Book reviews

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This brief but substantial volume by the late Nobel laureate Franco Modigliani and his former student Arun Muralidhar makes a significant contribution to the growing literature on public pension reform. Modigliani’s sudden death in September 2003 left the task of finalizing the book to his co-author, who is a former World Bank economist currently in private asset management. The authors (hereafter MM) offer a review of existing pension economics, explain the rationale for changing from a traditional pay-as-you-go government pension plan to a pre-funded structure, and propose a novel new approach combining defined benefit and defined contribution structures to effect that change. Their focus is particularly important today, as pay-as-you-go pensions around the globe face increasing financing pressures due to lower birth rates and increased life expectancies.

The book begins with three valuable theoretical lessons for pension reformers of all stripes. First, MM show that in a dynamically efficient economy where the return to capital exceeds wage growth, funded pensions outperform pay-as-you-go pensions, even adjusted for risk. That is to say, in the steady state, a funded program is preferred to a pay-as-you-go structure. Second, though pay-go pensions pay low implicit returns, they are also broadly Pareto optimal, implying that some sacrifice to some participants is necessary if one is to shift an underfunded program to a sustainable track. And third, MM argue that the transition to a funded system, while a desirable goal, will only be successful to the degree it brings about net increases in national saving. If higher pension funding were offset by larger government debt (the equivalent of the government holding a leveraged equity portfolio), the level and distribution of future output will not be appreciably different.

The MM reform propose moving public pensions from pay-go to funded status using a model that differs from the one advocated by the World Bank. Instead, they seek to capture the best of both defined contribution (DC) and defined benefit (DB) structures. Their plan would relate retirement benefits directly to contributions, so as to improve work incentives and public understanding. As in a DB pension, however, contributions would be pooled and participants would be guaranteed a return based upon the projected long-term fund average return over the long term; contributions would be changed as necessary to ensure a stable retirement replacement rate. The authors argue that administrative costs would be lower than in traditional DC plans, and using Monte Carlo simulations, they show that their plan would be more effective at providing minimum old-age benefits than would a pure DC structure where capital market volatility is borne entirely by participants.

The authors’ approach is imaginative and their economic analysis, as expected, is first-rate. The major shortcoming of the volume is its failure to deal comprehensively with two key
objections to their proposal: first, that a centralized pension fund invites political interference in investment decisions, and second, that the guarantee of a fixed, above-market return on the investment fund implies considerable implicit costs to sponsoring governments. MM’s treatment of these subjects is not thorough or rigorous, which is disappointing given the quality of analysis elsewhere in the book and the pivotal role these provisions play in their proposal.

In particular, proponents of the DC approach contend that higher Social Security trust fund balances are often offset by lower taxes and higher government spending in other accounts. Investing public pension assets in equities rather than government bonds would reduce (though not eliminate) this problem, though it would also raise the specter of political interference in investment decisions. Prominent economists including Alan Greenspan have argued that political considerations would inevitably enter into investment decisions, and World Bank research shows that public plan assets often earn substandard returns for precisely those reasons. MM reject these claims but devote less space to analysis and rebuttal than merited. Further, it is possible that having a guaranteed rate of return would permit governments to use non-financial criteria to guide financial decision making.

The authors also devote insufficient attention to pricing of the guaranteed rate of return. Under their structure, when returns exceeded the mean (projected at a real 5–5.5%), surpluses would be transferred to the government treasury; conversely, if returns fell short, treasury transfers would have to take place. Significantly, this guarantee would be provided to the fund at no charge. In essence, the MM pension fund would purchase to protect against returns below the guaranteed rate, financed by the sale of calls giving up returns in excess of that rate. Since Black-Scholes options pricing would imply that such a guarantee would have substantial cost, it is unclear how a government might provide it for free. The authors cite the government’s large size as one rationale, though in most developed countries the total size of government relative to public pension obligations is modest. Given the prominence this guaranteed return plays in the superior cost-benefit performance of the MM proposal over traditional DC structures, its pricing merits far more attention.

These concerns aside, Rethinking Pension Reform represents a significant contribution to the continuing debate over public pension reform, and it constitutes a fitting legacy for its distinguished co-author. In addition to theoretical analysis, the book also contains extensive discussions of Latin American DC pension reforms as well as outlines of prospective reforms for the United States and Spain.

ANDREW G. BIGGS
Associate Commissioner for Retirement Policy at the Social Security Administration

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Laurence Kotlikoff, a well-known professor of economics at Boston University and Scott Burns, a nationally syndicated financial columnist, have teamed up to warn us of a demographic time bomb that will wreak havoc with our fiscal future. Our Social Security and Medicare/Medicaid promises will explode with the retirement of the baby boom, and the U.S. will “go critical”—exorbitant tax rates, defaults on debt, rampant inflation, interest rates “through the roof,” exchange rates “down the tubes,” capital flight, and a brain drain. And politicians have conspired to hide this ugly truth. Yikes! What to do? Thank goodness for silver bullets. Replace the Social Security system with Kotlikoff’s old stand-by—a system of personal accounts invested in a single global-index with a federal retail sales tax to pay off benefits under
the old system. Shift Medicare from a fee-for-service plan to vouchers adjusted for health status. And individuals should buy houses, invest in gold, save, save, save (but not in tax-sheltered accounts), and yes, only one spouse should work. Whew!

The problem that Kotlikoff and Burns address is real, although the conversational style, clichés, and political asides are a bit too much for this reader. Yes, the U.S. population will age dramatically as the lead edge of the baby boomers reaches age 62 in 2008, and a high ratio of retirees to workers is here to stay, due to an extraordinary increase in life expectancy and decline in fertility. Further, we have promised retirement and health benefits through our public programs that cost a lot, and “our captain” has lost his way, giving away large chunks of government revenue through tax cuts just as we need the money. And yes, if forecasts for Social Security and health care spending prove true, the rest of government spending keeps pace with income growth, and the tax share does not rise, the government will face ever increasing deficits, mushrooming debt, and all the other bad outcomes described so vividly by Kotlikoff and Burns.

The weakness with this book lies less with the authors' description of the problem, and more with their approach to solutions. Their analysis is driven by “generational accounting,” a framework that requires estimating government spending and revenues for all current and future generations and discounting those amounts to the present. This exercise yields an unfunded deficit of $45 trillion, which is over four times the US GDP. Of course implementing this model requires Herculean assumptions regarding the correct rate of economic growth, the right interest rate to use, and health care spending rates, among others. But these technical issues pale in importance, given that the approach mis-casts the debate.

First, generational accounting frames the discussion in terms of generational conflict – the old against the young, parents against children, winners against losers. This structure ignores the fact that we are all members of families, with parents and children. The payments that the authors feel to be burdensome are destined to care for our elderly relatives, who, without Social Security, would rely on their children (or their own inadequate saving). Similarly, in the absence of Medicare, our elders would be forced to turn to us, today’s workers, to pay for the care they need – or go without. More importantly, over the life cycle each of us is a child, a worker, a parent, a grandparent, and a retiree. So the debate actually turns on how we want to allocate resources over our life span, and turning it into a generational conflict is not a meaningful framework.

Second, by definition, generational accounting frames the problem in terms of financial markets: the government has an enormous implicit debt not shown “on the books”, which will lead to financial collapse. In my view, the aging of the population is more appropriately framed as a labor market problem. An aging population with longer life expectancy will dramatically increase the cost of retirement and health benefits. Retirement systems under strain will provide less income in the future than they do today. Social Security benefits are already scheduled to decline under current law due to the extension of the retirement age, the growing cost of Medicare premiums, and the increase in taxation under the federal personal income tax. Restoring solvency to the program will likely involve further benefit reduction. At the same time, the shift in employer-provided pension coverage from defined benefit to 401(k) plans has weakened that source of support. And individuals do not save on their own (except through their homes) so they have few independent income sources on which to draw. In short, people are not going to have enough money to continue retiring at age 62.

Accordingly, I believe that the answer for both individuals and our pressed retirement systems is for people to work longer. A few extra years in the labor force raises Social Security benefits, allows for additional accumulation in retirement plans, postpones the draw-down of saving, and cuts the period over which people must be supported with retirement wealth. It also means that employers, rather than the Medicare program, provide health care benefits. Given the improvements in health that have accompanied the increases in longevity, continued employment is a feasible and important goal; moreover, it is becoming increasingly attractive with the dramatic slowing of labor force growth at younger ages. While working
longer is not a panacea, it certainly deserves more than the perfunctory dismissal offered by the authors.

Finally, generational accounting mis-directs our attention in the health care area. The authors contend that the fault rests with our health care programs for the elderly, since most of the $45 trillion generational-account shortfall arises from future Medicare and Medicaid expenditures. Instead, I propose that the health care problem is a national one. Health care costs are rising more rapidly than national income because of technological innovations in treatment unavailable a generation ago. While some waste and inefficiencies are also evident, it seems clear that changing the nature of the Medicare structure will not bring health care spending under control.

In conclusion, Kotlikoff and Burns lay out an important problem, but their silver bullets are no answer and their generational-account framework leads us in the wrong direction. We do need to reverse course and harbor our resources, in view of population aging; rolling back recent tax cuts would be a first step, and in the future, taxes as a share of income will have to rise as the population ages. More importantly, we must initiate a society-wide debate on continued employment. These suggestions are not silver bullets, but they will more successfully avoid a fiscal apocalypse.

Alicia H. Munnell
Peter F. Drucker Professor of Management Sciences and Director of the Center for Retirement Research, Boston College’s Carroll School of Management