Mr. White discusses promoting international financial stability: the role of the BIS

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A. Why financial stability is important

It is not surprising that central bankers worry about financial stability, even those central bankers who do not have statutory responsibilities for banking supervision. Weak financial systems can have long-lasting and insidious macroeconomic implications (the problem of "financial fragility") that are naturally of concern to central bankers. Moreover, sudden failures in financial institutions, financial markets or payment systems (the problem of "systemic crisis") threaten contagion effects warranting the close attention of central bankers given their traditional role as lender of last resort. The seemingly ceaseless string of financial crises through the 1980s and 1990s, in both industrial (e.g. Scandinavia and Japan) and emerging market economies (e.g. Mexico and South Asia), indicates that these are practical and not theoretical concerns.

One problem arising from financial fragility is that central banks will be tempted to forbearance in the conduct of monetary policy, with associated risks to price stability and an increased likelihood of asset price bubbles. Even if the monetary authorities do not choose to behave in this fashion, market perceptions that they may be forced to do so may actually encourage speculative attacks on currencies and eventually a process of self-fulfilling expectations.[1] Conversely, attempting to pursue stabilising macroeconomic policies when the financial system is already fragile can lead to institutional failures, giving rise to both heavy costs for national Treasuries and important negative feedback effects on the real economy.[2] These processes were seen in Sweden, Finland and Mexico and still more recently in a number of Asian countries. A stronger financial system would alleviate both macroeconomic problems. In the same spirit, it should also be noted that unstable macroeconomic policies can also contribute to financial instability through asset price bubbles and other channels. In short, monetary stability and financial stability are two sides of the same coin and central bankers should be concerned about both. This is perhaps the principal lesson to be learned from the financial crises we have witnessed around the world in the past two decades.

Sudden failures in financial markets or payment systems can also have far-reaching effects. Major changes in the prices of financial assets, perhaps but not necessarily related to movements in underlying fundamentals, could threaten the solvency of individual institutions. A recent example of such phenomena was the impact of the sudden decline in the value of the Mexican peso and some Asian currencies on the creditworthiness of private borrowers and in turn their bankers. Such unexpected developments could also lead to exaggerated concerns about counterparty risk, with associated

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[1] Following the seminal article by *Obstfeld* (1986), the possibility of multiple equilibria has been noted increasingly in the academic literature.

[2] For a summary of the explicit fiscal costs of some recent crises, see *Caprio and Klingebiel* (1996).

reductions in liquidity in other financial markets. The recent drying-up of trade credit in Indonesia and some other Asian countries is an example of what might happen. Finally, technical failures in payment systems, which currently process many trillions of dollars daily in the Group of Ten countries alone, would threaten a massive payments gridlock whose effects could easily extend beyond the financial sphere into the real economy. The disruptive effects of such a development would obviously increase (and perhaps non-linearly) the longer the problem persisted.

It is also the case in the modern world that financial instability is unlikely to remain contained within national borders. All financial disruptions are likely to have an international dimension because the three pillars of any financial system - financial institutions, financial markets, and payment and settlement systems - are increasingly international. In the early 1980s, virtually every OECD country limited or even refused the right of establishment to foreign financial institutions. By 1995 this discrimination had virtually disappeared in industrial countries and is being reviewed in many emerging markets.[3] Cross-border transactions in bonds and equities in 1980 amounted to 10% of the GDP of the Group of Seven countries (excluding the United Kingdom); by 1995 this had risen to 140%. Derivative instruments were essentially unknown in 1980; daily turnover (notional amounts) had risen to almost US$ 1½ trillion by 1st April 1995 and one-half of these trades involved a non-domestic counterparty.[4] Finally, the fact that new information is now available instantaneously and almost costlessly around the globe further increases the likelihood that shocks in individual countries will be propagated elsewhere, even when such contagion might not be warranted by underlying economic fundamentals.

B. A strategy for promoting financial stability

Any strategy for promoting global financial stability must begin by recognising two facts. First, the pace of change in modern financial markets is extraordinary, ongoing and irreversible. Second, financial transactions are becoming increasingly complicated and opaque and are involving an ever widening and changing cast of characters. The implication is that the “system” which policy-makers aim to stabilise is both difficult to define at any moment in time and rapidly changing.

An important underlying force driving both developments is continuing improvements in computing and telecommunications which have brought a sharp reduction in the costs of carrying out even extremely complicated financial transactions. Deregulation, which implies a significant expansion in the importance of market forces, has also contributed materially to the process of change to date. Yet, in part at least, deregulation is a by-product of technological change which has made it far easier to avoid existing regulations. For example, when Microsoft can be traded at a transactions cost of 2 cents a share on the Internet, Japanese domestic regulations that enforce a cost of US$ 5 are simply unsustainable.

3 For a fuller treatment of international agreements designed to facilitate international financial transactions and contribute to the health of the international financial system, see *White* (1997).

4 See *Bank for International Settlements* (1996a).

Better and cheaper communications have also contributed materially to the breakdown of sectoral and national distinctions in international financial markets, as well as to the growing participation of a whole host of new players. The importance of this last development should not be underestimated since such new participants as pension funds, mutual funds and hedge funds are not likely to behave like traditional banks, a possibility which creates new uncertainties about how the international financial system might react during periods of stress. The fact that emerging markets are also far more important on the global stage than they were ten years ago, and that emerging financial markets have many idiosyncratic properties (often including a lack of transparency and of good corporate governance), further complicates the task of formulating policies to ensure financial stability.[5] This combination of complexity and rapid change, allied with the increased integration of the international financial system, points, however, to four strategic implications.

First, measures to strengthen the system must be *comprehensive*. There are no simple answers. This means that wide-ranging measures must be directed to promoting the good health of each of the major components of the international financial system: financial institutions, financial markets and payment and settlement systems. In each instance, the overriding objective must be the stability of the system as a whole; that is, policy-makers must seek to ensure that disturbances in one component of the system are not easily transmitted throughout the system because they can interact with some other weakness elsewhere.

The second strategic implication is that policy-makers and regulators must rely increasingly on *market-led processes* to provide the discipline required to lead to prudent and stabilising behaviour. It seems to be a fact that regulators everywhere are having trouble keeping up with modern investment practices. Nor do they wish to respond with still stricter regulation of the traditional sort. This would be very costly in terms of efficiency, would only invite more evasion, and would probably lead to moral hazard problems and still greater dangers in the future. Rather, regulators are increasingly choosing to rely on the judgements of market participants, who are likely to be more up to date with evolving practices. In turn, the market will allocate rewards and punishments as necessary, both to owners of firms and to their directors and managements. This will help improve internal governance and encourage appropriate behaviour.

For market discipline to work effectively, regulators should put growing emphasis on disclosure and increased transparency. Better information aids “good judgement” as well as minimising the risk of “bad judgement”; say the likelihood that creditors might mistakenly shun good counterparties. However, since firms are often hesitant to increase voluntary disclosure, an important role for the public sector is to convince a small number of important and well-managed firms to start the process going. Other firms will then have little choice but to follow for fear of being accused of having something to

5 See *Goldstein and Turner* (1996) and *White* (1996).

hide. This strategy was recommended in a recent BIS document[6] (the Fisher Report) on the disclosure of derivatives transactions, and also underlies the strategy of the IMF in asking for better macroeconomic data from emerging countries (SDDS) in the wake of the Mexican crisis.

This approach might also be used to support efforts, recently undertaken by the G-10 Deputies[7] and the Basle Supervisors,[8] to reduce the risk of financial instability in emerging markets. Here the basic idea would be to build on the recently agreed set of international "Core Principles" governing the behaviour of (say) banks and their supervisors. Subsequently, a set of quantitative indicators of the health of the financial system might be drawn up[9] and applied in the first instance to countries whose financial systems were known to be in good condition. With time, the market (including rating agencies) might come to insist on similar information from other countries, which in turn would encourage pressures for desirable financial sector reforms. Recognising that the Core Principles were conceived of as minimum standards, the "hurdle rates" sufficient for banking systems to be judged healthy might be significantly higher in emerging than in industrial economies. Financial systems of many emerging markets are subject to relatively large macroeconomic shocks and to potential transitional problems in the context of financial deregulation, and may be prone to greater swings of sentiment than in more developed markets.[10] All such considerations should be taken into account when setting minimum requirements.

The third strategic implication is that market discipline must be a *complement to*, rather than a substitute for, *the traditional activities of regulators and policy-makers*. Publicly available information may arrive too late or be of too poor quality to support adequate market discipline. Moreover, safety-net provisions may also alter the incentives of market agents to respond appropriately to the receipt of new information.[11] Finally, it would be simply naive to assume that the markets will always exercise discipline appropriately. Throughout history, there have been instances recorded of excessive price volatility in financial markets, "bubbles" and other misalignment of financial asset prices.[12] Moreover, banks and other financial institutions, buoyed by waves of "excessive optimism" or even "irrational exuberance",[13] have frequently lent large sums of money to borrowers who ultimately proved unable to pay. Recent events in a number of Asian countries would seem to provide further evidence of this particular kind of market failure, albeit along with a number of other important shortcomings.

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6 *See Euro-currency Standing Committee* (1994b).

7 See *Group of Ten* (1997).

8 See *Basle Committee on Banking Supervision* (1997a).

9 This follows along lines originally suggested by *Goldstein* (1997).

10 See *Goldstein and Turner* (1996).

11 In the recent Asian experience, a number of central banks failed to provide timely data about their own exposure in forward markets and/or their commitments to support the foreign exchange requirements of private sector entities. Safety-net considerations may have affected the willingness of local depositors to keep their assets with local banks and the willingness of foreign banks to lend to local banks.

12 For an overview of such considerations, see *Bank for International Settlements* (1996b) and (1998a).

13 The former phrase was introduced by *McKinnon and Huw* (1996), the latter more famously by Alan Greenspan.

It is particularly worth noting at the present moment that imprudent behaviour and excessive risk-taking by financial institutions often follow periods of declining profits due either to deregulation, and the associated loss of monopoly rents, or bad investment decisions in the past. Examples of such phenomena can be found in the domestic behaviour of US banks in the 1980s[14] and the expansion of Asian loans by certain Japanese and European banks more recently.[15] Given the strong current trend towards financial deregulation in emerging markets, and the likely effects of similar developments in industrial countries (the “Big Bang” in Japan, the effective demise of Glass-Steagall in the United States and the effects on European banks of the introduction of the euro[16]), regulatory oversight will continue to have an important role to play for the foreseeable future. Indeed, it is plausible to argue that the combination of these changing circumstances, allied with the spread of Internet and other technologies[17](as well as important demographic changes[18]), could be ushering in an unprecedented period of transformation in modern financial markets. If so, policy-makers will need all the instruments available to them if this process of change is not to prove disruptive.

The role of policy overseers will, however, have to change to reflect this required complementarity between market discipline and regulatory oversight. Just as monetary policy in a deregulated financial system must be conducted “with the grain of the market”, regulatory oversight must be increasingly directed to improving market processes. In response, regulators have already begun to strengthen the focus they put on the adequacy of internal control procedures. This applies both to financial firms and to firms providing infrastructure services in the international financial system.[19] There must too be a greater willingness to use market-developed (firm-specific) models for evaluating risk exposures of various sorts (market risk, credit risk and liquidity risk); this process too is also well begun. Regulators will also wish increasingly to set or suggest standards for external disclosure. This will foster the use of market discipline in general and will facilitate the participation and contribution of

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14 The losses associated with the debt crisis of the early 1980s were followed (if not necessarily caused) by vigorous expansion into LBOs, property loans and proprietary trading.

15 At a CEPR conference in London on 4th-5th February 1998, David Folkerts-Landau of Deutsche Morgan Grenfell stated that many European banks had responded to declining rates of return in European banking in the early 1990s by “targeting middle-market Asia”. French banks have been repeatedly warned by the Bank of France to cease making international loans at margins that are too low to cover all-in costs. Crédit Lyonnais is known to be the French bank most significantly exposed to Asia.

16 See *McCauley and White* (1997).

17 Technology allows both the unbundling and the rebundling (pooling) of risks. This contributes to the development of securities markets as opposed to the use of intermediated credit. Moreover, new technological developments have supported the advancement of non-bank financial intermediaries at the expense of banks, and the advancement of specialist “non-banks” to the detriment of both. Finally, by making information cheaper to obtain publicly, technology directly attacks the insider information which is at the heart of relationship banking.

18 The broad implications of projected demographic trends in the OECD area has been the focus of recent OECD studies. See *Roseveare et al.* (1996). The G-10 Deputies currently have a Working Group looking into the macroeconomic and international financial implications.

19 In the realm of the governance of banks, see *Basle Committee on Banking Supervision* (1998b). With respect to governance issues in the area of financial infrastructure, see *Committee on Payment and Settlement Systems* (1997c).

rating agencies in particular. Finally, it is worth noting that as markets evolve, as they will certainly continue to do, the complementary nature of the relationship between the regulator and the markets will have to continue to evolve as well.

The fourth strategic implication is that regulation or guidance from policy-makers must be the by-product of *international agreements among policy-makers* from different countries. Given the reality of international competition, efforts must be made to establish a "level playing-field" for regulatory purposes. Participation in such agreements must also be widespread enough to avoid the danger of regulatory competition (regulatory arbitrage) for non-participating countries. Finally, given the required complementarity between regulatory and market discipline, the dialogue leading up to international agreements must somehow involve both public sector and private sector participants. The BIS plays an important role in facilitating such an international dialogue.

C. The role of the BIS in promoting financial stability

1. The process of achieving agreement

Before turning to what the BIS does, it is perhaps useful to be clear about what it does not do. In particular, it does not normally use its own financial resources to promote or finance particular courses of action by its members. In these respects, its mandate is completely different from that of other international financial institutions such as the IMF, the World Bank and the regional development banks. Rather, since being founded in 1930, its unchanged mandate has been to promote international cooperation on monetary and financial issues, principally but not exclusively among central banks. Leaving aside the banking services provided by the BIS to central banks and international institutions (which have resulted in a balance sheet of about $130 billion), the BIS could be described as being essentially a talking shop. However, this talk had led to many important decisions being taken with significant international implications. While the small BIS staff organises and facilitates meetings, and its research papers (both published and unpublished) help raise the analytic quality of the debate, the greater value added is provided by the national representatives who attend meetings at the BIS and contribute to international cooperation in other ways.

International cooperation at the BIS is based firmly on the principle of national (state) control.[20] This recognises the reality that sovereignty in the modern world still resides at the level of the nation state and that national legislatures (particularly those of larger countries) are often not willing to cede their power to international bodies. Moreover, this approach also helps alleviate concerns about the existence of a "democratic deficit"; that is, the fear that important decisions might be made by technocrats rather than public servants directly accountable to nationally elected politicians. The depth of such concerns is evident to anyone following the current debate about the introduction of the euro, the

[20] A fuller description and analysis of alternative processes for achieving international agreements can be found in *Kapstein* (1992) and *Kapstein* (1994).

desirability of the European Central Bank being politically accountable, and the future political structure of Europe. Yet such concerns are by no means confined to Europeans alone.

Members of the various committees which meet at the BIS negotiate positions among themselves. Each clearly pursues national objectives and, in general, each has been in close contact with private sector agents in his or her own country to ascertain their views. The objective of the exercise is to find a negotiated agreement which is mutually acceptable, across countries and to both public and private sector agents, and which can then be ratified by Ministers and Governors and subsequently implemented using national legislation or regulation. The fact that the size of committees is relatively small facilitates the decision-making process, as does the tradition of making decisions by consensus. The recognition that a failure to reach an international agreement would open the door to both unfair competition and regulatory arbitrage also drives the process forward.

The fact that national legislators have been willing to accede to such a process, and that private sector participants likely to be affected have also generally signed on, testifies to the moral authority exercised by these international agreements and the perceived legitimacy of the process itself. Moreover, although the committees which meet at the BIS have generally drawn their members from the G-10 group of countries, many of the agreements reached (most notably, capital adequacy standards for internationally active banks) have simply been accepted by non-G-10 countries as effective global standards. In this regard, the influence of private rating agencies has often played a useful supporting role, as have the efforts made by the various committees to disseminate publicly their findings and agreements.[21] Other international financial institutions, such as the IMF and World Bank, have also played a major role in communicating to a wide range of non-G-10 countries what might be thought of as "best practice" in the industrial world. It is also notable that this model, which leaves decision-making firmly in the hands of experts from nation states and relies on international organisations to spread the word, is the model recently recommended by the G-10 Deputies (in association with many representatives of emerging markets) in their recent report on financial stability in emerging market economies.[22]

These positive comments about the "Basle process" should not blind us either to shortcomings evident in the past or to some important challenges for the future. The most important problem in the past has been that, although difficulties were often identified at an early stage, it sometimes took a crisis of some sort to galvanise into action the process of finding a solution. By way of example, the Basle Committee on Banking Supervision was set up only after the failure of Bankhaus Herstatt in 1974, even though it had been recognised well in advance that banks with large international operations posed special problems. It is also instructive that the question of "Herstatt risk" (i.e. the credit risk arising from lack of simultaneity in the settlement of the two legs of foreign exchange transactions)

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21 A full list of all recent publications by the BIS and the various committees which meet there can be found at http://www.bis.org.

22 See *Group of Ten* (1997).

was highlighted at the same time (1974) but the first significant attempt to address the problem was not made until over twenty years later.[23] Having registered this shortcoming, it is also true that, the various committees meeting at the BIS also have become significantly more proactive in recent years. This will become evident below.

As for future challenges to the current process, the first complication is the need to involve participants from emerging markets. Hong Kong and Singapore are already the fourth and fifth largest foreign exchange markets in the world and other financial markets are expanding rapidly elsewhere. The growing industrial might of countries like Korea, China, Brazil and others must also be recognised, even if recent events in Asia suggest that there can be setbacks along the way. If the credibility of the decision-making process rests on the involvement of national experts from jurisdictions most affected by the decisions taken, then input from emerging markets will be increasingly important. The issue is how to reconcile such an expansion with the maintenance of the intimate club-like atmosphere (also involving shared values and shared conceptual frameworks) that facilitate agreement and decision-making on the basis of consensus.

A second important complication is the breaking-down of the barriers between different markets and different kinds of financial institution. Not only are national regulatory frameworks generally based on such distinctions but so also are international committees. At the very least, there needs to be a channel for communication among such bodies as the Basle Committee on Banking Supervision, IOSCO and the International Association of Insurance Supervisors. The recent decision in the United Kingdom to consolidate all forms of financial supervision in the hands of a super-regulator may presage a more radical solution to this problem, but one which raises still other complications. In particular, the decision to site this regulator outside the Bank of England, but to give the Bank responsibility for overall systemic stability, raises the question of overlapping mandates for those two bodies. Again, there may be international implications if non-central banks come to play an increasingly important role in the BIS process. Similarly, the introduction of the euro and the establishment of the European Central Bank raises the question of future representation on the various BIS committees. The answer to this will presumably depend on the nature of the relationship which evolves between national supervisors and the supranational European System of Central Banks.[24]

A final challenge has to do with managing the balance of influence between public sector and private sector representatives in the process. While in the past public sector participants generally made proposals and the private sector responded, increasingly the opposite is true.[25] This trend is, however, to be welcomed in that it is consistent with the concept that it is the private sector that should be held primarily responsible for avoiding possible failures in private financial markets. The role of the public sector will increasingly be to ensure that such private initiatives are commensurate with the total

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23 See *Committee on Payment and Settlement Systems* (1996b).

24 For a discussion of such issues see *McCauley and White* (1997) and *Centre for European Policy Studies* (1998).

25 Consider the recent reports by the *Group of Thirty* (1997) and the *Institute of International Finance* (1997).

costs (including externalities) of such failures. As noted above, however, it may well take many years for this new balance to be struck.

2. Specific measures to promote financial stability

The objective of this part of the paper is to record more specifically how various committees meeting at the BIS contribute to implementing the strategy for financial stability described above. Before doing so, it seems worth reiterating that the likelihood of financial stability, both at the national and the international level, will be significantly enhanced if governments follow stabilising macroeconomic policies. This objective is also firmly endorsed by the BIS, which indeed regularly organises a wide range of meetings directed to improving the conduct of monetary policy in participating countries. While these meetings have traditionally focused on events in the G-10 countries (regular meetings in Basle of the G-10 Governors, the Gold and Foreign Exchange Committee, Economists, Model Builders and many others), an increasing number of meetings now focus on macroeconomic developments in emerging markets as well.[26] However, since macroeconomic stability is a necessary but certainly not a sufficient condition for ensuring financial stability, the implication is that more specific measures to foster financial stability are still warranted and are indeed urgently required.

In this regard, it was suggested above that the international financial system is based on three pillars: financial institutions, financial markets, and payment and settlement systems. The analytical model underlying this suggestion is that of a flow-of-funds matrix underpinned by the infrastructure (payment systems and other "plumbing") required for it to function.[27] Perhaps more by luck than design, there is a BIS committee dealing with each of these individual pillars: the Basle Committee on Banking Supervision (institutions), the Euro-currency Standing Committee (markets) and the Committee on Payment and Settlement Systems (infrastructure).[28] Pursuing the analytical framework one step further, it is evident that disturbances at the level of institutions, markets or infrastructure will have implications for market clearing conditions (interest rates, exchange rates, etc.) in the flow-of-funds matrix which could well have macroeconomic implications. While all three of the BIS committees recognise these interactions, and increasingly share information in consequence, it is the Euro-currency Standing

[26] The proceedings of some of these meetings and the papers prepared for them are now available in a new series of BIS Policy Papers. See, for example, *Bank for International Settlements* (1998b).

[27] See *White* (1994).

[28] For the sake of completeness, it should also be noted that various other committees of national experts also meet regularly at the BIS and contribute in rather more technical ways to issues having implications for international financial stability. The Committee of Legal Experts has at various times considered the possible undesirable implications of having different legal codes (in particular, bankruptcy procedures) governing financial transactions in different countries, and the Committee has recently considered as well legal questions surrounding the introduction of electronic money. Committees of security and computer experts meet regularly at the BIS and commonly exchange views on technical issues having systemic implications. One such issue currently receiving attention is how the official community should itself respond to the "millennium bug" problem. This work complements the recent document (September 1997) issued by the Basle Supervisors directed to encouraging the private sector to address this problem in a serious way (see *Basle Committee on Banking Supervision* (1997b)). A global conference, jointly organised by the Basle Supervisors, IOSCO and the Committee on Payment and Settlement Systems, took place at the BIS on 8th April 1998.

Committee that has traditionally been most interested in the overall dynamics of these systemic processes.

a. The Basle Committee on Banking Supervision

The Basle Committee on Banking Supervision, whose traditional preoccupation has been the stability of banking institutions, is the best known of the committees which meet at the BIS. Set up in 1974, the Committee first directed its attentions to ensuring that all internationally active banks were adequately supervised on a consolidated basis. The first agreement of this sort was the Basle Concordat,[29] which established the principle that no foreign banking establishment should escape supervision, and that such supervision should be adequate. The Concordat has been revised a number of times in the light of changing circumstances and perceived shortcomings, but a key principle has been maintained throughout: the home or parent supervisor is responsible for the global operations of banks headquartered in its territory and should supervise them on a consolidated basis.

The Minimum Standards paper of 1992[30] was a further effort to put such principles into practice. Four standards were laid out to ensure that home supervisors do practise effective supervision (if not, the host country can refuse a banking licence) and to ensure that the home supervisor has adequate access to information about cross-border activities of its banks (if not, the home supervisor can refuse to allow the business to continue). Nevertheless, members of the Basle Committee and other supervisors continue to feel that the flow of information among themselves remains subject to legal impediments. Accordingly, at the International Conference of Banking Supervisors in Stockholm in 1996,[31] delegates from over 150 countries endorsed a further report prepared by a joint working group of the Basle Committee and the Offshore Group of Banking Supervisors. In this report 29 recommendations were presented. These included suggested procedures for the conduct of cross-border inspections by home authorities monitoring their own banks, and approaches for dealing with corporate structures which create potential supervisory gaps. Ongoing problems include those posed by countries which still do not allow on-site inspection by home-country supervisors (Singapore and France, for example) and fears that information sent to other supervisory agencies will find its way into the public domain under the laws of the recipient country (a particular concern in the United States). In both cases, changes to domestic legislation are required which may prove difficult to achieve.

A second preoccupation of the Committee has been to ensure that internationally active banks maintain a level of capital commensurate with the risks they run. The Committee's first achievement in this area was the promulgation of the Basle Capital Accord,[32] which was published in 1988 and laid down minimum capital adequacy requirements based on relative levels of exposure to

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29 See *Basle Committee on Banking Supervision* (1975).
30 See *Basle Committee on Banking Supervision* (1992).
31 See *Basle Committee on Banking Supervision* (1996).
32 See *Basle Committee on Banking Supervision* (1988).

various forms of credit risk, both on and off balance sheet. While a number of issues remain to be resolved by the Committee, such as the treatment of short-term capital flows into emerging markets via domestic banks, this hard-won agreement did succeed in both levelling the international playing-field and increasing levels of bank capital after a long period of deterioration in most G-10 countries. By September 1993, all G-10 banks with significant international operations were meeting or exceeding these minimum requirements.

This success clearly owed something to the legitimacy of the Basle process, but also reflected the fact that the Accord suggested a clear quantitative standard on which market participants could focus and impose discipline. More recently, the complications posed by having different accounting conventions in different G-10 countries have received more attention and this problem is also beginning to look more capable of resolution. Ongoing discussions between the Accounting sub-group of the Basle Supervisors and the International Accounting Standards Committee are directed to resolving some of these problems. Success in this area would also provide international benchmarks to help guide and improve accounting standards in many emerging markets. Without such improvements in the basic numbers, it is difficult to draw much comfort from banks in emerging markets claiming to have met the minimum capital adequacy requirements.

The Basle Committee has recently made a further significant extension to its work in the area of capital adequacy. Whereas credit risk initially figured centrally in the calculation of minimum capital requirements, increased attention is being paid to market risk. Moreover, in its calculation of exposure to market risk, the Committee is now prepared to use the results generated by firms' own internal models, subject to certain restrictions.[33] This has been a significant step, among many others, in the direction of regulators working more closely with the grain of the market. Yet new challenges in the area of capital adequacy are also emerging. Credit derivatives are rather new instruments but are spreading rapidly, and they may have the potential to change dramatically the nature of financial intermediation. Consequently, the required form of regulatory oversight might eventually also have to be reviewed.

A landmark extension of the work of the Basle Committee was mentioned briefly above. In October 1997, at the time of the IMF meetings in Hong Kong, the Committee released a new set of Core Principles for Effective Banking Supervision, based in large part on their deliberations and decisions taken over previous decades. These principles reflect the strategic considerations described above and constitute a significant development in at least four respects. First, they are *comprehensive* and cover all aspects of banking. Second, they provide a checklist of good practice for use by supervisors, international financial institutions, rating agencies and other *market participants*. Third, they were drawn up with the active *participation of official representatives* from emerging markets. And

[33] See *Basle Committee on Banking Supervision* (1995).

finally, they apply to *all banks* and not just those that are internationally active. This is a major development, the significance of which may not yet have been adequately appreciated.

The obvious remaining challenge is to ensure that these Core Principles are actually implemented. The Committee intends to begin by asking supervisors around the world to endorse the Core Principles and this will be followed by a questionnaire to determine whether actual supervisory practices are consistent with them. In cases of inconsistency, the intention would be to agree on a clear and definite timetable for change with a report on progress made being prepared for the next International Conference of Banking Supervisors in October 1998. This implementation strategy will complement the broader efforts being made to implement the results of the recent G-10 Deputies' study on financial stability in emerging market economies.[34] Broadly put, such implementation will demand an important degree of political will in all countries concerned. Mustering such will, particularly in the face of monopoly rents and the entrenched interests they support, will not be an easy task. Ways must also be found to evoke market discipline in ensuring that required changes are carried out.

Reflecting the breakdown of sectoral barriers and the growth of international financial conglomerates, the Basle Committee has had increasing contacts with its international counterparts representing both the securities (IOSCO) and the insurance (IAIS) industries. Indeed, all three groups now meet regularly in the Joint Forum on Financial Conglomerates and joint documents are beginning to emerge.[35] To facilitate such work, the IAIS Secretariat moved physically to Basle at the beginning of 1998. However, it is a fact that progress in establishing a consolidated supervisory framework has been slow, sometimes because of the difficulties of ensuring cooperation among different regulatory agencies at the national level. Such concerns may have provided some of the motivation for the recent proposal by the Group of Thirty (1997) that the relatively few, large international conglomerates should establish, promulgate and oversee their own industry standards, subject to review by a single international auditor with the active cooperation of supervisory bodies. What remains to be determined is whether this would provide an adequate degree of complementarity between market and regulatory discipline. An active debate on this issue seems both needed and likely.

b. The Euro-currency Standing Committee

Financial markets are the second major pillar of the international financial system. Analysing new developments in this area and the possible policy requirements arising from them has traditionally been of interest to the Euro-currency Standing Committee. This Committee was originally established to look into the expansion of international bank lending, and the LDC debt crisis was its principal preoccupation for much of the early 1980s. To provide increased possibilities for the official

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[34] The Secretariat of the G-10 Deputies has recently sent out a questionnaire to a wide range of national and international bodies to ascertain what each has done to support the strategy laid out in the original G-10 report. A report on progress to date and potential further steps will presumably be put forward to the G-10 Ministers and Governors.

[35] See *Basle Committee on Banking Supervision* (1998a).

and private sectors to monitor risk in this area, the Committee gave the BIS a mandate to coordinate the collection and dissemination of relevant international banking data from national (creditor) sources. Indeed, in recent years the international banking statistics have expanded in both content and geographic scope and further improvements are under way.[36]

The BIS statistics on international bank lending have received particular attention recently in the light of the Asian crisis. This crisis is similar to the debt crisis of the early 1980s in that banks have been the principal international creditors.[37] Moreover, the BIS is now also maintaining an extensive database on international securities markets and has dramatically expanded its coverage of derivatives markets. In addition to the triennial survey conducted by central banks, about 75 major financial institutions began, in June 1998, semi-annual reporting on their consolidated derivatives activity. Analysis of recent data and associated regulatory developments in all these areas (banking, securities and derivatives markets) is presented in various BIS publications.[38] While seeking to be neither alarmist nor prescriptive, this analysis does also attempt to highlight points of strain in the international financial system. Examples going back to 1996 included comments on the heavy exposure of Thai and Korean banks to short-term foreign currency financing, and the sharp reduction in both credit and market risk premia associated with relatively risky investments worldwide. The fact that these concerns were generally ignored, as were the similarly muted warnings by other international financial institutions, seems worthy of further reflection.

Over the last decade, the Committee has focused on the implications of financial innovations - and in particular of the rapid growth of derivatives markets designed to facilitate the transfer of market risk - for the functioning and stability of markets. While the general conclusion reached has been that derivatives enhance market efficiency,[39] financial innovation has also brought with it a diminution of transparency in markets and made it more difficult for market participants to assess the creditworthiness of individual counterparties. To help deal with these problems, the Committee (in association with the Basle Supervisors) has taken steps to encourage key market participants to improve their public disclosure practices, notably in the area of market and credit exposures, by drawing on information generated by their internal risk management systems. The semi-annual global statistics on derivatives markets, referred to above, should also help participants assess the significance of their own positions in these markets.[40]

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36 Data on loans made by banks will increasingly be available on an "ultimate risk" basis. That is, loans made to (say) a Brazilian bank in the United Kingdom will be classified as Brazilian and not UK exposure. The number of reporting countries is also likely to expand to record loans by (say) Korean banks to (say) Russian borrowers. The timeliness of the statistics is also being addressed.

37 In contrast, it differs in that sovereign borrowers were of primary importance in the early 1980s and today it is primarily private borrowers in Asia.

38 In particular, see the quarterly "International banking and financial market developments" and the semi-annual "The maturity, sectoral and nationality distribution of international bank lending".

39 See *Euro-currency Standing Committee* (1986) and (1994a).

40 See *Euro-currency Standing Committee* (1996).

Since the financial world is always changing, new questions pertinent to the mandate of the Euro-currency Standing Committee are always arising. One set of issues has to do with the implications for financial stability of structural changes in financial intermediation, notably a world in which non-bank financial entities and markets are coming to play increasingly prominent roles. A further source of concern is the resilience of liquidity in linked markets under stressful circumstances.[41] Many markets are dominated at the wholesale level by a relatively small number of key players (albeit often different ones in different markets), and their interactions as they strive simultaneously to adjust to common shocks can be an important determinant of market outcomes. Although short-term financial market volatility seems to have decreased over the last decade or so, we have observed occasional bouts of price "gapping" as well as sudden reversals of longer-term price movements without any obvious economic rationale. The reasons for this, and the possible implications for the solvency of market participants, need further assessment.

c. *The Committee on Payment and Settlement Systems*

The third pillar of the international financial system is the payment and settlement system. As the gross volume of financial transactions has expanded in recent years, the exposure of individual firms to possible non-payment by a counterparty has increased commensurately. Failing timely settlement, they too might be unable to meet their obligations, raising the prospect of gridlocks of potentially significant proportions. In recent years, the Committee on Payment and Settlement Systems has made many concrete proposals as to how these systems might be strengthened. While the focus has been on the timely settlement of large-value transfers, issues relating to retail payment systems (especially the implications of electronic money)[42] have also begun to receive attention. Typically, the action needed requires cooperation between the public and private sectors, but as far as possible the private sector has been encouraged to help itself.

The work of the Committee has consistently emphasised the importance of large-value interbank funds transfer systems, for the obvious reason that banks continue to be at the core of the international financial system. One of the Committee's first projects was a detailed analytic review of payment system developments in the G-10 countries, the results of which were published in 1985 in the form of a "Red Book" on payment systems. Since then, similar books have treated payment systems in a number of other countries, both industrial and emerging, and Red Books are regularly revised in the light of changing practice. As well, considerable efforts have been put into evaluating different kinds of cross-border and multicurrency interbank netting schemes and various reports have laid down agreed (by the G-10 central banks) minimum standards for such private sector systems.[43]

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41 For a recent discussion of market dynamics, market liquidity and the role of information in price determination in stressful situations, see *Euro-currency Standing Committee* (1997).

42 See *Committee on Payment and Settlement Systems* (1996a).

43 Among others, see *Committee on Payment and Settlement Systems* (1990a), (1990b), (1993) and (1995).

The Committee's most recent work focusing on banks is a report on real-time gross settlement (RTGS) systems.[44] These systems, which are now in place in most G-10 countries along with many others, protect against gridlock by ensuring final settlement of all transactions, transaction by transaction in real time. The report not only provides an overview of key concepts and principal design features but also describes the risks associated with such systems and some broader policy implications. It addresses the particular differences between systems already in place, the management of liquidity in such systems, and the various procedures used to queue payment instructions. The report is the first of its kind and is likely to prove particularly useful to both emerging and industrial countries still in the process of modernising their settlement systems.

In recent years, the Committee has extended its interest beyond banks to settlement systems for securities and foreign exchange, and clearing arrangements for exchange-traded derivatives. In all cases, the nominal values of the daily transactions are very large. Various reports on arrangements to support securities transactions have been published since 1992, with the latest effort focusing on a disclosure framework for system operators that will allow participants in such arrangements to better evaluate the risks they are running.[45] As for exposure to settlement risk in foreign exchange markets, the Committee has established that settlement exposures are much larger than had previously been thought. In a report published last year,[46] they also indicated ways in which participants could reduce such risks and strongly suggested they do so to avoid a punitive response from public sector authorities. Regarding clearing arrangements for exchange-traded derivative instruments, the Committee published a report in March 1997[47] which systematically reviewed such arrangements, identified weaknesses and made recommendations for remedying them. As with many other Committee reports, it contains a great deal of factual and comparative information not available elsewhere.

Finally, the Committee recognises that issues having to do with the use of collateral to manage risk, and with the operational reliability of the infrastructure (e.g. business continuity planning, especially with regard to IT services), are also germane to a well-functioning payment system. So too are many legal issues, such as the enforceability of netting agreements and the complications likely to arise from the absence of an international agreement on bankruptcy procedures for internationally active financial institutions. The bottom line is that the task of ensuring timely settlement in all circumstances remains incomplete and the Committee's agenda is still full.

d. Global participation in the work of the committees

Finally, the increasing efforts made by the various committees to involve non-G-10 countries in their work deserves to be emphasised. The Core Principles were drawn up with the close cooperation of non-G-10 supervisors, and the "Report on cross-border banking" was prepared jointly

44 See *Committee on Payment and Settlement Systems* (1997a).

45 See *Committee on Payment and Settlement Systems* (1997c).

46 See *Committee on Payment and Settlement Systems* (1996b).

47 See *Committee on Payment and Settlement Systems* (1997b).

with the Offshore Group of Banking Supervisors. Regional supervisory groups meet regularly with representatives of the Basle Committee in attendance, and there has been a significant increase in supervisory training by G-10 supervisors in association with the Secretariat of the Basle Committee. Finally, the Committee has recently initiated joint meetings with regional supervisors on the occasion of its quarterly meetings in Basle. All of these efforts are directed to building a truly global network of supervisors and the wide dissemination of documents, standards and guidelines developed by the Committee in association with others. Similar initiatives have recently been undertaken by the Committee on Payment and Settlement Systems with similar objectives in mind. The Euro-currency Standing Committee had, for many years, “extended” meetings involving representatives of important non-G-10 financial centres. However, it is now actively engaged in discussing how broader participation might be made more effective.

D. The role of the BIS in crisis management

It has been analytically convenient above to deal separately with the three major components of the international financial system and the BIS committees which support each. This approach also emphasises the comprehensive reach of the Committees’ concerns. However, a deficiency of this approach is that it fails to emphasise the relationships between the various components of the system, as well as the further links to macroeconomic variables of interest to central bankers. In fact, it is the complex reality of these interrelationships that makes the pursuit of financial stability such a challenging task and also accounts for the fact that there have been so many financial crises along the way.

Before turning to the role of the BIS in crisis management, it is important to note that, even at the domestic level, a certain “constructive ambiguity” often applies about the potential role of the public sector. This is to avoid bad behaviour and moral hazard on the part of the private sector. Given that no two crises are the same, the amount of pre-planning that can be done is in any event limited. Perhaps the most that can be hoped is that the prospective players in the unfolding drama - the central bank, the Treasury, supervisory bodies and deposit insurance agencies - know each other well and have well-established lines of communications, so that decisions affecting all can be speedily agreed upon. At a moment of crisis, the time allowed for decision-making is not likely to be great. Moreover, as we have seen in South Asia, the failure of domestic policy-makers to take credible policy actions quickly (particularly if these policies have been prescribed in the context of an IMF programme) can result in the market imposing heavy penalties.

The provision of international support to help resolve financial crises with international ramifications should be equally ambiguous if moral hazard is to be avoided.[48] In any event, liquidity

[48] A new but unwelcome form of ambiguity has emerged in the context of the Asian crisis. The short-term liquidity requirements of a number of countries have been so great as to call into question whether the Fund had adequate resources to restore confidence on the part of private creditors. For example, as of July 1996 the

support from the International Monetary Fund to sovereign borrowers must continue to be firmly linked to conditionality and the adjustment of domestic policies. Moreover, support should be provided in such a way as to insure that all the parties whose behaviour contributed to the crisis (both debtors and imprudent creditors) pay some part of the costs. As for liquidity support to internationally active banks, the G-10 Governors have agreed that such support should be provided in the first instance by the home-country authorities. However, this decision still leaves unclear whether the home authorities will be prepared to do so. The willingness of the Bank of England to allow Baring Brothers to fail is a welcome indicator of this ambiguity. What is also unclear is the extent to which other national authorities might act to support the home authorities in different circumstances. The 1996 agreement between the Federal Reserve and the Bank of Japan, under which the Bank of Japan could obtain dollar funds through repo arrangements, gives some indication of the possibilities in this regard.

Given the scope, increasingly wide participation and regularity of the meetings which take place in Basle, the BIS makes an important contribution to international financial stability by ensuring that policy-makers (at least central banks and other regulators) know each other well and have open lines of communication. This is the institution's most important contribution to crisis management, although not its only one. The international community (in particular the central banks of the G-10 countries) have often found it appropriate to provide bridge loans through the BIS to countries in financial difficulties which are awaiting the receipt of funds from the IMF, the World Bank or other such bodies. Such bridge loans often provide needed liquidity, are an indication of international support for the policy changes normally associated with Fund programmes, and ensure a continuing central bank involvement in the process of crisis management. While this role might be thought less important in the future, given that the Fund can now disburse much more rapidly than before thanks to the new Emergency Financing Mechanism, some possibilities still remain open. For example, in view of its expertise with arranging bridge loans, the BIS might be asked to help draw up multilateral legal agreements to ensure equal and fair treatment of sovereign creditors should loans go bad. Attempts to use bilateral agreements to secure a "second line of defence" in support of the IMF programme for Korea in recent months have become extremely complicated and are not yet complete.

For completeness, it should be noted that the BIS, in addition to providing support for bridge loan facilities, is also prepared to act as a principal and to lend funds on both a collateralised and an uncollateralised basis. Needless to say, the sums available in this fashion must be strictly limited by concerns about prudent behaviour and the continuing good financial health of the BIS itself. Nevertheless, there have been occasions when even the relatively small loans made by the BIS may have been useful in stopping small problems from potentially turning into much bigger ones.

E. Conclusions

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short-term debt (less than one year to maturity) owed by Korean debtors to international banks amounted to almost $70 billion. See *Bank for International Settlements* (1998c). Private bankers did finally agree to establish a process for rolling over this debt. However, to the extent that this was not purely voluntary, the difference between this procedure and a debt rescheduling is moot.

As the process of liberalisation and globalisation proceeds, markets increasingly replace the dictates of governments and regulators. This is perhaps even more true with respect to financial markets than in other areas of economic activity. As a corollary, the influence of those government bodies which work closely with markets tends to be enhanced. In part, this may explain the perception that both the domestic and the international profile of central bankers has risen in recent decades. Without delving too far into bureaucratic theories of institutional behaviour, the desire to expand their influence may be a further reason explaining why both central bankers and other regulators are increasingly relying on market processes to achieve their objectives. The role and reputation of the BIS has been similarly enhanced in that international cooperation among central banks and other regulators in large part takes place in that forum.[49]

Another change affecting the work of the BIS in recent years has been the growing emphasis being put by governments on issues having to do with financial stability as opposed to price stability and traditional macroeconomic preoccupations. It is of some note that the last four G-7 Summit Communiqués (Halifax, Lyon, Denver and Birmingham) put strong emphasis on such issues while hardly mentioning international macroeconomic policy coordination. It is also notable that, at the semi-annual meetings of the G-10 Governors and Ministers, the General Manager of the BIS has in recent years reported regularly on work being undertaken at the BIS in this area. This is not to say that traditional macroeconomic concerns have somehow become less important. Rather, these recent developments indicate that the BIS, and those who regularly meet there, now seem to have a wider scope for contributing to global economic welfare than perhaps ever before.

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[49] An important early paper describing this cascading process (from markets to central banks to the BIS) was written by *Padoa-Schioppa and Saccomanni* (1994).

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