

Annex A. Methodology

The Brazil Competition Assessment Project began in the first half of 2021 and was carried out in five phases, as agreed between CADE and the OECD. This annex describes the methodology followed in each of the project stages.

Stage 1: Mapping the sectors and collection of regulations

The objective of Stage 1 of the project was to identify and collect sector-relevant laws and regulations. The main tools used to identify the applicable legislation were online databases, the websites of the relevant authorities and sector specific reports by private or government bodies. In addition, in order to ensure that all important pieces of legislation were covered by the study, the team consulted with the industry and all competent public bodies involved in the sectors, members of the High-Level Advisory Group (HLAG), composed of senior government officials.

Over the course of the project, the lists of legislation were refined, as additional pieces were discovered by the team or issued by the authorities, while other pieces initially identified were found not to be relevant to the sectors or no longer in force. In total, approximately 230 pieces of legislation were selected for analysis, including laws, decrees, ordinances, regulations, auction public notices and concession contracts.

Another important objective of the first stage (which has continued for the entire duration of the project) was the establishment of contact with the market through the main authorities, industry associations and private stakeholders active in the sectors. The OECD team conducted fact-finding missions and met with government and private stakeholders. Interviews with market participants contributed to a better understanding of how the sectors under investigation actually work in practice and helped in the discussion of potential barriers deriving from the legislation. In total over 30 public and private stakeholders contributed to the reports.

The team has also launched an online survey to better understand the issues of each sector through private stakeholders' perspective. The survey's main goal was to verify if the private stakeholders considered that their sectors had regulatory barriers. The team had more than 20 meetings with associations of companies operating in the two sectors to present the online survey and to explain the concept of regulatory barrier under the Competition Assessment Toolkit. The survey result was very useful. Regarding the port sector, the team received 63 responses, while in civil aviation, 31 responses were received.

Based on the outcomes of the survey, the meetings, the discussion on practical problems stakeholders face, and backed up by further research, the OECD team identified the legislation to be prioritised for areas in which *prima facie* barriers to competition existed and an impact on competition could therefore be expected.

Stage 2: Screening of the legislation and selection of provisions for further analysis

In the second stage of the project, the main work stream was the screening of the legislation to identify potentially restrictive provisions, as well as providing an economic overview of the relevant sectors.

The legislation collected in Stage 1 was analysed using the framework provided by the OECD Competition Assessment Toolkit. This toolkit, developed by the OECD, provides a general methodology for identifying unnecessary obstacles in laws and regulations and developing alternative, less restrictive policies that still achieve government objectives. One of the main elements of the toolkit is a competition-assessment checklist that asks a series of simple questions to screen laws and regulations with the potential to restrain competition unnecessarily (see Box A A.1).

Based on the toolkit's methodology, the OECD compiled a list of all the provisions that answered any of the questions in the checklist positively. The government experts as were the members of the HLAG received draft lists and were given an opportunity to comment. The final list consisted of almost 1 250 provisions with the potential to restrict competition in the civil-aviation and ports sectors in Brazil.

The OECD also prepared an extensive economic overview of the relevant sector (and refined it during later stages), covering industry trends and main indicators, such as output, employment and prices, including comparisons with other Latin America and OECD member countries where relevant. The analysis conducted during this stage aimed to furnish background information to better understand the mechanisms of the sectors, providing an overall assessment of competition, as well as explaining the important players and authorities.

Box A A.1. OECD Competition Assessment checklist

Further competition assessment should be conducted if a piece of legislation answers “yes” to any of the following questions:

A) Limits the number or range of suppliers

This is likely to be the case if the piece of legislation:

1. grants a supplier exclusive rights to provide goods or services;
2. establishes a licence, permit or authorisation process as a requirement of operation;
3. limits the ability of some types of suppliers to provide a good or service;
4. significantly raises the cost of entry or exit by a supplier;
5. creates a geographical barrier to the ability of companies to supply goods, services or labour, or invest capital.

B) Limits the ability of suppliers to compete

This is likely to be the case if the piece of legislation:

1. limits sellers’ ability to set the prices of goods or services;
2. limits the freedom of suppliers to advertise or market their goods or services;
3. sets standards for product quality that provide an advantage to some suppliers over others or that are above the level that certain well-informed customers would choose;
4. significantly raises the costs of production for some suppliers relative to others, especially by treating incumbents differently from new entrants.

C) Reduces the incentive of suppliers to compete

This may be the case if the piece of legislation:

1. creates a self-regulatory or co-regulatory regime;
2. requires or encourages information on supplier outputs, prices, sales or costs to be published;
3. exempts the activity of a particular industry or group of suppliers from the operation of general competition law.

D) Limits the choices and information available to customers

This may be the case if the piece of legislation:

1. limits the ability of consumers to decide from whom they purchase;
2. reduces the mobility of customers between suppliers of goods or services by increasing the explicit or implicit costs of changing suppliers;
3. fundamentally changes the information required by buyers to shop effectively.

Source: (OECD, 2019^[1])

Stage 3: In-depth assessment of the harm to competition

The provisions carried forward to Stage 3 were investigated in order to assess whether they could result in harm to competition. In parallel, the team researched the policy objectives of the selected provisions, so as to better understand the regulation. The objective of policy makers was identified in the recitals of the legislation, when applicable, through discussions with the relevant public authorities, and/or through academic literature.

The in-depth analysis of harm to competition was carried out qualitatively and involved a variety of tools, including economic analysis and research into the regulations applied in other jurisdictions. All provisions were analysed, relying on guidance provided by the OECD's Competition Assessment Toolkit. Exchanges with government experts and market participants complemented the analysis by providing crucial information on lawmakers' objectives and the real-life implementation process and effects of the provisions.

In the course of Stage 3, several more potential barriers were eliminated from the analysis because the boundaries of the sectors were further narrowed to focus exclusively on the most relevant services for business in the selected sectors. Furthermore, after the in-depth assessment, the team concluded that some of the selected provisions did not harm competition. At the end of Stage 3, there were 618 barriers left which were deemed potentially harmful to competition.

Stages 4 and 5: Formulation of recommendations and final report

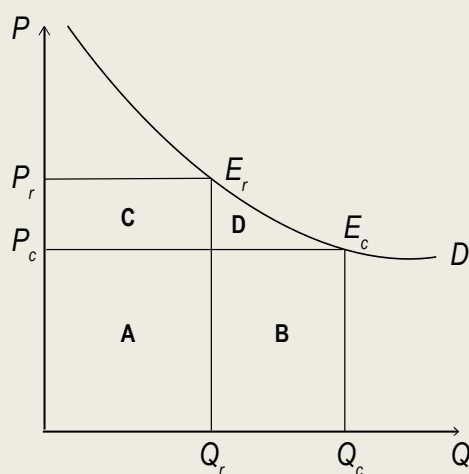
Building on the results of Stage 3, the OECD team developed recommendations for those provisions that were found to restrict competition. It developed alternatives policy proposals that are less restrictive for suppliers, while still aiming to fulfil the policy makers' initial objective. For this process, the team relied on international experience whenever available.

In addition, the benefits of removing barriers to competition were analysed qualitatively and, whenever feasible and meaningful, quantitatively. In these cases, the expected impact of lifting a regulatory restriction was relied on the standard methodology of measuring the effect of policy changes on consumer surplus. This is explained in Box A A.2 below.

Box A A.2. Measuring changes in consumer surplus

The effects of changing regulations can be examined as movements from one point on the demand curve to another. For regulations that have the effect of limiting supply or raising price, an estimate of consumer benefit or harm from the change from one equilibrium to another can be calculated. Graphically, the change is illustrated for a constant elasticity demand curve. E_r shows the equilibrium with the restrictive regulation, E_c shows the equilibrium point with the competitive regulation. The competitive equilibrium is different from the restrictive regulation equilibrium in two important ways: lower price and higher quantity. These properties are a well-known result from many models of competition.

Figure A A.1. Changes in consumer surplus



Under the assumption of constant elasticity of demand the equation for consumer benefit is:

$$CB = C + D \approx (P_r - P_c)Q_r + \frac{1}{2} (P_r - P_c)(Q_c - Q_r) \quad \text{Equation 7}$$

Where price changes are expected, a basic formula for a standard measure of consumer benefit from eliminating the restriction is:

$$CB = \left(\rho + \frac{1}{2} \epsilon \rho^2 \right) R_r \quad \text{Equation 8}$$

Where CB: standard measure of consumer harm, ρ : percentage change in price related to restriction, R_r : sector revenue and ϵ : demand elasticity. When elasticity is not known, a relatively standard assumption is that $|\epsilon|=2$. This value corresponds to more elastic demand than in a monopoly market, but less than the perfectly elastic demand in a competitive market. Under this assumption, the expression above simplifies to:

$$CB = (\rho + \rho^2) R_r \quad \text{Equation 9}$$

Several economic assumptions were made:

- We assume away any taxes, i.e. any implication resulting from the taxation regime on consumer surplus.
- We assume a regular, linear (or near linear), demand function, with no random term.
- We assume the set of services within each sector constitutes a “composite service” with “volume” Q, for which a “composite price” P is charged in the market.
- We assume the balance among the different services within each “composite service” does not change, or changes only in a negligible way, following the price changes that may result from the implementation of the issued recommendations.
- We do not factor in any interdependence between price and quality levels (although changes in any one may affect the other). This is equivalent to assuming that the “quality” of the different services remains constant or experiences a non-significant change. By “quality”, we mean a term that can involve a distribution of quality levels depending on who provides the service. The quality mean could remain unchanged as a result of implementing a certain recommendation, but the distribution of such quality over the different service providers could change (mean-preserving spread). In the latter case, even with an unchanged mean, there would be welfare effects just due to the change in the mean-preserving distribution of quality levels.
- We make no distinction here between Marshallian (relation between prices and income) and Hicksian (relation between prices and utility) demand functions. In any case, since we will be assuming certain values for the demand elasticities ($\epsilon = 2$), these values could be assumed for any of these two types of demand functions.

Source: (OECD, 2019^[2])

Draft recommendations were presented to the HLAG. Following consultation with the relevant public stakeholders, the recommendations were finalised and this final report was produced. In total, 368 recommendations were submitted to the Brazilian administration.

Co-operation with the Brazilian administration

Another important component of the project was to provide assistance in building up the competition assessment capabilities of the Brazilian administration. The OECD organised three workshops during the course of the project. In Stage 2 of the project, this covered an introduction to competition and regulation, and an overview of the project and of the methodology in the mapping stage. In Stage 3, the team provided substantive training on the OECD Competition Assessment Toolkit applied in screening the legislation. In Stage 4 and 5, sector experts provided technical inputs on competition and the OECD’s Services Trade Restrictiveness Index was presented.

The Brazilian Government experts provided a significant contribution on the mapping exercise of the legislation by commenting on whether the regulations collected were comprehensive. Subsequently, the close co-operation with the government experts continued with the identification of the objectives of the legislation in their sectors of expertise and discussion on the provisions identified by the OECD as restrictive on the basis of the Competition Assessment Checklist. The OECD team had, in total, over 80 meetings with the national ministries and authorities and with stakeholders, including sectoral experts.



From:
OECD Competition Assessment Reviews: Brazil

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

Please cite this chapter as:

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

DOI: <https://doi.org/10.1787/5e073a19-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>.