

Intergenerational Risk Sharing and the Effects of Social Security Reforms

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Unfunded public pension schemes present special challenges for reform, because of the transition costs of moving to a new system. Reforming unsustainable systems must involve some combination of reducing the pension benefits or increasing tax contributions, both of which have intergenerational implications. But these implications have the potential to be shared within families. For example, consider a social security reform that reduces benefits for future retirees but leaves benefits for current retirees unchanged. Even though they will receive different retirement benefits, current and future retirees are linked as families, and the different generations within the family may share the burden of the reform through intergenerational transfers within families.

In this study, we seek to better understand the intergenerational incidence of social security reforms by analyzing outcomes following two significant pension reforms in Italy in 1992 and 1995. These reforms significantly reduced the pension wealth of younger cohorts, both absolutely and relative to older cohorts. Thus, without compensating transfers from older cohorts to younger ones, younger cohorts would bear the large majority of the burden of the reforms.

A primary goal of the 1992 reform was to reduce pension expenditures by increasing eligibility standards and reducing benefit generosity. First, for private sector employees, the Early Retirement Ages were increased from 55 to 60 for men and from 60 to 65 for women. Second, eligibility for old-age pensions was made more restrictive by increasing the minimum number of required contribution years from 15 years to 20 years. Third, benefit amounts were reduced since the length of the earnings history used to compute benefits was increased. Fourth, benefit generosity was also reduced by indexing benefit amounts to price inflation instead of wage inflation. The savings from the pension reform were significant; roughly 25% of pension liabilities were eliminated. Nonetheless, many of the changes applied only to future cohorts since the reform left many current retirees exempt from the changes and imposed long phase-in periods. Most relevant for our purposes is that the effects of the reform differed systematically by age: losses in pension wealth were greatest for younger cohorts.

The 1995 reform aimed to tighten the link between perceived contributions and expected pension benefits. First, each worker would hold a notional social security account in which the balance would be based on contributions made over the worker's entire career. Second, individuals would choose a retirement age between 57 and 65. Then, based on the age of retirement, the balance in the individual's notional account would be converted into pension benefits, based on actuarially-adjusted life expectancy.

Our primary analysis considers the combined effects of the 1992 reforms and the 1993 recession on the income and consumption of individuals of different ages. The main goal is to measure the extent of

intergenerational risk sharing by analyzing how the income shocks experienced by different cohorts translated into their consumption. To this end, we consider three cohorts, defined by their age in 1992: young workers (age 25-34 in 1992), older workers (age 35-50), and retirees (age 60-75).

We compute “predicted income” as the amount that individuals would have been expected to earn had the reforms and recession not occurred. Thus, the differences, if any, between actual income and predicted income after 1992 are interpreted as the income shock due to the combined effects of the 1992 reforms and 1993 recession. We find noticeable shortfalls in actual income relative to predicted income for the two working-age cohorts beginning around 1992 and persisting at least 15 years thereafter. Young workers experienced the largest shortfalls relative to predicted income. Retirees, by contrast, experienced only very modest income shortfalls relative to predicted levels. The patterns correspond to what one would expect given the nature of the reforms, as well as the recession.

To get a sense of the extent to which different cohorts shared the burden of the income shocks, we then compute “predicted” and actual consumption over this period. For this measure too, we find that actual consumption falls far short of its predicted levels for the two working age cohorts. For retirees, by contrast, consumption remains roughly in line with its predicted trend. The fact that retirees experienced no detectable consumption shortfall suggests that they did not make large transfers to their children and other younger family members who experienced large income shortfalls. Overall, the evidence suggests that risk sharing across generations in Italy in the 1990s was limited. Specifically, shortfalls in different cohorts’ consumption expenditures tracked fairly closely their shortfalls in income. In light of these results, it seems unlikely that compensatory transfers within families would offset much of the distributional consequences of similar pension reforms.

The full working paper is available on our website www.nber.org/programs/ag/rrc/books&papers.html as paper NB12-17.

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