

New Developments in the Bundesbank's RDSC

Linking various sources as a key for unleashing more potential than ever before

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NBER Summer Institute 2019 – International Finance and Macroeconomic Data Sources

Cambridge, July 11th

Overview

What is this presentation about?

Not this presentation:

- one specific data set

This presentation: Bundesbank's RDSC and its various datasets

- I origin and accomplishments
- II overview and introduction to various datasets
- III data access requirements
- IV provided service
- V conclusion

I Origin & Accomplishments

Who are we and what do we do?

Origin

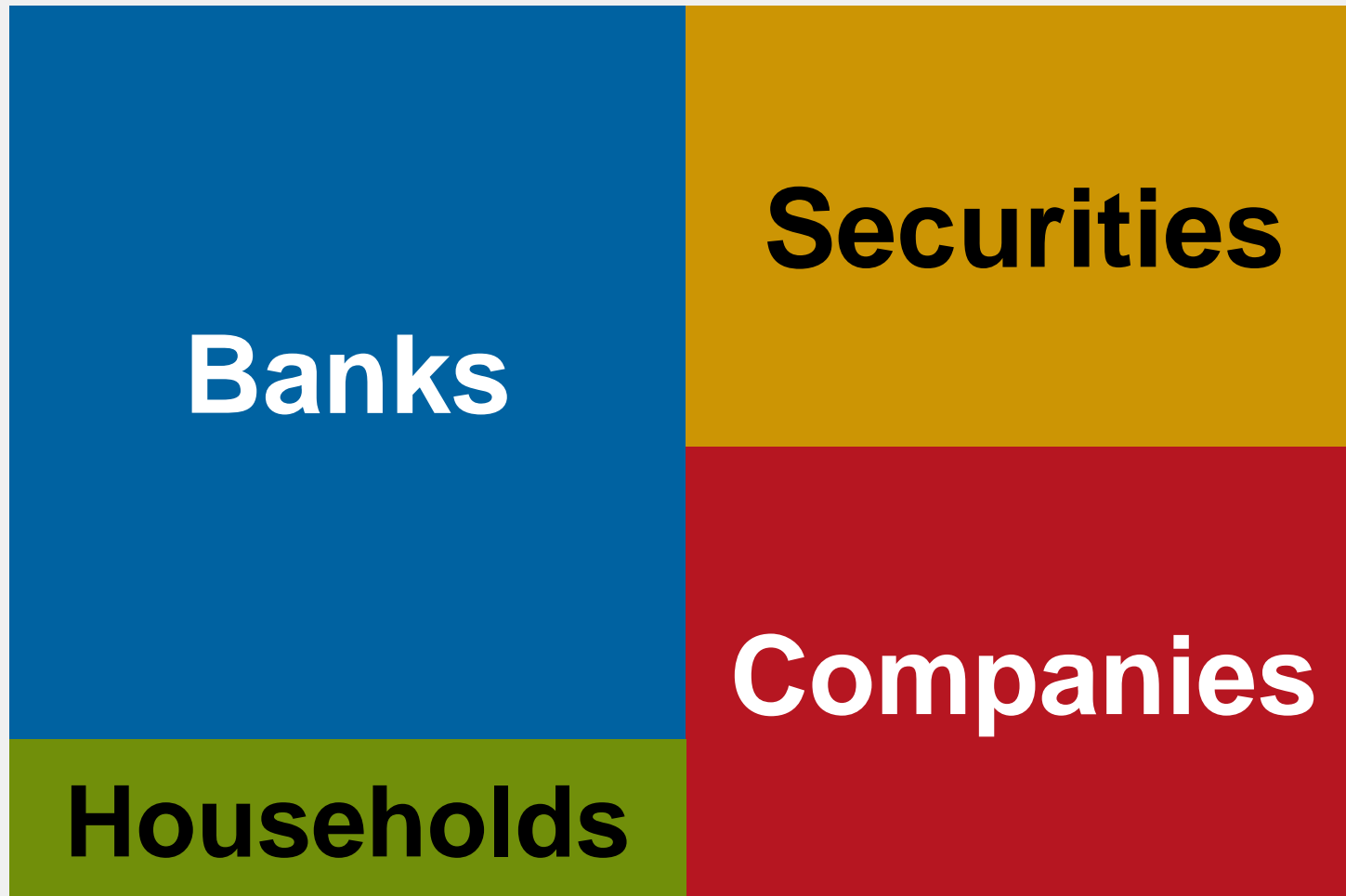
- The Bundesbank – like other central bank – produces datasets which have high quality and are highly valuable for policy analysis and research
- We have launched a large-scale initiative aimed at making **better use of existing data** both, **for** policy analysis as well as internal and **external researchers**, five years ago

Accomplishments

- Project applications: 565 (355 successful)
- Active projects: 312
- Mean number of datasets per project in 2018: 2.68
- Number of collaborating institutions: 160 worldwide, of which 90 abroad
- Publications: Journal of Financial Intermediation, The Journal of Finance, Journal of Financial Economics, Journal of Financial Stability, Review of Finance, The Quarterly Review of Economics and Finance, Journal of Banking and Finance and International Journal of Central Banking

II Overview and Introduction to Various Datasets I

Which micro datasets do we have?



II Overview and Introduction to Various Datasets II

Which micro datasets do we have?

Centralized Securities Database: CSDB (security level, panel)

- Detailed information on all securities (held in Europe)
 - 70 instrument attributes (eg. debt type, yield, maturity, issuance, redemption, coupons, splits)
 - 9 issuer attributes (eg. sector, country, IDs)
 - 2009 until today:

Securities Holdings Statistics: SHS-Base plus (bank / security level, panel)

- Information on security ownership and lending/borrowing of German MFI: bonds, shares, certificates, ...
 - Information on holding sector, holding country, ownership status, currency, stock raw, stock nominal value, stock market value (9 variables collected)
 - 2005 – 2012: quarterly; 2013 - today: monthly
 - 6 million observations each reporting period
 - monthly

II Overview and Introduction to Various Datasets III

Which micro datasets do we have?

Investment Funds Statistics: IFS-Base (fund / security level, panel)

- Detailed overview of the assets and liabilities of German open-end investment funds
 - 22 variables on respective fund (e.g. maturity type, repurchase type, ETF, legal form, ...)
 - 24 variables of funds' investments (e.g. isin, maturity, currency, country, ...) even other than securities, like real estate
 - 6,300 investment funds
 - 2009 until today, monthly

II Overview and Introduction to Various Datasets IV

Which micro datasets do we have?

Monthly Balance Sheet Statistics: BISTA (bank level, panel)

- Detailed core banking business information of German MFI
 - information on assets and liabilities by sector (interbank, corporate, households) and type (Credit, Bonds, Shares): ~ 1,500 observations per bank per month
 - all domestic MFIs: ~ 1,700 per month (today)
 - 1999 until today: monthly

Banks' Profit & Loss Accounts: GuV (bank level, panel)

- information on costs and earnings: ~ 150 observations per bank per year
- all domestic MFIs: ~ 1,700 per year (today)
- 1999 until today: annually

II Overview and Introduction to Various Datasets V

Which micro datasets do we have?

Credit Register Data: Mio-Data (lender-borrower level)

- Detailed information on lending by banks and insurances exceeding 1 million €
 - information on lender, lender group, exposure size (on / off balance sheets / derivatives), write-downs, internal default probabilities (PDs), borrower, borrower sector, borrower group
 - all domestic banks and insurances: ~ 2000 per quarter
 - 2002 until today: quarterly

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Which micro datasets do we have?

Financial statements of non-financial companies: USTAN (firm level, panel)

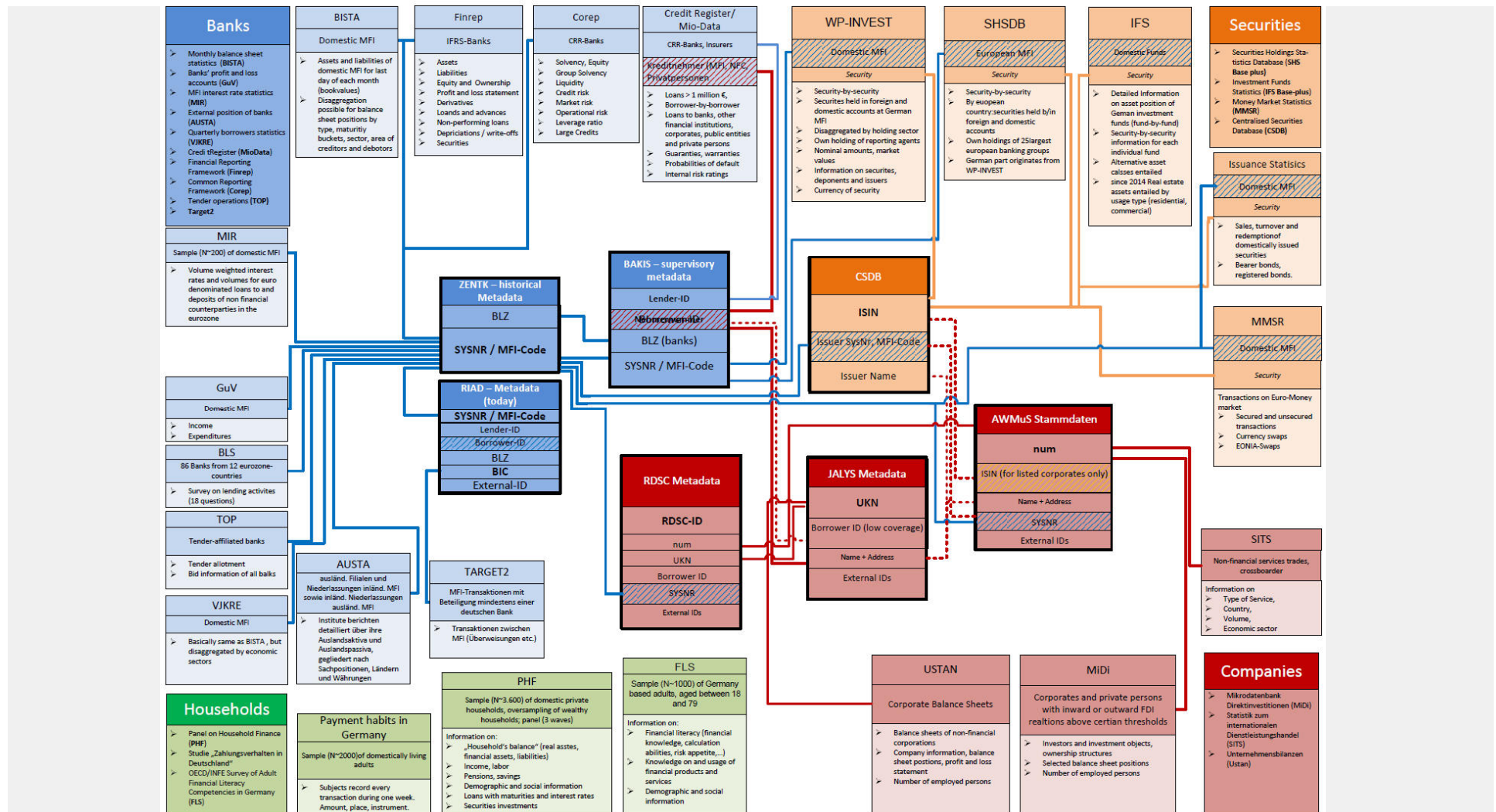
- Originates from Bundesbank's refinancing activities
 - Information on earnings and financing (1987 to 2011).

Germany's Statistics on International Trade in Services: SITS (firm level, panel)

- Part of the Balance of Payments (BoP) Statistics
 - Information on international service transactions carried out by German residents that exceed €12,500.

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Which micro datasets do we have?



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What to do with it?

Empirical Finance and Macroeconomics:

- (Financial) Network analysis
- (Intermediate) Asset pricing
- Regulatory validation
- Business model analysis
- Real- and monetary asset structuring
- Factors underlying the globalization of banking activities
- Risk taking by banks before and after the financial market crisis
- ...

III Data Access Requirements

How do we share confidential microdata?

Resulting practice: five safes framework



Save Projects: application for data access

Save People: curriculum vitae + contract

Safe Setting: data stays at Bundesbank premises

Save data: no directly identifying information

Save output: obligatory disclosure control

Source: Idea from Office for National Statistics UK
<https://blog.ons.gov.uk/2017/01/27/the-five-safes-data-privacy-at-ons/>

IV Provided Service

What else do we offer?

Linking various data sources

- matching tables for all Bundesbank microdata sets
- possibility to bring in individual, external data
- matching service for external microdata to Bundesbank data

Code@home

- data structure files on homepage
- remote execution

DOI registered Datasets (standardization & reproducibility)

Consistent documentation in English

Advisory service (data selection, access, handling, research potential, scope and validity)

High performance soft- and hardware

V Conclusion

Visit us! How to you find us:



VISIT US

THANK YOU FOR YOUR ATTENTION



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32nd floor in the Trianon-Tower in Frankfurt
(near the main railway station, excellent
connection to the airport: ~ 20 min train ride)

Backup

II Overview and Introduction to Various Datasets - Backup

Which micro datasets do we have?

Money Market Statistical Reporting: MMSR (trade repository, transaction level)

- Secured and unsecured money market, foreign exchange swaps, EONIA-swaps
 - 115 reporting agents (most active ones)
 - 2016/07 until today, nearly continuous (YYYY-MM-DD hh:mm:ss)

II Overview and Introduction to Various Datasets - Backup

Which micro datasets do we have?

External Positions of Banks: AUSTA (bank level, panel)

- assets and liabilities of banks (MFIs) in Germany and their foreign branches and subsidiaries vis-à-vis non-residents.
 - It contains detailed information about type and maturity of investment. Compared to the monthly balance sheet statistics, there are further **breakdowns of assets by recipient country** of the reported asset.
 - All positions that are necessary to calculate total external assets and liabilities as well as all **flows** (head <-> foreign branches) within a MFI.
 - The 80 largest domestic banks (with respect to the total of foreign assets and foreign liabilities in May of each year) and all domestic banks with foreign subsidiaries or branches, with detailed breakdowns of ca. 100 countries.
 - 2002, March until today.

II Overview and Introduction to Various Datasets - Backup

Which micro datasets do we have?

The MFI interest rate statistics: MIR (bank level, panel)

- Interest rates applied by domestic banks (MFIs) and the corresponding volumes for euro-denominated lending and deposit business with households and non-financial corporations in the Euro Area.
 - Sample of around 240 institutions.
 - 1999 until today: monthly

II Overview and Introduction to Various Datasets - Backup

Which micro datasets do we have?

Microdatabase Direct Investment: MiDi (firm level, panel)

- Information on inward as well as outward foreign direct investments (FDI). Granular information on FDI from domestic companies to companies located in other countries and incoming FDI from foreign owned companies to domestic and foreign owned companies
 - Statistical units: reports that contain the investment relationship between the transaction parties
 - Number of units data is collected from: over 440,000 annual reports with over 160 unique variables
 - 1999 until today: annually

II Overview and Introduction to Various Datasets - Backup

Which micro datasets do we have?

Panel on household finances (PHF)

- Survey on households' wealth and finances in Germany
 - Detailed breakdown of household balance sheets (private real and financial assets, debts etc.) and provision of other variables on e.g. income, consumption, pensions, savings, expectations, and demographic variables
 - Statistical units: Households resident in Germany except households living in institutions
 - Survey frequency: 3 years, 1st wave: 2010/2011, 2nd wave: 2014, 3rd wave: 2017
 - Net sample in 2nd wave: 4,461 (Panel households: 2,191)
 - Number of variables collected: 3,200 in 2nd wave
 - Micro data is available as a panel