

Implications of Basel II for the financial stability of developing countries

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1. Introduction

In June 2004, The Basel Committee on Banking Supervision (BCBS) approved the supposedly final version of the Basel II regulatory framework on “International convergence of capital measurement and capital standards”. Compared with the original 1988 Accord, 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 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 risk-sensitive methodologies employed by the more risk-sophisticated banks to compute their economic capital. In this perspective, Basel II, particularly its Pillar 1, must be considered 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 presumably also aims at containing the wide discretionary powers and the crucial role of supervision that an opaque Pillar 2 now establishes.

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 thought to apply only to international banks became 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 did not change either the logic of the New Accord, or its main features. Furthermore, although 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.

When we assess the implications of Basel II for 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 related to the efficacy and efficiency of Basel as a micro-regulatory tool, from the ones deeming it insufficient as a defence against systemic instability. We conclude that for 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 coherent with the domestic institutions and policies on which realistically these countries can 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, we trace the foundations of the Basel approach back to its original concern with international banks and afterwards to economic systems characterised by developed markets and institutions. In section 3, we discuss some of the criticisms levelled against Basel II and some proposals directed at countering those shortcomings. We will argue that, when compared with the present situation, some of those criticisms tend to overstress the implications of Basel II for developing countries. Of more relevance are those criticisms concerning 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 we discuss a more comprehensive assessment of financial stability. Part of the literature correctly stresses the difference between a bottom-up and a 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. Also with reference to the past experience, 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.¹ Some questions derive: 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 developing countries as in developed ones? Does a regulatory level playing field among countries also leads 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, schemes of micro-prudential regulation do not solve the problem of systemic instability. We argue that for 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 comes 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 and multiple requirements may only produce higher and inefficient regulatory costs.

The final paragraph tries to derive from the previous arguments some proposals for further research.

2. The Basel approach

It may be useful to recall the historical foundations of the Basel construction. The first Accord was being thought in a period in which the old banking regulation, afterwards termed as 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 with respect to 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 enough aware of how large international shocks, then already increasing in frequency and seriousness, could undermine their survival and put at risk 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'

¹ As it was in the 1980s when the first Basel Accord was mainly motivated by the systemic threat posed by the crises of several international banks.

capital (hence a gap between social and private optimal amount of capital). Historical studies were furthermore suggesting that for a long period of time banks had steadily decreased their capitalisation. It was then natural to suppose that putting a brake to, 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.

From the time of the formulation of the first Accord many things have changed. In our perspective the more fundamental change has been that many countries, developed and developing, adopted, more or less willingly, Basel I to move 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 given on whether capital requirements could always constitute the central piece of stability regulation for an entire banking system.² This new 'Basel Consensus' stems from two premises and has two main 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 push all banks to compute their economic capital according to best practices. As for the consequences, first, 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 in 1996 a manual on the Core Principles for Effective Banking Supervision and the prominent role given to the Second Pillar in Basel II. Second, some of the barriers erected by the previous banking regulation against systemic crises (such as limits on competition) are in many countries no more 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 that 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 also in the financial sector, hence an increase in capitalisation. Second, supervisors' action towards weak but not failing banks has been strengthened in many cases by the reference to an international rule, using it to push those banks to accept acquisitions or to look for mergers. When

² According to Goodhart (2004) the pendulum of regulation has swung too far in the direction of capitalisation.

interpreted with intelligence, capitalisation has often been used as a shortcut for pushing banks to improve their practices. Then a role of supervision more comprehensive than a simple capitalisation rule is crucial; our opinion is that *de facto* the first pillar of Basel II serves to give strength to the second one.³

3. A review of some criticisms

Some specific features of Basel I already fostered preoccupations for their implications for 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 their joining 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 developing countries. The more risk-sensitive approach adopted by Basel II should dispense with these specific criticisms.⁴

When looking at their potential implications for developing countries, the new features of Basel II have, however, attracted several criticisms that may be grouped into five main classes.

The first criticism relates to the limits of Pillar 1 regarding the diversification of banks' portfolio. Absent in 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" (Cornfold 2005, p. 26). Stephanie Griffith-Jones et al (2001, 2004) led the battle showing the quantitative relevance of including diversification with developing countries in the portfolio of international banks and suggesting that its omission could rarefy the funds flowing towards these countries, also increasing their cost of funding.⁵ Coherent with Basel's principles is the proposal to let banks that adopt internal full credit risk models to ask supervisors to test them. 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

³ Being based on loose principles, Pillar 2 is often criticized as a tool for supervisory prompt 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).

⁴ However, Ward (2002) suggests that the contrary may be true.

⁵ Simulating the 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.

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. 4-5).

A compromise is offered by BBVA (2003) with a correction coefficient applied to the capital requirement computed according 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 the ones exposed in the previous quoted passage. The proposal could then end up with the application of a fixed discount factor, not differently from what was finally adopted in Basel II for exposures to SMEs, fostering banks’ opportunistic behaviours.

Since international bank lending is generally considered as a source of instability,⁶ a more conservative approach to these operations should perhaps be welcome. However, as a recent document by the UNCTAD (2006) shows, Basel II unduly punishes the more ‘physiological’ part of those flows represented by commodity-related financing to developing countries. Apart from criticising Basel II for not considering 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 treatment for risk mitigation in well-structured deals. The document also contains useful proposals for supervisors, banks and debtors in developing countries to counter the negative effects for commodity finance.

For portfolio diversification, as when discussing 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 will 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 being calculated on a local basis, a paradox could ensue from applying a fixed diversification discount on a consolidated basis since not enough regulatory capital could remain to cover home country’s risks.

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

⁶ For an evaluation of the potential instability coming from international capital flows see e.g. Haldane (2001).

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 criticism concerns pro-cyclicality and instability. For Basel I, pro-cyclicality was not referred 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, directed at increasing horizontal risk-differentiation, could also increase time-sensitivity. Given the higher instability characterising developing countries, the result could be an accentuation of pro-cyclical lending of international banks towards developing countries. The discussion has then centred on technical issues, such as the 'point in time' or 'through-cycle' methodologies adopted by rating agencies and by banks in their internal risks assessments. As far as these methodologies allow for some time-sensitivity, the adoption of quite similar methods to assess risks by the major banks could also produce large swings in both directions, increasing instability. 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 a neutral impact of regulation (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 more in the next section). Of some help would be a regulation capable of reversing the intrinsic pro-cyclicality of banks, for instance giving to some parameters 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 with respect to the minimum regulatory one, that Pillar 2 openly requires. Again, Basel II gives supervisors a potentially wide discretionary power of intervention.

The third 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.⁷ The goal to attain a regulatory level playing field is therefore at risk, with a foreseeable large dispersion of regulatory menus among countries and banks, and wide differences in regulators' ability to manage, also with the necessary independence, the strong discretionary powers coming 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, pushing further the consolidation process in the banking industry. Given the large polarisation existing among banks in developed and developing countries, the result could be a significant increase in the presence of foreign banks in developing countries. Actually, we have here two points: whether international banks are driven by regulatory capital calculations when expanding their presence into developing markets; whether their presence, with the incentives coming from Basel II, may produce negative results for the host countries.

Past experience seems to show that capital requirements exert a negligible influence on the globalisation of banking activity. The driving force was the liberalisation of local banking markets in conjunction with the benefits accruing to international banks from following the more general globalisation process, from a better portfolio diversification and from exploiting local inefficiencies. In some cases, expanding into developing countries also allowed an increase in the bank's size, at expected low costs, which was considered as a means to lower the threats of hostile

⁷ A clear signal in this direction is given by US regulators planning to maintain the large majority of US banks under a revised Basel I regime. They argue that local and regional banks' activities are not so sophisticated to require Basel II methodologies, but only a buffer capital to take into account their scarce portfolio diversification (see e.g. Ferguson 2003).

⁸ Several commentators (e.g. Ward 2002) express strong doubts on giving to institutionally weak supervisors the wide discretionary powers that Basel II attributes to Pillar 2.

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 pushing towards prevalent quantitative, at arms length, assessments of debtors' risks, also allowing finer calculations of risk mitigation. Should foreign banks 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.⁹ The result could be a 'stability divide', with large stable foreign banks and small fragile local ones. As a result, the difficulties for SMEs to access credit could increase. However, some past experiences 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 did not exert a perceptible competitive pressure on local banks as far as efficiency is concerned, being more interested in exploiting local inefficiencies that requires 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 could not materialise or could be accompanied by country-specific negative externalities. However, in many developing countries, as for many small banks and firms in developed countries, a worrisome gap in the risk culture still exists. The further push coming from Basel to better risks assessments should then be welcome. Yet, more than from the specific rules contained in Basel I and II, a better risk culture comes from some of the indications collected in the Core Principles for Effective Banking Supervision, which actually also contain guidelines for the best banking practices.¹⁰ In this respect, convergence on risk measurements should matter more than convergence on rigid risk management rules. Supervisors should in these circumstances push banks to adopt these best practices, consequently permitting and inviting banks to operate in a 'didactic' way with their customers. This could be a preferred direction into 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

⁹ This is in effect a more general problem, potentially affecting any country, with cherry picking resulting from objective conditions and not from autonomous strategies.

¹⁰ Obviously the Core Principles document was in significant parts elaborated to be consistent with the Basel's books of rules.

be maintained within acceptable limits. In this respect no general answer may be possible, having to assess a strategy with reference to specific conditions. Moreover, under Basel II the operations of foreign banks in host countries will depend on how much they will be able to adopt strategies on a consolidated balance-sheet basis, and this will depend much on host countries' regulatory stance.

Hence 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. Being Basel II 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 the effective implementation of the Accord. Given the menu choice proper of Pillar 1 and the wide discretionary powers of Pillar 2, together with large differences in 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 coming from the 1975 Basel Concordat and its later revisions.¹¹ 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 local regulation.¹² Conflicts may arise when home and host countries follow different regulatory schemes. Basel II complicates the matter since it allows the choice between the standardised and the IRB approaches for credit risk, and a basic indicator, a standardised and an advanced measurement (AMA) approach for operational risks. Developing countries face in principle multiple choices, from allowing home regulation for foreign branches and subsidiaries up to submit both to host regulation; it is also worth considering that host countries may restrict the types of operations permitted to foreign branches. For credit risks, limits to exploiting 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: the principles that should guide host countries in deciding on the previous alternatives; the degree of freedom developing countries have in this choice. As to the first point, much depends on the host

¹¹ For the challenges posed by Basel to emerging countries supervisors see also Song (2004).

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

country assessment of the degree of seniority granted by the home legislation to the host's depositors in case of failure; on 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; on the net competitive effects on local banks, etc. As for the second 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 World Bank, might come to exert a strong pressure towards adopting stringent rules of cooperation among supervisors.¹³ The actual tendency is towards the production of international standards and rules by organisms lacking enforcement powers (such as BCBS, IOSCO, IAIS, IASB) and the inclusion of these standards and rules inside the FSAP, together with IMF principles for sound macroeconomic and institutional policies.¹⁴ Such an assessment has obvious influences on the intervention by the IMF and the World Bank and should also act, if frequently done and always made public, as a detailed 'rating' for the financial markets. Although specific conditions may be considered, the overall logic is to apply uniform standards to all countries. Regarding banking regulation and supervision, we have seen that a push for a better risk culture is positive; a rather different matter is the adoption of a homogenous set of specific rules. They imply the existence of a common micro-stability model for both developed and developing countries.

As the past experience on the application of Basel I suggests, this appears only in part true. While the banking crises of the 1970s and 1980s were mainly seen as the product of bad risk management by banks based in developed countries, those of the 1990s mainly affected developing countries, were systemic in nature and exposed a problem that is not directly tackled by Basel regulation: liquidity.¹⁵ Leaving aside for the moment the systemic nature of these crises, which will be dealt with in the following paragraph, students of banking would find rather awkward the focus of Basel on the asset side of banks' balance sheets 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

¹³ For a discussion of FSAP from the viewpoint of a WFA see Eatwell (2001).

¹⁴ See IMF (2001) for a discussion of microprudential and macroeconomic indicators.

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

¹⁶ See also Kregel (1998) and Goodhart (2004).

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). Domestic banks in developing countries face several problems for both capitalisation and liquidity. Characteristics of developing countries are a high concentration of wealth and a relevant contiguity between real and financial wealth (Rojas-Suarez, Wiesbrod 1996, Rojas-Suarez 2001). In these conditions a regulation based on minimum capital 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 and 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 not therefore surprising to find that some developing countries supplement 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, so that the weight of regulation must be limited to avoid being translated into very high interest margins and/or poor profitability. On the other hand, the liquidity of many banks’ assets is far from being real when seriously needed, not being sustained by their inefficient financial markets and by the limited resources of their public authorities. In these circumstances the 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 by weaker local financial markets and supervisory institutions. Furthermore, the weaknesses deriving from focusing on capital requirements may lead to limit severely the role of the Basel approach as a necessary condition for micro-stability in developing countries. We have argued that part of Basel’s (Core) principles may be considered as a positive push towards better risks 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.¹⁷ The idiosyncratic weaknesses of developing countries and the structural heterogeneities characterising countries at different stages of development are alien to Basel regulation.

4. An overall evaluation of the Basel stability approach

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 the costs of default of individual banks.¹⁸ What's 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 case of 'abnormal' negative events Basel's capitalisation is not enough 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 gives some positive contribution to enhancing micro-stability, serious doubts arise that such a bottom-up approach is capable *per se* to produce macro-stability.¹⁹

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

An effective system of banking supervision needs to be based on a number of external elements, or preconditions. These preconditions, 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

¹⁷ According to Haldane (2001, p.258) "In the regulatory sphere, one-size is unlikely to fit all". It is then no surprise that many analysts and authorities give prominent relevance 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).

¹⁸ When explicit or implicit public guarantees exist, capitalization is also intended to limit the costs of banking crises for taxpayers.

¹⁹ 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) is blunter in affirming that "Basel's purposes is to ensure that the banking system is well-managed worldwide ... and if ... banks get into 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" (slide 2).

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 FSAP is directed not only to fill the enforcement gap, but also to fill the preconditions gap. We should be aware that BCBS's approach 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 to complement a revised prudential regulation with the provision of specific monetary and fiscal institutional arrangements appropriate for systemic stability purposes.²⁰

It would not be unreasonable to think that these preconditions can become critical to attain 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 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 the intermediation margin produces profits when expectations are validated, capital and liquidity are costly ways of partially hedging risks. When banks' creditors are unable to exert a prudential discipline (as is the case for depositors) a strong incentive exists to maintain the costly margins of safety 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 an outcome is possible for capital, apart from public property. Basel minimum capital requirements put a lower limit to capital in relation to freely assumed operational and financial risks. The margins of safety should then be calibrated to expected volatility.²¹ An accentuated volatility thus produces for banks high intermediation margins, which are harmful to

²⁰ This is different from inserting macro-sensibilities into micro-rules. As an example, Borio (2003) proposes both to render Basel's rules sensible to idiosyncratic risks, when these 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 seems hardly enforceable since it would lead to charge large banks with significant multiples of today's minimum capital requirements.

²¹ For a discussion on the margins of safety see Minsky 1986, Kregel 1997 and Tonveronachi 2006b.

the economy, and high capital and liquidity requirements, which adds to the inefficiency and scarce competitiveness of the banking sector. Hence the institutional and policy preconditions discussed above represent external margins of safety for the banking sector. As far as they keep instability low, banks' hedging costs and inefficiencies are limited. Consistently with its premises, Basel's methodology couple low volatility with low bank capital requirements.²²

We conclude that, where robust preconditions exist, among them the possibility to use monetary and fiscal policies to contain economic cycles within acceptable limits, capitalisation might be considered as an effective micro-instrument to minimise the social costs of tackling with instability. Adopting this systemic perspective, developing countries present further weaknesses in addition to the ones 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, Basel's book of rules constitutes a very weak instrument to attain financial stability; the attempt to strengthen it with higher and multiple requirements would rapidly lead to unacceptable and inefficient costs of regulation.

5. Conclusions and a proposal for further research

Summing up:

- a) The effective implementation of Basel II in developing countries encounters many obstacles, perhaps the most important being setting up supervisory authorities with enough independence, resources and skills.
- b) The implementation of Basel II will not achieve financial stability in countries that lack the necessary structural and macroeconomic preconditions for such stability.
- c) Given its stress on regulatory capital, Basel II is particularly ineffective for developing countries where:
 - The concentration and contiguity of real and financial capital renders capital requirements ineffective.
 - The frequently experienced large shocks are not met by reasonable amount of banks' capital.

²² 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 higher than the standard 8%.

- 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, produces large and inefficient regulatory costs for banks.

d) The sum of Basel II, cross-border banking and the FSAP programme may create important distortions, pushing developing countries to adopt a standard that is incompatible with important aspects of their specific financial fragilities and with the sustainability of their development path.

These arguments should lead developing countries to cooperate in order to ask internationally to be evaluated not in terms of the Basel book of rules but in terms of the 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 coherent with their specific characteristics and capable to maintain regulatory costs within acceptable limits.²³ Financial regulation should be seen as part of a coherent scheme of 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 incentives²⁴, structural measures of financial regulation should be considered, when deemed appropriate, in substitution or in addition to prudential ones. Anyway, the interactions among preconditions, regulation and supervision must be played inside a structural dynamic context; in particular, since it takes more resources to supervise and enforce complex standards than simple rules, regulation should dynamically match prior supervisors' ability to manage it.

To substantiate the above arguments, a further research might be based on the following lines. First, to keep the research into manageable limits, two Latin American countries should be selected with enough different structural characteristics and with a past experience of financial crises. Second, a table of common and specific fragility

²³ Up to a point Eatwell (2001) follows similar lines in recognizing the inefficiency of a uniform stability set of codes. However, his proposal for a World Financial Authority leads him to require the existence of a set of shared general principles in reference to which to judge the compliance of a given jurisdiction. The 'Basel Consensus' is, however, unavoidably based on the perspective of international banks and, subordinately, to attain long-run domestic stability by means of market incentives. This limits the common ground with emerging countries to few very general principles at most. If these principles were broad enough to be general they would not offer effective guidelines for WFA's action. Wanting to go on with the WFA proposal, it should be necessary to fund it anew, significantly away from the principles and the governance of the existent BCBS. As a start, emerging countries could put up an Emerging Countries Committee on Banking Supervision based on the principle of a financial stability level playing field.

²⁴ For an incentive approach to regulation see Dhumale (2001).

characteristics should be construed for the banking sector of the two countries, so as to constitute a frame of reference for evaluating alternative sets of policy and regulatory proposals. Besides showing the types of risks, the table should present, by means of specific indicators, a scale of their dangerousness for generating crises. Third, an analysis of the potential strength of the two countries' policies should be directed at evaluating the external margins of safety they can produce for the banking sector, assuming they are correctly shaped in relation to the characteristics of the two economies, but taking their current institutional setting. This exercise should lead to evaluate the residuals of risks, in type and degree of dangerousness, that a non regulated banking sector ultimately face. Fourth, a Basel I or II banking regulation should be applied with a level of requirements coherent with the function of the banking sector to serve the economy (i.e. not too costly); hence, we should be able to assess at a systemic level which risks may be satisfactorily hedged and which risks remain in the danger zone. If an important stability gap remains, at least for one of the two countries, the analysis restarts from the third point, but adopting a normative approach. Here structural regulations should come in, for both the banking sector and the economy at large, possibly in conjunction with prudential ones. For this simulation we should follow the principle that those risks that cannot be satisfactorily hedged and supervised must not be, as far as possible, allowed into the system. This two countries exercise should also show how different specific features are responsible for different coherent sets of institutions, policies and regulations designed to keep instability within acceptable limits.

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Remarks at the International Conference on Financial Stability and Implications of Basel II.Â Banks developed, and continue to enhance sophisticated scoring systems to better express the likelihood of repayment of individual borrowers, and have grown increasingly sophisticated in their ability to segment exposures by characteristics that provide a fine classification of the risk of a homogenous pool of borrowers.Â Basel II also sets rigorous standards for the recognition of credit risk mitigation, ensuring that firms have sound internal procedures for assessing the legal certainty of such mitigation, that they include the effects of netting and collateral and that they factor into their calculations mismatches in maturity between hedging and hedged instruments, as well as other forms of basis risk. 13.3 Tax implications of Basel III proposals. 322. 6 13.4 Conclusion.Â Given that the Financial Stability Forum (â€œFSFâ€) was born at the G7 Finance Ministersâ€™ meeting in the wake of the Asian financial crisis of 1999, perhaps we should not be so surprised. Since then, the G7 grouping has grown in both number and scope.Â The impact of Basel III in each country will also need to be placed in the context of the local reform agenda. For example, in the European Union, Solvency II (which sets out strengthened risk 0 management and capital adequacy requirements for insurance firms) is being introduced with a proposed â€œgo-liveâ€ date of 1 January 2013.Â Basel II was born and took five years to develop and then a further four years to implement.