

The President, The President of the Senate, The Speaker of the House of Representatives

April 2019

THE NATION'S FISCAL HEALTH

Action Is Needed to Address the Federal Government's Fiscal Future

Accessible Version

September 2016

GAO Highlights

Highlights of GAO-17-xxxx, an annual report to Congress

View GAO-19-314SP. For more information, contact Susan J. Irving, (202) 512-6806 or irvings@gao.gov, Robert F. Dacey at (202) 512-3406 or daceyr@gao.gov, and Dawn B. Simpson, (202) 512-3406 or simpsondb@gao.gov

THE NATION'S FISCAL HEALTH

Action Is Needed to Address the Federal Government's Fiscal Future

Congress and the administration face serious economic, security, and social challenges that require difficult policy choices in the near term in setting national priorities and charting a path forward for economic growth. This will influence the level of federal spending and how the government obtains needed resources. At the same time, the federal government is highly leveraged in debt by historical norms.

A broad plan is needed to put the federal government on a sustainable long-term fiscal path and ensure that the United States remains in a strong econo ic position to meet its security and social needs, as well as to preserve flexibility to address unforeseen events. This report describes the fiscal condition of the U.S. government as of the end of fiscal year 2018 and its future unsustainable fiscal path absent policy changes. It draws on the *Fiscal Year 2018 Financial Report of the United States Government (2018 Financial R port)* and GAO's audit of the government's consolidated financial statements.

Significant Changes to the Government's Fiscal Condition in Fiscal Year 2018

According to the 2018 Financial Report, the federal deficit in fiscal year 2018 increased to \$779 billion—up from \$666 billion in fiscal year 2017. Federal receipts increased by \$14 billion, but that was outweighed by a \$127 billion increase in spending driven by, among other things, increases in defense, interest on debt held by the public (net interest), Social Security, Medicaid, and disaster relief and flood insurance. Cumulative debt held by the public increased from \$14.7 trillion (or 76 percent of gross domestic product (GDP)) at the end of fiscal year 2017 to \$15.8 trillion (or 78 percent of GDP) at the end of fiscal year 2018. By comparison, debt has averaged 46 percent of GDP since 1946.

Long-Term Fiscal Projections Show the Federal Government Is on an Unsustainable Fiscal Path

In the long term, the key drivers of growing federal spending are health care programs and net interest, according to the *2018 Financial Report*, CBO, and GAO. In its alternative simulation, GAO projects that

- federal health care spending will increase from 5.4 percent of GDP in fiscal year 2018 to 8.6 percent of GDP in fiscal year 2048, and
- net interest will increase from 1.6 percent of GDP in fiscal year 2018 to 6.7 percent of GDP in fiscal year 2048.

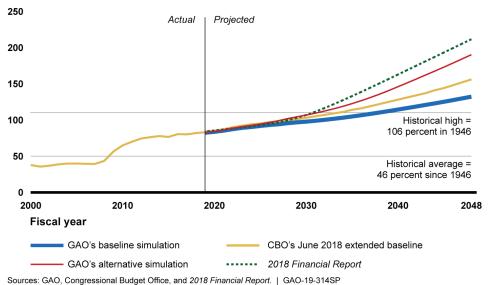
The 2018 Financial Report, the Congressional Budget Office (CBO), and GAO projections all show that, absent policy changes, the federal government's fiscal

DRAFT

path is unsustainable and that the debt-to-GDP ratio will surpass its historical high of 106 percent within 13 to 20 years (see figure below).

Debt Held by the Public under Projections from the 2018 Financial Report, the Congressional Budget Office (CBO), and GAO

Percentage of gross domestic product



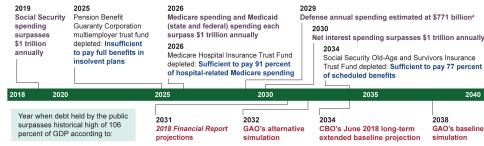
Data table for Debt Held by the Public under Projections from the 2018 Financial Report, the Congressional Budget Office (CBO), and GAO

Fiscal Year	GAO`s baseline simulation	GAO`s alternative simulation	CBO's June 2018 extended baseline	2018 Financial Report
2000			33.702	
2001	•		31.536	
2002			32.68	
2003			34.682	
2004			35.72	
2005	•		35.781	
2006			35.407	
2007			35.233	
2008			39.361	
2009			52.278	
2010	•		60.779	
2011			65.752	
2012			70.259	
2013			72.169	
2014			73.732	
2015			72.507	
2016			76.371	
2017	•		76.096	
2018			77.836	
2019	78.283	78.689	79	79.995
2020	79.574	80.274	81	81.495
2021	81.197	82.219	83	82.927
2022	83.25	84.625	86	84.460
2023	85.018	86.809	88	85.808

Fiscal Year	GAO`s baseline simulation	GAO`s alternative simulation	CBO's June 2018 extended baseline	2018 Financial Report
2024	86.232	88.469	90	86.940
2025	87.678	90.438	91	88.481
2026	89.003	92.595	93	90.362
2027	90.007	95.005	94	92.544
2028	91.547	97.884	96	95.408
2029	92.688	100.327	97	98.844
2030	93.642	102.649	99	102.811
2031	94.828	105.368	101	107.325
2032	96.152	108.28	103	112.395
2033	97.575	111.378	105	117.747
2034	99.079	114.763	107	123.276
2035	100.755	118.538	110	128.942
2036	102.517	122.614	112	134.743
2037	104.358	126.98	115	140.653
2038	106.247	131.613	118	146.636
2039	108.275	136.626	121	152.661
2040	110.347	141.893	124	158.743
2041	112.435	147.19	127	164.854
2042	114.534	152.519	130	170.941
2043	116.743	158.026	133	177.020
2044	118.87	163.436	137	183.098
2045	121.085	168.94	140	189.188
2046	123.407	174.61	144	195.299
2047	125.783	180.389	148	201.414
2048	128.137	186.157	152	207.510

Importance of Early Action: The 2018 Financial Report, CBO, and GAO state that the longer action is delayed, the greater the changes will have to be.

As shown below, major programs are projected to face financial challenges in the future.



Sources: Trustees for Social Security and Medicare, Congressional Budget Office (CBO), Centers for Medicare & Medicaid Services, GAO, and 2018 Financial Report. | GAO-19-314SP

Data for Timeline

Year	Event
2019	Social Security spending surpasses \$1 trillion annually

DRAFT

Year	Event
2025	Pension Benefit Guaranty Corporation multiemployer trust fund depleted: Insufficient to pay full benefits in insolvent plans
2026	Medicare spending and Medicaid (state and federal) spending each surpass \$1 trillion annually
2026	Medicare Hospital Insurance Trust Fund depleted: Sufficient to pay 91 percent of hospital-related Medicare spending
2029	Defense annual spending estimated at \$771 billion ^a ^a CBO did not report defense spending projections separately from total discretionary spending in its long-term projections after 2029.
2030	Net interest spending surpasses \$1 trillion annually
2034	Social Security Old-Age and Survivors Insurance Trust Fund depleted: Sufficient to pay 77 percent of scheduled benefits
2031	2018 Financial Report projections
2032	GAO's alternative simulation
2034	CBO's June 2018 long-term extended baseline projection
2038	GAO's baseline simulation

_aCBO did not report defense spending projections separately from total discretionary spending in its long-term projections after 2029.

Debt Limit Is Not a Control on Debt

The debt limit is a legal limit on the total amount of federal debt that can be outstanding at one time. It is not a control on debt but rather an after-thefact measure that restricts the Department of the Treasury's (Treasury) authority to borrow to finance the decisions already enacted by Congress and the President.

Alternative Approach to Managing Debt Is Needed:

At the time of this report, Treasury is taking extraordinary actions to continue funding government activities since the debt limit suspension period ended on March 1, 2019. Failure to increase or suspend the debt limit in a timely manner disrupts the Treasury market and can increase borrowing costs. Treasury securities play a vital role in financial markets. The full faith and credit of the U.S. must be preserved. GAO has recommended possible alternative approaches to the current debt limit.

Experts have also suggested instituting a fiscal rule imposed on spending and revenue decisions. Congress could consider these suggestions as part of a broader plan to put the government on a sustainable fiscal path.

^{**}Year when debt held by the public surpasses historical high of 106 percent of GDP according to:

Fiscal Risks Place Additional Pressure on the Federal Budget

Fiscal risks are responsibilities, programs, and activities that may legally commit or create expectations for future spending based on current policy, past practices, or other factors.

The federal government faces certain fiscal risks that are not fully accounted for in the budget and could lead to future spending increases and higher levels of debt. Examples include natural disasters and financial challenges like resolving the federal government's role in the housing finance market. A more complete understanding of fiscal risks can help policymakers anticipate changes in future spending and enhance oversight of federal resources.

Executive Agencies Have Opportunities to Contribute Toward Fiscal Health

Executive actions alone cannot put the U.S. government on a sustainable fiscal path, but it is important for agencies to act as stewards of federal resources. In prior work, GAO has identified numerous actions for executive agencies to contribute toward a sustainable fiscal future.

Actions needed to address improper payments	Reducing payments that should not have been made or that were made in an incorrect amount could yield significant savings. Reported improper payment estimates totaled about \$151 billion for fiscal year 2018. Since fiscal year 2003, cumulative estimates have totaled about \$1.5 trillion.
Multiple strategies needed to address persistent tax gap	Reducing the gap between taxes owed and those paid could increase tax collections by billions of dollars annually. The average annual net tax gap is estimated to be \$406 billion (for tax years 2008-2010).
Continue to address duplication, overlap, and fragmentation	GAO has identified numerous areas to reduce, eliminate, or better manage fragmentation, overlap, or duplication; achieve cost savings; or enhance revenue. Actions taken so far by Congress and the executive branch have resulted in achieved and projected financial benefits of roughly \$178 billion since fiscal year 2010.
Action needed to improve information on programs and fiscal operations	Decision making could be improved by ensuring the government's financial statements are fully auditable and by increasing attention to tax expenditures—tax provisions that reduce tax liabilities. Estim ated to collectively reduce tax revenue by over \$1 trillion in fiscal year 2018, tax expenditures are not regularly reviewed and their outcomes are not measured as closely as spending programs' outcomes.

Contents

GAO Highlights		2
5	Significant Changes to the Government's Fiscal Condition in Fiscal Year 2018	2
L	ong-Term Fiscal Projections Show the Federal Government Is on	
	an Unsustainable Fiscal Path	2
II.	mportance of Early Action: The 2018 Financial Report, CBO, and GAO state that the longer action is delayed, the greater the changes will have to be.	4
Ε	Debt Limit Is Not a Control on Debt	5
	Alternative Approach to Managing Debt Is Needed:	5
	Fiscal Risks Place Additional Pressure on the Federal Budget	6
E	Executive Agencies Have Opportunities to Contribute Toward	
	Fiscal Health	6
Letter		1
5	Significant Changes to the Government's Fiscal Condition in	
	Fiscal Year 2018	3
L	Long-Term Fiscal Projections Show the Federal Government Is on	
_	an Unsustainable Fiscal Path	11
	Fiscal Risks Place Additional Pressure on the Federal Budget	60
	Executive Agencies Have Opportunities to Contribute Toward Fiscal Health	69
	r iscar realtri	09
Appendix I: Objectives, Scope, and Mo	ethodology	83
Appendix II: GAO Contacts and Staff	Acknowledgments	85
Tables		
	Data table for Debt Held by the Public under Projections from the 2018 Financial Report, the Congressional Budget Office (CBO), and GAO	3
Т	Table 1: Receipts, Spending, and Deficit for Fiscal Years 2016–20183	J

Data for Figure 1: Fiscal Year 2018 Debt Held by the Public and	
Intragovernmental Debt (dollars in trillions)	8
Data table for Figure 2: Distribution of Ownership of Debt Held by	
the Public, 2001–2018	9
Data table for Figure 3: Federal Debt Held by the Public	15
Data for Figure 4: Debt Held by the Public under Projections from	
the 2018 Financial Report, the Congressional Budget	
Office (CBO), and GAO	23
Table 2: Projections for Major Categories of Spending	28
Data for Figure 5: Drivers of Long-Term Federal Spending	29
Data for Figure 6: Federal Spending on Major Health Care	
Programs Grows Faster Than GDP	32
Data for Figure 7: Daily Average Number of People Turning 65	36
Data for Figure 8: Net Interest Spending in Dollars and as a	
Percentage of Total Federal Spending	41
Data for Figure 9: Congressional Budget Office (CBO) Projections	
of the Average Interest Rate on All Federal Debt Held by	
the Public, Fiscal Years 2018-2048	44
Data for Figure 10: Maturity Dates of Marketable Debt Held by the	
Public at the End of Fiscal Year 2018	47
Data for Figure 11: Secondary Market Yields on Treasury Bills	
Maturing in Late October through Mid-November 2013	53
Table 3: Types of Fiscal Rules and Illustrative Examples	59
Data for Figure 12: Pension Benefit Guaranty Corporation's Net	
Financial Position of the Single-Employer and	
Multiemployer Programs Combined, Fiscal Years 1990	
through 2018	62
Data for Figure 13: Illustrative Examples of Immediate Response	
Spending	68
Data for Figure 14: Improper Payment Estimates Were	
Concentrated in Three Areas in Fiscal Year 2018	72
Data for Figure 15: IRS's Annual Average Tax Gap Estimate for	
Tax Years 2008–2010	74
Data for Figure 16: Estimated Average Annual Gross Tax Gap by	
Type of Noncompliance and Tax, Tax Years 2008-2010	75
Data for Figure 17: Tax Gap Comparison, Tax Year 2001 to Tax	
Years 2008-2010	77

Figures

Figure 1: Fiscal Year 2018 Debt Held by the Public and Intragovernmental Debt

	stribution of Ownership of Debt Held by the Public, 01–2018	9
	ederal Debt Held by the Public	15
Figure 4: De Fin	bebt Held by the Public under Projections from the 2018 pancial Report, the Congressional Budget Office BO), and GAO	23
•	ivers of Long-Term Federal Spending	29
Figure 6: Fe	ederal Spending on Major Health Care Programs ows Faster Than GDP	32
	ally Average Number of People Turning 65	35
Figure 8: Ne	et Interest Spending in Dollars and as a Percentage of tall Federal Spending	40
Figure 9: Co	ongressional Budget Office (CBO) Projections of the erage Interest Rate on All Federal Debt Held by the	
	blic, Fiscal Years 2018-2048	44
	Maturity Dates of Marketable Debt Held by the Public at End of Fiscal Year 2018	46
	Secondary Market Yields on Treasury Bills Maturing in the October through Mid-November 2013	53
Figure 12: P	Pension Benefit Guaranty Corporation's Net Financial sition of the Single-Employer and Multiemployer	
	ograms Combined, Fiscal Years 1990 through 2018	62
	lustrative Examples of Immediate Response Spending	68
	mproper Payment Estimates Were Concentrated in ree Areas in Fiscal Year 2018	72
Figure 15: If	RS's Annual Average Tax Gap Estimate for Tax Years	
	08–2010	74
No	Estimated Average Annual Gross Tax Gap by Type of ncompliance and Tax, Tax Years 2008-2010	75
	ax Gap Comparison, Tax Year 2001 to Tax Years 08-2010	77
Abbreviation 2018 Finance	ons cial Report Fiscal Year 2018 Financial Report of the Unit	ed
	States Government	
ACA	Patient Protection and Affordable Care Act	
СВО	Congressional Budget Office	
CMS	Centers for Medicare & Medicaid Services	
DI	Disability Insurance	
DOD	Department of Defense	
EU	European Union	
Fannie Mae	·	

FEMA Federal Emergency Management Agency

Federal Housing Administration FHA

Freddie Mac Federal Home Loan Mortgage Corporation

GDP gross domestic product

Ginnie Mae Government National Mortgage Association

GSE government-sponsored enterprise

HHS Department of Health and Human Services

IMF International Monetary Fund

IPIA Improper Payments Information Act of 2002

IRS Internal Revenue Service

MACRA Medicare Access and CHIP Reauthorization

Act of 2015

OASI Old-Age and Survivors Insurance OCO **Overseas Contingency Operations** OECD

Organization for Economic Co-operation

and Development

Office of Management and Budget OMB OPM Office of Personnel Management **PBGC** Pension Benefit Guaranty Corporation

SOSI Statement of Social Insurance SSA Social Security Administration Treasury Department of the Treasury

USPS U.S. Postal Service

VA Department of Veterans Affairs

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

April 10, 2019

The President
The President of the Senate
The Speaker of the House of Representatives

Congress and the administration face serious economic, security, and social challenges that require difficult policy choices in the near term in setting national priorities and charting a path forward for economic growth. This will influence the level and composition of federal spending and how the government obtains needed resources. These policymakers also face a federal government highly leveraged in debt by historical norms and on an unsustainable long-term fiscal path caused by an imbalance between revenue and spending that is built into current law and policy. Recent legislation intended to promote economic growth and address other national priorities, such as the Tax Cuts and Jobs Act, 1 the Bipartisan Budget Act of 2018,² and the Consolidated Appropriations Act, 2018³ have complicated the government's overall long-term fiscal outlook and debt burden. Thus, decisions in the near term to enhance economic growth and address national priorities need to be accompanied by a longterm fiscal plan to put the federal government on a sustainable long-term path. This is essential to ensure that the United States remains in a strong economic position to meet its security and social needs, as well as to preserve flexibility to address unforeseen events.

This annual report is intended to illuminate the need for a long-term fiscal plan by describing the fiscal condition of the U.S. government as of the end of fiscal year 2018, and its future fiscal path absent policy changes. We issued our last report on the nation's fiscal health in June 2018.⁴ This report provides an update on the government's fiscal health drawing from the *Fiscal Year 2018 Financial Report of the United States Government*

¹"To provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018," Pub. L. No. 115-97, 131 Stat. 2054, (Dec. 22, 2017).

²Pub. L. No. 115-123, Div. C, Title I, § 30101, 132 Stat. 64 (Feb. 9, 2018).

³Consolidated Appropriations Act, 2018, Pub. L. No. 115-141, 132 Stat. 348 (Mar. 23, 2018).

⁴GAO, The Nation's Fiscal Health: Action Is Needed to Address the Federal Government's Fiscal Future, GAO-18-299SP (Washington, D.C.: June 21, 2018).

(2018 Financial Report) and our audit of the government's consolidated financial statements for fiscal years 2018 and 2017.⁵

Every year, the Secretary of the Department of the Treasury (Treasury), in coordination with the Director of the Office of Management and Budget (OMB), prepares the U.S. government's financial statements, which, along with related information, are presented in the Financial Report of the United States Government (Financial Report). We are responsible for auditing these statements. The 2018 Financial Report contains information on the federal government's financial position and condition, including its costs and revenues. In this report, we discuss the federal government's fiscal condition and how it changed in fiscal year 2018, the federal government's unsustainable long-term outlook, risks to the government's fiscal condition, and opportunities to improve its fiscal health.

⁵GAO, Financial Audit: Fiscal Years 2018 and 2017 Consolidated Financial Statements of the U.S. Government, GAO-19-294R (Washington, D.C.: Mar. 28, 2019). The consolidated financial statements of the U.S. government are based on U.S. generally accepted accounting principles.

⁶As discussed in the *2018 Financial Report*, we were unable to provide an audit opinion on the federal government's fiscal year 2018 consolidated financial statements due to material weaknesses in internal control and uncertainties concerning the sustainability financial statements. However, with few exceptions, financial statements for the significant federal entities received unmodified or "clean" opinions. The significant entities that received a disclaimer of opinion on their fiscal year 2018 financial statements were the Department of Defense, the Department of Housing and Urban Development, and the Railroad Retirement Board.

⁷The 2018 Financial Report includes a statement of net costs, a statement of operations and changes in net position, reconciliations of operating results to the primarily cash-based budget deficit and changes in cash, a balance sheet (assets and liabilities), and sustainability financial statements, including long-term fiscal projections for the government as a whole and for social insurance programs (e.g., Social Security and Medicare). It also contains related unaudited financial information, such as information on the tax gap, improper payments, and tax expenditures. Also, most federal agencies prepare audited financial statements that provide more detailed information at the agency and program level.

⁸For the purposes of this report, fiscal condition is a broad concept using both budget and financial information. The term "fiscal" is part of fiscal policy, which refers to decisions on taxes and spending that affect the level, composition, and distribution of national income and output. The budget process is a major vehicle for determining and implementing fiscal policy.

⁹For more information on our objectives, scope, and methodology, see appendix I.

Significant Changes to the Government's Fiscal Condition in Fiscal Year 2018

Growth in Spending Outweighed Modest Revenue Growth

In fiscal year 2018, the reported federal budget deficit increased for the third consecutive year to \$779 billion. The fiscal year 2018 budget deficit was up from \$666 billion for fiscal year 2017 and \$587 billion for fiscal year 2016, as shown in table 1.

Table 1: Receipts, Spending, and Deficit for Fiscal Years 2016–2018

Dollars in billions

	Fiscal year 2016	Fiscal year 2017	Fiscal year 2018
Receipts	3,267	3,315	3,329
Spending	(3,854)	(3,981)	(4,108)
Deficit	(587)	(666)	(779)

Source: Financial Reports of the United States Government. | GAO-19-314SP

Receipts for fiscal year 2018 increased slightly by \$14 billion, 0.4 percent over fiscal year 2017. The 2018 Financial Report attributes this modest increase to higher net individual income tax receipts, excise taxes, social insurance and retirement receipts, and customs duties. The Congressional Budget Office (CBO) noted that total receipts in fiscal year 2018 were similar to those in fiscal year 2017 because of offsetting changes in different sources of revenues, caused in part by provisions of the Tax Cuts and Jobs Act.

Spending for fiscal year 2018 increased by \$127 billion, 3.2 percent over fiscal year 2017. According to the *2018 Financial Report*, this was driven by increases in defense, interest on debt held by the public, Social Security (the Old-Age and Survivors Insurance and Disability Insurance programs), Medicaid, disaster relief and flood insurance, refundable premium tax credits, and lower receipts from government-sponsored enterprises.¹⁰ According to CBO, spending for military activities of the

¹⁰The receipts from dividends of government-sponsored enterprises, such as the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) are recorded as an offset to spending.

Department of Defense (DOD) rose by 7 percent in fiscal year 2018, due in part to a legislative change in the statutory caps on appropriations set by the Budget Control Act of 2011, as amended. Medicaid outlays have risen by 47 percent in the past 5 years largely because new enrollees were added through expansions of coverage authorized by the Patient Protection and Affordable Care Act. In addition, Social Security spending grew because of increases both in the number of beneficiaries and in the average benefit payment. In fiscal year 2018, spending for the retirement portion of Social Security grew by 5.3 percent while the disability component grew by less than 1 percent.

In fiscal year 2018, Congress and the President enacted legislation that contributed to the growing debt and deficit. In its April 2018 budget and economic outlook report, CBO projected that legislation enacted from June 2017 through April 2018 increased the deficit by \$242 billion for fiscal year 2018 and by \$2.7 trillion over the next 10 years (2018–2027). These increases were primarily due to the Tax Cuts and Jobs Act, the Bipartisan Budget Act of 2018, and the Consolidated Appropriations Act, 2018. In its January 2019 budget and economic outlook report, CBO estimated that laws enacted from April 2018 to January 2019 would decrease deficits by \$774 billion over 10 years, almost entirely because of lower projections of emergency spending. However, even with these relatively lower projections, CBO still projects that the deficit will continue to grow in the coming years.

A more complete picture of the government's fiscal condition emerges looking at the Budget of the United States Government and the Financial Report together. The federal budget is the government's primary financial planning and control tool and is largely cash based, with the deficit or surplus being the difference between receipts (cash received by the U.S. government) and outlays (payments made by the U.S. government). The Financial Report provides the government's financial position and condition, including its revenues, costs, assets, and liabilities. Since the Financial Report is generally prepared on an accrual basis, it includes some items that are not in the budget. In the Financial Report, costs

¹¹In its January 2019 budget and economic outlook report, CBO reported that fiscal year 2019 appropriations designated as emergency requirements totaled \$2 billion as of January 2019, a substantial reduction from the \$108 billion appropriated for emergencies in fiscal year 2018. In accordance with the statutory rules that govern CBO's projections of discretionary spending, CBO's baseline assumes that in future years emergency spending will remain at its relatively low fiscal year 2019 level, adjusted for inflation. See CBO, *The Budget and Economic Outlook: 2019 to 2029* (Washington, D.C., Jan. 28, 2019).

include amounts incurred but not necessarily yet paid, and revenues include amounts the government has earned but not necessarily yet received.

Net Cost

Net cost shows how much it costs to operate the federal government. It equals the gross cost of goods produced and services rendered by the government minus earned revenues generated by those goods and services (e.g., Medicare premiums and national park entry fees), and is then adjusted for gains or losses from changes in actuarial assumptions used to estimate certain liabilities.

Net Operating Cost

Net operating cost is equal to net cost minus revenues such as taxes.

Source: GAO. | GAO-19-314SP

Net operating cost, which can be thought of as the Financial Report's counterpart to the budget deficit, remained at \$1.2 trillion in fiscal year 2018 because net cost and revenues increased by roughly the same amount. As discussed below, net cost increased by \$10.1 billion (0.2 percent) compared to fiscal year 2017. However, this was largely offset by a \$9.7 billion (0.3 percent) increase in tax and other revenues.

Net cost totaled \$4.5 trillion in fiscal year 2018. Similar to fiscal year 2017, 71 percent of the net cost of the federal government in fiscal year 2018 came from four agencies: the Department of Health and Human Services (HHS), the Social Security Administration (SSA), the Department of Veterans Affairs (VA), and DOD. Interest on Treasury securities held by the public represented an additional 8 percent of net costs in fiscal year 2018.

The \$10.1 billion total increase in net cost is the combined effect of many offsetting additions and subtractions across the government, including changes in program costs and actuarial assumptions. Additions to net cost during fiscal year 2018 included:

- The Department of Energy reported the largest increase in net cost among federal agencies—\$99.6 billion, primarily as a result of updated estimates of its environmental remediation costs, such as Waste Treatment and Immobilization Plant construction and operating costs.
- HHS and SSA net costs increased \$56.4 billion and \$39.5 billion, respectively, largely due to increases in benefit expenses from social insurance programs they administer.
- Interest costs related to debt held by the public totaled \$357 billion in fiscal year 2018 compared to \$296 billion in fiscal year 2017. Higher

¹²For fiscal year 2018, net operating cost (\$1.2 trillion) exceeded the budget deficit (\$779 billion) by \$380 billion, primarily due to accrued costs (costs incurred but not necessarily paid) related to increases in estimated federal employee and veteran benefits liabilities, and in certain other liabilities that are included in net operating cost, but not the budget deficit. Over the past several fiscal years, the net operating cost has been higher than the budget deficit.

inflation adjustments, increases in interest rates, and greater debt to be financed contributed to this \$61 billion increase.¹³

However, most of the additions were offset by changes in actuarial assumptions, which reduced net costs. Every year, agencies that administer benefit plans perform complex actuarial computations that consider the effects of changes in assumptions. A Net losses from changes in actuarial assumptions amounted to \$125.2 billion in fiscal year 2018, down from \$356.5 billion in fiscal year 2017. According to the 2018 Financial Report, these changes had the greatest effects on VA, the Office of Personnel Management (OPM), and DOD, all of which administer large benefit plans.

As discussed in the 2018 Financial Report, the federal government reported holding about \$3.8 trillion in assets at the end of fiscal year 2018, an increase from \$3.5 trillion at the end of fiscal year 2017. Most of this increase is attributable to an increase in cash and other monetary assets. The \$3.8 trillion in assets at the end of fiscal year 2018 consisted mostly of \$1.4 trillion in net loans receivable—primarily student loans—and about \$1.1 trillion in net property, plant, and equipment. The federal government also has resources beyond these assets including

- stewardship assets (such as national parks), which are discussed in the notes to the financial statements, are generally expected to be preserved indefinitely, and are measured in physical units with no financial value assigned to them;
- natural resources, including oil and gas reserves for which the value of future royalty receipts are reported in the unaudited required supplementary information section;
- the federal government's power to tax, which is not reflected in the financial statements as revenue until the federal government collects taxes or when it is agreed that taxes are owed; and
- the ability to set monetary policy, which includes actions undertaken
 by the Federal Reserve System that influence the availability and cost
 of money and credit as a means of helping to promote national
 economic goals.

¹³To account for inflation, Treasury adjusts the principal of its inflation-protected securities each day.

¹⁴These computations also consider the effects of the current year's actual experience.

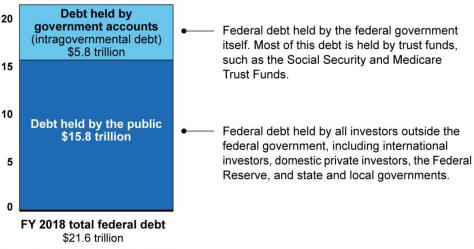
The 2018 Financial Report also reported total liabilities of \$25.4 trillion at the end of fiscal year 2018, an increase from \$23.9 trillion at the end of fiscal year 2017. Most of this increase is attributable to an increase of \$1.1 trillion in federal debt held by the public and accrued interest, and a \$0.3 trillion increase in federal employee and veteran benefits payable. The \$25.4 trillion in liabilities at the end of fiscal year 2018 consisted mostly of \$15.8 trillion in federal debt securities held by the public and accrued interest, and about \$8 trillion in federal employee and veteran benefits payable (about \$2.5 trillion in civilian and \$5.4 trillion in military and veterans).

Federal Debt Increased in Fiscal Year 2018

The total federal debt rose to \$21.6 trillion during fiscal year 2018, an increase of about \$1.2 trillion from fiscal year 2017. Both debt held by the public and debt held by government accounts (known as intragovernmental debt) increased (see figure 1). Cumulative debt held by the public increased from about \$14.7 trillion to \$15.8 trillion, and intragovernmental debt increased from about \$5.6 trillion to \$5.8 trillion.

Figure 1: Fiscal Year 2018 Debt Held by the Public and Intragovernmental Debt

Dollars (in trillions) **25**



Source: 2018 Financial Report. | GAO-19-314SP

Data for Figure 1: Fiscal Year 2018 Debt Held by the Public and Intragovernmental Debt (dollars in trillions)

Debt Held by government accounts (intragovernmental debt)	\$5.8 trillion
Debt held by the public	\$15.8 trillion

Source: 2018 Financial Report

Note: Other examples of intragovernmental debt include the Office of Personnel Management's Civil Service Retirement and Disability Fund and the Department of Defense's Military Retirement Fund and Medicare-Eligible Retiree Health Care Fund.

As a share of gross domestic product (GDP), debt held by the public increased from 76 percent at the end of fiscal year 2017 to 78 percent at the end of fiscal year 2018. Federal debt held by the public is the value of all federal securities sold to investors outside of the federal government. The dollar value of debt is difficult to interpret absent some sense of the size of the economy supporting it. Therefore, the ratio of debt to GDP is used throughout the world to gauge a country's ability to pay its debt.

The annual budget deficit—\$779 billion for fiscal year 2018—represents the amount by which the government's budget outlays exceed its budget receipts. The deficit is related to the annual net change in the amount of federal government borrowing from the public (or debt held by the public). However, the fiscal year 2018 increase in debt held by the public of \$1.1 trillion was higher than the reported fiscal year 2018 federal deficit of \$779 billion. This difference is primarily because of increases in the government's cash balance and in federal direct student loans.¹⁶

Over the longer term, debt held by the public is expected to grow as a share of GDP as a result of the structural imbalance between revenue and spending that is built into current law and policy. Debt held by the public is reported as a liability on the consolidated financial statements of the U.S. government. Intragovernmental debt is debt owed by Treasury to another part of the government. It is an asset to the federal government

¹⁵GDP is the value of all goods and services produced within the borders of a country in a given period. It is measured quarterly by the Bureau of Economic Analysis within the Department of Commerce.

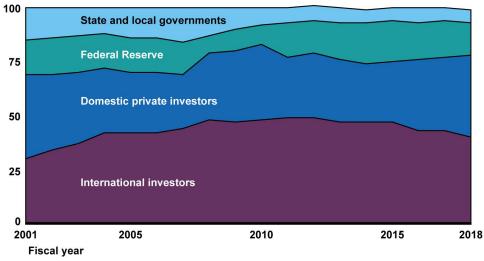
¹⁶When the federal government makes a direct loan, it disburses the full amount of the cash borrowed. Although the federal government may need to increase outstanding federal debt to finance this outlay, the Federal Credit Reform Act of 1990 (FCRA) stipulates that the budget records the estimated net subsidy cost to the federal government. See FCRA, classified, as amended, in part at 2 U.S.C. § 661c(d).

accounts but a liability to Treasury; they offset each other in the consolidated financial statements. However, when securities from intragovernmental debt are redeemed, the federal government will need to obtain the resources to reimburse the government accounts, which could lead to increased debt held by the public.

Debt held by the public is owed to a wide variety of investors. Figure 2 shows the distribution of the ownership of debt held by the public since 2001.¹⁷

Figure 2: Distribution of Ownership of Debt Held by the Public, 2001–2018

Percentage of total debt held by the public



Source: GAO analysis of Treasury and Federal Reserve data. | GAO-19-314SP

Data table for Figure 2: Distribution of Ownership of Debt Held by the Public, 2001–2018

	State and			
Fiscal	local	Federal	Domestic private	International
Year	governments	Reserve	investors	investors
2001	14.7	16.1	39.2	29.9

¹⁷For our analysis of trends in ownership of debt held by the public, we analyzed data from the Federal Reserve's *Financial Accounts of the United States*. Data from the Federal Reserve flow of funds report are indirectly based on data in the Treasury International Capital reporting system. Due to adjustments made before being published by the Bureau of Economic Analysis and Federal Reserve, these data will vary from the data as presented in the Treasury International Capital reporting system.

Fiscal Year	State and local governments	Federal Reserve	Domestic private investors	International investors
2002	14.0	17.1	35.2	33.7
2003	13.1	16.7	33.4	36.8
2004	12.4	16.3	29.7	41.7
2005	14.2	16.0	27.9	41.9
2006	14.3	15.9	28.0	41.8
2007	15.8	15.4	24.5	44.3
2008	12.9	8.2	30.6	48.2
2009	9.7	10.2	32.9	47.3
2010	8.1	9.0	35.0	47.9
2011	7.0	16.4	28.0	48.5
2012	6.9	14.6	29.9	48.6
2013	6.8	17.3	28.7	47.2
2014	6.5	19.2	26.9	47.4
2015	6.3	18.8	28.5	46.5
2016	6.6	17.4	32.6	43.4
2017	6.5	16.7	33.8	43.0
2018	6.4	15.0	38.3	40.3

Note: Ownership information is estimated primarily because securities are continually resold among investors. 2018 data are as of June 2018, the most recent data available at the time of this report.

Domestic investors—consisting of domestic private investors, the Federal Reserve, and state and local governments—accounted for about 60 percent of federal debt held by the public as of June 2018, while international investors accounted for the remaining 40 percent. International investors include both private investors and foreign official institutions, such as central banks and national government-owned investment funds. Central banks hold foreign currency reserves to maintain exchange rates or to facilitate trade. Therefore, demand for foreign currency reserves can affect overall demand for U.S. Treasury securities. An economy open to international investment, such as the United States, can essentially borrow the surplus of savings of other countries to finance more investment than U.S. national saving would permit. The flow of foreign capital into the United States has gone into a variety of assets, including Treasury securities, corporate securities, and direct investment.

Long-Term Fiscal Projections Show the Federal Government Is on an Unsustainable Fiscal Path

The accrual-based financial statements in the Financial Report of the United States Government provide certain information not included in the cash-based budget, but neither document alone provides a full picture of the government's long-term financial condition or fiscal outlook. International governmental accounting standards and other international organizations, such as International Monetary Fund (IMF) and Organization for Economic Co-Operation and Development (OECD), recommend sustainability reporting to assess the long-term sustainability of the government's fiscal policy. U.S. generally accepted accounting principles issued by the Federal Accounting Standards Advisory Board require that the Financial Report include such a report on the long-term sustainability of the federal government's fiscal policies and its major social insurance programs (e.g., Social Security and Medicare).

The Statements of Long-Term Fiscal Projections included in the *2018 Financial Report* show that, absent policy changes, the federal government continues to face an unsustainable long-term fiscal path.²¹ Over the long term, the imbalance between spending and revenue that is built into current law and policy is projected to lead to continued growth of

¹⁸See International Public Sector Accounting Standards Board, *Recommended Practice Guideline 1: Reporting on the Long-Term Sustainability of an Entity's Finances* (July 2013). The IMF includes fiscal sustainability reporting as one of the principles in its "Fiscal Transparency Code," an international standard for disclosure of information about public finances (http://www.imf.org/external/np/fad/trans/). Also, the OECD issues a report every 2 years on indicators that compare the political and institutional frameworks of government across OECD countries. OECD, *Government at a Glance 2017* (July 13, 2017).

¹⁹Federal Accounting Standards Advisory Board, *Statement of Federal Financial Accounting Standards 36: Comprehensive Long-Term Projections for the U.S. Government*, as amended (Sept. 28, 2009).

²⁰The Statement of Long-Term Fiscal Projections presents, for all the activities of the federal government, the present value of projected receipts and noninterest spending under current policy without change, the relationship of these amounts to projected GDP, and changes in the present value of projected receipts and noninterest spending from the prior year.

²¹The sustainability statements in the *2018 Financial Report* include the Statements of Long-Term Fiscal Projections and related information in Note 23 and in the unaudited Required Supplementary Information section of the report.

the deficit and debt held by the public as a share of GDP. This situation—in which debt grows faster than GDP—means the current federal fiscal path is unsustainable.

In the 2018 Financial Report, the projected deficit and debt in the long-term fiscal projections increased compared to the long-term fiscal projections in the 2017 Financial Report. These changes resulted primarily from (1) lower projected corporate receipts and lower projected individual income tax receipts resulting from the Tax Cuts and Jobs Act, and (2) a change in assumptions relating to discretionary spending caps. Prior to the 2018 Financial Report, these projections assumed that the discretionary spending caps established in the Budget Control Act of 2011, as amended, would be followed through 2021. However, since these caps have been raised repeatedly, the 2018 Financial Report now assumes that discretionary spending will grow at the same rate as nominal GDP beginning after 2019, beyond the current law spending limits.

Under the *2018 Financial Report* projections, spending for the major health and retirement programs will increase more rapidly than GDP in coming decades, in part because of an aging population and projected continued increases in health care costs per beneficiary. The projections assume that the provisions enacted in the Patient Protection and Affordable Care Act (ACA) designed to slow the growth of Medicare costs are sustained and remain effective throughout the projection period.²² They also reflect the effects of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), which, among other things, revised the methodology for determining physician payment rates.²³ The key assumptions, including those underlying the Social Security and Medicare projections, are summarized in the *2018 Financial Report*.

However, the 2018 Financial Report notes it is uncertain that the government will achieve the scheduled reductions in annual Medicare payment rate growth for most categories of Medicare providers under the ACA's productivity adjustment provision, and for the specified physician payment rate updates under MACRA. The Trustees of the Medicare trust funds, the Centers for Medicare & Medicaid Services (CMS) Chief

²²ACA, Pub. L. No. 111-148, 124 Stat. 119 (Mar. 23, 2010), as amended by the Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111-152, 124 Stat. 1029 (Mar. 30, 2010).

²³MACRA, Pub. L. No. 114-10, title I, § 101, 129 Stat. 87, 89 (Apr. 16, 2015).

Actuary, CBO, and others have all expressed concerns that the Medicare cost containment measures and the physician payment rate methodology in current law may not be sustained over the long term. If those provisions are not sustained, spending on federal health care programs will grow more rapidly than assumed in the projections. The extent to which actual future costs exceed the current law amounts due to such changes depends both on the specific changes that might be enacted and on whether such legislation would include further provisions to help offset such costs.²⁴

Both CBO and GAO also prepare long-term federal fiscal simulations which continue to show debt held by the public rising as a share of GDP over the long term.²⁵ CBO and GAO make the following assumptions for Medicare:

 Similar to the 2018 Financial Report projections, CBO's and GAO's baseline projections are based on achievement of the Medicare cost growth reductions expected under the ACA and MACRA provisions, which are subject to the uncertainties discussed above.

²⁴The 2018 Financial Report also includes an illustrative Medicare Trust Fund projection using alternative assumptions intended to provide context regarding the long-term sustainability of the Medicare program, and to illustrate the uncertainties in the 2018 Financial Report. As discussed in the 2018 Financial Report, the 75-year present value of future expenditures in excess of future revenue in the illustrative Medicare Trust Fund projection exceeds the \$37.6 trillion estimate in the 2018 Statement of Social Insurance (SOSI) within the 2018 Financial Report by \$9.8 trillion. The significant uncertainties about projected reductions in health care cost growth also affect the projected Medicare costs reported in the Statement of Long-Term Fiscal Projections (the Statement of Long-Term Fiscal Projections is consistent with the projections for Social Security and Medicare presented in the SOSI, and is based on the same economic and demographic assumptions that underlie the SOSI). As a result of these significant uncertainties and a material weakness in internal control, we were unable to provide an opinion on the sustainability statements in the 2018 Financial Report.

²⁵GAO prepares both a baseline extended and an alternative simulation of the next 75 years. The *2018 Financial Report's* projections go out 75 years. In its June 2018 long-term budget outlook report, CBO discussed the impact of different assumptions on its long-term extended baseline projection over the next 30 years. In August 2018, CBO also published alternative fiscal scenarios for the next 20 years using different assumptions from its June 2018 extended baseline projection. CBO's alternative fiscal scenarios do not fully account for all the long-term economic effects of CBO's alternative assumptions. GAO, *America's Fiscal Future: Projecting the Future of the Federal Debt*, accessed March 22, 2019, https://www.gao.gov/americas_fiscal_future?t=fiscal_forecast. CBO, *The 2018 Long-Term Budget Outlook* (June 26, 2018). CBO, *The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy* (Aug. 8, 2018).

Letter

 GAO's alternative simulation incorporates the CMS Actuary's 2018 illustrative alternative assumptions for Medicare, which assume certain cost controls under the ACA and MACRA are not maintained over the long term.

In addition to the differences discussed earlier, the projections from the 2018 Financial Report, CBO, and GAO differ in their assumptions about federal tax revenues.

- CBO's and GAO's baseline projections assume that current tax provisions will generally remain unchanged and that expiring tax provisions will expire as scheduled.
- GAO's alternative simulation generally assumes that current tax provisions will be changed so that expiring provisions will not expire as scheduled, including the individual income tax provisions of the Tax Cuts and Jobs Act.
- The 2018 Financial Report assumes that the expiring individual income and estate and gift tax provisions of the Tax Cuts and Jobs Act will be extended and will not expire as scheduled. Prior Financial Reports assumed that tax provisions would expire as scheduled.

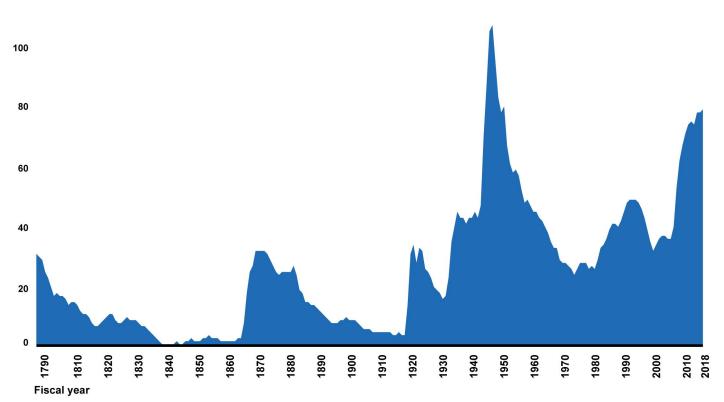
Overall, the 2018 Financial Report, CBO, and GAO each use somewhat different assumptions in their long-term fiscal projections, but their overall conclusions are the same: absent policy changes, the federal government's fiscal path is unsustainable.

The 2018 Financial Report notes that for most of the nation's history the debt-to-GDP ratio tended to increase during wartime and decline during peacetime. Historically, recessions have contributed to increases in this ratio, but the ratio has declined with economic recovery. This pattern is visible in figure 3. Publicly held debt as a share of GDP peaked at 106 percent just after World War II (in 1946) but then fell rapidly. However, as the 2018 Financial Report notes, it grew rapidly as a share of GDP from the mid-1970s until the early 1990s. In the 1990s, strong economic growth and a number of fiscal decisions, including implementation of "Pay-As-You-Go" rules, generated a significant decline in this ratio to 31 percent in 2001.

Figure 3: Federal Debt Held by the Public

Percentage of gross domestic product

120



Source: GAO analysis of Congressional Budget Office data. | GAO-19-314SP

Data table for Figure 3: Federal Debt Held by the Public

Year	Percent
1790	30
1791	29
1792	28
1793	24
1794	22
1795	19
1796	16
1797	17
1798	16
1799	16

Year	Percent
1800	15
1801	13
1802	14
1803	14
1804	13
1805	11
1806	10
1807	10
1808	9
1809	7
1810	6
1811	6
1812	7
1813	8
1814	9
1815	10
1816	10
1817	8
1818	7
1819	7
1820	8
1821	9
1822	8
1823	8
1824	8
1825	7
1826	6
1827	6
1828	5
1829	4
1830	3
1831	2
1832	1
1833	0
1834	0
1835	0
1836	0
1837	0
1838	1
1839	0

Year	Percent
1840	0
1841	1
1842	1
1843	2
1844	1
1845	1
1846	1
1847	2
1848	2
1849	3
1850	2 2 2
1851	2
1852	2
1853	1
1854	1
1855	1
1856	1
1857	1
1858	1
1859	2
1860	2 7
1861	7
1862	17
1863	24
1864	26
1865	31
1866	31
1867	31
1868	31
1869	30
1870	28
1871	26
1872	24
1873	23
1874	24
1875	24
1876	24
1877	24
1878	26
1879	23

Year	Percent
1880	18
1881	17
1882	14
1883	14
1884	13
1885	13
1886	12
1887	11
1888	10
1889	9
1890	8
1891	7
1892	7
1893	7
1894	8
1895	8
1896	9
1897	8
1898	8
1899	8
1900	7
1901	6
1902	5
1903	5
1904	5
1905	4
1906	4
1907	4
1908	4
1909	4
1910	4
1911	4
1912	3
1913	3
1914	3 4 3
1915	3
1916	3
1917	13
1918	30
1919	33

Year	Percent
1920	27
1921	32
1922	31
1923	25
1924	24
1925	22
1926	19
1927	18
1928	17
1929	15
1930	16
1931	22
1932	34
1933	39
1934	44
1935	42
1936	42
1937	40
1938	42
1939	42
1940	44
1941	42
1942	46
1943	69
1944	86
1945	104
1946	106
1947	94
1948	82
1949	77
1950	79
1951	66
1952	60
1953	57
1954	58
1955	56
1956	51
1957	47
1958	48
1959	46

1960 44 1961 44 1962 42 1963 41 1964 39 1965 37 1966 34 1967 32 1968 32 1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25 1982 28	Year	Percent
1962 42 1963 41 1964 39 1965 37 1966 34 1967 32 1968 32 1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1960	44
1963 41 1964 39 1965 37 1966 34 1967 32 1968 32 1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1961	44
1964 39 1965 37 1966 34 1967 32 1968 32 1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1962	42
1964 39 1965 37 1966 34 1967 32 1968 32 1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1963	41
1966 34 1967 32 1968 32 1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1964	
1967 32 1968 32 1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1965	37
1967 32 1968 32 1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1966	34
1968 32 1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1978 27 1979 25 1980 26 1981 25	1967	
1969 28 1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1978 27 1979 25 1980 26 1981 25	1968	
1970 27 1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1969	
1971 27 1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1970	
1972 26 1973 25 1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1971	
1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1972	
1974 23 1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1973	25
1975 25 1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1974	
1976 27 1977 27 1978 27 1979 25 1980 26 1981 25	1975	
1978 27 1979 25 1980 26 1981 25	1976	
1978 27 1979 25 1980 26 1981 25	1977	27
1979 25 1980 26 1981 25	1978	27
1980 26 1981 25	1979	
	1981	25
	1982	28
1983 32	1983	
1984 33	1984	
1985 35	1985	35
1986 38	1986	38
1987 40	1987	40
1988 40	1988	40
1989 39	1989	39
1990 41	1990	41
1991 44	1991	44
1992 47	1992	47
1993 48	1993	48
1994 48	1994	48
1995 48	1995	48
1996 47	1996	47
1997 45	1997	45
1998 42	1998	42
1999 38	1999	38

V	D 1
Year	Percent
2000	34
2001	31
2002	33
2003	35
2004	36
2005	36
2006	35
2007	35
2008	39
2009	52
2010	61
2011	66
2012	70
2013	73
2014	74
2015	73
2016	77
2017	77
2018	78

Since then, as figure 3 shows, U.S. debt held by the public has grown considerably as a percentage of GDP. The *2018 Financial Report* states that during the first decade of the 21st century, Pay-As-You-Go rules were allowed to lapse, significant tax cuts were enacted, entitlements were expanded, and spending related to defense and homeland security increased. In September 2008, the debt-to-GDP ratio was 39 percent of GDP. Pay-As-You-Go rules were reinstated in 2010, but the extraordinary demands of the last economic crisis and the consequent actions taken by the federal government combined with slower economic growth in the wake of the crisis pushed the debt-to-GDP ratio up to 74 percent by the end of 2014. By the end of fiscal year 2018, the debt had climbed to 78 percent of GDP. By comparison, debt has averaged 46 percent of GDP since 1946.

Figure 4 shows that debt held by the public as a share of GDP grows substantially in all the projections and simulations we discuss in this report. Debt held by the public is projected to surpass its historical high of 106 percent of GDP by

- 2031 in the 2018 Financial Report projections,
- 2032 under GAO's alternative simulation,

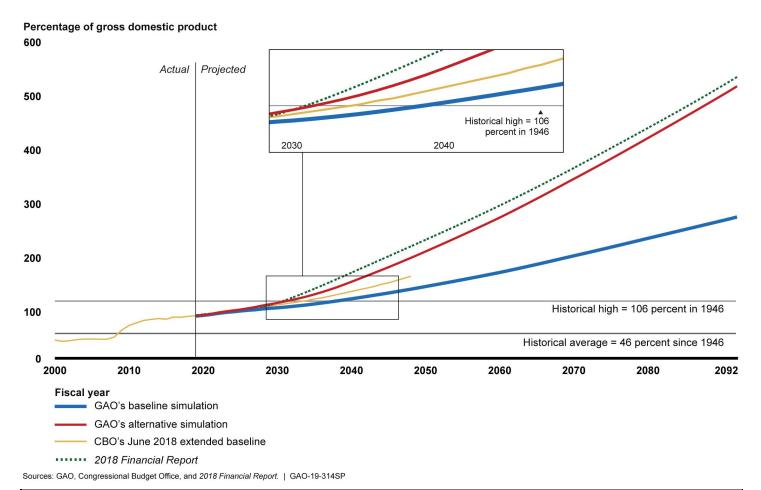
Letter

- 2034 under CBO's June 2018 long-term extended baseline projection,²⁶ and
- 2038 under GAO's baseline simulation.

The timing and pace of debt-to-GDP growth depend on the underlying assumptions made in the projections and simulations. All of them, however, show that, absent a change in policy, debt would grow to be greater than the size of the U.S. economy. The debt-to-GDP ratio would surpass its historical high of 106 percent within 13 to 20 years, and would continue to grow after that point.

²⁶At the time of this report, CBO's most recent extended baseline projections were those published in June 2018. CBO's January 2019 baseline projected lower levels of debt compared to the June 2018 extended baseline. In August 2018, CBO published alternative fiscal scenarios for the next 20 years that modify the assumptions in CBO's June 2018 extended baseline projections. Unlike its long-term extended baseline projection, these scenarios assume that current law will be changed to continue certain policies that are now in place. These alternative scenarios project debt as a share of GDP would surpass 106 percent in either 2028 or 2029. For example, the first alternative scenario assumes that provisions of the Tax Cuts and Jobs Act that are scheduled to expire in 2026 are extended. The second scenario is similar to the first, but it assumes tax policy changes that cause revenues to remain flat as a percentage of GDP beginning after 2028. The third scenario assumes that revenues remain flat as a percentage of GDP beginning after 2018. CBO's alternative fiscal scenarios are simplified analyses of the effects of those modified assumptions. They do not fully account for all the long-term economic effects of those changes. CBO, The Long-Term Budget Outlook Under Alternative Scenarios for Fiscal Policy (Aug. 8, 2018).

Figure 4: Debt Held by the Public under Projections from the 2018 Financial Report, the Congressional Budget Office (CBO), and GAO



Data for Figure 4: Debt Held by the Public under Projections from the 2018 Financial Report, the Congressional Budget Office (CBO), and GAO

Fiscal year	GAO's baseline simulation	GAO's alternative simulation	CBO's June 2018 extended baseline	2018 Financial Report
2000			33.702	
2001			31.536	
2002			32.68	
2003			34.682	
2004			35.72	
2005			35.781	
2006			35.407	

Fiscal year	GAO's baseline simulation	GAO's alternative simulation	CBO's June 2018 extended baseline	2018 Financial Report
2007			35.233	
2008			39.361	
2009			52.278	
2010			60.779	
2011			65.752	
2012			70.259	
2013			72.169	
2014			73.732	
2015			72.507	
2016			76.371	
2017			76.096	
2018			77.836	
2019	78.283	78.689	79	79.995
2020	79.574	80.274	81	81.495
2021	81.197	82.219	83	82.927
2022	83.25	84.625	86	84.460
2023	85.018	86.809	88	85.808
2024	86.232	88.469	90	86.940
2025	87.678	90.438	91	88.481
2026	89.003	92.595	93	90.362
2027	90.007	95.005	94	92.544
2028	91.547	97.884	96	95.408
2029	92.688	100.327	97	98.844
2030	93.642	102.649	99	102.811
2031	94.828	105.368	101	107.325
2032	96.152	108.28	103	112.395
2033	97.575	111.378	105	117.747
2034	99.079	114.763	107	123.276
2035	100.755	118.538	110	128.942
2036	102.517	122.614	112	134.743
2037	104.358	126.98	115	140.653
2038	106.247	131.613	118	146.636
2039	108.275	136.626	121	152.661
2040	110.347	141.893	124	158.743
2041	112.435	147.19	127	164.854
2042	114.534	152.519	130	170.941

Fiscal year	GAO's baseline simulation	GAO's alternative simulation	CBO's June 2018 extended baseline	2018 Financial Report
2043	116.743	158.026	133	177.020
2044	118.87	163.436	137	183.098
2045	121.085	168.94	140	189.188
2046	123.407	174.61	144	195.299
2047	125.783	180.389	148	201.414
2048	128.137	186.157	152	207.510
2049	130.587	192.084		213.627
2050	133.087	198.1		219.766
2051	135.595	204.158		225.905
2052	138.117	210.249		232.064
2053	140.647	216.385		238.258
2054	143.196	222.575		244.501
2055	145.78	228.813		250.806
2056	148.396	235.111		257.161
2057	151.043	241.472		263.575
2058	153.721	247.889		270.063
2059	156.427	254.375		276.612
2060	159.163	260.924		283.223
2061	162.052	267.733		289.905
2062	165.021	274.682		296.654
2063	168.024	281.69		303.469
2064	171.065	288.776		310.351
2065	174.146	295.932		317.297
2066	177.268	303.175		324.308
2067	180.435	310.497		331.379
2068	183.639	317.891		338.504
2069	186.88	325.365		345.690
2070	190.024	332.683		352.934
2071	193.157	339.992		360.220
2072	196.319	347.367		367.537
2073	199.52	354.809		374.887
2074	202.75	362.318		382.271
2075	206.01	369.889		389.688
2076	209.284	377.514		397.137
2077	212.575	385.194		404.607
2078	215.869	392.907		412.097

Fiscal year	GAO's baseline simulation	GAO's alternative simulation	CBO's June 2018 extended baseline	2018 Financial Report
2079	219.165	400.657		419.609
2080	222.455	408.435		427.144
2081	225.751	416.242		434.704
2082	229.036	424.076		442.297
2083	232.312	431.932		449.929
2084	235.581	439.806		457.606
2085	238.841	447.707		465.340
2086	242.101	455.641		473.141
2087	245.36	463.604		481.004
2088	248.619	471.598		488.944
2089	251.89	479.636		496.966
2090	255.17	487.714		505.069
2091	258.47	495.841		513.264
2092	261.971	504.382		521.553

Note: GAO's baseline simulation and CBO's June 2018 long-term extended baseline projection begin by using CBO estimates and generally assume current law continues into the future. GAO's baseline simulation assumes that revenue remains a constant share of gross domestic product (GDP). The 2018 Financial Report projections assume that the provisions of the Tax Cuts and Jobs Act are extended and that individual income taxes increase gradually as real taxable incomes rise over time, and an increasing share of total income is taxed at higher tax brackets. GAO's alternative simulation generally reflects historical trends, such as the extension of tax provisions scheduled to expire. It incorporates the Centers for Medicare and Medicaid Services Office of the Actuary's 2018 illustrative alternative assumptions for health care cost growth, which assume cost controls under current law are not maintained over the long term and projected health care costs substantially increase. Each simulation has its own GDP projections which affect the projected debt-to-GDP ratios.

Both the current fiscal condition and the long-term projections of fiscal sustainability are driven by the economy and by laws enacted by Congress and the President. In fiscal year 2018, for example, the Tax Cuts and Jobs Act, the Bipartisan Budget Act of 2018, and the Consolidated Appropriations Act, 2018 increased the projected debt-to-GDP ratio in CBO's, GAO's, and the *2018 Financial Report's* projections. CBO estimated that laws enacted from June 2017 to April 2018—primarily these three laws—would increase deficits by \$2.7 trillion between 2018 and 2027.²⁷ According to CBO, federal deficits are

²⁷CBO's April 2018 projections also estimated that this cumulative deficit increase is offset in part by the effects of revisions to its economic forecast, which led to \$1 trillion in reductions to projected deficits. This reduction is almost entirely because of increased projections of revenues, about half of which is attributable to the macroeconomic feedback related to the Tax Cuts and Jobs Act.

projected to reach \$1 trillion in 2022 and average \$1.2 trillion per year from 2020 to 2029.

Future policy decisions about levels of federal spending, revenues, the federal role in the delivery of health care, and other areas could also change the projections going forward. In addition, all projections involve some degree of uncertainty. Changes in projected health care costs, interest rates, spending levels, revenues, or economic growth would likely affect the debt-to-GDP ratio.²⁸ For example, the *2018 Financial Report*, CBO, and GAO projections generally assume that GDP grows at a steady rate. However, a recession or other economic crisis would likely increase the debt-to-GDP ratio beyond its projected levels because of a decline in GDP growth. The projections also do not fully account for fiscal risks discussed later in this report, such as disaster response spending.

These projections of increasing debt run counter to a global trend reported by the IMF. In April 2018, the IMF reported that overall deficits as a percentage of GDP among countries with advanced economies have been falling since 2012. The IMF also predicted in that report that most countries with advanced economies would reduce their debt-to-GDP ratios over the next 5 years.²⁹

State and local governments face many of the same long-term fiscal pressures—such as rising health care costs—as the federal government. GAO's most recent simulations suggest that the state and local government sector could continue to face a gap between revenue and spending over the next 50 years. Because most state and local governments are required to balance their operating budgets, the fiscal conditions indicated by GAO's simulations continue to suggest that the sector would need to make policy changes to avoid fiscal imbalances

²⁸To illustrate this uncertainty, GAO produces sensitivity analyses that show the effects on its simulations if selected variables are higher or lower than projected. See https://www.gao.gov/americas_fiscal_future?t=fiscal_forecast&s=what_if&layout=iframe&zaccessed on March 22, 2019.

²⁹International Monetary Fund, *Fiscal Monitor: Capitalizing on Good Times* (Washington, D.C.: April 2018).

before then.³⁰ Most likely, these changes would involve some combination of reduced spending and increased revenue.

Health Care Spending and Net Interest Remain Key Drivers of Long-Term Federal Spending

The 2018 Financial Report's long-term fiscal projections, CBO's long-term projections, and GAO's long-term simulations all project that revenue will increase slightly as a share of GDP in the coming years, but that spending will increase more rapidly than revenue. Major categories of spending are projected to each exceed \$1 trillion annually in the coming years, as shown in table 2. According to CBO, spending on defense will come close, but will not quite exceed \$1 trillion within the next 10 years.

Table 2: Projections for Major Categories of Spending Fiscal year Spending projection		
2019	Social Security spending exceeds \$1 trillion annually	
2026	Medicare and Medicaid ^a spending each exceed \$1 trillion annually	
2029	Defense annual spending reaches \$771 billion ^b Net interest spending exceeds \$1 trillion annually	
2030		

Source: GAO's alternative simulation, CBO, and Centers for Medicare & Medicaid Services. | GAO-19-314SP

In the long term, spending is being driven by federal health care programs and interest on debt held by the public (net interest) (see figure 5).³¹

^aMedicaid spending includes both state and federal spending.

^bIn its January 2019 budget and economic outlook, CBO projects spending on defense from 2019 to 2029. CBO did not report defense spending projections separately from total discretionary spending in its long-term projections after 2029.

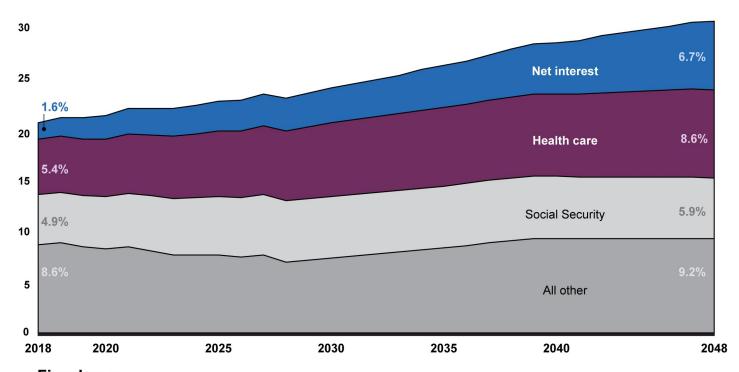
³⁰GAO's simulations assume that the current set of policies in place across state and local governments and the provision of real government services per capita remain relatively constant. GAO, *State and Local Governments' Fiscal Outlook: 2018 Update*, GAO-19-208SP (Washington, D.C.: Dec. 13, 2018).

³¹Net interest is primarily interest paid on debt held by the public. It is part of current outlays (spending) by the government (and appears as an outlay in the budget). Interest paid represents the cost of servicing the debt held by the public.

Figure 5: Drivers of Long-Term Federal Spending

Percentage of gross domestic product

35



Fiscal year

Source: GAO. | GAO-19-314SP

Fiscal Year	Net Interest	Health Care	Social Security	All other spending
2018	1.6	5.4	4.9	8.6
2019	1.8	5.5	4.9	8.8
2020	2.1	5.5	5.0	8.4
2021	2.3	5.6	5.1	8.2
2022	2.5	5.8	5.2	8.4
2023	2.6	5.9	5.4	8.0
2024	2.7	6.1	5.5	7.6
2025	2.8	6.2	5.6	7.6
2026	2.9	6.4	5.7	7.6

Fiscal Year	Net Interest	Health Care	Social Security	All other spending
2027	3.0	6.5	5.8	7.4
2028	3.1	6.7	5.9	7.6
2029	3.2	6.8	6.0	6.9
2030	3.3	7.0	6.0	7.1
2031	3.4	7.2	6.0	7.3
2032	3.5	7.3	6.0	7.5
2033	3.6	7.4	6.0	7.7
2034	3.7	7.5	6.0	7.9
2035	4.0	7.6	6.0	8.1
2036	4.1	7.7	6.0	8.3
2037	4.2	7.7	6.1	8.5
2038	4.4	7.8	6.1	8.8
2039	4.7	7.9	6.1	9.0
2040	4.9	8.0	6.1	9.2
2041	5.0	8.0	6.1	9.2
2042	5.2	8.1	6.0	9.2
2043	5.6	8.2	6.0	9.2
2044	5.8	8.3	6.0	9.2
2045	6.0	8.4	6.0	9.2
2046	6.2	8.5	6.0	9.2
2047	6.5	8.6	6.0	9.2
2048	6.7	8.6	5.9	9.2

Note: Data based on GAO's 2019 alternative simulations. GAO's simulation holds discretionary spending and other mandatory spending constant as a share of gross domestic product in the long term. Health care spending on major health care programs consists of Medicare, Medicaid, the Children's Health Insurance Program, and federal subsidies for health insurance purchased through the marketplaces established by the Patient Protection and Affordable Care Act (ACA) and related spending.

GAO's simulations show that these drivers will continue to increase in the coming years. In GAO's alternative simulation, federal spending on major health care programs is projected to increase to \$3.2 trillion in fiscal year 2048 (in 2018 dollars), compared to \$1.1 trillion in fiscal year 2018. In addition, GAO's alternative simulation projects that net interest spending will increase to \$2.5 trillion in fiscal year 2048 (in 2018 dollars), compared

to \$325 billion in fiscal year 2018. Similarly, CBO's January 2019 budget and economic outlook report projects that increased spending for Medicare, Social Security, and net interest will account for about three-quarters of the estimated \$2.6 trillion increase in total federal spending over the next 10 years.

Health Care Spending Continues to Grow Faster Than the Economy

Although growth in health care spending has slowed recently, total health care spending (public and private) in the United States continues to grow faster than the economy. Federal spending for major health care programs accounts for more than a quarter of total health care spending. As figure 6 shows, this spending has exceeded the growth of GDP historically and is projected to continue to do so. Federal health care programs include Medicare, Medicaid, and the Children's Health Insurance Program, along with federal subsidies for health insurance purchased through the marketplaces established by the ACA and related spending.

³²As previously mentioned, according to the *2018 Financial Report*, interest costs related to debt held by the public totaled \$357 billion in fiscal year 2018. The \$325 billion in net interest spending for fiscal year 2018 represents the net of \$357 billion in interest costs related to debt held by the public, interest income from financing accounts for federal credit programs, and net costs for other items such as other interest costs and certain investment income.

Figure 6: Federal Spending on Major Health Care Programs Grows Faster Than GDP

Cumulative real growth since 2000 (percentage)
700

Actual Projected

Cumulative growth in major federal health programs

600

400

200

Cumulative growth in gross domestic product

Source: GAO analysis of Congressional Budget Office and Bureau of Economic Analysis data. | GAO-19-314SP

Fiscal year

Data for Figure 6: Federal Spending on Major Health Care Programs Grows Faster Than GDP

Fiscal Year	Cumulative growth in major federal health programs	Cumulative growth in gross domestic product
2000	0.0	0.0
2001	8.2	1.7
2002	16.3	3.0
2003	25.7	5.3
2004	30.8	9.6
2005	35.2	13.3
2006	42.8	16.5
2007	53.2	18.7
2008	54.6	19.8
2009	75.4	15.7

Fiscal Year	Cumulative growth in major federal health programs	Cumulative growth in gross domestic product
2010	86.1	17.8
2011	89.6	19.9
2012	78.2	22.8
2013	88.6	24.4
2014	97.5	27.6
2015	120.5	31.4
2016	136.8	33.5
2017	137.3	36.2
2018	136.7	41.1
2019	143.8	45.3
2020	153.3	48.2
2021	166.8	50.4
2022	185.4	52.5
2023	194.7	54.9
2024	194.7	57.5
2025	215.5	60.3
2026	231.2	63.0
2027	242.3	65.8
2028	264.7	68.7
2029	271.1	71.7
2030	284.7	75.4
2031	310.3	79.2
2032	325.0	83.0
2033	340.1	86.9
2034	361.8	90.9
2035	378.0	95.0
2036	401.1	99.1
2037	418.4	103.4
2038	436.2	107.8
2039	461.3	112.2
2040	480.3	116.7
2041	507.0	121.4
2042	520.0	126.1
2043	548.2	131.0
2044	570.1	136.1
2045	592.9	141.4

Fiscal Year	Cumulative growth in major federal health programs	Cumulative growth in gross domestic product
2046	615.9	146.6
2047	639.8	152.0
2048	664.7	157.7

Note: Cumulative growth in both gross domestic product (GDP) and federal spending on major health care programs has been adjusted for inflation. GDP is the value of all goods and services produced in a country in a given year. Major federal health care programs consist of Medicare, Medicaid, the Children's Health Insurance Program, and federal subsidies for health insurance purchased through the marketplaces established by the Patient Protection and Affordable Care Act (ACA) and related spending.

CBO notes that growth in Medicare and Medicaid spending were key contributors to the increase in federal spending in 2018. According to CBO, in fiscal year 2018, total outlays net of offsetting receipts were \$605 billion for Medicare and \$389 billion for Medicaid. CBO reported that total net outlays increased by 2.7 percent for Medicare and 3.9 percent for Medicaid between fiscal years 2017 and 2018. CBO also reported that Medicaid spending increased 47 percent from fiscal years 2014 to 2018, largely because 36 states and the District of Columbia expanded eligibility for their Medicaid programs under the ACA.³³ Federal spending also increased by \$7 billion (or 17 percent) between fiscal years 2017 and 2018 for subsidies for health insurance purchased through the exchanges under the provisions of the ACA.

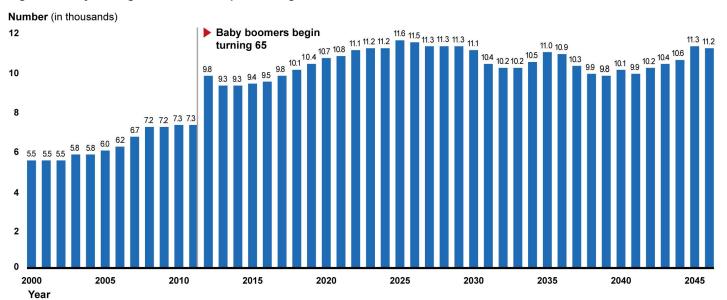
In the long term, growth in federal spending on health care is driven by increasing enrollment, particularly in Medicare, stemming primarily from the aging population, and by the increase in health care spending per beneficiary.

Aging population. In its 2018 long-term budget outlook report, CBO projected that, by 2048, 22 percent of the population will be age 65 or older, compared to 16 percent in 2018. This demographic trend is largely driven by lower fertility rates and increases in life expectancy,

³³According to the 2016 National Health Interview Survey, an estimated 5.6 million uninsured, low-income adults had incomes at or below the income threshold for expanded Medicaid eligibility as allowed under the ACA, and an estimated 3.7 million of these adults lived in states that did not expand eligibility for their Medicaid programs. The survey estimates also indicated that low-income adults in expansion states were less likely to report having any unmet medical needs or financial barriers to medical care compared with those in nonexpansion states. See GAO, *Medicaid: Access to Health Care for Low-Income Adults in States with and without Expanded Eligibility*, GAO-18-607 (Washington, D.C.: Sept. 13, 2018).

and has been accelerated by the relatively large baby boom generation, which began turning 65 in 2011 and will continue to turn 65 over the next decade (see figure 7). As the number of people older than 65 increases, Medicare enrollment is expected to increase over the next decade. In June 2018, the Medicare Trustees reported that Medicare had more than 58 million beneficiaries in 2017 and estimated that there would be 75 million beneficiaries in 2027. Medicaid will also be affected by the aging population since Medicaid is the primary government payer for long-term services and support provided to individuals who have limited abilities to perform routine daily activities. The CMS Office of the Actuary estimated that in fiscal year 2016, about 8 percent of the Medicaid population was age 65 or older; the average annual rate of enrollment growth for aged adults is projected to be 2.9 percent through 2026.

Figure 7: Daily Average Number of People Turning 65



Source: GAO analysis of U.S. Census Bureau information. | GAO-19-314SP

Note: Census data estimates of population are as of July 1 in each year.

³⁴In addition to most individuals 65 years of age and older, Medicare beneficiaries also include individuals under age 65 who are receiving benefits from Social Security or the Railroad Retirement Board on the basis of a disability, and those having end stage renal disease.

³⁵Fiscal year 2016 is the most recent year for which these data are available.

Data for Figure 7: Daily Average Number of People Turning 65

	Avg. # turning 65
Year	each day (in 1000s)
2000	5.5
2001	5.5
2002	5.5
2003	5.8
2004	5.8
2005	6.0
2006	6.2
2007	6.7
2008	7.2
2009	7.2
2010	7.3
2011	7.3
2012	9.8
2013	9.3
2014	9.3
2015	9.4
2016	9.5
2017	9.8
2018	10.1
2019	10.4
2020	10.7
2021	10.8
2022	11.1
2023	11.2
2024	11.2
2025	11.6
2026	11.5
2027	11.3
2028	11.3
2029	11.3

Year	Avg. # turning 65 each day (in 1000s)
2030	11.1
2031	10.4
2032	10.2
2033	10.2
2034	10.5
2035	11.0
2036	10.9
2037	10.3
2038	9.9
2039	9.8
2040	10.1
2041	9.9
2042	10.2
2043	10.4
2044	10.6
2045	11.3
2046	11.2

• Per beneficiary spending. The amount of money spent on health care per person has historically risen faster than per capita economic output and is projected to do so in the future. In its 2018 long-term budget outlook report, CBO projected that the growth in health care spending per person will account for about two-thirds of the increase in spending for the major health care programs as a share of GDP between 2018 and 2048. During the past several years, health care spending per person grew more slowly than it has historically, but CBO and the Medicare Trustees projected that spending per enrollee in federal health care programs will grow more rapidly over the coming decade. Various factors can affect per beneficiary spending, including the emergence of new medical procedures and treatments.

Increased health care spending for major federal health care programs will continue to place a strain on the federal budget in the near and the long term. Under GAO's alternative simulation, spending for major federal health care programs is projected to grow from 5.4 percent of GDP in

2018 to 8.6 percent of GDP in 2048. Illustrative examples of projected growth in federal health care spending include:

- Medicare. In its January 2019 budget and economic outlook report, CBO projected that Medicare spending net of offsetting receipts will reach \$1 trillion (3.7 percent of GDP) in 2026. In their June 2018 report, the Medicare Trustees projected that Medicare's Hospital Insurance Trust Fund will be depleted by 2026, 3 years earlier than projected in the 2017 report, with income projected to cover only 91 percent of all hospital-related Medicare spending in that year.³⁶
- Medicaid. The CMS Office of the Actuary projected that Medicaid spending will total \$1 trillion by 2026 (3.7 percent of GDP), of which \$624 billion will be federal spending.³⁷
- Federal subsidies for health insurance. CBO projected, in its January 2019 budget and economic outlook report that costs for people receiving federal subsidies for health insurance purchased through the exchanges and related spending under the provisions of the ACA will rise from \$58 billion in 2019 to \$83 billion by 2029.

Interest on the Debt Is the Fastest-Growing Category of Federal Spending

Both the 2018 Financial Report's long-term fiscal projections and GAO's simulations show spending on net interest growing such that over the long term it becomes the largest category of spending.³⁸ According to CBO, spending on net interest totaled \$325 billion in 2018 (8 percent of

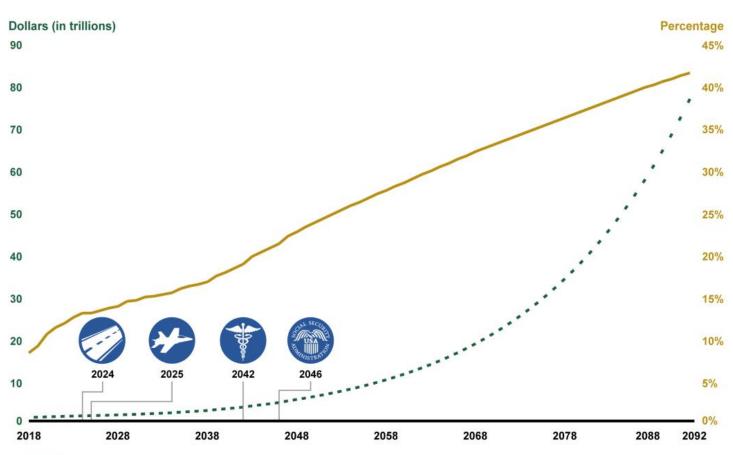
³⁶In its June 2018 report, the Medicare Trustees noted that there is substantial uncertainty as to the adequacy of future Medicare payment rates under current law. The report presents alternative projections illustrating higher Medicare outlays that would result if certain statutory Medicare payment provisions were not fully implemented in all future years. For example, the Trustees project that Medicare outlays would equal 5.9 percent of GDP in 2042 under current law, but would equal 6.2 percent of GDP under the illustrative alternative projections.

³⁷The Department of Health and Human Services, Centers for Medicare & Medicaid Services, Office of the Actuary, *2017 Actuarial Report on the Financial Outlook for Medicaid*, (Washington, D.C.: 2018). In this report, the CMS Chief Actuary stated that projections of health care costs are inherently uncertain. In particular, Medicaid projections are uncertain because enrollment and costs are very sensitive to economic conditions.

³⁸CBO's projections in its June 2018 long-term outlook report also show net interest growing as a percentage of total spending. However, since CBO's June 2018 extended baseline projections only go out to 2048, spending on net interest does not quite overtake Social Security spending in the projection period.

total federal spending), which is already larger than some other categories of spending. For example, the federal government spent more on net interest in fiscal year 2018 than on agriculture, transportation, and veterans' benefits and services combined. As shown in figure 8, spending on net interest is projected to continue to grow. Under GAO's alternative simulation, it will exceed nondefense discretionary spending in 2024 and Social Security in 2046 (see figure 8).

Figure 8: Net Interest Spending in Dollars and as a Percentage of Total Federal Spending



- - - Nominal dollars, trillions

— As a percentage of total federal spending

Net interest spending is projected to exceed spending on:



Nondefense discretionary spending in 2024



Defense discretionary spending in 2025



Medicare spending in 2042

Social Security spending in 2046

Source: GAO and GAO analysis of Congressional Budget Office data. \mid GAO-19-314SP

Data for Figure 8: Net Interest Spending in Dollars and as a Percentage of Total Federal Spending

Van	Naminal dallam fulliana	As a percentage of total
Year	Nominal dollars, trillions	federal spending
2018	\$0.325	7.8%
2019	\$0.384	8.6%
2020	\$0.462	10.0%
2021	\$0.525	10.8%
2022	\$0.588	11.3%
2023	\$0.648	12.0%
2024	\$0.698	12.5%
2025	\$0.743	12.5%
2026	\$0.796	12.8%
2027	\$0.854	13.1%
2028	\$0.925	13.3%
2029	\$0.992	13.9%
2030	\$1.058	14.0%
2031	\$1.161	14.4%
2032	\$1.241	14.5%
2033	\$1.329	14.7%
2034	\$1.424	14.9%
2035	\$1.572	15.4%
2036	\$1.692	15.7%
2037	\$1.823	15.9%
2038	\$1.967	16.2%
2039	\$2.183	16.9%
2040	\$2.361	17.3%
2041	\$2.555	17.8%
2042	\$2.761	18.3%
2043	\$3.061	19.2%
2044	\$3.304	19.7%
2045	\$3.563	20.2%
2046	\$3.840	20.7%
2047	\$4.245	21.6%
2048	\$4.572	22.1%
2049	\$4.921	22.7%
2050	\$5.291	23.2%
2051	\$5.685	23.7%
2052	\$6.104	24.2%

Year	Nominal dollars, trillions	As a percentage of total
		federal spending
2053	\$6.549	24.7%
2054	\$7.022	25.2%
2055	\$7.525	25.6%
2056	\$8.059	26.1%
2057	\$8.627	26.6%
2058	\$9.231	27.0%
2059	\$9.873	27.5%
2060	\$10.555	27.9%
2061	\$11.279	28.4%
2062	\$12.049	28.9%
2063	\$12.866	29.3%
2064	\$13.732	29.8%
2065	\$14.652	30.2%
2066	\$15.628	30.7%
2067	\$16.663	31.1%
2068	\$17.762	31.6%
2069	\$18.927	32.0%
2070	\$20.162	32.4%
2071	\$21.472	32.8%
2072	\$22.862	33.2%
2073	\$24.335	33.6%
2074	\$25.895	34.0%
2075	\$27.549	34.4%
2076	\$29.301	34.8%
2077	\$31.156	35.2%
2078	\$33.119	35.6%
2079	\$35.195	36.0%
2080	\$37.390	36.4%
2081	\$39.709	36.8%
2082	\$42.161	37.2%
2083	\$44.751	37.6%
2084	\$47.486	38.0%
2085	\$50.373	38.4%
2086	\$53.423	38.8%
2087	\$56.643	39.2%
2088	\$60.043	39.5%
2089	\$63.632	39.9%
2090	\$67.423	40.2%

Year	Nominal dollars, trillions	As a percentage of total federal spending
2091	\$71.426	40.6%
2092	\$75.653	40.9%

Note: Projected spending on net interest, Medicare, and Social Security is based on GAO's 2019 alternative simulation. Projected nondefense discretionary and defense discretionary spending is based on CBO's January 2019 baseline budget projections.

Interest spending grows for two main reasons:

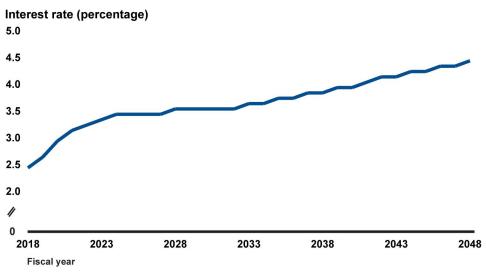
- **Growing debt.** At any given interest rate (above zero percent), interest payments increase as the debt grows.
- **Growth in interest rates.** For any given level of debt, a change in interest rates changes interest costs.³⁹ In recent years, interest rates on Treasury securities have remained low, so interest costs have been low. However, CBO and others projected that those interest rates will rise in the short and long term (as shown in figure 9), increasing interest costs on the debt.

In its January 2019 budget and economic outlook report, CBO projected that spending on interest payments will increase substantially in the coming years. Similarly, GAO's alternative simulation projects that spending on net interest will grow more quickly than any other component of the budget. Over the past 50 years, the government's net interest costs as a share of GDP have ranged from 1.2 to 3.2 percent, averaging 2 percent. GAO's alternative simulation projects that net interest spending will grow from 1.6 percent of GDP in 2018 to 6.7 percent of GDP by 2048, and will continue to grow over the long term.

Increases in interest rates have a compounding effect on debt. The interest rates on Treasury securities are a primary driver of rising interest costs. CBO projects that the average interest rate on all debt held by the public will rise to 4.4 percent in 2048, compared to 2.4 percent in 2018 (see figure 9). In its June 2018 long-term budget outlook report, CBO also noted that since the trend of increasing interest rates reflects long-term economic trends, it would be likely to continue even at the current debt level.

³⁹CBO explores the relationship between growing debt and interest rates further in a working paper. CBO, *The Effect of Government Debt on Interest Rates* (Washington, D.C.: March 2019).

Figure 9: Congressional Budget Office (CBO) Projections of the Average Interest Rate on All Federal Debt Held by the Public, Fiscal Years 2018-2048



Source: GAO analysis of CBO data. | GAO-19-314SP

Data for Figure 9: Congressional Budget Office (CBO) Projections of the Average Interest Rate on All Federal Debt Held by the Public, Fiscal Years 2018-2048

Fiscal Year	Interest rates (percent)
2018	2.4
2019	2.6
2020	2.9
2021	3.1
2022	3.2
2023	3.3
2024	3.4
2025	3.4
2026	3.4
2027	3.4
2028	3.5
2029	3.5
2030	3.5
2031	3.5
2032	3.5

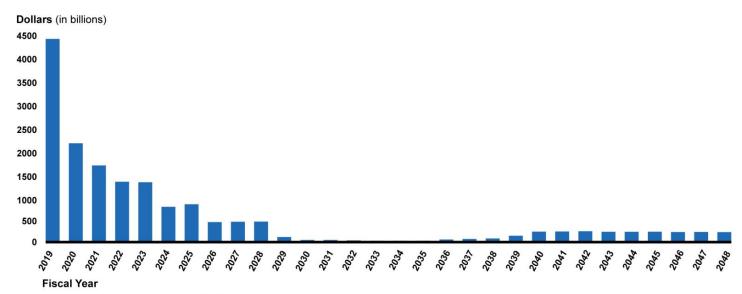
Fiscal Year	Interest rates (percent)
2033	3.6
2034	3.6
2035	3.7
2036	3.7
2037	3.8
2038	3.8
2039	3.9
2040	3.9
2041	4.0
2042	4.1
2043	4.1
2044	4.2
2045	4.2
2046	4.3
2047	4.3
2048	4.4

Net interest costs will also depend in part on the outstanding mix of Treasury securities (e.g., bills, notes, and bonds). Treasury issues securities in a wide range of maturities to appeal to the broadest range of investors and achieve its debt management goal of borrowing at the lowest cost over time. Longer-term securities typically carry higher interest rates but offer the government the ability to lock in fixed interest payments over a longer period and reduce the amount of debt that Treasury needs to refinance in the short term. In contrast, shorter-term securities generally carry lower interest rates. They also play an important role in financial markets. For example, investors use Treasury bills to meet requirements to hold financial assets maturing in a year or less. However, shorter-term securities add uncertainty to the government's interest costs and require Treasury to conduct more frequent auctions to refinance maturing debt.

⁴⁰GAO, Debt Management: Floating Rate Notes Can Help Treasury Meet Borrowing Goals, but Additional Actions Are Needed to Help Manage Risk, GAO-14-535 (Washington, D.C.: June 16, 2014).

Each year, trillions of dollars of debt mature (i.e., come due). Treasury refinances maturing debt by issuing new debt in its place. At the end of fiscal year 2018, 61 percent of the outstanding amount of marketable Treasury securities held by the public (about \$9.2 trillion) was scheduled to mature in the next 4 years. Treasury will likely need to refinance these securities at higher interest rates. Figure 10 shows the maturity dates of outstanding Treasury securities as of the end of fiscal year 2018. This debt consists of securities with maturity dates ranging from less than 1 year to 30 years. Going forward, Treasury will need to continue to issue new debt both to refinance maturing debt and to finance the projected growth in federal debt.

Figure 10: Maturity Dates of Marketable Debt Held by the Public at the End of Fiscal Year 2018



Source: GAO analysis of Treasury Data. | GAO-19-314SP

⁴¹Marketable securities are securities that can be resold by whoever owns them. At the end of fiscal year 2018, 97 percent of the outstanding amount of securities that constitute debt held by the public was marketable. For more information, see GAO, *Financial Audit: Bureau of the Fiscal Service's Fiscal Years 2018 and 2017 Schedules of Federal Debt*, GAO-19-113 (Washington, D.C.: Nov. 8, 2018).

Data for Figure 10: Maturity Dates of Marketable Debt Held by the Public at the End of Fiscal Year 2018

Fiscal Year of Maturity	Marketable Debt Held by the Public as of September 30, 2018			
2019	4296			
2020	2076			
2021	1603			
2022	1256			
2023	1246			
2024	723			
2025	778			
2026	397			
2027	404			
2028	408			
2029	80			
2030	17			
2031	16			
2032	7			
2033	0			
2034	0			
2035	0			
2036	26			
2037	38			
2038	48			
2039	106			
2040	194			
2041	198			
2042	203			
2043	191			
2044	191			
2045	192			
2046	186			
2047	187			
2048	183			

It is important that Treasury continue monitoring factors affecting demand for Treasury securities to help inform its debt management strategy. If Treasury offers too much of any given security, it may have to pay a higher yield to attract investors. If Treasury offers too little of a given security, it may affect the security's liquidity—or investors' ability to easily buy and sell the security—in the secondary market, which, in the long run, may also increase Treasury's borrowing costs.

Social Security Is Projected to Pose Significant Financial Challenges

Social Security has remained the bedrock of retirement security—insuring workers against the loss of income because of retirement, death, or disability. Social Security provides benefits to about 62 million older Americans, survivors, dependents, and individuals with disabilities and their families. It has helped reduce poverty among its beneficiaries, many of whom rely on Social Security for the majority of their income. According to Treasury's September 2018 Monthly Treasury Statement, Social Security paid nearly \$977 billion in Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) program benefits in fiscal year 2018. Looking forward, however, demographic factors, such as an aging population and slower labor force growth, are straining Social Security programs and contributing to a gap between program costs and revenues.

For many years, Social Security's revenues exceeded program costs and the programs built up reserves in the two trust funds: one for the retirement program (OASI) and one for the DI program. By law, the Social Security trust funds must invest in interest-bearing federal government securities.⁴³ During the period over which the Social Security trust funds received more in revenue than they paid out in benefits, these excess revenues were invested in federal government securities, reducing the

⁴²GAO, The Nation's Retirement System: A Comprehensive Re-evaluation Is Needed to Better Promote Future Retirement Security, GAO-18-111SP (Washington, D.C.: Oct. 18, 2017).

⁴³The Social Security Act requires that trust fund assets be invested in interest-bearing obligations of the United States or in obligations guaranteed as to both principal and interest by the United States. We are using the term "federal government securities" to refer to these obligations.

amount that had to be borrowed from the public to finance other federal programs.

However, starting in 2005 for the DI Trust Fund and in 2010 for the OASI Trust Fund, this situation reversed: Social Security began paying out more in benefits than it received in noninterest revenue. 44 Absent any changes, both trust funds are projected to deplete their assets and have insufficient income to pay benefits in full on a timely basis. In their 2018 annual report, the Social Security Trustees estimated that the DI Trust Fund would deplete its assets by 2032 with income sufficient to pay only 96 percent of scheduled benefits in that year. They also estimated that the OASI Trust Fund would deplete its assets by 2034 with income sufficient to pay only 77 percent of scheduled benefits in that year. 45 While action will be needed in any case, acting soon would allow any adjustments to be smaller and spread across more generations of participants. The actions could also be phased in to give affected individuals time to adjust their retirement planning.

Action Is Needed to Address an Unsustainable Fiscal Path

CBO has noted that large and growing amounts of federal debt held by the public over the coming decades would have negative long-term consequences for the economy, and would constrain future budget policy. In particular, the projected amounts of debt would

- reduce national saving and income in the long term;
- increase the government's interest costs, putting more pressure on the rest of the budget;

⁴⁴According to the Social Security Trustees, in 2016 and 2017, noninterest income and total income for the DI Trust Fund exceeded benefit payments due primarily to the temporary reallocation of the payroll tax rate from OASI to DI for years 2016 through 2018. This temporary reallocation was authorized in the Bipartisan Budget Act of 2015, Pub. L. No. 114-74, title VIII, subtit. C, § 833, 129 Stat. 584, 613-14 (Nov. 2, 2015).

⁴⁵These projections are from *The 2018 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* and reflect the Trustees' intermediate assumptions. Because the future is uncertain, the Trustees use three sets of assumptions to show a range of possible outcomes. The Trustees' intermediate assumptions represent the Trustees' best estimate of the trust funds' future financial outlook. The Trustees also present estimates using low- and high-cost sets of assumptions.

- limit lawmakers' ability to respond to unforeseen events; and
- increase the likelihood of a financial crisis.

The 2018 Financial Report makes similar points that while national debt can at times play a role in facilitating a healthy economy, economic theory suggests that high levels of national debt may contribute to higher interest rates, leading to lower private investment and a smaller capital stock which the economy can use to grow. It also notes that one of the goals of fiscal policy is to manage the national debt so that it is not a burden to future generations. A sustainable policy is one where the debt-to-GDP ratio is stable or declining over the long term.

To change the long-term fiscal path, policymakers will need to consider policy changes to the entire range of federal activities, both revenue and spending (entitlement programs, other mandatory spending, discretionary spending). One way to quantify the magnitude of the needed policy changes is by calculating the fiscal gap. The fiscal gap represents the difference between revenue and program spending (i.e., spending other than interest payments) that would need to be closed immediately and permanently to hold debt as a share of GDP at the end of a given period the same as at the beginning of the period.

To close the gap, policymakers would need to reduce program spending, increase revenue, or, more likely, do both.⁴⁶ To illustrate this point, the following projections show what it would take to maintain the debt held by the public as a share of GDP at the end of the 75-year projection period at its fiscal year 2018 level of 78 percent:

- Under GAO's alternative simulation, the fiscal gap over the 75-year projection period could be closed by cutting program spending immediately and permanently by 27 percent, or by increasing revenue immediately and permanently by 36 percent.
- Under GAO's baseline extended simulation, the fiscal gap could be closed by cutting program spending immediately and permanently by 13 percent, or by increasing revenue immediately and permanently by 15 percent.

⁴⁶Program spending (also referred to as noninterest spending) includes both discretionary spending and mandatory spending, but does not include spending on interest on debt held by the public.

 Under the 2018 Financial Report projections, the fiscal gap could be closed by cutting program spending immediately and permanently by 19 percent, or by increasing revenue immediately and permanently by 22 percent.

The 2018 Financial Report, CBO, and GAO all make the point that the longer action is delayed, the greater and more drastic the changes will have to be, placing an additional burden on future generations.

Debt Limit Is Not a Control on Debt: Alternative Approach Is Needed

In taking action to change the federal government's long-term fiscal path, it will be important for Congress to consider alternative approaches for managing the level of debt. As currently structured, the debt limit—a legal limit on the total amount of federal debt that can be outstanding at one time⁴⁷—does not restrict Congress and the President's ability to enact spending and revenue legislation that affects the level of debt; nor does it otherwise constrain fiscal policy. Rather, the debt limit is an after-the-fact measure; the spending and tax laws that result in debt have already been enacted. In other words, the debt limit restricts Treasury's authority to borrow to finance the decisions already enacted by Congress and the President.

U.S. Treasury securities play a vital role in U.S. and global financial markets to a great extent because of their large, liquid, and transparent market, and because investors are confident that debt backed by the full faith and credit of the U.S. government will be honored. Because Treasury securities are seen as the underpinning of the world's financial system and one of the safest assets in the world, they are broadly held by individuals—including in pension funds or mutual funds—and by institutions and central banks for use in everyday transactions. Treasury securities serve as a close substitute for cash for financial institutions and

⁴⁷The debt limit is codified at 31 U.S.C. § 3101(b), as amended, and applies to federal debt issued pursuant to the authority of 31 U.S.C. chapter 31. A very small amount of total federal debt is not subject to the debt limit. This amount primarily comprises unamortized discounts on Treasury bills and Zero Coupon Treasury bonds; debt securities issued by agencies other than Treasury, such as the Tennessee Valley Authority; and debt securities issued by the Federal Financing Bank.

⁴⁸GAO, Debt Limit: Delays Create Debt Management Challenges and Increase Uncertainty in the Treasury Market, GAO-11-203 (Washington, D.C.: Feb. 22, 2011).

corporate treasurers. Treasury securities are also one of the cheapest and most widely used forms of collateral for financial transactions, and are the basis for pricing many financial products, such as corporate bonds, derivatives, and mortgages.

One cannot overstate the importance of preserving the confidence that investors have that debt backed by the full faith and credit of the U.S. government will be honored. Failure to increase (or suspend) the debt limit in a timely manner would result in an impasse, and could have serious negative consequences for the Treasury market and borrowing costs. Uncertainty in the past around whether the debt limit would be raised or suspended has led to increases in borrowing costs for Treasury.

During the 2013 debt limit impasse, investors reported that they took the unprecedented action of systematically avoiding certain Treasury securities—those that matured around the dates when Treasury projected it would exhaust the extraordinary actions.⁴⁹ For these securities, interest rates increased dramatically and liquidity declined in the secondary market, where securities are traded among investors. Figure 11 shows how secondary market yields on Treasury bills increased in 2013 as a result of the debt limit impasse.

⁴⁹Extraordinary actions are actions that Treasury takes as it nears the debt limit to avoid exceeding that limit. These actions are not part of Treasury's normal cash and debt management operations. For more information, see GAO, *Debt Limit: Market Response to Recent Impasses Underscores Need to Consider Alternative Approaches*, GAO-15-476 (Washington, D.C.: July 9, 2015).

Figure 11: Secondary Market Yields on Treasury Bills Maturing in Late October through Mid-November 2013 Yield (in basis points) ■ Date Treasury projected it would exhaust its 50 extraordinary actions 40 30 20 10 9/3/2013 9/10/2013 9/17/2013 9/24/2013 10/1/2013 10/8/2013 10/15/2013 10/22/2013 10/29/2013 11/5/2013 11/12/2013 Maturity 10/17/2013 **---** 10/24/2013 ••••• 10/31/2013 --- 11/7/2013 - 11/14/2013 Source: GAO analysis of Bloomberg data. | GAO-19-314SP

Data for Figure 11: Secondary Market Yields on Treasury Bills Maturing in Late October through Mid-November 2013

Maturity Data		Line A	Line B	Line C	Line D	Line E
9/3/2013	1.7					
	5					
		3.25				
		2.25				
		3.25				
		3	1.25			

0/40/0040			В		Line C		Line D		Line E
	7	4.05							
9/10/2013 2.	. /	1.25							
5									
	2.25		1.25						
	2.25		2.25						
	1.25		1.75						
	1.75		1.25		1.25				
9/17/2013 1.	7	1.75		0.25					
5									
	1.25		2.5		1.25				
	1.25		1.75		0.25				
	1.25		2.25		1.25				
	1.25		1.75		1.25		0.75		
9/24/2013 1.	2	0.75		1.25		1.25			
5									
	1.75		2		1.5		1.25		
	0.75		1.5		1.5		1.25		
	1.75		1.75		2.25		0.25		
	13.2		13.7		17.7		18.7		3.75
	5		5		5		5		
10/1/2013 26	6.	34.2		53.2		46.2		31.7	
25	5	5		5		5		5	

Maturity		Line		Line		Line		Line		Line
Data		Α		В		С		D		E
		17.7		24.7		31.7		26.2		19.7
		5		5		5		5		5
		20.2		21.7		27.2		31.2		30.7
		5		5		5		5		5
		23.7		25.7		32.2		38.7		47.7
		5		5		5		5		5
		18.2		25.7		33.2		31.2		27.7
		5		5		5		5		5
10/8/2013	11.		13.7		15.7		16.7		14	
	25		5		5		5			
		9.75		8.25		11.2		11.7		11.7
						5		5		5
		5.5		5.25		12.7		13.2		11.2
						5		5		5
		1.75		1.75		7.75		7		5.75
10/15/13	3.2		3.75		8.25		7.75		6.75	
	5									
		2.25		1.75		3		2.25		2.25
		1.75		2.25		2.75		2.25		3.25
		0.75		1.5		3.25		3.75		0.75
		0.25		1.5		2.25		1.75		1.75
10/22/2013	0.7	1.75		1.25		1.25		0.75		

Maturity		Line		Line		Line		Line		Line
Maturity Data										
Dala		Α		В		С		D		E
	_									
	5									
		1.25		0.75		1.25		1.25		0.75
		1.20		0.70		1.20		1.20		0.70
		1.25		1.25		1.25		0.75		0.75
		0.25		0.25		0.25		-0.25		0.25
		-0.25		0.25		0.25		0.25		0.25
10/29/2013	0.2	0.75		0.25		-0.25		-0.75		
	5									
		0.75		1.25		0.75		0.25		0.25
		0.73		1.23		0.73		0.23		0.23
		1.5		1.5		1.5		0.75		0.25
		1.25		1.25		0.75		0.75		0.75
		1.25		0.75		0.75		0.75		0.75
11/5/2013	0.7		1.25		0.75		0.75		0.75	
	5		0							
	5									
		0.75		0.75		0.75		0.75		0.75
		0.75		0.75		0.75		4.05		4.05
		0.75		0.75		0.75		1.25		1.25
		1.25		1.25		0.75		0.75		0.25
11/12/2013	1	1.75		0.75		0.75		0.75		
		1.75		1.75		0.75		0.75		1.25
		1.5		2.25		1		1		1
		1.75		2.25		0.75		1.25		1.25

Note: The Department of the Treasury (Treasury) refers to extraordinary actions as the actions it takes as it nears the debt limit to avoid exceeding that limit.

Rates in the secondary market ultimately affect Treasury's borrowing costs, as investors generally demand similar rates at auction to those in the secondary market. The significant increases in interest rates on these Treasury securities reflected a new level of investor uncertainty about Treasury's ability to pay its bills and avoid a delayed payment or a default.

The Bipartisan Budget Act of 2018 temporarily suspended the debt limit from February 9, 2018, through March 1, 2019. On Monday, March 4, 2019, Treasury began to take extraordinary actions to continue funding government activities. It will continue taking these actions until the debt limit is raised or suspended. With these extraordinary actions in place, CBO estimates that Treasury will have sufficient cash to make its usual payments until late into fiscal year 2019.

Market participants interviewed for our 2015 debt limit report told us that market reactions to future debt limit impasses could be even more severe than they were in 2013. Investors also told us that they are prepared to take steps—similar to those taken in 2013—to systematically avoid certain Treasury securities during future impasses. Market participants we interviewed in January 2019 anticipated that they would take similar steps again if another debt limit impasse occurred.

If the level of publicly held debt or its share of GDP is to be used as a fiscal management tool to change the long-term fiscal path, it needs to be considered as part of overall budget decisions at the time those decisions are being made. A long-term plan is needed to put the government on a sustainable fiscal path. Such a step would provide a focus on the fiscal impacts of budget decisions, and would avoid the negative impacts of debt limit impasses.

In July 2015, based on a forum with experts in the field, we reported on options for Congress to delegate its borrowing authority and better align decisions about the level of debt with decisions on spending and revenue, and minimize disruption to the market. We identified three potential approaches to delegating borrowing authority:

⁵⁰Section 30301 of Division C of the Bipartisan Budget Act of 2018, Pub. L. No. 115-123, div. C, tit. III, § 30301, 132 Stat. 64, 132 (Feb. 9, 2018), temporarily suspended the debt limit.

- Option 1: Link action on the debt limit to the budget resolution.
- Option 2: Provide the administration with the authority to propose a change in the debt limit that would take effect absent enactment of a joint resolution of disapproval within a specified time frame.
- Option 3: Delegate broad authority to the administration to borrow as necessary to fund enacted laws.⁵¹

All of these options maintain congressional control and oversight of federal borrowing. We did not endorse a specific option, but we did suggest that Congress consider alternative approaches that better link decisions about the debt limit with decisions about spending and revenue at the time those decisions are made.

Some of the experts at our forum also supported replacing the debt limit with a fiscal rule imposed on spending and revenue decisions. Fiscal rules constrain fiscal policy by implementing numerical limits on the budget. They have been used at both the national and supranational level to promote fiscal responsibility and sustainability. The federal government has enacted such fiscal rules in the past. For example, the Budget Control Act of 2011 enacted limits on discretionary spending, which are enforced by additional spending cuts if those limits are breached (known as a sequester). Congress could consider additional fiscal rules as part of a broader, long-term plan to put the government on a sustainable fiscal path. In contrast to the debt limit, fiscal rules are intended to influence decisions about spending and revenue as those decisions are made.

According to experts at the IMF and the OECD, several types of fiscal rules have the potential to contribute to fiscal sustainability. Some countries use only one type of fiscal rule, while others have combined several fiscal rules. Using the OECD and IMF categorization, table 3 shows four of the types of fiscal rules they identified, describes each, and provides an illustrative example of a nation's use of that type of rule.⁵²

⁵¹More detail about these ideas and a discussion of the advantages and challenges to each can be found in GAO-15-476.

⁵²These examples are provided only as illustrations of the types of rules. Further analysis would be required to enumerate the implementation specifics and evaluate their effectiveness in promoting fiscal sustainability.

Type of rule ^a	Description	Illustrative examples from other countries
Budget balance rule	Constrains deficit levels and specifies that the debt-to-gross domestic product (GDP) ratio converges to a defined finite level.	Switzerland adopted a budget balance rule in its constitution in 2003 to stabilize the level of public debt by maintaining expenditure targets consistent with the annual budget.
Debt rule	Sets an explicit limit or target for public debt as a percentage of GDP.	New Zealand combines a debt rule, which sets a target debt to GDP level, with a budget balance rule.
Revenue rule	Sets ceilings or floors on revenues and aims to increase revenue collection or prevent excessive tax burdens.	France uses a revenue rule that sets binding minimum targets for the net impact of new revenue measures. An independent body monitors implementation of the rule.
Expenditure rule	Limits spending, typically in absolute terms or growth rates and occasionally as a percent of GDP.	Israel's expenditure rule has helped maintain fiscal stability by limiting how fast government spending may grow. An independent fiscal body monitors the rule.

Source: GAO analysis of the Organization for Economic Co-operation and Development (OECD) and International Monetary Fund (IMF) reports. | GAO-19-314SP

^aTypes of rules are identified by the OECD and IMF. OECD researchers identified an additional type of rule, but we chose to highlight the four rules that both organizations have in common.

Governments can use fiscal rules in combination to address shortcomings of any one individual rule. According to the IMF, as of 2015, more than 70 countries had combined two or more fiscal rules, and most countries that use fiscal rules today have more than one in place. For example, at the supranational level, the European Union's (EU) stability and growth pact combines an expenditure rule, budget balance rule, and a debt rule, which are designed to ensure that countries in the EU pursue sound public finances and coordinate their fiscal policies. The pact permits sanctions against member states that fail to comply with these fiscal rules. In recent years, however, several EU nations have struggled to meet the targets set forth in the agreement.

Economic literature notes that governments can design mechanisms to help fiscal rules strike a balance between flexibility and enforceability. For example, many fiscal rules include escape clauses which allow for a level of flexibility in responding to events like recessions or natural disasters. Other fiscal rules include features such as independent fiscal councils, which are institutions that can help formulate and implement sound fiscal policy, and constitutional mandates, which enshrine the rule in a country's constitution with the intent of making it more difficult to reverse or abandon. Some countries choose to use automatic correction mechanisms, which are designed to trigger automatically to respond to past deviations from a rule. For example, the IMF and OECD pointed out that Switzerland's budget balance rule created a threshold for deficit spending. If the amount of deficit spending exceeds the threshold, the excess must be eliminated within the next 3 years.

International economic organizations have found that fiscal rules are associated with successful efforts to stabilize debt. However, empirical evidence suggests that while fiscal rules may improve balance sheets, the correlation is weaker between fiscal rules and reductions in the debt-to-GDP ratio. In general, observers and budget experts have noted that success depends on effective enforcement of fiscal rules and sustained commitment by both policymakers and the public.

Experts and observers have also noted several trade-offs associated with fiscal rules. For example, fiscal rules may limit the ability to increase spending in response to adverse events. Some experts believe that, if governments try to subvert fiscal rules through creative accounting, it could undermine credibility or transparency.

Further analysis would be required to determine how to design an appropriate rule or combination of rules for the United States, but looking at their design and application in other countries can be helpful. U.S. policymakers would likely need to adapt the rules we highlighted to reflect the priorities of the nation and its economic situation. However, as a basis for discussion, it is useful to understand other countries' approaches to help improve their fiscal health as well as the strengths and challenges of the U.S. government's efforts to address its own fiscal health, such as the Budget Control Act of 2011 and similar proposals.

Fiscal Risks Place Additional Pressure on the Federal Budget

The federal government faces certain fiscal risks that are not fully accounted for in the budget and could affect the government's future fiscal condition. Fiscal risks or fiscal exposures are responsibilities, programs, and activities that may legally commit the federal government to future spending, or create expectations for future spending based on current policy, past practices, or other factors. ⁵³ A more complete understanding of fiscal risks can help policymakers anticipate changes in future spending and can enhance oversight of federal resources. Fiscal risks include the following examples:

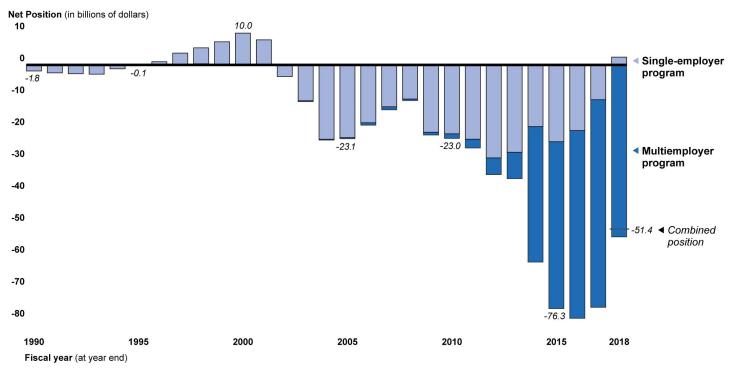
⁵³See our infographic on federal fiscal risks at https://www.gao.gov/assets/670/668649.pdf.

• The Pension Benefit Guaranty Corporation's (PBGC) financial future is uncertain because of long-term challenges related to its funding and governance structure. PBGC's liabilities exceeded its assets by about \$51 billion as of the end of fiscal year 2018—an increase of about \$16 billion from the end of fiscal year 2013 (see figure 12). PBGC's single-employer program covers defined benefit pension plans that generally are sponsored by one employer, while the multiemployer program covers defined benefit pension plans created through a collective bargaining agreement between employers and a union. The single-employer program, composed of about 23,400 plans in 2018, accounted for a surplus of \$2.4 billion at the end of fiscal year 2018—an improvement of about \$30 billion since 2013. The multiemployer program, composed of about 1,400 plans in 2018, accounted for a deficit of about \$54 billion at the end of fiscal year 2018.

In addition, PBGC estimated that its exposure to potential additional future losses for underfunded plans in both the single and multiemployer programs was nearly \$185 billion, of which the single-employer program accounts for \$175 billion of this amount. PBGC projected that there is more than a 90 percent likelihood that the multiemployer program will be insolvent by the year 2025 and a 99 percent likelihood by 2026. Although the single-employer program is currently in surplus, it is not certain that the program will remain in surplus into the future as past experience shows that large claims can cause its condition to change quickly.⁵⁴

⁵⁴The Bipartisan Budget Act of 2018 established the Joint Select Committee on Solvency of Multiemployer Pension Plans, which was tasked with voting on a report that was to include any findings, conclusions, and recommendations to significantly improve the solvency of multiemployer pension plans and PBGC (as well as proposed legislative language to carry out any recommendations) by November 30, 2018. Pub. L. No. 115-123, div. C, tit. IV, subtit. A, § 30422, 132 Stat. 64, 133-37 (Feb. 9, 2018). However, even though the joint committee did not vote on a report and was statutorily set to terminate no later than December 31, 2018, its co-chairmen released a statement committing to working to solve the multiemployer pension crisis past the November 30 deadline. For more information on Pension Benefit Guaranty Corporation insurance programs, see GAO, *High-Risk Series: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas*, GAO-19-157SP (Washington, D.C.: Mar. 6, 2019), 267.

Figure 12: Pension Benefit Guaranty Corporation's Net Financial Position of the Single-Employer and Multiemployer Programs Combined, Fiscal Years 1990 through 2018



Source: Pension Benefit Guaranty Corporation (PBGC). | GAO-19-314SP

Data for Figure 12: Pension Benefit Guaranty Corporation's Net Financial Position of the Single-Employer and Multiemployer Programs Combined, Fiscal Years 1990 through 2018

Fiscal year (at year end)	Single-employer program	Multiemployer program	Combined position
1990	-1.9	0.1	-1.8
1991	-2.5	0.2	-2.3
1992	-2.7	0.2	-2.6
1993	-2.9	0.3	-2.6
1994	-1.2	0.2	-1.0
1995	-0.3	0.2	-0.1
1996	0.9	0.1	1.0
1997	3.5	0.2	3.7
1998	5.0	0.3	5.4
1999	7.0	0.2	7.2
2000	9.7	0.3	10.0

Fiscal year (at year end)	Single-employer program	Multiemployer program	Combined position		
2001	7.7	0.1	7.8		
2002	-3.6	0.2	-3.5		
2003	-11.2	-0.3	-11.5		
2004	-23.3	-0.2	-23.5		
2005	-22.8	-0.3	-23.1		
2006	-18.1	-0.7	-18.9		
2007	-13.1	-1.0	-14.1		
2008	-10.7	-0.5	-11.2		
2009	-21.1	-0.9	-21.9		
2010	-21.6	-1.4	-23.0		
2011	-23.3	-2.8	-26.0		
2012	-29.1	-5.2	-34.4		
2013	-27.4	-8.3	-35.6		
2014	-19.3	-42.4	-61.8		
2015	-24.1	-52.3	-76.3		
2016	-20.6	-58.8	-79.4		
2017	-10.9	-65.1	-76.0		
2018	2.4	-53.9	-51.4		

• Federal support of the housing finance market remains significant even though the market has largely recovered since the 2007 to 2009 financial crisis. In 2008, the federal government placed the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) under conservatorship and entered into preferred stock purchase agreements with these government-sponsored enterprises (GSE) to help ensure their financial stability. These agreements could affect the federal government's financial condition. At the end of fiscal year 2018, the federal government reported about \$113 billion of investments in the GSEs, which is net of about \$91 billion in valuation losses.

The GSEs paid Treasury cash dividends of \$9.9 billion and \$25.3 billion during fiscal years 2018 and 2017, respectively. The reported maximum remaining contractual commitment of Treasury to the GSEs, if needed, is \$254.1 billion. The ultimate role of the GSEs could affect financial condition of other federal entities, including the Federal Housing Administration (FHA), which in the past expanded its lending

role in distressed housing and mortgage markets. At the end of fiscal year 2018, FHA's insured portfolio exceeded \$1.2 trillion.

The Government National Mortgage Association (Ginnie Mae) guarantees the performance of almost \$2 trillion in securities backed by federally insured mortgages—of which \$1.2 trillion were insured by FHA and \$0.8 trillion by other federal entities, such as the Department of Veterans Affairs. We have reported on the need for Congress to consider legislation for making changes to the future federal role in housing finance that addresses the structure of the GSEs; establishes clear, specific, and prioritized goals; and considers all relevant federal entities, such as FHA and Ginnie Mae.⁵⁵

- The U.S. Postal Service (USPS) continues to be in poor financial condition. USPS cannot fund its current level of services and financial obligations from its revenues. USPS's net loss of \$3.9 billion in fiscal year 2018 marked its 11th consecutive year of net losses totaling \$69 billion. USPS has budgeted for a \$6.6 billion net loss in fiscal year 2019. In addition, USPS has missed \$48.2 billion in required payments for postal retiree health and pension benefits through fiscal year 2018, including \$42.6 billion in missed payments for retiree health benefits since fiscal year 2010 and \$5.6 billion for pension benefits since fiscal year 2014. USPS has stated that it missed these payments to minimize the risk of running out of cash, citing its precarious financial condition and the need to cover current and anticipated costs and any contingencies.⁵⁶
- According to DOD, since September 2001, Congress has appropriated approximately \$1.8 trillion to DOD for Overseas

⁵⁵GAO, Housing Finance: Prolonged Conservatorships of Fannie Mae and Freddie Mac Prompt Need for Reform, GAO-19-239 (Washington, D.C.: Jan. 18, 2019). For more information on resolving the federal role in housing finance, see GAO-19-157SP, 95.

⁵⁶For more information on USPS's financial viability, see GAO-19-157SP, 99.

Contingency Operations (OCO), primarily in Iraq and Afghanistan.⁵⁷ Since 2007, we have reported on multiple issues associated with OCO funds, including DOD's efforts to transition enduring costs to its base budget.⁵⁸ In January 2017, we recommended that DOD develop a complete and reliable estimate of enduring costs to report in future budget requests.⁵⁹ In April 2018, DOD produced an estimate of the funds that would be shifted from OCO to the base budget request from fiscal years 2020 through 2023. These amounts ranged from \$53 billion to \$45.8 billion. However, the administration's fiscal year 2020 budget request increases the OCO amounts in fiscal years 2020 and 2021 to about \$165 billion and \$156 billion, respectively. According to DOD budget documents, these amounts fund not only direct war requirements, but enduring requirements that will remain after combat operations end, as well as some base budget requirements. The budget request further states that after fiscal year 2021—the final year of the discretionary spending caps in current law—OCO amounts for fiscal years 2022 and 2023 would be \$20 billion in each year.

 Some government insurance programs such as the National Flood Insurance Program have not collected sufficient premiums or do not have sufficient dedicated resources to cover expected costs without borrowing from Treasury.⁶⁰ For example, as of September 2018, the

⁵⁷DOD defines "contingency operations" as small, medium, or large-scale campaign-level military operations, including but not limited to support for peacekeeping operations, foreign disaster relief efforts, and noncombatant evacuation operations, and international disaster relief efforts. In contrast, regular or "base" activities include, for example, operating support for installations, training and education, and civilian personnel pay, which are costs that would be incurred, regardless of contingency operations.
Appropriated amounts designated for overseas contingency operations that would otherwise exceed the annual limits established for defense spending will instead result in an adjustment to the overall defense spending limit established for a particular fiscal year, and will not trigger a sequestration, which is an automatic cancellation of budgetary resources provided by discretionary appropriations or direct spending laws. From 2001 to 2009, overseas contingency amounts were designated for the Global War on Terror. Since 2009, contingency amounts have been designated for OCO.

⁵⁸Enduring costs refer to costs that would continue in the absence of contingency operations.

⁵⁹GAO, Overseas Contingency Operations: OMB and DOD Should Revise the Criteria for Determining Eligible Costs and Identify the Costs Likely to Endure Long Term, GAO-17-68 (Washington, D.C.: Jan. 18, 2017).

⁶⁰We have suggested an alternative way to record insurance commitments in the budget such that the federal government's commitment would be more fully recognized. See GAO, *Fiscal Exposures: Federal Insurance and Other Activities that Transfer Risk or Losses to the Government*, GAO-19-353 (Washington, D.C.: Mar. 27, 2019).

Federal Emergency Management Agency (FEMA), which administers the National Flood Insurance Program, owed \$20.5 billion to Treasury for money borrowed to pay claims and other expenses. We have reported that FEMA was unlikely to collect enough in premiums in the future to repay this debt.⁶¹ The amount owed is net of \$16 billion of debt that was canceled in October 2017 by the Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2017.⁶²

• The rising number of natural disasters and increasing reliance on federal assistance is a key source of federal fiscal exposure. As of December 2018, total federal funding for disaster assistance since 2005 is approaching half a trillion dollars (about \$430 billion), most recently for catastrophic hurricanes, flooding, wildfires, and other losses in 2017 and 2018. Disaster costs are projected to increase as extreme weather events become more frequent and intense because of climate change risks. Since 1993, the federal government has spent about \$154 billion on activities related to climate change—primarily for technologies to reduce emissions and for scientific research on climate change impacts. However, we found that OMB's reported funding for climate change activities does not include information on relevant federal fiscal exposures.

Policymakers could better understand the long-term effects of decisions if they had more complete information on programs for which costs are likely to increase due to climate change, such as disaster assistance. Policymakers could also use this information to understand the trade-offs between spending with long-term and short-term benefits. Further, this information could help the federal government develop a government-wide strategy for addressing climate change that focuses on reducing federal fiscal exposure. ⁶³

 The nation's surface transportation system—including highways, transit, maritime ports, and rail systems that move both people and freight—is critical to the economy and affects the daily lives of most Americans. However, the system is under growing strain. According to

⁶¹GAO, Flood Insurance: Comprehensive Reform Could Improve Solvency and Enhance Resilience, GAO-17-425 (Washington, D.C.: Apr. 27, 2017).

⁶²Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2017, Pub. L. No. 115-72, § 308, 131 Stat. 1224, 1228-29 (Oct. 26, 2017). For more information on the National Flood Insurance Program, see GAO-19-157SP, 272.

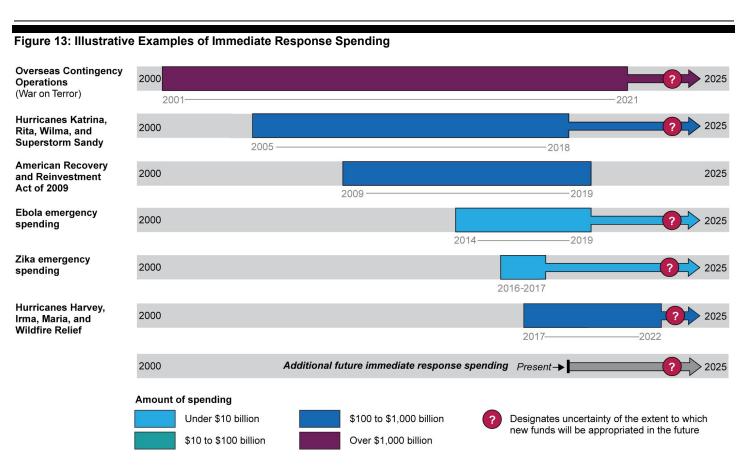
⁶³For more information on limiting the federal government's fiscal exposure by better managing climate change risks, see GAO-19-157SP, 110.

Letter

estimates, it will cost hundreds of billions of dollars to repair and upgrade it to meet current and future demands. Meanwhile, traditional funding sources are eroding and the federal government lacks a long-term sustainable strategy for funding surface transportation. The Highway Trust Fund, the major source of federal surface transportation funding, is increasingly unable to maintain current spending levels for highway and transit programs. Spending is projected to exceed revenues after 2021. In January 2019, CBO estimated that \$159 billion in additional funding would be required to maintain current spending levels plus inflation from 2022 through 2029.

When crises happen, citizens may expect immediate federal action, including large, additional amounts of federal spending. These expectations have come in part from previous crisis responses. Figure 13 provides some illustrative examples of resource allocation for such events as well as the length of time over which the resources were allocated.

⁶⁴For more information on funding the nation's surface transportation system, see GAO-19-157SP, 86.



Source: GAO analysis of legislation and Federal Emergency Management Agency, Congressional Research Service, Department of Homeland Security, Department of the Treasury, Centers for Disease Control and Prevention, and Congressional Budget Office data. | GAO-19-314SP

	Dollars in billions	First Year of Spending	"End" Year of spending	Arrow
Hurricane Sandy, Katrina, Rita, and Wilma	103.95	2005	2018	yes
OCO Spending (War on Terror Spending)	1,700.000	2001	2018	yes
Zika Emergency Spending	1.9	2016	2017	yes
Ebola Emergency Spending	5.405	2014	2019	yes
Stimulus Bill	787.000	2009	2019	no

	Dollars in billions	First Year of Spending	"End" Year of spending	Arrow
Hurricanes Harvey, Irma, Maria, and Wildfire Relief	118.7	2017	2022	yes

Note: Spending ranges are approximate and based on budget estimates as well as reported agency obligations and appropriations.

These crises often cannot be predicted and are difficult to budget for. The federal budget does contain some funds for disaster response through the FEMA's Disaster Relief Fund, but this fund often is insufficient to respond to the number and scope of natural disasters. ⁶⁵ Furthermore, it is not typically used as a funding source for other types of unforeseen events such as wars, financial crises, cyberattacks, or health pandemics.

Executive Agencies Have Opportunities to Contribute Toward Fiscal Health

Changes in spending and revenue to ensure long-term fiscal sustainability require legislative actions to alter fiscal policies, but in our prior work we have identified numerous actions for executive agencies to contribute toward a sustainable fiscal future. Although executive actions alone cannot put the U.S. government on a sustainable fiscal path, it is important for agencies to act as stewards of federal resources.

Reduce Improper Payments: Agencies Need to Curtail Billions in Improper Payments

Improper payments—payments that should not have been made or that were made in an incorrect amount—have consistently been a

⁶⁵The Disaster Relief Fund may only be used for presidentially-declared "major disasters," meaning any natural catastrophe (such as hurricanes, tornados, and earthquakes) or, regardless of cause, any fire, flood, or explosion which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance. 42 U.S.C. § 5122(2).

government-wide issue.⁶⁶ Since fiscal year 2003—when certain agencies were required by statute to begin reporting estimated improper payments for certain programs and activities—cumulative improper payment estimates have totaled about \$1.5 trillion.⁶⁷

For fiscal year 2018, agencies reported total improper payment estimates of about \$151 billion, compared to about \$141 billion for fiscal year 2017. For fiscal year 2018, 79 programs and activities across 20 agencies reported improper payment estimates, and 20 of those programs and activities reported improper payment rates estimated at 10 percent or greater. In addition, 16 programs and activities across 7 agencies reported improper payment estimates greater than \$1 billion:

- HHS: Medicaid, Medicare Fee-for-Service, Medicare Advantage, Children's Health Insurance Program, and Medicare Prescription Drug.
- VA: Community Care, Purchased Long-Term Services and Support, and Prosthetics.
- **SSA:** Old Age, Survivors, and Disability Insurance; and Supplemental Security Income.
- **Department of Agriculture:** Supplemental Nutrition Assistance Program, and National School Lunch Program.
- Department of Education: Direct Loan, and Pell Grant.
- Treasury: Earned Income Tax Credit.
- **Department of Labor:** Unemployment Insurance.

⁶⁶We have reported improper payments as a material deficiency or material weakness in internal control in our audit reports on the U.S. government's consolidated financial statements since fiscal year 1997. See GAO-19-294R. Under the Improper Payments Information Act of 2002 (IPIA), as amended, an improper payment is statutorily defined as any payment that should not have been made or that was made in an incorrect amount (including overpayments and underpayments) under statutory, contractual, administrative, or other legally applicable requirements. It includes any payment to an ineligible recipient, any payment for an ineligible good or service, any duplicate payment, any payment for a good or service not received (except for such payments where authorized by law), and any payment that does not account for credit for applicable discounts. See 31 U.S.C. § 3321 note. OMB guidance also provides that when an agency's review is unable to discern whether a payment was proper as a result of insufficient or lack of documentation, this payment must also be considered an improper payment.

⁶⁷Not all agencies are subject to IPIA, as amended; the law only applies to departments, agencies, or instrumentalities in the executive branch of the U.S. government. Prior-year improper payment estimates have not been adjusted for inflation.

Letter

As shown in figure 14, Medicare programs, Medicaid, and the Earned Income Tax Credit account for about 68.5 percent of the total improper payment estimates reported by agencies for fiscal year 2018.⁶⁸ The \$48.5 billion reported for the three Medicare programs for fiscal year 2018 was down from \$51.9 billion for fiscal year 2017 primarily because of a reduction in the Medicare Fee-for-Service program's estimated improper payments. According to HHS's *Fiscal Year 2018 Agency Financial Report*, the reduction in estimated Medicare Fee-for-Service improper payments was driven by a reduction in the estimated amount of improper payments for home health and skilled nursing facility claims. Because health care is one of the major drivers of the long-term fiscal outlook, it is especially critical to take appropriate measures to reduce improper payments in Medicare and Medicaid.⁶⁹

⁶⁸The fiscal year 2018 annual estimate of improper payments is attributable to 79 programs and activities, a decrease of 11 programs and activities from fiscal year 2017. The reduction in the number of programs and activities that reported improper payment estimates was mostly attributable to programs and activities no longer susceptible to significant improper payments under statutory thresholds, defined as gross annual improper payments that may have exceeded either (1) 1.5 percent of program outlays and \$10 million, or (2) \$100 million (regardless of the improper payment rate).

⁶⁹For more information on our work on Medicare and Medicaid including improper payments for these programs, see GAO-19-157SP, 241 and 250.

Medicare – \$48.5 billion

Medicare Fee-for-Service (Parts A and B)

Medicare Advantage (Part C)

Medicare Prescription Drug (Part D)

Earned Income Tax Credit – \$18.4 billion

12.2%

Medicaid – \$36.2 billion

All other programs – \$47.5 billion

Figure 14: Improper Payment Estimates Were Concentrated in Three Areas in Fiscal Year 2018

Source: GAO analysis of agencies' fiscal year 2018 data. | GAO-19-314SP

Data for Figure 14: Improper Payment Estimates Were Concentrated in Three Areas in Fiscal Year 2018

Earned Income Tax Credit – \$18.4 billion	12.2%	
Medicaid – \$36.2 billion	24.1%	
All other programs – \$47.5 billion	31.5%	
Medicare – \$48.5 billion Medicare Fee-for-Service (Parts A and B) Medicare Advantage (Part C) Medicare Prescription Drug (Part D)	32.2%	

To address the issue of improper payments, agencies should first identify the root causes of improper payments and then implement internal controls aimed at both prevention and detection. However, the government's ability to understand the scope of the issue is hindered by incomplete, unreliable, or understated estimates; risk assessments that may not accurately assess the risk of improper payment; and noncompliance with criteria listed in federal law. In addition, certain federal programs and activities determined to be at risk for improper payments did not report estimates of improper payments for fiscal year 2018, including the Premium Tax Credit and Temporary Assistance for

Needy Families, among others. In addition, DOD lacks quality assurance procedures to ensure the completeness and accuracy of the payment populations from which it develops improper payment estimates. To Further, various inspectors general reported their respective agencies had deficiencies related to compliance with the criteria listed in the Improper Payments Elimination and Recovery Act of 2010 for fiscal year 2017. Our work has identified a number of strategies and specific actions agencies can take to reduce improper payments, which could yield significant savings and help ensure that taxpayer funds are adequately safeguarded.

Address the Persistent Tax Gap: Opportunities to Increase Revenues Require Strategies on Multiple Fronts

The tax gap is the difference between tax amounts that taxpayers should pay and what they actually pay voluntarily and on time. The Internal Revenue Service (IRS) estimated the size of the average annual gross tax gap was \$458 billion for tax years 2008 through 2010. IRS also estimated it would recover \$52 billion through enforcement actions and late payments. This resulted in an average annual net tax gap of \$406 billion (see figure 15). Given the size of the tax gap, even modest reductions would yield significant financial benefits and help improve the government's fiscal condition.

⁷⁰In May 2013, we reported on major deficiencies in DOD's process for estimating fiscal year 2012 improper payments in the Defense Finance and Accounting Service Commercial Pay program, including deficiencies in identifying a complete and accurate population of payments; see GAO, *DOD Financial Management: Significant Improvements Needed in Effort to Address Improper Payment Requirements*, GAO-13-227 (Washington, D.C.: May 13, 2013). The foundation of reliable statistical sampling estimates is a complete, accurate, and valid population from which to sample. As of May 2018, DOD's efforts to establish and implement key quality assurance procedures to ensure the completeness and accuracy of sampled populations were still under development.

⁷¹The most recent inspectors general reports on compliance with the criteria listed in the Improper Payments Elimination and Recovery Act were issued in 2018 for fiscal year 2017.

⁷²For more information on our work on improper payments and related recommendations, see GAO, *Reducing Government-wide Improper Payments*, accessed March 22, 2019, http://www.gao.gov/key_issues/reducing_government-wide_improper_payments/issue_summary.

Figure 15: IRS's Annual Average Tax Gap Estimate for Tax Years 2008–2010 **Dollars (in trillions)** \$2,496 This difference of \$458 billion/year Taxpayers owed about \$2.5 trillion/year in federal = the Gross Tax Gap. taxes from things like: \$2.0 \$2.038 Individual income taxes And, although IRS Corporate income taxes estimated that it will \$1.5 Employment taxes collect an extra \$52 billion/year through late payments \$1.0 and enforcement However, they actually paid activities, about \$2 trillion/year. \$0.5 it also estimated that \$406 billion/year will never be collected, \$0 representing the Net Tax Gap. Taxes Taxes paid Source: Internal Revenue Service (IRS). | GAO-19-314SP

Data for Figure 15: IRS's Annual Average Tax Gap Estimate for Tax Years 2008-2010

	Dollars (in trillions)
Taxes owed	\$2,496
	Taxpayers owed about
	\$2.5 trillion/year in federal taxes from things like:
	Individual income taxes
	Corporate income taxes
	Employment taxes
Taxes paid	\$2,038
	However, they actually paid only about \$2 trillion/year.
	This difference of \$458 billion/year = the Gross Tax Gap.
	And, although IRS estimated that it will collect an extra
	\$52 billion/year through late payments and
	enforcement activities, it also estimated that
	\$406 billion/year will
	never be collected, representing the
	————Net Tax Gap.

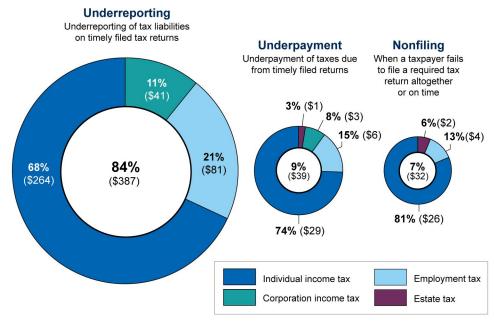
Note: IRS released its most recent tax gap estimate in April 2016 for tax years 2008 to 2010.

The tax gap arises when taxpayers, whether intentionally or inadvertently, fail to (1) accurately report tax liabilities on tax returns (underreporting),

(2) pay taxes due from filed returns (underpayment), or (3) file a required tax return altogether or on time (nonfiling). Underreporting accounted for 84 percent of the tax gap across tax years 2008 to 2010, as shown in figure 16.

Figure 16: Estimated Average Annual Gross Tax Gap by Type of Noncompliance and Tax, Tax Years 2008-2010

Dollars (in billions)



Source: GAO analysis of Internal Revenue Service (IRS) information. | GAO-19-314SP

Data for Figure 16: Estimated Average Annual Gross Tax Gap by Type of Noncompliance and Tax, Tax Years 2008-2010

Dollars (in billions)

Pie chart 1: Underreporting

Total of all three types: 84% (\$387) Individual income tax: 68% (\$264) Corporation income tax:11% (\$41)

Employment tax: 21% (\$81)

Estate tax:none

Pie chart 2: Underpayment

Total of all three types: 9% (\$39) Individual income tax: 74% (\$29) Corporation income tax: 8% (\$3) Employment tax: 15% (\$6)

Estate tax: 3% (\$1)

Pie chart 3: Nonfiling

Total of all three types: 7% (\$32) Individual income tax: 81% (\$26) Corporation income tax: none Employment tax: 13% (\$4)

Estate tax: 6% (\$2)

Source: GAO analysis of Internal Revenue Service information.

Note: Data may not sum to totals because of rounding. Individual income tax includes individual business income tax. Estate tax underreporting noncompliance is not shown in this graphic because it represents less than one-half percent of total underreporting noncompliance. Excise tax is not shown in this graphic because the Internal Revenue Service (IRS) does not have excise tax underreporting noncompliance or nonfiling noncompliance estimates, and its estimate for excise tax underpayment noncompliance represents less than one-half percent of total underpayment noncompliance. In addition, IRS does not have a corporation income tax estimate for nonfiling noncompliance.

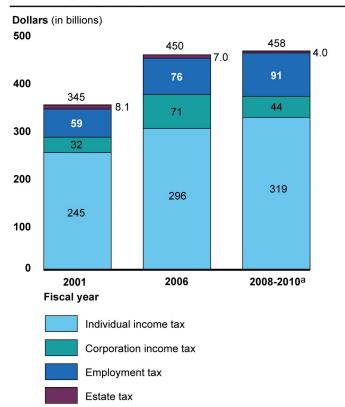
This issue has been on our High-Risk List since its inception in 1990.⁷³ Addressing the tax gap will require strategies on multiple fronts. Key factors that contribute to the tax gap include limited third-party reporting, challenges with customer service, and tax code complexity. For example, the extent to which individual taxpayers accurately report their income is correlated with the extent to which the income is reported to them and IRS by third parties. Where there is little or no information reporting, such as with business income, taxpayers tend to significantly misreport their income.

The tax gap has been persistent across different types of taxes and taxpayers over time, as shown in figure 17.

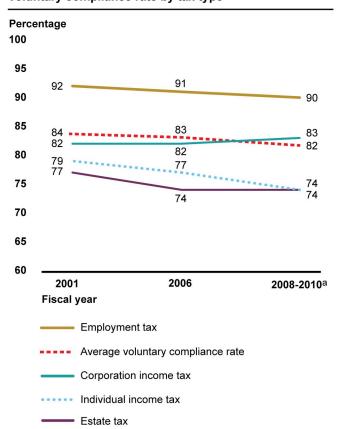
⁷³For more information on addressing the tax gap, see GAO-19-157SP, 235.

Figure 17: Tax Gap Comparison, Tax Year 2001 to Tax Years 2008-2010

Gross tax gap by tax type



Voluntary compliance rate by tax type



Source: GAO analysis of Internal Revenue Service (IRS) data. | GAO-19-314SP

Data for Figure 17: Tax Gap Comparison, Tax Year 2001 to Tax Years 2008-2010

	2001		2006		2008-20010	
	Dollars (billions)	Percent	Dollars (billions)	Percent	Dollars (billions)	Percent
Gross total	345		450		458	
Individual	245.4	79%	296	77%	319	74%
Corporation	32.3	82%	71	82%	44	83%
Employment	59	92%	76	91%	91	90%
Estate	8.1	77%	7	74%	4	74%
Excise	0.5		0.1		0.4	
Tax Gap as % of GDP	2.71%		3.06%		3.12%	
GDP	12,710		14,720		14,687	

	2001		2006		2008-20010	
	Dollars (billions)	Percent	Dollars (billions)	Percent	Dollars (billions)	Percent
Total voluntary compliance rate		83.7%	83.1%		81.7%	
Estimated true tax liability	1,767		2,660		2,496	

Note: This graphic does not include excise taxes, which accounted for less than 0.2 percent of each gross tax gap estimate. When the gross tax gap figures are inflated to fiscal year 2016 dollars, the figures are \$460 billion in 2001, \$530 billion in 2006, and \$509 billion in 2008-2010.

Reducing the tax gap will be a challenging task requiring action on multiple fronts. Our work has identified a number of strategies and specific actions IRS and Congress can take to reduce the tax gap. For example, in 2017, we recommended that IRS develop and document a strategy that outlines how IRS will use data to update compliance strategies that could help address the tax gap. We have also previously made recommendations to IRS aimed at enhancing taxpayer services and determining resource allocation strategies for its enforcement efforts, among others. IRS has not yet fully implemented many of these recommendations. We have also previously suggested targeted

^aThe 2008-2010 tax gap estimate is an average of all 3 years.

⁷⁴GAO, *Tax Gap: IRS Needs Specific Goals and Strategies for Improving Compliance*, GAO-18-39 (Washington, D.C.: Oct. 31, 2017). Likewise, we recommended that IRS develop and document plans to use employment tax compliance data to estimate the current state of the employment tax portion of the tax gap. See GAO, *Employment Taxes: Timely Use of National Research Program Results Would Help IRS Improve Compliance and Tax Gap Estimates*, GAO-17-371 (Washington, D.C.: Apr. 18, 2017).

⁷⁵See GAO, *Tax Fraud and Noncompliance: IRS Could Further Leverage the Return Review Program to Strengthen Tax Enforcement*, GAO-18-544 (Washington, D.C.: July 24, 2018); *2016 Filing Season: IRS Improved Telephone Service but Needs to Better Assist Identity Theft Victims and Prevent Release of Fraudulent Refunds*, GAO-17-186 (Washington, D.C.: Jan. 31, 2017); *IRS Website: Long-Term Strategy Needed to Improve Interactive Services*, GAO-13-435 (Washington, D.C.: Apr. 16, 2013); *2012 Tax Filing: IRS Faces Challenges Providing Service to Taxpayers and Could Collect Balances Due More Effectively*, GAO-13-156 (Washington, D.C.: Dec. 18, 2012); *Tax Gap: IRS Could Significantly Increase Revenues by Better Targeting Enforcement Resources*, GAO-13-151 (Washington, D.C.: Dec. 5, 2012); and *2010 Tax Filing Season: IRS's Performance Improved in Some Key Areas, but Efficiency Gains Are Possible in Others*, GAO-11-111 (Washington, D.C.: Dec. 16, 2010).

legislative actions such as expanding third-party information reporting, enhancing electronic filing, and regulating paid preparers.⁷⁶

Continue to Address Duplication, Overlap, and Fragmentation: Agencies Have the Potential to Achieve Billions in Financial Benefits for the Government

Since 2011, we have reported on federal programs, agencies, offices, and initiatives that have duplicative goals or activities as well as opportunities to achieve greater efficiency and effectiveness that result in cost savings or enhanced revenue collection. In our eight annual reports from 2011 through 2018, we presented about 300 areas and about 800 actions for executive branch agencies or Congress to reduce, eliminate, or better manage fragmentation, overlap, or duplication; achieve cost savings; or enhance revenue. Actions taken by the executive branch and Congress on these issues have resulted in achieved and projected financial benefits of roughly \$178 billion since fiscal year 2010.⁷⁷ As of October 2018, about 51 percent of the actions were fully addressed, about 24 percent were partially addressed, and about 18 percent were not addressed.⁷⁸ We estimate that tens of billions of dollars in additional financial benefits are possible by fully implementing our recommended actions.

⁷⁶See GAO-14-453; Paid Tax Return Preparers: In a Limited Study, Preparers Made Significant Errors, GAO-14-467T (Washington, D.C.: Apr. 8, 2014); Tax Gap: IRS Could Do More to Promote Compliance by Third Parties with Miscellaneous Income Reporting Requirements, GAO-09-238 (Washington, D.C.: Jan. 28, 2009); and Tax Gap: Actions That Could Improve Rental Real Estate Reporting Compliance, GAO-08-956 (Washington, D.C.: Aug. 28, 2008).

⁷⁷The \$178 billion includes about \$125 billion from 2010 through 2017 and \$53 billion projected to accrue in 2018 or later. In calculating these totals, we relied on individual estimates from a variety of sources, which considered different time periods and utilized different data sources, assumptions, and methodologies. These totals represent a rough estimate of financial benefits and have been rounded down to the nearest \$1 billion.

⁷⁸Seven percent of the actions have been consolidated or other—replaced or subsumed by new actions based on additional audit work or other relevant information—or closed as not addressed because the action is no longer relevant due to changing circumstances. For more information on our work on duplication, overlap, and fragmentation including cost-savings and revenue enhancements, see GAO, *2018 Annual Report: Additional Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Other Financial Benefits*, GAO-18-371SP (Washington, D.C.: Apr. 26, 2018) and *Duplication & Cost Savings: Action Tracker*, updated on October 10, 2018, https://www.gao.gov/duplication/overview#t=1.

Improve Information: Agencies Could Aid Fiscal Decision-Making by Providing Improved Information on Programs and Fiscal Operations

In many cases, agencies also need to take action to provide decision makers with additional or improved information on the performance and costs of policies or programs. In particular, decision-making could be improved by strengthening internal controls over financial reporting and increasing attention to tax expenditures.

Eliminating material weaknesses in internal control over financial reporting. Eliminating these weaknesses would improve the reliability of financial information and improve financial decision-making. The U.S. government's consolidated financial statements are intended to present the results of operations and the financial position and condition of the federal government as if the government were a single enterprise. Since the federal government began preparing consolidated financial statements more than 20 years ago, three major impediments have continued to prevent us from rendering an opinion on the federal government's accrual-based consolidated financial statements over this period: (1) serious financial management problems at DOD that have prevented its financial statements from being auditable, (2) the federal government's inability to adequately account for intragovernmental activity and balances between federal entities, and (3) the federal government's ineffective process for preparing the consolidated financial statements. Over the years, we have made a number of recommendations to OMB, Treasury, and DOD to address these issues.⁷⁹ Generally, these entities have taken or plan to take actions to address these recommendations.

The material weaknesses in internal control underlying these three major impediments continue to (1) hamper the federal government's ability to reliably report a significant portion of its assets, liabilities, costs, and other related information; (2) affect the federal government's ability to reliably

⁷⁹See, GAO, *Management Report: Improvements Needed in Controls over the Processes Used to Prepare the U.S. Consolidated Financial Statements*, GAO-17-524 (Washington, D.C.: July 12, 2017). In addition, see GAO, *DOD Financial Management – High Risk Issue*, accessed on March 22, 2019,

http://www.gao.gov/key_issues/dod_financial_management/issue_summary. Further, other auditors have made recommendations to DOD to improve DOD's financial management.

measure the full cost, as well as the financial and nonfinancial performance, of certain programs and activities; (3) impair the federal government's ability to adequately safeguard significant assets and properly record various transactions; and (4) hinder the federal government from having reliable financial information to operate in an efficient and effective manner.

Increased attention to tax expenditures. Tax expenditures are provisions of the tax code that reduce taxpayers' tax liability and therefore the amount of tax revenue paid to the government. Examples include tax credits, deductions, exclusions, exemptions, deferrals, and preferential tax rates. Tax expenditures are sometimes used to provide economic relief to selected groups of taxpayers, to encourage certain behavior, or to accomplish other goals. The goals they seek to advance may be similar to the goals of mandatory or discretionary spending programs.

In fiscal year 2018, tax expenditures reduced income tax revenues by approximately \$1.38 trillion based on our calculation summing Treasury estimates for each tax expenditure. The 2018 Financial Report included estimates for the five largest tax expenditures. The largest tax expenditure is related to employer-provided health insurance—employees generally pay no income taxes on their employers' contributions to their medical insurance premiums. This tax expenditure represents an estimated \$205 billion in forgone income tax revenue in fiscal year 2018.

Although they are routinely used as a policy tool, tax expenditures are not regularly reviewed and their outcomes are not measured as closely as spending programs' outcomes. In September 2005, we recommended that OMB take actions to develop a framework for evaluating tax expenditure performance, and to regularly review tax expenditures in

⁸⁰The sum of the specific tax expenditure estimates is useful for gauging the general magnitude of revenue forgone through provisions of the tax code, but aggregate tax expenditure estimates must be interpreted carefully. Summing revenue loss estimates does not take into account possible interactions between individual provisions or potential behavioral responses to changes in these provisions on the part of taxpayers. Additionally, Treasury's tax expenditure estimates include the effect of certain tax credits on receipts only and not the effect of the credits on outlays, which Treasury reports separately, but does not take into account interactions between individual provisions.

⁸¹The value of employer-provided health insurance and medical care is also excluded from Medicare and Social Security payroll taxes, and Treasury estimated that the payroll tax revenue losses were \$131.9 billion in 2018.

executive branch budget and performance review processes.⁸² However, OMB has not developed a systematic approach for conducting such reviews, and has not reported progress on addressing data availability and analytical challenges in evaluating tax expenditures since the President's fiscal year 2012 budget. In July 2016, we recommended that OMB work with agencies to identify which tax expenditures contribute to agency goals. OMB generally agreed with the recommendation but had taken no action as of March 2019.⁸³ Absent such analysis, policymakers have little way of knowing whether these tax provisions support achieving the intended federal outcomes. Policymakers also lack information to compare their cost and efficacy with other policy tools.⁸⁴

This publication was prepared under the direction of Susan J. Irving, Senior Advisor to the Comptroller General, Debt and Fiscal Issues, who may be reached at (202) 512-6806 or irvings@gao.gov; Robert F. Dacey, Chief Accountant, who may be reached at (202) 512-3406 or daceyr@gao.gov; and Dawn B. Simpson, Director, Financial Management and Assurance, who may be reached at (202) 512-3406 or simpsondb@gao.gov if there are any questions. GAO staff who made key contributions to this publication are listed in appendix II. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this publication. In addition, this publication will be available at no charge on GAO's website at http://www.gao.gov.

Gene L. Dodaro

Comptroller General of the United States

fene L. Dodan

⁸²GAO, Government Performance and Accountability: Tax Expenditures Represent a Substantial Federal Commitment and Need to Be Reexamined, GAO-05-690 (Washington, D.C.: Sept. 23, 2005).

⁸³GAO, Tax Expenditures: Opportunities Exist to Use Budgeting and Agency Performance Processes to Increase Oversight, GAO-16-622 (Washington, D.C.: July 7, 2016).

⁸⁴For more information on our work on tax expenditures, see GAO, *Key Issues: Tax Expenditures*, accessed on March 22, 2019, https://www.gao.gov/key_issues/tax_expenditures/issue_summary.

Appendix I: Objectives, Scope, and Methodology

This report summarizing the fiscal health of the federal government was conducted under the authority of the Comptroller General. In this report, we discuss the federal government's current fiscal condition and how it changed in fiscal year 2018, the federal government's unsustainable long-term outlook, the risks to the government's fiscal condition, and opportunities to improve its fiscal health.

To summarize the current fiscal condition and how it changed in fiscal year 2018, we reviewed:

- The Fiscal Year 2018 Financial Report of the United States
 Government (2018 Financial Report) prepared by the Secretary of the
 Treasury in coordination with the Director of the Office of
 Management and Budget (OMB),
- Congressional Budget Office (CBO) reports on the effects of legislation on its projections of the federal deficit, and
- Our prior work on federal debt.

For the federal government's long-term outlook, we reviewed the projections from the Statements of Long-Term Fiscal Projections in the 2018 Financial Report, CBO's June 2018 long-term budget outlook report, CBO's January 2019 budget and economic outlook report, and our long-term simulations of federal revenues and spending. Our two simulations are the baseline extended and the alternative. To conduct our simulations, we primarily used data from CBO and the Medicare and Social Security Trustees. The baseline extended simulation begins with a baseline using CBO estimates and generally assumes current law continues into the future; for example, tax provisions expire as scheduled. The alternative generally reflects historical trends; for example, tax provisions scheduled to expire are extended. For a description of the assumptions and data for these simulations, see https://www.gao.gov/assets/700/690292.pdf.

To describe the debt limit and alternative approaches to delegating borrowing authority, as well as the use of fiscal rules in the United States and other countries, we drew from our prior work. To describe the current

Appendix I: Objectives, Scope, and Methodology

status of the debt limit and the Department of the Treasury's (Treasury) extraordinary actions, we reviewed a CBO report and Treasury letter on the extraordinary actions.

To describe the risks to the federal government's fiscal condition, we drew from our audit report on the consolidated financial statements included in the *2018 Financial Report*¹, our 2019 High-Risk List, and relevant laws.²

To identify opportunities to improve the federal government's fiscal health, we reviewed our prior reports on improper payments, the tax gap, tax expenditures, our audit report on the consolidated financial statements included in the *2018 Financial Report*, and our work on duplication, overlap, and fragmentation.

We conducted our work from September 2018 to April 2019 in accordance with all sections of GAO's Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the engagement to obtain sufficient and appropriate evidence to meet our stated objectives and to discuss any limitations in our work. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any findings and conclusions.

¹GAO, Financial Audit: Fiscal Years 2018 and 2017 Consolidated Financial Statements of the U.S. Government, GAO-19-294R (Washington, D.C.: Mar. 28, 2019).

²Our 2019 High-Risk List was reported in GAO, *High-Risk Series: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas, GAO-19-157SP* (Washington, D.C.: Mar. 6, 2019).

Appendix II: GAO Contacts and Staff Acknowledgments

GAO Contacts

Susan J. Irving, (202) 512-6806, irvings@gao.gov

Robert F. Dacey, (202) 512-3406, daceyr@gao.gov

Dawn B. Simpson, (202) 512-3406, simpsondb@gao.gov

Staff Acknowledgments

In addition to the contacts named above, Janice Latimer (Assistant Director), Alexander Ray (Analyst-in-Charge), Michael Bechetti, Robert Gebhart, Meredith Moles, Laurel Plume, and Ardith Spence made key contributions to this report. Additional assistance in their areas of expertise was provided by Margaret Adams, Dorothy Amatucci, Jeff Arkin, Nikki Clowers, Michael Collins, Beryl Davis, Elizabeth Field, Daniel Flavin, James Andrew Howard, Richard Geiger, Charles Jeszeck, Shirley Jones, Sarah Kaczmarek, Thomas J. McCabe, James R. McTigue, Jr., Joseph O'Neill, Ernest Powell, Jr., Oliver Richard, Marylynn Sergent, Frank Todisco, Matthew Valenta, Rebecca Rust Williamson, and Charles Young.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's website (https://www.gao.gov). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to https://www.gao.gov and select "E-mail Updates."

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, https://www.gao.gov/ordering.htm.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on Facebook, Flickr, Twitter, and YouTube. Subscribe to our RSS Feeds or E-mail Updates. Listen to our Podcasts. Visit GAO on the web at https://www.gao.gov.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: https://www.gao.gov/fraudnet/fraudnet.htm

Automated answering system: (800) 424-5454 or (202) 512-7700

Congressional Relations

Orice Williams Brown, Managing Director, WilliamsO@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548

Strategic Planning and External Liaison

James-Christian Blockwood, Managing Director, spel@gao.gov, (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548