A high-stakes debate is raging among politicians, policy analysts, and concerned citizens over the use of individual accounts for Social Security reform in the United States. Some participants are partisans with strongly held positions that are rooted in fundamental differences in political philosophy. Some politicians and other commentators have used the words “looming” and “crisis.”

Mandating individual accounts appeals to some people on both economic and ideological grounds. From the economic standpoint, they argue that mandatory individual accounts would increase savings and reduce government’s role in the economy. From the ideological perspective, they contend that those pensions would enhance individual freedom, private property ownership, and personal responsibility, while reducing government’s role in the economy (President’s Commission 2001).

Others, however, argue that individual accounts that fully or partially replace a traditional defined benefit social security system may entail too much financial market risk, especially for vulnerable retirees (Gillion et al. 2000). Individual accounts that are carve-outs would generate high transition costs over a period of decades to pay benefits already promised in the old system. Individual accounts that are add-ons to social security, however, may be viewed differently because they retain social security as the traditional base of retirement income. They do not involve transition costs because they do not reduce funds allocated to pay for social security benefits already promised.
THE PROS AND CONS

Why Some Countries Use Individual Accounts for Social Security

Some policy analysts and international financial institutions, including the World Bank, have advanced a number of reasons for using individual accounts for social security (World Bank 1994). These arguments differ between plans that reduce an existing social security program and those that are an add-on to such a program.

Those who argue for individual accounts as part of social security reform, whether as mandatory add-ons or as voluntary carve-outs, generally believe such accounts would result in the following economic advantages:

• Improved functioning of capital markets
• Increased national savings
• Higher real (inflation-adjusted) rates of return
• Improved functioning of labor markets
• Reduced overall level of risk for workers

These issues are discussed in turn.

Improved functioning of capital markets

Some observers have credited individual accounts with encouraging the development of national stock markets and increasing national savings in countries in which financial markets were poorly developed before their introduction (Piñera 2001). Such effects on financial institutions are less likely to occur in the United States, which already has an established capital market.

Increased national savings

One of the most complex aspects of the debate is how individual accounts would affect savings. Individual accounts may increase national savings by substituting a funded account for an unfunded one; however, critics argue that the accounts could instead substitute for savings that would otherwise occur, especially among higher-income workers, many of whom already have substantial savings (Gale and Scholz...
Substitution for other forms of savings would be less likely to occur among lower-income workers because of their lower probability of having savings. To the extent that substitution occurs, any positive effect on savings is diminished.

Substitution could also occur through workers’ taking on additional debt to offset the added savings. Workers could do so to avoid the reduction in consumption that would occur if savings were to increase. For example, homeowners could increase their mortgage debt by refinancing their homes. The additional debt could offset the increase in financial market assets held in individual accounts.

Substitution that would offset increased savings would be especially likely with voluntary carve-out individual accounts, as opposed to mandatory accounts; this would occur because the workers likely to choose them have higher incomes and would already have savings in taxed accounts outside pension plans. They could switch their taxed savings into a tax-preferred individual account and, because of the tax advantage, would need to save less to reach a given target amount.

Further, some argue that boosting national saving can be accomplished through other means and should not be considered a function of social security. For example, an alternative would be to reduce the federal deficit by raising non–social security taxes and cutting non–social security spending (Cutler 1999).

Analysts opposed to mandatory individual accounts also have argued that, for the same reasons that social security is compulsory (i.e., because many people would not save sufficiently on their own), people will want to have access to their individual accounts before retirement. That also would reduce any positive effect on savings. The experience with Individual Retirement Accounts (IRAs) may be instructive. Because of political pressure, the law has been relaxed over the years since the inception of IRAs in 1974, allowing easier access to these accounts before retirement.

The effect of individual accounts on national savings also depends on other changes that are made in the government budget. If the government were to finance the transition to individual accounts with increased government borrowing, that would offset whatever increase in savings might occur among workers, in terms of net savings in the economy. The transition cost is the cost of paying for benefits that have already been promised but for which additional financing would be needed if
privatizing reduces the financing of the existing social security system. This transition cost can be large, and the transition period can last for five decades or longer. In Chile, for example, the transition cost peaked at nearly 5 percent of Gross Domestic Product (GDP) during the first decade of the reform, and even after 40 years the transition cost is projected to be more than 1 percent of GDP (Edwards 1998).

In the United States, Social Security has temporarily accumulated a large trust fund. With voluntary carve-out accounts, the amount in the trust fund would be reduced, as money paid out in benefits would not be replaced by payroll taxes. Some economists have argued from a national perspective that the increase in the trust fund has been offset by non–Social Security deficits. This shift in government financing from income taxes to payroll taxes may have increased savings to the extent that income taxpayers have a higher marginal propensity to save than payroll taxpayers (Diamond and Orszag 2004).

As is the case in other countries, a fundamental issue concerns whether encouraging national savings should be a primary responsibility of Social Security. Some commentators have argued that government tax and budgetary policy should assume that role (Gillion et al. 2000).

In sum, although the issues regarding social security and savings are unresolved, a shift to individual accounts, particularly voluntary carve-out accounts, may not increase national savings. In any case, there are other aspects of national economic policy that affect savings; thus, encouraging savings need not be a requirement of social security reform, especially if the proposed reforms reduce the insurance protections provided by social security.

**High real rates of return**

Some supporters of mandating individual accounts have projected high real rates of return, and indeed that has been the case in Chile. For each of the seven Chilean pension fund management companies (Administradoras de Fondos de Pensiones, or AFPs) in 2002, the real rate of return over the period 1982–2002 averaged at least 10 percent. Although these returns are high, they represent gross rates of return not subtracting fees and expenses. Once fees and expenses are taken into account, the cumulative average real rate of return is 6.8 percent for low-income workers and 7.1 percent for high-income workers.
However, even these adjusted figures overstate the rates of return received by workers because they are simple average rates of return, while the geometric average is the appropriate measure (Williamson 2005). The geometric average provides the rate of return that if earned continuously over the period would produce the actual ending balance. A Chilean brokerage firm used data for the years 1982–1998 and calculated an average real geometric rate of return net of expenses of 5.1 percent. By comparison, if the worker had instead purchased Chilean 90-day bank deposits each month, the average compound rate of return would have been 7.2 percent (CB Capitales 1999; Williamson 2005).

Individual account holders in other countries have not fared as well; the systems in Sweden, Hungary, and Poland, for example, experienced negative real rates of return for their first few years of operation because of the downturn in world capital markets during the early 2000s. These results highlight the fact that systems should not be judged based on rates of return experienced over a short period, which are subject to random fluctuations. An extended time period is more relevant for judging a long-term investment such as social security. Nonetheless, short-term fluctuations in capital markets can be a major risk for individual account participants who are nearing retirement.

In the United States, debate has arisen over the appropriate rate of return to credit individual accounts when prospectively comparing them with Social Security. Some correction should be made for the greater financial risk inherent in individual accounts that are invested in equities, with the extreme argument being that the rate of return credited should be that on bonds because the higher return on equities is due to the risk premium on equities. In any case, comparisons of rates of return between social security and individual accounts need to make some adjustment for risk.

**Improved functioning of labor markets**

Some policy analysts have thought that converting to individual accounts would reduce contribution evasion—the failure of workers and employers to make required payments—because benefits would be tied more closely to payments (World Bank 1994). Contribution evasion, however, remains a problem in many of the Latin American countries, especially among lower-paid or temporary workers and among employees in the informal sector (Bailey and Turner 2001). The informal sector
consists of casual employment that evades government regulation and taxation. Contribution evasion for social security occurs even in highly developed countries such as the United States, mainly in the underground economy and among self-employed workers. (See Appendix B for further discussion of contribution evasion.)

**Reduced level of retirement income risk**

Some argue that the use of individual accounts would reduce the overall level of risk that workers face concerning their retirement income (President’s Commission 2001). The choice between government or private provision of retirement income is affected by an assessment of the risks associated with each method, including the risks of financial markets compared with the political risks of having underfunded social security programs.

**Why Some People Oppose Individual Accounts for Social Security Reform**

It is important to distinguish between add-on and carve-out individual accounts. The opposition to individual accounts by some people concerns their use as carve-out accounts. Some policy analysts and international financial institutions, such as the International Labor Organization (Gillion et al. 2000), have argued against using carve-out individual accounts. Perhaps the chief rationale against mandating carve-out accounts is that they place too great a burden of financial risk on low-income workers, especially when the plans replace part of a traditional social security program, reducing the base level of benefits. With mandatory individual accounts that are an add-on to social security, the argument concerning financial market risk is weakened.

With mandatory individual accounts, the worker has an asset that is invested in the capital market and bears the risk of financial market fluctuations. When the worker reaches retirement, he or she generally also bears the risk of fluctuations in interest rates in determining the annuity value of the account balance. Workers differ in their attitudes toward financial market risk and in their knowledge about these markets. Typically, low-income workers are more risk-averse and less informed than higher-income workers concerning the investment of their retirement income.
A response to this criticism concerning risk-bearing in carve-out individual accounts is that workers may have the option of investing their accounts in low-risk assets. Further, it has been argued that risks would be reduced by diversifying sources of retirement income instead of relying exclusively on a pay-as-you-go system. Underfunded social security systems are also subject to the risk that workers will not receive all of the benefits promised or that contribution rates will be raised, although those risks are generally considerably smaller for older workers than capital market risks, in part because benefit cuts and tax increases impose political costs on policymakers.

A further issue is the extent to which guarantees are incorporated within the system (see Appendix A at the end of the book). Many countries with mandated individual accounts incorporate rate-of-return guarantees (for example, Argentina and Chile), but a sizable number, including Australia and Sweden, do not (Turner and Rajnes 2001). Such guarantees mitigate the adverse effects of market fluctuations on account holders.

**Issues Arising from Mandatory Individual Accounts**

Private sector management of individual account investments is generally viewed as the most important aspect of the substitution of a private role for a government role in the provision of social security. Financial management, however, is only one of several retirement income functions that can be privatized. Other functions include record keeping for the accounts of beneficiaries, the choice of fund managers, collection of contributions and disbursement to fund managers, annuitization of benefits, disbursement of nonannuitized benefits, and the insurance or provision of guarantees for promised benefits. All privatized social security systems maintain government involvement in some of these functions, which sometimes is extensive (Turner and Rajnes 1998).

In developing social security systems with individual accounts, countries must consider the extent to which worker choice is allowed. Generally, the greater the range of choice, the greater the system’s administrative cost because of the added complexity in administering the program. Will workers be allowed to choose from few investment funds or many? Will they be allowed to transfer money across funds at any time or once a quarter? How many funds will they be allowed to hold
at one time? These are some of the typical questions countries adopting such a system must resolve.

**VOLUNTARY CARVE-OUT ACCOUNTS**

The issues arising from incorporating individual accounts into social security depend on the type of accounts used. Although the literature on individual accounts is extensive, of the basic types of individual accounts, the least attention has been paid to voluntary carve-out accounts (exceptions include Blake 1995; Turner and Rajnes 1995; Gustman and Steinmeier 1998; Kotlikoff, Smetters, and Walliser 1998; Disney, Palacios, and Whitehouse 1999; Orszag and Greenstein 2001; and NASI 2005). Yet voluntary carve-outs can be the most complex type of individual account. (See Box 3.1 for some of the problems the United Kingdom encountered with voluntary carve-out accounts.)

With a voluntary carve-out, the worker has a choice. He or she can remain in the social security system or withdraw from it, either partially or fully, depending on the structure of the voluntary carve-out. In exchange for a reduction in both current taxes and future social security benefits, the worker is obliged to contribute to an individual account. The employer’s contributions to social security may also be transferred to the individual account.

In the mid-1990s, the United States considered a carve-out health insurance reform based on “pay or play” (Turner and Rajnes 1995). Voluntary carve-outs for social security had been proposed in the United States in 1935 as the Clark Amendment to the original Social Security Act; however, these were rejected by Congress because voluntary participation was thought to be inconsistent with the redistributive nature of the U.S. Social Security system (Schieber and Shoven 1999).

The genesis of voluntary carve-outs in the United Kingdom came from completely different reasons from those motivating President Bush’s proposal as put forth in his 2000 and 2004 presidential campaigns. The United Kingdom was quite late in establishing an earnings-related social security program; this was not done until the 1970s. At that time, a well-established private pension sector was already in place.
Box 3.1 Problems Encountered with Voluntary Carve-Out Accounts in the United Kingdom

Since 1988, the United Kingdom has allowed employees to voluntarily withdraw from part of social security by reducing their contributions and receiving lower benefits. Instead, employees contribute to an individual account. In 2005, a pension commission in the United Kingdom proposed abolishing this system (Pensions Commission 2005). This system of voluntary carve-out accounts (VCOs) has resulted in various problems.

Workers Are Being Encouraged to Leave the Individual Account System

Insurance companies are encouraging many policyholders to stop contributing to their VCOs and to return to the traditional social security program. The British government determines the benefit offset, the amount by which social security benefits are reduced for workers who choose the VCO. Although not its intent, the government set the VCO benefit offset so that it is no longer favorable for most workers to take the VCO, according to some British insurance companies. Every five years, the British government determines the amounts that are credited to individual accounts for workers taking a VCO. In 2002, interest rates were low, but the British government expected that they would rise. Thus they credited individual accounts at a lower level, assuming workers would be able to earn higher rates of return on their accounts. When interest rates did not rise, the amount workers were earning on their investments in their VCO accounts was insufficient to compensate them for the reduction in their social security benefits. Two large insurance companies, Prudential and Norwich Union, sent letters to their 750,000 policyholders with VCOs telling them that they would be better off leaving their VCOs and returning to the traditional social security program (Money Marketing 2004). In 2004, 500,000 people abandoned VCO pensions and returned to the state system (Cohen 2005).

The Government Paid Large Subsidies to Participants in the Individual Accounts

VCOs resulted in a large government subsidy in the early years. The British government initially established a favorable benefit offset for
workers to encourage them to choose VCOs. It subsequently estimated that the present value of the savings due to the reduction in future benefits was $22 billion less than the cost to the government in incentives provided to take a VCO. The cost to the government in incentives to take a VCO was roughly twice as much as it saved through reduced benefit payments (Budd and Campbell 1998).

Individual Accounts Have Been a Bad Deal for Many Workers

A number of people are financially worse off for having taken the VCO. Because of many workers’ lack of financial sophistication, pension service providers who have a financial interest in workers’ choosing accounts, even when those accounts are inappropriate for the individual, may have taken advantage of VCO participants. In the United Kingdom, with the “pensions mis-selling” scandal, more than two million people contributed to VCO accounts who would have been better off remaining in social security. Those affected represent more than 40 percent of workers who initially took VCOs with personal pensions, and the compensation they will receive from financial service providers as a result of being misled is approximately $20 billion. The people mis-sold were primarily lower-wage workers (Gillion et al. 2000).

There Is a Long Lag between the Collection and Crediting of Contributions to the VCOs

The government does not credit contributions to VCOs until 18 months after the start of the tax year in which the worker made the contributions, and it pays no interest during this period. While a system could be established to credit accounts more quickly, such a system would increase administrative costs because it would require more record keeping.

VCOs Have High Administrative Costs

In 1998, the combined effect of the fees charged on VCO accounts equaled an average reduction in yield of 3.2 percent per year for people who had participated in these plans for 10 years and a projected rate of 1.7 percent per year for people who would stay for 25 years (Blake and Board 2000).
Voluntary carve-outs were permitted in the United Kingdom not to reduce a preexisting social security program but to protect a preexisting defined benefit private pension system. Later, for ideological reasons relating to the encouragement of individual responsibility by Margaret Thatcher’s Tory government, workers were allowed to establish private accounts to reduce their participation in social security.

**Generosity of the Trade-Off**

The trade-off between contributions to an individual account and reductions in future social security benefits is probably the most important aspect of the structure of voluntary carve-outs, and it is the most difficult feature to structure to avoid distortions in the retirement income system.

The smaller the reduction in the worker’s future social security benefits that accompanies the reduction in the worker’s social security payroll taxes, the more favorable to the worker is the voluntary carve-out, and the more likely it is to be chosen. However, another directly related trade-off exists: the more favorable the voluntary carve-out is to the worker, the more costly it is to the government. A generous voluntary carve-out may result in a substantial subsidy of individual accounts by the traditional social security system or by government general revenue (Box 3.2).

The problem of setting the trade-off’s generosity is highlighted by the report of the President’s Commission (2001), which in its three proposals set three different rates. It proposes reducing future social security benefits the worker will receive by an amount based on the decrease in payroll taxes that is compounded by a real interest rate ranging from 2.0 to 3.5 percent. President George W. Bush suggested a real rate of 3.0 percent (above inflation) during his second term.

The benefit offset determines the voluntary carve-out’s effect on social security’s long-run solvency. If workers are required to forgo a portion of benefits actuarially equivalent to what would have been paid for by the reduction in their social security payroll taxes, social security’s finances will not be affected over the long run. A transition effect occurs, however, because social security contributions are decreased years before benefit payments are reduced. If the benefit offset deviates from actuarial equivalence, it will affect the desirability to workers of taking
the carve-out and will have a long-run effect on social security finances, which could be either positive or negative. Since it is expected that the U.S. Treasury will pay, on average, a real rate of return of 3 percent on its bonds that are issued specially for Social Security and are held in the Social Security Trust Fund (President’s Commission 2001), the rates of 2.0 and 2.5 percent for determining the reduction in Social Security benefits imply that the individual accounts would be subsidized by the Social Security system.

The carve-out is like a long-term loan to a worker from the social security system. The worker borrows from future social security benefits, with the loan being the reduction in social security contributions. Workers receive the rate of return actually earned on their individual accounts, which would be an expected 3 percent real (but with some interest risk) if they were to invest in Treasury bonds. Workers repay the loan through reduced receipt of social security benefits at the rate specified by the carve-out. If that rate were 2 percent real, workers would receive a government subsidy of 1 percent per year on the balance in their individual account because they would effectively be borrowing from the government at 2 percent and receiving a rate of return of 3 percent on the investment of this borrowing. If the rate were 3 percent, as
proposed by President Bush, there would be no expected subsidy over the long term.

A risk-free interest rate is credited to workers’ hypothetical accounts for determining the benefit offset since it is presumably applied to the account with certainty, while the investment earnings they actually receive on their accounts are risky. Whether workers take the voluntary carve-out would depend on three factors: how risk-averse they are, what other investments they have, and what special tax incentives, if any, the government would provide.

The Structure of the Trade-Off between Contributions and Benefits

For a voluntary carve-out account, the trade-off between reduced contributions to social security and reduced benefits from it can be structured in various ways. For example, the cut in benefits can be the same percentage as that in the worker’s social security contributions. If social security contributions by the worker are reduced by \( x \) percent, the future benefits accrued during that period are also reduced by \( x \) percent. The reduction in social security benefits with a carve-out can be set as an equal percentage for all workers choosing to take the carve-out. This way may be the simplest administratively.

Age neutrality

An additional complexity in designing carve-outs involves making the reduction in social security benefits age-neutral. With age neutrality, if a worker finds it optimal to take the voluntary carve-out at one age, the worker will find it optimal to continue opting out at older ages. This desirable, conceptually simple feature is difficult to achieve because of the difference in accrual patterns between traditional defined benefit social security plans and individual accounts.

For defined benefit plans and individual accounts that are equally generous at retirement, generally the individual account accrues benefits more rapidly for workers at young ages while the defined benefit plan accrues benefits more rapidly for workers at older ages. This happens because defined benefit plans tend to be backloaded in their patterns of benefit accruals. These different patterns of accrual create an incentive for workers to take the voluntary carve-out when young but not when
older. The problem of switching incentives can be addressed by making the choice of a carve-out irrevocable. However, such an arrangement raises issues of equity if the terms of the trade-off are subsequently amended, which they almost certainly would be. The British system gives workers greater freedom of choice, allowing workers to switch in or out once a year.

Rather than having a single rebate rate for all workers, the United Kingdom has an array of age-related rates. The rebate is the amount that is deposited in the individual account for workers taking the voluntary carve-out. Younger workers receive lower rebates on their payroll taxes (known as National Insurance contributions) than do older ones since individual accounts of equal lifetime generosity are more favorable than defined benefit plans for younger workers because of the differing accrual patterns. This difference generally occurs between accrual patterns in individual accounts and those in defined benefit plans. In 2001–2002, a 20-year-old received a 4 percent rebate, while a 50-year-old received the maximum rebate of 9 percent. Age-related rebates designed to keep the contracting-out arrangements age-neutral are complex, expensive to administer, and probably poorly understood by workers.

The rebate’s size is generally not fixed in a voluntary carve-out system but can be expected to be revised over time. The rebate structure in the United Kingdom is reevaluated by the Government Actuary every five years to take into account increases in life expectancy and changes in interest rates. The rebates have been calculated based on the expense in the private sector of providing a replacement benefit, with an amount added to the rebate as an incentive to take it.

**Gender neutrality**

A further problem in designing voluntary carve-out individual accounts is to structure the trade-off so that it is gender-neutral. Because women have a longer life expectancy than men, a gender-blind trade-off will not be gender-neutral in effect. The trade-off in the United Kingdom is not gender-neutral, but it encourages men and women to take the voluntary carve-out at different ages. For example, in the late 1990s, 93 percent of eligible men in Britain aged 45–54 chose the individual account, whereas only 32 percent of eligible women in that age group did so (Whitehouse 1998). For many years, Japan structured its voluntary carve-out with different rebates for men and women, but, now that
views of gender equity have changed, that is no longer the case (Turner and Watanabe 1995). An additional issue relates to the way changes in life expectancy affect benefits in a voluntary carve-out account and in social security.

In sum, voluntary carve-out accounts are complex to design and to operate. It is difficult to set, in a cost-neutral and nondistorting way, the relationship between contributions to the carve-out accounts and the reduction in the worker’s social security benefits. Further, that drop in social security benefits means that the worker’s base benefit is decreased, because social security provides the basic benefits in the retirement income system.

MANDATORY INDIVIDUAL ACCOUNTS
AROUND THE WORLD

About 30 countries have made individual accounts part of their social security system. This section discusses the features of mandatory individual accounts in selected countries around the world.

South America and the Caribbean

Twelve countries in South and Central America and the Caribbean have incorporated individual accounts into their social security programs (Gill, Packard, and Yermo 2005). In all except Chile’s example, the reforms have resulted in workers paying higher mandatory contributions for retirement income plans. The countries adopting individual accounts copied some features of the landmark Chilean reform but diverged in other respects.

Three approaches have been taken (Mesa-Lago 1997). First, directly following Chile’s example, the countries of Bolivia, El Salvador, and Mexico have closed their social security systems to new entrants and substituted a mandatory individual account system (mandatory full carve-out). All other reformed countries in Latin America have retained their traditional social security system in some respect.

Second, Uruguay has introduced a mixed system. All workers participate in both a mandatory social security program, which was reduced
during the reform but is still dominant, and a mandatory individual account program (partial replacement or mandatory partial carve-out). Because of considerations about financial risk, low-income workers only participate in the traditional social security program.

Third, Colombia and Peru have two competing programs, in which workers either choose the government-run system or a substitute, privately managed plan.

Chile

Because the Chilean reform has been a model for other countries, it is considered here in more detail. Although the main features of the initial Chilean reform are well known in the pension world, the Chilean system has evolved through frequent legislated changes, so that it continues to be a leader in the area of social security reform. The Chilean reform is based on the Chicago School (derived from the University of Chicago) or neoliberal economic principles of free choice, private ownership rights to social security benefits, and private sector investment and administration of pension accounts through competition in the marketplace.

In 1981, Chile reformed its social security system in a way that revolutionized thinking about social security. It became the first country to replace its publicly managed pay-as-you-go defined benefit system with privately managed individual accounts. In the new system, private corporations, known as Administradoras de Fondos de Pensiones (AFPs) or Pension Fund Administrators, manage the investment of the funds.

Workers are required to contribute 10 percent of their pretax salary, up to a ceiling, to a private pension fund of their choosing. The ceiling is indexed, rising monthly at the rate of inflation. Workers can also make voluntary contributions, though few do. An additional amount—ranging from 2.50 to 3.74 percent of a worker’s earnings—is levied to finance disability benefits, preretirement survivor benefits, and for general administrative expenses, including a commission. Contributions are withheld by employers from employee pay and transferred monthly to the AFP of the worker’s choosing. These payments are tax deductible. Thus, the government subsidizes pensions through the tax system. Employers do not contribute.
The Chilean mandatory pension system began with 12 AFPs and reached a high of 23, but the number has declined, so that in 1999 there were eight, and in 2005 there were six. Most of the reductions in AFPs have resulted from mergers, allowing workers to maintain their account with the merged AFP.

Initially, each AFP could offer only a single fund, but that limit was raised with the addition of a low-risk fund for older workers in response to criticism that the system placed too much financial market risk on workers nearing retirement. Since August 2002, employees have had a further expanded range of investment funds to choose from. The new law allows employees to select one of five funds offered by the AFP. The five fund types are denoted as A through E, going from highest to lowest risk. Men aged 56 and older and women aged 51 and older are prohibited from investing in Fund A. Retirees are limited to investing in one of the three funds with the lowest level of risk (C, D, and E).

The default for participants not choosing an investment is an important feature of an individual account. In Chile, rather than having a single default, employees who fail to make a selection are assigned to a fund according to their age, with older employees being defaulted to a lower-risk fund:

- Fund B—up to age 35 for both males and females,
- Fund C—ages 36–55 for males and ages 36–50 for females, or
- Fund D—age 56 and over for males; age 51 and over for females.

Fund A (for men up to age 55 and women up to age 50) and Fund E (no age limits) are not used for defaults. The younger age limits for females than males for fund types C and D reflect the fact that females are able to retire at younger ages than males: females may retire at age 60 and males may retire at age 65 with an old-age pension. Workers can take their retirement at younger ages if they have saved enough in their accounts to meet government-set minimum standards.

Even though the Chilean pension system is privatized, meaning that it has private sector management, the government still maintains a large role in the retirement income system. For workers contributing for at least 20 years, the system provides a guaranteed minimum benefit. For workers contributing for fewer years, the government provides an anti-poverty benefit. If an AFP is unable to provide the minimum mandatory...
rate of return, the government terminates the AFP and guarantees the minimum rate of return.

Proponents of the Chilean model claim that its advantages stem from its adherence to free market principles. It gives workers clearly defined property rights in their pension contributions. These rights are believed to decrease the political risks to social security—that government will legislate changes that will reduce the value of the benefits. It provides individual choice as to pension fund manager. It “acts as an engine of, not an impediment to, economic growth; and enhances personal freedom and dignity” (Rodriguez 1999). However, the “ownership society” has not proven to be universally popular in Chile; many workers do not contribute to the system.

Asia

Few Asian countries have used individual accounts for social security. Under the “two systems, one country” policy, Hong Kong maintains a separate social security system from the rest of China. In 2000, it began a mandatory individual account system under which workers and employers both contribute 5 percent of wages into funded individual accounts. Workers can voluntarily contribute higher amounts.

As in 401(k) plans, pension fund managers are chosen by employers, and employees can select only from among the funds provided by that manager (Fox and Palmer 2001). Fund managers typically offer several different choices, with a guarantee fund commonly being provided. Some guarantee funds ensure return of capital, while others guarantee a minimum rate of return. Hong Kong also maintains a fund to compensate participants for losses that are due to illegal activities by fund managers. The system in Hong Kong is not multipillar (providing income from more than one source) since the individual account system will be the primary source of retirement income for most workers participating in it.

Central and Eastern Europe and Central Asia

In 1998, Hungary established mandatory individual accounts, requiring contributions of 8 percent, while maintaining a defined benefit plan as the primary system, with that plan receiving contributions of 22
percent. A key difference between the reforms in Hungary and those in Poland is that Hungary made little change in its existing plan, while Poland completely restructured social security, instituting a notional account system.

A notional account system is a hybrid having features of both defined benefit and individual accounts. Hungary maintains an individual account for each worker, as a defined contribution plan would. However, these are called notional accounts because they are solely bookkeeping entities. Each worker’s account is credited with contributions and with interest earnings on accumulated account balances, but these credits are not tied to actual investments. The plan may be run on a pay-as-you-go basis, or it may have investments managed in the same way as defined benefit plans.

Russia has introduced funded individual accounts (Turner and Guenther 2005). Beginning in 2004, 4 percent of the employer’s contributions could be paid to private funds rather than to the State Pension Fund. That percentage increases to 6 percent in 2006 (Sandul 2002).

**OECD Countries**

Unlike in other OECD countries, the basic social security benefit in Australia is income-tested and asset-tested. About 70 percent of retirees receive it. An income-tested benefit is a benefit that workers must qualify for by proving that their income falls below a set level. Australia has never had an earnings-related social security program.

To supplement the income-tested benefit, Australia has introduced a privatized retirement income system, called the Superannuation Guarantee. That system mandates private sector employer-provided pensions that are primarily individual accounts. The contribution rate is 9 percent of salary. Because the government pension is unfunded, the change represents a move toward a funded system.

Because contributions are enforced by legislation and paid into funds administered and invested by the private sector, the Australian government has introduced extensive safeguards to ensure that employees’ pension entitlements are secure. This regulation has resulted in increased complexity, added costs, and a heavy burden on trustee boards responsible for overseeing the funds’ management.
Sweden has instituted a mandatory individual account system that incorporates lessons learned from the experiences of Chile and other countries, particularly in ways to reduce administrative costs. This individual account system reflects a desire to increase the amount of prefunding in the Swedish retirement income system and place greater emphasis on the role of the capital market and individualism (Harrysson and O’Brien 2003).

In 1999 and 2000, Sweden replaced its traditional defined benefit social security program with a notional account plan supplemented by a mandatory funded individual account. As described earlier, in a notional account system, each worker has an account that is credited with contributions and interest earnings; however, the system is financed on a pay-as-you-go basis, so the individual accounts are not funded, and the balances are bookkeeping entries. Out of a total contribution rate of 18.5 percent of earned income, 16.0 percent is for the notional account system and 2.5 percent is for individual accounts, called the Premium Pension. Starting in 2000, Swedish workers were allowed to choose from 460 different funds to manage their pension investments, with the default being a government-run fund. By 2005, the number of funds exceeded 600.

The Premium Pension system is administered by a new government agency, the Premium Pension Authority (in Swedish, Premipensionsmyndigheten, or PPM, as it is known). The PPM acts as a clearinghouse and record keeper for the funded individual account system. This agency was needed because the individual account system includes a broad range of activities that would have been difficult to undertake within the traditional functions of the Swedish Social Insurance Agency. In addition, a central agency is expected to help keep administrative costs low because of scale economies in administration (Palmer 2001).

The United Kingdom encourages contracting-out to individual account plans. While every developed country has a social security system, the United Kingdom is unusual in giving every employer and employee the option of contracting-out of part of social security. Contracting-out in Japan is available on a more limited basis and only through employer-provided defined benefit plans.

Contracting-out in the United Kingdom has developed into a highly complex system. In 1986, the United Kingdom passed an act designed, by using individual accounts, to encourage contracting-out (voluntary
carve-outs) from the State Earnings-Related Pension Scheme (SERPS), which is a defined benefit plan. Previously, contracting-out had only been possible with employer-provided defined benefit plans. That law allowed workers to leave SERPS or their employer-provided, contract-ed-out defined benefit plan by using a personal pension called an Approved Personal Pension. Workers with personal pensions were permitted to recontract into social security (SERPS) if that later appeared to be favorable.

The United Kingdom replaced SERPS with a pension program called the State Second Pension (S2P), which took effect April 2002. Workers and employers are permitted to contract out of the S2P. The S2P has been earnings-related, but in April 2007 it will become a flat-rate benefit, even though contributions are earnings-related. While the S2P is a flat-rate pension, the rebates paid to workers opting out remain connected to earnings. This arrangement provides greater incentive for lower-income earners to stay in the plan and for middle- and higher-income earners to leave.

Employees who contract out receive a rebate on their social security contributions. The amount is intended to reflect the savings to the government from not having to pay the pension to that participant. The money is paid directly into the employee’s contracted-out pension fund. Contracting-out has declined in popularity in the United Kingdom; it reached a peak of 69 percent of the workforce in 1991 and had dropped to 61 percent by 2001.

**CONCLUSIONS**

This chapter presents a broad overview of pension mandating and social security privatization around the world. It discusses issues in the social security reform debate relating to individual accounts and describes the main features of mandated and privatized systems in several countries. Mandating has been far more common an approach than voluntary carve-outs. Some of the complexities of structuring the rebate for a voluntary carve-out are described. The difficulties in designing voluntary carve-outs that are age- and gender-neutral and neutral in their effect on the financing of traditional social security programs are among the reasons few countries have adopted them.
Note

1. These alternatives reflect the fact that different groups within the commission prepared the various proposals.