

**CHAPTER 18**  
**THE DOMESTIC ROOTING OF FINANCIAL REGULATION**  
**IN AN ERA OF GLOBAL CAPITAL MARKETS**

**Thomas Oatley\* and W. Kindred Winecoff†**

**Introduction**

The financial crisis that began in 2007 has forced academics and policymakers to reexamine regulatory policy at the domestic and international levels. In an op-ed in the *Washington Post* during the height of the crisis, Prime Minister Gordon Brown (as he then was) called for ‘cross-border supervision of financial institutions; shared global standards for accounting and regulation; a more responsible approach to executive remuneration that rewards hard work, effort and enterprise but not irresponsible risk-taking; and the renewal of our international institutions to make them effective early-warning systems for the world economy’ (Brown 2008).

Similar responses were not only common following the current crisis, they continue a history of introspection following financial upheavals: in the United States (US), the Glass-Steagall Banking Act of 1933 -- which established federal deposit insurance and separated commercial from investment banking -- was a response to the waves of bank failures that exacerbated the Great Depression. In 2010, the United Kingdom (UK) reacted to the subprime financial crisis by moving to abolish its primary financial regulator, the Financial Services Authority, and giving its authority to several other agencies including the Bank of England and the Consumer Protection and Markets Authority, a new prudential supervision authority.

At the international level, the Basel Committee on Banking Supervision was formed to provide a platform for national governments to coordinate policy after policymakers mis-handled the liquidation of the German Bank Herstatt in 1974, thereby sparking an international controversy. The Basel Capital Accord (Basel I), which established minimum capital adequacy requirements across the G-10 countries, was agreed following the exposure of banks in the G-10 countries to the Latin American debt crises in the 1980s. The Revised Common Framework (Basel II) followed the East Asian financial crises in the 1990s. The Basel Committee has

---

\*Thomas Oatley – Associate Professor, Department of Political Science, The University of North Carolina – Chapel Hill.

† W. Kindred Winecoff – PdD Candidate, Department of Political Science, The University of North Carolina – Chapel Hill.

developed a new agreement (Basel III) to address weaknesses in prudential standards that contributed to the subprime crisis, to be refined and implemented in the coming years.

The concern is for good reason. Not only have financial crises always been a recurring feature of the global economy (Reinhart and Rogoff 2009; Kindleberger 1978), they have increased in incidence and severity following the collapse of the Bretton Woods system (Bordo & Eichengreen 1999). Nevertheless, a healthy financial sector is a prerequisite for economic growth (King & Levine 1993), and there is some evidence that an open international financial system fosters economic growth<sup>1</sup>. Governments use regulations to resolve the tradeoff between the necessity of a robust financial sector, as a precondition for economic growth, and the potential for devastating collapses in the real economy if the financial sector breaks down as a result of excessive risk-taking. In short, governments use regulatory policy to balance private and public interests.

As governments consider revisions to domestic and international regulatory regimes, scholars and policymakers should also reconsider the causes and effects of regulation. Specifically, we should focus on why governments may wish to coordinate regulatory policy across national jurisdictions, why they may wish to maintain domestic control over regulatory policy, and what sort of policy coordination can be expected in the current climate given domestic and international constraints. Can we expect the current crisis to lead to the creation of a new, rigorous international regulatory agreement?

To answer this question, we look to theories of political economy and past instances of international regulatory cooperation and competition. In the next Section, we discuss why financial regulation at both the domestic and international levels can be welfare-enhancing. We then provide a brief overview of international financial regulation up to this point in time before describing positive political theories of regulation. In the final Section we provide an account of our expectations for the future of international regulatory policy in light of economic theory, regulatory history, and political theory. Our analysis suggests that we should not expect a strong international financial regulatory regime to emerge from the recent crisis. Instead, regulatory structures will remain fragmented and subject to domestic politics. Some cooperation at the international level is likely, but we expect it to be narrow and weak.

## **1. Systemic Risk and the Prudential Regulation of Banks**

---

<sup>1</sup> There is some dispute on this point. Quinn & Inclan (1997) and Quinn & Toyoda (2008) find a strong association between capital account liberalization and growth, while Rodrik (1998) does not. Edwards (2001) argues that capital account openness affects developing and developed countries differently. The different results may be attributable to the fact that the different studies use different measures of capital account openness and study different time periods.

The classic case for prudential regulation arises from the systemic risk that inheres to the banking sector. Commercial banking is an inherently risk activity. Commercial banks transform short term and, thus, highly liquid liabilities (deposits and money market certificates) into long term and relatively illiquid assets. Consequently, every commercial bank faces liquidity risk and solvency risk. Liquidity risk arises from the possibility that depositors will run on the bank; solvency risk arises from the possibility that the value of assets will drop below liabilities through default or other factors. Illiquidity and insolvency have the same impact: they prevent banks from repaying their creditors.

Systemic risk arises because liquidity or solvency problems at one bank can spread through the entire financial system. When one bank cannot repay an important creditor, the creditor is likely to begin encountering liquidity and solvency issues of its own. Illiquidity at the counterparty bank makes it difficult for this bank to repay all of its creditors who may then, in turn, confront liquidity problems. The interconnectedness of the banking system—the fact that one bank’s assets are another bank’s liabilities—can thus transform what might be otherwise a localized liquidity or solvency crisis into a systemic crisis.

Prudential regulation strives to reduce the likelihood of systemic crises. Such regulation seeks this objective through a number of channels. On the one hand, regulation can directly restrict bank activities. For example, regulations might govern the degree of allowable exposure to single correspondents in the interbank market. Alternatively, regulations might force diversification of bank assets across assets classes to limit exposure to negative shocks centered in a single asset class. Rules such as these strive to create a network of interbank assets and liabilities that can withstand the collapse of an individual bank, even a relatively large one.

Regulation can also strive to minimize the probability that individual banks will face insolvency by regulating bank capital. Bank capital includes shareholder equity and retained earnings (so-called ‘Tier 1 capital’ under Basel II) and undisclosed reserves, revaluation reserves, general provisions, hybrid instruments, and subordinated term debt (so-called ‘Tier 2 capital’ under Basel II). Such capital provides a cushion for unexpected losses. In the event of a negative shock, therefore, capital provides the funds needed to settle liabilities. Under the Basel II framework, the amount of capital that banks must hold is determined by the riskiness of the assets on their balance sheet. A balance sheet dominated by riskier assets requires banks to hold more capital.

The fundamental case for *international* regulation differs from this standard case only by virtue of the geographic scale of systemic risk. As national financial markets become more tightly integrated, network interdependencies inherent in financial systems increasingly extend across borders. Banks incorporated in one jurisdiction hold assets and liabilities of banks and non-bank entities incorporated in other jurisdictions. Consequently, the failure of a foreign

institution can destabilize the local financial system. The most prominent illustration of such cross-border destabilization might be that arising from the collapse of the Credit-Anstalt in 1931, which some have characterized as the largest bank failure in history (see, e.g., Eichengreen 1995; Shubert 1991). International financial integration thus implies that domestic financial stability is dependent upon the financial health of foreign banks. Accordingly, governments gain an interest in the financial health of foreign banks and can potentially benefit from international measures that prevent foreign governments from under-regulating associated risks.

The potential benefits from international financial regulation are magnified by the extent to which governments use financial regulation to compete with each other as home states for financial institutions. Because compliance with regulation is costly, jurisdictions that impose relatively lax regulatory requirements gain a cost advantage over foreign competitors. In setting regulation within the context of globalized financial markets, therefore, governments must be aware of the impact of regulation on the competitiveness of local firms *vis-à-vis* foreign firms. At the minimum, governments wary of losing business to foreign jurisdictions will be reluctant to strengthen regulation even when they believe it necessary to do so. At the maximum, mercantilist governments will reduce the regulatory burden to attract firms into their jurisdiction. In globalized markets, therefore, unilateral national regulation can generate sub-optimal rules that fail to adequately manage the systemic risk inherent in banking. As a consequence, localized failures are more likely to spark international crises.

Changes in the financial sector over the past two decades also present opportunities for regulatory cooperation. The emergence of the ‘shadow banking system’ – in which traditional banking functions have increasingly been performed by investment banks, mortgage lenders, hedge funds, and other non-bank or quasi-bank institutions – has presented challenges for regulators. By the summer of 2008, lending by the shadow banking system in the US exceeded lending by the traditional banking sector (Geithner 2008). Unlike commercial banks, institutions in the shadow banking system do not take deposits, and so often escape many of the liquidity, leverage, and capital adequacy restraints imposed on commercial banks. These financial institutions are capable of spreading risk through the international financial system through the creation of asset-backed securities and derivative contracts, which are then sold to commercial banks and other institutional investors.

Over time, many large commercial banks began participating in these practices through structured investment vehicles, in-house hedge funds, and investment banking divisions. In the US, the 1999 repeal of Glass-Steagall wall separating investment from commercial banking encouraged this trend, although most European financial firms operated in a universal system already. The increased use of off-balance sheet investment vehicles spread risk from the shadow banking system throughout the financial system. If the value of the assets underlying these

securities and derivatives declines, then so does the value of the securities themselves. A decline in value of any asset can cause banks and other financial institutions to have difficulty paying their creditors, so a disruption in one corner of financial markets can ripple through the entire system. In this way, the systemic risk inherent in the traditional banking system is also present in the shadow banking system, but leading up to the subprime crisis regulatory safeguards did not kept pace with these financial innovations.

In short, the standard case for the prudential regulation of banking activities lies in the systemic risk associated with the interdependencies that inhere within financial systems. The case for international regulation resides in the recognition that in a global financial market the stability of local firms depends, in part, on the health of firms in foreign jurisdictions. This case for international regulation is strengthened by the recognition that the costliness of regulation makes governments reluctant to regulate unilaterally in a global market.

## **2. A Brief Overview of International Financial Regulation**

Although financial globalization creates a compelling case, on welfare grounds, for international financial regulation, in fact international regulation of financial institutions remains relatively under-developed. It is under-developed in terms of its organizational and institutional basis; it is under-developed in terms of its regulatory and geographic scope; it is under-developed in terms of its construction of specific regulatory practices; and it is under-developed in terms of the extent to which compliance is mandatory rather than voluntary.

One way to appreciate the current status of international financial regulation is to look at the current work of the Financial Stability Board (FSB). In April 2009, governments transformed the Financial Stability Forum into the FSB in an attempt to ‘strengthen its effectiveness as a mechanism for national authorities, standard setting bodies and international financial institutions to address vulnerabilities and to develop and implement strong regulatory, supervisory and other policies in the interest of financial stability.’<sup>2</sup> Governments gave the FSB the mandate to identify vulnerabilities, to advise on solutions, and to give momentum to the ongoing multilateral effort to strengthen financial systems. In connection with this work, the FSB has identified twelve core standards necessary for sound financial systems.<sup>3</sup> Three of the twelve pertain to the macroeconomic framework; five pertain to specific aspects of the institutional and market infrastructure (accounting, auditing, corporate governance, insolvency, payments systems, and

---

<sup>2</sup> <http://www.financialstabilityboard.org/about/history.htm>

<sup>3</sup> [http://www.financialstabilityboard.org/cos/key\\_standards.htm](http://www.financialstabilityboard.org/cos/key_standards.htm)

market integrity). The remaining three standards pertain to financial institutions: banking supervision, securities regulation, and insurance supervision.

A first observation to make, looking at the twelve areas above, is on the degree of organizational fragmentation. The International Monetary Fund (IMF) has responsibility for developing and monitoring compliance with standards for macroeconomic policy and data transparency. Responsibility for institutional and market infrastructure rests with the World Bank, the Organization for Economic Cooperation and Development, the International Accounting Standards Board, the Committee on Payment and Settlement Systems of the Bank for International Settlements (BIS), the Financial Action Task Force, and the International Organization of Securities Commissions. Banking, securities, and insurance regulation are likewise allocated to three different bodies: the Basel Committee on Banking Supervision, the International Organization of Securities Commissions (IOSCO), and the International Association of Insurance Supervisors (IAIS). Finally, the Financial Stability Board has some authority to coordinate the activities of these multiple groups.

Although international organizations dedicated to banking, securities, and insurance supervision do exist, only in the field of banking has cooperation within those organizations advanced beyond the formulation of non-binding principles and standards. The IAIS, for example, sets out principles that ‘identify areas in which the insurance supervisor should have authority or control and that form the basis on which standards are developed.’ Standards lay out best practices in particular areas. Neither the principles nor the standards in question are binding on IAIS members. IOSCO performs very similar functions. It has developed thirty standards for securities regulation based on three fundamental principles (IOSCO 2003). Yet, neither the principles nor the standards are binding obligations for IOSCO members. Moreover, in neither case do the commonly agreed best practices relate to specific regulatory requirements for specific types of institutions. IAIS provides no specific guidance, much less requirements, on how insurance firms must manage their assets and liabilities. Regarding capital adequacy, for example, IOSCO’s primary framework says only that ‘Capital adequacy standards...should be designed to allow a firm to absorb some losses, particularly in the event of large adverse market moves, and to achieve an environment in which a securities firm could wind down its business over a relatively short period without loss to its customers or the customers of other firms and without disrupting the orderly functioning of the financial markets. A firm should ensure that it maintains adequate financial resources to meet its business commitments and to withstand the risks to which its business is subject. Risk may result from the activities of unlicensed and off balance sheet affiliates and regulation should consider the need for information about the activities of these affiliates’ (IOSCO 2003, pp. 34-5).

Only in the case of banking supervision have national regulators moved beyond the formulation of non-binding standards and principles to create specific regulatory targets. Working within the Basel Committee on Banking Supervision, national regulators have developed common capital adequacy regulations for commercial banks. The first version of these standards, enunciated in 1988 in ‘The International Convergence of Capital Measurements,’ provided minimum suggested capital requirements for commercial banks.<sup>4</sup> The agreement defined regulatory capital, developed a formula with which to weight the risk of different asset classes, and suggested specific risk-adjusted capital ratios that G-10 members believed appropriately encouraged sound banking practice. Governments began to revise this initial agreement in the late 1990s, refining how banks and regulators should measure and weigh the risk attached to specific assets.

Although international regulation has progressed furthest in banking, even here its scope is limited. The capital adequacy regulations formulated by the Basel Committee do not constitute binding obligations for the world’s governments, or even for the governments that are members of the Basel Committee. As the Committee itself explains, ‘The Committee does not possess any formal supranational supervisory authority. Its conclusions do not have, and were never intended to have, legal force. Rather, it formulates broad supervisory standards and guidelines and recommends statements of best practice in the expectation that individual authorities will take steps to implement them through detailed arrangements -- statutory or otherwise -- which are best suited to their own national systems’ (Basel Committee on Banking Supervision 2009).

While the Basel Accord outlined broad standards, the interpretation and implementation of these standards was left up to national governments. Domestic regulators determined what accounting standard was used to measure the value of bank assets, and thus the required capital cushion. Some latitude was given to domestic regulators to determine what constituted regulatory capital, and what risk-weights were given to different asset types. The Accord included no provision for liquidity requirements. In fact, the original Basel Accord left so much to the discretion of national regulators, presented so many regulatory arbitrage opportunities for banks to exploit, and proved so inadequate to prevent pressures on the banking system during a series of financial crises during the 1990s, that a Revised Framework was commissioned less than a decade after the implementation of the original Basel Accord. The Basel II revision clarified many of the ambiguities in the original Accord, but was criticized in turn for promoting a ‘one-size-fits-all’ framework that was not appropriate for all countries, despite the fact that national

---

<sup>4</sup> The 1988 Basel I version of ‘The International Convergence of Capital Measurements’ was incorporated into the ‘Revised Framework’ of Basel II along with other documents in a process that culminated in 2006. The original may be found at <http://bis.org/publ/bcbasc111.pdf>. The revised comprehensive version may be found at <http://bis.org/publ/bcbs128.pdf>.

regulators still retained some discretion over risk calculation and other aspects of regulatory policy. As a result, many countries delayed the implementation of the Revised Framework or only partially adopted it.

The inadequacies of the Basel Accord and Revised Framework were demonstrated by a series of international financial crises that culminated in the subprime mortgage crisis. Before and after these crises some governments maintained stricter domestic standards than those suggested by the Basel Committee, and some research indicates that market discipline places a greater constraint on bank behavior than Basel requirements (Bernauer & Koubi 2009). There was no regulation of the shadow banking system at the international level, despite the fact that non-bank financial institutions are active across national borders, allowing risk to spread throughout the global financial system. The severity of the resulting subprime crisis provides strong evidence that the Basel standards were too weak to prevent banks from excessive risk-exposure.

Underscoring this point is the fact that, although accession to the Basel Accord is strictly voluntary, 140 of the 142 governments that responded to a 2006 World Bank survey claimed adherence to the Basel standards.<sup>5</sup> Such broad acceptance of the Accords indicates one of two things: either most governments do not consider the standards to be a major encroachment on their sovereignty nor a major burden to their banking sectors, or they claim adherence to the standard but do not actually achieve it. Neither the Basel Committee, nor the BIS, nor the IMF nor the FSB monitor compliance with the Basel Accord; the lack of an enforcement mechanism means that there are many instances of partial- or non-compliance (Ho 2002, Walter 2008).<sup>6</sup> Either situation seems to indicate that neither the Basel Accord nor its Revised Framework presents a meaningful constraint on the behavior of banks or governments, which is its ostensible purpose. Considering that the Basel Accord represents the most prominent example of financial regulation at the international level, these facts demonstrate the weakness of both the *de jure* and *de facto* requirements of global financial standards up to this point.

In short, governments have not yet taken significant steps toward the realization of the potential gains to be had from the global regulation of financial services. In fact, the pattern of government activity and inactivity revealed by the preceding discussion raises two puzzles. First, why do governments remain reluctant to develop strict, binding international financial regulations? This reluctance is especially puzzling when viewed in the context of other international regulatory frameworks. Second, why have governments been more willing to

---

<sup>5</sup> The data come from the Bank Regulation and Supervision database, described by Barth et al (2008) and found at <http://go.worldbank.org/SNUSW978P0>

<sup>6</sup> Many countries, including the United States, are still not yet fully in compliance with the Revised Framework of the Basel Accord.

develop common specific regulations in banking than in securities and insurance? Answering both questions requires us to explore the political economy of financial regulation.

### **3. The Political Economy of International Financial Regulation**

Early economic theories of regulation focused on the provision of public goods from which all actors in society benefit. According to this school of thought, regulation is to be used in the public interest to correct market failures or inefficiencies, such as negative externalities generated by some economic activities (Pigou 1932; Demsetz 1968). These occur when an economic action causes spillover effects that adversely affect others. The classic case involves a firm that creates pollution as a byproduct of production. Absent government intervention, the cost of cleaning up this pollution is borne by other actors or the society at large, not the firm that generates it. Regulation, through mandates or taxes, can be used to bring private and social costs in line to correct this market failure. In the case of finance, a function of regulation is to limit the capability of firms to generate risk that affects all of the actors in the system, not just the risky firm.

A second school of economic thought recognized that all regulations contain a distributional component: some actors will benefit from regulations, while others will suffer. Proponents of this view argue that regulations are a means for politically powerful interest groups to capture rents from the state, creating market inefficiency or failure where there was none before (Stigler 1971; Peltzman 1976, 1989). According to this view, regulations are of dubious social value, but strongly benefit those who are able to steer government policies in ways that protect their interests by limiting the competition they face. Classic cases of rent-providing regulations include barriers preventing new entry into markets, or granting of monopoly privileges by the state. In finance, regulations have been used to prevent foreign firms from entering domestic markets, or limiting the types of services they can provide.

Political economy analysis of regulation has incorporated both the public goods view and the rent-seeking view of regulatory policy into its models, and begins with the recognition that no matter how globalized financial markets have become, political accountability remains strictly local. And the governments that typically set the agenda for international negotiations, those who govern in the advanced industrialized countries, are held accountable by their population through regular national elections. As a result, the patterns of financial regulation we observe, in terms of its specific content as well as the degree to which it acquires an international component, reflect the imperatives of retaining office in electoral democracies.

First generation research drew on normative theories of regulation and political theories of international cooperation to explain international regulation as a process oriented toward public goods provision. Analysts working in this framework viewed national regulators as protectors of

the public interest (Kapstein 1989, 1991, 1994). They set regulation in order to ensure systemic stability, although always subject to the need to reduce the impact of rules on the cost of doing business at home. International regulation, within this perspective, was a natural response to the expansion of capital markets beyond national borders. The central argument is that as financial markets become increasingly globalized, governments recognized that they were losing the capacity to regulate national markets effectively. Systemic stability came to depend upon common regulatory regimes that could only be established through international cooperation. And because banks were at the leading edge of financial globalization, national regulators initiated a process of international cooperation intended to reduce the risk of systemic instability in a global financial system. The initial result of this process was the adoption of minimum capital adequacy ratios by G-10 countries, which provided a buffer against systemic cross-national counterparty risks created by international financial transactions.

Second generation research draws on positive theories of regulation to emphasize the domestic and international distributional implications that drive financial regulation (Oatley and Nabors 1998; Simmons 2001). In this approach, politicians strive to balance two objectives when setting financial regulation. On the one hand, and in common with first generation models, the need to retain electoral support leads politicians to create regulation that provides systemic stability in order to reduce the probability that they confront a systemic crisis. On the other hand, politicians strive to enact regulation that maintains the competitiveness of the domestic financial sector in order to retain the financial and political support of the domestic industry. The politician's problem is that a trade-off exists between these two objectives: rules that promote systemic stability reduce the competitiveness of local industry, while regulation that enhances the competitiveness of domestic institutions relative to foreign competitors often increases the risk of systemic crisis.

This need to balance competing demands is evident in political debates about financial reform that emerged in the wake of the 2008 financial crisis. On the one side, the general public pressed for measures to limit excessive risk taking by financial institutions. Public opinion surveys conducted by the Pew Institute in 2009 and 2010 revealed an American public desirous of more stringent regulation of the financial services industry. In the February 2010 survey, for instance, 59% of the respondents said that it was a 'good idea for the government to more strictly regulate the way major financial companies do business.' Only one-third of the respondents believed that tougher regulation was a bad idea (Pew Research Center 2010). The regulatory reforms in the Dodd-Frank Wall Street Reform and Consumer Protection Act reflected this popular sentiment. One provision created a new regulatory authority charged with protecting consumer interests. Other provisions brought previously exempt activities, such as derivatives,

into the regulatory orbit. Still other provisions limited bank activities and tightened regulator oversight of existing practices.<sup>7</sup>

While voters pressured politicians to ‘punish’ banks and restrict risky activities, financial institutions sought to thwart regulatory measures that would constrain the growth and reduce the competitiveness of the American financial sector. The Chamber of Commerce, for example, argued that although they recognized the need for reform, they feared that key elements of the proposal released in the spring of 2010 would place American financial institutions and the American capital markets more generally, ‘at a distinct competitive disadvantage’ (US Chamber of Commerce 2009). The American Bankers Association, although also generally welcoming the construction of a more modern regulatory framework, expressed concerns that the proposed regulatory reform was likely to impose unacceptably ‘heavy new regulatory burdens’ on the banking industry (American Bankers Association 2010).

Because finding a regulatory structure that satisfies these competing demands is difficult, and because these demands change over time, financial regulation tends to be instable and marked by long periods of regulatory decay punctuated by sharp instances of re-regulation. Regulation tends to tighten significantly in the wake of a crisis. Market liberalization occurs slowly in response to the loss of memory of the most recent crisis. As mentioned above, the Glass-Steagall Banking Act of 1933 separated commercial from investment banking, a rule that persisted in the US until the Financial Services Modernization Act was passed in 1999. In the wake of the 2008 subprime crisis many American officials supported the re-establishment of the ‘wall’ between commercial and investment banking. The ‘Volcker Rule’ – proposed by former Federal Reserve chairman Paul Volcker – serves much the same purpose by limiting the ability of commercial banks to engage in proprietary trading or sponsoring hedge funds. The sentiment also spread to Europe, despite the fact that European states have traditionally had universal banking systems. In the UK, a cabinet committee headed by chancellor George Osborne was established to examine whether to break up commercial and investment banks along similar lines (Evans 2010). Other national governments, and the European Parliament, debated taking similar measures.

Governments can enhance systemic stability following crises only if they can mitigate the consequent negative impact on industry competitiveness. In broad terms, governments have two options for reducing the negative consequences of stricter regulation: market closure or international harmonization. Governments opted for the first approach following the catastrophic

---

<sup>7</sup> Among the changes, Title X creates the Bureau of Consumer Financial Protection, to be located within the Federal Reserve; Title IV establishes regulations for hedge funds and other non-bank financial institutions; Title VII requires financial instruments such as credit default swaps and credit derivatives be traded through exchanges; Title VI included the so-called ‘Volcker Rule’, which banned some types of proprietary trading by depository institutions.

failure of the financial system in 1929-1931. Most governments abandoned the gold standard, strictly limited the convertibility of their currencies, and effectively ended private cross-border financial transactions.

On occasion, governments opt for international harmonization. The Basel Accord represents one such instance of this response. Following the collapse of the Bretton Woods system of fixed exchange rates and capital controls, there was no institutional mechanism for cross-border cooperation to prevent or resolve financial disruptions. The crisis generated by American commercial bank exposure to sovereign defaults in Latin America in the 1970s-80s necessitated government intervention in the financial sector. In response, the American public (and their representatives) demanded stricter regulation of the financial sector. The American banking industry argued that unilateral re-regulation would limit their competitiveness in global markets. An international agreement provided a way for American policymakers to appease both domestic audiences; stricter prudential standards improved system stability and thus made public intervention less necessary, while the international adoption of certain standards allowed domestic banks to compete against foreign banks on a 'level playing field'. The Basel Accord, which harmonized prudential standards across the G-10, checked both boxes.

Just as domestic regulations necessarily have distributional consequences, privileging some interest groups over others, so do international regulatory agreements. Observing this, one view expects the emergence of international standards to be largely a function of developments in the largest markets (Simmons 2001). Relative power determines whose rules will be proposed and accepted. Simmons argues that international regulations are a product of great power politics, whereby the dominant financial center initiates an international regulatory innovation that arises through a domestic political process similar to the one that led to the Basel Accord. This innovation represents a redistribution of wealth to the dominant state from weaker states and is thus Pareto-inferior relative to the status quo. After major-power initiation, the other states in the system must choose whether to adhere to the new standard or oppose it and risk retribution from the stronger states. According to this framework, the Basel Accord was a redistributive agreement where the dominant centers (the US and UK) were able to coerce weaker states (including the rest of the G-10 and, especially, Japan) to conform to their preferred standard by threatening to limit access to their markets if the weaker states resisted (Oatley and Nabors 1998). By using their agenda-setting capabilities to change the status quo, the dominant states were able to provide a strong, credible threat so that weaker states were forced to accede to the new standard even though it may not have been in their interests.

Simmons does not closely examine what developments within a domestic polity might trigger a regulatory innovation in a strong state. Drezner (2007) argues that international regulatory harmonization occurs when gains from coordination exist for the dominant state, even

if they do not for lesser states. He accepts Simmons' claim that states with large internal markets will be able to set standards for the globe by threatening to withhold access to those markets, but notes that the cost of adjusting to a new standard is also higher when the internal market is large, so powerful states will only push for a new standard when the gains from it exceed the costs of adjusting to it. Because these conditions do not often hold, this view expects relatively little international regulatory harmonization, but when it does occur it should reflect the interests of the most powerful firms and interest groups in the strongest states.

Another strand of research analyzes the incentives of regulators, who are in a principal-agent relationship with governments (Singer 2004, 2007). If regulators fail to maintain stability in domestic financial sectors, they run a high risk of being removed from office by their governments. Unlike governments, they have little incentive to promote the competitiveness of domestic industry, unless a lack of competitiveness affects the stability of the financial sector. Since regulators are held responsible for stability, *ceteris paribus* they prefer to keep regulatory authority for themselves rather than cede it to an international regulator, who may set standards that are suboptimal for firms under their jurisdiction. This equilibrium changes if a threat to stability emerges from foreign jurisdictions. In that case, national regulators may push for a broad international standard that addresses the cause of instability, while retaining as much autonomy as possible. The narrow focus on the Basel Accord seems to reflect this pattern, as does the composition of the Basel Committee itself, which is comprised of the primary bank regulators in the major industrialized countries.

These theories also help explain why the scope of international regulations has been narrowly focused on the traditional commercial banking sector and traditional banking activities rather than the shadow banking system and newer financial instruments, including structured investment vehicles, many over-the-counter derivatives, collateralized debt obligations, and credit default swaps. Many of these instruments allowed banks to move assets and liabilities off-balance sheet, and thus evade capital adequacy requirements like those in the Basel Accord. In effect, banks and non-bank financial institutions were allowed to take on excessive levels of risk without being required to build up capital buffers as protection against default.

There are two reasons why newer innovations were largely unregulated before the subprime crisis. First, regulations are usually created as a reaction to a past crisis, not in anticipation of a potential future crisis. While there had been signs of the potential dangers of highly-leveraged derivatives trading following the near-collapse of the hedge fund Long Term Capital Management in 1998, the subprime mortgage crisis was the first large-scale financial shock that heavily involved derivatives and other shadow banking vehicles. If regulatory policy generally reacts to crisis, and prior to 2007 there was no crisis involving these new financial

instruments to respond to, then it should be no surprise that many activities undertaken in the shadow banking system were left unregulated.

Second, many of these vehicles were designed to mitigate the very risk they ended up creating. Many of these investments – including mortgage-backed securities and credit default swaps – were intended to reduce the exposure a bank had to default risk. In fact, many experts believed that derivative contracts made the financial system much more stable. In one prominent example from 2002, Senator Dianne Feinstein of California proposed legislation that would strictly regulate some types of derivatives. This followed the collapse of the Enron energy company, which had used derivatives and special investment vehicles to hide the holes in its balance sheet. But Federal Reserve Chairman Alan Greenspan was strongly opposed to the bill, claiming that derivatives helped diffuse risk in financial markets (Ip 2004). Before the subprime crisis, such beliefs were shared by many in public and private positions of prominence, as well as by the rating agencies, which routinely gave AAA or Aaa ratings to securities that eventually became known as ‘toxic assets’. Given this intellectual climate, it is not surprising that most derivatives were left unregulated.

If we sum up the common expectations in these theories, we can converge on some general predictions regarding the likely necessary conditions under which financial regulation can occur at the international level. *First*, there must be a systemic financial crisis that threatens the stability of the strongest states’ economies and alters their domestic political equilibria in favor of stricter regulation. *Second*, resolution of the fundamental causes of the crisis must require international coordination. *Third*, stricter regulations must adversely affect the competitiveness of financial firms in the dominant states relative to foreign firms, thus putting pressures on the government in the dominant states to shift regulatory policy in a way that advantages their domestic firms. *Fourth*, the new standard must privilege the interests of the firms in the dominant states by shifting the costs of moving to the new standard to foreign firms. *Fifth*, the new international standard must maintain policy flexibility for leaders to resolve domestic political tradeoffs. The history of international financial regulation supports this pattern. The extent to which the above conditions are satisfied in the context of the subprime crisis is examined in the following Section.

#### **4. The Subprime Mortgage Crisis and Expectations for Future International Regulations**

Has the recent financial crisis altered the political equilibrium in powerful states toward stricter regulation? The answer appears to be ‘Yes’. Many states have begun reforming their regulatory structures at the domestic level to improve prudence and emphasize financial stability. Additionally, the Basel Committee has updated its Accord with new capital adequacy, liquidity,

and leverage requirements to be refined and implemented over the coming years. But should we expect a new, rigorous international regulatory standard in response to the subprime mortgage crisis? Positive theory and recent history suggest the answer is a qualified ‘No’: we should see some activity at the international level, but changes to the system are likelier than not to be narrow, focused, and limited. To see why, we must consider the causes of the crisis, its aftermath, and the incentives facing policymakers through the lens of the political theories discussed above.

The financial crisis and the recession that followed the collapse of the subprime mortgage sector in the US would seemingly provide an opportunity for meaningful policy changes at the international level. Financial crises are necessary conditions for enacting substantive regulatory reforms, and the international nature of this crisis would seemingly provide a window for the creation of a meaningful international prudential standard and enforcement mechanism. Necessary conditions are not always sufficient conditions, however, and the particular political dynamics present in this crisis leave little reason to think that this will lead to a major international policy changes.

If we consider the subprime crisis in light of the likely necessary conditions for international regulation listed above we can see why this is the case. The first condition appears to hold: a systemic financial crisis has shifted domestic political equilibria in many leading states towards stricter regulation. While these debates are still ongoing, some reforms (such as the German ban on naked short selling, the reallocation of regulatory responsibilities and abandonment of ‘light touch’ in the UK, the Dodd-Frank legislation in the US, and the new Basel requirements) have already been initiated, and other reforms are likely to become law in the US, Europe, and elsewhere.

However the second condition – namely, that correcting the causes of the crisis should require international regulatory coordination – need not necessarily apply. To understand this, consider the proximate cause of the crisis: banks and other financial institutions in the US created large quantities of securities backed by mortgage assets located in the US, which they traded amongst themselves and sold to other investors, thus spreading mortgage risk throughout the financial system. In other words, from the American perspective the locus of the crisis was domestic, not foreign. The crisis did not occur because of a negative externality imposed by foreign firms or governments, so reforming the regulatory system does not require international agreement. Because lawmakers are ultimately held responsible by voters for the stability of the financial system, they will prefer to maintain regulatory authority rather than cede it to an international organization whenever possible. Thus, the location of the crisis provides incentives for policymakers in the US to focus on domestic, rather than international, reform. Because the American market is the world’s largest, international reform is highly unlikely without their

support, but even European governments can do much to reform their domestic regulatory structures to address their exposure to the crisis.<sup>8</sup>

It would be surprising to see no international response if opportunities exist for dominant states to put their firms at a competitive advantage through regulatory harmonization, the third condition for regulatory reform. The international nature of the crisis may provide such opportunities. Indeed, the G-20 has repeatedly called for greater international cooperation in monitoring national financial industries and coordination in responding to disruption, and has tasked the FSB with that purpose.<sup>9</sup> It has reiterated the role of the Basel Committee in crafting prudential standards to be implemented by all its members, while acknowledging the need to ‘help promote a level playing field, taking into consideration individual countries’ circumstances’ (Group of 20 2010).

Perhaps more importantly, American leaders have been hesitant to unilaterally initiate the sort of reforms that would put their firms at a competitive disadvantage, such as significantly increasing minimum capital-to-assets ratios that banks must maintain to hedge against default risk. In fact, U.S. Treasury Secretary Timothy Geithner has been forthright in declaring the American administration’s goal for revision of the Basel Accord: raise capital ratios in such a way as to not disadvantage American firms. ‘By the end of this year [2010], we will negotiate an international consensus on the new ratios’, he said in March 2010, while noting that ‘[American] major global banks have more capital today relative to risk than do many of their major international competitors’ (quoted in Sorokin 2010). In other words, American banks would benefit if their competitors were also required to hold larger amounts of capital relative to assets, and would suffer if forced to do so while their foreign competitors were not, so the U.S. government has insisted that stricter capital requirements be included in any new Basel revision.

This American demand has attracted complaints from European banks and governments. Because American banks already maintain higher ratios than many of their global competitors, such a revision would fulfill the fourth requirement for international regulatory reform. Even before the financial crisis, American banks were required to hold 50% more Tier 1 capital than the Basel minimum to be considered ‘well capitalized’ by domestic regulators, and the definition of qualifying capital was stricter in the U.S. than in many other advanced countries.<sup>10</sup> If the US were to unilaterally place even stricter regulatory requirements on their financial firms without

---

<sup>8</sup> There are a variety of ways that this could happen, including changing the risk-weighting rules by which banks calculate their capital-to-assets ratios.

<sup>9</sup> See , e.g., the communiqué from the London meeting in April, 2009 that established the FSB, which may be accessed at <http://www.londonsummit.gov.uk/en/summit-aims/summit-communique/>. This has been emphasized in every communiqué, leaders’ statement, and progress report since, the full list of which may be found at [http://www.g20.org/pub\\_communiques.aspx](http://www.g20.org/pub_communiques.aspx).

<sup>10</sup> Since the crisis American regulators have relied less on official numbers and more on ‘stress tests’ and other subjective assessments in determining the appropriate level of capital for banks to hold.

other countries following suit, American banks would find it very difficult to remain competitive in globalized markets. But if foreign firms were also obligated to follow the new rules, American firms would be in a better competitive position.

For this reason, banks in Europe and Japan have resisted calls for a strong new regulatory standard. For example, the Association of German Banks issued a position paper in April, 2010 declaring that, while they were in support of regulatory reform ‘in principle’, they argued that the proposals under discussion by the Basel Committee ‘are unsuited to achieving the declared aim of stabilising the financial sector’ and would force German banks to raise at least €98 billion of new capital, and reduce loans by trillions of euros (Association of German Banks 2010). The Japanese Bankers Association issued a statement disputing nearly every component of the Basel Committee’s proposal, arguing that the proposed new rules would increase instability, decrease efficiency, and impair ‘market soundness’ (Japanese Bankers Association 2010). Japan’s banking sector, battered after more than a decade of economic slump, would likely find it even harder than banks in Europe to attract enough new capital to meet stricter standards.

So the current political and economic situation is quite similar to that which led to the creation of Basel Accord in the mid-1980s: American domestic political incentives caused leaders to push for stricter regulation of the financial sector, while the financial sector responded by lobbying for the standard to also apply to their foreign competitors so they would not suffer a competitive disadvantage. The resulting agreement – Basel I – largely reflected American political and business interests, but was also relatively weak. It included no enforcement mechanism, no supranational authority, and left much to the discretion of national regulators. This type of agreement fulfills the fifth condition described above by maintaining policy flexibility for leaders to resolve domestic political tradeoffs, at least in dominant states.

A similar outcome is occurring today. G-20 discussion of financial regulatory reform has focused almost entirely on updating the Basel Accord in light of the recent crisis rather than giving more authority to another institution. The resulting Basel agreement calls for increases in the quantity and quality of capital reserves that banks must hold against risk, new liquidity and leverage requirements, and a phase-in period of several years (beginning in 2013) for banks and national regulators to adjust to the new rules.<sup>11</sup> Perhaps as important is what is not in the agreement, such as rules regarding the organization or activities of the financial sector, official monitoring of compliance, an enforcement mechanism, or a transfer of regulatory authority from national governments to international bodies. The Basel Committee appears to have limited its jurisdiction to the most basic regulatory standards, leaving the more complex rules to national

---

<sup>11</sup> The press release that summarizes the new rules may be accessed at <http://bis.org/press/p100912.pdf>. The full compilation of Basel III documents is located at <http://bis.org/list/basel3/index.htm>.

governments. National governments also appear to be unwilling to cede monitoring and enforcement functions to a supranational authority, and neither the Basel Committee nor any other international institution has asked for this role.

Basel III also appears to have similar distributional implications to Basel I. Analysis from Barclays Capital and German bankers indicates that the ten largest German firms will need to raise more capital to meet the new standards than the thirty-five largest American firms, while Nomura estimates that the sixteen largest European firms will need to raise twice as much capital (Jenkins 2010; Murphy et al 2010). Because of this, Germany refused to accept the agreement unless full implementation was delayed until 2019. Japanese and British bankers also had concerns about capital standards and leverage requirements, respectively, that force them to raise more capital than their American counterparts. In short, Basel III appears to provide some competitive advantages to American banks relative to the pre-crisis status quo.

Does Basel III represent a significant shift in international regulatory policy? The previous discussion suggests the answer is 'No'. On the contrary, it may be considered a continuation of the status quo in structure and organization, and as with the Revised Framework, there is no guarantee that the new standards will be strictly adhered to. Many of the most important regulations will be enacted at the domestic level, and are thus subject to domestic political constraints. Regulatory fragmentation across national jurisdictions will continue, as domestic political constraints force governments to tailor national regulatory policies to their local needs. In sum, if Basel I and II were not considered to be a strong, meaningful global standard, then Basel III is not likely to be either.

## **6. Conclusion**

Governments have strong incentives to maintain strong economic performance in their countries, and economic growth requires a strong, stable financial system to channel funds from investors to businesses. Breakdowns in the financial sector have severe and often long-lasting effects on economies, and incumbents are often punished for poor economic performance. As a result, governments have incentives to create policies that encourage a secure financial sector. However, too many restrictions on the financial sector will also dampen economic performance. Regulatory policy is often in flux because there is a tradeoff between financial stability and economic performance. Immediately following financial crises governments enact regulatory reforms to address the causes of the crisis. But over time, these regulations are weakened in order to promote economic growth, or become obsolete through new developments in the financial sector. If regulatory policy becomes too lax states are at risk of suffering another financial crisis. Therefore

a cycle of crisis, re-regulation, deregulation, and repeated crisis tends to repeat itself over time, and has become more common in the post-Bretton Woods era.

The interconnectedness of financial markets across national borders presents an even greater challenge for policymakers. If regulators in one state enact stricter standards than those in another state, their firms will be put at a competitive disadvantage in globalized markets. This can destabilize financial markets and have adverse effects on economic growth. Moreover, a failure of firms in one jurisdiction can have negative effects on counterparty firms in other jurisdictions. In this way, even a localized event – such as Latin American sovereign debt defaults or a drop in home values in the US – can have negative effects across the globe. Because markets cross national jurisdictions, there is a strong case to be made that international financial regulations can be welfare-enhancing.

All regulations have distributional consequences, however, so international regulations will benefit some states more than others. The resolution of domestic tradeoffs is the motivation for governments to seek an international agreement, so they will try to influence the terms of any international agreement to satisfy the voters and firms in their jurisdiction. Since stronger states will be in a better place to steer the process than weaker states, any international agreement is likely to reflect the domestic political incentives facing incumbent governments in strong states.

For these reasons, a common pattern has emerged. Following international financial crises, states discuss ways to improve prudential standards. Many reforms are made domestically, but some desired reforms may adversely affect the competitiveness of domestic firms *vis-à-vis* their foreign competitors. In these circumstances, discussions are held at the international level and are led by the strongest states, which use their agenda-setting capabilities to propose international policies that help them resolve domestic political tradeoffs. Such proposals involve wealth redistributions, in the form of competitive advantages, from firms in weaker states to firms in stronger states. Governments of stronger states cannot resist these proposals without risking loss of access to the large markets in the stronger states. Governments of stronger states cannot extract too many concessions from weaker states without risking loss of cooperation. All governments are reluctant to cede too much authority to a supranational body, as this prevents them from using regulatory policy to resolve domestic tradeoffs. Thus, when an international accord is reached, it is often narrow, weak, and lacking in monitoring or enforcement mechanisms. Compliance varies from state to state, and regulatory policies beyond the scope of the agreement remain fragmented across jurisdictions.

Are there reasons to think that this pattern will be broken as a result of the recent financial crisis? The analysis presented here suggests the answer is ‘No’. Regulatory authority will ultimately remain with national governments, which will reform their domestic regulatory structures in different ways according to local needs. Some international agreement reflecting the

preferences of the strongest states is likely, but standards will be harmonized only along narrow dimensions, and are likely to be relatively weak.

## **Bibliography**

American Bankers Association (2010), Regulatory Restructuring: Letter to Senate Banking Committee (January 5). [http://www.aba.com/NR/rdonlyres/76DCD307-2D7E-48A6-A10F-623175F0AEAD/64678/RegulatoryRestructuring\\_ABASenateLetter\\_010510.pdf](http://www.aba.com/NR/rdonlyres/76DCD307-2D7E-48A6-A10F-623175F0AEAD/64678/RegulatoryRestructuring_ABASenateLetter_010510.pdf)

Association of German Banks (2010), 'Position of the Association of German Banks on the Basel Committee on Bank Supervision proposals on the capital and liquidity of banks.' Bundesverband Deutscher Banken. April 14, 2010.

Barth, James R., G. Caprio Jr., and R. Levine (2008), 'Bank Regulations are Changing: For Better or Worse?' *Comparative Economic Studies* 50 (4), 537–563.

Basel Committee on Banking Supervision. (2009), 'History of the Basel Committee and its Membership'. Bank for International Settlements.

Bernauer, Thomas, and V. Koubi (2009), 'Taking Firms and Markets Seriously: A Study on Bank Behavior, Market Discipline, and Regulatory Policy', Manuscript. Zurich: Center for Comparative and International Studies.

Bordo, Michael, and B. Eichengreen (1999), 'Is Our Current International Economic Environment Unusually Crisis Prone?' In *Capital Flows and the International Financial System*, ed. D. Gruen and L. Gower. Sydney: The Reserve Bank of Australia.

Brown, Gordon (2008), 'Out of the Ashes', *Washington Post*, A1.

Drezner, Daniel W. (2007), *All Politics Is Global: Explaining International Regulatory Regimes*, Princeton: Princeton University Press.

Edwards, Sebastian (2001), 'Capital Mobility and Economic Performance: Are Emerging Countries Different?' *NBER Working Paper*. Cambridge: National Bureau of Economic Research.

Eichengreen, Barry J. (1995), *Golden Fetters: the Gold Standard and the Great Depression 1919-1939*, Oxford: Oxford University Press.

Evans, Simon (2010), 'British Banks Still Face Breakup Threat,' *Businessweek*. May 17, 2010. [http://www.businessweek.com/globalbiz/content/may2010/gb20100517\\_189718.htm](http://www.businessweek.com/globalbiz/content/may2010/gb20100517_189718.htm)

Geithner, Timothy (2008), 'Reducing Systemic Risk in a Dynamic Financial System.' Remarks at the Economic Club of New York, June 9, 2008. <http://www.newyorkfed.org/newsevents/speeches/2008/tfg080609.html>

Group of 20 (2010), Communiqué, Meeting of Finance Ministers and Central Bank Governors, April 23, 2010. [http://www.g20.org/Documents/201004\\_communique\\_WashingtonDC.pdf](http://www.g20.org/Documents/201004_communique_WashingtonDC.pdf)

Ho, Daniel E. (2002), 'Compliance and International Soft Law: Why Do Countries Implement the Basle Accord?' *Journal of International Economic Law* (5), 647-688.

IOSCO (2003), Objectives and Principles of Securities Regulation. <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD154.pdf>

Ip, Greg (2004), 'The Deregulator: Greenspan's less visible role.' *The Wall Street Journal* November 19, A1.

Japanese Bankers Association (2010), 'Comment on the Basel Committee's Consultative Documents: 'Strengthening the resilience of the banking sector,' and 'International framework for liquidity risk measurement, standards and monitoring.' April 15, 2010.

Jenkins, Patrick (2010), 'German banks try to fend off Basel III.' *Financial Times* September 6, 2010. <http://www.ft.com/cms/s/0/2d61f5ae-b9c3-11df-968f-00144feabdc0.html#axzz14omPQcIF>

Kapstein, Ethan B. (1989), 'Resolving the Regulator's Dilemma: International Coordination of Banking Regulations', *International Organization* 43 (Spring), 323-47.

——— (1991), 'Supervising International Banks: Origins and Implications of the Basel Accord.' In *Princeton University Department of Economics Essays in International Finance*. Princeton.

———. (1994), *Governing the Global Economy: International Finance and the State*. Cambridge: Harvard University Press.

Kindleberger, Charles P. (1978), *Manias, Panics, and Crashes: A History of Financial Crises*, New York: Wiley.

King, Robert G., and R. Levine (1993), 'Finance and Growth: Schumpeter Might Be Right', *The Quarterly Journal of Economics* 108 (3), 717-37.

Murphy, Megan, N. Cohen, and B. Masters (2010), 'US banks receive Basel III boost.' *Financial Times* August 18. <http://www.ft.com/cms/s/0/0d54e652-ab01-11df-9e6b-00144feabdc0.html>

Oatley, Thomas, and R. Nabors (1998), 'Redistributive Cooperation: Market Failure, Wealth Transfers, and the Basel Accord', *International Organization* 52 (Winter): 35-54.

Peltzman, Sam (1976), 'Toward a More General Theory of Regulation?' *Journal of Law and Economics* 19(2), 211-240.

Peltzman, Sam (1989), *The economic theory of regulation after a decade of deregulation.* Washington D.C.: Brookings Institution.

Pew Research Center for the People and the Press (2010), 'Midterm Election Challenges for Both Parties,' <http://people-press.org/report/589/midterm-electionchallenges-for-both-parties> .

Pigou, Arthur C. (1920), *The Economics of Welfare*. 4<sup>th</sup> ed. London: Macmillan and Co.

Quinn, Dennis, and C. Inlcan (1997), 'The Origins of Financial Openness: A Study of Current and Capital Account Liberalization', *American Journal of Political Science* 41 (July), 771-813.

Quinn, Dennis P., and A. M. Toyoda (2008), 'Does Capital Account Liberalization Lead to Growth?' *The Review of Financial Studies* 21 (3), 1403-49.

Reinhart, Carmen M., and K.S. Rogoff (2009), *This Time Is Different: Eight Centuries of Financial Folly*, Princeton: Princeton University Press.

Rodrik, Dani (1998), 'Who Needs Capital-Account Convertibility?' In *Should the IMF Pursue Capital-Account Convertibility?* Princeton: Princeton International Finance Section.

Shubert, Aurel (1991), *The Credit-Anstalt Crisis of 1931*, Cambridge: Cambridge University Press.

Simmons, Beth A. (2001), 'The International Politics of Harmonization: The Case of Capital Market Regulation', *International Organization* 55 (3), 589-620.

Singer, David A. (2004), 'Capital Rules: The Domestic Politics of International Regulatory Harmonization', *International Organization* 58 (Summer), 531-65.

——— (2007), *Regulating Capital: Setting Standards for the International Financial System*, Ithaca: Cornell University Press.

Sorkin, Andrew R. (2010), 'The Issue of Liquidity Bubbles Up', *New York Times* March 30, 2010: B1.

Stigler, George J. (1971), 'The Theory of Economic Regulation', *The Bell Journal of Economics and Management Science* (2), 3-21.

US Chamber of Commerce (2010), Letter Opposing the 'Restoring American Financial Stability Act of 2010' (RAFSA), in its Current Form,' <http://www.uschamber.com/issues/letters/2010/100322rafsa.htm>

Walter, Andrew (2008), *Governing finance: East Asia's adopt of international standards*, Ithaca, NY: Cornell University Press.