# 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



# 2. Defining fintech (cont'd)

#### Large variety of companies

- Ieveraging 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**"):
  - $\rightarrow$  operate primarily in finance with inroads in various market segments
  - > large technology companies ("**big techs**"):
  - $\rightarrow$  offer financial services as part of much wider set of activities

### > traditional financial institutions:

 $\rightarrow$  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



## 3. Need for fintech data

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





<sup>1</sup> Fintech data demands are the average across the business areas.

- 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
  - $\rightarrow$ lists of fintech entities
  - $\rightarrow$ statistics on fintech credit



# 4. Fintech creates data gaps

As a percentage of jurisdictions

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

Do you think that fintech is creating gaps in central bank statistics?<sup>1</sup>

Panel A: High-fintech countries Panel B: Low-fintech countries Yes Yes No / do not know No / do not know 20 40 60 80 100 20 40 80 0 0 60 100

<sup>1</sup> 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



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**  $\rightarrow$ 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

- $\rightarrow$ treated as directly-controlled affiliates
- $\rightarrow$  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



# 5. How to close data gaps? (cont'd)

• Fintechs to be well covered in the statistical reporting perimeter

# > Guiding principle

 $\rightarrow$  providers classified according to the main economic activities performed

### Independently of the embedded technological intensity

 $\rightarrow$ 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

 $\rightarrow$ 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).

# 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?<sup>1</sup>



As a percentage of jurisdictions

<sup>1</sup> 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).

#### • 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 (eg 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 (eg financial surveys)
- > Useful to assess the impact on financial inclusion
- But only a few central banks involved

#### 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



#### • ... 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*...

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

#### Coordination

In per cent

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

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



# 7. Way forward: some useful considerations

• **Classification of economic activities** to consider fintechs

- Revision of ISIC at the UN level
- $\rightarrow$  Section K
- > Adapt existing collections

 $\rightarrow$ eg payment transactions, international banking and financial statistics

Enhance statistical methodologies

- > Standards:
- $\rightarrow$  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
- $\rightarrow$ Links with existing data
- $\rightarrow$ 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



www.bis.org/ifc/index.htm?m=3%7C46

**IFC Report:** 

www.bis.org/ifc/publ/ifc\_report\_fintech\_2002.pdf

