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## Reforming Global Banking Standards: Back to the Future?

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### Introduction

The recent financial crisis has prompted widespread calls for more robust regulation and supervision of the international banking system. The crisis laid bare a flawed financial architecture, designed by a handful of nations and limited to a small fraction of cross-border activity, which did little to prevent the catastrophic buildup of systemic risk. One of the key elements of this failed architecture was the Basel II Accord, a set of standards to govern the international banking system drawn up by the Basel Committee on Banking Supervision (BCBS), a group of G10 banking supervisors. 'After the current crisis', the economist Joseph Stiglitz has declared, 'it is clear that Basel II is dead' (Stiglitz, 2008, p. 21). Nouriel Roubini, meanwhile, argues that, 'All the pillars of Basel II have already failed even before being implemented' (Roubini, 2009). Some have even suggested that Basel II, although adopted only in the European Union in mid-2007, was itself one of the underlying causes of the crisis (Blundell-Wignall and Atkinson, 2008). The shortcomings of Basel II are especially puzzling given that the fundamental aim of the Basel II Committee, when it set out to reform banking rules in 1999, was to craft an Accord that significantly *improved* the safety and soundness of the international banking system. In this chapter, I ask *why Basel II fell so short of its creators' aspirations*. In answering this question, I also hope to explain why the latest attempt to regulate the international banking system, the so-called 'Basel III' Accord, is meeting a similar fate.

Basel II's failure, I argue, lies in regulatory capture, '*de facto* control of the state and its regulatory agencies by the "regulated" interests, enabling these interests to transfer wealth to themselves at the expense

of society' (Mattli and Woods, 2009, p. 10). Large international banks systemically manipulated the provisions of Basel II in their favour, extracting rents at the expense of their smaller competitors and, above all, the stability of the international financial system. They did this by exploiting their personal links with the Basel Committee to secure 'first-mover advantage' in the regulatory process. Arriving first at the decision-making table gave them disproportionate influence over regulatory outcomes, since policy decisions made at an early stage tend to be self-reinforcing.<sup>1</sup> As more resources are invested in a given policy, the costs of abandoning that policy in favour of once-possible options increase commensurately.<sup>2</sup> Unfortunately, the banking industry's relationship with the regulatory community – the basis of its ability to gain first-mover advantage – has only strengthened since the publication of the Accord in 2004. It helps us to understand not only why the Basel Committee failed to achieve its original objectives for Basel II, but also why the latest attempt to reform global banking rules, despite the tremendous political will behind it, is likely to enjoy no more success. The fate of Basel III, my analysis warns, is very much a case of history repeating itself.

There are few areas of regulation as closely linked to broader macro-economic stability and efficiency as banking regulation. Banks occupy a pivotal position in the economy, both as the basis of an efficient payments system and the key agents of financial intermediation – transforming the savings of those with a surplus (lenders) into productive investment by those with a deficit (borrowers). In part to protect the deposit insurance fund and in part to minimize the often enormous negative externalities associated with bank failures, regulators tend to impose a variety of prudential standards on banks aimed at ensuring their safety throughout the economic cycle. Over the past 25 years, capital adequacy requirements have emerged as the dominant form of prudential regulation. The rationale for holding regulatory capital – mostly made up of shareholders' equity – against bank assets is to provide a buffer against unexpected losses, allowing the bank to continue to operate during periods of stress. Where requirements are not high enough, banks will not have sufficient capital to cover their losses; liabilities will quickly come to outweigh assets, rendering them insolvent.

Unfortunately for banks, capital requirements come at a cost. Since equity is significantly more expensive than debt as a source of financing, when banks are forced to maintain capital buffers exceeding their preferred level they tend to regard these requirements as a form of 'regulatory taxation' (Jackson *et al.*, 1999a, p. 22.). By lowering their capital

levels, banks can reduce funding costs, increase leverage and boost their return on equity. For banks with sizeable asset bases, a tiny percentage reduction in capital requirements can represent a windfall of billions of dollars. As I show later, the incentive to minimize capital has proved too strong to resist. By hijacking Basel II negotiations, large international banks effectively rewrote the standards on international capital regulation to give themselves free rein to set their own capital requirements. The result was an Accord that allowed those institutions that posed the *greatest* threat to the stability of the financial system to hold the *least* capital – a recipe for economic disaster.<sup>3</sup> Understanding why Basel II failed to achieve the proper goals of capital regulation has important implications for subsequent efforts to create standards governing the international banking system, including Basel III.

The chapter is organized as follows. Section two begins with a brief history of the Basel Committee and the transition from the first Basel Accord to the second. This is followed by a more detailed account of the gap between the Basel Committee's objectives for Basel II and the outcome of the regulatory process. I attempt to explain this gap in section three. I show how personal contacts within the Basel Committee enabled large international banks to arrive first in the regulatory process and secure their favoured provisions in Basel II. Section four turns to the latest attempt to revise international capital adequacy standards, Basel III. I provide compelling evidence that the very same factors that caused Basel II's failure are now preventing any meaningful progress for its successor.

## The failure

Although the Basel Committee's initial work focused on determining the responsibilities of home and host country regulators *vis-à-vis* cross-border banks, its mandate soon expanded to capital requirements. The first framework for the capital regulation of internationally active banks was the 1988 Accord on Capital Adequacy, or Basel I (BCBS, 1988). Minimum capital requirements were based on two ratios: a ratio of Tier 1 (mainly equity) capital to risk-weighted assets of 4 per cent; and a ratio of Tier 1 plus Tier 2 (undisclosed reserves, loan-loss provisions, subordinated debt) capital to risk-weighted assets of 8 per cent. Assets were risk-weighted according to the credit risk of the borrower – that is, the risk that the borrower will default on a loan. Government bonds, for example, had a zero risk weighting, which entailed that no capital needed to be held against them. Traditional corporate loans, meanwhile,

had a 100 per cent risk weighting, which entailed that capital constituting the full 8 per cent of the value of a loan must be held against it.

By the late 1990s, the Accord had come to be seen as a blunt instrument that was 'useless for regulators and costly for banks' (quoted in Wood, 2005, p. 129). It provided easy opportunities to engage in regulatory arbitrage: exploiting the difference between economic risk and regulatory requirements to reduce capital levels without reducing exposure to risk. Its crude risk buckets for different categories of borrower entailed, for instance, that a loan to a secure blue chip company was treated the same as a retail customer's overdraft. This gave banks an incentive to move towards riskier, higher-yielding assets within a given bucket (from blue chip loans to retail overdrafts). Further, Basel I's narrow focus on the traditional 'originate-to-hold' model of banking encouraged banks to shift assets off the balance sheet, typically securitizing them.<sup>4</sup> By securitizing a pool of loans and selling the tranches on to third parties with partial recourse or financial guarantees, banks were able to lower capital requirements while retaining the full risk associated with the original pool (Jackson *et al.*, 1999a). The consequence of these activities was that overall capital levels in the banking system, which had risen sharply after Basel I came into effect in the early 1990s, were now beginning to decline.<sup>5</sup>

In September 1998 the Basel Committee announced that it would officially review the 1988 Accord with the aim of replacing it with more flexible rules. In June 1999 it released its first set of proposals for the new framework. According to the Committee, the new accord would have the following objectives: (1) The Accord should continue to promote safety and soundness in the financial system and, as such, the new framework should at least maintain the current overall level of capital in the system; (2) The Accord should continue to enhance competitive equality; (3) The Accord should constitute a more comprehensive approach to addressing risks (BCBS, 1999).

After five years of negotiations, notice-and-comment rounds and impact studies, the Committee finally announced that it had agreed on a new capital framework, the Basel II Accord. The accord rested on three 'pillars'. In addition to specifying minimum capital requirements (Pillar 1), the new accord provided guidelines on regulatory intervention to national supervisors (Pillar 2) and created new information disclosure standards for banks with a view to enhancing market discipline (Pillar 3).

As the regulatory process drew to a close, however, it became painfully clear that the Accord had failed to achieve *any* of its stated objectives.

With respect to the first and second objectives, the Committee's decision to establish an 'advanced internal ratings-based (A-IRB) approach' in Pillar 1 was crucial. Under the A-IRB approach, banks were for the first time permitted to use their own models to estimate various aspects of credit risk, an innovation that would ostensibly more closely align regulatory capital with underlying risk.<sup>6</sup> Smaller banks lacking the resources to operate in-house models would adopt the 'standardized approach', essentially a more refined version of Basel I which linked more fine-grained risk buckets to external ratings provided by credit rating agencies. As well as failing to improve the accuracy of credit risk assessments, the use of internal ratings would result in large capital reductions relative to Basel I. The fourth official 'Quantitative Impact Study' (QIS) showed that A-IRB banks would experience an average drop in minimum capital requirements of 15.5 per cent and a median reduction in Tier 1 capital of 31 per cent (OCC, FRS, FDIC, and OTS, 2006). Since the large banks adopting this approach hold a significant share of the market, overall capital levels in the banking system would almost certainly decline – on QIS-4 estimates by as much as 20 per cent in the United States – in explicit contradiction to Basel II's primary objective.

The introduction of internal ratings would also give the largest banks an enormous competitive advantage over their smaller rivals, breaching the Committee's second objective of enhancing competitive equality amongst banks. The 2006 QIS-5, for example, shows that A-IRB banks would experience a capital reduction of up to 26.7 per cent, while banks under the standardized approach would experience a 1.7 per cent *increase* in overall capital requirements (BCBS, 2006). Under Basel II, these larger institutions would be able to free up capital, expand their asset bases and maximize profits, at the same time as other banks were forced to deleverage and liquidate assets. These discrepancies would almost certainly reduce the profitability of smaller banks, causing them to lose market share and making them more vulnerable to takeovers from larger banks. Indeed, a 2006 survey of over 300 banks by Ernst and Young found that 75 per cent believed Basel II would benefit the largest banks employing the most advanced risk modelling systems at the expense of those unable to adopt them (Thal Larsen, 2006). Basel II, despite the Committee's original intentions, would create clear winners and losers.

Finally, Basel II cannot be seen to constitute a more 'comprehensive' approach to addressing risks. The Accord decisively failed to capture the three previously unregulated types of risks earmarked by the Committee at the beginning of the regulatory process: trading book risks, market

risk and securitization risk. Provisions for trading book risks were conspicuously absent, despite the Committee's awareness that the size of trading portfolios had mushroomed as a result of Basel I.<sup>7</sup> The treatment of market risk was little better.<sup>8</sup> Under Basel II, banks would be allowed to use sophisticated mathematical models to produce estimates of 'value-at-risk' (VaR), even though these models had been revealed in the late 1990s to vastly underestimate the probability of 'extreme' market events.<sup>9</sup> Finally, banks were allowed to hold negligible levels of capital against securitized assets, largely on account of the extremely low risk weights assigned to highly rated tranches, precisely those positions that incurred the largest losses in the recent crisis. According to QIS-5, A-IRB banks would see their securitization capital requirements fall by between 0 per cent and 17.3 per cent, while other banks would experience an increase of between 7.7 per cent and 10.2 per cent – figures that also have serious implications for the competitive equality (objective 2) that the Committee had aimed to achieve.<sup>10</sup>

What explains the astonishing gap between the Committee's initial aims for Basel II and the final product of the regulatory process? In the next section, I attempt to test the hypothesis that Basel II's failure was the result of the excessive influence of large international banks in negotiations for the Accord.

### **Why Basel II failed: an in-depth examination of the standard-setting process**

To test my account of Basel II's failure, I propose to use the method of process-tracing. A close examination of Basel Committee documents, press releases, interview transcripts and other sources will help to determine whether the implications of the capture hypothesis are borne out in the sequence of events comprising the Basel process (George and Bennett, 2005, p. 6). The first part of the section focuses on the Basel Committee's failure to achieve its first and second aims for the Accord, the result of its decision to allow the largest banks to use internal ratings. The second part will turn to the third aim, and the developments in the treatment of market risk, the trading book, and securitization that caused Basel II to fall short of providing a more 'comprehensive' approach to risk management.

#### **Internal ratings**

The Basel Committee's decision to create an A-IRB approach to credit risk represents perhaps the clearest example of excessive industry influence

in the Basel process. It should be evident by now that the attraction of internal ratings for large international banks lies in their potential for bringing about significant capital reductions. This can occur for two reasons. First, internal ratings are largely derived from historical data, which tend to understate the level of capital needed against future losses. Historical default rates of asset classes are often poor indicators of future default rates, and during financial crises assets which were previously uncorrelated tend to become correlated, generating much larger losses than anticipated.<sup>11</sup> Second, internal ratings provide banks with an easy opportunity to engage in regulatory arbitrage – reducing capital without reducing risk. The irony, of course, is that internal ratings were introduced as a *solution* to regulatory arbitrage.

Central to the introduction of an A-IRB approach to credit risk was the Institute of International Finance (IIF), a powerful Washington-based lobby representing major US and European banks. The IIF had long enjoyed a close relationship with the Basel Committee based on its personal contacts in national regulatory agencies. The longest-serving Chairman of the Basel Committee, the Bank of England's Peter Cooke (1977–88), was in fact one of the co-founders of the IIF.<sup>12</sup> The Chairman of the Committee in the mid-1990s, the Bank of Italy's Tommaso Padoa-Schioppa, was a close associate of Charles Dallara, Managing Director of the IIF since 1993. Indeed, it was after meeting at a social occasion in March 1995 that the two agreed to establish an 'informal discussion' on regulatory issues between financial institutions and bank supervisors. This led to the creation of the Market Risk Amendment in 1996 (see below), the product of close cooperation between Committee members and the IIF under agreed 'ground rules' of strict confidentiality. These links became even stronger under the chairmanship of William McDonough (1998–2003), a president of the New York Federal Reserve who presided over almost all of the Committee's work on Basel II. Another close friend of Dallara's from his 22 years at the First National Bank of Chicago, McDonough gave the IIF unprecedented access to the Committee from the earliest stage of the reform process. The institute even went as far as to establish a Steering Committee on Regulatory Capital in June 1999 specifically to make recommendations regarding the new Accord, a body that remained the Basel Committee's principal interlocutor throughout negotiations. The advantages of privileged access to standard setters were clear from the early stages of the Basel process. As early as the Second Consultative Paper in 2001 the IIF was able to identify seven different areas in which the Basel Committee had adopted its recommendations.<sup>13</sup>

One of these areas was the introduction of an internal ratings-based approach to credit risk. The IIF had lobbied aggressively for greater recognition of banks' own risk measurement systems since November 1997, on the grounds that they were more risk-sensitive than Basel I's arbitrary risk weights and had the crucial advantage of being already in use by banks (IIF, 1997). This proposal was initially met with skepticism by standard setters. At the September 1998 conference at which the Committee announced its agenda for revising Basel I, Bank of England staff stated that there were 'significant hurdles' to using internal systems to set capital requirements (Jackson *et al.*, 1999b, p. 100.) Similarly, a study by two Federal Reserve economists found the state of ratings systems in large American banks far less advanced than had been widely assumed (Treacy and Carey, 1998). Nevertheless, by the release of the first consultative paper for the new Accord the IIF had succeeded in convincing enough of the Committee of the merits of an A-IRB approach to credit risk for 'some sophisticated banks' (BCBS, 1999, p. 37.) There were, however, only a few paragraphs devoted to the idea, and the focus of the paper was how *external* ratings provided by credit rating agencies would be formally incorporated into the Accord. What changed between the release of the first paper in June 1999 and the second in January 2001, in which a full specification of a new A-IRB approach was given?

The answer lies in the persistent lobbying of the IIF, which took advantage of its intimacy with the Committee to ensure that the advanced approach, almost an afterthought in the first paper, became a reality. During 2000, the Steering Committee published a report specifically urging the Basel Committee to permit banks to use their internal risk rating systems as a basis for assessing capital requirements. Sir John Bond, then Chairman of the IIF, suggested that the measure was 'important for enhancing the competitiveness of banks by bringing individual banks' capital requirements more in line with actual risks' (Ibison, 2000). Revealingly, a credit risk manager at the UK's Financial Services Authority (FSA) at the time admitted that 'more regulators around Europe are coming round to the view that a large number of banks should be able to qualify for internal ratings' (Mackintosh, 2000). By mid-2000, it seems, every member of the Basel Committee had come around to the IIF's view, and the working group on credit risk began informal work with the IIF to incorporate internal ratings into the new framework.<sup>14</sup> The second draft's detailed exposition of the A-IRB approach was 'welcomed' by the IIF's Steering Committee as one

of seven areas in which its recommendations had been taken on board (IIF, 2001a, p. 6).

By the time small and non-G10 banks became aware of the likely impact of these developments, the release of the second consultative paper in 2001, negotiations were at such an advanced stage that an overhaul of the Committee's proposals was near impossible. As the vice president of a leading association of American community banks, put it, 'We didn't get involved until quite a late stage... And when we did, the modelling (A-IRB) approach was already set in stone. The [Basel] Committee had been convinced by the large banks.'<sup>15</sup> The few comments on the paper left by small banks reflected serious apprehension about the potential competitive inequities of Basel II. Among the loudest voices were the Second Association of Regional Banks, a group representing the Japanese regional banking industry, and Midwest Bank, an American regional bank catering to consumers in Missouri, Iowa, Nebraska and South Dakota. The latter protested that the few banks qualifying for the A-IRB approach 'will not be required to keep the same level of capital against financial instruments as 99 per cent of the financial institutions in this nation who cannot qualify under these standards' (Midwest Bank, 2001, p. 1.) These concerns were perhaps best expressed by America's Community Bankers (ACB), another group representing community banks across the United States. The ACB made a strong case for the claim that 'the Accord will benefit only the most complex and internationally active banks, saddling the vast majority of financial institutions in the United States with a cumbersome and expensive capital regulatory scheme...' (ACB, 2001, p. 2). This was most pronounced, the group claimed, in Pillar 1, where 'the proposed bifurcation between the standardized and internal ratings-based approaches to establishing minimum capital requirements will competitively disadvantage many smaller banking institutions that lack the resources necessary for developing a finely calibrated IRB assessment system' (*Ibid*, p. 2).

Competitive fears were not confined to community banks. Several important emerging markets also expressed fears that they would be disadvantaged under the new arrangements. Commenting on the 2001 second consultative paper, the Reserve Bank of India complained that, by failing to qualify for internal ratings, emerging market banks would experience a 'significant increase' in capital charges (Reserve Bank of India, 2001, p. 2). The People's Bank of China, meanwhile, suggested that the proposals 'basically address the needs of large and complex banks in G10 countries' (People's Bank of China, 2001, p. 2). Similar

worries were articulated by the Banking Council of South Africa, which pointed out that while ‘the Accord aims at “competitive equality”, the bigger, more advanced banks may have access to options that will give them a market advantage, whereas the smaller banks may find it difficult to afford the necessary infrastructure investments’ (Banking Council of South Africa, 2001, p. 4) Like the objections of community banks, however, these came too late to influence proceedings. The costs of discarding years’ worth of work on developing the A-IRB approach could not be borne by a Committee already under fire for breaching its deadline for finalizing the new Accord. It is no surprise that when a group of five major emerging markets protested about the Accord’s competitive implications at a behind-closed-doors meeting in Cape Town in 2002, it was accused by Chairman McDonough of attempting to ‘derail the whole process’.<sup>16</sup> By this stage the recognition of internal ratings was a well established feature of Basel II. Indeed, only very minor changes were made to Pillar 1’s credit risk approaches between 2001’s Second Consultative Paper and the final version of the Accord published in 2004.

### **Trading book, market risk and securitization**

As mentioned in section two, the Committee’s failure to achieve its third aim was a consequence of its refusal to properly regulate trading book risks, market risk and securitization risk. These developments can be traced to changes made both during negotiations for Basel II and in the mid-1990s shortly after Basel I came into effect.

Basel II’s light treatment of the trading book had much to do with the International Swaps and Derivatives Association (ISDA), the largest global financial trade association, representing over 860 institutions in the privately negotiated derivatives industry. As one of the first organizations to comment on the new trading book framework, the ISDA managed to persuade standard setters to defer to its judgement on several key provisions. Perhaps the most important of the Committee’s reversals was its September 2001 decision to drop an earlier proposal for an additional capital charge to cover the risks associated with credit derivatives. The ISDA had forcefully lobbied against the measure, dubbed the ‘w factor’, on the grounds that it was ‘unjustified in light of market practice: losses experienced on repo or credit derivatives trades had been minimal, and the contracts used to document the transactions were enforceable and effective’ (Boland, 2001). The Committee’s reversal, as the *Financial Times* noted at the time, was at odds with concerns earlier expressed by its members about the possibility that the structure of

some derivatives tended to concentrate risk rather than dispersing it (as they are in theory meant to do) (*Ibid*).

The ISDA also had a hand in the Committee's failure to regulate those trading book risks that were not captured by standard market risk models, in particular counterparty credit risk. The Committee's trading book working group, which worked closely with the ISDA, bought into the association's argument that 'the assumptions regarding the calibration of credit risk requirements in the banking book may not be appropriate for trading book exposures, which are typically short term in nature, more liquid, and marked-to-market' (ISDA, 2001, p. 11). As one former member of the Committee admitted, 'We went too far on capital relief for the trading book. We were convinced by the industry that [instruments in the trading book] needed a lower capital charge because they were more liquid... In good times, it's hard to go against the banks.'<sup>17</sup> The recent financial crisis has shown this argument to be fatally flawed, with heavy losses on highly illiquid and opaque trading book instruments. In the end, the section devoted to the trading book was one of the shortest in the 2004 final Accord. Accusations of regulatory forbearance, which grew louder in 2004, once again came too late. While the Basel Committee was forced to admit that increased capital charges for trading book risks were needed, given 'the complexities of the trading book issues to be discussed', it was willing only to defer reform to a later date (Tiner, 2004).

The only aspect of the trading book that the Committee made a concerted effort to tackle was market risk, albeit in the mid-1990s rather than during official negotiations for Basel II. Even in this area, though, proposals were significantly watered down in the face of industry pressure. In 1993, the Committee proposed to amend the 1988 Accord to incorporate market risk, largely in response to the deregulation of interest rates and capital controls, which had increased banks' vulnerability to market fluctuations. The 1993 paper proposed a standardized methodology for measuring market risks which calculated capital requirements on the basis of certain characteristics of debt securities and derivatives, such as maturity, credit rating, and category of borrower (BCBS, 1993). These proposals were met with strong opposition from the IIF, which complained that they failed to recognize the most 'sophisticated' modelling techniques already in use (IIF, 1993). The IIF was soon joined by the Group of Thirty, a Washington-based association of senior bankers, which backed VaR models as 'much more analytically rigorous than the old rules of thumb that bankers used to use' (Gapper and Corrigan, 1994). Although at first reluctant to consider the

use of VaR models, regulators began to give serious attention to the proposal after the establishment of an informal dialogue with the IIF in early 1995 (see above). By early 1995, the Committee fully endorsed the IIF's proposals, officially recognizing the use of in-house VaR models in a consultative paper released in April (BCBS, 1995).

This was a surprising development given the 'quite disparate' results from the Committee's testing exercise, which showed significant overall dispersion in capital charges for the same trading book even after the apparent factors causing systematic differences in model output were controlled for (*Ibid*, p. 5). It was also surprising given the serious doubts about these models that began to surface in 1995, such as the rating agency Standard and Poor's warning that the models only 'appear to offer mathematical precision' and that 'they are not a magic bullet' (Lapper, 1995). Most surprising, though, was the fact that these models passed into Basel II without question. At the time the Committee

*Table 4.1* Initial aims and regulatory outcomes in Basel II

	<b>Initial aim</b>	<b>Industry Lobby</b>	<b>Industry Recommendation</b>	<b>Final proposal</b>
<b>Internal Ratings</b>	Incorporate external credit ratings into new framework	IIF	Recognize internal credit risk models of large banks	Recognition of internal ratings for large banks in A-IRB approach
<b>Trading Book</b>	Introduce capital charge for derivatives risk ('w factor'); capture counterparty credit risk	ISDA	Drop 'w factor'; do not apply credit risk capital requirements to trading book	'W factor' abolished in 2001; minimal regulation of trading book
<b>Market Risk</b>	Standardized methodology based on fixed risk parameters	IIF	Substitute standardized methodology for market risk (VaR) models	Recognition of VaR models in 1996
<b>Securitization</b>	Link risk weight categories to external credit ratings	ESF, ASF	Lower risk weights for rated tranches	Reduced weights for rated tranches

was formulating its first draft Accord in early 1999, banks were reporting widespread losses on Russian government bonds that were entirely unanticipated by their VaR models. Bankers Trust, an American wholesale bank, reported that on five days during the latest quarter its trading account losses had exceeded its one day 99 per cent VaR calculation, a figure that statistically should be exceeded on just one day in a hundred (Graham, 1999). J.P. Morgan, too, reported that daily trading results had fallen below average far more often than its market risk models had predicted. Most damningly, a report published by the International Monetary Fund (IMF) in December 1998 had condemned VaR models for paying 'insufficient attention' to extreme market events and assuming that the processes generating market prices were stable (IMF, 1998). But despite widespread and persistent criticism, no questions were raised within the Committee about the continued use of VaR models in 1999.

Finally, Basel II's failure to create a more comprehensive approach to risk management also stemmed from its lenient treatment of asset securitization. In this case, the key actors were large forums for banks specializing in the trade of off-balance sheet instruments, in particular the European Securitization Forum (ESF) and the American Securitization Forum (ASF).<sup>18</sup> These forums persuasively argued that securitization facilitates prudent risk management and diversification by providing an efficient means for banks to redistribute their risks to those most willing to bear them. Securitization, the ESF claimed, 'has proven itself to be a source of safe, fixed income assets from the perspective of banks as investors' (ESF, 2001, p. 4). Although the credibility of these claims has been shattered by the recent crisis, the Committee proceeded to heavily dilute its securitization proposals, requiring progressively less capital for the same exposures as negotiations wore on. It even began to adopt the securitization industry's language, reiterating in several proposals that 'the Committee recognizes that asset securitization can serve as an efficient way to redistribute the credit risks of a bank to other banks or non-bank investors' (BCBS, 1999).

In its first draft in 1999, the Basel Committee proposed to directly tie capital charges for securitization tranches to external credit ratings. For all banks, tranches rated AAA or AA- would carry a 20 per cent risk weight, A+ to A- a 50 per cent weight, BBB+ to BBB- 100 per cent, BB+ to BB- 150 per cent, and B+ or below a deduction from capital. These proposals soon became the subject of intense industry opposition. In 2001, the ESF complained that the prescribed risk weights for rated tranches under the A-IRB approach were 'excessive', arguing that they

should never be higher than identically-rated conventional corporate exposures (ESF, 2001). After the IIF stepped in to back the ESF's claim, protesting that the 'proposal's recommended treatment of securitization activities is too stringent and risks disrupting the valuable aspects of existing activities', the Committee acquiesced, almost halving risk weights for large banks in order to link them with corporate exposures with similar default probabilities (IIF, 2001b, p. 11). In the next two years, further reductions were made to A-IRB risk weights on the advice of the securitization forums. By the release of the final paper in 2004, they had reached dangerously low levels: risk weights for the senior positions of tranches rated AAA would be 7 per cent, AA 8 per cent, A+ 10 per cent, A 12 per cent, BBB+ 35 per cent, and BB 60 per cent (BCBS, 2004b). The risk weights for rated tranches under the standardized approach, meanwhile, remained the same as in the 1999 first draft. This was a startling reversal. The inadequate treatment of securitization under Basel I, after all, was one of the key reasons for updating it in the first place. It is hard to resist the conclusion that, had another set of actors been first on the scene, securitization proposals would have reflected a very different set of preferences.

A detailed examination of the Basel process, then, provides strong support for the capture hypothesis. By claiming first-mover advantage in negotiations for Basel II, large international banks were able to ensure that every one of their recommendations was incorporated into the final version of the Accord (as summarized in Table 1). The preferences of second-movers, such as smaller and emerging market banks, were nowhere to be seen in Basel II. The ultimate consequence of these developments, regrettably for the Basel Committee, was an Accord that failed to achieve any of its original aims.

### **Implications for the fate of Basel III**

Beginning in the subprime mortgage market in the United States in the summer of 2007 and quickly spreading to Europe and the rest of the world, the recent financial crisis has passed perhaps the most damning verdict of all on Basel II. Whether or not they view it as a direct contributor to the crisis, supervisors have agreed that the fundamental tenets of the Accord – reliance on internal risk models, capital relief for the largest banks, and minimal regulation of the trading book – have been all but discredited by recent events. Something of a consensus has arisen in policymaking circles that a new approach to capital regulation is essential to the future stability of the global financial system. The

Financial Stability Forum (2008), an influential group of finance ministers and central bankers, issued a postmortem on the crisis in 2008 criticizing the 'significant weaknesses' in the existing capital framework (FSF, 2008, p. 12). The February 2009 Larosière Report, a framework for the future of European financial regulation, demanded 'fundamental review' of Basel II on the grounds that it 'underestimated some important risks and over-estimated banks' ability to handle them' (De Larosière Group, 2009, p. 16). The FSA's much anticipated Turner Review called for minimum standards to be 'significantly increased from [the] current Basel II regime' (FSA, 2009, p. 54). These efforts culminated in a 'regulatory tsunami' of new and far-reaching proposals issued by the Basel Committee in December 2009, dubbed 'Basel III'. The reform package shook the finance industry and in some eyes heralded a new era in the history of banking regulation – an era of 'more capital, more liquidity, and less risk' (PricewaterhouseCoopers, 2010, p. 6).

Such conclusions are too hasty. In this section, I argue that the same factors that led to Basel II's failure have resurfaced to undermine its successor. Despite the immense political will behind an overhaul of the global financial architecture, it is once again large international banks that have seized control of the regulatory process, effectively closing the window of opportunity for far-reaching reform. The first part of the section describes the favourable conditions, namely the shift of regulatory authority from the Basel Committee to the G20, under which Basel III was conceived. In the second part, I show how changes to these conditions in late 2009 lead us to expect an outcome of regulatory capture. In the final part, I test this prediction against the events of recent months, finding compelling evidence that large banks have enjoyed considerable success in diluting the reform proposals.

### **The origins of Basel III**

To understand how large financial institutions have been able to regain control of the Basel process, we have to return to the origins of Basel III in late 2008. The unexpected collapse of investment bank Lehman Brothers in September saw the financial crisis spill over into the real economy. GDP growth in the Euro area ground to a halt in the third quarter of 2008 and fell to 1.3 per cent in the fourth; in the United States, 0.9 per cent growth in the second quarter turned into 0.3 per cent in the third and -1.3 per cent in the fourth.<sup>19</sup> With public anger at the financial sector mounting and banking regulation becoming an increasingly politicized issue, capital adequacy standards soon became the prerogative of the G20. Unlike the Basel Committee, the G20 is

a forum of elected political leaders whose decisions are informed by a wide range of constituencies. Agreements reached by the group are therefore not expected to solely reflect the preferences of large international banks.

Indeed, the G20 was an effective advocate for capital adequacy reform. Two months after the Lehman collapse, the group called for international standard setters to 'set out strengthened capital requirements for banks' structured credit and securitization activities' (G20, 2008, p. 2). This prompted the Basel Committee, which had failed to make a single change to Basel II since the crisis broke out, to approve a set of enhancements to the Basel II trading book framework in July 2009 (BCBS, 2009). At the Pittsburgh Summit in September 2009, the G20 moved beyond the trading book, extending its demands to the whole of the Basel II framework. Setting a deadline of end-2010, the group ordered the Committee to formulate a new set of capital rules that would form the centerpiece of an 'international framework for reform' (G20, 2009, p. 8). These rules would include an international leverage ratio, countercyclical capital buffers, surcharges for 'systemically important' institutions, more restrictive definitions of capital, and short- and long-term liquidity ratios. In December 2009, the Committee took the first steps towards realizing the G20's vision for a new capital regime, issuing a set of preliminary proposals whose details would be filled in over subsequent rounds of negotiations during 2010 (BCBS, 2009). In a telling sign of the industry's frustration, IIF Managing Director Charles Dallara protested that 'political forces are driving the reform agenda, and central bankers have been marginalized in their role' (Chong, 2009). Chairman Joseph Ackermann, meanwhile, complained that he was not 'properly consulted' before the Pittsburgh Summit, and called on his fellow bankers to 'start again with an intensive dialogue between the private sector and the public sector on the strategic questions, on the technical details, including what is the economic price of certain things we are doing' (Guha, 2009a).

Fortunately for banks, the December reform package was only the beginning of the story for 'Basel III'. Rule-making soon returned to the Basel Committee, creating a major risk that the latest international capital Accord would once more fall short of its creators' aims. This is because the Committee formulating Basel III remains closely connected to the banking industry. One of the most prominent members of the Committee, the New York Federal Reserve's Marc Saidenberg, was head of regulatory policy at Merrill Lynch and a member of the IIF Committee on Market Best Practices until 2008. As recently as October

2007, the same month Merrill Lynch announced a record \$7.9bn loss on subprime-related investments, Saidenberg was busy lobbying regulators to 'avoid a knee-jerk reaction to recent events' (Callan *et al.*, 2007). Senior figures in the Basel Committee, meanwhile, have moved in the opposite direction. Darryll Hendricks, formerly of Federal Reserve Bank of New York, chairs the IIF Working Group on Valuation; Patricia Jackson, formerly of the Bank of England, chairs the IIF Working Group on Ratings; Roger Ferguson, a former vice chairman of the Federal Reserve's Board of Governors, sits on the institute's board of directors. In perhaps its greatest coup, the IIF managed to recruit Jacques de Larosière, author of the abovementioned Larosière Report and former governor of the Bank of France, to head its newly formed Market Monitoring Group. Despite acknowledging in the report that the crisis 'has shown that there should be more capital, and more high quality capital, in the banking system, over and above the present regulatory minimum levels', Larosière has in recent months enthusiastically taken up the IIF's cause (De Larosière Group, 2009, p. 16). 'Capital ratios,' he claimed in October 2009, 'if they are not well conceived, could substantially harm our economies. I see a great danger here. Regulators must not start piling new ratios on the existing ones, adding further requirements (leverage ratios, special ratios on large systemically important institutions, anti-cyclical capital buffers) to the normal – and revamped – Basel II risk-based system... Together, their impact could be lethal.' (De Larosière, 2009).

### **Leverage ratio, capital surcharge, countercyclical buffers and liquidity ratios**

Although the standard-setting process has yet to be concluded, there is strong evidence that large international banks have arrived first in the latest Basel process and that they are already enjoying considerable success in diluting Basel III. As well as being pushed back from their original 2012 starting date, key provisions of the Accord have been relaxed or even dropped in response to industry pressure. In the rest of this subsection, I examine five such provisions: the international leverage ratio; the capital surcharge on 'systemically important' institutions; countercyclical capital buffers; liquidity requirements; and restrictive definitions of capital.

The most contested element of the reform package has been the international leverage ratio, a simple ratio of equity to total (non-risk-weighted) assets introduced to provide a backstop against the risks inherent in the use of internal ratings. With some version of the ratio already in place in Canada, Switzerland and the United States, the

Committee's proposal to extend a leverage cap to all G20 countries has met with fierce resistance from European banks. Just one week after the publication of the December reform package, Denmark's largest financial institution Danske Bank protested that a leverage ratio would fail to capture the low risk of its large mortgage portfolio (Shanley, 2009). The Association of German Banks (BDB), meanwhile, called for the measure to be scrapped on the grounds that it 'would force banks to scale back their lending and therefore slow down the economic recovery' (BDB, 2010). Counterbalancing efforts by large American, Canadian, or Swiss banks to level the playing field have failed to materialize, largely a consequence of the perceived stringency of the Committee's proposal (unlike existing ratios it would capture all off-balance sheet assets and would not permit the netting of derivatives exposures).<sup>20</sup> With even banks such as JP Morgan and UBS opposed to the measure, regulators have been able to mount little resistance to the industry's offensive. In July 2010, the Committee announced that it would provisionally set the ratio at a mere 3 per cent, allowing banks to accumulate assets an incredible 33 times the value of their Tier 1 capital (BCBS, 2010, p. 3). It also refused to make compliance mandatory, proposing that the ratio form part of Pillar 2 – leaving its implementation at the discretion of national regulators – until at least 2018. It is no coincidence that almost one year before, as news of the G20's latest plans emerged, IIF managing director Charles Dallara had specifically called for 'leverage [to] be considered in this context under the so-called "Pillar 2" of the Basel II Accord' (Guha, 2009b).

The proposed capital surcharge on 'systemically important' banks has run into similar problems. After failing to influence the G20 with a lengthy report in July 2009 deeming it 'counterproductive', the IIF in recent months has intensified its lobbying efforts against the proposal, warning regulators as early as September 2009 of the dangers of 'setting up artificial categories of systemic firms' (IIF, 2009; Guha, 2009c). The banking industry, however, has not been united in its opposition to the surcharge. Smaller institutions, seeking to neutralize the capital advantage enjoyed by large banks under Basel II's A-IRB approach, have strongly supported the surcharge. The Independent Community Bankers of America (ICBA), an association representing 5,000 American community banks, has claimed that the 'largest financial institutions in the United States that are now considered "too big to fail" should be subject to a more rigorous set of leverage and risk-based capital requirements than other institutions and that are not determined by the institutions themselves based on internal risk-ratings formulas' (ICBA, 2010,

p. 3). Similarly, the World Council of Credit Unions (WOCCU), a trade association representing 54,000 not-for-profit credit unions around the world, has argued that the greater interconnectedness of A-IRB banks 'demands higher, not lower, capital requirements for large financial institutions, as the current calibration of Basel II suggests' (WOCCU, 2010, p. 2). Unfortunately, these actors may once again have arrived too late. By the time they registered their support for a capital surcharge – the end of the comment period in April 2010 – the Committee had already reached its own conclusions about the proposal. As early as March 2010, a month before the end of the comment period, one member noted a 'deeply-held scepticism around the table' regarding a rule-based capital add-on.<sup>21</sup> By mid-April, one week before the end of the comment period, the subcommittee charged with overseeing the proposal had already begun developing approaches for incorporating the surcharge into Pillar 2 of the new Accord (*Ibid*). The Committee confirmed fears that a potential surcharge would be non-binding in July, when it pledged to develop a 'guided discretion' approach to setting capital requirements for systemically important institutions (BCBS, 2010, p.5).

The Committee's attempt to mitigate the pro-cyclicality of the existing capital framework is likely to face more mixed fortunes. The proposed adoption of 'forward-looking provisioning' – an accounting practice that entails setting aside reserves for *expected* losses rather than actual losses – has been strongly supported by the Spanish banking industry, in particular Europe's largest bank Santander, which has been subject to a similar requirement since July 2000. Consequently, despite opposition from HSBC, UBS and the American Bankers Association, forward-looking provisioning is likely to feature in the final version of Basel III, with one Committee member describing the proposal as being 'warmly embraced' at a plenary in March 2010.<sup>22</sup> Other measures to tackle pro-cyclicality, however, look considerably less likely to survive the consultation process. The Committee's proposal to introduce 'countercyclical capital buffers' – buffers which are raised above regulatory minima in economic upswings and subsequently drawn upon as losses are incurred during periods of stress – has been contested by almost all segments of the industry. Several banks have followed the IIF's lead in arguing that 'such buffers must be determined, under flexible guidance, through a Pillar 2 approach, avoiding rigid triggers that are likely to be ineffective or counterproductive to a firm's recovery' (IIF 2010, p. 2). These views appear to be gaining currency. At its March 2010 plenary, a month before the deadline for public comments, the

Committee was said to have given a 'lukewarm reception' to preliminary proposals to include the add-on (linked to a credit-to-GDP ratio) in Pillar 1.<sup>23</sup> Although a formal version of the proposals was released for consultation in July, the Committee explicitly stated that the need for 'jurisdictional judgment makes [the proposals] distinct from the current Pillar 1 approach' (BCBS, 2010, p. 12).

Finally, efforts to introduce tighter definitions of capital and minimum liquidity requirements have suffered a significant setback in recent months. The Committee had originally proposed to exclude certain assets, such as minority interests and tax deferred assets, from the common equity component of Tier 1 capital because they had not proved sufficiently loss-absorbing during the crisis (BCBS, 2009, p. 13). Faced with the prospect of raising substantial amounts of new equity, a broad coalition of banks has mobilized to press the Committee to loosen its proposed definition of capital. The French Banking Federation (FBF), whose members depend heavily on equity provided by overseas shareholders, warned in April 2010 that the exclusion of minority interests would 'penalize the business model of cross-border groups' (FBF, 2010, p.4). The Japanese Bankers' Association (JBA), meanwhile, denounced the proposed treatment of tax deferred assets as 'one-sided' and 'rash', calling for it to be modified 'to ensure international comparability based on the differences in accounting standards and tax regime of each country' (Nakamoto, 2010; JBA, 2010, p. 13). In July 2010, the Committee yielded to industry pressure, allowing banks to include both types of assets in their common equity base. Echoing the FBF, the Committee justified its decision on the grounds that 'certain deductions could have potentially adverse consequences for particular business models and provisioning practices'.<sup>24</sup>

A similar reversal has characterized the Committee's stance on the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR), provisions aimed at ensuring banks hold enough liquid assets to meet their short- and long-term funding needs. In its April submission to the Committee, the IIF protested that the stress scenarios used to calculate the ratios were 'implausible' and 'excessively restrictive', arguing for 'a more realistic approach, with the changes of assumptions that would follow from it' (IIF, 2010, p. 6). The institute also advised the Committee to expand its 'too-restrictive' definition of liquid assets under the LCR to include corporate and covered bonds, and to shift the NSFR to Pillar 2 because it was 'far from granular enough to support a highly prescriptive regime' (*Ibid*, p. 16). Remarkably, just three months later the Committee fully embraced the institute's recommendations.

Table 4.2 Initial proposals and likely regulatory outcomes in Basel III

Initial Proposal	Industry Recommendation	Likely outcome (Basel III)
Introduce international leverage ratio in Pillar 1 (i.e. binding)	Move to Pillar 2 (i.e. non-binding)	Ratio made non-binding until at least 2018; set at only 3%
Create capital surcharge for 'systemically important' institutions in Pillar 1	Drop surcharge	Removal or adoption in Pillar 2
Introduce countercyclical capital buffers in Pillar 1	Move buffers to Pillar 2	Adoption in Pillar 2
Exclude minority interests and tax deferred assets from common equity base	Drop proposal	Proposal abolished in July 2010
Introduce short-term liquidity coverage ratio (LCR) and longer-term net stable funding ratio (NSFR)	Use less demanding stress scenarios for both ratios; widen definition of liquid assets under LCR; shift NSFR to Pillar 2	Relaxed stress scenarios for both ratios; wider definition of liquid assets under LCR; NSFR moved to Pillar 2 until at least 2018

As well as instituting less demanding stress scenarios for both measures, it permitted banks to count corporate and covered bonds as part of their portfolio of liquid assets for LCR, and shifted the NSFR from Pillar 1 to Pillar 2 until at least 2018 (BCBS, 2010, p. 6).

To summarize, this section offers a pessimistic assessment of the likely outcome of Basel III negotiations. As the first to contribute to the post-crisis regulatory discourse, large international banks have managed to regain control of the Basel process, with devastating consequences for the latest efforts to create an effective international capital regime (see Table 2). With such conditions in place, only one outcome remains likely. Just as the Basel Committee of the late 1990s failed to meet its objectives for a new capital Accord, the Basel Committee of the late 2000s – ten years and one global financial crisis later – is set to meet a similar fate.

## Conclusion

When the Basel Committee decided to update the original Basel Accord in 1998, it had high hopes for a new international standard for capital regulation. The new Accord, the Committee claimed, would remedy the

defects of the existing regulatory framework and significantly improve the safety and soundness of the international banking system. Why did Basel II fail to live up to these expectations?

Basel II's failure, in a nutshell, was the result of excessive influence by the banking industry. By claiming first-mover advantage in the Basel process, a small group of well-connected international banks were able to overhaul the rules of international capital regulation to maximize their profits at the expense of those without a seat at the decision-making table. Community banks and emerging market institutions had little choice but to accept what was in effect a *fait accompli*.

Unfortunately, as we have seen, these very same factors may have also jeopardized the latest attempt to reform international capital requirements, Basel III. Given the importance of reform in this area for the health of the global economy, it is crucial therefore that we heed the lessons of the analysis presented here. Future efforts to revise capital adequacy standards must both observe and ensure that access asymmetries between different stakeholders are as small as possible – principally, but not exclusively, by maintaining some kind of distance between supervisory bodies and the banking industry. Though difficult in practice to achieve, if implemented faithfully, such changes would go a long way towards ensuring that the next time regulators set out to revise international capital standards, they achieve every one of their aims.

## Notes

- 1 There is an important caveat. Early participation will only confer a decisive advantage on actors when negotiators have little accountability to domestic constituents. It has little consequence when agreements reached at the international level must be endorsed by domestic constituents in a separate 'ratification phase'. This effectively nullifies the potential gains from early participation, since any deal can be later rescinded by domestic groups.
- 2 As Paul Pierson puts it (2004, p. 71), 'If early competitive advantages may be self-reinforcing, then *relative timing* may have enormous implications...groups able to consolidate early advantages may achieve enduring superiority. Actors arriving later may find that resources in the environment are already committed to other patterns of mobilization'.
- 3 As Andrew Haldane, Executive Director for Financial Stability at the Bank of England, colourfully puts it: 'Basel vaccinated the naturally immune at the expense of the contagious: the celibate were inoculated, the promiscuous intoxicated.' (Haldane, 2009, p. 27).
- 4 Securitization is a way of financing a pool of assets which involves transferring them to a third party conduit, usually a 'special purpose vehicle' (SPV),

- which then issues asset-backed securities that are claims against the asset pool.
- 5 A July 1998 survey found that the average Tier 1 capital of the largest 1,000 banks made up only 4.48 per cent of total assets, its lowest level since 1992. Cited in Wood, 2005, p. 124.
  - 6 The different aspects of credit risk include probability of default, expected loss given default, and exposure at default. Estimates are fed into a formula which determines the amount of capital that should be held against a given exposure. See BCBS, 2004a.
  - 7 The trading book is the portfolio of financial instruments which are purchased or sold on the stock market to facilitate trading for a bank's customers or hedge against risk.
  - 8 Market risk is defined by the BCBS as 'the risk of losses in on and off-balance sheet positions arising from movements in market prices' (BCBS, 2004a, p. 157).
  - 9 VaR is the probability that losses on a portfolio of assets will exceed a certain amount within a given time horizon, for example \$1m over the next ten days.
  - 10 BCBS, 2006. For some banks the drop was as much as 43 per cent.
  - 11 Author's interview with former BCBS member 1, Oxford, December 2008.
  - 12 Author's interview with former BCBS member 2, Oxford, October 2008. The IIF was founded in 1983.
  - 13 IIF, 2001a. The most frequent meetings with banking executives appear to have been conducted by the Federal Reserve trio of William McDonough, Roger Ferguson and Darryll Hendricks – all of whom had a private-sector background and went on to work at major banks after leaving the Basel Committee. Author's interview with former BCBS member 3, Washington D.C. January 2009.
  - 14 Author's interview with former BCBS member 3, Washington D.C., January 2009.
  - 15 Author's interview with vice president of community bankers' association, Washington D.C., January 2009.
  - 16 Author's interview with former BCBS member 4, Washington D.C. January 2009.
  - 17 Author's interview with former BCBS member 3, Washington D.C., January 2009.
  - 18 Author's interview with former BCBS member 5, London, December 2008.
  - 19 Data from IMF World Economic Outlook Database. Available at <http://www.imf.org/external/pubs/ft/weo/2009/01/weodata/index.aspx> (accessed 22/04/2010).
  - 20 In the words of one credit analyst at Moody's, the proposal is 'far more draconian than the version currently being used in the US and Switzerland'. (Westlake, 2010).
  - 21 Author's interview with BCBS member 6, London, February 2010.
  - 22 *Ibid.*
  - 23 Author's interview with BCBS member 7, London, February 2010.
  - 24 BCBS, 2010, p. 1. These assets can now constitute up to 10 per cent of common equity each.

## References

- ACB, America's Community Bankers (2001) *Submission to the Basel Committee on Banking Supervision*. Available at [www.bis.org/bcbs/ca/amcobare.pdf](http://www.bis.org/bcbs/ca/amcobare.pdf)
- Banking Council of South Africa (2001) *South African banks' response to BIS*. Available at <http://www.bis.org/bcbs/ca/thbacosoaf.pdf>
- BCBS, Basel Committee on Banking Supervision (1988) *International Convergence of Capital Measurement and Capital Standards* (Basel: Bank of International Settlements).
- BCBS, Basel Committee on Banking Supervision (1993) *The Supervisory Treatment of Market Risks* (Basel: Bank of International Settlements).
- BCBS, Basel Committee on Banking Supervision (1995) *An Internal Model-Based Approach to Market Risk Capital Requirements*. (Basel: Bank for International Settlements).
- BCBS, Basel Committee on Banking Supervision (1999) *A New Capital Adequacy Framework. Consultative Paper Issued by the Basel Committee on Banking Supervision* (Basel: Bank for International Settlements).
- BCBS, Basel Committee on Banking Supervision (2004a) *International Convergence of Capital Measurement and Capital Standards: A Revised Framework* (Basel: Bank for International Settlements).
- BCBS, Basel Committee on Banking Supervision (2004b) *Changes to the Securitization Framework* (Basel: Bank for International Settlements).
- BCBS, Basel Committee on Banking Supervision (2006) *Results of the Fifth Quantitative Impact Study (QIS-5)* (Basel: Bank for International Settlements).
- BCBS, Basel Committee on Banking Supervision (2009) *Strengthening the Resilience of the Banking Sector* (Basel: Bank for International Settlements).
- BCBS, Basel Committee on Banking Supervision (2010) *Annex* (Basel: Bank for International Settlements).
- Blundell-Wignall, A. and Atkinson, P. (2008) 'The Subprime Crisis: Causal Distortions and Regulatory Reform', paper presented at the *Reserve Bank of Australia Conference*, July, Kirribilli, Australia.
- Boland, V. (2001) 'ISDA welcomes Basle decision', *Financial Times*, 25 September 2001.
- BDB, Bundesverband deutscher Banken (2010) 'Association of German Banks warns of negative consequences of a leverage ratio'. Available at [http://www.german-banks.com/html/15\\_press/press\\_00\\_100305.asp](http://www.german-banks.com/html/15_press/press_00_100305.asp)
- Callan, E., Wighton, D. and Guha, K. 'Regulators urged to take back seat', *Financial Times*, 25 October 2007.
- Chong, F. (2009) 'Bank fragmentation fears as politics overwhelms finance', *Asia Today Online*, 5 November 2009.
- De Larosière Group (2009) *The High-Level Group on Financial Supervision in the EU* (Brussels).
- De Larosière, J. (2009) 'Financial regulators must take care over capital', *Financial Times*, 16 October 2009.
- ESF, European Securitisation Forum (2001) *Submission to the Basel Committee on Banking Supervision*. Available at <http://www.bis.org/bcbs/ca/eurosecfor2.pdf>
- FBF, French Banking Federation (2010) *FBF comments on the consultative documents*. Published by the Basel Committee on Banking Supervision (BCBS 164 & 165). Available at <http://www.bis.org/publ/bcbs165/frenchbankingfe.pdf>

- FSF, Financial Stability Forum (2008) *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience*, 7 April 2008.
- FSA, Financial Services Authority (2009) *The Turner Review: regulatory response to the global banking crisis*.
- Gapper, J. and Corrigan, T. (1994) 'Byte of the new bank managers', *Financial Times*, 7 September 1994.
- George, A. and Bennett, A. (2005) *Case Studies and Theory Development in the Social Sciences* (Cambridge, MA and London, England: MIT Press).
- Graham, G. (1999) 'Scientific certainties have taken a beating', *Financial Times*, 29 January 1999.
- G20, Group of Twenty (2008) *Declaration of the summit on Financial Markets and the World Economy*. Washington D.C., November. Available at [http://www.g20.org/Documents/g20\\_summit\\_declaration.pdf](http://www.g20.org/Documents/g20_summit_declaration.pdf)
- G20, Group of Twenty (2009) *Leaders' Statement: The Pittsburgh Summit*. September 24–25. Available at: [http://www.g20.org/Documents/pittsburgh\\_summit\\_leaders\\_statement\\_250909.pdf](http://www.g20.org/Documents/pittsburgh_summit_leaders_statement_250909.pdf)
- Guha, K. (2009a) 'Bankers warn on regulation's threat to growth', *Financial Times*, 2 October 2009.
- Guha, K. (2009b) 'Bankers fight back against regulatory overkill', *Financial Times*, 2 October 2009.
- Guha, K. (2009c), 'IIF warns on lack of global banking rules', *Financial Times*, 14 September 2009.
- Haldane, A. (2009) 'Rethinking the Financial Network'. Speech delivered at the Financial Student Association, Amsterdam.
- Ibison, D. (2000) 'IIF outlines banks' worries over Basel Accord reform', *Financial Times*, 13 April 2000.
- ICBA, Independent Community Bankers of America (2010) *Submission to the Basel Committee on Banking Supervision*. Available at <http://www.bis.org/publ/bcbs165/icboa.pdf>
- IIF, Institute of International Finance (1993) *Report of the Working Group on Capital Adequacy*.
- IIF, Institute of International Finance (1997) *Report of the Working Group on Capital Adequacy: Recommendations for Revising the Regulatory Capital Rules for Credit Risk*.
- IIF, Institute of International Finance (2001a) *Report of the IIF Steering Committee on Regulatory Capital*. Available at <http://www.bis.org/bcbs/ca/iistctonreca.pdf>
- IIF, Institute of International Finance (2001b) *Report of the Working Group on Capital Adequacy*. Available at: <http://www.bis.org/bcbs/ca/iiwgoncaad.pdf>
- IIF, Institute of International Finance (2009) *Restoring Confidence, Creating Resilience: An Industry Perspective on the Future of International Financial Regulation and the Search for Stability*.
- IIF, Institute of International Finance (2010) *Re: "Strengthening the Resilience of the Financial Sector" and "International Framework for Liquidity Risk, Measurement, Standards and Monitoring"*. Available at <http://www.bis.org/publ/bcbs165/ioif.pdf>
- IMF, International Monetary Fund (1998) *World Economic Outlook and International Capital Markets: Interim Assessment*.
- ISDA, International Swaps and Derivatives Association (2001) *Response to the Basel Committee on Banking Supervision's Consultation on the New Capital Accord*. Available at <http://www.bis.org/bcbs/ca/isdaresp.pdf>

- Jackson, P., Furfine, C., Groeneveld, H., Hancock, D., Jones, D., Perraudin, W., Radecki, L., Yoneyama, M. (1999a) 'Capital Requirements and Bank Behavior: The Impact of the Basle Accord', *BCBS Working Paper no.1 (April)* (Basel: Bank for International Settlements).
- Jackson, J., Nickell, P. and Perraudin, W. (1999b) 'Credit Risk Modelling', *Financial Stability Review (Bank of England)*, Issue 6, 94–121.
- JBA, 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"*. Available at <http://www.bis.org/publ/bcbs165/japanesebankers.pdf>
- Lapper, R. (1995) 'Work ahead for quality controllers – banks', *Financial Times*, 12 April 1995.
- Mackintosh, J. (2000) 'Banks may get right to assess own risk', *Financial Times*, 31 March 2000.
- Mattli, W. and Woods, N. (2009) *The Politics of Global Regulation* (Princeton: Princeton University Press).
- Midwest Bank (2001) *Submission to the Basel Committee on Banking Supervision*. Available at <http://www.bis.org/bcbs/ca/midindbk.pdf>
- Nakamoto, M. (2010) 'Japan's banking chief hits at 'rash' capital proposals', *Financial Times*, 21 April 2010.
- People's Bank of China (2001) *Comments on the Second Consultative Package on the New Capital Accord*. Available at [www.bis.org/bcbs/ca/pebkofch.pdf](http://www.bis.org/bcbs/ca/pebkofch.pdf)
- Pierson, P. (2004) *Politics in Time* (Princeton: Princeton University Press).
- PricewaterhouseCoopers (2010) 'Basel Committee proposals for 'Strengthening the resilience of the banking sector: New rules or new game?' *Banking and Capital Markets*. Available at <http://www.pwc.com/gx/en/banking-capital-markets/assets/PwC-basel-proposal.pdf>
- Reserve Bank of India (2001) *Comments of the Reserve Bank of India on the New Basel Capital Accord*. Available at [www.bis.org/bcbs/ca/rebkofin.pdf](http://www.bis.org/bcbs/ca/rebkofin.pdf)
- Roubini, N. (2009) 'Nouriel Roubini on prospects for 2009', *Financial Times*, 9 February 2009.
- Shanley, M. (2009) 'Swedish FSA against binding bank leverage ratio', *Reuters*, 22 December 2009.
- Stiglitz, J. (2008) 'Government Failure vs. Market Failure: Principles of Regulation', *working paper prepared for the Tobin Project's conference on "Government and Markets: Toward a New Theory of Regulation"*, 1–3 February 2008, Yulee, Florida.
- Thal Larsen, P. (2006) 'Basel II best for biggest in banks' view', *Financial Times*, 10 April 2006, p. 23.
- Tiner, J. (2004) 'The Practical Implications of SEC Regulation outside the United States', speech delivered at the Marriott Hotel, London.
- Treacy, W. and Carey, M. (1998) 'Credit Risk Rating at Large US Banks', *Federal Reserve Bulletin* (November), 898–921.
- OCC, FRS, FDIC, OTS: US regulatory agencies (Office of the Comptroller of the Currency, Federal Reserve System, Federal Deposit Insurance Corporation, Office of Thrift Supervision) (2006) *Summary Findings of the Fourth Quantitative Impact Study*.

- Westlake, M. (2010) 'Heated debate seen likely over leverage ratio', *Global Risk Regulator*, 8(2), February 2010.
- Wood, D. (2005) *Governing Global Banking: The Basel Committee and the Politics of Financial Globalization* (Aldershot: Ashgate).
- WOCCU, World Council of Credit Unions (2010) *Re: Consultative document on Strengthening the Resilience of the Banking Sector*.