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Options for Monetary and Exchange Arrangements
in Transition Economies*

by

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Abstract

This paper considers two interrelated decisions that the authorities in transition economies need to take once they have decided to introduce their own national currency. First, the exchange rate regime, that is, the decision whether to peg or to float the exchange rate for the currency, the modalities for implementing this decision, and rules regarding the currency's convertibility into foreign currency; and second, the arrangements for the central monetary institution, including the degree of discretion that it should exercise in setting rates of domestic credit expansion.

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	<u>Page</u>
I. Introduction	1
II. General Principles of a Sound Currency	2
III. Policy Considerations and Institutional Arrangements to Promote a Sound and Stable Currency in Transition Economies	5
1. Financial policies	6
2. Options for exchange arrangements	8
a. Floating exchange rate	9
b. Fixed exchange rate	13
(1) Under a central bank	13
(2) Under a currency board	17
IV. Conclusion	19

I. Introduction

Several transition economies (henceforth, TEs) in the former Soviet Union have recently introduced their own currencies and more are expected to soon follow. Thus, it is a convenient time to address some major issues related to the choice of institutional arrangements that can help these countries rapidly attain and maintain a low and stable inflation rate. The purpose of this paper is to outline the alternative institutional structures that the TE authorities might wish to establish to achieve this fundamental objective, and to indicate areas where supporting policies will be needed.

Clearly, given current circumstances in many TEs, decisions about the monetary and exchange arrangements that will need to accompany the introduction of the new currency will have to be taken in conditions of considerable uncertainty. First, although there has been considerable progress, a number of TEs currently lack a set of well-developed market-supporting rules of behavior and institutions. 1/ Second, inter-TE trade has declined sharply in conjunction with the breakdown of the old command structure and the associated administrative disarray, exacerbated by lack of external financing. In some TEs these factors, combined with abrupt increases in prices of key imports, have contributed to a substantial decline in output. Third, the situation in many TEs has been complicated by the current uncertainties about whether the programmed reduction of inflation in the Russian Federation, which currently functions as the reserve-currency country will be achieved in the near term, and what impact this might have on the other TEs, including the possible balance of payments losses with the appreciation of their currencies against the reserve currency due to loss in competitiveness. Fourth, there is the issue of the

1/ Clear ownership and property rights; state's reduced role in the economy; legal, monetary, fiscal, and social security institutions.

loss of subsidies that have been provided among TEs through the sales of energy and certain agricultural products at highly subsidized prices and through "technical credits." Finally, there are possible complications in trade among TEs due to exchange rate risks, exchange restrictions, and the like.

This paper considers two interrelated decisions on: First, the exchange rate regime, i.e., the decision whether to peg or to float the exchange rate for the national currency, the modalities for implementing this decision, and rules regarding the domestic currency's convertibility into foreign currency; and second, the arrangements for the central monetary institution (CMI), including the degree of discretion that it should exercise in setting rates of domestic credit expansion. Section II reviews the general principles of a sound currency. Section III discusses the policy considerations and alternative exchange and monetary arrangements needed to provide the basis for a sound and stable currency. Section IV concludes.

II. General Principles of a Sound Currency

A sound currency, one that has stable internal and external purchasing power, is a crucial element without which a well-functioning market economy cannot be established or maintained. Basically, there are three requirements for a sound currency: (1) stability as a store of value, as a medium of exchange against goods and nonmonetary assets, and as a unit of account; (2) external convertibility, at least for current transactions; and (3) an institutional structure that manifests a credible commitment to ensuring a stable purchasing power for the currency in the future.

There are several reasons for achieving and maintaining a stable internal and external value for the domestic currency. Experience in a large number of countries suggests that high and unstable inflation rates have strong adverse effects on employment and on output growth. Furthermore, in an inflationary environment, holdings of commodities and foreign currencies substitute for the domestic currency as alternative stores of value. Commodity hoarding, although rational from an individual standpoint, impedes economic growth, while holdings of foreign currencies represent a reverse flow of real resources to the central banks that issue those currencies. The currency of a country with high and variable inflation rates is also a poor unit of account, because inflation distorts absolute and relative prices and makes accounting calculations and financial contracts difficult to undertake and enforce.

Policies that achieve convertibility of a currency are also crucial in enhancing its usefulness as a medium of exchange and also in encouraging foreign trade and investment. A convertible currency is one that can freely be exchanged for foreign currency on demand at a unified exchange rate. Current account convertibility refers to the ability to acquire foreign currency in order to make payments for imports and for other current account transactions. Full current account convertibility is important as a source of competitive discipline. This would help expose domestic producers and consumers to the structure of world market prices so that business firms produce according to comparative advantage and consumers maximize welfare.

Capital account convertibility refers to the ability to use foreign currency to acquire foreign assets and to repatriate profits or investments. Full convertibility of capital transactions for foreign residents (including

repatriation of both capital and profits) is important in order to attract foreign direct investment, associated managerial skills, and transfers of technology. Highly open TEs (measured by exports and imports as ratios to GDP) in particular would stand to reap the benefits of full participation in world goods and capital markets under conditions of free current account convertibility with a unified exchange rate. As regards capital account convertibility, in the initial phase the TE authorities will need to consider whether the gains from being integrated with world capital markets outweigh possible costs in terms of increased volatility of capital movements and their impact on macroeconomic instability, which is sometimes viewed as a rationale for imposing restrictions on certain categories of capital flows. However, there may also be significant problems associated with retaining capital controls during a transition period. First, capital controls may entail significant distortions, which might be substantial if the parallel (or financial) exchange rate diverges substantially from the exchange rate that applies to current account transactions. Second, the effectiveness of capital controls may be limited. As soon as there are incentives to evade controls, false invoicing of current account transactions will occur. Leakages may become large enough so as to make capital controls ineffective while, at the same time, socially costly.

A further distinction is sometimes made between internal and external convertibility. Internal convertibility refers to the ability of domestic residents to hold foreign-currency-denominated assets (e.g., bank deposits), and thus to convert domestic currency internally into foreign-currency-denominated assets. Such freedom, however, does not necessarily mean that domestic residents can make payments abroad or hold assets located in

foreign countries. 1/

As regards credibility, no new institutional structure, by itself, can instill it. The pursuit of a non-inflationary monetary policy requires the TE authorities to exercise firm control of the domestic financing requirement of the overall fiscal position. In addition there is a need to convey clear signals--a transparent set of rules--to the public concerning the conduct of macroeconomic policy. Finally, even a new institutional structure with a set of rules would not be sufficient to establish credibility of the overall macroeconomic stance. For example, if the TE authorities decide to establish a central monetary institution that is prohibited from financing the deficits of the public sector (government and state enterprises), a lack of fiscal control would cause the public sector to run up payments arrears. Since this is not sustainable in the longer term, political pressures could build up for the authorities to abandon the new institutional arrangement. In the final analysis, credibility that the new currency will remain stable can only be achieved if the TE authorities can implement restrained monetary and fiscal policies.

III. Policy Considerations and Institutional Arrangements to Promote a Sound and Stable Currency

A properly designed fiscal and monetary policy is critical to the macroeconomic performance of TEs in the years ahead. The highly inflationary experiences of several European nations formed after the First World War and of some developing countries after they achieved independence

1/ See P. Isard and J. Greene, Currency Convertibility and the Transformation of Centrally Planned Economies, Occasional Paper 81, IMF (1991).

in the 1950s and 1960s are examples of the sorts of problems that are to be avoided. The lack of budgetary and monetary discipline in many of these countries caused hyperinflation and rapid depreciation in the external value of their currencies.

To achieve and maintain a sound and stable currency, TEs must establish monetary and fiscal institutions that are capable of ensuring that rates of money and credit expansion are restrained to levels that maintain low inflation rates. This would require a commitment not only to monetary restraint but also to a restrained fiscal stance. Fiscal restraint is even more important in cases where the scope for nonmonetary domestic financing is extremely limited and where large external financing is inadvisable (and probably unavailable). Such restraint will make it possible to hold monetary financing of the fiscal deficit to a level that is consistent with low inflation. Thus, fiscal policy will need to support monetary objectives by ensuring a low flow of bank credit for financing the budget.

Two possible exchange rate arrangements are considered in this paper: a floating exchange rate; and a pegged exchange rate. The discussion includes a special pegged exchange rate arrangement with 100 percent foreign reserve cover (a currency board). Regardless of which institutional arrangement is chosen, there are essential financial and banking policies that have to be implemented in order to achieve the low and stable inflation rates that are consistent with maintaining a stable internal and external purchasing power for the new currency following its introduction.

1. Financial policies

As noted above, restrained fiscal policy is essential for monetary stability. In order to reduce the domestic financing of the fiscal deficit

to non-inflationary levels, tax reforms aimed at raising and diversifying revenues and expenditure control measures will need to be implemented.

Monetary policy must also be restrained. The growth rate of domestic credit should be set at a level that is consistent with targets for inflation and foreign reserves. This would require strict limits on overall credit expansion in the economy and sub-limits on credit to the public sector, including the state enterprises.

Beyond these general policy guidelines, there are certain specific measures and organizational changes that need to be implemented. The first step is to pool the gold, foreign exchange deposits and cash assets held by state-owned funds for immediate transfer to a central monetary institution (CMI) of the TE, which will be responsible for exchange rate policy and reserve management. Next, the CMI's commercial activities should be hived off into a separate commercial bank or phased out. The absence of commercial operations would enable the CMI to focus exclusively on its central functions of regulating monetary and exchange activities. The currency-issuing function would be undertaken by an Issue Department, while a Banking Department would take over all banking functions, including foreign exchange operations.

Banking reforms will also be required to nurture discipline on the part of commercial banks. A Supervision Department would review existing prudential regulations and introduce modifications as needed, prepare strategies for developing off-site monitoring and financial analysis of banks, and strengthen on-site inspection procedures. Commercial banks must be privatized eventually in order to eliminate the possibility of off-budget expenses of the public sector that might be channeled through state-owned

banks. Furthermore, in order to acquire banking expertise and gain easy access to world financial markets, it would be desirable to open the banking system to the establishment of branches of international banks through licensing procedures.

2. Options for exchange arrangements

The Fund's Articles of Agreement recognize the central importance of a member country's choice of its exchange arrangement; the policies required to support the choice; and the need for each member country to ensure that its exchange rate and macroeconomic policies foster orderly balance of payments adjustment. Since the adoption of the Second Amendment to the Articles in 1978, member countries have been free to adopt a wide variety of exchange arrangements.

Once a particular exchange arrangement has been chosen by a member country, the Articles of Agreement allow that member to alter its exchange arrangement whenever it chooses to do so, and only oblige the member to notify the Fund promptly of the change. Nevertheless, provided that a country's economic policies are conducted in ways that maintain a sustainable balance of payments position over the medium term without recourse to restrictions on trade and payments, adhering consistently over time to the same exchange arrangement, whether floating or fixed, acts to enhance the credibility of macroeconomic policies, reduces uncertainty, and allows institutional mechanisms to develop that facilitate trade and capital transactions, hedging, and risk diversification.

Whatever exchange rate regime--fixed or floating--the TE authorities choose to adopt, supporting financial policies and institutions along the

lines suggested in the preceding subsection are required to make the regime viable and credible.

a. A floating exchange rate

If the initial level of foreign exchange is inadequate to support a fixed exchange rate, and if the accumulation of external arrears is to be avoided, there may be no alternative but to let the new currency float freely to establish its level. For many TEs, the advantage of adopting a floating exchange rate arrangement is, of course, that the need for official foreign exchange reserves will be minimized. The major disadvantage is that no nominal anchor is provided for the domestic price level. In order for a floating currency to remain stable, it is essential that the TE authorities consistently implement a non-inflationary stance of fiscal and monetary policies. Since the exchange rate itself does not provide a nominal anchor for the domestic price level, the importance of other nominal anchors, such as simple rules for the growth of the money supply or nominal wages, is increased. In many TEs the use of nominal wages as an anchor is fraught with difficulties, in view of the socio-political nature of the employer-employee relations in the state enterprises.

Thus, the money stock may be the only option available to the TE authorities as an anchor for the domestic price level. There are two serious risks in this area. First, there is the public's uncertainty about the likely stance of financial policies in the near future. Second, there is the concern about the weak financial condition of the banking system. Given these risks, a freely floating exchange rate will be more likely to succeed if fiscal and monetary policies are seen to be tight initially, and if the problem of strengthening the banking system can be addressed at an

early stage. An announcement by the Government and the CMI of a detailed and credible program to restrain money growth at a level that is consistent with price stability would probably be the single most important factor operating to reduce the dangers of an unwanted depreciation of the national currency. Such a policy would be strongly reinforced if it could be supported at the outset by a firm incomes policy. The credibility of such a stabilization program will be significantly enhanced by a strong commitment of financial support from the international community.

At the practical level, the two main means of implementing a floating exchange rate are an auction system and an interbank system. Under one particular auction system that has been used in some developing countries, all export receipts would be surrendered to the CMI at the prevailing unified exchange rate. The supply of foreign exchange, less the amount needed to meet official external debt service obligations for the upcoming period, would be auctioned by the CMI (usually with a minimum reserve price), giving rise to a new exchange rate level that prevails until the next auction. A preferable system is the auction/fixing method. This would not require surrendering export receipts to the CMI. 1/ The system would only require repatriating them to the TE and concentrating all foreign exchange dealing in a single unified exchange market in, say, the capital city. In this way, enough supply and demand can be gathered at one spot to create the conditions for a functioning foreign exchange market. Regardless of whether at this time the CMI has any foreign exchange reserves of its own, it should take the initiative in creating this market.

1/ This is a desirable feature in view of the distortionary nature of surrender requirements.

Under an interbank system of foreign exchange trading, the exchange rate is determined by transactions among banks, and between banks and their clients. If surrender requirements are in force, export proceeds may be surrendered directly to banks, and information regarding transactions and exchange rates should be made widely available to market participants. 1/ Under both the auction and interbank systems there should, of course, be prudential supervision of commercial banks' (spot and forward) foreign exchange exposure.

Provided banking and financial institutions are sufficiently developed, an interbank foreign exchange trading system should be feasible once the exchange rate has been unified for current transactions and all exchange controls removed. In order for the system to operate efficiently, it is necessary that policies are operated to minimize the incentives for exporters to withhold foreign exchange from the market; that importers have relatively free access to the market; and that receipts of foreign exchange are sufficiently large and continuous that there is always a supply available to the market in reasonable amounts at some price. To achieve this breadth and depth of the foreign exchange market it is usually essential for the CMI to ensure that all foreign exchange that is surrendered by exporters, except that needed to build up international reserves or to meet official external debt service obligations, is sold in the foreign exchange market. This means that the CMI must be prepared to purchase foreign exchange for all other purposes in the market. Measures to build up the institutional structure of the market will also, over time, tend to

1/ Clearly, surrender requirements are a distortion and should be eventually eliminated.

reduce the profit incentives for exporters to withhold foreign exchange from the official market by under-invoicing and for importers to over-invoice. In view of the TE authorities' objectives with regard to structural reform, it is highly desirable for a well-functioning interbank market in foreign exchange to be developed as soon as possible.

Several Eastern European countries--Bulgaria and Romania, among others--have adopted some form of floating arrangement in recent years. After an initial overshooting, the Bulgarian lev moved in a range of about 8 percent of its average value against the U.S. dollar. Romania began with a dual exchange rate system for the lei, owing to concerns about the volatility of a single floating rate and the low level of foreign reserves. Half of the proceeds from most types of exports had to be surrendered at the fixed appreciated official exchange rate. Certain imports (e.g., industrial raw materials) were allowed in limited amounts at the fixed exchange rate to cushion the increase in domestic prices associated with price liberalization. All other current transactions and all capital account transactions took place at a freely fluctuating interbank exchange rate with virtually no restrictions. The premium on the free exchange rate reached 500 percent, but declined to about 200 percent following a devaluation of the official rate and leakages between markets. Owing to the difficulty of sustaining a dual exchange rate system because of improper invoicing of trade documents and other leakages arising from the spread between the official and interbank market rates, the system was unified and most restrictions were removed in November 1991. Since then, the authorities have operated a managed float.

b. A fixed exchange rate

This subsection discusses the fixed exchange rate system under alternative arrangements for the CMI: a discretionary central bank and a currency board. A full-fledged central bank exercises discretionary power to issue currency and influence commercial bank reserves by extending credit to the government and the banks. The central bank must be able to strictly control the growth of those credits in order to limit the increase of its net domestic assets at levels consistent with reasonable targets for domestic inflation and for foreign reserves.

(1) Under a central bank

After the TE's international reserves have been built up to an adequate level or a stabilization fund is made available, it would be feasible for the TE authorities to engage in some form of exchange rate pegging. Provided a sufficiently forceful macroeconomic adjustment effort is in place, this would allow the exchange rate to act as a nominal anchor for the domestic price level. Clearly, in this situation it would be desirable for the TE authorities to peg the domestic currency to the currency of a low inflation country, and then to implement financial policies that are firm enough to ensure that the peg could be maintained without undue recourse to exchange and trade restrictions. In present circumstances prevailing in most TEs, however, even a forceful stabilization program might initially lack credibility. Accordingly, a fixed peg would probably oblige the authorities to set a sufficiently tight domestic credit policy that, even in conditions of low initial credibility, inflation would still decline to the targeted level. Nevertheless, in these circumstances a fixed peg to a low-inflation currency at the initial real exchange rate

might require such a deflationary policy that it would exacerbate the present severe output decline.

These considerations suggest that if a fixed exchange rate is to be adopted while the domestic inflation rate is still well above that prevailing abroad it might be necessary to start with a peg that implies a substantially depreciated real value of the domestic currency. Starting with an over-depreciated national currency would provide a cushion for subsequent inflation differentials, owing to inertia in wage and price setting. Consequently, this strategy would help avoid a trend toward overvaluation of the real exchange rate at a later stage which could endanger the sustainability of the stabilization effort.

This way of exploiting the nominal anchor role of the exchange rate was reasonably successful in Czechoslovakia. At the outset, this country pegged its currency to the U.S. dollar at a level that implied a substantially depreciated real exchange rate in the period just prior to major price liberalization. As expected, the combination of the large initial depreciation and the price liberalization caused a sharp jump in prices. However, restrained financial and incomes policies prevented the initial depreciation from being fully reflected in domestic wages, so that the real exchange rate appreciated gradually and runaway inflation was avoided.

While a peg to a low-inflation currency seems the most logical choice to enhance the credibility of anti-inflation program, it is important to look at other aspects of this decision. Given that trade among groups of TEs in eastern Europe and the former Soviet Union is substantial, none of the single low-inflation currency pegs--DM, yen, or U.S. dollar--would be likely to ensure that a TE's international competitiveness remained stable

over time. There is thus a trade-off between single-currency pegging to establish anti-inflation credibility, and basket pegging to moderate movements in international competitiveness.

In general, there are TEs that produce and export mainly intermediate and finished manufactured goods, rather than primary products. Unlike primary commodities, the manufactured goods produced by TEs do not yet have established markets in the West; hence, undue declines in inter-TE trade would have a serious impact on their levels of output and employment.

The attractiveness of adopting a separate currency pegged to the currencies of the major trading partners (TEs or not) is also related to competitiveness and the achievement of a sustainable balance of payments. Other things equal, TEs that initially have high unit labor costs relative to other members of the common currency area are more likely to face external current account deficits as inter-TE trade gradually moves to world market prices. Accordingly, these TEs might decide to devalue their currencies vis-a-vis the common currency at the outset, while TEs with low labor costs and those that export primary commodities might be in a position to revalue their currencies. Specifically, such a pattern of exchange rate adjustments might be desirable among net energy-importing and net energy-exporting TEs. Analogous considerations apply to other real sector shocks, e.g., changes in terms of trade.

In the present circumstances, a (trade-weighted) basket pegging would afford a TE the additional flexibility of adjusting its exchange rate vis-a-vis the currencies of the main trading partners in the TE area and elsewhere to foster a sustainable balance of payments. In this case, however, the TE would follow the inflation rates prevailing in the major trading partners.

If the TE's paramount objective is to preserve inter-TE trade, a basket peg to the currencies of the major trading partners might be favored.

Eastern European countries that have adopted some form of a pegged exchange rate arrangement include Poland, Czechoslovakia, and Hungary. In Poland the initial peg of the zloty to the U.S. dollar was changed to a basket peg in 1990 to strengthen the balance of payments. In October 1991, as competitiveness deteriorated, the exchange rate regime was changed to a preannounced crawling peg in which the rate of depreciation declined gradually in percentage terms. Nevertheless, a step devaluation of some ten percent was undertaken in early 1992. Hungary adopted an adjustable peg to a composite basket of currencies that was updated by the authorities annually; in addition, discrete downward adjustments in the value of the forint have been made on several occasions. In all three countries, a substantial devaluation preceded the implementation of the exchange rate regime.

In Poland and Hungary, rates of inflation remained at high levels following the change in the exchange rate regime. A fixed exchange rate cannot provide a nominal anchor for prices unless the central bank's domestic credit policy is such that the peg can be maintained without causing a drain on international reserves or requiring a tightening of trade and payments restrictions. As the experiences of Poland and Hungary suggest, such a peg may be difficult to maintain, owing to an incessant pressure to finance the fiscal deficit and state enterprises (and, occasionally, to adjust to exogenous shocks). Recurrent devaluations enable the government to wipe out part of its debt denominated in domestic currency, thereby easing its financing constraint. The public, being

inevitably aware of this behavior by the government, would raise its expectation of inflation. If wage contracts are based on the expected inflation rate the government would have to inflict higher and higher inflation surprises through ever higher rates of monetization of the fiscal deficit in order to lower real wages and raise the demand for labor and the supply of output. In the long run there would be a high-inflation equilibrium, which would affect social welfare adversely (arising from the negative effects of a rise in uncertainty on domestic investment and output, and from unfavorable distributional effects).

An obvious way to make the fixed exchange rate credible is for the central bank to implement policies that convince the public that it will forgo the option to inflate, i.e., to precommit to a policy of price stability. One way to make this commitment credible would be for the central bank to surrender the power to alter the exchange rate against the reference currency or a basket of reference currencies. This means surrendering the discretionary power to expand credit and reserve money. Institutional arrangements for achieving this credibility could include, for example, joining a currency union or establishing a currency board.

(2) Under a currency board

There is always a risk that a discretionary central bank would expand money and credit too rapidly, either to finance the government deficit or to accommodate a strong demand for credit by the state enterprises or the private sector. This potential risk is compounded if the central bank lacks independence and/or if it has to grant directed credits to certain favored sectors. An option to minimize these problems is to restrict the central bank's power to expand domestic credit, especially credit to the public

sector; many central bank charters have provisions to this effect. A more drastic step is to eliminate the central bank's power to create domestic credit, through a currency board arrangement (as, for example, the Bank of Estonia has done recently 1/). This will constrain the inflationary potential significantly because the currency board is prohibited by law from extending domestic credits. 2/ If this institutional structure is adopted, the CMI's currency would be fully backed and reflected in its foreign reserves. The CMI would stand ready to issue or redeem its currency against a hard currency on demand at a predetermined and fixed exchange rate.

When combined with the 100 percent foreign reserve requirement, a currency board's exchange rate is credible because it is permanently fixed. 3/ A variant of this basic approach would be a modified currency board arrangement in which the CMI's Issue Department would be operated as a traditional currency board, with full foreign reserve backing of high-powered money (currency plus bank reserves), as in the case of Estonia. The CMI's Banking Department would hold any excess external reserves that were over and above the Issue Department's 100 percent marginal reserve requirements. In order not to undermine the Issue Department's full reserve backing of high-powered money, the Banking Department would be prohibited,

1/ See A. Bennett, "The Operation of the Estonian Currency Board," IMF, PPAA/92/3, December 1992.

2/ For an exposition of the mechanics of currency boards and an examination of other analytical issues, see K. Osband and D. Villanueva, "Independent Currency Authorities: An Analytic Primer," IMF Staff Papers, March 1993. For a discussion of the operational procedures in setting up a currency board, including a model currency board law, see S. Hanke and K. Schuler, Currency Boards: A Summary (Johns Hopkins University, May 1992).

3/ But not immutably fixed. Indeed, a typical currency board law provides for simple, transparent rules under which periodic adjustments of the exchange rate can be undertaken. See Hanke and Schuler, op. cit.

as in Estonia, from lending to the government or the enterprises, or even to banks, except in an emergency situation (a crisis or restructuring of a bank), with the proviso that such lending would have to be covered by available excess external reserves.

The successful operation of a currency board requires full convertibility for all current transactions. In order to provide liquidity to the domestic economy, capital transfers by foreign residents (both outward and inward) should be permitted.

Provided there is a serious program to control internal payments arrears and eventually eliminate them, the currency board arrangement would assist in implementing hard budget constraints on the government and on the state enterprises. This means that meaningful reforms would have to be undertaken to balance the budgets of both the government and the state enterprises or to develop alternative sources of nonmonetary domestic debt financing.

IV. Conclusion

Clearly, decisions on properly designed monetary and exchange structures for introducing and controlling any new currency will be critical to the macroeconomic performance of transition economies in the years ahead. This paper has summarized a freely floating exchange rate system and a fixed exchange rate system. Regardless of which institution is chosen, it is essential for the authorities to operate their monetary and exchange arrangements in a way that ensures a stable domestic and external value of the national currency. The transition economy's monetary and fiscal institutions must be capable of ensuring that rates of money and credit

expansion are restrained to levels that maintain low inflation rates. In general, this will require a commitment not only to monetary restraint but also to a restrained fiscal policy.

Certain institutional arrangements can help minimize the inflationary potential by restraining the central bank's capacity to expand domestic credit, particularly to the public sector. Provisions to that effect are included in many central bank charters. A more drastic way to prevent the central bank from causing excessive credit creation is to adopt a currency board arrangement. The successful operation of this institutional structure over the long term requires full convertibility for all external current and capital account transactions.

Any exchange rate policy requires the government's commitment to a hard budget constraint on itself and on the state enterprises. A hard budget constraint requires the implementation of appropriate tax, expenditure, and pricing policies, as well as systemic reforms directed at achieving and maintaining a balanced fiscal position, and at eliminating and precluding the accumulation of arrears.