'ratchet', which would automatically lower (or increase) the tax rate as long as the assets-to-annual-outlays ratio remained above (or below) a target range centered around six to one. This plan ensured that the payroll tax would not fall below 8.2%, nor would it ever exceed 22.1%. Both sides were happy with the arrangement. All they needed was Congressional approval.

Congress balked at the plan for two major reasons, one practical and one philosophical. The practical issue revolved around federal government accounting, which would have recorded the purchase of equities as an outlay (despite the fact that it would be made with proceeds from selling the Treasuries), which in turn would increase the budget deficit during a period in which that was politically difficult. Congress would have to explicitly exempt the plan from the standard government accounting procedures. The philosophical issue revolved around the US government owning a large block of private-sector stock. That hurdle was avoided by the establishment of a private trust, which would hold and manage the plan's assets. All of these issues were neatly packaged in the Railroad Retirement and Survivors' Improvement Act (RRSIA) of 2001. The privatized plan has been an unambiguous success: workers received their enhanced benefits, and Sass estimates that carriers have earned hundreds of millions of dollars annually as a result of the reduction in the payroll tax.

Some readers might assume, the concluding chapter entitled 'Lessons for Social Security' is simply a tacked-on attempt to broaden the volume's appeal. That would be a mistake, as Sass uses the space to elaborate on three problems encountered on the road to privatize the railroad plan: (1) the federal government accounting issues; (2) the philosophical and practical issues involved with investing the enormous Social Security trust fund in equities; and (3) the risk-reward tradeoff inherent to equity investing.

Overall, this is an excellent review of the road to the RRSIA and its impact on the railroad industry. Two quibbles: one is the terse history of railroad retirement leading up to the RRSIA. Elaboration would have helped the uninformed reader. The second is that the chapter on Social Security overlooks what many consider to be the biggest hurdle, specifically how to get from here to there given the enormous claims of the so-called 'notch' generation – i.e., those too young to remain on the current plan but too old to reap the full benefits of a new plan. But these are mere quibbles. If you are interested in railroad finance or privatizing Social Security, I can recommend this book.

LEE A. CRAIG
North Carolina State University

Get What's Yours: The Secrets to Maxing Out Your Social Security. By Laurence J. Kotlikoff, Philip Moeller and Paul Solman (eds). Simon & Schuster, 2015, ISBN 978-1-476-77229-5, 324 pages. doi:10.1017/S1474747215000347

As age 62 approaches, most Americans must make decisions about when to claim Social Security. Delaying claiming results in a higher monthly check, an actuarial adjustment intended to compensate for the fact that those who claim later will likely receive benefits for fewer months. But as it turns out, this adjustment is not actuarially fair for many (possibly most) individuals. That is, the expected present value of benefits can be increased through use of the right claiming strategy, which often involves delaying retirement benefits and taking full advantage of any auxiliary (survivor and spousal) that may be available. And the stakes can be high, amounting to tens or even hundreds of thousands of dollars in lifetime benefits.

Despite these high stakes, most people claim Social Security either as soon as they reach age 62 or upon stopping work – a strategy that is rarely optimal. It is a puzzle why so many people appear to leave so much money on the table. One hypothesis is that most people are simply unaware of Social Security's complex rules, which must be understood in order to take advantage of less conventional claiming strategies. If that is correct then a book such as this might get people to change their claiming choices. The book provides an easily digestible introduction to Social Security's rules, as well as advice on optimal claiming strategies under a variety of different circumstances. As the authors point out, given the stakes involved, 'claiming every possible dollar in Social Security should be a national pastime' (p. 123).

To take an example from the book (p. 127), consider a two-earner couple in which the wife is aged 67 and the husband 63. The authors suggest that both spouses wait until age 70 to claim their own retired worker benefits, allowing these benefits to reach their highest possible value. However, while waiting, the husband can receive a spousal benefit based on the wife's record starting at age 66. At age 70, the husband switches to his own retirement benefit, which will have grown through delay. The spousal benefit – which amounts to half the working spouse's full benefit – was originally designed with one-earner couples in mind. But strategic use by two-earner couples, as in the preceding example, is permitted under Social Security's rules and can substantially boost lifetime benefits.

There are numerous other, more complex case studies in the book involving disability benefits, same sex marriage, multiple marriages and divorces, widowhood, and children. These are all used to illustrate, in an easily accessible way, how Social Security's rules work and what factors individuals might want to consider in making claiming decisions. In addition, the book provides practical advice about dealing with the Social Security Administration. All of this will surely provide readers with plenty to consider as they make their own Social Security claiming decisions. Through use of humor and carefully chosen anecdotes, the authors have also done a remarkably good job of making a snooze-worthy topic – Social Security's rules – genuinely entertaining. Consider, for example, the hypothetical William H. Gigolo (pp. 119–120), who marries and divorces a series of high-earning spouses, living off their income while they are working, and then calculatingly proceeds to maximize the divorced spousal and survivor benefits he receives in retirement.

Still, one wonders what might happen as these Social Security 'secrets' become more widely known. Clearly if everyone followed the authors' advice, it would put a strain on government coffers. How might policy makers react? Might they, for example, take steps to limit the strategic use of spousal benefits by two-earner couples? This has happened with other claiming strategies. In the past, individuals were able to take advantage of a 'free loan' from Social Security, which permitted them to claim benefits at age 62, undo that decision at age 70 by repaying all benefits received (without interest), and re-claim immediately, taking full advantage of the higher benefit available through delay. That strategy was eliminated in 2010 just as it began to get attention. Now, a do-over is only permitted if benefits were started less than a year ago. This kind of discussion clearly goes beyond the scope of the book, which is intended to provide advice about how to optimize claiming under Social Security's current rules, but it is interesting to ponder nonetheless.

One also wonders whether a secondary purpose of the book is to get people to think about broader policy questions surrounding the design of Social Security. The authors frequently take shots at some of the seemingly arbitrary rules governing benefit collection. For example, why is the family maximum benefit – which caps the total amount that can be collected on one worker's earnings record – more generous for high earners than low earners? In a benefit formula that aims to be progressive, '[t]he way this benefit is calculated doesn't make sense to us', say the authors (p. 48). More generally, readers might be prompted to consider whether we really want a system where figuring out optimal claiming strategies needs to be a 'national pastime', wasting valuable time and energy that could otherwise be spent on genuinely enjoyable pastimes. Indeed, in the final chapter, the authors provide their own views on Social Security reform. Here, the authors disagree considerably, with Kotlikoff complaining that the system's 'complexity is beyond belief' (p. 247), Solman countering that '[i]t's simply a fantasy that laws and policy can simply be made simple' (p. 241), and Moeller arguing that despite its flaws, Social Security does its job 'very efficiently and with a cost structure that would be impossible for any private company to match' (p. 251).

Regardless of what policy conclusions one draws from the book, the bottom line is that it is chock full of useful advice for individuals approaching retirement age. At the very least, it should prompt readers to invest some time in thinking about their claiming decisions.

Sita Nataraj Slavov
George Mason University and NBER

Life Annuities: An Optimal Product for Retirement Income. By Moshe A. Milevsky (ed.). CFA Institute, 2013, ISBN 978-1-934667-56-9, 136 pages.
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The reviewed book introduces the benefits of life annuities and why it would be a good retirement income product and provides a comprehensive review of the literature life annuities. It is written such that people without prior knowledge of life annuities can easily understand the product and its features.

Chapter one discusses the institutional details of life annuities. It provides a comprehensive overview of the features of the product and the history of the product. Many readers will be surprised to find out that the first recorded life annuity transaction was four millennia ago in Egypt! The historic overview also provides examples of market failure where inadequate pricing and reserving has affected the issuer of life annuities. When looking at product innovations today it is good to keep in mind this historical perspective. It also deals with taxation and default risk from a North American perspective. Unfortunately, for readers interested in the global context, this is missing. An overview of the market is given for North America, where eight companies have total life annuities reserves of over $100 billion. Interestingly, shopping around for annuities can pay off. The monthly income for an annuity can differ by as much as 10% between insurance companies with the same credit rating. As expected, the higher the credit rating of an insurer, the lower monthly income you can expect. However, as the book shows, a lower monthly income does not imply that the credit rating has to be better. The chapter concludes by discussing variable annuities. Although these are popular annuity products, it is not the focus of the book and thus not much detail is provided.

Chapter two discusses ten formulas. The first four formulas relate to mortality tables and annuity pricing. It goes step by step from mortality rate to survival probability to constructing a life table. The book starts with providing the definition of the mortality rate. Technically literate readers might get confused by the definition of mortality rate as it uses rates and probabilities interchangeably. However, given that mortality probabilities are relatively small, they are approximately the same. It then continues by providing the equations for the survival probabilities given mortality probabilities and the construction of a mortality table given the Gompertz law. The Gompertz law was introduced in the 19th century and has stood the test of time, it is still applicable today. The nice feature of the Gompertz law is that based on only two parameters, a modal age at death parameter and a dispersion parameter, a mortality table can be constructed. This indeed would be a useful tool for financial planners in order to easily create individual survival curves for their clients based on their subjective life expectation. Those clients could be surprised to see their probability of living to advanced ages and would value financial advice for retirement even more. The last step is the construction of the price of a life annuity, assuming a time independent interest rate. The book also provides a pricing formula for annuities when mortality follows the Gompertz law, which then could easily be used when determining the money's worth for individuals given their subjective survival beliefs. The book also provides the formula for the money's worth of annuities. The closer to one the money's worth of annuities is, the fairer the price is. The author shows that the literature has found that the money's