Dodd–Frank: Content, purpose, implementation status, and issues

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Introduction and summary

As financial regulation evolved over the past 80 years, it became common to introduce new legislation with the claim that "this is the most significant regulatory reform since the Great Depression and the Banking Act of 1933." On July 21, 2010, following the 2008-09 financial crisis, President Barack Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act (hereafter Dodd-Frank). In the view of many in the industry, Dodd-Frank became the new standard against which all future reforms would be compared.¹ The stated goals of the act were to provide for financial regulatory reform, to protect consumers and investors, to put an end to too-big-to-fail, to regulate the over-the-counter (OTC) derivatives markets, to prevent another financial crisis, and for other purposes. The act has far-reaching implications for industry stability and how financial services firms will conduct business in the future.

Implementation of Dodd–Frank requires the development of some 250 new regulatory rules and various mandated studies.² There is also the need to introduce and staff a number of new entities (bureaus, offices, and councils) with responsibility to study, evaluate, and promote consumer protection and financial stability. Additionally, there is a mandate for regulators to identify and increase regulatory scrutiny of systemically important institutions. As a result, macroprudential regulation (aimed at mitigating risk to the financial system as a whole) will play a much more important role than it has in the past (see Bernanke, 2011). Two years into the implementation of the act, much has been done, but much remains to be done.

The act continues to be debated in the political, business, and public arenas. Were the right lessons learned from the recent crisis? Were the appropriate reforms introduced in the new regulations?³ Did the act go far enough or too far? Were the regulators given too much discretion in implementing the act? How burdensome are the new regulations and how will the intermediation process be affected? Will financial innovation be affected? Might regulatory reform induce some current financial activities to shift toward the less-regulated shadow financial sector?⁴ Are banks finding ways to effectively avoid or cushion the impact of the new rules?

In this special issue of *Economic Perspectives*, we, and the authors of the accompanying articles, discuss and evaluate the Dodd–Frank Act from a number of perspectives. In this introductory article, we summarize the major components of the act addressing prudential

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regulation, particularly those aspects that are highlighted in the accompanying articles. We also discuss the economics behind many of the reforms considered. This is not an attempt to cover every aspect of the act—as with any legislation, there are certain issues amended to the legislation late in the drafting process that are well outside the realm of financial regulation.⁵ The authors of the accompanying articles in this issue are: a scholar who has been actively involved in critiquing the new regulation, regulators who are responsible for implementing some of the more important aspects of the reform, and a financial policy expert working with a banking trade association.

Matthew Richardson (2012), Charles E. Simon Professor of Applied Economics at New York University, provides a general evaluation of Dodd–Frank, highlighting many beneficial aspects of the reforms—these include efforts to measure and regulate systemic risk; expansion of the regulatory reach to nonbank, systemically important financial institutions (SIFIs); and efforts to introduce a new resolution process for SIFIs. He also addresses what he terms missed opportunities in the regulatory reform effort and the potential for adverse, unintended consequences.

Martin Gruenberg (2012), acting chairman of the Federal Deposit Insurance Corporation (FDIC), discusses the new powers given to the FDIC in Dodd–Frank to resolve select institutions deemed to be systemically important. Prior to Dodd–Frank, the FDIC's resolution powers were limited to insured depository institutions. Holding companies or nonbank financial companies could only be resolved through the bankruptcy process. Gruenberg discusses the process by which the FDIC can use its new authority to effectively resolve SIFIs.

Wayne Abernathy (2012), executive vice president at the American Bankers Association, discusses the process by which the new regulations have been developed and implemented. Many of the act's original deadlines have been missed. Abernathy questions whether the process has gone as smoothly as suggested by financial regulators. However, he acknowledges the magnitude of the task and suggests that some modifications to the act may be necessary if its original intent is to be realized. He also raises some concern about the competitive impact across classes of banks—e.g., money center versus community banks.

Mark Van Der Weide (2012), senior associate director of supervision and regulation at the Board of Governors of the Federal Reserve System, discusses the Federal Reserve's efforts to mitigate threats to financial stability. Much of the effort has been directed at identifying and quantifying SIFIs. What criteria should be considered? What weights should be applied to the criteria? Once institutions have been categorized, the regulatory agencies must then decide how to calibrate the regulatory apparatus to best address the systemic concerns.

Finally, Scott O'Malia (2012), commissioner of the Commodity Futures Trading Commission (CFTC), discusses how the CFTC has been implementing its responsibilities under the act. He raises concerns about whether the commission is keeping the market adequately informed about developments. Additionally, he expresses concern about the commission's ability to keep up with industry developments and to leverage technology to support its enhanced regulatory role. He proposes some adjustments to the existing implementation process.

In this article, we briefly discuss aspects of the Dodd–Frank Act that are covered by the guest authors in this issue. In particular, we discuss efforts to enhance financial stability, improve the failure resolution process, and regulate the over-the-counter derivatives market. We also outline the purpose of the reforms and the tools available to regulators to achieve the desired outcomes.

Background

There had been numerous proposals for regulatory reform in recent years, but most of these proposals differed significantly from Dodd–Frank. Most recent proposed reforms were more concerned with restructuring the regulatory agencies than altering prudential regulation and allowable financial activities. For example, the U.S. Department of the Treasury (2008) proposed the phasing out of the thrift charter, the transitioning of thrifts toward a bank charter, and the elimination of the Office of Thrift Supervision (OTS).⁶ It also recommended a federal regulator for insurance companies. However, there were few proposed changes to product powers or prudential regulation.

Dodd–Frank also differed from reforms actually put in place over the previous 30 years in that it reversed the deregulatory trend that started in the early 1980s. For example, bank and bank holding company product powers had been expanded with the 1980 Monetary Control Act, the 1982 Garn–St. Germain Act, and the 1999 Gramm–Leach–Bliley Act. The 1980 and 1982 acts also eased deposit pricing restrictions on the industry. Limitations to geographic expansion were lifted with the 1994 Interstate Banking and Branching Efficiency Act (the Riegle–Neal Act) and numerous state laws aimed at increasing banks' ability to operate across state borders.

Another way in which Dodd–Frank differed from other recent regulatory reforms was in the flexibility it gave regulators. This approach contrasts significantly with the FDIC Improvement Act of 1991, for example, which was enacted at a time when Congress was frustrated with bank regulators because of the large number of recent bank failures and resulting large losses to the bank insurance fund-see Kane (1989a, 1989b), Benston and Kaufman (1994), and Young (1993). By contrast, many parts of the Dodd-Frank Act lack specificity as to how they are to be implemented, giving regulators significant discretionary authority to develop and implement rules (Casey, 2011). However, in many cases, Dodd–Frank imposed deadlines by which reforms need to be in place or studies need to be completed. This places significant pressure on regulators to meet the deadlines and implement the reforms while considering the potential regulatory burden that might be placed on the industry, as well as any adverse impact that burden may have on the industry's ability to carry out its role in markets.

Financial stability

Perhaps the most important objective of Dodd-Frank is to ensure a safe and stable financial system. Toward that goal, the act shifts from exclusively concentrating on microprudential regulation, which focuses on risk at individual institutions, to include macroprudential regulation, which focuses on overall market stability and systemic risk. During the financial crisis, it became obvious that the assumption that the financial system as a whole could be kept safe by regulating individual institutions was unsound. A purely microprudential approach ignores interconnections and externalities, whereby the actions of a single financial institution can induce broader spillover effects that adversely affect general market conditions, other financial institutions, and ultimately the economy as a whole. In contrast, macroprudential regulatory approaches attempt to manage overall financial system risk.7 Ideally, macroprudential tools can be used to induce financial institutions to internalize the costs of their actions on society, including externalities where costs are generated and shifted to others.8 With the increased reliance on macroprudential regulation, there was also a realization that regulators need to anticipate forthcoming industry problems.

These challenges were addressed in title I of Dodd–Frank, which created the Financial Stability Oversight Council (the Council) and the Office of Financial Research (OFR), which is housed in the U.S. Treasury Department. In addition, title I provides the Federal Reserve with additional authority to manage the systemic risk posed by SIFIs.⁹

The Council is structured as a consultative group of financial regulators. Its role is to identify risks that pose a threat to the stability of the financial system, promote market discipline, and respond to emerging threats. To accomplish this, the Council has the authority to make recommendations about appropriate macroprudential regulation, to collect information about market activities, and, perhaps most importantly, to designate systemically important institutions or activities that will come under the oversight of the Federal Reserve as the systemic risk regulator.¹⁰ The consultative format of the Council allows the individual agencies to continue to handle the substantive supervision of their industry-specific institutions, but also to share insights and keep the other agencies aware of developments across the financial industry. By design, this consultative format avoids the creation of another regulatory bureaucracy, but brings the key regulatory agencies together in a formal way to contribute to public policy.

The Council consists of ten voting members and five nonvoting members, combining the expertise of federal and state regulators and an insurance expert appointed by the President.

The voting members are as follows:

- Secretary of the Treasury, who serves as the chairman of the Council;
- Chairman of the Board of Governors of the Federal Reserve System;
- Comptroller, Office of the Comptroller of the Currency;
- Director of the Bureau of Consumer Financial Protection;
- Chairman of the Securities and Exchange Commission;
- Chairman of the Federal Deposit Insurance Corporation;
- Chairman of the Commodity Futures Trading Commission;
- Director of the Federal Housing Finance Agency;
- Chairman of the National Credit Union Administration Board; and
- An independent member with insurance expertise, appointed by the President and confirmed by the Senate for a six-year term.

The nonvoting members, who serve in an advisory capacity, are:

- Director of the Office of Financial Research;
- Director of the Federal Insurance Office;
- A state insurance commissioner designated by the state insurance commissioners;

- A state banking supervisor designated by the state banking supervisors; and
- A state securities commissioner (or officer) designated by the state securities commissioners.

The Council's success will hinge on its ability to maintain a comprehensive view of the financial system. Given the vast and complex nature of the financial system, this is a monumental task. The Council has the authority to request data and information from a number of sources, including the member agencies, financial institutions (if the information is not readily available from primary regulators), and the new OFR. The breadth and quality of this information will be critical in helping the Council to meet its objective of anticipating threats to financial stability, such as emerging asset bubbles. The OFR could play an integral role in this process as it collects, organizes, and analyzes financial data in its role of supporting the Council and its member agencies. In addition, the Council's member agencies could also conduct more targeted analysis aimed at their particular industry sectors.

Perhaps most importantly, the Council can also designate a nonbank institution as systemically important if the material distress or failure of the institution would pose a risk to financial stability. In making these decisions, the Council will consider the nonbank SIFI's size, leverage, liquidity profile, interconnectedness, mix of activities, and importance as a source of credit and liquidity to the financial system. To facilitate the designation process, the Council can request data and information from the firm in question, the firm's primary regulator, and the OFR. The Council may also ask the Federal Reserve to conduct examinations of the financial institution to facilitate the designation process. If, after the evaluation processes, the company is designated as systemically important, it will be subject to supervision by the Federal Reserve and enhanced prudential standards. The Council can also make recommendations to the Federal Reserve regarding the form that the enhanced prudential standards should take. These standards must be more stringent than those applicable to other nonbank financial companies with consolidated assets less than \$50 billion. In addition, the standards and requirements are likely to increase in stringency with the size of the company's systemic footprint. The enhanced prudential standards might apply to any or all of the following:

- Risk-based capital requirements,
- Leverage limits,
- Liquidity requirements,
- Resolution plan and credit exposure reports,

- Concentration and credit exposure limits,
- Contingent capital requirements,
- Enhanced public disclosures,
- Short-term debt limits, or
- Overall risk-management requirements.

In addition to recommendations concerning nonbank SIFIs, the Council may also recommend that the Federal Reserve apply enhanced prudential standards to institutions designated by the Council as financial market utilities (FMUs)—that is, institutions primarily involved in payment, clearing, or settlement activities that facilitate the completion of financial transactions. Again, the concern is that problems at these institutions could have systemic implications for the effectiveness of the broader financial system. Title VIII of the act requires the Federal Reserve to develop risk-management standards, incorporating relevant international standards, for the operations of these systemically important FMUs with respect to credit, liquidity, settlement, operational, and legal risk. In fact, the designation of these systemically important FMUs has proceeded more quickly than has the designation of nonbank SIFIs. In July, the Council designated eight FMUs as systemically important and subject to Federal Reserve oversight.11

The Council may issue similar recommendations for nonbank SIFIs and bank holding companies that are not designated as FMUs if the institutions take part in payment, clearing, and settlement activities. For example, the Council could make recommendations to impose restrictions on banks that act as agents in the tri-party repo market. Furthermore, the Council may provide recommendations to primary regulators to apply new or more stringent regulation to the activities and practices undertaken by financial institutions, even if these financial institutions have not been designated as SIFIs. Such recommendations can also be applied to specific financial instruments that are used or sold by these institutions. These recommendations may be made if a specific practice, activity, or financial instrument could create or increase the risk of significant liquidity, credit, or other problems in the financial markets.

Finally, if the Federal Reserve determines that a nonbank SIFI or a bank holding company with consolidated assets greater than \$50 billion poses a threat to the financial stability of the U.S., upon an affirmative vote from the Council, it can impose restrictions on the activities of these institutions. The tools available to the Federal Reserve to mitigate such risks include:

 Limiting the ability of the company to merge with, acquire, consolidate with, or otherwise become affiliated with another company;

- Restricting the ability of the company to offer a financial product or products;
- Requiring the company to terminate one or more activities;
- Imposing conditions on the manner in which the company conducts activities; and
- Requiring the company to sell or otherwise transfer assets or off-balance-sheet items to unaffiliated entities.

Arguably, many institutions and specific areas of the financial system were not subject to adequate supervision and regulation prior to the financial crisis. Possible examples include operating units of insurance giant AIG and global investment bank Lehman Brothers, the OTC derivatives markets, and consumer mortgage lending. The new oversight structure and systemic designation processes mandated under Dodd–Frank are an effort to better capture and regulate institutions and activities that can threaten the stability of the financial system.

Orderly liquidation authority

Since the failure, and subsequent rescue, of Continental Illinois National Bank in 1984, there has been a general outcry against the use of a too-big-tofail policy and the resulting means by which large, complex financial institutions were resolved-typically with government support.12 The general argument against such policies-which result in an implicit government guarantee—is that they reduce market discipline and result in moral hazard, allowing systemically important firms to take on excessive risk. In addition, these firms obtain a comparative advantage in the marketplace as a result of their perceived too-big-to fail status, which lowers the risk premiums on their debt instruments (deposits, senior debt, and subordinated debt).¹³ From a political perspective, the practice of preferential treatment for any company goes against the philosophical underpinnings of a capitalist society. Moreover, in times of financial crisis, the financial industry appears to be favored by the government. It might seem reasonable, therefore, to argue that financial firms, like other firms, should be resolved through the standard bankruptcy process. However, when Lehman Brothers failed, was not bailed out, and filed for bankruptcy in 2008, the consequences for the financial markets were severe, putting further strain on an already stressed system. For policymakers, this experience underscored the need to develop a more efficient resolution process for financial institutions that would reduce the risk of market disruption without making taxpayers accountable for the resolution costs.

U.S. law, like that in most other major jurisdictions, provides for alternative liquidation (Chapter 7) and rehabilitation (Chapter 11) procedures upon bankruptcy. However, the interconnected nature of the financial system gives rise to the need for an alternative failure resolution process for financial firms. For example, the existing bankruptcy process provides special treatment for "qualified financial contracts." These contracts-particularly repurchase agreements and derivatives-are insulated from typical bankruptcy provisions that would prevent creditors from terminating their contracts or seizing and selling collateral. Therefore, particular creditors of the failing financial firm are able to terminate, accelerate, or net contracts, as well as acquire and sell collateral associated with these contracts to close out their positions. These creditors avoid the bankruptcy process while other creditors are prevented from closing out their positions and must enter the process as a general or senior creditor, depending on their contractual priority.

These "safe harbor provisions" for qualified financial contracts have created concerns about potential adverse spillover effects, overutilization of qualified contracts, and inconsistent or inequitable treatment of creditors. The safe harbor provisions, and the resulting rush to close out positions or obtain access to collateral, could lead to significant disruption in financial markets as parties move quickly to replace the contracts or sell collateral into what may be very illiquid markets. It has been argued that this could lead to runs on shortterm instruments, which systemically important financial firms would be holding in sufficient quantities, and fire sales into unstable markets.¹⁴ That is, it is argued that there could be adverse systemic effects.

The orderly liquidation authority in Dodd–Frank is intended for troubled institutions that are considered systemically important. When firms enter the bankruptcy process, the objective is to maximize the value for creditors and create an orderly process for distributing that value in order of priority. However, with a systemically important firm, an optimal resolution process also needs to account for the potential impact on parties other than the creditors of the firm—that is, the spillover effects on other financial sector participants and the overall economy. These are the externalities discussed earlier.

To avoid potential disruptions resulting from resolving a systemically important firm through the bankruptcy courts, title II of Dodd–Frank spells out the role of the FDIC, in certain limited cases, as the orderly liquidation authority for institutions deemed to be systemically important.¹⁵ In that process, the safe harbor provisions are eliminated and the FDIC manages the resolution process. The use of such authority, however, is expected to be extraordinary and only when the stability of the whole U.S. financial system is in jeopardy. In most cases, the standard bankruptcy process will continue to apply.

To initiate the orderly liquidation process, the Secretary of the Treasury will decide if the financial company is in default or in danger of default, the company is systemically important, and it would be in the interest of the stakeholders of the financial company to enter into the orderly resolution process. The Secretary may initiate the process and recommend that the FDIC be made receiver of the troubled company. Depending on the type of financial institution, others on the Council may make a similar recommendation.

Dodd–Frank, however, imposes significant restrictions on the resolution process. First, the management and board of directors that were responsible for the failure of the firms must be removed from the organization. Second, the priority of claims in the resolution process should be adhered to in allocating firm losses that is, equity holders will not receive anything until all the other creditors, including the FDIC, have been repaid according to their priority. Third, the FDIC will not take an equity position with the failing firm. Finally, no taxpayer funds are to be used to prevent the firm from being liquidated. Instead, the industry, perhaps through special assessments, will incur any losses from the resolution process.

An important element of the new resolution process is the requirement that SIFIs provide supervisors with a document indicating how they could most efficiently be resolved should they encounter financial problems-the so-called living will (see Avgouleas, Goodhart, and Schoenmaker, 2010; Bernanke, 2010).¹⁶ One of the major problems with resolving a large financial institution is the complex interconnectedness of the various elements of the organization. Affiliates and subsidiaries may be legally structured in a manner to achieve certain corporate objectives such as tax avoidance or regulatory arbitrage that may make the resolution process more difficult. With a living will in place, regulators can work with the SIFIs to restructure the organization and avoid these difficulties should resolution become necessary.¹⁷ Generally, the living wills are intended to provide the resolution authority with critical information on the firm's organizational structure to aid in the resolution process. The first submission of living wills for banks with assets greater than \$125 billion was in July 2012.

Based on Dodd–Frank, the FDIC has put in place plans to accomplish the twin goals of eliminating toobig-to-fail and taxpayer-funded bailouts. In the orderly resolution process, the FDIC will act as receiver and the failing firm will be removed from the bankruptcy process.¹⁸

Over-the-counter derivative markets

Title VII of Dodd-Frank establishes a framework for the regulation of previously unregulated OTC derivatives. Even before the financial crisis, there were concerns that the OTC derivatives market represented a risk to the financial system, because it lacked the oversight and risk management tools typically associated with clearinghouse and exchange arrangements (see Born, 1998). The legislation brings the swap market under a joint SEC–CFTC regulatory regime to improve transparency, governance, and regulatory oversight. Broadly speaking, the legislation imposes new requirements for the instruments (swaps and security-based swaps¹⁹), the market participants (swap dealers and major swap participants), and the facilities on which the trades will be executed and cleared (designated contract markets, swap execution facilities, and derivatives clearing organizations). The regulatory responsibilities are split between the SEC and the CFTC (the joint regulators). The SEC will regulate securitybased swaps, and the CFTC will regulate other swaps (i.e., all other transactions defined as swaps that are not security based). Forward contracts on commodities that are guaranteed for physical delivery are exempt from the definition of a swap. Foreign exchange swaps and foreign exchange forwards have also been exempted from the definition of a swap.²⁰

OTC swaps are typically customized bilateral contracts negotiated between counterparties that sometimes can be traded directly to other market participants. A swap is an agreement between counterparties to exchange the cash flows of two distinct reference items. Often, one of the reference items is fixed and one is floating. Swaps can be based on various interest rates, exchange rates, currencies, commodities, securities, indexes, and other reference items. Buyers of OTC swaps are exposed to liquidity risk-the inability to sell an asset when necessary-and counterparty riskthe possibility that the seller will default on the contract's obligations. Interest rate swaps make up the largest segment of the swaps market by notional value of contracts outstanding, approximately \$400 trillion as of December 2011.21

Another type of swap, a credit default swap (CDS), was a significant factor in the financial crisis of 2008.²² These instruments were originally designed to provide lenders and market participants with a method to hedge (insure) against the credit risk of a particular company, institution, or industry. The buyer of a CDS pays a prenegotiated fixed premium (a percentage of the notional value) to the seller for the life of the contract in return for a guarantee that the seller will make a payment (the difference between notional and market value) if a prespecified credit event occurs on the reference security. If the buyer of the CDS owned the reference security, the CDS would be a hedge against losses on that security. If the buyer of the CDS did not own the reference security, the CDS would be a speculative short in the form of a naked CDS contract.23 In either case, the seller takes a long position on the reference security, collecting premiums in exchange for providing credit protection to the buyer. The market for CDS (and the synthetic securities derived from pools of CDS) was initially concentrated in corporate credit, meaning that the underlying reference securities were typically corporate loans or bonds. However, the market expanded into consumer and commercial credit as CDS contracts were written on residential/commercial mortgage-backed securities and consumer/commercial asset-backed securities, or tranches of these securities.

When asset prices deteriorated leading into the financial crisis, problems in the OTC derivatives market became apparent. Information on prices, quantities, and firm-specific exposures was limited. In addition, the lack of central counterparty clearing house (CCP) arrangements increased the complexity and uncertainty around counterparty risks. This lack of transparency intensified the withdrawal of liquidity during the crisis, because financial institutions were reluctant to enter into lending or OTC derivative contracts without the ability to properly assess their counterparty's risk profile. In addition, many financial institutions owned CDS and other credit derivatives as hedges against their exposure to structured assets or to other financial institutions. Given the pre-Dodd–Frank regulatory regime, certain institutions (such as AIG) sold large amounts of credit protection in the form of CDS and other types of credit derivatives. As margin calls and payments were triggered, the insuring institutions were unable to fulfill their obligations and there was no CCP to cover payments to the owners of the credit protection. In contrast, approximately 50 percent of the global OTC interest rate swap market is cleared by an independent CCP, the SwapClear service of LCH.Clearnet. This market functioned relatively well during the crisis, even when Lehman Brothers failed with a \$9 trillion portfolio. The risk-management procedures performed as planned and the collateral that Lehman held covered all defaults, and the portfolio was successfully unwound and auctioned off by the CCP (see LCH.Clearnet, 2008).

As a result of Dodd–Frank, the joint regulators will have the power to determine which types of

swaps will have to be cleared through a CCP and which swaps will be exempt from such clearing requirements. The joint regulators will also determine the appropriate margin and collateral requirements for swap transactions cleared on CCPs, taking into account systemic risk considerations. These requirements are powerful tools to control risk levels in the system. If one of the entities involved in a nonexempt swap transaction is a nonfinancial commercial end-user, then the trade is exempt from any clearing requirement. CCPs that clear any non-security-based swaps (for example, interest rate swaps) must register with the CFTC as a derivatives clearing organization (DCO) and will be subject to reporting, recordkeeping, and operational guidelines.²⁴ In addition, many DCOs will also register as swap data repositories and perform the functions prescribed in Dodd-Frank, which include making data and information on market participants' open swap positions readily available to regulators.²⁵ The goal is for all swaps that are mandated to be cleared centrally to be executed as standardized products on a designated contract market (e.g., CME Group) or a newly created swap-execution facility, both of which will be required to follow reporting, recordkeeping, and operational guidelines set by the joint regulators. These execution requirements are intended to provide market participants and regulators with more transparent price and volume data.

Any entity that is substantially involved in making a market for swaps will be designated as a swap dealer (SD) and any nondealer substantially involved in trading swaps will be designated as a major swap participant (MSP). In general, if an entity is a commercial enterprise using swaps to hedge its activities, it will be exempt from these definitions. Both SDs and MSPs must register as such and will be subject to reporting, recordkeeping, and operational guidelines of the joint regulators, even if the entity is a bank or bank holding company. If the SD or MSP does not have a prudential regulator, the joint regulators can impose capital requirements and will impose margin requirements for noncleared swap transactions. Otherwise, the prudential regulators will impose these requirements. However, the joint regulators can prescribe rules that limit the activities of nonbank SDs and MSPs, even if these entities have prudential regulators. These rules may include position limits and limitations on the involvement with certain types of swaps.

The goal of title VII is to enable the CFTC and the SEC to regulate their markets comprehensively. The legislation imposes new restrictions and requirements on the instruments, market participants, and trading platforms. The implementation process is very difficult but of critical importance, especially given the enormous size and importance of the OTC derivatives market to the financial system as a whole.

Conclusion

On July 21, 2010, the Dodd–Frank Wall Street Reform and Consumer Protection Act became law. The purpose of this article has been to set the stage for this special issue of *Economic Perspectives*, which provides a variety of perspectives on the challenges related to

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¹More details and the full text of the act are available at http:// thomas.loc.gov/cgi-bin/bdquery/z?d111:H.R.4173:.

²A number of law firms and consulting firms provide periodic updates as to the status of Dodd–Frank implementation. See, for example, Davis Polk & Wardwell LLP (2012).

³See, for example, Financial Crisis Inquiry Commission (2011), which is accompanied by dissents, including that of Peter J. Wallison (available at http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/ fcic_final_report_wallison_dissent.pdf).

4See Duffie (2012).

⁵In the case of Dodd–Frank, this includes issues such as "disclosures relating to conflict minerals originating in the Democratic Republic of the Congo," and "reporting requirements regarding coal or other mine safety."

⁶Under Dodd–Frank, chartered thrifts will be supervised by the national bank regulators and the OTS has been eliminated.

⁷One of the first to stress this need was Borio (2003). For a more thorough discussion of macroprudential regulation, see Hanson, Kashyap, and Stein (2011).

⁸Pollution is the classic example of a negative externality, where the polluting firm imposes costs on others that are not accounted for in the production process and in determining prices and quantities of outputs. Regulation should induce the polluters to internalize the cost they are imposing on others. Systemic risk is the externality addressed in Dodd–Frank.

⁹The other regulators will also be involved in the regulation of SIFIs through their role in the Council and the continuation of their previous regulatory authorities.

¹⁰Bank holding companies with assets greater than \$50 billion are defined as SIFIs in the act.

¹¹The list is of designated FMUs is included in FSOC (2012), Appendix A, available at www.treasury.gov/initiatives/fsoc/ Documents/2012%20Appendix%20A%20Designation%20of%20 Systemically%20Important%20Market%20Utilities.pdf.

¹²For more on Continental Illinois and means to address the toobig-to-fail issue, see Wall and Peterson (1990), Evanoff and Wall (2001), Evanoff, Jagtiani, and Nakata (2011), Bliss and Kaufman (2011), and Brewer and Jagtiani (2012).

¹³The literature on this topic is quite extensive. See, for example, Flannery and Sorescu (1996), Evanoff and Wall (2002), DeYoung et al. (2001), and Kwast et al. (1999). implementing the act. The treatment is not comprehensive. We have chosen to focus on specific aspects of the reform and their likely impact. We have not addressed two controversial aspects of Dodd–Frank—the introduction of the Consumer Financial Protection Bureau (see Cadwalader, Wickersham & Taft LLP, 2012) and the proposed limits on banks, and their affiliates, engaging in proprietary trading for their own account (the so-called Volcker rule; see Duffie, 2012).

¹⁴Some argue that instead of the new orderly liquidation authority, the existing bankruptcy code should be utilized for financial firm failures (Skeel, 2012) or that the code should be modified to better handle systemic financial firm failures (Scott, 2012). For a discussion of the advantages and disadvantages of using the bankruptcy code to resolve systemically important firms, see Bliss and Kaufman (2011) and Board of Governors (2012). For a discussion of the problems associated with safe harbor provisions, see Skeel and Jackson (2012).

¹⁵The decision to use the orderly liquidation authority would be made on a case-by-case basis. Bank holding company and nonbank SIFIs would qualify for consideration by the authorities to enter the orderly resolution process. The status of designated FMUs is currently unclear.

¹⁶It has been suggested that FMUs also be required to develop living wills, but this has yet to be decided.

¹⁷Indeed, one of the recommendations in the 2012 FSOC annual report was to use information from the living wills to simplify financial firms' organizational structure. See FSOC (2012).

¹⁸Some remain skeptical of whether the law will succeed in making too-big-to-fail a thing of the past and getting taxpayers off the hook— for example, see Wilmarth (2011).

¹⁹Security-based swaps are broadly defined as swaps based on a single security, or a loan, or a narrow-based group, or an index of securities, or events relating to a single issuer or issuers of securities in a narrow-based security index.

²⁰This was decided by the Secretary of the Treasury, by authority granted in Dodd–Frank. See www.treasury.gov/initiatives/wsr/ Documents/FX%20Swaps%20and%20Forwards%20NPD.pdf.

²¹See table 19 in www.bis.org/statistics/otcder/dt1920a.pdf.

²²Such contracts are typically associated with AIG, leading up to their rescue during the crisis. However the issue with the AIG contracts may have had more to do with the collateralization "hair trigger" and the sudden need to meet these calls.

²³In the case of naked CDS, the notional amount of the contracts can become greater than the notional amount of the assets on which the contracts are written.

²⁴CCPs that only clear security-based swaps are not subject to the same requirements.

²⁵See www.cftc.gov/ucm/groups/public/@newsroom/documents/ file/sdr_qa.pdf.

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