

Note 23. Long-Term Fiscal Projections

The SLTFP is prepared pursuant to SFFAS No. 36, *Comprehensive Long-Term Projections for the U.S. Government*. The financial statement, Note 23, and unaudited RSI provide information to aid readers of the *Financial Report* in assessing whether current policies for federal spending and taxation can be sustained and the extent to which the cost of public services received by current taxpayers will be shifted to future taxpayers. This assessment requires prospective information about receipts and spending, the resulting debt, and how these amounts relate to the size of the economy. A sustainable policy is defined as one where the ratio of federal debt held by the public to GDP (the debt-to-GDP ratio) is ultimately stable or declining. The *Financial Report* does not address the sustainability of state and local government fiscal policy.

The projections and analysis presented here are extrapolations based on an array of assumptions described in detail below. A fundamental assumption is that current federal policy will not change. This assumption is made so as to inform the question of whether current fiscal policy is sustainable and, if it is not sustainable, the magnitude of needed reforms to make fiscal policy sustainable. The projections are therefore neither forecasts nor predictions. If policy changes are implemented, perhaps in response to projections like those presented here, then actual financial outcomes will be different than those projected. The methods and assumptions underlying the projections are subject to continuing refinement.

The projections focus on future cash flows, and do not reflect either the accrual basis or the modified-cash basis of accounting. These cash-based projections reflect receipts or spending at the time cash is received or when a payment is made by the government. In contrast, accrual-based projections would reflect amounts in the time period in which income is earned or when an expense or obligation is incurred. The cash basis accounting underlying the long-term fiscal projections is consistent with methods used to prepare the SOSI and the generally cash-based federal budget.

The SLTFP displays the present value of 75-year projections for various categories of the federal government's receipts and non-interest spending.⁹ The projections for fiscal years 2019 and 2018 are expressed in present value dollars and as a percent of the present value of GDP¹⁰ as of September 30, 2019 and September 30, 2018, respectively. The present value of a future amount, for example \$1 billion in October 2094, is the amount of money that if invested on September 30, 2019 in an account earning the government borrowing rate would have a value of \$1 billion in October 2094.¹¹

The present value of a receipt or spending category over 75 years is the sum of the annual present value amounts. When expressing a receipt or spending category over 75 years as a percent of GDP, the present value dollar amount is divided by the present value of GDP over 75 years. Measuring receipts and spending as a percent of GDP is a useful indicator of the economy's capacity to sustain federal government programs.

Fiscal Projections

Receipt categories in the long-term fiscal projections include individual and corporation income taxes, Social Security and Medicare payroll taxes, and a residual remaining category of "other receipts." Non-interest spending categories include discretionary spending that is funded through annual appropriations, such as spending for national security; and mandatory (entitlement) spending that is generally funded with permanent or multi-year appropriations, such as spending for Social Security and Medicare. This year's projections for Social Security and Medicare are based on the same economic and demographic assumptions that underlie the 2019 Social Security and Medicare Trustees' Reports and the 2019 SOSI, while comparative information presented from last year's report is based on the 2018 Social Security and Medicare Trustees' Reports and the 2018 SOSI.¹² Projections for the other categories of receipts and spending are consistent with the economic and demographic assumptions in the Trustees' Reports. The projections assume the continuance of current policy which, builds off current law, but can be different than current law in cases where lawmakers have in the past periodically changed the law in a consistent way. The specific assumptions that depart from current law and are used for the current policy basis of these projections are explained below.

The projections shown in the SLTFP are made over a 75-year time frame, consistent with the time frame featured in the Social Security and Medicare Trustees' Reports. However, these projections are for fiscal years starting on October 1,

⁹ For the purposes of this analysis, spending is defined in terms of outlays. In the context of federal budgeting, spending can either refer to budget authority – the authority to commit the government to make a payment; to obligations – binding agreements that will result in payments, either immediately or in the future; or to outlays – actual payments made.

¹⁰ GDP is a standard measure of the overall size of the economy and represents the total market value of all final goods and services produced domestically during a given period of time. The components of GDP are: private sector consumption and investment, government consumption and investment, and net exports (exports less imports). Equivalently, GDP is a measure of the gross income generated from domestic production over the same time period.

¹¹ Present values recognize that a dollar paid or collected in the future is worth less than a dollar today because a dollar today could be invested and earn interest. To calculate a present value, future amounts are thus reduced using an assumed interest rate, and those reduced amounts are summed.

¹² Social Security and Medicare Trustees' Reports can be found at <https://www.ssa.gov/OACT/TR/>.

whereas the Trustees' Reports feature calendar-year projections. Using fiscal years allows the projections to start from the actual budget results from fiscal years 2019 and 2018.

| Changes in Long-Term Fiscal Projections | | |
|--|-----------------|------------------------------|
| Present Value (PV) of 75-Year Projections | Trillions of \$ | Percent of 75-Year PV of GDP |
| Receipts less non-interest spending as of September 30, 2018..... | (46.2) | (3.3) % |
| Components of Change: | | |
| Change in Reporting Period..... | (1.0) | - |
| Change due to Economic and Demographic Assumptions..... | (1.6) | 0.1 |
| Change due to Program-Specific Actuarial Assumptions..... | (1.1) | (0.1) |
| Change due to Updated Budget Data..... | 0.9 | 0.1 |
| Change in Model Technical Assumptions..... | - | - |
| Total | (2.9) | 0.1 |
| Receipts less non-interest spending as of September 30, 2019..... | (49.0) | (3.2) |

Note: Totals may not equal the sum of components due to rounding.

This year's estimate of the 75-year present value imbalance of receipts less non-interest spending is 3.2 percent of the current 75-year present value of GDP, compared to 3.3 percent as was projected in last year's *Financial Report*.¹³ The above table reports the effects of various factors on the updated projections.

- The largest factor, affecting the projections was the update of economic and demographic assumptions. While the present value of receipts less non-interest spending deteriorated by an additional \$1.6 trillion and appears to worsen the fiscal position, as a percent of the 75-year present value of GDP (\$1,531.8 trillion, compared to last year's \$1,406.3 trillion), the imbalance shrunk by 0.1 percentage point. In moving from the 75-year window's present value of GDP in 2018 to that of these 2019 projections, the increase in GDP exceeded the increase in the imbalance of receipts less non-interest spending and thus improved the fiscal position as a percent of GDP. Larger GDP is attributable both to strong growth assumptions in the projection window and lower projected interest rates that raise the present value of future-year GDP values.
- The second largest factor is the effect of new Social Security and Medicare program-specific actuarial assumptions, which increase this imbalance by about 0.1 percent of the 75-year present value of GDP (\$1.1 trillion).¹⁴
- The third largest change in the table, the change in reporting period – the effect of shifting calculations from 2019 through 2093 to 2020 through 2094 – increases the imbalance of the 75-year present value of receipts less non-interest spending by about \$1.0 trillion.
- The last factor – with an overall effect of decreasing the imbalance by about 0.1 percent of GDP (\$0.9 trillion) - is attributable to actual budget results for fiscal year 2019 and the budgetary estimates published in the 2020 President's Budget. These were primarily driven by higher individual income tax receipts arising from higher wages and salaries.

The net effect of the changes in the table above, equal to the penultimate row in the SLTFP, shows that this year's estimate of the overall 75-year present value of receipts less non-interest spending is negative -3.2 percent of the 75-year present value of GDP (negative \$49 trillion, as compared to a GDP of \$1,531.8 trillion). This imbalance can be broken down by funding source. Spending exceeded receipts by 1.7 percent of GDP (about \$25.5 trillion) among programs funded by the

¹³ The fiscal imbalances reported in the long-term fiscal projections do not include the initial level of publicly held debt, which was \$16.8 trillion in 2019 and \$15.8 trillion in 2018, and, therefore, they do not by themselves answer the question of how large fiscal reforms must be to make fiscal policy sustainable. See "Sustainability and the Fiscal Gap" and footnote 10 for additional discussion. More information on the projections in last year's *Financial Report* can be found in Note 23 to the Financial Statements here: <https://fiscal.treasury.gov/reports-statements/#>

¹⁴ For more information on Social Security and Medicare actuarial estimates, refer to Note 22, "Social Insurance."

government's general revenues, and there is an imbalance of 1.5 percent of GDP (about \$23.5 trillion)¹⁵ for the combination of Social Security (OASDI) and Medicare Part A, which under current law are funded with payroll taxes and not in any material respect with general revenues.^{16, 17} By comparison, the fiscal year 2018 projections showed that programs funded by the government's general revenues had an excess of spending over receipts of 1.7 percent of GDP (\$24.2 trillion) while the payroll tax-funded programs had an imbalance of spending over receipts of 1.6 percent of GDP (\$22.1 trillion).

Sustainability and the Fiscal Gap

As discussed further in the unaudited RSI, the projections in this report indicate that current policy is not sustainable. If current policy is left unchanged, the projections show the debt-to-GDP ratio will rise about 5 percentage points to a level of 84 percent by 2022, exceed 100 percent by 2030, and reach 474 percent in 2094. Moreover, if the trends that underlie the 75-year projections were to continue, the debt-to-GDP ratio would continue to rise beyond the 75-year window.

The fiscal gap measures how much the primary surplus (receipts less non-interest spending) must increase in order for fiscal policy to achieve a target debt-to-GDP ratio in a particular future year. In these projections, the fiscal gap is estimated over a 75-year period, from 2020 to 2094, and the target debt-to-GDP ratio is equal to the ratio at the beginning of the projection period, in this case the debt-to-GDP ratio at the end of fiscal year 2019 or about 79 percent. The target year is the last year of the 75-year period (2094).

The 75-year fiscal gap under current policy is estimated at 3.8 percent of GDP, which is 20.3 percent of the 75-year present value of projected receipts and 17.4 percent of the 75-year present value of non-interest spending. This estimate of the fiscal gap is 0.2 percentage points smaller than was estimated in 2018 (4.1 percent of GDP).

The projections show that projected primary deficits average 3.2 percent of GDP over the next 75 years under current policy. If policies were put in place that would result in a zero fiscal gap, the average primary surplus over the next 75 years would be slightly over 0.6 percent of GDP, 3.8 percentage points higher than the projected present value of receipts less non-interest spending shown in the SLTFP. In these projections, closing the fiscal gap requires running a substantially positive level of primary surplus, rather than simply eliminating the primary deficit. The primary reason is that the projections assume future interest rates will exceed the growth rate of GDP. Achieving primary balance (that is, running a primary surplus of zero) implies that the debt held by the public grows each year by the amount of interest spending, which under these assumptions would result in debt growing faster than GDP.

Assumptions Used and Relationship to Other Financial Statements

A fundamental assumption underlying the projections is that current federal policy (defined below) does not change. The projections are therefore neither forecasts nor predictions, and do not consider large infrequent events such as natural disasters, military engagements, or economic crises. By definition, they do not build in future changes to policy. If policy changes are enacted, perhaps in response to projections like those presented here, then actual fiscal outcomes will be different than those projected.

Even if policy does not change, actual spending and receipts could differ materially from those projected here. Long-range projections are inherently uncertain and are necessarily based on simplifying assumptions. For example, one key simplifying assumption is that interest rates paid on debt held by the public remain unchanged, regardless of the amount of debt outstanding. To the contrary, it is likely that future interest rates would increase if the debt-to-GDP ratio rises as shown

¹⁵ The 75-year present value imbalance for Social Security and Medicare Part A of \$23.5 trillion is comprised of several line items from the SLTFP – Social Security outlays net of Social Security payroll taxes (\$23.0 trillion) and Medicare Part A outlays net of Medicare payroll taxes (\$10.1 trillion) – as well as subcomponents of these programs not presented separately in the statement. These subcomponents include Social Security, Medicare Part A, and Medicare Part B administrative costs that are classified as non-defense discretionary spending (\$0.9 trillion) and Social Security and Medicare Part A income other than payroll taxes: taxation of benefits (-\$4.8 trillion), federal employer share (-\$1.3 trillion), and other income (-\$4.4 trillion).

¹⁶ Social Security and Medicare Part A expenditures can exceed payroll tax revenues in any given year to the extent that there are sufficient balances in the respective trust funds; these balances derive from past excesses of payroll tax revenues over expenditures and interest earned on those balances and represent the amount the General Fund owes the respective trust fund programs. When spending does exceed payroll tax revenues, as has occurred each year since 2008 for Medicare Part A and 2010 for Social Security, the excess spending is financed first with interest due from the General Fund and secondly with a drawdown of the trust fund balance; in either case, the spending is ultimately supported by general revenues or borrowing. Under current law, benefits for Social Security and Medicare Part A can be paid only to the extent that there are sufficient balances in the respective trust funds. In order for the long-term fiscal projections to reflect the full size of these program's commitments to pay future benefits, the projections assume that all scheduled benefits will be financed with borrowing to the extent necessary after the trust funds are depleted.

¹⁷ The fiscal imbalances reported in the long-term fiscal projections are limited to future outlays and receipts. They do not include the initial level of publicly-held debt, \$16.8 trillion in 2019 and \$15.8 trillion in 2018, and therefore they do not by themselves answer the question of how large fiscal reforms must be to make fiscal policy sustainable, or how those reforms divide between reforms to Social Security and Medicare Part A and to other programs. Other things equal, past cash flows (primarily surpluses) for Social Security and Medicare Part A reduced federal debt at the end of 2019 by \$3.1 trillion (the trust fund balances at that time); the contribution of other programs to federal debt at the end of 2019 was therefore \$19.9 trillion. Similarly, the \$23.5 trillion imbalance between outlays and receipts over the next 75 years for Social Security and Medicare Part A does not take account of the Social Security and Medicare Part A trust fund balances, it overstates the magnitude of reforms necessary to make Social Security and Medicare Part A solvent over 75 years by \$3.1 trillion. The \$3.1 trillion combined Social Security and Medicare Part A trust fund balance represents a claim on future general revenues.

in these projections. To help illustrate this uncertainty, projections that assume higher and lower interest rates are presented in the “Alternative Scenarios” discussion in the unaudited RSI section of this *Financial Report*.

As is true for prior long-term fiscal projections for the *Financial Report*, the assumptions for GDP, interest rates, and other economic and demographic variables underlying this year’s projections are the same assumptions that underlie the most recent Social Security and Medicare Trustees’ Report projections, adjusted for historical revisions that occur annually. These assumptions differ from those in the President’s Budget because they extend for 75 years, rather than 25 years. Additionally, they assume extension of current policy whereas the economic assumptions in the President’s Budget assume full implementation of policies reflected in the Budget.¹⁸ The use of discount factors consistent with the Social Security Trustees’ rate allows for consistent present value calculations over 75 years between the SLTFP and the SOSI.

The following bullets summarize the key assumptions used for the categories of receipts and spending presented in the SLTFP and the disclosures:

- **Social Security:** Projected Social Security (OASDI) spending excludes administrative expenses, which are classified as discretionary spending, and is based on the projected spending in the 2019 Social Security Trustees’ Report for benefits and for the Railroad Retirement interchange. The projections of Social Security payroll taxes and Social Security spending are based on future spending and payroll taxes projected in the 2019 Social Security Trustees’ Report, adjusted for presentational differences and converted to a fiscal year basis. More information about the assumptions for Social Security cost growth can be found in Note 22 and the unaudited RSI discussion of Social Insurance.
- **Medicare:** Projected Medicare spending also excludes administrative expenses, which are classified as other mandatory spending, and is based on projected spending from the 2019 Medicare Trustees’ Report. The projections here make some adjustments to the Trustees’ Report projections. Medicare Part B and D premiums, as well as State contributions to Part D, are subtracted from gross spending in measuring Part B and Part D spending, just as they are subtracted from gross cost to yield net cost in the financial statements.¹⁹ Here, as in the federal budget, premiums are treated as “negative spending” rather than receipts since they represent payment for a service rather than payments obtained through the government’s sovereign power to tax. This is similar to the financial statement treatment of premiums as “earned” revenue as distinct from all other sources of revenue, such as taxes. The projections are based on Medicare spending in the Medicare Trustees’ Report, adjusted for presentational differences and converted to a fiscal year basis. Medicare Part A payroll taxes are projected similarly. More information about the assumptions for Medicare cost growth can be found in Note 22 and the unaudited RSI discussion of Social Insurance. As discussed in Note 22, there is uncertainty about whether the reductions in health care cost growth assumed in the Medicare Trustees’ Report will be fully achieved. Note 22 illustrates this uncertainty by considering Medicare cost growth assumptions under varying policy assumptions.
- **Medicaid:** The Medicaid spending projections start with the projections from the 2017 *Medicaid Actuarial Report* prepared by CMS’s Office of the Actuary.²⁰ These projections are based on recent trends in Medicaid spending; the demographic, economic, and health cost growth assumptions in the 2017 Medicare Trustees’ Report; and projections of the effect of the PPACA on Medicaid enrollment. The projections in the Medicaid Actuarial Report, which end in 2026, are adjusted to accord with the actual Medicaid spending in fiscal year 2019. After 2026, the projections assume no further change in State Medicaid coverage under the PPACA, and the numbers of aged beneficiaries (65-plus years) and non-aged beneficiaries (less than 65 years) are expected to grow at the same rates as the aged and non-aged populations, respectively. Medicaid costs per beneficiary are assumed to grow at the same rate as Medicare benefits per beneficiary, as is generally consistent with the experience since 1987. Between 1987 and 2017, the average annual growth rate of spending per beneficiary for Medicaid and Medicare were within 0.3 percentage point of each other. Projections of Medicaid spending are subject to added uncertainty related to: (1) assumed reductions in health care cost growth discussed above in the context of Medicare, (2) the projected size of the Medicaid enrolled population, which depends on a variety of factors, including future State actions regarding the PPACA Medicaid expansion, and (3) certain limitations relating to the data used to generate the projected per enrollee spending in the 2017 Medicaid actuarial report.
- **Other Mandatory Spending:** Other mandatory spending, which includes federal employee retirement, veterans’ disability benefits, and means-tested entitlements other than Medicaid, is projected in two steps. First, spending prior to the automatic spending cuts called for by the enforcement provisions of the BCA is projected and, second, the

¹⁸ See the fiscal year 2020 President’s Budget, Analytical Perspectives Volume, Chapter 3 “Long-Term Budget Outlook”

¹⁹ Medicare Part B and D premiums and State contributions to Part D are subtracted from the Part B and D spending displayed in the SLTFP. The total 75-year present value of these subtractions is \$15.5 trillion, or 1.0 percent of GDP.

²⁰ Christopher J. Truffer, Christian J. Wolfe, and Kathryn E. Rennie, *2017 Actuarial Report on the Financial Outlook for Medicaid*, Office of the Actuary, Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services, September 2018. An updated Medicaid actuarial report for 2018 had not been published in time to be included in this year’s sustainability estimates.

effect of the BCA enforcement is projected through 2027. With regard to pre-BCA spending: (1) current mandatory spending components that are judged permanent under current policy are assumed to increase by the rate of growth in nominal GDP starting in 2020, implying that such spending will remain constant as a percent of GDP;²¹ and (2) projected spending for insurance exchange subsidies starting in 2020 grows with growth in the non-elderly population and with the National Health Expenditure (NHE) projected per enrollee cost growth for other private health insurance for the NHE projection period (through 2027 for the fiscal year 2019 projections), and with growth in per enrollee health care costs as projected for the Medicare program after that period. As discussed in Note 22, there is uncertainty about whether the reductions in health care cost growth projected in the Medicare Trustees' Report will be fully achieved. Projected exchange subsidy spending as a percent of GDP remains below the failsafe provision in the PPACA that limits the federal share of spending to 0.504 percent of GDP.

- **Defense and Non-defense Discretionary Spending:** These projections assume that discretionary spending (1) stays within statutory caps that apply through 2021 under the 2019 BBA (or is approximately 6.5% of GDP), (2) falls to a 6.1 percent share of GDP in 2022 and grows to a 6.2 percent share in 2029, where it remains thereafter.²² Projected overseas contingency operations spending, which is not subject to the caps, is assumed to grow from the actual level in the most recent year at the same rate as nominal GDP. To illustrate sensitivity to different assumptions, present value calculations under alternative discretionary growth scenarios are presented in the unaudited "Alternative Scenarios" RSI section.
- **Receipts (Other than Social Security and Medicare Payroll Taxes):** Individual income taxes equal the same share of wages and salaries as in the current law baseline projection in the President's Budget for fiscal year 2020. That baseline accords with current policy as defined above, including the continuation of the individual income, estate, and gift tax provisions of the TCJA²³ and the tendency of effective tax rates to increase as growth in income per capita outpaces inflation (also known as "bracket creep"). After reaching about 22 percent of wages and salaries in 2033, individual income taxes increase gradually to 28 percent of wages and salaries in 2094 as real taxable incomes rise over time and an increasing share of total income is taxed in the higher tax brackets. Through the first 10 years of the projections, corporation tax receipts as a percent of GDP reflect the economic and budget assumptions used in developing the 2020 President's Budget ten-year advance baseline budgetary estimates. After this time, corporation tax receipts grow at the same rate as nominal GDP. All other receipts also reflect 2020 President's Budget levels as a share of GDP throughout the budget window and grow with GDP outside of the budget window. Corporation tax receipts peak at 1.5 percent of GDP in 2025 before falling to 1.2 percent of GDP in 2029, where they stay for the remainder of the projection period. The ratio of all other receipts combined, excluding corporation tax receipts, to GDP is estimated to settle at 1.4 percent in 2021, where it generally remains through the projection period. Also, please see Note 27—Subsequent Events. To illustrate uncertainty, present value calculations under higher and lower receipts growth scenarios are presented in the "Alternative Scenarios" section.
- **Debt and Interest Spending:** Interest spending is determined by projected interest rates and the level of outstanding debt held by the public. The long-run interest rate assumptions accord with those in the 2019 Social Security Trustees' Report.²⁴ The average interest rate over this year's projection period is 4.9 percent, down from the 2018 *Financial Report's* 5.0 percent. These rates are also used to convert future cash flows to present values as of the start of fiscal year 2020. Debt at the end of each year is projected by adding that year's deficit and other financing requirements to the debt at the end of the previous year.

²¹ This assumed growth rate for other mandatory programs exceeds the growth rate in the most recent OMB and CBO 10-year budget baselines.

²² The 2018 projections assumed that spending in fiscal year 2019 would be consistent with BBA of 2018 spending caps and thereafter grow with GDP subject to Joint Select Committee on Deficit Reduction Controls. See the fiscal year 2018 *Financial Report*.

²³ The expiring individual income and estate and gift tax provisions of the TCJA are assumed to continue past their legal expiration on December 31, 2025 because of the recent historical pattern of such tax rates being extended; additional discussion may be found in the last section of this note.

²⁴ As indicated in the more detailed discussion of Social Insurance in Note 22 to the financial statements.

Departures of Current Policy from Current Law

The long-term fiscal projections are made on the basis of current policy, which in some cases is assumed to be different from current law. The notable differences between current policy that underlies the projections and current law are: (1) projected spending, receipts, and borrowing levels assume raising or suspending the current statutory limit on federal debt; (2) continued discretionary appropriations are assumed throughout the projection period; (3) scheduled Social Security and Medicare benefit payments are assumed to occur beyond the projected point of trust fund depletion; (4) many mandatory programs with expiration dates prior to the end of the 75-year projection period are assumed to be reauthorized; and (5) tax changes under the TCJA are assumed to continue beyond 2025. The last difference aligns with the historical pattern of such legislation being routinely extended or made permanent. As is true in the Medicare Trustees' Report and in the SOSI, the projections incorporate programmatic changes already scheduled in law, such as the PPACA productivity adjustment for non-physician Medicare services and the expiration of certain physician bonus payments in 2025.