DEUTSCHE BUNDESBANK EUROSYSTEM

Gathering Fintech Data Outside Statistical Departments: Summary of the IFC WG stock-taking exercise

IFC Working Group on Fintech Data

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Agenda

- IFC WG stock-taking exercise: Short overview
- Summary of workstreams‘s results on:
  1. Banking Supervision
  2. Financial Stability
  3. Payments and Market Infrastructure
  4. Statistics
  5. Fintech Industry
- Main messages from the stock-taking excercise

Stock-taking exercise: Short overview

In order to avoid overlaps with existing structures, to take stock of statistical work done so far and to understand user needs, the WG has:

- **27 members** from **22 different countries**/institutions in the **IFC Working Group** (WG) **on Fintech Data**

- **5 dedicated Workstreams** (WS) for the stock-taking exercise (with 3-7 members each, members coordinated input internally where necessary):

  (1) Banking Supervison, (2) Financial Stability, (3) Payments and Market Infrastructure, (4) Statistics, and (5) Fintech Industry

- used this **method**: Reading of papers, studies and other information bits relevant to each WS (about 30-40 papers/studies taken into consideration)

Key take-aways from Workstreams on Banking Supervision and Financial Stability (1/2)

Banking Supervision

- **Generally no responsibility for statistics in** the **supervision areas of Fintech activities identified**

- **Need for** a **clear definition of Fintech** (there is no legal classification), which captures the changing phenomenon, and **lack of robust databases on Fintech** for banking supervision purposes

Financial Stability

- **Difficult** to **obtain sufficient information** on Fintechs **to calculate relevant regulatory measures** such as leverage or liquidity ratio as well as maturity or liquidity mismatch

- Examples of **data needs**: Total number of Fintechs per jurisdiction, information on main financial innovations used, main financial services provided, target end-users, Fintech credit volume

- Internal auditors, **regulators** and **supervisors** can **use financial technology** to **reduce costs** of **regulatory reporting (RegTech)**

Key take-aways from Workstreams on Banking Supervision and Financial Stability (2/2)

Financial Stability, continued

- **Legal Entity Identifier (LEI)** may help to **support Fintech data collection** and **reporting**, in a way that **facilitates cross-border cooperation** and **information exchange** → Especially since cross-border issues of Fintech are generally not discussed.

- **Fintechs** with **innovations** such as **RegTech**, **cloud computing**, **Virtual Currency**, biometric technology and **data aggregation services** appear **not** to be **subject to** a **regulatory regime** (see EBA Discussion Paper on Fintech, 2017)

- **FSB (2017)** suggests **classifying Fintech developments by** the **main** existing **economic functions** provided (see figure 1 in the Annex)

Key take-aways from Workstream on Payments and Market Infrastructure

- **Definitions and concepts** may be **needed** to develop a **fintech data reporting framework** → Conduct a cost-benefit analysis before introducing new reporting obligations

- **Red Book statistics as focal point for this area**, since some Fintech developments were reflected in recent changes in this statistic

- Examples of **data needed in context of Red Book statistics:** New breakdown by legal status of non-bank for category „Overnight deposits by other than banks“, in general: breakdowns that consider fintech categories, breakdown of „total gross volumes/values“ by instrument type: Instant credit transfers

Key take-aways from Workstream on Statistics

- **Interest in**:

  understanding the **size** of **Fintech businesses**, their **concentration in financial instruments** → How will Fintech industry be defined? Should **IT services** be considered **part of Fintech?** How to **measuere Fintech activities** when integrated **within** traditional **financial institutions?** Is development undertaken by Fintechs reported as research and development? In which **asset category** are **cryptocurrencies** in?

- **Data needs/statistical questions**:

  full financial statements → Are they already part of business surveys? In which industries are they classified in? Are **Fintech activities** already **accounted for in GDP**?

  Need for: financial flows and stocks of Fintechs, number of participants, financial relations amongst Fintech firms, and to institutional sectors

  → **Clear guidance on statistical treatment** would be most helpful

- **Data gaps:**

  Fintech considered sufficiently **in export/import of services**? **Exclusively internet operating Fintechs** pose a **data reporting challenge** to national authorities because of **unclear**/unknown **frontiers**, missing definitions and concepts

Key take-aways from Workstream on Fintech Industry (1/2)

- **Interest in:**

  Fintech data requirements can range from **financial stability to cross-border exchange control**

- **Data needs**:

  Data to understand credit scoring in order to compare banks and P2P lenders‘ activities (University of Pavia Fintech laboratory) → collection of financial transactions data between borrowers and lenders by countries‘ sectors based on available international standards (e.g. SNA 2008 and ISO country codes)

- **WS‘s suggestions:**

  Fintech definition should cover the **spectrum of Fintech innovations,** e.g for crypto: market capitalisation, number of trading platforms, flow of funds between crypto and fiat currency (and vice versa), trading volumes, types/number of cryptos traded, number of customers, number of retailers or merchants accepting crypto, and the number of crypto vending machines per country, balance sheets of fintechs

  → **Benefit** from **more international collaboration** and **cross-jurisdictional data sharing**

Key take-aways from Workstream on Fintech Industry

Selected data initiatives: African Fintech data surveys and the Fintech data hub at South African Reserve Bank (SARB)

- Some African countries have conducted surveys trying to determine the size and nature of Fintech activities in their respective countries.
- Data collection idea for crypto exchanges: mix of moral suasion and Fintechs‘ desire for formal recognition by regulators

SARB Fintech data hub

- Started to collect Fintech data manually and engaged in automating the process so that data can be submitted via files or APIs.
- Stores data in South African Fintech data hub, and
- Intends to make it accessible for analysis by tax authority, market conduct, financial intelligence, National Treasury and central bank, access is being considered for academics and resarch organisations as appropriate.
- Other data availabe: Fintech type organisation, crowdfunding schemes etc., further thoughts on data collection process, standardisation and extend of Fintech data architecture

Main messages from the stock-taking exercise

- The **internet, Fintech innovation** and **digital assets** (including cryptocurrencies) are **enabling disaggregation** and **decentralisation** of **economic activites** and **centralised infrastructure.**
  - **Need for** a **clear (official) definition of Fintech terms,** which captures the changing phenomenon, including the scope of Fintech services
  - **Fintech defintion** mentioned most frequently in the stock-taking: „Fintech is defined as technology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services.“ (FSB, 2017; Drivers and Depth, 2017)
- **Data availability:**
  - Red-book focal point on payment systems
  - Otherwise lack of robust (official) databases on Fintech
  - Only commercial data or data from academic studies available (Cambridge Centre for Alternative Finance, the Inter-American Development Bank, the FSB and consulting firms such as EY)
- **The way forward, gathering data on fintech entities: FSB** (2017) **suggested classifying Fintech developments by** the **main** existing **economic functions** provided (see figure 1 in the Annex)

Thank you.

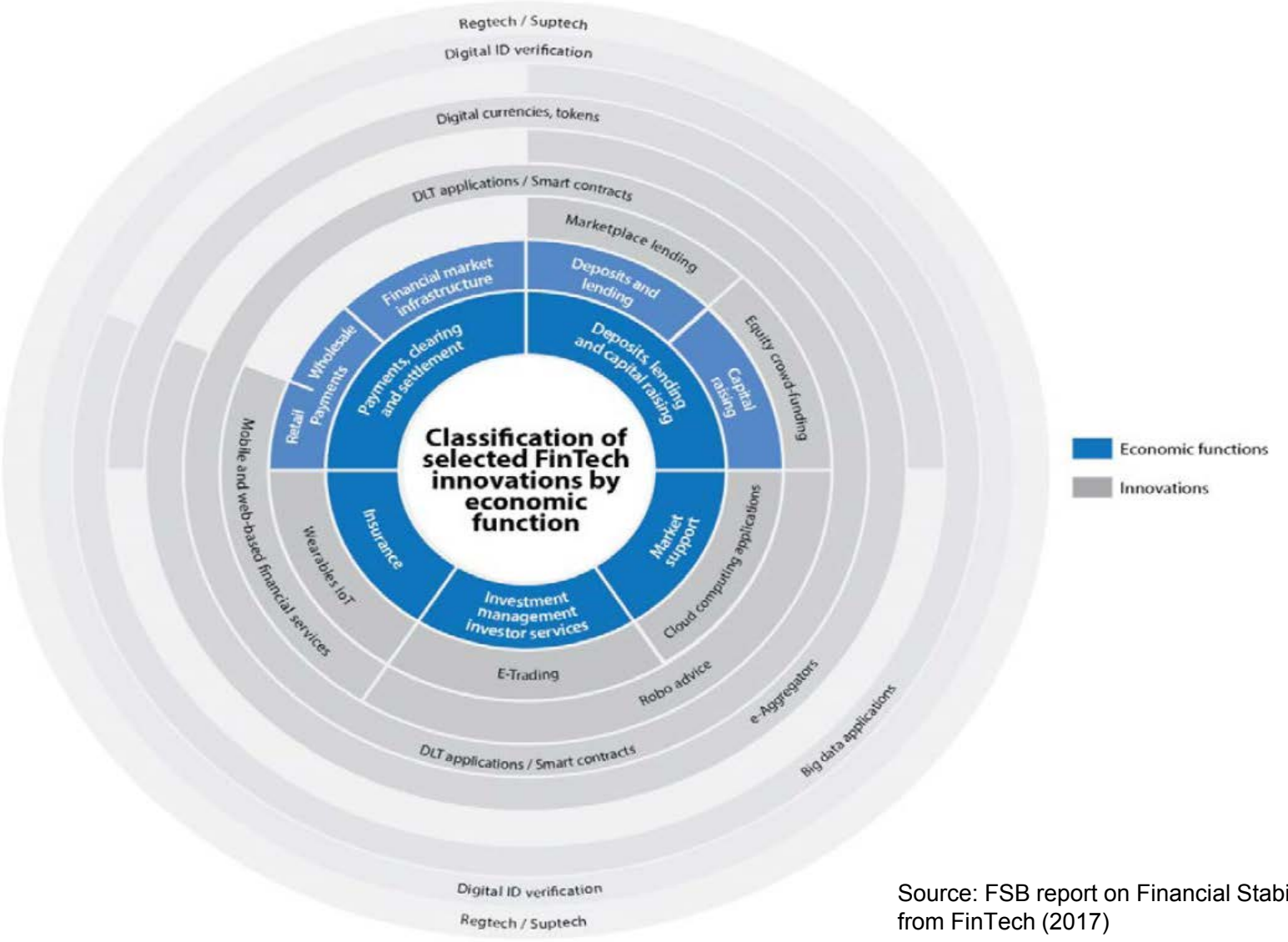
Any
Questions?

References

- Dorfleitner et al., FinTech market in Germany, 2016.
- EBA Discussion Paper on the EBA‘s approach to financial technology (FinTech), 2017.
- FSB, Financial Stability Implications from FinTech, 2017.
- FSB and BIS CGFS, FinTech credit, 2017.
- World Economic Forum (WEF), The future of financial service, 2015.

Annex to Financial Stability WS

Figure 1: Stylised classification of selected FinTech innovations by economic function



Source: FSB report on Financial Stability Implications from FinTech (2017)

Annex to Financial Stability WS, ctd.

Examples for FSB (2017) classifications:

- **In payment space**: mobile and web-based payment platforms, such as Alipay, Adroid Pay, Apple Pay, M-Pesa, PayPal and Samsung Pay offer end users the possiblity to pay for good and services online or through mobile devices, potentially providing the opportunity to reduce transaction costs compared with more traditional payment methods

- **Digital currencies**: E.g. Bitcoin and Litecoin, are to be used for similar purposes by households and firms to pay for real economic transactions. Loans can also be granted in digital currencies.

- **Crowdfunding**: Connects investors to borrowers, or, for equity, issuers through an internet-based platform (can be seen as a mean to pool funds and streamline sharing of information outside traditional financial intermediaries)

Source: FSB report on Financial Stability Implications from FinTech (2017)