



OTTAWA 2023

64TH WORLD STATISTICS CONGRESS



IPS 239 - Financial innovation and official statistics
The Bundesbank
Fintech Monitor: A Feasibility Study

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Disclaimer



The opinions and findings expressed in this presentation are those of the authors and do not necessarily reflect the view of the Deutsche Bundesbank.

- I. How the project began and our methodical approach
- II. Fintech segmentation and aggregated figures
- III. Possible further research queries and lessons learned



- **Policy and user need for information on structure and size of Fintech activities in Germany**
- **Inspired by IFC report (2020)** - Towards monitoring financial innovation in central bank statistics
- **Started with 3 separate Fintech lists** (from a Fintech Market Study by Prof. Dorfleitner for the German Finance Ministry, and two internal lists) and **requirement to construct Fintech data set without new reporting burden**
- **Consolidation and cleaning** the lists to arrive at one common list
- **Enrichment with statistical data sources available in-house** (e.g. RIAD and other commercially available data) and statistical company register from German NSI
- **What is 'Fintech'? -- Operational definition of 'Fintech' is missing,**
 - **Operational and pragmatic approach based on FSB definition. Fintech activities are enabling or supporting financial activities.** This excludes activities such as accounting or taxation. The result is a Fintech segmentation. This segmentation is not universal, it mirrors the **specific interests of central banks.**

- **Consolidation, prioritisation rules, standardization, new variables and expansion of the Fintech list;** and
- **Work on data quality and filling of data gaps** with new data sources (e.g. internally available commercial data) and data available on the internet (e.g. northdata, after asking for consent) until the end of January 2023

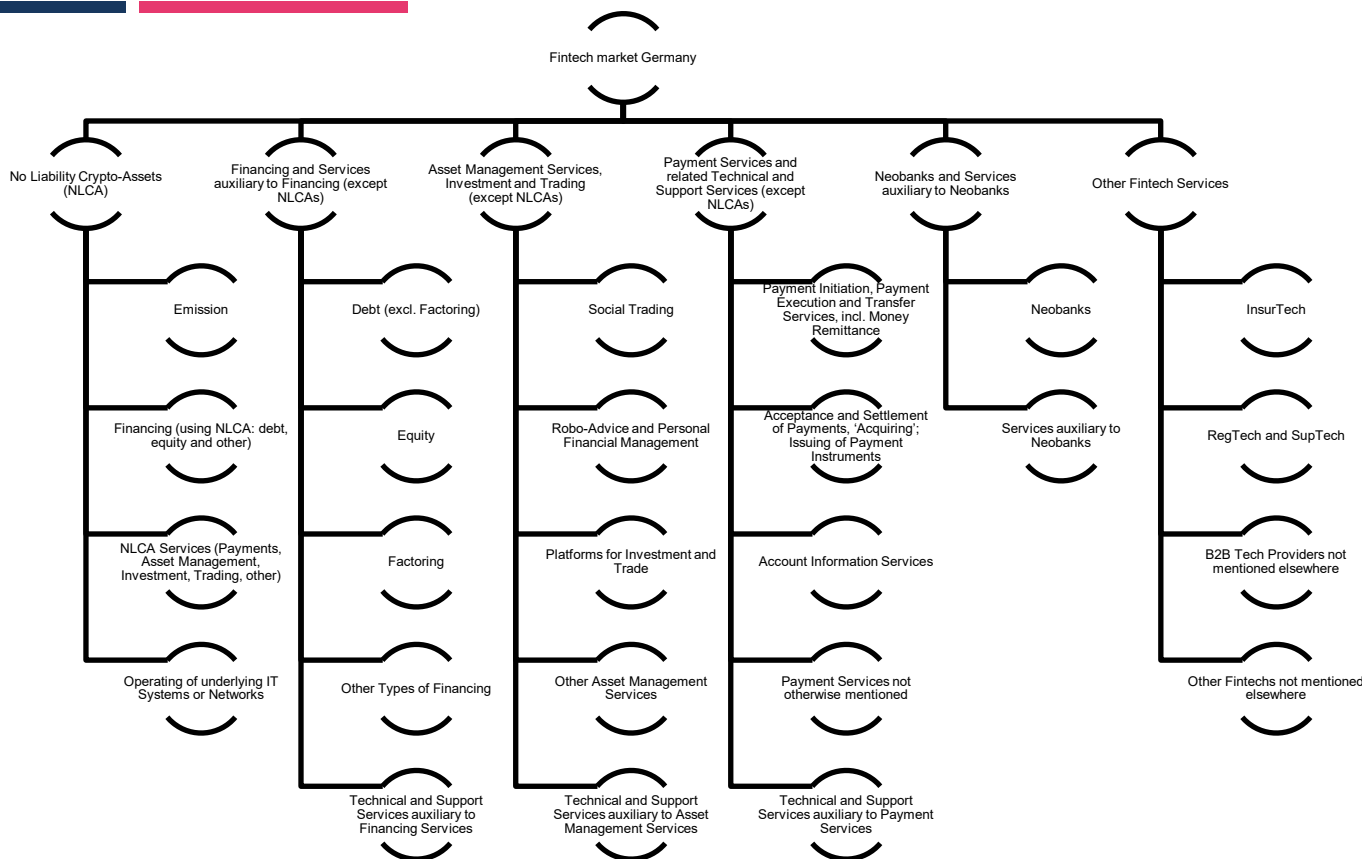
 In our opinion, we have **created a very unique and informative fintech data set** by combining **statistical, supervisory and commercial data** sources.

- **Distribution of the final micro data set** (excluding data from NSI) to internal Fintech analysts

- **Fintech Monitor in Numbers**, as of **end of January 2023**: **Up to 169 variables** and **13 different data sources** (not counting each supervisory register separately) used for **1376 Fintechs**
- **Selected data clusters:**
 - Ids of Fintech firms, **Fintech Brand** and **firm names**
 - Dummies for firm and brand status (e.g. active, inactive, fintech activity inactive)
 - Address, country data and **ISO country** and AGS codes, **year of foundation**
 - **Standardized information** on **sector** and **economic activity** (NACE, **ISIC**)
 - **Bundesbank Fintech Segmentation** for Fintech Brands and Fintech or firm
 - Tags (LinkedIn), **Business model description** and firm's capital
 - **Supervisory Information** of the Fintech (e.g. **Bafin**, **ESMA/EIOPA/EBA** entity type, ID etc.)
 - **Financial indicators** (e.g. turnover, total assets, profit&loss, # of employees; **incl. times series**)
 - **Firm size classes** (two diff. conventions, incl. guesstimates, if necessary)

- ESCB Register of Institutions and Affiliates Data (**RIAD**)
- Statistical business register (**URS**) from Destatis (restricted use for statistical purpose only)
- Bundesbank's Janika (internal set of NFCs' annual accounting data)
- German business register (**Handelsregister**)
- Register on annual report data (annual reports from Bundesanzeiger)
- Business register of UK (find-and-update.gov.uk)
- Data from two studies done by Prof. Dorfleitner et al.
- **Supervisory information:**
 - **BaFin** registers on companies, PMI and contract. bounded brokers
 - Trade and commercial register (IHK) on specialized brokers
 - Registers of **EBA** (CIR & PIR), **EIOPA** and **ESMA**
 - All other relevant and publicly available national supervisory registers referenced on firm's website (such as FCA, CySec, DNB etc.)
- **Fintech's website**
- **Commercial/website data**(e.g. LinkedIn, Northdata.de, Fintech-consult.de, Thebanks.eu, D&B, companyhouse.de)

II. Bundesbank segmentation: Fintech market in Germany



Fintech Monitor – Count and coverage of selected indicators



	Number*	As % of all Fintechs
All Fintechs	1,376	--
Active	1,189	86.4%
Foreign, active	263	19.1%
Resident, active	926	67.3%
Inactive**	187	13.6%

* Data as of Jan 31, 2023

** Inactive means in liquidation, not in existence or fintech business given up

Sources used for this and the following tables: Internal data, Dorfleitner et al., UK Companies House, northdata.de, LinkedIn company pages, thebanks.eu, dnb.com, fintech-consult.com, companyhouse.de and own estimates

Indicator coverage of active Fintechs

Turnover:	73.9%
Total Assets:	75.1%
No. of employees:	81.8%
NACE, standard.:	88.7%

Active German firms and their estimated fintech activity by...



Size class	#	%	Est av # empl, fintech act. only	Est av annual sales, in Mil. €, fintech act. only	
All Fintechs	926	100	24.8	4.07	
Micro (<10)	623	64.2	3.4	0.43	
Small (10-49)	203	26.9	21.5	3.07	
Medium (50-249)	75	6.8	80.4	12.40	
Large (>250)	25	2.1	416.9	78.00	

Sales and # employees partly imputed, because (a) data were not available, or (b) existing data refer to the entire firm and fintech is only minor part of firm activity.
Data as of January 31, 2023.

Experimental
data

Active German firms and their estimated fintech activity by...



Fintech Segment	#	%	Est av (total) empl, fintech act. only	Est av (total) turnover, in Mil. €, fintech act. only
All Fintechs	926	100	22,932	3,768.2
No liability CA	61	6.59	449	54.5
Financing & ass. serv	262	28.29	5,726	1,015.9
Assets, investm, trading	193	20.84	3,239	369.5
Payment and ass. serv	165	17.82	6,180	1,426.3
Neobanks & ass. serv.	41	4.43	3,374	464.0
Other fintechs	204	22.03	3,965	438.0

Sales and # employees partly imputed, because (a) data were not available, or (b) existing data refer to the entire firm and fintech is only minor part of firm activity.
Data as of January 31, 2023.

Experimental data

III. Other possible research queries



Mother and affiliates relationships of Fintechs (location and firm type of mother or affiliates etc.)

% of Fintechs without a supervisory license but with a cooperation partner having a supervisory license

% of Fintechs with a supervisory license

Tentative figures/estimates on the business size of some fintechs (e.g. credit volume of credit hubs etc.)

Relationships to cooperation partners, to which cooperations partners are Fintechs especially exposed to?

Foundation date and development of financial indicators over time (with some extra effort mortality figures possible)

Lessons learned

- **Cross-departmental and international cooperation** and exchange of views are **very important** in this new field
- Do not be hesitant to ask commercial data providers for the free use of their relevant data in a project framework
- Need for **coherent project plan**, adequate resources and management support
- **Beneficial to choose a commercial data provider** who specializes in start-up/Fintech data **as early as possible**
- Think about **outsourcing specific tasks** if resources are not readily available
- **Automate processes** as far as possible (not everything is automatable though!)
 - See presentation of Ulf von Kalckreuth for the Bundesbank's idea
- **Fintech statistics** is **important**, **difficult** but in the end **feasible!**



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THANK YOU.