6

Notional or Nonfinancial Individual Accounts

For the United States, as for other developed economies, history constrains the choice of public pension design. These countries have had public pension systems for many years and have substantial obligations to current retirees and to those who have been paying into the system and expect to receive benefits; the US Social Security system, for example, has unfunded liabilities of $4 trillion over the next 75 years (Hassett and MacGuineas 2005). These large obligations are a barrier for policymakers who want to introduce individual accounts: If young workers' contributions to the public pension program go to individual accounts, there will not be enough money to finance benefit payments to current and upcoming retirees. This is the problem of the transition to an individual account system.

One way out of this dilemma is to increase taxes and use the additional revenue to pay off the benefit obligation to workers and retirees who have contributed to the old defined benefit system. Government saving would thus remain unchanged by the transition to the new pension plan, as the increase in taxes would offset the greater expenditure on retirement benefits. Private saving would rise on the first round because pension contributions/taxes would go into individual accounts that would buy financial assets in the market. National saving would be increased unless individuals were to fully offset their individual account contributions by reducing other saving. In practice, some offsetting reduction of private saving would likely occur, but the overall result would almost certainly be an increase in national saving, particularly since most low- and moderate-income families save very little at present. This growth in national saving would translate into either more domestic investment (and an increased capital stock over time) or more net foreign investment (for the United States, a reduction in the current account deficit and a smaller stock of net foreign obligations), or both. In all cases, national wealth and the level of future income would increase.

We described this alternative, and its implementation in Australia, Chile, and other countries, in chapter 5, and noted that economists had concluded that Chile's transition to the new public pension program had been accompanied by an increase in national saving that contributed to the country's economic growth. Australia and Canada[1] have also used general tax revenue to finance obligations to current retirees, although evidence of net increases in saving is weak or nonexistent for these countries.

The problem with using tax revenue to finance obligations to current retirees is that it involves the politically unpopular policy of increasing taxes. In the United States, voters tend to punish policymakers who increase taxes and reward those who cut them. In Sweden taxes were already very high and policymakers did not want to increase them further.[2] So both countries turned to an alternative approach to the transition problem. The George W. Bush administration proposed to divert a fraction of Social Security contributions to individual accounts and borrow the funds needed to fund current and upcoming obligations to retirees and workers who had paid taxes into the fund. Latvia, Poland, and Sweden, on the other hand, established nonfinancial or notional accounts: Of the taxes that workers or their employers pay into the public pension program, a notional amount is credited to an individual retirement account. However, the money does not finance purchases of stocks or bonds in the capital market; instead, the notional value of the contributions accumulates in the account while the money itself pays the benefits of current retirees.

Although these two approaches to the transition problem differ—the US approach would create actual accounts backed by stocks and bonds—their economic implications are the same: In both cases the individual accounts are not matched by any increase in national saving. In Sweden and Latvia, the individual accounts are bookkeeping entries and are not backed by an increment to business-sector assets. In the US proposal there are real accounts, but their impact on national saving is offset by the increased borrowing ("dissaving") of the federal government. There is no

1. While Canada still has a predominantly PAYGO system, it used general tax revenue to finance the transition of a small segment of its pension system to a fully funded program.

2. The Swedish tax reform of 1991, which combined drastic cuts to top marginal income tax rates with measures to broaden the tax base, caused a total revenue loss for the Swedish government of 6 percent of GDP. In comparison, the 1986 US tax reform and the Bush tax cuts lowered revenues by only about 2 percent of GDP (Agell, Englund, and Södersten 1999). Despite this, though, Sweden still has one of the highest tax rates in the world, and its government has been reluctant to add to this burden.

net saving increase in either case and hence no increment to income and wealth for the economy.[3]

To evaluate notional defined contribution (NDC) accounts, we look at the experiences of Sweden, which pioneered in the development of such plans, Poland, and Latvia, which was the first country to set up notional individual accounts. Although the NDC system is not without problems, its introduction was a necessary reform in these countries because of their particular economic and historic circumstances: Sweden was something of a welfare state with high average and marginal tax rates, and Poland and Latvia were transition economies looking to shed communism and usher in a free-market approach to work incentives. The analyses thus illustrate two distinctly different situations in which the switch to an NDC system made sense. But neither situation applies to the United States. We look at the Bush administration proposal for individual accounts; although it called for funded individual accounts rather than NDC accounts, it had the same macroeconomic implications as an NDC system. As we said in chapter 1, while this plan was not implemented, the proposal provides very useful lessons for how individual accounts might operate in the United States and thus merits closer analysis.

Notional Accounts in Sweden

Starting around 1992 the Swedish government began a debate about the country's pension program, a defined benefit pay-as-you-go (PAYGO) plan in which current workers' contributions financed benefits to retirees, as in the United States and most other rich countries. Projections of contributions and pension liabilities revealed that the plan was not fiscally sound: Because of demographic trends and increases in longevity, there would not be enough revenue to pay benefits—again, a situation faced by the United States and other OECD economies. At the same time, there was concern in Sweden about the very high rate of taxation on citizens, with the accompanying risk of adverse effects on labor supply. Concerns about the viability of the pension program were exacerbated in the 1990s when the economy went into a deep recession. The unemployment rate had hovered around 2.5 percent for many years, but in 1991 it started rising, held at over 8 percent from 1993 to 1998, and hit a peak of 10.1 percent in 1997. In 2006 the rate remained at 7.0 percent.[4]

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3. In the case of the Bush plan, a full shift to individual accounts would generate net saving over the long term as the growth of the economy would eventually produce growth in individual saving, which would more than offset the present value of government borrowing to finance the transition.

4. Data are from the Bureau of Labor Statistics, Foreign Labor Statistics, available at http://stats.bls.gov.

New pension legislation was passed in 1994 after grueling political debate, and phase-in of the new system began in 1999. Persons born between 1938 and 1953 and after receive pensions that are partly determined by the new program, while those born in 1954 and after will receive their pensions entirely from the new system.[5] (See box 6.1 on transition in Italy.) The new system sets up a defined contribution plan that requires workers to contribute 18.5 percent of their taxable payroll (workers and employers split the cost in bookkeeping terms). Of this 18.5 percent, 16 percent is credited to a nonfinancial or notional account for the individual. The money does not buy financial assets but instead pays the pension benefits of current retirees, just like a standard PAYGO system. But the accumulated account values are important to individual workers because they determine the amount of income the individual will receive at retirement (subject to qualifications discussed below). The remaining 2.5 percent of payroll, also credited to the worker's individual account, goes to the purchase of financial assets. On retirement, workers' notional balances plus their financial balances determine the amount of their pension income from the system.[6]

Emphasis on Sustainability and Fairness

The priorities of policymakers in devising the reform plan were to create a program that would be sustainable as well as fair to individuals both within and across generations. Just as important, the reform had to be politically acceptable and supported by a majority of political parties in the Swedish parliament to forestall adjustments by successive governments.[7] The purpose of the shift to individual accounts was not to create an optimal retirement plan based on ideal welfare economics but rather to create

5. This meant that only Swedes age 61 or older at the time of the implementation of the reform were untouched by its provisions. All workers age 45 or younger at the time of implementation would be completely under the new system, while the intermediate age groups would be on a proportional mix of the two systems. The Swedish transition period to notional accounts is remarkably rapid compared with that in Italy, for instance (see box 6.1).

6. The 1994 reform also changed the quasi-mandatory occupational benefits that affected roughly 90 percent of workers, which had been meant to supplement public pension income, to a fully funded plan. Contribution rates vary around 3.5 percent, putting the fully funded returns to workers at roughly 6 percent (when included with the mandatory 2.5 percent from the public system) (Könberg, Palmer, and Sundén 2005).

7. Following the defeat of the Swedish Social Democrats in 1991, a new center-right, four-party coalition government came to power and formed a broad Parliamentary Working Group on Pensions together with the (now) opposition Social Democrats. The political negotiations leading to the Swedish NDC reform were thus effectively depoliticized and spurred on by the economic crisis in Sweden in the early 1990s. More than 85 percent of the Swedish parliament adopted the Working Group's proposals in 1994 after a purely symbolic parliamentary debate. See Könberg, Palmer, and Sundén (2005) for details.

Box 6.1 Italy: A case study in how not to implement a notional defined contribution system

As we have seen, Italy has among the lowest effective retirement ages in the OECD, even as it carries a huge government debt, has one of the highest current pension expenditure levels, and faces a very adverse demographic outlook. Not surprisingly, pension reform has been a recurring political topic in Italy, which has implemented several reforms in recent years.[1] First, in 1992, under acute financial pressure after that year's exchange rate crisis, a series of rises in the retirement age and extensions of required contribution periods—both from unsustainably low or short levels—erased perhaps a quarter of the total unfunded pension liabilities for privately employed workers. These nonetheless remained close to 300 percent of GDP after this reform (Beltrametti 1996).

Therefore, in 1995 the Italian government introduced a further reform of the still unsustainable pension system. The choice fell on the introduction of a notional defined contribution (NDC) system. On the face of it, this was a sensible idea, as Italy's labor market sorely needed the potential incentive for people to remain in the workforce longer that NDC systems provide through their direct links between worklife contributions and pension benefit levels.

However, at least three issues conspired to render Italy's 1995 NDC reform effort largely futile. First, the Berlusconi government introduced it almost overnight and without any kind of public debate over its strengths and weaknesses. The lack of prereform debate meant that the Italian public was entirely unprepared for the new individual provisions. This lack of preparation undoubtedly weakened the possible microeconomic behavioral impact of the NDC system on individuals' retirement decisions.

Second, and more importantly, the Italian government exempted essentially everyone except future workers from the reform. The excessively long transition period to the NDC system meant that all workers in 1995 with more than 18 years of contributions (i.e., those of about age 40, assuming an average working career starting in the early 20s) would be unaffected by the reform, and their pensions would be calculated entirely under the pre-1995 pension scheme. Only people who started to work after 1995 would be entirely under the new NDC scheme, and those in between would depend on each system proportionally according to their years of contributions. Needless to say, the exclusion of such a large part of the Italian workforce from the 1995 reform and the prolonged phasing-in period (likely stretching into the 2030s or 2040s) mean that the fiscal improvements from implementing the NDC system will be far lower in Italy than, for instance, Sweden.

(box continues on next page)

Box 6.1 Italy: A case study in how not to implement a notional defined contribution system *(continued)*

Third, the pension reform was pushed through by the center-right Berlusconi government without broad political support in Italy's fractured political system. As a result, although the 1995 reform forecast future adjustments of key elements of the pension system (such as conversion coefficients, retirement ages, and contribution periods) on a preset schedule, such decisions became perennially contested elements of Italian day-to-day politics. The 1995 reform thus ensured maximum continued political interference in the pension system rather than any degree of insulation against political manipulation.

As unlikely as it may seem given Italy's economic situation, it is possible that Italy's 1995 NDC pension reform made things worse rather than better in Italy.

1. This box relies extensively on the discussion of Italy's pension reform history in Franco and Sartor (2006).

a good-enough plan that dealt with the large and looming budget shortfall. The Swedes did, however, understand the underlying economics of retirement reform when they set up the plan.

Economic theory posits that the rate of return in a PAYGO system is determined by the economy's rate of growth, or the rate of growth of the real wage bill for a payroll-financed plan (Orszag and Stiglitz 2001). An economy with population growth of even 1 percent a year can, for a given rate of contributions, afford to pay higher retirement pensions than an economy with a stationary population because the number of workers paying into the plan exceeds the number receiving benefits. Similarly, increases in real wages make each successive generation richer and raise the level of contributions without increasing the proportion of wages paid in contributions. This feature is not just a theoretical result; it has played out in practice, allowing PAYGO pension plans to be generous to past retirees by taking advantage of economic growth, whereas in recent years declines in both labor force and real wage growth rates have caused financial difficulties for the public pension plans of many countries.

Recognizing that a notional contribution plan shares this same feature with standard PAYGO systems, the Swedish planners initially thought to tie the rate of return on the nominal account balances to the growth rate of the wage bill—reflecting the growth in the contribution base and ensuring the sustainability of the program in the face of demographic shifts. However, after debate, they decided to use a modified system that tied the rate of return on the notional individual accounts to per capita rather than aggregate wage growth. The modification was to address concerns about shortchanging recipients who had contributed to the program throughout their working lives but who would be penalized if they were part of a large generation followed by a smaller generation. The policymakers were trying to balance the need for sustainability with the desire to avoid unfair treatment of an "unlucky" generation. However, the modification compromised sustainability, so the policymakers introduced a fallback provision—an "automatic balancing mechanism"—that would reduce the rate of return if projections indicated that the system would become fiscally unsound.[8]

The automatic balancing mechanism guarantees the financial sustainability of the NDC system by activating when the balance ratio of pension system assets and vested liabilities falls below unity.[9] Pension assets are defined as the capitalized value of pension contributions—that is, essentially equal to the pension liability that these annual contributions can finance in the long term, plus the value of the Swedish NDC system's so-called "buffer funds."[10] If the balance ratio drops below 1, per capita wage indexation of pension benefits is temporarily abandoned until the ratio rises back to at least 1. In American terms, such a measure would be the rough equivalent of stopping the automatic COLA rises in annual Social Security benefits when contributions to the Social Security Trust Fund fell below payments—a drop that is projected to happen in 2017 (SSA 2007).

It is obvious that pension system designs akin to "automatic stabilizers," which function by temporarily abandoning automatic indexing of pension benefits, shift the entire cost of achieving pension sustainability onto existing retirees (see box 6.2). However, there is equally little doubt that having such legal statutes for automation on the books that explicitly identifies "those who will suffer" from nonsustainability serves to, in a way, depoliticize future changes to keep the pension system fiscally sustainable by somewhat insulating it from the risk of manipulation for short-term political gain.

In Sweden workers can choose when to retire, and their benefits are adjusted accordingly. Because the amount of their annuity or monthly benefit payment is also adjusted based on life expectancy, recipients will have to accommodate the trend toward longer lifetimes, if it continues, by accepting lower benefits, working longer, or saving beyond the required contributions. Indeed, many in Sweden have enrolled in occupational

8. See box 6.2 and chapter 8 for more analysis of the effects of automatic balancing mechanisms (ABMs).

9. See Könberg, Palmer, and Sundén (2005) for details.

10. "Buffer funds" emerged in the Swedish system as the disability and survivor pension schemes were part of the reform split from the main new NDC pension system and subsequently financed through general government revenues. This created extra funds from employer payroll taxes, previously used to finance these two programs that were channeled into the buffer funds.

Box 6.2 Automatic balancing mechanisms in public pension systems in Sweden, Germany, Japan, and the United States

Automatic balancing mechanisms in the Swedish, German, and Japanese public pension system function via a mechanism that leads to the abandonment of pension benefit indexing either in the event that the total liabilities of the pension systems surpass assets (Sweden's notional defined contribution or "turnover duration" approach) or in the event that the ratio of contributing workers to retirees decline (Germany and Japan's "dependency ratio" approach). In Germany, this approach has arguably already been used in 2003–04 and led to the abandonment of cost of living allowance (COLA) increases in old age pensions and a subsequent cut in real benefit levels to German retirees.[1]

The use of such automatic stabilizers that freeze COLA increases puts the entire restructuring burden on current retirees. Fiscal balancing of the program is thus achieved through a cost-cutting strategy.[2] But apart from the political advantage of identifying in advance who will suffer from an unsustainable pension system (imagine, for instance, the difference in the AARP approach to Social Security reform if, by sometime before 2020, when the trust fund cash-flow turns negative, COLAs were automatically abandoned!), the economic advantage of automatic stabilizers is that the required burden is spread over many more people than if pension deficits accumulate over decades. An approach that maintains the status quo until right before the crisis hits will lead to far more drastic changes in either benefit levels or tax rates to restore sustainability than a gradual phase-in of the necessary changes (see also chapter 8).

Unfortunately, the current legal environment of US Social Security "rolls the snowball into the future." If the US Social Security Old-Age, Survivors, and Disability Insurance (OASDI) Trust Fund is not reformed and runs out of money, as is scheduled to occur in the early 2040s, there will be an uncertain legal situation. As laid out by Kathleen Romig (2007), the Social Security Act specifies that benefit payments shall be made *only* from the trust funds (42 U.S.C.§401(f)), and the Antideficiency Act prohibits government spending in excess of available funds (31 U.S.C. §1341). On the other hand, the Social Security Act also stipulates that Social Security is an *entitlement program*, which means that the US government is legally obligated to provide full Social Security benefits to all, as described in the text of the Act. The subsequent legal battle would have to be resolved by the courts and/or Congress.

The Social Security Trustees' 1982 Annual Report, which was issued prior to the 1983 Social Security Reform and, therefore, predicted that the Old Age and

Box 6.2 Automatic balancing mechanisms in public pension systems in Sweden, Germany, Japan, and the United States *(continued)*

Survivors Insurance (OASI)[3] Trust Fund would be insolvent by July 1983, indicates on page 2 that the immediate outcome of a trust fund insolvency would be the "inability to pay some benefits *on time*" [emphasis added], as the trust fund would be able to pay benefits only as tax receipts were credited to it.[4] This would mean that recipients would receive their full Social Security checks only about 9 months every year, indicating an automatic benefit cut of about 25 percent sometime in the 2040s (rising to about 30 percent by 2080).

This mechanism is essentially the same as the Swedish, German, and Japanese "automatic balancing mechanisms," only applied some 30 years from now, when the problem will have grown much bigger. The approaches in Sweden, Germany, and Japan are thus superior to the current US situation, as it tackles the possibility of underfunding earlier (instead of pushing the day of reckoning into the future) and spreads the problem over many more people.

One reason it is so difficult to reform US Social Security is that the voting group of the baby-boomers is so large. They are unwilling to accept cuts or to support those who suggest them. The difference in approach of equally politically powerful baby-boomer generations in Sweden, Germany, and Japan is noteworthy. To address pension system underfunding, voters in these countries have legislated immediate cuts in pension benefits for themselves, not just their children, and hence have espoused a degree of intergenerational fairness not evident in the US political system.

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1. See Deutsche Welle (2003). Without this freeze in pension benefits, contributions to the German pension system would have had to rise in excess of 19.5 percent of wage income. In addition to the benefit freeze, German retirees also were made to pay full costs of nursing insurance, adding to the decline in the real level of old age income in Germany.
2. Automatic tax increases could also cover any underfunding, although they would put the burden of the cost of rescuing the underfunded pension system on workers rather than retirees.
3. The OASI Trust Fund is a separate legal entity. However, as old age and survivor pensions and disability pensions are intertwined and the OASI Trust Fund is far larger than the disability insurance trust fund, usually when discussing the fiscal status of Social Security, the two trust funds are presented together as the OASDI Trust Funds. See financial data for each at the Social Security Administration's website, www.ssa.gov.

(box continues on next page)

Box 6.2 Automatic balancing mechanisms in public pension systems in Sweden, Germany, Japan, and the United States *(continued)*

4. It is also important to note that the OASI Trust Fund until the 1983 reform had experienced a total 21 years of annual cash-flow deficits since its inception. In other words, under the present German "automatic stabilizer" policy, we would have seen 21 years of no COLA (purely hypothetically, of course, as COLA was introduced in Social Security only in 1975). There have been no annual cash-flow deficits since 1983. Furthermore the OASI Trust Fund from 1983–86 had to borrow (repaid in full in 1986) money from the disability insurance and Medicare hospital insurance trust funds to be able to cover its benefit payment commitments. It goes without saying that such a "fudge" will not be an option in the 2040s, by which time the hospital insurance fund will have been insolvent for more than 25 years based on current trends.

retirement plans that pay benefits in addition to the required government program.

For the 2.5 percent of payroll invested in financial assets, individuals receive market returns on their chosen asset portfolios (choices are limited to avoid unsafe investments) and government administration of the program minimizes administrative costs. Most participants did not choose an investment strategy but allowed their contributions to be placed in the default portfolio, which invests fairly conservatively, especially as people approach retirement age. Annika Sundén (2004) presents data showing that more than 90 percent of participants choose the default fund, a clear indication of the power of pension scheme design.[11]

The Minimum Pension Provision

As we found with the individual account systems in Chile and elsewhere, there is a potential poverty problem with such plans. Low-wage workers do not contribute much to their individual accounts and so do not build up very large balances at retirement. Their implied annuity payment is then low and they fall below the poverty line. Given the Swedish government's concern with fairness, it is not surprising that it's program addresses this issue squarely.

The minimum guarantee is available starting at age 65 to those who do not reach a threshold level of income from their retirement benefits; as

11. The Swedish government prevents the "default fund" from investing in certain companies, due to social policy considerations. See www.aarp.org.

of 2005, 30 percent of new retirees claimed at least some income from the minimum guarantee (Könberg, Palmer, and Sundén 2005). In 2005 the monthly minimum pension income was 6,993 Swedish kronor (SEK) for an individual and SEK12,476 for a married couple. It is tricky to put that in US terms because of exchange rate fluctuations and differences in the cost of living. But based on the OECD 2005 purchasing power parity exchange rate for the krona (SEK9.21 to the dollar), these amounts are about $760 a month for a single person and $1,355 for a couple—comparable to, but a bit less generous than, the typical US Social Security benefit.[12] However, Sweden also has other subsidies (e.g., for rent and transportation) for low-income elderly.[13]

On balance, the minimum living standard provided to the elderly in Sweden compares favorably with that in the United States. Sweden guarantees a solid minimum standard of living for its elderly regardless of their contributions to the individual account plan. That is a very important and valuable attribute of their system, but it carries a potential downside: It can reduce or even eliminate the favorable incentives created by a contributory pension plan by weakening the link between the amount paid in and the amount received. Furthermore, for some low-wage workers, there is absolutely no link between contributions to and receipts from the pension plan: In 2005 single persons eligible for a monthly earnings-related pension benefit of $450 (SEK4,137) or less received no financial benefit from their own contributions. As of 2005, 30 percent of new retirees claimed at least some income from the minimum guarantee (Könberg, Palmer, and Sundén 2005).

For retirees eligible for monthly pension benefits in the range of $450 to $1,094 (SEK4,137 to SEK10,080), the minimum guarantee is reduced by 48 cents for every dollar they received from the earnings-related pension program (Scherman 1999).[14] This means their retirement income is higher the more they have paid into the system, but the effective (implicit) marginal tax rate is 48 percent on the minimum guarantee, a figure high enough to dull the incentive to work longer or at a better-paid job. Retirees who reach the top of this range (above roughly $1,094) are unaffected by the minimum benefit and simply receive their earnings-related pension. These retirees can fully appreciate the full incentive impact of a contributory pension plan.

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12. This comparison is intended to give a sense of the generosity of the minimum payment in Sweden. Clearly, a minimum payment and an earnings-related pension are different from each other.

13. At the same time, however, out-of-pocket health care costs are slightly lower in the United States (at 13.1 percent of total health care expenditure in 2005) than in the Scandinavian countries (OECD Health Database 2007).

14. Sweden is one of only five OECD countries that fully tax pension benefits. See table 2.1 for an overview of how Sweden and other OECD countries tax social benefits.

Provisions such as these in Sweden that reduce the work incentive provisions of public retirement plans are not unusual in other countries. For example, in the United States a spouse who has stayed out of the workforce for a number of years to raise children may find that the Social Security benefit he or she would receive based on his or her own income and Social Security contributions is lower than the benefit he or she would receive based on his or her spouse's contributions—which is equal to 50 percent of the spouse's benefit. For someone in such a situation, Social Security taxes on labor income are pure taxes with no influence on future retirement income and could have an impact on the decision whether or not to return to work or how long to work before retiring.

Making Up for Missed Contributions

The minimum pension guarantee is one way of making sure that persons who do not contribute much to their individual accounts do not end up in poverty. Sweden has other provisions to protect workers without a full work and contribution history (e.g., because of unemployment or leaving the workforce to care for children or a sick relative): The government uses general tax revenue to make contributions to the person's individual retirement account. The idea is to avoid penalizing workers who are unable to work; however, the incentive effects of these provisions are hard to determine. On the one hand, such provisions may encourage some individuals to remain unemployed rather than accept an available job, or to report that they are caring for children or relatives when, in fact, they could work and choose not to. On the other hand, these provisions may help avoid the problem of workers forced to leave employment for an extended period who then end up with the minimum pension, regardless of their work choices, as they approach retirement age.

Conclusions on the Swedish Plan

Sweden faced a serious fiscal shortfall in its public pension program at a time when the government was trying to reduce the very high average and marginal tax rates faced by its citizens. Policymakers did not want to raise taxes to deal with the projected pension funding shortfall, which left the alternative of finding a way to cut benefits while avoiding a divisive political debate. They succeeded in this goal and were able to gain the support of the political parties and the labor movement for the pension reform plan, which still has broad support—a remarkable achievement. In addition, they have created important protections against old age poverty by providing a minimum benefit and other support for the elderly, including health care.

One criticism of the Swedish plan is that, by indexing benefits to per capita rather than aggregate wage growth, it does not address the fact that with a PAYGO system, an increase in the proportion of the population receiving benefits will either impose an increased burden on the working population or result in reduced retirement benefits, or some combination of the two. There is no costless way to deal with this problem. If it is anticipated, then there can be an increase in saving that increases the capital stock and thus the size of the economic pie available in the future. But this is costly because it involves a reduction in consumption as the counterpart to the increased saving. In the Swedish plan, however, there is no increase in saving and hence no increase in future income to deal with the demographic shift and resulting larger retirement burden.

On the other hand, the reform plan with individual accounts was a way of making benefit cuts that were politically acceptable, while using the minimum benefit provision to avoid elderly poverty, even if that solution comes at the price of higher taxes on the working population. The cuts in benefits will affect higher-income retirees, who are required to contribute 16 percent of their taxable payroll to individual accounts that will yield pretty low rates of return, especially if the balancing provision is invoked. It is important in this context, though, to note that higher-income retirees may also receive benefits from any tax-favored contributory occupational retirement plans in which they might participate (although Swedish expenditures on such tax breaks are very limited).

The Swedish reform plan was something of a "smoke and mirrors" solution because it sets up bookkeeping notional individual accounts rather than real ones (in fact, some Swedes regard the system as a fraud). But it is difficult to have a realistic debate about the tradeoffs involved in pension reform in any country, so the Swedish approach may have been a necessary evil. The plan did get a number of things right, avoiding a fiscal collapse and strengthening the individual-level (microeconomic) link between the decision to retire or postpone retirement and the size of the retirement benefit. Furthermore, the Swedish model has a built-in automatic balancing mechanism, meaning that if political leaders allow the pension system to slip into deficit, the entire adjustment burden will automatically be borne by current retirees through temporary abandonment of pension benefit indexation—likely a very powerful incentive for political leaders to ensure that such a deficit does not arise.

The Swedish model is biased in favor of pension reforms earlier rather than later, undoubtedly a very positive feature in an otherwise traditionally hostile political economy of pension reforms. Aside from the relatively small contribution of 2.5 percent of payroll into financial accounts, the pension benefits in the Swedish system are not subject to investment risk and thus avoid the problems that some other countries have faced in this area.

Notional Accounts in Other Countries

The example of the Swedish plan has been an important one for other countries seeking to reform their public pensions. In particular, the countries of the former Soviet bloc have faced the necessity of pension reform as their economies made the transition to a market orientation.

Poland

Under the communist regime, Poland had a Bismarckian public pension program that was financed by a social tax. In January of 1999 this program was replaced by a new system of individual accounts both financial and nonfinancial. Workers' social security contributions were split, with 12.22 percent of payroll sent to the nonfinancial plan and the revenues used to pay the pension costs of the legacy workers and retirees inherited from the old plan; an additional 7.3 percent of payroll was allocated to a financial plan and the revenues invested in financial assets managed by private-sector agents. The rate of return in the financial part of the program reflects the market outcome and depends on the choices of the individual participants. For bookkeeping purposes, the contributions are split 50-50 between employers and employees and the amounts paid to the NDC plan cumulated in individual accounts, credited with an administered rate of return.

The rate of return for the nonfinancial accounts was set equal to the rate of growth of the total wage bill, that is to say, the rate of return intrinsic to a PAYGO system. Unlike the Swedish plan, Poland did not modify this formula to protect any given generation against possible adverse demographic shifts, making its NDC plan resistant to the budgetary effects of such shifts. It was easier to follow the intrinsic return in Poland because it is a transition economy that has the potential for rapid economic growth, and so the likely intrinsic rate of return is higher in Poland than in Sweden. The rate of return in the financial part of the program reflects the market outcome and, of course, ultimately depends upon the choices made by the individual participants.

The transition from the old public pension plan to the new one was rather easy from a political viewpoint: The policy choices were debated, and the public was made aware that the old system was bankrupt and needed reform; with the economic upheaval in Eastern Europe since the fall of the Soviet Union, there was a willingness to accept change. Workers born before 1948 kept their pensions under the old system, and the new plan was phased in for other workers (similar to Sweden's phase-in). Since the greater part of the new system is the NDC plan, this allows contributions from younger workers to pay for those born before 1948.[15]

15. It was not possible to apply the new plan to older workers because employment records from before 1980 had been destroyed with the change in economic system.

From an administrative viewpoint, however, the transition to the new plan was not smooth at all, with serious IT problems and employer reporting issues, and it took more than four years—until the end of 2003—to develop accurate administrative records. Given the long-term record keeping of the US Social Security Administration, such problems would be unlikely in a US reform, but it is a worthwhile lesson that the practical implementation of public pension reform can be a challenge.

Latvia

In common with other transition economies, Latvia was hard hit by the collapse of the Soviet system and saw a 40 percent decline in its GDP. The government's pension obligations went from 5.5 percent of GDP in 1985 to 10.5 percent in 1995 (Palmer et al. 2006), putting the program in budgetary crisis. There was also concern about the absence of a link between pension payments and contributions made while working. Given the very large obligations to existing pensioners, a fully funded contributory individual account system was seen as impractical, so Latvia decided on a notional or nonfinancial plan with a small additional funded program of individual accounts.

Latvia got the idea of an NDC pension program from the policy debate in Sweden, but it was actually the first country to implement such a plan, through legislation in 1995,[16] so Latvia is the country with the longest track record of such a program. Initially, the plan set a contribution rate of 20 percent of payroll for the NDC plan with a gradual transition, so that by 2010 the contributions will be split 50-50 between the NDC part to pay current retirees and a financial contribution plan with individual accounts backed by financial assets. Participation in the funded financial plan is compulsory for workers born after 1971, and the goal is to transition to a scheme with funded individual accounts as the main source of pension benefits.[17]

Being at the leading edge of innovation can be an uncomfortable place, and there were some tough adjustment problems in Latvia, such as the determination of pension rights for legacy workers, the age of retirement, and how to deal with persons who had already been given special early retirement rights. These issues all had to be resolved in an economy experiencing a lot of turmoil as it made the transition to a market economy.

16. Italy passed its legislation for individual accounts in the same year.

17. A successful transition to a fully funded individual account system could, over time, increase national savings as a growing share of contributions is invested in financial assets rather than funneled to retirees. Any increase in saving would be conditional on factors laid out in chapter 5, such as provisions to catch those who "slip through the cracks" as well as a minimum guarantee that does not effectively offset the incentive for low-income workers to contribute to the system.

There is understandable pride in the fact that the country has sustained the new plan despite the difficulties and that it remains broadly popular.

One reason for its popularity, however, would be hard to replicate elsewhere and is ultimately unsustainable. Latvia decided to credit the nonfinancial accounts with a rate of return equal to the growth rate of the wage bill, in keeping with theory and in line with what Poland did subsequently. Like other transition economies, Latvia suffered a severe downturn with the collapse of the Soviet Union but after a few years began to recover. It achieved a growth rate in real wages of 5.5 percent over the period 1997–2003 and an additional growth of 1.1 percent in the number of employees contributing to the program. Thus participants in the plan enjoyed a rate of return of 6.6 percent a year in 1997–2003, after inflation—a pretty attractive outcome but one that would be hard to duplicate elsewhere and will be hard to sustain in Latvia over the long run. While a positive development at the time, the large growth in real wages creates unsustainable growth in liabilities for the pension system down the line, especially since the Latvian system has no automatic stabilizing mechanism.

Under the reformed pension plan, recipients receive benefits in the form of annuity payments, but the Latvian program does not provide fully price-indexed benefits. The government determined that creating a financial or funded program of individual accounts, in addition to the NDC plan, was a higher priority and that trying to provide price-indexed benefits as well would not be practical for budget reasons. There is partial indexation of benefits, and the level of benefits upon retirement is based on the accumulated amounts in the notional and financial parts of the plan and on life expectancy applied uniformly to all participants. This means that workers' pensions will depend specifically on the wages they earned in formal or reported employment. Indeed, a significant component of the reform plan was to encourage greater participation in the formal labor force. After the breakdown of the Soviet-era system, many workers moved into informal positions to avoid taxes, and the pension reform was designed to lure them back to the formal sector. The chaotic beginnings to the system because of the economic collapse complicated this task. Because of reporting failures, it was hard to distinguish between people who had worked in the old system and those who had moved into the unreported sector to escape taxation.

The Latvian program has succumbed to the same political pressures that raised pension levels in many advanced economies in periods when funding was available. The parliament granted extra indexation of benefits in 1997 and 1998 and then in 1999 introduced a special pension right that allows workers who were part of the old pension system to recalculate their benefits, a measure that followed intense lobbying by a group representing older professional workers (Palmer et al. 2006). Even though, in principle, workers' benefits increase the longer they work, in practice these benefit enhancements seem to have encouraged or facilitated early retirement. This may be a temporary outcome triggered by the drastic changes in the economy that have altered the nature of the labor market and the work environment—older workers in many transition economies have had a hard time adjusting to the changes and have made use of early retirement provisions when they are available.

Lessons from Poland and Latvia

Poland and Latvia, two transition economies with nascent capitalist systems, decided to establish individual account retirement systems and were able to convince the public that individual accounts were a good way to deal with the budget problems of the old public pension plan. Moreover, both were able to "solve" the transition problem by using nonfinancial individual accounts, keeping in mind the fact that this approach does not, by itself, add to national saving. In both cases, the government put in place a fairly extensive program of individual financial accounts on top of the NDC plan, which can be expected to increase saving. Because these economies are much poorer than Sweden, they had a greater need for saving and made it a bigger part of the program.

The Latvian case is particularly interesting because not only are individual accounts a bigger share of its program but its NDC system is meant to serve as a transition to a fully funded individual accounts system; the share of contributions allocated to financial assets, rather than to existing retiree benefits, will grow over time until it reaches 100 percent. An NDC system is a useful transition, as it is a hybrid of the distributive structure of a PAYGO system (contributions fund existing retiree benefits) with the incentive structure of an individual accounts system (benefits are dependent on participants' contributions). However, the issue of funding the transition is still unresolved because the funding structure of an NDC system is analogous to that of a PAYGO system, as the benefits of legacy workers who paid into the old system still must be funded somehow, for example, by raising taxes or borrowing. Alternatively, if the country grew at a sufficiently high rate during the transition period, and contributions accumulated faster than benefit payments to legacy workers, and these payments decreased in proportion to the increasing share of contributions to funded individual accounts, then such a transition plan could theoretically fund itself. Or it could at least offset some of the government's liabilities. This approach would be far more effective in a transition country like Latvia than, say, the United States, as high growth in the wage bill would offer more slack against negative shocks to the system. The coming years in Latvia will be a testament to the efficacy of such a transition.

The Latvian case is also interesting because of the way the political system worked to alter the tight link between contributions and benefits. One of the advantages of individual account systems is that, as we have discussed, they compel participants to connect contributions to benefits. In Latvia many workers had been part of the old pension plan, so their level of benefits was not easily determined on the basis of past contributions, a situation that opened the door to political bargaining over what they would receive. After intense lobbying, they were allowed to add to their benefits using the NDC formula rather than that of the old system. Going forward, we will see whether future benefit levels will depend on political pressures from lobbying groups, or whether the system's "virginity" can be restored.[18]

It might be similarly difficult to insulate individual accounts in the United States from political pressure if a particular cohort of workers (or retirees) was seen to have had a bad deal from such accounts. In particular, the cohort that is part of the transition to the new system may be in a position to exercise political leverage to improve their position at the expense of creating a trust fund. Latvia has no trust fund, despite the fact that impending demographic changes suggest the need for one. The resources that would have gone into a trust fund were given instead to persons in or near retirement, a group that made up a fifth of voters.

US Proposals to Establish Private Accounts

President Bush appointed the President's Commission to Strengthen Social Security soon after he took office, and the commission issued its report in December 2001 (President's Commission to Strengthen Social Security 2001). The bipartisan commission was co-chaired by former Senator Daniel Patrick Moynihan and Time Warner CEO Richard Parsons, and its members included respected economic experts on Social Security. The mandate of the commission was to examine the use of voluntary individual accounts in Social Security and to look for reforms that would improve the fiscal sustainability of the program without raising payroll taxes and without changing benefits for those who receive them or are close to retirement. This was a tough assignment.

Price Indexing

The commission came up with three alternative plans to accomplish these goals, but the real meat of the report was in Reform Model 2, which "enables future retirees to receive Social Security benefits that are at least

18. Oscar Levant famously remarked: "I knew Doris Day before she was a virgin."

as great as those of today's retirees, even after adjusting for inflation, and increases Social Security benefits paid to low-income workers. Model 2 establishes a voluntary personal account without raising taxes or requiring additional worker contributions. It achieves solvency and balances Social Security revenues and costs" (President's Commission to Strengthen Social Security 2001, 15).

How did the commission propose to achieve this? The key element of the plan that improves the fiscal solvency of Social Security involves a change in indexing procedure. Under current law, Social Security benefit levels at retirement are linked to the growth of wages. Upon retirement, beneficiaries stand to receive an amount linked both to the level of wages in the economy and to their own employment and wage record.[19] Once they retire, future monthly benefits are indexed to the consumer price index (CPI). These provisions mean that the replacement rate (the ratio of the benefit level to the wage received immediately before retirement) remains roughly constant over time. For example, those born in 1950 who are in the lowest earning quintile when they retire will have a replacement rate of 69.5 percent; if current law remains in place, those born in 2000 who are in the lowest quintile will have a replacement rate of 69.7 percent. That constancy does not apply for those in the highest quintile, as their replacement rates fall from 27.8 to 22.8 percent over the same time period (CBO 2004). Still, the current system is designed to maintain Social Security benefits as a significant fraction of retirement income for all but the highest-income recipients.

The President's Commission recommended that Social Security stop indexing initial benefit levels to wages and start indexing to the CPI. This would mean that the inflation-adjusted benefits of future retirees would be similar to today's levels but well below the levels they would have received under current law. Instead of rising with the general increase in real wages over time, benefit levels would remain constant in real terms. Absent any offsetting adjustments, the replacement rate for Social Security would thus decline over time, making these benefits a smaller and smaller component of retirement income over the very long run for most Americans.

In terms of addressing the solvency problem of the system, the commission greatly overdid it. The proposal would lead to surpluses by the middle of the century, and after 100 years, the revenues would be twice the outlays (CBO 2004, Figure 1B), as tax receipts would rise over time with wages but benefits would rise with prices. Assuming that real wages increase, the revenues would grow faster than the outlays.

19. This "initial benefit level" means that the value of pension benefits earned prior to retirement are until the actual time of retirement linked to national wage growth. See box 3.2 for a detailed description of how Social Security benefits are estimated.

Antipoverty Provisions

The commission, recognizing that its plan would reduce benefits for low-income workers to unacceptably low levels, proposed two ways to deal with elderly poverty. First, a floor under benefits would ensure that recipients had at least 120 percent of the poverty level of income. Second, benefits for elderly widows would increase immediately, as this group has a high incidence of poverty under the current system.

President Bush's Proposal

In February 2005 the White House issued *Strengthening Social Security for the 21st Century* (White House 2005). This 13-page document summarized the fiscal problems of the current Social Security system and proposed a voluntary system of private individual savings accounts for workers born after 1950. Participants could opt to devote 4 percent of their taxable payroll to personal retirement accounts, up to $1,000 a year, an amount that would rise over time. If they made this choice, their contributions to the regular Social Security fund would be reduced dollar for dollar. The SSA would aggregate the contributions from individual workers and put them into a small number of funds for private management—equities, bonds, and so on. The plan would work in the same way that the Thrift Savings Plan operates for federal employees, and it was estimated that administrative fees for the managed funds would be kept at around 30 basis points, well below the level of most private plans.

Although workers could choose which fund or combination of funds they would prefer, there would be restrictions and protections on the individual accounts. Participants would be strongly encouraged to move to more conservative portfolios as they neared retirement, in order to protect against sudden market swings. They could not withdraw funds before reaching full retirement age, and upon retirement they would receive an annuity benefit and not a lump-sum payout.

The argument in favor of the president's proposal was that the privatization plan would not add to the total costs of Social Security—that is, it would not worsen the fiscal imbalance. However, it did not claim to solve that imbalance. It argues that individual accounts would make Social Security a better deal than the current system, implying that future benefits would actually be higher than those currently promised. The proposal calls for transition financing (borrowing) in the amount of $664 billion ($754 billion including interest) over the next 10 years to make up for payroll tax revenues no longer available for current and near-term retirees.

Although the February 2005 paper does not address the issue of the solvency of the system, in subsequent speeches the president discussed progressive indexing as an approach to this problem.[20] It is not easy, however, to determine precisely what was meant by progressive indexing; the White House website (accessed April 19, 2007) has only two references to this concept, including an explanation that consists of three paragraphs in the 2006 *Economic Report of the President* (Council of Economic Advisers 2006, 80–83). The idea is that low-income workers would receive benefits based on the current indexing scheme, which indexes initial benefits by wages and subsequent benefits by prices. Initial benefits for higher-income beneficiaries would be a mix of price and wage indexing, and for top income beneficiaries, only price indexing would be used. The progressive indexing could be structured to ensure the viability of the system for the long run.

Despite the relatively brief analysis, progressive indexing is the key part of the administration plan that solves the financing problem of Social Security. It preserves benefit levels for low-income workers but cuts them for higher-income workers. The progressive indexing could be structured so as to ensure the viability of the system for the long run. And middle- and upper-income workers who concluded that they were not likely to get a good deal out of Social Security benefits could move about a third of their contributions to individual accounts.

Strengths of the Bush Proposal

The Bush proposal deals well with a number of the problems in individual account plans instituted overseas, such as those of Chile or the United Kingdom (discussed in chapter 5). It puts the government in charge of consolidating small contributions and possibly of record keeping as well, measures that would help keep down administrative costs. Private-sector asset managers would be responsible for the aggregated funds, avoiding the problem of government ownership of or influence on private-sector corporations. The goal of the White House was to limit the fees earned by financial institutions to 30 basis points of assets, but based on our conversations with financial institutions, that goal would be difficult to reach; something in the range of 60 to 90 basis points would be more feasible.

The plan would reduce rash investments by participants, limiting choice to a small selection of funds with reputable entities and no undue risk. Such an approach could not avoid the problem of a sustained downturn in the broad equity market, but it would at least prevent speculation in very risky stocks.

The plan also addresses the problem that has plagued Australia, where individuals withdraw their retirement funds in a lump sum, use the money

20. For example, in speeches on June 2, 2005, at the Hopkinsville Christian County Conference and Convention Center in Hopkinsville, Kentucky and on June 8, 2005, at the Capitol Hilton in Washington. Available at www.whitehouse.gov.

to pay off debts and mortgages, and then apply for the minimum retirement pension. Under the administration proposal, retirees would be required to purchase annuities, thus improving the US annuity market. At present only a small proportion of retirees purchase annuities with their private retirement funds. This may be because people are reluctant to surrender control of their assets, but it is also because annuities are a bad deal for many people. Just as there is a problem of "moral hazard" with life insurance, with annuities there is a similar but inverse problem. With life insurance, persons who know they have a life-threatening condition or do not expect to live long have an incentive to buy a policy, and so insurance companies insist on medical exams and ask a lot of personal questions. Conversely, individuals who expect to live for a long time have an incentive to buy annuities, but it is difficult for financial institutions to make an accurate assessment of lifespan for an individual, and so they base their calculations on the life expectancy patterns of those who apply for annuities and not on the average life expectancy of a broader population.[21] An average person, therefore, gets a lower annuity payment than is actuarially warranted. A legal provision requiring retirees who participate in the government individual account plan to buy annuities would reduce the market distortion and make the annuity market more efficient. The widespread use of annuities would also increase their familiarity and perhaps voluntary purchases as well.

Another advantage of the administration plan is that it links individuals' work history more closely to their pension receipts. Instead of paying Social Security taxes into an anonymous fund, workers participating in the private account program would see how their contributions were adding up and would be likely to view payments as contributions to their own saving rather than as taxes. This might provide greater political support for the program and could bring work incentives more in line with efficient market incentives.

Concerns about the Bush Proposal

The biggest concern about the privatization plan parallels a problem with the Swedish reform: It would not add to net saving, and without that, there would be no addition to US capital formation.[22] In effect, the size of the economic pie would be unchanged by this program. So if, as is claimed,

21. The life expectancy of someone conditional on their having applied for an annuity is greater than the life expectancy of someone conditional on their not applying, controlling for other observable characteristics of the individual.

22. In the long run, it is not entirely correct that the plan would add no net saving. Once the net present value of government dissaving (borrowing to finance the transition) equaled the net present value in the stock of private savings, then any incremental growth in private savings after that could add to national savings (assuming positive economic growth).

participants in the plan would be better off than under the current Social Security system, the improvement in their future income would come at the expense of other Americans, in higher taxes to service the government debt incurred to finance the transition.

The second concern is the progressive indexing proposal. Although the impact on current retirees would be zero, and very small for those retiring in the near future, the impact over the long run would be profound. The progressive indexing would eventually convert the traditional Social Security benefit structure from a universal retirement program to an antipoverty program for the elderly. It is a matter of judgment whether that is a good or bad idea. Those who believe that a universal retirement program is a good feature are against this move; those who think that a government retirement program should provide a minimum benefit to avoid elderly poverty will consider this a good move.

One of the advantages of the plan may also be a disadvantage, namely the closer linking of benefit receipts to contributions. Low-wage workers who contribute only small amounts to the pension program would receive only small annuity payments after retiring. Unless there is an adequate separate antipoverty program for the elderly, any shift to individual accounts will increase poverty.

To address this concern, the administration plan suggests 120 percent of the poverty level as the minimum benefit level. But over time, many low-wage workers would find that the amount they were to receive from the revised Social Security program was lower than this minimum benefit, so that any additional contributions to Social Security, and indeed any additional taxes they would pay by participating in the labor force, would not add to their retirement income. Such workers would have a strong incentive to avoid additional contributions or taxes by retiring early or by working in the informal economy for cash and not reporting this income. This problem echoes concerns in Chile, where a high fraction of the workforce does not participate in the retirement plan, particularly once they have qualified for the minimum benefit. Working in the informal sector is more common and probably easier in Chile than in the United States, but plenty of Americans work in jobs where part or all of their income is in cash (or tips) and unrecorded—in babysitting, gardening, hair salons, and restaurants, for example. The presence of millions of unrecorded immigrants in the US labor market indicates the potential for working and avoiding regulatory requirements.

A core of supporters of US Social Security strongly opposes reforms that they believe will convert the program into a welfare plan for the elderly. They view the program as a great success of the New Deal and fear that its transformation to a welfare program will eventually undermine it because Americans do not like welfare programs. Keeping a universal retirement plan is a priority for this group, which considers the progressive indexing proposal combined with privatized individual accounts a first step toward dismantling the traditional Social Security retirement program.

It is hard to make a clear judgment on this view because it involves political factors and a view about the sustainability of a Social Security if it has a more progressive system of support for the elderly. However, unless the political climate changes drastically, there will have to be some benefit cuts, as it seems unlikely that the Social Security funding shortfall will be solved purely through higher taxes. Given the choice, it would be better to cut benefits for high-income than for low-income retirees. Any resulting flattening of the benefit schedule will make the program more progressive and thus more like a welfare program, it is true, but we do not believe it is inevitable that this would automatically lead to the program's disappearance. Other countries—New Zealand, for example—have very flat (i.e., highly progressive) benefit schedules and have maintained their programs intact. Indeed, the cross-country evidence on progressivity of pension systems (chapter 3) suggests that a number of OECD countries have maintained significantly more progressive government pension systems than US Social Security without any discernible loss of broad political support. Although Americans do not like welfare, they also do not like pushing the elderly into poverty. And it is easier to make the case for supporting elderly retirees than for supporting single mothers (the main recipients of the traditional welfare system).

Conclusions

Based on the experience of other countries, it is very hard to see that notional individual accounts or NDCs have any decisive advantage over the current US Social Security system. They do not increase national saving or provide a solution to the budget shortfall. Their big advantage is that they (might) have microeconomic effects on human behavior via their direct link between work history and benefits received, providing greater encouragement for employment—thus avoiding the disincentive to work that public pensions otherwise create. But this is not any great advantage for the US system, which already provides a benefit adjustment that makes any retirement age between 62 and 70 more or less actuarially neutral. If the United States wanted to link retirement benefits more closely to work history, it could do so through reforms to the current system—by making benefit levels depend on all years of employment, for example, or by reducing spousal benefits.

An NDC plan may have been a good selection for countries that are in transition, have seen the impact of over 50 years of communism, and wish to move aggressively to develop greater individual incentives; in Latvia, for example, the plan was useful in the transition to a fully funded individual accounts system. And it may have been a good selection for countries such as Sweden that have had a long tradition of a welfare state that weakened work incentives. But the United States does not fall into either category.

It is worth noting, also, that Sweden does not really have an individual account system for low-income workers, whose labor force participation is most likely to be affected. There are such strong subsidies for low-income retirees in the Swedish system that their standard of living is only marginally affected by their work history and retirement age. This balancing act for low-wage workers highlights the tradeoff in public pensions. The virtue of linking work history to pension benefits is also the vice of generating elderly poverty or of perpetuating an unequal wage distribution in an unequal retirement income. Sweden has a hybrid system, and the transition economies will likely gradually move to a hybrid system also. The US Social Security system is already there.

The Bush administration proposal for individual accounts, while different in structure from an NDC system, had nearly identical macroeconomic implications in that it would generate no net change in national saving in the short run. Unlike an NDC system, the proposed system would use funded individual accounts, and the costs of transition to the new system would be entirely financed through borrowing. The increase in private saving in individual accounts would be entirely offset for many years by the "dissaving" to finance the cuts from contributions to the Social Security fund. The Bush proposal, drawing on the report of the Moynihan-Parsons commission, had strengths. It recognized many of the problems that had surfaced with financial or nonfinancial accounts in other countries. It called for the pooling of contributions for allocation to private fund managers. It limited the choices of participants so that they would not make risky investments and pushed people to more conservative portfolios as they neared retirement. It would have given new impetus to the annuity market. And it would have made it possible to build on those strengths with a system of individual accounts in addition to the existing Social Security system.

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