Sharing financial information: The case of Banco de Mexico

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BANCO DE MÉXICO

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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 scarce and very valuable asset, generating incentives to find ways to gather information in an efficient way. In this context information sharing among financial authorities becomes necessary.

- Learning from crisis episodes to improve the design, quality and granularity of information requested to financial intermediaries is important to improve the surveillance of the financial system.

- In the case of Mexico the turning point was the 1994-1995 financial crisis.

The Mexican case: The initial state

Information exchange among Mexican financial authorities before the 1994-1995 crisis

As result of poor coordination, regarding to information requirements...

Increasing burden reporting for financial institutions

Needs

Info req. Aut. 1

Financial Authority 1

Financial Authority 2

Info req. Aut. 2

Information requirements

Financial institutions
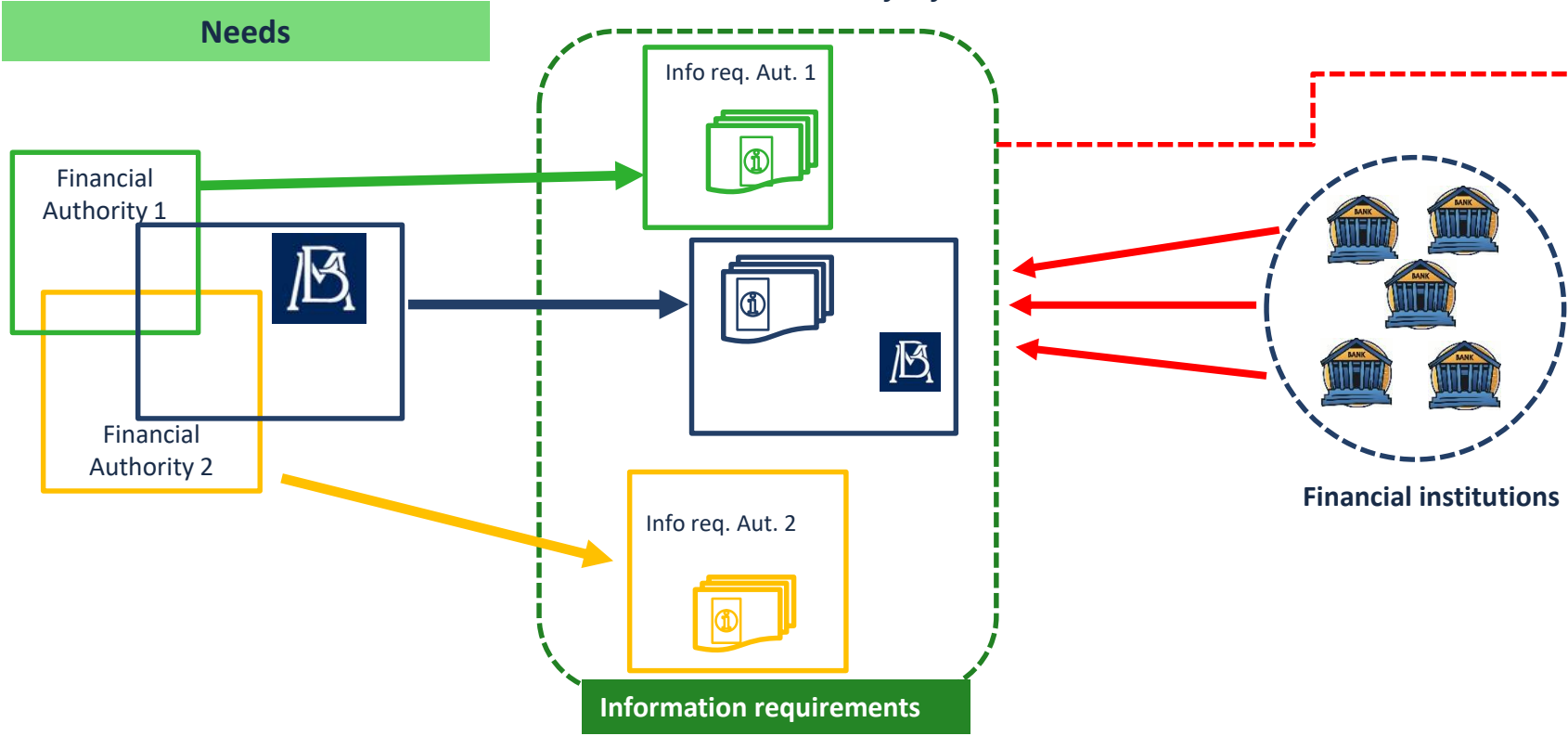
Some information requirements were / had...

- *Duplicated.*
- *Obsolete or inaccurate.*
- *Low frequency.*
- *Mostly aggregated data.*
- *Poor opportunity.*

The Mexican case: Actions undertaken

- In the Mexican case, the 1994-1995 crisis showed that the information of the financial system was clearly insufficient for monitoring the risks of sectors, markets and financial institutions.

- It was needed an important revision of the information requests and arrangements between financial authorities to improve efficiency of information gathering and processing. In particular, those actions were:

    i.   Consolidation and rationalization of several request made by different authorities.

    ii. Transformation of the financial information model to rely more on granular microdata and daily frequency.

    iii. The exploitation of scale economies in information processing.

    iv. Important efforts to improve data sharing among authorities.

The Mexican case: Actions undertaken

- The current normative framework for sharing information started in 2000 with the signature of a broad sharing agreement among different authorities.

Mexican Financial Crisis

1994-1995

- Agreement signed by financial authorities to share information based on the need to know criteria.

2000...

- Banxico
- CNBV
- SHCP
- IPAB

2000-2014 Banco de Mexico and the bank & securities supervisor (CNBV) concentrated the information requests (banks and brokerage houses). The deposit insurance agency (IPAB) and the Ministry of Finance (SHCP) became users of this information.
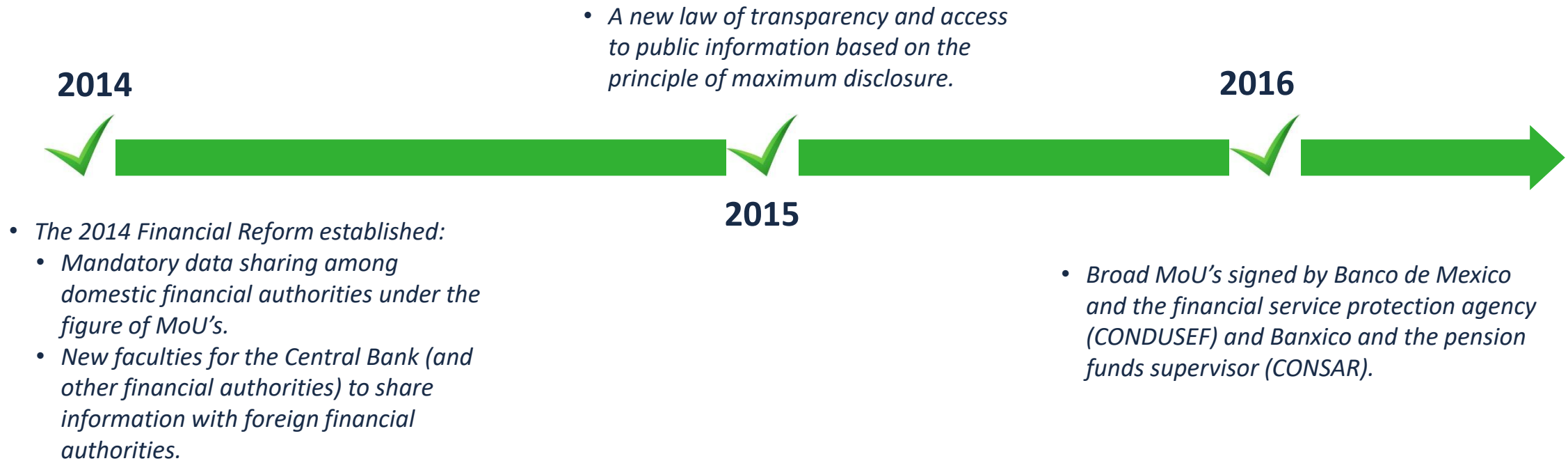
2014

Banco de Mexico specialized on microdata from financial operations (FX, derivatives and securities), regulatory regimes (capital adequacy, FX regimes and liquidity) and deposits.
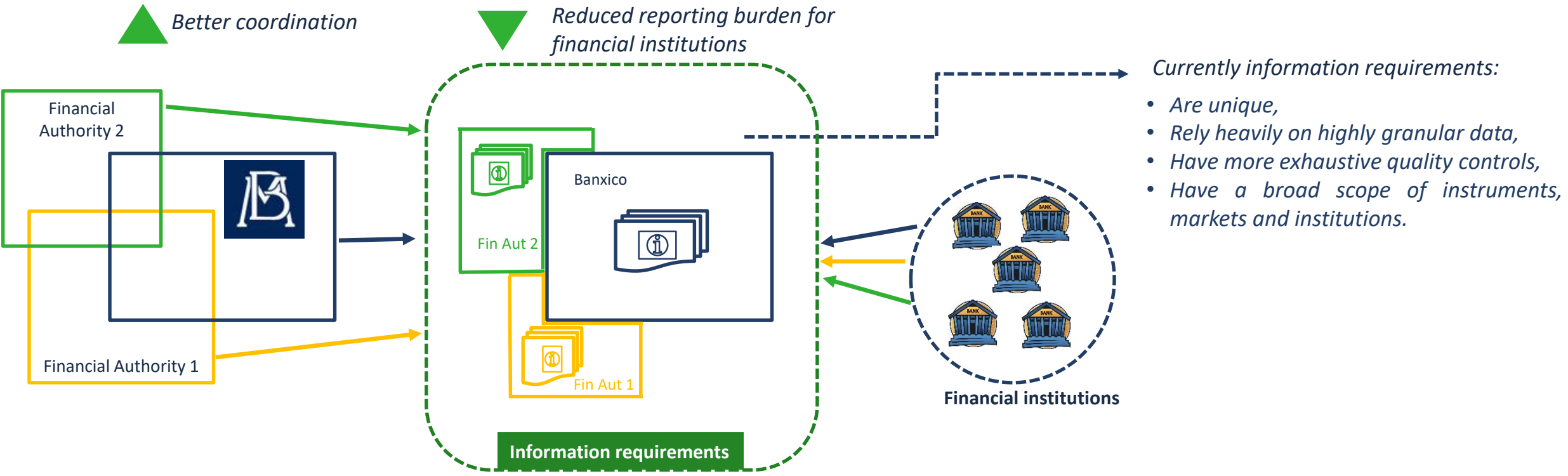
The Mexican case: Actions undertaken

2014

2015

2016

- *A new law of transparency and access to public information based on the principle of maximum disclosure.*

- *The 2014 Financial Reform established:*
  - *Mandatory data sharing among domestic financial authorities under the figure of MoU's.*
  - *New faculties for the Central Bank (and other financial authorities) to share information with foreign financial authorities.*

- *Broad MoU's signed by Banco de Mexico and the financial service protection agency (CONDUSEF) and Banxico and the pension funds supervisor (CONSAR).*

Current situation

- The new framework of information sharing has allowed Mexican financial authorities to improve significantly data sharing practices and convert them in milestone for completing the information used in theirs respective activities.

Information exchange among Mexican financial authorities current situation

Better coordination

Reduced reporting burden for financial institutions

Financial Authority 2

Financial Authority 1

Fin Aut 2

Banxico

Fin Aut 1

Information requirements

Financial institutions

Currently information requirements:

- *Are unique,*
- *Rely heavily on highly granular data,*
- *Have more exhaustive quality controls,*
- *Have a broad scope of instruments, markets and institutions.*

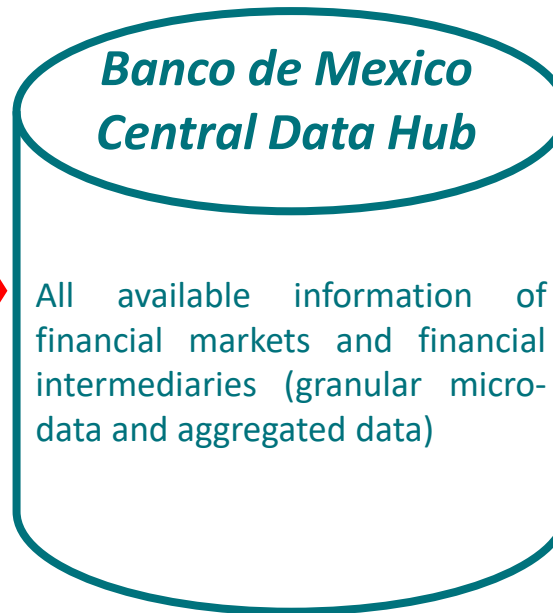# Current schemes for sharing Information by Banco de Mexico

- Banco de Mexico´s main scheme for the provision of information internally and to other financial authorities is a web based Central Data Hub, which provides secure access to financial sector databases
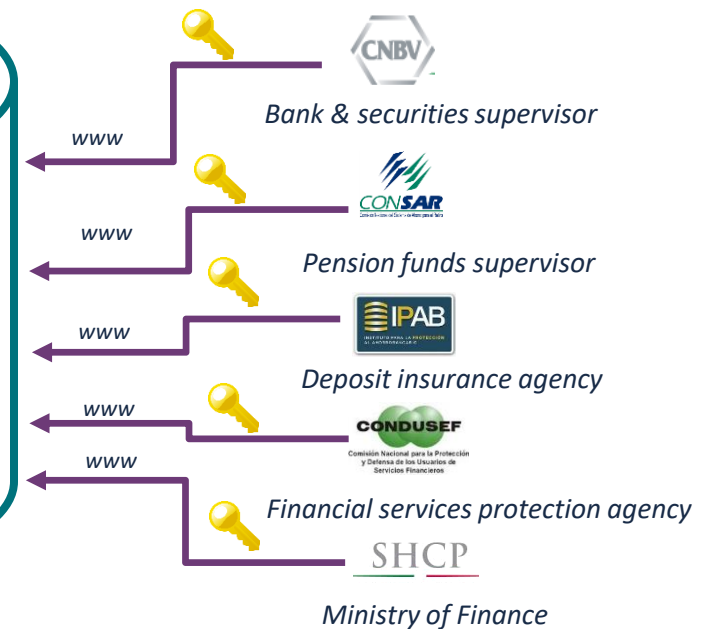
Direct Access Scheme

Information of Financial Institutions

Financial Authorities (*Self service*)

Directorate of Financial System Information

Banco de Mexico Central Data Hub

All available information of financial markets and financial intermediaries (granular micro-data and aggregated data)

CNBV — Bank & securities supervisor

CONSAR — Pension funds supervisor

IPAB — Deposit insurance agency

CONDUSEF — Financial services protection agency

SHCP — Ministry of Finance

Advantages:
- Full control over data consulted (log records)
- Access to all available financial sector data
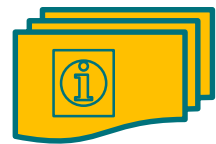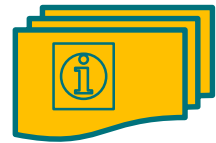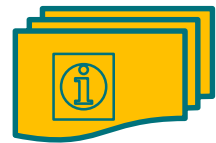- Easy tools for consulting data

Disadvantages:
- Less efficient for large volumes of information

Current schemes for sharing Information by Banco de Mexico

- The second scheme, has been used to share very large volumes of information (microdata) mainly with the Banking and Securities Supervisory, it works using a private FTP, and information is supplied according to an agreed upon calendar.
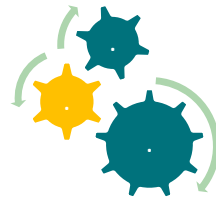
Controlled Service Scheme

Information of Financial Institutions

Directorate of Financial System Information

Scheduled copying of specific large databases (FTP)

CNBV databases (Bank & securities supervisor)

Advantages:
- Access to large volumes of specific data.
- More flexibility for data mining.
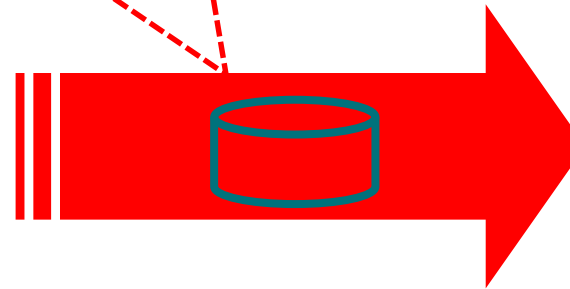
Disadvantages:
- No control over the information consulted
- Problems when information is actualized
- Only agreed upon information.

Current schemes for sharing Information by Banco de Mexico

- In the third scheme, the financial authorities uses public platforms for access to aggregate time series, some data at the institution level and, interactive graphics.

Self Service Scheme

Information of Financial Institutions

Financial Authorities (*Self service*)

Directorate of Financial System Information (DISF)

Internal data sharing

DISF and Other Directorates

Banco de Mexico platforms
- *Time series*
- *Interactive graphics*
- *Web applications*

CNBV — *Bank & securities supervisor*

CONSAR — *Pension funds supervisor*

IPAB — *Deposit insurance agency*

CONDUSEF — *Financial serv. protection agency*

SHCP — *Ministry of Finance*

Foreign financial authorities and other users

Advantages:
- Full control over data consulted (log records).
- Access to long time series.
- Easy tools for consulting data.

Disadvantages:
- Only aggregated information.
- Narrower scope of data.

Current interchange of information

Received by other Authorities

- Pension funds daily portfolio (*microdata*)
- Investment funds daily portfolio (*microdata*)
- Bank mortgages (*microdata*)
- Bank commercial loans (*microdata*)
- Ratings, prices, indices, interest rates, risk factors, etc. (aggregated)
- Other regulated intermediaries financial statements (detailed by institution)
- Bank operational information (detailed by institution)

Shared to other Authorities

- Derivatives (*microdata*)
- Securities (Repo / Buy – Sell / Security Lending (*microdata*)
- Foreign exchange operations (*microdata*)
- Interbank loans (*microdata*)
- Time deposits (*microdata*)
- Equities holdings (*microdata*)
- Credit & debit card transactions (*microdata*)
- Consumer loans (credit card, auto, personal, wage, etc.) (*microdata*)
- Credit bureaus (*microdata*)
- Financial fees and discount rates (*microdata*)
- Retail payment systems & payment network costs (aggregated)
- Demand deposits (aggregated)
- Financial products and services (detailed)
- Cash transactions in MXN and USD (aggregated)
- Capital adequacy (Basel III) (aggregated)
- Liquidity (Basel III) (aggregated)

CNBV

SHCP

CONSAR
Comisión Nacional del Sistema de Ahorro para el Retiro

IPAB
INSTITUTO PARA LA PROTECCIÓN AL AHORRO BANCARIO

CONDUSEF
Comisión Nacional para la Protección y Defensa de los Usuarios de Servicios Financieros

The Banco de Mexico case: A brief evaluation

- On information coordination among financial authorities, the second phase of the G-20 Data Gaps Initiative (G-20 DGI) did some recommendations for improving Data Sharing practices, with an important focus on microdata. These recommendations can be taken as a benchmark of data sharing best practices for a brief evaluation. The recommendations are:

    1. *Promoting the use of common statistical identifiers.*
    2. *Promoting the exchange of experience on statistical work with granular data and improving transparency.*
    3. *Balancing confidentiality and users' needs.*
    4. *Linking different datasets.*
    5. *Provision of data at the international level.*
    6. *Consideration of ways of improved sharing of granular data.*
    7. *Collection of data only once.*

The Banco de Mexico case: A brief evaluation

- The Mexican case can be analyzed under the light of the G-20 DGI Recommendations to improve data sharing.

  - **R1.** *Promoting the use of common statistical identifiers.* Banco de Mexico is working on the adoption of the Legal Entity Identifier and the Unique Transaction Identifier.

  - **R2.** *Promoting the exchange of experience on statistical work with granular data and improving transparency.* The financial information model of Banco de Mexico relies heavily on microdata of transactions in all financial markets. Recently Banco de Mexico shared with Banco Central de Chile its experience as Trade Repository in the collection and management of derivatives transactions.

  - **R3.** *Balancing confidentiality and users' needs.* The normative framework for data sharing mandates a broad exchange of information among authorities. A new Law of Transparency has triggered a new agenda for broadening the publication of financial information.

  - **R4.** *Linking different datasets.* Within financial authorities, the information is used for all possible purposes (research, policy making, supervision, statistics). The 2000 agreement and the recent MOUs establish governance of the data.

The Banco de Mexico case: A brief evaluation

- **R5.** *Provision of data at the international level*. The 2014 Financial Reform provided new faculties to Banco de Mexico to exchange information with foreign authorities, considering the reciprocity principle and relying on the use of MoUs.

- **R6.** *Consideration of ways of improved sharing of granular data.* Financial authorities in Mexico have a long history of sharing granular data under the 2000 agreement. In addition, Banco de Mexico is exploring ways for overcoming confidentiality for a broad dissemination of granular microdata.

- **R7.** *Collection of data only once.* In the late nineties, financial authorities revised data requirements to financial institutions to avoid duplication. In general, the different themes, markets and type of information (mainly granularity) were divided among authorities and the corresponding authority was responsible for fulfilling the requests of other authorities, both in terms of coverage and quality. In addition, a protection was provided to financial institutions to state that financial authorities could not request, in a permanent way more than once the same information.

Challenges ahead

- Some challenges ahead for Banco de Mexico to improve data sharing are:

  - Update the bilateral exchange of information with domestic authorities using MoUs, while the general framework is prepared (recommendations 2, 6 and 7).

  - Define the general framework with other authorities and update the governance mechanisms.

  - Prepare data sharing with foreign financial authorities, negotiating MoUs and developing efficient ways of exchanging the information. This is particularly important for the Trade Repository information on derivatives. (recommendation 5).

  - Improve the use of microdata to satisfies the needs of the general public and other financial authorities through new ways to provide direct access to databases and improving the BI tools (recommendations 3 and 6).

Challenges ahead

- In relation with the last challenge, Banco de Mexico is working on two projects:

  - First, the design and implementation of a platform for disseminate microdata, following the open data approach.

  - Second, the use of diverse ways (statistics, graphics, BI reports, etc.) to disseminate and exploit microdata on specific issues: credit, regulatory frameworks and, financial market operations. This project will imply a deep analysis of the raw data and the design of "new products" to disseminate information.

Annex: G20 DGI-2 Recommendations to improve data sharing

1. **Promoting the use of common statistical identifiers.** Economies and international organizations, as appropriate, are encouraged to foster the use of common identifiers and make every effort to adopt the latest international conceptual frameworks.

2. **Promoting the exchange of experience on statistical work with granular data and improving transparency**. Economies are encouraged to have a more active dialogue and exchange of practical experiences, in particular on the accessibility of granular data, metadata, and on techniques for statistical analysis and data protection.

3. **Balancing confidentiality and users' needs.** Economies are encouraged to revisit existing confidentiality rules, practices, and approaches in light of evolving users' needs and taking into account peer practices, seeking to maximize, as appropriate, the amount of information released while maintaining the confidentiality of data deserving protection.

4. **Linking different datasets.** Economies are encouraged to allow for the fullest possible use of data (for policy making, research, and statistical purposes) including through linking of different non-public datasets (possibly from different institutions) ensuring that strong governance and confidentiality protection arrangements are in place.

5. **Provision of data at the international level.** Economies are encouraged to have in place regional and international data exchange systems and appropriate legal frameworks to allow for sharing and exchange of granular data across borders.

6. **Consideration of ways of improved sharing of granular data.** Economies are encouraged to consider alternative forms of access to granular, potentially micro data, taking into consideration the confidentiality restrictions and users' needs.

7. **Collection of data only once.** Economies are encouraged to avoid multiple collections of the same data by promoting flexible uses of existing datasets to minimize the reporting burden. Increased sharing of data among relevant institutions at the national level should be a key priority.