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# International Project Finance: Risk Analysis and Regulatory Concerns

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# International Project Finance: Risk Analysis and Regulatory Concerns\*

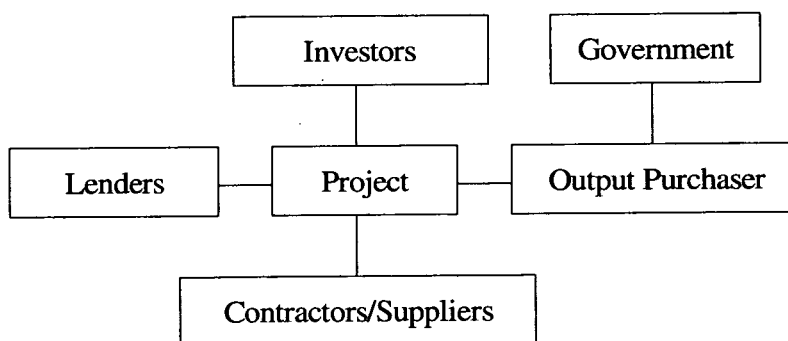
Michael P. Malloy\*\*

## I. INTRODUCTION

Project finance—international or otherwise—can be defined as “a method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the loan.”<sup>1</sup> The typical project finance transaction (*see* Figure 1, *infra*) is used for large, complex, and expensive constructions (*e.g.*, power plants, chemical processing plants, and mines) or systemic undertakings (*e.g.*, transportation infrastructure, environment, media, and telecommunications). The project may involve creation of a new capital asset or refinancing of an existing asset, with or without improvements.<sup>2</sup> The borrower is usually a “special-purpose entity” limited in its authority to developing, owning, and operating the facility.

**Figure 1**

**International Project Finance: Basic Structure**



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\* Copyright © 2004 Michael P. Malloy. Portions of this article are drawn from a forthcoming casebook, JOHN H. BARTON, BART S. FISHER & MICHAEL P. MALLOY, INTERNATIONAL TRADE AND INVESTMENT (Kluwer Law International, 2d ed.).

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1. BASEL COMMITTEE ON BANKING SUPERVISION, WORKING PAPER ON THE INTERNAL RATINGS-BASED APPROACH TO SPECIALISED LENDING EXPOSURES, at 2 (Oct. 2001), *available at* <http://www.bis.org> [hereinafter SPECIALISED LENDING EXPOSURES]. For a useful discussion of the basic structure of a project finance transaction, see P. WOOD, PROJECT FINANCE, SUBORDINATED DEBT AND STATE LOANS 3-9 (1996).

2. SPECIALISED LENDING EXPOSURES, *supra* note 1.

As a result, in a project finance transaction, the credit decision of a rational lender is based primarily on estimated cash-flow and the collateral value of the project's assets. In contrast, in an ordinary commercial loan, the credit decision depends upon the creditworthiness of the borrower and the value of any collateral contractually committed to the credit.

In terms of risk management, these contrasting credit situations suggest quite distinct perspectives with respect to the lender's exposure. On one hand, the ordinary commercial loan presupposes that the source of repayment will be the ongoing operations of the borrower, with the contractually committed collateral asset serving "as a risk mitigant and as a secondary source of repayment."<sup>3</sup> As a result, the current regulatory approach to lending risk has tended to emphasize the risk of counter-party failure.<sup>4</sup>

On the other hand, in a project finance transaction (Figure 1, *supra*) the lender looks to the contractually committed asset as the primary source of repayment. This shifts the relative emphasis to asset-related risks such as technology risks, construction and operational risks, market risks, and for international project finance transactions, country risks.<sup>5</sup> In addition, the risk of counter-party failure remains a consideration, but it is likely skewed by the asset-oriented nature of the transaction. Such transactions may exhibit "unique loss distribution and risk characteristics. In particular, given the source of repayment, the exposures exhibit greater risk volatility—in times of distress, banks are likely to be faced with both high default rates and high loss rates."<sup>6</sup> In other words, asset-oriented lending involves a more significant "walk-away" factor than borrower-oriented lending, where the credit resources and creditworthiness of the borrower are more directly engaged.

These considerations are of particular significance to international economic development and reconstruction policy. To a marked degree, development still depends on cross-border financial flows. Traditional strategies of government-to-government aid and multilateral assistance have been progressively supplemented, sometimes virtually replaced, by a strategy of reliance on the private sector to fund major infrastructure projects. As Scott and Wellons observed, "[p]roject finance . . . started to play an increasingly important role in cross-border financial flows in the mid-1980s in many regions of the world. In Asia by the early 1990s, direct

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3. *Id.* at 1.

4. See, e.g., BANK FOR INTERNATIONAL SETTLEMENTS, FINAL REPORT FOR INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT AND CAPITAL STANDARDS, reprinted in 4 FED. BANKING L. REP. (CCH) ¶ 47-105, at 51,167 (Mar. 15, 1996) (emphasizing assessment of capital adequacy of lender in relation to risk of counterparty failure) [hereinafter FINAL REPORT].

5. In this context, "country risk" should be understood to involve "host country support for the project, transfer risk, risk of expropriation, [and] macroeconomic stability." SPECIALISED LENDING EXPOSURES, *supra* note 1, at 18. For extensive discussion of the types of risk relevant to the conduct of the business of banking, see COMMITTEE ON BANKING SUPERVISION, CORE PRINCIPLES FOR EFFECTIVE BANKING SUPERVISION § IV.A, reprinted in, Michael P. Malloy, INTERNATIONAL BANKING: CASES, MATERIALS, AND PROBLEMS 417-45 (2003-2004 Supp.) [hereinafter CORE PRINCIPLES].

6. SPECIALISED LENDING EXPOSURES, *supra* note 1, at 1.

investment, of which project finance was a major part, dominated even the booming portfolio investment as a source of cross-border finance.”<sup>7</sup> Hence, the continuing viability of project finance as a mechanism for cross-border financial flows is critical to any effective policy of international economic development and reconstruction. The safe and sound management of the risks entailed by project finance are of paramount importance to the participation of such institutional lenders as internationally active banking enterprises. The need for effective risk management naturally engages the attention of the lending regulators, with the result that successful international development policy indirectly depends upon bank regulatory policy.

This paper will briefly examine the current risk management rules imbedded in bank regulatory policy and highlight certain methodological shortcomings exhibited by these rules. It will then analyze and assess a proposed revision of those rules that is intended to enhance their effectiveness and which will address the specific concerns raised by risks inherent in project finance transactions. Currently, there is significant controversy over the proposed revision, and this paper concludes that uncertainty over the fate of the revision threatens the continued efficacy and efficiency of project finance as a resource in development efforts.

## II. CURRENT RISK MANAGEMENT

### A. *The Capital Adequacy Guidelines*

The current international regime for risk management is founded upon the capital adequacy guidelines<sup>8</sup> developed by the Bank for International Settlements (“BIS”), in which U.S. bank regulators have been participating directly. The BIS, located in Basel, Switzerland, is a multilateral bank for national central banks.<sup>9</sup> Traditionally, the BIS has been primarily supported by the “Group of Ten” large industrialized democracies (“G-10”), consisting of Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States, with Switzerland as an additional, significant participant.<sup>10</sup> The

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7. HAL S. SCOTT & PHILIP A. WELLONS, *INTERNATIONAL FINANCE, TRANSACTIONS, POLICY, AND REGULATIONS* 1177 (Foundation Press, 10th ed. 2003).

8. FINAL REPORT, *supra* note 4. For extended discussion of the capital adequacy guidelines, see Michael P. Malloy, *U.S. International Banking and the New Capital Adequacy Requirements: New, Old and Unexpected*, 7 ANN. REV. BANKING L. 75 (1988) (discussing transition from pre-1988 U.S. capital adequacy requirements to BIS regime); Walter I. Conroy, Note, *Risk-Based Capital Adequacy Guidelines: A Sound Regulatory Policy or a Symptom of Regulatory Inadequacy?* 63 FORDHAM L. REV. 2395 (1995) (offering critique of BIS guidelines); Michael P. Malloy, *Capital Adequacy and Regulatory Objectives*, 25 SUFFOLK TRANSNAT'L L. REV. 299 (2002) (assessing operation of current rules and BIS proposed revision).

9. For extended discussion of the BIS, see MICHAEL P. MALLOY, *PRINCIPLES OF BANK REGULATION* §§ 9.7-9.9 (Thomson-West: Concise Hornbook Series, 2d ed. 2003).

10. With Spain joining on February 1, 2001, the operative group—the Basel Committee on Bank Supervision—currently consists of thirteen participant states: Belgium, Canada, France, Germany, Italy, Japan,

BIS assists central banks in the transfer and investment of monetary reserves and often plays a role in settling international loan arrangements. However, of increasing significance, it provides a forum for regulatory policy development through its Committee on Bank Supervision.

The capital adequacy guidelines set forth “the details of the agreed framework for measuring capital adequacy and the minimum standard to be achieved which the national supervisory authorities represented on the Committee intend to implement in their respective countries.”<sup>11</sup> The basic focus of this multilateral framework was “assessing capital in relation to credit risk (the risk of counterparty failure).”<sup>12</sup> However, the framework acknowledged that “other risks, notably interest rate risk and the investment risk on securities, need[ed] to be taken into account by supervisors in assessing overall capital adequacy.”<sup>13</sup> The framework consisted of an eight percent minimum required ratio of certain specified constituents of capital to risk-weighted assets.

The framework endorsed a risk-weighted approach to the assets denominator of the capital-assets ratio.<sup>14</sup> The framework established a relatively simple methodology for risk-weighting, employing only five risk weights.<sup>15</sup> Essentially, the methodology effectively captured only credit risk.<sup>16</sup> It was left to the discretion of national supervisory authorities to decide whether to attempt to account for more methodologically difficult types of risk, such as investment risk, interest rate risk, exchange rate risk, or concentration risk.<sup>17</sup> Furthermore, the national supervisory

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Luxembourg, Netherlands, Spain, Sweden, Switzerland, United Kingdom and United States. See *The Basel Committee on Banking Supervision*, at <http://www.bis.org>.

11. FINAL REPORT, *supra* note 4, at 51,166.

12. *Id.* at 51,167.

13. *Id.*

14. *Id.*

15. See *id.* at 51,175-51,176, Annex 2 (establishing risk weights by categories of on-balance-sheet asset).

16. *Id.* at 51,169.

17. *Id.* at 51,169-51,170. As to items exposed to significant interest-rate and exchange-rate related risk, such as swaps, options and futures, the framework took the position that special treatment was necessary, “because banks are not exposed to credit risk for the full face value of their contracts, but only to the cost of replacing the cash flow if the counterparty defaults.” See *id.* at 51,172. Post-1992, the Committee continued to refine the details and mechanics of risk management and supervision. See, e.g., BIS, Committee on Banking Supervision, *The Treatment of the Credit Risk Associated with Certain Off-Balance-Sheet Items* (July 1994); BIS, Committee on Banking Supervision, *Risk Management Guidelines for Derivatives* (July 1994); BIS, Committee on Banking Supervision, *Amendment to the Capital Accord of July 1988* (July 1994); BIS, Committee on Banking Supervision, *Prudential Supervision of Banks’ Derivatives Activities* (Dec. 1994); BIS, Committee on Banking Supervision, *Basle Capital Accord: Treatment of Potential Exposure for Off-Balance-Sheet Items* (April 1995); BIS, Committee on Banking Supervision, *An Internal Model-Based Approach to Market Risk Capital Requirements* (April 1995); BIS, Committee on Banking Supervision, *Public Disclosure of the Trading and Derivatives Activities of Banks and Securities Firms* (Nov. 1995); BIS, Committee on Banking Supervision, *Supervisory Framework for the Use of “Backtesting” in Conjunction with the Internal Models Approach to Market Risk Capital Requirements* (Jan. 1996); BIS, Committee on Banking Supervision, *Amendment to the Basel Capital Accord to Incorporate Market Risks* (Jan. 1996); BIS, Committee on Banking Supervision, *Interpretation of the Capital Accord for the Multilateral Netting of Forward Value Foreign Exchange Transactions* (April 1996); BIS, Committee on Banking Supervision, *Principles for the Management*

authorities also retained discretion to supplement the framework's risk-weighted methodology with "other methods of capital measurement,"<sup>18</sup> such as the mandated capital-assets ratios previously established by individual national regulators.<sup>19</sup> To account for country transfer risk, the Committee adopted an approach that applied differing risk weights to selected groups of countries.<sup>20</sup>

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*and Supervision of Interest Rate Risk* (Jan. 2001). Most recently, the Basel Committee has asked for comment, by October 31, 2003, on revised interest rate risk principles as part of its larger work on developing new international bank capital standards. *Basel Committee Asks for Comment On Revised Interest Rate Risk Principles*, BNA Banking Daily, Sept. 8, 2003. The revised consultative paper and a summary explanation concerning the proposal are available at <http://www.bis.org/publ/bcbs102.htm>.

18. FINAL REPORT, *supra* note 4, at 51,169.

19. Corresponding to the continuing process of refinement undertaken by the Basel Committee (*see The Treatment of the Credit Risk Associated with Certain Off-Balance-Sheet Items, supra* note 17), capital adequacy rules at the national level have been the subject of almost continuous reassessment and refinement by the regulators. *See, e.g.*, 61 Fed. Reg. 33,166 (1996) (publishing OCC, FRS & FDIC joint policy statement providing guidance on sound practices for managing interest rate risk); 62 Fed. Reg. 55,686 (1997) (to be codified at 12 C.F.R. pts. 3, 208, 325, 567) (proposing uniform treatment of certain construction and real estate loans and investments in mutual funds; simplifying Tier 1 capital standards); 62 Fed. Reg. 55,692 (1997) (to be codified at 12 C.F.R. pt. 225) (proposing similar amendments with respect to treatment of capital of bank holding companies); 62 Fed. Reg. 59,944 (1997) (to be codified at 12 C.F.R. pts. 3, 208, 225, 325, 567) (proposing regulatory capital treatment of recourse obligations and direct credit substitutes); 62 Fed. Reg. 68,064 (1997) (codified at 12 C.F.R. pts. 3, 208, 225, 325) (amending market risk provisions in risk-based capital standards); 64 Fed. Reg. 10,194 (1999) (codified at 12 C.F.R. pts. 3, 208, 325, 567) (OCC, Fed, FDIC and OTS rules for construction loans on presold residential properties, junior liens on one- to four-family residential properties, investments in mutual funds, and tier 1 leverage ratio); 64 Fed. Reg. 10,201 (1999) (codified at 12 C.F.R. pt. 225) (corresponding Fed rule applicable to bank holding companies); 65 Fed. Reg. 12,320 (2000) (to be codified at 12 C.F.R. pts. 3, 208, 225, 325, 567) (proposing changes in risk-based capital standards to address recourse obligations and direct credit substitutes); 65 Fed. Reg. 16,480 (2000) (to be codified at 12 C.F.R. pt. 225, Appendices A, D) (proposing regulatory capital treatment of certain investments in nonfinancial companies by bank holding companies); 67 Fed. Reg. 16,971 (2002), *corrected*, 67 Fed. Reg. 34,991 (2002) (codified at 12 C.F.R. pts. 3, 208, 225, 325, 567) (reducing risk weight applicable to claims on, and claims guaranteed by, qualifying U.S. securities firms and securities firms incorporated in OECD member countries from 100 percent to 20 percent; conforming FDIC and OTS rules to existing OCC and Fed to permit zero percent risk weight for certain claims on qualifying securities firms collateralized by cash on deposit in lending institution or by securities issued or guaranteed by the United States or other OECD central governments); 67 Fed. Reg. 31,722 (2002) (codified at 12 C.F.R. §§ 516.40(a)(2), 567.1, 567.5(b)(4), 567.6(a)(1)(iv)(G)-(H); *removing* § 567.7) (imposing 50 percent risk weight for certain qualifying mortgage loans; eliminating interest rate risk component of risk-based capital regulations; making technical amendments); 68 Fed. Reg. 56,530 (2003) (codified at 12 C.F.R. pt. 3, app. A, pt. 208, app. A, pt. 225, app. A, pt. 325, app. A, §§ 567.1, 567.5(a)(1)(iii), 567.6(a)((3)-(4)) (issuing interim final rule to remove consolidated asset-backed commercial paper program assets from risk-weighted asset bases for purpose of calculating risk-based capital ratios).

20. FINAL REPORT, *supra* note 4, at 51,170-51,171:

[T]he Committee has concluded that a defined group of countries should be adopted as the basis for applying differential weighting coefficients[.] The framework also recognizes . . . that this group should be full members of the OECD or countries which have concluded special arrangements with the [International Monetary Fund] associated with the Fund's General Arrangements to Borrow. . . .

. . . This decision has the following consequences for the weighting structure. Claims on central governments within the OECD will attract a zero weight (or a low weight if the national supervisory authority elects to incorporate interest rate risk); and claims on OECD non-central government public-sector entities will attract a low weight. . . . Claims on central governments and central banks outside the OECD will also attract a zero weight (or a low weight if the

In addition, the framework recognized the importance of bringing off-balance-sheet risk into the scope of the guidelines.<sup>21</sup> All categories of off-balance-sheet risk were brought within the framework and converted into appropriate credit risk equivalents.<sup>22</sup> Thus, the contingent exposure for items such as a standby letter of credit, would be converted into an equivalent asset value. The resulting national asset amount would be weighted in accordance with the risk weight applicable to the category of counterparty involved. However, anticipating that most counterparties in the market for such contingencies, particularly long-term contracts, "tend to be first-class names,"<sup>23</sup> the guidelines generally assigned a fifty percent risk-weight to such contingencies, rather than applying the one-hundred percent risk-weight that might otherwise be applicable.<sup>24</sup>

The final element in the risk-weighted methodology is the required minimum ratio level. The framework adopted a target standard ratio of eight percent, of which "core capital" elements—such as equity capital and surplus—must constitute at least four percent.<sup>25</sup> This target ratio became fully applicable by the end of the year in 1992.<sup>26</sup>

### B. Methodological Shortcomings

In practice as well as in principle, the capital adequacy methodology has exhibited several serious shortcomings. First, the framework primarily recognizes only credit risk, *i.e.*, the risk of counterparty failure.<sup>27</sup> The methodology has been refined to account for other types of risk, namely, interest-rate risks and exchange-rate risks.<sup>28</sup> However, it still fails to calibrate other risks, for example, internal or "operational" risks.<sup>29</sup>

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national supervisory authority elects to incorporate investment risk), provided such claims are denominated in the national currency and funded by liabilities in the same currency. . . .

. . . As regards the treatment of interbank claims, in order to preserve the efficiency and liquidity of the international interbank market[,] there will be no differentiation between short-term claims on banks incorporated within or outside the OECD. However, the Committee draws a distinction between . . . short-term placements with other banks . . . and . . . longer-term cross-border loans to banks which are often associated with particular transactions and carry greater transfer and/or credit risks. A 20 per cent [*sic*] weight will therefore be applied to claims on all banks, wherever incorporated, with a residual maturity of up to an[d] including one year; longer-term claims on OECD incorporated banks will be weighted at 20 per cent [*sic*]; and longer-term claims on banks incorporated outside the OECD will be weighted at 100 percent.

21. See *id.* at 51,171-51,172 (discussing treatment of off-balance-sheet engagements).

22. See *id.* at 51,176, Annex 3 (establishing credit conversion factors for off-balance-sheet items).

23. *Id.* at 51,178.

24. *Id.* However, some member countries have apparently reserved the right to apply the full 100 percent risk weight. See *id.* at n.9.

25. *Id.* at 51,172.

26. *Id.* at 51,172-51,173.

27. See CORE PRINCIPLES, *supra* note 5 (discussing types of risk).

28. See, e.g., 61 Fed. Reg. 33,166 (1996) (publishing OCC, FRS & FDIC joint policy statement

Second, the framework does not take into account the dramatic changes in the contours of the banking market itself. There was increasing consolidation in holding company patterns of ownership, and these consolidated enterprises were significantly diversified across a range of financial services. These patterns of consolidation and diversification were taking place in a markedly more globalized market environment.

Third, the methodology tends to be insensitive to the individual experience and operational qualities of banks. The framework has a “one size fits all” approach for banks subject to capital adequacy requirements.<sup>30</sup> This approach may create a false sense of security regarding supervision of the safety and soundness of the banking system as a whole.

Fourth, the methodology for risk-weighting was technically rudimentary. Five basic risk weights—zero, ten, twenty, fifty and one hundred percent of asset value—were available for *all* types of assets and *all* types of counterparties. This arrangement produced anomalous results. For instance, the same risk weight was applied to both a commercial loan for a small business operating a local retail computer store, and a major project finance transaction funding a national telecommunications system, despite the obvious differences in the relative risks involved in the two transactions.

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providing guidance on sound practices for managing interest rate risk). *But see* 67 Fed. Reg. 31,722 (2002) (codified at 12 C.F.R. §§ 516.40(a)(2), 567.1, 567.5(b)(4), 567.6(a)(1)(iv)(G)-(H); removing § 567.7) (imposing 50 percent risk weight for certain qualifying mortgage loans; eliminating interest rate risk component of risk-based capital regulations; making technical amendments).

29. The term *operational risk* may be defined as “the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events.” Basel Committee on Banking Supervision, *Consultative Document: The New Capital Accord* 94 (Jan. 2001) [hereinafter *Accord*]. As used in the BIS proposed Accord, the term does not include strategic and reputational risk. *Id.* For discussion of reputational risk, see CORE PRINCIPLES, *supra* note 5, at 291. A working paper of the BIS Committee’s Risk Management Group has proposed the deletion of the phrase “direct or indirect” from the definition of operational loss, because it was too vague. Risk Management Group, Basel Committee on Banking Supervision, *Working Paper on the Regulatory Treatment of Operational Risk*, available at <http://www.bis.org> [hereinafter *RMG Working Paper*]. In June 2002, the Basel Committee announced that it would be seeking detailed information from internationally active banks with respect to operational risk exposures for 2001. Daniel Pruzin, *Basel Committee Seeks More Bank Data on Operational Risk Exposures for FY 2001*, BNA Int’l Bus. & Fin. Daily, June 7, 2002, at d7.

30. This was particularly true of the U.S. application of the BIS framework. While the framework by its own terms applied only to international banks, U.S. statutes and implementing regulations applied the capital adequacy regime to *all* banks subject to federal regulation. See 12 C.F.R. at pt.3, app. A, § 1(b)(2) (explaining that Comptroller’s risk-based capital guidelines “apply to all national banks”); *id.* at pt. 208, app. A, § 1 (applying Federal Reserve’s risk-based capital guidelines “to all state member banks on a consolidated basis”); *id.* at pt. 325, app. A (applying FDIC’s risk-based capital maintenance rules “to all FDIC-insured state-chartered banks . . . that are not members of the Federal Reserve System . . . regardless of size”).



### III. PROPOSED REVISION

#### A. *The Proposed Basel Accord*

Over the past decade, the Basel Committee worked on amendments to the 1988 guidelines that accounted for new globalized financial practices and created a more flexible, risk-sensitive framework for determining minimum capital requirements.<sup>31</sup> In June 1999, the Committee issued a proposal that would significantly revise the capital adequacy accord<sup>32</sup> in two basic ways: the 1988 guidelines would be extensively refined, and a dramatic alternative approach was provided. The new approach had three basic principles: (i) International banks would be required to establish their own internal methods for assessing the relative risks of their assets; (ii) Supervisory authorities would be expected to exercise greater oversight of these capital assessments by banks; and (iii) Greater transparency in banking operations would be required, *e.g.*, the creditworthiness of borrowing governments and corporations would be assessed by credit-rating agencies, and these ratings would be used by banks in pricing loans to such borrowers. Financial institutions had until March 31, 2000, to respond to the proposed revisions, which the BIS anticipated would be effective no sooner than 2001.<sup>33</sup>

The Committee issued a revised version of the proposed accord for comment in January 2001.<sup>34</sup> This version enlarged upon the three-pronged approach to capital adequacy for international banks qualified to use it: capital adequacy requirements (largely revised from the 1988 guidelines);<sup>35</sup> increased supervision of bank capital maintenance policies;<sup>36</sup> and greater transparency through disclosure to the market, with resulting market discipline.<sup>37</sup> These elements are referred to as the three “pillars” of minimum capital requirements, a supervisory review process, and market discipline.

Of the three pillars, the minimum capital requirement is by far the most extensively discussed in the proposal, and would involve significant changes in capital adequacy regulation. Capital requirements would be extensively revised from the original framework version and would offer banks two alternative approaches to

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31. See Daniel Pruzin, *Basel Committee Sets Out Changes to Risk Calculations Under Capital Accord*, BNA Int'l Bus. & Fin. Daily, Oct. 3, 2001, at d3 [hereinafter Pruzin Oct. 3, 2001] (discussing BIS motivations for proposed Capital Accord); see also *supra* text accompanying note 17 (citing BIS issuances concerning refinement of capital adequacy framework).

32. Accord, *supra* note 29. See, *e.g.*, Alan Cowell, *An International Banking Panel Proposes Ways to Limit Risk*, N.Y. TIMES, June 4, 1999, at C4, col. 2 (describing proposed revision).

33. Alan Cowell, *supra* note 32, at C4, col. 4.

34. Accord, *supra* note 29.

35. See *id.* at 6-103 (discussing approaches to capital requirements).

36. See *id.* at 104-112 (discussing supervision).

37. See *id.* at 114-133.

capital adequacy. The standardized approach<sup>38</sup>—essentially the 1988 guidelines as revised by the new Accord<sup>39</sup>—would refine the guidelines. For example, it would provide for more articulated risk weights with respect to claims on sovereign borrowers, based upon their credit assessments by export credit agencies.<sup>40</sup> The Accord would require internationally active banks to account for operational risk (arising from poor documentation, fraud, infrastructural failure, and the like), in addition to credit and market risk.<sup>41</sup> The charge for operational risk was expected to approximate twenty percent of overall capital requirements.<sup>42</sup> The capital requirements would be applied to consolidated and sub-consolidated elements of larger financial services enterprises.<sup>43</sup>

As an alternative to the standardized approach, banks that demonstrate to their supervisors a satisfactory internal methodology for assigning exposures to different classes of assets consistently over time<sup>44</sup> would be able to maintain capital in accordance with an internal credit ratings system (the so called “internal ratings based,” or “IRB” approach).<sup>45</sup> The IRB approach is based upon sophisticated computer modeling or other, in-house analytical tools that determine credit risk on a borrower-by-borrower basis, and includes an estimate of future losses on assets.<sup>46</sup> Two methodologies for analysis are available. The foundation methodology would allow the bank to estimate internally the probability of default on the asset, while using regulator-imposed analysis of other risk components associated with the asset.<sup>47</sup> Under the advanced methodology, a sophisticated bank would be permitted to use internally generated estimates for other risk components.<sup>48</sup>

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38. *Id.* at 7-31.

39. *Id.* at 7.

40. *Id.* at 7-8.

41. *Id.* at 95.

42. *Id.* at 95 n.51.

43. *Id.* at 1.

1. The New Basel Capital Accord... will be applied on a consolidated basis to internationally active banks....

2. The scope of application of the Accord will be extended to include, on a fully consolidated basis, holding companies that are parents of banking groups to ensure that it captures risks within the whole banking group....

3. The Accord will also apply to all internationally active banks at every tier within a banking group....

(Footnote omitted.) However, the parent holding company of a banking group's holding company may not itself be subject to the Accord if it is not viewed as a parent of a banking group. *Id.* at 1 n.1.

44. *Id.* at 32.

45. *Id.* at 32-86.

46. *Id.* at 34.

47. *Id.* In October 2001, a task force of the BIS Committee questioned whether the foundation approach was necessary and asked for comments from the banking industry on this issue. SPECIALISED LENDING EXPOSURES, *supra* note 1, at 7-8.

48. *Accord*, *supra* note 29, at 34.

Banking industry commentators were highly critical of the revised proposal,<sup>49</sup> mainly because of reporting requirements perceived as excessive, and the level of capital charges viewed as unnecessarily high. In addition, in the Spring 2001, the annual report of the BIS Committee on Banking Supervision, which evaluated the public disclosure practices of international banks, criticized the relative lack of disclosure in areas related to credit risk modeling and use of internal and external ratings by major banks.<sup>50</sup> This has serious implications for the proposed Accord since disclosure of information regarding use of internal ratings is necessary for banks to qualify for the IRB approach proposed in “Pillar 1” of the new Accord.<sup>51</sup> In June 2001, the European Commission also raised concerns about the relatively tight timetable for finalizing the new capital regime.<sup>52</sup>

As a result, in June 2001 the BIS Committee delayed implementation of the proposed capital accord until 2005.<sup>53</sup> In a working paper issued September 28, 2001, the Committee’s Risk Management Group outlined changes to the proposed Capital Accord.<sup>54</sup> The proposed changes to the Accord’s “Pillar 1” would include, *inter alia*, a significantly lower operational risk charge as a percentage of a bank’s overall capital set-aside requirements, and greater flexibility in the use of advanced internal risk estimate methods for determining a bank’s minimum capital requirements.<sup>55</sup> Comments on the proposed changes were due by October 31, 2001.<sup>56</sup>

In December 2001, the Basel Committee announced its decision to carry out immediately a comprehensive “quantitative impact study” (“QIS”), to assess the overall impact of the proposed Capital Accord on banks and the banking system.<sup>57</sup> The Committee also postponed indefinitely circulation of a revised version of the proposed Accord, previously scheduled for early 2002.<sup>58</sup> Clearly, the new Accord would not be finalized during 2002 and implemented by 2005.<sup>59</sup>

In fact, controversy and criticism continued to build with respect to Basel II, and it was not until July 2003 that the Federal Reserve and the Federal Deposit Insurance Corporation even scheduled discussion of a joint advance notice of

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49. See Pruzin Oct. 3, 2001, *supra* note 31, at d3 (noting industry opposition).

50. Daniel Pruzin, *Basel Committee Cites Mixed Results for Meeting Proposed Capital Accord*, BNA Int’l Bus. & Fin. Daily, Apr. 24, 2001, at d2.

51. *Id.*

52. Joe Kirwin, *EC Welcomes Basel Committee Delay in Implementing New Capital Accord*, BNA Banking Daily, June 26, 2001, at d3.

53. Daniel Pruzin, *Capital Accord Draft Completion Delayed as Basel Committee Eyes New Revisions*, BNA Int’l Bus. & Fin. Daily, June 26, 2001, at d3.

54. *RMG Working Paper*, *supra* note 29. See Daniel Pruzin, *supra* note 31 (reporting on implications of *RMG Working Paper*).

55. Pruzin Oct. 3, 2001, *supra* note 31 (discussing proposed changes).

56. *Id.*

57. Daniel Pruzin, *Basel Committee Announces Further Delay to Completion of Revised Capital Accord*, Int’l Bus. & Fin. Daily, Dec. 14, 2001, at d9 [hereinafter Pruzin Dec. 14, 2001].

58. *Id.* On the eventual issuance of the Third Consultative Paper, see *infra* note 92.

59. Pruzin Dec. 14, 2001, *supra* note 57 (quoting statement issued by the Committee).

proposed rulemaking for the proposal.<sup>60</sup> Prospects for reaching consensus on such an implementing rule remained very much in doubt, both because of the complexity of Basel II itself, and because of the diverging and conflicting interests that needed to be reconciled between the Basel Committee and home country regulators.<sup>61</sup>

### *B. Specialised Lending Exposures*

The proposed Basel II in its still unresolved form certainly seems to address many of the shortcomings observed in the current capital guidelines.<sup>62</sup> The proposal recognizes a wider spectrum of risk, going well beyond the risk of counterparty failure to include even operational risk as a component in the calculation of capital adequacy requirements. It addresses the marked changes in the nature of the international banking market since the emergence of the framework in 1988 in its elaborate rules regarding consolidation and sub-consolidation in holding company patterns of ownership and control of complex, and diversified financial services enterprises. It also appears more risk-sensitive, with its resort to individualized treatment of sophisticated banking enterprises, as exemplified by its provisions for IRB assessment of asset risks. Finally, it provides a relatively more articulated methodology for risk-weighting specific types of assets, possibly even including specialized loan products like project finance, with their own risk assessment methodology.

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60. Richard Cowden, *FDIC, Fed Schedule July 11 Discussion Of ANPR for Basel II Capital Accord Plan*, BNA Banking Daily, July 8, 2003.

61. *Id.* at 1. After the close of the Symposium, a dramatic development occurred concerning the status of the proposed Accord. On May 11, 2004, the Basel Committee on Banking Supervision announced that it had reached agreement on outstanding issues that had impeded the finalizing of the Basel II accord. See Daniel Pruzin, *Basel Committee Announces Deal On Key Remaining Accord Issues*, BNA Banking Daily, May 12, 2004. These issues included calibration of minimum capital requirements, the proposed capital charge for operational risk, and the use of advanced internal ratings-based (IRB) systems for assessing bank capital charges. *Id.* The Committee stated that it would adhere to the proposed year-end 2006 target date for banks to adopt the more basic "standardized" and "foundation IRB" approaches for assessing minimum capital charges. *Id.* However, for banks adopting the most advanced IRB approaches—most, if not all, major internationally-active banks—the Committee expected that a year-end 2007 target date was necessary to allow further impact analysis and parallel running before full implementation. *Id.* On June 26, 2004, the Committee approved the final version of the revised accord. See Committee on Banking Supervision, Bank for International Settlements, *International Convergence of Capital Measurement and Capital Standards: a Revised Framework* (June 26, 2004), available at <http://www.bis.org/publ/bcbs107.htm>. The committee emphasized that it would continue to review the calibration of the accord prior to its implementation and adjust it as necessary to ensure that the new capital rules did not result in a sharp increase in overall minimum capital requirements. See Daniel Pruzin, *Basel Committee Approves 'Final' Version of Capital Accord; Criteria Could Still 'Evolve'*, BBD June 29, 2004. As with the previous guidelines, the committee expected that the revised accord would become the global standard for minimum capital requirements. *Id.* However, India and China, among other major developing countries, have already indicated that they did not intend to adopt the revised accord. *Id.* U.S. regulators—including the SEC as well as the OCC, Fed, FDIC and OTS—have decided that it will only be required for the relatively small number of the largest internationally-active U.S. banks. See *Five Federal Agencies Announce Plans to Implement Basel II over Four-year Period*, BNA Banking Daily, June 29, 2004.

62. See *supra* text and accompanying notes 27-30 (discussing shortcomings of BIS guidelines).

On October 5, 2001, the Basel Committee released a working paper focused on issues concerning the application of IRB approaches to risk assessment, and specifically focused on the treatment of “specialised lending exposures” such as project finance undertakings.<sup>63</sup> The working paper proposed a specific framework for treatment of specialized loans that rely primarily upon a stream of income generated by an asset rather than the creditworthiness of the borrower for repayment of the loan. Such a loan arrangement does not conform to assumptions underlying the IRB approach of the revised Accord, which tends to focus on the ongoing operations of the borrower as the source of repayment.<sup>64</sup> The proposed treatment of specialized loans includes any loans that exhibit the following characteristics:

- (i) The loan is intended for the acquisition or financing of an asset;
- (ii) Asset cash flow is the sole or almost sole source of repayment;
- (iii) The loan represents a significant liability for the borrower; and,
- (iv) Variability of asset cash flow, rather than the independent creditworthiness of the borrower’s overall enterprise, is the key determinant of credit risk.<sup>65</sup>

According to the *Specialised Lending Exposures* working paper, four loan products clearly meet these criteria. Project finance, “in which the lender looks primarily to the revenues generated by a single project”<sup>66</sup> for security and repayment, would be a product subject to the proposed treatment of specialized loans (“SLs”). A second product would be income-producing real estate, in which construction or acquisition of such assets as office buildings, retail properties, hotels, and the like is financed, and repayment depends upon income generated by the property.<sup>67</sup> A third product included in SLs would be big-ticket lease financing (or “object financing,” as defined by the *Specialised Lending Exposures* working paper), in which the acquisition of significant capital equipment such as vessels, aircraft, satellites, and railcars is financed on the strength of the lease income that the asset will generate.<sup>68</sup> Finally, commodity financing, involving “short-term lending to finance reserves, inventories, or receivables of exchange-traded commodities,”<sup>69</sup> would be included since repayment is dependent upon subsequent sale of the commodity. These, and

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63. SPECIALISED LENDING EXPOSURES, *supra* note 1. See Daniel Pruzin, *Basel Committee Outlines Further Changes to IRB Approach in Proposed Capital Accord*, Int’l Bus. & Fin. Daily, Oct. 10, 2001, at d5 [hereinafter Pruzin, Oct. 10, 2001] (reporting on SPECIALISED LENDING EXPOSURES).

64. See, e.g., *Accord*, *supra* note 29, at 50-51 (discussing risk assessment criteria applicable to corporate exposures).

65. Pruzin Oct. 10, 2001, *supra* note 63, at d5.

66. SPECIALISED LENDING EXPOSURES, *supra* note 1.

67. *Id.*

68. *Id.*

69. *Id.*

possibly other specialised lending exposures yet to be identified, would be subject to a single framework, with a specified set of components generating minimum capital requirements customized to such SLs.

How would these customized rules work in practice? To begin with, a bank would need to identify a loan asset that was eligible for such treatment. Consider the following examples drawn from the *Specialised Lending Exposures* working paper.

#### *Transaction I*

A bank finances a special purpose vehicle (“SPV”) that will build and operate a project. The SPV has an [output] contract with an end-user. The length of the [output] contract covers the full maturity of the loan, and the loan amortises fully during the length of the contract. The payments by the end-user to the SPV are based mainly on the ability of the SPV to provide the specified output/services and not on the actual demand for the output/services. If the contract is terminated, the end-user is normally required to purchase the underlying assets at a price related to the market value of the unexpired term of the contract.<sup>70</sup>

According to the working paper, this transaction would be treated as “a corporate rather than SL exposure.”<sup>71</sup>

#### *Transaction II*

A bank finances an SPV that will build and operate a project. [The SPV has no secured output/services contract with guaranteeing third-party or end-user.<sup>72</sup>] . . . [T]he bank is exposed to the key risks in the project—construction risk (the risk that the project will not be completed in a timely and/or cost effective manner), operational/technology risk (the risk that the project will not operate up to specifications), or market/price risk (the risk that the demand and the price of the output will fall and/or that the margin between output prices and input prices and production costs will deteriorate).<sup>73</sup>

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70. SPECIALISED LENDING EXPOSURES, *supra* note 1, at 2.

71. *Id.*

72. *Cf. infra* note 74 (discussing effect of existence of affiliated end-user in such transaction).

73. SPECIALISED LENDING EXPOSURES, *supra* note 1, at 2.

Here, the project would be classified as an SL exposure.<sup>74</sup>

### *Transaction III*

[A] bank provides a loan to finance a transatlantic fibre optic cable to an established telecommunications firm, which has an established business plan, track record and diversified revenue stream. . . .<sup>75</sup>

According to the working paper, this exposure would be considered corporate, not an SL exposure.<sup>76</sup>

As to the application of a customized IRB approach to risk management, if a bank is authorized to use an IRB approach for an exposure class (*e.g.*, for corporate exposures), it would be required to have an agreed plan with its supervisor to move all of its other exposure classes onto the IRB approach within a reasonable time frame. However, this would be dependent on the materiality of the bank's SL exposures. The working paper therefore proposed "that supervisors may, at national discretion, exclude SL holdings from one of the IRB approaches due to their immaterial exposure."<sup>77</sup> If the bank is authorized to use an IRB approach, and "its SL portfolio is considered to be material, then it will be required to *simultaneously* roll-out the IRB approach for its SL portfolio."<sup>78</sup> The next step is to determine what risk management approach is available to the bank:

(i) *the standardized approach*, in which assets are subject to the capital adequacy guidelines generally applicable to internationally active banks;

(ii) *the basic IRB approach*, in which a bank "can demonstrate compliance with the overall requirements for rating system and structure, but does not meet the standards for internal estimation of the specific risk parameters."<sup>79</sup> The bank would be required "to map its internal rating grades into the four supervisory determined categories (strong, fair, weak, and default)."<sup>80</sup>

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74. *Id.* If there were a contractual end-user, but "a circular relationship exists between the end user's and the project's financial strength," the project would still be classified as an SL exposure. *Id.* at 2-3. The working paper goes on to explain that

This would be the case when an end user has limited resources or capacity to generate revenues apart from those generated by the project being financed, so that the end users ability to honour its off-take contract depends primarily on the performance of the project.

*Id.* at 3.

75. *Id.* at 3.

76. *Id.*

77. *Id.* at 8.

78. *Id.* at 8-9 (emphasis in original).

79. *Id.* at 9.

80. *Id.* If the bank does not meet the minimum rating system and structure requirements for the basic

(iii) *the foundation approach*,<sup>81</sup> in which the bank meets supervisory standards for rating and process and standards for estimating probability of default (“PD”)<sup>82</sup> or loss given default (“LGD”).<sup>83</sup> Here the bank would be permitted to use its own PD or LGD estimates in determining risk weight, but would continue to use supervisory estimates of the remaining risk parameters.<sup>84</sup>

(iv) *the advanced approach*, in which the bank meets supervisory standards rating system and process and standards for estimating all the risk parameters—PD, LGD, and exposure amounts (“EAD”).<sup>85</sup> Here the bank would be permitted to use its own estimates as inputs for risk-weighting.<sup>86</sup>

Each of the IRB approaches, to respectively varying degrees, should provide a more risk-sensitive treatment than that offered under the standardized approach.<sup>87</sup> They are meant to operate along a continuum—an “evolutionary approach”<sup>88</sup> in the view of the working paper—that allows increasing degrees of autonomy to banks in the risk-assessment and risk-weighting of their assets, as they satisfactorily demonstrate their facility and sophistication. Assuming that this continuum would enable highly sophisticated, internationally active banks to develop very accurate determinations of risk, one might expect that risk-weights would become more specifically targeted at the advanced end of the IRB continuum. (See Figure 2, *infra*.)

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approach, the working paper suggests that all of its exposures could be associated “with a conservative estimate of [specific risk parameters]. One possibility is to require SL exposures under each respective product line to be automatically slotted into the ‘weak’ supervisory category set out in the basic approach.” *Id.*

81. If this approach is deemed necessary. The working paper has questioned whether the foundation approach should be included in the IRB framework. See Accord, *supra* note 29, at 34.

82. See SPECIALISED LENDING EXPOSURES, *supra* note 1, at 11-12 (discussing of the PD risk parameter).

83. See *id.* at 12-13 (discussing the LGD risk parameter).

84. *Id.* at 9.

85. See *id.* at 13 (discussing the EAD risk parameter).

86. *Id.* at 9.

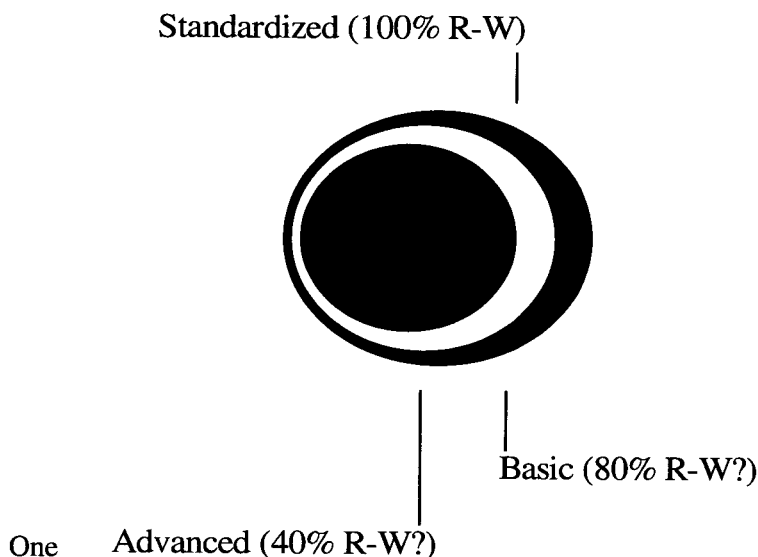
87. *Id.*

88. *Id.* at 6.



Figure 2

*Effect of IRB Risk-Sensitivity*



unresolved concern is that the increased autonomy of internationally active banks for risk-weighting may create problems of accountability and moral hazard.<sup>89</sup> The regulatory objective of maintaining a safe and sound banking system<sup>90</sup> is not necessarily served where such problems arise. In addition, the continuum, or “evolutionary” approach, would probably result in a formal stratification of banks—internationally active banks operating with significantly increasing autonomy in establishing risk management policies for themselves, and domestic-oriented banks operating under a standardized approach leaving them little, if any, managerial discretion in risk management. One may reasonably wonder how such a caste system would affect that other basic regulatory objective, the maintenance of public confidence in the banking system.<sup>91</sup>

89. See generally William A. Lovett, *Moral Hazard, Bank Supervision and Risk-Based Capital Requirements*, 49 OHIO ST. L.J. 1365 (1989) (discussing role of moral hazard).

90. Cf., e.g., 12 U.S.C. § 1831(o)(g) (linking capital supervision to safety and soundness).

91. On the principle of public confidence in the banking system as a basic policy objective of bank regulation, see generally Michael P. Malloy, *Public Disclosure as a Tool of Federal Bank Regulation*, 9 ANN. REV. BANKING L. 229 (1990).

#### IV. CONCLUSIONS

##### A. *Controversy and Uncertainty*

The momentum behind the Basel II proposal has continued to dissipate.<sup>92</sup> In April 2003, the Basel Committee asked for comment on its “Third Consultative Paper of the New Basel Capital Accord” and indicated its intention to finalize a Basel II Accord in the near future that would be implemented in 2007.<sup>93</sup> In August 2003, the British Bankers’ Association and the London Investment Banking Association confirmed that they had requested a delay in Basel II until 2010, and expressed a desire that the Basel II rules be further revised to be “less prescriptive and more principles-based.”<sup>94</sup> Towards the end of that month, Standard & Poor’s Rating Service (“S&P”) announced that it might downgrade banks if it disagreed with methods the banks used under Basel II to calculate capital requirements.<sup>95</sup> Although S&P expressed support for the Basel II effort to improve bank sensitivity to risk and risk assessment and measurement, “changes in the availability of credit arising from incentives created by the accord could have far-reaching effects on bank funding, the continued development of international capital markets, and the global economy.”<sup>96</sup>

##### B. *Project Finance and International Development*

The current regulatory state of play is of great significance to project finance as a tool of international development policy. It cannot be denied that the typical project finance transaction involves an array of risks that are, to say the least, distinguishable from the typical secured commercial credit and, at the worst, may involve more delicate issues of risk-sensitivity.<sup>97</sup> The current regulatory rules for the supervision of risk are not sophisticated enough to reflect the actual degree of risk in a particular transaction accurately, nor do these rules adequately distinguish the relative risk-sensitivity of project finance transactions from other lending products. Therefore, the danger is that a given project finance transaction may entail a higher risk weight—and as a result a greater burden on bank capital—

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92. *But see supra* note 61 and accompanying text (discussing finalized version of Accord).

93. R. Christian Bruce, *Regulators Must Supply More Answers Before Basel Can Be Adopted*, *Shelby, Sarbanes Say*, BNA Banking Daily, June 19, 2003, at 1.

94. *See* Patrick Tracey and Karen Werner, *British Banking Groups Seek Delay In Basel II Capital Accord Until 2010*, BNA Banking Daily, Aug. 11, 2003, at 1. The detailed response from the two associations regarding the latest version of Basel II available at <http://www.bba.org.uk/pdf/144112.pdf>.

95. Richard Cowden, *S&P Report Says It Might Downgrade Banks Some Banks Under Basel II Rules*, BNA Banking Daily, Aug. 28, 2003, available at <http://www.standardandpoors.com>.

96. *See id.*, at 1 (quoting Barbara Ridpath, Managing Director and Chief Criteria Officer, Standard & Poor’s Europe).

97. *See supra* text and accompanying notes 3-6 (discussing risk-sensitivity of project finance transactions).

than may be warranted by the specific risk situation of the particular transaction. To the extent that this danger is operative in the current market, it may have the effect of impeding cross-border resource flows to development projects.

On the other hand, the proposed revision of the capital adequacy rules may implicate safety and soundness concerns or heighten the incidence of moral hazard. To that extent, a new system of risk management based on the revision could lead to a formidable bubble in the market for specialised lending exposures and other products. The eventual bursting of that bubble could be of Enronian proportions, which could compromise the continued viability of international development efforts.

The current BIS guidelines are the dominant analytical model for capital supervision, with over one hundred countries assimilating them into their national regulatory systems.<sup>98</sup> Refining the rules to make them more risk-sensitive is a worthy undertaking. We should not be dissuaded from that task because of the difficulties involved in the effort.

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98. Joe Kirwin, *Capital Accord Draft Completion Delayed as Basel Committee Eyes New Revisions*, BNA Int'l Bus. & Fin. Daily, June 26, 2001, at d3.