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Statement of the Shadow Financial Regulatory Committee on
Strengthening Stress Tests

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The Dodd-Frank Act mandates the Federal Reserve Board (Fed) to apply stress tests to provide information about the capital strength of Bank Holding Companies (BHCs) that have at least \$50 billion in total assets and of the banking system as a whole. While the current approach has strengthened capital adequacy of the banking system, the Shadow Financial Regulatory Committee believes stress scenarios can be enhanced by supplementing the current, top-down approach with a broader range of bottom-up data that could better highlight growing systemic vulnerabilities.

Banking organizations have now reported three years of stress test results as part of the Comprehensive Capital Analysis and Review (CCAR) that the Fed devised to implement its obligation under the Dodd-Frank Act. In March 2015, the Fed reported the results for 31 large bank holding companies, both foreign and domestic.¹ The present approach can be characterized as top down. The Fed specifies three hypothetical scenarios: a base-line scenario, an adverse scenario, and a severely adverse scenario. In this latest round of stress tests, for the first time all banks proved to have adequate capital at the end of even the most severely adverse stress scenario.

The base-line scenario closely resembles the average of projections reported in surveys of economic forecasters. In the adverse scenario, the US experiences a mild recession. In the severely adverse scenario, banks not only experience a domestic recession but also a decline in global economic activity and a shock to asset prices.¹ Although the adverse scenario is designed to be less stark than the severely adverse scenario, the pattern of price changes that accompany the decline in domestic economic activity may differ. This provides the Fed with additional information about the impact of various conditions that might accompany a recession and enable it to identify vulnerabilities that should be tested in future stress tests.

Institutions must also produce their own stress tests twice a year. Although these BHC stress tests must incorporate the scenarios specified by the regulators, they must also be tailored specifically to stress a BHC's key vulnerabilities and idiosyncratic risks. These should be based on factors such as the BHC's particular business model, mix of assets and liabilities, geographic footprint, portfolio characteristics and revenue drivers. They also self-identify scenarios that would significantly impact their institutions.

Both supervisors and institutions must meet the analytic challenge of translating the hypothetical stress scenarios into implications for an institution's portfolios, funding costs and risk profiles, and the resulting cash flows over nine quarters. The Fed has demanded increasingly granular models to ensure that the idiosyncratic details of each institution are taken into account.

This CCAR process has enabled supervisors to be more forward looking in their oversight of banks and has strengthened the capital adequacy of the banking system. Nonetheless, the Shadow Financial Regulatory Committee believes that a wider range of information can be used to improve the CCAR process by specifying scenarios that will better identify weaknesses in the financial system and the institutions that may be most adversely affected. The current top-down approach should be supplemented with an elevation of emphasis on (1) the institutions' self-identified scenarios to take advantage of the information gleaned from banks; (2) more traditional inspections and examinations, and (3) market data. This information is already available and would not impose additional, onerous reporting requirements.

First, BHCs are required to produce their own stress tests, but the publicly reported results heavily emphasize the scenarios specified by the Fed. This would not matter if regulatory scenarios were infallible, but shocks may occur in a number of different dimensions that may not be captured in a base line, adverse, or severely adverse scenario. Since the BHCs are already required to identify the idiosyncratic risks arising from their business models and geographic or product concentrations, the current information could be meaningfully supplemented by asking each institution to consider its three greatest vulnerabilities identified in the banks' self-identified scenarios and then require banks to stress these vulnerabilities to the minimum regulatory capital requirement. If, for example, a bank specializes in commercial real estate lending, its most serious vulnerability is to real estate conditions. It

¹ See "2015 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule, Board of Governors of the Federal Reserve System, Oct 23, 2014.

would be asked to report how large a collapse in real estate prices it could absorb and remain in compliance with its regulatory capital requirements. Although no one can predict how large the fall in real estate prices might be, this number would provide information about the magnitude of such a shock the institution is prepared to withstand. By collating reports from the largest institutions on their most significant vulnerabilities, the Fed may be able to judge whether the banking system is vulnerable to some kinds of shocks that are not highlighted in the three regulatory stress scenarios specified each year and enable the Fed to produce more insightful stress tests.

Second, the ratings and evaluations of bank examiners might be analyzed to provide additional insights into trends in the vulnerability of banks to adverse scenarios. Several statistical tools might be deployed, but the FDIC researchers have produced some very promising results by using Markoff Chain simulations to extract information about increases in vulnerability to crisis from examination reports. These data already exist, but might be used to design more probing stress tests.

Third, financial market data provide an additional source of information about the overall vulnerability of individual, large banks. Researchers at New York University have focused on a market-based test of vulnerability to a shock by looking at the amount the value of a bank's equity would decline in response to a downturn in the overall stock market (the downside beta of a bank's equity). They estimated the vulnerability of individual banks to an overall market decline of 40% that are remarkably close to the cash flows generated in the CCAR analysis. These data appear useful for identifying vulnerabilities among a cross-section of banks and may help officials determine capital adequacy.

Consideration of these additional sources of information may reduce the risk that both regulators and banks may inadvertently focus on scenarios that would not cause serious harm and neglect additional sources of risk that should be taken into account.