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## The Global Financial Crisis and Proposed Regulatory Reform

*Randall D. Gwynn\**

The U.S. real estate bubble that popped in 2007 launched a sort of impersonal *chevauchée*<sup>1</sup> that randomly destroyed trillions of dollars of value for nearly a year. It culminated in a worldwide financial panic during September and October of 2008.<sup>2</sup> The most serious recession since the Great Depression followed.<sup>3</sup> Central banks and governments throughout the world responded by flooding the markets with money and other liquidity, reducing interest rates, nationalizing or providing extraordinary assistance to major financial institutions, increasing government spending, and taking other creative steps to provide financial assistance to the markets.<sup>4</sup> Only recently have markets begun to stabilize, but they remain fragile, like a man balancing on one leg.<sup>5</sup>

The United States and other governments have responded to the financial crisis by proposing the broadest set of regulatory reforms

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\* Partner and Head of the Financial Institutions Group, Davis Polk & Wardwell LLP, New York, New York. © 2009, Davis Polk & Wardwell LLP. I am deeply indebted to Pengyu Jeff He, Reena Agrawal Sahni, and Cristina Diaz Fong for their excellent assistance in preparing this Article. This Article covers developments announced prior to October 9, 2009. This Article is the result of research done in preparation for a presentation at the Annual International Conference, Dubai Economic Forum, Oct. 27–28, 2009.

1. A *chevauchée* is a type of raid used by medieval armies to spread terror among civilian populations and turn them against their governments by randomly burning and plundering rich and thickly populated towns and countryside. See DESMOND SEWARD, *THE HUNDRED YEARS WAR* 38 (1978).

2. Kevin Warsh, Governor, Bd. of Governors of the Fed. Reserve Sys., Address at the Council of Institutional Investors 2009 Spring Meeting: The Panic of 2008 (Apr. 6, 2009), available at <http://www.federalreserve.gov/newsevents/speech/warsh20090406a.htm>.

3. See Ben S. Bernanke, Chairman, Fed. Reserve, Address at the 2009 Commencement of the Boston College School of Law (May 22, 2009), available at <http://www.federalreserve.gov/newsevents/speech/bernanke20090522a.htm>.

4. Steven M. Davidoff & David T. Zaring, *Big Deal: The Government's Response to the Financial Crisis*, 61 ADMIN. L. REV. 463 (2009); Gary Dorsch, *After Shocks from the October Financial Markets Crash*, MARKET ORACLE, Nov. 7, 2008, <http://www.marketoracle.co.uk/Article7166.html>.

5. I am indebted to Gary Crittenden, former Chief Financial Officer of Citigroup, for this metaphor.

since the 1930s.<sup>6</sup> There is widespread belief that the financial crisis was caused by the free markets being too free. If we had better government regulation and supervision, and more of it, according to this way of thinking, we could have avoided the financial crisis and would prevent future crises from ever happening again.<sup>7</sup> These beliefs may or may not be correct, but governments are moving ahead as if they were. Heaven help anyone who stands in their way!<sup>8</sup>

This Article tries to identify who or what caused the financial crisis, how the crisis spread, how bad it is likely to become, and whether things are likely to become better or worse. It then discusses the U.S. and international government programs that were designed or implemented to arrest the crisis. Finally, it discusses the U.S. and international regulatory proposals designed to prevent future crises, or at least reduce their likelihood or severity.

### I. THE FINANCIAL CRISIS

The global financial crisis has been characterized by an unexpected collapse of asset values; extreme uncertainty, fear, and pessimism about future asset values; a severe contraction of credit and risk-taking; rising unemployment; and a shrinkage in general economic output. Hundreds of banks have failed or been bailed out, and hundreds more will fail before the crisis is over. Trillions of dollars of asset values have been wiped out. Fortunes have been lost. Some families have lost their homes. Unemployment has soared.

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6. Barack Obama, Remarks by the President on 21st Century Financial Regulatory Reform (June 17, 2009), *available at* [http://www.whitehouse.gov/the\\_press\\_office/Remarks-of-the-President-on-Regulatory-Reform](http://www.whitehouse.gov/the_press_office/Remarks-of-the-President-on-Regulatory-Reform) (“[M]y administration is proposing a sweeping overhaul of the financial regulatory system, a transformation on a scale not seen since the reforms that followed the Great Depression.”).

7. *See, e.g.*, Helene Cooper & Charlie Savage, *A Bit of ‘I Told You So’ Outside World Bank Talks*, N.Y. TIMES, Oct. 11, 2008, at A14 (“Year after year of unregulated free-market economics have finally come home to roost.”) (citations omitted); *What’s Worse Than a Flawed Bailout?*, N.Y. TIMES, Sept. 30, 2008, at A26 (“[T]he free market in finance, unregulated and unsupervised, has failed.”).

8. At least one member of the U.S. Financial Crisis Inquiry Commission (FCIC), which was established by Congress to investigate the causes of the financial crisis and report to Congress by December 15, 2010, has urged Congress to wait until the FCIC has finished identifying and analyzing the causes before it passes legislation to address the crisis. *See* Brian Burnsed, *Financial Crisis: Time For More Study, or Action?*, BUS. WK., Sept. 17, 2009, *available at* [http://www.businessweek.com/blogs/money\\_politics/archives/2009/09/financial\\_crisi.html](http://www.businessweek.com/blogs/money_politics/archives/2009/09/financial_crisi.html). The FCIC is modeled on the Pecora Commission, which performed a similar function in the United States in the 1930s. *See* LAWRENCE WHITE, *THE CRISIS IN AMERICAN BANKING* 97–100 (1995).

Ponzi schemes have been exposed. Economic output has slowed or even shrunk.

The first signs of the financial crisis appeared in 2007, when U.S. real estate prices began to collapse and early delinquencies in recently underwritten subprime mortgages began to spike. Some investors started shorting real estate markets.<sup>9</sup> The leveraged credit market dried up and billions of dollars of pending buy-out deals collapsed. Billions more in mortgage-backed securities (MBS) and collateralized debt obligations (CDOs) were written down. Several CEOs of major U.S. financial institutions lost their jobs.<sup>10</sup> Others saved their jobs by obtaining capital infusions from sovereign wealth funds, hedge funds, private equity funds, and other pools of risk capital.

The carnage quickly spread to Europe, where real estate prices also started to collapse, and many financial institutions had large exposures to both U.S. and European real estate investments.<sup>11</sup> Real estate prices continued to collapse in early 2008, resulting in billions of dollars of additional CDO markdowns, the collapse and rescue of Northern Rock and Bear Stearns, and extraordinary measures by the Federal Reserve to de-stigmatize the discount window for commercial banks and make emergency liquidity facilities available to the large investment banks.<sup>12</sup> As the Federal Reserve responded to the crisis by reducing interest rates and flooding the market with money, the value of the dollar plummeted relative to other currencies.<sup>13</sup> By the summer of 2008, the price of oil, agricultural products, and other commodities—which are generally denominated

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9. Vikas Bajaj & Edmund L. Andrews, *Broader Losses from U.S. Mortgages*, N.Y. TIMES, Oct. 24, 2007, at A1.

10. Martha Graybow, *American Chief Executives Face Tenuous Times*, N.Y. TIMES, Jan. 9, 2008, available at <http://www.nytimes.com/2008/01/09/business/worldbusiness/09iht-exec.1.9096108.html>.

11. The impact of the financial crisis on Asia has been more indirect—a drop in demand for Asian exports from the United States and Europe; losses by Asian sovereign wealth funds and governments on their investments in U.S. and European financial institutions; the sale by some U.S. and European financial institutions of their minority investments in the large Chinese banks; and a drop in the market capitalization of listed Asian companies.

12. Landon Thomas, Jr. & Matthew Saltmarsh, *European Regulators Move Swiftly to Rescue Two Lenders*, N.Y. TIMES, Sept. 28, 2008, at C2.

13. Jack Healy, *As Dollars Pile Up, Uneasy Traders Lower Currency's Value*, N.Y. TIMES, May 22, 2009, at B1.

in U.S. dollars—soared almost in inverse proportion to any declines in the dollar.<sup>14</sup>

The interbank credit markets seized up. The market value of U.S. and European financial institutions, especially U.S. mortgage giants Fannie Mae and Freddie Mac,<sup>15</sup> collapsed throughout the summer, putting increasing pressure on banking regulators throughout the world. The U.S. government was particularly concerned about Fannie Mae and Freddie Mac because of their size and importance to the U.S. housing market. On June 30, 2008, these two institutions had combined liabilities of over \$5.5 trillion, on a combined total regulatory capital base of approximately \$100 billion.<sup>16</sup> Moreover, there was a widespread perception that their obligations were backed by an implicit guarantee from the U.S. government. The U.S. Treasury asked Congress for a blank check—the power to inject unlimited amounts of additional capital into Fannie and Freddie—arguing that if the market knew that Treasury had a “bazooka” instead of a “squirt gun,” it was substantially less likely that Treasury would be required to provide any financial assistance at all. Congress gave Treasury that authority on July 30, 2008.<sup>17</sup>

The market value of Fannie and Freddie, however, continued to collapse throughout August.<sup>18</sup> The government determined that

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14. Adam Schreck, *Soaring Crude Pushes Gas Closer to \$4*, WASH. POST, May 20, 2008, at D02.

15. Fannie Mae is a U.S. government-sponsored enterprise (GSE) formally known as the Federal National Mortgage Association. Freddie Mac is a U.S. GSE formally known as the Federal Home Loan Mortgage Corporation. Their mission is to help provide liquidity to the U.S. residential market by purchasing or guaranteeing payment on certain residential mortgages. See FannieMae.com, About Fannie Mae, <http://www.fanniemae.com/kb/index?page=home&cc=aboutus> (last visited Feb. 13, 2010); FreddieMac.com, Our Mission, [http://www.freddie.mac.com/corporate/company\\_profile/our\\_mission/](http://www.freddie.mac.com/corporate/company_profile/our_mission/) (last visited Feb. 13, 2010).

16. See Fannie Mae, Quarterly Report for the Quarter Ended June 30, 2008 (Form 10-Q) (Aug. 8, 2008), available at <http://www.sec.gov/Archives/edgar/data/310522/000095013308002717/w58421e10vq.htm>; Freddie Mac, Quarterly Report for the Quarter Ended June 30, 2008 (Form 10-Q) (Aug. 6, 2008), available at <http://www.sec.gov/Archives/edgar/data/1026214/000102621408000026/f58905e10vq.htm>.

17. See Housing and Economic Recovery Act of 2008, Pub. L. No. 110-289, 122 Stat. 2654 (2008).

18. Stephen Bernard & Alan Zibel, *Fannie Mae, Freddie Mac Shares Plummet, Real Clear Markets*, Aug. 21, 2008, [http://www.realclearmarkets.com/news/ap/finance\\_business/2008/Aug/21/fannie\\_mae\\_freddie\\_mac\\_shares\\_plummet.html](http://www.realclearmarkets.com/news/ap/finance_business/2008/Aug/21/fannie_mae_freddie_mac_shares_plummet.html) (last visited Feb. 13, 2010).

many of their assets needed to be written down, and concluded that they would not be able to plug the hole by raising additional capital from the capital markets. Alarmed that fear of a failure of Fannie or Freddie could pull down the rest of the financial system, the U.S. Treasury decided to exercise its new “bazooka” authority on September 6, 2008—approximately five weeks after receiving it—concluding that such action would calm the financial markets. The government put Fannie and Freddie into conservatorship and pledged to inject up to \$200 billion of new capital in the form of senior preferred stock and warrants.<sup>19</sup> The terms of the transaction resulted in an immediate dilution of 80% of common shareholder value, and a sharp drop in the value of junior preferred stock. The value of Fannie’s and Freddie’s senior and subordinated debt, however, soared because it was senior to the government’s investment.

Rather than calming the markets, the “rescue” of Fannie and Freddie may have added fuel to the worldwide financial panic that continued throughout September and October. In any event, on the following weekend Lehman Brothers and AIG collapsed, and Merrill Lynch was bought at a fire-sale price by Bank of America.<sup>20</sup> The Federal Reserve exercised its emergency powers under Section 13(3) of the Federal Reserve Act to rescue AIG, but the government allowed Lehman Brothers to fail.<sup>21</sup> The terms of the AIG rescue were similar to Fannie and Freddie—the government received senior preferred stock and warrants, resulting in an immediate dilution of 80% of common shareholder value, and a sharp drop in the value of junior preferred stock.<sup>22</sup> But the value of AIG’s senior and subordinated debt soared, and the counterparties on its credit default swaps and other financial contracts were made whole.

After the AIG collapse, the U.S. Treasury asked Congress for express authority to invest up to \$700 billion in toxic mortgage and

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19. Dawn Kopecki, *Lockhart’s Fannie, Freddie Guarantee Remarks Stir Up Confusion*, BLOOMBERG.COM, Oct. 23, 2008, available at <http://www.bloomberg.com/apps/news?pid=20670001&sid=ajIEoZComm1k>.

20. Charlie Gasparino, *Bank of America to Buy Merrill Lynch for \$50 Billion*, CNBC, Sept. 14, 2008, <http://www.cnbc.com/id/26708319/>.

21. See Craig Torres & Scott Lanman, *Fed Eschews Markets, Picks Winners and Losers in AIG, Lehman*, BLOOMBERG.COM, Sept. 17, 2008, available at <http://www.bloomberg.com/apps/news?pid=20601087&sid=ahHI4BgK8V10&refer=home>.

22. Nanette Byrnes, *AIG’s Uphill Battle*, BUS. WK., Feb. 26, 2009, available at [http://www.businessweek.com/bwdaily/dnflash/content/feb2009/db20090225\\_499189.htm](http://www.businessweek.com/bwdaily/dnflash/content/feb2009/db20090225_499189.htm).

other assets in order to clean up the balance sheets of the U.S. financial sector.<sup>23</sup> While Treasury's request for what was later called the Troubled Asset Relief Program (TARP) was pending before Congress, Washington Mutual (the largest thrift in the United States) failed and was sold to JP Morgan; Wachovia was rescued by Citigroup and then Wells Fargo; Fortis and Dexia were nationalized by the Dutch, Belgian and French governments; Ireland announced a program to recapitalize its banking system; and the Icelandic banking system collapsed and a large portion of its assets were seized by the U.K. government.<sup>24</sup> Commodity prices, which had spiked during the summer as the dollar fell, reversed course and began to fall as the market began to fear a worldwide depression more than a weakened U.S. dollar.<sup>25</sup>

The House rejected TARP on September 30, 2008, resulting in the largest one-day drop in the Dow Jones Industrial Average of 778 points, or \$1.3 trillion in market value. The Senate quickly passed a bill during the first week of October, the House reconsidered its action, and President Bush signed the bill into law on the same day the House approved it.<sup>26</sup>

During the second week in October, the United Kingdom announced the terms of its rescue program for the Royal Bank of Scotland Group and Lloyds-HBOS, two of the largest banks in the world, which were on the brink of collapse.<sup>27</sup> The U.S. Treasury also announced its Capital Purchase Program (CPP), which involved making investments of up to \$250 billion in the preferred stock of U.S. insured depository institutions and their holding companies.<sup>28</sup> The U.S. Federal Deposit Insurance Corporation (FDIC) temporarily increased deposit insurance coverage to \$250,000 per

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23. Mark Thompson, *7 Questions About the \$700 Billion Bailout*, TIME.COM, Sept. 24, 2008, available at <http://www.time.com/time/politics/article/0,8599,1843941,00.html>.

24. Chris Dolmetsch, *Subprime Collapse to Global Financial Meltdown: Timeline*, BLOOMBERG.COM, Oct. 13, 2008, available at <http://www.bloomberg.com/apps/news?pid=20601208&sid=aleqkSjAAw10>.

25. John Wilen, *Dollar's Fall Stokes Spike in Oil, Gas Prices*, S.F. CHRON., Mar. 13, 2008, at C3.

26. Jay Newton, *What the Bailout-Bill Crisis Has Wrought*, TIME.COM, Oct. 3, 2008, available at <http://www.time.com/time/politics/article/0,8599,1847205,00.html>.

27. Ross Kerber, *Citizens Bank Parent to Be Part of British Rescue*, BOSTON GLOBE, Oct. 9, 2008, at E1.

28. Henry M. Paulson, Jr., *Fighting the Financial Crisis, One Challenge at a Time*, N.Y. TIMES, Oct. 18, 2008, at A27.

person per institution, as well as announcing the creation of the Temporary Liquidity Guarantee Program, which would provide credit support to debt capital market issuances and non-interest bearing transaction accounts.<sup>29</sup>

Week three in October resulted in a \$54 billion rescue of UBS by the Swiss National Bank, and the creation of a €500 billion rescue program by Germany to support its banking sector.<sup>30</sup> The next several weeks saw a stampede of U.S. financial institutions seeking to acquire insured depository institutions in the United States in order to qualify for CPP money. The U.S. government announced an additional \$20 billion in capital support and a related \$301 billion asset guarantee program for Citigroup in late November.<sup>31</sup> The U.S. government announced a similar program of extraordinary support for Bank of America in early 2009 to facilitate its acquisition of Merrill Lynch, which continued to hemorrhage value between signing and closing.<sup>32</sup> Similar failures, rescues, and financial assistance programs were announced throughout 2009 after the genuine panic receded. For a timeline of these financial crisis events, see Annex A, which is borrowed from *The Davis Polk Financial Crisis Manual*.<sup>33</sup>

It will be many years before the definitive account is written on the central cause or causes of the financial crisis. But several people have offered theories. Federal Reserve Chairman Ben Bernanke has identified global imbalances in savings rates and cash flows as the root cause.<sup>34</sup> Former Fed Chairman Alan Greenspan has stressed the

29. Federal Deposit Insurance Corporation, Temporary Guarantee Program Frequently Asked Questions (Nov. 16, 2009), <http://www.fdic.gov/regulations/resources/TLGP/faq.html>.

30. Nelson D. Schwartz, *UBS Gets Bailout, and Credit Suisse Will Seek New Capital*, N.Y. TIMES, Oct. 16, 2008, available at <http://www.nytimes.com/2008/10/16/business/worldbusiness/16iht-sbanks.4.17023713.html>.

31. Sarah Jones, *Europe Stocks Rise on Citigroup Rescue; Deutsche Bank, BHP Gain*, BLOOMBERG.COM, Nov. 24, 2008, available at <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aXSCLxGmWpuk>.

32. Daniel Kruger, *Fed Says Merrill Lynch Is No Longer Primary Dealer (Update 1)*, BLOOMBERG.COM, Feb. 11, 2009, available at <http://www.bloomberg.com/apps/news?pid=20601087&sid=aVWzNaO9CD9M&refer=home>.

33. THE DAVIS POLK FINANCIAL CRISIS MANUAL: A GUIDE TO THE LAWS, REGULATIONS AND CONTRACTS OF THE FINANCIAL CRISIS (2009) [hereinafter DPFCM], available at <http://www.davispolk.com/files/Publication/d1ab7627-e45d-4d35-b6f1-ef356ba68f2/Presentation/PublicationAttachment/2a31cab4-3682-420e-926f-054c72e3149d/fcm.pdf>.

34. See, e.g., Ben S. Bernanke, Chairman, Fed. Reserve, Speech at Morehouse College: Four Questions About the Financial Crisis (Apr. 14, 2009), available at



same global imbalances, which he characterized as “excessive” saving in China and oil producing countries, and huge investments of such savings in U.S. assets, as well as the surprising failure of the free market system to self-correct.<sup>35</sup> Paul Volcker, the Fed Chairman before Alan Greenspan, emphasized the repeal of Glass-Steagall as one of the principal causes.<sup>36</sup> Lord Turner identified macroeconomic trends, excessive consumer and business leverage, misplaced reliance on mathematical models, and pro-cyclical policies as among the chief causes of the financial crisis.<sup>37</sup> French finance minister Christine Lagarde points to the decision by U.S. authorities to allow Lehman Brothers to fail as a key reason why the financial crisis became so severe.<sup>38</sup> The de Larosi re Group emphasized the U.S. factors that contributed to causing the financial crisis, including low-interest rate policies and the creation of complex securitization products that financial institutions did not understand.<sup>39</sup> Others see rating agencies and mark-to-model accounting for assets with no ready market as creating a pernicious feedback loop that caused excessive mark-downs of illiquid assets. Still others blame weak risk management and a failure to make tough decisions during boom years.

Some have blamed mortgage brokers for deceiving consumers into taking risks they could not afford by offering them complex mortgage loans with teaser rates and flexible payment options that

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<http://www.federalreserve.gov/newsevents/speech/bernanke20090414a.htm>.

35. See, e.g., ALAN GREENSPAN, *THE AGE OF TURBULENCE: ADVENTURES IN A NEW WORLD* (2007); Alan Greenspan, *The Fed Didn't Cause the Housing Bubble*, WALL ST. J., Mar. 11, 2009, available at <http://online.wsj.com/article/SB123672965066989281.html>; Testimony of Alan Greenspan Before the Committee of Government Oversight and Reform (Oct. 23, 2008), available at <http://oversight.house.gov/documents/20081023100438.pdf>.

36. See Statement of Paul Volcker Before the House Financial Services Committee (Sept. 24, 2009), available at [http://www.house.gov/apps/list/hearing/financialsvcs\\_dem/volcker.pdf](http://www.house.gov/apps/list/hearing/financialsvcs_dem/volcker.pdf); Matthew Benjamin and Christine Hopper, *Volcker Urges Dividing Investment, Commercial Banks (Update 1)*, BLOOMBERG, Mar. 6, 2009, <http://www.bloomberg.com/apps/news?pid=20601087&sid=atSsZ5Fp8xuY&refer=home>.

37. See FINANCIAL SERVICES AUTHORITY, *THE TURNER REVIEW: A REGULATORY RESPONSE TO THE GLOBAL FINANCIAL BANKING CRISIS* (Mar. 2009), available at [http://www.fsa.gov.uk/pubs/other/turner\\_review.pdf](http://www.fsa.gov.uk/pubs/other/turner_review.pdf).

38. Tamara Vidaillet & Veronique Tison, *Letting Lehman Go Was Big Mistake: French Finmin*, REUTERS, Oct. 8, 2008, (Patrick Graham ed.) <http://www.reuters.com/article/idUSTRE49735Z20081008>.

39. THE DE LAROSI RE GROUP, *THE HIGH-LEVEL GROUP ON FINANCIAL SUPERVISION IN THE EU* (Feb. 25, 2009), available at [http://ec.europa.eu/internal\\_market/finances/docs/de\\_larosi re\\_report\\_en.pdf](http://ec.europa.eu/internal_market/finances/docs/de_larosi re_report_en.pdf).

the consumers could not understand.<sup>40</sup> Others say that subprime and other borrowers, seeing the opportunity to use the real estate bubble to their advantage, rolled the dice and are now simply disappointed that their gamble did not pay off.<sup>41</sup> Still others blame government policies that encouraged investors to take excessive risk by giving them reason to believe that some financial institutions—like mortgage giants Fannie Mae and Freddie Mac—were “too big or complex to fail.”<sup>42</sup> Still others blame executive compensation policies that do not require senior managers to internalize the costs of excessive risk-taking.<sup>43</sup> Still others blame a combination of government policies and inherent market failures.<sup>44</sup>

Many regulators and other policymakers, such as U.S. Treasury Secretary Tim Geithner, stress the lack of adequate regulatory or supervisory powers—especially the failure of any single regulator to have adequate power to gather information about or regulate the “financial system” as a whole—the existence of regulatory arbitrage, the lack of resolution authority over systemically important financial institutions, and the lack of power to regulate over-the-counter

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40. See, e.g., Letter from Barney Frank, Congressman, 4th Cong. Dist. of Mass., U.S. Cong. to Constituents About the Causes of the Economic Crisis (Oct. 11, 2008), available at <http://www.house.gov/frank/docs/2008/08-11-08-economic-crisis-letter.html>; Barney Frank, Congressman, 4th Cong. Dist. of Mass., U.S. Cong., Speech to U.S. House of Representatives: The Great Economic Hole (Apr. 2, 2009), available at <http://www.house.gov/frank/speeches/2009/04-02-09-great-economic-hole.html>.

41. See, e.g., David Reilly, *Mortgage Bombs, Quiet for Now, Await Next Boom*, BLOOMBERG.COM, June 24, 2009, available at <http://www.bloomberg.com/apps/news?pid=20601039&sid=asCPzYMnjbE4>; Kathleen Pender, *Why We Shouldn't Be Bailing out Subprime Lenders or Borrowers*, SFGATE.COM, Apr. 22, 2007, available at [http://articles.sfgate.com/2007-04-22/business/17241101\\_1\\_subprime-mess-bail-conventional-mortgage](http://articles.sfgate.com/2007-04-22/business/17241101_1_subprime-mess-bail-conventional-mortgage); Eli Lehrer & George Benston, *Subprime Borrowers: Not Innocents*, BLOOMBERG BUS. WK., 2008, available at [http://www.businessweek.com/debateroom/archives/2008/01/subprime\\_borrow.html](http://www.businessweek.com/debateroom/archives/2008/01/subprime_borrow.html).

42. See, e.g., Peter Wallison, *Congress Is the Real Systemic Risk*, WALL ST. J., Mar. 17, 2009, available at <http://online.wsj.com/article/SB123725470200650641.html>; Peter J. Wallison, Arthur F. Burns Fellow in Fin. Pol'y Studies, Am. Enter. Inst. for Pub. Pol'y & Res., Testimony Before the House Financial Services Committee (Mar. 17, 2009), available at [http://www.house.gov/apps/list/hearing/financialsvcs\\_dem/wallison031709.pdf](http://www.house.gov/apps/list/hearing/financialsvcs_dem/wallison031709.pdf).

43. See, e.g., Gene Sperling, Couns. to the Sec'y of the Treasury, U.S. Dept. of the Treasury, Testimony Before the House Financial Services Committee (June 11, 2009), available at [http://www.house.gov/apps/list/hearing/financialsvcs\\_dem/sperling.pdf](http://www.house.gov/apps/list/hearing/financialsvcs_dem/sperling.pdf); Lucian A. Bebchuk, Dir. of the Corp. Governance Program, Harvard Law School, Written Testimony Before the House Financial Services Committee (Jan. 22, 2010), available at [http://www.house.gov/apps/list/hearing/financialsvcs\\_dem/bebchuk.pdf](http://www.house.gov/apps/list/hearing/financialsvcs_dem/bebchuk.pdf).

44. See, e.g., RICHARD POSNER, *A FAILURE OF CAPITALISM: THE CRISIS OF '08 AND THE DESCENT INTO DEPRESSION* (2009).

derivatives.<sup>45</sup> Others say the regulators had all the power they needed, but failed to exercise it because they did not see the financial crisis coming. Others blame pro-cyclical capital, reserving or mark-to-market accounting policies, or the lack of adequate capital, liquidity and leverage requirements.

Although the final word on who or what caused the financial crisis has not been written, this financial crisis has followed a similar pattern that almost every other mania, panic, and crash has followed before this one. Some combination of cheap credit and excessive optimism creates a bubble in asset prices, typically in real estate or commodities. Eventually this bubble pops, resulting in a collapse in asset prices, a spike in interest rates, extreme uncertainty about “true” asset values, and excessive pessimism. This pattern has been described in great detail in Charles Kindleberger’s classic work, *Manias, Panics and Crashes: A History of Financial Crises*.<sup>46</sup>

It is a movie we have seen over and over again, at least since the 1600s, including the rise and collapse of tulip prices in 1637 and the European banking crisis that followed; the collapse of the South Sea bubble of 1720, which resulted in a U.K. banking crisis and claimed many personal fortunes, including that of Sir Isaac Newton; the Banking Panic of 1837, which wiped out a large number of banks throughout the United States; the Banking Panic of 1907, where J. Pierpont Morgan single-handedly restored confidence in the U.S. markets; the Roaring Twenties, 1929 Crash and the Great Depression of the 1930s; the U.S. savings and loan crisis of the late 1980s and early 1990s; and the global financial crisis of 2007–2009. In all of these cases, the prototypical pattern repeated itself, although with differences in each one.<sup>47</sup>

The recent global financial crisis was triggered by a collapse in U.S. real estate prices at a time when U.S. households, corporations, and financial institutions had built up huge levels of debt leverage. The first signs of the collapse appeared in the early delinquency rates of subprime mortgages underwritten in 2005, 2006, and 2007. This

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45. See U.S. TREASURY, A NEW FOUNDATION: REBUILDING FINANCIAL SUPERVISION AND REGULATION (June 17, 2009), *available at* [http://www.financialstability.gov/docs/regs/FinalReport\\_web.pdf](http://www.financialstability.gov/docs/regs/FinalReport_web.pdf).

46. Charles KINDLEBERGER, MANIAS, PANICS AND CRASHES: A HISTORY OF FINANCIAL CRISES (2005); *see also* CARMEN REINHART & KENNETH ROGOFF, THIS TIME IS DIFFERENT: EIGHT CENTURIES OF FINANCIAL FOLLY (2009).

47. See KINDLEBERGER, *supra* note 46, at 8–20.

led to increasing stress in the markets, a spike in interbank interest rates, the panic that occurred in September and October of 2008, and the recession in economic output that followed.<sup>48</sup>

Global macroeconomic factors certainly contributed to the shape and fury of this financial crisis. Excess savings in rapidly developing countries, such as China and oil-exporting countries, were invested in the debt of industrialized nations, driving down interest rates there. Cheap exports from developing countries (especially China and India) kept inflation low.<sup>49</sup> Increased productivity from the computer and information technology revolution also kept inflation low.<sup>50</sup> U.S. housing and monetary policy, Fannie and Freddie, and securitization also kept mortgage interest rates low. These conditions produced excessive optimism, talk of a “new paradigm” for economic growth and productivity, and cheap credit.<sup>51</sup> This in turn produced a real estate bubble in the United States and Europe, and a spike in consumer debt and financial institution leverage. Increased demand from developing countries also contributed to bubbles in commodities prices.

The global financial crisis spread through the financial sector first as these crises always do.<sup>52</sup> Banks and other financial institutions are characterized by high leverage, illiquid long-term assets, and extremely short-term liabilities (e.g., demand deposits). These characteristics make banks and other financial institutions susceptible to “runs on the bank.”<sup>53</sup> A run on a bank (or other financial institution) will result in a sudden and unexpected death spiral that is difficult to predict or arrest. Financial institutions are different from widget companies, which typically slide slowly into bankruptcy. History shows that financial institutions almost always fail suddenly and unexpectedly. This time it was no different. And Main Street immediately aligned against Wall Street.

The rational response of a financial institution to the threat of a run on the bank makes things worse. The rational response is to

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48. See POSNER, *supra* note 44, at 253.

49. *Id.* at 37–39.

50. See STEPHAN KUDYBA AND ROMESH DIWAN, INFORMATION TECHNOLOGY, CORPORATE PRODUCTIVITY, AND THE NEW ECONOMY 8–10 (2002).

51. *Id.* at 4–8.

52. ELLEN D. RUSSELL, NEW DEAL BANKING REFORMS AND KEYNESIAN WELFARE STATE CAPITALISM 34 (2006).

53. *Id.*

circle the wagons, increase capital and cash reserves, reduce the amount of credit extended, and otherwise reduce the institution's leverage. Because of a sort of inverse money multiplier effect, this type of response produces a severe contraction of credit throughout the system. This hurts everyone, the financial institution itself, other financial institutions, widget companies, and consumers. It is a negative externality like air pollution.

To illustrate how the money multiplier magnifies the expansion and contraction of credit throughout the system, consider the following example. Assuming a 10 fractional reserve requirement, every \$100 of whatever monetary base (e.g., central bank money) is deposited into the banking system will multiply by 10 times into \$1,000 of credit throughout the system ( $\$100 * 1/0.10$ ) when there is strong public confidence in the system. This can be called the triumph of the money multiplier in strong economies. The tragedy of the money multiplier during a financial crisis can be illustrated by the following modification of the example above. If banks are required or choose to circle the wagons during a financial crisis, so that fractional reserves grow from 10% to 20%, the money multiplier will amplify the contraction of credit. The amount of credit available in the system will shrink by 50% or more (i.e., \$500), not by only 10% or \$100. Available statistics show that the money multiplier fell from about 10 times in 2007 to less than 5 times by 2009,<sup>54</sup> resulting in a 50% or greater contraction in available money and credit.

Several factors made this financial crisis worse than it might otherwise have been. For example, the very instruments that helped manage credit risk, reduce the cost of credit and increase the availability of credit during normal times before the financial crisis made the crisis more violent. I am talking about mortgage-backed securities (MBS), collateralized debt obligations (CDOs), CDO-squared, collateralized securities lending programs, and credit default swaps.<sup>55</sup> Excessive confidence about financial models, as well as the failure of credit rating agencies to update their credit rating models as circumstances changed, also contributed to the existence and

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54. See The Disappearing Money Multiplier, <http://gregmankiw.blogspot.com/2009/01/disappearing-money-multiplier.html> (Jan. 5, 2009).

55. See Floyd Norris, *Credit Crisis? Just Wait for a Replay*, N.Y. TIMES, Dec. 28, 2007, at C1.

depth of the crisis.<sup>56</sup> Mark-to-model accounting rules, applied to assets with no ready market value, as well as the SEC's resistance to counter-cyclical loan loss reserves by banking institutions (in the name of preventing income management through the use of "cookie jars") may also have deepened the financial crisis.<sup>57</sup>

The recent global financial crisis is the worst crisis since the Great Depression.<sup>58</sup> It is far worse than the U.S. savings and loan crisis of the late 1980s and early 1990s.<sup>59</sup> But unemployment is not even close to the figures experienced during the Great Depression (yet), nor has sustained deflation or contraction in economic output occurred.<sup>60</sup> And the U.S. and world economies appear to be stabilizing.<sup>61</sup>

But there are serious dangers ahead. If the United States or other governments do not pull back the extraordinary assistance to the markets soon enough, we could experience runaway inflation that will be difficult to control. On the other hand, if the United States and other governments pull back too quickly, we could see another collapse in asset prices and a double-dip recession. Fed Chairman Ben Bernanke recently stated that "the recession is very likely over at this point, [but] it's still going to feel like a very weak economy for some time, as many people will still find that their job security . . . is not what they wish it was."<sup>62</sup> Most economists seem to share Chairman Bernanke's cautious optimism.<sup>63</sup> In contrast, Professor Nouriel Roubini has stated that "Data from the US—rising

56. Gretchen Morgenson, *House Panel Scrutinizes Rating Firms*, N.Y. TIMES, October 22, 2008, at B1.

57. Ann Lee, *Expect More Crisis*, FORBES.COM, July 17, 2008, available at [http://www.forbes.com/2008/07/16/banks-crisis-illiquid-oped-cx\\_al\\_0716lee.html](http://www.forbes.com/2008/07/16/banks-crisis-illiquid-oped-cx_al_0716lee.html).

58. John Harwood, *For Top Economic Aides, a Shaky Week in Office*, N.Y. TIMES, Jan. 24, 2010, at A11.

59. Michael Hudson and Jim Overton, *The Second Savings and Loan Scandal*, FORBES, Jan. 21, 2009, available at [http://www.forbes.com/2009/01/21/wamu-indymac-thrifts-oped-cx\\_mh\\_jo\\_0121hudsonoverton.html](http://www.forbes.com/2009/01/21/wamu-indymac-thrifts-oped-cx_mh_jo_0121hudsonoverton.html).

60. Carolyn Lochhead, *It's Not the Depression, Top Obama Adviser Says*, S.F. CHRON., Mar. 10, 2009, at A1.

61. Craig Torres, *Bernanke Sees 'Tentative Signs' Economy Stabilizing*, BLOOMBERG.COM, July 21, 2009, <http://www.bloomberg.com/apps/news?pid=20601087&sid=aLZRcOJqCKME>.

62. Sara Murray and Ann Zimmerman, *Bernanke: Recession 'Likely Over'*, WALL ST. J., Sept. 16, 2009, available at <http://online.wsj.com/article/SB125301730771311713.html>.

63. Phil Izzo, *Economists Call for Bernanke to Stay, Say Recession Is Over*, WALL ST. J., Aug. 11, 2009, available at <http://online.wsj.com/article/SB124993702311020493.html>.

unemployment, falling household consumption, still declining industrial production and a weak housing market—suggests that the U.S. recession is not over yet.”<sup>64</sup> He later predicted that “the economy is poised to slip back to anemic growth . . . in 2010, posing the risk of a double-dip recession.”<sup>65</sup>

Particularly troubling signs in the United States include the continued rise in unemployment, the percentages of mortgage loans that are either delinquent or in foreclosure, and growing delinquencies in the prime mortgage market. Most troubling of all, the FDIC has already closed nearly 100 banks in 2009 and has more than 400 additional banks (with \$300 billion in assets) on its “problem list” at a time when its deposit insurance fund is nearly exhausted.<sup>66</sup> While all 400 problem banks need not fail, a large percentage of them are likely to fail in the near future.

## II. PROGRAMS DESIGNED TO FIGHT THE CRISIS

I will give only a brief overview of the U.S. and international government programs that were designed or implemented to arrest the global financial crisis. Anyone who is interested in a more complete analysis of the programs proposed or implemented in the United States should consult *The Davis Polk Financial Crisis Manual*, which contains a thorough analysis of the laws, regulations, and contracts used in the United States to address the financial crisis. Portions of the manual are excerpted below.

### A. U.S. Programs

The U.S. programs designed to battle the financial crisis consist primarily of the Treasury’s Troubled Asset Relief Program (TARP)

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64. Nouriel Roubini, *A Phantom Recovery?* BUSINESS STANDARD, Aug. 19, 2009, available at <http://www.business-standard.com/india/news/nouriel-roubiniphantom-recovery/367421/>.

65. Nouriel Roubini, *Stop Asking When the Recession Will End*, FORBES, Aug. 20, 2009, available at <http://www.forbes.com/2009/08/19/recession-job-losses-nber-gdp-growth-opinions-columnists-nouriel-roubini.html>.

66. In order to replenish the deposit insurance fund, the FDIC has proposed that insured depository institutions prepay their quarterly risk-based assessments for the next three years by the end of 2009. Currently, the FDIC projects that its liquidity needs would exceed its liquid assets on hand beginning in the first quarter of 2010 (absent any action). The FDIC estimates that total prepaid assessments would amount to \$45 billion. See Federal Deposit Insurance Corporation, 12 C.F.R. § 327 (2009), available at <http://www.fdic.gov/regulations/laws/federal/2009/09proposeAD49.pdf>.

implemented under the Emergency Economic Stabilization Act of 2008 (EESA), as amended by the American Recovery and Reinvestment Act of 2009 (ARRA); the various programs implemented by the Federal Reserve under its traditional discount window authority for commercial banks and Section 13(3) of the Federal Reserve Act; the FDIC's use of its Deposit Insurance Fund to provide critical assistance to the banking system, including resolving failed banks and thrifts, temporarily increasing deposit insurance coverage to \$250,000 per person per institution, and its Temporary Liquidity Guarantee Program (TLGP); and the Treasury's rescue of Fannie Mae and Freddie Mac pursuant to the authority granted by the Housing Economic Recovery Act of 2008 (HERA).

### *1. Federal Reserve programs*

Despite the greater “press and political attention”<sup>67</sup> paid to TARP and the TLGP, the programs implemented by the Federal Reserve under Section 13(3) of the Federal Reserve Act represent the largest portion of U.S. government intervention.<sup>68</sup> Section 13(3) was used by the Federal Reserve to provide liquidity to Wall Street and U.S. companies, rescue Bear Stearns and AIG, and conduct monetary policy. Indeed, it was the government's tool of choice until the Bush Administration asked for new congressional authority—first to inject capital directly into Fannie Mae and Freddie Mac, and then to purchase troubled assets from and inject capital directly into the U.S. financial system as a whole. As a result of such programs, “the Federal Reserve's balance sheet more than doubled from August 2007 to December 2008, and [its] total assets at December 31, 2008, at the height of the crisis, were more than \$2 trillion, more than twice the highest year-end total in its history.”<sup>69</sup>

Section 13(3) permits the Federal Reserve to make “secured extensions of credit to any ‘individual, partnership, or corporation.’ It is not limited to depository institutions. But it can be invoked only under ‘unusual and exigent circumstances’ upon the affirmative vote

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67. DPFCM, *supra* note 33, at 19.

68. *Id.*

69. DPFCM, *supra* note 33, at 26 (citing Niel Willardson, *Actions to Restore Financial Stability: A Summary of Recent Federal Initiatives*, FEDERAL RESERVE BANK OF MINNEAPOLIS: THE REGION (Dec. 2008), at 16, available at <http://www.minneapolisfed.org/pubs/region/08-12/willardson.pdf>.)



of at least five members of the Federal Reserve.<sup>70</sup> Until 2008, it had not been used since the Great Depression.”<sup>71</sup>

*a. Term Securities Lending Facility (TSLF).*

The Federal Reserve’s first use of its Section 13(3) authority during the global financial crisis was to establish the TSLF on March 11, 2008. . . In the weeks leading up to the program, the credit markets had become frozen for certain highly leveraged market participants.<sup>72</sup> The TSLF was designed as a term lending facility for primary dealers.”<sup>73</sup> It was created to provide liquidity to primary dealers, and specifically to add liquidity to the mortgage-backed securities [MBS] market.<sup>74</sup> The Federal Reserve Bank of New York was authorized to lend up to \$200 billion of U.S. Treasury securities to primary dealers secured for a term of 28 days by pledge of eligible collateral. In effect, the program allowed primary dealers to swap lower quality securities for higher quality

70. DPFCM, *supra* note 33, at 20 (citing the Federal Reserve Act by the Act of July 21, 1932, 47 Stat. 715).

71. DPFCM, *supra* note 33, at 20–21 (“Five days after its enactment, on July 26, 1932, the Federal Reserve issued a circular permission to the Federal Reserve banks to make loans under the new authority for a period of six months, beginning August 1, 1932, and renewed such authorization from time to time until July 31, 1936. See Howard Hackley, LENDING FUNCTIONS OF THE FEDERAL RESERVE BANKS: A HISTORY 129–30 (1973). Before March 11, 2008, all secured loans under Section 13(3) had been made during the 1932–36 period, with most occurring in 1932 and 1933. Section 13(3) fell into disuse even during the Great Depression principally because of: (i) the addition of Section 13(b) to the Federal Reserve Act by the Industrial Advances Act of 1934, which authorized the Federal Reserve to make loans to commercial and industrial companies without the emergency condition, and (ii) the ability of the Reconstruction Finance Corporation, which was formed by the Hoover Administration in 1932 pursuant to the Reconstruction Finance Corporation Act of 1932, 47 Stat. 5, to make loans to nonbanking companies on more attractive terms than those offered by the Federal Reserve. The Reconstruction Finance Corporation was liquidated in 1957 pursuant to the Reconstruction Finance Corporation Liquidation Act of 1953 and Section 13(b) was repealed by the Small Business Investment Act of 1958. See David Fettig, *Lender of More than Last Resort: Recalling Section 13(b) and the Years When the Federal Reserve Opened its Discount Window to Businesses*, THE REGION (Dec. 2002), at 18–19, 44–45, available at <http://www.minneapolisfed.org/pubs/region/02-12/lender.pdf>; Walker Todd, *History of and Rationales for the Reconstruction Finance Corporation*, FED RES. BANK OF CLEVELAND ECON REV., 1992 Q.4, at 24, available at <http://www.clevelandfed.org/research/review/1992/92-q4-todd.pdf>; Howard Hackley, LENDING FUNCTIONS OF THE FEDERAL RESERVE BANKS: A HISTORY 127–136, 144–145 (1973)). *Id.* at 21 n.17.

72. *Id.* at 22.

73. *Id.* (“Primary dealers are the 18 large financial institutions that are the counterparties with which the Federal Reserve undertakes open market operations. Many of the 18 were also Wall Street’s most prominent investment banks.”) *Id.* at n.24.

74. *Id.* at 22.

[U.S. Treasury] securities that could be used more easily to obtain credit in the interbank or capital markets.<sup>75</sup>

*b. Bear Stearns.*

Despite the implementation of the TSLF, Bear Stearns suffered a classic “run on the bank.” Its cash reserves fell from over \$20 billion to \$2 billion in approximately one week. By Friday, March 14, Bear Stearns was prepared to file for bankruptcy in the absence of a significant capital infusion. Since no significant capital infusion was forthcoming from the private sector, the Federal Reserve was left as the only player that could quickly rescue Bear Stearns from bankruptcy.<sup>76</sup>

On March 14, 2008, the Federal Reserve, by the unanimous vote of all available members, authorized an extension of credit to Bear Stearns through JPMorgan Chase Bank under Section 13(3).<sup>77</sup> The Federal Reserve Bank of New York made an overnight loan of \$12.9 billion to JPMorgan Chase Bank through its normal discount window facilities. The loan was nonrecourse and was fully secured by \$13.8 billion of Bear Stearns assets. The loan was a simultaneous back-to-back transaction, whereby JPMorgan Chase Bank provided secured financing to Bear Stearns and took as collateral the same assets that JPMorgan Chase Bank used to secure its loan from the Federal Reserve.<sup>78</sup>

75. *Id.* at 22–23 (“For ‘Schedule 1’ auctions, the eligible collateral included Treasury securities, agency securities, and agency mortgage-backed securities issued or fully guaranteed by the federal agencies. For ‘Schedule 2’ auctions, the eligible collateral includes Schedule 1 collateral plus highly rated private securities. Highly rated private securities refers to investment grade corporate securities, investment grade municipal securities, investment grade mortgage-backed securities, and investment grade asset-backed securities. ‘Schedule 1’ auctions have since been discontinued, while ‘Schedule 2’ auctions continue to take place. *See* FEDERAL RESERVE, PERIODIC REPORT PURSUANT TO SECTION 129(B) OF THE EMERGENCY ECONOMIC STABILIZATION ACT OF 2008: UPDATE ON OUTSTANDING LENDING FACILITIES AUTHORIZED BY THE BOARD UNDER SECTION 13(3) OF THE FEDERAL RESERVE ACT 2–4 (Aug. 25, 2009).”). *Id.* at 23 n.25.

76. *Id.* at 24 (citing David Wessel, IN FED WE TRUST 157–59 (2009)).

77. *Id.* (“Section 13(3) generally requires an affirmative vote of at least five members of the Federal Reserve Board to approve an extension of credit under that provision. On March 14, 2008, one member of the Federal Reserve Board was unavailable at the time of the vote because he was en route from Finland and two other board seats were vacant. *See* David Wessel, IN FED WE TRUST 162 (2009). As permitted under Section 11(r)(2) of the Federal Reserve Act, however, the Board’s action approving the extension of credit was adopted by unanimous vote of all available members. *See* David Wessel, IN FED WE TRUST 162 (2009).”). *Id.* at n.32.

78. *Id.* at 24–25.

After the Federal Reserve's emergency loan, the focus turned to finding an acquirer for Bear Stearns—before the opening of business in Asia on Monday morning, March 17, which was Sunday evening, March 16 in the United States.<sup>79</sup> JPMorgan initially offered to acquire Bear Stearns for \$2 per share, or approximately \$236 million in total, but later raised its price to \$10 per share, or approximately \$1.1 billion in total, in order to obtain [approval for the transaction from Bear Stearns shareholders].<sup>80</sup> Since JPMorgan did not want to acquire certain illiquid Bear Stearns assets, the Federal Reserve was needed to absorb the risks associated with such assets. The Federal Reserve only had the authority to lend and did not have the authority to purchase assets, so any structure had to be based on the Federal Reserve making a loan.<sup>81</sup>

The Federal Reserve authorized the Federal Reserve Bank of New York to make a secured loan of up to \$30 billion to a special purpose vehicle, Maiden Lane, in order to purchase “less liquid”<sup>82</sup> assets of Bear Stearns and facilitate the acquisition of Bear Stearns by JPMorgan. The loan was authorized pursuant to Section 13(3). JPMorgan would be required to lend Maiden Lane \$1 billion. The Federal Reserve's loan was secured by the assets held by Maiden Lane.<sup>83</sup>

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79. *Id.* at 25. (“During the worst weeks of the financial crisis in the fall of 2008, weekend rescues generally operated under a Sunday evening deadline, reflecting the importance of Asian markets. According to one commentator, Goldman Sachs’ economists sent one of their weekly e-mails with the subject line “Sunday is the New Monday.” See David Wessel, IN FED WE TRUST 1–2 (2009).”). *Id.* at 25, n.36.

80. DPFCM, *supra* note 33, at 25–26. (“Some commentators have noted that JPMorgan’s bargaining position was weakened by the fact that it had agreed to guarantee all of Bear Stearns’ obligations for one year from the signing of the acquisition agreement, and the guarantee did not include a provision that would allow the guarantee to terminate if the Bear Stearns shareholders failed to approve the transaction. See Steven M. Davidoff, *Bear’s Big Guarantee*, N.Y. TIMES, Mar. 24, 2008, available at <http://dealbook.blogs.nytimes.com/2008/03/24/bears-big-guarantee/>; Ashby Jones, *Did Deal Overexpose JP Morgan?*, WALL ST. J., Mar. 25, 2008, at C2, available at [http://online.wsj.com/article/SB120640936857461199.html?mod=hps\\_us\\_whats\\_news](http://online.wsj.com/article/SB120640936857461199.html?mod=hps_us_whats_news).”). *Id.* at 26 n.38.

81. *Id.* at 26.

82. *Id.* (citing Federal Reserve, Periodic Report Pursuant to Section 129(b) of the Emergency Economic Stabilization Act of 2008: Update on Outstanding Lending Facilities Authorized by the Board under Section 13(3) of the Federal Reserve Act 9 (Aug. 25, 2009)).

83. *Id.* (citing Federal Reserve, Periodic Report Pursuant to Section 129(b) of the Emergency Economic Stabilization Act of 2008: Update on Outstanding Lending Facilities Authorized by the Board under Section 13(3) of the Federal Reserve Act 9–10 (Aug. 25, 2009)).

*c. Primary Dealer Credit Facility (PDCF).*

Although Bear Stearns had been rescued, there was a fear that other investment banks with similar funding models could also face liquidity squeezes and ultimately the risk of failure. In order to provide these institutions with more liquidity and prevent this outcome, the Federal Reserve announced the creation of the PDCF on March 16, 2008, under Section 13(3).<sup>84</sup> The PDCF is a temporary overnight liquidity facility that provides secured loans to primary dealers. The PDCF allows primary dealers to borrow funds from the Federal Reserve secured by a broader range of collateral than is permissible to secure borrowings under the discount window. Since the primary dealers included the largest investment banks in the United States, the PDCF provided the largest U.S. broker-dealers with temporary access to a Federal Reserve facility that is very similar to the Federal Reserve discount window.<sup>85</sup>

*d. AIG.* “In the third quarter of 2008, AIG started to experience an increasingly serious liquidity crunch,”<sup>86</sup> largely because of its securities lending business and the credit default swap portfolio of its affiliate, AIG Financial Products (AIGFP). “Under AIG’s securities lending program, AIG lent securities on behalf of its insurance company subsidiaries against cash collateral that was received from borrowers and invested in securities,”<sup>87</sup> including residential mortgage-backed securities (RMBS). AIG was responsible for any deficit in the cash collateral pool caused by any losses sustained in investing it or if AIG’s credit rating were downgraded. Under AIGFP’s credit default swap contracts, AIGFP was required to post collateral if the collateralized debt obligations (CDOs) protected by its credit default swaps fell in value or AIG’s credit rating were downgraded.

Because of drops in the value of RMBS and CDOs in August, AIG was required to post \$3.3 billion of additional collateral into its securities lending program<sup>88</sup> and AIGFP was required to post \$5.9 billion of additional collateral to secure its credit default swap

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84. See Press Release, Federal Reserve (Mar. 16, 2008), *available at* <http://www.federalreserve.gov/newsevents/press/monetary/20080316a.htm>.

85. DPFCM, *supra* note 33, at 26.

86. *Id.* at 28.

87. *Id.*

88. Am. Int’l Group, Inc., Annual Report (Form 10-K), at 3 (Mar. 2, 2009).

obligations.<sup>89</sup> After downgrades in AIG's credit ratings in early September, AIGFP estimated that it would need an additional amount in excess of \$20 billion in order to fund additional collateral requirements under its credit default swap obligations.<sup>90</sup> Inability to refinance its commercial paper commitments, sharp declines in AIG's common stock, and regulatory constraints on AIG's ability to borrow from its insurance company subsidiaries left AIG in severe difficulty during the weekend of September 13–14. AIG explored the possibility of a secured lending facility from the private sector, but was unable to obtain the necessary liquidity or capital from that avenue.<sup>91</sup>

“On September 16, 2008, pursuant to Section 13(3), the Federal Reserve authorized the Federal Reserve Bank of New York to lend AIG up to \$85 billion under a secured revolving credit facility.”<sup>92</sup> “As a condition to the loan . . . AIG also agreed to issue to a trust established for the benefit of the U.S. Treasury, a series of senior preferred stock”<sup>93</sup> and warrants equal to approximately 80% of the economics and voting power of the company.<sup>94</sup>

The loan was restructured in November to include loans to two new special-purpose vehicles.<sup>95</sup> The Federal Reserve lent approximately \$19.5 billion to Maiden Lane II so that the SPV could purchase MBS from AIG.<sup>96</sup> It lent approximately \$19.6 billion to Maiden Lane III so that the SPV could purchase from AIGFP's

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89. *Id.*

90. *Id.* at 4.

91. *Id.* at 3–5.

92. DPFCM, *supra* note 33, at 30 (citing Federal Reserve, Periodic Report Pursuant to Section 129(b) of the Emergency Economic Stabilization Act of 2008: Update on Outstanding Lending Facilities Authorized by the Board Under Section 13(3) of the Federal Reserve Act 12 (Aug. 25, 2009).

93. *Id.* at 31.

94. *Id.* (“Because of the degree to which the deemed conversion of the AIG Series C Preferred Stock is dilutive to AIG's common stockholders, the shares underlying Treasury's warrants, which are not adjusted for the conversion, represent only a tiny fraction of the total voting power of AIG's equity. As a result, the AIG Series C Preferred Stock currently represents approximately 79.8% of the total voting power.”) *Id.* at 3 n.60.

95. “In addition to the Federal Reserve's actions, Treasury also later acquired \$40 billion in senior preferred stock of AIG.” *Id.* at 31 n.61; *see also* Am. Int'l Group, Inc., Quarterly Report (Form 10-Q), at 3–5 (Aug. 7, 2009).

96. Am. Int'l Group, Inc., Current Report (Form 8-K) (Dec. 12, 2008).

counterparties \$62 billion of CDOs that were “protected by AIGFP’s credit default swaps.”<sup>97</sup>

*e. Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) and Commercial Paper Funding Facility (CPFF).*

By the fall of 2008, . . . money market mutual funds [were] facing severe liquidity pressure. After the failure of a large money market mutual fund, Reserve Primary Fund, investors began a run on money market mutual funds that lasted for weeks. Redemptions totaled over \$100 billion. In the face of redemptions, money market mutual funds had to start selling assets, including . . . commercial paper . . .<sup>98</sup>

Because of these fire sales, commercial paper issuers started to face liquidity pressures of their own, forcing many of them to draw on back-up lines of credit from banks. This put further pressure on the banking system because most banks had not anticipated that so many of these back-up facilities would be drawn at once. “In order to address the fire sales of commercial paper as a result of redemption pressures and the lack of liquidity in the commercial paper market, the Federal Reserve created the AMLF and the CPFF.”<sup>99</sup>

“The AMLF was authorized by the Federal Reserve on September 19, 2008 to provide funding to U.S. depository institutions and bank holding companies and their U.S. broker-dealer subsidiaries to finance purchases of high-quality asset-backed commercial paper from money market mutual funds.”<sup>100</sup> The CPFF was authorized on October 14, 2008, to establish a special-purpose vehicle to purchase three-month unsecured and asset-backed commercial paper directly from eligible issuers, including any U.S. commercial paper issuer including those with foreign parents.<sup>101</sup>

97. DPFCM, *supra* note 33, at 32; Am. Int’l Group, Inc., Current Report (Form 8-K) (Nov. 25, 2008).

98. DPFCM, *supra* note 33, at 32.

99. *Id.* (citing Brian F. Madigan, Dir., Div. of Monetary Affairs, Fed. Reserve, Bagehot’s Dictum in Practice: Formulating and Implementing Policies to Combat the Financial Crisis, Speech at the Federal Reserve Bank of Kansas City’s Annual Economic Symposium (Aug. 21, 2009), *available at* <http://www.federalreserve.gov/newsevents/speech/madigan20090821a.htm>).

100. *Id.* at 33.

101. *Id.*

*f. Term Asset-Backed Securities Loan Facility (TALF).*

The financial crisis has deeply affected the securitization market. In a period of months, the pendulum swung from a condition in which the financial markets assigned too low a value to the risk of certain securitization asset classes—such as subprime mortgages—to one in which seemingly the only securities that were readily marketable were those with an explicit or implicit government backing. Issuance of securities backed by credit card receivables and auto loans slowed to a trickle, and the sale of new commercial [MBS] (CMBS) ceased altogether. The absence of a functioning securitization market in turn severely constrained the practical ability of banks and other financial institutions to extend new loans to consumers and businesses.<sup>102</sup>

In an effort to revive the [asset-backed securities] (ABS) markets and provide “a critical channel for supply of new credit to households,”<sup>103</sup> the Federal Reserve created TALF, which began operations in March 2009 under the administration of the Federal Reserve Bank of New York.<sup>104</sup> Recently, Secretary Geithner characterized TALF as “[o]ne of the most important” Federal Reserve programs.<sup>105</sup> Through TALF, the Federal Reserve Bank of New York provides non-recourse loans to borrowers, secured by qualifying non-mortgage-backed ABS and, more recently, CMBS. The Federal Reserve Bank of New York is expected to lend up to \$200 billion, but TALF may be expanded to allow the Federal Reserve Bank of New York to lend as much as \$1 trillion. TALF is scheduled to stop making new loans on March 31, 2010 for non-mortgage-backed ABS and legacy CMBS and on June 30, 2010 for newly issued CMBS.<sup>106</sup>

Initially greeted with tepid interest, the program has since gained momentum. Through September 2009, investors have

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102. *Id.* at 144.

103. *Id.* (quoting U.S. DEPT. OF TREASURY, THE NEXT PHASE OF GOVERNMENT FINANCIAL STABILIZATION AND REHABILITATION POLICIES 3 (Sept. 14, 2009), *available at* <http://treas.gov/press/releases/docs/Next%20Phase%20of%20Financial%20Policy,%20Final,%202009-09-14.pdf>).

104. *Id.*

105. *Id.* (quoting *Written Testimony of Treasury Secretary Timothy Geithner: Hearing Before the Cong. Oversight Panel*, 111th Cong. (2009) (statement of Timothy Geithner, Secretary, U.S. Dep’t of the Treasury), *available at* <http://cop.senate.gov/documents/testimony-091009-geithner.pdf>).

106. *Id.* at 144–45.

requested \$46.5 billion worth of TALF loans to purchase eligible ABS.<sup>107</sup>

## *2. Treasury programs*

The original vision of the TARP was that Treasury would purchase up to \$700 billion of “troubled assets” from “financial institutions.”<sup>108</sup>

The TARP facility was expected to be used to purchase mortgages and other real-estate related assets in order to stabilize, enhance or at least establish reliable market values for illiquid assets.

That original vision, however, was never implemented. Instead, Treasury and the Federal Reserve quickly abandoned that plan and used TARP funds to make direct investments in the US financial system through [the Capital Purchase Program].<sup>109</sup>

*a. Capital Purchase Program (CPP).* The CPP earmarked \$250 billion for direct investments in U.S. financial institutions.

When the CPP was officially announced, regulators had already summoned the CEOs of the nation’s nine largest financial institutions to a meeting in Washington to inform them that their institutions had been designated as systemically important, and that therefore they would, whether they or their boards felt their institutions needed it or not, sign the term sheets put in front of them and accept the government investment.<sup>110</sup> The CEOs of these institutions all signed the one-page term sheets that day, which formed the basis of securities purchase agreements for the purchase

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107. *Id.* at 145 (citing U.S. DEPT. OF TREASURY, THE NEXT PHASE OF GOVERNMENT FINANCIAL STABILIZATION AND REHABILITATION POLICIES 38 (Sept. 14, 2009), *available at* <http://treas.gov/press/releases/docs/Next%20Phase%20of%20Financial%20Policy,%20Final,%202009-09-14.pdf>).

108. *Id.* at 41.

109. *Id.*

110. *Id.* at 69 (citing Joe Weisenthal, *Documents Reveal How Paulson Forced Banks to Take TARP Cash*, BUS. INSIDER, May 13, 2009, *available at* <http://www.businessinsider.com/uncovered-tarp-docs-reveal-howpaulson-forced-banks-to-take-the-cash-2009-5>; Joanna Ossinger, *Report: Paulson Told Banks They Must Take TARP Money*, FOX BUS., May 13, 2009, *available at* <http://www.foxbusiness.com/story/report-paulson-told-banks-tarp-money/>; David Wessel, IN FED WE TRUST 236–241 (2009)).



of preferred stock and warrants that were later signed by the financial institutions.<sup>111</sup>

Unlike the preferred stock the government purchased from Fannie Mae, Freddie Mac, and AIG, this preferred stock was not senior to outstanding preferred stock. Instead, it was *pari passu*. In addition, the warrants were for a relatively small amount of common stock rather than 80% of the company. These terms reflected a fundamental shift in policy from a focus on preventing moral hazard to a focus on restoring public confidence in the U.S. financial system.

After Treasury set aside \$125 billion for the nine largest financial institutions . . . it offered the remaining \$125 billion to other U.S. banking institutions, including regional and community banks, but only the banking institutions [other than the top nine] that were determined to be “healthy.”<sup>112</sup> Indeed, after the initial announcement, many regional financial institutions requested CPP investments to avoid being tainted as “unhealthy.” There was widespread fear that banks that did not request CPP investments would suffer deposit runs and possibly failure because their customers would conclude that they were unhealthy.<sup>113</sup>

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111. *Id.* (“For one version of the events leading up to the meeting where the regulators announced to the nine largest bank holding companies that they had no choice but to accept such capital, see David Wessel, *IN FED WE TRUST* 236–41 (2009).”) *Id.* at 69 n.5.

112. *Id.* at 70. Recently, the Office of the Special Inspector General for the Troubled Asset Relief Program (“SIGTARP”), issued a report describing the CPP as a program for “healthy banks,” and questioning whether all of the nine largest financial institutions were in fact considered by the U.S. Treasury and the Federal Reserve to be “healthy” at the time. See Office of the Special Inspector General for the Troubled Asset Relief Program, *Emergency Capital Injections Provided to Support the Viability of Bank of America, Other Major Banks, and the U.S. Financial System* (Oct. 5, 2009), available at [http://www.sigtarp.gov/reports/audit/2009/Emergency\\_Capital\\_Injections\\_Provided\\_to\\_Support\\_the\\_Viability\\_of\\_Bank\\_of\\_America..\\_100509.pdf](http://www.sigtarp.gov/reports/audit/2009/Emergency_Capital_Injections_Provided_to_Support_the_Viability_of_Bank_of_America.._100509.pdf). This criticism fundamentally mischaracterizes what the U.S. Treasury and the Federal Reserve said and did at the time. Indeed, the reason all nine were required to receive TARP money, rather than making it a fully voluntary choice, is that the U.S. Treasury and the Federal Reserve wanted to avoid characterizations of which ones of these large nine institutions were healthy or not at the time because they believed that sort of characterization would deepen the panic already underway. Instead, healthiness determinations were reserved to banks and bank holding companies that applied for some of the second \$125 billion of CPP money.

113. DPFCM, *supra* note 33, at 70.

*b. Systemically Significant Failing Institutions Program.*

On November 10, 2008, Treasury announced a restructuring of the government's financial support to AIG. As part of that overhaul, Treasury indicated that it would purchase \$40 billion of newly issued preferred stock, under the Systemically Significant Failing Institutions Program, with the proceeds used in part to reduce the total amount available under AIG's September 22, 2008 secured revolving credit agreement with the Federal Reserve Bank of New York.<sup>114</sup>

*c. Targeted Investment Program.*

Treasury first issued guidelines for the Targeted Investment Program on January 2, 2009, after previously announcing its investment in Citigroup on November 22, 2008, and beginning discussions with Bank of America about additional TARP investments in December 2008 in anticipation of the closing of its purchase of Merrill Lynch on January 1, 2009.<sup>115</sup>

Treasury has invested \$20 billion each via the Targeted Investment Program in both Citigroup and Bank of America by purchasing perpetual preferred securities. Treasury's investment supplements the initial TARP investments made under the CPP in these financial institutions.<sup>116</sup>

*d. Asset Guarantee Program.*

The Asset Guarantee Program was announced as a package with the Targeted Investment Program. Under the Asset Guarantee Program, the U.S. government entered into a definitive agreement with Citigroup to share losses with respect to a pool of \$301 billion in assets of Citigroup. Although the government agreed to the terms of a similar program with Bank of America with respect to a pool of \$118 billion of assets, the majority of which were assumed as a result of the Merrill Lynch acquisition, the parties never executed definitive documents for that program. On September 21, 2009, Bank of America announced that it had reached an

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114. *Id.* at 76.

115. *Id.* at 77.

116. *Id.*

agreement with regulators to pay a \$425 million fee to terminate the term sheet.<sup>117</sup>

Citigroup agreed to absorb the first losses in its covered assets portfolio up to \$39.5 billion. The Federal Reserve Bank of New York, Treasury and the FDIC share any additional losses with Citigroup, with the government absorbing 90% of that loss and Citigroup 10%.<sup>118</sup> Citigroup must manage the assets in the pool in accordance with guidance from a template issued by the government, including mortgage modification procedures adopted by the FDIC.<sup>119</sup>

*e. Capital Assistance Program (CAP) and stress tests.*

CAP was announced by Secretary Geithner on February 10, 2009. There are two main components of CAP:

- stress tests to determine whether certain institutions need additional capital buffers; and
- a capital assistance program through which eligible public institutions may apply for capital infusions from Treasury.

The program's emphasis on capital composition in the stress tests and preferred stock terms that add the ability to convert to common stock demonstrate Treasury's continued concern with increasing tangible common equity in recipient financial institutions.<sup>120</sup>

CAP enables qualifying financial institutions (QFIs) to issue mandatory convertible preferred stock to Treasury in order to provide such institutions with contingent common equity "as a bridge to private capital in the future," as is necessary to "retain the confidence of investors or to meet supervisory expectations regarding the amount and composition of capital."<sup>121</sup> The capital

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117. *Id.* at 78 (citing Press Release, Bank of America, Bank of America Terminates Asset Guarantee Term Sheet (Sept. 21, 2009), *available at* <http://newsroom.bankofamerica.com/index.php?s=43&item=8536>); *see also* Margaret Popper and David Milken, *Bank of America to Pay \$425 Million for Merrill Aid (Update 1)*, BLOOMBERG, Sept. 22, 2009, *available at* <http://www.bloomberg.com/apps/news?pid=20601087&sid=a2c5hYE7Uv.Y>.

118. *Id.* at 78–79.

119. *Id.* at 79.

120. *Id.* at 82.

121. *Id.* at 85 (quoting Press Release, Bd. of Governors of the Fed. Reserve Sys., Joint Statement by Secretary of the Treasury Timothy F. Geithner, Chairman of the Board of Governors of the Federal Reserve System, Ben S. Bernanke, Chairman of the Federal Deposit Insurance Corporation Sheila Bair, and Comptroller of the Currency John C. Dugan (May 6,

infusions are meant to increase capital buffers at QFIs to guard against economic conditions that are worse than expected. QFIs that issue mandatory convertible preferred stock under CAP are also required to issue Treasury warrants to purchase shares of the institution's common stock. No QFI has asked for funds under CAP.<sup>122</sup> Absent unusual circumstances or an extreme change in economic circumstances, it is unlikely that any CAP preferred will be issued.<sup>123</sup>

*f. Public-Private Investment Program (PPIP).*

PPIP is the latest U.S. government initiative to address the enduring problem of illiquid and troubled assets on financial institutions' balance sheets. The program, announced by Secretary Geithner on March 23, 2009, was originally hailed as a vital component of the government's plan to heal the financial sector. It received a warm welcome from Wall Street, with the Dow Jones Industrial Average rising 7% on the day of its announcement. Enthusiasm for PPIP waned over the following months, however, falling off particularly sharply after the results of the stress tests were announced on May 7, 2009, during which time it became clear that large financial institutions, at least, were once again able to tap the capital markets and would, therefore, be less likely to use PPIP to sell troubled assets, and as concerns were raised about the intersection of sales and mark-to-market accounting.<sup>124</sup>

As originally contemplated, PPIP had two halves: the Legacy Securities Program run by Treasury and the Legacy Loans Program run by the FDIC. Both programs contemplated the formation of investment funds capitalized with equity from Treasury and private investors to be leveraged with potentially attractive government financing in the form of either direct loans or debt guarantees, each fund a public-private investment fund or PPIF.<sup>125</sup>

A key principle underlying PPIP was a belief that, with the assistance of government capital and leverage, the private sector could be induced to purchase these troubled and illiquid assets at

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2009), *available at* <http://www.federalreserve.gov/newsevents/press/bcreg/20090506a.htm>).

122. CONG. OVERSIGHT PANEL, JULY OVERSIGHT REPORT: TARP REPAYMENTS, INCLUDING THE REPURCHASE OF STOCK WARRANTS (July 1, 2009), *available at* <http://cop.senate.gov/documents/cop-071009-report.pdf>.

123. DPFCM, *supra* note 33, at 85.

124. *Id.* at 181.

125. *Id.*

prices substantially in excess of the then-current market price. Both the government and the banks believed that such market prices simply reflected speculative “vulture” funds taking advantage of the distress of the banks and the dysfunctional credit markets to purchase assets at fractions of their underlying economic value.<sup>126</sup>

In June 2009, the FDIC indefinitely postponed the Legacy Loans Program, although in late summer of 2009 it held a pilot sale of receivership assets in a transaction that it hopes will serve as a template for transactions involving banks that have not been closed if and when the program is expanded to them. While Treasury has moved forward with the Legacy Securities Program, it faces numerous uncertainties. PPIP is now considerably smaller than originally anticipated, involving Treasury commitments of \$30 billion, down from the initial announcement of \$75-\$100 billion, and it is unclear whether the program has the scale to address the underlying problem.<sup>127</sup>

Valuation and accounting issues are central to understanding both the need for PPIP and the challenges affecting its success. Accounting rules do not require certain whole loans to be marked-to-market, and many financial institutions understandably have not done so. Should financial institutions sell these assets at a material discount to par, potentially substantial losses would translate into significant depletion of capital. By contrast, accounting rules require MBS and CDOs to be marked-to-market if they are classified as either “trading securities” or “available-for-sale securities.” Because fair value accounting applies to MBS and CDOs, many such assets have already been marked down to market or near-market levels, potentially making these assets better candidates for sale through PPIP.<sup>128</sup>

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126. *Id.*

127. *Id.* at 182. Recently, the U.S. Treasury announced the initial closings of two funds established under the Legacy Securities Program, each with committed equity capital of \$500 million from private investors. Collectively, the public-private investment funds have closed on approximately \$1.13 billion of private sector capital commitments, which have been matched 100% by the U.S. Treasury, representing total equity capital commitments of \$2.26 billion. The U.S. Treasury will also provide debt financing up to 100% of the total capital commitments of each fund. Press Release, U.S. Dep’t of the Treasury, Treasury Department Announces Initial Closings of Legacy securities Public-Private Investment Funds, Press Room (Sept. 30, 2009), *available at* <http://www.treas.gov/press/releases/tg304.htm>.

128. DPFCM, *supra* note 33, at 182–83 (“In addition, the FDIC earlier this year reaffirmed a capital rule that requires banks to hold additional capital against subordinated tranches of certain ABS if the senior tranches of such securities have been downgraded. This increased capital obligation could potentially require ‘dollar for dollar’ capital against the asset, which would potentially make these assets candidates for sale through PPIP.”). *Id.* at 183 n.2.

*g. Fannie Mae and Freddie Mac.* On September 6, 2008, the U.S. government took control of Freddie Mac and Fannie Mae as conservator, pursuant to the authority granted by HERA that Congress passed only several weeks prior.<sup>129</sup> In connection with the conservatorship, the U.S. government provided each of the GSEs with up to \$100 billion of direct financial assistance in the form of senior preferred stock and temporary access to the Federal Reserve's discount window. The U.S. Treasury also agreed to purchase an unspecified amount of MBS backed by the GSEs in the open market. As part of its fee for providing the financial support, the U.S. Treasury took a 79.9% interest in the common stock of each institution. The rescue of Fannie Mae and Freddie Mac is the largest government-assisted transaction in the U.S. history, as these two institutions hold or guarantee a combined \$5.5 trillion of mortgage-backed securities.

To further boost market confidence in the two GSEs, on February 18, 2009, the U.S. Treasury announced that the funding commitments would be increased to \$200 billion for each institution.<sup>130</sup> As of October 1, 2009, Fannie Mae has received \$44.9 billion of direct financial assistance from the U.S. Treasury, and Freddie Mac has received \$50.7 billion.<sup>131</sup> The U.S. Treasury has also purchased a total of \$181.5 billion of GSE MBS, as of October 1, 2009.<sup>132</sup> On top of the U.S. Treasury's financial assistance, the Federal Reserve established programs to purchase up to a total of \$200 billion direct obligations of the GSEs and to purchase up to a total of \$1.25 trillion of MBS that are guaranteed by the GSEs.<sup>133</sup>

129. For more information, see *Statement by Secretary Henry M. Paulson, Jr., on Treasury and Federal Housing Finance Agency Action to Protect Financial Markets and Taxpayers* (Sept. 7, 2008), available at <http://www.ustreas.gov/press/releases/hp1129.htm>.

130. See WHITE HOUSE BUDGET, GOVERNMENT-SPONSORED ENTERPRISES, FISCAL YEAR 2010, available at [www.whitehouse.gov/omb/budget/fy2010/assets/gov.pdf](http://www.whitehouse.gov/omb/budget/fy2010/assets/gov.pdf) (last visited Jan. 16, 2010).

131. See Data as of October 1, 2009 on Treasury and Federal Reserve Purchase Programs for GSE and Mortgage-Related Securities, available at <http://www.fhfa.gov/webfiles/14896/TreasFed9242009.pdf>.

132. *Id.* at 116–17.

133. See Fed. Reserve Press Release (Mar. 18, 2009), available at [www.federalreserve.gov/newsevents/press/monetary/20090318a.htm](http://www.federalreserve.gov/newsevents/press/monetary/20090318a.htm). As of October 1, 2009, the Federal Reserve has purchased a total of \$133.8 billion of direct obligations of the GSEs and a total of \$904.9 billion of GSE MBS. See Data as of October 1, 2009 on Treasury and Federal Reserve Purchase Programs for GSE and Mortgage-Related Securities, available at <http://www.fhfa.gov/webfiles/14896/TreasFed9242009.pdf>.

The future of Freddie Mac and Fannie Mae is uncertain. The U.S. Treasury's White Paper on Financial Regulatory Reform, released in June 2009, stated that the U.S. Treasury will report to Congress its recommendations on the future of Fannie Mae and Freddie Mac at the time of the 2011 budget release.<sup>134</sup>

### 3. FDIC's Temporary Liquidity Guarantee Program (TLGP)

"The FDIC Board approved the TLGP in October 2008 as part of an effort by the FDIC, the Treasury, and the Federal Reserve to stabilize the nation's financial system."<sup>135</sup> There are two parts to the TLGP: the Debt Guarantee Program and the Transaction Account Guarantee Program. Through the Debt Guarantee Program, the FDIC guarantees certain senior unsecured debt issued by participating insured depository institutions, their holding companies, or their affiliates.<sup>136</sup> Through the Transaction Account Guarantee Program, the FDIC provides unlimited deposit insurance for certain transaction accounts at participating insured depository institutions.

The Debt Guarantee Program has been highly attractive to participating entities, particularly the larger bank holding companies, because it provides access to funding at relatively low cost. Regardless of the participating entity's credit rating, the three major credit rating agencies rate debt issued under the TLGP with their highest ratings based on the FDIC guarantee. Most fixed-rate debt issued under the Debt Guarantee Program bears an annual interest rate between 1.5% and 3%.<sup>137</sup>

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134. Department of the Treasury, Financial Regulatory Reform, A NEW FOUNDATION: REBUILDING FINANCIAL SUPERVISION AND REGULATION (June 17, 2009), *available at* [http://www.financialstability.gov/docs/regs/FinalReport\\_web.pdf](http://www.financialstability.gov/docs/regs/FinalReport_web.pdf). In the White Paper, the U.S. Treasury listed a number of options for the reform of the GSEs, including: (i) returning them to their previous status as GSEs with the paired interests of maximizing returns for private shareholders and pursuing public policy home ownership goals; (ii) the gradual wind-down of their operations and liquidation of their assets; (iii) incorporating the GSEs' functions into a federal agency; (iv) a public utility model where the government regulates the GSEs' profit margin, sets guarantee fees, and provides explicit backing for GSE commitments; (v) conversion to providing insurance for covered bonds; and (vi) the dissolution of Fannie Mae and Freddie Mac into many smaller companies. *See id.* at 41-42, *available at* [http://www.financialstability.gov/docs/regs/FinalReport\\_web.pdf](http://www.financialstability.gov/docs/regs/FinalReport_web.pdf).

135. DPFCM, *supra* note 33, at 116.

136. *Id.* at 117.

137. *Id.* (citing Marshall Eckblad, *Banks Repaying TARP Still Enjoy Vast Government Debt Aid*, NASDAQ, June 12, 2009, *available at* <http://www.nasdaq.com/aspx/stock-market->

The FDIC is now winding down the Debt Guarantee Program, with October 31, 2009, as the last day for a participating entity to issue guaranteed debt. The FDIC is considering the establishment of a limited, six-month emergency guarantee facility following the expiration of the Debt Guarantee Program on October 31, 2009. “Entities that issue debt under the emergency guarantee facility would be permitted to issue FDIC-guaranteed debt through April 30, 2010.”<sup>138</sup>

Under the FDIC’s general deposit insurance program, deposits that are not subject to the transaction account guarantee are insured up to \$250,000 per person per institution, through December 31, 2013.<sup>139</sup> The Transaction Account Guarantee Program provides unlimited insurance coverage for any balances in a non-interest bearing transaction account through June 30, 2010.<sup>140</sup>

### *B. U.K. Programs*

The U.K. programs designed to battle the financial crisis consist primarily of:<sup>141</sup> HM Treasury’s Bank Recapitalisation Fund to make capital available to eligible banks and building societies, its Credit Guarantee Scheme to guarantee certain senior unsecured debt and other liabilities of eligible institutions, its Asset Protection Scheme to insure against losses for certain asset pools of certain targeted banks, and a permanent increase in the deposit compensation limit from £35,000 to £50,000; programs implemented by the Bank of England

news-story.aspx?storyid=200906121341dowjonesdjonline000736&title=banks-repaying-tarp-still-enjoy-vast-government-debt-aid.).

138. *Id.* at 126. See FDIC, NOTICE OF PROPOSED RULEMAKING (Sept. 9, 2009), <http://www.fdic.gov/news/board/NoticeSept9no6.pdf> (proposing alternatives for concluding the debt guarantee program of the TLGP).

139. See Helping Families Save Their Homes Act of 2009, Pub. L. 111–22, 123 Stat. 1632 (2009) (amending § 13(c)(4)(G)(ii) of the Federal Deposit Insurance Act, 12 U.S.C. 1823(c)(4)).

140. Despite outcries from some critics in the United States that the extraordinary measures taken by the Treasury, the Federal Reserve, and the FDIC in response to the recent global financial crisis threaten to transform the United States economy from a capitalistic system to a socialistic one, the measures that have been taken have stopped well short of the sort of nationalization that has resulted from government interventions in the past, including in ancient times. See, e.g., *Genesis* 47:13–26, which describes how the seven years of famine ended with Pharaoh having acquired all the money, cattle, and land of Egypt, and reduced the population to a sort of voluntary servitude.

141. For more information, see Davis Polk & Wardell, *UK and US Financial Rescue Packages* (Jan. 28, 2009), available at <http://www.davispolk.com/1485409/clientmemos/2009/01.28.09.UK.US.FRP.survey.pdf>.



to increase liquidity to financial systems through the Asset Purchase Facility and other liquidity facilities; and the institution of a special resolution regime for banks and building societies.

*1. HM Treasury programs*

On October 8, 2008, HM Treasury announced a package of rescue measures, including the establishment of a £50 billion Bank Recapitalization Fund and a Credit Guarantee Scheme of up to £250 billion.<sup>142</sup> On January 19, 2009, HM Treasury announced an Asset Protection Scheme when the initial phase of rescue measures proved insufficient to stabilize the financial system.<sup>143</sup>

*a. Bank Recapitalisation Fund.* The eligible institutions for HM Treasury's Bank Recapitalisation Fund are U.K. incorporated banks (including U.K. subsidiaries of foreign institutions) that have a "substantial business" in the United Kingdom and building societies. When the Bank Recapitalisation Fund capital injection program was announced on October 8, 2008, seven major U.K. banks and the largest building society were expected to participate in the program.<sup>144</sup> The £50 billion was ultimately taken by only two major banks, the Royal Bank of Scotland Group (RBSG), and the merged Lloyds TSB/HBOS.<sup>145</sup> The initial round of capital injections took the form of preferred shares. HM Treasury later bought ordinary shares in these two banks (in part by conversion of the preferred

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142. See HM TREASURY, REFORMING FINANCIAL MARKETS 9 (July 8, 2009) [http://www.hm-treasury.gov.uk/d/reforming\\_financial\\_markets080709.pdf](http://www.hm-treasury.gov.uk/d/reforming_financial_markets080709.pdf); HM Treasury, *Financial Support to the Banking Industry* (Oct. 8, 2008), available at [http://www.hm-treasury.gov.uk/press\\_100\\_08.htm](http://www.hm-treasury.gov.uk/press_100_08.htm).

143. See HM Treasury, *Statement on the Government's Asset Protection Scheme* (Jan. 19, 2009), available at [http://www.hm-treasury.gov.uk/press\\_07\\_09.htm](http://www.hm-treasury.gov.uk/press_07_09.htm).

144. See HM Treasury, *Financial Support to the Banking Industry* (Oct. 8, 2008), available at [http://www.hm-treasury.gov.uk/press\\_100\\_08.htm](http://www.hm-treasury.gov.uk/press_100_08.htm). The institutions expected to participate were Abbey National, Barclays, HBOS, HSBC Bank plc, Lloyds TSB, Nationwide Building Society, the Royal Bank of Scotland Group, and Standard Chartered.

145. See HM Treasury, *Treasury Statement on Financial Support to the Banking Industry* (Oct. 13, 2008), available at [http://www.hm-treasury.gov.uk/press\\_105\\_08.htm](http://www.hm-treasury.gov.uk/press_105_08.htm); HM Treasury, *Treasury Statement on Restructuring its Investment in RBS to Deliver Further Bank Lending to Industry and Homeowners* (Oct. 13, 2008), available at [http://www.hm-treasury.gov.uk/press\\_06\\_09.htm](http://www.hm-treasury.gov.uk/press_06_09.htm); HM Treasury, *Asset Protection Scheme* (Feb. 26, 2009), available at [http://www.hm-treasury.gov.uk/statement\\_chx\\_260209.htm](http://www.hm-treasury.gov.uk/statement_chx_260209.htm) [hereinafter *Asset Protection Scheme*]; HM Treasury, *Asset Protection Scheme—Agreement with Lloyds* (Mar. 7, 2009), available at [http://www.hm-treasury.gov.uk/press\\_23\\_09.htm](http://www.hm-treasury.gov.uk/press_23_09.htm).

shares invested earlier), resulting in the government owning 84% of RBSG and 43.5% of Lloyds TSB/HBOS.<sup>146</sup>

*b. Credit Guarantee Scheme.*<sup>147</sup> The Credit Guarantee Scheme provides guarantees of new short- and medium-term senior unsecured debt issued by U.K.-incorporated banks, including certain U.K. subsidiaries of foreign institutions. Unlike the United States' TLGP, which charged a flat fee varying with maturity, the cost of the Credit Guarantee Scheme is linked to the participating institution's median five-year credit default swap spreads from July 2, 2007 to July 1, 2008, applied retrospectively. In comparison to the United States' TLGP, where the Federal Reserve determined the risk weighting of FDIC-guaranteed obligations would be 20% for risk-based capital purposes, the FSA determined the risk weighting for HM Treasury-guaranteed obligations to be zero. Apart from senior unsecured debt, the Credit Guarantee Scheme was later extended to provide credit enhancement on other types of bank liabilities, such as certain eligible triple-A rated asset-backed securities, including those backed by mortgages and corporate and consumer debt.<sup>148</sup>

*c. Asset Protection Scheme.* Similar to the structure in the U.S. Asset Guarantee Program, the U.K. Asset Protection Scheme provides protection against losses on a defined asset pool above a certain threshold. The U.K. Asset Protection Scheme was used by HM Treasury to intervene in two major banks, RBS and Lloyds TSB/HBOS.<sup>149</sup> The U.K. government agreed to share losses with RBS with respect to an asset pool of £325 billion. RBS would bear the first portion of any losses, up to a total first loss of 6% or some £20 billion. After that, the U.K. government would bear the risk on up to 90% of any additional losses. RBS would pay a fee of 2% of the value of the assets insured, or approximately £6.5 billion. In the case of Lloyds TSB/HBOS, the asset pool is £260 billion. Lloyds

146. See *Asset Protection Scheme*, *supra* note 145; HM Treasury, *Asset Protection Scheme - Agreement with Lloyds* (Mar. 7, 2009), available at [http://www.hm-treasury.gov.uk/press\\_23\\_09.htm](http://www.hm-treasury.gov.uk/press_23_09.htm) [hereinafter *Lloyds*].

147. See generally United Kingdom Debt Management Office, *2008 Credit Guarantee Scheme*, available at [http://www.dmo.gov.uk/index.aspx?page=CGS/CGS\\_about](http://www.dmo.gov.uk/index.aspx?page=CGS/CGS_about) (last visited Jan. 15 2010).

148. See generally United Kingdom Debt Management Office, *2009 Asset-Backed Securities Guarantee Scheme*, available at [http://www.dmo.gov.uk/index.aspx?page=CGS/ABS\\_about](http://www.dmo.gov.uk/index.aspx?page=CGS/ABS_about) (last visited Jan. 15, 2010).

149. See HM Treasury, *Asset Protection Scheme* (Feb. 26, 2009), available at [http://www.hm-treasury.gov.uk/statement\\_chx\\_260209.htm](http://www.hm-treasury.gov.uk/statement_chx_260209.htm); *Lloyds*, *supra* note 146.

TSB/HBOS agreed to bear the first losses on up to 9.6% of the asset pool, or some £25 billion, and to pay a guarantee fee of 6% of the assets insured, or £15.6 billion. As with the RBS program, the U.K. government would bear the losses on up to 90% of any additional losses in the pool.

In connection to entering the Asset Protection Program with HM Treasury, the banks agreed to quantified lending commitments. For instance, RBS agreed to lend an additional £25 billion on commercial terms for mortgages and businesses on top of its current scale of lending both in 2009 and 2010. Lloyds TSB/HBOS agreed to lend an additional £14 billion on similar terms.

## *2. Bank of England programs*

In response to the financial crisis, the Bank of England lowered its official Bank Rate to 1.5%, the lowest rate since the creation of the central bank in 1694. To provide more liquidity to the financial system, the Bank of England established the Asset Purchase Facility to purchase certain high quality private sector assets, and other liquidity facilities, such as the Special Liquidity Scheme.

a. *Asset Purchase Facility.* On January 19, 2009, the Bank of England announced the Asset Purchase Facility with an initial commitment of up to £50 billion, which was expanded later up to £125 billion.<sup>150</sup> In comparison to the Federal Reserve programs, the Bank of England's Asset Purchase Facility is much smaller in scale. Also, unlike the Federal Reserve's program, the Asset Purchase Facility had to be authorized and guaranteed by HM Treasury, with the main parameters of the programs being set by the Treasury.<sup>151</sup>

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150. See Press Release, HM Treasury, Statement on Financial Intervention to Support Lending in the Economy (Jan. 19, 2009), available at [http://www.hm-treasury.gov.uk/press\\_05\\_09.htm](http://www.hm-treasury.gov.uk/press_05_09.htm); Press Release, Bank of Eng., Bank of England Reduces Bank Rate by 0.5 Percentage Points to 0.5% and Announces £75 Billion Asset Purchase Programme (Mar. 5, 2009), available at <http://www.bankofengland.co.uk/publications/news/2009/019.htm>; Press Release, Bank of Eng., Bank of England Maintains Bank Rate at 0.5% and Increases Size of Asset Purchase Programme by £50 Billion to £125 Billion (May 7, 2009), available at <http://www.bankofengland.co.uk/publications/news/2009/037.htm>; Press Release, Bank of Eng., Bank of England Maintains Bank Rate at 0.5% and Increases Size of Asset Purchase Programme by £50 Billion to £175 Billion (Aug. 6, 2009), available at <http://www.bankofengland.co.uk/publications/news/2009/063.htm>.

151. See Letter from HM Treasury to Bank of Eng. (Jan. 29, 2009), available at [http://www.hm-treasury.gov.uk/d/ck\\_letter\\_Bank\\_of\\_England290109.pdf](http://www.hm-treasury.gov.uk/d/ck_letter_Bank_of_England290109.pdf); Letter from Bank of Eng. to HM Treasury (Jan. 29, 2009), available at <http://www.bankofengland.co.uk/markets/apfgovletter090129.pdf>.

Many types of high quality private sector assets are covered by the Asset Purchase Facility, including debt issued under the Credit Guarantee Scheme, corporate bonds, commercial paper, syndicated loans, certain asset-backed securities, and gilts.

*b. Other liquidity facilities.* Other Bank of England liquidity facilities consist primarily of the Special Liquidity Scheme, the Discount Window Facility and the expansion of its long-term repo operations. The Special Liquidity Scheme allows authorized institutions to swap illiquid assets of sufficiently high quality for U.K. Treasury Bills for up to three years.<sup>152</sup> The Scheme was designed to finance certain illiquid assets on banks' balance sheets by exchanging them temporarily for more easily tradable assets. Under the Discount Window Facility, effective February 2, 2009, the Bank of England permits eligible banks and building societies to borrow gilts, for 30 or 364 days, against a wide range of collateral in return for a fee.<sup>153</sup> With respect to its long-term repo operations, the Bank of England increased the amount and frequency of its three-month lending and expanded the range of collateral eligible in those operations to include asset-backed securities, among other things.

### *3. Special resolution regimes for banks and building societies*

Until early this year, the U.K. insolvency laws did not distinguish banks from other commercial companies. The Banking Act 2009 (Banking Act) instituted a special resolution regime (SRR) for U.K.-incorporated banks and building societies, effectively replacing the Banking (Special Provisions) Act 2008, an emergency piece of legislation to deal with the Northern Rock crisis.<sup>154</sup> The Banking Act

152. For more information, see Bank of England, Special Liquidity Scheme, <http://www.bankofengland.co.uk/markets/sls/index.htm> (last visited Jan. 15, 2010).

153. See Bank of England, Sterling Money Market Operations Discount Window Facility, <http://www.bankofengland.co.uk/markets/money/discount/index.htm> (last visited Jan. 15, 2010).

154. See The Banking Act, 2009 (Eng.), *available at* [http://www.opsi.gov.uk/acts/acts2009/pdf/ukpga\\_20090001\\_en.pdf](http://www.opsi.gov.uk/acts/acts2009/pdf/ukpga_20090001_en.pdf). For more information, see generally ALLEN & OVERY, NEW INSOLVENCY PROCEDURES FOR BANKS AND BUILDING SOCIETIES (Apr. 2009), *available at* <http://elink.allenovery.com/getFile.aspx?ItemType=Bulletin&id=7b961018-03c0-4691-8d86-c50f35954edd>; LINKLATERS, THE BANKING ACT 2009 AND ITS IMPACT ON UK BANKS AND THEIR STAKEHOLDERS AND COUNTERPARTIES (Mar. 9, 2009), *available at* [http://www.linexlegal.com/content.php?content\\_id=83703](http://www.linexlegal.com/content.php?content_id=83703); SLAUGHTER AND MAY, A BRIEF GUIDE TO THE BANKING ACT OF 2009 (Mar. 2009), *available at* [http://www.slaughterandmay.com/media/786586/financing\\_briefing\\_a\\_brief\\_guide\\_to\\_the\\_banking\\_act\\_2008\\_mar\\_2009.pdf](http://www.slaughterandmay.com/media/786586/financing_briefing_a_brief_guide_to_the_banking_act_2008_mar_2009.pdf).

aims to provide the U.K. government with new tools to deal with failing banks and building societies. The Banking Act does not apply to an investment bank and the U.K. government is currently developing a separate resolution mechanism for investment banks.

Under the Banking Act, the FSA has the authority to trigger the regime if a bank has failed or is likely to fail to meet certain FSA-defined threshold conditions. Once the SRR is triggered, the Bank of England is responsible for managing and executing the resolution process and the Treasury is responsible for some key decisions such as financing or nationalization. Under the Banking Act, there are three stabilization options: (i) the Bank of England has the power to transfer all or part of a failing bank to a private sector purchaser; (ii) the Bank of England has the power to transfer all or part of a failing bank to a bridge bank established by the Bank of England; and (iii) the Treasury may take a bank into temporary public ownership by transferring its shares either to a nominee of the Treasury or a company wholly owned by the Treasury. In the case of a partial transfer, either to a private sector purchaser or a bridge bank, the residual bank would be placed into a “special bank administration” procedure, with the primary objective being to support the private sector purchaser or the bridge bank. The Bank of England, in conjunction with a bank administrator, executes the “special bank administration” procedure.

Since the passage of the Banking Act, *Dunfermline Building Society* was the first case under the SRR.<sup>155</sup> Some part of Dunfermline’s assets and liabilities was transferred to Nationwide Building Society and some part was placed into a bridge bank, wholly owned by the Bank of England. The assets and liabilities held by the bridge bank were sold later in a competitive auction process. The remainder of Dunfermline’s business was placed into the “special bank administration” procedure.<sup>156</sup>

### *C. Other European Programs*

The financial crisis has prompted actions from the European Commission and many national governments. In the European Union, all rescue packages by national governments are subject to

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155. See HM TREASURY, REFORMING FINANCIAL MARKETS, CM 7667, 31 (2009), available at [http://www.hm-treasury.gov.uk/d/reforming\\_financial\\_markets080709.pdf](http://www.hm-treasury.gov.uk/d/reforming_financial_markets080709.pdf).

156. *Id.*

the European Commission's state aid review as part of the EU's competition policy.<sup>157</sup> To allow swift implementation of national measures, the European Commission issued a series of Communications to provide a European framework of rescue operations and streamline the approval procedures.<sup>158</sup> The discussion below is informed primarily by two recent BIS reports and provides only a short summary of the various rescue programs instituted by the major European nations.<sup>159</sup>

### *1. Capital injections*<sup>160</sup>

All major European nations, including France, Germany, Italy, Spain, Switzerland, and the Netherlands, established capital injection schemes. The Italian and Spanish programs were not used because of their relatively healthy banking sectors, which were less affected by the financial crisis. The eligible institutions are typically depository institutions, though the programs in France, Germany, and the Netherlands also include insurance companies.

157. See, e.g., Europa.eu, Competition, [http://europa.eu/pol/comp/index\\_en.htm](http://europa.eu/pol/comp/index_en.htm) (last visited Jan. 15, 2010).

158. For more information, see *Commission of the European Communities*, COM (2009) 164 final (Aug. 4, 2009), available at [http://ec.europa.eu/competition/state\\_aid/studies\\_reports/2009\\_spring\\_en.pdf](http://ec.europa.eu/competition/state_aid/studies_reports/2009_spring_en.pdf); Communication from the Commission—The Application of State Aid Rules to Measures Taken in Relation to Financial Institutions in the Context of the Current Global Financial Crisis (EC) 25 Oct. 2008, 2008 O.J. (C 270) 8, 8–14, (the Banking Communication), available at [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52008XC1025\(01\):EN:NOT](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52008XC1025(01):EN:NOT); Communication from the Commission—The Recapitalisation of Financial Institutions in the Current Financial Crisis: Limitation of Aid to the Minimum Necessary and Safeguards Against Undue Distortion of Competition (EC) 15 Jan. 2009, 2009 O.J. (C 10) 2, 2–10 (the Recapitalization Communication), available at [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009XC0115\(01\):EN:NOT](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009XC0115(01):EN:NOT); Communication from the Commission on the Treatment of Impaired Assets in the Community Banking Sector (EC) 26 Mar. 2009, 2009 O.J. (C 72) 1, 1–22 (the Impaired Assets Communication), available at [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009XC0326\(01\):EN:NOT](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009XC0326(01):EN:NOT); Commission Communication on the Return to Viability and the Assessment of Restructuring Measures in the Financial Sector in the Current Crisis Under the State Aid Rules (EC) 19 Aug. 2009, 2009 O.J. (C 195) 9, 9–20 (the Restructuring Communication), available at [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009XC0819\(03\):EN:NOT](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009XC0819(03):EN:NOT).

159. See generally Fabio Panetta et al., *An Assessment of Financial Sector Rescue Programmes*, (Bank for International Settlements, BIS Papers No. 48, July 2009) [hereinafter BIS I], available at <http://www.bis.org/publ/bppdf/bispap48.pdf?noframes=1>; 2009 BANK FOR INTERNATIONAL SETTLEMENTS ANN. REP. 79 [hereinafter BIS II], available at <http://www.bis.org/publ/arpdf/ar2009c.pdf?noframes=1>.

160. See BIS I, *supra* note 159, at 20–22; BIS II, *supra* note 159, at 106–07.

Most of the capital injections take the form of preferred shares and, in the case of France, subordinated debt (which was later allowed to be converted to preferred shares). In terms of pricing, the annual dividend for preferred shares of the European programs was set according to the guidelines by the European Central Bank, ranging from 6–9.3% depending on the degree of subordination. Similar to the U.S. programs, some EU programs also require warrants for ordinary shares issued to governments to give them the potential for upside returns. The capital injections all carry some combination of restrictions in executive compensation, dividend payments and adoption of appropriate business strategy or restructuring plans.

### *2. Debt guarantees*<sup>161</sup>

Debt guarantee programs were also adopted in almost all European countries. The programs applied to domestic banks, and most of them also cover domestic subsidiaries of foreign banks. The eligible instruments are mostly newly issued senior unsecured debt with maturity terms usually ranging from three to five years. Some programs also cover shorter-term instruments such as certificates of deposit and commercial papers, but other programs explicitly exclude very short-term liabilities.

In terms of cost, most EU programs are linked to the issuers' median credit default swap (CDS) spreads over some historical period. By comparison, the United States' TLGP charges a flat fee that varies with maturity. Apart from debt guarantee programs, some European countries also increased their deposit insurance coverage, either temporarily or permanently, such as Germany, Italy, and Switzerland.

### *3. Asset guarantees*<sup>162</sup>

In comparison to programs for capital injections and debt guarantees that have been adopted in nearly all countries, asset guarantee programs have been rare. Apart from the Asset Protection Scheme in the United Kingdom, there is only one stand-alone case

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161. See BIS I, *supra* note 159, at 23–25; BIS II, *supra* note 159, at 103, 106.

162. See BIS I, *supra* note 159, at 10–11, 26–27; BIS II, *supra* note 159, at 107.

in Europe—namely, the Dutch guarantee of certain assets held by ING.

#### *4. Asset purchases*<sup>163</sup>

Asset purchase programs are even scarcer in Europe. So far, only Germany has announced a general program to purchase impaired assets. In Germany, a draft law from May 2009 authorized the establishment of a new facility to swap toxic assets from banks for government-guaranteed bonds, but the program has not yet been implemented.

Though not part of a general program, the Swiss National Bank purchased \$38.7 billion of toxic assets from UBS Switzerland and placed them into an SPV. Most of the purchased assets were U.S. real estate related. The Swiss National Bank provided 90% of the financing in the form of secured lending and UBS provided the rest in the form of equity and agreed to take the first loss on these assets.

#### *5. Bank insolvency laws and nationalizations*

The financial crisis exposed the constraints of the national bank insolvency regimes, prompting many EU countries to pass or consider legislation to institute special resolution regimes for banks and other financial institutions.<sup>164</sup> Before the financial crisis, most EU national governments did not have laws on their books allowing them to take over failing banks. As mentioned above, the U.K. government passed the legislation for a special bank resolution regime (SRR) in response to its experiences of dealing with the crisis of Northern Rock. The near-collapse of Hypo Real Estate Holding AG prompted the German government to pass a special legislation primarily for the purpose of taking over that failing institution. Currently, the German government is debating whether a special bank insolvency procedure should be put in place that would apply generally to all banks.<sup>165</sup>

163. See BIS I, *supra* note 159, at 25–26; BIS II, *supra* note 159, at 107.

164. See Matthew Dalton, *Europeans Review Bank Rules*, WALL ST. J., July 14, 2009, available at <http://online.wsj.com/article/SB124757731423738667.html>.

165. See Geoffrey T. Smith, *Germany to Create New Power to Take Over Insolvent Banks*, WALL ST. J., Aug. 6, 2009, available at <http://online.wsj.com/article/SB124950875633709055.html>; Andrea Thomas, *BaFin's Sanio Calls for FDIC-like Body For Germany*, WALL ST. J., July 31, 2009, available at <http://online.wsj.com/article/SB124895957063693663.html>.



In the case of Fortis, the Dutch government had the legal authority to take over the Dutch arm of Fortis and used it to nationalize it after an initial capital injection failed to stabilize the bank. In comparison, the Belgian government, however, did not have such powers, which complicated its handling of the Belgian arm of Fortis, as the shareholders were able to block a government-orchestrated sale of Fortis's Belgian banking assets to BNP Paribas SA for more than six months.<sup>166</sup> In light of the Fortis experience, the Belgian government is also drafting legislation for a special bank resolution regime.

6. *European Central Bank (ECB)*<sup>167</sup>

Since October 2008, the ECB cut its key policy rate by a total of 325 basis points to a historical low of 1%. Because of the euro area's largely bank-centered financial system, the ECB's actions to provide liquidity focused mostly on the banking sector.<sup>168</sup> Similar to the actions of central banks in the United States and United Kingdom, the ECB relaxed standards for eligible collateral, expanded counterparty coverage, and lengthened the maturity of refinancing operations from one week to six months. Instead of competitive auctioning for a given amount of credit as during normal times, the ECB followed a "fixed rate full allotment" procedure, essentially granting banks unlimited liquidity.

With respect to asset purchases, the ECB's asset purchase program is minimal with a total commitment of €60 billion. Eligible assets include only covered bonds.

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166. See Jan Brockmeijer, Deputy Dir., IMF Monetary and Capital Markets Dep't, *Lessons of the Crisis for EU Financial Supervisory Policy*, Remarks at the IMF-Bruegel-National Bank of Belgium Conference: After the Storm: The Future Face of Europe's Financial System (Mar. 24, 2009), available at <https://www.imf.org/external/np/seminars/eng/2009/eurfin/pdf/brockm.pdf>.

167. See Jean-Claude Trichet, President, European Cent. Bank, *Supporting the Financial System and the Economy: Key ECB Policy Actions in the Crisis*, Speech at the Nueva Economía Fórum-Wall Street Journal Europe Conference (June 22, 2009), available at <http://www.ecb.int/press/key/date/2009/html/sp090622.en.html>.

168. President Trichet stated that the Euro financial system is largely bank-centered, whereas the U.S. system is more market-based. At the end of 2007, total outstanding bank loans to the private sector amounted to about 145% of GDP in the euro area, while the corresponding figure for bank loans in the U.S. is only 63%. See *id.*

### III. REGULATORY REFORM DESIGNED TO PREVENT FUTURE CRISES

The U.S. and international regulatory proposals designed to prevent future financial crises, or at least reduce their likelihood or severity, are still in the process of being formed and discussed. I will summarize the current U.S., U.K., and other European proposals, as well as the G-20 proposals for worldwide financial regulatory reform.

#### *A. U.S. Proposals*

The financial crisis has created a perfect storm for more regulation in the United States. Many U.S. regulators and policymakers have stressed the lack of adequate regulatory or supervisory powers as one of the causes of the global financial crisis. As a result, there have been various proposals from the Obama Administration, from Democrats and Republicans in the U.S. Congress, and from other stakeholders, for how the financial regulatory system in the United States should be reformed or overhauled to prevent a future crisis from occurring, or at least reduce its likelihood or severity.

##### *1. Alleged flaws in the U.S. financial oversight system*

Among the alleged flaws in the U.S. financial oversight system that contributed to the financial crisis is the criticism that there are too many regulators in the United States with overlapping, and in some cases insufficiently overlapping, jurisdictions and mandates.<sup>169</sup> It is true that, as a result of historical development rather than national planning, a single financial institution in the United States can find itself subject to the jurisdiction of a wide swath of regulators by business subsidiary and across business lines, and that different financial institutions can find themselves subject to differing regulation depending on historical circumstance. This can lead to inefficiencies in regulation, can provide opportunities for regulatory arbitrage, and can result in regulators pointing fingers at each other when the system goes awry.

In fact, one of the main criticisms of the system is that no single regulator was responsible for overseeing risk within the financial system as a whole.<sup>170</sup> No single regulator, or collection of

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169. Joe Nocera, *Knee Jerks for Reform Are Overdue*, N.Y. TIMES, Mar. 29, 2008, at C1.

170. *It's the Regulations, Not the Regulator*, N.Y. TIMES, Mar. 18, 2009, at A30.

coordinated regulators, had the authority or the resources to collect information system-wide or to use that information to take corrective action in a timely manner across financial institutions and markets regardless of charter. For example, one of the lessons learned from recent experience is that a sector of the market, such as the mortgage brokerage industry, can be systemically important, even though no single institution in that sector is a significant player. A single regulator with responsibility for overseeing systemic risk could identify and move to regulate such a sector.

Finally, the current system provides no authority designed to empower a federal regulatory agency to control the resolution of a financial institution during a financial crisis, leaving the choice as between a so-called “bailout,” and allowing the institution to fail and file for bankruptcy, as occurred with Lehman Brothers.<sup>171</sup>

These and other alleged flaws in the current system have amplified the calls for reform of the current regulatory system.

## *2. Four models for financial regulatory reform*

Generally speaking, there are four global models for financial regulation: (1) institutional regulation, where supervision is based on the type of entity, such as a bank, insurance company, broker-dealer, etc.; (2) functional regulation, where supervision is based on function, such as securities activities, insurance, banking, investment advice, etc.; (3) a “twin peaks” model of regulation, where there is a separation of supervisory functions between two separate regulators, one which is responsible for prudential supervision, and the other which is responsible for conduct-of-business supervision; and (4) an integrated model of regulation, such as exists in the United Kingdom with the Financial Services Authority, where a single comprehensive supervisor is responsible for all the sectors of financial services business.<sup>172</sup>

The United States financial regulatory system has been characterized as an “institutionally based functional system” with

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171. Edmund L. Andrews & Eric Dash, *U.S. Seeks Expanded Power in Seizing Firms*, N.Y. TIMES, Mar. 24, 2009, at A1.

172. See U.S. TREASURY DEP’T, BLUEPRINT FOR A MODERNIZED FINANCIAL REGULATORY STRUCTURE (Mar. 2008) [hereinafter U.S. TREASURY DEP’T, BLUEPRINT], available at <http://www.treas.gov/press/releases/reports/Blueprint.pdf>; GROUP OF THIRTY, FINANCIAL REFORM: A FRAMEWORK FOR FINANCIAL STABILITY (Jan. 2009), available at <http://www.group30.org/pubs/reformreport.pdf>.

separate regulatory agencies broadly responsible for regulatory oversight across functional lines, such as banking, insurance, securities and futures.<sup>173</sup> Historically, these functions may have been housed in separate institutions, but with the passage of the Gramm-Leach-Bliley Act and other market developments, these functions are increasingly housed in a variety of institutions and within single institutions. The tension for financial regulatory reform in the United States is between making fundamental changes to this regulatory model, and making changes within the regulatory model as it currently exists.

### *3. Obama Administration's financial regulatory reform plan*

In June 2009, contemporaneously with increasingly loud calls for regulatory reform and domestic and international pressure to address some of the causes of the financial crisis, the U.S. Treasury released its *White Paper on Financial Regulatory Reform*.<sup>174</sup> In addition to identifying specific areas for reform, the White Paper identified five key objectives for financial regulation: (1) to protect consumers and investors from financial abuse; (2) to promote robust supervision and regulation of financial firms; (3) to establish comprehensive regulation of financial markets; (4) to provide the government with the tools it needs to manage financial crises; and (5) to raise international regulatory standards and improve international cooperation.

The extent to which the White Paper's conceptual proposals, and subsequent legislation proposed by the Obama Administration to implement those proposals,<sup>175</sup> achieve these goals is a matter of considerable debate. Roughly speaking, the proposals can be placed

173. See U.S. TREASURY DEP'T, BLUEPRINT, *supra* note 172.

174. U.S. TREASURY DEP'T, A NEW FOUNDATION: REBUILDING FINANCIAL SUPERVISION AND REGULATION (June 2009), *available at* [http://www.financialstability.gov/docs/regs/FinalReport\\_web.pdf](http://www.financialstability.gov/docs/regs/FinalReport_web.pdf). For a memorandum analyzing the White Paper, see DAVIS POLK, A NEW FOUNDATION FOR FINANCIAL REGULATION? (June 2009), *available at* [http://www.davispolk.com/files/Publication/726890c9-123c-4113-a924-a129bc96fbce/Presentation/PublicationAttachment/d1bbea9e-1369-49a5-838f-c83e8f4fae1b/062209\\_New\\_Foundation.pdf](http://www.davispolk.com/files/Publication/726890c9-123c-4113-a924-a129bc96fbce/Presentation/PublicationAttachment/d1bbea9e-1369-49a5-838f-c83e8f4fae1b/062209_New_Foundation.pdf).

175. For a discussion of the Obama Administration's initial financial regulatory proposals, see DAVIS POLK, THE REGULATORY REFORM MARATHON (July 2009), *available at* [http://www.davispolk.com/files/Publication/963cb101-2593-4ba0-9133-02f73afd2bd9/Presentation/PublicationAttachment/bfcca243-1cf2-47b6-81fb-0a23756a927c/072809\\_Marathon.pdf](http://www.davispolk.com/files/Publication/963cb101-2593-4ba0-9133-02f73afd2bd9/Presentation/PublicationAttachment/bfcca243-1cf2-47b6-81fb-0a23756a927c/072809_Marathon.pdf).

into four categories: (1) supervision and regulation of financial firms; (2) comprehensive regulation of financial markets; (3) consumer and investor protection; and (4) executive compensation and corporate governance. I will provide an overview of these proposals below. For a timeline of the political and regulatory responses, see Annex B.<sup>176</sup>

*a. Supervision and regulation of financial firms.* Reform to the supervision and regulation of financial firms is a keystone of the Obama Administration's proposals for comprehensive financial regulatory reform. These proposals include appointing the Federal Reserve as the systemic risk regulator in the United States, supplemented by a Council of Regulators; regulating systemically important financial institutions, or so-called "Tier 1 FHCs"; enhancing the capital and prudential standards for existing bank holding companies, and bringing previously exempted bank holding companies under the Federal Reserve's supervision; providing for authority to resolve systemically significant financial institutions; regulating hedge funds; reforming the regulation of credit agencies; and creating an Office of National Insurance.

*(1) Systemic risk regulator.* Reflecting the consensus among most U.S. policymakers that the U.S. financial regulatory architecture needs a systemic regulator, the centerpiece of the U.S. Treasury's proposal involves the creation of a single independent regulator with responsibility over systemically important firms and critical payment and settlement systems.<sup>177</sup>

One of the key policy disagreements in the domestic debate revolves around the role of the Federal Reserve as the sole or lead systemic risk regulator. The Administration's proposal reflects its decision to make the Federal Reserve solely responsible and accountable for systemic risk regulation and supervision, with assistance from a Financial Services Oversight Council. Many commentators and policy makers have long thought that the Federal Reserve is the only institution that has the experience and capacity to be the systemic risk regulator. The Bush Administration's Treasury took this position in its *Blueprint for a Modernized Financial Regulatory Structure*, stating that "[t]he Federal Reserve should

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176. DPFCM, *supra* note 33, at 5.

177. U.S. TREASURY DEP'T, BLUEPRINT, *supra* note 172, at 144.

assume this role in the optimal framework given its traditional central bank role of promoting overall macroeconomic stability.”<sup>178</sup>

This aspect of the proposed legislation has had many critics, including U.S. Senate Banking Committee Chairman Christopher Dodd, FDIC Chairman Bair, and SEC Chairman Schapiro. Some of these critics expressed concern about concentrating too much power in the hands of the Federal Reserve and reducing the influence of other federal agencies such as the FDIC and the SEC.<sup>179</sup> Many of these critics would place systemic risk authority in the hands of a council made up of a variety of federal regulators, including the SEC and the FDIC. The House Republicans would go a step further and transfer the Federal Reserve’s current regulatory authority to a new single financial institutions regulator, while limiting the Federal Reserve’s mission to monetary policy.

Recently, Federal Reserve Chairman Ben Bernanke, acknowledging these critics and their political clout, has stated that, although for purposes of both effectiveness and accountability, the consolidated supervision of an individual firm, whether or not it is systemically important, is best vested with a single agency, the broader task of monitoring and addressing systemic risks that might arise from the interaction of different types of financial institutions and markets should be incorporated into the mandate of each individual agency and should be the mandate of an oversight council, composed of representatives of the agencies and departments involved in the oversight of the financial sector.<sup>180</sup>

How this debate over the systemic risk regulator will be resolved is yet to be determined, but it is clear that the Administration intends to push for the Federal Reserve to be the regulator of systemically important financial firms.

(2) *Tier 1 FHCs*. The regulation and consolidated supervision of systemically important financial institutions is another key element of the Obama Administration’s regulatory reform proposals. The current financial crisis demonstrated that banks and

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178. *Id.*

179. Stephen Labaton, *An Overhaul of Financial Rules Is Taking Shape*, N.Y. TIMES, June 1, 2009, at B1.

180. See *Federal Reserve Perspectives on Financial Regulatory Reform Proposals: Hearing Before the H. Comm. on Financial Services*, 111th Cong. (2009) (statement of Ben Bernanke, Chairman of the Federal Reserve), available at <http://www.federalreserve.gov/newsevents/testimony/bernanke20091001a.htm>.

bank holding companies are not the only financial institutions that can create systemic risk if they fail. Other financial firms—such as investment banks or insurance companies—can also create systemic risk if they fail. Yet these other financial institutions have not been subject to the same sort of regulation and consolidated supervision in the United States as banks and bank holding companies. To close this gap in the regulatory structure, the Administration has proposed subjecting all systemically important financial institutions to the same framework for consolidated prudential supervision that currently applies to bank holding companies. Such action would prevent financial firms that do not own a bank, but that nonetheless pose risks to the overall financial system because of the size, risks, or interconnectedness of their financial activities, from avoiding comprehensive supervisory oversight.

The Administration's legislative proposal would define a new category of financial institutions called "Tier 1 FHCs." A Tier 1 FHC would be any "United States financial company" or "foreign financial company" that is designated as a Tier 1 FHC by the Federal Reserve. A "United States financial company" would be a "bank holding company or any other company" organized under U.S. law that is engaged "in whole, or in part, directly or indirectly," in "activities in the United States that are financial in nature," regardless of whether the company owns or controls a bank.<sup>181</sup> A "foreign financial company" would be a "bank holding company or any other company" organized under non-U.S. law that is engaged in whole or in part, directly or indirectly, including through a U.S. branch, in "activities in the United States that are financial in nature."<sup>182</sup> These definitions would give the Federal Reserve broad discretion to designate almost any large, highly leveraged or interconnected company as a Tier 1 FHC, provided it is engaged in at least some financial activities. Only a company that is exclusively engaged in nonfinancial activities is entirely insulated from being designated as a Tier 1 FHC. The proposed legislation would establish standards that are more stringent than those applicable to bank holding companies and would include stricter risk-based capital

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181. Title II, Obama Administration Legislative Proposal, *available at* <http://www.treas.gov/press/releases/reports/title%20ii%20tier%201%20fhcs%20%207222009%20finl.pdf>.

182. *Id.*

requirements, leverage limits, liquidity requirements, and overall risk management requirements.<sup>183</sup>

Critics have argued that designating firms as systemically important, or “Tier 1 FHCs,” will institutionalize them as “too big to fail,” creating another class of institutions like Freddie Mac and Fannie Mae that have funding advantages over their competitors because of the implicit support of the U.S. government. The Administration has responded by arguing that any funding advantages will be offset by the costs of enhanced capital, liquidity and other requirements that will be imposed on Tier 1 FHCs, and that it is not possible to impose these enhanced requirements on systemically important institutions unless there is some mechanism for identifying who they are. Moreover, the Administration has argued that imposing the enhanced requirements will reduce the incentives to becoming too large. Finally, the creation of an orderly resolution mechanism for these large, non-bank holding companies would also address the “too big to fail” problem.<sup>184</sup>

(3) *Capital and prudential standards for BHCs.* In addition to subjecting systemically important financial institutions to consolidated supervision and regulation by the Federal Reserve, regardless of their charter, the Administration has proposed consolidating certain U.S. bank supervisors, eliminating the ability of certain “non-bank” bank holding companies to remain exempt from bank holding company regulation, and enhancing the capital and prudential standards applicable to all bank holding companies.

As noted at the outset, one of the perceived flaws of the U.S. financial regulatory system is the number of regulators with similar mandates and exceptions to regulation due to historical circumstance. In an effort to address some of that inefficiency, the Administration has proposed consolidating the Office of the Comptroller of the Currency, which oversees national banks, and the Office of Thrift Supervision, which oversees national savings associations, into a single regulator, the National Bank Supervisor.<sup>185</sup>

In addition, certain insured depository institutions that do not currently fall within the definition of the term “bank” for the

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183. DAVIS POLK, REGULATORY REFORM MARATHON, *supra* note 175, at 3.

184. *Id.* at 2.

185. Title VI, Obama Administration Legislative Proposal, *available at* <http://www.treas.gov/press/releases/reports/title%20vi%20bhca%20amndts%20%200722%20fnl.pdf>.



purpose of bank holding company regulation, such as savings associations, industrial loan companies, credit card banks, trust companies, and grandfathered non-bank banks, would be included with a new definition of the term “bank.” Their parent holding companies would therefore become bank holding companies and would be required to conform their activities to the non-banking activity restrictions of the Bank Holding Company Act or to divest control over such depository institution subsidiaries.<sup>186</sup> With these reforms, the Administration is attempting to move financial regulation closer to a rational, more streamlined system.

The Administration has also focused on enhancing capital and prudential standards for all bank holding companies. A U.S. Treasury working group will publish a report on capital requirements by December 31, 2009. This is occurring in the context of a review by the Basel Committee on Banking Supervision of capital requirements. The Basel Committee released a complete proposal by the end of 2009.<sup>187</sup> The U.S. Treasury has called for reaching an international agreement on a new global capital framework by December 31, 2010, with implementation by December 31, 2012.<sup>188</sup>

Some of the U.S. capital reform proposals include making common equity a large majority of a banking firm’s Tier 1 capital, and limiting the amount of cumulative or non-cumulative perpetual preferred stock and qualifying trust preferred securities that can be included in Tier 1 capital. In addition, higher risk-based capital charges for certain instruments and exposures, such as off-balance sheet vehicles, proprietary and other trading positions, equity investments, asset-backed securities and mortgage-backed securities, and counterparty credit risk exposures to financial firms (e.g., non-centrally cleared derivatives, repos, reverse repos, securities lending, and margin loans), could be proposed. Other proposals are to apply higher capital requirements in the early phases of the credit cycle, to apply more uniform capital requirements throughout the cycle, and to require forward-looking loan loss reserves. U.S. bank regulators

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186. *Id.*

187. Basel Committee on Banking Supervision, *Strengthening the Resilience of the Banking Sector* (Dec. 2009), available at <http://www.bis.org/publ/bcbs164.pdf?noframes=1>.

188. U.S. TREASURY DEP’T, PRINCIPLES FOR REFORMING THE U.S. AND INTERNATIONAL REGULATORY CAPITAL FRAMEWORK FOR BANKING FIRMS, (Sept. 2009), available at [http://www.treas.gov/press/releases/docs/capital-statement\\_090309.pdf](http://www.treas.gov/press/releases/docs/capital-statement_090309.pdf).

and Treasury are debating whether to impose a capital surcharge on systemically important firms. Specific quantitative proposals for these charges and requirements have yet to be announced.

*(4) Resolution of systemically important financial institutions.*

One of the deficiencies identified in the recent financial crisis was the lack of authority by any federal regulatory agency to resolve a systemically important financial institution, such as Lehman Brothers or AIG, other than to allow the institution to file for bankruptcy. Those who view this lack of authority as a deficiency believe that allowing a systemically important financial institution to file for bankruptcy can result in systemic risk to the financial system. They believe that a regime that empowers a federal agency to direct the orderly resolution of failing, systemically important financial firms would be an improvement.

The proposed resolution authority is modeled on the special resolution law used by the Federal Deposit Insurance Corporation to resolve insured banks and thrifts. Its proponents believe that it would provide the government with a mechanism for imposing losses on the shareholders and creditors of the firm. For example, Chairman Bernanke has stated that establishing a credible process for imposing such losses is essential to restoring a meaningful degree of market discipline and addressing the too-big-to-fail problem. The availability of a workable resolution regime would also replace the need for the Federal Reserve to use its emergency lending authority under section 13(3) of the Federal Reserve Act to prevent the failure of specific institutions.

Currently, the proposal would place the FDIC or, in certain circumstances, the SEC, in charge of the resolution process. Potentially covered companies include any Tier 1 FHC, any bank holding company and any of their subsidiaries (other than an insured depository institution subsidiary, a broker-dealer subsidiary that is a member of the Securities Investor Protection Corporation (SIPC), or an insurance company subsidiary). These other subsidiaries would be resolved under their existing insolvency regimes.<sup>189</sup> Thus, while the proposed authority would have authorized a federal agency to resolve the holding companies and many of the subsidiaries in the Lehman Brothers or AIG groups, it would not have included the

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189. Title XII, Obama Administration Proposed Legislation, *available at* [http://www.financialstability.gov/docs/regulatoryreform/title-XII\\_resolutionauthority\\_072309.pdf](http://www.financialstability.gov/docs/regulatoryreform/title-XII_resolutionauthority_072309.pdf).

authority over those entire groups because the flagship broker-dealer in the Lehman Brothers group and every insurance subsidiary in the AIG group (accounting for the vast majority of the group's assets and liabilities) would have been excluded from coverage.

Moreover, there are significant issues raised by this proposal. The proposal would change the "rules of the game" for creditors and counterparties on the eve of bankruptcy and thereby disrupt their reasonable expectations with little or no prior notice. Creditors, counterparties, customers, and other stakeholders have very different rights under the U.S. Bankruptcy Code and the Federal Deposit Insurance Act, and changing the rules of the game on the eve of bankruptcy could itself create systemic risk. This problem may be addressed by harmonizing the rules that define creditors' rights in the proposed resolution authority with their counterparts under the Bankruptcy Code. This would leave a federal agency in charge of the process with the conservatorship and bridge company options, but otherwise applying many of the substantive rules defining creditors' rights as they currently exist in the U.S. Bankruptcy Code.

(5) *Hedge funds*. For a variety of reasons, the regulation of hedge funds and hedge fund advisers has become a main target of regulatory reform. Although hedge funds are not widely thought to have been a cause of the current financial crisis, the lack of transparency into their operations and their capacity to cause systemic risk, as demonstrated by the losses incurred by Long Term Capital Management in the late 1990s, has drawn scrutiny and persistent calls from Congress, foreign supervisors, and the public to require hedge fund advisers to register.<sup>190</sup> Moreover, hedge funds have become direct competitors with banks and securities firms in many aspects of their businesses.

The Administration has proposed to amend the Investment Advisers Act of 1940 to require nearly all advisers to hedge funds and other private pools of capital to register with the SEC.<sup>191</sup> The proposed legislation would not require funds themselves to register, but would require advisers to private funds to report to the SEC, on

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190. See ROGER LOWENSTEIN, WHEN GENIUS FAILED: THE RISE AND FALL OF LONG-TERM CAPITAL MANAGEMENT (2001).

191. See DAVIS POLK, PRIVATE FUND INVESTMENT ADVISERS REGISTRATION ACT (July 2009), available at <http://www.davispolk.com/files/Publication/42b233ac-70fd-44f0-9a0c06780d656923/Presentation/PublicationAttachment/b821d55d-fd30-4d1b-85b506a0aba19d04/07.17.09.PFIRA.html>.

a confidential basis, information about the funds they advise to permit an assessment of systemic risk posed by the funds.

The proposal would eliminate the exemption for private investment advisers and require all advisers to “private funds” to register with the SEC if their assets under management exceed \$30 million. The definition of “private fund” does not distinguish between hedge funds and other private funds, such as venture capital and private equity funds. The proposal does create a new exemption for a “foreign private adviser.” The proposal would require that an offshore adviser have no place of business in the United States in order to qualify for the exemption. Furthermore, the exemption would require not only that the foreign adviser’s U.S. clients number less than fifteen but also that the adviser manage less than \$25 million attributable to U.S. clients.

Registered investment advisers that are subject to the Advisers Act are required to implement a comprehensive compliance program, adopt a code of ethics and an insider trading policy, comply with certain custody procedures, advertising restrictions and document retention obligations, disclose and report specified information on Form ADV, and be subject to SEC examinations.

The proposed legislation would authorize the SEC to require registered investment advisers to provide reports regarding private funds they advise “as are necessary or appropriate in the public interest and for the assessment of systemic risk”<sup>192</sup> and to provide such reports to the Federal Reserve as well as to the Financial Services Oversight Council. The Administration has stated that during the financial crisis the government lacked the data necessary to monitor private fund activity, and that the proposal would require advisers to private funds to report information necessary to assess “whether risks in the aggregate or risks in any particular fund pose a threat to our overall financial stability.”<sup>193</sup> The reports required by the proposed legislation would include assets under management, use of leverage (including off-balance sheet leverage), counterparty

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192. Title IV, § 404, Obama Administration Legislative Proposal, *available at* <http://www.ustreas.gov/press/releases/reports/title%20iv%20reg%20advisers%20priv%20funds%207%2015%2009%20fnl.pdf>.

193. Press Release, U.S. Treasury Dep’t, Administration’s Regulatory Reform Agenda Moves Forward, TG 214 (July 15, 2009), *available at* <http://www.ustreas.gov/press/releases/tg214.htm>.

credit risk exposure, trading and investment positions, trading practices, and other information as determined by the SEC.<sup>194</sup>

Representative Paul E. Kanjorski, Chairman of the House Financial Services Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, recently proposed legislation to amend the Advisers Act similar to the Administration's proposed legislation, except that it would exempt investment advisers to venture capital funds from registration requirements and enhance the SEC's rulemaking authority in this area.<sup>195</sup> House Financial Services Committee Chairman Barney Frank has said that he plans to introduce legislation imposing restrictions on hedge funds, private equity firms, and broker-dealers while exempting venture capital firms from additional regulations as well.<sup>196</sup>

(6) *Credit rating agencies.* Among the many weaknesses identified as contributing to the financial crisis was the conduct of credit rating agencies, which were blamed for not adequately or accurately identifying credit risk in their securities ratings. Regulatory initiatives are currently under way to improve the integrity of the rating agencies' rating process. These initiatives have focused on enhancing the transparency of the rating process through greater disclosure of rating agencies' procedures and methodologies and strengthening rules addressing conflicts of interest.

On July 14, 2009, SEC Chairman Mary Schapiro announced a plan to create a new entity within the SEC whose sole purpose is to oversee and examine credit-rating agencies. On September 17, 2009, the SEC held an open meeting on measures to strengthen the oversight of credit rating agencies. At the meeting, the SEC voted unanimously to take several rulemaking actions, including the adoption of amendments designed to reduce reliance on credit ratings by eliminating references to nationally recognized statistical rating organization (NRSRO) ratings from certain SEC rules and

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194. DAVIS POLK, *supra* note 191.

195. See Davis Polk, *Representative Kanjorski Releases Investor Protection, Private Investment Fund Advisers Registration and Federal Insurance Office Proposals*, Oct. 6, 2009, [http://intranet.dpw.com/intranet/SS/depts/busdev/Communications%20by%20Type/All%20Client%20Communications/2009/100609\\_Kanjorski.pdf](http://intranet.dpw.com/intranet/SS/depts/busdev/Communications%20by%20Type/All%20Client%20Communications/2009/100609_Kanjorski.pdf).

196. See *Frank to Propose Hedge-fund Regulation Bill*, MARKETWATCH, Oct. 1, 2009, available at <http://www.marketwatch.com/story/frank-to-propose-hedge-fund-regulation-bill-2009-10-01>.

forms.<sup>197</sup> Also adopted were rules to provide investors with greater information concerning ratings history and to promote unsolicited ratings by providing all NRSROs with equal access to data underlying structured finance products. The SEC also proposed rules that would enhance credit rating agencies' compliance programs, further eliminate references to NRSRO ratings from SEC rules and forms, and require additional disclosure about the meaningfulness of ratings and the potential existence of revenue-related conflicts of interest. In addition, legislation proposed by the U.S. Treasury would require registration of all credit rating agencies as NRSROs, further enhance the SEC's supervision of credit rating agencies, and impose investor protection requirements. However, critics have been vocal in their assertions that the current initiatives do not go far enough. They have suggested further-reaching initiatives, such as requiring rating agencies to perform their own due diligence to verify information presented to them by issuers and exposing rating agencies to meaningful legal liability risks. The SEC has actively engaged such critics and recently voted to issue a concept release considering whether to subject NRSROs to liability when their ratings are used in connection with a registered offering.<sup>198</sup>

(7) *Office of national insurance.* Many regulators and commentators have endorsed the concept of a national insurance regulator, noting that “[j]ust as the state/federal banking system works well for the industry and the economy—so too can a similar insurance system.”<sup>199</sup> In congressional testimony, U.S. Treasury Secretary Timothy Geithner has said that “there is a good case for

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197. The Federal Reserve recently announced that it has proposed a rule that would establish criteria to determine the NRSROs whose ratings are accepted for the TALF program. The proposed rule, which would require a certain minimum level of experience in rating deals of any particular type, would likely result in an expansion of TALF-eligible NRSROs. The proposal is intended to promote competition among NRSROs and ensure appropriate protection against credit risk for the U.S. taxpayer. Press Release, Fed. Reserve (Oct. 5, 2009), <http://www.federalreserve.gov/newsevents/press/monetary/20091005b.htm>.

198. DPFCM, *supra* note 33, at 172–73 (citations omitted).

199. See Statement of the Honorable Steve Bartlett, President and Chief Executive Officer, The Financial Services Roundtable, Before the House Financial Services Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, U.S. House of Representatives, (Mar. 5, 2009), *available at* [http://www.fsround.org/media/pdfs/Roundtable\\_HFSC\\_030509\\_final.pdf](http://www.fsround.org/media/pdfs/Roundtable_HFSC_030509_final.pdf).

introducing an optional federal charter for insurance companies.”<sup>200</sup> However, due to political and historical roadblocks, it has been very difficult to move away from the current system of fifty-state regulation or to supplement it with an optional federal insurance charter.

As a compromise, the Administration has proposed an Office of National Insurance within the U.S. Treasury which, while not an optional federal regulator, would have real, albeit limited, powers and could portend increased federal involvement in the insurance industry.<sup>201</sup> The Office of National Insurance would monitor all aspects of the insurance industry, including identifying regulatory issues or gaps in the regulation of insurers that could contribute to a systemic crisis in the insurance industry or the U.S. financial system. It could recommend to the Federal Reserve that it designate an insurer, including its affiliates, as a Tier 1 FHC. The scope of the Office of National Insurance’s powers would extend to all lines of insurance except health insurance. In order to serve its functions, it would be given authority, with subpoena powers, to collect information from insurers (of a threshold size) and their affiliates, in coordination with the applicable state regulator (or regulatory agency).

It would also provide a much needed voice on international issues. The Office of National Insurance would coordinate federal efforts and establish federal policy on prudential aspects of international insurance matters. The proposal provides the U.S. Treasury Secretary with the explicit authority to negotiate and enter into international insurance agreements on prudential measures. Currently, representatives from fifty-six U.S. jurisdictions as well as the National Association of Insurance Commissioners participate in International Association of Insurance Supervisors activities, which can complicate the development of a uniform U.S. perspective on insurance matters.

*b. Comprehensive regulation of financial markets.* The comprehensive regulation of financial markets is a key element of the Administration’s regulatory reform agenda. The perception that over-the-counter derivatives and credit default swaps were

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200. Reuters, *Consumer Group to Geithner: Don’t Use Financial Overhaul to Deregulate Insurance*, Mar. 31, 2009, available at <http://www.reuters.com/article/pressRelease/idUS208225+31-Mar-2009+PRN20090331>.

201. See U.S. TREASURY DEP’T, BLUEPRINT, *supra* note 172, at 10–11.

inadequately regulated and contributed to the accumulation of systemic risk has led to calls for reform in those areas. Moreover, inadequate oversight and supervision of the securitization market was another area perceived to have contributed to excessive levels of debt leverage which exacerbated the housing bubble.

(1) *No SEC-CFTC merger; regulation of OTC derivatives.* One of the obvious areas for financial regulatory reform would have been to merge the U.S. Securities and Exchange Commission with the U.S. Commodity Futures Trading Commission. However, the political realities make this logical rationalization impossible to achieve. As a result, and in response to public pressure, the SEC and the CFTC have focused on how to harmonize futures and securities regulation. The Chairmen of the SEC and the CFTC have recently announced that the two agencies expect to issue a report by October 15, 2009, that will address the key areas in which their regulatory schemes are different, and recommend legislative and regulatory actions to address those differences where appropriate.<sup>202</sup>

In addition, the Administration has proposed sweeping legislation that for the first time would subject the over-the-counter (OTC) derivatives markets, OTC derivatives dealers, derivatives-clearing organizations and agencies, swap repositories, and major non-dealer participants to comprehensive regulation.<sup>203</sup> The proposed legislation will have major consequences for the OTC derivatives markets, dealers and participants, as well as for the CFTC and SEC. It represents a significant policy reversal from the Commodities Futures Modernization Act of 2000, legislation that essentially shielded the OTC derivatives market from pervasive regulation.

Remarkably, given concerns over regulatory fragmentation, the proposed legislation would divide primary regulatory and supervisory authority for derivatives among the CFTC, SEC and, in some instances, federal bank regulators. The CFTC and SEC would jointly adopt most rules implementing the proposed legislation and, in some cases, would be required to do so in consultation with federal

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202. Press Release, SEC and CFTC Chairmen Issue Update on Harmonization Report (Sept. 30, 2009), <http://www.sec.gov/news/press/2009/2009-211.htm>.

203. Davis Polk, *Obama Administration Proposes Sweeping Legislation to Regulate Over-The-Counter Derivatives*, Aug. 17, 2009, <http://www.davispolk.com/files/Publication/5a453323-3f01-4885-aede-07938800eedd/Presentation/PublicationAttachment/f08f8b6c-35a8-4ad8-88e4-8b9c697e5672/08.17.09.Obama.Derivatives.html>.



bank regulators. The proposed legislation would also require that “standardized” OTC derivatives be cleared by a derivatives clearing organization regulated by the CFTC or a securities clearing agency regulated by the SEC, and that all OTC derivatives that are centrally cleared be traded on a CFTC- or SEC-regulated exchange or a regulated alternative swap execution facility.

The proposed legislation would establish regimes for the registration and regulation by the CFTC and the SEC of a wide array of new entities, including derivatives dealers and major derivatives participants, swap repositories, security-based swap repositories, clearing organizations and agencies, and alternative swap execution facilities (under both the Commodity Exchange Act and the Exchange Act), and would also expand considerably the requirements applicable to CFTC-regulated derivatives clearing organizations.

The CFTC and SEC would share certain aspects of regulatory authority with the federal bank regulators who would have prudential oversight over derivatives dealers and major derivatives participants that are banks, and branches or agencies of foreign banks, and, for purposes of setting capital requirements, bank holding companies. In most cases, rulemaking and interpretations would be jointly promulgated by both the CFTC and SEC, and the federal bank regulators would have rulemaking authority with respect to margin, capital, and prudential rules with respect to the entities they regulate.

Importantly, regulators would be required to impose and enforce higher capital requirements for OTC derivatives that are not centrally cleared. The proposed legislation would permit, but not require, federal bank regulators to prescribe margin requirements for certain hedging counterparties that are not predominantly engaged in financial activities and are not derivatives dealers or major derivatives participants. The capital and margin requirements set by the federal bank regulators would serve as a floor for capital and margin requirements set by the CFTC and SEC and for capital requirements set by the Federal Reserve for bank holding companies and Tier 1 FHCs. The CFTC and SEC would be required to set capital and margin requirements for non-bank derivatives dealers and non-bank major derivatives participants that are “as strict or stricter” than those set by federal bank regulators for derivatives dealers and major derivatives participants that are banks. Harmonization of CFTC and

SEC regulations is sought by requiring the two agencies to prescribe requirements that treat “functionally or economically similar products” similarly.

On October 2, 2009, House Financial Services Committee Chairman Barney Frank released a discussion draft for OTC derivatives reform. The draft bill builds on the Administration’s proposed legislation, adding regulation in some areas and softening a number of key provisions, most importantly the clearing and exchange trading requirements and exclusions for end users.<sup>204</sup>

(2) *Systemically important payment, clearing, and settlement systems.* Payment, clearing, and settlement systems may be the least romantic portion of the U.S. financial system. Yet it is hard to imagine any segment of the U.S. financial system that has the potential to be more systemically important. If any major operator of one of these systems failed or experienced a serious disruption, financial transactions around the country and the globe could grind to a halt.

One way to measure their systemic importance is to consider the mindboggling volumes of transactions that the operators of some of these systems process. According to data posted on the Federal Reserve’s Web site, the average volume of dollar transfers processed by the Fedwire Funds Transfer System was approximately \$3 trillion per day in 2008.<sup>205</sup> Assuming 250 business days per year, that translates into \$750 trillion per year. Yet only a fraction of the dollar payments made through the U.S. and international banking systems are processed through Fedwire. A substantial and largely unmeasurable volume of additional transactions is processed on the books of banks themselves or directly between correspondent banks, without going through Fedwire.

The securities settlement system processes similar volumes of securities transactions. According to data posted on the Federal Reserve’s Web site, the average volume of U.S. government and agency securities transactions processed by the Fedwire Securities

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204. For a comparison of the Administration’s proposed legislation and Rep. Frank’s draft bill, and a discussion of the main differences between the proposals, see Davis Polk, *Representative Frank Releases Discussion Draft for Over-the-Counter Derivatives Reform*, Oct. 6, 2009, [http://www.davispolk.com/files/Publication/a68e3628-9fa6-4c1d-9b92-0f71dfc754d8/Presentation/PublicationAttachment/5a6ee725-a3b8-4588-b63e-1108df071367/100609\\_frank\\_deriv.pdf](http://www.davispolk.com/files/Publication/a68e3628-9fa6-4c1d-9b92-0f71dfc754d8/Presentation/PublicationAttachment/5a6ee725-a3b8-4588-b63e-1108df071367/100609_frank_deriv.pdf).

205. Federal Reserve, Fedwire Funds Service—Annual Data, [http://www.federalreserve.gov/paymentsystems/files/fedfunds\\_ann.txt](http://www.federalreserve.gov/paymentsystems/files/fedfunds_ann.txt) (last visited April 2, 2010).

Service was \$1.6 trillion per day or \$419 trillion per year in 2008.<sup>206</sup> Similarly, the Depository Trust Company, the principal U.S. securities settlement system for U.S. corporate securities, reported processing \$455 trillion of securities transactions in 2008.<sup>207</sup> A substantial, and largely unmeasurable, volume of additional transactions is processed on the books of banks, brokers, and other securities intermediaries, or directly between securities intermediaries, without going through Fedwire or DTC.

International securities settlement systems, mainly Euroclear and Clearstream, also process foreign and international securities transactions for U.S. and non-U.S. investors. Euroclear, the largest settlement system for internationally traded securities, reported a processing volume of €60 trillion in 2008, including transactions for U.S. investors.<sup>208</sup> In light of the systemic importance of payment, clearing, and settlement systems, it is not surprising that the Administration has proposed that the Federal Reserve should have additional authority over these institutions as part of its overhaul of the regulation of systemically important financial companies.

The Administration's proposed legislation would principally give the Federal Reserve authority to set risk management standards for both systemically important financial market utilities and the conduct of systemically important payment, clearing, and settlement activities by any financial institution.<sup>209</sup> Most financial institutions conduct some form of payment, clearing, or settlement function for their customers, including street name settlement, wire transfers, clearing bank operations, and tri-party repurchase facilities. In addition, some of these institutions conduct these activities on a "multilateral" basis. Any bank, broker, insurance company, or other financial institution that is not otherwise systemically important could have its payment, clearing, and settlement business subject to the Federal Reserve risk management oversight if the business is found to be systemically

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206. Federal Reserve, Fedwire Securities Service—Annual Data, [http://www.federalreserve.gov/paymentsystems/fedsecs\\_ann.htm](http://www.federalreserve.gov/paymentsystems/fedsecs_ann.htm) (last visited Jan. 14, 2010).

207. The Depository Trust Company Web site, <http://www.dtcc.com/about/subs/dtc.php> (last visited Jan. 14, 2010).

208. Press Release, Euroclear, Nordic CSD to Join the Euroclear Group—CSD Consolidation Accelerates (June 2, 2008), [http://www.euroclear.eu/3027\\_ENG\\_ST.htm](http://www.euroclear.eu/3027_ENG_ST.htm).

209. Davis Polk, *Obama Administration Proposes Sweeping Legislation to Regulate Over-the-Counter Derivatives* (Aug. 17, 2009), <http://www.davispolk.com/files/Publication/5a453323-3f01-4885-acde-07938800eedd/Presentation/PublicationAttachment/f08f8b6e-35a8-4ad8-88e4-8b9c697e5672/08.17.09.Obama.Derivatives.html>.

important. This would provide the “strong and consistent prudential standards and supervisory oversight” that Chairman Bernanke has recently reiterated are needed.<sup>210</sup>

Moreover, the proposed legislation authorizes the Federal Reserve to open and maintain an account for a designated financial market utility and offer the designated financial market utility the same financial services, discount window, and borrowing privileges as the Federal Reserve may provide to a depository institution under the Federal Reserve Act. This means that designated financial market utilities would have access to central bank money, making it feasible for them to settle delivery-versus-payment transactions in U.S. dollars on their own books without going through intermediary banks. They would also be able to tap the Federal Reserve as a lender of last resort, should they have liquidity issues.

(3) *Securitization markets.* The regulation of the U.S. securitization markets is another alleged weakness that contributed to the financial crisis. In a typical securitization, loan originators extend credit to borrowers and sell the income stream from that loan to a securitizer, who packages it along with many similar loans in a special purpose vehicle. Slices of the special purpose vehicle’s income stream are sold to investors as asset-backed securities. Securitization technology is meant to spread risk; instead of trapping capital at the lender level by requiring a lender to hold all of the credit risk of a loan until its maturity, securitization allows a lender to sell the loan immediately and use the funds received to originate new loans. Securitization has led to an enormous increase in the availability of credit financing for businesses and individuals over the past two decades and, as such, has been a major engine of economic growth.

However, a loan originator’s ability to avoid the credit risk of individual borrowers through securitization can also reduce the originator’s incentive to make sure borrowers are likely to be able to repay. In the extreme, if a lender retains no risk and is compensated for making loans regardless of repayment by the borrower, there may be a weakened incentive for the lender to determine the creditworthiness of the borrower. Allegations that some originators in the subprime mortgage market engaged in poor underwriting (through so-called “no-doc” loans, for example) led the

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210. Ben S. Bernanke, Fed. Reserve Chairman, Remarks on Regulatory Reform Before the Committee on Financial Services, U.S. House of Representatives (Oct. 1, 2009), <http://www.federalreserve.gov/newsevents/testimony/bernanke20091001a.htm>.

Administration to propose requiring originators and securitizers of loans to retain some of the risk in the loans they sell as part of the securitization chain.

The Administration proposes to take a two-pronged approach to the reform of the securitization markets. First, the Administration's proposed legislation aims to strengthen underwriting standards by requiring originators and securitizers to retain some of the risk of the loans they extend or package as part of an asset-backed securities securitization chain. These "skin-in-the-game" provisions would reduce the incentives for originators and securitizers to fund loans regardless of the borrower's ability to pay, as is alleged to have occurred frequently in the subprime mortgage market. The proposed legislation instructs the SEC and the federal banking agencies (the Federal Reserve, the National Bank Supervisor, and the FDIC) to enact regulations requiring securitizers to keep 5% of the risk of loans packaged in securitization transactions. Second, the proposed legislation aims to make the asset-backed securities investment process itself more transparent through a combination of disclosure by asset-backed securities issuers and improved information dissemination by credit rating agencies.

*c. Consumer financial protection agency.* A number of regulators and politicians have taken up the call for consumer protection, arguing that unfair and deceptive practices contributed to instability in the financial markets and the downturn in the economy by luring consumers into mortgages and products that were not appropriate for their circumstances.

The Administration has proposed creating a Consumer Financial Protection Agency, whose mission would be "to promote transparency, simplicity, fairness, accountability, and access in the market for consumer financial products or services."<sup>211</sup> However, the agency would be vested with vast new powers delineated in such a way that future jurisdictional turf wars are inevitable.<sup>212</sup>

The proposed legislation would authorize the agency to regulate "consumer financial products or services," defined as "any financial product or service to be used by a consumer primarily for personal,

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211. Davis Polk, *Consumer Financial Protection Agency Act of 2009*, July 1, 2009, [http://www.davispolk.com/files/Publication/2c9ef9b3-6871-4eac-9498-49d5fde025c7/Presentation/PublicationAttachment/32be2bc8-4cd3-4673-b1b8-0308ab5100b3/070109\\_CFPAA.html](http://www.davispolk.com/files/Publication/2c9ef9b3-6871-4eac-9498-49d5fde025c7/Presentation/PublicationAttachment/32be2bc8-4cd3-4673-b1b8-0308ab5100b3/070109_CFPAA.html) (citation omitted).

212. *Id.*

family or household purposes.”<sup>213</sup> The legislation would provide the new agency with broad authority to issue rules to ensure consumer protection. This authority would include prescribing rules regarding disclosures, sales practices, minimum operational standards, and requirements to offer standard products and services. For example, the new agency would be authorized to prohibit pre-dispute arbitration, propose model mortgage loan disclosure language, and require disclosure allowing consumers to compare financial products or services.

The proposed legislation would grant the agency broad authority to collect information, conduct investigations, and bring enforcement proceedings. The agency would also be empowered to require written reports from regulated entities to ensure compliance with consumer protection laws and rules adopted pursuant to the proposed legislation. The agency would also be authorized to issue subpoenas for the production of documents and testimony and to issue civil investigative demands for the production of documents, written reports or answers to questions, and oral testimony.

Throughout the proposed legislation, the role of state law enforcement with respect to consumer financial products is featured as a recurring theme. The proposed legislation contemplates that federal standards would act as a floor, not a ceiling, and explicitly encourages states to enact stricter laws. The legislation provides that any state consumer law of general application would apply to national banks and that state attorneys general would be authorized to bring actions in federal courts to enforce federal laws. This could lead to a fifty-state regulatory regime which would complicate, not streamline, consumer financial regulation.

*d. Executive compensation and corporate governance.* Among the topics that have received widespread attention in the United States and abroad is executive compensation and corporate governance reform. Outrage over the size of executive pay and concern about the short-term risk-taking incentives created by pay structures have propelled these issues to the forefront of the public debate. The Administration has proposed draft legislation to address executive compensation and corporate governance issues.

The proposed new legislation would require all U.S. public companies to grant shareholders an annual non-binding vote on

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213. *Id.*

executive compensation packages (say-on-pay) and further regulate compensation committees.<sup>214</sup>

If enacted, shareholders will be asked to cast non-binding votes to approve executive compensation as disclosed in proxy statements. Shareholders will also be asked to separately approve golden parachute payments in the context of meetings involving an acquisition, merger, or sale of assets. This vote would also be non-binding.

According to the Administration, the purpose of the legislation is to encourage accountability and better disclosure. The U.S. Treasury pointed to the experience in the United Kingdom where say-on-pay was adopted in 2002, noting that the rules have promoted increased shareholder dialogue and improved compensation practices, including the hiring of independent consultants, detailed compensation guidelines, and an increase in the number of meetings of compensation panels.

Under the proposal, compensation committee members would be subject to the same additional independence standards as audit committee members, and compensation consultants, legal counsel, and other advisors to the compensation committee would have to meet independence standards promulgated by the SEC.

Chairman of the House Financial Services Committee Barney Frank has also distributed a draft of executive compensation and corporate governance legislation that is similar to the Administration's proposals on say-on-pay and compensation committee matters. It would require financial institutions to disclose the structure of incentive-based compensation arrangements applicable to all employees to their federal regulator. Financial institutions would include banks, bank holding companies, broker-dealers, credit unions, and investment advisers and any other institution identified by federal financial regulators. Such disclosure would need to be sufficient for federal regulators to determine whether the compensation structure is aligned with sound risk management, structured to account for the time horizon of risks, and meets any other criteria that the regulators may determine to be appropriate.

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214. Davis Polk, *Treasury Seeks Legislation to Enact Say on Pay and Compensation Committees Changes for All U.S. Public Companies*, July 20, 2009, [http://www.davispolk.com/files/Publication/dccc1c9e-91c7-40db-b2ed-05ba2330b43b/Presentation/PublicationAttachment/35d6b2c5-4403-4c9c-a342-0a19c04549c6/072009\\_SayonPay.html](http://www.davispolk.com/files/Publication/dccc1c9e-91c7-40db-b2ed-05ba2330b43b/Presentation/PublicationAttachment/35d6b2c5-4403-4c9c-a342-0a19c04549c6/072009_SayonPay.html).

The House proposal would also grant federal regulators the authority to proscribe inappropriate or imprudent compensation practices for financial institutions as part of their solvency regulation. Federal regulators would be required to enact regulations that prohibit any incentive payment arrangement or other feature that encourages inappropriate risks by financial institutions, that threaten the safety and soundness of financial institutions, or that could have a serious adverse effect on economic conditions or financial stability.

Recently, the Federal Reserve has indicated that it will introduce guidelines to curb pay packages in banking. The Federal Reserve's guidance to banks "will apply not only to the top five or ten executives but way down into the organization—to traders or anybody whose activities can affect the risk profile of the company," Federal Reserve Chairman Ben Bernanke told Congress, presenting it as a "safety-and-soundness" issue.<sup>215</sup> Moreover, there have also been several executive compensation and corporate governance proposals coming out of the United Kingdom, the European Union, the G-20, and the Financial Stability Board. For a summary of these proposals, please see Annex D.

#### B. U.K. Proposals

The financial storm has prompted the United Kingdom to rethink its institutional framework for financial regulation. On July 8, 2009, HM Treasury released a White Paper—*Reforming Financial Markets*—outlining its regulatory reform proposals.<sup>216</sup> Under the proposals, the current institutional arrangements among the tripartite authorities—the Treasury, the Bank of England, and the FSA—would largely be left in place. About two weeks later, the opposition Conservative Party, now leading in polls for the next general election to be held by June 2010, released its counterproposals in an alternative White Paper—*From Crisis to Confidence: Plan for Sound Banking*.<sup>217</sup> Under its proposals, the Conservative Party proposed a paradigm shift in the regulatory

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215. See Paul Wiseman & Pallavi Gogoi, *Fed Aims to Rein in Bank Pay Abuses Way Below Top Execs*, USA TODAY, Oct. 6, 2009, available at [http://www.usatoday.com/money/industries/banking/2009-10-06-fed-rules-bank-pay\\_N.htm?csp=34](http://www.usatoday.com/money/industries/banking/2009-10-06-fed-rules-bank-pay_N.htm?csp=34).

216. See HM TREASURY, *supra* note 142.

217. See U.K. CONSERVATIVE PARTY, *FROM CRISIS TO CONFIDENCE: PLAN FOR SOUND BANKING* (July 2009), available at [http://www.conservatives.com/News/News\\_stories/2009/07/~/\\_media/Files/Downloadable%20Files/PlanforSoundBanking.ashx](http://www.conservatives.com/News/News_stories/2009/07/~/_media/Files/Downloadable%20Files/PlanforSoundBanking.ashx).



framework. If it wins the election, the Conservative Party intends to abolish the “integrated” approach to financial regulation, widely known as the “FSA model” that was put in place some twelve years ago by the U.K. government under the Labour Party, and move to a “twin peaks” structure.

*1. U.K. Labour government’s plan*

HM Treasury argues in its White Paper that the current institutional framework remains the right approach.<sup>218</sup> As widely expected, HM Treasury’s White Paper endorsed all of the major findings and recommendations in the *Turner Review: A Regulatory Response to the Global Banking Crisis*, an internationally acclaimed study led by FSA Chairman Lord Adair Turner.<sup>219</sup> To better coordinate among the tripartite authorities, it proposes to establish a Council for Financial Stability (CFS), a largely advisory body. To strengthen the macro-prudential oversight, both the FSA and the Bank of England would be statutorily responsible for financial stability.

*a. The Turner Review.* Since the publication of the Turner Review in March 2009, many of its recommendations have been endorsed by the G-20 summits, or recognized or adopted in the United States and the European Union. These recommendations, which are dealt with at length in relevant U.S., EU, or G-20 regulatory reform proposals in this Article and thus will not be repeated here, cover capital and liquidity requirements, macro-prudential oversight, regulation of systemically important institutions, crediting rating agencies, remuneration, risk management and corporate governance, market infrastructure for

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218. Shortly after the publication of HM Treasury’s White Paper, the U.K. House of Commons’ Treasury Committee released a report that dismissed its proposed reforms to the institutional structure of the tripartite authorities as “largely cosmetic.” The Parliamentary Committee’s report stated that the lines of authorities remain a muddle: there is still a lack of clarity regarding who is responsible for systemic oversight and who has executive authority in times of crisis. The report pointed out that before the crisis hit, no one had formal responsibility for financial stability, but now many do, including the Bank of England, the Financial Stability Committee within the Bank, the FSA, and the proposed Council for Financial Stability. See HOUSE OF COMMONS TREASURY COMMITTEE, BANKING CRISIS: REGULATION AND SUPERVISION 3–4 (July 31, 2009), available at <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmtreasy/767/767.pdf>.

219. See generally HM TREASURY, *supra* note 142; FINANCIAL SERVICES AUTHORITY, *supra* note 37.

OTC derivatives, etc.<sup>220</sup> What is worthy of more treatment here with regard to the situation in the United Kingdom is Lord Turner's call for a more "intrusive" regulatory and supervisory approach by the FSA, a shift from its much discredited "light-touch" regulatory philosophy.<sup>221</sup> In particular, the Turner Review recommends that the FSA should not just ensure systems and processes of the supervised institutions, but also challenge their business models and strategies. "This shift will imply a greater willingness . . . to intervene directly if [the FSA] perceive[s] that specific business strategies are creating undue risk to the bank itself or to the wider system."<sup>222</sup> It also recommends more intensive information requirements on certain key risks (e.g., liquidity), a focus on remuneration policies, and more regulatory scrutiny of technical skills of certain key management personnel.<sup>223</sup> Despite its future being clouded in uncertainty, the FSA under the current leadership of Lord Turner has already substantially intensified its regulation of the City.

*b. Revised "integrated" model.* The FSA would continue to be the single regulator of all the financial services firms in the United Kingdom, responsible for both prudential regulation and consumer and investor protection. To strengthen coordination and cooperation among the tripartite authorities, HM Treasury proposes to establish a Council for Financial Stability (CFS).<sup>224</sup> The FSA would be granted a new statutory remit for financial stability, importantly, with rule-making powers in furtherance of its new objective.

*(1) Council for Financial Stability (CFS).*<sup>225</sup> The CFS would be created on a statutory basis to replace the current Standing Committee under a Memorandum of Understanding. The CFS would consist of the same tripartite authorities, chaired by the Chancellor of the Exchequer. Similar to the Financial Services Oversight Council proposed by the Obama Administration, the CFS will mainly be an advisory body and a forum for discussion and coordination of regulatory actions among the tripartite authorities. The CFS will hold regular meetings throughout the year and, if

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220. See generally FINANCIAL SERVICES AUTHORITY, *supra* note 37.

221. See *id.* at 86–92.

222. See *id.* at 88.

223. *Id.* at 53, 76.

224. See HM TREASURY, *supra* note 142, at 12.

225. See *id.* at 12, 48–50.

necessary, hold emergency meetings to analyze and examine emerging systemic risks to the United Kingdom's economy.

(2) *The FSA*.<sup>226</sup> As the single prudential regulator of all financial services firms in the United Kingdom, the FSA has legal authority to set prudential standards, such as capital, liquidity, and risk management standards. HM Treasury proposes to legislate to provide the FSA with an explicit financial stability objective and extend its rule-making power, "to give it clearer legal authority to set rules whose purpose is to protect wider financial stability."<sup>227</sup> Under the proposals, the FSA would be granted more regulatory powers, including expanded powers to gather information from unregulated institutions to determine whether they should be brought under formal FSA supervision, enhanced enforcement powers to police market misconduct, and extended powers to intervene in individual institutions in pursuit of its new financial stability objective, etc.

(3) *The Bank of England*.<sup>228</sup> The Banking Act 2009 (Banking Act), which became effective on February 21, 2009, has already provided the Bank of England "a clear statutory objective" for financial stability.<sup>229</sup> HM Treasury acknowledges the responsibilities of the Bank of England to protect financial stability under existing legal authority, e.g., its role as lender of last resort and its oversight over key inter-bank payment systems. In particular, the Banking Act, which established a special resolution regime (SRR) for banks, granted the Bank of England the power to intervene to resolve failing banks once the FSA "triggers" an institution into the SRR.<sup>230</sup>

## 2. Conservative Party's plan: A "twin-peaks" structure

Despite the differences with HM Treasury and the ruling Labour Party, the Conservative Party's plan does not dispute most of the recommendations from the *Turner Review*.<sup>231</sup> Instead, the Conservative Party proposes a drastic shift in the institutional framework for regulation.

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226. See *id.* at 10–12, 51–57.

227. *Id.* at 11.

228. See *id.* at 8–9, 50–51.

229. *Id.* at 8.

230. *Id.* at 9.

231. See generally U.K. CONSERVATIVE PARTY, *supra* note 217.

Under the Conservative Party's plan, the FSA and the tripartite system, instituted by the U.K. government while controlled by the Labour Party some twelve years ago, would be abolished. The FSA's bank supervisory powers, which were transferred to it from the Bank of England, would be transferred back. The remnants of the FSA would be merged with the Office of Fair Trading that is in charge of the regulation of consumer credit, and the newly merged entity would be reconstituted to become "a powerful new Consumer Protection Agency" that would be "a far more consumer-oriented, transparent and focused body than the FSA."<sup>232</sup> While many bank regulators in the United States are questioning, and the industry representatives are lobbying hard against, the Obama Administration's proposal to create a Consumer Financial Protection Agency, and the idea of separating consumer protection from prudential supervision, the U.K. Conservatives confirm in their proposals that they would demolish the FSA, and the "integrated" model along with it, if they win the election next year.

"In the United States, they've called on the Federal Reserve," said David Cameron, the Conservative Party's leader, "In Britain, it's time to call on the Bank of England."<sup>233</sup> Under the Conservative Party's plan, the Bank of England would be "strong and powerful," responsible for both macro-prudential regulation to ensure financial stability and micro-prudential regulation with oversight over all banks and other financial institutions, including insurance companies.<sup>234</sup> Under the plan, a Financial Policy Committee would be created within the Bank, working alongside, and in "close coordination" with, the Monetary Policy Committee to monitor systemic risks and execute the special resolution regime for failing banks.<sup>235</sup> Similar to the collective responsibility model of the Monetary Policy Committee, the Financial Policy Committee will have independent members with representation of external experts. A primary goal of this new structure is to "ensure that monetary policy, financial stability and the regulation of individual institutions are closely coordinated."<sup>236</sup> In an interesting contrast to the

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232. See *id.* at 7, 42–48.

233. See Julia Werdigier, *Britain's Conservative Party Proposes Regulatory Shift*, N.Y. TIMES, July 21, 2009, at B3.

234. See U.K. CONSERVATIVE PARTY, *supra* note 217, at 4–5, 19–28.

235. See *id.* at 4–5, 25–26.

236. *Id.* at 5.

sentiment in the U.S. Congress, George Osborne, the U.K. shadow Chancellor, said of their proposals that the financial crisis had shown the need to “bring together the operation of monetary policy with regulation of the banking system . . . . We have learned you can’t separate central banking from the banking system.”<sup>237</sup>

Critics warn that a change of this magnitude would cause massive disruption, demoralizing the FSA’s staff and making its task very difficult over the coming year.<sup>238</sup> Some commented that a danger of “vacuum” would be created at the heart of U.K. regulatory policy at a time when authorities are still grappling with a financial crisis.<sup>239</sup>

### *C. Other European Proposals*

#### *1. Overview*

Regulatory reforms at the EU level represented another step towards more centralized authority in the European financial regulatory system. On September 23, 2009, the European Commission proposed draft legislation to strengthen the financial regulation in Europe that largely adopted the principles of the de Larosi re Report as endorsed by the European Council of Ministers on June 19, 2009.<sup>240</sup> The proposed legislation would create two pan-European agencies to improve regulation of the financial system—the European Systemic Risk Board and the European System of Financial Supervisors. The European System of Financial Supervisors would consist of three European Supervisory Authorities—a European Banking Authority, a European Insurance and Occupational Pensions Authority, and a European Securities and Markets Authority. The European Supervisory Authorities would assume full supervisory powers for those entities that have pan-

237. George Osborne, *Foreword* to U.K. CONSERVATIVE PARTY, *supra* note 217, at 2.

238. See George Parker & Megan Murphy, *Tory Plan Recipe for Turf Wars, Say Critics*, FIN. TIMES, July 21, 2009, available at <http://www.ft.com/cms/s/0/3075bd62-756c-11de-9ed5-00144feabdc0.html>.

239. See Laurence Norman & Natasha Brereton, *International Finance: U.K. Regulator Defends Its Role*, WALL ST. J., July 21, 2009, at C2, available at <http://online.wsj.com/article/SB124809502891665055.html>.

240. See European Commission, *Financial Supervision: New Legislative Proposals* (Sept. 2009), available at [http://ec.europa.eu/internal\\_market/finances/committees/index\\_en.htm#package](http://ec.europa.eu/internal_market/finances/committees/index_en.htm#package); Press Release, European Commission, *Commission Adopts Legislative Proposals to Strengthen Financial Regulation in Europe*, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1347&format=HTML&aged=0&language=EN&guiLanguage=en>.

European reach, such as credit rating agencies and EU central counterparty clearing houses.

Apart from the proposals to create pan-European regulatory authorities, the European Commission's latest reform efforts have been directed in several areas: hedge fund regulation, the regulation of credit rating agencies, and OTC derivatives. The proposed legislation for hedge fund regulation has been very controversial and has met particularly strong opposition from the United Kingdom, home to the majority of hedge funds in Europe. Because of the proposed legislation's extraterritorial impact, the U.S. government has also weighed in on the debate.<sup>241</sup> In comparison, the newly adopted regulations on credit rating agencies and the Communication on OTC derivatives regulation are largely aligned with the regulatory developments in the United States.<sup>242</sup> The discussion below will focus on the proposed pan-European regulatory entities and the proposed legislation on hedge fund regulation.

## *2. The proposed pan-European regulatory entities*

The proposed European Systemic Risk Board would monitor and assess threats to financial stability. Its role would be largely advisory, and it would have no independent regulatory authority. The European Systemic Risk Board would be able to issue non-binding risk warnings and recommendations, but with no legally binding powers. The European Systemic Risk Board would be composed of the heads of the European Central Bank and the member state central banks, as well as the three chairs of the European System of

241. See Alistair MacDonald, *U.S. Enters Europe's Fund Debate*, WALL ST. J., July 27, 2009, available at <http://online.wsj.com/article/SB124864567973282125.html>.

242. See REGULATION OF THE EUROPEAN PARLIAMENT AND THE COUNCIL ON CREDIT RATING AGENCIES, available at <http://register.consilium.europa.eu/pdf/en/09/st03/st03642.en09.pdf>. On July 3, 2009, the European Commission published a Communication on OTC derivatives regulation. Echoing the regulatory developments in the United States, the Communication proposes the following measures: (i) increasing use of central counterparties; (ii) promoting standardization of OTC derivatives; (iii) encouraging cleared derivatives to be traded on organized markets; and (iv) proposing the use of central data repositories for non-cleared derivatives. See COM (2009) 332, European Commission, available at [http://ec.europa.eu/internal\\_market/financial-markets/docs/derivatives/report\\_en.pdf](http://ec.europa.eu/internal_market/financial-markets/docs/derivatives/report_en.pdf); *EC Proposals for Increased Transparency and Risk Mitigation in Derivatives Markets*, Cleary Gottlieb Alert Memo (July 24, 2009), available at <http://www.cgsh.com/files/News/e5091569-0e2f-4262-9af9-411a2d99a6bc/Presentation/NewsAttachment/7615f030-f35-4d3d-87a2-b7839595c7c0/CGSH%20Alert%20-%20OTC%20Derivatives.pdf>.

Financial Supervisors. The head of European Systemic Risk Board would be elected by the European central banks.

The European Supervisory Authorities would be built up from, and replace, the existing Committees of Supervisors, known as the Level 3 Committees, and be responsible for improving the quality and uniformity of national supervision, establishing supervisory colleges to strengthen oversight of cross-border institutions, and creating a single regulatory rulebook for the European Union. National supervisors would retain responsibility for day-to-day supervision, but, in a large concession by advocates of member nations' autonomy, especially the United Kingdom, the European Supervisory Authorities would have binding authority to determine whether a national supervisor is complying with the EU rulebook and other EU law and issue binding decisions in the case of a disagreement.

Many hope that the three European Supervisory Authorities will eventually lead to European level financial supervision and enforcement which has, until now, been politically unpalatable. The focus on binding decisions reflects the experience that, even with identical legal texts, harmonized standards, or permitted variants from "floors," the EU experience with multiple interpreters and enforcers of the law has not resulted in effective regulation. However, the relationship between the proposed European Supervisory Authorities and national authorities remains unclear, perhaps deliberately so. As a result of pressure from the United Kingdom, EU leaders have expressly declared that "the decisions taken by the European Supervisory Authorities should not impinge in any way on the fiscal responsibilities of Member States," and a European Supervisory Authority is not allowed to require a member state to spend its taxpayers' money.<sup>243</sup>

### *3. Hedge fund regulation*

On April 30, 2009, the European Commission issued a proposed Directive on Investment Alternative Fund Managers ("Directive").<sup>244</sup>

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243. Nouriel Roubini & Elisa Parisi-Capone, *Regulatory Reform: A Primer*, FORBES, June 25, 2009, available at <http://www.forbes.com/2009/06/24/regulatory-reform-obama-eu-switzerland-hedge-funds-opinions-columnists-roubini.html>.

244. See COMMISSION OF THE EUROPEAN COMMUNITIES, PROPOSAL FOR A DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL 207 (2009), available at

The Directive went much further than the proposed U.S. hedge fund regulation, most controversially by imposing leverage limits and extraterritorial standards. Since the majority of Europeans' hedge funds are currently managed by U.K. managers, the ongoing fight is mostly between Continental Europe, led by France and Germany on one side, and the United Kingdom on the other.<sup>245</sup> The proposed Directive is, however, not expected to be adopted until at least late 2010, owing to the complex legislative process in the European Union.

The United States also has a large stake in this debate, since the extraterritorial standards imposed by the Directive could block U.S. business in Europe. The Directive would (i) prohibit the marketing of any funds domiciled outside the European Union unless a fund's home country has certain tax agreements with the EU manager's home country and (ii) impose an equivalency test between the provisions of the Directive and the legislation of a relevant non-EU country if a non-EU-based manager is to market any funds in the European Union.

#### *D. G-20 Proposals*

Financial markets are global in nature. Unless common regulatory standards are applied and enforced across national borders, opportunities for regulatory arbitrage will arise. The current financial crisis adds urgency to the need to seek a global approach to financial regulatory reform. Since the financial crisis intensified in the fall of 2008, three G-20 summits have been held to address the crisis, and financial regulatory reform was top on the agenda. The leaders at the G-20 summit in Pittsburgh affirmed that going forward, the G-20 will be the premier forum for international economic cooperation.<sup>246</sup>

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[http://ec.europa.eu/internal\\_market/investment/docs/alternative\\_investments/fund\\_managers\\_proposal\\_en.pdf](http://ec.europa.eu/internal_market/investment/docs/alternative_investments/fund_managers_proposal_en.pdf).

245. Alistair MacDonald, *U.S. Enters Europe's Fund Debate*, WALL ST. J., July 27, 2009, at C3, available at <http://online.wsj.com/article/SB124864567973282125.html>.

246. G-20, LEADERS' STATEMENT: THE PITTSBURGH SUMMIT, 3 (2009), available at [http://www.g20.org/Documents/pittsburgh\\_summit\\_leaders\\_statement\\_250909.pdf](http://www.g20.org/Documents/pittsburgh_summit_leaders_statement_250909.pdf) [hereinafter G-20, PITTSBURGH SUMMIT].



Broad consensus was reached in the G-20 summits on how to reform the global financial system.<sup>247</sup> To strengthen international coordination and cooperation, leaders at the G-20 summits agreed to reform the international financial institutions. In particular, the reconstituted Financial Stability Board (FSB) and the International Monetary Fund (IMF) will be jointly responsible for global financial stability.<sup>248</sup> The FSB will be responsible for coordinating and monitoring progress in strengthening international financial regulation.<sup>249</sup> The Basel Committee on Banking Supervision (Basel Committee) will continue to be the leading forum for the development of international standards for prudential regulation.<sup>250</sup> The discussion below focuses on the FSB and IMF, the newly proposed Basel capital regulatory framework, and cross-border bank resolutions.

### 1. *The FSB and IMF*

The G-20 summits agreed that the institutional capacity of the FSB and IMF should be substantially strengthened. Tasked to promote and coordinate the development of international best practices and regulatory standards, the reconstituted FSB with enhanced capacity would have equal institutional standing alongside the Bretton Woods institutions—the IMF and World Bank.<sup>251</sup> The resources of the IMF will be significantly increased to strengthen its role as lender of last resort in the international financial system.

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247. See G-20, DECLARATION ON STRENGTHENING THE FINANCIAL SYSTEM (2009), available at [http://www.g20.org/Documents/Fin\\_Deps\\_Fin\\_Reg\\_Annex\\_020409\\_\\_1615\\_final.pdf](http://www.g20.org/Documents/Fin_Deps_Fin_Reg_Annex_020409__1615_final.pdf) [hereinafter G-20, LONDON DECLARATION]. See generally FIN. STABILITY BD., IMPROVING FINANCIAL REGULATION, REPORT OF THE FINANCIAL STABILITY BOARD TO G-20 LEADERS (2009), available at [http://www.financialstabilityboard.org/publications/r\\_090925b.pdf](http://www.financialstabilityboard.org/publications/r_090925b.pdf) [hereinafter FSB, IMPROVING]; FIN. STABILITY BD., OVERVIEW OF PROGRESS IN IMPLEMENTING THE LONDON SUMMIT RECOMMENDATIONS FOR STRENGTHENING FINANCIAL STABILITY, REPORT OF THE FINANCIAL STABILITY BOARD TO G-20 LEADERS (2009), available at [http://www.financialstabilityboard.org/publications/r\\_090925a.pdf](http://www.financialstabilityboard.org/publications/r_090925a.pdf) [hereinafter FSB, OVERVIEW].

248. See G-20, LONDON DECLARATION, *supra* note 247.

249. See G-20, PITTSBURGH SUMMIT, *supra* note 246; G-20, LONDON DECLARATION, *supra* note 247.

250. See G-20, PITTSBURGH SUMMIT, *supra* note 246.

251. See G-20, THE GLOBAL PLAN FOR RECOVERY AND REFORM (2009), available at <http://www.g20.org/Documents/final-communicue.pdf> [hereinafter G-20, LONDON COMMUNIQUE].

Since the G-20 summit in London, the FSB has expanded its membership, now including all G-20 countries, and held its inaugural meeting in June 2009.<sup>252</sup> The new institutional structures of the FSB now include a Steering Committee and three Standing Committees. In particular, the Standing Committee for Supervisory and Regulatory Cooperation, now chaired by Lord Turner, will address coordination issues that arise among supervisors and regulators and will monitor and advise on best practice in meeting regulatory standards with a view to ensure consistency, cooperation, and a level-playing field across jurisdictions.

The IMF has tripled its lendable resources to \$750 billion through various means,<sup>253</sup> including bilateral pledges and, for the first time, issuance of its own notes.<sup>254</sup> The IMF also approved an allocation of \$283 billion Special Drawing Rights (SDRs) to boost world liquidity.<sup>255</sup> To ensure the IMF's long-term relevance and legitimacy, leaders at the G-20 summits emphasized that the IMF's governance structure should be reformed and modernized to reflect changes in the world economy and give greater voice and representation to developing countries.<sup>256</sup>

To promote financial stability at the global level, the G-20 summits committed to the following<sup>257</sup>: the IMF and FSB, in collaboration, to conduct Early Warning Exercises and identify the build-up of macro-economical and financial risks and recommend actions needed to address them; the IMF and FSB to produce guidelines for national authorities to assess whether a financial institution, market or an instrument is systemically important; the IMF and FSB, in collaboration with the World Bank and Basel Committee, to develop an international framework for cross-border bank resolution mechanism; the FSB, in collaboration with Bank for International Settlement (BIS) and other international standard

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252. Press Release, Fin. Stability Bd., Fin. Stability Bd. Holds Inaugural Meeting in Basel (June 27, 2009), *available at* [http://www.financialstabilityboard.org/press/pr\\_090627.pdf](http://www.financialstabilityboard.org/press/pr_090627.pdf).

253. IMF, BOLSTERING THE IMF'S LENDING CAPACITY (2009), *available at* <http://www.imf.org/external/np/exr/faq/contribution.htm>.

254. Press Release, IMF, IMF Signs US\$50 Billion Note Purchase Agreement with China (Sept. 2, 2009), *available at* <http://www.imf.org/external/np/sec/pr/2009/pr09293.htm>.

255. IMF, LOW-INCOME COUNTRIES TO BENEFIT FROM IMF ALLOCATION OF SDRS (2009), *available at* <http://www.imf.org/external/np/exr/cs/news/2009/CSO83.htm>.

256. G-20, PITTSBURGH SUMMIT, *supra* note 246, at 10–11; *see* G-20, LONDON COMMUNIQUE, *supra* note 251.

257. *See* G-20, LONDON DECLARATION, *supra* note 247.

setters, to develop macro-prudential regulatory tools; and the FSB to set guidelines for, and support the establishment, functioning of, and participation in, supervisory colleges, including through ongoing identification of the most systemically important cross-border firms.

## *2. Basel Committee and capital requirements*

The G-20 agreed that the Basel Committee, in collaboration with other international bodies and national authorities, should strengthen the Basel II Capital Framework for prudential regulation. Since the G-20 summit in London, the Basel Committee, the United States, the United Kingdom, and the European Union have all moved forward with various proposals on the capital, liquidity, and leverage requirements.<sup>258</sup> Although all of these proposals converge on the basic principles, specific quantitative proposals are still being worked out. The G-20 summit in Pittsburgh called for reaching an international agreement on the new capital framework by December 31, 2010, with the aim of implementation by December 31, 2012.<sup>259</sup>

*a. Capital.* The minimum capital requirement and the capital buffer above it would be higher than the pre-crisis levels. In particular, common equity, especially voting common equity as proposed by the U.S. Treasury, would be required to constitute a large majority of Tier 1 capital. Systemically important firms would be subject to even tougher capital requirements, such as a capital surcharge as proposed by the Basel Committee.

The new capital framework would impose higher risk-based capital charges to various exposures, such as off-balance sheet vehicles, trading book activities and credit securitizations, particularly re-securitizations such as CDOs.<sup>260</sup> The U.S. proposal would also

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258. See generally U.S. TREASURY DEP'T, PRINCIPLES FOR REFORMING THE U.S. AND INTERNATIONAL REGULATORY CAPITAL FRAMEWORK FOR BANKING FIRMS (2009), available at [http://www.treas.gov/press/releases/docs/capital-statement\\_090309.pdf](http://www.treas.gov/press/releases/docs/capital-statement_090309.pdf); Press Release, Bank for Int'l. Settlements, Comprehensive Response to the Global Banking Crisis (Sept. 7, 2009), available at <http://www.bis.org/press/p090907.htm> [hereinafter BIS, Comprehensive Response]; G-20, PROGRESS REPORT ON THE ACTIONS OF THE LONDON AND WASHINGTON G-20 SUMMITS (2009), available at [http://www.G20.org/Documents/20090905\\_G20\\_progress\\_update\\_London\\_Fin\\_Mins\\_final.pdf](http://www.G20.org/Documents/20090905_G20_progress_update_London_Fin_Mins_final.pdf). For more information, please see Annex C.

259. G-20, PITTSBURGH SUMMIT, *supra* note 246.

260. BANK FOR INTERNATIONAL SETTLEMENTS, REVISIONS TO THE BASEL II MARKET RISK FRAMEWORK (2009), available at <http://www.bis.org/publ/bcbs158.htm>; BANK FOR INTERNATIONAL SETTLEMENTS, GUIDELINES FOR COMPUTING CAPITAL FOR INCREMENTAL RISK IN THE TRADING BOOK (2009), available at <http://www.bis.org/publ/bcbs158.pdf>;

cover equity investments and counterparty credit risk exposures to financial firms (e.g., non-centrally cleared derivatives, repos, reverse repos, securities lending and borrowing transactions, margin loans, etc.).

To mitigate the pro-cyclicality effects of the current capital framework, a so-called counter-cyclical capital buffer framework would be developed to reflect more forward-looking, through-the-cycle considerations, resulting in higher capital requirements in the early phases of the credit cycle, and more uniform capital requirements throughout the cycle. The counter-cyclical capital buffer framework as proposed by the Basel Committee would also include capital conservation measures to constrain capital distributions, e.g., dividend payments, share buybacks, and compensation.<sup>261</sup> Separately, a framework of more forward-looking loan loss reserves is being developed by international and national regulatory bodies in collaboration with the accounting standard setters. In August 2008, the European Commission published a consultative paper on through-the-cycle expected loss provisioning based on the Spanish dynamic provisioning model.<sup>262</sup>

*b. Liquidity.*<sup>263</sup> The Basel Committee, the United States, the United Kingdom, and the European Union have all actively moved ahead to institute quantitative and qualitative frameworks for better liquidity risk management. The focus has been on several elements, including: (i) adequate levels of highly liquid marketable securities free of impediments that can be used to meet liquidity needs in stressful situations; (ii) increased focus on firms' stress testing and contingency funding plans that sufficiently address potential adverse liquidity events and emergency cash flow requirements; and (iii) comprehensive internal liquidity measurement and monitoring systems. In particular, the Basel Committee will introduce a

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BANK FOR INTERNATIONAL SETTLEMENTS, ENHANCEMENTS TO THE BASEL II FRAMEWORK (2009), available at <http://www.bis.org/publ/bcbs157.pdf>; *Accompanying Document to a Proposal for a Directive of the European Parliament and of the Council Amending Capital Requirements Directive on Trading Book, Securitization Issues and Remuneration Policies*, COM (2009) 362 final (July 13, 2009), available at [http://ec.europa.eu/internal\\_market/bank/docs/regcapital/com2009/summary\\_en.pdf](http://ec.europa.eu/internal_market/bank/docs/regcapital/com2009/summary_en.pdf).

261. BIS, Comprehensive Response, *supra* note 258.

262. European Commission, Commission Services Staff Working Document: Possible Further Changes to the Capital Requirements Directive (2009), available at [http://ec.europa.eu/internal\\_market/consultations/docs/2009/capital\\_requirements\\_directive/CRD\\_consultation\\_document\\_en.pdf](http://ec.europa.eu/internal_market/consultations/docs/2009/capital_requirements_directive/CRD_consultation_document_en.pdf).

minimum global standard for funding liquidity that includes a liquidity coverage ratio requirement, underpinned by a longer-term structural liquidity ratio to address liquidity mismatches.<sup>264</sup>

*c. Leverage.* The new capital framework would impose a non-risk-based leverage ratio. The Basel Committee is expected to release a proposal by the end of 2009 with calibration and impact assessment to be completed by mid-2010.<sup>265</sup> To ensure comparability, the G-20 at their summit in Pittsburgh agreed that the details of the leverage ratio will be harmonized internationally to adjust for accounting differences.<sup>266</sup>

### 3. Cross-border bank resolution

There is a growing consensus that the international financial system needs a better mechanism for resolving systemically important financial institutions. Many believe that the failure of Lehman Brothers exposed a process that does not meet appropriate standards for the orderly winding up of systemically important financial institutions. The G-20 concluded that the world needs to develop internationally-coordinated tools and frameworks for the effective resolution of large, financial groups to help mitigate the disruption of their failures to the financial system and reduce moral hazard in the future. Leaders at the G-20 summit in Pittsburgh specifically committed to address issues on cross-border resolution and crisis management by the end of 2010.<sup>267</sup>

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263. For more information on the U.S. proposed interagency guideline on liquidity management, see Proposed Interagency Guidance—Funding and Liquidity Risk Management, 74 Fed. Reg. 32,035 (July 6, 2009), *available at* <http://edocket.access.gpo.gov/2009/pdf/E9-15800.pdf>. For more information on the FSA liquidity managements, see FSA, CP08/22: STRENGTHENING LIQUIDITY STANDARDS (2009), *available at* [http://www.fsa.gov.uk/pubs/cp/cp08\\_22.pdf](http://www.fsa.gov.uk/pubs/cp/cp08_22.pdf); FSA, CP09/14: STRENGTHENING LIQUIDITY STANDARDS 3: LIQUIDITY TRANSITIONAL MEASURES (2009), *available at* [http://www.fsa.gov.uk/pubs/cp/cp09\\_14.pdf](http://www.fsa.gov.uk/pubs/cp/cp09_14.pdf); and FSA, CP09/13: STRENGTHENING LIQUIDITY STANDARDS 2: LIQUIDITY REPORTING (2009), *available at* [http://www.fsa.gov.uk/pubs/cp/cp09\\_13.pdf](http://www.fsa.gov.uk/pubs/cp/cp09_13.pdf). For more information on the EU proposal for liquidity management, see COMMITTEE OF EUROPEAN BANKING SUPERVISORS, CONSULTATION PAPER ON LIQUIDITY BUFFERS & SURVIVAL PERIODS (2009), *available at* <http://www.c-ebs.org/getdoc/8ed674fc-d767-4eed-b0c2-ac6f65b92d04/CP28-on-Liquidity-Buffers.aspx>.

264. FSB, IMPROVING, *supra* note 247, at 5; BIS, Comprehensive Response, *supra* note 258.

265. See BIS, Comprehensive Response, *supra* note 258.

266. G-20, PITTSBURGH SUMMIT, *supra* note 246, at 8.

267. *Id.* at 9.

*a. Contingency planning.*<sup>268</sup> The G-20 at their summit in Pittsburgh emphasized the development of internationally-consistent firm-specific contingency and resolution plans, or “living wills.”<sup>269</sup> All major cross-border firms with an FSB supervisory college would be required to develop such plans, considering both “going-concern,” or “gone concern” scenarios. The plans to be prepared by the firms would cover how to exit risky positions and scale back activities in an orderly fashion, and an effective, rapid, and cost-effective wind-down, if necessary. The FSB, under its Cross-Border Crisis Management Working Group, has already scheduled such contingency planning discussions with the major firms, that will take place later this year and in the first half of 2010.

*b. Cross-border bank resolution and national bank insolvency regimes.* The G-20 summit at Pittsburgh specifically endorsed two major international initiatives to develop cross-border bank resolution frameworks.<sup>270</sup> One initiative is the Cross-Border Bank Resolution Group at the Basel Committee (CBRG). The CBRG recently issued a consultative paper that proposes actions to improve efficiency and effectiveness of cross-border crisis management and bank resolutions.<sup>271</sup> The other initiative is the IMF/World Bank Global Bank Insolvency Initiative. The IMF and World Bank issued an interim report in April 2009 and will issue a final report in the spring of 2010.<sup>272</sup>

With more European countries moving to institute special bank resolution regimes, it makes more sense to harmonize differences, and ensure consistency, among the regimes across countries. The European Commission plans to release a consultative paper that examines the issue of harmonizing rules of its member states for unwinding troubled banks and will probably propose a Directive

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268. FSB, OVERVIEW, *supra* note 247.

269. G-20, PITTSBURGH SUMMIT, *supra* note 246, at 9.

270. FSB, OVERVIEW, *supra* note 247, at 3. An international NGO, the International Insolvency Institute, established a working group dedicated to promoting the development of special insolvency regimes at international forums, such as the G-20. See <http://www.iiiglobal.org/about>.

271. BANK FOR INTERNATIONAL SETTLEMENT, REPORT AND RECOMMENDATIONS OF THE CROSS-BORDER BANK RESOLUTION GROUP (2009), *available at* <http://www.bis.org/publ/bcbis162.pdf?noframes=1>.

272. See IMF & WORLD BANK, AN OVERVIEW OF THE LEGAL, INSTITUTIONAL, AND REGULATORY FRAMEWORK FOR BANK INSOLVENCY (2009), *available at* <http://www.imf.org/external/np/pp/eng/2009/041709.pdf>.

eventually.<sup>273</sup> The final report by the IMF and World Bank will also include recommendations on how to achieve more consistency among national bank insolvency laws.<sup>274</sup>

#### IV. CONCLUSION

As noted above, the United States and other governments have responded to the financial crisis by proposing the broadest set of regulatory reforms since the 1930s. These reforms generally propose the creation of systemic risk regulatory bodies that would focus on macro-prudential (as opposed to micro-prudential) supervision and regulation, and include more robust laws for winding up, or “resolving” systemically important financial institutions in ways that are less disruptive to the financial system during economic panics than traditional insolvency codes. They also generally call for greater and more counter-cyclical capital, liquidity, and maximum leverage requirements; regulation of executive compensation to reduce moral hazard by requiring management to internalize the risks of their choices; and increased regulation of over-the-counter derivatives.

The conventional wisdom is that by flooding the markets with liquidity in response to this crisis, central banks and other governmental bodies have avoided the mistakes of the 1930s. Time will only tell whether these actions have truly been wise, or whether they have merely planted the seeds for a more severe and uncontrollable future economic calamity of the sort described in ancient apocalyptic literature.<sup>275</sup> There are two serious dangers in the near term. If governments do not pull back the extraordinary assistance to the markets soon enough, we could experience runaway inflation that will be difficult to control. On the other hand, if governments pull back too quickly, we could see another collapse in asset prices and a double-dip recession. Because of political pressures that favor safety over sacrifice, I believe the former risk is more likely.

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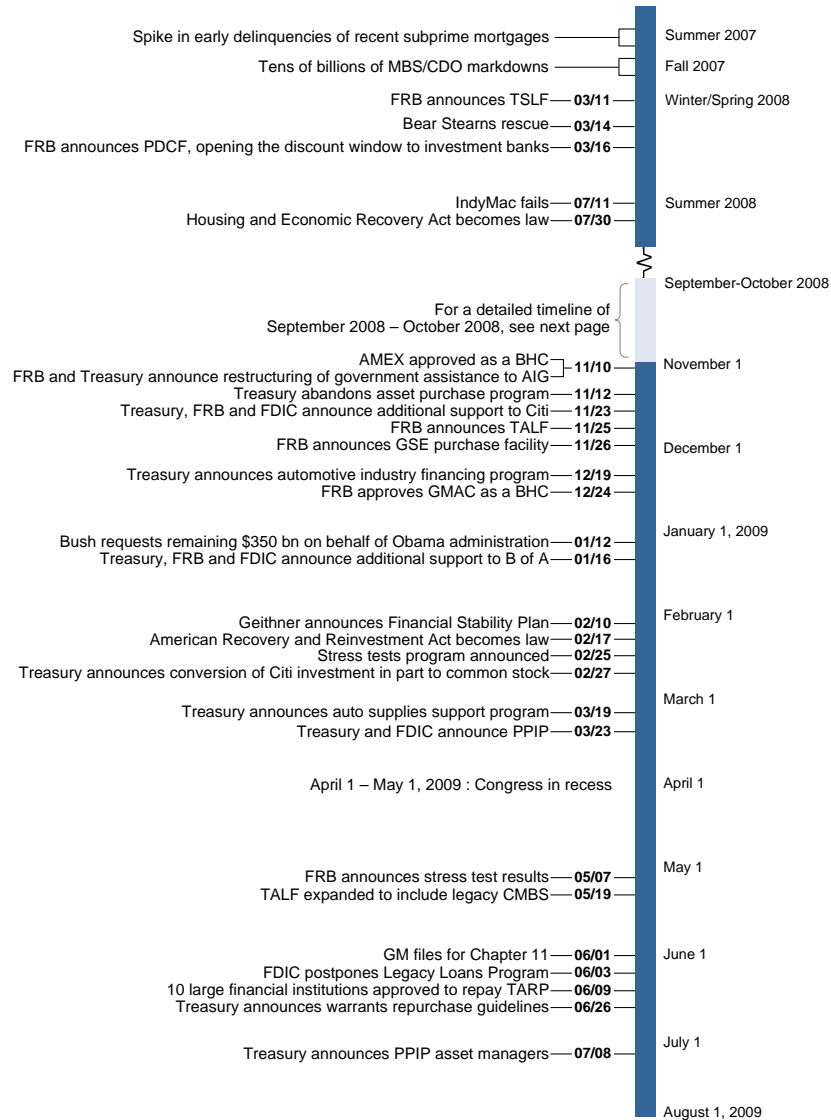
273. Matthew Dalton, *Europeans Review Bank Rules*, WALL ST. J., July 14, 2009, at A10, available at <http://online.wsj.com/article/SB124757731423738667.html>.

274. FSB, OVERVIEW, *supra* note 247.

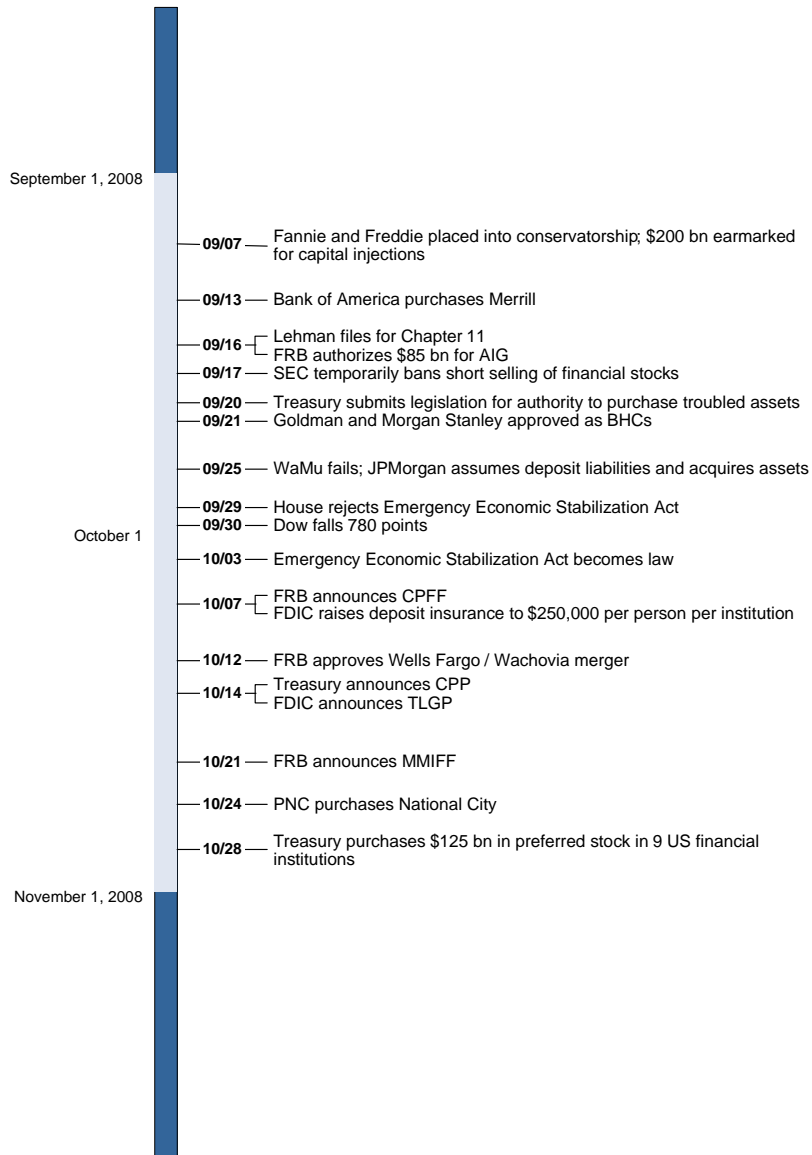
275. For example, Chapter 18 of the Book of Revelation (or Apocalypse) predicts the collapse in one day of a metaphorical City of Babylon, leaving the economic system in shambles and the merchants of the world weeping and mourning over its collapse. *Revelation* 18: 2, 11–16.

## ANNEX A

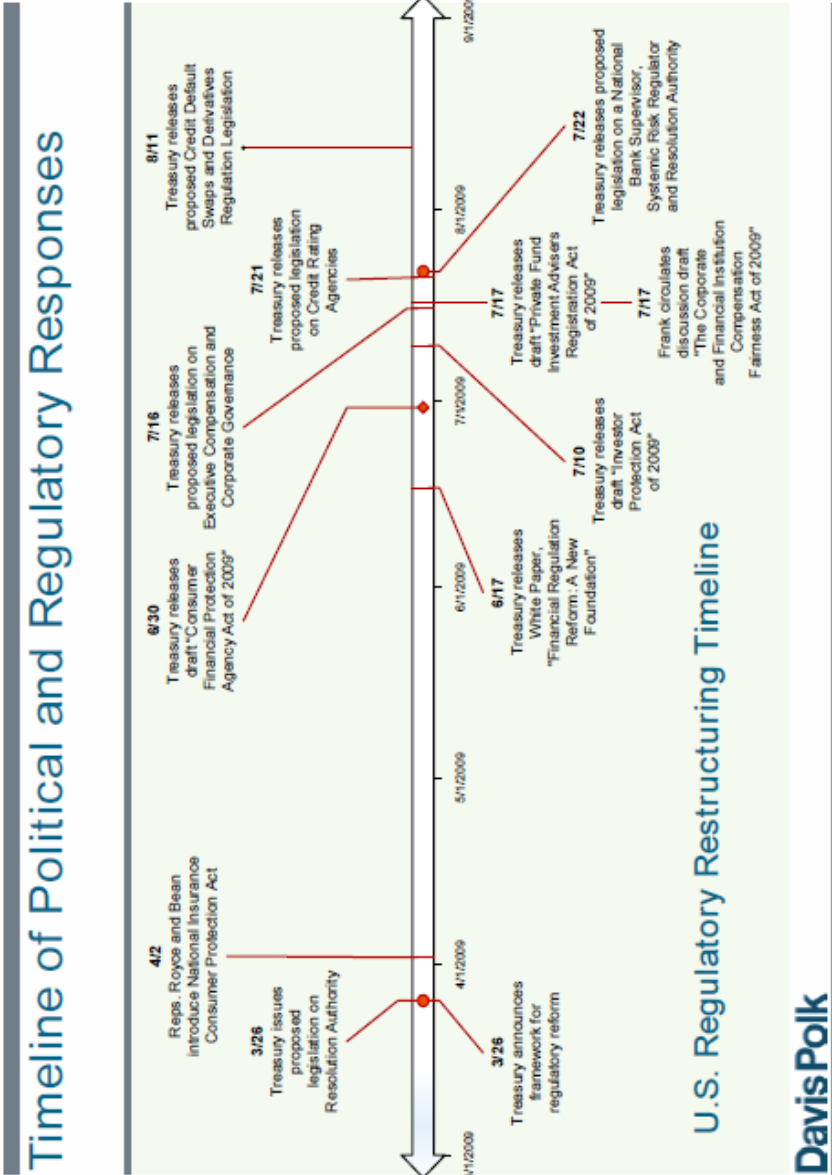
## FINANCIAL CRISIS LEGAL TIMELINE







ANNEX B



## ANNEX C

Summary of Capital, Liquidity, Leverage and Business Activity Regulatory Reform Proposals

| Reg. Reform Proposal        | Current US Requirements   | United States  | United Kingdom   | European Union   | Basel Committee   |
|-----------------------------|---|--|--|--|---|
| Higher Capital Requirements | <p><u>FHCs</u></p> <ul style="list-style-type: none"> <li>Each depository institution controlled by an FHC must be well-capitalized</li> <li>Well-capitalized currently means total Risk-Based Capital Ratio equal to or greater than 10 percent, and Tier 1 Risk-Based Capital Ratio equal to or greater than 6 percent, and Tier 1 Leverage Capital Ratio equal to or greater than 5 percent</li> <li>How proposals differ. US capital reform proposals would expand this requirement such that an FHC would be required to be well-capitalized on a consolidated basis</li> <li>Tier 1 capital. Currently, in addition to common equity, cumulative perpetual preferred stock and qualifying trust preferred securities may also be included in an institution's Tier 1 capital calculation. Cumulative perpetual preferred</li> </ul> | <p><u>Tier 1 FHCs</u></p> <ul style="list-style-type: none"> <li>Tier 1 FHCs would be required to be well-capitalized and well-managed on a consolidated basis</li> <li>Well-capitalized currently means total Risk-Based Capital Ratio equal to or greater than 10 percent, and Tier 1 Risk-Based Capital Ratio equal to or greater than 6 percent, and Tier 1 Leverage Capital Ratio equal to or greater than 5 percent.</li> <li>Well-managed currently means an institution that received satisfactory composite and management ratings at its most recent examinations.</li> <li>Tier 1 FHCs would be subject to "substantially heightened" capital requirements to be established by the Federal Reserve</li> <li>Specific quantitative proposals have yet to be announced</li> </ul> <p><u>Other FHCs</u></p> <ul style="list-style-type: none"> <li>Other FHCs would be</li> </ul> | <p><u>Turner Review and HMT Proposal</u></p> <ul style="list-style-type: none"> <li>Quantity of overall capital held would be increased</li> <li>Specific capital requirements would be determined through international cooperation</li> </ul> <p><u>Conservative Party Proposal</u></p> <ul style="list-style-type: none"> <li>Supports the Turner Review's conclusions, however proposes that the Bank of England regulate capital, liquidity and leverage requirements as opposed to the FSA</li> </ul> <p><u>FSA views</u></p> <ul style="list-style-type: none"> <li>Higher capital requirements would be appropriate for largest banks</li> <li>Does not envision higher, across the board legal or regulatory requirements for systemically important firms</li> </ul> | <ul style="list-style-type: none"> <li>The EU has not issued any formal proposals to require increased overall capital levels</li> <li>Specific EU capital proposals are detailed below</li> </ul> | <ul style="list-style-type: none"> <li>Minimum capital requirements would be raised and the predominant form of Tier 1 capital would be common equity and related earnings               <ul style="list-style-type: none"> <li>Specific quantitative proposals have yet to be announced</li> </ul> </li> <li>The Basel Committee is assessing whether there is a need for a capital surcharge for systemically important firms</li> <li>The Basel Committee is expected to release a complete proposal by the end of 2009, with calibration of the new requirements to be completed by mid-2010</li> </ul> |

C-1

| Reg. Reform Proposal | Current US Requirements   | United States   | United Kingdom | European Union | Basel Committee |
|----------------------|---|---|----------------|----------------|-----------------|
|                      | <p>stock and qualifying trust preferred securities may only constitute up to 25% of all Tier 1 capital and 15% of all Tier 1 capital for internationally active banks, except if the Federal Reserve has granted a specific exemption.</p> <ul style="list-style-type: none"> <li>How proposals differ: US capital reform proposals would limit the amount of cumulative perpetual preferred stock and qualifying trust preferred securities that can be included in an institution's Tier 1 capital calculation</li> <li>Risk-based capital charges. Each asset-type has a corresponding risk-based capital charge, pursuant to the Federal Reserve's rules</li> <li>How proposals differ: US capital reform proposals would increase the risk-based capital charges for certain instruments/exposures including off-balance sheet vehicles, proprietary trading positions, equity investments, ABS and</li> </ul> | <p>required to be well capitalized and well managed on a consolidated basis, not just at the insured depository institution level</p> <p><b>Higher Quality Capital</b></p> <ul style="list-style-type: none"> <li>Common equity would constitute a large majority of a banking firm's Tier 1 capital; and</li> <li>Inclusion in regulatory capital of innovative securities would be subject to strict, internationally consistent limits</li> <li>Specific quantitative proposals have yet to be announced</li> </ul> <p><b>Capital Surcharge</b></p> <ul style="list-style-type: none"> <li>US bank regulators and the Treasury are debating whether to impose a capital surcharge on systemically important firms</li> </ul> <p><b>US Timeline for Reform</b></p> <ul style="list-style-type: none"> <li>A Treasury working group will publish a report on capital requirements by December 31, 2009</li> <li>Treasury has called for reaching an international agreement</li> </ul> |                |                |                 |

C-2

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2010

| Reg. Reform Proposal                  | Current US Requirements   | United States   | United Kingdom  | European Union   | Basel Committee   |
|---------------------------------------|---|---|---|--|---|
| Higher Risk-Based Capital Charges     | MBS and counterparty credit risk exposures to financial firms (e.g., repos, securities lending, margin loans) | <ul style="list-style-type: none"> <li>Higher risk-based capital charges for certain instruments/exposures would be applied, including: <ul style="list-style-type: none"> <li>off-balance sheet vehicles;</li> <li>proprietary and other trading positions;</li> <li>equity investments;</li> <li>ABS and MBS securities; and</li> <li>counterparty credit risk exposures to financial firms, (e.g., non-centrally cleared derivatives, repos, reverse repos, securities lending, margin loans)</li> </ul> </li> <li>Specific quantitative proposals have yet to be announced</li> </ul> | <ul style="list-style-type: none"> <li>Capital required against trading book activities would be increased significantly</li> <li>Specific quantitative proposals have yet to be announced</li> </ul> | <ul style="list-style-type: none"> <li>Capital required against trading book activities and resecuritizations would be increased</li> <li>A draft Directive to raise capital requirements for trading book activities and resecuritizations is expected to be implemented in 2011</li> </ul> | <ul style="list-style-type: none"> <li>Capital required against trading book activities and resecuritizations would be increased</li> <li>Guidelines for computing capital for incremental risk in the trading book and higher risk weights for resecuritization exposures are expected to be implemented at the end of 2010</li> </ul> |
| Counter-cyclical capital requirements |   | <ul style="list-style-type: none"> <li>Higher capital requirements would be applied in the early phases of the credit cycle and more uniform capital requirements</li> </ul>  | <ul style="list-style-type: none"> <li>Higher capital requirements would be applied in the early phases of the credit cycle and more uniform capital requirements</li> </ul>                          | <ul style="list-style-type: none"> <li>Higher capital requirements would be applied in the early phases of the credit cycle and more uniform capital requirements</li> </ul>   | <ul style="list-style-type: none"> <li>A framework for counter-cyclical capital buffers would be implemented</li> <li>The framework would include capital</li> </ul>  |

C-3

| Reg. Reform Proposal | Current US Requirements  | United States   | United Kingdom   | European Union  | Basel Committee   |
|----------------------|--|---|--|---|---|
| Liquidity            | <ul style="list-style-type: none"><li>Each US bank regulator has qualitative guidance on funding and liquidity risk management</li><li>In order to harmonize this guidance, the US bank regulators have recently published Proposed Interagency Guidance on Funding and Liquidity Risk Management</li><li>The guidance emphasizes the importance of cash flow projections, diversified funding sources, stress testing, a cushion of liquid assets, and a formal contingency funding plan as primary tools for measuring and</li></ul> | <ul style="list-style-type: none"><li>would be applied throughout the cycle</li><li>More forward-looking loan loss reserves would be required</li><li>Specific quantitative proposals have yet to be announced</li></ul>  | <ul style="list-style-type: none"><li>would be applied throughout the cycle</li><li>More forward-looking loan loss reserves would be required</li><li>Specific quantitative proposals have yet to be announced</li></ul>   | <ul style="list-style-type: none"><li>would be applied throughout the cycle</li><li>The European Commission published a consultative paper on through-the-cycle expected loss provisioning based on the Spanish dynamic provisioning model and will issue a draft Directive in October 2009</li></ul>   | <ul style="list-style-type: none"><li>conservation measures such as constraints on capital distributions and forward-looking provisions based on expected losses</li><li>The Basel Committee has developed a proposal (not publicly released yet) for counter-cyclical capital buffers and it will be discussed at its September 2009 meeting</li></ul>   |
|                      |  | <ul style="list-style-type: none"><li>Banking firms would be subject to an explicit liquidity risk management regime that would be independent from the regulatory capital regime<ul style="list-style-type: none"><li>Specific proposals have yet to be announced</li></ul></li><li>Proposed guidelines on funding and liquidity risk management include:<ul style="list-style-type: none"><li>comprehensive liquidity risk measurement and monitoring systems</li><li>adequate levels of highly liquid marketable securities free of impediments that</li></ul></li></ul> | <ul style="list-style-type: none"><li>Quantitative and qualitative frameworks for liquidity risk management would be implemented with an increased focus on firms' stress testing and contingency funding plans</li><li>New liquidity reporting requirements would be implemented</li><li>The FSA is expected to issue a Policy Statement on liquidity standards in October 2009</li></ul> | <ul style="list-style-type: none"><li>Liquidity buffers and risk management frameworks would be implemented<ul style="list-style-type: none"><li>The core of a firm's liquidity buffer would be composed of cash and assets that are both highly liquid in private markets and central bank eligible, although some flexibility might be appropriate for the longer end</li></ul></li><li>Comments on the Committee of European Banking Supervisors consultative paper on liquidity buffers are due by October 31, 2009</li></ul> | <ul style="list-style-type: none"><li>A minimum global standard for funding liquidity would be applied that includes a stressed liquidity coverage ratio requirement, underpinned by a longer-term structural liquidity ratio</li><li>The Basel Committee is expected to release a complete proposal by the end of 2009, with calibration of the new requirements to be completed by mid-2010</li></ul> |

C-4

| Reg. Reform Proposal   | Current US Requirements  | United States  | United Kingdom  | European Union  | Basel Committee  |
|------------------------|--|--|---|---|--|
|                        | <ul style="list-style-type: none"> <li>managing liquidity risk. How proposals differ. The US does not currently have any quantitative liquidity rules. However, the Basel Committee is expected to issue a proposal by the end of 2009 that would set a minimum global standard for funding liquidity, including a stressed liquidity coverage ratio requirement, underpinned by a longer-term structural liquidity ratio</li> </ul>           | <p>can be used to meet liquidity needs in stressful situations</p>   |   |   |  |
| <b>Leverage Limits</b> | <ul style="list-style-type: none"> <li>Well-capitalized banks are required to maintain a leverage ratio of 5% or greater</li> <li>The leverage ratio is calculated by dividing Tier 1 capital by average total on-balance sheet assets, adjusted for any core capital deductions</li> <li>How proposals differ. US capital proposals would require a non-risk-based leverage requirement that would capture off-balance sheet items</li> </ul> | <ul style="list-style-type: none"> <li>A non-risk-based leverage constraint, which would, at a minimum, capture off-balance sheet items would be imposed</li> <li>Specific quantitative proposals have yet to be formally announced</li> </ul> | <ul style="list-style-type: none"> <li>A gross leverage ratio (total assets to capital) would be imposed</li> <li>Specific quantitative proposals have yet to be announced</li> </ul> | <ul style="list-style-type: none"> <li>The EU intends to present a legislative proposal on a leverage ratio</li> <li>A date for such a proposal has not been announced</li> </ul> | <ul style="list-style-type: none"> <li>A leverage ratio would be imposed</li> <li>The Basel Committee is expected to release a complete proposal by the end of 2009, with calibration of the new requirements to be completed by mid-2010</li> </ul> |



## ANNEX D

## EXECUTIVE COMPENSATION

| United States  | United Kingdom   | European Union  | Financial Stability Board   |
|--|--|---|---|
| <p><b>United States Department of the Treasury</b></p> <p><b>Scope.</b> Legislation would generally apply to U.S. public companies</p> <p><b>"Say-on-Pay"</b> – If enacted, for meetings held after December 15, 2009:</p> <ul style="list-style-type: none"> <li>• <b>Compensation.</b> Shareholders would be asked to cast annual non-binding votes to approve executive compensation as disclosed in proxy statements</li> <li>• <b>Golden parachutes.</b> Requires the SEC to adopt rules allowing shareholders to separately cast non-binding votes relating to any change in control payments, benefits or protections (including severance protections)</li> </ul> <p><b>Compensation Committee</b></p> <ul style="list-style-type: none"> <li>• <b>Independence standards.</b> Compensation committee members would be subject to independence standards. These standards, which are similar to the standards already applicable under the NYSE and NASDAQ listing standards, require that compensation committee members not: <ul style="list-style-type: none"> <li>◦ accept consulting, advisory or other compensatory fees from the company, or</li> <li>◦ be an affiliated person of the company or the company's subsidiaries</li> </ul> </li> <li>• <b>Consultants and other advisors.</b> <ul style="list-style-type: none"> <li>◦ Compensation consultants, legal counsel and other advisors to the compensation committee would be required to meet independence standards established by the SEC</li> <li>◦ The compensation committee has the</li> </ul> </li> </ul> | <p><b>Scope.</b></p> <ul style="list-style-type: none"> <li>• Will apply to any firm that is a (i) UK bank that has total regulatory capital exceeding £1 billion, (ii) a BIPRU 730k firm that has total regulatory capital exceeding £750 million or (iii) a full credit institution, a BIPRU 730k firm or a third-country BIPRU 730k firm that is part of a group with capital resources held within the group by UK Banks and BIPRU 730k firms exceeding £1 billion and £750 million</li> <li>• A BIPRU 730k firm is a bank, building society or investment firm that is subject to the Capital Requirements Directive where base (minimum) capital requirements of €730,000 apply</li> </ul> <p><b>Implementation.</b></p> <ul style="list-style-type: none"> <li>• In general, firms must be compliant by January 1, 2010</li> <li>• Firms are required to submit to Financial Services Authority (FSA) by October 31, 2009 their remuneration policy statements reflecting the principles below and will be subject to meetings with FSA on these policies between November 2009 and February 2010</li> </ul> <p><b>Remuneration Code: General</b></p> <p><b>Requirements</b></p> <ul style="list-style-type: none"> <li>• A firm must establish, implement and maintain remuneration policies, procedures and practices that are consistent with and promote effective risk management</li> <li>• The Remuneration Code covers all aspects</li> </ul> | <p><b>European Parliament Proposed Directive on The Supervisory Review of Remuneration Policies</b></p> <p><b>Purpose.</b> To amend the EU Capital Requirements Directive to cover the supervisory review of remuneration policies</p> <p><b>Scope.</b></p> <ul style="list-style-type: none"> <li>• In general, EU credit institutions and investment firms</li> <li>• Employees who have a material impact on the risk profile of the bank or investment firm</li> </ul> <p><b>Implementation.</b> The proposed Directive is expected to be implemented by 2011</p> <p><b>Member State authorities and remuneration policies and practices.</b></p> <ul style="list-style-type: none"> <li>• Member State authorities would require that every credit institution and investment firm have remuneration policies and practices that are consistent with effective risk management</li> <li>• Member States would ensure that the appropriate authorities have the power to impose penalties or measures for non-compliance</li> </ul> <p><b>Required remuneration policies.</b></p> <ul style="list-style-type: none"> <li>• A remuneration policy should (i) be consistent with effective risk management and not encourage excessive risk-taking and (ii) be in-line with business strategy, objectives, values and long-term interests</li> <li>• A management body should establish the general principles of the remuneration policy and is responsible for implementation, and</li> </ul> | <p><b>Scope.</b> G-20 governments</p> <p><b>Implementation.</b> G-20 expects governments to show progress in implementing these principles by the end of 2009</p> <p><b>Application.</b> Significant financial institutions, specifically large, systematically important firms</p> <p><b>Principles.</b> The principles aim to ensure effective governance of compensation, alignment of compensation with prudent risk taking and effective supervisory oversight and stakeholder engagement in compensation.</p> <p><b>Compensation</b></p> <ul style="list-style-type: none"> <li>• Compensation should be adjusted for risks including liquidity risk, reputation risk and cost of capital</li> <li>• Compensation systems should link the size of the bonus pool to the overall performance of the firm <ul style="list-style-type: none"> <li>◦ Bonuses should diminish or disappear in the event of poor firm, divisional or business unit performance</li> </ul> </li> <li>• Compensation payout schedules must be sensitive to the time horizon of risks <ul style="list-style-type: none"> <li>◦ Profits and losses of different activities are realized over different periods of time and variable compensation payments should be deferred accordingly</li> <li>◦ Management should question payouts for income that cannot be realized or whose likelihood of realization remains uncertain</li> </ul> </li> </ul> |

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| <p>authority to retain independent consultants, counsel and other advisors and would be directly responsible for their appointment, compensation and oversight of their work, similar to the audit committee oversight of independent auditors</p> <ul style="list-style-type: none"> <li>Companies would be required to disclose whether the compensation committee has retained an independent compensation consultant and if not, why not</li> <li>Companies must provide funding for the hiring of independent consultants, counsel and other advisors by the committee</li> </ul> <p><i>House Executive Compensation</i></p> <ul style="list-style-type: none"> <li>"Say-on-Pay" <ul style="list-style-type: none"> <li>Once effective, proxy solicitations for public companies will have to provide for a nonbinding shareholder vote on the executive compensation of the named executive officers</li> <li>Where a company is seeking the approval of shareholders for a merger, acquisition, or other consolidation or sale of the company, the shareholders must also be given the right to a nonbinding vote on any executive compensation agreement concerning any type of compensation, be it present, deferred, or contingent, that is related to the merger, acquisition, or other consolidation or sale of the company</li> </ul> </li> <li>"Say-on-Pay" would generally apply to US</li> </ul> | <p>of remuneration that could have a bearing on effective risk management including wages, bonus, long-term incentive plans, options, hiring bonuses, severance packages and pension arrangements</p> <ul style="list-style-type: none"> <li>A firm's obligations in complying with the Remuneration Code will vary depending on the nature, scale and complexity of the firm</li> <li>The FSA will assess the quality of a firm's remuneration policies and whether they encourage excessive risk-taking by a firm's employees</li> <li>The FSA will also expect firms to use the Policy Statement's principles in assessing their exposure to risks arising from their remuneration policies as part of the internal capital adequacy assessment process (ICAAP)</li> </ul> <p><b>Remuneration structure for certain key employees.</b> In the case of employees that (i) perform a significant influence function or (ii) whose activities have, or could have, a material impact on the firm's risk profile, the following principles should be followed:</p> <ul style="list-style-type: none"> <li>Remuneration for such employees should promote effective risk management</li> <li>Variable remuneration <ul style="list-style-type: none"> <li>A significant portion of variable compensation should be linked to the future performance of the firm (and, where applicable, the employee's division or business unit) and the business undertaken by the employee</li> </ul> </li> </ul> | <p>such policy is subject to review at least annually</p> <ul style="list-style-type: none"> <li>Performance-related remuneration would be based on a combination of the assessment of the performance of the individual, the business unit and the overall results of the credit institution</li> <li>Fixed and variable components of total remuneration would be balanced <ul style="list-style-type: none"> <li>Fixed remuneration. Would be sufficiently high to allow a flexible bonus undertaking to operate a flexible bonus policy and not pay bonuses if performance criteria are not met</li> <li>Variable remuneration. Payment of a major part of a bonus would be deferred for an appropriate period and should be linked to the future performance of the firm</li> </ul> </li> <li>Performance measurement to calculate bonuses or bonus pools would include an adjustment for risk and the cost of capital and liquidity required</li> <li>Payments for an early termination of employment should be based on performance over time so as not to reward failure</li> </ul> <p><i>European Commission Recommendation on Remuneration Policies in the Financial Services Sector</i></p> <p><b>Scope.</b></p> <ul style="list-style-type: none"> <li>Member States should apply the</li> </ul> | <p>at time of payout</p> <ul style="list-style-type: none"> <li>Payment mix of cash, equity and other forms of compensation should vary depending on position and role and should be consistent with risk alignment</li> <li>For employees whose actions have a material impact on the risk exposure of the firm: <ul style="list-style-type: none"> <li>A substantial proportion of compensation should be variable</li> <li>40%-60% of variable compensation should be deferred</li> </ul> </li> <li>For the most senior management and the most highly paid employees, the percentage of variable compensation that should be deferred should be above 60%</li> <li>The deferral period should be at least 3 years</li> <li>50% of variable compensation should be awarded in shares or share-linked instruments</li> <li>The remaining portion of the deferred compensation can be paid as cash compensation</li> <li>If a firm is not profitable during any vesting period, any unvested portions of compensation are to be clawed back.</li> <li>In the event of exceptional government intervention to stabilize a firm, supervisors should have the ability to restructure compensation</li> <li>Guaranteed bonuses should not be a part of compensation plans</li> </ul> |

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| United States   | United Kingdom  | European Union  | Financial Stability Board   |
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| <ul style="list-style-type: none"> <li>public companies</li> <li>Compensation Committees               <ul style="list-style-type: none"> <li>The bill requires that each member of the compensation committee of the board of directors be independent. "Independence" is defined to preclude board members from accepting any consulting, advisory or other compensatory fee from the company</li> <li>Compensation committees will have the authority to hire independent compensation consultants and legal counsel to advise them</li> <li>Standards would generally apply to US public companies</li> </ul> </li> <li>Incentive-Based Compensation Disclosure Requirements for Financial Institutions               <ul style="list-style-type: none"> <li>"Financial Institutions" includes banks, bank holding companies, broker-dealers, credit unions and investment advisors, and any other institution identified by federal financial regulators</li> <li>Financial institutions would be required to disclose the structure of incentive-based compensation arrangements applicable to all employees to their federal regulator</li> <li>Disclosure would need to be sufficient for federal regulators to determine whether the compensation structure is:                   <ul style="list-style-type: none"> <li>aligned with sound risk management;</li> <li>structured to account for the time horizon of risks; and</li> <li>meets any other criteria that the</li> </ul> </li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>A significant proportion of any bonus should be deferred with a minimum vesting period</li> <li>The vesting period should generally be at least three years</li> <li>In relation to the proportion to be deferred, if the bonus is significant when compared with the fixed component of an employee's remuneration, a "reasonable starting point" would be to defer at least two-thirds of a bonus</li> <li>Fixed remuneration. Should be a large enough proportion of total remuneration, such that a firm would not have to pay a bonus in a year in which the firm suffers a loss</li> <li>Guaranteed minimum bonus which runs for a period of more than one year and similar payments in addition to base salary that are not based on performance during the period would not be deemed consistent with the Policy Statement</li> </ul> <p><b>Profit-based measurement and risk-adjustment</b></p> <ul style="list-style-type: none"> <li>Assessments of financial performance used to calculate bonus pools should be based on profits, not revenues</li> <li>A bonus pool calculation should be adjusted for risk and the cost of capital and liquidity required</li> <li>The remuneration committee must determine the proportion of risk-adjusted profits that should be accrued, and paid out, in the form</li> </ul> | <p>Recommendations to all "financial undertakings":</p> <ul style="list-style-type: none"> <li>having their registered office or their head office in their territory</li> <li>at the parent level and to subsidiaries, including subsidiaries established in offshore financial centers</li> </ul> <p>"Financial undertaking" includes credit institutions, investment firms, insurance and reinsurance firms, pension funds and collective investment schemes</p> <ul style="list-style-type: none"> <li>Recommendations should apply to remuneration of employees who have a material impact on the risk profile of the financial undertaking</li> </ul> <p><b>Implementation.</b> Member States are invited to implement this Recommendation by December 31, 2009</p> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>Remuneration structure           <ul style="list-style-type: none"> <li>Financial undertakings should implement a remuneration policy that is (i) consistent with and promotes effective risk management and (ii) in-line with business strategy, objective and long-term interests, and such policy should be updated over time to reflect changing conditions</li> <li>Remuneration policies with a variable component or bonus should have an appropriate balance of fixed and variable compensation which may vary across staff members</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>Exceptional minimum bonuses should only occur when hiring new staff and should be limited to the first year</li> </ul> <p><b>Governance</b></p> <ul style="list-style-type: none"> <li>Board of Directors should:           <ul style="list-style-type: none"> <li>actively oversee the compensation system's design and operation</li> <li>oversee compensation practices for the whole firm, not just senior executives (complete delegation of compensation system operation to senior executives is risky)</li> <li>be independent, non-executive directors</li> </ul> </li> <li>Relevant board members overseeing compensation should have expertise in risk management and compensation</li> <li>Compensation systems should include controls and be regularly reviewed for compliance with design policies and procedures</li> <li>Attention must be given to the quality of performance measures to ensure: (i) inclusion of all costs; (ii) independence of valuations and (iii) avoiding giving current-year credit for expected future-year revenue.</li> <li>To ensure independence, staff engaged in financial and risk control should be compensated independent of the business areas they oversee and such compensation should be commensurate with their key role at the firm.</li> </ul> <p><b>Supervision</b></p> |

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| United States  | United Kingdom  | European Union  | Financial Stability Board   |
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| <p>regulators may determine to be appropriate</p> <ul style="list-style-type: none"> <li>• Incentive-Based Compensation Prohibitions               <ul style="list-style-type: none"> <li>◦ Federal regulators would be required to enact regulations that prohibit any incentive payment arrangement or feature that encourages inappropriate risks by financial institutions, that threaten the safety and soundness of financial institutions, or that could have a serious adverse effect on economic conditions or financial stability</li> </ul> </li> </ul> | <p>of variable remuneration</p> <p><b>Long-term performance measurement</b></p> <ul style="list-style-type: none"> <li>• When performance-related remuneration is a significant part of total remuneration, the performance assessment should be based on longer-term performance</li> <li>• Performance should be assessed on a longer-term scale because profits can be cyclical</li> </ul> <p><b>Role of the remuneration committee</b></p> <ul style="list-style-type: none"> <li>• Independence. The remuneration committee should have a majority of non-executive directors</li> <li>• Experience. One or more members of the committee should have skills and experience in risk management</li> <li>• Disclosure. The remuneration committee should issue a public document to inform shareholders about the remuneration policy and its implications for the firm's risk profile and for employee behavior</li> </ul> | <ul style="list-style-type: none"> <li>◦ Variable remuneration. There should be a maximum limit on variable remuneration</li> <li>◦ Fixed remuneration. Should be sufficiently high to allow a financial undertaking to operate a flexible bonus policy and not pay bonuses if performance criteria are not met</li> <li>◦ Payments for an early termination of employment should be based on performance over time so as not to reward failure</li> <li>◦ Bonuses:               <ul style="list-style-type: none"> <li>• Bonuses should be able to be entirely or partly withheld if performance criteria are not met or if the financial undertaking's situation deteriorates significantly</li> <li>• Where a significant bonus is awarded, a major part should be deferred with a minimum deferral period</li> <li>• A financial undertaking should be able to clawback all or part of bonuses that have been awarded for performance based on data which has been proven to be manifestly misstated</li> </ul> </li> </ul> <p><b>Performance measurement</b></p> <ul style="list-style-type: none"> <li>• Performance related remuneration should be based on a combination of individual, business unit and overall performance</li> <li>• Time horizon. Assessment of performance should be in a multi-year framework and payment of bonuses should be spread over</li> </ul> | <ul style="list-style-type: none"> <li>• Supervisory review of compensation practices must be rigorous</li> <li>• Supervisors should require significant financial institutions to demonstrate that the incentives provided by compensation systems take into consideration risk, capital, liquidity and the likelihood and timeliness of earnings.</li> <li>• The Basel Committee on Banking Supervision will integrate these principles into their risk management guidance by autumn 2009</li> </ul> <p><b>Disclosure</b></p> <ul style="list-style-type: none"> <li>• Firms must disclose information about their compensation practices (e.g., general design philosophy, risk adjustment and relation between compensation and performance, summaries of external and internal audits) for a broad range of employees in a clear, comprehensive and timely manner</li> <li>• Shareholders need to be able to evaluate the firm's risk management and other control systems and providing shareholders an explicit voice (e.g., a nonbinding resolution to approve compensation) may be helpful</li> </ul> |

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| United States | United Kingdom | European Union  | Financial Stability Board |
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|               |                | <p>the business cycle of the financial undertaking</p> <ul style="list-style-type: none"> <li>• Adjustments. Performance, as a basis for bonus or bonus pools, should be adjusted for risks and take into account the cost of capital and liquidity required</li> </ul> <p><b>Supervision and Disclosure</b></p> <ul style="list-style-type: none"> <li>• Supervisors should ensure that financial undertakings apply policies consistent with effective risk management</li> <li>• Remuneration policy should include measures to avoid conflicts of interest</li> <li>• Members of the board responsible for remuneration policy should have relevant expertise and functional independence</li> <li>• The remuneration policy and updates should be disclosed to shareholders in a clear and easily understandable manner</li> <li>• The nature, size and scope of activities of the financial undertaking should be considered in determining information to be disclosed</li> </ul> <p><i>European Commission Recommendation on The Remuneration of Directors of Listed Companies</i></p> <p><b>Scope.</b> Listed Companies</p> <p><b>Implementation.</b> Member States are invited to implement this Recommendation by December 31, 2009</p> <p><b>Remuneration Committee</b></p> <ul style="list-style-type: none"> <li>• Board members on the remuneration</li> </ul> |                           |

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| United States | United Kingdom | European Union   | Financial Stability Board |
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|               |                | <p>committee should exercise independent judgment</p> <ul style="list-style-type: none"> <li>At least one of the members of the committee should have experience in the field of remuneration policy</li> <li>Consultants that advise the committee should not at the same time advise the human resources department or executive or managing directors of the company concerned</li> <li>Committee should report on the exercise of its functions to the shareholders and be present at the annual general meeting</li> </ul> <p><b>Policy on Director's Remuneration</b></p> <ul style="list-style-type: none"> <li>For remuneration policies that include variable components, the non-variable component should be sufficient to allow the company to withhold variable components when performance criteria are not met</li> <li>Variable remuneration:             <ul style="list-style-type: none"> <li>A major part should be deferred for a minimum period of time</li> <li>Performance criteria should include non-financial criteria (e.g., compliance with applicable rules and procedures)</li> </ul> </li> <li>Share remuneration:             <ul style="list-style-type: none"> <li>Shares should not vest for at least 3 years after their award</li> <li>Share options should not be exercisable for at least 3 years after their award</li> <li>After vesting, directors should retain a</li> </ul> </li> </ul> |                           |

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| United States | United Kingdom | European Union  | Financial Stability Board |
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|               |                | <p>number of shares, until the end of their mandate (number of retained shares should be fixed)</p> <ul style="list-style-type: none"><li>o Vesting or exercisability of share awards should be subject to attainment of predetermined and measurable performance criteria</li><li>o Total number of shares to be retained should be fixed, in general, at twice the value of total annual remuneration</li><li>o Remuneration of non-executive or supervisory directors should not include share options</li></ul> <ul style="list-style-type: none"><li>• Contractual arrangements with executive or managing directors should include a clawback for remuneration awarded on the basis of data which was manifestly misstated</li><li>• Termination payments should not exceed a fixed amount or fixed number of years of annual remuneration (which generally should not be more than two years of non-variable compensation)</li></ul> |                           |

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