Coming out of the shadows?

Shadow banking is a system of financial institutions that mostly look like banks. These highly leveraged institutions borrow in short-term debt markets and invest in long-term illiquid assets. This part of the financial system includes asset-backed commercial paper (ABCP), money market funds, securities lending and collateralised repos (transactional dealers).

The size of this market is roughly $8000bn in the US alone (and even larger by some estimates) and matches the size of deposits, both insured and uninsured, held at depository institutions. The growth of shadow banking over the past 25 years has been extraordinary relative to the growth in deposits.

The US Securities and Exchange Commission aside, the shadow banking system is for the most part, unregulated. It is also unprotected from bank-like runs. The financial crisis of 2007-09 showed that much of the shadow banking system – investment banks and money market funds in particular – ended up being bailed out. This part of the financial system was too big to fail.

Shadow banks fell significantly, putting into question their solvency. Given the opaque nature of these institutions, uncertainty about which institutions were solvent led to a run on the sector.

- When non-prime mortgage prices collapsed in the early summer of 2007, the highest-rated (AAA equivalent) ABCP conduits that held non-prime mortgage-backed securities fell below par value, becoming insolvent and losing their short-term funding. (Conduits are special purpose vehicles set up primarily by large commercial banks that exhibit a significant maturity mismatch between assets and liabilities, as they mostly hold medium-to-long-term assets, which are financed by issuing short-term ABCPs). Because holdings of other asset-backed commercial paper (ABCP) conduits were unknown, short-term funding was pulled from the $1000bn sector. As a result these mortgage-backed securities were forced back onto the balance sheets of large complex financial institutions because the conduits had either explicit or implicit recourse to their balance sheets.

- When Lehman Brothers failed in September 2008, it became known that a large money market fund, the Prime Reserve fund, was exposed to its short-term debt. The losses on Lehman caused the fund to 'break the buck' as it fell below par value. Not knowing what other non-Treasury money market funds were
Institutions. To restore confidence, the government had to guarantee the money market sector.

- Investment banks funded a considerable amount of less liquid long-term asset-backed securities, using the short-term (typically overnight) repo market. Since repos were collateralised against these assets, as questions about the value of these assets arose, repo haircuts increased. This led to liquidity problems for weaker institutions and in turn to a systemic funding problems. Some banks effectively failed and more would have done so without government intervention.

Does history tell us anything about how to regulate the shadow banking system? During the panic of 1907 and the various banking panics between 1930 and 1932, uncertainty and lack of information about which financial institutions were insolvent led to system-wide bank runs. In response to these, the government created the Federal Reserve with its lender of last resort facility, the Federal Deposit Insurance Corporation (FDIC) and deposit insurance, along with a number of banking and investment acts. Arguably the most important part of the legislation was that depositors no longer had to remove deposits in panic because they had a government guarantee.

Moral hazard
It is well understood that safety nets create a moral hazard, that is, an incentive for banks to undertake greater risks than they would without this insurance. Regulators and policy-makers therefore set up a number of countervailing barriers: (i) banks would have to pay to be a part of the deposit insurance system; (ii) the risk-taking activities of banks were ring-fenced to the extent that there was a separation of the commercial and investment banking activities; and (iii) enhanced supervision and winding-down provisions for individual banks, generally in the form of capital requirements and prompt corrective action, were established.

Given this backdrop, there seem to be two distinct possibilities to regulate shadow banking going forward:

- The first is to apply a 1930s-type reform, namely to explicitly guarantee the short-term liabilities of the shadow banking sector in a systemic crisis. In return, institutions such as broker-dealers, ABCP conduits and money market funds would (i) be charged a fee akin to the FDIC premium; (ii) have their risk-taking activities restricted; (iii) be forced to hold a capital buffer; and (iv) be subject to wind-down provisions to avoid excessive risk shifting in distress.

- The second is to leave the shadow banking institutions unprotected, yet set up an airtight mechanism for dealing with these firms in a systemic crisis. Specifically, if there is a run on an institution’s liabilities, then, with the approval of a systemic risk council, the institution can suspend redemptions. This action would not in itself initiate bankruptcy or receivership proceedings. The collateral underlying these liabilities would be sold off in an orderly fashion or pledged back to the lenders. But since most lenders in the shadow banking system participate to access liquidity, the government would, at a significant haircut and for a fee, lend against the collateral. Any losses in the collateral would eventually be borne by creditors, not tax-payers.

Finally, at least a part of the shadow banking system, most notably ABCP conduits, appears to have evolved largely for commercial banks to make an end-run around Basel capital requirements. The loopholes involving different accounting and regulatory capital treatments of on- and off-balance sheet assets should be removed at the earliest opportunity as they facilitate leverage build-up in the shadow-banking world in opaque forms.

Key ideas

- **Shadow banks** look like banks, borrowing in short-term debt markets and investing in longer-term illiquid assets.

- **This $8000bn market** in the US matches the size of all deposits at US firms.

- **The shadow banking sector** is too big to fail, yet largely unregulated.

- **Balance-sheet problems**: When short-term funding was cut for ABCP conduits, mortgage-backed securities were forced back onto firms’ balance sheets.

- **Investment banks** funded a considerable amount of less liquid, long-term asset-backed securities using the short-term repo market. As asset prices fell, repo haircuts rose, creating liquidity problems. Without government support, more banks would have failed.

- **A 1930s-type reform** would guarantee the short-term liabilities of the shadow banking system in a crisis, introducing fee premium and other reforms.

- **An alternative** would allow institutions to suspend redemption during times of crisis, allowing for an orderly unwinding of collateral.

**Biography**
Viral Acharya is a professor of finance at NYU Stern School of Business and co-editor and contributor to NYU Stern’s book Regulating Wall St: The Dodd-Frank Act and the New Architecture of Global Finance, published in November 2010.