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Deregulation and the Financial Crisis: Another Urban Myth

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What caused the financial crisis? The widely accepted narrative, prominent in the media and pressed by the Obama administration, is that the crisis was caused by deregulation—the "repeal" of the Glass-Steagall Act and the failure to regulate both derivatives and mortgage brokers—which allowed excessive financial innovation, risk taking, and greed among financial players from mortgage brokers to Wall Street bankers. With this diagnosis, the proposed remedy is more regulation and government control of the financial system, from the over-the-counter derivative markets to mortgage brokers and the compensation of CEOs. The alternative explanation is that the crisis was caused by the government's own housing policies, which fostered the creation of 25 million subprime and other low-quality mortgages—almost 50 percent of all mortgages in the United States—that are now defaulting at unprecedented rates. In this narrative, the fact that two-thirds of all these weak mortgages are now held by government agencies, or were produced by government requirements, shows that the demand for these mortgages—and the financial crisis itself—originated in Washington. The problem for the administration's narrative is that its principal examples do not stand up to analysis: the repeal of a portion of the Glass-Steagall Act did not eliminate the restrictions on banks' securities activities (they were left unchanged), the mortgage brokers were responding to demand created by the government, and, there is no evidence that the failure to regulate credit default swaps (CDS) had any effect in causing or enhancing the financial crisis. Without a persuasive explanation for the cause of the financial crisis, the administration's regulatory proposals rest on a mythic foundation.

The administration's proposals for regulatory reform in the financial industry are based on the notion that the financial crisis was caused by too little regulation, and perhaps by inherent flaws in the financial system. To explain why a worldwide crisis occurred now, and not at some earlier time during the seventy years since the Great Depression, the administration's defenders claim that deregulation or nonregulation during the last twenty years allowed banks and other financial institutions to take risks that resulted in their near-insolvency, while the large number of

Key points in this *Outlook*:

- There are two narratives commonly used to explain the financial crisis. The administration and others blame deregulation or nonregulation, including the repeal of the Glass-Steagall Act and the failure to regulate mortgage brokers or credit default swaps.
- The alternative narrative is that the financial crisis was caused by U.S. government housing policies that helped create 25 million subprime and Alt-A mortgages—47 percent of all U.S. mortgages—which are currently defaulting at unprecedented rates. This caused the financial crisis and current recession.
- The deregulation/nonregulation narrative is not sound. Glass-Steagall, as applied to banks, was not repealed, and there is no evidence that CDSs caused any significant losses.
- The fact that two-thirds of all subprime and Alt-A mortgages are on the balance sheets of government entities, or were required by government policies, demonstrates that government created the demand that unregulated mortgage brokers were responding to.

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weak mortgages in our financial system is explained by a failure to regulate mortgage brokers.

Since the administration and Congress are proceeding as though deregulation caused the financial crisis, it is appropriate—indeed necessary—to ask: what deregulation? We have all heard it many times: the financial crisis was caused by the "repeal" of the Glass-Steagall Act in 1999,[1] although even a small amount of research would have shown that the relevant provisions of Glass-Steagall were not repealed. Another bit of myth-making is the claim that the prohibition on regulating CDS and other derivatives in the *Commodity Futures Modernization Act of 2000* was a cause of the financial crisis.[2] It is not unusual to see statements by otherwise knowledgeable people that the CDS "brought the financial system to its knees."[3] Recently, President Barack Obama justified the need for a Consumer Financial Protection Agency by claiming that predatory lending by unregulated mortgage brokers was a cause of the financial crisis:

> Part of what led to this crisis were not just decisions made on Wall Street, but also unsustainable mortgage loans made across the country. While many folks took on more than they knew they could afford, too often folks signed contracts they didn't fully understand offered by lenders who didn't always tell the truth.[4]

Unfortunately for the administration and its supporters, these examples of "deregulation" or nonregulation do not support the argument they are making for broader regulation of the financial system. The so-called repeal of Glass-Steagall was not a repeal of the restrictions on banks' securities trading—so banks are still subject to the prohibitions in Glass-Steagall; there is no evidence that credit default swaps or other derivatives had anything to do with the financial industry's losses or the financial crisis; and, as outlined below, the government itself—or government requirements—appear to be the source of most of the funds and the demand for the deficient loans that were made by the unregulated mortgage brokers.

Thus, a more compelling narrative than the administration's deregulation hypothesis would focus on the effect of over 25 million subprime and Alt-A (that is, nonprime) mortgages that are pervasive in the mortgage system in the United States. These junk loans, amounting to almost 50 percent of all mortgages, began defaulting at unprecedented rates in 2007, and the resulting losses caused the collapse of the asset-backed financing market in 2007, the near collapse of Bear Stearns in March 2008, and the bankruptcy of Lehman Brothers the following September. Perhaps more important than these events, the loss of the asset-backed securitization market—where receivables from credit cards, consumer loans, and mortgages were financed—caused a huge reduction in financing for businesses and consumers, precipitating the current recession.

Mortgage brokers cannot create and sell deficient mortgages unless they have willing buyers, and it turns out that their main customers were government agencies or companies and banks required by government regulations to purchase these junk loans.

Although the administration blames the production of these deficient loans primarily on unregulated mortgage brokers, many of whom it calls "predatory lenders," this turns the mortgage market on its head. Mortgage brokers—even predatory ones—cannot create and sell deficient mortgages unless they have willing buyers, and it turns out that their main customers were government agencies or companies and banks required by government regulations to purchase these junk loans. As of the end of 2008, the Federal Housing Administration held 4.5 million subprime and Alt-A loans. Ten million were on the books of Fannie Mae and Freddie Mac when they were taken over, and 2.7 million are currently held by banks that purchased them under the requirements of the Community Reinvestment Act (CRA). These government-mandated loans amount to almost two-thirds of all the junk mortgages in the system, and their delinquency rates are nine to fifteen times greater than equivalent rates on prime mortgages. In addition to destroying companies and neighborhoods and causing a severe recession, the accumulation of these loans on government-backed balance sheets will result in enormous losses for taxpayers in the future.

There is empirical evidence to support the idea that defaults of junk loans caused the financial crisis. In his book *Getting Off Track*, Stanford University economist John Taylor notes that on August 9, 2007, the spread between the London Interbank Offer Rate (LIBOR) and Overnight Index Swap (OIS) rates rose abruptly, indicating that concern about counterparty risk had suddenly taken hold among the world's major internationally active banks. Before August 9, the LIBOR rate was usually about ten basis points higher than the OIS rate, which is a rate-free risk that reflects what the market anticipates the federal funds rate will be over the next three months. On

August 9, the spread suddenly jumped to approximately sixty basis points and still remains elevated over two years later. A reasonable interpretation of this change is that information about defaulting U.S. mortgages—and ignorance about who was actually holding these loans—caused this sudden expression of counterparty risk.[5]

The "Repeal" of Glass-Steagall

The law known popularly as the Glass-Steagall Act initially consisted of only four short statutory provisions. Section 16 generally prohibits banks from underwriting or dealing in securities,[6] and Section 21 prohibits securities firms from taking deposits.[7] The remaining two sections, Section 20 [8] and Section 32,[9] prohibit banks from being *affiliated* with firms that are principally or primarily engaged in underwriting or dealing in securities. In 1999, the Gramm-Leach-Bliley Act (GLBA)[10] repealed Sections 20 and 32, so banks could thereafter be affiliated with securities firms, but Sections 16 and 21 were left intact, so that whatever banks were forbidden or permitted to do by Glass-Steagall—before the enactment of GLBA—remains in effect. In other words, after GLBA, banks were still prohibited from underwriting and dealing in securities, although they were now permitted, under very restrictive rules discussed below, to be affiliated with investment banks.

> It is incorrect to suggest that Glass-Steagall's repeal had any effect whatever on the ability of banks to engage directly in the risky business of underwriting and dealing in securities.

An investment bank is a securities firm—a firm specializing in the business of trading securities of all kinds. These firms are not backed by the government in any way, and—unlike commercial banks—are intended to be risk takers. The Glass-Steagall Act was designed to separate commercial banks from investment banks; it did that simply by prohibiting affiliations between the two and by prohibiting commercial banks from engaging in the business of underwriting and dealing in securities. After sixty-five years and many academic studies showing this separation was unnecessary and ill-advised,[11] GLBA repealed the affiliation prohibition but—as noted above— it left the restrictions on banks' securities activities untouched.

Glass-Steagall in the Context of Banking Law

Most U.S. banks are subsidiaries of bank holding companies (BHCs), ordinary corporations that have controlling positions in banks but are also permitted to engage in or control firms engaged in other financial activities. BHCs do not have the advantages available to banks—unquestioned access to the Fed's discount window, the ability to offer insured deposits, or participation in the nation's payment system—but they are free to engage in activities such as securities underwriting and dealing that are not permitted to banks. No one quarrels with the proposition that banks should not be able to use their insured deposits to engage in risky or speculative activities. For one thing, government-insured deposits give banks a source of funds that is lower cost than what is available to others, and thus would permit banks to compete unfairly with many other financial institutions that must raise their funds in the capital markets without government assistance. But more important than that, U.S. banking laws are designed to separate banks from the risks that might be created by the activities of their holding companies and other affiliates. This is done for two reasons: to ensure the so-called safety net (deposit insurance and access to the discount window) is not extended beyond banks to their holding companies or their nonbank affiliates, and to protect the banks' financial positions from exposure to the risks their affiliates take, including those affiliates engaged in securities activities. Insofar as possible, the banking laws are structured to allow a holding company—and even a bank securities subsidiary—to fail without endangering the health of any related bank. This separation is effected by severely restricting the transactions between banks and their affiliates, and thus the risks that banks might take on the activities of their affiliates or subsidiaries.

In order to reduce the range of bank risk taking, banking laws and regulations also limit the activities in which banks themselves are permitted to engage. That is the context in which the Glass-Steagall Act should be viewed. As noted above, Glass-Steagall continues to prohibit banks from underwriting or dealing in securities. "Underwriting" refers to the business of assuming the risk that an issue of securities will not be fully sold to investors, while "dealing" refers to the business of holding an inventory of securities for trading purposes. Nevertheless, banks are in the business of making investments, and Glass-Steagall did not attempt to interfere with that activity. Thus, although Glass-Steagall prohibited underwriting and dealing, it did not interfere with the ability of banks to "purchase and

sell" securities they acquired for investment. The difference between "purchasing and selling" and "underwriting and dealing" is crucially important. A bank may purchase a security—say, a bond—and then decide to sell it when the bank needs cash or believes the bond is no longer a good investment. This activity is different from buying an inventory of bonds for the *purpose* of selling them, which would be considered a dealing activity and involves considerable market risk because of the volatility of the securities markets.

Nor did Glass-Steagall ever prohibit banks from buying and selling whole loans, even though a loan could be seen as a security. When securitization was developed, banks were permitted—even under Glass-Steagall—to securitize their loan assets and sell their loans in securitized form. Similarly, banks were always permitted to buy and sell securities based on assets, such as mortgages, that they could otherwise hold as whole loans. Glass-Steagall did not affect this authority, but the act was interpreted to make clear that banks could not deal in or underwrite these or other nongovernment securities. Under this interpretation, banks could not underwrite or deal in mortgage-backed securities (MBS), but they were free to buy these securities as investment securities and sell them when they believed that would be appropriate. Again, these restrictions remained in force after GLBA; the only difference was that GLBA now permitted banks to be *affiliated* with firms that engaged primarily or principally in underwriting or dealing in securities, and this affiliation could be through a subsidiary of the bank's holding company (both the bank and the securities firm would then be under common control) or through a subsidiary of the bank itself. In both cases, whether the securities firm is a holding company affiliate or a subsidiary, there are severe restrictions on transactions—outlined below—between the bank and the securities firm.

Finally, Glass-Steagall permitted banks to underwrite and deal in government securities, or securities backed by a government, and this was also unaffected by GLBA. For example, both before and after Glass-Steagall and GLBA, banks have been able to underwrite and deal in U.S. government securities, the securities of Fannie Mae and Freddie Mac, and the general obligation bonds of states and municipalities. This exemption applies mostly to securities backed by the U.S. government or by a state or municipality, although it also applies in cases where the issuer of the security is performing a government mission but is not strictly backed or guaranteed by a federal, state, or municipal government—such as with Fannie Mae and Freddie Mac.

From this analysis, it should be clear that the GLBA's repeal solely of the affiliation provisions of the Glass-Steagall Act did not permit banks to do anything that they were previously prohibited from doing. Accordingly, it is incorrect to suggest that Glass-Steagall's repeal had any effect whatever on the ability of banks to engage directly in the risky business of underwriting and dealing in securities.

> It is reasonable to ask whether the repeal of the *affiliation* provisions of Glass-Steagall could have caused banks to suffer the losses that were a prominent feature of the financial crisis, and whether the possibility of affiliation with banks could have caused the losses to large securities firms.

Nevertheless, it is reasonable to ask whether the repeal of the *affiliation* provisions of Glass-Steagall could have caused banks to suffer the losses that were a prominent feature of the financial crisis and whether the possibility of affiliation with banks could have caused the losses to the large securities firms—also known as investment banks—that drove one of them into bankruptcy (Lehman Brothers), two of them into becoming subsidiaries of banks (Merrill Lynch and Bear Stearns), and two more into recasting themselves as BHCs under the supervision of the Fed (Goldman Sachs and Morgan Stanley). The remaining portions of the Glass-Steagall discussion in this *Outlook* will review the specific restrictions that Glass-Steagall imposes on banks, the restrictions on transactions between banks and their securities affiliates and subsidiaries, and the possibility that affiliations with a bank—permissible after GLBA—might have caused the losses suffered by the large investment banks.

Regulation of the Securities Activities of National Banks

Almost all the big banks—including Citibank, Wachovia, Bank of America, JP Morgan Chase, and Wells Fargo—are national banks, chartered, regulated, and supervised by the Office of the Comptroller of the Currency (OCC), an office within the Treasury Department. OCC regulations allow banks to underwrite or deal only in securities backed

by federal, state or local government, and the securities of companies like Fannie Mae and Freddie Mac that are deemed to be performing a government mission.[12] Other types of securities, such as corporate bonds, municipal bonds that are not general obligations or municipalities, small-business-related securities that are investment grade, and securities related to commercial or residential mortgages, may be bought and held by banks in limited amounts, but banks may not underwrite or deal in them.[13]

Accordingly, under OCC regulations, before and after GLBA, banks could not underwrite or deal in MBS or other nongovernmental securities. They could, of course, invest in MBS, but they could do this before and after the adoption of both Glass-Steagall and GLBA, just as they were permitted to invest in the whole loans that the MBS represented. In other words, to the extent that banks suffered losses on MBS, collateralized debt obligations, or other instruments that were securitized versions of whole loans, their losses came not from underwriting or dealing in these securities, but from imprudent investments. It would be correct to say, therefore, that banks suffered losses on these securities by acting as banks—as lenders—and not as the securities traders that some commentators seem to imagine.

Bank Affiliations with Securities Firms

Although banks themselves could not underwrite or deal in MBS or other nongovernmental securities under Glass-Steagall, GLBA permitted banks to be affiliated with securities firms that were engaged in this activity. Did this newly permitted affiliation cause banks to take losses they would not have sustained if GLBA had not repealed the affiliation prohibitions in the Glass-Steagall Act? The answer again is no. Banking law and regulations prevent the activities of a bank securities affiliate or subsidiary from adversely affecting the financial condition of a related bank.

As noted above, these laws and regulations are designed to separate a bank as fully as possible from the risks its holding company takes, or by any affiliate that is a subsidiary of the holding company. Although it is possible after GLBA for a bank to hold a securities firm as a subsidiary, OCC regulations require that this subsidiary be treated like a subsidiary of the holding company, rather than like a subsidiary of the bank. The principal statutory provisions that wall off the bank from its holding company affiliates and from its own securities subsidiary are sections 23a and 23b of the Federal Reserve Act, which are applicable to all banks, whether chartered by federal or state governments. [14]

Section 23a limits the financial and other transactions between a bank and its holding company or any holding company subsidiary. For extensions of credit, the limit is 10 percent of the bank's capital and surplus for any one holding company affiliate and 20 percent for all affiliates as a group. All such lending or extensions of credit must be collateralized with U.S. government securities up to the value of the loan, and must be overcollateralized if other types of marketable securities are used as collateral.[15] All transactions between a bank and its affiliates must be on the same terms as the bank would offer to an unrelated party.[16] Other restrictions also apply, including prohibitions on the bank's purchase of a low-quality asset from an affiliate,[17] or the bank's issuance of a guarantee, acceptance, or letter of credit on behalf of an affiliate.[18] All these restrictions are applied by the Comptroller of the Currency to a national bank's relationship with a securities subsidiary and by the Federal Deposit Insurance Corporation as the federal regulator of state-chartered insured banks.[19]

Of course, if the securities firm is a subsidiary of the bank rather than a holding company affiliate, the bank will have an investment in the subsidiary that could be lost if the subsidiary fails. However, OCC regulations require that the bank "must deduct the aggregate amount of its outstanding equity investment, including retained earnings, in its [securities subsidiary] from its total assets and tangible equity and deduct such investment from its risk-based capital . . . and . . . may not consolidate the assets and liabilities of [the securities subsidiary] with those of the bank."[20]

These restrictions substantially reduce any likelihood that the business of a securities affiliate or subsidiary will have an adverse effect on the bank. The bank's lending to a securities affiliate or subsidiary is severely limited, must be collateralized, and must be made on the same terms the bank would offer to an unrelated third party. In addition, the bank's investment in a securities subsidiary is not recorded as an asset on its balance sheet. In other words, the bank's investment in its securities subsidiary is effectively written off at the time it is made. Accordingly, if the securities subsidiary should fail, there will be no impact on the bank's regulatory capital position. Under these circumstances, it is highly unlikely that any activity carried on in a securities affiliate or securities subsidiary of a bank could have an adverse effect on the capital position of the bank.

It is also very doubtful that the restrictions of sections 23a and 23b would be ignored either by a bank as an institution or by any director, officer, or employee of a bank or its holding company. The law permits civil and criminal penalties for knowing violations of sections 23a, 23b, or

any other regulation, and the civil fines can be enormous. For example, banking regulators can impose on any bank director or officer a personal, civil money penalty of up to $1 million for every day a violation continues.[21]

It thus seems clear that GLBA's repeal of the affiliation provisions of the Glass-Steagall Act did not and could not have had any adverse effect on the financial condition of any related bank, and thus did not contribute, and could not have contributed in any way, to the financial crisis.

What Caused the Problems of the Largest Banks?

Since banks' securities activities were not affected in any way by the GLBA repeal of the affiliation provisions of Glass-Steagall, one must look elsewhere for the causes of the financial weakness that many U.S. banks suffered. As noted above, there is strong evidence that despite heavy regulation, many of the banks that got into trouble did so by failing to act prudently in their investment or lending activities—in other words, in their capacity as banks—and not because they engaged in securities trading or were affiliated with investment banks that were underwriting and dealing in securities. Many banks and other financial institutions bought and held MBS that were rated AAA but performed very poorly. Others, and particularly the very large banks, in order to gain regulatory approval for expansions and mergers, committed themselves to make mortgage loans that would comply with the requirements of the CRA. These regulations, enforced by the bank regulators, required loans to borrowers at or below 80 percent of the median income, and in many cases these borrowers did not have the financial resources to meet their obligations, especially when housing prices stopped rising in late 2006 and early 2007. There are data to support this hypothesis.

In spring 2008, at the request of the Treasury Department, the Fed and the Comptroller of the Currency supervised a special process of stress testing by the nineteen largest U.S. financial institutions (most of which were bank holding companies with large subsidiary banks). Table 1 is taken from a report by the Fed on the stress tests and shows the aggregate projected losses for all nineteen institutions in an economically adverse scenario.[22] For purposes of this discussion, two items in this table stand out—the very large projected losses on first and second lien mortgages and the projected trading and counterparty losses. The former is consistent with the hypothesis advanced at the outset of this *Outlook*—that the largest banks committed themselves to make large numbers of CRA-qualifying loans in order to gain regulatory approval for expansions in the late 1990s and 2000s. The total projected residential mortgage losses for Bank of America, Citibank, JP Morgan Chase, and Wells Fargo are $167 billion out of a total for all nineteen institutions of $185 billion. The mortgage losses of the other banks in the survey were negligible.

In the case of counterparty and trading losses, the projected total is also consistent with the hypothesis that banks themselves did little trading of securities after GLBA—either directly (which continued to be prohibited by Glass-Steagall) or indirectly through affiliates or subsidiaries. The relatively high level of trading and counterparty losses in the table—still a relatively small portion of the total—is probably attributable to including the holdings of the independent investment banks (Goldman Sachs and Morgan Stanley) among the nineteen institutions and the consolidation of the assets of the investment banks acquired in 2008 by JP Morgan Chase (Bear Stearns) and Bank of America (Merrill Lynch). The projected aggregate trading and counterparty losses for those four institutions alone were over $80 billion of the total of $99 billion for all nineteen institutions as a group. Similar losses for all the other banks in the survey were again negligible.

Equally important, what is clearly visible in Table 1 is that all nineteen institutions—most of which were

TABLE 1
ESTIMATED LOSSES FOR 2009 AND 2010 FOR THE MORE ADVERSE SCENARIO

Loan Category	Estimated Loss (in billions of dollars)	Percentage of Losses within Category
First lien mortgages	102.3	8.8
Second/junior lien mortgages	83.2	13.8
Commercial and industrial loans	60.1	6.1
Commercial real estate loans	53.0	8.5
Credit card loans	82.4	22.5
Securities (AFS and HTM)	35.2	N/A
Trading and counterparty	99.3	N/A
Other[a]	83.7	N/A
Total Estimated Losses (before purchase accounting adjustments)	**$599.2 billion**	

SOURCE: Board of Governors of the Federal Reserve System, "The Supervisory Capital Assessment Program: Overview of Results," news release, May 7, 2009, available at www.federalreserve.gov/newsevents/ press/bcreg/bcreg20090507a1.pdf (accessed November 4, 2009).
NOTE: Other category includes other consumer and nonconsumer loans and miscellaneous commitments and obligations.

banks—were projected to suffer losses on what anyone would consider traditional bank assets: residential and commercial mortgages, commercial loans, credit card receivables, and the like.

Accordingly, the enactment of GLBA—to the extent that it allowed banks to affiliate with securities firms—did not result in major bank losses from their own or their affiliates' securities or trading activities. On the contrary, it seems clear that the banks got into trouble and precipitated the financial crisis and the recession by doing exactly the things we expect them to do by making loans and holding normal and traditional financial assets. The absence of any major source of projected losses coming from securities and trading activities shows that the repeal of the affiliation provisions of the Glass-Steagall Act did not induce the banks to take on unusual amounts of trading assets. Nor was trading a significant source of their projected financial losses.

Was Bank Affiliation the Problem?

There is still one possibility—that GLBA's repeal of the affiliation provisions in Glass-Steagall enabled securities firms to establish relationships with banks—and these relationships caused the near-insolvency of Merrill Lynch, Goldman Sachs, and Morgan Stanley and the bankruptcy of Lehman Brothers. However, this seems highly unlikely. Each of these investment banking firms had a subsidiary bank—something that would not have been possible before the repeal of the affiliation provisions of Glass-Steagall—but these bank affiliates were far too small to cause any serious losses to their massive parents. Table 2 shows the relative size of the parent and the subsidiary bank for each of the four major securities firms.

TABLE 2

RELATIVE SIZE OF INVESTMENT BANKS AND THEIR BANK SUBSIDIARIES

Investment Bank	Investment Bank Assets (est.)	Subsidiary Bank's Assets
Goldman Sachs	$800 billion	$25.0 billion[a]
Morgan Stanley	$660 billion	$38.5 billion[b]
Merrill Lynch	$670 billion	$35.0 billion[c]
Lehman Brothers	$600 billion	$4.50 billion[d]

SOURCE: Author calculations.

NOTES: (a) Board of Governors of the Federal Reserve System, "Order Approving Formation of Bank Holding Companies," news release, September 22, 2008, available at www.federalreserve.gov/newsevents/press/orders/orders20080922a1.pdf (accessed November 4, 2009); (b) Ibid; (c) iBanknet, "Merrill Lynch Bank & Trust Co, FSB," available at www.ibanknet.com/scripts/callreports/getbank.aspx?ibnid=usa_2577494 (accessed November 4, 2009); (d) iBanknet, "Woodlands Commercial Bank," available at www.ibanknet.com/scripts/callreports/getbank.aspx?ibnid=usa_3376461 (accessed November 4, 2009).

In light of the huge disparities between the size of each major investment bank and the size of its depository institution subsidiary, it is highly unlikely that the insured bank subsidiary could cause any serious financial problem for the parent investment bank or significantly enhance the financial problems the parent company created for itself through its own operations.

Accordingly, the banks that encountered financial problems got into trouble the old-fashioned way—by making imprudent loans or taking imprudent financial risks. There is no evidence of significant amounts of risky securities activities. Similarly, the investment banks got into trouble in their own way and not because of their affiliations with small banks. Thus, the repeal of the affiliation provisions of the Glass-Steagall Act had no significant effect whatever in triggering or enhancing the financial crisis.

Credit Default Swaps

What about the other claimed "deregulation" that is alleged to have caused the financial crisis? Here the culprits are derivatives, and particularly credit default swaps (CDS). These instruments are not as well understood, so they have given rise to wild and truly absurd claims about their responsibility for the financial crisis. Routinely, the media contains unchallenged statements to the effect that CDS "brought the banking system to its knees."[23] Dozens of articles have been written about the supposed dangers of CDS, without anyone having to explain how, exactly, CDS would or could have such a dire effect.[24] Two *Outlooks* have outlined how CDS work and questioned how they could have the key role in the financial crisis so readily assigned to them.[25] I will not repeat the analysis in those pieces but instead will focus on two cases—the bankruptcy of Lehman Brothers and the Fed's rescue of AIG. Between them, they tell us a lot about whether CDS are the dangerous instruments they are made to appear.

Lehman Brothers was a major player in the CDS market, but there is no indication that Lehman was forced into bankruptcy by its CDS obligations. Instead, the most thorough accounts of the Lehman crisis in 2008 attribute the company's collapse to its funding sources' lack of confidence in the firm's viability.[26] When Lehman went into bankruptcy, the firm had over 900,000 outstanding derivative

contracts.[27] This would not be unusual for a dealer, which usually tries to hedge all its CDS obligations with an offsetting contract, thus doubling the number of its contracts. Once in bankruptcy, Lehman has not been able to perform on any of its CDS obligations, and many of them may have been canceled by Lehman's trustee, yet there have been no reports of any counterparties being forced into bankruptcy because Lehman was unable to perform. This is not surprising, given how CDS work. A CDS can be viewed as an insurance or guarantee contract. Where Lehman was functioning as the guarantor, it promised its counterparty that if a company we shall call *A* defaults on its obligations, Lehman will pay the counterparty a notional amount specified in the guarantee contract. In return, Lehman would receive a quarterly payment from its counterparty known as a premium.

What happened when Lehman failed? Clearly, its counterparty in the CDS on *A* would not be paid, but what loss had the counterparty suffered? The answer is that Lehman's counterparty has suffered no significant loss unless company *A* has also defaulted. In that case, Lehman would have owed its counterparty the notional amount, but was unable to pay. In the absence of a default by company *A*, Lehman's counterparty had a simple remedy—it could go back into the market and purchase another CDS to cover its exposure to company *A*, agreeing to pay the necessary premium to that new guarantor. It is similar to what would have happened if a homeowner's fire insurer had failed before the homeowner had a fire. The homeowner would simply call his broker and buy another policy. The loss, if any, would have been negligible. In other words, Lehman's failure to perform on its CDS would only have been significant if many companies whose obligations Lehman was covering through CDS had defaulted before or simultaneously with Lehman's default. That apparently did not happen in September 2008, when Lehman went into bankruptcy. Although many markets froze at that moment, the CDS market continued to function, and most, if not all, of Lehman's counterparties probably covered their exposures with new CDS.

This was the state of things when Lehman was the party that had issued CDS guarantees to protect the exposures of others. What happened when it was Lehman's debt itself that was protected by CDS written by other CDS market participants? There were CDS in the notional amount of approximately $72 billion written on Lehman, and Lehman's bankruptcy meant that all the parties that had written protection on Lehman were now obligated to pay their counterparties. Within a month of the Lehman bankruptcy, however, all of these obligations had been settled by the exchange of $5.2 billion among hundreds of counterparties. The relatively small amount that was ultimately necessary to settle the CDS on Lehman probably reflects in part the fact that the CDS market naturally disperses risks among many counterparties—just as the advocates of the CDS system have claimed—and also the fact that the notional amount outstanding on any reference entity (the issuer of the obligation that is covered—in this case Lehman) is always many times the actual amount of the loss. Moreover, there is no indication that the bankruptcy of Lehman—a firm with assets of about $600 billion—resulted in such large losses for any of the guaranteeing parties that their solvency or stability was threatened. One would imagine that, if CDS are the source of such a dangerous "interconnectedness" in the financial system, the bankruptcy of a major player like Lehman would have had a greater effect on the CDS market than it did. Yet that market apparently took the Lehman bankruptcy in stride.

AIG, which was rescued by the Fed with loans that totaled over $175 billion, also offers some important perspective. AIG got into serious trouble because a substantial portion of the CDS it wrote were guaranteeing collateralized debt obligations (CDOs) backed by pools of MBS that were in turn backed by pools of subprime and Alt-A mortgages—the toxic assets that later drove many large banks and other financial institutions to the brink of insolvency. Although the exact terms of these CDS are not known, AIG was probably guaranteeing to the holders of these CDOs that it would reimburse their losses if the securities lost value. In addition, AIG apparently did not hedge its risks—a very unusual and risky approach to writing swaps. Thus, AIG is a kind of worst-case example; it wrote swaps without hedging, and it wrote them on the instruments that had caused the worst losses to hundreds (if not thousands) of other financial institutions. In other words, it is not an example of what would generally happen in the CDS market, but rather what would and should almost never happen. Lawyers often note that hard cases make bad law, and in the same sense, basing policy on a worst-case scenario like AIG would also produce a bad set of rules.

Nevertheless, it is worth considering what actually would have happened if AIG had been allowed to fail. In this thought experiment, we will assume that AIG is different from Lehman because its obligation to reimburse its

counterparties had already in a sense matured; the CDOs it was covering had already lost value when its problems arose. As a result, as contemplated in almost all CDS contracts, its counterparties were seeking collateral from AIG to assure themselves that when they made a claim for their losses AIG would be able to pay. AIG did not have sufficient funds to provide collateral and thus would have defaulted on its obligations if the Fed had not stepped in. If AIG had been allowed to fail, and had not performed under its CDS obligations, its counterparties would have suffered real losses. This is different from the hypothetical circumstance of the homeowner and the fire insurance company. In this case, the "fire" has occurred—at least in part—before the insurance company has failed, and the homeowner has suffered a real loss that the failed insurance company cannot cover. René M. Stulz quantifies the potential loss to AIG as follows:

> By August 2008, AIG had a total amount of unrealized losses on its credit default swaps of $26.2 billion and had posted collateral worth $16.5 billion. . . . On September 16, after having been downgraded by S&P and Moody's, AIG had to post $14.5 billion additional collateral. It could not meet these collateral requirements without a bailout.[28]

This implies that AIG's total uncollateralized CDS obligations on the CDOs were somewhere between $25 billion and $41 billion. It is doubtful that this loss, spread among what were probably hundreds of counterparties worldwide, would have caused a systemic breakdown. In any event, it is important to recognize what an outlier AIG was in the swap market. It doubled down by taking only one side of swap contracts and did so massively, losing billions of dollars, covering an instrument that had been rated AAA—MBS backed by U.S. subprime mortgages—but which turned out to be a disastrous investment for virtually every financial institution that touched it.

Apart from AIG, it is difficult to find an example of a participant in the CDS market whose activities might have led to its insolvency. That was certainly not true of Lehman, which was a major market player. The fact that Lehman's failure did not seriously disrupt the CDS market, or cause serious losses for its CDS counterparties, strongly suggests that the dangers of CDS are wildly exaggerated. Under these circumstances, it is not at all clear that the failure to impose regulation on the derivative markets in 2000 was the deregulatory blunder it has been made out to be.

Conclusion

The causes of the financial crisis remain a mystery for many people, but certain causes can apparently be excluded. The repeal of Glass-Steagall by GLBA is certainly one of these, since Glass-Steagall, as applied to banks, remains fully in effect. In addition, the fact that a major CDS player like Lehman Brothers could fail without any serious disturbance of the CDS market, any serious losses to its counterparties, or any serious losses to those firms that had guaranteed Lehman's own obligations, suggests that CDS are far less dangerous to the financial system than they are made out to be. Finally, efforts to blame the huge number of subprime and Alt-A mortgages in our economy on unregulated mortgage brokers must fail when it becomes clear that the dominant role in creating the demand—and supplying the funds—for these deficient loans was the federal government.

Notes

1. See Thomas R. Keene and Andrew Frye, "Dinallo Says Problem Is Regulatory Structure, Not Pay," Bloomberg.com, October 23, 2009, available at www.bloomberg.com/apps/news?pid=20601087&sid=aNrJwDBv5jYU (accessed November 2, 2009).

2. *Commodity Futures Modernization Act of 2000*, Public Law 106-554, *U.S. Statutes at Large* 114 (2000): 2763, appendix E.

3. Lynn Stout, "Regulate OTC Derivatives by Deregulating Them," *Regulation* 32, no. 3 (Fall 2009): 30–41.

4. White House, "President Obama Promotes Tougher Rules on Wall Street to Protect Customers," news release, September 19, 2009, available at www.whitehouse.gov/the_press_office/Weekly-Address-President-Obama-Promotes-Tougher-Rules-on-Wall-Street-to-Protect-Consumers (accessed November 2, 2009).

5. John B. Taylor, *Getting Off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis* (Stanford: Hoover Institution Press, 2009), 15–21.

6. See *Banking Act of 1933*, Public Law 73-89, *U.S. Statutes At Large* 48 (1933) 162. Section 16, as incorporated in 12 U.S. C 24 (Seventh), both prohibits banks from underwriting and dealing in securities and permits them to act as brokers, as follows: "The business of dealing in securities and stock by the association shall be limited to purchasing and selling such securities and stock without recourse, solely upon the order, and for the account of, customers, and in no case for its own account, and the association shall not underwrite any issue of securities or stock."

7. U.S. Code 12 § 378.

8. Ibid., 12 § 377.

9. Ibid., 12 § 78.

10. *Gramm-Leach-Bliley Act*, Public Law 106-102, *U.S. Statutes at Large* 113 (1999): 1338.

11. See, for example, the work cited in James R. Barth, R. Dan Brumbaugh Jr., and James A. Wilcox, "The Repeal of Glass-Steagall and the Advent of Broad Banking," *Journal of Economic Perspectives* 14, no. 2 (Spring 2000), 191–204.

12. Office of the Comptroller of the Currency, "Investment Securities," Code of Federal Regulations 12, § 1.2(a), 1.2(b), available at http://www.occ.gov/fr/cfrparts/12CFR01.htm#%C2%A7%201.02%20Definitions (accessed November 2, 2009).

13. Ibid.

14. *U.S. Code* 12 § 371c and 371c-1.

15. Ibid., 12 § 371c(c)(1).

16. Ibid., 12 § 1(a)(1).

17. Ibid., 12 § 371c(a)(3).

18. Ibid., 12 § 371c(b)(7).

19. *Code of Federal Regulations* 12 § 5.39(h)(5).

20. *Code of Federal Regulations* 12 § 5.39(h)(1)(i) and (ii).

21. *U.S. Code* 12 § 1818(i).

22. Board of Governors of the Federal Reserve System, "The Supervisory Capital Assessment Program: Overview of Results," news release, May 7, 2009, available at www.federalreserve.gov/newsevents/press/bcreg/bcreg20090507a1.pdf (accessed November 4, 2009).

23. Lynn Stout, "Regulate OTC Derivatives by Deregulating Them," 30.

24. Ibid.

25. See Peter J. Wallison, "Everything You Wanted to Know about Credit Default Swaps—but Were Never Told," AEI *Financial Services Outlook* (December 2008), available at www.aei.org/outlook/29158; and Peter J. Wallison, "Unnecessary Intervention: The Administration's Effort to Regulate Credit Default Swaps," AEI *Financial Services Outlook* (August 2009), available at www.aei.org/ outlook/100065.

26. See, for example, David Wessel, *In Fed We Trust: Ben Bernanke's War on the Great Panic* (New York: Crown Business, 2009).

27. Subcommittee on Commercial and Administrative Law of the House Committee on the Judiciary, "Too Big to Fail: The Role for Bankruptcy and Antitrust Law in Financial Regulation Reform," 111th Cong., 1st sess., 2009, 1–13, available at http://judiciary.house.gov/hearings/pdf/Miller091022.pdf (accessed November 4, 2009).

28. René M. Stulz, "Credit Default Swaps and the Credit Crisis," (Working Paper 15384, National Bureau of Economic Research, Cambridge, MA, September 2009), available at www.nber.org/papers/w15384 (accessed November 4, 2009).