Saving Social Security: An Update

ince the publication of the first edition of this book in early 2004, the Social Security debate has moved to the top of the domestic policy agenda. In his February 2005 State of the Union address, President Bush proposed replacing part of the existing system with voluntary individual accounts. In the months that followed, much public discussion surrounded the administration's proposal as well as different approaches to addressing the underlying actuarial deficit in the Social Security program. In March 2005, the Trustees of Social Security released an updated set of actuarial projections. The new projections did not show any dramatic changes from the previous year's figures, but nonetheless they served to focus attention once again on the program's projected deficit and how it could be closed.1 In April 2005, President Bush expressed support for the "progressive price indexing" proposal we discuss below.²

The reform proposal that we put forward in the first edition of this volume played a cameo role in the discussions, partly by demonstrating that long-term solvency could be restored without losing the key social insurance features of the program. In December 2004, the Congressional Budget Office (CBO) released an analysis of our plan, some of

which is reprinted in this edition as appendix H.³ Under CBO assumptions, our plan more than eliminates the long-term deficit in Social Security. If the CBO projection rather than that of the Office of the Actuary became the test for whether a plan restores solvency, some of our proposed benefit reductions and revenue increases could be scaled back and still produce solvency.

This update examines the administration's proposal for individual accounts and discusses the so-called progressive price indexing proposal to restore long-term solvency by changing how initial benefits are calculated. We also contrast our approach to automatic indexing for life expectancy with one based on increasing the age for full benefits.

The Bush Administration's 2005 Individual Account Proposal

Under the proposal put forward by the Bush administration in early 2005, workers would be given the option of having part of their payroll taxes deposited into individual accounts. If a worker chose to participate in the individual account system, 4 percent of his or her payroll taxes (initially up to a limit of \$1,000, with the limit gradually increased over time) would be diverted into the account.⁴

The individual account system would involve two components. If a worker chose to participate in the system, he or she would invest the diverted portion of his or her payroll taxes in financial assets, which would accumulate in the account during the worker's career and become available to the worker upon retirement. But since the revenue diverted to this account would reduce the funds available to the traditional Social Security system, a "liability account" also would be created. The liability account would track the worker's "debt" owed to Social Security because of the diversion of payroll taxes. Each year, the Social Security Administration would update the liability account to include the additional taxes diverted, charging interest on the outstanding balance. Upon retirement, the debt would be repaid by reducing the worker's traditional Social Security benefit by enough to repay the accumulated debt. The benefit reduction is designed so that the present value of the expected reductions over a worker's lifetime is equal to the accumulated debt and matches the description of generic accounts in chapter 8.

The annual interest charge on the liability account would be set at 3 percentage points above inflation. Participation in the individual account system would thus generate additional retirement income only if the investment returns for workers reaching retirement exceeded the 3 percent per year inflation-adjusted charge on the liability account. The results would be similar to the results of investing on margin, with a real interest rate on the margin loan of 3 percent per year. Just as investing on margin generates net income only if the return on the investment exceeds the interest rate charged on the borrowed funds, workers who chose to participate in the administration's plan and earned less than 3 percent per year on their account after inflation would lose.

The design of the individual accounts would allow workers to choose from a limited menu of investment options arranged by a government administrative agency.⁷ The administration's 2005 proposal does not include any option for workers to move the accounts from the agency to private providers, although the President's Commission to Strengthen Social Security in 2001 did recommend such an option once the accounts reached a specified size. The president's new approach on this issue is better than that of his commission.

Workers would not be allowed access to their account balance before retirement. Upon retirement, the balance could be used to purchase an annuity—that is, it could be exchanged for a monthly payment that would last as long as the worker or his or her spouse was alive. Alternatively, some or all of the accumulated balance could be taken as a lump sum or a monthly payment or both, provided that both spouses agreed and that the traditional benefits together with the annuitized portion of the account were sufficient to keep the worker and spouse out of poverty. Note that if all of an account was annuitized upon retirement, none of the balance would be available to be passed on to heirs. Conversely, the annuitized monthly benefit paid during the retirement of a worker and his or her spouse would be reduced to the extent that a portion of their account was not annuitized in order to finance a bequest.

One important issue involves workers who die before reaching retirement. At the time this edition went to press, the full details of how the administration's account proposal would treat such cases had not been officially defined. It appears, however, that if a married worker died

before retirement, the surviving spouse would inherit *both* the asset account and the liability account; thus the spouse's inheritance could have a positive or negative value.⁸ The assets of a non-married worker who died would go into the worker's estate and the liability account apparently would be erased.

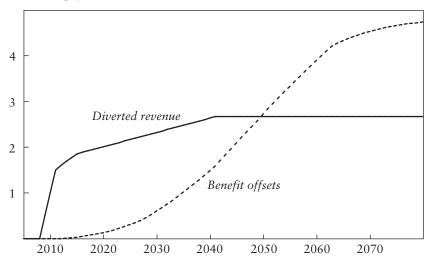
The administration has claimed that the system is actuarially neutral over an infinite horizon. In particular, since the 3 percent per year inflation-adjusted charge on the liability accounts would be equal to the projected interest rate for government debt, both the government and the Social Security system would be held harmless on each loan that was fully repaid, since the projected rate on the loan from the government is exactly equal to the projected rate on the government's own additional borrowing and on the returns earned by bonds in the trust fund. In part because the liability accounts of non-married workers who died before retirement would be extinguished, however, the accounts would not in fact be exactly actuarially neutral for Social Security, even over an infinite horizon.⁹

Even if the proposal were actuarially neutral over an infinite horizon, it would still generate a large cash-flow problem. Substantial revenues would be diverted from the Social Security trust fund to individual accounts long before the trust fund would receive the associated "debt repayments" from the liability accounts, since the "debts" would not be repaid until workers retired and their traditional Social Security benefits were reduced. This cash-flow pattern would reduce the trust fund balance on any given date and so worsen the actuarial balance over the traditional seventy-five-year projection period.

To examine the time profile of the cash flows, we follow the administration's assumption that two-thirds of workers would participate in the accounts. Figure 1 shows the cash-flow effects; the unusual pattern of the diverted revenue over the next few years reflects the phase-in rules for the accounts. He ignore the pre-retirement deaths of non-married workers, after which the liability accounts would not be repaid, the individual accounts have no effect on the trust fund in present value terms over an infinite horizon, since the trust fund is eventually paid back in full for the diverted revenue. However, the aggregate cash flow from the individual accounts is negative over a period of about forty-five years,

Figure 1. Cash-flow Effect from Administration's Individual Account Plan

Percent of payroll



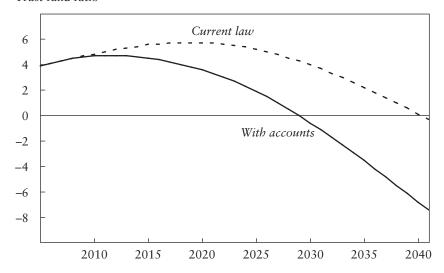
Source: Authors' calculations.

because the diverted revenue exceeds the benefit offsets until about 2050. This extended period of negative cash flow creates significant problems.

Currently, roughly 85 cents of every dollar in noninterest Social Security revenue is used to pay benefits during the same year. If revenue was diverted into individual accounts, the reduced cash flow would drive the trust fund balance to exhaustion sooner than currently projected, requiring either some source of additional revenue to continue paying current benefits or a reduction in current benefits to offset the reduced revenue flow. Indeed, the net cash outflow shown in the figure causes the trust fund to be exhausted more than a decade earlier than in the absence of the accounts—2029 rather than 2041, according to one analysis using the 2005 Trustees' Report. Figure 2 shows the trust fund balance relative to the wages covered by Social Security each year, with and without the proposed accounts. As the figure shows, at each point in time the trust fund is lower than it would have been in the absence of the accounts, because some "loans" made to workers are always outstanding.

Figure 2. Trust Fund Ratio under the Administration's Individual Account Plan

Trust fund ratio



Source: Authors' calculations.

Another perspective on the cash-flow impact of the proposed accounts comes from the effect on the seventy-five-year actuarial balance, the traditional measure used to evaluate solvency. While no official projection is available for the full seventy-five-year projection period, in part because the administration has not formally stipulated how it would handle the cash-flow problem, the actuarial deficit caused by the accounts over the next seventy-five years would amount to about 0.6 percent of payroll. To put that in context, the actuarial deficit is currently projected to be 1.9 percent of taxable payroll; if we add the administration's individual accounts, the deficit over the next seventy-five years increases to about 2.5 percent of payroll.

To avoid accelerating the exhaustion of the trust fund by the individual accounts, the administration's approach would apparently transfer substantial amounts from the general budget to Social Security. Relying on such a transfer from the rest of the budget would be a major departure

from the principles that have guided Social Security over its first seventy years. To date, all Social Security funding has come from dedicated revenue sources, serving thereby to keep the program out of the annual budget process. That is an attractive feature for a program that should not be changed frequently or without adequate notice. Indeed, relying on repeated substantial transfers from general revenues, when such transfers are not backed by a specific source of revenue or do not reflect compensation for a previous history of surpluses within the program, represents a large political risk for future benefits.

In addition to the uncertainty about future congressional action once the trust fund is exhausted, the enlarged borrowing needs of the federal government resulting from the cash-flow problems highlighted in figures 1 and 2 could have an adverse impact on the bond market, resulting in a significant rise in interest rates. These aggregate implications are not the only downsides to the administration's proposal. As we argue in chapter 8, reducing traditional Social Security benefits to make room for individual accounts would be unsound for society as a whole. The reason is that the benefits financed from a system of individual accounts are likely to differ from the benefits that Social Security provides today in several important ways, including the following:

-Retirement benefits under Social Security ensure a level of income that does not depend on what happens in the financial markets.¹³ Instead, benefits are related to the beneficiary's average lifetime earnings and when the beneficiary chooses to retire. With an individual account, by contrast, benefits during retirement depend on the value of the assets accumulated in the account, which depends not only on lifetime earnings and retirement timing but also on how well one has invested and on how financial markets happened to perform during one's career.¹⁴ It is entirely appropriate and indeed beneficial for most individuals to accept the risks of investing in financial markets as part of their overall retirement portfolio; it does not, however, make sense to incur such risks as a way of providing for a base level of income during retirement, disability, or other times of need. Individual accounts thus should supplement Social Security, not replace it. Furthermore, the accounts that already supplement Social Security, such as 401(k)s and IRAs, can be substantially improved to better serve the needs of workers.

-Retirement benefits under Social Security are protected from inflation, and they last as long as the beneficiary lives. Individual accounts could, in principle, achieve similar protections by requiring account holders, upon retiring, to convert their entire account balances into a lifelong series of inflation-adjusted payments—that is, an inflationindexed annuity. The administration's proposal for individual accounts does not include such a requirement in full, however. Even if it did, any such requirement might not be politically sustainable. Individual accounts have been promoted on the grounds that they would enhance one's "personal wealth" and "ownership" of one's retirement assets; maintaining substantial restrictions on how account holders may access and use their accounts seems inconsistent with achieving those goals. Moreover, the option of accumulating "bequeathable wealth," an explicit selling point of the account proposal, conflicts directly with the goal of financing benefits that last as long as the beneficiary lives. One cannot use the same assets both to maximize benefits during one's own lifetime and to leave something to one's heirs. In addition, Social Security benefits come as a joint-life annuity, protecting surviving spouses. Just as annuitization may not be sustained for individual accounts, so too protection of spouses could be undercut.¹⁵ And funds that are not annuitized could be spent in large measure while both spouses are alive, leaving too little for the survivor.

—The Social Security benefit formula is progressive: it replaces a larger share of previous earnings for lower earners than for higher earners. That progressivity provides a form of lifetime earnings insurance that is not available through private markets. For the nation, it helps reduce poverty and narrow income inequalities; for the individual, it can cushion the blow from a career that turns out to be less financially rewarding than hoped. As proposed, the individual accounts do not contribute to progressivity.

—No political pressure exists to give earlier access to Social Security benefits. In contrast, there is likely to be considerable pressure to allow individual accounts to mimic 401(k)s and IRAs, which allow pre-retirement access through loans and early withdrawals. Such access could undermine the preservation of funds for retirement.

—Social Security provides benefits in addition to basic retirement income. Some of these, such as disability benefits, would be difficult to integrate into an individual accounts system.

—Maintaining individual accounts would incur certain administrative costs, costs that the present structure of Social Security avoids. The higher those costs, the less generous the benefits that a given contribution history could finance. Also, inevitably, some of the workers who managed their own accounts would make poor investment choices that would leave them stranded in time of need, even if the financial markets had performed well. Although the administration's proposal has rules that would limit administrative costs and restrict opportunities for workers to make very poor investment choices, other proposals leave room for very high administrative charges and misguided investment decisions. Significant uncertainty thus surrounds the types of protective rules that may or may not accompany an individual account plan and the process by which such rules might evolve. For workers who do invest well, substantial variations would still exist from one cohort of retirees to another, even between those just a few years younger or older.

To sum up, the Social Security program has certain core principles: to provide benefits to workers and their families in the form of a real annuity after the disability, retirement, or death of a family wage earner; to provide higher annual benefits relative to earnings for those with lower earnings; and to provide similar wage replacement rates on average to cohorts who are close in age. A system of individual accounts could well move away from all of those principles. Benefits could be provided as a lump sum that might be outlived, leaving the worker or a surviving spouse much less well off than under an annuity; any access to the account balance before retirement could leave less for retirement; and replacement rates could vary dramatically from one generation to the next as financial markets fluctuate. Accounts larger than those proposed by the president could result in replacement rates that, rather than being progressive as under the current system, would tend to be proportional to earnings within a generation. 16 Finally, under the current system, the level of benefits becomes very predictable as a worker approaches retirement age; under an individual account system, however, benefits could be far less predictable, depending on possibly sudden changes in asset values and interest rates.

Price Indexing

The administration's account proposal does not improve the solvency of Social Security. In April 2005, however, the president expressed support for "progressive price indexing," which would reduce the projected deficit in the program. Although it sounds innocuous, the change would reduce benefits far more than it would appear to.

As we explain in chapter 2, under current law, initial retirement benefits are based on a worker's average indexed monthly earnings, which are determined by taking earnings in previous years and scaling them up by subsequent national average wage growth.¹⁷ The formula relating full benefits (the so-called primary insurance amount) to earnings also is indexed to average earnings. 18 The result is that benefits for new retirees roughly keep pace with wage growth. 19 Successive generations of retirees thus receive higher benefits because they had higher earnings—and paid higher payroll taxes—during their careers. That feature of the Social Security system makes sense, since a goal of Social Security is to ensure that a worker's income does not drop too precipitously when the worker retires and ceases to earn income. Focusing on how much of previous earnings is replaced by benefits, which is called the replacement rate, recognizes the real-world phenomenon by which families, having become accustomed to a given level of consumption, experience difficulty adjusting to substantial declines in income during retirement.

To understand how progressive price indexing would affect this benefit formula, we first examine "full price indexing" and then the related proposal for progressive price indexing, which the administration has now embraced. Under full price indexing, initial benefits would be reduced by the cumulative difference between wage growth and price growth from the time that the proposed system was implemented to the retirement of a given generation.²⁰ More precisely, the first step in determining benefits would be to calculate benefits as they are calculated under current law; then benefits would be reduced to offset the growth of real earnings—that is, any growth of wages in excess of price growth. In other

Recipient age when implemented	Percent change in scheduled benefits with 1 percent real wage growth	Percent change in scheduled benefits with 1.5 percent real wage growth	
55	-0.0	-0.0	
45	-9.6	-14.0	
35	-18.2	-26.1	
25	-26.0	-36.5	
15	-33.1	-45.4	
5	-39.5	-53.0	
0	-42.5	-56.4	

Table 1. Effect of Price Indexing/Real Wage Growth Negating Provision on Benefits^a

words, under price indexing, if average real wages were 10 percent larger after ten years, the roughly 10 percent growth in benefits that is currently credited to the retiree to keep pace with wage growth would simply be canceled. The result of the proposal is that on average for a cohort, real benefit levels would be constant over time, rather than increasing in line with real wages. Since real wage growth is positive on average, the change would reduce initial benefits relative to currently scheduled benefits, and the size of the reduction would increase over time.²¹

The provision thus is more accurately described as "real wage deflating" than as "price indexing," since it cancels the benefit increases from real wage growth. Two implications are immediately obvious. First, the longer the provision stays in effect, the larger the benefit cuts, assuming ongoing real wage gains. Second, the more rapid the real wage growth, the larger the benefit cuts.

We assume that there would be no benefit reductions for workers age 55 years and over at the time any legislation is enacted and that the reductions would be phased in starting with workers who were 54 at the time of legislation. For each additional year that a worker is younger than 55, the benefit formula is reduced by an additional amount equal to the percentage real wage growth of another year. Table 1 shows the percent change in currently scheduled benefits under this proposal, assuming that real wage growth is 1 percent or 1.5 percent.

a. Calculated as $1 - (0.99^{55-age})$ and $1 - (0.985^{55-age})$.

As the table shows, the benefits of a worker who was 35 years old at the time of legislation would be reduced by 18.2 percent under the proposal if real wage growth was 1 percent annually. The benefit reduction would be much larger, 26.1 percent, if real wage growth was 1.5 percent. The future benefit level for a newborn at the time of legislation would be reduced by 42.5 percent of the scheduled benefit level with 1 percent growth and by 56.4 percent with 1.5 percent growth.²² The replacement rates from Social Security would be reduced by corresponding percentages. The role of the Social Security system in allowing the elderly to maintain their standard of living after retirement would thus decline sharply over time.

A potentially less obvious implication of the proposal is how it would affect two workers with the same pattern of lifetime real wages who are of different generations. Consider a younger worker and an older worker with the same real wage at every age. The younger worker is part of a generation that has higher real wages on average than the older worker's generation. Under the proposal, the younger worker would receive a *lower* real benefit level than the older worker, despite the younger worker being further down the wage distribution of his or her generation.

To be sure, the proposal would generate cost savings for Social Security. Indeed, use of this real wage deflating provision by itself would be more than sufficient to eliminate the seventy-five-year actuarial imbalance in Social Security. (The present value of benefits after adopting the change would be even lower than the present value of "payable benefits," the level of benefits that could be paid using only existing revenue sources.) Moreover, since benefit levels would be so much lower than they are under the current formula, this system would accrue increasingly larger surpluses over time with unchanged economic and demographic assumptions.²³

However, the use of real wage deflating is even more troubling than simply reducing benefits based on *expected* real wage growth today. As shown in the table, if real wage growth was more rapid than expected, benefit cuts would be *larger* under this approach. Yet if real wage growth was more rapid, the underlying seventy-five-year actuarial deficit (that would exist in the absence of this provision) would be smaller. Under the real wage deflating approach, if real wage growth turns out to exceed the

currently projected rate, the need for benefit reductions decreases but the reductions themselves increase. In other words, that approach produces benefit reductions that are larger the less the financial need of Social Security for such reductions. A method of automatic indexing should be designed to help keep revenues and expenditures more closely balanced. This type of indexing does the reverse.

In summary, partially substituting price indexing for wage indexing in determining initial benefits represents a shift in the focus of the Social Security program away from its role of preserving the living standard of workers and their families upon retirement, disability, or death and toward a lesser role of providing benefits that would, on average, lag further and further behind earnings. Although this approach incorporates only one particular pattern of how benefits could be reduced for workers born in different years, it illustrates the broader implications of trying to close the long-term Social Security actuarial deficit solely by reducing benefits instead of by combining revenue increases and benefit reductions. Not surprisingly, approaches that rely exclusively on benefit reductions involve dramatic reductions relative to scheduled benefits. These reductions often apply even to beneficiaries with little or no ability to draw on an individual account, such as disabled workers and young survivors.

Progressive Price Indexing

The president's April 2005 proposal is a variant of full price indexing called "progressive price indexing." It would apply price indexing of initial benefits for higher earners, while continuing to use wage indexation for lower earners. Specifically, the current benefit formula would continue to apply to workers in the bottom 30 percent of the wage distribution (\$20,000 in 2005). The full price indexation proposal would be used to determine benefits for maximum earners, those whose wages equal or exceed the maximum taxable earnings base (\$90,000 in 2005). Workers whose wages lay between the two levels would receive a weighted average of the benefit under the current formula and the benefit under the price indexation formula.

Social Security actuaries have estimated that this proposal would reduce the actuarial deficit over the next seventy-five years by 1.4 percent of

	Progressive price indexing		Diamond-Orszag	
	Benefit (2005 dollars)	Percent change from current benefit formula	Benefit (2005 dollars)	Percent change from current benefit formula
Scaled to low earner				
(\$16,428 in 2005)	\$12,041	0	\$11,945	-1
Scaled to medium earner				
(\$36,507 in 2005)	\$16,584	-16	\$18,052	-9
Scaled to high earner				
(\$58,411 in 2005)	\$19,858	-25	\$22,935	-13
Scaled to maximum earner				
(\$90,000 in 2005)	\$22,829	-29	\$25,755	-20

Table 2. Benefit Reductions for Workers Claiming Benefits at Age 65 in 2045

Source: Calculations by Jason Furman, based on memos from the Office of the Chief Actuary.

payroll if the benefit reductions applied to both retirement and disability benefits, compared with the projected deficit of 1.9 percent of payroll.²⁵ (If disability benefits were exempted, the proposal would reduce the actuarial deficit by roughly 1.2 percent of payroll.) Thus progressive price indexing does not by itself restore solvency to the Social Security program, much less cover the cash flow problem that would be created by the individual accounts. Furthermore, the approach is quite flawed, for several reasons.

First, even though it fails to restore solvency, progressive price indexing imposes larger benefit reductions on average and higher earners than our plan does. The reason is that our plan dedicates additional revenue to Social Security, mitigating the need for benefit reductions while still achieving long-term financial balance. For example, progressive price indexing would reduce annual benefits for an average wage earner who is 25 today and retires in 2045 by 16 percent; our plan reduces benefits for such a worker by less than 9 percent (table 2).

Second, progressive price indexing ultimately leads to a flat benefit level for the top 70 percent of earners. That is, most workers within a

given generation would receive the same dollar benefit even though their earnings varied substantially (as did the payroll taxes that they paid). Under the current benefit formula and under our plan, higher earnings translate into higher benefit levels; ultimately, however, progressive price indexing leads to a system in which higher earners receive the same benefit as moderate earners. The reason is that progressive price indexing reduces benefits for higher and moderate earners but not for lower earners. As a result, the benefit level for the highest earner evolves toward the level of that for the worker at the 30th percentile. Breaking the link between earnings and benefits in this fashion moves the system from a focus on replacement rates to a focus on a minimum benefit level. This approach moves away from a balance between the two goals of relieving poverty and providing a foundation for an adequate replacement rate for middle-income Americans. Such a change in focus may undermine political support for the program.

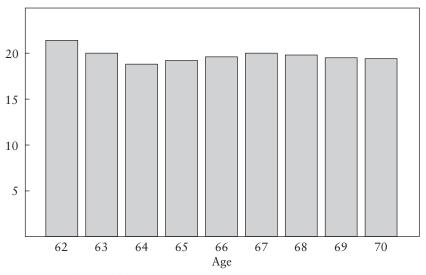
Finally, progressive price indexing suffers from the same flaw as full price indexing. It imposes more substantial benefit reductions—and leads to a flat benefit level more rapidly—the higher productivity growth is, even though that growth reduces the seventy-five-year actuarial imbalance in Social Security. Price indexation of this form, whether applied in full to all workers or applied partially to middle and higher earners, is thus a poorly constructed mechanism for reducing benefits.²⁶

Indexing for Life Expectancy

Apart from its individual account proposals, the Social Security commission appointed by President Bush in 2001 put forward two approaches to reducing the projected actuarial imbalance within Social Security. One relied on price indexing, as discussed above. The other called for indexing benefits to life expectancy. Several other recent plans have similarly called for automatic indexing of the age for full benefits (the so-called normal retirement age) to life expectancy. Unlike price indexing, indexing the full benefit age to life expectancy has the sensible effect of reducing benefits when financial pressures on the Social Security program are greater: when life expectancy increases, costs to the program rise; the proposal would reduce benefits in response. However, there are three

Figure 3. Benefit Reduction by Age for Increase in Full Benefit Age from 67 to 70

Percent benefit reduction



Source: Authors' calculations.

shortcomings in existing proposals to index the full benefit age to life expectancy.

In our adjustment for life expectancy (see chapter 5), we divided the indexation roughly evenly between tax increases and benefit reductions, and the percentage of benefit reduction was the same for all workers. With an increase in the age for full benefits, by contrast, the percentage of benefit reduction depends on the age at which a worker (or a spouse) claims benefits. Figure 3 shows the pattern of benefit reductions for workers resulting from an increase in the full benefit age from 67 (which it is scheduled to reach in 2022) to 70. As can be seen from the figure, the proposal generates somewhat larger benefit reductions for workers retiring at age 62 than at age 70. On average, however, earlier retirees have had lower lifetime earnings (and so lower benefits) than workers retiring at any later age, and they also tend to have a shorter life expectancy.

Targeting early retirees for larger proportional benefit reductions therefore is a poor approach.

The issue highlighted by figure 3 is inherent in using the full benefit age as the lever for indexing the system to life expectancy. The two other problems with many life expectancy proposals, including the one from the commission, involve how the proposal is implemented. First, it seems undesirable to deal with the increase in costs associated with longer life expectancy entirely through benefit reductions, rather than through a mix of benefit reductions and revenue increases. Yet all existing proposals to index the full benefit age to life expectancy place the full burden of adjustment on the benefit side.

Furthermore, even if the entire adjustment is done on the benefit side, some proposals, including that in Model 3 of the President's Commission to Strengthen Social Security, entail an overadjustment: they reduce lifetime expected benefits in response to an increase in life expectancy. A common proposal is to increase the age for full benefits in order to maintain a constant life expectancy at that age. But because an increase in life expectancy adds months of life at the end of an expected life, the present value of the associated benefits is lower than the present value of extra months of benefits at the full benefit age itself (given a positive interest rate). Since the proposal adjusts in terms of months rather than costs, the effect is that expected lifetime benefits are reduced rather than held constant as life expectancy increases. The difference is significant, as is illustrated by actuarial analysis. The proposal included in Model 3, which is equivalent from a cost perspective to indexing the full benefit age to life expectancy, reduced the seventy-five-year actuarial deficit by 1.17 percent of taxable payroll. Our proposal, by contrast, reduces the deficit by 0.55 percent of taxable payroll. Our proposal, by design, offsets the present value of the cost increase from improvements in life expectancy over an infinite horizon; the proposal included in Model 3 instead reduces the lifetime cost of benefits as life expectancy increases. The goal should be to offset the increased costs to lifetime benefits as life expectancy rises.

In sum, care must be taken to ensure that any indexing system chosen works in a way that is compatible with the goals and the needs of the Social Security system.

Conclusion

The administration's individual account proposal is flawed, both because it causes a substantial cash-flow problem that worsens solvency unless financed from a new source, and also because Social Security benefits are better designed than individual accounts to provide core retirement income. Individual accounts, in the form of 401(k)s and IRAs, can be substantially improved to supplement Social Security, but they should not replace Social Security.²⁷

Progressive price indexation also is flawed: it would respond in the wrong way if, as is virtually certain, future productivity growth diverges from current projections, and it relies on excessive benefit reductions to improve solvency. Survey evidence suggests that the public would prefer tax increases (or some combination of tax increases and benefit reductions) to exclusive reliance on benefit reductions.²⁸ To be sure, Social Security needs some adjustments to remain financially healthy for the long term. But benefit reductions of the severity associated with either full price indexation or progressive price indexation are not necessary, as the plan presented in this volume demonstrates.