Research findings on banking sector risk, competition and capital

Details:

This work furnishes evidence on a number of unresolved issues in financial stability analysis:

- Both at a country level and a bank level, there is a tendency for both the leverage ratio and the risk-adjusted capital ratio to be significant predictors of risk.
- The leverage ratio is as often relevant as the risk-adjusted capital ratio, underlining its importance as a regulatory tool.
- Especially in our work on national data, the results for the relation of competition to risk strongly underpins the "competition-fragility" hypothesis that more competition entails greater risk-taking by banks, and show a widespread impact of competition on risk generally.
- There are some differences between advanced countries and emerging market economies in the capital-risk-competition nexus, with for example a wider impact of competition in emerging market economies (although we suggest that both types of country need to pay careful attention to the evolution of competition in macroprudential surveillance).
- A shock to competition reduces leverage ratios and regulatory capital ratios significantly, giving a further reason for vigilance when competition increases. This result is consistent over a range of subsamples and risk variables.
- There is some evidence of greater vulnerability of weaker banks to low capital and high competition relative to the sample average or median.

Meanwhile policy implications include the following:

- Our results show that Basel III is shown to be justified in implementing focus on leverage ratios as well as risk adjusted capital ratios.
- We acknowledge the fact that competition policy in the economy in general is often under separate anti-trust authorities makes control of banking competition at a macroprudential level more complex, but the results stress the importance of regulators at least monitoring such competition
- Contrasts in some results between countries and regions underlines the fact that there is no “one size fits all” for regulation
- We suggest that the Z-score, being a measure of overall bank risk, should be focused on to a greater extent by regulators than is the case at present.

Authorities should undertake their own analyses using both macro data and individual bank data. The former is a weighted average of individual institutions, thus implicitly giving greater importance to large systemic institutions, while micro work typically gives equal weight to each institution. Context: stability of the global banking system

Regulation of the global banking sector following the crisis of 2008 under Basel III still requires research fully to understand the factors underlying banking sector risk taking. Using data for both banking sectors and individual banks, we assess determinants of such risk measures as non-performing loans, provisions, loan growth and the banking Z-score which indicates the distance to default, as well as banking crises per se.

The case for stabilising measures for the banking sector

The key findings of this research are that:

- Studies have focused mainly on capital reserves or competition but not both. This research shows that both measures have an important role in the determination of bank risk.
- It is shown that both risk adjusted capital and leverage ratios are relevant determinants of risk, which justifies focus of Basel III on both measures.
- Results vary between regions, time periods and across banks.
- The research has identified suitable metrics in respect of both capital and competition to support macroprudential surveillance and policy.

Policy Audience

This research was originally commissioned by the Bank of England under its research donations scheme. It is relevant to national and international banks, as well as to central banks and other regulatory agencies, including governments, Ministries of Finance, and their agents:

Bank of England (and international counterparts)

Financial Conduct Authority (and international counterparts)

IMF

World Bank

OECD

These findings are also relevant to academic experts, conference convenors and journal editors.

Research

Prof Davis combines his track-record as a central banker with his academic role in empirical analysis of the banking sector; Dr Karim's PhD focused on the macroeconomic determinants of banking crises and her ongoing work has focused particularly in this issue. Their research aims to identify the factors that led to the global financial crisis and that continue to undermine the stability of the banking system, and recommend appropriate policy responses.

Reports:

The bank capital-competition-risk nexus – a global perspective (peer reviewed journal article)

Bank leverage ratios, competition and risk in Europe and the United States (currently a working paper)

Research Leaders

Prof Philip Davis became Professor of Economics and Finance at Brunel in 2000 after a 20-year career as a central bank economist at the Bank of England, but seconded for spells with the bank for International Settlements in Basel and the European Monetary Institute in Frankfurt.

Since then his research interests have included: financial instability; pension funds and retirement income; Economics of financial institutions; international financial markets; financial regulation; application of industrial economics to financial markets; monetary aspects of securities markets and asset prices; economics of financial centres; portfolio modelling; consumption; EMU, sectoral balance sheets and the flow of funds; and theology and economics.

He consults internationally on the above issues.

Dr Dilruba Karim since completion of her PhD has been employed as a lecturer (and now senior lecturer) at Brunel with a focus on research into banking crises. She is also a visiting researcher at the National Institute of Economic and Social Research. She has collaborated on research for the Bank of England, Financial Services Authority, EU Commission, and HM Treasury.