### THE CZECH REPUBLIC - COUNTRY NOTE

#### I. Macroeconomic Characteristics

The Czech economy keeps developing in the upswing phase of the economic cycle which began in the 2<sup>nd</sup> half of 1999. The growth rate of the gross domestic product in constant prices maintained in 2001 the same dynamics of 3.3% as in the preceding year. The economic growth around 3% may be expected also in 2002. In the 1<sup>st</sup> quarter of 2002 GDP showed a year-on-year growth by 2.5%. The highest growth in 2001 as well as in 2002 was registered in the service industry - in telecommunications, banking and insurance sector, trade and services for enterprises, research and development. The manufacturing industry achieved in this period the growth rate of approximately one point lower that the average, while the added value in agriculture and building industry in real terms was decreasing.

On the basis of the existing calculations of the potential product made independently by the Ministry of Finance and the Central Bank it may be concluded that a slightly negative gap of the output persisted in the Czech economy during 2001. This was proved by the development of indicators of inflation and labour market which did not signal overheating of the economy. The relatively quickly increasing potential product and the existing development of the economy indicate that pre-conditions are obviously created for a long-term sustainable higher growth which is a necessary prerequisite for a successful both real and nominal convergence to the economic standard of the EU Member Countries.

The upswing in the economy proceeds on the basis of ongoing restructuring and modernization of production stimulated by foreign direct investments with a simultaneous limiting of production in some traditional industries. Thus the segments of economy with strong growth mingle with others where the production is stagnating or even significantly decreasing.

Industrial production in constant prices increased in 2001 in aggregate by 6.5%, of this the manufacturing industry by 7.8%. In the most dynamic branches of the manufacturing industry the annual growth rates ranged between 10 up to 30% (production of electric and optical devices, machinery and equipment, coking and oil refinery, rubber and plastics industry), while in others the production on a year-on-year basis more or less stagnated (food industry, textile and clothing industry, paper and printing industry) or even significantly fell (in the leather industry by 18%). At the same time starting from the 2<sup>nd</sup> half of 2001 there were certain signs of slowing down of the growth influenced by the weakening dynamics of export. In January through April 2002 the industrial production grew by 5.2%, of this the manufacturing industry by 6.1%. The production of electric and optical devices was again among the most dynamic branches. Its growth accelerated up to 31%. A substantial decline was registered by the leather industry and also textile and clothing industry.

Construction works increased in 2001 by 9.6%, in January through April 2002 their growth considerably slowed down to 4.2% (in constant prices). However, a higher volume of large constructions and government contracts contributed to the growth of the share of interim consumption in the total production of the building industry and, consequently to a decrease of the share of the added value of this industry in the formation of GDP.

The growth of the economic performance is ensured largely by the growth of labour productivity. In 2001 the gross domestic product per employee increased by 2.9%. The

growth of GDP was also influenced to some extent by the increase of employment by 0.4%. The growth of labour productivity in industry measured by index of sales in constant prices reached 5.0%. In 2002 these tendencies continued.

On the demand side, growth was primarily stimulated by gross capital formation which in 2001 increased by 8.9%. Investment in the fixed capital grew by 7.2%. The contribution of the change in inventory level and valuables to the growth of GDP decreased on a year-on-year basis by one half (0.7 percentage point in 2001). The growth of investment in the fixed capital was encouraged by a strong inflow of foreign direct investments which improve the production capacity of the domestic economy. The growth of the final household consumption also accelerated up to 3.9%. It was supported by the decline of the rate of savings with a simultaneous increased use of consumer credits. (The rate of gross household savings fell from 8.3% in 1999 to 8.0% in 2000 and 7.2% in 2001.) Government consumption expenditures which in 2000 fell by 1.0%, slightly increased in 2001 by 0.3%.

The economic growth was also in 2001 driven mainly by domestic demand. The contribution of the net export of goods and services to the growth of GDP which was negative already from the 2<sup>nd</sup> quarter of 2000 slowed down the GDP growth in 2001 by 2 percentage points. Similar tendencies (except for increase in inventory) continue also in 2002. In the 1<sup>st</sup> quarter the gross capital formation grew by 1.1%, of this of the fixed capital by 8.1% and household consumption expenditures grew by 4.1%. Although the contribution of the net export to the growth of GDP was negative again, it decreased to minus 0.2 percentage point.

Investment rate expressed as the ratio of the gross fixed capital formation to GDP was maintained on a relatively high level and in 2001 exceeded 28%. As compared to other transition economies in Europe such level of investment rate ranks among the highest. The rate of gross national savings increased in 2001 and exceeded 25% of GDP. Although the gap in relation to the investment rate remained negative, it fell down to three points. The development of the propensity to savings was in the course of 2001 and in the first half of 2002 influenced by a gradual decrease of interest rates.

The situation on the labour market is under the influence of intensive restructuring and in the recent months it also reflects a marked appreciation of the koruna (CZK). Manufacturers and exporters are motivated to decrease significantly the costs on the basis of the growth of labour productivity which leads to the reduction of the number of employees. Counteracting this tendency was in 2001 a relatively strong economic growth associated with the creation of new job opportunities. As a result, according to the LFS methodology for the first time since 1996 the employment increased by 0.4% on the annual average. This was partially influenced also by the effects of the active employment policy and a one-off effect of the new Labour Code limiting the permitted volume of overtime work. The annual increase of employment in the industry of 2.9% was also influenced by its growth in the companies under foreign control. According to the LFS methodology the employment in the 1st quarter of 2002 in the industry showed a further year-on-year increase.

The development of unemployment is influenced by contradictory tendencies. As a result of the ongoing restructuring of production and a lower external demand redundant employees are dismissed. In 2001 they were repositioned thanks to the generation of new job positions which increased to 58 thousand (from 46 thousand in the preceding year) and the unemployment rate on the annual average decreased. However, the trend changed in the course of the year - the unemployment adjusted for seasonal work started after 18 months of decline to grow again from June 2001. This development is connected with a certain slack in the export performance of the industry resulting from the decline of external demand. Contributing in this respect was also a number of other influences such as tightening of

conditions for early retirement, increased number of graduates. As of the end of 2001 the unemployment rate registered at labour offices amounted to 8.9% as compared to 8.8% at the end of 2000. In May 2002 the difference further increased and the unemployment rate reached 8.6% as compared to 8.1% in the same month of the preceding year.

The impact of restructuring on unemployment differs in individual regions depending on whether it is a region with low or high unemployment, with diversified or rather monopoly structure of employment. In the regions with low unemployment rate most dismissed workers find a new job relatively soon within several months (basically it is a frictional unemployment). It is documented by high flows of persons to and from unemployment. A qualitatively different impact is in the regions with an above-average unemployment rate where there is an absolute lack of new job positions. In these regions the number of applicants per 1 vacancy permanently several times exceeds the average in the Czech Republic (twice to 5times). Unemployment in the North-West and Moravian-Silesian regions is of a structural nature requiring a different way of solution, primarily by the increase of the motivation of citizens to accept and retain their jobs, by a change or increase of qualification etc.

Average gross nominal wage increased in 2001 by 8.5%. Its growth was faster than in 2000, however, the growth rates were slowing down in the course of the year. Increase of the average wage in the 1<sup>st</sup> half of the year by 9.3% was almost identical in the corporate and non-corporate sectors - in contrast to the 2<sup>nd</sup> half of the year when the growth rate of the average wage in the corporate sector was by more than 2 percentage points slower partially reflecting the slowdown of the growth of labour productivity. In the non-corporate sector where the dynamics of wages depends on the change in tariffs, the faster growth of the average wage in the second half of 2001 only reduced lagging behind the corporate sector. In the 1<sup>st</sup> quarter of 2002 the dynamics of wage slowed down. The growth of the average gross nominal wage in the whole economy reached 7.0% (in real terms on the basis of CPI 3.2%), in the corporate sphere 7.2%, in the non-corporate sphere 6.5%.

In the production industries the relatively favourable development between the growth of labour productivity and average wages was maintained. Although in 2001 there occurred a slight increase of unit wage costs (UWCs) in the industry in nominal terms, in real terms they continued to decrease. While labour productivity increased by 5.0% the average nominal wage grew by 6.2% and UWCs thus increased in the nominal terms by 1.1% (data covering companies with 20 and more employees). The real consumption wage measured by CPI increased in the whole industry by 1.8%. The real production wage (measured by prices of industrial producers) increased by 3.6%, i.e. less than labour productivity. In the building industry nominal UWCs fell in 2001 by 1.4%, of this in building companies with more than 100 employees even by a whole one tenth.

Terms of trade improved in 2001 by 2.1% (according to the national accounts). Their favourable development was influenced by both the development of the prices of oil and oil products and the appreciation of the koruna exchange rate. Export prices of goods and services fell by 1.1% with the decline of import prices by 3.1%. Improvement of terms of trade accounted for 1.6% of GDP. While in 2000 the terms of trade had a negative impact on the income balance of the non-financial sector in the amount of CZK 38 bil., in 2001, on the contrary, they contributed to its improvement by approximately CZK 36 bil. The development of terms of trade thus significantly influenced the changes in the economic situation of the corporate sphere.

Profit before taxation increased in non-financial organizations with 100 and more employees in 2001 by 16%. Profitability in relation to costs grew from 3.6% in 2000 to 3.9% in 2001, in relation to the equity it increased in the same period from 7.9% to 8.6%.

The average inflation rate in 2001 amounted to 4.7% which was by 0.8 percentage point more than in 2000 (of this approximately 0.5 percentage point was represented by a more significant increase of prices resulting from administrative measures). In the 1<sup>st</sup> half of 2002 the price growth slowed down and the moving inflation rate fell to 4.9% in June 2002. After the convergence of inflation at the end of the 1990s to the values common in the EU the growth of the price level in the Czech economy thus stabilised on a low level. The main cause of the continuing difference in the development of inflation in the Czech Republic and euro zone was balancing of price relations which was reflected primarily in a higher growth rate of prices of regulated items and non-tradable commodities.

With ongoing adjustment of the regulated prices, the price development was in 2001 and in the 1<sup>st</sup> half of 2002 influenced mainly by the cost drivers. Of the external factors it was mainly the development of oil prices on world markets which was reducing inflation starting from the 2<sup>nd</sup> quarter of 2001. Of the same effect was also the appreciation tendency of the koruna against the euro which intensified in the 1<sup>st</sup> quarter of 2002. Counteracting the acceleration of the price growth were also domestic factors, particularly the negative production gap and the favourable wage-cost development. Also a strong competitive environment on the domestic retail market was limiting the overall growth of inflation. Price growth accelerated only in mid-2001 which was caused by atypical seasonal nature of prices of food and prices of holiday trips abroad.

The key rate of the monetary policy (the two-week repo rate) was reduced between November 2001 and April 2002 in total by 1.5 percentage point to 3.75%. By this the central bank (CNB) responded to the growing asymmetry of risks towards the decline of inflation and to the tightening of monetary conditions by means of the appreciation of the exchange rate and the decline of inflation. After a certain increase in 2001 the interest differential against euro decreased in the first quarter of 2002. The shift in the perception of the price development (i.e. in the inflation forecast) was caused by several factors, mainly by decreasing of the expected dynamics of the foreign demand and by a stronger exchange rate of the koruna against the euro.

The koruna nominal exchange rate against the euro was appreciating in the whole course of 2001. At the end of 2001 and in the first quarter of 2002 the appreciation of the koruna exchange rate accelerated in connection with the ongoing inflow of funds to the Czech Republic and intensifying moods on the monetary markets resulting from the expectations of the increase of the sale of state-owned property abroad. Appreciation of the koruna against the euro reached in 2001 on average 4.5% (deflated by the change of GDP price levels in real terms 8.9%) against dollar in nominal terms 1.5% (in real terms 5.0%). In the 1<sup>st</sup> quarter of 2002 the average year-on-year nominal appreciation of the koruna against the euro reached as much as almost 10%, with even 11.8% at the end of the quarter. At the same time the index of the nominal effective exchange rate grew on a year-on-year basis by 8.5%. The index of the real effective exchange rate appreciated similarly due to a low inflation differential. The central bank responded to this development by interventions on the foreign exchange market and by changes of monetary policy rates. In order to eliminate another unbalanced nominal appreciation of the foreign exchange rate, the CNB and Government also agreed on a common procedure in addressing the impact of inflow of capital from privatization and other foreign currency revenues of the state. As a result of these measures the strong appreciation of the koruna against the euro stopped in May 2002 and the exchange rate stabilised.

The indicators of external balance were improving in 2001. The current account balance for 2001 registered a deficit in the amount of 4.6% of GDP (CZK 100 bil.) which was by 0.7 percentage point less than in 2000. The trade deficit for 2001 reached CZK 117 bil. (EUR 3,4 bil.) in comparison to CZK 121 bil. in the preceding year. Despite the slowdown of the

economic growth in the partner countries the growth rate of the export of goods (13.3% in current prices) exceeded the dynamics of the import (11.7%). The balance of services and the balance of transfers developed better in 2001 than in the preceding year. The balance of trade was in 2001 positively influenced by the decline of world prices of raw materials and development of export (products of engineering industry, in particular) to the EU Member Countries except for Germany. In contrast, the surplus of trade exchange with Germany where approx. 38% of our exports are directed, fell to approx. CZK 26 bil., i.e. roughly to one half. At the same time in 2001 the surplus of the balance of trade with regard to the EU Member Countries significantly increased.

A significant feature of the current development of the balance of payments has been for more than 3 years now the continuing large volume of FDI which almost twice as much offsets the current account deficit. In 2001 the net inflow of FDI in the Czech Republic amounted to EUR 5,4 bil., i.e. 8.5% of GDP which was by 1.1 percentage point less than in 2000. The inflow was significantly encouraged by the ongoing privatisation of the state property to the hands of foreign investors: the revenues from the sale of the state stakes accounted for approx. 30% of the total volume of FDI. Most direct investments (88% of the total amount) flew into the Czech Republic from the EU Member Countries. In the sector cross-section the main volume of direct investments was channelled to services (64%) and a smaller portion (36%) to the development of production capacities.

In 2001 the growth rate of the money supply increased. The year-on-year increase of M2 monetary aggregate grew from 5.6% at the end of 2000 to 13.0% at the end of 2001, primarily as a result of the inflow of foreign capital and worsening of the deficit of public finance. In 2001 the total volume of loans (adjusted for extra-monetary effects) started to grow again after two years of year-on-year declines. In December 2001 the year-on-year increase of loans amounted to 2.6% in the nominal terms and to 1.8% in the real terms (deflated by the price index of industrial producers). Lending recovered primarily due to the new loans provided to companies under foreign control and loans to population. In the 1<sup>st</sup> quarter of 2002 there occurred a year-on-year decline in the growth rate of money supply (9.8% in March 2002) and a stagnation of the growth rate of loans

The general government deficit in 2001 reached 2.4% of GDP. After adjustments for lending minus repayment, i.e. mainly the privatisation revenues and other transactions of financial nature it amounted to 5.2% of GDP<sup>1)</sup>. The general government performance was influenced by one-off effects both on the revenue side (higher collection of corporate income tax and non-tax revenues) and on the expenditure side; it was mainly the case of a marked increase of subsidies for transformation institutions (KOB/CKA group) as a result of payments of cumulated losses of the past years. After adjusting expenditures of general government budgets for transfers to transformation institutions their performance ended up with the deficit of 2.8% of GDP. Economic recovery had no significant influence on the development of general government deficit. The total deficit of general government budgets was substantially influenced by the result of the performance of the state budget which reflected most of the mentioned one-off effects diminishing on a short-time basis the impact of the continuing growth of the mandatory expenditures. The development of general government was markedly influenced also by the National Property Fund (NPF) performance which collected lower than expected privatisation revenues (moreover unevenly spread in the course of the vear) but offset them by restructuring of expenditures. This allowed to reduce the general government requirements from the financial markets as compared to 2000.

The "cash" deficit adjusted in this way serves as a proxy of the so called Maastricht deficit according to ESA 95. The deficit of the Government sector in 2001 is estimated at 5% of GDP.

The general government debt increased in 2001 by 1.8% of GDP to 18.8% of GDP. If we include in the general government debt also the so-called indirect obligations of the state in the form of financial obligations of Česká konsolidační agentura (which finances also its subsidiaries), the general government debt increases slightly to 23.7% of GDP (as compared to 23.2% of GDP in 2000).

The Czech economy has succeeded in maintaining the economic growth also under the conditions of a slowed down economic development abroad, mainly in the European Union and Germany in particular. In 2001 the growth rate of the gross domestic product was by 1.6 percentage point faster than in the EU-15. Thus the process of economic catching-up has been resumed. Although the impact of the economic cooling in the countries of the major business partners has not been very evident so far, certain symptoms of the slowdown of the growth rates of export and industrial production should not be neglected. The risks of a possible slowdown which are intensified by a fast appreciation of the koruna exchange rate and may be manifested with a certain delay should be handled by a consistent pursuit of structural changes and modernisation of economy. The prospect of improvement of the world prosperity creates pre-requisites for a favourable development of the Czech economy.

#### Statistical data

	1997	1998	1999	2000	2001			
Basic data		in 1000						
Population (average) i)	10,304	10,295	10,283	10,273	10,224			
Total area								
		in km <sup>2</sup>						
	78,866	78,866	78,866	78,866	78,866			

National accounts	in 1000 Mio Czech Koruna					
Gross domestic product at current prices	1,680	1,839	1,902	1,985	2,158	
1 USD = x CZK Average of period	21.711	32.274	24.600	29.500	20.020	
1 USD – X CZK Average of period	31.711	32.274	34.600	38.590	38.038	
		in 10	000 Mio EC	CU/euro		
Gross domestic product at current prices	46,8	50,6	51,6	55,8	63,3	
			in ECU/eu	ıro		
Gross domestic product per capita a) at current prices	4,500	4,900	5,00	5,400	6,200	
		% change	e over the p	revious yea	ır	
Gross domestic product at constant prices (nat. currency)	-0,8	-1,0	0,5	3,3	3,3	
Employment growth	-0,7	-1,4	-2,1	-0,7	0,4	
Labour productivity growth	-0,1	0,4	2,6	4,0	2,9	
	In Purchasing Power Standards					
Gross domestic product per capita a) at current prices	12,100	12,200	12,500	12,600	13,300	

Structure of production	In % of Gross Value Added b)					
-Agriculture	4,4	4,6	4,2	4,3	4,2	
-Industry (excluding construction)	34,1	32,5	31,8	32,3	32,9	

-Construction	8,0	7,2	7,2	7,1	7,2
-Services	53,4	55,7	56,8	56,3	55,8
Structure of expenditure		As % of	Gross Don	nestic Prod	uct
-Final consumption expenditure	73,4	71,2	73,2	73,7	72,8
-household and NPISH	53,6	52,5	53,6	54,1	53,6
-general government	19,8	18,6	19,6	19,6	19,2
-Gross fixed capital formation	30,6	29,1	27,8	28,3	28,3
-Stock variation c)	2,0	0,9	0,3	1,4	1,6
-Exports of goods and services	56,5	58,8	60,6	69,8	71,3
-Imports of goods and services	62,5	60,0	61,9	73,2	74,1

Inflation rate	% change over the previous year					
Consumer price index	8,0	9,7	1,8	3,9	4,5	

Balance of payments		in Mio ECU/euro					
-Current account	-2,835	-1,187	-1,470	-3,082	-2,945g		
-Trade balance	-4,008	-2,269	-1,785	-3,394	:		
Exports of goods	20,108	23,412	24,638	31,492	:		
Imports of goods	24,117	25,680	26,423	34,886	:		
-Net services	1,559	1,593	1,033	1,434	:		
-Net income	-699	-873	-1,198	-1,444	:		
-Net current transfers	315	362	479	322	:		
-of which: government transfers	46	63	56	16	:		
-FDI (net) inflows	1,148	3,303	5,932	5,405	5,489		
Public finance	in % of Gross Domestic Product						
General government deficit/surplus	-2,7	-4,5	-3,2	-3,3	-5,5p		
General government debt	13,0	13,7	14,5	17,0	23,7p		

Financial indicators	in % of Gross Domestic Product					
Gross foreign debt of the whole economy d)	24,0	26,9	28,2	26,5	:	
			as % of ex	ports		
Gross foreign debt of the whole economy d)	42,5	45,2	46,8	38,1	:	
Monetary aggregates		10	000 Mio EC	CU/euro		
-M1 e)	11,0	11,5	12,4	14,2	18,3	
-M2 e)	31,0	35,3	37,0	40,3	49,9	
-M3 e)	:	:	:	:	:	
Total credit	29,8	30,5	28,6	30,6	29,7	
Average short-term interest rates			% per an	num		
-Day-to-day money rate	19,2	13,6	6,8	5,3	5,0	
-Lending rate	13,9	13,5	9,0	8,0	7,8	
-Deposit rate	11,1	11,4	5,8	4,4	3,8	

ECU/EUR exchange rates	(1ECU/euro=Czech Koruna)						
-Average of period	35,93	36,32	36,88	35,60	34,07		
-End of period	38,03	35,19	36,10	35,05	31,96		

		1995=100						
-Effective exchange rate index	99,2	102,0	106,9	108,7	113,7			
Reserve assets		Mio ECU/euro						
-Reserve assets (including gold)	9,136	10,765	12,888	14,173	16,410			
-Reserve assets (excluding gold)	8,862	10,693	12,762	14,043	16,271			

External trade	Mio ECU/euro					
Trade balance	-4,187	-2,209	-1,746	-3,394	-3,425	
Exports	19,740	22,969	24,638	31,492	37,267	
Imports (FOB)	23,927	25,178	26,384	34,886	40,692	
		Pro	evious year=	=100		
Terms of trade	:	106,3	98,5	97,2	101,9	
	as % of total					
Exports with EU-15	59,8	64,0	69,2	68,6	68,9	
Imports with EU-15	61,8	63,5	64,2	62,0	61,8	

Demography		per 1000 of population					
Natural growth rate	-2,1	-1,8	-2,0	-1,8	-1,7		
Net migration rate (including corrections)	1,2	0,9	0,9	0,6	-0,8		
	per 1000 live-birth						
Infant mortality rate	5,9	5,2	4,6	4,1	4,0		
Life expectancy:			at birt	h			
Males:	70,5	71,1	71,4	71,6	72,1e		
Females:	77,5	78,1	78,1	78,3	78,5e		

Labour market (Labour Force Survey)	% of population					
Wage (monthly average) CZK	10,691	11,693	12,658	13,491	14,635	
Economic activity rate (15-64)	71,7	71,7	71,8	71,2	70,7	
Employment rate (15-64), total	68,6	67,5	65,6	64,9	65,0	
Employment rate (15-64), male	77,1	76,1	74,0	73,1	73,2	
Employment rate (15-64), female	60,2	58,9	57,4	56,8	57,0	
Average employment by NACE branches		į	in % of tota	l		
-Agriculture and forestry	5,8	5,6	5,3	5,2	4,6	
-Industry (excluding construction)	32,0	31,5	31,1	31,0	31,4	
-Construction	9,6	10,0	9,4	9,4	9,1	
-Services	52,6	52,9	54,1	54,8	54,6	
		in %	of labour	force		
Unemployment rate, total	4,3	5,9	8,5	8,8	8,0	
Unemployment rate, males	3,6	4,6	7,2	7,3	6,7	
Unemployment rate, females	5,1	7,5	10,1	10,5	9,6	
Unemployment rate of persons<25 years	7,0	10,8	16,6	17,0	16,3	
		as%	of all unemp	loyed		
Long-term unemployment share	32,3	31,5	36,7	50,0	52,9	

Infrastructure	in km per 1000 km²				
Railway network	120   120   120   120   121				
	km				
Length of motorways	485	499	499	499	517

Industry and agriculture	previous year=100				
Industrial production volume indices	104,5	101,9	96,9	105,4	106,5
Gross agricultural production volume indices	94,9	100,7	100,6	95,5	102,5

Standard of living	per 1000 inhabitants				
Number of cars h)	329,3	339,5	334,7	335,0	344,7
Main telephone lines	318,6	363,6	370,3	377,1	375,9
Number of subscriptions to cellular	50,9	94,1	189,2	423,3	676,5
mobile services					
Number of Internet subscriptions	5,5	7,9	19, 4	40,8	122,4

p = provisional figures

- a) Figures have been calculated using the population figures from National Accounts, which may differ from those used in demographic statistics
- b) Including FISIM
- c) These figures include changes in inventories, acquisitions less disposals of valuables and the statistical discrepancy between the GDP and its expenditure components
- d) Series break after 1997
- e) 2001 figures refer to November
- f) in 2001 change of methodology following 98 UN Recommendations
- g) Source: website of the National Bank
- h) Number of cars: change of methodology
- i) Population stocks for the year 2001 were changed in the light of preliminary results of the census hold at 1 March 2001, definitive results will be available in 2003

### **II. Housing Sector Overview**

As a result of systemic changes in the society, the entire **period from 1990 to the present** has had a mostly **transformational character**. The majority of fundamental changes in the system concentrated on eliminating administrative allocation of housing and establishing a market-oriented system took place in the first half of the 1990s. This period was marked by a neo-liberal approach which resulted in a situation where elimination of individual elements of the administrative allocation system was not followed by timely creation of adequate support measures. At that time, the government's strongly market-oriented housing policy was based on the assumption that housing is purely a matter of every individual, and the state is only responsible for establishing a basic legal and economic framework and helping the socially weakest individuals. This approach essentially shifted the responsibility for housing from the state to private individuals, municipalities, and other organizations that were not and could not be prepared to assume this role.

Development of the housing sector took place under the pressure of macroeconomic changes. One of the negative aspects of this trend was a sharp decline of funds invested into housing which slowed down housing construction. Another important factor of the transformation period was privatization, that of the residential dwelling in particular, and deregulation of prices. As regards privatization of the housing stock, the first step was transferring state-owned, loss-making, and often devastated housing to municipalities. As the housing stock was in a rather poor condition, municipalities tried to privatize the newly acquired buildings. Privatization took place chiefly on the basis of municipal decrees that allowed selling entire buildings to legal entities, most often cooperatives formed by tenants.

In addition, privatization was allowed by the Act on Ownership of Dwellings which set the conditions for liquidation of housing construction cooperatives perceived at the beginning 1990s as the remnants of the former regime (fortunately, this plan was not entirely successful). Despite some negative consequences<sup>1</sup>, housing stock has been privatized in most municipalities in a reasonable extent and not through the so-called "give-away" privatization plans which have been used by most transforming countries, almost completely eliminating the rental sector.

Liberalization and deregulation of prices, two important elements of the transformation period, brought about an important increase of housing prices, and this course of action further exacerbated the already deformed structure of housing expenditures where the highest portion was the cost of utilities, while net rent was undervalued. These problems—some new, some brought from the previous regime, and exhibited in deformed approach of many people to housing—have not been completely resolved.

The liberally-oriented housing policy could not yield the expected results. In mid-1990s, the government began to replace it by a more comprehensive and intervening approach to the housing sector. The basic conceptual document of that period, the "Government Plans and Measures in the Area of Housing" was adopted by the Government in 1997<sup>2</sup> and subsequently approved by the Chamber of Deputies. Despite some positive aspects introduced by the new concept, the housing sector continued to be afflicted by a number of negative factors, especially a lack of continuity between adopted legislative and economic measures which resulted in their lower effectiveness. To this day, some measures proposed in the above document have not been implemented.

# The Housing Policy Concept discussed and acknowledged by the Government in October 1999<sup>3</sup> responded to the situation in the housing sector at that time based on formerly formulated plans. The main aspects of the concept were as follows:

- it was consistently based on a housing market which is structurally and territorially (regionally and locally) differentiated,
- it understood the housing policy as the resultant and a part of the state's overall economic policy,
- it saw state intervention in the housing sector as a necessary precondition for reaching a balance on local housing markets,
- it considered elimination of existing deformations as one of the basic prerequisites without which an effective housing policy cannot be developed,
- it was based on the necessity to deepen the social aspect of the housing policy.

## The Housing Policy Concept updated in 2001 is based on the following brief assessment of the situation in the housing sector:

• The basic institutional and legal framework pertaining to the housing sector corresponds to the situation that exists in other European countries. The quality of housing is lower, but it roughly corresponds to the Czech Republic's economic performance. Some of the main

Government Resolution No. 1088/1999 dated October 18, 1999.

10

The most serious negative factors include the fact that the new owners lack funds for maintenance and in some cases deliberately violate their duty to pay their share of the cost of maintaining common parts of buildings

<sup>&</sup>lt;sup>2</sup> Government Resolution No. 155/1997 dated March 12, 1997.

problems are low financial availability of housing, unbalanced distribution of the housing stock, and neglected maintenance of buildings.

- The situation in the housing sector is considerably territorially differentiated. Mostly derived from economic and social situation in individual regions and settlements, the differences are exhibited in the size of the supply and demand on local housing markets. The size of the housing stock is similar in all regions.
- Support measures adopted so far are not sufficiently interrelated and precisely targeted. In consequence, they are not fully effective and mostly have a global character. Their effectiveness is limited by some uncompleted transformation steps in the housing sector as well as the overall economic and social situation.
- The situation in the housing sector is affected by a number of external factors. Some of the most important of them is the territorial distribution of business activities and the situation on the labor market; these factors cause local discrepancies between the availability of housing and the existence of employment opportunities in the same locality.

#### Description and Assessment of Basic Development Trends of the Past Period

#### 1. Existing Housing Stock - General Description

According to the 1991 Public Census, the **total housing stock** comprised of 4,077,193 dwellings, 0.9% of which (37,455) were unsuitable for occupancy. Results of the 2001 Public Census suggest that the housing stock presently consists of 4,366 293 dwellings of which about 1.4% are unfit for habitation (approx. 55 thousand dwellings). In the past ten years, the size of the housing stock has therefore increased by approximately 7.2%. During the same period, the number of dwellings fit for permanent occupancy (total size of the housing stock reduced by number of dwellings unfit for occupancy) increased by approximately 6.5%.

According to the 1991 Public Census, the Czech Republic had 3,705,681 permanently occupied dwellings, i.e. 90.9% of the housing stock. As to the remaining 9.1%, more than one third are used for recreation purposes, and most other dwellings are not permanently occupied for other reasons, such as due to unresolved restitution claims. Compared to 1991, the **number of permanently occupied dwellings** in 2001 was higher by approx. 3.3%. The number of vacant dwellings was higher as well, accounting for close to 12% of the total housing stock—this number includes dwellings which are permanently occupied in reality but are considered as used temporarily for statistical purposes.

The **size of the housing stock per capita** expressed by number of dwellings per 1,000 inhabitants is better than at the beginning of the 1990s. While there were 396 dwellings per 1,000 inhabitants in 1991, this number grew to 427 by 2001. The number of dwellings fit for permanent habitation and dwellings permanently occupied (including temporarily occupied dwellings<sup>4</sup>) increased from 392 to 421 and 360 to 374 per 1,000 inhabitants, respectively.

The Czech Republic does not suffer from an overall housing deficit. Disproportions on local housing markets are mostly due to an unsuitable distribution of the housing stock, and not an actual shortage of dwellings. Further, there are differences in the availability of housing between individual regions. While the best situation exists in Prague, the worst availability of housing can be found in the Zlín Region. The high demand for financially accessible housing in Prague and some other cities which seems to contradict the data on availability of

11

In accordance with the definition of dwellings intended for permanent use ("principal dwellings") included in the Recommendation for the 2000 Censuses of Population and Housing in the ECE Region.

dwellings is due to the attractiveness of these settlements and a shortage of relatively inexpensive housing for lower-income families. In contrast, there is a surplus of vacant dwellings in structurally affected regions and other localities.

According to partial results of the 2001 Public Census, there are 1,969 568 buildings. Family homes account for roughly 88% of them. About 43% of dwellings are situated in family homes, others, save for some exceptions, are located in apartment buildings.

The size of dwellings improved during the 1990s. While in 1991, the average **living area** of a permanently occupied dwelling was 45.9 square meters, it increased to 53.7 square meters in 1999. This improvement is owing to new construction of housing; for example new dwellings completed in 2000 had an average living area of 68.2 square meters. The quality of **amenities** is fully satisfactory; according to data collected in 1999, 97% of dwellings have a bathroom or a shower, and the same number have a water closet.

The average age of the **housing stock** is relatively high. In 1991, dwellings were 42.4 old, and the average age of family homes was as high as 60.3 years. A problem that exists in this regard are high energy requirements of dwellings.

A serious problem is **neglected maintenance of the housing stock** due to a lack of maintenance over a protracted period of time which has resulted in a decrease of the financial and utility value of residential structures. Specific problems exist in respect of prefabricated-panel buildings. Due to construction and design flaws and insufficient maintenance, these problems are exacerbated by the fact that buildings of this type account for close to one third of the housing stock. Another problem is a lasting lack of funds for regular repairs and maintenance, repair of defects caused by maintenance neglected in the past, modernization, and reconstruction

#### Housing stock size

Number of dwellings	Total number of	Dwellings unfit for	Available housing
	dwellings	occupancy	stock*
1991 Public Census	4,077,193	37,455	4,039,738
2001 Public Census	4,366,293	53,861	4,312,432
Increase in %	7.1	43,8	6.7

Source: Czech Statistical Office

Number of dwellings per 1,000 inhabitants

	Total number of dwellings	Available housing stock*
1991 Public Census	396	392
2001 Public Census	427	421

Source: Czech Statistical Office

# 2. Structure of the Housing Stock from the Viewpoint of Basic Forms of Housing

In 1991, the housing stock comprised state- and company-owned dwellings (approx. 40%), cooperative dwellings (approx. 20%), and privately-owned dwellings (approx. 40%). Fundamental changes have taken place in the structure of the basic forms of housing since

<sup>\*</sup> Total number of dwellings reduced by dwellings unfit for occupancy

<sup>\*</sup> Total number of dwellings reduced by dwellings unfit for occupancy

1989. According to data from a selective survey of the Czech Statistical Office collected in 1999 and partial data of the 2001 Public Census, the housing stock is as follows:

The **private rental sector**, created mainly based on property restitutions, accounts for about 7% of permanently occupied dwellings (most of them are apartments with regulated rent). The size of this sector remains more or less constant, save for (typically) temporary rentals of individual dwellings owned by private individuals. Taking into consideration the expected elimination of rent control, existing property-owners have retained rental buildings. Investors are not interested in this sector, however, as investment into rental housing has a long period of return in comparison with privately-owned dwellings. The situation in this sector is unsatisfactory. Most problems derive from strict rent control and the fact that rental buildings are in a very poor condition. In addition, the civil laws pertaining to lease of a dwelling are problematic, as they contain non-standard elements introduced before the year 1989 and prevent elimination of illicit activities on the housing market.

The **municipal rental sector**, created after 1991 by transferring state-owned dwellings to municipalities, accounted for approx. 23% of permanently occupied dwellings. The size of this sector is gradually decreasing, as municipalities privatize a part of their housing stock. Privatization schemes include sale of entire buildings to legal entities (most often cooperatives) formed by existing tenants and direct sale of individual dwellings, usually to existing tenants. This sector faces similar problems as the private rental sector. Nonetheless, new dwellings are constructed thanks to state subsidies. Owing to differences between the approach used by individual municipalities and the in-progress elimination of rent control, the form and function of municipal housing are not entirely clear.

The **cooperative sector**, which consists mainly of dwellings formerly owned by People's Housing Cooperatives, accounted for approx. 17% of the occupied portion of the housing stock. In addition to People's Housing Cooperatives, this sector includes dwellings owned by former members of these cooperatives and dwellings owned by legal entities, mostly cooperatives, established by tenants for the purpose of privatizing their buildings (approx. 1.5% of the total number of permanently occupied dwellings). The size of the cooperative sector is decreasing slightly, as dwellings owned by People's Housing Cooperatives are being privatized—this process started in the first half of the 1990s. From the viewpoint of users, the situation in this sector is relatively satisfactory. Almost no housing construction is taking place, however, as support from the state is not perceived as sufficiently motivating.

The **privately-owned housing sector** consists mainly of family homes and individual privately-owned dwellings in apartment buildings—these dwellings have been acquired either as part of privatization of municipal or cooperative housing or come from new construction. This sector represent 47% of permanently occupied dwellings. Over the long term, the privately-owned housing sector is the most rapidly expanding segment of the housing market. Factors which contribute to this trend include the focus of government subsidies and the problems relating to rental housing.

#### Structure of the housing stock according to sectors in 2001

Sectors	Share in%
Privately-owned housing	47%
Municipal rental housing	23%

Private rental housing	7%
Cooperative rental housing	17%
Other	6%
Total	100%

#### **Housing Construction**

New housing construction slowed down substantially after 1990 as a result of the transformation process. The **number of dwellings where construction has started** began to increase only after 1993. This trend was followed in 1996 by an increase in the number of completed dwellings. The number of dwellings whose construction started was highest in 1998 (approx. 35,000). Subsequently, it declined slightly to roughly 32,000, a figure that corresponds to the situation in 2001. However, this decrease has been compensated by an increase in modernization activity. The **number of completed dwellings** has been increasing steadily since 1995, but it has not attained the number of dwellings where construction has started. Increases of the housing stock are continually reduced by **diminutions of the housing stock** which have fluctuated between 2,000 to 4,000 dwellings annually during the past four years.

The reason behind the small number of newly constructed dwellings is low financial accessibility of housing caused by a substantial difference between the income of most households and the price of new dwellings. Due to this fact, developers concentrate predominantly on construction of privately-owned dwellings for people in the high-income bracket. Commercial construction of rental housing leased for market-derived rent is not sufficiently lucrative due to a long period of return of investment and problems in landlord-tenant relations. Another reason for low housing construction is a lack of adequate legislative and economic conditions that would allow building and leasing rental housing on a nonprofit principle.

While in 1991 apartment buildings accounted for most construction activity (approx. 62% of the total number of completed dwellings), the **ratio between the number of newly constructed dwellings in apartment buildings and family homes** began to even out in 1993, and since 1995 the number of dwellings in family homes has been higher. In 2001, completed dwellings in apartment buildings accounted for merely 31,5%, while the number of dwellings in family homes grew to 55,0%. The remaining completed dwellings were built in non-residential structures or created by conversion of non-residential buildings—they accounted for 13.5% of the total number of completed dwellings.

The structure of housing construction from the viewpoint of the basic forms of housing shows that privately-owned dwellings, located in both family homes and apartment buildings, account for the largest number of completed dwellings and dwellings whose construction has started. The extent of construction of rental housing, save for exceptions, are constructed only by municipalities which can obtain state subsidies for the purpose. Nonetheless, construction of a high number of such dwellings is co-financed by future tenants.

**Stimulation of housing construction** is one of the long-term priorities of the housing policy. However, the pressure on increasing the number of newly constructed dwellings in a situation when some important transformation steps have not been completed frequently results in ineffective use of public funds disbursed for these purposes.

Housing construction during 1990 - 2000

	Dwellings started	Dwellings completed
1990	61,004	44,594

1991	10,899	41,719
1992	8,429	36,397
1993	7,454	31,509
1994	10,964	18,162
1995	16,548	12,662
1996	22,680	14,482
1997	33,152	16,757
1998	35,027	22,183
1999	32,900	23,734
2000	32,377	25,207
2001	28,983	24,759

Source: Czech Statistical Office

#### **Cost of Housing**

In 1990, the **average purchase price of a completed dwelling** in an apartment building and a family home totaled CZK 171,449 and CZK 340,140, respectively. In 2000, these figures totaled CZK 1,449,000 and CZK 2,406,000, respectively. Hence, the cost was approximately 8.5 and 7 times higher, respectively. In contrast, during the same period nominal net household income became only about 2.8 times higher. In 2001, the acquisition cost of a new dwelling ranged between CZK 14,000 – 25,400 per square meters, depending on the construction technology, type of structure, and locality. In Prague and other attractive localities, the asking price usually exceeds CZK 30,000 per square meter. The price of newly constructed dwellings is slowly increasing with some fluctuations.

The **acquisition price of older privately-owned housing** constantly changes depending on economic developments and the situation on individual local and regional housing markets. It differs substantially based on the dwelling type, quality, etc. In Prague, Brno, and other attractive cities, the price of older dwellings does not vary considerably from the cost of new construction (for example, the average asking price of a dwelling in Prague is CZK 1,207,000<sup>5</sup>). Conversely, in regions affected by high unemployment and other problems, the market offers older dwellings for prices several times lower than the cost of new construction.

At present, **three types of rent** exist in the Czech Republic: the maximum base rent, objectively regulated rent<sup>6</sup>, and market-derived (non-regulated) rent. Most rental dwellings (98% according to surveys conducted by the Czech Statistical Office, 90% according to expert estimates) are leased for the **maximum regulated base rent** which gradually increases as part of the deregulation process. The maximum base rent in an average apartment with a floor size of approx. 60 square meters increased from CZK 134 in 1990 to CZK 1,291 in 2001<sup>7</sup>, i.e. by roughly 860%. The amount of the maximum base rent varies mainly depending on the settlement size, and it is not sufficient—with the exception of Prague—for covering building operating costs. The low level of the maximum base rent creates non-satisfiable

<sup>&</sup>lt;sup>5</sup> Price of a standard first-category apartment, 68 square meters of floor size, approx. 30% wear and tear according to KISEB – IRI price monitoring as of May 15, 2001.

This type of rent is charged in buildings constructed with the use of public funds, dwellings owned by legal entities formed by former tenants, and dwellings of former housing construction cooperatives.

The figure is derived from a theoretical calculation based on application of coefficients used for regulation of rent. It does not therefore coincide with the figure specified in the survey of consumer prices conducted by the Czech Statistical Office.

<sup>&</sup>lt;sup>8</sup> Comparison was made based on the so-called cost rent calculated at the minimum level as 2.8% of the reproduction acquisition price of property.

demand for this type of housing, indirectly contributing to increases of market-derived rent which, however, most households cannot afford to pay.

**Market-derived rent** is charged in dwellings built without the use of public funds and vacated dwellings. This type of rent varies substantially, mainly depending on the locality, similarly as the acquisition price of older dwellings. In Prague, the actual market rent fluctuated between CZK 45 to 483 per square meter per month in 2001, and the average rent, i.e. CZK 178 per square meter per month, was by 419% higher than the maximum base rent in effect in Prague up to July 2001 (CZK 34,27 per square meter per month, in 2002 CZK 37,07 per square meter per month).

Safe for exceptions (such as solid fuels), the **prices of other housing-related items** are administratively regulated. However, a deregulation process has been under way since the beginning of the 1990s. In the past ten years, water and sewerage fees have become 39 times, solid fuels 7.8 times, heat and hot water 7.6 times, net rent approx. 6.7 times; piped gas almost 6.5 times, and electricity close to 4.8 times higher. Nonetheless, most significant price increases took place at the beginning of the 1990s. A comparison of the aggregate inflation in the second half of the 1990s (51.3% between 1994 and 2000) with the housing index (increase by 125.5% during the same period) shows that housing prices were rising higher than other prices, and their contribution to the overall inflation was substantial. Nonetheless, the pace of increases of the main housing-related expenditures was relatively balanced during this period.

#### Development of the maximum base rent in an average dwelling<sup>9</sup>

Year	1990	1995	2000	2001
Average regulated	134	461	1,241	1,291
rent CZK/month				
Year 1990 = 100	100	344	926	963

Source: Ministry for Regional Development

#### Indexes of consumer prices of main housing-related items in %, 1994 = 100

	1999	2000
Summary index	145.6	151.3
Total housing	208.2	225.5
Net rent	299.0	319.6
Water	199.5	221.6
Sewerage	197.8	227.1
Electric power	221.1	254.6
Piped gas	225.1	258.8
Solid fuels	202.6	207.4
Heat and hot water	216.9	224.5

Source: Czech Statistical Office

#### **Other Housing-related Expenses**

In 2001, **housing-related expenditures of households** totaled on average (i.e. in all types of dwellings) CZK 3,006 per month—this sum corresponds to 16.1% of net household income (20.3% in rental dwellings). A comparison of households of employees and retirees shows that the latter are much more burdened by housing-related expenditures, the average share of household expenditures in their net monthly income totaled 24,2%, while in the case of

-

<sup>&</sup>lt;sup>9</sup> Theoretical calculation.

employed persons it was only 14.7%. For these households, the highest housing-related expenditure was the average cost of energy which comes close to 60% of all housing expenses. Essentially, the differences in the share of housing-related expenditures in income are due to varying income levels. Nonetheless, the internal structure of housing expenses is very similar in households that belong to different social groups.

**Housing costs are considerably differentiated** based on the type of housing (privately-owned, cooperative, rental), the dwelling size, and the size of the municipality where the dwelling is located. The average proportion of housing-related costs per household rises slightly as the municipality size increases. The differences are mainly due to different amounts of rent—the larger the municipality, the higher the proportion of rent in housing expenses. In addition, some differences stem from the technologies used for heating, preparation of hot water, and cooking.

A comparison of expenditures in individual types of housing on the example of households of employed persons shows that the highest housing expenses (absolute and relative) were paid in 2000 by households residing in rental dwellings (18.1%). Somewhat lower were expenses of households living in cooperative housing (15.8%), and the lowest sums were paid by households residing in their own family homes (11.7% of net household income). The low proportion of housing-related expenditures in privately-owned dwellings is due to the fact that in most cases people live in older family homes where the acquisition cost, which is the highest item in privately-owned housing, has been paid. The lower expenditures in cooperative housing can presumably be explained by low contributions to repair and maintenance funds and the fact that repairs and maintenance are to some extent performed by tenants themselves without having to pay the related costs. Structuring households into ten groups according to net household income and processing data pertaining to these groups shows that while the average net household income in the highest quintile corresponds to approximately the double of the lowest average value, the average housing expenditures (per household) in this quintile is only about 30% higher than the lowest average value. This demonstrates that wealthier families are burdened by housing expenses less than households with a lower income.

The **amount of housing expenditures paid by households** is gradually increasing as a result of the process of deregulation of rent and prices of energy. The problem concerns mainly low-income households, especially single-member households and households of retirees. It is most often found in larger settlements in rental and cooperative housing where tenants are essentially unable to control their housing-related expenditures. The existing housing allowance, one of the state's welfare benefits, does not take into account the actual housing expenses paid by individual households and the extent to which they burden a given household. However, households with very low income can apply for social privation benefits which are intended to provide basic living needs. However, there is no entitlement to these benefits under the law.

# Average net monthly income and housing-related expenditures per average household (2001)

	Average	Household of	Household of
	household	employed persons	retirees
Net income CZK	18,627	21,843	10,023
Housing expenses CZK	3,006	3,203	2,427
Housing expenses/net	16.1%	14.7%	24.2%

1 .		
ıncome		
IIICOIIIC		

## Percentage of individual types of housing-related expenditures in the total of these expenditures (2001)

	Average household	Household of employed persons	Household of retirees
Rent*	21.2%	21,5%	23.2%
Regular maintenance	7,9%	8,5%	4,6%
Water supply and	10,9%	11,5%	9,8%
other services			
Energy	60,0%	58,5%	62,4%
Total housing	100%	100%	100%
expenses			

Source: Czech Statistical Office

#### The Most Important Currently Used Instruments of Support for Housing

#### Support for Mortgage Loans

Mortgage loans are long-term loans secured with real estate and used especially for purchases of dwellings by individuals. These types of loans have been available in the Czech Republic since 1995, when the applicable legislation came into effect.

Government support for mortgage loans has several forms that differ in their focus. Exemption of interest revenues from mortgage certificates from payment of income tax has been intended to strengthen accumulation of funds in mortgage banks. Subsidized interest on mortgage loans and subtracting instalments from the income base for calculation of personal income tax, are intended to increase accessibility of mortgage loans for households.

The most important measure is subsidy of a part of interest on mortgage loans. Available only for purchases of new dwellings, the purpose of this measure is to encourage new housing construction. Based on the most recent legislative framework, the interest rate ranges between 0 to 4%, depending on current developments.

New measure is for acquisition of older dwellings for persons younger than 36 year old. This measure is based on the assumption that older dwellings will more easily satisfy household accommodation needs because they are always less expensive than newly constructed units. It is expected, that this measure will reduce the currently predominant orientation of households on new construction and make purchases of older dwellings more accessible.

#### Support for Construction of Municipal Rental Apartments and Technical Infrastructure

Investment subsidies for construction of rental apartments and the related infrastructure are granted on the basis of programs announced on an annual basis. The amount of this non-returnable subsidy totals a maximum of CZK 320 000 per unit and a maximum of CZK 80 000 per unit for related infrastructure. The subsidy purposely covers only a part of the costs of construction and needs to be combined with municipal or private funds.

<sup>\*</sup> Percentage of total housing expenses in respect of all items

The volume of funds allocated to this program since its beginning in 1995 has been substantial, a fact that has been positively reflected in the extent of new housing construction. Nonetheless, the program alone is unable to encourage the necessary construction of new rental apartments. Experiences with the program have shown that municipalities seek additional resources for financing construction of new dwellings. The planned form of housing organizations will rectify and legally define the form of multiple-source financing on a non-profit basis. Thus, housing non-profit organizations will gradually take over the investor role of municipalities.

#### Support for Construction of Rented Housing with Community Care Services

Investment subsidies for construction of nursing homes have been granted since 1991. The maximum amount of the subsidy is CZK 750 000 per unit intended for persons with reduced self-sufficiency, i.e. disabled and retired individuals. Nursing homes include so-called protected housing. Thus, municipal rental apartments are available for all groups of people who have specific housing needs.

#### Construction Savings Plans – Building Societies

Construction savings plans constitute a system for financing of housing which is based on clearly defined savings and loan stages. The advantage of construction savings plans is access to low-interest loans linked with low-interest savings plans. Available in the Czech Republic since 1993, construction savings plans are used for financing of varied housing needs—from acquisition of a dwelling to purchase of furnishings.

The main form of government subsidy is a non-returnable contribution of 25% of the annually saved amount (maximum CZK 4,500 per person) whose objective is to encourage households to save money and thereby accumulate funds necessary for the providing of low-interest loans. Another form of support is exemption of interest on construction savings deposits from income tax, and the possibility of deducting repaid interest on loans from the income tax base.

Construction savings plans are—mainly thanks to the government subsidy—used in a maximum possible extent, especially in the savings stage. Almost 40% of already granted loans have been used for purchase of a dwelling, often as part of privatization projects. However, only a fifth of loans have been used for acquisition of a new dwelling. This fact shows that funds that can be accumulated through construction savings plans are insufficient taking into consideration the cost of new construction.

#### Interest-Free Government Loan for Municipalities

The government loan (interest-free and repayable within up to ten years) is intended for municipalities and through them also to private property owners (loans with max. 7% interest totaling at least 20% of the allocated subsidy) for repair and maintenance of neglected housing fund. This form of government support was designed to initiate creation of municipal funds (a condition for obtaining the subsidy) intended for modernization of the housing stock. The change is prepared: This loans are turning to low interst credits granted by the State Housing Development Fund.

#### Subsidies for Repair of the Housing Stock

These subsidies are intended for all owners of buildings constructed with the prefabricated panel technology, namely municipalities, housing cooperatives, private owners, and legal entities in which the government does not own a stake. Not exceeding 50% of budget costs, the subsidy is intended for repair of very serious defects and emergencies.

#### Various forms of state support given to citizens, cities and towns in the flooded areas

The Ministry for Regional Development, which coordinates the renewal of all areas flooded in August 2002, has prepared a number of new programmes targeted at renewal housing there. The support is aimed at immediate help to people who lost their dwellings, including given them provisional accommodation for them. The Ministry further covers cost of removal of destroyed buildings or the ruins and supports the owners in repairing their dwellings or residential buildings. The municipalities, in whose region the housing stock was destroyed, can get subsidies for new housing rental construction.

#### Other Instruments

Besides the abovementioned most important instruments, there are numerous other measures whose aim is to provide support for the housing sector. Direct subsidies include payment of losses of banks for persons repaying subsidized loans (1 and 2.7%) granted in the past for cooperative and private construction and subsidies for heating insulation. Fiscal measures include a deduction of paid interest from the income tax base, exemption from property tax for fifteen years from certification of a new dwelling, and accelerated depreciation (30 years) aimed at creation of funds for repair of apartment buildings. Besides these forms of support, the state pays substantial sums in aid to areas affected by floods. Housing allowances should be also mentioned.

### III. Mortgage Loans

Universal Czech banks can obtain licenses for mortgage banking activity, as long as they keep separate legal and accounting records on the activity. The "mortgages" that provide the collateral for the mortgage bonds are not physically segregated from the other assets of the bank, but they are legally segregated in case of default or bankruptcy, so that they serve exclusively as first-rank collateral for the bonds.

The Czech banks do have to pay a small price for taking this approach. They are having to conform their mortgages to a norm of mortgage banking, having fixed rate loans (for 1 or 5 years), in contrast to the flexibility of U.S., U.K., and French banks to offer both variable and fixed rate loans. To the extent that they are funding the loans out of short-term deposits, this has introduced an element of interest rate risk that would not be required otherwise. (It is not clear how important this issue is. Banks do offer a one-year fixed rate loan that could easily be funded out of shorter-term deposits, but it appears that it is not popular.) On the other hand, the Czech mortgage banking law is not as restrictive as the German one, in that it permits the loan-to-value ratio to be as high as 70 percent.

There are nine mortgage banking licenses that have been issued so far. As noted above, all but one of these licenses have been given to universal banks, not specialized mortgage banks, and the one specialized mortgage bank has found it uneconomical to operate in that fashion.

One of them is exclusively focused on making loans on commercial real estate and another one is oriented towards commercial loans, loans for rental residential developments, and loans for high-cost houses.

Currently, the standard design for mortgages is a 20-year term, with a rate that is fixed for 1 or 5 years and prepayment that is subject to high, but negotiable, fees. It is advantageous for most households to take the full 20-year term and it appears that most do. The advantage is particularly great if the borrower qualifies for the 4 percentage point subsidy from the government, since this is payable out to 20 years. Even if not eligible, the interest on the loan is currently tax deductible, which reduces the effective real rate of interest to about zero percent, at least for high-income borrowers.

As September 2002, these loans are being offered at lowest rates 5,50 - 6,50 percent for the first 5 years. One variant of this design is an option of a one-year adjustable rate mortgage, convertible to a five-year rate at time of renewal.

Underwriting on these loans is based on calculations designed to ensure that remaining discretionary income exceeds 1.6 times the minimum living income for that family size. The net effect, apparently, is for a payment-to-net income ratio of about 30-35 percent. In making these calculations, the maximum 4 percent subsidy is deducted from the rate (if applicable) and a share of the tax savings due from deducting the interest paid is also removed from the net mortgage payment.

Notably, mortgage banking regulations allow loans with loan-to-value ratios of up to 70 percent to be used as collateral for mortgage bonds. Loans for up to another 20 or even 30 percent of the appraised value can be obtained at a higher, floating rate.

	1997	1998	1999	2000	2001
1  USD = x  CZK	31,711	32,274	34,600	38,590	38,038
Number of new Mortgage Loans	4,092	4,988	6,414	10,228	14,837
Mortgage Loans - total amount CZK mil.	9,247	10,987	10,922	18,180	24,810
Number of new mortgage loans (% of GDP)	0.55	0.6	0.59	0,95	1,15
New mortgage loans (individuals)	3,407	4,594	6,103	9,820	14,250
New mortgage loans (corporations)	685	394	311	448	457
New mortgage loans with State subsidy (number of flats)	2,031	2,761	3,053	4,765	7,161
Volume of new mortgage loans with State subsidy (bil. CZK)	1,557	2,336	3,403	5,601	10,149
Outstanding mortgage loans (with State subsidy) mil. CZK	1,684	4,020	7,423	13,024	
Outstanding mortgage loans (with State subsidy) mil. USD	53	125	214	337	778
Mortgage loans outstanding	0,1%	0,2%	0,4%	0,7%	1,4%

as% of GDP					
Average terms of mortgage loans (result interest rate)	7,91	8,73	8,73	7,93	7,02
Average terms of mortgage loans (average floor space)	103	100	98	93	88
Average terms of mortgage loans (average period in months)	184	185	186	181	181

#### Mortgage subsidy

- AIM OF MEASURE Support for greater use of mortgage loans
- FORM OF SUPPORT Subsidized interest on mortgage loans (four percentage points)
- APPLIES TO Construction of new privately owned single family houses or apartments
- **APPLICANT** Builders private persons
- TERMS Specified in Government Decree
- WHERE TO APPLY The aid is distributed through mortgage banks
- **NOTE** Paid interest may be deducted from income tax base

After adopting the necessary legislative conditions in October 1995, the Government approved the terms of state financial support for mortgage loans in order to stimulate new housing construction. The purpose of this program is to increase the availability of long term loans from commercial banks to private builders of family homes and apartment buildings. Mortgage loans are granted for a maximum of 70% of the value of the property to be built. Builders who lack initial capital can obtain the necessary funds from swing loans or loans granted under the Construction Savings Plan.

The financial aid can be used for construction of apartment buildings or family houses, purchase of land for housing construction, purchase of a new apartment or a house (within one year of certification), and for repayment of a loan received after January 1, 1995. A Government Decree specifies that borrowers are entitled to receive government financial aid until full repayment of mortgages, providing that the repayment period does not exceed twenty years. This measure applies to mortgages (or parts thereof) which do not exceed:

- CZK 2 million (house with two apartments),
- CZK 1.5 million (single family house),
- CZK 12,000 per square meter of an apartment, but no more than CZK 800 000 per unit in an apartment building.

### IV. Housing Finance Systems

A fundamental transformation of the system used to finance housing has been one of the key elements of the reform of the housing sector since the beginning of the 1990s. The main objective of the transformation is to create a financing system that will reduce the role of public funds and allow utilization of private finances, including capital and savings of individuals and legal entities, and loans provided by financial institutions. Newly introduced

elements of the financing system include construction savings plans (since 1993) and mortgage loans (since 1995).

Based on the German and Austrian models, the system of **construction savings plans** has developed considerably and exhibits further growth potential. This is apparent from the gradually increasing number of people participating in construction savings plans (4,196,408 as of December 31, 2001), a growing volume of savings (CZK 133.3 billion as of December 31, 2001), and an increasing amount of government subsidies added to savings (CZK 2,719 in 2001 on average). A factor contributing to the dynamic development of the system are high government subsidies which allow considerable accretion of savings, considering the current low interest rates on deposits. The government contributes 25% of the saved sum annually (up to a maximum of CZK 4.500 a year) to all individuals participating in a construction savings plan. 10 Such extensive subsidies are very demanding on the state budget. In 2001, CZK 9.313 billion was paid out, and the sum of subsidies is expected to exceed CZK 11 billion in 2002. Unless the system of construction savings plans is changed, it can be expected that when the system stabilizes (2004 – 2005), the annual amount of state subsidies will total approx. CZK 13.5 – 14.5 billion. 11 From the total volume of savings, about 53% has been paid out in loans (bridging loans and construction loans). However, the sum of all loans accounts for only some 12% of the total number of effective contracts, a fact that shows that most people use this system mainly for the high accretion of savings. Another reason for a low number of loans is a time shift, inherent to the system, between the stages when people accumulate savings and negotiate a loan. Loans, most of which are bridging loans, are used mainly for acquisition of older dwellings and reconstruction or modernization projects; their use in new construction is relatively low (approx. 20% of all loans provided as of September 30, 2002). Overall, the system of construction savings plans functions well, but it will be necessary to investigate possibilities of reducing the demand on the state budget related to the existence of this system.

The **system of mortgage loans** is not developing as rapidly as construction savings plans, as obtaining and repaying a mortgage loan in an amount necessary for acquisition of a property is not so easy accessible for households. Nonetheless, the system has a high growth potential and has developed rapidly especially in the past two years thanks to a reduction of interest rates (on average 6.24% as of September, 2002 for individuals), growing competition among mortgage banks, and people's increasing willingness to become indebted for the purpose of acquiring housing. Mortgage loans are provided against collateral, usually consisting of up to 70% of the value of the acquired property. Most of the nine banks which offer mortgage loans obtain funds for financing them from deposits; financing through issues of mortgage bonds is unnecessary due to a sufficient amount of available capital. From the introduction of mortgage loans up to September 30, 2002, a total of 61,932 mortgage loans were provided, totaling about CZK 104.6 billion. Since 1995, mortgage loans have been stimulated through interest subsidies derived from the average interest rate on mortgage loans. In 2001, the interest subsidy amounted to two percentage points, in 2002 one percentage points. <sup>12</sup> The purpose of interest subsidies is to reduce instalments and increase the accessibility of mortgages for households. Further development of mortgage loans can be expected as the economy grows and household incomes come closer to the acquisition prices of real estate. It

In addition to the subsidy, construction savings are exempt from income tax and the interest on loans can be deducted from the tax base for calculation of income tax. The latter tax relief is also used to stimulate the system of mortgage loans.

Source: Ministry of Finance 2001.

Mortgage loans are also supported through tax relief: the yield of mortgage bonds is exempt from income tax, and interest on loans can be deducted from the tax base for calculation of income tax, similarly as in the case of construction savings plans.

is very likely that the system of mortgage loans will become the main financial instrument for acquisition of housing, most likely in combination with construction savings plans which are already used by a large number of people.

## Construction savings plans from creation of the system to September 30, 2002 (cumulative)

Total number of contracts	7,108,766
Total effective contracts	4,575,857
Total savings in CZK billion	157,684
Total number of provided loans	615,879
Total sum of all provided loans in	87,384
CZK billion	

Source: Ministry of Finance; Association of Construction Savings Banks

#### Mortgage loans from creation to September 30, 2002 (cumulative)

Total number of mortgage	61,932
loans*	
Total volume of mortgage	104,597
loans* (CZK billion)	
Total volume of government-	28,947
subsidized mortgage loans	
(CZK billion)	
Number of dwellings	25,288
acquired with government	
subsidies	

Source: Ministry for Regional Development, CEDR \* Source: Mortgage banks, as of September 30, 2002

# **Indirect Subsidies (Tax Exemptions) Income Tax Exemptions**

- The following items are exempt from the income tax:
  - proceeds from sale of a family home or an apartment, including share of common areas of a building or co-ownership share and the land, as long as the dwelling was the seller's place of residence for at least two consecutive years prior to the sale;
  - proceeds from sale of real estate, dwellings, and non-residential premises, not included in the above definition, if the time period between acquisition and sale exceeds five years and if they are not included in commercial assets;
  - proceeds from transfer of cooperative membership rights and transfer of ownership rights in a transformed cooperative, as long as the time period between acquisition and transfer exceeds five years;
  - interest on construction savings deposits, including government-subsidized interest;
  - interest yield on mortgage bonds;

- subsidies from the state budget, budgets of cities, municipalities, and higher territorial self-governing units, state funds, allocated grants, and contributions from the state budget for acquisition or valuation of fixed tangible assets;
- income having the form of acquisition of ownership to a dwelling as a replacement for a vacated dwelling and financial compensation for vacating a dwelling paid to the tenant on the condition that the compensation is or will be used for satisfying housing needs at the latest within one year following the year when the compensation was received; similar conditions apply to proceeds from transfer of membership in a cooperative—if in this respect the lease agreement for the dwelling is cancelled and if the person uses the proceeds for satisfying his housing needs;
- proceeds consisting of regulated rent for lease of dwellings and garages and payments
  for services relating to the use of such dwellings and garages in buildings owned and
  co-owned by former State Housing Cooperatives and People's Housing Cooperative as
  well as proceeds from lease of dwellings and garages received by partners, members,
  or founders in the case of taxpayers created for the purpose of acquisition of a
  building.
- The following items can be deducted from the income tax base:
  - Individuals who have received a mortgage loan or a construction savings loan can deduct paid interest from the income tax base.
  - Accelerated depreciation of the acquisition or reproduction price of a building.

#### **Property Tax**

- The following structures are exempt from the property tax:
  - land and structures owned by the state;
  - land and structures owned by municipalities in whose cadastral territory they are located;
  - new residential buildings owned by individuals and dwellings in newly constructed apartment buildings owned by individuals, if they are used as the permanent residence of the owners or close relatives (the tax exemption lasts for 15 years from the date certification of completion is issued);
  - residential buildings owned by individuals who are socially needy or have a medical disability, if they are used by such individuals as their permanent residence;
  - structures where heating has been converted from solid fuels to a system using renewable energy, i.e. solar, wind, geothermal, biomass energy, or where changes have been made consisting of increasing thermal efficiency through construction modifications for which a building permit was issued (the tax exemption lasts for five years);
  - residential buildings returned as part of the restitution process (the tax exemption will last until 2007);
  - private residential buildings constructed before 1948 (the tax exemption will last until 2007);
  - dwellings transferred to individuals, municipalities, and cooperatives to individuals (the tax exemption will last until 2002).

Calculation of tax exemptions and their effectiveness is very problematic. Tax exemptions that take into account housing-related problems have been introduced into the Czech taxation system mainly due to the transformation of the economy (privatization, restitution) and establishment of a new system of financing housing (construction savings plans, mortgages). Important relief is provided by the possibility of deducting paid interest on housing-related loans from the income tax base and exempting newly constructed buildings from the property tax for 15 years. Exempting sale of real estate used for residential purposes, including transfers of membership rights and compensation for vacating a dwelling, from the income tax facilitate financing of people's housing needs.