ALOIS GUGER

AUSTRIA'S OLD-AGE PENSION SYSTEM IN AN INTERNATIONAL COMPARISON

In all industrialized countries demographic trends necessitate a reform of their old-age pension systems. The Austrian retirement system is relatively generous by international standards. Considering the very low retirement age and high net income replacement ratio, the system offers adequate maneuvering room to keep it on a sustainable financial basis.

The future of the public pension system has become a subject of intense public interest and political action. The long-term effects of the demographic aging of the population have been analyzed and discussed exhaustively over the last decade and have even provided the impetus for some tinkering with the system. But it was the recent financing problems suffered by public households (problems which incidentally are not associated with the demographic development) which created a wider public interest, to which the Federal government responded by producing a comprehensive concept for reform.

The situation is not specific to Austria: all European countries have put long-term, demographically motivated pension reform on their agendas, usually driven by and associated with short-term budget consolidation schemes.

Similarly, international organizations have for several years been studying the effects of aging in industrial societies, publishing comparative analyses and proposals for reform (*World Bank,* 1994, *Roseveare et al.,* 1996, *European Commission,* 1996, *Chaud – Jaeger,* 1996). In Austria, the Advisory Council for Economic and Social Issues produced a detailed analysis of the long-term effects of demographic developments and furnished proposals to sustain the long-term financing of the pension system already back in 1991. Several proposals – such as net adjustment (linking increases in pension payments to net wages), raising the pension assessment basis from the last 10 years to the best 15 years, introducing sliding pensions and increments for later retirements – were incorporated into the 1993 pension reform (51st Amendment to the Social Security Act). In July 1997, the Federal Ministry of Labor, Health and Social Affairs presented a study on "Perspectives of Old-Age Pen-

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sion Insurance in Austria" (*Rürup,* 1997); which was used by the Federal government to prepare a concept for structural reform, to be achieved by gradually harmonizing current old-age pension systems, and for safeguarding its financial basis in the long run.

THE WELFARE STATE AND OLD-AGE PENSION SYSTEM IN AUSTRIA

DESIGN AND SCOPE OF THE SOCIAL WELFARE SYSTEM

Based on the insights of *Esping-Andersen* (1990), theoretical discussions distinguish essentially three models of the welfare state:

- The *residual welfare state* concentrates on preventing poverty. Almost all welfare benefits are means-tested, i.e., dependent on income and/or property, and more or less the same for all beneficiaries. Support is given only to the neediest and only to the extent necessary to lift them above the poverty line. This liberal type of welfare state predominates the scene in Australia, the USA and Canada.
- The *corporate welfare state* is based on Bismarck's social insurance system and focused on income from earnings: the granting of benefits is directly linked to the breadwinner's (former) gainful employment. The emphasis is on maintaining the social status in the event of the breadwinner's illness, unemployment, disablement, old-age or death. The system is designed to preserve social differences and is structured to reflect differences between wage earners, salaried employees, civil servants and the self-employed. Warding off poverty and redistribution are secondary considerations in this model; the system makes excellent provision for those who are or were gainfully employed, but is full of gaps with regard to marginal groups that have never been included in the working life. This model is mostly found in the Central European countries, in Germany, Austria, France and Italy.
- The *Scandinavian welfare state*, such as can be found in Sweden, Norway, Denmark and in the Netherlands, puts equality and redistribution at the center of its concern. The social security system is the same for all groups, and social protection is comprehensive – universalist in the sense that all citizens of the country are granted entitlement to social rights regardless of their work status. With regard to retirement income, this means that every citizen is entitled to a public old-age pension once he or she has reached a given age.

These models are rarely applied in their pure forms. Most countries combine elements from each of them, although one model usually dominates. When we compare countries of roughly the same development level (such as industrialized countries), we find that the "residual welfare states" are at the low end of the social expenditure ratio while the "Scandinavian welfare states" have the highest social standards and ratios.

The Austrian welfare state is very much organized along corporate lines, strongly focusing on work and family. Individuals living in a stable working and family environment are adequately protected against the usual risks – illness, incapacity, unemployment and old-age. The system concentrates on maintaining the beneficiary's standard of living, keeps vertical re-distribution at a moderate level and is very fragmentary with regard to combating poverty – a problem of ever increasing scope at a time when individualization is spreading and jobs not covered by standard social security regulations are on the increase.

In general, the level of social security is relatively high in Austria, as is evidenced by its social expenditure as a proportion of GDP: in 1995, Austria spent almost 30 percent of GDP (or ATS 694 billion) on social security. With this, Austria's social expenditure rate ranks high in an international comparison, topped only by the Scandinavian countries, the Netherlands, France and Germany, and leaving non-European industrialized countries far behind (*Guger – Steiner,* 1997).

More than 80 percent of the social welfare budget is closely associated with aging, providing income in old-age, to surviving dependants and in the case of illness.

By far the largest share of the social welfare budget is spent on the old-age pension insurance system which, in Austria, includes provision for old-age (38 percent), surviving dependants (11 percent) and, to some extent, disablement (8 percent). The cost of covering the risk of illness (25 percent) is also closely linked with aging. Accordingly, more than 80 percent of the social welfare budget is directly or indirectly associated with the process of aging – a key aspect in evaluating the financial outlook in the face of a projected growth of the group of over-60-year-olds by 73 percent and a decline of the working population by 12 percent by the year 2030 (*Hanika,* 1996).

BASIC OLD-AGE PENSION MODELS

In all countries, pension insurance is organized and/or regulated by the state. In general, we distinguish between three pillars of old-age pension insurance:

- *state-organized public pension insurance,* financed by contributions or from general taxes;

- voluntary or obligatory *occupational pension schemes;* and
- private voluntary or obligatory *individual pension schemes.*

In spite of the difference in importance assigned to each of these components and a widespread discussion of the role of private pension schemes in various non-European countries, the public pension insurance scheme continues in its predominant role in all industrialized countries[1]. It may be financed according to the pay-as-you-go system or the funded (capital-reserve) system; payments may be contribution based or are defined benefits.

In most countries public pension schemes are mandatory pay-as-you-go schemes. Countries that prefer the corporate model put more emphasis on the insurance principle and link their benefits closely to contributions. The residual welfare state model, on the other hand, shows at best a loose link between benefits and contributions, and the link is entirely missing when pensions are financed from general tax revenues. Here, benefits are defined; pension payments are either a given uniform amount ("flat rate") or they depend on income ("means tested") and are reduced when a given income is exceeded.

In the Scandinavian welfare state model, the first pillar combines elements from both systems: a contribution-dependent benefit paid by the public pension insurance scheme and a basic pension for all those citizens who paid no contributions or not enough to receive greater benefits, with contribution-dependent benefits dominating.

The Austrian old-age pension insurance system is designed along the lines of the corporate model, founded basically on the insurance principle and thus on contribution equivalency, so that no provision is made to grant a basic pension to every (needy) citizen of pension age. The Austrian pension system is based on the principle of preserving the living standard; accordingly pension benefits are indexed to net wages (gross wages reduced by the social security contributions), and the consumer price index provides only the bottom limit. The system also contains elements of redistribution between generations: the principle of contribution equivalency is weakened by a number of measures, such as crediting of non-contributory periods (child-raising, conscription), non-contributory coverage of family members, early retirement pensions, compensatory supplements, etc.; the difference is covered from general tax revenues, the Federal contribution amounting to one quarter of overall pension payments.

[1] *World Bank* (1994), pp. 96ff; *Myles – Quadagno* (1996).

FINANCING OPTIONS: PAY-AS-YOU-GO VERSUS FUNDING PRINCIPLE

Most industrialized countries have designed their established public old-age pension systems on the pay-as-you-go principle: the working population pays directly for the pensions of their parents' generation. The main reason why this system is so popular appears to be the rapidity with which it could be introduced: pensions could be paid out immediately upon its introduction. Under the funding principle, where a fully funded basis is required, each generation first pays contributions before it can draw pension payments. Pensions are financed from individually saved contributions and interests earned on them so that introduction of this system takes a full generation. Any reform that aims to change from the pay-as-you-go to the funding model would therefore place a double burden on the affected generation[2].

Now that most industrialized countries are confronted with demographic and economic problems, reform models are emerging that propose to switch from the pay-as-you-go principle to the funding method. What would be the difference in the impact for individuals and the economy in general?

THE PAY-AS-YOU-GO PRINCIPLE

In the pay-as-you-go system current pension benefits are financed by the contribution payments of the currently active working population. Contributions depend on the payroll (and tax revenues), so that the margin available for financing pensions depends on the growth in wages and employment. It can be described by the following budget equation (for one period):

$$(1) \quad b \cdot n \cdot w = a \cdot p,$$

b . . . rate of contribution, n . . . number of workers, w . . . wage rate, a . . . number of pensioners, p . . . average pension benefit level.

The rate of contribution required to finance pensions is made up of the old-age dependency ratio and the average income replacement rate:

$$(2) \quad b = \frac{a}{n} \cdot \frac{p}{w},$$

[2] *Homburg* (1990, 1997) demonstrated that such a changeover would be possible without doubling the burden for one generation (pareto efficiency) by transferring existing pension obligations to the public debt, provided that this can be financed by the greater efficiency of the new system (greater labor supply). *Brunner* (1994) on the other hand, showed that this applies only when pension contributions are levied by way of lump-sum taxes, which in turn have major distributory effects detrimental to people with low incomes.

$\frac{a}{n}$ . . . old-age dependency ratio, $\frac{p}{w}$ . . . average income replacement rate.

Budget equation *(1)* indicates that, with the rate of contribution being constant, the scope of pension payments that can be financed ($a \cdot p$) depends solely on payroll growth, i.e., on the growth in employment and wages: if we refuse to increase contributions (i.e., do not accept any further redistribution between generations), it is the growth in total wages and salaries which determines the margin for financing pensions.

Under the pay-as-you-go system each generation obtains an implicit rate of return which is given by the ratio of pension payments to contributions in equation *(3)*, and equals the rate of growth of aggregate wage income (*Brunner,* 1996, 1997):

$$(3) \quad \frac{P}{b \cdot W} = 1 + wr + nr,$$

P . . . pensions ($P = a \cdot p$), W . . . payroll ($n \cdot w$), wr . . . rate of wage changes, nr . . . rate of employment changes.

Seen from the *circular flow analysis point of view,* the drain on purchasing power suffered by the national income through pension contributions in the pay-as-you-go model has its exact temporary correspondence in the effect on the national product from pensioners' consumption and savings. No matter how pensions are financed, pensioners claim part of the production.

THE FUNDING PRINCIPLE

According to this principle, the active population provides for its own old-age pension by foregoing consumption. An investment is made for each working individual which will later be used to finance his or her pension. The shortfall in consumption is compensated by an increased demand for productive investment; in this way, more goods can be supplied in the future to cover pension demand.

Under the funded or capital-reserve system the rate of return equals the rate of interest:

$$(4) \quad \frac{P}{b \cdot W} = 1 + r,$$

r . . . interest rate (assuming a two-period model as above).

Payments made to the beneficiary constitute the capitalized contributions made by the beneficiary.

In the pay-as-you-go model, individuals, through their contributions, obtain an option on national output at the time of retiring; in the funding model they acquire this option through their savings. Yet in both cases, consumption by the pensioners – with the exception of foreign trade flows – must be covered from current production and is therefore part of the real net output.

One frequently mentioned advantage of the funding model is that it is better able to cope with demographic changes because each generation pays its own contributions and no redistribution takes place between generations.

There are pros and cons for both methods (*Url,* 1997): the pay-as-you-go system is highly sensitive to demographic changes (aging of the population) and fluctuations in employment (unemployment), but it provides good protection against inflation and allows, in its Austrian version, pensioners to participate in the income development of those in active employment. The funding system, on the other hand, is better at handling demographic shifts but sensitive towards turbulent capital markets and inflationary periods, i.e., it is rather problematic in terms of preserving purchasing power. Advocates of the funding system also expect an impetus for growth from the formation of savings. Both effects – more savings and their productive investment acting on growth – are, however, highly disputed[3].

When comparing only the performance rates of the two models, we find that an assessment of individual profitability depends on whether the interest rate is higher or lower than the payroll growth rate (*Aaron,* 1966). The pay-as-you-go principle was popular until the late 1970s, when interest rates were lower than wage increases; ever since the early 1980s, interest rates have been high and wage increases low so that the share of wages in national income is declining. In the medium run, a similar course can be expected, but in the very long run, demographic shifts point towards a sea change: labor may well be in short supply in the second decade of the next century, so that labor productivity and real wages will rise more quickly.

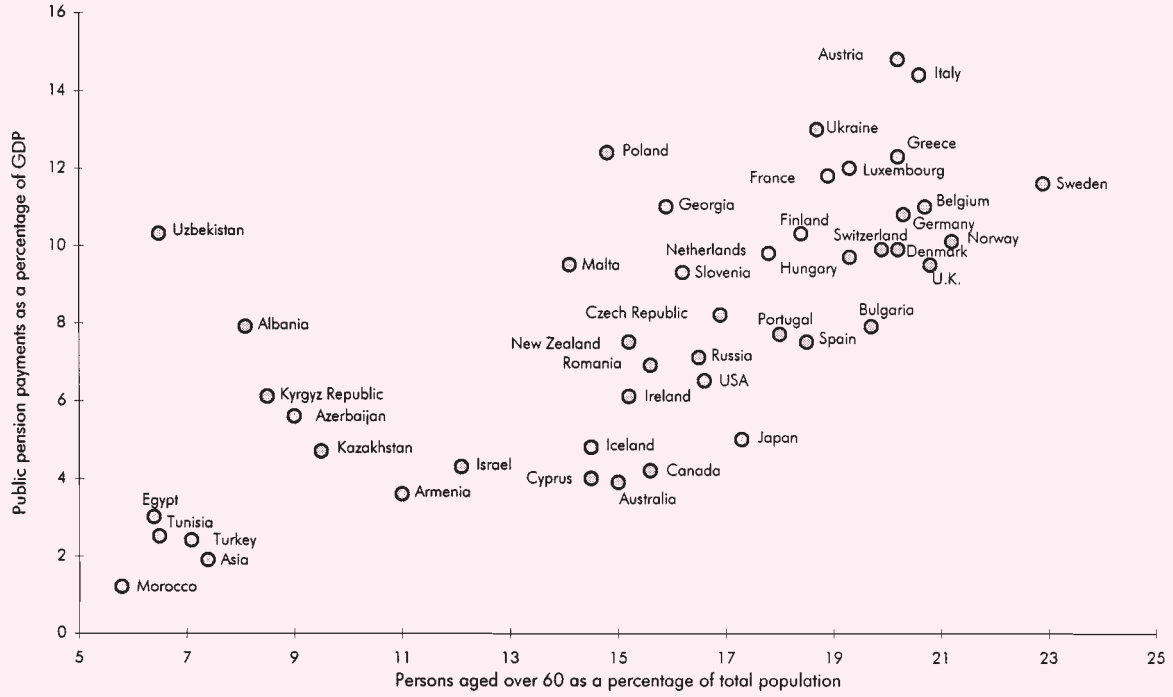
With regard to the generation currently retiring, *Preschnitz* (1996) showed that, assuming the same contributions level, alternative pensions obtained from private savings would be tiny compared to what is now paid under the general social security scheme.

SCOPE OF OLD-AGE PENSIONS IN AUSTRIA

Public old-age pensions in Austria are generous when compared on an international scale. According to preliminary figures, some ATS 368 billion, or 15.3 percent of GDP, have been spent on pension payments in 1996. A

[3] *Rürup* (1997) presents an exhaustive study of arguments and literature.

Figure 1: Public pension payments and demographic change



Source: *World Bank* (1994)

World Bank diagram of the early 1990s describes Austria as the country where public pensions make up the largest share of GDP. Even though there are proportionally more people aged 60 or over in Sweden, Norway, Belgium and Italy and the same proportion in Germany, pension payments in those countries as a share of GDP are, with the exception of Italy, markedly lower than in Austria. It should be noted that the World Bank figures do not take into account private, company or individual pensions, which are of little relevance in Austria but which serve as a strong pillar of old-age pension insurance in countries where public systems are less generous (Figure 1).

In 1996, Austria spent about 15 percent of its GDP on public old-age pensions.

The Austrian public pension system is regulated within the scope of the social insurance regime administered by the social partners. For all employees with the exception of civil servants, it is financed by contributions from employers and employees, set at 22.8 percent up to the maximum contribution threshold. Self-employed people pay 14.5 percent and farmers pay 13.5 percent to their respective insurance body.

Added to these contributions are amounts from the Federal budget which, compensatory supplements included, made up 27.4 percent of expenditures on pension insurance in 1996. These sums cover shortfalls produced from non-contributory periods (parental leave and military service) and compensatory supplements. The latter are a minimum pension for all those who have the minimum number of qualifying years but whose pension is below the compensatory supplement threshold (December 1996: 264,841 beneficiaries or 15.8 percent of all pensioners).

The subsidies required by the various social security bodies vary greatly: employee pension insurance bodies received 15.2 percent of their expenditure from the Federal budget (excluding compensatory supplements); insurance bodies for the self-employed, on the other hand, got 73.9 percent. In 1996, the Federal contribution to pensions for the 345,000 former self-employed was ATS 29.8 billion, almost the same amount as that spent on 1.5 million pensions for the former employed (ATS 30.1 billion). The figures reflect in particular the high old-age dependency ratio and the low contribution levels, in particular among farmers.

Pensions to civil servants made up about ATS 102 billion in 1996, financed by employee contributions of 11.75 percent and the public budget. If we were to compute a fictitious employer contribution in line with that required under the Social Security Act, coverage for retired civil servants would be about 57 percent and the Federal contribution thus 43 percent (*Bachmeyer,* 1997). Pensions for retired civil servants are calculated on the basis of their last

Table 1: Average old-age pensions in December 1996

	Total	Men	Women
		In ATS	
All pension insurance bodies	11,125	14,545	8,440
Pension insurance institute for wage earners	8,944	12,216	6,436
Pension insurance institute for the Federal Railways	10,429	13,329	7,968
Pension insurance institute for salaried employees	14,212	18,764	11,272
Social security institute for Austrian miners	17,923	18,808	11,327
Social security institute for the self-employed	12,300	14,884	9,187
Social security institute for farmers	7,502	9,949	4,856
Social security institute for Austrian notaries	54,977	54,977	–
Civil servants	32,103	32,422	30,733

Including compensatory allowance and children supplement (excluding nursing care allowance and family allowance).

salary and are not subject to maximum contribution and assessment thresholds.

PENSION PAYMENTS

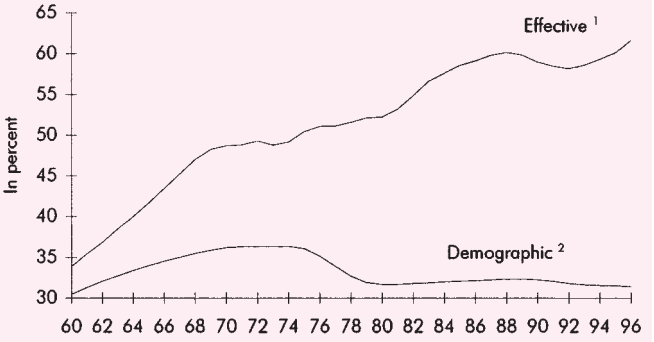
The average pension is relatively high in Austria: according to statistical data on wages and salaries, average net pensions in 1995 were 72.7 percent of net wages and salaries. Yet there are substantial differences between groups and in particular between the genders. In 1996, the average old-age pension was 11,125 ATS (including compensatory and children supplements, excluding nursing care allowance and family allowance); with men receiving 14,545 ATS and women getting 8,440 ATS. Farmers' pensions were the lowest (7,500 ATS), followed by wage earners' pensions (8,940 ATS), pensions for the self-employed (12,300 ATS) and for salary earners (14,200 ATS). Civil servants received an average of 32,000 ATS, as they are not subject to a maximum contribution and assessment threshold.

SHORT- AND LONG-TERM PROBLEMS IN THE FINANCING OF OLD-AGE PENSIONS

SHORT-TERM FINANCING PROBLEMS

As of the second half of the 1970s, the demographic trend has provided some relief to the system. The proportion of old people declined from 36 percent in the early 1970s to 32 percent, and is expected to go up again only after the turn of the millennium, to more than 33 percent. While the demographical burden declined or was at least brought to a halt, the effective pension burden went up: the ratio of pensions to contributors increased substantially with the rapid increase of unemployment in the 1980s. Relief, albeit of a short-term nature, came from the upswing in the late 1980s, until the next economic setback once again pushed up the figure of new pensioners. The economically driven increase was further accelerated by a structural increase, when early retirement based on many insurance

Figure 2: The old-age dependency ratio



Source: Hauptverband der österreichischen Sozialversicherungsträger (Association of Austrian Social Security Bodies), Austrian Central Statistical Office. – [1] Beneficiaries relative to contributors. – [2] Individuals aged 60 and over as a percentage of 15- to 59-year-olds.

years became attractive for many. The effective old-age dependency ratio was 417 pensioners for every 1,000 contributors in 1965, rose to 601 in 1988 and, after a temporary decline, once again peaked at 616 in 1996 (employees: 584; self-employed: 808).

The following factors played a decisive role in this development:

1. Consequent to the rapid increase of unemployment, the number of early retirements rose by 177 percent since 1970. The actual retirement age for disability pensions declined by 6.5 years to 49 and for old-age pensions by 4 years to 59.

2. At the same time, life expectancy rose by 3.8 years for disability pensioners and by 3.5 years for old-age pensioners, so that the period in which pensions are drawn increased by more than 10 years for disability pensions and by 7.5 years for old-age pensions.

3. The impact from the labor market situation and rising life expectancy was further exacerbated by relatively high pension increases in some years and the structural effect generated by retirees with a large number of contributory years behind them, so that average pensions rose steeply compared to the average assessment basis right up to the late 1980s, while wage increases flattened and the share of wages in national income went into a decline.

Already back in the 1980s, Alfred Dallinger, then minister for social affairs, expressed his concern about this development and demanded that the financing base be extended to reflect the employment situation and decline in the share of wages in national income, proposing a levy on value added – a proposal that today is once again forwarded by labor representatives (*Breuss – Schebeck – Walterskirchen,* 1997).

Table 2: Additions and deaths, by age

		Disability pensions	Old-age pensions
		In years	
Pension age			
Men	1970	56.6	64.2
	1980	53.9	62.5
	1995	49.4	60.4
Women	1970	56.6	61.5
	1980	55.1	59.5
	1995	48.8	58.0
Deaths			
Men	1970	68.8	76.2
	1980	70.1	77.1
	1995	68.1	78.7
Women	1970	72.0	77.7
	1980	74.8	78.9
	1995	75.8	81.2

Source: Association of Austrian Social Security Bodies, Federal Ministry of Labor, Health and Social Affairs, Social Report.

Figure 3: Average pensions

Pension insurance for employees

Source: Association of Austrian Social Security Bodies.

THE LONG-TERM FINANCIAL SITUATION

In industrialized societies, long-term financing problems are typically driven by the demographic aging process. Figure 4 shows the long-term development of the demographic dependency ratio, i.e., the number of dependants, children and older people as a percentage of the population of working age.

By 2030, the number of persons of retirement age will have risen by 70 percent, while the number of people of working age will have declined by 12 percent.

Over the next quarter of the century, the number of retirees as a proportion of the total population will rise from one in five today to one in three, and their number relative to the population of working age will double from its current 31 to 62 percent. This aging process, based on the assumptions of a constant birth rate of 1.5 per woman and increasing life expectancy, means:

- A growing part of the value added needs to be spent on financing pensions. In order to cover the requirements resulting just from the demographic shift, productivity in the European Union would have to be additionally increased by 0.1 to 0.3 percentage point over the next decade and by 0.5 percentage point from 2005 onwards (*Bacchielli,* 1996, pp. 37ff).
- The cost of health care is on the increase.
- The aging of the working population may well put a brake on productivity increases, as fewer qualified young workers are available.
- The decline in the number of people of working age will, after 2015, result in excessive demand on the labor market, leading to higher marginal productivity of labor, greater wage increases and once again to a rise in the share of wages in national income.
- The ratio of interest rate to real wage growth should then be once again reversed.

Most industrialized states are confronted with a similar demographic outlook. International organizations (OECD, IMF and World Bank) and the EU Commission have therefore presented comparative simulations and proposals for reform for their member states. Possible reforms within the system – i.e., parametric reforms – can be deduced from the above budget equation *(1),* i.e.:

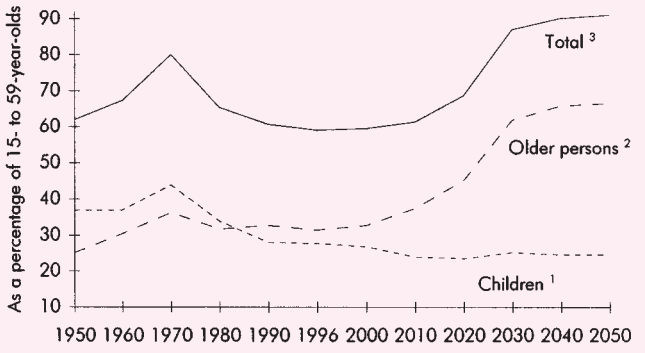
- contributions (b) may be increased;
- the retirement age may be raised, thereby lowering the pension period and thus the old-age dependency ratio $\frac{a}{n}$ and/or
- the income replacement rate $\frac{p}{w}$ may be reduced.

The European Commission estimated for each member state (ceteris paribus) the extent to which each of these factors would have to be changed to compensate for the demographic change and ensure the system's sustainability. Its findings are summarized in Table 3.

From this EU study (*Bacchielli,* 1996) we find that, based on plausible assumptions on growth and starting from an income replacement rate of 75 percent for the 20- to 59-year-olds, Austria would have to:

- increase contributions by 53 percent, to almost 35 percent, or
- reduce the income replacement rate by 45 percent, to just below 50 percent, or
- raise the retirement age by almost 11 years, to 68 years,

Figure 4: Demographic dependency ratio



Source: ÖSTAT. – [1] Persons under 15 years of age. – [2] Persons aged 60 and over. – [3] Persons under 15 and 60 and over.

in order to compensate for the effects of aging on the pension system. Obviously, the only realistic course of action is a combination of these tools, since a small economy that is heavily dependent on foreign trade has little leeway for increasing contributions. An increase in the Federal contribution being limited by the stability pact, reforms will have to focus on raising the retirement age and reducing the net income replacement rate. Changing the number of years in which pension payments are received and the income replacement rate (averaged for all pensioners) necessarily is a slow process so that measures which cannot but be introduced gradually need to be taken now in order to be effective when the demographic aging process accelerates after 2010 (Figure 4).

Within the EU, average adjustment requirements are hardly lower: contributions would have to be increased by 49 percent, the retirement age raised by ten years or the income replacement rate lowered by 43 percent. Based on this projection, the need for action is least urgent in Sweden and greatest in Ireland, Spain and the Netherlands.

For Austria, the *Advisory Council* (1991) found a much greater need for adjustments, although key proposals were already incorporated in the 1993 pension reform. The net adjustment introduced at that time combines the first two tools: an increase in the contributions automatically reduces the average income replacement rate, decreasing as it does the pension adjustment. In this way, the costs are shared between workers and pensioners. Steps were also taken to raise the retirement age, but they seem to be virtually ineffective, as the number of early retirees continues to rise markedly, the effect partly of the labor market situation and partly of the pension debate.

The recent *Rürup* study (1997) puts the need for adjustment on a par with the findings of the EU Commission. Its status quo scenario finds that implicit contributions (i.e., financing without Federal contributions) would have to rise by 60 percent in order to keep the system liquid.

Table 3: Adjustments to the pension system to compensate for aging between 1995 and 2045

Projections and simulations by Eurostat

	Increase in contributions	Reduction of income replacement rates	Increase in retirement age
	In percent		In years
Austria	53	45	10.8
Belgium	44	42	8.7
Denmark	43	37	8.2
Finland	49	42	8.8
France	51	44	9.6
Germany	49	42	10.6
Greece	50	43	8.4
Ireland	96	54	10.7
Italy	49	45	11.3
Luxembourg	50	41	8.9
Netherlands	74	50	11.4
Portugal	44	39	8.0
Spain	80	54	10.2
Sweden	24	26	5.8
U.K.	45	39	8.5
EU 15	49	43	9.9

Source: *Bacchielli* (1996).

Rürup's proposals and – with some variations – the reform concept developed by the Federal government to achieve a sustainable financial standing for the Austrian pension system assume a reform within the system that aims to strengthen the insurance principle (contributory equivalency) and gives top priority to maintaining the standard of living, while at the same time attempting to flatten the substantial gender- and scheme-related differences (general insurance scheme, schemes for the self-employed and for civil servants).

Reforms within the framework of the pay-as-you-go principle invariably involve the three parameters contributions, old-age dependency ratio and income replacement rate:

- Considering that contributions by employees and employers are already very high, proposals to increase such contributions are limited to the self-employed, where they are significantly lower and coverage is very low. The long-term objective is to harmonize contributions. Other proposals are to include all incomes and irregular employments in the compulsory insurance scheme, and to obtain cost-covering contributions from conscription, periods of unemployment and illness.
- In order to reduce the old-age dependency ratio, proposals are made to raise the retirement age: the statutory retirement age of men and women should be harmonized more rapidly at 65. The pension escalation rate (currently higher in the first 30 years than later) should be harmonized at 2 percent for the entire insurance period, in order to offset the unequal treatment of

the long-term insured currently practiced. Starting from the statutory retirement age, additions or reductions computed by actuarial principles should increase incentives to continue working after the retirement age. Partial pensions are envisaged for the disabled and incapacitated.

- The 80 percent income replacement rate granted after working for 40 years and retiring at age 65 is to be maintained, but the assessment period should be extended, if possible to cover the entire insurance period; initially, the best 15 years are to be gradually extended to 20 years. In view of the goal of harmonizing the systems, the period should be applied to all old-age pension systems (including that for civil servants). The current net adjustment rule is to be provided with a "demographic correction factor" which takes into account the residual life expectancy at the time of retirement for pension adjustment. As a sign of solidarity with the working population which is not protected by laws against loss of purchasing power, use of the inflation rate as a lower limit for pension adjustment is to be discontinued.

Next to such measures it is economic and educational policies aimed at employment and growth which provide strength to the sustained funding of the old-age pension system. A greater demand for workers would certainly restrain the trend towards early retirement, and an aging society needs more educational measures to preserve the ability and willingness to work among the older generation. Education at a public and company level must not be limited to the young, but must be specifically targeted at the older generations.

Are such reforms – aiming essentially to raise the retirement age and reduce the income replacement rate – truly unreasonable or is the Austrian old-age pension system really as generous as the international comparison of Figure 1 would have us believe?

The activity rate of the over 55 year olds is among the lowest in the OECD countries: in spite of relatively low unemployment (by international standards), only 42.6 percent of the men and 18.8 percent of the women aged 55 to 64 are actually part of the labor force. Labor force participation of this age group is lower only in Luxembourg, Belgium and France and about the same in the Netherlands. In Japan and Switzerland, their participation is almost double for men and a multiple for women, and even in Germany it is 10 percent higher. Raising the actual retirement age is a major and useful step, which, however, needs to be accompanied by employment and education measures in order to be effectively implemented.

In terms of net incomes Austria is again well placed with regard to the average net income replacement rate and

Table 4: An international comparison of age-specific activity rates, 1995

	Men		Women	
	55 to 64	Over 65	55 to 64	Over 65
	In percent			
Switzerland	82.3	15.8	59.0	9.0
Denmark	67.9	4.7	40.1	0.9
Sweden	70.4	13.9	63.4	5.1
USA	66.0	16.8	49.2	8.8
Norway	72.3	14.9	57.4	9.0
Japan	84.8	37.3	48.5	15.6
U.K.	62.4	8.2	40.8	3.2
Canada	58.9	10.1	36.3	3.3
Australia	60.9	9.2	28.6	2.5
Finland	46.0	5.1	42.9	2.0
Austria	42.6	6.1	18.8	2.6
Germany[1]	53.3	4.2	28.4	1.5
Netherlands	42.3	5.4	18.9	0.9
Portugal	62.0	21.2	34.2	9.4
France	41.5	2.5	30.9	1.2
Ireland	63.9	15.1	21.3	3.0
Belgium	35.9	2.3	13.3	1.0
Greece	61.1	11.7	24.5	3.7
Spain	54.9	2.9	55.5	1.4
Luxembourg	35.1	2.6	13.3	1.1
Italy	55.8	5.8	21.1	1.6

Source: OECD, Labor Force Statistics; WIFO. – [1] 1994.

thus the pensions paid in Austria: at the time of retirement, the net replacement rate was 75.7 percent on average in 1995; 80.5 percent for men and 73.4 percent for women with regard to old-age pensions (73.7 and 67.4 percent respectively for disability pensions). In an international comparison based on insurance years and qualification (i.e., income levels), Austria achieved top ranks for qualified employees (87 percent for long insurance periods and 73 percent for medium insurance periods). For bottom level incomes, a replacement rate of 91 percent for long and 76 percent for medium insurance periods is similarly above the international average.

Yet there are substantial differences within the Austrian system: income replacement rates for women, while growing strongly in the 1990s, are still lagging far behind those for men. Together with the relatively high gender-related wage differences, this results in lower average pensions for women.

So there is some room for reducing the income replacement rate, although it needs to be carefully leveraged. In spite of the maximum assessment threshold, the replacement rates are high, in international terms, for medium and high incomes, while for low incomes poverty quickly limits the margin for reduction. When the assessment period is extended, it is therefore advisable (as suggested by *Rürup,* 1997) to convert fictitious into actual qualifying periods by cost-covering contributions from unemployment insurance, the family burden equalization fund, etc., in order to prevent an excessive reduction of the replacement rate for those with low incomes.

Table 5: Austrian net income replacement rates at retirement

	1990	1995
	In percent	
Disability pension		
Men	75.2	73.7
Women	59.4	67.4
Old age pension		
Men	81.2	80.5
Women	65.0	73.4
Total	72.1	75.1

Source: Federal Ministry of Labor, Health and Social Affairs, WIFO.

The proposals in the Rürup report are limited to securing the sustainability of the current old-age pension system which is entirely based on income from work and on traditional stable relations at work and in the family. The principle of maintaining the standard of living continues to be awarded top priority, but the greater emphasis on contributory equivalency gives rise to the risk that the burden of adjustment will be borne to a greater extent by those people whose net income replacement rate is already lower today due to a shortfall of qualifying periods. The system should prevent the need for pensioners with insufficient qualifying periods to have recourse to social welfare assistance, analogously to the compensatory supplement. But there is more margin with regard to higher incomes: for these, replacement rates are relatively high in international terms, and they can avail themselves of the second and third pillars of old-age pension insurance (company pensions and individual insurance) based on the funding principle in addition to the pay-as-you-go principle (*Url,* 1997).

Measures to change the remuneration regime would also improve the financial standing of the old-age pension system and facilitate reforms: weakening insistence on the seniority principle while maintaining the overall life income would increase the financial basis and provide some relief for the system. It would alleviate the effects of extending the assessment period and reduce the cost of older workers, improving their employability. The new payment scheme for industrial employees, which provides for higher salaries at the start and a flatter income curve over life, is a step in this direction.

CONCLUSIONS

Demographic aging is forcing all industrialized countries to reform their respective old-age pension systems. Reforms in Austria and abroad are driven by current financing problems even though the long-term situation calls for greatly differing requirements.

The short-term financing problems experienced by the Austrian old-age pension insurance system are not the result of aging. Since the mid 1970s, Austria has enjoyed a highly advantageous demographic situation: the number of pensioners is less than one third that of the overall population of working age, and this old-age dependency ratio will not rise until the turn of the millennium. The problems rather derive from the labor market situation: employment problems are shunted off to the pension system by way of generous early retirement schemes. Added to this was an increase in benefits in the 1980s, which could be financed by high employment and income growth rates. Even though the pension reform of 1993 managed to put a stop to this development, the Austrian old-age pension system is still among the most generous internationally. Retirement starts early, and the average net income replacement rate at retirement is over 75 percent and rising.

Table 6: Net income replacement rates at retirement, 1994

	Employee without dependents			
	Low income		Qualified employee	
	Insurance period		Insurance period	
	Medium	Maximum	Medium	Maximum
	In percent			
Austria	76	91	73	87
Canada	53	64	34	40
Germany	63	80	67	85
Spain	.	93	.	76
Finland	68	71	49	50
France	57	88	42	62
U.K.	49	49	37	37
Israel	79	100	68	86
Iceland	86	93	81	88
Italy	62	89	62	89
Luxembourg	126	146	48	55
Norway	59	65	40	45
Portugal	55	73	60	80
USA	51	54	18	19

Source: Internationale Revue für Soziale Sicherheit, 1994; WIFO.

In the long run, the aging process undermines the financial basis for the pay-as-you-go system prevailing in all industrialized countries. In Austria, the old-age dependency ratio will rise to over 60 percent by 2030, i.e., the number of persons of retirement age will grow by more than 70 percent while the population of working age will shrink by 12 percent.

The demographic development is similar in all industrialized countries and their reforms generally point in the same direction: increasing contributions is not much of an option due to international competitive pressures, so that the focus is on measures to raise the retirement age and reduce benefits.

In order to compensate for the aging effect, Austria would have to increase contributions by more than 50 percent, raise the retirement age by 11 years or reduce the net income replacement rate by 45 percent, according to calculations carried out by the EU Commission. The proposals by the Federal government, which are essentially based on

the *Rürup* report (1997), follow the same line and concentrate on measures to raise the retirement age, which is very low by international standards, and to lower the net income replacement rate, which is relatively high in international terms.

By an international yardstick and given the low retirement age and high replacement rate, the Austrian old-age pension system offers sufficient maneuvering room for putting it on a sustainable financial basis. Large differences exist, however, between the regimes, and benefits vary greatly by income levels; a reduction of the replacement rate might well push some on a low-income level below the poverty line.

Implementation of the proposed structural reforms of the public pension system could be greatly facilitated by employment and education measures, in particular targeted

Austria's Old-Age Pension System in an International Comparison – Summary

In all industrialized countries demographic trends necessitate a reform of the provision of retirement income. The rise in the population of pension age relative to the working-age population (the old-age dependency ratio) puts considerable strain on existing public pension systems.

From a demographic perspective, Austria has been in a fair weather period since the mid-1970s. The old-age dependency ratio has been below one third and is set to rise only after the year 2000. The present financing problems result mainly from the unfavorable situation in the labor market: weak employment growth and the implementation of generous early retirement schemes have seriously strained the pension system. Even though the long-term financial situation of the public pension system was markedly improved by the pension reform of 1993, the Austrian pension system remains rather generous in an international comparison: the average net income replacement rate amounts to more than 75 percent of the income earned before retirement for social security pensioners in the private sector. In 1996, more than 15 percent of GDP was spent on the public pension system.

The aging of the population will, however, create long-term financial problems over the next decades: by the year 2030, the old-age dependency ratio will rise from the present rate of 31 percent to over 60 percent; the number of persons of retirement age will surge by more than 70 percent, but the working-age population will shrink by 12 percent. To safeguard the long-term financing of the public pension system, three options are available: higher contributions to the pension system, a higher age of retirement, and higher funding of the pension system from general tax revenues.

According to the calculations carried out by the EU Commission, Austria would have to raise the contributions to the pension system by more than 50 percent, or raise the retirement age by 11 years, or lower the net-income replacement rate by 45 percent in order to offset the demographic trend. Professor Rürup, in a study commissioned by the Ministry of Labor, Health and Social Affairs, reaches similar conclusions: the implicit contributions to the public pension system (financing without recourse to general tax revenues) would have to rise by about 60 percent. Of course, only a combination of all these measures is feasible and meaningful.

International competitive pressures sharply limit the extent to which contributions to the pension system can be raised; the financing of the pension system by general tax revenues is limited by the need to consolidate the Federal budget. Therefore, the reform proposals of the Federal government, which aim at maintaining the present system and its guiding principle of preserving the living standard of the population after retirement, concentrate on measures which raise the very low retirement age and lower the relatively high net-income replacement ratio.

The length of the period during which a retirement income is drawn as well as the replacement ratio can be changed only slowly for the pensioners on average. These reform measures, for purposes of fairness, can only be introduced gradually, and must be implemented now if they are to become effective around the year 2015 when the problems caused by the aging of the population become ever more serious.

Given the low retirement age and the high replacement ratio in an international comparison, Austria's pension system offers enough maneuvering room for putting the system on a sustainable financial basis. Large differences exist, however, between the various systems operating in Austria; benefits vary greatly by income level, and a reduction in the replacement ratio may push some persons with low income below the poverty line.

The proposed structural reforms of the public pension system may be complemented by employment and education policies, in particularly those targeted toward older employees; as far as income policies are concerned, a weakening of the seniority principle might help to alleviate some of the present problems.

at older employees, and, on the wages and salaries side, by the weakening of the seniority principle.

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