 15 countries and 127 industries considered and slightly more in industries competing at the domestic level. Second, markups have increased by approximately 7% on average, mainly driven by firms in the top half of the markup distribution.⁹ Third, entrenchment as well as rank persistence and market share instability measures indicate that the level of business dynamism among market leaders is low and it has decreased in last 20 years, notably in industries competing at the domestic and the European level. Finally, product concentration is highly correlated with industry concentration in related industries, and both are positively correlated with EU Commission antitrust interventions.

As regards dynamism among largest firms, market leaders' churn may be a potential dynamic proxy for the lack of competition (as opposed to market concentration based on leading firms' market shares only). In this context, the report emphasises that it is relatively high in the period considered. Notably, on average approximately 3.3 out of the top four firms in a given year remain market leaders in following one. Also,

⁶ Such an increase in aggregate markups mainly relates to those firms which have already a high markup.

⁷ A recent note of the International Monetary Fund also seems to confirm this trend, notably on the rise of market power among publicly traded firms in advanced economies, and that market power is becoming entrenched in many industries (IMF, 2021^[103]).

⁸ Specifically, it analyses the evolution of several proxies of market power and competition, such as concentration, markups and entrenchment over the last 20 years.

⁹ Businesses competing in global markets showed, on average, the highest markup increase, followed by companies competing in European industries and domestic markets.

more concentrated industries are related to higher entrenchment levels and average entrenchment has been rising in both weakly and heavily concentrated industries.¹⁰

This trend appears even more prominent in the digital sector. Online platforms may differ from the more traditional markets in several ways and in particular on how some of the characteristics of the digital sector, including, *inter alia*, network effects, multi-sided markets, data accumulation, and development of new ecosystems may appear on the market. While not necessarily novel features, the fact that many of them may be present at the same time makes them unique and suggest that, together with growing markups, they may have contributed to the rise of market power and economic moats in digital platforms and its resistance to change in the long-term as opposed to many traditional markets (OECD, 2022^[37]) (OECD, 2022^[38]).

Finally, in the digital sector, acquisitions by dominant firms may represent another way to increase market power by supporting entrenchment strategies to create wide economic moats around the core business and remove potential competitive threats, especially when related to ecosystems (OECD, 2023^[39]) – see section 3.4.

Striking the balance between promoting the development of new products and services for the benefit of consumers and economic growth, on the one hand, and the concerns resulting from the potential rise of market power and ineffective competition, on the other hand, remains therefore the real challenge for competition authorities, especially in the digital economy (Calligaris, 2018^[40]).

¹⁰ Dynamic measures of firms' markets entrenchment have been used in some previous studies. (Bessen et al., 2020^[106]), for example, suggests two different metrics for measuring entrenchment: (i) the annual displacement hazard rate of firms ranked in the top four in an industry falling out of the top four, and (ii) the yearly hazard rate of a firm ranked fifth to eighth in the industry moving up into the top four. (Freund and Sidhu, 2017^[105]), by using Orbis data, indicate that between one third and one half of firms in the top four in an industry in 2014 differ from those in 2006. Finally, in order to assess the churning of top firms, (Bajgar, Criscuolo and Timmis, 2021^[104]) examined three variables, including (i) firms' share in the top 8 which were not in this position in the previous year, (ii) the rank correlation between the top 8 firms' market shares over a two-year period and (iii) the instability of market share (OECD, 2024^[7]).

3 Economic moats and entrenchment: antitrust analysis and potential enforcement challenges

Competition authorities have already acquired significant knowledge about the concept of market power and dominance as well as practical experience when assessing abusive practices and merger transactions leading to anticompetitive effects. However, the relation between economic moats and entrenchment with the sources of market power may require further reflection among competition authorities and practitioners, notably if economic moats and entrenchment are considered more than just modern labels to old concepts. If this is the case, how should such business strategies be categorised under the current competition law frameworks of various countries? Can the introduction of these new terms influence and change the competitive analysis of competition authorities? Lastly, it is important to assess whether potential enforcement challenges are warranted?

3.1. Assessing market definition, dominance and barriers to entry

Assessing dominance and the degree of market power is relevant for competition authorities when applying antitrust rules to alleged anticompetitive unilateral conduct as well as when analysing the effects of merger transactions on competition.

Traditional key elements which are considered relevant by competition authorities when assessing dominance may include (i) the size and stability over time of the market shares of the dominant firm and its competitors, (ii) barriers to entry and expansion, and (iii) countervailing buyer power (R. Whish, 2012^[41]).

The delineation of the relevant markets is equally relevant in the assessment of a firm's degree of market power, used by competition authorities as a tool to identify and define the boundaries of competition between firms.¹¹ The analysis of economic moats and entrenchment may be relevant for competition authorities in that context. For example, when assessing the demand-side substitutability of a product or service, a firm enjoying a wide economic moat, such as brand loyalty or high switching costs, may affect consumer choice and switching behaviour (FasterCapital, 2023^[42]). Similarly, in relation to geographic market definition, the competitive advantage of having a strong distribution network, restricted in specific areas, may also be relevant and sufficient to narrow the geographic scope of the relevant market (FasterCapital, 2023^[43]) (OECD, 2016^[44]).

¹¹ See Commission Notice on the definition of the relevant market for the purposes of Union competition law (2024) - antitrust&cartels legislation 20240208 EC market definition notice all languages.zip | Competition Policy (europa.eu).

While there is no clear-cut legal or economic definition, it is also undisputed that barriers to entry play a key role in competition law and policy, for example in the assessment of dominance exercised by a firm or a group of firms (OECD, 2007^[45]).

In this context, economic moats and entrenchment may involve structural competitive advantages and deliberate actions respectively contributing to the creation of strong barriers to entry, naturally arising from the firm's business model as well as superior or integrated products. However, in the context of potential abusive practices and anticompetitive mergers, they may be considered by competition authorities as an additional factor when assessing dominance.

By placing greater emphasis on the structural nature of economic moats and the behavioural nature of entrenchment strategies when assessing a firm's alleged dominant position, the analysis of competition authorities may require focussing more on the firm's strategic objective to maintain its dominance over the long period. This temporal dimension, referred to a firm's dominant position becoming durable over time and unlikely to be challenged in the short term, may be closely related to situation where market power and dominance may become entrenched (CMA, 2020^[21]).

A distinction between past and future durability of market power also appears to be relevant. While the traditional concept of market power when assessing dominance "durability" generally refers to the **past** position of a firm in the market (i.e. market shares remaining stable over a long time), the presence of economic moats and entrenchment behaviour may lead to the creation or strengthening of durable market power in the **future** (e.g. the concept of tipping and incontestability in digital markets). This raises the question of how to address entrenchment strategies by firms which are not dominant yet, but whose business behaviour contributes to creating, expanding, or deepening economic moats that will lead to a future dominant position. This issue will be discussed later in section 3.4.

Based on the above, the analysis of competition authorities may therefore require not just relying on traditional enforcement tools but following a more dynamic approach to better understand how structural economic moats are (i) embedded in the firm's business model, (ii) sustained over time by entrenchment, (iii) influenced by the market characteristics, (iv) the result of a superior product or technology or leading to anticompetitive conduct (J. Furman, 2019^[46]).

Finally, when analysing a firm's dominance, the assessment of economic moats by competition authorities may be based on qualitative and quantitative evidence. Qualitative evidence to determine the firm's potential advantages over its competitors may include (i) analysing the firm's business model, main activities and sectors involved, (ii) identifying the key players in the relevant industry and (iii) assessing the firm's overall business strategy, moat sources and relevant tools used to improve the value of the products and services. On the other hand, quantitative evidence may focus on key performance indicators, including revenues, stockholder's equity, free cash flow and earnings per share or net income, all of which may allow to determine whether a firm holds a strong economic moat and is capable to attract new customers. (StableBread, 2023^[47]), (Morningstar, 2017^[48]).

3.2. Theories of harm: leveraging and exclusion

Being related to the concept of market power, economic moats and entrenchment become relevant also when analysing firms' potential abusive conduct as well as potential anticompetitive effects resulting from merger transactions.

They can be assessed under the traditional leveraging theory of harm where a dominant firm may take advantage of its strong economic moats and engage in strategies to distort competition in adjacent markets or to maintain and entrench its dominance in the core market. Such leveraging strategy may allow the dominant firm to raise rivals' costs and restrict consumer choice. At the same time, economic moats and entrenchment strategies may lead to the exclusion of competitors (i.e. anticompetitive foreclosure) both in adjacent markets and in the core market of the dominant firm (OECD, 2020^[49]; 2023^[39]).

In this context, anticompetitive foreclosure represents competition authorities' main concern related to potential abusive practices and anticompetitive mergers. In both cases, it may occur when actual or potential competitors' market access is eliminated (even partially) and competition significantly weakened. Subject to market structure and competitive dynamics, a firm may therefore find it profitable to leverage its dominant position in one market to gain a competitive advantage (i.e. extracting monopoly rents) and foreclose competition in an adjacent market or to engage in entrenchment strategies to maintain, protect and reinforce its dominance in the core market by making entry or expansion more difficult (ICN The Unilateral Conduct Working Group, 2015^[50]).

As a result, competitive advantages in the form of economic moats may be used in combination with leveraging and exclusionary strategies by a dominant firm to extend its market power in a neighbouring market as well as to ensure the deepest and widest barrier (moat) around its core monopoly product and service. Such exclusionary practices may be anticompetitive leading to a reduction of innovation and consumer harm (Kanter, 2022^[51]).

Understanding whether and how the introduction of these new concepts may influence antitrust analysis becomes relevant for competition authorities, also to assess whether potential enforcement challenges are justified (see section 3.4).

3.3. Examples of exclusionary practices

When economic moats and entrenchment are maintained in the long-term through anticompetitive practices, namely as part of a dominant firm's strategy to leverage and maintain market power, they are likely to be anticompetitive leading to exclusionary and discriminatory practices both in the unilateral conduct and merger context. Competition authorities may need to adapt their assessment while considering these potential new concepts and strategies. Examples of these practices across industries analysing the potential impact of economic moats and entrenchment, under both instruments, may include:

3.3.1. Discriminatory strategies in unilateral conduct

Self-preferencing

Self-preferencing is a widespread business strategy observed across various sectors of the economy. In the retail industry, such as supermarkets, it's common for firms to give preference to their own products while also offering those of third-party suppliers. Similarly, online platforms often prioritise their own offerings by featuring them prominently, enhancing them using insights from third-party sales data, or making access to their platform contingent on using their services. Such behavior may have the potential to drive efficiency, foster healthy competition, and stimulate innovation in various sectors (Li, 2023^[51]).

However, self-preferencing may become problematic when (i) dominant firms exploit their significant market power and wide economic moats in one market to unfairly provide preferential treatment to its own products or services in related markets and (ii) is capable of protecting a firm's dominant position in the core market.¹² This practice may lead to anticompetitive exclusionary and discriminatory behaviour by erecting entry barriers for new competitors, hampering their ability to compete fairly and resulting in diminished innovation, higher prices, and inferior products or services for consumers (Motta, 2023^[52]), (Petit, 2015^[53]).

In the digital sector, economic moats include strong network effects and sophisticated ecosystems comprising multiple products or firms operating across various related markets. In such cases, dominant firms may employ entrenchment strategies to maintain, strengthen and broaden their competitive advantages. This behaviour, which may manifest in the form of self-preferencing, has been recognised by

¹² See, for example, European Commission's decision in Case AT.39740 Google Search (Shopping) of 2017 - 39740_14996_3.pdf (europa.eu).

several competition authorities as a potential form of exclusionary abuse of dominance and discrimination practice. Enforcement actions against self-preferencing in abuse of dominance cases are conducted on a worldwide level by competition authorities to tackle this type of abuse ensuring a level playing field for all market participants and fostering a competitive environment that benefits consumers (OECD, 2020^[49]).

Since the European Commission's *Google Shopping* decision,¹³ analysing self-preferencing in digital markets from a competition perspective has become essential also in other jurisdictions, including however different outcomes, such as for example in Brazil.

Box 3.1. Self-preferencing in Brazil

In 2019, CADE, the Brazilian's competition authority, decided to file competition charges against Google regarding its online shopping platform, Google Shopping. The proceeding concerned whether Google had unfairly positioned Google Shopping in a preferential manner within the search results of its internet search engine, Google Search, thus breaching algorithmic neutrality to promote its own service at the expense of competitors. This is the identical conduct investigated by the European Commission and the US Federal Trade Commission.

From the cases of the US and the EU, it was clear that Google's strategy was to leverage its dominance in the generic search market to gain an unfair advantage in shopping services. However, in Brazil, while some Commissioners presented concerns related to the exclusionary practice, the majority concluded that the relevant conduct did not give rise to any anticompetitive effects.

Opinions among Commissioners varied regarding the potential negative impact of Google's conduct, considering its existing market power, capabilities and incentives for abuse and the exclusionary dimension of the commercial practice. Uncertainty played a role also on the difficulty of finding an effective remedy to implement a possible order to cease the alleged illegal conduct.

The different legal outcomes of cases against Google in various jurisdictions reflect the complexity of addressing economic moats and entrenchment in digital markets.

A forward-looking and dynamic analysis appeared to be relevant in this case, notably for assessing future and potential effects of Google's conduct under scrutiny. This required going beyond a firm engaging only in self-preference practices and verifying whether it does so by leveraging its existing market power and wide economics moats to keep potential competitors in a different playing field.

While competition authorities must accept to take decisions within a context of uncertainty, especially when trying to predict the effects about the future, the need to strike a balance of social costs related to state intervention (or omission) remains challenging, ultimately leading to different outcomes, even among competition authorities.

Source: Google Shopping in Brazil: Highlights of CADE's Decision and Takeaways for Digital Economy Issues by Paulo Burnier da Silveira, Victor Oliveira Fernandes - https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3435159

Data accumulation and restrictions on interoperability

Another significant source of competitive advantage for dominant firms, particularly related to certain firms' conduct making the existing economic moats more effective in digital the sector, refers to the collection of large amounts of data linked to potential restrictions on interoperability.

As regards data accumulation, the more a dominant firm is able to gain significant insights about market dynamics and rivals' strengths and weaknesses as well as consumers' preferences, the more likely it will

¹³ Ibid.

be successful in increasing its market power (Kumar, 2022^[54]). In this context, the “*castle and moat’s strategy*” may be specifically related to the collection and use of key data resulting not only in better services but also in a dominant firm becoming stronger and bigger as opposed to smaller entrants struggling to gain the critical mass of users’ data (Parul, 2023^[55]).

Strictly related to data accumulation is also the concern among competition authorities resulting from the lack of interoperability among the different groups of users across digital platforms.¹⁴

Depending on the different incentives existing in digital markets between incumbents and new entrants, or vertically integrated firms and those active only in part of a supply chain (OECD, 2021^[56]), the lack of interoperability may give rise to different challenges both from a competition law and policy perspective, including (i) the conflict between platforms and applications (Weiser, 2009^[57]) and (ii) the need to combine data across multiple platforms that may have a major impact on how data is used and ultimately on public and private welfare (Rubinfeld, 2019^[58]).

While there may not always be an obligation, even for a dominant firm, to ensure interoperability, leveraging dominance from one market to another or strengthening it in the core market by refusing to provide interoperability information may be considered an abusive practice. As for data accumulation, by controlling interoperability, a dominant firm may lock-in users, preventing them from easily switching to alternative products or services, thereby reducing competitive pressure in the market. This behaviour may allow dominant platforms to ultimately entrench their market power in their entire ecosystem, foreclosing rivals from their network (Stutz, 2021^[59]), (Nikpay, 2020^[60]).

Box 3.2. Acquisition of VMware by Broadcom: a multijurisdictional approach to interoperability and entrenchment

Broadcom’s acquisition of VMware, both California-based semiconductor giants (the Parties), was finalised following China’s State Administration for Market Regulation (SAMR) approval. The proposed transaction was scrutinised and cleared - conditionally in some jurisdictions - by different competition authorities around the globe in 2023. Some of the competition concerns identified by competition authorities were related to Broadcom’s incentives to reduce interoperability of VMware’s cloud computing software with third-party hardware products, ultimately foreclosing the hardware market.

In evaluating the potential effects of the proposed transaction, competition authorities also assessed the potential risk of entrenchment and foreclosure within the Fibre Channel Host-Bus Adapters market, which had the highest level of concentration among the markets in which Broadcom operated. Post-merger, Broadcom and VMware’s combined activities would have increased the Parties’ incentive to restrict and degrade interoperability of VMware’s software *vis-à-vis* Broadcom’s competitors, affecting their ability to effectively compete.

In response to these concerns, various competition authorities, including for example the European Commission, the Korean Fair Trade Commission and SAMR, imposed remedies aimed at addressing the potential anticompetitive effects arising from the proposed acquisition. These remedies included, *inter alia*, providing third-party access to key inputs for developing Broadcom hardware products, ensuring interoperability with VMware’s software and maintaining the compatibility for rivals.

Sources: China issues final clearance for Broadcom/VMware <https://globalcompetitionreview.com/article/china-issues-final-clearance-broadcomvmware>; Broadcom/VMware cleared in Korea, still faces hurdle in China <https://globalcompetitionreview.com/article/broadcomvmware-cleared-in-korea-still-faces-hurdle-in-china>; Broadcom/VMware wins EU approval <https://globalcompetitionreview.com/article/broadcomvmware-wins-eu-approval>

¹⁴ The term interoperability generally refers to “*the ability of different digital services to work together and communicate with one another*”, allowing “*users to combine multiple services with complementary functionality*” (OECD, 2021^[56]).

3.3.2. Merger and Acquisition as an ex ante exclusionary tool

Conglomerate effects, envelopment and ecosystems

Digital ecosystems, consisting of a core service and a range of supplementary products and services, provide a technologically connected set of offerings that are more complementary to one another. On the supply side, ecosystems are developed through large economies of scope and scale across marketplaces and network effects. On the demand side, consumer synergies resulting from technological links play a significant role (OECD, 2020^[61]).

Competition in the digital industry is increasingly a competition between few large ecosystems. The potential issues with acquisitions in digital ecosystems mainly relate to (i) conditions of access to the ecosystem and interoperability, which may lead to market power of the ecosystem's owner, (ii) the negative impact on consumers and market entry of the closed functioning of competing ecosystems, and (iii) the accumulation of vast amounts of data from the various components within the ecosystems (OECD, 2023^[62]).

From a theoretical point of view, the potential entrenchment strategy of the dominant firm is to acquire specific targets which are not in a horizontal or vertical relationship but are complementary to its core product mostly with the aim of obtaining an ecosystem that is in itself a wide moat around the core business (conglomerate effects) (OECD, 2023^[62]).

Creating an ecosystem through potentially non-problematic acquisitions of complementary products and services may have dynamic effects on the market, for example, by entrenching a firm's market position (i.e. making it more durable and less contestable) through (i) raising barriers to entry for new entrants to duplicate the incumbent offer or existing competitors to gain market shares, (ii) raising customers' switching costs, making it more difficult or less attractive for them to switch between rivals, (iii) increasing network effects, (iv) depriving competitors of economies of scale resulting in a competitive disadvantage compared to the merged entity (ICN Merger Working Group, 2024^[63]).

In this context, the conglomerate effects and ecosystems theory may also include the concept of platform envelopment, which refers to the ability of a dominant platform to enter another market through bundling or tying the two platform products. Platform envelopment may likely give rise to foreclosure effects in the second market as a result of potential network effects and economies of scope which would impede the competing platforms in the second market to compete with the merged entity. Conglomerate effects can lead to platform envelopment strategies which have been considered as a way for a platform to further expand and entrench its ecosystem without the need to offer new products, services or functionalities to gain substantial market shares (OECD, 2023^[62]).

Analysing acquisitions by dominant players in complementary markets - that may expand the ecosystem's offering in terms of products and services - in a way to determine the overall impact of the transaction on competition becomes therefore relevant for competition authorities.

Box 3.3. Recent examples of conglomerate mergers with potential entrenchment effects

European Commission

Booking Holdings / eTraveli Groups

On 25 September 2023, the European Commission (EC) prohibited the proposed acquisition of Flugo Group Holdings AB (eTraveli, Sweden) - one of the main providers of flight online travel agencies (OTAs) services in Europe, by Booking Holdings (Booking, US) - the leading hotel OTA.

The EC concluded that the proposed transaction would have strengthened Booking's dominance in the hotel OTA market in the EEA, leading to prices increase for hotels and, possibly, for consumers.

The EC's investigation emphasised that:

(i) Booking is the dominant hotel OTA in the EEA and would have acquired a key customer channel, (ii) Booking would have expanded its travel services ecosystem focusing on its hotel OTA business, (iii) the proposed transaction would have reinforced network effects and increased barriers to entry and expansion making it more difficult for other OTAs to develop a new customer base, (iv) Booking would have further increased its bargaining position towards hotels by strengthening its dominant position.

Booking's proposed remedies were not enough to address the identified competition concerns.

US Federal Trade Commission

Amgen Inc. / Horizon Therapeutics plc

On 14 December 2023, the US Federal Trade Commission (FTC) finalised a consent order focusing on potential competitive harm as a result of the acquisition of the global biotechnology company, Horizon Therapeutics, by Amgen, one of the world's largest biopharmaceutical firms. In May 2023, the FTC challenged the proposed transaction alleging that the deal would allow Amgen to (i) leverage its blockbuster drugs' portfolio forcing insurance companies and pharmacy benefit managers into favoring two monopoly products of Horizon's (Tepezza and Krystexxa) or (ii) disadvantaging rivals with regards to these two products. The FTC also found that the proposed transaction would entrench Tepezza's and Krystexxa's monopoly position in the thyroid eye disease and chronic refractory gout markets respectively, by replacing Amgen, with its broad and strong blockbuster drugs portfolio, for Horizon with its smaller portfolio, raising barriers to entry and making it more challenging for smaller firms to compete.

Under the FTC's final consent order, among other provisions, Amgen is not allowed to (i) bundle an Amgen product with either Tepezza or Krystexxa, (ii) condition any rebate or terms of contract related to an Amgen product on the sale of either Tepezza or Krystexxa, (iii) use any product rebate or contract term to eliminate products that would compete with these two drugs.

Sources: Commission prohibits proposed acquisition of eTraveli ([europa.eu](https://ec.europa.eu/commission/presscorner/detail/en/ip_23_4573)), https://ec.europa.eu/commission/presscorner/detail/en/ip_23_4573; FTC Approves Final Order Settling Horizon Therapeutics Acquisition Challenge <https://www.ftc.gov/news-events/news/press-releases/2023/12/ftc-approves-final-order-settling-horizon-therapeutics-acquisition-challenge>

Acquisitions of nascent competitors

The acquisition of a nascent competitor involves a dominant firm acquiring a specific target which (i) has the potential to grow into a significant direct competitor (horizontal effects), but (ii) it may also occur when there is the potential for the product to grow into an important input or a complement to the acquirer's product line (vertical or conglomerate effects) (OECD, 2020^[64]).

While acquisitions of nascent competitors by dominant firms generally support innovation, on the long term these acquisitions may also stifle innovation, notably due to a countervailing effect, referred to as the “*monopoly entrenchment*” of the buyer. The latter depends on the dominant firm’s competitive advantages related to past activities which may be strengthened by a series of acquisitions over time (V. Denicolo, 2021^[65]).

In this context, competition authorities’ main concern is that by acquiring a nascent competitor and controlling that relevant product, a dominant firm may remove entirely the potential competitive threat that it may pose in the near future (loss of competition) combined with a negative impact on innovation (loss of innovation) (OECD, 2020^[64]).¹⁵ For example, intrinsic market characteristics and firms’ competitive advantages in the form of economic moats may make it more challenging for a nascent competitor to offer similar products and services of the dominant firm in terms of quality and conditions offered.

One legitimate antitrust debate over acquisitions of nascent competitors in recent years is that these transactions have been under-investigated. For example, (Kwoka and Valletti, 2021^[66]) reported that while the GAFAM¹⁶ have engaged in more than 900 acquisitions between 2000 and 2010, “*worldwide, approximately 97% of these tech companies acquisitions have not been vetted by any competition authority*”. Similarly, the Furman review also refers to the likelihood of false negatives in mergers involving large digital platforms in recent years. As a result, the likelihood of false negatives in acquisitions involving large digital platforms in recent years cannot be excluded (J. Furman, 2019^[46]).

The acquisitions of Instagram and WhatsApp by Facebook (now Meta) are two typical examples of previous cases approved by competition authorities and revealing the potential challenges under the current antitrust enforcement framework, notably in relation to dominant firms entrenching and extending their dominant position through this type of acquisition (S. Albertson, 2024^[67]).¹⁷

On the other hand, competition authorities have recently started increasing scrutiny towards acquisitions of nascent competitors, particularly in the digital sector. For example, this has been the case under the current US administration through a series of enforcement and policy actions. In its Executive Order on “*Promoting Competition in the American Economy*”, President Biden emphasised how the enforcement of antitrust laws is key to meet the recent challenges caused by new industries and technologies, including the rise of dominant digital platforms resulting also from the acquisition of nascent competitors. The revised US Merger Guidelines of 2023 also specifically refer to this theory of harm, namely to the elimination of a nascent competitive threat, when describing the entrenchment of a dominant position in Guidelines 6 (The White House, 2021^[68]) (US DoJ, 2023^[69]).¹⁸

¹⁵ Nascent acquisition should be distinguished from killer acquisitions. In case of killer acquisitions, both competition and the product itself are “killed”, namely removed from the market whereas in relation to nascent acquisitions the product will remain in the market but absorbed by the acquiring company.

¹⁶ The acronym based on the initials of the five largest tech companies in the industry including Google, Apple, Facebook, Amazon, and Microsoft.

¹⁷ In December 2020, the US Federal Trade Commission sued Facebook alleging that it is illegally maintaining its personal social networking monopoly through a years-long course of anticompetitive conduct, including the acquisition of its nascent rival Instagram in 2012 and the acquisition of the mobile messaging app WhatsApp in 2014 to eliminate any threats to its monopoly - <https://www.ftc.gov/news-events/news/press-releases/2020/12/ftc-sues-facebook-illegal-monopolization>.

¹⁸ The revised US Merger Guidelines refer to a merger involving a dominant firm acquiring a nascent competitor, namely a firm that (i) could become a significant rival, (ii) facilitate the growth of other rivals, or (iii) lead to a reduction in its power.

Box 3.4. A recent acquisition of a nascent competitor challenged in Europe and in the US: the acquisition of Figma by Adobe

The proposed transaction concerns the acquisition of Figma, a developer of cloud-based collaboration and product design tools, by Adobe, a global software company offering, among others, creative design software tools and an interactive product design tool. The deal has been subject to an in-depth investigation by several competition authorities, including the US Department of Justice (DoJ), the European Commission (EC) and the UK Competition and Markets Authority (CMA).

At the end of 2023, the EC issued a statement of objections followed by the CMA which also preliminary found that the transaction would harm competition and consumers.

While the transaction would not lead to any horizontal overlaps between Figma's product design tools and Adobe's raster and vector editing tools (Photoshop and Illustrator), Figma was considered (i) an actual competitive constraint on Photoshop and Illustrator, driving innovation in relation to Adobe's products, and (ii) a potential competitor in creative tools.

The relevant authorities also investigated whether the proposed transaction would foreclose rival providers of interactive product design tools by bundling Figma with Adobe's Creative Cloud suite.

Adobe eventually decided to abandon the proposed acquisition at the end of 2023.

Sources: Commission sends Adobe Statement of Objections over proposed acquisition of Figma, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_5778; Adobe / Figma merger inquiry, <https://www.gov.uk/cma-cases/adobe-slash-figma-merger-inquiry>; Office of Public Affairs | Antitrust AAG Kanter Statement After Adobe and Figma Abandon Merger | United States Department of Justice <https://www.justice.gov/opa/pr/antitrust-aag-kanter-statement-after-adobe-and-figma-abandon-merger>.

Finally, acquisitions of nascent competitors can be assessed by competition authorities also under unilateral conduct rules.¹⁹ While the application of this practice has been debated in antitrust enforcement, the recent Court of Justice of the European Union's ruling ("CJEU") in the *Towercast* appeal against the French Competition Authorities' decision reiterates that a merger transaction which does not meet the relevant thresholds for notification can be subject to an *ex post* analysis under the abuse of dominance framework (M. Eben, 2023_[70]).²⁰

3.4. Potential enforcement challenges

Economic moats and entrenchment have generally been considered throughout this paper as legitimate business strategies adopted by firms to sustain competitive advantages and remain viable over the long period (Gallant, 2023_[2]), (P. Starr, 2023_[3]). These strategies may be beneficial for businesses, investors and consumers resulting in higher quality products, better services and lower prices (Kismet, 2023_[9]). However, they may become anticompetitive and raise competition concerns if maintained through anticompetitive practices leading to consumer harm (see section 3.2 and 3.4).

Between these two strategies, a middle area may be identified comprising legitimate economic moats and entrenchment strategies held by dominant (and non-dominant) firms that are gradually shifting into practices which may become anticompetitive. Drawing the boundaries between firms' successful strategies and those which may become anticompetitive remain complex to assess and potential enforcement challenges, both in the unilateral and merger context, cannot be excluded when analysing these situations, often leading to a significant uncertainty.

¹⁹ See Court of Justice of the European Union's ruling in *Continental Can* indicating that acquisition of dominant firms may amount to an abuse of a dominant position under certain circumstance.

²⁰ See Court of Justice of the European Union's ruling in Case C-449/21 (2023) in relation to a request for a preliminary ruling under Article 267 TFEU from the Court of Appeal in Paris by decision of 1 July 2021 in *Towercast SASU v Autorité de la concurrence, Ministre chargé de l'économie* (2023) - [CURIA - Documents \(europa.eu\)](https://eur-lex.europa.eu/curia/doclist/curia/doclist.do?method=detailDoc&docid=866222).

Limiting competition theories of harm and enforcement tools to one single objective or exclusively to when consumers are already harmed may not be sufficient, potentially requiring a shift towards a “*third generation competition law*” framework (i.e. a new and more comprehensive way to assess competition law) to specifically capture the realities of the new markets dynamics (Kuenzler, 2023^[71]). With the rise of the digital economy, according to recent literature, certain countries appear to be taking this middle area into consideration (see paragraph above), including for example multiple governance domains, more pragmatic and balance objectives and a full and diversified range of governance measures (Cuihong Cai, 2022^[72]).

Similarly, when mergers are used for entrenchment purposes, e.g. leading to conglomerate effects and closed ecosystems or the acquisition of a nascent potential competitor, these proposed transactions are also difficult to assess. Focusing a merger analysis only on certain products or services within the ecosystem or on the acquisition of existing or potential players and excluding the acquisition of nascent competitors, may be problematic and contribute to consolidate the market power of dominants’ players (Kanter, 2022^[5]).

While the current legal framework may be fit for assessing and addressing economic moats and entrenchment related to clear cases of monopolisation and anticompetitive mergers, notably by making the existing moats more effective (e.g. increasing barriers to entry and switching costs as well as degrading the quality of interoperability), it may pose potential challenges for a timely antitrust enforcement intervention in other specific areas.

For instance, the situation of dominant firms holding economic moats and engaging in entrenchment strategies that are not overtly anticompetitive but may become so in the future or in the case of a firm not yet dominant but engaging in entrenchment strategies to increase the depth and breadth of existing structural moats it benefits from. Here the concern would specifically relate to the strategic behaviour of a firm, not dominant at present, using anticompetitive strategies to achieve a dominant market position in the future (S. P. Torpey, 2021^[73]), (Papp, 2018^[74]). In both cases, the potential challenge for competition authorities is to accurately determine when a firm’s strategic behaviour may harm competition as opposed to when it is simply outcompeting against rivals based on ‘competition on the merits’.

In recent years, incorporating dynamic concepts related to digital markets into the current legal framework has proven to be a key challenge for competition authorities often assessed only after the relevant markets have been defined and applying embedded assumptions in relation to the factors contributing to market power. The analysis may be equally challenging when dealing with economic moats and entrenchment that supports innovation and consumer welfare as opposed to those that could potentially lead to anticompetitive practices (W. H. Rooney, 2023^[10]).

In this context, identifying and assessing economic moats and entrenchment in the assessment of the market power indicators may require a more comprehensive and dynamic analysis to examine a monopolist’s course of conduct, namely the evolution, durability and protection of a firm’s structural competitive advantages and potential effects on competition combined with its long-term business strategy (Kanter, 2022^[23]). Adopting a more forward-looking approach over an extended period of time, while gaining insights of future market dynamics and consumer behaviour, remains complex and may present challenges for competition authorities.²¹

In this context, examples of potential key areas of concerns for competition authorities may include:

- **Rapidly evolving markets:** in some sectors, a timely antitrust intervention to tackle economic moats and entrenchment may be even more challenging due to the specific characteristics of those

²¹ Consulting firms have also acknowledged these challenges and the benefit of a forward-looking perspective. For example, Deloitte Global identifies six solutions that may provide value to firms’ future growth, allowing them to achieve a differentiated, sustainable competitive advantage. These may include: (i) leverage M&A to increase transformation, (ii) elements of a practical operating model, (iii) digital-enabled distribution, (iv) robotic automation and cognitive enterprise, (v) regulatory readiness and productivity, (vi) technology as a differentiator. Analysing and implementing these innovative and effective solutions may allow to better understand the rationale behind a firm’s business model and potential entrenchment behaviours in the long period prior to an enforcement intervention (Deloitte, 2018^[101]).

relevant markets. The digital sector remains a clear and recent example where the development of new technologies and unique features often allow markets to tip in favour of the dominant firm limiting potential challenges of new market entrants (OECD, 2022_[38]).²²

- **Assessing dominance and identifying moats and entrenchment:** analysing dominance and the degree of market power when associating related business concepts such as economic moats and entrenchment remains complex. At the same time, identifying the existence of economic moats and entrenchment behaviour in the context of market power and dominance can be equally challenging. In this context, competition authorities may be confronted with sophisticated business models, especially in fast-moving industries. Focusing the analysis on the firm's structural competitive advantages to determine how the indicators of market power may evolve over time to an abusive conduct as well as on the firms' strategic objective to maintain or extend such dominance, for example through potentially non-problematic acquisitions, may represent an additional task for competition authorities in the assessment of market dynamics and firms' behaviour (OECD, 2022_[11]).
- **Defining the threshold for anticompetitive moats and entrenchment:** striking the right balance between market efficiencies and consumer harm has always been an issue of great importance for competition authorities. Determining when exactly economic moats and entrenchment may become anticompetitive leading to foreclosure and consumer harm may be part of this process. The latter would be also related to the two traditional opposing intervention competition authorities deal with, namely the false positive Type of error or overenforcement and false negative Type of error or underenforcement. Both are distinct from one another, and the analysis may vary depending on the competition dimension and the effects on competition (DOJ, 2019_[75]).

In this context, when considering the temporal dimension related to the concept of entrenchment (i.e. durability of market power) - and the associated main concern that economic moats and entrenchment may lead to the creation or strengthening of market power / dominance in the *future* - adopting a more aggressive approach to antitrust enforcement may appear to be more reasonable especially if the risk of durable market power is high. This may require adapting the existing competition law tools referring to past practices only (e.g. in the context of unilateral conduct) as well as including the longer-term effects of certain acquisitions, particularly in relation to fast-moving markets (OECD, 2023_[62]; Samranchit, 2021_[76]). However, determining the precise moment at which this situation may arise in practice and how competition authorities should assess it remains a challenge.

- **Designing effective remedies:** analysing and designing effective remedies, both in the unilateral conduct and merger context, that can “*actually breach the moats and allow competitors to reach the castle*” remains not an easy task for competition authorities, notably when the objective is to entirely terminate the potential exclusionary and discriminatory strategy of the dominant firm as a whole rather than focusing on a single and isolated action (Kanter, 2022_[23]).

Finally, the recent monopolisation lawsuit filed by the US Department of Justice (DoJ) against Apple,²³ may be an example of the potential challenges competition authorities may need to face, particularly in the digital sector, and on how antitrust enforcement may evolve, while investigating structural economic moats and entrenchment strategies leading to a firm's anticompetitive course of conduct.

²² For example, strong network effects and data processing across entire ecosystems can lead to monopoly power. Unlike previous networks, digital platforms expand in size naturally and very quickly. This facilitates the creation of strong and wide economic moats protecting the digital platforms and the entire ecosystem (Kanter, 2022_[5]). While supporting market power and dominance acquired through “competition on the merits”, competition authorities' priority is to assure that markets remain open, fair and contestable (Thomson Reuters, 2017_[102]).

²³ [Office of Public Affairs | Assistant Attorney General Jonathan Kanter Delivers Remarks on Lawsuit Against Apple for Monopolizing Smartphone Markets | United States Department of Justice, dl \(justice.gov\).](#)

4 Policy options on how to address moats and entrenchment

This section presents possible policy options to address potential enforcement challenges identified in the current legal framework. Potential structural issues resulting from economic moats may be addressed either by encouraging the use of investigative tools, including for example market studies and market investigations or by resorting to regulatory tools such as sector-specific regulations.²⁴ However, both options may still appear to be insufficient in response to the structural issues at stake, particularly in relation to the middle area described in section 3.4. On the other hand, a firm's behaviour associated with the concept of entrenchment may potentially be investigated and addressed by adjusting the current enforcement tools.

4.1. Investigative and analytical tools

4.1.1. Market studies²⁵

Concerns about potential delays involved in enforcement actions should be given careful consideration by competition authorities as speed and efficiency in tackling potential competition issues may be a key element of quality while promoting competition and innovation. The importance of *prima facie* investigations in competition enforcement therefore cannot be underestimated, and this is even more relevant in dynamic markets and fast-moving industries compared to more traditional markets and competitive analysis (O'Keeffe, 2018^[77]).

Market studies may be a powerful and flexible tool for competition authorities (in addition to antitrust market investigation powers and merger reviews) to assess and address emerging competition issues in a specific market or sector. They may play a key preventive role in identifying potential market failures while clarifying the different options available to tackle them from a competition policy, enforcement, regulatory, or other policy perspective (OECD, 2020^[78]).

Recommendations for regulatory changes, demands for firms to adapt their business model and conduct, law enforcement initiatives or further investigations are the most common market studies' outcomes. As a result, market studies may ultimately identify potential solutions to mitigate structural competition concerns,

²⁴ Merger control may also be considered as an alternative ex ante measure designed to analyse and address structural economic moats resulting from anticompetitive mergers.

²⁵ The term market studies may refer to different instruments used in various jurisdictions presenting similar characteristics, such as for example sector inquiries in the EU and a number of national member states, market inquiries in South Africa, fact-finding inquiries in Italy, fact-finding surveys in Japan and general studies in the US Department of Justice - <https://web-archiver.oecd.org/2021-10-31/567287-using-market-studies-to-tackle-emerging-competition-issues-2020.pdf>.

already at an early stage of the procedure, promoting competition and innovation, and reducing the likelihood of an infringement of competition rules (OECD, 2018^[79]).

In this context, having the advantage of being forward-looking, market studies may play a key role in detecting the middle area (see section 3.4), assessing and remedying emerging competition issues in specific industries including structural economic moats (e.g. a firm not yet dominant using economic moats and entrenchment to gain and maintain dominance). They may allow competition authorities to analyse the complex market dynamics associated with these structural competitive advantages, acquire in-depth knowledge on how new and emerging markets function and intervene more quickly. Without replacing empirical studies and detailed investigation based on relevant facts and data, a timely and more targeted intervention through market studies becomes crucial to prevent potential competition and consumer harm (O’Keeffe, 2018^[77]).

Box 4.1. Examples of recent market studies linked to economic moats and entrenchment

The Netherlands Authority for Consumer and Markets

In September 2022, the Netherlands Authority for Consumer and Markets (ACM) conducted a market study to assess the proper functioning of the Dutch cloud services market, including any risks on prices, quality, and innovation resulting from the market structure or the conduct of service providers.

The ACM’s market study showed that the cloud services market is growing rapidly since 2017 globally as well as in the EU and in the Dutch market. These services are offered by (i) some of the largest operators worldwide, (ii) several non-Dutch, medium-sized companies in Europe and the Netherlands, and (iii) Dutch operators. Two cloud service users can also be identified, namely end-users, such as companies and public organizations, and independent Software Vendors.

The results of the ACM’s market study emphasised several interesting points also related to economic moats and entrenchment potentially leading to barriers to entry in the market for cloud services.

First, the initial choice of a cloud infrastructure by a user is particularly relevant as, after the first choice, it becomes difficult and expensive to select a different provider and users may be locked into the selected provider for a long period. Second, switching barriers are generally technical and financial in nature. In addition, leveraging positions within the cloud by vertically integrated firm, notably through tying and bundling of cloud services, becomes a natural effect of a market characterised by substantial barriers to switching. Third, data are difficult to be transferred due to the use of different, closed APIs and poor interoperability also reinforcing such lock-in effects. Finally, the ACM expects the consolidation of the cloud services market to continue, notably as a result of the economies of scale and network effects.

The EU Digital Markets Act, the EU proposed Data Act and the Dutch Competition Act are considered relevant legal instruments to address and mitigate any potential risks identified by the ACM while promoting open markets and improving competition in the cloud market.

Australian Competition & Consumer Commission

In the seventh interim report for the Digital Platform Services Inquiry of September 2023, the ACCC looked at the impact on competition and consumers from the expanding ecosystems of digital platform providers in Australia. Social media, internet search engine and electronic marketplaces were the services included to analyse how they generate value and their impact on digital platform ecosystems behaviours. The ACCC recognised the potential risks that the interconnection of different products and services might create within the relevant markets. As a result, it provided a set of recommendations to address competition concerns and consumer harms in digital platform service markets.

The report emphasised common ecosystem expansion areas (e.g., generative AI, Virtual Reality, gaming, smart home devices, cloud storage services, among others), analysing competition and innovation dynamics. It focused on the services provided by large ecosystems in Australia. While considering that digital platform ecosystems compete to establish first-mover advantage through innovation, the ACCC also highlighted the risks of entrenchment, where participants may protect and fortify their economic moats, potentially impeding innovation to prevent disruption in the market they are active.

The ACCC also supported the recommendations outlined in the 2022 Regulatory Reform Report to the Treasurer, emphasising the need to (i) prohibit unfair trading practices and enhancing protections against unfair contract terms, (ii) implement platform-specific measures to address scams, (iii) introduce service-specific regulations to deter anti-competitive behaviour by firms, (iv) impose obligations aimed at preventing abusive practices that could entrench market power and sustain moats.

Sources: Public Market study cloud services DEF (acm.nl) <https://www.acm.nl/system/files/documents/public-market-study-cloud-services.pdf>
Digital platform services inquiry <https://www.accc.gov.au/system/files/DPB%20-%20DPSI%20-%20September%202023%20Report%20-%20Interim%20Report%207%20-%20Final%2815835612.1%29.pdf>

4.1.2. Market investigation powers

Another key tool for competition authorities to intervene when there are structural competition issues such as economic moats in a relevant market or to prevent such issues from arising in the near future is through market investigation powers. A key difference between market investigation and market studies is that the latter are not enforcement mechanisms by themselves, whereas market investigations allow competition authorities to impose remedies in cases where competition issues are identified. (OECD, 2016_[80]).

Competition authorities have generally addressed actual or potential competition issues, also related to economic moats and entrenched market power position of firms in key industries, through their existing enforcement mechanisms. However, the increase in market concentration across industries as well as the need to encourage competition authorities to intervene more quickly and in a more dynamic and forward-looking way may explain the recent trend towards the introduction or development of market investigation tools among several EU Member States (Cafarra, 2024_[81]).²⁶

One rationale for increasing and expanding investigation tools is the ability for competition authorities to impose structural or behavioural remedies to address market failures and overcome any structural harm to competition without the need to establish a competition law infringement by the firms under investigation. This approach also forms part of broader endeavours to adapt competition policy to the evolving dynamics of fast-moving industries, such as the recent digital economy, and globalised markets (Whish, 2020_[82]). Another factor supporting the need to increase the use of market investigation is the potential challenge posed by enforcing abuse cases and remedying them in a forward-looking way, including the onerous burden of proving each element of dominance and related abusive conduct as well as meeting the evidentiary standards in certain jurisdictions. While market investigation powers may not solve all the current enforcement challenges against potential anticompetitive practices, they may enable competition authorities to establish an additional, more proactive and forward-looking form of investigation to target structural market issues, such as structural economic moats, not stemming from provable violations of competition rules (J. van den Boom, 2023_[83]).

In this context, economic moats and entrenchment often manifest in concentrated and less competitive markets characterised by high barriers to entry and expansion, consumer lock-in, network effects, anticompetitive regulations, or distortions of competitive neutrality. These practices do not always entail overtly clear anticompetitive behaviours, such as abusive conduct, collusion between firms or

²⁶ The UK's market investigation tool, established by the UK Enterprise Act 2002, was one of the first measures starting this trend. The CMA defines market investigations as “*detailed examinations into whether there is an Adverse Effect on Competition in the market(s) for the goods or services referred*” (OECD, 2016_[80]).

anticompetitive mergers. Providing competition authorities with robust and updated market investigation tools to investigate and, where warranted, remedy certain evolving and dynamic market features which can potentially lead to anticompetitive behaviour may become relevant, especially in relation to emerging competition issues and potential new challenges (OECD, 2020^[78]; 2018^[84]).

Box 4.2. Market investigations power and examples of recent trends across jurisdictions

The German Competition Authority¹

Germany's legislative amendment of 2023 to the Act against Restraints of Competition marks a significant development in competition policy. The 11th amendment grants the Bundeskartellamt the power to impose remedies following a market investigation without the need to establish a violation of German competition rules. This reform responds to the prominent concerns about inadequate competition tools, particularly evident in rising prices for energy and food, prompting policymakers to seek enhanced regulatory measures. The expanded powers of the Bundeskartellamt will allow interventions in specific sectors where competition is deemed insufficient, ranging from facilitating market access for new entrants to considering structural remedies such as company divestitures.

The Swedish Competition Authority²

In Sweden, the government has initiated a comprehensive governmental inquiry in 2023 focusing on the possibility for enhancing market investigation tools within competition law in their jurisdiction.

"Our desire to review the regulatory framework is driven by, among other things, that we want to be able to intervene when we see that there are structural competition problems in a market or prevent such problems from arising in the near future. There is a need for rules that can help us intervene in a more forward-looking and flexible way than we can with current legislation," says the Swedish Competition Authority's General Counsel, Marie Östman.

Under the current legal framework, the Swedish Competition Authority can only investigate potential infringements that involve individual firms, excluding all other firms potentially active within the relevant market. The inquiry therefore aims to assess the effectiveness of current market investigation mechanisms and explore potential amendments, including the need for a new, broader and more flexible competition tool to complement the existing rules tools.

The results of the of the Swedish inquiry should be finalised no later than 28 February 2025.

The Czech Competition Authority

The Czech Competition Authority (CCA) is proposing updates to the Czech Competition Act, including the introduction of a new competition tool that allows intervention without evidence of anticompetitive behavior. This proactive approach signals potential shifts in enforcement strategies, particularly in sectors prone to structural distortions like digital and oligopolistic markets. The proposal aims to grant the CCA broader remedial powers following sectoral investigations, such as imposing notification requirements for mergers below standard thresholds and mandating transparency standards. While still at the ideation stage, the proposal reflects the CCA's proactive stance in addressing competition issues.

Notes:

¹ In Italy, the “Asset Decree” of 2023 (Law Decree No 104/2023 converted with amendments into Law No 136/2023) granted new investigation powers to the Italian Competition Authority, including the power to impose structural or behavioural remedies on the undertakings concerned to address competition issues even in the absence of any anticompetitive conduct. In January 2024, the Italian Council of State confirmed that such powers apply to all economic sectors (Council of State, Opinion No 61/2024) - see [Gazzetta Ufficiale](#). The South African Competition Commission (Commission) also released its Economic Concentration Report in 2022. The latter includes details on the Commission’s power to launch market inquiries into highly concentrated sectors and its increased power to impose structural remedies on businesses. Such structural remedies aim to remove barriers to entry for new potential entrants - see, for example, [South Africa: Competition Commission’s power to address economic concentration - Global Compliance News](#).

² The Danish and Norwegian Competition Authority are also considering implementing a similar legislation for the introduction of a new market investigation tool - see, for example, Main Developments in Competition Law and Policy 2023 – Norway - Kluwer Competition Law Blog and Denmark: proposed amendments to the Danish Competition Act show its teeth. Will companies risk being bitten? - Lexology.

Sources: <https://competitionlawblog.kluwercompetitionlaw.com/2023/11/15/new-provisions-in-german-competition-law-new-competition-tool-provisions-accompanying-the-dma-and-a-presumption-of-benefits/>; <https://www.bmwk.de/Redaktion/DE/Pressemitteilungen/2023/11/20231106-11-gwb-novelle-tritt-in-kraft-und-oeffentliche-konsultation-modernisierung-des-wettbewerbsrechts.html>; The Office has put forward a number of legislative proposals for greater efficiency in the field of competition <https://uohs.gov.cz/cs/informacni-centrum/tiskove-zpravy/hospodarska-soutez/3781-urad-predlozil-radu-legislativnich-navrhu-pro-vetsi-efektivitu-v-oblasti-hospodarske-souteze.html>; New competition tool and call-in power for mergers in Czechia? <https://www.schoenherr.eu/content/new-competition-tool-and-call-in-power-for-mergers-in-czechia> ; “With a new tool, we would be able to intervene more effectively against more competition problems” <https://www.konkurrensverket.se/informationsmaterial/nyhetsarkiv/med-ett-nytt-verktyg-skulle-vi-kunna-ingripa-effektivare-mot-fler-konkurrensproblem>

4.2. Strengthening the current regulatory tools

4.2.1. Sector-specific regulations

One of the most direct ways governments may influence the market economy is through regulations. The latter are mainly used to (i) address market failures, (ii) reduce barriers to entry, (iii) promote effective competition and innovation, (iv) ensure information transparency about products and services (CED, 2017^[85]).

The ways in which regulations may affect market dynamics and the economy may include categories such as (i) allocative or economic efficiency across sectors of the economy: the role of resources in the production and distribution of goods and services, and (ii) vibrancy and competitiveness within industries: how easy it is to establish new businesses and monitor their growth and for unsuccessful businesses to exit the market (CED, 2017^[85]).

A complementary regulatory regime in various industries, where potential challenges may arise when analysing economic moats and strategic entrenchment, may therefore be relevant to complement the enforcement of competition rules.

In recent years, some governments around the globe have already come forward with several regulatory initiatives with the aim to regulate large digital platforms *ex ante* and reduce barriers to entry while protecting and promoting competition in digital markets. In this context, key concerns specifically related to the potential increase of market power by digital firms, the influence of large digital platforms within the entire ecosystem and the fact that competition law enforcement was perceived as a less effective tool to address digital competition concerns. For this reason, several jurisdictions have proposed and enacted *ex ante* regulations of the largest digital firms as a complement to the traditional competition law enforcement tool (OECD, 2021^[86]).

Some of the issues analysed by competition authorities when assessing potential challenges in digital markets may be linked to economic moats, such as for example the rise of market power and barriers to

entry, both related to rapidly evolving markets. However, the analysis of competition authorities was confined mainly to the digital sector.

On the other hand, economic moats may develop across various fast-moving industries and addressing potential challenges related to these structural competitive advantages may require the application by competition authorities of other sector-specific regulations. For example, in telecommunication, sharing networks and removing potential infrastructure bottlenecks, while granting access to essential facilities at reasonable and non-discriminatory rates, may lower or even eliminate barriers for existing operators and new entrants providing better services and competitive choice for consumers (OECD, 2016^[87]). Similarly, addressing patent protections and designing optimal patent rights in the pharmaceutical industry may be relevant to balance the trade-off between promoting innovation and ensuring competitive markets (CEPR, 2020^[88]). Finally, in the energy sector, preserving the unbundling of generation, transmission and distribution services may prevent vertically integrated dominant firms from leveraging their economic moats, such as for example economies of scale or low-cost production, and the implementation of discriminatory practices ultimately distorting competition (Stein, 2024^[89]).

In sum, several business practices in the form of economic moats may be present in various key sectors that appear to be relevant for the overall market competitiveness and economic growth requiring closer scrutiny. Designing pro-competition market regulation across sectors by including sector-specific regulations to tackle structural economic moats as well as embedding relevant business principles in broader public policies may be investigated as another complementary way in promoting competition in concentrated markets characterised by high barriers to entry (Bank, 2017^[90]). In line with this approach, a study from Deloitte also considers a potential shift to a more flexible regulatory system that can be adapted to accommodate evolving technologies and address potential enforcement challenges brought by new business models and ongoing market developments (Deloitte, 2018^[91]).

4.3. Strengthening the current enforcement tools

4.3.1. Adjusting antitrust analysis to entrenchment

Adjusting effective antitrust enforcement across various sectors may be relevant to address potential challenges when assessing the impact of a firm behaviour leading to the entrenchment of market power. In this complex and dynamic environment, potential adjustments, for example, in the competitive analysis of unilateral conduct, may be implemented by competition authorities through several practices.

First, updating the enforcement framework to better reflect market realities and consumer behaviour, where traditional enforcement tools and economic models may be obsolete, appears to be necessary. For example, adjusting antitrust analysis to a more forward-looking approach, while gaining insights of future market dynamics, may prove to be relevant especially when analysing the strengths and durability of certain strategic behaviours, leading to entrenchment, namely a firm's dominance persisting over time and unlikely to be challenged in the short term by existing and potential rivals (CMA, 2020^[21]). While mitigating the risk of reducing legal certainty, antitrust enforcement and policy will therefore need to depart from static and more traditional models of market analysis and competitive assessments mainly based on formal indicators (e.g. firm size, market structure, and prices) and focus more on the enforcement of a long-term impact on markets and consumers while keeping pace with global markets evolution (ITIF, 2021^[92]).

The possibility to achieve a dominant position by leveraging entrenchment abusive behaviours may however also provide firms with strong incentives to invest and innovate. Substantial market power may indeed be critical for innovation, notably as it enables dominant firms to invest in R&D while providing new ideas and innovative products to the market (ITIF, 2021^[92]). Balancing the beneficial transitory instances of substantial market power leading to better quality for consumers and those when the latter may become entrenched and anticompetitive becomes therefore crucial for competition authorities (CMA, 2020^[21]).

Competition authorities around the globe have recently adopted a more dynamic approach for antitrust enforcement and policy to specifically address “*what they believe to be modern market realities*” (Kanter, 2022^[5]). For example, these key developments are reflected in the recent revision of competition guidelines in the unilateral conduct context.

Box 4.3. Examples of recent legal framework adjustments in unilateral conduct to reflect market dynamics

EC Revised 102 TFEU Guidelines of 2023

In March 2023, the European Commission (EC) amended the guidance on enforcement priorities through an Amending Communication as a result of market developments and the evolution of the EU Court’s relevant case law (the Guidelines).

At the same time, the EC also announced the launch of the process leading to the adoption of revised Guidelines on exclusionary abuses providing greater legal certainty and fostering consistent enforcement between the EC, national competition authorities and national courts. The EC will publish the draft Guidelines for public consultation by mid-2024 and the adoption is foreseen in 2025. In March 2023, the EC also published a Call for Evidence to gather relevant feedback from all interested stakeholders on the future Guidelines.

The main changes introduced by the Amending Communication, pending the process leading to the adoption of the Guidelines on exclusionary conduct, focus on: (i) the effects-based approach in Article 102 cases and (ii) the evolution of the EC’s Article 102 enforcement priorities, including: (i) the notion of anticompetitive foreclosure, (ii) the relevance of as-efficient competitors, (iii) the use of a price-cost as-efficient competition test, (iv) constructive refusals and unfair access conditions, (v) margin squeeze.

CCCS revised Guidelines of 2022

In December 2021, the Competition and Consumer Commission of Singapore (CCCS) has completed the review of several Guidelines related to the Competition Act 2004. The Guidelines refer to the analytical and procedural framework applied by the CCCS in enforcing the Act in Singapore.

The Guidelines is based on the changes made to the Act in 2018, the findings of the E-commerce Platforms Market Study, the CCCS’s previous enforcement experience and international best practices.

Among the seven CCCS Guidelines, *Section 47 Prohibition Guidelines* were amended to provide greater clarity and legal certainty on the assessment of market power and types of potentially abusive conduct in the digital era. Key revisions in this area included, *inter alia*, analysing (i) the strength of network effects in multi-sided markets, (ii) the degree of innovation, (iii) the importance of control and ownership of key inputs by an undertaking in the assessment of its market power, (iv) exclusionary behaviour creating barriers to entry, (v) preferential leveraging of market power in adjacent markets.

In specific sectors, characterised by innovation and evolving competition dynamics, the assessment of dominance may focus less on market shares and more on other factors as described above.

Sources: Application of Article 102 TFEU - European Commission, https://competition-policy.ec.europa.eu/antitrust-and-cartels/legislation/application-article-102-tfeu_en; Policy Brief, https://competition-policy.ec.europa.eu/document/download/40413680-4eda-4ba0-96b1-e3e9d4e22106_en?filename=kdak23001enn_competition_policy_brief_1_2023_Article102_0.pdf; CCCS Revises Competition Guidelines for Greater Clarity and Guidance, <https://www.cccs.gov.sg/media-and-consultation/newsroom/media-releases/cccs-revises-competition-guidelines-for-greater-clarity-and-guidance>.

Second, reducing barriers to entry may be an added value for competition authorities to tackle anticompetitive entrenchment, especially when they are built by dominant firms to make entry or expansion from competitors unlikely or more difficult in the long-term.

While the reasons behind a potential decrease in competition and corresponding increase of barriers to entry and market power of dominant firms are not explicit, possible explanations may also be associated

with the exploitation of certain entrenchment practices, all of which may reduce entry of new firms across markets leading to a reduction of competition and consumer welfare (CEA, 2016^[93]).

Competition enforcement may become therefore a key driver in reversing this trend, for example by challenging exclusionary conduct. More specifically, in abusive leveraging practices, when economic moats, such as for example network effects, give rise to barriers to entry, the expansion into related markets by a dominant firm may increase such barriers. A forward-looking analysis and monitoring of dominant firm conduct in adjacent markets, potentially leading to entrenchment, may facilitate fair competition in potentially related markets (CAP, 2019^[94]; 2016^[93]).

Finally, a greater focus on potential harm to product quality and innovation rather than on consumer prices and output effects may support competition authorities to better capture markets dynamics and long-term effects of entrenchment strategies on competition. According to Baker, a reduction of competition may lead to negative effects on innovation and “*competition in innovation or future products is presumed to be harmed when a dominant firm excludes its rivals.*” This conclusion may arise from (i) firms’ lower incentives to take business from rivals by providing better products and services, (ii) the difficulty of competition authorities in analysing the effects on competition in dynamic and innovative markets and intervening promptly in such markets. Antitrust analysis should therefore be structured “*by exploring rules designed to protect the competitive process*”. This is also in line with the European Commission’s and EU courts’ recent practice emphasising the correlation between the reduction of competition resulting from dominant firms’ practice and the negative effects on innovation (D. Geradin, 2021^[95]), (Baker, 2019^[96]).²⁷

4.3.2. International co-operation

International co-operation among competition agencies from all over the world has long been acknowledged as a key instrument and network for addressing enforcement and policy challenges in competition law. By fostering collaboration and facilitating information exchange on a global scale, competition authorities can significantly enhance their effectiveness when confronting complex issues, such as for example the ones associated with entrenchment, that exceed national boundaries. This collaborative approach not only promotes consistency in enforcement actions but also facilitates the dissemination of best practices and expertise (Bruegel, 2023^[97]).²⁸

In the context of addressing potential issues related to entrenchment, much of the collaboration so far has been focused on dominant digital firms. The unique challenges posed by the dominance of large tech firms with global reach underscore the heightened significance of international co-operation, particularly in digital markets. Given the transnational nature of these firms and their ability to operate across borders, effective resolution requires collaboration among competition agencies from various jurisdictions. Moreover, the rapid pace and global nature of these markets and firms underscore the importance of co-operation with other authorities to ensure the timely and comprehensive resolution of issues (EC, 2022^[98]). As a result, such global co-operation may certainly become an added value in addressing potential challenges specifically related to entrenchment which also go beyond the digital sector.

While informal international co-operation has proven valuable, there is also a growing recognition of the need for more formal and structured forms of collaboration to effectively regulate potential new challenges across sectors. The dynamic and cross-border nature of the digital economy and other fast-moving industries, all of

²⁷ See, for example, European Commission’s decisions in Case AT.39740 Google Search (Shopping) of 2017 - [39740_14996_3.pdf \(europa.eu\)](#) and in Case AT.40411 Google Search (Ad Sense) of 2019 - [40411_1619_11.pdf \(europa.eu\)](#).

²⁸ Domestic co-operation among different stakeholders, including for example governments, agencies, businesses and consumer associations may also be of added value to mitigate anticompetitive practices - [2023 updated compendium of approaches to improving competition in digital markets 1.pdf \(publishing.service.gov.uk\)](#).

which may be characterised by firms holding entrenched market power, might bring competition authorities to consider establishing formal mechanisms for co-operation that may extend beyond information exchanges. Implementing formal agreements, such as Memorandums of Understanding between competition authorities, and enhancing regional enforcement co-operation can provide a more robust framework for addressing potential competition issues such as entrenchment. (Carugati, 2022^[99]; Jenny, 2002^[100]).

5 Conclusions

Economic moats and entrenchment strategies may appear closely related but are distinct terms, both linked to the concept of market power. While economic moats and entrenchment may clearly overlap with the indicators of market power, a possible distinction may be drawn based on the way these terms are used and, even more, on a firm's long-term strategy.

Regardless of whether there is a consensus on a possible distinction between economic moats and entrenchment, this paper emphasises the relevance of their role for competition authorities when assessing the factors contributing to achieving and sustaining market power, notably when applied to digital platforms and in the context of the emergence of new ecosystems.

Competition authorities have already acquired significant knowledge about the concept of market power and dominance as well as practical experience when assessing anticompetitive practices. However, the relation between economic moats and entrenchment with the indicators of market power may add an additional layer in the competitive analysis requiring further reflection among competition authorities and practitioners.

Economic moats and entrenchment have generally been considered throughout this paper as legitimate business strategies adopted by firms to sustain competitive advantages and remain viable over the long period. These strategies may be beneficial for businesses, investors and consumers resulting in higher quality products, better services and lower prices. However, they may become anticompetitive and raise competition concerns if maintained through anticompetitive practices leading to consumer harm.

Identifying and assessing economic moats and entrenchment in the context of unilateral conduct as well as in mergers is complex and may require a more dynamic approach to assess the evolution and durability of a firm's structural competitive advantages and potential effects on competition combined with its business strategy rationale.

While the current legal framework may be fit for assessing and addressing economic moats and entrenchment related to clear cases of monopolisation and anticompetitive mergers, drawing the boundaries between firms' legitimate strategies and those which may become anticompetitive remains complex, even more when applying a more dynamic and forward-looking analysis, and potential enforcement challenges cannot be excluded when assessing these situations, often leading to a significant uncertainty.

Examples of key potential areas of concerns for competition authorities may include rapidly evolving markets, identifying moats and entrenchment, defining dominance and the required threshold for anticompetitive moats and entrenchment as well as designing effective remedies.

Finally, this paper examines several possible policy options under the current legal framework to address these potential challenges, including incentivising the use of investigative and analytical tools as well as strengthening the regulatory and enforcement tools, notably in the context of economic moats and entrenchment.

References

- Bailey, R. (2015), *Competition Law*, Oxford University Press. [26]
- Bajgar, M., C. Criscuolo and J. Timmis (2021), "Intangibles and industry concentration: Supersize me", *OECD Science, Technology and Industry Working Papers*, No. 2021/12, OECD Publishing, Paris, <https://doi.org/10.1787/ce813aa5-en>. [104]
- Baker, J. (2019), *The Antitrust Paradigms*, Harvard University Press. [96]
- Bank, T. (2017), *Markets and Competition Policy, Fostering growth and shared prosperity by opening and transforming markets*, <https://www.worldbank.org/en/topic/competition-policy>. [90]
- Barber, N. (2016), *Why entrench?*, <https://academic.oup.com/icon/article/14/2/325/2526805?login=true>. [18]
- Benchmark International (2023), *Exploring the Advantages of Vertical Integration*, <https://blog.benchmarkcorporate.com/exploring-the-advantages-of-vertical-integration>. [24]
- Bessen, J. et al. (2020), "Declining Industrial Disruption", *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.3682745>. [106]
- Bruegel (2023), *How best to ensure international digital competition cooperation*, <https://www.bruegel.org/policy-brief/how-best-ensure-international-digital-competition-cooperation>. [97]
- Cafarra, C. (2024), *The Trends and Cases That Will Define European Antitrust in 2024*, <https://www.promarket.org/2024/01/04/the-trends-and-cases-that-will-define-european-antitrust-in-2024/>. [81]
- Calligaris, S. (2018), *Mark-ups in the digital era*, https://www.oecd-ilibrary.org/industry-and-services/mark-ups-in-the-digital-era_4efe2d25-en. [40]
- Calvino, F. (2019), *Business dynamics and digitalisation*, https://www.oecd-ilibrary.org/science-and-technology/business-dynamics-and-digitalisation_6e0b011a-en. [6]
- CAP (2019), *Toward a Robust Competition Policy*, <https://www.americanprogress.org/article/toward-robust-competition-policy/>. [94]
- Carugati, C. (2022), *Proposals for International Cooperation in Digital Markets*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4204419. [99]
- CEA (2016), *Benefits of Competition and Indicators of Market Power*, https://obamawhitehouse.archives.gov/sites/default/files/page/files/20160502_competition_iss_ue_brief_updated_cea.pdf. [93]
- CED (2017), *Regulation & the Economy. The Relationship & how to improve it*, https://www.ced.org/pdf/CED_Report-Regulation_and_the_Economy.pdf. [85]

- CEPR (2020), *Optimal patent policy for pharmaceuticals: Balancing innovation and access to new drugs*, <https://cepr.org/voxeu/columns/optimal-patent-policy-pharmaceuticals-balancing-innovation-and-access-new-drugs>. [88]
- CMA (2020), *Appendix B: The SMS regime: designing SMS firms*, https://assets.publishing.service.gov.uk/media/5f9e72c58fa8f54d564aefda/Appendix_B_-_The_SMS_regime_-_designating_SMS_firms.pdf. [21]
- Cuihong Cai, T. (2022), *Moving toward a “middle ground”? - The governance of platforms in the United States and China*, <https://onlinelibrary.wiley.com/doi/full/10.1002/poi3.303>. [72]
- D. Geradin, D. (2021), *Strengthening effective antitrust enforcement in digital platform*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3945004. [95]
- D. Geradin, N. (2005), *The Concept of Dominance in EC Competition Law*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=770144. [27]
- Deloitte (2018), *Ahead of the curve, Forward-Looking solutions for tomorrow’s leading asset managements firms*, <https://www2.deloitte.com/us/en/pages/financial-services/articles/ahead-of-curve.html>. [101]
- Deloitte (2018), *The Future of Regulation*, https://www2.deloitte.com/content/dam/insights/us/articles/4538_Future-of-regulation/DI_Future-of-regulation.pdf. [91]
- DOJ, U. (2019), *Assistant Attorney General Makan Delrahim Delivers Remarks at ABA’s 2019 Antitrust Fall Forum*, <https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-abas-2019-antitrust-fall-forum>. [75]
- EC (2022), *Speech of EVP Vestager at the ICN Annual Conference: “A new age of international cooperation in competition policy”*, https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_22_2822. [98]
- ECB (2021), *Beyond the pandemic: the future of monetary policy*, https://www.ecb.europa.eu/pub/pdf/sintra/ecb.forum_central_banking.202112~3d9f018812.en.pdf. [29]
- F. J. Díez, J. (2021), “Global declining competition?”, *Journal of International Economic*, Vol. 132, p. 17, <https://www.sciencedirect.com/science/article/pii/S0022199621000696>. [36]
- FasterCapital (2023), *Economic Moat: Examining its Significance in Determining Intrinsic Value*, <https://fastercapital.com/topics/importance-of-economic-moat-in-investing.html>. [12]
- FasterCapital (2023), *The Role Of Brand Loyalty In The Substitution Effect*, <https://fastercapital.com/topics/the-role-of-brand-loyalty-in-the-substitution-effect.html>. [42]
- FasterCapital (2023), *Understanding the concept of Competitive Advantage*, <https://fastercapital.com/startup-topic/Understanding-the-concept-of-Competitive-Advantage.html>. [43]

- Freund, C. and D. Sidhu (2017), “Global Competition and the Rise of China”, No. 17-3, Peterson Institute for International Economics, [105]
<https://ssrn.com/abstract=2912922>|202.328.9000Tel|202.328.5432Fax|www.piie.com<https://piie.com/sites/default/files/supporters.pdf>.Electroniccopyavailableat:<https://ssrn.com/abstract=2912922>Electroniccopyavailableat:<https://ssrn.com/abstract=2912922>.
- G. Cai, D. (2023), *How Does Vertical Integration Affect Incentives to Innovate?*, [25]
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4432694.
- Gallant, C. (2023), *How an Economic Moat Provides and Economic Advantage*, Investopedia, [2]
<https://www.investopedia.com/ask/answers/05/economicmoat.asp>.
- ICN Merger Working Group (2024), *Non-Horizontal Mergers (forthcoming)*. [63]
- ICN The Unilateral Conduct Working Group (2015), *Unilateral Conduct Workbook*, [50]
https://www.internationalcompetitionnetwork.org/wp-content/uploads/2018/07/UCWG_UCW-Ch6.pdf.
- IMF (2021), *Rising Market power - A Threat to the Recovery?*, [103]
<https://www.imf.org/en/Blogs/Articles/2021/03/15/blog-rising-market-power-a-threat-to-the-recovery>.
- ITIF (2021), *Principles of Dynamic Antitrust: Competing Through Innovation*, [92]
<https://itif.org/publications/2021/06/14/principles-dynamic-antitrust-competing-through-innovation/>.
- J. De Loecker, J. (2020), “The Rise of Market Power and the Macroeconomic Implications”, *The Quarterly Journal of Economics*, published by Oxford University Press, Vol. 135, p. 84, [35]
<https://www.janeekhout.com/wp-content/uploads/26.pdf>.
- J. Furman, D. (2019), *Unlocking digital competition. Report of the Digital Competition Expert Panel.*, [46]
https://assets.publishing.service.gov.uk/media/5c88150ee5274a230219c35f/unlocking_digital_competition_furman_review_web.pdf.
- J. J. M. Rodrigues, A. (2010), *Managers’ Entrenchment and Power*, [19]
https://www.researchgate.net/publication/275601996_MANAGERS'ENTRENCHMENT_AND_POWER.
- J. Klement, C. (2021), *Moats or Market Power?*, [17]
<https://blogs.cfainstitute.org/investor/2021/03/15/moats-or-market-power/>.
- J. van den Boom, I. (2023), *Towards Market Investigation Tools in Competition Law: The Case of the Netherlands*, [83]
<https://academic.oup.com/jeclap/article/14/8/553/7420314>.
- Jenny, F. (2002), *International Cooperation on Competition: Myth, Reality and Perspective*, [100]
<https://www.iilj.org/wp-content/uploads/2017/02/Jenny-International-Cooperation-on-Competition-2002.pdf>.
- Kanter, J. (2022), *CRA Conference*, <https://www.justice.gov/opa/speech/assistant-attorney-general-jonathan-kanter-delivers-keynote-cra-conference>. [5]

- Kanter, J. (2022), *Keynote at Fordham Competition Law Institute's 49th Annual Conference on International Antitrust Law and Policy*, <https://www.justice.gov/opa/speech/assistant-attorney-general-jonathan-kanter-antitrust-division-delivers-keynote-fordham>. [23]
- Khanna, V. (2016), *Mr Warren Buffet, Is the Beach Your New Moat?*, <https://www.peyotemorgan.com/mr-warren-buffett-beach-new-moat/>. [11]
- Kismet, W. (2023), *Unveiling the Concept of Economic Moat in Business Strategy*, <https://kismetgroup.ca/unveiling-the-concept-of-economic-moat-in-business-strategy/>. [9]
- Kuenzler, A. (2023), *Third-generation competition law*, <https://academic.oup.com/antitrust/article/11/1/133/6984749>. [71]
- Kumar, S. (2022), *Excessive Data Collection as Anti-Competitive Conduct: The Approach of Germany and India*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4342468. [54]
- Kwoka, J. and T. Valletti (2021), *Unscrambling the eggs: breaking up consummated mergers and dominant firms*, <https://academic.oup.com/icc/article/30/5/1286/6360491>. [66]
- Li, M. (2023), *Self-Preferencing Across Markets*, <https://www.law.upenn.edu/live/files/12814-self-preferencing-across-markets>. [51]
- M. Eben, D. (2023), *Taking aim at innovation-crushing mergers: a killer instinct unleashed?*, <https://academic.oup.com/yel/advance-article/doi/10.1093/yel/yead013/7453609>. [70]
- M. Gale, F. (2022), *A Look At Michael E. Porter's Competitive Advantage If It Were Written For 2023 And Beyond*, <https://www.forbes.com/sites/michaelgale/2022/10/11/a-look-at-michael-e-porters-competitive-advantage-if-it-were-written-for-2023-and-beyond/>. [20]
- M. Holt, A. (2017), "Economic Moats Matter: Here's the Evidence", *Morningstar*, <https://www.morningstar.com/portfolios/economic-moats-matter-heres-evidence>. [16]
- Mckinsey (2016), *Digital Globalisation: The New Era Of Global Flows*, <https://www.mckinsey.com/~media/mckinsey/business%20functions/mckinsey%20digital/our%20insights/digital%20globalization%20the%20new%20era%20of%20global%20flows/mgi-digital-globalization-full-report.pdf>. [30]
- Morningstar (2023), *Economic Moat*, <https://www.morningstar.com/investing-definitions/economic-moat>. [13]
- Morningstar (2017), *Not All Moats Are Created Equal. Analysing economic moats through a quantitative lens.*, <https://www.vaneck.com.au/not-all-moats-are-created-equal/>. [48]
- Motta, M. (2023), *Self-preferencing and foreclosure in digital markets: Theories of harm for abuse cases*, <https://pdf.sciencedirectassets.com/271699/1-s2.0-S0167718723X00058/1-s2.0-S0167718723000553/main.pdf?X-Amz-Security-Token=IQoJb3JpZ2luX2VjECoaCXVzLWVhc3QtMSJIMEYCIQD6WVsUsKwn7IsvFB7cSj3E3fep1BUyvd1i9%2Fefc1dGIAIhAKq08MHB1OtXaqzgG9kEOGq0e0Ek9FaewAbgdtTJ0m>. [52]
- Nikpay, F. (2020), *The EU Law of Competition, Refusal to Supply Information Needed for Interoperability*. [60]
- O'Keeffe, S. (2018), *Use and Importance of Market Studies in Modern Competition Enforcement*, <https://academic.oup.com/jeclap/article/9/2/75/4621313?login=true>. [77]

- OECD (2023), *Theories of Harm For Digital Mergers*, [39]
<https://www.oecd.org/daf/competition/theories-of-harm-for-digital-mergers-2023.pdf>.
- OECD (2023), *Theories of Harm for Digital Mergers – Note by the European Union*, [62]
[https://one.oecd.org/document/DAF/COMP/WD\(2023\)51/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2023)51/en/pdf).
- OECD (2022), *The Evolving Concept of Market Power in the Digital Economy*, [37]
[https://one.oecd.org/document/DAF/COMP\(2022\)5/en/pdf](https://one.oecd.org/document/DAF/COMP(2022)5/en/pdf).
- OECD (2022), *The Evolving Concept of Market Power in the Digital Economy – Note by the United Kingdom*, [38]
[https://one.oecd.org/document/DAF/COMP/WD\(2022\)29/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2022)29/en/pdf).
- OECD (2022), *The Evolving Concept of Market Power in the Digital Economy – Summaries of contributions*, [1]
[https://one.oecd.org/document/DAF/COMP/WD\(2022\)63/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2022)63/en/pdf).
- OECD (2021), *Data Portability, Interoperability and Digital Platform Competition*, [56]
<https://web-archive.oecd.org/2021-10-31/591383-data-portability-interoperability-and-digital-platform-competition-2021.pdf>.
- OECD (2021), *Ex Ante Regulation and Competition in Digital Markets*, [86]
<https://web-archive.oecd.org/2021-12-01/616997-ex-ante-regulation-and-competition-in-digital-markets-2021.pdf>.
- OECD (2020), *Abuse of Dominance in Digital Markets*, [49]
[https://one.oecd.org/document/DAF/COMP/GF\(2020\)4/en/pdf](https://one.oecd.org/document/DAF/COMP/GF(2020)4/en/pdf).
- OECD (2020), *Executive Summary of the Hearing on Competition Economics of Digital Ecosystems*, [61]
[https://one.oecd.org/document/DAF/COMP/M\(2020\)2/ANN6/FINAL/en/pdf](https://one.oecd.org/document/DAF/COMP/M(2020)2/ANN6/FINAL/en/pdf).
- OECD (2020), *Start-ups, Killer Acquisitions and Merger Control*, [64]
<https://web-archive.oecd.org/2020-10-16/566931-start-ups-killer-acquisitions-and-merger-control-2020.pdf>.
- OECD (2020), *Using Market Studies to Tackle Emerging Competition Issues*, [78]
<https://web-archive.oecd.org/2021-10-31/567287-using-market-studies-to-tackle-emerging-competition-issues-2020.pdf>.
- OECD (2019), *Industry concentration in Europe and North America*, [32]
https://www.oecd-ilibrary.org/economics/industry-concentration-in-europe-and-north-america_2ff98246-en.
- OECD (2018), *Market Concetration*, [84]
[https://one.oecd.org/document/DAF/COMP/WD\(2018\)46/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2018)46/en/pdf).
- OECD (2018), *Market Studies Guide for Competition Authorities*, [79]
<https://www.oecd.org/daf/competition/OECD-Market-Studies-Guide-for-Competition-Authorities-2018.pdf>.
- OECD (2016), “Big Data: Bringing Competition Policy to the Digital Era, Background Note”, [22]
[https://one.oecd.org/document/DAF/COMP/WD\(2016\)74/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2016)74/en/pdf).
- OECD (2016), *Competition and infrastructure bottlenecks*, [87]
<https://www.oecd-ilibrary.org/sites/9789264251823-7-en/index.html?itemId=/content/component/9789264251823-7-en>.

- OECD (2016), *Defining Geographic Markets Across National Borders*, [44]
[https://one.oecd.org/document/DAF/COMP/WP3\(2016\)5/en/pdf](https://one.oecd.org/document/DAF/COMP/WP3(2016)5/en/pdf).
- OECD (2016), *The Role of Market Studies As A Tool To Promote Competition*, [80]
[https://one.oecd.org/document/DAF/COMP/GF\(2016\)4/en/pdf](https://one.oecd.org/document/DAF/COMP/GF(2016)4/en/pdf).
- OECD (2007), *Competition and Barriers to Entry*, [45]
<https://www.oecd.org/competition/mergers/37921908.pdf>.
- OECD, C. (2024), *Exploring the state of Competition in the EU (forthcoming)*. [7]
- OECD, N. (2020), *Digital competition policy: Are ecosystems different?*, [31]
[https://one.oecd.org/document/DAF/COMP/WD\(2020\)96/En/pdf](https://one.oecd.org/document/DAF/COMP/WD(2020)96/En/pdf).
- OXERA (2019), *Increased market power: a global problem that needs solving? - Oxera*, [34]
<https://www.oxera.com/insights/agenda/articles/increased-market-power-a-global-problem-that-needs-solving/>.
- P. Starr, P. (2023), *Escaping Policy Traps: Strategic Options for Overcoming Entrenchment*, [3]
https://www.princeton.edu/~starr/articles/articles23/Starr_Escaping-Policy-Traps-Strategic-Options.pdf.
- P. Starr, P. (2019), *Understanding Entrenchment*, Yale University Press, [4]
https://www.princeton.edu/~starr/Entrenchment/Starr_Entrenchment_Ch1.pdf.
- Papp, F. (2018), *Unilateral conduct by non-dominant firms: a comparative reappraisal*, [74]
https://discovery.ucl.ac.uk/id/eprint/10065650/1/Wagner-Von%20Papp%20Wagner-von%20Papp_Manuscript_Unilateral%20Non-Dominant.pdf.
- Parul (2023), *Google's 'castle and moat' strategy is data hegemony: CCI tells NCLAT*, [55]
[http://Google's 'castle and moat' strategy is data hegemony: CCI tells NCLAT \(smefutures.com\)](http://Google's 'castle and moat' strategy is data hegemony: CCI tells NCLAT (smefutures.com)).
- Petit, N. (2015), *Theories of Self-Preferencing under 102 TFEU: A Reply to Bo Vesterdof*, [53]
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2592253.
- Press, O. (ed.) (2012), *Competition law*. [41]
- Promarket (2021), *Concentration in the EU: Where It is Increasing and Why*, [33]
<https://www.promarket.org/2021/05/19/concentration-eu-antitrust-market-power-barriers-entry/#:~:text=Our%20main%20conclusion%20is%20that,keep%20markets%20open%20and%20competitive.>
- Rubinfeld, M. (2019), *Data Standardization*, [58]
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3326377.
- S. Albertson, T. (2024), *The No-Longer Nascent Use of Nascent Competition Theory*, [67]
<https://www.fenwick.com/insights/publications/the-no-longer-nascent-use-of-nascent-competition-theory>.
- S. P. Torpey, D. (2021), *The Unilateral Conduct Gap Sacrificing Interoperability and Innovation*, [73]
<https://www.competitionpolicyinternational.com/wp-content/uploads/2021/06/3-The-Unilateral-Conduct-Gap-Sacrificing-Interoperability-and-Innovation-By-Susannah-P.-Torpey-Dillon-Kellerman.pdf>.

- Samranchit, J. (2021), *Digital ecosystem mergers in big tech: A theory of long-run harm with applications*, <https://academic.oup.com/jeclap/article/13/5/365/6470960>. [76]
- StableBread (2023), *How to Identify an Economic Moat*, <https://stablebread.com/how-to-identify-an-economic-moat/>. [47]
- Stein, Z. (2024), *Unbundling in the Energy Sector*, <https://www.carboncollective.co/sustainable-investing/unbundling-in-the-energy-sector>. [89]
- Stigler (2019), *Report of the Committee for the Study of Digital Platforms, Market Structure and Antitrust Subcommittee*, <https://research.chicagobooth.edu/-/media/research/stigler/pdfs/market-structure-report.pdf?la=en&hash=E08C7C9AA7367F2D612DE24F814074BA43CAED8C>. [8]
- Stutz, L. (2021), *Interoperability in Antitrust Law & Competition Policy*, <https://www.competitionpolicyinternational.com/wp-content/uploads/2021/06/4-Interoperability-in-Antitrust-Law-Competition-Policy-By-Laura-Alexander-Randy-Stutz.pdf>. [59]
- The White House (2021), *Executive Order on Promoting Competition in the American Economy*, <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/>. [68]
- Thomson Reuters, P. (2017), *Speech by Johannes Laitenberger on striking the right balance in the enforcement of competition rules*, <https://uk.practicallaw.thomsonreuters.com/w-010-6555?transitionType=Default&contextData=%28sc.Default%29>. [102]
- UN (2022), *Impact of the Covid-19 Pandemic on Trade and Development*, https://unctad.org/system/files/official-document/osg2022d1_en.pdf. [28]
- US DoJ, F. (2023), *Merger Guidelines*, <https://www.justice.gov/d9/2023-12/2023%20Merger%20Guidelines.pdf>. [69]
- V. Denicolo, M. (2021), *Acquisitions, Innovation and the Entrenchment of Monopoly*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3988255. [65]
- VanEck (2023), *MOAT ETF: Question & Answer*, <https://www.vaneck.com/us/en/blogs/moat-investing/moat-question-and-answer/#point-three>. [15]
- W. H. Rooney, C. (2023), *Taking Innovation Seriously: A Dynamic Competition Model For Antitrust Law*, <https://journals.library.columbia.edu/index.php/CBLR/article/view/11893/6012>. [10]
- Weiser, P. (2009), *Regulating Inter Regulating Interoperability: Lessons from AT&T, Microsoft, and osoft, and*, <https://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1453&context=faculty-articles>. [57]
- Whish, R. (2020), *New Competition Tool: Legal comparative study of existing competition tools aimed at addressing structural competition problems with a particular focus on the UK's market investigation tool*, https://competition-policy.ec.europa.eu/document/download/b183b4d7-10f8-465b-afa0-0e267117ba60_en?filename=kd0420573enn.pdf. [82]
- Z. Qureshi, B. (2019), *The rise of corporate market power*, <https://www.brookings.edu/articles/the-rise-of-corporate-market-power/>. [14]

