DIGITAL PLATFORMS:

COMPETITION ASPECTS AND REGULATORY RECOMMENDATIONS FOR BRAZIL

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Marcos Barbosa Pinto
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Contents

Executive Summary

This study was conducted by the Secretariat of Economic Reforms of the Ministry of Finance to delve into the economic and competition aspects of digital platforms in Brazil, and to support proposals for improvement of the Brazilian Competition Defense System (SBDC). This report presents the main findings, and the outcomes of the study. The research was based on a comprehensive review of academic literature and technical reports. It also considered an international benchmarking of regulatory practices, economic studies specific to the Brazilian context, and a detailed analysis of the submissions received through our Public Consultation, *Tomada de Subsídios SRE/MF nº 1/2024*, in Portuguese.[1]

Digital platforms have redefined the way business and consumers interact, driving global economic growth and shaping several sectors. Technology companies that control digital platforms are now the largest companies by market capitalization in the world, having reached unprecedented magnitude. Recent evidence shows that economic growth and productivity gains are directly linked to the intensive use of digital technologies in different sectors of the economy.

The adoption of platforms as a business model has been a growing phenomenon in Brazil as well. Sectors such as fintechs, marketplaces, and delivery applications exemplify the dynamism of the Brazilian digital economy. The Information and Communication Technology (ICT) sector stands out for its high productivity, with average salaries in the country twice as high as the Brazilian national average. Representing 6.5% of the Brazilian GDP in 2023, the sector positions Brazil as a leader in Latin America, although behind global powers.[2]

Digital platforms can boost productivity in Brazil, contributing to economic growth. For this to happen, it is crucial that the Government promotes an environment conducive to the development of digital businesses and the adoption of these technologies in productive processes, through public policies that foster a competitive and innovation-friendly environment, capable of attracting investments, and stimulating research and development.

Promoting competition in digital platform markets is crucial, but not trivial: digital platforms have specific economic characteristics that significantly affect competition dynamics and market structures. These characteristics

[1] This report is complemented by 3 supporting documents: (1) Report on the Contributions Received by the Public Consultation No 01/2024; (2) Technical report with an international benchmarking, providing comparison of the subject matter with international standards or experiences; and (3) Technical report examining the specific economic context and trends related to digital platforms within Brazil. For more information, see: https://www.gov.br/fazenda/pt-br/composicao/orgaos/secretaria-de-reformas-economicas (in Portuguese).

[2] Brasscom. Relatório Setorial 2023, Macrosetor TIC. March 2024, available at: https://brasscom.org.br/wp-content/uploads/2024/04/BRI2-2024-004-001-Relatorio-Setorial-versao-resumida-v23.pdf. Accessed on: 21/07/2024.

include strong network effects, multi-sided market structures, the collection and processing of strategic data, and the emergence of digital ecosystems.

Due to strong network effects, as the number of users increases, the value of digital platforms also grows, while their marginal cost decreases. This is because the value of the platform is intrinsically linked to the possibilities of interaction that the network itself provides. The greater the number of participants and their respective offerings, the greater the potential for interactions and, consequently, the greater the value of the platform.

The intensity of network effects directly influences the processes of growth, consolidation, and eventual decline of platforms. High switching costs and the difficulty or high costs for using multiple platforms at the same time can intensify network effects and raise entry barriers. This dynamic can result in a "winner takes all" situation, making it difficult for new competitors to enter the market.

The business models of digital platforms, structured as multi-sided markets, require that these platforms reach a minimal critical mass of users to create sufficient market value and achieve sustainable growth. The platform operator needs to manage the incentives for each side involved in order to foster their engagement, seeking to maximize positive network effects. One of the consequences is the creation of differentiated pricing structures between the different sides of the market, including the offer of free services to one group of platform users while charging another.

The collection and processing of data are fundamental pillars of the digital platform business models. This data is used mainly in two ways: as a direct source of revenue, and as an input to improve the offer of products and services. Data can be used by multiple parties simultaneously without diminishing its value. Nonetheless, for these economic benefits to materialize, companies need to have the capacity and appropriate technologies for its exploration.

The emergence of digital ecosystems – intricate networks of complementary products and companies connected by the platforms – raises new economic and competition concerns. Digital platforms introduce new ways of creating value, altering the variables of interest and the strategic decisions of companies. The governance of these systems becomes a crucial strategic variable, once it defines the capacity to attract and sustain an increasing number of interactions and participants. However, governance power is unequally distributed, with ecosystem controllers playing a central role for business users who depend on these environments to develop their businesses.

The specific characteristics of the economic dynamics of digital platforms and the markets in which they operate limit the applicability of traditional competition law analytical tools.

Amidst the complexities and innovations introduced by digital platforms, it is challenging to accurately identify competition risks in a timely manner, including the limitations related to the definition of relevant markets, and identifying market power using existing tools. Markets organized across multiple sides and with strong network effects challenge this rationale, as each side of the market both influences and constraints the strategies of the other. These challenges are amplified as platforms evolve into complex ecosystems. It also increases the likelihood of consumer lock-in and barriers to the entry of new competitors.

Crucially, the concentration of economic power in large platforms constitutes a new market power structure that traditional antitrust analysis tools struggle to identify and remedy in a timely and adequate manner. The lack of a regulatory framework to promote efficiency in digital markets, in the absence of competitive pressure, represents a problem that directly impacts the country's development.

Jurisdictions around the world have been reflecting on the need for changes in competition law and practice, as well as the adoption of new pro-competitive regulatory tools. While the European Digital Markets Act (DMA) is often cited as a paradigm for pro-competitive digital regulation, there is a wide range of regulatory solutions and experiences underway. Beyond the European case, our analysis reveals a rich variety of regulatory approaches, which differ significantly in their objectives, instruments, and scope of application. The reforms, although varied, converge towards the introduction of new hybrid rules, situated between traditional antitrust law and economic regulation.

Also in Brazil, there is a mismatch between the current mechanisms for competition promotion and the new dynamics of digital markets. Similarly to other jurisdictions, the Brazilian Competition Defense System (SBDC) requires changes to overcome the identified bottlenecks.

This study recommends two groups of measures to improve the Brazilian Competition Defense System. The first set of proposals focuses on digital markets where strong network effects and a high degree of complexity lead to a scenario of a lack of effective competition, thus requiring complementary responses to manage network effects in the absence of competitive pressure and incentives for governance. This involves the introduction of new obligations that can be placed on platforms identified as being of systemic relevance to digital markets. The second group focuses on improving the application of antitrust law, expanding the current antitrust tools to analyze behavior and mergers in cases where competition is feasible. These incremental adjustments seek to respond to the competitive dynamics of digital markets in general.

The first group of recommendations of this study suggests reforms to the Brazilian Competition Law, with the introduction of a new pro-competitive tool aimed at systemically relevant platforms, and in the institutional framework needed to implement them. A new tool specifically targeted at multi-sided markets characterized by strong network effects – a key feature of large digital platforms – is needed, granting CADE the power to identify and remedy situations in which power asymmetries or lack of structural competition hinder the proper functioning of the market. The objectives are to promote contestability in multi-sided markets with strong network effects, to ensure parameters of governance and management of network effects in the absence of competitive pressure, to ensure freedom of choice for users of digital platforms, and to promote transparency in digital markets. The new rules will grant CADE powers to designate platforms with systemic relevance in digital markets. After the designation, and through an administrative procedure, CADE may impose obligations specific to each designated agent.

The implementation of these new powers requires building capacity within the antitrust authority, and to this end we recommend the creation of a unit specialized in digital markets within CADE. In addition, we propose the creation of a cooperation forum between the antitrust authority and other federal agencies, including direct public administration bodies and other federal agencies, including the National Data Protection Authority (ANPD), and the National Telecommunications Agency (ANATEL). Moreover, CADE's powers should be supplemented in order to make it feasible, within the scope of economic studies, to require information and analyze competitive dynamics, even outside the course of a specific investigation of anticompetitive practices or mergers, strengthening the performance of the agency.

The second group of proposed measures seeks to update the application of Law 12529/2011 and adapt the instruments and procedures for the analysis of anticompetitive practices and mergers to the realities of the digital markets. Despite the flexibility of the Brazilian Competition Law, the analytical tools designed for linear, traditional markets prove inadequate to handle the complexity of digital platforms. The adaptation of procedures and the incorporation of new methodologies, such as network and ecosystem analysis, aims to strengthen the antitrust authority's actions in markets where promoting competition through antitrust tools is feasible. The recommendations include updating guidelines for the review of mergers and the control of conduct associated with digital platforms.

The list below provides a summary of the proposed measures:

Group 1 - New instrument to promote competition in cases of digital platforms of systemic relevance

1. **Establish a procedure for CADE to designate platforms of systemic relevance for digital markets.**

2. **Introduce procedural transparency obligations to which the designated agents might be subject from the moment of the designation, at the discretion of CADE.**

3. **Establish a procedure for CADE to investigate designated companies and decide, on a case-by-case basis and as necessary, specific and substantive obligations for these companies.**

4. **A specialized unit within CADE is to be tasked with implementing the new pro-competitive tool.**

5. **Implement substantive obligations in cooperation with regulators such as ANATEL and ANPD, when necessary, based on specific technical and sectoral aspects.**

6. **Strengthen CADE's competences to develop market studies, granting it powers to request information and analyze specific sectors or industries.**

7. **Create an inter-institutional cooperation forum between CADE and other regulators and federal bodies like ANATEL, ANPD, and SENACON.**

Group 2 - Adjustments to the application of antitrust tools to platforms in general

8. **Update antitrust analysis tools for continuous improvement of the analytical framework used by CADE to identify and assess competition risks, including new theories of harm.**

9. **Revise CADE's pre-merger notification form to include specific questions about the business models of digital platforms.**

10. **Consider adopting the ordinary procedure for merger review cases involving large digital platforms with a significant number of users, when they meet the turnover criteria established in the law for mandatory notification.**

11. **Make use, when necessary, of the flexibility provided in Article 88, paragraph 7, of Law 12529/2011 to require the submission of mergers that, although they do not meet the formal notification criteria, may pose risks to competition.**

12. **Update the turnover thresholds for pre-merger notification established in items I and II of the head provision of Article 88 of Law 12529/2011.**

Introduction

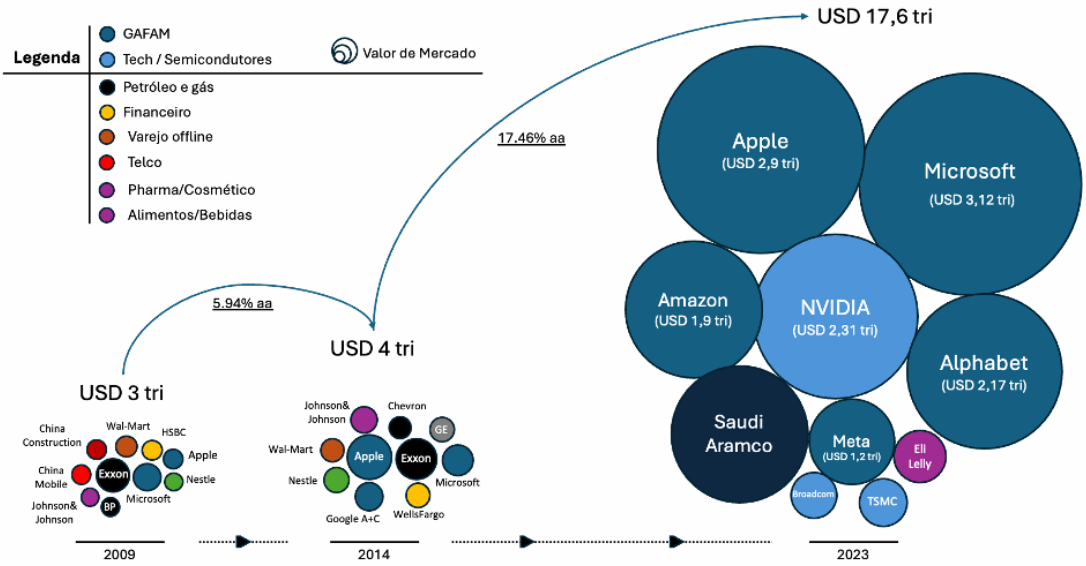
Digital platforms have become an increasingly important business model for the global economy, impacting various sectors and shaping the way companies and consumers interact. Fifteen years ago, the world's largest companies were scattered across traditional sectors such as oil and gas, finance, pharmaceuticals, construction, food and beverage, telecommunications, and retail. In 2023, 8 of the 10 largest companies in the world had platforms as a central part of their businesses.[3]

Technology companies have experienced explosive growth and reached unprecedented scale.[4] In addition to conglomerates focused on digital platform models, companies from sectors relevant to their operation, especially semiconductors, have also followed this trend, as illustrated in **Figure 1.**

[3] Statista e Forbes, The World's Biggest Public Companies, June 2024. "The 100 largest companies in the world by market capitalization in 2023 (in billion U.S. dollars)".

[4] Silva et al. reach a similar conclusion when analyzing the average performance, in terms of market value, of large companies controlling digital platforms compared to the Dow Jones Industrial and Nasdaq Composite (from 2017 to 2023) indexes. See Silva, V. J., Chiarini, T., & Ribeiro, L. C. (2024). Economia de plataformas: a eclosão de empresas brasileiras controladoras de plataformas digitais, http://dx.doi.org/10.38116/9786556350660.

Figure 1. Market value of the 10 largest publicly traded companies in the world (USD, 2009-2023)



Source: Background Paper – Economic Study

The exponential growth of the technology sector is linked to the substantial productivity gains provided by digital platforms.[5] Digital platforms unleveled the performance of companies operating in connection to digital platforms in comparison to companies operating solely in traditional markets. As the examples in **Figure 2** illustrate, digital platforms exhibit unparalleled performance in terms of productivity and growth rate, generating value from a significantly smaller number of assets – human, physical, and financial – compared to companies operating under traditional business models and related services. In addition to high productivity indicators and a lean structure, the speed at which these companies are created, established, and become market leaders is striking. A decade was enough for some digital platform companies to surpass the market value of century-old multinationals that are leaders in their respective industries.

Figure 2. Comparison of traditional versus platform companies in selected sectors

	Ano de Fundação	Número de funcionários (2023)	Valor de mercado (USD/bi, 2023)	Receita global / n. funcionários (USD, 2023)
Marriot	1927	411.000	69,72	57.664,23
AirBnB	2008	6.900	93,27	868.115,94
Volkswagen	1937	684.000	60	511.374,27
Uber	2009	30.400	139	1.223.684,21
WaltDisney	1923	255.000	176	348.745,10
Youtube	2006	7.100	455	4.436.619,72
FujiFilm (Jul/2012)	1934	81.600	8,6	330.882,35
Instagram (Jul/2012)	2010	13	1	-

Acomodações listadas: 8.900 → Proprietárias de acomodações: Sim
7.000.000 → Não

Produz conteúdo: Sim / Não

Source: Background Paper – Economic Study

[5] Parker, G.G., Alstyne, M.W.V., & Choudary, S.P. 2016. Platform Revolution. How Networked Markets are Transforming the Economy and How to Make them Work for You. W. W. Norton & Company, Ney York.

The adoption of platforms as a business model is also a phenomenon present in Brazil. Beyond the already established presence of digital platforms from multinational companies leading their segments, in 2022 there were at least 550 national companies whose business model was based on digital platforms, with several cases of successful national platforms.[6] Only 3 of them were founded before 2011, indicating the recent nature of the adoption of the platform as a business model by national entrepreneurs.[7] The main national companies organized into platforms offer marketplace and retail services, deliveries, transportation, and financial services, with a focus on B2C – in precedence to B2B.[8]

Brazilian technology companies are highly productive. Despite being relatively new, more than a third of those with up to 10 employees and two-thirds of those with 11 to 50 employees reported annual revenues exceeding USD 10 million, a significantly higher value than the national average for companies in this range, which typically face greater difficulties in adopting new technologies.[9]

The largest national digital platforms have replicated business models that have already been successful in other markets.[10] Especially in segments involving the intermediation of products and services with a physical component and a pre-existing offline market, such as delivery, transportation, real estate, and retail, Brazilian companies have been able to replicate technologies, adapt to specificities, and leverage local advantages to not only participate but also lead national markets with the presence of global precursors. Entrepreneurs have also shown creativity in expanding strategies and technologies successfully employed in intermediation and gig economy segments to meet national specificities and niche markets.[11]

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[6] Silva, V. J., Chiarini, T., & Ribeiro, L. C. (2024). Understanding Brazil's Platform Economy: Trends and Regulatory Challenges. *Nova Economia*, *34*(1), 1-31, https://doi.org/10.1590/0103-6351/7958

[7] As Cusomano et al. point out, the process of platformization in the US has been ongoing since at least the 1980s, led first by companies like Intel (1968), Microsoft (1975), and Apple (1976) - as well as IBM (1911) - which introduced the phenomenon of the personal computer, followed by companies offering software and services based on personal computers, such as Amazon (1994), Yahoo (1995), and Google (1998), then by social networks like MySpace (2003), Facebook (2004), and Twitter (2006), and finally by the "sharing economy" introduced by companies like Airbnb (2008) and Uber (2009). See Cusumano, M.A., Gawer, A., & Yoffie, D.B. (2019). The Business of Platforms. Strategy in the Age of Digital Competition, Innovation, and Power. HarperCollins Publishers.

[8] Silva, V. J., Chiarini, T., & Ribeiro, L. C. (2024). Understanding Brazil's Platform Economy: Trends and Regulatory Challenges. *Nova Economia*, *34*(1), 1-31, https://doi.org/10.1590/0103-6351/7958

[9] There are countless examples of success in Brazil, with at least 20 companies that have received at least USD 15 million in initial funding, with the five largest receiving almost USD 3 billion since their foundation. Silva Neto, V. J., Chiarini, T., & Ribeiro, L. C. (2024). Understanding Brazil's Platform Economy: Trends and Regulatory Challenges. *Nova Economia*, *34* (1), 1-31.

[10] Silva, V. J., & Chiarini, T. (2023). The Brazilian platform economy: innovation or imitation? IPEA, Centro de Pesquisa em Ciência, Tecnologia e Sociedade, https://www.ipea.gov.br/cts/en/all-contents/articles/articles/399-the-brazilian-platform-economy-innovation-or-imitation.

[11] See Silva, V. J., Chiarini, T., & Ribeiro, L. C. (2023) The Brazilian Digital Platform Economy: A First Approach. In: VII Encontro Nacional de Economia e Inovação, *https://osf.io/preprints/socarxiv/d478v.*

The importance of digital platforms to the Brazilian economy

The dynamism of domestic platforms over the past decade has been sufficient to propel Brazil to regional leadership. In 2023, the country had the highest number of unicorns in Latin America (19), including 7 of the 10 most valuable unicorns in the region, as well as having the information and communication technology (ICT) sector with the highest market value and hosting the largest number of fintechs, to name just a few examples.[12] Many of these results are associated with the country's investments in Research and Development, particularly relevant in the ICT sector, with Brazil investing twice the percentage of GDP compared to the Latin American average.[13]

Despite leading Latin America, Brazil is still far from the global frontier. Even though it has successfully replicated business models and platform technologies, introducing innovations at the company and market levels in Brazil, especially in intermediation services, the country has not yet been able to present innovations with a global impact or advance in cutting-edge technology segments.[14] Despite leading Latin America in terms of value and number of unicorns, this is a modest performance on a global scale - the US alone has 40 times more unicorns than Brazil.[15] When comparing domestic platforms to the Brazilian economy itself, their relevance is still incipient. Unlike what has already happened on a global scale (**Figure 1**), the largest companies and the most valuable national brands continue to focus on traditional business models and sectors such as mining, oil, and finance.[16]

The relevance of the ICT sector to the Brazilian economy, although significant compared to other Latin American countries, is still modest when compared to global powers like the United States. ICT is a highly productive sector, with average

[12] A unicorn company is a private startup that has a current valuation of one billion US dollars or more. For this analysis, after a company goes public (IPO) or is acquired, it is no longer considered a unicorn. For data on the ICT market, see Statista and the Brazilian Association of Software Companies "Information technology market value in selected Latin American countries from 2020 to 2022 (in billion U.S. dollars)". For data on unicorns, see *Statista and CB Insights*, "Leading unicorn companies based on market value in Latin America in 2023 (in billion U.S. dollars)". For data on numbers of fintechs, see *Statista and Inter-American Development Bank*, "Growth of fintechs in Latin America between 2017 and 2023, by country".

[13] According to data from the World Development Indicators, World Bank, in 2020 Brazil invested 1.14% of its GDP in R&D, while the average for Latin America was 0.61% of the GDP during the same period.

[14] Silva, V. J., & Chiarini, T. (2023). The Brazilian platform economy: innovation or imitation? PEA, Centro de Pesquisa em Ciência, Tecnologia e Sociedade, https://www.ipea.gov.br/cts/en/all-contents/articles/articles/399-the-brazilian-platform-economy-innovation-or-imitation.

[15] Although they have an economy that is 10 times bigger than the Brazilian.

[16] According to Statista and CompaniesMarketCap.com, as of March 2024, the ten largest companies in Brazil by market capitalization in 2023 were: Petrobras, Itaú, Vale, Nu Holdings, Santander Brasil, Ambev, BTG Pactual, Banco do Brasil, WEG, and Bradesco. Among the highest-valued companies, Nu Holdings stands out with a digital business model. Regarding the most valuable brands, two ICT sector players, Claro and Vivo, are prominent, but their business models do not center around digital platforms as discussed here. For the most valuable brands in Brazil in 2023, see Statista, Kantar, and PROPMARK. Kantar BrandZ 2024 Most valuable Brazilian brands.

salaries in Brazil twice the national average.[17] Although it represents only 1% of the country's workforce and about 33,000 companies (out of a total of 21 million), the sector contributed 6.5% of GDP in 2023.[18] While the country holds a leading position in Latin America, it is observed that the sector still has much room for growth in Brazil when compared to global powers. In the US, for example, the sector's share of GDP ranges from 8.8% to 10%, with proportionally 10 times more companies (550,000 out of 33 million).[19] The same is true in terms of R&D investment.[20] Brazil invested R$87 billion in 2020 - across all sectors, from public and private funds - a value sufficient to elevate Brazil to regional leadership, but an incipient performance in global terms. The US invested R$3.7 trillion in the period, a value equivalent to about 50% of Brazil's GDP.[21] In 2022, Amazon alone invested around R$200 billion in R&D.[22]

Despite a high internet penetration rate, internet usage in Brazil is less productive than the OECD average. With the fifth largest online population in the world, 84% of Brazilian households had internet access in 2023.[23] Brazilians spend an average of 9 hours per day online, which is 50% more than the global average.[24] However, Brazilians use the internet less productively compared to the OECD average.[25] Brazilians send fewer emails, conduct fewer online searches and

[17] According to Kubota, "the availability of a variety of communication and information technology (ICTs), such as the internet of things, artificial intelligence, cloud and edge computing, 5G communication networks, enables the radical redesign of services provided either by companies or governments with potential productivity gains" (free translation). See Kubota, L. C. O. (2024). Digitalização e Tecnologias da Informação e Comunicação: oportunidades e desafios para o Brasil.

[18] Brasscom (2024). Relatório Setorial 2023, Macrosetor TIC, https://brasscom.org.br/wp-content/uploads/2024/04/BRI2-2024-004-001-Relatorio-Setorial-versao-resumida-v23.pdf.

[19] See Statista, CompTIA; Bureau of Labor Statistics and Emsi, "Tech sector as a percentage of total gross domestic product (GDP) in the United States from 2017 to 2022"; and the official page of the International Trade Administration, United States, Software and Information Technology Industry, available at https://www.trade.gov/selectusa-software-and-information-technology-industry.

[20] The ICT sector has one of the highest percentages of investments in R&D worldwide. According to data of the Statista, European Commission, EFPIA, and R&D Scoreboar, globally, this sector is the second-largest investor in R&D as percentage of revenue, with 9.1% in 2021, behind only the health sector.

[21] National Science Board, National Science Foundation. (2024). Research and Development: U.S. Trends and International Comparisons. *Science and Engineering Indicators 2024*. NSB-2024-6. Alexandria, VA. https://ncses.nsf.gov/pubs/nsb20246/.

[22] Source: Statista, Schonfeld & Associates; R&D WORLD. Research and development (R&D) spending in the ICT sector worldwide from 2020 to 2022, by company.

[23] Source for the largest online populations worldwide: DataRePortal and Statista. In 2023, China was the leader with 1.050 billion people, followed by India with 692 million, the United States with 311,3 million, and Indonesia with 212,9 million people. Brazil was in the fifth position with 181,8 million people. The mobile phone is the main reason for this universalization process, as 99% of the Brazilians access the internet through their mobiles, leveraging a 4G consolidated network.

[24] Of the 49 countries available, Brazil is in second position, with a period of 9 hours and 14 minutes, behind only South Africa, with a 9-hour and 32-minute period. The world average is of 6 hours and 35 minutes. See DataRePortal (2024). Digital 2024 April Global Statshot Report, https://datareportal.com/reports/digital-2024-april-global-statshot

[25] OECD. (2020). *Going Digital in Brazil*, OECD Reviews of Digital Transformation, OECD Publishing, Paris, https://doi.org/10.1787/e9bf7f8a-en.

purchases, send fewer files, install less software, and interact less with digital public services.[26]

This difference is accentuated when comparing different social strata, with significant gaps between the usage habits of individuals with different levels of education.[27]

These data impact not only the adoption of digital platforms but also the potential of the Brazilian ICT sector. According to Borowiecki et al., digital training for workers, as well as investments in ICT software and hardware by companies, have a positive and significant impact on economic productivity, especially for less productive companies.[28] Despite widespread broadband access, Brazilian companies lag behind in the productive use of the internet and digital technologies. According to the OECD, Brazilian companies have fewer websites, make less use of enterprise resource planning (ERP) tools, and perform fewer big data analyses compared to the OECD average.[29] In addition to the difference in the average, the gap between small and large companies in Brazil is significantly larger than in Europe, exposing the difficulty of small and medium-sized enterprises (SMEs) in entering this environment.[30]

Leveraging the opportunities presented by digital platforms can be a crucial part of the solution to a chronic productivity problem. Since 2000, although national productivity has grown, it has not been enough to reduce the distance from the frontier, surpass regional peers, or even reach the Latin American average (**Figure 3**).[31] Among services, industry, and agriculture, only the latter - with the lowest added value - has shown productivity growth in the last 30 years.[32] Virtually all growth since 2000 has been due to increases in productive factors (capital and

[26] Analyses of companies of the State of Ceará by Cirera et.al. find that: (1) most of the companies still depend on pre-digital technologies to carry out general commercial activities like business administration, marketing, sales, payments or quality control, and (2) technological gaps are larger in smaller companies, and these deficits in technology adoption increase when the tools are from the Industry 3.0 and Industry 4.0. See Cirera, X., Comin, D., Cruz, M., Lee, K. M., & Martins-Neto, A. S. (2021). *Firm-level technology adoption in the state of Ceara in Brazil*. World Bank.

[27] OECD (2020), *Going Digital in Brazil*, OECD Reviews of Digital Transformation, OECD Publishing, Paris, https://doi.org/10.1787/e9bf7f8a-en.

[28] Borowiecki, M., Pareliussen, J., Glocker, D., Kim, E. J., Polder, M., & Rud, I. (2021). The impact of digitalization on productivity: Firm-level evidence from the Netherlands. *OECD Economics Department Working Papers*, No. 1680, OECD Publishing, Paris, https://doi.org/10.1787/e800ee1d-en.

[29] The only metric available where Brazilian companies make more intensive use of digital tools is in cloud services. However, it is interesting to note that the leaders in offering these services are global players. OECD (2020), *Going Digital in Brazil*, OECD Reviews of Digital Transformation, OECD Publishing, Paris, https://doi.org/10.1787/e9bf7f8a-en.

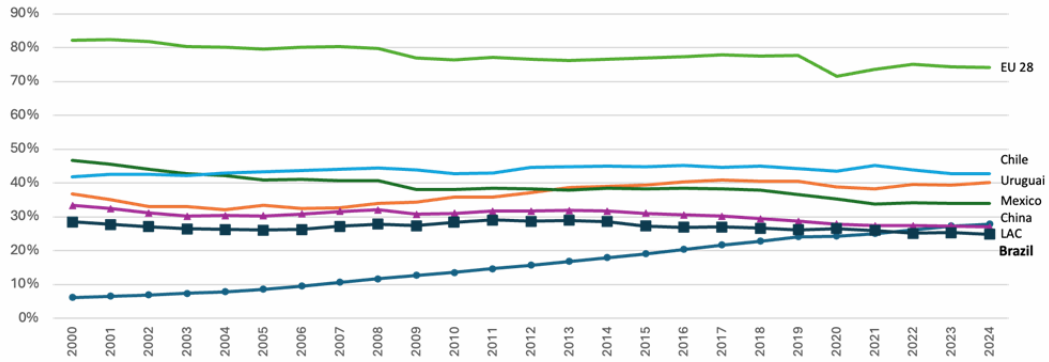
[30] Kubota and Rosa also find that "digital transformation (in Brazil) has been a process partly restricted to large companies, which face fewer difficulties in accessing the necessary technical knowledge, as well as skilled labor and adequate financing", (free translation). See Kubota, L. C., & Rosa. Digitalization and Information and Communication Technologies: Opportunities and Challenges for Brazil. In Kubota, Luis Claudio (ed.). Digitalization and Information and Communication Technologies: Opportunities and Challenges for Brazil. Rio de Janeiro: Ipea, 2024. ISBN: 978-65-5635-066-0. DOI: http://dx.doi.org/10.38116/9786556350660.

[31] Júnior, J. R. C. S., Silva, C. C. (2014) Evolução Da Produtividade e a Relevância Do Tema No Brasil. In Souza Jr., J. R. C., & Giambiagi, F. (Eds.). *O Desafio da Produtividade. Como Tirar o Brasil da Armadilha da Renda Média*. Editora Lux.

[32] World Bank (2023). Brazil - Systematic Country Diagnostic Update (English). Washington, D.C., http://documents.worldbank.org/curated/en/099072023134526692/BOSIB0bf484b270d508c2809049f2fffead

labor). The so-called total factor productivity (TFP) has been negative since 2010, having grown a total of only 10% since the 1970s.[33] Recent empirical studies show how digital platforms can promote productivity and benefit especially SMEs, generating growth opportunities and inclusion for informal entrepreneurs.[34]

Figure 3. Output per worker (GDP constant values of 2017, PPP), 2023, US=100%



Source: Background Paper, with data by the International Labour Organization (ILO) Notes: All the plotted economies compare to the U.S. values, which are equivalent to 100%.

For a country to reap the benefits of a growing digitalization of the economy, it is necessary to ensure a competitive environment. In this sense, Costa et al. indicate that the productivity gains associated with digital platforms are stronger in more dynamic markets, with changes in leadership among dominant platforms.[35] Rivares, et al. also affirm that productivity gains are lower when a platform is persistently dominant in its market, reinforcing the importance of promoting contestability.[36] This becomes especially important in the context of the growing role of digital platforms in the labor market and entrepreneurship.

[33] Júnior, J. R. C. S., Silva, C. C. (2014) Evolução Da Produtividade e a Relevância Do Tema No Brasil. In Souza Jr., J. R. C., & Giambiagi, F. (Eds.). *O Desafio da Produtividade. Como Tirar o Brasil da Armadilha da Renda Média*. Editora Lux.

[34] According to the World Bank, by reducing transaction costs due to their role in intermediation and the sharing of assets and costs, digital platforms lower the cost of doing business and enable smaller companies to access information, goods, and services that they previously lacked the scale to access. (World Bank. (2019). World Development Report 2020: Trading for Development in the Age of Global Value Chains. The World Bank. doi:10.1596/978-1-4648-1457-0). Furthermore, according to WBG (2024), platforms allow smaller companies to reach new markets that were previously unavailable due to distance, trade barriers, low demand, or lack of reputation. (World Bank [Forthcoming]. Competition Policy for the Digital Economy: New Rules Shaping Competition in Digital Platform Markets). Finally, Datta et al. argue that by reducing search and matching frictions, digital platforms also have the potential to lower frictional unemployment, reduce gender disparities, and overcome geographic barriers through opportunities for international outsourcing of talent and tasks. (Datta et al. (2023). Working Without Borders: The Promise and Peril of Online Gig Work. Washington, DC: World Bank. http://hdl.handle.net/10986/40066).

[35] Ver Costa, H., Nicoletti, G., Pisu, M., & von Rueden, C. (2021). Are online platforms killing the offline star? Platform diffusion and the productivity of traditional firms. *OECD Economics Department Working Papers*, No. 1682, OECD Publishing, Paris, https://doi.org/10.1787/1e2bbe10-en.

[36] Rivares, A. B., Gal, P., Millot, V., & Sorbe, S. (2019). Like it or not? The impact of online platforms on the productivity of incumbent service providers. *OECD Economics Department Working Papers*, No. 1548, OECD Publishing, Paris, https://doi.org/10.1787/080a17ce-en.

The recognition of the importance of public policies to promote competition in digital markets is increasingly evident in various countries. Multiple jurisdictions around the world have developed diagnoses to understand the impact of the adoption of the platform model in various economic segments on competition and the need to adapt analytical and legal tools to deal with these new models.

In many cases, there have been substantive reforms to antitrust law. In others, new complementary regulations have been adopted to promote competition. Despite the difference in the choice of legal instruments, it is noteworthy that jurisdictions such as Germany, the United Kingdom, and Japan have carried out legislative and public policy reforms to equip the competition authority with tools to curb anticompetitive conduct and promote competition in digital markets.[37]

Public Consultation SRE/MF No. 01/2024

Various sectors of Brazilian society recognize the importance of promoting competition in digital markets, as evidenced by the contributions received in the Public Consultation SRE/MF No. 1/2024.[38] Opened on January 18th and closed on May 2nd, 2024, the Public Consultation was a fundamental public participation tool for the construction of this report. Its objective was to gather comments and suggestions on the regulation of economic and competitive aspects of digital platforms, seeking to collect information that would better support the debate and the development of public policies.

A total of 72 contributions were received, from diverse profiles.[39] Of the participants, 13 submitted contributions were considered to be outside the scope of the Public Consultation, as they did not address – even indirectly – economic or competitive issues related to the regulation of digital platforms. Therefore, the content of the contributions from the remaining 59 participants was analyzed, both quantitatively and qualitatively.

The analysis of the Public Consultation categorized the topics addressed into three main discussion pillars:

- Pillar 1 was named "**Diagnostics**". It encompasses submissions about (1) the competitive landscape in markets with the presence of digital platforms in Brazil, (2) the main competitive problems respondents identified (and

[37] Fernandes also suggests that the international experience, beyond the European regulation, is relevant to reflect about the creation of the pro-competitive regulation in Brazil. See Fernandes, V. O. (2024). Lost in translation? Critically assessing the promises and perils of Brazil's Digital Markets Act proposal in the light of international experiments. *Computer Law & Security Review*, *52*, 105937.

[38] Public Consultation, *Tomada de Subsídios No. 1/2024*. Available at: https://www.gov.br/anm/pt-br/acesso-a-informacao/participacao-social/tomada-de-subsidios-2/tomada-de-subsidios-01-2024.

[39] There were 301 submissions made to the platform Plataforma + Brasil, which were made by 70 participants. Also, within the period of the public consultation, 2 contributions were sent exclusively by email to the SRE/MF, and were included into the data set, totaling 72 respondents.

their respective counterarguments) and (3) the sufficiency or insufficiency of the Brazilian Competition Defense System (SBDC) to deal with the potential anticompetitive problems identified.

- Pillar 2 was named "**Regulatory Rationale and Design**". It includes submissions that discussed the objectives and design of possible normative and institutional changes to the Brazilian legal system are organized, with a view to modifying the existing competences of the Brazilian Competition Defense System (SBDC) and/or establishing new competences through *ex ante* regulation.
- Pillar 3 was named "**Institutional Framework**". It addresses the institutional arrangements and structure for the application of a possible new ex ante regulatory model are addressed, as well as its relationship with the existing competition defense framework.

The quantitative and qualitative analyses were conducted to identify areas of consensus and divergence both (i) among different stakeholder groups and (ii) within the same stakeholder groups participating in the Public Consultation. To this end, participants were organized into groups, classified according to information available in their submissions and based sources publicly available online. Of the 59 relevant submissions, 52 were classified as submitted by legal entities, while seven were identified as submitted by individuals.

The following groupings were adopted:

- The legal entities were classified in (1) academia, (2) industry, (3) public sector, and (4) civil society.[40]

- Within industry specifically, companies or trade associations were identified as: (1) digital platform operators, (2) telecommunications operators, (3) business users, and (4) others.

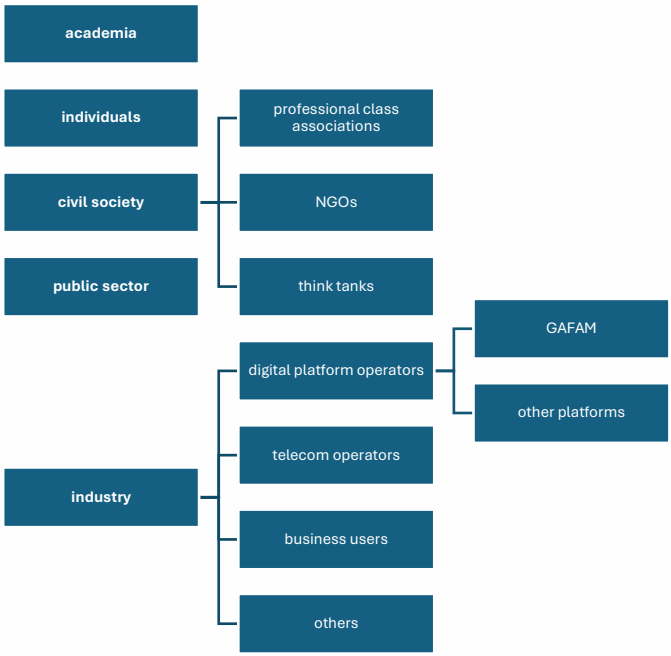
- Regarding platforms operators, the analysis also examined the representativity of companies identified by the acronym GAFAM (Google/Alphabet, Apple, Facebook/Meta, Amazon, and Microsoft), both through direct representation (i.e., the companies themselves) or through trade associations (direct participation or funding).

- Civil society participants were subdivided into three main categories as it follows: (1) professional associations, (2) third-sector associations focused on collective rights, and (3) think tanks, defined as "institutions which that

[40] For this purpose, the following were considered: (i) academia, as the actors affiliated with an academic institution; (ii) industry, as the companies and business associations; (iii) public sector, as the entities and bodies of the direct and indirect Public Administration; and (iv) civil society, as the third sector entities, professional associations, and think tanks.

conduct research, analysis, and recommendations for public policy across various areas".[41]

Figure 4. Groups and Subgroups of the Public Consultation



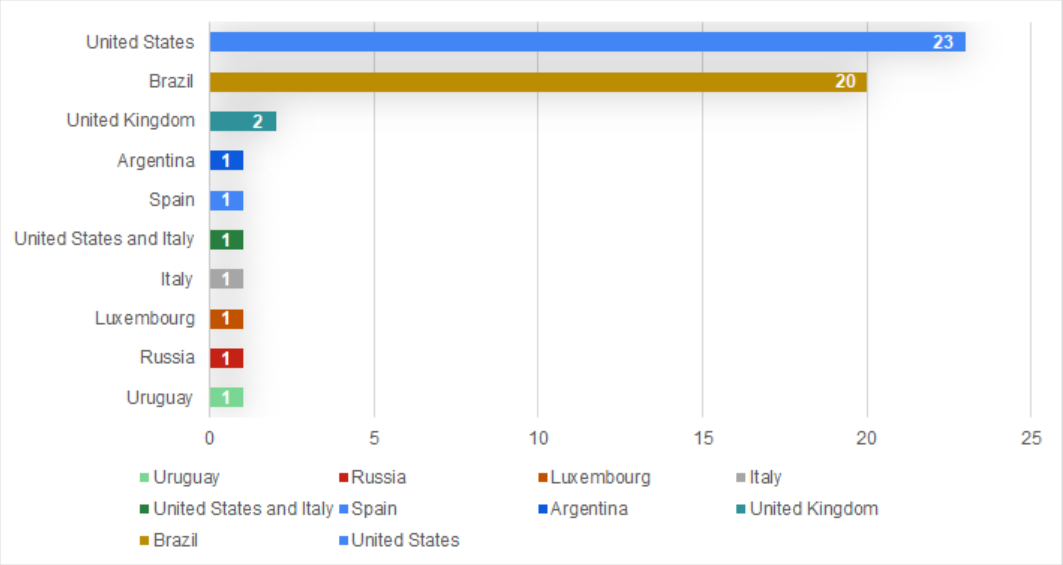
Source: Public Consultation Systematization Report.

Analysis of participants' nationality, based on the location of their headquarters or home office, revealed a predominance of foreign participants, particularly from the United States (24 submissions, Figures 5 and 6). In total, there were more submissions from foreigner stakeholders than Brazilian ones (32 foreign versus 20 Brazilian, **Figure 5 and 6**).[42] This trend was consistent across almost all stakeholder groups, with the exception of public sector participants, who were all Brazilian (Figure 7).

[41] ENAP (2020). Afinal, o que é um *think tank* e qual é a sua importância para políticas públicas no Brasil? Available at: https://www.enap.gov.br/pt/acontece/noticias/afinal-o-que-e-um-think-tank-e-qual-e-a-sua-importancia-para-politicas-publicas-no-brasil. Retrieved on: 30 May (2024).

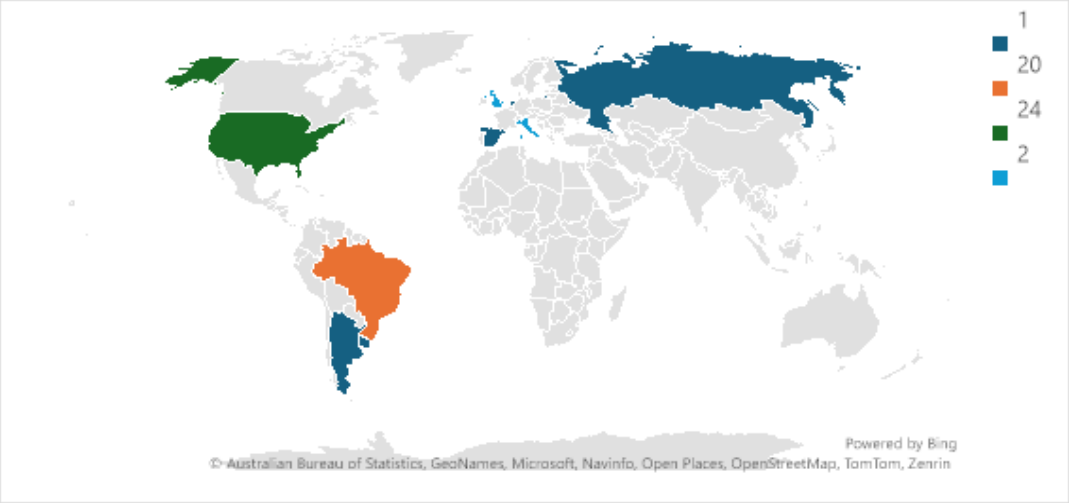
[42] The Dynamic Competition Initiative (DCI) as an initiative that congregates two universities, in the U.S. and in Italy, (respectively, University of California Berkeley and European University Institute), is represented like "United States and Italy" in Figure 5, but it appears twice in Figure 6, one for each of the countries mentioned. See: https://www.dynamiccompetition.com/.

Figure 5. Participants' nationalities, based on the location of their headquarters or home office (bar format)



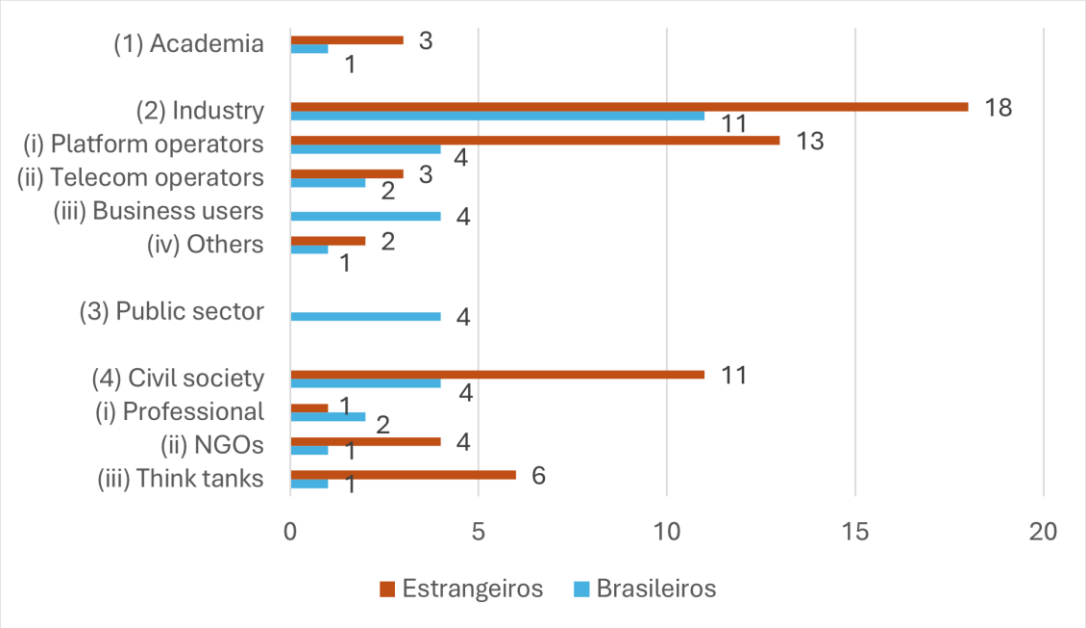
Source: Public Consultation Systematization Report.

Figure 6. Participants' nationalities, based on the location of their headquarters or home office (map format)



Source: Public Consultation Systematization Report.

Figure 7. Subdivisions by participants' nationalities, based on the location of their headquarters or home office



Source: Public Consultation Systematization Report

The merit of the submitted contributions was considered both for structuring the topics of this report and for developing the analysis items that follow. Specific contributions or groups of contributions are cited throughout the text in critical items that were highlighted by the participants in their response to the formulated questions. The comprehensive analysis and systematization of submissions is available in a separate document.[43] The full text of the submissions can be accessed through the Brazilian federal government's participation platform.[44]

The structure of this report

The first section of this report provides the analysis of the competitive and economic aspects of digital platforms. At this stage, the characteristics and specificities of these platforms are identified, based on a review of specialized literature and technical reports from other jurisdictions.

The second section delves deeper into the diagnosis of the challenges that arise with digital platforms, focusing on the insufficiencies of Brazilian antitrust law in the face of the dynamics and competitive challenges of digital platforms.

This detailed analysis allows the identification of aspects that point to a gap in the national legal framework, highlighting the need for both adaptations in the application of competition law and the creation of new regulatory instruments.

[43] Systematization Report of Submissions to Public Consultation No. 01/2024.

[44] Available at: https://www.gov.br/participamaisbrasil/concorrencia-plataformas-digitais

The third section presents a comparative analysis of the strategies adopted by ten jurisdictions to update their economic and legal tools in order to deal with the challenges posed by these platforms. The objective is to identify the regulatory and public policy responses developed by countries that have reached similar diagnoses to Brazil, and how developed models can support reflection on the Brazilian case.

The fourth section presents recommendations for improving the Brazilian Competition Defense System along two main groups: The first group includes recommendations for legislative changes to modernize and complement the tools available to the Brazilian antitrust authority, aiming to better address competitive problems in multi-sided markets with strong network effects. The second group focuses on recommendations for improvements in the application of Law 12529/2011 by CADE, including updates to the tools and procedures for analyzing conduct and mergers.

1. Economic and competition aspects of digital platforms

Despite the diversity of goods and services offered by varied digital platforms, these economic agents share fundamental characteristics that give rise to specific competition concerns. Although some of these aspects were already known to economic theory, such as network effects and two-sided markets, the main role that digital platforms assumed in several markets, the singularities of their business models, and their evolution towards complex ecosystems have provoked a new scrutiny on whether the current analytical tools and legal frameworks are adequate to understand and regulate them.[45] This discussion has led many countries to introduce and implement new laws to foster competition in markets where those platforms operate.[46]

This chapter examines the common features shared by digital platforms.

1.1. Digital platforms: what are they and why are they different?

Specialized literature offers various definitions of digital platforms, based on common aspects and the connection and intermediation functions that these agents perform. Gawer, for instance, defines digital platforms as "digital services that facilitate interactions via the internet between two or more distinct but interdependent sets of users (whether firms or individuals)".[47] Nooren *et al.* define digital platforms as "a basis for delivering or aggregating services and content from service and content providers to end users".[48]

Digital platforms play a central role in creating and distributing value by enabling interactions among economic agents.[49] This intermediation capacity two-sided or multi-sided markets. Such markets have two or more user groups that relate to each other directly or indirectly and depend on a platform precisely to facilitate this interaction, with the platform capturing value from these same interactions.[50]

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[45] Tirole, J. (2024). Competition and industrial policy in the 21st century. *Oxford Open Economics*, *3* (Supplement_1), i983-i1001. https://doi.org/10.1093/ooec/odad080

[46] World Bank (2024) Forthcoming. Competition policy for the digital economy: New rules shaping competition in digital platform markets.

[47] Gawer. A. (2021) 'Online Platforms: Economic and Societal Effects' (European Parliament 2021) PE 656.336.

[48] Nooren, P., Van Gorp, N., van Eijk, N., & Fathaigh, R. Ó. (2018). Should we regulate digital platforms? A new framework for evaluating policy options. *Policy & Internet*, *10*(3), 264-301.

[49] Evans, D. S., & Schmalensee, R. 2016. Matchmakers: the new economics of multisided platforms. *Harvard Business Review Press*.

[50] Evans, D. S., & Schmalensee, R. 2016. Matchmakers: the new economics of multisided platforms. *Harvard Business Review Press*.

Many traditional companies were already based on multi-sided markets, from advertising-funded newspapers to credit cards, but digital platforms are a specific business model, driven by hardware and software technological advances. To be considered a digital platform, beyond offering multiple services, it must (1) generate network effects, (2) serve different user groups, and (3) use digital technology to offer its services and collect and process data. This unique combination transforms companies' competitive strategies, differentiating them from the traditional business models.

1.1.1. Network effects

The interconnection between users and businesses on digital platforms generates significant network effects. A network is a system connecting several components denominated nodes. When connecting through digital platforms, these nodes can assume various functions, from consumers and suppliers to competitors or partners. Importantly, the number of nodes in a network - and the consequent possibility of available connections - affects the value each node attributes to the network itself. This interrelation consists of network effects, commonly characterized as direct and indirect, positive and negative.[51]

For network participants, a platform's value is tied to the possible interactions that network presence enables. The greater the number of available participants - and their services, conveniences, technologies, the greater the number of interactions and, consequently, the greater the platform's potential value.[52] The implementation of digital platforms usually has high fixed costs related to their technological infrastructure. Nevertheless, their operations usually have low marginal costs that decrease as user numbers increase. In this context, being large is essential: beyond potential input cost savings per unit produced generating supply-side economies of scale, higher participant numbers intensify connection possibilities, driving system value and generating demand-side economies of scale.[53] At the same time, each node added to the network increases significantly the possibilities of new connections, meaning the perceived value for each participant is disproportionately affected, generating expansion (and contraction) at non-linear rates.

The magnitude of the network effects can interfere directly in growth processes, consolidation or eventual network collapses.

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[51] Direct network effects happen when the value observed for a node is affected by the presence of another similar node, which plays the same role in the network. Indirect network effects, alternatively, happen when the value observed for a node is affected by the presence of nodes with different complementary roles.

[52] Parker, G.G., Alstyne, M.W.V., & Choudary, S.P. 2016. Platform Revolution. How Networked Markets are Transforming the Economy and How to Make them Work for You. W. W. Norton & Company, Ney York.

[53] This does not mean that platform companies do not benefit from supply-side economies of scale. In many cases, there are two effects that reinforce themselves mutually.

In this context, it is essential to identify criteria that inform the extent of network effects, especially those associated with demand-side and supply-side economies of scale.[54] For example, when benefits from new participant entry are felt across the network, rather than just in specific user subgroups, there is greater scalability and thus greater potential for demand-side economies of scale.[55] Demand-side economies of scale are also reinforced when users have homogeneous preferences, facilitating standardizations that increase the network's potential size, exacerbating network effects.[56] Similarly, high switching costs - individual or collective, potentially linked to exclusivity contracts - or high costs for simultaneous use of substitute platforms (multi-homing) reinforce the magnitude of demand-side economies of scale.[57] Finally, increasing marginal gains in network value from the entry of new participants enable positive reinforcements that amplify network effects. That said, although demand-side economies of scale drive the growth dynamics of networks, the addition of supply-side economies of scale to these variables generates value creation and destruction that are significantly faster than in traditional industries, including the potential for "tipping".[58] With both economies of scale in play, demand increases in digital platforms lead to both (i) supply cost reduction and (ii) increased perceived value for potential users.[59]

The combined outcome of the analysis of supply- and demand-side economies of scale indicates the possibility of an accelerated and unlimited rate of platform adoption, creating opportunities for "winner-takes-all" dynamics driven by network effects.

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[54] See, for example, Bundeskartellamt (2016). The Market Power of Platforms and Networks Working Paper, B6-113/15, https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Berichte/Think-Tank-Bericht-Langfassung.pdf?__blob=publicationFile&v=2; Shapiro, C., & Varian, H. R. (1999). Information Rules. A strategic guide to the network economy. Harvard Business School Press, pp 184; E BRICS (2023). Brics in the Digital Economy: competition policy in practice. 2nd Report, pp 34, https://cdn.cade.gov.br/Portal/assuntos/noticias/2024/BRICS%20Digital%20Economy.pdf?utm_source=GTDT&utm_medium=pdf&utm_campaign=Competition+in+Digital+Markets+2025.

[55] Localized network effects, where the increase in network value generated by new nodes may be more significant in smaller, specific groups than across the entire network, reducing the impact of new participant entry on the system's aggregate value.

[56] Eisenmann et al affirm that "The number of platforms serving a market tends to be small when network effects are strong, individual users face high costs when multi-homing (i.e., affiliating with multiple platforms), and user demand for differentiated platform functionality is limited" (Emphasis added). Eisenmann, T., Parker, G., & Van Alstyne, M. (2011). Platform envelopment. *Strategic management journal*, *32* (12), 1270-1285. From an inframarginal analysis, Bresnahan et. al. also suggests that heterogeneity in the demand for mobile apps promotes multi-homing and prevent market tipping. See Bresnahan, T., Orsini, J., & Yin, P. L. (2015). Demand heterogeneity, inframarginal multihoming, and platform market stability: Mobile apps. In *Proc. 9th IDEI-TSE-IAST Conf. Econ. Intellectual Property, Softw. Internet* (pp. 1-44).

[57] In the presence of network effects, relevant switching costs are often collective, as a new platform needs to access a minimum number of users to generate sufficient value to maintain and grow in size, known as "critical mass." When collective switching costs are high - everyone needs to switch simultaneously for the new network to obtain value - network effects tend to be stronger. See Cusumano, M.A., Gawer, A., & Yoffie, D.B. (2019). The Business of Platforms. Strategy in the Age of Digital Competition, Innovation, and Power. HarperCollins Publishers.

[58] Shapiro, C., & Varian, H. R. (1999). *Information Rules. A strategic guide to the network economy*. Harvard Business School Press.

[59] For instance, in segments where data usage is significant, scale in data production is important. In intermediation segments, scale in logistical capacity can also be relevant. Production of complex algorithms and maintenance of large networks may also present high fixed costs and significant supply-side economies of scale. In hybrid cases, where devices are associated with platform services, supply-side economies of scale can also be relevant.

In this context, economic agents may compete for monopoly or dominant positions in sequential dynamics, often supported by a predominant technology or network strategy. This position can be challenged or even supplanted by a superior technology or strategy, whether proprietary or from current or potential competitors. However, supplanting these monopolies is no trivial task. To overcome network effects, entrants must either revolutionize performance and functionalities to the extent of surpassing collective switching costs or rely on broad interoperability to introduce marginal improvements in complementary products and services, leveraging the incumbent's network economies. In this context, the risks of "entrenchment," monopoly rent extraction by platforms, and acquisition and abuse of dominant positions are significant.[60]

1.1.2. Multi-sided markets

The business model adopted by digital platforms poses a crucial challenge in coordinating the growth of the different sides of a platform.[61] As Evans identifies, digital platforms need to achieve a minimal critical mass of users to generate sufficient value and attain sustainable growth[62] Depending on the type of platform and the segments involved, one market side must join first to attract participation from other sides (e.g., social media users join before advertisers). In other cases, two or more sides must participate simultaneously for the platform to be viable (e.g., retail), creating a "zigzag" dynamic—small expansions, alternating between sides, direct coordinated participant growth. Every platform must either overcome this problem or risk failure. As Cusumano, Gawer, and Yoffie argue, many platforms fail by either not correctly identifying their most important side or depleting resources through significant subsidies before achieving the critical mass necessary for profitability or sustainable network effects.[63]

For the platform operator, it is necessary to manage the incentives for the sides involved so that they engage with it, seeking to maximize the positive direct and indirect network effects, and mitigating, on the other hand, the negative ones.[64] This management involves identifying which sides act as profit centers and loss leaders. Sides with inelastic demand to certain prices/quantities, willing to pay more or receive less for their participation on the platform, are defined as profit generators and candidates to subsidize the system.

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[60] See Eisenmann, T., Parker, G., & Van Alstyne, M. (2011). Platform envelopment. *Strategic management journal*, *32*(12), 1270-1285, pp 1; and BRICS (2023). Brics in the Digital Economy: competition policy in practice. 2nd Report. 2023, pp 35, https://cdn.cade.gov.br/Portal/assuntos/noticias/2024/BRICS%20Digital%20Economy.pdf?utm_source=GTDT&utm_medium=pdf&utm_campaign=Competition+in+Digital+Markets+2025.

[61] What the economic literature defines as the “chicken and egg problem”. See: Cusumano, M.A., Gawer, A., & Yoffie, D.B. (2019). The Business of Platforms. Strategy in the Age of Digital Competition, Innovation, and Power. HarperCollins Publishers.

[62] Evans, D. S. (2009). How catalysts ignite: the economics of platform-based start-ups. *Platforms, markets and innovation*.

[63] Cusumano, M.A., Gawer, A., & Yoffie, D.B. (2019). The Business of Platforms. Strategy in the Age of Digital Competition, Innovation, and Power. HarperCollins Publishers.

[64] Rochet, J. C., & Tirole, J. (2003). Platform competition in two-sided markets. *Journal of the European Economic Association*, *1*(4), 990-1029.

Conversely, sides with higher demand elasticity to certain prices/quantities, sensitive to monetary and non-monetary costs, are classified as loss leaders and candidates to receive subsidies to participate in the system.[65] Platform management also involves calibrating price structures across different related sides, beyond the simpler – though equally sensitive – task of setting price levels in linear market chains (based on costs and substitute products). Additionally, platform monetization strategies must be designed, which may focus on one or multiple sides, based on usage fees (e.g., per transaction or period) or entry fees (e.g., device purchases or licenses).

One consequence of network effect management is the formation of price structures across various platform sides, often resulting in zero monetary prices for certain user groups.[66] Besides the network effects and the multi-sided structure, zero-pricing can also be partially explained by the value extraction from user-provided data.[67] There is growing recognition that companies operating in digital markets, regardless of their primary monetization strategy, extract value directly from collecting and processing users' personal data, although this value is difficult to quantify using traditional economic metrics.[68] Data use for training artificial intelligence technologies and entry into adjacent markets where many technology companies seek to operate create new possibilities for extracting value from data collected via digital platforms.

1.1.3. Collection and data processing

Data collection and processing constitute a fundamental pillar of digital platforms' business models. These platforms accumulate vast quantities of user data, including consumption habits, relationship networks, and purchase histories. While there is no consensus in literature on the ideal model for measuring or governing data value, this debate is central to analyzing competition issues involving digital platforms. This is due to data's relevance as an economic input for these platforms, also becoming a source of market power.[69]

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[65] This cross-subsidy strategy was also mentioned in CADE's submission the public consultation, which noted that platforms subsidize the more price-sensitive side through charges made on the other side of the platform, enabling zero-price service offerings for one user group and thereby achieving viable market size. CADE's submission, 2024, p. 10.

[66] CADE's submission, 2024, p. 10.

[67] Evans, D. S., & Schmalensee, R. (2013). *The antitrust analysis of multi-sided platform businesses* (No. w18783). National Bureau of Economic Research.

[68] Coyle, D., Diepeveen, S., Wdowin, J., Kay, L., & Tennison, J. (2020). *The Value of Data: Policy Implications*. Bennett Institute for Public Policy, Cambridge in partnership with the Open Data Institute. https://www.bennettinstitute.cam.ac.uk/media/uploads/files/Value_of_data_Policy_Implications_Report_26_Feb_ok4noWn.pdf; Brynjolfsson, E., & Collis, A. (2019). How Should We Measure the Digital Economy? *Harvard Business Review*. https://hbr.org/2019/11/how-should-we-measure-the-digital-economy.

[69] Which also demonstrates the complementarity between the competition perspective and privacy and data protection issues, and the work developed by ANPD (National Data Protection Authority).

Data is used in two primary ways: as a direct revenue source and as a tool to enhance product and service offerings.[70] By collecting data, platforms obtain detailed information about user preferences and consumer habits, enabling, for example, data sales for advertising purposes and personalization of products and services according to specific interests.[71] Moreover, data collection and processing enable the creation of new monetization strategies.[72] This can occur through data value extraction (value capture) and through crossed subsidies that enable zero-pricing charges for end users, more sensitive to monetary costs.

Data value is intrinsically associated to the capacity of data processing and analysis. Sometimes, this capacity is lacking in the country or company sourcing the data. As pointed out by UNCTAD, developing countries already provide global platforms with raw data while paying for information-rich applications.[73] As they limit themselves to provide low value-added digital inputs, the potential for innovation and productivity growth in Brazil can be limited. This dynamic, similar to commodity exploitation, points to the risk of countries becoming trapped in providing low value-added digital inputs while importing high value-added services.

From an antitrust perspective, CADE emphasized in its Public Consultation submission how data acquisition can be used to gain market share, further expanding the amount of available data, and the potential for abuse of market power.[74] According to CADE, the use of data can result in price discrimination – raising consumer protection concerns as this practice would not benefit all consumers equally.[75] In contrast, Facebook argues that access to data does not necessarily translate into competitive advantage, given the non-rival nature of data. The company also emphasizes that alternative methods for data collection exist, and that data possession does not automatically guarantee product success.[76]

A crucial aspect of data is its non-rival and non-excludable nature. Nonetheless, for reaping their benefits, it is necessary to have capacities and technologies that enable the exploitation of their economic benefits. This means that data can be used simultaneously by various agents with no decrease in volume. Differently from regular commodities, like oil, data use does not result in insufficiency.

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[70] Stucke, M. E., & Grunes, A. P. 2016. *Big data and competition policy* (First edition). Harvard University Press.

[71] Kira, B., Sinha, V., & Srinivasan, S. (2021). Regulating Digital Ecosystems: Bridging the Gap Between Competition Policy and Data Protection. *Industrial and Corporate Change, 30*(4), 1337–1360. https://doi.org/10.1093/icc/dtab053

[72] Lianos, I. (2019). Competition Law for a Complex Economy. IIC - International Review of Intellectual Property and Competition Law, 50(6), 643–648. https://doi.org/10.1007/s40319-019-00829-6

[73] UNCTAD (2021). Digital Economy Report. Cross-border data flows and development: For whom the data flow, https://unctad.org/system/files/official-document/der2021_en.pdf.

[74] CADE's submission, 2024, p. 11.

[75] CADE's submission, 2024, p. 11.

[76] Facebook's submission, 2024, p. 4.

Jones and Tonetti argue that the nonrivalry results in increasing returns. As a result, there can be social gains with extensive use of data among companies.[77]

1.1.4. Digital ecosystems and network relations

Platforms create ecosystems while they connect different markets through a common technology. The platforms provide the foundation for developing a network of interactions between individuals and businesses, performing varied and interdependent functions that give rise to ecosystems.[78] As argued by Jacobides and Lianos, highlighting how ecosystem members interact alternately as partners, suppliers, distributors, competitors, or consumers, the authors note that these ecosystems emerge as alternatives to classical vertical integrations or supply chain arrangements, offering horizontally or diagonally connected multi-product packages that alter linear value chain dynamics.[79]

Digital platforms can facilitate the creation of complex ecosystems. In practice, companies can either have one or more platforms of this model or hybrid business models, with or without platforms. Selling complementary products or services to an established user base can both generate profits and improve customer relationships, helping to retain users.[80] Even if the platform cannot offer a new service directly, it can sell the access to its customers to other service providers. These dynamics encourage the creation of complex ecosystems integrating actors, services, and markets beyond mere combination of interrelated markets (as in two-sided markets), merging otherwise independent markets.[81] Consequently, there is evidence of network effects across the entire ecosystem, while providing access to greater data variety, allowing operators to combine different data sources and types to develop new products. This creates the possibility of exacerbated user lock-in effects and barriers to entry for less diversified competitors.

Platform and ecosystem governance is a central strategic variable. Ecosystem managers play a crucial role in enhancing positive network effects while mitigating negative ones. Meanwhile, they make substantial investments in the infrastructure and maintenance of the technology on which the platforms depend. However, the nature and the structure of these ecosystems can create conditions and incentives for holders to get involved in commercial practices that can generate, strengthen or

[77] Jones, C. I., & Tonetti, C. (2020). Nonrivalry and the Economics of Data. *American Economic Review*, 110(9), 2819-2858.

[78] Jacobides, M. G., & Lianos, I. (2021). Ecosystems and competition law in theory and practice. *Industrial and Corporate Change*, *30*(5), 1199–1229. https://doi.org/10.1093/icc/dtab061

[79] Jacobides, M. G., & Lianos, I. (2021). Ecosystems and competition law in theory and practice. *Industrial and Corporate Change*, *30*(5), 1199–1229. https://doi.org/10.1093/icc/dtab061

[80] The combination of low marginal costs, economies of scale and scope, as well as the control of a significant base of users, makes the development of complex ecosystems a winning strategy. See Shapiro, C., & Varian, H. R. (1999). Information Rules. A strategic guide to the network economy. Harvard Business School Press.

[81] As is the case with online advertising, to be addressed in the following section.

consolidate a certain market position, and have adverse effects on competition. The concentration of ecosystem access and usage rules control in few actors' hands raises specific concerns about competition conditions between platforms and within ecosystems.[82]

Companies acting as both ecosystem controllers and market participants generate specific concerns related to potential conflicts of interest. A company may act as infrastructure provider or access controller for different user groups while directly competing with them[83] Many major technology companies, for example, have integrated into various business lines, controlling ecosystems while selling their own products and services within these same ecosystems. For example, companies that control mobile operating ecosystems, on which other platforms depend on to operate, can also offer their apps and devices through this infrastructure. Depending on the context, this duality of roles provides the means and the incentives for the ecosystem controllers to use governance tools to leverage their own businesses or discriminate against competitors.

Digital platform governance decisions can either mitigate negative network effects or create entry barriers and unjustifiably limit competition. To determine whether decisions on governance are serving the users' interests or restricting competition, it is necessary to understand the specific competition dynamics of digital ecosystems - a type of analysis that is beyond that of the traditional antitrust law. Such analysis must comprehend these business models to understand economic and competitive nature of specific conduct and consider, among other aspects, governance strategy impacts on market structure, access, interoperability, and privacy and security issues.

[82] Alves et al highlight that ecosystem controllers can perform the role of 'private regulators' while they set the participation and competition conditions in the market. See Alves, C. C. P., da Rocha, D. C., Ribeiro, E. P., Pondé, J. L., Prado, L. C. D., & de Oliveira Lyra, M. P. (2023). The Essential in Essential Facilities: The Case of Digital Platforms. *Direito Público*, *20*(107). https://doi.org/10.11117/rdp.v20i107.7288

[83] Alves, C. C. P., da Rocha, D. C., Ribeiro, E. P., Pondé, J. L., Prado, L. C. D., & de Oliveira Lyra, M. P. (2023). The Essential in Essential Facilities: The Case of Digital Platforms. *Direito Público*, *20*(107). https://doi.org/10.11117/rdp.v20i107.7288

2. Limitations of antitrust law: challenges to competition enforcement related to digital platforms

Considering the complexities and innovations introduced by digital platforms, it is a challenge to clearly identify the nature of competitive risks. The are plenty of benefits brought by the platforms, and most are easily perceived: countless goods and services offered at no costs; the leverage of once underutilized assets (great advantage of the gig economy); access, mostly free and universalized, not only for consumption, but for economic activities, both for entrepreneurship and labor; continuous improvements in speed, with convenience and quality of goods and services at high and constant rates. In this universe, where would the typical competition problems be, such as high prices, low volume, poor quality, limited variety, and restricted access?

Despite the benefits, digital platforms also pose risks to the proper functioning of the market. As presented in section 1, through the combination of network effects, multi-sided markets, strategical data collection, and the creation of complex ecosystems, digital platforms changed the economic nature and the competitive strategies of the affected markets, resetting the way dominant positions are held and abused.[84] The tools employed by public policies aimed at promoting competition must be sensitive to these characteristics, or they risk becoming ineffective. When it comes to promoting competition, the objective is the same: to distinguish between competitive and anticompetitive outcomes by studying the nature of demand, the characteristics of the technology that affect production and costs, mapping relevant regulations and understanding the strategy of the market players. The question is to define to what extent the available tools are sensitive enough to the peculiarities brought by digital platforms.

There is an increasing consensus, both in the academic community and among the public policy makers, that the traditional antitrust law is not up to this challenge.[85] In practice, merger control has been unable to attract relevant cases, and it does, the analytical tools do not seem to be enough to properly identify risks. The enforcement against anticompetitive practices has served as an escape valve for antitrust policy by introducing incremental innovations to the analytical tools, and recently, identifying competitive harm caused by practices that the traditional instruments failed to detect.[86] The speed of changes in technology markets contrasts, however, with the slow pace of the competition enforcement proceedings.

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[84] Hagiu, A., & Rothman, S. 2016. Network effects aren't enough. *Harvard business review*, *94*(4), 17.

[85] Morton et. al. (2019). Stigler Committee for the Study of Digital Platforms. Market Structure and Antitrust Subcommittee Report.

[86] Cabral, L., Haucap, J., Parker, G., Petropoulos, G., Valletti, T. M., & Van Alstyne, M. W. (2021). The EU digital markets act: a report from a panel of economic experts. *Publications Office of the European Union, Luxembourg*.

At the same time, both economic literature and regulatory practice are beginning to suggest that digital platforms may present contexts where competition is either unfeasible or inefficient, much like it once was (and in some cases still is) for numerous utility services.[87]

The analysis in this section involves two stages. The first identifies the specific challenges that digital platforms impose to the antirust instruments. Based on the Brazilian digital markets dynamics and on the submission to the Public Consultation, bottlenecks were identified in the application of antitrust regulations, both generally as well as in the Brazilian law, and in the Brazilian Competition System. The second, employing approaches complementary to traditional antitrust tools, maps the complexity that digital platforms have already assumed in the Brazilian economy and presents methods for identifying relevant variables for analyzing competitive dynamics involving these players.

2.1. Challenges faced by the antitrust tools

For decades, companies have created value through linear production chains. In a unidirectional dynamic, inputs are transformed along a linear supply chain until a good or service reaches the final consumer. In this model, companies manage supply chains in detail, often through complex, long-term contracts associated to vertical integration strategies. Often productive assets and innovation processes are proprietary and exclusive. Stakeholders have specific and distinct roles, with vertical relationships between suppliers, producers, distributors, and consumers, and horizontal relationships among competitors. The strategic variables are focused on cost leadership, market and product differentiation, development of internal and proprietary improvements, as well as the creation of barriers to entry and development of competitors.[88]

Digital platforms change this paradigm by introducing new ways of value creation that change interest variables and firm's strategic behavior. Fixed costs, like storage, computing, and software capabilities, that used to fall on individual companies, begin to be shared among all the network participants.[89] Platforms "invert" the company, shifting the source of value creation to outside the firm. They innovate and unlock new value sources by using assets of third parties (operational, human, financial, and technological) instead of internalizing them, moderating the value creation that occurs externally with the same care as they manage the value

[87] In these cases, as affirmed by Tirole, regulatory proposals range from structural interventions (forcing divestments), regulating them as if they were network public services, implementing stronger antitrust measures, or even industrial policies by having the government to provide alternative key services, such as artificial intelligence. The following sections are dedicated to the analysis of the matter in the Brazilian case. See Tirole, J. (2024). Competition and industrial policy in the 21st century. *Oxford Open Economics*, *3*(Supplement_1), i983-i1001.

[88] See Porter, M. E. Competitive Strategy: Techniques for Analyzing Industries and Competitors. New York: Free Press, 1980.

[89] Parker, G.G., Alstyne, M.W.V., & Choudary, S.P. 2016. Platform Revolution. How Networked Markets are Transforming the Economy and How to Make them Work for You. W. W. Norton & Company, Ney York.

they create internally. The agents involved have overlapping roles, floating between suppliers, producers, users, partners, and competitors, forming ecosystems of companies, individuals, goods and services linked by a digital technology, the platform. Price levels in a specific market lose their relationship with marginal costs, and the price structure among interconnected markets becomes more relevant.[90] Demand-side economies of scale combined with low marginal costs and significant economies of scope (based on the ability to leverage a captive user base) enable the creation of complex ecosystems. The governance of this ecosystem becomes the main strategic variable so that it can sustainably attract and support an increasing number of participants and interactions.

In a transforming context, it is necessary to adapt the antitrust analytical tools to the new economic reality. When implementing antitrust tools. The first step is the definition of relevant markets, an exercise whose value lies in understanding market dynamics. The purpose of this step has been to identify the set of products in a given geographic region that impose constraints on each other's prices (or on other dimensions of competition, such as quality and innovation).[91] In practice, the traditional tools which have applied this concept deal with, at least, two main problems. The first issue is related to the reliance on stylized models based on linear supply chains, which are helpful due to their simplicity but have limited explanatory power, leaving out many relevant factual characteristics.[92] Another issue lies in the focus on precision, which once again undermines explanatory capacity in favor of identifying finite and well-defined sets of products, companies, and market shares.[93] As a result, there is a simplification bias in market definition, not only in potentially overly narrow (or overly broad) product market definitions but especially in the dynamics between overlapping and interdependent sides and stakeholders.

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[90] See Shapiro, C., & Varian, H. R. (1999). Information Rules. A strategic guide to the network economy. Harvard Business School Press.

[91] Fernandes, V., & Sá, M. V. S. de. (2024). Adaptando as definições de mercado relevante nos mercados digitais: lições da experiência do CADE. *Revista De Direito Administrativo*, *283*(2), 93–120. https://doi.org/10.12660/rda.v283.2024.90080

[92] Variables associated to impacts of network effects and their management by the platform, multi-sided markets, and eventual overlapping of roles among different stakeholders do not belong to the traditional tools neither in Brazil nor in other countries. See, for example, Hovemkamp, H. (2024). The 2023 Merger Guidelines: Law, Fact, and Method. Review of Industrial Organization. Especially focused on demand characteristics, these tools evaluate the possibility for consumers to change their demands towards alternative products, taking functionalities, differentiation, and consumption behavior as the main starting points. Despite being part of the analytical tools, supply substitutability has less emphasis. See, for example, CADE (2016). Guia Para Análise de Atos de Concentração Horizontal, pp 16-17. When possible, the guidelines indicate the analysis of cross-price demand elasticities and variants of the hypothetical monopoly test, as the SSNIP. The SSNIP (*small but significant non-transitory increase in price*) is a particular case of the hypothetical monopoly test (TMH), focused on the identification of the profitability of the hypothetical monopolist, based on price rises. Depending on the market, this test needs to be adapted to consider other variables than the price, like quality, under the risk of not capturing properly the markets analyzed. However, in practice, variations are rarely applied. See Davis, P., & Garcés, E. (2010). Quantitative Techniques for Competition and Antitrust Analysis. Princeton University Press.

[93] The precise delimitation of the markets is related to the following analysis, of market power, and to the preponderance of specific models of conduct-structure-performance that associate market concentration to market power.

This approach may fail to capture both risks and efficiencies of digital platforms, risking the effective enforcement of competition law.[94]

Submissions to the public consultation highlight the challenges to define the relevant markets in the context of digital platforms. CADE itself, for instance, drawing from its case experience, highlights that applying concepts such as "relevant market", "dominant position", and "market foreclosure" has proven complex when dealing with data-driven business models, stressing the need to analyze non-price anticompetitive effects.[95] Meanwhile, Zeta pointed out that the concept of relevant market may be too narrow for digital markets, in where products and services can be offered in combined and vertically integrated ways, creating an ecosystem of products that are dependent on and exclusive to that operator.[96]

The failure to understand the competition dynamics, given the current limitations of the tools applied to relevant markets, hinders the identification of market power. Market power can be defined as the ability to alter the competitive equilibrium of variables in the relevant market (such as prices, quantities supplied, quality, and variety), resulting in inefficiencies. Here, the traditional antitrust tools rely on theories of conduct-structure-performance, and on theoretical models that directly relate market share to market power to provide indicators, even preliminary ones, of the presence of market power.[97] This strategy has some advantages, especially the provision of a safe harbor for both companies (legal certainty) and authorities (reduction of analytical complexities), indicating that below a certain market share it is unlikely that a company exercises market power.[98] On the other hand, there is a dependence on the relevant market definition, whose participation and concentration rates ultimately influence the remainder.[99]

The current analytical tools can result in excessive simplification in the face of the complex competitive dynamic of digital platforms, imposing important risks. The failure in considering these dynamics when defining the markets, identifying market power and analyzing competitive impacts can result in errors of Type 1 and Type 2: failing to recognize practices that may be harmful due to

[94] Neto, C. M. S. P., & Lancieri, F. (2020). Towards a layered approach to relevant markets in multi-sided transaction platforms. *Antitrust Law Journal*, *83*(2), 429-482.

[95] CADE's submission, 2024, pp. 23-24.

[96] Zetta's submission, 2024, pp. 7-8.

[97] Motta, M. (2004). *Competition Policy: Theory and Practice*. Cambridge University Press.

[98] For instance, in Brazil, concentrations that result in market shares below 20% are reviewed under fast-track procedures. Some HHI values indicate whether a market is low concentrated (HHI<1.500), moderately concentrated (1.500<HHI<2.500), or highly concentrated (HHI>2.500), creating analytical consequences both to repressive and preventive control.

[99] To these indicators are added qualitative variables generally focused on the dynamics of regular supply chains, that include the mapping of entry barriers to competitors with sunk costs, exclusive resources (for example, mineral sources, patents), economies of scale and scope, degree of vertical integration, rivalry and regulations, as well as the "direction" of eventual dominant position, whether in the purchase (upstream market) and/or in the sales (downstream market) of goods and services throughout the chain.

relationships between multiple sides, or condemning practices that are ineffective in a platform context, respectively.[100]

The relation between price and cost is more complex in multi-sided markets since indirect network effects create interdependence among the demands of the various sides of the platform.[101] This complexity increases with the number of interdependent sides and with the different competitive dynamics and multimarket contacts that competitors can show in each side.[102] Evans and Noel show that for bilateral platforms with positive externalities between the members of these groups, optimal prices depend on (1) the price elasticities of demand for both sides, (2) the nature and intensity of the indirect network effects between each side, and (3) the marginal costs that result from the output change of each side. An increase in the marginal cost of one side does not necessarily result in a price increase in that one side in comparison to the price of the other side. In addition, the price that maximizes the profit in one side can be lower to the marginal cost for one side, or even negative.[103]

Digital platforms altered the incentives, the feasibility, and the relevance of supply side substitution. Given the specificities of a business model with several sides and network effects, it can be easier to introduce a new service to an already established community than to develop a new community for a new service or product.[104] Platform providers that serve different sectors, but have overlapping user bases, can leverage economies of scale and scope and network effects through service packages and infrastructure and data sharing. In addition to the leverage of network effects of a specific community, the offering of services in the platform reduced significantly the costs and the time necessary for the entry into several markets through the sharing of assets, know-how, and costs. Therefore, even network effects that can often be the main entry barrier allow for the entry and development of competitors, which is not viable in the traditional economy.[105]

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[100] Evans, D. S., & Noel, M. D. (2007). Defining Markets that Involve Multi-Sided Platform Businesses: An Empirical Framework with an Application to Google's Purchase of DoubleClick, http://dx.doi.org/10.2139/ssrn.1027933

[101] The specification of demand greatly affects the results of the analyses. For example, in linear demand models, products with a zero price have an elasticity of zero, as if demand no longer responds to market changes. This is a common situation in digital platforms but rare in traditional markets. Log-linear demand can address this issue, as demand can vary even when the price is zero. However, log-linear models assume that demand elasticity is constant along the entire demand curve, which is a strong assumption as elasticity often varies with the price level. See Davis, P., & Garcés, E. (2010). Quantitative Techniques for Competition and Antitrust Analysis. Princeton University Press.

[102] Evans, D. S. (2003). The antitrust economics of multi-sided platform markets. *Yale J. on Reg.*, *20*, 325.

[103] Evans, D. S., & Noel, M. D. (2007). Defining Markets that Involve Multi-Sided Platform Businesses: An Empirical Framework with an Application to Google's Purchase of DoubleClick, http://dx.doi.org/10.2139/ssrn.1027933

Eisenmann, T., Parker, G., & Van Alstyne, M. (2011). Platform envelopment. *Strategic management journal*, *32*(12), 1270-1285.

[105] Cusumano, M.A., Gawer, A., & Yoffie, D.B. (2019). The Business of Platforms. Strategy in the Age of Digital Competition, Innovation, and Power. HarperCollins Publishers.

The network effects are exacerbated because the digital platforms usually evolve into complex ecosystems, connecting digital services and multiple multi-sided markets. These ecosystems provide access to a greater variety of data, allowing the operator to combine different types and sources to develop new products. The integration of different products in an ecosystem also creates network effects in the whole ecosystem, beyond two-sided markets, and increases the probability of user lock-in effects. This dynamic exceeds relevant traditional markets and needs more than an adaptation to capture cross elasticities of demand between the sides of a platform. Therefore, complex ecosystems bring new challenges for the analyses of competitive dynamics.

Considering the technological dynamic and the business models, markets can quickly shift from contestable to (1) dominated by key platforms or (2) dominated by complex ecosystems. As the World Bank shows, understanding at which stage a given market and its respective digital platforms are is essential to determine whether a government intervention is necessary and, if so, which strategies would be most appropriate. When the platforms become dominant, the risks tend to be more related to the exploitation of users (individual consumers, entrepreneurs, and companies) and exclusionary practices. Mergers can be focused on expanding market power, for instance, through the acquisition of potential competitors or acquisitions in adjacent markets. When complex and dominant ecosystems emerge, the risks are more related to actions aimed at leveraging market power across multiple markets and excluding rivals or innovative players.[106]

2.1.2. Merger control

As network effects and innovation drive structural changes in markets, mergers increasingly become a means through which companies enter and establish market power in adjacent markets. Platforms in different stages—entrants, dominants in a market or parts of a complex ecosystem—can use mergers as a strategy to limit contestability and expand market power. In this context, the task of reviewing and identifying potentially anticompetitive mergers becomes more complex given the characteristics of digital platforms.

Three factors stand out that make merger control more challenging when it involves digital platforms. First, even when the acquiring company is a dominant player, the transaction often bypasses competition authorities' scrutiny because startups, typically the target company, do not generate sufficient revenue to exceed

[106] World Bank (Forthcoming). Competition policy for the digital economy: New rules shaping competition in digital platform markets.

the legal notification threshold.[107] Second, given the rapid changes and frequent competition for the market in the information economy (sequential monopolies),[108] it is necessary to develop more complex theories of harm based on dynamic competition, since many of the acquisitions involve nascent companies.[109] Third, non-horizontal theories of harm, especially for ecosystems (where the acquirer and the target are in different markets), become more relevant. On this topic, CADE recently launched a study discussing conglomerate mergers and their relationship with digital platforms, in addition to non-horizontal merger guidelines,[110] but little has been implemented so far.[111]

In this context, submissions to the Public Consultation pointed out that the turnover-based criteria would be ineffective in capturing potentially problematic acquisitions in the digital economy. In its submission, Sleeping Giants emphasized that turnover criteria have become obsolete in the digital economy, which is primarily driven by data and network effects.[112] EFF highlighted that the current framework focuses on business volume, resulting in acquisitions of new market participants by established companies typically falling outside the scope of *ex ante* analysis. While *ex post* analysis of these transactions is possible (through enforcement of Article 88, Paragraph 7 of Law No. 12,529/2011 or monitoring practices), they indicate that CADE usually does not apply structural remedies to such mergers.[113] ABERT highlighted that the time limitation of Article 88, Paragraph 7, which is restricted to one year after deal consummation.[114] Other

[107] According to a study published by CADE, the Brazilian antitrust authority "dealt with a limited number of mergers involving digital platform ecosystems, since the most important cases in other jurisdictions (such as Facebook/Whatsapp, Facebook/Instagram, Google/Waze, and Apple/Shazam) were not notified in Brazil. In addition, in the few cases in which the Brazilian antitrust authority discussed the topic, the analysis of conglomerate effects was mentioned, especially regarding summary mergers (such as in the Microsoft/LinkedIn, Magalu/Hub, Magalu/Kabum, and Hortigil/Americanas cases)" (free translation). CADE. Fusões Conglomerais: Teorias do Dano e CADE'S CASE LAW entre 2012 e 2022. Working Paper 006/2023, p. 17. See also Pires-Alves, C. C., Gonzalo, M., & Lyra, M. P. D. O. (2019). Startups and young innovative firms' mergers & acquisitions: an antitrust debate? Lessons from the ICT tecno-economic paradigm. *Revista de Economia Contemporânea*, *23*(02), e192324.

[108] See Shapiro, C., & Varian, H. R. (1999). Information Rules. A strategic guide to the network economy. Harvard Business School Press.

[109] The theory of harm called "killer acquisitions" come out in this context, where a company acquires a potential competitor to discontinue or slow down their products in the initial stages. See Pike, C. (2020). Start-ups, Killer Acquisitions and Merger Control. OECD Competition Papers, http://dx.doi.org/10.2139/ssrn.3597964

[110] CADE recently launched the *'Guia V+',* with guidelines for non-horizontal merger reviews, which is an important step towards the capacity of reviewing complex cases involving digital platforms. However, the document focuses on the dynamics of regular supply chains, so it does not address most of the challenges mentioned so far, even though it makes references to network economies, multi-sided markets, and ecosystems. See CADE (2024). Guia V+. Guia de Análise de Atos de Concentração Não-Horizontais.

[111] Resende, G. M, Fernandes, V. O., Barcelos, I. O. G. (2023). Fusões Conglomerais: Teorias do Dano e CADE'S CASE LAW entre 2012 e 2022. CADE, Working Paper 006/2023.

[112] Sleeping Giants Brasil's submission, 2024, p. 9.

[113] Sleeping Giants Brasil's submission, 2024, p. 7.

[114] ABERT's submission, 2024, p. 22.

submissions, including those from Idec and Telcomp, argued that despite the availability of *ex post* review of mergers, the instrument is seldom used by CADE.[115]

Submissions to the Public Consultation also identified limitations in merger control procedures. Some submissions noted a strategy employed by controlling companies of major platforms in acquiring current, nascent, or potential competitors.[116] EFF emphasized that a key characteristic of major platforms' vertical acquisitions is the pursuit of large quantities of consumer data, a situation warranting more thorough scrutiny.[117] Meanwhile, CTS/FGV indicated that the analyses of conglomerate effects in startup and small business acquisitions.[118]

In a context of incomplete legal tools, the global economy has been experiencing consolidation process in several sectors.[119] According to the World Bank, the biggest companies in the world have been leading this movement, including those related to artificial intelligence.[120] For instance, according to GAFAM Empire, Alphabet, Amazon, Meta, Apple e Microsoft acquired at least 1,210 companies in the world between 1987 and 2022, with more than 90% of those acquisitions happening after 2010 covering a great variety of sectors (including publicity, e-commerce, education, energy, entertainment, social media and streaming, food, games, health assistance, IT security, robotics and electronics) and technologies (virtual reality, software, hardware, artificial intelligence, big data analysis, cloud computing, biotechnology, and georeferencing). [121] Among the 151 merger cases compiled by the World Bank in 44 jurisdictions, 8% were blocked and 28% were cleared with conditions.[122] In Brazil, between 1995 and 2023, at least 233 mergers related to digital platforms were analyzed by CADE, with 84% of them

[115] Idec's submission, 2024, p. 13; Telcomp's submission, 2024, p. 16-17.

[116] Idec's submission, 2024, p. 48.

[117] Sleeping Giants Brasil's submission, 2024, p. 6.

[118] CTS/FGV's submission, 2024, s.p.

[119] Cabral, L., Haucap, J., Parker, G., Petropoulos, G., Valletti, T., and Van Alstyne, M., (2021) The EU Digital Markets Act, *Publications Office of the European Union*, Luxembourg, 2021, ISBN 978-92-76-29788-8, doi:10.2760/139337, JRC122910. OECD (2023), "Theories of Harm for Digital Mergers", *OECD Roundtables on Competition Policy Papers*, No. 293, OECD Publishing, Paris, https://doi.org/10.1787/0099737e-en.

[120] World Bank (2021) Antitrust and Digital Platforms: An analysis of global patterns and approaches by competition authorities. EFI Insight-Trade, Investment and Competitiveness. Washington, DC.

[121] GAFAM Empire, project developed by DensityDesign, available at https://gafam.theglassroom.org, retrieved on 26/07/2024.

[122] World Bank (Forthcoming). Competition policy for the digital economy: New rules shaping competition in digital platform markets. See also World Bank (2022, September). The Global Markets Competition and Technology Digital Antitrust Database, https://dataviz.worldbank.org/views/Global-Digital-Antitrust-Database/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y.

reviewed under a fast-tracked procedure. All were approved by CADE, three of them were cleared with conditions.[123]

2.1.3. Anticompetitive practices

According to the World Bank (2021), several practices can be associated to market structure, management, and monetization characteristics and the relationship among the several sides of digital platforms.[124] For instance, and always in the presence of sufficient entry barriers, self-preferencing practices can be very concerning in vertical platforms, in which the privileged access to the data of competitors and multi-homing restrictions are present. At the same time, tying or bundling requires attention in platforms that have strong network effects and complex ecosystems that are leveraged to other sectors. Exclusivity agreements and price parity clauses outside or inside the platform are relevant when the business model depends on the attraction and retention of strategic and different service providers. In addition, collusion conducts can appear more clearly when the platforms are responsible for the definition of prices, as well as eventual price abuses which can happen when there is a significant disparity between the demand elasticities of the different sides of a platform. Finally, business models that rely on large proprietary and historical datasets as a competitive advantage for offering services (such as digital ads) require attention regarding the collection and use of third-party data, including from competitors.

Submissions to the Public Consultation mentioned examples of anticompetitive practices that may occur in digital markets. CADE highlighted the existence of exclusivity practices, product tying and bundling, self-preferencing, and competition-restrictive terms of use. Specifically, CADE mentioned the pre-installation of applications on mobile operating systems, forced bundling of social network services with e-commerce advertisements, manipulation of online search rankings and app store distribution, creation of interoperability barriers, imposition of abusive terms and conditions in app distribution stores, use of third-party data to calibrate platform's own product offerings, as well as excessive data collection and use of such data across different businesses within the same economic group.[125] Idec argued that restrictions on data sharing and portability may be related to various anticompetitive practices, such as (1) denial of access to an essential facility; (2) tying arrangements; and (3) refusal to deal.[126]

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[123] In two of these merger agreements, the Office of the Superintendent General at CADE, responsible for the production of evidence, argued for the clearance without restrictions. See CADE (2023). Mercados de Plataformas Digitais. Versão Revista e Atualizada. Cadernos do Cade, https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/cadernos-do-cade/Caderno_Plataformas-Digitais_Atualizado_29.08.pdf.

[124] World Bank (2021) Antitrust and Digital Platforms: An analysis of global patterns and approaches by competition authorities. EFI Insight-Trade, Investment and Competitiveness. Washington, DC.

[125] CADE's submission, 2024, p. 11, 16.

[126] Idec's submission, 2024, p. 26.

They also asserted that vertically integrated platforms leverage their power in adjacent markets, discriminating against competitors and business partners, thereby abusing their economic power and harming competition.[127] ANATEL highlighted the exploitation of behavioral biases for market manipulation, specifically citing salience and default biases.[128]

The growing number of antitrust cases involving digital platforms in the world is a sign of the increase in the concerns about anticompetitive market dynamics associated with their presence**.** According to the World Bank, as of September 2022, at least 133 conduct cases had been decided by competition authorities in 40 different jurisdictions.[129] In this sample, the antitrust authorities found violations in the majority of the cases. Misconduct was found more frequently in high income economies (71% in high income economies versus 63% in middle income economies), which indicates that low-income jurisdictions can face more difficulties to find and present evidence in its cases. In Brazil, CADE data indicates that at least 23 conduct cases involving platforms had been initiated by 2023, with 3 Conduct Cessation Agreements (TCCs) signed, 11 cases dismissed, and 9 still ongoing.[130]

For antitrust tools to effectively address these complexities, a series of adjustments is necessary. In addition to the previously discussed adaptations for identifying the markets involved, it is necessary to consider and incorporate into the analytical toolkit the potential competitive impacts of typical platform strategies, particularly variables related to managing network effects, as well as access rules, quality, privacy, interoperability, pricing structure, and the collection, use, and processing of data. This approach will enable the updating of theories of harm based on these strategies, including considering the significant overlap of roles among stakeholders, as opposed to the classic analyses of linear production chains with distinct upstream and downstream agents and fixed roles for suppliers, distributors, consumers, and competitors.

2.1.4. Promotion of efficiency in the absence of competitive pressure

The promotion of competition is part of a broader policy agenda.[131] A diligent antitrust policy—with proper rules and practices, independent institutions, and sufficient resources—is necessary for an effective antitrust policy. However, it is not enough. Antitrust policy is focused on identifying, sanctioning, and deterring

[127] Idec's submission, 2024, p. 22.

[128] Anatel's submission, 2024, p. 4.

[129] World Bank (2022, September). The Global Markets Competition and Technology Digital Antitrust Database, https://dataviz.worldbank.org/views/Global-Digital-Antitrust-Database/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y.

[130] See CADE. Mercados de Plataformas Digitais. Versão Revista e Atualizada. Cadernos do Cade. Agosto/2023. Available at https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/cadernos-do-cade/Caderno_Plataformas-Digitais_Atualizado_29.08.pdf.

[131] Falco, G. A. (2017). Para além do antitruste: a necessidade de um novo paradigma para a política de concorrência no Brasil. *Revista Do IBRAC*, *23*(2), 40–63.

anticompetitive impacts arising from (i) changes in market structures (structural control) and (ii) anticompetitive strategies (conduct control) implemented by market agents in specific cases. By definition, traditional antitrust policy does not address some of the fundamental obstacles to competition, particularly barriers created by the economic nature of certain markets, which shape competitive dynamics beyond the specific strategies typically analyzed in competition administrative proceedings.

Depending on the intrinsic characteristics of the industry, competitive dynamics may be insufficient or unfeasible, making mere antitrust intervention inadequate to promote efficiency and productivity. The most evident example where market competition is not viable or efficient, for economic reasons, is the existence of natural monopolies (economies of scale with cost subadditivity).[132] In these cases, it is necessary to have *ex ante* mechanisms capable of increasing market contestability and, even more important, driving efficiency when there is not enough competitive pressure.[133] In the context of digital platforms, both the economic literature and the regulatory practice are beginning to indicate that these business models may present cases, albeit for different reasons, where competition may be unviable or insufficient, much like it once was (and in some cases still is) in numerous public network infrastructure services.[134]

In the case of digital platforms, the sectors that are prone to dynamics such as "the winner takes all or most" and creation of complex ecosystems deserve more attention. The international community is still discussing these concepts, but in general terms the regulator should focus on sectors with strong network effects, high fixed costs, prevalence of third party's data use and collection and economies of scope, especially when they lead to the creation of complex ecosystems (one or more platforms offering multiple digital services).[135]

In these cases, *ex ante* regulation is necessary to promote contestability, preserve competition in adjacent markets, and create incentives for the efficient management of ecosystems. Especially in cases where key platforms have not yet 'tipped' markets, or complex ecosystems led by specific economic groups have not yet prevailed, ex-ante regulation can promote contestability. Through measures such as interoperability, data sharing, portability, and clarity in terms and conditions of use, for example, regulation can reduce switching costs and

[132] It is worth noting that the condition of natural monopoly is not static, as it changes with the technology available to achieve economies of scale. Precisely at moments of inflection, one of the main challenges is to differentiate market segments that require deep interventions affecting prices and quantities from those that need moderate or light interference to allow competition to flourish, such as the imposition of access and interoperability rules..

[133] Stiglitz, J. E., & Rosengard, J. K. (2015) Economics of the Public Sector. W. W. Norton & Company, Fourth Edition. 960p.

[134] Morton et. al. Stigler Committee for the Study of Digital Platforms. Market Structure and Antitrust Subcommittee Report. 2019.

[135] European Commission. Commission Staff Working Document Impact Assessment Report Accompanying the document Proposal for a Regulation of The European Parliament and of The Council on contestable and fair markets in the digital sector (Digital Markets Act). SWD/2020/363 final. 2020.

facilitate entry and innovation, maintaining competitive pressure. On the other hand, in contexts where a key platform or complex ecosystems have already become entrenched, ex-ante regulation can establish rules both to preserve competition in adjacent markets, preventing anticompetitive leveraging of network effects, and to mitigate opportunistic behaviors and abuses of market power in ecosystem management, avoiding discrimination against competitors and exploitation of stakeholders, thereby addressing the lack of competitive pressure in and for the market.

Also significant, delays in the conclusion of antitrust investigations have been pointed as a significant obstacle to the prevention, punishment, and correction of anticompetitive practices in digital markets.[136] The complexity of these markets, characterized by fast development, information asymmetries, and complex interdependence between services and stakeholders, makes it even more difficult to create and monitor corrective measures. Investigations can take years during which the harmful effects of the anticompetitive conduct may become irreversible.[137] In Brazil, there is also evidence of high costs, both for antitrust authorities and agents involved in investigations, in applying traditional antitrust law to digital markets. cases decided by CADE in these markets required lengthy investigations and repeated information-gathering efforts, such as issuing multiple requests for information and conducting internal studies with support from the Department of Economic Studies.[138] These variables alone warrant discussions about the need to consider regulatory alternatives for promoting competition in these sectors.

Several Public Consultation submissions indicated challenges in interventions promoting competition within markets with platforms and characterized by high entry barriers. TIM emphasized that remedies available to CADE would be limited, as the antitrust authority lacks the ability to impose specific behavioral rules generically to a set of agents, unless arising from a concrete case through sanctions or restrictions on mergers subject to its approval. Such a measure would be important to reduce barriers and promote competition.[139] Proteste highlighted that there are market characteristics and structures in which specific digital platforms are inserted that give few players gatekeeper powers.[140] This would generate

[136] European Commission. Commission Staff Working Document Impact Assessment Report Accompanying the document Proposal for a Regulation of The European Parliament and of The Council on contestable and fair markets in the digital sector (Digital Markets Act). SWD/2020/363 final. 2020.

[137] Pereira Neto, C. M. S., Pastore, R. F., & Paixão, R. (2022). Competition Law Enforcement in Digital Markets: The Brazilian Perspective on Unilateral Conducts. *The Antitrust Bulletin*, 67(4), 622-641. On the timeline of the Google Search decision, see da Silveira, P. B., & Fernandes, V. O. (2019). Google Shopping in Brazil: Highlights of CADE's Decision and Takeaways for Digital Economy Issues. *Concurrences e-Bulletin*.

[138] Pereira Neto, C. M. S., Pastore, R. F., & Paixão, R. (2022). Competition Law Enforcement in Digital Markets: The Brazilian Perspective on Unilateral Conducts. *The Antitrust Bulletin*, *67*(4), 622-641.

[139] TIM's submission, 2024, p. 3.

[140] Regarding the access to essential room for the creation of a great number and variety of transactions, according to the definition of gatekeeper given by Proteste.

incentives and capacity for proliferation of anticompetitive conduct with drastic, rapid, and permanent effects, potentially causing a lock-in effect that would entrench a particular agent's position. In this scenario, according to Proteste, the costs of a false negative in evaluating possible infractions would be increased, given the relative slowness of antitrust authorities' action.[141] Similarly, Mercado Livre highlighted that in markets where competition has already "tipped," and a player's market position has become entrenched, ex post intervention by antitrust authorities may be ineffective in restoring or promoting competition.[142]

As highlighted by CADE in its Public Consultation submission, in markets with pronounced network effects, offering superior or cheaper service does not guarantee a new competitor's success. User migration is hindered by the lock-in effect, making it difficult to replace dominant platforms, even when superior alternatives exist.[143] Such dynamics intensify established companies' market power, making it difficult for new competitors to enter. ANATEL, in its Public Consultation submission, highlighted the existence of this phenomenon in markets where digital platforms operate, exemplifying "winner takes all" or "winner takes most" dynamics, where competition shifts from 'within the market' to competition 'for the market itself.'[144]

Many submissions to the Public Consultation emphasized the need for swifter responses to anticompetitive conduct, highlighting the high cost of conducting antitrust investigations involving digital markets. Significantly, CADE's submission indicated that investigations of dominant position in digital markets can extend for many years. Regarding European experience, reports indicate that investigations of abuse of dominant position also consume excessive resources.[145] Match Group, in turn, stated that competition defense laws only allow authorities to respond to risks and concerns after they have materialized, when substantial and irremediable damage may already exist.[146] Proteste's submission emphasized that complexity tends to be greater in the case of digital platforms, as there is very little accumulated experience to guide investigations.[147] TIM further mentioned there is a profound information asymmetry between the platforms and the antitrust authorities, such that the authority does not know in detail how platforms operate.[148] In this regard, CAF stated there is a long history of antitrust investigations where companies mobilize resources to delay authorities' decisions and solution

[141] Proteste's submission, 2024, p. 23.

[142] Mercado Livre's submission, 2024, p. 27.

[143] CADE's submission, 2024, p. 11-12.

[144] Anatel's submission, 2024, p. 2.

[145] CADE's submission, 2024, p. 24 and 28.

[146] Match Group's submission, 2024, p. 7.

[147] Proteste's submission, 2024, p. 22-23.

[148] TIM's submission, 2024, p. 3.

implementation, to the detriment of competitors and consumers.[149] Finally, ABERT claimed that the antitrust authorities have several limitations to conduct investigations within short timeframes, such as budget and human resources constraints, in addition to difficulties to collect and review large amounts of information and documents.[150]

Designing and monitoring corrective measures within the traditional antitrust framework can be complex and difficult to implement, given technical challenges in designing remedies for digital markets. CADE stated that the complexity of designing effective behavioral or structural remedies is even greater when involving issues such as "access to data, interoperability standards, and portability". Such remedies would require "expert technical knowledge, so they could be difficult to monitor and require constant updating due to fast technological changes that happen in digital market" (free translation).[151] Regarding the creation of remedies in the context of interim measures and agreements currently at the disposal of the Brazilian authority, CADE highlighted that the usage of these tools require a case-by-case approach. Also, it would be challenging to create remedies, enforce and monitor them.[152]

Beyond technical difficulties, Public Consultation submissions also highlighted challenges arising from the possible scope of antitrust remedies. Idec considered that antitrust remedies in digital market cases would be marked by low effectiveness when analyzing international and Brazilian experience.[153] Similarly, Match Group emphasized that antitrust cases, being time-consuming and difficult, typically involve narrow approaches to deal with limited aspects of a company's conduct, potentially resulting in limited effectiveness of the imposed remedy, which would be circumscribed. Some submissions highlighted that many remedies imposed by antitrust authorities would be merely cease-and-desist orders, insufficient to correct effects already consolidated in the market. Beyond design, implementation, and monitoring, Match Group highlighted that antitrust authorities tend not to review negotiated or imposed solutions over time, which can be especially important in a sector characterized by rapid evolution.[154]

[149] CAF's submission, 2024, p. 2.

[150] Abert's submission, 2024, p. 7.

[151] CADE's submission, 2024, p. 24-25.

[152] CADE's submission, 2024, p. 30.

[153] Idec's submission, 2024, p. 4.

[154] Match Group's submission, 2024, p. 6.

2.2. Mapping ecosystems and networks of digital platforms in Brazil

After presenting an overview of the national companies operating digital platforms (introduction), the economic foundations of digital platforms (section 1), and the challenges for implementing public policies to promote competition (section 2.1), we now shift focus to investigating how digital platforms operate in Brazil. This section aims to explore the stage of development of some of the main platforms operating in the country and how their ecosystems are structured. Even without the intention of conducting market competition investigations—which falls outside the scope of this report—it is possible to apply alternative approaches to traditional antitrust tools to study the competitive dynamics of platforms in national markets.

Two complementary approaches are implemented to analyze the competitive complexity of the platforms in the Brazilian economy. The first approach uses the business models of different platforms, particularly their monetization strategies, as a fundamental basis for understanding competitive dynamics. This exercise allows for investigating how demand and supply on different sides are interconnected, as well as shedding light on strategic variables that influence the magnitude and management of network effects. The second approach maps the network formed by the services and the companies surrounding the main platforms operating in the country. This network mapping enables the identification of how services and economic groups interact within the Brazilian economy beyond monetization strategies, providing further insights into the magnitude of network effects, multimarket contact dynamics among companies, and indicia regarding the extent of economies of scope, supply-side substitutability, and the formation of complex ecosystems.

2.2.1 Business models and monetization strategies in digital platforms in the Brazilian economy: digital advertising

The analysis of the business models behind various digital platforms allows for identifying patterns of organization and behavior that go beyond the classic analysis of the relevant market, highlighting interrelated sides and services. Aggregating sectors by monetization strategies—instead of product features or production technologies —can improve the understanding of competitive dynamics.[155] Morton et. al identified three basic patterns of platform organization, the ones monetized by (1) digital advertising, (2) access fees, or (3) transaction fees:[156]

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[155] Morton, F. S., Etro, F., Latham, O., Caffarra, C. (2020, June). Designing regulation for digital platforms: Why economists need to work on business models. Centre for Economic Policy Research (CEPR), https://cepr.org/voxeu/columns/designing-regulation-digital-platforms-why-economists-need-work-business-models.

[156] In concrete cases, factual complexities can often lead to overlaps between these strategies, with platforms monetizing through multiple approaches. However, the simplification provided by case stylization aids the proposed analysis.

- Several types of free costumer services are monetized through ads or collection and usage of user data. Social media, search engines, advertising-based video on demand (AVoD), apps, and browsers are examples;[157]
- In the other extreme, there are the physical or digital device-centric platforms, such as smartphones or operating systems, which values is generated by the presence of a set of desirable complementary services and which monetization happens through access fees charged to the consumer, may they be prices of devices, single-use fees or subscriptions. Operational systems, mobile devices, and subscription or on-demand video platforms are the main examples.
- Finally, there are transaction platforms in which technology is used to reduce transaction costs and increase the trust between the parties in a transaction. Often, they are services or goods that used to be negotiated offline and widely, and the digital platform offers a more efficient alternative to the parties, charging an intermediation fee. Financial services, retail, passenger transportation, delivery, tourism, and real estate services are examples.

In this report, platforms monetized through digital advertising will serve as an illustration of the benefits that this approach—broader compared to the identification of relevant antitrust markets—brings to understanding competitive dynamics involving digital platforms. This choice is based on several factors. First, platforms monetized through digital advertising involve a complex range of services that sometimes complement and sometimes compete with each other, while also potentially serving as distribution channels, consumers, or suppliers for one another.[158] Second, many of the services associated to these platforms are characterized by the "winner takes all or most" dynamics with dominant players in all the sides involved.[159] Finally, these platforms have been the target of market studies and antitrust investigations around the world, which results show complex competitive dynamics that imposes both analytical challenges and competition risks.[160]

Submissions to the Public Consultation raised numerous concerns regarding platforms related to digital advertising. Among the submissions, those highlighting that market concentration in social media and search engine services

[157] Here, the reference is solely to advertising-based video on demand (AVoD). See ANCINE (2022). Panorama de Vídeo por Demand no BRAZIL, https://www.gov.br/ancine/pt-br/oca/publicacoes/arquivos.pdf/informe-vod2022.pdf.

[158] See Competition and Markets Authority (2020). Online platforms and digital advertising. Market study final report, https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf.

[159] See Competition and Markets Authority (2020). Online platforms and digital advertising. Market study final report, https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf.

[160] World Bank (Forthcoming). Competition policy for the digital economy: New rules shaping competition in digital platform markets. See also World Bank (2022, September). The Global Markets Competition and Technology Digital Antitrust Database, https://dataviz.worldbank.org/views/Global-Digital-Antitrust-Database/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y.

would have negative impacts on the digital advertising ecosystem were particularly noteworthy. For instance, Sleeping Giants emphasized that search engine and social media services in Brazil are characterized by low interoperability, and that platforms use their dominant position to accumulate and process vast amounts of user data.[161] EFF highlighted concerns regarding vertical relations in the ad-tech services related to programmatic advertising.[162]

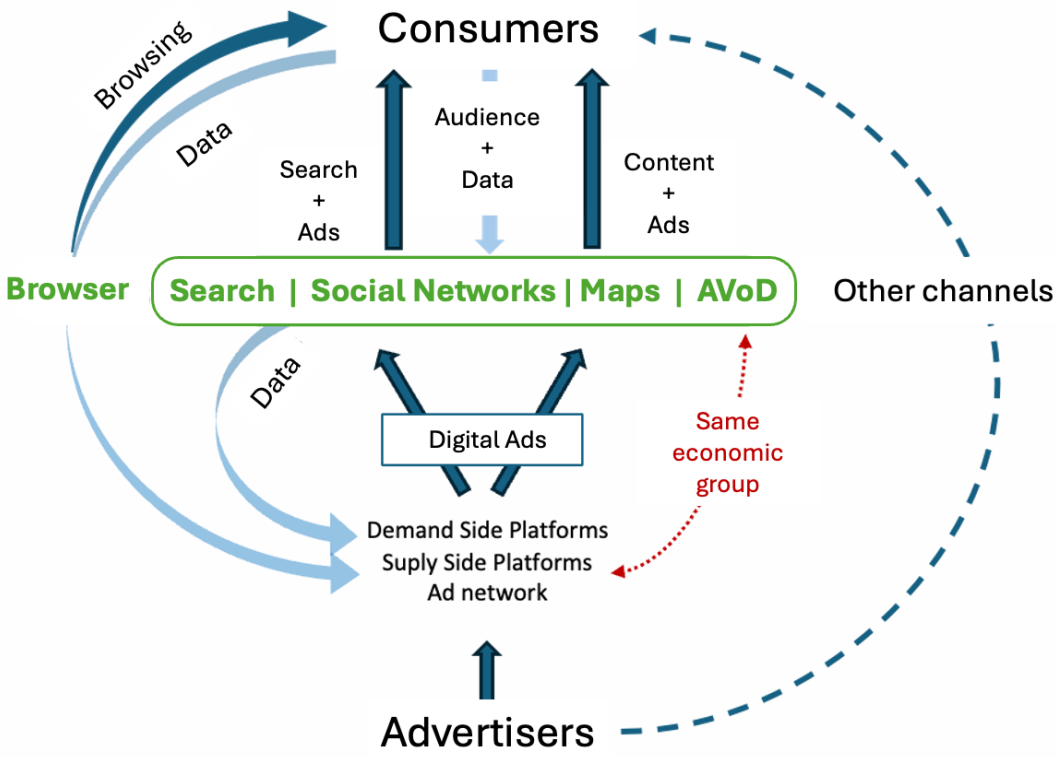
It is important to understand how these platforms are organized in order to map more effectively the Brazilian context. The competitive dynamic in these platforms is marked by the "eyeball economy" in which several services are offered, usually for free and open access, with the objective of holding the attention of consumers for the longest time possible while collecting valuable data along the way. In contrast, the providers monetize the attention, and the data obtained through the sale of advertising space. On the subsidized side of the platform, various types of services can be offered to users, such as social networks, online searches, maps, and AVoD. Depending on the range of services offered by the companies and platforms involved, other services, such as browsers or email, may also be provided to facilitate user access, enhance loyalty, and collect their data to support 'profit center' services focused on advertising sales. On the advertising sales side, these services may present themselves in a more or less overlapping manner, such as in the offering of video advertising.[163] Also important is the adjacent segment of digital advertising technical services, which is distinct from providing advertising space or offering content or functionalities. It involves the management of so-called programmatic media. These are services such as supply-side platforms (SSPs) and demand-side platforms (DSPs) for the automated buying and selling of online advertising space through electronic auctions conducted on ad exchange platforms. This overlapping group of services and stakeholders forms a complex ecosystem around digital advertising (**Figure 8Figure**).

[161] Sleeping Giants's submission, 2024, p. 6.

[162] EFF's submission, 2024, p. 4.

[163] See UNITED STATES OF AMERICA et al., v. GOOGLE LLC, Case No. 20-cv-3010 (APM); STATE OF COLORADO et al., v. GOOGLE LLC, Case No. 20-cv-3715 (APM), MEMORANDUM OPINION.

Figure 8. Complex ecosystem of platforms monetized by digital advertisement



Source: Elaborated by the authors.

As illustrated by Figure 8, it is a complex sector. The services involved show countless overlapping and interdependent layers. Therefore, the main digital platforms are, at the same time, relevant publishers (search engines, social media, VoD, maps) and relevant players in the programmatic media chain (DSP, SSP, and Ad networks). Although Figure 8 does not explore it, browsers, operational systems, telecom companies, and manufacturers of mobile devices are important access channels to users, and, in many cases, are offered by the same economic groups.[164]

The competitive dynamic on each of the sides of an ecosystem interferes with the players' capacity to gain and exercise market power. Each service highlighted can show different competitive dynamics, some are composed by multiple providers more or less integrated (such as the publisher side), others are characterized by the lack or the low number of direct substitutes (such as search engines and browsers). The programmatic advertising sector, on the other hand, is an important gateway to digital advertising. Big economic groups that operate vertically can have access to advertising data and inventory that hinder the development (entry) of less diversified players.

[164] See UNITED STATES OF AMERICA et al., v. GOOGLE LLC, Case No. 20-cv-3010 (APM); STATE OF COLORADO et al., v. GOOGLE LLC, Case No. 20-cv-3715 (APM), MEMORANDUM OPINION.

The browser segment shows a "winner takes all or most" dynamic, with sequential leadership substitutions and correlation with the performance of linked operational systems. The growth of Google Chrome over the past decade, for example, is associated with the rise of the Android system and the use of mobile devices, contrasting with the decline in market share of the personal computer operating system led by Microsoft Windows and its Internet Explorer.[165] Google Chrome leads the Brazilian market with 75% of market share, their average in the world is 65%. Safari is the second most relevant with 9% of market share, followed by Microsoft Edge, Opera, Firefox, and Samsung.[166] Much of the value of these services is associated with the collection of user data to serve as input for the provision of various services, as well as being one of the main gateways to digital users, potentially leveraging other services through default strategies and the integration of functionalities with other platforms and services.[167]

The search engine segment also shows "winner takes all or most" dynamics. In this sector, Google also has a dominant position in the world, especially in Brazil, reaching 95% of market share.[168] The Google search page is the most visited website in Brazil. In October 2024, for instance, it ranked first among the most visited sites in the country. YouTube, owned by the same economic group, ranked second, followed by WhatsApp in third place. The fourth position was occupied by globo.com. Although there are specialized search engines that offer targeted searches—including the so-called specialized vertical providers (SVPs), such as marketplace, tourism, and real state platforms—there are no options of services with the same type of general search engines.[169] At the same time, the capacity to link advertisements to specific text searches greatly increases the likelihood of conversion and positions the service as hardly substitutable, although it can be complemented by other digital advertising strategies. In this regard, search services are also a significant source of detailed data collection on user consumption preferences. This data can be used to offer a wide variety of services and products, enhancing economies of scale and scope. Finally, there is a natural tendency toward the emergence of vertical integration dynamics, as any other type of service provided by the economic group controlling the general search engine will appear in search results alongside direct competitors, raising concerns about discrimination

[165] See Statista and statcounter.com, "Global market share held by leading internet browsers from January 2012 to August 2024".

[166] See DataRePortal (2024). Digital 2024 April Global Statshot Report; DataRePortal (2024). Digital 2024 Brazil.

[167] In addition to browsers and mobile devices, operational systems are also considered key vectors in the distribution of digital services, and defaults, preferences, or exclusivity in this context can have a competitive negative effect. See Competition and Markets Authority (2020). Online platforms and digital advertising. Market study final report, pp 101 e ss, https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf.

[168] See DataRePortal (2024). Digital 2024 April Global Statshot Report; DataRePortal (2024). Digital 2024 Brazil.

[169] Competition and Markets Authority (2020). Online platforms and digital advertising. Market study final report, pp 87 and ss. Available at: https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf.

and self-preferencing. Therefore, special attention is given to the potential anticompetitive nature of certain behaviors involving search engines.[170]

Compared to browsers and search engines, social media shows more diversification and evidence of active multi-homing. Worldwide, no relevant social media has achieved even 1% of exclusive users.[171] In Brazil, the use is also dispersed. There is an average of 8 platforms used per person per month, against 6,5 platforms per month in the global average. Brazilians are also the users that spend more time in social media, surpassing three and a half hours per day—80% above the global average. However, this does not mean that there are no dominant groups. Even with a strong multi-homing and massive use of these services by the Brazilians, there are players with significant market participation. Meta and Google services are the most used. Youtube, Whatsapp, Instagram, and Facebook are among the ten most visited websites in the country, reaching between 70% to 90% of the Brazilian internet users.[172] ByteDance (TikTok), X (Twitter), Threads, Telegram, and Kwai are also popular, in addition to Microsoft's specialized services such as Linkedin and Twitch.[173] In the social media sector, it is important to highlight that there is a significant overlap in features, user groups, and substitutability of VoD services, communication without a phone number and social media itself.[174] In an analysis guided by business models and monetization, it is possible to work with such fluid delimitation. However, in classic exercises defining relevant antitrust markets, determining the nature of these services adds additional complexity.

Some players in this market operate in multiple segments. All of them aim at enhancing user retention and attention, surrounding them with complementary services so that they spend the longest time possible in the same ecosystem. At the same time, operating in several sectors makes it possible to collect data to supply a sophisticated advertising product and preferably not replicable by competitors. This happens frequently through their own programmatic advertising services structure. According to a study by the CMA, the combination of (1) agreements to make available apps and services as default in key distribution channels, such as browsers, operational systems, and mobile devices, (2) the consumer behavioral biases, which tend to inertia in the usage of standard features,

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[170] According to the World Bank, search engines are among the most investigated and sanctioned services for anticompetitive practices involving digital platforms. See World Bank (Forthcoming). Competition policy for the digital economy: New rules shaping competition in digital platform markets. See Competition and Markets Authority (2020). Online platforms and digital advertising. Market study final report.

[171] See DataRePortal (2024). Digital 2024 April Global Statshot Report.

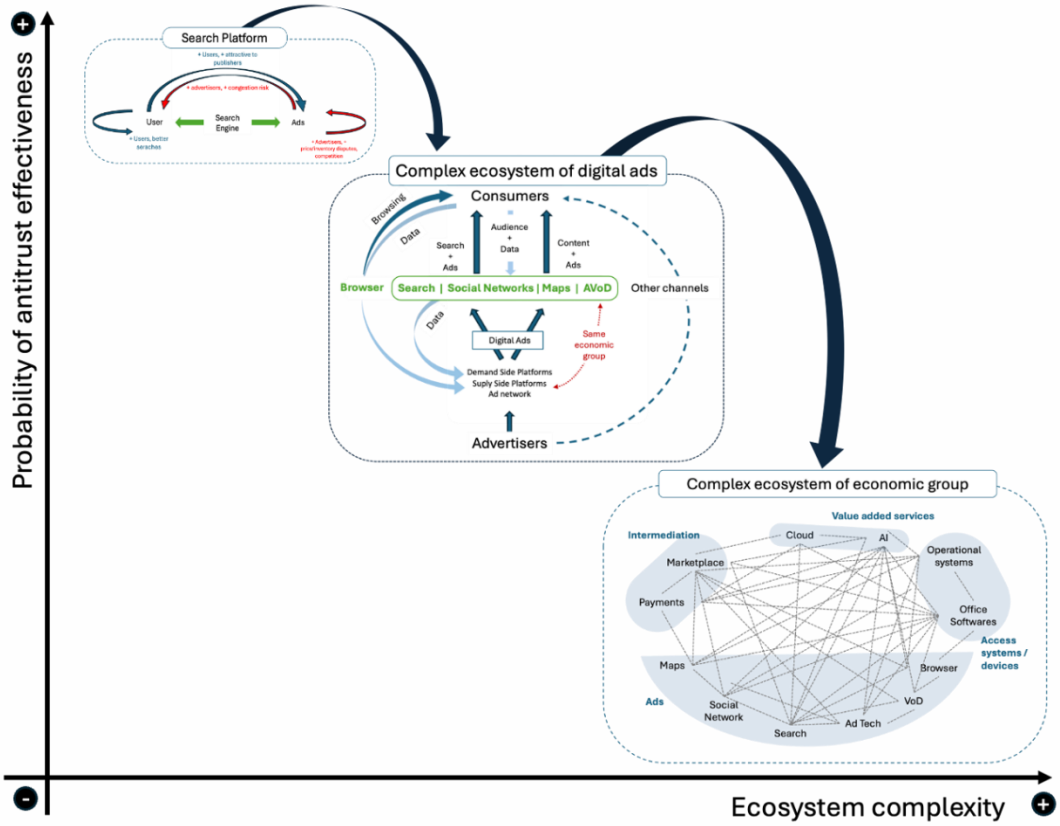
[172] For social media penetration data, see Statista, Statista Digital Market Insights "Number of users of selected social media platforms in Brazil from 2018 to 2028, by platform (in millions)". For the most visited websites, see Semrush (2024, July). Most Visited Websites in Brazil, https://www.semrush.com/website/top/brazil/all/

[173] See Statista, "Most popular social media platforms in Brazil as of 3rd quarter 2023, by usage reach"

[174] CADE recently published a study on the streaming and video on demand markets in Brazil, and adopted very limited market definitions, although it discusses in detail wider aspects involving the competitive dynamic in these markets. See Bastos, C. S. P. (2024). Análise do Mercado Relevante de Vídeo sob Demanda. CADE, DEE, Documento de Trabalho n. 002/2024, https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-detrabalho/2024/DT_002-2024-Mercado-relevante-vod.pdf.

(3) low transparency in terms of use, access, and structures of cost of services involved in the ecosystem, especially in the ad tech chain, (4) network effects, economies of scale, and access to a significative volume of third parties' data, and (5) vertical relations, makes these services prone to significative lock-in effects with the potential to structural inefficiencies and anticompetitive conducts.[175] The study also highlights that there is an additional competitive risk caused by the main players of advertising ecosystems offering other types of services, in other ecosystems, may they be intermediary or of access to devices, creating complex ecosystems managed by big economic groups. Looking at these services separately can hinder the proper identification of competitive risks. **Figure 9** illustrates this challenge.

Figure 9. Regulatory matrix: from platforms to complex ecosystems



Source: Elaborated by the authors

Similar to ecosystems centered on digital advertising, the Brazilian economy features numerous others. There are also complex ecosystems monetized through access fees for operating systems and mobile devices, as well as those monetized by intermediation fees, ranging from the typical gig economy models (such as

[175] Competition and Markets Authority (2020). Online platforms and digital advertising. Market study final report.

delivery and transportation) to fintechs and marketplaces.[176] Each ecosystem has multiple interdependent sides, different competitive and multimarket contact dynamics, whose proper mapping is an essential step in informing effective regulatory action.

2.2.2. Network Analysis: insights on sectors, companies and formation of complex ecosystems in Brazil.

The analysis of platforms based on monetization strategies is a necessary step but not sufficient to capture the full competitive complexities involving digital platforms. he analysis of platforms based on monetization strategies sheds light on which services are connected on different sides of the same platform, functioning as gears of a single final product or service—such as in the case of attention retention strategies for advertising offerings. While insightful, this approach cannot map how these platforms may be interconnected with others employing different monetization strategies, thereby pointing to even more complex economies of scope or network effects resulting from such interconnections. Similarly, the analysis of ecosystems based on monetization strategies cannot reveal how different economic groups may develop complex ecosystems encompassing various potentially interconnected strategies, as illustrated in **Figure 9**

Analyzing the network of services and companies that operate in the Brazilian digital markets add important variables. To this end, 20 digital services were selected, encompassing business models of digital platforms or services that are strategic to their operation, such as artificial intelligence and cloud services,[177] and that are also (1) relevant in the Brazilian context, either for their wide usage or for the existence of successful national companies, and/or (2) have already raised competition concerns in Brazil or in other countries.[178] Within these services, the main companies in the national context were identified, as well as the services

[176] As developed in the background paper "Digital Platforms in Brazil: Economic Foundations, Market Dynamics, and Promotion of Competition".

[177] The services included were: (1) digital advertising ecosystems (search engines; browsers; social media; AVoD; messengers; digital advertising – search engine, display, video – ; programmatic advertising services chain – ad tech); (2) services in ecosystems financed by devices or access fees (mobile operational systems, desktop operational systems, games, artificial intelligence, VoD, and cloud services); (3) services in intermediary ecosystems (payment fintechs, marketplaces, general delivery, food delivery, transportation, tourism, app stores, and real state). The AVoD and VoD were analyzed together; Ad tech includes the whole chain (e.g. DSP, SSP, and Ad Exchange).

[178] According to the World Bank, retail, food delivery, passenger transportation, software/operational systems, search engines and online advertising are responsible for 62% of the surveyed anticompetitive conduct cases involving digital platforms around de world. The AI and cloud services are two of the main innovation promoters in digital platforms and a central part of the growth strategy of this business model. Similarly, fintechs are one of the main success cases in Brazil, in addition to being one of the most dynamic services and offered by a big part of the main players operating in the country. Finally, the definition of services does not follow the regular analyses of relevant markets; thus, they join similar services such as VoD, AVoD, and streaming.

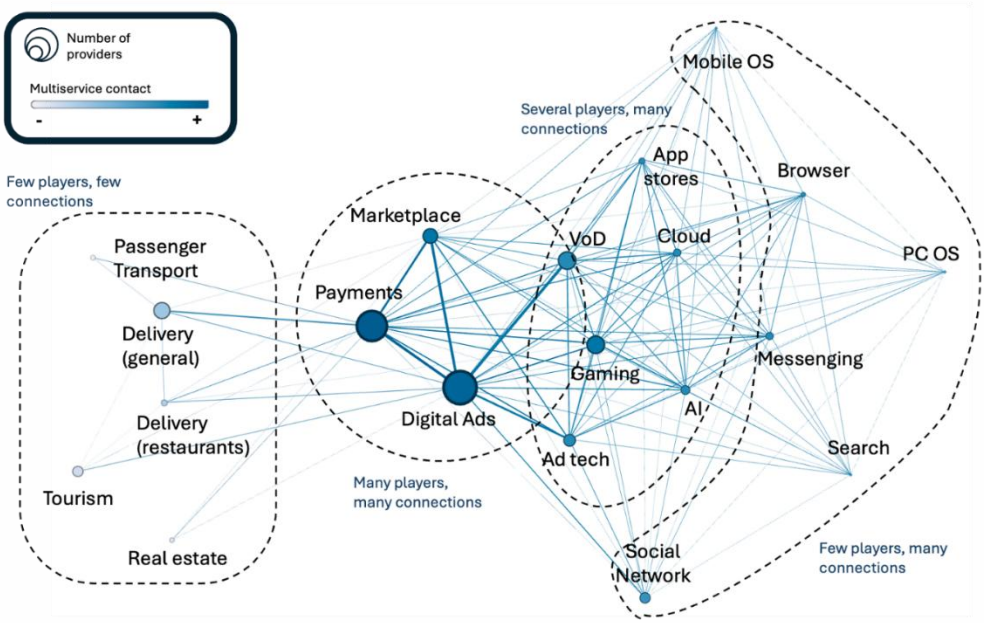
provided by the same economic group within this universe.[179] With this data, two network analyses were conducted, one focused on services and another focused on economic groups.

Networks of services

The analysis focused on services aims at identifying which sectors are offered jointly and which are more isolated. This analysis can assist in identifying the magnitude of economies of scope—and supply-side substitutability—and the extent of network effects, for example. It also allows for investigating whether there is any pattern in the organization of services offered by national and international companies. For this purpose, the network nodes were defined as the 20 selected digital services, while the edges between them represent the presence of the same economic group offering services across these nodes. Another relevant attribute is the size of the nodes, which varies according to the number of providers identified for each service. Finally, the thickness of the edges and the intensity of the color of the edges and nodes indicate the degree of connection between different services (multiple overlapping links result in thicker edges, and more connected nodes have a more intense color), as shown in **Figure 10**.

[179] The main companies were defined by the providers that represent 80% of the sales, turnover, active users, online accesses, number of downloads or performance in consumer research in the respective sector, depending on the information publicly available.

Figure 10. Network Analysis: Digital Services Offered in Brazil **(2024)**



Source: Elaborated by the authors. Network generated by the software Gephi v0.10.1 based on the algorithm ForceAtlas.[180]

Network analysis allows for interpreting the characteristics of the networks of different services and the potential specialization of national companies. Figure 10 illustrates some of these interpretations.

- The far-left side of the network, which encompasses tourism, real estate, delivery (general and restaurants), and passenger transportation, points to segments with the fewest connections in the entire network. In other words, companies offering these services provide relatively fewer complementary services compared to the rest of the network. At the same time, these are relatively concentrated sectors, with the exception of general deliveries. Thus, there are indications that these networks may exhibit characteristics that limit the development of more complex ecosystems, such as demand heterogeneity, as well as geographic constraints on offering services linked to the physical logistics of goods and services, which could reduce the network's growth speed. Another hypothesis is that these players have not yet reached sufficient critical mass to leverage their network effects into other services. This does not mean that there is no possibility of tipping specific services, even if with a relatively lower potential for leveraging network effects to other sectors. It is worth noting that even foreign companies participating in these sectors do not offer services from the far-right side of the network. This suggests that it is more a characteristic of the

[180] Nodes repulse each other like charged particles, while edges attract their nodes, like strings. These forces create a movement that converges to a balanced state.

services provided by these networks, and the impact they have on the dynamics of network effects, rather than a limitation of national platforms.

- The right side of the network features nodes with few companies (except for VoD and gaming) but with a high degree of connectivity. This may indicate that the networks generated by these segments exhibit significant economies of scope, enabling the leverage of users for the provision of many services, while also presenting strong enough network effects to drive 'winner-takes-all or most' dynamics in their original segments. Notably, with a few exceptions in Ad Tech, gaming, cloud, and VoD (where Brazilian companies participate, but marginally), only foreign companies operate in this part of the network.
- When applying to this analysis the classification of digital platforms proposed by Cusumano et. al.[181] it can be noticed that most segments with a high number of connections are innovation platforms, characterized by stronger network effects (digital products and services with global reach and no physical limitations, positive feedback loops, and greater demand homogeneity), as opposed to transaction platforms in the left-side of the network, which are more connected to reducing transaction costs in the real economy
- Finally, payment fintechs, digital advertising (excluding 'Ad Tech'), and marketplaces represent the most common package of platform services in Brazil. These are not only the segments with the highest number of offering companies and the greatest number of connections but also serve as overlapping segments between services with geographically limited network effects (e.g., gig economy) and services with global network effects (e.g., social networks and operating systems). Marketplaces are a sector featuring both purely digital players (especially international) and hybrid ones, originating from large traditional retail chains (national). There is also a significant niche segment of marketplaces focusing on specific areas (e.g., health products, home, construction, sports). Part of the dynamism in this sector is linked to immediate opportunities to leverage scale in core services to enable complementary revenues through (i) advertising sales—a growing activity (called retail ads), though still marginal compared to search or social network digital advertising—and (ii) offering payment functionalities. The latter is made more feasible by pro-competitive central bank regulation,

[181] Cusumano et. al. point three types of platforms: innovation platforms, transaction platforms, and hybrid platforms. Innovation platforms are technologies that offer the basis for the development of complementary software that in fact will define the available features to users. Transaction platforms are based on the reduction of transaction costs, increase of security, and facilitation of exchange between stakeholders. Hybrid platforms, on the other hand, are companies that can join in one or multiple platforms both business models. See Cusumano, M.A., Gawer, A., & Yoffie, D.B. (2019). The Business of Platforms. Strategy in the Age of Digital Competition, Innovation, and Power. HarperCollins Publishers.

which created payment institutions with simplified obligations compared to other financial institutions, particularly banks.[182]

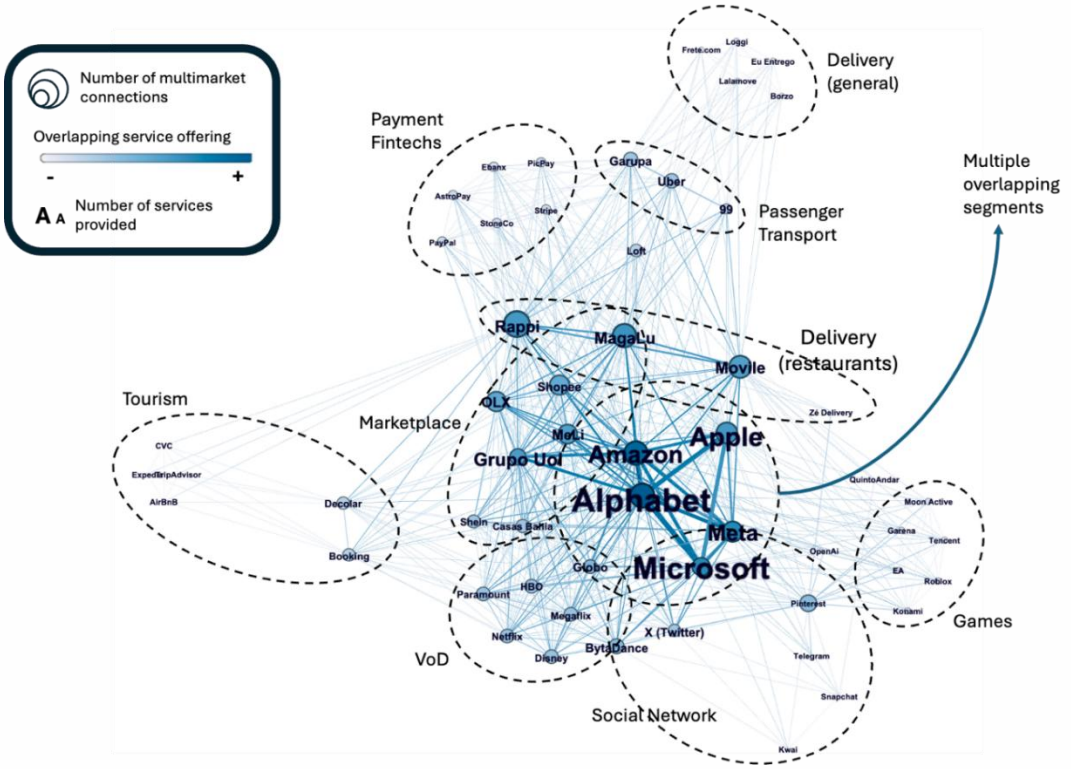
Networks of companies

The analysis focused on economic groups aims to identify which services are offered by the same economic group and the extent of multi-service contacts between different groups. Combined with the network analysis of services, this step can aid in mapping complex ecosystems, identifying economic groups operating across multiple services, as well as multimarket contacts between different ecosystems. It is also possible to investigate potential patterns in the organization of companies around specific ecosystems or platforms, as well as provide indications of the potential for economies of scope and the ability to leverage network effects for offering various services.

The analysis of economic groups also seeks to identify potential differences between national and international groups operating in the country, as well as characteristics intrinsic to certain platforms, with a greater or lesser tendency to diversify into multiple business models and monetization strategies. To this end, using the same database from the service network analysis, the network nodes were defined as the economic groups, and the edges between them represent the overlap in offering one of the 20 services analyzed in the network shown in **Figure 10**. The main attributes of the network are as follows: The size of the node labels represents the number of services offered by each economic group. The size of the nodes varies according to the number of their direct connections (multimarket connections). The thickness and intensity of the color of the edges and nodes vary according to the number of connections multiplied by the weight of each link (multiple overlapping links, indicating that many services coincide between different economic groups), as illustrated in **Figure 11**.

[182] On the regulatory work done by BACEN to facilitate the rise of fintech platforms, see the report Zetta (2021). A revolução dos entrantes: competitividade e inclusão financeira, https://somoszetta.org.br/wp-content/uploads/2024/01/A-Revolucao-dos-Entrantes-PT-Desktop.pdf

Figure 11. Network Analysis: Economic Groups Operating in Key Digital Platform Services in Brazil (2024)



Source: Elaborated by the authors. Network generated by the software Gephi v 0.10.1 based on the algorithm ForceAtlas.[183]

The network analysis shows preliminary evidence on the presence of both specialized platforms and complex ecosystems of economic groups. Figure 11 illustrates some of these interpretations.

- The segments of general delivery, restaurant delivery, and passenger transportation are closely located, an expected outcome given the various overlaps between their business models—transaction platforms based on the gig economy, leveraging similar stakeholders and displaying network effects with geographic limitations. However, it is notable that "restaurant delivery" and "passenger transportation" have, at the same time, a smaller number of providers who are more diversified, especially through the offering of financial services, compared to players in general delivery. Until recently, there were even platforms operating in all three segments, but large players have opted to specialize. There are indications that the general delivery segment presents greater possibilities for multi-homing (e.g., more homogeneous providers), lower entry costs (e.g., less need to subsidize sides, fewer incentives to establish exclusivity agreements), which, consequently, dampen network effects. This

[183] Nodes repulse each other like charged particles, while edges attract their nodes, like springs. These forces create a movement that converges to a balanced state.

can increase the number of competitors, make monetization more difficult, and, in turn, reduce the capacity to leverage new services.

- The payment Fintech segment, despite having many specialized players, demonstrates a high degree of relative connectivity. This is because financial services (in this case, payments) are offered by agents from virtually all segments. In other words, players originating from Fintechs do not exhibit significant diversification into non-financial services, but almost all other segments end up diversifying into Fintech services. This phenomenon may be associated with the complementarity of financial services to the other activities of platforms, often offering products tailored to specific niches. It also reinforces the assessment that payment platforms, in general, are among the most dynamic segments of the digital economy in Brazil.
- The marketplace segment appears centralized in the figure due to its large number of relatively diversified players, including, notably, the provision of digital advertising (publisher side) and financial services, as highlighted in the service network analysis.
- Given the overlap of functionalities among social networks, VoD, and messaging services, as well as their characteristics of strong direct network effects, the area of the network where these companies are located features highly differentiated players. On one hand, there are highly specialized companies—those that offer only one of these services with simplified monetization. On the other hand, there are diversified players focused on monetization through digital advertising, leveraging vertical integration on the supply side of digital advertising by combining both ad space and Ad Tech services. Finally, this segment also includes some candidates for characterization as complex ecosystems, extending beyond advertising dynamics and involving marketplaces, fintechs, or even operating systems and cloud services.
- Finally, a group of companies stands out for offering a large and diversified number of services, characterized by strong multi-service interactions (providing alternative services for all sides of various platforms) and connecting with virtually every company in the network. These players are candidates for identifying complex ecosystems of companies in the Brazilian context. They are considered candidates because the analysis must go beyond the mere potential offering of multiple services and seek to understand whether these players are indeed active and relevant participants in these segments. Moreover, it must assess to what extent their activities are interconnected enough to effectively generate economies of scope and leverage network effects, data, and other assets across different segments.
- It is noteworthy that some of the analyzed services cannot be associated with any specific region of the network due to the significant overlap of offerings in these segments, as is the case with artificial intelligence, cloud services, operating systems (mobile and personal computer), app stores, and Ad Tech. It is no coincidence that these services are located on the right side of the service

network (**Figure 10**), where services combine both a relatively small number of providers and a high level of multi-service offerings. Thus, while the service network indicated the presence of strong network effects in these cases, the company network in **Figure 11** reinforces this indication by suggesting that these services may serve as pillars in the formation of complex ecosystems of companies.

It is essential to emphasize that for any decision in a specific case, additional steps of analysis—both prior and subsequent—are necessary beyond the proposed ecosystem and network analyses. First, it is crucial to understand how the collected data and the way it is organized affect the network structure. Figures 10 and 11 provide a snapshot of how certain economic groups and the selected services they offer are interconnected in Brazil at a specific moment (August 2024).[184] They way in which services are selected, and players are allocated interferes with the size of the network, their nodes, and the nature of their connections. Other groups and services would reveal other networks. Therefore, how the network is built is a crucial aspect for the quality of the analysis. Second, it is important to investigate the evolution of these networks over time, as well as it is necessary to complement the analysis with deep dives into each of the complex ecosystems, platforms, and services of interest to understand how business models, monetization strategies, economic characteristics, market regulations, and competition strategies are defining the behavior of these players and what are the impacts on competition. This exercise involves, for instance, mapping the business structures of several companies of an economic group, identifying incentives for favoring or giving equal treatment to the interest parties. It is also necessary to understand the relevance that a specific player or economic group has in each market and their ability to leverage network effects, data and other inputs for other services.

The network analysis developed in this section indicates the complexity of the competitive dynamics involving digital platforms in Brazil. There are national and foreign platforms in important sectors of the Brazilian economy, such as retail, finance, and entertainment. In addition, these platforms affect the whole infrastructure of the digital economy, from operational systems to cloud services. In many cases, it is possible to identify the consolidation of key platforms in several markets that have two or three players, which requires the monitoring of the antitrust authority through proper tools to identify, punish and dissuade possible anticompetitive strategies and results. More importantly, there are strong evidence that many platforms evolved into highly complex ecosystems in which economic and market characteristics can reduce significantly the room for contestability and competition, requiring actions from the competition authority that go beyond its current mandate.

[184] With data collected from desk research.

2.2.3. Other important ecosystems for the digital economy

Submissions to the Public Consultation also highlighted other services and ecosystems considered relevant to the Brazilian digital economy. In addition to digital advertising, discussed previously, there was an emphasis on competitive issues related to mobile operating system ecosystems, while e-commerce intermediation and fintech ecosystems were cited as examples characterized by conditions fostering competition and innovation.[185]

Respondents emphasized that the mobile operating systems segment warrants attention from policymakers. Submissions highlighted the role of smartphones in people's lives, coupled with the significant economic power wielded by mobile operating system operators. Some submissions reinforced that the structure and functioning of mobile operating systems are both relevant and sensitive to the proper functioning of the economy. Facebook Brasil, for example, highlighted smartphones' role in enabling individuals to "work, create new business opportunities, connect with friends and family, participate in political activities, and consume news" (free translation).[186] This is compounded by high smartphone penetration in Brazil, the primacy of smartphone applications for online shopping in Brazil, and Brazilians' high daily time spent on mobile phones compared to the global average.[187]

Smartphones are also relevant to people's financial lives, as the majority of bank account operations and financial transactions are conducted through mobile devices. Facebook Brasil, mentioned that the "segment is important for consumers and fundamental for the Brazilian tech industry" (free translation),[188] considering the number of opportunities facilitated by smartphones.

Respondents highlighted the control exercised by mobile operating system operators. Proteste pointed to high switching costs involving mobile operating systems, both for app developers (e.g., due to loss of customer base and the cost of rewriting applications in another language) and users (e.g., due to inability to migrate subscriptions).[189]

Respondents also listed potentially anticompetitive practices employed by mobile operating systems operators. Such practices can be gathered in three main areas: competitive issues with mobile app stores (e.g., prohibition of other app

[185] As highlighted in the Public Consultation Report, non-GAFAM digital platform operators were the main group that commented on anticompetitive issues related to the mobile operating systems ecosystem. On the other hand, GAFAM platform operators and think tanks were the main groups that mentioned positive examples from the Brazilian digital economy.

[186] Facebook Brasil's submission, 2024, p. 28.

[187] Facebook Brasil's submission, 2024, p. 29.

[188] Facebook Brasil's submission, 2024, p. 29.

[189] Proteste's submission, 2024, pp. 33-34.

stores and access rules deemed unfair and/or discriminatory against current and potential competitors), (ii) competitive issues related to mobile payments (e.g., mandatory use of ecosystem operators' payment methods, allegedly excessive commission rates, and inability to use certain components), and (iii) self-preferencing practices by mobile operating system operators to the detriment of rival app developers and functionalities (e.g., collection and use of rival data without reciprocal sharing and practices favoring their own applications such as pre-installation and defaults).

There was also emphasis on competition concerns involving app stores, considered the most relevant —and, in some cases, the only — means for app distribution in mobile operating systems. Respondents emphasized two main practices related to app stores: the prevention of other app stores from operating on specific operating systems,[190] and the imposition of access rules deemed unfair and/or discriminatory against certain developers, especially current and potential competitors.[191]

Some respondents identified concerns related to mobile payments. Submissions primarily mentioned: (1) mandatory use of operating system operators' payment systems within their respective app stores and for in-app transactions, (2) allegedly high commission rates for transactions within mobile ecosystems, (3) independent developers' inability to use certain mobile device components (e.g., Near Field Communication or NFC technology for contactless payments), (4) practices limiting communication between apps and their users, such as anti-steering clauses (e.g., limiting the ability to inform users about alternative ways to contract services), and (5) creation of proprietary digital wallets beyond those held by ecosystem operators.[192]

Respondents expressed concerns regarding self-preferencing practices by mobile operating system operators to the detriment of rival app developers and functionalities. In addition to orchestrating the mobile ecosystem, the operators of operating systems also offer their own downstream apps. Thus, some respondents pointed to practices where operating system operators collect and use data from

[190] Match Group states that this practice limits the developers' bargaining power and reduce alternatives in case of dissatisfaction with Apple products (Match Group's submission, 2024, p. 1).

[191] CAF states that there are arbitrary practices both in the development of certain a priori rules and in the conduct of app review processes (CAF's submission, 2024, p. 5).

[192] Regarding commission fees and anti-steering clauses, Proteste asserts these are exploitative practices, as they can be interpreted as charging higher prices to developers, reducing their margins. On the other hand, the other practices can be considered exclusionary, as they prevent developers from competing with functionalities already offered by Apple (Proteste's submission, 2024, p. 34). Furthermore, regarding the inability of developers other than Apple to use certain iPhone components, Mercado Livre emphasizes that access to Apple's NFC technology by developers would enable the expansion of fintech companies and digital wallets, "introducing greater competition and innovation in payment methods markets" (Mercado Livre's submission, 2024, p. 9).

rival applications without sharing the same data with independent developers,[193] and also employ other practices to favor their own applications over rival ones (e.g. pre-installation, default device settings, interoperability restrictions).[194]

Submissions mentioned e-commerce intermediation and fintechs as positive examples, indicating cases of innovation, dynamism, and growth in the Brazilian digital economy. The two sectors showed examples of different regulatory histories: while submissions listed payment methods as a good example of regulatory intervention that promoted competition and innovation in the sector, e-commerce was indicated as a case in which there was no regulatory intervention but where multiple players and channels exist.

Some submissions highlighted the role of the fintech segment in reducing banking service costs and increasing financial and digital inclusion in the country. For Facebook, these technology companies were "able to challenge the position of major historical incumbents, largely thanks to innovation and a risk-based regulatory framework" (free translation).[195] Amazon emphasized that the retail sector faces broad competition across multiple channels, such that no essential channel would exist.[196] Similarly, ALAI and Camara-e.net expressed views distinguishing Brazilian retail from dynamics observed internationally.[197]

2.3. Final considerations

The business model of digital platforms is fundamental to the continuous development of the Brazilian economy, driving productivity. However, maximizing its potential requires a careful focus on the competitive dynamics of these markets. More specifically, the country faces the challenge of reconciling the growth of platforms while ensuring a competitive environment.

There is a misalignment between the current mechanisms for promoting competition in Brazil and the new dynamics of digital markets, similar to what

[193] In this regard, Match Group emphasizes that by limiting data sharing with rival applications, it hinders Match Group's own ability to detect and respond to scams, as well as prevents it from adopting age verification tools (Match Group's submission, 2024, p. 2). Meanwhile, CAF and Proteste emphasize that operating system operators collect commercially sensitive information from developers and use it to compete against them (CAF's submission, 2024, p. 5; and Proteste's submission, 2024, p. 34).

[194] For example, CAF emphasizes that vertical integration allows Apple and Google to give advantages to their downstream applications (CAF's submission, 2024, p. 5). Similarly, Zetta highlights the use of interoperability restrictions, for example, between smartwatches and personal computers, which make it more difficult for users of these devices to abandon the iPhone due to compatibility issues (Zetta's submission, 2024, pp. 5-6). Meanwhile, Yandex objects to pre-installation mechanisms and default settings selection in mobile operating systems, which tend to favor the services of the operating systems' owners themselves. According to Yandex: "this results in discrimination against local developers who may have a better and more relevant product, affecting related markets (for example, the advertising market, where services become more expensive due to lack of competitive pressure)" (free translation) (Yandex's submission, 2024, p. 4).

[195] Facebook Brasil's submission, 2024, p. 12.

[196] Amazon Brasil's submission, 2024, p. 2.

[197] ALAI's submission, 2024, p. 11; and Camara-e.net's submission, 2024, p. 6.

is observed in other jurisdictions. This misalignment manifests on two distinct levels, requiring specific solutions.

The concentration of economic power in the hands of major platforms creates a new market power structure that traditional antitrust analysis tools, even with updated methodologies, are unable to adequately identify and address. Network analysis, moreover, highlights a qualitative difference among the various players operating digital platforms. Some platforms exercise governance power over other platforms, subjecting them to their decisions.[198] This dynamic is particularly evident in relation to major global platforms, whose services are essential to the digital economy as a whole.

The lack of an adequate regulatory framework to promote efficiency in digital markets in the absence of competitive pressure is a problem that directly affects the country's development. By allowing the concentration of power in a few actors, this situation inhibits innovation, harms productivity, and widens Brazil's gap with other economies. Updating competition defense parameters emerges as a strategic solution to this problem, with the potential to foster the development of digital businesses and attract investments.

The enforcement of competition law by CADE can be improved to address cases of conduct and mergers involving digital platforms. While Brazilian antitrust law offers flexibility to handle some of these situations, its application through analytical tools designed for traditional, linear supply chain markets is insufficient and inadequate for cases involving digital platforms.

It is crucial for Brazil to adjust its competition defense mechanisms, considering both global demands and national specificities. Given the constantly evolving global scenario with direct impacts on the local context, a thorough, evidence-based analysis of the Brazilian reality underscores the need to update the national competition policy.[199]

The challenges identified in this study call for a regulatory update, encompassing both legislative reforms to create a new tool capable of identifying and addressing problems where traditional antitrust is insufficient, and regulatory reforms at CADE's level aimed at improving traditional antitrust analytical tools. The new legislative and public policy solutions introduced in other countries are examined in the next section, while the following section presents the detailed design of the two proposed approaches for the Brazilian context.

[198] This can happen, for instance, in the case of marketplaces and the acceptance of payment platforms, or in the case of operational systems and the user terms of applications of different platform services.

[199] See Kira, B. (2023). The Politics and Economics of Brazilian Competition Law. *Latin American Law Review,(11)*, 21-52.

3. Jurisdictions in motion: international benchmarking

Given the specific characteristics of digital markets, the global regulatory and public policy landscape has evolved to address the challenges to competition. Various jurisdictions have reviewed their legal frameworks and proposed new measures to deal with the peculiarities of these business models.

Understanding the international dynamics provides relevant subsidies for reflection on the Brazilian case. For the purposes of this study, the responses provided by ten jurisdictions were analyzed, identifying similarities and particularities in relation to the Brazilian case. The analysis considered the strategies and institutional models developed by each of them, observing the variety of responses and the types of problems they aim to solve, as well as the reasons that justify the choice of one path or another. The main findings of the analysis are discussed in this section.

3.1. Summary table

The following table presents a summary of the comparative research, highlighting the wide range of regulatory solutions and experiences underway. While the European model of the *Digital Markets Act* (DMA) is frequently cited in the literature and in comparative studies as the paradigm of pro-competitive digital regulation, being the most mentioned model in the submissions to our Public Consultation, our analysis revealed a diversity of approaches. Many submissions considered the European model to be overly rigid, with the imposition of a series of positive and negative obligations on large platform controllers.[200]

Beyond the European case, the analysis reveals a rich variety of regulatory approaches, which differ significantly in their objectives, instruments, and scope of application. They range from changes in the realm of soft law (as in Singapore), through the reform of antitrust law to create *quasi*-regulatory instruments (as in Germany), to the adoption of new pro-competitive regulations (as in the United Kingdom and Japan). Even among jurisdictions that have opted to adopt a form of regulation with ex ante obligations, there is diversity in different aspects, such as in relation to the specific focus of the regulations, the process of defining the obligations applicable to designated agents, the level of detail of the

[200] For example, Amazon rejected the adoption of a DMA-style regulation in Brazil, emphasizing that the DMA emerged from a specific political context, aimed at avoiding regulatory fragmentation, and is derived from competitive concerns identified by the European Commission, which have not been identified in Brazil, and is a less adaptable approach (Amazon's submission, 2024, p. 21). Similarly, Google rejects a DMA-type model, stating that it is a risky experiment, with negative effects already being perceived (Google's submission, 2024, p. 1).

rules, the available enforcement mechanisms, and the flexibility and adaptability of the rules.[201]

[201] As Oliveira suggests, regulatory designs for promoting competition in digital markets are the result of political disputes that influence the definition of objectives, processes, and institutional design. This fact helps to explain variations in the regulatory options adopted by different countries. Oliveira, Paulo Henrique de. A economia política da regulação concorrencial de mercados digitais: um estudo comparativo entre EUA e União Europeia. FGV EASP - Mestrado em Administração Pública e Governo (2024)

Table 1. Summary of the examined cases			
Jurisdiction	**Focus of the analysis**	**Approach**	**Body responsible**
European Union	Digital Markets Act (DMA – Regulation UE 2022/1925), approved in 2022.	Ex ante regulation with pre-determined obligations for platforms that supply core platform services and are designated as gatekeepers.	The European Commission is the entity responsible for the application of the DMA, through a joint team of the Directorate-General for Competition (DG COMP) - responsible for the application of antitrust law - and the Directorate-General for Communications Networks, Content and Technology (DG CONNECT).
United Kingdom	Digital Markets, Competition and Consumers Act 2024, from May 2024	Ex-ante regulation with conduct requirements and individualized pro-competitive interventions (PCIs) for undertakings designated as having Strategic Market Status (SMS).	Competition and Markets Authority (CMA), the UK's competition regulator, which also gains new powers to conduct investigations and implement consumer protection laws.
Australia	Digital Platforms Inquiry Reports, produced by the Australian antitrust agency ACCC, as well as response by the Australian government to the ACCC's recommendations.	The interim report published in 2022 highlighted the need for regulatory reform to address competition concerns and consumer harms related to digital platforms. The government published a response in 2023 and is in the process of developing a regulatory proposal (under the Treasury).	A new regulation would grant powers to the Australian Competition and Consumer Commission (ACCC), Australia's competition and consumer protection regulator.
Japan	New legislation introducing ex-ante obligations focusing on smartphone operating systems and app stores (Act on the Promotion of Competition for Specified Smartphone Software) was approved by the Japanese Parliament on June 12, 2024, and is expected to come into force in December 2025. The law was drafted by the Secretariat of the Headquarters for Digital Market Competition	New legislation approved in June 2024 adopts an ex-ante regulatory model with a specific focus on mobile digital ecosystems.	The Japan Fair Trade Commission (JFTC), Japan's antitrust authority, will be responsible for implementing the new law.

	(HDMC), under the Japanese Cabinet Secretariat, based on a report produced by the Japanese antitrust authority (Japan Fair Trade Commission – JFTC).		
Germany	Article 19 from the German Competition Act (*Gesetz gegen Wettbewerbsbeschränkungen* – GWB)	2021 Reform of German Competition Law granting the Bundeskartellamt, the German Federal Cartel Office, new powers to impose ex-ante obligations. In a two-step process, the Bundeskartellamt can prohibit companies with "paramount significance for competition across markets" from engaging in certain practices, defined on a case-by-case basis by the regulator. Stage 1 is a designation procedure (§ 19a(1) GWB). Stage 2 allows the Bundeskartellamt to initiate investigations into designated companies and prohibit certain conduct under specific abuse of dominance rules (§ 19a(2) GWB).	Bundeskartellamt, the German antitrust authority.
United States	The primary legislative proposal under discussion is the American Innovation and Choice Online Act (AICOA – S. 2033, 118th), currently under review by the Senate Judiciary Committee. The main instrument in force is the Executive Order on Promoting Competition in the American Economy from 2021, which directed federal agencies to promote competition and innovation. Additionally, new merger guidelines adopted in 2023 require that transactions involving multi-sided platforms consider competition	AICOA is a bipartisan bill to introduce ex-ante regulation focused on economically significant platforms with large US user bases and that function as critical trading partners. The US government has been using all available tools to advance a pro-competition agenda across the economy, with a particular focus on the technology sector. This includes antitrust lawsuits against large tech companies, soft law instruments, and competition advocacy tools to foster competition in the technology sector. Lawsuits filed by the Department of Justice (DOJ) against tech companies are part of this strategy. A notable case was the DOJ's lawsuit against Google, alleging that the company had illegally monopolized the search and online advertising	There is no single agency responsible for implementing the US government's strategy to promote competition in digital markets. The government has adopted a whole-of-government approach involving various actors.

	between platforms, competition on platforms, and competition to replace a platform.	markets, decided by the U.S. District Court for the District of Columbia in August 2024.	
South Africa	The primary tool for addressing competition issues in digital markets is the market inquiry, enabled by new powers granted to the antitrust authority to design remedies and prohibit certain conduct. The scope of market inquiries was expanded through an update to the competition law in 2018.	The Online Intermediation Platforms Market Inquiry was the first conducted by the antitrust authority using these new powers. The investigation focused on specific sectors considered most relevant to the South African economy, including e-commerce, online travel agencies, food delivery, app stores, real state and automobile ads, and search engines. The final report, published in 2023, included specific remedies for some companies and sector-wide interventions.	The Competition Commission (CompCom), South Africa's antitrust authority, is responsible for conducting market inquiries and imposing remedies.
India	Draft Digital Competition Bill (DCB), a legislative proposal introduced in March 2024 by a special committee established by the Ministry of Corporate Affairs, based on the findings of the Report of the Committee on Digital Competition Law.	The DCB aims to establish ex-ante obligations for Systemically Significant Digital Enterprise (SSDE), that provide at least one core digital service in India. The Indian government accepted comments and suggestions on the legislative proposal until 15 May 2024.	The Competition Commission of India (CCI), India's antitrust authority, will be the primary body responsible for implementing the future law.
Taiwan	TFTC White Paper on Competition Policy in the Digital Economy, from December 2022.	The report suggests amendments to the Taiwan Fair Trade Act, including changes to the guidelines for defining relevant markets and the proposal to create a market investigation tool. The paper emphasizes the improvement of antitrust enforcement. It opts not to adopt ex-ante pro-competitive	The Taiwan Fair Trade Commission (TFTC) is the antitrust authority responsible for enforcing competition law.

		regulation and prioritizes local connections when considering the effects on competition.	
Singapore	CCCS Market Study on E-commerce Platforms, from September 2020.	The report identifies a need for greater clarity and guidance from the antitrust authority on the application of competition law in the digital environment but suggests improvements in the enforcement of competition law and existing consumer protection rules, without requiring legislative changes.	The Competition and Consumer Commission of Singapore (CCCS) is the antitrust authority that prepared the study and is responsible for improving the enforcement of competition law.

3.2. Selected cases

Despite this diversity of strategies, they share a common aspect: they identify the need to adapt the regulatory and institutional framework to keep pace with the rapid evolution of the markets in which digital platforms operate. Analysis of various cases demonstrates that the economic and competitive dynamics of digital platforms, especially due to the existence of digital ecosystems, are distinct and require specific economic and legal tools. This section of the report presents a more detailed analysis of the diagnoses and policy choices developed in three jurisdictions: Germany, the United Kingdom, and Japan.

3.2.1. Germany

In Germany, the primary legislative response has been an update to the antitrust law, empowering the competition authority to address markets with strong network effects without creating a standalone regulatory regime. The legislative reform completed in 2021 introduced Section 19a to the German Competition Act (GWB). This new section allows the Bundeskartellamt (BKA, the German Federal Cartel Office) to intervene more swiftly in cases where competition is threatened by large companies operating in multi-sided markets.

The legislative change introduces a two-step process for the BKA to: i) designate companies as having "paramount significance for competition across markets" and ii) conduct investigations leading to the prohibition of certain practices – conduct that will be presumed illegal for designated companies, such as self-preferencing their own group's services or restricting market entry by processing competitively sensitive data.

The designation decision is primarily based on the business model and structure of the potentially designated company, rather than on specific conduct. Paragraph 1 of Article 19a sets out two cumulative conditions for the BKA to designate a company, making it subject to ex-ante obligations: i) the company must operate significantly in multi-sided or network markets; and ii) it must have paramount significance for competition across markets.

Although the wording of Article 19a is broad enough to encompass other types of companies, there are indications that the primary focus is on large technology companies. While the law only requires that the designated company has significant operations in multi-sided or network markets (Article 18(3a)), the explanatory memorandum makes it clear that the aim is to regulate only a few companies "focused on digital business models".

Furthermore, the document emphasizes that the provision targets only a "small group of companies" or "digital ecosystems".[202] However, the wording of Article 19a gives the new tool a broader scope, allowing it to address not only digital platforms but also other services, such as Google's automotive services. This flexibility ensures that the legislation can keep pace with market developments and adapt to new business models that may emerge in the future.

The law does not establish specific quantitative criteria for designating companies. When assessing a company's paramount significance for competition across markets, the law lists broad criteria, stipulating that the following factors should be considered in particular: dominant position in one or more markets, financial strength or access to other resources, vertical integration and activities in related markets, access to data relevant for competition, and the significance of its activities for third-party access to supply and sales markets, as well as its related influence on the commercial activities of third parties.

The text of the law also allows companies that are not yet dominant in any market to be designated. This approach differentiates the new tool from Article 19a of the traditional antitrust application, which only addresses companies that are already in a dominant position. In Article 19a, the threshold is deliberately lower, indicating a certain position of leadership, but not necessarily dominance.

The second stage of the process consists of an investigation focused on a specific practice of the designated company. Although the designation decision does not impose direct restrictions, it enables the company to be investigated and potentially subject to conduct rules. In this second stage, the relevant economic position is presumed based on the designation, so that the investigation conducted by the antitrust authority does not require compliance with the traditional stages of antitrust analysis, such as the definition of the relevant market and the dominance test.

This investigation may culminate in the imposition of conduct rules to remedy identified competitive problems. Paragraph 2 of Article 19a lists a catalogue of potentially harmful conduct that the BKA may prohibit designated companies from engaging in. The types of prohibitions are deliberately formulated in a broad manner in the law. It is up to the BKA, based on the circumstances of the specific case, to determine which prohibitions are most appropriate, establishing a specific order (cease and desist) for the company under investigation.

[202] BMWK, White Paper Digital Platforms Digital regulatory policy for growth, innovation, competition and participation. Accessed 1 March 2017, available at: https://www.bmwi.de/Redaktion/DE/Downloads/G/gwb-digitalisierungsgesetz-eferentenentwurf.pdf?_blob=publicationFile&v=10

The designated company may present efficiency defenses and demonstrate that the questioned behavior is "objectively justified". However, the burden of proof lies with the designated company, which must demonstrate the pro-competitive or efficiency-enhancing effects that the practice may have.

Only after being designated as a company of fundamental importance and receiving a decision establishing specific prohibitions will the company be required to comply with the stipulated conduct rules. After the determination of the prohibitions, if the company infringes the legal prohibition decision, an administrative fine may be imposed, or the injured party may file a lawsuit for damages.

The first companies have been designated, and the BKA is conducting investigations to define customized prohibitions. On 5 October 2023, the authority concluded the first investigation of a company designated under Article 19a of the GWB: the case against Google regarding the company's terms of use and data processing, establishing specific obligations to remedy the identified problems.[203]

3.2.2. United Kingdom

In the United Kingdom, the primary strategy adopted has been a combination of amendments to antitrust law, such as expanding investigative powers, and the adoption of a new pro-competitive regulatory instrument. This combination aims to strengthen the ability of the antitrust authority (Competition and Markets Authority – CMA) to identify and remedy competition risks in a timely manner.

The Digital Market, Competition and Consumers Act 2024 (DMCC) establishes a new pro-competitive regime for digital markets.[204] The Act, enacted in May 2024, seeks to address the significant market power of a small number of technology companies, granting new tools to the CMA's Digital Markets Unit to proactively promote more dynamic markets and prevent anticompetitive practices.

The new regime will target a limited number of firms that exert significant control over digital markets. These firms will be designated as having strategic market status (SMS) in relation to specific digital activities. The Act does not provide an exhaustive list of digital activities but presents a broad concept, defining them as activities for the provision of services or content via the internet.

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[203] BKA, Bundeskartellamt gives users of Google services better control over their data. Accessed 6 October 2023, available at: https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Entscheidungen/Missbrauchsaufsicht/2023/B7-70-21.html?nn=3591568

[204] Digital Markets, Competition and Consumers Act 2024, available at: https://www.legislation.gov.uk/ukpga/2024/13/contents

The CMA will designate a firm as having SMS in relation to a digital activity after conducting an investigation based on qualitative and quantitative criteria. In terms of qualitative criteria, the CMA will consider whether the firm has: i) substantial and entrenched market power, and ii) a position of strategic importance in relation to one or more UK-connected digital activities. The Act sets out that a firm would have a position of strategic importance in relation to a digital activity where one or more of the following conditions are met: a) the firm has achieved a position of size or scale in relation to the digital activity; b) a significant number of businesses use the digital activity as carried on by the firm under investigation to conduct their businesses; c) the firm's position in relation to the digital activity would enable it to extend its market power into a variety of other activities; d) the firm's position in relation to the digital activity enables it to determine or substantially influence how other businesses behave, in relation to the digital activity or otherwise.

The Act also sets out a quantitative criterion: turnover thresholds as minimum requirements for designation as SMS, but not as presumptions. Only firms with a global turnover exceeding £25 billion and a UK turnover exceeding £1 billion may be investigated for SMS designation.

The Act grants the CMA power to set specific conduct requirements for each designated SMS digital activity. The Act does not provide an exhaustive and specific list of such measures, but rather a broad list of permitted types of conduct requirements, which include both positive obligations, requiring firms to adopt certain behavior, and negative obligations, which aim to prohibit certain types of conduct. For example, the CMA may create rules prohibiting a designated firm from using data unfairly, or from restricting the ability of users or potential users to use products from other firms.

Beyond conduct requirements, another fundamental regulatory tool introduced by the law is the possibility of designing pro-competitive interventions to address the sources of market power of SMS undertakings. The CMA will have the power to design targeted interventions to address the root causes of competition problems in digital markets.

The CMA will be responsible for implementing the DMCC regime through the Digital Markets Unit (DMU). The DMU will operate as an administrative unit within the CMA, making day-to-day decisions on the regime and applying the appropriate measures.

The UK government has indicated that it intends for the DMU to seek to address competition concerns through informal and cooperative engagement with businesses. However, the antitrust authority will have robust powers to deal with non-compliance by businesses, including the imposition of fines of up to 10% of global turnover and the holding to account of senior managers for ensuring that the company complies with information requests.

The CMA is a member of the UK Digital Regulation Cooperation Forum (DRCF). The forum also includes the Information Commissioner's Office (ICO), the Office of Communications (Ofcom), and the Financial Conduct Authority (FCA). This interagency collaboration aims to ensure the coherence and effectiveness of digital regulation in the UK.[205]

The DMCC came into force in May 2024, and the first investigations to designate SMS undertakings are scheduled to take place within the first year of the regime. The full implementation of the law will require the definition of specific conduct requirements and pro-competitive interventions for each designated SMS digital activity, a process that will be led by the CMA in collaboration with stakeholders.

3.2.3. Japan

The strategy adopted by Japan was a combination of three main strategies, in a combination of antitrust and regulatory tools. Such measures include changes in soft law for better application of antitrust law to digital markets, a new law establishing a co-regulation model and imposing a code of conduct on certain platform operators, and more recently a new pro-competitive regulation establishing ex ante obligations for mobile digital ecosystem operators.

With regard to soft law measures, the Japan Fair Trade Commission (JFTC), the Japanese antitrust authority, has adopted new analytical guidelines focused on digital markets. The guidelines aimed to improve the application of the Antimonopoly Law (Law No. 54 of 1947 - AMA). These guidelines specifically address issues such as network effects and the role of data, which are crucial for antitrust analysis in digital markets.[206]

In addition to soft law measures, Japan has also implemented more comprehensive legislative reforms. The first of these was the Act on Improving Transparency and Fairness of Digital Platforms (TFDPA), in force since 1 February 2021.[207] The TFDPA, inspired by the European P2B Directive, establishes a regulation applicable to the relationship between platforms and businesses, aiming to promote transparency and fairness in commercial relations. Certain platform operators – including app stores, online marketplaces and digital advertising platforms – are subject to codes of conduct.

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[205] United Kingdom, The Digital Regulation Cooperation Forum. Accessed 28 March 2023, available at: https://www.gov.uk/government/collections/the-digital-regulation-cooperation-forum

[206] Japan, Act on Prohibition of Private Monopolization and Maintenance of Fair Trade (Act No. 54 of April 14, 1947), available at: https://www.jftc.go.jp/en/legislation_gls/AMA.pdf

[207] METI, Act on Improving Transparency and Fairness of Digital Platforms (TFDPA), May 2020, available at: https://www.meti.go.jp/english/policy/mono_info_service/information_economy/digital_platforms/index.html

Compliance with these codes of conduct is monitored by the Ministry of Economy, Trade and Industry (METI).

The Japanese government assessed that the concentration of economic power in mobile app ecosystems persisted and decided to adopt pro-competitive regulation specific to this sector. This decision was motivated by the need to intervene promptly to contain the negative effects of the dynamics of these markets and by the need to prioritize intervention in platforms with greater market power, capable of significantly influencing competition. In June 2024, the Act on Promotion of Competition for Specified Smartphone Software was approved by the Japanese parliament, aiming to regulate companies that dominate smartphone operating systems and app stores.[208]

The new law gives the JFTC the authority to designate as "designated operators" companies that offer certain types of software (mobile operating systems, app stores, browsers, and search engines) and whose business reaches a specific size. The designation of these companies will be based on quantitative and qualitative criteria, defined by the Cabinet Office for each type of software.

Designated companies must comply with a series of obligations established by the law, many of which are similar to those of the European DMA. For example, designated companies may not favor their own products or services in search results without justification and must ensure that developers have access to resources controlled by their operating systems. The law also prohibits the use of data collected from third parties to promote their own products and services.

The law grants the JFTC the power to investigate, impose fines, issue cease and desist orders, and other measures. The law also prohibits retaliation against users who file complaints, encouraging third-party participation in law enforcement.

3.3. Hybrid regulatory tools

Our comparative analysis reveals that, while reforms vary, there is a convergence towards the introduction of hybrid rules that sit between traditional antitrust law and economic regulation.[209] Although the specific legal instrument adopted and the range of companies that can be designated vary, these

[208] JFTC, Cabinet Decision on the Bill for the Act on Promotion of Competition for Specified Smartphone Software. Accessed 26 April 2024, available at: https://www.jftc.go.jp/en/pressreleases/yearly-2024/April/240426.html. The legislation was drafted by the federal government's HDMC and approved based on the recommendations made in the 2023 report, 'Competition Assessment of the Mobile Ecosystem'. This report examined how the structure of the mobile ecosystem impacts the competitive environment. The full summary of the report, published by the JFTC on 16 June 2023, can be found at: https://www.kantei.go.jp/jp/singi/digitalmarket/pdf_e/documents_230616.pdf

[209] The OCDE highlights that hybrid regulatory tools are innovative means to regulate and monitor digital platforms. OCDE (2021), Ex ante regulation of digital markets, OECD Competition Committee Discussion Paper, https://www.oecd.org/daf/competition/ex-ante-regulation-andcompetition-in-digital-markets.htm

initiatives share the characteristic of expanding the tools available to the antitrust authority, circumventing the limitations inherent in traditional antitrust law when dealing with economic agents that hold significant market power, resulting from strong network effects and a privileged position in organizing and controlling access to inputs and digital infrastructures.

In Germany, the focus has been on reforming antitrust law to give the competition authority more tools to intervene when a company operates in multi-sided or network markets and holds significant importance for competition in more than one market. The identification of companies that can be designated, based on their business model, broadens the scope of application of the law and offers greater flexibility to identify problematic actors. This is a hybrid approach, combining antitrust and regulatory elements: the law requires a case-by-case analysis, but allows for the imposition of ex-ante obligations, dispensing with the process of defining the market and identifying market power, typical of traditional antitrust law.

The United Kingdom, in turn, has opted to establish a new pro-competitive regulatory tool, complementary to antitrust law, granting the competition authority powers to impose ex-ante obligations on companies with substantial and entrenched market power in digital activities. The scope of UK law is more specific than German law, clearly indicating a focus on companies that provide digital services. UK law provides a range of obligations that can be imposed on designated companies, but the establishment of specific rules for each company and digital activity occurs on a case-by-case basis, following an investigation. Similar to Germany, this case-by-case analysis limits the number of simultaneous investigations but avoids the application of generic and inflexible rules to all actors.

Finally, in Japan, the option was for pro-competitive regulation focused on very well-defined actors: mobile ecosystems that, due to their structure and market power, present competition problems that traditional antitrust cannot solve. Dominant companies in these ecosystems can be designated by the antitrust authority and will then be subject to obligations predefined by law, which are applicable from the moment of designation. This approach resembles per se prohibitions and is made possible by the nature of the target of the regulation, composed of a restricted universe of companies with similar characteristics.

4. Regulatory and public policy proposals

Given the assessment that competition policy needs to be updated to keep pace with the dynamics of digital platforms, this chapter presents a regulatory agenda. Based on previous analyses and contributions received through the Public Consultation, the proposals are divided into two main groups.

The first group proposes changes to the Brazilian Competition Defense System and to the Brazilian competition law to equip CADE with more effective tools to intervene in light of competitive issues involving systemically relevant platforms. The toolkit would be structured in two stages. The first would consist of designating companies that are large economic agents with significant presence in multi-sided markets, whose economic power is associated with the particularities of the dynamics of digital markets, including the presence of strong network effects. The second stage, after designation, would consist of establishing specific regulatory obligations for each designated economic agent.

This new mechanism aims to strengthen CADE's institutional capacity in addressing the competitive challenges inherent to digital markets. The objectives are to promote contestability in markets that tend naturally toward consolidation, to ensure governance parameters and management of network effects in the absence of competitive pressure, to ensure freedom of choice for digital platform users, and to promote transparency in digital markets.

	Group 1 - New Toolkit for promoting competition in cases of digital platforms of systemic relevance	
#	**Proposal**	Required change
1	**Establish a procedure for the designation of systemically relevant platforms whose economic power is associated with the particularities of the dynamics of digital markets.** • The law will establish a set of **qualitative criteria** for the designation of companies, considering aspects such as: presence in multi-sided markets; market power associated with network effects; relevant supply of multiple digital services; vertical integrations in related markets; access to large volumes of relevant personal and commercial data; and substantial number of users. • To ensure that only large economic agents are subject to designation, the law will establish **minimum turnover**	Change in law

	criteria, both globally and in Brazil. Companies whose turnover falls below the established thresholds will be exempt from designation (**safe harbor**). • Designation decisions must be submitted to CADE's Tribunal.	
2	**Introduce procedural and transparency obligations that may be imposed on designated agents from the moment of designation, at CADE's discretion**, such as: • Obligation of **prior notification** of mergers. • **Transparency rules providing end users and business users** with commercially relevant information for the use and provision of services and products. • **Duty to inform** end users, business users, and CADE, about changes in the terms of use or services offered. • Procedural and transparency obligations imposed on designated agents must be submitted to CADE's Tribunal.	Change in law
3	**Establish a procedure for CADE to investigate designated companies and define specific substantive obligations for each case.** • The law will establish a list of obligations that ***may* be imposed by CADE**, providing flexibility for each case. • The scope of the obligations **may be specified** in relation to specific products and services offered by the designated agent. • **Reversal of burden of proof:** objective justification and proof falls on the designated agent. • Substantive obligations imposed on designated agents must be submitted to CADE's Tribunal.	Change in law
4	**A specialized unit at CADE will be responsible for implementing the new pro-competitive tool.** • A new specialized unit will be responsible for **monitoring digital markets, designating economic agents, establishing, and monitoring obligations**, and investigating potential violations.	Change in law

	• The unit will bring together a **specialized technical team** that will develop expertise in matters related to digital platforms and ecosystems, multi-sided markets, and network effects.	
5	**Implement substantive obligations in cooperation with regulators such as ANATEL and ANPD, when necessary due to relevant technical and sectoral aspects.** • Regulators such as ANATEL and ANPD may be involved in the process of designing, implementing, and monitoring specific obligations defined after an investigation of designated agents, when necessary, due to relevant technical or sectoral aspects.	Change in law
6	**Strengthen CADE's powers to conduct market studies, granting DEE powers to request information and analyze a particular sector or industry, on its own initiative, or following requests from other bodies, or complaints received.** • This tool will enable CADE to conduct **a proactive and comprehensive analysis of competitive dynamics across various sectors**, allowing it to identify and address systemic competition problems, not limited to specific conduct or specific moments, such as in merger cases.	Change in law
7	**Create an inter-institutional cooperation forum between CADE and other federal bodies (e.g., ANATEL, ANPD, and SENACON) for issues related to digital markets.** • An inter-institutional cooperation forum, with flexible arrangements, that enables the exchange of information between federal bodies, sectoral regulators, and experts, allowing for agile responses and resource efficiency in cross-cutting issues related to digital markets.	New presidential decree

The second group addresses updates in the application of Law No. 12529/2011, focusing on *infralegal* rules or soft law recommendations that do not require legislative changes. These updates aim to improve the application of current law, including updating tools and analysis procedures employed by CADE, with a focus on ecosystems marked by the dynamics of digital platforms, but with a lower degree

of complexity. The objective is to improve the analysis of cases and procedures, especially in scenarios where potential competition is relevant and there is no pronounced imbalance of power between the agents.

	Group 2 - Adjustments in applying antitrust tools to any platforms	
#	**Proposal**	Required change
8	**Update antitrust analysis tools for continuous improvement of the analytical framework used by CADE to identify and assess competition risks, including new theories of harm.** • The inclusion of network and ecosystem analyses in its investigative tools is fundamental, as it allows for an assessment of the interdependence between agents in multi-sided markets and the importance of network effects in defining relevant markets and market power. • This gradual update will enable CADE to develop more adequate theories of harm to capture the nuances of the competitive dynamics present in digital platforms.	Infralegal: revision in CADE's guidelines, and practices
9	**Revise CADE's pre-merger notification form to include specific questions about the particularities of digital market dynamics.** • The questions will allow for the collection of relevant data to identify network effects and assess theories of harm specific to digital platforms, such as data on the number of end and business users, the possibility of interoperability between platforms, types of data collected and their use for product or service differentiation purposes, among others.	Infralegal: Revision in CADE's merger notification form
10	**Consider adopting ordinary procedures for analyzing mergers involving digital platforms with a high number of users, when they meet the turnover criteria established in the law for mandatory prior notification.** • Consider adopting ordinary procedure for mergers involving large digital platforms, when necessary,	Infralegal: CADE's practices

	based on evaluation of information received through notification form. • The ordinary procedure allows for a more in-depth analysis of cases, for a better understanding of the particularities of the competitive dynamics involving digital platforms.	
11	**Make use, when necessary, of the flexibility provided in Article 88, paragraph 7, of Law No. 12,529/2011 to require the submissions of mergers that, although they do not meet the formal notification criteria, may pose risks to competition.** • Transactions involving platforms that, although they do not fit the criteria for mandatory prior notification, nor the designation criteria discussed in the specific instrument, may have a significant impact on competition. • This flexibility is particularly relevant in cases involving vertical integration between digital platforms or expanded access to data relevant to competition.	Infralegal: CADE's practices
12	**Update the turnover thresholds for pre-merger notification established in items I and II of Article 88 of Law No. 12,529/2011.** • Update the turnover thresholds for prior notification of mergers, allowing CADE to focus its efforts on the analysis of transactions with a greater potential to impact competition.	Infralegal: new interministerial ordinance between the Ministry of Finance and the Ministry of Justice

4.1. Updating the Brazilian Competition Defense System

The first group of proposals aims to strengthen the Brazilian Competition Defense System to defend competition and promote efficiency in digital markets more swiftly and effectively in the absence of competitive pressure. Establishing a new hybrid regulatory system focused on systemically relevant economic agents is fundamental to this pillar. The objective is to provide CADE with more flexible and adaptable instruments to deal with such agents, expanding the range of tools available to address situations where the traditional antitrust

framework demonstrates less effectiveness and the risk of harm to competition is higher.

4.1.1. A new pro-competitive tool for platforms of systemic relevance

Legislative changes are necessary to establish a new pro-competitive instrument that empowers CADE to address platforms with systemic relevance. This new tool involves two procedures: (1) procedure for designating economic agents of systemic relevance, based on specific criteria, and (2) procedure for investigating competitive dynamics and defining specific obligations related to problems identified in each case.

The procedure for designating agents that will be subject to the new instrument due to their special status should be based on a combination of qualitative and quantitative criteria.

The qualitative criteria should seek to identify and measure the presence of typical characteristics of digital markets that increase the complexity of competitive dynamics, harm fair competition and the proper functioning of the market and reduce the effectiveness of traditional antitrust tools.[210] These characteristics include presence in one or more multi-sided markets, market power associated with network effects, vertical and horizontal integrations in related markets, strategic position to facilitate or obstruct third-party activities; access to a large amount of personal and commercially relevant data; and a significant number of users.

To ensure flexibility in the designation process while preserving legal certainty, the qualitative criteria established by law are complementary and must be considered jointly. The more pronounced these characteristics are as a whole, the greater the systemic relevance of the economic agent and the justification for its designation. This approach allows regulatory efforts to focus on agents occupying strategic market positions, capable of significantly influencing the behavior of other agents and competitive dynamics.

Public Consultation submissions highlight the importance of establishing qualitative criteria for designating regulatory targets. CADE emphasized the importance of using qualitative criteria to identify companies subject to pro-competitive regulation, "largely based on the extent of a company's market power in the upstream intermediation market, the lasting or transitory nature of the

[210] On the relevance of qualitative criteria, see Fernandes, V. O. (2024). Lost in translation? Critically assessing the promises and perils of Brazil's Digital Markets Act proposal in the light of international experiments. *Computer Law & Security Review*, 52, 105937.

company's power, and the existence of businesses that depend on the company's product or service to access other markets" (free translation).[211]

Respondents emphasized that a combination of qualitative criteria should be used to support a designation decision. Among possible qualitative criteria, Proteste highlighted the need to consider "(i) whether the platform in question faces competitive pressures from other platforms, or whether a lock-in effect due to network externalities and the absence of multi-homing by users on both sides makes it an incumbent difficult to challenge, and whether (ii) the platform generates a gatekeeper position of a competitive space that can be characterized as essential or indispensable" (free translation).[212] Zetta also listed qualitative criteria that could support designation methods, including: (i) high levels of switching costs in markets and company practices to increase them; (ii) operational control of infrastructure; (iii) vertical integration of services; (iv) level of economic dependence for connection to a necessary input or channel; (v) existence of market power or ecosystem leverage; (vi) in multi-sided markets, the existence of economies of scale resulting from network effects.[213]

In addition to qualitative criteria, the law will establish a quantitative criterion based on annual turnover to ensure that only large economic agents are subject to designation. Companies whose turnover falls below the established values will be exempt from designation (safe harbor). The definition of a minimum economic criterion will serve as an initial filter, allowing for the focusing of analysis efforts on agents with a higher probability of significantly impacting competition. The establishment of these values, which must be periodically reviewed to keep pace with market dynamics, ensures that regulation is applied in a proportionate and effective manner, avoiding the regulatory overload of small and medium-sized enterprises.

The use of quantitative criteria also emerged as a recommendation in the Public Consultation. CADE emphasized that the stipulation of quantitative criteria such as turnover would aim to ensure that the regulation encompassed the largest companies, holders of extensive ecosystems, which would raise greater competitive concerns.[214]

Other Public Consultation submissions argued that quantitative criteria should not be used in isolation for designating companies subject to the new regulation. For example, Google opined that regulation should not target companies solely based on their size.[215] Meanwhile, Zetta argued that "turnover and customer

[211] CADE's submission, 2024, p. 49.

[212] Proteste's submission, 2024, p. 31.

[213] Zetta's submission, 2024, p. 13.

[214] CADE's submission, 2024, p. 48.

[215] Google's submission, 2024, p. 20.

number requirements are not sufficient to determine the need to adopt specific rules previously defined, since this type of imposition can hinder innovations and affect new entrants that are growing in that segment".[216-217] In its submission, Abipag suggested that the law should define clear procedures for reviewing and updating threshold definitions for asymmetry conditions, so that "values or references do not become outdated".[218]

The designation process, based on a combination of quantitative and qualitative criteria, may be initiated ex officio by CADE. The mere fact that a company exceeds these thresholds does not automatically imply its designation. The final decision on designation will rest with CADE, which will analyze the data presented by the company, considering both quantitative and qualitative criteria.

Once a designation investigation is initiated, the company or economic group must provide the requested information and cooperate with the procedure, similar to what currently occurs in the context of CADE's preparatory proceedings. The designation procedure will also include mechanisms to encourage civil society participation, allowing third parties to submit relevant information to inform the analysis by the antitrust authority, and the designation procedure may also be initiated ex officio by CADE or at the request of third parties. Designation decisions must be approved by CADE's Tribunal.

<u>Proposal 1</u>: Creation of a new legal instrument enabling the designation of economic agents of systemic relevance in digital markets, based on a set of qualitative and quantitative criteria.

Designated economic agents may be subject to various obligations, defined and specified on a case-by-case basis for each company, based on a list provided by law. These obligations can be divided into three types: general - procedural and transparency -, specific, and monitoring and compliance. General obligations, which may be imposed on specific services and segments of the designated agent in the designation order, may include the requirement of prior notification for mergers and other transparency and information provision rules.

Public Consultation submissions advocate for the need for notification, transparency, and information obligations. In its submission, IDEC suggests that "inspiration can be drawn from the DMA for mandatory notification of mergers by gatekeepers 'when the merging entities or the concentration target provide core platform services or any other services in the digital sector or enable data

[216] Zetta's submission, 2024, p. 11.

[217] Similarly, Mercado Livre states that "any regulation should not be based on merely quantitative presumptions but rather should aim to address existing market failures in various digital market segments that effectively exist, having efficiency and consumer welfare as its foundation" (free translation) (Mercado Livre's submission, 2024, p. 6).

[218] ABIPAG's submission, 2024, p. 11.

collection" (free translation).[219] Telefonica highlights that granting greater transparency to information held exclusively by companies (e.g., policies on accessing and using user data) can enhance both the enforcement of the new regulatory instrument and antitrust law itself.[220]

Proposal 2: Designated agents may be subject to procedural and transparency obligations, from the time of their designation, at CADE's discretion. The designation decision may impose measures such as prior notification of mergers and specify transparency obligations, including the duty to provide clear information about their services and products, as well as to communicate changes in the terms of use of the services offered.

The second group of obligations consists of substantive obligations, which can be both positive and negative. Negative obligations include the prohibition of potentially anticompetitive practices such as limiting the participation of competitors, restricting access to offers, favoring one's own products, tying products, misusing commercial data, restricting access to relevant information, and hindering product interoperability. Positive obligations, on the other hand, aim to facilitate the entry of new competitors, reduce barriers to entry, and expand user choices. To this end, companies may be required to provide data transfer tools, allow for settings customization, provide clear and accessible information, guarantee deadlines for adapting to new rules, and establish effective mechanisms for handling complaints.

Both negative and positive substantive obligations must be defined individually for each designated economic agent, following a detailed analysis of their business model. A specific procedure, with stages and deadlines defined by law, will govern this process. The legislation may establish an illustrative list of measures, but CADE will define the concrete obligations for each case, specifying which services or activities each obligation will apply to, based on the evidence collected.

The process of defining substantive obligations must allow for the participation of the designated agents and other interested parties. Companies may present justifications, but they bear the burden of proof to demonstrate the efficiency claims. CADE may also determine the participation of interested third parties in this process. The Tribunal will approve the substantive obligations determined for each designated agent. Specific obligations involving matters related to the competences of sectoral regulatory bodies must involve such bodies, which may be included, where appropriate, in the process of establishment, approval, and monitoring.

[219] IDEC's submission, 2024, p. 20.

[220] Telefônica Brasil's submission, 2024, p. 5.

The third group of obligations relates to monitoring and compliance. The designated economic agents will have to provide CADE periodic reports, demonstrating compliance with determined general and specific obligations. These reports must be published in a publicly accessible version on CADE's website and on the websites of the platforms themselves, ensuring the transparency of the process and the monitoring of compliance with the obligations.

The definition of obligations in a flexible and customized manner was advocated by several Public Consultation respondents. CADE has recommended the adoption in Brazil of a regulatory framework "endowed with flexibility, characterized by the individual adjustment of regulatory provisions and continuous monitoring", through the "hybridization of ex-ante structures concurrently with the ex-post dynamic already developed within the [Brazilian Competition Defense System]" (free translation).[221] Furthermore, a " platform-specific guidance may also include more comprehensive assessments of competition and regulatory objectives, for example".[222]

Failure to comply with the obligations will constitute an infringement of economic order and will subject the designated economic agent to administrative sanctions and other measures that may be applied by CADE, depending on the severity of the infringement. CADE will have the prerogative to initiate investigations for non-compliance, being able to receive complaints and conduct investigations to investigate violations. The creation of a specialized body within CADE for this monitoring is discussed in detail below.

<u>Proposal 3:</u> CADE may impose substantive obligations, both positive and negative, on designated platforms. These obligations will be defined individually for each company, following a detailed investigation of its business model.

4.1.2. Institutional design for the implementation of the new regime

CADE will be the designated entity tasked with the implementation of the new pro-competitive instrument and will have new supervisory powers over designated agents. The proposed regime represents a valuable addition to CADE's toolkit for promoting competition in digital markets.[223] Assigning new powers to the competition authority has also been the choice of other jurisdictions to deal with such markets.

[221] CADE's submission, 2024, p. 45.

[222] CADE's submission, 2024, p. 39.

[223] CADE has expertise on case analysis in digital markets. See CADE (2023). Mercados de Plataformas Digitais – Revised and Updated Edition, Department of Economic Studies (DEE).

Germany, the United Kingdom, and Japan, as discussed in section 3, have conferred, to a greater or lesser extent, powers on their respective antitrust authorities to identify relevant actors and design obligations for designated companies.

CADE is recognized internationally as a mature antitrust authority, with institutional capacity and experience in conducting competition analysis.[224] The Brazilian authority also has internal procedures and practices that can be easily adapted to accommodate new powers.

In the Public Consultation, the choice of CADE as the regulatory entity was supported by most respondents. For example, CADE itself argued that it is the appropriate authority to regulate digital platforms, highlighting (i) international experience, which has convergently assigned the function of *ex ante* regulation of digital markets to competition authorities, (ii) CADE's accumulated expertise in handling complex competition issues and digital markets, (iii) CADE's international insertion and greater ability for international cooperation, thus avoiding regulatory fragmentation, (iv) the fact that CADE has broad institutional coordination with various Brazilian agencies, and (v) the synergies between the domains of *ex ante* regulation and competition in digital markets.[225]

Technology companies also advocate CADE as the authority responsible for implementing pro-competitive regulation in digital markets. Facebook, for example, argues that CADE would be the most suitable authority for the task, highlighting its cross-market reach and technical expertise, the lower cost of assigning a new mandate to competition agencies (compared to, for example, establishing new agencies), and the alignment of CADE's mandate with regulatory purposes.[226]

To complement CADE's existing capacity, a specialized unit for digital markets should be created within the authority. This unit would have the dual function of: (i) proactively monitoring the market, identifying and analyzing potential competitive distortions within its mandate, focusing on sectors and practices that may harm competition and consumers; and (ii) implementing the new pro-competitive tool that will be created, applying it in the processes of designating and investigating companies, as well as monitoring compliance with the established obligations. In this way, the unit will be responsible for analyzing the documents necessary for designation, conducting in-depth investigations, defining obligations for designated companies, receiving complaints, and identifying potential violations.

[224] OECD/IDB (2019), OECD Peer Reviews of Competition Law and Policy: Brazil.

[225] CADE's submission, 2024, p. 23-24.

[226] Facebook Brazil's submission, 2024, p. 34.

The formation of a specialized unit for digital markets within CADE has been advocated by various submissions received during the Public Consultation. CADE itself highlights the importance of "forming a specialized unit within the authority, dedicated exclusively to handling cases of digital platforms, which would guarantee a more effective and informed approach" (free translation).[227]

Proposal 4: CADE should be the competent authority to implement the new regulatory tool for digital markets. To this end, it is proposed to create a specialized unit for digital markets within the competition authority.

Where the substantive obligations imposed on designated agents involve matters within the remit of specialized regulatory bodies, such bodies may be involved in the implementation and monitoring process. Obligations related to interoperability parameters and data portability, for example, may require adjustments associated with technological interfaces and development standards specific to a particular sector or technical area. Consequently, specialized regulators such as ANATEL and ANPD may be included in the process of designing, implementing, and monitoring specific obligations imposed on designated agents following investigations, where necessary due to relevant technical or sectoral aspects.[228]

Proposal 5: Substantive obligations that involve matters within the competence of specialized regulators shall be designed, implemented, and monitored in cooperation with such bodies, such as ANATEL and ANPD, when necessary due to relevant technical and sectoral aspects.

4.1.3. Expansion of powers to conduct market studies

To complement the new regulatory tool for digital markets, it is essential to expand CADE's powers to collect information and analyze market structures in a more systematic manner. Strengthening the powers of the Department of Economic Studies (DEE) will enable this body to conduct more in-depth studies to understand competitive dynamics and help identify competition problems at early stages, before they become obstacles to competition.

Strengthening the market studies instrument would provide CADE with the power to request and collect information to analyze beyond specific conduct or concrete case, identifying recurrent structural issues in market dynamics and barriers to competition more broadly. Granting DEE the power to request information will allow for a broader study of markets, including the relationship between economic agents, and identifying structural competition concerns without

[227] CADE's submission, 2024, p. 53. Other submissions supporting the creation of a specialized unit at CADE are Idec (p. 17); Google (p. 11); and Sleeping Giants (p.22).

[228] In its submission to the public consultation, ANATEL argues that in the regulation must have mechanisms to ensure the regulatory agency access to information needed. See: Submission to the public consultation sent by ANATEL, 2024, p. 6.

the need to first identify specific anticompetitive conduct or focus the investigation on the behavior of only one (or a few) companies. It would also allow CADE to examine the market structures even in the absence of a clear dominant market position, or when a company's dominant position has not been obtained through mergers, examining a sector of the economy more systematically. This approach, as Fletcher argues, would be "especially well designed to carry out the holistic analysis of markets where problems are market-wide and there are a variety of interwoven factors –structural and behavioral – creating competition concerns".[229]

Market studies could be initiated by DEE on its own initiative or at the request of third parties, without requiring prior merger notification or evidence of an infringement of the economic order. The expansion of DEE's powers would make it possible to collect information from a wide range of market agents, including consumers, suppliers, competitors, and other interested parties. It would also provide flexibility regarding when companies can be required to provide information, as information requests and data analysis would not be limited to investigating specific conduct or mergers and could even retrospectively consider the effects of a transaction or series of transactions in the investigated market.

The proposal to include new powers to conduct market studies takes notes from practices adopted in jurisdictions such as the United Kingdom, South Africa, and Mexico, is supported by various respondents that contributed to the Public Consultation.[230] For Mercado Livre, it is "necessary for the antitrust authority to conduct market studies or investigations and in-depth analyses of market failures and distortions, in line with what is done internationally". To this end, it advocates "that the implementation of a formal market investigation mechanism, as is the case in Germany or the United Kingdom, can be a path for improvement" (free translation).[231]

<u>Proposal 6:</u> Expand CADE's powers to strengthen market studies, granting the agency the power to request information and analyze, on its own initiative or upon request, a particular sector or industry, without it being within the scope of a specific administrative procedure for a merger or investigation of an infringement to the economic order.

Beyond building institutional capacity within the CADE, more substantive cooperation with other government institutions will benefit the competition authority, given the cross-cutting nature of issues related to the regulation of

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[229] Fletcher, A. (2021). Market investigations for digital platforms: panacea or complement?. *Journal of European Competition Law & Practice*, *12*(1), 44-55.

[230] Other jurisdictions with a legislation allowing market investigation are Greece, Iceland, Mexico, and South Africa, among others. See 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 United Kingdom market investigation tool. Luxembourg: Publications Office of the European Union. p. 37-48.

[231] Mercado Livre's submission, 2024, p. 23.

digital platforms. This cooperation is already a CADE practice, which has significant experience in this area. Since the entry into force of the current Competition Law in 2012, CADE has intensified its articulation with other supervisory and regulatory bodies in Brazil, including the Public Prosecutor's Office (MP), the Central Bank of Brazil (BACEN), the National Consumer Secretariat (SENACON), the Federal Court of Accounts (TCU) and sectoral regulators such as the National Data Protection Authority (ANPD), through formal cooperation agreements and the sharing of information and expertise. There are also concrete examples of joint action between regulators for the supervision of technology companies in Brazil.[232]

Creating mechanisms to foster inter-institutional cooperation can bring significant gains in the efficiency of monitoring digital markets and economies of scale in investigations. A cooperation forum, such as the UK's Digital Regulation Cooperation Forum (DRCF), with clear procedural rules and formalized mechanisms for sharing information, could serve as a model to encourage cooperation between CADE and other federal bodies.[233] Such a coordination network will help to ensure timely and appropriate responses to rapidly evolving technology markets, whose business models are constantly changing. In addition, more flexible arrangements that encourage cooperation through consultation duties and clear procedures for initiating discussions can significantly complement the specific role of each regulator and optimize the management of complex cases.[234]

The need for institutional cooperation was also defended by Public Consultation participants. One of the submissions came from Abranet, which advocates for the creation of a multi-sectoral forum or council that leverages regulatory cooperation based on existing mechanisms, such as Cooperation Agreements and multidisciplinary working groups.[235] In the same vein, Conselho Digital emphasizes that CADE has been seeking "greater cooperation and coordination with other regulatory agencies, both national and international, to address cross-cutting issues such as data privacy and cybersecurity, which have a direct impact on competition" (free translation).[236]

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[232] On May 2021, CADE, the ANDP, the MPF, and SENACON issued a statement to WhatsApp and Facebook, related to the new privacy policy for messaging apps. For more information, see Kira, B. (2024). Inter-agency coordination and digital platform regulation: lessons from the WhatsApp case in Brazil. International Review of Law, Computers & Technology, 1-24.

[233] Vanberg, A. D. (2023). Coordinating digital regulation in the UK: is the digital regulation cooperation forum (DRCF) up to the task?. International Review of Law, Computers & Technology, 37(2), 128-146

[234] See recommendations and justifications on Kira, B. (2024). Inter-agency coordination and digital platform regulation: lessons from the WhatsApp case in Brazil. International Review of Law, Computers & Technology, 1-24.

[235] ABRANET's submission, 2024, p. 22.

[236] Conselho Digital's submission, 2024, p. 30.

<u>Proposal 7:</u> Creation of an inter-institutional cooperation forum between CADE and other federal bodies, including the National Consumer Secretariat (SENACON), the National Data Protection Authority (ANPD) and the National Telecommunications Agency (ANATEL), on issues related to digital markets.

4.2. Refinements in the Application of Law 12,529/2011

The second group of proposals focuses on improving competition law practices and procedures for antitrust cases involving digital platforms without systemic relevance. For these platforms, it is more likely that the provisions and procedures of the current Brazilian antitrust legislation are capable to promote competition. The implementation of the measures in this set of proposals, therefore, does not require substantial legislative changes. However, changes in the interpretation and enforcement of the law are necessary.

Several submissions to the Public Consultation proposed a series of non-legislative changes to the Brazilian Competition Defense System.[237] These suggestions aim to modify the way in which Law No. 12,529/2011 and its *infralegal* regulations are enforced and deal with adapting the instruments used by the competition authority in analyzing anticompetitive conduct and mergers, as well as internal procedures adopted in administrative processes.

4.2.1. Update of analytical tools

The traditional analytical tools employed in antitrust analysis are not adequate to identify and measure competitive dynamics and specific competitive risks of digital platforms. This requires significant adaptations in law enforcement to address contemporary competition challenges, both in relation to anticompetitive conduct and the analysis of mergers. The main suggestions relate to the methods of identifying competitive dynamics, such as the definitions of relevant market and market power, as well as the development and application of theories of harm appropriate to these markets.

Regarding relevant market definition, the traditional approach, based on the analysis of demand substitutability, proves inadequate for multi-sided markets and digital ecosystems. Updating the analytical tools used by CADE to incorporate the analysis of business models, ecosystems, and networks formed by platforms is essential to improve law enforcement. As Fernandes and Sá point out, a more flexible approach, which prioritizes understanding the interactions between economic agents and competitive dynamics, rather than metrics such as the SSNIP,

[237] See Systematization Report of Public Consultation submissions.

is more effective in identifying the relevant competitive forces in each specific case.[238]

Considering all relevant sides is crucial to identifying market power, an essential step for antitrust law enforcement in both conduct and merger analysis. As Prado demonstrates, the relevance of the platform in multiple services consumed by the same community increases demand inelasticity, conferring greater market power.[239] The more services a platform offers and the greater its share in each of them, the lower the demand elasticity and the greater the market power on the side of interest. Paradoxically, a platform with multiple services, even with a smaller share on a specific side, can exert greater market power than a platform with a larger share on a single side. Diversified service offering makes substitution by competitors difficult, even if they offer superior quality products.

In the market power analysis phase, it is recommended that CADE consider the nature and magnitude of network effects, the dynamics of digital ecosystems, and platforms governance mechanisms. Investigations can gain efficiency by prioritizing analysis of the size and heterogeneity of user communities, the possibility of multi-homing, the geographic limits of network effects, the relationships between the sides of the platform, and the governance mechanisms employed. Competitive analysis focused on producing this diagnosis, based on each specific case, will enable the development of more effective tools to identify and prevent anticompetitive conduct, with potential gains in the effectiveness of antitrust practice.

Adapting analytical tools for relevant market and market power definition to understand digital platforms' specificities is crucial, not only as analysis steps but also because it will allow CADE to develop and apply new theories of harm more suitable for evaluating common digital platform practices from an antitrust law perspective. Theories of harm are tools for testing concrete hypotheses about the impact of certain practices, seeking to establish a causal relationship between an action and a negative outcome for competition. In this way, theories of harm delimit and contextualize the application of general rules for specific cases.[240]

The analysis of CADE's case law indicates that this interpretative adaptation is still incipient, and aspects such as the magnitude of network effects, multi-sidedness of markets, and the massive collection of data are not yet explicitly articulated in the identification of risks and the application of antitrust law by

[238] Fernandes, V., & de Sá, M. V. S. (2024). Adapting market definition to digital markets: lessons from Cade's experience. Revista de Direito Administrativo, *283*(2), 93-120.

[239] Prado, T. S. (2021). Assessing the Market Power of Digital Platforms, 23rd Biennial Conference of the International Telecommunications Society (ITS).

[240] Kira, B., & Coutinho, D. R. (2021). Adjusting the lens: new theories of harm for digital platforms. Revista de Defesa da Concorrência, *9*(1), 83-103.

the Brazilian competition authority.[241] In its Public Consultation submission, CTS/FGV highlights the importance of expanding CADE's enforcement horizons, which could bring benefits "by enabling the Brazilian competition authority to come into contact with new perspectives that catalyze the investigation of new dimensions of competitive harm arising from the operation of dominant digital platforms - including privacy, business users' operating conditions, end-user manipulation, among others" (free translation).[242]

It is essential that CADE develops new theories of harm to structure the analysis of conduct typical of digital platforms. A clear example of these new practices is the exploitation of behavioral biases, such as the manipulation of algorithms to exploit users' cognitive vulnerabilities,[243] a practice that has been identified as anticompetitive by participants in the Public Consultation. For example, regarding the exploitation of behavioral biases, ANATEL highlights the manipulation of framing effects, salience bias, and default bias.[244] The exploitation of these biases can lead consumers to make decisions that do not reflect their real interests, harming competition and limiting market options.

The development of new theories of harm would also be useful for cases of self-preferencing by ecosystem controllers, a recurring point in the Public Consultation.[245] According to Idec, "[by] leveraging its power in an adjacent market, discriminating against competitors and business partners, digital platforms abuse their economic power and harm competition and consumers".[246] CADE highlighted that self-preferencing can occur in various ways, such as in "the display of online search rankings, in the distribution of app stores, or even in imposing difficulties on interoperability, when a dominant platform restricts the ability of competitors to interoperate with its platform or access key inputs such as data, APIs or app stores, raising barriers to entry".[247] CTS/FGV also highlighted self-preferencing as anticompetitive conduct specific to digital ecosystems.[248]

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[241] Kira, B., & Coutinho, D. R. (2021). Adjusting the lens: new theories of harm for digital platforms. Revista de Defesa da Concorrência, *9*(1), 83-103; Zingales, N., & Renzetti, B. (2022). Digital Platform Ecosystems and Conglomerate Mergers: A Review of the Brazilian Experience. World Competition, *45*(4); Kira, B. (2023). Is IFOOD Starving the Market? Antitrust Enforcement in the Market for Online Food Delivery in Brazil. World Competition, *46*(2).

[242] CTS/FGV's submission, 2024, s.p.

[243] For example, the exploration of behavioral biases is called dark patterns. See Mattiuzzo, M., & Pedigoni Ponce, P. (2024). Power through design–dark patterns, personalization and the emergence of TikTok. International Review of Law, Computers & Technology, 1-25.

[244] ANATEL's submission, 2024, p. 4.

[245] See Binotto, A., & Deluca, P. (2023). Self-preferencing between all and nothing: in search for a definition under Brazilian competition law. Latin American Law Review, (11), p. 73-92; Penereiro, S. V., Kastrup, G. H., & Barbosa, V. J. M. (2023). My game, my rules? Brazil's and world wide's antitrust experiences dealing with self-preferencing. Revista do IBRAC, (1), 59-86.

[246] IDEC's submission, 2024, p. 32.

[247] CADE's submission, 2024, p. 16.

[248] CTS/FGV's submission, 2024, s.p.

In addition to the development of new theories of harm, competition law enforcement for digital platforms can be improved by adapting existing theories of harm developed for traditional conduct. For example, it would be possible to treat excessive data collection and processing as non-monetary price increases; equate less favorable terms of use with quality restrictions; and consider aspects such as opacity, dark patterns, and high switching costs as restrictions on consumer choice.[249] CADE, in its Public Consultation submission, emphasizes that its practice demonstrates that it is possible to frame new theories of harm as abuse of a dominant position, listing specific practices that can be considered exploitative conduct, such as "the imposition of abusive terms and conditions of use in app distribution stores, the use of third-party data to calibrate offers of the platform's own products, excessive data collection, and use of such data in different businesses of the same economic group".[250-251]

Brazilian competition law can, therefore, be enforced to more efficiently identify new forms of abuse of economic power typical of digital platforms. The wording of Article 36 of Law No. 12,529/2011 allows for this analysis, permitting various conducts to be addressed, provided their effects are considered harmful to competition. Theories of harm offer a valuable tool for identifying, evaluating, and quantifying these effects, adapting the broadly described type in antitrust law to the specific context of digital platforms.[252]

The applicability of antitrust law to anticompetitive conduct typical of digital markets was identified by Public Consultation participants. Ibrac emphasizes that characterizing violation of economic order is not limited to the form or content of the act but is guided by the production of deleterious effects on competition. Despite this, the submission also highlights that "there may be a mismatch between the possibilities enabled by the open typification of competitive illicit and the effective application of this legal framework in concrete cases" (free translation).[253]

<u>Proposal 8:</u> Update antitrust analytical tools to continuously improve the analytical framework used by CADE to identify and assess competitive risks. A more robust analytical framework will allow CADE to more accurately identify

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[249] CTS/FGV's submission, 2024, s.p.

[250] CADE's submission, 2024, p. 16.

[251] Similarly, other Public Consultation submissions emphasize the need to adapt competition law enforcement through refinements in new theories of harm. This includes, for example, contributions suggesting (i) greater application of criteria involving more dynamic antitrust analysis, such as conglomerate effects in digital markets (position defended by CTS/FGV), (ii) analysis of issues such as data access, potential ecosystem foreclosure, network effects, and improvement of analytical technique (position defended by SDIC/MDIC), (iii) characterization of market power abuse in zero-price markets and development of clear theories of harm for self-preferencing cases (position defended by Proteste), and (iv) incorporation of new theories of harm in CADE's analysis (e.g., privacy as a quality competition attribute, personal data processing irregularities as abuse of dominant position, reduction of choice, and deleterious effects on innovation) (position defended by Idec).

[252] Kira, B., & Coutinho, D. R. (2021). Adjusting the lens: new theories of harm for digital platforms. Revista de Defesa da Concorrência, (1), p. 83-103.

[253] Ibrac's submission, 2024, p. 19 and 26.

platforms' market power, thereby allowing the development of more appropriate theories of harm for competitive risks associated with business models.

4.2.2. Reforms to merger review procedures

Mergers involving digital platforms can not only reinforce dominant positions in specific markets but also increase ecosystems complexity, facilitate the transfer of market power between previously unrelated services, and strengthen network effects, thereby reducing competition. To prevent distortions in competitive dynamics arising from changes in market structure and ecosystem complexity, a merger review must identify and prevent transactions that unjustifiably harm competition. In Brazil, under Law No. 12,529/2011, this review is carried out in advance, meaning that mergers that meet certain criteria must be mandatorily notified to the Administrative Council for Economic Defense (CADE) and approved before they can be implemented.[254]

To better identify potential competition risks related to digital markets in the Brazilian context, it is recommended that CADE's merger notification form be updated to include more detailed questions about the business models of parties involved in the operation, with emphasis on identifying platform controllers in the parties' economic groups. The absence of data and the difficulty in projecting the future evolution of these dynamic markets limit the ability to assess potential competition risks in advance, increasing uncertainty and the risk of erroneous decisions. Therefore, the form should be improved to allow the collection of crucial information for understanding the parties' business models, including network and ecosystem analysis, such as the number of users, types of services offered, and data collected and processed.

<u>Proposal 9:</u> Review CADE's merger notification form to require parties to identify if any of the economic groups include digital platform controllers and to include specific questions about the platforms' business models, including data on the number of users, interoperability between platforms, and types of data collected and their use for purposes of product or service differentiation.

When the notification form indicates that it is a company that controls at least one platform with a large number of users, it is recommended that CADE consider adopting the ordinary procedure to conduct a more in-depth assessment of potential competition risks. This measure is justified by the greater complexity inherent in transactions involving large digital platforms, which require more detailed analyses and a considerable amount of information. The ordinary procedure, by providing longer deadlines, allows for a more thorough investigation.

[254] See Kira, B. (2023). Confronting the Procedural Challenges in Regulating Digital Market Mergers in Brazil. Chapter in:" Women in Antitrust: Antitrust Across the Borders", Sao Paulo: Editora Singular.

This procedure could be applied both to mergers notified by designated platforms and to cases of mandatory prior notification provided by law. Turnover serves as an economic filter to identify transactions that require more rigorous analysis, avoiding submission to the ordinary procedure of transactions involving smaller platforms, while the number of users serves as an indicator of the size of the networks established by the platform.

Proposal 10: Consider adopting ordinary procedure for the analysis of mergers involving large digital platforms that have indicated a large number of users in the notification form, when they meet the turnover criteria established by law for mandatory prior notification.

It is important that CADE makes use, when appropriate, of the procedural mechanism of Article 88, §7 of Law 12,529/2011 to require the submission of merger notifications involving digital platforms that are not subject to mandatory notification. This measure would be particularly relevant when there are third-party complaints or market studies indicating signs of significant anticompetitive effects.

This legal prerogative can be exercised through APAC (Administrative Proceeding to Assess Concentration) procedures. According to CADE Resolution No. 24/2019, APAC procedures can be adopted in one of three scenarios. The first two scenarios describe the practice of "gun-jumping", i.e., the completion of mergers subject to mandatory review before CADE approval. The third scenario, in turn, establishes CADE's residual jurisdiction to examine non-notifiable mergers, in recognition that notification thresholds, based on turnover, may not adequately capture the anticompetitive effects of certain transactions. However, CADE's practice reveals that these procedures have been used predominantly in cases of 'gun-jumping' and not for the examination of mergers that do not meet the mandatory notification thresholds, indicating a potential underutilization of this tool to address the specific challenges of digital markets.[255]-[256] The use of this prerogative could be accompanied by interim measures or agreements to preserve the reversibility of the transaction, to create the necessary incentives for a swift analysis of the operation.

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[255] Renzetti, B., & Saito, C. (2023). Merger control in digital platforms: A critical analysis of the limits and potential of Article 88, § 7 of Law No. 12,529/2011. Revista de Defesa da Concorrência, 11(2), 67-86. Kira, B. (2023). Confronting the Procedural Challenges in Regulating Digital Market Mergers in Brazil. In Women in Antitrust: Antitrust Across the Borders. São Paulo: Editora Singular.

[256] In this regard, Telcomp highlights in its contribution that CADE can make more frequent use of the ex post review provision for concentration acts provided for in Article 88, paragraph 7, of Law No. 12,529: 'Regarding point (i) – i.e., legal requirements for the characterization of a concentration act subject to mandatory notification to CADE – it is observed that, in fact, CADE seems to use very timidly the guarantee provided in paragraph 7 of Article 88 of Law No. 12.529/2011, to request the submission of concentration acts that do not meet the legal requirements for mandatory notification. In Telcomp's view, this is an important faculty and instrument for CADE to be able to, for example, analyze legal transactions involving digital platforms that do not constitute, a priori, concentration acts subject to mandatory notification, as was the case, for example, of the acquisition of WhatsApp by Facebook/Meta ten years ago, in which CADE did not make use of the guarantee in question.' (Telcomp, 2024, p. 18)

The use of such a prerogative was also suggested by Public Consultation participants. In its submission, Idec highlighted that the power provided for in Article 88, Paragraph 7 of Law No. 12,529/11 can be used by CADE to "determine the notification of mergers that do not meet the current turnover criteria but raise some concerns, including in terms of data concentration that may generate potential abuse of economic power". This paragraph, in addition to being rarely used by CADE, has never been used to analyze mergers involving digital platforms.[257] Meanwhile, the Dynamic Competition Initiative (DCI) suggests that CADE could regulate Article 88, Paragraph 7 of Law No. 12,529/11 to address concerns involving digital markets, as a low-cost solution that would avoid potentially overburdening the authority.[258]

<u>Proposal 11:</u> It is recommended that CADE makes use, when necessary, of the residual jurisdiction provided for in Article 88, Paragraph 7 of Law No. 12,529/2011, to require the submission of mergers that, although they do not fit the formal notification criteria, may pose risks to competition.

In the current merger control system, it is observed that many concentrations in innovative sectors escape CADE's scrutiny, while many transactions with no competitive relevance overburden the antitrust authority's analysis.

For CADE to have a greater capacity to analyze cases with a higher potential to impact competition, Brazil's merger control system must also be improved to reduce the number of cases of little competitive relevance submitted to the authority. The 2019 OECD report reveals that, between 2012 and 2017, CADE analyzed more than 2,500 concentrations, but only 46 cases were challenged by the SG **(**General Superintendency) and forwarded for in-depth analysis by the Tribunal.[259] The volume of notified transactions continued to grow significantly in subsequent years, putting even more pressure on the agency's analytical capacity. Between 2021 and 2023, 1,881 mergers were notified, raising the average to around 600 notifications per year, and in 2023 CADE judged 611 mergers, with the SG challenging only 3 of these cases.[260]

It is therefore recommended that the thresholds mentioned in items I and II of Article 88, caput of Law 12,529/2011 be updated to higher levels than those currently provided for by the interministerial regulation in force. The turnover criteria established in Law No. 12,529/2011 and in Interministerial Ordinance No. 994/2012 are outdated and do not adequately capture the dynamics of modern

[257] IDEC's submission, 2024, p. 20.

[258] DCI's submission, 2024, p. 18.

[259] OECD Peer Review: Brazil (2019).

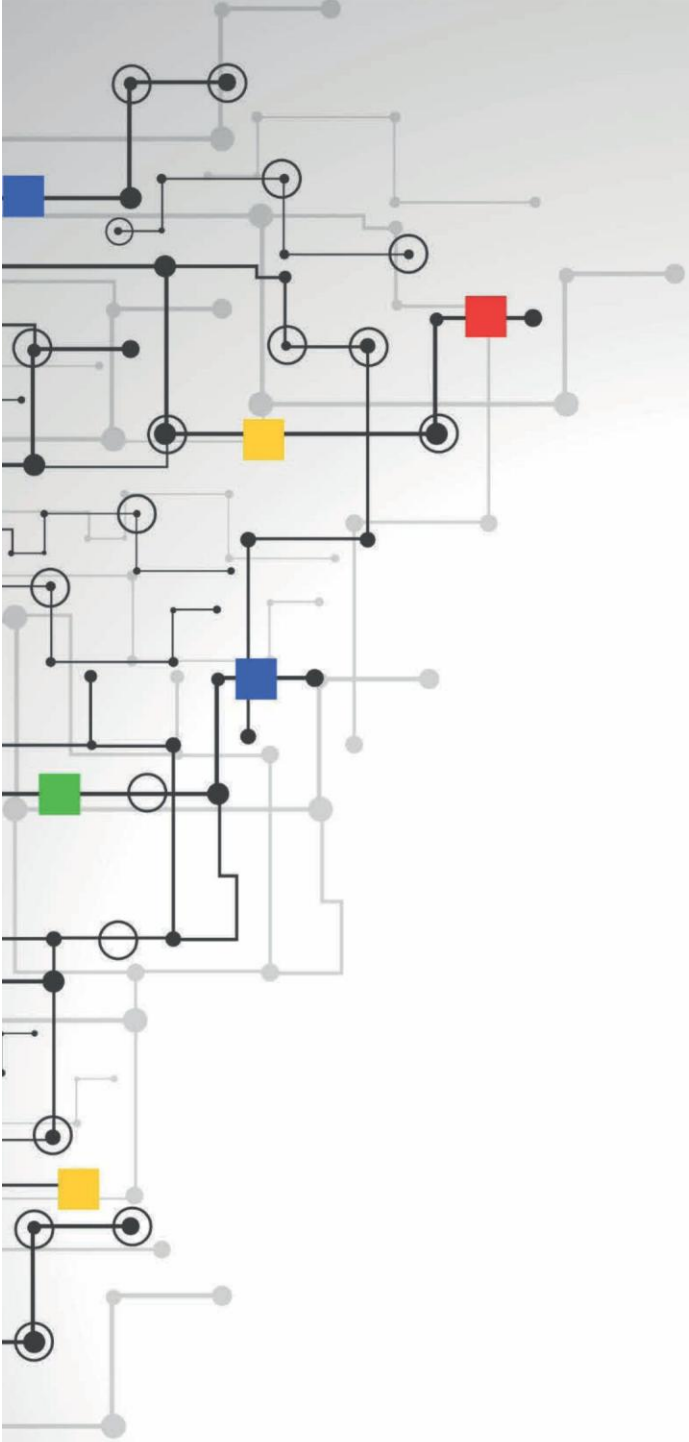
[260] CADE. 2023 Integrated Management Report.

markets, especially digital ones. Updating the turnover criteria would ensure that only transactions with a higher risk are submitted to CADE's analysis.

The update of the thresholds for mandatory prior notification was mentioned in the Public Consultation. This position was advocated by the George Washington Competition & Innovation Lab and by Idec in their submissions. For the GW Competition & Innovation Lab, merger control consumes significant resources, while a large proportion of the mergers analyzed by CADE are of low complexity. For Idec, the current criteria mean that "not very relevant transactions are notified to the authority," so it would be "important that at the sub-legal level the value of the turnover set out in Interministerial Ordinance 992/2012 be increased and/or updated annually (which could even occur through a legal requirement for monetary updating)" (free translation).[261] With this done, the authority would potentially cease to analyze many fast-tracked mergers.

<u>Proposal 12:</u> Update Interministerial Ordinance 994/2012 to raise the turnover values established in items I and II of Article 88 of Law No. 12,529/2011, to require prior notification to CADE for analysis only of transactions with a higher potential to impact competition.

[261] IDEC's submission, 2024, p. 19.



MINISTÉRIO DA
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