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Social Security reform and intertemporal smoothing

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Abstract

This paper examines the welfare and distributional impact of switching from a defined benefit pension system like Social Security to a defined contribution system of personal retirement accounts (PRAs). While such a switch would do away with the transfers that low-wage workers receive through Social Security, it would have the benefit of reducing labor supply distortions. Moreover, a particular kind of PRA suggested in this paper – one that has very low (or zero) contribution rates early in life – substantially enhances life-cycle patterns of consumption and labor supply by making more resources available to credit-constrained young workers. Simulations of a life-cycle model show that in welfare terms these PRAs significantly outperform conventional PRAs because of this enhanced intertemporal smoothing.

JEL Classification: E21; H31; H55

Keywords: Personal retirement accounts; Labor supply; Intertemporal smoothing

1. Introduction

Much of the debate over Social Security reform in the U.S. has centered on the question of whether to undertake fundamental reform that would shift from the

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current defined benefit policy toward a defined contribution policy of personal retirement accounts (PRAs). Such a shift would affect individuals' welfare, and its distribution, in a variety of ways.

On the one hand, a move toward PRAs would eliminate the extensive transfers inherent in the current system. These transfers serve several purposes. First, they provide insurance, within a cohort, by redistributing toward workers who experience adverse labor market shocks throughout their lives. Second, they provide insurance across cohorts, by transferring toward cohorts that experience adverse aggregate shocks. Third, the transfers redistribute toward workers with low *expected* lifetime earnings, which can be interpreted as insurance against being born with fewer skills. Based on these considerations alone, a shift to PRAs would adversely affect the level and distribution of individuals' well-being.

On the other hand, PRAs have advantages that could enhance welfare relative to the current system. First, the taxes and transfers inherent in Social Security distort individuals' labor supply decisions. The benefits that an individual receives are imperfectly linked to the contributions they make, and consequently the contributions largely constitute a tax on labor. Under PRAs, that tax and its distorting effect on labor supply decisions are eliminated.

A second potentially significant advantage of PRAs, which has received little or no attention, relates to the current system's distortion of life-cycle patterns of consumption and labor supply. In general, young people who anticipate higher future income would like to borrow against that future income in order to smooth their consumption over the life cycle. However, limits to borrowing impede this smoothing and result in a distorted consumption pattern that grows with income over the life cycle. As Hubbard and Judd (1987) pointed out, Social Security exacerbates the distorted life-cycle consumption profile by forcing young people to save, effectively, via their Social Security contributions. Although Hubbard and Judd do not discuss it, the life-cycle profile of labor supply is similarly distorted. Young people, who would like to work less early in life, when wages are lower and human capital acquisition is more important, cannot afford to do so because their forced contributions to Social Security make it more difficult to consume leisure.

One way to reduce these distortions of life-cycle patterns, perhaps significantly, would be to allow contributions to the PRAs to be low (or zero) early in life and then to increase with age. As a result, young, borrowing-constrained workers would not be forced to save for their retirement, which would allow them to optimally increase their consumption (of both goods and leisure). Most (to my knowledge, all) of the proposed PRA policies do not consider this possibility, but the results in this paper will clearly demonstrate that they should. It is worth emphasizing, however, why a contribution schedule of this sort (low initially, then increasing with age) would be considerably less attractive in the context of a defined benefit policy like Social Security. In particular, because the imperfect benefit–tax linkage of Social Security means that contributions are largely perceived as a tax on labor, contribution rates that rose with age would discourage labor supply later in life – precisely when their effort is most valued by the market.