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Perspectives on the Government Sector and Aggregate Demand

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After ameliorating the contraction in aggregate demand during the Great Recession, discretionary fiscal policy actions slowed the pace of recovery in the early years of the current expansion. By 2014, however, the restraint from discretionary fiscal policy had essentially ended, and we anticipate that over the next several years fiscal policy actions will provide only a meager boost to the growth in aggregate demand. In sharp contrast, the government sector has generally provided significant and sustained impetus to aggregate demand over the course of past expansions. This memo discusses the analytic framework and factors which inform this assessment of the effect of the government sector on aggregate demand.[1]

We begin, though, with a brief discussion of the topical issues of the implications of the debt crisis in Puerto Rico for the state and local government sector and upcoming fiscal deadlines at the federal level. We then turn to our treatment of the government sector and aggregate demand by providing a brief overview of the channels through which the government sector influences demand. We then discuss the analytic apparatus that we use to quantify these effects. Next, we use this apparatus to examine the effect of the government sector on the growth in real GDP in the current expansion and in the staff's projection. Finally, we conclude with a brief section on fiscal policy and aggregate demand in the longer term.

**Near-term fiscal issues: Puerto Rico and looming federal budget deadlines**

The late-June announcement that Puerto Rico debt was "not payable" naturally raises the question of whether other U.S. subnational governments may soon confront their own debt crises. Puerto Rico, though, appears to be a unique case. As displayed in Figure 1, the value of public debt in Puerto Rico equals around 70 percent of its GDP, far in excess of the most indebted state, New York, which has a ratio of around 25 percent.[2] In addition, although both Puerto Rico and the states and localities face significant obligations for unfunded pension benefits, the magnitude of these liabilities is much greater for Puerto Rico than for most state and local governments. Thus, we do not believe that the crisis in Puerto Rico has immediate parallels for U.S. state and local

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[1] Although it is not the focus of this memo, the government sector also has important effects on aggregate supply. Channels through which these aggregate supply effects operate include public infrastructure investment, public provision of educational services, the effects of the tax code and transfer programs—such as Social Security—on incentives to work and invest, and the influence of government borrowing on private sector investment.

[2] These debt figures include the debt of both the state (or commonwealth) government and all local governments.

governments. To date, the financial markets appear to share this judgment as there has been little sign of contagion from the recent events in Puerto Rico to the broader municipal bond market. Nonetheless, there have been a small number of municipal bankruptcies in recent years (e.g. Detroit and Stockton, CA) and it would be unsurprising if there were some additional fillings over the next several years.

Figure 1

Ratio of State and Local Government Debt to State GDP
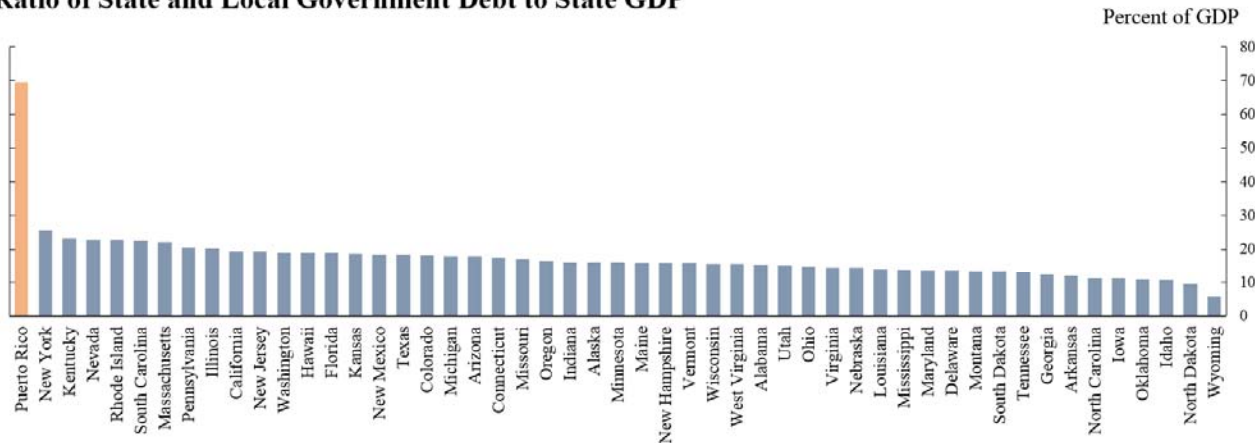
Note: The chart displays the 2014 debt-to-GDP ratio of the fifty U.S. states and the Commonwealth of Puerto Rico. U.S. state debt values are staff estimates based on 2012 debt levels extrapolated to 2014 using the trend in total U.S. state and local government debt. Source: U.S. Census, Bureau of Economic Analysis and Government Development Bank of Puerto Rico

The federal government faces a number of fiscal deadlines, the most significant of which involve the need for the Congress to pass annual appropriations bills and to raise the ceiling on federal debt. Both the Administration and Congress have issued budget plans calling for spending in excess of current law. But, Congress only plans to boost defense spending while the Administration and congressional Democrats propose equal increases to defense and nondefense spending. The staff assumes that it will prove too difficult to negotiate new, higher spending levels and the resolution of this dispute will be to set both defense and non-defense spending at current-law levels with no lapse in funding. In contrast, some speculate that there may be a lapse in funding and, accordingly, a government shutdown. The staff estimates that the last shutdown subtracted ¼ percentage point from the growth in real GDP in the fourth quarter of 2013 and then boosted GDP growth by a similar amount in the following quarter. Turning to the debt ceiling, the staff currently estimates that the federal debt limit will bind in late 2015, but we assume that it will be lifted before the uncertainty leaves an imprint on financial markets. Thus, the staff's baseline projection assumes there will be no major disruptions to federal government operations over the remainder of this year and that spending will follow current law. Our baseline projection for the government sector is discussed in greater detail below.
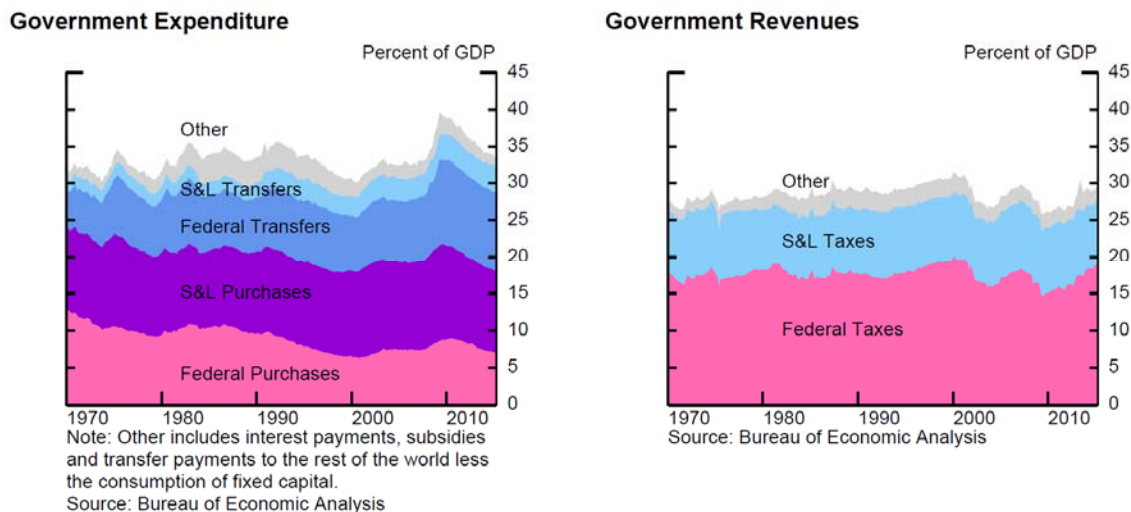
The government sector and aggregate demand

The general government sector comprises the federal government, state governments, and nearly 90,000 local government entities including municipalities, counties, and school

districts. The three principal policy tools of the government sector that influence aggregate demand are purchases, taxes, and transfer payment programs.

Purchases encompass the range of goods and services bought by governments in order to produce public services such as education, transportation, and national defense; it includes compensation for public sector employees. As shown in Figure 2, these purchases, which are the direct contribution of the government sector to GDP, currently constitute 18 percent of GDP; two-thirds are due to state and local governments. Transfers, which include programs such as Social Security and other income support programs, are not directly included in the government component of GDP, but instead influence aggregate demand by affecting personal income. Spending for transfer programs equals 15 percent of GDP, with the federal government accounting for a large majority. Thus, the total expenditures of the government sector are currently equal to about one-third of GDP. Taxes influence aggregate demand through their effect on the incomes of households and businesses as well as by creating incentives for saving and investing, through provisions such as the investment tax credit. Taxes currently equal somewhat less than 30 percent of GDP, with around two-thirds attributable to collections by the federal government.

Figure 2

Government Expenditure — Percent of GDP

Note: Other includes interest payments, subsidies and transfer payments to the rest of the world less the consumption of fixed capital.
Source: Bureau of Economic Analysis

Government Revenues — Percent of GDP

Source: Bureau of Economic Analysis

A framework for analyzing the effect of fiscal policy changes on aggregate demand

The staff's primary tool for assessing the effects of fiscal policy actions on aggregate demand is our fiscal impetus (FI) measure. FI measures the *direct*, or first-round change in aggregate demand arising from *discretionary* fiscal policy changes made by the federal and state and local governments. Thus, FI does not include all of the channels through which fiscal policy changes may influence aggregate demand. In particular, it does not account for follow-on, or multiplier, effects that may result from the first-round changes in aggregate demand. Nor does FI include the effects of the so-called automatic stabilizers—that is, the shifts in tax revenues and government expenditures that occur endogenously over the business cycle even in the absence of discretionary policy

changes. For instance, a decline in tax collections during a recession caused by falling income would not be included in FI.

FI is constructed in three steps. First, the magnitude of the discretionary change in each element of purchases, taxes, and transfers is estimated. Second, we calculate the effect on aggregate demand of these changes using guidance from staff models and other research about the response of consumers and businesses to changes in government policy. Thus, FI is model dependent: Using different modeling frameworks in this second step would potentially produce different estimates of the effect of fiscal policy actions on aggregate demand. Third, the policy effects are aggregated into a single fiscal indicator that quantifies the impulse to growth in real GDP. A brief appendix describes the methodology we use to construct FI in a bit more detail and also discusses the method's limitations.

Figure 3

Government Fiscal Impetus

Note: Fiscal impetus measures the direct impetus to aggregate demand from discretionary federal fiscal policy actions, including, changes in federal purchases, grants, transfer payments, and taxes. A positive value indicates aggregate demand stimulus. A negative value indicates restraint.
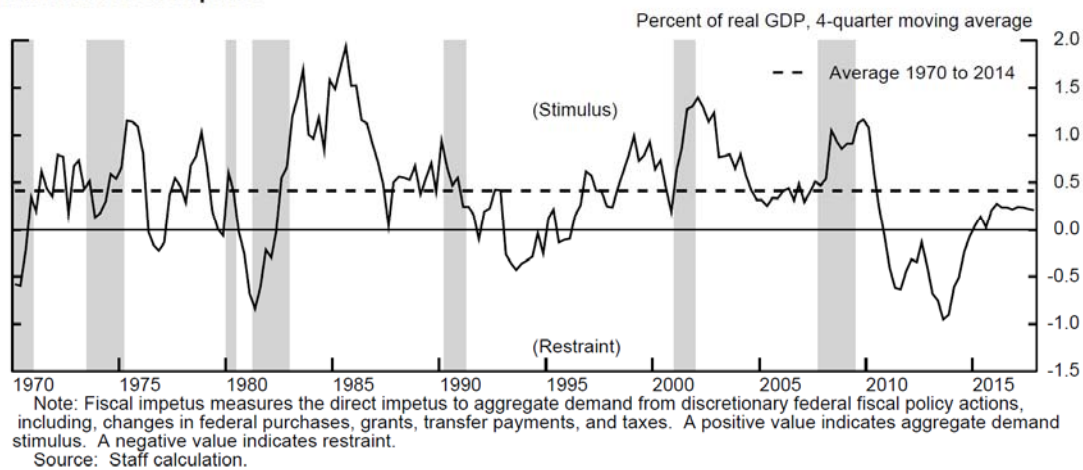Source: Staff calculation.

Figure 3 shows our estimate of FI from 1970 through the end of the staff's medium-term projection. Positive values indicate that discretionary fiscal policy actions are stimulating the growth of aggregate demand, while negative values suggest that policy is restraining growth in demand. Several observations jump out. First, policy (by this metric) is typically stimulative, boosting GDP growth by almost 0.5 percentage point per year, on average, over this period.[3] Second, policy has been particularly stimulative immediately following recessions: With the exception of the very brief 1980 recession and the early-1990s recession (a period marked by significant concern over the federal deficit and debt), FI has shot up in the aftermath of economic downturns. Third, the level of stimulus during and immediately following the Great Recession was not extraordinary; FI in this period is broadly similar to that in the early 2000s and is lower than in the early 1980s. Finally, the duration, and to a lesser extent the depth, of fiscal restraint over the last several years has been extraordinary.

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[3] A positive value for FI does not necessarily imply a government budget deficit. For instance, if an increase in discretionary purchases is financed with a non-discretionary increase in tax revenue resulting from economic growth, no deficit would result and FI would be positive (due to the increase in discretionary purchases).

Fiscal impetus during the current expansion

In order to identify the source of the unusually restrictive fiscal policy in recent years, we decompose the contour of FI in two different ways. We first decompose FI into broad policy components. The first component, termed "stimulus," includes fiscal policy changes that were enacted at the federal level to explicitly provide short-term, temporary support to the economy. The second component, termed "consolidation," includes a number of policies at the federal level that were enacted to reduce the deficit, namely the Budget Control Act (BCA) spending caps, sequestration, and tax increases enacted as part of the "fiscal cliff" agreement. The third component, termed "other", captures all other discretionary policy actions, including budget actions at the state and local level and the drawdown of overseas military operations.

Figure 4 displays this decomposition, with total FI shown by the black dots. As indicated by these black dots, the contribution to the growth in real GDP from discretionary fiscal policy swings from positive in 2008-2009 to neutral in 2010 and then to negative over the next several years. This contour has been influenced importantly by two factors. First, the stimulus policies boosted GDP growth from 2008 to 2010 but then became a source of restraint starting in 2011, as they began to expire. Second, fiscal consolidation yielded a notable drag on GDP growth in 2013 and then a more subdued drag in 2014. As the restraint from the consolidation policies and the expiration of the stimulus policies waned, FI shifted to nearly neutral in 2014.
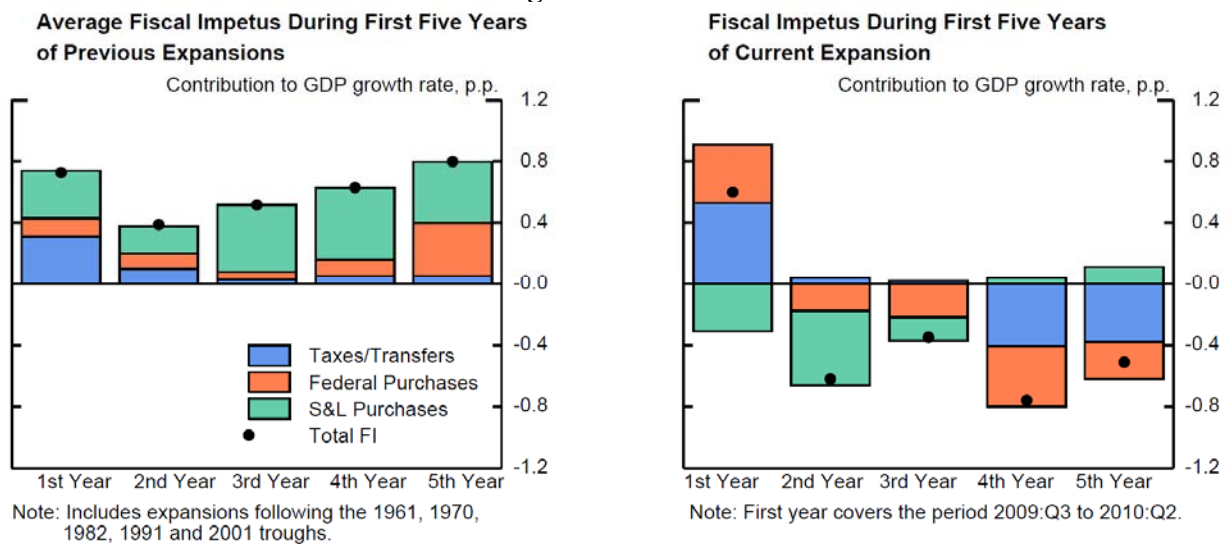
Figure 4

FI, Q4/Q4 basis
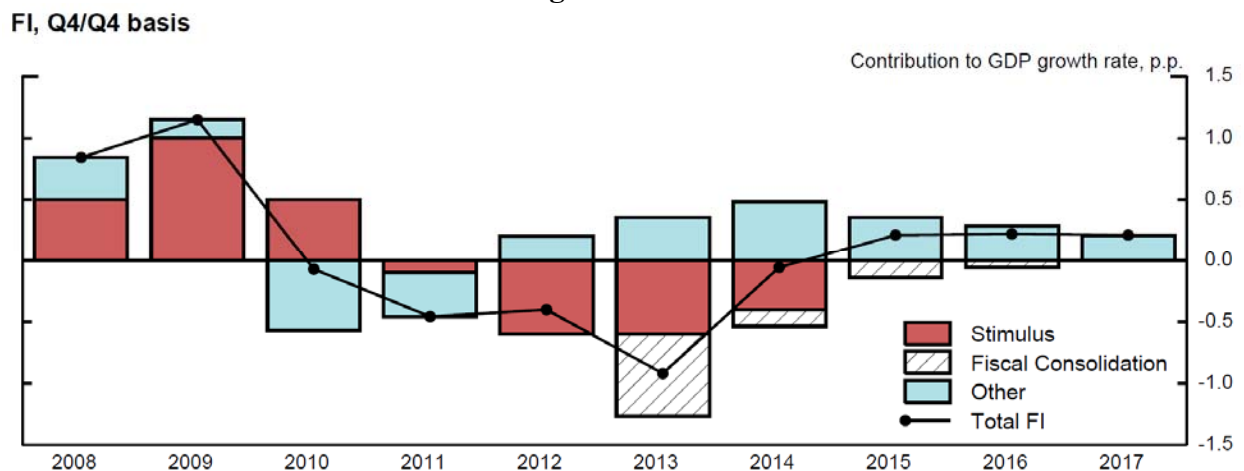
Our second decomposition adopts a longer-term perspective to highlight how unusually restrictive discretionary fiscal policy has been in the current expansion. Figure 5 examines our estimates of FI in each of the first five years following a business-cycle trough. The horizontal axis shows the number of years after the trough. The left panel displays the average for each year over previous recoveries since 1960 and the right panel displays the current expansion. FI is decomposed into three parts: the effect of changes in tax and transfer policies, the effect of changes in federal purchases, and the effect of changes in state and local purchases.

The difference between the current expansion and past expansions is stark: Although FI in the first year of the current expansion is quite similar to the historical average (which can be seen by comparing the black dots in the first bars in both the left and right panels of Figure 5), in the following four years of the expansion it held substantially below the historical norm. Policy actions *boosted* real GDP growth by an average of 0.6 percentage point in years two through five of past expansions. By contrast, over the same time span in the current expansion, policy actions *restrained* real GDP growth by an average of 0.6 percentage point.

Figure 5

Average Fiscal Impetus During First Five Years of Previous Expansions

Contribution to GDP growth rate, p.p.

Taxes/Transfers
Federal Purchases
S&L Purchases
• Total FI

1st Year 2nd Year 3rd Year 4th Year 5th Year

Note: Includes expansions following the 1961, 1970, 1982, 1991 and 2001 troughs.

Fiscal Impetus During First Five Years of Current Expansion

Contribution to GDP growth rate, p.p.

1st Year 2nd Year 3rd Year 4th Year 5th Year

Note: First year covers the period 2009:Q3 to 2010:Q2.

The atypical restraint from fiscal policy changes largely reflects three factors. The first two, the expiration of the stimulus policies and fiscal consolidation at the federal level, were discussed above. The third factor is a sharp reduction in state and local government purchases in the first three years of the expansion followed by very sluggish growth thereafter. By contrast, state and local government purchases provided significant impetus to aggregate demand in past expansions.
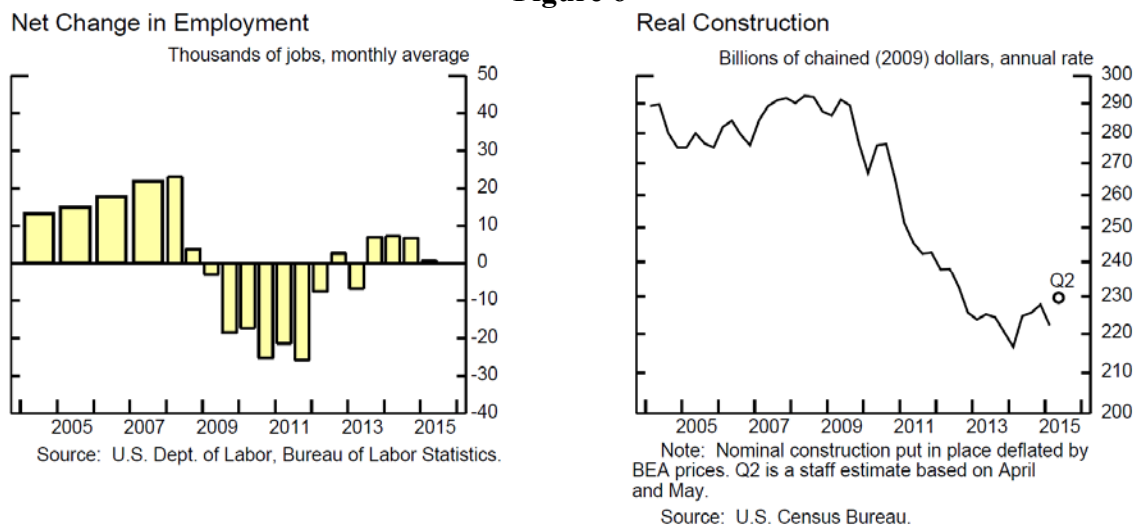
The unusual behavior of purchases by state and local governments in the current expansion primarily reflects the steep deterioration in their tax receipts driven by the depth of the recession and anemic recovery, as well as the downturn in housing prices (which suppressed property tax revenues); it also reflects the withdrawal of temporary grants-in-aid provided as part of the federal stimulus.[4] These governments operate under relatively binding balanced budget rules. While they have some ability to smooth through revenue shocks using reserve funds and other techniques, their balanced budget rules require them to bring operating expenditures into line with revenues over time.

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[4] Other factors have also played a role. For instance, the state and local government sector has become increasingly reliant on personal income taxes. This tax source is more cyclically sensitive than either of the sector's other two primary tax sources—sales taxes and property taxes—and thereby increases the vulnerability of these governments' budgets to cyclical fluctuations.

Thus, at the state and local level, the shortfall in revenues caused by the Great Recession required either spending cuts and/or tax increases. In practice, budget shortfalls were mostly closed by reducing purchases of goods and services, particularly state and local government payrolls. Tax changes were small in the aggregate, and transfer payments—primarily Medicaid—continued to grow over the recovery, due in part to increased demand on income-support programs arising from the economic downturn.

The decrease in state and local purchases was pronounced. As displayed in Figure 6, state and local government employment fell by around 700,000 from 2009 through 2012 – a nearly 4 percent decline in the sector's workforce. Moreover, real outlays for the construction of public infrastructure such as highways plunged and currently stand around 20 percent below their previous peak.[5]

Figure 6

Net Change in Employment
Thousands of jobs, monthly average
Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

Real Construction
Billions of chained (2009) dollars, annual rate
Note: Nominal construction put in place deflated by BEA prices. Q2 is a staff estimate based on April and May.
Source: U.S. Census Bureau.

The restraint from fiscal policy actions over the past several years was particularly consequential given the more limited capacity of monetary policy at the effective lower bound. Our FI estimates suggest the restraint from fiscal policy changes had real costs in terms of higher unemployment and lost output that could have been avoided had the contour of fiscal policy changes been altered to be less restrictive during the recovery and then subsequently less accommodative once the economy had returned to full employment. Moreover, the speed and degree of fiscal consolidation was not required by financial markets, as Treasury rates were exceptionally low (unlike for some foreign governments). Indeed, some have argued that the low interest rate environment implies that public spending on public infrastructure and human capital should be materially

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[5] In principal, capital expenditures are not subject to balanced budget requirements and can be financed by debt. In practice, though, a sizable fraction of these outlays are funded with current tax revenues—e.g. state gasoline taxes—and state policy makers were apparently quite averse to increasing the use of debt financing.

higher.[6] On the other hand, looser fiscal policy would have resulted in a higher path for government debt. We discuss the costs of high government debt below.

Fiscal impetus in the medium-term projection

In order to project FI going forward, we develop judgmental assumptions about discretionary policy changes.[7] Based on these assumptions, as was seen in Figure 3, we expect fiscal policy actions to provide a relative meager boost to aggregate demand over the next several years. This projected impetus is due almost entirely to an expected increase in purchases at the state and local level. With state and local tax revenues continuing to rise gradually, albeit slowly, as a result of the broader economic expansion, these governments should have the wherewithal to modestly boost their purchases over the next several years. Moreover, with student-teacher ratios having moved up after years of declines, the stock of public infrastructure growing at the slowest pace since 1950, and many other state and local government services similarly strained, there is likely public demand for at least some expansion in these purchases. Indeed, both sector employment and investment in infrastructure have turned up somewhat over the last year-and-a-half (as can be seen in Figure 6).

Turning to the federal level, we expect changes in national fiscal policies will have little influence on aggregate demand growth over the next several years. This assessment reflects our view that the political stalemate in Washington will prevent any significant adjustment in fiscal policy. In particular, we expect the parameters of the tax and transfer system to remain unchanged and that, as discussed earlier, discretionary outlays will generally follow the path set by the BCA budget caps and sequestration which effectively hold real discretionary spending about constant. Buttressing this view is our belief that concern over the elevated level of federal debt relative to GDP will work against any debt-financed fiscal policy adjustments.

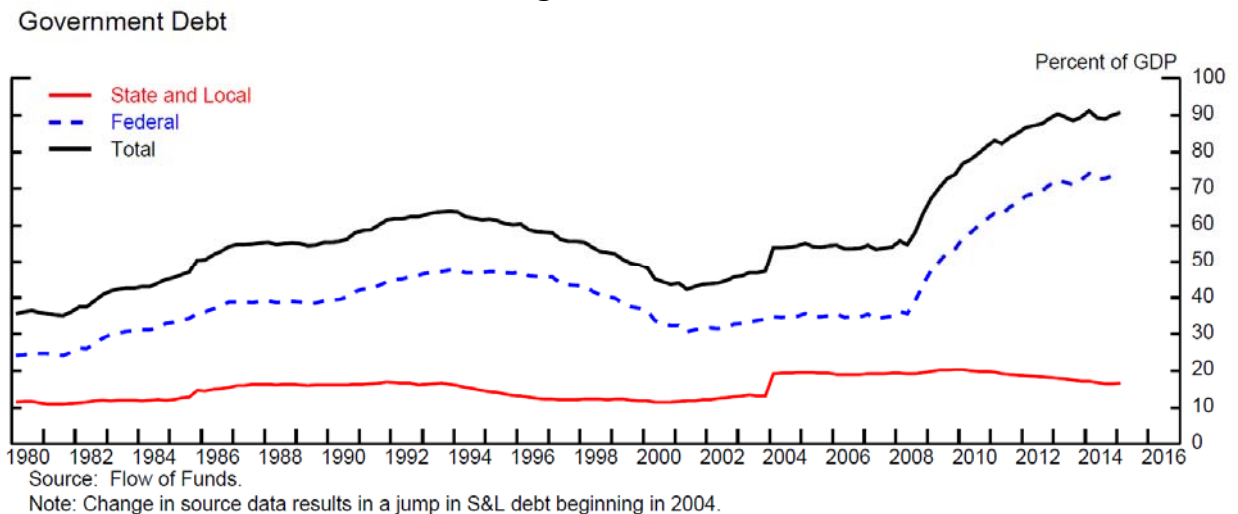**Fiscal policy over the longer term**

One legacy of the Great Recession is a significant increase in the level of public debt. As displayed in Figure 7, federal government debt has stabilized at around 70 percent of GDP after having surged approximately 35 percentage points during and following the Great Recession. Over this period revenues slumped and outlays increased sharply due to

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[6] See, for example, Delong and Summers (Fiscal Policy in a Depressed Economy, Brookings, 2012) and IMF (The Time is Right for an Infrastructure Push, WEO, September 2014).

[7] Our projected federal policy assumptions often differ from either the Congressional Budget Office's (CBO's) baseline assumptions or the Administration's proposals. One reason that differences may arise between CBO's baseline projection and the staff's forecast is that the CBO is required to incorporate all current law into their projection, including the expiration of popular programs. In many cases, the staff determines that current law is not the most likely policy outcome. Likewise, when the Administration's proposals appear to lack congressional support, we typically do not incorporate them into our forecast.

both discretionary stimulus actions and the automatic stabilizers. Including the debt of state and local governments, total government debt equals 90 percent of GDP.[8]

Figure 7

Government Debt

Source: Flow of Funds.
Note: Change in source data results in a jump in S&L debt beginning in 2004.

Over the long term, the Congressional Budget Office (CBO) projects that, if current policies remain in place, federal government revenues will fall well short of outlays, producing substantial annual imbalances. As a result, federal debt is projected to rise steadily, exceeding 100 percent of GDP by 2040. This upward pressure on federal debt is primarily due to increased spending for Social Security and federal health care programs, and a substantial increase in the cost of servicing the debt.[9,10]

The level of government debt is a concern for three principal reasons. First, expanding government debt may weigh on economic growth. In particular, government borrowing may push up long-term interest rates and thereby crowd-out private sector investment. Moreover, the cost of servicing the debt may necessitate increases in distortionary taxes or reductions in productive public expenditures. Second, as the level of debt increases, the likelihood of a fiscal crisis—a situation in which investors become unwilling to lend to the government unless compensated with extremely high interest rates—may increase.[11] Third, a higher debt-to-GDP ratio may reduce the room for countercyclical

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[8] Much of the long-term debt of states and localities reflects borrowing for government infrastructure, and reductions in state and local construction following the Great Recession have led to lower borrowing needs. As a result, nominal state and local debt has been edging down. State and local debt outstanding was 17 percent of GDP at the start of 2015—slightly lower than in 2007.

[9] Over the next few years, the cost of servicing the debt increases mainly because of a rise in the effective interest rate on federal debt. Over the longer term, the increase in the cost of servicing the debt is primarily due to the large increase in the stock of debt.

[10] State and local governments also confront significant long-term budget pressures, mainly from the underfunding of pension and retiree health benefits and the escalating cost of the Medicaid program.

[11] The maximum sustainable level of public debt is difficult to pin down and subject to considerable controversy. Some analysts have concluded the U.S. currently has significant fiscal space remaining – i.e. the ability to take on significantly more debt before it would become unstainable (e.g. Ostry et. al. 2015). Regardless, long-term budget pressures will gradually erode whatever fiscal space remains unless policy makers adjust the trajectory of federal outlays and/or revenues.

fiscal policy in the future. In particular, future policy makers may feel constrained from using fiscal policy to respond to a major economic crisis due to fear that doing so could spark a fiscal crisis.

Under CBO's projections, in order to lower the federal debt-to-GDP ratio, policy makers will need to make changes to tax policies, spending policies, or both. For example, in order to reduce the debt-to-GDP ratio to 38 percent—the average over the last 50 years—by 2040, policy makers would need to increase revenues or decrease outlays by an average of 2½ percent of GDP annually beginning in 2016. If instead policymakers wished to reach 2040 with the debt-to-GDP ratio equal to around 70 percent—its current value—they would need to increase revenues or decrease outlays by 1 percent of GDP annually. While either of these scenarios would entail reducing the impetus to aggregate demand from the government sector during the period of consolidation, stabilizing the debt-to-GDP ratio would also lower the probability that government debt eventually acts as a significant drag on economic growth, reduce the odds of a fiscal crisis, and leave policy makers in a better position to use the "fiscal cannon" to boost aggregate demand in a future economic crisis.

APPENDIX

Fiscal Impetus methodology

We construct FI in three steps. First, we estimate the dollar change in taxes, transfers, and purchases resulting from discretionary policy changes. Second, we estimate the effect on aggregate demand of these changes in outlays and revenues. Third, we aggregate the effects from the second step into a single measure. This appendix section provides additional detail on the first and second steps.

The FI methodology is quite straightforward for purchases. In the first step, all changes in real purchases are considered to be discretionary because they are generally controlled by the annual appropriations process. In the second step, these changes are assumed to affect aggregate demand on a one-for-one basis: a $1 million increase in purchases immediately boosts demand by $1 million. Taxes are a bit more complicated. In the first step, we estimate the *legislated* changes in taxes using a variety of sources.[12] In the second step, we apply estimates of the marginal propensity to consume (MPC) to these tax changes to quantify how much the policy change should affect aggregate demand growth through household spending and business investment. These MPC estimates are taken from either the coefficients in the macroeconomic models used by the staff, including FRB/US, or from the relevant literature. For example, for personal income tax changes we use an MPC of 0.7 phased in over two years following the tax policy change. Thus, a $1 billion personal income tax cut—which increases the disposable income of households—would be scored as boosting the level of GDP by $700 million by the end of two years. (The remaining $300 million is assumed saved and does not directly affect aggregate demand.) We use different MPC estimates for different types of taxes, and we use lower MPCs for temporary tax changes, consistent with findings in the research literature. Transfer payments are handled similarly, although we employ somewhat higher MPCs, consistent with empirical model results. These higher MPCs probably result from most transfers going to lower-income households, which are more likely to be liquidity constrained than the population as a whole.

Fiscal Impetus: Uncertainty and Limitations

There are three important sources of uncertainty surrounding our FI measure. The first arises from the MPC estimates used to construct FI. Although these MPC estimates are firmly grounded in the staff's macroeconomic models and the broader research literature, they remain subject to considerable uncertainty. The second source of uncertainty concerns difficulty in assessing the timing of the response to a change in fiscal policy. In general, we time the impetus with the implementation of the policy, rather than with the enactment. For example, consumers are assumed to react to an increase in transfer payments when they observe the higher payments, not when the higher payments are

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[12] Our estimates for legislated changes to taxes rely on the Joint Committee on Taxation (JCT) for federal taxes and the National Association of State Budget Officers (NASBO) for state taxes. For local taxes, we make a variety of assumptions, as comprehensive data on legislated changes in taxes are unavailable.

announced.[13] The third source of uncertainty arises from our estimates of the magnitude of discretionary policy changes. While we generally obtain these estimates from organizations well equipped to conduct such budget scoring—e.g. the Congressional Budget Office (CBO) and Joint Committee on Taxation (JCT)—they are subject to error.

As noted above, by design FI captures only the *direct*, first-order change in aggregate demand arising from *discretionary* policy actions. There are two primary channels through which government policy changes can influence aggregate demand not incorporated into FI: multiplier effects which follow the first round effect on aggregate demand, and changes in taxes and transfers that are not discretionary.

Follow-on multiplier effects can be quantitatively significant, but they do not substantively change the contour of impetus from the government sector in recent years or in the projection. Figure A1 illustrates these points. In the figure, the contour of the solid line, which displays the standard FI measure, is qualitatively similar to the dashed line, which includes follow-on aggregate demand effects using the staff's standard multiplier assumptions calculated using the FRB/US model.[14]

Turning to the second channel—the effect of non-discretionary changes in taxes and transfers—one important element is the automatic stabilizers, which refer to the counter-cyclical changes in outlays and expenditures that occur in response to the business cycle. For instance, an economic downturn will suppress tax revenues as incomes fall and push up outlays for transfer programs such as unemployment insurance. Thus, the automatic stabilizers work to buffer cyclical swings in the economy. Simulations using the FRB/US model suggest that a 1 percentage point shock to GDP growth is reduced to only a 0.8

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[13] Some studies, such as Auerbach (2003), instead base the timing on when the policy is enacted. It is our judgment that the empirical literature finds relatively little support for quantitatively important announcement effects on aggregate demand. For example, the consumption literature, in general, finds "rule of thumb" behavior by many consumers but little support for "Ricardian" behavior. Survey evidence shows little awareness of tax law changes. By contrast, there is some support for anticipatory changes in taxable income to tax law changes: The timing of dividends, bonus payments and other forms of income were shifted into late 2012 in response to the expected increase in tax rates in 2013.

[14] The CBO produces estimates of the effect of federal fiscal policy actions on GDP growth which include multiplier effects. These estimates have been broadly similar to the federal component of FI, adjusted to include multiplier effects, in recent years. The academic literature on the connection between fiscal policy changes and economic growth also tends to jointly examine the first round effect of policy changes and the follow-on multiplier effect. Estimates from this literature vary widely. One reason for the divergent conclusions is the variety of methodologies used to estimate the response. In particular, there are different approaches to controlling for the effects of monetary policy and other factors. Moreover, there are many differences in the nature, duration, and timing of the policy changes used to identify the effect. For example, estimates of the effect of changes in government purchases tends to be larger than the effect of changes in taxes (see Van Brusselenn 2010 for a discussion). In addition, there is evidence that the effect may differ depending on the amount of slack in the economy (e.g. Auerbach and Gorodnichenko 2012) and the response of monetary policy (e.g. Coenen et. al. 2012). For a review of the literature see Whalen and Reichling (2015).

percentage point shock by the automatic stabilizers when monetary policy does not respond to the shock (Follette and Lutz 2010).[15]

Figure A1

Fiscal Impetus with and without Multiplier Effects

Note: Multipliers from FRB/US. Forecast starts in 2015Q2.
Source: Staff.

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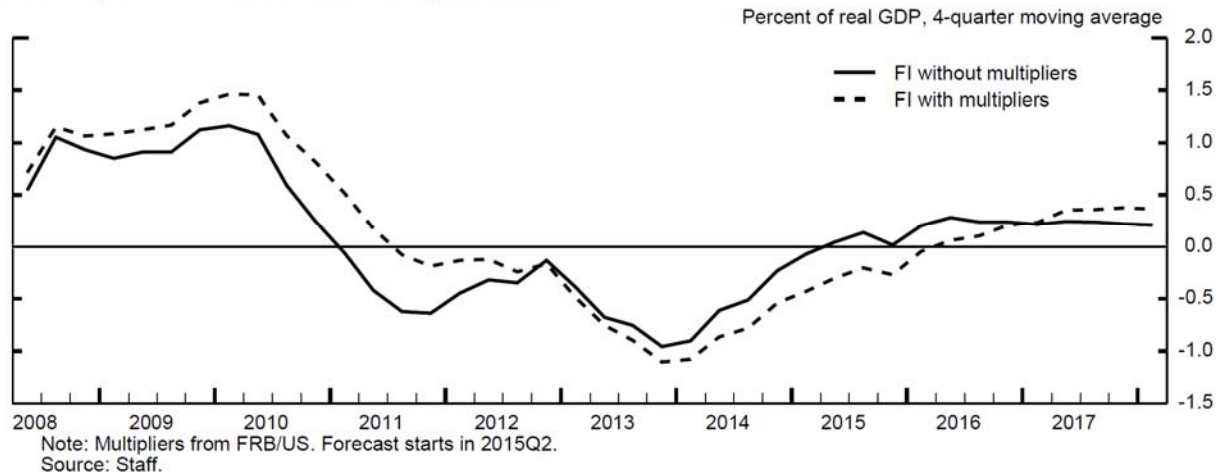
[15] Another element of non-discretionary changes in taxes and transfers is the secular increase in transfer payments due to demographic trends and the rising cost of health care. The CBO estimates that the secular increase in Social Security and federal health care spending in coming years will boost transfer payments by around 0.2 percentage point annually and consequently boost aggregate demand by a similar amount.

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