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Pension Policies in the OECD Countries: Background and Trends

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Abstract

Concerns about restructuring old-age income provisions and reforming public pension schemes are an OECD-wide phenomenon. This paper highlights first the background of the reform debate. Despite the divergences in the structure of public pension schemes, the main pressures for reform are strikingly similar across the OECD area and thus can be discussed under three broad headings: budgetary, economic, and social. The reform trends are presented in the second part of the paper and highlight the central features of the current reform process: reform, not revolution; extension of basic provisions; strengthening social adequacy and individual equity; and redistributing the sources of old-age income.

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Summary

Concerns about restructuring old-age income provisions and reforming public pension schemes are an OECD-wide phenomenon. This paper highlights the background of the reform debate and the central features of the ongoing reform process.

There are two main reasons why all 24 OECD member countries are either considering implementing or have already implemented reforms of their public pension schemes. First, the social and economic framework in which retirement schemes operate has changed substantially in recent decades, and this development has led, as a reaction, to considerations of reform. The paper broadly summarizes the changes in the socioeconomic framework under budgetary, economic, and social headings. The budgetary scope can be discerned from the increase in public expenditure for old-age income, rising as a percentage of GDP from 4.4 percent in 1960 to almost 9 percent in 1985. The economic pressures for restructuring retirement programs are based on their assumed negative impact on economic performance and, in particular, on labor and financial markets. The social changes requiring reform relate to increased female participation in the labor force, rising divorce rates, and changes in the family structure. The second main pressure for reform arises from anticipation of future developments, mainly of a demographic nature. On the basis of current demographic projections all OECD countries can expect a significant shift in the age structure between now and the second quarter of the next century. The problems attendant on an aging population will be exacerbated in many countries as the social security systems themselves mature.

The paper surveys the numerous reforms that have been undertaken and that are currently contemplated. It summarizes the tendencies of these reforms in four broad conclusions. First, there is no move to abolish current public pension systems, but only a desire for reforms within the existing approach. Second, there is a tendency to give greater importance to basic income support for the elderly. Third, the approaches to reform are largely characterized by a double strategy that emphasizes both social adequacy and individual equity. Fourth, the reform considerations aim at a redistribution of the sources of old-age income, namely labor earnings, transfers, and capital income.

I. Introduction 1/

Concerns about restructuring old-age income provisions, and especially about reforming public pension schemes are not just restricted to a few countries, but are an OECD-wide phenomenon. There are two main reasons why all OECD member countries are either considering implementing or have already implemented reforms of their public retirement schemes. First, the social and economic framework in which retirement schemes operate has changed substantially in recent decades and this development has led as a reaction to consideration of reform; prominent in this consideration are rising budgetary constraints at the level of both social security schemes and the general public budget. Second, the anticipation of future developments, mainly of a demographic nature, has created additional pressure for reform.

In most OECD countries, political perceptions of the need for reform have so far been mainly of the reactive type. Future developments, especially the projected aging of the population, serve more as a justification than as a cause of intended or implemented reforms. This political behavior pattern is hardly surprising: short-term reactions are characteristic of voter-oriented Western democracies.

The tendency for economic, social, and demographic developments in Western industrialized countries to move in the same direction means that there is strong similarity in the discussions about reform and in the trends in old-age income provisions. This common pattern is stronger than the differences in the systems might lead one to believe. While notable differences do, of course, remain, this paper will concentrate more on the shared features than on the divergences in past developments and current tendencies.

The structure of this paper is as follows. Section II highlights the background and the various causes of the reform debate. The pressures for reform in three broad areas--budgetary, economic, and social--are summarized to provide a better understanding of the current trends and prospects of retirement income provisions. Section III presents the major directions of reform and prospects for social security schemes. Since the trends for reform in OECD countries are strikingly similar and the purpose of this paper is to present broad developments, the various reform directions are summarized under broad headings. Some tentative conclusions are drawn in Section IV.

1/ Numerous studies and reform proposals for public pension schemes exist at a national level in every OECD member country. For issues at the international level see the references, although the list is by no means exhaustive.

II. Background and Pressure for Adjustment

Although the reasons for a reorientation of old-age income support, especially within social security systems, are seemingly quite diverse across the OECD area, the main determinants for reform are practically identical in all countries.

The changes in the socioeconomic framework, and hence the creation of pressures for reform, can be summarized under three broad headings: budgetary, economic, and social.

1. Budgetary scope

The budgetary scope can be discerned from the increase in public expenditures for old-age income. Across the OECD area, the share of these expenditures as a percentage of GDP was 4.4 percent in 1960 and has more than doubled since, reaching almost 9 percent in 1985. The most dynamic growth was experienced in Japan, whose share almost quadrupled from a low level of 1.3 percent in 1960 to 5.2 percent in 1985. The highest absolute increase was experienced in Italy, where public expenditures for old-age pensions rose from 4.9 percent of GDP in 1960 to 14.2 percent in 1985. This value is at present the highest among OECD countries. The average expenditure shares in the seven smaller and larger OECD countries differ little in size and trend; the shares of the latter are presented in Chart 1.

For most countries, the rise was more pronounced after the first oil shock, reflecting the endogenous response of pension schemes to the larger number of beneficiaries and lower real growth rates. In some OECD countries, the more recent changes vary widely and show a tendency for a flattening or even a reduction of the trend in the expenditure share. This leveling-off can largely be related to three factors. First, the reforms and adjustments of public schemes that took place during the 1980s in the OECD countries; second, a short-term improvement in the demographic structure, owing to the entering of smaller post-World War I birth cohorts into retirement age; and third, the recent upswing in the economic performance that raised the denominator of the expenditure share (GDP) more strongly at a time when the numerator (expenditure) was relatively more stable.

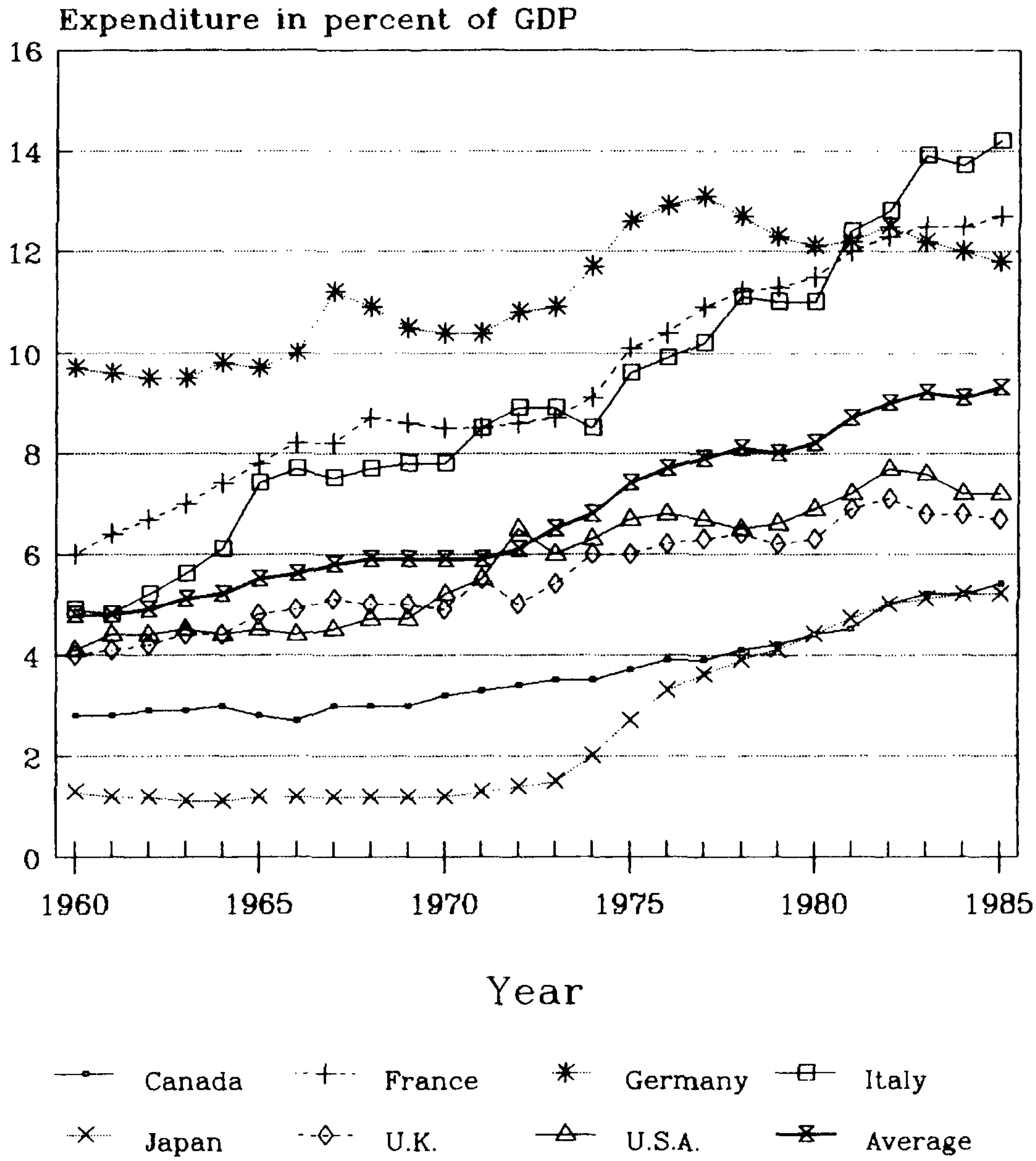
Nevertheless, the global trend in expenditure and the implied dramatic change in the resources that are transferred via public means from the working to the retired population have several consequences for the public budget:

(1) In purely arithmetic terms, the rise in public pension expenditure has contributed significantly to the growth of the relative share of the public sector, that is, total public expenditure as a percentage of GDP. Across the OECD area, the average contribution of public pension schemes to the increase in the public sector share was

Chart 1

Public Expenditures on Pensions

Seven Major OECD Countries



Source: OECD, Social Policy Data Bank.

one fourth over the last 25 years; in Italy it was more than one third. In some countries, and especially after the two oil-price shocks, the contribution was 50 percent or more (Appendix Table 1).

(2) The financing of public pension schemes is closely related to the financing needs of public budgets: directly, as in the case of basic schemes financed from general revenues or budgetary transfers required by contributory schemes; and indirectly, since higher contribution rates compete with other public levies.

(3) There is seemingly a strong relationship between the growth of expenditures for public pensions and the explosion of national debt in almost all OECD countries (OECD (1986)).

The relationship between public pensions and the general budget on one hand, and the pressure for budgetary consolidation on the other makes it inevitable that ministers of finance, anxious to control budgetary expenditure, will also turn to their retirement schemes during this critical review. Some observers even suggest that the financial consolidation of pension schemes is a necessary condition for budgetary control in most OECD countries.

2. The economic impact

The economic pressures for restructuring retirement systems are based on their assumed negative impact on economic performance. The goals of public pension schemes and their implementation have been pursued by social policymakers for a long time, largely independently from economic policy. However, since the 1970s and in view of the lagging performance of OECD economies, critical voices are becoming stronger. In particular, the impact of social security on two markets--the labor market and the financial market--is being called into question. Many economists and politicians argue that the rising social security contribution rates are partly to blame for current labor market problems; others consider the benefit structure responsible for the decreasing labor force participation of the elderly. Furthermore, sluggish capital formation and low economic growth in OECD countries are said to be linked to the influence of public schemes, financed on a pay-as-you-go basis, on the private savings rate. Although firm evidence of both alleged (negative) effects is still lacking, these arguments are increasingly being picked up in economic debate. 1/

This shift in the discussion goes along with changes in the paradigm(s) of economic policy. Until the 1970s economic policy was dominated by Keynesian views, emphasizing the positive aspects of public retirement provisions: their multiplier and automatic stabilization

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1/ There is a growing body of academic literature on this subject. For a survey, see Danziger, Haveman, and Plotnick (1981); Aaron (1982); Burtless and Aaron (1984); Wise (1985); and Holzmann (1988a).

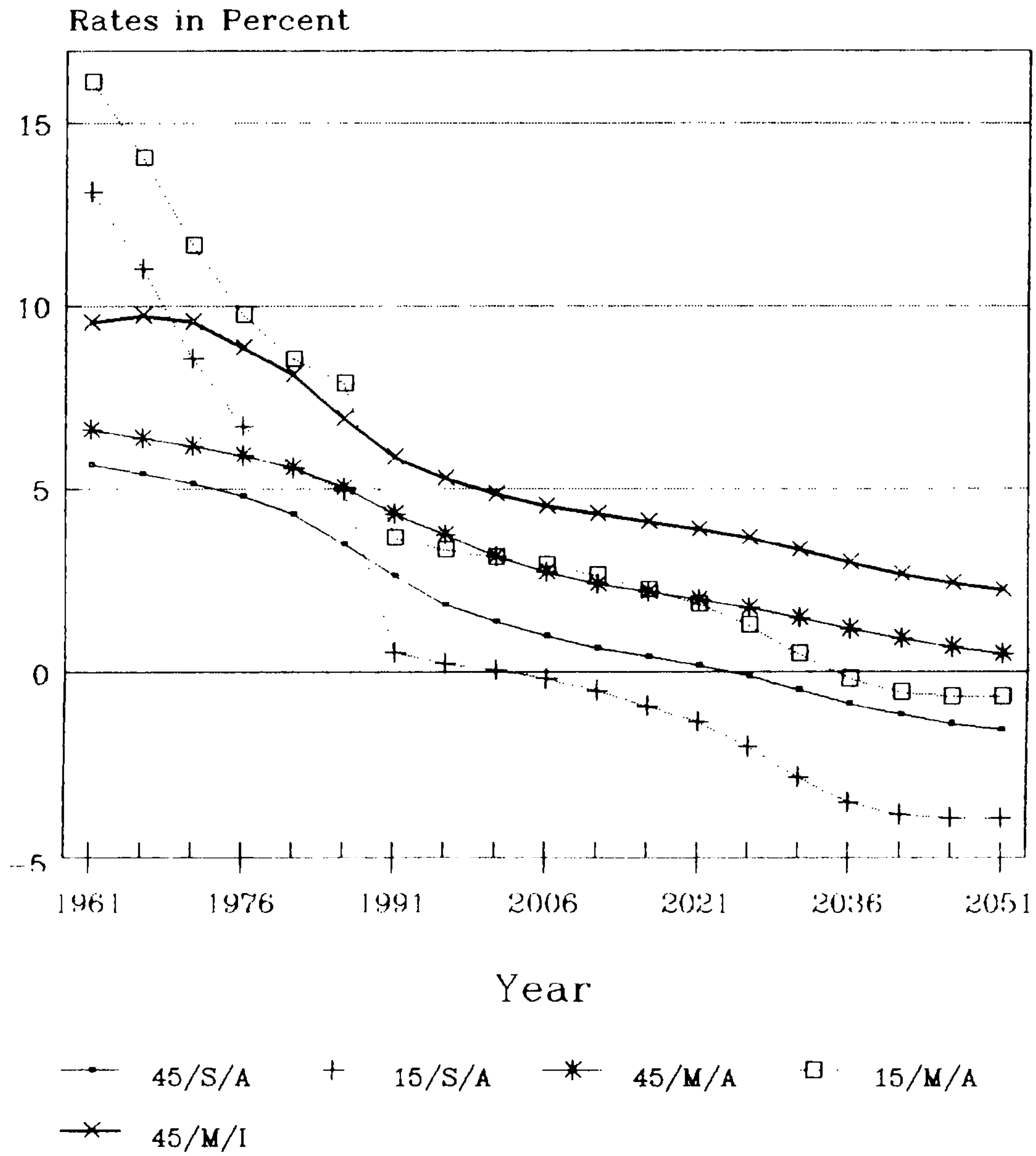
effects, or their positive distributional impact. However, economic events and the apparently decreasing effectiveness of traditional demand-side policy, shifted the emphasis to supply-side economics, that is, considerations that also take account of individual reactions to changes in the socioeconomic setting. Public pension schemes with their mandatory membership certainly exert a strong influence.

A further economic pressure for rearranging total retirement provisions is exerted by the changing price of public pension schemes. Their price has increased because the internal rate of return of these schemes is decreasing and will continue to fall. This implicit interest rate, which brings past contributions into equilibrium with future benefit streams, was very high for the starting generation of pension schemes financed on a pay-as-you-go basis. As the systems mature, this rate decreases and--with a negative population growth outweighing productivity growth--may even become negative in the next decades in a number of countries. Chart 2 shows estimated real internal rates of return (RIRR) for selected pension-cohorts (i.e., those retiring in the same year) in the Austrian employees' social security scheme between 1961 and 2051. The values and trends of these RIRRs are likely to be similar in OECD countries with an insurance system (see e.g., Leimer and Petri (1981) or Hudges (1985)), and they point out two important policy consequences: first, with positive rates of return on financial investments (also in the long run, since in each country they are increasingly determined by the world financial market (Fukao and Hanazaki, (1987)) but decreasing RIRR for social security contributions, portfolio theory predicts substantial changes in the retirement asset composition (assuming constant variance-covariance relations between public and private sector rates). The implied change in the optimal retirement portfolio should have important consequences for the societal demand for social security provisions. Second, the important differences in the RIRR that prevail between different groups suggest considerable problems in achieving a social consensus for reform, since the current system regulations will be advantageous for some groups, even if contribution rates increase drastically.

The discussion about reforming old-age income provisions is also influenced by the improved economic position of the elderly in society. Available evidence suggests that poverty among the elderly has dramatically decreased over recent decades so that in many countries today their risk of poverty is below that of the population on average (OECD (1988a)). This is largely the result of increased eligibility and rising real benefits per capita, the latter often exceeding the income growth of the active population. (Appendix Table 2 provides some information about the changes in real benefit position of public pensioners in OECD countries). Moreover, comparing gross pension benefits with gross earnings largely underestimates the relative income position of beneficiaries since they pay little or no social security contributions, are less exposed to income tax progressivity, and may enjoy preferential tax treatment. In contrast, the working population is subject to a high and increasing tax burden. Thus, it is argued, the

Chart 2

Real Rates of Return in Social Security
(Austrian General Pension Scheme)



45/M/A:Contribution years/Married-Single
/Average-Increasing Income Profile
Source: Holzmann (1988b)

income position reached by the elderly should permit reforms of public pension schemes, especially since new "problem" groups in society are emerging (e.g., single parent families) and the tax burden of the active population is still rising.

3. Social change

This last statement leads on to consideration of changes in the social framework that might lead to adjustment in pension regulations. First, changes in the family structure can be cited. The creation of public pension schemes was a (late) reaction to the break-up of an extended family structure that included all generations, and to the formation of smaller families. Most pension schemes are oriented toward the model of a nuclear family, consisting of a working husband and a housewife who cares for a number of children. However, the situation has changed again and if current trends continue, this model-type family soon will not be representative: For women, the risk of divorce is now higher than the risk of being widowed; labor market participation of women is increasing and approaches that of men for some age groups in a few countries. Hence, the current forms of survivor's pension and other regulations are becoming obsolete.

In addition, a number of pension experts point to changes in the socioeconomic setting that could constitute an objective justification for less public and more private retirement provisions (Kessler (1986)). Given the evidence of a decreasing dispersion of mortality rates and thus a reduction in the uncertainty of life duration, a lower probability of adverse selection may exist. Some studies indicate shifts in the population from myopic individuals, with a very short planning horizon (à la Keynes-Tobin) to life-cyclers (à la Modigliani). Finally, it is argued that a decrease in risk aversion on the part of individuals can be stated owing to rising income levels.

However, the current reform discussion is not only determined by the pressures of, and reactions to, past changes in the socioeconomic framework and the current financial situation of public schemes. Increasingly, future and anticipated developments are taken into account. The most important influence is exerted by the projected shift in the age structure and the aging of population.

4. Aging populations

Population aging is not a new phenomenon for the OECD area, where on average the share of those aged 65 and over increased from 8.5 percent in 1950 to 12.5 percent in 1985. Nevertheless, an increase of almost 50 percent in the proportion of elderly people during the period contributed little to the growth of pension expenditure; this growth was largely determined by wider eligibility and higher real benefits (OECD (1985), Holzmann (1987a)).

On the basis of current demographic projections--national and international--all OECD countries can expect a significant shift in the age distribution between now and the second quarter of the next century. The most recent projection by the OECD Secretariat (OECD (1988b)) up to 2050 suggests for most countries a moderate growth in the proportion of elderly people (65 and over) between 1985 and 2010, followed by a considerable acceleration and a peak around 2040 (12.5 percent, 15.3 percent, and 21.9 percent in 1985, 2010, and 2040, respectively).

This aging of the population has three main components: (1) "aging from above," since life expectancy will continue to rise in the coming decades; (2) "aging from below," as in all OECD countries fertility rates have been falling since the 1960s and are now well below replacement level in most countries; and (3) the march of the baby-boom generation through the age structure. Since for most countries this last effect is of crucial importance, even a rapid return of the fertility rate to replacement level or above could not prevent a significant aging of population in the decades to come. 1/

Such a projected shift in the age structure is particularly alarming for public pension schemes, which are nowadays financed on a pay-as-you-go basis. (The substantial social security funds in Canada, Japan, and Sweden are no exception.) The financial consequences of the demographic shift can be explored through the use of a simple model (OECD (1988a)). Under the assumption of constant replacement rates (i.e., benefits as a percentage of labor earnings), and constant labor force participation rates, public expenditures on pensions as a percentage of GDP are expected to double across the OECD area between 1985 and 2040.

Chart 3 illustrates projections of the impact of population aging on the pension expenditure share for the seven larger OECD countries. The general trend of expenditures is much the same in all countries, but the levels differ substantially, reflecting differences in the initial expenditure level and in the projected demographic change. Since base-year conditions are assumed throughout the projection period, the

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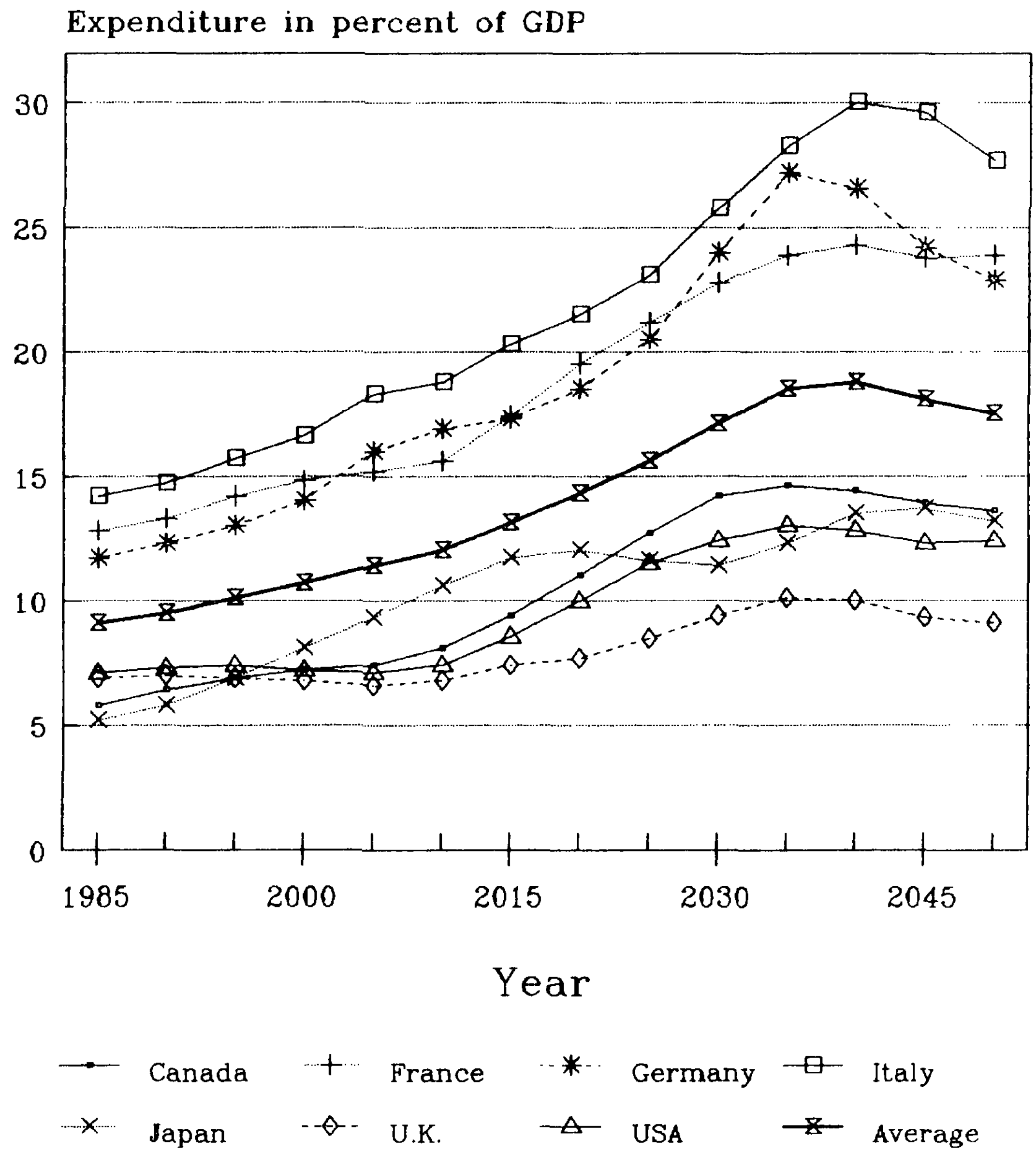
1/ The assumptions of the OECD medium variant projection--although similar to the UN demographic projections--can be considered rather optimistic, since they assume a moderate growth in life expectancy, negligible migration flows, and the return of the fertility rate to replacement level in the long term. Lower fertility rates and higher life expectancy at retirement age, however, would considerably exacerbate the aging of the population, especially if linked with an increase in the mortality rates of the working population. The latter could be a consequence of AIDS, if current trends in the spread of the disease continue.

Chart 3

Population Aging and Public Pension Expenditure



Source: OECD, Social Policy Data Bank, medium demographic variant; author's calculations.

demographic component essentially reflects alternative developments in the old-age dependency ratio (i.e., the ratio of people 65 and over to the working-age population, aged 15 to 64).

5. System maturation

To cope with this demographically induced expenditure growth of public retirement schemes, either a doubling of the contribution rates or a halving of benefits per retiree would be necessary. However, in many OECD countries this expenditure growth, which was due to aging, is likely to be reinforced as systems mature. The restructuring of social security schemes in the 1950s and 1960s, as well as various improvements during the golden years of high economic growth and low unemployment has had long-term effects in coverage and benefit levels that will reach far into the next century. In the Japanese pension scheme, before the 1985 reforms, the estimated impact of system maturation on expenditure growth was greater than the demographic effect, the latter already being considerable compared with many other countries. For many European OECD countries, a statement in a recent report by the French Government may be representative: "The doubling of the pension burden from now until 2025 is almost equally split between demographic changes and system maturation: until 2005 system maturation is the main determinant, as population is relatively stable; afterwards, the population aging is decisive" (Ruellan (1986)).

The presentation of the various pressures for reform--if only the most essential ones--should have made it clear that current financial problems and future demographic shifts are only two among many other pressures to reorganize total old-age income provisions when reforming social security systems. The multiplicity of motives is one of the main reasons for the difficulties encountered in the reform process, and explains the major directions taken by reform proposals.

III. Trends in the Restructuring of Old-Age Income Provisions

In principle, it is a delicate and problematic task to indicate trends in a retirement policy. Restricting such a presentation of trends to already implemented reforms would not be very revealing, since current reform proposals are not included. However, taking account of the total scope of reform discussions would also be misleading, since a number of proposals--and not only from the academic world--are unlikely to receive political backing. The following selection and presentation of trends are situated somewhere in the middle and aim to be representative of the state of (political) reform considerations in the member countries of the OECD.

Surveying the numerous steps toward reforms untertaken and current intentions, their trends can be summarized and discussed in four broad areas:

(1) There is no move to abolish current public pension systems, but only a desire for reforms within the existing approach.

(2) There is a tendency to give greater importance to basic income support for the elderly.

(3) The approaches to reform are largely characterized by a double strategy: emphasizing social adequacy and individual equity.

(4) The reform considerations aim at a redistribution of the sources of old-age income, namely labor earnings, transfers, and capital income.

1. Reform, not revolution

None of the recent changes in public pension systems in OECD member countries constitutes a revolution, nor is such an attempt currently envisaged. Some countries have substantially adjusted their retirement programs in recent reforms, but these adjustments always took place within the existing philosophy.

A question frequently asked is why are retirement schemes so hard to reform. It has been argued that a necessary prerequisite for reform is a substantial political consensus about: (a) the deficiencies of the current system structure and the need for change; and (b) the particular alternatives that would be superior. Some of the main arguments can be repeated here (see Thompson (1983); and Holzmann (1988b)):

(i) Not all groups in a country are convinced that a restructuring of retirement provisions is necessary. Some believe that a slight streamlining would be sufficient for the time being, a conviction often held by groups who fear the potential loss of their own favorable status.

(ii) Attitudes as to what constitutes an equitable distribution of the costs and benefits of a public retirement system are ultimately based on value judgments, since neither theory nor empirical evidence is likely to provide objective criteria.

(iii) There is little agreement about the effects of the current systems on economic variables, such as labor supply and savings, and hence on economic performance. But even if these effects were undesirable and detrimental to the employment situation or to economic growth, it is often unclear that the proposed alternatives would be less harmful.

(iv) Public retirement systems serve more than one objective, so that even if there were agreement that a particular purpose would be better served in some other way, the adoption of a reform may involve an unacceptable sacrifice of other objectives.

(v) Social programs are interdependent; the main contingencies in most countries are covered under separate programs even if for historical, administrative, or other reasons. Reforms in one program may conflict with the structure and objectives of other programs that derive their political and social support from groups that are different in age, occupation, or ethnic composition.

(vi) Even if consensus for a new or largely restructured system could be obtained, there are existing entitlements that cannot easily be changed and new entitlements that are being created. This creates important technical problems of transition, social problems of equal treatment between generations, and political trade-offs between long-term advantages and short-term costs.

These, and numerous other restrictions, led to "reforms" within the established approach, which nevertheless have been substantial in a few countries. This was the case in the United States in 1983, in Japan in 1985/86, and in the United Kingdom in 1986.

The U.S. reform was a multi-instrument approach, comprising inter alia adjustments in the benefit formula, the inclusion of (newly hired) civil servants in the general public pension scheme (OASDI), a scheduled increase in contribution rates above current expenditure requirements to build up a substantial social fund to cope with future demographic changes, a planned increase in the retirement age, and partial taxation of hitherto untaxed benefits.

The Japanese reform also had the goal of harmonization of pension schemes, but mainly involved a cut in future benefit levels (by fixing the current replacement rates) and the introduction of basic income support for the elderly (OECD (1988c)).

The reform in the United Kingdom reduced future replacement rates in the SERPS (State Earnings-Related Pension Scheme) from 25 percent to 20 percent, decreased the benefit level for survivors, and extended the assessment period for benefit calculation. In addition, contracting out from SERPS (i.e., the supply of earnings-related supplementary public benefits via occupational pensions in exchange for reduced contribution rates) was extended to personal pensions.

How is it that a few countries have succeeded in a substantial reform of their public pension schemes and received the necessary political support? Insofar as the small size of the sample permits a generalization, the following explanations are suggested.

In the case of Japan and the United Kingdom, the systems had been introduced fairly recently and an entitlement to full benefits was not yet established. The largely immature state of the schemes made it possible in both cases to reduce future benefit levels without changing current benefits.

In the United States, the Social Security Act requires projections of the financial situation of the (public) old-age, survivors', and disability insurance (OASDI) over a period of 75 years. The Annual Report of the Board of Trustees of the OASDI Trust Funds represents a political as well as legal obligation for politicians to act with a view to the long term, and provides the general public with a comprehensive insight into the future financial prospects of the scheme. 1/

Furthermore, in all three countries private retirement provisions--via occupational and personal arrangements--are important. Hence, adjustments in public benefits are softened in their effects on the total income of retirees, and in addition are politically eased, since these cuts are partly compensated by special provisions for low-income groups, and by tax concessions for private provisions, from which mostly higher income groups profit. Hence, the conclusion can be drawn that the more difficult a reform of public schemes is, the greater is their importance for the income position of the individual.

2. Extension of basic provisions

Although there has been little attempt at drastic reform in public retirement provisions in the OECD countries, some basic provisions for the elderly, independent of earlier contributions, are being introduced in social insurance schemes in some countries and are under discussion in others. The emphasis on basic income support can be seen to arise from socioeconomic changes as the next step in the evolution of the welfare state. In this stylized model of historical evolution, the first stage was paternalism, when private charity and public assistance were provided to the less fortunate. The second stage was social insurance, when compulsory programs were developed to cover the increasing number of occupations and contingencies. The third stage emphasized the ideas of prevention and universality. In the process of transition from paternalism through social insurance to concern with maintaining the quality of life, the basic income schemes for the elderly (and other population groups) are expected to play an increasing role.

In addition to these largely qualitative arguments, which are linked with general income levels in post-industrial societies, there are technical, economic, and political arguments in support of the introduction of basic provisions.

(i) Basic income support can be seen as a useful device to cope with changes in household structure and the problems connected with

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1/ In most other OECD countries, the required projection period is 5 to 15 years, if projection requirements exist at all. The contention is that long-term projections by an official, or by an independent institution (similar to the U.S. Board of Trustees), would substantially change the attitude toward reform in other countries as well.

divorced women and other disadvantaged groups in society. These arguments led to the recent introduction of basic provisions in Japan.

(ii) The introduction of basic flat-rate provisions into social insurance schemes is also favored by those who would like a clearer distinction between the transfer and the insurance annuity elements of social insurance programs. This separation of social insurance policy and assistance policy should increase the effectiveness of the systems as it makes it possible, within limits, to separate considerations of equity and efficiency.

(iii) An extension of the private retirement provisions is undoubtedly viewed as favoring higher income groups and persons with longer working records. Thus, it might be necessary to reinforce the basic provisions on social and political grounds, if a move toward private provisions is intended.

At present, about half of the 24 OECD member countries have basic provisions. Japan recently joined the group of countries that provide basic as well as earnings-related public pensions; this group includes the Scandinavian countries and to some extent the United Kingdom and Ireland. Countries that provide basic provisions only are Australia, New Zealand, and Iceland. In the third group, countries with (pure) social insurance schemes (e.g., Switzerland and the Netherlands) have almost universal basic coverage, and in a number of other countries elements of basic provisions were introduced in the 1960s and 1970s (e.g., Pensione Soziale in Italy, or Supplementary Security Income in the United States). Whether the current discussion in many other countries will eventually lead to basic income support for all elderly is not yet decided, but it is likely to happen in some countries.

3. Social adequacy and individual equity

The last contention can be supported by other indications that characterize the third general tendency, namely the double strategy of social adequacy and individual equity in the adjustment process of public pension schemes. Budgetary constraints, and the limited scope of reform options within the existing philosophy, determine this approach.

This leads to measures that concentrate available but scarce financial resources on the most needy among the retired population. This tendency is particularly visible in countries with basic income support only: Australia recently reintroduced an asset-test alongside the income-test for granting basic benefits; and New Zealand, with its universal basic scheme without a retirement test, recently introduced a tax surcharge that absorbs all payments received from the National Superannuation Scheme for the highest income group.

A stronger emphasis on social adequacy is also detectable in countries with earnings-related public pension schemes. The aforementioned partial taxation of benefits in the United States can be classified under this tendency, as well as various adjustments in favor of low-income groups in a number of other OECD countries. In countries with earnings-related benefits, a second tendency is visible, namely to strengthen (again) the links between benefits and contributions. The political logic behind this approach is that restricted options are available if the approach to reform was essentially to stay within the given system. To moderate current and future expenditure growth, the only options available are a reduction in eligibility and/or a decrease in the benefit levels, either by reduced replacement rates or by lower indexation. However, these adjustments require additional justification other than financial and budgetary considerations. That justification is found in the underlying insurance principle and the implied individual equity concept, relating individual contributions to benefits.

This strengthening of the insurance principle in social insurance schemes can be seen in the lengthening of the assessment period for benefit calculation, for example, in Austria from the last 5 to the last 10 years, in Spain from the last 2 to the last 8 years, and in the United Kingdom from the best 15 years of contribution base (i.e., earnings below ceiling) to lifetime earnings. This tendency to base the benefit calculation not on the last earnings, or best earnings during a number of years, but on lifetime earnings can be noted in almost all countries. A second indication of efforts to tie the benefit structure more closely to earnings is the attempt to reduce noncontributory periods (such as education and unemployment). The abolition or reduction of multiple public pension benefits (especially in the case of own and survivors' benefits) that takes place in a number of OECD countries is also seen as a means to foster social adequacy and individual equity (beside the main objective of reducing spending). Finally, in a number of countries, reductions and credits for earlier or later withdrawal from the labor market are adjusted toward a more actuarial structure. This restructuring also has the goal of making the impact of social security schemes on labor supply and retirement decisions more neutral.

In recent years most OECD countries also modified their indexation procedures to slow down pension growth. The techniques applied ranged from index switch, index modification, and changes in the review period of the index, to capping and temporarily suspending periodic indexation (see Wartonick and Packard (1983), Fuery (1985), and OECD (1988a)). These adjustments were mainly an ad hoc answer to financing pressures, with severe drawbacks and an unanswered central policy question, namely, should reduced benefit levels be achieved primarily via reduced new benefits or reduced indexation. Even if both modifications lead to the same present value of benefits, they are likely to have different effects on the individual. Currently, most countries apply both policy options with varying weights, and a discussion about their social and economic consequences is only starting.

4. Redistributing the sources of old-age income

The reform of public pensions will lead to a redistribution of income sources in old age--not merely as a result, but quite often as an objective in itself. The main income sources are: labor earnings, transfer income, and capital income.

The past trends in these three income sources for selected OECD countries show strong similarities but also differences in their relative importance for the elderly (Appendix Tables 3 to 7). For all countries, the decreasing importance of labor earnings in elderly households over the past decades can be noted, reflecting the decreasing labor market participation of the elderly. In some countries this reduction was totally compensated by increased transfer income; the relative importance of capital income or personal old-age saving remained low and largely constant. In some other countries, in particular the United States, Canada, and Finland, transfer income increased, but the share of capital income rose even more. The United States, for example, experienced a reduction of the labor-earnings share from 29 percent to 16 percent between 1962 and 1984; during the same period the share of transfer income rose only slightly, from 43 percent to 46 percent, but the share of capital income grew from 19 percent to 34 percent.

The current and anticipated financial crises of public pension schemes, as well as other considerations, have stimulated discussion about a redistribution between these shares.

A first approach is an increase in the legal or actual retirement age. Until now, only the United States under the 1983 reform foresees an increase in the standard retirement age from 65 at present to 67 between 2000-2027. The recent reform of the Japanese Employees Pension Schemes allows only for an increase in standard retirement age for women from 55 at present to 60 before the year 2000. In all other OECD countries, an increase in the retirement age(s) is part of the reform discussion and will probably be implemented in the future, especially since this option could lead to a substantial moderation in the expenditure growth (Halter and Hemming (1987)). Hence, increasing the retirement age would lead to a reduction in transfer income and probably also to an increase in labor earnings among the income sources in old age.

A second and complementary approach is to replace future reduced public retirement provisions by private income support for old age. A shift in the responsibility between transfer and savings support has various dimensions:

(i) In economic terms the pay-as-you-go component of income support would be reduced, to be replaced by greater reliance on funded provisions, with various requirements and implications at the macro- and microeconomic levels.

(ii) In political terms, the question arises whether pensions should be public or private; this distinction has become ideologically charged and its usefulness has been questioned. Yet in practical terms it covers the size and degree of public intervention, the issue of public provision versus public regulation, and the scope for individual choice.

(iii) In institutional terms, a distinction must be made between the supplier and the kind of old-age income support: the government via public pensions, the employer via occupational pensions, and the financial institutions via personal pensions.

The issues involved in a re-examination and redistribution of old-age income responsibilities are numerous and interrelated. They concern the analysis of alleged advantages resulting from a redistribution of responsibilities, the design of alternative methods of old-age pensions, the identification of requirements for redistribution in economic, social, and institutional terms, and the investigation of the likely consequences of redistribution on the economy and society (Holzmann (1987b)).

Although firm empirical evidence cannot be given for any of these issues and information at both the international and national levels is still lacking, in most OECD countries some consideration is being given to redistribution "at the margin."

In France, for instance, the Government has recently made some efforts to imitate the U.S. Individual Retirement Accounts; in Austria a similar approach is under discussion within the planned tax reform; and in Italy there are several serious attempts to follow the U.S. example of occupational provisions (see e.g., Gabrielli and Fano (1986)). And in other countries, where public, occupational, and personal pensions are already providing income to the elderly, a number of adjustments have been made. In the United Kingdom, for instance, there is the extension of "contracting out" from public to occupational, and now to personal, provisions. In Canada, in 1986, a substantial change in the framework of occupational and personal provisions had also taken place. In Switzerland, minimum occupational pensions were made mandatory since 1985. Finally, in Australia a similar approach is under discussion, or at least a stronger emphasis and regulation of the occupational superannuation has been suggested.

IV. Tentative Conclusions

This paper has tried to present the broad trends in old-age income provisions in the OECD countries by analyzing the background and pressures for reform and its major tendencies. Emphasis was given throughout to public or social security schemes, but since they cannot be viewed in isolation, references to other old-age income programs had to be made as well. In view of the complexity of the subject, many questions must remain unanswered, among other things,

(i) Are the current attempts at reform sufficient to cope with economic constraints, social changes, and demographic developments?

(ii) In what direction should the retirement systems in industrialized countries move? Toward the Swiss model, consisting of universal public, mandatory occupational, and voluntary personal provisions? What should be the distribution between these programs?

(iii) How should retirement programs be coordinated with the tax system to achieve certain social goals, while preventing negative allocative effects?

No satisfactory answer can yet be given to these and many other questions. The reasons are many: First, issues of social consensus are involved and a solution through the political debate is tedious and time consuming. Second, too little information is at present available at the national and international levels to give sufficient support in tackling many crucial questions. And third, the economic situation in future decades, and hence the required degree of reform, is not known.

Nevertheless, the current discussion of reform of public schemes and the OECD-wide tendency to give more responsibility for old-age income to the private sector may give cause for some optimism about adequate income for the elderly in the future, and about a reasonable burden on the future working population. In turn, enhanced private provisions may also ease the process of reform in public pension schemes. But to prevent unrealistic optimism or unwarranted pessimism it is desirable to evaluate more clearly the areas where a redistribution can be advantageous, and to identify precisely the necessary conditions in economic, regulatory, and social terms (OECD 1987)).

Table 1. Contribution of Public Expenditures on Pensions to Total Public Sector Growth in OECD Countries, 1960-85

	1960-85			1960-75			1975-85			1975-79			1979-85		
	Total 1/	Pension 2/	Contr. 3/	Total 1/	Pension 2/	Contr. 3/	Total 1/	Pension 2/	Contr. 3/	Total 1/	Pension 2/	Contr. 3/	Total 1/	Pension 2/	Contr. 3/
Canada	17.8	2.6	14.8	11.2	1.0	8.7	6.6	1.7	25.1	-1.1	0.4	...	7.8	1.2	15.7
France	17.9	6.7	37.2	8.9	4.1	45.5	9.0	2.6	28.8	2.0	1.2	59.1	7.0	1.4	20.3
Germany	15.0	2.2	14.6	16.5	2.9	17.7	-1.5	-0.7	-41.6	-1.3	-0.3	-26.2	-0.2	-0.4	...
Italy	28.3	10.2	36.9	13.1	4.9	37.6	15.2	5.2	34.4	2.2	1.3	58.9	3.0	3.9	30.2
Japan (1965-85)	14.0	4.2	30.0	8.5	1.5	13.5	5.5	2.7	49.6	4.4	1.4	33.1	1.1	1.3	114.2
United Kingdom	15.4	2.8	17.9	15.0	2.0	13.6	0.4	0.7	182.1	-3.5	0.2	...	3.9	0.5	14.0
United States	9.6	3.1	32.2	7.2	2.6	33.6	2.0	0.5	26.0	-2.9	-0.1	-3.1	4.9	0.6	12.5
Average of above countries 4/	16.8	4.5	26.9	11.5	2.7	23.5	5.3	1.8	34.2	—	0.6	...	5.3	1.2	23.1
Average of smaller OECD countries 5/	17.3	4.6	26.4	11.8	2.9	24.9	7.9	1.7	21.8	3.4	0.8	24.8	4.6	0.9	0.2
OECD average 4/	17.1	4.5	26.6	11.7	2.8	24.1	6.9	1.8	25.5	2.7	0.7	35.9	4.9	1.0	21.1

Source: OECD, National Accounts and Social Policy Data Bank, expenditure segment.

1/ Change in total public expenditure as a percentage of GDP, calculated as final year share minus initial year share.
2/ Change in pension expenditure as a percentage of GDP, calculated as final year share minus initial year share.
3/ Change in pension expenditure share as a percentage of change in total public expenditure share.
4/ Unweighted average.
5/ Countries contained in this table are Australia, Austria, Belgium, Denmark, Finland, Greece, Ireland, Netherlands, Norway, Spain, Sweden, and Switzerland.

Notes: Total public expenditures essentially consist of current disbursement plus gross capital formation of the public sector. It is measured by the sum of lines 38 (Income and Outlay Account), 9, 10, 13, 14 and 15 less lines 2 and 3 (Capital Accumulation Account) in Table 6 of National Accounts, OECD, Volume II, Detailed Tables.

Table 2. Changes in Real Benefit Positions of Public Pensioners in OECD Countries, 1960-85

	Old Age		Invalidity		Survivors	
	Index 1/	Growth rate 2/	Index 1/	Growth rate 2/	Index 1/	Growth rate 2/
Australia (1961-85)	181	2.40	269	4.03	315	4.69
Austria	335	4.96	249	3.71	360	5.26
Canada	230	3.38	205	2.91	76	-1.11
Denmark	211	3.04	225	3.29	136	1.23
Finland	469	6.38	327	4.85	233	3.44
Germany	180	2.38	158	1.84	194	2.69
Ireland	351	5.15	226	3.31	295	4.42
Italy	313	4.67	328	4.86	324	4.82
Japan (1961-84)	498	6.63	446	6.16	756	8.43
Netherlands	274	4.12	205	2.92	233	3.44
New Zealand	188	2.55	139	1.32	129	1.01
Norway	301	4.51	301	4.50	169	2.12
Portugal (1960-84)	83	-0.75	102	0.09	79	-0.94
Sweden (1960-84)	290	4.35	369	5.36	347	5.10
Switzerland (1960-84)	529	6.89	439	6.10	417	5.88
United Kingdom	176	2.28	267	4.01	228	3.36
United States (1960-84)	182	2.43	147	1.54	187	2.53
Average 3/	256	3.83	240	3.56	225	3.29

Source: OECD, Social Policy Data Bank, pension segment.

1/ Index 1960 = 100. The index was calculated on the basis of annual compound growth rates and for the total period 1960-85 even if the growth rate covers a smaller period.
2/ Annual compound growth rate.
3/ Unweighted geometric mean.

Table 3. Composition and Trend of Gross Income of Elderly Households 1/ in Canada, 1965-82

(As percent of total)

	1965	1971	1975	1982
Employment income	44	35	30	21
Investment income	14	18	17	25
Retirement pensions	36	44	48	48
of which:				
OAS/GIS	28	32	33	29
CPP/QPP		1	4	8
Private	8	11	11	11
Other income	6	3	5	6
Total income = 100				
In current prices Can$1,000	2.774	4.426	6.505	16.259

Source: C. Goodman, "Changing Structures of Retirement Income in Canada," in Conjugating Public and Private: The Case of Pensions, ISSA Studies and Research No. 24, Geneva, 1987.

1/ Census households with head 65 and older; all units.

Table 4. Composition and Trend of Gross Income of Old-Age Pension Recipients in Finland, 1974-83

(As percent of total)

	Males		Females	
	1974	1983	1974	1983
Earnings	9.8	4.3	3.6	1.8
Private income	5.0	2.2	3.8	1.7
Income from self-employment	14.0	7.9	2.7	3.0
Retirement pensions	70.8	84.8	89.6	92.5
Of which:				
National pensions	29.4	26.6	58.3	47.3
Employment pensions	41.4	58.2	31.3	45.2
Other income	0.4	0.8	0.3	1.0
Total income = 100				
In 1984 prices Fmk 1,000	35.5	44.2	20.3	27.1

Source: E. Karlimo, and P. Siren, "Trends in the Composition and Levels of Retirement Income in Finland," in Conjugating Public and Private: The Case of Pensions, ISSA Studies and Research No. 24, Geneva, 1987.

Table 5. Composition and Trend of Gross Income of Elderly Households 1/ in Japan, 1975-83

(As percent of total)

	1975	1977	1979	1981	1983	1984
Earnings	56.0	42.8	44.1	43.6	35.0	34.5
Property income	9.6	10.4	11.3	8.1	6.9	8.7
Social security pensions	26.2	34.1	37.3	43.2	50.4	51.4
Other social security benefits	--	2.7	3.2	2.0	2.4	2.1
Other income 2/	8.1	10.1	4.0	3.0	5.3	3.4
Total income = 100 In ¥ 1,000	1,147	1,534	1,824	2,174	2,108	2,146

Source: Japanese Ministry of Health and Welfare.

1/ Elderly households are defined as households where the male head is 66 and over and the wife 61 and over, or the male head is 68 and over with children in the household 15 and below, or the single female head is 63 and over.

2/ Comprises payments from occupational pension schemes. However, in the past, payments were normally made on a lump-sum basis.

Table 6. Composition and Trend of Gross Income of Pensioners 1/ in the United Kingdom, 1951-85

(As percent of total)

	1951	1961	1971	1982-82	1984-85 2/
Earnings	27	22	18	10	9
Investment income	15	15	13	10	9
Occupational pensions	15	16	21	21	22
Total public transfers	42	48	48	59	60
Of which:					
National insurance retirement pension	35	41	40	47	49
Other social security benefits 3/	8	6	7	12	11
Total	100	100	100	100	100

Source: United Kingdom, Department of Health and Social Security, Social Trends, Vol. 16, 1986 Edition.

1/ Adjusted for differences in size and composition of household.
2/ Projections.
3/ Mainly supplementary and housing benefits. Growth in the 1970s was largely due to housing and disability benefits.

Table 7. Composition and Trend of Gross Income of Elderly People in the United States, 1962-84

(As percent of total)

	1962	1967	1976	1980	1984
Earnings	29	29	23	19	16
Asset income	16	15	18	22	28
Retirement pensions	40	46	53	54	51
Social security	31	34	40	40	38
Private	3	5	7	7	6
Government employee	6	7	6	7	7
Public assistance	6	4	2	1	1
Other income	9	6	4	4	4
Total	100	100	100	100	100

Source: M. Upp, "Relative Importance of Various Income Sources of the Aged, 1980," Social Security Bulletin, January 1983; current population surveys, March 1985.

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