Economic consequences of the Baby Boom as it enters old age

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The Baby Boom and population aging. Because the aging of the Baby Boom ushers in an era of rapid population aging in the US, we often wrongly think of it as the cause of population aging. The reality is the opposite: Without the Baby Boom, the population would have begun to age twenty to thirty years earlier. Figure 1 shows a comparison of the Old Age Dependency Ratio (OADR) according to an actual population projection based on a projection by the Trustees of the Social Security Administration and the OADR in a hypothetical world in which fertility had been constant in the US between 1946 and 1967 with no Baby Boom. The OADR would have been higher in all years between 1946 and 1937 had the Baby Boom not taken place. The generations that came before or after the Baby Boom would have had a harder time funding Social Security and Medicare without the Baby Boomer tax payers. And the Baby Boomers themselves had children, leading to many hundreds of thousands additional births each year who make the labor force larger, pay taxes, and help to support the elderly.

But now these Baby Boomers are themselves beginning to cross into what is traditionally called old age. How will this transition affect the economy? Here are a few of the many ways: the costs of entitlement programs for the elderly will rise rapidly threatening fiscal sustainability; the growth rate of the labor force will slow sharply; average savings rates may decline; yet capital per worker will increase which should boost productivity, and private transfers from the elderly to each child, both at death and during life, will likely increase. When the Baby Boomers were born, older people consumed far less than younger adults. Now, as the Boomers move into old age, the elderly consume far more than younger adults, and are far more socially costly. I expand on each of these points below

- 1. The cost of public entitlement programs will increase. This is really due to the Baby Bust, that is the low fertility and few births that followed the high fertility of the Baby Boom years. The costs per worker of paying for Social Security benefits, Medicare, and institutional Medicaid (need based nursing home care) are going to rise strongly, threatening the fiscal sustainability of these programs. These are unquestionably very serious costs. However, we need to keep in mind that among the rich industrial nations the US has relatively high fertility, late retirement, and a modest level of pension benefits, so the fiscal pressures will be less severe than in Europe, Japan or Canada. At the same time, the US has a more serious fiscal challenge from high and rapidly rising health care costs.
- 2. Will the baby boom generations get more than their fair share of public benefits? Since the entitlement programs are unsustainable as currently structured, let us assume that their budgets are balanced half by cutting benefits and half by raising taxes. In this case, by the time they die, the baby boom generations will have received

1 to 4% more relative to life time earnings through Social Security and Medicare than they paid in taxes for these programs, as shown in Figure 2. If we add public education to the calculation, than the life time gain falls between -1% (a loss) to +4%, depending on year of birth, as shown in Figure 3.

- 3. **Dramatically slower labor force growth**: The retirement of the huge Baby Boom generations will deplete the labor force which will grow more slowly in the coming decades, as shown in Figure 2. The growth rate of the working age population (ages 20-64) from 1970 to 2010 was 1.3 percent per year, and the growth rate from 2010 to 2050 will be only .4%, or one third as rapid according to Social Security projections, although more rapid immigration would lessen the decline. This slower growth contributes to raising the old age dependency ratio, but it should also mean an increase in capital per worker which will raise the productivity of labor.
- 4. Aging Baby Boomers will consume far more than younger adults on average. In 1960, the elderly consumed a third less than younger adults. As the coverage and generosity of Social Security increased, and new programs like Medicare and Medicaid were introduced and provided rising benefits, consumption by the elderly grew much more rapidly than for other age groups and by 2003, they consumed substantially more than younger adults (see Figure 3), with publicly funded health care and long term care accounting for some but not all of this increase. This pattern is typical of rich industrial nations. Because of this higher level of consumption, the aging Baby Boomers will impose heavier support costs on the working age population than did elderly in the past.
- 5. Assets and the elderly: The elderly have higher net worth than younger adults, peaking around age 60 but remaining quite high at older age as well. As population share of the elderly increases wealth per capita and per worker will rise. It is possible that increasing wealth will depress the rate of return to assets, but overseas investment opportunities should reduce any such effect. A simple calculation based on the cross-sectional age profile of net worth from the Survey of Consumer Finance shows that if that profile were to remain unchanged, then population aging between 2010 and 2050 would raise the net worth per person of working age by 30%. That ignores the point that with lower mortality and longer life, the net worth age profile should increase more strongly with age since each individual would need more savings to provide for a longer period of retirement, other things equal. It also ignores general equilibrium effects, for example that an increased capital labor ratio would reduce the rate of return on capital which would reduce the interest rate which would affect savings behavior, all contingent on the degree of openness of the economy.
- 6. **Saving rates and the elderly**: On average, the elderly continue to save, consuming only a portion of their income from assets. However, they save at a lower rate than younger people, so population aging may lead to lower average private savings rates. Since the labor force will be growing at a slower rate as the baby boom moves into old age, the saving rate does not need to be as high to provide enough capital for

workers, and indeed capital per worker will most likely continue to rise even if the saving rate falls, according to the reasoning just above.

7. **Private transfers from the elderly to their children and grandchildren**. In the US as in most rich industrial nations the elderly (65+) make substantial intergenerational transfers – financial assistance and gifts—to their descendants, in addition to any bequests they may leave at the end of their lives. As the numbers of elderly increases relative to the number of their descendants, due to the lower fertility that followed the baby boom, the size of these transfers per recipient may rise substantially, depending on the motivation of the elderly donors. In addition, end of life bequests per descendant may increase disproportionately since there are fewer descendants to share these bequests, although increasing annuitization of the wealth of the elderly tends in the opposite direction.

What does all this add up to? There is great uncertainty about the relative sizes and interactions of these various effects, but my hunch is that the population aging ushered in by the retirement of the Baby Boom will not be the end of the world.

Figure 1



Source: Source: Author's calculations using Social Security Administration projections, but assuming that the Total Fertility Rate remained at 2.5 from 1945 through 1967.

Figure 2. Net Present Value at birth of expected value of Social Security and Medicare benefits minus taxes paid for these programs, assuming the program budgets are balanced 50% by raising taxes and 50% by cutting benefits.



Source: Bommier et al (2010)



Source: Bommier et al (2010)

Figure 4.



Growth rate of working age population 20-64, SSA data

Source: Calculated from Social Security Administration data and projections (2010 Trustees Report).

The changing shape and composition of US consumption, 1960, 1981 and 2003, and the role of the public sector. (Ratio to average labor income ages 30-49).



Source: Lee and Donehower (in press), from National Transfer Accounts project.