What are municipal bonds and how are they used?

Municipal bonds (a term that encompasses both state and local government debt) are obligations that entitle owners to interest plus repayment of principal at a specified date. States and localities (cities, townships, counties, school districts, and special districts) issue bonds to pay for large, expensive, and long-lived capital projects, such as roads and schools.

State and local governments issue bonds to pay for large, expensive, and long-lived capital projects, such as roads and water treatment facilities. Although states and localities can and sometimes do pay for capital investments with current revenues, borrowing allows them to spread the costs across multiple generations. Future infrastructure users bear some of the cost through higher taxes or tolls that service the debts.

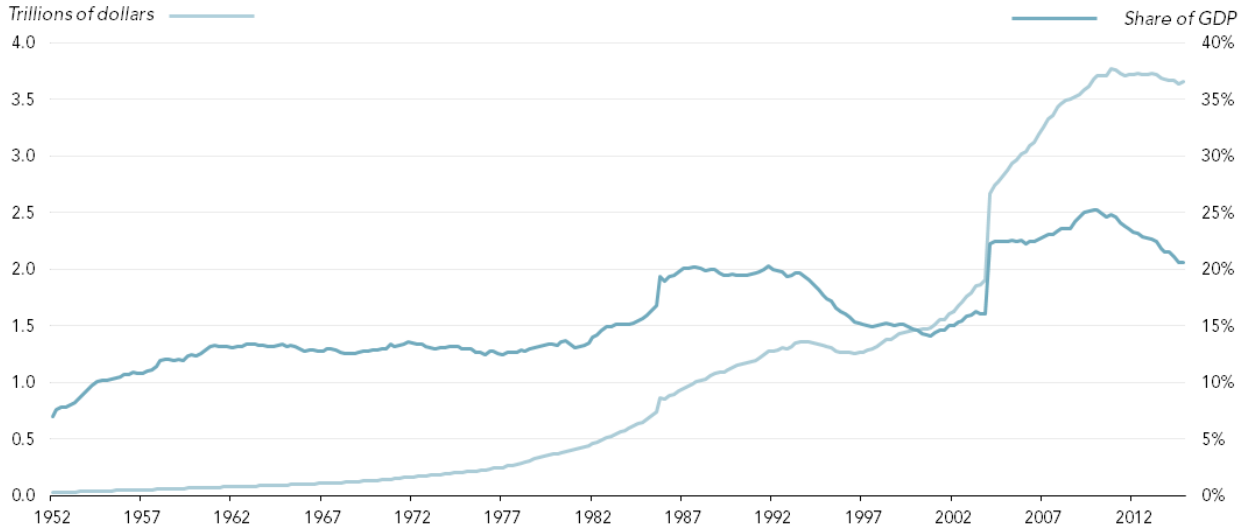
State and local governments borrow mainly by issuing bonds. Investors may buy bonds and hold them to maturity, or they may sell them on secondary markets. Bonds are often described in terms of their yield, or the interest rate that equates prices to cash flows. Bond prices and yields are inversely related to one another, so when prices rise, yields fall.

How Large Is the Muni Bond Market?

At the end of 2014, state and local governments had $3.65 trillion in debt outstanding (figure 1). Although the level of municipal debt has more than tripled in nominal terms since the mid-1980s, it has remained relatively stable as a percentage of GDP (15 to 20 percent). In fiscal year 2012, the latest year for which breakdowns are available, state governments were responsible for 40 percent and localities for 60 percent of the debt outstanding.

FIGURE 1

State and Local Government Debt Outstanding
1952–2012



Source: Federal Reserve Bank, March 2015.
Note: Starting in the first quarter of 2004, the Federal Reserve made a one time $800 billion adjustment to the stock of municipal debt oustanding.

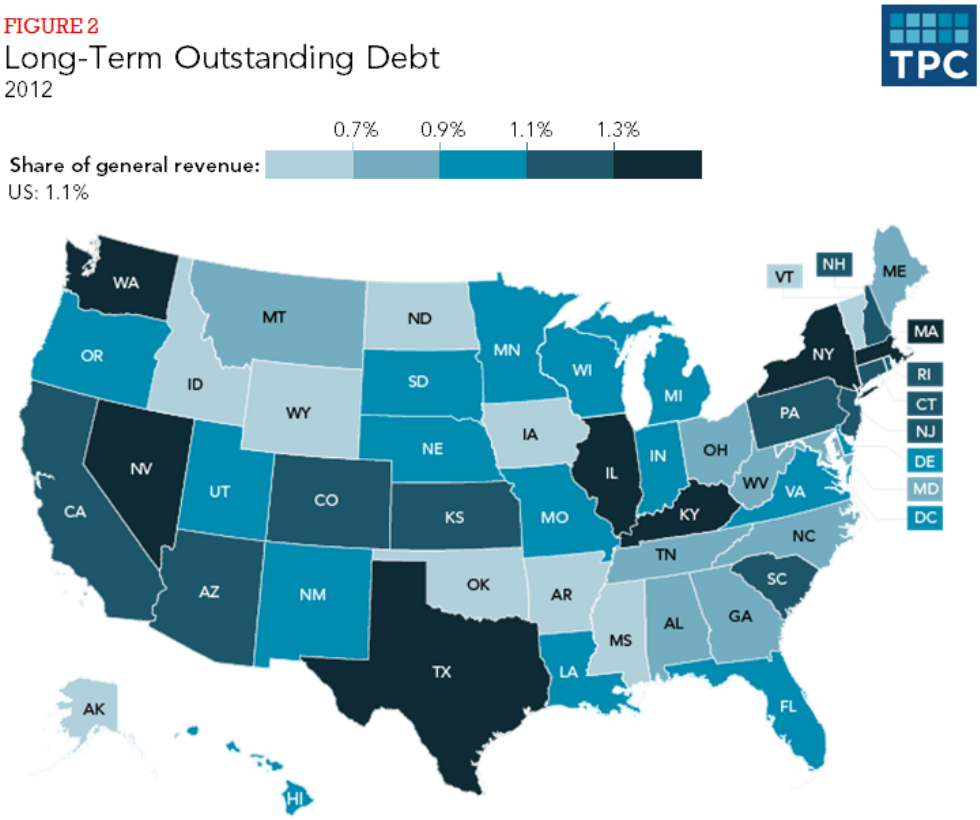
About 98 percent of this debt was issued for longer than one year. States and localities also borrow over the short term to smooth uneven cash flows (e.g., when tax revenues arrive in April but expenditures occur throughout the year).

States vary widely in their long-term municipal debt outstanding (figure 2).

FIGURE 2

Long-Term Outstanding Debt

2012



Source: US Census Bureau.

What Are the Main Types of State and Local Government Debt?

General obligation (GO) bonds are generally considered the most secure form of municipal debt because they are backed by an issuer's "full faith and credit," including its power to tax. Bonds may also be secured by future revenue streams, such as tolls or other user charges and are called revenue bonds.

GO bonds typically require voter approval and are subject to limits on total debt outstanding. Revenue bonds and bonds secured by anticipated legislative appropriations are not subject to these requirements or limits. In addition to new borrowing, state and local governments may issue bonds to refinance or "refund" existing debt.

In 2014, roughly 60 percent of state and local issuances were revenue bonds and 40 percent were GO bonds. Issuances were lower than average and more heavily weighted than usual toward refunding, similar to a refinancing. Issuers were seeking to

take advantage of low interest rates but were reluctant to issue new debt as revenue growth remained sluggish in the wake of the Great Recession.

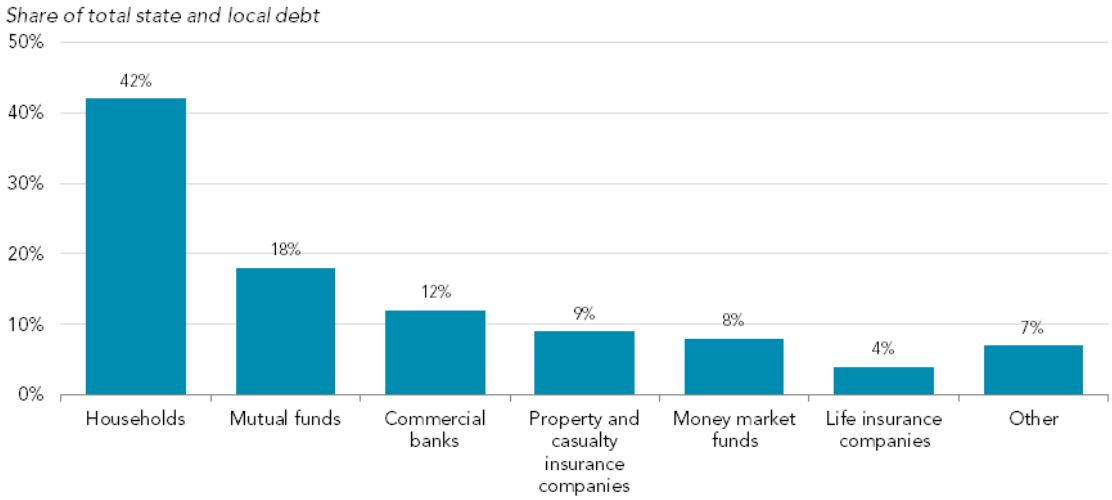
Who Holds State and Local Government Debt?

The largest quantity is held by households, followed by mutual funds (which also includes household investors) (figure 3). Banks and life insurance companies used to be more prominent municipal bond holders until the Tax Reform Act of 1986 and subsequent litigation limited the advantages of doing so.

FIGURE 3

Holders of State and Local Debt

2nd quarter, 2015



Source: Federal Reserve Bank, March 2015.
Notes: "Other" category includes: closed-end funds, foreign investors, brokers and dealers, nonfinancial corporate businesses, government-sponsored enterprises, savings institutions, exchange-traded funds, state and local government general funds, and state and local government retirement funds.

How Does the Federal Tax Exemption Work and What Are Proposals for Reform?

Since its inception in 1913, the federal income tax has exempted interest payments received from municipal bonds (a term that encompasses both state and local debt) from taxable income. State and local governments also typically exempt interest on bonds issued by taxpayers' state of residence. However, the US Supreme Court in *Department of Revenue of Ky. v. Davis* upheld states' ability to tax interest on bonds issued by other jurisdictions, though some jurisdictions, including the District of Columbia, do not tax municipal debt from any state.

Because of the tax exemption, state and local governments can borrow more cheaply than other debt issuers, such as corporations, for a given level of risk and length of maturity. The federal tax exemption therefore functions as a federal subsidy to state and local public infrastructure investment. This subsidy comes at a cost in foregone tax revenues, which amounted to *$29 billion* in fiscal 2014.

The tax exemption has been criticized as inefficient because high-bracket taxpayers receive more than the inducement needed to purchase municipal bonds. In 2007, for example, a high-grade taxable municipal bond (some do not qualify for the exemption) yielded 5.6 percent. The yield for a comparable tax-exempt bond was 4.4 percent. Thus, taxpayers in the 21 percent bracket should be just indifferent between the two types of bonds (the gap in yields—1.2 percentage points—is about 21 percent of 5.6 percentage points). Anyone in a higher bracket receives a windfall that generates no additional benefit for the borrower.

In light of this inefficiency, proposals have long circulated to cap the federal tax exemption (e.g., at 28 percent in President Obama's FY2016 and prior budgets) or to augment tax-exempt bonds with taxable bonds providing a direct subsidy to issuers as a tax credit to bondholders. The President's FY2016 budget included such a taxable bond proposal modeled after the 2009 American Recovery and Reinvestment Act's Build America Bonds. However, the revenue gain from eliminating or capping the deduction depends on whether bondholders responded by shifting their portfolios toward taxable bonds or other investments (Verdugo and Poterba 2011).

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