OBSERVATION

TD Economics

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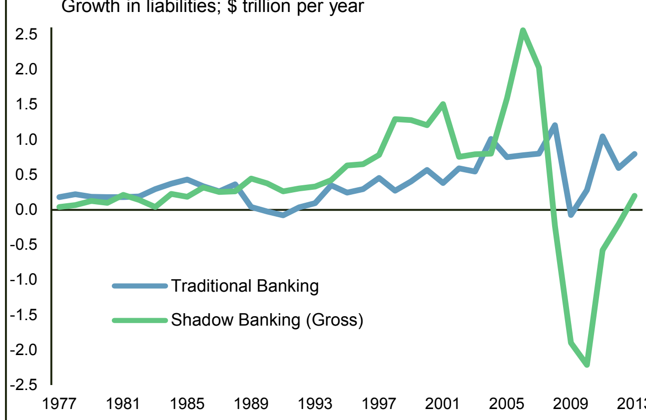
SHADOW BANKING IN AMERICA: BACK IN THE SPOTLIGHT

Highlights

- Shadow banking emerged in the 1970s and has grown at a spectacular pace since, evolving through financial innovation in response to changes in laws and regulations governing the financial industry.
- Shadow banks have been an important source of credit in the economy until the financial crisis, with shadow banking liabilities sharply surpassing traditional bank liabilities during the credit boom.
- The financial crisis exposed flaws in shadow banking, highlighted the potential for broader financial sector contagion related to backstops from traditional banks to shadow institutions, and resulted in increased regulatory oversight on both traditional and shadow banks.
- After five years of declines, shadow banking begun to grow last year. This trend will likely continue, as increasing demand for credit from a recovering economy together with more stringent regulation of traditional banks pushes credit intermediation into the ever evolving shadow banking system.

A key element in the expansion of the U.S. credit bubble, and its subsequent burst, was the rapid growth in lending by non-traditional financial intermediaries. Commonly referred to as 'shadow banks,' they consist of entities such as asset-backed commercial paper (ABCP) conduits, credit hedge funds, finance companies, government-sponsored enterprises (GSEs), money market mutual funds (MMMFs), securities lenders, and structured investment vehicles (SIVs). These represent a "whole alphabet soup of levered up non-bank investment conduits, vehicles, and structures" as described by Paul McCulley, credited with coining the 'shadow bank' moniker (McCulley 2007). The term sounds ominous and inherently carries a negative sound. The criticism stems from the sector's historically minimal regulatory oversight related to its non-deposit taking nature, absence of explicit public sector guarantees, and lack of access to central bank liquidity. Nevertheless, shadow banks, which conduct maturity, credit, and liquidity transformation – just as traditional banks, although not under one roof – are an important part of the financial system.

SHADOW BANKING LENDING OUTGROWING TRADITIONAL FOR TWO DECADES...UNTIL BUST



Source: Federal Reserve Board, TD Economics

The emergence of shadow banking in the 1970s can largely be attributed to the evolving regulatory environment the financial industry operated in. Changes in laws and regulations brought about financial innovation that has underpinned rapid growth in shadow banking since. In 1989, despite being half the size, shadow bank credit began to expand faster than traditional banking in dollar terms. It has since been an important source of funding, facilitating the flow of credit, and hence, economic growth. This trend ended with the bursting of the credit bubble, which shadow banking helped to fuel through the underpricing of liquidity and credit tail risk, despite being touted as helping increase financial stability. The financial crisis exposed flaws in

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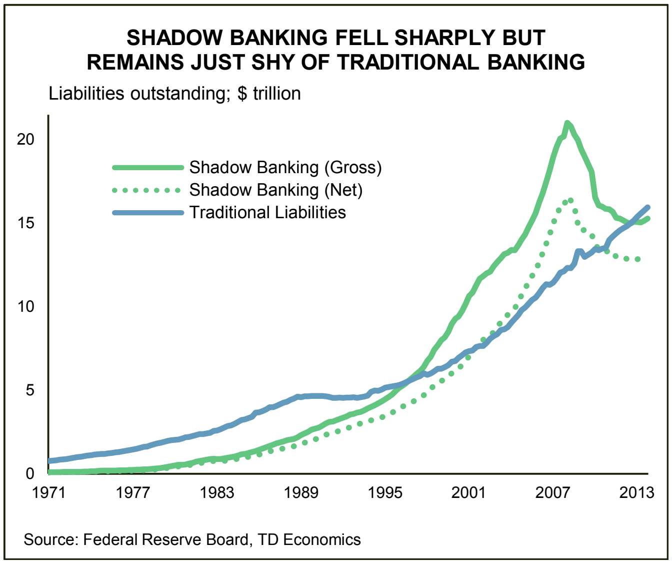


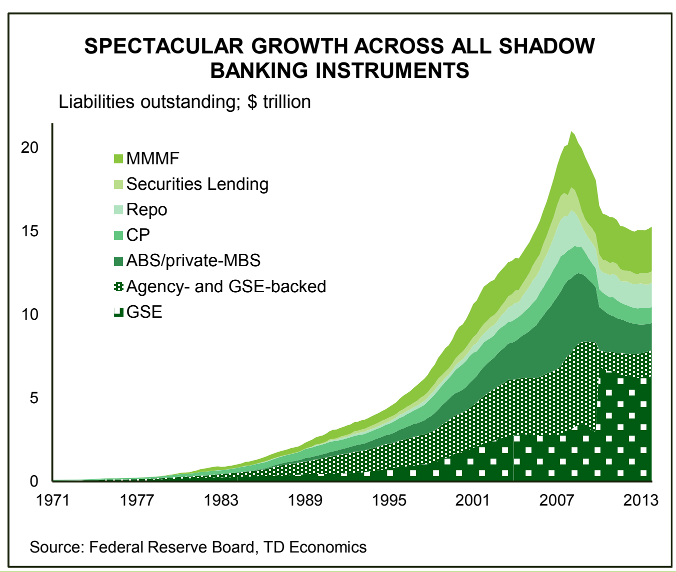
the design of shadow banking and highlighted the potential for broader financial sector contagion related to guarantees and backstops to shadow institutions from traditional banks.

Despite their deep retrenchment and sharp write-downs since the crisis, gross shadow bank liabilities still account for nearly as much as these of deposit-taking traditional banks. And after five consecutive years of declines shadow bank lending is on an upswing once again. Driven by rising demand for credit from a growing economy, together with competitive advantage stemming from increased regulatory burden on large deposit-taking institutions, shadow banks together with smaller deposit-taking institutions are increasingly active in credit intermediation. While shadow banking has not escaped increases in regulatory oversight, its growth prospects remain high, and are further accentuated by future financial innovation. Shadow banking is on the rise again and will continue to evolve in response to the changing regulatory climate.

From boom…

Shadow banking activity revolves around securitization of loans, leases, and mortgages and wholesale funding activities. The beginnings of securitization can be traced back to the 1970s, when Ginnie Mae began to guarantee mortgage pass-through securities, as a way to foster the secondary mortgage market and promote homeownership. Fannie Mae and Freddie Mac followed shortly thereafter. In order to address the inherent prepayment risk of mortgage backed securities (MBS), and to further broaden the investor base in the secondary mortgage market, MBSs began to be packaged into Collateralized Mortgage Obligations (CMO) starting in 1983. Then in the mid-80s, securitization spread from the GSE-backed securities to private-label MBS, as well as other securities, backed by loans other than mortgages. The first asset-backed security (ABS) issuance was tied to computer equipment leases, but quickly expanded to a wider range of loans, leases, and other receivables. (Cowan 2003) Securitization activity is inherently dependent on several wholesale sources of funding which make up the remainder of the shadow banking system. These consist of instruments such as commercial paper (CP), repurchase agreements (repos), as well as securities lending, and money-market mutual funds. Aggregating the securitization and funding liabilities provides a proxy for the gross size of shadow banking activity in the United States. This proxy is not perfect. Data from the Federal Reserve's Flow of Funds does not fully capture all shadow activities in the economy. Also, the gross aggregate measure suffers from some double counting, related to funding of ABS/MBS through money market funds, which the net measure attempts to address. (Pozsar et al. 2010)

The measure is nonetheless useful in quantifying the size and growth in shadow banking. Between 1970 and 1980, shadow bank liabilities went from largely nil to $500 billion – roughly a quarter of traditional bank liabilities at the time. Since then, and until the global financial crisis, shadow banking has grown twice as fast as traditional banking despite its more cyclical nature. In fact, the only periods when shadow banking grew slower than traditional banking was during recessions and in their immediate aftermath. In dollar terms, growth in shadow bank liabilities began to outpace traditional ones in 1989 and has largely done so right through 2007. Gross shadow liabilities surpassed traditional banking sector liabilities by 1996 and the net measure achieved

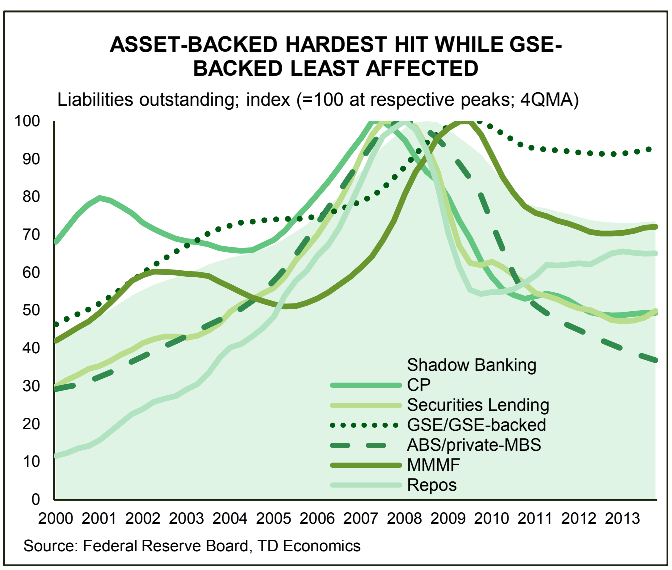


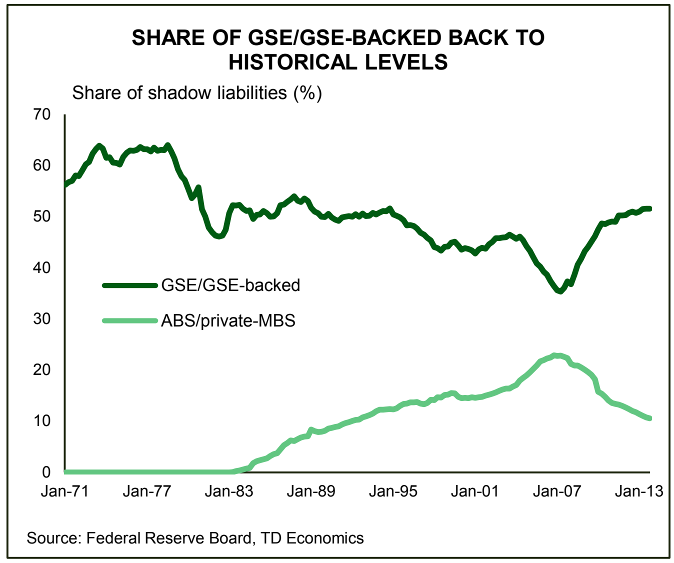
that mark five years later. Shadow banking peaked just as the Great Recession began with gross liabilities of more than $21 trillion. The net measure stood some 25% above traditional bank liabilities. Securitization activity made up 60% of shadow banking activity, with agency- and GSE-backed accounting for two-thirds of this share, while ABS and private-label MBS made up the remainder. Wholesale funding accounted for the remaining 40% of shadow banking liabilities, with MMMFs providing nearly one half of funding prior to the recession.

…to bust

As the credit bubble burst, shadow banking contracted precipitously. Its gross liabilities plunged nearly 30% to $15 trillion, with net liabilities declining by some $4 billion. In contrast, traditional banking liabilities experienced declines only in select quarters, with the sector generally continuing to grow. However, even with their severe declines, shadow liabilities fell only to levels last seen in 2005/06, with the gross measure remaining just shy of traditional liabilities.

However, the aggregate number does not tell the whole story. Much of the decline in shadow banking since the financial crisis is related to ABS and private-label MBS issuance, as well as funding related to it. Gross shadow liabilities fell $6 trillion from their peak, with nearly half in ABS/private-MBS alone, leaving outstanding liabilities currently at just one-third its pre-crisis level. Commercial paper liabilities fell by one half to just under $1 trillion recently, with 80% of the decline in CP issuance related to ABS/private-MBS direct placement. Securities lending accounted for another $500 billion of the decline and remains around half its previous peak. Repos and money market funds have done relatively better, but are also below peak activity levels (20% to 30%). At the same time, agency- and GSE-backed securities and mortgage-pools are only slightly lower than previous records.

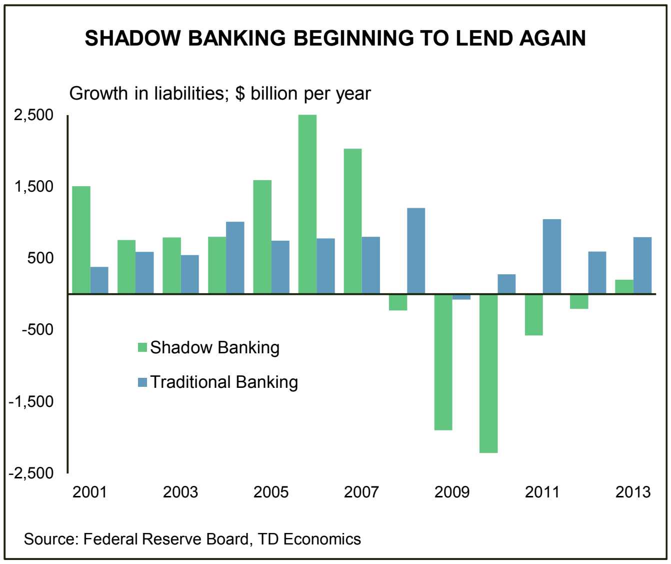




The relatively muted declines in agency- and GSE-backed liabilities vis-à-vis other shadow banking categories resulted in these securities now making up over half of outstanding shadow bank liabilities. While this is still shy of the 60% share during the 1970s, it is a substantial increase from the 35% at the height of the credit frenzy. At the same time, ABS and private-label MBS (and their collateralized obligations), which were nonexistent in the 1970s and rose to account for nearly 25% of all shadow banking by 2006, have since fallen back down to half that share.

What's in store?

The shadow banking sector is much smaller than its 2008 peak, but its gross liabilities are only slightly below those of the traditional banking sector. And, there is evidence that shadow banking is starting to grow. After stabilizing in late 2012, shadow liabilities increased by over $200 billion in 2013. This was roughly one-quarter of the lending that was done by traditional banks, but the gap is closing. In the second half of 2013, shadow bank liabilities increased by 60 cents for every dollar in traditional bank liabilities. Most of the recent growth has been in agency- and GSE-backed securities, but money market mutual funds and securities lending appear to have also turned the corner. And while still declining, commercial paper and ABS/private-MBS liabilities are doing so at a decreasing rate, with most recent data suggesting positive issuance in securities backed by commercial and multifamily mortgages at the end of last year.



As the U.S. economy accelerates later this year and through 2015, demand for credit will surely rise. This is expected to boost traditional bank volumes, but will also likely fuel credit growth from shadow banking. The increasing regulatory burden on large deposit-taking institutions will likely accentuate this. Pozsar et al. (2010) indicate that "increased capital and liquidity standards for depository institutions and insurance companies are likely to increase the returns to shadow banking activity." This will likely be partly offset by heightened regulation of shadow banking, enacted since the financial crisis in order to remedy previous flaws.

Thus far, economic viability of ABCP issuance has already been severely impacted by Financial Accounting Standards Board's accounting changes for off-balance-sheet items alongside Basel III liquidity provisions. The Securities and Exchange Commission's (SEC) Regulation AB strengthens disclosure guidelines for ABS, which will likely add to the cost of potential issuers, but should provide additional clarity for potential investors. Both ABS and ABCP issuance may also be affected by the Dodd-Frank Wall Street Reform and Consumer Protection Act, which requires issuers of these securities to hold a portion of the issuance on their balance sheets. Dodd-Frank also established a process for the designation of systemically important non-bank firms, allowing for prudential regulation to extend to large shadow banking institutions. Since the crisis, the SEC also placed limits on the amount of maturity and liquidity transformation that money market mutual funds may undertake.

More regulation will likely be forthcoming. Stating that a great deal has been accomplished, Ben Bernanke expressed that "much work remains to better understand sources of systemic risk, to develop improved monitoring tools, and to evaluate and implement policy instruments to reduce macroprudential risks." (Bernanke 2011) This sentiment was echoed more recently by Governor Tarullo who indicated that "a sounder, more stable financial system requires a more comprehensive reform agenda." (Tarullo 2013)

Even with greater regulatory oversight the scope for growth in shadow banking remains significant. Future innovation in financial products provides significant growth potential for the constantly evolving sector. Economists at the Federal Reserve Bank of New York, who are among the foremost experts on the topic, expect "shadow banking to adapt to these new regulations" and "new forms of regulatory arbitrage and shadow banking to emerge." (Adrian and Ashcroft 2012a)

Given that it is perpetually evolving, it is difficult to speculate on what shadow banking will look like in the future. Regulation enacted so far has increased the costs of ABCP and ABS issuance, while enhancing transparency and better aligning objectives of issuers and investors. This may, on net, constrain issuance. Also, growth in MMMFs may be slowed by previously enacted limits. Lastly, much of the recent growth in shadow banking has come from agency- and GSE-backed securities. With GSE reform on the table, it is not clear whether private-label MBS will be able to seamlessly step in to fill any void that may potentially develop.

The bottom line is that shadow banking contracted deeply during the recession and much of the slow recovery, but just as stronger balance sheets led to increased competition across commercial banks, the recovery in the financial system and the economy is also injecting life back into shadow banking. Given the role that it played in helping fuel the credit bubble, the recovery in shadow banking is bound to attract considerable attention. This has put shadow banking under greater regulatory scrutiny. But, even with more oversight, there is good reason to believe that this sector will continue to play a core role in the financial system and it will expand in the years ahead.

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