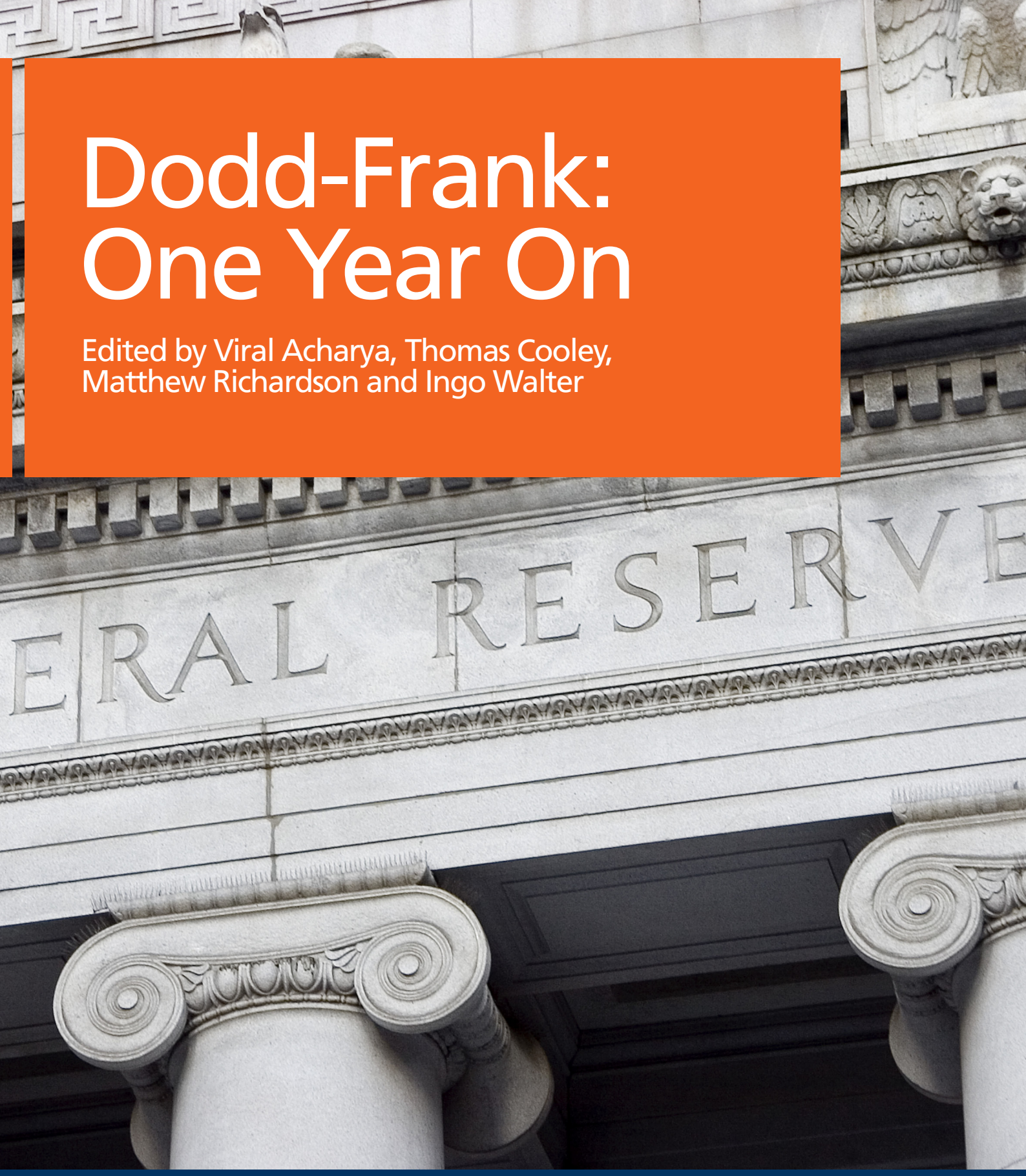
# Dodd-Frank: One Year On

Edited by Viral Acharya, Thomas Cooley, Matthew Richardson and Ingo Walter

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# Dodd-Frank: One Year On

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# Contents

# About the Contributors

**Viral V. Acharya** is the C. V. Starr Professor of Finance at the Leonard N. Stern School of Business at New York University. Prior to joining NYU Stern, Professor Acharya was a Professor of Finance and Academic Director of the Private Equity Institute at the London Business School, a Research Affiliate of the Center for Economic Policy Research and an Academic Advisor to the Bank of England. He was appointed Senior Houblon-Normal Research Fellow at the Bank of England to conduct research on efficiency of the inter-bank lending markets in 2008. Professor Acharya's research interests are in the regulation of banks and financial institutions, corporate finance, credit risk and valuation of corporate debt, and asset pricing with a focus on the effects of liquidity risk. He has published articles in the *Journal of Finance, Journal of Financial Economics, Review of Financial Studies, Journal of Business, Rand Journal of Economics, Journal of Financial Intermediation, Journal of Money, Credit and Banking*, and *Financial Analysts Journal.*

**Tobias Adrian** is a Vice President of the Federal Reserve Bank of New York, with the Capital Markets Function of the Research Group. His research covers asset pricing, financial intermediation, and macroeconomics, with a focus on the aggregate implications of capital market developments. He has contributed to the New York Fed's financial stability policy and to its monetary policy briefings. Tobias Adrian holds a Ph.D. from MIT and an MSc from LSE. He has taught at MIT and Princeton University. Dr. Adrian was a Robert Solow Foundation Graduate Fellow, Massachusetts Institute of Technology, and is the recipient of the Institute for Quantitative Investment Research Award and the President's Award for Excellence of the Federal Reserve Bank of New York.

**Neil M. Barofsky** is Adjunct Professor of Law and Senior Research Scholar/Senior Fellow at NYU School of Law. Prior to joining NYU, Barofsky was the first Special Inspector General of the Troubled Asset Relief Program ("SIGTARP") from 2008 until 2011. As SIGTARP, Barofsky audited and investigated the purchase, management, and sale of assets under the $700 billion TARP program. Barofsky established the Office of the SIGTARP, and built it to a point where, at the time of his departure, it had 140 employees, had won criminal convictions of 18 people, helped keep $555 million in taxpayer funds from being lost to fraud, provided Treasury with 68 recommendations to protect taxpayers from losses in programs, and was continuing to work on 153 pending civil and criminal investigations.

**Martin Baily** is Senior Fellow, Economic Studies, and the Bernard L. Schwartz Chair in Economic Policy Development at Brookings. Dr. Baily is also a Senior Advisor to McKinsey & Company, assisting the McKinsey Global Institute on projects on globalization and productivity. He is an economic adviser to the Congressional Budget Office and a Director of The Phoenix Companies of Hartford, CT. He served as the co-chair of the Financial Reform Task Force supported by The Pew Charitable Trusts and is a member of the Squam Lake Group of academics working on financial reform issues. In August 1999 Dr. Baily was appointed as Chairman of the Council of Economic Advisers. As Chairman, he served as economic adviser to the President, was a member of the President's Cabinet and directed the staff of this White House agency.

**Michael Barr** teaches Financial Institutions, International Finance, Transnational Law, and Jurisdiction and Choice of Law, and co-founded the International Transactions Clinic. He was on leave from 2009-2010, serving as the U.S. Department of the Treasury's Assistant Secretary for Financial Institutions. He was a key architect of the Dodd-Frank Wall Street Reform and Consumer Protection Act. He is a senior fellow at the Center for American Progress and the Brookings Institution. Barr previously served as Treasury Secretary Robert E. Rubin's Special Assistant, as Deputy Assistant Secretary of the Treasury, as Special Advisor to President William J. Clinton, as a special advisor and counselor on the policy planning staff at the State Department, and as a law clerk to U.S. Supreme Court Justice David H. Souter.

**Thomas Cooley** is the Paganelli-Bull Professor of Economics at the Leonard N. Stern School of Business at New York University, as well as a Professor of Economics in the NYU Faculty of Arts and Science. He served as Dean of the Stern School from 2002 to January 2010. He is a widely-published scholar in the areas of macroeconomic theory, monetary theory and policy and the financial behavior of firms. He has been a senior advisor and member of the Board of Managers of Standard & Poors since December 2010. Responding to the financial crisis of fall 2008, he spearheaded a research and policy initiative that yielded 18 white papers by 33 NYU Stern professors, published as *Restoring Stability: How to Repair a Failed System* (Wiley, 2009). Together with Stern colleagues he edited and wrote the book, *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance* (Wiley, November 2010).

**Thomas M. Hoenig** is president and chief executive officer of the Federal Reserve Bank of Kansas City and the senior member of the Federal Reserve System's Federal Open Market Committee. Dr. Hoenig took office in 1991 as the eighth chief executive of the Tenth District Federal Reserve Bank at Kansas City. Dr. Hoenig joined the Federal Reserve Bank of Kansas City in 1973 as an economist in the banking supervision area. He was named a vice president in 1981 and senior vice president in 1986. He has served as an instructor of economics at the University of Missouri-Kansas City and lectured on the U.S. banking and regulatory system for the People's Bank of China. Dr. Hoenig is a member of the Board of Trustees of the Ewing Marion Kauffman Foundation and serves on the boards of directors of Midwest Research Institute and Union Station.

**J. Nellie Liang** is the Director of the Office of Financial Stability Policy and Research, appointed in 2010. Liang joined the Board in 1986, acting most recently as a senior associate director in the Division of Research and Statistics. In that role, she has led a group of economists focused on the intersection of economics and finance, including oversight of capital markets, financial institutions, consumer finance, and financial flows. Liang was a key participant in crafting the Federal Reserve's response to the financial crisis and helped lead the Supervisory Capital Assessment Program, or bank stress tests, which helped increase public confidence in the banking system in 2009. Liang has a Ph.D. in economics from the University of Maryland and an undergraduate degree in economics from the University of Notre Dame.

**Pat Parkinson** is director of the Division of Banking Supervision and Regulation. An economist and senior adviser in the Board's Division of Research and Statistics, Parkinson previously served as the division's deputy director. He served as the Chairman's principal staff adviser on issues considered by the President's Working Group on Financial Markets from 1993-2008. Parkinson joined the Board in 1980 as an economist in the Division of International Finance and later joined the Division of Research and Statistics. In 1986, he was named the

manager of the Financial Analysis Section in the Division of Banking Supervision and Regulation. He returned to Research and Statistics in 1988 as chief of the Capital Markets Section. He was promoted to assistant director in 1989, associate director in 1994, and deputy director in 2005.

**Vincent Reinhart**, a former director of the Federal Reserve Board's Division of Monetary Affairs, joined AEI in 2008 after working on domestic and international aspects of U.S. monetary policy at the Fed for more than two decades. He held a number of senior positions in the Divisions of Monetary Affairs and International Finance and served for the last six years of his Federal Reserve career as secretary and economist of the Federal Open Market Committee. Mr. Reinhart worked on topics as varied as economic bubbles and the conduct of monetary policy, auctions of U.S. Treasury securities, alternative strategies for monetary policy, and the efficient communication of monetary policy decisions. At AEI, he also conducts research on key economic variables before and after adverse global and country-specific shocks, policy mistakes leading to the 2007-09 financial meltdown, and the implementation and impact of quantitative easing.

**Matthew Richardson** is the Charles E. Simon Professor of Applied Economics in the Finance Department at the Leonard N. Stern School of Business at New York University. He currently holds the position of the Sidney Homer Director of the Salomon Center for the Study of Financial Institutions which is a leading financial research center. In addition, he is a Research Associate of the National Bureau of Economic Research. Professor Richardson has done research in many areas of finance, including both theoretical and empirical work. He recently co-edited two books on the financial crisis, *Restoring Stability: How to Repair a Failed System* (Wiley, 2009) and *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance* (Wiley, November 2010), and is a co-author of *Guaranteed to Fail: Fannie Mae, Freddie Mac and the Debacle of Mortgage Finance* (Princeton University Press, March 2011).

**Kim Schoenholtz** teaches courses on money, banking, and financial markets and on macroeconomics. Previously, he was Managing Director and Senior Advisor in Citigroup's Economic and Market Analysis (EMA) department, and served as Citigroup's global chief economist from 1997 until 2005. After taking a year's leave, he returned in 2006 as a Senior Advisor in EMA. Mr. Schoenholtz joined Salomon Brothers in 1986. He was named Salomon's chief economist in 1997, and subsequently became chief economist at Salomon Smith Barney and at Citigroup. He has served as a member of the Executive Committee of the Centre for Economic Policy Research and is currently a panel member of the U.S. Monetary Policy Forum.

**Stijn Van Nieuwerburgh** joined New York University Stern School of Business as an Assistant Professor in the Finance Department in August 2003, from Stanford University where he earned his PhD in Economics. He currently is Associate Professor with tenure and Yamaichi Faculty Fellow. Professor Van Nieuwerburgh's primary research areas include finance, macroeconomics, and real estate. His current work focuses on general equilibrium asset pricing and the role of housing in the macro economy. This research studies investors who are constrained in their borrowing by the value of their housing collateral. This collateral mechanism has important implications for risk premia on stocks and bonds. Prior to earning his Ph.D., Professor van Nieuwerburgh obtained a masters degree in Financial Mathematics from the Mathematics department at Stanford, and a bachelor degree in Economics from the University of Gent in Belgium. He was elected as a faculty Research Associate at the National Bureau of Economic Research and the Center for European Policy Research.

**Nicolas Véron**'s research focuses on financial systems and financial regulation in Europe and at the global level. He coordinates Bruegel's research in this area and has written policy papers for Bruegel on banking supervision and crisis management, accounting standards, credit rating agencies, international financial regulatory institutions, economic and financial nationalism, and sovereign wealth funds. In 2009 he also joined the Peterson Institute for International Economics as a Visiting Fellow. Véron is the author of *Smoke & Mirrors, Inc.: Accounting for Capitalism,* a book on accounting standards and practices (Cornell University Press, 2006); of numerous policy papers, alone or with co-authors including Morris Goldstein, Thomas Philippon, Jean Pisani-Ferry, Adam Posen, and Lars-Hendrik Röller.

**Ingo Walter** is Vice Dean for Faculty and holds the Seymour Milstein Chair in Finance, Corporate Governance and Ethics at the Stern School of Business, New York University. Prof. Walter received his A.B. and M.S. degrees from Lehigh University and his Ph.D. degree in 1966 from New York University. He has been on the faculty at New York University since 1970. From 1971 to 1979 he was Vice Dean for Academic Affairs and subsequently served a number of terms as Chair of International Business and Chair of Finance. Subsequently he served as Director of the New York University Salomon Center for the Study of Financial Institutions from 1990 to 2003 and Director of the Stern Global Business Institute from 2003 to 2006. He has been Dean of the Faculty since 2008. Prof. Walter has had visiting professorial appointments at the Free University of Berlin, University of Mannheim, University of Zurich, University of Basel, the Institute for Southeast Asian Studies in Singapore, IESE in Spain and various other academic and research institutions. He also held a joint appointment as Professor of International Management from 1986 to 2005 and remains a Visiting Professor at INSEAD in Fontainebleau, France. Dr. Walter's principal areas of academic and consulting activity include international finance and banking. He has published papers in most of the professional journals in the field and is the author, co-author or editor of 26 books, most recently *Mergers and Acquisitions in Banking and Finance – What Works, What Fails and Why?* (New York: Oxford University Press, 2004), *Governing the Modern Corporation* (New York: Oxford University Press, 2006) and *Regulating Wall Street* (New York: John Wiley & Sons, 2011). Prof. Walter has served as a consultant to various corporations, banks, government agencies and international institutions, and has held a number of board memberships.

**Lawrence J. White** is the Robert Kavesh Professor of Economics at New York University's Stern School of Business and Deputy Chair of the Economics Department at Stern. During 1986-1989 he was on leave to serve as Board Member, Federal Home Loan Bank Board, and during 1982-1983 he was on leave to serve as Director of the Economic Policy Office, Antitrust Division, U.S. Department of Justice. He is the General Editor of The Review of Industrial Organization and formerly Secretary-Treasurer of the Western Economic Association International. Prof. White received the B.A. from Harvard University (1964), the M.Sc. from the London School of Economics (1965), and the Ph.D. from Harvard University (1969). He is the author of *The Automobile Industry Since 1945* (1971); *Industrial Concentration and Economic Power in Pakistan* (1974); *Reforming Regulation: Processes and Problems* (1981); *The Regulation of Air Pollutant Emissions from Motor Vehicles* (1982); *The Public Library in the 1980s: The Problems of Choice* (1983); *International Trade in Ocean Shipping Services: The U.S. and the World* (1988); *The S&L Debacle: Public Policy Lessons for Bank and Thrift Regulation* (1991); and articles in leading economics and law journals. He is the co-author of *Guaranteed to Fail: Fannie Mae, Freddie Mac, and the Debacle of Mortgage Finance,* Princeton University Press, 2011 forthcoming (with V.V. Acharya, M. Richardson, and S. Van Nieuwerburgh). He is editor or coeditor of eleven volumes: *Deregulation of the Banking*

*and Securities Industries* (1979); *Mergers and Acquisitions: Current Problems in Perspective* (1982); *Technology and the Regulation of Financial Markets: Securities, Futures, and Banking* (1986); *Private Antitrust Litigation: New Evidence, New Learning* (1988); *The Antitrust Revolution* (1989); *Bank Management and Regulation* (1992); *Structural Change in Banking* (1993); *The Antitrust Revolution: The Role of Economics,* 2nd edn. (1994); *The Antitrust Revolution: Economics, Competition, and Policy*, 3rd edn. (1999); *The Antitrust Revolution: Economics, Competition, and Policy*, 4th edn. (2004); and *The Antitrust Revolution: Economics, Competition, and Policy*, 5th edn. (2009). He was the North American Editor of *The Journal of Industrial Economics*, 1984-1987 and 1990-1995. Prof. White served on the Senior Staff of the President's Council of Economic Advisers during 1978-1979, and he was Chairman of the Stern School's Department of Economics, 1990-1995.

# Dodd-Frank: One Year On...
# Prologue

**Viral Acharya, Thomas Cooley, Matthew Richardson and Ingo Walter**
Stern School of Business, New York University

# Dodd-Frank: One Year On…

## Prologue

July 22nd marks the first anniversary of the signing of the Dodd-Frank *Wall Street Reform and Consumer Financial Protection Act*, the most comprehensive regulatory effort for financial markets since the 1930's. The financial crisis of 2007-2009 and the accompanying contraction in the global economy made it abundantly clear that the safety and soundness of the world financial system was seriously impaired and required fixing. The U.S. was the first mover among the world's leading economies in outlining a new regulatory architecture for financial markets. But the U.S. legislation was not a fully formed set of rules, or even a set of principles. Rather it outlined a path and a set of critical elements for the new regulatory architecture.

In recognition of the first anniversary of the Dodd-Frank Act's enactment, The Pew Charitable Trusts and the NYU Stern School organized the conference "Dodd-Frank: One Year On" at Pew's offices in Washington, DC. The Conference brought together academics, policy makers and architects of the Dodd-Frank reforms and some of the regulators who are shaping and implementing them. The eBook provides summary remarks and analysis by the participants at this conference offering unique perspectives into current thinking on the Dodd-Frank Act, where the regulatory process stands one year out, and upcoming challenges in the years ahead.

The Dodd-Frank Act attempts to address a vast variety of issues; too-big-to-fail, consumer protection, proprietary trading, derivatives clearing and transparency, ratings agencies, executive pay, corporate governance, and so on.

There was uniformity at the conference, even within the group of academics and researchers critical of the legislation, that the Act was a step in the right direction. There was consensus that the financial architecture pre- Dodd-Frank was broken, and the effort to reform and repair this architecture had its heart in the right place. But at the end of a long day of free flowing and candid discussion there were several large issues that emerged. We summarize these below.

- Will the new regulatory structure make the financial system more robust to shocks by providing institutions the tools to heal themselves?

The critical ingredient for the health of the system is adequate capital. The key issue is whether a financial firm or market participants will have adequate capital and liquidity to withstand adverse events whether they be due to idiosyncratic shocks or aggregate shocks. And, will these adequate levels of capital be privately held? These underlying questions were at the heart of discussions of regulatory capital requirements, both under Dodd-Frank and under Basel III rules. There was broad agreement that the primary concern is aggregate risk, which leads to externalities when the financial sector gets under-capitalized, and provides the *raison d'être* for

regulating bank capital. There were also discussions of where capital requirements should be imposed - at the level of the firm or on markets and transactions, and every time the word "shadow banking" was mentioned, the attractiveness of market- or asset-class level capital requirements - unfortunately, not the focus of Dodd-Frank - became clear.

- Does the Dodd-Frank Act adequately deal with monitoring and measuring systemic risk?

The Dodd-Frank Act assigns new responsibilities to the Federal Reserve to identify systemically important financial institutions (SIFI's). There is a new body, the Financial Stability Oversight Council (FSOC) and a supporting research organization the Office of Financial Research (OFR), within the Treasury that will support the work of the FSOC with data and research. There were discussions of how this regulatory structure should assess *what* safe levels of capital are in the event of major shocks to asset markets. There was growing dissatisfaction with the Basel III risk-weights approach and an increasing preference for measures that assessed the systemic risk of financial firms using market data or through regulatory stress tests. Academics are actively researching the issues of how to identify and measure systemic risk and there is significant progress being made on all fronts. The Treasury's new Office of Financial Research is developing the data capabilities necessary to support the FSOC with both information and analysis necessary to monitor the risks in the system. The key unknowns in this effort are how regulators will act on the information as it emerges and whether they will be timely in their response to the accumulation of risk. Again, an important concern is the problem of monitoring risks in the constantly evolving shadow banking system, whose transparency could be enhanced if regulation were to operate at the markets- or transactions-level.

- Do the provisions of the Act deal adequately with the problem of too-big-to-fail institutions?

The Dodd-Frank Act prescribes an Orderly Liquidation Authority (OLA) for insolvent financial firms. Enforcement and implementation of this authority are assigned to the Federal Deposit Insurance Corporation (FDIC). Many details still need to be worked out. There was a lively discussion of whether the OLA framework was conceptually right in wishing to *liquidate* systemically important financial firms rather than *resolve* them. Any such resolution would likely entail upfront costs but to the extent OLA plans to primarily collect premiums *ex post* from surviving financial firms, there was concern that the OLA could distort incentives for firms in the event of a crisis. At any rate, whether the OLA can effectively deal with a systemic crisis or not will be known only the next time we do have a crisis. Given this uncertainty, concerns were expressed about the constraints imposed on the Federal Reserve that would limit their ability to provide emergency assistance to non-banks, which this crisis has shown can be systemically important. This is a

concern since the OLA, as envisaged by the Dodd-Frank, is focused on SIFI's only, and not on systemically important markets, such as sale-and-repurchase transactions ("repo"), or herds of small institutions that are systemically important, such as money market funds.

- To what extent will the Dodd-Frank Act involve the right mix of automatic "stabilizers" (e.g. higher capital requirements), fixed rules (e.g. the Volcker Rule) and discretion (e.g. Federal Reserve's ability to lend to illiquid, potentially insolvent, institutions at flexible haircuts), to be an effective framework for financial stability?

This was perhaps the most fundamental underlying question in all of the discussions. As we noted above, conceptual gaps in the design of Dodd-Frank's Orderly Liquidation Authority raise concerns that in the next financial crisis, as in the last, regulatory discretion and forbearance might take hold as the preferred route of crisis resolution. There was an active discussion about the advantages of building rule-based recapitalization of institutions, directly into their capital structure, as well as upfront capital requirements tied to systemic risk. Such stabilizers were deemed particularly important given that all the evidence – from this crisis and prior ones – suggests that any fiscal route to recapitalization in a crisis tends to favor the financial sector's creditors rather than addressing their under-capitalization and the induced spillovers to households and the real economy. The great divergence in relative health of large economies and their financial sectors creates only additional risks in coming up with a reasonably well-harmonized regulatory framework, one that sets an adequately high standard rather than the lowest common denominator. These risks from having a globally active and pliant financial sector only make it more imperative that the focus be on rule-based containment of the incidence of financial crises rather than on discretionary attempts to limit the spillovers during crises.

Of course, successful financial regulation needs to strike a balance that encourages innovation and competition, monitors carefully innovations designed to evade regulation, permits discretion and flexibility on the part of regulators, but not so much flexibility that the system is prone to capture by the regulated or the political process. This is a tall order indeed. The Dodd-Frank Act is ambitious in trying to strike this balance. Its implementation in the first year has, however, highlighted several pitfalls. The good news is that the Act does allow the regulators sufficient freedom to chart out the right rules.

And yet, it would be a mistake to think that simply getting Dodd-Frank's implementation right solves ALL things that are not well in the financial sector and in the United States. The un-addressed household indebtedness issue, the need to unwind the government-sponsored enterprises (Fannie Mae and Freddie Mac, in particular) in a graceful manner to promote a privately organized but well-

capitalized mortgage finance system, and the fiscal readjustments on the government balance-sheet remain important challenges in parallel.

We hope you enjoy reading the evaluation of the Dodd-Frank Act and possible improvements in the accompanying e-book which compiles remarks of various participants at the Pew/Stern conference. We are grateful to the various participants and the keynote speakers (Michael Barr and Thomas Hoenig) not only for their contributions but also for the public policy role that they have played in directly or indirectly influencing and implementing financial sector reforms. We are especially indebted to Charles Taylor and Michael Crowley of The Pew Charitable Trusts whose superb stewardship of the conference has made the conference and this e-book possible, as well as to leading journalists from financial press who moderated the conference sessions and stimulated important discussions on pressing – current as well as long-term - issues. Finally, we thank Richard Baldwin of voxeu for encouraging us to put this together and Anil Shamdasani of CEPR in binding it all.

Viral V. Acharya Thomas Cooley Matthew Richardson Ingo Walter

New York University Stern School of Business

(co-authors and co-editors of *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance, 2010,* John Wiley and Sons)

PEW FINANCIAL REFORM PROJECT AND NYU STERN SCHOOL OF BUSINESS

# DODD-FRANK: ONE YEAR ON – AGENDA

**June 27, 2011**
**The Pew Charitable Trusts**
901 E Street NW
Washington, DC 20004

## Monday, June 27 (Americas Room, 2nd Floor)

8:00 – 8:30 a.m. **Registration and Breakfast**

8:30 – 8:45 a.m. **Welcome:** **Charles Taylor**, Director, Financial Reform Project, The Pew Charitable Trusts

8:45 – 9:15 a.m. **Keynote: Dodd-Frank One Year On –** What philosophy to regulation and supervision is embodied by the Dodd-Frank Act? How does the Act regulate banking and shadow banking? What new tools does it create? What challenges remain?

**Presenter:** **Michael Barr**, Professor, University of Michigan Law School and former Assistant Secretary for Financial Institutions, U.S. Department of the Treasury

9:15 – 10:15 a.m. **Keynote Discussion: DFA's Architecture: Built to Last?** – What should macro-prudential, micro-prudential and consumer protection regulation do? Can the Act deliver? Soon? Ever? Did legislators miss a trick when they didn't consolidate the largest micro-prudential agencies?

**Discussants:** **Thomas F. Cooley**, Paganelli-Bull Professor of Economics and Dean Emeritus, NYU Stern School of Business
**Martin Baily**, Senior Fellow, Brookings Institution
**Moderator:** **Jon Hilsenrath**, *The Wall Street Journal*

10:15 – 11:30 a.m. **Panel I: A Stronger or a Weaker Fed?** – The Fed started to remake itself before Dodd-Frank and has kept up the pace since. Is a sufficient transformation underway? Will it continue? Can the Fed handle a future crisis better? Is monetary independence potentially compromised?

**Participants:** **Patrick Parkinson**, Director, Banking Supervision and Regulation, Board of Governors of the Federal Reserve System
**Kermit Schoenholtz**, Adjunct Professor, NYU Stern School of Business
**Vincent Reinhart**, Resident Scholar, American Enterprise Institute
**Moderator:** **Jon Hilsenrath**, *The Wall Street Journal*

**The opinions expressed at this event are those of the speakers and do not necessarily reflect the views of Pew, its management or its Board

## DODD-FRANK: ONE YEAR ON – AGENDA

11:30 – 11:45 a.m. Break

11:45 – 1:00 p.m. **Panel II: A Downward Path for Systemic Risk?** – Is systemic risk heading in the right direction – downward? Moral hazard remains. Is systemic risk measurement and monitoring improving? Is a dominant theory of systemic risk emerging? Is government action contributing to systemic uncertainty? Is the OFR MIA? Can the FSOC grow from joint rule-making to coordinated policy execution and response to rising risk?

**Participants:** **Matthew P. Richardson**, Charles E. Simon Professor of Applied Economics, NYU Stern School of Business
**J. Nellie Liang**, Director, Office of Financial Stability and Research, Federal Reserve
**Richard Berner**, Counselor to U.S. Secretary of the Treasury Timothy Geithner
**Moderator:** **Chrystia Freeland**, Reuters

1:00 – 2:15 p.m. **Lunch and Keynote: Do SIFIs Have a Future?** – Is "SIFI" a useful idea? Do we need interlocked behemoths for growth, innovation or international competitiveness? How important are the associated inequities? Is it worth trying to spot some of the "super-spreader" institutions in advance?

**Speaker:** **Thomas M. Hoenig**, President, Federal Reserve Bank of Kansas City

2:15 – 3:15 p.m. **Panel III: Will DFA Make Shadow Banking a Blessing or a Boon?** – Do we know what shadow banking is? Should we think differently about the crisis – as a wholesale run calling for repo insurance? Does DFA regulate shadow banking – activities and/or institutions – enough? Will disintermediation go on forever? And is that destabilizing?

**Participants:** **Viral Acharya**, C.V. Starr Professor of Finance, NYU Stern School of Business
**Tobias Adrian**, Vice President, Capital Markets Function, Federal Reserve Bank of New York
**Robert Plaze,** Associate Director, Division of Investment Management, SEC
**Moderator:** **Greg Ip,** U.S. Economics Editor, *The Economist*

3:15 – 4:00 p.m. **Lessons from Bailouts: A Conversation**

**Speaker:** **Neil Barofsky**, Adjunct Professor and Senior Fellow, NYU School of Law and former Special U.S. Department of the Treasury Inspector General for the Troubled Asset Relief Program (TARP)
**Moderator:** **Charles Taylor**, Director, Financial Reform Project, The Pew Charitable Trusts

4:00 – 4:15 p.m. **Break**

## DODD-FRANK: ONE YEAR ON – AGENDA

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|---|---|---|
| 4:15 – 5:15 p.m. | **Panel IV: Can Alphabet Soup Make a Wholesome Meal?** – With so many multilateral institutions – the G-20, BIS, EU, FSB, IOSCO, IMF – will too many cooks spoil the broth? How is financial reform faring abroad? Is harmonization approaching sufficiency – for data standardization, capital requirements, shadow banking, resolution authority and supervision? For resolution of internationally active SIFIs – do we need a new bankruptcy treaty? | |
| | **Participants:** | **Nicolas Véron**, Senior Fellow, Bruegel<br>**Morris Goldstein**, Senior Fellow, Peterson Institute for International Economics |
| | **Moderator:** | **Steven R. Weisman**, Editorial Director and Public Policy Fellow, Peterson Institute for International Economics |
| 5:15 – 5:30 p.m. | **Adjournment** | **Charles Taylor**, Director, Financial Reform Project, The Pew Charitable Trusts |

**Select presentations to be available at www.pewfr.org.

# 1. The Dodd-Frank Act, One Year On

**Michael S Barr**
University of Michigan Law School, Brookings Institution and the Center for American Progress

**Michael S. Barr**
**Professor of Law, University of Michigan Law School**
**Senior Fellow, the Brookings Institution & the Center for American Progress**

**Keynote Address: The Dodd-Frank Act, One Year On**
**Pew/NYU Conference**
**Washington, D.C., June 27, 2011**

Over two years ago, the United States and the global economy faced the worst economic crisis since the Great Depression. The crisis was rooted in years of unconstrained excess on Wall Street, and prolonged complacency in Washington and in major financial capitals around the world. The crisis made painfully clear what we should have always known--that finance cannot be left to regulate itself; that consumer markets permitted to profit on the basis of tricks and traps rather than to compete on the basis of price and quality will, ultimately, put us all at risk; that financial markets function best where there are clear rules, transparency and accountability; and that markets break down, sometimes catastrophically, where there are not.

The growth of the "shadow banking" system permitted financial institutions to engage in maturity transformation with too little transparency, capital, or oversight. Large, short-funded, substantially interconnected financial firms came to dominate the market. Huge amounts of risk moved outside the more regulated parts of the banking system to where it was easier to increase leverage. Legal loopholes allowed large parts of the financial industry to operate without oversight or transparency. Entities performing the same market functions as banks escaped meaningful regulation on the basis of their corporate form, and banks could move activities off balance sheet and to entities outside the reach of more stringent regulation. Derivatives were traded in the shadows with insufficient capital. "Repo" markets became riskier as collateral shifted from Treasuries to poorer quality asset-backed securities. The lack of transparency in securitization hid the growing wedge in incentives facing different players in the system and failed to require sufficient responsibility from those who made loans, or packaged them into securities to be sold to investors. Synthetic products multiplied risks in the securitization system. The financial sector, under the guise of innovation, piled ill-considered risk upon risk.

As the shadow banking system grew, our system failed to require real transparency, sufficient capital or meaningful oversight. Rapid growth in key markets hid misaligned incentives and underlying risk. Financial innovation often outpaced the capacity of managers, regulators and markets to understand new risks and adjust. Throughout our system we had increasingly inadequate capital buffers – as both market participants and regulators failed to account for new risks appropriately. Short-term rewards in new financial products and rapidly growing markets overwhelmed or blinded private sector gatekeepers, and swamped those parts of the system that were supposed to mitigate risk. Consumer and investor protections were weakened and households took on risks that they often did not fully understand and could ill-afford.

Rising home and other asset prices had helped to feed the financial system's rapid growth, and to hide declining underwriting standards and other underlying problems in the origination and securitization of mortgage loans. When home prices began to decline, fault lines were revealed. The asset implosion in housing led to cascades throughout the financial system, and then to

contagion from weaker firms to stronger ones. Failures in shadow banking fed failures in the more regulated parts of the banking system. Then, in the fall of 2008, credit markets froze. The over-reliance on short-term financing, opaque markets and excessive-risk taking that had been the source of significant profit, fanned a panic that nearly collapsed the global financial system.

Comprehensive reform was essential. One year ago, President Obama signed into law the Dodd-Frank Act, which is delivering these essential reforms.

Before Dodd-Frank, major financial firms were essentially regulated by what they called themselves rather than what they did. A legal name could often determine regulation by the least stringent supervisory agency, or no supervision at all. Huge amounts of risk moved outside of the more regulated parts of the banking system into the so called “shadow banking” world, to firms subject to less oversight, lower capital requirements, and weaker consumer protection.

Today, Dodd-Frank provides authority for clear, strong and consolidated supervision and regulation by the Federal Reserve of any financial firm—regardless of legal form—whose failure could pose a threat to financial stability.

Before Dodd-Frank, the government did not have the authority to unwind large, highly leveraged, and substantially interconnected financial firms. Think Bear Stearns, Lehman Brothers, and American International Group—all of which collapsed in the financial crisis, threatening the stability of the financial system. Firms benefited from the perception that they were "too-big-to-fail," which reduced market discipline, encouraged excessive risk-taking, provided an artificial incentive for firms to grow, and created an unlevel playing field. As the financial crisis mounted, the government bailouts were necessary to avert a broad-scale financial calamity, but they were also deeply offensive, and reinforced moral hazard.

Today, Dodd-Frank ends "too big to fail". Major financial firms will be subject to heightened prudential standards, including higher capital requirements. By forcing firms to internalize the costs that they impose on the broader financial system, they will have strong incentives to shrink and reduce their complexity, leverage, and interconnections. And should such a firm fail, thanks to revised international capital rules, there will be a bigger capital buffer to cushion losses.

Moreover, our nation no longer has to make the untenable choice between taxpayer bailouts and market chaos. Instead, Dodd-Frank provides the Federal Deposit Insurance Corporation with the authority to wind down any firm whose failure would pose substantial risks to our financial system, in a way that will protect the economy while ensuring that large financial firms – not taxpayers – bear any costs.

Before Dodd-Frank, no regulator had the responsibility to look across the full sweep of the financial system and take action when there was a threat.

Today, the Financial Stability Oversight Council has clear responsibility for examining emerging threats to our financial system regardless of whence they come.

Before Dodd-Frank, enormous risks grew up in the shadows of the unregulated over-the-counter derivatives market, including credit default swaps.

Today, regulators are putting in place the tools to comprehensively regulate these derivatives markets for the first time. The Act provides for transparency and price competition. It moves the market towards exchange trading and central clearing. It provides for strong prudential, capital, and business conduct rules for all dealers and other major participants in the derivatives markets. And it combats manipulation, fraud, and other abuses.

Before Dodd-Frank, consumer protection regulation was fragmented over seven federal regulators, with no accountability. So called non-banks—such as mortgage brokers and payday lenders—could avoid federal supervision altogether. Banks could choose the least restrictive among competing banking agencies. Federal regulators preempted state consumer protections laws without adequately replacing these safeguards. Fragmentation of rule writing, supervision and enforcement led to finger-pointing in place of action, and made actions taken less effective.

Today, Dodd-Frank ensures that there is one agency accountable for one marketplace with one mission—protecting consumers. The Consumer Financial Protection Bureau will help consumers by giving them the tools to make their own choices, and weed out bad practices.

The United States had an urgent obligation to fix the failures that threatened our financial system and helped trigger the worst global economic crisis since the Great Depression, and a recession that has cost American families and American businesses so dearly.

The Dodd-Frank Act puts in place the key reforms that were necessary to establish a firm foundation for financial stability and economic growth in the decades ahead.

# 2. Regulatory Architecture

**Thomas F Cooley**
NYU Stern School of Business

# Regulatory Architecture

Pew/NYU Stern Conference on The Dodd-Frank Act
Thomas Cooley, NYU/Stern

As we approach the one year anniversary of the signing into law of the Dodd-Frank *Wall Street Reform and Consumer Protection Act* (henceforth DFA) it is a good time to take stock of where we are and what has been accomplished. It is also appropriate to give an early stage assessment of its likely success at providing a stable future path for the U.S. financial system, and by extension, the global financial system. It is an unquestionably difficult job to fashion regulation that is both effective and politically implementable. And then the framers and implementers have to listen to critics like myself and my colleagues who, from the politics-free realm of academia, contrast what has been achieved to some ideal that is politically unlikely. Nevertheless, this is what we are put on earth to do and do it we must.

By now the origins of the crisis have been articulated in print, in award winning movies, and in engaging televisions series. We know well who was at the scene of the crime and in particular the role of the shadow banking sector in engaging in regulatory arbitrage and accumulating the tail risks that led to the incredible and destructive events of 2007-2009.[1] Michael Barr was one of the principal architects of the DFA and we all owe him a great debt of gratitude for his service to the country in trying to fashion a new safer regulatory framework for the financial system.

A common feature of many commentaries is to fault the dismantling of the regulatory architecture of the 1930's for the precipitation of the financial crisis. We can only hope that the regulatory architecture developed in the framework of the Dodd-Frank Act will give us six decades or more of financial stability and economic growth as the reforms of the 1930's did. And we can hope that they spell the end of too-big-to-fail. Certainly the intent is there and many of the right ingredients are on the table. But I think there is a lot of wishful thinking involved in viewing this legislation as likely to achieve the success of the earlier reforms. In the 1930's the U.S. made a choice to move away from universal banking and toward a tightly regulated system. The reforms were successful because they addressed the market failures of the financial system at the time and they addressed the problems of moral hazard that were likely to arise as a consequence of their solutions. It was a belt and suspenders approach to regulation. In contrast, the Dodd-Frank reforms seem more like a group of regulators poised to reach out and hold up the pants should they start to fall. Maybe it will work. But from my perspective it seems like a missed opportunity to streamline the regulatory architecture and make the

[1] If the is any uncertainty about the forensics or the details I can recommend two excellent books by Stern Faculty: *Restoring Financial Stabilty,* and *Regulating Wall Street,* both published by John Wiley and Sons.

safeguards in the system more automatic, less vulnerable to regulatory arbitrage and less vulnerable to political interference.

As I acknowledged some of this is easily said but hard to achieve. But some of it is achievable even now in the implementation phase that we are in the midst of.

To understand where the concerns lie you have to understand why the regulatory architecture of the 1930's met its demise. A popular version of this story has it that we had a burst of free market fundamentalism and decided to do away with the restrictions embodied in the Glass-Steagall Act. That there was a high degree of free market fundamentalism is not in dispute – one has only to recall how the concerns of Brooksley Born head of the CFTC , about the dangers of the unregulated derivatives market, were summarily dismissed by Treasury Secretary Larry Summers and Fed Chairman Alan Greenspan. But by the time the Graham, Leach Bliley Act was passed in 1999, the regulatory architecture of the 1930's was long since dead, killed not by a set of beliefs about the ability of markets to discipline themselves, but by innovation. Innovation occurred for many reasons: the end of the Breton Woods System of Exchange rates created a need for currency hedging instruments and swap arrangements; high inflation rates inspired the development of certificates of deposit and NOW accounts; new business models made it possible to serve customers and evade the constraints of regulation.

The drive to innovate and the incredible resiliency of the shadow banking system is at the heart of my unease about the Dodd-Frank Act. All of the runs that occurred at the onset of the financial crisis occurred in the shadow banking sector – runs on wholesale funding markets, money market funds and so on. And much of the dialogue around the DFA and its implementation has acknowledged the risks inherent in the shadow banking sector. Nevertheless, there seems to me a fundamental misconception about the nature of shadow banking and the fundamental role of regulation. I will get to that in a minute.

First, lets think about what we want from the Dodd-Frank Act. This is not a statement about some ideal regulatory framework, it's to late for that and that was politically infeasible. But, what do we want from an implemented version of what we have? Our goal should be a regulatory system that:

- Encourages innovation and competition.
- Provides a transparent financial system.
- Ensures safety and soundness.
- Preserves the U.S. position as a center for global finance.
- Deals as much as possible with problems of moral hazard and time inconsistency.

We talk about a lot of these issues in our recent book and I don't want to rehearse them all here. Although we think there are a lot of missed opportunities we give the DFA a lot of praise for improving transparency and worrying about the right ingredients for safety and soundness, addressing consumer protection. But there are some big areas of concern.

In good architecture it is said that form should follow function. I think the same is true in regulatory architecture for the financial system. The DFA misses the boat on that score. The Act worries a lot about the dangers in the shadow banking system and it gives the Federal Reserve the responsibility to identify systemically important financial institutions and set capital requirements for them. Nevertheless it leaves a lot of discretion to the FSOC to decide what to do about shadow institutions. Needless to say it is disconcerting, in light of that, to hear the Treasury Secretary, who will head the FSOC, fretting last week that it may be dangerous to set capital requirements for banks too high because they might drive activity to the shadow banking sector.

This is disconcerting on two grounds. First, capital requirements are the backbone of safety and soundness. There are plenty of rational analyses that suggest that capital requirements should be greater than those being contemplated by Basel III and that SIFI buffers should be greater than what has been announced. Secondly, the right analysis is not that we should lower capital requirements for banks and bank holding companies but that they should be applied to all institutions engaged in risky intermediation and maturity transformation regardless of their form. Capital requirements should be applied at the level of markets and products, not restricted to particular institutional forms.

If the DFA is to be viable for dealing with universal banks that operate across borders it will have to address this problem. Host countries are going to want to have capital associated with the markets that institutions are operating in. There will be a drive for ring fencing in this sense and it should apply to both standard banks and shadow institutions. The more closely proximate regulatory capital is to the markets and transactions that create risk by intermediation and maturity transformation the more effective it will be at insuring the health of the system.

The other problem that this recent episode highlights is the time-inconsistency of the DFA framework. As long as there is discretion on the part of regulators about capital requirements and their application then there are incentives to do what is optimal in the short run, rather than worry about the long-term health of the financial system. Even though you are on a diet it is often optimal in the short run to stop off for an ice cream and promise that you will get back on track in the future. That is why have been so many proposals to institutionalize strengthening capital when times are good to better withstand shocks when they are not.

The other big open question is whether the DFA really does end too-big-to-fail. If it does then that addresses a lot of the concerns about moral hazard because that is indeed the major source of moral hazard in the system. One interpretation is that the orderly liquidation spelled out in the Act can be successful at resolving failed institutions and thus eliminates a major distortion in the financial system. The recent back testing by the FDIC to assess how well the system would have worked for Lehman is encouraging in this respect but it may be a little over optimistic. But once again the big flaw is that it relies too much on discretion and discretion leads to regulatory capture and time inconsistent policies.

One need look no further than the FDIC to see that this is a real problem. Although it is one of the most successful regulatory institutions to come out of the 1930's it was vulnerable to capture by financial institutions (and their political supporters) that did not want to "overfund" the insurance fund, thus leaving it underfunded in the S&L crisis. In fact the DFA is more wrong-headed than that because it proposes that, in the event of a costly resolution of a failing institution, surviving healthy institutions can be asked to cover the costs rather have the taxpayers pay them. This seems completely backward. For one thing it is time inconsistent since surviving institutions are likely to be stressed themselves in the event of a crisis. It may also encourage them to take more risk.

This is a bit like what is going on in Europe but there is a big difference. Both the healthy and the unhealthy sovereign states are bound together in a monetary union. Their problem that needs a long term solution is the same – they need to figure out how to fund an insurance scheme ex-ante that promotes sound fiscal behavior.

There is a way to avoid some of these problems. Since the idea of what constitutes a living will is still open to interpretation, one could eliminate a lot of the discretion and time inconsistency by not only ordering all the beneficiaries and their priorities in that will, but by building into the capital structure the orderly recapitalization of the firm, allowing it to continue as a going concern. This is the spirit of bail-ins and convertible bonds that are rapidly gaining support. Of course there are big debates about triggers and so on but these are second-order issues of discretion.

At the end of the day the DFA will be most successful if it is implemented in a way that leaves less room for interpretation of the rules of the game and has less focus on traditional organizational forms and more on identifying banking and maturity transformation wherever they occur.

On a final note, at the current stage of implementation there is a great deal of handwringing about not setting capital requirements so high as to encourage capital flight and discourage lending and financial intermediation. This is exactly the wrong

debate to be having. The depth and expertise of our capital markets and the quality and stability of our institutions are our greatest assets. The only thing that is tarnished right now is our reputation for safety and soundness. The best way to recoup that is by strengthening our reputation for transparency and non-discretionary rules of the game.

# 3. The Limits to Discretion in the Architecture of Dodd-Frank

**Martin Baily**
The Brookings Institution

**The Limits to Discretion in the Architecture of Dodd-Frank**

**Martin Neil Baily, Brookings**

When Dodd-Frank passed, I was pleased that important steps forward had been made in making the US financial sector safer. In particular, placing the Fed in charge of monitoring all major financial institutions, while it was not my first choice, was still an improvement over the system that existed before in which very large institutions like AIG or risky institutions such as Bear Stearns were regulated by entities that lacked the ability to recognize the potential for failure in these companies.

On balance I ended up supporting the consumer financial protection agency, albeit somewhat reluctantly. There should always be resistance to the creation of a new agency unless it is truly necessary and there were, and still are, concerns that those who run the CFPA may not fully understand the way financial markets work. Some regulations designed to protect consumers can end up limiting the access of low income consumers to borrowing or credit cards. In the end however, there was evidence that some financial institutions had followed dubious business practices designed to exploit the forgetfulness and lack of knowledge of the borrowing public. The CFPA has the potential to help consumers.

The most important concern about Dodd-Frank is that it may have limited or undermined the ability of the Fed and Treasury to act quickly and strongly to prop up the financial system and prevent collapse in the event of a new crisis in the future.

Both conservatives and liberals alike were outraged that financial institutions received support from taxpayers. On the left, the bailouts were seen as a redistribution from poor to rich. To conservatives the bailouts created a moral hazard problem that will encourage the next generation of CEOs to take even more risks, knowing that if they fail, they will be bailed out. With both left and right united against bailouts, Dodd-Frank limited the power of the Fed to act under exigent circumstances to prevent a financial meltdown.

This was the wrong lesson from the crisis, reflecting a misunderstanding by voters and politicians of the real costs and tradeoffs of quick and decisive steps to preserve the financial sector. The direct cost to taxpayers of the bailout to Wall Street banks was very small, while the costs of failure to the shareholders and senior executives of the failed institutions were enormous, whether they were bailed out or not. The problem of moral hazard does indeed exist in our economy, in fact this problem in the health care field is driving our economy into bankruptcy. Moral hazard is certainly something that financial regulators should pay attention to. But it is hard to see future financial CEOs eagerly taking on excess risks

because they are looking back at Bear Stearns, AIG or Citi and thinking the same fate would be fine for their own institutions. The moral hazard problem should be viewed through a realistic lens and not as a bumper sticker.

Despite many mistakes along the way, the Fed and Treasury did the right things in supporting financial markets and financial institutions in order to prevent a total break down of the financial sector. One of the things the movie *To Big to Fail* got correct was the serious and imminent danger of economic collapse faced in the fall of 2008. Could the same thing happen again? It is less likely because of the positive steps taken to improve supervision, but in one important way the current situation is worse than before. Our financial institutions are even more concentrated than they were before the crisis, having merged under pressure from the Treasury. Multiple failures among these large institutions would be even more serious for the economy than last time, and we have limited the power of the Fed and the Treasury to deal with such a crisis.

The second question with Dodd-Frank is whether or not it is creating an unwieldy structure that will inhibit the productive workings of financial markets. Recall that our financial system was highly regulated before the crisis. Citi had rooms full of people that were supposed to be poring over the books making sure that everything was alright. Insurance companies, large and small were and are highly regulated. The problem in the crisis was that no one thought through the consequences of a 30 percent decline in home prices. No one thought this was possible. (Almost no one). The problem of ineffective regulation was greater than the problem of not enough regulation.

I want to give Dodd-Frank the benefit of the doubt here. The nature of the new regulatory system is emerging with some international cooperation and it will fix some of the obvious problems of the old system. We must make sure the result is a more effective system of regulation and not just a series of process changes that are a goldmine for accountants without much increase in safety. It would be nice to see steps taken to improve the pay and training of lead regulators, on the one hand, and to see evidence that those regulators who failed to regulate effectively in the crisis have been relieved of their jobs.

**The Resolution Mechanism**

Dodd Frank limited the Fed's power to act under exigent circumstances and has set up in its place a process that is not designed to avoid the failure of large institutions but to resolve these institutions in the event that they fail. This resolution authority has been given to the FDIC. I have read the FDIC white paper on resolution and what it would have done in the case of Lehman and I did not fully understand the process.

Much of what is written about the resolution process seems designed to reassure politicians and the public that it is not a bailout. OK, if that is indeed the case, it should be viewed as a kind of better bankruptcy procedure. How much better? Any objective observer who looks at what happened to global financial markets after the Lehman bankruptcy would say that it was a disaster. Financial markets went into free fall, the Fed was forced to step in and provide huge guarantees, the stock market dropped like a stone, with the Dow falling to around 6,000 some weeks after the event. It is natural during a crisis for everyone to try and move their wealth into a safe place and avoid whatever disasters may be ahead. Collectively, this response triggers runs on financial institutions and can cause financial collapse. So a better bankruptcy would have to avoid these consequences and it is important that the FDIC provide a clearer understanding of how it will accomplish this as part of its modified bankruptcy process.

The other alternative is to view the FDIC resolution process as actually a bailout in disguise. Lehman had $50 to $70 billion of bad assets that Treasury refused to guaranty and so the viable parts of Lehman could not be sold to the Koreans or Barclays or anyone else. The FDIC says that it would have created a bridge institution and kept the viable parts of the institution afloat and available for sale. This sounds like they would have done what Treasury refused to do, namely take over the bad assets and sell the rest. Since I have argued above that bailouts may be better than meltdowns, I guess for me this version of the FDIC resolution process is preferable. But putting the FDIC in this role is surprising and creating a bailout in disguise is not what Dodd Frank advertized that it was doing. The FDIC is the caretaker of insured deposits and not the curator of financial markets. And I do not see how the FDIC would have the resources or authority to respond quickly and effectively to a future situation where multiple large and small institutions were failing and global markets were in turmoil.

Perhaps other people understand all of this, but as a representative citizen I would like to feel more confident about the new resolution process and how it will forestall future crises of the kind that followed Lehman. Indeed it would be an instructive exercise to commission an independent research study that would rerun the crisis period with the new limits on Fed power and the FDIC resolution mechanism both assumed to be in place and ask whether or not the researchers believe the outcome would have been better or worse than the one we actually had. Stress tests for banks are clearly a good idea and stress tests for policy seem like a good idea too.

Since these comments have focused on areas of concern about Dodd Frank, let me conclude with some praise. It was essential that steps be taken to make the system safer and to avoid the excessive risk taking that brought down the economy. As the new regulatory structure emerges there are many elements that undoubtedly will make banks safer. Higher capital requirements, better reporting, a more

unified regulatory structure for large institutions and the creation of the FSOC to monitor developments are all positive steps. Unfortunately we are not protected today from a new financial crisis because sovereign debt is now vulnerable, including Treasuries. But for a while at least private sector financial institutions should not generate a new crisis like the last one.

# 4. A Stronger or a Weaker Fed?

**Patrick Parkinson**
Board of Governors of the Federal Reserve System

I would like to thank The Pew Charitable Trusts and Stern School of Business for the opportunity to provide my perspective on this important topic. The Dodd-Frank Act has materially altered the Federal Reserve's responsibilities and authorities. Given my current role at the Board, I plan to focus my remarks on the Fed's responsibility for the supervision and regulation of banks, bank holding companies and other financial institutions. I will also touch on the important role other regulatory agencies will play going forward and the implications of the DFA for future crisis management by the government. I will not address the topic of monetary policy, a topic best addressed by others more directly involved in the Board's monetary policy function.

The Dodd-Frank Act, and the financial crisis that preceded and generated it, have strengthened the supervisory authorities and responsibilities of the Federal Reserve in three principal ways: by expanding the population of firms subject to Fed supervision, by extending the Fed's mandate to include macro-prudential supervision, and by removing some of the Gramm-Leach-Bliley limitations on the authority of the Federal Reserve to obtain information from and impose prudential standards on subsidiaries of bank holding companies.

The expansion of the range of firms and proportion of the U.S. financial sector subject to Federal Reserve oversight occurred in part de facto and in part de jure. At the height of the financial crisis, most of the large stand-alone investment banks that had assiduously avoided the strictures of Fed supervision and capital regulation in the years leading up to the crisis suddenly became bank holding companies or were acquired by bank holding companies. Many of the largest nonbank lending firms also sought supervisory comfort in the warm embrace of the Fed during the crisis, including CIT, AMEX, Discover, and GMAC. As a result of these voluntary changes, the number of large, complex financial institutions subject to Fed oversight grew

significantly. And many of these firms will find it hard to escape Fed oversight going forward thanks to the Hotel California provision of the DFA.

The DFA further extended the reach of Fed oversight to include savings and loan holding companies. On July 21 the Fed will inherit responsibility for roughly 400 SLHCs, holding over $3 trillion in assets. While the large majority of SLHCs are small and engage in activities that parallel those of traditional BHCs, the SLHC population also includes 10 of the 25 largest insurance companies in the United States and 180 grandfathered unitary thrift holding companies, many of which are substantially engaged in commercial activities. A few large insurance-based SLHCs have already sold their thrift or announced plans to sell their thrift and escape Fed oversight. Others may follow as they are confronted with the full scope of the Fed's consolidated supervision program—but many are expected to retain their thrift. Adapting the Fed's supervisory programs, which were designed to address the risks associated with more traditional banks and bank holding companies, to large insurance companies and other nontraditional SLHCs, will pose significant supervisory challenges in the coming months and years.

In addition, the DFA gives the Federal Reserve supervisory authority over any nonbank financial firms and financial market utilities designated as systemically important by the Financial Stability Oversight Council. The Board will become the consolidated supervisor for any nonbank systemically important financial institution designated by the FSOC and will need to adapt its consolidated supervision and regulatory programs for systemic BHCs to those nonbank companies. The DFA gives the Board new authority to participate in the examinations of all designated FMUs, and to prescribe or recommend risk management standards for designated FMUs.

In addition to expanding the universe of firms subject to Fed supervision, the Dodd Frank Act and the financial crisis more generally have altered the focus of the Fed's holding company supervision programs. Prior to the DFA and the financial crisis, the Fed's consolidated supervision program was centered on ensuring the safety and soundness of individual bank holding companies and minimizing the risk posed to insured depository institutions by their nonbank affiliates. A key element of the DFA, however, is its injunction to the Fed and other financial regulators to employ macro-prudential approaches to supervision and regulation. We are to oversee financial firms with a view toward protecting the stability of the broader financial system – not just protecting the solvency of individual firms. The Fed has already begun to reorient its supervision program toward the achievement of macro-prudential goals – early steps include the 2009 SCAP, the 2011 CCAR, and the formation of our Large Institutions Supervision Coordinating Committee – but much work remains to be done.

The DFA also eliminated some of the so-called "Fed-lite" restrictions imposed by the Gramm-Leach-Bliley Act, which had limited the ability of the Fed to examine, collect information from, and impose prudential standards on, subsidiary banks and other functionally regulated subsidiaries of BHCs. Removal of these restrictions will help improve the Federal Reserve's visibility into subsidiaries of holding companies and give the Fed a greater ability to address threats to a consolidated firm's safety and soundness or to financial stability more broadly from wherever within a firm the threats emerge. DFA also specifically directs the Fed going forward to examine non-functionally regulated, nonbank subsidiaries of bank holding companies that engage in banking activities in a manner consistent with the way we, the OCC, and FDIC examine banks.

Not all elements of the Dodd-Frank Act strengthen the role of the Fed. Just as the Fed has been granted greater back-up supervisory authority over the primary regulators of BHC subsidiaries under the Act, other agencies have been granted back-up authorities in areas where the Fed traditionally stood alone. In line with its responsibilities under Title II of the DFA for resolving systemically important financial firms, the FDIC has new back-up authority to examine systemically important bank holding companies and nonbank financial firms supervised by the Fed that are not generally in sound condition in order to protect the deposit insurance fund and prepare for resolution. The FDIC also has joint responsibility with the Board for reviewing the so-called "living wills" or resolution plans required under the Act and determining, jointly with the Board, if a SIFI's resolution plan is not credible or would not result in an orderly liquidation. The Act's comprehensive regulatory framework for OTC derivatives also gives the SEC and CFTC authority for some aspects of banks' derivatives activities that had been the sole domain of bank regulators. For example, under Title VII of the DFA, the SEC and CFTC are charged with establishing and enforcing business conduct, recordkeeping, and reporting standards for the swaps business of bank and nonbank swap dealers and are charged with determining which swaps entered into by banks and nonbanks must be centrally cleared or traded. The Federal Reserve and other banking agencies maintain full prudential supervisory authority over banks – including authority to set capital and margin standards for uncleared swaps entered into by banks – but the locus of federal regulation of derivatives in a post-DFA world is moving to the CFTC and SEC..

The creation of the FSOC, with its broad mandate to monitor and take action to mitigate systemic risk and to monitor regulatory developments, adds a new layer of oversight to the regulatory activities of all the federal financial regulators, including the Fed. For example, the

FSOC has authority to make non-binding recommendations to the Board on its enhanced prudential standards for SIFIs and to all primary federal financial regulators to promote financial stability goals.

The last area I want to discuss is crisis management. The DFA removed a number of the tools used by the government to manage the recent financial crisis. In particular, the Dodd-Frank Act placed significant restrictions on the Fed's lending authority in section 13(3) of the Federal Reserve Act. Not only has the Fed's 13(3) authority been restricted to broad-based facilities, but the Secretary of the Treasury can also veto the establishment of those facilities. While the DFA reined in the tools available to the Fed in times of crisis, these constraints on the Fed's 13(3) authority, in the context of other DFA reforms, is a positive step toward eliminating "too big to fail." The narrow lending facilities that the Fed employed during the crisis, such as the Bear Stearns and AIG facilities, were created because there was no other government authority at the time that could be used to protect the financial system from the disorderly failure of large, interconnected financial institutions. The orderly liquidation authority in title II of the DFA provides a superior set of tools to manage the resolution of a failing financial firm in a crisis. The resolution of a firm in OLA will be managed by the FDIC, but the Fed retains a central role in the decision-making process to move a firm into resolution under the OLA, along with the Treasury (in consultation with the President).

In conclusion, I believe DFA has strengthened the Fed's role as a supervisor of banks and other financial institutions. But it has also strengthened the FDIC and other arms of the federal government. Now more than ever, our success in meeting our safety and soundness and financial stability objectives will be dependent on our ability to collaborate with other regulators in the United States and abroad.

# 5. Dodd-Frank and the Fed: More Crisis Prevention, Less Management

**Kermit Schoenholtz**
NYU Stern School of Business

Pew Forum: June 27, 2011
D-F Panel on Fed

I would also like to thank our Pew hosts for organizing today's forum.

I will focus on two questions in the next few minutes. First, has Dodd-Frank (DF) diminished the monetary independence of the Fed? Second, has DF enhanced the Fed's ability to handle a future crisis?

Monetary Independence

I doubt that DF significantly compromises the monetary independence of the Fed. Doubts about Fed independence seem an inevitable consequence of the Fed's extraordinary actions to contain the crisis. Important concerns include the Fed's interactions with Treasury during the crisis and the unprecedented scale and composition of the Fed's balance sheet. However, Dodd-Frank per se is not a key driver of these concerns.

I should note that earlier versions of DF *did* threaten Fed independence. For example, the House bill included provisions that could have fostered politically motivated scrutiny of monetary policy decisions. It also could have politicized senior appointments to the Federal Reserve District Banks. However, the final DF Act shed most of these expressions of populist revolt.

By delaying the release of details about Fed crisis operations, the final DF Act also achieved a better balance between the need for Fed transparency and accountability and the need to ensure central bank effectiveness as lender of last resort. Even so, concerns linger whether intermediaries will be willing to participate in future extraordinary Fed liquidity operations knowing that their activities will be made public.

Ability to Handle a Crisis

How does DF affect the Fed's ability to handle a crisis? On balance, DF better equips the Fed to *prevent* a crisis, but clips its authority to *manage* one. This policy shift, combined with uncertainties about the complex, untested DF regime for resolving failing SIFIs, should further encourage policymakers to act aggressively and preemptively to reduce the probability of a future crisis.

How does DF better equip the Fed to prevent a crisis? DF highlights the importance of limiting systemic risk. Its requirements for systemic capital surcharges and regular stress tests lay key foundations for a comprehensive macroprudential framework. The structural changes introduced by DF, such as the creation of a Fed

vice chair for supervision, a Treasury Office of Financial Research, and the Financial System Oversight Council (FSOC), should help to institutionalize and sustain the Fed's heightened attention to financial stability.

I am assuming heroically – or at least hoping – that the new FSOC will identify any systemic nonbanks and place them under enhanced supervision by the Fed in a timely fashion. No less heroically, I assume that the FSOC will prompt the Fed and other regulators to contain the systemic risks still inherent in key markets and institutions, such as the market for repo and the world of money market funds.

Ultimately, it will be up to the FSOC, the Fed and other regulators to limit systemic risks in a world where manufacturing tail risk is still profitable. The financial industry as a whole, its individual participants, and its political representatives will continue to resist rules that constrain profit. These rules include heightened capital, margin or liquidity requirements. Indeed, higher capital requirements will incentivize even greater regulatory arbitrage and the expansion of shadow finance. Activities also will tend to shift internationally to the regulator of least resistance.

At this early date, the signs are mixed about effective regulators will be in achieving containing systemic risk, even if we limit our analysis to the behavior of the Fed. Consider, for example, the Fed's two stress tests. The 2009 test that began at the depth of the crisis offers a textbook example of applied macroprudential principles that lent that exercise credibility, including: (1) the availability of a clear public backstop mechanism for supplying capital in the absence of a private source; (2) the application of common standards across institutions for asset valuation at a point in time; (3) the use of plausible asset-loss assumptions; and (4) the designation of increased capital needs in dollar terms, rather than as a capital ratio, thus limiting the incentive to deleverage. The successful test marked the return of U.S. intermediaries to the capital markets in a wave of new private capital-raising.

In contrast, the method and outcome of the Fed's second stress test completed this year pose some concerns. In particular, it is questionable that the U.S. financial system as a whole is sufficiently healthy to warrant the capital distributions that the Fed authorized on the basis of the second stress test. If you are interested in seeing why, I refer you to this year's US Monetary Policy Forum report, which I co-authored, entitled "Stressed Out: Macroprudential Principles for Stress Testing." In addition, because the capital surcharges for SIFIs were not yet known, the early return to capital disbursement sanctioned by the second stress test seems premature.

What if, as eventually seems inevitable, another crisis occurs? DF blesses the creation of Fed broad-access liquidity programs for nonbanks – such as the Treasury Auction Facility (TAF) or the Primary Dealer Credit Factility (PDCF). The

new DF requirement of prior Treasury approval may be an obstacle, but it would mostly appear to formalize actual practice: Would the Fed have undertaken its extraordinary crisis liquidity provisions in the face of Treasury opposition?

More important, DF prevents the Fed from lending to individual nonbanks outside of a program of broad access. In some instances, such regulation of form over function could be sidestepped. The crisis conversions into financial holding companies of Goldman and Morgan Stanley come to mind. Yet, the new DF rules are aimed at preventing a future Fed intervention in a Bear- or AIG-like instance. The thrust of DF seems to force such challenged nonbanks into the new FDIC-led resolution process.

On this front, I am significantly less optimistic than the FDIC about limiting systemic disruptions if creditors face uncertain losses. In its April 2011 assessment of how the DF resolution mechanism might have worked in the case of Lehman, the FDIC estimated that creditors could have been quickly compensated and the healthy portions of Lehman sustained with only small losses. However, this rosy scenario depends on several doubtful assumptions, including a long period for assessing the condition of the fragile SIFI, confidence about asset valuation during a crisis, and lack of international jurisdictional complications.

Ultimately, policymakers can't have it both ways: Enhancing market discipline by letting creditors take a hit in a crisis will raise the probability of a contagious run. The alternative of protecting creditors to keep a future Lehman in operation fosters moral hazard. The worry is that DF does both. Uncertainty about the untested resolution process and the associated risk to creditors may encourage a run in an episode when the financial system's capital has been depleted. Conversely, the possible imposition by the FDIC of an *ex post* levy on survivor banks to fill the hole from an insolvent (possibly nonbank) intermediary encourages systemic risk-taking and a race to the bottom.

Let me close, then, by endorsing the recent comments of Fed Governor Daniel Tarullo with regard to regulating SIFIs. In his words, "the special resolution mechanism of Dodd-Frank and the enhanced capital requirements called for by that same law should be regarded as complementary rather than as substitutes. Indeed, additional capital requirements would relieve some pressure on the insolvency regime." In my terms, we need an array of macroprudential policies to help avoid a tryout of the DF resolution regime.

Thank you.

# 6. Happy Anniversary Dodd-Frank!

**Vincent Reinhart**
The American Enterprise Institute

# Happy Anniversary Dodd-Frank!

Vincent Reinhart
*The American Enterprise Institute*

*June 27, 2011*

Just about one year ago, President Obama signed the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Act) into law. Appropriately enough, the traditional gift for a one-year anniversary is paper. Legislation over two thousand pages in length surely consumes a lot of that. Consider the estimate that the Act requires 243 separate rule makings, 67 one-time studies or reports, and 22 new periodic reports.

Its enactment into law changes the scope of permissible activities for financial firms. New responsibilities are given to old agencies, old functions are given to a new agency, and a council of regulators sits atop it all to identify risks and coordinate responses. Chief among the responsibilities of the Financial Stability Oversight Council (FSOC) is to determine which private firms are more equal than others. Being in the club of systemically important financial institutions (SIFIs) comes with costs rolled into the category of "enhanced prudential standards." But membership also has its privileges.

One year on, many serious flaws in this edifice are apparent. For want of space rather than subject matter, I will consider four of them. In particular, the first two relate to the misdiagnosis central to the legislation and the irrelevance of the

vaunted resolution powers at a time of crisis. The second two more narrowly concern the Federal Reserve.

First, the Act focuses on activities within the existing set-up of the financial system. Some activities formerly done in banks—notably proprietary trading and some derivatives operations—must be moved off the balance sheet. And more activities at more institutions will be under the scrutiny of regulators. But the incentive to do most of those activities remains intact. In a market economy, this means those activities will continue to be done. Financial institutions will spin off bits, rename other parts, and make their balance sheets further devoid of meaning.

Thus, the legislative response to the complexity of markets and institutions and related failure of regulation shown in the financial crisis has been to make the system more complicated and to rely on even more regulation. Indeed, a design principle would seem to be to preserve the status quo of a landscape dominated by large, complex financial intermediaries.

Such complexity introduces three fundamental problems in monitoring behavior.

First, supervisors are at a decided disadvantage in understanding risk taking and compliance for a firm that might involve dozens of jurisdictions, hundreds of legal entities, and thousands of contractual relationships. But if an institution is so difficult to understand from the outside, how can we expect market discipline to be effective? The second cost of complexity is that the outside discipline of credit counterparties and equity owners is blunted. Creditors are more likely to look to the

firm's reputation or a stamp from a rating agency rather than the underlying collateral provided by the financial contract. Equity owners are more likely to defer to senior management, opening the way to compensation abuses and a twisting of incentives to emphasize short-term gains. Third, a complicated firm is almost impossible to manage. Senior management cannot monitor employees, especially when staff on the ground have highly specialized expertise in finance, law, and accounting. And employees who are difficult to monitor cannot be expected to look to the long-term interests of where they work.

A design failure is the second key reason that financial firms strive to get big and complicated. Financial officials will offer them the protection of being too big to fail at a time of crisis—the privilege of SIFI membership. When markets are stressed, authorities will almost surely convince themselves that a faltering firm may be the first domino to topple. That is, the new resolution authority provided in the Act may give authorities the ability to act, but will not increase their willingness to do so in extremis. Remember that too big to fail entered our lexicon in the 1970s, referring to banking regulators' unwillingness to close down banks despite their legislated authority to do so.

As for the Federal Reserve, authorities should have no regret that some of their lending powers have been trimmed back. Political officials should have to sign off whenever taxpayer dollars are put at risk, such as when lending to nondepository institutions. There is much to regret, however, about the new responsibilities given to the Fed.

My third point is that monetary policy making is already hard. Adding an ambiguous mission regarding financial stability invites threats to the Fed's reputation. The Federal Reserve is viewed by the public and elected officials in terms of the performance of all its responsibilities. Multiple goals invite multiple opportunities for missteps that damage its reputation.

Compounding the problem are the consequences for the communication of policy. Public officials must strike a balance between informing and reassuring the public. This sometimes leads them to shade public statements away from a description of the most likely outcome for events toward the most comfortable one. What public official would want to be the trigger for a run? Thus, the wider the scope of the responsibilities of an agency, the more likely statements will be emptied of content, to the detriment of its reputation.

Fourth, does the Fed really need to be a supervisor to conduct monetary policy? True, a central bank with no expertise about financial markets, institutions, and utilities would work at a disadvantage. But that would not be the case if the Fed was stripped of regulatory powers. As the nation's central bank, the Fed would continue to operate the payments system, shuttling reserves among thousands of institutions to facilitate finance and trade. The Fed would still operate the book-entry system, or the sole registry of ownership of U.S. government securities. Both functions involve recording hundreds of thousands of transactions, measured in the trillions of dollars, each day and working closely with market utilities. Moreover, in

performing these activities, the Fed often extends credit within the day to financial institutions.

These roles give the Fed important insights about institutions, markets, and utilities. The Fed's role as a provider of critical services and essential intraday credit also gives it a lever to pry information from financial institutions. With that as the base, the incremental benefit of retaining supervision appears limited.

My suggestion is that after the next financial crisis, and there will be a next one, legislation should eliminate the underlying encouragements to complexity. The requirement of simpler and more transparent balance sheets would restore effective supervision, market discipline, and tighter internal controls. It would also make officials more confident that an individual firm could fail without bringing down the entire financial system.

*Vincent Reinhart is a resident scholar at the American Enterprise Institute. This article is based on remarks at a panel for the Pew Financial Reform Project and NYU Stern School of Business, "Dodd-Frank: One Year On."*

# 7. The Dodd-Frank Act and Systemic Risk

**Matthew Richardson**
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**The Dodd-Frank Act and Systemic Risk**
**By Matthew Richardson**

The economic theory of regulation is clear. Governments should regulate where there is a market failure. It is a positive outcome from the Dodd-Frank legislation that the Act's primary focus is on the market failure of the recent financial crisis, namely systemic risk. The negative externality associated with such risk implies that private markets cannot efficiently solve the problem, thus, requiring government intervention.

More concretely, current and past financial crises show that systemic risk emerges when aggregate capitalization of the financial sector is low. The intuition is straightforward. When a financial firm's capital is low, it is difficult for that firm to perform financial services, and, when capital is low in the aggregate, it is not possible for other financial firms to step into the breach. This breakdown in financial intermediation is the reason there are severe consequences for the broader economy. When a financial firm therefore runs aground during a crisis period, it contributes to this aggregate shortfall, leading to consequences beyond the firm itself. The firm has no incentive to manage the systemic risk.

For the first time, the Act highlights the need for macro prudential regulation, that is, (i) to measure and provide tools for measuring systemic risk (an example being the Office of Financial Research), (ii) to then designate firms, or even sectors (e.g., money market funds), that pose systemic risk, and (iii) to provide enhanced regulation of such firms and sectors.

While arguably this type of regulation was always in the purview of central banks and regulators, it is important that it is now written into the law. The mere fact that high quality people, like my fellow panelists Nellie Liang (who heads up the systemic risk group at the Federal Reserve Board) and Dick Berner (who is helping to set up the Office of Financial Research), are now involved in the process cannot be underestimated. If these activities continue, several years from now, we will have much better data, much more developed processes for dealing systemic risk, and overall a much better understanding of systemic risk.

I believe the costs of such activities are outweighed by the benefits. That said, I am now going to "put my critical academic hat on" and point out two especially worrying outcomes of Dodd-Frank. One deals with the Act itself, the other with how the Act is being implemented. On the second point, I have concerns with the way macro prudential regulation is going and in particular with how capital requirements are being set. I will provide that analysis shortly.

But first, it needs to be pointed out that the Dodd-Frank Act puts a heavy reliance on the creation of an Orderly Liquidation Authority (OLA). Resolution by its nature is a balancing act between two forces that (potentially) work against each other. On the one hand, the regulator would like to mitigate moral hazard and bring back market discipline. On the other hand, the regulator would like to manage systemic risk. So how well does Dodd-Frank do in terms of balancing these two forces? From my viewpoint, it does not perform very well.

It seems to me that the Act is for the most part focused on the orderly liquidation of an individual institution and not the system as a whole. Of course, what is unique about a financial firm's failure during a crisis is that it has an impact on the rest of the financial sector and the broader economy.

To put this into perspective, consider Federal Reserve Chairman Ben Bernanke's oft-cited analogy for why bailouts, however distasteful, are sometimes necessary. Bernanke has described a hypothetical neighbor who smokes in bed and, through his carelessness, starts a fire and begins to burn down his house. You could teach him a lesson, Bernanke says, by refusing to call the fire department and letting the house burn to the ground. However, you would risk the fire spreading to other homes. So first you have to put out the fire. Only later should you deal with reform and retribution. This is what I would call legislation pre Dodd-Frank.

I would argue that you should call the fire department, but instead of saving the neighbor's house, the firefighters stand in protection of your house and those of your other neighbors. If the fire spreads, they are ready to put it out. And by the way, because a fire company is expensive to keep, we will charge all the smokers in the neighborhood the cost. And over time, the neighborhood will have less smokers. This is what we mean by balancing moral hazard mitigation and systemic risk management.

This is not what Dodd-Frank does. Here's one example. The Act creates wrong incentives by charging ex post rather than ex ante for systemic risk. In particular, if firms fail during a crisis and monies cannot be fully recovered from creditors, the surviving systemically important financial institutions must make up the difference ex post. This actually increases moral hazard because there is a free rider problem – prudent firms are asked to pay for the "sins" of others. It also increases systemic risk in two important ways. First, firms will tend to herd together and a race to the bottom could ensue. Second, this clause is highly pro-cyclical because it requires the surviving firms to provide capital at the worst possible time.

Now, I will turn to recent developments on the macro prudential side of things. The basic thrust of Basel III is higher capital requirements overall, and, then for systemically risky institutions, even higher capital requirements. The criteria for systemic risk are five factors based on size, interconnectedness, lack of substitutability, complexity and level of global activity. To the extent that the capital requirements for systemically risky firms could increase by 2.5%, one has a terrible feeling that implementation might be very Basel-like and just assign 0.5% to each of these factors. Whether it is risk-weights, level of new capital required, how firms are chosen to be systemic, and surcharges on these systemic firms, it all seems somewhat arbitrary and not based on objective criteria. And, for sure, the implementation will be quite course and therefore easily gamed.

What we care about is the risk that a firm will falter when other firms are struggling, in othr words, this is about co-dependence between financial firms. Key factors that go into this measurement are therefore how much leverage a firm has, how correlated are its assets in the bad state of nature, and whether its failure increases the likelihood of other firms failing.

In the following two pages, along with my colleague here at NYU Stern (Viral Acharya), we provide one such way to think about setting capital requirements in a systemically risky world.

# 8. How to Set Capital Requirements in a Systemically Risk World

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# How to Set Capital Requirements in a Systemically Risk World

By Viral V. Acharya and Matthew Richardson

1. ***Why are capital requirements so important?*** When a large part of the financial sector is funded primarily with leverage and is hit by a common shock such as steep drop in house prices, individual financial firms cannot meet immediate repayments demanded by their creditors. There simply aren't enough well-capitalized, or low-leverage, firms in the system to buy other firms' assets, re-intermediate with their borrowers, or lend at reasonable rates and maturities in inter-bank markets. Capital is thus the lifeblood of the financial system when it is under stress. But that is precisely when capital becomes scarce. Invariably, an aggregate credit crunch and loss of intermediation ensue.

2. **How should capital requirements be designed in good times to prevent and manage this systemic risk, the risk that collective under-capitalization of the financial sector can create spillovers on to real and household sectors**? A reasonable criteria is to set the capital requirement such that a financial firm should in expectation have enough capital to withstand a full-blown crisis. In other words, $E[E_i|crisis] \geq K_i E[A_i|crisis]$, where $E_i$ is financial firm *i*'s equity, $A_i$ is the firm's total assets (i.e., its equity capital plus debt obligations), and $1/K_i$ is the firm's maximum leverage ratio at which it still provides full financial intermediation. For example, in Basel III, the minimum ratio of common equity capital to assets $K_i = 3\%$.

3. **What does this criteria imply for capital requirements**? It is possible to derive that the minimum required capital *today* is $E_{i0} \geq K_i \frac{A_{i0}}{(1-(1-K_i)MES_i)}$ where *MES* is the firm's Marginal Expected Shortfall, defined as its expected percentage loss in equity capital conditional on a financial crisis.

4. **How would this work?** Consider the recent financial crisis. The average return of the worst quartile of performing bank holding companies was -87% versus -17% for the top performing quartile during the crisis. For the 3% minimum, this would translate to a 19.2% capital requirement before the crisis for the more systemic firms (as measured by ex-post *MES* of 87%) and just 3.6% for the less systemic ones (*MES* of 17%). Alternatively, using ex ante measures, the NYU Stern risk rankings of the 100 largest financial firms suggest a range of MES from 40% to 75%, implying capital requirements ranging from 5% to 11%.

5. **What are the key implications of this methodology?**

    a. The first is that this capital requirement is fairly simple to interpret and can be calculated in a straightforward manner. What is required is an expectation of a firm's equity capital loss during a financial crisis. One could employ *statistical-based measures of capital losses* of financial firms extrapolated to crisis periods. With a number of our colleagues here at NYU Stern, we have done just that with state-of-the-art time-series techniques. The afoementioned systemic risk rankings of financial firms are provided at http://vlab.stern.nyu.edu/welcome/risk. Of some interest, these measures estimated in 2006 and early 2007 load quite closely on the firms that performed poorly during the financial crisis. Or, regulators could estimate firm's capital losses during adverse times via *stress tests of financial institutions*. Stress tests are conducted routinely by regulators and the estimated percentage losses from these tests could simply be substituted into the above formula for capital requirements. Of course, the regulator would need to impose scenarios that necessarily coincide with financial crises, in other words, much more severe than those employed in stress tests this year both in the U.S. and Europe.

b. The second point is that our risk factor $\left[\frac{1}{1-(1-K)MES}\right]$ is a scaling-up factor on firm's assets, a kind of "systemic risk weight", that is rather different from the asset-level risk weights set forth in Basel II, and now expanded in III. A strong case can be made that the current crisis was all about large complex financial firms exploiting loopholes in Basel risk weights to make a one-way concentrated bet on residential and commercial mortgages. By attempting to estimate a firm's losses in a bottom-up, granular manner, the Basel risk weights create room for tremendous gaming by the financial sector, and provide incentives to enter into specific spread trades and concentrate risk. In other words, there is a reason why firms loaded up on AAA-rated higher yielding securities and purchased protection on these securities from AA- or AAA-rated insurance companies like A.I.G. In contrast, our approach based on a top-down, market-based systemic measure, incorporates the risk of the underlying assets when we care most, namely during a financial crisis, and is much harder to game.

6. ***What are the capital requirements changes under Basel III?*** With respect to capital requirements, Basel III effectively increases (with the conservation of capital buffer) capital requirements from 4% to 7%. On top of these requirements, based on a series of firm characteristics related to Basel's systemic risk criteria, these capital requirements can be increased by an amount ranging from 0%-3%. Along with a number of other adjustments, Basel III introduces a new "simple" leverage ratio as a supplementary measure to risk-based capital which is to be set at 3%. For practical purposes, Basel III continues the risk-weights that are tied to credit ratings both within and across asset classes.

7. ***What are some criticisms of this approach?***

   a. First, and foremost, the systemic risk weights seem arbitrary and are not based on objective criteria. Thus, across-the-board higher capital requirements, as are being proposed for systemically important financial institutions (SIFI's), may actually exacerbate the problem. Regulation should not be about more capital per se but about more capital for systemically riskier financial firms.
   b. Second, our methodology makes clear that higher capital requirements resulting from systemic risk do not have to coincide with larger financial institutions. For a variety of reasons, it may well be the case that large financial institutions deserve heightened prudential regulation. But if the criteria is that they need sufficient capital to withstand a crisis, it does not follow that size necessarily is the key factor unless it adversely affects a firm's MES, i.e., its performance in a crisis.
   c. Third, it is certainly the case that a bank's return on equity does not map one-to-one with a bank's valuation. A higher return on equity might simply reflect higher leverage on the bank's part, and the benefit of leverage may be arising from the government safety net. Therefore, calling for higher equity capital requirement may be sensible. That said, there seems to be little economic analysis of what the right level of capital should be.
   d. Finally, whatever is being proposed for the banking sector in terms of capital requirements should have likewise regulation for the shadow banking sector, lest the activities will simply be shifted from one part of financial markets to another. The result of such a shift could actually lead to an increase in systemic risk.

# 9. Systemic Risk Measurement and Monitoring

**J. Nellie Liang**
Board of Governors of the Federal Reserve System

# Systemic risk measurement and monitoring

Pew / NYU Conference: Dodd-Frank One Year On

Nellie Liang[1]

June 27, 2011

An important feature of complex financial systems is that firms lend to each other for a number of reasons, including to smooth liquidity positions or to manage risk exposures. These connections between firms, however, can give rise to systemic risks as the distress of one firm can inflict losses on its counterparties or raise the probability that many firms are harmed through their exposures to common risks.

The recent financial crisis demonstrated clearly that stresses in one part of the financial system can be transmitted and amplified and seriously impair other parts of the system. Policies aimed at ensuring the safety and soundness of individual financial institutions were found to be insufficient to enhance financial stability when there are many linkages. The Dodd-Frank Act recognized these interconnections when requiring the regulatory agencies to establish new rules and structures to mitigate systemic risks.

Measuring and monitoring systemic risks is an extensive undertaking. Research on how risks are transmitted is still in early stages, both because of insufficient data and complexity of linkages. This note discusses the approach at the Federal Reserve to measure and monitor systemic risks. The goal of the monitoring and research efforts is to develop better measures of linkages among firms and markets, and importantly to guide its efforts to implement policies to mitigate potential systemic risks. The framework for conducting analysis and research on the effective use of various macroprudential tools, not discussed here, is also a high priority initiative for the Fed. The ultimate objective of both of these efforts is to increase the resilience of the

[1] Views expressed are my own and do not reflect the Federal Reserve Board or staff. Tobias Adrian and Daniel Covitz provided helpful comments.

financial system so that it can absorb various types of shocks and still continue to perform its critical function to intermediate credit.

**Framework for monitoring systemic risks.** The framework that guides the financial stability work at the Fed recognizes the complexities of the modern financial system, and thus is broad and eclectic. It is a wide-ranging effort among many economists and analysts in the broad Fed system, working with or drawing on the work in the research community, to empirically quantify a broad set of financial risks.

Systemic risk arises when firms or markets have the potential to propagate shocks or credit events, and inflict significant damage on the financial system and broader economy. Thus the approach can be broken down into: (1) identify possible financial shocks, (2) assess vulnerabilities in the financial system that could propagate shocks, and (3) evaluate how shocks could disrupt financial intermediation and impair economic activity.

Systemic risk measures often focus on assessing the resilience of the financial system, its ability to absorb shocks. Systemic risk measures can reflect structural or cyclical vulnerabilities, or be firm-specific, market-wide, or related to macroeconomic activity. Structural vulnerabilities arise from direct and indirect linkages among firms and markets. Key examples of structural vulnerabilities are the perception of too-big-to-fail institutions, the unstable business model of money market mutual funds, and intra-day exposures in the tri-party repo markets.

Cyclical vulnerabilities reflect that systemic risk can build up with extended periods of favorable economic and financial conditions. A run-up in asset prices beyond fundamentals could lead to sharp reversals in risk premia, which could be exacerbated by rising leverage and greater mismatch of the maturities of assets and liabilities. In times of stress, weakened conditions of a single financial firm can make the entire system more vulnerable to shocks and

credit events. Stress tests based on forward-looking scenarios, including those mandated by Dodd-Frank, can provide additional insight into the resiliency of firms to weather adverse economic, credit, and liquidity conditions.

**Examples of systemic risk measures.** A number of quantitative firm-specific measures have been developed, based on financial market prices such as stock prices and CDS premiums. These measures are based on the insight that firms that have high covariance in bad states of the world will be more systemically risky. One measure, Conditional Value-at-Risk (CoVaR), reflects losses of the financial system conditional on the stress of a particular firm. Specifically, it measures the increase in the value at risk of the financial system conditional on a firm becoming distressed (e.g., a $5^{th}$ percentile bad event).[2] Other measures condition on the financial system's distress. The Systemic Expected Shortfall (SES) reflects losses born by equity holders conditional on a large tail return for the broader equity markets.[3] And the Distressed Insurance premium (DIP) measures a hypothetical insurance premium against catastrophic losses in a portfolio of financial institutions.[4] The systemic importance of an institution is measured by its marginal contribution to the aggregate insurance premium.

Market-based measures have been criticized because people question what investors could actually know about the connections that firms have with one another. Nonetheless, these types of measures provide valuable information about market perceptions of how firms will perform in bad states of the world. Moreover, whether or not market participants fully

[2] Adrian, T. and M. Brunnermeier, "CoVaR," Federal Reserve Bank of New York Staff Report no. 348, http://www.newyorkfed.org/research/staff_reports/sr348.pdf

[3] Acharya, C and L Pedersen, T Philippon, and M Richardson (2010): "Measuring Systemic Risk," working paper, March 2010 (http://ssrn.com/abstract=1573171)

[4] Huang, X and H Zhou, and H Zhu (2009): "Assessing the Systemic Risk of a Heterogeneous Portfolio of Banks During the Recent Financial Crisis," Federal Reserve Board Finance and Economics Discussion Series 2009-44 http://www.federalreserve.gov/pubs/feds/2009/200944/200944pap.pdf

understand the connections, or quality of assets, their perceptions can raise funding costs and have important implications for the viability of firms.

Some have suggested that the systemic risk measures have more valuable cross-sectional properties, but less desirable time-series properties. However, given that these measures are based on conditional tail correlations that vary over time, they would seem to capture some valuable information. Currently, all three of the measures suggest the largest firms pose less systemic risk than in 2008 and 2009, but more than before the crisis erupted (Exhibit 1).

Detailed information on direct connections is very limited. Data from a few other countries' banking systems, such as Austria and Canada, have been used to build network maps among individual banks.[5] Network analysis allows a regulator to estimate how the stress of a counterparty would directly affect the individual firms in the network, and also to simulate follow-on effects, which could be very significant.

Research on network analysis has been applied to international banking, specifically the system of banking systems in 21 countries based on BIS credit exposure data.[6] That research develops measures of how stress would travel through the network of countries, and specifically whether stresses would tend to concentrate within a small set of countries (i.e., be less likely to move out) or to disperse widely, indicating greater systemic risk. In 1989, exposures were more concentrated among a small cluster of banking systems in the US, UK, Japan, and when stresses hit that group, it tended to stay there. In contrast, that same cluster in 2008 accounted for less credit, and the connections of the cluster to other countries and between the other countries were considerably larger. The implication is that stress in 2008 was less likely to be contained within

[5] See, for example, Elsinger, H., A. Lehar, and M. Summer (2006), "Risk Assessment for Banking Systems," Management Science, and Gauthier, C., A. Lehar, and M. Souissi (2010), "Macroprudential Regulation and Systemic Capital Requirements," Bank of Canada Working Paper 2010-4.

[6] Garratt, R., L. Mahadeva, and K. Svirydzenka, Measuring Systemic Risk in the International Banking Network (2011), Bank of England Working Paper, no. 413.

a small set of countries than in 1989, suggesting that the financial system in 2008 was more systemically risky than in 1989.

Direct and follow-on credit and funding linkages are only one way in which firms can be interconnected. Contagion can arise from asymmetric information or uncertainty, and may depend on conditions in financial markets, such as time varying risk appetite. Because of these channels, efforts to monitor systemic risk need to encompass more than firms and focus also on system-wide channels.

Increasing and high leverage and maturity mismatch in the financial and nonfinancial sectors of the economy can also pose risks. A new survey of primary dealers by the Fed to evaluate the availability and terms of credit for securities financing and OTC derivatives should provide regulators and market participants regular and systematic insight into the leverage of the financial system.[7] At the same time, the Fed is better utilizing its existing data collection efforts, such as the Y-9C, and the Flow of Funds accounts, to measure the reliance of the banking sectors and the nonfinancial sector on unstable short-term funding sources and maturity mismatch (exhibit 3).

In addition, the Fed as the central bank is especially interested in evaluating how possible threats could disrupt the availability and terms of credit, and thus the real economy. We draw on structural macro models of the U.S. economy and foreign economies, such as FRB-US, and new DSGE models to evaluate potential policy tools. Work is ongoing at the Fed and in the academic community to enrich the financial sectors in these models.

**Conclusion.** The approach at the Fed to promote financial stability is built on a large-scale empirical research effort, the aim of which is to measure and monitor systemic risk across a

[7] Senior Credit Officer Opinion Survey on Dealer Financing Terms
http://www.federalreserve.gov/econresdata/releases/scoos.htm

broad spectrum of financial institutions and markets, and strengthen our understanding of the interaction of the financial system and economy. The Fed expects to be transparent in its research efforts and to engage with the outside community of researchers and analysts to advance its efforts. This effort will require more standardized and more timely data, and greater disclosure. The Fed will work to ensure that new data requirements and disclosure practices are helpful not only to regulators, but also to the private sector in its efforts to mitigate risks.

**Exhibit 1. Firm-specific systemic risk measures**

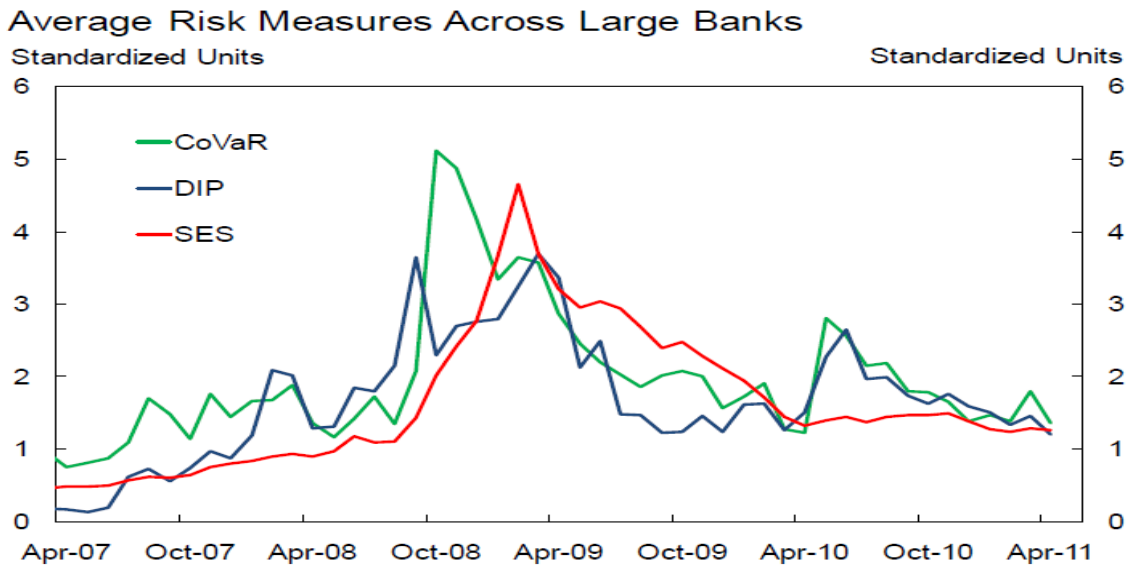
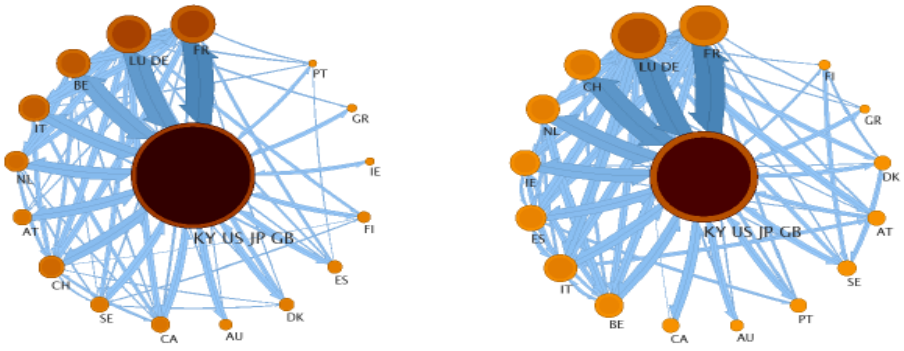



**Exhibit 2. Network measures of country banking systems**

**Chart 8: The 1989 Q3 modules imposed on the 1989 Q3 data (left) and on the 2008 Q2 data (right)**




Sources: Bank for International Settlements, Locational by Residence data and own calculations.

# 10. Do SIFIs Have a Future?

**Thomas M. Hoenig**
Federal Reserve Bank of Kansas City

# Do SIFIs Have a Future?

Thomas M. Hoenig
President and Chief Executive Officer
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Pew Financial Reform Project and New York University Stern School of Business
"Dodd-Frank One Year On"
Washington, D.C.
June 27, 2011

**Introduction**

We are approaching the one-year anniversary of the Dodd-Frank Act. With so much of the Act's implementation work unfinished, it is not an anniversary that we can celebrate; rather it is an opportunity to take stock. In that vein, I congratulate the organizers of this conference for bringing together such an excellent group of individuals to do just that. In particular, I want to recognize the New York University Stern School of Business and economics faculty for the outstanding research they have done on critical financial reform issues. Their collaborative efforts have produced a series of must-read books that have a combination of rigorous economic analysis and practical policy prescriptions that is rarely seen these days.

Much of the Dodd-Frank discussion revolves around the economic distortions and disruptions caused by the largest and most complex financial companies, the so-called systemically important financial institutions, or SIFIs.

As we consider the topic of SIFIs, let me ask the following questions: How can one firm of relatively small global significance merit a government bailout? How can a single investment bank on Wall Street bring the world to the brink of financial collapse? How can a single insurance company require billions of dollars of public funds to stay solvent and yet continue to operate as a private institution? How can a relatively small country such as Greece hold Europe financially hostage? These are the questions for which I have found no satisfactory answers. That's because there are none. It is not acceptable to say that these events occurred because they involved systemically important financial institutions.

Because there are no satisfactory answers to these questions, I suggest that the problem with SIFIs is they are fundamentally inconsistent with capitalism. They are inherently destabilizing to global markets and detrimental to world growth. So long as the concept of a SIFI exists, and there are institutions so powerful and considered so important that they require special support and different rules, the future of capitalism is at risk and our market economy is in peril.

To more fundamentally address this issue, we must go beyond today's Dodd-Frank. We must confine the use of the safety net to its original intent. We must reduce the artificial complexity of existing financial structures. The rewards of success must be balanced against the credible consequences of failure. In achieving such goals, we will enhance the stability of the fundamental mechanism through which monetary policy is conducted and the economy depends.

**The decline in competition and accountability in banking**

The U.S. economy is the most successful in the history of the world. It achieved this success because it is based on the rules of capitalism, in which private ownership dominates markets and individuals reap the rewards of their success. However, for capitalism to work, businesses, including financial firms, must be allowed, or compelled, to compete freely and openly and must be held accountable for their failures. Only under these conditions do markets objectively allocate credit to those businesses that provide the highest value.

For most of our history, the United States held fast to these rules of capitalism. It maintained a relatively open banking and financial system with thousands of banks from small community banks to large global players that allocated credit under this system. As late as 1980, the U.S. banking industry was relatively unconcentrated, with 14,000 commercial banks and the assets of the five largest amounting to 29 percent of total banking organization assets and 14 percent of GDP.

Today, we have a far more concentrated and less competitive banking system. There are fewer banks operating across the country, and the five largest institutions control more than half of the industry's assets, which is equal to almost 60 percent of GDP. The largest 20 institutions control 80 percent of the industry's assets, which amounts to about 86 percent of GDP.

Here's the irony: This marked increase in concentrated power, and therefore, more concentrated risk, reflects past efforts to assure greater economic stability. This might best be described as "good intentions/bad outcomes" syndrome. For example, the Federal Reserve was founded following the 1907 Banking Panic and was charged with providing liquidity support to solvent banks that were experiencing

funding problems. After the Great Depression, the Federal Deposit Insurance Corp. was created to provide limited deposit insurance to protect small depositors and to further increase the resiliency of the financial system.

Then, over the past 30 years, this safety net has expanded far beyond its original intent. More recently, Glass-Steagall was repealed, giving high-risk firms almost unlimited access to funds generated through their new access to the safety net. Finally, following a series of crises during the late 1980s and 1990s, the government confirmed that because of systemic impact, some institutions were just too big to fail—the largest institutions could put money in nearly any asset regardless of risk, and their creditors would not be held accountable for the risk taken. Predictably, the industry's risk profile increased dramatically. The SIFI was born.

Is it any wonder then that in the fall of 2008 we experienced the greatest financial crisis since the Great Depression? Financial institutions had again become irresponsible in their lending practices. They had increased their leverage ratios to unprecedented levels. They became “dry kindle” for a financial fire and, with the end of the housing boom, the match was struck.

Now, with their bailout costs amounting to billions of taxpayer dollars, SIFIs are larger than ever. Strikingly, they are arguing that they should not be held to stronger capital standards if the United States hopes to remain globally competitive. That assertion is nonsense. The remainder of my remarks today will describe how the United States can achieve a stronger, more stable financial system in order to secure its future as a global economic leader.

**Proposal to reduce costs and risks to the safety net and financial system**

Following this financial crisis, Congress and the administration turned to the work of repair and reform. Once again, the American public got the standard remedies—more and increasingly complex regulation and supervision. The Dodd-Frank reforms have all been introduced before, but financial markets skirted them. Supervisory authority existed, but it was used lightly because of political pressure and the misperceptions that free markets, with generous public support, could self-regulate.

Dodd-Frank adds new layers of these same tools, but it fails to employ one remedy used in the past to assure a more stable financial system—simplification of our financial structure through Glass-Steagall-type boundaries. To this end, there are two principles that should guide our efforts to restore such boundaries. First, institutions that have access to the safety net should be restricted to certain core activities that the safety net was intended to protect—making loans and taking deposits—and related activities consistent with the presence of the safety net.

Second, the shadow banking system should be reformed in its use of money market funds and short-term repurchase agreements—the repo market. This step will better assure that the safety net is not ultimately called upon to bail them out in crisis.

Restricting activities of banking organizations

Consistent with the first principle, banking organizations with access to the safety net should be generally confined to the following activities: commercial banking, underwriting securities and advisory services, and asset and wealth management services. Underwriting, advisory, and asset and wealth management services are mostly fee-based services that do not put much of a firm's capital at risk. In addition, asset and wealth management services are similar to the trust services that have always been allowable for banks.

In contrast, banking organizations should be expressly prohibited from activities that include dealing and market-making, brokerage, and proprietary trading, which expose the safety net but have little in common with core banking services.[1] Within the protection of the safety net, they create expansive risks that are difficult to assess, monitor or control.

Thus, banking organizations would not be allowed to do trading, either proprietary or for customers, or make markets because such activity requires the ability to do trading. In addition, allowing

[1] This categorization of financial activities is from Matthew Richardson, Roy Smith and Ingo Walter in Chapter 7 of *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance*, edited by Viral V. Acharya, Thomas F. Cooley, Matthew Richardson, Ingo Walter, New York University Stern School of Business, John Wiley & Sons Inc., 2010.

customer but not proprietary trading would make it easy to game the system by "concealing" proprietary trading as part of the inventory necessary to conduct customer trading. Also, prime brokerage services not only require the ability to conduct trading activities but also essentially allow companies to finance their activities with highly unstable uninsured "deposits." This combination of factors, as we have recently witnessed, leads to unstable markets and government bailouts.

Critics of this proposal contend that institutions grow to be large and complex because of economies of scale and scope and they need the size and related complexities to be profitable and to compete globally. They believe firms must have broad, mostly unrestricted access to all financial activities to provide one-stop shopping and compete on a global basis. Arguments also are given that large banks and securities firms are necessary to make efficient markets for securities trading essential for carrying out monetary policy.

These arguments are unconvincing and, in fact, mislead. First, yes, it would be unfortunate if restricting activities were to drive U.S. banks and jobs to other countries. However, we have 200 years of banking success in this country to refute that assertion. More recently, under Glass-Steagall, U.S. banks and investment banks were highly competitive and successful as each specialized in lending to or underwriting businesses all over the world. There is considerable evidence that under Glass-Steagall the United States was at no competitive disadvantage to Europe, with its mingled merchant banking system. The United States led the world—because it had strong, prudently run institutions that knew how to manage money in the best interests of the client.

Second, there is no strong evidence of unlimited economies of scale and even less for wide economies of scope. Although both exist, they are captured at an asset size far less than that of SIFIs today.

Third, large corporations would have ample convenient access to commercial and traditional investment banking services inside commercial banking. They would have to go to securities dealers to purchase swaps and other derivatives for hedging purposes, something that has been done in the past without difficulty.

Finally, it also seems improbable to me that any country should be willing or able to expand its safety net or to expose its taxpayers to the undefined risks of protecting ever-larger and more complex banking organizations. Instead, what countries should be focused on now is getting back to fundamentals aimed at simplifying highly complex and unstable SIFIs. The focus should be on financial stability.

Reforming the shadow banking system

A legitimate concern of limiting the safety net is that this could worsen the risk of financial instability by pushing activities to the unregulated shadow banking system. Clearly, focusing solely on the regulated banking industry and ignoring the unregulated shadow banking system would not solve the problem and, in fact, might expand the shadow banking sector that was an integral part of the financial crisis.

Much of the instability in the shadow banking system stems from its use of short-term funding for longer-term investment. The solution to this instability problem is not to provide a safety net for the shadow banks and regulate them more but, instead, to remove exceptions in which money market instruments are treated essentially as deposits. The current exceptions encourage significant short-term funding of longer-term assets.

First, investors in money market mutual and other investment funds that are allowed to maintain a fixed net asset value of $1 have an incentive to run if they think their fund will "break the buck." Thus, if the fixed $1 net asset value is eliminated and the share values of such funds are required to float with their market values, shadow bank reliance on this source of short-term funding and the associated threat of disruptive runs would be greatly reduced.

Second, the potential disruptions to funding stemming from the repo financing of shadow banks should be ended. One of the sources of instability during the crisis was repo runs, particularly on repo borrowers using subprime mortgage-related assets as collateral. Essentially, these borrowers funded long-term assets of relatively low quality with very short-term liabilities.

These practices would be greatly reduced by rolling back the bankruptcy law for repo collateral to the pre-2005 rules. Prior to then, if a repo borrower defaulted, mortgage-related collateral could not be immediately taken and sold by the creditors. Returning to these rules would discourage the use of mortgage-related assets as repo collateral and reduce the potential for repo runs. Term lending through securitization would continue, probably at a smaller scale, with more closely matched term wholesale funding provided by institutional investors such as mutual funds, pension funds and life insurance companies.

These changes to the rules for money market funds and repo instruments would increase the stability of the shadow banking system because term lending outside the safety net would be less dependent on "demandable" funding and more reliant on term funding, and the pricing of risk would better reflect the actual risk incurred.

**A final note: Implications for monetary policy**

Finally, as a member of the Federal Open Market Committee, I realize that we must consider the potential effects of these proposals on the conduct of monetary policy. The impact could be significant because, as currently practiced, monetary policy operations are channeled through a limited number of counterparties called primary dealers. These dealers are required to participate in all auctions of U.S. government debt and represent a key element in the implementation of policy.

Currently, there are only 20 primary dealers. They are the largest financial firms operating in the United States, and most are affiliated with commercial banks. It is with this relationship that the changes I propose could affect the conduct of monetary policy. Specifically, given that primary dealers could no longer be affiliated with commercial banks, would this inhibit market-making in securities, including Treasuries, and therefore interfere with the conduct of monetary policy?

The answer is "no." It is not necessary that primary dealers be affiliated with banks. It is only necessary that they be institutions that deal in U.S. Treasuries and participate in auctions of U.S. government debt. Prior to the 1990s merger boom among investment banks and the Gramm-Leach-Bliley

Act, it was typical that half or more of the primary dealers were not affiliated with commercial banks. Therefore, the fact that primary dealers are not commercial banks would have little effect on the Federal Reserve's ability to conduct monetary policy.

I would add that although commercial banks could not be primary dealers, they could remain a key part of the monetary policy mechanism. Recently, the Federal Reserve gained experience in using the Term Auction Facility (TAF). The TAF might very successfully be used in conjunction with primary dealer operations to conduct policy well into the future.

As you may recall, during the financial crisis, the TAF was an important component of monetary policy. For example, the TAF was introduced in December 2007 with an initial auction of $20 billion. The facility was then ramped up to almost $500 billion by March 2009—about one-fourth of the assets on the Federal Reserve's balance sheet. The maturity of TAF loans was generally 28 days or 84 days.

By broadening the Federal Reserve's monetary tools to include the TAF to provide term funds through the banking system in parallel with the primary dealers, we could greatly expand the number of counterparties used in the conduct of monetary policy. Thus, the TAF and primary dealers would provide deep markets for the term portion of policy; primary dealers and traditional open-market operations would continue as the means for managing day-to-day operations and for maintaining the federal funds rate close to the target. With more counterparties, we enhance competition and enable nearly all banks to play a role in the conduct of monetary policy. This would make the largest banks less "SI" and more "FI."

**Conclusion**

The financial system has become far less competitive and far more volatile with the onset of systemically important institutions. Though large firms remain a critical part of our economic system in the United States, they should not become so dominant that they become unaccountable to our capitalistic system. We can make the necessary reforms to end the unique status of the SIFI and, in doing so, restore much of our global competitive vigor. Only from a position of financial strength can the United States remain the global economic leader.

# 11. An End to Fannie and Freddie: Putting the Genie Back in the Bottle

**Viral V. Acharya, Matthew Richardson, Stijn Van Nieuwerburgh and Lawrence J. White**
Stern School of Business, New York University

**An End to Fannie and Freddie: Putting the Genie Back in the Bottle**

Viral V. Acharya, Matthew Richardson, Stijn Van Nieuwerburgh, Lawrence J. White[*]

It's been over 2½ years since Fannie Mae and Freddie Mac were placed in government conservatorships, effectively making them wards of the U.S. Treasury. These two large "government-sponsored enterprises" (GSEs) are emblematic of the excesses of residential mortgage lending in the decade of the 2000s. The Treasury has already made over $150 billion in capital contributions to keep them afloat, and there is at least another $50 billion – and possibly as much as $250 billion – still to come.

Fannie and Freddie need to be put out of their (and the taxpayers') misery. We have an innovative "side-by-side" plan for how to get from here to there. But first, some background:

Remarkably, the Dodd-Frank legislation of last summer, despite promising "comprehensive" financial regulatory reform, was wholly silent on what to do about the GSEs. Their only mention in the law was a directive to the Obama Administration to issue a GSE report.

The Obama Administration duly delivered its report in February. But it too ducked the issue, presenting three alternatives rather than providing a clear plan for going forward. House Republicans recently introduced piecemeal eight GSE bills, but no one has a sense of urgency.

Consequently the GSEs continue to buy mortgages and either keep them as investments or bundle them into mortgage-backed securities (MBS) that are sold to investors, with the GSEs' guarantees. Indeed, the GSEs' activities currently touch over 70% of newly issued mortgages – and if the guarantees of the Federal Housing Administration (FHA) are included, the government ownership or guarantees of mortgages cover over 90% of new mortgages!

The new mortgages that the GSEs are buying are of considerably higher quality than those of the bad old days of the mid 2000s. The additional losses that will be announced by the GSEs over the next few quarters are the delayed recognition of older loans going bad, rather than new losses on new loans. Nevertheless, there is widespread agreement that the GSEs can't stay as wards of the Treasury indefinitely and that having the government owning or insuring over 90% of all mortgages is a huge over-extension of government activity. Securitizing and insuring residential mortgages should be predominantly a private sector activity.

But how to get from here to there? Despite the absence of political action, there is a surprising amount of agreement on some basic principles – at least as expressed in the Obama Administration's proposals and about a dozen other proposals that have been put forward by various think tanks, industry associations, and academics:

- Fannie and Freddie should be phased out of existence: through a combination of a decrease in their investment holdings and an increase in the fees that they charge for their guarantees on their MBS, both of which will open up opportunities for the private sector

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[*] The authors are professors at the NYU Stern School of Business and co-authors of the recently published *Guaranteed to Fail: Fannie Mae, Freddie Mac, and the Debacle of Mortgage Finance* (Princeton University Press).

– which currently can't compete in the presence of government subsidies – to re-enter these activities.

- Any remaining subsidy programs for housing should be smaller, better focused on low- and moderate-income households, on-budget (lodged in FHA), and transparent.

- If there are government guarantees that are a backstop for the non-subsidized mortgages or MBS, the guarantees should solely support the financial instruments and not any of the financial institutions that are issuing them.

- Any such government guarantees should be transparent and explicitly priced so as to avoid further subsidy.

So, where are the disagreements? They are primarily over whether there need to be government guarantees; and, if yes, what their form should be.

One camp believes that government guarantees are necessary on an ongoing basis, as a continuous backup for the private sector entities that will be issuing and guaranteeing the MBS, in the event that any of these entities fails to honor its obligations. But the pricing of this "tail-risk" government insurance will be extremely difficult, at best, and will more likely be a back-door way to bring subsidy back into the broader mortgage market.

Another camp believes that there needs to be a government back-up that is activated only in the event of widespread distress in the financial markets and that would provide its insurance only to new mortgage and MBS activity at that time, so as to keep the mortgage markets functioning. But, again, the pricing of this insurance would be problematic; and, besides, we already have the Federal Reserve as the back-up for times of general financial stress.

A third camp – to which we are sympathetic – argues that the private sector, suitably regulated, can handle the job. However, we think that there needs to be some interim help. After all, the GSEs have been around since the 1970s, and the financial markets have become quite accustomed to dealing with them and their debt. Here's the best way to put that "genie" back in the bottle:

Government MBS insurance should initially be available *alongside* the private-sector MBS guarantees. The initial fractions could be 75% government and 25% private. *A crucial feature is that the price for the government guarantee would be identical to what the private partner charges – thus eliminating the possibility of underpriced and subsidized government insurance.* The guarantees would be available only where the underlying mortgages were high quality and below a specified dollar amount. Over time, as the private sector gained experience, the government percentage would be reduced, and the dollar amount ceiling would be reduced. By the end of, say, 10 years, government participation would be wholly phased out.

It is possible to replace Fannie and Freddie with a functioning private sector. We just need a little ingenuity – which our side-by-side plan provides – and some political willpower. Anyone have a plan for that?

# 12. Dodd-Frank One Year On: Implications for Shadow Banking

**Tobias Adrian**
Federal Reserve Bank of New York

# Dodd-Frank One Year On: Implications for Shadow Banking

Tobias Adrian, Federal Reserve Bank of New York, June 27, 2011

One year after the passage of the Dodd Frank Act (DFA), regulators proposed several of the rules required for the implementation of the act. In this note, I discuss some aspects of proposed DFA rules in light of shadow banking. The topics are risk retention rules for securitized products, and the impact of capital reforms on ABCP conduits. While the reform of securitization is primarily resulting from DFA, changes in accounting standards together with the Basel capital reforms have had important impacts on the economics of ABCP conduits. The views expressed in this note are my own, and do not necessarily reflect the views of the Federal Reserve Bank of New York or the Federal Reserve System.

## Credit Risk Retention

The securitization of credit and the funding of securitized products were at the heart of the shadow banking system. Prior to the financial crisis, underwriting standards in credit markets, and particularly in mortgage markets, deteriorated drastically. Mortgages without downpayment, with deferred or even negative amortization, or made to borrowers without verified income, were frequently originated. These poor underwriting standards have been linked to the ability to securitize risk. When originators of mortgages have the ability to securitize and sell the mortgages, a potential for moral hazard arises, as incentives between the underwriter/originator and securitizers on the one hand and the ultimate owner of asset backed securities (ABS) on the other hand are often not sufficiently aligned. The DFA requires credit risk retention by securitizers designed to reduce this moral hazard problem. The risk retention provisions are contained in Title IX of the Dodd-Frank Act, "Investor Protections and Improvements to the Regulation of Securities." Thus, the aim of the rule is to protect investors from shoddy underwriting practices.

DFA section 941(b) requires a variety of regulatory authorities to jointly prescribe regulations that force securitizers to retain not less than five percent of the credit risk of any asset that they sell through the issuance of an ABS, and prohibit securitizers from directly or indirectly hedging or otherwise transferring the retained credit risk. The implementation of DFA's credit risk

retention is specified in a notice of proposed rule-making (NPR) issued in April 2011. My discussion of the credit risk retention applies to the proposed rule, which is subject to modifications before the issuance of the final rule.

The issuer must disclose the amount and form of retention to investors, and must provide material assumptions which justify the aggregate face amount of liabilities. A menu approach to risk retention is offered where vertical, horizontal, or a mix of vertical and horizontal tranches can be retained. "Vertical" retention refers to holding a portion of all tranches, while under "horizontal" retention the securitizer retains a first-loss tranche restricted to receive only scheduled principal. The NPR also allows for other forms of risk retention, such as a 50-50 split of a vertical and a horizontal slice (an L-shape).

As a consequence of the menu approach to the risk retention rule, the incentives to monitor underwriting standards by issuers of securitized products will vary according to the choice of the risk retention. From an economic point of view, a horizontal slice usually provides the issuer with the strongest incentive to monitor underwriting standards. However, issuers might be compelled to choose a vertical slice or L-shaped risk retention, as these will generally require a lower funding cost. One potential advantage of the vertical slice is that, if the issuer services the loans underlying the security, the servicer's incentives might be better aligned with investors' interests. The vertical slice can also be more effective in circumstances where the equity tranche exceeds the 5 percent. In such a case, a vertical slice will at least provide some incentive to control risk for the losses in the equity tranche beyond the 5 percent. It is generally not clear that securitizers have the incentive to make the socially optimal choice of a risk retention tranche.

The rule also includes a "premium capture mechanism" that disallows securitizers from structuring interest only securities which transfer the full cash value to the equity tranche holder at the time of issuance. The premium capture mechanism prevents the structuring of the equity tranche in such a way that the incentive alignment is removed as cash flows are no longer sensitive to the credit quality of the underlying securities.

If the issuer of the security is a bank, the capital requirement applied to the retained risk is a key consideration for the economic rationale of securitization. The capital treatment for the retained risk is tightly linked to the accounting treatment. It is currently unclear whether a horizontal tranche

will achieve true sale treatment under accounting rules. If true sale is not achieved, incentives for securitizations by banks are vastly reduced. Consequently, non-bank entities such as real estate investment trusts (REITS), finance companies or others might play a more important role in securitization markets.

The credit risk retention rules are designed to align incentives of securitizers with the ultimate owners of the securities. Credit risk retention has long been market practice in ABS markets. The historical track record suggests that the market will function properly with the risk retention requirements, and will be able to provide liquidity to loan securitizations. The rules recognize that the guarantees provided by Fannie Mae and Freddie Mac lead them to retain 100 percent of the credit risk of the mortgages they securitize, and because this guarantee is currently backed by financial support from the government, the proposed rules do not require these government-sponsored enterprises to retain additional risk.

An important aspect of the credit risk retention rules are exemptions for "Qualified residential mortgages" (QRM).[1] QRMs are securitizations backed entirely by high-quality mortgages. The DFA requires QRMs to feature underwriting and product features that are associated with lower default risk based on historical data. The proposal currently defines QRMs as closed-end, first-lien mortgages used to purchase or refinance one- to four-family properties, with tight restrictions on debt to income ratios and borrower credit histories, and a maximum loan to value ratio of 80 percent.[2]

**Consolidation of ABCP Conduits**

The asset backed commercial paper market (ABCP) market was one of the first markets of the shadow banking system to collapse during the financial crisis. ABCP is issued by qualifying special

[1] See Vice Chair Janet L. Yellen's speech at the 2011 Federal Reserve Bank of Cleveland Policy Summit, Cleveland, Ohio, June 9, 2011 for further elaboration of QRMs. http://www.federalreserve.gov/newsevents/speech/yellen20110609a.htm

[2] QRMs cannot feature negative amortization, interest-only payments, or the potential for large interest rate increases. The maximum loan-to-value ratio is 80 percent for purchase mortgages, with no junior lien at closing; 75 percent on rate and term refinance loans; and 70 percent on cash-out refinance loans.

purpose entities (SPEs) such as ABCP conduits, or by structured investment vehicles (SIVs). These conduits hold loans and securities, including mortgages, and issue commercial paper. The commercial paper is secured by the assets of the conduit, and most conduits get 100 percent liquidity backup lines from commercial banks. The backup lines effectively insure that investors can be repaid at par when the commercial paper matures. The conduit is structured as a bankruptcy remote SPE from the bank that provides the line of credit.

Banks used ABCP conduits to increase return on equity (ROE). By moving loans, mortgages, or securitized products off balance sheet into a conduits or SIVs, only a capital charge for the backup liquidity line was required. Because the liquidity line benefited from official backstops such as the discount window and deposit insurance, the cost of capital did not fully reflect the risk transfer from the balance sheet to the conduit. As a result, the reduction in capital charges yielded an increase in return on equity. However, through the liquidity line, the bank retained exposure to the off balance sheet vehicles. Indeed, in the second half of 2007, many banks effectively consolidated assets from conduits and SIVs on balance sheet. From a regulatory point of view, the problem with the off balance sheet funding via ABCP was that discount window and deposit insurance guarantees were extended indirectly and sometimes implicitly via the liquidity line to the conduit.

The credit risk retention rules as proposed in the NPR based on DFA section 941(b) specifically apply to ABCP conduits. The sponsors of conduits have to hold a minimum five percent horizontal tranche of the conduit on balance sheet. This rule has implications for capital requirements, and is closely tied to accounting treatment.

DFA section 165 prescribes enhanced prudential standards for systemically important financial institutions (SIFIs), defined as bank holding companies (BHCs) with $50 billion or more in assets as well as any nonbank financial company designated by the Financial Stability Oversight Council (FSOC). The prudential standards are to be established by the Board of Governors of the Federal Reserve, and have to include (i) risk-based capital requirements and leverage limits, (ii) liquidity requirements, (iii) overall risk management requirements, (iv) resolution plans and credit exposure report requirements, and (v) concentration limits. The risk based capital requirements and liquidity requirements for BHCs are developed in conjunction with the Basel Committee for Bank Supervision (BCBS). Key aspects of the capital reform of the Basel Committee include the increase of the quality and quantity of capital, particularly emphasizing the share of common equity in

regulatory capital; an increase in the risk coverage to include off-balance sheet exposures and derivatives related exposures, and the adoption of liquidity requirements.

The inclusion of off balance sheet activities in computing capital requirements is required by section 165(k) of the DFA (subject to some exemptions).[3] The term "off-balance sheet activities" is defined by DFA to mean an existing liability that is not on the balance sheet, but may move on-balance sheet upon the occurrence of some future event. The definition explicitly includes standby letters of credit, repos, interest rate swaps and credit swaps, among others.

The capital treatment of off balance sheet vehicles is also tightly linked to accounting treatments. On June 12, 2009, the Financial Accounting Standards Board (FASB) issued Financial Accounting Standards (FAS) 166 and FAS 167. FAS 166&167 removed the concept of a qualifying special purpose entity from generally accepted accounting principles (GAAP) and altered the criteria under which special purpose entities, like mortgage-backed securities (MBS) trusts, must be included in the issuer's, controlling-class holder's, or servicer's consolidated financial statements. FAS 166 contains rules which govern whether a transaction qualifies for sale treatment. FAS 167 specifies principles for the accounting for qualified special purpose entities.

Federal banking agencies announced the risk-based capital rule related to FASB's adoption of the Statements of FAS 166&167 in January 2010, effective March 2010. Banking organizations affected by the new accounting standards are generally subject to higher risk-based regulatory capital requirements. The rule better aligns risk-based capital requirements with the actual risks of certain exposures. The adoption of FAS 166&167 eliminates the exclusion of most ABCP programs from risk-weighted assets, effectively consolidating conduits on balance sheet. In cases where the bank sponsors the conduit and provides backup liquidity to a conduit, it must consolidate the loans or securities of the conduit onto its balance sheet, resulting in increased risk-based and leverage ratio capital requirements as well higher loan loss reserves. In addition to the consolidation of bank sponsored conduits, capital rules also significantly increase liquidity and capital requirements for bank backup lines of credit to independent entities such as multiseller conduits. However, if the bank provides backup liquidity to a conduit sponsored by a third-party, it can use an internal-model based approach (IAA) of the securitization framework.

[3] It should be noted that the NPR for implementation of section 165(k) has not yet been issued.

# 13. Lessons from the Crisis

**Neil Barofsky**
NYU School of Law

Lessons From The Crisis

Two of the most striking lessons from the financial crisis and its aftermath – that the continued existence of financial institutions deemed "too big to fail" seriously threatens the nation's economy and fiscal well-being, and that our financial regulators have a limited ability to oversee those institutions – appear either to have been forgotten or to have never been learned.

The financial crisis demonstrated that the stability of the country's financial system is vulnerable to the bad decisions of just a handful of executives at the small number of financial institutions that have been effectively guaranteed against failure by the United States government. The continued existence of such institutions, and more particularly the market distortions that accompany the perception of government guarantees, remain, in the words of Kansas City Federal Reserve Bank President Thomas Hoenig, "the greatest risk to the U.S. economy."[1]

As has now been well documented, the out-of-control risk accumulation by "too big to fail" firms—now dubbed "Systemically Important Financial Institutions" or SIFIs—helped precipitate the financial crisis and necessitate the government's extraordinary multi-trillion dollar effort to prevent financial Armageddon. One part of that response involved the government sponsoring, supporting, subsidizing – and, when deemed necessary, threatening – the largest financial institutions to swallow up their struggling counterparts. Indeed, then–President of the New York Federal Reserve Bank and current–Treasury Secretary Timothy Geithner so zealously sought to serve as matchmaker between these institutions that several of the financial institutions' chief executive officers nicknamed him "eHarmony," after the on-line dating service.[2] Beginning with the Federal Reserve's support of JP Morgan Chase's acquisition of Bear Stearns and continuing through Treasury's use of Troubled Asset Relief Program (TARP) funds (as well as explicit threats to management) to ensure that Bank of America would complete its merger with Merrill Lynch, the government's response to the crisis made the five largest U.S. financial institutions 20% larger, and therefore more dangerous, than they were before the crisis. This historic concentration could have been far higher, of course, if other mergers advocated by the New York Federal Reserve Bank had occurred — such as between Citigroup and Goldman Sachs (currently the 3rd and 5th largest

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[1] Thomas M. Hoenig, President, Federal Reserve Bank of Kansas City, *Financial Reform: Post Crisis?,* at Women in Housing and Finance, Washington, D.C. (Feb. 23, 2011) (transcript available at http://www.kansascityfed.org/publicat/speeches/hoenig-DC-Women-Housing-Finance-2-23-11.pdf) ("Today, I am convinced that the existence of too big to fail financial institutions poses the greatest risk to the U.S. economy.").

[2] *See* Andrew Ross Sorkin, *Too Big to Fail: The Inside Story of How Wall Street and Washington Fought to Save the Financial System—and Themselves* at 483 (2009).

bank holding companies in the United States) or JP Morgan Chase and Morgan Stanley (ranked 2nd and 6th).[3]

In addition to materially increasing the size of the largest financial institutions, the government's response to the crisis through TARP and other efforts made explicit what many had long suspected—that certain institutions had amassed so much economic power, both individually and collectively, that the government simply could not allow them to fail. Further, the manner in which the bailouts were conducted served to exacerbate market distortions by protecting against loss other market participants who, in a normally-functioning market without government guarantees, would have imposed the necessary market discipline to compel the largest institutions to contain their excessive accumulation of risk. For example, the bailed-out institutions' creditors and counterparties largely suffered no losses, reinforcing their belief that they too would be protected in a crisis. Similarly, the executives who were responsible for leading their firms into the crisis retained their outsized pre-crisis risk-enhanced payouts (and often their jobs); and shareholders were largely spared the total loss that they would have suffered absent government intervention. In other words, the bailouts largely rewarded stakeholders who relied on the implicit guarantee of a government bailout, and punished only those who had to pay for it—the taxpayers.

That the country's financial system was (and still can be) brought to its knees by the poor decisions of a small group of financial institution executives is an unconscionable policy failure. The Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA) was enacted to address both that failure and the exacerbation of moral hazard that accompanied the bailouts, making the broad promise to once and for all "end 'too big to fail'" and the associated "taxpayer funded bailouts."[4]

Today, it is obvious that this effort is failing, at least so far. The market continues to bestow upon the largest financial institutions the substantial benefits that flow from an implicit government guarantee. Indeed, the credit ratings agencies remain committed to granting the largest institutions enhanced credit ratings based on the assumption that they will be bailed out once again, and by some reports, those institutions' funding advantage has actually *increased* since Dodd-Frank's passage.[5]

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[3] National Information Center, *Top 50 bank holding companies* (Mar. 31, 2011), http://www.ffiec.gov/nicpubweb/nicweb/top50form.aspx.

[4] Timothy Geithner, Treasury Sec'y, Testimony before the Congressional Oversight Panel (June 2010); Barack Obama, President of the United States, *Remarks by the President on the Passage of Financial Regulatory Reform* (July 15, 2010) (transcript available at http://www.whitehouse.gov/the-press-office/remarks-president-passage-financial-regulatory-reform) ("Because of this reform, the American people will never again be asked to foot the bill for Wall Street's mistakes. There will be no more taxpayer-funded bailouts – period.").

[5] *Still Too Big, Still Can't Fail*, Wall St. J., Mar. 5, 2011, *available at* http://online.wsj.com/article/SB10001424052748703530504576164880968752682.html;

As a result, one of the significant causes of the 2008 financial crisis—the market distortions flowing from the perception that the government serves as Wall Street's backstop—has in many ways only gotten worse. With this perception comes the perverse incentives that encourage executives at these institutions to accumulate more and more risk, both to realize short-term payouts for themselves and to compete with their risk-accumulating, maximum-return-on-equity-seeking SIFI brethren. As a result, the continued failure to take the dramatic steps necessary to alter the market's perception that bailouts will once again be necessary will inevitably encourage behavior that will make another crisis (and the need for further bailouts) far more likely.

While DFA has not convinced the market that its goal of ending bailouts has been met, it did provide regulators with powerful tools, which if used properly and aggressively, could mitigate systemic risk and the need for bailout. For example, DFA directs regulators to use its "living will" and resolution provisions to, directly or indirectly, simplify, shrink, ring-fence or materially change the capital structure of SIFIs *before* the next crisis strikes in order to reduce their systemic risk.

A fundamental flaw of DFA, however, is its failure to recognize one of the most important lessons of the financial crisis: that regulators are fallible and often lack the political will and capital to successfully regulate systemic risk. Simply giving the regulators a host of powerful tools does not necessarily mean that they will know when and how to use them and have the wisdom to use them appropriately.[6] More importantly, as recent history has shown, no legislation can confer upon the regulators the fortitude to withstand the intense pressures that will be exerted on them should they attempt to seriously challenge the "too big to fail" business model. After all, these are the exact same regulators whose capture, incompetence, and inability to resist the forces of Wall Street were described by the Financial Crisis Inquiry Commission as "widespread failures" that "proved devastating" to the financial system.[7]

Furthermore, even if the regulators are up to the task, under DFA, the ultimate responsibility for addressing the problems arising out of "too big to fail" institutions rests largely on the shoulders of the Secretary of the Treasury, whom DFA anoints as

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Although one of the credit ratings agencies recently gave notice that it is considering downgrading the credit ratings of certain institutions by reducing some of the recent "uplift" from government support, it still intends to give enhanced ratings to each of the largest banks back based on the continued assumption of a government bailout. Moody's Investor Service, *Moody's reviews of BofA, Citi, Wells Fargo supported ratings for downgrade* (June 2, 2011), http://www.moodys.com/research/Moodys-reviews-BofA-Citi-Wells-Fargo-supported-ratings-for-downgrade?lang=en&cy=global&docid=PR_219798.

[6] DFA did create the Office of Financial Research which may, over time, assist regulators in finding pockets of systemic risk in the financial system.

[7] Financial Crisis Inquiry Commission, *The Financial Crisis Inquiry Report* at xviii (Jan. 2011).

the Chairman of the newly-created Financial Stability Oversight Council (FSOC). In that role, the Treasury Secretary has broad responsibility for DFA's implementation, including final decision-making authority over forcing a SIFI into orderly liquidation, and overseeing the required two-thirds vote of FSOC's members to compel material changes in the size and structure of SIFIs to make them less systemically dangerous.[8] Therefore, even assuming a level of competence and resistance to capture that has not been previously demonstrated by the independent regulatory agencies, the ultimate decision will rest with a political appointee who serves the political interests of the governing administration. Given the economic, political, and lobbying power of the largest financial institutions, the influence that they have traditionally had over Treasury Department decisions, and the political vagaries of the electoral cycle, it appears extremely unlikely that the tough game-changing decisions needed to finally address "too big to fail" will be made from this perch. There certainly has been no compelling action from Treasury since DFA's passage that would suggest otherwise.

Indeed, there appears to be little appetite in Washington for using political capital to address the "too big to fail" problem. Instead, the political focus is understandably on the current fiscal crisis and the need for deficit reduction. The "too big to fail" problem and fiscal reform efforts, however, are very much linked, and failure to address the former may render the reform efforts meaningless. The recent financial crisis is largely responsible for the recent escalation of our national debt, as the government dramatically increased spending on stimulus- and bailout-related programs. Moreover, Standard & Poor's, in its recent warning on the government's credit rating, estimated that the up-front fiscal costs associated with bailing out financial institutions in the next financial crisis could total up to one-third of the nation's GDP—$5 trillion.[9] An amount even remotely close to this estimate would eclipse the total dollar figures at issue in the proposed fiscal reforms that are the subject of such intense debate today. It is therefore imperative, given DFA's reliance on political decision-making, that eliminating the "too big to fail" institutions' government safety net be included among the political priorities and shared sacrifices necessary for the United States to regain its fiscal footing. Otherwise, even if the two political parties somehow build a bridge to span their differences and reach a fiscal compromise, that bridge could be washed away by the flash flood of red ink required to bail out the banks yet again.

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[8] Dodd–Frank Wall Street Reform and Consumer Protection Act §§ 203(b), 121(a), 12 U.S.C.A. §§ 5383(b), 5331(a) (West 2011).

[9] Standard & Poor's, *Fiscal Challenges Weighing on the 'AAA' Sovereign Credit Rating on the Government of the United States* (Apr. 18, 2011), http://www.standardandpoors.com/ratings/articles/en/us/?assetID=1245302919686.

# 14. Can Alphabet Soup Make a Wholesome Meal?

**Nicolas Véron**
Bruegel

Oral remarks at the Pew Financial Reform Project and NYU Stern School of Business Conference **"Dodd-Frank: One Year On"**, Washington DC, June 27, 2011

By Nicolas Veron, Senior Fellow at Bruegel

I am very grateful to the Pew Charitable Trusts' invitation for the invitation to participate in today's conference.

Financial reform cannot be contemplated in any jurisdiction, even the US, without consideration of the global environment. In 2007-08, the Europeans complained about being innocent victims of a crisis caused by inadequate financial regulation in the US. We have a reversal of this situation now, with the recent concerns that US money-market funds and hence the US financial system might be negatively affected by disorderly developments in Greece and the eurozone. As long as the US is committed to global financial integration as it has been in the past few decades, and as it should continue to be, there is no domestic regulation in the US that can prevent US stakeholders from exposure to great risks in a world that is financially unstable.

*Financial reform in jurisdictions other than the US*

Given the importance of the transatlantic financial relationship and the high degree of financial integration between Europe and the US, it is natural to compare Dodd-Frank with financial reform initiatives in the European Union. The main difference is that, while the US and EU were hit by a financial shock of broadly similar magnitude in September-October 2008, the US has been much quicker in getting over it. The forced restructuring in late 2008, followed by TARP and the spring-2009 stress tests, have resulted in the core of the US banking system returning to a more-or-less normal state around mid-2009. This is true even as smaller banks continued to experience severe difficulties later and until now.

By contrast, Europe on the whole has remained financially fragile since 2007-08. The unconvincing successive rounds of banking stress tests are one symptom of this failure to manage and resolve the crisis, at least in the eurozone, which forms the bulk of the European economy. In different degrees, Switzerland, the UK, Scandinavia and Central and Eastern European countries within the EU have made progress towards exiting the crisis, but when looking at the EU as a whole the general picture remains far from safe and sound.

This is a key reason why the EU lags behind the US in terms of post-crisis financial reform. Also significant is the difference in legislative processes. In the US, and in line with local tradition, many different threads were woven together in one single (and massive) piece of legislation, even though implementing regulations are still being discussed as we speak. By contrast, the EU has about as many separate bills on financial reform as there are units in its Directorate-General for the Internal Market and Services. A few have been approved in final form, mostly on politically iconic issues, such as the regulation of credit rating agencies, limits on remuneration policies, or hedge fund regulation. But the centralization of

derivatives clearing is still under discussion. In addition, the review of the Markets in Financial Instruments Directive (MiFID) is scheduled to start later this year, and the core texts on banking reform, namely Capital Requirements (so-called CRD4) and Bank Crisis Management and Regulation, are not even available in draft form.

To its credit, however, the EU has made major progress in one area in which the US has done very little in this legislative cycle, namely the reform of the architecture of financial regulatory bodies. The creation of three new EU-level supervisory authorities (the European Banking Authority, European Securities and Markets Authority, and European Insurance and Occupational Pensions Authority) effective as of January 1 this year is a momentous step. It contrasts with the failure of Dodd-Frank to effectively streamline the landscape of federal agencies (apart from the suppression of the Office of Thrift Supervision). The new European Supervisory Authorities will take time to reach their full dimension but I am convinced that in the medium term they will become key players. They also represent a bold institutional innovation, as they can plausibly be considered the world's first-ever supranational financial supervisors.

I have no time (and limited competence) to review efforts at financial reform in non-Western jurisdictions, but the common thread is that these tend to view the crisis very differently from how it is generally viewed in the US and Europe. What we call the global financial crisis, non-Westerners view – perhaps more accurately – as a North Atlantic financial crisis. As a logical consequence, the appetite in the non-Western world for major financial reform is more limited. Specifically in Asia, there is a tension between, on the one hand, fierce competition among various financial centers (and the countries that host them) for the leading role as Asia's financial hub, and on the other hand, a certain financial conservatism as the crisis has seemed to discredit financial innovation. This conservatism often takes the form of a defense (which in my opinion is misguided) of various forms of financial repression, and of near-exclusive reliance on bank intermediation as opposed to capital markets. It is too soon to distinguish how this tension will play out, and to determine the consequences for Asian financial development and financial integration, which is very important to the future of the global financial system.

*Financial reform at the global level*

Here too I have no time to enter in any detail. At this point I don't see the proliferation of an alphabet soup of global bodies (such as the FSB, BCBS, BIS, IASB, IOSCO, IAIS, etc.) as a concern in itself. The problem is not the multiplicity of institutions at the global level. Rather it is their individual weakness linked to an intergovernmental decision-making model that too often results in a low common denominator.

The first G20 summits in Washington, London and Pittsburgh gave us ambitious rhetoric on the need to accelerate global convergence or harmonization of financial rules and relegate regulatory arbitrage to the dustbin of history. The truth, however, is that the crisis has made global harmonization more difficult. It is relatively easy to converge on light-touch rules when the general tendency is deregulation and liberalization. It is much more difficult, perhaps impossible, to keep global consistency in an era of reregulation, which of necessity is at least partly determined by local politics. In addition, the rise of emerging economies, which often adopt a more strict defense of their sovereignty than European

countries or even the US, introduces an additional hurdle. As a result, financial internationalism was a more straightforward proposition five or ten years ago than it is now.

Looked at from this perspective, key global financial standard-setters have actually made more progress in the past two years than might have been expected. The Basel 3 agreement is a qualified success to the extent that it significantly tightens the definition of capital, significantly raises the minimum ratio, and introduces important new limits in terms of leverage and, in a more tentative way, liquidity. On the accounting front, the International Accounting Standards Board has been confronted with a number of political obstacles in recent years but the adoption of its standards continues to spread, and the US may still take a constructive stance with the so-called "condorsement" (convergence or endorsement) concept recently brought forward by the Securities and Exchange Commission.

That said, there remain major concerns that reregulation initiatives could result in new fragmentation of the regulatory system. For example, the forced clearing of over-the-counter derivatives through central counterparties may encourage each jurisdiction or currency area to have "its" clearing house, if only because of the need for an adequate framework of supervision and resolution. Another example is the regulation of credit rating agencies, which until the crisis was the almost exclusive preserve of the US but is now in place or being introduced in most major jurisdictions. Even if public authorities insist that they do not intend to regulate rating methodologies, the very proposition that ratings by a given agency mean the same thing across the globe could be put at risk over the medium term.

Last, but by no means least, is the longstanding and still unresolved challenge posed by large international financial intermediaries, or G-SIFIs (globally systemically important financial institutions) in the new jargon. It is probably a good thing to envisage a capital surcharge for these, but such a surcharge would not be enough to overcome the absence of a compelling prudential and resolution framework for such firms. This yawning policy gap has been publicly acknowledged by senior policymakers such as the Federal Reserve Board's governor Daniel Tarullo, who referred to it in a recent speech. The EU experience suggests that this will be a very tough nut to crack indeed. It certainly represents a major item of unfinished business on the global financial reform agenda.

# Appendix. Money Market Fund Reform Options: Executive Summary

**Report of the President's Working Group on Financial Markets**

# Report of the
# President's Working Group on Financial Markets

# Money Market Fund Reform Options


**October 2010**

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## Executive Summary

Several key events during the financial crisis underscored the vulnerability of the financial system to systemic risk. One such event was the September 2008 run on money market funds (MMFs), which began after the failure of Lehman Brothers Holdings, Inc., caused significant capital losses at a large MMF. Amid broad concerns about the safety of MMFs and other financial institutions, investors rapidly redeemed MMF shares, and the cash needs of MMFs exacerbated strains in short-term funding markets. These strains, in turn, threatened the broader economy, as firms and institutions dependent upon those markets for short-term financing found credit increasingly difficult to obtain. Forceful government action was taken to stop the run, restore investor confidence, and prevent the development of an even more severe recession. Even so, short-term funding markets remained disrupted for some time.

The Treasury Department proposed in its *Financial Regulatory Reform: A New Foundation* (2009), that the President's Working Group on Financial Markets (PWG) prepare a report on fundamental changes needed to address systemic risk and to reduce the susceptibility of MMFs to runs. Treasury stated that the Securities and Exchange Commission's (SEC) rule amendments to strengthen the regulation of MMFs—which were in development at the time and which subsequently have been adopted—should enhance investor protection and mitigate the risk of runs. However, Treasury also noted that those rule changes could not, by themselves, be expected to prevent a run on MMFs of the scale experienced in September 2008. While suggesting a number of areas for review, Treasury added that the PWG should consider ways to mitigate possible adverse effects of further regulatory changes, such as the potential flight of assets from MMFs to less regulated or unregulated vehicles.

This report by the PWG responds to Treasury's call.[1] The PWG undertook a study of possible further reforms that, individually or in combination, might mitigate systemic risk by complementing the SEC's changes to MMF regulation. The PWG supports the SEC's recent actions and agrees with the SEC that more should be done to address MMFs' susceptibility to runs. This report details a number of options for further reform that the PWG requests be examined by the newly established Financial Stability Oversight Council (FSOC). These options range from measures that could be implemented by the SEC under current statutory authorities to broader changes that would require new legislation, coordination by multiple government agencies, and the creation of new private entities. For example, a new requirement that MMFs adopt floating net asset values (NAVs) or that large funds meet redemption requests in kind could be accomplished by SEC rule amendments. In contrast, the introduction of a private emergency liquidity facility, insurance for MMFs, conversion of MMFs to special purpose banks, or a two-tier system of MMFs that might combine some of the other measures likely would involve a coordinated effort by the SEC, bank regulators, and financial firms.

[1] The PWG (established by Executive Order 12631) is comprised of the Secretary of the Treasury (who serves as its Chairman), the Chairman of the Federal Reserve Board of Governors, the Chairman of the Securities and Exchange Commission, and the Chairman of the Commodity Futures Trading Commission.

Importantly, this report also emphasizes that the efficacy of the options presented herein would be enhanced considerably by the imposition of new constraints on less regulated or unregulated MMF substitutes, such as offshore MMFs, enhanced cash funds, and other stable value vehicles. Without new restrictions on such investment vehicles, which would require legislation, new rules that further constrain MMFs may motivate some investors to shift assets into MMF substitutes that may pose greater systemic risk than MMFs.

The PWG requests that the FSOC consider the options discussed in this report to identify those most likely to materially reduce MMFs' susceptibility to runs and to pursue their implementation. To assist the FSOC in any analysis, the SEC, as the regulator of MMFs, will solicit public comments, including the production of empirical data and other information in support of such comments. A notice and request for comment will be published in the near future. Following a comment period, a series of meetings will be held in Washington, D.C. with various stakeholders, interested persons, experts, and regulators.

***MMFs are susceptible to runs***

MMFs are mutual funds. They are investment vehicles that act as intermediaries between shareholders who desire liquid investments and borrowers who seek term funding. With nearly $3 trillion in assets under management, MMFs are important providers of credit to businesses, financial institutions, and governments. In addition, these funds are significant investors in some short-term funding markets.

Like other mutual funds, MMFs are regulated under the Investment Company Act of 1940 (ICA). In addition to ICA requirements for all mutual funds, MMFs must comply with SEC rule 2a-7, which permits these funds to maintain a stable net asset value (NAV) per share, typically $1. However, if the mark-to-market per-share value of a fund's assets falls more than one-half of 1 percent (to below $0.995), the fund must reprice its shares, an event colloquially known as "breaking the buck."

The events of September 2008 demonstrated that MMFs are susceptible to runs. In addition, those events proved that runs on MMFs not only harm fund shareholders, but may also cause severe dislocations in short-term funding markets that curtail short-term financing for companies and financial institutions and that ultimately result in a decline in economic activity. Thus, reducing the susceptibility of MMFs to runs and mitigating the effects of possible runs are important components of the overall policy goals of decreasing and containing systemic risks.

MMFs are vulnerable to runs because shareholders have an incentive to redeem their shares before others do when there is a perception that the fund might suffer a loss. Several features of MMFs, their sponsors, and their investors contribute to this incentive. For example, although a stable, rounded $1 NAV fosters an expectation of safety, MMFs are subject to credit, interest-rate, and liquidity risks. Thus, when a fund incurs even a small loss because of those risks, the stable, rounded NAV may subsidize shareholders who choose to redeem at the expense of the remaining shareholders. A larger loss that causes a fund's share price to drop below $1 per share (and thus break the buck) may

prompt more substantial sudden, destabilizing redemptions. Moreover, although the expectations of safety fostered by the stable, rounded $1 NAV suggest parallels to an insured demand deposit account, MMFs have no formal capital buffers or insurance to prevent NAV declines; MMFs instead have relied historically on discretionary sponsor capital support to maintain stable NAVs. Accordingly, uncertainty about the availability of such support during crises may contribute to runs. Finally, because investors have come to view MMFs as extremely safe vehicles that meet all withdrawal requests on demand (and that are, in this sense, similar to banks), MMFs have attracted highly risk-averse investors who are particularly prone to flight when they perceive the possibility of a loss. These features likely mutually reinforce each other in times of crisis.

***The SEC's new rules***

In January 2010, the SEC adopted new rules for MMFs in order to make these funds more resilient and less likely to break the buck. The regulatory changes that mitigate systemic risks fall into three principal categories. First, the new rules enhance risk-limiting constraints on MMF portfolios by introducing new liquidity requirements, imposing additional credit-quality standards, and reducing the maximum allowable weighted average maturity of funds' portfolios. Funds also are required to stress test their ability to maintain a stable NAV. Second, the SEC's new rules permit a fund that is breaking the buck to suspend redemptions promptly and liquidate its portfolio in an orderly manner to limit contagion effects on other funds. Third, the new rules place more stringent constraints on repurchase agreements that are collateralized with private debt instruments rather than government securities.

***The need for further measures***

The SEC's new rules make MMFs more resilient and less risky and therefore reduce the likelihood of runs on MMFs, increase the size of runs that MMFs can withstand, and mitigate the systemic risks they pose. However, the SEC's new rules address only some of the features that make MMFs susceptible to runs, and more should be done to address systemic risk and the structural vulnerabilities of MMFs to runs. Indeed, the Chairman of the SEC characterized the new rules as "a first step" in strengthening MMFs, and Treasury's *Financial Regulatory Reform: A New Foundation* (2009) anticipated that measures taken by the SEC "should not, by themselves, be expected to prevent a run on MMFs of the scale experienced in September 2008."

Mitigating the risk of runs on MMFs is especially important because the events of September 2008 may have created an expectation that, in a future crisis, the government may provide support for MMFs at minimal cost in order to minimize harm to MMF investors, short-term funding markets, and the economy. Persistent expectations of unpriced government support distort incentives in the MMF industry and pricing in short-term funding markets, as well as heighten the systemic risk posed by MMFs. It is thus essential that MMFs be required to internalize fully the costs of liquidity or other risks associated with their operation.

In formulating reforms for MMFs, policymakers should aim primarily at mitigating systemic risk and containing the contagious effect that strains at individual MMFs can have on other MMFs and on the broad financial system. Importantly,

preventing any individual MMF from ever breaking the buck is not a practical policy objective—though the new SEC rules for MMFs should help ensure that such events remain rare and thus constitute a limited means of containing systemic risk.

***Policy options***

The policy options discussed in this report may help further mitigate the susceptibility of MMFs to runs. Some of these options may be adopted by the SEC under its existing authorities. Others would require legislation and action by multiple government agencies and the MMF industry.

*(a) Floating net asset values.* A stable NAV has been a key element of the appeal of MMFs to investors, but a stable, rounded NAV also heightens funds' vulnerability to runs. Moving to a floating NAV would help remove the perception that MMFs are risk-free and reduce investors' incentives to redeem shares from distressed funds. However, the elimination of the stable NAV for MMFs would be a dramatic change for a nearly $3 trillion asset-management sector that has been built around the stable share price. Such a change may have several unintended consequences, including: (i) reductions in MMFs' capacity to provide short-term credit due to lower investor demand; (ii) a shift of assets to less regulated or unregulated MMF substitutes such as offshore MMFs, enhanced cash funds, and other stable value vehicles; and (iii) unpredictable investor responses as MMF NAVs begin to fluctuate more frequently.

*(b) Private emergency liquidity facilities for MMFs.* The liquidity risk of MMFs contributes importantly to their vulnerability to runs, and an external liquidity backstop to augment the SEC's new liquidity requirements for MMFs would help mitigate this risk. Such a backstop could buttress MMFs' ability to withstand outflows, internalize much of the liquidity protection costs for the MMF industry, offer efficiency gains from risk pooling, and reduce contagion effects. A liquidity facility would preserve fund advisers' incentives for not taking excessive risks because it would not protect funds from capital losses. As such, a liquidity facility alone may not prevent broader runs on MMFs triggered by concerns about widespread credit losses. Importantly, significant capacity, structure, pricing, and operational hurdles would have to be overcome to ensure that such a facility would be effective during crises, that it would not unduly distort incentives, and that it would not favor certain types of MMF business models.

*(c) Mandatory redemptions in kind.* When investors make large redemptions from MMFs, they may impose liquidity costs on other shareholders in the fund by forcing MMFs to sell assets in an untimely manner. A requirement that MMFs distribute large redemptions in kind, rather than in cash, would force these redeeming shareholders to bear their own liquidity costs and thus reduce the incentive to redeem. Depending on whether redeeming shareholders immediately sell the securities received, redemptions in kind may still generate market effects. Moreover, mandating redemptions in kind could present some operational and policy challenges. The SEC, for example, would have to make key judgments regarding when a fund must redeem in kind and how funds would fairly distribute portfolio securities.

*(d) Insurance for MMFs.* Treasury's Temporary Guarantee Program for Money Market Funds helped slow the run on MMFs in September 2008, and some form of insurance for MMF shareholders might be helpful in mitigating the risk of runs in MMFs. Unlike a private liquidity facility, insurance would limit credit losses to shareholders, so appropriate risk-based pricing would be critical in preventing insurance from distorting incentives, but such pricing might be difficult to achieve in practice. The appropriate scope of coverage also presents a challenge; unlimited coverage would likely cause large shifts of assets from the banking sector to MMFs, but limited insurance might do little to reduce institutional investors' incentives to run from distressed MMFs. The optimal form for insurance—whether it would be private, public, or a mix of the two—is also uncertain, particularly given the recent experience with private financial guarantees.

*(e) A two-tier system of MMFs with enhanced protection for stable NAV funds.* Reforms aimed at reducing MMFs' susceptibility to runs may be particularly effective if they permit investors to select the types of MMFs that best balance their appetite for risk and their preference for yield. Policymakers could allow two types of MMFs: stable NAV funds, which would be subject to enhanced protections such as, for example, required participation in a private liquidity facility or enhanced regulatory requirements; and floating NAV funds, which would have to comply with certain, but not all, rule 2a-7 restrictions (and which would presumably offer higher yields). Because this two-tier system would permit stable NAV funds to continue to be available, it would reduce the likelihood of a substantial decline in demand for MMFs and large-scale shifts of assets toward unregulated vehicles. At the same time, the forms of protection encompassed by such a system would mitigate the risks associated with stable NAV funds. It would also avoid problems that might be encountered in transitioning the entire MMF industry to a floating NAV. Moreover, during a crisis, a two-tier system might prevent large shifts of assets out of MMFs—and a reduction in credit supplied by the funds—if investors simply shift assets from riskier floating NAV funds toward safer (because of the enhanced protections) stable NAV funds. However, implementation of such a two-tier system would present the same challenges as the introduction of any individual enhanced protections (such as mandated access to a private emergency liquidity facility) that would be required for stable NAV funds, and the effectiveness of a two-tier system would depend on investors' understanding the risks associated with each type of fund.

*(f) A two-tier system of MMFs with stable NAV MMFs reserved for retail investors.* Another approach to the two-tier system already described could distinguish funds by investor type: Stable NAV MMFs could be made available only to retail investors, who could choose between stable NAV and floating NAV funds, while institutional investors would be restricted to floating NAV funds. The run on MMFs in September 2008 was almost exclusively due to redemptions from prime MMFs by institutional investors. Such investors typically have generated greater cash-flow volatility for MMFs than retail investors and have been much quicker to redeem MMF shares from stable NAV funds opportunistically. Hence, this approach would mitigate risks associated with a stable NAV by addressing the investor base of stable NAV funds rather than by mandating other types of enhanced protections for those funds. Such a system also would protect the interests of retail investors by reducing the likelihood that a run might begin in institutional MMFs (as it did in September 2008) and spread to retail

funds, while preserving the original purpose of MMFs, which was to provide retail investors with cost-effective, diversified investments in money market instruments. This approach would require the SEC to define who would qualify as retail and institutional investors, and distinguishing those categories will present challenges. In addition, a prohibition on sales of stable NAV MMFs shares to institutional investors may have several of the same unintended consequences as a requirement that all MMFs adopt floating NAVs (see option *(a)* in this section).

*(g) Regulating stable NAV MMFs as special purpose banks.* Functional similarities between MMF shares and bank deposits, as well as the risk of runs on both, provide a rationale for requiring stable NAV MMFs to reorganize as special purpose banks (SPBs) subject to banking oversight and regulation. As banks, MMFs could have access to government insurance and lender-of-last-resort facilities. An advantage of such a reorganization could be that it uses a well-understood regulatory framework for the mitigation of systemic risk. But while the conceptual basis for this option is fairly straightforward, its implementation might take a broad range of forms and would probably require legislation together with interagency coordination. An important hurdle for successful conversion of MMFs to SPBs may be the very large amounts of equity necessary to capitalize the new banks. In addition, to the extent that deposits in the new SPBs would be insured, the potential government liabilities through deposit insurance would be increased substantially, and the development of an appropriate pricing scheme for such insurance would present some of the same challenges as the pricing of deposit insurance. More broadly, the possible interactions between the new SPBs and the existing banking system would have to be studied carefully by policymakers.

*(h) Enhanced constraints on unregulated MMF substitutes*. New measures intended to mitigate MMF risks may also reduce the appeal of MMFs to many investors. While it is likely that some (particularly retail) investors may move their assets from MMFs to bank deposits if regulation of MMFs becomes too burdensome and meaningfully reduces MMF returns, others may be motivated to shift assets to unregulated funds with stable NAVs, such as offshore MMFs, enhanced cash funds, and other stable value vehicles. Such funds, which typically hold assets similar to those held by MMFs, are vulnerable to runs but are less transparent and less constrained than MMFs, so their growth would likely pose systemic risks. Hence, effective mitigation of this risk may require policy reforms targeting regulatory arbitrage. Reforms of this type generally would require legislation and action by the SEC and other agencies.

July 22nd 2011 marks the first anniversary of the signing of the Dodd-Frank Wall Street Reform and Consumer Financial Protection Act , arguably the most comprehensive regulatory effort for financial markets since the 1930s.

Here, at the NYU Stern School of Business, we have spent the better part of the last three years analyzing the financial crisis of 2007-2009. The result of this collaboration has been three books; first dealing with the causes of the financial crisis and how to fix the financial system (*Restoring Stability: How to Repair a Failed System*, Wiley, March 2009), second in providing an economic analysis of the Dodd-Frank Act (*Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance*, Wiley, November 2010), and third addressing an important omission in the Act, namely the government sponsored enterprises (*Guaranteed to Fail: Fannie Mae, Freddie Mac and the Debacle of Mortgage Finance*, Princeton University Press, March 2011).

In recognition of the first anniversary of the Dodd-Frank Act's enactment, The Pew Charitable Trusts and the NYU Stern School organized the conference "Dodd-Frank: One Year On" at Pew's offices in Washington, DC. The Conference brought together academics, policy makers and architects of the Dodd-Frank reforms and some of the regulators who are shaping and implementing them. The eBook provides summary remarks and analysis by the participants at this conference offering unique perspectives into current thinking on the Dodd-Frank Act, where the regulatory process stands one year out, and upcoming challenges in the years ahead.

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