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Toward Building a More Effective Resolution Regime: Progress and Challenges

Remarks by

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at the

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Observing the five-year anniversaries of various key moments in the financial crisis throughout 2013 cannot but prompt us to step back and evaluate the effectiveness of the regulatory reform efforts that followed. This week, which marks five years since the U.S. government launched the Troubled Asset Relief Program (TARP), is a particularly appropriate moment to hold this conference on the resolution of systemically important financial institutions (SIFIs). The TARP's extension of unprecedented capital support to many of the largest U.S. banks reflected the view of government officials that the failure of these firms would have posed a grave threat to the financial system. The turmoil that followed the failure of Lehman and the decision to rescue AIG each, in their way, underscored the absence of a third alternative to the options of bailout or disruptive bankruptcy. The creation of such an alternative, included as the Orderly Liquidation Authority in Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act, was a key part of the reforms.

In fact, the emergence of a growing consensus around the key elements of a credible resolution mechanism, and the work to engraft those elements into appropriate statutory and administrative frameworks, is one of the more unheralded—if still in progress—successes of the post-crisis regulatory response. Here in the United States, the Federal Deposit Insurance Corporation (FDIC) has been doing path-breaking work to build out the statutory provisions of the Dodd-Frank orderly liquidation authority. Internationally, the Financial Stability Board (FSB) has elaborated a set of principles to guide the development of resolution mechanisms globally.<sup>1</sup> And, throughout both processes, there has been fruitful interaction among the official sector, academics, and market participants.

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<sup>1</sup> In November 2011, the Financial Stability Board adopted *Key Attributes of Effective Resolution Regimes for Financial Institutions*, a new international standard that sets out the core elements of an effective special resolution regime for systemically significant financial firms ([www.financialstabilityboard.org/publications/r\\_111104cc.pdf](http://www.financialstabilityboard.org/publications/r_111104cc.pdf)).

In my remarks this afternoon, I will begin by explaining the purpose and critical features of a special mechanism for resolving large financial firms, especially those of systemic importance. Next, I will explain why the efforts of the FDIC have been so important in developing credibility for the Title II resolution mechanism for systemically important firms and identify some of the important work that remains, not just for the FDIC, but for a range of official sector and private actors, here and abroad. Finally, I will end with a few thoughts on the relationship between resolution mechanisms and the broader regulatory reform agenda we have been pursuing over the past several years.

### **The Purpose and Critical Features of a Special Resolution Mechanism**

The crisis, and the scope of government support for large banks that it precipitated, spawned an ambitious international regulatory reform agenda directed at the financial stability risks posed by SIFIs. It was recognized that, left unaddressed, the necessary but unpalatable government interventions during the crisis would only further entrench the too-big-to-fail status of systemic financial firms—increasing moral hazard, undermining market discipline, and harming competitive equality among financial institutions of different sizes.

Stated most pointedly, then, the purpose of a special resolution mechanism for large financial firms is to prevent future situations in which government officials face the unappealing choice they confronted in 2008, to which I alluded a moment ago. Stated more analytically, a special resolution mechanism is needed to take account of the characteristics of financial markets, and of larger firms operating in those markets, that do not fit easily with normal bankruptcy practice. These characteristics all relate to a basic function of financial intermediaries in providing liquidity to firms and households—whether through maturity transformation, by which banks allow depositors to lend out their savings while maintaining

complete liquidity; through market-making, by which dealers provide liquidity to investors in various instruments; or through other forms of intermediation.<sup>2</sup>

Precisely because financial intermediaries provide these liquidity services, they are subject to funding strains when customers or counterparties become uncertain of the value of the loans, securities, or other assets held by the intermediaries. Where those assets are opaque—as can be the case, for example, with a portfolio of conventional loans or with securities backed by many loans bundled together from various originators—the incentive to withdraw funding increases, particularly in periods of stress when the value of broadly held asset classes may be at risk of precipitous decline.

This familiar dynamic is obviously a potential problem for the intermediary. It becomes a problem for society when one or both of two things follow: First, as in the classic case of bank runs, problems at one bank lead depositors or counterparties at other banks to withdraw their own funds, fearing that their own banks may have similar difficulties repaying them because they hold similar assets. Or, second, the liquidity squeeze leads a sizeable financial firm to engage in a fire sale of its assets in order to raise the funds necessary to compensate for the disruption of its normal funding channels. Dumping a sizeable book of assets on the market, in turn, can lead to the adverse feedback loop observed during the crisis: Downward pressure is placed on similar assets held by others, thereby accelerating margin calls on leveraged actors and amplifying mark-to-market losses for all holders of the assets, thereby prompting fire sales by others. In either or both of these eventualities, the potential insolvency of the financial firm is a problem not just for shareholders, employees, and creditors, but for the financial system as a whole.

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<sup>2</sup> The long-standing special resolution powers of the FDIC for insured depository institutions, on which Title II was in part modeled, themselves reflect some relevant peculiarities of banking, and financial markets more generally, compared to other industries.

A final point is that a financial firm, through the operation of one or both of these dynamics, can shift from viable to non-viable in quite a short period of time. And, once the confidence of counterparties and customers is shaken, and funding withdrawn, the game is essentially over. Of course, matters are made worse if the firm did not maintain adequate capital levels or relied too heavily on short-term funding, as was the case with many of the firms that failed or came under severe pressure in 2008. However, it is important to note that the nature of financial intermediaries means that even firms compliant with more rigorous capital and liquidity requirements could be faced with these dynamics in a tail event.

To be credible, then, a resolution mechanism for large financial firms must be capable of dealing with these characteristics of financial markets. This is the premise underlying Title II of Dodd-Frank, and I think it has also been the premise of thoughtful commentators who have proposed amendments to the Bankruptcy Code for application to large financial firms.<sup>3</sup> There are three key features of Title II and, modified in certain respects, some of these Bankruptcy Code proposals reflect recognition of the peculiarities of financial markets in a way the current Bankruptcy Code does not.

The first key feature of Title II, simply put, is speed. It is vital that a resolving authority be able to move very quickly from non-resolution to resolution status, while maintaining continuity of operations. As many of you will recall, during the financial crisis the makeshift arrangements crafted by governments in an effort to avoid large negative effects on financial markets were usually completed over a weekend.

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<sup>3</sup> See, e.g., John F. Bovenzi, Randall D. Guynn, and Thomas H. Jackson (2013), "Too Big to Fail: The Path to a Solution," Bipartisan Policy Center: Washington, D.C., May, <http://issuu.com/bipartisanpolicycenter/docs/toobigtotofail/111?e=6794573/2433607> and Kenneth E. Scott and John B. Taylor, eds. (2012), *Bankruptcy Not Bailout: A Special Chapter 14* (Stanford, Calif.: Hoover Institution Press). Of particular interest in Scott and Taylor is the careful analysis by Professor Thomas Jackson in presenting a proposal for a new Chapter 14 of the Bankruptcy Code. *Id.* at pp. 25–70.

The second key feature is a source of immediate funding to continue essential functions and minimize the kind of fire sales referred to earlier. The Bankruptcy Code allows for so-called debtor-in-possession (DIP) financing to be provided to any firm going through the bankruptcy process.<sup>4</sup> Such DIP financing is often essential to maximize the going-concern value of the firm. For a failed SIFI, such funding may be required quickly and in fairly large sums—needs that may not be fully met by private lenders, at least not in the immediate aftermath of a firm being placed into the Title II process.

For these reasons, funding from the FDIC, drawing on a line from Treasury, is available under Title II. It is important to note, though, that the underlying concept has the same roots as DIP financing—lending that will maintain or increase the going-concern value of the firm, not absorb losses. It is not a capital injection and does not put taxpayers at risk. The FDIC has indicated that it will, in order to protect taxpayers more fully, require that the financing be collateralized and if, for any reason, the FDIC cannot recover the full amount of credit extended, the shortfall is to be made up by a tax on other large financial firms.

The third necessary feature is a temporary stay of close-out rights of qualified financial contract counterparties. The ability of the FDIC, subject to important creditor safeguards, to nullify the direct- and cross-default rights of counterparties can halt the disruptive, uncertainty-driven race to seize and liquidate a firm's assets immediately upon its entrance into a Title II resolution. The FDIC authority includes the opportunity to decide whether it wants to transfer qualified financial contracts (QFCs) to a bridge financial company or another solvent company

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<sup>4</sup> When a firm is continuing operations under the reorganization provisions of Chapter 11 of the Bankruptcy Code, or even doing so temporarily under the liquidation provisions of Chapter 7, it may, without court approval, incur unsecured debts for which creditors have priority over other unsecured lenders for normal operational expenses; with the approval of the court, the firm may also incur debt for other expenses. As explained above, repayment of some existing short-term creditors may be necessary to maintain the value of a financial firm, something not generally considered a normal operating expense of the sort for which DIP financing is routinely available under current bankruptcy law.

during a one-day statutory stay of the contractual rights of counterparties of the firm being resolved. As I will discuss later, this authority is not without limitations, particularly in a cross-border resolution, but it is a critical tool for an effective resolution of a financial firm with complex portfolios of financial contracts.

While Title II establishes a special resolution mechanism and grants the FDIC powers responsive to the special challenges posed by the failure of large financial institutions, it provides only a legal framework, not an elaborated description of how these powers would be used to resolve a systemically important financial firm. Moreover, the very large financial firms that are the most likely subjects of a Title II proceeding have extensive cross-border activities, and thus implicate the legal systems of other countries. Thus, for orderly liquidation authority to be effective in containing too-big-to-fail concerns and supporting financial stability, the statutory provisions must be supplemented with administrative planning by the FDIC and with consistent measures in other jurisdictions.

### **Developing a Clear, Credible Approach to Resolution**

It is important to develop and articulate a credible approach to such a resolution proceeding, for at least two reasons. First, unless creditors and counterparties have well-grounded expectations as to how they will be treated in a resolution setting, they may need to charge a premium to compensate for the additional uncertainty associated with the disposition of their claims, which can lead to a mispricing of risks. In some cases, particularly in periods of increasing stress in the financial system, they may be unwilling to deal with certain firms altogether. Parties who have short-term lending to, or contractual arrangements with, these firms may “run” as those loans or contracts lapse, thereby potentially crippling the ongoing business of the firm and creating adverse effects in other parts of the financial system.

A second reason is, in some sense, the converse of the first. If creditors and counterparties do not believe the FDIC can successfully resolve the firm, they may not price in the potential for losses that *should* be incorporated in their dealings with large firms. That is, if investors and other market actors think the prospects for orderly resolution seem low, they may assume the firm will be rescued by the government, and any moral hazard present in these markets will continue. By specifying which financial obligations will be maintained and where the FDIC will look to impose losses, a well-developed approach to resolution can create incentives for private action compatible with the overall aims of systemic firm resolution.

The FDIC has made great progress in implementing Title II, in particular by developing the single-point-of-entry approach to resolution of a systemic financial firm. Under the single-point-of-entry approach, the FDIC will be appointed receiver of only the top-tier parent holding company of the failed firm. After the parent holding company is placed into receivership, the FDIC will transfer assets of the parent company to a bridge holding company. The firm's operating subsidiaries (foreign and domestic) will remain open for business as usual. To the extent necessary, the FDIC will then use available parent holding company assets to recapitalize the firm's critical operating subsidiaries. Equity claims of the failed parent company's shareholders will effectively be wiped out, and claims of its unsecured debtholders will be written down as necessary to reflect any losses or other resolution costs in the receivership. The FDIC will ultimately exchange the remaining claims of unsecured creditors of the parent for equity or debt claims of the bridge holding company and return the restructured firm back to private sector control.

This conceptual approach to resolution under Title II represents an important step toward ending the market perception that any U.S. financial firm is too big or too complex to be allowed

to fail.<sup>5</sup> The aim of the single-point-of-entry approach is to stabilize the failed firm quickly, in order to mitigate the negative impact on the U.S. financial system, and to do so without supporting the firm's equity holders and other capital liabilities holders or exposing U.S. taxpayers to losses. The single-point-of-entry approach offers the best potential for the orderly resolution of a systemic financial firm under Title II, in part because of its potential to mitigate run risks and credibly impose losses on parent holding company creditors and, thereby, to enhance market discipline.

In the United States, the top-tier parent company of a large banking firm generally is not an operating company but a holding company, whose primary purpose is to raise capital and direct the operations of its subsidiaries. Its assets largely consist of cash, liquid securities, and equity and debt interests in its subsidiaries. This common organizational feature of U.S. banking firms facilitates the single-point-of-entry approach because the liabilities of the top-tier holding company are structurally subordinated to the customer obligations and other direct liabilities at the firm's operating subsidiaries. Accordingly, under the single-point-of-entry approach, the equity and debt at the holding company level can form a buffer that must first be exhausted before any customer or creditor of a subsidiary suffers losses. The existence of this buffer should help give the customers and creditors of a U.S. banking firm greater clarity regarding their potential loss exposure in failure. The presumption that holding company capital liabilities would be required in the first instance to absorb losses in a systemic financial firm will be critical in maintaining the confidence, and limiting the run potential, of customers, liquidity providers, and other creditors at the operating subsidiary level.

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<sup>5</sup> It is worth noting that the Resolution Project at the Hoover Institution, which produced the proposal for a special Bankruptcy Code Chapter 14 cited in footnote 3, is now at work on a variant of its proposal that builds specifically on the single-point-of-entry approach.

The single-point-of-entry approach does not involve a government guarantee that subsidizes systemic financial firms by protecting their investors from downside risk. The resolution would result in a recapitalization of a failed firm by the firm's own investors. Any protection received by the creditors of a failed firm's operating subsidiaries would be provided by the equity and debt holders of the failed firm's parent holding company. And even if any temporary losses were suffered by the government because of its provision of liquidity, Dodd-Frank requires that the government be reimbursed through assessments on large financial firms.

The work being done by the FDIC in building out its approach to Title II will continue, and the FDIC has indicated that it will explain this thinking in further detail in a public release later this year. In addition to the FDIC's work, there are other ways that the credibility of Title II can be enhanced. For example, the Federal Reserve and the FDIC can use their joint responsibility for overseeing the resolution plans, which are required by Dodd-Frank, for large, prudentially regulated firms to improve the resolvability of systemically important financial institutions.<sup>6</sup> The largest U.S. bank holding companies and foreign banking organizations submitted their first annual resolution plans to the Federal Reserve and the FDIC in 2012 and have recently submitted a second round of resolution plans. These plans have yielded valuable information that is being used to identify, assess, and mitigate key challenges to resolvability under the U.S. Bankruptcy Code and to support the FDIC's development of backup resolution

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<sup>6</sup> Dodd-Frank Section 165(d), 12 U.S.C. §5365(d). Resolution plans are also required of non-bank financial firms designated by the Financial Stability Oversight Council as of systemic importance and thereby subject to supervision by the Federal Reserve. These plans are also useful supervisory tools that have helped the Federal Reserve and the firms focus on opportunities to simplify corporate structures and improve management systems in ways that will help the firms be more resilient and efficient, as well as easier to resolve. Earlier this year, the Federal Reserve issued supervisory guidance relating to operational resilience, including supervisory expectations regarding collateral management; payment, clearing, and settlement activities; liquidity and funding; management information systems; and shared and outsourced services. This guidance was informed by the cross-firm comparative review of the first round of resolution plans and reflected initial supervisory judgments of those practices and capabilities necessary to support effective recovery and resolution planning efforts. Going forward, supervisory assessments will require firms to demonstrate their capabilities in these areas. The resolution planning process has been designed to be iterative; there is still much work to be done in this area by firms, domestic and foreign supervisors, and national governments.

plans under Title II. We expect the second round of submissions to include improvements that address the initial set of obstacles to resolvability identified during the first round.

More broadly, our evaluation of the resolvability of these large firms has been further advanced by the resolution planning process. Let me mention two ways in which the organizational structure of systemic financial firms could be shaped so as to facilitate the single-point-of-entry approach. One would be to ensure that losses at material operating subsidiaries, including in material foreign subsidiaries, could be transferred to the parent holding company in resolution. The other would be to keep the firm's parent holding company non-operational and otherwise "clean" through limits on the issuance of short-term debt and on the conduct of material business operations in the parent holding company. The single-point-of-entry approach concentrates losses on the creditors and counterparties of the SIFI parent, as opposed to the operating subsidiaries. Accordingly, the impending failure of a SIFI would create strong incentives for creditors and counterparties of the parent holding company to run.<sup>7</sup> The single-point-of-entry strategy will be more credible and effective if the only creditors of the parent holding company are holders of capital instruments, and long-term debt holders are fully aware they are subject to bail-in as part of any Title II resolution.

Another way to enhance the credibility of the FDIC's approach is to require adequate loss-absorbing capacity within large financial firms. Minimum capital requirements, conceptually, are designed to cover losses up to a certain statistical probability. If an extreme tail event occurs and the equity of the firm is wiped out, successful resolution without taxpayer assistance would be most effectively accomplished if a firm had sufficient long-term, unsecured

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<sup>7</sup> Although long-term debtholders of a troubled SIFI parent will be contractually unable to run, a SIFI parent with sizeable amounts of short-term debt could face substantial runs in times of stress. The contagion could spread to short-term creditors of other SIFI holding companies.

debt to absorb additional losses and to recapitalize the business transferred to the bridge operating company. The presence of this debt explicitly identified for possible bail-in on a “gone concern” basis should help other creditors clarify their positions in the orderly liquidation process. A requirement for long-term debt could also have the benefit of improving market discipline, since holders of that debt would know they faced the prospect of loss should the firm enter resolution and would presumably demand an appropriate risk premium.

The Federal Reserve, in consultation with the FDIC, will be issuing in the next few months a proposal that would require the largest, most complex banking firms to hold minimum amounts of long-term, unsecured debt at the holding company level. This requirement will have the effect of preventing erosion of the current long-term debt holdings of the largest, most complex U.S. firms, which, by historical standards, are currently at fairly high levels. Absent a minimum requirement of this sort, one could expect declines in these levels as the quite flat yield curve of recent years steepens; indeed, we have recently seen some evidence of the beginnings of such declines. At the international level, the FSB has recently announced that it will be issuing proposals for global standards on gone-concern loss absorbency for global systemically important financial institutions.<sup>8</sup>

The single-point-of-entry approach will also be facilitated by the presence of a sufficient amount of assets of the right types at the SIFI parent to enable the recapitalization of its material operating subsidiaries when losses have eroded the capital of the subsidiaries. The write-down of equity and the imposition of haircuts on parent holding company debt in Title II does not by itself recapitalize the operating subsidiaries. Moreover, foreign operations of a SIFI are more likely to be ring-fenced or wound down separately under the insolvency laws of their host

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<sup>8</sup> Financial Stability Board (2013), *Progress and Next Steps Towards Ending “Too-Big-To-Fail” (TBTF): Report of the Financial Stability Board to the G-20*, [www.financialstabilityboard.org/publications/r\\_130902.pdf](http://www.financialstabilityboard.org/publications/r_130902.pdf).

countries if foreign authorities or directors do not have full confidence that local interests would be protected. A requirement that a SIFI's parent holding company hold minimum amounts of "internal bail-in" debt issued by its material operating subsidiaries could offer a solution to this problem: A failed SIFI parent holding company would be able to inject capital into its material operating subsidiaries by effectively converting that intra-group debt into equity.

### **Cross-Border Issues**

In many ways, Title II has become a model resolution regime for the international community. In 2011, the FSB adopted the *Key Attributes of Effective Resolution Regimes for Financial Institutions*, a new standard for resolution regimes for systemic firms.<sup>9</sup> The core features of this global standard were already embodied in Title II. By acting early, through the passage of the Dodd-Frank Act, the United States led the way in shaping the development of international policy for effective resolution regimes for systemic financial firms. The FDIC's work on the single-point-of-entry approach continues to help frame the terms of international discussions at the FSB. Moreover, as the home-country supervisor of eight of the 28 global systemically important banks (G-SIBs) identified by the FSB, the Federal Reserve has responsibility for establishing and routinely convening for each U.S. G-SIB a crisis management group.<sup>10</sup> These firm-specific crisis management groups, which are comprised primarily of the firm's prudential supervisors and resolution authorities in the United States and key foreign jurisdictions, are working to mitigate potential cross-border obstacles to an orderly resolution of the firms.

All that said, many other major jurisdictions have not yet enacted legislation that would create a statutory resolution regime with the powers and safeguards necessary to meet the FSB's

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<sup>9</sup> Financial Stability Board (2011), *Ibid.* 1

<sup>10</sup> Financial Stability Board (November 2012), "Update of group of global systemically important banks (G-SIBs)," [www.financialstabilityboard.org/publications/r\\_121031ac.pdf](http://www.financialstabilityboard.org/publications/r_121031ac.pdf).

*Key Attributes*. Mitigating the obstacles to SIFI resolution will require, at a minimum, that key foreign jurisdictions implement national resolution regimes consistent with the *Key Attributes*.

While compatible host-country resolution regimes are necessary for orderly cross-border resolutions, they may not be sufficient. Most importantly, home-country resolution of a global systemic financial firm may be nearly as difficult if creditors and counterparties of the firm's foreign operations run as will likely happen if domestic creditors and counterparties do so. Possibilities for such runs may be reduced by well-developed and transparent arrangements for cooperation between home- and host-country officials in resolving these firms. The recent joint paper by the FDIC and Bank of England is an important example of such cooperation.<sup>11</sup> But, standing alone, even the best of cooperative arrangements may not remove all salient obstacles.

One key challenge is that certain Title II stabilization mechanisms, including the one-day stay provision with respect to over-the-counter derivatives and certain other financial contracts, may not apply outside the United States. Accordingly, counterparties to financial contracts with the foreign subsidiaries and branches of a U.S. firm may have contractual rights and substantial economic incentives to terminate their transactions as soon as the U.S. parent enters into resolution. Equivalent opportunities and incentives may apply to counterparties of U.S. operations of foreign banking organizations.

One approach to addressing this problem would be for domestic legislatures to amend bankruptcy and insolvency laws to recognize stays imposed in home-country resolution procedures consistent with international standards. However, it may be difficult to get such legal changes on roughly comparable terms in all relevant jurisdictions, much less to conclude a binding international agreement along those lines.

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<sup>11</sup> FDIC and Bank of England (December 2012), *Resolving Globally Active, Systemically Important, Financial Institutions: A joint paper by the Federal Deposit Insurance Corporation and the Bank of England*, [www.fdic.gov/about/srac/2012/gsifi.pdf](http://www.fdic.gov/about/srac/2012/gsifi.pdf).

A second approach, currently under consideration by regulators, would be to seek modifications to standard contractual cross-default, netting, and related practices. This approach would use contractual measures to achieve the same end of having these arrangements effectively governed by resolution decisions in home countries. Of course, even if agreement were reached among regulators, in consultation with relevant industry associations, and effective steps were taken to implement that agreement, it could take some time for the new terms to be widely adopted in relevant markets. But a regulatory timeline could be set to speed up the process. This approach may be the most promising for tackling this vexing problem.

### **Resolution and Regulation**

The resolution mechanism created by Title II of Dodd-Frank is gaining greater operational credibility as the FDIC builds out its single-point-of-entry approach. With each rule, policy statement, cross-border agreement, and firm-specific resolution plan, that credibility is further increased. Additional measures such as those I have suggested today will continue to enhance this third option of orderly resolution, and relieve government officials of the Hobson's choice of bailout or disruptive bankruptcy for systemically important financial firms.

However, as is apparent from the amount of work and planning involved in this effort—particularly, though not exclusively, on cross-border matters—the construction of a resolution framework remains an ongoing challenge. Moreover, even when a large, complex firm *can* be resolved at no cost to taxpayers without provoking a systemic crisis, there will very likely still be significant negative externalities in the financial system. That is, even if a firm is not too-big-to-fail, it may still be of sufficient systemic importance to make its failure a costly event.

Thus, even as policymakers strive to increase prospects for orderly resolution, we must continue efforts to reduce prospects for the failure of a systemically important firm that would

require this special mechanism. Stronger capital and liquidity requirements that improve going-concern resiliency will remain crucial to a reform agenda directed at containing the too-big-to-fail problem. The objectives of preventing failure and of reducing systemic costs in the event failure nonetheless occurs are complementary, rather than alternative, policy aims.

The most important systemic vulnerabilities that have not been subject to sufficient regulatory reforms are those created in short-term wholesale funding markets. In the recent financial crisis, severe repercussions were felt throughout the financial system as short-term wholesale lending against all but the very safest collateral froze up. Although short-term wholesale funding levels at major U.S. and foreign banking firms are lower than they were at the outset of the crisis, major global banks remain significant users. High levels of such funding increase the probability of severe funding problems at, and thus the failure of, major financial firms. They also complicate the orderly resolution of major financial firms in the event of failure.<sup>12</sup> Indeed, precisely because an effective orderly resolution mechanism provides for continued funding of certain short-term creditors to staunch potentially calamitous runs, that type of funding will not be subject to the increased market discipline resulting from the creation of a credible resolution process. This fact only strengthens the case for measures to limit the potential of short-term wholesale funding to be an accelerant of systemic problems.

## **Conclusion**

As I stated at the outset, I believe that creation of the orderly liquidation authority in Title II of Dodd-Frank, the work of the FDIC in developing that authority, the international consensus on the need for similar authority in relevant jurisdictions, and the continuing dialogue

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<sup>12</sup> Daniel K. Tarullo (2013), "Evaluating Progress in Regulatory Reforms to Promote Financial Stability," speech delivered at the Peterson Institute for International Economics, Washington, May 3, [www.federalreserve.gov/newsevents/speech/tarullo20130503a.htm](http://www.federalreserve.gov/newsevents/speech/tarullo20130503a.htm).

with academic and policy commentators together constitute a relatively unnoticed success in the world of financial regulatory reform.

This observation has come with two, probably predictable caveats. First, considerable work remains, so as to continue building and communicating a credible resolution mechanism that will allow investors, creditors, and counterparties of large financial firms to form reasonable expectations as to how a resolution would be conducted. Second, while it is important to have such a mechanism as part of an overall program to confine too-big-to-fail problems, it would not be desirable to have to use it. The more desirable outcome would be for its very credibility to work in concert with capital, liquidity, and other applicable regulations to reduce the chances of its actual utilization.

These two thoughts bring me to a final point. As I mentioned, serious work is being done by various commentators on proposals to adapt the Bankruptcy Code to the salient differences between financial and most other industries. As I have watched the back-and-forth between those in the official sector charged with developing orderly resolution mechanisms and those working on bankruptcy amendment proposals, I have noted each side taking account of some points in favor of the other side's model, with attendant modifications in everyone's thinking.

Differences remain, to be sure, such as the tradeoff between, on the one hand, a bankruptcy model's reliance on the independence of the judiciary and the accumulated precedent for dealing with creditors' claims and, on the other, the advantages in the Title II model of speed, pre-existing knowledge of financial firms, and a systemic perspective. But there has also been productive convergence. I join those who believe that the best outcome may be an amended Bankruptcy Code co-existing with Title II, with the former the default route in the case of a large financial firm's insolvency, and the latter available for the unusual moment when systemic risks

loom large. The adaptation of the Bankruptcy Code to deal with large, but not necessarily systemic, financial firms would itself be an important step forward. And the existence of *two* options other than bailout or disruptive bankruptcy would be welcome to anyone who remembers the position of policymakers in the fall of 2008.