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The Debt Limit: How, When, and What If

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- The federal government has been partially shut down for 4 days, and it appears likely that the situation could continue for a while longer. As the shutdown continues, the political focus has begun to shift to the next deadline: the Treasury expects to exhaust its borrowing capacity by October 17. We expect the Treasury's cash balance to be depleted no later than October 31 and possibly quite a bit sooner.

- After October 17, the Treasury can keep conducting auctions to roll over maturing securities, but it cannot increase outstanding debt. Under current sizes, October's month-end settling auctions would raise a large amount of net cash. If the debt limit has not been raised, auction sizes could be cut significantly, or some of the month-end settling coupon auctions could be postponed.

- In the event that the Treasury lacks adequate cash to make all of its scheduled payments, technical complexities and legal uncertainties might prevent a full prioritization of all payments. However, we do believe that the Treasury could ensure that enough cash was available to make interest payments on Treasury securities. There are other strategies the Treasury might also be able to pursue.

- In the event of a missed principal or interest payment, we see the likelihood of significant direct forced selling of Treasuries by money managers as a result of a temporary downgrade to selective default status as relatively low. The more concerning issue is the possibility that fund redemptions might broadly increase due to end-investor concern, prompting liquidations of Treasuries by money market mutual funds.

- If the debt limit is not raised before the Treasury depletes its cash balance, it could force the Treasury to rapidly eliminate the budget deficit to stay under the debt ceiling. We estimate that the fiscal pullback would amount to as much as 4.2% of GDP (annualized). The effect on quarterly growth rates (rather than levels) could be even greater. If this were allowed to occur, it could lead to a rapid downturn in economic activity if not reversed very quickly.

The Debt Limit: How, When, and What If

The federal government has been partially shut down for four days, with the deadline for raising the debt ceiling looming in the middle of the month. The situation is highly uncertain, but we would make a few observations:

The political focus is shifting to the debt limit. As the shutdown enters its second week, it is becoming increasingly clear that the reopening of the government is unlikely to occur before an extension of the debt limit has also been agreed upon. This leaves two options: consider the two issues together and enact a single package dealing with both issues, or enact a debt ceiling increase first and then reach separate resolution on a "continuing resolution" to reopen the government. Either is possible, but we believe the probability of a package combining both issues is more likely.

The debt limit discussion continues to look much broader than the narrow issues at play in the debate over restoring government spending authority. It is not yet clear what congressional Republicans will seek in return for a debt limit increase, nor is it clear how much Democrats will be willing to negotiate. The notion of a "grand bargain" on fiscal reforms has resurfaced, but looks like too great a challenge to negotiate in the short time remaining before the deadline. Other options include modifications to sequestration or perhaps a fast-track procedure for tax reform.

It has also become less clear how long any resolution might last. Our sense is that it does not serve either side to enact a short-term extension of the debt limit, and an extension through the 2014 election appears to be the best outcome for both parties. However, this might change if negotiations begin to focus once again on a broader fiscal deal. If so, lawmakers would need extra time to work on details, and might a short-term extension, setting up another deadline at some point over the next few months.

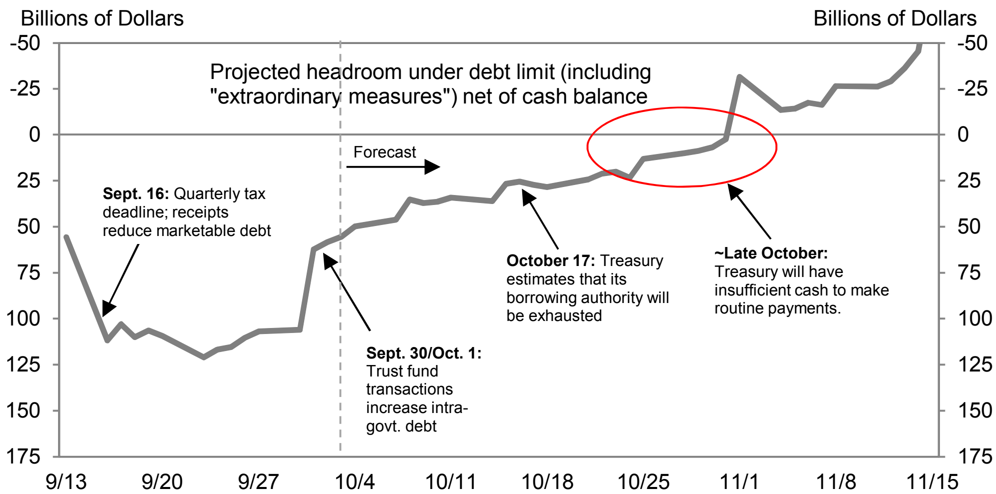
Two Deadlines Lead to Uncertainty

Unless Congress raises the debt limit, Treasury will no longer be able to issue debt from October 17, and it will deplete its cash by the end of October if not before (Exhibit 1). Unfortunately, the deadline for action in this instance has become less clear than in previous debt limit debates, in part because much of the commentary on the debt limit has conflated two different deadlines.

The first deadline is when the Treasury will exhaust its borrowing authority. The Treasury announced in September that it expects this to occur on October 17, in line with the projection the Treasury released a month ago. Since this projection is determined mainly by Treasury issuance expectations and flows in trust funds, rather than on day to day fluctuations in cash flows, there is little reason to second-guess Treasury's estimate.

By contrast, the Treasury does not project when it will deplete its cash balance, though many external organizations do. Since the Treasury usually aims to run a cash balance large enough to cover unexpected payment needs or a revenue shortfall, the Treasury expects to have $30bn on hand the day it exhausts its borrowing capacity. The Treasury views this $30bn as the minimum prudent balance in light of the significant uncertainty in daily cash flows, though there have been a few instances (unrelated to the debt limit) in which the cash balance has dipped below $15bn. Most external projections of the debt limit deadline focus on when this cash is depleted. Our own estimate implies that the Treasury could conceivably continue to make its scheduled payments until the end of October. However, the Treasury's cash balance is likely to be so low after about October 25 that, depending on revenue fluctuations, the cash balance could be depleted on any day. At that point, it is possible that the Treasury would need to cease making payments in order to conserve the little remaining cash they would still have on hand.

Exhibit 1: Treasury likely to deplete cash in late October



Source: Treasury. Goldman Sachs Global Investment Research.

The partial shutdown of the federal government is unlikely to shift the date at which the Treasury depletes its cash by more than a couple of days in our view. The main effect of the shutdown would be to eliminate Federal employee compensation for non-exempted workers, which should amount to $400 million per day on average in reduced spending, or about $5 billion in reduced spending if it lasts until the October 17 deadline. It is possible that spending in other areas of the budget could slow, lowering spending slightly further. However, it is very unlikely that the Treasury would see a large enough spending reduction to extend the date at which it depletes its final cash balance by more than a couple days. A number of large payments totaling around $60bn are due November 1, and it appears very unlikely that the Treasury would be able to make all of the payments scheduled that day absent an increase in the debt limit, regardless of the exact effect of the shutdown.

While we believe that congressional leaders take the October 17 deadline seriously, there is nevertheless a fair chance that Congress might not pass legislation to deal with the debt limit until after that date, because of the expectation that the $30bn cash balance the Treasury projects could be used to meet obligations for several more days. While this is probably true, if Congress does not increase the debt limit by the October 17 deadline, we would expect markets to interpret this as an increased risk of missed payments, potentially resulting in much more disorderly market activity than we expect to occur prior to the deadline.

Treasury Financing: Hard Choices After October 17

If the debt limit has not been extended by the October 17 deadline, Treasury could continue conducting auctions to roll over maturing securities, but it would not be able to increase the overall amount of debt outstanding. Given our assumption that net non-marketable issuance will be slightly negative in the near term, the upshot of this for marketable issuance is that only a modest amount of net new cash can be raised (i.e., auctions will, to a first approximation, be limited to refinancing existing debt). This should not be a problem through the October 24 bill settlement date.

However, under current sizes, October's month-end settling auctions would raise a large amount of net cash. If the debt limit has not been raised, something would have to give to prevent this from occurring: for example, bill auction sizes could be cut significantly, allowing negative net bill issuance to offset the cash that would otherwise be raised by the coupon auctions. Alternatively, one or more of the month-end settling coupon auctions could be postponed. We see the 30-year TIPS re-opening, scheduled to be announced on October 17, as the first coupon auction that could potentially be disrupted by a failure to raise the debt ceiling in a timely manner.

Since 1995, the Treasury Department delayed the announcement of 17 regularly scheduled auctions and postponed the auction date for 11 auctions in light of debt ceiling considerations.[1] Historically, it has been much more common for Treasury to delay or reduce the size of bill rather than coupon auctions, suggesting that a similar strategy might be employed in the second half of October, if necessary. Indeed, the Government Accountability Office (GAO) notes that "Treasury officials ... stated that postponing the announcement or auction of longer-dated securities such as notes and bonds is more disruptive than postponing shorter-dated securities such as bills," citing private interviews.[2]

Exhibit 2: Upcoming Treasury Bill Auctions

Treasury Bill Financing ($bn)

	New issuance						
Settlement date	4w	3m	6m	12m	CMB	Maturing	Net cash
10/3/2013	35	25	25	0	20	110	-5
10/10/2013	35	35	30	0	?	115	-15
10/17/2013	35	35	30	22	?	120	2
10/24/2013	35	35	30	0	?	93	7
10/31/2013	35	35	30	0	?	89	11
11/7/2013	35	35	30	0	?	89	11
11/14/2013	35	35	30	22	?	114	8

*Gray shading indicates hypothetical projection holding bill sizes constant.

Source: Treasury Department. Goldman Sachs Global Investment Research.

Exhibit 3: Upcoming Treasury Coupon Auctions

Treasury Coupon Financing ($bn)

	New issuance								
Settlement date	2y	3y	5y	7y	10y	30y	TIPS	Maturing	Net cash
10/15/2013	0	30	0	0	21	13	0	32	32
10/31/2013	32	0	35	29	0	0	7	61	42
11/15/2013	0	30	0	0	24	16	0	63	7

*Gray shading indicates projection.

Source: Treasury Department. Goldman Sachs Global Investment Research.

Prioritization of Payments: Would They? Could They?

One of the most frequent questions related to the debt limit is whether the Treasury could prioritize payments in order to remain below the debt limit while continuing to make what it deems to be essential payments. Technical complexities and legal uncertainties might prevent a full prioritization of all payments, but we do believe that the Treasury could ensure that enough cash is available to make interest payments on Treasury securities.

1 Susan Irving and Gary Engel. "Debt Limit: Delays Create Debt Management Challenges and Increase Uncertainty in the Treasury Market." GAO Report to the Congress 11-203. February 2011.

2 Ibid.

There are two sources of uncertainty about the Treasury's ability to prioritize spending:

- **Legal authority:** Some have argued that the Treasury's authority to prioritize payments is unclear. This is obviously a complex legal question that we cannot answer. We can, however, point to past precedents. Ahead of the 1985 debt limit increase, the GAO advised the Senate Finance Committee that the Treasury had the authority to choose the order in which to pay obligations.[3] Whether this opinion still holds today is uncertain, since the legal justification at the time was not specified and the effect of legislation enacted since then is unclear. Prioritization did occur previously, following expiration of a temporary increase in the debt limit on July 1, 1957. As the federal government began to run a budget deficit that year, the Treasury was forced to delay payments to federal contractors in order to avoid breaching the limit.[4] More recently, as the debt limit approached in early 1996, the Treasury indicated that failure to raise the debt limit would result in failure to make Social Security payments. The result was that Congress provided authority specifically to issue debt to fund Social Security payments, as an interim step prior to passage of the debt limit hike.[5]
- **Technical considerations.** The Treasury's position on prioritization is that its systems are designed to pay all obligations as they are due, and do not allow the Treasury to set a priority of payments to pay some obligations and not others. Considering that the Treasury makes around 4 million payments per day, this is not hard to believe. Even if full prioritization across all payments were possible, it seems unlikely to work smoothly in practice.

While these challenges might prevent prioritization of each Treasury payment—i.e., it might be impossible to pay entitlement benefits before defense contractors—we would expect that if it became necessary, the Treasury would still find a way to separate principal and interest payments from the rest. It is worth noting that those principal and interest payments, unlike other Treasury payments, are made through the Fedwire system, which could allow easier segregation from other outlays.

Other Creative Ideas Might Be Considered

In the event that the Treasury deems prioritization of interest payments impossible or illegal, a few other options might be considered.

- **Make payments in arrears.** According to a 2012 Treasury Inspector General report, the Treasury considered in 2011 whether to cease making all payments for a given day until enough tax revenue had been received to cover a full day's worth of payments.[6] At that point, the Treasury would make that particular day's worth of payments, and then cease payments again until adequate cash had arrived for the following day. While this plan might work in theory, the practical problem is that on November 1, the payments the Treasury must make are so large that the Treasury would already be nearly a week in arrears after the first day it has depleted its cash (Exhibit 4). So while this sort of strategy might be employed, the practical effect in early November would probably be indistinguishable from a decision to cease payments entirely.

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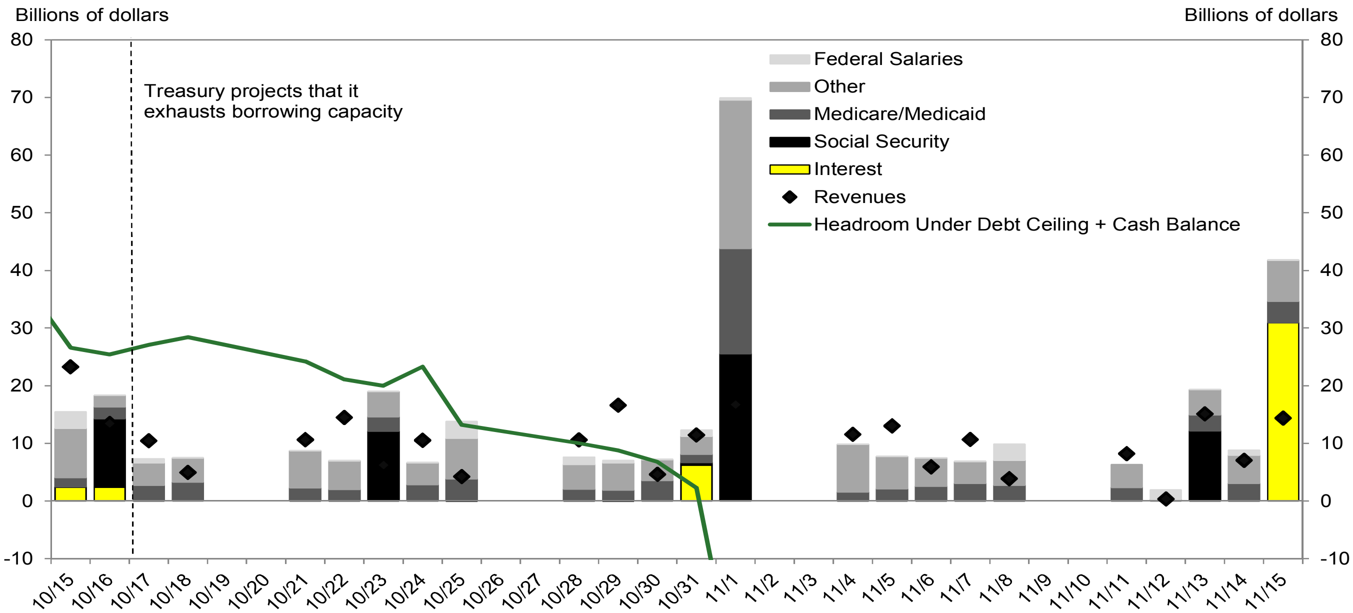
[3] Letter to the Hon. Bob Packwood, October 9, 1985.

[4] See for example Treasury Sec. Douglas Dillon's account of the events in "Key Areas in Current Economic Policy", Federal Reserve Bank of New York Monthly Review, June 1963

[5] "Debt Ceiling: Analysis of Actions Taken During the 1995-1996 Crisis," General Accounting Office,1996.

[6] Letter to the Hon. Orrin G. Hatch, Treasury Inspector General, September 24, 2012.

Exhibit 4: The Treasury's Finances are Lumpy



Source: Treasury. Goldman Sachs Global Investment Research.

- **Extend the "Debt Issuance Suspension Period."** One source of potential additional headroom under the debt limit would be for the Treasury to declare a longer "debt issuance suspension period" (DISP). Following ad hoc actions taken during the 1980s debt limit debates, Congress established specific rules around what sort of "extraordinary measures" the Treasury could take to conserve headroom under the debt limit. This particular provision of law allows the Treasury to disinvest intragovernmental debt—this is counted toward the debt limit—from the Civil Service Retirement and Disability Fund (CSRDF) in an amount equal to the expected benefit payments from that fund over the course of the DISP. The upshot is that with each additional month of DISP that the Treasury declares, more benefits would be estimated to be payable during that period, meaning more intragovernmental debt could be disinvested, which would result in more headroom under the limit. However, the law is not very prescriptive regarding how the duration of the DISP should be estimated.[7] The Treasury under the Obama administration has interpreted this authority conservatively, and the current DISP runs only through October 17, 2013. However, if the Treasury had no other options, it is possible that it could opt to extend the DISP for a longer period. For example, the Treasury in late 1995 announced a 12-month DISP. Monthly benefits run at about $6.4bn per month, so if this were done again it could provide as much as $75bn to $80bn in additional headroom under the limit. Of course, the Treasury is unlikely to want to provide Congress with any additional motivation to delay the increase in the debt limit, so in our view the Treasury might only consider such an approach in the event that an interest or principal payment on a Treasury security were at risk.

In addition, there are several less plausible theoretical ways in which Treasury could raise more cash than it "costs" them in terms of room under the debt limit. For one, Treasury could issue very high coupon debt would be auctioned at a premium to face value. (In

[7] Specifically, 5 U.S.C. 8348(j)(5) states "the term 'debt issuance suspension period' means any period for which the Secretary of the Treasury determines for purposes of this subsection that the issuance of obligations of the United States may not be made without exceeding the public debt limit." See "Debt Ceiling: Analysis of Actions Taken During the 1995-1996 Crisis," General Accounting Office,1996.

contrast, Treasury normally auctions coupon securities at a very slight discount to face value.) Under this scenario, Treasury would essentially be swapping an out-sized up-front cash flow for a promise to pay above-market coupons in the future.

Alternatively, given that some debt auctioned in recent years is now trading at a discount to par (in light of the rise in interest rates since early May), it is possible that Treasury could raise cash to buy back debt trading at a discount, retiring a greater amount of par value than the amount raised. However, the amount of money that could be raised under this scenario is limited.

Some readers may notice that other oft-discussed ideas such as invoking the 14th amendment, minting a platinum coin, or selling government assets are absent from our list.[8] Our view is that while one cannot rule out any particular approach if a crisis develops, the Treasury has ruled these out on numerous occasions and there is little reason to expect that the Treasury would pursue them any further. They also come with serious risks. There are legal questions surrounding the constitutional and platinum coin strategy. For example, if the 14th amendment strategy were challenged, holders of Treasury securities would ultimately depend on the courts to ensure their validity.

The platinum coin strategy and asset sales face practical constraints. The platinum coin strategy, while intriguing, would have significant implications for the Fed's balance sheet and could call into question the independence of the Federal Reserve, which would have to accept it in order for the strategy to work (the Fed and the Treasury have both publicly rejected the approach).[9] The Treasury could potentially sell assets like gold reserves or the student loans it holds, but as a practical matter this is also unworkable. Not only would such sales send a troubling message to the markets and the public, but they would take quite a bit of lead time to arrange. By contrast, asset sales would presumably only be considered in exigent circumstances when there would be little time to structure a transaction.

The Technical Implications of a Defaulted Security

The term "default" has been used to mean a number of different things in the context of the debt limit. The media often refers to a failure to extend the debt limit by the deadline as a form of default, while lawmakers sometimes refer to any failure of the Treasury to make a scheduled payment to an individual or business as a default.

The two areas where a default is more narrowly defined are the rating agencies and US sovereign credit default swaps (these definitions are independent of one another—a default in the eyes of a rating agency is not equivalent to a default for CDS purposes, and vice versa):

- Rating agencies define default as a failure to service a debt obligation. In the event that the Treasury fails to make a scheduled interest or principal payment, the rating would be moved to "selective default" or its equivalent until principal and interest are paid in full. After the default was cured, the rating assigned to the US would presumably be lowered but by how much is unclear and would depend on the specific circumstances. Such a downgrade could also affect other ratings dependent on the US federal government, such as the GSEs or municipalities. As we have noted in prior research, many investment mandates allow investment in Treasury debt or sovereign debt

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[8] For background on these approaches, see for example "3 Ways Obama Could Bypass Congress," Jack M. Balkin, July 28, 2011.

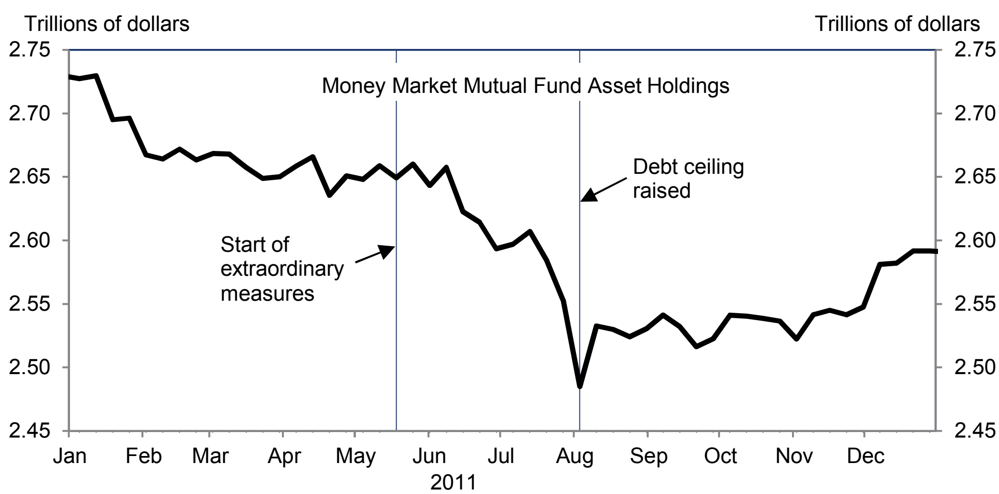
[9] "Treasury, Fed kill idea of $1 trillion platinum coins to avert debt crisis," Reuters, January 12, 2013.

generally, without regard to the rating of that debt, so a downgrade should not generally affect the ability of major holders to continue holding securities.[10]

- Credit default swaps could potentially trigger if the Treasury missed a payment, but it would depend on how long payments were delayed.[11] According to ISDA, US CDS is triggered by a "failure to pay, repudiation/moratorium, and/or restructuring." Failure to pay would in theory be a risk if the debt ceiling were not raised and Treasury were not able to find other ways to make payments. However, US sovereign CDS has a three-day grace period on failure to pay, meaning that the Treasury would still be able to make a payment within three days and avoid triggering a credit event. Overall CDS exposure is fairly modest, at $23 billion gross exposure and $3.3 billion net exposure at the end of September.[12] Since firms' net exposure is reduced by the recovery value of the underlying obligation—which in the case of Treasuries should be essentially full recovery value—the triggering of CDS not only seems unlikely but would also probably have little consequence if it did occur.

We see the likelihood of significant direct forced selling of Treasury securities by money managers as a result of a temporary downgrade to selective default status as relatively low. The more concerning issue is the possibility that fund redemptions broadly increase due to end-investor concern about defaulted Treasuries, prompting liquidations of Treasuries by money market mutual funds. Exhibit 5 illustrates substantial outflows from money market mutual funds during 2011. However, at present such outflows might be expected to be more limited in nature. The expiration of unlimited FDIC insurance on bank deposits at year-end 2012 eliminates the most obvious close substitute in terms of a highly liquid risk-free vehicle for cash.

Exhibit 5: Money Market Mutual Funds Lost Assets in 2011



Source: AMG.

The Treasury bill market is clearly indicating concern about upcoming debt ceiling deadlines (Exhibit 6). In our view, this is the direct result of the high level of acrimony in Washington. Starting with the security maturing on October 17, bill rates are elevated, suggesting lower investor appetite for holding these securities. This unusual "humped" pattern is similar to that seen in late July 2011 during the last debt ceiling standoff, and has become more pronounced as the government shutdown has continued.

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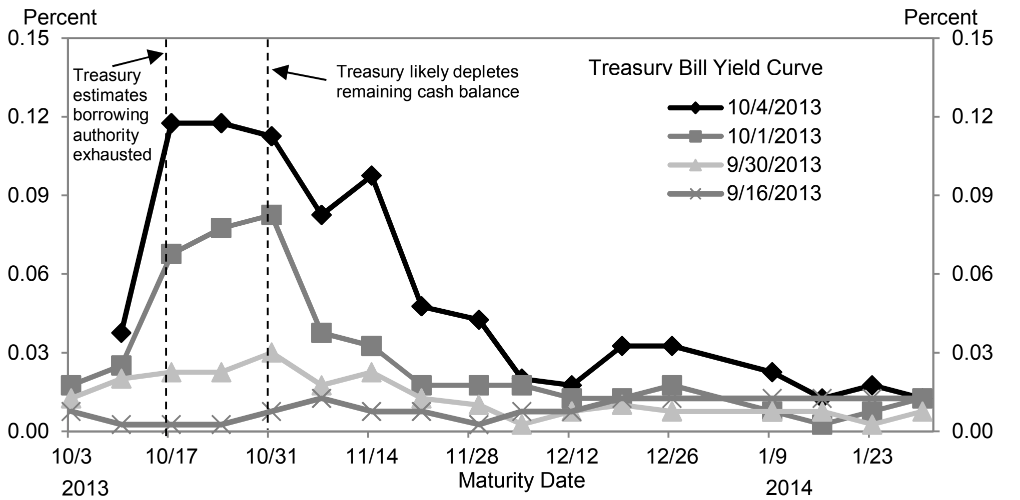
10 "Potential Consequences of a Downgrade of the US Sovereign Rating," US Daily, July 28, 2011.

11 CDS on US Sovereign Debt Q&A; ISDA.

12 DTCC Trade Information Warehouse Data, Table 6.

Exhibit 6: Treasury Bills Illustrate Debt Limit Concerns



Source: Bloomberg.

We expect that in the event of a failure to make a scheduled interest or principal payment, the Federal Reserve would make a statement clarifying that the defaulted security remained eligible collateral for discount window lending. The Fed would be very likely to err on the side of caution in avoiding any action that could potentially exacerbate an already volatile situation.

Foreign Official Accounts Do Not Like Debt Ceiling Shenanigans

An additional factor is the potential reaction of foreign official accounts (such as central banks) to debt ceiling-related volatility. As shown in the left panel of Exhibit 7, according to the Treasury's TIC data, past debt ceiling showdowns have on average resulted in a modestly slower rate of accumulation of Treasury securities in their immediate aftermath. Similarly, the right panel of Exhibit 7 shows that the share of bill auctions awarded to foreign investors declined somewhat during 2011 as debt ceiling concerns grew. Although detailed figures are only available through July in the case of the TIC data and August in the case of the auction allotment data, we would expect similar patterns to hold at present.

Growth, Not Treasuries, Ultimately at Risk in a Debt Limit Mishap

Failure to raise the debt limit would eventually lead to a sharp reduction in spending and could result in a rapid downturn in near-term economic activity. A very short delay past the October deadline—for instance, a few days—could delay the payment of some obligations already incurred and would create instability in the financial markets. As noted in prior research, this uncertainty alone could weigh on growth.[13]

But a long delay—for example, several weeks—would likely result in a government shutdown much broader than the one that started October 1. In the current shutdown, there is ample cash available to pay for government activities, but the administration has lost its authority to conduct "non-essential" discretionary programs which make up about 15% of the federal budget. By contrast, if the debt limit were not increased, after late October the administration would still have authority to make most of its scheduled payments, but would not have enough cash available to do so.

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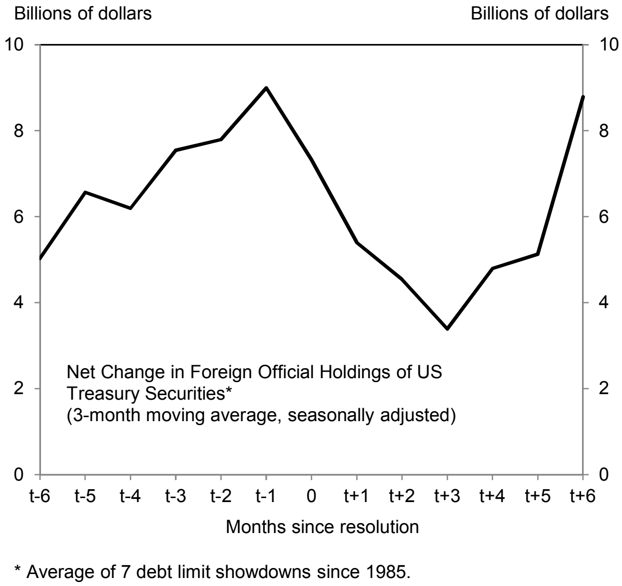
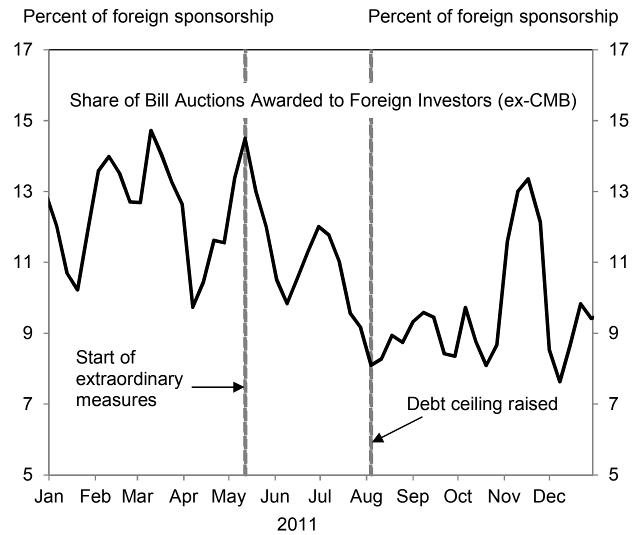
[13] "The US Fiscal Debate: Headline Risks to the Downside, Fiscal Risks to the Upside," US Daily, September 19, 2013.

Exhibit 7: Foreign Official Sponsorship Sensitive to Debt Ceiling Concerns





Source: Treasury Department. Goldman Sachs Global Investment Research.

Using our cash flow projections as a guide, we estimate that the revenues the Treasury will receive in the month following the October 17 deadline would equal only about 65% of spending going out, implying a far greater fiscal pullback than will occur as a result of the ongoing shutdown. In essence, a prolonged delay would force the Treasury to rapidly eliminate the budget deficit to stay under the debt ceiling. (The deficit has significant seasonal fluctuations and CY Q4 is normally a higher-deficit period, offset by lower deficits or surpluses in other periods, particularly CY Q2.)

We estimate that the minimum pullback in spending that would be required to remain under the debt limit for one month without an increase would be equivalent to 1.7% of GDP (annualized).[14] However, if the Treasury decided to set aside interest payments and make other payments in arrears, we estimate it would result in a pullback in primary (i.e., non-interest) outlays of 4.2% of GDP (annualized).[15] In both cases, the effect on quarterly growth rates (rather than levels) could be even greater. If this were allowed to occur, it could lead to a rapid downturn in economic activity if not reversed very quickly.

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[14] Since payments related to Social Security, Medicare, and other programs financed through trust funds result in redemptions of intragovernmental debt and thus have much less of an effect on headroom under the debt limit, we estimate the low-end of the range of the potential pullback can be estimated by assuming that the Treasury would postpone only payments that raise the level of outstanding debt subject to limit. However, this would require prioritization of spending, which may not be possible. This estimate assumes, for illustrative purposes, the debt limit would be binding for the entire month of November, resulting in a decline in spending of $75bn, or 1.8% of GDP when considered at an annualized rate.

[15] This estimate also assumes that the debt limit would be binding for the full month of November, and that the Treasury pays interest on schedule and all other payments in arrears, by waiting for sufficient revenues to accumulate before paying any non-interest obligations. This would result, we estimate, in a monthly decline in outlays of $175bn, or 4.2% of GDP when considered at an annualized rate.

The US Economic and Financial Outlook

(% change on previous period, annualized, except where noted)

	2012	2013 (f)	2014 (f)	2015 (f)	2016 (f)	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4
OUTPUT AND SPENDING													
Real GDP	**2.8**	1.6	2.9	3.2	3.0	**1.1**	**2.5**	1.8	2.5	3.0	3.5	3.5	3.5
Consumer Expenditure	**2.2**	1.8	2.4	2.7	2.5	**2.3**	**1.8**	1.4	2.0	2.5	3.0	3.0	3.0
Residential Fixed Investment	**12.9**	13.9	14.5	13.4	12.5	**12.5**	**14.2**	11.0	15.0	15.0	15.0	15.0	15.0
Business Fixed Investment	**7.3**	3.0	7.7	6.8	5.5	**-4.6**	**4.7**	6.1	8.2	8.2	8.2	8.2	8.2
Structures	**12.7**	0.8	7.8	5.9	5.0	**-25.7**	**17.6**	5.0	7.5	7.5	7.5	7.5	7.5
Equipment	**7.6**	4.1	9.3	8.1	6.1	**1.6**	**3.2**	7.9	10.0	10.0	10.0	10.0	10.0
Intellectual Property Products	**3.4**	3.1	5.3	5.4	5.0	**3.8**	**-1.5**	4.5	6.0	6.0	6.0	6.0	6.0
Federal Government	**-1.4**	-5.7	-5.2	-2.5	-1.2	**-8.4**	**-1.6**	-10.0	-5.0	-5.0	-5.0	-4.0	-3.0
State and Local Government	**-0.7**	-0.3	1.2	1.8	2.0	**-1.3**	**0.4**	0.7	1.0	1.5	1.5	1.5	1.5
Net Exports ($bn, '09)	**-431**	-418	-429	-452	-465	**-422**	**-424**	-410	-414	-419	-425	-433	-441
Inventory Investment ($bn, '09)	**58**	55	67	75	75	**42**	**57**	61	61	61	65	69	71
Industrial Production, Mfg	**3.9**	2.1	3.4	3.7	3.5	**4.9**	**-0.3**	2.0	4.1	3.5	4.0	4.0	4.0
HOUSING MARKET													
Housing Starts (units, thous)	**783**	926	1,151	1,420	1,610	**957**	**869**	900	979	1,042	1,108	1,192	1,264
New Home Sales (units, thous)	**368**	434	531	685	809	**449**	**443**	410	435	472	508	551	593
Existing Home Sales (units, thous)	**4,661**	5,162	5,339	5,501	5,685	**4,943**	**5,057**	5,400	5,247	5,284	5,321	5,357	5,394
Case-Shiller Home Prices (%yoy)*	**3.8**	5.4	7.9	3.8	2.5	**8.0**	**8.7**	8.6	7.9	6.1	4.7	4.2	3.8
INFLATION (% ch, yr/yr)													
Consumer Price Index (CPI)	**2.1**	1.5	1.7	1.9	2.1	**1.7**	**1.4**	1.6	1.5	1.5	1.9	1.7	1.7
Core CPI	**2.1**	1.8	1.8	1.9	2.1	**1.9**	**1.7**	1.7	1.8	1.7	1.8	1.8	1.8
Core PCE**	**1.8**	1.3	1.5	1.6	1.8	**1.5**	**1.2**	1.2	1.3	1.3	1.5	1.5	1.5
LABOR MARKET													
Unemployment Rate (%)	**8.1**	7.5	6.9	6.3	5.9	**7.7**	**7.5**	7.4	7.3	7.2	7.0	6.8	6.6
GOVERNMENT FINANCE													
Federal Budget (FY, $ bn)	**-1,087**	-650	-600	-475	-550	--	--	--	--	--	--	--	--
FINANCIAL INDICATORS													
Federal Funds^ (%)	**0.16**	0.13	0.13	0.13	1.25	**0.14**	**0.09**	**0.08**	0.13	0.13	0.13	0.13	0.13
10-Year Note^	**1.72**	2.75	3.25	3.50	4.00	**1.96**	**2.30**	**2.81**	2.75	2.85	3.00	3.15	3.25
Euro ($/€)^	**1.31**	1.38	1.40	1.35	1.25	**1.30**	**1.32**	**1.34**	1.38	1.40	1.40	1.40	1.40
Yen (¥/$)^	**84**	105	110	115	125	**95**	**97**	**99**	105	105	108	110	110
Brent Crude Oil ($/bbl)^	**110**	110	101	100	100	**108**	**103**	**112**	110	108	107	105	101

* Weighted avg of metro-level HPIs for 366 metro cities where the weights are dollar values of single-family housing stock reported in the 2000 Census.
** PCE = Personal consumption expenditures. ^ Denotes end of period.
NOTE: Published figures are in bold.

Source: Goldman Sachs Global Investment Research.

Economic Releases and Other Events

Due to the Federal government shutdown, the employment situation report, factory orders, and construction spending were not released on schedule last week. No alternative release dates have been set in light of uncertainty around how long the shutdown will last. This week's calendar lists data releases by originally scheduled publication date. However, if the government remains shut down, we do not expect to receive the trade balance, JOLTS, wholesale inventories, the import price index, the Monthly Treasury Statement, PPI, retail sales, or business inventories. The minutes from the September FOMC meeting, NFIB small business optimism, weekly jobless claims, and University of Michigan consumer sentiment will be released regardless of the status of the shutdown.

Date		Time (EST)	Indicator	Estimate GS	Consensus	Last Report
Mon	**Oct 07**	15:00	Consumer Credit (Aug)	n.a.	+$12.0bn	+$10.4bn
Tue	**Oct 08**	**8:30**	**Trade Balance (Aug)**	**-$39.4bn**	**-$39.4bn**	**-$39.1bn**
		12:25	Cleveland Fed Pres Pianalto spks at Econ Club of Pittsburgh			
		12:30	Philly Fed Pres Plosser spks on economy; Johnston, PA			
Wed	**Oct 09**	10:00	Wholesale Trade (Aug)	**n.a.**	+0.3%	+0.1%
		10:00	Chicago Fed Pres Evans spks on monetary policy; Wash DC			
		14:00	Minutes of Sept 17/18 FOMC Meeting			
Thu	**Oct 10**	8:30	Import Price Index (Sep)	n.a.	+0.2%	Flat
		8:30	Initial Jobless Claims	n.a.	310,000	308,000
		8:30	Continuing Claims	n.a.	2,863,000	2,925,000
		9:45	St Louis Fed Pres Bullard spks at bank's policy research conference			
		13:45	Fed Gov Tarullo spks on regulatory reform at Bretton Woods mtg; DC			
		14:00	Federal Budget Balance (Sep)	n.a.	+$65.0bn	-$147.9bn
		14:30	SF Fed Pres Williams spks to bus & community leaders; Boise, ID			
Fri	**Oct 11**	**8:30**	**Producer Price Index (Sep)**	**+0.3%**	**+0.2%**	**+0.3%**
			Ex Food & Energy	**+0.1%**	**+0.1%**	**Flat**
		8:30	**Retail Sales (Sep)**	**Flat**	**+0.1%**	**+0.2%**
			Ex Autos	**+0.4%**	**+0.4%**	**+0.1%**
			Ex Autos, Bldg Materials & Gas	**+0.4%**	**+0.4%**	**+0.2%**
		9:55	**Reuters/U. Mich Consumer Sentiment—Prel (Sep)**	**72.0**	**76.0**	**77.5**
		10:00	Business Inventories (Aug)	n.a.	+0.3%	+0.4%
		11:00	Fed Gov Powell spks on monetary policy panel at IIF annual mtg; DC			
		13:00	Boston Fed Pres Rosengren spks at Council of Foregin Relations			

Source: Goldman Sachs Global Investment Research.

Disclosure Appendix

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We, Jan Hatzius, Alec Phillips, Jari Stehn, Kris Dawsey, David Mericle, Shuyan Wu and Michael Cahill, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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