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Possible Macroeconomic Effects of a Temporary Federal Debt Default

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The macroeconomic effects of a federal debt default are extremely uncertain, ranging from a temporary blip down in real activity, to a major crisis that pushes the economy back into recession and potentially into deflation. This memo discusses some key considerations underlying this assessment. In addition, it provides an illustrative example of the potential consequences that might occur if the latest budget and debt limit negotiations were to fail and the various parties were to remain at loggerheads for several weeks.

Key considerations in evaluating the consequences of a debt default

- Such an event would be unprecedented. Although other countries have defaulted on their sovereign debt, these defaults occurred in situations where the government could not feasibly continue to service its debt. Failure to raise the U.S. federal debt ceiling, in contrast, would be a voluntary decision to stop meeting the government's obligations even though it has no problems doing so. In addition, no other nation that defaulted on its sovereign debt ever enjoyed two key features of the U.S. economy—Treasury securities are the world's "safe" asset and the dollar is the world's main reserve currency. For these reasons, we have essentially no historical experience to help us predict the likely consequences of a failure by the Congress and the Administration to raise the debt ceiling.
- The financial market effects of a debt default would be highly uncertain, both because of its unprecedented nature, and because (as events in recent years have illustrated) we have only a limited understanding of the dynamics of the financial system when hit with a major shock.
 - Yields on Treasury securities could rise noticeably, even if the default lasted only a day or two. And if the debt limit impasse dragged on for weeks, it could conceivably lead investors to demand a premium similar to that paid on AAA corporate bonds.
 - Given that Treasury yields serve as a benchmark rate for the pricing of other securities, and given that a prolonged stand-off would probably make the general economic outlook much more uncertain, private interest rates could rise sharply. Rising interest rates and risk premiums would in turn push stock prices down appreciably.
 - In some extreme scenarios with a prolonged default, financial markets could be severely impaired. For example, the functioning of the repo market could be compromised and some money market mutual funds could experience liquidity pressures.
 - A debt default could also have some international repercussions. For example, a prolonged default might increase the reluctance of investors to hold Treasury securities and perhaps dollar-denominated assets more generally. Although the resulting rebalancing in portfolios might be relatively gradual, it could lead to a decline in the

dollar over time (although a sudden drop could not be ruled out) and a higher “country-risk” premium on all U.S. assets.

- A debt default would also adversely affect the economy through its direct effects on aggregate income flows and government operations if the impasse in raising the debt limit lasted for several weeks.
 - Currently, an extremely large portion of federal government spending is funded through borrowing (in part because tax payments are concentrated in other months). From mid-October through mid-November, for example, only 65 percent of projected spending would be covered by revenues.¹ Thus, 35 percent of government cash outlays would need to be cut if a debt limit accord was not reached until the middle of November.
 - Assuming that the Treasury prioritizes its payments to cover all scheduled net interest payments, other federal spending would be temporarily reduced by the following amounts (expressed in nominal terms at an annual rate): \$340 billion in nominal federal purchases; \$630 billion in Social Security, Medicare, and other transfer payments; and \$150 billion in grants to state and local governments.
 - Some of this shortfall in disbursements would probably be made up later in the fourth quarter after a budget agreement was reached, and some of it would be disbursed in the first quarter. On a quarterly basis, federal outlays could drop \$180 billion at an annual rate in the fourth quarter relative to baseline, but would then jump \$180 billion in the first quarter; outlays later in 2014 would be unaffected.²
 - Although households and firms would eventually be made whole following the debt default, they nonetheless might have difficulty smoothing through the disruption to their income flows. In addition, disruptions of this magnitude might make households and firms noticeably more cautious about spending for a time, creating knock-on multiplier effects that would weaken overall consumption, investment and hiring even further.

An illustrative example of the potential macroeconomic consequences of default

- As noted above, the macroeconomic fallout could be severe if the standoff lasts for several weeks. To illustrate this possibility, we constructed a simulation of the FRB/US model in which the economy is hit with a variety of shocks to financial markets, income flows, government operations, and household and business confidence.

¹ The federal government appears to have the necessary funds to avoid default through mid-October, so this would seem to be the relevant beginning period for considering the start of default.

² Although the fourth-quarter drop in *nominal* compensation of federal employees would be made up in the first quarter of next year, a one month furlough of workers during the fourth quarter would result in a loss of *real* federal spending (and hence real GDP) that would not be made up. This effect would shave $\frac{3}{4}$ percentage point from the annual rate of real GDP growth in the fourth quarter and add the same to GDP growth in the first quarter.

- With regards to the timing of the shocks, we assume that the Treasury would be unable to fully meet all its payment obligations beginning in mid-October. We further assume that the Treasury would continue to make only partial payments through mid-November, at which point the impasse is assumed to come to an end.
- In response, 10-year Treasury yields and BBB corporate bond yields jump, and are 80 and 220 basis points, respectively, above the baseline on average over the fourth quarter of this year and the first quarter of the next. In addition, stock prices fall 30 percent relative to baseline and the dollar drops about 10 percent.
- The deterioration in financial conditions is accompanied by a tightening in credit availability as well as a reduction in household and business confidence. The effect of these developments on private spending are scaled to be about one-third to one-half as large as those seen in late 2008 and early 2009.
- These various shocks fade away over the course of 2014 and 2015. Thus, the simulation incorporates no permanent rise in term/risk premiums on Treasury debt, nor any sustained rise in the country risk premium applied to holding dollar-denominated assets.
- Under these assumptions, the economy falls into a mild recession during the last quarter of this year and the first quarter of the next, and real GDP growth is appreciably below baseline next year (as shown in the attached table). The unemployment rate rises to almost 8 percent next year, and inflation slows. Under these conditions, monetary policy would remain very accommodative for considerably longer than assumed in the staff's baseline forecast.

Simulated Macroeconomics Effects of a Temporary Federal Debt Default

	2013	2014	2015	2016	2017
Real GDP (Q4/Q4 percent change)					
September Tealbook baseline	2.3	3.1	3.4	3.2	2.6
Debt Default with major fallout	1.0	1.4	2.9	3.6	3.8
Unemployment rate (Q4 Level)					
September Tealbook baseline	7.2	6.6	5.8	5.3	5.1
Debt Default with major fallout	7.4	7.9	7.5	6.8	5.9
Core PCE prices (Q4/Q4 percent change)					
September Tealbook baseline	1.2	1.5	1.6	1.7	1.8
Debt Default with major fallout	1.2	1.5	1.4	1.4	1.4
Federal funds rate (Q4 Level)					
September Tealbook baseline	0.1	0.1	0.8	1.9	2.8
Debt Default with major fallout	0.1	0.1	0.1	0.1	0.8
10-year Treasury yield (Q4 Level)					
September Tealbook baseline	3.1	3.6	4.0	4.4	4.6
Debt Default with major fallout	3.7	3.9	4.1	4.0	4.0
BBB corporate bond yield (Q4 Level)					
September Tealbook baseline	5.2	5.5	5.7	6.1	6.3
Debt Default with major fallout	7.4	7.3	7.0	6.5	6.0