From the outset, Daniel Tarullo highlighted one of the main themes of his book that will play a large role in the success of Basel II: the close interconnection between Basel II as a regulatory arrangement and the Basel Committee on Banking Supervision itself.

**Historical Development**

Starting with Northern Rock’s stark misinterpretation of its financial situation in 2007, Dan Tarullo analyzed the historical evolution of banking regulation and supervision, focusing particularly on capital requirements. Bank regulation in the United States 30–35 years ago consisted mainly of statutory restrictions, such as the rate of interest a bank could charge or how much it could expand geographically. In short, banks’ business models were relatively confined, although profitable. But from the 1970s on, the traditional banking sector experienced strong competition with the advent of money market funds, mutual funds, and other financial innovations. In response to this development, deregulation of the banking sector let banks expand into other, nontraditional banking areas. This expansion led to alternative modes of banking supervision. Supervisors began to put more emphasis on rigorous internal risk management and creating a capital buffer that would compensate for the (more risky) activities in which a bank might engage.

These two modes—capital requirements, which are more rule oriented, and internal risk management, which is more discretionary—were not completely congruent. Basel II is supposed to bring the two modes together.

Alternative modes of capital regulation are the use of leverage ratios or different risk-weighted measures (either with regulator or bank weights).

**Basel I**

Dan Tarullo gave a brief review of Basel I. One of its most salient features is its classification of assets into arbitrary “risk buckets.” Overall, this approach is relatively straightforward. Basel I fared quite well in terms of safety and soundness (except for Japan), its degree of competitive equality, and was acceptable on the issue of
procyclicality. It turned out, however, that its implications for regulatory arbitrage were more worrisome, especially with the proliferation of securitization.

Under Basel II, the largest banks are allowed to use their own internal models of risk management, while other banks must use external rating agencies to set capital requirements. The rationale for having banks use their own risk models is that they know their assets and borrowers best, which gives them an informational advantage over the model used by a regulatory body.

**Assessment of Basel II**

One major improvement of Basel II over Basel I is that it is more risk sensitive. However, in light of the recent credit crunch, it is questionable whether the internal credit risk models have been reliable. Three problems related to these credit risk models are:

- **Data issues:** There is not enough data available to empirically validate the risk models in full detail.
- **Stress tests:** The rarity of occasions of extreme financial stress limits the predictive power of the models in bad times.
- **Extreme-tail events:** Rare events occur more often than predicted by standard risk models. For example, a five sigma event in the S&P stock index should occur only once in 10,000 years. In fact, 30 such events have occurred in the last 75 years.

Some formulae for credit-risk models developed in Basel II, although sophisticated, are still undeveloped.

As for Basel II’s impact on capital levels, capital requirements are likely to decrease. However, in some trial runs, banks came up with very different results. Tarullo criticized the Committee’s approach to implement Basel II in reality and see what would happen.

Furthermore, there are implementation and enforcement issues. The use of internal bank models introduces temptations.

In terms of procyclicality, risk exposure will be reduced in good times. In bad times, however, the measures might not be adequate.

Tarullo discussed the staffing problem that regulators face. Good people with expertise are likely to work for the very banks that regulators are supposed to supervise.

**International Dimension**

What about systemic risk? Basel II’s assessment of this issue is underinvestigated, with the Committee focusing on a bottom-up approach.

Moreover, should the focus be on negotiation or implementation? Both are important, but there are likely to be some negotiation dynamics.
In terms of mutual monitoring, there is little systematic reporting within the Committee itself. It could play the role of a friendly monitor and assess whether the regulations are being well-implemented in the respective countries.

In conclusion, the effectiveness of the Committee is not ideal.

**Recommendations**

1. Accelerate work on redefining capital. What exactly counts as capital?
2. Adopt international leverage ratio(s). This tool is blunt, but helpful. It is especially important to analyze the role of off-balance sheet exposures.
3. Add subordinate debt requirements
4. Substitute for detailed Pillar 1 rules. Not everyone should have the same rules since countries and institutions differ.
6. Increase transparency.

**Questions & Answers**

Q: What should be done regarding liquidity risk, which is not addressed in your book?
A: One should pay more attention to liquidity risk. The issue is whether principles or guidelines are sufficient for liquidity-risk management or whether there should be numerical requirements.

Q: What are the alternatives to the regulatory approach taken in Basel II?
A: There is no perfect alternative. Maybe it would make sense to take a standardized approach such as Basel I and make adjustments to it. But sticking to Basel I will not solve its shortcomings. Another alternative would be a precommitment scheme under which banks would be allowed to set aside as much capital as they want to compensate for losses, but if they do not hit their own projections, they would be penalized. The problem is finding the right kind of penalty and avoiding timing issues. Furthermore, after issuing subordinated debt, banks would need to set their own capital requirements, and the market would figure out whether they made the right decision.

Q: There are three fundamental problems. First, the magnitude of risk undertaken by financial institutions is enormous. We have had a solvency crisis every decade. We need to triple or quadruple capital for an adequate level given the macroeconomic risk. Second, neither Basel I nor Basel II sets capital standards, but only capital ratio standards. So, banks can either increase their capital or decrease their assets to meet the standard. In bad times, many banks may want to decrease their assets simultaneously, with negative effects for the whole economy. Third, bank capital is not backed by physical resources as in the case of, for example, GE. So there is no trade-off between the use of productive resources and capital for banks.
A: These are very cogent points. These questions relate to the same underlying problem: What is the capital buffer supposed to do? Repay debt? Keep the bank at an operating level? Provide the bank with enough capital to continue lending in difficult times? According to Alan Greenspan, capital requirements should not account for systemic risk. This is the task of the Fed in its lender of last resort function. So, the question of what we are trying to achieve with capital requirements is essential to the question of how much capital is needed.

Q: How does Basel II account for different experiences in different countries?
A: There are important differences among nations (e.g. emerging countries, industrial structure). That is why I question the megaregulatory approach.

Q: Is it rational from a regulator point of view to have items off-balance sheet?
A: It is hard to ask the right question with respect to off-balance-sheet items. One example is SIVs. When one of these vehicles got into trouble, the bank that had created it took it back on its balance sheet. The rationale might have been reputational considerations. In any case, the SIV was neither an on-balance-sheet nor an off-balance-sheet item.

Q: What is the most important lesson of international regulation versus competitive national regulation?
A: In order to approach the complexity of large international banks, one needs international cooperation. One example is subsidiaries of international banks that can take on problematic assets while the parent company is being scrutinized. Another aspect is that national regulators might try to bind their own hands, so when pressures arise on a national level, international scrutiny might prevent them from getting too loose.