The turmoil in financial markets that resulted from the 2007 subprime mortgage crisis in the United States has revealed massive failures of risk management by financial institutions and of regulation and supervision of these institutions by government authorities. Would these institutions have been sounder if the 2004 Revised Framework on International Convergence of Capital Measurement and Capital Standards (Basel II accord) had already been fully implemented? The objective of Basel II—negotiated between 1999 and 2004—was to produce the rules by which minimum capital requirements would be set under domestic bank regulatory policy in each country represented on the Basel Committee on Banking Supervision. The exercise resulted in a dramatic change in capital regulation of large banks: Basel II permits large, sophisticated banks to base their minimum capital requirements on inputs from their own internal credit risk models through the use of either a “foundational” or “advanced” internal ratings–based approach.

The Basel Committee itself implicitly acknowledged in spring 2008 that the revised framework would not have been adequate to contain the risks exposed by the subprime crisis and needed strengthening. This crisis has highlighted two more basic questions about Basel II: One, is the method of capital regulation incorporated in the revised framework fundamentally misguided? Two, even if the basic Basel II approach has promise as a paradigm for domestic regulation, is the effort at extensive international harmonization of capital rules and supervisory practice useful and appropriate?

In this book, Daniel Tarullo provides extended and, on balance, reasonably negative answers to both questions. His criticisms of the Basel II approach relate directly to the onset of the financial crisis last year and have broader implications for reforming the regulation of large financial institutions. He first assesses the effectiveness of Basel II as a model for domestic capital regulation, focusing on the advanced internal ratings–based (A-IRB) approach—the fundamental innovation of Basel II that most large multinational banks will adopt to calculate capital requirements.

While Tarullo lauds the two core aims of Basel II—to align capital requirements more closely with the risks actually assumed by banks and to continuously prompt banks to adopt the best-available risk management practices—as being absolutely desirable, he questions the potential of the Basel II A-IRB proposal to achieve those aims. He examines the potential advantages of the IRB approaches—greater risk sensitivity, the prod given to large and complex banks to improve their internal risk management systems, and the creation of a “common language” of risk profiles to assist supervisors and market actors in their evaluation of banks—and concludes that numerous problems, including the unproven character of internal ratings assessments and the administrative difficulties in monitoring bank implementation of IRB requirements, raise significant doubts that these advantages will be realized.

At the same time the A-IRB model is enormously complex, full of opportunities for bank and national supervisory discretion, and only indirectly related to the state-of-the-art risk evaluation and management systems actually used by banks for business purposes. The latter feature may present an opportunity for a different form of regulatory arbitrage—one based on shaping the IRB process for regulatory purposes. Thus, there is a strong possibility that the Basel II paradigm might eventually produce the worst of both worlds—a highly complicated and impenetrable process (except perhaps for a handful of people in the banks and regulatory agencies) for calculating capital but one that nonetheless fails to achieve high levels of actual risk sensitivity.
The shortcomings of the IRB method as the foundation for domestic regulation will only be magnified at the international level. Tarullo expresses significant doubts about the efficacy of this approach in the many countries in which there is no tradition of extensive on-site supervision of risk management systems. Moreover, there are substantial monitoring problems for regulators attempting to confirm that their counterparts in other Basel Committee countries have successfully validated and supervised the internal ratings models of banks in those countries.

Tarullo then considers alternatives to Basel II—both substitute paradigms for domestic capital regulation that could be incorporated into an international arrangement and different approaches to international cooperation. In the first category are three options: retaining a standardized risk-based capital approach, substituting market-based discipline for regulatory capital requirements, and instituting a “precommitment” approach to regulatory capital. The second category presents two fairly dramatic possibilities: eliminating international efforts to harmonize capital regulation and—perhaps even more controversial—moving beyond harmonized national regulation toward direct regulation of internationally active banks by a supranational authority.

However, none of these alternatives presents either a substantive approach or a mode of international cooperation preferable to Basel II, at least not at present. But elements of several of these alternatives may be planted firmly onto the modified Basel II suggested in the final chapter, where Tarullo makes five recommendations with respect to capital regulation:

- **Accelerate work on redefining capital.** The Basel Committee has long recognized the need to revisit the definition of 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.

- **Adopt a simple leverage ratio requirement, such as that included in US law.** This admittedly blunt measure of capital is highly transparent and not subject to easy evasion. It provides a kind of regulatory safety net, even though it is not highly risk sensitive. The committee should also consider implementing a minimum ratio of capital to income in order to take account of off-balance-sheet bank activities in a similarly blunt but transparent fashion.

- **Institute a requirement that complex, internationally active banks issue subordinated debt with specific, harmonized characteristics.** While not an assured outcome, there is a reasonable chance that the market pricing of this debt would serve a “canary in a coal mine” role in alerting supervisors to potential problems at a bank.

- **Remove the detailed rules of pillar 1 (minimum capital rules) in favor of augmenting the current pillar 2 principles, which guide national agencies’ supervision of complex, internationally active financial institutions.** These principles would include (1) some form of risk-based capital requirement, (2) a requirement that banks maintain a credit risk model for use in calculating internal capital requirements and an operational risk system, and (3) more detailed expectations for supervisory intervention when capital requirements fall below minimum levels. National implementation of these principles would be subject to regular and sophisticated peer review. While less detail is needed on the minimum capital rules, more detail would be needed on the information that banks adopting the internal ratings–based approach would have to disclose.

- **Strengthen the monitoring role of the Basel Committee.** This should include regular and substantially more robust peer review of national regulatory activity to implement Basel rules and principles. The committee should regularly report on bank capital positions and capital supervision. Finally, and most importantly, the committee should establish a special inspection unit—a supranational team of experts that conducts in-bank validations of the credit risk models used by internationally active banks in the Basel Committee countries.
This unit would serve both to disseminate expertise among the various national supervisors and to provide some monitoring of their own validation of their banks’ models and attendant risk management.

In closing, Tarullo considers the degree to which Basel II offers a promising new mode of international economic cooperation. The Basel Committee’s work in general, and Basel II in particular, is an example of a system of structured international activities intended to make national laws and regulations more congruent or effective, implemented by national government officials with domestic regulatory responsibility. The question has arisen, should this model of international governance be emulated by other officials wrestling with the challenge of regulating global economic activity in a world of nation-states? Some have even speculated that this model could be an alternative to conventional trade agreements, at least where the aim is to remove barriers to trade created by significant divergence in national regulatory practices.

In light of his assessment of Basel II, Tarullo is cautious about drawing conclusions on the desirability of taking a similar approach in other regulatory areas, financial and nonfinancial. His emphasis on the interaction among a substantive regulatory approach, international institutional capabilities, and prevailing political economy renders such a conclusion highly specific to an issue area. However, he does explain how attention to each of these factors, informed by the Basel II experience, usefully illuminates analysis of the potential utility of this model.