Cambridge Judge Business School

The 10th Annual Risk Summit

Financial crises of the future: the lessons of history

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Agenda

- **Historical financial crises**
  - Some lessons
- **Why have financial systems become less resilient?**
  - Liability management, maturity transformation and mortgages
- **Financial crises of the future**

Definitions

‘a disturbance to financial markets, associated typically with falling asset prices and insolvency amongst debtors and intermediaries, which ramifies through the financial system, disrupting the market’s capacity to allocate capital’, Eichengreen and Portes

‘a credit boom gone wrong’, Hyman Minsky

Recent (and forthcoming) literature

Ò. Jordà, M. Schularick and A.M. Taylor, ‘Financial crises, credit booms, and external imbalances: 140 years of lessons.’ *IMF Economic Review*, vol. 59 (2011).

D. Aikman, A.G. Haldane and B.D. Nelson, ‘Curbing the credit cycle’, *Economic Journal*, vol. 125 (June, 2014), pp. 1072-1109.

A.C. Hotson, *Respectable banking: the search for stability in London's money and credit markets since 1695* (Cambridge, 2017).

D.J. Needham and A.C. Hotson, ‘The changing risk culture of UK banks’, in K. Alexander, D. Ralph and M. Tuveson (eds), *Beyond bad apples: risk culture in business* (in press, Cambridge University Press).

Historical catalogue of financial crises

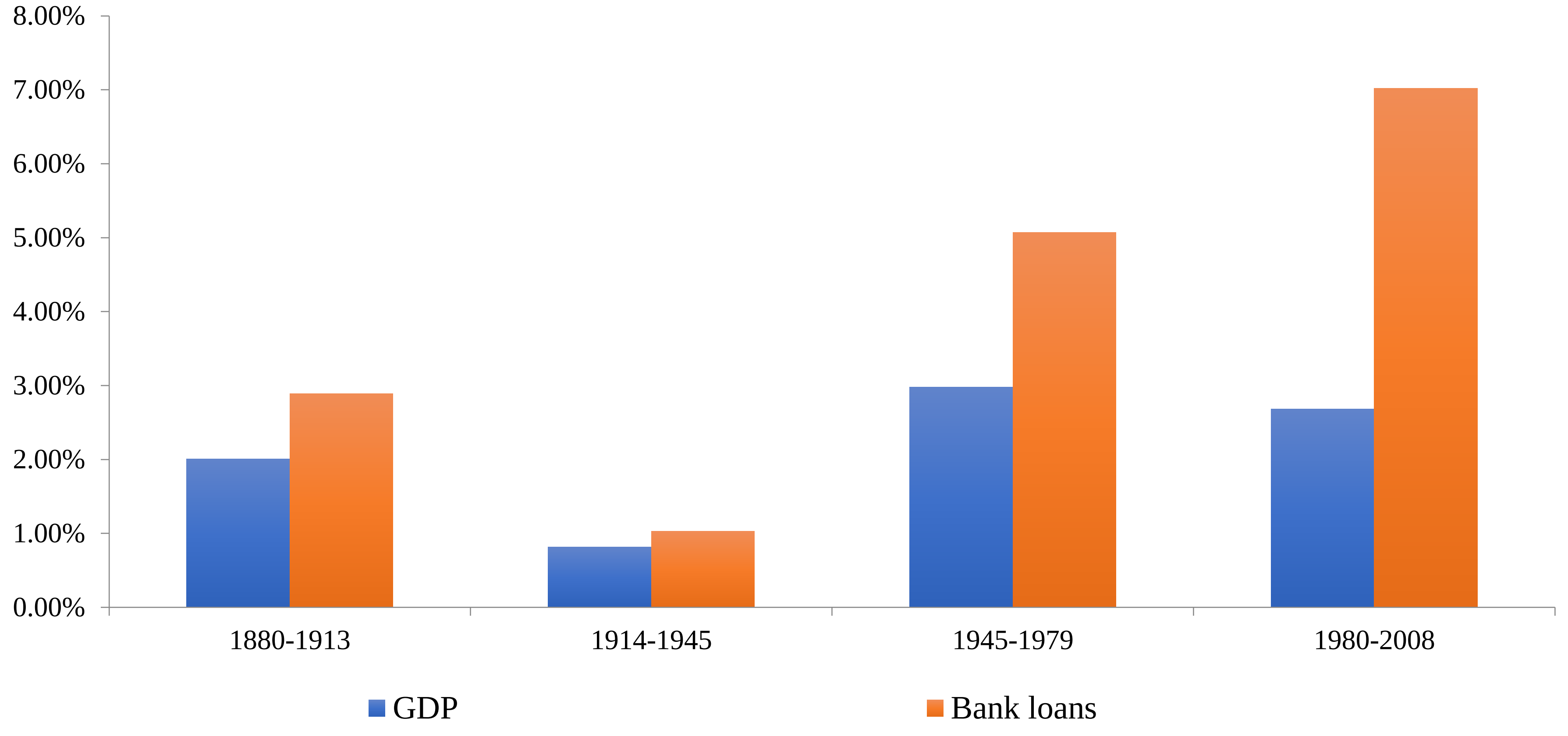
1. Crises of the 1720s (South Sea, Mississippi Scheme, Windhandel)
2. Country bank crisis of 1825 in UK
3. Panic of 1857 in USA
4. Collapse of Overend and Gurney, 1866
5. Crisis of 1873 (USA)
6. Baring Crisis, 1890
7. 1907 ‘Bankers’ Panic’
8. Financial Crisis of 1914
9. 1931-33 and the Great Depression
10. Latin American Debt Crisis, early 1980s
11. Asia crisis, 1997-99
12. Subprime and the Global Financial Crisis

What caused these financial crises?

- **Economic shocks**
  - War (1914), natural disasters (1907)
- **Speculation**
  - Currencies, commodities were more important in the past (1857)
  - House prices now more important
- **Rapid credit growth**

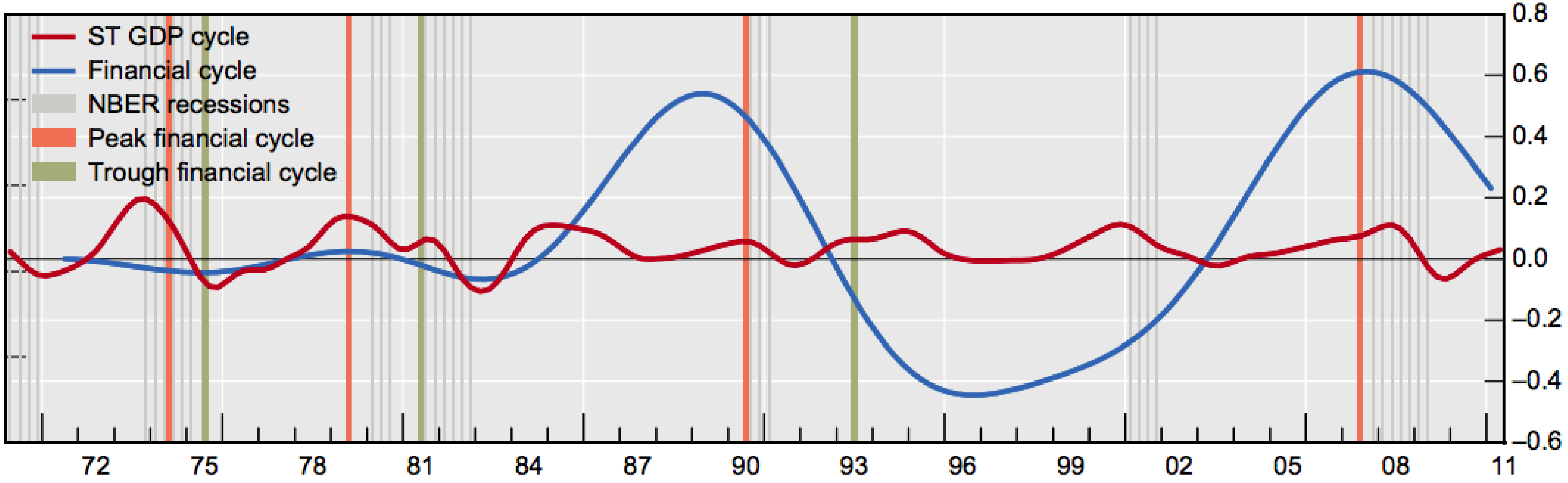
–‘a sustained pick-up in the ratio of credit to GDP has been highly correlated with banking crises … more credit intensive booms tend to be followed by deeper recessions and slower recoveries’, Aikman *et al* (2014).

UK annual real GDP and bank loan growth



Source: Aikman *et al*, 2014.

US financial and business cycles



Note: Orange and green bars indicate peaks and troughs of the combined cycle using the turning-point (TP) method. The frequency-based cycle (blue line) is the average of the medium-term cycle in credit, the credit to GDP ratio and house prices (frequency based filters). The short term GDP cycle (red line) is the cycle identified by the short-term frequency filter.

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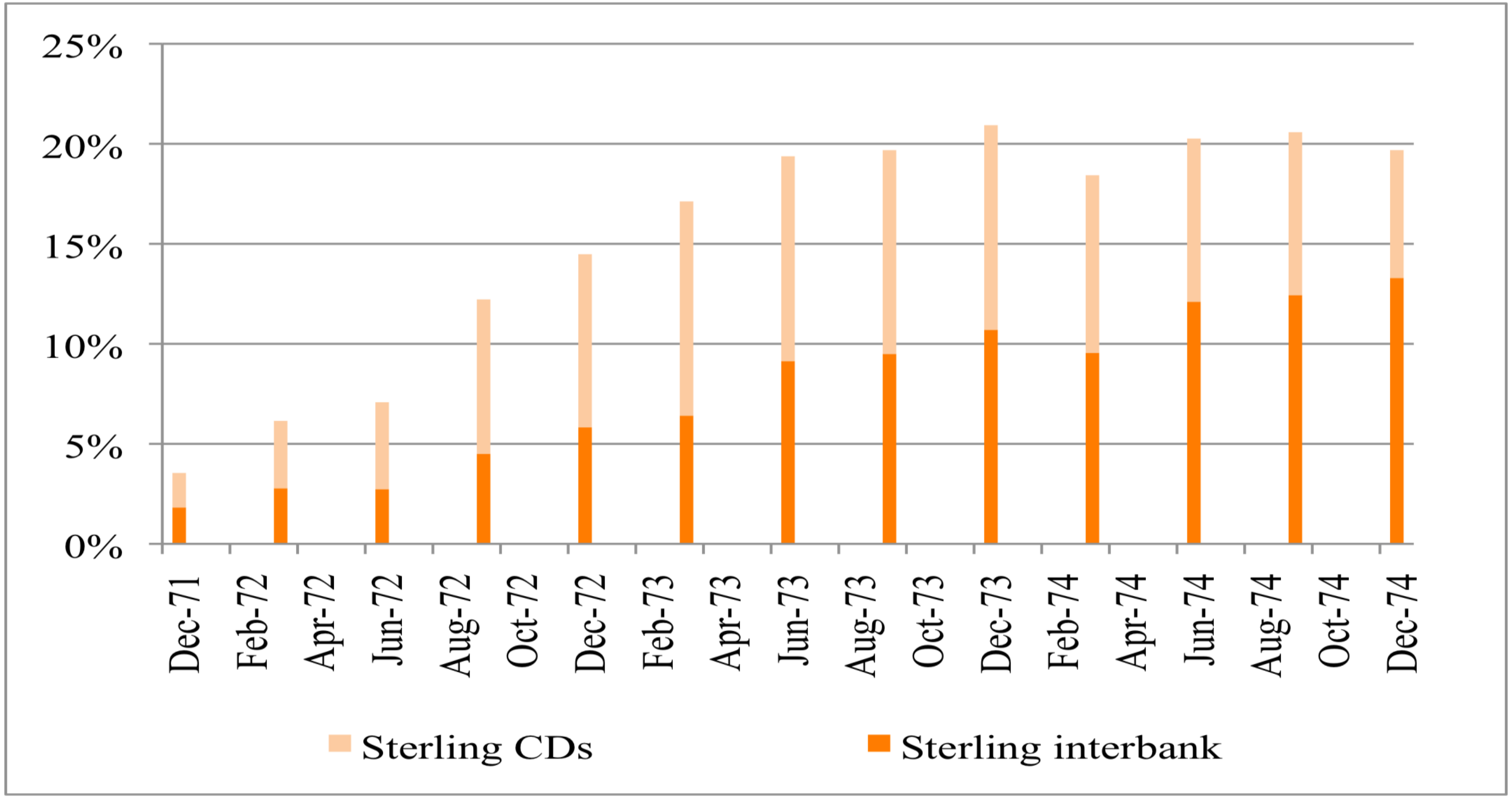
Source: *Drehlman, Borio and Tsatseronis*, 2012.

Why did the UK financial system become less resilient?

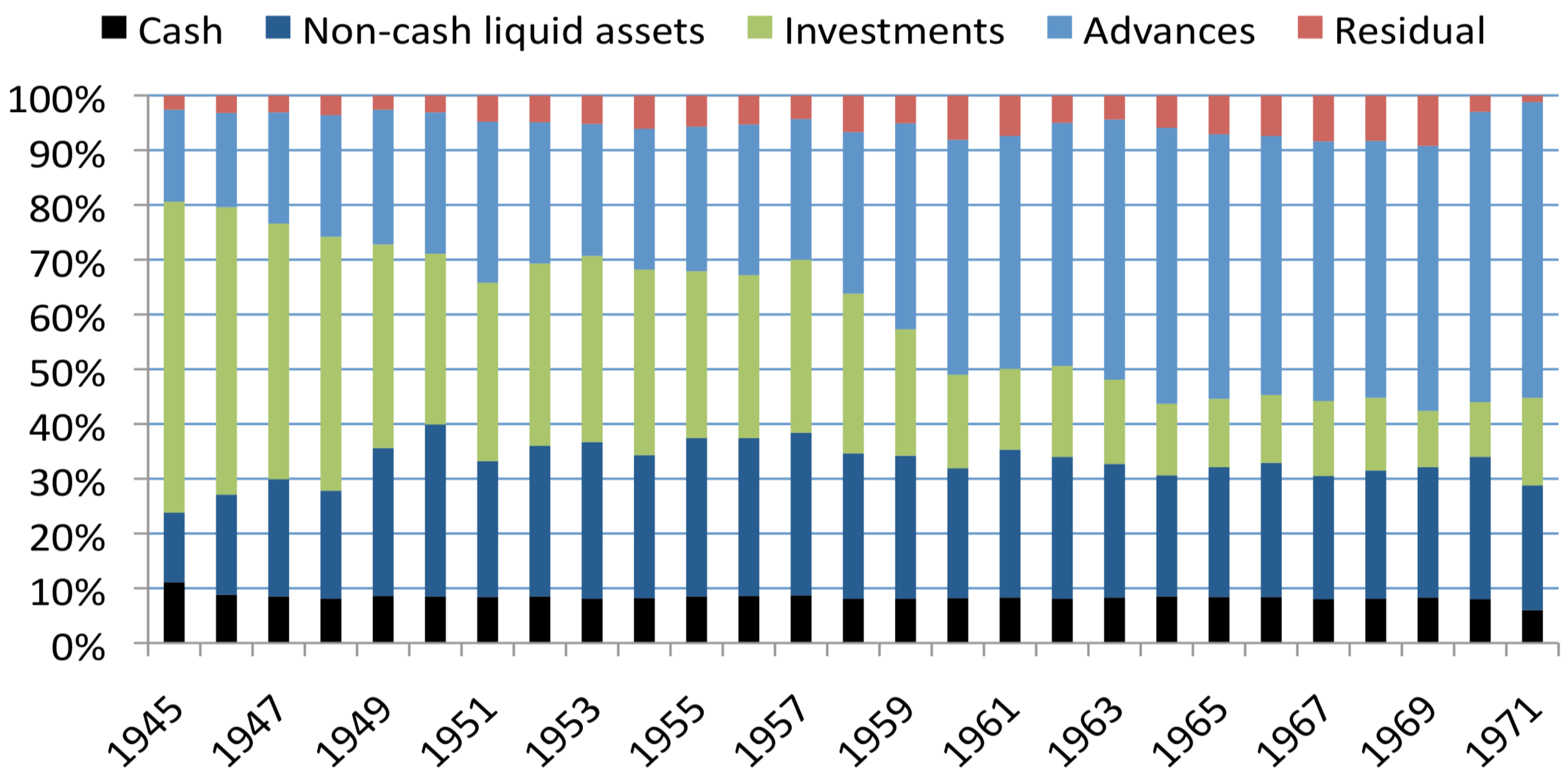
‘our banking system in 1955 was not very different from what it had been fifty years before, in respect of the range of facilities offered and the way in which they were provided. By 1983 it had become a lot different’, John Fforde, former Bank of England Chief Cashier, 1983.

- Liability management
- Maturity transformation
- Mortgage finance

Liability management: UK clearing bank wholesale funding



Why did liability management increase in the 1970s?



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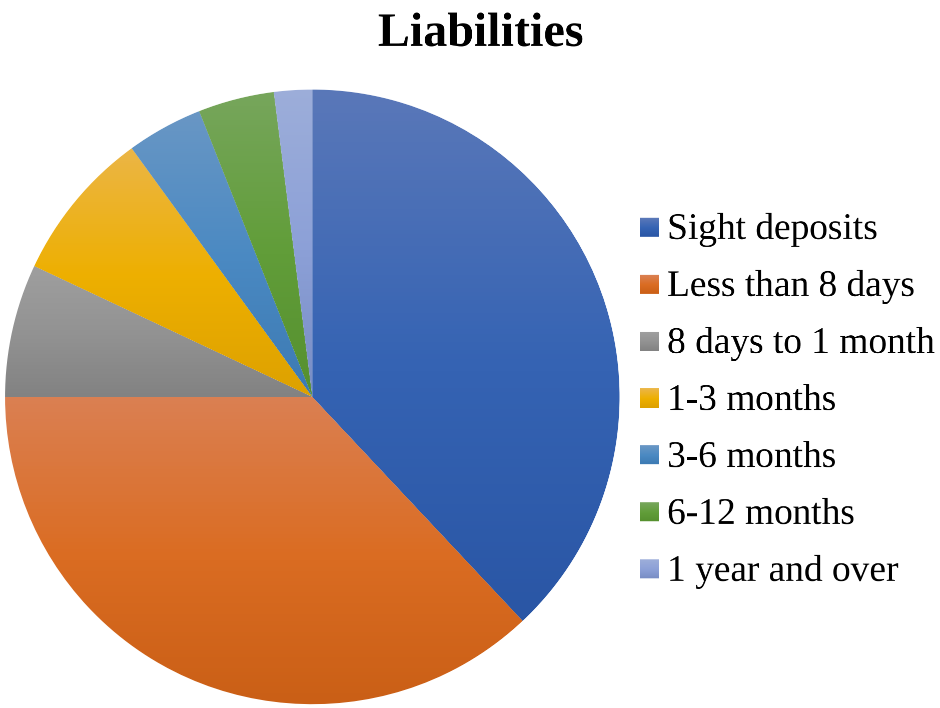
Maturity transformation ('mismatching')

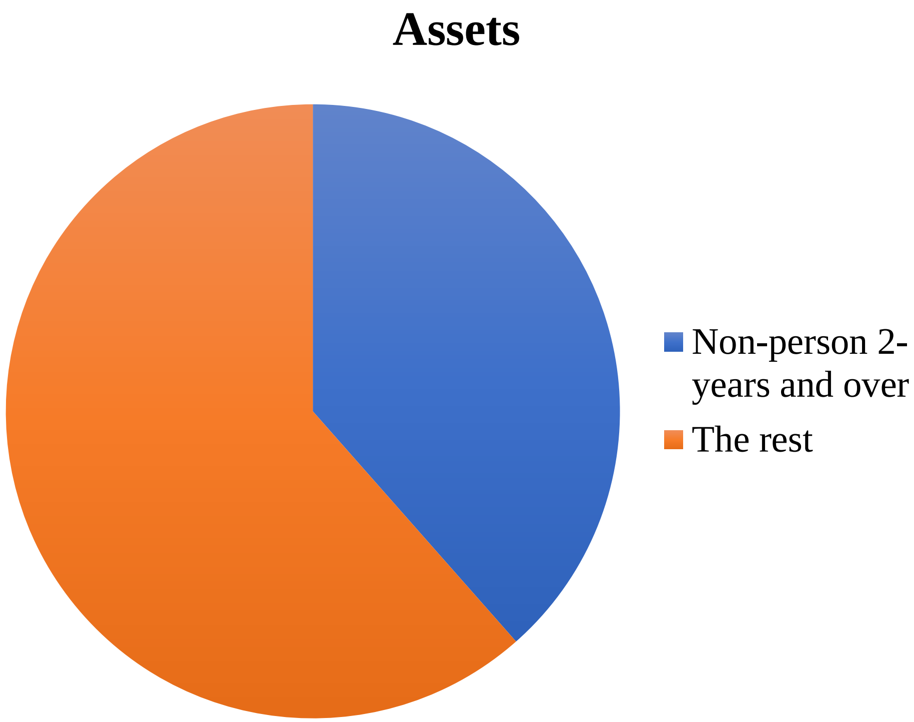
'[In 1955] lending was virtually all by overdraft'…'the widespread introduction of medium-term lending by the banks, at variable rates linked to interbank rates…became the main innovation of the 1970s. It evolved mainly after 1974 as an innovatory response to the onset of high and volatile levels of inflation and the consequential unwillingness of industrial and commercial companies to borrow at fixed interest', John Fforde, 1983.

'Banks are able to fund illiquid assets with short-term, liquid liabilities... The production of liquidity in this fashion is socially valuable because it allows savers to withdraw funds when they want, rather than when the investments they ultimately fund pay off' , Diamond and Dybvig, (1983)

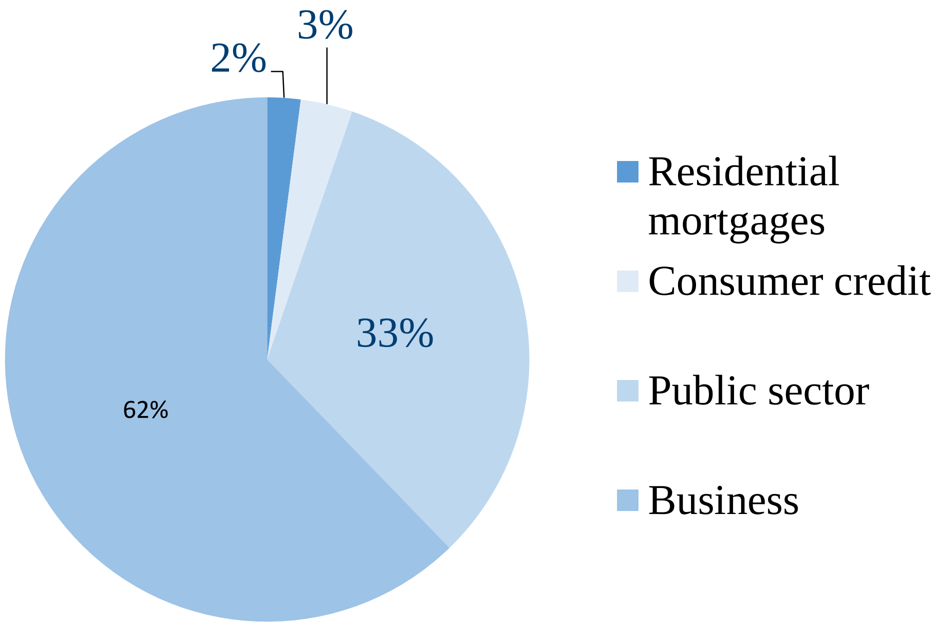
'the business of banking is one of maturity mismatch' M. Choudry, *Principles of banking* (2012)

Maturity transformation (1976)

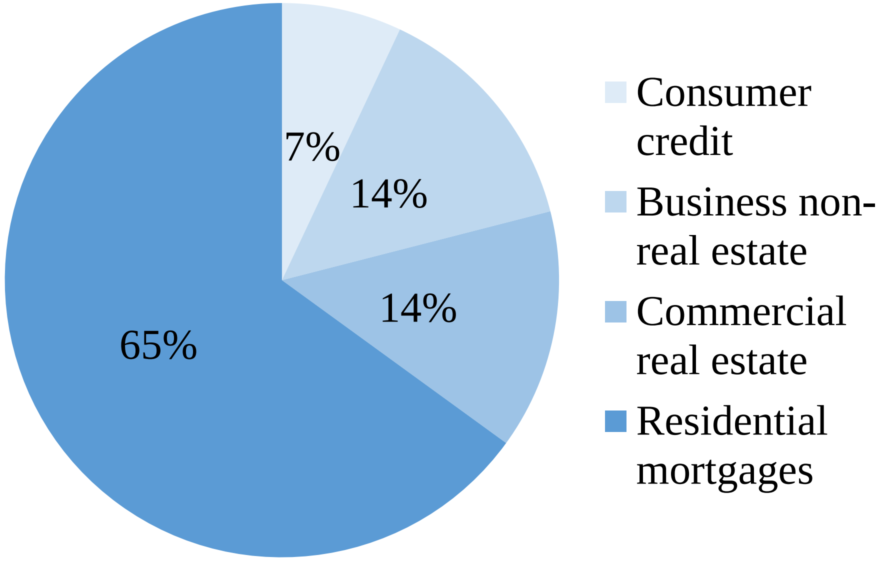




Mortgages and the UK clearing banks



1971



2012

Mortgages

‘house or shop property, even of a superior class, is not a desirable security…on the grounds of its uncertainty of sale’, George Rae, 1885.

‘the attributes of real estate as an asset make it unsuitable as security for the institutions that manage the payments system. The maturities are long, the assets are costly to liquidate, their value can fluctuate enormously, and they are exposed to taxation’, A. Offer, 2014.

Liability management, maturity transformation and mortgages

Financial crises of the future

‘Most (though not all) financial crises in recent decades have been caused by losses related to property lending. Lending to the real estate sector enables rapid loan expansion with the appearance of tangible collateral. Real-estate lending is not just riskier than previously believed (due to its significant systemic component). It is also the prime cause of the maturity mismatch and excessive leverage that has made the banking system so fragile’. Goodhart and Perotti, 2015.

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