SOCIAL SECURITY FINANCES:
FINDINGS OF THE 2017 TRUSTEES REPORT

By Elliot Schreur and Benjamin W. Veghte*

SUMMARY

In 2016, Social Security income from payroll contributions, tax revenues, and interest on reserves exceeded outgo by $35 billion. Reserves, now at $2.8 trillion, are projected to grow to $3.0 trillion by the end of 2021. If Congress takes no action before then, reserves would be drawn down to pay benefits. The Disability Insurance (DI) Trust Fund is projected to cover scheduled benefits until 2028, and the Old-Age and Survivors (OASI) Trust Fund until 2035.¹ On a combined OASDI basis, Social Security is fully funded until 2034, but faces a projected shortfall thereafter. After the projected depletion of the combined OASDI Trust Funds, Social Security contributions and tax revenues would continue to be received and would cover about 77 percent of scheduled benefits (and administrative costs, which are less than 1 percent of outgo). The long-range actuarial shortfall over 75 years is projected to be 2.83 percent of taxable payroll – that is, 2.83 percent of all earnings that are subject to Social Security contributions. This projected long-term revenue shortfall increased from 2.66 percent of taxable payroll, which was reported in the 2016 Trustees Report. Timely revenue increases and/or benefit reductions could bring the program into long-term balance, preventing the projected shortfall.

What is the Trustees Report?

The Social Security Act established a Board of Trustees for the Social Security and Medicare trust funds and requires the Board to report annually to Congress on the status of the funds. The Act calls for a Board of six members: the Secretaries of the Treasury, of Labor, and of Health and Human Services; the Commissioner of Social Security; and two trustees representing the public who must be from different political parties and are appointed by the President and confirmed by the Senate.²

The 2017 Trustees Report provides updated projections about the future finances of Social Security’s two trust funds, the Old-Age and Survivors (OASI) Trust Fund and the Disability Insurance (DI) Trust Fund. It is a tool for Congress and the public to gauge the financial status of the Social Security system and to understand the scope of the program’s commitments. Social Security’s financial balance is projected over 75 years, longer than almost all other government or private-sector projections. This requirement

This brief was produced by Elliot Schreur, Research Associate, and Benjamin W. Veghte, Vice President for Policy, at the National Academy of Social Insurance.
Figure 1. Shares of Income to the Trust Funds, 2016

Interest on reserves; 9%
Income taxes on benefits; 3%
Employer and employee Social Security contributions; 87%

Source: Board of Trustees, 2017: Table IV.A3.
Note: Percentages do not total 100 due to rounding and exclusion of certain reimbursements to the trust funds from the general fund of the Treasury. http://www.ssa.gov/OACT/STATS/table4a3.html

reflections the critical importance of Social Security and the fact that its commitments are very long term. A high degree of stability and predictability is a valued part of the Social Security tradition. Any projection over so long a period is inherently uncertain. Nonetheless, the Trustees’ projections provide a long lead time for policymakers to consider – and for citizens to express their views on – how to maintain long-term balance. The 2017 report is the 77th to be issued and is available on the website of the Office of the Chief Actuary of Social Security: www.ssa.gov/OACT.

Who pays for Social Security?

Workers and employers pay for Social Security through mandatory contributions under the Federal Insurance Contributions Act (FICA). Workers and employers each pay 6.2 percent of earnings up to an annual cap, which is $127,200 in 2017. Of the 6.2 percent of earnings that workers and employers each pay into Social Security, 5.015 percent goes into the OASI Trust Fund and 1.185 percent goes into the DI trust fund. The Bipartisan Budget Act of 2015 set these rates effective for the period January 1, 2016 through December 31, 2018. After 2018, the allocation of Social Security payroll contributions will revert to what it had been since 2000: 0.9 percent to the DI Trust Fund, and the remaining 5.3 percent to OASI. Self-employed workers pay both the employee and the employer share and can deduct the employer share from their taxable income. Higher-income beneficiaries pay income taxes on part of their benefits. Part of this income-tax revenue goes to the Social Security trust funds, and part goes to the Medicare Hospital Insurance Trust Fund.

Interest on Social Security’s reserves provides an additional source of program income. The reserves are invested in special-obligation U.S. Treasury bonds, which earned an effective interest rate of 3.2 percent in 2016. Worker and employer contributions accounted for about 87 percent of trust fund income in 2016, while interest on reserves accounted for about 9 percent, and income taxes paid by beneficiaries accounted for about 3 percent (Figure 1).

Who receives Social Security?

Social Security pays monthly benefits that replace part of the earnings that are lost when a worker who has paid into the program becomes disabled, retires, or dies. In January 2017, 61 million Americans, or almost one in five, received Social Security benefits. Approximately one family in four receives income from Social Security. Beneficiaries include 41.4 million retired workers, 4.1 million widows and widowers, and 2.5 million spouses. About 3.2 million children under age 18 (or up to age 19 if still in high school) receive benefits as dependents. About 8.8 million disabled workers receive benefits.
How much does Social Security pay?

The average monthly benefit paid to all retired workers in January 2017 was $1,363, or about $16,356 annually (Table 1). The average monthly benefit was somewhat smaller for disabled workers ($1,171) and for widows and widowers age 60 or older ($1,303). Benefits are higher for families. For example, widowed mothers or fathers with two children received $2,650 a month, on average, or about $31,800 a year, while disabled workers with one or more children received $1,802 a month, on average, or about $21,624 a year. For comparison, the 2017 federal poverty guideline for an individual is $12,060 a year; for a family of two it is $16,240; and for a family of three it is $20,420.

Social Security is the main source of income for most people age 65 and older. For almost half of married beneficiary couples and over two-thirds of unmarried beneficiaries age 65 and over, Social Security accounts for more than half of total income.

Social Security benefits are generally increased each year by an automatic cost-of-living adjustment (COLA) that is based on the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). Because the CPI-W increased 0.3 percent from the third quarter of 2014 to the third quarter of 2016, Social Security benefits increased by 0.3 percent in December 2016. The CPI-W in the third quarter of 2014 was used as the starting point for this calculation because the increase in the CPI-W between the third quarter of 2014 and the third quarter of 2015 was less than 0.05 percent, the minimum price increase necessary to trigger a change in Social Security benefits.

Benefits may be claimed as early as age 62. The size of the benefit is increased for each year workers defer claiming up to age 70. The increment is approximately 6-8 percent a year. About one third of retirees who claimed benefits in 2015 claimed at age 62. They received 25 percent less than they would have received had they claimed at age 66 and 43 percent less than if they claimed at age 70, but payable over a longer expected payment period.

A common way to assess benefit levels is to compare workers’ benefit amounts at retirement with their earnings over their working careers. Under current law, the replacement rate for a medium earner (with career-average earnings of $49,366 in 2016) retiring at age 65 is projected to decline from 38 percent of career-average earnings in 2017 to 36 percent in 2025 and thereafter. The replacement rate for a medium earner retiring at the early age of 62 is projected to decline from 32 percent in 2017 to 30 percent in 2022. The drop in replacement rates is a result of the 1983 Social Security amendments that gradually increased the age at which unreduced benefits are paid from age 65 to 67 for workers born in 1960 and later, with the full shift first taking effect for workers who will reach 62 in 2022 and later. When considering options to close the projected Social Security funding gap, it is useful to take into account reductions in benefits already scheduled under current law.

### Table 1. Average Monthly Benefits, January 2017

<table>
<thead>
<tr>
<th>By Beneficiary Type:</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retired workers</td>
<td>$1,363</td>
</tr>
<tr>
<td>Disabled workers</td>
<td>$1,171</td>
</tr>
<tr>
<td>Widows or widowers (60 or older)</td>
<td>$1,303</td>
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<table>
<thead>
<tr>
<th>By Family Type:</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retired worker and spouse (62 or older)</td>
<td>$2,262</td>
</tr>
<tr>
<td>Widowed mother or father and two children</td>
<td>$2,650</td>
</tr>
<tr>
<td>Disabled worker and one or more children</td>
<td>$1,802</td>
</tr>
</tbody>
</table>

a SSA, 2017b.  
b SSA, 2017c.
How do actuaries project the future?
Each year the Social Security actuaries review the performance of the economy, take into account new laws and regulations, modify and improve projection methods, and reassess assumptions about future economic and demographic trends that will affect the Social Security system — such as employment, wage levels, productivity, inflation, interest rates, birth rates, death rates, and immigration.

The actuaries make projections using three scenarios agreed upon by the Trustees: intermediate, low-cost, and high-cost. The intermediate scenario receives the most attention. In general, the low-cost estimate uses assumptions that generate higher revenues or lower overall costs (such as higher economic growth, lower unemployment, higher fertility rates, more net immigration, and lower life-expectancy) while the high-cost estimate uses assumptions that generate lower revenues or higher spending. For each scenario, the Trustees Report separately projects the status of the funds for the short term (10 years) and long term (up to 75 years).

What do the Trustees project for the short term?
In 2017, the Social Security trust funds are projected to collect $1,013.8 billion and pay out $955.2 billion, increasing asset reserves by $58.6 billion (Table 2). Almost all outgo will be used to pay benefits; less than 1 percent of outgo will be spent on administration. Income consists of revenues — contributions from workers and employers and income from taxation of benefits — plus interest earned on the trust fund reserves.

By law, income in excess of what is needed for current outgo is invested in interest-bearing securities guaranteed as to principal and interest, and these invested assets

<table>
<thead>
<tr>
<th>Table 2. Social Security at a Glance, 2015-2017</th>
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<tr>
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<tr>
<td><strong>2015</strong></td>
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<tr>
<td>Income (in billions)</td>
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<td>Outgo (in billions)</td>
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<tr>
<td>Increase in trust fund reserves (in billions)</td>
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<td>Trust fund balance (in billions)</td>
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<td>Covered workers (in thousands)</td>
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<tr>
<td>Beneficiaries (in thousands)</td>
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<td>COLA (in thousands)</td>
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<td>Taxable maximum</td>
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<tr>
<td><strong>2016</strong></td>
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<tr>
<td>$920.2</td>
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<td>$897.1</td>
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<tr>
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<tr>
<td>168,430</td>
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<td>59,963</td>
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<td>1.7%</td>
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<tr>
<td>$118,500</td>
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<td></td>
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<tr>
<td><strong>2017 projected</strong></td>
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<tr>
<td>$957.5</td>
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<tr>
<td>$922.3</td>
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<tr>
<td>$35.2</td>
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<tr>
<td>$2,847.7</td>
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<tr>
<td>170,828</td>
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<tr>
<td>60,907</td>
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<tr>
<td>0.0%</td>
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<tr>
<td>$118,500</td>
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Source: Board of Trustees, 2017.

a Trust fund balances shown are as of the end of the year indicated.
b Workers who are paid at some time during the year for employment on which OASDI taxes are due.
c Beneficiaries receiving benefits on December 31.
d COLAs shown are effective beginning with benefits paid in January of the year indicated.
e Actual.
make up the trust fund reserves. Since 1937, Social Security has collected about $19.9 trillion in revenues and interest and has paid out about $17.1 trillion in benefits and administrative costs (as of December 31, 2016), leaving a balance of $2.8 trillion in its trust funds. Under the intermediate assumptions, Social Security income will exceed outgo each year until 2022. That is, income from revenues and interest will exceed outgo for benefits and administrative costs and the reserves will continue to grow. By the end of 2021, the reserves are estimated to be $3.0 trillion.

What do the Trustees project for the longer term?
The Trustees Report provides summary measures of projected program income and outgo over the next 25, 50, and 75 years. The Trustees recognize that the reliability of the financial projections declines as the projection period increases. Under intermediate assumptions:

• Over the next 17 years, Social Security income and trust fund reserves can cover all scheduled payments.
• Over the next 25 years, Social Security finances are projected to cover 93 percent of expected outgo.
• Over the next 50 years, Social Security finances are projected to cover 87 percent of expected outgo.

• Over the next 75 years, Social Security finances are projected to cover 84 percent of expected outgo.

These measures of financial self-sufficiency illustrate the extent to which the program’s assets and income are projected to meet future obligations. The 25-, 50-, and 75-year projections indicate that remedial actions will be needed to ensure that all legislated benefits will be paid. The Trustees Report highlights other key dates about Social Security’s future finances:

• In 2022, revenue from payroll contributions, interest on reserves, and taxation of benefits is expected to be less than total outgo for that year. If no action is taken before then, reserves would then start to be drawn down to pay benefits.
• Trust fund reserves are expected to be depleted in 2034, provided that Congress takes no action between now and then to lower outlays or increase revenues. Even if Congress does nothing, revenue will continue to be received in the form of contributions from workers and employers, as well as from the taxation of benefits, after reserves are depleted. This revenue is projected to cover about 77 percent of scheduled benefits and administrative costs in 2034 and 73 percent of benefits in 2091. By law, Social Security cannot pay benefits in excess of its income and reserves.
What has changed since last year’s projections?

Social Security’s projected long-term revenue shortfall increased from 2.66 percent of taxable payroll in 2016 to 2.83 percent in the 2017 Trustees Report. In the absence of congressional action, the year in which the combined OASDI Trust Funds would be fully drawn down has remained at 2034. For the Disability Insurance Trust Fund, that projection is 2028, improved since last year largely due to lower than expected DI applications.

Year-to-year changes in the estimates are to be expected. Reasons for the changes between the 2016 and 2017 projections are described in Table II.D2 and Section IV.B6 of the Trustees Report.

Some of the assumptions with the largest effects include changing the 75-year projection period by one year (worsens the balance by 0.05 percent of taxable payroll), improving program data and projection methods (worsens the balance by 0.04 percent of taxable payroll), updating demographic data (worsens the balance by 0.03 percent of taxable payroll), updating the real-wage differential to take into account faster-than-expected growth in premiums for employer-sponsored group health insurance (worsens the balance by 0.03 percent of taxable payroll), and lowering expected GDP (worsens the balance by 0.02 percent of taxable payroll).

The long-range actuarial shortfall is projected to be 2.83 percent of taxable payroll – that is, 2.83 percent of all earnings that are subject to Social Security contributions. To put this in perspective, the projected shortfall would be eliminated if the contribution rate paid by employees and employers each were 7.7 percent instead of 6.2 percent over the next seventy-five years.¹⁸

What do the high-cost and low-cost projections show?

In the Trustees’ high-cost scenario, Social Security’s reserves would be depleted in 2029 (instead of 2034 in the intermediate scenario), and during the first 25 years, the program’s finances would be sufficient to cover 82 percent (instead of 93 percent) of its outgo. In the low-cost scenario, Social Security would be fully financed throughout the 75-year projection period, and during the first 25 years, Social Security’s finances would cover 105 percent (instead of 93 percent) of program outgo. The difference among estimates underscores the great uncertainty about what the distant future holds.

Disability Insurance Trust Fund requires legislative action by 2028

Of the 6.2 percent of earnings that workers and employers each pay into Social Security, 5.015 percent goes to the Old-Age and Survivors Insurance (OASI) Trust Fund and 1.185 percent goes to the Disability Insurance (DI) Trust Fund. This allocation of Social Security contributions was implemented pursuant to the Bipartisan Budget Act of 2015, which set these rates effective for the period from January 1, 2016 through December 31, 2018. While the two trust funds are often considered together and described as the OASDI
Trust Fund, or simply as “the Social Security Trust Fund,” by law the two funds are separate and cannot borrow from each other without congressional authorization. Viewed separately, the OASI Fund can cover scheduled benefits until 2035, but the DI Fund can do so only until 2028.

The Disability Insurance Trust Fund is projected to be depleted in 2028. Thus, lawmakers will need to act to avoid an abrupt reduction in DI benefits, as revenues coming into the DI Trust Fund are projected to cover only 93 percent of statutory DI benefits in 2028. As of the beginning of 2017, the DI Trust Fund pays out benefits to approximately 10.6 million beneficiaries of DI—including 8.8 million disabled workers.19 Congress has never permitted such a drop in Social Security benefits to occur. Such a decline would cause hardship for millions of vulnerable individuals and their families. On average, disabled worker beneficiaries worked and paid into Social Security for 22 years before qualifying for DI benefits, and more than half rely on DI benefits for 75 percent or more of their total income.20

What will Social Security cost as a share of the total economy?

A widely accepted way to assess Social Security’s future affordability is to compare benefits scheduled to be paid under current law with the size of the entire economy at the time. In 2016, Social Security outgo was 5.0 percent of the economy, or gross domestic product (GDP). It is projected to rise to 6.1 percent of the economy by 2035, when all baby boomers will be retired, and then to decline somewhat, remaining between about 5.9 and 6.2 percent of the economy thereafter (Figure 2).

Figure 2. Social Security Outgo as a Percent of the Economy (GDP), 2015-2090

Source: Board of Trustees, 2017: Table VI.G4.
What happens to the Social Security's reserves?

The yield on Social Security's reserves averaged 3.2 percent in 2016. Interest earned on individual securities ranges from 1.375 percent to 5.625 percent depending on the year when issued. The annual interest earned on these securities is credited to Social Security's trust funds. The securities can be redeemed at par whenever needed to pay Social Security benefits. The Treasury bills, notes, and bonds that make up most of Social Security's reserves are considered extremely safe investments because they are backed by the full faith and credit of the United States. Private pension funds maintain large investments in U.S. bonds, as do many institutional investors and foreign governments.

The sum of all Treasury securities makes up the national debt. Most of the debt (approximately 72 percent) is held by (that is, owed to) the public: individuals, corporations, and other investors in the United States and abroad who have lent money to the government by investing in government securities. At the end of 2016, about 14 percent of the national debt was owed to the Social Security trust funds, and another 14 percent was owed to all other federal trust funds or accounts.

Some people express concern when they hear that Social Security's reserves are lent to the U.S. Treasury. This is not a misuse of Social Security funds. This procedure has the advantage of investing Social Security's reserves in one of the safest financial instruments available. The Treasury securities held by the trust funds are a binding legal commitment requiring the Treasury to redeem the securities with interest when the money is needed to pay Social Security benefits. The promise to pay embodied in U.S. Treasury securities has never been broken.

What is the Social Security ‘cash flow’ balance?

Discussions of ‘cash flow’ balance calculate Social Security’s annual income and outgo without counting the income from interest on trust fund reserves. In recent years some media reports have stated that “Social Security has gone cash flow negative.” But the cash flow balance is not an accurate representation of the financial status of the Social Security trust funds. In fact, the program’s total income exceeded outgo by...
$35.2 billion in 2016, and income is projected to continue to exceed outgo until 2022. Figure 3 shows Social Security’s outgo as well as its income from payroll contributions, interest on reserves, and taxation of benefits for 2016 and as projected for 2017 and 2018.

From a unified federal budget perspective, the interest owed to Social Security is an outflow from the non-Social Security budget (the ‘General Fund’) to the Social Security trust funds. From a Social Security financing perspective, the interest earned on the reserves is an integral part of the program’s income. It is a legal obligation of the federal government to the Social Security system and its beneficiaries.

**How can policymakers address Social Security’s projected long-term shortfall?**
Policymakers have many options to prevent the Social Security trust funds from becoming depleted over the 75-year projection period and beyond. The Academy has recently conducted two national public opinion surveys to find out which measures to maintain Social Security’s long-term finances the American public would prefer. Both studies found that those surveyed would rather pay higher contributions than see benefits reduced. In particular, more than 7 in 10 of those surveyed, across generations and income groups, preferred a package of changes that would raise revenues in two ways: by gradually eliminating the cap on taxable earnings and by gradually increasing the payroll tax rate from 6.2 percent to 7.2 percent. The preferred package would also increase the minimum benefit for low-paid workers with long work records and would adopt a COLA based on price increases experienced by seniors. This package of four changes would convert the program’s projected long-term shortfall into a modest surplus, providing a margin of safety. Many other policy options exist as well.

**CONCLUSION**

Projections indicate that scheduled Social Security benefits can be paid in full over the next 17 years with no change in current law. If nothing were done to restore long term balance during the next 17 years, benefits would be abruptly cut. To avoid that eventuality, Congress should act within that period to close the funding gap. Modestly increased revenue or gradual benefit cuts can bring the program into long-term balance, ensuring that cumulative Social Security revenues cover all statutory benefits for the next 75 years and beyond, just as they have done throughout the last 77 years.
ENDNOTES

1 Board of Trustees, 2017.
2 At present, the two public trustee positions are vacant.
3 Beginning in 1984, Federal law subjected up to 50 percent of an individual’s or a couple’s OASDI benefits to Federal income taxation under certain circumstances. Treasury allocates the revenue derived from this provision to the OASI and DI Trust Funds on the basis of the income taxes paid on the benefits from each fund. Beginning in 1994, the law increased the maximum percentage from 50 percent to 85 percent. The HI Trust Fund receives the additional tax revenue resulting from the increase to 85 percent. Board of Trustees, 2017: Glossary.
4 Social Security Administration (SSA), 2017a.
5 Board of Trustees, 2017: Table IV.A3.
6 SSA, 2017b; U.S. Census Bureau, 2017.
7 U.S. Census Bureau, 2016.
8 SSA, 2017b.
9 SSA, 2017b.
10 SSA, 2017c.
13 The increase from one quarter to the next must be greater than zero, rounded to the nearest 0.1 percent, meaning that the threshold for a cost-of-living increase is 0.05 percent. The change from the third quarter of 2014 to the third quarter of 2015 was in fact negative, but no negative cost-of-living adjustment to Social Security benefits is allowed under the law. SSA, 2017d; Social Security Act, n.d.
15 SSA, 2017f.
16 SSA, 2017f.
17 These measures of actuarial solvency draw on work by Kenneth Buffin (2002). They compare the resources available to the program (beginning balance plus future revenues and interest) over a period of time to scheduled obligations over the same period. For this purpose, obligations do not include a target fund at the end of the period. The estimates are derived from information in Table IV.B5 of the Trustees Report (Board of Trustees, 2017).
18 The combined increase is slightly higher than the actuarial deficit due to the assumed response of employees and employers to an increase in the contribution rate.
19 SSA, 2017b.
20 Zients and Donovan, 2015; Bailey and Hemmeter, 2015: Table 2.
21 SSA, 2017a.
22 Board of Trustees, 2017, Table VI.A4.
25 SSA, 2017g; Reno and Lavery, 2009.
27 SSA, 2017g.
REFERENCES


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