

Basel III: Dynamics of State Implementation

Narissa Lyngen*

INTRODUCTION

In December 2010, the Basel Committee on Banking Supervision issued the text of the Basel III Framework,¹ a series of global financial regulations that respond to the Great Recession, the financial crisis of 2007–2009.² Basel III is the third iteration of the Basel Accords, which, along with the Basel Committee and its negotiation process, have been hailed as an exemplar of international regulation and law-making,³ but also critiqued as deeply flawed and subject to influence by the banks regulated by the agreement, among other issues.⁴

Although not formally binding, Basel I and II were widely adopted by member countries of the Basel Committee, as well as by many non-member countries.⁵ However, implementation of the Accords has always been contentious, with variations in state-level adoption, and efforts to implement Basel III have been similarly problematic.⁶ The Framework has been met with protests from banks about the burden of the new regulatory require-

* J.D. Candidate 2013, Harvard Law School.

1. See Press Release, Bank for Int'l Settlements, Basel III rules text and results of the quantitative impact study issued by the Basel Committee (Dec. 16, 2010), available at <http://www.bis.org/press/p101216.htm>.

2. See HUBERTO M. ENNIS & DAVID A. PRICE, THE FEDERAL RESERVE BANK OF RICHMOND, BASEL III AND THE CONTINUING EVOLUTION OF BANK CAPITAL REGULATION ECONOMIC BRIEF 1 (2011), available at http://www.richmondfed.org/publications/research/economic_brief/2011/eb_11-06.cfm.

3. ANNE-MARIE SLAUGHTER, A NEW WORLD ORDER (2004) [hereinafter SLAUGHTER BOOK]; Anne-Marie Slaughter, *The Real New World Order*, 76 FOREIGN AFF. 183 (1997) [hereinafter Slaughter Foreign Affairs Article]; Michael S. Barr and Geoffrey P. Miller, *Global Administrative Law: The View from Basel*, 17 EUR. J. INT'L L. 15 (2006).

4. See generally DANIEL K. TARULLO, BANKING ON BASEL: THE FUTURE OF INTERNATIONAL FINANCIAL REGULATION (2008); Chris Brummer, *How International Financial Law Works (and How It Doesn't)*, 99 GEO. L.J. 257 (2011); Thomas Oatley & Robert Nabors, *Redistributive Cooperation: Market Failure, Wealth Transfers, and the Basel Accord*, 52 INT'L ORG. 35 (1998); Pierre-Hugues Verdier, *Transnational Regulatory Networks and Their Limits*, 34 YALE J. INT'L L. 113 (2009).

5. See, e.g., Daniel E. Ho, *Compliance and International Soft Law: Why Do Countries Implement the Basel Accord?*, 5 J. INT'L ECON. L. 647, 649. The United States is an exception in this regard, and has not fully implemented Basel II reforms. See BASEL COMMITTEE ON BANKING SUPERVISION, PROGRESS REPORT ON BASEL III IMPLEMENTATION 4 (2011) [hereinafter BASEL III IMPLEMENTATION REPORT], available at <http://www.bis.org/publ/bcbs203.pdf>.

6. See Tarullo, *supra* note 4, at 45. Cf. BASEL III IMPLEMENTATION REPORT, *supra* note 5, at 4 (indicating that, as of September 2011, six countries, including the United States, were still in the process of implementing Basel II).

ments, as well as calls for even more rigorous requirements by the national financial authorities of a number of countries, including Sweden, Switzerland, the United Kingdom, and Austria.⁷ Sweden's central bank has announced its intention to unilaterally implement stricter regulations.⁸ Many states plan to implement the new regulations on an accelerated timeframe.⁹ Other countries' financial authorities, including the Reserve Bank of New Zealand, do not intend to implement certain core parts of the regulations.¹⁰

This Article uses scholarship on international financial regulation and the first two Basel Accords to establish a theoretical and historical context for understanding Basel III and the mixed response it has received from the international community. It suggests that national-level implementation of Basel III has been contentious and difficult for a number of reasons. First, the changes to the Basel Framework are costly and may have negative implications for the global competitiveness and profitability of some states' regulated financial institutions.¹¹ This has created political pressures at the national level, affecting state implementation. Second, the current depressed global economic environment and related financial uncertainty has exacerbated resistance to the new standards, which are expensive in both the short and long term. Finally, doubt in the efficacy of the Basel Accords in the wake of the Great Recession may be a contributing factor to international community's ambivalent response to Basel III.

7. See Memorandum from the Sveriges Riksbank 1, 3 (Nov. 25, 2011) [hereinafter Sveriges Riksbank Memorandum], available at http://www.riksbank.se/upload/Dokument_riksbank/Kat_publicerat/Pressmeddelanden/2011/pm_111125_nr19e_eng.pdf; Andrew Ackerman, *Jamie Dimon Says Regulations Will 'Stifle' Economic Growth*, WALL ST. J. DEAL J. BLOG (Apr. 5, 2011, 2:16 PM), <http://blogs.wsj.com/deals/2011/04/05/jamie-dimon-says-regulations-will-stifle-economic-growth/>. Whether capital requirements are costly is the subject of academic debate, with some taking the position that capital requirements cannot in fact be costly. See, e.g., Anat R. Admati et al., *Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Expensive* (Rock Center for Corporate Governance at Stanford University, Working Paper No. 86, 2011), available at <https://gsbapps.stanford.edu/researchpapers/library/RP2065R1&86.pdf>. This Article assumes that capital requirements do have some cost, since the scholars whose work is cited herein take this position.

8. See Press Release, Sveriges Riksbank, New capital requirements for Swedish banks 1 (Nov. 25, 2011) [hereinafter Sveriges Riksbank Press Release], available at http://www.riksbank.se/upload/Dokument_riksbank/Kat_publicerat/Pressmeddelanden/2011/nr19e.pdf.

9. See RESERVE BANK OF NEW ZEALAND, IMPLEMENTATION OF BASEL III CAPITAL ADEQUACY REQUIREMENTS IN NEW ZEALAND CONSULTATION PAPER 5, 13 (2011) [hereinafter RBNZ CAPITAL ADEQUACY REQUIREMENTS], available at <http://www.rbnz.govt.nz/finstab/banking/4577705.pdf>; Sveriges Riksbank Press Release, *supra* note 8, at 1 (stating that the Riksbank requirement of ten percent of Tier 1 capital will be in effect as of January 2013, and the requirement of 12 percent of Tier 1 capital will be in effect as of January 2015).

10. See RBNZ CAPITAL ADEQUACY REQUIREMENTS, *supra* note 9, at 5, 13.

11. Regulatory arbitrage can take place in implementation of regulations at the national level that differ from the international regulatory framework for the benefit of domestic regulated sectors. Financial institutions can also engage in regulatory arbitrage by moving to jurisdictions with less oversight and fewer regulatory requirements, or by taking advantage of standards that involve some degree of discretion on the part of the regulated entity. In the case of the Basel Accords, this last type of regulatory arbitrage has typically involved manipulation of accounting and risk measurement methods. See Brummer, *supra* note 4, at 267, 298–99.

I. POLITICAL PRESSURE AND THE DISTRIBUTIVE EFFECT OF INTERNATIONAL FINANCIAL REGULATIONS—BASEL I AND II

Supporters hailed Basel I as a model of global network governance and an ideal example of a transnational regulatory network (“TRN”).¹² Under the regulatory network theory, a TRN consists of a network of national government regulators that negotiate directly with one another to establish mutually beneficial regulatory agreements, representing a democratic shift from “hierarchies to networks.”¹³ TRNs are able to solve complex international problems that require coordinated action by the international community, enjoying an advantage over traditional international organizations because of their specific expertise and relative freedom from political constraints as unelected, appointed specialists.¹⁴ Regulators are also dispersed throughout the international community and subject to some degree of accountability to their states’ governments.¹⁵ This decentralization and (limited) accountability eliminates the risk that a single, centralized world government enacting these types of international laws and regulations might pose to state sovereignty and democracy.¹⁶ The result is distributionless regulatory coordination that benefits the international community as a whole.

Critics challenge the regulatory network theory account of the Basel Accords as a mutually beneficial, apolitical regulatory agreement.¹⁷ Verdier argues that international regulatory networks are not politically insulated, but are in fact subject to domestic political pressures.¹⁸ The administrative process is influenced by politicians due to executive appointment of regulatory positions, legislative drafting of administrative statutes of origin, and the threat of legislative intervention.¹⁹ Regulators thus face similar pressures from domestic interest groups as elected political officials, though for regulators this pressure is indirect.

According to Singer, elected public officials are motivated by conflicting goals: the promotion of investor confidence, which is generally advanced by more stringent regulations and a focus on financial stability, and the international competitiveness of their state’s financial sector, which typically

12. Transnational regulatory networks are also referred to as “transgovernmental networks” to emphasize the difference between these networks and other types of transnational activity that falls outside of the governmental sphere. See SLAUGHTER BOOK, *supra* note 3, at 10.

13. Slaughter Foreign Affairs Article, *supra* note 3, at 184. See SLAUGHTER BOOK, *supra* note 3, at 7.

14. See SLAUGHTER BOOK, *supra* note 3, at 8; Slaughter Foreign Affairs Article, *supra* note 3, at 185.

15. See SLAUGHTER BOOK, *supra* note 3, at 11.

16. See *id.* at 8–10.

17. See Verdier, *supra* note 4, at 115. Cf. TARULLO, *supra* note 4; Brummer, *supra* note 4; Oatley & Nabors, *supra* note 4. Slaughter’s work on transnational and transgovernmental networks builds on international cooperation theories developed by Robert Keohane and Ethan Kapstein. The authors cited here respond to portions of this body of scholarship.

18. See Verdier, *supra* note 4, at 114–15.

19. See *id.* at 127; David A. Singer, *Capital Rules: The Domestic Politics of International Regulatory Harmonization*, 58 INT’L ORG. 531, 535–38 (2004).

means fewer regulations and a focus on growth and profits.²⁰ Officials additionally must please their different constituents, including financial sector and consumer interest groups, whose concerns are often opposed. Regulators therefore must also navigate between these competing objectives, while at the same time pursuing financial stability.

Critics also argue that the regulatory solutions that TRNs create are often not uniformly beneficial. Instead, regulatory coordination at the international level often has a distributive effect, with some states gaining at the expense of others.²¹ Variations among states' domestic regulated sectors mean that global regulatory standards affect states differently, with distinct costs of implementation for each state and implications for the international competitiveness and profitability of that state's regulated sector.²² These variations also mean that some states will enjoy more of the benefits of a global regulatory standard, while others will face a disproportionate amount of the costs.²³ States for which the regulation is costly will suffer internationally since they will be less globally competitive as compared to the states that benefit from the regulation. Other states that previously enjoyed a comparative advantage against foreign banks may lose some of this advantage after international regulations are harmonized.

This inconsistent impact on states creates obstacles in both the negotiation and national implementation stages of international regulation and increases the political pressure on regulators.²⁴ Regulated domestic financial institutions will resist regulations that may result in loss of profitability due to higher costs of regulatory compliance and decreased competitiveness as against other states' banks. These institutions also often bear much of the cost related to the implementation of regulations and ongoing supervisory oversight. Such institutions will therefore lobby to avoid international agreements incorporating regulations that may have this effect.²⁵

Other critics describe the Accords as not only subject to political pressure but also inherently political in nature, originating from self-interested actions by certain powerful nations. Oatley and Nabors reject the functionalist view of international regulation, which posits that regulation is adopted to respond to some event with global impact, such as international market failure, that highlights the need for the international community to provide a regulatory response.²⁶ Instead, they argue that Basel I presents an example

20. See Singer, *supra* note 19, at 536–38.

21. See Verdier, *supra* note 4, at 115. Verdier's third critique of TRNs is that they are "institutionally ill equipped to resolve these conflicts" since "[i]n order to solve distributional consequences, international negotiations must involve concessions and tradeoffs across issue-areas and, in some cases, threats and other manifestations of relative power. These tasks are not easily entrusted to regulatory agencies. . . ." *Id.* at 115–16.

22. See Brummer, *supra* note 4, at 269–70; Verdier, *supra* note 4, at 124.

23. See Verdier, *supra* note 4, at 115, 124–25.

24. See *id.* at 115.

25. See *id.*

26. See Oatley & Nabors, *supra* note 4, at 37; Verdier, *supra* note 4, at 134.

of intentional redistribution initiated to address strong domestic political pressures.

Oatley and Nabors characterize the Accords as a direct response by the United States to political pressure in the wake of the savings and loan and sovereign debt crises of the 1970s and '80s.²⁷ Initially, the United States considered responding to the crisis by funding IMF credit grants to the developing countries whose sovereign debt remained on the books of U.S. banks.²⁸ Those countries would use the funds to service their debt to U.S. banks, effectively transferring money from taxpayers to commercial banks.²⁹ Voters, and thus Congress, were adamantly opposed to such a bail out, and the government instead turned to regulatory solutions, the most obvious of which was the imposition of higher capital requirements on the commercial banking sector.³⁰

The Basel Framework is based on the rationale that requiring banks to maintain certain levels of capital, or assets that are not encumbered by any contractual obligations for repayment, provides banks with an equity cushion that allows them to remain solvent in the event of major losses.³¹ Unilaterally imposing higher capital requirements on the American banking industry would restrict U.S. banks' capacity to lend and invest. Foreign banks whose state regulators imposed lower or no capital requirements would enjoy comparatively greater lending and investing capacity. In contrast, if the international banking community as a whole adopted higher capital requirements, this would allow the United States to implement these stricter requirements without a significant reduction in the comparative profitability of U.S. banking activities. Coordinated financial regulation, and in particular capital requirements, would level the international banking playing field, minimizing previously existing discrepancies in competitive advantage.³² This would appease American voters and also U.S. banking sector constituents by preserving U.S. banks' competitiveness against foreign banks while avoiding use of government funds to aid banks.³³

Protection of American banks in the global marketplace was especially important at the time of Basel I since the U.S. banking industry was coping

27. See Oatley & Nabors, *supra* note 4, at 36–37 (noting that “[t]he U.S. proposal for capital adequacy regulations was not motivated by concern about international financial stability, but by a need to satisfy competing interest group and voter pressures”).

28. See *id.* at 42–43.

29. See *id.* at 42–44.

30. See *id.* at 43–44.

31. See Verdier, *supra* note 4, at 133; Douglas J. Elliott, *A Primer on Bank Capital* 1 (The Brookings Inst., 2010), available at http://www.brookings.edu/~media/Files/rc/papers/2010/0129_capital_elliott/0129_capital_primer_elliott.pdf.

32. See TARULLO, *supra* note 4, at 76. This description of competitive advantage does not account for other jurisdiction- and institution-specific factors that might impact a state's competitive advantage in the global marketplace. See *id.* at 76–77.

33. See Oatley & Nabors, *supra* note 4, at 44–45.

with increasing competition from Japan and Germany's banking sectors.³⁴ These countries resisted the imposition of international capital adequacy standards because the proposed regulations were costly for Japanese and German banks.³⁵ However, Japan and Germany eventually acquiesced to what would become Basel I after the United States and the United Kingdom implicitly threatened to exclude from their markets foreign banks not subject to the same regulatory capital requirements in their home states.³⁶

Basel I's stated goals were to foster "the soundness and stability of the international banking system" and "reduce competitive inequalities" among national banking systems.³⁷ The core of the Basel I Framework was its capital ratio requirements, which mandated that banks hold a minimum ratio of qualified regulatory capital to total assets, the latter of which were measured on a risk-adjusted basis.³⁸ Basel I divided regulatory capital into two tiers: Tier 1 included high-quality capital such as common equity and preferred stock, and Tier 2 included lower-quality securities such as subordinated debt.³⁹ The regulations created a risk-weighted assets method of calculating regulatory capital ratios based on the principle that a bank's capital levels should reflect the riskiness of its assets.⁴⁰ The risk-weighted assets method provided weighted categorizations of various types of assets and was designed to promote uniform calculations of these ratios across regulated banks and jurisdictions.⁴¹ Banks were to apply these weightings in calculating their capital ratios in order to standardize capital requirements at the international level.⁴²

Although implemented to address "competitive inequalities" arising from regulatory differences at the state level, Basel I is widely believed to have facilitated regulatory arbitrage, by permitting significant discretion in state implementation.⁴³ The oversimplified method of asset classification used in determining risk and capital requirements meant that certain assets of different economic risk were given the same weight in the Basel risk calculations. Tarullo argues that this "created incentives for banks to 'arbi-

34. See *id.* at 44.

35. See *id.* at 48.

36. See *id.* at 44; TARULLO, *supra* note 4, at 50–51 ("In late 1986, the United States and United Kingdom delayed further elaboration of their own capital adequacy standards in favor of developing a common approach Once this agreement had been concluded, the two countries turned up the pressure on others by intimating that they might require these capital standards of foreign banks seeking to acquire banks, or perhaps even doing business, in their countries").

37. Basel Committee on Banking Supervision, *Capital Requirements and Bank Behaviour: The Impact of the Basel Accord 1* (Bank for International Settlements, Working Paper No. 1, 1999), available at http://www.bis.org/publ/bcbs_wp1.pdf?noframes=1. Basel I was adopted in 1988.

38. See Peter King & Heath Tarbert, *Basel III: An Overview*, 30 BANKING & FIN. SERVICES POL'Y REP. 1, 2 (2011).

39. See *id.*

40. See Elliott, *supra* note 31, at 4.

41. See King & Tarbert, *supra* note 38, at 2.

42. See *id.*

43. See Verdier, *supra* note 4, at 138.

trage' by migrating their lending to the riskiest assets within each risk-weight category in order to maximize their return on capital."⁴⁴

Initially, Basel I seemed like a success: most of the Basel Committee member countries adopted the regulations within the established timeframe, and many non-member countries also implemented the Framework.⁴⁵ However, subsequent changes in the international economy and domestic commercial banking sectors of states that had adopted Basel I resulted in shifts in national implementation.⁴⁶ The United States and United Kingdom became less concerned with internationally uniform capital standards after their banks were able to recapitalize.⁴⁷ Japan's economic downturn made compliance with Basel I's capital requirements prohibitively expensive for Japanese banks and resulted in under-enforcement of the Accord in Japan.⁴⁸ Under pressure from banks that wanted to use modern methods of risk management rather than Basel I's simplistic risk-weighting calculations, many state regulators permitted banks to fulfill Tier 1 capital requirements with instruments that in some cases seemed unlikely to provide financial cushioning in the case of a loss.⁴⁹ This allowed banks to effectively overstate their capital positions, creating issues of enforcement of the Accord at the national level.⁵⁰

Basel II, finalized in June 2004, attempted to address such issues by introducing new risk measurement methods, imposing higher capital requirements on banks with riskier assets, and acknowledging issues with Basel I's definition of capital and its insufficient disclosure requirements for regulatory capital.⁵¹ The second Accord established a three-pillar structure that continues to be a part of the Framework under Basel III. The three pillars consist of minimum capital requirements, supervisory review, and market discipline.⁵² The first pillar, which built on Basel I's capital requirements, was central to Basel II and continues to be a primary focus of Basel III. Calculation of risk-weighted assets was expanded to include market and op-

44. See *id.* at 139–40.

45. See TARULLO, *supra* note 4, at 65–66.

46. See Verdier, *supra* note 4, at 137.

47. See *id.*

48. See TARULLO, *supra* note 4, at 69.

49. See Verdier, *supra* note 4, at 137–38; TARULLO, *supra* note 4, at 69.

50. See TARULLO, *supra* note 4, at 69–72. These claims focused specifically on Japan. See *id.*

51. See Marianne Ojo, *Basel III—The Journey Culminating in the Present Framework (Part 1)*, 30 BANKING & FIN. SERVICES POL'Y REP. 13, 14–15 (2011); BASEL COMMITTEE FOR BANKING SUPERVISION, CONSULTATIVE DOCUMENT: STRENGTHENING THE RESILIENCE OF THE BANKING SECTOR 13 (2009) [hereinafter *Strengthening the Resilience of the Banking Sector*], available at <http://www.bis.org/publ/bcbs164.pdf>; Patricia Jackson et al., *Capital Requirements and Bank Behaviour: The Impact of the Basel Accord 21* (Basel Committee on Banking Supervision, Working Paper No. 1, 1999), available at http://www.bis.org/publ/bcbs_wp1.pdf. See generally BASEL COMMITTEE ON BANKING SUPERVISION, BASEL II: INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT AND CAPITAL STANDARDS: A REVISED FRAMEWORK (2006) [hereinafter *BASEL II*], available at <http://www.bis.org/publ/bcbs128.htm>.

52. See *BASEL II*, *supra* note 51, at 6.

erational risk measurements.⁵³ Basel II also provided several options for risk assessment, including a standardized method that incorporated external credit ratings (later viewed as a primary reason for Basel II's failure to predict the 2007–2009 crisis), and two “internal-ratings based” methods, which allowed more sophisticated banks to utilize their proprietary risk management models in determining their capital ratios.⁵⁴

Basel II has also been characterized as the product of political pressure, this time from the banks subject to Basel I regulations.⁵⁵ Though Basel II ostensibly targeted the regulatory arbitrage made possible by Basel I's overly-simplistic method of risk measurement and lax definitions of capital, Tarullo argues that the impetus behind Basel II was the desire of large international banks to engage in regulatory arbitrage using new risk measurement methods.⁵⁶ The resulting internal-ratings based method of risk assessment established by Basel II allowed banks to create proprietary measurements with “the expectation that their required capital levels would decline.”⁵⁷ Basel II's flaws have been further highlighted by the recent financial crisis, including differences in methods of weighting risk for trading book and banking book assets and reliance on external credit ratings and banks' internal risk models to calculate capital requirements.⁵⁸

II. BASEL III—GOALS AND IMPLICATIONS

Proponents of the functionalist view may argue that demand for revision of Basel II arose in the international community in response to an economic crisis that was distinctly global in nature, requiring a global response for the benefit of the international community as a whole. But, the circumstances giving rise to Basel III are similar to those preceding the adoption of Basel I. Oatley and Nabors, writing in 1998, described the situation facing the United States at that time as follows: “the lack of prudential oversight by American regulators had allowed U.S. money center banks to engage in unsound lending practices, the consequences of which threatened the stability of the U.S. financial system.”⁵⁹ Though the causes of the recent financial crisis are widely debated, many believe a primary factor to be deregulation of the financial sector, which facilitated a decline in lending standards and a

53. See King & Tarbert, *supra* note 38, at 2. Market risk was added to the Framework in 1996, during the interim between Basel I and II. *Id.*

54. See *id.*

55. See TARULLO, *supra* note 4, at 87 (noting that “[e]ven more than Basel I, [the Basel II process] has resembled a trade negotiation, with extensive political and constituency involvement”).

56. See *id.* at 88–89 (discussing the increase in U.S. banks' use of securitization of loans, which “provided a major arbitrage opportunity”).

57. See *id.* at 100–01.

58. See King & Tarbert, *supra* note 38, at 2–3.

59. See Oatley & Nabors, *supra* note 4, at 42.

glut of high-risk loans.⁶⁰ There is a real possibility that the needs of the American banking sector have again been the impetus behind the Basel Accord's new capital requirements.⁶¹

The main goal of the Basel III Framework is to “[strengthen] the global capital framework” by “rais[ing] the quality, consistency and transparency of the capital base.”⁶² Basel III narrows existing definitions of capital, increases the level of Tier 1 capital from 4 percent under Basel II to 8.5 percent, and increases overall capital requirements to 10.5 percent.⁶³ Tier 1 capital is primarily restricted to common stock, while Tier 2 capital may include preferred stock with debt-like features and some categories of subordinated debt.⁶⁴ Tier 3 capital, which was established by Basel II, restricted to coverage of market risk, and generally consisted of unsecured subordinated debt, has been eliminated.⁶⁵

Capital requirements continue to be measured against a risk-weighted calculation of a bank's assets. However, Basel III also uses a universal leverage ratio as an additional measure of capital adequacy independent of credit ratings or banks' internal risk measurements.⁶⁶ The ratio involves a straight comparison of capital to total assets without any risk weighting and will require banks to perform calculations separate from those used to determine their risk-weighted assets capital requirement.⁶⁷

The universal leverage ratio is part of the macroprudential component of Basel III, which is a departure from the previous Accords' focus solely on microprudential measures.⁶⁸ The Basel III macroprudential regulations are aimed at addressing systemic risk in the banking sector and also include a countercyclical buffer. This buffer provides an additional capital require-

60. See generally Andrew W. Lo, *Reading About the Financial Crisis: A 21-Book Review*, J. ECON. LITERATURE (forthcoming) (manuscript at 10) (noting that “[n]o single narrative emerges from this broad and often contradictory collection of interpretations”); Paul Krugman, *It Was Lehman Wot Did It*, N.Y. TIMES BLOG (Feb. 14, 2012, 8:44AM), <http://krugman.blogs.nytimes.com/2012/02/14/it-was-lehman-wot-did-it/> (disagreeing with economists John B. Taylor and John H. Cochrane regarding the importance of Lehman Brothers' failure in the financial crisis of 2007–2008).

61. Though, as mentioned above, many American banks opposed Basel III's higher capital standards, assuming that financial regulations have distributive effects and that maintaining higher capital ratios is costly, U.S. banks will suffer fewer consequences in regard to their international competitiveness if these higher standards are imposed on the entire international banking community.

62. BASEL COMMITTEE ON BANKING SUPERVISION, BASEL III, A GLOBAL REGULATORY FRAMEWORK FOR MORE RESILIENT BANKS AND BANKING SYSTEMS 2 (2010) [hereinafter BASEL III], available at <http://www.bis.org/publ/bcbs189.pdf>. See also ENNIS & PRICE, *supra* note 2, at 1.

63. See ENNIS & PRICE, *supra* note 2, at 1.

64. See King & Tarbert, *supra* note 38, at 4.

65. See Client Publication, Shearman & Sterling LLP, *The New Basel III Framework: Implications for Banking Organizations* 4 (Mar. 30, 2011) [hereinafter Shearman & Sterling Client Publication], available at http://www.shearman.com/files/Publication/f4e80b99-f0a1-4e3a-90f0-3bf21c7d0ce0/Presentation/PublicationAttachment/8d4e19cc-1ba3-4501-8fe6-63a6633d5b6b/FIA-033011-The_new_Basel_III_framework_Implications_for_banking_organizations.pdf; Strengthening the Resilience of the Banking Sector, *supra* note 51, at 4–5.

66. See King & Tarbert, *supra* note 38, at 6.

67. See Elliott, *supra* note 31, at 6; King & Tarbert, *supra* note 38, at 6.

68. See King & Tarbert, *supra* note 38, at 3.

ment intended to address excess credit growth and asset bubbles and may be imposed within a range of zero and 2.5 percent, allowing regulatory discretion regarding the appropriate rate.⁶⁹

The new Basel III liquidity component establishes two different liquidity tests that banks must meet in order to fulfill the minimum liquidity threshold.⁷⁰ The first test, called the liquidity coverage ratio, focuses on short-term liquidity. The liquidity coverage ratio measures minimum liquidity levels based on a stress test to determine whether a bank has sufficient assets to cover cash outflows during a one-month period in the face of a downgrade of the bank's credit rating, losses of certain types of funding, and a number of other adverse events.⁷¹ The second test is the net stable funding ratio, which examines medium and long-term liquidity using a similar stress test based on a one-year period.⁷²

Basel III also mandates enhanced disclosure that affects reporting on securitization exposures, off-balance sheet vehicles, and the components of regulatory capital and capital ratio calculations.⁷³ Banks must make certain information about their regulatory capital holdings available on their websites.⁷⁴

It is not clear if Basel III will effectively address the issues of regulatory arbitrage present under Basel II. Like the previous two Accords, Basel III allows for regulatory judgment in the implementation of many of its provisions.⁷⁵ While some degree of regulatory discretion is necessary to accommodate differences in domestic regulated sectors and to encourage state adoption of the Basel Accords, this discretion sometimes creates opportunities for regulators to establish rules that favor their state's institutions.⁷⁶ And, despite the focus on issues of regulatory arbitrage that resulted from Basel II's internal-ratings based measure of risk, Basel III uses similar risk assessment methods to determine capital requirements.⁷⁷ Nonetheless, some practitioners think that the Basel Committee will emphasize enforcement of consistent national regulations, leading to "convergence in implementation

69. See *id.* at 5.

70. See *id.* at 9.

71. See *id.*

72. See *id.* at 10.

73. See BASEL COMMITTEE ON BANKING SUPERVISION, BASEL COMMITTEE ON BANKING SUPERVISION REFORMS—BASEL III TABLE, available at <http://www.bis.org/bcbs/basel3/b3summarytable.pdf>.

74. See BASEL III, *supra* note 62, at 27 ("Banks are also required to make available on their websites the full terms and conditions of all instruments included in regulatory capital").

75. The Basel Committee's Consultative Document on Basel III, issued for comment in December of 2009, notes that "certain parameters" of the liquidity tests "will need to be set by national supervisors to take account of jurisdiction-specific conditions." BASEL COMMITTEE ON BANKING SUPERVISION, CONSULTATIVE DOCUMENT, INTERNATIONAL FRAMEWORK FOR LIQUIDITY RISK MEASUREMENT, STANDARDS AND MONITORING 5 (2009), available at <http://www.bis.org/publ/bcbs165.pdf>.

76. See Verdier, *supra* note 4, at 138 (noting that it was "[a]t Japan's insistence" that Basel II made changes to Tier 2 capital requirements, which was "aimed primarily at accommodating domestic financial practices").

77. See ENNIS & PRICE, *supra* note 2, at 1.

among the major jurisdictions.”⁷⁸ Ultimately, the effectiveness of the Basel III Framework in discouraging regulatory arbitrage and addressing some of the causes of the recent financial crisis remains to be seen—the regulations provide for gradual implementation over the course of six years, starting in 2013.⁷⁹

The Third Accord’s requirement that large global banks significantly increase their capital reserves and alter the composition of those reserves is expected to decrease the profitability of regulated institutions and has thus elicited vociferous opposition from regulated banks.⁸⁰ These more stringent capital requirements may have negative implications for the availability and cost of banks’ financing for their operations.⁸¹ The Basel Committee’s report on the impact of Basel III admits that the regulations are likely to affect growth, though only in the short term.⁸² Some of the opposition may also be due to concerns that Basel III’s increased reporting requirements and use of more stringent capital reserve quality standards will decrease opportunities for regulatory arbitrage, both in state implementation and by regulated institutions.⁸³ This would negatively impact the profitability of banks that previously benefited from use of such arbitrage.

It is not surprising that banks are resisting potentially expensive new regulations that impose restrictions on their operations. The recent financial crisis has left the global economy severely weakened, creating significant economic uncertainty and placing even more pressure on the regulators making national-level implementation decisions. This has amplified resistance to Basel III because of the expectation that the stringent capital requirements will be costly, decreasing regulated banks’ profitability.⁸⁴ The

78. See Shearman & Sterling Client Publication, *supra* note 65, at 5.

79. See BASEL III, *supra* note 62, at 69. However, as noted, many countries intend to implement Basel III ahead of this timeframe, and more information about the effect of the new regulations and the international community’s view of the Framework may be revealed even by 2013.

80. See generally David Enrich, *Banks Return With a Goal: Pushing Back*, WALL ST. J., Jan. 26, 2011, at A8.

81. See, e.g., Jack Ewing, *Basel Report Shows Banks Have Way to Go to Meet Capital Rules*, N.Y. TIMES, Dec. 17, 2010, at B4.

82. See MACROECONOMIC ASSESSMENT GROUP, BANK FOR INTERNATIONAL SETTLEMENTS, ASSESSING THE MACROECONOMIC IMPACT OF THE TRANSITION TO STRONGER CAPITAL AND LIQUIDITY REQUIREMENTS 2 (2010), available at <http://www.bis.org/publ/othp12.pdf>. The extended implementation timeline is in part intended to address Basel III’s impact on economic growth.

83. See BASEL III, *supra* note 62, at 27.

84. See Patrick Jenkins, *Finance: Banks face a perfect storm that is getting worse*, FINANCIAL TIMES, Jan. 24, 2012 (“Regulatory reform at a global level, under the new Basel III rule book, will make large chunks of investment banking more expensive to operate because it demands bigger capital buffers be held to back it.”), available at <http://www.ft.com/intl/cms/s/0/4e1bfe0e-41d3-11e1-a1bf-00144feab49a.html#axzz1nXnscooH>; Brooke Masters, *Regulation: Industry worries about the impact of new rules*, FINANCIAL TIMES, Sept. 19, 2011 (noting that bankers and consultants have warned that global regulatory efforts could drive up the costs of certain transactions, including payment processing and securities custody, potentially forcing some institutions to quit these businesses), available at <http://www.ft.com/intl/cms/s/0/da8a62c8-da03-11e0-b199-00144feabdc0.html#axzz1nXnscooH>; Ennis & Price, *supra* note 2, at 4. Cf. Ackerman, *supra* note 7 (noting that J.P. Morgan Chase CEO Jamie Dimon says that banks will charge more for services to get return on their capital in response to the Basel III capital requirements).

additional reporting requirements and objective measures of risk and capital quality imposed under Basel III may also level competitive advantages more than under Basel I or II, further fueling this resistance. Finally, the cost of initial implementation and ongoing reporting is bound to be particularly unwelcome when many of the regulated banks have struggled to remain profitable even after a series of major cost-cutting measures.⁸⁵ Many of these banks are large institutions that continue to have meaningful lobbying power despite their financial difficulties. The uncertainty of the current global economic environment that surrounds the implementation of these conservative lending practices will likely result in more lobbying for regulators and banks to permit flexibility in national-level implementation that will allow banks to minimize costs associated with the new regulations.

On the other hand, there remain incentives for regulators and financial institutions to implement even costly financial regulations. Brummer argues that states have strong incentives to implement non-mandatory international financial regulations because of the “disciplining” effect of market forces.⁸⁶ Jurisdictions, and by extension regulators and financial institutions, must compete with one another to attract capital; financial institutions similarly compete for capital within jurisdictions.⁸⁷ Regulators and financial institutions may thus comply with non-binding regulations to signal their stability and strong corporate governance to investors and other market participants. This will lower their costs of borrowing and facilitate transactions with other financial institutions, enhancing their overall competitiveness.⁸⁸ This is particularly the case where regulatory standards are widely implemented or viewed by the international financial community as a floor.⁸⁹ Under such circumstances, implementation of regulatory standards may be a prerequisite for international competitiveness even where regulations are costly.

The degree to which the Basel Accords are subject to market discipline is contested. Many believe that, with a few exceptions, the Basel Accords have been implemented at the national level by both Basel Committee members and non-member countries, and have been effectively treated as mandatory despite not being formally binding.⁹⁰ Since the Accords are so well estab-

85. See generally Victoria McGrane & Alan Zibel, *Bank Profits Rise But Revenue Soft*, WALL ST. J., Nov. 23, 2011, at C3.

86. See Brummer, *supra* note 4, at 286-88. This starkly contrasts with customary international law, which has been widely critiqued as ineffectual. See, e.g., David Zaring, *International Institutional Performance in Crisis*, 10 CHI. J. INT'L L. 475, 477 (2010).

87. See Brummer, *supra* note 4, at 267.

88. See *id.* at 286-27.

89. See *id.* at 272.

90. See Charles Freeland, *The Work of the Basel Committee*, in Robert C. Effros, ed., 2 *Current Legal Issues Affecting Central Banks* 231, 233 (IMF May 1994); Andrew Crockett, *International Standard Setting in Financial Supervision*, Lecture at the Cass Business School, City University, London (Feb 5, 2003), available at <http://www.bis.org/speeches/sp030205.htm> (noting that though the Basel Accords “have no legal force,” they have been “applied in all countries represented on the Committee” and “almost universally applied in non-member countries”).

lished, compliance, even with updated versions of the Framework, seems likely to play an integral role in investors' perceptions of stability and corporate governance.⁹¹

Brummer, in contrast, takes the view that "many of the *Core Principles* have been implemented only haphazardly across jurisdictions," and that "noncompliance in some areas has been deemed widespread across all countries."⁹² However, Brummer's analysis includes data on both developed and developing countries, which indicate that most developed countries had fully adopted and were generally compliant with the Basel regulations, while only slightly more than fifty percent of developing and underdeveloped countries were compliant.⁹³ Because developing and underdeveloped countries tend to have banking sectors that are less sophisticated than that of wealthier states, it is often more difficult, and sometimes not feasible, for these countries' financial regulators to effectively impose international financial regulations on banks. Including developing and underdeveloped countries in data on state compliance with the Basel Accords may therefore conceal the regulatory dynamic that exists for developed countries. For developed countries with sophisticated financial and banking sectors, the Basel Accords in many cases appear to be a regulatory floor, even creating pressure to engage in a regulatory race to the top.⁹⁴

The fact that some countries have adopted higher capital requirements than those required under Basel III and are implementing the Framework on an accelerated timeframe supports the view that the Framework is subject to market discipline, at least in certain countries. The Bank of England and Swiss National Bank have indicated that they want the capital requirements to be viewed as a minimum floor.⁹⁵ Sweden's national financial authorities have published recommended capital requirements for Swedish banks that are higher than the requirements established by the Basel III Framework.⁹⁶ The Sveriges Riksbank has cited investor confidence and systemic financial stability as important factors driving its decision regarding capital requirements.⁹⁷ The Governor of the Reserve Bank of New Zealand said that the central bank will likely implement Basel III earlier than required, noting that "as most jurisdictions are likely to implement Basel 3 [sic] ahead of the

91. See Verdier, *supra* note 4, at 133–34; Singer, *supra* note 19, at 535–38.

92. See Brummer, *supra* note 4, at 299.

93. See *id.*

94. See Alan Bollard, Governor, Reserve Bank of New Zealand, Speech at the Basel III Conference in Sydney (Mar. 25, 2011) [hereinafter Bollard Speech], transcript available at <http://www.rbnz.govt.nz/speeches/4327011.html> (noting that "just as most jurisdictions are likely to implement Basel 3 ahead of the Basel Committee's timeline, we would expect to do likewise").

95. See Market News International, *SNB's Hildebrand: New Basel III Rules A Minimum Requirement*, FOREX LIVE (Sept. 13, 2010, 13:25 GMT), <http://www.forexlive.com/blog/2010/09/13/snbs-hildebrand-new-basel-iii-rules-a-minimum-requirement/>.

96. See Sveriges Riksbank Memorandum, *supra* note 7, at 1.

97. See *id.* (explaining the reasoning behind Sweden's use of higher capital, stating that "[t]he proposed higher capital requirements. . .increase confidence in the Swedish banking system").

Basel Committee's timeline, we would expect to do likewise."⁹⁸ The impetus behind these decisions is at least in part the enhancement of investor confidence in their states' banking sectors.⁹⁹

Reputational pressures on regulators are a second source of "discipline" that encourages implementation of non-binding regulations.¹⁰⁰ Regulators make promises to one another during the regulatory negotiation process and rely on one another for assistance in enforcing regulations where regulated entities operate in multiple jurisdictions.¹⁰¹ Regulators that do not abide by the promises they make during negotiations will lose credibility in future rounds of negotiation.¹⁰² Breaking promises can also erode goodwill with other regulators, who will be less willing to assist in cross-border enforcement.¹⁰³ Finally, "the success of domestic markets is generally viewed as a proxy for the success of a regulator."¹⁰⁴ Regulators are incentivized to foster the competitiveness, profitability, and growth of the national financial sectors that they are responsible for regulating, because this reflects positively on their work as a regulator.¹⁰⁵ This reputational dynamic is even more difficult to discern, particularly at this early state in the Basel III implementation process, since credibility and goodwill are far more difficult to measure than state enforcement of regulatory requirements. Additionally, the secretive nature of the Basel Committee's negotiations will be an impediment to this type of analysis.¹⁰⁶

III. BASEL III AND THE GREAT RECESSION

The recent financial crisis has undermined faith in the efficacy of the Basel Accords and may test the Accords in new ways. Though the roots of the Great Recession reach back to before the Basel Committee's release of Basel II, which the United States had not fully implemented by 2007, the Second Accord was grounded in the same principles as the First and the Third: each of the Basel regulations utilizes capital requirements as an integral component of their regulatory structure.¹⁰⁷ The failure of the Basel Framework to

98. See Bollard Speech, *supra* note 94.

99. See Sveriges Riksbank Memorandum, *supra* note 7, at 3 ("The proposal thus reduces the systemic risk in the Swedish financial system and increases confidence in the Swedish banking system.")

100. See Brummer, *supra* note 4, at 284–86. Brummer also cites institutional pressures on states as causing a "disciplining" effect regarding implementation of international financial regulations. *Id.* at 280–81, 262–63.

101. *See id.* at 285.

102. *See id.* at 286.

103. *See id.*

104. *See id.* at 267.

105. *See id.* at 267.

106. *See id.* at 278.

107. *See* TARULLO, *supra* note 4, at 4–5. The shift in approach from Basel I to Basel II that Tarullo describes focuses more on the size and complexity of the Basel II 300-page regulatory framework, the extensive notice and comment period that followed the release of the Basel II regulations, and the subsequent revisions based on quantitative studies of the Accord's impact, as contrasted with the thirty page

prevent the crisis, or to even indicate that widespread failure of the financial system was a risk, is thus likely to impede the implementation of Basel III. Some even blame the Basel Framework for the insolvencies that wreaked havoc on the global financial system.¹⁰⁸ As Zaring noted, “Basel’s role in felling America’s big five investment banks may suggest that international regulatory networks are important, but the current crisis has raised real questions about their (and Basel’s) usefulness.”¹⁰⁹

Doubts related to Basel II therefore logically extend to Basel III. Although Basel III adds new elements to the regulatory framework, its primary focus is raising the capital requirements established by Basel I and further developed by Basel II.¹¹⁰ The Basel II risk-weighted assets method of calculation used to determine capital requirements will be largely the same under Basel III, though with significant adjustments to the risk weights of certain securities.¹¹¹ Basel III will also continue to have the same regulatory scope as Basel II.¹¹² These similarities call into question the Basel Committee’s ability to develop an international financial regulatory scheme that “[strengthens] the soundness and stability of the international banking system.”¹¹³

Under Verdier’s analysis, doubt about Basel III’s effectiveness as a stabilizing regulatory tool is likely to inflame national-level political resistance to the implementation of the Accords. Such doubt may also affect regulators’ incentives since a significant benefit of the implementation of international

document produced by the Basel Committee that negotiated Basel I, which was not subject to review after its adoption. See Pierre-Hughes Verdier, *Banking on Basel: The Future of International Financial Regulation*. By Daniel K. Tarullo. Washington, DC: Peterson Institute for International Economics, 2008, 104 AM. J. INT’L L. 338, 338–39 (2010).

108. See Zaring, *supra* note 86, at 482–83 (arguing that “[i]t was the Basel Committee that set the standards that Bear Stearns, Lehman Brothers, and the big European banks met in practice, and it was Basel II that did not, in the end, sufficiently keep the banks solvent”). In 2007, Basel risk assessments indicated that Bear Stearns and Lehman Brothers, whose failure was at the heart of the recent financial crisis, were adequately capitalized. See Securities and Exchange Commission, Chairman Cox Letter to Basel Committee in Support of New Guidance on Liquidity Management (Mar. 20, 2008), online at <http://sec.gov/news/press/2008/2008-48.htm> (last visited Feb. 27, 2012) (stating that Bear Stearns met supervisory standards throughout the period leading up to its effective sale to J.P. Morgan Chase). Although some scholars are of the view that capital levels were not main the issue driving the 2007–2008 crisis, and that widespread lack of confidence in institutions like Bear Stearns and Lehman Brothers was the driver behind their failure, see, e.g., Morgan Ricks, *Regulating Money Creation after the Crisis*, 1 HARV. BUS. L. REV. 75 (2011), this only makes the Basel Accords continued reliance on capital requirements more questionable.

109. See Zaring, *supra* note 86, at 483.

110. See generally BASEL III, *supra* note 62.

111. See ENNIS & PRICE, *supra* note 2, at 3.

112. See generally BASEL III, *supra* note 62. Basel III will regulate the same types of institutions as Basel II—large, international banks and their subsidiaries, and holding companies for corporate groups whose operations primarily consist of banking activities. The regulations apply to both banking and other financial activities. See BASEL III, *supra* note 62, at 11; BASEL II, *supra* note 51, at 7; Shearman & Sterling Client Publication, *supra* note 65, at 5.

113. Basel Committee on Banking Supervision, *Capital Requirements and Bank Behaviour: The Impact of the Basel Accord*, Working Paper, No. 1, 1 (Apr. 1999), available at http://www.bis.org/publ/bcbs_wp1.pdf?noframes=1. See Zaring, *supra* note 86, at 483.

financial regulations is that it provides a state's financial sector and institutions with a stamp of internationally recognized regulatory approval.

Furthermore, Zaring points to the extensive involvement of the Group of Twenty countries, or G-20, in the Basel III negotiation process to demonstrate the increasingly political nature of the Basel Accord negotiations. He argues that this political environment casts doubt on the regulations as expertise-driven and impairs confidence in the efficacy of the Accords.¹¹⁴ This critique may be difficult to refute since Basel Committee negotiations take place in secrecy, and, if valid, could undo the benefits of the transparency achieved in the negotiation of Basel II and III, both of which have included a notice and comment period and dissemination of revised drafts.¹¹⁵ It also undermines the regulatory network view of the Basel Committee negotiations as "a model for international rule-making with greater accountability and legitimacy."¹¹⁶

The controversy over the new Basel III macroprudential requirements may indicate a lack of faith in the Framework and the Basel Committee's negotiation process. In its proposal for implementation of Basel III, the Reserve Bank of New Zealand announced that it does not intend to implement the leverage ratio requirement, a core piece of the innovative but controversial macroprudential measures.¹¹⁷ However, the Reserve Bank of New Zealand is not rejecting other portions of the regulations and will be implementing the Basel capital requirements on an accelerated timeframe. The Reserve Bank stated that "the one-size-fits-all aspect of the leverage ratio is poorly targeted" and "would also undermine the value of the existing risk-based approach to the calculation of required capital."¹¹⁸ Such

114. See Zaring, *supra* note 86, at 477. The Basel Accords are negotiated by the Basel Committee on Banking Supervision, which today consists of national financial regulation and central bank officials from the G-20 countries, and is administered through the Bank for International Settlements in Basel, Switzerland. The Group of Twenty countries include Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, Korea, Turkey, the United Kingdom, the United States, and the European Union. Basel I was negotiated by Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the UK and the US. See Bank for International Settlements ("BIS"), History of the Basel Committee and its Membership, online at <http://www.bis.org/bcbs/history.htm> (last visited DATE); Barr & Miller, *supra* note 3, at 16. The Basel Committee is overseen by a second committee made up of national finance ministers and central bank governors from the G-20, as well as representatives from the International Monetary Fund and the World Bank. BIS

115. David Zaring, *Informal Procedure, Hard and Soft, in International Administration*, 5 CHI. J. INT'L L. 547, 572-80 (2005). The text of Basel III was released in December of 2010. After a period of review, a revised version of the regulations, updated to include modification of one of the Framework's risk measures, was released in June 2011. Press Release, Bank for International Settlements, Capital treatment for bilateral counterparty credit risk finalised by the Basel Committee (Jun. 1, 2011), available at <http://www.bis.org/press/p110601.htm>.

116. Barr & Miller, *supra* note 3, at 17.

117. See Client Publication, KPMG LLP, Basel III: Issues and Implications 10 (2011), available at <http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Documents/baselIII-issues-implications.pdf>; King & Tarbert, *supra* note 38, at 3.

118. RESERVE BANK OF NEW ZEALAND, IMPLEMENTATION OF BASEL III CAPITAL ADEQUACY REQUIREMENTS IN NEW ZEALAND CONSULTATION PAPER (2011) 13, available at <http://www.rbnz.govt.nz/>

unapologetic rejection of the leverage ratio may imply a lack of consensus on the utility of certain portions of the Framework and indicate states' need for increased stability measures and simultaneous skepticism as to some parts of the new Framework.

It is not yet clear if the international community will respond differently to Basel III than it has to previous versions of the Framework. Incentives for implementation so far cut both ways, and the uncertainty in the global economy will only contribute to regulatory uncertainty surrounding these stringent regulations. And, if Basel II is any indication, the Third Accord is likely to undergo significant revision as it is implemented. Implementation in the United States must also be coordinated with Dodd-Frank Act regulation, and these rules are still being formulated. Certain portions of Dodd-Frank conflict with some of the Basel III capital requirements and will have to be reconciled in the implementation process.¹¹⁹ As Andrew G. Haldane, Executive Director of Financial Stability at the Bank of England, put it, “[h]istorical experience suggests that this is unlikely to be the end of the road.”¹²⁰

finstab/banking/4577705.pdf. The RBNZ's proposal was issued in November 2011, and the comment period ended in January 2012. *Id.* at 1. As of the writing of this paper, the RBNZ has yet to issue a final proposal for implementation, with incorporation of any comments provided during this period.

119. See Shearman & Sterling Client Publication, *supra* note 65, at 15.

120. Andrew G. Haldane, Executive Director, Bank of England, Remarks based on a speech given at the American Economic Association (Jan. 9, 2011), *available at* <http://www.bis.org/review/r110325a.pdf>.

