FEDERAL RESERVE BANK OF DALLAS

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Southwest Economy

Don't Mess with Texas

Texas' economic recovery has been a little underwhelming. For two years, the state's employment and output have grown more slowly than the rest of the country's. Lagging behind is somewhat unusual for Texas, which for a half century has run ahead of the nation in job growth for all but three periods.[1]

Texas pulled out of such sluggish periods in the past by letting economic forces play out. After restructuring, the state emerged stronger and better equipped to ride the next wave of expansion. There's no reason to think that won't happen again.

Domestic and global forces are now reshaping the Texas economy, and that process is restraining growth. Competitive pressures are spurring companies to reduce costs. Low interest rates and an investment tax incentive have encouraged companies to put money into productivity-enhancing technologies and equipment. At the same time, an increasingly global economy is helping producers cut costs by importing goods and services, freeing up resources that can be invested in other operations.

These changes will yield widespread benefits. Businesses and consumers will be able to purchase

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Russia's Churn: So Far Along, So Far to Go

Social Security and Medicare: No Free Lunch

Public attention has recently focused on the federal budget outlook for the coming decade.[1] But as Alan Greenspan and other observers have noted, the real budget challenge is the long-run growth of Social Security and Medicare.

These programs are big and getting bigger, outpacing the growth of revenue. Large tax increases or benefit cuts will occur to address this shortfall, no matter how much we might wish they could be avoided.

In their current form, Social Security and Medicare involve transfer payments from the young to the elderly rather than actual saving. Scaling back these transfer payments would increase national saving and give future

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Social Security and Medicare: No Free Lunch

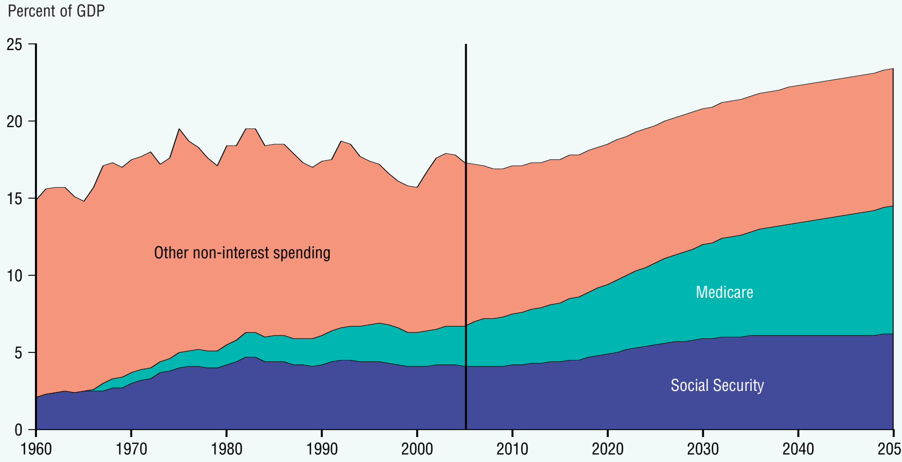
(Continued from front page)

generations a better standard of living. However, it would also impose a transition cost on current generations.

Many people hope for, and some promise, a free lunch that avoids this transition cost. Unfortunately, there is none. It is possible to shift the burden from one group of people to another, but no policy proposal—including privatization—offers an escape from that burden. If future generations are to be made better off, the transition cost must be paid.

Chart 2

Spending Surge Is Driven by Social Security and Medicare



SOURCE: Congressional Budget Office, *The Long-Term Budget Outlook*, December 2003, supplemental data at http://www.cbo.gov/Spreadsheet/4916_Data.xls.

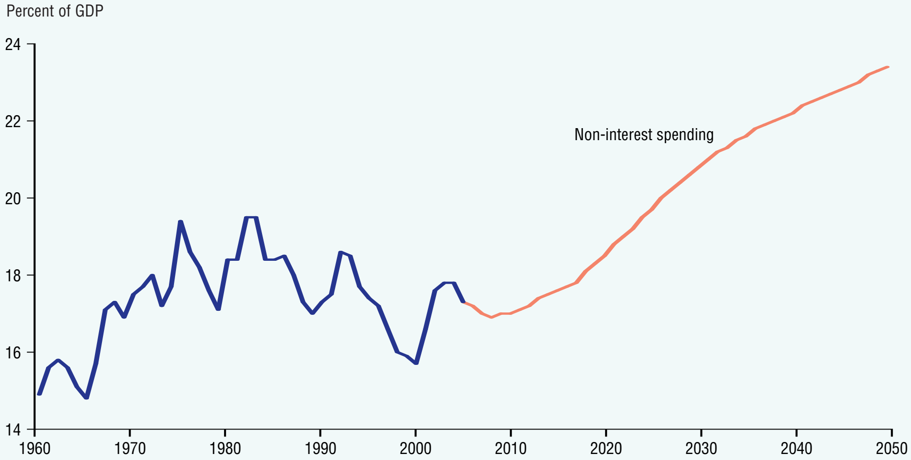
Programs Are Big—And Getting Bigger

Chart 1 shows federal spending, other than interest on the debt, as a share of GDP. From 1960 through 2004, such spending fluctuated around an average value of 17.3 percent of GDP. But the Congressional Budget Office (CBO) paints a much different picture for the future in its December 2003 long-run budget projection. Under CBO's intermediate assumptions, non-interest spending is projected to rise relentlessly, to 23.4 percent of GDP by 2050, with no letup in sight.

The federal budget includes thousands of spending programs, but the spending surge is primarily driven by just two—Social Security and Medicare (*Chart 2*). In fact, CBO projects that non-interest programs other than Social Security and Medicare will shrink from 11.1 percent of GDP in 2004 to 9.0 percent in 2050. (The federal portion of Medicaid will grow from 1.5 percent to 3.3 percent, while all other non-interest programs will shrink from 9.6 percent to 5.7 percent.) If these other programs don't shrink, the total spending growth will be even more dramatic.

Chart 1

Federal Spending Projected to Surge



SOURCE: Congressional Budget Office, *The Long-Term Budget Outlook*, December 2003, supplemental data at http://www.cbo.gov/Spreadsheet/4916_Data.xls.

How large will Social Security and Medicare become? From 2004 to 2050, Social Security spending will rise from 4.2 percent of GDP to 6.2 percent. Over the same period, Medicare will grow explosively, from 2.5 percent of GDP to 8.3 percent.

A variety of factors contribute to this growth. One factor is the retirement of the baby boom generation, which will swell the ranks of retirees for the next few decades. That's a temporary phenomenon, though. The Medicare prescription drug benefit that takes effect in 2006 will also raise costs, but it is a secondary factor.

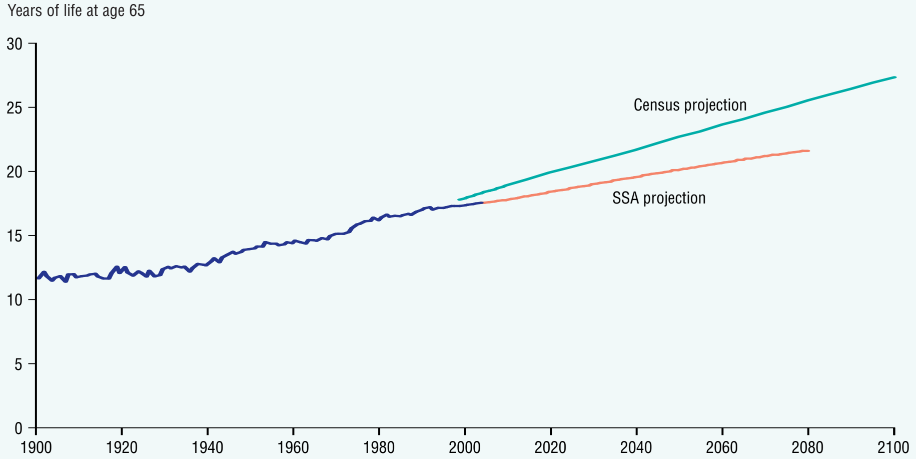
The two forces that account for most of the long-run spending surge are longer life spans and rising medical costs.

Under the Social Security trustees' intermediate projection, life expectancy at age 65, which is now about 17 years, will steadily rise by almost half a year per decade (*Chart 3*). CBO uses this same assumption in its long-run budget projections mentioned above. The Census Bureau, like many private demographers, projects increases about twice as rapid—nearly one year per decade.[2] And the faster life spans rise, the more Social Security and Medicare must pay.

The second force driving up program spending is the ongoing rise in medical costs. Under the Medicare trustees' intermediate projection, spending per beneficiary in Medicare Part A (the hospital part of the program) will quintuple over the next 75 years, even after adjusting for overall inflation (*Chart 4*). Of course, medical costs are hard to predict, but some experts believe that costs will rise even more rapidly, as they have done in the past, which would place an even greater strain on Medicare.[3]

Chart 3

Life Spans Projected to Lengthen



SOURCES: Social Security Administration; Census Bureau.

Costs Will Outpace Revenue

Although spending is scheduled to grow sharply under current law, revenue is not scheduled to keep pace.

Social Security and Medicare Part A are financed by earmarked taxes—primarily a payroll tax on employee compensation and an accompanying tax on self-employment income.[4] The combined tax rate is 15.3 percent up to a threshold ($90,000 in 2005) linked to national average wages, and is 2.9 percent thereafter.

This tax rate is not automatically adjusted for increases in life span or medical costs, even though these factors do automatically increase spending. As a result, future payroll tax revenue will not be sufficient to cover future benefit costs. The trustees estimate that Medicare Part A will be unable to pay full benefits after 2019 and that Social Security will be unable to do so after 2042. Of course, the exact years depend on various assumptions, but the day will come when revenue no longer covers costs.

How can this financial shortfall be addressed? To maintain promised benefits, we will have to come up with more money. How much more? If we continue to rely on the payroll tax and we keep revenue and spending in balance each year, the tax rate would need to rise ever higher to keep up with rising costs. By 2080, the tax rate would have to roughly double, to 31 percent, to cover that year's Social Security and Medicare Part A benefits.[5]

Or, the shortfall could be addressed through income tax hikes and discretionary spending cuts. For example, we could raise income tax revenue by about one-third, but such a large tax increase would likely reduce economic output and have other undesirable consequences. On the spending side, even the complete elimination of spending other than Social Security, Medicare, Medicaid and interest wouldn't be enough to cover the shortfall. But substantial tax hikes could be combined with substantial spending cuts to raise the required amount of money.

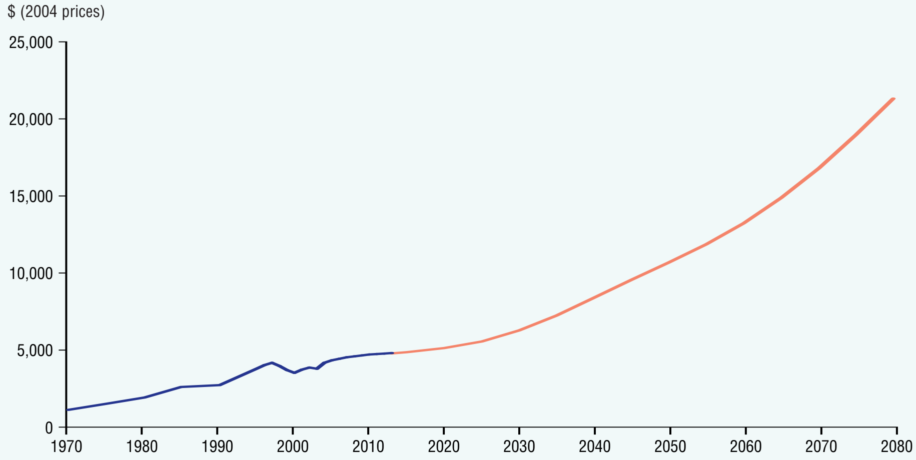
The alternative is to reduce promised benefits, and there are many ways to do this. Eligibility ages for Social Security and Medicare could be raised by several years in line with longer life spans. Means tests could be imposed on either or both of these programs, making them more like welfare. Social Security cost-of-living adjustments could be trimmed by using a more conservative measure of inflation, as Alan Greenspan and others have proposed.

Two other possibilities would change the rate at which future benefits rise. Social Security benefits for each

Chart 4

Medical Costs Projected to Soar

(Real spending per beneficiary, Medicare Part A)



SOURCES: Social Security Administration; Center for Medicare and Medicaid Services.

Preserving Social Protections

Many people believe that scaling back the pay-as-you-go system would force individuals to fend for themselves in retirement. But asking each *generation* to save for itself does not mean that each *individual* must save for himself with no assistance from other members of his generation. The current system provides various social protections to low-wage workers, including more generous benefits relative to the taxes they pay. A restructured system could improve returns for future generations without sacrificing these protections.

One way (certainly not the only way) to preserve social protections while providing better returns for future generations is a *partial* privatization. Individuals would invest in IRA-like accounts some of the money that would otherwise have been transferred to their parents. All workers would be required to contribute, would be limited to diversified investments and would be required to spread withdrawals over the course of their retirement years. The government would make additional contributions into accounts held by low-wage workers.

To the extent that social protections impose some efficiency costs, such as discouraging work, the partial privatization described above would not eliminate those costs. But it would spare future generations the below-market returns of the pay-as-you-go system. These below-market returns do not occur because of the social protections, but because each generation pays for its parents' retirement rather than saving for its own.

cohort of retirees are currently tied to average wages in the economy at the time the cohort attains age 60. Since prices generally rise more slowly than wages, we could reduce future spending by tying those benefit levels to prices rather than wages. This "price indexation" was a leading option discussed by the presidential commission on Social Security.[6]

A similar proposal could be applied to Medicare. Under current law, Medicare benefits are tied to rapidly rising medical costs. We could reduce future spending by linking those benefits to wages or even to prices.[7]

Reducing promised benefits doesn't necessarily mean future retirees would receive smaller benefit checks than current retirees do. But it does mean they'd receive less than current law now promises them—about 50 percent less in 2080, if the books are to balance in that year.

Reform plans can be simple or complicated, can raise taxes or cut promised benefits, can build up a trust fund or privatize the system—there are at least as many plans as there are economists. But the major economic effect of any reform plan depends on one simple feature: whether the plan reduces transfer payments from the young to the old. Permanently reducing these transfers helps every future generation enjoy a better standard of living but requires current generations to bear a transition cost. Maintaining the transfers helps current generations avoid sacrifice but requires every future generation to pay the tab in the form of a permanently lower standard of living. The impact of a plan on these transfers, and only that impact, determines the gains to future generations and the transition cost imposed on current generations.

To understand these conclusions, let's look at how Social Security and Medicare operate.

Pay-as-You-Go Retirement Programs

Social Security and Medicare are pay-as-you-go retirement programs. This means contributions by workers are not saved or invested, but are immediately consumed by the elderly.

Members of any working generation could receive substantially greater retirement income if they could save the money rather than transfer it to their parents. Economists have shown that a pay-as-you-go system offers a long-run below-market rate of return equal to the growth rate of national labor income, which has averaged 3.4 percent over the past 75 years. If each generation saves for itself, it can earn a market return equal to the pretax marginal product of capital, which has averaged about 6 percent. Over a working lifetime, the latter return offers about twice as large a payoff.[8]

For this reason, future generations would be better off if they could put less money into the pay-as-you-go system and invest more. Each generation would receive less money from its children but would come out ahead because it could earn market returns on the money it would otherwise transfer to its parents. This would permanently increase national saving and enlarge the nation's capital stock, which would ensure those generations a better standard of living. Furthermore, the social protections provided by the current system could be maintained. (See the box titled "Preserving Social Protections.")

Transition Cost

As just discussed, future generations would greatly benefit if we reduce transfer payments from the young to the elderly rather than compel the young to finance ever-higher transfers in perpetuity. Future generations would earn a higher rate of return than they can at present, without undermining social protections.

But there is an elephant in the room: the benefits owed to current retirees.

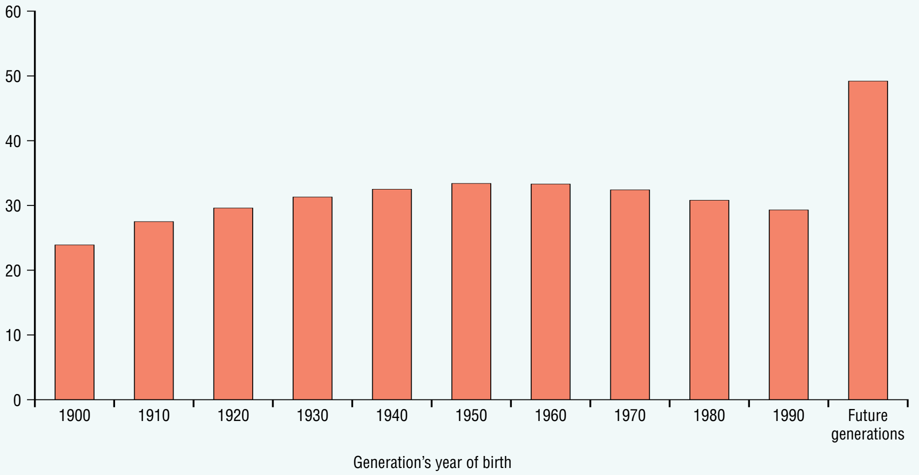
Simply put, current retirees have been promised benefits for which they did not save. (Although they paid taxes into the system during their working years, their taxes were transferred to their parents rather than saved.) A severe reduction in benefits would inflict a catastrophic transition cost on those retirees, who are depending on their children to fund their retirement. And indeed, even the most ardent advocates of reform would leave those in or near retirement largely untouched. For this reason, reforms would likely target current workers rather than current retirees. Those workers would then bear the transition cost, making full transfers to their parents while working but receiving reduced transfers from their children upon retirement.

Of course, the cuts could be delayed by another generation and even another. But eventually, some generation has to bear the transition cost if the system is to be reformed. That generation pays full benefits to its parents but does not receive full benefits from its children. In effect, that generation pays twice. Reform reduces that generation's rate of return even as it raises future generations' returns.

If future generations are forced to

Chart 5

Future Generations Face Heavy Burden



NOTE: Calculations assume the fiscal gap is closed by imposing a uniform lifetime net tax rate on all future generations (those born after 1995).

SOURCE: "Generational Accounts for the United States: An Update," by Jagadeesh Gokhale, Benjamin R. Page, and John R. Sturrock, in *Generational Accounting Around the World*, ed. Alan J. Auerbach, Laurence J. Kotlikoff and Willi Leibfritz, Chicago: University of Chicago Press, 1999, p. 497.

There is no free lunch. The only way to consume more in the future is to save more in the present, which requires a sacrifice of consumption today.

bear the full cost of correcting the fiscal imbalance, they will face a heavy burden indeed. Chart 5 shows the lifetime net tax rate faced by current and future generations. The lifetime net tax rate is the present value of federal, state and local taxes minus the present value of federal, state and local transfer payments (including Social Security and Medicare), divided by the present value of labor income. While current generations face lifetime net tax rates between 25 and 32 percent, those generations born after 1995 face a lifetime net tax rate of almost 50 percent. That's high by almost any standard and is largely due to the current entitlement system. Unfortunately, we can reduce their load only by shouldering some of the burden ourselves.

No Free Lunch

It's important to understand there is no free lunch. The only way to consume more in the future is to save more in the present, which requires a sacrifice of consumption today. A formal mathematical analysis reveals that the transition cost imposed on current generations must equal in present discounted value (when discounted at the pretax marginal product of capital) the gains enjoyed by subsequent generations.[9] In layman's terms, someone must pay, and the only question is who that someone will be. The following discussion explains why various proposals for avoiding this burden fail to do so.

No Free Lunch from General Government Revenue. Some reform plans call for the use of general government revenue during the transition. Under this approach, benefits would be reduced one generation after a reduction in payroll taxes, with general revenues covering the financing shortfall. For example, today's workers might receive a reduction in payroll taxes while today's retirees would still receive full benefits (financed from general revenue rather than from payroll taxes). Benefit reductions would be deferred until today's workers retire.

At first glance, this might seem to avoid saddling any generation with a transition cost. Today's retirees would be protected. Although today's workers would receive lower benefits when they retire, that burden would be more than offset by the lower payroll taxes they would pay while working.

But the transition cost would still be present. The revenue used to pay benefits to today's retirees would not appear from nowhere. Like all government revenue, it would come from the American people. One or more generations would have to bear tax increases or spending cuts to provide the general revenue, thereby paying the transition cost. The *size* of the transfers between young and elderly is what matters, not whether they are financed with payroll taxes or general government revenue.

No Free Lunch from Debt Issuance. While the above discussion assumes that general revenue would be obtained from tax increases or spending cuts, some plans call for the revenue to instead be obtained through borrowing. Debt issuance would offer no free lunch, however, because the debt would have to be serviced or retired.

If the debt were retired, national saving would increase and future generations would gain. However, one or more generations would have to bear tax increases or spending cuts to finance the debt repayment, thereby paying the transition cost.

If the debt were not retired, it would have to be permanently serviced. Every future generation would bear tax increases or spending cuts to pay the interest, which would (it turns out) impose the same burden as they would bear from continuing the pay-as-you-go system. And national saving wouldn't rise because the extra debt would exactly offset the increase in personal saving. This policy would not reduce transfers from the young to the elderly; it would merely relabel those transfers as interest payments rather than retirement benefits. Because the burden imposed by a pay-as-you-go retirement system is economically equivalent to the burden of government debt, replacing the one burden by the other would have no real effects, either good or ill.[10]

No Free Lunch from Privatization. Some people think the transition cost can be avoided through mandatory individual accounts. It can't be, however, because the money invested in the accounts would have to come from somewhere. If the money would otherwise have been transferred to the elderly, national saving would increase and future generations would gain—but those generations receiving the smaller transfers after paying the larger ones would bear the transition cost. If the money were obtained by issuing government debt, then (as explained above) servicing that debt would cause the hoped-for gains to evaporate because the additional government borrowing would exactly offset the additional personal saving.

By themselves, individual accounts do nothing to increase national saving or increase rates of return—those effects occur only if transfers from young to elderly are reduced.[11] The partial privatization discussed in the box "Preserving Social Protections" could raise returns for future generations while maintaining social protections for those generations, but it would not and could not avoid the transition cost.

Inescapable Reality. The inescapable reality is that the pay-as-you-go system has promised benefits without accumulating assets to pay them. Someone must pay—the only question is who. If the system is maintained in its present form, every future generation must bear below-market returns to service this liability—just as you would do if you maxed out a credit card and made minimum monthly payments from now to eternity. If the transfers from young to elderly are scaled back, on the other hand, current generations must bear a large transition cost as the burden is repaid—just as you would do if you paid off the balance on your maxed-out credit card.

While we might wish it were possible to pay current benefits in perpetuity without raising taxes, it is impossible to do so. This is the reality that must be faced.

"Why should I care about posterity?" comedian Groucho Marx once asked. "What's posterity ever done for me?" While obviously meant in jest, Groucho's question captured the essence of the tough choice we face today. Simply put, we must decide whether to sacrifice for the sake of posterity. Time will tell how we respond to this challenge.

The only certainty is that there is no free lunch.

—Jason L. Saving
Alan D. Viard

Saving is a senior economist and Viard is a senior economist and research officer in the Research Department of the Federal Reserve Bank of Dallas.

Notes

[1] For a discussion, see "The Federal Budget: Developments and Outlook," by Alan D. Viard, Federal Reserve Bank of Dallas *Southwest Economy*, July/August 2004.

[2] For a recent discussion of longevity projections, see "Social Security Underestimates Future Life Spans, Critics Say," by Robert Pear, *New York Times*, December 31, 2004, p. A1.

[3] "The Truth About Social Security and Medicare," by Henry Aaron, *Challenge*, vol. 47, May/June 2004, pp. 27–41. On p. 36, Aaron suggests that costs may rise more rapidly than assumed. The trustees assume, as does CBO, that Medicare spending per beneficiary eventually grows 1 percentage point per year faster than per capita GDP. From 1970 to 2003, the actual rate of "excess" spending growth was 3 percentage points per year, according to CBO, *The Long-Term Budget Outlook*, December 2003, p. 5.

[4] The nonhospital part of Medicare is financed from general revenue.

[5] 2004 *Social Security Trustees Report*, p. 165.

[6] *Strengthening Social Security and Creating Personal Wealth for All Americans*, by the President's Commission to Preserve and Strengthen Social Security, December 2001, p. 15.

[7] See *The Coming Generational Storm: What You Need to Know About America's Economic Future*, by Laurence J. Kotlikoff and Scott Burns, Cambridge, Mass.: MIT Press, 2004. On p. 169, authors Kotlikoff and Burns propose linking Medicare benefits to wages.

[8] For a more detailed discussion, see "Social Security Restructuring: Tough Decisions Ahead," by Jason L. Saving and Alan D. Viard, Federal Reserve Bank of Dallas *Southwest Economy*, September/October 2003.

[9] See *How Pension Financing Affects Returns to Different Generations*, Congressional Budget Office Long-Range Fiscal Policy Brief No. 12, September 22, 2004, p. 4, and "Generational Policy," by Laurence J. Kotlikoff, in *Handbook of Public Economics*, vol. 4, ed. Alan J. Auerbach and Martin S. Feldstein, Amsterdam: Elsevier Science, 2002, pp. 1884–85.

[10] Many economists have noted the equivalence of government debt and pay-as-you-go retirement systems. For a recent discussion, see Kotlikoff 2002, pp. 1887–90.

[11] The fact that privatization does not offer a free lunch has been noted by many observers, including Alan Greenspan. See his statement to the Senate Budget Committee, reprinted in *Federal Reserve Bulletin*, January 1998, pp. 32–35. He also explained that shifting between debt and equity offers little or no real economic gain, even when equity has higher expected returns than debt.