



## **Sharing information with financial authorities. The case of Banco de Mexico<sup>1</sup>**

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### **Abstract**

In this paper we present the experience of data sharing of the information of Banco de Mexico with other financial authorities. After the 1995 Tequila crisis, data sharing among financial authorities became an essential part of the regulatory and supervisory framework of financial institutions, and the foundation of the current data sharing framework was established in 2000 with a broad agreement and was further strengthened with the 2014 financial reform.

**Keywords:** data sharing; cooperation; financial information.

### **1. Introduction**

Crisis always unveil data gaps and inefficiencies in the collection and generation of information, during these episodes, accurate information on the health of financial institutions and markets becomes a very valuable asset, generating incentives to improve precision and information sharing among financial authorities. When financial authorities learn from these episodes to improve the design, quality and granularity of information requested to financial intermediaries they can achieve important improvements for the surveillance of the financial system and the generation of value for analysis. That was the case of the Mexican experience after the financial crisis of 1994-1995, as the crisis produced an important revision of the information requested to financial institutions and the arrangements between financial authorities to improve efficiency of information gathering and processing. In particular there was: i) a consolidation and rationalization of several requests made by different authorities that eliminated duplicities and obsolete information; ii) a transformation of the financial information model to rely more on granular microdata and daily frequency (particularly for market instruments); iii) the use of scale economies in information processing, concentrating regulatory reports in fewer authorities; and iv) improved data sharing among authorities, as a precondition to make all other improvements feasible. These decisions have become a milestone of the financial authorities' arrangement to allow an efficient supervision of financial institutions and markets.

The rest of the paper describes some of the features of the data sharing arrangement that has allow Banco de Mexico to share information with other financial authorities. Section 2 depicts the current regulatory framework which allows information sharing between financial authorities. Section 3 describes briefly the evolution and current state of the model of financial information of Banco de Mexico. Section 4 describes the schemes that Banco de Mexico uses to share information with other financial authorities and. Finally, Section 5 presents some final remarks and challenges ahead for data sharing.

### **2. Current regulatory framework for data sharing**

In Mexico, over more than 15 years data sharing among financial authorities has been broad and effective. This is a result of a regulatory framework, which allows the sharing of statistics and supervisory information, including transactional data and a set of institutional agreements. The current general regulatory framework for data sharing includes:

- I. An early agreement signed in 2000 by several financial authorities to share data according to a "need to know" criteria;
- II. Recent modifications in the financial legislation, which established data sharing between domestic financial authorities as mandatory;

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<sup>1</sup> The views and conclusions presented in this paper are exclusively the responsibility of the authors and do not necessarily reflect those of Banco de Mexico. We would thanks to Edgar Hernández for his valuable comments.

- III. New faculties for the Central Bank (and other financial authorities) to share information with foreign financial authorities; and,
- IV. A new law of transparency and access to public information based on the principle of maximum disclosure (increasing dissemination of data with different audiences).

Even before 2000, the legal framework was not prohibitive to information sharing as it only defined the obligation of the financial authority to gather the necessary information for the fulfillment of its mandates. Nonetheless, in 2000, Mexican financial authorities signed an agreement to coordinate their actions to compile, store, share and disseminate the information received from the financial intermediaries.<sup>2</sup> The agreement settled the basis to improve efficiency on information requirements to financial institutions, since it includes safeguards to prevent the duplication of information requests. This accord has been served as a gross guideline for sharing information between financial authorities. It is still in place and it has been gradually substituted by new Memorandums of Understanding (MoU) between financial authorities.

Second, as part of the financial sector reform, in 2014 there was a broad revision of several laws that regulate the activities of the different financial intermediaries.<sup>3</sup> An important modification was making data sharing mandatory among domestic financial authorities. Specifically, these laws establish that to preserve financial stability and avoid disruptions in the functioning of the financial system and/or the payments system, financial authorities should share information they manage as result of:

- i) Their own functions;
- ii) Some actions coordinated with other entities or authorities; and
- iii) Having obtained it from other authorities.

This reform established as a requirement the signing of MoUs between authorities to exchange information. These MoUs should specify: i) the information to be shared; ii) the conditions for sharing this information; iii) the level of confidentiality or reserve of the information; and, iv) control instances for specific situations (e.g. information denied, delays, etc.). It is worth mentioning that financial authorities are liable for the dissemination of reserved or confidential information.

Authorities' information sharing becomes a priority in cases of potential risk for financial stability. For example, the Credit Institutions Law establishes the obligation of the bank supervisor (CNBV) to share all relevant information with the deposit insurance agency (IPAB) if they detect capital adequacy problems in credit institutions.

The third element is the introduction in 2014 of the faculties for Banco de Mexico to share information with foreign financial authorities after the signing of MoUs to establish the conditions of the information exchange and to include the reciprocity principle.

The financial reform has strengthened the data sharing framework and the possibilities to improve analysis and supervisory and regulatory functions of financial authorities. The legal framework includes a safeguard to deny information when national security might be affected or when the MoU agreed conditions have not been satisfied.

A fourth element of the data sharing general framework is given by a broader sharing of information with different audiences. Important changes in accountability and transparency were undertaken, in 2015 it was issued the new General Law of Transparency and Access to Public Information. This law establishes the principle of maximum disclosure as one of its main elements. In this law, information is classified according to its level of confidentiality in: public, reserved and confidential information; with disclosure restrictions for the last two cases. When facing a request of information under this law, each authority is responsible for determining the level of confidentiality and faces the burden of the proof when it cannot be disclosed.

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<sup>2</sup> In 2000 the accord was signed by the Ministry of Finance (SHCP), the bank and securities supervisory (CNBV), the financial service protection agency (CONDUSEF), the deposit insurance agency (IPAB), and Banco de Mexico. Some years later, the supervisory of retirement savings (CONSAR) adhered to this accord.

<sup>3</sup> Among laws modified are Regulation Financial Groups Law and Credit Institutions Law.

### 3. The model of financial information at Banco de Mexico

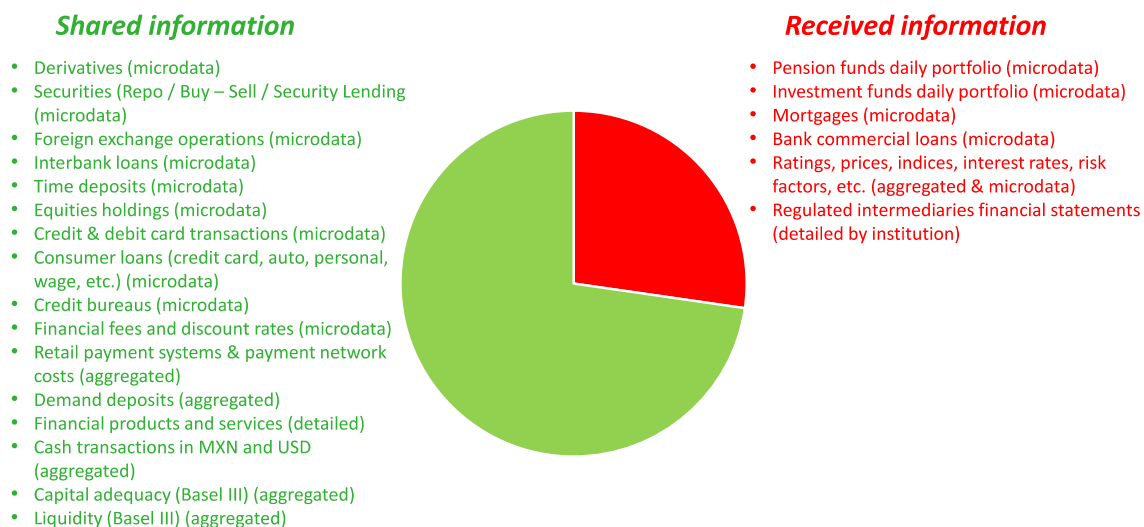
In the late 1990s, Banco de Mexico change adopted a new approach to its information requests to banks and other financial institutions from aggregated information to granular microdata. According to Gaytan (2014), Banco de Mexico gradually change the “top-down” approach for the “bottom-up” approach in the construction of its financial information model. The main advantage of the “bottom-up” approach is its flexibility to respond to a wide range of information uses for risk analysis and policy decision using existing information or with low cost for financial intermediaries. The disadvantage is the high cost of maintenance. Nonetheless, as mentioned by this author “in periods of financial turmoil, the benefits of having the information greatly surpasses any maintenance costs”.

The richness of the financial information model was possible because of the broad faculties of Banco de Mexico to supervise financial intermediaries (banks, brokerage houses and some other financial intermediaries). Currently, this model has a broad scope including regulatory information (capital adequacy, liquidity, FX regimes), bank balances, and granular information on the operation of these intermediaries in all financial markets. In addition, the data sharing arrangements have allowed Banco de Mexico to complete its model of information beyond the information it collects; gathering information on pension and investment funds investment portfolios, and additional information on banks.

Currently, the financial information model of Banco de Mexico contains a big share of granular microdata (around the 85% of total records by the end of 2016). Microdata also constitutes an important set of information increasingly used by other authorities under the data sharing arrangements.

Figure 1 presents the information shared and received by Banco de Mexico with/from other financial authorities and the kind of data.

*Figure 1. Financial information shared by Banco de Mexico*

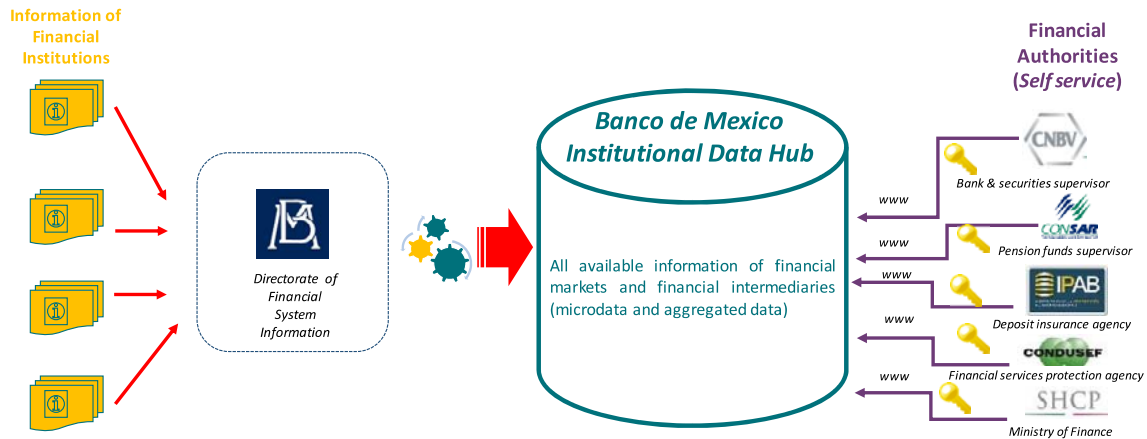


### 4. Data sharing schemes in Banco de Mexico

Currently Banco de Mexico has three different schemes to share data with other domestic authorities, each one has specific features due to volumes and characteristics of shared information.

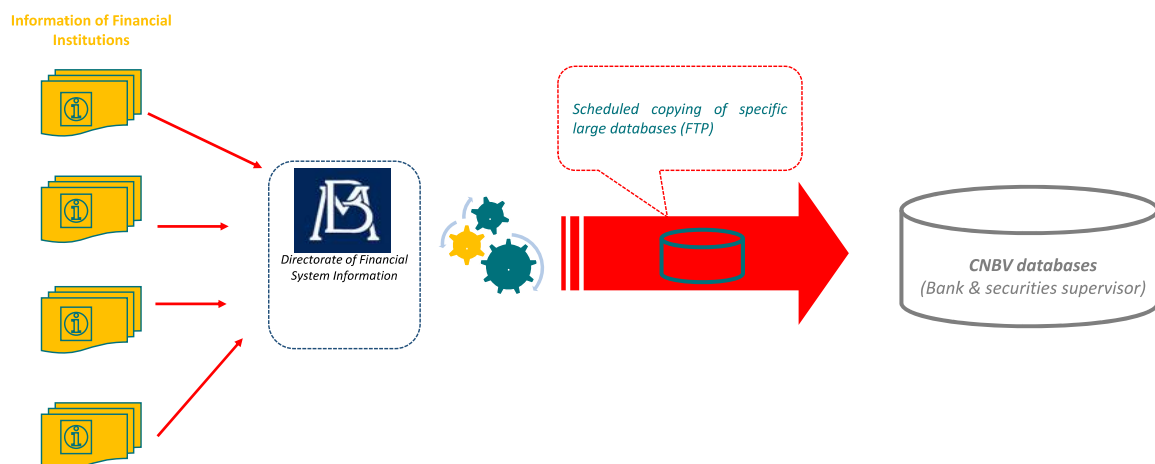
The first is a Central Data Hub scheme, currently a web application developed to provide secure direct access to databases of financial system information managed by Banco de Mexico. Different financial authorities and different areas within Banco de Mexico access directly both granular and aggregated micro-data of different markets and institutions. This scheme has as some advantages: Full control over data consulted (log records), access to most available data, and easy tools for consulting data via queries. Nonetheless, data queries have a large but limited size (one million records) to prevent disruptions of other queries by excessive traffic.

**Figure 2. Central Data Hub (direct access)**



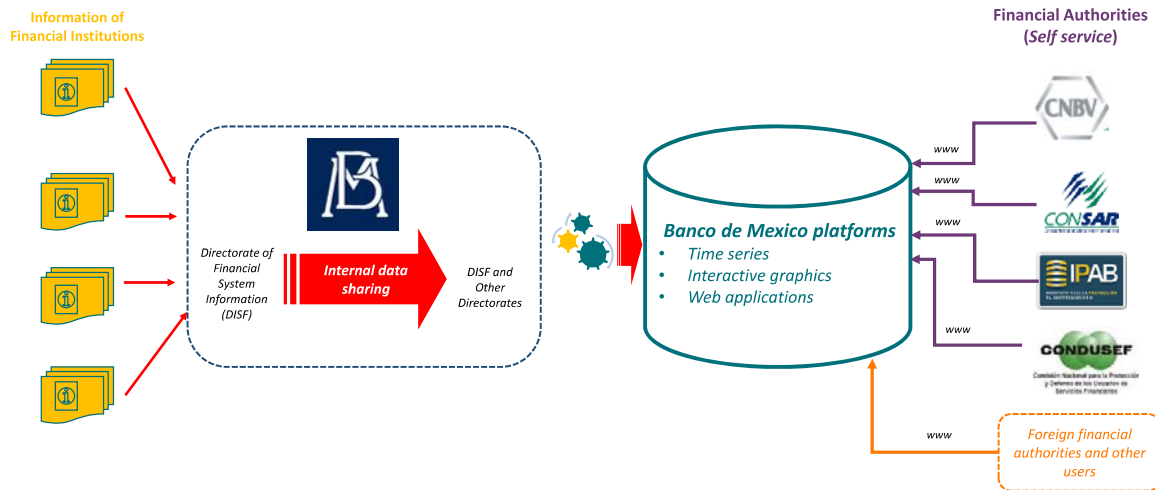
The second scheme is a controlled service scheme. It was developed to share very large volumes of predefined microdata, it works using a private FTP, and information is supplied according to a defined calendar. It is a very safe and efficient channel that allows to access very large volumes of predetermined specific data. One possible disadvantage is related to the predetermined date of the copy, as it may rise problems when information is modified, generating possible differences with the updated information.

**Figure 3. Controlled Service**



The third scheme for sharing information with domestic financial authorities is a controlled service scheme. Under this scheme, the financial authorities use public platforms to access aggregate time series, some data of banks at level institution and, interactive graphics. The current platforms are in-house developments, which includes elements for safe sharing. The main advantages of this scheme are the access to long time series and the easy tool to consulting data. As disadvantage, this scheme is not designed to handle granular microdata.

Figure 4. Self Service



## 5. Conclusions

In Mexico, over more than a 15 years, data sharing among financial authorities has been broad and effective as a result of important arrangements that have made possible the sharing of statistics and supervisory data. In the way ahead, Banco de México faces some challenges to further improve information exchange both in terms of content and of the means to do it.

- Continue updating bilateral MoUs for information sharing among domestic authorities.
- Preparing a multilateral framework with strengthened governance.
- Increase the data sharing services, with foreign authorities and repositories, when acting as the Central “Trade Repository” like for derivatives operations.
- Improving access of general public and other financial authorities to microdata databases.

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