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**Working Party No. 2 on Competition and Regulation**

**Assessing and Communicating the Benefits of Competition Interventions – Note by  
Brazil**

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This document reproduces a written contribution from Brazil submitted for Item 6 of the 75th meeting of Working Party 2 on 12 June 2023.

More documents related to this discussion can be found at  
<https://www.oecd.org/competition/assessing-and-communicating-the-benefits-of-competition-interventions.htm>

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## Brazil<sup>1</sup>

1. The Brazilian antitrust authority, CADE, annually publishes a study measuring the benefits expected from its performance. Based on a methodology of the OECD, the publication aims to quantitatively estimate the outcomes of the authority's activities. The publication is the topic of this contribution and will be further detailed in the following sections.

### 1. Quantitative assessment of the impact of CADE's activities

2. In 2020, the Department of Economic Studies (DEE) of CADE developed the first study about the benefits of the authority's performance in 2018 in cases relating to anticompetitive practices and mergers. Under the name "*Mensuração dos benefícios esperados da atuação do Cade*", the study has had a significant role in providing transparency about CADE's work. Since then, the publication is issued annually and is regarded as a relevant document about antitrust policy in Brazil. The fifth edition, published in March 2023, refers to the work performed in 2022.

3. The main purpose of the document is to estimate the expected benefits resulting from CADE's merger reviews, antitrust investigations, and imposed sanctions. The relevant work of studying the impact of its actions and publicising it to society is in line with best practices followed by antitrust authorities worldwide. The study is not a requirement provided in the Brazilian legislation but the individual initiative of CADE.

#### 1.1. Methodology

4. The applied methodology to measure the impact of CADE's actions follows the recommendations of the 2014 OECD publication "Guide for Helping Competition Authorities Assess the Expected Impact of Their Activities". The main advantage of adopting the OECD guidelines is the possibility to standardise estimations, making them easier to understand and compare them over time. To estimate the impact of an antitrust authority's actions, the OECD guide suggests calculating the amount consumers would incur in case the authority failed to intervene. In economic theory, this amount is calculated by adding up the welfare loss of all consumers in an economy that result from these failures. This amount is then understood as the benefits to society from the antitrust authority's actions.

5. Based on the adopted methodology, benefits to consumers resulting from the enforcer's decisions are given by three variables:

- the turnover of the companies in the affected market;
- the price increase removed or avoided;
- the expected duration of the price effect.

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6. We considered in Table 1 of the OECD guide as parameter to determine the value of each variable. The parameter is specific to each type of decision (mergers, cartels and unilateral conduct). The sum of the impact of these decisions determine the total impact of the authority during the analysed year.

**Table 1. Parameters suggested by the OECD**

	<b>Affected revenues</b>	<b>Price increase</b>	<b>Duration (years)</b>
<b>Mergers</b>	Ex-ante revenue of all firms in the affected market(s)	3%	2
<b>Cartels</b>	Ex-ante revenue of the companies under investigation in the affected market(s)	10%	3
<b>Unilateral conduct</b>	Ex-ante revenue of the companies under investigation in the affected market(s)	5%	3

Source: CADE, based on data from the OECD

7. For merger cases, the OECD suggests considering only blocked and conditionally cleared mergers, assuming that the authority's action provided welfare benefits and avoided possible harmful effects on the market.

8. The affected turnover is a sum of the turnover of all firms in the market(s) affected by the remedies (in case CADE conditionally clears the transaction) or the blockage of the transaction. However, the sum of turnovers is not always possible; where that is the case, we should calculate a proxy for each turnover. This is illustrated by a merger case where the applicants only provided estimations of the total amount of premium gasoline and diesel distribution in the affected markets. The market turnover was then estimated based on the average price of the products in those markets.

9. As to anticompetitive conduct, the OECD recommends considering all decisions against the plaintiffs in the calculation. However, CADE chooses not to consider individuals and legal persons that do not develop an economic activity (e.g. trade unions and associations) since they do not have a gross turnover deriving from business activities.

10. As to the period of assessment, the suggestion is to include all cases heard throughout the year, taking care so as to avoid counting benefits more than once. Another relevant consideration regards the financial information of companies and the manner such data is treated. Information related to the year of each study is used where possible. For instance, the report estimating the benefits of CADE's activities in 2022 preferably considers information related to 2022. However, such information is not always available. When this happens, the most recent values are considered and adjusted for the Selic interest rate of each year. When the available information is in foreign currency, it is first converted to the Brazilian currency according to the exchange rate of the last day of the year and subsequently adjusted for the Selic rate of December.

11. Study outcomes are disclosed each year in two different manners: divided considering the type of decision (cartel, unilateral conduct, merger) and the total.

12. The number of merger cases used in estimating these figures has been stable throughout the years. As far as cartels are concerned, Operation Car Wash, which investigated collusion in public procurement in 2018, boosted the figures, which increased once more in 2022. Unilateral conduct, in turn, had a decrease in quantity (Table 2).

**Table 2. Number of cases by type of decision**

Year	Mergers*		Cartels		Unilateral conduct		Total
	No.	%	No.	%	No.	%	
2018	7	9%	60	76%	12	15%	79
2019	5	14%	18	51%	12	34%	35
2020	7	22%	17	53%	8	25%	32
2021	6	21%	19	66%	4	14%	29
2022	7	14%	37	73%	7	14%	51
<b>Total</b>	<b>32</b>		<b>151</b>		<b>43</b>		<b>226</b>

Note: \* Conditionally cleared or blocked mergers only. Unconditionally cleared mergers were not included.  
Source: CADE

13. CADE also publishes the results using a three-year moving average because the effect of its actions are not only observed in the year of the decision but within a longer period (especially for larger cases). The aim is to make the annual amount less susceptible to discrepancies (as observed in 2019), and include the long-term effects of the actions.

14. Furthermore, CADE carries out sensitivity analyses of the outcomes by changing the parameters used for calculation. As a rule, the authority uses the parameters seen in Table 1 (Scenario 2). We also create alternative estimates by using more conservative price increase and duration parameters (Scenario 1) or more aggressive ones (Scenario 3). Table 3 below summarises the parameters used for each scenario.

**Table 3. Parameters used in sensitivity analysis**

Scenario	Type of decision	Price increase	Duration (years)
Scenario 1	Cartel	5%	1
	Unilateral Conduct	1%	1
	Mergers	1%	1
Scenario 2	Cartel	10%	3
	Unilateral Conduct	5%	3
	Mergers	3%	2
Scenario 3	Cartel	15%	6
	Unilateral Conduct	10%	6
	Mergers	5%	3

Source: CADE

## 1.2. Main results

15. Table 4 shows the values for the expected benefits from CADE's activities, calculated according to the methodology referred to in section 2. The first column presents the benefits at the current values for each year (adjusted for the inflation according to the Selic interest rate of December 2022). The second column shows the three-year moving average.

**Table 4. Benefits from CADE's activities**

Year	Expected benefits (USD million)*	Moving average (three-year period)
2018	5,074.52	-
2019	8,403.87	-
2020	952.19	4,808.28
2021	1,029.95	3,462.00
2022	2,387.68	1,456.61

Note: (\*) Values adjusted for the inflation rate of 31 December 2022.

Source: CADE.

16. In comparison, the amounts for 2018 and 2019 were greater than those of the subsequent years. This is due to some events that occurred in those two years. In 2018, CADE heard a total of 60 cartel cases—the majority of them related to Operation Car Wash, one of the greatest anti-corruption and money laundering initiatives in the recent history of Brazil. These cartel cases alone amounted to 65% of the expected benefits of 2018.

17. As for 2019, two agreements signed with Petrobrás to cease anticompetitive practices in the markets of natural gas and oil refining represented 88% of the expected benefits. The agreements included the mandatory disposal of assets of Petrobras in the two sectors; some of these divestitures have already been carried out. More than the financial value, the expectation is that the agreements change drastically the Brazilian markets of natural gas and oil refining, translating into great benefits to society and end consumers.

18. Table 5 shows the benefits obtained over the years from cases of mergers, cartels, and unilateral conduct. Each year the amount collected through these three types of cases vary—sometimes significantly. For instance, in 2018, cartels represented most of the benefits reaped that year, amounting to circa 65%. However, in the following year, unilateral conduct cases were responsible for 90% of the collected benefits. In 2020, mergers amounted to an expressive percentage (76%) compared to 2021 (2%). In 2022, mergers became relevant once more, totalling 48% of the benefits, whereas cartels got 43%. In total, we estimate a collection of USD 14,932.10 million over the five years: USD 2,668.94 from mergers, USD 4,871.98 from cartels, and USD 7,391.18 from unilateral conduct.

**Table 5. Benefits from CADE's activities over the years by type of case**

Year	Mergers		Cartels		Unilateral conduct		Total
	Expected benefits (USD million)*	%	Expected benefits (USD million)*	%	Expected benefits (USD million)*	%	
2018	740.53	19%	2,552.74	65%	627.87	16%	<b>3,921.14</b>
2019	149.71	2%	544.31	8%	6,212.70	90%	<b>6,906.72</b>
2020	611.08	76%	117.09	15%	76.98	10%	<b>805.15</b>
2021	15.08	2%	629.74	69%	266.59	29%	<b>911.41</b>
2022	1,152.54	48%	1,028.10	43%	207.04	9%	<b>2,387.68</b>
<b>Total</b>	<b>2,668.94</b>		<b>4,871.98</b>		<b>7,391.18</b>		<b>14,932.10</b>

Note: \* Values updated by 31 December 2022

Source: CADE

### 1.3. Limitations and ways to expand the analysis

19. These estimates have some limitations, as seen in the OECD guidelines. Firstly, they do not consider the dynamic or deterring effects of decisions. Although there is a consensus that the two effects make up a huge part of the outcome of CADE's performance, we still lack a methodology to quantify them. As our estimates have a more conservative character, we chose to forgo these effects until we find a way to gauge them consistently.

20. In addition, the estimates do not include the impact of the authority's advocacy actions, i.e. efforts to educate about competition and promote a culture of free competition. Like the dynamic and deterring effects, measuring the benefits obtained through advocacy actions is not a simple task. CADE is working on a methodology to calculate the impact of advocacy efforts but it is still in the early stages of gathering literature and consulting other antitrust agencies. One should note that, unlike similar efforts, CADE has opted for more conservative parameters. Similarly, when faced with divergent information, the authority has always picked the smaller figures to avoid reaching overestimated numbers. Even though this conservatism is desirable for governmental actions, they often deviate from the best results.

21. Therefore, to enhance this approach, CADE could possibly use its own experience in proposing parameters closer to the reality. The authority has conducted some ex-post assessments of mergers in the markets of frozen food, air passenger transport, and stock exchanges; it also studied cartel cases in the markets of fuel and crushed stone (see the annex). However, these studies are not carried out regularly or sufficiently to be used in founding estimates on the benefits of CADE's performance.

22. Another appealing way to expand benefit assessment is to measure their effects on Brazil's macroeconomic variables like unemployment, inflation, growth, etc. Perhaps, in this case, the greatest challenge is understanding how the enforcer's actions pass on and reflect on these variables. We expect some actions to have a rapid response from these variables, whereas other variables may feel a more lasting impact.

## 2. Spreading the culture of competition and communication

23. The Brazilian antitrust authority annually publishes its activities in its yearbook. The CADE Yearbook is a report that covers statistics and important cases relating to competition advocacy, merger reviews, and investigations into antitrust violations. Furthermore, it brings information on the authority's relations with national and international entities, held events, and investments in infrastructure and human resources. The publication aims to publicise the main outcomes produced by the authority in the previous year as a way to inform society on the implementation of competition policy in the country. As a majorly descriptive and informative document, it does not include qualitative or quantitative assessments of the effects of the reported actions.

24. Other CADE initiatives to promote competition culture and provide transparency:

- Producing online courses for EGOV – a government training platform for public servants. The courses cover the following topics: introduction to competition policy, leniency programmes, cartels in public procurement, antitrust compliance, unilateral conduct, and merger reviews.
- Producing working papers to research the theory, methods, and applications of competition policy.

- Publishing technical opinions (produced by the Department of Economic Studies) on mergers, probes into anticompetitive conduct, and competition advocacy.
- Publishing the Revista de Defesa da Concorrência, CADE's journal on competition policy that includes scientific papers written from the perspectives of Law, Economics, Foreign Affairs, and related areas. Issued twice a year, the papers undergo a blind review process in line with scientific best practices.
- Offering an exchange programme in which university students from across the country participate in seminars on antitrust policy and get acquainted with the daily work of the authority for a month at CADE's headquarters.
- Holding seminars to discuss research produced by CADE or academic works on antitrust policy.
- Online broadcasting of the Tribunal hearings since 2004. First, the live broadcast regarded audio only, but since 2018 video is also transmitted via CADE's YouTube channel.

25. The authority's Communications Unit makes such documents and events available on our website. We also present these documents in seminars to discuss their results. Although website visitors, publication views, and event attendance can be easily measured, there is no established methodology yet to assess the impact of these activities.

## Annex – Ex-post assessments of cartels and mergers by the Department of Economic Studies

Documento de Trabalho n. 007/2022 - Estimacão de sobrepreço em cartéis: o caso do cartel de combustíveis na região metropolitana de Belo Horizonte/MG. Available at: [https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-de-trabalho/2022/DOC\\_007-2022\\_Estimacao-de-sobrepreco-em-carteis-cartel-de-BH.pdf](https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-de-trabalho/2022/DOC_007-2022_Estimacao-de-sobrepreco-em-carteis-cartel-de-BH.pdf)

Documento de Trabalho n. 005/2022 - Avaliação ex-post de ato de concentração: O caso BVMF-CETIP. Available at: [https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-de-trabalho/2022/DOC\\_005-2022\\_Avaliacao-ex-post-de-AC\\_O-caso-BVMF-CETIP\\_vf.pdf](https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-de-trabalho/2022/DOC_005-2022_Avaliacao-ex-post-de-AC_O-caso-BVMF-CETIP_vf.pdf)

Working Paper n. 003/2021 - Ex post mergers evaluation: Evidence from the Brazilian airline industry. Available at: [https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-de-trabalho/2021/Documento-de-Trabalho\\_Ex-post-mergers-evaluation-Evidence-from-the-Brazilian-airline-industry-versao-final.pdf](https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-de-trabalho/2021/Documento-de-Trabalho_Ex-post-mergers-evaluation-Evidence-from-the-Brazilian-airline-industry-versao-final.pdf)

Documento de Trabalho n. 04/2019 - Mensurando os benefícios de combate a cartéis: o caso do cartel de combustíveis no Distrito Federal. Available at: <https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-de-trabalho/2019/documento-de-trabalho-n04-2019-mensurando-os-beneficios-de-combate-a-carteis-o-caso-do-cartel-de-combustiveis-no-distrito-federal.pdf>

Documento de Trabalho n. 03/2019 - Avaliação ex post de ato de concentração: o caso Sadia-Perdigão. Available at: <https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-de-trabalho/2019/documento-de-trabalho-n03-2019-avaliacao-ex-post-de-ato-de-concentracao-o-caso-sadia-perdigao.pdf>

Documento de Trabalho n. 02/2018 - Avaliação de política de concorrência: Estimacão de danos no cartel de postos de gasolina em Londrina. Available at: <https://cdn.cade.gov.br/Portal/centrais-de-conteudo/publicacoes/estudos-economicos/documentos-de-trabalho/2018/documento-de-trabalho-n02-2018-avaliacao-de-politica-de-concorrenca-estimacao-de-danos-no-cartel-de-postos-de-gasolina-em-londrina.pdf>