FINANCIAL STABILITY IN EMERGING MARKET ECONOMIES

A strategy for the formulation, adoption and implementation of sound principles and practices to strengthen financial systems

April 1997

Report of the Working Party on Financial Stability in Emerging Market Economies

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ISBN 92-9131-902-3

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EXECUTIVE SUMMARY

In response to an initiative at the Lyon summit in June 1996, representatives of the Group of Ten countries and of emerging market economies have jointly sought to develop a strategy for fostering financial stability in countries experiencing rapid economic growth and undergoing substantial changes in their financial systems. This enterprise has been prompted by the recognition that banking and financial crises can have serious repercussions for these economies in terms of heightened macroeconomic instability, reduced economic growth and a less efficient allocation of savings and investment.

Representatives of Argentina, France, Germany, Hong Kong, Indonesia, Japan, Korea, Mexico, the Netherlands, Poland, Singapore, Sweden, Thailand, the United Kingdom and the United States participated in the work, which was carried out under the chairmanship of Mario Draghi, Chairman of the Deputies of the Group of Ten. In the course of the work, representatives of these economies consulted officials from other countries in order to take account of their views on the matters being considered. Representatives of the Basle Committee on Banking Supervision, the International Accounting Standards Committee (IASC) and the International Organization of Securities Commissions (IOSCO) and staff members of the Bank for International Settlements (BIS), the European Commission, the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD) and the International Bank for Reconstruction and Development (World Bank) attended the meetings and provided crucial input. The Working Party also consulted other international groupings, received contributions from a number of regional development banks and had the benefit of market participants' views.

The aim of the work is to develop a concerted international strategy to promote the establishment, adoption and implementation of sound principles and practices needed for financial stability. The strategy has the following major components:

- Development of an international consensus on the key elements of a sound financial and regulatory system by representatives of the Group of Ten and emerging market economies.
- Formulation of norms, principles and practices by international groupings of national authorities with relevant expertise and experience such as the Basle Committee, the International Association of Insurance Supervisors (IAIS) and IOSCO.

- Use of market discipline and market access channels to provide incentives for the adoption of sound supervisory systems, better corporate governance and other key elements of a robust financial system.
- Promotion by multilateral institutions such as the IMF, the World Bank and the regional development banks of the adoption and implementation of sound principles and practices.

In developing this strategy the working party has been guided by three fundamental premises:

- Ultimate responsibility for policies undertaken to strengthen financial systems must lie with the national authorities, which have a strong interest in developing sound arrangements for their financial systems.
- In an increasingly integrated global economy, financial sector stability is most likely to be achieved when international prudential standards are met and when markets operate competitively, professionally and transparently, according to sound principles and practices that generate the relevant information and appropriate incentives.
- Sound macroeconomic and structural policies are essential for financial system stability to prevent or at least limit the emergence of serious financial imbalances, misleading price signals and distortions in incentives.

Financial stability requires sufficient political and social consensus supporting the measures needed to establish and maintain that stability. A financial system that is robust is less susceptible to the risk that a financial crisis will erupt in the wake of real economic disturbances and more resilient in the face of crises that do occur. Although reforms are in many cases urgent, the time required for their implementation will differ considerably depending on their nature and the need for appropriate sequencing. The international community can be of assistance by developing in a consultative manner a corpus of sound principles and practices bearing on financial system robustness and supporting their adoption and implementation.

Sources of financial instability

Past experience demonstrates that financial instability in emerging market economies can be attributed to a wide range of microeconomic and institutional failings. However, it is almost invariably in an unstable macroeconomic environment, in the wake of major structural transformations, or as a result of significant distortions in the real economy, that these failings

give way to systemic crises. Emerging market economies have been more prone to boom-bust cycles and to sudden corrections in asset prices, in part because they have tended to be less diversified and less able to absorb shocks than more mature industrial economies. Macroeconomic instability in emerging market economies has also reflected weaknesses in macroeconomic management.

While the macroeconomic and broader structural environment in which financial institutions operate has played an important role in the unfolding of financial crises, the root causes are generally to be found in microeconomic and institutional failings. Generally, problems begin with lax management within financial institutions. Poor internal controls, connected lending, insider dealing and fraud are often the source of poor asset quality. Moral hazard worsens when owners do not face proper incentives to act prudently and to supervise managers, who may then be guided by objectives that are not compatible with sound financial practices and be shielded from external discipline. Weaknesses in the legal framework compound the problems of lax management and weak corporate governance, for instance by undermining the collection of collateral. Once credit quality has been compromised, regulatory shortcomings and supervisory forbearance can aggravate matters by failing to identify problems and preventing them from being addressed in a comprehensive and timely fashion. The market can play a crucial role in disciplining bad performers, but this function can be hindered by inadequate information or distorted incentives, such as explicit or implicit government guarantees. In the absence of effective market discipline, the entire burden of external oversight falls on regulators and supervisors, who may not have the requisite capacity.

Key elements of robust financial systems

Crucial actions for strengthening financial systems, whose priority and speed of implementation will vary from country to country depending upon the stage of development of the financial system, are:

- Creation of an institutional setting and financial infrastructure necessary for a sound credit culture and effective market functioning. To this end, it is necessary to:
  - create a legal environment where the terms and conditions of contracts are observed and where legal recourse, including the taking possession of collateral, is possible without undue delay;
  - foster the development and adoption of comprehensive and well-defined accounting principles that command international acceptance and provide accurate and relevant information on financial performance;

  - promote robust payment, settlement and custody arrangements;
  - establish an adequate array of competitive financial markets where a full range of financial instruments can be developed and issued so as to promote financial system resilience and, in particular, facilitate risk management.

- Promotion of the functioning of markets so that owners, directors, investors and other actual and potential stakeholders exercise adequate discipline over financial institutions. To this end, it is necessary to:
  - improve the quality, timeliness and relevance of standards for disclosure of key information needed for credit and investment decisions and foster efficient use of this information by such entities as rating agencies, credit bureaus and central credit registers;
  - promote effective systems of internal management and risk control with strict accountability of owners, directors and senior management (including prevention of insider abuses and financial crime, control of connected lending and promotion of accurate loan valuation, asset classification, risk assessment and provisioning practices);
  - ensure that financial institutions have capital commensurate to the risks they bear, underpinned by the minima established by the relevant international groupings;
  - encourage ownership structures that foster stakeholder oversight, including private ownership to strengthen the monitoring of management performance and to reduce distortions in incentives;
  - promote openness and competitiveness in banking and financial markets, subject to essential prudential safeguards;
  - enhance the professionalism and skills of managers of financial systems;
  - design and apply safety net arrangements (deposit insurance, remedial actions, exit policies, etc.) so that the incentives of depositors, investors, shareholders and managers to exercise oversight and to act prudently are not undermined.

- Creation of regulatory and supervisory arrangements that complement and support the operation of market discipline. To this end it is necessary to:
  - ensure that supervisory and regulatory authorities are independent from political interference in the daily execution of supervisory tasks but are accountable in the use of their powers and resources to pursue clearly defined objectives;

- ensure that the authorities have the power to license institutions, to apply prudential regulations, to conduct consolidated supervision, to obtain and independently verify relevant information and to engage in remedial action;
- ensure they have the powers and sufficient resources to cooperate and exchange information with other authorities, both at home and abroad, thereby supporting consolidated supervision.

Developing sound principles and practices

A corpus of sound principles and practices is useful when action is taken to strengthen financial systems. For any specific area or activity relevant for robust financial systems, there should be a single set of principles developed through a broad international consultative process involving national experts with extensive experience in the area in question. The principles developed for various areas should be mutually consistent, and applied in the light of the circumstances of each country.

Sound principles and practices should be established in the following areas and by the following international groupings:

Accounting. The International Accounting Standards Committee is working to develop a set of high-quality accounting standards, particularly for listing purposes; if this is successful, it will contribute to ensuring that information contained in the financial statements is accurate, timely and comprehensive. Cooperation with other relevant groupings such as IOSCO and the Basle Committee should continue to take place.

Payments and settlements. The Committee on Payment and Settlement Systems of the G-10 central banks should continue to foster the development of efficient and robust payment and settlement systems and practices.

Banking supervision. The Basle Committee on Banking Supervision of the G-10 central banks should continue to promote the development of a comprehensive and internationally endorsed set of principles and practices for banking supervision.

Securities market supervision. The members of the International Organization of Securities Commissions should assign high priority to the development of a comprehensive and internationally endorsed set of principles and practices for the regulation of securities and futures markets.

Insurance supervision. The International Association of Insurance Supervisors should complete the development of principles relating to the supervision of insurance companies and supplement them by guidelines that could be applied by national authorities.

Financial conglomerates. The three international supervisory groupings (for banking, securities and insurance) should cooperate through the Joint Forum to ensure that conglomerates are subject to adequate supervision, particularly as they present special challenges on account of their size and complexity.

In all areas the work of such groupings should respect the broad strategy and key premises listed above. Where they have not yet done so, the groupings should establish precise timetables for the completion of their work.

Although the above international groupings should have primary responsibility in their areas of expertise, a complementary role can be played by such other groupings as the Euro-currency Standing Committee of the G-10 central banks and various committees at the OECD. There are some areas where no single grouping would naturally assume primary responsibility for forging consensus on principles and practices. In these, consideration needs to be given to whether an international consensus on sound practices is needed, and if it is, what procedures should be established for developing one.

Adopting and implementing sound principles and practices

Involving a wide range of countries in the process of formulating principles and practices facilitates their adoption and implementation because it generates a degree of commitment that would be difficult to achieve in the absence of such consultation. A variety of complementary methods contribute to the adoption of sound practices.

Market access. Financial markets can provide strong incentives for the adoption of standards that alleviate creditors' concerns about the soundness of the financial system. The desire to gain access to key financial markets can be a strong incentive as well.

One of the most effective means to spread best practice in banking and other financial activities is through the professional and commercial operations of well-run banks and other institutions active in both established and emerging market economies. Accordingly, authorities in all economies should provide well-managed financial institutions with access to their markets. This will promote the spread of high-quality management systems and professional skills, thus contributing to the strengthening of the "credit culture".

International organisations such as the IMF, the World Bank and the regional development banks and the OECD should support this process. They can also contribute to the acceptance and implementation of principles and practices developed by the relevant international groups. These institutions should foster the spread of best practice through market channels. They should support countries' efforts to reduce the macroeconomic

imbalances and eliminate the structural distortions that are at the root of financial instability. By promoting the improvement of the quality and comparability of the information currently made available, and encouraging and supporting further dissemination of data, they can enhance the capacity of shareholders, interbank counterparties, retail depositors and other actual and potential claimants to monitor progress and to provide the incentives and discipline that will bolster the robustness of financial systems.

Taking stock of progress in the adoption of sound principles and practices. In its surveillance the IMF should take stock of the progress that countries with clear vulnerabilities have made in the adoption of sound principles and practices developed by the international groupings. In its policy advice it should consider the macroeconomic implications of financial sector or supervisory weaknesses and draw the attention of national authorities to macroeconomic imbalances that can disrupt the banking and financial sector. In some instances, the World Bank may have superior information on financial conditions in a country and on the health of its financial system. The IMF and World Bank should develop modalities for sharing their assessments of financial sector strength and the regulatory and supervisory regimes in individual economies. Other multilateral organisations with less universal membership can also contribute to monitoring the adoption of sound practices. The OECD engages in peer group reviews in this area, and the European Commission considers the strength of the financial sector in the process of accession to the European Union.

Advice for financial sector reform. The World Bank and the regional development banks are the most appropriate institutions for providing advice for the development of robust and efficient financial structures in emerging markets. This will involve the provision of advice to client countries modelled on the norms developed by the international groupings.

Financing programmes of financial sector reform. The World Bank and the regional development banks should provide financing for financial sector reform and structural measures to strengthen financial systems. In cases where immediate balance-of-payments problems or macroeconomic strains arise in part because of weakness in the financial sector or in the framework for financial supervision and regulation, IMF-supported programmes could include steps to correct shortcomings in the financial sector.

Technical assistance can be of great help in developing the skills needed for a robust financial system. Such assistance can be provided by the private sector, by the bilateral official sector and by the multilateral agencies. The private sector and bilateral official sector both have expertise and experience that is highly relevant and are therefore in a good position to support countries' efforts to strengthen their financial systems. The multilateral institutions should foster the spread of this expertise as they give higher priority to financial sector issues in their activities. Among the multilateral institutions the World Bank and the regional

development banks should play a leading role in providing technical assistance to countries seeking to build strong financial systems. Coordination is needed to ensure that the activities of the different institutions are complementary. The recipient countries should play an active role in coordinating the technical assistance they receive so as to ensure that it addresses their needs.

Coordination. Because the roles and responsibilities of the IMF and the World Bank overlap in many respects, close coordination between them is essential with respect to their assessment of financial systems, programme design and technical assistance. They should also further clarify their respective roles in order to ensure complementarity, bearing in mind their different comparative advantages. In all three areas they should develop practical and effective means to ensure close collaboration. It is also important to ensure that there is adequate cooperation between the Bretton Woods institutions and other multilateral institutions, such as the regional development banks, the European Commission and the OECD, and also with the international groupings such as the Basle Committee and IOSCO. The Bretton Woods institutions should work in close cooperation with the international groupings that have developed norms and principles relevant for financial stability. The multilateral institutions should utilise the prevailing norms when developing internal guidelines for use by their country and sector experts. In addition, they should cooperate with various international groupings, exchanging relevant information as needed.

Chapter I

SOURCES OF FINANCIAL INSTABILITY

Introduction

Increasingly, macroeconomic instability in emerging market economies, as well as in more mature industrial economies, has been associated with serious problems in the financial sector. The macroeconomic costs imposed by financial sector problems have been very large in terms of forgone growth, inefficient financial intermediation and impaired public confidence in financial markets. The resolution costs have themselves largely been borne by the public sector. For example, the cumulative fiscal and quasi-fiscal outlays associated with systemic bank restructuring have amounted to about 30% of GDP in Chile (1981-87) and 20% in Venezuela (1994-present). Significant fiscal and quasi-fiscal costs, in the order of 10-15% of GDP, have also been observed in Spain (1977-85), Mexico (1994-present) and Hungary (1987-present), and on a somewhat smaller scale in Finland (1991-94), Poland (1991-present) and Sweden (1990-93).[1] The estimated fiscal cost of the 1980s S&L crisis in the United States has been put at between 2 1/2 and 3% of GDP.[2]

Crises in the financial sector have also involved significant international spillover risks, which are of direct concern to the international financial community. In a number of cases they have resulted in international financial support to countries facing financial crises; this support has been instrumental in containing the risks of contagion, and has also helped countries smooth out the economic costs of the crises over time.

Domestic financial sector problems have been located primarily in the banking sector. This reflects the fact that, despite the expansion of capital markets in emerging market economies, banks remain the dominant channel of financial intermediation in emerging market economies. In most Asian and Latin American countries, banks still account for more than 80% of financial intermediation.[3] In these circumstances, the banking sector is likely to remain the principal source of systemic vulnerability in the financial sector. However, financial instability in emerging market economies can also originate from other financial institutions, to the extent that these tend to be less well capitalised than in industrial countries.

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[1] Lindgren et al. (1996) and IMF staff estimates. Owing to efficient restructuring and asset recovery, the final costs may in fact be much lower than previously expected in the case of Sweden.

[2] US Federal Reserve staff estimate.

[3] IMF (1996).

The vulnerability of the financial sector is inherent to the function it performs, namely to transform risk and liquidity. Financial sector crises are thus closely associated with a breakdown of these functions. The various episodes of financial sector instability in emerging market and industrial economies alike can be traced to similar weaknesses and failings in the countries concerned, notably in the areas of corporate governance and management, the incentive structure provided by the financial and institutional frameworks, market discipline and regulatory and supervisory structures.

However, it is almost invariably in an unstable macroeconomic environment, in the wake of serious macroeconomic policy failures or major structural transformations, or as a result of significant distortions in the real economy, that these vulnerabilities give way to systemic crises. This reflects the adverse impact of macroeconomic instability and structural distortions on price signals, asset price volatility and incentives to act prudently. Indeed, empirically, banking crises have frequently occurred following periods of rapid expansion in economic activity linked to the emergence of unsustainable macroeconomic imbalances, frequently combined with market distortions. A sudden correction in asset prices following the emergence of these imbalances exposes the underlying weaknesses of the financial sector and often acts as the trigger for a crisis. Emerging market countries with relatively sound financial systems have, in contrast, been able to overcome severe external macroeconomic shocks, as in the case of Chile in the aftermath of the Mexican crisis of 1994-95.

The experience of many countries also indicates that, in a financial sector crisis, causality between the macroeconomic framework and financial sector soundness runs in both directions. Thus, while macroeconomic instability weakens financial institutions, an unsound financial sector, in turn, undermines macroeconomic performance and magnifies the effects of shocks and disturbances in the economy. In what follows, this chapter will deal successively with macroeconomic sources of vulnerability, weaknesses specific to the financial sector itself and the interaction between the two sources of fragility.

Macroeconomic sources of vulnerability

Instability

Macroeconomic instability - high and variable inflation rates, booms and busts in economic activity, and unsustainable fiscal and external positions - is the most obvious and direct macroeconomic source of vulnerability faced by banks and the financial sector on account of its adverse effect on asset price volatility and the allocation of financial resources. Although financial institutions, in principle, can hedge against volatility in their own

portfolios, macroeconomic risks or volatility cannot be hedged away in the aggregate. Thus, in economic downswings banks cannot protect themselves against a deterioration in the quality of loan portfolios, which erodes their capital and reserve positions. While economic booms or loose financial policies may improve bank profitability in the short term, they are likely to destabilise banks in the medium term if they result in asset price bubbles and inflation.

Macroeconomic instability also contributes to wide and sudden changes in asset prices. Declines in real estate prices were important factors behind banking problems in the Nordic countries, the United States and Venezuela, as was the bursting of the equity and real estate price bubbles in Japan in the 1990s.[4] Asset price swings are often accentuated by distortions in the real economy, such as tax provisions that encourage borrowing or investment in real estate and which alter financial prices and incentives. Significant changes in relative prices - typically shifts in the terms of trade - also contributed to banking difficulties in a number of other countries, including Chile in the early 1980s, Malaysia in the mid-1980s, as well as Nigeria and Norway following the decline in oil prices that began in 1986.[5]

The financial misallocations and subsequent corrections associated with macroeconomic instability are often related to inadequate risk management on the part of financial institutions, investors and market participants. Over-optimism, often in the wake of liberalisation, leads to a rapid expansion of domestic credit during favourable economic conditions, including increased lending to high-risk sectors, which in turn can feed asset prices bubbles. Rapid growth in banking system credit relative to GDP was observed prior to financial crises in Argentina, Chile, Colombia, Finland, Mexico, Norway, Sweden and Uruguay.

Macroeconomic instability has tended to be more pronounced among developing and emerging market economies than in industrial countries. This reflects, in part, the fact that these economies have tended to be less diversified and have frequently been impaired by structural rigidities or imperfect or incomplete markets, with the result that they have been more exposed to, and less able to absorb, economic shocks. As a consequence, these countries tend to be confronted by wider swings in real exchange and interest rates, private capital flows, and terms of trade relative to the size of their economies than those faced by industrial countries, which exposes their financial systems to commensurately greater risks.

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4 Lindgren et al. (1996).

5 Lindgren et al. (1996).

Macroeconomic instability does not only reflect the structure of the economy, however. Weaknesses in macroeconomic management have often been the primary source of episodes of macroeconomic instability. Sudden changes in macroeconomic policies, the accumulation of unsustainable fiscal and current account imbalances, heavy reliance on volatile short-term external financing, or the defence of an exchange rate that is out of line with fundamentals generally lead to sudden corrections in asset prices and boom-bust cycles.

Weaknesses in macroeconomic management are often reflected in exchange rate instability. The direct exposure of banks, and of other financial institutions, to exchange rate disturbances is linked to the size of their open foreign exchange positions. But there are also important indirect linkages due to the effect of a change in the exchange rate on the performance of borrowers. While extensive "dollarisation" in domestic intermediation may reduce banks' direct foreign exchange exposure, this is often at the expense of increased credit risk associated with the ability of the borrowers to service their foreign-exchange-denominated loans in the event of a large depreciation or devaluation.

Financial systems are also vulnerable to structural changes and shifts in policy regimes, such as liberalisation or disinflation, particularly if institutional failures, structural rigidities or regulatory impediments prevent financial institutions from adjusting to the new environment. For instance, this was the case in many transition economies in the wake of the massive and permanent changes in relative prices, terms of trade and export markets that they experienced.

Inflation

Inflation, particularly when combined with non-neutral tax systems or incomplete markets, distorts incentives for both borrowers and creditors, in ways that make the financial system more fragile. Nonetheless, financial institutions and banks in particular have been able to adapt to inflation, even high inflation, in ways that protect their profitability. For instance, banks adjust to an inflationary environment by indexing lending rates and shifting into assets whose prices lead inflation, such as foreign exchange. The financial sector weaknesses induced by inflation have, typically, been revealed instead during the transition to lower inflation. These weaknesses arise from a number of different factors. First, in conditions of high inflation, a rising share of bank income is derived from the float on payments, from the inflation tax on unremunerated deposits and from foreign exchange dealings. These sources of income tend to dry up when inflation declines. Secondly, high inflation erodes the information base for business planning and credit appraisal, and thereby contributes to raising portfolio risk. High inflation in Russia, for instance, has caused banks to downplay credit analysis and concentrate on earnings in foreign exchange and short-term financial markets. In

Brazil, the weakness induced by this lack (or erosion) of the credit assessment skills of banks was exposed in the transition to a more stable environment during its stabilisation programme.[6] The demand for bank loans during periods of high inflation may also be discouraged by high nominal interest rates. Thirdly, high inflation hampers the development of financial markets especially with respect to debt instruments with longer maturities. Fourthly, in the presence of non-neutral tax systems, inflation distorts financial incentives towards overborrowing.

A significant reduction in the rate of inflation appears to have been a factor in a number of financial crises since 1980. This does not argue for the maintenance of high inflation, but rather points to the need to choose carefully the mix of disinflation policies to preserve bank soundness. Monetary tightening leading to a steep rise in interest rates can result in a sharp decline in asset prices (directly and indirectly by reducing the ability of borrowers to service their loans), which in turn can contribute to banking problems. Disinflation strategies based on exchange rate targets tend to achieve a tightening of monetary conditions with a more attenuated effect on domestic asset prices, although the ensuing changes (and possible misalignments) in real exchange rates can negatively affect banks with foreign exchange exposures. Regardless of the nature of a banking system's risk exposures, however, a stabilisation programme that relies solely on monetary restraint can place excessive demands for swift adjustment on banks. Greater reliance on fiscal retrenchment can alleviate some of these pressures, by reducing the size of the interest rate or real exchange rate adjustment that is required to break the inflationary momentum.

Liberalisation

Liberalisation offers important benefits: it enhances the opportunities for smoothing out the effects of real shocks and it promotes competition and efficiency in the financial sector. In this respect, financial liberalisation, including capital account liberalisation, generally plays a stabilising role. However, during the transition, it can contribute to financial instability by increasing the exposure to credit and foreign exchange risks, particularly if it is undertaken in an unstable macroeconomic environment. Financial institutions in recently liberalised financial systems often lack the experience to manage these risks, and, in the face of stronger competition, institutions will tend to be pushed towards riskier investments. Liberalisation may give rise to incentives for banks that are otherwise soundly managed to build up large open foreign exchange positions abroad to finance domestic assets, or to engage in foreign exchange lending to residents supported by domestic resources. Risks are

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[6] Lindgren et al. (1996).

inherent to financial intermediation and financial institutions should not be fully shielded from them, but the strengthening of the regulatory and supervisory framework in parallel with capital and financial liberalisation can improve the incentives to manage these risk appropriately. However, in many countries that liberalised their domestic financial sectors and their capital accounts, prudential regulation and supervision capabilities did not keep pace, and did little to limit banks' exposures to exchange and interest rate disturbances.

Liberalisation may also increase the vulnerability of the banking sector as a result of an inappropriate sequencing of reforms. In the case of Sweden, for instance, domestic financial liberalisation in the mid-1980s, combined with pent-up demand for credit and a favourable economic cycle, contributed to an unsustainable boom in housing and commercial property, in part because it was carried out without first reducing the tax incentives to borrow and invest in housing. The situation was aggravated by the fact that foreign exchange restrictions prevented residents from investing in foreign real estate assets, which might have relieved the demand pressures on domestic assets. In the event, bank lending rose by some 25% annually and commercial property prices rose by some 150% over a five-year period.[7]

Failures in the design of macroeconomic policy instruments

Fiscal policy affects the financial sector primarily through its impact on macroeconomic stability; fiscal sustainability and the ability of fiscal policy to respond flexibly to macroeconomic shocks are the key factors involved. Fiscal policy choices also have a direct bearing on the strength of the financial system through the tax treatment of financial institutions. Specific taxes on financial institutions, financial instruments or transactions undermine financial intermediation. Tax systems that do not deduct loan loss provisions from the computation of taxable earnings, or that include interest accrued on non-performing assets in the definition of earnings will tend to undermine the accumulation of bank capital and reduce incentives to recognise loan losses in a timely fashion. The tax system more broadly can have implications for bank soundness by altering asset prices and thereby the ability of borrowers to service their loans; the effect of changes in the tax-deductibility of mortgage interest payments on real estate prices is a case in point. On the "expenditure" side, fiscal policy has typically contributed to bank weakness and systemic unsoundness by imposing quasi-fiscal responsibilities on the banking system through directed lending, without adequate compensation for, or incentives to monitor and contain, the underlying risk. Policy-based lending was a particular feature of the banking system in transition economies under central planning, but is not unique to those systems.

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[7] Bank of Sweden staff.

The very choice of monetary policy instruments and central bank facilities can affect the soundness and the vulnerability of the banking system. The absence of a properly functioning lender of last resort facility can induce greater instability in the payment systems and drive illiquid banks into insolvency through a fire sale of assets. The development of financial markets has permitted a move towards indirect (market-based) instruments of monetary control, with considerable gains in terms of efficiency. However, the use of market-based monetary instruments may also increase the exposure of banks to market risk. For this reason, the transition from direct to indirect monetary policy instruments requires careful planning and monitoring of bank soundness.

Sector-specific sources of vulnerability

The unfolding of a financial sector crisis can be attributed to a wide range of microeconomic and institutional failures. Generally, problems begin with lax management within financial institutions. Poor internal controls, connected lending, insider dealing and fraud are often at the root of poor asset quality. Moral hazard worsens when owners do not face proper incentives to act prudently and to supervise managers. A particular case in this regard may be that of government-owned financial institutions if their managers are guided by objectives that are not compatible with sound financial practices, while at the same time being shielded from external discipline. Weaknesses in the legal framework compound the problems of lax management and weak corporate governance, for instance by undermining the collection of collateral. Also, unreliable payment systems and underdeveloped financial systems increase the risks which are inherent to financial transactions. Once credit quality has been compromised, regulatory shortcomings and supervisory forbearance can aggravate matters, by failing to identify problems and preventing them from being addressed in a timely fashion. The market can play a crucial role in disciplining bad performers, but this function may not be performed satisfactorily in the presence of inadequate information or distorted incentives, such as explicit or implicit government guarantees. In the absence of effective market discipline, the entire burden of external oversight falls on regulators and supervisors.

Corporate governance and management

Management failures in the financial sector generally reflect a lack of appropriate incentives to act prudently, owing to inadequate information, accounting, monitoring and reporting procedures and requirements. Weak classification and provisioning requirements for problem loans, for instance, can permit management to show adequate capital the day before a bank collapses. Inexperience, or outright incompetence, fraud and looting have also

played a role in the failure of financial institutions. Mismanagement may reflect a separation of managers' interests from those of the owners, or simply inexperience which induces banks to limit business to a small number of close clients. Poorly managed or financially impaired banks may also fail to undertake adequate credit appraisals, monitor borrowers or enforce financial discipline, undermining financial discipline in the economy at large. In transition economies, such deficiencies are often the legacy of central planning, which cannot be remedied overnight.

Owners, to the extent that they put their own capital at risk, typically have strong incentives to ensure that financial institutions are managed in prudent ways. Government ownership of financial institutions has frequently been at the root of management failures because political pressure may place prudential and commercial considerations second to other objectives, with a resulting incentive structure that does not promote profitability and bank soundness. Directed lending of state banks, for instance, can be an important factor behind poor asset quality. Government ownership can also contribute to blunting external discipline on management to the extent that transparency is low, that supervisors have little leverage with managers and that managers are protected from the risk of takeover.

The incentive structure can similarly be perverted under private ownership, if banks are used as captive sources of finance, so that owners have little net exposure to their banks. Indeed another major cause of management failure, often at the root of banking problems, is insider lending or lending to related enterprises, when lending decisions are not based solely on the borrower's creditworthiness. Inappropriately structured privatisations have been one channel through which related enterprises have gained control of their banks.

As long as they have a significant amount of own capital at risk, owners tend to have a strong incentive to ensure that financial institutions are managed prudently. However, if a bank starts with little capital or its capital (net of lending to owners) is allowed to be eroded, incentives to act prudently are weakened and moral hazard increases. Owners and managers who no longer have significant funds at stake will more readily engage in riskier behaviour. As a result, an unsound bank may offer higher than market interest rates to depositors, undercutting sounder banks, or may choose riskier transactions to earn higher returns. Because constraints from an earlier regime of strict controls had resulted in an erosion of the net worth of US savings and loan associations (S&Ls), these institutions began to engage in increased risk-taking ("gambling for resurrection") when it was decided in the early 1980s to expand the range of activities in which they were permitted to engage. This type of behaviour is accentuated by a presumption of government bailout which encourages a "heads I win, tails you lose" attitude. Poorly capitalised banks can become captive to insolvent debtors, to whom they keep lending (including by capitalising overdue interest) lest their own financial

weakness be exposed. This unhealthy relationship between banks and enterprises has been observed in many transition economies. It is compounded in some cases by asset stripping of enterprises, which further weakens incentives for banks to foreclose.

Market infrastructure and discipline

Poor corporate governance and management are often compounded, particularly in transition and developing countries, by weak legal and judicial infrastructures. Inadequate corporate, bankruptcy, contract and private property law as well as ineffectual judicial enforcement all contribute to a breakdown in credit discipline, leading to a higher incidence of non-performing loans and a lower collection rate, and inhibit the development of a credit culture.

The absence of a reliable legal infrastructure, a lack of information and inadequate disclosure requirements also hamper the development of financial markets (including interbank and capital markets). Without such markets, banks face a much narrower range of investment opportunities and financing sources, making them much more vulnerable to shocks. Incomplete or underdeveloped financial markets also contribute to amplifying price swings, can lead to the collapse of liquidity under stress, and reduce the scope for financial diversification in the economy at large. To be sure, a well-developed interbank market can also be a vehicle of contagion, if sound banks fail to control their exposures to unsound banks.

Deficiencies in the financial infrastructure may also originate from unreliable payment, settlement and custody arrangements. Because of banks' central role in the payment system, weaknesses in the payments infrastructure, due, for instance, to the reversibility of transactions and time-lags, will increase banks' vulnerability to payment risks. These weaknesses tend to be more important in the international payment system.

One of the main factors that undermines the incentives to act prudently is a lack of transparency about banks' operations and financial condition which makes it difficult for stakeholders to exercise proper market discipline - rewarding good performers and sanctioning poor ones. Creditors may fail to discipline poor performers because of distorted incentives, or a lack of timely and accurate information. Government intervention can also blunt incentives to discipline poor performers, and therefore undercut market forces. Such intervention may take several forms, such as creating strong expectations that owners and creditors will be bailed out, weak exit policy and overgenerous lending of last resort and depositor protection. Implicit or explicit government guarantees may also have played a role in fuelling unsustainable real estate price booms, by encouraging overlending and excessive risk-taking by financial institutions. This is not to say that government intervention (e.g.

deposit insurance and lender of last resort actions) should not play a role, since there are significant adverse externalities associated with disorderly market discipline. Where governments do intervene, it is important that they do so in ways that restore as fully as possible the channels of market discipline, to the extent that those channels are not disruptive to financial stability. This will involve addressing the underlying causes as well as the immediate symptoms of a crisis.

Inadequate disclosure, information, accounting standards and basic "hard data" are a widespread impediment to effective market discipline, characteristic of many emerging market economies. Another information-related problem is the fact that bank loans typically do not have an objectively determined market value, which makes it difficult to assess the value of problem loans. The problem is compounded by the fact that managers have incentives to conceal the real value of problem loans, and, when accounting and auditing standards are weak or lack independence, they have ample opportunity to do so, including in off-balance-sheet items, in affiliated companies or in offshore units.

Supervision and regulation

Supervision and regulation are essential complements to effective management and market discipline. Regulations can themselves be a source of vulnerability to the extent that they are too lax, too intrusive, poorly designed, outdated or inadequately implemented. For instance, lax regulations can undermine financial systems by allowing the entry of unqualified owners and managers into the industry, or by failing to step in when weak internal governance has allowed excessive exposures and risk-taking. However, prudential rules governing what activities financial institutions can engage in more often mask quasi-fiscal motivations or other policy objectives, such as channelling financial resources to priority sectors. This kind of non-prudential regulation tends to weaken financial institutions by limiting their ability to diversify risk, and by inhibiting innovation. This was the case with the restrictions on the maturities and interest rates on both assets and liabilities that had been placed on US savings and loans associations, which exposed the industry to an unsound concentration of loans and to excessive interest rate risk.

On the supervisory side, a common and serious problem is forbearance, which allows weak banks with distorted incentives to continue operating, or invites looting by insiders, leading eventually to much larger clean-up costs. Supervisory forbearance may be due to a number of factors, including a lack of supervisory independence, political interference aimed at preventing failures rather than ensuring the exit of weak banks, regulatory capture, a lack of supervisory accountability, or fears of legal challenge. As with management, however, a more basic problem is the lack of reliable information, which makes

it difficult for supervisors to assess the quality of loans, banks' exposures, and the extent of related lending. A lack of skills and inadequate resources frequently complicate the task of supervision.

Feedback effects

While macroeconomic instability weakens the financial system, a fragile financial structure, in turn, tends to make the economy less resilient to shocks and to amplify their effect. The example of unbalanced and excessive growth in bank credit during economic upswings was cited above. Similarly, a downswing will be aggravated if banks are forced to call loans or sell assets and collateral in a declining market, or attempt to recover their losses by widening interest rate spreads, as was the case during the 1994 financial crisis in Turkey. Also, the financial cost associated with the resolution of systemic weaknesses or crises can hold back the recovery, to the extent that it induces a compensating fiscal adjustment or rise in private saving in its aftermath.

The degree to which problem institutions can cover their losses by increasing intermediation margins depends directly on the market power of the affected institutions. Problem banks with sufficient market power will be more successful at recovering the cost of non-performing loans by widening interest rate spreads, usually through a rise in lending rates. Thus, if financial weakness is sufficiently widespread or systemic, and entry, including foreign entry, is hampered, interest rate spreads will tend to rise in the economy at large, with adverse effects on capital accumulation. Such was the experience of Brazil, Mexico and Turkey in the wake of their respective banking problems.[8] It has also been found that unsound banking practices, particularly lending to companies in distress, contributed to high real interest rates in Chile and in the Philippines following the liberalisation of interest rates in those countries.[9]

A weak or weakened financial sector will also constrain policy options and possibly encourage mistaken policy action. For instance, when macroeconomic stabilisation or the need to preserve external confidence calls for monetary tightening, concerns about the effect of higher interest rates and reduced liquidity on the cost of funds and the loan portfolios of weak banks may delay policy action and thereby exacerbate the risk of sudden reversals of capital flows, which may, in turn, precipitate a more serious banking crisis. Concerns of this

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8 IMF (1996).

9 Lindgren et al. (1996).

type are likely to have played a role, for instance, in Mexico and in Venezuela in 1994.[10] In this latter case, for instance, the central bank expanded liquidity to assist domestic banks despite rapid inflation and large foreign exchange reserve losses.

Domestic financial sector weaknesses have other important potential repercussions on exchange rate stability and the balance of payments. An unsound domestic banking system will be less capable of providing an efficient foreign exchange market and of maintaining adequate correspondent relationships and external interbank credit lines. Also, worries about the soundness of the financial system can trigger a flight to quality by domestic depositors and foreign investors, often in the form of an exchange of domestic for foreign assets with implications for the exchange rate as in Israel in 1983.[11]

An unsound banking system will impair the transmission mechanism of monetary policy and complicate monetary management, as normal relationships between policy instruments and targeted objectives become less predictable, and by implication monetary targeting becomes more vulnerable to policy errors. For instance, the money multipliers rose in periods of unsoundness in Argentina, Chile, Ghana, the Philippines and Uruguay, but fell in Estonia. Unsound banks are also less sensitive to an increase in the cost of funds and more willing to accept risky borrowers. Shifts in the interest rate elasticity of monetary aggregates have been documented for Argentina, Chile, the Philippines, Spain and Uruguay following banking crises.[12] This inability of banks to respond to changes in credit or interest rate conditions, and to transmit those signals to the market, will impair the transmission of monetary policy, whether through the credit or the interest rate channel.

Since the money market cannot be expected to lend to unsound banks trying to make up for liquidity shortfalls, the resulting segmentation of the market will further complicate matters and make interest rate signals less meaningful. Liquidity management will be blunted by the interest rate inelasticity of demand of high-risk borrowers, and market segmentation will impede the dispersion of liquidity throughout the system. Thus, reserve shortfalls in unsound banks will not be responsive to changes in policy rates. The tendency of unsound banks to overvalue loans, misclassify non-performing loans and capitalise overdue interest will also complicate monetary management, by making it more difficult to assess the impact of credit expansion on the economy. For instance, capitalisation of interest is estimated to have accounted for some 65% of credit expansion in Poland in 1991.[13]

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[10] IMF (1996).

[11] Lindgren et al. (1996).

[12] Lindgren et al. (1996).

[13] Estimate provided by the Polish authorities.

Chapter II

KEY FEATURES OF A ROBUST FINANCIAL SYSTEM

Introduction

The previous chapter indicates that the financial stability of an economy depends on two fundamental sets of factors. The first comprises the macroeconomic and structural *conditions in the real economy* bearing on financial decisions and which form the environment within which the financial system operates. The second is the *robustness* of the financial system itself, comprising the financial markets, institutions, and arrangements through which financial transactions are carried out. Major instabilities or distortions in the real economy almost inevitably pose risks to financial stability, however robust the financial system. Nevertheless, a robust financial system can lower the risk that problematic real economic conditions will lead to financial crisis as well as reduce the damage from a crisis if it occurs. Financial stability depends not only on having the requisite institutions and other capabilities; there must also be sufficient political and social consensus supporting the measures needed to establish and maintain that stability.

This chapter sets out the key features of a robust financial system. A robust financial system is essentially one that meets the "test of markets", insofar as it remains stable and efficient under a wide range of market conditions and circumstances. Robust financial systems can take a number of specific forms but all have three basic attributes. First, a robust system is *flexible* in that it continues to function efficiently in allocating finance in accordance with underlying economic fundamentals under a full range of economic circumstances - in particular when those circumstances are changing rapidly. Secondly, the system is *resilient* in the sense that markets continue to function and payments are carried out reliably and expeditiously in the face of economic disturbances. And thirdly, a robust system is *internally stable* in the sense that it does not itself generate major financial shocks, or magnify external shocks, that can lead to financial crisis, for example, when banks continue to lend for the purpose of real estate even when prices have gone beyond economically justifiable levels in the expectation that they will be bailed out if a contraction occurs.

The degree to which a financial system possesses the qualities needed for robustness depends largely on how well it performs three basic functions: maintaining appropriate *incentives* for financial actors; generating the available *information* bearing on financial decisions; and providing the necessary *capabilities* for institutions and individuals to respond effectively to market incentives and utilise information.

Appropriate incentives are essential to ensure that investors, creditors, owners and managers, in the pursuit of their private interests, pay heed to the social consequences of their actions and take necessary precautions in the face of risk. For this to be the case, private actors need to reap the full gains, and bear the full costs and risks, of their financial decisions; and the gains, costs and risks to private actors need to be in line with those available to the economy as a whole. Markets must also be able to exercise adequate discipline, and stakeholders must be able to reward and penalise the managers of financial institutions for their successes and failures.

Timely access to relevant and reliable information is essential for effective financial decisions, as well as for effective market discipline, corporate governance and supervisory oversight. Robust and efficient financial systems possess means for gathering and disseminating all material information needed by lenders and investors to assess the creditworthiness of their counterparties, by stakeholders to monitor the performance of those to whom they have delegated responsibility, and by supervisory authorities to exercise prudential oversight.

To respond effectively to incentives and information, individuals and institutions also need to possess the *capabilities to implement their financial decisions*. There needs to be a robust infrastructure to ensure that transactions can be carried out reliably and in a timely manner and are enforceable; that information is disseminated adequately; and that there is a sufficient array of markets and financial vehicles to allow actors to allocate their resources effectively among alternative uses and over time, and to diversify risks. In addition, financial actors need to be free from undue regulatory or other legal restrictions on their ability to carry out transactions.

The remainder of this chapter considers, in light of the analysis of vulnerabilities in the previous chapter, key requirements for promoting financial stability. These requirements can be regarded as end-point objectives that efforts to improve financial robustness should seek to attain over time, rather than as a set of characteristics that can be attained immediately or which currently are fully present in any financial system. The discussion begins with conditions in the real economy and then delineates the key elements of a robust financial system under three headings: *infrastructure, market functioning and regulatory and prudential oversight*. Two points concerning the discussion should be emphasised:

- No single step or narrow group of steps can be sufficient to ensure a robust financial system. Robustness is a function not only of the individual factors themselves but of their interaction; thus improvements in one area typically require complementary measures in other areas if their benefits are to be fully realised.

- The specific institutional arrangements needed to ensure robustness will change as markets and the economic environment evolve; thus the ability of the financial system, including regulatory and supervisory arrangements, to adapt to economic change is essential to maintaining financial robustness.

This second point is considered in the penultimate section of the chapter, which briefly discusses principles for maintaining financial robustness during financial liberalisation and financial reform in the aftermath of a financial crisis that severely affects the banking system. The chapter concludes with a brief discussion of how the elements of a robust financial system might be made operational, with an illustrative set of concrete indicators of robustness that could be used as a guide by interested parties being annexed to this report.

Conditions in the real economy

Conditions in the real economy, macroeconomic and structural, provide the basic signals to which the financial system responds. As illustrated by the experiences discussed in Chapter I, financial stability depends critically upon the degree to which these conditions promote the following objectives. The first is to provide as much predictability as possible in economic outcomes by minimising fluctuations in real activity and avoiding unnecessary swings in asset prices and resource allocation. Such predictability reduces, although it cannot entirely eliminate, the risk of extensive financial "mistakes" that lead to financial problems. Predictability requires the avoidance of unsustainable debt loads or financial imbalances whose reversal can lead to sudden large shifts in asset prices and to instability in the real economy. The second objective is to generate appropriate incentives for the allocation of investment resources, across sectors and over time, in a socially efficient manner. And the third is to promote features of the financial system that strengthen its robustness.

Macroeconomic and structural conditions are important not only individually, but also because *their effects are mutually reinforcing*. Realisation of the full benefits of stable macroeconomic conditions requires sound structural conditions; and certain structural imperfections can greatly magnify the financial risks arising from unstable macroeconomic conditions.

Macroeconomic requirements

As underscored in Chapter I, the following macroeconomic requirements are crucial for the maintenance of financial stability:

- Policies that contain fluctuations in aggregate economic activity as far as possible are fundamental: macroeconomic policies should seek sustainable growth in line with the economy's potential, and avoid "go-stop" growth since it creates widespread uncertainty and risks of pervasive financial reverses.
- Achieving and maintaining price stability is of equal importance to sustain incentives to enter into long-term contracts and to minimise distortions and the uncertainty about relative prices fostered by inflationary environments.
- Sound public finances are essential: public deficit and debt levels should be sustainable and moderate. Public debt, especially that held externally, must be adequately diversified in terms of currency, maturity and the range of holders. Government pension systems and other public programmes involving future commitments need to be adequately funded and consistent with the economy's capacity to meet the commitments.
- There must be an adequate level of national saving, private and public, to finance domestic investment needs without unsustainable reliance on foreign borrowing. External payments positions must be sustainable, which requires an adequate level of national saving, and an exchange rate that remains consistent over time with the underlying competitiveness of the economy. Capital flows financing the balance of payments and the associated external debt need to be sustainable and adequately diversified.
- Macroeconomic policy instruments must be adequate and consistent with the exchange rate regime: monetary authorities need to be free to pursue price stability as their overriding objective; and fiscal authorities must have the capability to control public expenditures and collect adequate revenues.

Given that financial decisions involve commitments extending into the future, *financial stability depends not only upon the present or recent effectiveness of macroeconomic policies but also upon their future credibility*. A high degree of policy credibility helps to minimise volatility in financial market prices and makes it more likely that changes in those prices will be stabilising for the economy as a whole. Credibility is largely derived from past policy performance over a substantial period - which increases the premium on the pursuit of sound policies in the present. And, especially as financial markets develop and become more sophisticated, credibility depends increasingly upon the clarity, transparency and internal consistency of the policy commitments of public authorities.

Structural requirements in the real economy

Structural policies should seek to ensure that relative prices are in line with economic fundamentals so that they provide proper financial incentives; and that structural conditions promote the efficient and sustainable allocation of real and financial resources. Sound structural conditions promote the smooth adjustment of prices and quantities to changing economic conditions, and reduce risks that asset values will be impaired by sudden shifts of relative prices that have become misaligned in relation to their long-term fundamental determinants. Important ingredients of sound structural conditions include:

- Tax policies that minimise distortions to incentives; tax provisions whose distortionary effects are magnified by inflation should be avoided; tax regimes should be stable and predictable.
- Efficient, competitive and flexible markets - for products and productive factors such as land, labour and other basic resources - that affect financial incentives.

Structural policies affecting the financial sector need to ensure its efficient operation, stability and robustness; these policies are discussed further in the following sections.

Institutional and financial market infrastructure

The availability of information necessary for sound financial decisions, the ability to respond to incentives and the capacity to implement financial transactions efficiently all depend upon the quality of a number of infrastructure building blocks that support effective market functioning. These include the *legal and judicial framework* governing financial matters, the *accounting systems* used to gather and disseminate information, *the payment systems* for executing transactions, and the *infrastructure features of the markets themselves*.

Legal and juridical framework

The basic functions of the legal/juridical framework in supporting the financial system are:

- to establish clearly the rights, responsibilities and liabilities of the parties to financial transactions;
- to establish codes to support market forces in maintaining appropriate incentives and adequate information;
- to provide means to enforce legal obligations and claims efficiently.

In order to accomplish these aims, the legal framework needs to include adequate contract, corporate, bankruptcy and private property laws. A basic requirement of any legal code is up-to-date contract law that clearly defines the contractual rights and responsibilities of all agents involved in loans and in the purchase, sale and holding of the full range of available financial instruments. Among the legal provisions required are those governing obligations to meet contractual payments, the definition and consequences of non-payment, requirements entailed by covenants and other conditions placed on the borrower, and custody of collateral. Fiduciary responsibilities and liabilities of financial agents, stakeholders and managers of financial institutions need to be clearly defined, so that they are held accountable for their conduct. As far as possible, legal provisions governing financial activity need to be "rule-based" and transparent. For example, conditions governing the exercise of contingent provisions, such as call options, and the taking possession of collateral, need to be objective so that they can be readily identified by all parties. Legal provisions should also be formulated in a sufficiently flexible fashion to allow their extension to new instruments and activities as they emerge - while recognising that changes in laws will be necessary when more fundamental market changes occur.

Since individual actors often have an incentive to withhold private information, legal codes need to mandate disclosure of facts directly material to counterparties, stakeholders and other interested parties if effective market discipline is to be maintained. Other activities that take undue advantage of information disparities or which abuse fiduciary responsibilities, such as self-dealing or insider trading, also need to be legally discouraged.

Of particular importance to preserving appropriate incentives are standards governing the entry of financial firms together with bankruptcy codes and other provisions relating to exit. Well-designed bankruptcy codes reduce uncertainty by specifying ex ante rules governing the distribution of unpaid obligations in the event of failure, and provide a necessary "breathing space" to make provision for an orderly disposition of the failing entity, or to allow the continued operation of an entity whose value as a going concern exceeds its break-up value. It is very important that such provisions maintain stakeholders' liability, up to the limit of their original commitment, for losses from failing institutions as well as management accountability so that moral hazard incentives are contained. Codes should be such that bankruptcy is seen as a last resort by institutions in financial difficulties to avoid undermining the fundamental principle that debts must be repaid on time and in full. To balance these considerations effectively, bankruptcy authorities need to have adequate legal and administrative authority to replace managements, to reorganise failing institutions, and to develop and, if necessary, impose formulas for distributing assets.

The effectiveness of the legal framework also depends critically upon the quality of enforcement of its provisions. Judicial remedies in the event of non-compliance with contracts need to be efficient and expeditious: judicial procedures should not be so costly that they discourage companies from acting to enforce their contracts. It is particularly important that remedies are obtainable in a time-frame that is relevant to the financial transaction involved: for example, unless creditors are able to gain possession of collateral rapidly in the event of non-payment, or to take action quickly when covenants are violated, the provisions are effectively voided in economic terms. Legal procedures for enforcement also need to be objective and honest so that outcomes of disputes are as predictable as possible on the basis of objective criteria. There should be laws against illicit financial activities, in particular money laundering, and they should be vigorously enforced since such activities, by undermining the reputation of individual financial entities, can impair confidence in the financial system as a whole.

Two other specific priorities are improvements in the *transparency and efficiency of the judicial mechanisms* to enforce financial agreements; and ensuring that *effective means exist to take possession of collateral*.[14] Difficulties encountered in many emerging markets in obtaining reliable remedies in case of non-compliance (because of undue delays, overly convoluted administrative procedures and the inability to predict how applicable laws will be interpreted in practice) were cited by many of the respondents to surveys of participants in major financial centres. Improvements in this area would help particularly in improving emerging market economies' access to external financial markets and in encouraging the transfer of skills and financial technology via direct investment.

All economies periodically face the task of *revising and updating legal codes to reflect new market realities*. Transition economies face a particularly great challenge in developing legal codes suitable to a market environment, given their heritage of extensive state involvement in economic decisions. In this respect, frameworks based on industrial country models have proved quite useful as a starting-point but must still be adapted to the particular financial systems of transition economies and altered as those systems evolve.

Accounting and other information systems

Accounting systems are central to the provision of the information needed by the creditors, borrowers, owners, managers and others with an actual or potential stake in an enterprise to make reasonable assessments of the effectiveness of the enterprise's operations

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[14] Lindgren et al. (1996).

and to assess its future prospects. High-quality accounting systems are essential to ensure the transparency of operations needed for effective internal governance and market discipline.

Effective accounting systems embody four basic quality standards. First, the information provided is numerically and factually *accurate*; secondly, it is *relevant and transparent* in that individual items correspond correctly to the underlying condition being reported; thirdly, the information is *comprehensive* in covering all material activities and aspects of an enterprise's operations that bear on its present and future financial condition; and fourthly, the information needs to be sufficiently *timely and regularly provided* to be of use when decisions are made.

A more general principle is that accounting measures should provide a realistic picture of the *true economic gains and losses*. Methods used to value assets need to take realistic account of their likely value when liquidated or redeemed, in the light of the portfolio strategies of the institution as well as unforeseen contingencies it may encounter. Valuation at historical cost of loans or other assets for which there is no satisfactory organised market, on the condition that adequate provisions are made for non-performance or losses, can provide a reasonable method of accounting for the true economic value of assets that are held to maturity. On the other hand, marking marketable assets to market value generally provides a more reliable indication of their true economic value, but only if the markets are sufficiently developed and efficient to provide reliable guides as to prospective asset-sale prices.

Essential elements of accounting procedures applying to banking and other financial institutions are standards governing:[15]

- classification and reporting of asset quality, including realistic valuation and strict criteria for recognising bad loans;
- timely and prudent procedures for provisioning and strict quality standards for the components of capital;
- accurate measurement and reporting of loan concentrations, including systems to detect excessive lending to related parties or over-concentrations in particular sectors or instruments;
- relevant measures of profitability and other aggregate indicators of the overall financial position;
- effective systems to assess individual risks as well as risks to the aggregate portfolio under various contingencies;

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[15] International Accounting Standards Committee (1995).

- consolidated reporting including all relevant affiliated entities whose condition directly affects the financial position of the parent;
- adequate reporting of contingent and below-the-line liabilities, such as unfunded pension liabilities and guarantees for affiliates.

These procedures and rules are essential to avoid the concealing of serious asset quality or other financial problems in financial institutions from supervisors and stakeholders.

Auditing mechanisms are essential to ensure that accounting norms are effectively applied and maintained and to monitor the quality of internal control procedures. Both internal and external audits are vital complements to assessment of financial institutions by supervisory authorities. Internal audits on an ongoing basis enable problems to be recognised before they are able to impair the financial soundness of an institution. External audits on the basis of internationally acceptable standards by independent qualified private entities are important in ensuring the objectivity and integrity of internal control procedures and the accuracy and comprehensiveness of information disclosed to external parties. To ensure their objectivity and credibility, external auditors need to be legally accountable for the competence and integrity of their examinations.[16] There should be comprehensive laws setting out the responsibilities and obligations of external auditors, and independent auditing should be required at least for public companies and licensed financial institutions. However, internal management bears the first and primary responsibility for ensuring that internal audits are effectively conducted and that information disclosed to external auditors and the public is adequate.

The *development* of accounting standards so as to provide accurate, timely and internationally comparable information is a key priority for improving the robustness of financial systems in emerging market economies, particularly given the role that deficiencies in accounting systems have played in past banking crises.[17] It is very important that national accounting standards be of high quality and be rigorously interpreted and applied. Harmonisation of private accounting standards with those employed by supervisors is also important in order to reduce the costs to private institutions of complying with regulatory/supervisory requirements.

In many emerging economies, auditors, management and supervisory authorities face considerable difficulties in adequately measuring the value of individual instruments and therefore of an institution's portfolio as a whole.[18] These difficulties have considerably

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[16] de Krivoy (1996).

[17] Goldstein and Turner (1996)

[18] de Krivoy (1996) and Goldstein and Turner (1996).

hampered the ability of managements to assess adequately their institutions' financial status and to make changes in investment priorities when needed; also hampered are market discipline and the ability of regulators to recognise developing problems before they become serious. While due partly to deficiencies in accounting standards, this difficulty is aggravated by underdeveloped markets, which make it hard to predict liquidation values; and where markets are better developed, by a lack of price data on which to base assessments of loan and other asset values.

This problem also raises a broader issue *about gaps and deficiencies in publicly available data*, particularly from national authorities, on aggregate financial indicators, conditions in the real economy and government policies. A lack of such basic data, for example timely figures on the international reserves held by the government, has been an important factor limiting the ability of stakeholders and other interested parties, in particular foreign investors and official institutions, to effectively monitor the economic and financial condition of countries that are major international borrowers.

Private market arrangements and conventions

Apart from legal, judicial and accounting arrangements, robust financial systems generally possess a range of *private mechanisms and institutions* for the application of codes of conduct, conventions and "best practices" to limit price manipulation, fraudulent behaviour and other detrimental practices. They also possess mechanisms to facilitate transactions (e.g. through documentation standards and valuation procedures) and facilities to organise relations among market players (e.g. fair-dealing rules, dispute settlement, technical support). Such arrangements can be particularly important in markets with a high degree of diversity in participants or which involve heterogeneous instruments. However regulatory as well as competition authorities need to scrutinise such arrangements to ensure that they promote effective market functioning and are not used to restrict competition or otherwise used to promote the interests of a small group of insiders at the expense of the market as a whole.

Competent, independent and objective *credit-rating agencies, credit bureaus and other similar entities* such as central credit registers that specialise in the assessment of the financial condition of market players can be of particular use in enhancing market information and market efficiency.[19] Credit-rating facilities can be essential to the development of certain markets, such as those for commercial paper, and can also improve access to markets by lesser-known borrowers by disseminating information about their credit-worthiness.

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[19] de Krivoy (1996).

Payment and settlement systems

Sound payment systems are essential to the smooth operation of market economies. They are necessary to enable the process of settling monetary transactions to be completed in a timely fashion, without imposing excessive costs on individual users or engendering excessive risks for the system as a whole. The potential interbank exposures in payment systems can be very large and thus the systems need to be highly reliable and to contain well-designed and effective risk management mechanisms. Sound payment systems can be important for the maintenance and improvement of incentives for market discipline; their development also enhances incentives for the adoption and observance of norms for prudent behaviour and for adequate disclosure.

Market diversity and depth

Financial systems need to have a broad array of instruments and markets and to provide a sufficient range of services if they are to be efficient and flexible and resilient enough to continue to function effectively in the face of disturbances or major economic changes. The most robust financial systems possess both well-functioning money markets and efficient capital markets, including primary and secondary markets for equities and markets for a full range of fixed income maturities. The markets are sufficiently deep, with an adequate breadth of participation, so that all but exceptionally large transactions can be executed throughout the trading day without triggering excessive price movements. Robust systems also need a variety of instruments that meet the differing needs of savers, borrowers and creditors for liquidity, marketability, length of commitment and credit and market risk. Provided that the markets for the underlying instruments are sufficiently well-developed, a reliable and efficient legal system is in place and financial institutions have the necessary internal controls, the availability of financial futures and derivatives enhances the potential for managing various risks.

Such an array of markets and instruments contributes importantly to financial robustness, and also helps to promote economic efficiency and development, in a number of ways, that is:

- by allowing adequate scope for diversifying risks and facilitating the bearing of risks by those in the best position to do so;
- by enhancing the liquidity and marketability of financial positions and the ability of financial actors to alter the structure of their portfolios when their circumstances change;

- by reducing fluctuations in financial asset prices in response to temporary shifts in the balance of market supply and demand, ensuring that market liquidity is maintained in the face of major shocks, and by reducing the likelihood that serious price misalignments will develop;
- by facilitating the management of public sector debt, including the avoidance of requirements on the central bank or commercial banks to absorb government debt to the detriment of monetary control and banking system financial soundness;
- by enhancing the effectiveness of market-based instruments of monetary control and by increasing the ability of monetary policy to prevent surges in capital inflows from interfering with domestic policy objectives;
- and by promoting the efficient allocation of funds provided by capital inflows and ensuring that private and public external debt positions are adequately diversified.

Historically, the development of a full array of financial markets has been an evolutionary process, with money markets often developing first and serving as a catalyst for the development of capital markets. *Regulatory policies that promote and do not unduly interfere with market functioning are essential to the development of diverse and efficient financial markets.*

The freedom of interest rates to vary with market forces, and of financial institutions to sell and acquire securities freely, and the openness of the markets to all financially qualified participants are essential to the expeditious development of markets that are complete and efficient.

- Markets are also likely to develop most fully when financial institutions, as well as non-financial entities, are free to issue a full range of liabilities, including bonds and equity; conversely, substantial segmentation of funding instruments and activities among different classes of financial institution tends to slow and limit market development.
- Removal of officially directed lending and other limits on credit allocation (except those that are essential for prudential reasons) is indispensable to the development of robust and efficient financial intermediaries and markets.

Openness of domestic financial markets to external competition can also help greatly in promoting market development; in particular, the financial systems of countries such as Japan, the United Kingdom, Australia, New Zealand, Canada and, more recently, Hungary have benefited from the participation of foreign financial institutions in the domestic

markets.[20] Conversely, the experience of a number of industrial countries indicates that excessive constraints on domestic market functioning can effectively drive much domestic financial activity offshore.[21] More generally, market development is promoted by infrastructure that supports efficient market functioning, such as mechanisms for disseminating information and settling transactions discussed earlier.

In addition, supervisory norms and mechanisms need to be adapted and updated as financial innovations occur in order to ensure that incentives for prudent behaviour are maintained and that information disclosed to external parties continues to be sufficient and transparent.

The further development of existing markets, and the expansion of the array of markets, is an important priority for improving financial robustness in emerging market economies. In transition economies, the development of both short and long-term financial markets is closely linked to the development of financial intermediaries. The development of a sound and efficient banking system is essential in this regard, but other financial intermediaries such as pension funds, insurance companies and investment funds also need to be established. The improvement and expansion of securities markets, as well as the further development of equities markets, is particularly important in many other emerging economies, especially those that have had problems in the past with disruptions from large surges in capital inflows.[22] Efforts to reduce reliance on debt financing by highly leveraged firms would help in encouraging the growth of equity markets. To avoid distortions, the establishment of new markets needs to proceed in tandem with the development of traditional markets.

Market functioning

As indicated in Chapter I, deficiencies in management and control have been common elements in banking and other financial crises. Thus the quality of the institutional governance - the oversight and control by directors, managers and responsible staff - of financial businesses is crucial to reducing the likelihood that crises will emerge, as well as to limiting the severity of crises when they do occur. The primary responsibility for ensuring sound institutional governance rests with the owners and with the board of directors and senior management who act as their agents. However, institutional governance is likely to be

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[20] 1996 OECD Economic Survey for Hungary.

[21] OECD (1997).

[22] White (1996b) and Goldstein and Turner (1996).

strongest when there are strong external incentives for its exercise, in the form of *competitive markets and effective mechanisms and incentives for market discipline by stakeholders*.

Foundations of good institutional governance

The foundation of good institutional governance is a sound business strategy and a competent and responsible senior management. Managers and directors, acting with and on behalf of owners, need to inculcate and maintain a *sound credit culture* throughout the financial institution based on the principle that debts must be repaid on time and in full and that contracts must be strictly observed. Lenders must develop strong credit evaluation procedures, make credit decisions on an impartial basis and provide accurate reports to supervisory authorities. To this end, the highest priority must be placed on institutional arrangements to ensure that "due diligence" is exercised in assessing credit and other risks and in carrying out ongoing oversight of the payment status of loans and other investments. The legal provisions complementary to a sound credit culture are those relating to the responsibility implied by the act of borrowing - that the debt will be repaid on time and in full.

Good institutional governance of banks and other financial institutions requires *comprehensive internal control procedures and policies* that are implemented by skilled personnel and carefully monitored by management. This requires a clear delineation of responsibilities; policies governing lending standards and other financial decisions that are explicit, transparent and disseminated throughout the organisation; comprehensive and internally consistent record-keeping systems; and internal audit and management control functions that are organisationally separated from the internal groups they are overseeing, along with other internal "checks and balances" for confirmation and cross-checking. Very important also are policies and enforcement means to ensure that staff act in the interest of the institution and do not engage in insider trading, disclosure of proprietary information, or provision of credit on grounds other than objective assessments of potential returns and risks.[23]

Effective risk management of financial institutions is crucial and becomes even more critical as well as complex as markets develop. Financial institutions need to have effective means to measure, monitor and control the various risks they face. Banks in particular need to have high-quality systems to evaluate credit risk and monitor the financial soundness of major borrowers. Risk management systems need to include means to gauge the overall risk exposure of the enterprise in its entirety, considering not only risks encountered in normal

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[23] Lindgren et al. (1996).

circumstances but also rarer contingencies, such as the possibility of unusually large adverse shifts in several major financial markets at the same time.

The maintenance of good institutional governance requires that owners, directors and senior management have adequate incentives and be subject to financial and, where appropriate, legal sanctions in the event that they behave improperly. Owners, in particular, need to have a sufficient financial stake in the enterprise, particularly if moral hazard incentives arising from the public safety net are to be contained. Partly for this reason, and also to provide a buffer to absorb losses, capital should be commensurate with the risks that a financial institution assumes. Directors also need to be accountable for gross negligence or other failures to meet their obligations. Company law should set out clearly the duties of directors and the recourse that shareholders have in the event that these duties are not performed adequately. The structure of private ownership can also affect the quality of internal governance: for example, highly concentrated ownership by industrial and commercial enterprises increases the risks of connected lending.

Private ownership of financial institutions helps to foster good institutional governance by alleviating the conflicts of interest that can arise when institutions are owned by the government and by increasing incentives for strong managerial performance.[24] Largely for these reasons, the privatisation of government financial institutions has been a key element of financial sector reform efforts in many countries in recent years. It is important to ensure that government-owned institutions, like privately owned ones, are managed according to sound principles of institutional governance. Directors and senior managers should be chosen on the basis of ability and integrity and be free of obligations to other government agencies that could conflict with their responsibility to ensure the efficient and profitable operation of the enterprise. Adherence to sound commercial practices needs to be the ultimate criterion by which managements of government-owned institutions are judged and held accountable: where the promotion of larger social goals is necessary, it should be achieved via explicit subsidies and other measures that do not impair incentives to pursue sound business practices. Any privatisation of financial institutions needs to be effectively implemented if it is to improve institutional governance. In particular, privatised institutions need to be established on a sound financial basis and with a sufficiently diverse ownership to prevent abuse of the institution's franchise for the benefit of individual interests or commercial entities.

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[24] Lindgren et al. (1996), Goldstein and Turner (1996) and Corrigan (1996).

Market discipline by stakeholders

Good institutional governance is more likely to be sustained if there are *outside stakeholders*, that is, depositors, creditors, investors and other actors with a sufficient direct stake in a financial institution to take the trouble and bear the cost of exercising diligent oversight of its activities and to provide external discipline to management. Encouraging the participation of outside stakeholders can be particularly important in improving market discipline over closely held financial institutions, which are relatively prevalent in many emerging market economies.[25]

The incentive for existing and potential stakeholders to exercise oversight depends on the size and nature of their claims, the structure of their holdings and the likelihood that holders of the claim will be shielded from loss in the event of bad performance or failure of the institution. Financial institutions should generally be allowed to fail in the event of insolvency and their exit should be subject to bankruptcy and other principles normally applied to the rest of the economy. And, as discussed further in the next section, the financial safety net needs to be designed and operated so as not to overly reduce incentives for stakeholder oversight - although some loss in this regard is difficult to avoid.

Several features of the financial and market infrastructure promote effective oversight by stakeholders. One is the *presence of efficient markets for subordinated debt*, since large holders of subordinated debt are likely to exercise oversight in much the same way as private shareholders; regulatory authorities in Argentina require banks to issue a certain amount of subordinated debt in order to enhance market discipline. *Good interbank markets* in which bank creditors have effective systems for counterparty appraisal and exposure control and the ability to reduce credit lines or increase risk charges to poorly managed banks also help to promote oversight. The *presence of major money centre or other major foreign private institutions as stakeholders* can be particularly beneficial to oversight, given their extensive experience and expertise in monitoring.

Effective systems for providing information with the features described in the preceding section are essential to stakeholder monitoring. Accounting standards based on principles and rules that command wide international acceptance are crucial in this regard as they facilitate the comparison of performance across countries. Authorities need to ensure that institutions disclose sufficiently complete and accurate information to allow stakeholders to make intelligent assessments of their performance, and to make sure that adequate information is available on economic conditions affecting the institutions' performance. Admittedly, market reactions to the disclosure of information revealing performance

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[25] Lindgren et al. (1996).

problems is costly to the institution involved - but that is the essence of market discipline; moreover, the costs are greater when markets overreact and become excessively pessimistic in response to rumoured problems, as they tend to do when information is not adequately disclosed.

Oversight cannot be effective without *remedies and sanctions in the event of unacceptable performance*. Thus markets along with legal and regulatory structures governing acquisitions and mergers need to facilitate an appropriate level of contestability in the control of financial institutions. Stakeholders need to be able to expeditiously exercise the contractual sanctions allowed for in their claims on financial institutions, for example by being able to take possession of collateral in a timely fashion.

Finally, a key feature of a robust banking system and one that is important in maintaining incentives for stakeholder oversight is that from time to time some banks fail. Such individual failures do not give rise to systemic or macroeconomic problems. The cost of the failure is principally borne by holders of equity and subordinated debt, with the responsible managers (particularly senior management) suffering appropriate penalties for their actions, inactions and errors of judgement.

Competition

Competitive markets are essential if private gains and social returns from financial decisions are to be consistent. Uncompetitive markets encourage the inefficient use of resources to extract returns from other actors ("rents") which do not represent gains to society as a whole. Lack of competition, since it limits the ability of stakeholders and customers to shun poorly run institutions, seriously undermines incentives for good institutional governance and impairs market discipline.

A competitive financial market does not necessarily require a large number of institutions, nor exclude the presence of institutions with substantial market share; however, *the market must be contestable* in that market shares and prices are market-driven competitive outcomes and there is liberal entry and exit. In particular, entry should be open to entities that meet the necessary requirements regarding the competence of owners, capital and the adequacy of management and other systems. Entry from abroad, either on a de novo basis or via an interest in or affiliation with local firms, can be particularly useful in promoting competition, especially where local markets are small and/or underdeveloped, as well as in facilitating the transfer of financial technology and the development of the skills of local personnel.

Competition also requires that financial institutions be free to provide a full range of instruments, products and services and to develop and offer new vehicles, subject only to essential prudential requirements. Interest rates, prices of instruments and services and credit flows also need to vary with market forces if competition is to be maintained and efficiently pursued.

The social stake in financial stability beyond that which markets alone can be expected to provide can entail certain restrictions on competition. For example*, authorities need to impose sufficiently stringent licensing requirements* to prevent the entry of banks of questionable soundness or competence, since their proliferation could undermine public confidence in the overall integrity of the banking system. Prudential considerations have also been a factor in the past motivating authorities to impose restrictions on interest rates, branching or the types of instruments institutions can offer. However, the experience of industrial countries over the last several decades has led to general acceptance by their authorities that financial stability and efficiency are best secured by liberalised and well-developed financial markets. This approach, with a few possible exceptions, need not involve substantial "trade-offs" of prudential and competitive considerations and is consistent with the application of overall principles of competition policy to the financial sector.

Regulation and supervision

Official oversight of the financial system encompasses financial regulation, including the formulation and enforcement of rules and standards governing financial behaviour as well as the ongoing supervision of individual institutions. Financial regulation and supervision play an essential role in fostering financial robustness. They should seek to support and enhance market functioning, rather than to displace it, by establishing basic "rules of the game" and seeing that they are observed. Effective and adaptable regulatory/supervisory structures are critical in all economies. Special vigilance and skill are needed by the regulatory/supervisory authorities to contain the risks arising when the financial system is undergoing rapid and extensive change.

General considerations for effective regulation and supervision

A fundamental guiding principle in the design of all regulatory/supervisory arrangements is that they should seek to support and enhance market functioning, rather than to displace markets. Where financial systems are less developed, a key objective of policy is to reduce the need for regulation in the future by improving the quality of private market forces. The historical experience of industrial countries suggests that the emphasis in

regulatory and supervisory approaches shifts as markets liberalise from explicit limits or other rules towards primary reliance on guidelines, supervisory assessments and incentives for sound business behaviour on the part of owners, stakeholders and management.

Apart from the specific responsibilities and objectives noted below, regulatory/supervisory authorities collectively need to pursue the following broader objectives:

- Define clearly the types of institutions subject to regulation and oversight along with the jurisdiction of each regulatory/supervisory agency for those institutions.
- Promote the reliability, effectiveness and integrity of the market infrastructure, in particular payments and transactions systems.
- Foster efficient operation and competition in the financial system.

The specific forms taken by regulation and supervision in any particular country are necessarily shaped by individual circumstances, particularly the state of the key features described in earlier sections. Typically, there will be several regulatory/supervisory agencies, with authorities responsible for banks institutionally distinct from those responsible for other major classes of financial institution or for securities markets.

Banking and other authorities charged with overseeing financial institutions have three major areas of responsibility: licensing of new entrants and authorisation for new or expanded activities by existing entities; ongoing supervision of the financial institutions; and remedial correction of problems arising in institutions that are failing, or at risk of failing.

To carry out its mandate effectively, each official agency must have powers and responsibilities that are clearly defined and of sufficient scope to accomplish its mission, appropriate standards and enforcement mechanisms, and adequate human and other resources. There needs to be close coordination and exchange of necessary information among banking, securities market and other regulatory/supervisory authorities, with suitable protection of such information where appropriate.

A clear framework defining responsibilities, objectives and operational independence is an essential foundation for effective regulation and supervision. Ensuring, and if necessary strengthening, the independence of supervisors and regulators is especially important when there has been extensive government involvement in the financial system or when financial institutions are closely allied to large and politically influential commercial interests. At the same time, supervisors and regulators need to report regularly on the general considerations shaping their policies if they are to maintain their credibility with the market and the general public.

In order for supervisors and regulators to exercise their powers and responsibilities in a coherent fashion, *they need a comprehensive set of prudential norms and standards*. In the absence of such criteria, supervision is likely to be haphazard, idiosyncratic and more vulnerable to pressures for exceptions and exemptions. The norms and standards need to be objective, internally consistent, transparent and well-understood by those to whom they are applied; such norms need to clearly define behaviour that is not permitted, as well as the nature and treatment of exceptional or "suspect" conditions, such as exposures that, while permissible, carry special risk or otherwise warrant attention.

Regulatory norms and standards must be relevant and consistent with prevailing conditions in the country in which they are applied. However *it is highly desirable that they be of high quality and shaped by certain core principles* for at least four reasons: first, to assure market participants, including foreign stakeholders, that sound financial practices are being applied, thereby increasing market confidence in the country's overall financial health; secondly, to help promote a level playing-field and fair competition among institutions of a similar type; thirdly, to prevent countries adhering to rigorous financial practices from being unduly penalised by "regulatory" competition from jurisdictions with overly lax regulatory standards; and fourthly, to make effective use of the experience and expertise of the international supervisory community in formulating the principles.

Norms and standards can play this role only if effective means exist for their *enforcement*. All supervisory authorities need to have access to comprehensive, consistent, reliable and timely information on the activities of the financial institutions they oversee, including those of home or foreign affiliates. Supervisors should have sufficient independence and authority to be able to impose penalties if prudential regulations are not met. Depending on the institutions supervised, possible penalties include: fines; the removal of management in cases of unsafe or unsound banking practices; and constraints on the institution's permitted activities, including, in extreme cases, closure.

The formulation of policies and standards and their implementation and enforcement also require that regulatory/supervisory authorities *have adequate financial and human resources*. Financial crises (including those of the US savings and loan industry) have not been prevented in part because supervisors were either too understaffed or otherwise unable to detect problems arising from the changing strategies of the financial institutions. Supervisors need to understand the full range of activities undertaken by the institutions they oversee and their knowledge and skills need to be periodically updated to keep abreast of market developments, such as the use of novel instruments and complex portfolio strategies. Supervisors need to have the means to collect, review and analyse supervisory and financial reports from banks on a solo and consolidated basis.

Considerations applying to banking regulation and supervision

The central role played by banks in the financial system imposes responsibilities on bank regulatory/supervisory authorities that, while generally similar to those of other financial oversight agencies, are also distinctive in some respects. In the licensing of new banks, authorities need to evaluate carefully the proposed ownership structure, operating plan, control systems and internal organisation to ensure that they are adequate to support sound functioning; licensing authorities also need to verify in the case of a foreign bank applicant that it has the approval of its home supervisory authorities to establish operations in the host country. Authorities also need to ensure that directors and senior managers possess the requisite ("fit and proper") skills and integrity. At the same time, authorities should seek to facilitate and encourage entry by well-qualified institutions in order to improve the quality of the banking system and promote competition.

Both in the licensing process and in ongoing supervision, banking authorities need to pay particular attention to capital adequacy. The standards formulated by the Basle Committee on Banking Supervision constitute a minimum floor in this respect: standards applied in practice need to reflect the risks to which financial systems are exposed and may need to be higher than the Basle standards if risks are higher because of vulnerabilities to external disturbances, a history of weak macroeconomic performance or undeveloped financial markets.[26]

The Core Principles developed by the Basle Committee are important for effective bank supervision. Among them are:[27]

- Evaluation of internal control mechanisms to ensure that they are commensurate with the nature and scale of the business undertaken, including systems for risk management, and enforcement of measures needed to correct deficiencies in these mechanisms when they arise.
- Requirements that capital adequately reflects the risks that banks take and that asset concentrations and exposures are prudently determined and managed.
- Requirements for adequate disclosure of information concerning financial institutions' performance.
- Establishment and enforcement of rules and regulations governing activities requiring specific approval or prior notice, such as transfer of a bank's shares, major

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[26] Lindgren et al. (1996).

[27] Basle Committee on Banking Supervision (1997) and United Nations (1994).

acquisitions or investments, and approval to establish foreign branches or subsidiaries.

- Establishment of realistic and effective policies, practices and procedures for loan classification and for provisioning against problem loans.
- Implementation of off-site monitoring and surveillance, on-site examinations and/or use of external auditors and consolidated supervision.
- Establishment and enforcement of standards for supervisory reporting, including accounting standards, provisions governing the scope and frequency of reporting, confirmation of the accuracy of the information provided, and disclosure.
- Determination that banks have adequate policies, practices and procedures to ensure that they are not used, intentionally or unintentionally, for criminal purposes.
- Supervisors must require that the local operations of foreign banks be conducted to the same high standards as are required of domestic institutions and must have powers to share information needed for consolidated supervision.

Three aspects of these responsibilities need to be emphasised. First, *regular contact with a bank's management and a thorough understanding of the institution's operations are essential. There must be a means of independently validating* information reported or disclosed, in particular the adequacy of asset valuations and loan loss provisions, and of monitoring banks' performance as market conditions change. *On-site examinations are particularly important* to allow supervisors to evaluate a management's effectiveness and compliance with supervisory standards in those markets where weaknesses in accounting or reporting systems impair the effectiveness of off-site monitoring. Reliance should be placed on external auditors only when a well-developed independent auditing profession exists, when supervisors and auditors have a clear understanding of their roles and where auditors are fully accountable. More frequent examinations will typically be needed for institutions in difficulties or with relatively high risk profiles. Examiners also need to be equipped with realistic loan classification and provisioning criteria if they are to be able to identify asset quality problems and to ensure that managements take the necessary corrective action. Provided an independent and competent auditing profession exists and the respective roles of auditors and supervisors are clearly delineated, supervisors could use external auditors in lieu of own on-site examinations in whole or in part.

In this context, *consolidated supervision* is essential if examinations, and overall oversight, are to be effective. An important aspect of consolidated supervision is maintaining contact and sharing information with host-country supervisory authorities. In addition to facilitating consolidated supervision by other countries' authorities, bank supervisors need to

have powers to share information with home-country supervisors of foreign banks operating in their country. Failure to account for related entities in reporting and examinations can lead to seriously inaccurate evaluations of a banking institution's true financial health and of the risks that it faces.[28] Lack of consolidated supervision can also encourage the concealment of imprudent or illicit transactions booked with an affiliate not covered by the parent's reports or in its examination. It is especially important that supervision of domestic banking institutions extend to their offshore affiliates.

Secondly, particularly where stakeholder discipline mechanisms are poorly developed, competition is limited or historical circumstances have retarded the development of strong risk management as an institutional governance priority, *the regulatory framework needs to pay special attention to banks' procedures for assessing and managing all risks, including credit risks*. In this context, particular care should be taken to limit two distinct credit risks that have frequently aggravated financial problems in emerging market economies: first, connected lending and, secondly, undue risk concentrations vis-à-vis single borrowers, or several borrowers whose creditworthiness is closely related. In this context, authorities need to carefully monitor exposures to particular sectors, such as real estate, that are prone to periodic price cycles.[29]

Thirdly, banking authorities also need to be satisfied that banks have adequate policies and procedures for identifying, monitoring and controlling market risks, including in particular exchange rate and interest rate risk. This is particularly important when the currency has reached an unsustainable level or there are other distortions in domestic financial markets that provide incentives for banks or their creditors to engage in unsustainably large borrowing in foreign currency; regulatory restraint in such cases is clearly less preferable than fundamental economic policies to correct the misalignments or distortions, but is likely to be necessary in the event that such policies are not undertaken. For analogous reasons, authorities need to pay close attention to banks' interest rate risk management procedures and exposures when the liquidity of domestic markets is limited. Effective monitoring of currency or interest rate exposures needs to take account of off-balance-sheet as well as on-balance-sheet exposures. Due attention also needs to be paid to potential indirect exposures, for example those that may arise when borrowers with large open foreign currency positions become unable to service their debts to banks following a large and sudden change in exchange rates.

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[28] de Krivoy (1996).

[29] Goldstein and Turner (1996).

Finally, well-formulated policies for achieving corrective action and, in cases where an institution is not viable as a going concern, orderly exit policies are essential to the effective exercise of banking authorities' oversight responsibilities. Of particular importance to industrial as well as emerging market economies in this context are remedial procedures to deal with financial problems of individual banks. Because extensive delay can magnify the cost of resolving a crisis, it is useful to have available concrete procedures for prompt corrective action. In addition, corrective procedures that are at least in part rule-based can help to reduce political pressures for undue forbearance. The prompt corrective action procedures incorporated in US banking legislation are based on this approach: graduated regulatory sanctions are imposed when a bank's capital adequacy level deteriorates; and authorities have the option to close a bank well before all capital is lost. Features of the Chilean bank regulatory system also allow for prompt and early correction. At the same time, however, authorities need to retain sufficient discretion to be able to deal flexibly with problems that arise and to be able to adapt the means for dealing with problem banks to market circumstances. Moreover, the principal objective of prompt corrective action procedures is to prevent problems of individual institutions from becoming systemic, rather than to deal with systemic problems if they do arise.

Operation of the safety net

The high cost to society at large of a collapse of the banking system is a principal reason why authorities in virtually all countries provide a safety net involving the potential outlay of public funds in the event that the stability of the banking system is threatened. Such arrangements inevitably create moral hazard because they hold out the prospect that stakeholders will be at least partially indemnified for losses from failing institutions. In order to minimise this moral hazard it is essential to design and implement safety net arrangements so that incentives are not seriously distorted by the policies pursued. In general this will also reduce the likelihood of having to use public funds to support the banking system. In any case, any pre-commitment to a particular course of action in support of a financial institution should be avoided by the authorities, who should retain discretion as to whether, when and under what conditions support would be provided. In addition, when making such a decision, it is important to analyse rigorously whether there is a systemic threat and, if so, what options there may be for dealing with systemic contagion effects in ways that limit the adverse impact on market discipline. To this end, the arrangements should seek to implement the following principles:

- Deposit insurance coverage should be designed to mitigate moral hazard problems, for example by confining it to smaller depositors who lack the ability or sufficient

incentive to monitor banks; an element of co-insurance even for small depositors can augment market discipline.

- Private sector devices, such as "lifeboat" operations, mergers and takeovers should be encouraged and facilitated by the authorities whenever appropriate, not least because they are often in the collective interest of banks as a whole. Central banks or other neutral parties can foster such arrangements, without making any financial or other commitments, by providing their good offices and acting as an independent broker. The authorities should only encourage private sector support efforts that will result in sufficient financial and managerial strength for the institution to be viable.
- Restructuring of failed institutions should maintain the hierarchy of liabilities mandated by law and by market arrangements; managers should be subject to strict accountability for their past performance; and shareholders and holders of unsecured debt should be given the lowest priority in recovering their investments.
- Official lending facilities, including "lender of last resort" support, need to be consistent with the central bank's overall approach to the implementation of monetary policy in pursuit of macroeconomic objectives while permitting it to deal with temporary liquidity shortfalls and systemic disturbances. Central bank lending should be adequately collateralised. In general loans should only be made to solvent institutions.
- Public money should be provided only as a last resort, and if it must be provided, should be combined with stringent conditionality, clear performance criteria and reliable means of repayment, for example through the use of warrants.

Securities market oversight

Regulation and supervision of securities markets entail both the formulation and supervision of sound market practices and the oversight of financial intermediaries which specialise in securities business. The activities and institutions over which securities authorities exercise oversight are diverse and subject to substantial change over time. Geographically or functionally diversified financial groups may be regulated by multiple supervisors.

A major responsibility of securities authorities is the licensing of investment firms and other entities primarily engaged in securities business and the development of standards for their sound operation. As with the licensing of banks, authorities need to have clear and well-defined procedures and standards to ensure that owners meet objective licensing norms,

that there is a sound business plan and that capital is adequate given the risks taken on by the firm.

Key components of a securities regulatory regime include:[30]

- Sufficient authority for the securities regulator to act independently in investigating securities violations and enforcing securities laws.
- Open, transparent exchanges and other self-regulatory organisations for market participants that are subject to oversight by the securities regulator.
- Clear regulatory responsibility for the licensing and regulation of securities market participants, including reporting, record-keeping, financial responsibility requirements and inspection and disciplinary procedures.
- Sound and up-to-date systems for risk management by securities firms that adequately reflect both "normal" market conditions and rarer contingencies, given the complexity of the financial strategies employed.
- Clear and effective procedures for obtaining access to records and other information bearing on firms' operations and disciplinary procedures in the event of non-compliance.
- Coherent procedures of orderly disposition of securities firms' assets in the event of default.
- Standards for the collection and reporting of transactions data, including a clear audit trail.
- High-quality auditing, accounting and disclosure standards for securities issuers, and corporate governance standards to ensure the protection and enforcement of shareholder rights.
- Enforcement of laws and regulations against fraud and market manipulation.
- Prudential standards for collective investment schemes.

Given the diversity of activities subject to oversight by securities authorities, *it is essential that there be effective means for information exchange among oversight entities, including in particular between securities and banking authorities*. The international nature of securities markets also requires close cooperation among securities authorities in different countries.

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[30] See Annex 3 and United Nations (1994).

Strategies for financial liberalisation and for reforms following crises

Strategies to improve financial robustness involve two broader sets of issues concerning the interrelations among the steps to be taken. The first concerns *the sequencing of deregulation measures and complementary policies* during the process of financial liberalisation. The second involves the overall strategy and specific elements of *measures that need to be taken in the aftermath of financial crises* to repair the financial system and to improve its longer-term robustness.

Strategies for financial liberalisation

The experiences of many industrial and emerging market economies demonstrate that *the process of financial liberalisation involves inherent risks* as financial institutions adjust to a new environment in which they are confronted with unfamiliar opportunities and risks. The large changes entailed by the process of moving from a constrained financial equilibrium towards a market-determined one can have at least temporary destabilising effects. For example, the relaxation of restrictions on credit access can lead to an unsustainable credit boom. Emerging market economies are particularly subject to these risks, not only because of financial liberalisation but also because of the limited development of their financial systems and the pressures created by the internationalisation of financial markets.

The specific institutional and other modalities needed for effective management of financial liberalisation depend on individual country circumstances and cannot be prescribed a priori. However, historical experience does underscore several key principles that need to be observed if the risks from financial liberalisation are to be contained and its full benefits ultimately realised.

First, liberalisation must be conceived and executed as part of a comprehensive strategy that includes policy actions in other areas to ensure that appropriate incentives and effective market discipline are sustained and strengthened as constraints on private financial actors diminish. Sound policies providing a stable macroeconomic environment must accompany liberalisation if risks of major financial problems are to be contained; necessary changes in tax policies and other structural reforms to limit distortions to financial incentives must also be undertaken.[31]

Secondly, liberalisation increases the challenges to regulatory and supervisory authorities. *The policies and capabilities of oversight authorities, including exit and safety net policies, must be adapted and modernised to stay in line with private financial market*

[31] OECD (1994) and White (1996b).

conditions and practices. The technical skills of examiners and those responsible for the formulation of standards must be regularly upgraded if they are to maintain effective oversight as the strategies of private financial institutions become more sophisticated and complex. More generally, as liberalisation proceeds, the effectiveness of regulatory and supervisory policies depends less on specific rules mandating or limiting particular aspects of financial behaviour, and increasingly on maintaining and strengthening incentives for good institutional governance and effective market discipline.

Thirdly, the sequencing of the liberalisation process needs to be consistent with the pace of market development and sufficiently even to avoid the concentration of strains on a single sector. Serious problems can be created by "partial liberalisation" that distorts the relative competitive positions of various classes of financial institution, for example by weakening the ability of banks to compete with less regulated competitors; or by encouraging the exploitation of regulatory "loopholes" by certain types of institution at the expense of others.[32] At the same time, however, liberalisation that outstrips market capabilities can be counterproductive. For example, where risk control procedures are rudimentary, the elimination of restrictions on operations involving derivatives and complicated financial products which expose users to risks that they do not fully understand should be coordinated with action to strengthen the capacity of institutions to monitor and control risks. As these considerations suggest, whether a rapid comprehensive liberalisation ("Big Bang") is better or worse than a more sequenced and gradual process depends critically upon the state of financial markets and their environment at the outset.

A final point is that *delaying necessary financial liberalisation does not avoid or even significantly postpone financial risks, but tends to make them worse*. Inaction in regard to liberalisation does not prevent markets and financial institutions from changing; however, those changes, since they naturally tend to be focused on circumventing regulations, can create new market distortions. Accordingly, authorities can best ensure that financial market evolution will sustain and strengthen financial stability by expeditious implementation of a coherent strategy for financial liberalisation.

Restoring and improving financial robustness in the wake of crises

Financial crises, particularly those involving the banking sector, typically require immediate steps to restore financial stability followed by an extended reform effort to improve financial robustness over the longer term. The strategy needed to achieve these objectives has three basic components. First, authorities need to restore the functioning of the

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[32] Lindgren et al. (1996), Goldstein and Turner (1996) and Edey and Hviding (1995).

financial system, and particularly the payment system, in the near term; secondly, banks, and possibly other financial institutions, must be restructured and placed on a sound financial footing; and thirdly, reforms must be undertaken which, together with the restructuring efforts, correct the problems in the financial system that led to or aggravated the crisis and also improve its future robustness.

The re-establishment of financial market functioning is the most immediate priority in the aftermath of a financial crisis. Confidence that the crisis will be resolved and its underlying causes addressed is critical in this regard. Authorities need to formulate a coherent strategy to alleviate immediate pressures on the markets, correct the underlying problems that led to the crisis and improve and maintain financial stability over the longer term. Such a strategy will generally entail measures to improve macroeconomic stability. The overall strategy and its individual policies need to be transparent and credible to market participants and the general public if confidence is to be restored and the social and political consensus needed to implement necessary reforms is to be sustained.

Restoring the financial soundness of individual banks involves two sets of measures: balance-sheet restructuring to restore the solvency of banks that will survive; and changes in bank operations to ensure that surviving entities can be operated profitably and soundly in the future. The modalities that best achieve these objectives depend upon the particular circumstances surrounding the crisis and the structural characteristics of the financial system, and therefore cannot be specified a priori. However, any well-designed strategy to restore bank soundness should be consistent with the following principles:[33]

- Preservation and enhancement of incentives for good institutional governance; restoration of capital should be achieved as far as possible through injections of equity by owners, subordinated debt or other instruments which increase the financial interest of owners and stakeholders in the enterprise's success.
- Use of public funds should be kept to a minimum and be subject to strict conditionality.
- Separation of the management and recovery of problem loans from ongoing bank functions, so that management can focus on restoring the sound operation of core capabilities.
- Formulation of a sound business plan focusing on core products and competencies.
- Reduction of operating costs, increases in efficiency and improvements in internal controls.

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[33] See IMF (1996).

- Changes in ownership and internal structures to ensure that incentives for directors, managers and staff are aligned with the interests of owners.
- Improvement in systems for risk management, credit assessment and monitoring of the condition of borrowers and the status of loans.

Apart from individual bank restructuring, *systemic measures need to be taken to improve the structure of the banking industry or to address problems in the operating environment affecting banks as a group*. The ultimate objective is to improve the longer-term stability, robustness and efficiency of the banking system. While the specifics again depend on individual country circumstances, effective systemic reforms will normally include the following general steps:[34]

- Closure and restructurings to improve the financial viability and efficiency of surviving financial institutions, as well as to promote competition.
- Limits on asset growth and activities of large, financially troubled institutions until they are on a sounder footing, in order to allow healthier institutions to expand.
- Use of the licensing power and reforms to permissible ownership structures to promote properly qualified ownership; to reduce propensities for self-dealing, overly concentrated lending and other imprudent activities; and (where necessary) to separate bank ownership from industrial or commercial interests.
- Changes in regulatory restrictions on permissible activities of banks or other financial entities to improve banks' ability to diversify and operate profitably.

Indicators of financial robustness

In order to make the strategy set out in this report operational, it is useful to have a set of indicators of financial robustness that could be used by any interested party, including national authorities, international institutions and private sector entities such as credit-rating agencies and financial institutions, to assess the stability of the financial system and its vulnerability to adverse shocks. These indicators should be derived from the norms and practices developed by the expert international groupings.

Such a set of indicators could fulfil at least two distinct functions. First, it could be used to provide early-warning signals of crises. This function is useful and necessary, insofar as indications of an incipient crisis in a particular country may (1) allow the authorities to

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[34] IMF (1996).

prepare for the consequences of such a crisis, and (2) focus efforts on implementing reforms that would prevent the crisis.

An additional, and perhaps more important, function of financial robustness indicators would be to provide a means of assessing progress towards achieving a structurally sound and stable financial system. This chapter has listed many features of a robust, stable financial system, most of which are related to structural characteristics of the financial system. If these characteristics are present, the system will have a better chance of weathering shocks issuing from the real economy. The robustness indicators should therefore provide a checklist of a country's progress towards putting in place the necessary structural features of a stable, robust financial system. By highlighting areas where progress towards structural reform has been deficient, this checklist could help to focus further reform efforts on appropriate tasks. It would also contribute towards the early-warning function, in that it would help in gauging the resilience of the financial system to shocks.

An illustrative example of a list of robustness indicators is annexed to this report. These indicators could be used to monitor progress towards financial stability in all economies, including emerging market economies. The example is intended mainly to highlight the way in which a set of robustness indicators might be selected and presented. In practice, a set of robustness indicators might cover more areas in greater detail.

It is worth noting that the structural indicators presented below cannot be compiled for a particular country by using any readily available multi-country database. Accurate assessment requires in-depth knowledge of the country in question. That should not be regarded as a drawback. If the robustness indicators are to provide valuable information on financial system stability, they must of necessity be more detailed and complex than what can be drawn from a standardised quantitative database.

Many of the illustrative indicators - for example, enforceability of market contracts - are judgemental. This increases the difficulty of using the list of robustness indicators and reduces their comparability across countries. This difficulty could be attenuated by using supplementary indicators of a more factual nature. For example, use could be made of information on the extent to which the Basle and IOSCO principles of effective supervision had been adopted, on the average length of time required to complete a lawsuit and on average court costs. The list of illustrative indicators does not represent minimum standards of effectiveness in the main areas of supervision of banking, securities, insurance and financial conglomerates, or of accounting and payment systems, which are the province of the relevant international groupings indicated in Chapter III.

Chapter III

A STRATEGY FOR PROMOTING ROBUST FINANCIAL SYSTEMS

Introduction

Progress in promoting robust financial systems requires first and foremost continuing attention to the establishment and maintenance of a stable macroeconomic environment. In addition, it is essential to develop an understanding of the key features of a robust financial system. But understanding alone is not enough. Specific action must be taken to ensure that weaknesses in financial systems are corrected and, once corrected, that resilience is maintained irrespective of changes in macroeconomic conditions. Countries have clear incentives to work towards robust financial systems because having them increases access to global financial markets and provides benefits in the form of more stable and often faster economic growth.

This chapter sets out a concerted international strategy conceived jointly by representatives of industrial and emerging market economies to promote the establishment, adoption and implementation of principles and practices needed for financial stability. The strategy has the following major components:

- Development of an international consensus on the key elements of a sound financial and regulatory system by representatives of the Group of Ten and of emerging market economies.
- Formulation of sound principles and practices by international groupings of national authorities with relevant expertise and experience such as the Basle Committee, the IAIS and IOSCO.
- Use of market discipline and market access channels to provide incentives for the adoption of sound supervisory systems, better corporate governance and other key elements of a robust financial system.
- Promotion by multilateral institutions such as the IMF, the World Bank and the regional development banks of the adoption and implementation of sound principles and practices.

First, the strategy underscores the principle that the *ultimate responsibility for policies to strengthen financial systems lies with national governments and financial authorities* in the countries concerned. Responsibilities for formulating, adopting and implementing sound practices should rest with those who have the most at stake, possess the

greatest capacity and enjoy the widest credibility. Market incentives can contribute to the adoption and implementation of sound principles and practices. The role of the international community is to provide advice, incentives and a yardstick against which progress can be measured, that is, to support the adoption and implementation of norms that are developed through a consultative process among national authorities and market participants.

The strategy calls for the maximum *use of existing arrangements, institutions and procedures*, adapting them as necessary and ensuring consistency among them. Not only will this avoid duplication and a waste of resources, it will permit action to be taken more rapidly.

The strategy is intended to be comprehensive yet adaptable. Comprehensiveness is needed because there is no single or narrow set of measures that will ensure financial robustness. A range of complementary actions in a variety of areas is needed. At the same time the measures in the various areas should be compatible and consistent. In any given area it is important to have only a simple set of standards. The approach should be adaptable because of the continuing evolution of economic and financial conditions and the need to tailor actions to the specific circumstances of the country. Moreover, some of the reforms may take a considerable time to implement fully, while others can be acheived more quickly. The priority, speed and manner in which countries make changes will differ, and their decisions should be based on a careful analysis of the appropriate sequencing of reforms.

Building on these premises, this chapter seeks to identify the tasks that need to be performed, to delineate roles and responsibilities and to set out concrete measures with specific timetables.

Formulation, adoption and implementation of sound principles and practices

Sound macroeconomic and structural policies, which are of cardinal importance in their own right, help to create the conditions needed for financial sector stability. Beyond this, it is highly useful to develop an international consensus on the key elements of sound financial and regulatory systems and on sound principles and practices in these areas.

International acceptance of sound principles and practices bearing on financial stability is likely to be greatest when the norms are developed by those with the greatest professional competence in a consultative process involving national authorities and market participants. Widespread agreement on best practices can provide a reference point for domestic financial authorities and governments and for markets in assessing country risk. International financial institutions can rely on these norms in their work with their member countries, especially the emerging economies. Where international groups have established norms or best practices, market discipline and market access concerns should help to prompt

financial institutions and regulators around the world to adopt these criteria. The experience of international groupings of supervisors and accountants has demonstrated that such a cooperative approach leads to the gradual but wide acceptance of important principles and practices.

In broad terms, such a process for establishing international norms runs as follows. Preliminary agreement on suggestions for sound practices in a specific area is reached by a group of key players often in a consultative manner with others which are not members of the group but have a material interest and relevant experience and expertise. This group then engages in a process of consultation, for example by issuing a draft for discussion or by convening meetings with regional or other groupings in order to take account of the views of others concerned with the matter at hand. After this process of consultation, a new, more definitive version is prepared and released. A formal endorsement may give the recommendations greater weight. However, they have no legal force until they are adopted by national authorities. They derive their authority from the expertise of those that have formulated them and their wide acceptance from the consultative manner in which they are prepared. They come to be applied because they reduce risk, improve market functioning and foster a level playing-field. If the conventions or norms are not observed, market participants exact a risk premium.

This sort of process is sometimes led by the official sector, as in the case of the development of international agreements on the supervision of banks, securities houses and insurance companies. In other cases the private sector may take the lead, as when groupings like the International Accounting Standards Committee (IASC), the International Swaps and Derivatives Association (ISDA), the International Securities Market Association (ISMA), the Emerging Market Traders Association (EMTA) and the Group of Thirty have developed standards, codes of conduct or recommendations. Irrespective of whether the official or private sector takes the lead, there is often some involvement of the other side in the form of consultation or tacit encouragement of the process. Ultimately, the standards are adopted because they facilitate transactions or contracting and improve the efficiency and robustness of the system while at the same time ensuring transparent competitive conditions.

An important feature of such consultative processes is that *they should lead to a single set of principles* for any specific area or activity relevant for robust financial systems. A proliferation of norms promulgated by different groupings can lead to confusion and potentially even competition in laxity. The various principles will have to be applied in the light of the specific circumstances of a country or region, as for example when greater instability in the economy requires greater bank capital. And there will need to be consistency in the principles and practices developed for closely allied activities. The international norms

should be considered as minimum standards and national authorities should apply them more stringently when needed.

Development of sound practices, principles and norms

This section sets out various areas in which international agreement on principles and practices would be desirable and feasible, given the existing international arrangements. It also indicates which international official and private sector groupings have the expertise and experience to develop the principles and practices. The groupings and institutions are diverse in nature and mandate. Some are functional in nature while others have an institutional focus. In some cases the norms will apply to only one of the key areas set out in Chapter II: (a) institutional and financial market infrastructure, (b) market functioning, and (c) regulation. In other cases, the conventions established will cut across the key areas. Moreover, there are complementarities across the areas.

Consultation with interested parties is an integral part of the development of sound principles and practices. For example the Basle Committee and the Committee on Payment and Settlement Systems work with regional groups as part of the process of elaborating their norms. The various groupings have engaged in a process of consultation and should seek to do so actively in the future in order to involve their regional and national counterparts in the development and implementation of the various norms.

Accounting. The International Accounting Standards Committee (IASC) is in the process of developing a core set of high-quality accounting standards to ensure that the information contained in the financial statements is accurate, timely and comprehensive. The accountancy bodies of key countries are represented on its Board and it has developed a process of consultation along the lines outlined above. The wider acceptance of its standards will help to increase the comparability of financial statements across countries and markets. It should play an important role in the development of accounting standards that will provide information essential for monitoring, measuring and controlling risk. It should make every effort to complete its current work programme by March 1998. In addition, it should continue to cooperate with the Basle Committee and IOSCO on matters relating to financial instruments and markets such as valuation, income recognition and disclosure.

Payments and settlements. The Committee on Payment and Settlement Systems (CPSS), which operates under the aegis of the central bank Governors of the G-10 countries, seeks the development of practices that foster efficient and robust payment and settlement systems. Because of concern about developments that could entail systemic risks, its main focus of attention has been on questions relating to wholesale payments, including large-value interbank transfer systems, foreign exchange settlement risk and the delivery of and payment

for securities. Concern about the implications of the emergence of electronic money led it to extend its attention to retail payments. It works by seeking to increase the understanding and awareness of payment and settlement system issues. In some areas, it has developed a series of principles and recommendations that have been published in various reports. It increasingly pursues a policy of open consultation with representatives of other countries. It should seek to ensure that the principles and recommendations that it has developed are widely accepted.

Banking supervision. Since its inception in 1974, the Basle Committee on Banking Supervision (the Basle Committee), which also operates under the aegis of the central bank Governors of the G–10 countries, has done substantial work to establish basic principles for the supervision of internationally active banks and to devise minimum standards for banking supervision. In response to the need for a comprehensive set of guidelines that could be applied not merely to internationally active banks but to the entire banking system in a variety of different countries, the Basle Committee has developed both a set of core principles for effective banking supervision and an exhaustive compendium of rules and recommendations on banking supervision. This effort is intended to generate a comprehensive and internationally endorsed set of principles and practices to be applied in the light of the conditions prevailing in individual countries. The "Core Principles" are set out in a consultative paper released in April. The compendium contains all existing Basle Committee recommendations, guidelines and standards. A process of broad consultation is under way to ensure that the principles and practices are both appropriate and widely accepted. The core principles of banking supervision are annexed to this report.

Securities market supervision. The International Organization of Securities Commissions (IOSCO) is the international forum for securities regulators, comprising 134 member agencies from 81 countries; a very large proportion of its members are from emerging markets. The members of IOSCO seek to promote high standards for the effective supervision and regulation of securities markets. Their aim is to ensure that markets are fair, efficient and sound. In the aggregate, IOSCO's output represents a comprehensive set of principles for the regulation and supervision of securities and futures markets worldwide. A consultative approach is used that leads to the voluntary adoption of these principles by country authorities. The dissemination of its principles and guidelines through its membership contributes to market transparency, investor protection and financial stability. A collection of its principles and past conclusions, guidelines and recommendations has been compiled and is annexed to this report.

Insurance supervision. The International Association of Insurance Supervisors (IAIS) is the third international grouping of supervisors of financial institutions. It is seeking

to establish supervisory procedures and standards. Its first aim is to develop principles relating to the supervision of insurance companies. These principles would be fairly general in nature, and provide little concrete guidance for supervision. Accordingly, a second aim is to develop guidelines that could be applied by national authorities. This process is not as advanced as that in banking supervision, but it should progress.

Conglomerates. The prime responsibilities of the three international supervisory groupings (for banking, securities and insurance) centre on the institutions that their members oversee. The failure of a large enterprise engaged in two or more of the three institutional categories could cause serious financial distress. The three groupings are seeking, through their cooperation in a Joint Forum, to address these concerns and are examining procedures to ensure that financial conglomerates are subject to adequate supervision. This process should continue and consideration should be given to the need for guidelines for the supervision of financial conglomerates and to the determination of how financial supervision should take place. In addition, since there needs to be an adequate understanding of the full range of risks confronting a conglomerate, there should be scope for exchanging information among supervisors. Steps are being taken to remove unnecessary barriers or hindrances to such information exchange.

Other activities. Although the above international groupings should have primary responsibility in their areas of expertise, other groupings have a useful role to play. For example, the Euro-currency Standing Committee of the G-10 central banks, and its enlarged grouping consisting of representatives of G-10 and emerging market countries, focuses on systemic risk and macroprudential issues. It has been instrumental in ensuring that information on the scope and evolving nature of international banking and financial markets is available and has sought to enhance market discipline by initiating a process of competition among financial institutions in the quality of public disclosure about their market and credit risk exposures. Similarly, the work of various committees at the OECD improves the understanding of key elements of robust financial systems and the interaction between macroeconomic, structural and financial market conditions that may have a bearing on financial strength. The experience of the European Union also shows that regional integration can play a significant role in promoting the adoption of sound principles and practices in emerging market economies and in supporting their implementation. Many of its directives serve as benchmarks for the financial legislation enacted by countries contemplating membership. The principle of mutual recognition and a system of a single license ensures that these directives provide a set of minimum norms while at the same time avoiding the erection of undue barriers to competition among financial institutions. Moreover, since many of the potential new members are countries in transition, the European Union is well placed to help address the special challenges that they face. Finally, the recommendations of the Financial

Action Task Force on money laundering have proved to be helpful for the development of regulations and laws to combat money laundering. These recommendations are also of importance for emerging market economies.

Cooperation. There are some areas in which no single grouping would naturally assume sole or primary responsibility for forging a consensus on sound principles and practices, but where several have an interest or partial responsibility. Examples of such areas are accounting, transparency and disclosure and financial sector competition and liberalisation policy. In the area of disclosure and accounting, the Basle Committee, the IASC and IOSCO all cooperate in improving the timeliness, quality and comparability of the information in financial statements. This cooperation should continue and be intensified in areas where there are common concerns. Lines of communication should also be established between the various groupings and the international organisations, which may be able to provide useful suggestions for the further development of the international norms developed by these groupings.

Areas for possible future work. There are also certain areas that are not being addressed by any grouping or combination of groupings. For example, widely accepted norms have not been developed for loan classification, asset valuation and provisioning despite their importance for financial stability. In addition, national practices with respect to the design and use of the safety net differ considerably and no widely accepted practices and principles exist for good corporate governance, orderly exit or legal and juridical arrangements affecting the credit culture.

The absence of internationally agreed sound practices in a particular area is not necessarily a problem. It may well be that there is no need for a globally agreed consensus in that area. If there is such a need, however, it may be useful to establish procedures for developing a consensus in a cooperative manner. In some cases, for example with regard to loan classification, asset valuation and provisioning, achieving consensus may be complicated by differences across countries in legal, accounting and taxation practices. Furthermore, there is a subjective element in most valuation processes. It might be possible to identify underlying principles which should be applied differentially across countries. Consideration needs to be given to whether there is a need to develop an international consensus in these and other areas and how this should be done.

Adopting and implementing sound practices and robust structures

The formulation of sound practices must be followed by their adoption and implementation. These stages are, however, closely intertwined. Involving countries in the process of formulating the principles of sound practice generates a degree of commitment that

would be difficult to achieve in the absence of a process of consultation in their development. Moreover, there are a variety of complementary methods to foster the adoption and successful implementation of sound practices. By relying on several complementary methods, the spread of sound practices will be faster and their implementation better. However, the pace of implementation needs to be such that it is within the capacity of market participants to adjust.

Using market channels. Once principles for sound practices have been established, markets can provide important incentives for their adoption. For example, emerging market economies that implement widely accepted norms will gain improved access to the international capital market and may obtain sizable reductions in funding costs. Market encouragement of compliance with sound practices operates on two levels, that of the national authorities and that of the individual firm. Their impact can be reinforced by the appropriate design of regulation and supervision as discussed in Chapter II.

National authorities will face strong incentives to adopt international norms for financial regulation, prudential arrangements and supervisory practices, since this will reduce creditors' concerns about the soundness of their systems and also allow them to gauge more accurately the creditworthiness of individual firms. Both of these factors will reduce the country-specific risk premia built into costs of funding. In fact, these incentives could engender a process by which countries that make the most progress in the adoption of sound financial policies experience the largest reductions in risk premia.

Markets that are competitive and transparent generate incentives to adopt appropriate structures. Accordingly, efforts to ensure appropriate oversight by owners and other stakeholders will help to foster the spread of sound risk management and other desirable commercial practices. Once norms in areas such as accounting, disclosure, risk management practices and capital adequacy have been set for the financial operations of individual institutions, both at the domestic and the international level, individual institutions will have an incentive to comply in order to lower their own, firm-specific cost of funds. It also is likely that in countries where international norms for financial regulation and supervision have not yet been adopted by the national authorities, creditworthy individual firms would lobby their authorities to adopt them in order to allow them fuller access to the international capital market.

The market channel can serve not only to provide incentives for sound financial practices, but also to provide essential banking and financial skills. For example, foreign financial institutions often have risk management and credit analysis procedures that are needed in emerging market economies. Such skills can be transferred to the domestic financial system through entry from abroad. In addition, well-managed private sector firms can be a source of technical assistance to help improve the management of financial

institutions. Use should be made of a variety of different arrangements by which commercial banks and other financial institutions from different markets can support and learn from one another: exchange of qualified personnel, twinning arrangements, joint ventures in emerging and developed markets with either majority or minority stakes for the foreign banks, the opening of full branches or subsidiaries, etc. In all these cases there is likely to be a transfer of credit culture and management skills that are essential for financial institutions to make use of good information and to react to appropriate incentives.

Gaining access to a market can be a strong incentive to strengthen financial systems. For example, the listing requirements in the key markets often call for the disclosure of extensive information prepared according to recognised accounting standards. Similarly, the Basle minimum standards allow access to a banking market to be denied to institutions from countries where banking supervision is unsatisfactory and not performed on a consolidated basis. While access to major markets is a strong incentive in its own right, the principle of adequate supervision on a consolidated basis by home supervisors has recently been endorsed by supervisors from 140 countries, giving it still greater force.

The OECD and the European Union apply conditions relating to the financial sector for membership. Such criteria should be consistent with the global norms. Robust financial systems are an essential element of countries' readiness for EU membership, and the process of preparing for membership will support the global objectives that are developed. Accession implies acceptance of existing EU directives, including those bearing on financial stability. Because this presumption of acceptance applies to internal legislative frameworks, it has a wider immediate reach than mechanisms working through cross-border activities.

Action by national authorities in the prudential area also contributes to the spread of sound practices. The authorities in the countries with major financial centres can and do lay down establishment criteria regarding managerial capabilities, financial resources and the provision of relevant information by banks and by their home-country supervisory authorities. By applying such criteria even-handedly to domestic institutions and affiliates of foreign institutions, these authorities can help to spread sound supervisory systems and practices. In addition, provisioning guidelines of supervisory authorities in the main markets that lead banks to allocate larger amounts to reserves for loans to entities in countries with weak financial systems provide an incentive for the authorities in these countries to remedy matters, as the funding costs of entities from these countries will decline once the provisioning requirements are lowered. Bilateral contacts between supervisors from the industrial countries and those in the emerging market and developing countries also tend to improve supervisory skills and help to ensure confidence and the exchange of information which is invaluable in times of distress.

The private sector and the bilateral official sector both have expertise and experience that is highly relevant and should continue to support countries' efforts to strengthen their financial systems. The multilateral institutions should foster the spread of this expertise. Coordination is needed to ensure that the activities of the different institutions are complementary. Recipient countries should play an active role in coordinating the technical assistance they receive so as to ensure that it addresses their needs.

Role of the international institutions

Each of the major international institutions can contribute significantly to the greater robustness of financial systems. They should act in support of and encourage the spread of best practice through market channels. They can support countries' efforts to reduce the macroeconomic imbalances and eliminate the structural distortions that are at the root of financial instability. In addition, they can take stock of progress in adopting the principles and sound practices developed by the international groupings and provide technical assistance to develop the requisite skills and capacities. Moreover, by promoting the improvement of the quality and comparability of the information currently made available, and encouraging and supporting further dissemination of data, they can improve the capacity of stakeholders to monitor progress and provide the incentives and discipline that will bolster the robustness of financial systems.

Taking stock of progress in the adoption of sound principles and practices. In its surveillance, the IMF, with its nearly universal membership and its regular process of consultation with its members, is well placed to take stock of the progress in the adoption of sound principles and practices developed by the international groupings. It should focus its efforts on instances where the benefits of such stocktaking are likely to be the greatest. Its assessment of a country's economic situation should entail an analysis of whether inadequate application of the principles and norms relevant for financial sector stability could have macroeconomic implications. Through its surveillance activities, the IMF can also help to identify and draw the attention of national authorities to macroeconomic imbalances that can disrupt the banking and financial sector and to weaknesses in the financial sector that pose a risk to macroeconomic stability. It should encourage the adoption and implementation of the norms discussed above. Surveillance could also address issues related to capital account liberalisation.

While the IMF is in regular contact with all its members, the World Bank may in some cases be in a better position to provide a timely assessment of a country's economic conditions and the health of its financial sector. The IMF and World Bank should develop modalities for sharing their assessments of financial sector strength and of the regulatory and

supervisory regimes in individual economies. Other multilateral organisations with less universal membership can contribute to monitoring the adoption of sound practices. The OECD engages in peer group reviews in this area, and the European Commission considers the strength of the financial sector in countries in the process of accession.

The institutions involved in the monitoring of progress in the adoption of sound practices will need internal guidelines for use by their country and sectoral experts engaged in financial system assessment. These guidelines should be based on the work of the relevant international groups developing norms. In particular, in areas where core principles and norms have been developed, such as banking supervision, securities market oversight and accounting, the internal guidelines of the multilateral institutions should incorporate these norms as they stand. The multilateral institutions should also assist the groupings that have developed the principles and sound practices by communicating to them information obtained in consultations with national authorities that might be relevant to the enhancement of the norms.

The multilateral institutions can also enhance the capacity of the markets to exercise discipline by improving the information available to market participants. The ongoing efforts of the IMF to promote the improvement of the quality, timeliness and comparability of key data disseminated by national authorities is important and should continue to be given high priority. Information on conditions in the financial system is also important. When deciding how much information they should publish on their own assessments of financial strength, the multilateral institutions must balance the need to maintain the confidence of the authorities, as well as the possibility that market participants might rely on such assessments rather than exercise their own due diligence, against the disciplinary effect obtained by the release of such information. National authorities should, in any case, be encouraged to disseminate accurate and relevant information in a timely fashion.

Advice for financial sector reform. The World Bank and the regional development banks are the most appropriate institutions for providing advice for the development of robust, efficient financial structures in emerging markets. This will involve the provision of advice to client countries keyed off the norms developed by the international groupings. While the World Bank and the regional development banks should take the lead in providing international advice to countries seeking to build strong financial systems, the IMF, other official institutions and the private sector can also play an important role. The IMF has the capability to introduce financial sector conditions into its programmes. In cases where an IMF programme is responding to macroeconomic strains caused in part by weakness in the financial sector or in the framework of financial supervision and regulation, the programme could include conditions to correct these shortcomings.

The World Bank and regional development banks, working in close cooperation with individual central banks and the private sector, can help to strengthen financial systems in the following ways:

(i) *Promoting sound, market-oriented banking and financial systems and encouraging the development of capital markets.* Countries should be assisted in undertaking the structural reforms necessary to remove distortions in the economy that weaken the financial system, impede capital market development and undermine effective supervision. Programmes and technical assistance can also be targeted to support the development of financial institutions and capital markets to broaden and deepen the financial sector.

(ii) *Promoting stronger supervisory regimes and institutional strengthening of supervisory agencies.* A key priority for the World Bank and the regional development banks is the utilisation of technical assistance and financial sector programmes to assist countries in adopting sound supervisory practices. Policy reforms in the supervisory area recommended by the development banks should be consistent with principles developed by the international groupings.

(iii) Encouraging the resolution of serious banking problems and the restructuring of failed institutions in ways that support market principles. A large number of emerging economies have recently experienced banking sector crises or currently face serious weaknesses in their banking systems. Addressing these problems should be a significant priority for the World Bank, which should have the primary responsibility for assisting national governments in developing and implementing comprehensive and effective programmes to restructure their banking systems and to deal with weak or insolvent institutions.

(iv) *Providing advice on the privatisation of state-owned banks*. Privatisation of state-owned banks is often an appropriate element of a banking sector restructuring programme. Countries should be advised of best practices and related policies needed to underlie and support a successful privatisation programme.

(v) *Developing the financial and legal infrastructure*. The World Bank and the regional development banks are well placed to assist countries in developing high-quality payment and settlement systems and other market infrastructures and in adopting accounting disclosure and auditing practices in line with international standards, and to support legal/juridical reforms through high-quality and prudent lending programmes and technical assistance.

Financing programmes of financial sector reform. The World Bank and the regional development banks should provide financing for financial sector reform and structural measures to strengthen the financial system. In cases where immediate balance-of-payments problems or macroeconomic strains arise in part because of weakness in the financial sector or in the framework of financial supervision and regulation, IMF programmes could include steps to strengthen financial systems. Consideration should be given to the extent to which the provision of financial resources for financial sector reform should be conditional on the adoption and implementation of sound principles and practices.

Technical assistance is essential to build the skills needed for a robust financial system. Such assistance can be provided by the private sector, by the bilateral official sector and by the multilateral agencies. It is up to the national authorities in the countries concerned to seek the best help from the wide variety of sources. Among the multilateral institutions, the World Bank and the regional development banks should play a leading role in providing technical assistance to countries seeking to build strong financial systems. In areas or countries where it has an established comparative advantage, the IMF can also provide technical assistance. The European Union provides significant technical assistance in the area of financial system reform in transition countries, notably in the framework of pre-accession programmes.

A crucial element in strengthening supervision is the development of a capable, professional cadre of supervisors through high-quality training programmes that upgrade supervisory skills. All these programmes should rely on the principles and practices being developed by the relevant international groupings. When providing technical assistance and training, international institutions should build on and promote the development of bilateral relationships between national supervisors. There is broad scope for combining the resources of the international financial institutions with the expertise of national supervisors sometimes acting in concert with the international supervisory groupings to enhance the availability of training programmes. The regional development banks should establish links with regional groups of supervisors to support training programmes tailored to regional needs.

Coordination is needed to make the best possible use of the resources available when support is being provided by a number of different entities. It is particularly important for the international community to develop operating procedures for ensuring that the provision of financial and technical assistance is coordinated, complementary and effective.

Because the roles and responsibilities of the IMF and the World Bank overlap in many respects, close coordination between them is essential with respect to the assessment of financial conditions, programme design and technical assistance. The World Bank needs to be aware of the macroeconomic context for its assessment of the implications of financial sector

policies, and the IMF must be cognisant of the microeconomic and structural foundations of macroeconomic policies. As was mentioned above, when exercising the oversight function they should exchange relevant information on the robustness of financial systems and on progress in adopting and implementing programmes of financial reform.

When the World Bank and the IMF design programmes with financial sector conditions, they should consult each other to ensure the complementarity and consistency of their conditionality and advice. They should cooperate closely in those cases where the IMF may be the principal or sole international institution assisting a country in its structural adjustment efforts. Similarly, while the World Bank may have the lead in designing financial liberalisation measures, it should coordinate closely with the IMF to ensure that appropriate macroeconomic policies are maintained during the process.

The coordination between the IMF and the World Bank should take place at all levels, and extend to regular and frequent contact between financial sector and country experts in both institutions and be based on clear and efficient procedures for coordinating operations and establishing priorities jointly for country operations. The contacts should take place in the early stages of financial reform with a view to ensuring that such reforms occur at the appropriate pace and are coordinated with other necessary changes. The two institutions intend to develop such procedures. Their efforts to ensure cooperation are to be welcomed.

It is also important to ensure that there is adequate cooperation between the Bretton Woods institutions and other multilateral institutions, such as the regional development banks, the European Commission and the OECD, that are concerned with financial sector issues involving their members or countries seeking membership. Such cooperation is needed to ensure that the results of their efforts are mutually consistent in order to avoid unnecessary duplication of efforts and to ensure that there is an adequate sharing of information. The foundation for such coordination already exists among these institutions. For example, over the past several years, the OECD Secretariat has cooperated closely with the staffs of the IMF and the World Bank in preparing reviews of several current or potential future members with serious financial problems. The technical assistance and training activities of the international financial institutions and other official institutions should also be coordinated. In addition, the international organisations should cooperate with the international groupings of national authorities, exchanging relevant information as needed.

Critical areas for action

The analysis of the sources of financial fragility and the description of the key elements of a robust financial system in the preceding chapters make it clear that action in many different areas is needed to ensure progress. Because time and resources are limited, it is important to identify those measures that are most likely to have the greatest impact in establishing a stable and robust financial system. On the basis of the analysis in Chapter II, this section lists the areas of reform that should be given the highest priority for implementation. This list is subject to several caveats.

First, the discussion is necessarily general in nature. The specific priorities in any given country or in a group of countries will often differ. Secondly, the time required for implementation will differ considerably, depending upon the reform undertaken. For example, both establishing appropriate capital adequacy requirements and reforming the legal/juridical system are essential to providing the basis for a stable, robust financial system. Legal/juridical reform will often take much longer to achieve than revising capital adequacy requirements, but the long-term importance of such reform implies that work towards accomplishing it should start as soon as possible. Finally, the list presented below necessarily represents only part of the action that should be taken to bolster financial stability. Setting out priority areas in no way implies that other measures are not essential, such as the elimination of the real distortions in the economy or the macroeconomic imbalances that engender financial crises.

Institutional and market infrastructure

- Strengthen the legal/juridical framework to ensure that property rights are well-defined and to promote a sound credit culture.
  - Create a legal environment where the terms and conditions of contracts are observed and the rights and responsibilities of all agents involved in loans or transactions in financial assets are well-defined, understood and enforceable without undue delay, including the ability to pledge and take possession of collateral and to wind up or reorganise a bankrupt entity.
- Improve the quality, timeliness and relevance of information used by market participants and regulators to assess asset quality, creditworthiness and the condition of financial institutions.
  - Foster the development and adoption of comprehensive and well-defined accounting principles that command international acceptance and provide accurate and relevant information on financial performance.

- Seek to ensure that loan valuation, asset classification, risk assessment and provisioning practices reflect sound and accurate assessments of claims and counterparties.
- Seek to ensure the independent verification of financial statements and compliance with principles of sound practice through professional external auditing and/or on-site inspection.
- Foster greater transparency through regular and comprehensive disclosure of information and the efficient use of this information by such entities as rating agencies, credit bureaus and central credit registers.
- Encourage the publication of selected asset price indices and data on credit extended for the purchase of certain assets.
- Promote robust payment, settlement and custody arrangements.

- Promote the development of an adequate array of financial markets and instruments that enhance financial resilience and allow risks to be managed effectively.

Market discipline and competition

- Increase the incentives for market participants to exert discipline over financial institutions.
  - Require capital commensurate with risk and volatility subject to the minimum standards of the relevant international grouping and ensure that shareholders are not shielded from losses in the event of adverse financial performance.
  - Encourage ownership structures that foster stakeholder oversight, including private ownership to strengthen the monitoring of management performance and to reduce distortions in incentives.
  - Design and apply safety net arrangements (deposit insurance, remedial actions, exit policies, etc.) so that the incentives for stakeholders to exercise oversight and to act prudently are not undermined and so that potential recourse to public funds is reduced.
- Subject to prudential standards being met, foster competition in the financial sector by removing unnecessary segmentation, dismantling administrative restrictions and allowing foreign participation in, and access to, the domestic financial system.
- Reduce the vulnerability of the financial system to particular risks, including abuse of the banking franchise.

- Promote effective systems of internal management and risk control, including the prevention of insider abuses such as connected lending and the monitoring of concentration of risks.
- Enhance the professionalism and skills of managers of financial institutions.

Regulation and supervision

- Promote the independence of supervisory and regulatory authorities from political interference in the daily execution of supervisory tasks and seek to ensure that they have adequate powers and resources to pursue clearly defined objectives but are sufficiently accountable in their use.
- Provide the authorities with the power to license institutions, to conduct consolidated supervision, to apply prudential rules, to ensure that the data provided by financial institutions are accurate, timely and comprehensive, to conduct off-site and on-site examinations, to replace banks' managers and to impose penalties.
- Equip the authorities with the necessary powers and sufficient resources to cooperate and exchange information with other authorities, both at home and abroad, thereby supporting consolidated supervision.

• Develop a well-defined strategy for responding to the prospective insolvency of financial institutions.
  - Take prompt corrective action to address financial problems before they reach critical proportions.
  - Close unviable institutions promptly and vigorously monitor weak or restructured institutions.
  - Undertake a timely assessment of the full scope of financial insolvency and the fiscal cost of resolving the problem.

Further steps

Setting out the key features of a robust financial system and delineating a concerted international strategy to promote the establishment, adoption and implementation of a consistent set of sound principles and practices is a major landmark. Subsequently, a number of further steps should be taken.

First, in keeping with the procedures advocated above for developing a broad consensus, it would be useful to embark on a process of consultation with a larger group of countries. In addition to informal contacts, a meeting or meetings should be convened to consider the approach developed as part of this initiative. Consultation with market participants should also take place.

Secondly, further consideration should be given to filling the gaps that remain in the areas where there is no clear assignment of roles and responsibilities for the development of understandings on best practice. Where several groupings have a responsibility for, or interest in, a common question, it may be advisable to continue the current practice of having different groupings examine different aspects of the issue or the same aspect from a different perspective. In this case it is important to ensure coordination and to avoid the emergence of conflicting norms. In cases where there are no groupings either singly or jointly responsible for a specific area, it may be useful to consider whether norms are needed and how consensus on them can best be generated. But it may also be advisable to ensure that no key area is overlooked and also to establish procedures for developing consensus when several bodies are active in an area.

Thirdly, as part of the implementation process, the IMF and the World Bank should take further steps to define their respective roles and means of coordination, both between themselves and with other international organisations. In this regard, the Working Party notes that the two institutions plan to present a joint paper to their Boards on this subject.

Finally, in keeping with their standing mandate in this area, the G-10 Deputies in cooperation with representatives of the emerging market economies should monitor progress in implementing the concerted strategy set out in this report and consider whether any changes to it are needed in the wake of evolving economic and other conditions.

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Annex 1

ILLUSTRATIVE LIST OF INDICATORS OF ROBUST FINANCIAL SYSTEMS

I. Legal and juridical framework

- Well-defined property rights and contract law
- Market contracts easily enforceable in practice
- Ability to pledge and seize collateral
- Well-developed bankruptcy code

II. Accounting, disclosure and transparency

- Loan valuation, asset classification and provisioning practices reflecting sound assessment of counterparties
- Effective/regular auditing mechanisms
- Information on the creditworthiness of financial institutions made publicly available on a regular, frequent basis
- Timely publication of relevant aggregate financial data (macroeconomic indicators, reserves, banking sector statistics, etc.)
- Availability of impartial credit-rating or credit information facilities

III. Stakeholder oversight and institutional governance

- Capital adequacy requirements commensurate with risk
- Replacement of management for poor performance
- Enforceable legal liability of managers
- Pervasive use of effective systems of risk management and internal control

IV. Market structure

- Financial sector open to qualified new entrants, including those from abroad

- Share of foreign participants in total assets
- Financial sector concentration ratios
- Liquid interbank money and capital markets
- Regulations permit full range of financial instruments
- Sound/effective payment and settlement systems
- Share of banking system assets held by public sector financial institutions

V. Supervisory/regulatory authority

- Independent from political interference in the daily conduct of supervision and appropriate accountability for achieving clearly defined objectives
- Power to force disclosure, impose penalties, etc.
- Adequate resources for staffing, training, compensation
- Conducts supervision on a consolidated basis
- Shares information with other supervisors
- Verification of information on risk management and internal control systems and on asset quality by regular examinations or external audits
- Adherence to norms established by international consultative bodies (Basle Committee, etc.):
  - In principle
  - In practice
- Measures to address particular types of risk:
  - Evaluation of risk management systems
  - Connected lending
  - Risk exposure and loan concentration
  - Special attention to foreign currency and interest rate risk management and exposures
  - Heightened scrutiny of asset quality and capital adequacy in the face of sharp asset price movements
- Strategy for addressing financial insolvency:

– Procedures for prompt corrective action or the equivalent

– Appropriate exit policy

VI. Design of the safety net

- Explicit rather than implicit deposit insurance, paid for by banks and targeted especially towards protecting small depositors
- Appropriate allocation of losses among stakeholders
- Stringent conditionality for the use of public money

Annex 2

BASLE CORE PRINCIPLES FOR EFFECTIVE BANKING SUPERVISION

BASLE COMMITTEE ON BANKING SUPERVISION

Preconditions for effective banking supervision

An effective system of banking supervision will have clear responsibilities and objectives for each agency involved in the supervision of banks. Each such agency should possess operational independence and adequate resources. A suitable legal framework for banking supervision is also necessary, including provisions relating to authorisation of banking establishments and their ongoing supervision; powers to address compliance with laws as well as safety and soundness concerns; and legal protection for supervisors. Arrangements for sharing information between supervisors and protecting the confidentiality of such information should be in place.

Licensing and structure

The permissible activities of institutions that are licensed and subject to supervision as banks must be clearly defined, and the use of the word "bank" in names should be controlled as far as possible.

The licensing authority must have the right to set criteria and reject applications for establishments that do not meet the standards set. The licensing process, at a minimum, should consist of an assessment of the bank's ownership structure, directors and senior management, its operating plan and internal controls, and its projected financial condition, including its capital base; where the proposed owner or parent organisation is a foreign bank, the prior consent of its home-country supervisor should be obtained.

Banking supervisors must have the authority to review and reject any proposals to transfer significant ownership or controlling interests in existing banks to other parties.

Banking supervisors must have the authority to establish criteria for reviewing major acquisitions or investments by a bank and ensuring that corporate affiliations or structures do not expose the bank to undue risks or hinder effective supervision.

Prudential regulations and requirements

Banking supervisors must set minimum capital requirements for banks that reflect the risks that the banks undertake, and must define the components of capital, bearing in mind its ability to absorb losses. For internationally active banks, these requirements must not be less than those established in the Basle Capital Accord.

An essential part of any supervisory system is the independent evaluation of a bank's policies, practices and procedures related to the granting of loans and making of investments and the ongoing management of the loan and investment portfolios.

Banking supervisors must be satisfied that banks establish and adhere to adequate policies, practices and procedures for evaluating the quality of assets and the adequacy of loan loss provisions and reserves.

Banking supervisors must be satisfied that banks have management information systems that enable management to identify concentrations within the portfolio and supervisors must set prudential limits to restrict bank exposures to single borrowers or groups of related borrowers.

In order to prevent abuses arising from connected lending, banking supervisors must have in place requirements that banks lend to related companies and individuals on an arm's-length basis, that such extensions of credit are effectively monitored, and that other appropriate steps are taken to control or mitigate the risks.

Banking supervisors must be satisfied that banks have adequate policies and procedures for identifying, monitoring and controlling country risk and transfer risk in their international lending and investment activities, and for maintaining adequate reserves against such risks.

Banking supervisors must be satisfied that banks have in place systems that accurately measure, monitor and adequately control market risks; supervisors should have powers to impose specific limits and/or a specific capital charge on market risk exposures, if warranted.

Banking supervisors must be satisfied that banks have in place a comprehensive risk management process (including appropriate board and senior management oversight) to identify, measure, monitor and control all other material risks and, where appropriate, to hold capital against these risks.

Banking supervisors must determine that banks have in place internal controls that are adequate for the nature and scale of their business. These should include clear arrangements for delegating authority and responsibility; separation of the functions that

involve committing the bank, paying away its funds, and accounting for its assets and liabilities; reconciliation of these processes; safeguarding its assets; and appropriate independent internal or external audit and compliance functions to test adherence to these controls as well as applicable laws and regulations.

Banking supervisors must determine that banks have adequate policies, practices and procedures in place, including strict "know-your-customer" rules, that promote high ethical and professional standards in the financial sector and prevent the bank being used, intentionally or unintentionally, by criminal elements.

Methods of ongoing banking supervision

An effective banking supervisory system should consist of some form of both on-site and off-site supervision.

Banking supervisors must have regular contact with bank management and thorough understanding of the institution's operations.

Banking supervisors must have a means of collecting, reviewing and analysing prudential reports and statistical returns from banks on a solo and consolidated basis.

Banking supervisors must have a means of independent validation of supervisory information either through on-site examinations or use of external auditors.

An essential element of banking supervision is the ability of the supervisors to supervise the banking organisation on a consolidated basis.

Information requirements

Banking supervisors must be satisfied that each bank maintains adequate records drawn up in accordance with consistent accounting policies and practices that enable the supervisor to obtain a true and fair view of the financial condition of the bank and the profitability of its business, and that the bank publishes on a regular basis financial statements that fairly reflect its condition.

Formal powers of supervisors

Banking supervisors must have at their disposal adequate supervisory measures to bring about corrective action when banks fail to meet prudential requirements (such as

minimum capital adequacy ratios), when there are regulatory violations, or where depositors are threatened in any other way.

Cross-border banking

Banking supervisors must practise global consolidated supervision, adequately monitoring and applying appropriate prudential norms to all aspects of the business conducted by banking organisations worldwide, primarily at their foreign branches and subsidiaries.

A key component of consolidated supervision is establishing contact and information exchange with the various other supervisors involved, primarily host-country supervisory authorities.

Banking supervisors must require the local operations of foreign banks to be conducted to the same high standards as are required of domestic institutions and must have powers to share information needed by the home-country supervisors of those banks for the purpose of carrying out consolidated supervision.

Annex 3

PRINCIPLES AND RECOMMENDATIONS FOR THE REGULATION AND SUPERVISION OF SECURITIES MARKETS

INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS

I. IOSCO: structure and objectives

IOSCO is the international forum for securities regulators, constituted by 134 member agencies from 81 countries. IOSCO's membership encompasses the whole range of agencies, associations and organisations involved in the regulation and development of securities markets worldwide. IOSCO's work programme therefore has a global reach and global impact, in terms of both geography and range of affected markets.

As stated in its by-laws, IOSCO's members have resolved to:

- cooperate together to promote high standards of regulation in order to maintain just, efficient and sound markets;
- exchange information on their respective experiences in order to promote the development of domestic markets;
- unite their efforts to establish standards and an effective surveillance of international securities transactions;
- provide mutual assistance to promote the integrity of the markets by a rigorous application of the standards and by effective enforcement against offences.

Any agency requesting admission to the membership of IOSCO must commit to these basic principles as well as to the resolutions adopted by IOSCO's Presidents Committee before the application is considered.

II. The work of IOSCO: consensus and cooperation

IOSCO's work programme is designed to develop high-quality standards and promote market integrity through a process of member consensus and cooperation. Management of the Organisation is the responsibility of the Executive Committee, an elected body consisting of 19 member agencies. The substantive work of the Organisation is conducted by the Technical Committee and the Emerging Markets Committee (EMC), with important policy and organisational decisions adopted by the entire membership convened as

the Presidents Committee. The Technical Committee is composed of 16 members representing the larger, more developed and internationalised markets, and the EMC is composed of 56 members representing the emerging markets. In addition, IOSCO has constituted four Regional Standing Committees: the Africa/Middle East Regional Committee, the Asia-Pacific Regional Committee, the European Regional Committee and the Interamerican Regional Committee. These committees meet periodically to discuss matters specific to their respective regions.

Each member of an IOSCO Committee is represented by its Chairman or Chief Executive; the IOSCO consultative and decision-making process therefore involves the top representatives of the world's securities regulators, from both the emerging markets and the more developed markets. IOSCO is supported by a small Secretariat based in Montreal, Canada, and the work of the Organisation is conducted through the Committees and Working Groups (as described below) by senior and expert representatives of the member agencies.

The structure of IOSCO, combining global reach, participation by members at the highest level, and consensus-building, ensures that IOSCO's recommendations, guidelines and work product reflect global concerns, including those particular to emerging markets, and are accepted by virtually all of the world's securities regulators. This high level of consensus and support from the worldwide community of regulators is particularly important as it can provide the support that member agencies need to promote domestic legislative change. This role of IOSCO as a forum for promoting market integrity and investor confidence in individual domestic markets promotes financial stability worldwide.

III. Working to meet the needs of emerging securities markets

The concerns and interests of regulators in emerging economies, and the need to foster sound regulatory systems, have always had a high priority in IOSCO's work agenda. This is reflected in IOSCO's broad membership structure, and the participation of both emerging and developed economies in all of IOSCO's work.

The structure and objectives of the EMC reflect IOSCO's commitment to the development of sound regulatory principles in emerging securities markets. The objectives of the EMC are:

- the development and improvement of the efficiency of emerging securities markets through the establishment of sound regulatory principles and minimum standards;
- the preparation of training programmes for the personnel of members;
- the exchange of information; and

– the transfer of technology and expertise.

The EMC Steering Committee oversees the activities of the five EMC Working Groups. The EMC Steering Committee is made up of the EMC members that sit on the Executive Committee and the five Working Group Chairmen, and is chaired by the Chairman of the EMC. Members meet and communicate on a regular basis during the year in order to ensure that the five Working Groups follow their mandated terms of reference and specific work programmes as closely and as efficiently as possible.

The Technical Committee and the EMC have adopted parallel working group structures. The EMC Working Groups pursue their mandates in two parallel directions: (1) issues of specific interest to EMC members; and (2) issues being examined by the parallel Technical Committee Working Group. The Technical Committee and the EMC have also agreed to exchange observers on Working Groups in order to enhance practical cooperation. The EMC Working Group Chairmen therefore receive and provide input from and to the Technical Committee Working Groups. This high degree of coordination and cooperation between the two Committees enables the EMC to better focus its resources on some of the practical difficulties specifically encountered by its members.

In addition to supporting the particular focus of the EMC, IOSCO continues to seek ways to incorporate the concerns and interests of regulators in emerging markets into the Organisation as a whole. For example, IOSCO recently increased the representation of emerging market regulators on the IOSCO Executive Committee and reinforced the importance of regional groupings within the formal structure of the Organisation. This new structure has also enhanced the ability of IOSCO to address issues and make recommendations that are valid for both emerging and developed markets.

In addition, IOSCO is committed to long-term training for securities regulators from emerging markets. IOSCO is currently planning a new educational programme, directed by the Secretary General and designed to facilitate the transfer of regulatory expertise within the Organisation. The focus of the initial programme, expected to be held in September 1997, will be the regulation of financial intermediaries (in particular brokers and financial advisers) in emerging markets. By conducting a training programme on the practical aspects of the licensing, regulation and inspection of broker-dealers and other market participants, IOSCO can foster more effective supervision of market intermediaries, and thereby contribute to market confidence and integrity.

For more than ten years IOSCO has conducted an on-the-job training programme, in the course of which approximately 60 staff members of regulatory agencies from emerging markets have received training at member agencies in more developed markets. The on-the-job training programme provides a useful complement to the extensive inter-agency training

programmes that have been in place at IOSCO member agencies for many years and have contributed to the development of sound regulatory structures and practices for emerging markets.

IV. Working groups and coordination of regulatory initiatives

The structure of IOSCO results in a work product that is relevant to both developed and emerging markets. As described above, the EMC and the Technical Committee have adopted analogous working group structures with parallel overall mandates, and while the EMC Working Groups focus on issues specific to emerging markets, they maintain a close liaison with their parallel groups in the other Committee. This structure fosters mutual awareness of issues and approaches, and allows IOSCO to speak with a unified voice. The five Working Groups of the Technical and Emerging Markets Committees are as follows:

- ***Working Group No. I on Cross-Border Offerings and Listings***:

  promoting the achievement of high, comparable accounting, auditing and disclosure standards to facilitate cross-border securities offerings;

- ***Working Group No. II on Regulation of Secondary Markets***:

  promoting measures to enhance the transparency, integrity and robustness of financial markets and market processes;

- ***Working Group No. III on Regulation of Financial Intermediaries***:

  promoting the development of effective supervisory arrangements for securities firms and, in particular, for internationally active and diversified groups;

- ***Working Group No. IV on Enforcement and the Exchange of Information***:

  promoting improved cooperation and communication among regulatory authorities, and contributing to the battle against international financial fraud;

- ***Working Group No. V on Investment Management***:

  promoting standards to facilitate the cross-border regulation of internationally marketed collective investment schemes (CIS) and their fund managers.

V. Substantially all of IOSCO's work programmes and regulatory initiatives are intended to foster sound regulatory principles in emerging and developed markets

IOSCO's work product takes many forms, including: member resolutions; recommendations for action; model guidelines; reports; and the promulgation of principles. Indeed, IOSCO has produced more than 40 reports and other documents which, taken together, embody comprehensive principles and guidelines for the regulation and supervision of securities and futures markets worldwide. Through their dissemination among the IOSCO membership, these principles and guidelines contribute in a very real and tangible way to the development of transparent markets, investor protection and financial stability. While, as described below, specific work projects have focused on the particular interests of the emerging markets, all of IOSCO's work promotes high regulatory standards and strong markets throughout the world.

For the purposes of this memorandum, these initiatives have been organised under the seven key elements that are common to any sound securities regulatory regime. The common theme underlying each of these elements is the promotion and development of market integrity and investor confidence.

A. Measures designed to enhance the authority of securities regulators to act in a timely and objective manner in enforcing securities laws and investigating potential violations

The dramatic growth of international financial operations has had a major impact on the work of securities regulators. In an age of borderless markets, regulators must work together internationally in order to be effective domestically. IOSCO has long stood for the importance of cooperation and assistance in enhancing the ability of regulators to enforce securities and futures laws and investigate potential violations. Through the efforts of IOSCO, securities and futures regulators have established mechanisms to share information necessary to investigate cross-border frauds and permit the initiation of legal action against wrongdoers.

In 1994, IOSCO members reaffirmed their commitment to mutual assistance and cooperation by adopting a Resolution on Commitment to Basic IOSCO Principles of High Regulatory Standards and Mutual Cooperation and Assistance. Among other things, the resolution calls on each IOSCO member to conduct an evaluation of its own ability to collect and share information, including information about the beneficial ownership of bank and brokerage accounts. This self-evaluation process is currently under way. In addition, a task force consisting of the Chairmen of the Executive, Technical and Emerging Markets Committees has been formed to develop recommendations for building on the self-

evaluations to encourage and improve international cooperation. Recommendations are expected to include strategies for enhancing information disclosure by under-regulated and uncooperative jurisdictions. IOSCO addressed the challenges presented by such jurisdictions in its Report on Under-Regulated and Uncooperative Jurisdictions (October 1994), in which it made a series of recommendations for collective action.

Given the ease with which funds can be transferred from one jurisdiction to another, and thereby out of the reach of defrauded investors, there is also a need for regulators to cooperate with one another in order to track and facilitate the recovery of funds across international borders. In this regard, IOSCO has issued recommendations relating to:

- adopting measures and mechanisms to deprive perpetrators of financial fraud of the proceeds of their activities;
- highlighting potential pathways for improvements in jurisdictions where there are few means to address the issue; and
- facilitating the return of the assets and interests of defrauded investors to their legitimate owners.

These recommendations are contained in an IOSCO report focusing on the means used by 27 different jurisdictions to protect the interests and assets of defrauded investors (Measures Available on a Cross-Border Basis to Protect Interests and Assets of Defrauded Investors, July 1996).

IOSCO members have found that memoranda of understanding (MOUs) are an effective tool for obtaining information to enhance their enforcement efforts, in part because they can bridge differences in legal and regulatory regimes. In 1991, IOSCO promulgated ten Principles for use by securities and futures regulatory authorities in developing MOUs with their foreign counterparts (Principles of Memoranda of Understanding, September 1991). These Principles have been incorporated into many of the more than 300 MOUs now in existence worldwide. The development of an extensive network of MOUs has resulted in greatly improved cooperation among regulators, contributing to the maintenance of safe and secure markets.

B. Establishing clear regulatory responsibility for licensing and regulation of securities market participants and transactions, including reporting, recordkeeping, inspection and disciplinary procedures

Clear, well-defined procedures for licensing and regulation of securities market participants and transactions are crucial to sound regulatory systems in both developed and emerging markets. In light of this principle the Presidents Committee adopted a Resolution on

International Conduct of Business Principles setting out the basic standards of business conduct for financial firms. In adopting this resolution, IOSCO members underscored the importance of implementing and promoting these principles in their jurisdictions.

IOSCO has recognised that it is critical to the public confidence in financial markets that client assets be properly handled and accounted for. The threat to client assets is perhaps most acute when the firm is unable to compensate its clients for losses because it is facing insolvency. Therefore, IOSCO has published 20 recommendations on measures and mechanisms that jurisdictions should establish as best practice to provide a high level of protection for assets and interests of clients held by financial intermediaries. A self-assessment has been initiated to determine the level of compliance of IOSCO members with these recommendations. (Report on Client Asset Protection, August 1996).

Procedures for the orderly disposition of a market default are a key component of any sound regulatory regime, and are essential to investor confidence. This is specially true in the dynamic area of futures and options transactions. IOSCO has affirmed the importance of transparency of market default procedures for providing certainty and predictability to market participants, facilitating orderly handling in the event of a default, and enabling market participants to make informed assessments. The issue has been addressed in three specific measures:

- the publication of a list of information items that should be available to market participants as to market default procedures regarding futures and options trading;
- a recommendation on Communications upon Implementation of Default Procedures;
- recommendations for Best Practices on the Treatment of Positions, Funds and Assets in the Event of the Default of a Member Firm. These recommendations are designed to permit prompt isolation of problems in order to minimise systemic risk.

All of the above can be found in the March 1996 report entitled Default Procedures.

IOSCO work in progress includes a report on the regulatory framework for short selling and securities lending by market intermediaries, which should help EMC members better address key regulatory issues in these areas.

Emerging markets are also addressing the challenges presented by the rapid growth in derivatives activities. In 1994 IOSCO published a set of principles and guidelines for the development of derivatives markets in emerging markets. These principles and guidelines deal with the conditions for the development and regulation of derivative markets, and the characteristics of an adequate financial infrastructure and market structure (Report of the Development Committee Task Force on Derivatives, September 1994).

Following up on the 1994 Report, IOSCO published a set of guidelines and recommendations on the appropriate regulatory approach for jurisdictions that are developing or plan to develop derivatives markets (Legal and Regulatory Framework for Exchange Traded Derivatives, 1996). This Report makes use of reports from six emerging market agencies (Brazil, Chinese Taipei, Korea, Malaysia, South Africa and Thailand) that describe their experiences and plans in the area of derivatives market regulation. These analyses provide a useful reference for jurisdictions considering the development of derivatives markets.

It is worth mentioning in this context that the CVM of Brazil, a member of the EMC, has for the past two years offered Training Sessions on Practical Aspects of the Development and Operation of Derivatives Markets, directed to regulators from emerging economies.

IOSCO also has discussions in progress with the Committee on Payment and Settlement Systems (CPSS) of the G-10 central banks regarding regulatory issues related to securities custody and lending.

C. Auditing, accounting and disclosure standards for securities issuers, and corporate governance standards to ensure protection and enforcement of shareholders rights

One of IOSCO's most important initiatives is its coordination with the International Accounting Standards Committee (IASC) as the IASC works to develop a core set of high-quality international accounting standards (IAS). In July 1995, IOSCO and the IASC agreed to a workplan that, upon successful completion, currently scheduled for March 1998, could result in IOSCO endorsement of IAS for use in cross-border capital-raising and listing in global markets. IOSCO has been engaged in an intensive review and consultative process with the IASC, including attendance as an observer at IASC Board meetings, designed to promote progress on this undertaking.

IOSCO has begun an analysis of the work of the International Federation of Accountants (IFAC) towards the development of acceptable International Standards for Audits (ISA). A comparison of certain of the ISAs to several national auditing standards has been initiated. The results of this work will be used to guide future substantive discussions with IFAC during 1997.

Additional IOSCO measures to improve disclosure standards include:

(1) development of international standards for non-financial statements disclosures for use by foreign issuers in cross-border offerings and listings;

(2) publication in 1994 of recommendations for minimum disclosure standards for public securities offerings and a Model Prospectus for Emerging Markets; and

(3) publication in 1996 of guidelines for the reporting of material events by issuers of publicly traded securities in emerging markets (Reporting of Material Events).

IOSCO work in progress includes standards for Interim Reporting and Presentation of Financial Statements.

D. Strengthening enforcement of laws and regulations against fraud and market manipulation by requiring the establishment of audit trails with respect to trading, clearance and settlement activities

IOSCO has devoted a substantial measure of attention and energy to sound, effective and efficient market processes. For example, in 1992 IOSCO published a detailed blueprint for establishing or developing an efficient and risk-minimising clearing and settlement system in emerging market economies (Clearing and Settlement in Emerging Markets: A Blueprint). The blueprint uses the nine recommendations of the Group of Thirty (G-30) on clearing and settlement to frame the characteristics of an efficient clearing and settlement system, and goes on to discuss both the non-technical policy issues that must be addressed and the technical design questions. As a practical follow-up to this work, the Malaysian Securities Commission, a member of the EMC of IOSCO, will be holding a training session and an international seminar on clearing and settlement in emerging economies, on March 3-5, 1997, directed to regulators of emerging markets.

Another example of IOSCO initiatives in the area of clearing and settlement is the recent development, with the CPSS, of a disclosure framework for securities settlement. This framework will assist regulators and market participants in evaluating the risks associated with cross-border securities settlement.

IOSCO work in progress in this area also includes: (i) development of a legal framework to support the operations of central securities depositories and to offer a greater degree of legal certainty for participants; and (ii) a report, Implications of the Use of Internet and Other Electronic Networks for the Regulation of Secondary Markets.

E. Supervision of market intermediaries, including the establishment of financial responsibility requirements

Effective supervision of market intermediaries is essential to the maintenance of just, efficient and sound markets. IOSCO continues to devote a great deal of effort and attention to this area, as demonstrated by the work product of the Technical Committee and EMC

Working Group on the Regulation of Market Intermediaries. In this regard, because IOSCO believes that close international cooperation is essential, it has continued to increase its cooperative activities with other regulatory groups as called for by the G-7 Ministers in their 1995 and 1996 communiqués. Among other things, IOSCO and the Basle Committee have jointly established eight major principles of supervision which set out the overarching objectives of the supervision of market intermediaries. These principles are:

- cooperation and information flows among supervisory authorities should be as free as possible from impediments both nationally and internationally;
- all banks and securities firms should be subject to effective supervision, including the supervision of capital;
- geographically and/or functionally diversified financial groups require special supervisory arrangements;
- all banks and securities firms should have adequate capital;
- proper risk management by the firm is a prerequisite for financial stability;
- the transparency and integrity of markets and supervision rely on adequate reporting and disclosure of operations;
- the resilience of markets to the failure of individual firms must be maintained;
- the supervisory process needs to be constantly maintained and improved.

(Joint Statement of IOSCO and the Basle Committee on Banking Supervision, May 1996)

Other important initiatives taken by IOSCO to foster more effective supervision of market intermediaries include a survey on capital adequacy regimes for market intermediaries among members of the EMC, which is scheduled for completion during 1997. The EMC also expects to issue a report, during 1997, on Financial Risk Management in Emerging Derivatives Markets, which will review policies and actions taken by EMC members with respect to supervision of derivatives markets' risk management.

One of the key factors in the effective supervision of market intermediaries is the financial responsibility of market participants. IOSCO has taken several important initiatives in this field, especially on the topic of the management and mitigation of potential risks associated with derivatives positions. For example:

- The worldwide growth of the OTC derivatives business led to the adoption by IOSCO in March 1996 of a recommendation on the Recognition of Bilateral Netting Agreements in the Calculation of Capital Requirements for Securities Firms. This

recommendation takes note of the increasing importance of the OTC derivatives business as a proportion of the overall business of securities firms, and encourages the use of legally enforceable bilateral netting agreements by authorised securities firms.

- The growth in derivatives trading activity in the securities sector has prompted firms to develop methods to analyse, control and report their trading risk in a consistent and reliable way. Firms have increasingly been turning to more sophisticated quantitative-based risk management methodologies using modern option and portfolio theory. This trend has led to the development of value-at-risk modelling techniques. The IOSCO Technical Committee is currently considering the appropriateness of the use of value-at-risk models by securities regulators for capital adequacy purposes and continues to cooperate with the Basle Committee on model testing and analysis. The basis for this consideration is the July 1995 report on the Implications for Securities Regulators of the Increased Use of Value-at-Risk Models by Securities Firms. This Report recognises the role played by value-at-risk models in improving internal controls and risk-based capital standards for securities firms. The Report explains how the value-at-risk models are constructed, points out the role that models should play as part of a firm's risk management procedures, and considers the implications for securities regulators of recognising the output of value-at-risk models for the purpose of calculating capital requirements for market risk.

- IOSCO recognises that supervisors should continuously improve their understanding of how exchange-traded and OTC derivatives affect the overall risk profile and profitability of market intermediaries. IOSCO and the Basle Committee have set out guidelines for the types of information that regulators and supervisors should obtain from banks and securities firms in order to form a judgement as to the risks associated with proprietary and client-based derivative trading activities. (Framework for Supervisory Information About the Derivatives Activities of Banks and Securities Firms, May 1995).

- IOSCO and the Basle Committee have also jointly prepared a set of recommendations for improved disclosure of both quantitative and qualitative information about derivatives trading activities. These recommendations are contained in Public Disclosure of the Trading Activities of Banks and Securities Firms (November 1995), which also reviews disclosure practices adopted by a large number of banks and securities firms in their 1994 annual accounts. An update to this report, including 1995 data, was released in November 1996.

F. Establishing open, transparent stock exchanges and other self-regulatory organisations (SROs) for market participants, which are subject to oversight by the securities regulator

IOSCO is uniquely placed to foster international cooperation and information sharing between securities regulators. It is important that market authorities closely monitor exposures that are large enough to put the market at risk and share information with one another so as to manage market risk.

IOSCO has put forward some important recommendations for cooperation between market authorities in the monitoring of and exchange of information on large exposures on futures and options markets. IOSCO recommends that market authorities (regulatory bodies, SROs or the markets themselves) consider establishing trigger levels for open positions so that, when the trigger levels are reached, the beneficial owner of an open position can be identified. Given the increasing internationalisation of trading activities, IOSCO also recommends that market authorities open and maintain channels of communication with one another in order to share information regarding large exposures. The recommendations propose the use of Information Sharing Arrangements between market authorities, and set forth the essential elements of such arrangements. (Cooperation Between Market Authorities, March 1996).

IOSCO work in progress includes the development of guidelines for surveillance techniques and practices to detect and prosecute price manipulation.

G. Establishing standards of regulation for collective investment schemes

Collective Investment Schemes (CIS) are a rapidly growing sector of the securities business, and IOSCO has devoted a great deal of attention to CIS-related issues. CIS are of particular interest to emerging markets: they offer a flexible, simple and convenient means for investors, including small savers, to participate in domestic and international securities markets. The development of CIS can therefore increase both foreign and domestic investment in an emerging market. IOSCO has devoted significant time and attention to the development of sound regulatory principles for CIS, thereby contributing to the growth and stability of emerging markets.

IOSCO has recommended core principles for the development and supervision of CIS, focusing specifically on the needs of emerging markets regulators. These recommendations, contained in the recent IOSCO report, Collective Investment Schemes, provide guidance for the regulatory activities of EMC members. In order that emerging markets can apply solutions that best fit their own particular circumstances, the report also

includes a comparative analysis of the CIS regulatory regimes in place in four EMC member jurisdictions.

International regulatory cooperation can be of critical importance to maintaining market integrity in emergencies involving the cross-border activity of CIS. These emergencies can take the forms of the insolvency or threatened insolvency of the CIS manager, trustee, custodian or affiliated company, or of a misappropriation of funds. The increased internationalisation of the markets in which CIS and their principals operate can give these emergencies cross-border implications. Therefore, IOSCO has developed a set of recommended policies for cooperation between regulators during an emergency, and a set of general principles for regulators to consider in the context of the suspension of dealing and marketing (Regulatory Cooperation in Emergencies, June 1996).

The increasing popularity of the CIS as an investment vehicle has also increased the need for disclosure of risk. Market integrity and investor protection hinge on the issue of accurate disclosure, and IOSCO has recommended a variety of ways of improving the presentation of risk factors in CIS offering documents and advertising, and proposed policies for ensuring that financial intermediaries adequately explain the risks of CIS investment to potential investors (Disclosure of Risk - A Discussion Paper, September 1996).

Another category of risks to be addressed in the context of CIS are those risks regarding the custody of cash deposits and non-cash assets. The failure of a financial institution with responsibility for custody will have consequences for CIS regulators, supervising CIS and fund management entities alike. The increase in cross-border activity led IOSCO to issue guidelines on the subjects of contractual arrangements between a custodian and the operator of a CIS, including the selection and authorisation of custodians, co-mingling of assets and omnibus accounts, and monitoring of custody arrangements. (Guidance on Custody Arrangements for Collective Investment Schemes - A Discussion Paper, September 1996).

VI. Conclusion

The dramatic increase in securities transactions and the increasingly globalised marketplace have set new challenges for securities regulators worldwide. The members of IOSCO recognise that market integrity, investor protection and financial stability can only be achieved through a high level of cooperation and communication. IOSCO provides the forum for that cooperation and communication, allowing members to share their expertise, make concrete their commitment to the goals of market integrity and investor protection, provide practical assistance to other members, and supply critical leverage to regulators seeking to

influence domestic legislation and regulation. IOSCO's commitment to these goals, accompanied by its global reach, participation by members at the highest level, and consensus-building have enabled IOSCO to make important contributions to the development of sound securities regulatory principles in both emerging and developed markets.

Annex 4

EFFORTS BY THE G-10 CENTRAL BANKS TO REDUCE SETTLEMENT SYSTEM RISKS

COMMITTEE ON PAYMENT AND SETTLEMENT SYSTEMS

Introduction

The G-10 central banks, through their Committee on Payment and Settlement Systems (CPSS) and related groups, have long been at the forefront of efforts to reduce risks in payment and settlement systems. Since the early 1980s, the G-10 central banks have been studying the arrangements used for the settlement of domestic and cross-border transactions, with a view to ensuring that the structure and design of those arrangements do not generate unacceptable credit and liquidity risks for financial market participants. This work has been motivated by concerns that the credit and liquidity risks inherent in payment and settlement systems have the potential to contribute to systemic problems if not properly managed and controlled. In this regard, the CPSS has considered it important to cooperate with other groups, including the International Organization of Securities Commissions (IOSCO), the Basle Committee and the G-10 Deputies, to address issues of common concern. It has also developed relationships with other central banks, particularly those of emerging market economies, in order to extend its work outside the Group of Ten.

This report describes the major issues on which the CPSS has focused, reviews the work it has carried out or has under way in these areas and discusses its planned future activities. The primary approaches to risk reduction adopted by the CPSS in its work have been to provide an analysis of the risks associated with different payment and settlement arrangements, to foster a dialogue among market participants on these risks and, where appropriate, to promote best practices or establish minimum standards. The Committee has focused its efforts on large-value funds transfer systems, foreign exchange settlement risks and multilateral netting schemes, securities settlement systems, clearing arrangements for exchange-traded derivatives, and electronic money.

Large-value funds transfer systems

The work of the CPSS has consistently emphasised the importance of large-value funds transfer systems, which are used for interbank payments and for payments on behalf of customers. Estimates compiled by the CPSS indicate that these systems transfer several

trillion dollars per day in the G-10 countries, a large portion of which is related to the settlement of financial market transactions. These systems and their risk management features have often been a focus of the Committee's discussions and it has over time compiled substantial information on their main features in both G-10 and non-G-10 countries. The ongoing factual publications of the CPSS in this regard (known as the "Red Book" series of publications) provide market participants with useful information on these important systems that is not readily available from other sources.

The work of the CPSS in this area has contributed to a growing awareness of the need for sound risk management in large-value funds transfer systems. These interbank funds transfer systems can be classified broadly into gross settlement systems and net settlement systems. In a gross settlement system, the final settlement of funds occurs transaction by transaction, usually on a continuous or real-time basis. Systems that can effect final settlement on a continuous, transaction-by-transaction basis throughout the processing day are generally known as real-time gross settlement (RTGS) systems. In a net settlement system, on the other hand, the final settlement of funds transfers occurs on a net basis according to the rules and procedures of the system at specific, designated times.

During the past ten years a number of countries have decided to introduce RTGS systems to help limit settlement risks in the interbank payments process. Nearly all G-10 countries plan to have operational RTGS systems in operation by mid-1997 and many non-G-10 countries have also been developing RTGS systems.

Because of the growing importance of RTGS systems, the CPSS recently compiled a report on RTGS, which was published in March 1997. The report considers the key concepts and risks involved in large-value payment systems, the principles and design features of RTGS systems and some general issues relating to the development of RTGS systems. It outlines the major differences between RTGS systems already implemented or being planned in G-10 countries and examines the management of liquidity in RTGS systems and the procedures used to queue payment instructions. The report also considers the differences between RTGS and net settlement systems. In publishing the report, the CPSS aims to provide market participants with information on a number of aspects of the development of RTGS. This should be particularly helpful to the many countries currently in the process of introducing RTGS systems, as no other analytical study of this kind is publicly available.

Foreign exchange settlement risk and multilateral netting schemes

In early 1996 the G-10 central bank Governors endorsed a report prepared by the CPSS entitled *Settlement Risk in Foreign Exchange Transactions*, which provided a clear

definition of foreign exchange settlement risk, a corresponding method to measure the risk properly and specific recommendations for reducing it. Current settlement practices generally expose each trading firm to the risk that it could pay the funds it owes on a trade, but not receive the funds due from its counterparty. Given the nearly $1.2 trillion in daily foreign exchange trades, the potential consequences of a disruption in the foreign exchange settlement process are considerable. The G-10 central banks have been concerned about the effects of large settlement exposures on the safety and soundness of banks, the adequacy of market liquidity, market efficiency and overall financial stability.

The report, published in March 1996, set out a strategy to reduce foreign exchange settlement risk based on action by individual banks to control their own exposures and by industry groups to develop well-constructed multicurrency services that would contribute to the risk reduction efforts of individual banks. As part of the strategy, individual central banks will work with supervisory authorities, where appropriate, to foster private sector action in their domestic markets. In addition, where appropriate and feasible, individual central banks will consider enhancements to national payment systems. A two-year horizon was set for the implementation of this strategy, after which the G-10 central banks will assess the progress that has been made and consider further action should progress not be sufficient.

The indications are that the strategy is spurring progress in this area, although much work lies ahead. The report has attracted considerable publicity since it was published, with central banks themselves publicising it in their domestic markets and holding seminars with groups of banks. A survey of individual banks has been conducted to assess the extent to which they are answering the G-10 Governors' call for action or are likely to do so in the future, and members of the CPSS have been monitoring existing and proposed multilateral schemes for foreign exchange transactions. The clearing and settlement report has been brought to the attention of the Basle Committee and a number of individual central banks have initiated actions with their own supervisors including, in some cases, the development of guidelines on foreign exchange settlement risk for bank examiners. Developments such as the introduction of new RTGS systems and the prospect of longer operating hours for existing systems are also helping the market to reduce foreign exchange settlement risk.

The current work builds upon the considerable attention that the G-10 central banks have paid to these issues over the years. The 1989 *Report on Netting Schemes* and the 1990 *Report of the Committee on Interbank Netting Schemes* identified issues that may be raised by cross-border and multicurrency netting arrangements, and established minimum standards and an oversight regime for cross-border netting schemes. The 1993 report on *Central Bank Payment and Settlement Services with respect to Cross-Border and Multi-Currency*

Transactions examined possible central bank service options that might reduce risk in the settlement of foreign exchange trades.

Securities settlement systems

The CPSS has undertaken an active programme of work concerning the arrangements for the settlement of securities transactions. Its 1992 Report on *Delivery Versus Payment in Securities Settlement Systems* defines and analyses the types and sources of risk associated with settlements between direct participants in a single settlement system. The report also clarifies the meaning of delivery-versus-payment (DVP)[35] mechanisms and describes three common approaches to achieving DVP, each of which entails different risks to market participants.

The report on *Cross-Border Securities Settlements* (1995) analyses the channels that market participants use to complete cross-border securities transactions. The report identifies the different risks that may be present in these arrangements and stresses the importance of understanding the procedures used to effect back-to-back transactions and cross-system settlements. It concludes that the complexity of and lack of transparency in cross-border securities settlement arrangements pose challenges for market participants in assessing the risks they face through their participation in these systems.

Building on these efforts as well as on prior work carried out by IOSCO, the CPSS and IOSCO have jointly developed a disclosure framework that settlement system operators and their participants can use to gain a clearer understanding of the rights, obligations and exposures associated with securities settlement systems. The framework, which is in the form of a questionnaire was drawn up by a working group made up of representatives of the CPSS and IOSCO, as well as private sector and emerging market settlement system operators.

The CPSS and IOSCO published the disclosure framework in February 1997 and have encouraged regulatory and supervisory bodies worldwide to ask system operators in their jurisdictions to complete the questionnaire and make it available to market participants.

Clearing arrangements for exchange-traded derivatives

Following the Barings failure, the CPSS organised a systematic review and analysis of risks in clearing systems for exchange-traded derivatives in the G-10 countries. The

[35] Delivery versus payment refers to a link between securities transfers and funds transfers that ensures that the delivery of securities occurs if and only if the payment of funds occurs.

resulting report, which was published in March 1997, describes the structure of the clearing arrangements for exchange-traded derivative contracts and also identifies possible weaknesses in the arrangements. These include the potential inadequacy of the resources of clearing organisations in the event of member defaults following large price movements, a lack of intraday controls on members' positions and the use of payment arrangements that do not ensure timely intraday settlement. The report suggests possible ways to deal with such weaknesses, including the use of stress testing by clearing organisations, more timely trade matching for the calculation of margin requirements and the strengthening of payment arrangements to provide intraday finality.

The report also provides a wealth of information about the design and operation of selected individual clearing houses in the G-10 countries that is otherwise difficult to obtain.

Electronic money

The G-10 central banks have played a leading role in analysing the issues that may arise as a result of the development of electronic money. This work has included the preparation of reports covering issues relating to the technical security of electronic money products, the monetary policy and seigniorage implications of these products, their potential legal aspects, law enforcement concerns and regulatory questions and approaches. These reports were discussed by the G-10 central bank Governors, who have asked the BIS, in cooperation with the CPSS, to carefully monitor further developments in this area. In August 1996 the CPSS and the G-10 Group of Computer Experts published the report on *Security of Electronic Money*, with the expectation that the information it contains on the range of security measures that can be taken to protect electronic money products will assist the public discussion of these topics. Drawing on the work done by the CPSS and by G-10 monetary policy experts, in October 1996 the BIS published a short report on *Implications for Central Banks of the Development of Electronic Money*, which summarises many of the key issues that may arise in connection with electronic money products. The G-10 central banks and the CPSS are also cooperating in the work that the G-10 Deputies have undertaken in this area.

Future activities and outreach

The CPSS plans to continue its active engagement in a number of areas. These include the implementation of the G-10 central banks' strategy relating to foreign exchange settlement risk. The CPSS and IOSCO will follow up on the disclosure framework for securities settlement systems and their Secretariats will also serve as clearing houses for

completed responses to the questionnaire. The CPSS will cooperate with the BIS in monitoring the development of electronic money products and will ensure that the G-10 central banks continue to play a key role in the analysis of related policy issues. It also plans to continue and, where appropriate, to strengthen its cooperation with other groups, in particular the Basle Committee and IOSCO.

Closer cooperation has also been sought with non-G-10 central banks, particularly those of emerging market economies. Meetings have been held between the Committee and various non-G-10 central banks, and payment system seminars and workshops have been organised in collaboration with the BIS for regional central bank groups in Latin America, Eastern Europe, Asia and the Middle East.

Conclusion

Through their collective efforts in analysing and promoting awareness of risks and developing minimum standards or best practices, the G-10 central banks and the CPSS have played leading roles in promoting robust payment and settlement arrangements. Their work in this area is ongoing and reflects the need to continually monitor and improve the risk management in these systems.

Annex 5

MEMBERS OF THE WORKING PARTY ON FINANCIAL STABILITY IN EMERGING MARKET ECONOMIES

Chairman

Mario Draghi

Argentina	Pablo E. Guidotti	Ministry of Finance
France	Gerard Kremer	Bank of France
Germany	Heinz Dieter Maurer	Deutsche Bundesbank
Hong Kong	Andrew Sheng David Carse	Hong Kong Monetary Authority
Indonesia	Mr. Djakaria	Bank of Indonesia
Japan	Hiroshi Toyoda Yoshiharu Oritani	Ministry of Finance Bank of Japan
Korea	Shee Yul Ryoo	The Bank of Korea
Mexico	Enrique de la Madrid	Mexican Banking & Securities Commission
Netherlands	Age Bakker	Netherlands Bank
Poland	Ryszard Kokoszczynski	National Bank of Poland
Singapore	Koh Beng Seng	Singapore Monetary Authority
Sweden	Göran Lind	Bank of Sweden
Thailand	Siri Ganjarerndee	Bank of Thailand
United Kingdom	Robin Fellgett David Reid	H.M. Treasury Bank of England
United States	Jeffrey R. Shafer Timothy Geithner Edwin M. Truman Sally Davies Richard Zechter	Department of the Treasury Department of the Treasury Federal Reserve Board Federal Reserve Board Department of the Treasury

Bank for International Settlements	William White
– Basle Committee	Erik Musch
Commission of the European Communities	Joly Dixon
International Monetary Fund	David Folkerts-Landau Carl-Johan Lindgren
International Organization of Securities Commissions	Eudald Canadell
Organisation for Economic Co-operation and Development	Val Koromzay
World Bank	Jonathan Fiechter
Secretaries	Gavin Bingham Edward Gardner Charles Pigott