

Global Credit Portal RatingsDirect®

February 16, 2012

The Role Of The U.S. Financial System: What Should It Be?

Senior Research Fellow:

Mark Adelson, New York (1) 212-438-1075; mark_adelson@standardandpoors.com

Deputy Chief Economist:

Beth Ann Bovino, New York (1) 212-438-1652; bethann_bovino@standardandpoors.com

Table Of Contents

- I. Introduction
- II. The Need For Regulation Of The Financial System
- III. From Theoretical To Practical
- IV. Ideas To Guide Future Policy
- V. Conclusion
- References

The Role Of The U.S. Financial System: What Should It Be?

I. Introduction

What is the purpose of the U.S. financial system? U.S. lawmakers arguably should have an answer to that question when they embark on framing policy to regulate the American financial services industry. Policy development can be either reactive or proactive. Reactive policy tries to cure or prevent perceived ills. Such policies may dominate at the bottom of an economic cycle, where they may be too late to help. Those policies rarely appear at the top of an economic cycle. At the top of a cycle, the notion that financial markets can effectively govern themselves may influence or even dominate the policy landscape and may lead to lax policies or regulations. In contrast, a proactive policy orientation would focus on the financial system's overarching purposes, such as maximizing systemic stability or maximizing the output of the overall economy. That type of policy orientation might, in the future, help lawmakers fashion better policies.

The idea of proactive policy is hardly new. Historically, various areas of national interest have become the subject of proactive policies. America's early space program was an example of a proactive policy. On May 25, 1961, in a special address to Congress, President Kennedy stated: "First, I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to the Earth." Slightly more than eight years later, on July 20, 1969, Neil Armstrong and Buzz Aldrin landed the Eagle spacecraft on the Sea of Tranquility. Four days later, they returned safely to Earth. The housing initiatives of the New Deal are another example of largely proactive policy. They did not simply address the problems of the Great Depression, and they embodied a vision of transforming America from a nation of mostly renters into one of mostly homeowners. The proposals for housing reform from HUD and the Treasury earlier this year likewise reflect both elements of proactive and reactive policy, though they seem to lean more toward the latter. In short, a reactive policy is usually a response to a problem, whereas a proactive one expresses a vision of how things "ought to be."

Wise policy decisions about the financial system are important for several reasons. First, the financial services sector now accounts for a significant share of U.S. GDP--roughly 8%. Historically, the share has been lower. Over the past 150 years, it grew from about 1.5% to the current level, with much of the growth coming in the last three decades (Philippon, 2008). Second, regulation of the financial services industry can have unintended consequences for other sectors. Virtually every other sector of the economy consumes financial services. Thus, according to some views, policies that unnecessarily increase the cost of financial services may place a drag on the whole U.S. economy. Third, and as demonstrated vividly by the 2008-2010 financial crisis, the cost of financial crises can be enormous and can subject millions of American families to hardship.

II. The Need For Regulation Of The Financial System

The notion of financial regulating is meaningful only in the context of a true "financial system." Until the past few centuries, mankind engaged in trade and commerce, but not finance.

A. Emergence of financial systems

Barter and exchange have been a regular part of human activity since prehistoric times. Later, certain commodities, such as shells or precious metals, came to serve as forms of money ("commodity money"). Then, around 600 BCE, the first true coins appeared. Coins originally served as a convenient form of bullion because they had standard weights and metallic composition. Coins served as the dominant form of money for almost 2,000 years. Along the way, paper money first appeared in China around the ninth century. Merchants travelling on the Silk Road used government-issued paper receipts for metal coinage that they had previously deposited at a government office. Later, however, the Chinese experience with paper money came undone. Around 1375, the government issued banknotes that were not convertible into coins. By 1420, the banknotes were worth just 4% of their face amount. The experience was so scarring that China did not try paper money again until the 1850s.

Meanwhile, commerce in medieval Europe included trading and discounting bills of exchange. However, real paper money did not appear until 1661 when Stockholms Banco issued the first European paper banknotes. More importantly, though, the bank also combined the functions of taking deposits and extending loans. In fact, the issuance of banknotes allowed the bank to extend loans in an aggregate amount greater than the amount of its deposits plus its capital. This was a pivotal event. It was the birth of fractional reserve banking. Although Stockholms Banco collapsed after just a few years--in fact, from the over-issuance of banknotes--its brief existence can be viewed as the first example of a modern financial system.

The invention of fractional reserve banking gave banks the power to increase the money supply by creating money in the form of banknotes. However, it also created the risk of bank failures if they could not meet demands of banknote holders to convert their banknotes into coins or bullion.

The 17th century brought several other key developments in the evolution of the modern financial system. One was the creation of the joint stock, limited-liability corporation. The feature of limited liability allowed for raising capital from larger numbers of investors. One of the early appearances of limited liability corporations was in the Dutch East India Co. Alongside the emergence of limited liability corporations came stock markets--starting in Amsterdam--that provided trading in company shares.

Another key 17th century-development was growth of insurance following the Great Fire of London in 1666. A few decades later, in 1688, Lloyd's Coffee House opened and later developed into a marketplace for marine and other insurance policies. Of note, the creation of the Bank of England in 1694 had less to do with modern notions of finance than it did with funding England's wars with France.

The evolution of banking and finance accelerated gradually through the remainder of the 17th century and into the 18th. The notion of regulating banks or the financial system began to gradually emerge. For example, by 1776, the evolution had reached a sufficiently advanced stage that Adam Smith addressed it briefly in "The Wealth of Nations." Smith wrote:

Where paper money, it is to be observed, is pretty much confined to the circulation between dealers and dealers, as at London, there is always plenty of gold and silver. Where it extends itself to a considerable part of the circulation between dealers and consumers, as in Scotland, and still more in North America, it banishes gold and silver almost entirely from the country; almost all the ordinary transactions of its interior commerce being thus carried on by paper...

* * *

To restrain private people, it may be said, from receiving in payment the promissory notes of a banker, for any sum whether great or small, when they themselves are willing to receive them, or to restrain a banker from issuing such notes, when all his neighbours are willing to accept of them, is a manifest violation of that natural liberty which it is the proper business of law not to infringe, but to support. Such regulations may, no doubt, be considered as in some respects a violation of natural liberty. But those exertions of the natural liberty of a few individuals, which might endanger the security of the whole society, are, and ought to be, restrained by the laws of all governments, of the most free as well as of the most despotical. The obligation of building party walls, in order to prevent the communication of fire, is a violation of natural liberty exactly of the same kind with the regulations of the banking trade which are here proposed.

* * *

If bankers are restrained from issuing any circulating bank notes, or notes payable to the bearer, for less than a certain sum, and if they are subjected to the obligation of an immediate and unconditional payment of such bank notes as soon as presented, their trade may, with safety to the public, be rendered in all other respects perfectly free. The late multiplication of banking companies in both parts of the United Kingdom, an event by which many people have been much alarmed, instead of diminishing, increases the security of the public... By dividing the whole circulation into a greater number of parts, the failure of any one company, an accident which, in the course of things, must sometimes happen, becomes of less consequence to the public.... (Smith, 1776, pp. 423-29).

Smith's idea of regulation was straightforward. He wanted to protect "the security of the public" by prohibiting the issuance of small denomination banknotes. The reference to the "security of the public" is broad and general. By itself, it does not reveal whether Smith's concern was primarily about systemic risk or instead about consumer protection. Either way, though, Smith's concern seems to be more about preventing a bad outcome rather than trying to accomplish a desired result. Thus, even before financial regulation actually existed, Smith appears to have held a reactive mindset rather than a proactive one.

It took the better part of a century after Adam Smith published "The Wealth of Nations" for regulation of banks to really emerge. In 1844, England was the first major country to adopt a comprehensive banking code. It covered "conditions of entry, form of charter, minimum capital standards, and requirements to publish balance sheets" (Grossman, 2010, p. 139). Other countries were slow to follow England's lead. Countries that continued to allow banks to issue paper money were generally quicker to impose regulation. On the other hand, the countries that had centralized the issuance of paper money from central banks were among the slowest to embrace regulation. Many did not establish bank regulations until after the First World War.

B. Theoretical motivations for financial regulation

Many commentators identify "stability" as one of the main motivations for having financial regulation. By stability, they generally mean the goal of preventing financial crises that have material consequences in the real economy. Depending on context, the stability motivation may relate to the solvency or viability of individual firms (banks, securities firms, or insurance companies) or preserving the ability to execute monetary policy through the institutions of the financial system.

In some respects, the stability motivation overlaps significantly with the "consumer protection" motivation, which focuses directly on protecting the interests of ordinary individuals. At some level, a key motivation for financial system regulation is simply to prevent fraud by dishonest service providers. The core proposition of the financial services industry is to get a customer to entrust a portion of his wealth to a service provider. Absent some form of regulation, shady operators could open firms under false pretenses and then steal their customers' money. The existence of terms like "boiler room," "bucket shop," and "Ponzi scheme" in the American financial lexicon demonstrates the relevance of consumer protection as a motivation for financial regulation. Indeed, from one perspective, nearly the entire framework of U.S. federal securities regulation is essentially a consumer protection construct.

Still, however, stability and consumer protection are not quite the same. The stability motivation focuses on the financial system, while the consumer protection motivation focuses on individuals.

"Efficiency" is another type of motivation for financial system regulation. The efficiency motivation considers the role of the financial system in the larger economy and focuses on steering the financial system to maximize the performance of the larger economy. Maximizing the economy's growth and output are universally agreeable goals. However, these goals are not strictly regulatory ones. They seem to straddle the line between regulation and economic policy. In that vein, efficiency potentially intrudes on the larger issue of balancing the diverse goals of economic policy: full employment versus price stability versus short-term growth versus the distribution of income versus long-term growth versus international competitiveness.

III. From Theoretical To Practical

Moving from the theoretical to the practical may make it simpler to define a goal for financial regulation in the U.S. We can start by considering what we want from the financial system, or, alternatively, we can try to imagine an ideal system. Of course, there is a continuum of infinite potential visions. However, it is useful to consider several examples along the continuum as illustrative cases. Let's consider three. The first is a financial system that is primarily oriented around providing basic financial services to U.S. households and businesses. The second is a financial system primarily oriented toward maximizing the output of the U.S. economy by facilitating the mechanisms of capitalism. The third is a financial system oriented toward enhancing the balance of trade by treating financial services as an export-oriented industry. Each of the three alternatives has distinct implications.

A. Basic option: providing basic financial services

A U.S. financial system designed primarily to provide basic financial services to households and businesses would likely be relatively simple and represents the "basic option." The main activities of the financial system would include basic banking, investment, and insurance services. An overall theme for a financial system styled in a basic model would be for all types of financial services to be within sight of the regulatory apparatus. Thus, notions like the "shadow banking system" and "off-balance sheet" activities are immediately suspect. To the extent that basic system includes such activities, they would be on the regulatory radar just as much as any other activities.

In a simple system, regulated banks, securities firms, and insurance companies would have closely limited powers and the system would likely feature consumer protection elements like deposit account insurance from the Federal Deposit Insurance Corp. (FDIC) and brokerage account insurance from the Securities Investor Protection Corp. (SIPC). The capital-formation process and the capital markets would be closely regulated. Margin requirements would be high and would apply broadly across all investment products. Selling short would be restricted or

prohibited. There would be few, if any, hedge funds. Broker-dealers might be required to operate as general partnerships (i.e., no limitation of liability for partners). Commodity markets would involve only standardized contracts for futures and forwards. There would be few, if any, other types of derivatives. Credit default swaps would not exist, but credit insurance might (as a type of regulated insurance product). Products and strategies designed largely to promote or facilitate speculation would be regulated or banned under state gambling laws. Consumer loan products, including residential mortgage loans, would be simple. There would be few, if any, adjustable rate mortgage loans. There would be little, if any, federal preemption of state consumer protection laws, such as usury laws and antipredatory lending laws. Commercial banking and investment banking would be separated, as they were under the Glass-Steagall Act. There would be less interconnectedness among financial institutions.

Under the basic option, regulations would likely limit the leverage of American financial firms to a greater degree than under the other options (discussed below). One way of limiting leverage could be through explicitly higher "regulatory capital" standards. Another way would be to reduce or eliminate loopholes, like off-balance sheet activities, that financial firms' have sometimes used to circumvent capital standards. Likewise, a basic option might include tight restrictions on the permitted activities of different types of financial firms for the purpose of limiting or preventing firms' involvement in lines of business that are considered risky.

Although limitations on leverage and permitted activities might make failures of financial firms less common, such imitations could have other consequences as well. For example, they might lower the firms' profitability or make American financial firms less competitive relative to their less-stringently-regulated foreign counterparts. Information technology has improved the ability of foreign firms to transact with customers from a distance. However, even in such a case, American firms need not be disadvantaged in the home market provided that all foreign entrants would have to play by the same rules. To capture services offered by different types of firms (e.g., banks versus mortgage banks), regulation might focus on activities (i.e., mortgage lending) as opposed to the type of entity that conducts them.

A financial system in the style of the basic option would likely be much smaller than today's. It might account for only 1% to 3% of U.S. GDP. The financial system might resemble that of the U.S. during the four decades starting around 1940 (roughly until the Depository Institutions Deregulation and Monetary Control Act of 1980). The lower degree of interconnectedness would, in effect, serve as a system of firebreaks. Systemic risk would be low. Financial crises would likely be rare and generally mild. Regulators would close failed institutions and none would be considered "too big to fail."

B. Middle option: harnessing capitalism to maximize output

Despite the appeal of simplicity, a fair criticism of the basic option is that it would give short shrift to important objectives beyond providing basic financial services. For example, the basic option arguably does too little to support the mechanisms of capitalism. Along with democracy, capitalism has been described as one of the two great pillars of American society. America traditionally embraces the notion that capitalism produces progress and prosperity. Therefore, an alternative to the basic option would be a "middle option" that places greater emphasis on allowing the Invisible Hand to allocate society's productive resources to their best and highest uses. The middle option might start with all the features of the basic option and then adjust some of them to enhance the process of capital formation.

For instance, a middle option might have somewhat lower margin requirements than a basic option and might

permit short-selling. Those changes likely would enhance liquidity in capital markets and would give investors greater confidence in the ability to sell investments that they have previously purchased. That, in turn, could make new securities issues--the transactions at the heart of capital formation--more appealing to greater numbers of investors. To further promote secondary market liquidity, a middle option might also include equity derivatives (e.g., standardized call and put option contracts) and might permit speculative strategies.

A middle option might strongly favor securitization as a market-based device for allocating capital to the housing sector. Of course, a middle option might be less restrictive than a basic option with respect to maintaining strong oversight of "shadow banking" activities like securitization. Also, a middle option might embrace a somewhat wider variety of residential mortgage loans beyond the traditional, 30-year, fixed-rate, fully amortizing loan.

Like a basic option, a middle option would place greater emphasis on consumer protections and systemic stability than on the international competitiveness of U.S. financial firms. Accordingly, a middle option would likely loosen some of the basic option's limitations on leverage and the scope of permitted activities of financial firms. However, it would likely retain greater regulatory stringency than was present in the years preceding the financial crisis. For example, regulation in the middle option would likely limit firms' activities in derivatives and complex structured products. A middle option that allowed financial firms to engage in derivative activities might limit the scope of such activities to exchange-traded contracts such as equity options and commodity futures and forwards. If it went further, to allow financial firms to write and trade over-the-counter derivatives, the scope of those activities would likely be limited to standardized contracts for interest rate and currency swaps.

A financial system in the form of the middle option would likely not include credit default swaps (CDS) within the scope of permitted activities for financial firms. CDS can actually impede the process of capital formation by diverting attention and trading activity from the cash markets, where capital formation actually occurs. When financial firms buy and sell credit protection through CDS, the underlying "reference credit" (i.e., the company that is the subject of the CDS contract) receives no proceeds. An investor that sells protection though a CDS is one that might otherwise have purchased a bond issued by the reference credit. When CDS are part of the landscape, a company issuing debt may have to compete with CDS that name it as the reference credit. The competition can be challenging because CDS often allow an investor to take a roughly equivalent position with higher leverage.

A financial system in the style of the middle option would likely be somewhat smaller than today's. It might account for 4% to 5% of U.S. GDP. It might resemble the U.S. financial system during the period from roughly 1980 to the mid-1990s. It might embody some of the flexibility added by the Garn-St. Germain Depository Institutions Act of 1982 but still stop well short of the regulatory loosening expressed in the Gramm-Leach-Bliley Act. Regulation would be fairly tight, and firms' activities would be somewhat limited. A lower degree of interconnectedness would, in effect, serve as a system of firebreaks. Systemic risk would be moderate. Financial crises would likely be infrequent and of only moderate severity. Regulators would generally close failed institutions, and only a few (if any) would be considered "too big to fail."

C. Elaborate option: finance services as an export industry

A potential criticism of the both the basic option and the middle option is that neither ascribes sufficient value to financial innovation or to harnessing American ingenuity to make the U.S. financial system the leading financial system in the world, with the widest offering of products and services to customers around the globe. A financial system that emphasized those elements would likely be the most elaborate. It would likely feature the least stringent regulatory environment, reflecting the deregulation elements of both the Gramm-Leach-Bliley Act and the

Commodity Futures Modernization Act of 2000. It would likely include minimal margin requirements, few limits on short selling and speculative strategies, and widespread use of all types of derivatives (including customized over-the-counter derivatives). Financial firms would have the broadest powers and would be permitted to engage in all types of financial businesses (i.e., banking, securities, and insurance). Consumer protection would be primarily based on disclosure rather substantive regulation (e.g., regulation that bans the sale of certain products to consumers). The widest array of residential-mortgage-loan products would be offered, including subprime loans, pay-option adjustable-rate mortgages, interest-only loans, and no- and low-documentation loans, in addition to traditional 30-year fixed-rate mortgages.

A financial system in the style of the elaborate option might account for 6% or more of U.S. GDP. The financial system might resemble that of the U.S. during the period from the late-1990s to the onset of the financial crisis. There would be a high degree of interconnectedness between institutions and firebreaks would not exist. Systemic risk would be significant and financial crises would be more frequent and more severe when they occurred. Regulators would readily acknowledge that some institutions are "too big to fail."

IV. Ideas To Guide Future Policy

For any vision of what should be the role of America's financial system, future policy decisions may be improved if they embrace a few key ideas:

The need for sufficient information:

There is potential danger when important decisions are not informed by adequate information. Accordingly, policymakers should be most desirous of gathering information on large or growing financial activities. That is, they should be eager to fill in information gaps relating to large or growing activities. For example, before the crisis, there were no comprehensive official statistics of the size of the "repo" market. It existed as part of the "shadow banking system," operating largely beneath the view of regulatory radar. However, in the aftermath of the crisis, the repo market was identified as having been pivotal, both in the demise of Bear Stearns and in the crisis overall (Financial Crisis Inquiry Commission, 2011, pp. xx, 283, 288, 293). Had policymakers and regulators possessed greater knowledge of the repo market, including its size and vulnerabilities, they might have acted differently in framing policy and regulations in the years before the crisis.

Complexity can be a source of systemic risk:

Policymakers should remain mindful that complexity of financial products can be a source of risk. Complexity of financial products has been implicated in explaining why the downturn was so severe. Financial innovation brought a number of complex, new products into the market place in the years preceding the crisis. On the surface, the new products improved the market efficiency and reduced costs of financial transactions. However, market participants broadly underestimated the risks in such products.

Complexity inherently impedes understanding, including understanding of risk. It forces market participants to rely more heavily on assumptions and rules of thumb, often embedded in computer models. The use of assumptions and rules of thumb, especially those embedded in a computer model, may cause market participants to overlook (or forget) risks or to make decisions with incomplete understanding of what they are actually trading.

Blurring of subsector boundaries:

Policymakers can encourage moderation in risk taking by maintaining a clear definition of "banking." The definition of "banking" became blurred by competition from foreign banks, nonbanks (such as money markets), and the debt capital markets in general (Gorton, 2010, p. 170). This, as Gorton points out, makes defining a bank more difficult. Additionally, the move by banks into new activities in competition with nonbanks clouds the definition even more. With the definition thus blurred, barriers to entry are effectively lowered. The low barriers to entry encourage banks to engage in riskier behavior. In essence, lost bank charter values can cause increased risk-taking. If policymakers find such risk-taking unacceptable, one strategy might be to restore the value of bank charters by maintaining suitable barriers to entry. The alternatives would be to create other types of incentives for financial firms to limit their risks (capital regulation has shown this to be difficult) or to expend greater resources directly policing the firms' risk-taking activities.

Avoid counter-cyclical policymaking/regulation:

"Cycle proofing" regulation would be a key step toward a more sound American financial system. Policymakers should favor policies that they believe can endure the oscillations of the business cycle. They should seek to avoid loosening and tightening the stringency of financial system laws as business conditions oscillate.

V. Conclusion

The New Deal brought a huge wave of creative and radical initiatives that produced Glass-Steagall, the SEC, the FDIC and the FHA. Although the reforms were born in the nadir of the Great Depression, they did not merely seek to tackle the problems of the 1930s financial system within its current framework. Instead, they created a whole new framework. America's financial landscape was changed on a grand scale--and the change was clearly for the better. The recent financial reform legislation is much more narrowly tailored, though still extremely long and complex. Its extreme complexity reflects an attempt to fix an extremely complex financial system within the system's existing context and framework. By contrast, Glass-Steagall was just 37 pages long but still had enormous impact. Together with the other reforms of its era, it represented a forward looking and visionary approach.

The financial system and its regulatory framework are vital to the health of the American economy. America might be well served by a financial regulatory framework that embodies purposeful design rather than one that is an amalgam of reactive steps (and sometimes reversals) spanning eight decades.

References

Laws

- Commodity Futures Modernization Act of 2000, Pub. L. No. 106-554, 114 Stat. 2763A–365 (2000) http://www.gpo.gov/fdsys/pkg/PLAW-106publ554/pdf/PLAW-106publ554.pdf.
- Depository Institutions Deregulation and Monetary Control Act of 1980, Pub. L. 96-221, 94 Stat. 132 (1980) http://www.fdic.gov/regulations/laws/rules/8000-2200.html.
- Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. 111-203, 124 Stat. 1376 (2010) http://www.gpo.gov/fdsys/pkg/PLAW-111publ203/pdf/PLAW-111publ203.pdf.
- Garn-St. Germain Depository Institutions Act of 1982, Pub. L. 97-320, 96 Stat. 1469 (1982) http://www.fdic.gov/regulations/laws/rules/8000-4100.html.
- Glass-Steagall Act, Pub. L. 73-66, 48 Stat. 162 (1933)

- http://fraser.stlouisfed.org/docs/historical/ny%20circulars/1933_01248.pdf.
- Gramm-Leach-Bliley Act, Pub. L. 106-102, 113 Stat. 1338 (1999)
 http://www.gpo.gov/fdsys/pkg/PLAW-106publ102/pdf/PLAW-106publ102.pdf.

Books

- Calomiris, C. & Gorton, G. (1991). "The Origins of Banking Panics: Models, Facts, and Bank Regulation." In G.R. Hubbard (Ed.). "Financial Markets and Financial Crises." (pp. 109-174). National Bureau of Economic Research. http://www.nber.org/chapters/c11484.pdf.
- Ferguson, N. (2008). "The Ascent of Money: A Financial History of the World." London: Penguin Group.
- Gorton, G. (2010). "Slapped by the Invisible Hand: The Panic of 2007." Oxford University Press.
- Grossman, R. (2010). "Unsettled Account: The Evolution of Banking in the Industrialized World Since 1800." Princeton: Princeton University Press.
- Rajan, R. (2010). "Fault Lines: How Hidden Fractures Still Threaten the World Economy." Princeton: University Press
- Reinhart, C. & Rogoff, K. (2009). "This Time is Different: Eight Centuries of Financial Folly." Princeton: Princeton University Press.
- Reserve Bank of India. (2005). "Report on Currency and Finance 2004-05." Mumbai: Gunjeet Kaur (pp.122 27). http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/69291.pdf.
- Smith, A. (1776). "The Wealth of Nations, Books I-III." London: Penguin Group (reprinted 1997 with introduction by Andrew Skinner).

Articles and reports

- Blundell-Wignall, A. & Atkinson, P. (2011). "Global SIFIs, Derivatives, and Financial Stability." OECD Journal: Financial Market Trends. Volume 2011. Issue 1. http://www.oecd.org/dataoecd/62/10/48299884.pdf.
- Commission of Experts for Limiting the Economic Risks Posed by Large Companies (Switzerland). (2010). "Final Report."
 - http://www.sif.admin.ch/dokumentation/00514/00519/00592/index.html?lang=en&download=NHzLpZeg7t,lnp6I0NTU042l2
- Financial Crisis Inquiry Commission. (2011). "Financial Crisis Inquiry Report." U.S. Government Printing Office. http://www.gpo.gov/fdsys/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf.
- Independent Commission on Banking (U.K.). (2011). "Final Report Recommendations." Domarn Group. London. http://bankingcommission.s3.amazonaws.com/wp-content/uploads/2010/07/ICB-Final-Report.pdf.
- Kroszner, R. (1999). "Is the Financial System Politically Independent?: Perspectives on the Political Economy of Banking and Financial Regulation." Working paper prepared for the Swedish Government Inquiry on the Competitiveness of the Swedish Financial Sector.
 - http://research.chicagobooth.edu/economy/research/articles/151.pdf.
- McKinsey & Co. McKinsey Global Institute. (2011). "Mapping Global Capital Markets 2011."
 http://www.mckinsey.com/mgi/reports/freepass_pdfs/Mapping_global_capital_markets/Capital_markets_update_email.pdf.
- Miles, D., Yang, J., & Marchegianno, G. (2011). "Optimal Bank Capital." Discussion Paper No. 31. Bank of England – External MPC Unit.
 - http://www.bankofengland.co.uk/publications/externalmpcpapers/extmpcpaper0031.pdf.
- Philippon, T. (2008). "The Evolution of the US Financial Industry from 1860 to 2007: Theory and Evidence."
 Working Paper, Figure 1 (Nov 2008) http://pages.stern.nyu.edu/~tphilipp/papers/finsize.pdf.
- "The Great American Experiment: A Juxtaposition of Capitalism and Democracy," The 2003 Milton S. Eisenhower Symposium, press release, The Baltimore Chronicle (16 Sep 2003)

- (http://baltimorechronicle.com/sep03_EISENHOWER.html).
- Department of the Treasury and Department of Housing and Urban Development. (2011). "Reforming America's Housing Finance Market A Report to Congress."
 - http://www.treasury.gov/initiatives/Documents/Reforming%20America%27s%20Housing%20Finance%20Market.pdf.
- U.S. Senate, Permanent Subcommittee on Investigations. (2011). "Wall Street and The Financial Crisis: Anatomy of a Financial Collapse Majority and Minority Staff Report."
 - http://hsgac.senate.gov/public/_files/Financial_Crisis/FinancialCrisisReport.pdf.

Copyright © 2012 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&Ps opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process..

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

The **McGraw**·Hill Companies