

The Challenges of Financial Globalisation

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I Introduction

The challenges posed to institutions and policymakers by the progressive global integration of financial markets are becoming more urgent by the day. They need to be addressed more effectively – nationally, regionally and internationally as recent financial turmoil in Asia demonstrates. The Asian currency and capital market crisis which is still unfolding suggests that many of the lessons of the Mexican crisis of 1994–1995 have been left unlearned. Institutions and policymakers at all levels need to be better equipped to anticipate and prevent local financial disturbances from becoming larger regional or global accidents – especially when their likelihood of escalating can be gauged in advance. But, at present, they seem more geared to repairing post-accident damage with the usual ‘tough measures’ after markets and economies have been traumatised; often unnecessarily.

In the 33 months between the Mexican and Asian crises there have been a number of mini-crises – if those are what abnormal, swift price adjustments represent – affecting banking, currency, securities and property markets in countries influenced by financial globalisation such as Venezuela, Brazil, South Africa, India and Pakistan. Though commented on *en passant* by the IMF in its *World Economic Outlook* and *International Capital Markets* reports, these have otherwise gone unnoticed in the same way that tremors were once ignored before an earthquake. Yet each has signalled something about the way in which globally linked markets force changes in prices and policies when governments seem intent on avoiding reality. They presaged a larger shock in weaker parts of the system, which were more vulnerable to outward portfolio flows and currency attacks, especially where asset prices and currency values had been driven up to unsustainable levels. Yet little was done to put safety nets in place; regionally or globally. There was generalised complacency about the success of a few developing countries in attracting large quantities of foreign capital in a short period of time even though neither their absorptive nor their institutional (in the broadest sense of the term) capacity had improved much. Yet, although the media emitted early warnings, no part of the official system wanted to risk being seen as

alarmist about the possibility of further shocks likely to be caused by the growing nervousness of international private capital.

It is disappointing that as this decade approaches its close, the world of global finance still emphasises curative measures *after* financial market disruption occurs and a chain reaction ensues, rather than on prophylaxis to prevent crises from erupting and spreading contagion. Perhaps that is because neither institutional defences nor policymaking mindsets – at all tiers of governance – have yet shaped themselves to deal with the world of the present and future. Their architecture and procedures appear ill-suited to: (i) monitoring the right information to assess tectonic shifts in markets – which occasionally have more to do with information asymmetries affecting market perceptions and sentiments, rather than with policy fundamentals suddenly going awry; (ii) anticipating failures in market mechanics; or (iii) responding in real time to national and global financial system dysfunctions. National and international institutions created to deal with the financial problems of the 1950s and 1960s, have tried to adapt, with differing degrees of success, to addressing the problems of the 1970s and 1980s. But they seem ill-equipped in dealing with the challenges which a rapidly globalising financial world poses in the 1990s and beyond. This rather basic reality may well lie at the root of the system's apparent impotence.

The analogy between monitoring financial markets and seismic technology is perhaps apt. Despite the relatively rapid globalisation of finance, the world appears to be a long way from developing the necessary algorithms and putting in place remote sensing systems (at national, regional and global levels) needed to predict and prepare for financial quakes. National governments, as well as regional and international institutions, do not have a clear view as to what to measure, where to measure it, with what frequency, or how to use information in real time. At present, the quantity and quality of information (see Section IV.3 below) available in developing markets is much too inadequate and untimely to justify the volume of private flows to emerging markets from global sources. Also, the quality of interpretation and dissemination of the information that is available, especially by players in emerging markets, leaves much to be desired. The research publications of major global banks and brokerages on investments in emerging markets have become bulkier and glossier with time; as have their advertisements to attract a wider range of investors. But their content remains devoid of value-added substance.

II The Current Problems of Financial Globalisation

At the *national* level, markets (exchanges and players) and governments –

especially in developing countries – have been maladroit in avoiding the double-edged sword of financial globalisation. Their nonchalance in dealing with its costs matches their anxiety to attract its benefits. They have yet to deal adequately with some fundamental issues which need to be resolved before markets can work: i.e. competition; transparency; acceptance and application of global accounting, disclosure and due diligence standards; institutional restructuring, especially of domestic securities brokerages and investment banks; dematerialisation of scrip, electronic registers; establishment of national depositories, integrated custody, settlement, transfer and ownership registration mechanisms; the rapid development (technological, ethical and management) of securities and currency exchanges; and the properly articulated regulation of cross-border operations of financial institutions and markets. Instead they have focused on less crucial, but politically more contentious, issues such as: the role of foreign vs. domestic players in their banking and capital markets; protecting public banks, instead of restructuring and privatising them as quickly as possible; and protecting the vested interests of insufficiently qualified, inadequately capitalised, and technologically backward domestic brokerage houses and broker-dominated securities exchanges, which invariably place their own interest in manipulating securities markets and prices above the interests of securities issuers and of institutional and individual investors.

Most damagingly, developing country governments have been slow to realise that financial globalisation has an immediate impact on breaking down – in a speedy but disorderly fashion – barriers between banking, securities, currency and property markets in their domestic economies which had previously been artificially compartmentalised. They have been equally slow in seeing that when economic policies result in erratic price and trading behaviour in any one of these segments, the pressures generated inevitably spill over into other segments before asset value bubbles, which are artificially pumped up, burst. Major price corrections are then forced in all segments through large exchange rate and asset price adjustments – usually by foreign rather than domestic players. The compartmentalised control that developing country governments used to exercise over each segment in quarantined conditions is no longer applicable or effective in a globalised financial world.

The Regional Level – the ‘Missing Link’ – of Financial System Governance

At the *regional* level, with the qualified exception of the EU, there appears to be a vacuum in terms of institutional structures as well as defence mechanisms (special market stabilisation and cut-out mechanisms, facilities and

funds) to cope with the malign effects of currency and capital market ructions. This is surprising since the contagion effects, and the real economic and financial costs, of financial market failure are most serious for, and spread most quickly to, immediate neighbourhoods. Moreover, private capital flows are becoming intra-regionally concentrated, particularly in Europe and East Asia, and increasingly in Latin America. With this being the case, failure in one market is likely to have immediate and large regional repercussions (as the current Asian crisis demonstrates) before it has global consequences. With trade issues assuming overwhelming priority (and receiving the most attention) in debates on regionalisation, most developing regions have paid insufficient attention to dealing satisfactorily with related *macro-financial* issues; despite the rapidly growing importance of intra-regional trade-related and portfolio investment. Consequently, supranational (regional) bulwarks have not yet emerged to prevent or contain currency and capital market crises in vulnerable countries, or to insulate the regions surrounding them from negative spillover effects. This is puzzling since volatility and uncertainty in currencies, and large contractions in wealth, are more damaging to long-term regional (and global) trading and investment interests, especially at the level of firms, than any other phenomenon.

That reality underlines both: (a) how unidimensional and limited trade preoccupations are in the process of regionalisation; and (b) the falsity of the *regionalism* vs. *multilateralism* dichotomy that underpins much debate on the merits of the latter over the former. The point is often overlooked that the post-1990s emphasis on regionalism (sub-optimal though it may seem from a trade perspective) is a reaction to: (i) the perceived failure of nationalism and of multilateralism; and (ii) inherent structural weaknesses in the functioning of global economic institutions. The latter operate in a fashion which denies inclusion – i.e. the effective participation of economies other than the large powerful ones in their policy and decisionmaking processes and protocols. Thus, the twin processes of regionalisation and globalisation are not seen as complementary or mutually reinforcing over an interim period: i.e. until a form of multilateralism emerges, based on interaction among regional blocs, within which nation-states feel empowered. Instead these processes are seen to be competing and antagonistic, resulting in the wrong question being asked, about whether to create regional or global defences to stabilise global financial markets; when the answer is that both are needed.

The Global Level of Financial System Governance

At the *global* level, international financial institutions and global economic

policymakers seem trapped in a timewarp. Their responses and approaches to new financial market crises are redolent of the way in which they dealt with sovereign debt crises. It is not immediately obvious that new dimensions and needs which have emerged to prevent or manage capital account and (private) capital market crises, have been properly recognised. These needs became apparent seven years ago and have gathered momentum since. The newest era of private capital flows coincided with the (alleged) demise of the developing country debt crisis at the end of the 1980s. The sudden emergence and explosive growth of private capital flows in the 1990s has invariably been seen (and represented) as a vindication of successful debt crisis management, or as a prize which ‘good’ countries win when they have reformed and embraced the ‘magic of the marketplace’. Rapid growth in private capital flows has been understandably applauded. Developing countries have also been proselytised with missionary fervour about reforming faster to attract such flows. Yet, questions have been raised as early as 1992 about whether a sudden explosion in private flows and their concentration in just a few emerging markets, might not produce the same pressures, breakdowns and rounds of stabilisation and adjustment as the debt crisis; especially in the absence of commensurate development of market and institutional capacity to accommodate such flows.

History does repeat itself, but rarely in the same way. The sovereign debt crisis of the 1980s was triggered by the herd-instinct of global commercial banks competing to make syndicated loans in volumes greater than the digestive capacity and creditworthiness of developing country borrowers (especially governments and their instrumentalities) could absorb. The inclination of global financial markets in the 1990s to channel a large volume of private funds into emerging markets through different funnels, though also driven by herd-instinct, is based on a different set of premises, more acceptable motivation and on an inexorable process of equilibration between the global distribution of productive (cash-generating) assets and financial claims on them. Even so, it raises the same concerns about: (i) the absorptive capacity of private sectors and the institutional and regulatory capacities of governments in emerging markets; and (ii) whether such capacities are growing at the same pace as the flow of private funds. But that is where the similarity ends. It would be ironic and inequitable if – as a result of intervention to deal with the after-effects of a financial crisis (e.g. in Thailand and Indonesia) along the same lines as the debt crisis – the end result were to be the same, i.e. classical harsh adjustment with the burden falling on the poorest people in these countries in order to protect global private investor interests from the full consequences of the risks they took.

Transitional Problems with Equilibrating Financial Claims on Productive Assets

The globalisation of finance in the 1990s represents a long-delayed but entirely natural adjustment. Processes of financial deregulation in the developed world and economic liberalisation in the developing world occurred independently through the 1980s. They converged in the early 1990s creating push-pull forces which caused a surge in private capital flows into markets formerly out-of-bounds. The effect was similar to flooding created by mis-sited dams crumbling under pressure. As artificial cross-border obstructions to the broader ownership of claims on future cash flow streams were lowered, finance from global sources inevitably attempted to acquire assets (generating future cash flows) to which access had been denied.¹ That in turn triggered anticipatory as well as reactive swings in the flow of domestic savings with disintermediation out of banking into capital, currency and property markets. When prices overshot in securities markets, gains were taken by investors with privileged access to information and invested in other segments where prices were deemed low and assets undervalued, offering attractive returns and exits; especially in currency and real estate markets with gold and oil being out of vogue. However, when returns failed to materialise and exits (in terms of liquidity) proved illusory, the inevitable financial ructions ensued.

Cross-border flows of private capital into financial and related markets were bound to have exchange rate effects especially as over-controlled capital accounts were progressively opened and other barriers such as foreign ownership of domestic securities were dropped. Such processes were never likely to be smooth or problem-free; especially in the initial phases of such a major global adjustment. That adjustment is still taking place, and it has a long way to go before any sort of equilibrium is achieved. Market prices for securities, currencies and real estate invariably overshoot when large volumes of foreign capital invade small, highly imperfect secondary markets which are not resilient or robust. Then they over-correct. Cycles of overshooting and over-correction recur in a volatile manner until the amplitudes of such fluctuations are dampened over time with market maturation. That happens only with continuing reductions in information asymmetries and commensurate improvements in the functioning of mar-

1 Of course, for global markets to work properly and symmetrically, the point is missed (especially when waxing lyrical about financial globalisation) that openness to capital flows may need to be mirrored in openness to labour flows as well so that labour markets can function as freely as capital markets in order to maximise welfare.

ket mechanisms, player capacity and regulation across emerging markets to internationally acceptable standards.

Vested Interests Generating Price Instability

One of the unintended consequences of financial deregulation has been that global (private) financial institutions have, during the 1990s, created vested interests within their organisations which may actually be generating price instability in all financial markets. They pose a systemic risk in global financial markets given the way in which they operate; especially when herd instincts take over. Global financial institutions – whether banks, investment houses, securities brokerages, hedge funds and even asset managers – appear to have created a global whirlpool of their own by: (i) creating profit centres out of currency, derivatives and emerging market security trading departments; (ii) taking large positions in leveraged instruments on proprietary accounts; and (iii) staffing such departments with overpriced talent which is then pressured to produce results: i.e. profits derived from daily over-trading of currencies, derivatives and other leveraged financial instruments.

Too many traders around the world are now engaged in frenetic trading (churning) often unrelated to anything ‘real’. For example, the volume of global forex trading in 1996 exceeded \$280 trillion, nearly 10 times world GDP (\$29 trillion) and over 40 times world exports of goods and services (\$6.5 trillion). Such ‘froth’ results in amplifying out of all proportion small missteps in fiscal and monetary policy and creates market conditions which then require unnecessarily large policy corrections with consequent adverse effects on the real economy.

In that sense, traders in emerging markets, currencies and derivatives are operating in much the same way that syndicated loan salesmen operated through the 1970s. Belief in the view that markets are safer and wiser conduits for private flows than banks to governments are as mistaken as earlier beliefs that countries do not go bankrupt and can therefore be lent to indefinitely. Moreover, markets have been conduits for private flows to undeveloped areas on several occasions before. The managements of global securities firms are just as unable as the managements of commercial banks were in 1982 to control risk in such ‘perverse incentive’ operating environments with the conflicts of interest and moral hazards they pose. Even though they rely on sophisticated risk-management techniques involving mathematical models with computer-activated buy-sell triggers – which most senior managements do not have the basic wherewithal to comprehend – it would be idle to pretend that they are in fact managing risk at all.

In such ‘over-hyped’ environments populated by volatile and continu-

ously recycled talent, markets are driven more by sentiment, perception and rumour rather than by reality. More dangerously, they are influenced by frequent misinterpretation of policy and its consequences; especially in emerging markets when traders extrapolate too much from unreliable and often misleading data. Such institutional characteristics can result in amplifying the effects of financial disruptions and spreading contagion far faster than underlying circumstances warrant, creating unnecessary pressures for economic policymakers who are rarely accomplished in reading market minds.

III The Future Challenges of Financial Globalisation

The foregoing introductory sections depict, somewhat simplistically, the inevitable transitional problems being created by financial globalisation. But if it is generally accepted as being in the ballpark, then what is inexplicable is the somnambulism of governments, institutions, and market players – at national, regional and international levels. They have had the benefit of experience with adjustments of this broad nature before in one form or another in the 1970s and 1980s. The same cycles have occurred in the US, Europe and most recently in Japan, where the after-effects of precisely such market excesses and failures continue to persist in a dogged fashion after seven years of economic stagnation. They could have been expected to be repeated in overextended and oversold emerging markets where large flows resulted in rapid asset overvaluation followed by the inevitable corrections. The same cycle was seen in Mexico in 1994. Yet was enough done to anticipate the problems that were bound to arise or to construct appropriate devices for dealing with them?

It is almost as if a prolonged fit of absent mindedness or retrospect blindness has seized the system afflicting it with irremediable myopia. With that somewhat depressing thought in mind, the remaining sections of this paper elaborate on a few ideas and attempt to make a few observations about how the challenges of global financial integration might be addressed at various levels of governance. I will concentrate on issues that arise with the increasing integration of global capital markets, and I will not deal with issues concerning banking systems which have been dealt with more extensively in the literature.

The Growing Prominence of Emerging Markets in Global Finance

It has now become a cliché that growth in private capital flows and in the size of financial markets in the last decade has been breathtaking. Tables 1-

10 (at end of paper) illustrate how rapidly financial markets have grown in the last decade and how quickly they have been globalising. Another point they make is that from 1990 onwards emerging markets have begun to play a prominent role in world markets (Tables 1, 7, 8 and 9). They have grown more rapidly than the smaller OECD markets (outside G-7 countries) such as Austria, Denmark and Luxembourg. Together, with a market capitalisation of over \$2.2 trillion in 1996, emerging markets are approaching the size of the combined markets of OECD excluding G-7. Financial securities traded in these markets are constituting an increasing share of global institutional and individual asset portfolios. Moreover, entities from emerging markets are floating an increasing proportion of securities in *developed* markets (especially global markets such as London, New York, Tokyo and Singapore). That process will continue until rough equilibrium is attained between securities associated with emerging financial markets and the productive capacities of their real economies (accounted for in PPP rather than market terms); which will continue to grow at a faster rate than in the industrial world for some decades to come.

For example, China and India are now the world's second and fourth largest economies in real output (PPP) terms. Together they account for over 15% of world GDP. But they account for only 1% of world market capitalisation. Their debt markets account for less than 0.5% of total debt traded. Their combined market capitalisation at the end of 1996 was less than that of Taiwan, Malaysia or South Africa taken individually. That serves to illustrate how far the related processes of continued emerging market development and financial globalisation still have to go before equilibrium is reached. But that will not happen without disruptions and downward corrections in individual cases. Take the case of Japan: in 1987 before its equity market corrected in a rather spectacular fashion, it accounted for nearly 36% of world market capitalisation, even though its output (PPP) was about 10% of world GDP. In 1996, Japan's market was down to 15% of world market capitalisation with its share of global output declining to 8% (PPP). Further downward adjustments in Japan's markets and its currency are almost inevitable. A similar sharp downward adjustment has taken place in Malaysia, Indonesia and Thailand in the first round, and Korea and Taiwan in the second.

But these individual cases notwithstanding (representing markets overshooting and over-correcting when assumptions about future growth rates are proven wrong), the argument in the aggregate is not likely to be affected. It is a simple argument relying on crude proxies to make the point that, in a perfect global market economy with perfect financial markets, the volume of financial claims on future cash flow streams (i.e. on assets which generate tradable output wherever they may be located) must eventually

equilibrate in net present value terms; so must risk-adjusted discount rates as economic endowments are gradually equalised. Obviously the process of financial market development and its relationship to output (and stocks of assets which generate output) and future cash flow is more complicated than that. Also, market capitalisation is a crude proxy. It is affected by: (i) market structure; and (ii) the extent to which a local market has international dimensions.

Germany is a good example of the first case. In 1987, Germany accounted for about 5% of global output (PPP) but less than 2.7% of world market capitalisation. Most German equities were closely held by banks and rarely traded in volume, thus dampening stock prices and lowering market capitalisation. By 1996, that situation had corrected a little. A larger Germany accounted for 4.7% of global output (PPP) and 3.3% of world capitalisation. Examples of the second case are London, Singapore and Hong Kong, whose markets are disproportionately large when compared to the share of their domestic economies in world output.

At the end of 1980, developing countries as a whole accounted for about 28% of world GDP but accounted for less than 2% of stock market capitalisation and 1.5% of debt market volume. In 1990, those proportions had changed to 35% of world GDP, 7% of world market capitalisation and 4% of debt market volume respectively. By 1996, they had changed again to over 42%, 11% and 6% respectively. In the 1990s, financial market enlargement in developing economies has proceeded faster – at an annual rate of about 25% – than output growth (at about 5.5%). It is of course impossible to predict whether those same differential rates of growth will persist over the next few decades. Both are likely to slow down.

But even assuming, *ceteris paribus*, that the rate of financial market growth in developing countries slows to an average of around 15% and output growth to 4% over the next three decades, equilibrium between traded financial claims in markets (i.e. securities) and output-generating assets in the real economy will be approached by around 2030. By then, what presently comprises the *developing* world should account for over 60% of world GDP and over 50% of market capitalisation. That extrapolation assumes that the *developed* world (as presently constituted) grows at a rate of around 2.5% annually and its financial markets expand at around 10% annually. Of course by 2030, the goal posts will have moved (as they have already) as more countries transit from the developing to the developed category.

Emerging Markets: Facing the Transitional Problems of ‘Catching Up’

From the viewpoint of financial globalisation, emerging markets have

more catching up to do in global forex and derivatives markets than in equity and debt (bond) markets. Global forex markets are likely to be transformed as the larger developing economies (especially India and China) open their capital accounts completely and resort to issuing sovereign and corporate bonds in world markets. The use of derivatives too, which is highly concentrated in North America at the present time (Tables 4 and 5), is likely to grow exponentially as a wider range of market players and regulators become familiar with them and as derivatives become as familiar (for risk-hedging) in emerging markets as they are in developed ones.

None of these developments is likely to occur without market failures, public trauma, and forced policy adjustments in a number of individual countries; especially as complex, leveraged instruments are introduced in markets which are fragile and insufficiently developed. Yet, in a globalised financial system dominated by transnationals, efforts to prevent, obstruct or delay the entry of sophisticated products until markets are more developed, will be about as successful as King Canute's efforts to hold back the tide.

A slowed pace for introducing derivatives, for example, may restrict the flow of portfolio funds from institutional investors accustomed to hedging their exposure risks and locking in gains through derivatives. Similarly, an inefficient market in forex is also likely to deter inward portfolio flows although such a market also facilitates outward flows at a much faster rate than imperfect forex markets. National governments, independent regulatory agencies, private accounting and legal firms, and international financial institutions (regional and global) will need therefore to cooperate on an unprecedented scale in order to accelerate the processes of orderly financial market development and put in place adequate safety nets to cope with accidents that are bound to occur even as efforts are made to prevent them.

The extent of the effort needed can be glimpsed through the following figures. Of the 209 economies in the world, IFC in its *Emerging Stock Markets Factbook of 1997*, lists 51 as 'developed' although only 24 of these have stock markets of any significance. Of the 158 countries classified as 'developing' only 71 have stock markets. Of these, just 11 accounted for over 80% of the total capitalisation of all emerging markets: i.e. Brazil, China, India, Indonesia, Korea, Malaysia, Mexico, the Philippines, South Africa, Taiwan and Thailand. And even these 11 emerging markets are characterised by major institutional gaps, operating weaknesses and regulatory lacunae; as indeed are many of the smaller developed markets.

Almost all of these eleven countries have imbalanced financial markets with equity markets being excessively large in relation to debt markets and

other financial market segments; their forex and derivatives markets have hardly developed at all. These figures impart a nuanced dimension to the term 'globalised finance'. Most countries, including some small developed ones, are connected only tenuously to global financial circuits. Although private financial market operations (and therefore private capital flows) have now spread to parts of the world which they did not reach before, there remains a long road to travel before private capital can flow through efficient market mechanisms with equal facility everywhere and before all countries can be served by financial markets in the same way.

IV Pragmatic Solutions

There are a multitude of challenges therefore which face national and international institutions and policymakers under such circumstances. All of them cannot possibly be dealt with in a paper such as this. For that reason, the following sections deal with a few select issues which have not been dealt with elsewhere. I will focus deliberately on pragmatic 'market' issues rather than theoretical or policy issues on which much weight has been placed in the burgeoning literature on this subject.

1. The Need for Regional Financial Markets for Small Nations

There are many countries in the world (especially in Africa, the Caribbean and the Pacific (ACP)) which are too small to justify having their own markets with the panoply of support facilities as well as the liquidity, width and depth that financial markets need in order to function properly. These countries will need to accept the reality that *regional* capital and banking markets will fulfil their needs and purposes better, more efficiently and more cost-effectively than national markets can. The headlong rush therefore by small countries (in Eastern and Southern Africa for example) to establish their own stock markets, often aided and abetted by international agencies, makes little sense especially in a financial world which can be electronically linked and networked with small markets being linked to larger hubs.

In that context the initiatives taken by francophone West African countries sharing a common currency (the CFA franc) to take a regional approach to capital market development seem more sensible and deserve strong support from the international community. It would be timely for small ACP countries, the regional organisations to which they belong, and the international financial community (especially the EU and the Commonwealth which both have special links with the small ACP states)

to come to early understandings on the need to develop regional financial markets in specifically amenable environments before the tendency to 'go it alone' becomes over-exuberant, unstoppable and results in a waste and duplication of scarce financial, technological and human resources.

That proposition may apply equally to Maghreb and Mashreq countries as well as small states in the Arabian Gulf, South Asia, the Indian Ocean and Indo-China. Also, small illiquid markets are particularly prone to market manipulation which can occur in either direction with relative small amounts of capital driving speculative price movements. Larger regional markets with greater liquidity, breadth and depth would reduce, but not eliminate, such risks.

2. *Rationalising Fragmented Markets and Players in Large Countries*

By the same token, but in an opposite sense, there is equally a need to rationalise fragmented local markets in large countries. These local markets emerged under different conditions, when transport and telecommunications constraints were binding in a primitive technological environment. In India, for example, there are 22 stock exchanges, and over 4,000 small domestic brokerage firms virtually all of which are under-capitalised, technologically antediluvian, professionally undeveloped, and operationally inefficient, conducting transactions in a paper-driven environment. Most of these exchanges and brokerages have trading volumes which are too small to justify independent existence. Their existence expands the scope for counter-productive inter-market price arbitrage through collusive price-rigging by brokers acting in concert, by corporates which regularly trade in their own shares through third-party brokers or their own intra-group brokerages. A handful of large, competent domestic brokerages have already become part of the transnational structures of international securities firms (many of them owned by global banks) through joint ventures in which the foreign partner is becoming increasingly dominant. Meanwhile over 90% of trading volume is concentrated in the four major metropolitan (and one national) exchanges. This picture is also generally true of other large emerging markets, although perhaps not quite as extreme as in the Indian case.

Thus a two-tier industry structure has developed: with the upper tier, which is globally influenced and catering mainly to large domestic and foreign *institutional* investors, driving the market. The lower tier – which deals with the bulk of domestic *individual* investors – is increasingly illiquid and poses a systemic threat; i.e. the possibility of widespread brokerage failures resulting in a loss of public confidence. To some extent that unhappy situation is already unfolding. Continuation of such an industry

structure does little to enhance the credibility of local capital markets, either at home or abroad. Also when the policies, internal surveillance and operations of exchanges are dominated by member brokerages whose viability and operating standards leave much to be desired (when compared with international standards), too many opportunities are created for collusive malfeasance by unethical market operators. And ethics have not been the hallmark of operators in the Indian capital markets as a series of annual financial market ‘scams’ between 1992-1997 suggests.

Surprisingly, although the Indian authorities have laboured mightily to protect the preserve of domestic banks (in terms of market share) and mis-directed large volumes of tax resources to re-capitalise large parts of the banking system – which is mostly publicly owned and still highly inefficient by international standards – they have done the opposite in the case of capital markets. The authorities have neglected restructuring the domestic brokerage industry (which is almost entirely privately owned) either through positive incentives or through punitive measures which are uniformly enforced in the face of frequent default. And despite large loans by IFIs for financial sector reform, the urgent matter of reforming the industry and support structure of the Indian securities industry has gone unattended.

Some attention has been paid to improving the quality and effectiveness of capital market functioning (with the introduction of electronic trading on the National Stock Exchange, the establishment of a national depository and the gradual dematerialisation of scrip, albeit in a clumsy way) and of regulation. But the point has obviously missed the authorities, as well as the IFIs involved with financial sector reform in India, that regulation would improve automatically and the regulatory task made much easier, if the industry’s structure were to change in a more amenable manner and the objects of regulation were to become stronger, more competent professionally and more viable financially. What exists in India is an extreme case. But similar problems exist in most large countries with fragmented local markets which require rationalisation and electronic linkage.

3. Information Imperfections and Asymmetries in Financial Markets

All parties involved in dealing with emerging markets and financial globalization have frequently expressed concerns about: (a) the urgency of improving the quality and timely availability of economic and corporate information; (b) the timeliness of its dissemination; and (c) the creation of competitive markets in interpreting information and broadcasting it widely – especially by encouraging the creation of a vibrant financial press and of a market-supporting independent market analysis capacity. Those con-

cerns apply not just to emerging markets but to all financial markets; although the problem in emerging markets is gargantuan. Yet despite the rhetoric, the progress made – in reducing information imperfections and asymmetries, and in suppressing the use of privileged insider access to trade unethically – has fallen far short of expectations. The gap between rhetoric and reality is explained in part by the absence of a concerted effort by authorities at all levels to improve the situation; another part is explained by ‘regulatory capture’ in emerging markets where regulators are co-opted by market players and issuers to tolerate ‘non-disclosure’ practices which are often deployed for proprietorial gain.

A major effort now needs to be made to improve the quality, frequency and timeliness of: (i) relevant economic information at a sufficiently disaggregated level to enable real-time market analysis (which will require a substantial investment in statistical systems at all levels of government) produced by governments; (ii) real-time information on fiscal developments (by line item) as well as monetary developments including daily movements in all key interest rates, yield curves, exchange rates, use of reserves for intervention, and levels of reserves, which is produced by central banks; (iii) real-time market information produced by exchanges in all primary and secondary financial markets, i.e. equity, debt, convertibles, derivatives, money etc.; (iv) real-time information on corporates and securities issuers, sovereign and quasi-sovereign, and on trading undertaken by parties closely related to security issuers; and (v) real-time information on exchange trading activities, over-the-counter and kerb deals, the financial health of intermediaries and counterparties; (vi) real-time credit-rating information; as well as (vii) information on intermediaries in regulatory default. Such an effort should involve the same players who participated in dealing with a similar problem of poor information at the time of the debt crisis; especially the IFIs (along with the OECD, UN agencies, the Commonwealth Secretariat, the South Centre and others).

In connection with item (i) above, one possibility might be to make more transparent, and publish immediately, the outcome of IMF Article IV consultations and have the IMF (or the multilateral development banks) come out with pithy annual or semi-annual economic reports on significant emerging markets, equivalent to those published by the OECD on its member economies. Such reports need to be presented in a manner which markets can understand and digest. At present the IFIs gather a large amount of data in developing countries which rarely enters the public domain although the reasons for it to remain confidential and private are becoming less valid by the day. In the interests of the better functioning of financial markets these established conventions of confidentiality and secrecy between national governments and IFIs now need to be reviewed

and overhauled to meet the needs of a globalised financial world.

Efforts to improve information flows will need to involve global wire agencies such as Dow Jones, Reuters and Bloomberg, as well as information-based rating and index agencies (S & P and Moody's). It will need to skip several generations of technology. Most emerging markets and their governments will need to leap into the electronic age to cope with the task that confronts them. That, in turn, will require major investments in local, national and global (fail-safe) power and telecommunications infrastructure dedicated to supporting financial markets. How critical this aspect is was recently demonstrated when a satellite supporting the V-SAT electronic trading on India's National Stock Exchange failed. There was no back-up to which the system could immediately be transferred. Trading was interrupted for 10 days resulting in a trading loss of around \$2 billion and a financial loss to the securities industry estimated at about \$150 million (or the cost of several equivalent satellites).

Apart from overall 'broad' economic and market information needed to support analysis, position-taking or risk-hedging assessments by market players, there is an even greater need for accurate, frequent, regular and timely financial and operating micro-information on corporates and security issuers. Accounting and disclosure standards in most emerging markets remain abysmally low – a condition for which there can no longer be any legitimate excuse. These need to be upgraded swiftly through positive and negative incentives applied by: national authorities, exchanges which allow listings, as well as at the international level by regulators and IFIs; especially those involved in financial sector reform. Global and national legal and accounting firms need to be brought into such an enterprise as equal partners on a basis which impels issuers of traded financial securities (whether governments, quasi-sovereigns or private corporates) to provide more useful and accurate information as a matter of course with creative accounting veils being penetrated immediately.

Though mundane, the task of improving present standards of information in emerging as well as developed markets is crucial. It requires urgent attention with the mobilisation of efforts from a wide range of sources under the aegis of the appropriate authorities. Yet, its importance is invariably overlooked until markets fail and authorities overreact. Financial markets are information sensitive and particularly vulnerable to failure when information is imperfect or opaque. Markets and prices become volatile and vulnerable when rumours (often deliberately floated in emerging markets by unscrupulous intermediaries) dominate perceptions. Markets also fail when there are major asymmetries between information available to issuers and market intermediaries vis-à-vis information available to regulators, investors and the public, or when essential information is absent or

late, leaving markets to speculate on the intentions of governments or central banks. For these reasons, authorities at every level of governance, can ill-afford to be negligent on this score.

4. Financial Market Regulation in a Globally Integrated Regime

As is generally recognised, regulation remains comparatively weak in most emerging markets. Indeed, even in developed markets, regulators strive (usually in vain) to keep abreast of market developments. Market players thus have a permanent edge technologically, and in terms of instrument and trading knowledge, over regulators. They are invariably ahead of them except when markets fail due to their own excesses; at that point retroactive pleas for improved regulation emerge from the industry itself.

The need has long been recognised for: (a) improved regulation in emerging markets at macro, meso and micro-levels; (b) more attention by regulators in source countries to portfolio flows from institutional asset managers into emerging markets; and (c) improved interaction and regular communication between regulators in source and recipient countries. Happily, action is being taken on all three fronts although there is, of course, much more that could be done by authorities at national, regional and global levels.

Regulatory institution and capacity building in emerging markets is an urgent task that needs to be supported by private agents as well as bilateral donors in developed markets and IFIs which could underwrite: (a) more regulator-to-regulator exchange programmes; (b) enhanced training inputs into regulatory training institutes established specifically for emerging market regulators at the *regional* level to achieve both economies of scale as well as closer bonding between neighbouring regulators; (c) information and experience sharing; and (d) exchange-to-exchange programmes involving the training of surveillance staff to improve self-regulation within exchanges. Also, the compliance function within brokerages in emerging markets is hardly developed at all with most securities firms in such markets being more accustomed to a non-compliance culture. It is usually the case that regulatory agencies in emerging markets issue edicts, rules, regulations and clarifications faster than they can enforce or the securities industry can absorb. That usually results in significantly increased violations which go unchecked because market operators anticipate under-enforcement due to lack of regulatory capacity. That, in turn, reinforces an ethos of 'violation tolerance' in emerging market regulation which, when embedded, becomes extremely difficult to reverse.

Although a specific and detailed agenda for improvements in the regulatory arena is not for a paper such as this to develop, the broader issue

needs to be highlighted at all tiers of financial system governance. Specifically, as the author has urged on various occasions, there is a role for organisations such as the Commonwealth Secretariat, the South Centre, regional organisations and development banks, as well as securities exchanges in developed markets, to play in improving financial market regulatory capacity (both official and intra-market) and intermediary compliance capacity on a programmed basis. The initial costs of such capacity building may need to be subvented from sources of official support; but these could easily be recovered in the medium term from levies on markets and market players to make continual investment in improved regulatory capacity a financially self-sustaining enterprise.

Well-developed, specific programmes for improving financial market regulation on a time-bound basis, like information enhancement, should be an intrinsic part of the package of conditionality which accompanies loans or facilities extended by the IFIs and regional development banks for financial sector reform. Such programmes need to be particularly carefully constructed when it comes to enhancing regulatory and supervision capacity over derivatives markets in developing countries which, at the present time is almost non-existent.

In that context, the time has come (if it is not overdue) for the world at large to follow the UK's model of creating a single financial services regulatory authority under one roof with permeable internal walls. Instead, at present, financial regulation in most countries is fragmented across several agencies: i.e. central banks for banking systems; securities and exchange commissions or boards for capital markets, and separate organisations for regulating long-term contractual savings, insurance, and non-bank financial intermediaries.

The current model of fragmented regulation, has its roots in the history of financial market evolution. But it has long outlived its usefulness. It leads to key issues falling between the cracks because no agency is regulating a particular activity, or results in unending turf battles between different regulators; accompanied by confusion caused by conflicting edicts from different regulators. Certainly supranational regulation and regulatory coordination is likely to be enhanced immeasurably if the single institutional model were to be separated from the implementation of monetary policy, and more widely adopted for regulating the financial services industry. A degree of global standardisation could be built into the functions, organisations and activities of such independent free-standing regulatory agencies. That core issue should be placed high on the agenda of IFIs involved in reforming financial systems in emerging markets. It needs to be equally high on the agenda of developed countries as well.

5. *Official Intervention in Financial Markets*

That residual official intervention capacity needs to be built into financial markets (especially debt markets and forex markets) to safeguard the integrity of financial systems goes without saying. It is an unarguable proposition that central banks need to have intervention capacity, along with the resources necessary, to intervene in disorderly markets and stabilise prices before volatility results in a collapse of public confidence and a public crisis ensues. That is fine as long as policies are correct, fundamentals are sound and intervention is essential as a corrective device to prevent market over-reactions affecting adversely the stability of interest rate and exchange rate policy.

Some authorities in emerging markets have taken this further by having public contractual savings institutions (such as publicly owned unit trusts or life insurance companies or government monopoly pension funds) intervene in *equity* markets as well. Intervention of this type, and the need for it, is debatable. It is usually resorted to when governments feel it necessary to override market signals about overvaluation which are usually proven right even if the market has a tendency to discount values far in advance. Experience suggests that such intervention is generally unsound. Rather than stabilising markets, it can have the opposite effect if the buying and selling behaviour of public institutions is misread by market players or taken as an opportunity to unload stock on public agencies when their liquidity – which is dependent on voluntary savings flows and small investor preferences for risk-reward mixes which change continually – may be running dry. In such situations a market collapse is deferred, not avoided. When public institutions try to readjust their portfolios by selling stock they have bought to stabilise markets they usually discover, in unsettled market conditions, that there are no private buyers left in the market.

Although individual cases may differ, broad experience in developing countries suggests that governments would be better off professionalising and privatising public pension funds, insurance companies and unit trusts and opening entry to foreign players in these areas of financial activity and asset management, so that a real market involving a large number of independent players emerges. There is a clear role for IFIs, developed country governments, and global financial institutions in accelerating such a transition in a frictionless manner. The operations of large public institutions in equity and other asset markets (like property) are usually prone to large-scale failures of administrative judgements which have a highly concentrated effect, no different to the effects when a number of private players indulge in herd-instinct behaviour, but often more aggravated.

Though intervention in debt and currency markets may be more accept-

able and justifiable to a wide spectrum of opinion (although some market economists would argue that such interventions are counterproductive and inefficient) such intervention has implications for the management of domestic monetary policy which need to be taken into account; especially when intervening agencies and the markets in which they operate lack the instrumentation, capacity and experience for sterilisation or post-crisis correction. Also, for intervention to be credible it has to be backstopped by: (a) soundness of fundamental macroeconomic policy and sustainable macrobalances in internal and external accounts; and (b) a sufficiency of resources for markets to perceive clearly that intervention will be effective. There is much for economic managers in emerging markets to learn about intervention in open markets and about the relatively greater efficacy of intervention when leaning in the direction of the market rather than against it. The IFIs and developed country central banks have a crucial role to play in transferring such knowledge effectively and keeping it updated. At the extreme they can even participate in such interventions either on a case-by-case or on a wider transparent rule-driven basis.

The Role of International Reserves

In that context, there needs to be a fundamental re-appraisal of the role of reserves in a financially globalised world of open capital accounts to overturn traditional thinking about the role of reserves in the context of closed capital accounts and persistent trade or current account deficits. In a globalised financial world with open capital accounts, the holding of reserves to provide credible liquidity for financing a required level of imports over a conscionable period of time becomes almost a meaningless notion, at least for countries with sufficient creditworthiness. Thus the reporting of reserves in terms of months-of-imports is slowly becoming an irrelevant indicator for IFIs to highlight. In the world of the future, most countries (other than the destitute) will not need to hold reserves to finance imports. Reserves will be needed instead to maintain the credibility of open capital accounts and the stability of financial systems; particularly the stability of monetary policies as reflected in interest, inflation and exchange rates. The case for holding commensurate reserves will be even stronger in those systems which: (a) have attracted large volumes of foreign flows, especially portfolio flows, which are liquid, volatile and footloose in nature; and (b) depend on the residency of such flows for the stability and liquidity of their financial markets, and by implication, of their fiscal and monetary policies. In such a world, reserves take on an entirely new and different meaning. They have to be sufficiently large, in proportion to stocks of volatile portfolio capital, to prevent market perceptions of vulnerability to sudden and

large outflows of capital for whatever reason.

At the same time, reserves will only impress markets if the credibility of economic governance and policy management is such as to assure players that reserves will be used intelligently when necessary; and usually in a prophylactic manner. That was patently not the case in either Mexico or Thailand although it was more the case in Malaysia and Hong Kong. Moreover, reserves can most effectively be used for intervention in tandem with a number of other liquidity-influencing measures to bolster domestic systems against purely speculative attacks (i.e. attacks which are not inspired by fundamental misalignments in economic policies or asset values and prices in financial and open property markets).

But, in a world of open capital accounts, the holding of sufficient reserves is not a costless exercise for most developing countries. When the reserves held are not earned (i.e. the outcome of cumulative trade surpluses over a number of years) but borrowed, they can become an albatross, especially if active reserves management results in a negative spread for the central bank concerned. Even when they are earned, holding reserves usually has high opportunity costs in terms of foregone investment and development alternatives. Also, in the case of most small countries, other than the trading dynamos like Singapore, Hong Kong or Taiwan, the amount of reserves that can reasonably be mustered and held are unlikely to be sufficient on their own to withstand speculative attacks on a collusive basis by large hedge funds or by a group of forex or derivatives traders in global transnationals acting in concert.

Therefore, there is a strong case for instantaneous reserves augmentation for intervention purposes. There is a *prima facie* case for such augmentation first, at the sub-regional or regional level (similar to current arrangements available to members under the ERM in the EU) and then, at the global level. Such arrangements could be in the form of bilateral support arrangements between neighbouring central banks or, at the other extreme, contractually binding plurilateral or multilateral arrangements which automatically trigger mutual reinforcement by pooling reserves to intervene on behalf of a member country under a binding regional monetary arrangement. Studies are already underway in various regions of the world (with Asia being at the forefront) to explore whether such arrangements can be constructed and implemented in a feasible and cost-efficient manner.

These debates are likely to unleash the usual sterile arguments about the efficacy of regional arrangements vs. global facilities. Hopefully such diversions will be put to bed quickly since reason seems to: (a) suggest the need for both; and (b) support the legitimacy of regional intervention – if only because contagion should be arrested in the immediate neighbourhood

before it is permitted to spread. At whatever level these arrangements come into effect there is a need to consider new ideas – which may be anathema to the usual opponents of liquidity creation for any purpose whatsoever – such as the possibility of temporary liquidity creation to withstand speculative attacks if pooled intervention reserves are insufficient, accompanied by associated arrangements to withdraw liquidity when stability has been restored.

The notion that liquidity creation always has a ratchet effect, which results in its prompt withdrawal being nearly impossible, needs to be challenged (in theory and practice) with new arrangements being designed to make liquidity withdrawal as feasible and as easy as liquidity creation in a globalised financial world. Such an approach would certainly lessen the costs to individual countries, and to the world at large, of being compelled to hold a much higher level of reserves than is either necessary or desirable to maintain the credibility of universally open capital accounts, simply to provide insurance against the vagaries and occasional failures of a globalised financial system which is likely to evolve and behave in ways which are as yet impossible to predict and might be difficult to contain. Such a concept might actually be designed on the principles of insurance, or of tailored options contracts (involving a “market” in which all central banks participate) with associated premia, which are triggered under certain circumstances in a specific way for a specific purpose.

But in creating such facilities the problems of moral hazard and of exercising administrative judgements to intervene prophylactically in real time need to be recognised. Arrangements like these, if devised, will need to be accompanied by strict, continuous, and more frequent (than IMF Article IV) surveillance and monitoring arrangements which are applied to economic management and to surveillance of financial market behaviour. Intervention can only be justified to fend off attacks on markets and currencies which represent fits of frenzy or when market perceptions and sentiments are misaligned with underlying fundamentals. In theory, the latter phenomenon should be rare if markets are operating with adequate information. It would be difficult to justify intervention in the case of legitimate attempts by markets to correct imbalances which governments are unwilling to rectify through timely policy adjustments and mid-course corrections. But, in practice, it is difficult to differentiate between a ‘speculative attack’ and a ‘corrective adjustment’. What is happening in Asia at present, does have its roots in policy fundamentals being out of kilter although not by as much as market movements suggest. It may also reflect a sentiment on the part of markets that creeping hubris in Asian governments, convinced about their miraculous powers, is approaching intolerable levels representing a danger to markets and to their own economies.

6. *Emerging Market Mechanics and Architecture*

As with information inadequacies and regulatory lacunae, financial authorities at all levels need to focus urgently on improving 'market mechanics and market architecture' in emerging markets to bring it up to the standards which apply internationally. In contrast to experience with banking systems, it is surprising to discover that most policymakers – whether at the national, regional or international levels – possess very little practical knowledge of the mechanical intricacies or functioning of securities exchanges (whether equity, bond, forex or derivatives) and markets. Unfortunately, where non-banking financial markets are concerned, the devil is usually in the detail. Regulators who have never actually operated in such markets tend not to understand how they actually work, at which nodes they are vulnerable to abuse, and how markets are likely to be affected by regulatory changes.

Most emerging markets have fundamental weaknesses when it comes to the four main pillars of market architecture; and all of these affect market probity and efficiency: (a) the structure, operations and governance of different types of securities exchanges themselves; (b) the structure and operating characteristics of the securities industry comprising the key market players, i.e. investment banks and, more particularly, securities brokerages; (c) the clearing, settlement and transfer mechanisms employed by the exchanges; and (d) the custodial and registration institutions and mechanisms. A major effort needs to be made by authorities at all levels to address problems in all four areas, problems which are usually exacerbated by environments which are still in the paper age and not yet in the electronic age.

Stock exchanges in emerging markets are generally antediluvian in terms of their technology, operating practices and reluctance to adapt and transform to meet international standards; especially when they are dominated by domestic broker members. Exchanges which are independently run corporations, providing trading platforms for the brokerage community to use on a subscription basis, are usually more professionally managed and more likely to keep abreast of state-of-the-art developments in technology and customer service orientation. Broker-dominated exchanges tend to put the interests of brokers above those of other market participants, in particular small individual investors.

There is an urgent need to transform the functioning of exchanges in emerging markets and to move toward self-regulating, independent (i.e. not broker-dominated) multi-market exchanges which provide trading for equities, debt instruments, forex, and derivatives under one overarching structure rather than segmented exchanges which deal in only one type of

security. Such exchanges are more likely to emphasise internal surveillance over brokers and floor traders, work closely with regulators thus making the regulatory task much easier, keep up with international developments in standards of disclosure and in technological upgrading, link up with other international exchanges, and balance the interests of issuers, intermediaries and investors in their operations. All exchanges should be encouraged to move to electronic trading platforms and be provided with finance on appropriate terms to make this transition.

National authorities, working together with the IFIs (particularly the World Bank, IFC and regional development banks (RDBs)) need to emphasise securities exchange reform and transformation at least as much as banking system reform and bank restructuring, through loans and programmes designed specifically for this purpose; either as free-standing operations or as an integral part of financial sector adjustment lending operations. Regrettably, none of the IFIs nor RDBs have developed any internal expertise worthy of respect on securities exchange operations despite the obvious priority which developing such in-house expertise should have had over the last five years. Failure to develop such expertise reflects poorly on the lack of knowledge and absence of initiative on the part of the leaderships of the private sector and financial sector units of these institutions.

To rectify this shortcoming, the RDBs should develop cooperative partnerships with a number of major exchanges with strong internal institution-building capacity (such as those in New York, Philadelphia, London, Chicago, Singapore, Hong Kong, Amsterdam, Toronto and Montreal) under a wide-ranging special programme to upgrade and reform securities exchanges in emerging markets (at least the 11 major ones) and bring them up to international operating standards within the next five years. The financial sector departments of the MDBs should be innovative in designing and funding such partnerships to overcome their own lack of internal capacity to handle this particular area. Absence of progress by exchanges to meet international operating standards within a reasonable period of time should result in their disqualification from handling secondary market trade transactions involving international portfolio investments.

By the same token, the securities brokerage industry in almost all emerging markets needs to be transformed within the next five years to ensure that brokerage firms operating in emerging markets meet minimum qualifying requirements which would assure that they are: (i) adequately capitalised; (ii) have access to institutional liquidity against their own holdings of stock, especially at times of market tightness; (iii) are professionally competent in dealing with issuers and investors; (iv) employ international ethical standards; (v) have strong internal compliance departments and

procedures; (vi) professionally managed by qualified and properly trained specialists. All brokers should be required to undergo a period of training and apprenticeship experience before being licensed to trade or deal directly with customers and should receive special training in dealing with international clients. Professional broker associations which employ a measure of self-regulation to maintain professional standards need to be encouraged and supported.

In coping with the rapid evolution of the global brokerage industry, emerging markets need to pay more attention to the role of foreign brokerage firms and their impact on the domestic structure of the industry. The mistakes that emerging markets like India have made (through a combination of official ignorance and negligence) in destroying the market position of domestic brokerages and creating a two-tier system which discriminates against domestic individual investors in quality of service should not be repeated. Instead, local brokerages need to be provided with a level playing field and be given sufficient lead time for restructuring to meet international competition through acquisitions, mergers and recapitalisation.

The costs of not doing so are glaringly obvious in the Indian case. There the secondary market has now shrunk with 90% of secondary trading concentrated in about 30 stocks (out of 8,000) which are preferred by foreign investors because of the large market capitalisation of the companies involved and the liquidity of the scrip. Trading in the shares of competitive medium-sized companies has virtually disappeared with the result that they are now being denied access to capital on primary markets because their stocks have little appeal to foreign investors who now dominate market sentiment. The small domestic investor, who was the bulwark of investment in Indian equities between 1985-1994, has virtually disappeared from the marketplace, both because of the unforeseen consequences of foreign entry in changing the industry's market structure, as well as the malfeasance and malpractices of a small number of brokers, investment banks and unscrupulous issuers.

In the meantime, most small domestic brokerages which used to make markets in mid-cap stocks have become illiquid, unable to trade the stocks which they hold in such companies. The result has been a capital market which has become dysfunctional in meeting the needs of the real economy. Yet, no action has been taken by the authorities or by the IFIs involved in financial system reform to rectify the situation with appropriate responses when intelligent and timely intervention could have prevented the outcome. Instead the authorities have chosen to rely on jawboning public investment institutions to behave in one way or another to prop up the market and prevent a total collapse. Such experiences are not unique to

India. They have occurred at some time or another in almost all emerging markets and were characteristic of many developed markets *circa* 1920. What is incomprehensible is that such events are still tolerated by national authorities and the international community at the threshold of the 21st century in a world that is supposed to be financially globalised.

Emerging markets have also been slow in responding to the demands of the international marketplace for introducing more efficient and responsive clearing, settlement and security transfer procedures and mechanisms (i.e. transferring, registering and recording the transfer of a financial security from one owner to another upon its sale and purchase). Too many emerging markets remain characterised by a paper-driven regime in which the ownership of securities is manifested by the personal possession of a physical certificate. Transfer of ownership is not effectuated or recorded until a physical transfer actually takes place. In developed markets, there is no longer any physical transfer involved with most securities being dematerialised and immobilised by being kept on electronic registers in centralised depositories. Any change of ownership resulting from trades is recorded through electronic book entry, registration and transfer by custodians and registrars with most investors being content with proof of ownership via brokers' confirmations and receipts of buy-sell transactions, along with their portfolio positions being recorded in monthly statements.

The log-jams created by continued reliance on the physical movement of vast quantities of paper in securities markets have become almost unimaginable in their effect on constipating exchanges and brokers' back-offices when market volumes are high. So are the possibilities for a variety of malpractices which emerge by way of bad deliveries, forged signatures on transfer forms, the circulation of easily forged share and bond certificates, delayed settlement to individual customers while brokers use customers' share certificates to trade on their own account, or for repo transactions, and so on. All of these market malfunctions can be avoided by having emerging market players leap-frog into the electronic age and by taking steps to create a dematerialised environment.

This, of course, is easier said than done in environments where investors have virtually no faith in the ethics of brokers and where brokers' receipts would not easily be accepted as satisfactory proof of ownership. Nor are most brokers capitalised sufficiently to instil confidence. And telecommunications infrastructure in most emerging markets is not sufficiently well-developed to support such changes. Major architectural changes therefore need to be made in overall market infrastructure in a properly sequenced fashion taking local circumstances into account over a pre-determined period of time. Such changes need to be adequately designed and properly financed both in terms of changes in large-platform architecture where

securities exchanges, custodians and depositories are concerned, and at the level of individual brokerages which need long-term financing (as well as additional capital) to make the necessary investments in new systems, hardware-software packages, qualified people with entirely different talents, and new accounting, control and compliance systems.

Similar transformations are needed in market-supporting mechanisms and institutions such as clearing, settlement and payment systems (which require dovetailing with commercial banks) as well as in the reformation of custodians, registrars and depositories; all of which involve their own complexities. Transformations are also required in the secretarial departments of corporates issuing securities which need to make matching investments in electronic systems to keep their own shareholder registers up to date. Taken together these measures require revolutionary transformations in the way in which the securities industry presently functions in emerging markets.

Financial system reform involves more than policy change and wishful thinking; the practical details cannot be left ignored or left to the domestic brokerage industry to sort out. That approach rarely works and often backfires. Transforming the architecture and functioning of capital markets and brokerages is a major national undertaking which requires an unusual degree of planning, the formulation of a clear strategy and the proper sequencing of tactics. It entails an extraordinary effort at public-private cooperation and participation, and a high level of committed external support from the IFIs as well as from exchanges and brokerages in developed markets. While the importance of such ingredients is recognised in programmes for reforming banking systems in developing countries, they are not as evident in reforming capital markets. In the larger emerging markets, both need to be tackled simultaneously.

7. Interaction Across Tiers of Governance in a Globalised Financial World

The last of the selected issues or challenges which this paper chooses to deal with concerns the obvious necessity for interaction across the three principal tiers of financial system governance: national, regional and global. Much has already been alluded to in the foregoing sections of the paper which underlines the need for such interaction. Yet, though the need for it may be obvious, it is not clear that the issue is being addressed at all except perhaps in the case of case-by-case interaction among regulatory agencies.

What is clear from experience thus far is that interaction at all three tiers needs to be widened and deepened at every level: i.e. at the level of: (i)

apex economic policymaking institutions and personages, i.e. ministries of finance and central banks; (ii) regulatory agencies, in particular central bank supervisors and securities and exchange commissions; (iii) securities exchanges themselves and especially their surveillance and monitoring departments; (iv) the brokerage community; (v) the asset management industry; and (vi) investor protection bodies.

Such interaction needs to be well organised and needs to take place on a regular, and not just on a crisis-management, basis by way of: (a) regular professional exchanges through conferences, symposia and industry conventions and associations; (b) training and professional development programmes for all agencies involved in capital markets which permit wide interaction, exchange of information and experience sharing; and (c) specific institutional arrangements for coordination and cooperation at national, regional and global levels which requires cooperation on certain issues of mutual concern. Such interaction is not just a matter for policy-makers or officials. It is perhaps even more important for the senior managements and boards of private financial institutions whose staff and organisations operate at the front line of the investment community. In developed markets such interaction occurs so frequently that it is no longer worthy of specific note. But for emerging markets that is not the case.

To fill the gap that exists, there is a special role to be played by regional organisations as well as by unique organisations such as the Commonwealth and the South Centre – in addition to the roles that the IFIs and RDBs should be playing but are not, or at least not to the extent that the occasion demands. A clear and crisp programme of needed interactions could easily be developed but it would prove to be valueless, simply because once the process is kick-started, an internal dynamic will take over which would govern the intensity and direction of voluntary interaction thereafter. The role that needs to be played in fostering interaction is a catalytic one but one which no global institution has contemplated playing seriously as yet.

V Conclusions and Recommendations

In going through its various sections, the paper has reached its own conclusions and made several recommendations of a generic kind. The more important among these are pulled together and reiterated below for convenience:

- National governments, independent regulatory agencies, private accounting and legal firms, and international financial institutions

(regional and global) need to cooperate on an unprecedented scale in order to accelerate orderly financial market development and put in place adequate safety nets to cope with accidents that will occur even as efforts are made to prevent them.

- Although private financial market operations (and therefore private capital flows) have now spread to parts of the world which they did not reach before, there remains a long road to travel before private capital can flow through efficient market mechanisms with equal facility everywhere and before all countries can be served by financial markets in the same way.
- Small ACP countries will need to accept the reality that *regional* capital and banking markets will fulfil their needs and purposes better, more efficiently and more cost-effectively than national markets can. It would be timely for: (i) such countries; (ii) the regional organisations to which they belong; and (iii) the international financial community – especially the EU and the Commonwealth which both have special links with the small ACP states – to come to early understandings on the need to develop regional financial markets before the tendency to “go it alone” results in a waste and duplication of scarce financial, technological and human resources.
- Equally there is a need to rationalise excessively fragmented local markets in large countries such as, for example, India.
- Financial markets are information sensitive and vulnerable to failure when information is imperfect or opaque. Markets and prices become volatile and vulnerable when rumours dominate perceptions. Markets also fail when there are asymmetries between information available to issuers and market intermediaries vis-à-vis information available to regulators, investors and the public, or when essential information is absent or late leaving markets to speculate on the intentions of governments or central banks.
- The progress made – in reducing information imperfections – has fallen far short of expectations. A major effort needs to be made involving the IFIs (along with the OECD, UN agencies, the Commonwealth Secretariat, the South Centre and others) on improving the quality, frequency and timeliness of broad economic information at all levels in emerging markets.
- One possibility which might be considered is to make more transparent

and publish immediately the outcome of IMF Article IV consultations and have the IMF (or the MDBs) publish pithy annual or semi-annual economic reports on significant emerging markets, equivalent to those published by the OECD on its member economies.

- Apart from overall broad economic and market information needed to support analysis, position-taking or risk-hedging assessments by market players, there is also a need for accurate, regular and timely financial and operating micro-information on corporates and security issuers.
- Regulatory capacity building in emerging markets is an urgent task that needs to be supported by private agents as well as donors in developed markets. There is a role for organisations such as the Commonwealth Secretariat, the South Centre, regional secretariats and regional development banks, as well as securities exchanges in developed markets, to play in improving regulatory capacity (both official and intra-market) and intermediary compliance capacity on a programmed basis.
- Emerging markets should contemplate creating a single financial services regulatory authority under one roof with permeable internal walls (following the UK model). That should also be placed on the agenda of IFIs involved in reforming financial systems in emerging markets.
- The experience of developing countries suggests that governments would be better off professionalising and privatising *public* pension funds, insurance companies and unit trusts and opening entry to foreign players in these areas of financial activity and asset management, so that a real market involving a large number of independent players emerges. There is a clear role for IFIs, developed country governments, and global financial institutions in accelerating such a transition in a frictionless manner.
- There is much for economic managers in emerging markets to learn about intervention in open markets. The IFIs and developed country central banks have a crucial role to play in transferring such knowledge effectively and keeping it updated. They can participate in such interventions either on a case-by-case or on a wider transparent rule-driven basis.
- In a globalised financial world with open capital accounts, the holding

of reserves to provide credible liquidity for financing a required level of imports over a conscionable period of time becomes a meaningless notion, at least for countries with sufficient creditworthiness. Reserves are needed instead to maintain the credibility of open capital accounts and the stability of financial systems; particularly the stability of monetary policies as reflected in interest, inflation and exchange rates.

- There is a strong case for instantaneous reserves augmentation for intervention purposes. There is a *prima facie* case for such augmentation first, at the sub-regional or regional level (similar to current arrangements available to members under the ERM in the EU) and then, at the global level. In that connection new ideas need to be explored; e.g. the possibility of temporary liquidity creation to withstand speculative attacks if intervention reserves are insufficient, accompanied by arrangements to withdraw liquidity when stability has been restored.
- Financial authorities at all levels need to focus on improving “market mechanics and market architecture” in emerging markets to bring these up to the standards which apply in international markets. Exchanges should move toward becoming self-regulating, independent (i.e. not broker-dominated) multi-market exchanges which provide trading for equities, debt instruments, forex, and derivatives under one overarching structure.
- All exchanges in major emerging markets should adopt electronic trading platforms and be financed on appropriate terms to make this transition.
- National authorities, working together with the IFIs (particularly the World Bank, IFC and regional MDBs) need to emphasise securities exchange reform and transformation at least as much as banking system reform and bank restructuring, through sector adjustment loans and programmes designed specifically for this purpose.
- Under a wide-ranging, special ‘emerging markets accelerated development programme’ the MDBs should: (i) develop partnerships with major exchanges in developed markets, to upgrade and reform securities exchanges; (ii) transform the securities brokerage industry to ensure that brokerage firms operating in emerging markets meet minimum qualifying requirements; (iii) introduce more efficient and responsive clearing, settlement and security transfer mechanisms with a

shift to electronic trading, book-entry and registry and revamped custodial, registrar and depository services.

- The architectural changes that need to be made in overall market infrastructure must be implemented in a properly sequenced fashion, and take local circumstances into account over a pre-determined period of time. Such changes need to be adequately designed and properly financed.
- Interaction among the three tiers of financial system governance – national, regional and global – needs to be widened and deepened. Such interaction needs to be well organised and take place on a regular, not just a crisis-management, basis.

Table 1 Private Capital Flows to Emerging Markets
(in billions of dollars)

	1990	1991	1992	1993	1994	1995	1996
Total Private Flows to Emerging Markets	44.4	56.9	90.6	157.1	161.3	184.2	243.8
of which:							
Foreign							
Direct Investment	24.5	33.5	43.6	67.2	83.7	95.5	109.5
Foreign							
Portfolio Investment	5.5	17.3	20.9	80.9	62.0	60.6	91.8
of which: Bonds:	2.3	10.1	9.9	35.9	29.3	28.5	46.1
Equity:	3.2	7.2	11.0	45.0	32.7	32.1	45.7
Memo: Net Issues of International Debt				150.7	285.7	313.2	n.a
of which: OECD Countries				85.2	232.3	261.8	n.a
Developing Countries				65.5	53.4	51.4	n.a
Commercial Bank Loans:	3.0	2.8	12.5	-0.3	11.0	26.5	34.2
Other Flows	11.3	3.3	13.5	9.2	4.6	1.7	8.3

Source: World Bank, *Global Development Finance, 1997*, and IMF, *International Capital Markets*, September 1996.

Table 2 Cross-Border Transactions in Bonds and Equities for G-7 Countries
(as percentage of GDP)

	1985	1990	1995	1996
United States	35.1	89.0	135.3	151.5
Japan	63.0	120.0	65.1	82.8
Germany	33.4	57.3	169.4	196.8
France	21.4	53.6	179.6	229.2
Italy	4.0	26.6	252.8	435.4
Britain	367.5	690.1	950.0*	1,350.0*
Canada	26.7	64.4	194.5	234.8

* personal estimate.

Source: IMF, *World Economic Outlook*, May 1997.

Table 3 Foreign Exchange Markets
(in billions of dollars and percentages)

	1986	1989	1992	1995
Estimated Daily Global Turnover	188	590	820	1,190
of which percentage traded in:				
London	n.a.	26.0	27.0	30.0
New York	n.a.	16.0	16.0	16.0
Tokyo	n.a.	15.0	11.0	10.0
Singapore	n.a.	8.0	7.0	7.0
Hong Kong	n.a.	7.0	6.0	6.0
Zurich	n.a.	8.0	6.0	5.0
All Other Markets	n.a.	20.0	27.0	26.0
<i>Global Forex Trading</i>				
<i>Turnover as percentage of:</i>				
World Exports of Goods and Services	7.4	15.8	17.4	19.1
Total Global Reserves (minus gold)	36.7	75.9	86.0	84.3

n.a.: not available

Source: IMF, *World Economic Outlook*, May 1997.

Table 4 Markets for Derivatives (Principal Outstanding on Unclosed Contracts)
(in billions of dollars)

	1986	1989	1992	1995
Interest Rate Futures	370.0	1,200.8	2,913.0	5,863.3
Interest Rate Options	146.5	387.9	1,385.4	2,741.6
Interest Rate Swaps	511.0	1,502.6	3,850.8	12,810.7
Currency Futures	10.2	16.0	26.5	37.9
Currency Options	39.2	50.2	71.1	43.2
Currency Swaps	280.0	898.2	1,720.7	2,394.8
Equity Index Futures	14.5	41.3	79.8	172.2
Equity Index Options	37.8	70.7	158.6	326.9
Total Principal Outstanding on Swaps	791.0	2,400.8	5,571.5	15,205.5
Total Principal Outs. on Futures/ Options	618.3	1,766.9	4,634.4	9,185.3
of which outstanding in:				
North America	518.1	1,155.8	2,694.7	4,847.2
Europe	13.1	251.0	1,114.3	2,241.3
Japan-Asia-Pacific	87.0	360.0	823.5	1,990.1
Other Regions	-	0.1	1.8	106.7

Source: IMF, *International Capital Markets*, September 1996.

Table 5 Annual Turnover in Organised Derivatives Markets
(millions of contracts)

	1986	1989	1992	1995
Interest Rate Futures	91.0	201.0	330.1	561.0
Interest Rate Options	22.3	39.5	64.8	225.5
Currency Futures	19.9	28.2	31.3	98.3
Currency Options	13.0	20.7	23.4	23.2
Equity Index Futures	28.4	30.1	52.0	114.8
Equity Index Options	140.4	101.7	133.9	187.3
Total Derivatives Contracts Traded	315.0	421.2	635.6	1,210.1
of which traded in:				
North America	288.7	287.9	341.4	455.0
Europe	10.3	64.4	185.0	353.3
Japan-Asia-Pacific	14.4	63.6	82.8	126.5
Other Regions	1.6	5.3	26.3	275.4

Table 6 The Global Syndicated Commercial Bank Loan Market
(in billions of dollars)

	1992	1993	1994	1995
All Countries	221.4	220.9	252.0	320.2
Industrial Countries	165.2	168.3	199.4	251.6
Emerging Markets	48.2	41.6	38.2	50.9
Offshore Financial Centres	6.1	9.8	14.3	17.4

Table 7 Secondary Market Transactions in Emerging Market Debt
(in billions of dollars)

	1993	1994	1995
Total Annual Debt Trading Turnover	1,978.9	2,766.2	2,738.8
of which:			
Africa	79.8	111.4	109.2
Asia	18.2	24.7	31.1
Latin America /Caribbean	1,621.6	2,259.3	2,284.2
Eastern Europe/Other	154.8	198.5	n.a
by instrument:			
Loans	273.6	244.4	175.3
Brady Bonds	1,021.3	1,684.0	1,580.3
Corporate and Sovereign Bonds	176.6	164.9	232.8
Local Currency Bonds	361.9	518.9	572.4
Options and Warrants on Bonds	57.4	142.4	178.0
Unspecified Securities	-	11.6	-

Source: IMF, *International Capital Markets*, September 1996.

Table 8 Net Assets of International Emerging Market Equity Funds Floated
(in billions of dollars)

	1992	1993	1994	1995
Total Emerging Market Funds	29.63	72.79	109.03	108.82
of which: Global Funds	7.75	24.75	34.72	36.00
Asia Region Funds	8.00	21.50	32.66	34.80
Asia Country Funds	8.45	16.33	22.67	22.07
LAC Region Funds	2.00	5.20	10.92	8.50
LAC Country Funds	2.67	3.87	5.62	4.31
Europe (R+C)	0.74	1.09	2.00	2.54
Africa (R+C)	0.02	0.05	0.44	0.60

Source: IMF, *International Capital Markets*, September 1996.

Table 9 Market Capitalisation and Value Traded in World Equity Markets
(in billions of dollars)

	1987	1990	1993	1996
World Market Capitalisation	7,831.82	9,399.36	13,963.34	20,177.66
of which: Developed Markets	7,499.07	8,784.77	12,326.26	17,951.71
of which: USA	2,588.89	3,059.43	5,136.20	8,484.43
Japan	2,802.95	2,917.68	2,999.76	3,088.85
Britain	680.72	848.87	1,151.65	1,740.25
Other Markets	1,426.51	1,958.79	3,038.65	4,638.18
Emerging Markets	331.75	614.59	1,637.08	2,225.96
World Value Traded	5,846.86	5,514.05	7,190.05	13,597.88
of which: Developed Markets	5,677.32	4,614.01	6,090.90	12,011.06
of which: USA	2,423.07	1,751.25	3,354.96	7,121.49
Japan	2,047.22	1,602.39	954.34	1,252.00
Britain	389.83	278.74	423.53	578.47
Other Markets	817.20	981.63	1,358.07	3,059.10
Emerging Markets	169.55	900.05	1,099.15	1,586.82

Source: IFC, *Emerging Stock Markets Factbook*, 1997

Table 10 Shares of World Output
(in billions of dollars and percentages)

		1980	1994	1995	1996
World GDP	Market	10,768.09	25,677.21	27,846.24	29,935.00
	PPP*	12,028.47	31,271.00	33,153.00	35,113.00
	% Nominal and PPP	100.00	100.00	100.00	100.00
OECD Countries (and Arab OPEC)	Market	7,758.41	19,676.45	21,263.39	22,780.53
	PPP	7,457.65	17,574.30	18,002.08	18,609.89
	% Market	72.05	76.63	76.36	76.10
	% PPP	62.00	56.20	54.30	53.00
Developing Countries (and NICs)	Market	1,615.21	4,716.90	5,246.23	5,732.55
	PPP	3,416.08	12,148.78	13,294.35	14,958.14
	% Market	15.00	18.37	18.84	19.15
	% PPP	28.40	38.85	41.10	42.60
Transition Economies	Market	1,394.46	1,283.86	1,336.62	1,421.91
	PPP	1,154.73	1,547.92	1,525.04	1,474.75
	% Market	12.95	5.00	4.80	4.75
	% PPP	9.60	4.95	4.60	4.20

* All of the PPP figures for 1980 are derived estimates applying PPP calculations for the 1980 market data series based on work done in developing PPP methodology for the Human Development Report.

Sources: This table has been extrapolated from several sources: (i) IMF, *World Economic Outlook*, May 1997; (ii) World Bank, *Global Development Finance*, 1997; (iii) International Finance Corporation, *Emerging Stock Market Factbook*, 1997; (iv) World Bank, *World Development Indicators*, 1997; (v) World Bank, *World Development Report*, 1997; (vi) World Bank, *Global Economic Prospects*, 1997; and (vii) UNDP, *Human Development Report*, 1997.