Irving Fisher Committee on Central Bank Statistics | ◆ **BIS**

Towards monitoring financial innovation

7th meeting of the Arab Statistics Initiative, 11-12th Nov 2020

Robert Kirchner, Deputy Director General, Statistics, Deutsche Bundesbank

Fintech and Statistics

Fintech, or financial innovation and digitalisation, is **transforming the financial sector**, by introducing new financial products, and bringing existing services to a larger market,

- This activity generates **data gaps** in central bank statistics.
- Fintechs increasingly important for **financial stability and payment systems.**
- Internationally comparable **information on fintech is lacking in official statistics**. To understand innovation, **qualitative information of fintech activity**, information on **evolving structures**, and **harmonised time series** are needed.

The **IFC Working Group on Fintech Data Issues** has reviewed the state of affairs and outlined a **targeted road-map** to **construct fintech statistics.**

Irving Fisher Committee (IFC) Working Group on Fintech Data Issues

The IFC is a **forum of central bank statisticians and economists world-wide**, hosted at the BIS in Basel. A platform for methodology, policy and governance in central bank statistics!

- 2018-2020 **Working Group on Fintech Data :** More than 20 participating central banks, plus the IMF.

- Input from the broader central bank community, through a **survey on fintech data** conducted among the 92 IFC members.

- July 2020 – **Final report**. Key message: **systematic and coordinated provision of statistical information** is needed!

- Recommendations for **setting up a statistical information system (road map)**

- 19 notes and papers on **analytical issues and country experiences**.

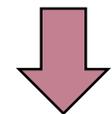# Irving Fisher Committee (IFC) Working Group on Fintech Data Issues

- Chartingجدول اعداد existing, readily accessible information sources

- Investigating data needs by means of literature and informal contacts to users

- Conducting formal survey among the statistics depts. of 91 central banks on user demands

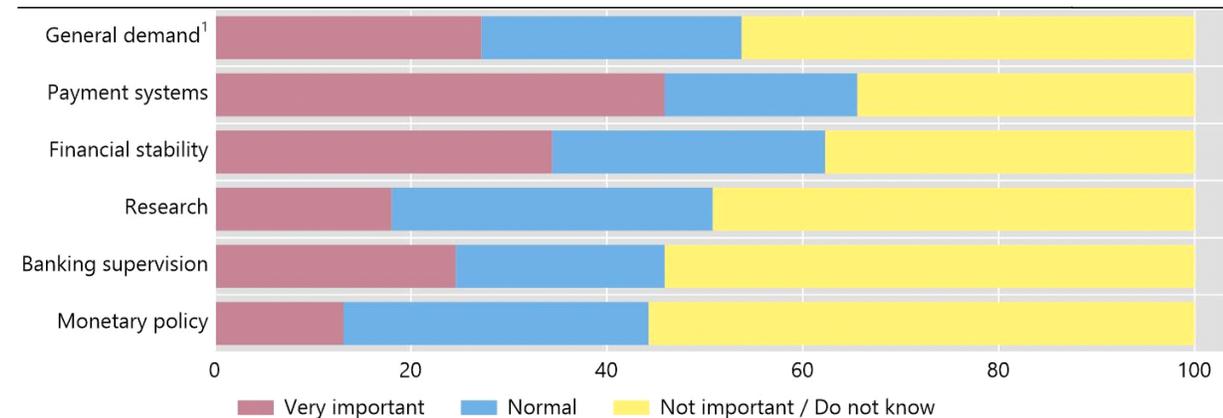- Making visible a **significant information gap**

2019 IFC survey on fintech data

Fintech is creating, overall, strong data needs; these are particularly significant in **payment systems** and **financial stability departments**.

Are there fintech data demands in the following business areas?

In per cent   Graph 1

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

Source: IFC survey on Fintech data, 2020.

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What is fintech? Common elements in definition and classification issues

Fintech **not recognised** in Official Statistics. Also outside statistics, there is **no unique characterisation of** fintech. Current definitions typically have three common features:

- ▪ *financial services*

- ▪ *innovation*

- ▪ *"technology"*

Cannot be used as a basis for classification – as the **content of the descriptor will change over time.**

Consistency requires that a **firm that is Fintech today will be Fintech tomorrow** if it keeps on producing the same services

→ We need to subsume fintech industries to a broader system of activities.

However: it is important that Fintech activity is **recognised as financial in nature!**

Clusters of activities

We need to start **activity based,** focussing on clusters of specific interest for central banks such as (see Daseman et al 2020, IFC Working Group Final Report, Annex 3):

- **Payment**
- **Lending**
- **Savings and deposits**
- **Insurance**
- **Investments**
- **Financial planning and advisory**
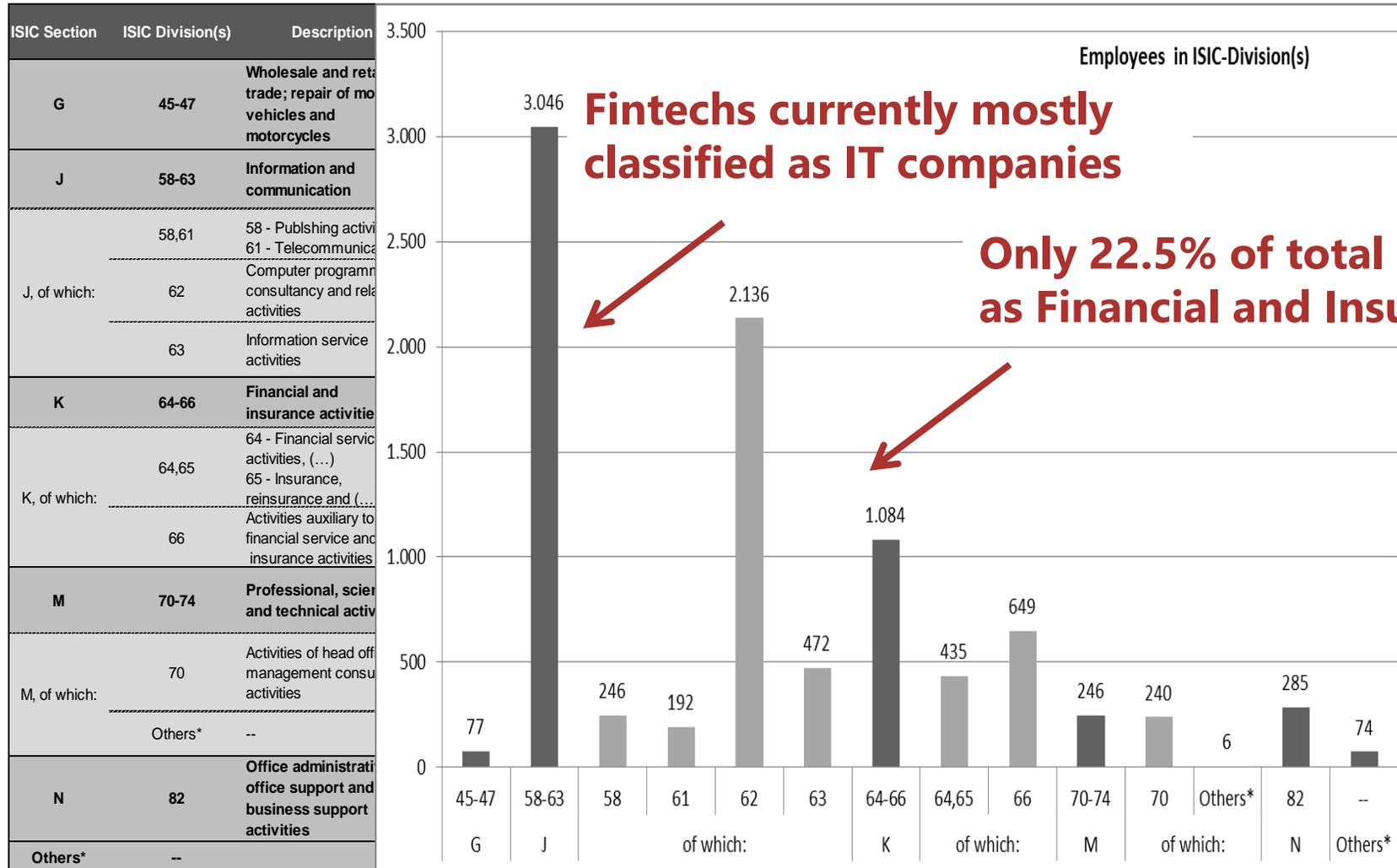- **Capital raising**
- **B2B tech advisors**

Collecting cluster-specific information

Few characteristics will be meaningful or available for all fintechs. Based on the policy needs for the cluster at hand, different pieces of information will be important, such as:

- **Transaction volumes and size composition** for payment providers
- **Deposit volume** for companies taking deposits
- **Lending activity** for credit platforms
- **Issue of debt or equity securities** for capital raising companies
- **Asset volumes** (financial or non-financial) for crypto-asset providers or –platforms

Many of these cluster specific characteristics are readily defined in the relevant statistical area, eg banking or payment statistics!

Fintech employees 2015 in Germany, distribution in ISIC division clusters

ISIC Section	ISIC Division(s)	Description
G	45-47	Wholesale and retail trade; repair of motor vehicles and motorcycles
J	58-63	Information and communication
J, of which:	58,61	58 - Publshing activi 61 - Telecommunica
	62	Computer programm consultancy and rela activities
	63	Information service activities
K	64-66	Financial and insurance activitie
K, of which:	64,65	64 - Financial servic activities, (…) 65 - Insurance, reinsurance and (…
	66	Activities auxiliary to financial service and insurance activities
M	70-74	Professional, scien and technical activ
M, of which:	70	Activities of head off management consu activities
	Others*	--
N	82	Office administrati office support and business support activities
Others*	--	

Fintechs currently mostly classified as IT companies

Only 22.5% of total # empl classified as Financial and Insurance activities.

Employees in ISIC-Division(s)

	Value
45-47 (G)	77
58-63 (J)	3.046
58	246
61	192
62	2.136
63	472
64-66 (K)	1.084
64,65	435
66	649
70-74 (M)	246
70	240
Others*	6
82 (N)	285
-- (Others*)	74

A roadmap towards internationally harmonised fintech statistics I

To understand innovation, **qualitative information, information on evolving structures, and harmonised time series are important**.

1. **Fintech classification**
   - In the course of the revision of the ISIC, all steps in the value chain of financial activities and products **should be assigned to section K** (financial services)
   - **New categories** describing fintech firms activities shall be introduced

2. **Identification of fintech firms**
   - National and global data collections on fintech firms shall be developed
   - Starting points can be non-official or semi-official fintech lists, if available

3. **Linking lists of fintech firms with existing firm level data,** eg balance sheet ميزانية عمومية data, income statements, ownership structure, annual reports).

A roadmap towards internationally harmonised fintech statistics II

4. **Fostering cooperation**
- ▪ **Internal and external cooperation** is needed, eg to link existing data
- ▪ **Data-sharing** within institutions, between institutions and internationally
- ▪ **Cooperation with economists** to understand evolution of market structures and business models

5**. Application Programming Interfaces (API) وصلات بينية and Artificial Intelligence assisted web search**
- ▪ **Publicly available internet data** or data from APIs can be used to fill data gaps
- ▪ **Automated data-gathering techniques**

6**. Surveys serve to monitor:**
- ▪ the **financial service providers**' and
- ▪ the **demand side** -- other financial or non-financial companies or households

Recommendations

1) **Promote global adoption of revised classification** of economic activities that better takes into consideration fintech services, see IFC recommendation to revise the ISIC at the United Nations (UN) level. Fintech activities to be assigned to financial services as part of the value chain of financial products, and specific categories should be established.

   - Central banks could consider ways to implement a revised classification in specific data collection exercises, including payment transactions data and the international banking and financial statistics already compiled by the BIS.

2) **Ensure that statistical methodologies used to measure fintech activities adhere to sound professional and scientific standards.** Specifically, ensure that fintech is considered in the context of the international consultations for the revision of System of National Accounts (SNA) and Balance of Payments/International Investment Positions (BoP/IIP) standards.

Recommendations

3) **Develop a comprehensive process to continuously monitor the situation and address fintech-related data issues that may arise.** To compile fintech statistics, central banks could **implement the roadmap outlined in the report**, which cover the **classification of fintech firms, links with existing data, cooperation with other data-providing agencies, and the use of surveys or AI-supported web search.**

4) **Leverage existing IT innovation and accelerate it,** by promoting technological solutions to facilitate the compilation of fintech statistics; cooperating with other domestic and international stakeholders, and making resources available internationally, for instance, by by **sharing IT tools through the BIS Innovation Hub (BISIH).**

Outlook

- The **European System of Central Banks Statistics Committee** is taking concrete steps towards a coordinated procedure.

- **International co-operation** is key: fintechs are often most important in countries other than their host. Monitoring fintechs is an international business!

- The **EU Commission** is preparing an **encompassing strategy on fintech** – promoting growth and providing effective control of risks by means of regulation.

- US is debating encompassing **regulation of fintech activities.**

In the end, we need **multi-purpose statistical monitoring systems, set up nationally, but linked in an international network**

References

- Irving Fisher Committee on Central Bank Statistics, IFC Report No 10: Central banks and fintech data issues. 2020 Survey conducted by the Irving Fisher Committee on Central Bank Statistics (IFC). Basel, February 2020

- Irving Fisher Committee on Central Bank Statistics IFC Report No 12: Towards monitoring financial innovation in central bank statistics. Report prepared by the IFC Working Group on Fintech Data Issues, July 2020

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THANK YOU