1 Overview

While regulations pursue legitimate policy objectives, when they are overly restrictive or onerous, however, a comprehensive review can help identify problematic areas and develop alternative policies that achieve government objectives without harming competition.

Competition Assessment Projects evaluate market regulations to identify regulatory barriers to competition. These include regulations that restrict entry into a market; constrain firms' ability to compete (for example, by regulating prices); treat competitors differently (for instance, by favouring incumbents); facilitate co-ordination among competitors; or restrict consumers' ability to change suppliers. The methodology followed in this systematic exercise is summarised in Annex A., which also describes the stages of the project and provides full references to the OECD Competition Assessment methodology.

This chapter provides some background information on the Brazil Competition Assessment Project, before summarising the main findings of the literature on the benefits of competition and the estimated economic benefits of implementing the recommendations.

1.1. Background to Brazil's Competition Assessment Project

In November 2020, an agreement was signed between the Brazilian competition authority, Administrative Council for Economic Defense (CADE), and the OECD. This set out how OECD, in co-operation with CADE, would conduct a competition-assessment review of laws and regulations in two sectors of the

Brazilian economy: civil aviation and ports. The project began in January 2021 and concluded with a formal launch of the OECD recommendations and a public report published in September 2022.

Using the methodology set out in OECD's Competition Assessment Toolkit, the project aimed to identify unnecessary regulatory restrictions to competition that act as barriers to sustainable economic growth and innovation in Brazil, and suggested alternative, less restrictive ways to achieve the same regulatory goals.

The OECD Competition Assessment Project in Brazil identified aspects of national regulatory and policy environment that may be hindering the efficient functioning of a competitive market in the two sectors. The project considered the likely consequences of existing regulation and proposed alternatives that may better achieve the policy objective, while ensuring a competitive business climate. The project outcome, which mainly comprises recommendations for regulatory reforms, intends to support the Brazilian Government's priorities by promoting higher productivity and innovation throughout the economy.

The competition-assessment methodology is based on the assumption that there are often several ways to achieve a specific public-policy goal, and that some policies restrict competition more than others. Since consumers generally benefit from more, rather than less, competition, it is essential to identify which restrictions to competition are not strictly necessary for the pursuit of public goals and develop alternative less restrictive policies that still achieve the desired government objectives. The OECD's Competition Assessment Toolkit provides a general methodology for these two tasks. This methodology has been used in several countries and updated based upon lessons learned and global regulatory advances.

This project was carried out against a background of the COVID-19 pandemic crisis which has had a profound impact on Brazil's economy. Putting in place a pro-competitive regulatory framework that helps businesses avoid unnecessary costs and enables flexibility will be crucial for a sustainable recovery. More than ever, it is important to maximise society's well-being without unnecessary burdensome regulatory costs to companies.

The two sectors under review have played and continue to play a significant role in increasing Brazil's economic development. The civil-aviation sector has a fundamental role in the economic development and in the national integration of a country as large as Brazil. Passengers are currently only a small percentage of the country's overall population, in a ratio much lower than in other comparable jurisdictions, suggesting a substantial potential for growth. The ports sector has a fundamental role in Brazilian foreign trade, as water transportation is used for most Brazilian exports and imports. This is particularly relevant since Brazil has an important role in the transport of loaded goods in global maritime trade.

These sectors are also at the core of current structural and regulatory reforms in Brazil. In particular, government policy objectives include:

- 1. improving economic-policy governance, in order to align Brazil with best international practice
- 2. updating and improving regulatory frameworks to promote greater market efficiency, quality of services, and legal certainty
- 3. expanding opportunities for private (both national and foreign) investment
- 4. developing all modes of passenger and freight transport, in order to promote territorial integration
- 5. increasing the efficiency of infrastructure, in order to provide safety and mobility for people and cargo
- 6. improving horizontal regulatory frameworks to avoid legal inconsistency between public entities (Government of Brazil, 2020^[1]).

In this context, and after initial research and exchanges with stakeholders, the sectoral analysis focused on 1) cargo handling for ports activities, and 2) passenger traffic in civil aviation. The analysis of the ports sector did not include sea transport, inland waterways, and fluvial transport.

1.2. The benefits of competition and lifting barriers

This competition-assessment project aims to identify regulations that may unduly restrict market forces and, in doing so, harm Brazil's growth prospects. In particular, the project identifies restrictive regulations that:

- 1. are unclear, and so may be applied in arbitrarily or without transparency
- 2. prevent or hinder new firms, including small- and medium-sized businesses, from accessing markets
- 3. allow a limited number of firms (or individuals in the case of regulated professionals) to earn greater profits than they otherwise would, for reasons unrelated to their productivity or the quality of their products or services
- 4. force consumers to pay more than they otherwise would.

Each restriction is likely to have an impact well beyond individual consumers in the sectors assessed. When customers can choose, firms are forced to compete with each other, innovate more and be more productive (Nickell, 1996_[2]; Van Reenen, Griffith and Blundell, 1999_[3]; Griffith, Harrison and Simpson, 2006_[4]; Aghion et al., 2004_[5]). Further, industries in which there is greater competition experience faster productivity growth. These conclusions have been confirmed by a wide variety of empirical studies and are summarised in the OECD's "Factsheet on how competition policy affects macro-economic outcomes" (OECD, 2014_[6]). Competition stimulates productivity because it provides the opportunity for more efficient firms to enter and gain market share at the expense of less efficient firms. Other important benefits of competition include lower consumer prices (Griffith and Harmgart, 2008_[7]); greater consumer choice (Min, 2014_[8]; Autorité de la concurrence, 2020_[9]); and higher-quality products and services (Boik and Takahashi, 2020_[10]).

In addition to the evidence of competition fostering productivity and economic growth, many studies have shown the positive effects of more flexible product market regulation (PMR).¹ These studies analyse the impact of regulation on productivity, employment, research and development (R&D), and investment, among other variables (Cette, Lopez and Mairesse, 2019[11]). Differences in regulation also matter and can reduce significantly both trade and foreign direct investment (FDI) (Fournier, 2015[12]).

A particularly large body of evidence points to the productivity gains of more flexible PMR. At company and industry level, restrictive PMR is associated with lower multi-factor productivity (MFP)² (Nicoletti and Scarpetta, 2003_[13]; Arnold, Nicoletti and Scarpetta, 2011_[14]).³ Further, anti-competitive regulations have an impact on productivity that goes beyond the sector in which they are applied and this effect is more important for those sectors closer to the productivity frontier (Bourlès et al., 2013_[15]).⁴ Specifically, a large part of the impact on productivity is due to investment in R&D (Cette, Lopez and Mairesse, 2017_[16]). Innovation and investment in knowledge-based capital, such as computerised information and intellectual property rights (IPRs), are also negatively affected by stricter PMR (Andrews and Criscuolo, 2013_[17]; Andrews and Westmore, 2014_[18]). Moreover, lowering regulatory barriers in network industries (such as transport) can have a significant impact on exports (Daude and de la Maisonneuve, 2018_[19]).

Greater flexibility can also lead to higher employment. A 2004 study found that after road-transport deregulation in France, employment levels in the sector increased at a faster rate than before deregulation (Cahuc and Kamarz, 2004_[20]).⁵ A 10-year, 18-country OECD study concluded that small firms five years old or less contribute about 42% of job creation on average (Criscuolo, Gal and Menon, 2014_[21]). As noted by the OECD, "such a disproportionately large role by young firms in job creation suggests that reducing barriers to entrepreneurship can contribute significantly to income equality via employment effects" (OECD, 2015_[22]).

There is some evidence that lifting anti-competitive regulations can also reduce income inequality. One study found that less restrictive PMR improved household incomes and reduced income inequality (Causa, Hermansen and Ruiz, 2016_[23]).⁶

Empirical studies show that barriers to competition can contribute to the accumulation of resources by the wealthiest segments of society at the expense of others. A 2018 study assessed the redistributive effects of market power in eight countries (Ennis, Gonzaga and Pike, 2019_[24]). It found that market power benefits the wealthiest households by providing them with rents and that the share of wealth of the top 10% of households derived from market power is between 12% and 21%. Finally, a 2018 paper studied the impact of PMR on the persistence of profits in the long term, finding that regulations that raise barriers to entry can protect incumbents' above-average profits (Eklund and Lappi, 2018_[25]). The authors found that more stringent PMR, as measured by the OECD PMR indicator, is associated with persistent profits. The results described above hold in a variety of settings, but specific estimates depend on the country. For instance, a 2017 study quantified the impact of structural reforms, including PMR and labour market reform, in a large sample including both OECD and non-OECD countries, and found that "stringent product market regulations will have a three-time larger negative impact on MFP in countries with per capita income lower than about 8 000 USD (in PPP terms)" (Égert, 2017_[26]).

In summary, anti-competitive regulations that hinder market entry and expansion may be particularly damaging for a country's economy as they reduce productivity growth, limit investment and innovation, harm employment creation, and may favour certain group of firms over other companies and consumers, with consequences for income inequality.

The objective of this report is to identify regulatory barriers to competition and propose recommendations on possible, less restrictive alternatives. The project was carried out by the OECD with the support of the Brazilian competition authority, Administrative Council for Economic Defense (CADE). The resulting OECD recommendations address specific restrictions and administrative burdens identified in the legislation covering the civil-aviation and ports sectors. The expected benefit from the recommendations is directly linked to lifting those restrictions and the consequent positive effect on competition in the relevant sectors. Expected benefits from implementing recommendations include increasing consumer welfare – for instance, through lower prices – and increasing FDI in the sector. In addition to these benefits, full implementation of the OECD's recommendations can be expected to deliver positive long-term effects for small- and medium-sized enterprises (SMEs) and employment. In particular, given the importance of ports for the performance of many other sectors of the economy, lifting barriers to competition in this sector could have a significant economic impact across the economy and facilitate cross-border trade.

This report includes estimates of possible benefits from implementing selected recommendations (see Annexes 2.B, 3.A and 3.B). These range between approximately BRL 700 million and BRL 1 billion a year for the Brazilian economy, which correspond to around 20 times CADE's annual budget. The main recommendations driving the benefits are those focused on jet-fuel supply, maritime pilotage, and pool of port workers, as set out in Table 1.1. To calculate these estimates, the OECD relied on a framework for evaluating changes in consumer welfare described in Annex A.

These figures are likely to underestimate the actual impact of fully implementing the Brazil Competition Assessment Project recommendations for a variety of reasons. First, it was not possible to quantify the effects of all the individual recommendations, due to insufficient data on specific issues or because of the nature of the recommended regulatory change. Second, the Competition Assessment project focuses on laws and regulations rather than enforcement, and changes in regulation can only have an impact if regulations are enforced. As this is not always the case, the actual benefits of lifting regulatory restrictions can be limited. Third, the estimates do not account for benefits to the business environment arising from improving the quality of legislation; for instance, by implementing recommendations to streamline the body of legislation and to provide more guidance and clarity to businesses. Fourth, the estimation framework focusses on the impact on consumer welfare, which is the standard approach followed by most competition

22 |

authorities and is embedded in the OECD Competition Assessment Toolkit (OECD, 2019[27]). In contrast, other benefits, such as increases in employment and improved cross-border trade, are not included in this estimate.

Table 1.1. Summary of estimated annual benefits by sector

Sector: restriction	Benefit (BRL, millions)
Civil aviation: jet-fuel supply	58.40-88.03
Ports: maritime pilotage	502-796
Ports: pool of port workers	137.48
Total	697.88-1 021.51

Note: For details on the methodology used, see Annex A.

These highlighted substantial benefits underline the value of competition assessment as an ongoing economic policy tool. In particular, the competition-assessment methodology set out in the OECD's Toolkit can serve as the basis for future regulatory reform efforts in other sectors. The continuing use of competition assessment can help spread awareness among government ministries and regulatory authorities about the value of competition, and the need to ensure that laws and regulatory impact assessments undertaken when developing or revising policy and regulation, so as to examine policy and legislative proposals and assess their potential impacts before they are adopted. Due to its close co-operation and contributions to the OECD project team, CADE (and other relevant public bodies) has acquired experience with the Competition Assessment Toolkit, which will be valuable for future similar exercises.

1.3. Summary of key findings

This competition-assessment review identifies and analyses regulatory barriers to competition as well as administrative burdens in the Brazilian civil-aviation and ports sectors. Both of these sectors play a fundamental role in the national economy.

This chapter provides a summary of the main issues and recommendations. More details can be found in the specific chapters of the report, while a complete list of all the barriers to competition identified and the OECD's recommendations is contained in a spreadsheet published as a standalone document on our dedicated website.

1.3.1. Overview of the sectors

The sectors covered by this review are essential for the transport of goods and people both in the domestic and international markets. Since the 1990s, both sectors have undergone regulatory reforms aimed at promoting competition.

In the ports sector, Brazil had 170 private-use terminals (TUPs) operating under a fully privatised model in 2021; they were responsible for 66% of the cargo handled in Brazilian ports in 2021 (ANTAQ, 2022_[28]). Nevertheless, the maritime-transport service sector in Brazil is less open to trade and investment and less efficient than the OECD average or other comparable economies, such as Chile, Colombia, and Costa Rica.

The civil-aviation sector has undergone significant growth both in terms of revenue-passenger kilometres (RPK) and of available-seat kilometres (ASK).⁷ However, the sector presents characteristics of potentially high market concentration, such as high fixed costs, exposure to exogenous shocks, particularly fuel-price

fluctuation, and legal barriers related to security standards (CADE, 2017_[29]) (ANAC, 2021_[30]). Consequently, lifting barriers to competition in these sectors could be expected to have a significant economic impact.

The OECD identified over five hundred potentially harmful restrictions in approximately 230 pieces of legislation, including laws, decrees, ordinances, regulations, public-auction notices, and concession contracts for assessment.

In total, the report makes 368 specific recommendations to mitigate harm to competition (Table 1.2).

These recommendations are listed in spreadsheet published as a standalone document on our dedicated website.

Table 1.2. Summary of the barriers to competition analysed and recommendations made

	Civil aviation	Ports	Horizontal	Total
Potential restrictions identified	324	177	49	550
Recommendations made	203	120	45	368

Note: After the initial screening of legislation in the ports and civil-aviation sectors and a more in-depth assessment, some of the potential restrictions identified were revoked.

Using a specific methodology described in the OECD Competition Assessment Toolkit, the report provides estimates of the impact that the implementation of the recommendations would have. It finds that the implementation of key recommendations would lead to benefits of over BRL 1 billion a year.

1.3.2. Civil aviation

Airport management

Technical-experience requirements

Airport-concession tender notices require bidders to demonstrate appropriate technical experience to participate in the auction. This provision aims to guarantee that the winning bidder is technically qualified to meet the concession's goals and to mitigate potential costs for the government and users. Nevertheless, technical-experience requirements have varied across tenders, and do not always seem proportionate to the contract being tendered.

The OECD recommends the following: Brazilian authorities should implement a structured approach to determining the technical-experience requirements for airport-concession auctions. These requirements should be at the lowest possible levels and should be based on objective, proportionate and technical criteria, such as the size and characteristics of the airport.

Restrictions on horizontal integration

In its privatisation process, Brazil has imposed certain restrictions on airport cross-ownership in order to stimulate competition between airports. The first concession rounds established that the same firm could not be awarded more than one competing airport. More recent concession rounds did not follow this rule, and competing airports may end up being managed by the same player, which is likely to harm competition.

The OECD recommends that Brazilian authorities ensure that an entity or related entities is not allowed to control competing airports, either in already awarded or future concessions. Minority holdings should only be accepted in exceptional cases and should be barred from participation in corporate governance.

24 |

Airport-concession contracts

Concession tenders have evolved since their inception and have incorporated lessons learned from earlier rounds. Although many of these changes were positive, successive concession contracts with different clauses, even for similar and competing airports, may affect the level playing field. In practice, this may reflect different incentives and disincentives of each specific concession model used in Brazil – say, concession fees, tariff regulation and mandatory investments – which may influence each concessionaire's total costs and revenue sources.

The OECD recommends the following: Brazilian authorities should consider harmonising all airportconcession models, so as to ensure that all players are subject to the same regulatory environment, especially the tariff-regulation regime. Ideally, improvements implemented in the most recent concession rounds should be retrospectively applied to previous concession contracts. Certain of these changes may be difficult in practice since they may require contractual amendments and re-balancing to take into account any amendment's economic-financial impact.

Airport revenue

Revenues from commercial services

The current design of commercial concession contracts may restrict competition in the provision of commercial services at Brazilian airports. The barriers identified, such as relatively long lease terms and exclusivity agreements, may prevent more aggressive competition between commercial providers inside airports, leading to higher prices for airport users, but also lower quality and reduced variety. Even if the high revenues generated by commercial services may partially cross-subsidise airport tariffs, passengers may still end up spending more in total.

To improve competition in the provision of commercial services at airports, the OECD has three recommendations.

- ANAC should more effectively monitor prices and the quality of commercial services at airports by building upon current consumer surveys provided for in airport-concession contracts, and consider including indicators related to the price-performance ratio of commercial services as a quality factor in future airport concession contracts. Any suspicious behaviour of anti-competitive practices should be duly notified to CADE.
- 2. Brazilian authorities should adopt non-exclusivity clauses for commercial contracts in airports, except in justified situations subject to prior ANAC approval.
- 3. Brazilian authorities should require airport operators, when defining the lease terms of commercialconcession contracts, to take into consideration the minimum level of investment that will be incurred by the contracting party. If no investment is required, the contract should have short terms.

Ground-handling services

Access to jet-fuel supply infrastructure at the airport

In most Brazilian airports, incumbents control storage tanks and – at airports with the system – fuel-pipeline facilities, which makes it difficult for new firms to enter the market. As Brazilian regulations are unclear about the scope of open-access rights to airport space, incumbent firms often do not enable new entrants to access the distribution and fuelling infrastructure,

The OECD recommends the following: Brazilian authorities should clarify the legislation and ensure proper enforcement towards a genuine open-access regime for jet-fuel supply infrastructures, especially at large international airports that handle more flights with larger, more fuel-consuming aircrafts, where access to

hydrant systems can give those firms using them a competitive advantage vis-à-vis others using refuelling trucks. Open access should be based on transparent, objective and non-discriminatory criteria, while regulation still ensures other public policy objectives, such as safety, security, environmental protection and recoupment of the investments. Any dispute arising from the enforcement of open-right access should be decided by an independent third party.

Civil-aviation personnel

Nationality requirement

According to Brazilian legislation, the aircrew of domestic flights must be composed only of native or naturalised Brazilian citizens. For international flights provided by Brazilian airlines, up to a third of flight attendants on board can be foreigners, but pilots and flight mechanics must still be Brazilian citizens. In case of a shortage of Brazilian workers, foreigners may be provisionally admitted, but ANAC's authorisation is required and only valid for the time necessary to qualify new Brazilian aircrew and for a maximum of six months.

By excluding nationals of other countries, Brazilian regulation reduces the number of people able to offer services in the market. The requirement may also make the entry of potential market participants more difficult as a consequence of the difficulty and cost of finding suitable crew.

Although foreigners are allowed to be employed as a last resort (subject to ANAC's authorisation and for a limited time), if no interested national citizens are found to qualify, the shortage of personnel will remain in place. Although Brazil does not face current shortage of aircrew, this may happen in the future.

The OECD has one recommendation. Brazilian authorities should consider relaxing the nationality requirement, especially for international flights. This should include ANAC issuing guidelines on the transparent, objective, and non-discriminatory assessment of requests for temporary admission of foreign aircrew when national labour is short. It should also consider the possibility of extending the flexibility period for longer than six months if no sufficient qualified Brazilian workers can be found within that time frame.

Flight- and duty-time limitations

In line with the Convention on International Civil Aviation, Brazil establishes flight-time and duty-period limitations to manage fatigue and ensure that crew members can safely perform their duties at an adequate level of alertness.

Brazilian regulation appears more restrictive than other jurisdictions, which is likely to increase costs for Brazilian airlines on long-haul flights compared to foreign competitors. These limitations may also prevent Brazilian airlines from providing flights on certain routes, although this has been mitigated by recent regulatory changes providing for a fatigue risk-management system.

The OECD recommends the following: Brazilian authorities should consider reviewing flight-time and dutyperiod limitations, taking into account the regulations established in other jurisdictions, but also relevant scientific principles and knowledge, past experience, cultural issues and operational nature, in line with ICAO recommendations.

1.3.3. Ports

In Brazil, ports have recourse to two models of management, each with a specific legal framework: the landlord model for public ports and a model applying to fully privatised ports (TUPs). Leasing contracts are the main instrument used to grant terminals in public ports, while authorisations are common for the construction and operation of private port facilities (TUPs).

Centralisation of the leasing process and absence of flexibility in leasing contracts

Centralisation of the leasing process: The Port Secretariat, which is part of the Ministry of Infrastructure, is the central decision-making body for leasing terminals in public ports. The law provides for specific exceptions, by enabling the delegation to specific port authorities of the bidding procedure for port leases, as well as of the execution, management and inspection of such contracts. However, this delegation procedure is yet to be widely adopted.

By giving more autonomy to qualified and responsible port authorities to choose lessees, decentralisation would make the process under the standard procedure faster and more agile.

The OECD recommends the following: Brazilian authorities should consider introducing more flexibility in the rules which lay down the conditions and procedure for delegation of the leasing process to port authorities (currently, of Ordinance No. 574/2018) to give more autonomy to port authorities when choosing lessees, whether through tenders or simplified processes for non-complex contracts, while remaining subject to federal legislation on public procurement and port-leasing contracts.

Absence of flexibility in leasing contracts: The OECD found a lack of flexibility in the ability of public authorities to make changes to the use and improvement of space in public ports. This concern affects changes in the type of cargo and the authorisation for new investments. More agile process for contractual changes may lead to greater efficiency and may diminish private ports' competitive advantage.

The OECD has two recommendations.

- 1. Brazilian authorities should review the regulations and put in place more efficient and speedy processes for contractual changes.
- 2. Brazilian authorities should also consider the creation of more instruments, such as the agreement of investment risk, that make it easier for an operator to change the contract at its own risk with the possibility of a later rebalancing in cases of public and private interest.

Duration of the authorisation process to build and operate port facilities

The process of obtaining an authorisation to build and operate port facilities can have up to 18 steps. It usually takes a long time to complete and involves many different entities. The requesting entity must wait for the completion of the process before making any investment.

Considering the length of the process and a need for more agility, the OECD has two recommendations.

- 1. Brazilian authorities should consider reducing the number of bodies involved in the authorisation process.
- 2. They should consider implementing provisional instruments that authorise a request after a fewer number of steps of the authorisation process to allow the requesting entity to move forward without having to wait until the completion of the entire process.

Pilotage and the rotation shift

In each pilotage zone in Brazil, pilots wishing to provide their services to ships arriving in a port must follow a rotation shift that follows a list elaborated by the pilots' representative. The requirement to follow the single rotation shift creates an artificial monopoly in the market. Pilots are obliged to accept the assignment that they receive under the single rotation shift, without being able to choose their own clients, while vessels must accept the pilot assigned according to the shift rules. This means that maritime pilots chosen to provide services to a given ship act as monopolists and no other pilot can compete against them.

The OECD has two recommendations.

- 1. Brazilian authorities could abolish the single rotation shift, in line with the possibilities offered in the Pilotage Law to give pilots a choice about how they provide their own services. If this option is chosen, Brazilian authorities should define another way of identifying which pilot will provide the service to ensure service competition between the pilots and their entities, while guaranteeing safety. This new scheme should take into account pilot fatigue and exercises for the renewal of pilot qualification, while ensuring uninterrupted availability of pilots
- 2. Alternatively, if Brazilian authorities maintain the current rotation shift established by the DPC, some form of price control of pilotage services would seem appropriate. If this option is chosen, any price-setting body should be independent and use objective criteria in its decisions.

Pool of port workers

In Brazilian public ports, the pool of port workers, known as OGMO, has the monopoly of registering permanent and casual workers, establishing worker teams, and managing port-worker training. In contrast, private ports can freely hire their workers. This regulatory asymmetry creates competitive concerns.

The OECD has four recommendations.

- 1. The OGMO monopoly of the registration and supply of port workers should be abolished. Brazilian authorities should discuss with unions the necessary considerations for the design of new legislation. In particular, Brazilian authorities should take into account both the unpredictability of the demand of casual port workers and the flexible requirements of today's shipping industry.
- 2. The Brazilian authorities should allow port operators to assign workers and allow them to choose workers who best meet their needs.
- 3. Brazilian authorities should introduce flexibility in the set number of workers required to perform each task.
- 4. Brazilian authorities should remove OGMO's exclusive management of port-worker training and allow port operators to choose the training most appropriate for their workers.

Segregation and delivery-service fee: lack of legal certainty

The segregation and delivery-service fee (SSE or THC2) was firstly introduced in 1996, after the establishment of retroport terminals (also known as "dry ports"), which are areas outside the port used to store goods until their customs clearance. Port operators began charging this additional fee for the handling of containers when these began to be stored in retroports and not in their own storage areas.

For more than 20 years, regulatory agencies and other competent bodies have had and still have diverging opinions regarding the legality of this fee. In addition, the legal regulatory framework seems unclear, which contributes to legal uncertainty for port operators, retroports, and importers.

The OECD recommends the following: Brazilian authorities should address the lack of legal certainty related to the port fees for the handling of ship containers. Brazil should consider clarifying the current legal framework with transparent, non-discriminatory, and objective provisions to charge port fees including those related to the SSE/THC2 fee.

References

Aghion, P. et al. (2004), "Entry and Productivity Growth: Evidence from Microlevel Panel Data", *Journal of the European Economic Association*, Vol. 2/2-3, pp. 265-276, <u>https://www.jstor.org/stable/40004902</u>.

ANAC (2021), Características do mercado de transporte aéreo público: uma visão do mercado no Brasil e comparação dos níveis de concentração com outros países. Texto para Discussão, 01, <u>http://www.gov.br/anac/pt-br/centrais-de-conteudo/publicacoes/textos-para- discussao/textos/td-01-caracteristicas-do-mercado-de-transporte-aereo-publico-v201911.pdf</u> .	[30]
Andrews, D. and C. Criscuolo (2013), "Knowledge-Based Capital, Innovation and Resource Allocation, OECD Economics Department Working Papers, No. 1046", OECD Publishing, <u>https://doi.org/10.1787/5k46bj546kzs-en</u> .	[17]
Andrews, D. and B. Westmore (2014), "Managerial Capital and Business R&D as Enablers of Productivity Convergence", <i>OECD Economics Department Working Papers</i> , No. 1137, OECD Publishing, Paris, <u>https://doi.org/10.1787/5jxx3d441knr-en</u> .	[18]
ANTAQ (2022), Painel Estatístico Aquaviário da ANTAQ, http://ea.antaq.gov.br/QvAJAXZfc/opendoc.htm?document=painel%5Cantaq%20- %20anu%C3%A1rio%202014%20-%20v0.9.3.qvw⟨=pt- BR&host=QVS%40graneleiro&anonymous=true.	[28]
Arnold, J., G. Nicoletti and S. Scarpetta (2011), Does Anti-Competitive Regulation Matter for Productivity? Evidence from European Firms, IZA Discussion Paper, Vol. 5511, <u>https://www.iza.org/publications/dp/5511/does-anti-competitive-regulation-matter-for-productivity-evidence-from-european-firms</u> .	[14]
Autorité de la concurrence (2020), <i>"The benefits of competition"</i> , <u>http://www.autoritedelaconcurrence.fr/en/the-benefits-of-competition</u> .	[9]
Boik, A. and H. Takahashi (2020), "Fighting Bundles: The Effects of Competition on Second- Degree Price Discrimination", <i>American Economic Journal: Microeconomics</i> , Vol. 12/1, pp. 156-187, <u>https://doi.org/10.1257/mic.20180303</u> .	[10]
Bourlès, R. et al. (2013), "Do Product Market Regulations in Upstream Sectors Curb Productivity Growth? Panel Data Evidence for OECD Countries", <i>The Review of Economics and</i> <i>Statistics</i> , Vol. 95/5, pp. 1750–1768, <u>https://doi.org/10.1162/REST_a_00338</u> .	[15]
CADE (2017), <i>Cadernos do Cade: Mercado de Transporte Aéreo de Passageiros e Cargas</i> , <u>https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-</u> <u>economicos/cadernos-do-cade/mercado-de-transporte-aereo-de-passageiros-e-cargas-</u> <u>2017.pdf</u> .	[29]
Cahuc, P. and F. Kamarz (2004), <i>De la précarité à la mobilité: vers une sécurité sociale professionelle</i> , Documentation Française, <u>http://www.vie-publique.fr/rapport/27046-de-la-precarite-la-mobilite-vers-une-securite-sociale-professionnelle</u> .	[20]
Causa, O., M. Hermansen and N. Ruiz (2016), <i>The Distributional Impact of Structural Reforms,</i> OECD Economics Department Working Papers, No. 1342, OECD Publishing, <u>http://www.oecd.org/social/labour/The-distributional-impact-of-structural-reforms.pdf</u> .	[23]
Cette, G., J. Lopez and J. Mairesse (2019), "Rent creation and rent sharing: New measures and impacts on total factor productivity", <i>Economic Inquiry</i> , Vol. 57/4, pp. 1915-1938, <u>https://doi.org/10.1111/ecin.12809</u> .	[11]
Cette, G., J. Lopez and J. Mairesse (2017), "Upstream Product Market Regulations, ICT, R&D and Productivity", <i>The Review of Income and Wealth</i> , Vol. 63/S1, pp. S68-S89,	[16]

https://doi.org/10.1111/roiw.12252.

Criscuolo, C., P. Gal and C. Menon (2014), <i>"The Dynamics of Employment Growth: New Evidence from 18 Countries, OECD Science, Technology and Industry Policy Papers, No. 14</i> , OECD Publishing, <u>https://doi.org/10.1787/23074957</u> .	[21]
Daude, C. and C. de la Maisonneuve (2018), <i>"Network service deregulation and manufacturing exports in Greece", OECD Economics Department Working Papers, No. 1474</i> , OECD Publishing, <u>https://doi.org/10.1787/18151973</u> .	[19]
Égert, B. (2017), "The quantification of structural reforms: Extending the framework to emerging market economies", <i>OECD Economics Department Working Papers</i> , No. 1442, OECD Publishing, Paris, <u>https://doi.org/10.1787/f0a6fdcb-en</u> .	[26]
Eklund, J. and E. Lappi (2018), "Product regulations and persistence of profits: OECD evidence", <i>Journal of Regulatory Economics</i> , Vol. 54/2, pp. 147-164, <u>https://link.springer.com/article/10.1007/s11149-018-9365-y</u> .	[25]
Ennis, S., P. Gonzaga and C. Pike (2019), "Inequality: A hidden cost of market power", Oxford Review of Economic Policy, Vol. 35/3, pp. 518-549, <u>https://doi.org/10.1093/oxrep/grz017</u> .	[24]
Fournier, J. (2015), "The negative effect of regulatory divergence on foreign direct investment", OECD Economics Department Working Papers, No. 1268, OECD Publishing, <u>https://doi.org/10.1787/5jrqgvg0dw27-en</u> .	[12]
Government of Brazil (2020), <i>Estratégia Federal de Desenvolvimento para o Brasil: 2020-2031</i> , <u>http://www.gov.br/economia/pt-br/assuntos/gestao/estrategia-federal-de-</u> <u>desenvolvimento/arquivos/efd-2020-2031_v2.pdf</u> .	[1]
Griffith, R. and H. Harmgart (2008), ""Supermarkets and Planning Regulation"", <i>CEPR Discussion Paper No. DP6713</i> , <u>https://cepr.org/publications/dp6713</u> .	[7]
Griffith, R., R. Harrison and H. Simpson (2006), <i>The link between product market reform,</i> <i>innovation and EU macroeconomic performance</i> , <u>https://ec.europa.eu/economy_finance/publications/pages/publication_summary817_en.htm</u> .	[4]
Min, H. (2014), "Consumer benefits of reforming a state-dominated industry", <i>Journal of Regulatory Economics</i> , Vol. 47/1, pp. 58-77, <u>https://doi.org/10.1007/s11149-014-9262-y</u> .	[8]
Nickell, S. (1996), "Competition and Corporate Performance", <i>Journal of Political Economy</i> , Vol. 104/4, pp. 724-746, <u>https://doi.org/10.1086/262040</u> .	[2]
Nicoletti, G. and S. Scarpetta (2003), "Regulation, productivity and growth: OECD evidence", <i>Economic Policy</i> , Vol. 18/36, pp. 9-72, <u>https://doi.org/10.1111/1468-0327.00102</u> .	[13]
OECD (2019), OECD Competition Assessment Toolkit 3: Operational Manual, OECD Paris, https://www.oecd.org/competition/assessment-toolkit.htm.	[27]
OECD (2015), "Chapter 2. The effect of pro-growth structural reforms on income inequality", in <i>Economic Policy Reforms: Going for Growth 2015</i> , OECD Publishing, Paris, <u>http://www.oecd.org/economy/growth/going-for-growth-2015.htm</u> .	[22]
OECD (2014), <i>"Factsheet on how competition policy affects macro-economic outcomes"</i> , OECD Paris, <u>https://www.oecd.org/competition/factsheet-macroeconomics-competition.htm</u> .	[6]

Van Reenen, J., R. Griffith and R. Blundell (1999), "Market Share, Market Value and Innovation", *Review of Economic Studies*, Vol. 66/3, pp. 529-554, <u>https://doi.org/10.1111/1467-937x.00097</u>.

Notes

¹ The methodology followed in this project is consistent with the product market regulations (PMR) index developed by the OECD. To measure a country's regulatory stance and track progress of reforms over time, the OECD developed an economy-wide indicator set of PMR in 1998 (Nicoletti and Scarpetta, 2003_[13]). This indicator was updated in 2003, 2008, 2013 and 2018.

² Multi-factor productivity (MFP) is a measure of the "efficiency with which labour and capital inputs are used together in the production process"; see, https://data.oecd.org/lprdty/multifactor-productivity.htm.

³ One study analysed firm-level data in 10 countries from 1998 to 2004 using the OECD's PMR index at industry level, and found that more stringent PMR reduces firms' multi-factor productivity (MFP) (Arnold, Nicoletti and Scarpetta, 2011^[14]).

⁴ The study of 15 countries and 20 sectors from 1985 to 2007 estimated the effect of regulation of upstream service sectors on downstream productivity growth. The productivity frontier refers to the most productive countries and sectors in the sample. The farther a sector is from the frontier, the less productive it is.

⁵ Employment growth in the road transport sector in France increased from 1.2% a year between 1981 and 1985 to 5.2% a year between 1986 and 1990. Between 1976 and 2001, total employment in the sector doubled, from 170 000 to 340 000.

⁶ Using the OECD's summary index of PMR in seven non-manufacturing industries in the energy, telecoms and transport sectors, one study found stringent PMR had a negative impact on household disposable income (Causa, Hermansen and Ruiz, 2016_[23]). This result held both on average and across the income distribution, and led to greater inequality. The authors noted that lower regulatory barriers to competition would "tend to boost household incomes and reduce income inequality, pointing to potential policy synergies between efficiency and equity objectives".

⁷ RPK increased, for domestic flights, by more than 282% from 25.2 billion in 2000 to 96.4 billion in 2019; and ASK more than doubled from 43.6 billion in 2000 to 116.6 billion in 2019.





Access the complete publication at: https://doi.org/10.1787/d1694e46-en

Please cite this chapter as:

OECD (2022), "Overview", in OECD Competition Assessment Reviews: Brazil, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/b8960fc6-en

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

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

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

