that motivate and guide investment decisions, with differences in their balance making some investors more risk-averse and others more risk-seeking. Neuroscience data reveal how evolution (the "selfish gene") manages to put us and keep us on the hedonic treadmill, where the anticipation of rewards turns out to be much more rewarding than their realization. Fear and risk (Chapter 6) turn out to be closely related, in the sense that investment options are typically not avoided or sought out as the result of their statistical properties (e.g., their variance of returns), but as the result of the feelings (fear and anxiety vs. comfort and happiness) they elicit. The book provides compelling examples of how evaluations of investment options by the reflective or the reflexive brain diverge, and of the dangers to the financial bottom-line when our reflexive brain goes unchecked.

For each emotion covered, the book describes seminal studies (many just behavioral, others that examine corresponding brain activations) that show how these emotions influence our actions (including our financial decisions). Each chapter ends with a list of practical suggestions for how prudent investors can and should maintain control over the emotion under discussion. This is, of course, where Zweig's expertise lies, though most, if not all of his suggestions have been made before, by others as well as him. In addition to his *Money* magazine articles and guest columns in *Time* and cnn.com, Zweig edited the revision of Benjamin Graham's classic text *The Intelligent Investor*. As it turns out, the insights into how our brain deals with financial decisions provided by neuroeconomics are fully consistent with the suggestions made by experts like Graham and Buffett over the last few decades. However, a reader would be hard-pressed to find many financial management recommendations in the book that newly arose from any neuroscience insight. In this sense, the promise of the subtitle ("How the new science of neuroeconomics can help make you rich"), undoubtedly designed to sell copies, is somewhat misleading. The one exception is a list of useful suggestions, throughout the book, on how to help the reflective brain thwart the grasshopper instinct of the reflexive brain to consume now, with high discount rates for future costs and benefits. Helping people increase their limited ability to defer gratification has obvious implications for socially more desirable pension savings rates.

What the book provides in its final chapter are some novel insights into the nature of happiness. Neuroeconomics has shown us that our reflexive brain, with its dopaminergic reward centers that are thrilled by doing better than expected and by the expectation of reward, but hardly fire at the delivery of expected rewards no matter how good, is being used by evolution to put us on the hedonic treadmill. We constantly expect happiness to be just around the corner, if only we can achieve that next promotion, salary increase, or investment target. While the resulting striving has made us arguably the most successful species on earth, both individually and collectively we might be encountering physical limits to the development desired by our unsatisfiable motivational system, because our reflective brain has made our striving so effective. While many of the final chapter's recommendations sound like pop psychology, they are valuable in recommending habits that, if developed, will assist our reflective brain in to getting us off the hedonic treadmill focused forever on the future and on to a life that cherishes the experience of doing and being in the moment.

Elke U. Weber
Columbia University

Pension Reform and the Development of Pension Systems: An Evaluation of World Bank Assistance. By the Independent Evaluation Group of the World Bank. The World Bank, 2006, ISBN 0-8213-6551-7, 143 pages. doi:10.1017/S147474720800351X

In early 1994, the World Bank (hereafter the Bank) leapt onto the uncrowded stage of debate on pension reform. Recognizing both the looming threat of aging populations in many middle

income and transition economies and the bankruptcy of many national pension systems, the Bank's publication, *Averting the Old Age Crisis*, compellingly argued the merits of a Chilean-style pension reform. The book preached the salvation that a multi-pillar approach—centered on a mandatory, privately run, funded defined contribution (DC) pillar–could provide for fiscally-strapped governments and insolvent pension schemes, not to mention its potential for enhancing economic growth. Over the following decade, the Bank aggressively promoted this vision with loans to member governments, policy research and advisory services, and technical assistance. Consistent with its practice of carrying out *ex post* evaluations of its work, the present volume, which I shall refer to as the *Report*, provides an evaluation of the Bank's efforts at pension reform.

The *Report* was written as an internal assessment for the Bank's Executive Board, so it covers such topics as: (i) the Bank's strategy for pension reform; (ii) the different ways in which the Bank promoted such reforms; (iii) the quality of the initiatives adopted under Bank tutelage; (iv) the impact of such reform efforts in the concerned countries; (v) the effectiveness of the Bank in building an institutional capacity for pension policy development and implementation; and (vi) the cohesiveness of the Bank's efforts both internally and with other external agencies also engaged in pension reform work. Some of these issues will be of limited relevance to those outside the Bank. Also, curiously, the evaluation exercise chose as its criteria for assessing the success of the Bank's efforts not the policy recommendations from *Averting*, but rather the official Strategy for Social Protection, which was only adopted by the Bank's Executive Board in 2001, long after much of the evaluated work had occurred. Moreover, and not surprisingly, the *Report* focuses principally on countries that sought the Bank's guidance on pension reform and where the Bank was heavily engaged (largely in Latin America, the Caribbean, and the Eastern European and Central Asian transition countries). Thus, many issues germane to pension policies in countries with less developed pension systems were neither addressed by the Bank nor considered in this *Report*.

As a result, the reader interested in pension reform may come away from the *Report* wishing for more. Should a country institute a model that differs from the Bank's official Strategy? What are the pros and cons of alternative strategies for developing social protection schemes that encompass not only a formal pension system but also a social safety net for the vulnerable elderly? How should one approach the reform of a financially weak pension system? Fortunately, these issues are the subject of many books, articles, and conference proceedings published by the Bank over the last decade, many on the web. As noted in the *Report*, that research has contributed importantly to clarifying our understanding of the policy and implementation issues involved in pension reform.

Notwithstanding these caveats, this *Report* is nevertheless a fascinating read for pension specialists, illuminating clearly the many challenges and difficulties involved, not only in designing a pension reform, but in developing effective institutions for implementing and administering a new pension system. For example, in reviewing the Bank's experience with countries that sought Bank guidance or loans, the *Report* illustrates how the Bank, despite its missionary zeal in promoting a DC-focused multi-pillar system, often found itself working instead with governments to implement parametric reforms to existing PAYG systems. In practice, the Bank's staff recognized that a one-size-fits-all approach would be impractical, in part because often countries wanted help with policies quite different from those recommended in *Averting*.

The *Report* also underscores the multiple dimensions of a successful reform program, particularly one that presupposes the development of new institutions in both the public and private sectors. It illuminates how the Bank, in providing policy guidance, often did not examine whether the institutional preconditions or economic and financial structure of a country were appropriate for a multi-pillar approach, particularly one reliant on a funded DC system. Surprisingly, the Bank did not make projections of the fiscal expenditure requirements of the minimum pension guarantees often provided in connection with mandatory DC schemes. The *Report* also contains occasional jewels of information illustrating how the

arguments for a mandatory private pillar proved more fragile than logic would have suggested. For example, in many countries that adopted a private funded DC system, the private pension money tended to be heavily invested in government securities, rendering their financial prospects not dissimilar from those of a PAYG system (viz., reliant on the fiscal sustainability of the government's finances). This resulted from limited development of the financial sector in the countries concerned, the need for financial instruments of a relatively long-term nature mirroring the maturity of potential liabilities, and the effect of government regulations limiting the riskiness of the portfolio investments of these funds.

Confirming the concerns expressed by early critics of the Chilean reform, the *Report* also notes that in other countries, the net return on many funded pension systems proved to be not much larger than the growth rate of wages (i.e., the return associated with a PAYG system), reflecting the high burden of administrative costs and risk premia. Moreover, the *Report* underscores that most of the key secondary objectives posited for a DC funded pension pillar—an increase in the savings rate, improved labor market incentives, an increased coverage rate, and financial market development—were unmet. Finally, and perhaps less surprising, the *Report* underscores the bottlenecks observed both in internal and external coordination among the different bureaucratic players and agencies dealing with pension reform issues. Externally, in its discussions with many countries, the Bank worked fairly independently from other aid agencies. And internally, there was little coordination between those in the Bank dealing with policy development and those engaged in actual discussions with country officials on specific policy reforms and Bank lending programs.

One final observation emerges from the *Report*. There remains an enormous gap in actuarial expertise in many reforming countries, throwing doubt on their nations' capacity to analyze the financial viability of alternative proposed reforms. Despite the growing importance of pension institutions, actuarial education, particularly outside the United States, remains underfunded and underprioritized, leaving many countries with inadequate capacity to program and design pension policies.

Peter S. Heller
SAIS, The Johns Hopkins University

Aging Nation: The Economics and Politics of Growing Older in America. By James H. Schulz and Robert H. Binstock. Greenwood Press/Praeger Publishers, 2006, ISBN 0-275-98415-X, 296 pages. doi:10.1017/S1474747208003521

Perhaps the leading domestic policy issue facing America is the long-term effect that the aging of the U.S. population will have on the federal budget and the national economy. Anticipated spending for health and retirement programs is widely projected to have negative consequences for the federal budget deficit, public debt accumulation, and the future economic well-being of the nation. Recent long-term budget forecasts from the Congressional Budget Office remind us that the nation faces serious fiscal and economic threats which will require some unpleasant, if not painful, policy actions.

Some analysts and pundits have prescribed drastic action to curb entitlement spending as the only solution, forecasting economic catastrophe if the country fails to sharply curtail entitlement spending, and placing blame primarily on the aging of the population and sometimes on the voting power of senior citizens. These "merchants of doom," as James Schulz and Robert Binstock refer to them in their excellent survey of aging policies in the United States, seem to equate projected entitlement spending growth with the end of American hegemony in the world economy. It should come as no surprise that Schulz and Binstock disagree vigorously with the gloomy assessment. They have been for many years among the more thoughtful