Disclosure

The views expressed in this presentation are exclusively the responsibility of the author and do not necessarily reflect those of Banco de México.
Agenda

1. FinTech Ecosystem
2. Mexican FinTech Law
3. Data Gaps for Financial Stability
4. Initiatives for Closing Data Gaps
5. Conclusions and Final Remarks
FinTech Ecosystem

- FinTech is the “technologically enabled financial innovation that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services”. (FSB)

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<th>Payments, Clearing &amp; Settlement Services</th>
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- Portal and data aggregators | Data applications (Big data analysis, machine learning, predictive modelling)
- Distributed ledger technology (blockchain, smart contracts) | Security (customer identification and authentication)
- Artificial intelligence (bots, automation in finances, algorithms) | Ecosystems (infrastructure, open source code, APIs)
- Cloud computing | Internet of things | Mobile Technology
FinTech: New Chances... but also New Risks

- Financial inclusion
- Alternative participants for intermediating resources
- Competition
- Better conditions for financial operations
- Facilitates investment services
- Possibility for better returns

FINTECH

- Liquidity
- Customer loyalty
- Dependence on Algorithms
- ML and FT
- Increased complexity of the financial system
FinTech in Mexico

- FinTech activities in Mexico have expanded at an annual average rate of 23% in the last 5 years.
- Despite its relevance and rapid expansion, information about FinTech activities is scarce, non-standardized and untimely.

### FinTech Entities in Mexico

Source: Finnovista

1/ Includes crowdfunding, loans and payments. 2/ Includes ETFI, EFM and PFM. 3/ Includes insurance, wealth management and others.
Mexican FinTech Law Drivers

• In early 2017, there were around 160 firms in Mexico related to the use of technologies for financial services, who had granted more than one billion pesos in loans and had more than 540 thousand active users.

• Technologies applied to financial services are a very useful tool to broaden financial inclusion; however, a regulatory framework is needed to protect end-users of these services.

• Additionally, to promote the development of the financial system, fostered by competition, a new law was required in order to provide a clear set of rules to bring confidence to participants and the objective of pursuing financial stability.
Mexican FinTech Law

- Financial Inclusion
- Competition
- Consumer protection
- Financial Stability
- Financial Innovation
- Technological Neutrality
- Prevention of Illicit activities

FinTech Law
Mexican FinTech Law

- **Banco de México**
- **Bank & securities supervisor (CNBV)**
- **Financial services protection agency (CONDUSEF)**
- **Pension funds supervisor (CONSAR)**
- **Insurance supervisor (CNSF)**

**Virtual Assets**

**Financial Technology Institutions (FTI)**

- **Institutions of collective financing**
  (debt financing, capital financing & joint ownership or royalties)
- **Institutions of electronic payments funds**
- **Sandbox**
Mexican FinTech Law

The Mexican Congress approved a new framework to regulate Financial Technology Institutions (FinTech Law)

Banxico. General Guidelines for virtual Assets Operations

Deadline for interested firms to present the request authorization to operate as a FTI to CNBV. 89 companies presented the request

Banco de Mexico (Banxico). General Guidelines for API’s & Open Banking information

Banxico. General Guidelines for virtual Assets Operations

Banxico. General Guidelines for FinTech (including regulatory reports)

CNBV authorized the first FinTech (NVIO Pagos) to operate as an Electronic Payment Funds Institution under the framework of the FinTech Law
Mexican FinTech Law – Information Requirements

Information Requirements by Banco de Mexico or CNBV

- Loans
  - Maturity date
  - Interest rate
  - Credit destination
  - Credit currency
  - Identification of lenders
  - Contract date
  - Payments and related guarantees

- Deposits

- Payments
  - Payment services
  - Fraud operations
  - Funds involved in claims
  - Electronic payment funds accounts
  - Operations at a transactional level
  - Virtual assets

- Derivative operations
  - Payments
  - Contracts
  - Counterparties
  - Prices
  - Guarantees

- Virtual assets

Financial statements // Financial information by economic sector // Fees
The FinTech Law considers a transition period, during which authorities are not gathering data.

By law, Fintech entities must provide information to authorities. In particular, including detailed information about their balance sheets and financial statements (identifying currency and type of financial instrument).

### Institutions of collective financing (regulatory reports)

- **Balance Sheets** *(balances at the end of the period for all concepts that are part of the statement of financial position)*
- **Bank loans and loans from other organizations** *(information that allows knowing the details of the loans granted to ICF and credit monitoring information)*
- **Financial Statements** *(statements of financial position, changes, cash flows and comprehensive income)*
- **Complaints** *(information regarding claims related to crowdfunding operations)*

### Institutions of electronic payments funds (regulatory reports)

- **Balance Sheets** *(balances at the end of the period for all concepts that are part of the statement of financial position)*
- **Bank loans and loans from other organizations** *(information that allows knowing the details of the loans granted to ICF and credit monitoring information)*
- **Financial Statements** *(statements of financial position, changes, cash flows and comprehensive income)*
- **Information on Agents** *(information regarding registrations, cancellations, monitoring of services and operations of commission agents)*
- **Complaints** *(information regarding claims related to payment funds operations)*
Data Gaps for Financial Stability

• A relevant factor to measure potential risks for financial stability, is to have knowledge about the degree of interconnectedness in the financial system (as shocks could spread more easily as interconnectedness increases). This is possible only if financial authorities have data on transactions of financial intermediaries, including those of FinTech firms.

• To analyze the risks that FinTech could pose to financial stability, it is needed to measure these risks and their potential effects, as well as the probability associated to their occurrence (a small FinTech sector could have little affectations to financial stability, even if its degree of connectivity with other intermediaries were high).

• As FinTech activities could be similar to the ones of incumbent financial intermediaries, some associated risks would be comparable (credit risk, market risk, liquidity risk, maturity mismatches, among others) but others, such as cyber risk, could be more prevalent.
Data Gaps... New Chances

• Under the new ecosystem, it is essential that market participants have enough information available to adequately assess the risks inherent to the business models of FinTech.

• The technological impulse of FinTech also represents an opportunity for Authorities to enhance alternative models of collection and dissemination of information, adopting technological advances at the forefront of all the updates that arise with the innovation of financial technology. In this sense, it is important to make an important effort not only to adopting technological advances but also standardizing the correct implementation of these technologies among the market participants in order to facilitate collecting, disseminating and sharing of information.

• The use of technologies, like unified repositories such as data warehouses, could facilitate the safeguarding and analysis of information to ensure that it complies with the minimum requirements required by financial authorities and minimize the risks to impact on financial stability.

• FinTechs, without legacy systems burdens, can adopt global data standards (such as the LEI code), and data management practices at a very low costs, making an innovative financial sector on their data risk capabilities.
New business models could give the chance to financial authorities to use new regulatory schemes, one of these could be the regulatory sandbox. This could be a useful tool to identify potential risk of adopting new business models in FinTech.

By its characteristics, the regulatory sandbox represents an innovative model where financial innovation developments can be tested in a safe environment. It provides a controlled and defined area that allows simulating a real environment to test the innovative model without putting the financial system at risk.

Some advantages of the Sandbox are:

- Reduces developments costs.
- Allowed by regulation.
- Safe environment to test business models and identify potential risks without damaging the financial system stability.
Final Remarks

• The irruption of FinTech in the financial system is a challenge for Central Banks since it could rise new risks but also new chances.

• Balance between promoting innovation for the development of the financial system and the costs generated by regulation.

• International coordination and cooperation are required to design the information requirements that will apply to FinTechs, as these entities usually operate in multiple jurisdictions. Global coordination will allow financial authorities to monitor the growth of FinTech sector and will ease the identification of potential risks in financial system.