Working Paper

Pension Systems and Social Security Trends and National Characteristics

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Foreword

This brief survey paper on the main characteristics of pension systems and social security systems in twelve European countries and Canada belongs to a series of papers originating from the project "Family, Household, and Social Security in Aging Societies." It provides a basis for comparing past and probable future trends in the thirteen countries currently participating in the project.

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The first section of this background paper gives a brief overview of postwar developments in social security with special attention to changes in pension systems and family policies. The second section is devoted to a comparison of national pension schemes of the countries involved in this project.

1. A short course in social security history

I. The 1950s: from social insurance to social security

Social security as an integrated, comprehensive state system of income maintenance programs was implemented in industrialized countries immediately after the war. Prior to World War II, only a limited part of the population benefited from voluntary insurances or employers' schemes while existing state systems were notoriously inadequate and offered poor benefits.

The new system first improved upon the situation by extending the number of beneficiaries. Pension, health, work injury and unemployment schemes became progressively universal and mandatory. The system also enhanced and made provisions for indexing benefits. This policy was aimed at guaranteeing an income sufficient for subsistence in case of interruption of earnings.

A second part of the new social security policies was the adoption of family allowance systems. Before the war, family allowances existed in a number of European countries but were restricted to employed women. The extension of "child allowance" to all women was either originated in pro-natalist views or/and in concern for the welfare of children. In both cases, the basic idea was that an individual labor-based income system does not automatically grant family subsistence.

A main feature of the new system is that old-age pension schemes were financed on a pay-as-you-go basis: actual contribution revenues are served totally as benefits. This funding system was unanimously preferred to previous reserved-based saving-type schemes, which collapsed after the 1929 "Krach" or, as in Germany, could not survive hyper-inflation. Pay-as-you-go systems were seen as the only way to secure sufficient income over the life-cycle.

In a number of countries, new old-age pension programs also departed from former schemes by serving flat-rate pensions instead of earnings-related benefits, thus reflecting the egalitarian social philosophy underlying the setting of social security systems. The fact that at the same time the identical political issue was raised by governments from various political horizons and that similar answers were given suggests that originally, in addition to these progressive views, the development of social security systems was also a way to enforce and strengthen the social and economic role of the State. This can be illustrated by the unique case of Sweden, where the setting of a pay-as-you-go system was targetted to the constitution of large reserves to serve public investment policy.

Table 1: Social security as a percentage of GDP 1960–1980.

	1960	1970	1980	difference 1960/70	1970/80
Austria	15.4	18.6	22.4	3.2	3.8
Canada[a,b]	9.2	11.8	15.1	2.6	3.3
CSSR	15.4	18.0	18.9	2.6	0.9
Finland	8.8	12.8	18.6	4.0	5.8
France	13.2	15.3	26.8	2.1	11.5
GDR	na	13.1	17.0	na	3.9
FRG	15.4	17.0	23.8	1.6	6.8
Hungary	8.8	11.0	18.2	2.2	7.2
Italy[a]	11.7	16.3	18.2	4.6	1.9
Netherlands	11.1	20.0	28.6	8.9	8.6
Norway	9.4	15.5	20.3	6.1	4.8
Poland	8.9	10.7	15.7	1.8	5.0
USSR	10.2	11.9	14.1	1.7	2.2
non-weighted average	11.7	16.4	22.6	4.7	6.2

[a]1959/60
[b]1979/80
SOURCE: ILO, The cost of Social Security, 1985

II. The 1960s: the end of egalitarianism and the Czechoslovakian experience

The steady increase in wages experienced during the late 1950s and 1960s in all Western and especially European countries put an end to these egalitarian views. Under social pressure, all countries with flat-rate pensions, with the exception of the Netherlands, were forced to implement supplementary earnings/employment-related schemes. Moreover, employer pension plans which tended to favor higher-paid employees expanded and often became mandatory.

This decade was also marked by original developments in Czechoslovakia where social security measures were designed in relation to labor and population policies. Incentives to continue working beyond pensionable age were provided to workers in order to overcome manpower shortages. Maternity leave was granted to mothers of children under three years of age and credited as years of work. Possibilities of early retirement were also offered. All of these measures were taken with a view to encouraging fertility.

III. The 1970s: facing economic turmoil

The 1970s were characterized by a growing concern with the financial equilibrium of social security. Despite the deterioration of the economic situation in market economy countries, social security spendings increased steadily (see Table 1). Facing high public deficits, governments reacted by implementing cost-containment policies for health care. On the other hand, liberal early retirement policies were set up which bore part of the cost of the high unemployment. High unemployment also affected social security by reducing contributions while some relief came from the drop in family allowance expenses resulting from the fertility fall.

Contrasting changes in family policies followed these demographic changes. In East Europe, new family policies were mainly population policies. Pro-natalist measures, inspired by the

Czechoslovakian experience, spread among the Soviet blóck. On the contrary, several Western European countries accentuated the welfare component of their family policies. Measures targetted at low-income families – especially at the growing number of single or divorced woman-headed one-parent families – were taken while, with the exception of France, tax-deduction provisions for families were discontinued.

IV. The 1980s: the fear of aging and pension reforms

Since the beginning of the present decade, concern with the financial aspects of social security has grown in parallel with the awareness of the future aging of the population. Most of the debate has focused on the question of underfunded pensions.

In the first quarter of the next century, large cohorts of baby-boomers will be eligible for pensions while the actives belong to much smaller cohorts. There is no doubt that under such circumstances, the actual performance of pay-as-you-go old-age pension systems cannot be preserved unless reforms are undertaken. Numerous proposals have been put forward including both limited measures and major changes in the financing and benefit structure of schemes.

Among technical adjustment measures are: higher contributory rates; suppression of the ceiling on contributions; banning mandatory retirement; partial retirement, or increasing pensionable age. Major reform proposals promote deregulations within multi-tiered pension systems. Flat-rate pensions are again favoured and sometimes seen as what should only subsist from present pay-as-you-go state pension systems. This revival is first linked with possibilities of changes in public financing strategies. As universal pensions are not directly employment-related, but can be seen as a minimum social income, it would be easier to replace contributions by value-added-tax. Universal pensions are also considered to be saving-incentive, which is now a main concern as pay-as-you-go systems have been accused of having strong negative economic effects by reducing savings. Along similar lines are incentives to the development of personal saving-type pensions schemes through tax-deduction or bonus. Employer-plans for earnings-related pensions are encouraged in order to reduce state spendings while common taxation provisions for benefits are viewed as a means to increase revenues.

The need for reforms also arises from the changing social status and economic role of women. High divorce rates raise the question of how to divide future pension entitlements. Increasing labor force participation lowers the proportion of dependent women and reduces the relevance of general provisions for widows' pensions. Also, social recognition for "homemakers" has sometimes led to the consideration of child-rearing leave or related part-time employment as years of full-work.

2. International comparison of pension schemes

I. Pensions and social security spendings

An increase in social security expenditure is a general phenomenon. Between 1960 and 1980, the share of the national wealth devoted to social security has doubled on average – passing from 11.7 to 22.6 percent of GDP – in the thirteen countries included in Table 1. However, this general trend encompasses substantial national differences. In 1960, social security spendings ranged from 8.8 percent to 15.4 of GDP, while in 1980 it represented between 14.1 and 28.6 percent. As can be seen from Figure 1, national discrepancies do not arise from differentials in the level of GDP but from different national policies. Top-ranking countries are the Netherlands and France with more than 25 percent of their GDP in 1980, while in the lower corner we have Canada, Poland and USSR with about 15 percent.

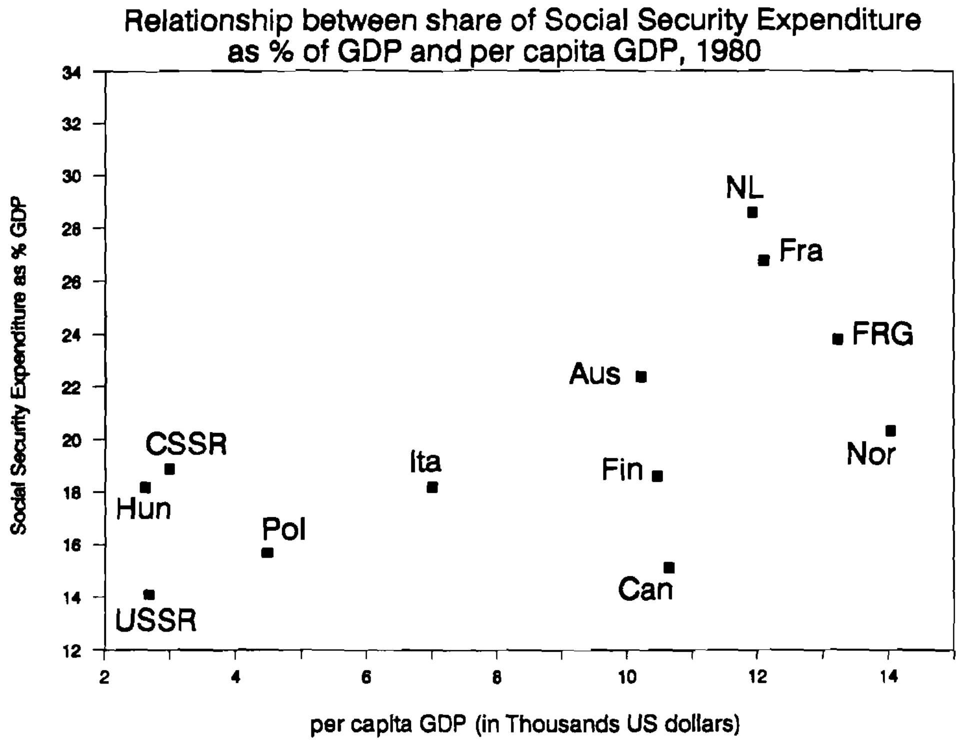

Relationship between share of Social Security Expenditure
as % of GDP and per capita GDP, 1980
Social Security Expenditure as % GDP
34
32
30
28
26
24
22
20
18
16
14
12
2
4
6
8
10
12
14
per capita GDP (in Thousands US dollars)
NL
Fra
FRG
Aus
Nor
CSSR
Ita
Fin
Hun
Pol
Can
USSR

Figure 1:

Strong differences also exist in the way money is spent, especially in relation to the size of pension expenses (see Table 2). Pension expenditures in 1980 represented between approximately one-fourth of total security expenditures in Canada and approximately one-half in Eastern European countries, Austria, FRG and the Netherlands.

In the case of Canada, both the low level of social security spendings and the low proportion of pension expenditures is due to the fact that the earnings-related and mean-tested pension schemes were only implemented during the mid-sixties and are therefore far from maturation.

II. Pensions schemes

A synopsis of the different national pensions schemes is presented in Table 3. Four countries have universal flat-rate pensions: Canada, Finland, the Netherlands and Norway. All countries have state earnings-related pensions with the noticeable exception of the Netherlands. Three countries have extended earnings-related employer-plans: Finland where it is mandatory, France, and the Netherlands. In Canada, employer pension plans are expanding. In Italy and Austria this concerns mainly highly-paid employees. Some of these plans are purely private pay-as-you-go systems while others are saving-type schemes.

All countries have provisions for early retirement through disability pension schemes. All western countries, Canada and Norway excepted, have early-retirement plans for older, unemployed workers. Other provisions for arduous work or long service also exist in most of the countries. However, in Eastern European countries the survivors' pension cannot be added to the old-age pension.

Among our sample of countries, only the GDR has no general plan for widows. On the other hand, survivors' benefits tend more and more to apply also to males.

All countries without universal pensions, except the FRG, have programs aimed at providing a minimum pension to aged persons - mostly women with a short work record - with low or no income. This is also the case in Canada where the universal pension is not considered as a social minimum.

III. Social security revenues

Contributions constitute the main source of revenues for social security revenues and, on average, represent 60 percent of all receipts (see Table 4). However, in two countries, Czechoslovakia and Soviet Union, social security revenues come almost exclusively from State participation. In other countries, State participation amounts on average to one-third of total income. Other sources of revenues which include participation of other public authorities, special tax and capital income, play a substantial role in only four countries: Canada, Finland, the Netherlands and Poland.

Different situations are observed in funding resources of pension schemes. In Eastern European countries, as well as in Norway, no specific contribution exists for pension programs. Canada, with extremely low contribution rates, is also close to this pattern. In countries with pension contributions, rates vary greatly between employees and employers and in total value (see Table 5). There is no employee contribution in Norway, whereas it amounts to approximately 28 percent of salary in the Netherlands (of which 15.05 is for disability). On the other hand, Norwegian employers pay approximately 20 percent and those in the Netherlands pay less than 6 percent. FRG and Canada have opted for equal contributions. Overall pension contribution rates range from 14 in France to 33.5 percent in the Netherlands.

Table 2: Expenditures by type of program as a percentage of total social security expenditures 1960–1980.

		Health	Pensions	Unemployment	Family	Other
Austria	1960	26.0	46.0	5.0	14.0	9.0
	1980	22.2	52.7	3.6	15.0	6.6
Canada	1960	25.9	25.9	14.8	17.3	16.0
	1980	29.3	26.0	12.2	8.9	23.6
Czechoslovakia	1960	34.9	46.1	0.0	17.1	2.0
	1980	30.7	52.4	0.0	14.8	2.1
Finland	1960	28.2	32.4	1.4	19.7	18.3
	1980	33.3	41.3	3.3	4.7	17.3
France	1960	24.4	28.9	0.0	32.2	14.4
	1980	31.3	33.9	5.3	11.9	17.6
GDR	1960	34.7	54.2	0.0	9.7	1.4
	1980	40.6	54.7	0.0	4.7	0.0
FRG	1960	28.2	53.6	1.8	2.7	13.6
	1980	29.9	49.0	7.2	5.7	8.2
Hungary	1960	50.6	37.7	0.0	11.7	0.0
	1980	30.9	52.5	0.0	16.6	0.0
Italy	1960	25.0	39.3	3.6	25.0	7.1
	1980	39.1	44.9	3.6	5.1	7.2
Netherlands	1960	28.4	43.2	2.3	17.0	9.1
	1980	31.0	46.7	4.5	8.7	9.1
Norway	1960	45.3	32.0	2.7	8.0	12.0
	1980	43.1	39.9	2.1	5.3	9.6
Poland	1960	44.8	32.2	0.0	23.0	0.0
	1980	45.6	47.0	0.0	4.7	2.7
USSR	1960	48.0	49.0	0.0	3.1	0.0
	1980	44.9	52.9	0.0	2.2	0.0
non-weighted	1960	34.1	39.1	2.8	15.5	8.5
average	1980	34.8	44.0	4.0	8.4	8.7

SOURCE: ILO, The cost of Social Security, 1985

Table 3: National pension schemes by type of pension.

	State Pensions								Employer Plans[c]	
	universal	employment-related	early retirement schemes			survivors		low income		
			disability	unemployment	others	females	males		females	males
Austria		*	*	*	*	*	*[b]	*	?	
Canada	*	*	*			*	*	*[d]	30%	50%
Czechoslovakia		*	*		*	*		*		
Finland	*	*	*	*	*	*			100%	
France		*	*	*	*	*	*	*	80%	
GDR		*	*		*			*		
FRG		*	*	*	*	*	*			
Hungary		*	*			*	*[b]	*		
Italy		*	*	*	*	*	?	*	20%	
Netherlands	*		*	*		*[a]			80%	
Norway	*	*	*			*	*			
Poland		*	*		*	*	*	*		
USSR		*	*		*	*	*[b]	*		

[a]below pensionable age
[b]dependent or invalid widowers
[c]percentages of private sector workers covered
[d]in five provinces
SOURCE: Social Security Programs Throughout the World - 1985, US Department of Health and Human Services, Washington, D.C., 2986.
M. Gordon, Social Security Policies in Industrial Countries, Cambridge University Press, 1988, table 8.1.

Table 4: Composition of social security revenues around 1980 (percentages).

	Contribution	State participation	Other income	Total
Austria	68.1	29.6	2.3	100.0
Canada	20.2	47.1	32.7	100.0
Czechoslovakia	3.7	94.6	1.7	100.0
France	74.4	20.9	4.7	100.0
Finland	69.3	14.7	16.0	100.0
GDR	52.6	47.3	0.1	100.0
FRG	77.4	21.3	1.3	100.0
Hungary	79.6	20.4	0.0	100.0
Italy	65.8	32.3	1.9	100.0
Netherlands	76.7	12.9	10.4	100.0
Norway	77.2	22.6	0.2	100.0
Poland	54.3	34.8	10.9	100.0
USSR	0.0	97.2	2.8	100.0
unweighted average	59.9	34.3	5.7	100.0

SOURCE: ILO, The cost of Social Security, 1985

Table 5: Contribution rates to pensions programs (Old-age, survivors, invalidity and death).

	employee	employer	total
Austria	10.25	12.45	22.70
Canada	1.80	1.80	3.60
Finland	2.05	16.60	18.65
France	5.80	8.20	14.00
FRG	9.35	9.35	18.70
Italy	7.15	17.06	24.21
Netherlands	27.75	5.75	33.50

IV. Pensionable and retirement ages

Table 6 gives the pensionable ages (old-age and early retirement) and the actual estimated age at retirement in ten countries. Pensionable age for males is 60 in four countries and 65 in the six others. For women, this varies between 55, 60 and 65 years. Similar ages for males and females are observed in the FRG, the Netherlands and in Scandinavian countries. Provisions for early retirement usually allow retirement to be five years earlier than pensionable age. Moreover, in all countries, anyone who qualifies can go on disability pension at any age.

The actual average age at retirement in these ten countries is approximately 60.5 and 59 years for males and females respectively. Male seniority at retirement differs greatly between countries – from 0 in France to 4.5 years in Italy, and the reverse in Canada, Finland and FRG where the mean age at retirement is higher for women than for men.

These figures largely confirm the importance of early retirement and of the gap between legal provisions and reality (see also Figure 2). Only in France where normal age at retirement was recently lowered, and Italy, is the actual age at retirement for males higher than the pensionable age. For females, this is more frequently the case especially in countries with a low pensionable age – 55 years.

This trend is also illustrated in Table 7 which shows labor force participation rates at older ages in 1950 and 1985. On average 80 percent of males aged 60–64 were active in 1950, whereas in 1985 the majority of actives is found in only one-third of the countries – Canada, GDR, the Netherlands, Norway and Poland. Above the age of 65, noticeable levels of economic activity for males are indicated in Eastern European (also for females in Poland), the Scandinavian countries, and Canada, but in none of the Western European countries.

V. Benefits

Typically, earnings-related benefits are calculated using the formula:

$$\text{Yearly benefit rate} \times \text{Number of years worked} \times \text{Salary}$$

The yearly benefit rate, number of years worked for full pension, and income basis are parameters which substantially differ from one country to another – and sometimes within a country according to occupational schemes – and lead to very different situations as can be seen from Table 8.

Generally speaking, the higher the number of years worked corresponding to full pension, the higher the full pension: 80 percent of income in Austria and Italy with 45 and 40 years respectively and 75 percent in Hungary with 42 years. Conversely, countries with lower working duration requirements such as France (37.5 years), FRG (35 years) and Poland (20 years), indicate lower maximum benefits – about 50 percent of income. Canada is a special case where benefits are calculated as a fixed and low percentage – 25% – of average earnings.

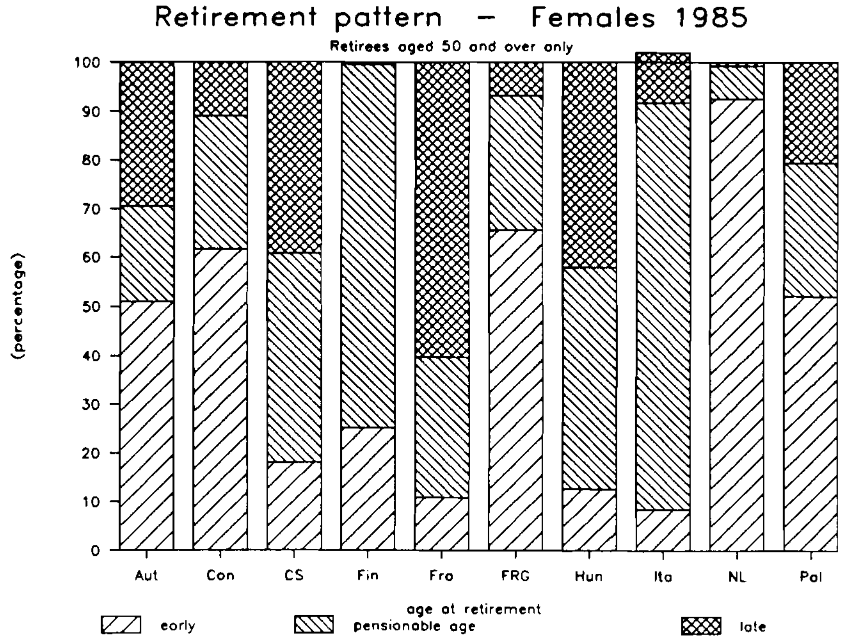
A great deal of variety is observed with respect to the income basis for calculation: last year, last 3, 5 or 10 years, highest 10 years and the whole working life. However, this has limited impact on pensions compared with provisions for indexing benefits. In all Western European countries included in this table, benefits are automatically indexed for wage increase – and also for price in Finland – while limited provisions for price increase are indicated in Hungary and Poland and no provisions in Czechoslovakia. Canada alone indexes for price increase.

In all countries, except Hungary and the Netherlands, supplementary benefits – flat rate supplement or fixed relative increase – are provided for dependent children (see Table 9).

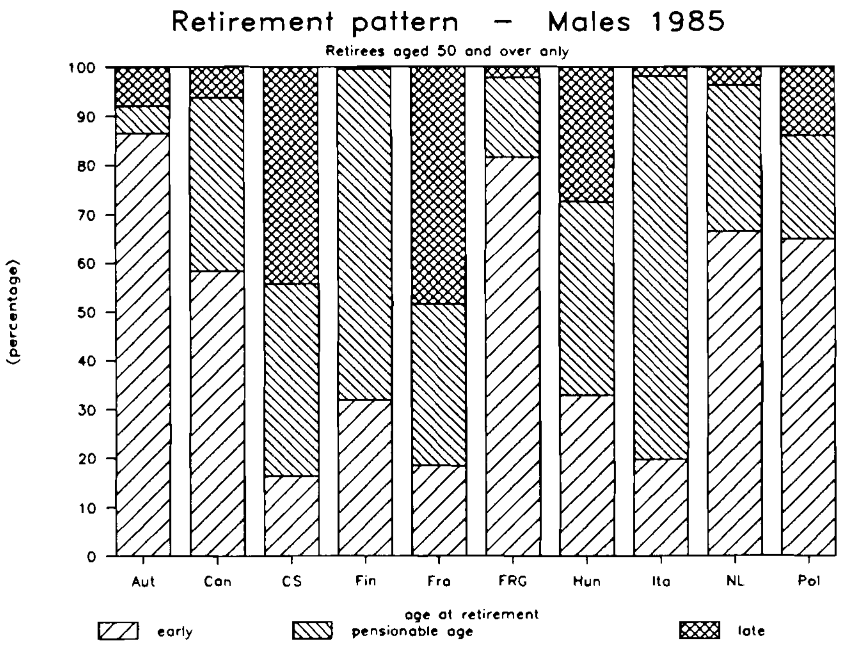
Table 6: Pensionable ages and mean age at retirement in 1985.[a]

	pensionable age: old-age		pensionable age: early retirement		mean age at retirement		differences: males – females	differences: old-age – mean age	
	males	females	males	females	males	females		males	females
Austria	65	60	55	50	59.8	58.9	0.9	5.2	1.1
Canada[b]	65	65			63.1	63.4	–0.3	1.9	1.6
Czechoslovakia[b]	60	55			59.3	56.4	2.9	0.7	–1.4
Finland	65	65	60	60	62.7	63.4	–0.7	2.3	1.6
France[b]	60	60	55	55	61.6	61.6	0	–1.6	–1.6
FRG	65	65	60	60	60.5	61.6	–1.1	4.5	3.4
GDR	65	60			na	na			
Hungary	60	55			59.6	56.0	3.6	0.4	–1.0
Italy[b,c]	60	55	55	50	60.6	56.1	4.5	–0.6	–1.1
Netherlands[b]	65	65	60	60	59.2	57.5	1.7	5.8	7.5
Poland	65	60			59.2	57.0	2.2	5.8	3.0
unweighted average					60.6	59.2	1.6		

[a]old-age and disability pensions (claimants for disability pensions aged 50 and over)
[b]estimate
[c]1988



Retirement pattern – Females 1985
Retirees aged 50 and over only
(percentage)
100
90
80
70
60
50
40
30
20
10
0
Aut
Can
CS
Fin
Fra
FRG
Hun
Ita
NL
Pol
age at retirement
early
pensionable age
late



Retirement pattern – Males 1985
Retirees aged 50 and over only
(percentage)
100
90
80
70
60
50
40
30
20
10
0
Aut
Can
CS
Fin
Fra
FRG
Hun
Ita
NL
Pol
age at retirement
early
pensionable age
late

Figure 2:

Table 7: Labor force participation rates for selected age-groups. 1950 and 1985.

		males				females			
		total	55–59	60–64	65+	total	55–59	60–64	65+
Austria	1950	65.8	88.2	76.7	41.1	36.3	37.1	28.5	16.1
	1985	58.7	77.1	23.1	4.2	35.8	31.9	9.1	2.1
Canada	1950	60.7	92.1	80.3	40.9	17.8	13.9	10.1	4.5
	1985	60.7	84.0	64.9	13.8	39.5	41.0	27.3	5.0
Czechoslovakia	1950	63.1	85.9	51.8	26.2	36.1	40.3	28.4	16.3
	1985	57.7	83.7	44.4	17.1	47.6	39.1	19.7	5.3
Finland	1950	61.6	93.9	88.2	44.2	39.6	54.0	43.7	21.1
	1985	56.1	65.2	37.1	6.3	46.0	53.8	23.9	2.4
France	1950	65.4	84.8	81.8	37.2	28.3	40.3	38.2	14.3
	1985	55.4	73.1	33.4	5.6	35.1	41.2	18.3	2.2
FRG	1950	63.4	88.0	73.9	27.5	31.9	29.9	21.3	9.6
	1985	62.7	81.5	39.9	4.7	35.0	36.2	14.1	3.1
GDR	1950	62.1	96.1	83.4	34.6	40.3	42.7	28.6	10.2
	1985	65.0	90.4	82.0	21.7	49.3	65.5	30.3	5.6
Hungary	1950	67.4	92.5	83.2	64.4	25.8	28.5	27.0	20.0
	1985	56.1	71.9	13.1	3.5	41.9	18.1	7.9	2.5
Italy	1950	67.6	89.7	73.4	46.6	21.0	18.2	14.1	7.4
	1985	55.5	66.2	29.8	6.8	24.7	16.4	7.8	1.4
Netherlands	1950	60.8	93.9	83.0	31.5	18.7	16.3	13.1	5.5
	1985	56.1	77.1	56.8	4.2	24.9	20.2	10.5	0.9
Norway	1950	65.8	95.8	90.7	42.3	20.1	25.0	22.1	8.7
	1985	59.2	86.8	69.9	23.2	39.5	49.0	23.9	6.0
Poland	1950	61.3	96.4	86.4	59.8	42.1	55.7	45.3	29.0
	1985	57.8	81.2	56.0	26.5	45.9	53.2	31.8	14.8
USSR	1950	57.4	89.5	86.5	49.0	48.1	50.9	42.6	35.0
	1985	56.3	77.4	29.4	8.9	47.1	23.9	8.9	2.5
unweighted	1950	63.3	91.0	79.9	40.1	29.9	33.2	26.3	14.1
average	1985	58.0	78.7	46.2	10.7	38.9	38.3	18.6	3.8

SOURCE: ILO, Economically Active Population: Estimates and Projections, 1950–2025, 1986.

Table 8: Main components of earnings related benefits (state pension).

	Yearly benefits rate	years of contribution for full pension	full pension as percentage of earnings	income basis type	indexing provisions
Austria	1.9+1.5	30+15	79.5	last 10 years	wage
Canada	–	–	25	average earnings	price
Czechoslovakia	1.71/2.29	35	60/80	last 5/10 years	
Finland	1.50	40	60	average earnings	wage & price
France	1.33	37.5	50	highest 10 years	wage
FRG	1.50	35	52.5	average earnings	wage
Hungary	1.78	42	75	last 3 years	partly price
Italy	2.00	40	80	last 5 years	wage
Poland	2.75	20	55	last year	partly price

Table 9: Old-age benefits: supplement for dependent.

	children	spouse
Austria	5% per child	
Canada	flat-rate	universal pension
CSSR	flat-rate	flat-rate
Finland	flat-rate	reduced universal pension
France	10% if 3 child.	flat-rate
GDR	flat-rate	flat-rate
FRG	flat-rate	
Hungary		flat-rate
Italy	flat-rate	flat-rate
Netherlands		reduced universal pension
Norway	25%	reduced universal pension
Poland	flat-rate	flat-rate
USSR	10% for one dependent, 15% else	

Table 10: Survivor benefits.

	universal pension	per cent of earnings-related pension of insured person (state pension)
Austria		60
Canada	flat-rate	60
Czechoslovakia		60
Finland		50
France		52
FRG		60
GDR		–
Hungary		50
Italy		60
Netherlands	flat-rate	nr
Norway	flat-rate	55
Poland		80
USSR		65
unweighted average		55

The same applies to a dependent spouse, with the exception of Austria and FRG. In the case of the Netherlands and the Scandinavian countries, it should be noted that universal pensions are reduced for married couples to about 150 percent that of the benefits for a person living alone.

Afterwards, widowed survivors are entitled to full benefits, while with earnings-related pensions they receive between 40 and 80 percent of the benefits of the deceased spouse (see Table 10).

The absence of provisions for survivors in the GDR is explained by the very high female labor force participation.

The variabilities in pension entitlements and in the sex-ratio of the elderly population explain the wide differences in the respective shares of old-age and survivors benefits in national pension spending which range from 90-10 percent in France, Hungary and the Netherlands to 2/3–1/3 in Austria and FRG (see Table 11).

Two concluding remarks

Basically, pension programs are income maintenance programs. Therefore the overall impact of the different provisions included therein can be measured in terms of the income replacement rate. Figures for a limited number of countries and workers in manufacturing are shown in Table 12.

Replacement rates lie between one-third of former income in Canada and about two-thirds in Austria, France and Italy for single retirees. Replacement rates are higher for aged couples in four countries and the difference with singles seems higher in countries with universal pensions. In three countries, Austria, FRG and Italy there is no difference.

Pension programs are also social support programs for the elderly. In this respect their efficiency can be measured in terms of the population covered. Table 13 shows that the proportion of women aged 65 and over receiving neither old-age nor survivors benefits in France

Table 11: Old-age and survivors pensions expenditures (in percentages)

	old-age	survivors	total
Austria	66.1	33.9	100.0
Canada	76.5	23.5	100.0
Czechoslovakia	74.8	25.2	100.0
Finland	80.3	19.7	100.0
France	90.3	9.7	100.0
FRG	66.7	33.3	100.0
GDR	100.0	0.0	100.0
Hungary [a]	90.1	9.9	100.0
Italy	75.3	24.7	100.0
Netherlands	91.5	8.5	100.0
Poland	76.2	23.8	100.0
unweighted average	80.7	19.3	100.0

[a] estimate

Table 12: Earnings replacement levels for males: Ratio average old-age benefits/average earnings in manufacturing.

	single	married
Austria	68	68
Canada	34	49
France	66	75
FRG	49	49
Italy	69	69
Netherlands	44	63
unweighted average	57	65

SOURCE: M. Gordon, Social Security Policies in Industrial Countries Cambridge University Press, 1988, tab. 4.1 p61.

Table 13: Proportion of women aged 65 without old-age or survivors pensions in France and Hungary 1984 (in percentage)

	single	married	divorced	widowed	total
France	20.4	33.8	15.2	21.9	25.5
Hungary	16.8	48.8	11.7	10.2	21.4

SOURCE: France, Income Survey, INSEE; Hungary, Micro-census and Hungary was approximately one-fourth and one-fifth respectively in 1984. Moreover, the exclusion from main pension benefits greatly varies with marital status, the maximum being observed for married women: one-third in France and about one-half in Hungary. This suggests that in countries with no universal pension, 10 to 15 percent of the elderly female population is supported by husband and/or family only and is completely excluded – in period terms – from social transfer programs.

References

Commission of the European Communities (1988), Comparative tables of the social security schemes in the member states of the European Communities, 14th edition. Luxembourg: EEC.

Council of Europe (1987), Comparative tables of the social security systems in Council of Europe member states not belonging to European Communities, 3rd edition. Strasbourg: Council of Europe.

Gordon, M. S. (1988) Social security policies in industrialized countries. Cambridge: Cambridge Academy Press.

ILO, (1985) The cost of social security, Geneva: ILO.

ILO, (1989) The cost of social security, Geneva: ILO.

OECD, (1988) Reforming public pensions. Paris: OECD.

US Department of Health and Human Services, (1986) Social security program throughout the world - 1985. Washington, D. C.: Social Security Administration.