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Conclusions and Recommendations

The advent of the subprime crisis triggered a debate over whether a fully implemented Basel II would have mitigated or exacerbated the risk associated with securities backed by subprime mortgages. Important as the merits of this debate are, the most significant argument is one that neither side can make credibly—that *any* capital regulation regime could have sufficiently contained these risks so that the subprime situation would have been merely a problem rather than a crisis. After a decade in which supervisory attention was mainly focused on capital regulation and banks' own risk management systems, policy debate inside and outside of the official sector has broadened to other subjects.

The Basel Committee has, in the wake of the crisis, acknowledged the need for more attention to liquidity risk. The unhappy experience of many banks with off-balance-sheet entities has suggested that reputational risk may need to be taken more seriously, since the actual risks to a bank resulting from such entities seem to have exceeded the contractual obligation of the bank to support them. Perhaps most interesting and potentially far-reaching, some actual and proposed responses to the crisis have focused on limiting the use of certain financial products. Mortgages and mortgage products will be more regulated after the crisis than they were before. Regulators and banks have been reassessing securitization practices more broadly, including consideration of alternatives such as covered bonds. Some market participants have themselves questioned whether financial institutions should be creating and trading financial instruments whose complexity makes assessment of the risks they pose, particularly in a down market, highly speculative. While eventual supervisory action may include relatively few outright prohibitions or significant restrictions on bank products, it will almost surely entail increased scrutiny of their use.

The current agenda for reforming bank regulation is thus far broader than that pursued by Basel Committee members over the past decade. While the analysis of Basel II in this book does not, of course, address these newly added issues, it does yield one relevant conclusion. The questions raised here about the efficacy of Basel II, both as a paradigm for domestic regulation and as an international arrangement, strengthen the case for more robust supervisory attention to, and action on, areas other than capital regulation. It seems improbable that *any* form of capital regulation will be able to bear the regulatory weight that, in fact if not in intention, the Basel Committee placed on it over the past decade. There is an undeniable attraction to a conceptually elegant mode of regulation that calibrates bank capital precisely to the risks associated with whatever credit exposures a bank may assume, whatever instruments it may trade, and whatever operations it may conduct. This attraction has perhaps come dangerously close to being a Siren song for at least some Basel II authors and defenders. One hopes that the subprime crisis has, if nothing else, injected sufficiently dissonant notes to catch the attention of Basel II believers.

But if capital regulation is fated to be less effective than was hoped by some, it will—and should—remain an important part of financial regulation. Indeed, the partial rescue of Bear Stearns by the Federal Reserve in March 2008 has set in motion a debate that may well lead in the United States to commercial bank–like capital requirements being extended to other financial institutions whose failure might pose a systemic risk. Thus, the fashioning of effective capital requirements remains a very important part of financial regulatory reform. So too, as the most highly-developed international process to harmonize an important field of domestic economic regulation, Basel II provides important evidence on the utility of this approach not only for capital regulation but for other areas of financial regulation. This chapter draws conclusions from the analysis in previous chapters, provides recommendations for changing Basel II, and ends with some thoughts on the lessons of this arrangement for regulatory cooperation and harmonization in other areas.

To recapitulate the approach set forth in chapter 1 and applied in subsequent chapters, assessment of international harmonization efforts requires analysis of both the appropriateness of the harmonized regulation for domestic purposes and the benefits arising from domestic application of those same rules by other participating countries. As part of the latter inquiry, it is obviously necessary to examine whether and how the international arrangement can assure implementation by all participating countries. For this reason, among others, the efficacy of a harmonizing effort depends to a considerable extent on the compatibility of the harmonized rules or regulatory procedures with the institutional capacities and features of the international arrangement. Finally, because most harmonizing efforts—certainly including Basel II—are nested in a broader structure of international cooperation, one must ask how such efforts will affect the overall pattern of cooperation.

The analysis in chapter 5 raised serious questions as to the appropriateness of the Basel II advanced internal ratings–based (A-IRB) model for minimum domestic capital requirements. Not all its shortcomings are intrinsic to the A-IRB approach. For example, the potentially sizable reduction in minimum capital requirements is attributable to the specific formulas developed by the Basel Committee in the then-prevailing political context for banking regulation, not to the idea of an A-IRB approach as such. But other problems—notably those associated with model reliability and monitoring—are inherent in any A-IRB or full-model approach to capital regulation, at least for the present. Whether these problems are serious enough to render A-IRB an unwise or infeasible model for banking regulation is a close question. The chief reasons for answering in the negative are, first, the absence of any compelling alternative model and, second, the expectation of some supervisors that they can ultimately adequately refine the model based on their experience to make the approach workable. The next several years may reveal whether this expectation is well-grounded, although the opaqueness of the A-IRB supervisory process and the unfortunate history of regulatory failures appearing only after disaster strikes may extend the test period.

When we turn to its specifically international character, Basel II appears more clearly ill-advised. The Basel II *process* has made some significant contributions to safety and soundness regulation. It focused banking supervisors—in the Basel Committee countries and around the world—on the need to align capital requirements and related regulation more closely to the complex and sometimes novel risks being assumed by internationally active banks. The supervisors, in turn, encouraged the banks to improve their risk management systems and, more generally, to do a better job of understanding the risks faced by their own institutions. It may be that it was easier for national supervisors in each Basel Committee country to prod their own banks in this direction as part of an international process, though the possibility that there was an implicit deal of significantly lower capital in return for more attention to risk management would suggest otherwise. Even with this qualification, these outcomes are accomplishments.

In addition, the introduction of the three-pillar concept was an important contribution to domestic banking regulation and an advance in international supervisory cooperation. Pillar 2 incorporated domestic supervisory practices into the carefully articulated shared expectations that define the Basel Committee as an international institution. Similarly, pillar 3 established the principle that market discipline should be enlisted as an element of an overall strategy for safety and soundness supervision. The very complexity of an internationally active bank's risks places a greater premium than ever on the firmness and sophistication of bank supervision. It also argues for enlisting, to the degree possible, the assistance of market judgments. Regrettably, though, pillars 2 and 3 received less emphasis than they deserved, and each is less ambitious than would have been desirable. There is little in the way of institutional apparatus or procedures to develop either of these important elements of modern banking supervision.

These benefits for international banking supervision are more than outweighed by the drawbacks of the A-IRB model as the basis for a cooperative arrangement. As explained in chapter 6, questions about the appropriateness of A-IRB as a model for US regulation become more serious in the context of the G-10 countries, much less the 82 other countries that are adopting Basel II. And, regardless of the supervisory capabilities of all these countries, the difficulties in monitoring implementation of the IRB approaches will compound questions of whether the Basel II regime is in fact enhancing the safety and soundness of internationally active banks. More speculatively, there is some concern that the ongoing extensive work elaborating or refining the IRB approaches will slow progress in the Basel Committee on important matters such as the definition of tier 1 capital and the management of liquidity risks. As markets for securitized mortgages imploded during 2007, one could not help wondering whether some of the time devoted by central bankers and other bank regulators to the Basel II exercise over the last decade would not have been better spent in collective assessments of emerging risks to internationally active banks.

Nor is it likely, given the amount of discretion granted national supervisors, that Basel II will produce greater competitive equality among banks from different countries than did Basel I. Nonetheless, the development and publication of highly specific capital adequacy rules have given banks an opportunity to complain on competitive equality grounds when national supervisors consider supplementing or strengthening those rules as applied domestically. These industry critics have attempted to transform what is supposed to be a floor for regulatory capital requirements into a ceiling. Although the proposition would be difficult to establish with any certainty, the trade negotiation dynamic of the Basel process negotiations may have enhanced the effectiveness of industry lobbying grounded on these sorts of complaints—to the detriment of the policy aims of financial stability and containing moral hazard.

Recommendations

The reality is that, for all its uncertainties and flaws, the revised framework has been agreed upon. With its belated implementation by the United States, Basel II completed its three-year sojourn in limbo and will soon be the applicable capital standard for at least the largest banks in all

Basel Committee countries.[1] It is highly unlikely that the Basel Committee will abandon the A-IRB approach anytime soon. Quite apart from the substantive judgment of participating agencies that it is the best approach and needs time to be fully developed, few members of the Basel Committee will be eager to start over after a decade of painstaking work. The doggedness with which the Federal Reserve Board and some other members of the committee pursued the A-IRB approach in the face of its obvious problems suggests that this disinclination will be very strong. Indeed, the criticisms of Basel II appear to have induced a certain defensive obstinacy on the part of some, though by no means all, of the officials involved.

This, then, is the point at which to confront the predicament of outside policy analysts commenting on what they believe to be a deficient newly-minted policy. One response, of course, is to call for a substantially different policy that an analyst believes clearly preferable. For the reasons suggested in the preceding paragraph, such a call is even less likely to be heeded, at least in the near to medium term, than a similarly ambitious proposal for overhauling a long-established policy. But this response can help maintain a critical focus on the new official policy as it is implemented and perhaps in some cases contribute to changing it sooner rather than later. A second option is for the policy analyst to state misgivings about the overall policy but then suggest only incremental changes. This kind of proposal is presumably more likely to be received favorably by policymakers (though how much more favorably varies greatly), but its potential policy relevance comes at the cost of blurring what the commentator may believe to be important analytical and normative problems in the newly adopted policy.

Given the analysis of the preceding chapters, the choice in making policy recommendations in this area is not so binary. While one may wish that the Basel Committee had pursued other approaches with more vigor a decade ago, chapter 7 concluded that none of the existing options is at present a sufficiently developed regulatory model to be readily substituted for the A-IRB approach of Basel II. Even if an alternative were available, there would remain the question of whether detailed harmonization is the optimal basis for an international arrangement. Thus the recommendations that follow do not comprise a "Basel III." Neither, though, are they mere glosses on Basel II. They may be better understood as "Basel II½." With US regulators having committed as part of their interagency compromise on implementation to a review of Basel II after it has been in operation for two years, there may now be a built-in opportunity to consider these and other proposed modifications.

As the use of a fraction implies, this package is an intermediate proposal. It has three aims. First, it is intended to put the international

1. As of this writing, US banking agencies have not published their proposal for amending capital requirements for banks not required or not choosing to adopt the A-IRB approach. In the European Union, all banks are now subject to one of the three Basel II approaches.

arrangement on a sounder footing by compensating for some of the more glaring problems with an international arrangement founded on a harmonized A-IRB approach. Second, it creates mechanisms that could evolve into more cohesive approaches both to domestic capital regulation and to Basel Committee arrangements, including the critical task of freeing senior Basel Committee officials to focus on evolving risks to the international banking system. Third, it provides for regular and rigorous assessments of the regulatory and institutional mechanisms included within the package, both to reinforce the second aim and to provide a greater measure of regulatory transparency.

Five recommendations are made here. The first is for the Basel Committee to accelerate its work on redefining the kinds of capital that qualify as tier 1 or tier 2 types. The second and third are proposals for an international leverage ratio and subordinated debt requirement, which are based on the discussion in chapter 7. These proposals could be adopted without forsaking the IRB approaches, although they are offered because they provide a more workable basis for an international arrangement. The fourth recommendation is for eliminating the harmonized, detailed rules of the IRB approaches in favor of a set of best supervisory practices, including some form of risk-based capital regulation and a requirement that each internationally active bank of a certain size establish and maintain a validated credit risk model. The fifth and final proposal is directed at improving the monitoring processes for both supervisory oversight of banks' risk management and international peer scrutiny of this supervisory oversight in each Basel Committee country. All these measures would be desirable whether or not the specific IRB approaches of Basel II are retained, although obviously their emphasis and role would shift were the third recommendation eventually adopted.

Were all these recommendations adopted, Basel II½ would rest on four, rather than three, pillars. Pillar 1 would be significantly scaled back to include a leverage ratio requirement and a requirement for some form of risk-sensitive capital requirement. Pillar 2 would include principles applicable to risk management by systemically important banks, including a requirement for maintenance of a credit risk model, as well as supervisory oversight and expected interventions. Pillar 3 would be expanded to include a subordinated debt requirement; its disclosure requirements would also be revisited and refined. Finally, a new pillar 4 would strengthen the monitoring capacities of the Basel Committee.

Recommendation 1: Accelerate Work on Redefining Capital

The Basel Committee has long recognized the need to revisit the definitions of tier 1 and tier 2 capital. Although the committee decided not to address this topic in Basel II, it has included the definition of capital as part of its post-Basel II work program. Thus this first recommendation is endorsement of the committee's agenda, rather than a call for a change of course. However, the rather deliberate pace with which the committee has begun this review should be accelerated. The fallout from the subprime crisis has again underscored the importance of ensuring that regulatory capital truly possesses the stable buffering characteristics that should define core capital.

In addition, the crisis has—at least for a time—altered the political environment for financial reform by placing banks on the defensive, just as the Latin American debt crisis of the 1980s did. Now, as then, domestic reformers may have the upper hand if they move quickly. Similarly, nationalistic competitive considerations will be more muted for a time within the Basel Committee, as supervisors focus more on shared prudential goals in the face of the massive failure of risk management by many of the world's largest financial institutions. Once the crisis recedes, though, the domestic political economy of normal times will return, and with it an international negotiating dynamic more sensitive to national considerations.

As a substantive matter, of course, neither national nor international rules on minimum capital ratios mean much if the amount of capital designated as the numerator of those ratios is spurious. Chapter 3 recounted how some of the key substantive compromises in the Basel I negotiations involved accommodating the wishes of some countries to include in the definition of capital such questionable items as unrealized gains from stock holdings. In the intervening years, Basel Committee countries have permitted their banks to include as tier 1 capital various hybrid financial instruments that were not included in the original Basel I definition of qualifying capital.

It is also worth noting that, in contrast to the extreme detail of the A-IRB portion of Basel II, a negotiated definition of the permissible components of tier 1 and tier 2 capital can be relatively straightforward. Unlike A-IRB, the capital of a bank should be reasonably transparent, with its certified financial statements providing an opportunity for any interested party to calculate the tier 1 and tier 2 levels. While there will surely be occasions for the exercise of national supervisory discretion to determine if a financial instrument qualifies, these occasions should be infrequent enough to be reported to and, where necessary, discussed in the Basel Committee.

Recommendation 2: Adopt an International Leverage Requirement

A leverage ratio requirement should be added to pillar 1. Its principal virtue would be to set a transparent floor for bank capital levels that is difficult to manipulate. Its simplicity and relative transparency mean that compliance can be much more easily monitored than an A-IRB approach. Thus, it is a particularly useful benchmark for supervisory intervention, as under the prompt corrective action system of US law. One striking characteristic of the otherwise Babel-like quality of the debate over Basel II in the United States was the near unanimity of present and former bank regulatory officials on the importance of retaining a leverage ratio requirement as a key supervisory tool. The only exceptions were two members of the Federal Reserve Board who briefly expressed sympathy for the view propounded by some banks that this requirement would be outmoded in a post-Basel II world.[2]

Of course, the flip side of a leverage ratio's simplicity is its bluntness. It is not relevant to a bank's calculation of its economic capital requirements. By definition, it excludes risk sensitivity. And under current US practice, it does not take account of off-balance-sheet activities that can, as shown by the fate of structured investment vehicles during the subprime crisis, pose enormous credit risks in the aggregate. Standing alone, a leverage ratio of any sort—and the current US requirement in particular—is surely insufficient for a prudent domestic capital regulation regime.

Yet when compared with the complexity, arbitrariness, and uncertainty of the A-IRB approach, the virtues of the leverage ratio shine brighter, especially as an element of an international arrangement on capital regulation. Its relative transparency is even more important in the international context. Basel Committee members, market actors, and virtually anyone else can readily determine the leverage ratio simply by inspecting a bank's balance sheet. As noted previously, the importance of certified financial statements for so many corporate and regulatory purposes reduces the chances that the reported numbers will have been manipulated, with or without the acquiescence of a bank's supervisors.

By adopting an international version of a leverage ratio, the Basel Committee would establish a requirement that, while certainly imperfect, helps provide at least moderate assurance that minimum capital levels are being maintained. In this regard, it is important to recall the discussion in chapter 6, which showed how a safety and soundness rationale for international capital standards rests in part on concerns that banking agencies in other countries may be tempted, or come under external pressure, to relax regulation of their own banks. This dynamic underscores

2. Then-chairman Alan Greenspan's expression of sympathy was more a conceptual musing than a concrete proposal to eliminate the requirement. The suggestion by Fed Governor Susan Bies that the leverage ratio would be eliminated was more significant, both because of its context as an effort to reassure banks during efforts to implement Basel II and because she was at the time the lead on bank regulatory issues on the board. As noted earlier, she subsequently pledged allegiance to the leverage ratio under pressure from influential members of Congress.

the importance of monitoring domestic enforcement of the international standard, since the very rationale for the international standard contemplates the possibility that national regulators may deviate from it. For this reason, the Basel Committee should adopt an international leverage ratio regardless of whether it retains the IRB approaches and regardless of whether these approaches to setting capital requirements prove technically reliable. The opaqueness of the internal ratings process and of related supervisory oversight makes international monitoring of IRB enforcement a continuing problem. There will inevitably be a trade-off between the sophistication of the capital standard and its transparency. A leverage ratio provides a useful, though imperfect, anchor.

While the leverage ratio will never be more than a blunt regulatory instrument, it can be better honed than the present US version. As discussed in chapter 7, the exclusion of off-balance-sheet items from the denominator of the ratio means that this metric misses entirely a large and growing part of the credit risk assumed by internationally active banks. None of the three options for redressing this circumstance is wholly satisfactory. Use of credit conversion factors, such as those in Basel I that turn off-balance-sheet items into "asset equivalents," obviously requires information about the off-balance-sheet exposures and thus loses much of the leverage ratio's simplicity and transparency. Moreover, while the story of how banks calculated capital requirements for their potential exposures to securitized assets in off-balance-sheet entities has yet to be fully told, there is some question as to whether all such exposures were in fact covered under the Basel I credit conversion rules still in effect for US banks in 2007. Yet the option of using a sophisticated methodology to capture potential exposures more comprehensively would only reduce transparency further.

Chapter 7 explained the conceptual promise of a capital-to-revenue ratio as a supplement to a conventional leverage ratio. The subprime mortgage crisis of 2007 reveals another potential advantage of this ratio, since it would reflect activities such as the servicing of legally independent structured investment vehicles that created severe reputational problems for Citigroup and other financial institutions. Obviously, though, an idea that has not even been backtested using available data is not ready for adoption.[3] It may be that a denominator other than gross revenue (but still related to income) would be more useful. It may be that no ratio of this sort provides even a blunt but workable indicator of credit risk from all activities of banks, including off-balance-sheet exposures. Yet the work required to address and answer these issues would be several orders of magnitude less than what was required to develop the A-IRB approach. This task should be undertaken. At the same time, in order to avoid the Basel Committee's 1999 mistake of committing itself to an undeveloped methodology, it is worth

3. Some of the committee's work on the simpler approaches to capital requirements for operational risk may provide a useful starting point.

revisiting the use of credit conversion factors and the informational issues surrounding off-balance-sheet exposures. It may be, for example, that the simple approach of a percentage of these exposures can serve the same purposes as the leverage ratio.[4]

Based on the current state of knowledge, then, the recommendation here is twofold. First, the Basel Committee should provisionally adopt a simple leverage ratio of the sort used in US and, in somewhat different form, Canadian bank regulation. Basel Committee members should commit to take corrective action for any internationally active bank whose ratio falls below the minimum.

Second, the committee should simultaneously undertake the analytical work needed to determine the utility of the capital/revenue ratio, a simple percentage of off-balance-sheet exposures, and any other similarly transparent alternative. If it turns out that the capital/revenue approach is promising, then a second minimum ratio should be adopted. If a basic percentage of off-balance-sheet exposures seems more predictive of bank problems, then that calculation should be incorporated into a revised leverage ratio, in which case the minimum percentage of balance sheet assets might need to be adjusted downward. If no option reveals itself to be useful, then the simple leverage ratio would be retained.

Setting the actual requirement of the provisional leverage ratio raises another problem. A plausible starting point might be the 5 percent level required under US law for a bank to be considered "well capitalized." Since the internationally active banks of special interest to Basel Committee members are generally part of the diversified financial services firms that US law requires to contain only well-capitalized banks, the 5 percent requirement would simply internationalize the rule already applicable to the likes of Citigroup and Bank of America. A conceptual rejoinder to this proposal is that a standardized international capital requirement should be truly a *minimum*. This would argue for the 4 percent level for a bank to be considered "adequately capitalized" under US law.

Here, though, one confronts the fact that the leverage ratios of many large European banks appear closer to 3 percent, and sometimes even less than that. Meanwhile, at least pending the effects of the 2007 subprime meltdown, the US counterparts of these banks generally maintained leverage ratios of 6 percent or higher (see appendix table 5A.1 in chapter 5). Some of this gap may be attributable to differences in applicable accounting standards, which affect the values of the numerator, denominator, or both. It may also be the case that differences in activities contained within banks

4. One obvious problem is how to assure useful and reliable disclosure of the off-balance-sheet exposures, so that the transparency virtues of the leverage ratio are replicated. Another is that the nature of these exposures arguably varies more than conventional loans to borrowers of different creditworthiness, and thus the use of a single percentage for the entire universe of exposures will be substantially cruder than a leverage ratio.

affect the comparative leverage ratios.[5] It seems unlikely, though, that these factors explain the entire disparity between US and European banks. Indeed, the traditional opposition of European regulators to an international leverage ratio may be based in no small part on the expectation that US regulators would insist on the US standard.

The practicalities of the situation thus present themselves: European regulators—notwithstanding the recent support for a leverage ratio and prompt corrective action system expressed by the European Shadow Financial Regulatory Committee (2006)—will likely continue to resist an international leverage ratio, at least partly out of concern that its level would force some European banks to reduce assets or increase capital. The recent decision by the Swiss Federal Banking Commission to impose a leverage ratio requirement on large banks may, however, signal that European regulators will be more receptive to such a requirement in the aftermath of the subprime crisis.[6] Even if the Federal Reserve Board agrees with the other banking agencies that an international leverage ratio is a good idea, the US agencies may be reluctant to agree to anything less than 4 percent, or even 5 percent. Having seen the efforts of some US banks to turn what were supposedly capital floors in Basel II into ceilings, the agencies may fear that a lower international standard will set off another round of complaints about competitive disadvantage. Short of technical explanations accounting for most of the current disparity in leverage ratios across the Atlantic, both sets of regulators will need to compromise.

One possibility would be to establish the leverage ratio at 3 percent. Technically, this is the US minimum for banks that are otherwise highly rated by their supervisory agencies,[7] although in practice the agencies require the higher levels. Setting the requirement at this level should not require wholesale adjustment by European banks. The US agencies

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5. The leverage ratio requirement is also applicable to bank holding companies in the United States, so theoretically, financial activities that must be conducted only in affiliates of commercial banks (and not in the banks themselves) are still covered. There is some ambiguity on this point, since the 1999 law that permitted affiliations of commercial banks with virtually any other kind of financial institution specified that the Federal Reserve Board should not apply banking law capital requirements to affiliates whose capital is regulated by other agencies, such as the Securities and Exchange Commission.

6. The decision of the Swiss authorities is reported in Daniel Pruzin, Swiss Regulators to Hike Capital Requirements for Biggest Banks, *BNA's Banking Report*, July 7, 2008, 30. Because UBS and Credit Suisse suffered some of the largest losses of any European banks during the subprime crisis, the views of the Swiss supervisor may not portend a more general change of heart among European regulators.

7. As a formal matter, the 3 percent level applies to banks that have the highest composite rating under the so-called CAMELS ratings (based on *c*apital, *a*sset quality, *m*anagement, *e*arnings, *l*iquidity, and *s*ensitivity to market risk).

could maintain, in turn, that the Europeans were enacting a requirement where none had existed before and that, in any case, this was the same bare minimum as technically exists under US banking regulation.[8]

Recommendation 3: Add a Subordinated Debt Requirement

For all that greater supervisory cooperation and a common leverage ratio might bring in the way of more effective supervision, the complexity and speed of transactions in large banks will continue to pose great challenges in terms of obtaining and evaluating information about the condition of banks. For the reasons detailed in chapter 7, market discipline is a natural candidate to complement supervision in these circumstances. Thus, pillar 3 should be strengthened to include a requirement for systemically significant banks to issue subordinated debt. As noted earlier, there are sufficient uncertainties about even the most nuanced subordinated debt proposals to make principal reliance on that approach ill-advised. Indeed, an alternative market disciplinary device such as reverse convertible debentures might prove superior, since it has the potential not only to signal bank infirmities but also to provide an automatic compensatory addition of equity capital when the bank's position deteriorates (Flannery 2005). However, this promising idea raises its own conceptual questions and is thoroughly untested in practice. Subordinated debt proposals have been refined over years of academic and policy debate. As an adjunct to supervision, the approach seems well worth trying.[9]

To be a useful basis for comparison among banks, there would need to be standardization of maturity, frequency of issue, and as many other terms as possible. These details would have to be negotiated, of course, although empirical and policy work has already provided some starting points for discussion. As suggested in chapter 7, requirements might include issuance on a quarterly basis so as to have outstanding subordinated debt in an amount equal to at least 2 percent of the bank's assets. There would have to be a prohibition against credit enhancements or guarantees, as well as restrictions on ownership of the debt by affiliates and other parties with an incentive to prop up a bank's capital position.

The debt requirement would apply only to banks above a certain size. One possibility is the dual threshold of $250 billion in assets or $10 billion in on-balance-sheet foreign exposures used by the US banking agencies to

8. The key to the success of this tactic would probably be for the agencies to enlist the support of key congressional actors beforehand, something they did not do with Basel II. With congressional support for the move established, the banks would have nobody influential left to whom to complain, even were they so inclined.

9. Depending on experience with this requirement, it may later be appropriate to use subordinated debt prices as a trigger for supervisory intervention in some circumstances.

determine the "core" banks required to adopt A-IRB. Ultimately, though, the criteria chosen should be those that capture all banks whose activities have international systemic implications. Technically, both Basel I and Basel II already apply only to "internationally active banks" (Basel Committee 2006g, paragraph 20). However, the widespread adoption of Basel I as a generally applicable bank regulation in many countries created an assumption that subsequent Basel Committee measures would apply de facto to all banks. Making the subordinated debt requirement (and the requirement of a credit risk model set forth below) applicable only to banks whose scope and activities have international systemic implications does not rest on a similar assumption—on the contrary, it would be inappropriate and impractical to require most banks to issue subordinated debt. Though there is nothing wrong with the Basel Committee attending to generally applicable banking regulation, its primary focus and activity should be with banks whose weakness or failure could disrupt the banking systems of other countries.[10]

As noted in chapter 7, the impairment of credit flows to financial institutions during the subprime crisis raises an important question about the utility of an ongoing subordinated debt requirement for major banks. In a financial crisis, investors may be unable to distinguish among the risks faced by different banks. Prices of outstanding issues of subordinated debt may similarly reflect generalized market fears, rather than assessments of the specific circumstances of an issuing bank. In this eventuality, the subordinated debt requirement will be essentially useless, at least during the pendency of the crisis. This possibility, however, does not negate the value of the subordinated debt requirement, properly understood as a supervisory adjunct. The greatest value of a subordinated debt requirement is likely to be as a source of early warnings about problem banks. Adverse responses of analysts and investors to developments at a bank should prod supervisors to look more closely and, where appropriate, take corrective action. Supervisors do not need to be told to scrutinize major banks more thoroughly during a major financial dislocation—they are almost surely already nervously monitoring those institutions on something like a real-time basis and devising potential responses if conditions worsen. In these circumstances, the "canary in a coal mine" function of subordinated debt is hardly necessary; everyone knows the atmosphere has become toxic.

10. It is worth noting that domestic practice in the United States creates a precedent for imposing a subordinated debt requirement only on large banks. This is one of the requirements for a bank to own a "financial subsidiary" that is permitted to engage in certain activities otherwise forbidden to banks and their subsidiaries. Only if the bank is one of the 50 largest insured banks is it required to hold qualifying subordinated debt (Title 12 of the United States Code, paragraph 24a).

To realize the potential contribution of market discipline to financial safety and soundness, the issues surrounding the pillar 3 disclosure requirements discussed in chapter 5 would need to be resolved. Without adequate disclosure, the value of market reactions to bank conditions will be severely circumscribed. As a means to refine these requirements in a manner that strikes an appropriate balance of informational benefit to markets and manageable costs for banks, the Basel Committee should establish an advisory group consisting of representatives from national securities commissions, banks, and market actors that invest in or analyze subordinated debt issues. With the advice of that group, the committee should revise the pillar 3 requirements.

This proposal has the dual purpose of immediately providing regulators with additional information on market perceptions of bank risk and of determining whether subordinated debt prices could be used as a more formal part of bank regulation. There should be three institutional measures to ensure that these purposes are fulfilled.

First, like the other elements of this Basel II½ proposal, national implementation would need to be monitored and refined by the Basel Committee in a context of a more rigorous peer process. The more general quarterly review process proposed in the fifth recommendation could include reporting on the price movements of the debt issues and discussing anomalies or shortcomings in the requirement. The committee could modify the requirements as needed.[11]

Second, the advisory committee proposed in the preceding paragraph should be retained to provide ongoing independent views on the utility of, and possible improvements to, the subordinated debt requirement.

Third, after an appropriate period of experience with the requirement, the committee should commission an evaluation by respected nongovernmental experts. This evaluation should examine whether, when, and how movements in subordinated debt prices are indicative of problems in a bank and as such warrant supervisory attention. The conclusions of the evaluation, which ought to be publicly available, would provide the starting point for an analysis by the committee of whether a subordinated debt requirement is likely to add anything useful to supervisory practice, is useful only as an additional information input for supervisors, or has promise as a more formal trigger for supervisory attention.

11. Of course, regulators from one country may want to inquire of their counterparts in another country as to whether a significant decline in the price of subordinated debt of a bank in the second country presents a reason for immediate supervisory attention. However, such an inquiry would presumably be made immediately, rather than waiting for scheduled Basel Committee meetings.

Recommendation 4: Substitute International Principles for Detailed Pillar 1 Requirements

There are significant questions whether an A-IRB approach is a desirable model for domestic regulation. It is simply misplaced as a basis for international regulatory convergence, and there is thus a good argument for removing the IRB rules from pillar 1. This proposal obviously runs counter to the direction of the Basel Committee in the past decade, though not to the extensive and continuing skepticism of academics, policy observers, and, to some degree, banks. Thus, this recommendation is not made in the expectation that it will receive consideration from the Basel Committee in the near term but rather to illustrate how a more manageable—and thus effective—international arrangement on capital adequacy might be structured.

In place of the IRB rules would be a simple pillar 1 requirement for *some* form of risk-based capital requirement applicable to systemically important banks and a set of pillar 2 principles addressing both bank risk-management and supervisory oversight of bank capital. As to the pillar 1 requirement, it would be up to each national regulator, subject to ongoing consultations within the Basel Committee, to decide which regulatory capital rule should apply to its banks. Despite the misgivings here about an A-IRB approach as a regulatory model, there is no reason to forbid Basel Committee countries from using some form of this approach or, indeed, a full model approach. Though there is reason to be skeptical that the A-IRB approach will ever be the optimal form of capital regulation, experience with the approach in actual operation may allow for sufficient adjustment to make it a workably reliable regulatory model. Supervisors might even become comfortable with allowing each bank to use its own credit risk model, rather than formulas devised by the supervisors themselves. On the other hand, national regulators should also be free to elect a simpler risk-based approach, including one of the variants on a standardized approach, with all its limitations. Precisely because each existing approach has so many shortcomings, it seems reasonable to allow national regulators to make their own choice within the context of general oversight by the Basel Committee.

Pillar 2 sets forth four principles of supervisory review:

1. Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.

2. Supervisors should review and evaluate banks' internal capital-adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this process.

3. Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum.

4. Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored.

These principles are unobjectionable as far as they go. However, they are underdeveloped even as a complement to the detailed rules of pillar 1 and even as elaborated in the rest of pillar 2. A return to simpler, more readily verifiable rules, as suggested here, should be accompanied by considerably more specific expectations for supervisory action to oversee bank risk management in general and capital levels in particular. This recommendation is consistent with the movement away from a narrow "regulatory" approach and toward a more "supervisory" approach to banking law that has been embraced by US, UK, and other national banking agencies. That shift has rested on the premise that risks associated with the complexity and pace of large bank activities cannot be effectively contained even with sophisticated rules. Instead, the emphasis increasingly has been on fostering robust risk management systems within the banks themselves. But a necessary adjunct to this approach is an equally robust and expert supervisory process. If Basel Committee arrangements are to provide assurance that the risks posed to international financial stability by banks of all member countries are adequately contained, then more international attention to the supervisory process is essential. Thus, while some of the additional principles recommended here will be relevant only if the pillar 1 IRB rules are abandoned, many could usefully be added to pillar 2 in any event.

The proposal here to remove the IRB rules from the Basel Accord is motivated not by rejection of the premise underlying the movement toward a more supervisory approach to banking law but by skepticism that the IRB methods for capital rules are well-advised and a conviction that embedding these methods in a detailed international arrangement is misguided. Removing those rules should be accompanied by increased, not less, attention to banks' calculations of their own risk. To the current first supervisory principle in pillar 2 should be added a requirement that each bank covered by the subordinated debt requirement maintain credit and operational risk models as part of its strategy for assessing and maintaining adequate capital levels. A set of best practices on incorporating the output of these models into bank capital maintenance should be developed in consultation with banks and the outside vendors that market such models. The resulting guidelines would then be included in pillar 2.

The second supervisory principle in pillar 2 would have to be substantially augmented with best practices for validating the integrity of the models used by banks. Some of the existing pillar 1 guidance on qualifications for the IRB approaches could be imported into this expansion of pillar 2. This might be adequate for supervisors who retain an IRB method for determining regulatory capital. However, where supervisors have elected a different method—either a standardized approach or a full-model approach—the guidelines for validation will need to be broad enough to apply to any model a bank might reasonably use. This quite fundamental step away from the pillar 1 rules is intended to reconnect the Basel process with the original aim of better aligning supervisory activities with bank expertise in assessing risk sensitivity. The monitoring problems identified in chapter 5 remain; indeed, they may be compounded, insofar as each bank will use its own credit model (just as it will for business purposes as A-IRB is implemented). The next recommendation responds in part to that problem, but only in part. Although the elimination of A-IRB as a separate regulatory capital requirement would also eliminate the invitation to regulatory arbitrage that attaches to something banks regard as an artificial measure, the potential for bank mistakes and supervisory uncertainty are surely present in the Basel II½ proposal presented here, though arguably no more so than under Basel II.

Regardless of the fate of the IRB approaches as elements of the Basel II international arrangement, certain elaborations of the second, third, and fourth supervisory principles of pillar 2 are called for. For reasons discussed in chapter 6, there should be more specificity in expectations for the supervisory oversight process, including the nature and extent of bank examinations. Supervisors should be expected to receive and review on a regular basis the raw output of the credit and operational risk model of banks, along with an explanation of any discrepancies in the amount of capital actually held by the banks against particular risks and the amount that would be indicated by the model. This practice would enhance both the rigor of supervisory evaluation under the second principle and the foundation for action under the third principle, stating the expectation that banks will operate above minimum levels of capital.[12] The fourth supervisory principle—on regulatory intervention to prevent or remedy capital declines below minimum levels—should be considerably more developed. While all the specifics of the US system of prompt corrective action may not be suitable for all Basel Committee members, there must be clearer expectations concerning the timing and scope of regulatory interventions in

12. Where a country maintains an IRB method for setting risk-based regulatory capital requirements, there should be little or no divergence between model output and capital requirement; thus the impact of this additional requirement would be limited in these circumstances.

response to declines below the minimum levels of either the leverage ratio or applicable risk-based requirements. In addition, as experience is gained with market activity in the required issues of subordinated debt, the Basel Committee should draft guidance concerning appropriate supervisory reactions to price changes that could indicate problems in a bank.

Recommendation 5: Strengthen the Monitoring Functions of the Basel Committee

For all its working groups and meetings, the Basel Committee has shied away from monitoring or even discussing the capital positions of banks within the Basel countries. In its early years, the relative informality of the committee was one reason for its success. Even today, there are good reasons not to make capital adequacy accords binding as a matter of international law. The notion of adjudicating "violations" of such an arrangement sits uncomfortably with both the aim of promoting cooperation among national supervisors and the need for supervisors to exercise regulatory judgment in light of a bank's external as well as internal circumstances. It is probably unhelpful to think in terms of demanding "compliance" with a capital accord, because the overtly adversarial posture that could be generated by an emphasis on international legal obligations and enforcement could erode the cooperation among supervisors that is critical to all the activities of the Basel Committee.[13]

Still, the presence of nationalistic as well as cooperative incentives for national supervisory agencies argues for institutional arrangements within the committee to uphold the shared expectations reflected in its capital agreements. As suggested earlier, the most effective means of achieving this end may be to combine monitoring activities with other functions such as information sharing, analysis, problem solving, and work on new proposals. That is, the monitoring task should be embedded in peer review, rather than an adjudicatory context. The peer review function should itself be blended with cooperative endeavors. In addition to the institutional features of the subordinated debt proposal, two innovations that follow these precepts are recommended here—one modest and the other fairly far-reaching.

First, the committee should institute a quarterly review and report on capital levels of the large, internationally active banks covered by the requirements for subordinated debt and the use of internal models. The report, which could be either an appendix to the existing *BIS Quarterly*

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13. The reluctance of US banking agencies to cast the Basel capital accords as legally binding is also connected to the potential domestic legal and constitutional issues that would be raised, since it is doubtful that the agencies have authority to bind the United States as an international legal matter.

Review or a freestanding Basel Committee publication, would have both a quantitative and qualitative section. The former would contain the leverage and risk-based capital ratios of these banks,[14] as well as information on the price movements of banks' subordinated debt described in the second recommendation. The qualitative portion would include the committee's analysis of the condition of these banks and an account of steps taken by national regulators to strengthen any bank whose capital ratios fell below the regulatory minimum or whose debt price movements gave other grounds for concern.

The requirement of a report will obviously provide information to markets, policy analysts, academics, and other interested parties. While much of this information will already have been available from other sources, its quarterly release in aggregated form will create a regular occasion for these groups to focus on the capital condition of internationally active banks. This focus may, in an admittedly modest fashion, provide some oversight of the Basel Committee and the national supervisors. More significant could be the attention paid to the information and analysis by Basel Committee members themselves as the report is prepared. National supervisors will need to explain significant changes in their banks' capital positions or subordinated debt prices to the rest of the committee. This process will allow other members to make further inquiries on the conditions of a specific bank or banks, as well as to bring to the fore trends that may require regulatory attention or adjustment. While this reporting requirement obviously cannot guarantee closer attention by the Basel Committee to the quality of minimum capital regulation in its member countries, it at least provides an opportunity for appropriate review. The prospect of scrutiny by nongovernmental parties (including ex post scrutiny if potential warning signs have been ignored) may itself prompt greater committee activism.

Second, the committee should establish an inspection unit, charged with independently assessing the capital management practices of large, internationally active banks from Basel Committee countries. One or more teams of experts would conduct on-site model validation and oversight of a limited number of these banks in any given year. The inspection unit would, within the constraints of its resources, examine banks from different countries each year. Initially, at least, the experts in the inspection unit would be drawn from the bank regulatory agencies in the Basel Committee countries, detailed for a sufficiently long period that they could function as part of a team of examiners. The inspection unit teams would indirectly monitor how national agencies were performing in model supervision. The experience would also provide members of the team the opportunity to profit from what other national supervisors had learned in their own model validation and examination efforts and, hopefully, build

14. The risk-based capital ratios would not, of course, be directly comparable, since under the foregoing set of recommendations each country would select its own measure.

trust and a true "common language" among the relevant experts from different countries.

Regardless of whether an IRB or other common risk-based capital approach is required, these banks will maintain complex risk management systems, including the use of credit risk models. If the IRB approaches of Basel II are retained, assessment of a bank's internal ratings system and associated capital calculation is obviously central to the success of the regulatory approach. If the IRB approaches are dropped from the international arrangement, some countries may nonetheless retain them. Banks in countries that do not would still be required, as stated in the third recommendation, to maintain appropriate models as an integral part of their risk management systems. If there is no national or international capital requirement, supervisors would still be able to use a bank's credit risk model and the larger risk management system of which it is a part, in evaluating whether a bank's capital levels are adequate for its risk profile.

As emphasized earlier, the opaqueness of both the operation of the bank credit risk models and their supervision by national regulators are key contributors to the monitoring difficulties associated with Basel II. The proposal for review and reporting of bank capital positions does not ameliorate these problems. Although the Accord Implementation Group and its various subgroups will create at least some indirect opportunities for peer review of certain aspects of IRB implementation, there is nothing in existing Basel Committee plans that will extend peer oversight into the bank-specific supervisory process. This kind of supervision will be just as important in a non-IRB regime. An inspection unit would assume this role and, thereby, mitigate one of the greatest obstacles to effective monitoring of supervisory oversight of sophisticated bank risk management systems.

As a practical matter, the unit would likely be able to review only a modest fraction of even the largest banks in any given year. But this level of activity should be sufficient to give the Basel Committee as a whole an indication of how each member country's banking agencies are administering the IRB approach or, in the absence of a common risk-based capital requirement, how they are supervising the risk management systems of large banks. Following each of its examinations, the inspection unit should have a debriefing process with the relevant national supervisor. There would be no direct legal or regulatory consequences of these examinations. However, where the inspection unit uncovered significant problems that national supervisors had failed to correct or of which they were unaware, there would be opportunity for discussion and, as appropriate, remedial action by the national supervisor. The results of each year's reviews should be discussed within the Basel Committee as a whole and an edited description of the inspection unit's annual activities published by the committee as part of one of the quarterly reports proposed earlier.

An obvious hurdle to this recommendation is the concern of banks and national supervisors with the proprietary information—both risk management and customer-based—available to supervisors validating a credit risk model. In this context, the concern probably would not extend to the greatest worry of a bank regulator—that a hint of a problem in a bank becomes a self-fulfilling prophecy as counterparties rush to exit relationships with the troubled bank. This worry is expressed by supervisors as an explanation for why they may not immediately tell other national supervisors that one of their banks has encountered a problem. The model validation and examination process would only by chance coincide with an incident of vulnerability for a specific bank.

As to broader confidentiality concerns, these are real but need not be insuperable. Regulators in other areas—including competition and securities—have found ways to share information about internationally active firms during investigations, while maintaining appropriate levels of confidentiality about proprietary information. There seems no reason why similar arrangements could not be developed in the banking area. Indeed, the greater problem may be that the officials on detail—knowing the performance of their home agencies is subject to scrutiny and their individual actions may affect their careers once they return to their permanent jobs—will pull their punches in evaluating supervisory performance.

There is an argument for gradually converting the inspection unit from a group of detailees to a permanently staffed entity that employs its own experts. Over time these experts might be recruited directly from sources other than bank supervisory agencies. The resulting autonomy and continuity of the staff would help guard against the problems anticipated in the preceding paragraphs, while not resulting in any transfer of direct regulatory authority from those national agencies. Even short of this more permanent status, the inspection unit could be expanded to involve experts from, and examination of bank models in, non-Basel Committee countries.

Implications Beyond Capital Regulation

Because the work of the Basel Committee is the exemplary case of a form of international economic arrangement that has been variously described as "soft law," a government regulatory network, or international regulatory convergence, the question arises whether it contains lessons for other economic areas inevitably arise. The Basel Committee has been exemplary both in its range of cooperative activities, which include coordinating supervision of internationally active banks as well as harmonizing capital requirements, and in the degree to which agreement within the committee has been incorporated into national regulatory practice. In its idealized form, such an arrangement is a system of structured international activities carried out by national government officials with domestic regulatory responsibility, intended to make national laws and regulations more congruent and to facilitate coordinated enforcement of similar national laws. The arrangement is not binding as a matter of international law—unlike trade agreements, for example. Accordingly, there is no formal dispute settlement mechanism. The informality and flexibility are consistent with the underlying assumption that the participating officials have a shared, ongoing interest in the effective regulation of private actors involved in international economic activity.

The ongoing cooperation of banking officials in the Basel Committee, including the Basel II effort, and the remarkable influence of Basel I outside the G-10 countries suggested that a new mode of international economic governance was emerging, in which national regulation would be efficaciously coordinated internationally. Enthusiasm for this new approach arose partly from its promise as a means of managing a global financial system in a world of nation states. Inevitably, there has arisen the question whether the Basel Committee should prefigure a broader set of arrangements for supervisory cooperation and substantive convergence among national financial regulators. As dramatically shown by the financial problems unleashed by the collapse of the US subprime housing market, there are close links not only between commercial banks around the world but also between banks and other financial market actors. Yet other international arrangements among financial supervisors—such as those under the auspices of the International Organization of Securities Commissions and the International Association of Insurance Supervisors—have to date been considerably less robust than those of the Basel Committee.

Going even farther afield from banking regulation, some have wondered whether the Basel Committee arrangements provide a viable alternative to trade agreements for dealing with commercial arenas in which divergent domestic regulation creates impediments to trade in goods or services. Trade agreements usually address such circumstances by creating international obligations that limit the permissible scope of national regulation directed against foreign interests, either in the form of national treatment provisions or as more general procedural and substantive regulatory requirements. These alternative approaches in trade agreements each pose significant difficulties. National treatment obligations are notoriously difficult to apply to many forms of domestic regulation; treatment of a foreign firm that appears discriminatory is often justified by reference to the peculiarities of that firm's product or conduct. Imposition by trade agreements of binding obligations to observe specified procedural or substantive requirements can, particularly in the context of dispute settlement, embody a deregulatory bias that elicits negative political reaction. The question is whether regulatory convergence could eliminate most discriminatory or costly differential treatment of foreign firms without undermining the foundational aims of the regulatory area.

Of course, there has long been both skepticism and enthusiasm about the Basel Committee's efforts. Some have disparaged these efforts as nothing more than a bureaucratic effort at self-protection in the face of regulatory competition (Macey 2003). Others, beginning from a different ideological orientation, have offered an interestingly complementary critique of the Basel Committee as a triumph of technocrats over democratically accountable legislatures (Alston 1997). Experience with the Basel II process to date suggests that, whatever one's views of the desirability of nonformalized modes of coordinating national regulation, the potential of highly developed harmonization efforts may be more limited than both enthusiasts and critics have expected, though perhaps for different reasons.

In fact, the best answer to questions about the lessons of Basel II for other areas—financial and nonfinancial—is that they are limited. One cannot, of course, reasonably infer general principles about the utility of a given form of international arrangements from a single case, no matter how interesting and important. The analytical emphasis in this book on the interaction between the particulars of a substantive regulatory approach and the institutional capacities of a specific arrangement underscores the perils of applying these conclusions elsewhere. Furthermore, the history of the Basel Committee itself reveals the importance of specifics in determining the appropriateness of the regulatory convergence approach. While some of these specifics are fairly durable—such as the complexity or ease of monitoring compliance with the harmonized arrangement—others are highly contingent, such as the political domestic political environments prevailing at the time the arrangement is negotiated.

Although specifics are ultimately determinative, some elements of the Basel II experience do suggest certain considerations relevant to the promise of regulatory convergence arrangements in international financial regulation and, more broadly, other international economic spheres.

First, the importance of building the international arrangement on an efficacious regulatory model is, for all its obviousness, difficult to overstate. Unless the model provides at least a workably sound basis for domestic regulation, the international arrangement is unlikely to be a net benefit for participating countries. The conclusion here that Basel II is misguided is closely connected to the conclusion that the A-IRB approach is problematic as a domestic regulatory model. In the case of Basel II, one can argue that the officials who drove the process made some basic mistakes in fixing on an approach to capital regulation that was completely untested. However, costs associated with a suboptimal regulatory model will usually be incurred in an international negotiation for a harmonized arrangement, even where the basic model is a sound one for all participating countries. The negotiation will yield a regulatory approach different from that which would have been generated in a purely domestic process, as countries accommodate one another's preferences in order to reach agreement. In most instances, as in Basel II, the effect will be a domestic regulatory regime inferior to one that would emerge from a solely domestic process. Thus, to be a worthwhile policy initiative, this "optimality gap" between the internationally harmonized rules and domestically generated rules must be offset by other benefits, such as those discussed in chapter 6. The greater the optimality gap, the greater must be these other benefits.[15]

Arrangements with highly detailed negotiated rules are almost sure to enlarge the optimality gap. In some instances, the gap will increase because the greater the detail in the rules, the greater the chance that some of these detailed rules will be unsuitable for the domestic regulatory environments of one or more participating countries. For industries such as financial services, in which innovation and changing practices require regulatory suppleness, the detail in the international arrangement may slow proper supervisory responses because the international renegotiation of these details may be difficult to complete expeditiously.

Second, the Basel II experience suggests that the success of international regulatory convergence efforts depends on successfully matching a regulatory model to institutional capacities and incentives. This is among the most important ways in which the specifics of an arrangement determine its efficacy. The A-IRB approach of Basel II presents substantial difficulties not only for domestic regulators supervising banks but for other Basel Committee members monitoring the quality of oversight by each national supervisor. Even a model that is a sound basis for domestic regulation in participating countries may not align well with an international arrangement's institutional features. Accordingly, there may be situations in which no regulatory model is both sensible policy in participating countries and compatible with an effective international arrangement.

The recommendations presented earlier in this chapter illustrate the two strategies for achieving greater compatibility between the substantive and institutional elements of a regulatory convergence arrangement. Either the substantive points of harmonization can be adjusted to better fit the capacities of an international arrangement or the institutional features of the arrangement can be adjusted so as to augment its capacities and change the prevailing incentive structure. As with the Basel II recommendations, these strategies may be combined to produce a more effective international arrangement. Indeed, the Basel II experience raises the possibility that too ambitious an effort at harmonizing rules might undermine some of the salutary effects of the Basel Committee's other activities. A somewhat counterintuitive implication of these observations

15. It is possible that, in a particular case, an international process could yield a pattern of regulation that serves the public interest of some, or even all, participating countries better than would a domestically generated regulatory model. This could happen if, for example, the international configuration of negotiating parties reduced the influence of a domestic interest group that was able to capture the national regulatory process. Similarly, an international arrangement might exercise oversight of national regulators that is valuable but underprovided within the nation's domestic system. However, such instances are likely to be considerably fewer than those in which there is an optimality gap.

is that simpler international rules will sometimes, maybe frequently, be more valuable than a comprehensive scheme in achieving specified regulatory ends, even where the activities regulated are themselves complex.

A corollary to this point is more far-reaching, though even more speculative. While an assessment of Basel II should engender a measure of skepticism toward ambitious efforts at detailed international regulatory harmonization, it may simultaneously recommend bolder institutional initiatives. Such boldness need not and, in many cases, should not lead to even the limited supranational functions contained in the foregoing recommendations for modifying Basel II. But to the degree that financial (or other) markets are significantly and progressively globalized, it seems unlikely that conventional international arrangements will be effective. There appear to be significant constraints on the use of international arrangements to provide a global regulatory framework for financial activities, and perhaps other transnational economic activities as well. In addition to the problems associated with detailed negotiated common rules, an arrangement composed of multiple national regulators may pose chronic incentive and efficiency problems. Effective and efficient regulation of global economic activities may require development of appropriate *supra* national governance mechanisms to help monitor implementation of the rules and standards agreed upon internationally and, eventually, to play a direct (if limited) role in supervision of private economic activity.

Third, the history of Basel I and Basel II counsels a good deal of attention to the political economy prevailing in an issue area for which a regulatory convergence arrangement is contemplated.[16] While it is axiomatic that the outcome of any process involving governments will be shaped by politics, the relevant politics may vary substantially depending on factors such as the timing and scope of the initiative. This observation applies both to the prevailing political economy within each participating nation and, at the international level, to interactions between government officials and private interests. That is, even within a particular issue area, there is likely not a fixed set of political dynamics shaping the initiative and thus its outcome. The greater the potential fluidity of these forces in an issue area, the more consequential will be the choices of those who launch such an initiative.

It is true that retrospective criticism often overlooks the contemporaneous uncertainties and nuances that confronted policymakers. However, even an examination of Basel II more sympathetic to policymakers suggests that the initiative was launched with less of a plan—both substantive and political—than would have been advisable. Though a simplification of the Basel I and II histories, one point of contrast between the two

16. It may be more precise to say political "economies," since the relevant political dynamic may differ significantly from country to country. However, as in the case of Basel II, during any negotiation there will usually be exogenous forces that have parallel effects, even where there are differences in the relevant politics of participating countries.

negotiations is illustrative of the importance of the prevailing political dynamic to the outcome of an exercise in international regulatory convergence: The initiation of Basel I when most banks were on the defensive in the aftermath of the Latin American debt crisis led to a regime that required higher regulatory capital floors, whereas the tortured development of the A-IRB approach of Basel II during a period of high bank profits and self-confidence led to a regime that promised significantly lower regulatory capital requirements. One suspects that Basel II would have looked very different had the subprime mortgage crisis occurred during, rather than after, the negotiations.

With respect to initiatives in other areas, one lesson may be that in international negotiations as in much of life, timing is very important. At the very least, officials contemplating an international initiative to compensate for perceived inadequacies in the regulation of financial activity would be wise to consider, in light of the Basel II experience, how they can navigate the political seas so as to maximize chances of achieving the aims that motivate them to seek an international arrangement.

These tentative inferences from the Basel II experience lend some support to commentators such as Leebron (1996) who have been skeptical of international proposals for detailed harmonization of domestic regulation in all but unusual cases. The history of Basel II bolsters the common criticisms of such initiatives as too likely to be maladapted to conditions in each country and too difficult to modify in response to changing external circumstances. The Basel II experience also suggests that the effort required to complete and sustain a complex harmonized arrangement may come with high opportunity costs, as other more productive modes of international cooperation remain comparatively undeveloped. Yet none of the foregoing is meant to suggest that informal cooperative mechanisms among national regulators, or even more fully elaborated modes of regulatory convergence, are presumptively misguided. On the contrary, where a regulatory sphere includes significant transnational activity, the effectiveness and efficiency of national regulation may increasingly depend on bilateral, multilateral, or even supranational cooperation. Basel II reveals the potential hazards as well as benefits of one approach to such arrangements. But its ultimate lesson is that something different must be tried, not that sustained and structured cooperative efforts should be abandoned.