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Intervention versus Regulation:
The Role of the IMF in Crisis Prevention and Management

by

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This paper addresses the question of the most effective role for the IMF in an increasingly volatile global capital market, taking into account the interest of the majority of its members. The experience of the Bretton Woods system and its successor "non-system" is reviewed, and resultant institutional structure contrasted with implicit need for public action to resolve the systemic problems of the global capital market. An interventionist approach explicitly proposed by the Fund, designed to discipline borrowers, is contrasted with an alternative approach implicit in the rules proposed by the Bank of International Settlements, and designed to regulate lenders - as is the practice of financial authorities at the national level. Finally, the new powers necessary to create an orderly market for international capital are contrasted with the reality of current international institutional arrangements.

[JEL classifications: F330, F420, G180]

1. *Introduction*¹

With the Cold War at an end, the debt crisis apparently resolved and widespread agreement on economic policy, it seemed that at the close of the 1980s the developing countries would be the main beneficiaries of a dynamic world economy in the 1990s. The extension of free trade throughout the world and the integration of capital markets implied a truly 'global economy' of the kind anticipated by Keynes and his colleagues at Bretton Woods nearly fifty years before, where poor countries with sound economic policies could now expect rapid export growth and massive foreign investment inflows to establish efficient production structures and eliminate poverty. However, during the 1990s this optimism has been rapidly eroded as the difficult negotiation leading to the establishment of the World Trade Organization and the chronic instability in global financial markets has revealed both the limitations of international regulatory institutions and the risks to developing countries of rapid integration to global markets.

The increasing volatility of exchange rates has led to the danger of economic disruption, thereby reducing the volume of international trade and productive investment, while major exchange rate misalignments (particularly between the dollar, mark and yen) can lead to misallocation of resources and major adjustment problem, both of which make the developing countries particularly vulnerable to inconsistencies in which private capital markets make funds available to them (Mussa, 1994).

The financial and macroeconomic stability of these non-industrial economies is vital not only to the three-quarters of humanity that live there but also to the world economy as a whole - for although they still only account for 29% of world trade this is growing rapidly and they already generate 45% of world production and adsorb 52% of fixed investment (see table 1).

This paper addresses the problem of the most effective role for the IMF under these circumstances, taking as the central criterion the need to provide adequate institutional support for an orderly global capital market that can promote trade and investment worldwide. As the first of the Fund's Articles of Agreement states, its aim is:

"to facilitate the expansion of balanced growth in international trade, and to contribute thereby to the promotion and maintenance of high levels of employment

¹ I would like to thank Andrew Hurrell, Frances Stewart, Laurence Whitehead, Ngaire Woods and an anonymous UNCTAD referee for helpful comments on an earlier draft.

and real income and to the development of the productive resources of all members as primary objectives of economic policy."

The second section of this paper briefly reviews the experience of the Bretton Woods System and its de facto successor practice; while the third sets out the systemic problems caused by the rapid expansion of global capital markets. The fourth and fifth sections look at global financial management from two perspectives: the interventionist approach to payments crises and in defence of exchange rates associated with the IMF; and the establishment of international rules for global financial markets espoused by the BIS. The concluding section derives the policy implications of the analysis for the powers and procedures of the IMF and its place within the emerging system of global financial management and regulation.

[insert table 1 here]

2. The Bretton System Woods in principle and practice

2.1 The original design

The wartime US-UK negotiations which led up to the Bretton Woods conference in July 1944 had started as early as 1941, and were conducted by technical experts in both countries relatively free of normal domestic pressures. The major concern of the negotiators was to prevent a return to the inter-war experience of post-bellum recession and the instability in world trade and financial flows, and thus the creation of adequate mechanisms to ensure adequate provision of liquidity and a stable payments system - in other words, global central banking functions - were central to their proposals (Tew, 1988). Keynes's proposal for an international clearing union between economies (through their central banks) was aimed at overcoming this problem and permitting autonomous domestic macroeconomic policy. In the absence of some automatic mechanism such as a clearing union or international policy coordination to offset the deflationary tendency of asymmetric adjustment, conventional Keynesian policy to ensure full employment clearly could not be viable in one country (Kregel, 1994).

However, in practice the problem of the destabilizing impact on global demand of asymmetric adjustments to disequilibrium by creditor and debtor nations under a fixed

exchange rate system, was never directly faced - mainly because of the position of the US under and after the Bretton Woods system. Indeed, some critics would suggest that during the postwar period it has fallen to the IMF to ensure that any country that attempts an independent expenditure policy will be forced to reverse it in the interests of stability.

The institutional design at Bretton Woods was clearly designed to help non-industrial countries - although it should be borne in mind that these were seen as what are now termed middle-income countries (eg Central and Southern Europe, the 'Dominions' and Latin America) rather than the then colonies which now constitute LDCs proper, with the possible exception of India. Although Keynes's original plans for a global central bank, an international investment fund and a commodity stabilization system were not implemented in practice; the central intent was clearly to stabilize the world economy and thus, by improving expectations, raise investment and employment - a need which is even more urgent today although the imagination and determination of world economic leadership at the end of the Cold War seem to be rather less than they were in 1944.

2.2 A limited life

Technically, the Bretton Woods System (BWS) was in place from 1945 until 1973, but in fact its period of operation was much shorter. The failure of US to force the UK to accept Bretton Woods rules as a condition for post-war reconstruction loan for Britain was compounded by the bilateral administration of Marshall Aid, the reconstruction of European trade and payments on a regional basis, and the replacement of the ITO by the GATT. Only in 1958, when the European currencies became convertible, did the Bretton Woods system become fully operational - although by then the deterioration of the US gold position had already revealed its inherent weakness.

During this early period, the role of the IMF was mainly confined to technical support for re-establishment of payments systems. The US, as the world's major creditor nation, coincidentally compensated deficits in current account balances through foreign and military aid, and met Keynes's original requirement for expansive surplus reductions rather than recessive deficit reductions. After 1958, a de facto gold-dollar standard emerged as the US opposed an increase in gold prices, but it lasted for little more than a decade as it was inherently unstable because continued US deficits would undermine dollar convertibility while their elimination would cause a global liquidity crisis which the

modest issuance of Special Drawing Rights (SDRs) would be unable to resolve. 1968 saw the effective end of the gold-dollar standard as the private price was floated; and in 1971 under the Smithsonian Agreement the US succeeded in having other countries revalue their currencies against the dollar, while maintaining the dollar's gold inconvertibility. The Deutschmark was floated in 1973, permanently marking the end of the dollar standard and a shift towards a system of floating exchange rates and liberalized capital flows that persists to this day. The US had ceased to become the world's central banker at the same time as it lost hegemonic security leadership (Walter 1993).

The need for a more rational system akin to that envisaged by Keynes at Bretton Woods was understood quite early on (Triffin, 1960), and became the basis for the subsequent creation of Special Drawing Rights (SDRs) to be administered by the IMF as a source of liquidity. However, the two major crises faced by the international financial system in the 1970s and 1980s - the recycling of the petrodollar surpluses and the sovereign debt problem - were of a quite different nature from those posed by post-War reconstruction. Meanwhile the provision of trade finance became the task of rapidly expanding private capital markets rather than central bankers as such. Coincidentally, the first OPEC oil shock came in 1973 just after the Bretton Woods System broke down, generating a severe deflationary shock to the world economy and the first major post-war recession, which the newly created SDRs did little to resolve.

The massive recycling of petrodollars during the 1970s took place largely through the commercial banking system: OPEC trade surpluses were initially matched by OECD deficits, but the lack of local investment opportunities moved funds into US and European banks, which then on-lent to their own governments and subsequently to a number of middle income industrializing countries to finance their trade gaps and public investment in the form of sovereign debt. The OECD countries managed to find new energy sources, economise on energy use, and adjust their own export prices; although the non-industrial countries adjusted less efficiently to the oil shock and tended to accumulate debt instead. The IMF did not play a central role in this recycling process, which did not take place through the central banks either, as had been anticipated under the Bretton Woods System. The IMF (and the World Bank) did manage to channel some funds towards the poorer countries seriously affected by the new oil price regime, and although this had considerable welfare benefits, it did not significantly affect world financial markets. More

seriously, neither the Fund nor the BIS (nor the respective national authorities) appear to have attempted to exercise *ex ante* control over the larger borrowing governments nor, as importantly, over the lending banks to prevent the accumulation of bad debt. Indeed, the petrodollar recycling was regarded as a considerable success at the time - and the problem of world financial management was said to have moved from one of avoiding liquidity shortage to one of coping with excess liquidity.

2.3 Two decades of the "non-system"

The subsequent 'debt crisis' arose from overlending not only to oil importers such as Brazil but also to exporters such as Mexico. Commercial bank loan officers as well as borrowing governments appeared to believe that real commodity prices would stay high and real interest rates low; but the reversal of US monetary policy (with a continued fiscal deficit) and declining terms of trade for natural resource exporters made the resulting sovereign debt service unsustainable. The Fund had not managed to stop banks from overlending nor governments from over-borrowing. Capital markets were not capable of writing off deteriorating asset values; particularly since leading international banks feared the consequences of a write-off for their own capital structure and solvency. The restructuring of the debt of major borrowers at or close to default which might have caused a systemic crisis in world financial markets as insolvency was transmitted from one large institution to another (such as Mexico in 1982), became once again the responsibility of the US Treasury as lender of last resort.

Although the LDC debt crisis may no longer pose a threat to world banking, it is far from over as it has neither been repaid or written off - although most middle-income countries have enjoyed sufficient export growth to reduce the debt service burden, while the poorer countries have benefited from some debt cancellation by donor governments. The Fund's key role in this world financial crisis was not in fact to overcome capital market failure: rather it focused on ensuring the fiscal and foreign exchange resources needed to maintain (restructured) payments obligations are generated by reducing domestic absorption. Debt restructuring through the Paris and London "clubs" was not chaired by the Fund. The World Bank became responsible for the longer-term structural adjustment programmes designed to restore exports and sustained growth through domestic market reform - in other words, the restoration of solvency. None the less, these stabilization

policies were quite effective in their own terms; although the notion that acceptance of IMF conditionality would restore governments' creditworthiness with commercial banks was not borne out by events as these effectively abandoned the LDC sovereign loan market.

Indeed, just as at the end of the 1980s a number of OECD countries were expressing doubt as to the value of IMF to international economic management, the end of the Cold War in 1989 gave a new role to the Fund as the administrator of the radical liberalization of the Eastern European economies - a role it could take on because it was the only institution with the staff and the model to undertake the task after its experience in Latin America. However, the relative success of this transitional role in Eastern Europe (which has now been replaced by the longer-term tasks of industrial modernization) had little to do with the regulation of global capital markets. Also in the late 1980s, the process of privatization and financial liberalization attracted a new type of foreign investor - institutional fund managers - to 'emerging markets'. These new capital flows of the 1990s were not regulated by the IMF either, which was unable to overcome the asymmetric information and agency problems which inevitably arose and culminated in another Mexican collapse in 1994-5. Once again, the US Treasury was forced to intervene in order to bail out US investors; a key element of the rescue operation being the largest loan in IMF history - which was arranged in record time without rigorous conditionality.

2.4 The pressure for reform

Although it is now clear that floating rates have not been quite the disaster that the Bretton Woods fathers expected on the basis of inter-War experience, the macroeconomic policy autonomy expected by its proponents did not materialise either (Obstfeld, 1995) - except presumably in the case of the G3:

"The authorities of the three largest industrial economies appear to have reached the judgement that, in the light of their limited trade linkages with each other and relatively asymmetric underlying disturbances, the benefits provided by stabilizing exchange rates between these three currencies are outweighed by the potential losses that would result from less flexible domestic policies." (Mussa, 1994: 22)

The interests of the rest of the world are, of course, another matter.

After some twenty years of experience of floating rates, continued instability in

foreign exchange markets - particularly the strains within the EMS and the decline of the dollar during the 1990s - has thus logically led to renewed interest in the possible role of the IMF in preventing and managing crises in international financial markets. As the capacity (and willingness) of the US authorities to continue as the world's central banker has declined, and the German and Japanese authorities have apparently been unable to share the burden effectively, this is perhaps not surprising. Indeed, the Bretton Woods Commission (1994) is quite clear that the degree of volatility under floating exchange rates since 1971 has been associated with lower growth rates, and strongly recommends a return to an administered (ie flexible) fixed-rate system coordinated by the IMF in representation of the G7.

3. The present problem: orderly capital markets in a global economy

3.1 Interest rates and market clearing

The experience of steady growth and price stability under the Bretton Woods System is often cited in support of a return to a managed fixed-rate system similar to that of 1958-71 (BWC, 1994), or even to the gold standard system operated by leading central banks between 1873 and 1914 (McKinnon, 1988). Detailed econometric research broadly supports the former view (Eichengreen, 1994), although the positive effects are essentially confined to the 1960s and there a clear limitations both to the idea that periods of fixed exchange rates are necessarily associated with output stability and to the notion that the international transmission of business cycles can be avoided by flexible rates.

What is more, the successive cases of major financial distress experienced in the past two decades (which include the persistence of US deficits, the global stock market collapses of 1987 and 1989, property market slumps in the UK and Japan after over-lending, frequent secondary banking failures and major sovereign debt insolvencies in non-OECD countries) have been closely related to exchange rate instability but not primarily caused by it. Rather, the integration of capital markets, the securitization of persistent fiscal deficits, the dissolution of financial boundaries between institutions and countries, and the emergence of new and heterogenous financial instruments have all created new sources of instability in capital markets themselves.

In this context, exchange rates are as much the result of capital movements - in

other words, 'exchange rates as asset prices' (Dornbusch, 1980) - as they are of trade flows. Current account deficits and surpluses balances are increasingly seen as the result of domestic imbalances between the savings and investment patterns of public and private sectors, and less related to trade flows as such (IMF, 1991). Indeed, in many cases trade flows react to capital account movements rather than the other way around - as the current dollar/yen problems shows.

Further, interest rates do not necessarily clear these disequilibria either because rates are in effect related to the desire to hold the stock of bonds, while adjustment takes the form of changes in asset balances rather than in price as such (Goldstein, 1993). In principle, of course, the level of investment in an open economy need not be constrained by savings (nor would savings have to come into line with investment) because the resultant current account balance could be financed by matching international capital flows. Under the Bretton Woods system of fixed exchange rates such flows were relatively small, so that savings and investment moved together in most large economies. However, from the late 1970s onwards, capital became much more mobile and the US itself suddenly shifted from a net surplus to a net deficit position - and its fiscal deficit was essentially financed by Japanese householders until the early 1990s.

Interest rates within the OECD became broadly equalized for similar dollar bonds in the 1980s, while exchange rates adjusted in response to domestic interest rate differentials which in turn allowed for a modest risk margin (Turner, 1991). The flexible exchange rates had originally been expected to permit some autonomy to domestic demand management but in practice the bond markets have come to enforce a uniform monetary policy irrespective of the divergent cyclical position of the national economies. The close correlation between domestic saving and investment in the industrial economies, which cannot simply be explained by a spurious correlation (eg. both being functions of GDP) or regulatory restrictions. It is more likely that the 'home bias' in the acquisition of financial assets arises from factors such as currency risk, agency problems, and asymmetric information - and is endemic to market structures themselves (IMF, 1991).

In other words, interest rates do not act so as to clear the international capital market and bring savings and investment into line on a global scale, while exchange rates do not appear to affect trade flows sufficiently to adjust current account deficits rapidly enough to avoid asset adjustment. In effect, a systemic rationing system exists based on

market perceptions of 'sovereign risk', expressed as an assessment of the 'quality' of that country's bonds and thus its longer-term growth potential and fiscal solvency; this perception of risk is based on subjective expectations and strongly affected by market sentiment.

3.2 The standard model of international capital markets

Standard analytical models of international capital markets between industrial countries still rely on an implicit model of independently and identically distributed random shocks and a homogeneous population of consumer-investors, differing at most by their risk-aversions and endowments - and thus cannot readily explain the origins of global financial instability, the rationing out of risky sovereign borrowers and the systemic problems of international fiscal coordination, and speculative currency crises (van der Ploeg, 1994). More seriously, the application of industrial organization theory to the understanding of foreign investment as the result of the decisions of multinational corporations (eg. Dunning, 1992) has yet to be applied to banks and mutual funds.

None the less, the leading international macroeconomic policy models of an academic nature (McKibbin & Sachs, 1991) and the Multimod-II used by the Fund itself (Masson, 1990) are still demand-driven: the output of the industrial countries is assumed to rise until some sort of capacity constraint or an employment/inflation corner is reached. Savings are essentially the inverse of the household consumption function, while investment behaviour is a simple accelerator model. Interest rates derived from monetary policy stances play a key role in determining exchange rates, and have income effects through the debt service burden, but the basic macroeconomic transmission mechanism from one economy to another is thus trade, with capital flows adjusting, which generates a potential 'locomotive effect' from the G7 (or even G3) economies to the rest of the global economy. By extension, effective coordination between economies (eg in policy stances) can increase the aggregate level of world GDP reached at equilibrium. This view still influences most views of the benefits of global macroeconomic coordination.

Moreover, the standard paradigm for the structural adjustment of developing economies still identifies the world market as an efficient allocator of global resources. Openness as a development strategy is a self-evident proposition where any problems are ex hypothesi due to misguided domestic policy. It

"constitutes perhaps the most important opportunity for raising the welfare of both developing and industrial countries in the long term. ... Globalization comes with liberalization, deregulation, and more mobile and potentially volatile cross-border flows, which means that sound macroeconomic management commands an increasingly high premium. Penalties for policy errors rise. Globalization thus requires closer monitoring and quicker policy responses at the country, regional and global levels. ... The process of integration will affect countries unevenly and could increase international disparities. ... The global outlook is in general bright, but masks wide differences across regions and countries - for many, global optimism coexists with local pessimism. Accelerating outward-oriented growth in the poorest countries will be a special challenge." (World Bank, 1995: v)

However, despite this optimism and some progress towards in the establishment of the World Trade Organization and the evident success of some newly-industrialized countries in taking advantage of this globalization, it is widely agreed that in practice: (i) not all poor countries have been able to take advantage of trade liberalization, particularly those dependent on primary commodities or without competitive industrial capacity; and (ii) international financial instability has slowed growth in the industrial economies and excluded developing countries from global capital markets.

3.3 Segmented markets in practice

In fact, these capital flows between the industrial economies and the rest of the world are clearly segmented between portfolio acquisition, foreign direct investment (FDI), bank credits and official development assistance (World Bank, 1994), each of which form of asset acquisition appears to be driven by different institutional behaviour but where country 'quality' appears to be a determinant factor. This is true even in the case of FDI when the investment and savings decisions are taken by the same agent, but where externalities prevent profitability from reflecting factor scarcity and infrastructure and skills are central to the choice of location (UNCTC, 1992).

There is also a clear segmentation between country groupings. The decline in bank credit flows from the IEs to the RoW since the debt crisis of the early 1980s, and the rise of portfolio flows in the early 1990s, has been confined to a small group of upper middle-income countries: both have been essentially concerned with public sector finance. FDI

flows have similarly been confined to relatively few NICs, and are largely financed by the firms concerned. Aid flows are focused on the poorest countries, and determined by non-economic factors.

In consequence, if investment rises autonomously in one country it is not necessarily possible to tap a savings surplus in a second country because of the portfolio preferences of asset holders in the second country (Brainard & Tobin, 1992). Indeed, the second country may not be able to implement expansionary policies either if its own asset holders respond negatively - as in the recent case of Japan. If this is true within the OECD it is a fortiori so between industrial economies and the rest of the world. However, recent theorization of imperfect international capital markets has yet to be explicitly adapted to the situation of non-industrial economies. Although some advance has been made on the interaction between new trade theories, capital flows and LDC growth on a global basis in neo-structuralist 'North-South' models (Vines & Muscatelli, 1989), capital flows are still treated as exogenous except for borrowing limits imposed by existing sovereign debt burdens.

These developing countries rely on capital flows to sustain investment (see table 2) and suffer disproportionately from international financial volatility in a number of ways, among which the most important are:

- i) exchange rate instability, high interest rates and low investment slow down growth in OECD countries, and thus export demand from the RoW;
- ii) high interest rates raise the cost of debt service and cause fiscal strain in LDCs, causing macroeconomic instability and reducing private investment;
- iii) global market uncertainty excludes many developing countries from access to private capital flows, and subjects others to destabilizing volatility in flows;
- iv) the inability of capital markets to work out debt burdens in response to insolvency imposes a long-term resource burden on poorer countries and further reduces their attractiveness to foreign investors;
- v) the more vulnerable LDCs become subject to policy conditionality that goes beyond ensuring that international obligations are met and raises questions of sovereignty.

[table 2 about here]

3.4 The implications for global central banking

The concern of the founding fathers of the IMF at Bretton Woods as to the consequences of volatile capital flows were not only conditioned by the immediate post-War circumstances but also by their fear of the consequences of a return to unfettered private capital movements which had caused such instability in the inter-War period (Kindelberger, 1988) is still relevant today even if their solution is not. The implicit assumption that capital flows would be channelled through central banks is no longer true, while the existence of integrated international capital markets also means that for instance, leading surplus governments are not necessarily in a position to implement expansionary policies even if they so desired. None the less, Keynes's own perception of uncertainty as a driving force in market sentiment, and the consequent need for institutional structures to reduce uncertainty and promote productive investment, seems more relevant than ever. Moreover, in his evidence to the Macmillan Commission over a decade before Bretton Woods, Keynes had already identified the problem caused by the divergence between the rate of interest required to attract foreign capital and cover the current account deficit on the one hand, and the rate required to support the recovery of full-employment investment (Kregel, 1994). This problem is not only still highly relevant to Latin America and Southern Europe: the hope that the UK itself could escape from this trap by leaving the ERM was swiftly proved illusory for the simple reason that the bond markets are the one part of the global capital market which is efficiently integrated.

In sum, the problems to be faced by a global financial regulator today are not only quite different from those contemplated at Bretton Woods in 1944, but also distinct from those faced by the IMF and the Bretton Woods system in the 1970s. These new global problems have two dimensions that characterize central banking in a closed economy: (a) the provision of liquidity as 'lender of last resort' to smooth temporary fluctuations in market sentiment; and (b) the establishment of an orderly financial market by prudential regulation of the financial intermediaries themselves. In effect, when there is a mismatch between asset demand and liability supply which the market cannot handle, the central bank must undertake 'public action' in the short run so as to provide the required assets (ie liquidity) and restructure liabilities, and in the longer run act so as to prevent this mismatch occurring - usually by regulating asset acquisition in a rationed credit market where demand exceeds supply of funds.

4. Global central banking I: lender of last resort

4.1 The IMF proposals for a short-term financing facility

The role of a potential global central bank as lender of last resort is reflected in the current proposal by the IMF to create a new "short term financing facility" (STFF) which could be disbursed very rapidly to counter swings in market sentiment and speculative pressures which do not reflect economic fundamentals. This would complement the Fund's existing facilities for countering perverse capital movements, particularly in two difficult situations involving critical discontinuities where support must be immediate if it is to be effective at all: (a) the defence of an exchange rate peg; and (b) illiquidity causing default risk. This role was seen by the Bretton Woods Commission as central to the Fund's future (BWC, 1994).

The Fund is the most plausible candidate for this role of providing 'backstop finance' on a regular basis. The G7 central banks (and those of the G3 in particular) have of course been responsible for the major rescue operations in post-War history, but they lack any institutional apparatus. Although in the case of the European Union the existing coordination mechanism based on the Bundesbank should evolve into the European Monetary Institute by the end of the century, this would not extend further afield in the foreseeable future. The Bank of International Settlements has in the past only provided bridging finance, and does not have any developing country participation or operating experience in stabilization programmes.

Although the IMF was originally conceived as a potential lender of last resort, this was foreseen as a current account problem, and Article VI specifically precluded lending to finance a capital outflow - which the same article implied should be handled by administrative controls. However, in practice Article VI is not applied and the Fund now argues against capital controls (although it does appear to support various sterilization measures) so that logically this preclusion should not prove a real obstacle. The need for open market operations, and thus capacity to significantly affect the market for G7 government bonds, would remain a problem.

4.2 Problems of scope and scale of the STFF

The coverage of such a scheme would presumably be limited to non-industrial countries,

and would depend on whether fixed exchange rates are felt to be a desirable policy. On the assumption that flexible parities remain the rule (if only in order to maintain a stable real exchange rate) then such intervention would mainly be justified in cases of indebted countries at the margin of the private capital market. Moreover, even this category could be reduced by arguing that last-resort lending should be restricted to cases where default would pose a systemic threat, spilling over into a withdrawal of funds from neighbouring or similar countries.

In particular, some such market intervention is clearly essential if a return to flexible rate bands is contemplated (Williamson & Miller, 1988) as the European ERM system has demonstrated. This could only be avoided if there were automatic mechanisms to force surplus countries to adjust their asset positions themselves - which would require a high degree of intervention in the fiscal and monetary affairs of these countries and a complete change in IMF competency.

Coverage under the Camdessus proposal ("Short-Term Financing Facility" paper presented to the IMF Executive Board, 26 September 1994) would be limited to some fifty (mainly upper middle-income countries) which have a high degree of involvement in the international capital market. The terms of access would be based on specific 'drawing right' provisions made under the regular Article IV consultation, in cases where the Fund determined that country has a sound policy record and no fundamental balance of payments problem. This could be made automatic and thus very rapid, but only at some risk to the Fund - particularly if it ended up effectively funding (and thus enabling) capital flight. The level of access (which could be arranged in tranches) would need to be commensurate with potential reserve losses - although without fully financing capital flight but rather relying on positive signalling effects on markets - and could reach 300% of quota. However, the maturity of the loans would be short (three months) and if the problem persisted it could be replaced by a normal standby or extended arrangement.

The IMF proposes that such a facility could be financed from the Fund's normal resources - perhaps by activating General Arrangements to Borrow (GAB), although this would imply confining access to the established rules for stand-by and extended arrangements.

Ideally, the source of the funds required for this purpose should be provided by new sources of liquidity - at best the issue of SDRs or at least the expenditure of the

excess reserves of surplus economies such as Japan - as proposed by the IMF Managing Director at the Copenhagen Social Summit in March 1995. The use of SDRs for this purpose has been a standing proposal since the original Bretton Woods conference, the automatic use of reserves of surplus countries proposed in the Keynes Plan having been subsequently reformulated to allow for open market operations by the Fund (Triffin, 1960). It would also require modification of Article XVIII which requires SDRs to be allocated pro rata to existing quotas, a restriction which is already under strain due to the current G7 proposal to allocation the first SDR increase since 1981 to the transition economies to the detriment of the developing countries as a whole.

In any case, if the conversion of SDRs into a true fiduciary reserve asset is not acceptable to the more conservative members of the G7, the STFF could involve the IMF borrowing on financial markets, effectively creating liquidity by converting long-term liabilities into short-term assets. As in the case of the World Bank, the willingness to subscribe would not arise from the quality of IMF assets (ie the STFF loans) but rather their underwriting by the G3. Assuming that this would be forthcoming, the relevant criterion becomes the likely effectiveness of such a scheme. On the one hand, like all last-resort lending, it could delay adjustment rather than make it easier and thus requires fine judgement as to future government behaviour - even though the 'moral hazard' dilemma would clearly apply more to the creditors than to the debtors in such circumstances. On the other, the speed of intervention is crucial in such cases, and thus automatic access on country request (or at most on approval by Fund executives) would be necessary - which would effectively disenfranchise the Executive Board. Thus the quality of the Fund's assessment is crucial in determining whether the effects will be positive and in giving the right signals to international capital markets - particularly where by definition it is necessary to intervene against prevailing market sentiment.

However, the scale of intervention in two recent crises give some idea of the funding problem involved in global central banking were countries of any size to be involved. In one day in early June 1995, the G3 central banks spent \$20 billion in supporting the dollar - an effect which lasted for little more than a week. During the 1992 ERM crisis, some \$130bn was mobilised (mainly by the Bundesbank) in defence of the currencies of Denmark, Ireland, Italy, Portugal, Spain and the UK - countries whose combined IMF quotas were \$23 billion, and thus under the proposed 300% rule could

have drawn only \$70 billion.

At first sight, the recent Mexican crisis perhaps is a good example of the potential use of such a STFF: in fact the initial IMF access offered to Mexico of \$7.8 billion was three times quota, but this was rapidly raised to \$ 17.8 billion (ie seven times quota). Even though this was only a third of the \$50 billion required for the rescue plan, it was widely regarded at the time as an impressive display of flexibility by the Fund faced by the threat of a systemic threat to world capital markets (or at least emerging markets). However, in retrospect the episode can be seen as evidence of the continued power of the US Treasury to change the unwritten rules in support of US investors, while the nature of the operation (refinancing Mexican treasury bills) was such that medium-term rather than short-term resources were clearly needed.

4.3 The wider implications of the STFF

In this context, the Mexican experience does not seem very promising as the Fund did not warn either side adequately before the event - although neither did the leading private sector ratings agencies. Even after the event could not decide on the origins of the problem, offering three alternative explanations for the excessive current account deficit generated by the private sector which it had not previously thought significant (IMF, 1995 vol ii appendix I).

There are also a number of potential externalities arising from intervention on this scale. First, the potential 'crowding in' of foreign investment as a consequence of increased confidence arising from an IMF support operation might be accompanied by a 'crowding out' of other lending activities of the Fund. Clearly this is much more likely if it were financed from the Fund's regular resources (or gold sales) than if special arrangements were made to borrow from another source such as the GAB or directly from the market. The problem would also be more serious if medium-term resources are tied up in this way, or if non-participating developing countries are to contribute - as they would be if an SDR issue under present rules were to be reallocated by G7 decision to funding the STFF.

Second, there would be a general gain if the creation of the new facility reinvigorates the Fund as part of a stronger system of global economic management - particularly if this involved the active participation of industrial economies as potential

beneficiaries and greater coordination of their macroeconomic (and thus exchange rate) policies. Cooperative handling of problems of debt overhang, transition to market systems and access to capital markets would benefit not only the country directly involved but also other LDCs in similar situations - through both the learning process and the enhanced investor confidence.

Third, if the financing of the STFF involves the provision of liquidity rather than insistence on recessionary stabilization programmes this should help to sustain steady global demand growth. This would be distinct from the notion that large amounts of aid transferred from North to South would somehow stimulate world trade and recovery, the expansionary effect of which depends entirely on how the aid is financed and which may even lead to reduced world growth and terms of trade deterioration if private investment response in the North is perverse (Vos, 1994).

A logical complement to discretionary intervention in order to compensate for market failure ex post is the reorganization of markets themselves in order to reduce the likelihood of such failure ex ante. To this problem of creating 'orderly markets' we now turn.

5. Global central banking II: prudential supervision

5.1 Capital market volatility and the non-industrial economies

The effectiveness of international public institutions - which range from securities market regulators to the Bretton Woods bodies themselves - can be judged in terms of their ability to maintain an orderly market and stimulate real investment, growth and employment on a global scale.

The rapid development of international financial markets in recent years has had a paradoxical consequence. On the one hand, the increased marketability of assets has led to increased liquidity - thus decreasing the need for access to official borrowing in the case of most middle-income countries and many of the larger low-income countries such as India and China. Indeed, bodies such as the World Bank have experienced a net negative resource flow towards this type of countries in recent years (World Bank, 1995). On the other hand, this liquidity has increased systemic risk because collapse or insolvency can be rapidly transmitted from one market or institution to another (OECD,

1991). Indeed it has been apparent for some time that this problem is particularly acute where regulatory systems have incomplete coverage or overlap in an inconsistent manner, creating opportunities for speculative profits: "there is a growing tendency to build financial links along regulatory fault lines where the responsibility for supervisory oversight is weak, divided or clouded" (Federal Reserve Bank of New York, Annual Report 1985).

The process of financial deregulation - in terms of lifting restrictions on lines of business, location, credit restrictions, capital movements etc - has been essentially national in nature (with the exception of the European Union) but has spread worldwide, partly due to consistent pressure from Washington. This process, combined with technological advances, has reduced the transactions costs involved in acquiring and managing diversified international portfolios dramatically, permitting large institutional investors such as pension funds and insurance companies to dominate cross-border capital flows. This process should increase the efficiency international capital markets in two senses: first, greater competition between financial intermediaries should reduce margins and improve information flows; and second, resource allocation (by arbitrage and diversification) should create a wide range of assets carrying the same risk-adjusted rate of return, with all countries having access to the pool of world savings. However it has also reduced the participation of banks in the financial intermediation between savers and investors - the so-called 'disintermediation' process (Dale, 1992). This in turn has generated new threats of default by small or undercapitalised market participants due to the large (and often leveraged) flows involved. Thus there is greater need than ever for organized settlement systems which will reduce systemic risk, and for clear rules as to the ability of international banks to be able to withstand sudden calls on their resources - as was recognized by the Basle Committee on Bank Supervision in 1993 (BIS, 1994).

From the point of view of non-industrial countries, there are particular problems arising from this process: (a) the need for greater investor protection and incentives in order to encourage longer term investment; (b) the threat of contagion from default in the region spreading to other neighbours; and (c) the additional macroeconomic instability caused by fluctuations in narrow and shallow domestic security markets which attract foreign capital inflows.

The maintenance of stable access to international capital markets is crucial -

particularly under conditions of exogenous shocks - so as to permit high levels of investment leading to sustainable growth of output, productivity and employment. It is now well established that private investment is particularly sensitive to uncertainty about future profitability and capital costs (Dixit & Pindyk, 1994) so that such stability will be as important to the decisions of firms as it is for governments. Macroeconomic policy and welfare provision depend crucially on external shocks (FitzGerald, 1993), while the level of employment and wages is sensitive to the size and composition of capital flows (FitzGerald & Mavrotas, 1994) - a point, incidentally, that is conspicuously absent from the Fund's rather simplistic model used for financial programming in constructing the conditionality for IMF stabilization programmes (IMF, 1987).

In principle international capital markets can achieve the reconciliation of inconsistent national saving and investment plans, through a system of international financial markets cleared by flexible interest rates and asset prices reflecting risk and maturity. In practice, of course, there is a multi-stage portfolio acquisition process based on 'rules' used by the institutions of asset acquiring countries to reflect the perceived 'quality' of assets specific to their country of origin (Brainard & Tobin, 1992). Perceived asset quality is determined by expectations which vary according to the type of asset in question: ranging from 'endogenous growth' fundamentals in the case of DFI, through fiscal stances in the case of bonds to perceptions of other investors' expectations in the case of equities. Under these circumstances of asymmetric information and agency problems, 'herd behaviour' by investors is only to be expected - particularly if they are institutional managers who are rewarded according to their performance relative to other managers.

5.2 The BIS and a rules-based system

In marked contrast to the International Monetary Fund, the Bank for International Settlements - itself a pre-Bretton Woods institution, having been founded in 1930 as a means of payments crisis prevention - coordinates the increasingly autonomous OECD central banks (rather than representing ministries of finance), and focuses on maintaining payments systems rather than provision of liquidity. In other words, the BIS reflects the other aspect of global central banking - prudential regulation - which is becoming more important as international capital flows shift from public to private sectors.

The object of the BIS in practice is to curb excessive risk taking by lenders ex ante (instead of helping borrowers ex post as the Fund does) through regulations as to the asset portfolios of financial intermediaries. Although it does act as a coordinator of leading central banks in crisis situations (eg the 1995 Mexican crisis) it does not make loans itself except in the form of bridging finance. However, apart from its important work on regulatory system, the BIS also acts as an agent and trustee - a role which has become more important in recent years as the Bank has become the agent for the European Monetary Institute, for the private ECU clearing and settlement system and for the collateral on Brazilian bonds. The BIS believes, however, that much more could be done to improve market transparency through disclosure and to make market infrastructure more resilient by strengthening settlement systems.

At present the Basle rules on capital adequacy refer only to banks although the BIS sees a clear need to extend them to securities firms, to clearly define the jurisdictions of national regulators and to define the role of internal risk management systems. This is a particular problem because deposit insurance and lender-of-last-resort facilities are normally only available to banks, so that other intermediaries are more liable to collapse. There is also a marked trend towards allowing supervisory recognition of an institution's internal market risk management model, in order to cope with derivative trading and complex portfolios - which the traditional capital adequacy rules (based on the nature of the counterparty and the credit risk involved on individual asset classes) cannot do.

In contrast, the European Commission's Capital Adequacy Directive of 1993 applies to both credit institutions and securities firms, and takes certain unsettled obligations explicitly into account. The creation of a Single European Market in financial services has been a slow and difficult process due to the need to modify domestic legal systems because unlike traded goods, financial services involve a series of future obligations of which the purchaser cannot directly assess the eventual value, and thus her interests must be safeguarded by law. Although this process has been facilitated in practice by the so-called "passport", which means that firms or products authorized in one member country are acceptable in another, cross-border financial services essentially depend on the underpinning provided by the existence of a transnational European legal system (Lasok, 1994).

Given the similarity in the concerns and functions of the duty of oversight of

payment and settlement systems on the one hand, and those of prudential regulation and supervision on the other, it is not surprising that both functions are usually performed by central banks directly or indirectly through a financial superintendency. Historically, both functions have their origin in the role of central bank as an ultimate supplier of a risk-free medium to the financial system: the provision of liquidity is the last line of defence in the containment of systemic crises. As the Bank puts it:

" Distinguishing solvency from mere liquidity problems is a difficult task; it becomes practically impossible without the necessary advance knowledge of the financial condition of participants the information needs of the central bank are an important dimension of the problem of the organisation of the lines of defence to deal with systemic risk ... (as) ..., the progressive expansion in the sphere of markets and hence in trading can be expected to further heighten the risks involved in the execution of financial transactions or by the intermediaries facilitating their completion." (BIS, 1994: 191-2)

Although in fact the integration of financial supervision systems within the US and within the European Union are both currently under way, only the latter can as yet provide a model for eventual global arrangements. Unfortunately the other line of advance, that of international coordination between domestic security regulators (through the International Organization of Securities Commissions, IOSCO) has made little progress in establishing a parallel for securities firms to what the Basle accord has done for banking - mainly because of disagreement between the US and other fifty member countries. In contrast, considerable progress has been made by OECD countries towards the integration of regulations on direct foreign investment, although this is unlikely to be extended under the WTO umbrella because of the unwillingness of developing countries to liberalize as quickly as industrialized ones.

5.3 Creating an orderly market

The creation of an orderly market would thus seek to influence the three key subjective factors - national propensities for net financial saving, long-term expectations as to yields on assets and attitudes to liquidity - which generate instability in capital markets. This would require appropriate institutional design in terms of both operational rules and discretionary intervention. Of these three factors, the first might be the proper subject of

international tax regulation, while the latter two relate to the prudential regulation of capital markets just discussed. By extension, global market stabilization would presumably relate to two crucial money values: money wages and the quantity of money. At the global level the former would presumably relate not only to eventual nominal exchange rate stability (adjusted for productivity) but also to labour standards enacted through the WTO. Only the latter would relate to the proposed role of the IMF as provider of global liquidity in the form of *bancor* or SDRs.

There is a strong argument for establishing a system of "orderly workouts" for sovereign debtors in particular, in such a way that creditworthiness could be restored after restructuring - the model being the "Chapter 11" US bankruptcy provisions. This might involve the creation of a representative council for bondholders, an independent arbitral tribunal to help coordinate the activities of the Paris and London "clubs", corresponding changes to future bond covenants, and statutory monitoring by the IMF under Article V.2.b which empowers the Fund to perform financial and technical services if authorized to do so (Eichengreen & Portes, 1995). However, for this to be enforceable for sovereign debtors - and *a fortiori* for other forms of cross-border liabilities - then existing international public law would require considerable modification (Greenwood & Mercer, 1995).

A severe restriction on establishing a system of rules is that despite the globalization of private trade and capital flows, there is no system of private international law as such. Those rules that do exist (eg the GATT/WTO) derive from the treaty obligations of contracting states under international public law (Dixon, 1993), and domestic governments are responsible for regulating or representing their citizens. In consequence, it hardly surprising that the doctrine of private international law is known as 'conflict of laws' and the principle of lex loci delicti generally prevails (Hill, 1994). Normally, therefore, parties to international financial contracts agree on an appropriate jurisdiction - which by custom usually means New York. However, it appears that there is a considerable lack of clarity and consistency even among New York courts as to the appropriate legal principles to be applied in international commercial cases in times of rapid change in market instruments, institutions and regulations (Morris & North, 1994: chap 30).

In addition, it would be necessary to change the existing practice of the IMF and

the World Bank insofar as they do not permit the writing off of sovereign debt to themselves, although as the result of successive restructurings during the past decade they are now the largest creditors for most of the poorest countries.

In the long run the developing countries undoubtedly stand to gain from a global commitment to improve the working of capital markets. These markets cannot clear investment and savings flows (and thus the current account imbalances) or revalue existing assets properly, due to problems of imperfect information and contract enforcement which lead in turn to rationing behaviour by institutions. Any scheme for international monetary reform must contain, therefore, not only new provisions for *ex ante* monitoring and *ex post* workouts, but also appropriate prudential regulations and information systems for such markets as well as discretionary intervention by an international central bank in order to provide liquidity to asset holders when and where required.

6. Policy implications for the IMF

6.1 *The requirements for global central banking*

Global central banking, even in its embryonic form presently under discussion as the backdrop for IMF reform, thus requires a combination of crisis intervention and prudential regulation - not just the provision of liquidity as lender of last resort. What is more, liquidity in a complex global capital market is more a matter of asset preference than one of money supply as such. Either intervention or regulation is relatively ineffective without the other, so at the very least closer coordination between the IMF and the BIS is clearly necessary. The provision of the basis of an orderly market is a public good, but one which provides a strong incentive to participants in the form of the cost of exclusion.

The non-industrial countries probably have more to gain from a rule-based system than from a discretionary one, because although the latter allows their special circumstances to be recognized in a crisis, the former would recognize them as partners in a global system. Establishing global rules is difficult, as the experience of the Uruguay Round indicates, and there may appear to be some operational benefit from establishing systems in particular regions or groups of countries; but in the case of capital markets, an incomplete system is an invitation to speculation and evasion unless the cost of exclusion is a real deterrent.

The Bretton Woods Commission felt that "the time is now ripe to restore the original focus of the Fund on international monetary issues" and strongly recommended that "the IMF should be given a central role in coordinating macroeconomic policies and in developing and implementing monetary reforms", but recognized that this would require two previous steps: "first, the major industrial countries should strengthen their fiscal and monetary policies and achieve greater overall macroeconomic convergence; and second, these countries should establish a more formal system of coordination, involving form and credible commitments, to support these policy improvements and avoid excessive exchange rate misalignments and volatility" (BWC: A-4,5).

While it is clearly desirable that member governments pursue macroeconomic stability and growth within a rule-based system, supported and policed by global agencies such as the IMF and the OECD, it is not at all clear that even if the G7 governments could agree on what policies to pursue, whether they could actually implement them. There are two reasons for this: (a) governments cannot all guarantee that legislatures responding to domestic voter concerns and autonomous central banks with restrictive objectives will implement the policies; and (b) the private sector is increasingly independent of domestic policy and responsive to international sentiment.

6.2 The governance of the Fund

There is also some current debate as to the governance of the IMF itself on two distinct yet related issues. On the one hand, there is concern that the directors are insufficiently senior to take major decisions, so finance ministers must be convened to take them - with a loss of the speed and discretion which are essential for effective central banking (BWC, 1994). A more regulatory stance might reduce the need for such delegates, but an enhanced international role (even as executive secretariat to some international body) would once again require directors with authority both among their peers and with their home government. On the other hand, there is a longstanding criticism that the IMF board reflects the industrial-country 'shareholders': even taking into account the non-industrial countries' share in world output their representation should be greater, but this should not be obtained at the cost of reducing the Fund's potential power to regulate the G7 policies. Once again, a more regulatory (rather than interventionist) approach would reduce the fears of all parties and make a balanced solution more likely. This might take the form

an 'economic security' body similar to the UN Security Council with permanent G7 membership and rotating minority membership from the Rest of the World (Stewart, 1995).

The US\$50 billion underwriting of the refinancing of Mexico's short-term debt in early 1995 required unprecedented coordination between the US Treasury, the International Monetary Fund and the Bank of International Settlements, and is thus a very good case of the operational problems raised by international crisis management. However, at the Toronto G7 meeting, despite formal agreement on the support package, strong resentment remained among other members who did not feel that adequate prior consultation had taken place on an operation to acquire one-third of Mexican debt.

Although most G7 members agreed that rapid action on this scale was required in order to stabilize international financial markets, it appears that the Germans in particular were concerned by the moral hazard implicit in US investors being saved from their poor judgement, while the French were only mollified by the need to retain their control of the chair of the IMF. Indeed, Britain and Germany (along with Denmark, The Netherlands, Belgium and Switzerland) abstained in the IMF vote to raise the Fund's contribution from US\$7.8bn to US\$17.8bn, and the scale and form of the contributions from Europe and Japan to the Bank of International Settlements US\$10bn commitment were never worked out. The EU was also extremely concerned that extra facilities for Mexico might make it more difficult for the IMF to provide large scale loans for Russia and the Ukraine.

Moreover, it is not yet at all clear who will in practice monitor the present support operation. The IMF will have difficulty in monitoring its own US\$17.8 billion standby loan (the largest in its history), but this will be almost impossible in practice if the US Treasury and the BIS are imposing different conditions - unless they transfer these responsibilities to the Fund. The difficult issue of debt seniority also remains, with the European governments insisting that their potential 'involuntary' US\$ 10 bn contribution through BIS be given priority when Mexico begins to repay.

However, the absence of adequate and timely information on international asset risk and the inability (or unwillingness) of markets to handle long-term debt problems seems to have been at the heart of the Mexican problem - which the IMF neither foresaw nor prevented. This is not a problem confined to emerging markets subject to unforeseeable political and economic shocks: the debt problem in a number of smaller

OECD economies will probably require coordinated international action in coming years in order to prevent financial market instability from bringing the current global economic recovery to a halt.

6.3 Can the Fund fulfil its original mandate?

Setting up a structure of surveillance and early warning in order to monitor and respond to emerging crises is essential. However, it is not entirely clear whether the IMF is the best institution to do this - and the Fund would require considerable enhancement of its powers, which are essentially confined to making funding conditional on the fiscal and monetary policy stance of a borrowing government. The Fund cannot conduct the kind of open-market operations or impose the temporary administrative regulation of capital flows required in international emergencies - powers which are normally conferred on central banks in order to cope with financial crises at the national level. Nor can it conduct prudential regulation of lending institutions to prevent losses on unsafe asset portfolios leading to systemic risks.

Without such powers, or close cooperation with those national or international institutions which might have (or obtain) these powers, it is very difficult to see how the International Monetary Fund can fulfil the task with which it was entrusted at Bretton Woods - above all by regulating lenders as well as borrowers, as national financial authorities do as a matter of course.

The answer to this question depends, in turn, on whether we are to see the failure of international financial institutions to create an "orderly market" as in effect a public-action problem (Kapstein, 1994) or rather one of re-establishing hegemony in a new monetary order (Walter, 1993). To the extent that it is recognized that existing nationally-based regulations are increasingly inadequate, and given the extreme unlikelihood of supranational authorities being established and the limited capacities (and interests) of private actors, managing global capital markets will have to be on an intergovernmental basis, but with much more far-reaching management of private actors. This could be achieved and enforced either through international institutions (such as the IMF or the BIS) along the lines of the WTO, or a greater willingness to enforce commonly agreed international norms within national legal jurisdictions as is the practice in the European Community. However, to the extent that particular national and sectoral interests have pressed for deregulation (and insist that the only current problem is one of timely

information and debtor discipline) and seem so unconcerned by the threats posed by market disorder, it is difficult to see what might press them to support re-regulation. At best, therefore, international financial regulation - and by extension a more effective role for the IMF in crisis management and prevention - might have to be constructed within a hierarchically organized world economy, as in effect exists in the trade areas within the GATT/WTO system.

Table 1: The Structure of the World Economy, 1994

	No	% world output	% world trade	% world investment
Industrial	23	55	71	48
G3	3	35	33	32
Other	20	20	38	16
Non-industrial	161	45	29	52
Africa	50	3	2	2
Asia	30	23	16	32
M.East	18	5	4	5
L. Amer	34	9	4	8
E. Eur	28	5	3	5

Source: IMF World Economic Outlook (October 1994, May 1995). 'World output' refers to share of world GDP in 1994 on PPP basis; 'world trade' is share of world exports of goods and services in 1994; 'world investment' calculated by author as the average investment to GDP ratio for 1994 applied to the region's share in world output.

Table 2: Non-industrial Countries: Sources and Uses of Funds, 1993
(percent of GDP)

	Total	Af	As	ME	LA	EE
Saving	24.1	15.7	29.8	18.3	17.3	17.9
Investment	26.6	18.1	31.7	22.2	20.5	21.2
Net Lending	-2.5	-2.4	-1.9	-3.9	-3.3	-3.3
unrequited transfers	1.3	4.4	1.0	1.2	0.9	1.1
factor income	-1.9	-5.0	-1.2	-	-3.1	-0.9
resource balance	-2.1	-2.2	-1.8	-5.1	-1.1	-3.5
Acquisition of foreign assets	1.3	1.1	2.4	-0.8	-0.2	2.8
change in reserves	1.3	0.4	1.7	0.9	1.0	2.2

Source: IMF World Economic Outlook (October 1994)

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