Potential Macroeconomic Consequences of an Aging Population with Insufficient Savings

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Today’s “risk on/risk off” world is dominated by short-term (at times minute-by-minute) swings in sentiment influenced by the latest headlines hogging the spotlight, spanning from the Fiscal Cliff in the U.S. to the state of austerity plans in Greece. While these events have consumed the attention of many market observers, another longer-term issue has been forming for decades in the U.S. — the aging of the Baby Boomer generation. The Baby Boomers, defined by the U.S. Census Bureau as those born between 1946 and 1964, have played a dominant role in the demographic landscape of the U.S. since their birth early in the post-WWII era. This remains the case today as the leading edge of the Baby Boomers began to reach their full retirement age of 66 in 2012. The aging of this generation will be a central issue over the next several decades as the Census Bureau projects a doubling of the “age 65 and older” cohort between 2010 and 2050. In this paper, we explore the potential impacts of the aging population on both the economy and the financial markets over the coming years.

There are many moving parts to this demographic shift, most of which are easy to understand in isolation, but more difficult to understand in aggregate. One of the biggest challenges is the fact that there is a meaningful degree of interaction between demographics and economics. For most of the past 30 years, the U.S. economy benefitted from the Baby Boomer generation moving through adulthood and into their prime spending years. Going forward, however, the aging of this generation will become a headwind to growth as they move out of these prime spending years. Tacked onto this demographic shift are the complications of insufficient savings among many in this generation, compounded further by higher health care costs and longer life expectancies. The headwinds could come in the form of decreased economic output and productivity, as well as greater strain on government entitlement programs due to increased demand from the shift in demographics. The aging of the Baby Boomers will also be felt at the firm level as companies must deal with their customers changing tastes, needs and ability to spend. It is important to note that while this phenomenon will be a headwind to long-term growth, it does not mean that long-term growth is not possible. The good news is that the U.S. population will continue to expand and potential tailwinds of immigration and further productivity improvements can help to mitigate the headwind of the Baby Boomers. However, caution must be exercised when making forecasts based on the prior era of Boomer-related tailwinds.
A Look at the Facts

The Age Distribution of the U.S. is Going to Change Going Forward

Chart 1 breaks down the U.S. population into six different age groups and shows how the percent of the population that falls into each group has changed over the past decade. The chart also shows how shifts in the share of the population in each group are projected to occur over the next two decades. The key takeaway is that the 66+ demographics’ share of the population will increase largely at the expense of the 35-54 demographic.

As the Baby Boomer generation retires, the old age “dependency ratio” (i.e., the ratio of the retiree-age population to working-age population) will increase as the population of those over 65 expands more quickly than the working-age population. At the same time, the working-age population (16-65) is projected to fall from approximately 66% of the population to approximately 61% of the population by 2030. These changes will increase the old age dependency ratio from 18% to 30% by 2030. The youth dependency ratio is set to increase from 32% to 34% by 2030, moving the total dependency ratio from 51% to 64% over this period.

This headwind of the aging population is a global challenge and it is important to realize that the scope of this problem expands far beyond our country, not only in the effects of our retirement problem on other countries, but because many countries are in more dire demographic situations than the U.S. (Chart 2). The relative good news in the U.S. is that the population is still growing, whereas Japan and some countries in Europe are facing zero or negative population growth rates today, as well as in the future.

Millions of Boomers Have Under Saved for Retirement

According to the Federal Reserve, just over 50% of families had retirement accounts in 2010, and data from the Employee Benefit Research Institute (EBRI) suggests that the number of workers saving for retirement has continued to fall through 2012. The average retirement account balance in 2010, according to the Fed’s data, was only $170,000, while the median account was almost a quarter of this size, coming in at $44,000. Such a large disparity between the median and average is a result of a disproportionately small number of people having relatively large balances in their retirement accounts. Over 85% of those families in the top quintile of income have retirement accounts, whereas only 11% of those in the bottom quintile do.
There is a large difference between the mean and median values of the accounts even among peers in the same income quintiles, which may be due to the individuals in each quintile being in different phases of their life cycle. However, the difference between the mean and median is even more pronounced by age cohort, limiting the explanation that demographic differences explain the deviation within income quintiles (Chart 3).

A combination of issues has compounded to create this problem, including two bear markets in equities (since 2000), lower interest rates, and the housing bust. Both mean and median income fell during the last recession, and according to the 2010 Survey of Consumer Finances, the median family net worth fell 38.8% from 2007 to 2010, while mean net worth fell 14.7%. The hardest hits were to individuals in the middle income brackets. The Center for Retirement Research at Boston College calculates a National Retirement Risk Index constructed off of the Federal Reserve’s Survey of Consumer Finances. The trend in this Index has worsened, and as of 2010, it showed that 53% of individuals were at risk of not being able to maintain their pre-retirement quality of living. As expected, the lower income population was most at risk. Younger generations were also most at risk (Chart 4). The EBRI runs a Retirement Security Projection Model® which takes into account retirement resources including Social Security, net housing equity, annuities or lump-sum distributions from defined benefit plans, as well as the account balances from defined contribution plans, IRAs, and cash balance plans. It estimates that the aggregate retirement income deficit number for Baby Boomers and Generation X (those born from 1948-1974) is $4.3 trillion5.

EBRI’s 2012 Retirement Survey found that American’s confidence in their ability to retire comfortably has fallen to only 14%, virtually unimproved from the end of the bear market in 2009, and at a historical low. Americans are mostly worried about having adequate money to pay for medical expenses, as well as long-term care expenses in retirement, as opposed to basic expenses. Medicare typically only covers about 60% of healthcare expenses, excluding long-term care (which for the most part is not covered), and the out-of-pocket costs to the beneficiary are set to increase due to the fact that Medicare is underfunded and there have been cutbacks to many employment-based retirement systems, both public and private.
Data provided by the EBRI shows that, excluding long-term care, a 65 year old couple in 2012 (with median drug expenses) would need approximately $163,000 to have a 50% chance of meeting their medical expenses throughout retirement, and approximately $283,000 to have a 90% chance. A stunning 60% of workers have less than $25,000 in savings and investments, excluding their primary home and defined benefit plans, and 30% had under $1,000 in savings and investments.

**Greater # of Retirees = Greater Stress on Entitlement System (Social Security and Medicare)**

In 2010, the annual outlays of the Social Security program were larger than the annual tax revenues (excluding interest to the trust funds) – happening for the first time since the Social Security Amendments of 1983 were put in place. In 2011, the gap was about 4%, and going forward it is estimated by the 2012 Congressional Budget Office (CBO) long-term projections that the gap will average about 10%, and is expected to move above 20% by 2030. The CBO estimates that without any reforms to the current system, the combined Old Age, Survivors, and Disability Insurance (OASDI) trust funds will be exhausted in 2034. The CBO ran 500 simulations, varying the demographic and economic factors which underlie the projection, and found that there is a steep increase in the percentage of the simulations which show the exhaustion of the funds between 2030 and 2036 from approximately 20% to roughly 65%, and by 2042 just under 90% of the simulations show complete exhaustion.

Health care inflation is higher than that of the broad measure, as it has been for most of history. However, this is particularly worrisome considering that health care costs grow as a proportion of personal consumption expenditures as people age. Medicare was never designed to cover health care expenses in full, and as of 2009, Medicare covered 59% of health care services costs for beneficiaries 65 and older, with out-of-pocket covering 13%, private insurance covering 14%, and a mix of Medicaid, Tricare, and other sources making up the other 14%. The out-of-pocket costs are expected to increase due to the fact that Medicare is underfunded and there have been cutbacks to many employment-based retirement systems, both public and private.
What are the Potential Consequences?

Shifts in Consumer Spending Patterns

The aging of the Baby Boomers will have an impact on macroeconomic dynamics, as the older population typically does not spend nearly as much in retirement. It is beneficial to observe the shift in spending that will likely occur due solely to the changing demographics, isolated from the fact that the Baby Boomers moving into this age group have not saved enough. Chart 5 reminds us that the number of people entering their prime spending years (ages 35 to 54) does not make up for the number leaving (Chart 5). The 40-49 age cohort is projected to have negative growth over the next ten years. Furthermore, population growth has been slowing for the past ten years and is now at the lowest it has been since the Great Depression, and is forecasted to continue to decline. This is largely due to the fact that birth rates have failed to keep pace with population growth (Chart 6). In viewing this chart, one can clearly see the decline in birth rates during the baby bust, which created a lack of support for those Baby Boomers that are retiring today. The combination of these factors represents a headwind for future consumption (all else being equal).

Lower spending is not the only factor that changes as people retire – spending patterns change as well. This can have significant impacts on specific areas of the economy, increasing sales for some and decreasing revenues for others. For example, the demographic shifts into the 55+ age cohort from 2000-2010 likely explain a large portion of decline in vehicle miles traveled (in addition to higher gasoline prices) since the early 2000s, as older people generally drive less as compared to their younger years. The Bureau of Labor Statistics 2011 Consumer Expenditures Survey shows that the 65+ demographic spends less on items such as food, shelter, apparel, vehicles and entertainment than the younger age cohorts. Based solely on demographics, we would expect to see aggregate consumption growth slow as Baby Boomers continue to age (Chart 7). In fact, the aging of the population was a negative contributor to economic growth during the 2000–2011 period.
Impact on the Labor Market and Productivity

Dependency ratios essentially divide the population into economic consumers and producers. Producers are the working-age population who support the consumers, the young and the old. Changes in these ratios signify shifts in the burden on the working population. The dependency ratio initially falls as the fertility rate in a country decreases, because there are a growing number of producers relative to consumers, creating what economists call a “window of opportunity”. This window is often characterized by rising incomes, savings and tax revenues - trends that can last for several decades. The demographic dividend during the period 1965-2000 was even larger, as females entered the labor force, increasing the labor force participation rate and the hours worked per capita. However, as is happening globally today, the trend is ending as the number of people entering the workforce barely covers the number leaving, and the one-time economic dividend from women entering the workforce has been grandfathered in.

The combination of increased life expectancy and the lack of savings suggest that there will be an increased number of workers that will choose to retire later in life. According to the EBRI’s 2012 Retirement Study, over 20% of workers today expect to retire later than they had previously planned. The top three reasons cited for longer expected working careers (aside from the weak economy) were lack of faith in Social Security/government, a change in employment situation, and inadequate finances/cannot afford to retire. Those expecting to retire after age 70 are at an all-time high. This idea of workers staying in the labor force longer is not new, but rather it is a trend that has been slowly occurring for the past decade and is predicted to continue, according to the Bureau of Labor Statistics (Chart 8). However, at some point these workers will retire.

Companies are facing pressures due to the aging Baby Boomers, both in terms of labor force productivity as well as changes in consumer spending patterns. They will need to adapt by finding solutions to increase the productivity of an aging labor force and efficiently train entry-level employees, which will not have the same level of skills as retiring employees. Research has shown that in many industries, productivity declines as workers move closer to retirement age.
Therefore, the increase in employees in generally less productive age cohorts, and the decrease in the most productive workers, creates a challenging environment for companies and the economy. Furthermore, there may be increased competition for the top talent, which could increase labor costs. It is possible that there will be increased competition for all workers as the labor pool is set to grow at extremely low levels for the coming years. According to the U.S. Census Bureau data from 2012 (when the first of the Baby Boomers move out of the working age population) to 2030, the U.S. labor force will only expand by a net 87,000 persons per month. Although the slower growth in the working age population could lead to wage growth and a decline in unemployment, it also has the potential to lead to inflationary pressures. However, immigration has the potential to change what appears to be very well-defined demographic realities for the next few decades.

The Effect of the Aging Demographics on the U.S. Manufacturing Renaissance

In our May 2012 Outlook Series, we touched on the skills gap in manufacturing as being a risk to the Manufacturing Renaissance theme. A large percentage of manufacturers were already indicating a moderate to severe shortage in skilled production workers, and over half of these manufacturers expected this to grow in the next 3 to 5 years as their older skilled workers retired. We have been monitoring what we call “The Big Crew Change”, from the National Petroleum Council’s 2007 report Hard Truths, for the past several years, which pertains to the fact that over the next ten years, in some industries (e.g., petrochemicals, nuclear engineering, and many other technical professions) around 50% of workers will be eligible to retire. The skills gap in certain industries is at risk of further widening, because fewer people have entered these industries or received degrees in those specific skill sets in recent years (e.g., enrollment in petrochemical programs has dropped about 75% in the last 25 years ). This skills shortage could greatly limit the potential for an American Manufacturing Renaissance as companies are forced to compete over a shrinking talent pool and cope with decreased productivity as the newer employees do not have the experience to replace the retiring workers.
The likelihood of some Baby Boomers remaining in the labor force past the full retirement age has the potential to help bridge this gap a bit until some of the newer workers gain the necessary experience. Furthermore, increased wages that could result from the shrinking talent pool may entice workers to delay retirement longer and should also encourage younger workers to acquire the skills necessary to obtain these positions. Automation could also decrease the reliance on the skilled workers, representing a positive productivity offset to the impact of the Big Crew Change. As mentioned earlier, another solution could come in the form of changes to immigration policies to attract skilled workers to the U.S.

**Investment Implications**

The Baby Boomer generation has had a meaningful impact on both the overall economy and individual sectors throughout their lives. At the broad asset class level, it is likely that there will continue to be demand for investment income as more and more people move into retirement. The demographic shift will keep yields down as more people need to save. Unfortunately, this search for yield has pushed nominal rates in many fixed income areas to the point where they do not provide much of a cushion against inflation. If investors continue to flock to these so-called safe assets, they are not going to earn a rate of return that will prepare them for retirement. Though unlikely today, a bout of higher inflation would put retirees in an even worse position given their lack of savings, and the fact that many have left the equity market for the perceived safety of U.S. Treasuries. The share of the U.S. stock market that U.S. households own both directly and through retirement accounts has fallen from 68% in 2000 to around 61% today. Equities have also been losing favor in pension funds and insurance companies since 2004.

The impact of the aging of the Baby Boomer generation will also be felt by many companies in the coming years. Over the next few decades, this group will likely provide tailwinds to some industries and headwinds to others. As the mix of Baby Boomer purchases change, so too will the beneficiaries of their spending. Investors need to be mindful of the fact that industries that were beneficiaries of this tailwind in the past are likely going to encounter demographic headwinds going forward. These industries may continue to expand, but expectations of a return to the “good old days” of revenue growth supported by the Baby Boomers will likely result in disappointment.
Conclusion

Favorable demographic dynamics have been a tailwind for economic growth in the U.S. for the past several years. However, this year the leading edge of the Baby Boomers reached retirement age, and what was once a growth driver is in the process of becoming a growth headwind. It is important to understand both the prior contributions from demographics, as well as the likely future impact that these issues will have at the asset class, industry and company level. Investors should account for the fact that certain industries/companies may be at risk of losing demographic tailwinds and should adjust their forecasts accordingly. The combination of the under saving, the increased demand placed on government programs, and the decreased growth in spending due to the demographic shift argues for a slower pace of economic growth (all else being equal). Fortunately, all is not equal and birthrate is not the sole growth driver for the U.S. Immigration and productivity growth have the potential to offset the economic drag created by the retiring Baby Boomers, as do a number of upside scenarios we have explored in prior editions of this newsletter. As with other issues, active management and investment flexibility will be the keys to successfully navigating the risks of an aging population.