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# Exit in the Framework of Macro-economic Shocks and Policy Responses during Transition: a Cross-country Comparison

by

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## **Contents:**

1. Introduction: Shocks, Policy Responses and Exit	4
2. Credit Shocks in Post-communist Economies	5
3. Fiscal Adjustment and its impact on SOEs	9
4. The CMEA and Soviet Import Trade Shocks	11
5. The Shock of Over-devaluation	13
6. Accomodation via Bank Credit	14
7. Accomodation via Inter-enterprise Debt	17
8. Accomodation via Relaxation of Enterprise Taxation	21
9. The Fiscal Stance of General Government and Accomodation	23
10. Accomodation via Exchange Rate Policy	24
11. Accomodative Protectionism	26
12. Conclusion	28
References	33

## 1. Introduction: Shocks, Policy Responses and Exit.

Our aim is, first, to attempt to measure the size of the shocks affecting the fast reformers of the Visehrad group and some of the slower reforming reference countries (such as Bulgaria, Romania, Russia and Ukraine); second, to assess the policy responses of governments (by classifying these as either adaptive or accommodative, and by trying to gauge their importance).

Enterprises in post-communist economies have been subject to a wide range of shocks as the old economic order has been swept away. It has been claimed that among the most important of these shocks have been:

- the elimination of soft budget constraints, resulting among others from price liberalization, the elimination of "soft credit" (either in the form of loans granted on a non-commercial basis, or at significantly negative real interest rates) and from the drastic reduction in budgetary subsidies to enterprises.
- 2) foreign trade shocks, resulting from the disappearance of export markets and the shift to world prices in convertible currencies for raw materials and energy.
- 3) over-devaluation, as trade was liberalised and currencies were sharply devalued to maintain the competitiveness of domestic producers<sup>1</sup>.

In the words of two eminent observers:

"In a matter of days and weeks, Polish enterprises, subject to the simultaneous shocks of price liberalization, trade liberalization and fiscal stabilization in January 1990, plunged from a shortage economy characterised by a sellers' market into a buyers' market where firms must compete to sell their products. Similar changes took place in Czechoslovakia in early 1991, even though fiscal stabilization was less an issue due to more balanced initial macro-economic conditions. Even though price liberalization accelerated substantially between 1989 and 1991. Last but not least, the CMEA breakdown constituted a price liberalization at the level of the whole region." [Grosfeld and Roland, 1994].

<sup>&</sup>lt;sup>1</sup> There need not have been any intention to "over-devalue", but rather to avoid under-devaluation.

## 2. Credit Shocks in Post-communist Economies.

One measure of the elimination of soft budget constraints is the change in real credit to non-government which accompanied the transition. In Czechoslovakia this fell by 9% in 1990 and by 26% in the first half of 1991, followed by an increase of 5% in the second half of 1991 and of 1.5% in the first half of 1992. Thus overall the effect was far from insignificant.

	CSFR	Czech F	Republic	Slo	vakia
		total	SOE	total	SOE
12/1989	100	100	100	100	100
12/1990	83	92	89	69	70
06/1991	64	71	64	57	56
12/1991	67	69	63	60	56
06/1992	68	69	57	64	55
12/1992	-	70	_	60	_
12/1993	-	67	_	56	_
12/1994	-	73	_	51	_

#### Table 1: Real credit to Enterprises (PPI deflated)

Source: own calculations based on Svejnar [1993] and official statistics provided in the "Statistical Bulletin - Poland, Czech Republic, Slovakia, Hungary (Quarterly)".

In Slovakia credit was noticeably tighter than in the Czech Republic, and in both countries from 1991 credit to state enterprises was significantly tighter than total credit. Particularly striking is the sharp fall in credit in Slovakia in 1990, before reforms really got underway, and at a time when credit was far less affected in the Czech Republic.

In Hungary there has been hardly any contraction in credit to businesses, whereas in Poland the reduction in real credit to firms has been by far the steepest among the four

#### countries:

	Pol	Hungary	
	Real Credit	Industrial Output	Real Credit
Q1/1989	100	100	100
Q2/1989	96	96	98
Q3/1989	70	85	107
Q4/1989	43	91	103
Q1/1990	28		98
Q2/1990	41	66	93
Q3/1990	48	69	102
Q4/1990	49	76	96
Q2/1991	47	58	95
Q4/1991	53	60	99
Q4/1992	50	68	100
Q4/1993	48	73	108
Q4/1994	46	83	-

#### Table 2: Real credit to Enterprises (PPI deflated)

Sources: Commander and Coricelli [1992] and official statistics provided in the "Statistical Bulletin - Poland, Czech Republic, Slovakia, Hungary (Quarterly)".

The relationship between output and real credit is tenuous for all four countries. Thus in Hungary, between the beginning of 1989 and the end of 1993 real credit to enterprises actually increased, whereas industrial output fell by 30%.

In Poland, between 1985 and 1988 real credit to enterprises fell by over 23%, while industrial output increased by 13.6%. During 1989 real credit to enterprises and industrial production developed as Table 2 shows. Thus the index of the ratio of real credit to industrial output changed as follows during the year: 100, 100, 83, 47, 40 (Q1 1990). In the eleven quarters which follow (to the end of 1993) real credit to enterprises increases by over 70%, while industrial production grows by a mere 3%, increasing the ratio of real credit to industrial production back to 67. Then, during the four quarters of 1994 industrial production increases by 12% while real credit falls by 4%. Thus in the medium term, from 1985 to 1994, there seems to be remarkably little relationship between the levels of industrial output and real credit to enterprises in Poland, with output often changing in the opposite direction to

changes in real credit. Indeed, the correlation coefficient on quarterly data is both small and negative  $(-0.1797)^2$ .

Calvo and Coricelli [1993] claim that nevertheless a relationship can be found on cross sectional data when comparing the last quarter of 1989 and the first quarter of 1990, with a (relatively low) co-efficient of about 0.2. They stress that the fall in inter-enterprise credit (IEC) which accompanied the stabilization in Q1 1990 in Poland contributed to the discrepancy between the fall in real credit and the fall in output. The increase in real IEC in the last quarter of 1989 helped to offset the fall in real bank credit, whereas the fall in real IEC augmented the fall in real bank credit in the first quarter of 1990 (see Table 3 below). However, what Calvo and Coricelli fail to take into account is that had this fall in real IEC not happened, the tightening in real bank credit might not have affected either output or inflation at the beginning of 1990 (as it was industrial output fell by far less than real credit to enterprises).

 Table 3: Inter-enterprise Credit in Poland

Q1 1989	100
Q2 1989	109
Q3 1989	92
Q4 1989	123
Q1 1990	73

Source: Rostowski [1993].

In the absence of the final tightening of real bank credit in Q1 1990, IEC might have continued expanding in a bubble of the kind analyzed in Rostowski [1993], undermining the stabilization. Indeed, this is what seems to have happened in Russia in the first half of 1992, during the Gaidar team's attempted stabilization.

However weak the empirical relationship between real credit and industrial output was, there can be little doubt that a fundamental change in the availability of credit occurred at the beginning of 1990 in Poland, as it did in Slovakia in the same year and at the beginning of 1991 in the Czech Republic<sup>3</sup>. In Hungary the change in the credit allocation regime may

 $<sup>^{2}</sup>$  The results are even worse if quarterly real credit is lagged behind industrial output: t-1 = -0.014; t-2 = 0.0369; t-3 = 0.0538.

<sup>&</sup>lt;sup>3</sup> In fact, the tightening of credit to state enterprises in Poland was greater than appears in Table 2, as in the second half of 1990 all nominal increases in credit granted by the nine regional banks in Poland were earmarked for the private sector, and the same policy was pursued throughout 1991 in Czecho-slovakia. In Poland this policy was considerably loosened in 1991, with credit to the private sector targeted only to grow twice as fast as that to SOEs.

have been more gradual, yet it was equally effective (Section 6 below). This change was central to the change in macro-economic regime which occurred in these countries. It has been called a shift from "systemically bad" to "systemically good" credit [Rostowski 1995]. "Systemically bad" credit was provided by the state owned banking system without any assumption that it would ever be repaid. Also, in countries with high and accelerating inflation (Poland until 1990, Ukraine until 1994) this systemically bad credit was easily obtainable, bore significantly negative real interest rates, and constituted a major proportion of the quasi-fiscal deficit. As a result it functioned as a mechanism by which the borrowers (mainly state enterprises and farms, but also in Poland private farmers) received a significant proportion of inflation tax revenue as a subsidy [Layard and Richter, 1994]. For credit to become "systemically good", banks had to learn to allocate it on a commercial basis. For banks to have the incentive to acquire the skills needed to start allocating credit commercially, credit had to stop bearing sharply negative real interest rates (at which it was hard for borrowers to invest so badly as to be unable to service their obligations), and it had to stop being easily available. Putting the conditions for "systemically good" credit in place was, however, tantamount to eliminating the subsidy borrowers had received through their access to a significant proportion of inflation tax revenues<sup>4</sup>. Since this subsidy was related in various ways to enterprises' output, it is not surprising that when it was reduced output also fell<sup>5</sup>.

Thus the general association of the introduction of the new "good credit" regime and of a sharp fall in industrial output is not in doubt. What is doubtful is any direct quantitative relationship between real credit and industrial output and, perhaps more important, the policy implication that there was an alternative policy which could have avoided the fall in real credit in these countries, while at the same time stopping very high inflation<sup>6</sup>.

<sup>&</sup>lt;sup>4</sup> In Czechoslovakia, where inflation was very low before the transition, enterprises continued to obtain part of the seigniorage from money creation by getting credit which they were not expected to repay.

<sup>&</sup>lt;sup>5</sup> Two kinds of link operated: (1) the higher the level of output the higher the level of credit granted by the state owned banks; (2) the higher the level of credit the higher the level of output (because enterprise managers wanted to prove their efficiency to superiors and thus obtain promotion, and higher subsidy levels made it possible to increase production).

<sup>&</sup>lt;sup>6</sup> Given their absence under the old regime of "bad credit", banks had to invest in obtaining credit allocation skills. They were unlikely to do so simply as a result of the authorities statement that a given (pre-stabilization) increase in nominal credit was the final one. (Such a credible one off increase is how Calvo and Coricelli suggest that real credit can be maintained during stabilization). Only once government had actually failed

## 3. Fiscal Adjustment and its impact on SOEs.

In all three Central European countries budgetary subsidies were reduced sharply:

								(%	of GDP)
	Poland		Poland Hungary		Czechoslovakia				
	А	В	С	А	В	С	А	В	С
Subsidies	16.2	5.0	11.2	15.6	5.6	-9.9	26.3	7.9	-18.5
o.w. SOE subsidies	7.1	2.1	-5.0	9.8	3.3	-6.5	22.2	7.9	-14.3
Transfers <sup>a</sup>	9.9	19.7	9.9	13.7	24.4	10.7	11.8	16.3	4.4
Profit tax	11.1	5.8	-5.3	10.5	4.0	-6.5	18.6	12.7	-5.8

Notes:

<sup>a</sup> to households;

A = 1985-7; B = 1991-2; C = change

Source: Barbone and Marchetti [1994] and author's calculations.

The largest reduction in subsidies (but from the highest level) occurred in Czechoslovakia, and Czechoslovakia remained the country with the highest level of subsidies. Subsidy removal is significant not only because it increases the hardness of budget constraints, but also because it provides some measure of the extent of price liberalization. Thus it is no accident that subsidy reduction was by far the largest in Czechoslovakia. The relatively low level of subsidies in Hungary reflects its relatively high share of free prices in 1986, while the low level in Poland was due to partly to freer prices and partly to greater shortages (i.e. "unfunded" price control).

Schaffer [1995] reports on the results of a survey of 37,720 Polish firms for 1991 and 11,719 Czech firms for 1992. He concludes that: "The pattern for the two countries is very similar: about 85-90% of all firms...and 75-90% of total revenues, are in firms receiving

to increase nominal credit to compensate for preceding inflation, would the introduction of the new regime become

virtually no subsidies (i.e. firms where subsidies make up 1% or less of their total revenue)... already by the second year of the transition, most of the enterprise sector is budgetary subsidy free." Manufacturing firms in both countries received less than 10% of all subsidies, which accounted for less than 0.5% of their revenues. The transport sector received 35-40% of all subsidies in both countries. In Poland mining received 37% of the subsidies in 1991, but coal prices were liberalised late that year, and this then largely disappeared. In the Czech Republic agriculture received 25% of subsidies. Subsidies were important for the strongly subsidized sectors, accounting for 5-18% of their revenues, but the overall level of subsidies was low, and comparable to EU levels:

Bulgaria	48
Czech Republic	44
Hungary	4.8
Poland	
Slovakia	2.5
SIOVAKIA	4.0
Romania	5.5

Table 5:Subsidies as a % of GDP: 1993

Source: Schaffer [1995] and World Economic Outlook, IMF, October 1994.

These subsidy reductions have been of a similar scale to the reductions in bank credit discussed in the previous Section. In Poland, where the reduction in credit was the largest, real credit to non-government was reduced from about 40% of GDP at the beginning of 1989 to 12% of GDP at the beginning of 1990, after which it has risen to about 20% of GDP. The fall has thus been of the order of 22 percentage points of 1989 GDP. In Czecho-slovakia the credit contraction was no smaller relative to GDP, as credit was equivalent to about 75% of GDP in 1990. Thus the 33% fall in real credit in the first half of 1991 was equivalent to almost 25 percentage points of 1990 GDP. In Hungary real credit hardly fell, and actually rose relative to GDP as the latter fell by some 20% between 1989 and 1993<sup>7</sup>.

credible, and would banks actually invest in credit allocation skills.

<sup>&</sup>lt;sup>7</sup> This effect is partly due to deflating nominal credit by the PPI while GDP is deflated by a price index which gives a weight of over 0.5 to consumer prices which rose far faster than the PPI. Nevertheless, this distortion also held in Czechoslovakia and Poland.

As we have seen, between 1985-7 and 1991-2, subsidies to SOEs fell by 14.3 percentage points of GDP in Czechoslovakia, 5 percentage points in Poland, and 6.5 percentage points in Hungary (Table 4). These figures are smaller than those for credit (except in the case of Hungary). To the extent that we accept that credit under the old system (be that central planning or market socialism) was "systemically bad", then credit was effectively a form of subsidy, and therefore the reduction in real credit is comparable to - and additive with - the reduction in budgetary subsidies. **If we accept this approach then the initial impact on enterprises and consumers<sup>8</sup> was about 40% of GDP in Czechoslovakia and between 33% (Q1 1990) and 25% (Q4 1990) in Poland. We have seen that in Hungary subsidy removal predominated, and amounted to only about 6.5% of GDP<sup>9</sup>.** 

The question then becomes: to what extent did remaining credit cease having the characteristics of a subsidy under the new system? We return to this matter in Section 6.

## 4. The CMEA and Soviet Import Trade shocks.

Rosati [1993] distinguishes between three kinds of trade shock which affected the post-CMEA countries:

- the terms of trade shock, resulting from the increase in the relative price of raw materials, and particularly energy products, which had to be paid by importers (particularly Central European importers of Soviet primary exports);
- 2. that part of the Soviet import collapse which was due to the disintegration of CMEA \_ via trade reduction and trade diversion<sup>10</sup>;

<sup>&</sup>lt;sup>8</sup> Not all subsidies were paid to enterprises, although the vast bulk were in both Poland and Czechoslovakia (Table 4).

<sup>&</sup>lt;sup>9</sup> Really the matter is more complex. If credit is effectively non-repayable then it is the real value of the flow of new credit which represents the subsidy to borrowers. This is effectively paid for out of inflation tax by money holders [Layard and Richter, 1994]. To the extent to which credits are repayable, the amount by which the real interest rate on loans in negative would be a measure of the subsidy value of bank credit.

<sup>&</sup>lt;sup>10</sup> These are the effects which correspond to trade creation and trade diversion when a common market is established.

3. that part of the Soviet import collapse which was due to internal Soviet factors (recession, disintegration of the state, shortage of foreign currency, etc.).

These effects do account for a large proportion of the 1991 fall in GDP in central and eastern Europe:

	Bulgaria	CSFR	Hungary	Poland	Romania
GDP change	-25.7	-15.9	-10.2	-7.2	-13.7
At market exchange rates					
effect (1)	-	-	-2.3	-0.2	-
effect (2)	-12.4	-3.1	-3.6	-3.1	-
effect (3)	-18.1	-5.4	-4.4	-3.2	-
GDP decline not due to trade shocks	-4.8	7.4	-0.2	0.7	-
At PPP exchange rates					
effect (1)	-	-	-1.3	-0.1	-
effect (2)	-3.5	-1.0	-2.1	-1.7	-
effect (3)	-5.1	-1.8	-2.5	-1.7	-
GDP decline not due to trade shocks	17.1	13.1	4.3	3.7	-

#### Table 6:

Source: Rosati [1993].

Since real GDP is measured at domestic relative prices the market exchange rate approach is to be preferred. On this basis more than the whole of the 1991 GDP fall is accounted for by trade shocks in Bulgaria and Hungary! In Czechoslovakia slightly over half of the 1991 GDP fall comes from trade shocks<sup>11</sup>. In Poland almost the whole of the 1991 fall is so explained - although it must be remembered that Poland had an 11.7% fall in GDP in 1990 which was only marginally due to trade effects, giving the lowest impact of trade shocks for 1990-1 together (12.4% of GDP fall unexplained for the two years together).

Roderik [1994] found a somewhat lower effect of trade shocks for Czechoslovakia and Hungary: 7.5% of GDP (vs. 8.5%) and 7.8% (vs. 10.2%) respectively. For Poland the

<sup>&</sup>lt;sup>11</sup> Rosati was unable to calculate the pure terms of trade effects for either Bulgaria or Czechoslovakia.

effect was much weaker: 3.5% instead of 6.5%. However, Roderik's work is flawed by his failure to take account of the price equalization schemes which existed for CMEA trade (this was particularly important in Poland).

## 5. The Shock of Over-devaluation.

Devaluations can have contractionary effects in the short run [Edwards 1986 and Gylfasson and Schmid 1983]. If this is so, then extreme over-devaluations could have sharply contractionary effects. One way of measuring initial over-devaluation of the domestic currency is to look at the gap between PPP exchange rates and the fixed or floating exchange rates brought in at the beginning of the transition when convertibility was introduced.

As we can see from column 3, Bulgaria and Czechoslovakia over-devalued quite significantly relative to countries with similar GDPs per capita at PPP. Poland hardly overdevalued at all at the beginning of its reforms in 1990, while Hungary under-devalued (or maintained its currency over-valued) to quite a significant extent. For Poland this result holds only for the average of 1990 as a whole. With the nominal exchange rate constant and the PPI rising 192% during 1990, there must have been considerable over-devaluation at the very beginning of the year. However, when considering the results of economic policy in 1990 it is the average real exchange rate for the year which is likely to be more important. Furthermore, it should be remembered that the PPI increased by 109%, or more than half of its total increase, in January 1990 alone<sup>12</sup>.

<sup>&</sup>lt;sup>12</sup> The PPP numbers quoted here imply GDP per capita levels which probably underestimate Polish GDP, and over-estimate Czechoslovak GDP. The persistence for some three years of monthly average dollar wage rates of about \$200 in both Poland and the Czech Republic, casts doubt on these numbers, particularly as most consumer goods are significantly cheaper in Poland than in the Czech Republic. This would mean that over-devaluation was somewhat stronger than Table 7 suggests in Poland in 1990, and somewhat weaker in Czechoslovakia in 1991.

	GDP per capita at MER	GDP per capita at PPP	PPP/MER
Bulgaria	845	3 000	3.550
Mauritius	1 933	3 114	1.601
Panama	1 919	3 257	1.697
Thailand	1 269	3 476	2.739
Colombia	1 219	3 895	3.195
Turkey	1 461	3 973	2.719
Costa Rica	1 807	4 077	2.256
Poland	1 630	4 200	2.560
Argentina	1 894	4 499	2.375
Brazil	3 270	4 592	1.404
Mexico	2 396	5 186	2.164
Malaysia	2 156	5 289	2.453
Hungary	3 068	5 400	1.760
South Africa	2 592	5 451	2.103
Uruguay	2 736	5 565	2.034
Chile	1 958	5 603	2.862
Venezuela	2 352	5 770	2.453
Portugal	4 413	6 231	1.412
Czechoslovakia	2 063	6 250	3.030
Greece	5 401	6 904	1.278
Ireland	9 273	8 875	0.957
Cyprus	6 394	9 760	1.526
Spain	9 601	10 354	1.078
Israel	10 256	10 724	1.046

#### Table 7: Ratios of PPP rates to Market Exchange Rates (MER)

Data are for 1989 for non-transition countries, for 1990 for Poland, and for 1991 for the remaining transition economies.

Source: "Trends in International Distribution of Gross World Product", 1993, Department for Economics and Social Information and Policy Analysis, Statistical Division, National Account Statistics, Series X, No. 18, Special Issue, United Nations, New York.

PlanEcon quoted in Rosati [1993] and author's calculations using the Polish official GDP deflator.

## 6. Accommodation via Bank Credit.

In spite of the sharp fall in real credit to non-government during 1989-90 in Poland, such credit as was available continued initially to be provided by the banks in a highly inefficient manner. Pinto and van Wijnbergen [1994] find that for the period from Q3 1989 to Q3 1991 there was a large and highly significant negative relationship between enterprise profits and bank credits. This result is strengthened when the enterprises in the sample are

Exit in the Framework of Macro-economic Shocks...

divided into profitable (AAA) and loss-making (A) subsamples. In the authors' words: "... bank loans went to firms that were not doing well...banks played no role in corporate governance; they simply funded enterprise losses."

$$(BB / EMPL)_{it} = a_i + b_1 PRF_{it} + b_2 CC_{it} + e_{it}$$
(1)

Firm type		1989.3 - 1991.3	1991.4 - 1992.2
AAA	<b>b</b> 1	-0.018 (-1.55)	0.025 (1.99)
	b <sub>2</sub>	0.006 (1.76)	-0.003 (-0.82)
А	b <sub>1</sub>	-0.037 (-5.60)	-0.007 (-1.56)
	b <sub>2</sub>	-0.0004 (-0.63)	-0.00003 (-0.22)

Та	ble	e 8:
	~ ~ ~ ~	

Notes:

t-statistics in brackets

BB = nominal bank borrowing deflated by PPI.

PRF = Profits/sales.

CC = Cash constraint variable.

EMPL = Quarterly employment in each firm.

Source: Pinto and van Wijnbergen [1994].

Gomulka [1995] found similar results, with the worst 10% of firms (responsible for some 12% of sales) accounting for some 60% of bank credit.

From Q4 1991 the Kawalec-Sikora reforms of the governance of state owned commercial banks (SOCBs) began. The banks were commercialised and provided with supervisory boards appointed by the Ministry of Finance. In October 1991, the MOF forbade lending to some 2000 troubled firms. At the same time work began on the preparation of the Enterprise and Bank Financial Restructuring Project and on "case by case" bank privatization. Pinto and Wijnbergen claim that taken together the change in bank governance, the ban on lending to troubled firms, the expectation of recapitalization and privatization, seem to have fundamentally changed bank managements' incentives. The question remains, however, to what extent the change in bank managements' behaviour depicted in Table 8 was the result of the Kawalec-Sikora reforms, and to what extent it was simply the result of

learning by doing (which takes time) in response to the change in the credit regime after January 1990. Interestingly, this change was not accompanied by any further fall in industrial output but, on the contrary, by the beginnings of recovery - even though it was accompanied by a further decline in real credit (see Table 2).

Pinto and van Wijnbergen also find that already in 1990 (i.e. before the bank governance reform), managers perception of the ease of obtaining bank credit was not at all related to their level of bank debt, suggesting that banks passivity resulted from a desire to prevent firm failures rather than from a fear of exposing their bad debts to public knowledge.

In the Czech Republic bank credit classified as "risky" (i.e. loss and doubtful according to standard Anglo-saxon classification) increased extremely fast:

	% of total	% of GDP
end:		
1991	2.4	1.7
1992	19.0	13.7
1993	23.8	17.3

 Table 9: Risky bank credits in the Czech Republic

Source: Ministry of Industry and Trade of the Czech Republic, May 1994.

It is unfortunately unclear to what extent this is a process of accumulation of risky credits, and to what extent it is one by which credits are revealed as risky. Dittus and Prowse [1994] show non-performing loans in 1992 to be 28% of total credits in Hungary and 26% in Poland<sup>13</sup>. The equivalent figures for risky loans as a share of GDP are 12.6% and 5.5% compared to 17.3% in the Czech Republic<sup>14</sup>.

We have seen how the bank governance reforms in Poland may have changed bank lending behaviour. A similar effect seems to have occurred in Hungary as a result of the introduction of the automatic bankruptcy trigger. This may have been partially offset, however, by the three successive recapitalizations of the state banks, which are believed by

<sup>&</sup>lt;sup>13</sup> Their figure for 1992 for the Czech Republic is 19%, which is consistent with that of the Czech MIT. However, the National Bank of Hungary gives figures for the three categories of problem loans in Hungary as: end 1992 - 11.5%; end 1993 - 17.5% [Szanyi 1995]. Both are far below those given by Dittus and Prowse.

many observers to have introduced severe moral hazard into the Hungarian banking system, and which cumulatively cost the state treasury the equivalent of 9% of GDP. In Poland bank recapitalization was far less expensive (about 1.5% of GDP), and has not as yet resulted in manifest moral hazard.

## 7. Accommodation via Inter-enterprise Debt.

It has been claimed that Inter-enterprise Debt (IED) expansion can be a way for enterprises to evade hard budget constraints and the effect of macro-economic policy tightening, and that once a large stock of IED has been built up "even sound policies such as tighter bank credit may have no effect" [Calvo and Coricelli 1995]. Thus, in Russia in 1992 IED increased seven and a half times in real terms between December 1991 and June 1992, growing from 3.5% of GDP to 24.5% (while bank credit fell at the same time from 40% of GDP to 11.5%)<sup>15</sup>. A number of other countries which have had severe difficulties stabilizing, such as Romania and Ukraine, have experienced similar IED surges [Khan and Clifton 1992]. Nevertheless, it has been argued that for IED to be a mechanism of accommodation, some kind of multilateral clearing of IED has to be in prospect [Rostowski 1993]. Furthermore, the experience of post-communist economies with IED has been very varied. Thus, as we have already seen in Table 3, in Poland IED fell 40% in real terms when macro-economic stabilization was imposed. In Hungary, also, IED remains constant as the transition progresses.

In the Czechoslovakia, on the other hand, there has been a significant accumulation of inter-enterprise debt:

<sup>&</sup>lt;sup>14</sup> Bank credit to non-government non-financial businesses is about 45% of GDP in Hungary and 21% of GDP in Poland.

<sup>&</sup>lt;sup>15</sup> The nominal value of IED of Rbs.39 bn. and Rbs.3,000 bn. for end December 1991 and end June 1992 [Rostowski 1993], was divided by 1991 nominal GDP in the first case and by nominal GDP in Q2+Q3 1992 multiplied by two in the second case. The same procedure was used for bank credit. End June 1992 is the mid-point for Q2 and Q3 of 1992, so that this procedure probably gives a good approximation to total 1992 GDP at end June 1992 prices. Since there was significant inflation (of about 100%) during 1991, though most of it was in February 1991, 1991 nominal GDP probably underestimates 1991 nominal GDP at December 1991 prices. As a result, IED and bank credit as shares of GDP in December 1991 are probably somewhat **overestimated**.

	1988	1989	1990	1991
Poland				
- total	-	-		27.8
- for G & S <sup>a</sup>	30.5	23.9	19.6	22.4
Hungary				
- for G & S <sup>a</sup>	36.4	33.3	33.5	33.1
CSFR				
- total	29.3	25.0	40.5	59.3

Table 10: Enterprise end-period receivables as a percentage of annualized GDP

Note: <sup>a</sup> for goods and services.

Source: Fan and Schaffer [1993].

Not only did IED fail to increase in Poland and Hungary (unlike Czechoslovakia) during the transition, but Polish and Hungarian data is well within the norm for western countries, whereas in Czechoslovakia the average payment period is about 3.5 months, which is the same as in the western country with the longest payment period, France [Fan and Schaffer, 1993].

CSFR	2.5 - 3.5
Denmark	1.6
Finland	1.8
France	3.5
Germany	1.6
Hungary	1.5 - 1.7
Ireland	2.0
Italy	3.0
Netherlands	1.7
Norway	1.6
Poland	1.5 - 1.8
Sweden	1.6
Switzerland	2.0
UK	2.6

Table 11: Payment periods East and West (in months)

Source: Fan and Schaffer [1993]. Central European figures are for payables and receivables for goods and services relative to turnover, except in the case of the CSFR, where they are for total payables and receivables relative to turnover.

This data is the more striking because bank credit to non-government relative to GDP fell quite modestly in Czechoslovakia between 1989 and 1992 (from 75% to 70%). If we add bank and inter-enterprise credit and relate the sum to GDP, then the figures we get for 1992 are: Poland 48%, Hungary 75% and Czechoslovakia 135%.

Czechoslovakia certainly seems to be a "high credit economy", and this particularity seems to be related to the failure of Czechoslovak firms to respond as energetically as have Polish and Hungarian firms to the hardening of budget constraints as regards stocks of inventories:

Table 12: Enterprise inventories (outside agriculture) as a percentage of annualised GDP

	1988	1989	1990	1991
Poland	33	19 <sup>a</sup>	21	20
Hungary	46	43	37	34
CSFR	76	76	76	67

Note: <sup>a</sup> Biased downwards as a result of near hyperinflation in late 1989. Source: Fan and Schaffer [1993]

How then do we explain the difference between Hungary and Poland on the one hand, and Czechoslovakia and Russia on the other? Also, what is the similarity between a country -Russia - whose policy has been very loose from the macro-economic point of view and one -Czechoslovakia - which is the exemplar of tight policy? The contrast between Poland and Russia may have stemmed from the different degree of credibility of stabilization policy in the two countries. In Poland firms seem to have believed that stabilization would happen, and were therefore unwilling to grant credit to their customers, which they feared they were unlikely to have repaid as their customers would continue to face hard budget constraints. In Russia, with stabilization incredible, firms will have expected their customers to recover access to soft budgets after the failure of the stabilization attempt, and therefore to be able to pay their debts. The only problem facing suppliers, in their own view, would then have been to charge a sufficiently high price to compensate for expected inflation in the period of the inter-enterprise loan [Rostowski 1993].

A process of growing credibility of the reforms seems to be at work in Hungary also.

Not only do receivables decline as a share of GDP (Table 10), but payment arrears registered by the National Bank of Hungary (which account for only a very small proportion of receivables), initially show a tendency to increase in the first years of the transition, but then exhibit a sharp decline as the automatic bankruptcy trigger and stringent financial discipline via the banks are introduced:

		(HUF bn.)			
Date Payment arrears		Date	Payment arrears		
1990		1993			
January	81	January			
March	-	March	103		
June	-	June			
September		September	93		
December	90	December	82		
1991		1994			
January	116	January	77		
March	119	March	56		
June	138	June	78		
September	140	September	50		
1992		November	65		
January					
March	188				
June	136				
September	79				
December	74				

#### Table 13: Hungary: Intercompany payment arrears

Source: Szanyi [1995], NBH's blacklist for bill of exchange rediscount activity.

These results suggest that there is something in Koves's [Szanyi 1995] idea of the Hungarian bankruptcy law as a form of "supply-side shock therapy", having some of the same effects as Poland's "demand-side shock therapy". Not only did output fall as a result of both shocks, but payments discipline also improved significantly.

In Czechoslovakia on the other hand payment discipline clearly deteriorates significantly at the beginning of the transition. This may be because Czechoslovakia implemented a degree of "supply side gradualism": it suspended the operation of its bankruptcy law until mid-1993, two and a half years into the transition<sup>16</sup>. Furthermore, softness in the Czech government's approach to firms in the area of IED is confirmed by the fact that a number of multilateral clearings of IED took place there, something which occurred neither in Hungary nor in Poland, and which is typical of transition and stabilization laggards such as Russia, Romania and Ukraine! Unfortunately, no data is available as yet for receivables in the Czech Republic for the period 1992-4, which would allow us to verify whether - as hypothesised - IED continued to grow as long as the bankruptcy law was suspended, and only then began to decline.

### 8. Accommodation via Relaxation of Enterprise Taxation.

Barbone and Marchetti [1994] argue convincingly that subsidy reductions contributed to the fall in enterprise profits, and show that - net of subsidy removals - enterprise profit taxes either remained unchanged (Hungary) or actually increased (Czecho-slovakia, Poland).

It is useful, however, to proceed in a more straightforward way, and examine what happened to the total gross tax burden on enterprises (not just profit taxes), to see whether this burden was reduced in order to accommodate the otherwise deteriorating financial position of enterprises.

Thus, taxes on enterprises increase as a percentage of GDP in Poland, while they fall somewhat in Czechoslovakia (Czech Republic) and Hungary. In the latter two cases, however, if we adjust for the fall in producer subsidies (a la Barbone and Marchetti), we get a net increase in the total tax burden on enterprises of about 8.2% of GDP in the Czech Republic and 3.5% of GDP in Hungary<sup>17</sup>. The figure for Bulgaria is of quite a different dimension, with the gross tax burden on enterprises falling by 17.1% of GDP, while total subsidies fell by 10.7% of GDP. Bulgaria thus differs from the Central European countries in

<sup>&</sup>lt;sup>16</sup> This is not to deny the positive supply side effects of mass privatization: they do not seem to have found any expression, however, in an improvement in payments discipline.

<sup>&</sup>lt;sup>17</sup> For Poland this figure is about 7.7% of GDP.

being the only one for which the total "net tax burden" on enterprises probably fell quite sharply<sup>18</sup>.

	1989	1993	
Bulgaria	36.9	19.8	
Czech Republic	32.9 <sup>a</sup>	26.8	
Hungary	27.9	24.9	
Poland	22.2	24.9	
Romania	20.3	18.6	

Table 14: Gross Tax Burden on Enterprises (% of GDP)

Notes:

<sup>a</sup> Czechoslovakia

The taxes involved are: profits tax, wage tax, social security payments and excess wage tax (only in Poland).

Source: IMF World Economic Outlook 1994.

Thus the tax regime has not generally been used to relax budget constraints on enterprises in Central Europe<sup>19</sup>. However, the accumulation of tax arrears by firms has been a source of accommodation in Central European PCEs. Schaffer [1995] estimates the value of tax and social security arrears as follows:

Table 15: Tax and social security arrears as a % of GDP, end of period

	1991	1992	1993
Czech Republic	-	2 <sup>a</sup>	4 <sup>a</sup>
Hungary	-	5.8 <sup>a</sup>	6.9
Poland	3.7	3.8	4.6
Slovakia	-	_	5.4

Note: <sup>a</sup> Approximate.

<sup>&</sup>lt;sup>18</sup> If subsidies to producers in Bulgaria fell by a smaller share of GDP than did total subsidies, as was the case in all the Central European countries, then the fall in the total tax burden on enterprises "net of subsidies to producers" will have been at least 6.4 percentage points of GDP.

<sup>&</sup>lt;sup>19</sup> Even in Bulgaria the fall in the tax burden was mainly the result of their failure to raise the tax revenue they had hoped.

This data suggests that although the stock of tax arrears is highest in Hungary, the flow of arrears in recent years has been highest in the Czech Republic. Survey data from 200 firms each in Hungary and Poland show that tax arrears are strongly negatively correlated with profits, and in Poland with state ownership (but not with size). The flow of tax arrears to manufacturing is about 1% of GDP in the two countries, and as such is greater than the flow of overt subsidies. Schaffer concludes that "in a limited, but still important sense we are seeing the re-emergence of the "soft-budget constraint" in these transition countries." What is worth noting is that, at least until 1993, the extent of this phenomenon was very limited, not exceeding 2% of GDP per annum in any country, a number which may have been significantly smaller than the accumulation of bad debts in banks.

## 9. The Fiscal Stance of General Government and Accommodation.

Czechoslovakia (and subsequently the Czech Republic) show a continued commitment to fiscal balance throughout the period after the fall of communism, although there was a not totally insignificant deficit in 1991, the year of the CMEA trade and Soviet import shock.

In Poland the initial year of transition and stabilization registered a large swing of 10.5 percentage points of GDP from deficit to surplus, showing the government's determination to harden budget constraints throughout the economy. The almost equally large swing in the opposite direction in 1991, however, was not the result of a desire to accommodate the CMEA and Soviet import shock, but was rather the result of the revenue effects of these shocks not having been foreseen. Expenditure was cut, but not sufficiently to prevent a very large deficit emerging. However, whatever the intentions of government, the effects were that the fiscal stance in Poland in 1991 and 1992 was far more accommodative than in 1990 - and maybe more important - far more accommodative than in Czechoslovakia (and then the Czech Republic), which was hit by exactly the same external shocks and which also undertook a rigorous stabilization. Improving revenues and continuing expenditure cuts resulted in a significant reduction in the deficit in 1993.

	1989	1990	1991	1992	1993
Bulgaria	-1.7	-8.8	-8.6	-7.0	-12.8
Romania	7.4	1.1	0.6	-4.6	-0.2
Czech Republic	-2.8 <sup>a</sup>	-0.4 <sup>a</sup>	-2.1 <sup>a</sup>	2.0 <sup>a</sup>	1.0
Hungary	-1.4	0.5	-2.2	-5.6	-6.4
Poland	-7.5	3.0	-6.5	-6.8	-2.9

**Table 16: General Government Fiscal Balance** 

Note: <sup>a</sup> Czechoslovakia

Source: IMF World Economic Outlook, October 1994, p. 80-83.

A similar situation to that in Poland developed in Hungary from 1991, as a result of the trade shock and the effects of the new bankruptcy law on profits (company profits and above all bank profits). The revealing of bad bank debts not only reduced profits tax revenues from the banks, but also required a massive increase in expenditures to finance bank recapitalization (cumulatively all the Hungarian recapitalizations amounted to the equivalent of 9% of one year's GNP). The difference between Poland and Hungary, however, is that in the latter the authorities began to take action to reduce the deficit significantly only in 1995, whereas in Poland the deficit was reduced (to a still excessive) 3% of GDP from 1993<sup>20</sup>.

In Bulgaria the story is very much the same as in Hungary, only on a very much larger scale. In Romania (the other "comparator" country) most of the inflationary financing came through subsidized credits from the central bank which went directly to business (i.e. the source of accommodation was the quasi-budget deficit of the central bank, rather than the fiscal accounts of the general government).

<sup>&</sup>lt;sup>20</sup> Given the very low ratio of domestic broad money to GDP, the inflationary effects of a given deficit (relative to GDP) will be higher in Poland than in Hungary.

## **10.** Accommodation via Exchange Rate Policy.

We have already seen in Section 5 that, with the possible exception of Czechoslovakia, the countries of Central Europe cannot be considered to have overdepreciated when they began their transition and shifted to internally convertible currencies. Consequently, it should not come as a surprise that, again with the exception of Czechoslovakia, these countries began the transition with significant real appreciations of their currencies:

	Czechoslovakia		Hungary		Poland	
	Nominal	Real	Nominal	Real	Nominal	Real
1988	80.0	100.0	79.7	100.0	4.5	100.0
1989	83.8	94.8	93.5	98.5	15.1	93.9
1990	100.0	82.4	100.0	112.4	100.0	103.1
1991	162.2	86.4	118.2	126.1	111.3	137.6
1992 <sup>b</sup>	155.5	97.5	124.9	134.0	143.7	136.4
1993 <sup>°</sup>	160.5	105.3	145.4	129.0	191.0	135.7
1994 <sup>d</sup>	154.8	115.7	167.2	119.8	240.8	142.9

#### Table 17: Real<sup>a</sup> and nominal exchange rates against the US\$

Notes:

Base year for real rates 1988, base year for nominal rates 1990.

<sup>a</sup>Real devaluation indices obtained through deflating the nominal rates with PPI; an index value below 100 represents real depreciation of domestic currency.

<sup>b</sup>Figures exclude fourth quarter of 1992 for Czechoslovakia (or Czech Republic).

<sup>c</sup>Czech Republic

<sup>d</sup>Figures for 1994 are based on the third quarter for Czech Republic and Poland and on the second quarter of the same year for Hungary.

Source: National statistics and IMF, International Financial Statistics, various issues, and authors' calculations.

In Poland the shift to convertibility in 1990 saw a real appreciation of about 10%, while in Hungary the more gradual introduction of convertibility during 1989-1992 was accompanied by a real appreciation of 36%. In fact these figures understate the true degree of real appreciation in these two countries, as the nominal exchange rates used to calculate the

real rates before convertibility was introduced are official rates which overvalue the domestic currency<sup>21</sup>. In Czechoslovakia there was a large real depreciation in 1990 (of 13%), but the shift to convertibility in 1991 was also accompanied by a real appreciation, albeit a modest one, of 5%.

Czechoslovakia (and subsequently the Czech Republic), with its fixed nominal exchange rate policy and its continuous real appreciation, clearly did not accommodate antireformist or anti-restructuring pressures via its exchange rate policy. Indeed, between 1991 and 1994 the currency appreciated in real terms by 34%. The situation was quite different in Hungary, where there were two clearly distinguishable phases: (1) 1989-92, when the real exchange rate appreciated sharply; and (2) 1992-4, when it depreciated by 10.6%<sup>22</sup>. Policy during the latter phase, however, should not be thought of as intentionally accommodative to cost pressures on enterprises. Rather it was the inevitable result of the need to obtain an improvement in the balance of payments, which had been very badly affected by the period of real appreciation.

The Polish story is different again: sharp real appreciation during 1990, and then a fairly constant real exchange rate, maintained by a nominal devaluation which closely shadowed PPI inflation<sup>23</sup>. Thus from 1991 the exchange rate was not used as a nominal anchor in Poland, and to that extent exchange rate policy can be considered to have been accommodative. Experience during the second half of 1994 and early 1995 is particularly striking: in spite of rapidly accumulating reserves the exchange rate crawl was only slightly slowed, with the consequence that consumer price inflation in 1994 was 30%, only 5 percentage points down on 1993, the poorest result to date since the transition in Poland began<sup>24</sup>.

<sup>&</sup>lt;sup>21</sup> With many transactions taking place at black or free market (auction) rates, the right pre-convertibility rate is some weighted average of the official and freer rates. Such a rate would give a lower value to the domestic currency pre convertibility, and therefore show a smaller nominal depreciation upon convertibility. Since the price index used to arrive at the real exchange rate - the PPI - is not affected, the true real appreciation must be larger, or the true real depreciation - in the case of Czechoslovakia - smaller.

<sup>&</sup>lt;sup>22</sup> This tendency has continued into 1995.

 $<sup>^{23}</sup>$  Most of this was achieved through a pre-announced crawling peg, although discrete devaluations also occurred.

## 11. Accommodative Protectionism.

As we can see in Figures 1A and 1B, protectionism has remained low with a slight upward trend in Czechoslovakia (subsequent to 1992 in the Czech Republic) between 1989 and 1993<sup>25</sup>. In Hungary there was some slight reduction in tariffs in 1991. This was maintained into 1992 if we look at the average tariff level weighted by the importance of each good in imports<sup>26</sup>.



Figure 1A: Average tariffs level (unweighted) 1989-1993

Source: Transition report p.114

<sup>&</sup>lt;sup>24</sup> Ultimately, international reserve accumulation was so large that the zloty had to be floated in May 1995, which resulted in a 4% nominal appreciation.

<sup>&</sup>lt;sup>25</sup> Low tariffs did not prevent the economy from being almost entirely "protected" by central planners' complete control of foreign currency allocation.

<sup>&</sup>lt;sup>26</sup> It was almost entirely reversed in 1992, if we take the unweighted average.



Figure 1B: Average tariffs level (weighted) 1989-1993

Source: Economic Bulletin for Europe, Vol. 44(1992). UN, New York 1993

The clearest case of accommodative protectionism, however, is Poland, where tariffs were slashed by two thirds (on a weighted basis) at the same time as currency convertibility was introduced in 1990. This was followed by a return to pre-reform levels in 1992 under the populist Olszewski government (i.e. there was a tripling of the average weighted tariff level)<sup>27</sup>, partly in response to populist political pressure, but also partly as a revenue raising measure, so as to limit the rapidly growing budget deficit. However, it should be noted that the budgetary aims of the policy could have been achieved, at least in the case of some goods without discriminating against imports. Thus, for instance much higher registration fees for cars, particularly for luxury cars, could have been so designed as to collect as much revenue as the increased tariffs. The decision to use tariffs rather than license fees thus shows a desire to accommodate the pressures on domestic producers, as well as improving the budgetary accounts<sup>28</sup>. It was only under the more mainstream Suchocka government that tariffs once again declined in 1992, but this time the reduction was far more modest than in 1990. The

<sup>&</sup>lt;sup>27</sup> On an unweighted basis there was already a sharp increase in 1991. However, the difference between the two measures shows that the Bielecki government in 1991 increased a large number of tariffs on goods which were hardly imported at all. It seems that this was done intentionally, so as to respond to political pressure in favour of protectionism without doing too much economic damage. It was only under Olszewski that "large ticket" imports, such as cars, were hit by high tariff levels.

 $<sup>^{28}</sup>$  Eminent western advisers were closely involved - by their own account - in the decision to raise tariffs under the Olszewski government.

left wing government, in power since 1993 in Poland, has once again increased tariffs significantly - particularly for agricultural goods.

### 12. Conclusion

As regards the measurement of shocks, it appears that two of the commonly mentioned macro-economic shocks seem to have had significant effects, while two did not. The trade shock (both CMEA and the Soviet import one) had very large effects on all the countries concerned (see Table 6). In fact, if Rosati is right, these two shocks account for the bulk of the fall in GDP in the East European transition economies, and little remains to be explained (except in Bulgaria and the CSFR)<sup>29</sup>. A second shock to enterprises which was clearly very significant was the removal of subsidies (Table 4). Interestingly, this was largest in Czechoslovakia, the country for which the trade shocks seem to provide least explanation of the output fall. Very Little relationship could be established between the reduction in real credit which occurred at the beginning of the transition in all the Central European countries and the fall in output, suggesting that there is some doubt as to the extent to which this factor caused a shock to which producers had to adjust. On the other hand, the change in the nature of credit - rather than in its quantity - must have caused a fundamental change in the operating environment of firms<sup>30</sup>. Finally - and very surprisingly to the authors themselves the introduction of current account convertibility was not generally accompanied by a clear over-devaluation of currencies (Table 7). Thus, overdevaluation could have been a factor contributing to output falls and causing a negative shock to the average producer only in Czechoslovakia and Bulgaria (again). Indeed, in Hungary the move to convertibility was accompanied by real appreciation, both relative to the previous situation and relative to comparable countries!

In the matter of accommodation, the countries of Central Europe, have differed considerably as regards the "accommodative policies" each has pursued. All three countries

<sup>&</sup>lt;sup>29</sup> For Bulgaria this need for explanation goes in opposite directions, depending on whether the effects on GDP are at PPP or market rates of exchange.

have pursued some degree of accommodation via bank lending to enterprises, with substandard and worse loans accounting for between a fifth and a quarter of bank credit in all three countries by 1993. However, in terms of their effects on firms and of their costs to the economy (ultimately the taxpayer or the depositor), these policy were of a very different magnitude in the various countries, cumulatively accounting for over 17% of one year's GDP in the Czech Republic, over 12% in Hungary and over 5% in Poland.

As regards inter-enterprise debt also, Czechoslovakia (and later the Czech Republic) has pursued a far more permissive policy than either Hungary or Poland. Whereas it is hard to measure the amount of accommodation which took place in that country as a result of the authorities' toleration of the IED build up (IED is not classified as substandard or otherwise in any statistics), this looseness is reflected both in the fact that Czechoslovakia (and then the Czech Republic) has indulged in multilateral clearings of IED, and in the fact that IED is much larger in the Czech Republic than elsewhere, and grew much faster in Czechoslovakia than elsewhere in Central Europe in the early transition. This looseness is reflected in the persistence of much higher levels of inventories in Czechoslovak non-agricultural firms than in Polish or Hungarian ones, and in the failure of these levels to decline, as they did in the other two countries (Table 12).

Reductions of the gross tax burden on enterprises were not generally used a mechanism of accommodation in the Central European countries during 1989-93. Czechoslovakia (and the Czech Republic as its heir) had the largest fall in the gross burden as a share of GDP (Table 14), but this was accompanied by an even larger fall in enterprise subsidies, with a similar situation holding in Hungary (compare Table 4). In Poland the gross tax burden on enterprises actually increased, in spite of the reduction in subsidies. Only in Bulgaria does the reduction in the gross tax burden on enterprise seem to have been significantly larger than the reduction in subsidies to them. Tax and social security arrears are also not very large (Table 15), and - more importantly - were growing quite slowly in both Hungary and Poland during 1991-3. Interestingly, the fastest rate of growth of tax arrears in 1992 and 1993 seems to have been in the Czech Republic, although even here this accumulation was only the equivalent of approximately 2% of GDP in each year, a figure

<sup>&</sup>lt;sup>30</sup> The present authors would argue that for this qualitative change to take place, the real quantity of credit had to be allowed to decline if this was the consequence of imposing constraints on its nominal quantity.

that is significantly less than the accumulation of risky bank debts in the same country (Table 9).

General government fiscal balance shows, as expected, a very rigorous fiscal policy being pursued in the Czech from 1992 onward (Table 16). In both Hungary and Poland, on the other hand, there was a marked deterioration from 1991, with the difference that this is to some extent brought under control in Poland from 1993, whereas such is not the case for Hungary, where very large deficits continue into 1995. Bulgaria shows massive and uncontrolled deficits, while the low Romanian deficits are the result of accommodation occurring via the central bank rather than the treasury in that country.

The nominal exchange was used rigorously as a nominal anchor in Czechoslovakia (and later the Czech Republic) throughout the post-1991 period. In Hungary nominal depreciation was kept below the rate of PPI inflation during 1989-92, exerting a strong disciplining effect on the traded goods sector as the real exchange rate appreciated (Table 17). In the subsequent period this policy was reversed in order to protect the country's international reserves, which relaxed the pressure on producers to adapt, and thus was to some extent accommodative. In Poland, after the sharp real appreciation of 1990-1, the real exchange rate was kept roughly constant - i.e. it was accommodated to domestic inflationary pressures on the PPI, although fortunately there was no attempt to really loosen up on tradeables producers by pursuing a policy of active real devaluation. As a result, the nominal exchange rate was not used as a tool of anti-inflationary policy, which would have mattered less if the other tools (monetary and fiscal policy) had been wielded more vigorously.

Protectionism was not used as an accommodative policy to any great degree in either Czechoslovakia (later the Czech Republic) or Hungary. However, it was used quite clearly in Poland, particularly under the Olszewski government (and again since 1994 under the post-communist government).

All of the Central European countries pursued accommodative policies to some degree, but each tended to use a different package of these policies. Thus in Poland it was mainly protectionism (from 1992), together with the failure to use the nominal exchange rate as an anchor after 1991. Poland's fiscal stance was also allowed to deteriorate sharply in 1991

and 1992, and only improved from 1993. On the other hand, the accumulation of bad bank debts and tax arrears and the growth of - and multilateral clearance of - inter-enterprise debt played a small or non-existent role in Poland. In Hungary the main instrument of accommodation has been the fiscal deficit, with the accumulation of bad bank debt in second place. After 1992 exchange rate policy became somewhat more accommodative. Neither the accumulation of IED nor protectionism were important in Hungary. In Czechoslovakia accommodation occurred mainly in its most "invisible" forms: bad debt accumulation and the growth and multilateral clearance of IED. The Czech Republic has also been the country with the highest recent growth of tax arrears.

The structural effects of these policies can be seen in the failure of inventories to decline from their massive levels as late as end 1991. On the other hand, fiscal, exchange rate and tariff policy were exemplary. Given the sensitivity of the Czech government to foreign criticism, it may not be accidental that it is the less observable accommodative policies which have been adopted in that country.

Although it has been possible to identify which country has favoured which accommodative policies, many of the policies remain incommensurable, with the consequence that it has proved impossible to conclude which country in Central Europe has pursued the least and which the most accommodative policy. Accommodation has occurred on a significant, and probably similar scale, in all three countries. At the same time it must be stated that in none of the three Central European countries has accommodation been so extensive as to bring a halt to enterprise adjustment and restructuring, let alone to threaten a reversal of the reforms.

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