



Evolving Micro- and Macroprudential Regulations in the US: A Primer

Diana Hancock

Board of Governors of the Federal Reserve System

Achieving Financial Stability: Challenges to Prudential Regulation
Nineteenth Annual International Banking Conference, November 3-4, 2016
Cosponsored by the Federal Reserve Bank of Chicago and the European Central Bank

The views expressed are those of the author and should not be interpreted as representing the views of the FOMC, its principals, the Board of Governors of the Federal Reserve System, or any other person associated with the Federal Reserve System.

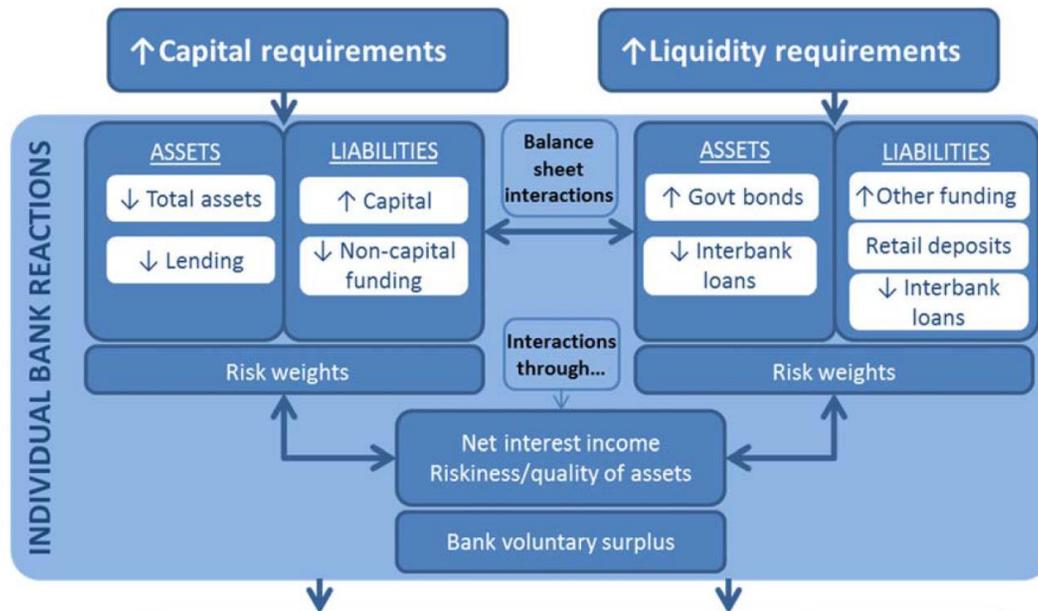
What's New?

- Academic research has improved our understanding around the transmission mechanisms for capital and liquidity regulatory requirements to economic activity
 - Impacts on individual entities
 - Impacts on aggregate leverage and liquidity as well as financial stability
 - Benefits and costs
- Prudential requirements that vary with the size or the systemic importance of specific entities
- A different approach for regulating foreign banking organizations
- Heightened prudential requirements for some nonbanking organizations, including financial market utilities
- Proposed regulations for insurance companies supervised by the Federal Reserve
- On the macroprudential policy front, there is a new framework for implementing the countercyclical capital buffer

Academic Research on Transmission Mechanisms

Capital and liquidity requirements

Transmission Mechanisms of Capital and Liquidity Regulatory Requirements to Economic Activity...



Changes to capital and liquidity requirements directly influence bank reactions through two key interactions:

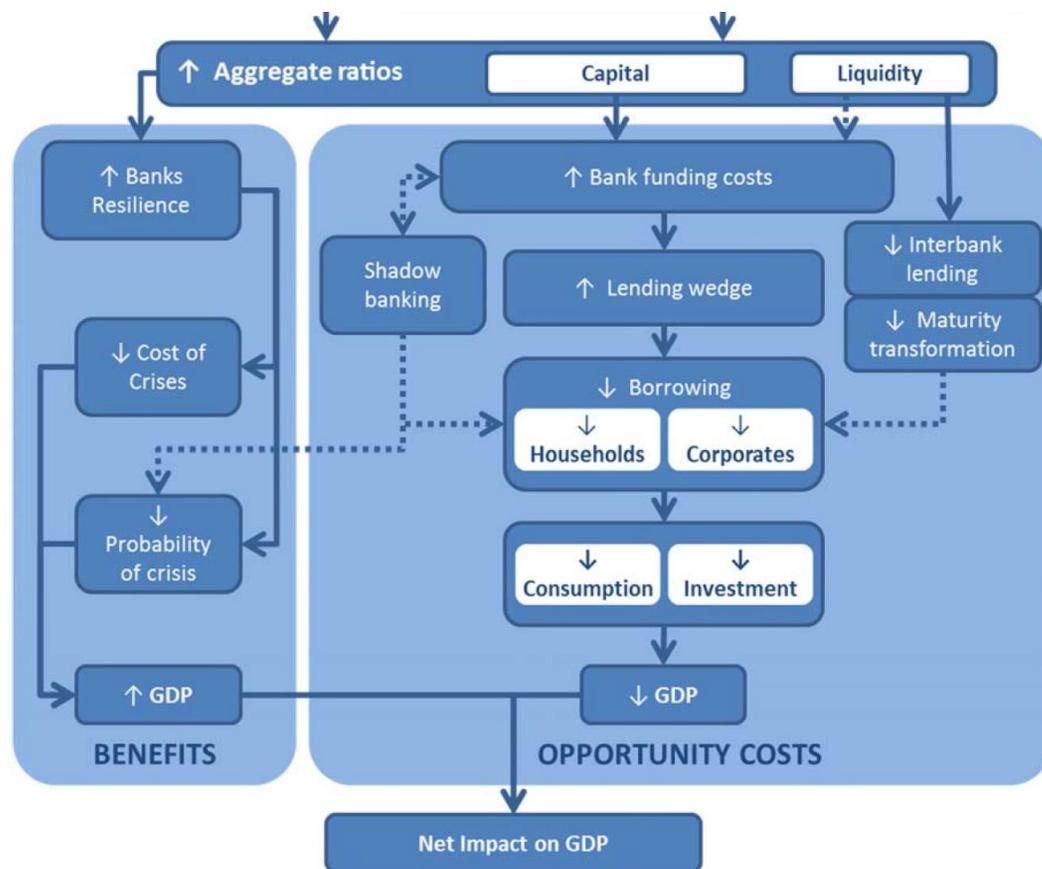
- 1. balance sheet interactions:** changes to a bank's balance sheet in response to changing capital requirements will impact liquidity management, and vice versa. For example, banks reduce interbank loans and purchase government bonds in response to an increase in the regulatory liquidity buffer which, in turn, can reduce risk-weighted assets and thereby boost the capital ratio, helping to meet any increase in capital requirements
- 2. other interactions:** changes to banks' balance sheet composition will change income earned as well as the quality of both assets (by, for example, reducing the amount of risky assets) and capital (by, for example, requiring more CET1 equity). These changes, in turn, can trigger further changes to banks' balance sheets

An indication of the likely direction of change given an increase in regulatory requirements is shown where the literature is (more or less) unambiguous about the direction of the banks' reaction

See Basel Committee on Banking Supervision (2016), "Literature Review on Integration of Regulatory Capital and Liquidity Instruments," Working Paper No. 30, March.

...Transmission Mechanisms of Capital and Liquidity Regulatory Requirements to Economic Activity

The reaction of individual banks can then impact aggregate capital and liquidity ratios



Changes to aggregate capital and liquidity ratios have implications for aggregate economic activity – both positive (benefits) and negative (costs)

See Basel Committee on Banking Supervision (2016), “Literature Review on Integration of Regulatory Capital and Liquidity Instruments,” Working Paper No. 30, March.

On the benefits side

- Higher capital and liquidity ratios improve the resilience to shocks of both individual banks and the financial system itself
- Improved resilience, in turn, lowers both the probability of a financial crisis and the size of the economic loss in the event that a crisis does occur
- The benefit is the expected loss that is avoided by having higher capital and liquidity requirements

On the cost side

- Higher capital requirements directly increase bank funding costs which, in turn, reduce borrowing by households and non-financial firms
- Changes to liquidity requirements reduce interbank lending and maturity transformation, which also impacts aggregate borrowing
- Lower borrowing reduces aggregate consumption and investment and, eventually, gross domestic product (GDP)

Overall, **the net benefits of regulation are positive** as the expected loss that is avoided in the event that a crisis occurs is offset by the opportunity cost of reduced economic activity during non-crisis periods

Prudential Requirements Vary Across Firms

The size or systemic importance of an entity matters

Regulatory Differentiation in the US Starts with the Dodd-Frank Act (DFA)

- DFA creates prudential requirements that vary with the size or systemic importance of banking organizations
 - It creates thresholds for various prudential regulations at asset sizes of \$1 billion, \$10 billion, and \$50 billion
- Sec. 165 of DFA requires the Federal Reserve to establish enhanced prudential standards for Bank Holding Companies (BHCs) with total assets of \$50 billion or more and other financial firms designated as systemically important by the Financial Stability Oversight Council (FSOC)
 - These standards include capital, liquidity, risk management, resolution planning and single-counterparty limits
 - These standards increase in stringency depending on the size, interconnectedness, role in credit intermediation, and other factors specified in the law
 - In addition, firms with greater than \$50 billion in assets are subject to annual supervisory stress tests

Source: Davis Polk & Wardwell LLP, "US Bank Holding Companies: Overview of Dodd-Frank Enhanced Prudential Standards Final Rule" at <http://usbasel3.com/EPS/>

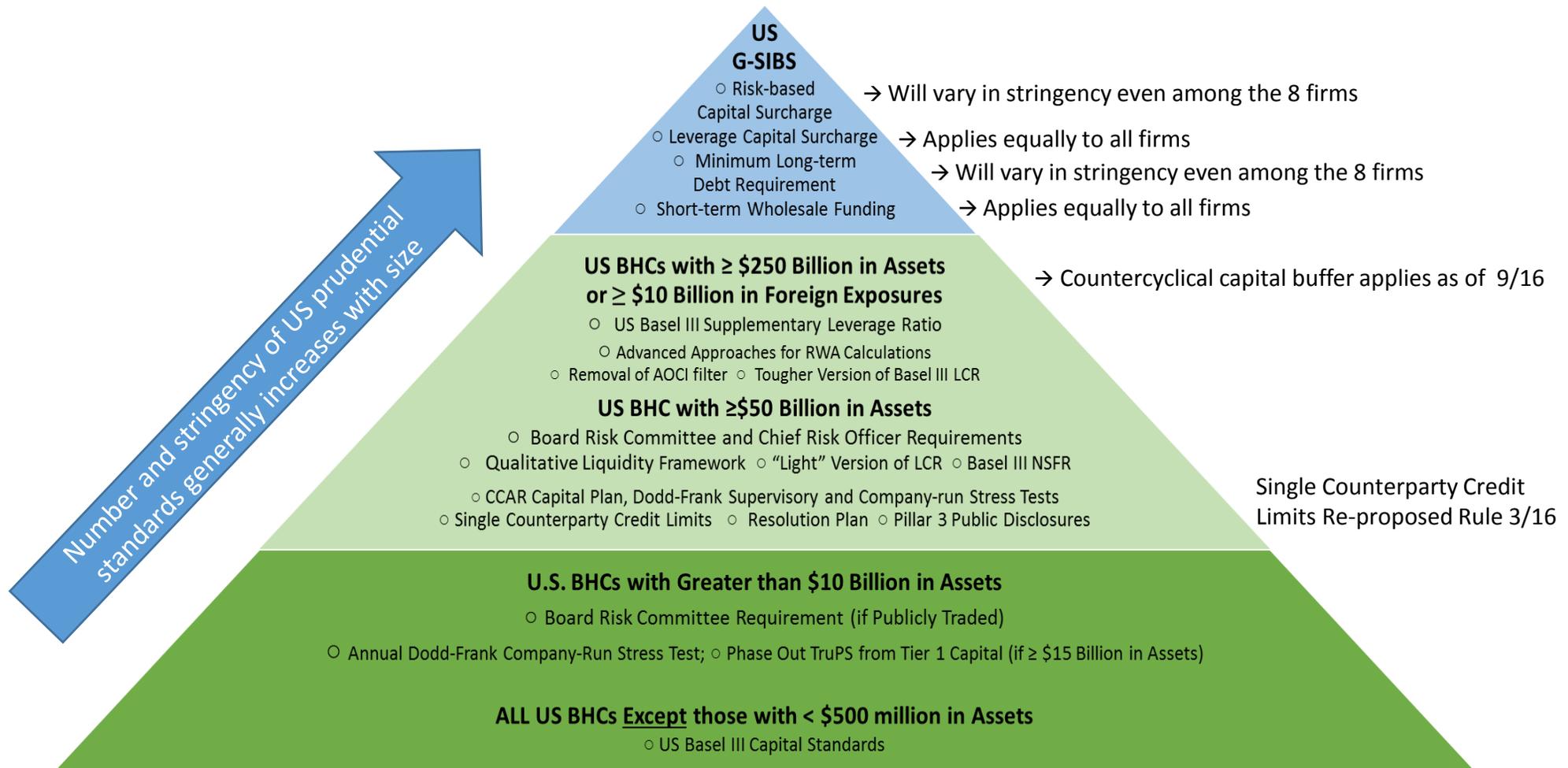
The Federal Reserve Created Three Categories within the Universe of Firms with Assets \geq \$50 Billion

- Firms with assets between \$50 billion and \$250 billion
 - are subject only to basic enhanced prudential standards
- Firms with at least \$250 billion or \$10 billion in on-balance-sheet foreign assets
 - are also subject to more stringent requirements, including advanced approaches for risk-based capital requirements, the supplementary leverage ratio, the countercyclical buffer, and the full-scope liquidity coverage ratio
- The eight US BHCs that have been designated as global systemically important banking organizations (G-SIBs)—JP Morgan Chase, Citigroup, Bank of America, Goldman Sachs, Morgan Stanley, Bank of New York Mellon, State Street, and Wells Fargo—will be subject to an additional set of regulatory requirements

Sources: D.T. Tarullo (March 19 2015) “Application of Enhanced Prudential Standards to Bank Holding Companies,” before Committee on Banking, Housing and Urban Affairs, US Senate; Davis Polk & Wardwell LLP “US Bank Holding Companies: Overview of Dodd-Frank Enhanced Prudential Standards Final Rule” at <http://usbase13.com/EPS/>

Financial Stability Board, “2015 Update of List of Global Systemically Important Banks” at <http://www.fsb.org/wp-content/uploads/2015-update-of-list-of-global-systemically-important-banks-G-SIBs.pdf>

The Prudential Landscape for US BHCs is Multifaceted



Source: Davis Polk & Wardwell LLP, “US Bank Holding Companies: Overview of Dodd-Frank Enhanced Prudential Standards Final Rule” at <http://usbasel3.com/EPS/>

Foreign Banking Organizations, Nonbanks, and Financial Market Utilities

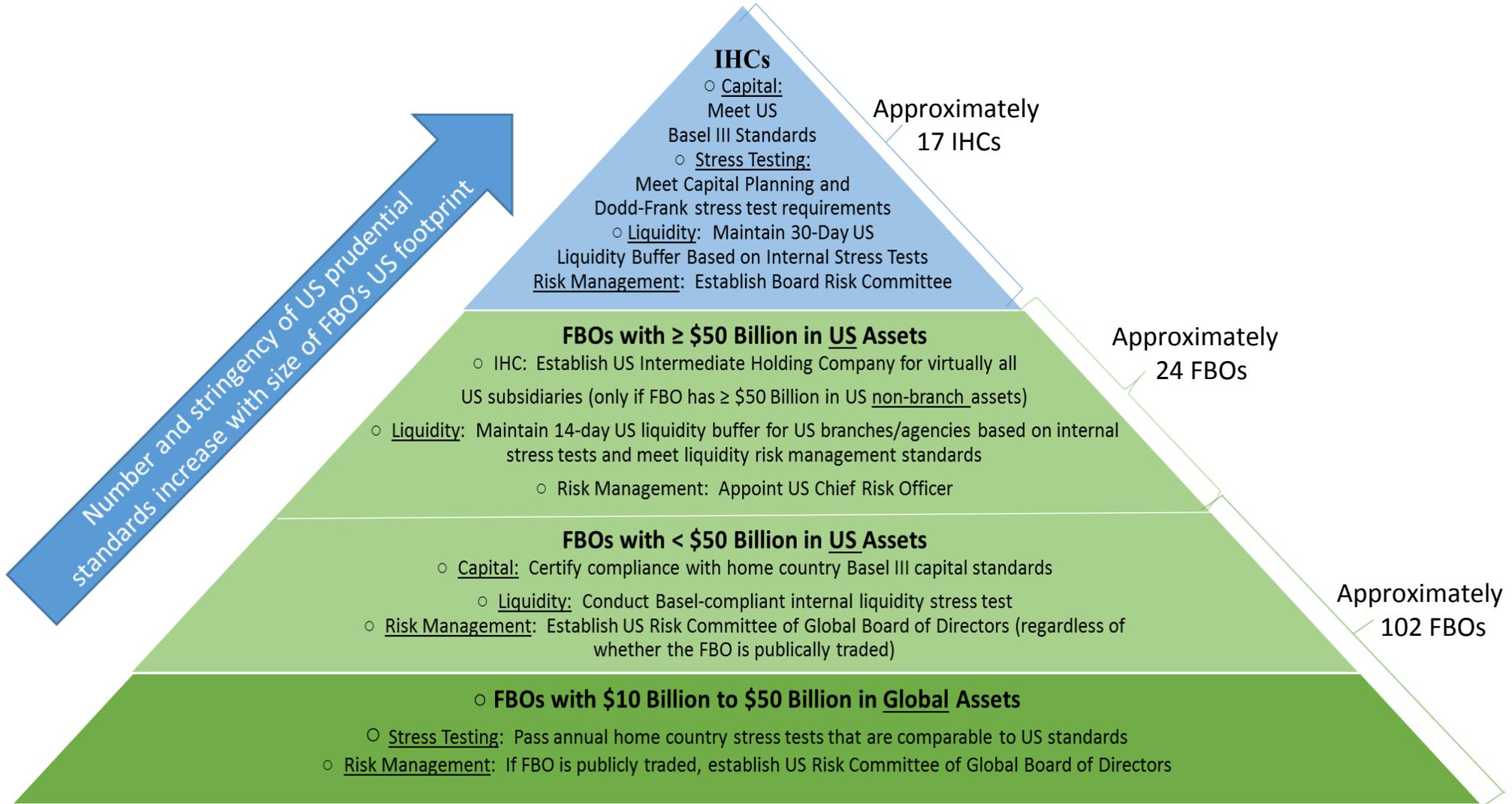
A new approach

Regulation of Foreign Banking Organizations (FBOs)

- Sections 165 and 166 of DFA instruct the Federal Reserve to implement enhanced prudential standards for large foreign banks, it
 - bolsters capital requirements for financial holding Companies (FHCs), including foreign FHCs, by extending the well-capitalized and well-managed requirements beyond US bank subsidiaries to the top-tier holding company
 - removes an exemption from BHC capital requirements that had been granted by the Federal Reserve's Supervision and Regulation Letter 01-01
- A new approach was designed to
 1. address vulnerabilities that were created by a shift in foreign banking activities toward often complex capital market activities and a significant reliance on short-term funding, which is associated with run risk
 2. maintain the principle of national treatment and allow foreign banks to continue to operate in the US on an equal competitive footing
 3. reduce the ability of large foreign banks to restructure their US operations to minimize the impact of US regulatory changes
- Require a top-tier US intermediate holding company (IHC) over all US bank and nonbank subsidiaries (IHC) for the largest US operations of foreign banks
- Require liquidity standards for large US operations of foreign banks

Sources: D.K. Tarullo (November 28, 2012) "Regulation of Foreign Banking Organizations" at Yale School of Management Leaders Forum;
Davis Polk & Wardwell LLP, "Foreign Banks: Overview of Dodd-Frank Enhanced Prudential Standards Final Rule" at <http://usbasel3.com/EPS/>

New US Regulatory Landscape for FBOs



Sources: D.K. Tarullo (November 28, 2012) "Regulation of Foreign Banking Organizations" at Yale School of Management Leaders Forum;
 Davis Polk & Wardwell LLP, "Foreign Banks: Overview of Dodd-Frank Enhanced Prudential Standards Final Rule" at <http://usbasel3.com/EPS/>

Heightened Prudential Standards for Some Nonbanking Organizations

- The final rule that strengthened prudential standards for US BHCs and FBOs (issued on February 18, 2014) does not apply to nonbank financial companies that are designated by the FSOC for Federal Reserve supervision
- Instead, the Federal Reserve Board said “it will apply enhanced prudential standards to these institutions through a subsequently issued order or rule following an evaluation of the business model, capital structure, and risk profile of each designated nonbank financial company”

Source: <http://www.federalreserve.gov/newsevents/press/bcreg/20140218a.htm>

For Example, Enhanced Prudential Regulations were Applied to GE Capital on July 20, 2015

- Because of the substantial similarity of GECC's current activities and risk profile to that of a large BHC, the enhanced prudential standards that would be applied to GECC are similar to those that apply to large BHCs, but are tailored to reflect the unique characteristics of GECC
- In light of the plan that had been announced and that was in the process of execution by General Electric (GE), parent company of GECC, to substantially shrink GECC's systemic footprint and retain only those business lines that support GE's core industrial businesses, the final order provided for the application of enhanced prudential standards in two distinct phases

Source: Federal Register Notice at <https://www.federalregister.gov/articles/2015/07/24/2015-18124/application-of-enhanced-prudential-standards-and-reporting-requirements-to-general-electric-capital>

GE Capital: Enhanced Prudential Regulations

July 8, 2013

The Financial
Stability Oversight Council,
FSOC, voted to designate General
Electric Capital Corporation, Inc.



Phase 1 standards designed to help ensure that GECC maintains high-quality regulatory capital and liquidity in amounts commensurate with its risk as it executes its divestiture plan

PHASE ONE – Jan 1, 2016

- Risk-based Capital Requirement
 - Leverage Requirement
- Liquidity Coverage Ratio Rule
- Risk Reporting Requirements

On June 28, 2016, the FSOC voted to rescind the designation of GE Capital Global Holdings, LLC. It is no longer subject to prudential regulations in the US

Phase 2 standards would only be applied if GECC was still designated by FSOC prior to January 1, 2018

PHASE TWO – Jan 1, 2018

- Risk-based Capital Requirement
- Leverage Requirement
- Liquidity Coverage Ratio Rule
- Liquidity Risk-Management
- Risk Reporting Requirements
- General Risk Management
 - Capital Planning
 - Stress Testing
- Restrictions on Intercompany Transactions
- Governance Requirements

Regulation of Financial Market Utilities

- Financial market utilities (FMUs) are multilateral systems that provide the infrastructure for transferring, clearing, and settling payments, securities, and other financial transactions among financial institutions or between financial institutions and the system
- In cases where, among other things, a failure or a disruption to the functioning of an FMU could create, or increase, the risk of significant liquidity or credit problems spreading among financial institutions or markets and thereby threaten the stability of the U.S. financial system, the FMU may be designated as systemically important by the FSOC under Title VIII of the Dodd-Frank Act
- To date, the FSOC has designated 8 FMUs as systemically important. The Supervisory Agency (i.e. the Federal agency that has primary jurisdiction over a designated FMU under Federal banking, securities, or commodity futures laws) is indicated in parentheses:
 - The Clearing House Payments Company, L.L.C., on the basis of its role as operator of the Clearing House Interbank Payments System – (Federal Reserve Board)
 - CLS Bank International – (Federal Reserve Board)
 - Chicago Mercantile Exchange, Inc. – (Commodity Futures Trading Commission (CFTC))
 - The Depository Trust Company – (Securities and Exchange Commission (SEC))
 - Fixed Income Clearing Corporation – (SEC)
 - ICE Clear Credit L.L.C. – (CFTC)
 - National Securities Clearing Corporation – (SEC); and
 - The Options Clearing Corporation – (SEC)
- FMUs supervised by the Federal Reserve Board are subject to
 - Part I of its Payment System Risk policy that incorporates the risk-management standards in the CPSS-IOSCO Principles for Financial Market Infrastructures (PFMI)

On June 3, 2016, the Federal Reserve Proposed Regulatory Capital Frameworks for Supervised Insurers

- “Building Block” Approach
 - Starting point, existing state and foreign risk-based capital requirements for insurance company subsidiaries and the Federal Reserve’s risk-based capital standards for banking, non-insurance and unregulated subsidiaries
 - A firm’s aggregate capital requirement would equal “the sum of the capital requirements at each subsidiary, with adjustments to address items such as differences in accounting and to eliminate inter-company transactions, and scalars to reflect other cross-jurisdictional differences such as differing supervisory objectives and valuation approaches
 - The second capital framework, referred to as the “consolidated approach” and intended for the Designated Insurer SIFIs, would “categorize an entire insurance firm’s assets and insurance liabilities into risk segments, apply appropriate risk factors to each segment at the consolidated level, and then set a minimum ratio of required capital”
 - Specific risk weights, risk segments and capital adequacy ratios to be used under the consolidated approach, the specific scalars to be used in the building block approach, and the definition and potential tiering of qualifying capital under both proposed frameworks were not specified

Sources: Federal Register Notice at <https://www.gpo.gov/fdsys/pkg/FR-2016-06-14/pdf/2016-14004.pdf>; Sullivan & Cromwell, “Federal Reserve Proposes Regulatory Capital Frameworks for Supervised Insurers and Enhanced Prudential Standards for Insurers Designated as Systemically Important,” June 7, 2016

On June 3, 2016, the Federal Reserve also Proposed Prudential Standards for Insurers Designated as Systemically Important

- For example, the proposed rule would require designated insurer SIFIs to
 - create and maintain an enterprise-wide risk management framework and implement related policies and procedures
 - Establish and maintain a risk committee of the board of directors responsible for the company's risk management policies and framework, and to appoint a chief risk officer and chief actuary
 - focus on liquidity
 - produce and regularly update comprehensive enterprise-wide cash-flow projections over short- and long-term horizons
 - establish, maintain, and periodically test a contingency funding plan for responding to a liquidity crisis, including performing quantitative assessments to identify liquidity stress events and available funding sources
 - establish and maintain procedures for monitoring collateral, legal entity liquidity risk, and intraday liquidity risk
 - conduct “rigorous and regular” liquidity stress testing and scenario analysis under normal and adverse conditions over four stress-testing time horizons: 7 days, 30 days, 90 days and one year; and
 - maintain a liquidity buffer, comprised of highly liquid, unencumbered assets, sufficient to meet net cash outflows over a 90-day period

Macroprudential Policy

New framework for countercyclical capital buffer

Why is Macroprudential Policy Important?

- Consensus is emerging that such policies are necessary for financial stability
 - Can provide new levers to curb dangerous credit booms and excessive risk-taking by financial intermediaries
- Empirical identification of their effectiveness is difficult
 - One of more of such policies is typically implemented in response to growing risks; such policies are typically employed in conjunction with more traditional macro policies (e.g., monetary and fiscal policies)
- Recent evidence suggests
 - Policies designed to build capital buffers make a banking system more resilient once a crisis occurs, but do not rein in credit growth enough to prevent the bust
 - Liquidity buffers could be effective at reducing the negative consequences of negative feedback spirals
 - Suitably-timed changes in loan eligibility criteria can slow the supply of specific types of credit
- Like other macro policies, there is a debate about rules vs. discretion
 - Rules are less susceptible to forbearance; facilitate decisions that are consistent
 - Discretion allows policymakers to adapt to unexpected changes and/or uncertainty

See Basel Committee on Banking Supervision (2016), "Literature Review on Integration of Regulatory Capital and Liquidity Instruments," Working Paper No. 30, March

Macroprudential Policy

New Framework for Countercyclical Capital Buffer

- September 8, 2016, the Federal Reserve Board released a policy statement detailing the framework it will follow in setting the Countercyclical Capital Buffer (CCyB) for private-sector credit exposures located in the US
 - CCyB is a macroprudential tool that can be used to increase the resilience of the financial system by raising capital requirements on internationally active banking organizations when the risk of above-normal losses is elevated
 - CCyB would then be available to help banking organizations absorb shocks associated with declining credit conditions; Implementation of the buffer could also help moderate fluctuations in the supply of credit
- Policy statement provides background on the range of financial-system vulnerabilities and other factors the Board may take into account as it evaluates settings for the buffer
 - including but not limited to, leverage in the nonfinancial sector, leverage in the financial sector, maturity and liquidity transformation in the financial sector, and asset valuation pressures
 - the range of indicators and models that the Board may consider is likely to change over time because economic and financial risks are constantly evolving
- The Board expects that the CCyB will be activated when systemic vulnerabilities are meaningfully above normal and that the Board generally intends to increase the CCyB gradually
 - the Board expects to remove or reduce the CCyB when the conditions that led to its activation abate or lessen and when the release of CCyB capital would promote financial stability

Sources: <https://www.federalreserve.gov/newsevents/press/bcreg/20160908b.htm>
<https://www.federalreserve.gov/newsevents/press/bcreg/bcreg20160908b1.pdf>