Experts say that retirees need 70-80 percent of their prior earnings to keep up their standards of living in retirement. Social Security today replaces less than that – about 40 percent for an average earner at 65. Yet most retirees rely on Social Security for most of their income. For today’s retirees, pensions are a distant second to Social Security as a source of income, while income from assets ranks third. Achieving an adequate retirement income will be a growing challenge for future retirees. Social Security will replace a smaller share of earnings under current law and employers are shifting away from traditional pensions to 401(k) plans that expose workers and retirees to more risks. Most experts agree that an ideal pension system would have broad coverage, be fully portable, avoid “leakage” from early withdrawals, provide inflation-indexed benefits that last for life, continue benefits for widowed spouses, and have low administrative costs. Social Security has all these features. Policymakers concerned about retirement income adequacy – for boomers, their children and grandchildren – will need to consider how much to build on Social Security’s strengths and how much to focus on other parts of the retirement system.

This brief focuses on the role of Social Security in producing adequate retirement income. Issues about the affordability and solvency of Social Security are discussed in other Academy briefs (Reno and Lavery 2005 and 2006).

How do experts evaluate retirement income adequacy?
To show how well income in retirement will allow a worker to maintain his or her standard of living, financial advisors use replacement rates – a ratio of retirement benefits to pre-retirement earnings. Because some expenses are reduced or eliminated in retirement (such as payroll taxes, work-related expenses, and saving for retirement), experts generally advise that replacement of 70 to 80 percent of prior earnings could produce a comparable standard of living (Alford, Farnen and Schachet 2004; Fidelity Research Institute 2007; Palmer et al. 2004).

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Traditional replacement rate studies measure income adequacy at retirement, but do not always track income and spending into advanced old age. If some types of income (such as pensions) do not keep up with the cost of living or if some expenses (such as health care) rise faster than income, then income will become less adequate as retirees grow older.

**How do Social Security replacement rates measure up?**

Social Security is designed to provide a foundation of retirement income that will be supplemented by pensions and savings. Social Security’s progressive benefit formula replaces a larger share of past earnings for low earners than for high earners. The benefit design recognizes that low earners need higher replacement levels in order to meet basic needs and that they are less likely to have pensions or significant personal savings in addition to Social Security.

As shown in Figure 1, a 65-year old retiring in 2007 with a lifetime of average earnings would receive a benefit that replaced about 40 percent of prior earnings. A low earner at 65 would receive a benefit that replaced about 54 percent of prior earnings, while one who always earned the maximum that is taxed and counted for Social Security benefits would have a replacement rate of about 28 percent (Board of Trustees 2007). These replacement rates are for individuals who worked steadily throughout their careers and retired at 65.

![Figure 1. Social Security Benefits Compared to Past Earnings, 2007](image)

**Illustrative Low, Average, High, and Maximum Earner Retiring at Age 65**

Actual retirees often do not fare as well as these illustrative cases suggest for several reasons (Thompson 2004). First, while the illustrative cases assume workers retire at age 65, many retirees take benefits at 62 – and those benefits are reduced for early retirement. In addition, many retirees do not have steady work histories like those assumed for illustrative workers. Women, in particular, are likely to experience gaps or spells of reduced employment while caring for young children, aging parents, or other relatives. These breaks in employment...
cause many women to receive lower benefits than a steady life-long worker. Consequently, the average benefit paid to new retirees in 2005 (the latest data available) replaced about 33 percent of the average wage for all workers in the prior year (Board of Trustees 2007; U.S. Social Security Administration (SSA) 2007). Clearly, if retirees need 70 to 80 percent of prior earnings to maintain their standards of living, Social Security provides only a foundation. And that foundation will be smaller in the future as the age for claiming full retirement benefits increases to 67.

**How do today’s U.S. replacement rates measure up with those in other advanced economies?**

By international standards, U.S. Social Security replacement rates are modest. A study by the Organisation for Economic Co-operation and Development (OECD) finds that U.S. replacement rates rank near the bottom among its member countries (Figure 2). Of the 30 countries studied, U.S. replacement rates ranked 4th from the bottom for low earners, 5th from the bottom for average earners and 9th lowest for high earners. Countries that have higher replacement rates generally spend a larger share of their national resources on Social Security pensions for retirees.

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**Figure 2. Social Security Replacement Rates in OECD Countries by Earnings Level**

- **Low Earner**
  - OECD average: 72%

- **Average Earner**
  - OECD average: 57%

- **High Earner**
  - OECD average: 48%

Source: OECD 2005a & b. Low earners earn half of the average wage, while high earners earn twice the average wage. Illustrative full career workers draw benefits from each country’s mandatory pension program at the normal retirement age.
How much income does it take for retirees to make ends meet?

While replacement rates define income adequacy in terms of maintaining the retiree’s prior standard of living, dollar thresholds define adequacy in terms of meeting the cost of basic necessities. Both are useful concepts. Low-income retirees may find that replacing a specified portion of prior income still falls short of meeting basic needs. How much do elders need to pay for essentials?

The official poverty guidelines – $10,210 for an individual and $13,690 for a couple in 2007 – are sometimes used as a proxy for minimum adequate income. The poverty measures were developed nearly 45 years ago and have been updated only by changes in the consumer price index since then. Consequently, the official poverty thresholds do not reflect economy-wide improvements in living standards or changes in spending patterns since the 1950s and early 1960s. New research on an Elder Economic Security Standard finds that income at the poverty level falls short of meeting basic needs today. This standard is being developed for each of the 50 states and the District of Columbia by Wider Opportunities for Women to assess how much income retired couples and single individuals will need to age in place, wherever that may be. The standard reflects the cost of meeting basic needs—housing, food, health care, transportation—and a general category for all other items (clothing, personal and household products, etc.). The standard reflects spending in local areas to meet basic needs without relying on means-tested subsidies, such as food stamps, Medicaid, or subsidized housing (Russell, Bruce and Conahan 2006).

The first study was completed in Massachusetts in 2006 and found that retired couples and elders living alone could not make ends meet at the poverty level. In fact, depending on their housing, health, and geography, elders would need between about 150 percent and 300 percent of the official poverty level to meet basic living expenses without assistance.

How do Social Security benefits measure up against dollar thresholds?

Average Social Security benefits fall short of the new Elderly Economic Security Standard, but are somewhat higher than the U.S. poverty thresholds. On an annual basis, the average Social Security benefit paid in January 2007 was about $12,530 a year for retired workers, and about $20,560 a year for retired couples with both partners receiving benefits (U.S. SSA 2007). The large majority of yearlong recipients of retired-worker benefits received between $6,000 and $19,000 in 2006 (U.S. SSA 2007).

What other income do older Americans have in retirement to supplement Social Security?

Social Security is the most common source of income for older Americans. About nine in 10 elders receive it and, of the total dollars received by elders, four dollars in 10 come from Social Security. Elders’ other important sources of income are pensions and annuities, income from assets (such as interest, dividends and rental income from real estate), and earnings from continued employment (Figure 3).
Figure 3. Percent Receiving Specified Sources of Income, 2004
Married Couples and Unmarried Persons Age 65 and Older

<table>
<thead>
<tr>
<th>Type of Income</th>
<th>Total</th>
<th>Married Couples</th>
<th>Unmarried Men</th>
<th>Unmarried Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent receiving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Security</td>
<td>89</td>
<td>90</td>
<td>87</td>
<td>89</td>
</tr>
<tr>
<td>Pensions - total</td>
<td>41</td>
<td>51</td>
<td>41</td>
<td>32</td>
</tr>
<tr>
<td>Public employee pensions</td>
<td>14</td>
<td>18</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Private pensions</td>
<td>29</td>
<td>36</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>Income from assets</td>
<td>55</td>
<td>67</td>
<td>48</td>
<td>46</td>
</tr>
<tr>
<td>More than $2,000 per year</td>
<td>24</td>
<td>33</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>Earnings from work</td>
<td>24</td>
<td>37</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Supplemental Security Income</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>


Pensions or annuities are received by about half of married couples, but only about four in ten unmarried men and three in ten unmarried women have pension or annuity income. The pensions are from either private employer plans or public plans that cover federal, state, and local government employees.

Elders commonly receive asset income, but it often comes in small amounts. Such income helped meet living expenses for about two in three married couples and nearly half of unmarried men and women. Asset income that amounted to as much as $2,000 a year was less common. About one in three couples, one in five unmarried men and one in six unmarried women received as much as $2,000 a year in income from interest, dividends, property rentals, estates, trusts, or other assets.

While most elders no longer have income from work, those who do work often receive a large part of their income from earnings. Earnings were a source of income for 37 percent of couples, but just 18 percent of unmarried men and 13 percent of unmarried women still had income from work. About half of those with any income from work count on that income for half or more of their total income. The likelihood of having any income from work drops sharply with age – from 44 percent of couples and unmarried persons ages 65-69 to just 7 percent of those 80 years of age or older. Thus, earnings are a major source of income for elders who work beyond age 65 (or who have a working spouse), but at advanced ages earnings eventually end.

**How much do high- and low-income groups rely on Social Security?**

Social Security is an important share of income for middle- and upper-middle income elders as well as for low-income retirees. In Figure 4, elders are divided into five equal groups based on their total income. Each pie chart shows the share of the group’s total income.
from key sources. Elders in the bottom two fifths of the income distribution (with incomes below $16,350) drew more than 80 percent of their total income from Social Security. Elders in the middle group (with incomes between $16,360 and $25,590) received nearly two thirds of their total income from Social Security, while those in the next to highest income group relied on Social Security for nearly half their income. In the highest income group (over $44,130), continued employment was the largest single source of income. Most elders in this top income group were not yet fully retired. When and if they do retire, their income sources might come in relatively equal shares from Social Security, pensions, and asset income. In the lower income groups (where most elders are fully retired), Social Security is by far the largest single source of retirement income, while pensions ranked second, and asset income was third.

**How many elders get most of their income from Social Security?**

Fully six in ten elders get half or more of their income from Social Security, including about three in ten who get almost all their income (90 percent or more) from Social Security (Figure 5). Unmarried women are particularly reliant on Social Security, with seven in ten getting half or more of their income from Social Security, and four in ten relying on Social Security for almost all their income.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Married Couples</th>
<th>Unmarried Men</th>
<th>Unmarried Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2004</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent relying on Social Security for:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half or more of total income</td>
<td>60</td>
<td>49</td>
<td>58</td>
<td>69</td>
</tr>
<tr>
<td>90% or more of total income</td>
<td>31</td>
<td>20</td>
<td>31</td>
<td>41</td>
</tr>
<tr>
<td><strong>1976</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent relying on Social Security for:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half or more of total income</td>
<td>59</td>
<td>50</td>
<td>61</td>
<td>65</td>
</tr>
<tr>
<td>90% or more of total income</td>
<td>25</td>
<td>16</td>
<td>24</td>
<td>32</td>
</tr>
</tbody>
</table>


The heavy reliance on Social Security is not new. Over the past two or three decades, most elders have received most of their income from Social Security. In 1976 about six in ten elders relied on Social Security for at least half their income—a rate very similar to that found in 2004. The share of older Americans who receive almost all their income (90 percent or more) from Social Security has increased slightly over time as means-tested cash benefits fill a smaller role for elders today than in 1976 (U.S. SSA 1979 and 2006).
Figure 4. Shares of Income from Specified Sources by Income Level, 2004
Married Couples and Unmarried Persons Age 65 and Older

- **Lowest fifth:** $10,400 and below
  - Social Security: 83%
  - Other: 1%
  - Earnings: 10%
  - Pensions: 2%
  - Income from Assets: 4%

- **Second fifth:** $10,400 - $16,350
  - Social Security: 83%
  - Other: 3%
  - Earnings: 4%
  - Pensions: 3%
  - Income from Assets: 7%

- **Middle fifth:** $16,350 - $25,590
  - Social Security: 66%
  - Pensions: 17%
  - Earnings: 6%
  - Income from Assets: 4%
  - Other: 7%

- **Next to highest fifth:** $25,590 - $44,130
  - Social Security: 47%
  - Pensions: 26%
  - Earnings: 16%
  - Income from Assets: 8%
  - Other: 3%

- **Top fifth:** $44,130+
  - Social Security: 21%
  - Pensions: 40%
  - Earnings: 19%
  - Income from Assets: 18%
  - Other: 2%

How well do retirees maintain their prior living standards when pensions and financial assets are counted?

Retiree households that have pension income in addition to Social Security often achieve a replacement goal of 70-80 percent of prior income, while retirees without pensions do not fare as well (Munnell and Soto 2005). Particular replacement rate estimates depend on how the households’ prior earnings and financial assets are measured. Using a career average measure of pre-retirement earnings and not counting financial assets produces a median replacement rate of 63 percent for couples with pensions and 70 percent for singles with pensions. Assuming that financial assets are annuitized boosts the median replacement rates for pension recipient households to 74 percent for couples and 86 percent for singles. (These two assumptions provide reasonable lower and upper bounds for measuring the contribution of financial assets to economic well-being in retirement.)

Households without pensions fall short of the 70-80 percent replacement goal. Assuming that their financial assets are annuitized, median replacement rates were 55 percent for couples and 58 percent for singles without pensions. Replacement rates from Social Security alone for those without pensions were 43 percent for couples and 46 percent for individuals.

If one uses a measure of pre-retirement earnings based on recent earnings (the highest five of the last 10 years) instead of career average earnings, replacement rates are about 15 percentage points lower than those cited above. Pension recipients households would have median total replacement rates of 60 percent for couples and 67 percent for singles. Couples and singles without pensions would have median replacement rates of 44-45 percent from Social Security and financial assets combined.

Munnell and Soto (2005) conclude that many of today’s retirees are entering retirement in pretty good financial condition, but they note the following cautions: households without pensions are not faring well; pensioners will usually see inflation erode the value of their pensions as they age; the estimates assume people buy annuities with their financial assets, but few people do; and finally, the landscape is changing for future retirees in terms of both pensions and Social Security replacement rates.

How will Social Security replacement rates change in the future?

Under current law, Social Security is scheduled to replace a smaller share of pre-retirement earnings for boomers than it has for retirees over the last two or three decades, unless boomers work longer. Since the mid-1980s, Social Security replacement rates have been quite stable, but net replacement rates will decline sharply over the next 20 years. An average earner retiring at age 65 in 2005 had a benefit that replaced about 42 percent of prior earnings, similar to a comparable retiree in 1986 (Figure 6). Medicare Part B premiums are automatically deducted from Social Security benefits and, because those premiums have gone up faster than benefits, net Social Security replacement rates declined slightly between 1986 and 2005, from 41 to 39 percent of prior earnings, even as gross benefits kept up with earnings increases.
In the next two decades net replacement rates under current law will decline further for three reasons (Munnell and Sass 2006). First, 1983 legislation that increased the so-called normal retirement age (NRA) from 65 to 67 is being phased in. That change brings an across-the-board benefit cut at every retirement age. Second, Medicare Part B premiums are projected to continue to rise faster than Social Security benefits because health costs are rising rapidly. Finally, the 1983 law that made part of Social Security benefits taxable under the personal income tax will affect more people in the future because the exempt amounts are not indexed to keep pace with inflation. For all these reasons, an illustrative average earner retiring at 65 in 2030 will have net Social Security income that replaces about 29 percent of prior earnings, down from 39 percent in 2005, and 41 percent in 1986.

What is happening to the rest of the retirement income system?

Employers are shifting away from providing defined-benefit pensions for their employees. Those pensions, which promise retirees benefits for life, used to be the main retirement plans provided by large employers. Today, those traditional pension plans cover fewer than 20 percent of private sector workers (Munnell 2007; Munnell and Perun 2006).

Increasingly, workers have only 401(k)-type retirement plans, which place additional risks and responsibilities on individual workers. While coverage under 401(k) plans is growing, recent studies find that individual workers fail to take full advantage of them to achieve retirement security. In particular, workers may postpone joining the plan; contribute less than the optimal amount; fail to adequately diversify their investments; invest too much in their employers’ company stock; and cash out accumulations when they change jobs. Consequently, retirees end up with relatively modest account balances. In 2004, the median 401(k) balance for household heads nearing retirement was $60,000 (Munnell 2007). That balance could purchase a monthly annuity (indexed to rise by 3 percent a year) that would start out at age 65 at about $324 a month (U.S. Thrift Savings Plan 2007).
Personal savings are not rising to fill the gap left by the shift away from traditional pensions and the projected decline in Social Security benefits relative to workers’ prior earnings. At the same time, out of pocket health care costs for elders are projected to rise faster than retirees’ incomes and thus to be a growing share of required spending as retirees grow older.

**What makes an effective and efficient pension system?**

In an effort to improve retirement income security and adequacy, various expert groups have considered the attributes of an ideal pension system for American workers and employers. Most experts agree that an ideal pension system would:

- Be fully portable so that coverage follows workers from job to job;
- Cover low-paid, temporary, and part-time workers as well as others;
- Cover workers in small companies as well as those in large firms and be easy for small employers to administer;
- Cover farm and household workers and self-employed persons as well as others;
- Impose few obligations and risks on employers – no fiduciary responsibility, no complex compliance rules or risk of being sued for mistakes in plan design;
- Limit “leakage” in the form of early withdrawals;
- Pay monthly annuities that last for life;
- Index annuities to keep up with the cost of living;
- Continue payments to widowed spouses in old age; and
- Provide disability insurance to workers who lose their capacity to work before they reach retirement age.

Each of these features is found in the Social Security system. In addition, unlike most private pensions, Social Security’s benefit formula is progressive. That formula helps compensate for the facts that low earners need higher replacement rates in order to meet basic needs and that they are less likely to have retirement income from pensions or significant savings. Finally, the Social Security system has a strong record of administrative efficiency. Less than 1 percent of Social Security funds collected are spent on administrative costs (Board of Trustees 2007).

**Summary and conclusion**

Social Security has many features of an ideal pension system. It delivers retirement income progressively, effectively, and efficiently. But its replacement rates are modest. To maintain Social Security replacement rates at levels experienced in the past two or three decades would require some increase in benefits. At the same time, steps are needed to bring the Social Security program into financial balance (Reno and Lavery 2005). As private pensions shift from defined benefits to individual savings accounts, a strong defined benefit in Social Security gains added importance. Policymakers who are concerned about securing adequate retirement income in the future – for boomers, their children, and grandchildren – will face choices. They will need to decide how much to build on the strength of the Social Security system, how much to expect from employer-sponsored pension plans, and how much to expect individuals to save for themselves.
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