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THE DEVELOPED WORLD'S DEMOGRAPHIC DEMISE

The greatest demographic change in human history will occur within the next century as the United States and the rest of the industrialized world move from being "forever young" to being "forever old." In the United States, the largest part of the change will happen in the next 25 years as 77 million baby boomers age and retire, nearly doubling the percentage of the population over age 65 from 12 percent in 2000 to 21 percent in 2030. Laurence Kotlikoff, chair of the economics department at Boston University, describes the economic and social effects of an aging society in which the federal support systems of Social Security, Medicare, and Medicaid are under extreme financial pressure as a result of both fewer working-age citizens paying taxes and rising health care costs for a long-lived population. He emphasizes the need for more accurate and transparent accounting of the federal debt and argues for massive reforms so that the debt is shared across generations rather than handed down to our children.

MISSION CONTROL

- The federal support systems of Social Security, Medicare, and Medicaid are under extreme financial pressure as a result of both fewer working-age citizens paying taxes and rising health care costs for a long-lived population.
- If the current rate of growth of Medicare and Medicaid costs continues, by 2050 the United States will spend about 26 cents out of every dollar we produce on these two programs.
- In 2005, the United States' fiscal gap—the difference between its bills and financial commitments over time and the taxes to be collected over time—was $65.9 *trillion.*
- The real danger is that the country will get stuck in what economists call a bad *steady state*—one featuring ongoing and economically suffocating liabilities, sky-high tax rates, recurrent bouts of inflation, widespread tax avoidance, capital flight, and a brain drain as the nation's most talented workers seek their fortunes on distant shores.

The Scope of the Problem

Two powerful forces, rising life expectancy and declining birthrates, drive the aging of the planet. This aging is not a temporary event. We won't be getting older this year or this decade, and then turn back and get younger. Indeed, we are well into a demographic change that is inherently very long-term and nearly irreversible. In the United States, the *dependency ratio*—the ratio of those 65 and older to those 20 to 64—will rise between 2000 and 2030 from .21 to .35, a massive increase. Worldwide, children (those under 15) outnumber older people (65 and older) by three to one today; that ratio will be one to one by 2050. Soon thereafter, after centuries during which few people were old and nurturing children was the primary social concern, children will become a minority around the globe. The primary social concern will be caring for the elderly.

Traditionally, the primary noninstitutional source of help and support—physical and financial—for the elderly has been their children. Yet as marriages shorten, birth rates decline, and families' geographical dispersion expands, the care and support the elderly can expect from their children is shrinking. Many are old and alone today, and more are likely to be so in the future. In the United States, nonfamily supports for the elderly—Social Security, Medicare, and Medicaid—will become more important to the quality of individuals' lives at the same time that these programs become crushingly expensive to the younger generations.

Generational Accounting

The federal budget deficit as calculated today is economically meaningless, nonsensical, and irresponsibly misleading. Indeed, it represents a small fraction of the nation's *fiscal gap*—simply the difference between our government's projected expenditures and receipts in present value. Calculation of the fiscal gap is based on *generational accounting,* a form of dynamic accounting that shows the total magnitude of the federal government's bills (based on current policy) over time and the total of all taxes to be collected over time, and compares the two streams. Generational accounting clearly shows how much will be left for future generations to pay to close the fiscal gap. The United States' fiscal gap in 2005 was $65.9 *trillion*. This calculation by two economists—Jagadeesh Gokhale and Kent Smetters—is an update of a fiscal gap analysis they did while serving at the U.S. Treasury in 2002. In contrast to this gigantic figure, the official federal debt in the hands of the public—the figure that gets all the attention—is closer to $5 trillion. The primary difference is that the government's commitments to Social Security, Medicare, and Medicaid are simply not on the books. With generational accounting, everything is on the books and so the cost of any proposal, whether a massive transportation bill or a small program, is clear and the burden to either ourselves or our children is known.

A Grim Scenario

The U.S. government has never formally defaulted on its debt. But it has implicitly done so many times by simply printing more money to repay what it owes. The resulting inflation waters down the real value of the repayment and leaves creditors with watered-down dollars. History is replete with examples of what happens when countries can't pay their bills. They raise taxes to exorbitant levels, begin printing money, and either implicitly or explicitly default on their obligations. This triggers inflation, high interest rates, low exchange rates, and, finally, bankruptcies. The end result is complete financial meltdown. Argentina is the latest country to suffer an economic collapse. The United States could be next on the list.

Some financial gurus in New York, London, Zurich, Tokyo, and elsewhere are beginning to realize that the United States is not immune from going broke. Bond traders in particular seem to be taking notice as long-term interest rates continue to nudge up and the dollar heads down. The day of reckoning will come when bond traders, individual investors, and foreign central banks begin to appreciate the true state of our country's finances and start to dump their Treasury issues. This will send interest rates and, most likely, inflation rates through the roof. Prices will rise in reflection of the Federal Reserve's attempt to lower rates by—guess what—printing money.

The real danger in this scenario is that our country will get stuck in what economists call a bad *steady state*—one featuring ongoing and economically suffocating liabilities, sky-high tax rates, recurrent bouts of inflation, widespread tax avoidance, capital flight, and a brain drain as the nation's most talented workers seek their fortunes on distant shores.

The implications of this scenario for higher education are significant. As the government searches for additional sources of revenue, the tax-exempt status of colleges and universities and their many related enterprises could be lost. To help cut costs, government-sponsored research, an important revenue stream for higher education, could decline. Further, in a bad economy families are less able to afford tuition, increasing pressure on already-stretched financial aid budgets and decreasing enrollment. A bad economy also weakens giving to colleges and universities, and endowment returns suffer. Finally, as opportunity in the United States declines, foreign students are less likely to be attracted to study here.

At Boston University, we're working on an idea called *Education for Life,* which represents one small but concrete way in which an institution can work to make a difference. Five years ago we started a series called Conversations with Economists—early evening talks by faculty and distinguished guests for students and members of the university community about economics. One evening, 500 students showed up voluntarily to hear Paul Samuelson. Our proposal is to expand this effort across all our departments, every night of the week, and to open the talks to the public. We plan to collaborate with our local public radio station to publicize the conversations and to make them available to anyone in the world on the Web. The returns on building awareness and knowledge among the broader population (we plan to target younger students as well as working adults) on a topic such as the financial consequences of the massive demographic shift happening now on our planet are well worth the effort and clearly help our university fulfill its mission.

Solutions

Niall Ferguson, professor of history at Harvard University, and I propose the following reforms to the federal fiscal system. We take a holistic approach, embracing taxes, Social Security, and health care, and aim to be both efficient and fair.

Tax Reform

We propose replacing the personal income tax, the corporate income tax, the payroll (FICA) tax, and the estate and gift taxes with a *federal retail sales tax* and a rebate. The tax would work just like the sales taxes currently levied in many states, though at a higher rate. The rebate would be paid monthly to households based on their demographic composition, and would be equal to the sales taxes paid, on average, by households at the federal poverty line with the same demographics.

The tax would be highly transparent and efficient, and would save hundreds of billions of dollars in tax compliance costs. A federal retail sales tax would be progressive, in that it effectively taxes wealth as well as wages, because when the rich spend their wealth and when workers spend their wages, both would pay sales taxes.

A federal retail sales tax would enhance generational equity by asking rich and middle-class older Americans to pay taxes when they spend their wealth. The poor elderly, living on Social Security, would end up better off. They would receive the sales tax rebate even though the purchasing power of their Social Security benefits would remain unchanged (due to an automatic adjustment that would raise their Social Security benefits to account for the increase in the retail price level).

The sales tax would be levied on all final-consumption goods and services. Its tax rate would be set at 33 percent—high enough to cover the costs of the Social Security and health care reforms proposed below, as well as meet the government's other spending needs. This rate sounds high compared with an income tax, but a 33 percent sales tax is actually equivalent to a 25 percent income tax: if you spend 75 cents on an item and pay an additional 25 cents (33 percent of 75 cents) in taxes, then that item cost you $1.00—the same net effect as if you earned a dollar, paid 25 cents (25 percent of $1.00) in taxes, and then had 75 cents left to spend.

Indeed, adding up the personal income, corporate income, and FICA taxes that households pay, either directly or indirectly, shows that the vast majority of taxpayers today face combined average and marginal direct tax rates above 25 percent. Will taxing consumption rather than income reduce spending and put the economy in recession? No, it will shift spending away from consumption goods and services to investment goods, which will help the economy grow through time. As today's China and yesterday's Japan show, economies that shift from consuming to saving and investment can experience tremendous performance.

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Social Security Reform

We propose the establishment of a Personal Security System (PSS)—a system of individual accounts, but with very different properties than the scheme proposed by President Bush. All workers would be required to pay 7.15 percent of their wages, up to what is now the Social Security earnings ceiling (i.e., they would contribute what is now the employee FICA payment), into an individual PSS account. Married or legally partnered couples would share contributions so that each spouse or partner would have the same size account. The government would contribute to the accounts of the unemployed and disabled. In addition, the government would make matching contributions on a progressive basis to workers' accounts, thereby helping the poor to save.

All PSS accounts would be private property. But they would be administered and invested by the Social Security Administration in a market-weighted global index fund of stocks, bonds, and real-estate securities. Consequently, everyone would have the same portfolio and receive the same rate of return. The government would guarantee that at the time of the worker's retirement, the account balance

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would equal at least what he or she had contributed, adjusted for inflation—that is, the government would guarantee that workers could not lose what they contributed. This would protect workers from the inevitable downside risks of investing in capital markets.

For individuals between the ages of 57 and 67, PSS account balances would be gradually sold off each day by the Social Security Administration and exchanged for inflation-protected annuities that would begin paying out at age 62. By the time workers reached age 67, their account balances would be fully annuitized. Workers who died before reaching age 67 would bequeath their account balances to their spouses, partners, or children. The goal of the PSS plan is the same as Social Security's original goal, that is, to guarantee all Americans a basic and secure living standard in retirement.

Health Care Reform

We propose abolishing the existing fee-for-service Medicare and Medicaid programs and instead enrolling *all* Americans in a universal health insurance system called the Medical Security System (MSS). Every October, the MSS would provide each American with an individualized voucher to be used to purchase health insurance for the following calendar year. The size of the voucher would depend on the recipient's expected health expenditures over the calendar year. Thus, a 75-year-old with colon cancer would receive a very large voucher worth, for example, $150,000, while a healthy 30-year-old might receive a $3,500 voucher. Similar to the current Medicare and Medicaid systems, the MSS would have access to participants' medical records and set the voucher level each year based on that information.

The vouchers would pay for basic inpatient and outpatient medical care, prescription medications, and long-term care over the course of each year. If a person cost the insurance company more than the amount of his or her voucher, the insurance company would make up the difference. If a person cost the insurance company less than the voucher, the company would pocket the difference. Insurers would be free to market additional services at additional costs. MSS would, at long last, promote healthy competition in the insurance market, which would go a long way toward restraining health care costs. The beauty of the plan is that all Americans would receive health care coverage and that the government could limit its total voucher expenditure to what the nation could afford. Unlike the current fee-for-service system, under which the government has no control over the bills it receives, MSS would explicitly limit its liability.

Cost controls are crucial because current promised but underfunded Medicare and Medicaid benefits are approximately *six times* larger than the unfunded liabilities of Social Security, and rising life expectancies will only exacerbate the situation. Data show that the United States has less control over its health care costs than other countries, such as Japan and Germany. If the current rate of growth of Medicare and Medicaid costs continues, by 2050 the United States will spend about 26 cents out of every dollar we produce on these two programs (corresponding figures for Japan and Germany are 15 and 17 cents, respectively).

Conclusion

For the sake of our children and the future of our country, we must act now to institute dramatic changes in our fiscal system before we exact a terrible toll on the next generation. As an academic, I feel an intellectual obligation to offer public policy solutions to the serious problems we face. My deepest motivation, however, flows from the simple fact that I am a father. I love my children and worry about their future and that of all the rest of America's children.

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