Facing strains on their social security systems from an aging population, a trend has developed in foreign countries to consider ways of shifting a portion of retirement income spending from the public to the private sectors.

International Trends in Social Security Reform

Though the United States faces the prospect of an aging population as the large "baby boom" generation matures, a review of international population and labor force statistics indicates that many other countries are projected to have an even more significant aging of their populations.

These changing demographics are leading a number of other countries to undertake reviews of the financing and spending levels of their retirement income systems. A large beneficiary population relative to a shrinking population of active workers poses strains in particular for the social security systems of foreign countries, which are generally financed on a pay-as-you-go basis. In reaction, a significant international trend has developed in which consideration is being given to ways of shifting a portion of the burden for providing retirement income from the public to the private sector—i.e. to both private employers and to individual workers. But in none of the cases studied here does this trend go so far as to totally substitute a private system for a public system, as some in the United States have proposed.

This Issue Brief—the first in a two-part analysis—reviews recent changes that have been made or proposed in certain foreign social security systems, with particular focus on systems in Canada, France, Italy, Japan, Switzerland, and the United Kingdom. In every case, issues have been selected for discussion that have direct interest for U.S. readers and policymakers. EBRI's August Issue Brief will continue this international perspective by discussing trends in corporate and individual retirement plans abroad.
Introduction

Reform of the social security system has been a prominent issue in several countries recently, especially France, Japan, Italy, and the United Kingdom. Canada has revised its financing provisions for the Canada Pension Plan (the earnings-related portion of the social security benefit) without making major changes in the structure of the social security system. Switzerland is in the midst of the tenth scheduled review of its social security system.

By 1985, at least 132 countries were known to have some form of government-sponsored old age, survivors, and disability program. (Social Security Programs Throughout the World - 1985)

Around the world, “social security” is usually interpreted as being the government-sponsored benefit programs. However, in other countries, the term often includes a wider range of benefits than it does in the United States. Old age pensions, survivors’ benefits, long-term disability benefits, short-term sickness and maternity benefits, unemployment compensation, workers’ compensation, medical care, and family allowances are all considered social security benefits in some countries. This Issue Brief will concentrate on old age, disability, and survivors’ benefit programs in particular.

Demographic Issues

Many industrialized countries have pay-as-you-go social security systems, similar to that of the United States. A social security fund exists, but it is essentially working capital, with some reserves, for the payment of current benefits. Benefits currently being paid are financed from the payroll taxes of current employees. This means that future generations of taxpayers must be relied on to pay the benefits when the current population retires. This system works best when there is a large working population paying taxes to support a relatively smaller retired population.

By 2025, some major countries are estimated to have a population over age 65 which is 40 to 55 percent the size of its working population.

A few countries, most notably Singapore and Malaysia, do not have pay-as-you-go social security systems, but have instead established provident funds to fulfill the...
role of both social security and company pension plans. Provident funds are essentially national savings funds with individual account records. An individual’s benefit at retirement is the sum of his/her contributions plus interest. Provident funds are also popular with lesser developed countries that are establishing a social security system for the first time, because these funds generate a large pool of capital that can be used for government development projects.

Sweden, and to a lesser extent Denmark, have accrued substantial funds in support of their earnings-related social security benefits, so that investment returns contribute to the financing of benefits.

After World War II until the 1980s, most industrialized countries had a population over age 65 which was about 20 to 30 percent of its working population, or a ratio of 3 to 5 working persons to each person over age 65. However, because of low birth rates and the greater longevity of the population, this situation is expected to change within 40 years. By 2025, some major countries are estimated to have a population over age 65 which is 40 to 55 percent the size of its working population, or a ratio of 2 to 2.5 working persons to each person over age 65.

Table 1 shows the “economically active” population between the ages of 15 and 64 in each country compared to the number of persons over age 65. “Economically active” is defined by the International Labor Office as all persons who are employed or looking for work. It excludes full-time students, housewives, or persons otherwise not part of the work force. The figures for 1950 to 1980 are based on actual census data; the figures for 1985 through 2025 are projections; both are calculated by the International Labor Office.

The percentages in table 1 can be generally interpreted as potential retirees under the social security system compared to potential payroll taxpayers. It does not take into account that some of the economically active population may be receiving unemployment compensation, disability benefits, or other forms of social security payments at various times between ages 15 and 64. It also does not take into account the fact that the normal retirement age is currently lower than age 65 for both males and females in France, Italy, and Japan, and lower than age 65 for females only in the United Kingdom and Switzerland; nor does it take into account that some persons choose to take early or deferred retirement. Retirement age is a variable which can be increased or decreased by mandate or incentives.

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>Canada</th>
<th>France</th>
<th>Italy</th>
<th>Japan</th>
<th>Switzerland</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>20.1%</td>
<td>20.4%</td>
<td>26.4%</td>
<td>21.2%</td>
<td>12.0%</td>
<td>22.5%</td>
<td>24.2</td>
</tr>
<tr>
<td>1960</td>
<td>24.0</td>
<td>21.0</td>
<td>28.4</td>
<td>23.9</td>
<td>12.7</td>
<td>22.7</td>
<td>26.1</td>
</tr>
<tr>
<td>1970</td>
<td>24.0</td>
<td>19.9</td>
<td>31.3</td>
<td>28.1</td>
<td>14.6</td>
<td>25.0</td>
<td>29.0</td>
</tr>
<tr>
<td>1980</td>
<td>24.1</td>
<td>20.1</td>
<td>32.2</td>
<td>35.6</td>
<td>19.5</td>
<td>29.4</td>
<td>32.2</td>
</tr>
<tr>
<td>1985</td>
<td>24.5</td>
<td>21.2</td>
<td>27.7</td>
<td>33.2</td>
<td>21.4</td>
<td>28.9</td>
<td>31.5</td>
</tr>
<tr>
<td>1990</td>
<td>25.4</td>
<td>23.0</td>
<td>28.7</td>
<td>35.3</td>
<td>23.9</td>
<td>30.2</td>
<td>32.1</td>
</tr>
<tr>
<td>2000</td>
<td>25.0</td>
<td>24.8</td>
<td>32.0</td>
<td>40.8</td>
<td>32.3</td>
<td>34.0</td>
<td>31.3</td>
</tr>
<tr>
<td>2010</td>
<td>25.7</td>
<td>27.7</td>
<td>32.4</td>
<td>45.0</td>
<td>41.1</td>
<td>41.6</td>
<td>31.9</td>
</tr>
<tr>
<td>2020</td>
<td>33.8</td>
<td>37.2</td>
<td>41.3</td>
<td>50.2</td>
<td>48.6</td>
<td>51.3</td>
<td>37.4</td>
</tr>
<tr>
<td>2025</td>
<td>38.6</td>
<td>42.4</td>
<td>45.4</td>
<td>53.8</td>
<td>47.1</td>
<td>55.3</td>
<td>40.4</td>
</tr>
</tbody>
</table>

Note: Percentages mean that in the United States in 1950, the number of potential retirees represented 20.1 percent of the number of potential payroll taxpayers to social security. Derived from the number of persons over age 65 as a percentage of the number of economically active persons aged 15 to 64.

From table 1, it appears that many other countries will have a more serious problem with the increase in the aging of their population than the United States. Countries have a number of alternatives for dealing with the issues while maintaining a pay-as-you-go social security system. The main avenues available for altering these demographic effects are:

- encouraging higher birth rates by means of incentives for more children;
- encouraging the immigration of economically active people;
- encouraging new entrants to join the work force (e.g., housewives previously counted as not economically active).

Other alternatives relate more directly to the operation of the social security system itself. The financial balance of a pay-as-you-go system can be improved by increasing the total revenues received or by decreasing the benefits paid out. To increase total revenues, some of the choices are:

- increasing the payroll tax rate and/or the salary level to which it applies;
- increasing or initiating a government transfer to the social security system from general revenue;
- transferring funds from other social welfare programs, particularly education if the proportion of children has decreased; or
- raising the retirement age to retain people in the economically active category longer.

To decrease total benefits paid out, the main choices are:

- decreasing the benefit levels (e.g., reducing the pension formula, changing the averaging period for wages counted, setting a maximum benefit cap, reducing the indexation of benefits), or
- decreasing the number of persons qualifying for benefits (by introducing stricter eligibility conditions or longer qualifying periods).

Larger reserves can be deliberately accrued during demographically favorable times to provide a cushion in unfavorable periods. (This is now the course being followed in the United States, where a large surplus is projected to develop, which will then be used to make payments in the next century, when scheduled revenues are projected to fall short of projected annual benefit payments.) Alternatively, the responsibility for providing retirement benefits can be shifted from the government sector to the private sector—either to companies or individuals.

The choices that are economically or politically feasible vary by country. Sometimes action is taken that solves one problem while creating another. France, for example, lowered its normal retirement age to solve unemployment problems, when the demographics indicated that the retirement age should have been maintained or increased to aid the social security system. Some of the choices made in other countries are set out later in this Issue Brief as examples.

**Major Social Security Reforms**

**United States**

The last major reform of the U.S. Social Security system took place in 1983. At present, although some groups propose restructuring the Social Security system to make it more of a savings plan and less of a redistribution of income to lower income people, there are no immediate prospects of any such changes being enacted (Dilley, 1987).

**Canada**

The federal and provincial governments in Canada have recently agreed to a 25-year plan, effective January 1, 1987, designed to improve the financing of the Canada Pension Plan (CPP).

Social security benefits in Canada include a flat-rate benefit paid to all residents, which is financed from general revenues, and an earnings-related benefit plan, called the Canada Pension Plan, which provides additional benefits to employees based on payroll tax payments.
The objective of the 25-year financing plan is to establish financial reserves for the Canada Pension Plan at a level equal to two years’ worth of benefits and to stabilize it on a pay-as-you-go basis for the future. The financing of the Canada Pension Plan is scheduled to be reviewed at least every five years by the federal and provincial ministers of finance, to ensure that the financing objectives are being met.

Three separate commissions in France have recently reviewed the financing of the social security system. Emergency measures have now been taken by the government to increase the revenues to the social security system.

France

Three separate commissions in France have recently reviewed the social security system and concluded that immediate and serious financing problems exist.

In December 1986, the Social Security Accounting Commission forecast that a deficit of about $5.1 billion would occur in 1987; slightly more than half of this deficit will be created by the health insurance system and the remainder by the old age and survivors’ insurance program. High unemployment, unfavorable demographics, and the reduction in the retirement age from 65 to 60 (see Change in Retirement Age below) have all contributed to this situation.

The Commission for Evaluation and Protection of Old Age Insurance issued a report in May 1987 with recommendations for raising additional revenue for the social security system.

In 1987, a new committee of “wise men” was set up to propose short-term financial measures and to develop a strategy for publicizing the need for changes. This committee estimated the 1987 social security deficit to be about $2.5 billion even if the current reserve of $1.5 billion were used up entirely. They estimated the 1988 deficit at $6.6 billion.

Then on May 29, 1987, the government announced its emergency measures to raise revenue for the social security system. Some of the more important measures include:

- an increase in the employee’s payroll tax for old age benefits from 6.4 percent to 6.6 percent on earnings up to about $19,680 per year. The employer’s payroll tax rate remains at 8.2 percent;
- an increase in the health insurance payroll tax for employees from 5.5 percent to 5.9 percent. This tax is levied on total salary. The employer’s payroll tax of 12.6 percent was not changed;
- an income tax surtax of 0.4 percent that had been assessed on 1985 income and payable in 1987 will be extended to 1986 income, payable in 1988;
- a new surtax of 1 percent will be assessed on income from capital and real estate. This revenue will be assigned directly to the old age program for salaried employees; and
- a new tax of 2 percent will be imposed on tobacco.

These measures are expected to raise sufficient revenue for the social security system for the immediate future.

Italy

Italy has long been concerned that its social security system cannot finance its promised benefits in the coming years. It has been estimated that by the year 2000, payroll tax rates to the social security system in Italy will have to be over 50 percent of pay to sustain the 1985 level of benefits without government borrowing. There is currently a large general revenue component that finances the Italian social security system in addition to payroll tax revenues. The substantial federal budget deficit may make it difficult for the government to maintain this subsidy in the future. Italy

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also has one of the more serious demographic problems: by 2025, the population over age 65 will be nearly 54 percent of the economically active population age 15 to 64 (see table 1).

It has been estimated that by the year 2000, payroll tax rates to the social security system in Italy will have to be over 50 percent of pay to sustain the 1985 level of benefits without government borrowing.

Progress in introducing an acceptable plan to reform the social security system has been slow. Each of the many political parties has its own proposals for social security reform. In late 1986, the labor minister made another major proposal for reform of the social security system. Various aspects of this reform proposal are discussed later in this Issue Brief. However, since no political party achieved an overall majority in the elections in June 1987, another coalition government will be established. No immediate progress on social security reform is expected.

Japan

A major reform of social security occurred in Japan during 1985-86. New legislation (Act no. 34 of May 1, 1985) effective April 1, 1986, increased payroll taxes, reduced the benefit accrual rate, and restructured the institutions that pay social security benefits. This reform was deemed necessary because it was determined that to maintain the prior benefit formula, payroll taxes would have to be increased to about four times the current rate within 20 years. The previous formula would have awarded an average old age benefit from social security that was in excess of the net pay of an ordinary worker within 20 years. This effect was partly a result of the aging of the population and partly a result of the maturity of the social security system.

The two main institutions which pay benefits, the National Pension Scheme and the Employees' Pension Insurance, were reorganized so that all persons in Japan now receive the same flat-rate basic benefit under the same eligibility conditions.

The present Japanese social security system was established in 1944, so few people have yet to achieve a full career of 40 years under the system. In 1985, the average male employee nearing retirement had been covered for 32 years. Old age benefits include a flat-rate basic benefit for all residents, including housewives and persons who are not employed, plus an earnings-related benefit for employed persons. Since both the flat-rate and the earnings-related benefit formula are dependent on years of coverage, the total benefits paid out increase dramatically with an increase in the average years of coverage for the population.

For employees, the result of the social security reform is a reduction in the flat-rate benefit, a reduction in the earnings-related benefit, an increase in the payroll tax rate for the earnings-related benefit, and a change in the institution that pays the flat-rate benefit. The current contributions and benefit formula are described further below.

In 1985, legislation became effective in Switzerland that required all employers to provide a pension plan with certain minimum features.

Switzerland

Switzerland undertakes regular, formal reviews of its social security system. The tenth review has been underway for several years now, but results are not yet available.

2 There are also four other social security institutions covering employees in the public sector and a separate Seamen's Insurance Scheme.
Some years ago, Switzerland deliberately decided not to expand the level of the retirement benefits paid from its social security system, apart from cost-of-living increases. Instead, in 1985, legislation became effective that required all employers to provide a pension plan with certain minimum features. (EBRI, forthcoming.) The Swiss consider it advantageous for the economy and the financial health of its retirement income system to have a balance between a pay-as-you-go, basic social security system and a funded, mandatory private pension system.

United Kingdom

From 1984 through 1987 under the Conservative Party government in the United Kingdom, numerous pension proposals, new legislation, and new regulations were put forth that will substantially change both the social security and the private benefit systems.

As background on the United Kingdom, there has been a flat-rate portion to the old age benefit for many years. During the 1960s and 1970s, a succession of earnings-related social security programs were proposed. Implementation of each proposal progressed as long as the political party sponsoring it was in power. When the party in power changed after an election, the new government promptly abolished its predecessor’s social security program and introduced its own. As a result, there was much preparation for change, but no real progress in social security matters for about 15 years.

In 1975, under a Labor Party government, all political parties agreed to a proposal for an earnings-related benefit to be added on top of the flat-rate social security benefit. This earnings-related benefit became effective in April 1978; it later became known as the State Earnings-Related Pension Scheme or SERPS. A major feature of the plan was the provision for contracting-out of SERPS for company plans that met certain minimum requirements. This meant that a company that already had its own defined benefit pension plan, or wished to establish one, could elect not to participate in SERPS. Since only defined benefit plans were permitted to contract-out of SERPS, it caused a decline in the popularity of defined contribution plans in the United Kingdom. By 1983, about 10 million employees in the United Kingdom participated in SERPS and another 11 million were in contracted-out pension plans (United Kingdom, Government Actuary, 1986).

When SERPS was introduced in 1978, the payroll tax and benefit levels were based on projections produced by the Government Actuary’s Department; at the time, these were believed to be adequate to ensure the financial health of the system. In June 1984, new data on the aging of the population and prospective revenues to the social security system were published as a result of the government’s Inquiry into the Provision for Retirement. Projections were carried out through 2025 on the ratio of retirees to employed persons. With no unemployment, it was estimated that there would be 2.7 employed persons for each retiree in 2025; however, if a 6 percent unemployment rate were assumed, the ratio dropped to 1.8 employed persons to each retiree in 2025.

A significant feature of the United Kingdom government’s policy with regard to SERPS and personal pensions is the encouragement of individuals to take more responsibility for their own retirement benefits and to reduce their dependence on government-related programs.

In June 1985, the Conservative Party government published a Green Paper (a policy paper for discussion) proposing that the State Earnings-Related Pension Scheme be abolished. The government feared that SERPS would be in serious financial difficulty in the future due to the aging of the population. It was suggested that the initial actuarial projections, carried out about 1975 when SERPS was first planned, were for too short a period and that the payroll tax revenues would not support the promised benefits over the long term. The proposal to abolish SERPS caused much public discussion and considerable opposition from pension industry groups. Since the Green Paper did not include sufficient statistics to support its conclusions, there was much debate over the validity of both the original and the new actuarial projections.
In a White Paper (a proposal for future legislation) published in December 1985, the government conceded to public pressure and proposed to reform SERPS, instead of abolishing it. The Social Security Act of 1986 provided the legislative framework for reforming SERPS, along with many other changes for company pension plans. It also outlined the basis for the introduction of new "personal pensions" (similar to individual retirement accounts) and greater latitude for employees in choosing whether to participate in the pension plan sponsored by their employer.

A significant feature of the government's policy with regard to SERPS and personal pensions is the encouragement of individuals to take more responsibility for their own retirement benefits and to reduce their dependence on government-provided programs. This is part of the Conservative Party platform, which is in line with the privatization program for nationalized industries and the introduction of "personal equity plans" to encourage stock purchases by the average worker. Since Prime Minister Margaret Thatcher was re-elected and the Conservative Party received a substantial majority in Parliament in the national elections on June 11, 1987, the social security and pension changes are likely to be implemented as scheduled.

In this Issue Brief, only the changes to SERPS will be reviewed. Personal pensions and the new regulations allowing employees to opt-out of their company pension plan will be covered in the August EBRI Issue Brief on international trends in corporate and individual pension plans.

Changes in the Payroll Tax Rate and Wage Base

United States

The payroll tax rate and the wage base for U.S. Social Security is set by act of Congress with the president's signature. Future increases are already scheduled through the year 2000 (see table 2). The wage base increases each year in proportion to the increase in the average earnings level.

In 1977, legislation was enacted to restore financial solvency to the U.S. Social Security system and as part of that arrangement it provided for scheduled increases in the wage base and for increased payroll tax rates. The increases in the payroll tax rates were larger than those that would have resulted from indexing as there was a desire to generate more revenue to the system. Under the 1977 amendments to the Social Security Act, there were no payroll tax rate increases scheduled between 1986 and 1990. In 1983, Congress accelerated the effective date of some of the previously scheduled increases in the payroll tax rate, as part of an overall effort to restore solvency to the Social Security system.

Under the current provisions, there will be an accumulation of a very large trust fund between now and the early part of the next century. The trust fund will then be reduced as payments are made to the "baby boom" generation. The first members of the baby boom generation, born in 1946, will reach normal retirement age (then scheduled to be age 66) in 2012. The actions of Congress were a deliberate effort to restore solvency to the Social Security system and to build up a trust fund to be used in the next century.

Under the U.S. system, the payroll tax rate is shared equally by the employee and the employer. In Canada,
Japan, and Switzerland, the social security taxes are also split equally between the employee and the employer. In many European countries, the employer pays a higher rate than the employee. However, in the Netherlands, the employee pays the full amount for the old age benefit, although the employer makes substantial payments for other benefits.

In the United States, the total Social Security payroll tax consists of three separate payroll taxes—one for the Old-Age and Survivors Insurance program, one for the Disability Insurance program, and one for the Hospital Insurance (Medicare) program. There are changes in not only the total tax rate but in how it is split among the components. The Medicare rate is scheduled to be 1.45 percent for the employee and the employer, each, between 1986 and 2000, yet it is forecast under the current projections that the Medicare trust fund will have severe financial problems around the turn of the century.

In the United States, a 75-year projection is performed to evaluate the long-term financial condition of Social Security. This projection period is longer than that used abroad. Canada has just adjusted payroll tax rates to the Canada Pension Plan based on a 25-year plan. The original 1975 projections for the State Earnings-Related Pension Scheme in the United Kingdom were for less than 40 years, which just stopped short of the significant increase in the ratio of retirees to employed persons in 2020 to 2025 (see table 1).

**Canada**

The Canadian federal and provincial governments have recently agreed on a 25-year plan, effective January 1, 1987, to raise the payroll tax rates for the Canada Pension Plan. When the Canada Pension Plan was established in 1966 to provide an earnings-related portion to social security, the tax rate was deliberately set at a low level to avoid the accumulation of an excessively large fund before substantial benefits were required to be paid out. The new rates are shown in table 3.

These contribution rates finance only the Canada Pension Plan. The flat rate portion of social security, known as Old Age Security (OAS), is financed from general revenue. The provincial health care programs are financed by monthly premiums in most provinces and a separate contribution is made for sickness and maternity benefits.

A review of the financial status of the Canada Pension Plan by the federal and provincial ministers of finance is scheduled to be conducted every five years.

**Italy**

The basic social security system in Italy is known as the INPS (Istituto Nazionale della Previdenza Sociale). Payroll taxes are levied on total salary, even though there is a ceiling on the salary counted for benefit calculations. This does not penalize high-income employees as much as it might appear. When an

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**Table 3**

Payroll Tax Rate and Wage Base for the Canada Pension Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Payroll tax rate</th>
<th>Wage base (US $)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>1.8%</td>
<td>$ 5,250</td>
</tr>
<tr>
<td>1975</td>
<td>1.8</td>
<td>7,250</td>
</tr>
<tr>
<td>1980</td>
<td>1.8</td>
<td>11,000</td>
</tr>
<tr>
<td>1985</td>
<td>1.8</td>
<td>16,700</td>
</tr>
<tr>
<td>1986</td>
<td>1.8</td>
<td>18,700</td>
</tr>
<tr>
<td>1987</td>
<td>1.9</td>
<td>19,300</td>
</tr>
</tbody>
</table>

| Year | Increase | | |
|------|----------|---|
| 1988 | 2.0%     | * |
| 1989 | 2.1      | * |
| 1990 | 2.2      | * |
| 1991 | 2.3      | * |

Subject to Future Review

<table>
<thead>
<tr>
<th>Period</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-2011</td>
<td>0.075% per year increase</td>
</tr>
</tbody>
</table>

* Wage base is increased approximately in line with national average wages.

¹ Exchange rate: Canada $1.34 = US $1.00 as of June 10, 1987. 1970-86 wage bases converted to US dollars at the exchange rate in effect at the end of each year.
employee achieves the status of a manager, his/her contributions to the basic social security system cease, and he/she starts to contribute to a special social security system for managers in industry or commerce, which has a higher salary level for tax and benefit calculations.

The social security reform proposals recommend limiting payroll taxes to the same salary level as is used for benefit calculations. This is intended to encourage the development of employer-sponsored pension plans, which Italy now lacks. Presumably employers could design plans to be more easily integrated with social security.

The current payroll tax to the INPS for old age benefits is 17.81 percent for the employer and 7.15 percent for the employee, both on total salary. There are also numerous other required payments by employers for additional benefits such as family allowances, unemployment, and medical care.

Japan

Japan’s recent, major social security reform resulted in higher payroll tax rates to the social security system, effective April 1, 1986. The rate paid by employees (versus nonemployed persons) to the Employees’ Pension Insurance program covers the flat-rate benefit for the employee and a dependent spouse and the earnings-related benefit for the employee only. Self-employed persons and those who are not employed also pay about $50 per month directly to a bank or government office to cover their flat-rate benefit paid from the National Pension Scheme.

Male and female employees in Japan have had different payroll tax rates to social security in the past. Under earlier rules, female employees paid lower rates and received reduced benefits from social security, since they were not expected to work until retirement age. Females received a lump-sum benefit upon withdrawing from the work force, usually at the time of marriage. Now, the objective is to equalize the payroll tax rates and the benefits for male and female employees. For several years, the rate for female employees has been increased by 0.15 percent per year; this will continue until it equals the rate for male employees.

Since April 1986, the payroll tax rate for male employees increased to 6.2 percent of covered earnings, each, for the employee and the employer. The rate for female employees increased to 5.65 percent of covered earnings, each, for the employee and the employer. The former rates were 5.3 percent for male employees and 4.65 percent for female employees, each, for the employee and the employer.

The maximum covered salary is now equivalent to about $39,700 per year for male and female employees.

Reduction in the Benefit Formula

United States

In the United States, a weighted benefit formula is used that pays proportionately higher benefits to lower-paid and average-paid workers than it does to workers who pay taxes on the maximum taxable wages. The United States is quite unusual in this respect, although Greece, the Philippines, the Soviet Union, and a few smaller countries use a wage class system that awards benefits on an inverse scale to the level of the worker’s average earnings.

Most industrialized countries use a formula for their earnings-related benefit that is a variation of a percentage of earnings (averaged over a certain period and sometimes revalued) times years of contribution. Some countries require payroll taxes on total salary even though there is a ceiling on the salary counted for benefit calculations. However, removal of the ceiling on taxable wages has usually been introduced simply as a method of collecting additional revenues when a country’s social security system is in financial difficulty. In the United States, the same maximum applies to the payroll tax assessment as to the salary counted in the benefit formula.

In 1972, an automatic indexing feature was adopted in the United States, which resulted in an “unintended”

3 Managers are known as industrial or commercial dirigenti according to a formal, national job classification system.

increase in the benefits to new retirees. Therefore, in 1977, the benefit formula was modified to restore benefit levels to what they were intended to be. This resulted in a sharp reduction in benefits for some people, creating the so-called “notch effect” for people retiring after the new law took effect. Since then, the benefit formula has been relatively stable.

Most industrialized countries use a formula for their earnings-related benefit that is a variation of a percentage of earnings times years of contribution.

In the future, a reduction in the early retirement benefit is scheduled to be phased in as the normal retirement age increases gradually from 65 to 66, and then from 66 to 67, in the next century.

Italy

A proposal introduced by the labor minister in late 1986 would reduce the formula for social security retirement benefits paid from the basic social security system (the INPS). This proposal would increase the averaging period from 5 to 10 years for wages used in calculating the benefit.

Currently, the INPS benefit is 2 percent of average earnings over the last five years, times years of contribution. Earnings of the first four years are adjusted for changes in the cost of living. Earnings counted for the calculation of benefits are subject to a ceiling of about $28,300\(^5\) for 1987, even though payroll taxes are paid on full salary. Therefore, under the current system, an employee with 40 years of contributions is promised 80 percent of final 5-year average revalued salary, with salary counted up to a ceiling of $28,300 for 1987.

The ceiling on salary for calculation of benefits has been raised each year in accordance with the increase in the cost of living. The labor minister has proposed that the ceiling be increased by only 75 percent of the full increase in the cost of living in the future. It has also been proposed that the minimum years of contribution for eligibility for the social security retirement benefit be raised from 15 to 20 years.

The new Italian government elected in June 1987 will now have the opportunity to introduce new proposals to reform the social security system.

Japan

The reform of the social security system in Japan resulted in a significant reduction in future retirement benefits. The total social security benefit consists of a flat-rate component and an earnings-related portion. The reduction was imposed on both parts of the benefit. The formula for the flat-rate benefit has been:

\[
\text{\$17 \times \text{years of coverage} = \text{monthly benefit}}
\]

In the formula, years of coverage is limited to a minimum of 15 years and a maximum of 35 years.

Since April 1, 1986, the flat-rate amount used in the calculation will be reduced gradually from about $17 to $9, over 20 years.

The formula for the earnings-related benefit has been:

\[
1.0 \times \text{covered earnings} \times \text{years of coverage}
\]

The 1.0 percent in the formula will be reduced to 0.75 percent, also phased in over 20 years from April 1, 1986.

United Kingdom

When the government agreed to retain the State Earnings-Related Pension Scheme (SERPS) instead of abolishing it as proposed in its June 1985 Green Paper, it made a compromise by reducing benefits. The Social Security Act of 1986 reduced the old-age benefit formula and the benefits to widows, but it introduced parity for widowers. However, the changes will not affect current

retirees or widows or anyone retiring or becoming widowed before the year 2000.

The current SERPS formula for the old-age benefit is 25 percent of average “relevant earnings” for a person with a full career (49 years for men and 44 years for women). “Relevant earnings” is salary between about $3,400 and $25,500* per year, revalued according to a published earnings index. Only the best 20 years of an employee’s career are counted in averaging relevant earnings.

The new formula will be 20 percent of relevant earnings averaged over an employee’s whole career, not just the best 20 years; exemptions will be made for years of no earnings due to illness or caring for children.

Since SERPS was only introduced in April 1978, no one actually receives a full career benefit, as yet. Current retirees receive a benefit based on a formula of 1.25 percent of relevant earnings, times years of payroll tax payments.

The new formula will be introduced gradually for persons first retiring after April 6, 2000; the 25 percent will be scaled down gradually by 1/2 percent per year until it reaches 20 percent for persons retiring after April 6, 2009.

The other major change to SERPS affects widows and widowers. Current rules allow a widow to inherit 100 percent of her deceased husband’s retirement benefit, provided that his benefit and any benefit that she has earned in her own right together do not exceed the maximum SERPS benefit payable to one person.

The new rules will allow a widow or widower to inherit only 50 percent of his or her deceased spouse’s benefit. It will affect only those persons whose spouse dies on or after April 6, 2000.

Change in Retirement Age

United States

The United States has already legislated an increase in the normal retirement age from age 65 to age 67, to be phased in between the year 2000 and 2022, for both males and females.

The United States is unusual in scheduling its normal Social Security retirement age to be raised above age 65.

In the year 2000, the age at which the full retirement benefit from Social Security can be claimed will be increased by two months each year until it reaches age 66 in 2005. It remains at age 66 until the year 2017 when it is again raised by two months each year until 2022. From 2022, the normal retirement age for both males and females will be age 67.

The United States is unusual in scheduling its normal Social Security retirement age to be raised above age 65. Only Norway, Denmark, and Iceland currently have normal retirement ages in excess of age 65, and these countries have had a normal retirement age of 67 for many years. Ireland does set its normal retirement age at age 66, but it allows the full benefit from social security to be paid at age 65, providing the person is actually retired; at age 66, the benefit is paid regardless of continued employment.

Canada

Canada changed to a flexible retirement age for the Canada Pension Plan beginning January 1, 1987. Retirement will now be permitted between ages 60 and 70 at the employee’s option. However, benefits will still be calculated for the normal retirement age of 65, and the benefit will be reduced by 0.5 percent for each month the employee is less than age 65 when benefit payments start. The benefit will be increased by 0.5 percent for each month the employee delays receipt of the pension after age 65.

Employees under age 65 are required to “substantially cease working” if they choose to receive their CPP.

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benefit early. Employees over age 65 are not required to retire in order to receive the CPP benefit.

France

France is one of the few major countries to significantly lower the retirement age at which full old age benefits from social security are payable. In April 1983, the retirement age was lowered from age 65 to age 60. The new provisions allow a person with 37.5 years (maximum) of coverage to receive the full benefit of 50 percent of covered earnings over the best 10 years at age 60; earnings are revalued for increases in national average wages. Under the previous rules, a benefit of only 25 percent of covered earnings was available at age 60, even for persons with a full 37.5 year career; the 50 percent benefit was not available until age 65. A 75 percent benefit, which was formerly available for retirement deferred until age 70, has been abolished.

Even in 1980, France had serious demographic issues for its social security system with its population over age 65 representing 32.2 percent of its economically active population (see table 1). The retirement age was lowered in an attempt to alleviate unemployment. It was considered better social policy to encourage older workers to leave the work force and to have their jobs filled by younger workers, than to have a large number of unemployed young people who had rarely held a job at all. Even if the government had to transfer funds to the social security system to pay the extra benefits, it was assumed that savings would be made in unemployment benefits.

For a person to receive the social security benefit at age 60, it is necessary to cease employment with the original employer; the objective is to open up a job slot for an unemployed person. The recipient of the old age pension can take employment with another firm however; if he does so, a special levy is applied to his earnings, a “solidarity tax”, which is designated for the unemployment fund.

Italy

Italy’s social security system now allows male employees to retire at age 60 and female employees at age 55. The recent proposals for social security reform would raise the retirement age to 65 for both males and females, phased in over a lengthy period.

Japan

Japan recently raised the retirement age for women from age 55 to 60, thus equalizing it to the retirement age for men. The change became effective from October 1986, but will be phased in over a 15-year period.

Switzerland

A proposal was introduced into Parliament in early 1987 to increase the normal retirement age for female employees from age 62 to age 63. The normal retirement age for male employees would remain at age 65. In addition, the proposal would permit both male and female employees to take early retirement one year prior to normal retirement age—therefore, at age 62 for females and age 64 for males. There are currently no provisions for early retirement benefits from social security in Switzerland.

Early Retirement/Disability Benefits

United States

In the United States, early retirement benefits are available at age 62 at a reduced rate. Increased benefits are paid if retirement is deferred between ages 65 and 69. The early and deferred retirement provisions are viewed as an option to be taken at the choice of the employee. Disability benefits are paid to persons who have a severe disability preventing them from engaging
in substantial gainful employment; the disability must be expected to last at least one year or to result in death.

In some European countries, early retirement for workers is viewed by the government as a method of alleviating unemployment. Older workers are encouraged to leave the work force and make their jobs available to unemployed persons. (See discussion above under Retirement Age for France.) Often a special early retirement program is introduced for a limited period, which is separate from the standard retirement provisions under the social security system. The special program is financed from general revenue or by a special unemployment payroll tax.7

A significant trend, developing from the financial difficulties for social security systems, is the shifting of the burden for retirement income from the public to the private sector—both to employers and to individuals.

In the United States, any reduction in work force is considered primarily a private-sector issue. The Age Discrimination in Employment Act in the United States, however, prohibits discrimination in employment for persons age 40 and older.

European countries do not have similar age discrimination legislation, but work force reductions that affect employees with seniority are likely to be opposed by the unions. In some European countries, disability benefits are awarded to persons without strict eligibility conditions, especially to older unemployed persons whose unemployment benefits have expired. This makes it more difficult to gauge the financing needs of each of the separate social security programs.

Italy

Unemployment and a generous interpretation of "disability" by social security administrators has resulted in large numbers of Italian people receiving disability benefits when they are not actually disabled. In 1984, it was determined that about 9 percent of the total population of Italy received disability benefits from social security. New restrictions on eligibility for disability were introduced in 1985 in an attempt to curb the excesses.

Italy also pays welfare benefits to low-income people from the same fund as its social security benefits. This makes it difficult to structure an effective payroll tax and benefit rate exclusively for earnings-related retirement benefits. The recent proposals suggested separating the social security and the welfare systems.

United Kingdom

The United Kingdom has had various versions of a Job Release Scheme since 1977. Under this program, a male who is age 62-64, a female who is age 59, or a disabled male who is age 60 (normal retirement age is 65 for males and 60 for females) is eligible to receive a weekly benefit from the Job Release Scheme providing he or she retires and is replaced by someone who was previously unemployed. Receipt of this benefit does not affect eligibility for normal retirement benefits at the appropriate age. In 1983, an option was added that allowed the employee to change to part-time work, providing an unemployed person was hired for the other half of the job.

Conclusion

The review presented here of the status of social security reform in Canada, France, Italy, Japan, Switzerland and the United Kingdom shows that:

All countries are facing the prospect of an aging population, which will put stress on the financing of their social security systems.

France and Italy have serious financial deficits in their social security programs now.

7 Further information and an inventory of special early retirement, disability, and unemployment programs are included in "Early Retirement Schemes and Unemployment," (Economic Commission for Europe, 1986).
Canada and Japan have already scheduled the necessary adjustments to keep their social security systems financially stable.

Switzerland conducts regularly scheduled reviews, lasting several years each, of its social security system; the results of the current review are not yet available. Action taken in previous years to limit expansion of the social security system is, however, likely to mean that the financing burden will be manageable.

The United Kingdom has spent three years on proposals and legislation relating to the State Earnings-Related Pension Scheme. The current revisions are intended to keep the system in financial balance in the future.

A significant international trend, developing from the financing difficulties for social security systems, is the shifting of the burden for retirement income from the public to the private sector—both to employers and to individuals.

Switzerland made a formal decision in this matter when it introduced its mandatory pension plan legislation, effective January 1985, for employers. In addition, it introduced new tax incentives for individual retirement savings in January 1987. Canada has had an established system of corporate and individual retirement plans for some years, but has current proposals to regularize the tax benefits among all varieties of private-sector benefit plans.

Corporate pension plans are being established in Italy for the first time, even without official encouragement from the government. France has plans underway to introduce personal retirement savings plans for the first time, probably next year.

The United Kingdom has made the most dramatic policy change with official encouragement of individual responsibility for retirement benefits, by means of personal pension plans which can be contracted-out of both the State Earnings-Related Pension Scheme and, under certain conditions, from an employer’s pension plan. Personal pension plans will be available beginning in January 1988.

It may be significant that the two countries in this review (excluding the United States) with the least social security financing difficulties, Canada and Switzerland have a diversified approach to providing retirement income. Both countries have a basic social security system, an earnings-related benefit (the Canada Pension Plan in Canada, minimum mandatory corporate pensions in Switzerland), voluntary corporate pension plans, and tax incentives for individual retirement plans.

The countries with the most social security financing difficulties, France, Italy, and the United Kingdom are all moving in the direction of shifting some of the responsibility for retirement income from the public to the private sector.

Japan is somewhat outside this trend, having dealt with its social security financing problems very directly by simply reducing benefits and increasing payroll taxes without making significant changes in the private pension system.

International trends in corporate and individual retirement plans will be the subject of the August 1987 EBRI Issue Brief.

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