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Book reviews

The Economic and Financial Market Consequences of Global Ageing by Kieran McMorrow and Werner Roeger, Springer Verlag, 2004, ISBN 0892063939, 345 pages, Price $99.00. DOI: 10.1017/S1474747204211611

For individuals, the journey from middle-age to elderhood is, alas, one of diminishing vigor and productivity. But could the aging of populations pose similar challenges for national and regional economies – and indeed the global economy? This question is not as fanciful as it might seem. For at the beginning of the twenty-first century, much of the world seems on track to reach what, until recently, were unimaginably old average ages. Leading the pack is Japan, whose typical citizen will be 50 in 2025, up from just 22 in 1950. The 15 nations that made up the European Union (EU-15) in 2003 expect to be closing in on a collective median age of 49 by mid-century. Older still will be the nine Central and Eastern European nations that joined the EU in 2004. In addition, a surprising number of emerging-market economies expect their median ages to rise into the 40s, or even 50s, by 2050. Among them: China, Russia, South Korea, all of Eastern Europe, and portions of Southeast Asia and Latin America.

Behind this epochal transition is the global downturn in fertility, a trend which is affecting societies across almost every region and stage of economic development. The rich countries may be aging first. But the developing world will age much faster, mainly because birthrates are falling more rapidly from much higher levels. It remains nevertheless that not all rich countries fit neatly into the first-to-age category. America's median age will barely budge during the first half of the century, according to the U.S. Census Bureau. To be sure, the coming explosion of "baby boomer" retirees will trigger European-style pension headaches. But expanding youth populations – the product of replacement-level birthrate and robust immigration flows – should keep the typical American under 40. By this reckoning, the U.S. population will expand 49 percent in the first half of the century, even as the EU-15 and Japanese populations decline by 2 percent and 14 percent, respectively.

In *The Economic and Financial Market Consequences of Global Ageing*, European Commission (EC) economists Kieran McMorrow and Werner Roeger examine the likely effects of these differential aging trends on GDP, consumption, savings, investment returns, capital flows, and net foreign assets for key economic regions. Their tool is the EC's "aging model," a general equilibrium, open economy macro-model linked to a micro-economy model. For simplicity's sake, the model divides the international economy into five groupings: the EU-15, Japan, the United States, the "fast-aging" (mostly former communist) countries, and the "slow-aging" developing world. The latter is especially eclectic, lumping youthful-but rapidly-aging India and Mexico together with the Middle East and sub-Saharan Africa, where youth populations are soaring. While the authors' particular focus is on the potential upside from social welfare and labor market reform in the EU-15, there is much in this treatise for the other regions to take note of.

In their baseline scenario, McMorrow and Roeger portray a future in which demographic decline combines with structural rigidities to slow potential GDP growth in the EU-15 to an average of 1.3 percent during 2000–2050. The main culprit is a shrinking workforce. Whereas employment added 0.5 percent a year to GDP during 1950–2000, the authors calculate that it will subtract 0.1 percent during the ensuing half century. This means that GDP growth will consist principally of the rise in total factor productivity. Here, however, progress is thwarted

by over-regulation. The baseline assumes that potential per capita income growth in the EU-15 will average 1.4 percent a year during 2000–2050, compared to 1.2 percent in hidebound Japan, and 1.8 percent in the more flexible U.S.

As it turns out, these trends have large consequences for financial markets. In the baseline scenario, the EU-15 and Japan account for a sharply diminishing share of global output, falling from a combined 26 percent of global GDP in 2000 to 14 percent in 2050, while America's share rises from 23 percent to 26 percent. The first-order effect is a decline in domestic returns to capital, as the EU's slower growth rate translates into fewer profitable investment opportunities. Even as this is occurring, however, large middle-aged populations (and balanced budgets) fuel robust national savings rates. In an open global market, this turns the EU and Japan into large-scale suppliers of capital to the faster growing portions of the world – particularly, the US, where assets are reasonably safe.

The authors go on to explore a series of scenarios in which the EU-15 boosts labor force participation rates to US levels, adopts partially funded pension systems, and deregulates labor and product markets. The biggest economic gains come from an increase in employment rates—currently about ten points below those of the US and Japan. Yet these one-off effects run their course by 2025; and, by 2045, potential growth is back down to 1.1 percent, despite a five-year increase in the effective retirement age. Meanwhile, a shift toward partially funded pensions boosts savings rates, but does little for GDP, as 80 percent of new savings flow abroad in search of higher returns. These returns do, however, add to Gross National Product (a measure of output which includes foreign earnings) and per capita income growth. More promising is a "comprehensive" strategy that combines both sets of reforms with a third package designed to bump up total factor productivity growth. Under this scenario, an eyebrow-raising 75 percent of new savings is put to work domestically. Still another scenario has the developing world likewise adopt productivity enhancing reforms. In this case, less EU capital stays home, and still less flows to the US.

This could be a good thing, according to the authors. They argue that, in recent decades, over-supplies of savings may already have produced two major asset bubbles. In the late-1980s, slackening population and labor force growth in Japan reduced domestic investment demand just as the proportion of Japanese in their high-saving middle-age years began to peak. What followed in Japan's relatively closed capital market was a monumental real estate and equity market bubble whose effects are still reverberating throughout the world economy. McMorrow and Roeger also make the case that Europe's excess savings helped fuel the U.S. technology bubble of the late-1990s. Surely were more of the world to offer sound investment opportunities, bubbles would be less likely.

As with all modeling exercises, however, the devil is in the detail. The baseline scenario hardly seems a most likely one. Will fertility in the EU and Japan increase significantly after 2015, as the model's "medium variant" UN population projections suggest? Perhaps. But pension systems have been banking on a turnaround in births for three decades now, and have nothing to show for it but red ink. Will members of the common currency eurozone adhere religiously to agreed-to deficit limits, so that new age-related spending is paid for by higher taxes? Not likely. Long before the EU age wave even begins to crest, the eurozone's "big three" – France, Germany and Italy – find themselves blatantly in violation of the Stability and Growth Pact.

The authors also are obliged to use the EC's notoriously unrealistic official long-range assumptions regarding aging-related budgetary pressures. Under these projections, for example, Belgian medical inflation henceforth will rise in tandem with general prices, despite having exceeded general price growth by an average of two percent a year since 1980. Italian long-term care expenditures will remain stable as a share of GDP, despite a 3.5-fold growth in the over-80 population. The cumulative impact of this optimism is to raise questions as to whether, in fact, the EU (and Japan) will produce the abundant saving needed to support the base-case rise in per capita living standards. In graciously acknowledging this criticism, the authors note that the central conclusions of the exercise remain unchanged: the EU-15 must deregulate,

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embrace globalization, and reduce the generosity of the welfare state. That is, Europe must aspire to a set of economic and social rules closely resembling those of the dreaded "American model."

In passing, the authors touch on the question of whether an aging workforce that is increasingly set in its ways is capable of embracing a more rough and tumble version of capitalism. The evidence they cite – an annual survey of entrepreneurialism by the London Business School's Babson College – gives scant comfort. On the surface, at least, older societies are less prone toward risk-taking and innovation. Although marketed as a textbook, this report is only the latest in a series of technical papers produced by McMorrow and Roeger on the economic challenges and opportunities posed by the aging of the EU in a world that is fast being transformed by globalization. One hopes there is more to come.

At the very least, future refinements should give greater definition to their model's open-economy features. A thirty-ish and still largely agricultural China – which is soon to surpass Japan as the world's second largest economy – has little in common with creaky Russia and Eastern Europe. In the same vein, backwater Mongolia and Ethiopia have nowhere near the world-altering potential of English-speaking, software savvy India. Finally, while the "no policy change" approach does much to illuminate the stark choices facing advanced welfare states, it vastly understates potential productivity growth in the developing world. As such, it may oversell the capital market effects of structural reform in the EU.

Despite these drawbacks, *The Economic and Financial Market Consequences of Global Ageing* provides a useful, if somewhat mechanical, introduction to a world just over the horizon, in which aging has changed everything. While frankly underlining the unsuitability of today's social policies to that world, it holds out the hope for a "win-win" solution in which the enterprising youth of Bangalore are enlisted via the capital markets to boost the living standards of aged coupon-clippers in Brussels.

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* Paul Hewitt has written this review in his personal capacity. No official support or endorsement by the Social Security Administration or the United States is intended or should be inferred.

Pension Policy in an Integrating Europe edited by Onorato Castellino and Elsa Fornero, Edward Elgar Publishing, 2003, ISBN 1 84376 2544, 256 pp., Price $95.00. DOI: 10.1017/S1474747204221618

As the European Union prompts greater economic integration of increasing numbers of member states, the design of public and private pension program in individual EU countries assumes growing importance. Public programs in EU countries are extremely heterogeneous, and the design and organisation of each country's program remains the full responsibility of that individual member state. Recent reforms offer little evidence of "convergence" toward an EU-wide 'model' of a common public pension program. Nevertheless, how the costs of public pension programs affect EU macroeconomic stability is of central concern to the European Commission and to member states. Moreover, there are issues of harmonization that relate to private pension plans, such as labor mobility, regulation, transferability, and governance, that do require a collective response by member states. It is against this background of EU integration that the chapters in this volume should be seen, as they cover many issues associated with EU-wide pension provision and one study on the lessons of US policy for private retirement saving.

The editors, Onorato Castellino and Elsa Fornero, first introduce themes, after which the first four chapters focus on employment issues including the impact of payroll taxes and retirement behavior. Nicoletti and Peracchi review economic status, health status, income, and

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wealth of the elderly in EU countries using five waves of the European Community Household Panel. The chapter offers useful descriptive data on these variables across the countries, coupled with descriptive regression models of health, market participation, and income determination cross-nationally and over time. The results suggest that there are significant similarities in the evolution of health with age and in retirement behavior across countries, but the determinants of income vary substantially – especially the relative importance of private wealth.

Daveri gives a useful survey of the empirical and methodological literature on the impact of payroll taxes, including pension contributions, on employment. The author concludes that the theory is straightforward but it is difficult to prove empirically that higher labor taxes induce higher unemployment. It might, however, be argued that the theory is not so straightforward either – in particular, payment of individual contributions to public pension programs may generate perceived individual "rights" to future pensions. To this extent, a pension program therefore contains a mixture of tax component and retirement saving. Pension contributions are not then a pure 'tax' and should not be treated as such. Indirectly, this issue also emerges in the chapter by Pestieau, which considers the extent to which countries differ in their implicit 'tax' on retirement arising from non-actuarial early retirement regimes and other non-linearities in the lifetime budget constraint.

The final paper in this section by Contini and others considers work and training contracts for young people initiated in 1985 in Italy. The work is rather out of step with the other papers in the section, insofar as it considers a quite different age group. The indirect relevance would hinge on the authors showing that subsidized hiring of younger workers (due to waivers of the pension contribution) resulted in substituting employment of younger workers for older workers; the authors do not find such an effect. Nevertheless, there is an interesting question here: when targeted labor market policies are introduced in countries such as Italy and the UK, why are there apparent differences in both design and success across different age groups – for example, why do policies to waive pension contributions to increase employment appear to work for younger but not older workers in Italy?

The next section has two chapters focusing on private pensions. The study by Khitatrakun and Scholz describes US provision of tax incentives for private saving and gives a flavor of the extensive US debate as to whether tax incentives have increased gross private and national saving. The authors tend to be sceptical, finding tax incentives have little impact on saving, and they make the additional points that complex and possibly inconsistent tax regimes do not assist in raising national saving – a point that could be taken to heart by many EU governments, not least the United Kingdom. The chapter by Börsch-Supan and Lührmann provides a useful summary of the methods of taxing pensions and different definitions of regime 'neutrality', extensively illustrated by policy regimes in Germany.

The book's last section focuses on pension portability, a topic of increasing pertinence in the EU as integration proceeds. The chapter by Ippolito explores the distinction between defined benefit and defined contribution plans, based on the US experience of the switch of coverage from DB to DC plans. In the simplest model, DB plans induce greater disincentives to labor mobility than DC plans, but Ippolito shows how the legal environment and, in particular, the measurement of "pension rights" in both DC and DB plans must be identified before conclusions are drawn. Finally, Andrietti provides a somewhat ambitious paper on occupational pensions and EU job mobility. In fact, the work examines the relationship between job mobility and membership in private pension plans *within* four EU countries using ECHP data. The essential problem in estimating any structural model of plan incentives and job mobility is that people who are less likely to switch jobs may join DB-pensioned employment, so we observe worker (or employer) selection rather than the impact of plan incentives. These issues are recognized by Andrietti in his discussion. Ironically, one of the original aims of the ECHP cross-country panel was to provide evidence of migration *across* national boundaries, which would have been of interest to those seeking evidence on the role of pension plans in an integrating Europe. Unfortunately, small sample sizes of migrants simply ruled out this type of analysis to date.

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Overall, this volume offers an interesting collection of studies. Nevertheless, we offer the *caveat* that the book's title says more than it delivers.

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Coming Up Short: The Challenge of 401(k) Plans by Alicia H. Munnell and Annika Sunden, Brookings Institution Press, 2004, ISBN 0-8157-5888-X, 272 pages, Price $34.95. DOI: 10.1017/S1474747204231614

The transformation of the private pension system in the United States over the past 25 years has been dramatic. In 1980, the majority of pension covered workers had defined benefit (DB) plans that promised a life-annuity at retirement. Today, the majority of pension covered workers have defined contribution (DC) plans that provide for a stream of contributions to an account leaving workers with an accumulation of contributions and asset returns at retirement. In the United States, the 401(k) plan is the most popular type of DC plan. Like other DC plans, the 401(k) invests contributions and provides a worker with an account balance at retirement. A unique feature of the 401(k) is that employees can make pretax contributions and employee participation is often voluntary.

The shift from the DB to the DC will affect retirement income security in numerous ways. In their new book, Alicia Munnell and Annika Sunden examine the consequences of the rapid growth of 401(k) plans for future retirement security. The book discusses a wide range of recent research to illustrate some of the shortcomings of this relatively new method of retirement saving. Policy recommendations are made for correcting several of the recognized shortcomings.

The book starts with a review of the different ways the shift from DB to 401(k) plans could affect pension coverage, pension wealth at retirement, exposure to different types of risk, and mobility and retirement incentives. Simulations are used to show that under plausible assumptions regarding rates of return and contribution behavior, 401(k) plans are capable of generating as much wealth at retirement as DB plans. The authors note, however, that the simulations generate account balances that are much larger than what is observed in reality. This leads to a discussion of why the simulations are likely to be overstatements of actual accumulation behavior and the many ways that 401(k) plans create opportunities for mistakes with respect to pension saving.

A wide range of research on 401(k) saving is reviewed and provides a solid perspective on the plethora of factors influencing the amount of savings workers will accumulate through their 401(k) on the long road to retirement. First, there is a discussion of the determinants of participation and contribution behavior in 401(k) plans. This includes the role of worker income, employer match rates, financial education, peer effects, automatic enrollment and defaults that employers set for contribution rates. Second, worker investment decisions are discussed along with evidence on workers' abilities (or lack thereof) to wisely manage pension assets. This includes a discussion of the rate of return risk that workers are exposed to and an extensive review of recent research on the extent of irrational investment behavior in the management of pension assets. A separate chapter is devoted to the risk of including company stock in the pension.

The expenditure of pre-retirement lump sum distributions and the decision to annuitize pension wealth at retirement are described as two other important concerns with the 401(k) system. The chapter on the annuitization decision does a good job of reviewing the literature on why so few people choose to purchase an annuity at retirement and suggests that the failure to annuitize is a problem. In their final chapter, the authors conclude that 401(k) plans are "coming up short" by shifting much of the responsibility for participation, contributions, investment and withdrawal to the workers who often lack the experience to make wise decisions. Several policy recommendations are given for improving the pension system.

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Overall, the book provides an excellent background to a discussion of whether a pension system that relies so heavily upon the 401(k) plan will provide adequate retirement income security in the future. The literature review is current, wide-ranging and accessible to a wide audience. The discussion of the regulatory environment is sufficient for an understanding of the research covered in the book and a cursory overview is provided in an appendix.

Some readers will take issue with the authors' viewpoints. Many analysts view the flexibility and portability offered by 401(k) plans as one of its primary advantages. It allows workers to tailor their savings rates to their own personal circumstances and match their investment portfolio to their own risk preferences. Others view this flexibility as a problem in that it allows some people to make "unsound" or "irrational" decisions. People with 401(k) plans may save too little, invest unwisely, spend their pension savings prior to retirement, or fail to annuitize at retirement. While there will be disagreement over the need for various types of government intervention, the authors leave little doubt that the shift to 401(k) plans exposes workers to new kinds of risk, especially for those who lack financial sophistication. Whether and how the government should respond to these risks is still a debatable point.

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Saving Social Security: A Balanced Approach by Peter A. Diamond and Peter R. Orszag, Brookings Institution Press, 2004, ISBN 0-8157-1838-1, 287 pages, Price $32.95. DOI: 10.1017/S1474747204241610

Written by two of the most influential thinkers in the Social Security community, this book makes an extremely important contribution to the field by filling in the details of one of the main approaches to reforming the US underfunded public pension system. In recent years, proponents of individual investment accounts have dominated the war of ideas in the Social Security arena. One need only look as far as the Social Security Administration's website to see this borne out: of 12 recent reform plans, only one other than Diamond and Orszag's omits an individual account component. This one-sided discussion has done little to further the understanding of the tradeoffs involved in diversifying, prefunding, or partially privatizing Social Security. Instead, it has pitted "pro-accounters" against "anti-accounters" in an unproductive debate filled with accusations and exaggerations. The Diamond-Orszag plan serves the useful purpose of illustrating what it would take to make the Social Security system structurally sound while keeping it primarily pay-as-you-go. By detailing what is needed to make a non-accounts plan solvent, *Saving Social Security: A Balanced Approach* helps to refocus the discussion on the central issues of what combination of benefit reductions and tax increases are most appropriate to rebalance Social Security. Importantly, the authors should be commended for their honesty in representing the costs of their choices – particularly given that a number of individual account plans have been less forthcoming about how the upfront costs of creating accounts would be financed.

Diamond and Orszag explicitly lay out their policy goals which include: (1) Restoring actuarial balance and structural soundness to the Social Security system; (2) Avoiding burdening the rest of the federal budget; (3) Spreading the program's legacy costs fairly; (4) Expanding benefits for certain groups; and (5) Strengthening the economy by encouraging work and saving. Their policy choices are in part guided by a useful framework they provide to analyze the system's structural weaknesses, which they identify as stemming from increasing life expectancies, increased earnings inequality, and the system's "legacy costs" or the costs of financing the benefit windfalls received by earlier generations of recipients. (The authors readily acknowledge that theirs is not the only way to view the underlying problems and certainly some, such as declines in fertility rates, are not included in their particular framework.)

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The plan includes a package of gradually phased-in benefit reductions and tax increases to address the root causes cited by the authors. Specifically, to reflect growing life expectancies, they advocate raising payroll taxes and reducing the PIA factors used to calculate benefits. (This approach is noteworthy because it splits the changes between revenue increases and spending reductions, whereas most plans rely on increasing the retirement age or solely reducing benefits in response to growing life expectancies.) To reflect growing income inequality, Diamond and Orszag would increase the maximum taxable earnings base and further decrease benefits for high-income earners. Finally, in order to finance the program's legacy costs, they suggest expanding the program to include new state and local workers and levying a "legacy tax" on earnings above the taxable maximum, with workers receiving no additional benefits for these contributions. Additionally, they expand benefits for low-earners, widows and widowers, disabled workers and young survivors.

Overall, the programmatic changes are quite progressive and would increase the amount of redistribution within the Social Security program. In general I share these preferences and believe it is most sensible to ask more affluent workers and retirees to contribute the most to the reforms. (There is however, a missed opportunity here to phase-out outdated benefits such as spousal benefits, which are both regressive and no longer appropriate for a modern workforce.) But it should be noted that there are many who oppose such distributional shifts, with those on the right arguing that the system is already progressive enough and those on the left fearing that such shifts would turn the system into a "welfare" program, undermining public support.

The authors should be given credit for not only restoring actuarial balance, but also making the program structurally sustainable – an important objective that most other non-account plans fail to achieve. Plans structured only to eliminate only the actuarial deficit tend to fall out of balance as soon as the 75 year period is shifted forward. The authors hold themselves to a higher standard of producing a stable Social Security trust fund ratio at the end of the period, which they achieve by assuming that the phased in tax increases and benefit reductions would continue to grow beyond the 75 year window as needed to maintain balance.

Furthermore, unlike many reform plans, Diamond and Orszag do not depend on unspecified general revenues to finance their plan. Thus it would not place additional burdens on the rest of the federal budget – an explicit goal of the authors' and one shared by the many analysts who acknowledge that the problem is not just an isolated Social Security problem, but a broader budgetary problem as well. However, there are other important indicators by which the plan does not fare as well. In particular, the cash flow deficits are only pushed forward two years, moving them from 2018 to 2020, and the plan fails to reach positive cash flow within the 75 year time period, though it is likely it would soon after. Accordingly, future policy makers would still have to contend with the issue of what policies to enact to repay the obligations owed to the Social Security trust funds.

Summary Statistics

	Diamond-Orszag	*Current system*
Actuarial balance	0.9%	–1.92%
Sustainability	Yes	No
Year of cash flow turns negative	2020	2018
Year of cash flow turns positive	Just beyond 75 year window	Never
General revenue transfers (PV)	$0.9 trillion	$3.5 trillion
Share of GDP:		
2003	4.4%	4.4%
2025	6.2%	6.0%
2050	6.7%	6.7%
2075	6.5%	6.9%

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The main area where I take issue with the authors' portrayal of their plan is their strong emphasis on how "balanced" it is, which leads many readers to assume that the changes made through revenue increases and benefit reductions are roughly equivalent. Were this the case, one would expect the costs of the program to be lower as a share of GDP than they are currently stated to be. However, under the Diamond-Orszag proposal Social Security remains the same share of GDP – or larger – for almost the entire 75-year period. This occurs because the built-in benefit decreases are roughly offset by the expansionary benefit changes that are also included in the plan. One way to view the proposal then, is that the program is brought back into balance primarily through tax increases while benefits are shifted to make the overall structure more progressive. While this is a legitimate preference for the authors to pursue, the description of the relative weightings of benefit reduction versus tax cuts is the least transparent portion of the book. It is also problematic for those of us who believe that controlling the growing costs of the Social Security program must be one of the objectives of reform. Given that in the coming decades the costs of the federal government are projected to grow well beyond historical levels, with the bulk of the growth occurring in retirement and particularly healthcare transfer programs for retirees, it seem particularly troubling to rely so heavily on tax increases to fill in the Social Security funding gap. Not only would this be likely to have profound effects on other areas of the budget, but the higher tax rates will create a drag on the economy at a time when growth will be particularly important.

Furthermore, their plan is not balanced from a generational perspective. The authors emphasize the importance of taking action sooner rather than later, but their plan involves specifying the actions immediately, while phasing the changes in extremely slowly. Thus most of the effects are pushed well into the future and would be felt disproportionately by younger workers and future generations.

Not only should the inequitable generational effects be noted: further, delaying the policy changes fails to take advantage of the opportunity to prefund the program to increase saving. It is somewhat surprising that the authors opt to return the system to a primarily pay-as-you-go structure given the emphasis they place on strengthening the economy through higher levels of saving. On one hand, I credit them for not building up the program's trust funds; I prefer that approach to the alternative, since I believe that Social Security surpluses in the past have produced both larger tax cuts and larger spending increases in the budget than would have been true otherwise. Assuming this is the case, there is significant risk that building up the trust funds further would lead to more of the same rather than higher levels of government savings. (Thus the appeal of individual investment accounts, which are less likely to affect government consumption, as a means to prefund Social Security; of course proposals to borrow the funds to finance the transition to accounts would also not be particularly effective.) Diamond and Orszag discuss whether the trust funds have been effective in increasing national saving, and they come down on the positive side. I disagree with them about the degree to which saving has been increased as a result of Social Security surpluses, but we recognize there is no conclusive study backing either point of view. Nor, in all likelihood, is there a way to craft one. Nonetheless, it does strike me as odd that since the authors cite increasing national saving as one of their major objectives, and believe that the trust funds are effective in so doing, they choose not to structure their plan to use the trust funds to build up savings and decide to forego prefunding pretty much completely.

Whether one agrees with the reform plan or not, what is most important is that this book contains an honest, transparent and comprehensive approach to making the much needed reforms to the Social Security program. For this reason alone, it deserves serious consideration. I hope that it will improve the tenor of the discussion, and it would certainly be unwise to underestimate the impact this book will have on the ongoing Social Security reform debate.

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The Distributional Aspects of Social Security and Social Security Reform edited by Martin Feldstein and Jeffrey B. Liebman, The University of Chicago Press, 2002, ISBN 0-226-24106-8, 469 pages, Price $57.00. DOI: 10.1017/S1474747204251617

The US Social Security program provides retirement and disability benefits to millions of citizens each year, and it has been credited with significantly reducing poverty among the aged. The system's popularity among voters is so great, that many perceive program reform as tantamount to touching the "third rail" of politics. Nevertheless, demographic trends portend change for the system. Improvements in mortality coupled with low fertility rates point toward a future population with relatively fewer workers per retiree, thus reducing the funding base for the pay-as-you-go system. There are many ways the system could be reformed, but personal accounts have received a great deal of attention in recent years. This volume is part of a National Bureau of Economic Research series on the feasibility and potential consequences of a shift to a new form of social security system, one with a significant investment-based component. Other books in the series have focused on the risks associated with both the current program and one with personal accounts, as well as transition financing; by contrast, this volume offers 10 studies comparing benefits from the current program and a reformed system which included how personal accounts might distribute benefits across covered workers and their families.

The topic is of substantial interest in the debate over personal accounts. Some who oppose such a reform note that it might reduce the redistribution of wealth to vulnerable groups of retirees like widows and workers with low lifetime earnings. But this volume presents many results that, together, produce an overriding message: distributional concerns need not inhibit policymakers from considering personal account reform options.

The contributing authors, all with substantial expertise in the field, focus on redistribution under the current system, and potential distributional effects of a reformed Social Security program. Each chapter is followed by useful comments and other participants in the conference at which the work was presented. The first set of chapters considers redistribution under the current program, and taken as a whole, they suggest that the current program may not be as redistributive as many would believe. It is true that lifetime earnings for workers are related to monthly benefits using a progressive formula, but other aspects of the system counteract the redistributive effect of the benefit formula. Specifically, workers with low lifetime earnings tend to have higher mortality rates. Therefore, they are both less likely to reach retirement and have shorter retirements than those with higher average lifetime earnings. Spousal benefits also erode the redistributive effects of the progressive benefit formula. Nevertheless, increases in women's labor force activity may mitigate this last factor in the future.

A second set of chapters explores reforms without personal accounts, such as increasing the retirement age. Here the lesson that emerges is that benefit-reducing reforms typically lead to rather small reductions in overall progressivity. Nevertheless, the small changes in redistribution appear to come from a net effect of benefit improvements and reductions across various subgroups, depending on the specific reform envisioned. Increasing the early eligibility age, for instance, would reduce lifetime benefit payments for those with relatively low life expectancies. But coupling this reform with a minimum benefit could mitigate the redistributive loss from the later eligibility age. While some reforms could produce insignificant changes in the program's redistributiveness, some of the authors in this section note that many reforms could reduce the well-being of future retirees.

The volume's final four chapters take up distributional issues in the context of a reformed social security system having investment-based personal accounts. Though the authors address a wide range of topics, including bequests, annuity options, and possible changes in wages, the

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most notable conclusion is that personal retirement accounts can achieve redistribution just as well as the current program. The analysis makes use of data from the Survey of Income and Program Participation as well as Social Security administrative data on earnings and benefits. But, as one discussant notes, the findings might be too optimistic because assumed future real rates of return on the accounts of 5.5 percent enhance the likelihood that most beneficiaries will do better in the reformed system. Even a more conservative "low return" assumption of 3.5 percent might be too high for those concerned with at-risk groups. And a market downturn could disproportionately affect benefits received by low lifetime earners.

One major omission should be noted: none of the chapters acknowledge the disability insurance (DI) program. Under the current system, including DI benefits would make the current system appear more redistributive. Furthermore, it is not clear how the disabled would fare in a personal accounts system. Notwithstanding this shortcoming, this book should become a fundamental resource for all those interested in the technical aspects of the reform debate. This volume, along with others in the NBER series, would serve as an excellent resource for instructors of upper-level public finance, policy, and pension courses.

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* Opinions expressed are those of the author and do not necessarily reflect those of any agency of the U.S. Government.

Postal Savings and Fiscal Investment in Japan by Thomas F. Cargill and Naoyuki Yoshino, Oxford University Press, 2003, ISBN 0-1992-5734-5, 300 pages, Price $55.00. DOI: 10.1017/S1474747204261613

Two government institutions of strategic importance in Japan, but little-known outside that country, are responsible for much of that nation's saving and investment: the Postal Savings System (PSS), and the Fiscal Investment and Loans Program (FILP). These two entities are mutually supportive: the FILP, better thought of as a suite of policies than a single agency, gets more than half of its funding from the PSS, while the PSS supports government-guaranteed investment by investing in FILP ventures. And these entities are large: the PSS is probably the largest public financial institution in the world, with deposits totalling 255 trillion yen (USD 2.32 trillion at an exchange rate of 110 yen to the dollar in March 2000). FILP spending exceeds 10% of Japanese GNP. It is worth noting that the PSS is more than just a giant savings bank: it provides finance to the government, it sells mortgages to the public, and it offers life and disability insurance and a range of annuity products including long term care insurance. It is thus involved in some of the most important insurance markets in Japan.

To my knowledge, this book is the first in English on the subject, and it provides an informed and readable account of the PSS and the FILP as well as their place in Japan's economic and financial system. This volume comes at a good time. Inefficient investment and poor governance have long been blamed for Japan's economic malaise, and these two institutions have become prime targets of these criticisms. The Japanese economy has endured years of deflation, successive financial sector reforms have spluttered, and the few successes chalked up only serve to highlight how much more is needed.

The volume offers an account of the two institutions, placing them in the context of Japan's changing financial institution landscape. Their relationship to the broader economy is then examined, using a flow-of-funds model incorporating the PSS and the FILP. The authors also report empirical results from a number of studies, and they conclude with an overview of the issues associated with PSS and FILP reform. The first two chapters and the final, overview chapter are likely to be most useful for a non-specialist, though they furnish a somewhat jaundiced assessment of the prospects for genuine reform. The PSS appears more powerful than ever, and it is (naturally) opposed to reform which would curtail this power. FILP

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expenditures have steadily increased as a proportion of GNP since the 1950s, and in particular since the 1970s, when the wave of financial "reforms" commenced.

It is interesting for pension specialists to note that the social security account in Japan currently holds about JPY150 million in reserves, or about 30% of Japan's GDP. These assets were at one time at the disposal of the FILP and related agencies, but, as a result of recent reforms, only half of these resources will now be invested through these channels, with the other half invested in more traditional financial assets. The idea is that the fraction of the social security surplus available for FILP-type activities should further decline over the next period, to 2007. Similarly, while the PSS still makes its savings available to the FILP, life insurance assets are now invested in conventional financial assets. These developments have to be counted as successful reforms on their own.

The authors make the point that the PSS-FILP alliance probably helped the Japanese economy during the rebuilding program after World War II, countering many obstacles raised by incomplete markets and deficient public infrastructure. But the flow-of-funds model of Chapter 3 and the empirical results reported in Chapter 4 suggest that it is likely that these entities are now doing more harm than good. The authors are less than sanguine about the prospects for genuine reform, since they feel that the power of the PSS and the FILP may be capable of neutralizing any genuine threat to their powerful position in Japan's financial and political landscape This book is a valuable addition to the libraries of Japan finance and pension specialists, and it offers the interested non-specialist an unusual insight into the way in which financial institutions can outlive their usefulness.

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A Review of Fiscal and Generational Imbalances by Jagadeesh Gokhale and Kent Smetters, AEI Press, 2003, ISBN 0-8447-7167-8/95 p/$15.00.

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Jagadeesh Gokhale's and Kent Smetters' new monograph *Fiscal and Generational Imbalances* is a critically important study that documents in excruciatingly fine detail the magnitude of the long-term fiscal problem facing the United States. The book's key calculation is the country's present value fiscal gap – the difference between the present value of all projected future federal expenditures (including repayment of principal plus interest on official debt) and all projected federal future receipts. According to the authors, the size of this gap totals $51 trillion[1] – a figure that boggles the mind, and well it should. The gap is roughly 5 times GDP, far in excess of private sector net wealth, and roughly 11 times official federal debt.

The authors show that paying off this liability would require extraordinarily painful fiscal adjustments. For example, closing the gap by raising federal personal and corporate income taxes would necessitate an immediate and permanent 74 percent tax hike. Alternatively, the government could opt to cut Social Security and Medicare immediately and permanently by 51 percent. A third option, which, believe it or not, would fail to fully close the gap, is to eliminate, immediately and permanently, all federal discretionary spending. Delay will only make these numbers larger, for the fiscal gap, like our own unpaid credit card bills, grows with interest.

This "menu of pain", is, in effect, a demonstration of the nation's insolvency. The reason is that no politician would publicly advocate any of the menu's entreés, but unless the government serves one or some combination of them, the fiscal gap will continue to grow forcing the government to (a) explicitly default on official debt, (b) implicitly default on official debt by printing money and, thereby, servicing the debt with watered down money, or (c) some combination of (a) and (b).

Indeed, even letting the public know the size of the national fiscal gap is politically risky. In my view, the Bush Administration did all it could to suppress this study, which could have been

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entitled *The Treasury Papers*. The study was commissioned in mid-2002 by former Treasury Secretary Paul O'Neill at the urging of Smetters, who was then Deputy Undersecretary of the Treasury for Economic Policy. Smetters enlisted the help of Gokhale, then Senior Economic Advisor of the Federal Reserve Bank of Cleveland. This was an appropriate choice, for Gokhale is a co-developer of generational accounting which includes the calculation of policies to achieve generational balance. The Treasury Papers were initially to be published in February 2004, but in my view this might have dramatically worsened chances of enacting passage of the President's third tax cut and the Medicare prescription drug benefit. Such concerns about Secretary O'Neill's penchant for truthful revelation culminated in the Secretary's unceremonious firing in December 2003. Within days, the Treasury Papers were censored. Smetters and Gokhale then determined to publish the study on their own, which they did with the help of the American Enterprise Institute. In publishing the Treasury Papers, Gokhale and Smetters did what Daniel Ellsberg did in publishing the *Pentagon Papers* – they put their jobs at risk as well as their chances for future employment with the current or any subsequent administration. Like Ellsberg, these economists put country before self in a critically important act of truth telling.

My deep admiration for the authors of this book and for their general analysis should be apparent. But this does not preclude my picking some bones with certain aspects of their analysis. In their introduction, the authors point out the advantages of their fiscal gap measure relative to convention deficit accounting. What they fail to stress is that we have no alternative but to replace the federal deficit as a fiscal metric. This is for the simple reason that the deficit is not a well-defined economic measure; its value is entirely a function of the fundamentally non-economic choice by the government as to how to label its receipts and payments. In contrast, the fiscal gap measure is well defined in that its value would remain the same regardless of the choice of fiscal labels one might wish to entertain. This attribute of the overall fiscal gap – that it is a label-free fiscal metric – does not, unfortunately, hold true of the authors' decomposition of the fiscal gap into (a) current and future generational imbalances, and (b) the fiscal gaps of particular programs, like Social Security and Medicare. Thus, while I believe and trust the authors' overall fiscal gap calculation, I differ with them with respect to their assertion that the size of the fiscal gap is almost entirely attributable to Social Security and Medicare. Their assessment is predicated on a particular choice of fiscal nomenclature that has no economic basis.

Having said this, it is clear to me that the Social Security and Medicare programs are both in desperate need of reform, and these reforms can make a major contribution to eliminating the size of the fiscal gap. My hope is that this book will be one of an ongoing series of studies of the fiscal gap by the authors and other economists. The fiscal gap, in particular, and generational accounting, in general, should become the standard means by which the government and academia assess a nation's fiscal standing.

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A History of Public Sector Pensions in the United States by Robert L. Clark, Lee A. Craig, and Jack W. Wilson, University of Pennsylvania Press, 2003, ISBN 0-8122-3714-5/328 p/$49.95. DOI: 10.1017/S1474747204281616

Succession planning, performance rewards, and golden handcuffs, are benefit concepts that are not new, nor is the use of promised future compensation to encourage economic and political support. Indeed, these venerable concepts laid the foundation of modern pensions. In *A History of Public Sector Pensions in the United States*, Robert Clark, Lee Craig, and Jack Wilson take the reader on a journey that provides insight into the early development of retirement and disability benefit programs in the public sector. The authors demonstrate how the goals of creating loyalty, shaping and stabilizing a workforce, and encouraging desired

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retirement behavior, influences how employers use and approach pension benefits. This book is essential reading for those that set retirement policy, for those who seek to influence worker behavior, and those who want to develop an optimal contract between employer and employee. This desire for an optimal contract, as described in this book, is one in which both parties are made better off. Getting there is what this book is about.

The book begins by examining a century of pension developments in the United States, starting with plans developed for the Armed Services; then it moves on to local and state civilian employees; it next turns to federal worker plans; and finally the authors touch on private sector pensions. It is important to understand the reasons behind the establishment of retirement benefits in each sector of the economy, to appreciate their current state of evolution. Since their earliest existence, military pension plans, originally designed to provide disability payments to those who were injured, were structured to encourage specific behavior: join up, stay in, and then retire. States and localities followed the lead in the public sector in implementing disability and retirement benefits with similar objectives. Coverage of Federal workers followed and private sector plans began their expansion after World War II. Defined benefit plans are the historical backdrop for this book, although the authors acknowledge the growth of defined contributions plans in the past 30 years.

It is interesting to learn that many modern pension concepts had their roots in the 1799 Act that established a pension plan for the US Navy. For instance, notions of plan sponsor guarantees of benefit payments, exclusive use of plan assets for participants, benefits based on earnings and term of employment, and life annuities, arose because the Navy had a funding source, namely captured prizes from the high seas. Initially the Naval pension portfolio was invested in US government securities, but it later added private bank stock and state/municipal bonds. Technology also influenced the sources of public pension funding. For instance, Naval pensions grew robust when ships were overtaken, boarded, and their cargo captured. The system floundered, however, when technological warfare advances meant that sailing ships were replaced with faster ships able to disable and sink vessels from an extended distance. Indeed, both the Naval plan and its Army counterpart over time evolved into a "pay-go" plan.

Thus economic conditions, technological change, and politically-motivated investment restrictions eroded public pension systems and ultimately required federal intervention. Another current-day parallel is that, following the Civil War, the Navy fund held assets exceeding the plan's future liabilities. Congress then used those assets for other purposes and issued special issue non-negotiable bonds that yielded below-market rates. This practice continues today, with the investment of Social Security assets. The lesson is that amassing assets in a public pension plan attracts attention, and accumulated assets may be diverted to other purposes.

Such episodes in pension history provide cautionary tales which underscore the need for principles of fiduciary care, investment diversification, coordination of benefit design and funding policy, and careful actuarial estimates. A related lesson is that financing and benefits rules legislated at one time have the potential to be changed later. Program revisions frequently alter benefits, contributions, and sometimes reshape the entire program. Public pensions, therefore, can and will be dynamic institutions over time.

In future work, the authors could be challenged to look beyond institutional history, to explore how pension benefits and financing affects state, local, and federal government behavior. For example, how do local and national economies respond to investment of public pension plan assets? How do capital markets respond? Answering such questions would provide a welcome extension of their explorations. In sum, this history of public pension plans, full of investment scandal and political intrigue, provides a well-written, page turner for pension aficionados.

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