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Social Security Privatization Around the World

by
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Introduction

Social security privatization was practically unheard of twenty years ago. While most countries of the world continue to rely on traditional social security systems, an increasing number, primarily in Latin America and Central and Eastern Europe, have privatized at least part of their social security systems. The term “privatization” is used here to mean replacing at least part of the publicly run social security system with a privately managed and funded one. Mandatory individual accounts are included within this definition.

Purpose

This Issue Paper surveys social security privatization around the world. It presents a framework for understanding the approaches that countries have used to privatize social security. It then surveys the countries that have done so. Based on this review of the international experience, it discusses issues that have arisen in the course of privatization, including high administrative costs, delay in crediting accounts, and the lack of predictability of benefits due to financial market risks.

Methodology

To organize the survey of social security privatization into groups of countries with similar programs, this Issue Paper divides the world into five regions, based on similarities in social security old-age benefit programs within these regions. The regions are Africa and the Middle East, Asia and the Pacific, Latin America and the Caribbean, Central and Eastern Europe and Central Asia, and the high-income countries of the Organization for Economic Cooperation and Development (OECD). High-income countries belonging to the OECD are discussed as a group, rather than being discussed with the countries in the geographic region where they are located, because of fundamental similarities in social security programs generally across those countries. Recent additions to the OECD in Latin America, Asia, and Central and Eastern Europe, however, are included with the other countries in their respective regions because their relatively lower income makes them more typical of the countries of their regions. Except for the contracting-out feature in the provident fund in Gambia, no African or Middle Eastern countries have fully or partially privatized social security; thus those regions are not discussed. The regions are discussed in increasing order of social security coverage of the labor force. Coverage rates are one measure of the extent of development of a social security system.

Principal Findings

1. Risk. Defined contribution individual accounts are riskier for workers than defined benefit social security programs in most countries, causing the level of benefits they provide to be unpredictable. A number of systems where the privatized plan provides a substantial part of retirement income have introduced rate of return guarantees in an attempt to control the financial market risk. These guarantees typically reduce the difference in rates of return received by workers at a point in time by restricting the portfolios of the pension providers, but they do not protect against prolonged periods of low rates of return.
2. Administrative Expenses. To reduce administrative expenses, Sweden uses a centralized collection agency that collects all contributions and maintains records of accounts. This system is considerably less expensive to administer than the voluntary carve-out system of the United Kingdom. Still, administrative expenses in Sweden are considerably higher than in a traditional social security system.

3. Voluntary Carve Outs. The experience in the United Kingdom indicates that it is difficult to structure voluntary carve outs so that workers at all ages will be better off taking the voluntary carve out than remaining fully in the social security system. In the United Kingdom, the terms of the voluntary carve out vary by the age of the worker. Many workers in the United Kingdom have been made worse off by taking the voluntary carve out, and currently, some insurance companies are advising their clients to remain fully in the social security system.
4. Transition Costs. While the term “transition” suggests a short period, the transition period typically lasts 50 or 60 years. In Chile, the annual transition cost peaked at about 5 percent of gross domestic product (GDP) during the first decade of reform, but after more than 40 years it is projected to still exceed 1 percent of GDP. Some countries have reduced transition costs by reducing the value of benefits in the pay-as-you-go social security system. For example, Argentina has raised the early retirement age at which those benefits could be received so that the level of annual benefits that were formerly receivable at a younger age would be receivable at the new early retirement age. This change is not an actuarial adjustment of benefits for postponed retirement, but rather pushes back the age at which benefits are received.
5. Payout Choices. It is difficult for individual account plans to replicate some of the payout features of social security defined benefit plans. For example, Chile does not provide gender-neutral annuitization or “free” spousal and survivor benefits.

Conclusions

An increasing number of countries have privatized part or all of their social security old-age benefit programs. Social security privatization using individual accounts has occurred two ways. Voluntary carve-out plans are used in the United Kingdom and Japan. Mandatory plans are used by a number of Latin American countries, such as Chile, and by Sweden. The experience of the United Kingdom with voluntary carve-out accounts, the type that has been proposed for the United States, has indicated a number of problems with the functioning of these accounts, including a long delay in the crediting of individual accounts, high administrative costs, and a worsened economic situation for many workers who have chosen to participate in those accounts. In addition, political risk is inherent in voluntary carve-out accounts. The British government changes the generosity of the carve-out arrangement every five years to adjust to changing interest rates and mortality rates. In both the United Kingdom and Japan, the percentage of the workforce participating in voluntary carve-out accounts has declined. While traditional defined benefit social security programs have encountered problems, problems have also been encountered in the privatized social security systems.

Introduction

Social security privatization was practically unheard of twenty years ago.[1] Now, an increasing number of countries, primarily in Latin America and Central and Eastern Europe, have privatized at least part of their social security systems. The term "privatization" is used here to mean the replacement of at least part of the publicly run social security system with a privately managed and funded one or the mandating of an individual account plan.

This paper surveys social security privatization around the world, reviewing ways in which privatization has occurred. It surveys some countries in different parts of the world that have fully or partially privatized social security, and analyzes several issues that have arisen.

Ways of Privatizing Social Security

Countries have used two approaches for privatizing social security: voluntary carve-out plans and mandatory individual accounts. A carve out is a diversion of a worker's social security contributions into an individual account that results in a reduction in the worker's social security benefits, with offsetting benefits being provided by the individual account. Voluntary carve-out plans, called contracted-out plans in British terminology, are used in the United Kingdom and Japan. With a voluntary carve out, workers voluntarily reduce their social security contributions in exchange for making contributions to an individual account plan. Mandatory individual account plans are used by a number of Latin American countries, such as Chile.

In some countries, privatization plays a minor role in the retirement income system, while in others it plays a dominant role. The role of privatization within the retirement income system is often expressed by using the framework of tiers of programs. The World Bank (1994) has favored a three-tier approach for retirement income systems: the first tier is a basic government-run benefit program designed to alleviate poverty, the second tier is a mandatory funded privatized program, and the third tier is a voluntary funded program. The debate over privatization has focused on the second tier, with full privatization considered to be replacement of the social security old-age benefit program with a mandatory privately managed funded program.

Seven Fundamental Risks in Individual Account Pension Plans

Most social security privatization has occurred using individual account plans. Individual account plans are generally more risky for workers than traditional social security programs, which are defined benefit plans. Seven types of risk affect participants in individual account plans. Six of these risks are greater for participants in individual account plans than for those in defined benefit social security plans. Five of the risks do not even exist for participants in traditional defined benefit social security plans.

1. Investment Risk. Investment risk arises in financial markets. It can be reduced at the expense of reducing expected rates of return. This risk is borne by the plan sponsor in well-funded defined benefit plans but by the individual worker in defined contribution plans. Defined benefit plan sponsors generally bear all the financial market risk, but workers may bear some financial market risk with employer-provided defined benefit plans in the case of firm bankruptcy. No risk pooling occurs among the participants in individual account plans (Modigliani and Muralidhar 2004).

2. Agency Risk. Agency risk arises in financial markets because workers' investments are handled by agents who may improperly manage the workers' investments. These agents include mutual funds and the corporations in which the investments are made. This

risk is borne by the plan sponsor in defined benefit plans but by the individual worker in defined contribution plans.

3. Individual Management Risk. Individual management risk arises from worker errors in managing pension investments. Evidence has accumulated that many workers systematically make errors in managing pension investments, and that these errors reduce their retirement income (Turner 2003). Individual risk does not arise in traditional defined benefit social security plans but does arise in individual account plans.

4. Annuitization Risk. When workers annuitize individual account plans, they bear the risk of reduced annual benefit levels caused by changes in interest rates. When interest rates are low, the level of annuitized benefits is also low. This risk, borne by workers in individual account plans, typically does not arise for workers in defined benefit plans which provide benefits defined through a formula, and is not affected by interest rates at the point of retirement.

5. Longevity Risk. Longevity risk is the risk that the worker will live longer than expected and have insufficient funds. This risk is borne by the plan sponsor in defined benefit plans but by workers in individual account plans up to the point of retirement when they annuitize their accounts. Longevity risk is entirely borne by the worker in individual account plans when those plans do not annuitize.

6. Replacement Rate Risk. Replacement rate risk is the risk that workers will have a lower replacement rate than expected. The replacement rate is the percentage of pre-retirement earnings that are replaced by retirement income. Replacement rate risk is affected both by financial market risk and by risk in the worker's pre-retirement earnings. Traditional social security programs tend to provide a determinable replacement rate, while the replacement rate provided by an individual account plan may be highly variable, depending on the variability in

rates of return of the portfolio in which the account is invested. This risk is borne to some extent by the individual worker (due to uncertain wages) in defined benefit plans and is completely borne by the worker in individual account plans.

7. Policy Risk. Policy risk arises from changes in national tax and retirement income policy that affect the level of benefits received from a pension. Policy risk arises for participants in both defined benefit and individual account plans. To some extent, policy risk arises for both types of plans due to the effects of increased life expectancy. It is the only source of risk that is greater in most countries for participants in defined benefit plans than in mandatory individual account plans. However, considerable policy risk is a feature of voluntary carve-out individual accounts because governments have changed the parameters affecting the value of taking the carve out.

Privatization Around the World

To survey social security privatization, this paper divides the world into five regions based on similarities in social security old-age benefit programs within these regions: Africa and the Middle East, Asia and the Pacific, Latin America and the Caribbean, Central and Eastern Europe and Central Asia, and the high-income countries of the Organization for Economic Cooperation and Development (OECD). High-income countries belonging to the OECD are discussed as a group rather than in the geographic region where they are located because of similarities in the social security programs across those countries. Recent additions to the OECD in Latin America, Asia, and Central and Eastern Europe are included with the other countries in their regions. Except for the contracting-out feature in the provident fund in

Gambia, no African or Middle Eastern countries have introduced a privatized aspect to social security; thus that region is not discussed.

The regions are considered in the order of the rate of social security coverage of the labor force, starting with the lowest rate of coverage.

Asia and the Pacific

In Asia, social security privatization has been limited to a few countries. Hong Kong, though now part of China, maintains its own social security system. In 2000, it began a mandatory individual account system in which workers and employers each contribute 5 percent of wages into funded individual accounts. Workers may voluntarily contribute larger amounts. The pension fund manager is chosen by the employer, and employees can choose only from among the funds offered by the manager the employer chooses (Fox and Palmer 2001). This program maintains a fund to compensate participants for losses caused by illegal activities by fund managers. Hong Kong's is not a multi-tier system since, when fully mature, the individual account system will be the primary source of retirement income for most workers. It provides lump-sum benefits, as is common in Asia's provident funds (national savings plans). Hong Kong maintains a means-tested program for poverty relief.

Income redistribution from higher-income to lower-income workers as a form of social insurance is frequently a goal of traditional social security programs but generally not of privatized systems. While privatized individual accounts can be structured so that income redistribution occurs, individual accounts generally are structured as in Hong Kong so that there are no income transfers among account holders at different income levels.

A number of countries that were formerly British colonies have provident funds (Gillion et al. 2000). These provident funds are national mandatory savings plans managed by government institutions that generally pay benefits in a single lump-sum payment. Contracting out is a feature of the provident funds in India, Sri Lanka, Nepal, and Fiji.

Latin America and the Caribbean

Until the 1981 pension reform in Chile, no country had completely replaced a publicly administered social security program with a privately administered one. After observing the Chilean social security reform for more than a decade, a number of other Latin American countries have introduced individual accounts as part of their social security system. The first countries to do so were Peru (1992), Colombia (1993), Argentina (1994), Uruguay (1996), and Mexico (1997). They were followed by two of the poorest countries in the region--El Salvador (1997) and Bolivia (1998). Since then, these countries have been joined by Costa Rica (2000) and the Dominican Republic (2003), representing nearly half the population of Latin America (Gill, Packard, and Yermo 2005).

The Latin American countries adopting individual account plans have taken three approaches (Mesa-Lago 1997). First, directly following Chile, the countries of Bolivia, El Salvador, and Mexico have closed their social security system to new entrants and substituted an individual account system (mandatory replacement). All other Latin America countries that have adopted social security reforms have retained their traditional social security system in some form. Second, Uruguay has introduced a mixed system. All workers participate in both a traditional social security program, which was reduced in the reform but is still dominant, and a mandatory individual account program. Uruguay's program provides an earnings-related benefit. Low-income Uruguayan workers only participate in the traditional social security program, and do not participate in the privatized individual accounts. Third, Colombia and Peru have two competing programs, with workers choosing to participate in one of them. These two countries have a form of contracting out, where workers have a choice of whether to participate in the government-run system or in a substitute privately managed plan.

These programs provide fully funded individual accounts managed by private sector pension fund managers. Sometimes the government also operates a pension fund management company that competes with the private companies to attract workers as clients. The benefits the workers receive depend on the investment returns on their accounts as well as various fees, which reduce the level of benefits. In Chile, for example, workers choosing an annuity purchase it from an insurance company for an administrative fee averaging 5.5 percent of the annuity's value (Kay and Kritzer 2001)

Related to the issue of risk is whether privatized systems incorporate financial guarantees. Many countries have systems of privatized individual accounts that incorporate rate of return guarantees--for example, Argentina and Chile. Guarantees tend to be provided in countries, such as Chile, where the privatized part of social security is a relatively large share of total retirement income. In Chile and Argentina, no pension fund can credit its account holders a rate of return less than a certain amount below the average for all pension funds. These guarantees do not protect workers against prolonged periods of low returns (Turner and Rajnes 2001).

Because of widespread contribution evasion, the mandatory individual account plans in Latin America have generally failed to cover more than half of the labor force, and because the uncovered half has lower income, these plans have failed to address problems of poverty in old age (Gill, Packard, and Yermo 2005). It was originally thought that mandatory individual account plans would be attractive to workers, leading to an increase in coverage rates (World Bank 1994), but that has not happened. Coverage rates have ranged from roughly 10 percent to 60 percent of the economically active population (Gill, Packard, and Yermo 2005). Possible explanations are that the high mandatory contribution rates have discouraged young and poor workers, that flat fees have caused the fees to be high for poor workers, and that other forms of saving are more attractive because they are more liquid. However, another problem with the mandatory account plans in Latin America is that they have discouraged the development of voluntary private savings (Gill, Packard, and Yermo 2005).

Because Chile was the first to reform its social security system, and continues to be a leader in making changes, it is considered in more detail than the other countries.

<u>Chile</u>. In 1981, the military dictator Pinochet introduced a new system that transferred responsibility for financing old age pensions from the pay-as-you-go social security system to funded individual accounts managed through the private sector. With this arrangement, Chile has largely privatized its social security system. Unlike its old system, which entrusted collection and distribution of funds to public institutions, private corporations, known as *Administradoras de Fondos de Pensiones* (AFPs) or Pension Fund Administrators, administer the new system.

Workers contribute 10 percent of their pre-tax salary up to a ceiling to a private pension fund of their choice. An additional amount--ranging from 2.5 percent to 3.74 percent of payroll--finances disability benefits, pre-retirement survivor benefits, and general administrative expenses, including a commission. AFPs may also charge fixed commissions. Employers do not contribute.

Fees have been high. For workers retiring in 2000, 28 to 33 percent of their cumulated contributions went to pay fees (Gill, Packard, and Yermo 2005). The administrative costs in the Chilean system in 1998 averaged 1.36 percent of account balances, not including the costs of providing benefits. These costs compare to costs of about 0.2 percent of assets charged individuals by large indexed mutual funds in the United States. According to one study, Chile currently has the lowest administrative costs of any Latin American mandatory system due to its large amount of assets and longer experience (James, Smalhout, and Vittas 2001). These payments are tax deductible, and thus the government subsidizes the pension system through the tax system.

Chile does not regulate the level of commissions AFPs charge. While proponents of privatization anticipated that competition would drive down fees, in Chile there appears to be little price competition based on the level of commissions, with none of the AFPs advertising based on price. The AFPs have competed for clients based on advertising about the service provided or based on building a brand name image. Competition, however, does seem to have reduced the number of AFPs. Many have been taken over by other providers or have gone out of business. At one time there were 23, but the number has fallen to 6.

While investment choice is thought to be a hallmark of social security privatization, of the Latin American countries that have instituted mandatory individual account systems, Chile thus far is the only one to provide a choice of investments (Gill, Packard, and Yermo 2005). All other countries offer a choice of mutual funds that provide similar investment portfolios. In 2002, Chile introduced a multifund structure that allows younger workers to choose among funds with different percentages invested in equities.

An outcome of the financial market risk in the Chilean pension system is that, because of differences over time in the rates of return in financial markets, there have been large differences in rates of return received by different cohorts, with the cumulative average rates of return ranging from 4 percent to 11 percent (Gill, Packard, and Yermo 2005). In part because of the varying rates of return over time, it is difficult for Chilean workers to predict what their retirement benefits will be.

Private sector investment management of a funded social security system is generally viewed as the most important aspect of social security privatization. However, it is only one of several retirement income functions that can be privatized. Other functions include record keeping for beneficiaries' accounts, choice of fund managers, receipt of contributions and disbursement to fund managers, annuitization of benefits, disbursement of benefits, and insurance of promised benefits. While proponents of privatization favor private sector provision over government provision of services, all privatized social security systems maintain some government involvement, and sometimes the involvement is extensive (Turner and Rajnes 1998).

Even though the Chilean pension system is largely privatized, the government still maintains a large role. For workers with at least 20 years of contributions, it provides a guaranteed minimum benefit if their accumulated account balance is insufficient to provide a minimum benefit. Many Chilean workers do not qualify for that benefit because of their irregular employment. For workers with fewer than 20 years of contributions, the government provides an anti-poverty benefit to a fixed number of workers. Also, if the pension fund managers are unable to guarantee the mandatory rate of return, the government guarantees a minimum rate of return relative to the average rate of return earned by all plans. In that case, the funds are transferred to a different private sector fund manager (Turner and Rajnes 2001).

Transition costs that arise in privatizing social security worsen the financial situation of the traditional social security program. In establishing a privatized system, the government must determine who should pay the transition cost and how it should be financed. A transition cost arises when privatizing part or all of an existing pay-as-you-go social security system because privatization diverts contributions from the traditional system into individual accounts. Additional funding during the tradition is needed because benefits must still be paid to the existing beneficiaries, as well as to future beneficiaries (current workers) who have accrued benefits in the traditional system. The transition cost can be large: in Chile, the unfunded pension liability, which is the total transition cost, has been estimated to equal 100 percent of GDP at the time of the reform (CBO 1999). The annual transition costs to the Chilean government budget peaked at about 5 percent of GDP during the first decade of reform, but after more than 40 years it is still projected to exceed 1 percent of GDP (Edwards 1998).

Chile has financed the transition costs in part by achieving government surpluses in the rest of the budget and using general government revenue. In Chile and Bolivia, government-owned enterprises have been privatized, and the proceeds have been used to help finance the transition. Transition costs can also be financed by government general revenue obtained by increased borrowing. Some countries have limited the problem of financing the transition cost by allowing workers already participating in the pay-as-you-go system to continue participating in that system. Chile also did this. Some countries have limited the transition cost by reducing the value of the benefits accrued in the pay-as-you-go system. Chile and Argentina reduced the value of the accrued benefits in the old social security system by raising the age at which those benefits could be received.

Central and Eastern Europe and Central Asia

Following the 1991 break-up of the Soviet Union, a number of countries in the former Soviet Union and the Soviet bloc have partially privatized their retirement income systems.

Both Poland and Latvia have established mandatory pay-as-you-go plans called notional defined contribution plans as the first tier of their retirement income systems and mandatory funded individual account plans as the second tier. With a notional defined contribution plan, each worker has an individual account that is credited with contributions and investment earnings. The countries that have established these plans have all operated them on a pay-as-you-go basis, with current workers' contributions used to pay current retirees' benefits. The systems often also have assets in a buffer fund to ensure that there will be adequate funds to pay benefits during economic downturns when contributions into the system may decline.

In 1998, Hungary established an individual account system collecting contributions of 8 percent of workers' pay while maintaining a defined benefit system as the primary system with contributions of 22 percent, split between employers and workers. A key difference between the reform in Poland in 1999 and that in Hungary is that Poland completely restructured its social security system, instituting the notional account system, while Hungary made little change in its existing system. The administration of the systems also differ: in Poland, funds for the individual accounts are transferred to the social security administration, which acts as a central clearinghouse, and are then disbursed to the individual fund managers, while in Hungary the contributions are transferred directly from employers to the mutual funds (Fultz 2002).

Other countries in the region have also introduced individual account pensions. Beginning in 2004, Russian employees can allocate part of their employer's contributions to a private pension fund, rather than keeping the money in the State Pension Fund. Starting that year, 4 percent of pay can be paid to private funds, increasing to 6 percent in 2006 (Sandul 2002). Kazakhstan, an oil-rich former Soviet republic, reformed its social security system in 1997 by requiring workers to contribute 10 percent of their wages to privately managed individual retirement accounts. It phased out its defined benefit social security system, so workers rely on a single program. Croatia, Estonia, and Bulgaria also introduced funded individual account systems in 2001 (Fultz 2002). Macedonia legislated a reform in 2000, with new entrants to the labor force being covered in 2003.

OECD

While several of the traditional OECD countries have mandated employer-provided pensions as add ons to social security, few have privatized social security. Contracting out as a form of voluntary privatization occurs when workers are allowed to reduce their social security contribution in exchange for participating in a funded employer-provided defined benefit plan. It is permitted in Japan for defined benefit plans and in the United Kingdom for both defined benefit plans and individual account plans (Blake and Turner 2005).

Rather than privatizing social security, a number of countries in the OECD have mandated employer-provided pensions through law, or have effectively mandated them through widespread labor contracts. Countries with employer-provided pensions mandated by law include Australia and Switzerland. Denmark, Finland, Netherlands, and Sweden mandate private pension coverage for most workers through labor agreements between employers and unions.

Sweden, the United Kingdom, and Japan

Sweden, the United Kingdom, and Japan are examined because of the similarities taken by those countries to approaches that might be tried in the United States.

Sweden. In 1994, Sweden chose a complete reform of its social security system based on a notional defined contribution plan and a mandatory funded individual account system. It levies a contribution rate of 18.5 percent of earned income, up to a ceiling income. Of this amount, 16.0 percent finances the notional defined contribution plan (Turner 2004).

Sweden mandates funded individual accounts, with a contribution of 2.5 percent of salary. It has designed these accounts to have lower administrative costs than the mandatory individual accounts in Latin America, but as a consequence, it takes, on average, 18 months from the beginning of the tax year for the workers' contributions to be credited to their accounts (Sundén 2004).

Countries must consider the extent to which worker choice is allowed in privatized systems. Generally, the greater the range of worker choice concerning investments and benefit options, the greater the system's administrative cost. Also, a greater range of choice of investment options may result in a greater range of levels of retirement income as workers experience different investment outcomes.

The Swedish system is unique in allowing workers a large number of investment options. Starting in 2000, Swedish workers were allowed to choose from 460 pension funds to manage their pension investments. That number has grown to nearly 700. Perhaps because many workers find the large number of funds overwhelming, but also because most new participants are young, more than 90 percent of new participants do not choose any and are placed in the default fund (Sundén 2004). The default fund is largely invested in equities and does not have any provision for reducing the proportion invested in equities as workers near retirement.

Because it is the most popular fund, accounting for roughly a third of the assets in the Swedish individual accounts plans, the default fund plays an important role in the Swedish system. The government manages the default fund, and because of its investment policies concerning corporate behavior it does not invest in some well-known companies, such as Coca-Cola. Because of the downturn in world financial markets, the total return for the default fund was -10.6 percent in 2001 and -26.7 percent in 2002. This compared to a total return for the capital-weighted average for all the other funds within the mandatory system of -10.6 percent in 2001 and -33.1 percent in 2002 (Sjunde Ap-fonden 2003).

Sweden is the only country with mandatory individual accounts in which the government is the sole provider of annuities. The government guarantees a minimum rate of return of 2.7 percent in calculating annuities (National Social Insurance Board 2002). This guarantee reduces the interest rate risk to participants of converting their account balances, but it increases the prospective cost to the government of providing the accounts.

The total administrative fee averaged 0.95 percent of assets in 2000, the first year the system was in operation (Palmer 2001). That does not include the cost of paying benefits because few workers were eligible yet to receive benefits. The total fee is expected to decline considerably as a percentage of assets as the assets within the system grow.

United Kingdom. In 1986, the United Kingdom passed a law permitting contracting out from the State Earnings-Related Pension Scheme (SERPS) using an individual account plan. Previously, employees could contract out only with defined benefit plans. The law enabled employees to contract out of SERPS or their occupational pension plan and establish a personal pension, called an Approved Personal Pension (APP). With APPs, employees must purchase an annuity from an insurance company at retirement. Contributors to APPs are permitted to rejoin social security (SERPS) if they wish.

With a voluntary carve out, workers reduce their contributions to the traditional social security program. In exchange for a reduction in both current taxes and future social security benefits, workers are obliged to contribute to an individual account from which they will receive future benefits. Governments face financial risks in setting the generosity of the terms of the trade-off between the reduction in contributions versus the reduction in future social security benefits. The British government initially established a favorable trade-off for workers to encourage them to choose voluntary carve outs. It subsequently estimated that the present value of the reduction in future state benefits was £5.9 billion (in 1988 prices) lower than the cost to the government in incentives provided to take the voluntary carve out. The cost to the government in incentives to take the voluntary carve out was roughly twice as great as the savings to the government through reduced benefit payments (Budd and Campbell 1998).

Defined benefit social security plans and individual account plans generally differ in their accrual pattern over an individual's work life. For plans that are equally generous at retirement age, generally an individual account plan accrues benefits more rapidly at young ages while a defined benefit plan accrues benefits more rapidly at older ages near retirement. The United Kingdom initially had a flat benefit offset that was the same for workers of all ages, but to deal with this problem of different incentives at different ages, the United Kingdom now uses an age-related benefit offset to provide a financial incentive to discourage workers from contracting back into the state system at older ages.

The benefit offset is the amount the government pays into the worker's individual account. The government collects the full amount of the social security tax from all workers. For workers who take the voluntary carve out, the amount the government contributes to their individual account is higher for older workers than for younger workers. In 2001-02, a 20-year-old taking a voluntary carve out received a 4 percent rebate (benefit offset amount) into his or her individual account, while a 50-year-old received the maximum rebate of 9 percent. At age 20, the value of the benefit offset from social security is worth four times the amount of the social security (SERPS) benefit foregone.

The size of the benefit offset is re-evaluated by the Government Actuary every five years to take into account changes in life expectancy and interest rates that may necessitate a change in the rebate. The benefit offset amount fell during the late 1990s, but rose in 2002-03. Currently, major insurance companies are advising their clients not to take the contracted out benefit because the benefit offset has been set too low. Age-related benefit offsets, as used in the United Kingdom, are complex (varying by single year of age), expensive to administer, and poorly understood by workers.

It is generally difficult for individual account plans to replicate some of the payout features of social security defined benefit plans, such as gender-neutral annuitization, cost-of-living indexation, and "free" provision of spousal and survivor benefits. Of these, the only feature the individual accounts in the United Kingdom provide are cost-of-living indexation. Contracted-out accounts follow standard insurance practice and provide survivor benefits to married couples by reducing the monthly benefits paid while both husband and wife are alive. While both partners are alive, married couples receive monthly benefits that are 85 to 90 percent of what similarly situated single people receive in order to pay for benefits for the surviving spouse. By comparison, U.S. Social Security provides many married couples a benefit 150 percent larger than that of a single person.

The situation of many workers has been made worsened by their decision to enroll in personal pensions and contract out of social security. This outcome has provoked a major scandal concerning the responsibility of financial institutions that "mis-sold" individual account pensions by encouraging workers to contract out (Gillion et al. 2000).

The percentage of the workforce contracting out declined from 69 percent in the early 1990s to 61 percent in the early 2000s (Pensions Policy Institute 2004). In 2004, 500,000 people abandoned VCO pensions and returned to the state system (Cohen 2005).

Japan. In Japan, voluntary carve outs from social security can be done only using employer-provided defined benefit plans. Nonetheless, aspects of the Japanese experience are relevant for assessing voluntary carve outs using individual accounts. In any type of carve-out system, it is difficult to calibrate the requirements for the carve-out plan. In Japan, many employers have decided that they are unable to obtain the financial rate of return necessary to provide the benefits required of voluntary carve-out plans. The percentage of the Japanese labor force participating in voluntary carve-out plans has declined from a peak of 40 percent in the mid 1990s to 18 percent in 2004 (Takayama 2005). Thus, like in the United Kingdom, there has been a large decline in the percentage of the workforce participating in voluntary carve outs.

Policy Lessons

The President's Commission to Strengthen Social Security (2001) proposed a type of privatization that maintains a traditional but sharply reduced social security benefit and provides a small individual account as a voluntary carve out from the basic benefit. The experience of other countries with privatization provides a number of lessons.

1. Administrative Expenses. High administrative expenses have been an issue with individual accounts. To reduce such expenses, Poland and Sweden use a centralized collection agency that collects all contributions. While that approach requires a substantial government involvement, it reduces administrative costs, and thus appears to be better than other administrative approaches, especially in a system that offers workers many choices. Nonetheless, administrative expenses in those systems are considerably higher than in traditional social security systems. To reduce administrative expenses, both Sweden and the United Kingdom have a lag of about 18 months from the start of the tax year for crediting to individual accounts the contributions individuals have made for a tax year. Even with this feature, the voluntary carve-out accounts in the United Kingdom have had high administrative expenses.
2. Extent of Choice. A fundamental design decision is whether workers will have the choice of participating in the privatized system or whether participation will be mandatory, and if mandatory, whether it will be an add on or a carve out from social security. An important issue in structuring retirement income systems is the level of generosity of the base benefit. A mandatory add on has the advantage of preserving the traditional social security system as a base. A trade-off exists between the degree of choice allowed workers and the level of administrative expense. It is more expensive to administer a voluntary carve-out system than a mandatory system, and more expensive to administer a system with many investment choices than one with few choices. Aside from cost considerations, beyond a certain number of choices, increased choice may

result in confusion among participants. It may make it more difficult for some participants to evaluate the choices and reach a reasoned decision.

3. Transition Costs. A problem that arises in privatizing social security is paying for the transition costs. Because of the transition costs, privatization worsens the financial condition of the traditional social security system. Countries must determine how to finance transition costs in moving from a pay-as-you-go system to a system that includes funded individual accounts and reduces social security tax payments. Some countries have reduced the transition costs by reducing the value of benefits in the pay-as-you-go social security system. Along with reductions in benefits, some degree of general revenue financing may be necessary to pay the transition cost, or it could be financed by increased government borrowing.

4. Default Fund. When individuals choose their investment funds, a default fund may be needed for those who do not make a selection, perhaps because of lack of confidence in their ability to do so, or lack of interest in learning about financial markets. Among 401(k) plans in the United States, default funds have tended to be conservative, with some workers being placed in a low-risk, low-return fund that may not be the best choice over the course of their careers because it ultimately leads to relatively low retirement benefits. Sweden, by contrast, chose a default fund that has a substantial percentage of its portfolio invested in equities, but with no reduction in the percentage in equities as workers near retirement age. Workers placed in the default fund have lost money during periods of decline in world equity markets.

5. More Government Bureaucracy. To manage its individual account system, Sweden found it necessary to establish a new government bureaucracy because the types of functions

required to manage the individual account system differed substantially from those required to manage its traditional social security system.

6. Payout Choices. In establishing privatized systems, countries have tended to give less thought to the benefit payout phase of individual accounts than they have to the accumulation phase. It is generally difficult for individual account plans to replicate some of the payout features of social security defined benefit plans, such as gender-neutral annuitization, cost-of-living indexation, and "free" provision of spousal and survivor benefits.
7. Predictability of Benefits. Variability in rates of return in financial markets makes it difficult for workers to predict the level of their retirement benefits.
8. Winners and Losers. Because of differences in rates of return in financial markets over time, there are winners and losers, with large differences in rates of return received by different cohorts. In a system with many choices, there also are large differences in rates of return received by different people within the same cohort. In the first few years of the Swedish mandatory individual account system, most workers lost money because of the downturn in world financial markets.
9. Individual Management Risk. Individual risk is the risk that individuals will make bad decisions when they are given the responsibility of deciding whether to fully participate in social security and how to manage their investments in individual accounts. Experience in the United Kingdom indicates that many workers have been made worse off by their decision to take a voluntary carve out and not participate fully in social security.

10. Annuitization Risk. Workers face interest rate risk in annuitizing their account balances. To mitigate this risk, the Swedish government provides a minimum rate of return guarantee, but this guarantee prospectively increases the expected cost to the government of providing individual accounts.
11. Political Risk. Political risk is the risk that the government will change its policy in a way that will affect the level of benefits received. This risk is inherent in voluntary carve-out accounts. The British government changes the generosity of the carve-out arrangement every five years to adjust to changing interest rates and mortality rates.
12. Inflation Rate Risk. While some privatized systems provide inflation-indexed benefits, that is difficult for private sector insurance companies to do in countries that lack a substantial market for inflation-protected securities.
13. Survivors' Benefits. Related to payout choices, consideration needs to be given to provision of survivors' benefits, both in the case of a worker's pre-retirement death and death after a worker has begun collecting benefits. In the United Kingdom, married couples receive lower benefits than do similarly situated single persons in order to provide benefits for the surviving spouse. By comparison, U.S. Social Security provides many married couples a benefit 150 percent higher than that of a single person.

Conclusion

In considering major social security reform involving partial privatization, it is important to realistically assess the actual functioning of the system envisioned, rather than considering in the abstract the functioning of an idealized system. For this reason, a careful assessment of international experience can provide useful information for social security reform in the United States.

A system of voluntary carve outs, as in the United Kingdom, is expensive to administer because of its complexity. The system in the United Kingdom has encountered a number of problems, including a major scandal when millions of workers lost benefits by deciding to take a voluntary carve out. Currently, workers are being advised to leave the individual accounts system and return to the social security system. A mandatory add-on system, similar to that of Sweden, where individual accounts are provided on top of a generous base of traditional social security benefits, would be less complex and thus less costly to administer. It would avoid the transition costs that arise when money is taken out of the traditional social security system in order to fund individual accounts.

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[1] The opinions presented here are those of the author and do not represent the position of AARP. I have received valuable comments from John Gist, David Rajnes, and participants at a seminar at AARP.