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OUTLOOK OF THE OLD-AGE PENSION SYSTEM IN THE CZECH REPUBLIC

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I. Introduction

The Czech Republic is a landlocked country located in the center of the European continent, having an area of about 79,000 square kilometers and a population of about 10 million. Before World War II, the Czech Republic (then part of Czechoslovakia) was known as a world-leading industrialized country, and today it remains an industrialized country centering on manufacturing industries, such as automobiles and machinery. Since establishment of the Communist Party government in 1948, the country operated under a socialist Soviet-type political system for about 40 years until 1989, when communist rule collapsed in several East European countries following the 1989 peaceful revolutions. Today the Czech Republic continues its transformation from the old socialist political and economic regime to one based on democracy and market mechanisms. This transformation to construct a new society undertaken by the Czech Republic and other former socialist countries marks a historically unprecedented challenge, and is one that after 15 years continues today largely through the process of ongoing trial and error.

The transformation process in the Czech Republic began under the leadership of Prime Minister Václav Klaus (now president). Considered one of the most important Czech politicians of the recent era, Klaus placed emphasis on implementing market mechanisms and so-called radical economic reforms from 1990 to 1997. In 1998, the Social Democratic Party took the post of political power from the Klaus Administration, and since then the political and economic conditions of the Czech Republic have changed significantly. The basic strategy of the Klaus Administration, such as small government and promotion of market mechanisms, consequently shifted toward greater government control, such as government-led industrial policy. Today the administration is beginning to overhaul established policies on foreign capital incentives and social security among others.

A general survey of the situation in the Czech Republic from 1989 to the present (March 2005) shows a significant change occurring in 1998 within the political and economic spheres. The turning point was the currency crisis of May 1997, which was triggered by the exposure of huge bad loans in the financial sector and related insufficient restructuring of old state enterprise resulting from economic reforms that focused on macro-level factors and neglected the micro level. As a result of the crisis and underlying problems, Klaus was forced to resign at the end of 1997 and the Social Democratic Party came to power in June 1998. However, the new government faced an uphill battle for reform considering the country's dire economic situation.[1]

While the government's main concerns during the initial stages of the economic transformation process were focused on macroeconomic policy and reform, from the second half of the 1990s, restructuring and privatization of state-owned enterprise's became the prime concern. At present, during what can be called the second half of transformation, such reforms have generally been completed, regardless of their success or failure. Social security reform, direct foreign investment and the country's affiliation with the EU are currently the most pressing issues. The two international policy issues will be discussed separately in another section. The social security issue, on the other hand, is attracting attention as an area of pertinent interest not only in Japan but also globally. The problem of pension reform has become a pressing concern for the nation as it faces shortages in sources of pension revenue simultaneously with a huge domestic debt.

The following section will discuss the Czech Republic's old-age pension system under the transformation process from 1990 onwards, paying particular attention to specific features and problems of the system.

II. Public pension system

As in many other countries, the population of the Czech Republic is aging, as shown in Tables 1, 6, and 7. In 1999, approximately 18% of the Czech population was aged 65 or over, and the natural rate of population increase was -2.3 per million persons. Discussion on these points will be limited here to simply say that population decline and aging are expected to continue in the foreseeable future. The Czech pension program consists of an old-age pension, a disabled pension, a widow's pension, an orphan pension and others. At the end of 1999, out of the total of 3,184,000 men receiving pensions, 1,892,000, or 59.4%, were receiving old-age pensions (see Table 2). Old-age pension expenditure, on the other hand, accounted for 71.5% of total pension expenditure in 1999 (see Figure 1).

Table 1. Basic data	1999
Area (km^2)	78,866.0
Population (thousand)	10,278.0
Population density/km^2	130.0
Economically active persons (thousand)	5,408.0
Persons over working age (thousand)	1,873.0
Life expectancy for men	71.4
Life expectancy for women	78.1
Births	89,471.0
Birth rate (‰)	8.7
Deaths	109,768.0
Death rate (‰)	10.7
Natural population increase	-20,297.0
Natural rate of population increase (‰)	-2.0
Migration balance	8,774.0
Rate of migration balance (‰)	0.9
Total population increase	-11,523.0
Rate of total population increase (‰)	-1.1
Marriages	53,523.0
Marriage rate (‰)	5.2
Divorces	23,657.0
Divorce rate (‰)	2.3
Source: Czech Statistical Office, 2000.	

Table 2. Trend in the number of pensions paid by type of pension (thousand)

	Old-age	Full disability	Partial disability	Widow	Orphan[1]	Other[2]	Total
1985	1,646	349	122	636	49	49	2,850
1989	1,707	344	126	631	66	43	2,916
1990	1,737	353	130	535	66	31	2,952
1991	1,777	367	127	635	63	28	2,997
1992	1,804	382	123	637	60	26	3,033
1993	1,815	398	120	636	60	24	3,052
1994	1,811	410	117	632	60	21	3,051
1995	1,811	420	177	629	62	18	3,057
1996	1,806	408	124	656	58		3,052
1997	1,813	398	138	680	59		3,088
1998	1,859	392	145	695	57		3,147
1999	1,892	385	150	682	75		3,184

Source: Ministry of Social Affairs and Labour, 2001.

Notes: 1. Until 1988, the number of stems; from 1989 the number of children. The stem represents all children in the family surviving after the parent's death.

2. Includes pensions relating to persons making special contributions to society who died before January 1, 1957.

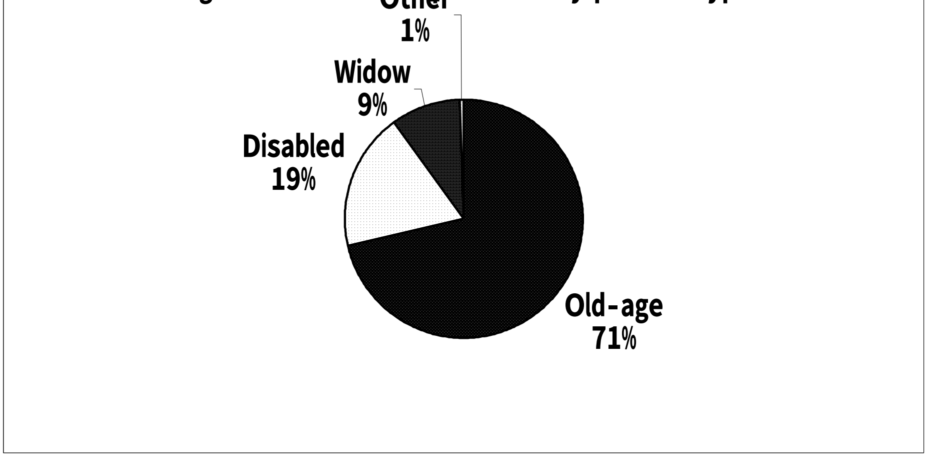


Figure 1. Pension expenditure by pension type

Figure 2. Structure of old-age pension system

Private pension funds	**3rd tier**
-	**2nd tier**
Public pension insurance	**1st tier**

The present old-age pension system in the Czech Republic is a two-tier system consisting of a basic pension that is based proportionally on income (1st tier), and arbitrary private sector pension funds (3rd tier) (see Figure 2). The public pension 1st tier is a pay-as-you-go scheme for employees, which may be supplemented from national finances in the case of a deficit. The plan is a defined-benefit type (DB) in principle, and is managed by the Ministry of Social Affairs and Labour. The contribution rate is 26% of income, broken down into a 19.5% contribution from employers and a 6.5% contribution from employees. The Czech contribution rate is higher that of Western nations or Japan. The calculation standard for premiums is the main average gross income for the preceding 10 years, with the maximum being 13,000

CZK and the minimum 6,100 CZK. In 1995, the basic pension general insurance law was revised to allow gradual raising of the pensionable age (Act No. 155/95). Specifically, the old-system's eligible ages for receiving pension of 60 years old for men and 53-57 years old for women (the former for women having more than five children, the latter for no children) can be raised by 2007 to 62 years old for men and 57-61 years old for women. The pensionable age is being raised in stages from 1996 to 2007, that is, pension is delayed two months per year for men and four months per year for women. For example, in 2003 the pensionable age for men was 61 years and four months, and for women was from 55 years and eight months to 59 years and eight months. At the end of 2000, old-age pension recipients numbered 1,890,000 and the average monthly pension received (for regular recipients) was 6,300 CZK. The total pension expenditure for the same year was 191,300 million CZK, which accounted for 10% of GDP (see Tables 2, 3 and 4).

Table 3. Average monthly pension payments

CZK

Old-age	1999			2000		
	Total	Male	Female	Total	Male	Female
Full old-age	5914	6557	5391	6297	6988	5735
Proportional old-age	3524	3567	3521	3648	3563	3656

Source: Ministry of Social Affairs and Labour.

Table 4. Pension system revenues and expenditures

	1993	1994	1995	1996	1997	1998	1999	2000
Contribution rate (%)	27.2	27.2	27.2	26.0	26.0	26.0	26.0	26.0
Revenues (billion CZK)	79.7	100.0	116.6	129.8	142.2	151.4	168.7	182.2
Pension expenditures (billion CZK)	79.5	90.5	105.8	123.4	146.4	162.0	171.6	191.3
Administrative expenditures (billion CZK)	1.55	2.00	2.28	2.67	2.55	2.64	3.28	3.49
Balance (billion CZK)	-1.4	7.6	8.4	3.7	-6.8	-13.2	-6.0	-12.6

Source: Ministry of Social Affairs and Labour, 2001.

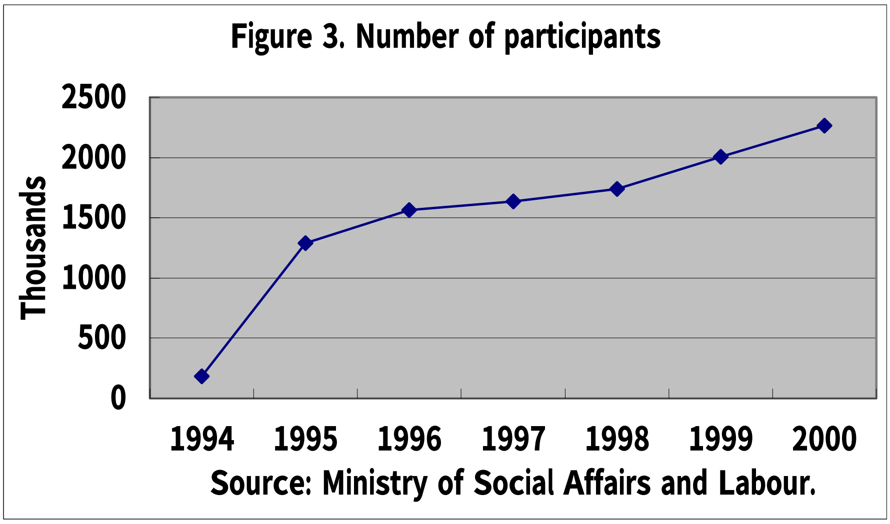
III. Private sector pension funds (3^{rd} tier)

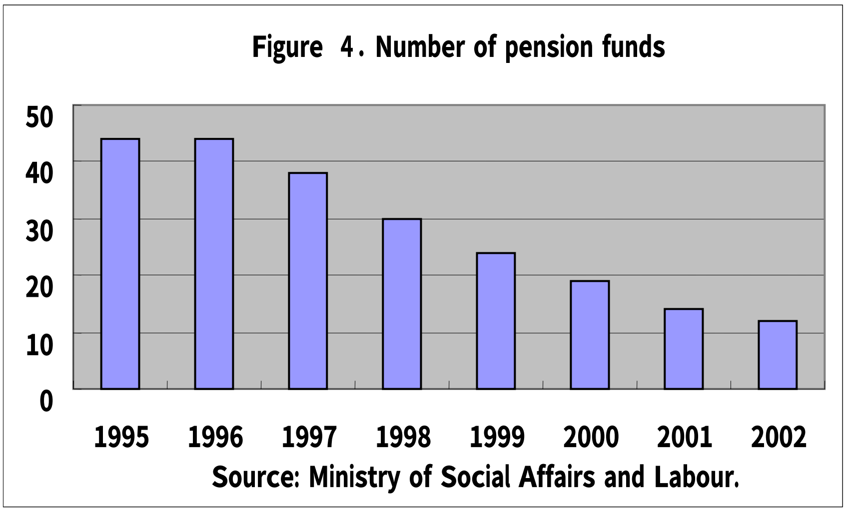
In 1994, the supplemental pension insurance law was passed by the Czech Parliament, and a private pension fund was newly recognized. While the old pension system consisted of only public pensions, the new pension system consists of a two-tier system. Under the privatization initiative of the Klaus Administration, coupons representing negotiable securities exchangeable for stocks in state companies were distributed among the Czech people. Although citizens were able to purchase and sell stocks directly, they did not have the knowledge or understanding required for purchasing and selling stocks since they had been living under a socialist system for 40 years. In order to administer and manage the coupons, an investment fund was established in 1992 as a mediating financial organization. This investment fund collected most of the coupons distributed among the people, and as a major stockholder it consequently wielded sudden significant influence on the Czech economy.[2]

The right-wing Democratic Party led by Klaus as well as domestic and foreign investors had insisted on privatization of the existing pension system and they had intended to stimulate the capital market by introducing institutions such as investment funds and pension funds. Although establishment of the pension fund emerged under this background, due to inadequacies of the investment fund law, activity surrounding the fund was very opaque, and soon one scandal succeeded another. This is why the European and American investors successively withdrew from the Czech Republic's capital market, which was a major factor behind the above-mentioned currency crisis. The pension fund system, therefore, essentially became a state-run entity, which is greatly different from Klaus's intention.[3]

Eligibility for the fund is determined somewhat arbitrarily. Currently, about 40% of the 2,400,000 people in the work force have joined. Each private sector pension fund has defined contributions and manages a source of revenue under the original strategy. Overall, the system has 12 funds as of 2003. Though there were 44 funds in 1995, liquidation of poorly performing funds or integration of separate funds has been carried out under direction of the Ministry of Finance and the Securities and Exchange Commission. The total assets of the pension fund now exceed 55 billion CZK, and an upward trend is apparent (see Figures 3, 4 and 5). This is believed to be largely a result of investors turning to pension funds as interest rates offered by banks have been decreased.

Average contribution rates are 2.5% of a pension fund member's monthly income, with the state contributing an additional 1%. Therefore, if we add the mandatory 26% contribution for public pension, private fund members have almost 30% of their average income being contributed to pension (see Figure 6). In 2001, the average monthly contribution was 338 CZK per member and 90 CZK per member by the state (see Figure 7). The state subsidy amount depends on the amount of a member's contribution. For example, in the case of a 100-199 CZK monthly member contribution, the state pays 50 CZK as a fixed amount, plus 40% of the member's contribution exceeding 100 CZK. In the case of a monthly member contribution of 500 CZK or more, the state pays a fixed 150 CZK. The high level of state support is the reason why it is said to be a state-led pension fund scheme (see Table 5). The government is planning to increase the tax deductible amount for contributions under the pension scheme currently being developed.





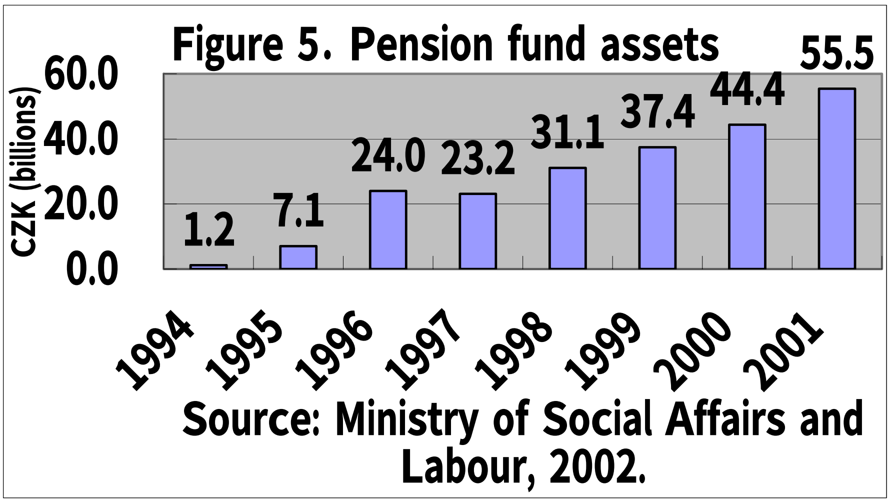


Table 5. State contribution to private pensions

Member contribution per month	State subsidy per month
100-199CZK	50CZK+40% from above 100CZK
200-299CZK	90CZK+30% from above 200CZK
300-399CZK	120CZK+20% from above 300CZK
400-499CZK	140CZK+10% from above 400CZK
500CZK and more	150CZK

Source: Ministry of Social Affairs and Labour.

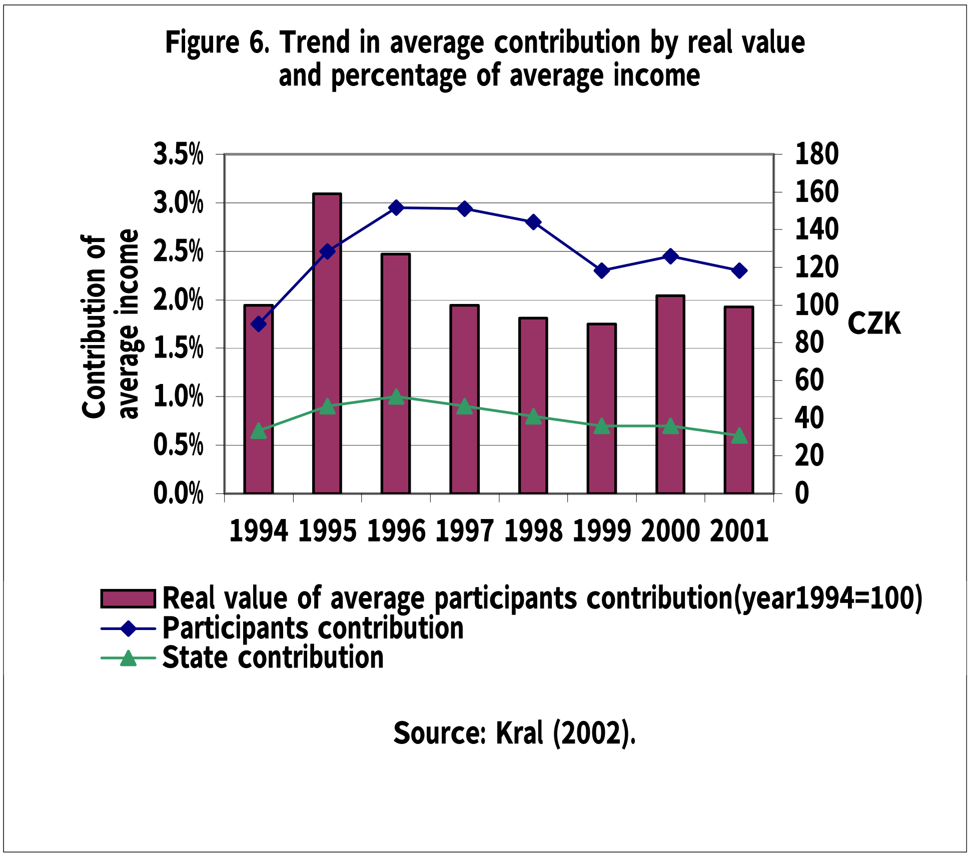


Figure 6. Trend in average contribution by real value and percentage of average income

Source: Kral (2002).

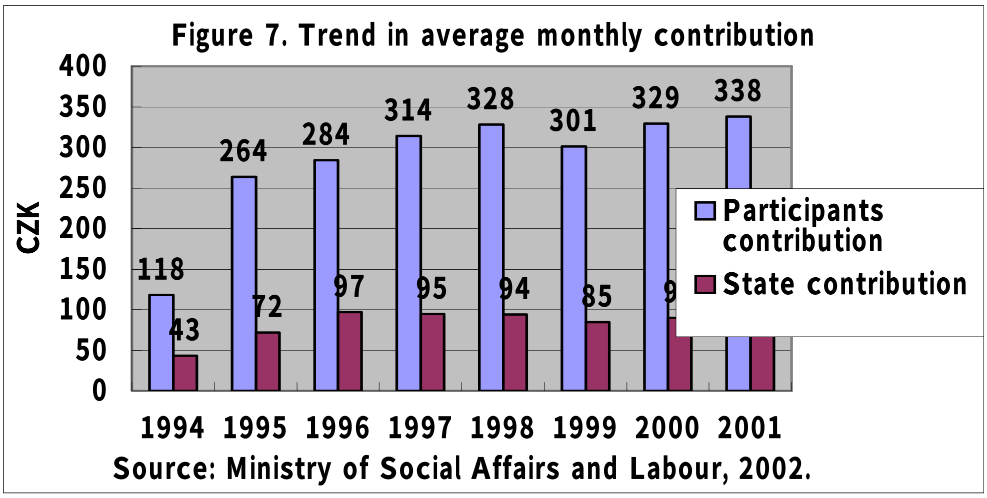


Figure 7. Trend in average monthly contribution

Source: Ministry of Social Affairs and Labour, 2002.

IV. Features and problems of the pension system

Although an outline of the old-age pension system in the Czech Republic has been described, specific problems of the system are discussed in this section.

1. Low birth rate and aging population

Low birth rates and population aging are serious problems faced by countries around the world including the Czech Republic. According to U.N. statistics, the proportion of the Czech population aged 65 years or older as a percentage of those aged 15-64 years is forecast to be 23% in 2010, then reaching 37.9% in 2030(see Table 6). These values are not only significantly higher than Eastern Europe as a whole, but they approach levels found in Northern Europe, France and Britain. As shown in Table 6, the working-age population (aged 15 to 64) will be faced with an increasing burden for supporting the old age population. Moreover, while the population of those aged 65 years and over will continue to increase, the population of those below age 55 will decrease, as shown in Table 7.

Low birth rates and population aging simultaneously necessitate higher pension contributions and reduced pension benefits, which is now a widespread problem throughout the world. For the Czech Republic and other counties rooted in socialism, how to minimize the national burden in light of these trends is a particularly vexing issue. As the baby boom generation, especially those born immediately after World War II, approach the pensionable age, pension reform is indeed an urgent matter.

As discussed in the second section, the Czech Republic adopted a pay-as-you-go public pension system. However, with the burden of premium increases caused by the low birth rate and aging, the system is becoming more and more difficult to maintain. Although the pay-as-you-go system is stable when a population composition remains constant and its revenue source steady, it is vulnerable to difficulties when the aged portion of the population increases. As indicated in Table 8, the Ministry of Social Affairs and Labour predicts that the dependence rate (i.e., ratio of the number of pensioners to the number of workers) will exceed 90% in 2050 under pensionable ages set out by the current law. This is one major reason why it has been argued the pay-as-you-go system, which constitutes the basic pension system of the Czech Republic, should be reconsidered.

Table 6. International comparison of ratio of percentage of population aged 65 and over to percentage of population aged 15-64

	2010	2030
Czech Republic	23.0	37.9
Eastern Europe	19.4	31.0
Northern Europe	25.5	38.2
Southern Europe	27.4	41,6
Western Europe	26.9	41.6
France	25.3	38.7
Germany	29.6	43.3
Italy	31.4	49.1
Spain	27.0	42.2
Britain	25.9	38.3

Source: United Nations, World Population Prospect 1950-2050 (1998 Revision).
Czech Republic - Demographic Project of the Czech Statistical Office, 2001.

Table 7. Trend in population age structure

	1995	2000	2010	2020	2030
Total population	10,320,000	10,268,000	10,244,000	10,098,000	9,691,000
Age structure(%)					
Men:	100	100	100	100	100
0-19	28.0	24.1	20.3	19.3	18.2
20-54	52.4	54.5	52.0	49.4	45.6
55-64	9.2	10.5	14.4	12.6	15.1
65-	10.4	10.9	13.3	18.7	21.2
Women:	100	100	100	100	100
0-19	25.2	21.7	18.3	17.4	16.4
20-54	48.8	50.6	47.9	45.7	42.0
55-64	9.9	11.1	14.9	12.5	14.8
65-	16.0	16.6	18.9	24.4	26.9

Source: Ministry of Social Affairs and Labour, 2001.

Table 8. Ratio of number of pensioners to number of contributors

Year	Retirement age according to Act No.155/95	Retirement age 65
1996	0.48	0.48
1997	0.48	0.48
1998	0.47	0.47
1999	0.47	0.47
2000	0.48	0.48
2005	0.49	0.49
2010	0.53	0.52
2015	0.59	0.54
2020	0.64	0.57
2025	0.68	0.58
2030	0.72	0.61
2040	0.86	0.70
2050	0.93	0.78

Source: UNDP, Human Development Report 1999: Czech Republic, 1999.

2. From economic miracle to economic crises

The large demonstration that led to the collapse of the Communist Party government in November 1989 is known as "the velvet revolution" for its peaceful unfolding. Likewise, the separation of Czechoslovakia into the Czech Republic and Slovakia in 1993 is known as "the velvet divorce" for its expectedly smooth materialization. Since macro-economic conditions in the Czech Republic were better than those in other Central European countries when communism collapsed, it can be said that initial conditions for transforming the economic system were relatively good. From 1990 until the end of 1997, there was no major political confusion and the country steadily progressed in carrying out the radical reforms initiated by Klaus. In 1995, the GDP growth rate reached 6% and the country became the first former socialism nation to join the OECD. Experiencing such a favorable conversion process, the Czech Republic was labeled an "honor student" by the West in the mid-1990s, and its success was generally known as "the miracle of the Czech Republic."

During this period, the Czech Republic experienced good economic performance, low unemployment, rising wages (real and nominal) and surplus pension income. As shown in Table 4, pension revenue exceeded expenditure from 1994 to 1996 for a surplus balance of 7,600 million CZK, 8,400 million CZK and 3,700 million CZK each year respectively. In 1994, under the prevailing optimistic mood, the early-retirement program was introduced, and in 1996 the rate of annuity insurance contribution was reduced from 27.2% to 26% (see Table 4).

In 1997, however, exposure of excessive bad loans in the financial sector and delays in restructuring the old state-owed enterprises led to the currency crisis that affected the whole economy. The positive income-expenditure pension balance reversed in 1997 to become a 6,800 million CZK deficit, followed in 1998 by a 13,200 million CZK deficit. The preceding three-year surplus, however, did not remain in the pension system as accounting methods included the amount in the general accounts. Furthermore, while increased unemployment caused by the economic crisis led to the reduction of pension income, large numbers of people applied to utilize the early-retirement program, which increased pension expenditure (see Table 4 and Figure 8). The government of the Social Democratic Party raised the budget in order to keep the real value of pension payments constant, as shown in Table 9. The pension system accounts remain unbalanced to date.

Although the above-mentioned economic crisis played a role in creating today's pension system difficulties, it should be stressed that the government's policy of reducing contribution rates and introducing the early-retirement program during the era of economic optimism are the chief factors behind the current pension crisis.

Table 9. The pension replacement rate

	Average gross income (A)	Average old-age pension (B)	B/A (%)
1989	3,170	1,598	50.4
1990	3,286	1,731	52.7
1991	3,792	2,176	57.4
1992	4,644	2,413	52.0
1993	5,817	2,734	47.0
1994	6,894	3,059	44.4
1995	8,172	3,578	43.8
1996	9,676	4,213	43.5
1997	10,691	4,840	45.3
1998	11,693	5,367	45.9
1999	12,655	5,724	45.2

Source: Ministry of Social Affairs and Labour, 2001.

Table10. New pensions granted, by type and sex

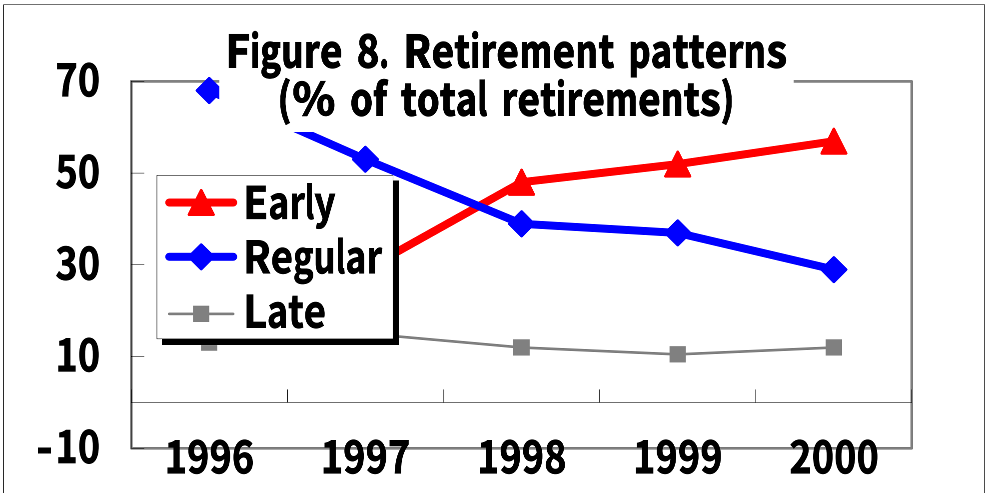
	1999			2000		
	Total	Male	Female	Total	Male	Female
Old-age total	110259	47952	62307	96894	39993	56901
Full old-age	51609	23111	28498	39297	17522	21775
Proportional old -age	722	132	590	546	134	412
Early old-age	57928	24709	33219	57051	22337	34714
by 2 years	12075	5257	6818	10085	4302	5783
by 3 years	45853	19452	26401	46966	18035	28931

Source: Ministry of Social Affairs and Labour, 2003.

Table 11. Average level of new pensions granted, by type and sex

	1999			2000		
	Total	Male	Female	Total	Male	Female
Old-age total	5974	6591	5494	6091	6768	5609
Full old-age	6490	7064	6021	6793	7348	6341
Proportional old-age	2467	2737	2377	2532	2698	2451
Early old-age						
by 2 years	5370	5980	4894	5513	6201	4994
by 3 years	5593	6220	5128	5659	6370	5212

Source: Ministry of Social Affairs and Labour, 2003.

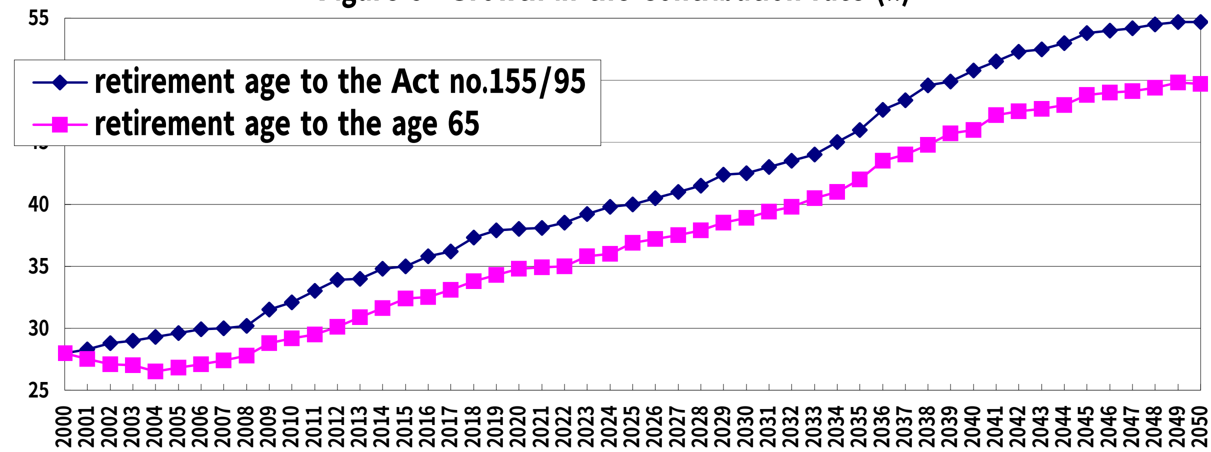


Source: Ministry of Social Affairs and Labour, 2001.

V. Final remarks

As mentioned above, the Czech Republic adopted a defined benefit (DB) type pay-as-you-go system as its basic public pension plan (the 1st tier), and a defined contribution (DC) type private pension fund (3rd tier). While the low birth rate and aging of the population is causing a financial burden on the system, we can see no significant change in these population dynamics from 1995 to 2004. The key factors for the system's financial difficulties, rather, can be said to be failing pension policies, such as the reduced contribution rate in the mid-1990s, the introduction of the early retirement program and accounting methods that placed surplus balances into the general account. If the rate of income substitution (replacement rate) shown in Table 9 is maintained (i.e., if the value of pension benefits is maintained) under the current law, the rate of basic pension contribution as a proportion of income must rise to 35% in 2015, and as high as 55% in 2060, as illustrated in Figure 9. Pension reform in the Czech Republic is consequently a pressing issue that must be urgently and appropriately addressed.

Figure 9. Growth in the contribution rate (%)



Source: UNDP, Human Developmemt Report 1999: Czech Republic, 1999.
Note: Results assume the replacement rate remains at the current level of 44%.

Although the low birth rate and population aging has been discussed, it should be stressed that the relationship between these demographic factors and pensions is a serious issue that applies not only to the Czech Republic, but to most developed countries around the world. The Czech Republic now faces fundamental reform of its pension program in light of the low birth rate and aging issues along with its failed pension policies of the past.

Under its pay-as-you-go basic pension system, it will be increasingly difficult to support the aged population, which will continue to rise proportionally. In parallel to the pay-as-you-go system, introduction of scheme for contributions proportional to income, such as defined contribution, is needed. Jan Kral, director of the pension department at the Ministry of Social Affairs and Labour, has appealed for the introduction of such a defined-contribution pension scheme as part of fundamental reform.[4] His other proposals for reform include increasing pension contributions, reducing the income substitution rate and raising the pensionable age. Moreover, there have been calls from the financial sector and foreign investors for the introduction of a private pension program, such as an individual account system. Expected increased mobilization of the labor force in the Czech Republic under the process of integration with the EU provides further supporting rationale for an individual account system. The individual-savings type account system adopted in Sweden and other nations, for example, provides participants with benefits that are basically unaffected by a change in workplace. An individual-savings scheme also helps mitigate the intergenerational support burden. In Britain and Germany, for instance, a private sector defined-contribution pension scheme has been introduced, and a substantial defined-contribution pension scheme is being planned for the Czech Republic following its ascension to the EU.

Table 12 shows the Czech government's outline for pension reform based on recommendations by the EU and the World Bank. The outline indicates establishment of a three tier system. Since both organizations also recommend the introduction of personal pension insurance systems, such as an individual-savings scheme as indicated in the 3rd tier in Table 13, defined-contribution schemes classified both by occupation and personal insurance may be introduced sooner or later.

Table 12. Draft of pension reform by the Ministry of Social Affairs and Labour

Parameter	1st tier: Pension insurance	2nd tier: Additional employee insurance	3rd tier	
			Private super-annuation scheme	Commercial insurance
Guaranteed by the state	yes	no	no	no
Extent	all economically active persons	groups of persons by occupation	individual	individual
Participation	obligatory	voluntary	voluntary	voluntary
Financing	pay-as-you-go	fully funded	fully funded	fully funded
Relation of contributions and benefits	alternative 1: DB alternative 2: NDC	NDC	NDC	both DB and NDC
Amount of benefits	alternative 1: based on the period of insurance and achieved income alternative 2: based on the amount of contributions paid and individual lifetime (regardless on sex)	based on the amount of contributions paid	based on the amount of contributions paid	based on the amount of contributions paid
Solidarity	between generations and income groups	none	none	none
Tax deductions	yes	yes	yes	yes
Contribution by the state		No	yes	no
Administration of the system	public	private	private	private

Source: Ministry of Social Affaires and Labour, 2002.

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Notes

[1] Refer to Shuichi Ikemoto, *The Transformation Process and the Czech Economy* (in Japanese), Azusa Shuppan, November, 2002.
[2] Refer to Shuichi Ikemoto, "A Consideration of the Coupon Privatization in Czechoslovakia," *Ikkyo Ronsou*, No. 114 of No. 6, December 1995.
[3] Although Klaus is a strong advocate of market principles, he has introduced compromised policies, as is often required of politicians.
[4] Interview with Jan Kral, director of the pension department, Ministry of Social Affairs and Labour, January 2003 and February 2005.