### Written Testimony of Mark Zandi Chief Economist and Co-Founder Moody's Analytics

#### Before the Senate Budget Committee

"The Impact of Political Uncertainty on Jobs and the Economy"

September 24, 2013

The U.S. economy remains frustratingly far from full employment. While there are many reasons for this, political brinkmanship around the federal budget and Treasury debt ceiling has been a significant contributing factor. Much progress has been made since the Great Recession, and the economy's prospects are improving, but this will continue only if policymakers can resolve their differences in a timely way.

Harsh political vitriol, threats of shutting down the government, and the possibility of not fulfilling the government's financial obligations have weighed heavily on the collective psyche. This has significant economic consequences. Businesses are more reluctant to invest and hire, and entrepreneurs are less likely to attempt startups. Financial institutions are more circumspect about lending and households are more cautious about spending. While many factors are at work here, Washington's heated budget battles are a significant contributor.

While the current budget battle will be difficult, it is generally expected that lawmakers will come to terms in time to avoid a government shutdown or a breach of the debt ceiling. They have shown an ability to come together at the last minute in other recent fiscal battles, including the showdowns over the debt ceiling in summer 2011 and the fiscal cliff earlier this year.

As such, the budget battle should have little adverse effect on businesspeople, consumers or investors, provided it is resolved in time. But policymakers should not take solace in this. If they botch it and the government shuts down or fails to meet all its obligations, investor and consumer psychology will be undermined, and the economy will suffer serious harm.

To resolve the current budget impasse, policymakers should not add to the significant fiscal austerity already in place and set to last through mid-decade. Tax increases and government spending cuts over the past three years have put a substantial drag on economic growth. In 2013 the fiscal drag is as large as it has been since the defense drawdown after World War II.

Moreover, because of fiscal austerity and the economic recovery, the federal government's fiscal situation has improved markedly. The budget deficit this year will be less than half its size at the recession's deepest point in 2009. Under current law and using reasonable economic assumptions, the deficit will continue to narrow through middecade, causing the debt-to-GDP ratio to stabilize.

As part of any budget deal, lawmakers should reverse the sequester. The second year of budget sequestration will likely have greater consequences than the first, affecting many government programs in ways that nearly all agree are not desirable. A sizable share of the sequestration cuts to date has been one-off adjustments, but future cuts will have to come from lasting reductions in operational budgets.

It would, of course, also be desirable for lawmakers to address the nation's daunting long-term fiscal challenges. While the fiscal situation should be stable through the end of this decade, the long-term fiscal outlook remains disconcerting. If Congress does not make significant changes to the entitlement programs and tax code, rising healthcare costs and an aging population will swamp the budget in the 2020s and 2030s. Both cuts in government spending and increases in tax revenues will be necessary to reasonably solve these long-term fiscal problems.

A grand bargain with comprehensive entitlement and tax reform is likely too much to hope for, but lawmakers can do some things now to address our long-term fiscal issues and help resolve the current impasse.

Revenue-neutral corporate tax reform that scales back tax expenditures in exchange for a lower top marginal corporate tax rate would also be a significant policy achievement. This would significantly improve the competitiveness of U.S. businesses and the economy's long-term growth. Much of the hard intellectual work necessary to accomplish this has been done, and there is general agreement among economists that this would provide a meaningful boost. As part of corporate tax reform, multinationals could be encouraged to repatriate their overseas profits with a temporarily lower tax rate. The resulting onetime boost to tax revenues could be used to finance infrastructure development here at home, also improving U.S. competitiveness and long-term growth.

New budget rules that recognize the magnitude of our long-term problems and encourage solutions would be especially helpful. These could include incorporating fiscal-gap and generational accounting in the budget process, and significantly extending the current 10-year budget horizon to facilitate entitlement and tax reform.

Congress should also use this opportunity to eliminate the statutory debt ceiling. It is an idiosyncratic, anachronistic and, as has been demonstrated, potentially destructive rule that is detrimental to sound economic policy. Absent repeal, an alternative would be to require debt-ceiling increases when spending, taxation and appropriations bills are

passed. Doing so would restore the fundamental economic relationship between budgeting and borrowing, and reduce the risk that political brinkmanship could damage the full faith and credit of the United States or the stability of world financial markets.

## **Political uncertainty**

The U.S. economy has made significant strides since the Great Recession, but the recovery has been lackluster and the economy remains far from full employment. Since the recovery began four years ago, real GDP growth has been stuck near a tepid 2% and unemployment is a still-high 7.3%, despite falling labor force participation.

Behind the disappointing recovery is the reluctance of businesses to hire and invest. They have yet to experience the entrepreneurial "Field of Dreams" moment—"build it and they will come"—that sparks stronger economic growth in every recovery. In past recoveries, managers eventually realized they could not continue to increase profits by cutting costs; they needed to invest even in uncertain revenue opportunities. That has yet to happen in the current recovery.

Businesses are not laying off workers—the layoff rate is at a record low and initial unemployment insurance claims are trending down—but they are not hiring many, either. Nationwide, about 4.4 million workers are being hired per month, about 1 million fewer than at the peak of the economic expansion a decade ago.

Hiring is tepid in nearly every industry. In construction and manufacturing, hiring has picked up little since the Great Recession. The only substantive acceleration has occurred in energy, and to a lesser degree, healthcare.

Firms have increased the number of posted job openings, almost back to prerecession levels. Yet companies are not filling these jobs (see Chart 1). The ratio of job openings to hiring is about as high as it has been in the available data back to 2000. In some cases, open jobs go begging because businesses cannot find qualified workers. Yet firms also appear to have grown more picky, refusing to make an offer unless they believe they have a perfect candidate.

Chart 1: Businesss Are Reluctant to Hire



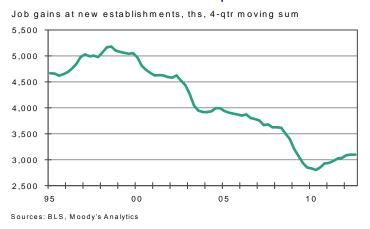
Businesses are also shy about investing in physical capital. Spending on everything from computer equipment to R&D to warehouses has essentially not risen at all over the past year, and remains not much above its prerecession peak; excluding the energy sector, such spending has actually fallen. Real investment is up only because of declines in equipment prices, which largely reflect the impact of technological improvements.

The tepid pace of investment is surprising because businesses are as profitable as they have ever been. Corporate profit margins, measured as the ratio of after-tax profits to output, is at double the average level since World War II. Balance sheets are also sturdy, as businesses are flush with cash and debt loads are light. Credit for new investment is ample and cheap, with banks anxious to make commercial and industrial loans and bond investors lustily buying corporate debt.

Excess capacity in some manufacturing industries and too much vacant office space is probably crimping investment a bit. But manufacturing capacity is lower today than before the recession and commercial construction as a share of GDP is about as low as it has ever been.

The shortfall in hiring and investment appears to stem partly from a drop in entrepreneurial activity. New establishments created close to 3 million jobs in 2012 (the latest data), not much more than during the recession. This compares with 3.6 million jobs in 2007, the year before the recession, and 5 million jobs in 1999 at the height of the technology boom (see Chart 2).

Chart 2: Where Are the Startups?



Startups that can expand quickly—once dubbed "gazelles"—such as Facebook and Twitter, are especially important to economic growth, sparking lots of job creation and investment. Indeed, while many analysts have called attention to the plight of small businesses in recent years, it is more precisely the scarcity of gazelles that has constrained growth.

The falloff in entrepreneurship is difficult to explain. Theories abound: The pace of technological change has moderated since the burst of internet-powered innovation around the turn of the century. Fewer Americans are in their 30s, an age when people are most likely to start firms, and high student loan debt holds many of these people back. The high cost of health insurance encourages workers to stick with employers who provide coverage. The flow of foreign immigrants, who are by definition risk-takers, is down.

All these factors likely have some impact. But also important is the nightmare of the Great Recession, which has been difficult to shake, particularly given a seemingly neverending series of uncertainties and unfortunate events. From the European debt crisis to financial regulation and healthcare reform to Washington's budget battles, there has been much to be nervous about. And the uncertainty continues: One-half of CEOs in the Business Roundtable's 3Q13 CEO outlook survey "indicated that the ongoing disagreement in Washington over the 2014 budget and debt ceiling is having a negative impact on their plans for hiring additional employees over the next six months." Shaky nerves stifle the risk-taking and entrepreneurism that is key to stronger growth.

What goes on in Washington is often a source of uncertainty, but according to the Moody's Analytics index, political uncertainty is currently very high. It rose significantly during the heated debate over the American Recovery and Reinvestment

Act—the \$830 billion fiscal stimulus legislation—in early 2009, surged during the budget debate in early 2010, and rose to a record high during the Treasury debt-ceiling showdown in the summer of 2011 (see Chart 3). Uncertainty also increased as the fiscal cliff approached in late 2012, and it has been rising in recent weeks as angst over the current fiscal impasse mounts.

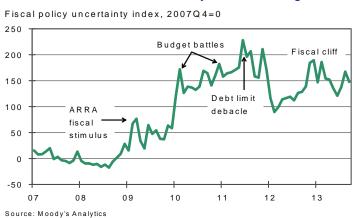


Chart 3: Political Uncertainty Remains High

Political uncertainty constrains business investment, especially on R&D, and reduces hiring and slows GDP growth. Based on a statistical analysis, the increase in political uncertainty since the recession hit in 2008 has reduced real GDP by close to \$150 billion, lowered employment by 1.1 million jobs, and increased unemployment by 0.7 percentage point.<sup>2</sup> If political uncertainty had simply remained unchanged from its 2007 level, the unemployment rate today would be 6.6% instead of its actual 7.3%.<sup>3</sup> This is still uncomfortably high, but if not for the logjam in Washington the economy would now be much closer to full employment.<sup>4</sup>

# No government shutdown

Congress' first order of business is appropriating funds for the fast-approaching 2014 fiscal year. If lawmakers fail to act by October 1, the federal government will partially shut down. At a minimum, lawmakers must pass a continuing resolution to extend current spending authority, which expires at the end of this month.

A shutdown that lasts only three or four days would have modest economic consequences, costing the economy approximately 0.2 percentage point of annualized real GDP growth in the fourth quarter.<sup>5</sup> A brief shutdown would have limited economic impact because it would affect only discretionary spending, the one-third of the budget

funded through congressional appropriations. Mandatory spending would not be affected. Some appropriated spending would also likely be considered essential and not cut, in such areas as national security, air traffic control, law enforcement, and the processing of benefit payments. Using the 1995 government shutdown as a guide, approximately half of all government employees would not be able to go to work. Moreover, most government spending would be delayed and not canceled in a brief shutdown. Federal employees would lose pay, but most other activity would be made up later.

However, shutting the government down for three or four weeks would do significant economic damage, reducing real GDP by 1.4 percentage points in the fourth quarter. And this likely understates the economic fallout, as it does not fully account for the impact of such a lengthy shutdown on consumer, business and investor psychology. Any interruption much longer than a month would cause GDP to fall over the quarter, and one longer than two months would likely precipitate another recession.

For context, the longest government shutdown on record, in late 1995 and early 1996, lasted about three weeks. The economy's growth slowed sharply as a result (see Chart 4).

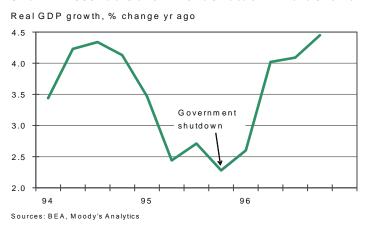


Chart 4: 1995-'96 Government Shutdown Hurt Growth

## Raise the Treasury debt ceiling

Lawmakers must increase the \$16.7 trillion Treasury debt ceiling before mid-October. According to Treasury Secretary Jack Lew, that is when the "extraordinary measures" the Treasury has been using since May to stay under the limit will no longer work.<sup>6</sup> At that point, the government would be able to pay bills with only the cash it has on hand, about \$50 billion on any given day.

It is impossible to know precisely when the Treasury will run out of ways to avoid the ceiling. The key uncertainty is revenues: Quarterly corporate income taxes were due September 16, giving the Treasury some leeway, but the Treasury must issue a large amount of nonmarketable debt to the entitlement-related trust funds on October 1, reducing its flexibility. Timing will become clearer after that, but the Treasury will likely be out of options by the end of October, when a large interest payment on Treasury securities is due.

Operationally, the Treasury might be able to prioritize interest payments on U.S. government securities, as those payments are handled by a different computer system than other government obligations. But practically that would be difficult; it would entail paying bond investors before Social Security recipients, for example. Prioritizing other payments would likely not be possible, as the Treasury might not be able to sort through the blizzard of payments due each month to decide which to pay.

More likely, the Treasury would delay payments as officials suggested in a 2012 inspector general's report. The Treasury could also wait until it received enough cash to pay a specific day's bills. Initially, the resulting delays would be short, but they would increase over time. For example, if the Treasury hit its borrowing authority on October 18, payments to Medicare and Medicaid providers due that day would be delayed one business day, to October 21. But checks to be issued on November 1 for Social Security, veterans benefits, and active-duty military pay would not go out until November 13.

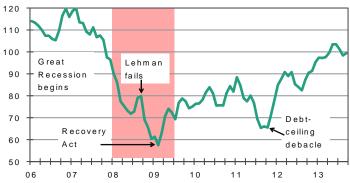
It has become typical for Congress to run down the clock, but in the end it has never failed to come through. The motivation is clear: Any delay in raising the debt ceiling would have dire economic consequences. Consumer, business and investor confidence would be hit hard, putting stock, bond and other financial markets into turmoil.

This was clearly evident in the near-debacle that occurred in summer 2011, when lawmakers raised the debt ceiling at the very last minute. Brinkmanship nevertheless undermined consumer confidence, sent stock prices reeling, and caused credit default swap spreads on U.S. Treasury debt to widen sharply (see Chart 5). The bitter showdown led Standard & Poor's to cut its rating on Treasury debt from AAA to AA+. Although policymakers acted before the debt ceiling was reached, the fallout nearly caused the fragile economic recovery to stall.

Chart 5: Debt-Ceiling Debate Undermined Confidence

Consumer confidence index, Oct 2001=100

Sources: Rasmussen Public Opinion Research, Moody's Analytics



Another such confrontation would also effectively shut the government, which would have authority to spend but would not have the cash to pay for it. The Treasury would have no choice but to eliminate its cash deficit, which will run as high as \$130 billion in November. This is about 9% of GDP (annualized). The economy would quickly fall into another severe recession.

Given the serious consequences of not raising the debt ceiling in a timely way, it is widely expected that Congress will do so. After several rounds of fiscal brinkmanship over the last few years, financial markets have become increasingly desensitized to the headlines coming out of Washington. However, lawmakers should not become complacent, thinking that breaching the debt limit is somehow all right. It is not. There will be a violent reaction in financial markets if policymakers fail to act in time.

# No additional near-term fiscal austerity

In any agreement to increase the debt ceiling or extend funding for the federal government, lawmakers should avoid adding to the fiscal austerity in place through middecade. Congress has been appropriately focused on reducing the government's large budget deficits, but recent tax increases and government spending cuts have put a significant constraint on growth. Under current law, fiscal headwinds will continue to blow hard in 2014 and 2015. It would be wise not to add to those headwinds, and allow the private economy to gather momentum.

While the U.S. economy has begun its fifth year of recovery from the debilitating Great Recession, it remains fragile. Growth has been modest, with real GDP expanding close to 2% per year since the recovery began, and payrolls are still nearly 2 million jobs

shy of their prerecession peak. The nation's 7.3% unemployment rate remains well above most estimates of full employment, which is closer to 5.5%. And this understates the stress in the job market given the large number of potential workers who have left the labor force because of a lack of perceived job opportunities.

The private economy has made significant strides since the recession. American companies have strong balance sheets with low debt and lots of cash, and they have done an excellent job reducing their costs. By most measures, they are highly competitive. The financial system is much better capitalized and liquid, and increasingly willing and able to extend credit. Households have also significantly reduced their debt loads, which are now about as low as they have ever been. Higher house prices and stock values are also supporting households' better financial condition.

But the strengthening private economy is not evident in the nation's overall performance because of fiscal austerity. In calendar year 2013, the drag on the economy from federal tax increases and spending cuts will amount to 1.5 percentage points of real GDP growth. That is, if fiscal policy were simply neutral with respect to the economy, real GDP growth this year would be closer to a strong 3.5% (2 percentage points in actual real GDP growth plus 1.5 percentage points from the elimination of the fiscal drag). The fiscal drag will reach its apex in the current quarter, and over the year is greater than in any other year since the defense drawdown that followed World War II (see Chart 6).

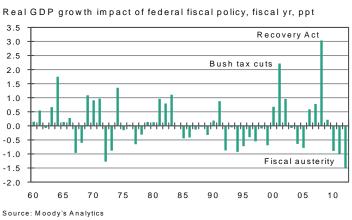


Chart 6: Fiscal Headwinds Are Blowing Hard

The federal government's improved fiscal situation also provides lawmakers with some leeway. Tax revenues are rising at a double-digit pace and government spending is falling. The budget deficit for fiscal 2013 is set to come in well below \$700 billion.

This is still large, but it is half of what it was at its peak in fiscal 2009. Under current law and assuming the economic recovery stays intact, the deficit will continue to narrow through mid-decade. The nation's debt-to-GDP ratio, while uncomfortably high at more than 70%, will stabilize.

Given the still-fragile economic recovery, the austerity already in place, and a better near-term federal budget situation, policymakers should not add to the fiscal burden on the economy through mid-decade. This will help the private economy kick into higher gear, hasten a self-sustaining economic expansion, and promote a quicker return to full employment.

## Replace the sequester

Policymakers should replace the cuts scheduled for the coming year as part of the sequester with other budget savings.

The impact of the current year's sequester, which began in March, is becoming more visible in the economic data. Hiring freezes announced early this year appear to have accelerated the decline in federal government employment. There has been an even larger impact on hours worked and personal income. Federal furloughs caused government wages and salaries to decline by half a percent in August alone. Cuts in procurement spending are also reducing support for private sector jobs, particularly among defense contractors, although the impact of the sequester on private employment is occurring gradually, with a significant lag.

A second year of sequestration will have greater consequences for the economy. The cuts will be larger and will start immediately, rather than beginning six months into the fiscal year as occurred this year. Because of lags between budgeting and actual spending, and between federal spending and its impact on the job market, the fallout from this year's cuts will carry over into 2014. A sizable share of the fiscal 2013 sequestration cuts was also made through one-off adjustments such as temporary furloughs or zeroing-out unobligated funds that were authorized but not spent. With this low-hanging fruit now gone, future cuts will have to come more from reductions in operational budgets. Given the indiscriminate nature of sequestration, this will be especially disruptive to government programs.

Continuing the sequester would have particular implications for the Pentagon. While in fiscal 2013 sequestration cuts were divided evenly between security spending—on defense, homeland security and international affairs—and non-security spending, in 2014 and beyond the split will be between defense and nondefense, requiring that a greater share of cuts comes from the Pentagon's budget. The Defense Department also paid for a

substantial portion of its 2013 cuts by eliminating unobligated balances and, without that cushion this year, will be forced to make deeper cuts from payrolls and operations. The potential for an escalation in military operations in Syria could increase the overseas contingency operations budget, which is not exempt.

### **Enact budget reforms**

The statutory debt ceiling is an anachronistic law that if not repealed should be reformed so that it can no longer lead to a voluntary default on U.S. government obligations. Fiscal-gap and intergenerational accounting should also be adopted in the budget process.

Using the threat of a default on U.S. government obligations as a tool in fiscal policy negotiations has meaningful economic costs. Short of a repeal of the debt ceiling, policymakers should consider strengthening the link between borrowing, tax and spending policy, by requiring "ability to pay" language in any legislation that adds to future deficits. Ability to pay is defined as sufficient projected tax revenue and borrowing authority to cover the current Congressional Budget Office deficit forecast. This requirement would be applied to all direct spending, taxation and annual appropriations bills. Any discrepancies that result from changes in the CBO forecast could be reconciled in the annual budget process.

The debt ceiling would still force lawmakers to think about the long-term fiscal impact of any legislation, but it would do so in the context of the spending and taxation bills that create the need for that debt. This proposal makes use of current CBO budget projections and scoring practices, and thus should cause no new compliance costs.

Policymakers should also adopt the INFORM Act, which would require the CBO and General Accounting Office to adopt fiscal-gap and generational accounting. This provides a more accurate calculation of the nation's long-term fiscal obligations and thus would create the basis for sounder budgeting and fiscal decision-making.

The fiscal gap describes the difference between the present value of projected government expenditures, including interest and principal payments on outstanding federal debt, and taxes and other receipts, including income accruing from the government's ownership of financial assets. Generational accounting measures the burden of closing the fiscal gap on today's and tomorrow's children, assuming they must do so on their own and that the burden on each generation is proportional to its labor earnings.

Fiscal-gap and generational accounting are comprehensive and forward-looking, and determine the sustainability of fiscal policy and the burden of that policy on future generations. Fiscal-gap accounting has already been adopted by the Social Security Trustees and Medicare Trustees and is becoming more widely used in other countries.

## Pass corporate tax reform

To break the budget impasse, policymakers should consider adopting revenue-neutral corporate tax reform. Reform that resulted in a lower marginal corporate tax rate would also help the competitiveness of U.S. companies and thus support stronger long-term economic growth.

Corporate tax reform, which involves reducing or eliminating tax expenditures in the corporate tax code and using the resulting additional revenues to reduce marginal rates for businesses, would also be a positive economic step. U.S. marginal corporate tax rates are high by international standards, even after accounting for exemptions, deductions and credits that result in lower effective tax rates. All the loopholes also make the tax code complex and inefficient. Permanently lowering marginal corporate tax rates would improve the competitiveness of U.S. companies and thus long-term economic growth.

As part of corporate tax reform, multinational corporations would be encouraged to repatriate their sizable overseas profits through a temporarily lower tax rate. This would give a onetime boost to tax revenues that could be used to finance needed infrastructure development in the U.S. This too would help the competitiveness of U.S. companies and thus long-term economic growth.

#### **Conclusions**

Washington's recent budget battles have been painful to watch and harmful to the economy. Political brinkmanship creates significant uncertainty and anxiety among consumers, businesses and investors, weighing on their willingness to spend, hire and invest.

Despite this, the economic recovery is four years old and counting, and the private economy has made enormous strides in righting the wrongs that triggered the Great Recession. Business balance sheets are about as strong as they have ever been, the

banking system is well-capitalized, and households have significantly reduced their debt loads. The private economy is on the verge of stronger growth, more jobs and lower unemployment.

The key missing ingredient is Congress' willingness to fund the government after the end of this fiscal year and to raise the Treasury debt ceiling. If policymakers can find a way to do these things in a timely way, almost regardless of how ungainly the process is, then the still-fragile recovery will quickly evolve into a sturdy self-sustaining economic expansion.

We are close to finally breaking free from the black hole of the Great Recession. All it will take is for Washington to come together over the next few weeks.

The Moody's Analytics politic

<sup>&</sup>lt;sup>1</sup> The Moody's Analytics political uncertainty index is based on the credit default swap-implied expected default frequency for five-year Treasury bonds, the present value of future expiring tax provisions, and the share of businesses that cite legal and regulatory issues as their biggest problem in the Moody's Analytics weekly business survey. The index is set equal to 0 in 2007, the year before the recession. The higher the index, the greater the uncertainty. Other measures of uncertainty, such as the Baker-Bloom policy uncertainty index, have a similar historical pattern. This index is available at <a href="http://www.policyuncertainty.com/">http://www.policyuncertainty.com/</a>

<sup>&</sup>lt;sup>2</sup> These results are based on a structural vector autoregressive model of the U.S. economy. The model is used to estimate the extent to which surprise changes in political uncertainty produce changes in GDP, unemployment, the hiring rate, investment, jobs, and several other economic variables.

<sup>&</sup>lt;sup>3</sup> The impact on unemployment is smaller than that found by Leduc and Liu. They concluded that without increased policy uncertainty, the unemployment rate would be 1.3 percentage points lower today. See Leduc, S. and Liu, Z., "Uncertainty and the Slow Labor Market." Federal Reserve Board of San Francisco Economic Letter, July 22, 2013. http://www.frbsf.org/economicresearch/publications/economic-letter/2013/july/us-labor-market-uncertainty-slow-recovery/ <sup>4</sup> It is difficult to statistically distinguish between political uncertainty and policy uncertainty. Political uncertainty pertains to the uncertainty created by the political brinkmanship and dysfunction in government. Policy uncertainty pertains to the uncertainty created by potential changes in government spending, tax and regulatory policy. The 2011 showdown over the Treasury debt limit was especially hard on the economy as it created a great deal of political uncertainty, but also involved large changes to spending and tax policy. The current government funding and debt limit debates may have less of an economic impact, as it appears to involve more political than policy uncertainty. Despite current legislative efforts to defund Obamacare, such a defunding seems very unlikely to happen, and no other major policy changes are being debated, at least so far. Also mitigating the economic impact of the current debate is that businesspeople, consumers and investors appear to be increasingly desensitized to the political vitriol with each budget battle.

<sup>&</sup>lt;sup>5</sup> A thorough analysis of the causes, processes and effects of federal government shutdowns, including potential issues for Congress, can be found in "Shutdown of the Federal Government: Causes, Processes and Effect." *Congressional Research Service Report for Congress*. August 6, 2013. http://www.fas.org/sgp/crs/misc/RL34680.pdf

<sup>&</sup>lt;sup>6</sup> Secretary Lew's letter to Congress can be found at <a href="http://www.treasury.gov/initiatives/documents/082613%20debt%20limit%20letter%20to%20congress.pdf">http://www.treasury.gov/initiatives/documents/082613%20debt%20limit%20letter%20to%20congress.pdf</a>)

<sup>&</sup>lt;sup>7</sup> If fiscal austerity measures had not been implemented since early 2011, making federal fiscal policy neutral with respect to the economy, then real GDP would be nearly \$300 billion greater, there would be almost 2 million more jobs, and the unemployment rate would be more than a percentage point lower. This is based on a simulation of the Moody's Analytics structural model of the U.S. economy. The simulation assumes that monetary policy would not have changed; that is, the Federal Reserve would have engaged in the same amount of quantitative easing despite the stronger economy.

<sup>&</sup>lt;sup>8</sup> The INFORM Act is described in detail at http://www.theinformact.org/content/text-bill