Investment bank regulation after the Bear rescue

Dwight Jaffee and Mark Perlow assess the impact of the Bear Stearns rescue and outline steps to prevent something similar happening again.

The subprime mortgage crisis has seriously jarred the financial system in the Unites States in at least three distinct areas: subprime lending, the proper role for the ratings agencies in the securitisation process, and the implications of the Bear Stearns meltdown – and its subsequent rescue – for financial markets and institutions. In this article, we analyse the last of these issues and review and evaluate a number of possible regulatory responses.

Unique rescue

The Federal Reserve's emergency loan of $30 billion to JPMorgan on 16 March this year to expedite its merger with Bear Stearns was unique in a number of ways. First, it allowed the borrower to post low-quality collateral in exchange for central bank money and, second, it provided the central bank with no recourse to other bank assets if the loan was not repaid. A concurrent and equally extraordinary action by the Fed was to allow dealers direct access to its discount window – access that was previously restricted to depository institutions.

In testimony before the Unites States Congress, Ben Bernanke, the chairman of the Fed; Christopher Cox, the chairman of the Securities and Exchange Commission (SEC), and Timothy Geithner, the president of the New York Fed, all confirmed that these unusual and unprecedented steps were taken in response to fears of a systemic meltdown if Bear Stearns had to file for bankruptcy protection on Monday 17 March. The episode raises intriguing questions about how the capital positions of American investment banks are currently regulated, what actually happened to Bear Stearns, and why its collapse would have threatened a systemic crisis.

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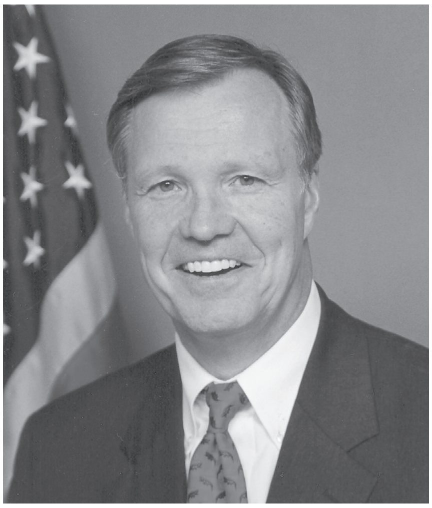
1. Regulating investment banks



Christopher Cox

Under the current regulatory framework in the United States, the SEC exercises oversight over financial and other risks at the five largest American investment banks: Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch and Morgan Stanley. These investment banks requested consolidated supervision by the SEC in order to satisfy European Union requirements for prudential regulation, which ultimately led to the voluntary "consolidated supervised entities" programme. In his congressional testimony Cox described the two key components of the program and why it was not sufficient to prevent the Bear Stearns crisis:

- The SEC requires that all investment banks maintain a 10% capital ratio, comparable to the Fed's 10% standard for "well capitalised" bank holding companies. Yet, as Cox explained, Bear Stearns maintained a cushion well above this requirement throughout the crisis, which is to say that the firm remained solvent. Bear Stearns' solvency was further confirmed by the fact that JPMorgan purchased Bear Stearns at a positive price and provided the $30 billion of market value collateral on the Fed's loan.

- The SEC also requires that all investment banks maintain cash and high-quality securities sufficient to meet their liquidity needs if they lost access to unsecured funding for the following year. Again, Bear Stearns was meeting the SEC liquidity rules, but the firm lost its access to secured funding during the week of 10 March. Based initially on rumors that some counterparties had stopped trading with Bear Stearns, other investment banks followed suit, hedge fund prime brokerage clients withdrew cash from their Bear Stearns accounts, and money-market funds reduced their short-term lending and repurchase agreement (repo) exposure. It is not completely clear why they took such unprecedented actions, but the most likely explanation is they feared that their status as secured lenders might be challenged if Bear Stearns went bankrupt. It is also possible that repo holders that did not take delivery of collateral from Bear Stearns – thereby earning higher risk-adjusted interest – decided that those returns were no longer worth the risk.

The Fed acts The bottom line for Bear Stearns was that, in the absence of other actions, it would have failed to meet its obligations on 17 March and would have been compelled to file for bankruptcy protection. As a result, the Fed had no option but to intervene on the evening of 13 March in a well-reported sequence of actions that were carefully described in Geithner's testimony.

Timothy Geithner

The key question related to the Fed's actions is why it chose to rescue Bear Stearns rather than allow it to fail. After all, Long-Term Capital Management (LTCM), a hedge fund, suffered a similar liquidity crisis in 1998 and no financial support from the Fed was required for the successful private liquidation of its open positions.

One difference is that the investment banking community was able and willing to take on responsibility for the liquidation of LTCM. In contrast, a comparable liquidation of Bear Stearns would have severely depressed prices in the already fragile markets for mortgage-backed securities and collateralised debt obligations – thereby risking that the liquidity crisis could become a systemic insolvency crisis.

Too entangled to fail?

The most critical feature of the Bear Stearns crisis, however, is that the firm's bankruptcy would have created severe financial distress for literally thousands of counterparties to derivatives and other contracts – a point emphasised by both Cox and Geithner. These counterparty positions arose as the result of Bear Stearns' central role as a principal, market-maker, and dealer in the over-the-counter markets for financial derivatives – including foreign exchange, interest rate, and credit default derivatives, with many of the latter directly tied to subprime mortgage-backed securities and collateralised debt obligations. The Bank for International Settlements estimates that the outstanding notional amounts of these instruments worldwide totalled more than $500 trillion as of June 2007. These derivatives positions are commonly used to create hedge and arbitrage positions, often requiring positions with several different counterparties. The resulting system is highly interlinked: one firm's assets are another firm's liabilities. The failure of one central counterparty could then in effect dramatically increase the net negative market exposure of many counterparties, and thereby create a cascade of bankruptcies.

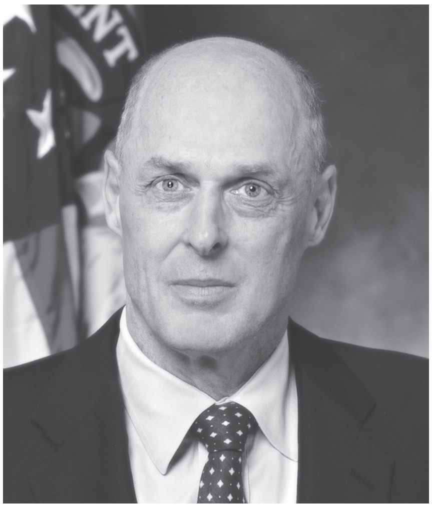
Against this background, it is understandable that the Fed intervened to provide liquidity to Bear Stearns and to expedite a merger, thereby avoiding bankruptcy. The most valuable feature of the merger agreement was that JPMorgan accepted and guaranteed all of Bear Stearns' loan and counterparty obligations, thus eliminating the risk of a cascade of bankruptcies.

2. Rethinking regulation

The Fed's unprecedented actions to avoid a Bear Stearns bankruptcy provide a *prima facie* case that the regulation of investment banks must be expanded, which by now is almost the conventional wisdom. To be sure, there is another view. Peter Wallison of the American Enterprise Institute points out that while major investment banks and hedge funds also failed in the past, only the unique confluence of market conditions leading to Bear Stearns' liquidity crisis required Fed intervention – conditions that Wallison does not expect to reoccur. In his opinion, commercial banks alone require access to the Fed's discount mechanism as a result of their primary role in the economy's payments system, while market discipline and not government regulation will provide sufficient oversight for the investment banking industry.

The problem with the Treasury's plan

A similar embrace of market discipline over regulation is at the heart of *Blueprint for a Modernized Regulatory Structure*, proposed by the United States Treasury under Hank Paulson, the Treasury Secretary, in March 2008. While the blueprint proposes a "prudential financial regulator" to address the capital requirements of financial institutions, the focus is on depository institutions and the payments system. The plan also proposes that the Fed serve as a "market stability regulator," but recommends that its authority to require corrective actions be limited to cases where overall financial stability was threatened. Essentially, this would only authorise the Fed to serve as a fireman putting out financial fires rather than using regulation to prevent future fires.



Hank Paulson

The blueprint also distinguishes between "normal" Fed discount-window lending and "market stability" discount-window lending, limiting direct access to the former to depository institutions (excluding investment banks). Because of the lack of a permanent liquidity backstop for investment banks, the Treasury's plan is unlikely to provide the necessary reassurances to investment bank's counterparties until the run has already started and market stability was thereby threatened.

Market discipline gone wrong

But it is exactly this kind of scenario – the prospects of a cascade of counterparty defaults – rather than the Bear Stearns bankruptcy by itself that necessitated the Fed's intervention. Market discipline, therefore, proved inadequate in providing stability to derivatives dealers. Indeed, the market discipline imposed on Bear Stearns took the destabilising and destructive form of a bank run. Therefore, just as commercial bank regulation is imposed to protect the payments system, further regulation of investment banks is required to protect the counterparty system.

There are already discussions on new regulatory controls for investment banks. But these primarily focus on capital requirements and related rules as the *quid pro quo* for the expanded access to Fed liquidity and protection, since the implicit central bank guarantee would introduce moral hazard to the counterparties of investment banks and lead to excessive risk-taking. Indeed, these discussions generally ignore the capital requirements the SEC already imposes on investment banks, which are identical to those the Fed imposes on bank holding companies seeking the highest mark for soundness. Furthermore, these capital requirements did not protect Bear Stearns' solvency. Any potential improvement in capital requirement regulations, therefore, will primarily relate to how they are managed in practice.

Strengthening the toolbox

The first such improvement would grant the SEC the authority to require "prompt corrective action" by investment banks – something the regulator does not currently have. The Federal Deposit Insurance Corporation Improvement Act of 1991 states that when a commercial bank has insufficient capital, the bank regulator must close the bank unless it takes prompt corrective action to raise additional capital or to find a merger partner. Congress designed prompt corrective action requirements to prevent the "forbearance" by regulators that allowed technically insolvent Savings and Loan Associations to continue to operate – which only increased the losses ultimately covered by deposit insurance. The failure rate of commercial banks has been remarkably low since the enactment of prompt corrective action provisions. Similar powers should clearly be provided to the regulator of investment banks: while they would certainly take the SEC seriously if the regulator asserts that their capital is inadequate, prompt corrective action would strengthen the SEC's toolbox and make clear to the regulator that it has political support to exercise this authority.

A second – and more complex – area for improvement is the use of mark-to-market accounting for asset values and capital adequacy. Given the combination of volatile market prices, leveraged and maturity-mismatched positions by investment banks, and the ability to hedge these risks if they so choose, mark-to-market accounting has been an essential tool for monitoring adherence to capital standards. The subprime mortgage crisis, however, created low or non-existent trading volumes in many instruments, extraordinarily wide bid-ask spreads, and an unprecedented difference between market bids and what informed investors consider the fundamental value of various subprime mortgage-backed securities and collateralised debt obligations. Under these circumstances, mark-to-market accounting may understate a firm's fundamental solvency, which in turn may deter lenders, thus creating a self-fulfilling liquidity crisis. Proposing immediate solutions for this problem is difficult, but clearly it should remain on the agenda for further regulation. One option would be for accounting and banking regulators to work together to provide specific guidance delineating the conditions under which the market for an instrument is no longer deemed active enough to require mark-to-market accounting, thereby allowing valuation based on the present discounted value of the instrument's future expected payment streams.

Lessons from the payments system

Perhaps the most critical area for expanded regulation of investment banks is to separate the firms' investment activities from their counterparty activities. This separation would recognise that the counterparty system now parallels the payments system as a fundamental component of the financial system's infrastructure. The regulatory structure that has successfully protected the American payments system offers a template for protecting the counterparty network from risky investment activities. The key regulatory statutes that protect the payments system from bank investment activities are the Bank Holding Company Act of 1956, which regulates bank holding companies, and the Gramm-Leach-Bliley Financial Services Modernization Act of 1999, which regulates financial holding companies. These statutes mean that:

- Commercial banks may only carry out a "banking business," which is primarily defined as issuing deposits and making loans.

- Bank holding companies may carry out activities "closely related to banking". The Fed designates the approved activities, and the list has increased over the years.

- Financial holding companies may carry out a wider range of financial activities, including insurance and investment banking. To qualify as a financial holding company, a bank holding company must be deemed as "well capitalised," the Fed's highest risk-based capital rating, among other requirements.

This pyramid structure allows a bank holding company to own one or more commercial banks as well as a financial services holding company. The structure operates, however, under the clear understanding that the holding companies should protect the commercial bank and not the other way around. For example, a holding company may always transfer capital "downstream" to a commercial bank subsidiary, whereas special conditions of profitability and capital adequacy must be met before capital can be transferred "upstream" from the commercial bank to the holding companies.

Separation of functions

Our primary proposal for the expanded regulation of American investment banks is that a comparable structural separation should be created to protect the solvency and liquidity of an investment bank's counterparty operations from the risks and possible losses that occur in its various investment activities. The need for such a separation arises because investment banks' trading and investment activities have become increasingly risky, including the leverage and maturity-mismatches that magnify the expected returns but also the risks. Were the investment bank to carry out only these investment and trading activities, in effect it would operate as a hedge fund, and therefore not require as tight regulation. Investors in the entity would have incentive to provide the proper degree of discipline.

However, a moral hazard issue arises when an investment bank combines its investment and trading activities with counterparty activities, a combination that all the major firms have in fact adopted. This creates an externality whereby losses in the investment subsidiaries threaten the counterparty division, in effect putting the counterparty desk – and potentially the entire financial system – at risk. Absent the separation of the two activities, an investment bank and its counterparties would have the incentive to rely upon the Fed's liquidity backstop to take excessive risks, knowing that they would reap any gains while the Fed would absorb system-threatening losses. The detailed regulations necessary to create the separation of these activities is well beyond the scope of this paper, but the legal infrastructure used to combine commercial banks, bank holding companies and financial holding companies provides a good starting point.

Fed concerns over settlement

A related problem is that the process for clearing and settling over-the-counter derivatives is largely manual and not systematised, which frequently results in delays and backlogs in settling trades. The system also has no mechanism for "closing transactions," through which a trader can carry out a transaction to offset and eliminate a prior open position, which is the standard method used on traded exchanges. The result is an enormous accumulation of outstanding gross positions that far exceeds the economically relevant net positions. The Fed has long feared that in a time of crisis, counterparties could repudiate obligations that had not yet cleared, resulting in large-scale uncertainty about net exposure and capital positions. While the Fed – the New York Fed in particular – has led a successful industry effort to decrease the backlog in settlements for credit default swaps, this initiative did not eliminate the general systemic threat. The most obvious solution would be to establish a clearing house for over-the-counter positions that would parallel the clearing houses used to settle in the payments system or to settle exchange-traded securities.

Other regulatory schemes also serve as precedent for our proposal. Insurance law, for example, relies on the regulatory device of separating highly risky activities from safer and systemic activities within a holding company structure. Most states jurisdictions require that security guarantee insurers, including the major bond and mortgage insurers, be "monoline". In extreme form, these insurers could provide only security guarantee insurance. More generally, insurance holding companies are permitted to own multiple insurers, but the claims and capital of each of the "monoline" subsidiaries are financially isolated from the rest of the firm.

Our proposed approach towards regulation of investment banks could also be applied to two other sets of major financial institutions. The first is the Chicago Mercantile Exchange, Chicago Board of Trade (now merged under a single holding company) and similar exchanges, which also create very large elements of counterparty risk by taking on the responsibility to fulfill the ultimate settlement on both sides of each trade on the exchange. Moreover, the capital resources they maintain to do so are limited, raising the possibility that they will have to call upon their shareholders to supplement the capital.

The second set consists of Fannie Mae and Freddie Mac, the two enormous government-sponsored enterprises for mortgages. These institutions share two characteristics with investment banks. First, they maintain enormous on-balance-sheet investment portfolios (about $1.5 trillion by the end of 2007); and second, they fund this portfolio primarily by rolling over short-term borrowing (more than $2 trillion in 2007). Indeed, Freddie and Fannie are arguably the largest counterparties for interest-rate derivatives in the world. To be clear, the trading exchanges and Freddie and Fannie are also distinct from the investment banks in many respects, so we are not suggesting a "one size fits all" regulatory structure. But we do believe that the counterparty positions of both these sets of institutions merit serious regulatory attention in light of their fundamental role in the financial system.

Preventing future crises

The subprime crisis and its most troubling manifestation yet – the meltdown and federal rescue of Bear Stearns – have posed unprecedented challenges to the financial system. While the Fed has responded with a series of creative and constructive interventions, it is clear that financial regulators do not have the necessary tools to prevent this or future crises from damaging the counterparty activities of the major derivatives dealers, which are now an integral part of the financial infrastructure. The regulatory initiatives outlined in this article will strengthen this infrastructure, without imposing unnecessary regulatory burdens. □