

Reforming the International Financial System Where do we Stand?

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N° 03-2000 – May 2000

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This paper does not reflect the position of the CAE, but only its author's views.

Abstract:

This paper argues that the work done over the last three years has led to a very significant strengthening of the international financial system. This does not come as a direct result of the decisions that have been taken, but rather from a better understanding, in emerging countries and industrialised countries alike, of the major mistakes to be avoided as far as financial policies are concerned (banking supervision, debt management and exchange rate policies). In particular, the risk of severe balance of payments crises in the advanced emerging countries now seems much lower than in the past.

However, the task of reforming the international financial system is far from over. Firstly, floating exchange rates in most emerging countries should reduce the risk of a full-blown financial crisis but in order to avoid the costs of excessive exchange rate volatility these countries need more guidelines about the best way of managing exchange rate flexibility. Secondly, the issue of private sector involvement in solving the problems of countries with excessive debt is still a very open question. We are rather sceptical that the IMF could or should play, as argued by some recent official statements, a leading role as a sort of referee between creditors and debtors. Thirdly, more should be done to reduce the maturity mismatches and the liquidity risk still present in the balance sheet of many financial institutions. Liquidity risk makes even relatively sound institutions vulnerable to rumors, contagion and loss of market access. Contrary to a frequently expressed view, we criticize the idea that this liquidity risk is the price to be paid to enable the banking sector to finance productive investment with households' short term precautionary savings. We argue for a very firm stance against the management and the shareholders of financial institutions asking for public support. There is clearly the need for a "code of good practices" in this area. Fourth and finally, recent attention was focused on "market failures" in the credit market, but more should be done to understand and reduce the risks of "valuation crisis", i.e. large movements in asset prices without any change in fundamentals. We stress the weakness of the methods used by many investors to assess the risk/return tradeoff offered by the financial assets in which they invest. Recent official statements from the G7 and the Financial Stability Forum supported the concept of "enhanced national surveillance of financial market activity", but there has been little tangible progress to date in this area while some worrying signs of imbalances have appeared in the financial markets of the industrialized countries.

After the severe monetary and financial crises experienced during the last few years –EMS in 1992/1993, Mexico in 1994/1995, Asia in 1997/1998, Russia in 1998 and to some extent Brazil in 1998/1999– intense research and discussion have taken place in order to define the reforms that are necessary to ensure better functioning of the international financial system. Academic experts and officials have taken part in a considerable number of task forces and international conferences. The length of the list of works published in the last three years on this topic is truly impressive.

However, it may appear that the practical decisions that have stemmed from this analysis are not yet far reaching². The Financial Stability Forum was created in February of last year just after the presentation of the Tietmeyer report. While this new discussion forum seems to facilitate the cooperation between various official bodies and may provide a useful contribution to the early detection of financial fragility, it can hardly be characterised as a major systemic innovation. Moreover, a new mechanism was also set up by the IMF in order to enable countries that are threatened by contagion to cope with this threat (the new CCL facility). However, the mode of operation and conditions attached to this new instrument are still far from clear and, indeed, the design of CCL is to be reconsidered in 2000. A welcome emphasis has been put on the need to ensure greater involvement of the private sector in the resolution of crises but the international community is having some difficulty clarifying what the so-called Cologne framework really means for private investors. Finally, significant initiatives have been taken in order to enhance the transparency of international organisations, and new standards or codes of good practices have been published or are being prepared on a large set of issues ranging from banking supervision to various forms of transparency.

Many critical observers doubt that the above innovations fully respond to the key issues raised by the crises that have erupted over the last few years. Even if they had been approved three years ago, it is hard to prove that they would have had a significant impact on the dynamics of the recent crises.

² The IMF's website, www.imf.org, provides an up-to-date and complete coverage of initiatives taken over the last three years in order to reform the International Financial System. See IMF(2000), "Report of the Acting Managing Director to the International Monetary and Financial Committee on Progress in Reforming the IMF and Strengthening the Architecture of the International Financial System", April 12, 2000. Regular statements of G-7 Finance Ministers and Central Bank Governors are also very useful for monitoring the pace of reform. See in particular the statement issued just before the IMF 2000 spring meeting, G-7 (2000), and, for a more complete coverage, G-7 (1999), "Strengthening the International Financial Architecture" report of the G-7 Finance Ministers to the summit held by Heads of State in Cologne, June 1999.

However, we would argue that the work carried out over these last three years has already indirectly allowed for considerable strengthening of the international financial system. This does not stem directly from the decisions that have been taken but rather from greater awareness –in emerging countries and in industrial countries alike– of the main errors to be avoided. There are in particular three areas where the financial policies of emerging countries seem bound to evolve positively: banking supervision, debt management and foreign exchange policy. Best practices are gradually becoming better known and the IMF's surveillance has been strengthened. As a result, crisis prevention measures have been substantially enhanced: the likelihood of repeating major mistakes in financial policies is smaller than a few years ago (section I).

However, this positive assessment does not give us any reason to give a clean bill of health to the international community or to consider that the work for the reform of the international financial system is already completed. There are a few risks and fundamental inefficiencies that still need to be addressed.

On the one hand, as regards crisis prevention, we need to make further progress towards the definition of best practices which must be adhered to by the countries involved, in their own interest. There are a few unfortunate loopholes in the production of international standards. This article deals with foreign exchange and bank restructuring issues. On the former, the dangers of rigid pegs have been highlighted by recent crisis, but a pure float is not an option for most countries and the IMF has not yet provided a useful practical guide about the best way of managing exchange rate flexibility (section II). On the latter, we will challenge to some extent the widespread view that assuming liquidity risk is a normal part of banking and we will argue that as long as sight deposits are properly insured, managers and shareholders should pay a very high price when their bank lose market access and has to request some form of public support (section III). Liquidity risk makes financial systems vulnerable to contagion and systemic risk and the optimal policy of national “lenders of last resort” has still to be codified.

On the other hand, while better multilateral surveillance and the production of standards certainly make a very useful contribution to crisis prevention, they are not the only *raison d'être* of international financial organizations. Progress has been slower in other areas. We will not address here the key issue of how the IMF, the World Bank and regional development banks best promote development and fight poverty in developing and emerging countries alike, but rather stick with the issue of financial market instability and discuss how to improve the management of balance of payment crisis in these countries.

Many questions are still unresolved as far as private sector involvement and the role of the lender(s) of last resort are concerned. Here a deeper understanding of the real “market failures” at play in the foreign exchange and sovereign credit markets may be needed and we would caution at this stage against putting excessive responsibility on the IMF as a sort of referee between private creditors and public debtors (section IV).

Finally, beyond the specific issue of the financing of emerging countries, we must not forget the other malfunctions of the international financial system. In some areas, “market failures” are probably much more prevalent than it has been recognised so far. We will stress the weaknesses of some of the risk control and valuation models used by investors. As a result, we will point out the need for heightened monitoring mechanisms for financial markets in industrial countries, because they might be the places where the next financial crises will materialise and also because instability on these markets seems to have significant economic costs (section V).

Recent official reports quite rightly pointed out the major risk arising from excessive leverage in financial markets and started to show some promising support for the concept of “enhanced national surveillance of financial market activity”, see G7 (2000) or FSF (2000), but there has been little real progress to date in this area.

We will conclude by stressing what we consider to be the three main short-term priorities, in order to pursue the reform of the International Financial System (section VI).

In terms of the management of balance of payments difficulties, the main issue to be addressed is the definition of the mechanisms which ensure efficient workouts of unsustainable levels of debt. There is still a serious question mark over the role of the IMF on these matters.

In terms of systemic risk, we believe that after the theme of “excessive leverage” addressed in many reports over the last year and a half, liquidity risk should now take center stage. More needs to be done to assess why there is still so much liquidity risk in the international financial system and what could be done to improve the incentives for debtors to better manage their liquidity position.

Last but not least, the instability in major financial asset valuations should be viewed as a major cause for concern, and the process of “enhanced national surveillance of financial market activity” should be clarified and progressively implemented.

As far as the last two priorities are concerned, the Financial Stability Forum is well placed to play a leading role in monitoring the work that needs to be done

I. Financial policies of emerging countries and the strengthening of the international financial system

Before referring to “market failures”, we strongly argue that the crises of the last few years have been caused first and foremost by blatant errors in the conduct of the financial policy of most of these emerging countries. Some argue about who is ultimately responsible for these errors –the countries themselves or the international organisations which advise them– but this is not the issue under discussion in this article.

Analysis of recent crises has pinpointed three main factors of financial vulnerability. It is likely that emerging countries will protect their own interests by being much more vigilant in these areas.

The first new consensus is about the need for effective supervision of banking systems. Opening a banking system to international capital flows without strengthening its supervision beforehand almost inevitably brings about far-reaching financial difficulties. This theme is so widely known that it does not call for lengthy explanation. Banks’ liabilities are guaranteed either explicitly –insured deposits– or implicitly –anticipation of a rescue plan under the “too big to fail” principle. The existence of these guarantees considerably reduces the discipline imposed by the market on bank behaviour. In order to avoid excessive risk-taking which harms the economy and may potentially be expensive for the public sector, it is indispensable to organise effective bank supervision. The Basle Committee on Banking Supervision, comprising banking supervisors from the main industrialised countries, has clearly defined the principles underpinning this supervision exercise.³

³ See “Core principles for Effective Banking Supervision” put forward by the Basle Committee, BCBS (1997), and more recently “A new capital adequacy framework”, BCBS (1999), for a description of the three pillar approach to banking supervision.

In this area, most countries seem able to draw lessons from the painful experiments of the last few years, and international organisations are considerably strengthening their technical assistance capabilities. The Latin American example is also encouraging: the Mexican and Argentinean crises of 1995 have led Governments in these countries to assign high priority to the strengthening of their financial system. This is probably the main reason why Latin America was able to withstand the contagion phenomenon originating from Asia. Without analysing the details of the reforms that have been implemented, it is necessary to emphasise the fact that the control of some local banks by foreign institutions has had a major stabilising influence.

The weakness of the banking sectors of Asian countries is certainly one of the main reasons for the crisis that has hit these countries. However, observers also insist on the key role played in Asia and elsewhere by the inappropriate structure of public and private debt. This is the second area where the general level of awareness has been raised. Major short-term and/or foreign currency debt create considerable risk. We would emphasise four areas of vulnerability that have all come to bear during recent crises:

- Short-term debt creates a liquidity risk, in particular in case of an international crisis which is transmitted by contagion. Foreign creditors may decide to cut their credit lines. As will emerge later, this risk is often exaggerated, but it can represent a real danger under extreme circumstances.

- Short-term debt also creates a strong interest rate risk: given that an interest rate hike that is purely national or that is decided in order to defend the foreign exchange rate increases the debt burden, creditors may doubt the solvency of the debtor concerned. This vicious cycle was a major factor in the case of Russia.

- Foreign currency debt may contribute to exchange rate crisis: debtors who have borrowed in foreign currency will want to cover their exposure as soon as doubts surface regarding the stability of the foreign exchange rate. This hedging behaviour goes naturally hand-in-glove with capital outflows. Whether in Asia or in Brazil, we have seen the genuine difficulties encountered in stabilising the foreign exchange rate when economic agents who have borrowed in foreign currency decide to reduce the risks they have taken and try to hedge their positions.

– As we have seen in Asia, debt denominated in foreign currency tends to transform a foreign exchange crisis into a global financial crisis. A lower exchange rate increases the liabilities of economic agents who have borrowed in foreign currency. In extreme cases, this may give rise to doubts concerning their solvency and bring about the emergence of a liquidity crisis extending to all agents in the country concerned, ending with a collapse of the financial system.

There is no absolute rule as to the limits that should not be exceeded regarding short-term debt and/or foreign currency debt. It is likely that these rules depend to a large extent on the foreign exchange regime (see section below). However, it is clear that most emerging countries have understood the need to be extremely careful in this area. As a result, in many countries, with the IMF's assistance, monitoring systems have been set up in order to enhance the information available to the authorities regarding the external debt of the private sector, particularly the banking sector.

Furthermore, there is no doubt that all countries are trying to build a very significant cushion of foreign exchange reserves in order to meet the risk of capital outflows associated with high short-term debt and/or foreign currency debt. We may also assume that countries facing a major inflow of short-term capital will not hesitate in the future to use Chilean-style measures (taxation of capital inflows) in order to avoid excessively unstable funding of their balance of payments.

The third area in which practice is changing is exchange rate policy. Analysis of the crises of the nineties has clearly shown the four risks associated with excessively rigid foreign exchange policies.

– It may lead to inappropriate economic policies and several forms of disequilibria. It is difficult to maintain on an ongoing basis the competitiveness of the country concerned. Inflation control is made difficult by the constraints weighing on monetary policy. In particular, it is difficult to raise interest rates if the economy overheats. Of course, fiscal policy may, to a certain extent, act as a substitute for monetary policy in order to avoid excessive acceleration of demand as well as price pressures. Moreover, monetary policy may recover a measure of autonomy thanks to Chilean-style measures aimed at slowing down capital inflows. In practice, most countries which have retained fixed exchange rates over a long period ended up experiencing a more or less sharp overvaluation of their currency (Italy in 1992, Thailand in 1997, Brazil in 1999, etc.) and an increase in foreign debt, especially short term liabilities denominated in foreign currencies.

– It is very difficult to adjust the foreign exchange rate when the need arises. Such a change has political consequences (the authorities risk losing face), but also a financial impact. Debtors who have borrowed in foreign currency are making a loss and may decide to react by hedging their foreign exchange rate exposure. This behaviour may bring about a spiralling depreciation. Experience has shown the risks of a collapse of the currency after a period of supposedly controlled devaluation (Italy in 1992, Brazil during the last weeks following devaluation in 1999, etc.).

– A fixed exchange rate system is very vulnerable to speculative attacks. Speculators are dealing with “one way bets”. At best, from their point of view, they will make a considerable foreign exchange gain if the country devalues. At worst, for a few days, they will bear a minimum financing expense linked to the interest rate differential between the currency they buy and the currency they sell. It is therefore necessary to intervene heavily on the foreign exchange market and/or raise interest rates to very high levels for the currency that is under attack in order to increase this financing cost, but this interest rate hike has a high economic cost, and speculators may intensify their attack as they doubt whether high interest rates are sustainable over a protracted period. They are also encouraged by the knowledge that, at the end of this battle and once the peg is broken, the currency of a country which has lost all its foreign currency reserves and has slumped into recession due to excessively high interest rates can only collapse.

As a result of the risk of so-called “self-fulfilling speculative attacks”, many argue that the problems with pegs run much deeper than explained by Mundell’s famous “incompatibility triangle”: countries not only lose control of current monetary policy and the ability to cool down the economy in the event of overheating, but, in order to avoid “multiple equilibria”, they may even have to forego the option of following an independent monetary policy in the future. We will later argue that these “multiple equilibria” theories can be very misleading when they are used to defend free floats or are interpreted as the proof of “market failures”, but they do at least show all the risks and difficulties of defending a peg in a very rigid manner.

– The fourth problem associated with rigid exchange rates is less frequently discussed, but seems very important. Through multiple channels, fixed exchange rates weaken the supervision of the economic policy of the countries concerned. The markets’ doubts as to economic fundamentals and the stability of foreign exchange rates prove costly. Indeed, as we have seen, they tend to bring about a major rise in interest rates.

This sometimes drives international organisations to a form of self-censorship when assessing the position of the country concerned (see the IMF's position vis-à-vis Russia or Brazil) and also leads the country to apply strong pressure on its "controllers" (here again international organisations, but also rating agencies and research units of major international banks).

Over the last few years, all of these reasons, and primarily the first three, have brought about a change in international consensus. Today, rigid foreign exchange rates are only recommended for three types of countries: as a transitional step, for countries that have lost any monetary credibility and are unable to manage a floating exchange rate system, for the poorest countries, whose financial systems are still rudimentary and which are protected by strict foreign exchange controls, and for countries heading, with full knowledge of the facts, towards monetary union ("currency board" followed by "dollarisation" or "euroisation").

As a matter of fact, the large majority of emerging countries has abandoned fixed foreign exchange rate policies. In the case of Mexico in 1995, Thailand, Korea and Indonesia in 1997, Russia in 1998 and Brazil in 1999, this was not a choice, but the result of the financial crisis. However, none of these countries is currently contemplating returning to a fixed foreign exchange rate system.

In total, changes in financial practices in most emerging countries will probably substantially reduce the risk of a new financial collapse of these countries. However, it remains clear that the reform of the international financial architecture is far from complete. Certain sound practices need to be better defined. Crisis management must be reviewed. Finally, financial instability in the industrial countries themselves should not be overlooked.

II. Foreign exchange policies: looking for standards

Difficulties encountered with fixed foreign exchange rate systems should not conceal the drawbacks of totally flexible foreign exchange systems for developing countries. If certain conditions are not met, in particular regarding the credibility of monetary policy, exchange rates may prove highly volatile.

Foreign exchange instability has several negative consequences. Businesses bear higher costs, in particular for hedging purposes, but this also tends to increase the cost of capital, since the risk assumed by outside investors is increasing. In fact, many if not most experts advocate the idea of a managed float rather than a totally free float.

It is however striking to observe the weakness of theoretical and empirical works attempting to define an optimal management mode. This is an essential question for developing countries as well as international monetary and financial authorities: how can the right balance between flexibility and stability be struck?

In principle, there are two different methods for introducing stability into a flexible foreign exchange rate. These two methods are not at odds with each other, but appear to be rather complementary:

– **Monetary policy may explicitly define foreign exchange stability as one of its objectives.** It is thus necessary to clarify the relative importance of objectives and the central bank's policy regarding the appropriate response when these objectives are not met. Rigid and fixed exchange rates are an extreme which is easy to define: the foreign exchange rate is the only objective and when necessary interest rates are adjusted in order to strictly comply with it at any time. However, many other policies are possible, both in terms of objectives and reaction functions, and it would be interesting to conduct a systematic analysis of their advantages and drawbacks.

Indeed, it is hard to understand why so many qualified observers deem an “intermediate exchange rate regime” to be unattainable, since it is possible to devise almost an infinity of reaction functions for the central banks relative to the exchange rate. As stressed by Mussa et al. (2000), “the facts reveal that developing countries with flexible exchange rate regimes generally do not practice benign neglect of the exchange rate. Compared to the Group of Three (G-3) countries, these developing countries tend to put much more of the weight of the adjustment to macroeconomic shocks on variations in interest rates and in international reserves than on variations in the exchange rate”. “Intermediate exchange rate regimes” are the rule rather than the exception and a systematic investigation of the wide range of possibilities has yet to be conducted

For instance, the policy implemented by France after the widening of the EMS's fluctuation margins in 1993 seems a particularly interesting example of an “intermediate exchange rate regime”. The French authorities switched from a rigid type of defence to what could be termed a sort of “elastic policy”. In keeping with the move towards EMU, the exchange rate remained the only objective, but the method for defending the parity changed drastically. France maintained an interest rate differential with Germany, and this gap increased progressively when the foreign exchange rate deviated from the target foreign exchange rate (which was the EMS's central rate). Aggressive interest rates hikes were no more used to stabilize the DM/FF rate in a very narrow range.

Eventually, this “elastic policy” proved much more effective than the rigid policy which had been implemented before in order to ensure the franc’s stability. In particular, the introduction of a modicum of flexibility into the defence of the currency made it possible to fend off purely speculative attacks. Attacking the French franc ceased to be a “one way bet”. The remarkable success achieved by European central banks in managing foreign exchange rates starting from 1993 has been illustrated by Bartolini and Prati (1998). Their analysis “points to the usefulness of this policy for other countries that target their exchange rate”.

As regards emerging countries willing to have a high degree of stability in their foreign exchange rates without suffering all of the costs associated with a rigid foreign exchange rate, we would emphasise the benefits of “an adjustable reference parity” system, which is directly inspired by the French experience while taking into account these countries’ specific features.

We will briefly describe this regime which is presented more in depth in Bergsten, Davanne and Jacquet (1999), Davanne (1998) and Davanne and Jacquet (2000).

1/ The foreign exchange objective is defined in relation to a basket of currencies. It is adjusted regularly in order never to deviate from reasonable estimates of the “long-term equilibrium exchange rate” i.e. an exchange rate compatible with a balanced growth of the economy.

2/ In order to defend this objective, the central bank generally follows what we called an “elastic policy”, i.e. it gradually raises its interest rates when the foreign exchange rate falls below its reference level. If the markets’ lack of confidence is brought about by an overvaluation of the currency rather than speculative attack, this “elastic policy” is unlikely to succeed in bringing back the exchange rate to its reference level. In this case, a readjustment is necessary.

3/ The exchange rate objective plays an asymmetric role in the central bank’s reaction function. The foreign exchange rate may rise if a tightening of monetary policy is required. The pursuit of foreign exchange stability should not limit the authorities’ ability to control inflation in case economic activity becomes too buoyant.

This particular “intermediate exchange rate regime” has never been fully tested by any emerging country. However, such an approach seems to avoid most of the drawbacks associated with a fixed exchange rate system, while ensuring a high level of stability of foreign exchange rates.

Indeed, we would argue that the two main criticisms generally levelled at fixed-but-adjustable exchange rate regimes, i.e. the fact that they lead to inappropriate economic policies and are vulnerable to speculative attacks, are very much dependent on the assumption that monetary authorities use excessively rigid tactics to defend the peg. As shown by the French experience, “multiple equilibria” and “self-fulfilling speculative attacks” are mainly the result of an inadequate defense of the target exchange rate. With a more flexible defense policy, “one way bets” disappear and it is hard to see how speculators can trigger a devaluation if there is no fundamental imbalance in the economy. Taking into account the bulk of recent experiences, it is hard to understand why so many observers seem to believe that the defense of a peg needs die hard policies. For example, Mussa et al. (2000) may have missed the true lessons learnt from the EMS crises of 1992-1993 and the need for flexible responses to speculative attacks, when they state that “with substantial openness to global capital markets, maintenance of exchange rate pegs requires the undiluted commitment of monetary policy and the capacity of the economy and the financial system to withstand the pressures generated by the interest rate adjustments that may occasionally be necessary to defend the peg”.

The “Adjustable Reference Parities” framework is certainly not a one fits all policy and many emerging countries may prefer to pursue more independent monetary policies and accept more exchange rate volatility as a result. But this framework, and the French experience among others, show that far from being limited to “corner solutions”, the list of possible exchange rate regimes is almost endless. Though they should avoid at all cost the blind defence of a rigid peg, monetary authorities can certainly lend some weight to the objective of exchange rate stability if they choose to.

– **Exceptional (sterilized) foreign exchange interventions constitute the other method for reducing some of the volatility introduced by flexible exchange rate systems.** Even under regimes where monetary policy is 100% devoted to short term internal goals, i.e. real economic growth and price stability, market interventions may be decided upon when parities deviate sharply from levels that are viewed as consistent with “economic fundamentals”. This has indeed been the policy of the G-7 countries since the mid eighties. In order to help other countries attempting to manage their exchange rate, there is the need to better define the surveillance process that provides a warning in the event of sharp divergence between current exchange rates and reasonable estimates of a “proper” exchange rate.

As discussed in Davanne and Jacquet (1999), the search for the latter requires on the one hand an analysis of the “exchange rate long-term equilibrium”, taking into account the structural features of the country concerned, and on the other hand the analysis of the country’s position in the economic cycle. Put simply, a country which is experiencing an economic slowdown much sharper than that felt by its neighbours and lower interest rates, will very logically have a foreign exchange rate that is undervalued in relation to its long-term equilibrium⁴.

Regarding all these questions, the lack of guidelines seems highly regrettable. When Brazil changed its foreign exchange policy at the beginning of 1999, it appeared that the authorities encountered great difficulties in defining the new regime. This float –literally and figuratively speaking– first led to a frightening collapse of the foreign exchange rate. It is essential at the international level to study more in depth the optimal management of a flexible foreign exchange system. Over time, the IMF must be able to define a series of best practices.

III. Best practices for national “lenders of last resort”

In addition to foreign exchange policy, there is another area where emerging countries lack internationally recognised references for the conduct of their financial policy, i.e. the management of localised banking crisis. In this case also, this lack reflects real conceptual difficulties and points to the need for a strengthening of the international effort in order to identify best practice.

As regards banking supervision, we may make a very general distinction between two phases: monitoring proper, whose aim is to maintain a sufficient level of capital in order to meet any contingency, and crisis management, if monitoring has not proved sufficient to avoid the emergence of problems for a bank. It is often the market which reveals these difficulties, which means that the ailing bank suffers from liquidity constraints and asks for exceptional refinancing by the national “lender of last resort”, usually the central bank.

⁴ Since Dornbusch (1976) seminal work on the “overshooting mechanism”, it is well-known that, even on an efficient foreign exchange market, parities can move away for a while from their equilibrium levels.

The method used for treating these difficulties is very important. Decision-makers, i.e. supervisors and the central bank, must take into account short-term considerations –avoiding further accumulation of losses by the relevant banks, avoiding a panic among creditors and any extension of panic to other banks– but also, in the longer term, must pursue a consistent policy that does not give other institutions the temptation to be remiss in the future.

Indeed, it is necessary to introduce greater discipline in lending behaviour by trying to change the behaviour of bank managers, shareholders and creditors. It would be slightly naive and dangerous to rely excessively on the effectiveness of direct prudential control regarding the quality of the loan portfolio or the level of shareholders' equity in order to ensure the stability of the financial system. As a matter of fact, banking supervisors increasingly stress the importance of the other “pillars” of an effective banking supervision process, see BCBS (1999). On the one hand, they insist that the banks' internal decision-making process as much as loan portfolios should be examined. Auditors check the quality of the internal mechanisms set up in order to monitor and control risks. On the other hand, “market discipline” is becoming a buzz-word and banks' decisions should be better controlled by shareholders and creditors. But there can be no market discipline if there are no credible penalties for all involved parties in the event that a bank has to request some sort of public support.

In addition to the regular monitoring enforced by banking supervisors before the emergence of any crisis, a key question is to identify those bank restructuring mechanisms that are most able to give a sense of responsibility to players on the credit market. These are delicate and essential topics and we may regret that “guides” prepared by international organisations are rather evasive on the subject of localised crisis management, while they are very complete on the issue of monitoring itself. In fact, most supervisors admit that there is a gap in the international production of codes of best practice

In this area, we would like to briefly touch on three sets of questions: the treatment applied to the bank's shareholders and management where there is a serious question mark about the institution's solvency, the treatment applied in case the problem appears to be more of a liquidity than solvability nature, the penalties that can or cannot be imposed on creditors.

As far as solvency crises are concerned, there should be no difficulty in establishing a consensus around the idea that the senior management and shareholders should be the main victims of bank restructuring programs. It is true that the risk of a strong penalty, which should generally go all the way to nationalisation, might lead to a certain extent to credit rationing during an economic slowdown. Banks will have incentives to be extremely prudent. However, the alternative is worse: a headlong rush into lending generally has a considerable cost for the Treasury and may later lead to an even stronger credit crunch. The need to penalize as much as possible shareholders in case the bank asks for public support and there are serious doubts about its solvency, should be stated much more loudly by the international organisations preparing standards on these issues. Indeed, many emerging countries completely failed to follow this basic rule in the past.

The subject becomes much more controversial when there are doubts about the real situation of the institution in trouble and when the management can argue that it has basically fallen victim to a liquidity crunch, and market panic, rather than a real lack of solvency. Indeed, there is a very strong school of thought that argues that assuming liquidity risk is a natural part of banking and accordingly that national and international lenders of last resort should be ready to act without applying extreme penalties whenever a sound institution loses market access. This view is mainly based on the theoretical argument put forward by Diamond and Dybvig (1983), one of the most quoted articles in the literature on lenders of last resort. This article claims that banks play a useful role by transforming short-term precautionary savings into long-term financing, since they offer at the same time liquidity to households and stable long-term financing to businesses.

This maturity transformation entails no risk for the financial system overall, since, thanks to the “large numbers law”, precautionary savings are broadly stable at the macro level, but it makes possible a run on an individual bank if some households lose confidence in its ability to repay the short-term deposits. Moreover, runs can be self-fulfilling since depositors have every reason to withdraw their savings from a bank as a precautionary measure if they believe others may do it.

Thus, in order to make possible or even facilitate, this socially useful maturity transformation by the banking sector, a rather generous lender of last resort is needed to suppress the risk of self-fulfilling panics.

We would argue that this particular line of reasoning is conceptually flawed. One has to distinguish between liquidity risk stemming from sight deposits on the one hand (transaction money), and short-term precautionary savings on the other hand. The liquidity risk is only intrinsic in the financial system for sight deposits serving as transaction cash, since banks have no other choice but to lend these sight deposits for longer maturities. By so doing, they are indeed exposed to a major liquidity risk in case a large number of depositors withdraw their funds at the same time. However, in this area, there is little doubt that the best answer is to create an effective deposit guarantee system which makes panic and a bank run very unlikely, rather than to call on a lender of last resort. Let's turn our attention to precautionary savings and to Diamond and Dybvig's arguments. In the real world, contrary to the highly stylized model used by these authors, the transformation role may be performed by financial markets without having banks playing any role. When a business issues floating rate notes, it has a stable financing, and households have liquid savings, since they may resell their securities on a secondary market. Obviously, in such a situation, households bear the risk that the company may fail. But risk adverse investors can buy treasury bills or bonds issued by highly-rated corporations. In other words, it is the job of modern financial markets, absent from Diamond and Dybvig's model, to provide liquidity and allocate various risks to the agents best placed to support them.

As long as there are secondary markets able to provide liquidity to investors and an insurance scheme to protect holders of transaction money, there is absolutely no market failure which may be used to justify on a fundamental basis that managers and shareholders of banks get incentives and implicit subsidies to mismanage their institutions' liquidity position.

Consequently, we would argue in favor of a very firm stance towards banks asking for public support. There are solid grounds for stating that any loan granted by monetary authorities on the basis of a procedure deviating from normal refinancing rules must go hand-in-glove with a very heavy penalty for the shareholders of the bank concerned. Banks are not ordinary businesses. On the one hand, they benefit indirectly from the public guarantee given to certain categories of depositor. On the other hand, when a bank is unable to meet its commitments, there is a major risk of contagion, and negative consequences may be systemic in nature. This justifies the application of particularly stiff penalties to banks which call, even temporarily, for public financing, in order to compel banks to manage their liquidity risk very prudently.

Liquidity risk together with excessive position taking and leverage, discussed later in this paper, are the two main causes of systemic crisis. When there is too much liquidity risk in the financial system, it becomes very vulnerable to self-fulfilling panic and systemic risk. Reducing considerably the extent to which financial institutions assume such risks, i.e. recognizing that there is no real “market failure” in this area and that financial markets rather than banks should be the real providers of liquidity to investors, should be a high priority for the international financial community.

Indeed, except in special situations, we see little reason for the authorities to try to greatly differentiate the tough treatment applied to managers and shareholders asking for public support, depending on whether or not there is a solvency problem. On the one hand, this kind of differentiation is very hard to define and implement and, on the other hand, liquidity mismanagement is dangerous enough to justify very heavy penalties.

To be clear, we did not argue in the preceding paragraphs for the end of the “lender of last resort” and letting financial institutions fail in the midst of a liquidity crisis, but simply in favour of extremely heavy penalties going as far as nationalization in exchange for the requested public support. Indeed, what to do with the creditors and whether or not certain banks are “too-big-too-fail” is the third and much more difficult issue that we will now discuss.

A rigorous approach to the management of cash-flow difficulties in the banking sector might discipline managers and shareholders but would have no direct consequences on creditor’s behaviour. It seems however that people have gone too far in the application of the “too-big-to-fail” principle. While we stressed that it is indispensable to protect small depositors in order to avoid recurrent bank panics, it does not seem justified to have creditor banks lend in total impunity to an ailing bank and let the public sector foot the final bill. For example, according to the Meltzer report, IFIAC (2000), the cost of the 1995 banking system bailout in Mexico is currently estimated at roughly 20 percent of Mexico’s annual GDP.

The application of a penalty to large creditors, in particular interbank creditors, in the event of losses which may involve public funds, would change quite radically the operating mode of the banking sector, in particular as regards international financing. Creditors would perform a control function, which would come in addition to that of bank supervisors and shareholders, in order to ensure that equity is maintained at a sufficient level.

The main difficulty, which typically caused monetary authorities to back down until the Russian crisis of the summer of 1998, is due to the risk of instability caused by such a policy based on the responsibility principle. The logic which gradually prevailed as regards small depositors seems also to apply to the largest creditors: if they risk incurring a penalty, they will cut their credit lines when the first rumours of difficulties are heard and will thus create involuntarily the crisis they fear.

It should be very clear that the dilemma faced by the authorities is again very much linked to the importance of the liquidity risk present in the international banking system. With less liquidity risk, panic on the part of creditors would have far fewer systemic consequences and there would be much more room for manoeuvre in involving the creditors and liquidating the banks in a difficult situation. In some sense, less tolerance towards liquidity risk could trigger a virtuous circle: longer maturities in the interbank market would make it much more difficult for creditors to escape in the event of difficulties and as a result they would be much more vigilant before providing credit to other banks.

Let's note however that the fear of systemic risk is not the only reason why public authorities may be reluctant to let a bank fail. Indeed, normal bankruptcy laws are probably not wholly appropriate to the specificity of the banking sector. For example, banks play a role as credit providers and freezing even temporarily or partially the activities of a bank may cause some difficulties to the large number of corporations depending on the failed bank for finance. In some sense, one can argue that taking into account their special importance in the economy, it is crucial that the restructuring of a failed bank is done quickly and efficiently. There is a sort of externality and traditional bankruptcy procedures may be inadequate.

Hart (1999) focuses on the analysis of bankruptcy procedures and highlights the general benefits of debt/equity swaps in case of bankruptcy. His analysis may be specially relevant for banks in trouble. One can imagine that monetary and financial authorities could be granted the right to organise a partial debt/equity swap in respect of the liabilities of a bank which has been seized (the volume of debt involved in the swap might be calculated on a case-by-case basis in order to re-establish a level of shareholders' equity complying with prudential standards). Where authorities exercise this option, domestic and foreign creditors would then become the sole owners of the bank, except for small depositors who would be totally protected.

Such rules for the management of bank restructuring obviously make sense only where difficulties are circumscribed locally. In that case, the quick ownership transfer from the shareholders of the failed bank to its creditors corresponds to a deep economic rationality and would offer many benefits. However, such mechanisms raise many practical feasibility issues in particular due to the high heterogeneity of banks' liabilities (debt maturity, level of collateral given as a guarantee to creditors). In any case, the possibility to implement bankruptcy rules specific to the banking sector deserves to be analysed in a detailed manner.

On all the subjects related to the optimal management of localised banking crisis, the Financial Stability Forum should coordinate the work of the various official bodies involved. It is necessary to define ways of reducing systemic risk by making sure that financial institutions get better incentives as far as liquidity and counterparty risk management is concerned.

IV. Management of balance of payments crises in emerging countries: in search of the applicable principles

The above developments are related to localised banking problems that are manageable at a purely national level. The issues are quite different as regards a general funding crisis in a country which is not able to secure an equilibrium of its balance of payments. The pursuit of better economic and financial policies should in the future restrict considerably the occurrence of such crises in the most advanced emerging countries. However, we must draw all consequences from recent crises in this area and overhaul the crisis management mechanism used by the international community.

A very important decision which has already been taken is to limit international support for countries struggling to defend an overvalued peg. The IMF's Executive Board has considered that "the IMF should not provide large-scale assistance to countries intervening heavily to support an exchange rate peg if this peg is inconsistent with underlying policies. In some cases, it should offer advice on an appropriate exit strategy", see IMF(2000). This statement marks a very important and welcome change of stance relative to the policy which was pursued in Brazil and Russia less than two years ago.

To understand the significance of this change, it is essential to recognise that there are not two types of balance of payments crises (solvency and liquidity) –but at least three: many recent crises, starting with the EMS crises in 1992/1993, were at the outset mere foreign exchange crises linked to an expected devaluation. The pressure on the reserves was more due to economic agents' reluctance to hold the currency concerned than to a constraint linked to the availability of external credit. The same observation also applies to the case of Thailand at the very beginning of the crisis, i.e. until the July 1997 devaluation and the sharp downgrades in international ratings. Many observers attribute the sharp reversal of capital flows in the first half of 1997 to the fundamental instability of the supply of credit by international banks –the so-called herding behaviour– while the funding difficulties had probably a lot to do with the rising fear of a devaluation of the Thai baht. In other words, in matters of credit denominated in foreign currency, there is too great a tendency nowadays to discuss only the supply side whereas in fact the demand side, i.e. the willingness to bear the exchange risk, is at least as important in terms of accounting for many large swings in capital flows.

What should be done when a country is coping with a pure foreign exchange crisis? The answer is pretty obvious in principle when the peg can be considered as overvalued due to clear inconsistencies in the country's economic policies. The exchange rate has to be adjusted and the policy mistakes corrected. The new IMF policy relative to pegs is a welcome consequence of this basic principle.

The issue is much more controversial when the national authority can argue with some credibility that the attack is mainly speculative and that the exchange rate is broadly consistent with underlying policies. Indeed, the international community and the IMF do not have yet a clear policy stance in such cases.

Here also there is a powerful school of thought that argues about the existence of “market failure” and “multiple equilibria”. Speculative attacks would be self-fulfilling and an international lender of last resort would be needed to fend off unwarranted speculation. We already stressed in section II that we believe such a view is strongly misleading and that in this area there are no multiple equilibria, but only rigid and inadequate defense policies. A flexible and more efficient response, inspired by the solution experimented with by France in 1993, was described above.

Introducing a certain flexibility of the foreign exchange rate while parsimoniously using foreign exchange reserves and interest rate hikes may fend off purely speculative attacks at a low cost. Where market diffidence has deeper reasons and is due to an overvaluation of the currency, a readjustment is necessary.

In the case of such a pure foreign exchange crisis, one can argue that lenders of last resort have no role to play. The purpose of IMF facilities is to remedy a failure of the credit market –more on that later– and not to help maintain excessively rigid foreign exchange policies. This may be the main change required by crisis management. Indeed, we would argue, paraphrasing the IMF’s Executive Board conclusions, that the IMF should not provide large-scale assistance to countries intervening heavily and rigidly to support an exchange rate peg even if this peg seems to be consistent with underlying policies (except maybe in order to help countries credibly engaged in a process leading de jure or de facto to monetary union).

Once this principle has been set forth, it remains to define what is a sound reaction to a pure foreign exchange crisis. Indeed, the previous redrafting of the IMF’s Executive Board conclusions should not be mistaken as meaning support restricted to floating exchange rates. As previously discussed, there is a wide range of intermediary regimes and there are several effective responses to foreign exchange rate crises. The international community has still a lot of work to do to specify the best practices in this area.

The issues at stake are rather different when the crisis comes mainly from a country losing market access, due to doubts in the market about either the liquidity or the solvency of the government or the banking sector. Here comes the rather tricky topic of “private sector involvement” in resolving crises. But here again we have first to stress that most systemic liquidity crises in emerging markets are generated, at least initially, by policy mistakes rather than the so-called herd behaviour of international bankers. Bankers are not specially keen in cutting credit lines to borrowers with reasonable medium term prospects as they compromise their future business by doing so. In general, they need some good excuses to trigger a liquidity crisis when there is little doubt about their client’s solvency. Indeed, in many recent cases, the governments provided these good excuses by badly mismanaging their exchange rate reserves. Both in Mexico (1994/1995), Thailand (1997) and Korea (1997), the funding crisis took a turn for the worst and became systemic when the markets realised that exchange rate reserves had been allowed to fall to a level too low to service the on and off-balance sheet obligations of the public sector⁵ for more than a few weeks.

⁵ In Mexico, this was due to the need to repay the large stocks of “tesobonos”, short-term

In the case of Thailand and Mexico at least, one can argue that the liquidity crisis and the loss of market access was mainly the result of a badly managed traditional exchange rate crisis and that the story could have been different with better protection of these countries' foreign exchange reserves⁶. Overall, we can only stress once again the importance of the role played by inadequate exchange rate regimes during the most recent crises

In any case, whatever the reasons and the culprits, it happens that countries lose market access and, cut from private credits, ask for the support of the international community. The main innovation of the last two years has been the clear resolve to have the private sector contribute more to the solution of these credit crises. This serves a dual purpose: reducing the burden on public funds due to the limited amounts available, but also making investors more responsible in emerging countries by having them bear the consequences of the errors they may make. There was also a moral or political dimension to this choice: after the Mexican and the Asian crisis, it became hard to explain to public opinion that the people of the crisis countries had to suffer the full cost of the recession and that taxpayers in industrialized countries were taking a (small) risk on the emergency funding provided to these countries, while the international banks were allowed to escape unscathed. Indeed, on a case-by-case basis, solutions have been found in order to involve the private sector –for instance, through co-ordinated renewal of short-term credit lines, as was the case in Korea⁷.

treasury bills denominated in dollars. In Thailand, this was due to the very large operations of the central bank in the forward market. In Korea, this was due to the fact that a large part of the foreign exchange reserves were lent to domestic banks and thus unavailable for defending the Korean won.

⁶ The case of Korea is different in the sense that Korea was clearly in the fall of 1997 a victim of the contagion process which followed the crisis in other Asian countries. The dangerous immobilization of reserves lent to Korean banks was a response to the liquidity crunch the Korean banking sector was experiencing at that time. In the case of Mexico and Thailand, one could also argue that this was not only a badly managed exchange rate crisis since the weakness of the banking sector certainly played a role. However, until mid-1997, many foreign investors were dealing with local Thai banks with the idea that there was an implicit public guarantee, see Moody's (1998), and the liquidity crisis in the public sector certainly played a key role in undermining the credibility of this guarantee and contributed to the run on the local banking sector.

⁷ See IMF (1999): "Involving the Private Sector in Forestalling and Resolving Financial Crisis" for an analysis of recent experiments and the various problems raised by the involvement of private-sector investors.

Building on these experiments, G7 finance ministers proposed a general and rather vague framework for private sector involvement in June 1999, the so-called Cologne framework. The rules were further specified in the most recent G7 statement, see G7 (2000). The principle of private sector involvement was reaffirmed and the most significant clarification was to give the IMF “a central role in deciding if private creditors should contribute to any program financing, while taking duly into account the specific circumstances of individual cases”. Annex II to the statement confirms that the IMF is expected to be the main source of expertise about the country’s underlying payment capacity and the nature of the private sector contribution (nothing in some cases as “the combination of catalytic official financing and policy adjustment should allow the country to regain full market access quickly”, “voluntary approaches as needed to overcome creditor coordination problems” in other situations such as in the 1997 Korean crisis, or, in the most difficult cases, comprehensive debt restructuring to “provide for an adequately financed program and a viable medium-term payments profile”).

The IMF is thus supposed to act as a referee between the interests of the various parties involved, even though “the international official community should not micromanage the details of any debt restructuring or debt reduction negotiations” and debtors would continue to negotiate with creditors. The IMF should play a central role in determining the fair sharing of efforts between the people of the country involved (tightening of fiscal policy), the public sector (IMF and bilateral exceptional financing plus in some cases public debt restructuring by the Paris club) and the private sector.

One could argue that this is not a completely new role for the IMF, despite all the recent fuss about the need to change crisis management and involve the private sector in resolving crises. After all, the international banking sector made large losses in the 80s when, in the wake of the first Mexican crisis, it appeared necessary to reschedule and then to reduce the large private debt of Latin American countries. The so-called London club was where the negotiations between private banks and debtors took place and at that time they were already monitored by the IMF and the international community. One novelty rests on the growing importance of international bond issuance by emerging countries and the difficulty in this area in organizing negotiations and the coordination of bond holders. But this problem could in principle be solved by introducing “collective action clauses” which may make possible negotiations of the London club style. “Collective action clauses” are designed to prevent a single bond holder from blocking a restructuring deal. Logically, G7 finance ministers stress, with little results so far, that they will encourage the use of collective action clauses in international bonds issued by emerging market economies.

However, the new approach relative to crisis management introduces two major changes that should both be discussed. Firstly, the IMF is given a much more formal role, especially in case of debt restructuring, and its role as a referee should become much more visible than in the past. For example, “the Fund should set out publicly how and why certain policy approaches have been adopted, in line with the Cologne framework”, see G7 (2000), annex II. Secondly, private sector involvement is not ruled out in the event of a pure liquidity crisis despite the call by some observers for an international lender of last resort.

Let’s start by discussing the enhanced role of the IMF in debt restructuring process. Why is there the need for a much more formal approach and more visibility of the IMF in this area? One answer is probably that the world has changed and that there is a general demand for more transparency. It becomes much more difficult for the IMF and the treasury departments of G7 countries to share the burden behind closed doors, putting pressure on both the creditors and the debtors without a clear medium-term program. The second answer is that the leadership of the IMF was maybe too weak in the traditional approach and the resolution of the debt overhang required too many years. Indeed, the eighties was the “lost decade” for Latin America and it took seven years and many different plans before excessive debt was reduced under the Brady plan.

The eighties have again illustrated that there is a very fundamental market failure in the international market for sovereign credits. In this area, there is no equivalent to the bankruptcy laws which apply to private sector debtors. When a sovereign debtor misses a payment to its creditors, there is absolutely no rule to determine how its debt should be restructured. True, the foreign state, as any other debtor, could be sued in the courts of the creditors’ countries. But the process can only lead to very uncertain results as the assets that can be seized are limited to the state’s foreign holdings. The possibility to sue does not replace clear bankruptcy rules and may only lead to a deadlock with the country unable or refusing to pay and the creditors asking for a full reimbursement.

It is hard to see how a credit market could really function without rules specifying the rights of the creditors in case of trouble. How can investors correctly price risks if the risks are simply unknown in the sense that the consequences of a default are not specified? Indeed, it is hard to argue that the market for sovereign credit is working correctly. There are wide swings in spreads as investors have no way to efficiently price the risk of default. Countries lose and regain market access frequently.

Last but not least, in case of trouble, it takes years to sort out the situation and the costs of a default can be huge for both the debtors and the creditors despite, or, according to the Meltzer report⁸, because of the loose involvement of the IMF and the international community in the negotiations.

Something had maybe to be done to improve the situation and reduce the consequences of this key market failure. But is the decision to place more explicitly the IMF at the center of an informal “bankruptcy procedure” the right one? The future will tell but one should not underestimate the difficulties of this new task. As the IMF (2000) itself put it, “assessing the appropriate means to secure private sector involvement in individual cases raises complex issues, and will require considerable judgement”. On the one hand, the difficulties will be of a technical nature as in the real world there is considerable uncertainty regarding the ability of a country to repay its debts. In principle, the IMF’s plans should be contingent (what should be done if interest rates rise more than expected and/or the prices of exported commodities fall?). On the other hand, burden sharing involves by definition some difficult political choices as there is a need to arbitrate between the interest of the people in the country in crisis and the interest of the creditors, who are not only the shareholders of the international commercial banks but also the households who put their money in mutual funds investing in bonds issued by emerging countries. Is the IMF, backed by the key industrialised countries, in a position to make those tough political choices? How would the new Cologne framework have worked in Russia if the Russian government had decided in August 1998 to collaborate with the IMF and asked for a general negotiated debt restructuring, with “private sector involvement”, rather than going for a unilateral moratorium? What will happen in China if one day the IMF is asked to devise a medium-term program financing and has to define in broad terms the contributions of the private external creditors and the official external creditors?

Despite the lack of transparency of past procedures and the costs involved, it is not certain that strengthening the formal role of the IMF in debt restructuring is such a good idea. It may be better to keep the previous ambiguity which did not prevent the IMF and the international community from intervening when the situation between official debtors and creditors reached a deadlock, but did not force them to play the difficult and highly political role of referee.

⁸ The Meltzer report, IFIAC (2000), argues that far from being helpful the international community was in fact partially responsible for the time needed to solve the crisis in Latin America in the eighties since IMF lending may have allowed both creditors and lenders to delay the time of reckoning.

In other words, the key principle which should be reaffirmed is maybe more the need for sovereign debtors and private creditors to negotiate in good faith to try to find a negotiated solution when debt service appears too high, rather than the central role of the IMF and its readiness to help in these situations. In any case, there should be a continued attempt to try to find the best answer to the very real market failure, highlighted by the less than satisfactory functioning to date of the sovereign credit market.

Let us now turn our attention to the optimal management of liquidity crises where, following a series of policy mistakes or due to extreme cases of contagion, fundamentally solvent states (Mexico, Thailand, Korea) lose market access and are unable to stop the run on their banking system even by guaranteeing themselves their banks' liabilities. The Cologne framework has been far less specific regarding this kind of crisis than for the solvency crisis which requires comprehensive debt restructuring. This seems rather strange since most of the recent crises, with maybe the exception of the Russian crisis, were clearly of a liquidity nature.

Following the relative success observed in Korea or Brazil, the implicit official thinking is probably that under these circumstances some concerted pressure should be put on international banks in order to obtain the renewal of the various credit lines to the illiquid state and banking system. But can we be sure that this is the best answer?

On the one hand, dealing with problems in this manner creates a major risk of contagion as international banks may decide to leave other countries in similar situations before the authorities put pressure there as well to maintain the credit lines. More generally, when the slightest concern surfaces over their debtors' liquidity, creditors may be inclined to cut their credit lines, thereby precipitating the crisis they fear.

On the other hand, this policy is rather myopic as it does not differentiate between foreign banks which have lent to rather sound and merely illiquid domestic institutions and those which have engaged in hazardous lending to fundamentally insolvent local banks. Indeed, one of the key characteristic of most of the recent crisis was that while the loss of market access for the involved states was only due to liquidity mismanagement, in the background the crisis in the banking sector was of a more structural nature. This makes it difficult to simply recommend a lender of last resort policy which would allow all the foreign creditors to escape without any losses.

The challenge in this respect is to devise crisis management rules that allow some differentiation according to the nature of the debts involved (for example, the weakest banks could conceivably be closed and the money lent to them by foreign banks frozen while the central bank, with the help of the international community, acts in a very resolute manner to play its function of lender of last resort vis-à-vis the rest of the banking sector).

Here again, the international community probably has some work to do in order to devise a more accurate and market-based approach to managing liquidity crises such as those we have seen in recent years. However, there is little doubt that in this area, the priority is to improve the prevention mechanisms since there is no reason why fundamentally solvent states such as Thailand or Korea should suffer such devastating liquidity crises: better exchange rate policies, better management of exchange rate reserves and better incentives in the banking sector in terms of liquidity risk management will certainly greatly reduce the likely recurrence of this sort of crisis.

V. From monitoring economic and financial policies in emerging countries to the surveillance of financial markets in industrialized countries

The crises of the last few years were mainly related to the funding of emerging countries. It is therefore natural that this theme currently dominates the international debate. On the contrary, questions linked to the major asset markets (forex, bonds, equities) in industrial countries are often neglected in the current debates. Nevertheless, it seems that one of the main features of these markets is that their volatility is much higher than what would be warranted by economic fundamentals. For example, as Krugman (1989) put it, “foreign exchange markets behave more like the unstable and irrational asset markets described by Keynes than the efficient markets described by modern finance theory”.

Moreover, the current dynamics that are at play in some of these markets seem to be of particular concern: the valuation levels reached by US stock markets seem excessive in view of the earnings medium-term outlook, and the dollar’s strength may seem disquieting given that the US foreign deficit has already reached record levels.

There appears to be an urgent need for in-depth analysis of the causes of the instability of financial valuations and the frequent uncoupling between developments in the real economy and in the financial sphere. The role of the authorities should not be restricted to emergency interventions in panic situations.

Regardless of the market concerned, the causes of excessive volatility remain quite mysterious. However, there is growing consensus over the fact that excessive leverage is one of the important factors. Institutions which take large positions relative to their own capital, the so-called HLIs, for Highly Leverage Institutions, sometimes have a highly destabilizing impact on market dynamics. If the market turns against them, they may have to sell long trading positions or cover their short positions in order to protect their capital base whatever their opinion on the fundamental value of the assets they are trading. In many instances, especially in the fall of 1998, we have seen large moves in asset prices (Yen/dollar rate, spreads on various bonds...) related to forced liquidation by HLIs, with apparently no news on the “economic fundamentals” to account for the sharp price changes. It is often said that in these situations, markets are driven by so-called technical factors rather than fundamentals.

The price instability sometimes created by HLIs’ trading activity can even degenerate into a credit crisis as exemplified by the near collapse of LTCM in the fall of 1998. At some stage, excessive leverage can create such sharp adjustments in asset prices that some players with a weak capital base and excessive exposure run the risk of becoming insolvent. Indeed, it appears now very clear that excessive leverage and excessive liquidity risk are the two main threats to financial stability and the two channels which transform localised and manageable difficulties into much broader systemic crises

As a result, the activities of HLIs has been the subject of considerable attention recently, see FSF (2000). Various proposals have been made to reduce the risk of excessive leverage, mainly through better risk management by the trading counterparties of the HLIs.

The international official community is also stressing the need for “enhanced national surveillance of financial market activity” in view of the risks caused by excessive leverage, see G7 (2000) and FSF (2000). This new emphasis is welcome but there has been little real progress so far in this area.

In two reports requested by the French Prime Minister and the French Finance minister, Davanne (1998) and Davanne (1999a), we discussed some of the characteristics of such a process of surveillance. One of the key themes of these reports is that investors tend to make regular mistakes when they estimate the risk/return tradeoff of the assets in which they invest. When they become aware of their mistake, there is a “valuation crisis”, i.e. a sharp adjustment in prices without any new real economic information. We would argue that investors with different horizons are vulnerable to different kinds of mistakes. Short-term investors, HLIs and others, may easily underestimate the short-term volatility risk, which may conduct to excessive leverage, while the current allocation process may easily lead many long term investors to form rather naive views about long-term returns.

Indeed, there are several well-documented cases in which short-term investors using VAR methodology seriously underestimated actual risks, i.e. the possibility of a sharp adjustment in prices. We already mentioned the 1998 example. Investors engaged in the so-called “yen carry trade”, i.e. who borrowed yen in order to buy dollars and thus take advantage of the interest rate spread, were generally underestimating the possibility of a sharp upward move in the value of the yen. When the yen started to rise contrary to expectations, many dealers were forced to unwind their positions in order to limit losses, which entailed dollar sales against the yen and accelerated the rise of the yen. This is the market mechanism which is generally cited as the reason for the spectacular appreciation of the yen on 7 and 8 October 1998, when it rose 12% even though no significant piece of economic news was released⁹.

In Davanne (1999a), we argued that markets participants and national authorities alike lack key pieces of information required for the assessment of these risks. Large price moves generally occur as a result of many market participants having major exposure to the asset under consideration and deciding, for whatever reason, to cut this exposure. It is simply impossible to estimate the likelihood of large changes in asset prices without some knowledge of the exposure of various market participants. This is an area where information is missing. However, the international community has recently indicated its willingness to address the existing gaps as far as this sort of information is concerned.

⁹ See “The Yen Carry Trade and Recent Foreign Exchange Market Volatility” , part V, of BIS (1999).

Indeed, the G7 Finance Ministers stated last year in their report to the Cologne Economic Summit on the International Financial Architecture, G7 (1999), that among the many steps to which they “attach the highest priority” was the “completion of the work of the CGFS¹⁰ on reporting of aggregate positions and transactions in foreign exchange markets”. Little has been done so far, however, and, while pleading for more transparency, FSF (2000) made it clear that in November 1999, the G10 Governors decided not to proceed further with work in this area. Let’s hope that the G7 finance ministers will ask the central bank governors to reconsider this very surprising decision.

We should note that the quest for more information on investor exposure should not be limited to banks and HLIs. There are many other parts of the financial sector in which large, sometimes hidden, exposure exists. Better knowledge of this exposure is required both in order to estimate credit risk (the risk that a large change in asset prices may threaten the institution’s solvency) and to analyse the risk of large changes in asset prices if, either voluntarily or through the need to protect their capital base, these institutions, which are not necessarily HLIs, decide to reduce this exposure. For example, let us consider the life insurance sector. In some countries, life insurance companies have a large exposure to change in long-term interest rates as the guarantees they give to their policy holders (minimum return and possibility of earlier redemption without penalties) may be costly to assume in case of a large drop or a large increase in long-term rates. Another field of investigation is that of defined benefits pension funds. How do they managed their equity exposure? What are the risks that some plan sponsors require a reduction in this exposure if stock markets fall too much and the fund’s assets threaten to fall below the liabilities committed relative to pensioners and workers?

Collecting and disseminating more information on market exposure and analysing how this exposure could change in various situations (stress scenario) should be a central part of any monitoring process. As a result of the information released in the market, as a by-product of this surveillance process, short-term investors would be in a better position to estimate the risk of large asset prices changes.

¹⁰ Committee on the Global Financial System of the Bank for International Settlements.

Let us now discuss our concern regarding the methodology adopted by long-term investors in order to assess long-term returns and strategic asset allocation. Long-term investors are not really concerned by the short-term volatility of prices since they invest for the long term. They may even view short-term market fluctuations as buying opportunities provided the price falls do not threaten some kind of minimum funding requirement rule. Indeed, the main risk for long term investors is to be wrong on the assumptions regarding long term returns. If they realise that they make a mistake on this front, they may change their strategic asset allocation and this may have a large and lasting impact on market prices.

Most long term investors implicitly or explicitly base their strategic asset allocation on the so-called “efficient market hypothesis”. They take the view that risky financial assets should offer a risk premium and that, as financial markets are generally efficient, current prices are at the required level. In other words, the best forecast that can be done, is that various assets will generate a long-term return equal to the risk free rate plus a risk premium. The nice thing with the “efficient market hypothesis” is that in order to estimate the long-term return, investors do not need to perform the tricky job of analysing profits, inflation and so on, but have simply to estimate the risk premium required by other market participants.

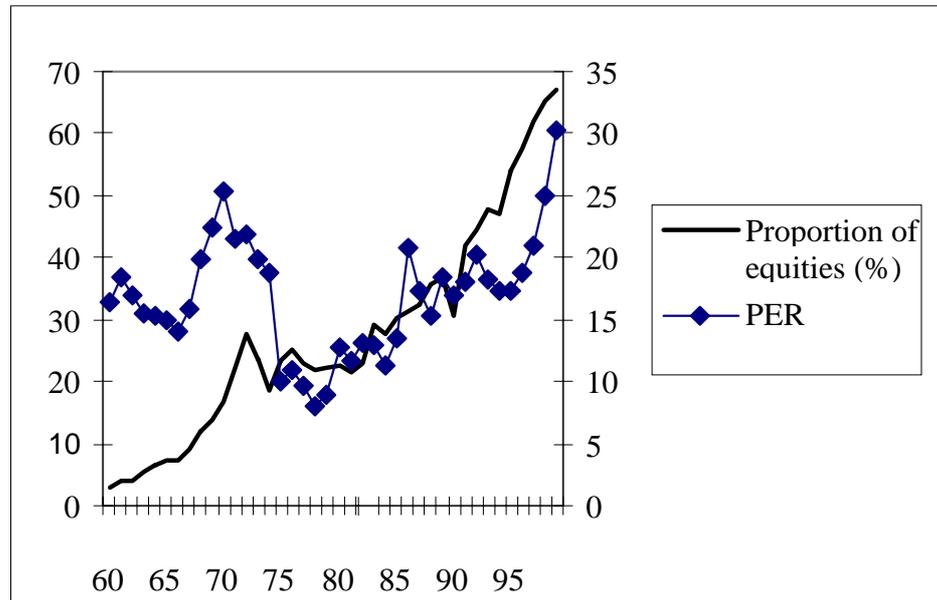
This does not seem too difficult since we have historical data on the long-term return of various assets and there is little reason to expect risk aversion to have changed dramatically. A cautious investor will certainly consider that in the future the equity risk premium could be lower than since the war¹¹, but it should remain substantial. As a result of the high historical return on equities and of the reliance on the “efficient market hypothesis”, the portfolio of all long-term investors is currently heavily tilted towards equities.

The following graph, for example, shows equities as a share of the total assets held by US state and local pension funds¹² together with the PER (price earning ratio) of US equities. Both are currently at a historical maximum.

¹¹ In the US, equities have provided an excess return of around 8% relative to Treasury bonds since the war.

¹² Assets controlled by these pension funds amount to 30% of US GDP.

Figure 1: Proportion of equities in US public pension funds' assets (left hand side) and US equities PER (rhs)



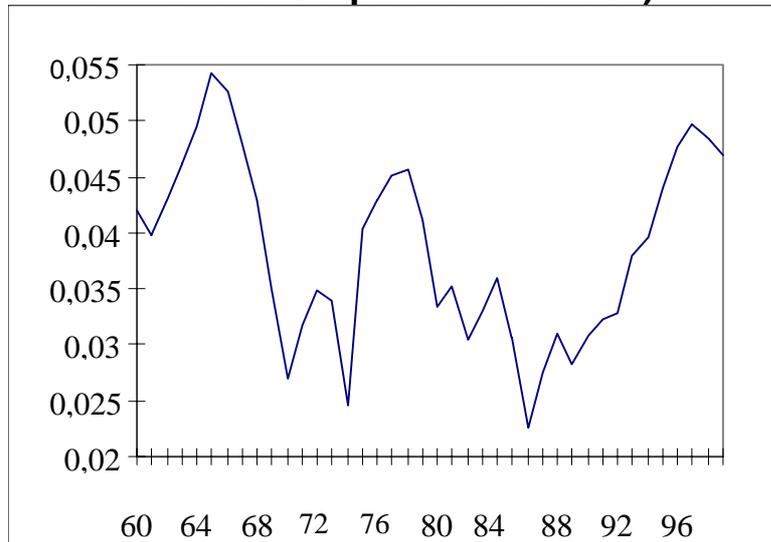
Source: “Flow of Funds Accounts of the United States”, Board of Governors of the Federal Reserve System, March 2000.

Despite the apparent rationality of such an approach, it suffers from a clear paradox directly related to the “impossibility of informationally efficient markets” discussed by Grosman and Stiglitz (1980). If all investors believe in market efficiency and determine their strategic asset allocation without paying the cost of any fundamental research on the long-term return of various assets, how can current prices reflect the “economic fundamentals” and correctly measure the actual prospects for future equity returns? Another drawback of the traditional reliance of long-term investors on past asset returns is that most recent works tend to show that risk premia vary over time¹³. This may be due to phenomena linked to the supply of securities –for instance a large external deficit increases the external debt and foreign creditors’ yield requirements– or may be linked to objective changes in the nature of the shocks encountered by the economy –for instance a dampening of inflationary shocks increases demand for bonds– or may reflect more subjective changes in investors’ preferences –as for instance greater awareness of long-term opportunities offered by equity investments.

¹³ See Campbell *et al* (1997) for a discussion of the empirical evidence.

Overall, in estimating long term asset returns, investors would be better off relying less on a retrospective approach and more on a real analysis of the long term “economic fundamentals”. This paper does not constitute the appropriate framework for this type of economic analysis. However, given the current return on equities of just over 3% (earnings/US equity market value) and a share of after tax profits in GDP already at a 30-year high (see graph), it is rather unlikely that the return on US equities could beat by far the rather attractive 4% risk-free real return guaranteed on US indexed bonds over the next 30 years. Currently, the strategic allocation of most long term investors, heavily tilted toward equities, does not seem to correctly reflect the long term risk/return tradeoff of various assets.

**Figure 2: Share of after-tax profits
(Nonfarm Nonfinancial Corporate Business) in the US GDP**



Source: “Flow of Funds Accounts of the United States”, Board of Governors of the Federal Reserve System, March 2000.

In our opinion, an efficient process of “enhanced national surveillance of financial market activity” should take fully into account the weakness previously discussed in the way many investors, both short-term and long-term, assess the tradeoff between asset risk and return. Excessive leverage is just a symptom of a more fundamental phenomenon. Thus, monitoring would need to integrate at least three main aspects: first and foremost, a thorough examination of various classes of market participants’ exposure to major moves in asset prices, second, an assessment of the degree to which short-term investors, HLIs and others, have fully integrated the previous information in their risk-control models, third, regular audits of asset allocation models, with a special eyes on investor assumptions regarding the long-term return of various assets.

VI. Concluding remarks: three priorities to continue to reform the International Financial System

Above all, a more efficient working of the International Financial System requires a convergence of financial policies in most countries toward the best practices. Progress has already been made and international organisations will continue to help through the improvement of standards and the regular surveillance of their implementation. However, we have mentioned several drawbacks in the reform process and we would like to conclude by stressing the international community's three short-term priorities, as we see them.

The need to reduce liquidity risks in the International Financial System

In terms of systemic risk, we believe that after the theme of “excessive leverage” addressed in many reports over the last year and a half, it is the turn of liquidity risks to take center stage. More needs to be done to assess why there is still so much liquidity risk in the international financial system and what could be done to improve the incentives for debtors to better manage their liquidity position.

This is a difficult issue. When dealing with “market failures” in credit markets, observers usually emphasise the structural sensitivity of all financial systems to liquidity risk and the attendant need for national and international lenders of last resort. This consensus view should however be qualified: as we already discussed, liquidity risk is only intrinsic in the financial community for sight deposits used as transaction cash, since banks have no other choice but to lend these sight deposits for longer maturities. In so doing, they are exposed to major liquidity risk in the event of simultaneous withdrawal of funds by a large number of depositors. In this area, the best answer is probably to create an effective deposit guarantee system that renders panic and a bank run highly unlikely, rather than to call on a lender of last resort.

For the remaining part, liquidity risk, whether incurred by Governments or by private economic agents, arises from financial management errors that must be punished. No solvent bank or Government is under any obligation to secure its financing by one- or three-month arrangements.

It seems necessary that the international community becomes much more aware of this phenomenon and ascribes a high degree of priority to a sharp reduction of the widespread liquidity risk which makes the financial system so vulnerable to contagion and systemic risk. Financial institutions should be encouraged to lengthen the maturity of their funding and governments should develop efficient bond market to consolidate their debt. Our proposals regarding the application of very heavy penalties to illiquid debtors are based on this analysis. The Meltzer report, IFIAC (2000), recommended that “the IMF in cooperation with the BIS should promulgate new standards to ensure adequate management of liquidity by commercial banks and other financial institutions so as to reduce the frequency of crises due to sudden withdrawal of short-term credit”. We also stressed the need for standards in this area. However the Financial Stability Forum, rather than the IMF and the BIS, now really seems to be the right place to coordinate the work of all the numerous official bodies potentially involved in this issue.

Bankruptcy laws: how should sovereign debtors be treated?

In terms of the management of balance of payments difficulties, the main issue to be addressed is the definition of the mechanisms providing efficient workouts of unsustainable levels of debt. There is still a serious question mark over the role of the IMF in these matters.

This question should be put in a broader context. Rather than the vulnerability to liquidity crisis, the main fundamental “market failure” in credit markets is the difficulty in coordinating the measures taken by creditors when a debtor is unable to pay on time, whatever the reasons. Any missed payment calls for a very delicate exercise in co-ordination between the various creditors. This is not at all spontaneous and requires the introduction of an effective bankruptcy law. Without effective coordination which minimises the cost for lenders and debtors alike, a localised credit problem can easily spread as a debtor failure is a potential threat to the situation of its creditors.

This coordination exercise probably depends on the nature of the debtor. In industrial countries, ailing non-financial companies are subject to effective bankruptcy proceedings. The strengthening of the legal infrastructure and the introduction of more efficient bankruptcy rules are quite rightly viewed as major priorities by many emerging market economies. On the contrary, the management of bankruptcies of banks and public-sector bodies raises questions that remain unsettled regardless of the country concerned.

As regards banks, the absence of an adequate bankruptcy law and the widespread use of the “too-big-to-fail” principle tends to give public authorities an overwhelming role in the management of the restructuring process. The bank is not entrusted to its creditors, possibly represented by a temporary trustee, as would be the case for a normal business, but is placed under the supervision of public authorities and generally recapitalised through the public budget. Government authorities then play the role of “last resort investors”, rather than pure lenders of last resorts¹⁴. We have sketched out several proposals in order to attempt to remedy this situation which is dangerous for public finance and may cause creditors to lend too much.

But in the area of bankruptcy laws, the most pressing unresolved issues arise from the situation of sovereign debtors facing difficulties. The management of cases of insolvency is particularly difficult for sovereign lending, some would say hopeless, since the notion of debtor liquidation is totally meaningless in this particular case. Even the notion of solvency is hard to define since it depends on the political feasibility and social desirability of raising taxes or cutting public spending in the future. As discussed earlier, we do not believe that the IMF could or should play itself the role of an implicit bankruptcy court, even if it can occasionally contribute to a successful negotiation between creditors and lenders. In any case, there is the need for an acceleration of progress as far as “collective action clauses” are concerned in order to facilitate this negotiation process¹⁵.

Some bankers fear that such clauses may make emerging economies’ funding more difficult since investors could conclude that defaults become easier and more likely¹⁶. This may sound rather provocative, but if they are right, such a partial closure of the international sovereign credit market might well be in the long run the single best thing which could happen to emerging countries. After all, it seems hard to find a country which has successfully based its development process on large scale foreign currency debt owed by the state to private creditors while there are many examples of countries having suffered painful crises due to an excessive reliance on this market. One could argue that governments having no access to the international credit market would have to make useful structural changes to attract the foreign capital they need.

¹⁴ See Aglietta and De Boissieu (1999).

¹⁵ Eichengreen and Rühl (2000) stressed that the lack of progress in this area was the key reason why recent efforts to “bail-in” the private sector in Pakistan, Ecuador, Romania and Ukraine “have been less than a success”.

¹⁶ However, empirical works do not seem to validate these fears. Eichengreen and Mody (2000) found no large impact of collective action clauses on borrowing costs.

Building a healthy banking system, developing a liquid bond market in the local currency, or improving the bankruptcy laws to facilitate the access of local companies to the international capital markets may represent a much healthier way of attracting foreign savings than the building of a large stock of public debt denominated in foreign currencies. This means that the G7 should probably be very cautious in trying to devise new explicit burden sharing schemes based on the IMF which could prove unworkable in the future, but may give the parties involved a false sense of security and encourage in the short term the development of this inefficient market.

Clarifying and implementing a process of “enhanced national surveillance of financial market activity”

Last but not least, the instability in the valuation of major asset markets needs to become a major subject of preoccupation. Valuations in some equity markets are reaching levels which have proved unsustainable in the past. The very strong dollar against the euro is hard to justify on a fundamental base and may only increase the worrying imbalance of US external trade¹⁷.

The characterisation of “market failures” as far as the valuation of assets is concerned is much more difficult than in the credit market. There are regular “valuation crises”, such as the October 1987 crash where substantial price moves occur without any important piece of new information, but it is hard to identify the market failure which trigger such events. It seems very clear that the valuation and asset allocation models used by investors are involved. After all, asset prices can change sharply only if people change their mind about the real value of the assets in which they invest. Indeed, we already stressed the weakness in the way many investors assess the tradeoff between asset risk and return. However, as far as investment behaviour is concerned, “market failures” seem to go beyond that.

In the real world, few would dispute that investment decisions are frequently based on a rather unsophisticated type of analysis. It is often tempting to attribute this situation to irrationality. However, it is probably related to very fundamental problems in the incentives structure that investors face when producing or using information.

¹⁷ See Gros et al. (2000) for an analysis of the recent dynamic in the euro-dollar exchange rate.

These incentives-based market failures are probably very much related to Keynes's famous "beauty contest metaphor"¹⁸. An efficient working of financial markets rests on the processing of an enormous amount of information. The fundamental value of an asset depends on its future return and on the risk premium required by investors to hold it. For most assets, it is very costly to do the research needed to get a reasonably good estimate of these two key parameters. There is absolutely no reason to expect that private incentives alone will lead to the optimal production and use of this costly research.

Indeed, Hirshleifer's (1971) seminal paper on the private and social value of information showed that there could be both too much or too little production of information.

As far as the excessive production of information is concerned, he noticed that in a pure exchange economy, there is no social value in information which will be revealed a bit later anyway. For example, there are many incentives to try to guess the US CPI or IBM quarterly earnings a few hours before the figures are released because any surprise relative to the consensus view will move the markets, but there is little, if not no, social value in this research activity. As stressed by Hirschleifer, the advance knowledge of such a piece of information will only have a redistributive effect in favour of those who know the figure and can trade on it at the expense of the uninformed.

However, the case of excess production of information seems to be the exception rather than the rule. Overall, there are several powerful mechanisms which can lead to an underproduction of information by the private sector. For example, let us consider the rationale of passive investing, i.e. making no research at all but buying each stock according to its share in total market capitalisation. By definition, the passive investor, or index tracker, benefits from the same performance as the average investor without paying the cost of any research. Net of all expenses (fees, commissions, analysts' compensation...), the return obtained by the passive investor is by definition above average (same gross return and less working expenses). Indeed, over many years, index funds tend to outperform the large majority of actively managed funds.

¹⁸ According to Keynes (1936), financial markets work like special beauty contests in which members of the jury win a prize if their choice is the same as the choice of most other members of the jury. In other words, in this beauty contest, the jury does not try to select the most beautiful candidate but the one supposed to be the most beautiful according to each member of the jury's idea of the others' preferences. Transposed to financial markets, this means according to Keynes that investors have little incentives to select the most valuable assets but in order to succeed should rather choose the assets that others will buy. See also Devenow and Welch (1996) for a review of modern theories on rational herding.

As it is the case for many long-term investors who currently invest in stocks on the sole basis of “market efficiency” and the impressive past record of equity markets, the index tracker is a kind of free-rider as far as research is concerned¹⁹.

We will not enter much further into the economics of information production and utilisation in financial markets, but simply stress the reasonable assumption that too much information with little social value is produced (forecasts of short-term corporate earnings, short-term macroeconomic indicators or short-term interest rate changes by central banks) while there is an underproduction of more fundamental economic information (risk premia on various assets, trend in long-term profits, inflation or savings...). In view of the above considerations, government spheres in the broadest sense (national authorities and international organisations) definitely have a role to play in directly producing information and in making sure that there is an efficient market infrastructure (independent research institutes, research departments of banks, rating agencies, etc...) able to provide the market with adequate and timely information or valuation methodologies²⁰.

We previously stressed the need for the authorities to monitor how investors assess the tradeoff between asset risk and return. However, this may represent only the first step of a process of “enhanced national surveillance of financial market activity”. The Financial Stability Forum should be at the forefront of the efforts to better define the responsibilities of governments and international organisations in this key area.

¹⁹ This is basically why the market cannot be informationally efficient according to the definition given by Grossman and Stiglitz. All the information cannot be in market prices since in that case passive investing would clearly be optimal and if all investors are passive investors there is no more production of information.

²⁰ This is the key issue dealt with in Davanne (1999b) where it is argued that transparency is not sufficient since market participants should have the right incentives to process the available information.

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