# Implications of Basel II for financial stability. Clouds are darker for developing countries

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#### 1. Introduction

In June 2004, The Basel Committee on Banking Supervision (BCBS) approved what was expected to be the final version of the Basel II regulatory framework on "International convergence of capital measurement and capital standards." Compared with the original 1988 Accord (Basel I), its three-pillar approach (minimum capital requirements, supervisory review process and market discipline) offers a more comprehensive framework for banking regulation and supervision, while the revision of minimum capital requirements allows for both a menu of choices and a migration to more risk-sensitive methodologies.

Under Pillar 1, regulators and banks may choose between a Standardised Approach (SA), which constitutes a revision of Basel I, and an entirely new internal ratings-based approach (IRB), whose two methodologies (Foundation and Advanced) are intended for banks with more sophisticated risk management. While Basel II remains primarily focused on the operations of international banks, the presence of the SA *de facto* recognises that in the meantime around 100 countries had adopted Basel I as the regulatory framework for their entire banking system. Basel II continues to consider capitalisation and good risk practices as the main tools to make banks more resilient. The IRB methodologies are seen as the necessary step towards aligning regulatory capital with the advanced

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risk-sensitive methodologies employed by the more risk-sophisticated banks to compute their economic capital. In this perspective, Basel II, and in particular its Pillar 1, is to be seen as a dynamic regulatory environment ready to accept more advanced risk methodologies as soon as they appear reliable enough to be incorporated in its prudential scheme. This characteristics also appears to aim at containing the wide discretionary powers and the crucial role of supervision that an opaque Pillar 2 now holds.

The substantial innovations represented by F-IRB and A-IRB are intended only to apply, at least for the near future, to international banks. However, the unchanged governance structure of BCBS – with delegates from central banks and supervisory authorities of the G-13 – does not recognise that a framework initially conceived to apply only to international banks has become the standard for entire banking systems, also for many non-BCBS countries. Although some representatives of the developing countries were enrolled as sparring partners after the initial proposal of revision advanced in 1999, this changed neither the logic of the New Accord nor its main features. Furthermore, although the BCBS recognises that, as a result of the financial liberalisation of the 1990s, the home-host countries' supervisory relations have become a crucial articulation for the effective implementation of the Accord, the relative institutional arrangement basically remains as loose as that of the original 1975 Basel Concordat.

In assessing the implications of Basel II for the developing countries, some of its features are often criticised as posing serious dangers to the financial efficiency and stability of these countries. The aim of the present paper is to analyse these criticisms, distinguishing those regarding the efficacy and efficiency of Basel as a micro-regulatory tool from the ones deeming it insufficient as a defence against systemic instability. I conclude that for the developing countries a change of approach is needed, going from Basel's regulatory level playing field to a stability level playing field. This means opening regulation to country-specific micro and macro features and making it consistent with the domestic institutions and policies on which these countries can realistically rely. To this end it is worth considering alternative schemes made up of "weaker" versions of

prudential regulation accompanied by structural interventions for both the banking system and the economic system in general.

The paper is structured as follows. In section 2. I trace the foundations of the Basel approach back to its original concern with international banks and subsequently to economic systems characterised by developed markets and institutions. In section 3, I discuss some of the criticisms leveled against Basel II and some proposals aiming at countering those shortcomings. I shall argue that, when compared with the present situation, some of those criticisms tend to overstress the implications of Basel II for the developing countries. Of more relevance are those criticisms concerning certain basic features of the Basel approach, like its reliance on capitalisation and on efficient supervisory authorities, whose weaknesses make that approach inefficient even as a micro-regulatory tool. In section 4 I discuss a more comprehensive assessment of financial stability. Part of the literature correctly stresses the difference between a bottom-up and top-down approach to regulation. Basel, both I and II, is clearly a bottom-up or microeconomic approach to regulation, which views the resilience of the banking system as the sum of resilient banks. Looking back to past experience, too, such an approach may appear at odds with the systemic character of many financial crises, apart from the direct systemic threat posed by the failure of large financial intermediaries. A number of questions arise from all this: is Basel II a necessary and/or sufficient condition to attain domestic and international financial stability? Is its eventual contribution to domestic stability as strong in the developing countries as in the developed ones? Does a regulatory level playing field among countries also lead to a stability level playing field? To a certain extent these questions follow from Basel's Core Principles, when they state that a set of preconditions of policy and structural character, "mostly outside the direct jurisdiction of the supervisors, have a direct impact on the effectiveness of supervision in practice" (BCBS, 2006, p. 6). The creation in 1999 of the Financial Stability Forum is another strong signal that, according to the representatives of the leading developed countries,

<sup>&</sup>lt;sup>1</sup> As it was in the 1980s when the first Basel Accord was mainly notivated by the sistemic torea posed by the crises of several International banks. For analysis of the 1997 Asian debacle in terms of a systemic crisis see, for instance, Kregel (1998b) and Dhumale (2000).

schemes of micro-prudential regulation do not solve the problem of systemic instability. We argue that for the developing countries the main problem is not to be found in specific features of Basel II, although for its eventual implementation some improvements would help. The crucial problem arises from the fact that, with weak "preconditions," Basel II does not constitute an effective defence against systemic banking crises, while attempts to strengthen it by means of stricter, multiple requirements may only produce higher, and indeed inefficient, regulatory costs.

The final section sets out to draw some policy conclusions from the previous arguments.

# 2. The Basel approach

It may be useful to recall the historical foundations of the Basel construction. The first Accord was thought in a period when the old banking regulation, subsequently termed structural, was still operating, especially in the US. The foundation of the old regulation, where it existed, was to address the systemic nature of (in)stability. The experience of the 1970s and early 1980s showed that something was missing for large banks operating at an international level, whose scope of action had been constantly widening. These banks were thought to be sufficiently well managed as regards operative efficiencies and the pricing of expected losses, but not sufficiently aware how large-scale international shocks, then already increasing in frequency and seriousness, could undermine their survival and jeopardise the functioning of the international and domestic financial systems. The above experience showed how easy it was for a serious shock to produce balance sheet write-offs of an order of magnitude higher than banks' capital (hence a gap between social and private optimal amount of capital). Historical studies were furthermore suggesting that banks had long been steadily decreasing their capitalisation. It was natural to suppose, then, that putting a brake on or reversing this trend could improve the resilience of international banks, i.e. their ability to buy time to rebuild their viability. Furthermore, a risk-adjusted capital requirement could act as an ex ante incentive against excessive risk-taking: hence the formulation of Basel I, whose widespread adoption was seen, often primarily, as a way to reach an international regulatory level playing field directed at limiting unfair competition.

Since the formulation of the first Accord many things have changed. From our perspective the most fundamental change has been that many countries, developed and developing, adopted Basel I more or less willingly in order to move on from the old systemic (structural) regulation to the new prudential one. This widened its scope, from dealing with international banks to applying to entire banking systems. However, no real fresh thought was applied to whether capital requirements could always constitute the central piece of stability regulation for an entire banking system.<sup>2</sup> This new "Basel Consensus" stems from two premises and has two major consequences. In the long run, domestic stability derives from freeing the market forces, since incentives coming from competition are seen as compatible with both micro-efficiency and stability. In the short run, supervision must drive all banks to compute their economic capital according to best practices. As for the consequences, it was no longer possible to extend to the new context, also made up of medium and small-sized banks, the presumption of efficient and well managed institutions; hence the need to produce a manual on the Core Principles for Effective Banking Supervision in 1996, and the prominent role given to the Second Pillar in Basel II. Furthermore, some of the barriers erected by the previous banking regulation against systemic crises (such as limits on competition) are in many countries no longer in place.

While the experience of Basel I in developed countries is generally considered beneficial to the stability of their banking system, serious doubts exist as to whether this was actually due to the capitalisation rule. First, we must discount that prolonged economic growth in many of these countries has produced fat profits especially in the financial sector, and hence an endogenous increase in capitalisation. Second, the supervisors' action towards weak but not failing banks has been strengthened in many

<sup>&</sup>lt;sup>2</sup> According to Goodhart (2004), the pendulum of regulation has swung too far in the direction of capitalisation.

cases by reference to an international rule, using it to drive those banks to accept acquisitions or seek mergers (see for example Montanaro and Tonveronachi 2006). When interpreted with intelligence, capitalisation has often been used as a shortcut to induce banks to improve their practices. A role for supervision more comprehensive than a simple capitalisation rule is, then, crucial; my opinion is that *de facto* the first pillar of Basel II serves to give strength to the second.<sup>3</sup>

## 3. A review of some criticisms

Certain specific features of Basel I had already given rise to concern over their implications for the developing countries. The favourable risk-weights treatment for sovereign and bank loans to OECD countries was severely tested with Mexico's and South Korea's crises soon after they joined the club; the favourable treatment for short-term loans to banks operating in non-OECD countries was seen as responsible for increasing the volatility of funds directed to the developing countries. The more risk-sensitive approach adopted by Basel II should dispense with these specific shortcomings.<sup>4</sup>

On assessing their potential implications for the developing countries, however, the new features of Basel II have attracted various criticisms that may be grouped into five main classes.

The first class of criticism concerns the limits of Pillar 1 regarding the diversification of bank portfolios. Absent from the standardised approach,

"the correlation terms of the IRB approach [...] can only take account of diversification effects within the categories of assets specified and not across these classes" (Cornford, 2005, p. 26).

Griffith-Jones and Spratt (2001) and Griffith-Jones, Segoviano and Spratt (2004) led the battle showing the quantitative relevance of including

<sup>&</sup>lt;sup>3</sup> Based as it is on loose principles, Pillar 2 is often criticized as a tool for prompt supervisory action. For an assessment of the superiority of FDIC's action with respect to a Basel II centered on Pillar 1 see Kaufman (2005) and Kregel (2006).

<sup>&</sup>lt;sup>4</sup> However, Ward (2002) suggests that the contrary may be true.

diversification with the developing countries in the portfolio of international banks and suggesting that its omission could rarefy the funds flowing towards these countries, as well as increase their funding costs. <sup>5</sup> In keeping with Basel's principles is the proposal to let banks adopting internal full credit risk models invite supervisors to test them. The BCBS replies that

"it is true that Basel II falls short of recognising the diversification benefits of full credit risk models, although the internal-ratings based approach recognises the benefits of diversification to some degree by assuming that a bank's assets benefit from the same degree of diversification as that of an average, internationally active bank [...]. Nevertheless, the main reason that we have not fully recognised diversification effects at this stage is because first we need to see clear evidence from many banks that they have robust systems in place themselves to assess and quantify such effects and that they rely on their measures of diversification in their daily risk management. Of course, as systems improve in the future, we would be happy to discuss them, and once there is a "best practice" in this field we will be better able to recognise it in the capital framework. In the meantime experience with internal credit models will provide us with highly valuable information" (Caruana, 2004, pp. 415).

A compromise is offered by the BBVA (2003) with a correction coefficient applied to the capital requirement computed according to Pillar 1. Since this coefficient depends on the degree of diversification of the bank's portfolio, its "fine" evaluation would in practice run into the same difficulties as those ones mentioned in the passage quoted above. The proposal could then end up with application of a fixed discount factor, much as was finally adopted in Basel II for exposure to SMEs, fostering opportunistic behaviours on the part of banks.

Since international bank lending is generally considered a source of instability, <sup>6</sup> a more conservative approach to these operations might well prove welcome. However, as a recent document by the UNCTAD (2006)

<sup>&</sup>lt;sup>5</sup> Simulating the effects of adoption of Basel II on some German international banks, Liebig *et al.* (2006) tend to dismiss as irrelevant its effects on loans to emerging markets with respect to the existing situation.

<sup>&</sup>lt;sup>6</sup> For an evaluation of the potential instability deriving from international capital flows see e.g. Haldane (2001).

shows, Basel II unduly punishes the more "physiological" part of those flows represented by commodity-related financing to the developing countries. Apart from criticising Basel II for failing to consider country diversification, more convincingly the document shows how the treatment provided for commodity finance could be improved by adopting a more realistic risk profile and a more flexible frame for risk mitigation in well structured deals. The document also contains useful proposals for supervisors, banks and debtors in the developing countries to counter the negative effects for commodity finance.

In the case of portfolio diversification, as in discussion of the other points dealt with below, we should distinguish between international bank lending and lending from international banks' branches and subsidiaries operating in host countries. As we shall see when discussing the institutional aspects of Basel II, the home-host countries supervisory relations are in this case crucial for permitting international banks to calculate their regulatory capital on a consolidated basis. When host supervisors require regulatory capital to be calculated on a local basis, a paradox could ensue from applying a fixed diversification discount on a consolidated basis since too little regulatory capital could remain to cover the home country's risks.

With reference to operational risk, Bernanke (2004) asserts that:

"In contrast to the treatment for credit risk, Basel II allows both the consolidated and the individual legal entities to benefit fully from the [operational] risk reduction associated with group-wide diversification. However, host countries charged with ensuring the strength of the legal entities operating in their jurisdictions will not be inclined to recognize an allocation of group-wide diversification benefits, given that capital among legal entities is simply not freely transferable, especially in times of stress. The Basel Supervisors' Committee has thus proposed that "significant" subsidiaries will have to calculate stand-alone operational-risk capital requirements that may not incorporate group-wide diversification benefits. Other subsidiaries can use an allocated portion of the group-wide requirements, requirements that may be calculated with diversification offsets. Host-country supervisors, of course, have the right to demand more capital than may result from such allocations. Thus, both the proposal for significant subsidiaries and the possible host-supervisor response for other subsidiaries may well result in the sum of the individual legal-entity capital requirements being greater than the consolidated-entity requirements."

Another proposal is to deal with portfolio diversification inside Pillar 2, although this would produce some opacity and significant variance among supervisors.

The second class of criticism concerns pro-cyclicality and instability. For Basel I, pro-cyclicality did not refer to changes in risk-weights but to movements in actual capitalisation around its regulatory level. For Basel II many analysts agree on the further danger that more risk-sensitive methodologies, aiming at increasing horizontal risk-differentiation, could also increase time-sensitivity (Goodhart, Hofmann and Segoviano, 2004). Given the higher instability characterising the developing countries, the result could be an accentuation of pro-cyclical lending of international banks towards the developing countries. Discussion then centred on technical issues, such as the "point-in-time" or "through-the-cycle" methodologies adopted by rating agencies and banks in their internal risks assessments (ECB, 2005; Gordy and Howells, 2006). Inasmuch as these methodologies allow for some time-sensitivity, the adoption of quite fairly similar methods to assess risks by the major banks could also produce large swings in both directions, increasing instability (Griffith-Jones and Persaud, 2003). The Basel Committee is of the opinion that the flatness of the risk-weight curve and the stress tests required for supervisors' approval of banks' internal models should guarantee regulation to produce a neutral impact (Caruana, 2004). The discussion is not always clear on the distinction between "normal" cyclical movements and less frequent, but more disruptive, systemic crisis events. To keep capital requirements within acceptable limits, VAR calculations exclude exceptional losses. It follows that, despite the possible existence of flattening methodologies, "disaster points" are out of their reach (on this point more in the next section). Of some help would be a regulation capable of reversing the intrinsic pro-cyclicality of banks, for instance endowing some parameters with an anti-cyclical variability (e.g. see Goodhart, 2004). The results ultimately depend on the level and movements of the buffer capital, i.e. the surplus of capital in excess of the minimum regulatory capital, which Pillar 2 explicitly requires. Again, Basel II gives supervisors potentially wide discretionary powers of intervention.

The third class of criticism rests on the quantity and quality of

resources needed for banks and supervisory authorities to comply with Basel II efficiently. The problem also concerns the balance of costs and benefits arising from the New Accord. While large international banks expect net benefits from adopting the IRB version of Pillar 1, and regulators in rich countries may have the proper resources to supervise them efficiently, this is clearly not the case for most developing countries' regulators and for medium and small-sized banks. The goal of attaining a regulatory level playing field is therefore at risk, with foreseeable large-scale dispersion of regulatory menus among countries and banks, and big differences in the regulators' ability to manage – also with the necessary independence – the strong discretionary powers deriving from an opaque Pillar 2.8

Linked to the previous point is the fourth criticism. It is common opinion that large banks and financial conglomerates adopting the more advanced options of Pillar 1 will benefit from lower capital requirements than medium and small banks, constrained to adopt the standardised approach or a revised version of Basel I. This should give an advantage to the large dimension, further driving the consolidation process in the banking industry. Given the considerable polarisation existing among banks in the developed and developing countries, the result could be a significant increase in the presence of foreign banks in the developing countries. Actually, we have two questions arising here: are international banks driven by regulatory capital calculations when expanding their presence into developing markets? May not their very presence, with the incentives deriving from Basel II, entail negative repercussions for the host countries?

Past experience seems to show that capital requirements exert a negligible influence on the globalisation of banking activity. The driving

<sup>&</sup>lt;sup>7</sup> A clear signal in this direction is given by US regulators planning to maintain the overwhelming majority of US banks under a revised Basel I regime. They argue that local and regional banks' activities are not so sophisticated as to require Basel II methodologies, but only need a buffer capital to cope with their scant portfolio diversification (see e.g. Ferguson, 2003).

<sup>&</sup>lt;sup>8</sup> Several commentators (e.g. Ward, 2002) express strong doubts about giving institutionally weak supervisors the broad discretionary powers that Basel II attributes to Pillar 2.

force was the liberalisation of local banking markets in conjunction with the benefits accruing to international banks from following the more general globalisation process, and indeed from superior portfolio diversification and exploitation of local inefficiencies. In some cases, expanding into developing countries also allowed for increase in the bank's size, at expected low costs, which was considered as a means to lower the threats of hostile take-overs. Basel II does not seem to contain incentives strong enough to change this picture significantly.

More uncertain are the effects of Basel II on the operations of foreign banks in host countries. The main preoccupation stems from the IRB methodologies of Pillar 1 driving towards prevalent quantitative, arm's length assessments of debtors' risks, also allowing for finer calculation of risk mitigation. Were foreign banks to operate like this in developing countries, they could *de facto* cherry pick as only the best debtors possess the "objective" conditions to apply to them for credit, leaving the worse ones operating with local banks. The result could be a "stability divide," with large stable foreign banks and small fragile local banks. As a result, the difficulties for SMEs to access credit could increase. However, some episodes in past experience point to the possibility of a soft cherry picking process inside a more general "passive" strategy. Often, especially when confronted with weak supervisory authorities, foreign banks have not exerted a perceptible competitive pressure on local banks as far as efficiency is concerned, being more interested in exploiting local inefficiencies, requiring the survival of a weak local banking sector (see e.g. Tonveronachi, 2006a). If and how Basel II could change this "passive" role of foreign banks is not clear. In any case, the often declared benefits accruing to the local risk culture from competing with foreign banks might not materialise, or could be accompanied by country-specific negative externalities. However, in many developing countries, as in the case of many small banks and firms in developed countries, a worrisome gap in risk culture still exists. The further push coming from Basel to better risk assessments should, then, be welcome. Yet, more than from the specific rules contained in Basel I and II, improvements in risk culture derive from

<sup>&</sup>lt;sup>9</sup> This is in effect a more general problem, potentially affecting any country, with cherry picking resulting from objective conditions and not from autonomous strategies.

some of the indications collected in the Core Principles for Effective Banking Supervision, which actually also contain guidelines for best banking practices. <sup>10</sup> In this respect, convergence on risk measurements should matter more than convergence on rigid risk management rules. Supervisors should in these circumstances induce banks to adopt these best practices, consequently permitting and inviting them to operate in a "didactic" way with their customers. This could be a preferential direction in which to channel the scarce resources available to supervisors. The "market" discipline coming from foreign banks, when present, could help if the externalities stemming from their presence could be maintained within acceptable limits. In this respect no general answer is possible, strategies having to be assessed with reference to specific conditions. Moreover, under Basel II the operations of foreign banks in host countries will depend on the extent to which they can adopt strategies on a consolidated balance-sheet basis, and this in turn will largely depend on the host countries' regulatory stance.

Thus we come to the fifth criticism, i.e. the institutional weakness of the entire international regulatory framework and in particular of home-host supervisory relations. Basel II being primarily concerned with international banks, and given their recent significant expansion into developing countries, the BCBS recognises that the home-host countries supervisory relations have become crucial for effective implementation of the Accord. Given the menu choice of Pillar 1 and the wide discretionary powers of Pillar 2, together with big differences in the supervisors' ability and independence, the effective operation of Basel II is seen to depend on voluntary cooperation among supervisors. Cornford (2005) discusses the problems arising from matching the necessity to apply Basel II on a consolidated basis with the principles deriving from the 1975 Basel Concordat and its later revisions. According to the Concordat the home country is responsible for solvency on a consolidated basis, while the host country can require all entities operating in its jurisdiction to adopt the

<sup>&</sup>lt;sup>10</sup> Obviously the Core Principles document was in significant parts drawn up to be consistent with the Basel books of rules.

<sup>&</sup>lt;sup>11</sup> For the challenges posed by Basel to emerging countries' supervisors see also Song (2004).

local regulation. 12 Conflicts may arise when home and host countries follow different regulatory schemes. Basel II complicates the matter since it allows for choice between the standardised and the IRB approaches for credit risk, and a basic, a standardised and an advanced measurement (AMA) approach for operational risks. In principle the developing countries are faced with a range of choices, from allowing home regulation for foreign branches and subsidiaries on the one hand to submitting both to host regulation on the other; it is also worth considering that host countries may restrict the types of operations permitted to foreign branches. For credit risks, limits to exploit consolidation for regulatory capital may derive from regulatory differences in the various jurisdictions. For operational risks, limits to economies on capital requirements may also derive from the impossibility of a consolidated use of the AMA approach, which would otherwise allow group-wide diversification. Two points are relevant here: namely the principles that should guide host countries in deciding on the previous alternatives and the degree of freedom the developing countries have in this choice. As for the former point, much depends on a number of factors, including the host country assessment of the degree of seniority granted by the home legislation to the host's depositors in case of failure, the sufficiency of the home regulation in view of the possibly different and more stringent rules the host country deems it necessary for its own system, the net competitive effects on local banks, and so on. As for the latter point, although a World Financial Agency (as some have proposed, e.g. Eatwell and Taylor, 1998) is not yet in sight, the Financial Sector Assessment Program (FSAP), jointly set up by the IMF and the World Bank, might come to exert strong pressure towards adopting stringent rules for cooperation among supervisors. 13 The present tendency is towards the production of international standards, rules and codes by organisms lacking enforcement powers (such as the BCBS, IOSCO, IAIS, IASB) and inclusion of these standards, rules and codes within the FSAP, together with IMF principles for sound macroeconomic and institutional

<sup>12</sup> In the spirit of the Concordat this is an extreme solution, since foreign branches should be supervised by the home countries' authorities. Liquidity requirements are in any case subject to host regulation.

<sup>&</sup>lt;sup>13</sup> For a discussion of FSAP from the viewpoint of a WFA see Eatwell (2001).

policies. <sup>14</sup> Such assessment has obvious influences on intervention by the IMF and the World Bank and should also act, if frequently carried out and in all cases made public, as detailed "rating" for the financial markets. Although specific conditions may be considered, the overall logic is to apply uniform standards to all countries. With regard to banking regulation and supervision, as we have seen, the drive towards a better risk culture is clearly positive; a rather different matter is the adoption of a homogenous set of specific rules, implying the existence of a common micro-stability model for both the developed and developing countries.

As past experience of application of Basel I suggests, this implication appears only in part true. While the banking crises of the 1970s and 1980s were widely seen as the product of bad risk management by banks based in developed countries, those of the 1990s mainly affected the developing countries, were systemic in nature and revealed a problem that is not directly tackled by Basel regulation, namely liquidity. 15 Leaving aside for the moment the systemic nature of these crises, which will be dealt with in the following section, students of banking should find the Basel focus on the asset side of banks' balance sheets rather awkward, limited as it is to the computation of capital requirements. As my colleague Elisabetta Montanaro puts it, what a well-managed bank hit by a serious disturbance needs is to buy time. 16 While the evaluation of capital should express the forward looking possibility for a bank to remain in business, more pressing are its liquidity needs at the outset of a crisis. "It is liquid assets, not capital, that provides time in crises" (Goodhart, 2004, p. 10, underlined in the original).

Domestic banks in developing countries face a number of problems in both capitalisation and liquidity. Characteristic of the developing countries are a high concentration of wealth and close contiguity between real and financial wealth (Rojas-Suarez and Wiesbrod, 1996, and Rojas-Suarez, 2001). In these conditions a regulation based on minimum capital

<sup>&</sup>lt;sup>14</sup> See IMF (2001) for a discussion of microprudential and macroeconomic indicators.

<sup>&</sup>lt;sup>15</sup> Since liquid assets require less capital, Basel contains an incentive to maintain a certain degree of liquidity. How strong this incentive proves is, however, highly questionable. Specific micro-requirements on liquidity are left to the discretion of Pillar 2.

<sup>&</sup>lt;sup>16</sup> See also Kregel (1998a) and Goodhart (2004).

requirements is not effective; the financial system is more fragile (since the domino effect is amplified), and during a general crisis it is very difficult to sustain bank capitalisation. As for liabilities, they are normally of a very short-term variety not backed by credible insurance deposits schemes; recurrent banking crises make depositors ready to run; deep, liquid financial markets are not available; banks frequently work with currency mismatches between assets and liabilities; the central bank is not always capable of acting as an effective lender of last resort, especially when the shock affects both current profitability and liquidity. It is therefore not surprising to find that some developing countries supplement the Basel regulation with higher minimum capital ratios and apparently stringent provisions on liquidity, in terms of fractional reserves and liquid assets requirements. However, banks that already suffer from working in a difficult environment see their performance negatively affected by the sum of capital, reserve and liquidity requirements; thus a further weight of regulation must be limited if it is not to lead to excessively high interest margins and/or poor profitability. On the other hand, the liquidity of many banks' assets is far from proving real when seriously needed, the support of their inefficient financial markets and the limited resources of their public authorities being all too feeble. In such circumstances liquidation of these assets may transform illiquidity into insolvency.

Summing up, while the above criticisms touch upon weaknesses in the application of Basel II to all sorts of countries, their potentially more disruptive effects for developing countries are seen as deriving from the latter being characterised by a higher intrinsic instability and weaker local financial markets and supervisory institutions. Furthermore, the weaknesses deriving from focusing on capital requirements may lead to severely limiting the role of the Basel approach as a necessary condition for micro-stability in developing countries. I have argued that part of Basel's (Core) principles may be considered as a positive drive towards better risk assessments. The problems with Basel II come when it is taken as a standard (book of rules) that could be efficiently adopted by all sorts of countries. <sup>17</sup> The idiosyncratic weaknesses of the developing countries and

 $<sup>^{17}</sup>$  According to Haldane (2001, p. 258), "In the regulatory sphere, one-size is unlikely to fit all." It is no surprise, then, that many analysts and authorities attach predominant

the structural hetero geneities characterising countries at different stages of development are alien to Basel regulation.

# 4. An overall evaluation of the Basel stability approach

Basel's version of prudential regulation of the banking sector is part of a more general trend characterising financial regulation in the last few decades which has its origins in the process of financial liberalisation, both international and domestic, aiming at freeing financial markets from previous structural constraints and privatising the financial sector. The retreat of governments from direct interventions in the economic sphere found its major impulse in the financial sector, at both the national and supranational level. Outstanding examples are to be seen in the increasingly subsidiary role of the IMF and World Bank, and the tendency to privatise pension and health schemes. The financial markets then assumed the role of supreme judges on economic matters, public and private, helping drive the privatisation process yet further and significantly constraining public choices.

In order not to leave a vacuum, direct public interventions have been substituted by a plethora of authorities, with varying degrees of autonomy, having as their horizon conditions of first best; in other words, their mission is to reduce what dominant economic doctrine sees as market imperfections. <sup>18</sup> The higher the level of autonomy, the higher the actual private nature of such authorities, *de facto* often implying the rewriting of constitutions due to the multiplication of non elected bodies possessing quasi-constitutional powers. Private international institutions also proliferated, assuming the role of new "high priests" of the revealed economic wisdom: hence the plethora of rules, standards and codes of conduct. <sup>19</sup>

importance to supervisory activity and to the Pillar 2 of Basel II, even as a preliminary step before adopting any version of Pillar 1. See e.g. Deloitte (2005).

<sup>&</sup>lt;sup>18</sup> This contrasts with a second best approach, which may require introducing more imperfections. The Tobin tax is an example of the second best approach.

<sup>&</sup>lt;sup>19</sup> As we have seen, many of them were incorporated in the FSAP programme.

Like much of current economic theory, the entire construction of modern financial regulation is based on a partial analysis approach. Each financial sub sector – banks, insurance companies, securities markets, and so on – is regulated on standalone merit, with a micro-partial view of local efficiency and local stability. Inside this sub sectoral approach, the Basel model of banking regulation is based on a model of partial analysis on its own: regulation is calibrated on a representative bank, and that is enough for the entire banking system. This tendency has gone so far as to worry some central bankers and supervisors. Once banks are regulated, risks apparently tend to disappear from their balance sheets without the authorities knowing precisely where they go and how much they are concentrated. Regulatory arbitrage is fully operative since investment decisions exploit the regulators' non-systemic sub-sectoral approach. Another example concerns the banking supervisors, uneasy from the outset about certain aspects of the fair value accounting standards dictated by an international private institution (IASB) when adopted by banks.

When applied to a domestic banking system, Basel regulation stops at micro-market failures, trying to mimic the otherwise inefficient market control by bank creditors, so as to reduce the probability and costs of default of individual banks. What is more, the regulatory defences are confined to "normal" cyclical disturbances. The past experience under Basel I in many developing countries and the formalisation of the IRB methods of Basel II – which excludes exceptional losses from capital requirements – make it clear that in the case of "abnormal" negative events Basel's capitalisation is not sufficient protection against banking crises (see e.g. Dhumale, 2000). Furthermore, systemic liquidity problems are not considered. Therefore, even if we were ready to accept that Basel II offered some positive contribution to enhancing micro-stability, there would still be serious doubts as to whether such a bottom-up approach was capable *per se* of bringing about macro-stability. <sup>21</sup>

<sup>20</sup> When explicit or implicit public guarantees exist, capitalization is also intended to limit the costs of banking crises for taxpayers.

<sup>&</sup>lt;sup>21</sup> According to Caruana (2004), Basel II "sought to increase the stability of the global financial system – a goal that would benefit not just banks, but more broadly businesses and consumers" (p. 3). Deloitte (2005, slide 2) is blunter in affirming that "Basel's purposes is to ensure that the banking system is well-managed worldwide [...] and if [...] banks get into

As anticipated in the Introduction, the BCBS itself is aware that a micro-regulation is effective only when more general pre-conditions exist:

"An effective system of banking supervision needs to be based on a number of external elements, or preconditions. These pre-conditions, although mostly outside the direct jurisdiction of the supervisors, have a direct impact on the effectiveness of supervision in practice. Where shortcomings exist, supervisors should make the government aware of these and their actual or potential negative repercussions for the supervisory objectives. Supervisors should also react, as part of their normal business with the aim to mitigate the effects of such shortcomings on the efficiency of regulation and supervision of banks. These external elements include: sound and sustainable macroeconomic policies; a well developed public infrastructure; effective market discipline; and mechanisms for providing an appropriate level of systemic protection (or public safety net)" (BCBS, 2006, p. 6).

Independently of the elements included among the preconditions and of their subsequent specification, it is clear that the Basel regulation is not considered by its own proponents as a sufficient condition to attain systemic stability. And it is also clear that the aim of the FSAP is not only to fill the enforcement gap, but also to fill the preconditions gap. We should not lose sight of the fact that the BCBS explicitly limits the realm of bank regulation to the micro-level, leaving macro-stability to preconditions related to systemic features and macroeconomic policies. Substantially in tune with this approach, Goodhart (2004) proposes complementing a revised prudential regulation with the provision of specific monetary and fiscal institutional arrangements appropriate for systemic stability purposes.<sup>22</sup>

The Basel proposal appears, then, to be neither a necessary nor a sufficient condition to attain an acceptable degree of macro-stability and efficiency, especially for the developing countries. It is not a necessary

trouble they have enough capital to see them through solvency problems. If the banking system is thus perceived to be "sound," liquidity problems, the immediate source of bank failures, are much less likely to arise."

<sup>&</sup>lt;sup>22</sup> This is different from inserting macro-sensitivities into micro-rules. As an example, Borio (2003) proposes both to render Basel's rules sensitive to idiosyncratic risks, when they are capable of producing macro-effects, and to utilise macro-signals for a time-varying calibration of risks. In any case, apart from openly abandoning the regulatory level playing field, his first suggestion hardly seems enforceable since it would lead to burdening large banks with significant multiples of today's minimum capital requirements.

condition because we may devise other, potentially more effective and efficient regulatory schemes. For example, a minimum non risk-weighted capital ratio limit (like the 3% required in USA) could be introduced, together with severe rules on risk provisioning and effective liquidity requirements. Such a scheme would dispense with the risk-sensitive minimum capital requirements and so dispose of much of the criticism deriving from it, such as its limits on allowed portfolio diversification, its procyclicality, its complexity and associated costs. This alternative scheme would also have the merit of concentrating attention more on liquidity, which is the primary cause of banking crises, especially in developing countries. It is not a sufficient condition for two reasons. At the micro-level, much of the criticism analysed above concerns its inefficacy, especially when applied to countries with weak institutions and banking systems (take the requirements placed on the supervisory authorities, for example, and the difficulties in re-capitalising in times of trouble, precisely when it is called for). At the macro-level, as we have seen, the very Core Principles formulated by the BCBS make it clear that a set of institutional and policy preconditions are required to make it effective. These preconditions could arguably become critical to approach financial systemic resilience, with banking regulation much in second place.

Following Minsky's analysis, the conversion of financial fragility into instability depends on the macroeconomic context, i.e. on the overall validation of expectations. With damped cycles, financial instability is kept at bay since economic units of every kind experience and expect limited divergences between planned and actual results.

In Minskyan terms, banks are structurally in a speculative position since they add financial risks to operative ones. Being subject to liquidity and insolvency shocks, they maintain margins of safety in terms of both expected flows (their margins) and stocks (their capital and liquidity). While intermediation margins produce profits when expectations are validated, capital and liquidity are costly ways of partially hedging risks. When the banks' creditors are unable to exert a prudential discipline (as is the case of depositors), a strong incentive exists to keep costly safety margins at a low level. Excluding liabilities denominated in foreign currencies, Bagehot's recipe for a domestic lender of last resort serves to

economise on liquidity; no such outcome is available for capital, apart from public property. The Basel minimum capital requirements put a lower limit to capital in relation to freely assumed operational and financial risks. The safety margins should then be calibrated to expected volatility. Marked volatility thus requires banks to charge high intermediation margins, which are harmful to the economy, and hold high capital and liquidity requirements, which adds to the inefficiency and poor competitiveness of the banking sector. Hence the institutional and policy preconditions discussed above represent an external safety margin, or cushion, for the banking sector. Insofar as they reduce instability, the banks' hedging costs and inefficiencies are kept low. Consistently with its premises, the Basel methodology couples low volatility with low capital requirements.<sup>24</sup>

I conclude that, where robust preconditions exist, including the possibility to use monetary and fiscal policies to contain economic cycles within acceptable limits, capitalisation might perhaps be considered an effective micro-instrument to minimise the social costs of tack-ling the residual micro-instability. Adopting this systemic perspective, the developing countries show further weaknesses in addition to those singled out in the previous section. Since these countries do not possess such a strong set of preconditions and are subject to high endemic economic and financial volatilities, the Basel book of rules constitutes a very weak instrument to attain financial stability; any attempt to strengthen it with more stringent and manifold requirements would rapidly lead to unacceptable and inefficient regulation costs.

### 5. Conclusions

Summing up:

a) The effective implementation of Basel II in developing countries

<sup>&</sup>lt;sup>23</sup> For discussion of safety margins see Minsky (1986), Kregel (1997) and Tonveronachi (2006b).

<sup>&</sup>lt;sup>24</sup> For the IRB approach, higher instability means a shift to the right of the loss distribution curve and a fatter right tail. This may help to explain why under Basel I some emerging countries decided to adopt minimum capital requirements above the standard 8%.

encounters many obstacles, perhaps the biggest being the problem of setting up supervisory authorities with the necessary independence, resources and skills.

- b) Implementation of Basel II will not achieve financial stability in countries that lack the necessary structural and macro-economic preconditions.
- c) Given its stress on regulatory capital, Basel II is particularly ineffective for developing countries where:
  - the concentration and contiguity of real and financial wealth renders capital requirements ineffective;
  - the frequently experienced major shocks are not met with reasonable amounts of bank capital;
  - liquidity may frequently be a more important requisite than capital in order to avoid systemic crises;
  - following a prudential regulation approach, the attempt to prevent systemic crises by adding up several types of minimum requirements, and strengthening them, leads to heavy and inefficient regulatory costs for banks.
- d) The sum of Basel II, cross-border banking and the FSAP programme may create appreciable distortions, driving developing countries to adopt standards incompatible with significant aspects of their specific financial fragilities, and indeed with the sustainability of their development path.

Furthermore, since Basel II is also a response to financial innovations partly prompted by Basel I, and in any case an attempt to cope with the emergence of more exotic forms of finance, we may well ask exactly what type of finance is really necessary for development. Historically, the countries that succeeded in rising above the underdevelopment threshold did not require very complex forms of financial institutions and instruments; what they needed was the pooling of financial domestic resources, heavy lending and a strong, deft hand being taken by governments. China is a recent example. The more exotic financial instruments, which Basel II is endeavouring to pursue, actually serve the

needs of wealthy people in both the developed and developing countries.<sup>25</sup> When speaking of pressure groups in financial matters we have then partly to rethink the old divide between North and South. A truly prudential approach to regulation should follow the principle that those risks that cannot be satisfactorily hedged and supervised should not, as far as possible, be allowed into the system. Regulatory schemes that pursue the interests of a minority and consequently become ineffective, excessively complex and costly for the needs of a country, represent a "first worst" solution.

These factors should lead the developing countries to cooperate in order to concur in asking to be evaluated at the international level not in terms of the Basel book of rules but in terms of adoption of very broad principles of risk measurement and management, supplemented by a complex set of policy measures and institutional settings that should be both consistent with their specific characteristics and able to hold regulatory costs within acceptable limits. Financial regulation should be seen as part of a coherent structural and policy framework appropriate for each country. Given that only advanced institutions and markets can be counted on to respond effectively to prudential rules and incentives, <sup>26</sup> structural measures of financial regulation should be considered, when deemed appropriate, in substitution of or in addition to prudential measures. In any case, the interactions between preconditions, regulation and supervision must be played out within a dynamic structural context; in particular, since it takes more resources to supervise and enforce complex standards than simple rules (Ward, 2002), regulation should dynamically match the supervisors' ability to manage it.

Allowing the developing countries to have place and voice in international institutions such as BCBS is often seen as a way to bend rules, standards and codes to their characteristics and interests. For instance Eatwell and Taylor (1998) and Eatwell (2001) propose a World Financial Authority (WFA) based on a set of shared general principles serving as reference to judge the compliance of a given jurisdiction. The

<sup>&</sup>lt;sup>25</sup> They also contribute to the general trend of transferring risks to ultimate investors.

<sup>&</sup>lt;sup>26</sup> For an incentive approach to regulation see Dhumale (2001).

"Basel Consensus" is, however, inevitably based on the perspective of international banks and, subordinately, attainment of long-run domestic stability by means of market incentives. This limits the common ground with the emerging countries to just a few very general principles at best. If these principles were broad enough for general application, they would not offer effective guidelines for WFA action. If it were decided to go ahead with the WFA proposal, it would be necessary to fund it anew, departing significantly from the principles and the governance of the existent BCBS – a task that at present appears utterly impossible.

On a more limited plane, the question is whether more democratic forms of governance of the existing international institutions might help to introduce modifications able to limit the negative effects of regulations, standards and codes on developing countries.<sup>27</sup> Three aspects need to be considered: the stage reached by the formulation and implementation of such schemes, how far those modifications could affect the basic principles on which the schemes have been already built and what can be holding the developing countries back from raising their voice.

With regard to Basel II, its formulation and implementation has reached a stage where we cannot possibly think of introducing any change in its inner logic. Viewing it as a dynamic book of rules, a more assertive presence of developing countries in its Committees could in time make it possible to introduce some modifications regarding, for instance, portfolio diversification and pro-cyclicality, but without affecting its general approach. However, one cannot help wondering why the developing countries have not taken some common initiative within the IMF and World Bank, whose statutes allow them some voice. For instance they could have asked for some of their specific issues to have fuller room in the research agenda and be explicitly considered in the FSAP programme. Adding to this the points made above about the interests of pressure groups, we may conclude that the problem of democracy in financial matters also has to be analysed at a domestic level.

Without abandoning these types of initiatives, Jetin's proposal (2007) aimed at the creation of Regional Committees to deal with region-specific

<sup>&</sup>lt;sup>27</sup> This was one of the questions posed by the organisers of the Rio Meeting.

problems in financial regulation has to be seriously considered, hoping that the existing structural differences among and inside regions will not stand in the way of agreement on basic principles and methodologies.

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