Social Security: The big picture

September 2016

FOR NEARLY 80 YEARS, SOCIAL SECURITY HAS SERVED AS THE FOUNDATION OF RETIREMENT SECURITY FOR MOST AMERICAN WORKERS. Today, it confronts a particular challenge: the retirement of 76 million Baby Boomers and, eventually, the aging of their children, the Millennials.

Social Security—as it is currently defined—is not sustainable over the long term without modifications. It is estimated that the overall reserves of the program will be fully depleted by 2034. Encouragingly, a range of bipartisan proposals present various options that could make Social Security fully sustainable through 2090—and there is ample time for action.

This paper examines the financial state of the Social Security trust funds, the powerful demographic forces that are shaping the future of the American retirement landscape and the specific proposed reforms that aim to preserve this important social program.

THE GREAT AMERICAN DEMOGRAPHIC SHIFT

There is no question that America is experiencing a tremendous demographic shift. The current size of the GI and Silent generations, people born between 1910 and 1945, is just over 33 million individuals. The Baby Boomers, born between 1946 and 1964, are currently more than twice as large a group.

A generation is defined as a group of individuals with shared experiences, beliefs and behaviors who share a common sense of identity.[1] While generations typically span 18 years, several experts have argued that the Boomer generation and their children, the Millennials (also known as Generation Y or the "Echoboomers"), have such strong identities that they have condensed the group between them, Generation X, to a mere 16 years. Definitions vary, but Gen X is often viewed as the group of Americans born between 1965 and 1981. The Millennials are the much bigger cohort, born between 1982 and 2000 (**EXHIBIT 1**, next page).

Regardless of how the generations are demarcated, the Boomers plainly represent a huge surge in population growth—and one that will be surpassed by their own children's generation. This is no mere demographic blip but, rather, a critical trend that could have an impact on all aspects of the American retirement system.

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[1] William Strauss and Neil Howe, *Generations: The History of America's Future, 1584-2069* (William Morrow & Co., 1991).

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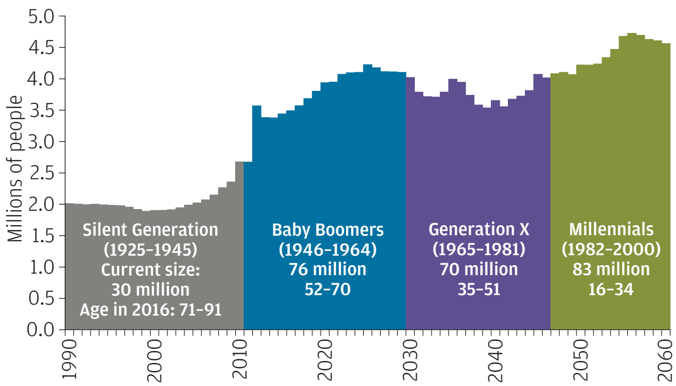
The great American demographic shift

EXHIBIT 1: THE NUMBER OF PEOPLE TURNING 65 YEARS OLD



Source: U.S. Census Bureau, J.P. Morgan Asset Management (2014). The Census graph data does not reflect the full size of the Millennial generation, which would extend out to 2065. The Census estimates the size of the Millennial generation at 83 million.

The prime working years of the Baby Boom generation coincided with a shift in the American retirement system, from defined benefit plans to defined contribution (DC) plans, such as 401(k)s. As more Americans take primary responsibility for funding their own retirements, Social Security is increasingly important as the common “floor” of retirement income. What do these demographic changes mean for Social Security?

For roughly the first decade after Social Security was established in 1935, the math worked very well. In 1945, there were almost 42 workers per Social Security beneficiary. The ratio then began to steadily decline. The ratio of workers to beneficiaries remained fairly stable from 1974-2008 at roughly 3.3 to 1 as the Boomers passed through their primary working years. In 2008, as the leading edge of the Boomers turned 62 and were eligible for early claiming, the ratio dropped to 3.2 to 1. The ratio is projected to drop to just over 2.4 to 1 by 2025. In the 2016 trustees report, the decline in the number of workers who are paying payroll taxes compared to the sharp increase in beneficiaries is cited as a primary reason for Social Security solvency issues. The trustees also mention the increase in longevity of beneficiaries as a contributing factor.

A TALE OF TWO TRUST FUNDS

Social Security, officially the Old-Age, Survivors and Disability Insurance (OASDI) Trust Funds, is comprised of two trust funds that are funded and managed separately: the Old-Age and Survivors Insurance (OASI) Trust Fund and the Disability Insurance (DI) Trust Fund.

The total payroll tax levied on earnings up to $118,500 in 2015 was 12.4% (6.2% each from employees and their employers, with self-employed individuals contributing the full 12.4%). Of this total, 10.6% went to OASI and 1.8% went to DI. Due to changes in the 2015 federal budget, there is a temporary increase in the allocation of payroll taxes into the DI fund for 2016–2018 to 2.37%. In 2019, the allocation will go back to 1.8%. When looked at individually:

- The DI Trust Fund is forecast to fully deplete its reserves in the 3Q of 2023.
- The OASI Trust Fund is forecast to become depleted in 2035.

When looked at in combination, the two funds are projected to be fully funded into 2034, at which time approximately 80% of benefits would be payable.

Though Social Security is facing growing challenges over time, 2010 was the first year in which benefits paid exceeded annual payroll tax contributions. Many individuals believe that the temporary reduction in payroll tax income in 2011 and 2012 exacerbated the problem, but it is important to remember that the fund was credited the amount of lost payroll revenue from the Treasury’s General Fund as a result of legislation. Factoring in this credit, the net deficit between cost and non-interest income to the trust fund was $71 billion in 2013.

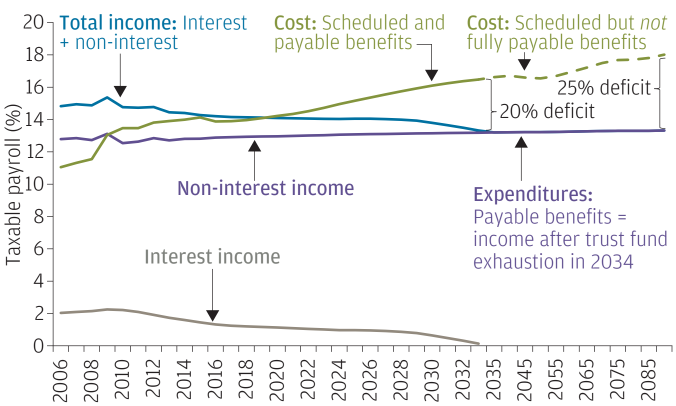
Despite costs exceeding annual payroll revenue, ongoing annual interest income credited results in positive growth of the trust fund from $2.8 trillion in 2016 to $2.9 trillion (in current dollars) through 2020, at which point it begins a steady decline until depletion in 2034. It is important to note that even though the assets of the trust fund are growing, the amount of annual costs covered by trust fund reserves goes from 303% in 2016 to 165% at the beginning of 2025, due to promised benefits growing exponentially.

When the OASDI fund is projected to be fully depleted, the combined benefits promised will exceed payroll tax income by 20%. By 2090, that deficit is projected to grow to 25%.

The longer we wait, the more drastic the necessary "fix." To ensure solvency for the years beyond 2034, a 2.6 percentage point increase in the payroll tax, from 12.4% to 15.0% (this assumes no substantial legislative changes to the maximum wage base) or an across-the-board decrease in benefits of 16% would be required if we acted today. If we wait until 2034, the required action would be more severe—a 3.6 percentage point increase in the payroll tax or a 21% decrease in benefits (**EXHIBIT 2**).

Social Security solvency

EXHIBIT 2: OASDI INCOME, COST AND EXPENDITURES AS PERCENTAGES OF TAXABLE PAYROLL; UNDER INTERMEDIATE ASSUMPTIONS



Note: Non-interest income includes net payroll tax contributions, General Fund of the Treasury reimbursements and taxation of benefits.

Source: 2015 OASDI Trustees Report, J.P. Morgan analysis.

DISABILITY INSURANCE: A STATUS REPORT

Disability insurance is intended for individuals who are unable to work due to disability but are too young to claim Social Security benefits. In 2015, total federal spending on worker disability insurance benefits amounted to $143 billion, accounting for 16% of the OASDI budget, up from 10% in 1988.

There are now 10.8 million workers enrolled in disability, with 1.2 million individuals added since 2009, a 16% increase. Recent growth reflects a long-term trend that began in 1984 when the approval process to become a beneficiary became less rigid.[2]

[2] John Merline, "The Sharp Rise in Disability Claims," Richmond Federal Reserve, Region Focus, Second/Third Quarter 2012.

Before 1984, disability benefits were only covered based on a list of specific medical conditions, but in recent decades the approval process changed to become more subjective, considering an applicant's overall medical condition and ability to work. In 2015, there were 5.9 disabled-worker beneficiaries per 100 people working, up from 2.8 in 1980, a 111% increase.

The aging population is contributing to this increase, because older workers are more likely to become disabled. After adjusting for age and sex differences of workers since 1980, the ratio of disabled-worker beneficiaries to workers increased by 45% since 1980.

When the 2015 trustees report was released, the DI fund was projected to be depleted in 2016. The 2015 budget averted this depletion by temporarily reallocating more payroll taxes into the DI fund for three years. At the same time, the budget reduced expenses for the combined fund by stipulating the following:

- Expanding cooperative disability investigation units to all 50 states
- Use of electronic data to improve administration of disability claims
- Disability claimants must be examined by a doctor in all 50 states
- Access to financial information to aid in the determination of the ability to repay overpayments to claimants
- The phase-out of certain Social Security claiming strategies that are used to maximize benefits for a family

In combination, these 2015 budget actions are projected to extend the life of the DI fund to 3Q 2023, while not materially changing how long the OASI fund or the combined fund will last, which is still projected to be 2035 and 2034, respectively.

The changes to the Social Security claiming strategies were viewed as closing a "loophole" that allowed for extra benefits that were not intended by Congress when they last changed the law related to Social Security benefits with the Freedom to Work Act in 2000. The changes will not apply to anyone currently using the strategies. Any further action to bolster either the disability or old-age and survivors fund is unlikely to deliver a meaningful change to benefits for individuals over the age of 50. Most likely, the biggest impact will be on the Millennials, though fortunately they have time to plan and save.

DOES THE SOCIAL SECURITY TRUST FUND EXIST?

The Social Security trust fund is comprised of accounts managed by the Department of the Treasury. These accounts hold "special issue" securities of the United States Treasury, which means that they are only available to the trust fund, are not marketable and cannot be redeemed prior to maturity. The benefit of these "special issue" securities is that they are not subject to nor contribute to volatility in the U.S. Treasury market, which results in the accounts essentially operating like they are holding cash.

Income (i.e., payroll taxes received and interest income) is deposited on a daily basis and invested in the securities. The U.S. government then spends the borrowed cash on other obligations. Concerns about the U.S. government's ability to meet the loan obligations are unfounded. The securities held by the trust funds are by definition backed by the full faith and credit of the U.S. government and are as safe as U.S. Savings Bonds or other financial securities of the U.S. government, given that it is generally accepted that the U.S. government will never default on its loan obligations.

WHAT IS THE FUTURE OF SOCIAL SECURITY?

Social Security can be put on a path to longer-term solvency through a number of manageable ways. The good news is that there are plenty of bipartisan proposals from which to choose.

These proposals include:

- Increasing the maximum wage earnings cap ($118,500 in 2016) at a rate that would ensure 90% of all wages earned in the United States would be subject to OASDI taxes. In 2014, this would have meant that workers would face payroll taxes for Social Security up to $177,500.[3]
- Modifying the benefits formula to slow the growth of benefits promised to younger Americans.
- Raising early eligibility and full retirement ages at a rate that would keep pace with increased longevity (e.g., 64 and 69, respectively).
- Expanding the number of individuals paying into the program (e.g., including state and local workers).

We expect that future changes in benefits would mostly affect individuals age 50 or younger and would be gradually implemented.

[3] Source: Congressional Budget Office, Options for Reducing the Deficit: 2014–2023, November 13, 2013.

CHAINED CPI

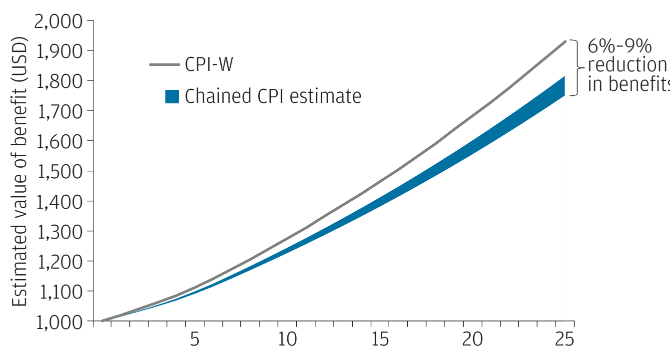
There is only one bipartisan proposal that would affect all Americans, including those close to or currently receiving Social Security benefits. If adopted, this proposal would change the inflation index used to calculate the cost of living adjustments (COLA) applied to Social Security. The index currently used is CPI-W, which tracks the inflation experienced by wage earners in urban areas. CPI-W generally underweights the inflation of prices related to housing, recreation and medical care—three categories that are particularly important to older Americans. Therefore, it is important to note Social Security today isn't adjusted to keep pace with the basket of goods that older people buy.

Chained CPI takes into account the fact that when prices for one good rises, consumers have the choice to choose a less expensive substitute. A good example is when the price of beef rises, consumers can substitute chicken or fish, which may be cheaper at the time. As a result, many believe that Chained CPI is a better measure of the inflation that people actually experience.

Using Chained CPI to determine adjustments to Social Security would result in a very modest reduction in income received over time. It is estimated that the difference in the cost of living adjustment could be between .25% and .4% lower, which would mean an estimated 6%–9% reduction in annual benefits received after 25 years (**EXHIBIT 3**).

Growth of $1,000 Social Security benefit

EXHIBIT 3: ESTIMATED VALUE OF BENEFIT BASED ON CPI-W VS. CHAINED CPI



Source: Social Security Administration. Assumes Social Security COLA projection for CPI-W. Estimate based on COLA reductions of 0.25% and 0.4%, which are based on estimates by the Congressional Budget Office (CBO) and J.P. Morgan Asset Management. Shown for illustrative purposes only.

It is important to note that this proposal was fairly unpopular among the majority of voters who are age 50 and older and would likely face significant political opposition.

The investment implications of such a change are clear: If Chained CPI is eventually implemented, individuals will need to fund more of their retirement spending from their portfolios, making it that much more important for them to be invested in a balanced way that keeps pace with the erosion of purchasing power experienced by older individuals over ever-longer retirements.

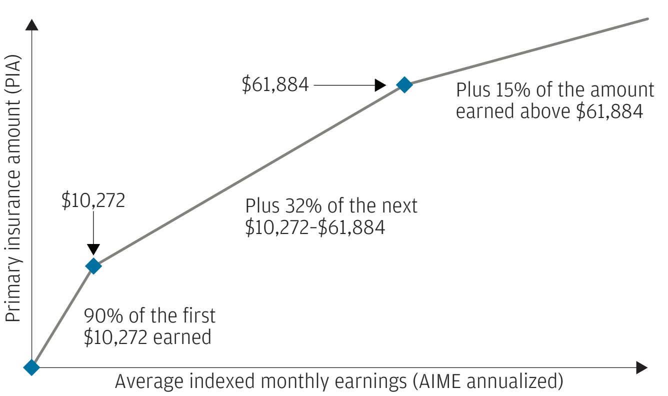
MEANS TESTING FOR HIGHER EARNERS

While we do not anticipate any form of means testing based on accumulated wealth, it is likely that high lifetime earners may see a reduction in their Social Security benefits. Several proposals seek to reduce the benefits promised to high-earning younger individuals by modifying the formula by which their benefits are calculated. This may be accomplished by changing what are referred to as "bend points" in the benefit formula. Bend points are a lot like marginal tax rates—but in reverse. A higher percentage of income replacement is applied to the lowest level of income, with lower percentages applied to higher earnings.

EXHIBIT 4 illustrates the current bend points applied to annualized income thresholds. The average of an individual's 35 highest years of income is assessed at different thresholds on a highly progressive scale. 90% of the first $10,272 in earnings, 32% of the next $51,612 in earnings and 15% of the amount earned above $61,884 up to the maximum wage limit of $118,500 are used to determine an individual's Primary Insurance Amount, or his/her Social Security benefit.

Means testing on high earners

EXHIBIT 4: CURRENT BENEFIT FORMULA BEND POINTS (NUMBERS HAVE BEEN ANNUALIZED)

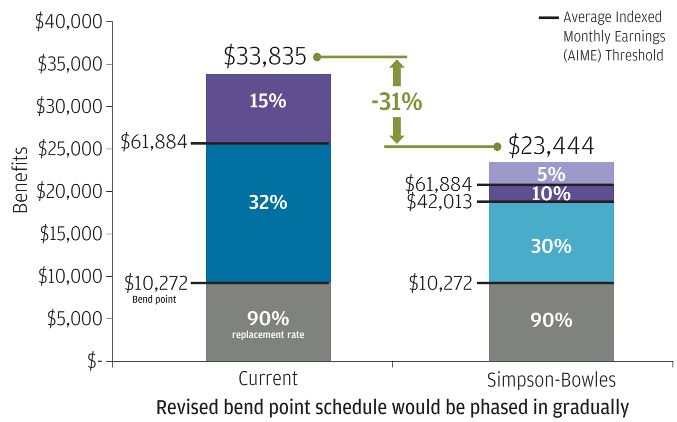


Source: www.ssa.gov. Shown for illustrative purposes only.

Let's look at the Simpson-Bowles proposal (**EXHIBIT 5**) to illustrate how this modification might work. Simpson-Bowles proposed adding a bend point and lowering the percentages applied to an individual with earnings greater than $42,013, while preserving coverage for median households and below. Keep in mind that this proposal would be very gradually phased in such that the Millennials would be affected the most. While more recent proposals have generally had support from one party, the latest bipartisan effort (not produced by any sitting legislators) used very similar bend points as Simpson-Bowles, with some changes to encourage working more years.[4]

Social Security means testing and proposals

EXHIBIT 5: COMPARISON OF 2016 BEND POINTS TO SIMPSON-BOWLES PROPOSAL; BASED ON 35-YEAR AVERAGE ANNUALIZED AIME OF $115,716



Source: Social Security Administration. Assumes new Simpson-Bowles end point is 61.5% of the way between current bend points 1 and 2 following the method used by the Social Security Office of the Chief Actuary. $115,716 annualized AIME is for a person retiring at age 66 in 2020, who earned the maximum taxable amount since age 22. Note bend points are set at age 62, regardless of actual retirement age. Forward-looking data points based on forecasted amounts in the 2016 trustees report.

Not shown on graph: The Bipartisan Policy Center, Domenici-Rivlin Debt Reduction Task Force Plan 2.0 (Domenici-Rivlin), Dec. 2010, suggested replacing the current 15% bend point with a 10% bend point and adding a new 8% bend point, phased in between 2023-2052.

Shown for illustrative purposes only.

[4] Bipartisan Policy Commission, Securing Our Future: Report on the Commission on Retirement Security and Personal Savings, June 2015.

SOCIAL SECURITY REFORM: A HISTORY LESSON

Social Security was first enacted into law in 1935, with the Social Security payroll tax first levied in 1937. The original tax rate was 2% (1% each from employee and employer on earnings up to $3,000 a year).

Other than the latest change, which was considered closing a “loophole,” past changes to Social Security have been gradual, so as not to disrupt individuals currently dependent on benefits. For example, the last significant amendments, made in 1983, affected individuals born in 1938 or later—meaning that they were 45 or younger at the time. The amendments stipulated that the full retirement age (FRA), the age at which one is entitled to full retirement benefits, would gradually increase from 65 to 67 over a 22-year period that began in 2000. Individuals born in 1960 or later (that is, they were 23 years old or younger in 1983), will be eligible for FRA at age 67.

Credits for delayed retirement (“delayed retirement credits”) are another change in the Social Security program. Over time, the calculation of these credits has been revised, with the change similarly having an impact on younger workers more than the older population. When credit for delayed retirement was first implemented in 1972, there was a 1% increase in benefits after FRA up to age 72. In 1981, it increased to 3%. Amendments in 1983 increased the credit to 3.5% with gradual credits of 0.5% every other year until the credit reached 8% per year for those born in 1943 or later, and also reduced FRA to age 70. The Senior Citizens’ Freedom to Work Act of 2000 allowed an individual to file for and suspend payment of Social Security retirement benefits at FRA, thus enabling more people to leverage delayed retirement credits. While the 2015 budget decreased the utility of suspending benefits for families who want to coordinate benefits, it does still allow people to start and stop benefits after full retirement age.

As a result of these changes, the number of individuals claiming early Social Security retirement benefits steadily increased from roughly the mid-1980s through the 1990s. More recently, the pace has slowed as delayed retirement credits became more generous and the shift from defined benefit to defined contribution plans gave workers an incentive to work longer. The decline has been particularly steep over the past 10 years for individuals in excellent, very good and good health.[5]

[5] Source: The Urban Institute, *Social Security Claiming: Trends and Business Cycle Effects*, March 2012.

To quantify the impact this change might have on higher-earning younger workers, we’ve modeled the benefits before and after for an individual who has consistently earned the maximum wage base for 35 years and has therefore accumulated the highest possible benefit. As such, this is a “worst-case” scenario and indicates that this type of modification could produce as much as a 31% reduction in the Social Security benefit available to this individual. Most estimates anticipate less dire scenarios to be experienced on average, with estimates being 15%-20% less in benefits based on more typical earnings experiences.

CONCLUSION

The problem is clear—and so too is the potential for a meaningful solution for the long term.

Demographic shifts—beginning with the Baby Boomers and continuing with their children, the Millennials—will pressure a range of social programs, including Social Security. Unless action is taken, the reserves are forecasted to be fully depleted by 2034.

More than one path leads to solvency. Various approaches could greatly strengthen the Social Security program. For Social Security overall, Congress can choose from a substantial roster of bipartisan proposals to make the program sustainable well beyond 2089. Legislators are likely to follow past precedent and change the program only gradually. In addition, they are unlikely to change benefits significantly for anyone over age 50. We recommend that younger individuals, particularly higher earners, should be prepared for some cuts in their benefits.

NEXT STEPS

To learn more about the Retirement Insights program, please visit us **at www.jpmorganfunds.com/RI.**

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Source: 2016 Old-Age, Survivors and Disability Insurance (OASDI) Trust Funds Report and Social Security Administration, www.ssa.gov, as of June 2016. Office of the Actuary, Estimate of the Effects on the OASI and DI Trust Funds of enacting the provisions of the Title VIII of H.R. 1314m the "Bipartisan Budget Act of 2015," introduced on October 27, 2015 by Representative John Boehner.

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