It is a pleasure to have the opportunity to speak here today on the important topic of financial regulatory reform. As always, what I have to say reflects my views and not necessarily those of the Federal Open Market Committee or the Federal Reserve System.

A robust financial system is central to our economic well-being. The financial crisis and the Great Recession wreaked havoc on millions of American households and businesses, and much of this damage was due to a flawed regulatory framework. In particular, many large banks and securities firms had inadequate capital and liquidity buffers, and the financial system had a number of important structural weaknesses that made it vulnerable to stress. In response, legislators and regulators made significant changes to strengthen our regulatory framework. Importantly, as we consider further changes, we must avoid throwing the baby out with the bathwater.

As I see it, an effective regulatory regime for the financial system must do three things:

- Ensure that all financial institutions that are systemically important have enough capital and liquidity so that their risk of failure is very low, regardless of the economic environment.
- Have an effective resolution regime that allows such firms to fail without threatening to take down the rest of the nation’s financial system, and without requiring taxpayer support.
- Preserve the important structural changes put in place since the financial crisis that make the financial system more resilient to shocks. These include the centralized clearing of over-the-counter (OTC) derivatives, better supervision and oversight of key financial market utilities, and the reforms of the money market mutual fund industry and the tri-party repurchase funding (“repo”) system.

In contemplating changes to the regulatory regime, the good news is that the U.S. financial system is much sounder today than it was on the eve of the financial crisis. The quantity and quality of capital and liquidity for U.S. banks have markedly improved, meaning that the banking industry can support the economy even under considerably more adverse economic conditions. And, although returns on equity have dropped as balance sheet leverage has declined, banks remain profitable enough to cover their cost of capital and continue to serve their household and business customers.

Much of this progress is due to regulatory changes enacted since the crisis. In addition to buttressing the capital and liquidity standards for major banks, the regulatory community has made significant strides in many other areas. We developed a resolution framework for systemically important banks that better enables a failing bank to recapitalize with less risk to the rest of the financial system, and in a way that should not require taxpayer assistance. We reformed key segments of the financial system such as the money market mutual fund industry. We reduced the aggregate risk in the system by mandating the centralized clearing of OTC derivatives. And, we strengthened the prudential oversight of those systemically important financial market utilities (FMUs) that clear such activity. Collectively, these reforms make the system more robust and resilient to the failure of a large, systemically important institution. Thus, we have made considerable progress toward ending a regime in which some financial firms were “too big to fail.” We want to avoid the unfortunate situation where authorities are faced with a Hobson’s choice: save a failing firm to prevent it from taking down the entire financial system, or allow the firm to fail but risk the collapse of the financial system.
Nearly a decade ago, we suffered the worst financial and economic crisis since the Great Depression. In fact, we were perilously close to experiencing another depression. The harm the crisis caused Americans can only be described as catastrophic. From November 2008 to April 2009, the economy lost an average of 700,000 jobs per month. Total employment in the United States fell by nine million jobs, and the unemployment rate rose to more than 10 percent. There was also a broad-based decline in home prices—about 30 percent on average, nationally. As a result, nearly 8 million foreclosures occurred, and the homeownership rate declined to levels not seen since the late 1980s.

The crisis exposed many significant structural weaknesses in the U.S. and global financial systems. Among them:

- Systemically important firms were allowed to operate with inadequate amounts of capital and insufficient liquidity buffers, and were overly reliant on short-term wholesale funding. They were excessively complex and interconnected with each other and with the shadow banking system.
- Large firms came up woefully short in monitoring, measuring and controlling the risks that could—and did—materialize under stress.
- Securitization markets suffered from a number of defects, including poor design for many securitized products and misaligned incentives in the credit ratings regime. This led to inflated credit ratings for many mortgage securitizations that subsequently performed poorly as mortgage delinquencies increased.
- There were significant problems in funding and derivative markets, including flaws in tri-party repo, money market mutual funds that were vulnerable to runs, and massive and opaque bilateral OTC derivative exposures.
- Finally, all of these problems were magnified by the lack of a good resolution process for large, complex financial firms that got into trouble. As a result, policymakers were forced to develop ad hoc interventions to contain contagion and to prevent the collapse of the U.S. financial system.

We should never forget how close we came to a full-blown depression, and we must resolve to never allow a return to conditions like those that existed prior to the financial crisis.

That said, it is entirely appropriate to take a critical look at the changes that were made to the regulatory regime. While we do not yet have evidence of how these reforms will hold up during the next economic downturn, many have been in place long enough that we can begin to evaluate their efficacy.

In such an evaluation, we should keep in mind the three goals I mentioned in my introduction. First, we must ensure that the probability of failure for a systemically important firm is exceedingly low. Such a failure can lead to contagion that can damage a broad set of financial market participants, and impede the ability of the financial system to support the economy. The failure of a single systemically important firm—because of its size and interconnectedness—can significantly weaken the entire financial system. We saw this firsthand following the failure of Lehman Brothers.

Second, if a systemically important firm does fail, we must have mechanisms in place to minimize the damage to the rest of the financial system. While we can make individual firms stronger, more robust and less prone to failure, I expect that there will still inevitably be failures in the future. In principle, we could make individual institutions completely bulletproof in all possible environments. However, this would require such high levels of capital and liquidity that it would likely make them uncompetitive in their ability to provide financial services to their customers.
Third, we must keep in place the structural changes that have made the global financial system less vulnerable to adverse shocks.

So, what does this imply when we consider revisions to the Dodd-Frank Act and other aspects of reform?

**Capital and Liquidity Standards**

It is important to maintain appropriate capital and liquidity standards for large, complex firms to mitigate external shocks and the risks they pose to the economy. In particular, we need to maintain our focus on firms whose impairment would have significant negative consequences for the rest of the financial system. Effective capital and liquidity standards help to limit these adverse consequences. At the same time, they work against conferring a competitive advantage to large banks from a perception that they may be too big to fail. Accordingly, large financial firms have had to more than double their stock of high-quality capital since the crisis.

Prior to the financial crisis, large financial firms were not required to hold sufficient high-quality liquid assets to protect against runs, and, as a result, several would have failed if not for extraordinary government intervention. Today, the liquidity buffers for large financial firms have dramatically improved in terms of both their size and quality. This is due in part to investors’ demands, but also to the efforts by regulators and supervisors in the United States and abroad to develop appropriate liquidity standards for large banking institutions.

Some have argued that capital standards alone would be sufficient to mitigate the risks of failure. I am not convinced. As I just noted, the crisis clearly demonstrated the added importance of liquidity, as the firms that failed appeared to have been appropriately capitalized based on traditional regulatory metrics at the time.

Moreover, I strongly favor a system of capital and liquidity requirements that is harmonized on a global basis. Some believe that the United States should no longer participate in international forums—such as the Basel Committee on Banking Supervision—that discuss and recommend minimum capital and liquidity standards for global banking institutions. The argument is made that these international bodies are dictating to and constraining the choices of the United States. That is simply not the case. The Basel standards and other international efforts actually benefit the United States and its banks. In the preponderance of cases, agreements struck in these forums raise international standards closer to existing U.S. standards. Establishing a more level playing field enhances the competitiveness of internationally active U.S. firms. It also makes the global financial system safer by ensuring that foreign banks are subject to appropriate standards that cover their global operations. This protects the U.S. households and businesses that transact with these banks in the United States and abroad.

Also, it is important to note that the recommendations of these international standard-setters are not automatically legally binding in the United States. They do not go into effect unless they are adopted by a U.S. authority acting under U.S. laws following an administrative process. They are also subject to a period of public notice and comment. When appropriate, U.S. authorities have adopted different standards than those proposed in international forums.

Finally, following the financial crisis, the Federal Reserve developed a capital stress testing supervisory program—known as the Comprehensive Capital Analysis and Review (CCAR). CCAR has become an integral part of ensuring appropriate capital levels. By imposing a discipline of forward-looking capital assessment on our largest firms, CCAR helps protect the safety and soundness of the largest financial institutions—and therefore the stability of the entire financial system.

The CCAR process consists of two parts. First, the quantitative assessment evaluates whether a firm holds a sufficiently large capital buffer so that it can continue to be a viable financial
intermediary even in a stressed market and macroeconomic environment. Second, the qualitative assessment evaluates whether the firm’s risk management and capital planning processes are well-developed and well-governed. CCAR has helped to strengthen the capital levels of the largest financial institutions, and has pushed these firms to steadily improve their risk management and capital planning processes.

While appropriate capital and liquidity standards are necessary, they must be augmented by a supervisory regime that can assure the quality of a firm’s governance, controls, risk culture and compliance with applicable laws and regulations. As we saw with JPMorgan Chase in the “London Whale” episode and with Wells Fargo more recently, effective risk management and governance is a necessary complement to having adequate capital and liquidity buffers.

**Resolution**

We also must have an effective resolution mechanism that allows a firm to fail without threatening to bring down the entire financial system. We are not quite there yet—given some of the challenges in executing resolution on a cross-border basis—but we have made significant progress. In particular, I would point to two developments that are especially important.

The FDIC and the Federal Reserve have used the authority provided by Title I of the Dodd-Frank Act to oversee the so-called “living will” process—the resolution planning that large financial firms must do as a contingency for their potential failure. Developing living wills necessitates that firms and regulators consider, in advance, how bankruptcy can serve as the basis for resolution, and take actions to address any obstacles to an orderly resolution under the bankruptcy code. This effort has helped to reduce the complexity of large financial firms and has made them better positioned to enter bankruptcy without imposing large costs on society.

In addition, the Federal Reserve recently finalized a rule that requires systemically important bank holding companies to have minimum levels of total loss absorbing capacity (TLAC). Firms are expected to meet this requirement mainly via the issuance of long-term debt by the holding company parent. In bankruptcy, this debt could be used to recapitalize these firms and would be available to absorb any additional losses.

The Dodd-Frank Act also created a “last resort” option for the resolution of a large financial firm—Title II Orderly Liquidation Authority. This authority can be triggered only in special circumstances, and requires the action of a number of regulatory and fiscal authorities.

There is an understandable reluctance for the government to be directly involved in resolving a large firm. It creates the perception that the largest firms get special advantages. This is why many would prefer to eliminate Title II and rely exclusively on a bankruptcy process.\(^3\)

But, if we were to rely on ordinary bankruptcy rather than Title II for the resolution of a systemically important financial firm, we would need to ensure that the bankruptcy regime would work in a way that does not destabilize the financial system. First, such a regime would need to enable a systemically important firm to initiate a resolution strategy over a weekend while markets are closed so that the firm’s subsidiaries could continue to operate. Otherwise, the remaining franchise value of the troubled firm would quickly evaporate and we would experience significant contagion across the financial system. Second, there would need to be a credible liquidity backstop for the restructured firm in place by Sunday evening when Asian markets open. Many of the troubled firm’s counterparties would undoubtedly initially run because the cost of doing so would be very small. They would be especially likely to do so if there were no credible liquidity backstop. Debtor-in-possession financing would not be not a viable option because it simply would not likely be available in a timely manner and on the scale—potentially hundreds of billions of dollars—needed to fill the hole created when counterparties run away from a systemically important financial institution.
There is also another difficulty. In the event of a financial holding company’s bankruptcy restructuring, there are limits on the Federal Reserve’s ability to lend to subsidiaries that continue to operate. The Federal Reserve has the legal authority to lend through the discount window against a subsidiary bank’s high-quality collateral, with appropriate haircuts. But, under existing laws and regulations, the Federal Reserve cannot lend to the securities affiliates. Moreover, Section 23A of the Federal Reserve Act restricts the commercial bank subsidiary of a systemically important firm from on-lending the funds borrowed from the Fed to its broker-dealer—even if the broker-dealer has good collateral to pledge against the loan.

Put simply, in today’s legal and regulatory regime, there is a large potential liquidity gap. There is not a credible liquidity backstop for a broker-dealer in bankruptcy. In contrast, Title II provides for temporary funding through the Orderly Liquidation Fund, which can support the resolution of the recapitalized entity, including the broker-dealer. This means that if one were to eliminate Title II, one should develop an alternative means to provide a temporary, comprehensive liquidity backstop to the restructured firm.

**Reforms to Market Structure**

We should also keep in place the key structural reforms of financial markets that are making the financial system safer. In my mind, the most important of these include money market mutual fund reform, tri-party repo reform, and the mandate for the centralized clearing of OTC derivatives. In each case, the post-crisis structural reforms have made the system more resilient to the potential insolvency of a major financial institution. As a result, the level of stress placed upon the entire financial system by the failure of a single firm should be considerably lessened.

As part of this, we must maintain the capability for robust oversight of key FMUs. Centralized clearing is a beneficial development for financial markets. It reduces the amount of risk in the system by facilitating the netting of exposures to the central clearing party. As a result, centralized clearing makes the financial system more resilient and enables greater efficiency and transparency for trading counterparties. However, the trade-off for these benefits is that more residual risk is now concentrated in the FMUs. Consequently, it is important to retain the protections contained in the regulatory framework provided by Title VIII of the Dodd-Frank Act. We must ensure that FMUs are appropriately supervised and can withstand the failure of one or two of their largest counterparties and continue to operate.

**Worth Another Look**

So, what hasn’t worked as well as we might have expected, or might be less crucial in light of the principles that I discussed earlier?

First, I would start with regulations for small and medium-sized banking institutions. As I discussed earlier, we must ensure that the firms whose failure could impose the greatest costs on ordinary borrowers and savers have the capital, liquidity and risk management standards appropriate to that risk. But, the majority of banks in the United States do not come close to falling into this category. For smaller institutions, the regulatory and compliance burdens can be considerably lighter because the failure of such a firm will not impose large costs or stress on the broader financial system.

Also, we must recognize that smaller firms have less ability to spread added compliance costs across their business. All else equal, an increase in compliance burden can create an unintended competitive advantage for larger institutions. We should also recognize the important role that smaller banking institutions have in supporting local communities around the country. The ability to lend to local businesses often depends on close bank-customer relationships, and on knowledge that is often difficult to develop when the home office is very distant.
There have been efforts by regulators at the Federal Reserve and elsewhere to reduce the regulatory requirements for such institutions, and that is something that we should continue to work on. Lawmakers could also evaluate statutory thresholds to see if they should be raised to apply to fewer, larger institutions. For example, the Dodd-Frank Act sets a higher prudential regime for those firms with $50 billion or more in assets. I believe that this threshold could be raised significantly without unduly increasing the risk to the broader financial system.

Second, policymakers might reexamine the implementation of the Volcker Rule to ensure that it is efficiently achieving its policy objectives. The fact is that most market-making activity has an element of proprietary trading. The market maker that bids successfully often does so based on a view on which way the market might be headed in the near term. Thus, the line between market-making and proprietary trading is not always clear-cut, which makes regulation in this space difficult.

Some market participants have argued that the Volcker Rule has contributed to the decline in market liquidity of corporate bonds. Although I view the evidence on this point as inconclusive, it may be worth considering giving greater discretion to trading desks that facilitate client business to intervene when markets are illiquid and volatile. Also, community banks are subject to the Volcker Rule even though they typically do not engage in proprietary trading, or sponsor or retain ownership interests in hedge funds or private equity funds. This seems like an unnecessary burden that drives up compliance costs without a significant corresponding public benefit, so we also should exempt community banks from the Volcker Rule.

Third, although CCAR is a vital part of our bank regulatory toolkit, I believe that we should consider changes that might lessen the burden it places on banks. In this vein, the Federal Reserve recently removed the CCAR qualitative assessment for large, non-complex firms. This is a good example of identifying regulatory burdens that are not worth the cost. We are also considering the implementation of a stress capital buffer that would better align the dynamic stress capital requirements of CCAR with our more static, point-in-time regulatory capital rules. Other potential adjustments include changes to the assumptions about the pace of a firm’s planned dividend and share repurchases, and how a firm in a stressed environment would likely manage its balance sheet and business footprint.

The financial crisis provided a vivid reminder that a well-functioning financial system is a necessary condition for a vibrant economy. The efficient intermediation of funding from savers to borrowers supports economic activity and, over time, raises living standards. This means that we need a financial system that is robust and resilient to shocks. Most of the changes that have been implemented since the financial crisis have moved us in this direction, and it is important that any new changes to laws and regulations be grounded in what we have learned. Our central purpose must be to ensure a safe and sound financial system that efficiently provides financing to households and businesses through the ups and downs of the business cycle.

Thank you for your kind attention. I would be happy to take a few questions.

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1. James Bergin, Dianne Dobbeck, Jack Quitt, Kristin Malcamey, Kevin Stiroh, Joseph Tracy and Emily Yang assisted in preparing these remarks.

2. In addition, a regime with common, harmonized standards helps to reduce compliance costs for U.S. firms that operate internationally.

3. However, we should recognize that in the current setup large banks pay a price for being systemically important in terms of higher capital requirements and the need to maintain a large cushion of TLAC. Combined with the requirement to develop living wills and to simplify their operating models and their business, this should eliminate any competitive advantages associated with potential availability of Title II.