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# New horizons for risk management: Shifting rules, shifting strategies

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The Chicago Fed's Supervision and Regulation Department, in conjunction with DePaul University's Center for Financial Services, sponsored its fifth annual Financial Institution Risk Management Conference on April 10–11, 2012. The conference focused on bank stress tests conducted by federal regulators, the impact of the Dodd–Frank Wall Street Reform and Consumer Protection Act (DFA), and housing risk.

Some materials presented at the conference are available at www.chicagofed.org/webpages/events/2012/risk_conference.cfm.

**This** *Chicago Fed Letter* summarizes the presentations and discussions of the regulators, academics, risk-management professionals, and business leaders in attendance. To kick off the conference, Ali Fatemi, DePaul University, noted that Europe's sovereign debt crisis appears to loom over the global economy, creating obstacles for recovery. Carl R. Tannenbaum, Federal Reserve Bank of Chicago, pointed out the banking industry, while still working through credit problems, is now beginning to look forward to a point when it will be operating more normally. That said, much uncertainty about the DFA's ultimate impact remains.

### Dynamic capital supervision

Daniel K. Tarullo, Governor, Board of the Governors of the Federal Reserve System, explained that while comprehensive bank stress testing had been discussed among academics, analysts, and regulators before the recent financial crisis, it was only during the crisis that this tool was used across large financial services firms concurrently. In February 2009, the federal bank regulatory agencies,[1] led by the Fed, created a stress test and required the nation's 19 largest bank holding companies (BHCs) to apply it as part of the Supervisory Capital Assessment Program (SCAP). The goal of the stress test was to determine how much capital a BHC would need to ensure its viability in an adverse scenario.

Tarullo stated the decision by the Fed to release the stress test results "proved to be an important step in establishing market and public confidence that the U.S. financial system would weather the crisis." Tarullo continued by saying SCAP changed attitudes toward supervision within the Fed, since the traditional static views of capital ratios were enhanced by SCAP's forward-looking analysis. The simultaneity of the stress test across multiple BHCs also introduced a macroprudential dimension, which provided insights into the condition of the entire financial system. Drawing on the lessons learned in the 2009 stress test, Congress included a requirement for stress testing in the DFA, which passed in 2010.

The SCAP's horizontal, interdisciplinary approach to stress testing was carried forward into the Fed's Comprehensive Capital Analysis and Review (CCAR) of 2011 and 2012; in both years, a review of firm-specific capital plans was added to enhance testing. In November 2011, the Fed issued a new regulation formally requiring large banking organizations to submit annual capital plans.

Tarullo stated the 2012 CCAR stress test, developed in fall 2011, was based on a very adverse scenario. Under this stress test, losses for the 19 firms totaled $650 billion, which would be high based on historical standards, and the loan-loss rate was 7.2%, compared with a loss rate of about 5.4% over the peak eight quarters of losses during the recent financial crisis. Despite the stringency of the stress test, only four firms fell below minimum capital ratios. A comparison with the 2009 SCAP results indicates capital ratios have improved since the crisis, Tarullo stated.

According to Tarullo, stress testing serves many purposes—such as promoting and assessing the capacity of BHCs to understand and manage their capital positions; giving regulators opportunities to evaluate firms' capital distribution plans (against their overall capital positions); and providing regular assessments of whether large BHCs will meet capital requirements in accordance with regulatory agreements developed by the Basel Committee on Banking Supervision[2] as they take effect in the United States.

**Stress testing and capital planning**

Brad Vander Ploeg, Federal Reserve Bank of Chicago, moderated the stress testing and capital planning panel. He stated capital stress testing is a dynamic, forward-looking exercise; while the results are important, the thinking that goes into designing the testing is just as important.

David Palmer, Board of Governors of the Federal Reserve System, said stress testing is not the endgame; rather, it is a useful tool that helps with capital planning and liquidity management as well as overall risk management. He also acknowledged the size of banking organizations matters when designing the testing framework and analyzing the test results.

Peter Christoffersen, Rotman School of Management, University of Toronto, discussed the differences between micro and macro stress testing. In micro stress testing, bankers would develop a large number of different market scenarios to determine the impact on a known portfolio of assets. Christoffersen indicated macro stress testing would be used to learn about systemic risks and financial stability through modeling various macroeconomic and financial market scenarios. With macro stress testing, the challenge for both bankers and regulators is to identify relevant risk factors, whose importance may be differentiated across banks. Christoffersen concluded that macro stress testing requires a better understanding of the linkages between macroeconomic and financial variables.

> The regulatory response in the aftermath of the financial crisis is having a profound impact on financial organizations' capital planning and risk management.

David J. Long, of Raymond James & Associates Inc., gave an institutional investor view of stress testing. He said that it is expensive for banks to assemble the data required to conduct the tests and that stress testing takes up management's time that could be spent focusing on the day-to-day issues of running the bank. Despite these costs, Long stated stress testing has been quite helpful by signaling the health of the banking system to market participants; defining how much capital can be returned to shareholders; and forcing banks to examine capital levels under extreme and previously unforeseen economic conditions.

**A CEO's perspective on risk**

Richard Davis, U.S. Bancorp, stated the new financial services environment will be shaped by legislation, regulation, supervision, and enforcement. As the CEO of a regulated entity, Davis said he does not see any value in complaining about regulation; he said such complaints are "a burden on the company." On the risk-management front, Davis said he does not view the chief risk officer as someone who merely collects data, but as someone who resolves issues across business lines regardless of the impact on revenues.

**Chief risk officer perspectives**

Todd Vermilyea, Board of Governors of the Federal Reserve System, moderated the chief risk officer panel and posed questions such as what keeps you awake at night and how does your firm use data. David Sutter, Discover Financial, explained one of his biggest concerns is information security. Consumer demand for data increases as technology advances. Each customer request requires electronic data to trade hands, adding risk with each exchange; customer requests have become even more complex with smartphones being used to pay bills, transfer funds, and make deposits (with photographed check images). Additionally, the need for data storage is increasing exponentially (with regulatory requirements only adding to the demand), heightening the risk of information security breaches.

Diane Kerr, State Farm, shared her risk-management philosophy, which is to build a robust risk-management infrastructure designed to integrate, coordinate, and facilitate proactive risk-management practices throughout the enterprise. The development of a board-level risk committee with an independent director has led to an improvement in defining and documenting the firm's risk appetite, she explained. Risk-management procedures were in place during the financial crisis, but formalizing the practices remains a challenge.

Kevin Moffitt, First Midwest Bank, said the "fraud risks are huge" for electronic payments and even acknowledged some security issues are beyond management's ability to control. However, banks are responsible for monitoring potential issues and developing solutions to minimize adverse impacts. First Midwest Bank's view of risk management has been profoundly influenced by the financial crisis and the DFA. The bank's management is focused on enhancing corporate governance; adopting a risk appetite definition; and implementing an enterprise-wide risk-management framework.

**Financial supervision challenges**

Thomas Hoenig, former president, Federal Reserve Bank of Kansas City, discussed how establishing a culture of financial stability matters as much as making and following the rules. He said the reforms under DFA have all been introduced before, but financial markets skirted them. Supervisory authority existed, Hoenig noted, but it was used lightly because of political pressure and the misperception that free markets, with generous public support, could self-regulate. An expansion of the federal safety net and a relaxation of the rules within this net encouraged the acceptance of greater risk-taking throughout the banking system, especially at those institutions deemed "too big to fail." Such factors were key contributors to the financial crisis. Hoenig argued that following the crisis, the incentives are still to "leverage balance sheets and take risks." Regulators should set a new tone to enhance the stability of the financial system.

**Systemic and liquidity risks**

As the moderator for the panel on systemic and liquidity risk, Kristin LaPorte, Federal Reserve Bank of Chicago, stated that historically a chain of bank failures was an important indicator of systemic risk. However, another sign of systemic risk could be the freezing up of financial markets in response to solvency concerns, resulting in increases in the cost of capital or decreases in its availability.

Steven Schwarcz, Duke University School of Law, identified at least four market failures that could impair the ability of financial markets to function efficiently. The first one is the herd mentality in investment choices, coupled with an overreliance on commonly available (and sometimes questionable) information such as credit rating agencies' ratings; this failure results from investors tending to be complacent and being prone to panic. The second failure is the misalignment of the financial services firms' short-term compensation schemes for their management with the firms' long-term interests. The third one is the complexity of financial market products, which can exacerbate the first two market failures. The fourth failure is that the actions of some market participants often lead to problems for other market participants and even non-market participants because of a lack of sufficient self-monitoring. All of these failures contributed to the recent financial crisis. To stabilize firms and financial markets in the wake of these failures, liquidity was injected by central banks. Schwarcz contended the DFA undercuts the Fed's ability to provide liquidity by limiting its power to act as the lender of last resort—a vital safeguard if used judiciously.

Mary Aiken, Board of Governors of the Federal Reserve System, stated the regulatory agencies' key policy goals are for financial institutions to have more self-insurance against sudden declines in liquidity and to raise the awareness and importance of liquidity risk through changes in the firms' culture. Aiken shared some steps for changing firms' culture, including stress testing and liquidity planning. Aiken urged the boards of directors at financial firms to regularly discuss liquidity risk.

Leonard Matz, Liquidity Risk Advisors, stated most banks have ignored or barely noticed federal regulatory agencies' guidance on liquidity management because they are too busy becoming compliant with DFA and other new regulations. According to Matz, there are presently not enough resources at financial services firms to adequately address liquidity risk; additionally, only a few banks are connecting stress tests to contingency planning or the strategic management of their liquidity vulnerabilities.

**DFA's impact**

Moderating the DFA panel, Kevin Van Solkema, The Private Bank, said the act has served several purposes: It has created a process for liquidating failed firms, implemented regulation for over-the-counter derivatives, and strengthened risk-management governance of financial institutions. Additionally, Jeffrey Brown, Promontory Financial Group, discussed Title 10 of DFA, which established the Consumer Financial Protection Bureau (CFPB). The statute calls for the CFPB to protect consumers against abusive, unfair, and deceptive practices by financial services firms.

Molly Mahar, Board of Governors of the Federal Reserve System, stated DFA seeks to mitigate risk and promote financial stability for the largest financial institutions through the establishment of the Financial Stability Oversight Council (FSOC); the designation of certain nonbank financial companies as systemically important financial institutions; and the implementation of the Fed's enhanced prudential standards.

Til Schuermann, of Oliver Wyman, noted that while stress testing is not a new concept, stress testing regulation is a new phenomenon. Additionally, Schuermann explained that the forward-looking analysis conducted annually as part of the DFA-mandated stress test is a new multivariate approach, which incorporates all scenarios and factors into a single analysis. Contrary to DFA stress testing, the pre-SCAP static stress testing used a single-risk-factor shock to a product or business line.

**Housing risk**

As moderator for the housing risk panel, Tom Neary, Lifeline Assets, asked panelists about the current state of the housing market. Douglas Duncan, Fannie Mae,



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discussed the breakdown in controls and risk assessment in the financial system during the crisis. Duncan also noted the recent burst of optimism in the housing market may indicate that it has hit the bottom. However, Duncan predicted the housing market would move even lower in 2012 before actually bottoming out in 2013, because increases in the rental and multifamily housing markets were offset by recent vintages of FHA (Federal Housing Administration) loans not performing well and the backlog of foreclosed homes not being sold off rapidly enough. Further, Duncan argued the Fed's interventions to bring down interest rates are helping the housing market recover.

Chris Mayer, Columbia Business School, was more pessimistic about housing risk, noting the unusual course of the current recovery in the housing market. Mayer noted 6.5% of mortgages are sitting in some state of foreclosure. Performance on mortgage loans is very different from that on auto loans or credit cards. Delinquencies for both auto loan and credit card payments have come down considerably. First-mortgage payment delinquencies are still at very high levels, even though they have declined.

Bill Longbrake, of the Robert H. Smith School of Business, University of Maryland, noted that earlier this year the federal government and 49 state attorneys general reached a $25 billion settlement agreement with the nation's five largest mortgage servicers over abuses in mortgage loan servicing and foreclosure procedures.[3] Even so, much work remains to reduce housing risk. For instance, the role of the CFPB and the future of Fannie Mae and Freddie Mac need to be defined more sharply. Longbrake said loan modifications have been declining; however, more modifications are coming through the private sector rather than the federal government's Home Affordable Modification Program (HAMP).[4] HAMP has been effective in reducing mortgage payments by 37% on average, but redefault rates for HAMP loans are still high because the program currently deals with only first-mortgage debt, not the total debt of the borrower. Despite such shortcomings, HAMP was extended through the end of 2013, with broader eligibility standards.

### Summing up

The regulatory response in the aftermath of the financial crisis is having a profound impact on financial organizations' capital planning and risk management. Stress testing, liquidity planning, and enhanced consumer protection are but three of the initiatives introduced by the DFA. The hope is that refocused and reinforced risk management will place firms on sounder footing as they continue to address challenges in the current economic and financial environment.

1 The agencies that participated in the 2009 SCAP were the Board of Governors of the Federal Reserve System (along with the Federal Reserve Banks), the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency.

2 For further details, see www.bis.org/bcbs/.

3 For details on the settlement, see www.justice.gov/opa/pr/2012/February/12-ag-186.html.

4 For details on HAMP, see www.makinghomeaffordable.gov/programs/lower-payments/Pages/hamp.aspx.