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Abstract

The 1990s financial crises triggered many changes to the design of the international financial system, the so-called international financial architecture. While much affected, developing countries have had very little influence on the changes, which the formulation of the new Basle capital accord (B-II) illustrates. The article shows that B-II has largely been formulated to serve the interests of powerful market players, with developing economies being left out. For developing countries, B-II can make domestic financing more costly and raise the costs of and reduce the access to external financing. Importantly, B-II can exacerbate fluctuations in the supply of external financing, an unfortunate outcome, given that developing countries already suffer from volatility.

Keywords: Basle Committee, capital adequacy, financial governance, financial architecture, financial reform, international standards, capital flows, poor countries, cost of capital, international development.

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Introduction

The financial crises of the 1990s led to a debate on the reform of international financial architecture. In response to the crises, international institutions dealing with financial governance such as the Basle Committee on Banking Supervision (BC), the OECD, the IMF, World Bank, and the newly created Financial Stability Forum (FSF) promulgated a range of international standards to shape and facilitate market behaviour. These new standards were held up as models for developing and other countries to follow and have been implemented and assessed through various mechanisms (Financial Sector Assessment Programmes (FSAP), Report on Standards and Codes (ROSC), etc.). This (new) set of standards and institutions has been called the international financial architecture.

The new Basle capital accord (B-II), now in its (difficult) implementation phase, is part of this new international financial architecture. As with the other standards, the policy process leading to B-II largely excluded inputs from developing countries. Nevertheless, and although the accord is formally only applicable to internationally active banks of G10 countries, it is likely to become the global norm for banks, thereby affecting the costs of domestic and international financial intermediation. B-II is especially significant for the cost of international capital for developing countries and could reduce their access to external financing. By employing B-II as a case of the skewed policy process underlying international financial architecture reform, this article seeks to achieve two different, yet interrelated analytical objectives.

In the first place, this article examines the process through which B-II was formulated, explaining how the particular standards were proposed and adopted. The core argument is that B-II capital requirements were formulated in a relatively
exclusionary and closed policy community consisting of regulators and supervisors from the G10 leading industrial nations and their private sector interlocutors. In these networks, private market interests find respondents in finance ministers and central bankers and have thus been able to shape policy at the global level. The final rules and standards sanctified by B-II tend to advance the interests of powerful market players with little regard for developing and emerging market economies, despite the fact that the impact of B-II is far wider than the banking institutions and markets of G10 committee members.¹

Secondly, the article discusses the likely impact of B-II on the financial system of developing countries and develops several measures of its impact on capital flows to developing countries. The central claim advanced here is that the new standards are likely to exacerbate fluctuations in the costs and availability of external financing for many developing countries. This outcome is unfortunate in view of the expectation of many that the new international financial architecture in general and B-II in particular, by enhancing the safety and soundness of the system as a whole, will also provide significant benefits for the most vulnerable members of the international community.

The Basel accord also needs to be considered in relation to other elements of the new international financial architecture. Developing countries have had very little influence on the formulation of the new standards, potentially undermining their legitimacy and effectiveness. Representation of many developing countries in the IMF

¹ The Committee itself accepts that its standards should be adopted by a wide range of supervisory authorities: “This document is being circulated to supervisory authorities worldwide with a view to encouraging them to consider adopting this revised framework at such time as they believe is consistent with their supervisory priorities (Basle Committee 2006a, 15).” The Committee’s own website homepage accepts that “Over recent years, it has developed increasingly into a standard-setting body on all aspects of banking supervision, including the B-II regulatory capital framework (web address http://www.bis.org/bcbs/index.htm).” According to a Financial Stability Institute (FSI) survey, some 88 non-Basle Committee supervisors will adopt the framework, and by 2009 some 5,000 banks in 73 countries, representing 75% of non-Basle Committee banking assets, will be subject to the standards, the principal motivation being that many of these banks are foreign controlled by G10 financial institutions (FSI 2004, 5) and to which the principles of consolidated supervision apply.
and World Bank is not in accordance with their share of global economic activity. While the formation of the G-20 and the Financial Stability Forum might have rendered some international decision-making processes more inclusive, the membership and structural hierarchy of these and other forums leave little doubt that the global financial system continues to be run by the leading industrial nations. Even those emerging markets included often assert different interests from and lack collective bargaining power *vis-à-vis* the dominant members.

At the same time, the costs of implementing the new standards are higher for developing countries than for the developed countries. Developing economies are institutionally further from the “norms” being promulgated and international institutions and (major) developed members have considerable leverage over developing countries in terms of enforcement. The new international financial architecture also manifests some serious myopia in relation to emerging markets, e.g. the lack of a predictable sovereign debt workout system exacerbates the risks of lending to developing countries, thus increasing the cost and volatility. Yet, progress on such a system has been stymied by, among others, the unwillingness of creditor countries and their private sectors to consider changes. In other words, the same combination of interests as initiated and developed B-II has blocked reforms of interest to developing countries. As such, this article serves as one example of the shortcomings of current reform efforts and the adverse impacts on developing countries. To ensure changes to the system benefiting all, reform of the governance of the international financial system itself is needed.

The first section of this article places B-II in the context of broader changes in global financial governance in the last 15 years, in particular the post-East Asia crisis reform process. The second section focuses on the BC and the new capital accord
specifically, supporting the claim that the policy process gives better voice to G10 private financial institutions than to the constituency of developing countries, despite the fact that the Committee’s impact is clearly broader than its membership suggests. The third section examines the impact of such a process on the global financial system and on the costs of financial intermediation, with particular attention to the likely effects that the new agreement will have on the cost and/or volume of capital flows for emerging market and developing countries. Using data from major banks’ own internal ratings systems and the BC’s own Quantitative Impact Survey, this section supports the claim that B-II is likely to have negative consequences for especially the poorest countries, certainly where sovereign lending is concerned.

1. The new international financial architecture: a short overview

This section argues that B-II fits in a context of financial architecture reform which essentially emphasises improved facilitation of market processes. Measures to improve the functioning of markets have included the range of institution-building, macroeconomic and other standards promoted by IFIs and since adopted by national governments referred to in the introduction. This approach has dominated debate and policy despite some of the well-known difficulties such a system bodes for the victims of “original sin” even when they adhere to sound standards of governance.2

During the 1980s, a range of developing country strategies shifted from state intervention, capital controls, and trade protection/import substitution to one dominated by economic openness, fiscal discipline, and a greater degree of market-led adjustment, in line with what came to be called, in an article by John Williamson, the

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2 See the collection edited by Eichengreen and Hausmann (2005). In their introduction, they put the point succinctly: “If much was promised, less was delivered (p. 3)….there is little evidence that the standard institutional reforms will redeem them from original sin (p. 6).”
‘Washington Consensus’. In a number of respects, Mexico and other countries went further than what Williamson specified as ‘consensus’ to embrace more radical aspects of the ‘neo-liberal’ platform of rapid opening of the capital account, rapid financial system liberalization, far-reaching privatization, and a reduction of welfare provision, and often pegged exchange rates as well. This approach was seen as a corrective to interventionist ‘infant industry’ approaches associated with Raul Prebisch and the UN Economic Commission on Latin America in the 1950s. The sovereign debt crisis and extreme inflation of the 1970s questioned this development policy rationale, and the extraordinary growth of private capital markets from the 1980s onwards demonstrated the need to think not only about official sector transfers in development policy, but also to create conditions conducive to private sector investment. Private investors prefer developed countries at least partially because developing countries constitute greater investment risks, even though success promises greater returns. If developing countries could reduce the risks posed by inflation, exchange rate volatility, indebtedness, reduce the arbitrariness of what were perceived to be politically driven state intervention strategies, and reduce structural rigidities impairing the adjustment process, then capital would be more likely to flow towards emerging market countries. This would require a major adaptation of the legal, institutional, and substantive policy framework within developing countries. Market-led development would also lead to smoother adjustment processes, avoiding the pitfalls of debt-financed state-led strategies.

3 Williamson (1990) claimed, in a cautious assessment, that there was consensus around was a series of market-oriented reforms in development policy for Latin American countries, and which pointedly did not include capital account liberalisation.

4 As Williamson (2002) himself points out, the term also came to represent a more radical ‘neo-liberal’ ideology of minimalist state involvement, greatly reduced welfare provision, monetarism, and radical privatisation.
By 1994 Mexico (regarded as a star pupil along with Argentina and others who imperfectly embodied the consensus) baffled the world of the Washington Consensus and plunged into a combination of exchange rate crisis and financial crisis that led to a controversial record IMF loan package assembled under US leadership.\(^5\) At the Halifax G7 summit of June 1995 and subsequently at Lyons and Denver (1996-7), there was a re-examination of global financial and monetary governance.\(^6\) The ‘Peso Crisis’ passed, however, with little changed at the international level and complacency reasserted itself.\(^7\) This was despite a range of more and usually less radical proposals for change coming from academics and official sources. Proposals focused largely on improving market signals to smooth volatility through better financial market transparency, stronger macroeconomic policy standards and IMF monitoring, complemented by better supervision (including at the international level), robust exchange rate regimes, and the like. A consensus formed that radical change was not necessary.

The 1997/98 crisis among the again star pupil (if often misunderstood) Asian tigers\(^8\) caught officials and the private sector again by surprise. Explanations such as exchange rate rigidities, a lack of transparency on macroeconomic policy, and poor financial supervision were again found *ex post facto*. New causes also emerged, among them the sin of ‘crony capitalism’ and a failure to develop transparent market-

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\(^5\) It was of course always an option for more radical neo-liberals to claim that the real problem was that Mexico did not go far enough, and thus that the ‘consensus’ was in itself insufficiently radical.


\(^7\) Among the more radical proposals was that of an international bankruptcy court to facilitate sovereign debt workouts under more predictable conditions and an international banking standard (see Goldstein (1997)).

\(^8\) Although arguably the most successful examples of economic development, Japan and east/SE Asia, and now China, based their strategies on state-led investment strategies, import substitution combined with trade protection (progressing in time to export promotion), financial repression, and strict local content rules relating to foreign direct investment. Such strategies were not insensitive to market forces and the need for competitiveness, but they were anything but market-led.
based relationships in the corporate world. Though contagion followed in Russia, Argentina, Turkey, and Brazil, and indeed the LTCM incident nearly brought collapse to Wall Street itself, the reform debate remained limited in scope and the process incremental in nature. The one radical proposal from the official sector, the Sovereign Debt Workout Mechanism (SDRM) proposed by the IMF and which contained elements of a global bankruptcy procedure (Krueger 2002), was defeated by a combination of developing and developed member states alike at the IMF meetings of March 2003, in large part because of strong private sector opposition.

In the late 1980s and 1990s, many developing countries implemented ‘Washington Consensus’ reform policies, often going beyond it. The emergence of post-Soviet ‘transition economies’ contributed to the sense of a triumph of market-based approaches to economic development. After the late 1990s financial crises, however, analysis revealed that insufficient attention had been paid to the legal, institutional, and regulatory aspects of market-based reform at the national and international levels. While there was no essential re-examination of the approach itself, a serious reckoning with the way in which it had been implemented in various settings occurred.

The 1998 Birmingham G7 summit document9 at the height of the Asian Crisis provides perhaps the clearest statement of what it termed an ‘emerging consensus’. First, it stressed ‘transparency,’ meant to include the provision of ‘accurate and timely’ macroeconomic and supervisory data (e.g., reserve positions, levels of national public and private indebtedness). Countries would adhere to IMF Special Data Dissemination Standard (SDDS) codes, and the IMF would accelerate the publication of data on central bank reserve positions. Transparency in national and

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9 See the report at http://www.g8.utoronto.ca/summit/1998B-Irmingham/g7heads.htm.
IFI policymaking would also enhance investor confidence, reducing uncertainty and improving investment pricing in the market. Secondly, it argued that weak national financial systems required sound macroeconomic, regulatory and supervisory policies first and that capital account opening would only then be advisable. It also mentioned that foreign financial firms should have full access to emerging markets in order to transfer skills and expertise, and enhance financial system functioning. Thirdly, national financial systems needed strengthening in relation to corporate governance practices and norms (something to which a number of developed countries might have, in retrospect, paid more attention) and supervision, achieved through the Basle ‘Core Principles’ for Effective Banking Supervision\(^\text{10}\) and multilateral surveillance of supervisory practice.\(^\text{11}\) Fourthly, the private sector must take greater responsibility: burden-sharing in debt workout/lending on in crises so public resources do not underpin private gain; no more implicit or explicit government or IFI guarantees of crisis ‘bailout’ which risks moral hazard. National bankruptcy laws needed clarification, enhancing understanding of risks and the consequences of mistakes. Fifthly, the IMF was designated to lead greater inter-IFI co-operation, co-ordinating multilateral and bilateral aspects of stabilization efforts. Finally, global forums for better dialogue between emerging market and developed creditor countries should be developed; the establishment of the Financial Stability Forum (FSF) with a secretariat in Basle (1999) and the G10-G20 consultation process were the principal results of this aspect of the reforms.\(^\text{12}\)

\(^\text{10}\) First issued in September 1997; latest version October 2006, Basle Committee (2006b).
\(^\text{11}\) Via the Committee on the Global Financial System and Committee on Payment and Settlement Systems (both G10), the Core Principles Liaison Group, and International Conference of Banking Supervisors (liaison with non-G10 supervisors).
\(^\text{12}\) For a broader account of standards and what was developed from the Birmingham principles, see the Financial Stability Forum web site “Compendium of Standards/12 Key Standards for Sound Financial Systems.” [http://www.fsforum.org/compendium/key_standards_for_sound_financial_system.html](http://www.fsforum.org/compendium/key_standards_for_sound_financial_system.html).
These reform measures largely assumed that problems and eventual solutions lay more in the reform of the weak institutions and practices of the emerging market economies than with the international financial architecture itself. The only architectural reform as such was the establishment of the FSF and two committees to monitor multilateral supervisory practice, and the designation the IMF as the lead institution for co-ordinated debt workout. At the same time, policymaking in developing countries was further constrained through transparency/new standards and enhanced monitoring, to conform better to the expectations and preferences of investors. As it maintained the largely market-oriented approach of the Washington consensus, it ignored considerable empirical evidence that many successful development processes, including of European countries, did not occur under a particularly open market orientation.

This outcome reflected who the key players were, who controlled the agenda, and who responded to and shaped proposals over time. Given the diversity of national financial systems and legal/policy making institutions in the developing world as obstacles to stability, a ‘one-size-fits-all’ solution is clearly a problem (Rodrik, 1999). Therefore one might have expected considerable consultation between those proposing the reforms and those who must accept and implement them. Although some argue that emerging market participation in global financial governance has increased significantly (Germain 2001), the case remains weak. The G7/G10 governments, and the private sectors in these countries, remain in a commanding position relative to the IMF, the G20 process, the FSF, and other institutions such as the OECD or the broader ‘Basle Process’ based at the BIS. With the exception of the IMF, the OECD, and to some extent the G20, there is no emerging market membership in any of these bodies. The establishment of the G20, including some
emerging market economies, as a consultative body to the G10/G7 process, including deliberations in the broader ‘Basle Process’, constitutes progress but does not represent full membership of the key bodies. While Hong Kong and Singapore are members of the FSF, they hardly qualify as developing countries under current circumstances, and represent a tiny population. In the IMF, a considerable number of the executive directors representing transition or developing countries are in fact from developed countries (e.g., Belgium, The Netherlands, Spain, Italy, Canada, Iceland and Australia together represent some 71 countries, or 64 in addition to themselves). Despite the recent IMF quota adjustment favouring four developing countries (China, South Korea, Mexico and Turkey), the cumulative vote of developing countries remains much below their share of global economic activity. In the end, the G7 finance ministers developed the agenda and led the debate. Importantly, G7/G10 central banks and treasury ministries have close and long-standing relationships to their respective private financial sectors and are responsive to their preferences. As a consequence, it is far more likely that developed country private sector preferences were central to the proposals than the preferences of either developing country states or the corresponding financial institutions and corporations thereof.

2. **The Political Economy of Basel II**

This section focuses on the BC and the B-II accord specifically. It outlines the content as well as the background to the new capital adequacy agreement and demonstrates that, despite its broad global impact, it reflects the preferences of a

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14 For a comparative analysis of developed country state-financial sector relations under conditions of global integration, see Coleman (1996); and for an analysis of finance-government relationships relative to the negotiation of the EU single financial market, see Story and Walter (1998); for a classic characterization of state-financial sector relations in the UK, see Moran (1986).
narrow constituency of interests. The new accord confers competitive advantage on the very internationally active banks which originally proposed it.

**From Basle I to B-II**

The motivations for the new Accord (B-II), ostensibly arose from a number of technical weaknesses in Basel I (B-I), from changes in financial services provision globally, and from the corresponding changes in the pattern of old and emergence of new risks. The main weakness of B-I was that the capital reserves assigned to loans did not distinguish between the real default risks of different sorts of debtors (Basle Committee 1999, 8-9). One obvious distortion was the zero weighting given to loans to all OECD governments, treating capital adequacy requirements for e.g., Korea and Mexico the same as developed countries. It also ignored the considerable difference between loans to major, stable and recognized companies versus risky ventures with new technologies or the uncertainty of speculative minerals exploration. Nor was much attention paid to the correlations among the various risks, which ignored the potential gains from diversification. Finally, the earlier accord did not properly account for operational risk in lending and securities market activities of banks. These weaknesses skewed risk management incentives, encouraged securitisation and potentially led to poor asset composition, with in turn negative effects on resource allocation and systemic risks (Basle Committee 1999, 9). Finally, rapid changes in contemporary financial services industries left supervisors facing a constant array of new market innovations and risks which could not be handled by traditional supervisory practices. The conclusion was that a major revision was necessary.

The starting points were to better measure risk exposures, to emphasize more risk management and to increase the role of market discipline. In B-II this led to the so-
called ‘three pillars’ consisting of 1. minimum capital requirements; 2. supervisory review of capital adequacy; and 3. public disclosure (Basle Committee 2003). Under the three pillar system bank owners and risk managers, supervisors, and market forces combine forces to oversee banks, and bank supervisors will no longer be exclusively responsible for the supervisory process and specifying levels of capital adequacy.

Pillar one maintains the basic provisions of B-I but institutes important changes in the way aspects of risks are to be calculated and expands the range of risks to include operational risks. Three different options for measuring required capital are available to banks under the proposals. The Standardised approach for less sophisticated institutions is based on B-I but enhances risk sensitivity, with differential ‘risk weightings’ for sovereign and corporate exposures, to be calculated according to external credit assessments such as the OECD or commercial ratings agencies (Standard and Poor, Moody’s etc). Option two, the ‘Foundation’ version of the ‘Internal Ratings Based’ (IRB) approach to risk management, makes limited use of internal Value at Risk (VaR) and other models. And option three, the ‘Advanced’ IRB approach, is meant for the largest and most sophisticated financial institutions. In the Foundation version, only the probability of default is calculated by the bank, and all other capital ratios are specified by the supervisor. In the Advanced version, all aspects of credit risk are estimated by the bank itself. The Committee characterizes the advanced approach as “…a point on the continuum between purely regulatory measures of credit risk and an approach that builds more fully on internal credit risk model.”, with further movement along the continuum as “foreseeable” (Basle Committee 2006a, 17). Collateral and loan guarantees are to be taken into account in all approaches.
Essentially option three is a ‘self-supervision’ approach, but qualified by the compliance provisions of Pillar Two. Banks’ risk management must qualify for the internal ratings approach. Supervisors must also approve and regularly assess (stress testing) the internal application of risk management models. Pillar three consists of ‘Market Discipline’ in the form of public disclosure of, among others, bank risk profiles and capitalization as a compliment to the first two pillars. This approach is based on claims by the industry itself that market discipline is the best guarantor of sound risk management, and that supervisory oversight is essentially redundant in a soundly functioning system of market discipline. Implementation is now expected toward the end of 2007. The new Accord has been subject to criticism on a number of grounds, best revealed through an analysis of the political economy of B-II policy-making from conception to its current implementation phase.

The Basel II Policy Process

The Basel Committee on Banking Supervision (initially ‘Basle Committee on Banking Regulations and Supervisory Practices’) was founded in 1974. The Basel Committee (BC) was an initiative of the G10 central bank governors, who were spurred into action following the twin collapse of the Franklin National Bank and the Bankhaus Herstatt in eurocurrency trading, both of which nearly toppled the global financial system at the time. The BC reports to the G10 central bank governors and membership (currently in fact 13 countries) consists of one representative of each country (the national central bank, and if this is not the banking supervisor, then in

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15 And therefore the claim is surely suspect as deriving from narrow self-interest, also given the negative externalities associated with financial crises. Recent corporate scandals also cast some doubt on the sufficiency of public disclosure for proper management.
16 For more on the history of the BC, see Wood (2005).
17 Belgium, Canada, France, Germany, Italy, Japan, Luxemburg, Netherlands, Spain, Sweden, Switzerland, the UK, and the US.
addition a representative of the national supervisory agency, this does not add an extra ‘vote’ and the committee does not vote anyway, operating on a consensus basis).

The initial policy question under consideration was one of supervisory responsibility for internationally active banking institutions: who precisely was responsible for supervising bank branches and subsidiaries across borders – home or host country? The first result was the Basle Concordat of 1975 guiding cross-border supervisory cooperation, which has since undergone numerous refinements and amendments.\(^{18}\)

The BC quickly gained a reputation for ‘Olympian’ detachment as a guardian of the public, essentially state, interest.\(^{19}\) The BC operated under conditions of strict secrecy and relative insulation from public and private institutions of government and market. The institutional culture of its earlier years contributed to this impression: global financial integration was in its early stages and the strong ‘public domain’ of the Bretton Woods post-war era in financial systems governance underpinned the Committee’s role and decision-making processes. The negotiation of B-I to 1988 was the crowning achievement of the BC, and occurred with little formal consultation with ‘outside’ interests.

There is no doubt that up until the negotiation of the Market Risk Accord amending the 1988 B-I agreement (Basle Committee 1996), the Committee did operate in a considerably more detached manner than is the case today. However, Olympian detachment and insulation from the traditional politics of government lobbies obscured a more prosaic reality. Financial policy-making has historically taken place in relatively closed and exclusionary policy communities with central banks and autonomous regulatory agencies at the core of the system. These policy


\(^{19}\) See the state-centric account of Basle by Kapstein (1994).
communities have often been characterized by ‘business corporatism’ and the
delegation of public authority to private agencies via self-regulation (Coleman 1996;
Moran 1986), which continues to be a primary instrument in the regulatory process
today. This close relationship between regulatory/supervisory agencies and their
constituencies in the financial services industry is in fact enhanced by the ‘Olympian’
distance of central banks and other autonomous agencies with regulatory and
supervisory responsibilities from the rough and tumble of traditional policy-making in
democratic governments, such as in trade negotiations. The politics of financial
governance, at both the national and the transnational level, takes place in relatively
closed communities between financial sector private interests and autonomous public
authorities who share skills and knowledge. This in turn enhances these interests’
power and effectiveness in controlling the policy agenda and outcome. This is even
more so the case in developing countries with strong traditions of financial repression
and state control of the credit allocation process (Zhang, 2003, 38-41).

While the BC might appear to deliberate in Olympian detachment, national central
banks and financial supervisors never did. Regulatory policy in national system was
developed in close co-operation with a small community of private interests which
shared more with central banks and supervisors than with other sectors of the
economy and society. The process of international financial integration meant
supervisory and regulatory bargains reached at the national level had to be adapted.
B-I was the first attempt to achieve this in relation to capital adequacy. The outcome
of the agreement meant some national banking sectors had to raise substantial
amounts of new capital, sharply affecting national cost of capital (Oatley and Nabors
1998). Calls emerged for the BC to consider more closely the impact of its decisions

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20 These points are developed and supported empirically in Underhill 1995, 1997.
on the banking sectors. The result was the emergence of more BC consultation with the private sector, including with the Institute for International Finance (IIF)\textsuperscript{21} based in Washington. This consultation process expanded further with the Committee’s 1993 proposals to amend B-I to include securities markets risks as applied to banks (Basle Committee 1993).

This at first informal and until then unprecedented consultation process with IIF began when the IIF issued a paper sharply criticizing the 1993 BC paper: the proposals “fail[ed] to create sufficient regulatory incentives for banks to operate more sophisticated risk measurement systems than those necessary to meet the regulatory minimum”, \textsuperscript{22} meaning VaR models. A well-circulated and authoritative paper by Dimson and Marsh (1994) of the London Business School, arguing that VaR models were more effective than the Committee’s proposed approach, added to the pressure to revamp the proposal. Two consecutive new consultative documents embraced the approach advocated by the IIF (Basle Committee 1995a, 1995b). The pressure had worked, but the Committee’s new and soon to become formal interlocutor was hardly representative of the range of interested parties which would be affected by the amended accord or its successor, B-II. There was no emerging market representation and the process did not extend beyond the traditionally close relationships between banks and supervisors/regulators. Situated at the transnational level, one may argue, the emerging policy community was even further removed from traditional lines of democratic accountability in the policy process.

Following the successful translation of IIF preferences into Committee policy, the IIF-BC relationship became regular practice as the Committee began to consider B-II

\textsuperscript{21} The IIF was originally formed as a consultative group of major US and European banks during the debt crisis of the 1980s, and became a more broadly based organisation representing some 350 member banks worldwide. See website for membership, \url{http://www.iif.com/about/member_list.quagga}.

in the face of ongoing criticisms of B-I treatment of credit risk, which had remained so far unchanged. In fact, the private sector began playing an even stronger agenda-setting role than in the past. The review of B-I began with a study group of the Group of Thirty, a private think-tank-like body of members drawn from the public/official and private institutions in the financial sector alike, many of whom had held prestigious appointments in both. The group formed a study group and issued a report on systemic risk in the changing global financial system (Group of Thirty 1997). As Paul Volcker, chairman of the G30 stated in the ‘Foreword’ to the report (p.ii),

“The report concludes that an ambitious effort to produce an international framework to serve as a guide to the management, reporting and supervision of major financial institutions and markets is justified and even imperative, beginning with the global commercial and investment banks. A collaborative effort between financial institutions and their supervisors would be most likely to be effective and broadly acceptable over a wide range of institutions and countries.”

The report observed that management controls should play a central role in the supervision of financial systems, and that ‘core’ financial institutions should take the initiative to develop a new system along with “international groupings of supervisors.” In essence, financial globalization had rendered the supervisory process increasingly difficult and beyond the reach of national supervisors. The conclusions of the report (p. 12) implied that,

“supervisors will be readier to rely on the institutions that they supervise, and that the institutions themselves will accept the responsibility to improve the structure of, and the discipline imposed by, their internal control functions.”

Here lie the origins of the market-based supervisory approach contained in the three pillars of B-II. In 1998 the IIF issued its own report specifically urging the BC to update B-I on the basis of banks’ market-based internal control mechanisms (IIF 1998). Although the BC invited consultations on its three sets of proposals for B-II,

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23 The report includes the names of study group participants (pp. ix-x), and members of the G30 itself (pp. 47-8).
the IIF remained the principal interlocutor, and comments came overwhelmingly from financial institutions in Europe and North America, and to a lesser extent official from agencies and a few academics and chambers of commerce/industry producer associations.  

While it might an exaggeration to make a claim of capture of the BC in the mid/late-1990s, there is little doubt that it is far more likely the BC and its member institutions will take into the account the articulated preferences of private sector interlocutors in developed countries than the interests of developing country supervisors and their corresponding financial sectors. The long-institutionalized relationship between regulators and the regulated in financial supervision, which approximates conditions of capture, had developed at the transnational level by the mid-1990s. And B-II derived directly from the proposals of the private sector.

Consultation nonetheless means that the BC has been opening up. Besides the financial sector, a few other interest associations have commented on B-II and the proposals did change over time in response. Limited as these comments were, they are nonetheless revealing. The next section analyses the range of criticisms as revealed by the consultation process, outlining the winners and losers of the accord, and who turn out to be the most politically influential in the policy process.

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24 See Committee web site section on comments on proposals at http://www.bis.org/bcbs/cacomments.htm (comments on second consultative document) and http://www.bis.org/bcbs/cp3comments.htm (comments on third consultative document).

B-II: Winners and Losers

There are clear distributional conflicts and level playing field issues surrounding B-II, and comments have been extensive. Concerns have been raised by constituents in all countries regarding small and unrated banks and regarding access to financial services for (SME) corporate clients, issues of paramount interest for developing countries. It is noteworthy that there were very few submissions to the BC from developing country financial institutions, and comments from the official sector in developing countries were usually brief, though developing countries observed that they would have to submit to the new standards. The fate of these comments is dealt with below, but the consultation debate and ongoing criticisms of the final accord leave little doubt that the primary beneficiaries of the accord in competitive terms are precisely the major financial institutions which proposed it in the first place.

A first cleavage concerns conflict between large, internationally active and small banks. The American Community Bankers (ACB), representing small US banks and ‘thrift’ institutions, put it most bluntly: “Many community banks will end up holding higher capital under the accord as compared with global and potentially more risky institutions (ACB 2003, 3).” This point was echoed by the German Bankenfachverband (small consumer financing banks) and a range of other national and EU-level associations. Their concern is that, given high development and compliance costs, smaller banks are in no position to employ the Foundation and certainly not the Advanced IRB approaches and that use of the Standardised approach would lead to either relative or absolute increases in capital charges (relative to B-I) for these banks, leading to competitive disadvantages.

26 Of 186 for the 3rd Consultation exercise, only 31 came from developing countries including Taiwan and Korea and off-shore financial centres.
27 These and subsequent citations to position papers are available on the BC websites listed in note 24.
28 Many developing country supervisors were in no position to implement the IRB approaches anyway.
The BC’s own study reinforces this point: the reductions in capital required by moving to the advanced IRB approach relative to B-I are much greater than by moving to the Standardised or Foundation IRB approaches (BC 2006c, 5-11, p. 10, Table 5). Note that none of the G10 large internationally active (so called ‘Group 1’) banks is expected to use the Standardised approach anyway, whereas 33 of the 153 smaller G10 banks (‘Group 2’) are planning to do so. This is even starker for the non-G10 countries where 49 of 54 banks in non-G10 ‘Group 2’ (smaller) banks are planning to do so (p. 7, Table 3). For these non-G10 Group 2 banks, the Standardised approach would yield a 38.2% increase in capital charges relative to B-I, the Foundation IRB approach an increase of 11.4%, and the Advanced IRB approach a modest reduction of 1% (p. 10, Table 5). The impact is clear: substantial competitive advantages to those large banks (mostly in developed countries) who could apply the (Advanced) IRB approach.

As banks in the global system began to realise the likely impact, level playing field concerns among banks, including at the international level, emerged. Lobbies were also concerned that non-bank financial services firms should not gain competitive advantages as a result of the accord. The American small banking lobby bore fruit when it the US decided to apply the new accord only to the 10-20 largest internationally active US banks (a choice the agreement allows national supervisors to make). In the meantime, although also facing opposition, the EU stuck to its position that the accord would apply to all banks.

Fears were also expressed by those small banks and their SME clients stuck with the Standardised approach. This approach relies only on external rating agencies,

29 “Non-G10” included Australia, Singapore, and 7 developing countries. There were only 6 non-G10 group 1 banks; the survey was anonymous, but it is highly likely that these were Australian and Singaporean as the criteria for group 1 banks are: the bank has at least €3 billion in capital, is diversified, and internationally active.
with claims on highly rated clients (both financial and non-financial corporations) receiving lower capital charges (e.g., AAA to AA-, only 20%). Most small credit institutions and SME clients, however, have no ratings (obtaining a rating is expensive). Being unrated, they are subject to a 100% charge (Basle Committee 2006a, 19-23), identical to Basel I, but an increase relative to other corporations, since all claims on the private sector were assigned a 100% charge under Basle I, even though risks have not increased. B-II thus implies a clear relative capital cost disadvantage for both rated and unrated banks specialising in lending to SMEs, as well as to their clients. In the end, strong lobbies in the EU spearheaded by smaller German banks were effective in obtaining more favourable treatments of SMEs and banks specializing in small scale lending.

The situation for unrated banks or their clients in developing countries was worse: many sovereigns would attract a 100% (BB+ to B-) or a 150% (below B-) charge, and under the rules no bank or corporate client could have a charge lower than the weighting of the sovereign in which they were incorporated (Basle Committee 2006a, 21-23). For otherwise creditworthy entities within those countries, capital costs are thus set to rise relative to Basle I. Developing country submissions to the BC identified this as a problem, arguing that some banks and corporations in developing countries were sounder than the sovereign and that the ratings of the bank and corporations should be considered separately from that of the sovereign and based on the real risks of lending to the bank or corporation itself. Yet their pleas were ignored.

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30 See e.g. submissions on [http://www.bis.org/bcbs/cp3comments.htm](http://www.bis.org/bcbs/cp3comments.htm) by Austrian Banking Industry, the German Bankenfachverband, the European Co-operative Banks, the World Council of Credit Unions, or the Kredittilsynet-Norges Bank (Norwegian central bank) submission.

31 See e.g. submission of the central bank of Belize ([http://www.bis.org/bcbs/cp3/belcenban.pdf](http://www.bis.org/bcbs/cp3/belcenban.pdf)) and of Burundi ([http://www.bis.org/bcbs/cp3/burcenban.pdf](http://www.bis.org/bcbs/cp3/burcenban.pdf)).
This yields further criticism of B-II that has particular implications for developing countries: the differential risk weightings of B-II compared to B-I lead to a significant increase in capital requirements for loans to lower rated borrowers in low-rated sovereigns, reducing the likely quantity of lending to these borrowers. These lower rated borrowers tend to be developing country sovereigns or banks and firms in those economies.

A related, but more technical aspect of particular relevance for developing countries concerns the risk reduction effects of (international) portfolio diversification. As risks are not perfectly correlated, the individual capital adequacy requirements as determined by economic models applied to individual credits, do not add up to the overall need for capital in respect to the overall credit portfolio. Banks not only benefit from this diversification, but in fact in part exist as intermediaries for this very reason, as their diversified portfolios reduce their overall capital needs. B-II acknowledges this diversification effect, but only in the IRB approaches, where it allows banks to use an average correlation varying by asset class, e.g., between 0.12 and 0.24 for corporations. The capital reductions from using (low) correlations are significant and are one of the main reasons why the IRB-approach requires less capital than the Standardised approach.

Both B-I and B-II may place insufficient emphasis on the potential risk reduction effects of diversifying international investment portfolios to include both developed and developing countries. Such inattention raises the cost of capital and lowers access

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32 For additional literature reinforcing these points, see e.g. Persaud (2002); Griffith-Jones et al (2002a, 2002b).
33 The accord stipulates that B-II should not lead to an overall increase in capital requirements compared to B-I; higher requirements for lower rated firms thus will be compensated by reduced requirements for lower rated firms.
34 It also allows lower correlations for assets more subject to probable default since an increase in the asset default risk is argued to indicate a more idiosyncratic nature of the asset, thus justifying a lower correlation. Current correlations to be used for other asset classes are, for example, 0.15 for mortgages, 0.03 and 0.16 for retail exposures, etc. with further adjustments for maturity.
to external financing for developing countries (Griffith Jones et al. 2001). Developing countries as a group exhibit a lower correlation with developed countries than the correlations among most assets within countries or from different developed countries. The potential diversification benefits from lending to developing countries may be large, justifying lower capital adequacy requirements. Griffith Jones et al. (2001) show that the chance of unexpectedly large losses on a portfolio evenly distributed across developed and developing countries is some 25 percent lower than that of a portfolio only distributed among developed countries. Consequently, the capital adequacy charges should be set lower for a well-balanced portfolio that includes developing countries. An additional aspect is that by not accounting sufficiently for the risk reduction effects of portfolio diversification, B-II may lead to a higher concentration of lending in less risky, but more correlated segments of the economy or of the world, thus leading to higher systematic risk.

This argument about the possible negative effects of B-II is, however, like the other ones, only relevant if capital adequacy requirements are binding and not if banks already can, and do, allocate capital according to economic criteria without regard to formal capital constraints. Furthermore, there is presumably a supply of assets within developed countries which also have low correlations with other assets that also could provide the diversification benefits sought. The issue of low(-er) correlations for some specific assets raises the question whether adjustments should be allowed within the approach for specific assets or whether a generic approach should be maintained.

35 A complete test would then also require comparing the diversification benefits from investing in emerging markets with those available from investing in all type of assets; this is done in the so called spanning literature.

36 The fact that there is already guidance on asset specific correlations in the IRB suggests that the BC has answered this question positively.
Procyclicality is another significant criticism of particular relevance for developing countries. If B-II relies more than B-I on market signals, in the form of both asset prices as well as ratings, this means that B-II relies little on the ‘soft’ information used in traditional relationship banking, an additional bias against lending to (unrated) SMEs. The market approach also implicitly assumes that the aggregation of good practices in individual institutions leads to stability at the systemic level. However, B-II sensitivity to market signals via VaRs and to some extent also via rating agencies (although the latter claim to rate borrowers across business cycles on relative, not absolute terms) may be enhancing the very procyclicality already inherent in market prices. If a wide range of ‘systemically important’ banks responds simultaneously and in the same way to perceived risks—as reflected in prices and ratings in the market, downturns and upturns may be reinforced as banks downgrade or upgrade clients on a large scale. This issue may be of particular concern for emerging markets whose asset prices and ratings are already more volatile than those of developed countries as it could make their external financing more volatile.

A few last criticisms have been raised, with also specific implications for developing countries. The hallmark of B-I was its simplicity, at the cost of some insensitivity in terms of credit risk. The hallmark of B-II may be its complexity. Satisfying this complexity raises compliance costs relatively more for smaller and less sophisticated banks, erecting barriers to entry and hindering competition. This affects again especially banks in developing countries that tend to be smaller and less sophisticated, putting them at a competitive disadvantage relative to large banks from developed countries. Another, more subtle effect of B-II’s complexity and stress on sophisticated use of market data, internal models and rules, is that they can generate a false sense of security irrespective of real market conditions. Furthermore, they can
facilitate regulatory capture as either supervisors ‘hide’ behind technical complexity or are overwhelmed by bank-based information. Again, this can affect developing countries especially as financial institutions tend to be less well managed and supervisors have fewer resources to oversee banks and, often being less independent, are more subject to capture in the first place. We next analyze the quantitative importance of some of these criticisms as they affect developing countries.

3. The impact of Basel II on developing countries

If one may conclude from the analysis so far that B-II has largely been negotiated with the interests of developed country financial systems and institutions in mind, it remains to be determined more precisely what the impact on the interests of developing country economies and financial systems will be. It is well established that the typically low-rated, developing country sovereign and the banks and firms in these countries suffer from limited access to financial services and from procyclical lending patterns. At the same time, the level and stability of financial flows to developing countries and the growth of firms within these countries are closely associated with these countries’ development prospects. As argued in the previous section, B-II will affect capital flows to developing countries through the cost and volume of developed country bank lending and through the procyclicality of international lending. The shift in costs will be especially significant for OECD emerging markets with B-I zero weightings (currently Czech Republic, Hungary, Mexico, Poland, Slovak Republic, South Korea and Turkey). For developing countries implementing B-II domestically or which have a large presence of foreign banks that will apply B-II, the cost of capital for local firms and the procyclicality of lending within the country can be adversely affected.
Both international and domestic effects need to be evaluated relative to the B-I regime, to the extent the current regime is already binding on international and local banks. The impact of B-II on bank capital adequacy requirements and associated lending conditions has been the subject of a number of investigations, including BC’s own quantitative surveys (the latest being Quantitative Impact Study (QIS) 5, Basle Committee 2006c). These QIS results are discussed here only as they relate to developing country economies local lending conditions. The main part of this section, however, is devoted to presenting new results on the effects of B-II on international capital flows, employing a set of actual bank internal ratings and comparing those with data from rating agencies. This data significantly enhances the understanding of the impact of IRB-models relative to the Standardised approach.\(^{37}\)

**Effects on local financial conditions**

The BC analysis (Basle Committee 2006c) provides some, although limited indication concerning the effects of B-II on lending within developing country financial systems. The QIS-5 study shows that the Standardised approach is the most likely approach to be adopted by the smaller banks in the non-G-10-countries, and these banks will also experience the highest rise in capital relative to B-I. It also shows that even the Foundation IRB approach will have negative effects for smaller banks in developing countries, although not as serious as some have claimed. In turn, these increased capital adequacy requirements will lead to higher cost of capital for borrowers. Other analyses confirm these potentially adverse impacts of B-II for developing countries. Majnoni, Miller and Powell (2004), for example, show using data from Argentina that the Foundation IRB (notwithstanding its benevolent risk

\(^{37}\) Remembering that most developed country lending to developing countries will be carried out by large banks employing the advanced IRB approach, not the Standardised approach where increases in capital costs are more obvious.
calibration) leads to an average capital adequacy requirement of about 15%, higher than B-I. In the case of Mexico and Brazil, the Foundation IRB approach would, according to their simulations, yield requirements of around 10% and 14% respectively — higher than B-I’s 8% and higher than current required levels in Mexico (8%) and in Brazil (11%). This increase in capital adequacy requirements will in turn translate into higher lending rates for locally-based firms and households. Indeed, Shin and Chang (2005) demonstrates that the adoption of the BIS capital adequacy ratio in Korea following the 1997-98 economic crisis created a severe credit crunch and damaged the growth prospect for the Korean economy.

The Cost of External Financing

Several papers have shown that B-II will increase the costs of external financing for many developing countries (Griffith-Jones et al 2002b; Reisen 2001; Weder and Wedow 2002). Weder and Wedow (2002) show on the basis of the proposal as of November 2001 that, by simply applying B-II versus B-I and using publicly available rating agency data, spreads charged by banks could change between 40 basis points for A-rated borrowers and 2000 basis points for CCC-rated borrowers under the Foundation IRB approach and between 40 basis points for A-rated borrowers and 350 basis points for CCC-rated borrowers under the Standardised approach. These effects are significant. Their results also imply that countries rated less than BB- could see their cost of capital go up under the IRB-approach. But, for the Standardized approach only borrowers rated worse than B- would see their spreads increase.

As of 2001, 10 out of the 26 developing countries rated by S&P were less than BB-. At that time, only 3 out of 26 rated developing countries were rated less than B-. As of October 2006, 55 developing countries (countries with income per capita less
than $10,000) have been rated. Of these, 25 countries are rated less than BB- and 2
countries are rated less than B-. This shows that some, but not the majority of rated
developing countries would thus see an increase in spreads on the basis of a
mechanical application of B-II. Of course, all other developing countries are not
rated; although many will not have access to capital in the first place, may see some
impact as well. In addition, QIS-5 claims that the Advanced IRB approach will lead
to some significant reductions in capital requirements to less risky loans in developed
countries. As a consequence, incentives for portfolio reallocation away from the
riskier economies will add themselves to the rise in the cost of capital there.

This comparison of spreads already shows some of the possible differences
between the approaches using more ratings. These results, however, are still based on
simulations assuming that internal ratings (IR) are the same as external ratings (ER).
Whether the use of actual IR might alter this conclusion depends largely on whether
that would yield a higher share of lower rated borrowers, how IR evolve relative to
ER and on the actual usage of the different approaches under B-II (Standardised
versus IRB).

Access to the IR data of a major, internationally active Dutch bank to permits
more detailed analysis. The data covers a longer period of country ratings than ER
agencies such as S&P or Moody’s, and also covers many countries which have not
had (or sought) such ratings. As such, the analysis provides also a better perspective
on the use of ratings in general.38

The first comparative step is to map IR from the bank with ER of S&P and
Moody’s, converting all ratings to an ordinal scale from 1 to 20 (Table 1). The Table
also provides the default probabilities as calculated by S&P and Moody’s for

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38 For a full description of the data, see Claessens and Embrechts (2003).
equivalently rated corporate sector borrowers, so as to calculate needed capital adequacy requirements and resulting spreads.

**Table 1: Risk Mapping between Internal and External Ratings and default probabilities of S&P and Moody’s**

<table>
<thead>
<tr>
<th>S&amp;P ratings</th>
<th>Internal rating</th>
<th>Default Moody’s</th>
<th>Default prob. S&amp;P</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AA+</td>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AA</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AA-</td>
<td>15</td>
<td>0.06</td>
<td>0.03</td>
</tr>
<tr>
<td>A+</td>
<td>14</td>
<td>0</td>
<td>0.02</td>
</tr>
<tr>
<td>A</td>
<td>13</td>
<td>0</td>
<td>0.05</td>
</tr>
<tr>
<td>A-</td>
<td>12</td>
<td>0</td>
<td>0.05</td>
</tr>
<tr>
<td>BBB+</td>
<td>11</td>
<td>0.07</td>
<td>0.12</td>
</tr>
<tr>
<td>BBB</td>
<td>10</td>
<td>0.06</td>
<td>0.22</td>
</tr>
<tr>
<td>BBB-</td>
<td>9</td>
<td>0.39</td>
<td>0.35</td>
</tr>
<tr>
<td>BB+</td>
<td>8</td>
<td>0.64</td>
<td>0.44</td>
</tr>
<tr>
<td>BB</td>
<td>7</td>
<td>0.54</td>
<td>0.94</td>
</tr>
<tr>
<td>BB-</td>
<td>6</td>
<td>2.47</td>
<td>1.33</td>
</tr>
<tr>
<td>B+</td>
<td>5</td>
<td>3.48</td>
<td>2.91</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>6.23</td>
<td>8.38</td>
</tr>
<tr>
<td>B-</td>
<td>3</td>
<td>11.88</td>
<td>10.32</td>
</tr>
<tr>
<td>CCC+</td>
<td>2</td>
<td>18.85</td>
<td>21.32</td>
</tr>
<tr>
<td>CCC</td>
<td>2</td>
<td>18.85</td>
<td>21.32</td>
</tr>
<tr>
<td>CCC-</td>
<td>2</td>
<td>18.85</td>
<td>21.32</td>
</tr>
<tr>
<td>CC</td>
<td>2</td>
<td>18.85</td>
<td>21.32</td>
</tr>
<tr>
<td>Selective Default</td>
<td>1</td>
<td>18.85</td>
<td>21.32</td>
</tr>
</tbody>
</table>

Note: The risk mapping assumptions are based on Table 3 from Claessens and Embrechts (2003). The default probabilities are taken from Weder and Wedow (2002), Table II.2, with the modification that the C-category and SD are separately classified, although they have the same default probability.

We next recalculate the results for the changes in spreads for the various credit classes using instead of the usual ER our IR. Table 2 provides the results for default probabilities from S&P (results from Moody’s are very similar). Since the ER and IR map closely, the IR results show similar effects as the ER. The cost of international bank financing for the worse-rated countries could rise under B-II by up to 1700 to
1900 basis points compared to B-I. The better-rated countries, however, could see
their costs decline by up to some 150 to 180 basis points.\textsuperscript{39}

\textbf{Table 2: Adjustments in spreads for equivalent rates of return under B-I and B-
II}

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
\hline
18 & 0 & 0,00 & 0,00 & 0,00 & NA & 0,00 \\
17 & 0 & 0,00 & 0,00 & 0,00 & NA & 0,00 \\
16 & 0 & 0,00 & 0,00 & 0,00 & NA & 0,00 \\
15 & 0 & 0,03 & 15,72 & 1,26 & 0,00 & 0,00 \\
14 & 0,5 & 0,02 & 13,87 & 1,11 & 45,07 & -43,07 \\
13 & 0,5 & 0,05 & 19,17 & 1,53 & 32,60 & -40,41 \\
12 & 0,5 & 0,05 & 19,17 & 1,53 & 32,60 & -40,41 \\
11 & 1 & 0,12 & 28,82 & 2,31 & 43,37 & -71,18 \\
10 & 1 & 0,22 & 39,19 & 3,14 & 31,90 & -60,81 \\
9 & 1 & 0,35 & 49,62 & 3,97 & 25,19 & -50,38 \\
8 & 4 & 0,44 & 55,62 & 4,45 & 89,90 & -177,54 \\
7 & 4 & 0,94 & 79,34 & 6,35 & 63,02 & -82,65 \\
6 & 4 & 1,33 & 92,04 & 7,36 & 54,32 & -31,84 \\
5 & 7 & 2,91 & 126,89 & 10,15 & 68,96 & 188,23 \\
4 & 7 & 8,38 & 215,47 & 17,24 & 40,61 & 808,26 \\
3 & 7 & 10,32 & 242,79 & 19,42 & 36,04 & 999,51 \\
2 & 7 & 21,32 & 362,43 & 28,99 & 24,14 & 1837,03 \\
1 & 7 & 21,32 & 362,43 & 28,99 & 24,14 & 1837,03 \\
\hline
\end{tabular}

According to this calculation, and considering only those 40 countries for which
we have both ER and IR as of end 2000, the number of countries that would have seen
their cost of external financing increase on the basis of the IR as of end 2000 was
actually less than half (Figure 1). The impact of Basel II could be therefore interpreted
as on average neutral. This observation is of course very dependent on the time
period chosen since most middle-income developing countries had then a rating
higher than a scale of 6. If ratings were used as of early 1990s, when developing

\textsuperscript{39} There is again the assumption that the capital adequacy requirements are binding and that the
required rates of return are determined in line with the observed spreads for each borrower.
countries were generally rated lower (Figure 2), then there would be more countries with an increase in spreads than countries with a drop. The IR (and the ER) may have improved over time as countries’ fundamentals improved, which is confirmed by the further progression since 2000 when developing countries growth has generally been favourable, creditworthiness has increased, and average ratings have increased.

**Figure 1**

![Number of countries which have a positive, neutral, or negative spread change due to Basel II according to internal ratings in Oct-90, Oct-96, and Apr-01 (total in sample=40)](image)

**Figure 2**

![Bar chart showing positive, neutral, and negative spread changes](image)
Number of countries in each internal rating class in Oct-90, Oct-96, and Apr-01 (sample=40 countries)
The average impact of B-II, based on these results, is thus modest. Regardless, there remain a number of countries already having difficulty obtaining financing for which B-II has adverse impacts on the cost of their external financing. Importantly, the overall impact of B-II on developing countries may be more adverse than previously noted when using ERs only. Typically, the countries without an ER are the less creditworthy countries. Indeed, the data show that the IR are on average lower than the ER. Figure 3 shows that the increases in the average required spread under B-II using the IRB approach compared to B-I for the complete sample of developing countries for which we have either IR or ER. Under both ratings, the spread change is positive. Using the IR, however, the average increase is higher than for the ER, largely since the bank rates more countries, including lower creditworthy countries. The studies based exclusively on ER thus underestimated the effects on spreads as only the more creditworthy borrowers are rated by S&P and Moody’s.

**Figure 3**

*Average spread change in basis points under Basel II to produce risk adjusted return under Basel I based on S&P and Internal ratings*

40 Note that IR includes almost all countries; only around 1997 does S&P cover as many countries as the IR. Since in the beginning of the period, S&P rated only the best, capital requirements based on ER are lower on average, so the graph before 1997 is biased.
As several papers have pointed out, there are some weaknesses in this form of analysis since a number of factors might mitigate the impact of B-II. These mitigating factors include the fact that the simple analysis presumes that banks want to keep their risk-adjusted rates of return the same under B-I compared to B-II. The ex-ante required rates of return implied by the capital adequacy weights under B-I and using the corporate default probabilities are already quite high, however. For low rated borrowers, for example, the capital adequacy requirements combined with the default probabilities of the corresponding rated class of corporations imply required a three-fold increase in spreads (for B-rated assets). These very high required spreads for lower rated borrowers are the result of applying the same ex-ante required rates for each credit class under B-II as under B-I. Using a more realistic assumption that banks use a fixed hurdle rate across all asset classes (of, say, 18 percent as suggested by Powell, 2001) would lower the increases in required spreads to between 100 and 200 basis points for lower rated borrowers. Of course, this hurdle rate is ad-hoc and potentially inconsistent with the principles of the risk-based approach, which requires different rates as adjustments are made for risks, but it still shows some of the sensitivities.

Another mitigating factor is that developing countries do receive funds from sources other than banks that are not subject to capital adequacy requirements, such as capital markets and non-bank financial institutions. This would reduce the impact of B-II. Of course, the access to capital markets and other financing may be more limited for precisely lower rated countries, thus negating this effect for these countries. Another mitigating factor is that banks using the Standardized approach face lower capital requirements than those using the IRB approach when lending to lower rated
borrowers (specifically in the range below BB+). Some clientele relationships may then arise whereby banks using the IRB-approach choose to lend to safer borrowers and the banks using the Standardised approach lend to riskier borrowers.\footnote{While this may mitigate the effects on developing countries, it would go against the objectives of the new Basel accord in the first place as it introduces another distortion and may lead to risk-taking by those banks least qualified to assess risks.}

These competition and clientele effects can thus mitigate some of the impact of B-II. Still, it cannot be assumed that these will be perfectly offset (in the presence of perfect substitutes, mandatory capital adequacy requirements would never be relevant as there always would be some alternative source of financing available elsewhere). Borrowers may, for example, prefer to borrow from IRB-banks than elsewhere, even when spreads increase. For example, these banks may better be able to assess, monitor and manage risks, and for those reasons may be able to provide financing to countries relatively more cheaply than other banks or the general capital markets.

The most important adjustment, however, to the simple calculations is that banks may not be constrained by the (new) capital adequacy requirements as they may already be adjusting their economic capital in line with the risks associated with particular countries. Of course, this argument makes B-II in a general sense irrelevant: if banks are already doing what economic capital models require, then there would not be any impact of capital adequacy regulations, even when properly based on such economic models. This goes against the general thrust of having an accord in the first place, so it is reasonable to assume there is some binding effect of B-II and some effects on banks’ costs of lending and consequently on spreads.\footnote{Weder and Wedow (2002) investigate the issue of binding in more detail by studying the relationships between actual loan volumes to emerging markets and the capital charges that would be required under B-II using the IRB. They find that the capital flows from BIS reporting banks to 25 emerging markets over the period 1993-2001 are already affected by the simulated B-II capital adequacy requirements, consistent with the interpretation that banks have already largely adjusted their claims using a model anticipating the new capital adequacy requirements. They do find that German banks may have been constrained in lending, but not so the other countries. Nevertheless, there might still adjustment necessary for some countries, particularly if the new accord is not well calibrated; the}
In short, this section has demonstrated that on balance, the cost argument is not the most important to B-II from the point of view of most developing countries. While there can be impact for some borrowers, and especially for those with limited access to market-based external financing, it need not be large on average, especially as ratings improve as they have done in the last decade. At the same time, the analysis has shown that there is little in B-II that specifically addresses the concerns of developing countries or anything that could be attributed to developing countries’ specific inputs.

Volatility of external financing

B-II may have another adverse effect through potentially reduced continuity in the access of borrowers to bank financing and increased volatility. As noted, there is an element of procyclicality in B-II as it encourages greater use of models that rely more on market data, including asset prices, which are procyclical to begin with. Furthermore, requiring the same model type of many banks will induce convergence among them, thus increasing the risks of financial contagion as banks react simultaneously to the same or similar signals. These tendencies may be aggravated as the accord encourages greater use of ER and IR. Both types of ratings are arguably somewhat volatile and probably procyclical (see Lowe, 2002). Since developing country assets are already subject to more volatility and procyclicality than other asset classes are, the introduction of B-II might be particularly harmful for emerging markets.

Here further study may determine whether IR and ER volatility and procyclicality might differ over time, important because B-II allows greater use of IR. On a cross-

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simulation above suggest that some lower rated countries may see their costs increase sharply under the IRB-approach.
country basis, the differences between the two types of ratings are generally small (Figure 4; see further Claessens and Embrechts 2002). On an individual country-by-country basis over time, however, the IR and ER are not perfectly correlated (Figure 5). For many countries, there is a low or even a negative correlation and the average of the correlations between the two ratings for a sample of 40 developing countries over the 1997-2001 period is only 0.42.\textsuperscript{43}

\textsuperscript{43} The sample is small and short as few countries were rated in the early 1990s.
Note: internal and external ratings compared as of April 2001, using the conversion scale of Table 1.

Figure 5

Correlation between S&P and Internal ratings in the period October 1997-April 2001

Average total correlation: 0.42

Notes: Correlations refer to between internal and external ratings over period 1997-2001, on a quarterly basis. Some correlations are near zero due to the fact that at least one rating series has (near) zero variance, which makes for very low correlations.
This issue may also be analyzed by comparing IR to ER volatility. If the IR are more volatile than ER, then there is some suggestive evidence that B-II may lead to more volatile lending. When we compare the raw volatility, we find that the average (and median) volatility of the IR is higher than that of the ER (Figure 6). The average variance of the IR is 0.99, while the average for ER is 0.48. Using an F-test, we can show that the difference is statistically significant at the 1% level. On a simple comparative basis, IR are thus much more variable than ER. Assuming that the behaviour of this bank is representative of the behaviour of others, greater use of IR could lead to an increase in the volatility and procyclicality of capital flows.

Figure 6

Average variance of S&P and Internal ratings per country

We next look at the speed of adjustment between IR and ER. Arguments have already been made that, while there is broad similarity, ER are less responsive than IR to events. There has been evidence, for example, that ER are slower to adjust to large

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44 We should note that the distribution of both ratings is not normal, and as documented there is considerable rigidity in the ratings, followed by sudden adjustments. This can affect the power of the tests.
events, such as the East Asian countries’ financial crisis, than IR are. Indeed, some simple graphical inspection of the data (Figure 7) shows that ER tend to be slightly more stable and adjust downward more in gradation, whereas IR adjust quicker, show less ratchet and have more one-off effects in downgrades.

Figure 7: Internal and External Ratings in the East Asian Financial Crisis

A more formal test is to look at migration from period to period in the ratings in the form of matrixes of transition probabilities (Table 3a and 3b), using the same mapping as in Table 1. The matrices show the fraction of ratings in this period (vertical axis) that moves to a different rating in the next period (horizontal axis). The percentages add up to 100% across rows. It is clear that IR show more and sharper migration than ER do. In the ER matrix, there are very few changes more than one notch away from that of the previous period. In contrast, and especially in higher rating categories, there can be sharp adjustments of IR at some points in time, often more than 2 or sometimes even 4 notches down. Some of these moves are related to financial crises or sudden unwillingness to pay, where the bank takes quick actions and downgrades. Note, however, that the IR also show more drastic upgrades than the
ER. In general, the comparison shows the forwardness of banks to change their ratings and the reluctance of the rating agency to change their ratings.

Table 4a: ER Migration Probabilities

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These simple comparisons do not imply that either IR or ER are worse predictors of the true creditworthiness of countries, since correction needs to be made for the underlying volatility of countries’ fundamentals. For example, ERs may not be ‘volatile enough’ if the external rating agencies do not adjust their ratings in line with the changes in the underlying volatility. The higher volatility of IR may then more accurately reflect the higher volatility of the underlying fundamentals. The problem is how to take into account the fundamental creditworthiness of borrowers. Measures such as secondary market prices for debt (or spreads) suffer from the problem that spreads are endogenous to the ratings themselves (although there is some evidence that spreads are better predictions of country fundamentals than ratings are). Lowe’s (2002) review of studies suggests that capital adequacy requirements derived from S&P are less cyclical than those derived from IR, even when considering fundamentals. Whether this is also the case for country ratings remains to be determined.

6. Conclusions

This article has argued and offered evidence in support of the following points. First, it argued that the debate over the reform of financial architecture has been disproportionately constrained relative to the frequency and depth of financial crises
in emerging market countries. The system has not been seriously adapted to the needs of developing and other emerging economies, and specific proposals to stabilize the system during debt workout processes following acute crises, such as the Fund’s Sovereign Debt Restructuring Mechanism (SDRM), have been dismissed. The onus continues to be placed on developing countries themselves to address internal weaknesses and strengthen their position in the global financial system. Standards continue to be promulgated largely by developed countries and compliance monitored through the very institutions of global governance which they dominate. Proposals to attenuate the market-based pressures of global financial integration and its consequences for the poor in the development process do not find their way onto the reform agenda despite evidence that these might bring benefits.\footnote{See section 1 of Underhill and Zhang (2003), especially articles by Williamson (“Costs and Benefits of Financial Globalisation”) and by Cohen (“Capital Controls: the Neglected Option”).}

Secondly, this article analyzed directly at the political economy of the Basle process and how this policy process yielded the current proposal. The evidence supported the claim that the Basle process was dominated by developed country supervisors in a close relationship with major developed country financial institutions, suggesting capture of the policy process underpinning international supervisory cooperation. This provides a clear explanation as to why the needs of developing countries might so poorly be taken into account by the BC, despite the fact that the new accord has major implications for supervisory practices and costs in markets around the globe.

Finally, the article posed the question as to whether there is indeed evidence that the B-II will have an adverse effect on developing countries. It reported evidence from the Basel Committee that B-II will imply higher capital adequacy requirements for institutions employing the Standardised approach. These institutions tend to be
the smaller banks located in non-G10 emerging market and developing countries. In turn, this implies that their clients would see their cost of capital rise and access to financing decline. It also found that B-II, although the effects on average are small, will have an adverse impact on the costs and volumes of capital flows to some lower-rated developing countries. Importantly, it found evidence that the procyclicality of capital flows to developing countries can increase with the use of internal ratings by international active banks. The increase in fluctuations in the availability of external financing would be a very unfortunate outcome, given that developing countries already suffer from volatile capital flows.

The clear implication is that if BC standards have such an obviously global impact as the BC itself claims and to which the evidence here attests, affecting the terms of competition among financial institutions and the cost of capital and incentives for portfolio formation worldwide, a committee more representative of the broader interests of the global community is required. This argument applies equally to other aspects of the global financial architecture.
Appendix: Calculations of required spreads and requirements

The results for Table 2 used the following formulas, from Basel II modifications as of November 5, 2001 (so as to maintain comparability with the ratings which are also as of end 2001). [http://www.bis.org/bcbs/qis/capotenmodif.pdf](http://www.bis.org/bcbs/qis/capotenmodif.pdf), page 5

Correlation (R) = \[0.10 \times \frac{(1 - \text{EXP}(-50 \times \text{PD}))}{(1 - \text{EXP}(-50))} + 0.20 \times \frac{1 - (1 - \text{EXP}(-50 \times \text{PD}))}{(1 - \text{EXP}(-50))}\]

Maturity factor (M) = \[1 + 0.047 \times \left(\frac{(1 - \text{PD})}{\text{PD}^{0.44}}\right)\]

Capital requirement (K) = \[\text{LGD} \times M \times N\left[(1 - R)^{-0.5} \times G(\text{PD}) + (R / (1 - R))^{0.5} \times G(0.999)\right]\]

Risk-weighted assets = \[K \times 12.50\]

We assume, like Weder and Wedow (2002), LGD=50 (see their note 6, “In the consultative document from January 2001, the Basel Committee expressed its belief that a LGD rate of 50 per cent for senior unsecured claims”).

This yields the formula used:

Risk-weighted assets = \[625 \times N\left[(1 - R)^{-0.5} \times G(\text{PD}) + (R / (1 - R))^{0.5} \times G(0.999)\right] \times (1 + 0.047 \times \left(\frac{(1 - \text{PD})}{\text{PD}^{0.44}}\right))\]

For the table, we used the Libor spreads in Table III.1 of Weder and Wedow (2002), and the reported default probabilities of Moody’s and S&P in Table II.2 of Weder and Wedow (2002), respectively. The interpretation of the tables is similar to Table III.1 of Weder and Wedow (2002).
References

America’s Community Bankers (ACB 2003), Submission to the Basle Committee re Third Consultative Paper, http://www.bis.org/bcbs/cp3/amecomban.pdf


Basle Committee (1995a), Proposal to Issue a Supplement to the Basle Capital Accord to Cover Market Risks (Basle: Bank for International Settlements, April)

Basle Committee (1995b), An Internal Model-Based Approach to Market Risk Capital Requirements (Basle: Bank for International Settlements, April)


Basle Committee (2001), Potential Modifications to the Committee’s Proposals, consultative document (Basle: Bank for International Settlements, November)

Basle Committee (2003), Overview of the New Basle Capital Accord, consultative document (Basle: Bank for International Settlements, April)


Basle Committee (2006b), Core Principles for Effective Banking Supervision (Basle: Bank for International Settlements, October)

Basle Committee (2006c), Results of the Fifth Quantitative Impact Study (QIS 5), (Basle: Bank for International Settlements)


