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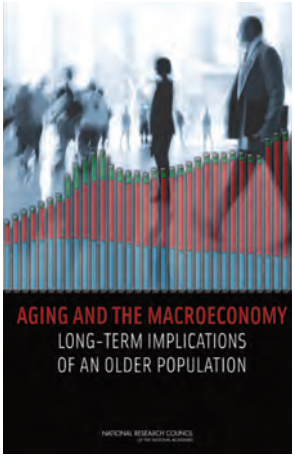
REPORT IN BRIEF

Aging and the Macroeconomy: Long-Term Implications of an Older Population

Board on Mathematical Sciences and Their Applications · Division on Engineering and Physical Sciences
Committee on Population · Division of Behavioral and Social Sciences and Education · **September 2012**



The United States is in the midst of a major demographic shift. In the next four decades, people aged 65 and over will make up an increasingly large percentage of the population: The ratio of people aged 65+ to people aged 20-64 will rise by 80%. This shift is happening for two reasons: People are living longer, and many couples are choosing to have fewer children and to have those children somewhat later in life. The resulting demographic shift will present the nation with economic challenges, both to absorb the costs and to leverage the benefits of an aging population.

This report presents the fundamental factors driving the aging of the U.S. population, as well as its societal implications and likely long-term macroeconomic effects in a global context. The report finds that, while population aging does not pose an insurmountable challenge to the nation, it is imperative that sensible policies are implemented soon to allow companies and households to respond. It offers four practical approaches for preparing resources to support the future consumption of households and for adapting to the new economic landscape.

Background and Overview

The population of the United States will age substantially over the next four decades due to steadily rising longevity and the drop in fertility following the Baby Boom. Although longer life is a highly desirable improvement in human wellbeing, it also places stresses on our economic system because older people consume a great deal more than they earn through their market labor. To the extent that people have prepared for this stage of life by starting to save and accumulate assets earlier in their working lives, the problem is reduced, but in fact older people are substantially supported by public transfer programs such as Social Security, Medicare, and Medicaid.

Therefore, our national response will need to involve some combination of major structural changes to Social Security, Medicare, and Medicaid; higher savings rates during working years; and longer working lives. The longer our nation delays making changes to the benefit and tax structures associated with entitlement programs for older individuals, the larger will be the "legacy liability" that will be passed to future generations. The larger this liability, the larger the increase in taxes on future generations of workers, or the reduction in benefits for future generations of retirees, that will be required to restore fiscal balance. Decisions must be made now on how to craft a balanced response.

Fundamental Factors Shaping the Economic Landscape in the Coming Decades

Steadily Rising Longevity

As mortality rates have fallen in the U.S., the average length of life has risen from 47 years in 1900 to 78 today, and it is expected to continue to rise in coming decades. By 2050, U.S. life expectancy is projected to reach 84.5 years. The average person living now is much more likely to survive until age 65 or 70, and to live more years thereafter. This is aging at the level of the individual. Longer life is to be celebrated, and the discussion of the fiscal challenges that result should not distract from this key point. In addition, everyone who will reach age 65 by 2050 has already been born, as have many of the younger people who will be in the workforce then.

Health at older ages has also improved over the last half century as disability rates have fallen, and many of the additional years that people are living are healthy ones. However, the decline in disability appears to have stopped around 2000, and the future trend is uncertain. Nonetheless, the report found that there is substantial potential for increased labor force participation at older ages if people so choose. Most people will have plenty of healthy years still available at the time they retire. Later retirement is both a realistic policy option and an available individual choice.

In many countries including the United States, the age of 65 has conventionally been considered the "normal retirement age," and this chronological age has been incorporated into many public policies and private attitudes. The Committee believes that age 65 is an increasingly obsolete threshold for defining old age and for conditioning benefits for the elderly.

Shifting Balance of Older and Younger Population Groups

Longer life is only a part of the story. In 1957, at the height of the post-World War II Baby Boom, the fertility rate was 3.7 births per woman; the average for 2006-2010 was slightly less than 2.1 births per woman. Lower fertility causes slower population growth, and this is also a major cause of population aging. It makes younger age groups smaller relative to older ones, so there are fewer young people to support older people through taxes or private transfers.

The shifting balance of older and younger population groups has given rise to an increasingly contentious debate within American society about how to address fiscal deficits. Projected costs of public entitlement programs seem daunting, particularly in the context of economic recession. The historically large deficits of the last three years, in part caused by efforts to help the economy recover from the deep recession that followed the financial crisis in 2008, have unfortunately coincided with the leading edge of the retirement of the Baby Boom generation.

The Impacts of a Changing Global Economy

Whatever the economic consequences of population aging for the United States, it is important to recognize that the U.S. economy is integrated in the global economy and that population aging is a global, not merely a national, phenomenon. For example, level of income is a factor in international markets as well. Per capita income depends on both the fraction of the population employed and the average productivity per person employed. One of the ingredients in productivity growth comes, over the long run, from the generation and diffusion of new scientific, technological, and engineering knowledge as well as other gains in efficiency. While having a young population can help drive invention and innovation, population aging has very little effect on technological change across societies.

Other global factors, such as income levels, education, institutions, and economic incentives to innovate, tend to dominate the actual distribution of scientific and technological output. In addition, several factors may offset or amplify the decline in the number of workers per capita and increasing consumption pressures. These could include changes in underlying productivity growth, in labor force behavior, and in government policies, such as those influencing the growth in public and private health care costs.

In the United States, the weak economy that has followed the global financial crisis has ended many working careers prematurely. Meanwhile it also has lowered the value of many other components of household net worth, such as corporate equities and housing stock value, leaving many people ill-prepared to support themselves in retirement. Employment has grown faster than population over recent decades, but this trend is likely to reverse and there will be a slower growth in average incomes due to demographic trends. However, there might be other offsetting factors, either positive or negative, that would change the growth in living standards.

Four Practical Approaches to Prepare for Population Aging

Some combination of the following four approaches must be taken in order to prepare the United States for its future demographic distribution.

Workers save more (and consume less) in order to prepare better for their retirements.

Studies of the adequacy of U.S. retirement savings produce different answers depending upon the methods used, with research suggesting that between one-fifth and two-thirds of the older population have under-saved for retirement. Some common themes emerge. First, there is strong evidence that low and lower-middle-income households accumulate few financial and pension assets for retirement. For these households, Social Security, Medicare, and Medicaid are a central part of maintaining living standards in retirement. To the extent that benefits paid by these government programs might be reduced in the future, the living standards of affected retiree households will fall.

Second, the quality of people's financial decisions, and therefore their financial literacy, will play an increasingly important role in how well households fare in their retirement years. Households will need to decide how much more to save and how to structure their portfolios during their working years. They will need to decide when it is economically prudent to retire, taking into account personal, macroeconomic, and political uncertainties. When they do retire, they will need to decide whether to annuitize their accumulations, and if so, how much and with what annuity options. For many households whose wealth rests mainly in their home ownership, they will need to decide whether and how to use those assets to finance consumption in retirement. There is substantial value in boosting financial literacy to help people prepare for these financial decisions.

Workers pay higher taxes (and thus consume less) in order to finance benefits for older people.

Longer and healthier lives are a great benefit, not in themselves a cost. But it does not follow that these added years of healthy life can all be taken as post-retirement leisure, rather than having some devoted to working longer, postponing retirement or working longer hours before retirement. If all of the added years are taken as leisure, then consumption at all ages must be considerably reduced to pay for these new years of leisure through higher savings or higher taxes.

Because the government plays a particularly important role in financing consumption and healthcare for the elderly, many of the consequences of population aging will be focused on specific government programs rather than spread across the economy. For these programs, population aging will have a major effect on costs. Population aging already has led to projected shortfalls in the finances of Social Security, Medicare and Medicaid, and is likely to lead to increasing government budget deficits in the future.

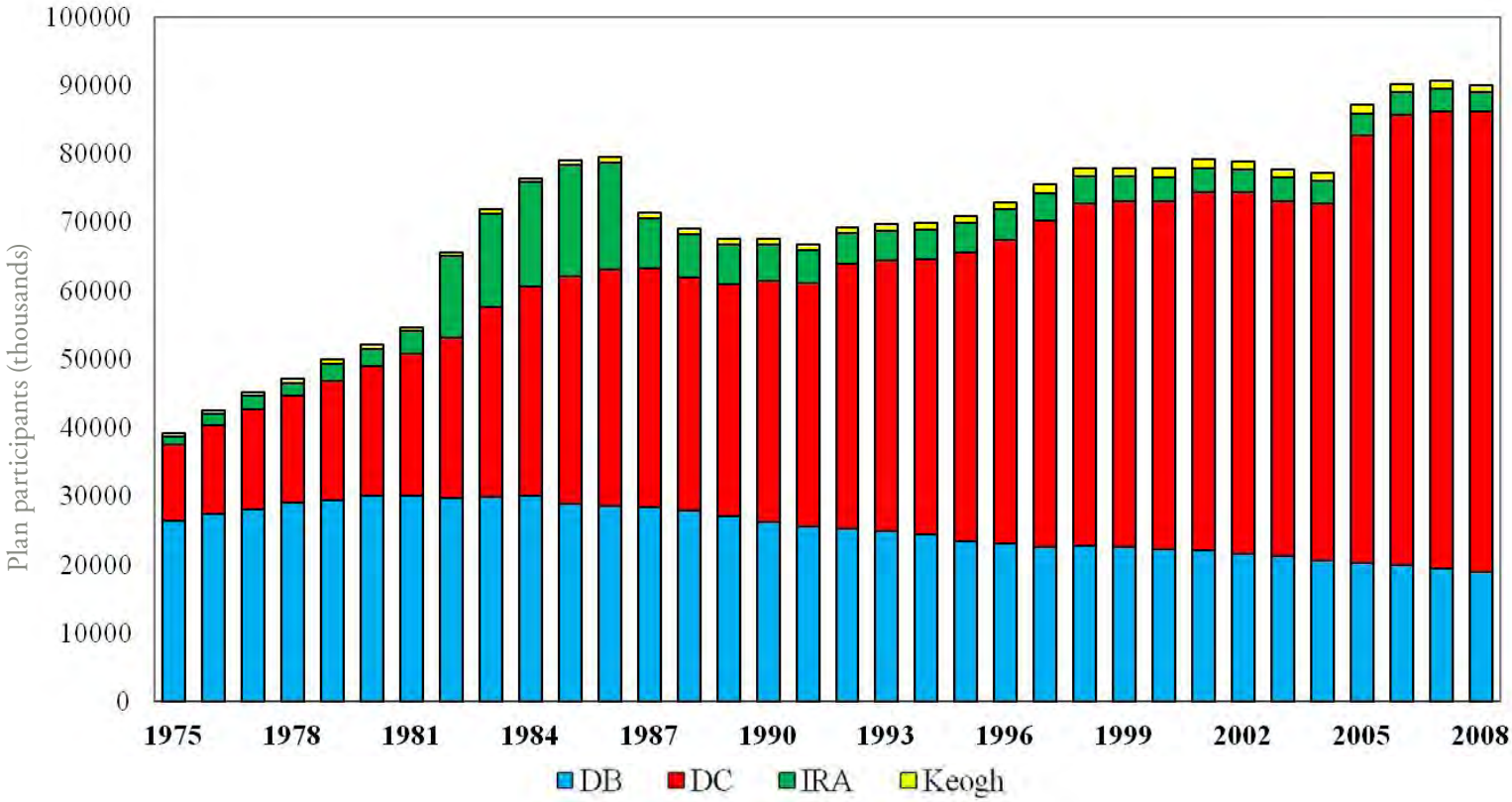
The consequences for Social Security are predictable, and they can be addressed relatively easily by changing benefit formulas and increasing contributions. Programs providing health care and long term care, notably Medicare and Medicaid, are a different matter. Health care costs per eligible person have been growing substantially faster than per capita income for decades, and if this pattern continues, it will interact with population aging to drive up public health care expenditures substantially.

Benefits (and thus consumption) for older people are reduced so as to bring them in line with current tax and saving rates.

About half of the U.S. workforce is covered by an employer-sponsored retirement plan, and this has been true for the last half-century. But the structure of pension plans has changed dramatically over time. In the 1970s, most employer-sponsored pension plans were of the defined benefit (DB) variety, where payouts were based on an employee's earnings history, length of service, and retirement age.

Today, employer plans in the corporate sector have mostly converted to defined contribution (DC) pensions—for example, 401(k) or 403(b) plans. Participants must generally decide how much to contribute (sometimes with an employer match) and where to invest the funds, thus bearing capital market risk more directly. The changing nature of pensions has several implications. For example, with benefit amounts less closely tied to workers' earnings histories—particularly when employees have an option to contribute little or nothing to the accounts—individuals may have difficulty determining whether their saving is adequate for their retirement needs.

Pension plan participants in the private sector by plan type, 1975-2008



SOURCES: Data for defined benefit (DB) and defined contribution (DC) from Department of Labor, Form 5500; data for individual retirement accounts (IRA) and Keogh plans from Internal Revenue Service, Statistics of Income

People work longer and retire later, raising their earnings and national output.

Age at retirement is central to population aging and its economic consequences. Raising the average age of retirement is one key alternative to reducing the consumption associated with leisure and enhancing people's ability to stretch their assets over their lifetimes. The average retirement age for men declined substantially in the U.S. throughout most of the 20th century. Although this trend stopped in the early 1990s and then reversed, men still retire at a much younger age than in the past, despite their better health and much longer lives. Women's average age at retirement has moved parallel to men's over recent decades, but it stabilized and began to rise somewhat later.

The report suggests that there will be a continued rise in the labor force participation rate of older Americans. Some have expressed concern that if older members of the population work longer, they will "take jobs away" from the young. Yet this has not happened in the past, nor has it occurred in other nations. In normal times, outside of deep business cycle recessions, the overall number of jobs is determined primarily by the size of the labor force. If anything, an increase in older workers is predicted to slightly increase the wage rates of young workers.

Conclusion

The bottom line is that the nation has many good options for responding to population aging. On the whole, America is strong and healthy enough to pay for increased years of consumption through increased years of work, if we so choose. Alternatively, we will be healthy enough to enjoy additional active years of retirement leisure if that is our decision, individually or collectively—this is provided we choose to reduce our consumption and start saving more for retirement earlier in our lives.

Nonetheless, there is little doubt that there will need to be major changes in the structure of federal programs. The transition to sustainable policies will be smoother and less costly if steps are taken sooner rather than later. An aging society need not have lower living standards, lower growth in innovation and productivity, or inefficiently high tax rates. But delaying decisions on how to adapt to our aging demographic structure will make the transition more difficult and costly. Many adjustments will have to be made, and no single feasible policy change is likely to be either an acceptable or a sufficient response to the dynamic challenge and opportunity of population aging. While many aspects of the future are uncertain, population aging is a certainty, and the long-term macroeconomic shifts must be addressed by the political process sooner rather than later.

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