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**Working Party No. 3 on Co-operation and Enforcement**

**Data Screening Tools for Competition Investigations – Note by Mexico**

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This document reproduces a written contribution from Mexico submitted for Item 3 of the 136th OECD Working Party 3 meeting on 28 November 2022.

More documents related to this discussion can be found at  
[www.oecd.org/daf/competition/data-screening-tools-for-competition-investigations.htm](http://www.oecd.org/daf/competition/data-screening-tools-for-competition-investigations.htm)

Ms Despina PACHNOU  
[Email: [Despina.PACHNOU@oecd.org](mailto:Despina.PACHNOU@oecd.org)]

**JT03506565**

## Mexico

### 1. Introduction

1. The General Directorate of Market Intelligence (the Intelligence Unit)<sup>1</sup> of the Investigative Authority (IA) of the Mexican Federal Economic Competition Commission (COFECE or Commission) is focused on detecting potential anticompetitive conducts and other competition issues in the Mexican market. To achieve this objective there are several tools and methods, among which digital screening is included. This written submission provides a general overview of COFECE's screening activities.

### 2. Collection of data and digital screening tools

2. In COFECE's experience, to effectively conduct a screen there are two key stages. First, a stage of information collection and processing, where sources should have a minimum degree of consistency, as well as be representative of the specific market. For example, gathering prices, quantities, among other variables, throughout mid to long term time periods, arranged in a single or similar format pertaining to relevant players in the market. It is important to consider that if the collected information is not of optimal quality, irrelevant or insufficient, the end results may also be deficient, following the "garbage-in garbage-out" logic.

3. In the second stage, COFECE would use specific analytical applications, algorithms, and methods that "flag" or indicate potential irregular behaviours in the datasets. For example, in terms of public procurement screening, the Intelligence Unit has developed a tool that can detect patterns of potential price-fixing, bid winner rotation, among others.

4. Based on the above, COFECE's experience could be summarized in digital screening to mainly developing and implementing tools using different technological based infrastructure and platforms, to contribute to the detection of potential anticompetitive conducts or to provide analytical inputs to ongoing investigations.

5. Additional examples of tools would range from applications that facilitate automatised data collection and processing tasks, to analytical algorithms that flag irregular behaviour in large volumes of data, to mention a few. COFECE's tools have been developed in-house. For these the Intelligence Unit would design specific applications using several programming languages (R, Python, SQL, to mention a few), and execute these in an arrangement of physical and virtual infrastructure.

6. Even though it could be possible to potentially collaborate with external suppliers, particularly in data collection and processing tasks, the strategic nature of the information managed by the Intelligence Unit compels for restrictions in terms of providing any sort of access to data to external suppliers. This consideration is also relevant for detection algorithms.

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<sup>1</sup> The General Directorate of Market Intelligence, established in the Organic Statute of COFECE, available in English at: [https://www.cofece.mx/wp-content/uploads/2022/01/ESTATUTO-ORGANICO-ENG\\_.pdf](https://www.cofece.mx/wp-content/uploads/2022/01/ESTATUTO-ORGANICO-ENG_.pdf)

### 3. Enforcement areas

7. In COFECE's view, digital screening would be possible when there are sufficient data sources with a generalised consistency and quality. In the Mexican context, not every sector or economic activity has reached a stage of maturity in terms of information therefore resulting in insufficient or limited data sources. For example, for economic activities related to the primary sector<sup>2</sup>, the consistency and availability of data is not sufficient to conduct potential screening applications.

8. The Commission has learned that sectors or activities that are subject to specific regulation, such as energy markets, or public procurement, could have a greater degree of information availability due to specific legal or regulatory requirements. For other sectors, it has been opted to apply additional tools to collect data, including gathering large volumes of information from open sources using automatised tools including web scraping.

9. After managing to collect and process the relevant information, the Intelligence Unit would then apply one of its screening algorithms. For example, as mentioned before, it has developed both behavioural and structural screening applications in public procurement. These applications are designed internally, drawing from insights from the available literature, including previous OECD publications such as the Guidelines for Fighting Bid Rigging in Public Procurement<sup>3</sup>, as well as from sharing perspectives with fellow competition agencies. The goal is to be able to identify specific potential issues or irregular behaviour in markets where screening activities are conducted, considering the context of the Mexican economy.

### 4. Benefits and challenges

10. Since the creation of the Intelligence Unit, COFECE has been able to develop several ex officio cases that are built with inputs including those that result from screening activities, mostly in public procurement. In addition to this, COFECE's ongoing investigations in public procurement that could result from other sources, such as formal complaints, also benefit from the existing screening capabilities to strengthen the economic robustness of the case. This is particularly important in Mexico as the Supreme Court has determined that the use of economic analysis can also be considered as indirect valid evidence that could support the existence of an anticompetitive conduct<sup>4</sup>.

11. However, based on COFECE's experience, digital screening should be considered as part of a larger toolkit that competition agencies can use to detect potential anticompetitive conducts. COFECE intends to build ex officio cases by including additional elements that support the existence of an anticompetitive conduct to support its legal standard of probable cause. Results from screening could be useful as a first step to detect flags of irregular behaviours, but these would not be enough, as there needs to be a more in-depth analysis of the specifics that could either support or reject the preliminary case theory.

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<sup>2</sup> Primary sector refers to economic activities in the first links of value chains. For example: agriculture, livestock raising activities, fishing, forestry resources collection, among others

<sup>3</sup> Available at <https://www.oecd.org/competition/cartels/42594486.pdf>

<sup>4</sup> The resolution from the Mexican Supreme Court can be accessed in the link that follows, please consider that the content of said source is in Spanish <https://sjf2.scjn.gob.mx/detalle/tesis/2009653>

12. As it has been discussed before, COFECE considers that data screening tools are more effective in markets that have availability of quality data. However, the Intelligence Unit is not limited only to these, as tools such as web scraping are continuously used to collect information from public sources. It is also able to conduct screens in data that is obtained using formal investigation tools through information requirements to undertakings or information requests to public authorities and regulators. It has been observed that screening can be a more effective tool to detect potential horizontal agreements, for example bid rigging, but we are also exploring applications to either detect or investigate other conducts.

13. There is no one-size-fits-all solution when it comes to screening. Even though there is a substantial set of literature and discussions related to the use of screens for antitrust enforcement, each agency faces different challenges depending on their context. This also implies that an effort to adapt and develop specific tools for screening is important.

14. Developing screening projects would also imply devoting time and learning from both successes and failures. In some cases, early screening projects could be prone to errors, both in technical and analytical terms. For example, the challenge of detecting behaviours could result from insufficient infrastructure and tools, or also be attributable to type I or type II errors.

15. Hence, screening results would need additional elements that support the existence of a potential anticompetitive conduct in each market, mainly because false positives are likely, or in other situations, the findings may not be representative of the actual behaviour or situation in each market. These are situations that despite the resources, both material and human, devoted to screening projects could arise and become less likely as the learning curve is reduced.

## 5. Resources

16. COFECE's Intelligence Unit is formed by staff from diverse backgrounds. However, screening activities are conducted by officers with experience and education in economics, statistics, mathematics, computer science, and data science. In addition, the IT forensics team of the Intelligence Unit provides technical support and participates in joint infrastructure projects. The results of screening activities are also subject to competition analysis by joint teams of lawyers and economists to assess the extent in which a potential finding could be relevant to indicate a potential anticompetitive conduct.

17. Developing capabilities to implement screenings is a strategy that competition agencies should consider as part of their detection and enforcement toolkit. The continuous generation of information and data in current economic activities compels competition authorities to be able to not only collect information, but also to understand and analyse it. A combination of different detection and enforcement tools would not only result in better capabilities for investigations but could also contribute to deterrence.

## 6. International Cooperation

18. In terms of the extent in which COFECE publicises the use of digital screens, it is important to highlight that the Intelligence Unit, and the IA in general, by their own nature do not provide details to the public on the specific development of their activities. Moreover, there is a legal mandate to protect the information used as part of both the detection and investigation of anticompetitive conducts. COFECE has been eager to share

our experience in terms of methods and specific tools, but not in ongoing cases, with competition agencies that have signed a Memorandum of Understanding (MoU) with COFECE to abide to common confidentiality provisions.