



Center for Social & Economic Research

**Macroeconomic Policies:
Stabilization and Transition
in Former Czechoslovakia
and in the Czech Republic**

by

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1. Introduction

The reform process in the Czech Republic (and former Czechoslovakia), which after some preparations in 1990 started in 1991 has been implemented along two major reform lines:

- microeconomic restructuring including privatization, liberalization of prices and markets, and
- creation of a market-typed institutional framework with the stress put on commercial banking and capital markets.

The success which was achieved up till now in the field of macroeconomic stabilization is clearly visible. In spite of the price shock in the first three months of 1991 due to the price liberalization and the cuts of subsidies, the monthly consumer price increases since then until the end of 1992 did not surpass 2 percent and in 1992 annual inflation rate was 11.3 per cent, which was the lowest figure among all the ex-communist countries. A slightly higher inflation in 1993 - estimated at 21 per cent at annual rate - reflects the price increase resulting from the new tax system introduced in January 1993 and the impacts of starting economic recovery. Low inflationary expectations bring forth favourable impacts on entrepreneurial climate in the economy.

The external stabilization of the economy has been reflected in the exchange rate of the Czechoslovak Koruna (CSK) which after the massive devaluation at the end of 1990 (by more than 100%) remained stable during 1991-92. This stability has been maintained in spite of the widening scope of internal convertibility, the balance of payments and foreign exchange reserves fluctuations at the end of 1992 due to the expected split of Czechoslovakia. After the split the Czech Republic has kept the exchange rate of the Czech Koruna (CK) unchanged while Slovakia devalued the Slovak Koruna (SK) by 10 per cent. At the end of 1993 the external reserves of the Czech banking system reached USD 6 billion¹, the highest level in the post-war period.

¹ 1 bn = 1.000.000.000

The price paid for the macroeconomic stabilization and the collapse of Comecon was a sharp decline in economic activity. During 1991 GDP in real terms decreased by 14.2 per cent followed by further 7.1 per cent in 1992 and estimated 0.7 per cent in 1993, the total decline between 1990-1993 being 22.7 per cent. In the mid-1993, however, first signs of economic recovery could be observed, especially within construction, household consumption and imports of technology. In spite of the above decline in economic activity the unemployment rate remained very low: 6.6% and 5.1% in Czechoslovakia and 4.1% and 2.4% in the Czech Lands at the end of 1991 and 1992 respectively. At the end of 1993 unemployment rate in the Czech Republic was 3.4 per cent.

Some progress but far less impressive was achieved within microeconomic restructuring as well. Almost one thousand big industrial enterprises were privatized through voucher privatization representing the property of more than USD 7 bn (in book value). A number of other firms have been privatized using standard privatization methods. In 1993 more than 70 per cent of retail sale is back in private hands and the share of private sector in GDP is estimated to approach 55 per cent. All this at the background of the starting conditions in 1990 when 98 per cent of total capital stock was in the state and cooperative ownership. Continuous changes may be also observed in monetary and credit policy of commercial banks. As opposed to the initial tight conditions under which credits were extended to state-owned enterprises, in 1992-1993 monetary and credit policies were relaxed and new credits were allocated mostly to the private sector. The overall stable environment and the increasing role of the market behaviour allowed also fiscal authorities to ease the former tight measures to some extent.

Nevertheless, the structural development of the economy has considerably lagged behind. The industrial structure has changed very slowly and in fact the position of primary and low value-added industries, including energy, has been strengthened. More than 30 per cent of industrial output is still produced in enterprises with more than 5,000 employees which reflects a bias towards large-size companies. As regards exports the shares of machinery and transport equipment decreased sharply and the role of industries within primary sector and industries processing raw materials increased.

A relatively successful macroeconomic stabilization has been accompanied by a surprisingly low unemployment - especially in the Czech Republic - where unemployment rate stayed at 3.4 in December 1993, which indicates that microeconomic restructuring has

not yet taken place in the extent that could be compared with macroeconomic performance. This in turn means that the issue of macroeconomic stabilization will have to be addressed again in the near future.

2. Macroeconomic Stabilization Policies

Macroeconomic stabilization was meant to set up necessary conditions for microeconomic transformation, first of all for a mass-scale privatisation and creation of competitive markets. Simultaneously, currency convertibility was introduced. On the macro level aggregate demand had to be put under control, and a reasonable balance in foreign exchange payments built-up, at least in the medium term (the flow issue), along with a sufficient level of reserves (the stock issue). The main avenue towards these goals was seen in the implementation of the government's stabilization programme, based on the restrictive stance of macroeconomic policies. On the micro level a satisfactory standard of financial discipline was particularly required.

However, under the given conditions, a number of serious constraints were faced:

- stabilization policies had to be applied within the mostly "inherited" institutional framework, in an almost entirely "socialized" economy. The responsiveness of the traditional state enterprises to restrictive fiscal, monetary and credit policies was hardly predictable, but it had to be assumed as a relatively low,
- the economic policy calibration and targeting had to cope with the discontinuities of previous trends and with a rather high degree of uncertainty of the current economic development. This uncertainty was due to both the legacy of the past as well as to a number of external shocks, coinciding with fundamental institutional changes initiated domestically.

With the resolution to cope with those limitations, the authorities tried to adjust their policies accordingly and

- linked the instruments of the traditional stabilization policies (fiscal, monetary and credit) in a pragmatic way with the instruments of wage and incomes policies (i.e. with the elements of so-called heterodox approach),
- opted for a more restrictive stance of their policies and for an "overshot" of the domestic currency that seemed warranted by relatively stabilized macroeconomic situation of Czechoslovakia,

- made the efforts to increase the volume of foreign exchange reserves. In improving the initial non-satisfactory situation in foreign exchange reserves, a substantial support has been provided by international institutions, particularly by the IMF and by the EC.

3. Disciplinary Role of Fiscal Policy

Fiscal policy, as the integral part of the antiinflationary policy of the government, was intended to play a crucial role of restraining overall demand throughout the transition period. The budgets of general government - comprising that of the federation and republics, local authorities and extrabudgetary funds - were conceived broadly speaking as balanced. The similar effect was to be induced by reducing the role of government in the economy - excessively high in the pre-reform period - in terms of decreasing gradually the ratio of budget receipts/expenditures to GDP.

But this does not exhaust the goals/constraints taken into account by the government. It has been difficult to formulate a budget that is restrictive enough and which at the same time does not exacerbate the demand-induced decline in output and is also capable of meeting the most pressing demands of the social safety net. Careful attention was paid to the composition of expenditure, with the aim of restraining government consumption (especially military spending). Subsidies have been step by step reduced (particularly those for agriculture and housing).

Although one cannot infer the fiscal stance of government from the budget surplus/deficit alone, the results look persuasive. In 1990 the budget of general Czechoslovak government ended up with a minor surplus, in 1991 with a deficit, which represented about 1.0 per cent of GDP and in 1992 with the deficit not exceeding 0.6 per cent of GDP (at the same time the budget of general government of Czech Republic was run with minor surplus). It is noteworthy that the proceeds from privatization have been kept outside the budgets. In the beginning of 1993 Czechoslovakia was splitted into two independent states and each has followed its own fiscal policy. Preliminary data for 1993 indicate that the budget of general government of Czech Republic ended up with a relatively large surplus of 0.8 - 1.0 per cent of GDP.

In comparison with 1989 the ratio of budget expenditures to GDP decreased from 55 per cent to about 45 per cent in 1993 (the projected budget of CR for 1994 has the ration

about 43 per cent) - see **Tables 1** and **2**. This means that while the nominal receipts/expenditures increased, in real terms they decreased at the faster pace than real GDP.

Since 1989 till 1992 the structure of both state budgets' revenues and expenditures changed significantly. On the revenue side the share of corporate tax and agricultural tax declined while the shares of income tax and turnover tax went up. Expenditures of the budgets were shifted to cover higher material, travel and wage costs as well as the costs of non-profit organizations. Transfers to corporate sector were in relative terms declining and the same tendency can be observed in social benefits which mainly reflects relatively low unemployment rate. These trends are depicted in **Tables 3 & 3a** and **4 & 4a**.

Table 1. Total Revenues and Expenditures of All Budgets 1989-1993

	1989	1990	1991	1992	1993*	1994*
Total Revenues (in bn CK)	415,4	463,1	505,5	540,0	401,5	431,8
Total Expenditures (in bn CK)	414,9	455,9	515,9	551,0	400,3	431,8
Surplus/Deficit +/- (in bn CK)	+0,5	+7,1	-10,4	-8,0	+1,2	0
Surplus/Deficit +/- (% of GDP)	+0,04%	+0,08%	-1,0%	-0,6%	+0,13%	0,0%

* 1989-1992 data for Czechoslovakia; 1993 estimates for Czech Republic; 1994 projection for Czech Republic
Source: Statistical Yearbook of Czechoslovakia

Table 2. Share of Overall Budgetary Expenditures on GDP (in per cent)

1989	1990	1991	1992	1993	1994*
54,7%	56,2%	52,8%	54,6%	45,0%	43,2%

* projection

Note: Data from 1989-1992 are for Czechoslovakia and 1993-1994 for Czech Republic

Source: Statistical Yearbook of Czechoslovakia

Table 3. Revenues of State Budgets of Czechoslovakia in 1989-19 (in bn CK)

	1989	1990	1991	1992
Total revenues	314.8	355.8	467.5	487.9
Turnover tax	74.7	108.6	123.4	125.8
Corporate tax	174.6	177.7	191.0	181.3
Transfer and revenues of non-profit state institutions	27.6	32.4	32.0	32.3
Agricultural tax	22.6	21.2	21.7	13.9
Income tax*	2.1	2.3	67.3	94.9
Social insurance	0.7	0.8	7.2	11.0
Other revenues	10.9	12.7	24.8	28.7

* in 1989 and 1990 income tax collected by local budgets

Source: Statistical Yearbook of Czechoslovakia

Table 3a. Revenues of State Budgets of Czechoslovakia in 1989-1992 (in percent)

	1989	1990	1991	1992
Total revenues	100	100	100	100
Turnover tax	23.8	30.5	26.4	25.8
Corporate tax	55.6	50.0	41.0	37.2
Transfer and revenues of non-profit state institutions	8.9	9.1	6.8	6.6
Agricultural tax	7.2	6.0	4.6	2.8
Income tax	0.7	0.6	14.4	19.5
Social insurance	0.2	0.2	1.5	2.2
Other revenues	3.6	3.6	5.3	5.9

Table 4. Expenditures of State Budgets of Czechoslovakia 1989-1992 (in bn CZK)

	1989	1990	1991	1992
Total Expenditures	263.1	292.4	406.8	468.5
in which:				
Investments	7.4	8.3	17.0	19.3
Material costs and maintainance	8.6	9.4	31.8	21.9
Services and Other Non-productive Expenditures	73.8	85.9	94.0	92.6
Travel costs	1.1	13.9	33.6	32.0
Wage costs	8.2	8.5	29.9	45.9
Social benefits	91.7	95.2	121.6	133.7
Contributions to non- profit organizations and subsidies to cooperatives	27.0	28.1	30.3	75.9
Transfers to corporate sector	45.2	43.0	48.3	47.2

Source: Statistical Yearbook of Czechoslovakia

Table 4a. Expenditures of State Budgets of Czechoslovakia 1989-1992 (in per cent)

	1989	1990	1991	1992
Total Expenditures	100	100	100	100
of which:				
Investments	2.8	2.8	4.2	4.1
Material costs and maintainance	3.3	3.2	7.8	4.7
Services and other non- productive expenditures	28.0	29.5	23.1	19.8
Travel costs	0.4	4.7	8.3	6.8
Wage costs	3.1	2.9	7.4	9.8
Social benefits	34.9	32.6	29.9	28.5
Contributions to non- profit organizations and subsidies to cooperatives	10.3	9.6	7.4	16.2
Transfers to corporate sector	17.2	14.7	11.9	10.1

4. State Budget and State Debt

When evaluating the financial position of the general government during the transition period it should be noted, that with the exception of foreign borrowing (from the European Economic Communities, World Bank and G24), the government practically did not resort to any financing outside the banking sector. Secondly, the central bank has been (and in CR still is) independent of any instructions given by the central government in providing for its primary objective to ensure the stability of domestic currency. Also by the law, the central bank has been forbidden to cover final budget deficits by direct credit to government. (Total amount of Treasury bills held by the central bank - which would cover short-term deficits in the current budget during the fiscal year - is also limited by the law.)

Thirdly, in determining the financial position of government the budget deficits/surplus played just a minor role. Net credit to general government of CSFR from domestic banking sector increased from almost a negligible level in 1990 to the level representing about 7 per cent of GDP in 1992. Gross indebtedness (both domestic and foreign) of the central government of CR was estimated in 1993 as representing about 21-22 per cent of GDP in 1992, before final financial settlement between the CR and SR. Debt service in 1993 represented about 4 per cent of budget receipts of the Czech central government.

Among the major factors which contributed to the increase of indebtedness were, firstly, the decision of the government to cover (net) capital losses of the banking sector connected with large devaluation of the domestic currency in 1990, secondly, its decision to eliminate the distortions in the previous linkages between the government and the banking sector, which resulted in the taking-over of old, mostly dubious, government credits abroad and to some extent foreign liabilities of one commercial bank. This clean-up operation continued in connection with the split of CSFR and the central government of CR "inherited" a proportionate part of the federal government debts.

In the near future the government will likely need to step into safeguard bank deposits if a run of company bankruptcies evolves. Even if the broad bad-debt problem of the banking sector can be kept out of the budget (by covering the cost of enterprise debts out of bank provisioning and partly the proceeds from privatization) it is likely that the government will be involved to some extent in covering bank imbalances.

5. New Tax System in 1993

In January 1993 the government of CR started to implement a sweeping reform of taxation and more generally of the whole budget system. The new tax system is fully consistent in its structure with the system used in the EC countries - see **Tables 5** and **6**. Apart from the most important innovation - the shift from turnover tax to a destination-type VAT - almost all tax structures were changed. The restructuring of the tax system was aimed at broadening of the tax base, removing distortions in the old system and making fiscal operations more efficient, transparent and equitable.

A major effort in the preparation of both the legislation and the administration for the new system was required, including the training of people to operate it. The government expected that the tax collection would face a variety of difficulties in the initial phase and took precautionary measures in the regulation of expenditures. At the same time new social security funds were established, with the Health Care Fund already independent of the budget and the Social Care Fund and Employment Fund to become independent in 1994. All of them are financed by special contributions paid partly by the employees and partly by the employers. The government budget is committed to contribute the Health Care Fund on behalf of those who cannot so themselves.

Finally, local budget reform was introduced. To ensure their relative financial autonomy, selected taxes were assigned to local governments, although legislation on taxes and fees remains uniform and centralized across the country. Along with the specific transfers the general purpose transfers should to some extent level out differences in the fiscal capacity of individual local governments.

As a more detailed breakdown of budgetary expenditures by sectors reveals expenditures to individual industries and housing, most of them subsidies, has been declining fast. The share of social expenditures, education and social insurance has increased. The shift in the structural patterns started in Czechoslovakia in 1990 has continued since 1993 also in the Czech Republic - see **Tables 7** and **8**.

Table 5

Budgetary Revenues of Czech Republik in 1993 and in 1994 (estimates in bn CZK)

	1993				1994			
	Central government	Local government	Total	in per cent	Central government	Local government	Total	in per cent
I. TAX REVENUES	223,6	33,7	257,3	64,1	235,3	39	274,3	63,5
A. Corporate income tax	70,1		70,1	17,5	72,9		72,9	16,9
B. Personal income tax	1,5	24,2	25,7	6,4	4,5	36,1	40,6	9,4
C. VAT	80,6		80,6	20,1	94,5		94,5	21,9
D. Excises	39,5		39,5	9,8	42,1		42,1	9,7
E. Property tax		3	3	0,7		2,9	2,9	0,7
F. Custom duty	14,8		14,8	3,7	14,9		14,9	3,5
G. Other taxes	6,1		6,1	1,5	6,4		6,4	1,5
H. Tax collections from 1992	11	6,5	17,5	4,4			0	0,0
II. SOCIAL CONTRIBUTIONS	107,5		107,5	26,8	120,1		120,1	27,8
III. NON-TAX REVENUES	22,2	14,5	36,7	9,1	24,4	13	37,4	8,7
TOTAL REVENUES	353,3	48,2	401,5	100	379,8	52	431,8	100

Table 6

Budgetary Expenditure of Czech Republik in 1993 and in 1994 (estimates in bn CZK)

	1993				1994			
	Central government	Local government	Total	in per cent	Central government	Local government	Total	in per cent
I. CURRENT EXPENDITURE	297,6	56,7	354,3	88,5	322,4	58	380,4	88,1
A. Non-investment subsidies to enterprises	29,8	6,2	36	9,0	28	5,7	33,7	7,8
B. Transfers to households	121,4	3,2	124,6	31,1	139,6	3,4	143	33,1
C. Exp. on goods and services	127,7	46,3	174	43,5	149,3	47,4	196,7	45,6
- Education	39,5	12,2	51,7	12,9	45,6	13,5	59,1	13,7
- Health	18,9	2,7	21,6	5,4	16,8	3	19,8	4,6
- Defence, pub. order and safety	32,5		32,5	8,1	40,6		40,6	9,4
- Public services	14,3		14,3	3,6	18,8		18,8	4,4
- Other	22,5	31,4	53,9	13,5	27,5	30,9	58,4	13,5
D. Debt services	15,6		15,6	3,9				
E. Transfers to abroad	0,9		0,9	0,2	0,9		0,9	0,2
F. Housing policy	2,2	1	3,2	0,8	4,7	1,5	6,2	1,4
II. CAPITAL EXPENDITURE	31,5	7,3	38,8	9,7	35,9	8	43,9	10,2
G. Transfers to enterprises	5,8	1	6,8	1,7	6,5	1	7,5	1,7
H. Other	25,7	6,3	32	8,0	29,5	7	36,5	8,5
III. GOVERNMENT LENDING	7,2		7,2	1,8	7,5		7,5	1,7
TOTAL EXPENDITURE	336,3	64	400,3	100	365,8	66	431,8	100

Table 7

Structure of Expenditures of State Budgets in Czechoslovakia 1989 - 1992
Classified by Sectors (in per cent)

	1989	1990	1991	1992
1. Public Services	2,8	3,0	3,4	2,3
2. Defence	5,8	5,3	4,6	4,3
3. Security	2,1	2,1	2,9	2,9
4. Education	6,1	6,7	6,3	8,8
5. Health	6,3	7,0	4,7	9,2
6. Social Insurance	16,8	20,0	26,6	27,4
7. Housing	7,5	7,8	2,0	.
8. Associations, Culture and Sports	3,1	3,0	5,5	.
9. Energy Sector	2,9	0,7	0,1	.
10. Agriculture and Forestry	9,1	6,6	9,3	7,1
11. Mining, Industry and Construction	8,2	6,2	1,0	.
12. Transport and Communication	5,9	4,9	1,9	.
13. Other Services	12,7	15,9	3,1	.
14. Other Expenditures	10,9	11,0	28,5	38,0
TOTAL	100	100	100	100

Source: Statistical Yearbook of Czechoslovakia, 1992
Financial indicators, Federal Ministry of Finance

Table 8

Structure of Budget Expenditures of Czech Republic in 1993 - 1994
Classified by Sectors (in per cent)

	1993	1994
1. Public Services	3,2	3,4
2. Defence	4,5	4,9
3. Security	3,4	4,3
4. Education	11,0	11,8
5. Health	13,9	14,3
6. Social Insurance	27,5	29,1
7. Housing	0,9	1,3
8. Associations, Culture and Sports	1,5	1,6
9. Energy Sector	1,1	1,1
10. Agriculture and Forestry	1,9	1,7
11. Mining, Industry and Construction	1,0	1,1
12. Transport and Communication	3,6	3,4
13.+14. Other Services and Expend.	26,5	21,9
TOTAL	100	100

Source: Statistical Yearbook of Czech Republic, 1993
Financial indicators, Czech Ministry of Finance

6. Inflation and Wages

The role of macroeconomic policy in a transition economy is to prevent that once and for all jump in price level which follows liberalization of prices does not function as a starter of hyperinflation, affecting the overall stability of the economy and causing possible social unrest. To fulfil this aim, macroeconomic policy must address wage and income setting.

One cannot overemphasize the fact that during the transition period markets, and especially labour market, can hardly be relied upon as fully fledged and efficiently operating. In this context, the issue of indexation of wages and of other fixed incomes is a particularly sensitive one; wage and income policy may be considered to provide an anchor to stabilization policy.

In Czechoslovakia a tripartite commission was formed in 1990 representing government, trade unions and managers. It was empowered to set guidelines and limits on wage and income policy, including schemes for unemployment benefits. A bargaining process resulted in an agreement on the principles of wage indexation, minimum wage rates and unemployment benefits for 1991. It was agreed that wages could be raised in March 1991 by 5 per cent to cover higher cost of living in 1990 and in the first quarter of 1991. Besides, if the price index in the first quarter were to increase by more than 25 per cent nominal wages were allowed to rise so that a maximum of a 12 per cent decline in real wage was allowed for.

In the case of inflation rate of 25 per cent, the minimum value of an implicit coefficient for wage indexation was thus fixed at 0.52 level. However, the value of the coefficient was not constant; the higher the inflation rate, the higher was the implicit value of the wage indexation coefficient and *vice versa*. (For an inflation rate of 40 per cent the value of the coefficient reaches 0.7.) Moreover, starting from the second quarter of the year, a further maximum decline of real wage was agreed to stay at 10 per cent.

Higher cost of living of pensioners and families with children were compensated to a larger extent than wages and salaries and the compensation schemes depended on the patterns of their expenditures. Unemployment benefits for the first six months of unemployment were determined at a 65 per cent rate of the last net salary, and the rate was lowered to 60 per cent

rate in the second six months of unemployment. Finally, the minimum wage rate was set at 2.000 CK per month (60 per cent of the average wage) and 10.8 CK per hour.

Overall indexation of wages in 1991 resulted in 16.4 per cent rise of money wage but the real wage rate declined by 24 per cent. In spite of much larger drop in real wage than envisaged the social consensus reached on the basis of Tripartite Agreement between trade unions, employers and government was preserved.

In 1992 the regulation of wages was partly relaxed (the rules were fixed only in June 1992). The measures were selective in nature, directed mainly against a wage-push of the state-owned enterprises in order to countervail their short-term behavioural patterns. However, the money wage rate increased unexpectedly by 22.2 per cent and as the cost of living went up slower, the real wage increased by almost 10 per cent. At the same time productivity of labour declined - see **Tables 9** and **10**.

Table 9. GDP, Productivity and Wages in Czech Republic (Annual percent change)

	1990	1991	1992	1993*
Real GDP	- 1.2	- 14.2	- 7.1	- 0.5
Employment	- 0.2	- 7.0	- 3.0	- 2.0
Productivity of Labour	- 1.0	- 7.7	- 4.2	- 1.5
Money Wage Rate	3.5	16.4	22.2	27.0
Real Wage Rate	- 5.8	- 23.9	9.7	5.0

* Preliminary data

Source: Statistical Yearbook of CSFR 1992 and Reports of Czech Statistical Office

Table 10. Labour Unit Costs and Prices in Czech Republic (Annual percent change)

	1990	1991	1992	1993*
Labour Unit Costs ^{a)}	4.5	26.1	27.1	28.9
Consumer Prices	9.9	56.6	11.1	21.2
GDP Deflator	9.5	46.4	10.0	...

^{a)} Index of money wage rate divided by index of productivity of labour

* Preliminary data

Source: Table 7

At the beginning of 1993 government abandoned regulation of wages, so that the former liberalization of prices and foreign trade was completed. General Agreement for 1993 only stipulated, that as far as the increase of money wage rate exceeded the increase of

consumer prices by more than 5 percentage points in the last quarter, the government would tailor appropriate measures.

In mid-1993 when nominal wages already exceeded the threshold the government reintroduced wage controls imposing a special corporate tax applicable to the companies violating 5 percentage points rule.

7. Monetary and Credit Policies

The scenario of economic reform and government programme of 1990 called for restrictive stance of monetary and credit policies as an integral part of macroeconomic stabilization and liberalization package. The aim was to restore and to maintain price and monetary stability while implementing a sweeping price, foreign trade and foreign exchange liberalization at the beginning of 1991 and while profound institutional and systemic changes began to materialize. A consistent implementation of macroeconomic stabilization was regarded a key pre-condition for avoiding vicious circles of wage-price and devaluation-cost-price spirals in the course of transition. By the same token it was also expected to create conditions for desirable advance of microeconomic and institutional restructuring and, consequently, for the success of entire transition. With the benefit of hindsight it can be claimed that the stabilization policies in former Czechoslovakia succeeded in securing the mentioned aims. However, the implied costs, in particular in terms of diminished output performance, proved to be significantly higher than expected.²

Referring to the relatively stabilised initial macroeconomic situation in former Czechoslovakia and confronting it with the extent of the incurred costs, the justification of the adopted restrictive policies was repeatedly questioned by some domestic as well as foreign observers.

It is true, despite a parallel legacy the starting conditions in former Czechoslovakia diverged from those in some other transition economies. This divergence was not, however, only positive one. The "comparative advantage" was limited to macroeconomic sphere: Czechoslovakia did not have to cope with already galloping open inflation, the existing

² The 16% fall in GDP in 1991 was far worse than the modest 5-6% drop predicted by the government.

monetary overhang reflecting inherited disequilibria and accumulated inflationary potential was relatively modest and relatively low was also the extent of foreign debt (Hrnčir M., Klaccek J., 1991).

On the other hand, the microeconomic and institutional foundations for a market type economy were much less favourable (Charemza W.W., 1991). Unlike Hungary and Poland, Czechoslovakia lacked entirely private sector and market institutions, its economic structure was one-sidedly biased to big units. Monopolies, mostly administratively created, dominated. These institutional constraints notwithstanding, the Czechoslovak reform strategy opted for an abrupt price, foreign trade and foreign exchange liberalization, including the introduction of a domestic currency convertibility at the very start of transition.

Consequently, the adopted policies had to be targeted not only on the "stock" issue, but in particular on the "flow" factors, to diminish the risk of inflationary pressures developing in the course of transition itself. It follows, apart from the argument that the restrictive stance should be "by definition" an integral part of macroeconomic stabilization and liberalization programmes, there were compelling "domestic" reasons for restrictive monetary and credit policies to be imposed in the initial stage of transition.

The controversial issue, and not only in Czechoslovakia, became the degree of restriction, the implied tightness of the policies as well as their time profile and calibration in individual stages. The diverging standpoints were expressed *ex ante*, in the course of policy making and in its implementation. The discussion, fuelled in particular by the unexpectedly high cost in terms of the decreased output and by the protracted period of the recession, has been going on also *ex post*. Calvo and Coricelli advanced the conclusion suggesting that monetary policies in transition economies were too tight and thereby exacerbated output falls (Calvo G., Coricelli F., 1992).

The available evidence on the relative role played by the depressed aggregate demand, by the shifts in the composition of demand and by the negative supply shocks in the experienced decline of output in former Czechoslovakia in 1990-1992 is not yet entirely convincing and clear. Most domestic as well as outside observers claimed, however, that the credit restraint was overshoot also in the Czechoslovak case, in particular in the first months of

1991, contributing thus to a deeper depression than envisaged and justified.³ On the other hand it was argued that the restrictive impact of monetary and credit policies should be qualified, pointing to such phenomena as the dramatic increase of interenterprise arrears and the persistence of negative real interest rates in the given period.

However, transition is not an uniform and steadily developing process. Both the underlying conditions and policies differed not only across individual countries but also in the course of time. It follows, the impact of restrictive policies must be evaluated with respect to individual phases and their specific features. Moreover, the policy aims and their outcomes significantly diverged in reality. The existing transmission mechanisms and adopted instruments, being co-responsible for the experienced gap between the policy aims and their results, turned to be an important causal factor.

8. Monetary Policy Targets

With the start of transition, the restoration of internal and external stability of currency, i.e. stability of domestic price level together with the stability of exchange rate, and their sustainability became the major policy objective.

Though there was a general consensus on the desirability of these underlying long-term objectives, a less straightforward issue was whether to set intermediary targets for conduct of monetary and credit policies, and in the positive case what types of targets should be adopted given the constraints and discontinuities implied at the start of transition. In favour of adoption of intermediary targets worked in particular the powerful arguments to discontinue the previous discretionary conduct of policies which resulted in "traditional" accommodative character of money supply and to stop the inertia of money "machine" generating funds in accordance with the "real" needs (Calvo, G.A., 1991). On the other hand, their potential merits were constrained by the existing conditions: by the lack of stabilized and credible relationship of monetary aggregates and by the discontinuities in development trends. Moreover, the institutional setting, including transmission mechanisms of monetary policy, was undergoing a complete overhaul and adjustment.

³ "Even Czechoslovakia implemented macroeconomic tightening in the IMF programme in January 1991, although there was no serious macro imbalance at the outset..Macroeconomic policy was therefore much too tight in the CSFR.." (Nutti D. M., Portes R., 1993, p. 10).

These constraints notwithstanding, monetary authorities resorted to monetary targeting. The aim was to give a clear signal on their intentions in the course of individual stages of transition. And it was money supply, though in a differentiated versions, which was attributed the role of intermediary monetary target since 1990.

Judging from the targets, the highly restrictive stance set for 1990 and in particular for the first half of 1991 was relaxed already in the second half of 1991, while the policies for 1992 and 1993 shifted in principle to a "neutral" character. It was only obvious that within the overall trend from the restrictive to neutral stance the Central Bank had to react to the diverging current developments, to the changed expectations and shocks like the split of the country at the end of 1992, and to calibrate its policy accordingly. Moreover, the institutional framework and transmission mechanisms of monetary policy were rapidly changing in the mentioned period. As a consequence, the targets used to control money supply and the means of their implementation had to be adjusted accordingly. Within a relatively short time spane their concrete forms shifted from the control of domestic credit creation in 1990, to the indicator of net domestic assets of the banking system from 1991 onwards and to the control of money supply as represented by M2 started in the second half of 1992.

In a parallel to monetary target, the Central Bank's policy followed an exchange rate objective since the beginning of 1991 and aimed to keep nominal exchange rate stable. However, though adhering to the strategy of "nominal exchange rate anchor" neither the government nor the Central Bank committed themselves to any pre-announced period of keeping the exchange rate unaffected. Given the uncertainties and shocks involved in transition, it appeared unrealistic to fix an "equilibrium rate" for long term and, being committed to it, to attempt to make it sustainable without inflicting unbearable costs on the economy. Notwithstanding, the nominal exchange rate of Koruna has been maintained stable since the beginning of 1991, i.e. already for more than three years (the changes implied only reflected the shifts in cross-rates of basket currencies).

The exchange rate objective was conceived as complementary to monetary target, not as its alternative. The feasibility of such an arrangement was conditioned by the initially relatively separated "domestic" monetary developments from the outside world. It is, however, obvious that the increasing monetary and financial openness of the country makes such a "dual" solution less viable in future.

9. Implementation and Outcomes of Monetary Policies

Unlike Hungary and Poland, former Czechoslovakia moved to a two-tier banking system only at the start of transition, in 1990. Constrained by the underdeveloped institutional framework and by only limited range of available monetary policy instruments, the authorities set their target for 1990 in terms of an accrual to domestic credit volume. This reflected the existing conditions in which money supply was in principle determined just by domestic credit creation. According to the target, the volume of extended credits was to be kept within the range of minus 2 to plus 1 percent as against the end-1989 level.

As set, it was undoubtedly a rather restrictive target, implying virtual stagnation of credit creation. Though the upper limit was relaxed to plus 2.6 percent in the second half of the year, reflecting substantial price increases resulting from the cuts in price subsidies (particularly for foodstuffs) and from administrative price corrections, the outcome at the end of the year was plus 0.8 percent, i.e. within the originally stipulated range.

From 1991 onwards, the indicator "net domestic assets of the banking system" in quarterly breakdown has been adopted instead to guide and to control money supply. It was defined as the difference between the liabilities of the banking system (in the concept of broad money, M2, i.e. money and quasi money) and the net foreign assets. Being one of a set of four indicators elaborated in co-operation with the IMF which qualified the corridor of a desirable macroeconomic development both in the domestic and external sectors of the economy, it represented the benchmark for calibration of monetary policies.

The period of 1991 and, in particular, the first months of the year represented the turning point in Czechoslovak transition and, at the same time, the period when monetary and credit restriction was the most severe. With the initiation of a sweeping liberalization programme in the previously heavily regulated economy, monetary authorities tightened the policies to prevent open inflation from accelerating. The resulting degree of restriction and its real impact were, however, co-determined by a number of qualifying factors. And particularly these qualifications made the evaluation of the policy outcomes rather controversial.

Apart from the adjustments of the policies themselves in the course of the year, a substantial divergence appeared between the authorities' intentions as reflected in the ex ante guide-lines and indicators on the one hand and their implementation on the other. The actual

accruals in the net domestic assets of the banking system, for example, proved to be considerably below the cumulative limits set for 1991. Accordingly, the total volume of credits granted by banks increased by only 2.2 percent in the first quarter of 1991 and by only 4.2 percent in the first half of the year (compare **Table 11**).

The aggregate figures conceal, however, opposite trends in the composition of newly extended credits compared to 1990. While in 1990 the increases in banks' credits were almost entirely confined to credits extended to government, in the first half of 1991 the volume of this type of credits diminished and the main accruals materialized instead in credit allocations for enterprises. In the first quarter of 1991 the volume of credits to enterprises and households increased by almost 6% (5.6%) against the end of 1990.

Evaluating the data for the whole year, money supply increased by 20.8% (between the fourth quarters of 1990 and 1991, **Table 12**) compared to the increase in nominal GDP by 18.6%. As price level measured by CPI increased in the same period by more than 1/2 (by 53.6%), the real money supply diminished by 1/3, while the real GDP by 16.5%. Credits to enterprises were the most dynamic item of money supply, increasing by 25.9% in the course of 1991. Nevertheless, in real terms they were still by 1/5 below the to the end-1990 level.

These data have been often referred to in support of the arguments that monetary and credit restraint was excessive in the examined period, leading to a credit crunch and, consequently, unnecessarily repressing the level of economic activity. Two parallel factors are claimed to be responsible: the policy targets for money supply and credit volumes were too restrictive and, at the same time, the real outcomes proved to be even more restricted than intended. This applies in particular to the first months of 1991. While price level surged after sweeping liberalization by 25.8 % in January 1991 (as measured by CPI), instead of accommodating this once-for-all price level shift the volume of extended bank credits diminished even in nominal terms in that month. Though the credits to enterprises and households recovered in the course of the first quarter (and increased by 5.6% against the end of 1990), in real terms they were still by 1/4 lower.

Table 11. Czechoslovakia - Consolidated Assets of the Banking Sector in 1989-1992 (in bn CSK)*)

	1989	1990	1991				1992			
			Q1	Q2	Q3	Q4 ³⁾	Q1	Q2	Q3	Q4
Net foreign assets (in conv. currency)	17.8	-9.2	-19.1	-16.2	-0.8	18.5	44.3	69.8	79.6	59.8
Net domestic assets	530.0	557.5	569.1	595.4	617.2	679.7	667.9	676.6	707.3	780.1
Total domestic credits	583.6	640.2	656.0	667.3	695.6	755.7	743.5	780.0	828.5	876.9
Net credit to government	5.9	54.2 ¹⁾	37.9	8.6	11.6 ²⁾	36.8 ²⁾	13.4 ²⁾	22.2 ²⁾	34.2 ²⁾	66.3 ²⁾
Net credit to National Property Fund	0.0	0.0	-0.9	-4.2	-11.7	13.7	1.9	-0.8	-10.3	-23.8
Credits to enterprises and households	577.7	586.0	619.0	662.9	695.7	700.0	715.3	746.1	788.9	814.7
Enterprises	530.8	536.0	567.8	611.3	642.6	644.6	659.0	690.2	726.0	748.3
Households	46.9	50.0	51.2	51.6	53.1	55.4	56.3	55.9	62.9	66.4
Credits in foreign exchange	..	..	..	..	..	5.2	12.9	12.5	15.7	19.7

*) End of quarter (year) data.

1) Including the effects of devaluations in 1990.

2) Including EC, World Bank and G-24 loans to government.

3) Including debt-write off and bank recapitalization.

Source: Financial Statistical Information, Czech National Bank

Table 11a. Czech Republic - Consolidated Assets of the Banking Sector in 1991-1993 (in bn CK)*)

	1991		1992				1993			
		Q1	Q2	Q3	Q4 ³⁾	Q1	Q2	Q3	Q4	
Net foreign assets (in conv. currency)	15.4	32.1	51.5	75.3	49.2	51.9	69.7	86.3		
Net foreign assets (CR/SR)	11.1	7.0	15.0	13.9	26.0	26.0	26.0	26.0		
Net domestic assets	460.8	468.4	456.6	472.3	524.2	505.8	525.8	542.2		
Total domestic credits	527.6	518.5	538.5	572.4	612.8	611.4	644.2	667.8		
Net credit to government ¹⁾	21.6	6.6	9.8	20.1	53.0	26.5	24.2	25.3		
Net credit to National Property Fund	7.1	1.7	-3.1	-14.1	-24.5	-26.5	-28.3	-29.8		
Credits to enterprises and households	495.4	499.8	522.1	551.3	567.8	594.7	628.2	650.8		
Enterprises	459.2	462.4	484.8	507.1	521.3	549.2	583.2	606.4		
Households	36.2	37.4	37.3	44.2	46.5	45.5	45.0	44.4		
Credits in foreign exchange	3.5	10.4	9.7	15.1	16.5	16.7	20.1	21.5		

*) End of quarter (year) data.

1) Including WB, WB Japan, EC, G24 loanes to government.

Source: Financial Statistical Information, Czech National Bank

Table 12. Czechoslovakia - Money Supply in 1989-1992 (in bn of CSK)

	1989	1990	1991				1992			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Broad money (M ₂)	547.8	548.3	550.0	579.2	616.4	698.2	712.2	746.4	786.9	839.9
Money (M ₁)	311.1	288.8	278.9	285.7	317.0	371.9	356.7	378.2	397.4	430.5
Currency (M ₀)	68.0	73.7	72.9	76.2	80.7	88.4	86.2	95.0	99.1	99.2
Households	62.8	69.0	67.4	70.3	74.7	81.2	79.1	86.4	89.2	87.2
Enterprises	5.2	4.7	5.5	5.9	6.0	7.2	7.1	8.6	9.9	12.0
Demand deposits	243.1	215.1	206.0	209.5	236.3	283.5	270.5	283.2	298.3	331.3
Households	107.5	103.4	94.3	92.0	91.4	94.2	94.9	96.6	96.2	97.5
Enterprises	135.6	108.9	106.8	112.4	139.0	184.6	166.7	180.2	196.1	231.8
Insurance companies	0.0	2.8	4.9	5.1	5.9	4.7	8.9	6.4	6.0	2.0
Quasi-money	236.7	259.5	271.1	293.5	299.4	326.3	355.5	368.2	389.5	409.4
Time and savings deposits	232.5	231.7	243.6	254.0	254.3	279.9	298.5	302.4	312.5	330.1
Households	170.2	167.4	174.7	180.1	186.2	210.8	219.1	222.7	225.0	241.5
Enterprises	6.6	10.5	15.1	19.7	13.9	13.7	26.7	32.3	37.2	43.7
Insurance companies	55.7	53.8	53.8	54.2	54.2	55.4	52.7	47.4	50.3	44.9
Foreign currency deposits	4.2	27.8	27.5	39.5	45.1	46.4	57.0	65.8	77.0	79.3
Households	1.7	9.8	13.5	18.1	22.4	26.6	35.1	39.8	46.3	53.1
Enterprises	2.5	18.0	14.0	21.4	22.7	19.8	21.9	26.0	30.7	26.2

Source: State Bank of Czechoslovakia, Financial Statistical Information

Table 12a. Czech Republic - Money Supply in 1991-1993 (in bn CK)

	1991	1992				1993			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Broad money (M ₂)	487.3	507.5	523.1	561.5	599.4	583.7	621.7	654.5	
Money (M ₁)	256.0	261.8	265.1	283.5	306.9	265.5	291.9	316.5	
Currency (M ₀)	55.3	62.3	58.1	60.7	58.9	36.0	46.9	53.1	
Demand deposits	200.7	199.5	207.0	222.8	248.0	229.5	245.0	263.4	
Households	65.7	66.0	68.5	69.0	71.0	83.4	82.5	83.2	
Enterprises	131.7	127.0	133.7	149.5	174.4	141.7	159.3	176.7	
Insurance companies	3.3	6.5	4.8	4.3	2.6	4.4	3.2	3.5	
Quasi-money	231.3	245.7	258.0	278.0	292.5	318.2	329.8	338.0	
Time and savings									
deposits	193.0	205.1	211.8	224.2	236.6	260.9	268.6	277.0	
Households	145.1	151.0	153.9	157.0	168.9	178.7	179.3	183.3	
Enterprises	8.9	17.6	26.9	32.0	30.0	43.5	48.3	52.2	
Insurance companies	39.0	36.5	31.0	35.2	37.7	38.7	41.0	41.5	
Foreign currency									
deposits	38.3	40.6	46.2	53.8	55.9	57.3	61.2	61.0	
Households	24.0	25.8	29.4	34.4	37.9	41.5	42.0	44.2	
Enterprises	14.3	14.8	16.8	19.4	18.0	15.8	19.2	16.8	

Source: Czech National Bank, Financial Statistical Information

There are therefore reasons to argue that the degree of restriction was overshoot, in particular in the follow-up period after price liberalization. However, the resulting credit restraint was only to some extent due to the adopted policies and their objectives. The evolved divergence between the intentions and the actual credit developments appeared to account for a considerable share of the implied restriction in reality. The and the actual credit developments appeared to account for a causes of this divergence must be attributed especially to the existing conditions at the start of transition. All the parties involved, the Central Bank, commercial banks and their clients were exposed to a rapidly changing environment. Their decisionmaking was constrained by the discontinuities of the previous trends and institutions and, at the same time, faced many unknowns and uncertainty as for future developments. In the circumstances, commercial banks started to behave rather cautiously and, as a result, their credit activities developed only gradually and delayed.

Though the stagnating nominal money supply and its considerable fall in real terms, accompanied by a sharp increase in nominal interest rates can be identified as symptoms of an overshooting of credit restraint leading to credit crunch in 1991, a number of counter-arguments made the above conclusion subject to reservations:

- while nominal interest rates increased substantially in 1991 compared to the previous period (see **Table 13**) and appeared therefore too high, the real interest rates in fact turned negative. Consequently, enterprises were subsidized by households. By the same token, the inflated price level significantly eroded the real volume of former enterprise debts,
- due to the price level jump in January 1991, after the price liberalization, enterprises' profits surged to a multiple,
- dramatic increase of interenterprise arrears, though itself to some extent a product of credit restraint, in reality implied a circumvention of tight credit conditions.

The successful restoration of price and monetary stability in the course of 1991 made possible a gradual relaxation of the restrictive policies. In 1992 (and in 1993 in the Czech Republic as well), the monetary policy shifted from restrictive to neutral stance. While adhering to this trend in principle, monetary authorities had to react to the changing climate and to arising disturbances. In the course of the year the control of money supply responded to faster than anticipated increase in foreign assets and in uncommitted resources of the major banks. However, the disturbing factors arose especially towards the end of 1992. It refers in particular to the split of the federal state and to the uncertainties about the future monetary arrangements which affected the behaviour of economic agents and their expectations. As a

Table 13. Czechoslovakia - Interest rates and inflation in 1989-1992

	1989		1990				1991				1992			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Discount rate	4.0	5.0	5.0	5.0	8.5	10.0	10.0	9.5	9.5	9.0	9.0	8.0	9.5	
Lombard rate												11.5	14.0	
Refinancing credit														
3 month (auctions)								10.3	10.3	10.4	10.5	11.8	14.7	
Average interbank														
deposit rate						13.7	14.2	13.8	11.9	12.8	12.2	12.5		
Credits (average)	5.7	5.4	5.4	5.6	7.6	14.7	15.1	14.2	13.9	13.5	13.7	13.6	13.3	
Short term						13.9	17.9	16.3	16.1	16.9	16.4	15.9	15.1	
Medium term						13.5	15.4	14.1	14.2	15.9	15.7	15.5	15.2	
Long term						15.1	10.5	9.9	9.6	9.5	10.1	10.2	10.2	
Deposits (average)	2.5	2.6	2.7	2.8	3.3	7.6	8.2	8.6	8.0	8.7	6.9	6.6	6.6	
Demand deposits						2.2	2.5	2.3	2.7	3.0	2.8	2.5	2.4	
Term deposits						12.3	13.2	13.7	13.1	12.9	10.6	10.6	10.6	
of which														
Short term						11.5	13.1	13.3	12.5	9.8	8.1	8.1	8.1	
Medium term						13.7	13.9	14.7	14.1	14.2	12.7	12.4	12.1	
Long term						10.0	13.4	17.4	17.6	15.9	13.9	14.3	14.5	
CPI ¹⁾	1.4	2.4	3.1	13.6	18.4	40.9	49.2	49.5	53.6	1.8	3.0	6.4	11.5	
CPI ²⁾	1.4	3.4	3.9	14.1	18.4	54.7	68.5	56.3	52.7	16.6	7.8	7.8	11.6	

¹⁾ % change against of the end of previous year.

²⁾ % change against the same period of previous year.

Source: Financial Statistical Information, Czech National Bank

result, a significant decline of foreign exchange reserves materialized at the end of 1992 and in the first weeks of 1993, coupled with a re-emergence of inflationary pressures.

These disturbances notwithstanding, the macroeconomic stability was maintained throughout 1992, inflation did not exceed the targeted ceiling of 12% annual rate. Compared to 19.5 % originally set, money supply increased by 25% due particularly to the dynamic growth of credits to enterprises and households by 18.3%.

Table 14. Czechoslovakia - Nominal and Real Money Supply Developments in 1989/1992 (in bn in CSK)

	1989	Nominal		Real	
	Q4	Q4 1992	Index 92/89	Q4 1992	Index 92/89
Money (M1)	311,1	430,5	138,3%	207,3	66,6%
Broad Money (M2)	547,8	839,9	153,3%	404,4	73,8%

Table 14 summarizes money supply developments in former Czechoslovakia between the fourth quarters of 1989 and 1992. Though the volume of both M1 and M2 substantially increased compared to the base period, by 38% and 53% respectively, in real terms both aggregates were at the end of 1992 still significantly below the end-1989 level. This would hold even provided the price level jump of first quarter of 1991 was excluded. Accordingly, the data would suggest a long-term restrictive character of monetary policy. Such a conclusion should to be, however, qualified for the GDP developments.

10. Changing Approaches and Means to Control Money Supply

Within a relatively short time span of 1990-92 a remarkable shift from direct regulation of monetary developments to their basically indirect control was accomplished.

In the first phase of transition, while departing from the centrally planned economy framework, monetary authorities made use of credit volume's and interest rate's ceilings to secure the implementation of monetary policy targets and to prevent undesirable soaring of interest rates in the existing non-competitive conditions on the domestic money markets. Despite their potential merits, the applied ceilings constrained commercial banks activities, even though the cautious policies the major commercial banks pursued in extending new credits made credit volumes' limits mostly not-binding in reality. Interest rate ceilings

interfered with the desirable differentiation of clients according to the appraisal of their creditworthiness and risk involved.

Both interest rate's and credit volume's ceilings were phased out in the course of 1992, without any negative consequences. On the whole, the speed of interest rate de-regulation was remarkable, even compared to the postwar experience of developed economies, and represented a clear signal of the authorities' determination to move as quickly as viable to a market type environment. Though the phased out ceilings seemed to be to some extent substituted by "window guidance" and moral persuasion by the Central Bank, commercial banks have been in principle free to set their lending and borrowing rates since then. The only important exception were the subsidized schemes of households loans extended in the past, in particular for housing construction.

Discount rate policy became active since the start of transition (compare **Table 15**). Up to April 1992 the short-term refinancing credits from the Central Bank were only available at the discount rate. In the course of time, however, the direct impact of discount rate on the level and pattern of interest rates has been weakening. The discount rate changes increasingly represented only a signal of the future course of Central Bank's policy.

The de-regulation process notwithstanding, the behaviour of interest rates and their pattern continued to reflect the rigidity and underdevelopment of money and foreign exchange markets. As follows from data in **Table 13**, in the period since the start of the transition in 1990 the values of real interest rates fluctuated from highly negative to positive ones. Though the extent and frequency of nominal interest rate's adjustments significantly increased compared to the previous period, the main cause of real interest rate's fluctuations were varying rates of domestic inflation. Accordingly, four sub-periods can be identified in the years 1990-1993:

- from mid 1990 to mid 1991: surging price level and mostly highly negative real interest rates
- from mid 1991 to the third quarter of 1992: price level stabilized and positive real interest rates prevailed
- second inflationary wave at the end of 1992 and at the beginning of 1993: real interest rates turned again to negative values
- from the second quarter of 1993 onwards: the tendency back to positive real interest rates.

Table 15. Interest rate policies in 1990-1993

Date	Discount rate	Lombard rate	Interest rate ceiling
1990 January 1	4 %	..	-
April 1	5 %	..	-
October 1	7 %	..	13 %
November 21	8 1/2 %	..	22 1/2 %
December 28	10 %	..	24 %
1991 June 1	10 %	..	22 %
August 1	10 %	..	19 1/2 %
September 9	9 1/2 %	..	17 %
1992 March 25	9 %	..	abolished as of April 1
August 26	8 %	11 1/2 %	-
December 30	9 1/2 %	14 %	-
1993 June 10	8 %	..	-
August	8 %	12 1/2 %	-
December	8 %	11 1/2 %	-

Source: Financial Statistical Information, Czech National Bank

Compared to mostly repressed inflation under the former centrally planned framework, open inflation accelerated since the second half of 1990. The impact of the inflation proper (i.e. of core inflation) was, however, mixed with the impact of "corrective" price changes administered by the authorities, with the once-for-all institutional changes such as sweeping price liberalization at the beginning of 1991 and the reform of tax system, including the introduction of value-added tax at the start of 1993.

Summarizing the experience of the period 1990-1993, real interest rates acquired positive values when inflation was relatively low, and negative ones when inflation rate accelerated. This conclusion coincides with the lessons learned elsewhere: in the conditions of regulated interest rates and underdeveloped credit markets, the determining factor for real interest rate values was the extent of price level increases. The mentioned outcome also reflected the policies of the Central Bank. In the high inflation period the Bank's discount rate signalled that the surging price level should be considered only a temporary phenomenon. In the opposite situations, when inflation rate decreased to almost zero level, the discount rate's policy reflected the still inherent inflationary pressures.

Though the inflation record of the former Czechoslovakia and of the Czech Republic in the years 1990-93 was more successful than elsewhere in the EMEs, the data suggest that the real interest rates, especially on deposits, were negative for protracted time spans. It refers in particular to the first months of 1991 and, to a lesser extent, to the beginning of 1993 as well. It implied a substantial resource transfer from creditors to debtors. As the overwhelming share of savings was generated by the households, while the major part of credits was contracted by the enterprises, households extended a substantial "hidden" subsidy to enterprises.

11. Currency Convertibility

The 1990 reform programme set the implementation of currency convertibility as a key target of the transition policies.

While there was a general consensus about its desirability, views widely differed as to what type and degree of convertibility and, particularly, when. Should at least a limited type be introduced at the very beginning of the transition process (to follow, among others, the Polish approach) or should it be conceived an element only in a longer-term gradual adjustment (the concept followed in Western Europe in the 1950s).

Czechoslovak authorities opted for an "early" option and for a simultaneous liberalization in both the domestic and external spheres. These measures were implemented as a concerted package at the beginning of 1991. The type of convertibility introduced was "internal convertibility for registered businesses on current account items". This regime was to secure free and unlimited access to foreign exchange for import purposes, while the proceeds from exports should be transferred to the authorized banks at the current rate of exchange. The scheme was later-on extended to non-registered businesses as well and further liberalized, providing also for the hedging against currency risks.

However, the identification of the concept introduced as "internal convertibility on current account items" does not seem to be precise. On the one hand, the convertibility regime has not been yet officially extended for tourist purposes. Citizens have the right to maintain private foreign exchange accounts, but they are entitled to buy only a limited amount of foreign exchange per year at the current rate of exchange. For 1992 and 1993 that

amount was set at the equivalent of CSK 7500, i.e. about USD 270 at the current exchange rate. (A significant share of citizens do not use this possibility at all.)

The capital account has not been entirely closed in reality. The inflow of foreign exchange funds for joint-ventures, foreign direct investment and portfolio investment was virtually unregulated and the free repatriation of both profits and principal guaranteed, among other due to the agreements on the protection of investment and on the prevention of double taxation concluded with most relevant countries.

As for the regime for domestic subjects, firms are entitled to contract credits in foreign exchange abroad subject to the consent of the Czech National Bank. This consent was in reality confined to the Bank's prior notification. While maintaining their foreign exchange accounts, commercial banks with foreign exchange licence are to comply with the regime of "open foreign exchange positions" set by the Czech National Bank.

The main mechanism of implementing the regime of currency convertibility has been the inter-bank foreign exchange market initiated in 1991 and composed of the Central Bank and of commercial banks with foreign exchange licence. At the end of 1992 27 commercial banks participated (22 from the Czech Republic and 5 from Slovakia).

Up to September 1992, the regulation set for inter-bank foreign exchange market required commercial banks to maintain their foreign exchange liquidity ratio, i.e. the ratio of their foreign exchange assets to liabilities in the range of 0.85 to 1.05. When getting below the lower limit, a commercial bank was expected to buy foreign exchange from the Central Bank, and when above the upper limit, it should sell it back.

In September 1992 the scheme was substituted by a more flexible system of "open foreign exchange positions". This requires the sum of bank's "short" and "long" foreign exchange positions not to exceed 30% of the capital core of the given bank.

The policies of the Central Bank have been oriented towards a progressing liberalization on foreign exchange front, with the aim to create conditions for a shift from "internal" to "external" type of currency convertibility.

12. Exchange Rate Developments

Given a wide range of uncertainties faced at the beginning of the transition, both domestic and external, the selection of exchange rate level and of exchange rate regime was far from being an unambiguous and non-controversial issue.

Czechoslovakia opted for a fixed exchange rate regime, with the aim to use nominal exchange rate as an instrument of macroeconomic stabilization, i.e. as a nominal anchor of the stabilization process. This approach followed the suit applied elsewhere in stabilization programmes, making use of the fact that exchange rate is a special "macroeconomic" price, with impact across the entire national economy.

The Czechoslovak Koruna (CSK) and later on the Czech Koruna (CK) has been pegged to a basket since the beginning of January 1991 and this peg has remained virtually untouched⁴.

A realistically competitive exchange rate is the major factor conditioning sustainable balance-of-payments developments. At the beginning of the transition the requirements associated with the programmed sweeping liberalization and opening of the economy called for an initial undervaluation compared to what could be called "fundamental equilibrium exchange rate". The controversial issue was by how much to deviate and, consequently, by how much to devalue.

The aim was to avoid both unnecessary large undervaluation, which would imply inflationary cost-push pressures and mitigate the desirable disciplining function of foreign competition, as well as overvaluation, which would result in unsustainable balance-of-payments deficits, undermining the very existence of currency convertibility and of the liberalization programme.

⁴ Both the composition of the basket and the relative weights of individual currencies were, however, revised on an annual basis. The respective shares in 1991 were as follows: DEM 45.52%, USD 31.34%, ATS 12.35%, CHF 6.55%, GBP 4.24%. The revised composition of 1992: USD 49.07%, DEM 36.15%, ATS 8.07%, CHF 3.79%, FRF 2.92%. As of May 2, 1993 the basket of the Czech koruna is confined to only DEM and USD, with the weights 65% and 35% respectively.

A wide range of values was proposed, from CSK 16 per USD (which was close to the former "commercial rate") up to 35-40 CSK, i.e. approaching the marginal and parallel market ratios. Finally, the exchange rate with which Czechoslovakia started its stabilization and liberalization programme was set at CSK 28 per USD.

In reality, this rate was the outcome of the three successive devaluations of the CSK vis-a-vis convertible currencies in the course of 1990: CSK was devalued by 16.6% on January 8, by 55.3% on October 15, and by 15.985 on December 28, 1990.

However, the first two devaluations represented more-or-less only administrative corrections of the existing exchange ratios, rather than proper devaluations, being implemented as isolated acts without accompanying price liberalization. Their rationale was thus rather limited.

The second devaluation was originally scheduled only for the beginning of 1991 as a component of the liberalization package (which also implied phasing out the scheme of foreign exchange retention quotas of exporting firms). Being discussed in public, as a preannounced policy, enterprises and households started to behave accordingly. Imports dramatically increased in the second half of 1990, along with the growing pressure on the liquidity of the banking sector and on foreign exchange reserves.

Moreover, despite the official support from abroad to the reform programme of the new, non-communist Czechoslovak government, a substantial share of foreign investors recalled their deposits from Czechoslovak banks at that time.

The second devaluation, effected on October 15, 1990, was thus an "unplanned" act, implemented under distress, with the aim to reverse the depletion of foreign exchange reserves.

These developments reminded to the authorities the role of expectations and represented a harsh lesson on their own conduct and policies. However, the tensions which evolved also prompted them to err rather in overshoot undervaluation than the other way round. As a result, the third of the successive devaluations followed, fixing exchange rate at CSK 28 per USD.

While the nominal exchange rate remained stabilized in the period, the calculations of real effective exchange rate (REER) indicated gradual, but persistent appreciation. Between December 1990 and December 1992 the REER based on CPI appreciated by 41%, and that based on PPI by more than 44%. According to the standard reasoning it implied a corresponding loss in relative competitiveness.

As a result, the competitive edge of the devaluations effected in 1990 appeared to be in principle eroded at the end of 1992.

Compared to Poland and Hungary, the major factor which enabled to maintain the nominal exchange rate of the CSK unchanged was a more favourable inflation record in the period under consideration.

Table 16. Consumer prices in Czechoslovakia, Hungary and Poland in 1986-92 (average annual percentage changes over the previous year)

	1986	1987	1988	1989	1990	1991	1992
Czechoslovakia	0.5	0.1	0.2	1.4	10.0	57.9	10.3
Hungary	5.3	8.6	15.5	17.0	28.9	35.0	23.0
Poland	17.7	25.0	60.0	251.0	586.0	70.0	40.0

Source: Statistical Yearbook 1993 of the Czech Republic

Notwithstanding this "comparative advantage" in terms of the transition economies, the price level increases were distinctly higher compared to "standard" market economies, even though also due to the institutional and administrative changes, and not only to "genuine" inflationary factors alone.

The mentioned disparity in inflation rates vis-a-vis partner market economies persisted in 1993 as well. While the government's and the Central Bank's policy target was in the range of 16-18%, the final annual rate against the previous year was 20.8%. As a result, the trend towards REER's appreciation continued, and even accelerated in 1993.

Though later on than Poland and Hungary, the Czech Republic faces the challenge what type of exchange rate policies (or what changes) to adopt to maintain competitiveness in the world markets and to balance foreign exchange accounts in medium run.

References

- [1] Calvo, G.A., Financial Aspects of Socialist Economies: From Inflation to Reform, In: Corbo, V., Coricelli, F. and Bossak, J., Reforming Central and Eastern European Economies, A World Bank Symposium, The World Bank, Washington, 1991
- [2] Calvo, G.A., Coricelli, F., Stagflationary Effects of Stabilization Programmes in Reformed Socialist Economies. Enterprise Side Versus Household Side Factors, World Bank Review, 1992, Vol. 1, pp. 77-90
- [3] Charemza, W., Alternative paths to macroeconomic stability in Czechoslovakia, European Economy, Special edition No. 2, 1991
- [4] Herr, H., Tober, S. and Westphal, A., A Strategy for Economic Transformation and Development in Eastern Europe, De Pecunia, vol. III., No. 3, Décembre 1991
- [5] Hrnčir, M., Money and Credit in the Transition of the Czechoslovak Economy, In: Siebert, H. (ed.), The Transformation of Socialist Economies, Kiel Symposium, Kiel
- [6] Hrnčir, M. and Kláček, J., Stabilization policies and currency convertibility in Czechoslovakia, European Economy, Special Edition No. 2, 1991
- [7] Nuti, D.M. and Portes, R.: Central Europe: the way forward, In: Portes, R. (ed.), Economic Transformation in Central Europe. A Progress Report, European Communities, Butter & Tanner Ltd., Frome, Somerset, pp.1-20
- [8] OECD Economic Survey, Czech and Slovak Federal Republic, 1991

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