

# **BANK OF ENGLAND**



### **Data Sharing in Regulation**

#### Experiences from the UK

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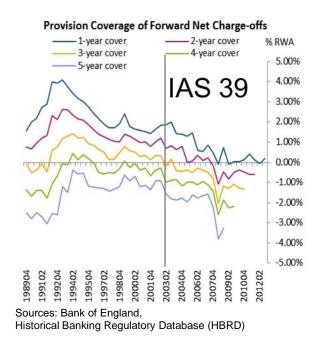
#### Disclaimer

The views expressed in this paper are those of the author, and not necessarily those of the Bank of England or its committees



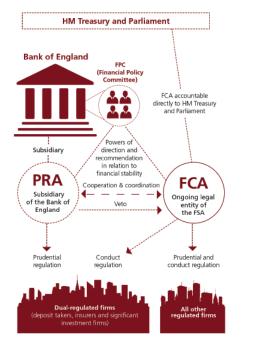
# What is the trouble with Data?

- Market Interventions by Central Banks
  - Price stability
  - Financial stability and micro-prudential
  - Financial sector competition
  - Support government's economic growth objectives
- Financial Sector Complexities...
  - ... and complexity of regulation
  - Unintended consequences





#### **Issues: Banking Regulatory Infrastructure and Data**





- Bank of England's Data and Statistics Division
  - Firm level data analysis for MPC, FPC, PRA board
  - International negotiations
  - Other Government bodies (e.g. ONS, Treasury)
- FCA collects rich transaction data
  - Wholesale (Financial transactions, interest rates, OTC derivatives, hedge funds)
  - Retail (payday lending, credit card statements, Credit bureau files, Personal current account micro data, Product sales data)
  - Firms' regulatory submissions, Employees' authorisations

# Issues: Legal basis of sharing

- General public: UK Freedom of Information 2000
  - BoE protects certain data
- FCA, National Statistics and other public sector bodies
  - Memorandum of understanding
- International collaboration
  - European Banking Authority (EBA), BCBS
  - Memo of Understanding with Central Banks



### Data sharing completes the picture





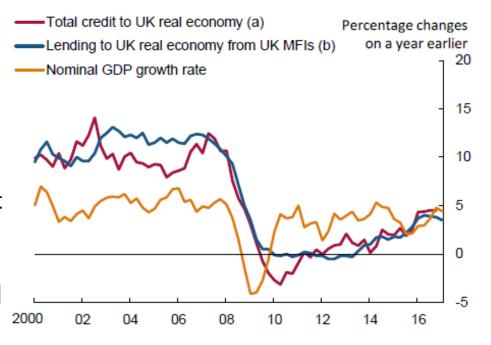
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Granular data on borrowers and firms

- granular risks to financial stability
- cost of regulation (cost of credit)
- Banks' business models
- Data on economic conditions
  - by geography, industry, sectors, etc.
  - vulnerable individuals
- Financial/non-financial interconnections
  - Data on unregulated sectors
- Global dimension

# Credit growth and risk

- Significant credit growth in recent times
- Where is the risk
  - High loan to income (LTI) mortgages are vulnerable
  - Unsecure consumer credit growth in higher risk pockets
- Use mortgage contract and credit ratings data





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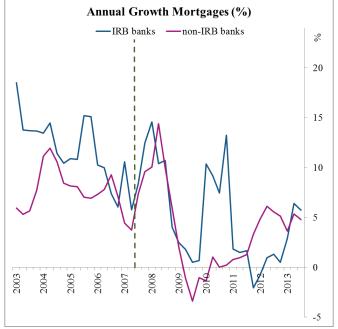
#### **Issues – Anonymity and matching**

- Access to anonymised data
- Only a small percentage of households matched
- Data analytics require large datasets for accurate measures



#### Examples – Internal Models for Credit risk

- UK Basel 2 adoption in 2007
  - Banks move to internal ratings based (IRB) models for mortgage credit risk
- Key questions:
  - does it create advantages for IRB firms?
  - Does it matter for risk?
- Key issue: Identification not possible from whole-bank data.



Sources: Bank of England, Historical Banking Regulatory Database (HBRD)



#### Issues – Data quality and consistency

- 14 million overall observations
  - Only 7 million matched
- Data compilation standards
  - PSD from bank/branch level reporting
  - Role for data scientists and advanced methodologies to match and clean data
- Level of consolidation for prudential policy
  - Wider than domestic loans



# **Further reading**

- FCA data strategy: https://www.fca.org.uk/about/data-strategy
- Alex Brazier (2017) "Debt strikes back" or "The Return of the Regulator"? <u>http://www.bankofengland.co.uk/publications/Pages/speeches/2017/992.aspx</u>
- Benetton et al (2016) Staff Working Paper No. 639: Specialisation in mortgage risk under Basel II. <a href="http://www.bankofengland.co.uk/research/Documents/workingpapers/2017/swp639.pdf">http://www.bankofengland.co.uk/research/Documents/workingpapers/2017/swp639.pdf</a>
- de-Ramon et al (2017) UK Banks since the Basel Accord. <a href="http://www.bankofengland.co.uk/research/Documents/workingpapers/2017/swp652.pdf">http://www.bankofengland.co.uk/research/Documents/workingpapers/2017/swp652.pdf</a>

