Summary for non-specialists
Economic Papers No. 472 / 2012
Economic Papers index

Non-bank financial institutions: Assessment of their impact on the stability of the financial system

by Patrice Muller, Graham Bishop, Shaan Devnani, Mark Lewis and Rohit Ladher (London Economics)

Background

The study 'Non-bank financial institutions: assessment of their impact on the stability of the financial system' was launched to broaden DG ECFIN's knowledge about possible transmission channels of financial stress and their empirical importance, in particular as regards the non-bank financial institutions. As requested by DG ECFIN in its tender, the study (i) analyses the role of non-bank financial institutions (as a whole industry and per relevant segments) in the building up of imbalances/asset bubbles that led to the crisis (period 2001-2007), (ii) assesses the behaviour of non-bank financial institutions during the crisis (as a whole industry and per relevant segments), whether they amplified the systemic risk or suffered asymmetrically from the financial shock (period 2007-2009), and (iii) explores the possibility of setting up a set of indicators and diagnostic tools (quantitative and qualitative indicators) to identify existing and the building up of risks in non-bank financial institutions and in the financial market segments in which non-bank financial institutions play an important role.

The Study was carried out by London Economics, in association with Graham Bishop.

Summary

Over the past decade, and in particular since the crisis started, the sector of the non-bank financial institutions of the EU27 has grown in importance in terms of financial stability, as reflected in its strong increase in size and growing interconnectedness with the banking sector. As result, policy-makers have proceeded in gaining a better understanding of the nature and the role of the various non-bank financial institutions and their potential impact on financial stability.

Part of the difficulty of assessing the impact of non-bank financial institutions on financial stability is the wide range of institutions involved. The study examines in great detail the (i) money market funds, (ii) private equity firms, (iii) hedge funds, (iv) pension funds and insurance undertakings, (v) central counterparties, and UCITS and exchange traded funds (ETFs).

The report addresses the risks run by each of the several types of non-bank financial institutions (credit, counterparty, liquidity, redemption, fire sales risk, etc.). These risks are magnified as a result of multipliers, a.o. size, inter-connectedness, but also regulatory features.

Money market funds were not the primary cause of financial crisis but played an important role via second-round effects. The collapse of the market for asset-backed commercial paper, for instance, led investors to withdraw from money markets due to perceptions over the funds' exposures to asset backed commercial paper. The resultant contraction of assets held within these funds led to important feedback loops that exacerbated the impact of the financial crisis. Specifically, non-government or

corporate issuers' exposure to funding liquidity risk increased substantially as money market funds were not intermediating in longer-dated money market instruments/prime money market instruments.

The main risk to financial stability of the private equity sector relates to its role in the leverage loans market. However, it is unclear where the burden for the excessive rate of growth of the leveraged loans market should lie with private equity funds or banks.

The impact of hedge funds on financial stability during the financial crisis appears to be a story of the relationship between banks and hedge funds. Although comprehensive data is lacking, commentators point to excessive risk-taking by hedge funds, due to prime broker, trading or ownership relationships with banks, as major underlying causes for the build-up of risks. The impact of these risks materialising were viewed to be particularly deleterious to financial stability due to feedback loops involving, for example, liquidity constraints of hedge funds, exacerbated as a result of difficulties in markets for short-term funding.

Traditional insurance undertakings and pension fund activities appear not to have been relevant to the build-up and materialisation of risks to financial stability. The main effects on financial stability of this sub-sector are through the fire sale mechanism. As a consequence of asset devaluations, insurance undertakings and pension funds may have curtailed their purchasing activities on securities markets, which exacerbated already difficult conditions in these markets.

The key risk that central counterparties pose is the concentration of credit risk associated with their own failure or the failure of one of their very large members. Risk to financial stability arising from their activities is likely to increase as a result of their size, connectedness with bank and non-bank financial institutions, and connectedness between each other.

The threats to financial stability arising from ETFs include the grouping of tracking error risk with trading book risk by the swap counterparty, which could compromise risk management, collateral risk triggering a run on ETFs in periods of heightened counterparty risk, materialisation of liquidity risk when there are sudden and large investor withdrawals and increased product complexity and options on ETFs undermining risk monitoring capacity.

The report further highlights the risks arising from a number of activities frequently undertaken by these non-bank financial institutions, in particular securitisation (a.o. agency risk), securities lending (a.o. counterparty risk) and repos (a.o. liquidity risk).

Finally, the report provides a selected overview of approaches for the measurement of financial instability and financial distress. It focuses on tools that have been developed for banks and that may be usefully applied to non-bank financial institutions in the future. The tools can be broadly grouped into 5 categories, namely (i) indicators of financial distress based on balance-sheet data, (ii) early-warning indicators, (iii) macro stress tests, (iv) methods for calculating the systemic importance of individual institutions, and (v) analyses of interconnectedness. However, the review of available non-bank financial institutions' data undertaken by the study and the discussions with stakeholders (about 30 non-bank financial institutions were surveyed for this study) identified a number of major data gaps, which, at the present time, preclude transposing the analysis undertaken so far for the banking institutions to the non-bank financial institutions.

Based on the findings from the literature and taking into account the limited range of relevant data, the study recommends that the following key risk-contributing factors should be regularly monitored as part of a broader risk monitoring system for both the various non-bank financial institutions segments and individual non-bank financial institutions: (i) an indicator of the appetite for risk-taking (e.g. rate of growth of the balance sheet items), (ii) an indicator of leverage, (iii) an indicator of liquidity risk, and (iv) an indicator of maturity mismatch. Missing from the set of indicators listed above are indicators related to credit and market risk. The sectoral and sub-sectoral data which are currently available are too aggregated to be able to construct credit and market risk indicators. While the annual statements and reports published by public financial institutions provide often information of the credit and/or market risk of a range of assets on their books, such information is typically available with a considerable lag so as to make it largely useless in a rapidly evolving financial environment. Missing is also an indicator of interconnectedness as, at the present time, the publicly available information can only be analyzed at a very aggregate level and provides only a picture, from the banking sector's perspective, of the connectedness of the latter with non-bank financial institutions but not, from the non-bank financial institutions' perspective, of connectedness of non-bank financial institutions with themselves or with the banking institutions.

The study advises to accompany the broad sectoral monitoring by a monitoring of the evolution of various asset classes or activities such as: (i) derivatives (using data from the BIS), (ii) securitised assets (using data from AFEME), (iii) repos (using data from ICMA), (iv) securities lending (using data from Data Explorer), and (v) central counterparties' exposures (using data from the central counterparties).