

# Review of Economies in Transition

Idäntalouksien katsauksia

1993 • No. 2

12.3.1993

Reprint in PDF format 2002

Miroslav Hrncír

The Exchange Rate Regime and Economic Recovery

Bank of Finland Institute for Economies in Transition, BOFIT

# ISSN 1235-7405 Reprint in PDF format 2002

Bank of Finland
Institute for Economies in Transition (BOFIT)

PO Box 160 FIN-00101 Helsinki Phone: +358 9 183 2268

Fax: +358 9 183 2294 bofit@bof.fi www.bof.fi/bofit

The opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the Bank of Finland.

# The Exchange Rate Regime and Economic Recovery

#### Introduction

In 1992, the key issues facing Czechoslovakia<sup>1</sup>, as well as some of the other transition economies in Central Europe, was the **initiation of economic recovery**. Given the degree of openness to the outside world already achieved and the perceived desire to continue this process, any recovery of domestic activity can be made sustainable only if **the growth of export potential matches the increase in imports over the mediumterm**.

In this context, the paper examines the role of the exchange rate and the choice of exchange rate regime.

## 1 Exchange rate options

Despite significant progress towards a market economy framework accomplished within a relatively short time span, the transition economies of Central Europe are still far from being homogeneous enough to react sensitively to developments in prices and foreign exchange rates. It is therefore claimed that the exchange rate and the exchange rate regime must be of less significance than for market economies. "In the dislocated economies of Eastern Europe, the exchange rate is far from the pervasive price that it is thought to be in the West.... In other words, the exchange rate can hardly be relied upon to anchor an economy in which competition is limited, marketing nonexistent and communications appalling." (Fry, 1992).

On the other hand, however, merely the transition itself makes the present stage of specific importance: the "code of behaviour" of newly created and restructured agents, including private and privatised firms, trade unions, and government authorities is being forged and "built in". Alternative exchange rate regimes obviously differ in terms of requirements and signals sent to economic agents. And given that Czechoslovakia is a small economy increasingly open to the outside world, the current exchange rate regime is likely to be a factor determining the expectations and behaviour of economic agents, at least in the medium term.

<sup>&</sup>lt;sup>1</sup> At the beginning of 1993, Czechoslovakia was divided into two separate entities, the Czech and Slovak republics. This paper, which was written in the autumn of 1992 and refers to then Czechoslovakia, addresses issues relevant to both the newly created national states.

#### 1.1 Changing approaches in the postwar world economy

Neither the experience from the development of market economies nor the theory on optimal exchange rate systems can suggest an unambiguous answer to what would be the appropriate exchange rate regime for the transition economies. However, both experience from elsewhere and theoretical writings on exchange rate systems, particularly those based on the "optimal currency area" argument (Mundell, 1961; McKinnon, 1964), do provide useful guidance and lessons.

Since World War Two, economic development have been dominated quite different exchange rate systems: successive stages of the world, the adjustable peg system of the Bretton Woods' framework, implying relatively firmly fixed rates (except for the case of fundamental disequilibrium; Nurkse, 1945), was replaced by mostly floating rates for major currencies in the 1970s. The 1980s saw a resurgence of interest in fixed exchange rate options and in international policy coordination, with special emphasis on the role of fixed exchange rates in the disinflation process. **The disciplining** effects of fixed rates, together with the concepts of **credibility and reputation**, came to the fore with the revival of the ERM and EMS, and with the plans for EMU and a single common European currency in particular.

The different stages mentioned above and the regimes associated with them have often been evaluated by observers in a diametric fashion way: some argue that the Bretton Woods' system functioned quite satisfactorily for a period; others, by contrast stress that it was doomed to collapse. Freely floating rates provided a solution at the time, but they accentuated, undesirable volatility and misalignments in the foreign exchange sphere and, consequently in the entire world economy. In a sense this regime failed in the same way as the Bretton Woods' arrangement. Quite recently the controversial aspects of the ERM and EMS have become hot political and economic issues.

The experience gained from a particular type of exchange rate arrangement also differs widely across individual countries. For example in the case of currency pegs, which is the arrangement relevant to small transition economies, Austria was quite successful in pegging its currency to a basket and later to the deutschmark for two decades (Hochreiter and Knöbl, 1991), whereas the experience of other economies was considerably less satisfactory. Finland, for example was forced to abandon the peg times for an indefinite period in 1992 (Leppänen, 1992).

Summarizing the experience from the postwar developments in the world economy, two alternative strategies for exchange rate policy can be distinguished:

# (a) External balance and the employment-oriented concept of the exchange rate

In this case the exchange rate is assigned the role of an instrument securing the competitiveness of domestic industries on the world markets, the aim being to maintain both employment and external balance in the national economy. Its level is adjusted accordingly, either through floating or by discrete changes. This concept of exchange rate policy reflects the "conventional wisdom", which traditionally associates preservation of competitiveness with adjustments of the

exchange rate itself, i.e. as a rule through (competitive) depreciation of the domestic currency.

#### (b) The stability-oriented concept of the exchange rate

In this approach the exchange rate is expected to be an instrument contributing primarily towards stability and low inflation in the domestic sector, and only via this also to external balance. This option, a "hard currency policy", implies a fixed exchange rate pegged to a stable currency. The disciplining and credibility effects of this type of foreign exchange rate regime, i.e. of a nominal anchor, should provide a basis for maintaining its competitive level vis-á-vis other countries.

The alternative regimes identified above differ in their priorities and aims and, consequently, in their impact on the behaviour and expectations of economic agents.

### 1.2 Arguments in the choice of exchange rate regime

Though the literature on optimum currency areas cannot give any definite answer as regards the exact type of exchange rate regime that should be applied (e.g. Wihlborg and Willett, 1992), it does provide a number of relevant arguments and guidance for the discussion of the issue.

It suggests that there is always a trade-off between the macroeconomic advantages of flexible exchange rates and the microeconomic advantages of fixed rates. The relative costs and benefits of fixed versus flexible exchange rates vary across countries, depending on their size, structural and institutional characteristics, the nature and source of shocks they face, their objectives and current economic situation. Other dimensions given, the case for a fixed exchange rate regime in a transition economy is evidently much stronger for a smaller country with a higher share of export and import flows in its economic activity. (In an extreme case, with only a few non-traded goods and services, the impact of exchange rate changes would be more or less confined to the changes in the domestic price level).

# 1.3 The case for "simple rules" or a "managed" type of exchange rates

The "simple rule" alternative comprises two extreme options: a freely floating rate or a firmly fixed rate. This does not, however, appear to be a viable solution. In contemporary economies divergent objectives are as a rule aimed at, which different weights attached to them across countries and periods. Moreover, various shocks, external as well as domestic, have to be coped with.

Experience also suggests that exchange rates tend to be mostly managed in the present world economy. After the collapse of the gold standard there were only a few cases of entirely fixed rates in the long run; free floating was also mostly confined to several episodes.

In the conditions of transition economies

#### (a) the free floating option

has sometimes been suggested as a reasonable approach to establishing a proper initial value for the currency after the breakdown of the former centrally planned economy framework.

There are, however, severe constraints on its potential value in the environment of the transition economies: rather thin currency markets, underdeveloped institutions, as well as lack of forward foreign exchange markets and of short-term "arbitrage" and speculative capital flows which could under certain conditions work towards stabilizing the exchange rate (Williamson, 1991).

Consequently, the extent of misalignments and exchange rate volatility would evidently be much greater than in consolidated market economies of a similar type. And even in those stabilized economies the experience with free floating has not been particularly encouraging. This type of solution therefore seems unsuited for the environment and objectives aimed at in Czechoslovakia;

#### (b) irrevocably fixed exchange rates

The comparison with developed open market economies seems again to suggest non-viability of this solution for transition economies. Given the profound changes – including institutional – uncertainties and shocks involved in the transition process, it appears unrealistic to attempt to fix an "equilibrium rate" for the long term. Moreover, apart from the question as to what level to initially set the exchange rate, even greater problems appear to be involved in making the adopted rate reasonably sustainable in the long run, without inflicting unbearable costs on the economy.

Consequently it follows that neither free floating nor irrevocably fixed rate options seem to be realistic for transition economies, however attractive the simple rule approach might be given the many complexities involved in the transition. Some type of compromise "managed" solution, involving more or less of discretion, therefore appears to be appropriate.

## 1.4 The "managed" option as applied in transition economies

In Czechoslovakia, a version of the adjustable peg system seems to have been applied. While maintaining a fixed parity with respect to the basket, the authorities have made no commitments as to its duration, thus not excluding its possible adjustment.

In Hungary, a broadly similar arrangement has been adopted. The discrete adjustments made in the forint's exchange rate have aimed at keeping the real rate more or less stable.

By contrast in the Polish case, a crawling peg system was adopted in 1992 to cope with the inflation differential.

A crawling peg implies that the exchange rate is adjusted by small changes at regular intervals (daily, weekly or monthly); in the case of Polish zloty the daily base was chosen.

The apparent advantage of such an arrangement is that it seeks to avoid abrupt changes in the real exchange rate, which certainly has some merits in the still relatively inflationary Polish economy. On the other hand, there is an implied danger of embedded inflationary expectations. The crawling peg arrangement may then turn out to be an additional source of the inflation differential rather than a way of coping with it.

Though operating in a different way, the "managed" exchange rate alternatives in Hungary and Poland have recently tended to adjust by and large to differences in relative price performance vis-à-vis their partners. The policy has thus – at least to some extent – been developing towards the real exchange rate anchor concept suggested for transition economies by Nuti (1991) and Fry and Nuti (1992).

The concept of the real exchange rate anchor certainly has some advantages, given the environment of the transition economies with a "positive" inflation differential. It tends to provide relatively stable conditions vis-à-vis the outside world for investors and traders, which may have a positive effect on their activities and expectations. Assuming that the starting point is chosen correctly, it can be expected to lead to a balanced current account in the medium term.

However, there are some constraints implied as well. Data on price level developments are available with lags only. Applying them means that the real exchange rate only accommodates the price differential ex post, without exercising any disciplining effect on economic agents. To establish, instead, a real "anchor" ex ante would require some kind of forecast or targeted data on relative inflation rates, which is by itself open to a considerable margin of misassessment.

Managed-type exchange rates appear to be the only feasible option for the transition economies. The policy of a stable real rate, while accommodating the ensuing inflation differential, is likely to work towards balancing foreign exchange accounts and at the same time to provide a stable parameter in real terms for investment and trade activities with respect to the outside.

On the other hand, however, this type of solution is not particularly helpful as regards restructuring in the microsphere and exercising a disciplining role on the behaviour and performance of economic agents. Without doubt, it is just these microeconomic dimensions which are of key importance, conditioning in fact any economic recovery and revival of sustainable growth in transition economies.

## 2 The case for an export-led recovery

Viewed from the demand side, the recovery of transition economies could be fostered either through the expansion of domestic demand components or through expanding foreign demand. While the possibilities of an across-the-board promotion of domestic demand appear to be rather constrained in the current circumstances, the prospects for expansion of foreign demand seem to be more promising. In the case of Czechoslovakia there is certainly scope for the revival of trade in the region, and with Hungary and Poland in particular. At the same time, unexploited opportunities still exist to expand "non-sensitive" exports to the OECD area, especially when the present recession in the major OECD countries is over.

It follows, that a continuation of the recent trend towards an export surplus, developing into a type of export-led recovery, might be a feasible way out of the current structural depression.

This proposition appears, however, to be ruled out by standard macroeconomic reasoning. The macroeconomic identities suggest that an export-led recovery implies "by definition" exports of domestic savings. As the transition economies seem to be clear examples of countries suffering from capital deficiency, just the opposite trend, i.e. a net inflow of savings, is considered desirable.

The static and dynamic considerations of the issue should be distinguished, however. It could be argued that:

- given the constraints on the promotion of domestic demand, an expansion of export demand would be a feasible way to boost domestic investment, thereby generating increasing domestic savings. The point is that the recovery of economic growth would become sustainable only if a domestic investmentsaving mechanism is set in to motion,
- an export surplus signals a trend towards a strong and stable currency. This
  would contribute to policy credibility and to changing expectations among
  domestic and foreign investors alike. It is precisely this shift in expectations
  which is so crucial for reversing the present economic downturn. Without it,
  any promotion of aggregate demand is likely to be mostly translated into
  import and price increases.

It may also be argued that the real impact of relevant macro-variables is conditioned by their composition, which is not, however, identifiable in terms of macroeconomic identities. The recent surpluses on Czechoslovakia's current account were matched by repayment of short-term bank liabilities, apart from an increase in foreign exchange reserves. At the same time, a growing inflow of long-term capital, foreign direct investment in particular, outweighed the surplus on current account. A net increase in savings "earmarked" for productive use could thus be achieved, despite a current account surplus.

### 2.1 "Wrong" type of exports?

In reality, however, the impact of the export surplus appears to have been diminished somewhat by its composition. Czechoslovak exports to world markets increasingly shifted towards relatively lower value-added products. This trend gained momentum from the early seventies onwards, under the re-imposed centrally planned economy framework; it has, however, continued during transition as well.

As shown by Bohatá and Fisher (1992) while the total volume of exports fell in 1990 and 1991, the exports of the iron-metallurgy and basic chemicals industries stabilized or even increased. This was so, despite their rather high energy and material inputs, the supply of which, moreover, was subject to increasing uncertainties and constraints.

These industries also ranked at the top in terms of relative export performance expressed as the volume of exports per employee and/or firm.

Table 1. The relative export performance of selected industries in 1991

Industry	Average export performance	
	a) per enterprise	b) per employee
	(mill CSK)	('000CSK)
Iron-metallurgy	1962.8	272.1
Chemical ind.	466.9	255.1
Engineering	189.2	121.9
Electrotechnics	75.3	63.0
Glass and porcelain	179.7	144.5
Shoe and leather	352.6	126.9

Source: Bohatá and Fischer, 1992

## 2.2 The role of the exchange rate regime

The three consecutive devaluations of the CSK in 1990 aimed at creating conditions for sustainable trade liberalization and limited currency convertibility by providing a "flat" basis for export expansion.

The devaluation-type approach is expected to lead to an improvement in price and cost competitiveness, given satisfactory price elasticities and provided that the effects of devaluation are not quickly eroded by subsequent increases in incomes.

Apart from the qualification that these conditions need not be a priori satisfied, the export stimulus of devaluation applies to those items where the cost and price dimensions of competition are substantial, if not dominant. Non-price factors, on the other hand, tend to be more important for non-homogeneous products, i.e.

more sophisticated and higher value-added products for which goodwill, reliability, advertising and marketing, prompt delivery, after-sales service and meeting of individual customer needs are crucial.

This qualification concerning the export stimulus of devaluation appears to be relevant in the conditions of transition economies. The legacy of past developments and the rigidities of existing markets, of labour and financial markets in particular, severely constrain the reallocation of resources and the supply response to changing price and exchange rate ratios. Even more important, the lack of established contacts with world markets, the lack of distribution networks, underdeveloped marketing and deficient related services substantially diminish the impact of the price advantages implied by devaluation, in particular in the sphere of non-homogeneous, higher value-added products.

Consequently, as might be expected, the short-run response to the devaluations effected in Czechoslovakia in 1990 was rather unequal across individual industries. As a rule, though with some notable exceptions, new export markets could be found relatively more easily for raw materials, intermediate products and construction materials<sup>2</sup>.

The ensuing shifts in the export pattern have evidently contributed to the divergent performance of individual industries. Those hardest hit by the present recession were mostly manufacturing ones, while in the heavy industries the drop experienced was only modest. The energy and fuel industries were even able to maintain the their former levels of output.

# 2.3 Short-term gains vs medium- and long-term costs of the devaluation-type approach

In the environment created by the devaluations at the start of transition, the implied comparative advantages of Czechoslovak exporters were increasingly based on cost advantages, conditioned particularly by the depreciated labour costs in foreign exchange terms.

The impact of this type of development appears rather controversial. On the positive side, it could be claimed that it secured:

- (i) trade balance and current account surplus in conditions where
- internal convertibility on current account and trade liberalization were being implemented,
- foreign exchange reserves were rather low, and
- sustained export growth to convertible-currency markets was crucial in order to offset at least partially the sharp contraction of trade to the former CMEA,

<sup>&</sup>lt;sup>2</sup> An export "boom" in steel and rolled material to the EC markets led to countermeasures by the EC countries, involving anti-dumping action.

(ii) more attractive conditions for foreign investors who were ready to exploit the opportunities provided by low labour costs (particularly since the labour force is relatively well educated and qualified), along with prospective capital gains.

On the other hand, however, the implied consequences in the medium- and long-run are hardly favourable:

- (i) data on recent trends seem to confirm that the incentives derived from an undervalued currency and "cheap labour" fostered a further shift towards lower value-added branches, and within branches to relatively less sophisticated products, thus accentuating long-run trends towards "regressive specialization",
- (ii) the negative implications of moving to lower value-added products include the risk of
- a brain drain and of an increasing gap in relation to technological standards in the world economy. By contrast, the successful examples of revitalization elsewhere were based on the narrowing of this gap,
- an increasing cost disadvantage compared to the parallel products of low-income countries, as well as the risk of continued clashes of interest in the "sensitive sectors" with the EC countries,
- (iii) in the conditions of transition economies the "soft" exchange rate regime is particularly apt to contribute to vicious circles of devaluation, inflation and a lowering in the degree of value-added in production, as:
- to reverse the inertia of past trends, enterprises must be induced to make every effort to innovate, to develop and to market new products of a higher quality and technical standard, to catch up in marketing and sales services. As enterprises are accustomed to rely more on "outside" help and expost corrections in the rules rather than on their own internal adjustment, "devaluation-type" policies in fact provide for a continuation of the "traditional" behaviour pattern and expectations,
- given the underdeveloped financial and labour markets and existing institutional rigidities, there is implied inertia in the "given" allocation of resources. While in the past preferences were mostly given to heavy industry branches, the devaluation-type policies boosted their comparatively high "profitability" and "export orientation". As a result, a biased picture of comparative advantages, favouring material- and energy-intensive branches, is being built into resource allocation.

From this it follows that the "devaluation-type" approach was able to the secure the competitiveness of Czechoslovak exports in the short run. At the same time, however, it actually worked against their competitiveness in the medium and long run as a result of both the type of signals to economic agents and to the pattern of resource allocation generated.

# 3 An alternative exchange rate regime for Czechoslovakia?

The challenge facing Czechoslovakia's development in the medium run is to reverse the trend towards downgrading of its production and export structures which has dominated in the past.

If this trend continues in the medium and long run, a vicious circle is likely to develop. Under the conditions of an open economy, an increasing productivity gap with respect to trade partners further diminishes gains from trade and leads to repeated waves of inflation and devaluation. Instead, any sustained recovery and revival of economic growth requires moving upwards on the value-added scale.

### 3.1 Policies to cope with microeconomic and structural defects

An alternative to exchange rate policies accommodating ex-post to domestic cost and price increases via repeated devaluations, is the "hard currency" option. It implies the adoption of a nominal exchange rate as a policy target. Its most demanding version is an irrevocably fixed nominal rate, pegged to a low-inflation "pilot" national or composite (ECU) currency.

The main argument for fixing the nominal exchange rate is the traditional one: the disciplining effects on economic agents. In the case of Czechoslovakia, these effects should contribute to the desired, complete overhaul and reorientation of the behavioural pattern and expectations of economic agents. It does not follow, however, that the nominal exchange rate anchor alone would be powerful enough for this purpose; other instruments must be applied in a consistent and comprehensive way to make the regime changes in the microsphere effective (Portes, 1990).

Once the policy of a nominal exchange rate target is made credible (i.e. after the authorities have passed several "tests" of their policies and proceeded differently from what might otherwise be expected), and enterprises have learned that they can no longer rely on "traditional" depreciation of the domestic currency as a way out of the recurrent pressures of inflating domestic costs, the microeconomic advantages of the fixed exchange rate approach should begin to materialize. The experience from elsewhere, notably Austria, seems to support this assumption (Marin, 1985).

In the case of Czechoslovakia a wide margin for productivity increases exists provided the changed regime and re-oriented incentives and expectations begin to bite. As a legacy of the past, there is an accumulated potential of efficiency gains in the existing wasteful methods of using inputs and equipment, "organizational slack", overstaffing and outmoded routines. Even more important are the potential gains to be had in a dynamic setting, as the centralized framework failed particularly in regard to the introduction of new products and technologies.

Along with the microeconomic impact, the policies adopted should be capable of coping with the **structural defects** of the Czechoslovak economy. As argued in section 2, the rather unequal starting conditions across branches and

industries were due to past development. Consequently, a policy relying only on a unified exchange rate and changes therein and aiming at an "equal footing" works in a **discriminatory way** in reality. As a rule, it favours the heavy industry branches preferred in the past, at the expense of most manufacturing ones.

To correct for this and to achieve a real "levelling of the ground" would require a transitional arrangement, combining exchange rate policies with promotion schemes for those "disfavoured", i.e. for industries with higher value-added products.

Consequently, there seems to be a **legitimate case for "industrial policies"** which, not attempting to pick winners and losers, would contribute to the development of infrastructure, telecommunications, business, trade and banking services, to the increased mobility of labour and to the upgrading of human capital. It is flaws precisely in these areas which have placed firms in sophisticated manufacturing branches at a disadvantage with respect to both foreign competitors and domestic producers of basic, low value-added products.

In a similar way, **export promotion schemes** appear to be warranted to correct for the implied disadvantages of domestic exporters of products with higher value-added. These schemes should:

- enable the costs of export reallocation and penetration of world markets (the
  extra cost of developing marketing, goodwill, distributional networks, the
  additional risk implied) to be borne, and
- provide a "breathing space" for adjustment and restructuring for those who are likely to be viable producers and exporters in the medium run.

These arguments, developed in line with **infant industry reasoning** and which could be termed "**revitalizing industries**" **arguments** given their prior existence in the Czechoslovak case, appear to be fairly powerful ones. It could be claimed that it would be necessary to resort to them, if the implied disadvantages inherited mainly from the centrally planned economy – of branches and products where non-price factors of competition dominate are to be corrected within a reasonable "transitory" period.

There are, of course, well-known qualifications and difficulties with the infant-industry argument for protection (Baldwin, 1969, and Hillman, 1991). In the context of transition economies, several issues appear to be especially relevant:

- is the protection once extended likely to remain only temporary,
- as the whole manufacturing sector cannot be protected for the purposes of revitalization, the selection implies a moral hazard problem,
- even if only temporary, protection incurs costs,
- protection of infant industries may virtually eliminate foreign competition, which, given the absence of domestic competition, is only the source capable of providing effective incentives for restructuring. "Revitalizing" protection may operate in just the opposite direction to the desired disciplining effects of a fixed exchange rate.

### 3.2 The potential role of foreign competition

It is true that in the transition scenarios the incentive and disciplining impact of foreign competition was attributed a key role in developing the competitive environment. It was recognized that the reforming countries of Central and Eastern Europe, unlike e.g. Japan, could rely on "workable" and "contestable" competition to be created within the domestic economy only.

However persuasive and unambiguous this claim may appear, the "revitalizing" effects of foreign competition on domestic firms in the Czechoslovak case have, up till now, fallen far short of expectations and have, moreover, turned out to be controversial (Hrnčíř, 1992).

At the start of the transition, the substantial devaluations effectively eliminated foreign competition for most Czechoslovak industries. The only exceptions were the least efficient branches, including consumer electronics, which for the most part could not survive the competitive pressure even at a sharply depreciated exchange rate.

A dilemma is faced in the existing conditions. On the one hand, greater exposure to foreign competition would be highly desirable as a driving force for the restructuring of domestic firms. On the other hand, however, any significant increase in exposure to foreign competition is likely to threaten the very existence of sophisticated, relatively higher value-added branches, while leaving material-and energy intensive basic industries largely unaffected.

Unlike the policies adopted at the start of transition, the strategy combining the fixed exchange rate target concept with industrial policies and export promotion schemes could also allow for a more **intensive role for foreign competition.** 

Under the hard currency approach, the pressure of foreign competition would tend to squeeze profits across all industries. In contrast to the past, however, support via industrial policy and export promotion schemes would compensate manufacturing branches for their relative disadvantages, enabling those viable in the medium run to survive and expand.

Export promotion schemes, oriented towards the higher valueadded branches, should be based on ex ante established rules in order to avoid administrative discretion and moral hazard problems as far as possible: support is extended only to those who qualify. The experience from elsewhere (including countries in Far East Asia) suggests the feasibility of such schemes, rewarding volume and/or increasing rates of export sales. Unlike in the past, support in promotion schemes of this type is focused on the relatively successful and potentially successful industries. Consequently, there is a greater chance that it will serve only as a temporary device.

To conclude: while the case for a fixed exchange rate to be preferred to commercial policy measures holds as a general proposition, under the given distorted conditions a transitory "corrective" departure appears to be desirable. Applying similar reasoning, McKinnon argued for "cascading" tariffs rather than a lower exchange rate (McKinnon, 1991).

### 3.3 Conditions for a fixed exchange rate regime to be viable

The microeconomic advantages of the fixed nominal exchange rate policy must, however, be compared with the macroeconomic constraints and costs implied. However attractive its disciplining and behavioural effects might be in the environment of transition economies, it does not follow that the "hard currency" policy of a fixed exchange rate might be reasonably resorted to under any conditions and at any time. It would be neither feasible nor sensible, if its costs in terms of lost output, increased unemployment and social hardship were likely to outweigh the microeconomic and structural benefits.

In the postwar period, a number of European economies (e.g. the Nordic countries) adopted a different strategy: promoting macroeconomic developments via low interest rates, while repeated adjustments of exchange rates were used to accommodate domestic cost pressures and to re-establish a strong competitive position. And only at a more mature and stabilized phase did they, for the most part, shift to the fixed rate policy.

If in a "strict" version, i.e. when irrevocably fixed, the exchange rate is "lost" as a policy instrument, this implies that other instruments must be used, and must be capable of securing competitiveness.

In the medium and long run, maintaining competitiveness is an **issue of fundamentals:** they must converge with those of the anchor currency's country (countries). At the same time, however, **cyclical changes and various external and domestic shocks** arise in the course of time which must be accommodated as well. It follows that the policy of a fixed exchange rate places heavy demands on the mechanisms of domestic adjustment: they must be sufficiently effective and flexible both as for secular and short-run developments.

When assessing the chances of pursuing a fixed exchange rate policy in a transition economy, what matters most is potential movements in the real exchange rate. Providing that the prospective inflation differential with respect to the anchor country is either zero or negative, the given nominal exchange rate is likely to be sustained.

Changes in the real exchange rate are related to changes in the nominal exchange rate and to relative changes in wage levels, in profits and in productivity with respect to the anchor countries. The **key variable appears to be the relative change in productivity.** If favourable, i.e. higher or at least matching the increases in partner countries, wages and profits may rise accordingly, without causing real exchange rate appreciation. This type of favourable constellation materialized e.g. in postwar Germany. It may also be a challenge for transition economies: could they exploit the chance of starting at a rather low level to achieve relatively higher productivity increases while catching up?

The structural and institutional properties of the economy in question are evidently decisive in this respect, particularly the degree of efficiency and flexibility in the functioning of labour and financial markets. It matters whether disposable savings are increasingly channelled to the "right" users. Likewise, a flexibly functioning labour market is likely to be crucial, if competitiveness is to be maintained via domestic adjustments instead of nominal exchange rate changes. The positive experience of social corporatism and voluntary incomes policies in a number of small European economies at earlier

stage of their development (Pekkarinen, Pohjola and Rowthorn, 1992) could be a good example to follow in the Czechoslovak case.

However, even with an appreciating real exchange rate, it might be possible to successfully maintain the given nominal rate, provided there are counterbalancing effects deriving from an improvement in non-price factors of competition. It is particularly these effects that it is hoped would arise from a hard currency policy; in the Czechoslovak conditions they would be of vital importance<sup>3</sup>. The Austrian example suggests the feasibility of their materialization.

-

<sup>&</sup>lt;sup>3</sup> "Austria increased her real market share in the OECD area form 0.9 per cent in 1970 to 1.08 per cent in 1980. This 20 per cent increase in Austrian market share took place despite an 18 per cent revaluation of the real exchange rate of the schilling vis-à-vis her trading partners in the same period" (Marin, 1985, p.479).

## 4 Concluding remarks

However unrealistic the fixed exchange rate regime might appear under the present conditions of the transition economies, we suggest that its benefits and costs should be seriously scrutinized, taking into account the specific conditions of individual countries. In the Czechoslovak case, we believe it could be a desirable option in the future.

There are contradictory factors at work as regards the time horizon for its possible adoption. It is evidently not viable over the next 1–2 years, taking into account all the forthcoming institutional changes and uncertainties involved.

On the other hand, a number of factors call for the implementation of the policy shift without delay:

- one of the lessons from the development of open market economies is that it takes time to build the credibility of the strategy opted for, and it must be "earned" (Hochreiter and Knöbl, 1991). The policy shift becomes increasingly more demanding, the more are opposite expectations embedded in the behaviour of firms, trade unions and various pressure groups. A comparison between Austria and Nordic countries is of particular interest in this respect. By this reasoning, there is a considerable difference between forward- and backward-looking expectations in inflationary tendencies (Barro, 1983), and in the chances of coping with a fixed exchange rate regime,
- as long as capital account flows remain mostly regulated, the "complicating" role of interest rate parity and of speculative capital flows is substantially diminished, if not eliminated. It seems therefore advantageous to go through the process of learning in conditions where the "fundamentals matter".

A reasonably early adoption of a policy of a nominal exchange rate anchor could therefore create a more favourable environment for the future stages of development.

Despite all the handicaps, Czechoslovakia ought to have relatively good chances of succeeding with the fixed exchange rate strategy. In addition to the comprehensive privatization programme and inflow of foreign direct investment, there is a tradition of industrial development and, moreover, of prudent monetary and fiscal policies aiming at a stabilized currency. This tradition dates back to the period after World War I, when the newly created Czechoslovak republic adopted conservative fiscal and monetary policies and, as a result, avoided the hyperinflation experienced by all its neighbours, including Germany, Austria, Hungary and Poland (Sargent, 1986).

The hypothesis is that under the given conditions, the policy of a hard currency – rather than devaluations as implied by the conventional wisdom – should lead to a sustained, export-led recovery of the Czechoslovak economy in the medium run.

#### References:

Balassa, B. (1964). The Purchasing Power Doctrine: A Reappraisal. Journal of Political Economy.

Baldwin, R. (1969). The Case Against Infant – Industry Tariff Protection. Journal of Political Economy.

Barro, R.J. (1983). Rules, Discretion and Reputation in a Model of Monetary Policy. Journal of Monet. Econ.

Bofinger, P. (1990). The Role of Monetary Policy in the Process of Economic Reform in Eastern Europe. CERP. Discussion Paper No. 457.

Bohatá, M. – Fischer, M. (1992). **Analýza vývoje výkonnosti průmyslu v** průběhu transformačního procesu. ÚÚNV. Prague.

Dornbusch, R. (1990). From Stabilization to Growth. NBER Working Paper No. 3302.

Fry, M.J. (1992). Monetary and Exchange Rate Policies in Poland and Other Eastern European Countries: Some Lessons from Further East. Mimeo.

Fry, M.J. – Nuti, D.M. (1992). Monetary and Exchange Rate Policies during Eastern Europe's Transition. Oxford Review of Economic Policy. Spring.

Herr, H., Tober S. – Westphal, S. (1991). A Strategy for Economic Transformation and Development in Eastern Europe. De Pecunia No. 3.

Hillman, A.L. (1991). International Trade Policy in the Transition from Socialism. Conference Paper. Jerusalem.

Hochreiter, E. – Knöbl, A. (1991). Exchange Rate Policy of Austria and Finland, Two Examples of a Peg. Bank of Finland Discussion Papers. No. 12.

Hrnčíř, M. (1992). **Developing Competition in a Transition Economy.** Conference paper. Prague.

Hughes, G. – Hare, P.G. (1992). Industrial Policy and Restructuring in Eastern Europe. Oxford Review of Economic Policy. No. 1.

McKinnon, R. (1991). Liberalising Trade in a Socialist Economy. Conference paper. Vienna.

Kolanda, M. – Kubišta, V. (1980). Costs, Performance and Behaviour of the Czechoslovak Manufacturing Enterprises on the World Markets in the 1980's. The Institute of Forecasting. Prague.

Kornai, J. (1986). The Soft Budget Constraint. Kyklos.

Landesmann, M. (1991). Industrial Restructuring and the Reorientation of Trade in Czechoslovakia. European Economy. Special Edition No. 2.

Leppänen, S. (1992). Finland and Austria: Two Different Economic Policy Strategies. Conference paper.

MacDonald, R. – Taylor, P.M. (1992). Exchange Rate Economics. IMF Staff Papers. No. 1.

Marin, D. (1985). Structural Change through Exchange Rate Policy. Weltwirtschaftliches Archiv. Heft 3.

Mundel, R.A. (1962). The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability. IMF Staff Papers.

National Economic Development Office. (1977). International Price Competitiveness, Non-Price Factors and Export Performance. London.

Nurkse, R. (1945). Conditions of International Monetary Equilibrium, in Ellis, H.S. – Metzler, L.S.: Readings in the Theory of International Trade.

Nuti, D.M. (1990). Internal and International aspects of Monetary Disequilibrium in Poland, in: Economic Transformation in Hungary and Poland. European Economy.

Pekkarinen, J., Pohjola, M. – Rowthorn, B. (1992). Social Corporatism, A Superior Economic System? Clarendon Press. Oxford.

Pick, M. (1990). Productivity, Purchasing Power Parity, Exchange Rate. Institute of Forecasting. Prague.

Plan Econ Report. (1992). No. 16–17, 18, ed. Vanous, J., April–May.

Portes, R. (1990). **Introduction**, in: Economic Transformation in Hungary and Poland. European Economy. No. 43.

Sargent, T.J. (1986). Rational Expectations and Inflation. Harper & Row.

Summers, R. – Heston A. (1988). New Set of International Comparisons of Real Product and Price Lewels. Estimates for 130 Countries. Income and Wealth No. 1.

Wihlborg, C.G. – Willett, T.D. (1992). **Optimal Currency Areas Revisited**, in Wihlborg, C.G., Fratianni, M., Willet, T.D. Financial regulation and Monetary Arrangements after 1992, Amsterdam.

Williamson, J. (1991). The Economic Opening of Eastern Europe, in Williamson, J. (ed.) Currency Convertibility in Eastern Europe, Washington D.C.

#### REVIEW OF ECONOMIES IN TRANSITION

from number 4 ISSN 1235-7405

1/92	Pekka Sutela: <b>Neuvostoliiton hajoamisen taloudelliset aspektit.</b> 24 s.
	Jouko Rautava: Suomen ja Venäjän taloussuhteet Suomen EY-jäsenyyden valossa. 12 s

- 2/92 Seija Lainela Jouko Rautava Neuvostoliiton talouskehitys vuonna 1991. 15 s. Seija Lainela Viron taloudellisen kehityksen lähtökohdat. 9 s. Merja Tekoniemi Yksityistäminen itäisen Euroopan maissa ja Baltiassa. 7 s.
- 3/92 Kamil Janácek **Transformation of Czechoslovakia's Economy: Results, Prospects, Open Issues.** 20 p.

Sergey Alexashenko **General Remarks on the Speed of Transformation** in the **Socialist Countries.** 25 p.

Sergey Alexashenko The Free Exchange Rate in Russia: Policy, Dynamics, and Projections for the Future. 19 p.

Jouko Rautava Liikaraha, inflaatio ja vakauttaminen. 16 s.

- 4/92 Stanislava Janácková Kamil Janácek Privatization in Czechoslovakia. 8 p.
  Sergey Alexashenko The Collapse of the Soviet Fiscal System: What Should Be Done? 45 p.
  Juhani Laurila Neuvostoliiton ja Venäjän velka. 23 s.
  Jukka Kero Neuvostoliiton ja Venäjän ulkomaankauppa. 24 s.
- Pekka Sutela Clearing, Money and Investment: The Finnish Perspective on Trading with the USSR. 26 p.
   Petri Matikainen "Suuri pamaus" Puolan talousuudistus 1990. 22 s.
- Miroslav Hrncír Foreign Trade and Exchange Rate in Czechoslovakia: Challenges of the Transition and Economic Recovery. 39 p.
   Terhi Kivilahti Jukka Kero Merja Tekoniemi Venäjän rahoitus- ja pankkijärjestelmä. 37 s.
- Neija Lainela Baltian maiden rahauudistukset. 23 s.
   Seija Lainela Jouko Rautava Baltian maiden poliittisen ja taloudellisen kehityksen taustat ja nykytilanne. 14 s.
   Sergei Alexashenko Verojen ja tulonsiirtojen jakautuminen entisessä Neuvostoliitossa. 17 s.
- 1/93 Pekka Sutela Taloudellinen transitio Venäjällä. 11 s.
   Pekka Sutela Venäjän taloudellinen voima 2000-luvulla. 9 s.
   Pekka Sutela Itäinen Eurooppa integraatiossa: ottopoikia, sisarpuolia vai ... 11 s.
- Inkeri Hirvensalo Changes in the Competitive Advantages of Finnish Exporters in the Former USSR after the Abolition of the Clearing Payment System. 35 p.

  Miroslav Hrncír The Exchange Rate Regime and Economic Recovery. 17 p.

  Gábor Oblath Real Exchange Rate Changes and Exchange Rate Policy under Economic Transformation in Hungary and Central-Eastern Europe. 31 p.

  Gábor Oblath Interpreting and Implementing Currency Convertibility in Central and Eastern Europe: a Hungarian Perspective. 19 p.
- Jouko Rautava Venäjän järjestelmämuutos ja talouskehitys 1992. 19 s.
   Seija Lainela Baltian maiden talous vuonna 1992. 25 s.
   Pekka Sutela Itäinen Eurooppa vuonna 1992. 14 s.
- Jouko Rautava Monetary Overhang, Inflation and Stabilization in the Economies in Transition. 17 p.
   Jarmo Eronen Manufacturing Industries before and after the Collapse of Soviet Markets: a Comparison of Finnish and Czechoslovak Experience. 19 p.

- 5/93 Pekka Sutela **Uusi hanke entisen rupla-alueen kaupankäynnin monenkeskeistämiseksi.** 8 s. Juhani Laurila **Venäjän velkakriisin kehitys ja nykytilanne.** 10 s.
- Jouko Rautava **Yritystuesta sosiaaliturvaan: Julkisen tuen muutospaineet Venäjällä.** 7 s. Jarmo Eronen **Venäjän uusi hallinnollinen aluejako.** 7 s. Aleksei Tkatshenko **Pienyrittäjyys Venäjällä: Nykytilanne ja kehitysnäkymät.** 35 s.
- Tuula Rytilä Russian Monetary Policy Since January 1992. 20 p.
   Inkeri Hirvensalo Developments in the Russian Banking Sector in 1992-1993. 22 p.
- Seija Lainela Pekka Sutela Introducing New Currencies in the Baltic Countries. 26 p.
   Inna Shteinbuka The Baltics' ways: Intentions, Scenarios, Prospects. 27 p.
   Inna Shteinbuka Latvia in Transition: First Challenges and First Results. 33 p.
   Inna Shteinbuka Industry Policy in Transition: the Case of Latvia. 30 p.
- 9/93 Jouko Rautava Venäjän keskeiset taloustapahtumat heinä- syyskuussa 1993. 10 s. Merja Tekoniemi Venäjän parlamenttivaalien poliittiset ryhmittymät. 3 s. Jarmo Eronen Venäläinen ja suomalainen periferia: Permin Komin ja Kainuun luetaloudellista vertailua. 29 s.
- 10/93 Seija Lainela Venäjän federatiivisen rakenteen muotoutuminen ja taloudellinen päätöksenteko; Pietarin asema. 14 s.
  Inkeri Hirvensalo Pankkitoimintaa Pietarissa. 14 s.
  Juhani Laurila Suoran sijoitustoiminnan kehittyminen Venäjällä ja Suomen lähialueella. 29 s.
  Juhani Laurila Suomen saamiset Venäjältä. Valuuttakurssimuutosten ja vakautusten vaikutukset. 8 s.
- 1/94 Pekka Sutela Insider Privatization in Russia: Speculations on Systemic Change. 22 p. Inkeri Hirvensalo Banking in St.Petersburg. 18 p.
- 2/94 Aleksei Tkatshenko **Pienyritysten yksityistäminen Venäjällä.** 23 s. Jarmo Eronen **Konversio Venäjällä: tulosten tarkastelua.** 10 s.
- Juhani Laurila Direct Investment from Finland to Russia, Baltic and Central Eastern European Countries: Results of a Survey by the Bank of Finland. 14 p.

  Juhani Laurila Finland's Changing Economic Relations with Russia and the Baltic States. 11 p.

  Jouko Rautava EC Integration: Does It Mean East-West Disintegration. 8 p.

  Eugene Gavrilenkov Macroeconomic Crisis and Price Distortions in Russia. 20 p.

  Eugene Gavrilenkov Russia: Out of the Post-Soviet Macroeconomic Deadlock through a Labyrinth of Reforms. 22 p.
- Jouko Rautava Venäjän järjestelmämuutos ja talouskehitys 1993. 16 s.
   Seija Lainela Baltian maat vuonna 1993. 19 s.
   Jouko Rautava Suomen idänkauppa 1990-93. 7 s.
- 5/94 Pekka Sutela Production, Employment and Inflation in the Baltic Countries. 22 p. Seija Lainela Private Sector Development and Liberalization in the Baltics. 14 p. Seija Lainela Small Countries Establishing Their Own Independent Monetary Systems: the Case of the Baltics. 17 p.
- 6/94 Merja Tekoniemi **Työttömyys ja sosiaaliturva Venäjällä.** 31 s.
- Pekka Sutela Fiscal Federalism in Russia. 23 p.
   Jouko Rautava Interdependence of Politics and Economic Development:
   Financial Stabilization in Russia. 12 p.
   Eugene Gavrilenkov "Monetarism" and Monetary Policy in Russia. 8 p.

8/94	Pekka Sutela <b>The Instability of Political Regimes, Prices and Enterprise Financing and Their Impact on the External Activities of the Russian Enterprises.</b> 31 p. Juhani Laurila <b>The Republic of Karelia: Its Economy and Financial Administration.</b> 37 p. Inkeri Hirvensalo <b>Banking Reform in Estonia.</b> 21 p.
9/94	Jouko Rautava Euroopan unionin ja Venäjän välinen kumppanuus- ja yhteistyösopimus - näkökohtia Suomen kannalta. $7~\rm s.$
10/94	Seija Lainela - Pekka Sutela <b>The Comparative Efficiency of Baltic Monetary Reforms.</b> 22 p. Tuula Rytilä <b>Monetary Policy in Russia.</b> 22 p.
11/94	Merja Tekoniemi <b>Miksi Venäjän virallinen työttömyysaste on säilynyt alhaisena?</b> 19 s.
1/95	Jouko Rautava <b>Venäjän järjestelmämuutos ja talouskehitys 1994.</b> 19 s. Seija Lainela <b>Baltian maat vuonna 1994.</b> 21 s. Vesa Korhonen <b>Itäisen Euroopan talouskehitys 1994.</b> 19 s.
2/95	Urmas Sepp <b>Inflation in Estonia: the Effect of Transition.</b> 27 p. Urmas Sepp <b>Financial Intermediation in Estonia.</b> 32 p.
3/95	Vesa Korhonen <b>EU:n ja Venäjän kumppanuus- ja yhteistyösopimus.</b> 31 s. Jouko Rautava <b>Talousintegraatio ja Suomen turvallisuus - Suomi Euroopan unionin idän taloussuhteissa.</b> 21 s. Jouko Rautava <b>Suomen idänkauppa 1985-94.</b> 10 s.
4/95	Nina Oding <b>Evolution of the Budgeting Process in St. Petersburg.</b> 29 p. Urmas Sepp <b>A Note on Inflation under the Estonian Currency Board.</b> 12 p. Pekka Sutela <b>But Does Mr. Coase Go to Russia?</b> 14 p.
5/95	Urmas Sepp Estonia's Transition to a Market Economy 1995. 57 p.
6/95	Niina Pautola The New Trade Theory and the Pattern of East-West Trade in the New Europe. 21 p.
	Nina Oding Investment needs of the St.Petersburg Economy and the Possibilities to meeting them. 20 p.
	Panu Kalmi Evolution of Ownership Change and Corporate Control in Poland. 21 p.
7/95	Vesa Korhonen <b>Venäjän IMF-vakauttamisohjelma 1995 ja Venäjän talouden tilanne.</b> 37 s. Inkeri Hirvensalo <b>Maksurästit Venäjän transitiotaloudessa.</b> 30 s.
	Seija Lainela Baltian maiden omat valuutat ja talouden vakautus - pienten maiden suuri menestys. 14 s.
8/95	Pekka Sutela Economies Under Socialism: the Russian Case. 17 p. Vladimir Mau Searching for Economic Reforms: Soviet Economists on the Road to Perestroika. 19 p.
9/95	Niina Pautola East-West Integration. 33 p. Panu Kalmi Insider-Led Privatization in Poland, Russia and Lithuania: a Comparison. 16 p. Iikka Korhonen Equity Markets in Russia. 14 p. Jury V. Mishalchenko - Niina Pautola The Taxation of Banks in Russia. 5 p.
1/96	Juhani Laurila <b>Payment Arrangements among Economies in Transition: the Case of the CIS.</b> 23 p. Sergei Sutyrin <b>Problems and Prospects of Economic Reintegration within the CIS.</b> 17 p. Viktor V. Zakharov - Sergei F. Sutyrin <b>Manager Training - Another Emerging Market in Russian Educational Services.</b> 9 p.

2/96 Jouko Rautava Venäjän järjestelmämuutos ja talouskehitys vuonna 1995. 12 s.

Juhani Laurila **Katsaus lähialueisiin.** 28 s.

Iikka Korhonen **Baltian vuosikatsaus.** 10 s.

Pekka Sutela Ukrainan ja Valkovenäjän taloudet vuonna 1995. 10 s.

Vesa Korhonen Itäisen Euroopan siirtymätalouksien kehitys 1995. 17 s.

3/96 Niina Pautola Intra-Baltic Trade and Baltic Integration. 12 p.

Vesa Korhonen The Baltic Countries - Changing Foreign Trade Patterns and

the Nordic Connection. 16 p.

Iikka Korhonen Banking Sectors in Baltic Countries. 22 p.

4/96 Niina Pautola **Trends in EU-Russia Trade**, Aid and Cooperation. 16 p.

Niina Pautola The Baltic States and the European Union - on the Road to Membership. 20 p.

Elena G. Efimova - Sergei F. Sutyrin The Transport Network Structure of the St.Petersburg

Region and its Impact on Russian-Finnish Economic Cooperation. 11 p.

Iikka Korhonen An Error Correction Model for Russian Inflation. 10 p.

5/96 Juhani Laurila - Inkeri Hirvensalo **Direct Investment from Finland to Eastern Europe**;

Results of the 1995 Bank of Finland Survey. 21 p.

Tatiana Popova - Merja Tekoniemi Social Consequences of Economic Reform in Russia. 26 p.

Iikka Korhonen **Dollarization in Lithuania.** 7 p.

Juhani Laurila - Inkeri Hirvensalo Suorat sijoitukset Suomesta Itä-Eurooppaan; Suomen Pankin

vuonna 1995 tekemän kyselyn tulokset. 20 s.

Jouko Rautava Suomi, Euroopan Unioni ja Venäjä. 6 s.

Niina Pautola Baltian maiden talouskatsaus 1996. 12 s.

1/97 Panu Kalmi Ownership Change in Employee-Owned Enterprises in Poland and Russia. 51 p.

2/97 Niina Pautola **Fiscal Transition in the Baltics.** 23 p.

Peter Backé Interlinkages Between European Monetary Union and a Future EU Enlargement

to Central and Eastern Europe. 19 p.

3/97 Iikka Korhonen A Few Observations on the Monetary and Exchange Rate Policies

of Transition Economies. 8 p.

Iikka Korhonen A Brief Assessment of Russia's Treasury Bill Market. 8 p.

Rasa Dale Currency Boards. 14 p.

4/97 Sergei F. Sutyrin Russia's International Economic Strategy: A General Assessment. 17 p.

Tatiana Popova The Cultural Consequences of Russian Reform. 17 p.

Ludmilla V. Popova - Sergei F. Sutyrin Trends and Perspectives in Sino-Russian Trade. 11 p.

5/97 Jouko Rautava **Venäjän järjestelmämuutos ja talouskehitys vuonna 1996.** 10 s.

Iikka Korhonen - Niina Pautola Baltian talouskatsaus 1996. 12 s.

Merja Tekoniemi **Katsaus lähialueisiin 1996.** 11 s.

Merja Tekoniemi Ukrainan talouskatsaus 1996. 10 s.

Kari Pekonen Valko-Venäjän talous vuonna 1996. 6 s.

Katri Lehtonen Keski- ja Itä-Euroopan talouskehitys vuonna 1996. 13 s.

6/97 Niina Pautola **Towards European Union Eastern Enlargement - Progress and Problems** 

in Pre-Accession. 17 p.

Katri Lehtonen Theory of Economic Reform and the Case of Poland. 26 p.

Boris Brodsky Dollarization and Monetary Policy in Russia. 14 p.

7/97 Toivo Kuus **Estonia and EMU Prospect.** 24 p.

Olga Luštšik The Anatomy of the Tallinn Stock Exchange. 23 p.

Riia Arukaevu Estonian Money Market. 20 p.

Iikka Korhonen The Sustainability of Russian Fiscal Policy. 8 p.
 Tatiana Popova - Merja Tekoniemi Challenges to Reforming Russia's Tax System. 18 p.
 Niina Pautola Optimal Currency Areas, EMU and the Outlook for Eastern Europe. 25 p.

2/98 Peter Westin Comparative Advantage and Characteristics of Russia's Trade with the European Union. 26 p.

Urszula Kosterna **On the Road to the European Union - Some Remarks on Budgetary Performance in Transition Economies.** 31 p.

3/98 Jouko Rautava Venäjän järjestelmämuutos ja talouskehitys vuonna 1997. 11 s.

Merja Tekoniemi **Keskuksen ja alueiden välisten suhteiden kehitys Venäjällä 1992-1997.** 10 s. Niina Pautola **Baltian talouskatsaus 1997.** 11 s.

Merja Tekoniemi **Katsaus Suomen kauppaan IVY-maiden ja Baltian maiden kanssa 1990-1997.** 11 s.

Tom Nordman Kiinan talouden tila ja ongelmat. 11 s.

Merja Tekoniemi Ukrainan talouskatsaus 1997. 10 s.

Iikka Korhonen Keski- ja Itä-Euroopan talouskehitys 1997. 12 s.

4/98 Kustaa Äimä Central Bank Independence in the Baltic Policy. 30 p.

Iikka Korhonen – Hanna Pesonen **The Short and Variable Lags of Russian Monetary Policy.** 11p. Hanna Pesonen **Assessing Causal Linkages between the Emerging Stock Markets of Asia and Russia.** 10 p.

5/98 Laura Solanko Issues in Intergovernmental Fiscal Relations – Possible Lessons for Economies in Transition. 19 p.

Iikka Korhonen Preliminary Tests on Price Formation and Weak-form Efficiency in Baltic Stock Exchanges. 7 p.

Iikka Korhonen A Vector Error Correction Model for Prices, Money, Output, and Interest Rate in Russia. 12 p.

Tom Nordman Will China catch the Asian Flu? 14 p.

6/98 Saga Holmberg Recent Reforms in Information Disclosure and Shareholders' Rights in Russia. 17 p.

Vladimir R. Evstigneev **Estimating the Opening-Up Shock: an Optimal Portfolio Approach to Would-Be Integration of the C.I.S. Financial Markets.** 39 p.

Laura Solanko – Merja Tekoniemi **Novgorod and Pskov – Examples of How Economic Policy Can Influence Economic Development.** 14 p.

Ülle Lõhmus - Dimitri G. Demekas **An Index of Coincident Economic Indicators for Estonia.** 12p.

7/98 Tatyana Popova **Financial-Industrial Groups (FIGs) and Their Roles in the Russian Economy.** 24p.

Mikhail Dmitriyev – Mikhail Matovnikov – Leonid Mikhailov – Lyudmila Sycheva **Russian Stabilization Policy and the Banking Sector, as Reflected in the Portfolios of Moscow Banks in 1995–97.** 29 p.

1/99 Jouko Rautava Venäjän järjestelmämuutos ja talouskehitys vuonna 1998. 10 s.

Iikka Korhonen – Seija Lainela Baltian maat vuonna 1998. 10 s.

Tom Nordman Kiinan talouden tila ja näkymät. 13 s.

Pekka Sutela Ukrainan talouskatsaus 1998. 14 s.

Iikka Korhonen Keski- ja Itä-Euroopan talouskehitys vuonna 1998. 10 s.