Individual Retirement Arrangements

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Synonyms

Old-age savings; Retirement planning

Definition

Individual retirement arrangements are the variety of formal and informal vehicles that individuals can use to finance their retirement and accommodate general well-being in old age.

Overview

Across the world, individuals must make arrangements to prepare for old age and retirement. The challenges individuals and governments face in financing retirement are complicated by the uncertainty in life expectancy and medical expenses, the growing elderly population, and even cognitive biases. Furthermore, the availability of different vehicles for individual retirement arrangements varies by country and socioeconomic status. Many countries have social insurance programs to accommodate people in old age, but the structure and generosity of these programs exhibits wide variation. Describing the full set of individual retirement arrangements used by people around the world is beyond the scope of this article, so we provide examples detailing common arrangements from several countries, with a focus on developed countries.

Beginning with the continent of Europe, nearly all countries in this region have contributory earnings-related income security programs financed by payroll taxes taken from employers, employees, or both. There are fewer countries with flat-rate (independent of income) contributory programs. In addition, several European countries such as France and Germany have government-financed programs to which employers and employees do not directly contribute. Most are means-tested programs for individuals below a certain income or wealth threshold, but some countries have universal non-contributory programs. A few European countries including Finland and Iceland have, in addition, mandatory occupational pensions in which employers are required by law to provide retirement funding. Individual accounts in which employees contribute to a fund that is paid out in retirement are also available in some countries such as Russia and Sweden (Social Security Administration and International Social Security Association 2018a).

The types of income security programs used in North and South American countries are broadly

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similar to those used in Europe. For example, Mexico and Chile use individual retirement schemes, and fewer countries in this region use flat-rate contributory or universal noncontributory plans compared to European countries. There are exceptions such as Argentina, which uses a flat-rate contributory program and Canada which uses a flat-rate universal program (SSA and ISSA 2017a). The distribution of plans offered is broadly similar in Asia and the Pacific, with a key difference in that some countries, including India and Indonesia, use provident funds, in which employer and employee contributions are put aside in special publicly managed funds to be paid out as a lump sum in retirement (SSA and ISSA 2017b). None of the countries in Europe or the Americas offer provident funds. Countries in Asia and the Pacific also generally offer fewer earnings-related and means-tested plans. On the other hand, the structure of available retirement plans in Africa stands in stark contrast to the rest of the world. In Africa, although most countries have earnings-related plans, there are few countries with means-tested or any other retirement income security plans (SSA and ISSA 2017b). The specific structure and generosity of these programs vary greatly by country. In the United States, workers pay into the federal Old-Age, Survivors, and Disability Insurance (OASDI) program (commonly known as Social Security) through payroll taxes, and benefits are paid out in retirement. Many employers sponsor defined contribution (e.g., 401(k)) programs, where employees choose a contribution amount and employers will match the contribution up to a certain percentage of employees' pay. Over the past few decades, there has been a movement towards defined contribution and away from defined benefit (e.g., pension) programs, in which at retirement, employers pay workers a set amount based on their tenure at the firm and earnings history. Individuals also have the option to save independently in Individual Retirement Accounts (IRAs), where contributions have tax-sheltered status until the time of retirement. Roth IRAs are taxed at the time of contribution, but not when the funds are paid out in retirement.

Preparations for healthcare in old age are also important. Long-term care insurance protects individuals against the risk of high expenses in old age, such as moving to a nursing home, assisted living, adult day care services, home care, and home modifications (AARP 2016). Many retirees rely on informal care from family members. In the United States, individuals aged over 65 are eligible for Medicare, which covers key health expenses. Many developed countries have government-provided health insurance for all citizens (The Commonwealth Fund 2016), but developing countries often lack the resources, infrastructure, and policy push to adequately address the elderly's medical needs. For a useful overview of insurance markets for the elderly, we refer readers to Fang (2016); that review article focuses on insurance against income risk, health expenditure risk, long-term care insurance risk, and mortality risk.

Key Research Findings

Increases in life expectancy and falling fertility rates have raised questions of how countries will finance longer retirement periods for these increasing needs. Although aging populations are prevalent across the world, there are large differences between and within countries. Eggleston and Mukherjee (2018) provide an overview of global demographic trends and research addressing challenges and potential solutions to meeting the retirement needs of an increasingly older population. With life expectancies increasing, one might expect retirement age to increase as well, but Bloom et al. (2010) find a negative correlation between life expectancy and the retirement age of males from 1965 to 2005. The difficulties of financing retirement are more salient in countries where the population is rapidly growing older, such as in Japan. Unami (2018) discusses the demographic changes and economic challenges and suggests that a combination of policy reforms around taxes, benefits, and economic growth be enacted in conjunction with each other.

Much research has been focused on inequality and distributional impacts of retirement policy.

Kluge et al. (2018) examine aging and migration across countries in the EU and consider a hypothetical in which differences in fiscal hardship across countries are eliminated due to transfer between countries. Turning to inequality among individuals within countries, Chetty et al. (2016) find a high correlation between income and life expectancy in the United States, implying that richer individuals are benefitting more from old-age Social Security programs. Olivera (2019) finds that life expectancy differences by socioeconomic status (SES) lead to pension wealth inequality across 26 European Union countries but that the effect was lessened from 2006 to 2014.

Others have explored why inequality in retirement wealth is so prevalent. Dynan et al. (2004) seek to explore differences in pension wealth by income and find that higher lifetime-income households save at higher rates and have a slightly higher propensity to save than lower lifetime-income households. They highlight uncertainty about future income and health expenses, bequest motives, asset-based means testing, and behavioral factors as potential drivers of these differences. Bernheim et al. (2001) agree that behavioral factors play a role in variation in retirement wealth among households, emphasizing "rule of thumb," "mental accounting," and hyperbolic discounting as potential explanations. They reject the traditional assumption that differences are driven by time preference rates.

There has also been research related to behavioral biases that lead to undersaving and on interventions to overcome these biases and encourage saving. Goda et al. (2015) find that present bias and exponential-growth bias reduce retirement savings and estimate that the elimination of these two biases could increase savings by 12–70%. Using a field experiment, Goda et al. (2014) find large effects from providing employees with retirement income projections and enrollment information. However, they caution that care should be taken when designing retirement savings interventions, since their projections are sensitive to assumptions made about how to model retirement income forecasting.

One type of intervention that has received a lot of attention is changing default rates on retirement savings plans. Thaler and Benartzi (2004) created the Save More Tomorrow program, which commits people in advance to saving a higher portion of their future salary increases for retirement. They initially offered the program at a midsize manufacturing company where a large majority of employees enroll. Over a period of 40 months, participants increased savings rates from 3.5% to 13.6%, on average. Since then, the Save More Tomorrow program has been broadly implemented and used by over 15 million Americans (Benartzi 2017). Beshears et al. (2017) conduct an experiment where employees are exposed to varying default contribution rates. They conclude that individuals use the initial rate as an anchor to make adjustments near the default, leading to higher contribution rates among those with higher defaults. Bernheim et al. (2015) argue that the optimal default rate is either the maximum that the employer will match or zero. Additionally, they offer ways to determine which rate is more appropriate. Meanwhile, Goda and Manchester (2013) argue that optimal defaults in pension plan choice vary with worker characteristics (primarily age).

Financial literacy has also been found to have a large influence on retirement savings. Lusardi and Mitchell (2017) find a causal relationship between financial knowledge and readiness for retirement, while Lusardi et al. (2017) find that financial literacy accounts for 30–40% of wealth inequality. Annuities may be a good way for individuals to insure against financial hardship brought on by living longer, but Brown et al. (2017) find that many people have trouble understanding annuities, particularly if they are complex. They recommend reducing complexity by enlarging choice brackets and instructing people to visualize decumulating their assets over retirement when making annuity choices.

Another area of research relates to informal care in retirement from family. Evidence from China's "Later, Longer, Fewer" campaign shows that parents who are more exposed to family planning have less children and have diverging physical and mental health outcomes. While these

parents consume more and have slightly higher physical health, their mental health is worse, and they are more likely to report depression (Chen and Fang 2018).

Since many people receive informal care from their children in retirement, it is important to think of how policy relates to children of retirees. Mukherjee (2018a) finds that if Social Security benefits are cut, it will not only affect the retirees but also their children, who will provide more care to and receive less money from their parents. Bauer and Sousa-Poza (2015) find that although the effect of informal caregiving on labor force participation is small, caregivers' psychological and physical health may suffer.

Turning to factors that influence various uses of care, Costa-Font et al. (2018) leverage wealth shocks induced by a housing bubble and burst to identify the effect of wealth on formal and informal care use. Using this source of variation, they find that an increase in wealth induces greater use of formal care; Goda et al. (2011) corroborate this finding using variation from the Social Security notch, which also induced exogenous wealth shocks. We note that although Costa-Font et al. find a small decrease in whether people used informal care, the effects are concentrated on the extensive margin; wealth had no effect on the number of hours used. Coe et al. (2015) find that long-term care insurance reduces informal caregiving by children, implying that long-term care insurance could benefit both older and younger generations.

Future Research Directions

In an interview, retirement research expert Olivia Mitchell describes important avenues in financial longevity and financial literacy (Mukherjee 2018b). She emphasizes educating individuals about probabilities of survival to various ages and associated savings decisions. She also notes that changing expectations about retirement is key to encouraging people to work longer. To encourage individuals to save enough while working, Mitchell suggests employers make savings fun by creating competitions between employees or by leveraging people's interest in risk-seeking gambles. For example, Tufano (2008) documents an increase in saving spurred on by lottery-linked savings programs in the United Kingdom which pays out a large prize to one participant who earns "lottery tickets" by saving in a bank account. Even though only one person wins the prize, the "gamification" of the program encourages many to save.

One concern Mitchell raises is making sure that the elderly population is protected against fraud. DeLiema et al. (2018) document financial fraud faced by older individuals in the United States but do not find consistent observable characteristics of the elderly population who experience fraud. Even without exposure to fraud, some older individuals may be putting themselves in poor financial positions. Evidence has shown that while cognitive ability is strongly related to which member of a household is the primary financial decision-maker, changes in cognitive ability over time do not have much of an impact on changing these roles (Angrisani and Lee 2018). This conclusion is not surprising, since people are generally unaware of their own cognitive decline (Mitchell 2018).

While there has been significant research on behavioral nudges to encourage individuals to save more for retirement, there has been less research on the decumulation phase, which is when individuals draw down their retirement savings. One finding related to this phase is by Horneff et al. (2018). They find that deferred annuities, which set aside a portion of retiree's savings for a later age (e.g., 85 years), can increase welfare by up to 20% of plan accruals.

More broadly, many research and policy experts have expressed concerns about undersaving for retirement. Yet, there is disagreement in the literature as to the extent of this undersaving. A notable example is Sholz, Seshardi, and Khitatrakun (2006). They use a life cycle model incorporating uncertainty, taxation, pension, and Social Security benefits and find that over 80% of households are saving at least their optimal wealth targets. They also find that the savings deficit is small for the households saving less than their optimal target.

Innovations in developing countries are still being tested and deserve further research. Mitchell and Mukherjee (2017) find promising results from a field experiment of micropensions for a poor population in India. The basic product is a commitment savings program in which people contribute money during their working years and access the savings only at age 60. Most respondents surveyed in the experiment were interested in the micropensions, but the popularity is due in part to government matching funds which may not be sustainable in the long run. We refer interested readers to Cole (2015) and Eling et al. (2014) for reviews of the challenges and opportunities in expanding microinsurance products in developing countries.

In summary, there are a multitude of individual retirement arrangements around the world that leverage both formal and informal savings, as well as different forms of employer benefits and social insurance. The commonality around the world is that these mechanisms will change as societies experience demographic and other changes.

Cross-References

- Annuities
- Assets and Wealth
- Care Coordination
- Care Management
- Defined Contribution/Defined Benefit
- Fiscal Welfare
- Formal/Informal Care
- Healthcare Financing
- Living Arrangements in Later Life
- Long-Term Care
- Medicare: Coverage, Evolution, and Challenges
- Pension Systems
- Personal Care
- Preparation for Future Care: The Role of Family Caregivers
- Pre-retirees' Preparation for Retirement
- Primary Caregiver
- Reserve Mortgages
- Social Security Around the World
- Social Security in China
- Social Security in Europe
- Social Security in Latin America
- Social Security in the USA
- Social Security: History and Operations
- Social Security: Long-Term Financing and Reform
- Welfare States

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