Since the Great Recession, total government spending has behaved abnormally both in its greater volatility and in its slow growth. Over this period, a secular trend in the composition of government spending toward more transfers and fewer purchases of goods and services has accelerated. During the Great Recession, government debt increased substantially as tax revenues plummeted. Economic recovery has brought increased tax revenues and stabilized deficits, but government debt remains elevated, and the debt-to-GDP ratio is currently nearing its historical peak.

**Total Government Spending**

Over the 50 years prior to the Great Recession, 1957 to 2006, real government spending increased by an average of 3.81 percentage points per year. Over the same 50-year period, the standard deviation of the growth rates of government spending (a measure of variability) was 1.92, and there was never a single year in which real government spending declined.

In contrast, from 2007 onwards, real government spending has increased by an average of only 1.94 percentage points per year. The standard deviation of the rates of change increased to 2.80 percentage points. Declines occurred in 3 out of 8 years, but they followed an increase of 6.15 percent from 2008.
to 2009, which was the largest single year increase since 1966–1967. Our finding of increased volatility is consistent with the work of Fernández-Villaverde, Guerrón-Quintana, Kuester, and Rubio-Ramírez (2015), who also document a dramatic increase in government spending volatility since the Great Recession.

As GDP was falling during the Great Recession, government spending as a share of GDP increased. In the third quarter of 2009, government spending as percentage of GDP reached 41.43 percent, its highest level since World War II. Since that peak, downward movements in government spending have moved it more in line with its historical share of GDP.

**Mix of Government Spending**

In looking at the composition of government spending, we focus on two types of spending. One is consumption expenditures and gross investment (GCGI) and the other is transfer payments. Broadly speaking, GCGI consists of spending by the government on goods and services. More specifically, government consumption consists of spending by the government to provide goods and services to the public, and government gross investment is spending by the government on longer-lived assets that benefit the public such as roads and military equipment. Transfer payments consist of spending on social benefit programs such as social security, unemployment insurance, and veterans’ benefits.

**Long-run Trends**

Since 1929, the sum of GCGI and transfer payments consistently has accounted for roughly 90 percent of government spending (with the remaining 10 percent accounted for by government interest payments and subsidies). However, the relative shares of GCGI and transfer payments have been changing. GCGI’s share has been declining, and transfers’ share has been rising. In 1957, GCGI made up 76.79 percent of government spending, but by the end of 2006 it had fallen to 54.81 percent. The trend downward was steady, with GCGI falling by an average of 0.46 percentage points per year. The composition of GCGI spending has been changing as well. From 1957 to 2006, the percentage share of GCGI allocated to defense fell...
from 56 to 24, an average annual decrease of 0.63 percentage points. Meanwhile, transfers’ share of government spending increased from 14.36 percent in 1957 to 33.91 percent in 2006, an average annual increase of 0.40 percentage points.

**Recent Developments**

Since the start of the Great Recession, most long-run trends in the composition of government spending have accelerated. From 2007 onward, the rate of decline of GCGI’s share has accelerated to 0.65 percentage points annually on average. As of 2014:Q4, GCGI comprised just 49 percent of government spending, its lowest share on record. The pre-Recession trend towards a declining share of defense spending in GCGI has slowed, as this share remains virtually unchanged at 24 percent. During this same period, transfers’ share of government spending has increased at an average annual rate of 0.71 percentage points and now stands at 40.12 percent of government spending, its highest share on record.

**Government Revenues, Deficits, and Debt**

Taxes account for the majority of the government’s revenue. During the Great Recession, tax revenues fell sharply. From 2007:Q4 to 2009:Q2, real tax receipts fell by 15.17 percent. The “Mix of Government Spending” chart above shows the percentage of government spending financed by current tax receipts. We can see that in 2009:Q3, tax receipts financed only 62.17 percent of current government spending, the lowest share since World War II.

The gap between current tax receipts and government spending is known as the “deficit.” The deficit-to-GDP ratio shows the spike in the deficit associated with the sharp declines in tax revenues during the recession and its recent stabilization during the economic recovery to levels consistent with historical precedent.

At the end of 2006, total public debt was 61.8 percent of GDP, a debt burden not unusual from the mid-1980s onward. From the above figure, we can see the effect of the deficits of the Great Recession on the accumulation of government debt. During the Great Recession, the ratio of public debt to GDP rose to 82.4 percent by the end of 2009, a level not seen...
since 1950. Five years after the recession, total debt reached 103.3 percent of GDP and has remained above 100 percent since. The US economy last experienced comparable levels of public debt in the years immediately following World War II, when the ratio of public debt to GDP peaked at 119 percent in 1947.\(^1\)

Since the Great Recession, real government spending has shown unusually high volatility while increasing overall by an unusually small amount. The mix of government spending continues to shift toward more transfers in an acceleration of a trend in place since 1950. Meanwhile, government debt has continued to accumulate as tax revenues have recovered only slowly along with economic output. As a result, government debt as percentage of GDP is now nearing its historical peak.

**Footnote**

1. Computing the debt to GDP ratio with just debt held by the public yields a very similar path of debt relative to GDP, but the ratio is lower for debt held by the public (standing at about 73 percent at present) than for overall debt.

**Reference**