Central banks & fintech data issues:
an IFC perspective

Bruno Tissot
Head of Statistics and Research Support, BIS & Head of the Secretariat of the Irving Fisher Committee on Central Bank Statistics (IFC)

VI Meeting of the Financial Information Forum of Latin American and Caribbean Central Banks, Session 3
“New participants of the financial system and information needs (Fintech)” - Virtual format 29 May 2020

The views expressed are those of the author and do not necessarily reflect those of the BIS or the IFC.
Overview

1. IFC survey of central banks
2. Defining fintech
3. Need for fintech data
4. Fintech creates data gaps
5. How to close data gaps?
6. Concrete initiatives to close data gaps
7. Way forward: some useful considerations
1. IFC survey of central banks

- **Fintech**: technology-enabled innovation in financial services

- Key **interest for central banks**
  - Future of central banking linked to innovation
  - Usual mandate to supervise payment systems
  - Also affect monetary and financial stability objectives

- **IFC survey** launched in 2019
  - Covered 2/3 of 92 IFC members
  - Specific additional focus on LAC region (with CEMLA support)
2. Defining fintech

*Less than half of central banks has a working definition of fintech firms*

Does your jurisdiction have a (working) definition of fintech firms?

<table>
<thead>
<tr>
<th>Number</th>
<th>Yes</th>
<th>No / Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>26</td>
<td></td>
</tr>
</tbody>
</table>

Source: IFC survey on Fintech data (2020).
2. Defining fintech (cont’d)

- Large **variety of companies**
  - leveraging on technology to supply different types of financial services and products

- **Fintech developing in the majority of the jurisdictions, through 3 different channels:**
  - emerging firms (”fintechs”):
    → operate primarily in finance with inroads in various market segments
  - large technology companies (”big techs”):
    → offer financial services as part of much wider set of activities
  - **traditional financial institutions:**
    → modified business model to deal with digital innovation
2. Defining fintech (cont’d)

Fintech firms particularly engaged in the provision of payments, clearing, and settlement services, as well as in credit intermediation

Are there fintech firms in your jurisdiction?

As a percentage of jurisdictions

Source: IFC survey on Fintech data (2020).
3. Need for fintech data

**Significant need for fintech data among central bank users**

Are there fintech data demands in the following business areas?

In per cent

<table>
<thead>
<tr>
<th>Business Area</th>
<th>Very important</th>
<th>Normal</th>
<th>Not important / Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>General demand¹</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial stability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking supervision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monetary policy</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Fintech data demands are the average across the business areas.

Source: IFC survey on Fintech data (2020).
3. Need for fintech data (cont’d)

- **Central banks’ data demands** relatively high

- Depend on business area / jurisdiction / type of information
  - Strongest requests by units in charge of *payment systems*
  - Demands particularly important in *high-fintech jurisdictions*
  - Users typically interested in
    - lists of fintech entities
    - statistics on fintech credit
4. Fintech creates data gaps

*Important data gaps especially in high-fintech countries...*

Do you think that fintech is creating gaps in central bank statistics?¹

As a percentage of jurisdictions

<table>
<thead>
<tr>
<th>Panel A: High-fintech countries</th>
<th>Panel B: Low-fintech countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Bar chart for high-fintech countries" /></td>
<td><img src="image2" alt="Bar chart for low-fintech countries" /></td>
</tr>
</tbody>
</table>

¹ Countries are classified as high or low-fintech following the CCAF(2018) index. High-fintech countries = Australia, Brazil, Canada, France, Germany, Ireland, Israel, India, Japan, Korea, Singapore, Switzerland, the United Kingdom, and the United States. The remaining countries are in the low-fintech group.

Source: IFC survey on Fintech data (2020); CCAF (2018).
4. Fintech creates data gaps (cont’d)

... and as regards payments and lists of financial institutions

In which statistics is fintech creating gaps?

In per cent

Source: IFC survey on Fintech data (2020).
4. Fintech creates data gaps (cont’d)

- Gaps depend on business area / jurisdiction / type of information

- Reflect **three main developments**
  - Fintechs can be **classified outside the financial sector**
    → eg fintechs initially set up as IT companies
  - **Lack of granularity** of the current statistical framework
    → non-bank financial institutions often grouped together (OFIs)
  - **Traditional institutions sponsoring technological start-ups**
    → treated as directly-controlled affiliates
    → activities blurred in consolidated groups’ reports
5. How to close data gaps?

**Main cause behind gaps is that fintech is developing outside the regulatory perimeter**

– *in terms of assets, institutions, services provided*

Why is fintech creating gaps in statistics?

As a percentage of jurisdiction reporting gaps

- New assets outside the regulatory perimeter
- New firms outside the regulatory perimeter
- Fintechs are small and diverse
- New services outside the regulatory perimeter
- Traditional financial service providers are providing fintech services
- Traditional financial service providers are using fintech services
- New firms which cannot be recognised as fintechs

Source: IFC survey on Fintech data (2020).
5. How to close data gaps? (cont’d)

- Fintechs to be well covered in the statistical reporting perimeter
  - Guiding principle
    - providers classified according to the main economic activities performed
  - Independently of the embedded technological intensity
    - Currently, principle applied in an ad hoc manner

- Official business classification systems should be revisited
  - Ensure that firms engaged in financial intermediation are systematically classified in the financial sector
    - Eg neobanks, entities engaged in crowdfunding, robo-advisers or payment processing companies
  - Key opportunity: revision of the International Standard Industrial Classification of All Economic Activities (ISIC)
5. How to close data gaps? (cont’d)

Many tools at the disposal of central banks to address data gaps

Which of the following initiatives can be helpful to close fintech data gaps?

In per cent

Source: IFC survey on Fintech data (2020).
6. Concrete initiatives to close data gaps

Two thirds of central banks in high-fintech jurisdictions have launched an initiative to address fintech-related data gaps

Are you launching statistical initiatives to close fintech data gaps?1

As a percentage of jurisdictions

Panel A: High-fintech countries

Yes

No / do not know

Panel B: Low-fintech countries

Yes

No / do not know

1 Countries are classified as high or low-fintech following the CCAF(2018) index. High-fintech countries = Australia, Brazil, Canada, France, Germany, Ireland, Israel, India, Japan, Korea, Singapore, Switzerland, the United Kingdom, and the United States. The remaining countries are in the low-fintech group.

Source: IFC survey on Fintech data (2020); CCAF (2018).
6. Concrete initiatives to close data gaps (cont’d)

- **Half of central banks have launched an initiative**
  - Primary objective
    - Update lists of financial entities / adjust reporting requirements

- **Collection of data from financial intermediaries** (or “supply side”)
  - From financial firms (e.g., regulatory reports)
  - Publicly available financial statements
  - Information from industry associations / business registries

- **Collection of data from financial services’ users** (or “demand side”)
  - From the economic agents (e.g., financial surveys)
  - Useful to assess the impact on financial inclusion
  - But only a few central banks involved
6. Concrete initiatives to close data gaps (cont’d)

Central banks are particularly active in the data collection work...

(note: respondents may not be fully informed of the additional initiatives led by other institutions)

Which authorities are regularly gathering information on fintech?

As a percentage of jurisdictions

Source: IFC survey on Fintech data (2020).
6. Concrete initiatives to close data gaps (cont’d)

... as in the following case studies:

- Surveys among financial intermediaries
  *Italy, Costa Rica...*

- Identification of firms by engaging with the industry
  *Spain...*

- Coordination through a hub
  *South Africa...*

- Crypto-assets monitoring
  *ECB...*
6. Concrete initiatives to close data gaps (cont’d)

**Coordination is important to close gaps... esp. internationally**

Coordination

In per cent

Panel A: How important is coordination in closing fintech data gaps?

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Very important</th>
<th>Normal</th>
<th>Not important / Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination at the central bank level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordination with fintech industry associations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation with other central banks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation with other domestic authorities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation with international financial institutions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Panel B: How important are the following international initiatives in closing fintech data gaps?

- Clarifying statistical definitions of fintech
- Adjusting guidance on statistics compilation
- Sharing data across jurisdictions
- Revising statistical standards
- Fostering the issuance of the Legal Entity Identifier
- Setting up a global registry of fintech firms

Source: IFC survey on Fintech data (2020).
7. Way forward: some useful considerations

- **Classification of economic activities** to consider fintechs
  - Revision of ISIC at the UN level
    → Section K
  - Adapt existing collections
    → eg payment transactions, international banking and financial statistics

- Enhance **statistical methodologies**
  - Standards:
    → Fundamental principles for official statistics
  - Next manuals
    → eg SNA / BoP
7. Way forward: some useful considerations (cont’d)

● **Developing fintech statistics**
  - Various steps to monitor fintech eg
    → Definition
    → Links with existing data
    → Cooperation with other agencies
    → Surveys
    → Web-scraping

● **Leverage on IT innovation**
  - Solutions to **facilitate compilation**
    → sharing IT tools
  - Domestic / international **cooperation**
    → eg BIS Innovation Hub
Thank you!!

Questions?
Jose.Serena@bis.org
Bruno.Tissot@bis.org
IFC.Secretariat@bis.org

Link to the IFC website:
www.bis.org/ifc/index.htm?m=3%7C46

IFC Report: