



THE WILLIAM DAVIDSON INSTITUTE
AT THE UNIVERSITY OF MICHIGAN BUSINESS SCHOOL

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Problems and Solutions*

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Working Paper Number 14
November 1996

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Prepared for the Conference on Global Pension Crisis, organized by the Council on Foreign Relations, New York, November 15-16, 1996. The views expressed in this paper are those of the author and do not necessarily reflect official views of WDI. Comments are welcome and should be addressed to The William Davidson Institute, 701 Tappan Street, 9th floor, Ann Arbor, MI 48109-1234, telephone 313-763-5020, fax 313-763-5850, e-mail wdi@umich.edu. Published by The William Davidson Institute with permission from the author.

**Pensions in the Former Soviet Bloc:
Problems and Solutions**

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Pensions in the Former Soviet Bloc: Problems and Solutions

1. Introduction

The former Soviet bloc countries (FSBCs), defined here broadly to include Albania and former Yugoslavia, face an acute crisis in their pension system. The problem is in many respects more serious than that faced by OECD countries and it stems from the collapse of the Soviet-type system of comprehensive (cradle-to-grave) social security. The system required exceptionally high labor force participation, low and compressed wages, and government reallocation of the surplus. The government in turn provided citizens with job security and an integrated system of health care, child care, education, and pension benefits.

As a result of a several factors, the system is no longer viable in most FSBCs. In this paper, I discuss the nature of the problem and the proposed solutions. As is the case in a number of OECD countries, the costs, benefits and the associated tradeoffs are fairly clear. The main problem is ultimately the political will to carry out the reforms.

2. The Demographic Situation

As can be seen from Table 1, from the standpoint of the pension crisis the demographic situation in the FSBCs is generally more favorable than in the OECD countries. The FSBC people are on average younger, with the population over 65 years old constituting 10.5% of total population in 1990, as compared to 13.2% in the OECD

countries. The notable exceptions are Bulgaria, Hungary and Ukraine, whose shares of the population aged over 65 exceed the OECD average.

The projections of the proportion of population over 60 years of age for the years 2000-2030 indicate that on average one may expect the same relative gap between the FSBCs and OECD countries to persist (Table 1). The demographic dynamics will of course vary across individual countries, with Croatia and Slovenia gradually resembling more the OECD average and Ukraine increasingly having a younger population.

The fact that the relative gap between the FSBC and OECD countries is expected to remain roughly constant over time unfortunately means that the FSBCs are facing a similar problem of aging population as the OECD countries. As may be seen from Table 1, the proportion of the FSBC population over 60 years of age is projected to rise from 15.3% in 1990 to 17% in year 2000 and 21.5% in year 2020.

3. The Pension System under Communism and in the Transition

The problem of aging population faced by the FSBCs is more complicated than is evident at first glance from Table 1. In particular, all FSBCs have inherited a publicly funded, pay-as-you-go (PAYG) system, in which the currently employed individuals and employers pay payroll taxes that are used by the government for the pension benefits of the currently retired people. The widespread nationalization, together with collectivization and other state intervention in agriculture, meant that FSBCs, unlike China and Vietnam, established an almost universal pension coverage of the population.

Moreover, as may be seen from Table 2, the system inherited from the Communist era allows individuals to retire roughly five years earlier than their counterparts in the OECD world. Thus, with the exception of Poland, the statutory retirement age in the FSBCs has been 55 years for women and 60 years for men. This contrasts markedly with the average age of 62.4 years for women and 64.4 for men in OECD. In terms of Table 1, a more appropriate rough comparison would hence be between the 1990 share of populations over 60 years of age in the FSBCs (15.3%) and the 1990 share of population over 65 years of age in OECD (13.2%). From this perspective, the old age problem in the FSBCs is more serious than that in the OECD bloc.

An alternative way to examine the pension problem is to consider data on the expected duration of retirement at the official retirement age. As the data in Table 3 indicate, with the exception of Poland the expected duration is longer in the FSBCs than in the OECD countries – FSBC men have retirement duration that is about one year longer than their counterparts in OECD (15-16 vs. 14-15 years), while FSBC women have much longer duration than OECD women (23-24 vs. 18-21 years). The effect of shorter life expectancies in the FSBCs thus mitigates but does not eliminate the disadvantage they face relative to OECD as a result of their early statutory retirement age.

Another problem faced by the FSBCs stems from the fact that a significant proportion of their population retires with pension benefits before reaching the already low statutory retirement age. The phenomenon is brought about by special retirement regimes established for selected occupations (e.g., miners) and a liberal granting of disability-based early retirement. For example, in the early 1990s the proportion of retirees with disability

pensions was 12% in Bulgaria, 30% in Hungary, 36% in Poland (Fox, 1994) and it rose from 7% to 13% in the Czech Republic from 1994 to 1996 (Erbenova, et al, 1996). As a result, in Poland a full 40% of all old age pensioners in 1990 were below the standard retirement age (Fox, 1994). In the Czech Republic only 13% were below retirement age in 1994-1996 (Erbenova, et al.). This in turn means that the fact that Poland's official retirement age is equal to the level in most OECD countries (and hence is high by FSBC standards) is quite misleading. A related problem is that employers and employees increasingly evade the payment of pension and other social security taxes.

All these factors in turn make the number of individuals contributing to the pension fund relative to the number of pensioners smaller than the number of working age individuals relative to the old age population. Indeed, as can be seen from Table 4, in 1990 the ratio of contributors to the pensioners was only 40-70% of the ratio of persons aged 20-59 to persons aged 60 and more. Moreover, the ratio of contributors to pensioners was usually falling during the first phase of the transition in the early 1990s, so that by 1993-94 it amounted to only 40-75% of the corresponding OECD average. Thus, while in 1990 there were 2.6 contributors for every pensioner in OECD, in 1993-94 there were only 1-2 contributors per pensioner in the FSBCs.

When one considers the size of government pension expenditures relative to GDP in the various transition economies, one observes an enormous variation, from a low ratio of 5.4% in Russia to the high ratio of 15.2% in Poland and 16.4% in Slovenia (Table 5). The range is comparable to but its upper tail exceeds that observed in the OECD countries, where the U.S. has a low ratio of 5.3% and Sweden a relatively high value of

13.2%. The ratio of total social expenditures to GDP in the FSBCs ranges from 17.6% in Russia to 24.7% in Hungary. It hence exceeds the U.S ratio of 11.6 and resembles the corresponding ratios in Western European countries. Finally, the share of pension expenditures in total social protection expenditures varies from 31% in Russia to 74% in Poland. Since the corresponding OECD figures are in the 40-50% range, the FSBCs display a greater variation in the weight that pensions have in total social protection expenditures.

Under communism, the replacement rate (pension/previous net wage) was high in Central Europe but much lower in the Soviet Union and the Balkans (Fox, 1994). In Central Europe, statutory replacement rates were around 70-80%, while in Romania the rate was around 40%. The pensions were usually tax-exempt and were based on wages in several years preceding retirement. In a number of countries they were not indexed to inflation, which was not a problem when prices were effectively controlled. However, as prices were decontrolled and a number of countries suffered episodes of high inflation or hyperinflation, the real value of pensions was eroded. As may be seen from Table 6, during the early 1990s the replacement rates declined in the Czech Republic and Slovenia, but have risen in Poland. In general, data on the ratio of pension to gross wages are more readily available than data on the ratio of pensions to net wages. Using these more readily available gross replacement rates, one can see that in the 1990s these tend to be lower in Russia, Ukraine and Bulgaria (34-39%) than in the Czech Republic and Hungary (49%) and especially Poland (71.5%). Slovenia is in a category of its own, with the net

replacement rate of 75% signalling a gross replacement rate that greatly exceeds even that of Poland.

The above factors, together with the fact that wages represent a smaller proportion of GDP in FSBCs than in OECD countries, mean that payroll tax rates levied to fund pensions tend to be much higher in the FSBCs than in OECD. In particular, the average pension tax as a percentage of gross wages amounts to 25.5% in the FSBCs as compared to 16.6% in the OECD countries (Table 7). The highest rates are found in Hungary (35% in 1992), followed by Ukraine (34% in 1996), Slovenia (31% in 1995) and Poland (30% in 1992). These high rates have spurred the rise of the informal (underground) sector in these economies, created perverse results, and further exacerbated the ability of the tax system to collect revenues. They have also created a significant wedge between workers' take-home pay and employers' labor costs, thus distorting labor demand and supply decisions.

4. Policy and Politics of Pension Reform

As I indicated earlier, the public PAYG system, based on an almost universal coverage, low retirement ages accentuated by widespread early retirements, high replacement rates, and the tax free nature of the pension benefits has imposed a high tax burden on most transition economies. At the same time, the high systemic dependency means that the benefits are quite low and yet barely affordable. The problem is becoming increasingly severe as the old age dependency ratios are rising over time, signalling the need for a steady increase in pension expenditures as a share of GDP under the current

system. Yet, at the FSBC levels of income per capita, higher taxes would be difficult to collect.

In an attempt to provide adequate pension benefits to those who need them, while containing budget deficits and reducing the share of government revenues and expenditures in GDP, most FSBCs have started to consider and some also implement major reforms of their pension systems. The reforms generally aim at establishing a three-pillar pension system that would (1) ensure redistribution across individuals and generations with the aim of minimizing the incidence of poverty among the old, (2) provide insurance against unforeseen shocks, and (3) induce consumption-smoothing saving behavior over one's lifetime. The three pillars are (1) a mandatory, publicly managed system, financed by taxes on a PAYG basis, (2) a mandatory savings system that would be privately managed, and (3) a system of voluntary private saving that would supplement the first two pillars (see World Bank, 1994, for details). All countries have inherited the first pillar and some have made significant progress in making it be more efficient as well as in introducing the third pillar. The second pillar is yet to be fully developed as a private scheme. The following four examples illustrate the diversity of the reforms steps carried out to-date and the seriousness of the political problem associated with the pension reform.

The Czech Republic is an example of a determined reform country. The generous eligibility criteria for early retirement, established in 1988, were tightened in 1993 and then again in 1994. As a result, people cannot simultaneously work and draw a pension, unemployed individuals have to be registered for at least 180 days before qualifying for a

(two-year) reduction in the statutory retirement age and an actuarially fair reduction in pension benefits has been imposed on voluntary early retirees. In January 1996, a new Pension Insurance Act was passed which gradually increases the retirement age (two months per year for men and 4 months per year for women), divides the pension into a fixed component as well as a part based on previous contributions, indexes pensions to a combination of wage and consumer price indices, and introduces a system of supplementary private pension funds. As of 1996, about one-quarter of the labor force participates in the private pension funds. Pensions remain untaxed (see Erbenova, et al., 1996). A major political issue has emerged after the May 1996 Parliamentary elections, when the strong opposition led by Social Democrats started demanding a repeal of the increase in the retirement age. The issue is political support and at present it is not clear what the outcome of the initiative to repeal the retirement age increase will be.

In Hungary, a new legislative framework concerning pensions was introduced in 1992, when a ceiling on contributions was imposed, the minimum number of years of contribution was raised, and pensions were indexed to the net average wage. However, the provision in the 1992 law to increase the retirement age has been repeatedly postponed. A 1993 law permitted the establishment of supplementary private pension funds but participation has so far been limited. Political problems have not only delayed the implementation of the legislated increases in the retirement age; they have also prevented the government from dealing effectively with the abuse of the early retirement provisions and disability pensions.

Poland launched pension reforms in 1991, when it gradually increased the number of working years used to calculate the earnings base for pensions, abolished some occupation-specific privileges, lowered the maximum pension, and indexed pensions to the average wage. In 1993 the indexation was reduced from 100% to 91%. Pensions are also increasingly being calculated on the basis of past income as well as contributions. The resulting system is thus a hybrid of an income-based social assistance pension and an earnings-related defined benefit system. Private supplementary schemes have also started to be offered. As in the Czech Republic and Hungary, the main issues in the current political debate concern the merit of increasing the retirement age and tightening the eligibility criteria for disability pensions.

Russia's pension system operates as a PAYG social insurance system for the retirees and disabled. While the system operates under a set standard rules, numerous exceptions exist (lower tax for agriculture, lower retirement ages for some professions, etc.) The pension fund was running surpluses until mid-1995, when revenues started falling short of expenditures. At present the fund is subsidized by the government and real pension benefits have been declining, especially for individuals receiving the minimum pension. By international standards, Russia's expenditures on pensions as a share of GDP are low (Table 5). The main problem facing Russia's pension system is a rapid growth of pensioners (exceeding the demographically predicted numbers) and the declining wage base on which the government levies the pension tax. Thus between 1993 and 1995, the number of disability retirees increased by 21%, while the real industrial wage bill declined by 44% between December 1992 and May 1994, and another 28% in the first six months

of 1995 as compared to the average of 1994 (World Bank, 1996c). Over the last two years, the Russian government has been considering the introduction of a three-pillar pension system along the lines proposed by the World Bank (1994). The system has not been implemented because of the inability to find finances for the extra costs associated with the transition to this new system.

5. Conclusions

In many respects the transition economies of the former Soviet bloc, former Yugoslavia and Albania are facing a more serious pension crisis than either the OECD or other developing countries, including China and Vietnam. These transition economies face the problems of aging population, a single pillar pay-as-you-go public system, almost universal coverage of the population, low retirement ages, high and growing dependency ratios, high expenditure and contribution (tax) levels, high statutory replacement rates, and perverse distributions. Since the system is very broad-based, it is costly and yet offers low benefits to those in need.

The countries are aware of the need for a fundamental pension reform and some (e.g., the Czech Republic, Poland and Hungary) have taken the first reform steps. The main problem in carrying out a sweeping reform is the lack of political consensus about incurring the cost associated with switching from the old to the new system. Yet, hesitation and delays contribute to further erosion of the revenue base as more economic agents switch from the formal into the informal (underground) sector. Delays increase the eventual cost of the reform.

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Table 1: Demographic Indicators

	Population Over 65 Years Old	Population over 60 Years Old			
	%	%			
	1990	1990	2000	2020	2030
Selected Transition Economies:					
Albania	5.3	8.1	9.7	14.9	19.1
Bulgaria	13.4	19.7	22.8	26.3	26.7
Croatia	12.1	17.8	21.2	26.9	28.7
Czech Rep.	11.8	16.9	16.9	22.6	24.0
Hungary	13.5	19.3	20.9	26.7	26.8
Poland	10.0	14.8	16.2	22.2	23.3
Romania	10.3	15.6	17.8	20.2	21.9
Russia	11.4	16.5	18.7	24.4	24.9
Slovenia	11.1	16.2	19.4	26.5	29.1
Ukraine	13.5	18.7	21.3	24.5	25.5
Weighted Average of FSBCs	10.5	15.3	17.0	21.5	22.7
Western Reference Countries:					
U.S.	12.3	16.6	16.5	24.5	28.2
U.K.	15.7	20.8	20.7	25.5	29.6
Germany	14.9	20.3	23.7	30.3	35.3
Weighted OECD Average	13.2	18.2	19.9	27.0	30.7

Source: World Bank (1994a)

FSBCs = Former Soviet Union Bloc Countries (includes Albania, Croatia and Slovenia)

Table 2: Statutory Retirement Age

Selected Transition Economies:	1991		Recent Years	
	Women	Men	Women	Men
	Bulgaria	55	60	
Czech Rep.	55	60	55 ^a	60 ^a
Hungary	55	60	55 ^b	60 ^b
Poland	60	65	60 ^c	65 ^c
Romania	55	60		
Russia	55	60	55 ^d	60 ^d
Ukraine	55	60	55 ^e	60 ^e
Average of FSBCs	55.3	60.3		
Western Reference Countries:				
U.S.	65	65		
U.K.	60	65		
Germany	65	65		
OECD Average	62.6	64.4		

Source: 1991 = World Bank (1994a)

a = Ministry of Labor and Social Affairs of the Czech Republic

b = 1995, as reported in World Bank (1996b)

c = 1995, as reported in World Bank (1995)

d = 1995, as reported in World Bank (1996c)

e = 1996, as reported in Kane (1996)

Table 3: Pre-Transition Expected Duration of Retirement at the Official Retirement Age

Selected Transition Economies:	Women	Men	Year
Bulgaria	23.3	15.9	1987-89
Czechoslovakia	23.3	14.9	1988
Hungary	23.1	14.8	1989
Poland	20.1	12.5	1988
Romania	22.8	16.1	1989
Yugoslavia	23.7	16.3	1990
Soviet Union	24.0	15.4	1990
Western Reference Countries:			
U.S.	18.6	14.9	1988
U.K.	21.3	13.6	1989
Germany	17.6	13.8	1987

Source: World Bank (1994a).

Table 4: Dependency Ratios

		Contributors/ Pensioners	Persons Aged 20-59/ Persons Aged 60+
Albania	1990	2.7	5.9
	1993	1.0	
Bulgaria	1990	1.2	2.7
	1993	1.2	
Czech Rep.	1990		3.1
	1993	2.0	
Hungary	1990	1.7	2.8
	1993	1.5	
Poland	1990	2.0	3.6
	1993	1.9	
Romania	1990	1.6	3.3
	1993	2.0	
Slovenia	1985	3.6	
	1990	2.3	
	1994	1.4	
Russia	1990	2.2	3.2
	1993	1.9	
Ukraine	1990	2.0	2.8
OECD Average	1990	2.6	

Source: 1990 = Fox 1994
1993 = World Bank (1996a)
Slovenia = IMF (1995)

Table 5: Expenditures on Total Social Protection and Pensions As a Percentage of GDP

		(1) Total Social Protection Expenditure/GDP	(2) Pensions/GDP	100∇(2)/(1) Pensions/Total Social Protection Expenditure
Albania	1992		6.3	
Bulgaria	1992		8.4	
Czech. Rep.	1990	19.5	8.0	41.1
	1993	21.7	8.2	37.5
	1995	21.7	8.8	40.7
Hungary	1991		10.6	
	1992	24.7	10.4	42.1
Poland	1988	9.4	7.1	75.5
	1990	11.0	8.1	73.6
	1992	21.1	15.0	71.1
	1994	20.6	15.2	73.8
Slovenia	1994		16.4	
Russia	1992	22.1	4.0	18.1
	1993	17.9	5.9	33.0
	1994	17.6	5.4	30.8
Ukraine	1991		9.6	
	1992		8.8	
	1993		9.0	
U.S.	1989	11.6	5.3	45.7
Germany	1990	22.3	9.6	43.1
Spain	1989	16.3	7.9	48.5
Sweden	1991	26.4	13.2	50.0

Sources: 1992 = Fox (1994), Czech Republic = RILSA (1996), Hungary = 1991 Fox (1992), 1992 OECD (1995a), Poland = World Bank (1995), Slovenia = IMF (1995), Russia = OECD (1995b), Ukraine = Kane (1996), U.S., Germany, Spain, Sweden = World Bank (1995).

Table 6: Replacement Rates (Old Age Pension/Average Wage)

		(Pension/Net Wage).100	(Pension/Gross Wage).100
Albania	1992		55.0
Bulgaria	1992		34.0
Czech Rep.	1990	72.0	50.0
	1992	68.1	49.0
	1995	59.4	48.0
Hungary	1992		49.0
	1993	62.8	
Poland	1988		53.3
	1990		75.6
	1992		71.5
Romania	1992		43.0
Slovenia	1990	89.2	
	1992	77.8	
	1994	75.4	
Russia	1992		34.0
	1995		35.0
Ukraine	1992		39.0

Sources: 1992 = Fox (1994), Czech Republic = RILSA (1996) and Erbenova et al. (1996), Hungary = 1991 Fox (1992), 1992 OECD (1995a), Poland = World Bank (1995), Slovenia = IMF (1995), Russia = OECD (1995b), Ukraine = Kane (1996), U.S., Germany, Spain, Sweden = World Bank (1995).

Table 7: Total Social Security Tax and Pension Tax as a Percentage of Gross Wages (Payroll)

		Total Social Security Tax/Wages	Pension Tax/Wages		
			Total	By Employee	By Employer
Albania	1992	26.0	25.0		
Bulgaria	1992	35-50	27-38		
Czech Rep.	1994-95	48.5	27.2	6.8	20.4
	1996	47.5	26.0	6.5	19.5
Hungary	1992	53.0	35.0		
Poland	1992	43.0	30.0		
Romania	1992	31-41	17-26		
Slovenia	1992	41	30.0		
	1995		31.0	15.5	15.5
Russia	1992	40	32.0		
	1995		29.0	1.0	28.0
Ukraine	1992	37.0	31.0		
	1996	53.0	33.56	1.0	32.56
FSBCs Average (1995)			25.5		
OECD Average (1995)			16.6		

Sources: 1992 = Fox (1994), Czech Republic = RILSA (1996), Hungary = 1991 Fox (1992), 1992 OECD (1995a), Poland = World Bank (1995), Slovenia = IMF (1995), Ukraine, 1996, CEE and FSU Average, OECD Average - Kane (1996, U.S., Germany, Spain, Sweden = World Bank (1995).