FINANCIAL MANAGEMENT OF GLOBALIZATION OF DEVELOPING COUNTRIES

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 References

I. Globalization

Any statement such as "Developing countries are now getting increasingly globalized" can be properly understood only in contrast with the paradigm of development that most developing countries were following in the '50s and '60s, and also by and large in the '70s. Developing countries have always been a part of the global economy. They all participated in international trade through exports and imports of goods and services. They received capital from abroad as foreign investment and as aid and transfers, and sometimes also as loans. They also exported a part of their savings not only as repayment of loans and repatriation of investments, but also as flight of capital through legal or illegal channels. They all felt, in different degrees, the impact of changes in the international economic environment such as business cycles, fluctuations in exchange rates or changes in terms of trade. So developing countries were never outside the arena of the global economy.

Indeed, it is not implausible to argue that most developing countries remained underdeveloped because of their disadvantageous participation in the global economy. This was especially so in the colonial period, when their surpluses were drained away to the industrial countries. Even after that, most of their economies were relegated to producing and exporting primary products with declining prices or low-technology manufactures, with sluggish growth in productivity. Participation in trade and global

transactions did not appear to the developing countries as conducive to their economic transformation.

Because of such perceptions and because of the dominant views about development during those days, most developing countries until about the early 1970s followed policies that militated against their integration with world trade and finance. Almost all of them had built up walls of protection on their agriculture and industry through tariffs, quantitative restrictions and a plethora of non-tariff barriers on imports and many forms of restrictions even on their exports. The rationale of such policies of protection, known as import substitution strategies, was to increase the effective rates of return on domestic activities from enlarging domestic markets. These in effect not only reduced their growth of imports, but also by diverting resources from less profitable exporting activities, reduced their growth of exports. Capital flows to developing countries during that period were relatively small and confined mainly to foreign aid and multilateral institutional lending. The limited amount of foreign investment that flowed in faced many restrictions of procedural hurdles and fiscal disincentives.

The impact of such inward-looking policies was felt not only in slowing down the process of globalization, but also in distorting the prices and production structure of these countries, resulting in inefficiencies and losses in potential output. However, by the mid-1970s, several changes in the international economic environment had diluted the appeal of these policies. First, the GATT round of negotiations had succeeded in initiating a steady process of reduction of trade barriers in the industrial countries. Several developing countries took advantage, increasing their growth of exports. A number of East Asian countries shifted their policies from inward-looking to outward-looking strategies and through improvement in efficiencies, succeeded in raising the rates of growth of their GDP. As the process of trade liberalization in industrial countries and growth in world demand continued, several developing countries came out of their export pessimism and moved towards an outward-orientation in their policies. ¹

Secondly, the international inflationary situation, expanding public expenditure in the United States following the Vietnam war, and the excess supply of dollars that eventually led to the breakdown of the fixed exchange rate system in the early 1970s, also allowed developing countries to receive higher unit values for their exports. That neutralized, to a large extent, whatever tendency there was towards declining terms of trade for developing countries, which had earlier provided the theoretical basis of the import-substitution strategy.²

Thirdly, and more importantly, the aftermath of the oil crisis, first in 1972-73 and then in 1978-79, changed the whole regime of international capital flows, as surpluses from oilmoney searched for vents of deployment as loans or investment. Many developing countries were able to access international markets at negligible real interest rates, and in spite of the dwindling flow of concessional assistance to developing countries, there was a substantial rise in the flow of international capital, especially as loanable funds to these countries. The spurt in the flow of foreign direct investment came much later, around the 1990s, but the multinational corporations that were the main channels of such investment

were undergoing fundamental changes in the nature of their operations. They were becoming increasingly footloose, with different stages of their activities spread out in different countries. Intense competition among the companies in the demand and supply of technology as well as of inputs and outputs were reducing their monopoly-rents on these activities. This had allowed several developing countries to make use of multinationals to improve their capabilities.

In response to the changes in the international economic environment, developing countries were gradually changing their policies and moving towards globalization. It is after the debt crisis of the early 1980s, however, that this process was hastened and many developing countries started adopting programmes of reforms that made increased globalization or integration with the world economy their stated objectives.

By the end of the 1980s, the policy paradigm of most developing countries had undergone a change, moving from inward-looking, import-substituting, regulatory regimes to outward-looking, export-promoting market-oriented policies. As a result, for most developing countries the share of foreign trade in GDP, the share of foreign capital in total savings and all other indices of globalization kept on increasing. By the mid-1990s, several developing countries had almost fully integrated their trade and payments systems with the international economy, making current as well as capital accounts fully convertible. Others kept some restrictions on capital accounts while making current accounts almost completely convertible. Nearly all developing countries became members of the World Trade Organization (WTO), subjecting them to the discipline of non-discriminatory trade liberalization. Even those countries that did not fully open up their trade and payments systems had to accept that whatever restrictions they maintained would only be temporary and that they would have to adjust in time to the full implications of globalization.

II. Financial requirements of adjusting to globalization

Countries adjusting to globalization and opening up to international trade and payments required finance. This was recognized as early as 1944, when the IMF was created at the Bretton Woods Conference, to provide balance of payments support to countries for maintaining an open trade system with convertible current accounts.⁴ Although the IMF was open to membership by all countries and several developing countries actively participated in the Bretton Woods Conference, the design of IMF support at that time was meant mainly to serve industrial countries exiting World War II with devastated economies. They wanted to restore an orderly and expanding trading system, and to increase the volume of world output and trade through appropriate monetary and exchange rates policies. It was recognized that in that process, countries might often face problems of balance of payment deficits. If such deficits were temporary and reversible because they were caused by reversible, exogenous factors, these countries would need finance to tide over the period when such deficits were incurred. But if these deficits were caused by changes in the international environment that were not temporary or reversible, the countries would have to adjust their prices and production structures through changes in policy. During the period of adjustment, they would need finance so that they did not

have to compress their expenditure too much or follow policies that were too deflationary. The IMF was expected to provide that finance as a medium-term loan to be repaid in 3 to 5 years, and to monitor the spending of that money and the implementation of the policies needed for adjustment set as conditions for receiving that finance.

In the first 20-25 years of the IMF, several industrial countries drew on such balance of payments support for adjustment. However, the major part of their external capital requirements, until private capital flows within the industrial countries were fully revived, was met by the United States Marshall Plan for war-ravaged European economies. The Bretton Woods Conference also created the World Bank to provide long-term assistance to adjusting countries to finance investments for augmenting production capacities in tradable sectors as well as infrastructures. But industrial countries did not have to use much finance from the World Bank, as the Marshall Plan aid was more than fully able to meet their requirements. By 1958, when the Marshall Plan ended, international capital markets had revived sufficiently in industrial countries to meet each other's investment requirements. By the 1970s, they could also meet, through loans, swaps and other arrangements among themselves, the need for balance of payments support for adjustment that the IMF was meant to provide. After the end of the 1970s, the industrial countries needed hardly any finance from the IMF.

The case with developing countries was, however, altogether different. From the very beginning of the Bretton Woods period, developing countries insisted, both at Conference Forums and at Executive Board meetings, that their balance of payments problems were different from those of the industrial countries. They also required not only different policy designs but also a substantially larger amount of adjustment finances, compared with the requirements of the industrial countries. In fact, at the Bretton Woods Conference itself, developing country delegates tried hard to incorporate "development" as an objective and purpose of the IMF, as elaborated in its Article I. They pointed out that the requirements of following that objective were not the same as those of pursuing "orderly development of trade and payment", which was then accepted as the Fund's main purpose. This was not accepted by the major industrial countries, which refused to dilute the functions of international institutions in charge of the monetary management of the world economy with any special consideration for development. ²

The reasons for rejecting the developing countries' concern at the very inception of the IMF would explain to a large extent the constraints on an international financial institution like the IMF in managing the financial requirements of globalization of developing economies. The problems of development, according to the major industrial countries' representatives, were related to long-term investment and capital formation. Those were supposed to be the domain of the World Bank. The balance of payments problems of all countries, whether developed or developing, were related to expenditures exceeding income or the value of output and the only way to solve them was to bring down expenditures to the level of output. Underlying this proposition was an assumption that the level of output would generally be at the maximum with full employment, which would be ensured by wage flexibility. Within that level of output, the optimal production of tradables, of exportables and importables, are determined by the exchange rate. In that

framework, a balance of payment problem would essentially be a demand-management problem. In the original Fund model, this was related mainly to money supply or credit management in an open trade economy with price-wage flexibility and perfect competition. §

For developing countries, the IMF prescriptions, derived from the Articles and discussions at the Bretton Woods Conference, were simple. "Go to the World Bank to supplement bilateral assistance to augment resources for long-term investment in order to expand your capacities. But at any point of time, you produce the maximum output given your capacity through perfect competition and complete wage-price flexibility. After that your balance of payments problems are exactly the same as any other country. You must reduce your expenditures to the level of your capacity output by reducing money supply and credit creation. With a fixed nominal exchange rate, as agreed at Bretton Woods, a fall in price-level will depreciate the real exchange rate, increase your level of exports and reduce your level of imports – eliminating your current accounts deficit and solving your balance of payments problems."

The provision for balance of payments support by the IMF in this model was only to facilitate a smoother adjustment of expenditure to output. Instead of reducing expenditures immediately and precipitating a severe deflation, the IMF assistance would allow the country concerned a somewhat longer time to adjust. But the amount of assistance should be so calibrated as to not allow the country to postpone adjustment and thereby resist the solution of the problem. There was always the problem of the moral hazard. In softening the immediate blow of demand repression, if the IMF provided too much finance to carry on without effecting hard policy changes, the problems could magnify to generate a more severe crisis in the future. So the founders of the IMF insisted not only on making the amount of finance very limited but also on disbursing them on conditions of the country's fulfilling the policy performance.⁹

The Fund model

The initial Fund model of demand-management mainly through monetary policy was gradually modified to incorporate other variables that affected aggregate demand. However, the Fund model should have kept evolving with changes in the Fund's job description over time, and in response to the requirements of the changing clientele. Until the early 1970's, the Fund's policy-prescriptions were centered around defending the fixed exchange rate system, though the details had to be adjusted to changes from an initial dollar-shortage to the subsequent dollar-surplus international economic environment. After the Bretton Woods system broke down between 1971 and 1973, the Fund's job changed from supporting the fixed exchange rates to promoting exchange rate stability, which allowed them the theoretical justification of getting involved with practically all aspects of a country's economic policy. The Fund's clientele had also changed in the intervening period. While in the 1950s and 1960s many industrial countries drew on the Fund's financial support, by the 1970s the Fund's clientele had become almost entirely confined to developing countries.

It was increasingly apparent to the Fund staff and the Executive Board that the predominantly monetarist model – even after incorporating some Keynesian variables of demand-management – did not work well with developing countries. 11 Ouite a number of countries that entered a Fund programme of adjustment to a balance of payments crisis had to prolong their process of adjustment through repetitive programmes. That would have suggested that the adjustment problems of developing countries could not be solved in a short period. The usual Fund standby programmes were for a period of one year, with the repayment obligations for the Fund's loans spread over 3 to 5 years. That worked quite well with industrial countries, but most developing countries asked for extensions of the period of adjustment. The Fund had to accommodate these requests, as otherwise many of these countries would have defaulted in their repayments to the Fund. As a result, quite a few of these countries had a number of successive standby programmes dealing with the same balance of payments problem. In spite of that, several of them went off track and gave up the programmes in the course of their implementation. Sometimes the Fund found itself providing support through successive programmes to countries to enable them to repay the Fund's over-dues. There were of course a number of cases of success when the balance of payments deficits that called for the Fund's support were reversed. But even in those cases, the countries often found that while their balance of payments had improved, their growth performance or unemployment had deteriorated. More often than not, the improved payments situations could not be sustained.

The Fund model and the policy prescriptions based on it are sometimes described as "one-size fits all" programmes recommended to all countries irrespective of their nature or stage of development. This criticism is not quite fair, because even in the 1960s and 1970s, the specific programmes of the Fund differed from each other in terms of the extent of policy corrections, their sequencing and mix of instruments, as well as the quantum of support. From the late 1970s and during the 1980s and 1990s, when the Fund introduced a series of three-year programmes with eight or more years of repayment as under its Extended Financing Facility or Structural Adjustment or Extended Structural Adjustment Facilities, the nature of the policy prescriptions underwent significant changes.

It is also unfair to allege that the Fund did not take into account the specific conditions of a country's economy in formulating its adjustment programmes. For most countries the Fund would recommend lowering the fiscal deficit and the rate of inflation, but the extent would vary from country to country, and the method of reduction would also be widely different. The variations in interest rates and exchange rates could also be large – for some they would be prescribed to rise, and for others to fall. On the details of many other policies, especially when they relate to structural changes, the prescriptions would be very different. It is quite possible to argue that the Fund sometimes made mistakes in recommending a particular policy, but this would be due more to complexities of the problems and difficulties in identifying, ex ante, their effective solutions. But it would be too simplistic to attribute them to the Fund's following a uniform policy standard irrespective of the problematic differences.

The impression that the Fund always prescribes the same set of policies to all countries has been caused mainly by a bias in the Fund's approach to the balance of payments problem for demand-management policies. The institutional requirements of successfully dealing with its clientele led the Fund to change the details of its policy prescriptions to developing countries over time. But the Fund found it difficult to move away from the demand-management bias of its early days, and to get involved with the supplymanagement problems that characterized the balance of payments difficulties of developing countries. The Fund was happy to leave the supply-management problems of developing countries to the World Bank, which was expected to support their long-term investment. Its own supply-side concerns were limited to promoting free market competition with price-wage flexibility, which was expected to produce the maximum output given the stocks of capital, labour and other resources. The Fund did not get into problems of investment or growth. Nor did it concern itself with the possibilities of market failure. The right prices with a competitive framework would provide the right incentives to attract the right amount of investment and the right kind of technology leading to sustainable growth. Changing the real interest rates and the real exchange rates were practically the only two supply-side instruments with which the IMF was concerned – one dealing with the inter-temporal allocation of resources, the other dealing with the allocation between tradables and non-tradables. With prices determined in the competitive equilibrium framework, real interest rates depended on nominal interest rates, which in turn were determined by money supply that entered into the Fund model as an instrumental variable. Similarly, with nominal exchange rates as fixed parameters under the Bretton Woods system, real exchange rates were determined endogenously with all other prices. If there was a dis-equilibrium between the demand and supply of exportables and importables, competitive prices change to bring about the equilibrium. If that does not happen, there is a "fundamental dis-equilibium" when the parameterially fixed nominal exchange rates will be allowed to change in order to restore equilibrium.

This preoccupation with demand-side management to solve all balance of payments problems led the Fund to prescribe austerity, i.e., fiscal repression and a lowering of the fiscal deficit mainly through the reduction of public expenditures, and tightening money supply and credit expansion in all Fund programmes. The indiscriminate use of this approach, without incorporating corrective actions to neutralize its efforts on the supplyside and the long-run problems of development, has attracted the most criticism for the IMF approach. The developing countries that approached the Fund for accommodation would sometimes already be in the grip of a severe depression – a policy of further demand-repression might be able to produce a trade surplus by reducing imports more than exports and enable the country to meet its debt services obligation to its creditors – but only at a great cost to its consumption standards and development prospects. Insisting on the reduction of fiscal deficits often resulted in the reduction of public expenditure for investment and for social development programmes, as other items of expenditure such as administration, defense or interest payments were often very inflexible in the short run. Similarly, increased interest rates and lack of credit resulting from financial repression produced a repression of investments and contraction of industrial output, disrupting the process of development. During the East Asian crisis, the Fund recommended in addition to sharp interest rate hikes, structural measures such as closing down banks with large

non-performing assets to promote competition and efficiency, resulting in the near-collapse of banking systems. While preventing financial profligacy was undoubtedly important, as was the need for disciplining the errant banks, the application of the medicine should have been properly gradated and complemented with measures to check side-effects, so that the patient did not die in the end.

As mentioned earlier, developing countries insisted from the inception of the Bretton Woods period that the nature of their balance of payments problems was fundamentally different from that of developed industrial countries, and could not be separated from the problems of development. Increasing exports with a sustained expansion of revenue without declining terms of trade would depend upon the composition of outputs and a steadily rising productivity of the tradable sector. That would require increased investment, which expanded capacity with the latest technology, while investment itself would be determined by the prospects of growth and confidence in policies that promoted growth. Accordingly, an essential precondition for a sustainable improvement of balance of payments was that the economy grew steadily with stable policies that raised investors' confidence. Any set of measures that disrupted the process of growth was not conducive to sustainable growth of exports and therefore could not solve the country's balance of payments problems.

The IMF has not been very comfortable with designing programmes for balance of payments improvement with growth. Under a demand-management programme, if domestic demand can be sufficiently depressed, a country can always generate a trade surplus to meet the obligations of debt servicing by reducing imports and releasing domestic products for exports. But it is very difficult to achieve growth of output in the country. The variables that determine growth are much less tractable, and policies can only create an appropriate environment for growth without ensuring that all the actors in the economy will behave in a way that actually produces growth. The IMF considers itself primarily a monetary institution concerned about safeguarding its resources and the ability of the countries it supports to repay what they borrow. For that, demandmanagement policies appear much less risky than uncertain growth-promoting policies. But the experience with implementing Fund-supported programmes have amply demonstrated that simple demand-management policies that do not provide for expanding capacity and development, in most cases fail to work. They do not produce a sustainable improvement in balance of payments, and arrears tend to develop even on the repayment of IMF borrowings, not to speak of the possibility of defaults in the repayment obligations to commercial creditors.

This became particularly clear after the debt crisis. In the early 1980s several Latin American countries, which had earlier borrowed heavily from commercial banks at almost negative real interest rates, came to the point of defaulting on their debts when interest rates, especially in the United States, registered a sharp increase. Several countries at that time adopted Fund programmes of adjustment to eliminate the payments deficits, and the success of these programmes crucially depended upon the revival of new credits from commercial banks to finance new investment. Despite the fact that a number of countries had achieved impressive trade surpluses, new credits were not forthcoming.

That was mainly because investors did not have the confidence that the countries' growth performances would improve and that the potential returns on their investments would fully materialize, because improvements in trade surplus were caused primarily by demand-repression and deflationary policies.

All this led to a serious rethinking about the design of Fund programmes that could produce adjustment with growth. The Fund's Research Department brought out several papers extending earlier monetary models to design financial programmes that ensured adjustment with growth. There was a famous Fund seminar on "Growth Oriented Adjustment". The Mexican programmes in the mid-1980s for the first time explicitly provided for finance contingent on growth. Since then, most programmes incorporated in their design growth-promoting policies. For low-income countries, the programmes under the Extended Structural Adjustment Facility combined funds from the World Bank and the IMF to support growth-promoting policies. The programmes for highly indebted countries worked out policy packages to restructure both commercial and official debts to enable countries to repay the debts as their incomes increased. And in the early 1990s, growth became the principal concern in the programmes of the formerly socialist and transitional economies.

III. Financing requirements of growth-oriented adjustments:

The details of the policy prescriptions in growth-oriented programmes would naturally be different for different countries, depending upon their stage of development and the nature of their balance of payments problems as they adjusted their economies to global competition. But one common factor for all such programmes was the requirement of substantial financial support during the period of adjustment. Indeed, the experience of all countries that engaged in such adjustment programmes in the recent past indicated that whatever might be the specific policy targets, the successful implementation of these programmes crucially depended on the adequate and timely provision of finance.

The nature of such financial support, however, would be quite different from those required to meet with problems like the Mexican crises of 1994, the East Asian crisis of 1997 or the collapse of the Russian economy in 1998. These problems were related to the second stage of globalization, when developing countries had opened up their capital accounts, making them partially or fully convertible, and had become vulnerable to market failures even after receiving substantial flows from the capital markets. Although more and more developing countries, as they grew and accessed international capital markets over the years, would probably be facing similar problems, currently not more than 20 countries are concerned. The overwhelming bulk of developing countries are involved with problems of growth-oriented adjustment at the first stage of globalization, that of opening up to international trade with current account convertibility. These countries would have to adjust to international prices of goods and services and their fluctuations and changing supplies.

The IMF adjustment programmes are usually designed around a financial exercise to estimate the financial support a country will need to carry out the programmes. The basic

model of that exercise was developed in the 1960s by Polak and his associates. ¹³ The specification of some of the relations, occasionally incorporating additional variables and the judgments exercised in the processing of data and the identification of the variables, differed from country to country and from time to time. But the nature of the exercise has remained practically the same. A target is first fixed for the improvement of the balance of payments of the country during the programme period, measured by changes in net international reserves. To this is added an estimate of net imports, measured by a projection of import requirements over and above the estimate of exports for the period. This total is then adjusted for all committed capital flows, such as debt repayments or disbursements of loans previously arranged. The residual gives the additional net international financing that will be needed during the period. By subtracting from this amount an estimate of other possible inflows of foreign investment and balance of payments support from other bilateral, multilateral and commercial sources, the IMF determines the amount that will have to be financed from the IMF sources.

In actual practice, because of the limitations of data and of properly identified relationships between different variables, most of these estimates are carried out based on judgments that are often rudimentary and arbitrary and influenced by extraneous factors. Estimates of exports are, more often than not, simple upgrading of projections of past trends, unable to capture the effects of devaluation and other policy changes. In effect these estimates really become targets that the officials judge to be plausible. Import requirements in most cases are endogenously determined by relating them to the levels of output, seldom using the effects of other variables, including changes in prices or exchange rates that take time to work themselves out. As a result, the entire estimate of net imports – required imports minus projected exports – becomes judgmental, and more often than not they are fixed by working backwards from the IMF's estimate of available financing from other donor governments, multilateral agencies and possible commercial sources, and a minimum drawal of its own resources.

This method of estimation is inherently biased towards under-financing the adjustment programmes. Instead of an independently estimated net import requirement and a target increase in reserves determining the amount of finance the Fund should provide to support such programmes, it is the finance that the IMF chooses to provide that determines the sustainable net imports and incremental reserves. The IMF is usually quite reticent about deploying its resources, which are taxpayers' money provided by different governments as quota subscriptions, and which are supposed to be used for temporary financing, recoverable within a short time with interest. The conditionalities the Fund usually imposes on borrowing countries are as much motivated by improving the policies of the countries as by ensuring the repayment possibilities of the funds it lends. As the risk of default increases with the severity of the balance of payments problem of the borrowing countries, the Fund's reticence in providing them with substantial assistance increases – just when they are badly needed.

The Fund often tries to rationalize its under-funding as playing the role of a catalyst in attracting finance from other private and institutional sources. There is of course some validity in the argument that if the Fund is seen to be supporting a country's adjustment

programme through its normal phases of disbursement, this indicates that the country is fulfilling the performance criteria and the related conditionalities. This should improve the country's credit rating and investor confidence in the sustainability of its policies, which should attract additional finances from international capital markets and augment the supply of investible resources to the country. This does not, however, mean that the government's budget will have more resources. It has been seen in many cases that the binding constraints on the implementation of the adjustment programmes have not been so much the overall savings gap or imports gap of the country, as the widening resources gap of the government that raises the fiscal deficit. The IMF lends money to the government to augment its resources and to help finance its expenditures in a non-inflationary way. So, the under-financing of the Fund-supported adjustment programmes would impact adversely on the implementation of the programmes and the outcomes of the policies.

However, if the Fund's catalytic role actually succeeds in attracting additional investible resources to the country from capital markets, it will facilitate raising the rate of growth of the economy. In that case, even if it does not immediately provide additional fiscal resources to the government, it will do so over a few years, raising more revenues from increasing income. What will then be required is the provision of adequate finances at least for the initial period, until the growth rate of the economy picks up to yield additional revenues to the government. The total amount of the finance provided by the Fund during this period may turn out to be much less than the total that would be needed over a number of years if growth rates did not pick up early, and if initial provisions are inadequate and less than that required in every year. In other words, the amount of the support required from the Fund would depend very much upon the phasing of that support, and it is more likely than not that if the programme is fully funded, both up front and in the initial years, the country should be able to graduate out of a dependence on the Fund sooner than expected. This is assuming that the Fund programmes are growthoriented and the economy moves on to a sustainable path of growth within a few years of implementing such programmes.

The experience of the IMF in supporting adjustment programmes of developing economies has been, generally speaking, quite the contrary. The countries that have entered Fund-supported programmes have only on a few occasions graduated with success, fulfilling its balance of payments and sustainable output growth targets. More often than not either it gets off track in the midst of a programme, abandoning it completely, or it adopts further programmes to make mid-course corrections of policies and meet the repayment obligations of the previous programme. As a result, the involvement of a country with Fund programmes appears to be very prolonged, through repetitive short- or medium-term programmes piling up a very large total of financial assistance from the Fund over a number of years. The Fund is often not successful either in satisfactorily completing the process of adjustment, or in limiting the amount of financial support provided to the country. Indeed under-funding a programme, when it is needed initially, often ends up in prolonged funding of adjustment programmes of a much larger amount.

In sum, there are three major lessons to learn from the history of Fund-supported adjustment programmes. First, these adjustment programmes must be growth-oriented, and policies should be so designed as to not limit themselves solely to achieving a balance of payments equilibrium in the short-run. A country is expected to adjust to changes in the terms of trade and the relative prices for different sectors when it opens up to world trade and convertible current accounts. But for a developing country, a short-run balance of payments equilibrium is not sustainable unless it is accompanied by growth of income and output that would require specific policies beyond opening up trade and current accounts and not depending upon their trickle-down impact on GDP, savings and investment. Those policies would in turn involve augmenting the domestic supply of investible resources to realize the potential growth of output, and would require much more financial support than envisaged in the original concept of the balance of payments support for adjustment to international prices.

In the Bretton Woods framework, a country was expected to require only limited support in adjusting to changes in relative prices resulting from opening up to international trade. The improved allocational efficiency would raise the level of output and improve the balance of trade by raising the level of net exports of the country following the lines of comparative advantage. Financial support is required only because the increase in net exports is not instantaneous, and that time can be reasonably short if all obstacles to free movement of goods and services are removed and the market system is fully flexible. The IMF support was meant to help the country defend the exchange rate without disrupting the policies of freeing trade and payments.

For growth-oriented adjustment programmes, special measures are necessary because the static gains in the level of GDP due to improved allocational efficiency from freeing international trade and current accounts transactions are not expected to raise the rates of savings and investment sufficiently to significantly raise the rate of growth. An increase in the level of GDP could of course raise the rate of savings if the marginal rate of savings were higher than the average. But given the rigidities of the production structures and movement of resources in developing countries, the extent of the gain in GDP would be too small to be effective in a few years. In other words, the static efficiency gains would not be quickly converted into dynamic efficiency gains of higher savings and investment leading to higher growth. The country will have to depend upon the trickle-down effects of short-term gains in output from improved efficiency into a gradual rise of output growth over a rather long period. If no supplementary policies are taken to push up the rate of investment and accelerate the rate of growth, the adjustment programmes would be stuck at stagnant if not falling levels of output, and would very likely be disrupted.

The second lesson to learn is that the immediate outcome of the opening up of a country to free international trade and payments can be quite adverse. At first, there would be an increase in the level of imports and a deterioration of the balance of trade. Several import-substituting industries will contract and the labour engaged in them would become unemployed. The export industries will of course become more profitable and their production should expand and exports should increase. But they would require both

time and capital investment. The length of time required would depend upon the flexibility of the system – how fast resources can move from one place to another and how soon workers and managers can be retrained or recruited for the sound industries. Similarly, the machinery and equipment of the units that would close down facing competition are not like mecano sets. What will be required are new investments in the new units with new technology and new equipment, and even if the value of these new investments does not much exceed the value of old investments in the wound-up units, these cannot be regarded as replacements. The new investments in the new units will be determined by the prospective rates of return in these units, appropriately weighted by risks about the prospective growth of demand for the products, which in turn would depend upon the prospects of stability of the country's policies. Even if the prospective rates of return or profitability of the new industries are quite high, the perceived risks about the sustainability of the overall growth of the economy and of the projected sectoral demand may render such investments unattractive or create a situation where investors would rather adopt a "wait and see" approach before locking in their funds for a long term. 15

If investments are not forthcoming in these activities, the supply of exportables will not increase, and the projected growth of exports will not be realized. With imports increasing due to the opening up of the economy, the balance of trade of the country will deteriorate, calling for even larger flows of foreign capital, or in the absence of such flows from private and other sources, for even larger financial support from the IMF. If such financing is not available, the country will have no option except reversing the policy of liberalization of foreign trade and imposing controls on imports. That would raise the profitability of import substitutes relative to exports, and reduce incentives to increase exports, compounding the problems further. Alternatively, attempts will be made to suppress aggregate demand to reduce the growth of imports, and in the process reduce the growth of output and the overall profitability of investment. The private investors who were reluctant to lock in their funds in long-term investment would find their reluctance justified, because the falling growth of output and overall demand would have reversed the initial liberalization policies.

In an underdeveloped economy the constraints of limited availability of infrastructural services and other complimentary inputs for exporting activities are more binding than in industrial economies. A shift in the relative price in favor of export activities would more easily attract and absorb investment increasing the supplies in industrial economies than in developing economies. A substantial investment in power, transport, communication and ports as well as export services infrastructure must take place simultaneously, if not prior to directly expanding capacities in the exports sector of developing countries. Any investment in an exporting activity would thus require a multiple of that investment in related activities for viability. So in an adjustment programme of a developing economy at the first stage of globalization, there has to be a much greater provision of investment than in industrial countries. If private and other institutional investors from the capital markets can not adequately provide for them, the IMF has to provide that additional support. An under-funding of that would disrupt the adjustment programmes.

The third lesson from the experience of Fund-supported adjustment programmes is that Fund support should be provided up front or as much as possible in the initial phase of the programme. As the main determinant of private investment is investor confidence in the stability of the policies adopted by governments in pursuance of adjustment programmes, investors from both the domestic and international capital markets would frequently adopt a "wait and see" approach until they are confident that policies will not be reversed and that the growth of output and employment will be sustained. During that period, it is imperative that the IMF fully funds the programme even if other sources of finance play truant.

Besides the scale of funding such adjustment programmes, it is also important that they should offer medium to long-term financing, with some concessionality in the interest rates. The IMF itself recognized the importance of such qualitative requirements of finance when it first set up its Extended Financing Facility and then its concessional Structural Adjustment Facility, and later the Extended Structural Adjustment Facility. The normal funding pattern of the IMF is of a revolving fund for 3 to 5 years at interest rates related to the treasury rates of member governments, because of the monetary nature of the Fund using quota resources that are like the reserves of different Central Banks. The Fund had to make special arrangements for providing extended periods of finance with concessionality through these facilities by raising money directly from the governments or by using profits from sales of its gold stocks. By their very nature, the size of funds raised through such arrangements would be much more limited than the quota resources of the IMF. If successful implementation of the adjustment programmes called for large amounts of such long-term concessional finances, then either aid finance from governments would have to be mixed with the quota resources to make them concessional and usable for long-term financing or other international agencies that provide long-term finance have to join with the Fund.

IV. Financial management of the first phase of globalization

The above analysis would suggest that the IMF has a major role to play in the financial management of developing countries going through what may be described as the first phase of globalization. During that phase developing countries would open up to international trade and current account convertibility almost in the same manner as the industrial country members of the IMF opened up in the post-Bretton Woods period. For quite some time after the Bretton Woods conference, the opening up process for industrial countries was slow and hesitant – until the Marshall Plan for the European economies and U.S. support for Japan helped these countries to reconstruct themselves. By the 1960s and 1970s, most industrial countries had made their current accounts fully convertible, reducing exchange controls on current transactions to the minimum and removing most of the barriers to their trade in goods and services. Several rounds of GATT negotiations accelerated the opening up of international trade and IMF surveillance of the rules of transactions and financial support when necessary helped the process of current account convertibility. When the fixed exchange rate system of the Bretton Woods period broke down in the early 1970s, most industrial countries moved towards flexible exchange rates, freeing monetary policies from the constraints of

maintaining par values. That paved the way for their capital account convertibility and their second phase of globalization, so that by the 1980s most industrial countries were more or less fully integrated, in the sense that the outcomes of any single country's policies and activities became dependent upon other country's policies and activities.

Most developing countries, even after becoming signatories to the IMF articles and the GATT agreements, resisted the process of globalization and integration with the world economy by invoking special clauses that allowed them to be exempted from full trade liberalization or current account conversions. Still, quite a few of them needed frequent and substantial support from the IMF to meet their balance of payments problems even with their partial and slow process of opening up to globalization. Their economies had to adjust to the changes in their terms of trade and the resulting changes in the set of relative prices, the methods of payments and the servicing of accumulated debts. During the Bretton Woods period of fixed exchange rates, they had to defend the par values of their currencies. Even after the fixed exchange rate system broke down, most of them pegged their currencies. The consequent constraints on their monetary as well as fiscal policies very often dictated the design of their adjustment policies.

The main difference between the industrial countries and the developing countries adjusting to the first phase of globalization, as we have argued above, is that the success of the adjustment policies for developing countries depended very much upon (a) their design as growth-oriented adjustment programmes, and (b) the adequate availability of funding for these programmes. These two requirements would remain essential whether the opening up was partial or complete, gradual or rapid. On both these accounts, the IMF would have major roles to play. In designing these programmes, the IMF would have to move beyond simple and short-term balance of payments improvement programmes to medium-term structural adjustment programmes promoting overall growth. In mobilizing finance, the IMF must play the lead role of coordinator of funds from other multilateral, bilateral or even commercial sources in addition to providing finances itself.

As we have seen, the financial requirements for full funding can be very substantial. If the IMF's own resources are inadequate, it must be able to catalyze funds from other sources. In the early years, when international capital flows from private sources to developing countries were insignificant or confined to limited amounts of direct investment flows to a few selected countries, the IMF would have to link its support to assistance from bilateral aid donors or multilateral development agencies. In recent years, when the overwhelming bulk of international capital flows come from private sources, the IMF's or other multilateral agencies' financial support should be able to leverage additional flows from the private sources, either by appropriate design of policies or through risk-sharing or complementary investment measures. In either situation, the IMF has to play a major role as catalyst of additional finance.

The clear implication of the IMF playing such a role in accordance with the responsibility given to it by the international community at the time when it was created, of managing international finance and promoting the development of an open world trade and payments system, is that if it fails to catalyze funds from all other sources, it has to fill the

gap itself. In other words, the countries that adopt such adjustment programmes must be certain that if they follow the policies agreed upon and if they fulfill the performance criteria, they would receive the full financial support required to implement these programmes. As we have seen, it is the certainty that the policies of adjustment adopted by the authorities of the developing countries will be carried through that lends stability to their policy environment, which is the most important determinant for investor confidence. Ensuring full funding of the programmes, whether directly from the IMF or in combination with financing from other sources is, therefore, essential.

During the '80s and '90s, the first phase of globalization of developing countries - opening up to international trade and payments, and getting integrated with each other through current account convertibility – was accelerated and almost universalized. Most countries adopted major economic reforms liberalizing the internal and external movement of goods and services, adjusting their production structures and monetary, fiscal and exchange rate policies to a freer trade and payments system. However, although almost all these countries made significant progress towards current account convertibility, very few of them adopted measures for making their capital accounts convertible. Their globalization process, therefore, remained confined to the first phase, when the integration of their economies was being effected more through the markets of trading in goods and services and of current payments, and not so much through capital markets for free cross-border movements of savings and investments.

This first phase of globalization of the developing countries is expected to last for quite some time, as the overwhelming majority of these countries are still far short of being graduated to the second phase of integration through capital markets. As these countries would be facing all the problems of adjustment in the first phase, they would depend on the IMF for the balance of payments support in accordance with the original articles of agreement. Only if they can successfully implement their programmes – adjusting production structures along the lines of their comparative advantage and producing sustainable growth – will private investment from international capital markets flow into these countries. It is then that they would be moving to the second phase of globalization.

It is imperative, therefore, that during this phase the IMF is bestowed with sufficient internal resources through increases in quotas or through the creation of SDRs so that it can meet the full financing requirements of adjusting countries. It should try to attract or catalyze financing from other sources, but in cases where such outside finances fall short, the IMF should step in to make the programmes fully funded. The developing countries have for a long period, beginning with the Working Group Report of the G-29 in 1986, called for the creation of a Contingent Financing Facility out of the Fund's own resources. It should be available to all adjusting countries, meeting the performance criteria of their adjustment programmes if the available finance from all other sources falls short of the expected or of the requirement, over and above the standard adjustment finance from the IMF on account of these programmes. It may be necessary to revive that proposal, and not limit it only to countries facing financial crisis or creating systemic problems.

The principles of such contingency facility can be summarized as follows. If according to a standard adjustment programme, whether under EFF or ESAF facilities, the IMF is expected to provide an amount X on the assumption that others would provide Y so that (X+Y) would fully fund these programmes and if due to some exogenous factors or unforeseen developments or errors in projection and judgment, the other sources provide finances less than Y, or (X+Y) falls short of the actual financial requirements, the Fund's support should be raised beyond X to the amount necessary to fully implement the programme. This is provided, of course, that the country continues to implement policies according to the programme. The contingency financing should be automatic if the country fulfills all the performance criteria. If not there might be a review of the programme to judge if the country was doing the best it could in the situation and the programme could be disrupted if such financing were not available. In any case, the country concerned must feel assured that the international community, through the IMF was fully committed to supporting it in its adjustment process so long as the country was meeting all the obligations of following policies according to the programme.

V. The Second Phase of Globalization – through integration of capital markets.

The problems of financial management of the second phase of globalization, when the capital markets of the countries are being integrated, are quite different from those during the first phase. During the heyday of the Gold Standard, particularly from 1870 to 1914, when international trade and payments were conducted in currencies backed by and pegged to gold, the world witnessed high capital mobility and integration of the national economies. The system collapsed in the inter-war period and attempts to revive the gold standard failed with declines in capital mobility and disruptions in currency convertibility. When the Bretton Woods Conference re-engineered the international financial system and set up the IMF and the World Bank as the institutional pillars of the system, it aimed at integrating the world economy mainly through trade, but not capital movements. The IMF Articles of Agreement called for current account convertibility and full freedom of trade and payments for current transactions at fixed exchange rates. But it allowed the countries to maintain restrictions on capital flows on the assumption that complete freedom of capital movements may disrupt the orderly development of current account transactions for trade and payments. This arrangement persisted even after the fixed exchange rate system was given up in the early 1970s. But although no member of the IMF was obliged to remove their discretionary restrictions on capital account transactions, international capital movements registered a sharp increase in the 1970s and continued to increase steadily since then and many countries - especially industrial countries – relaxed restrictions on capital mobility. For those countries, the integration process went beyond the first phase through free current account transactions to the second phase of linking up through capital mobility.

For most developing countries, the integration process has not progressed much further than the first phase, as they have not completely adjusted themselves to trade liberalization and current account convertibility, although almost all of them initiated that process during the 1980s and 1990s through Fund-supported adjustment programmes. That is why most of them have not been able to take advantage of high capital mobility

and the phenomenal increase in international capital flows since 1995. The bulk of such capital flows remained confined to only a few developing countries, creating problems for them in adjusting to surges in capital flows. For most other developing countries, problems remained similar to adjusting to trade and payment liberalization and currency convertibility, requiring financial support from the IMF as discussed above.

The conditions necessary for countries getting integrated through capital mobility are related to investors' confidence, with or without full convertibility of their capital accounts. Investors from abroad must believe a country's ability to sustain a process of development with stable policies and a reasonable rate of return on investment that should be transferable in foreign exchange. That is ensured when all current transactions are convertible and investment receipts are repatriable. It is not necessary that all capital inflows and outflows be allowed without any impediment. It would of course enormously help matters and contribute to investor confidence if capital accounts were fully convertible in addition to the freedom for all current transactions to be conducted in foreign exchange. But only a few countries, even in the industrial world, have such complete convertibility with all barriers on current and capital flows completely withdrawn. There would at least be some regulations imposed by supervisory agencies even in the most advanced market economies.

Most developing countries, which received large investment flows from international capital markets, had different degrees of capital accounts convertibility. Some had succeeded in adjusting their economies to the opening up of their trade accounts and to changes in the terms of trade, interest rates and exchange rates in the process of their globalization and the increasing amounts of capital flows. Even with limited capital account convertibility restricted to repatriability of investment receipts and of investment incomes, they could receive large inflows of international capital and get engaged in the second phase of adjustment to globalization. The problems they faced and the financial support they required were qualitatively different from those of the first phase. For most of them the problems emerged after a reasonably long period of adjustment with growth that transformed their economies.

There were also some countries which went for capital account convertibility in order to attract increasing capital inflows from the world capital market without successfully adjusting their economies to the first phase of globalization. They soon get into problems, both of liquidity and solvency, in sustaining the process of development and servicing the investment flows. They lost credibility and the confidence of the investors, which precipitated crises of reverse capital flows that convertible capital accounts could not cope with. ¹⁶

Thus, measures to help developing countries face the process of opening up to the first phase of globalization adjusting to free trade and currency convertibility must be followed by policies to help them during the second phase of adjustment to high capital mobility and also capital convertibility. So long as the international capital market retains its buoyancy, investible funds, whether they are for direct investment, portfolio allocation or short-term flows, would be looking for investment outlets in developing countries

where marginal productivity of capital is often very high and where the risk-weighted effective rates of return of investment could also be very high if the countries followed appropriate policies. In effect, if a country succeeds in adjusting its economy to the opening up of current accounts and is able to sustain its process of development with a stability of policies, the grounds get prepared for it to attract private capital from international markets. If there is even a marginal increase in the exposure of these countries to international capital markets, they may literally be flooded with capital flows that would quickly lead to the second phase of globalization. They will start getting integrated to the world economy not only by adjusting their productive activities to international prices of commodities and services but also by adjusting to changes in interest rates and exchange rates, to monetary and fiscal policies. As capital flows are absorbed and are deployed to earn the higher rates of return, countries move on to trajectories of higher growth of output and employment when the adjustment process is successful. Clearly such surges in capital flows can be initiated and sustained, even if capital accounts are only partially convertible, if successful adjustment of the first phase increases the productivity of investment and the confidence of investors in the sustainability of policies.

Managing the adjustment of a country to increased capital flows or the second phase of globalization would require completing the first phase of adjusting the structure of production, trade and finance to international prices, and changing interest rates and exchange rates relative to domestic and international inflation rates. All this would call for policies similar to those during the first phase of adjustment through the improvement of macro-economic stability and balance of payments viability with sustainable economic growth. This would require the kind of financial support from international organizations like the IMF as we have already discussed.

In addition to this, however, adjustment to the opening up to capital mobility may face the problem of a reversal in capital flows. The capital that came in as direct or portfolio investment or as short, medium or even long-term loans may withdraw themselves from the country, attended by capital flight or outflows of domestic savings, depending upon the degree of capital convertibility of the country. This can precipitate a major crisis in the economy. It may be very difficult to readjust its production and payments system to such reversal of capital flows. An equilibrium of relationships between the growth of outputs, trade, savings and investment together with increased foreign savings, when disrupted due to the withdrawal of foreign savings and flight of domestic savings, may not just be replaced by a lower level equilibrium, but may actually be thoroughly destabilizing with sharply falling output and savings, trade and employment.

Such a disruption can take place for at least two reasons. First, policy mistakes and inability to successfully carry out the implementation of adjustment programmes may make investors lose their confidence. Secondly, either because of such loss of confidence or some exogenous developments or shocks, panic may exacerbate the loss of confidence, when investors and other economic agents compete with each other to exit with whatever funds they can secure by the sale of their assets or withdrawal of their deposits from domestic institutions.

It is important to keep the distinction between the two sources of problems in managing this second phase of globalization through capital mobility. The first is related to the problems of market development – of allowing the market forces to play their role fully in adjusting to the structure of the economy's production, trade and financial system. The second is related to the problems of market failure. If the markets fail to give the right signal to the individual agents in the economy to behave appropriately toward an equilibrium that is optimal not only for the individual but also for the whole economy, there is a problem of market failure. That cannot be solved in the same manner as solving the problems of market development through increased competition and removal of barriers on the free play of market forces. More often than not in such cases, individuals following their own 'rational' maximizing behaviour reach an outcome that is suboptional or inefficient and unstable.

Financial markets are proverbially prone to market failure, and the most important source of that market failure is imperfect information. Joseph Stiglitz and his associates have formally modeled the effects of imperfect information on the operation of market forces to show that they are so widespread as to make market failures endemic and almost universal unless corrected by appropriate policy intervention. ¹⁷ In the case of financial markets, the prices of financial services more often than not fail to clear the market, and prices at which markets are cleared are not always the prices at which the profits of financial service providers are maximized. Unlike commodity markets, money in the capital market is exchanged for a promise of returns in the future, which is contingent upon not only what happens in the future, but also on how the economic agent behaves. So a financial market cannot run as an auction market and lenders do not simply lend to those who offer to pay the highest interest rates. A lender has to form judgments on the basis of whatever information is available about the probability of realizing the promised return. Because the borrower's efforts affects returns on the loan and because of imperfect information, banks cannot stipulate all the actions that a borrower should undertake nor formulate the terms of the loan contract in such a manner that the borrower is induced to take the right action to make the outcomes of the loan a success. Similarly, by varying the price of loans (interest rates), banks may not be able to get the best allocation of loanable funds. Without full information about the projects, the banks cannot judge if the individuals who are willing to pay higher interest rates are not taking undue risks to undertake projects with lower probability of success but higher profits when successful.

In their classic paper of 1981, Stiglitz and Weiss¹⁸ showed that a loan market in a situation of imperfect information is often characterized by credit rationing, where the interest rates could be in equilibrium (in the sense that bankers would not have any incentives to change the rate once it is reached), but where there could still be an excess demand (in the sense that among loan applicants who appear to be identical, some receive a loan and other do not, and the rejected applicants would not receive a loan even if they offer to pay a higher interest rate). This is because the expected return for the bank increases less rapidly than the interest rate, and beyond a point it would actually decrease. This happens mainly because first, as interest rates increase, a higher proportion of riskier borrowers come for the loan. Second, a borrower may opt for a riskier project, because if

the project succeeds he can take away the high profit but if it fails he expects to walk away with default as banks cannot fully monitor his actions. In other words, as the real interest rate increases, the probability of default on loan contracts also increases, resulting in less than proportionate increase in expected return. If the deposit rates offered by the banks are equal to their expected return, which would happen in a perfectly competitive model, the supply curve of loanable funds as a function of real interest rates would be backward bending. The real interest rates at which the demand for loans would be equal to the supply and the markets are cleared would be much higher than the rate at which the expected return would induce the maximum supply of loanable funds which would still fall short of the high demand for loans at the corresponding low real interest rates. As the market would not clear the demand and supply of loans, they would have to be naturally rationed out.

Within the framework of the Stiglitz – Weiss model, the banks that are following prudent policies would on their own put a ceiling on their interest rates without being dictated by any regulatory authority. But if there is macro-economic instability with inflationary pressures and real exchange rate uncertainty, the expected return on bank loans may fall much below the actual rate of interest. If there is no regulatory authority trying to restrain the interest rates, the banks may try to take undue risks. The incentive to make highinterest and therefore, high-risk loans can be very tempting, because a favorable outcome may lead to very high profits, while they can walk away when there are heavy losses. The default rates among the borrowers, at a time of crisis, may not be related if the banks concentrate lending to a few large borrowers. The tendency gets compounded if there is a deposit insurance cover, creating a real moral hazard. The expected profits from risky lending could be very high, because with favorable outcomes, banks would keep the extraordinary profits without paying the probability cost of incurring unusual losses, which can be passed on to insurance. The problem of moral hazard is multiplied when the banks are not privately owned, but run as public sector institutions with little risk of bankruptcy or loss of ownership claims when outcomes were unfavorable. 19

The problems of imperfect information, and the related adverse selection and moral hazards of a domestic financial market are many times multiplied in the international financial markets. International financial institutions could reasonably well perform the agglomeration function of pooling together the savings of individuals in different countries, and the transfer function of transferring resources from savers of one country to investors in another country. But they would find it extremely difficult to perform the selection function (finding the best user in terms of yielding the highest expected returns); and the control function, which involves the principal-agent problem of inducing prudent behaviour of those who have been provided funds. The possibility of market failures in such situations is very large, and the problems do not get solved if the flows of funds expand, or if an institution like the IMF stands ready with substantial support if market failures occur. It will be necessary to have effective regulatory authorities both in the domestic and in the international financial markets – functioning in a framework of much greater transparency and with better flows of information and more effective norms of prudential behaviour by both the lenders and borrowers across the countries.

This is easier said than done, but two issues become clear in this context that need to be highlighted. First, if the IMF is a financial player, providing funds to clients to meet their requirements, it should be as much the subject of regulation as any other international financial institution. In that case, the IMF cannot be given the regulatory function over the international capital market, as proposed by many in recent deliberations. The international regulatory authority should be independent and separate from the financing institutions, even if their ownership is inter-governmental.

Secondly, providing the IMF with more money to solve the problems of the failure of the financial markets is not going to be any help because the problems do not result from the lack of funds, but from the inability to use the funds properly. In other words, the role of the IMF in dealing with the problem of adjustment of countries to the second phase of globalization through high capital mobility and expanding international financial markets needs to be tackled differently from problems of the first phase of globalization. As seen above, the principle requirement then is increasing the IMF's financial support.

Another way of looking at the market failure problem of financial markets is to consider what Jeffrey Sachs describes as problems of multiple equilibria and problems of collective action or coordination. Multiple equilibria in financial markets result from the dependence of the value of financial assets on market expectations while market expectations themselves depend upon the value of those assets. This is endemic in the nature of the assets that are traded in financial markets where current payments are made in exchange of the promises of future payments and where the value of those assets depends upon the perceived values of those promises. If the market expectations about the fulfillment of those promises change, the value of those assets will also change. Similarly, if the current value of the assets changes, market expectations about the future value of the assets also change. This circularity gives rise to the possibility of the economy landing into one or another equilibrium, in the sense that once it has landed into one, it would continue to remain in it. There is nothing in market behaviour that can move the economy from one equilibrium to another, no matter how desirable or undesirable the equilibrium position is.

The classic example of such a multiple equilibrium problem is the value of bank deposits that are supposed to be converted into cash according to their face value on demand. But since it is the job of banks to use these deposits to lend to borrowers at different maturities, these deposits can maintain their face value only if a small proportion of these deposits are demanded for encashment at any time, and if banks are not required to call back their loans to meet that demand. But if for some reasons depositors fear that banks will not be able to meet their commitments – either because they have made bad investments or because the overall conditions of the economy have deteriorated – it is quite rational for a depositor who expects the total value of the bank's assets to deteriorate to cash in his deposits before others. But if all or most depositors try to encash their deposits, the banks will have to recall their loans, lose the value of their assets and fail to meet their liabilities, leading to the depositors losing the value of their deposits. Note that even if the banks had made some bad investments, if all depositors were not rushing to withdraw their deposits, the banks should be able to meet the claims of the few

depositors who might withdraw and adjust their investments to recover their position in time. The crisis is caused by the combined behavior of individual depositors expecting a fall in the value of the assets of the bank and therefore trying to be the first to redeem their deposits before others who were also expected to behave in the same way. The market expectation of a fall in the value of assets would actually lead to the fall in their value.

It may also be noted that an improvement in the banks investment policies or operational efficiency would not be able to prevent the crisis if market expectations did not change and each depositor continued to believe that other depositors expecting a fall in the market value of the banks' assets would withdraw their deposits. The only way to change the market expectation would be if the market expectations were not fulfilled – if the depositors saw that in spite of withdrawing their deposits, the value of the banks' assets did not fall, and that the banks were able to meet their commitments. This would happen if the banks had recourse to some lender of last resort – a central bank from which they could borrow to meet the demand for liquidity of the banks' depositors without recalling their own loans and impairing their values. There would then be a turn-around and the depositors would regain their confidence in the banks, expecting an improvement in the value of their assets. They would bring back their deposits, hold a larger portion of them as fixed deposits of longer maturities, facilitating the banks to lend to more long-term borrowers. All this would actually improve the value of their assets. If the bank's investment policy and efficiency improved, the turn-around would come sooner, but the basic cause of the market failure would have to be removed and the market expectations would have to be improved, in order to resolve the crisis.

Bank runs caused by panicked expectations of bank failures had been a periodic feature of the financial system of capitalist industrial countries throughout the 19th and 20th centuries. Kindleberger, who chronicled the history of such financial crisis or panics, described them as market failures caused by the irrational behaviour of market agents or manias. He also traced the evolution of central banks functioning as lenders of last resort in the industrial countries. Walter Bagehot in 1873 enunciated the role that the Central Bank could play by freely lending to banks facing runs, providing them with sufficient liquidity to meet the depositors' demands. The depositors would then regain confidence that their deposits would be honoured at full value without running to the banks, which would break the expectations of panic. Accordingly, central banking institutions emerged in different countries, playing the role of lenders of last resort, helped by their roles as issuers of notes and as conductors of bank supervision. In the United Kingdom, the Bank of England was a private bank that developed into a state institution performing the functions of a Central bank. In the U.S. the Federal Reserve System was established in 1913 to play the role of a lender of last resort and of a central bank issuing notes.

Since the creation of the IMF at the Bretton Woods Conference, the international community has debated on whether the IMF would be assigned the role of a central bank of the central banks of different countries, with the power to supervise the functioning of the national central banks and their national monetary policies, as well as to issue notes as international lender of last resort. The IMF was given the power of supervising the

monetary policies of the governments and the central banks that came to the Fund for financial assistance. The IMF was also allowed to issue SDRs, which are like legal tenders, but are acceptable only by central banks, and which are created not automatically by the Fund's lending but only by an accord of the member governments. The IMF was also a sort of lender of last resort to central banks or national governments in the sense that the central banks could borrow from the IMF to meet their payment needs, but there were strict limits to their total borrowing related to their quotas and subject to time-consuming negotiations and conditionalities. The IMF lending was really meant to help countries to tide over balance of payments problems that could be resolved through changes in policies. It was not meant to help countries withstand the pressures of panics or manias, which were to be resolved not so much by policy changes as by the supply of timely liquidity to resist deteriorating market expectations.

But as countries were exposed to the phenomenal growth of capital mobility in the 1990s, and more and more countries became vulnerable to panics and capital flight abroad due to a collapse of market expectations, there was an increasing clamor to give the IMF the formal role of a lender of last resort. There are several forms in which financial panics could manifest themselves in international markets, due to a collapse in market expectations. In each case, an international lender of last resort could help countries withstand the reversal of market expectations and overcome the panic and impending financial crisis.

Whether the IMF should play that role would have to be decided after carefully considering all the implications. For example, there may be a case of general creditor panic among the international banks when a sovereign government or the financial institutions of a developing country borrowed substantial funds in the short term. Under normal circumstances, with favorable market expectations and projections of growth and profitability in a stable policy framework, the short term loans would be rolled over or new loans would be made to complete the long-term investment programme. But if for some reasons the creditors lose confidence in the country's ability to pay back the loans, or to convert the domestic currency pay offs into foreign exchange or the investment programmes taken up would not be completed, they may not agree to roll over the loans, or if they do, they may insist on a sharp rise in the interest rates at which many of the investment projects already undertaken and only partially completed, may become unviable. If such investments fail, the country's ability to pay back the loans already undertaken gets impaired, and the new loans, if approved would require very high rates of return, not only to pay for themselves but also to service the past debt. If this does not appear to be feasible, it would be rational for individual creditors to withdraw before others do, and if all creditors follow their individually rational course of action the investment programmes would be disrupted, the creditors will lose their money, and the value of their assets will be grossly impaired.

There are two aspects of the problem that should be clearly distinguished. If there are policy failures leading to the impairment of investment projects already initiated or the transferability of the pay off becomes uncertain, they have to be tackled by improving policies. This would not require any lender of last resort, although international

institutions like the IMF or the World Bank may have to provide financial assistance to the countries to implement the policy reform in the same manner as during the first phase of globalization. However, the problems may be caused mainly by market expectations when each creditor expects that the other creditors would withdraw because of a loss of confidence and therefore decides to withdrew himself before others do and thereby force the investment projects to be disrupted mid course. On such an occasion, a lender of last resort might be of help, allowing the investment projects to be completed and yielding enough returns to pay back both the old and the new loans. This would then break the market expectations and revive the creditors' confidence, a process that would be helped if the country also corrected the policy failures, if any during that period.

The Mexican crisis of December 1994 was an example of such creditor panic, when Mexico was unable to rollover its short-term public debts. With \$29 billion in dollar-denominated debts (tesobonos) falling due in 1995, the Mexican central banks had reserves of only \$6 billion and the December devaluation set off a creditor panic when each potential tesobono purchaser feared that if other creditors refused to roll over their debts, Mexico would face a default. The interest rates increased sharply to reflect the default risk, and with little roll over of the debts, Mexico was pushed into a crisis. This was met by the IMF with an unprecedented scale of support to Mexico, together with support from the United States as a loan package as if from a lender of last resort. That loan package succeeded in keeping Mexico out of default and in dissipating the creditor panic. ²³

Another possible example of the role of a lender of last resort is when there is a panic regarding the value of a country's currency. If for some reason residents lose confidence in the sustainability of the value of the domestic currency, they would reduce the holding of the currency and shift to other assets or to other currencies. If the fiscal deficit of a country is financed by seigniorage or increasing the supply of high-powered money that people are willing to hold and if there is no reduction in that fiscal deficit, it will be necessary to increase the supply of money, if the residents demand for holding money falls to finance the same deficit. As a result the value of the currency will fall further, reducing further the demand for holding that currency.

Again if the loss of confidence in the value of the currency is due to policy failures, such as uncontrolled fiscal deficits or an unviable exchange rate policy, any programme for regaining the confidence must change these policies. But if the panic leading to the flight from the currency is caused by market expectation feeding on itself – a shift from domestic currency to foreign currency in the expectation of exchange rate depreciation and fulfilling that expectation or in ensuring inflation leading to a further fall in the value of the currency and further depreciation – it could be met effectively by a lender of last resort. By increasing the supply of foreign exchange, the market expectations of exchange rate depreciation can be reversed, provided the policy failures, if any, are corrected.

Thus, if the IMF can effectively play the role of the lender of last resort, it can be very useful in solving the problems of market failure, which are caused by market exceptions

and multiple equilibria. But this function of the IMF should be clearly differentiated from the IMF's role as provider of supporting finance for adjustment programmes and policy reforms of countries going through the first phase of globalization and of opening up to world trade and current payments.

There are two major requirements for the Fund to play this role effectively. First, a lender of last resort must be able to provide assistance at the first sign of crisis so that the adverse exceptions do not get a chance to be self-fulfilling. This would call for a prior clearance of the programmes or some arrangements that the countries hoping to receive such assistance would be under a policy discipline before any crisis actually hits them. In the language of the IMF, these countries should be under a shadow programme, fulfilling all the performance criteria regarding appropriate policies, but without drawing any financial support from the IMF, as capital markets would be expected to provide all the finance that is required. This would also ensure that the crisis if it hits the country would be essentially the result of market failures of adverse expectations and not very much due to policy failures or at least not due to policy mistakes that could be detected ex ante.

Secondly, the finance provided by the lender of last resort must be adequate to fight the adverse market expectations. At least the line of credit that would seem to be available to the country must be large enough to make the speculators realize that their attack on the country might be too costly for themselves. Actual drawal of the funds might turn out not to be large, if the market expectations are reversed early. But the provision of funds that could be potentially drawn upon must be sufficient to break the chain of expectations.

The scale of finance necessary to effectively play such a role of lender of last resort may actually be very large. Since the countries involved would be relatively developed, receiving substantial capital inflows, a panic that reverses such flows into capital flight might need be very substantial fund to withstand the speculative pressures and revive the creditors and investors' confidence. So, if two or three countries need help at about the same time – which would often be the case because any financial crisis that hits one country has a tendency to hit several countries at a time – then most of the resources of the Fund would be exhausted, leaving very little to assist other countries facing the balance of payments problem of the first phase of globalization.

In re-engineering the international financial system, it would be necessary to address this basic question – what are the priorities in using the Fund's resources. These resources are mainly derived from the Fund's quotas, which are taxpayers' money contributed by the different governments according to some agreed criteria based on the financial strength of the different countries. Unlike the World Bank, the IMF normally does not borrow money from the capital market. The interests that have to be paid for the use of such resources are related to the average interests that treasuries of the different governments have to pay on their borrowings, plus some transaction costs, and more often than not, such interest rates are much cheaper than the market rates. Although every effort should be made to expand these resources, it would still be necessary to use these resources prudently according to priorities.

It has also been seen above that the main shortcoming of the Bretton Woods system of adjustment of countries to globalization is that their programmes remain underfunded. For most developing countries the financing of these programmes on market terms may be too costly to be used effectively. Besides, most developing countries are still in their first phase of globalization, requiring substantial finance for carrying out their adjustment programmes from the IMF, supplemented by long-term development finance from the World Bank and other development agencies. The recent increases in the quotas of the Fund would still be insufficient to meet the requirements of funding such programmes. A diversion of a substantial part of these quotas to perform the task of the lender of last resort to few developing countries that have moved to the stage of adjusting to increased capital flows would leave the programmes of most of the countries under-funded, therefore under-implemented.

But if quota resources are not to be used in its functioning as a lender of last resort, how would the IMF, if it has to perform the role, secure the necessary finance that is quick disbursing and adequate? A possible answer is to replicate the existing schemes of the General Agreement to Borrow (GAB), which can be invoked to meet a "systemic" crisis. These are schemes of a prior agreement among the Central Banks and the governments, to open a line of credit when the IMF has to assist countries coming out of a systemic crisis. It is possible to have different variations of the schemes in principle, and the agreement may extend beyond the government and the central banks to major commercial banks with substantial stakes in the revival of the affected countries and resolution of their crisis. Even for normal adjustment finance of these countries, the Fund may use its limited quota resources to leverage funds from the capital market, rather than provide all the finance from its own resources. That would allow the Fund to leave most of its quotas for funding the adjustment programmes of the overwhelming bulk of the countries, which have very little access to the international capital market.

There is another form of market failure that is related to collective and coordinated action, which may require a relatively small amount of the IMF finance to catalyze other sources of funds, but needs the IMF to play a more effective role of coordinator and promoter of collective action. The classic example of such a case is the debt adjustment problem of major debtors, who for some reason or other default in their debt servicing and who would face a major crisis if creditors chose to withdraw their debts even at a loss, and were not willing to provide new loans. What would often be necessary is some debt forgiveness (when individual creditors may like to free-ride, but collectively may be willing to share in the forgiveness), some sharing of the burden by all creditors, adopting procedures of the bankruptcy courts in many countries and ascribing "seniority" to creditors providing new loans so that they can be serviced first before others, and thereby ensuring new flows of credit that are essential to revive the economy. This would require the role of a coordinator among the creditors who can bring about such collective action, which the IMF can perform effectively if authorized internationally. The IMF would not require much finance for this purpose, but would need the authority to address the problem effectively.

Conclusion

To sum up, the IMF still has to play a major role in managing international finance in a global economy. It has to distinguish its supportive role to countries adjusting their economies and their policies to the opening up of trade and current accounts from its role of support to countries which are open to receiving substantial capital flows from international capital markets. The Fund is seriously under-funded, requiring a substantial increase in quotas. It needs to be supplemented by other development banks. But it also requires the authority to redesign adjustment programmes, taking fully into account all the failures of the market. But more importantly, the Fund can play all the roles of a market leader and coordinator, not only of policies designed carefully to meet the specific requirements of globalizing developing countries, but also of raising funds to assist their economies in adjustment.

References

Bagehot, Walter (1873,1962): Lambard Street: A Description of the Money Market, Richard Irvin Inc.

de Vries, Margaret (1985): The International Monetary Fund, 1972-78, IMF Washington DC.

de Vries, Margaret (1987): Balance of Payments Adjustment, 1945-1986 the IMF Experience, IMF Washington DC.

Dixit A and R. Pindyk (1994): *Investment Under Uncertainty*, Princeton Greenwald, B and J.E Stiglitz (1986): *Externalities in Economics with imperfect information and incomplete markets*; Quarterly Journal of Economics, May 1986. Horsefield, J. Keith(1969): *The International Monetary Fund*, 1945-65, IMF, Washington DC.

IMF (1987): *Growth Oriented Adjustment*, proceedings of a Seminar, 1987. James, Harold (1996): *International Monetary Cooperation since Bretton Woods*; IMF, Washington DC.

Kindleberger C.P. (1996): *Manias, Panics and Crashes*; Third Edition, John Wiley. Robichek E.W. (1986): The IMF's Conditionality Reexamined in Adjustment Conditionality and International Finance; ed. by J. Muns) IMF, Washington DC. Rodrik, Dani (1990): *How should structural adjustment programmes be designed;* World Development No. 7, 1990.

Sachs, J.(1995): *Do we need an International Lender of Last Resort*; F.D. Graham Lecture: Princeton

Sachs J. and A. Warner(1995): *Economic Reform and the Process of Global Integration*; Brooking Papers on Economic Activity No. 1, 1995.

Sachs J, A Tornell and A Velasco(1995): *Lessons from Mexico*; Memo, Harvard, MA Sengupta, Arjun: *IMF and the LDCs*; Macmillan: (forthcoming).

Sengupta, Arjun (1995): *The Financial Sector and Economic Reform in India;* Sir Purushottamdas Thakurdas Memorial Lecture, 1994, Indian Institute of Bankers, reprinted in Economic and Political Weekly, Feb., 1995.

Stiglitz J.E. and A. Weiss (1981): *Credit Rating in Markets with imperfect information*; American Economic Review, 1981(3)

Footnotes:

- 1. The volume of world trade was growing at a much higher rate than world output, during this period and continued to do so in the following decades. The exports from developing countries were growing much faster than the volume of world trade, which contributed very largely to the reduction if not renewal of their export pessimism.
- 2. Numbers for unit values and terms of trade, 1950's, 1960's, 1970's & 1980's.
- 3. Capital flows, aid, loans and direct investment figures.
- 4. See J. Keith Horsefield (1969): The International Monetary Fund Volume:III (Documents) and also James H. (1994): International Monetary Cooperation since Bretton Woods.
- 5. Marshall Plan and its effect have been well analyzed by IMF, Robert Solomon (1982): The International Monetary System 1945-81, Hooper and Row.
- 6. Sengupta, Arjun: IMF and the LDCs, Macmillan (forthcoming) discusses the evolution of the Fund and its relation with the LDCs.
- 7. History of the Fund has been well documented, first in the three volumes edited by Horsefield (1969) then by Margaret de Vries (1985).
- 8. Margaret de Vries (1987): Balance of Payments Adjustments: The IMF Experiences IMF (Chapter I) gives the views of Edward Berustein about the rationale of the Bretton Woods approach to balance of payments adjustment. Bernstein was the first Research Director of the IMF.
- 9. Keynes, who was one of the architects of the IMF, pleaded for unconditional balance of payments support to the adjusting countries, only at a rising interest cost related to the amount of finance. He had to give up that position in the face of opposition from other creditors, and all IMF support beyond the first tranche of the quotas became conditional much later in the 1960s and 1970s, when the IMF adopted compensatory financing facility for developing countries having reversible export shortfalls, mainly of primary products, due to exogenous factors which could not be affected by policy change. The IMF accepted the case for unconditional financing to cover the shortfall on grounds that no policy adjustment was necessary, and the country only needed finance and no adjustment.
- 10. Polak J.J. (1957): "Monetary Analysis of Income Formation and Payments Problems" IMF Staff Papers Vol 6, November 1957.
- 11. See Margaret de Vries (1987) for discussion of the Fund's experience in dealing with the adjustment policies in the developing countries in 1960s and 1970s.
- 12. "Growth Oriented Adjustment", IMF 1987.
- 13. J. Polak (1957) and Robichek, E.W.: "The IMF's Conditionality Reexamined" in Adjustment Conditionality and International Financing ed. by J. Muns, IMF. Robichek was the author of an unpublished mimeographed paper, spelling out the steps of the financial programming of the IMF, following Polak's model, which formed the basis of most Fund exercise for about 30 years.
- 14. Rodrik, Dani (1990).
- 15. Dixit Pindyk (1940).
- 16. See Sachs and Warner, 1995, which describes how many developing countries, having access to foreign borrowing with the return to high capital mobility, first in the wake of emergence of oil surplus in the late 1970s, then towards the end of 1980s and early 1990s, borrowed heavily in the world markets without adjusting their economies first to the open trading and payments system. Within 10 years of surges in international lending in 1970s dozens of developing countries defaulted in servicing their international loans and in the 1980s and early 1990s, more than 50 countries were in arrears and ready restructuring of their debts. Excess borrowing resulted in high inflation in several countries leading to higher inflation, such as in Argentina, Bolivia, Peru, Poland, Russia, Serbia and Yugoslavia.
- 17. Greenwald and Stiglitz (1986).
- 18. Stiglitz and Weiss (1981).
- 19. Sengupta, Arjun (1996).
- 20. Jeffery Sachs (1995).
- 21. Kindleberger (1996).
- 22. Walter Bagehot (1873).
- 23. Sachs, Tornell and Velareo (1995).