

Debt Limit Analysis

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Executive Summary

SUMMARY OF FINDINGS



- On May 1, 2023, U.S. Treasury Secretary Janet Yellen <u>notified</u> Congress that the Treasury Department (Treasury) could exhaust its cash on hand and extraordinary measures as early as June 1, 2023.
- BPC now <u>projects</u> that if policymakers do not act on the debt limit,
 Treasury will most likely have insufficient cash to meet all its financial obligations sometime between <u>early June and early August 2023</u> (what we call the X Date).
- Economic risks will spike well before Treasury's account balance reaches zero. Managing Treasury security auctions and meeting all obligations will become increasingly challenging as reserves dwindle.
- Due to the unpredictability of cash flows, and thus, all debt limit projections, policymakers should act ahead of the projected X Date window if they intend to ensure that all obligations of the U.S. government are paid in full and on time.

SUMMARY OF FINDINGS



- In February, BPC <u>underscored</u> the importance of 2022 tax collections on the timing of this year's X Date and cautioned that depressed revenues could force a "<u>too close for comfort</u>" situation prior to quarterly tax receipts due on June 15.
 - Since that time, new adverse cash flows have materialized. For example, disasterarea taxpayers in most of <u>California</u> and parts of <u>Alabama</u>, <u>Arkansas</u>, <u>Florida</u>, <u>Georgia</u>, <u>Indiana</u>, <u>Arkansas</u>, <u>Mississippi</u>, <u>New York</u>, <u>Oklahoma</u>, and <u>Tennessee</u> have been granted filing extensions for the 2022 tax season, delaying their returns from April to later in the year.
- The strength of government revenues through the remainder of May will
 materially impact whether the X Date falls near the front end of BPC's range
 and before a projected influx of quarterly tax receipts on June 15.
 - If revenues can sustain operations through that date, Treasury may be able to forestall default through the crucial date of June 30, when approximately \$145 billion in one-time, additional extraordinary measures become available.
 - In such a scenario, the additional room created by these measures would support Treasury's ability to make good on our obligations through at least early July and perhaps several weeks beyond.

SUMMARY OF FINDINGS



- Financial and economic risks grow as the debt limit impasse drags on.
 - On May 4, 2023, Treasury sold \$50 billion of four-week securities scheduled to mature on June 6 at a record 5.84%—the highest yield for any Treasury bill auction since 2000—demonstrating an aversion among investors to hold debt maturing around the X Date.
- After running out of cash, Treasury will be unable to meet its financial obligations. How Treasury would operate in such an environment is unclear. Prioritization and delayed payments are two potential possibilities, but substantial operational and legal uncertainty exists about operationalizing them.
- Ongoing risks include increasing costs to taxpayers, delayed payments to individuals and businesses, and potentially catastrophic financial and economic impacts if congressional inaction to raise the debt limit causes the U.S. government to default on its debt (unprecedented in modern history).



The X Date

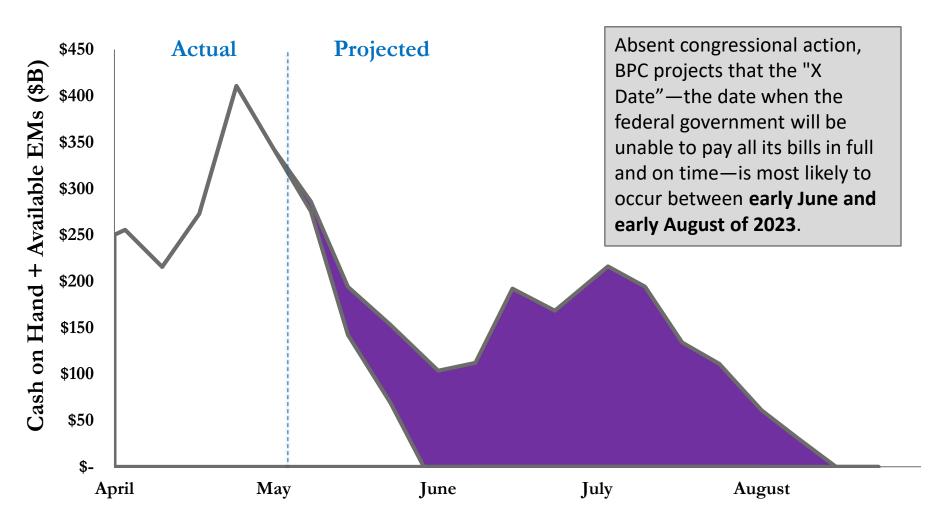
WHAT IS THE X DATE?



- <u>X Date</u>: The first day on which Treasury has exhausted its borrowing authority and no longer has sufficient funds (via extraordinary measures, residual cash on hand, and daily revenues) to meet all its obligations in full and on time.
 - In other words, if the debt limit has not been extended by the X Date, the federal government will begin defaulting on some of its obligations.
 - After the X Date, bills must be paid out of incoming cash flows, which will generally be insufficient to cover all government spending.
- BPC projects that the X Date will most likely occur between early June and early August of 2023.
- No one—not even the Treasury secretary—can know precisely when the X Date will arrive.

WHEN IS THE X DATE?





<u>Notes:</u> Dates shown are the 1st of the month. This projection is subject to substantial uncertainty and volatility resulting from economic performance, cash flow fluctuations, and other factors. Extraordinary measures are reflected at the time that they are expected to become available. Range reflects cash on hand plus available extraordinary measures, or in other words, remaining room under the debt limit.

WHAT DOES BPC'S X DATE MEAN?



- Rather than predict a specific day when the U.S. is most likely to begin defaulting on its obligations, BPC releases a range during which we are confident that will occur.
 - Significant uncertainty exists when attempting to assess millions of payments flowing in and out of the federal government on a daily basis.
 - It is helpful for lawmakers to grasp the earliest that the X Date is likely to occur and understand there are risks and costs even leading up to that date.
- Policymakers should not interpret BPC's projection to suggest that they
 can delay action on the debt limit until the beginning of the X Date range
 without consequence.
 - History has shown time and time again that real costs and risks to debt limit brinkmanship begin appearing in the weeks and months prior.
 - Interest rates on short-term Treasury securities that mature this summer are already rising, demonstrating a degree of concern in the market.



The Debt Limit

THE BASICS



The <u>debt limit</u> is:

...the maximum amount that Treasury is allowed to borrow

...set by statute (Congress must act to change it)

...covers most debt issued, whether held by the public (such as Treasury bills and savings bonds) or intragovernmental (such as debt held by the Social Security trust funds).

- Because the federal government is running a deficit, Treasury needs to borrow from the public (i.e., domestic and foreign investors) to cover its obligations. The debt limit restricts its ability to do so.
- Extending the debt limit does not authorize new spending—rather, it enables the federal government to pay its bills and spend what Congress has already approved.

REACHING THE DEBT LIMIT – WHAT IT MEANS



Layers of Defense Against Default

 The Treasury Department has multiple means that can be used to pay the nation's bills. If policymakers do not act, however, all these layers of defense will eventually be breached, and the nation will fail to meet its financial obligations in full and on time.



THE BIG THREE EXTRAORDINARY MEASURES



1. The G-Fund of the Thrift Savings Plan

 Each day, Treasury may temporarily reduce the amount of debt held by this fund, which holds government bonds for federal employee retirement accounts.

2. The Civil Service Retirement and Disability Fund (CSRDF)

 Treasury may postpone new investments in this pension fund. The CSRDF measure is most useful in June, September, and December, when major interest credits and reinvestments of maturing securities occur.

3. The Exchange Stabilization Fund (ESF)

 Each day, Treasury may temporarily reduce the amount of debt held by this fund, which is used to facilitate foreign exchange transactions.

STATUS OF EXTRAORDINARY MEASURES



EXTRAORDINARY MEASURES	January 31, 2023	Remaining as of May 5, 2023
Do not reinvest the Federal Employees' Retirement System G-Fund	\$169 billion	\$94 billion
Do not reinvest the Exchange Stabilization Fund	\$17 billion	\$17 billion
Do not make new investments in the civil service and postal retirement funds	\$41 billion	\$0 billion
Issue and exchange securities from the Federal Financing Bank	<\$10 billion	<\$10 billion
Total	~\$230 billion	~\$115 billion

Notes: Totals indicate all estimated *available* measures that generate room under the debt limit between January 31, 2023, and the conclusion of Treasury's debt issuance suspension period (DISP) on June 5, 2023. The exact number may change over time depending on any potential extension of the DISP. Treasury also has additional measures that assist with cash flow and debt management. Figures may not add due to rounding.

Sources: U.S. Treasury Department, Description of Extraordinary Measures, January 2023; Monthly Statement of the Public Debt; Congressional Budget Office

AFTER EXTRAORDINARY MEASURES



- As of May 3, 2023, Treasury had approximately \$115 billion in available extraordinary measures remaining, with \$188 billion in cash on hand.
- Once Treasury has utilized all its emergency borrowing authority, only two sources will remain from which to continue funding government operations:
 - Remaining cash on hand
 - Daily cash inflows (federal revenues received each day)



Cash Flows

TRADITIONAL SOURCES OF UNCERTAINTY



Revenue Growth

- Revenue is generally the more volatile side of the federal government's cash flows, varying from month-to-month and from day-to-day. Certain types of revenue, such as the January-April tax season and quarterly tax payments due in June and September, are especially unpredictable.
- For example, revenues from income tax payments processed during this past tax season were less than CBO anticipated in their February 2023 baseline budget projections. That shortfall is now baked into BPC's projections.

Major Changes in Policy (e.g., emergency spending)

- Major fiscal policy decisions can alter Treasury cash flows, and therefore, the X Date. For example, in the past emergency spending on natural disasters has accelerated the X Date's timing.
- This year, the IRS has granted taxpayers in select counties across seven states delayed tax filing deadlines, impacting federal revenues during the typical tax collection season.

ADDITIONAL SOURCES OF UNCERTAINTY



Pandemic Aftermath

The uncertainty over certain pandemic-related policies, such as the pause on student loan repayments and recent federal action on loan forgiveness, inject further volatility into Treasury's cash balances. State and local governments continue to spend down pandemic relief resources at varying rates, complicating efforts to forecast cash flows at the federal level.

Inflationary Pressures

- Among the five types of Treasury marketable securities, one type—Treasury Inflation-Protected Securities (TIPS)—are designed to protect investors against inflation. Unlike other Treasury securities with fixed principal amounts, the TIPS principal amount adjusts with inflation, eating up headroom.
- Efforts by the Federal Reserve to tame persistent inflation by raising interest rates directly impact interest owed on our national debt throughout the year.

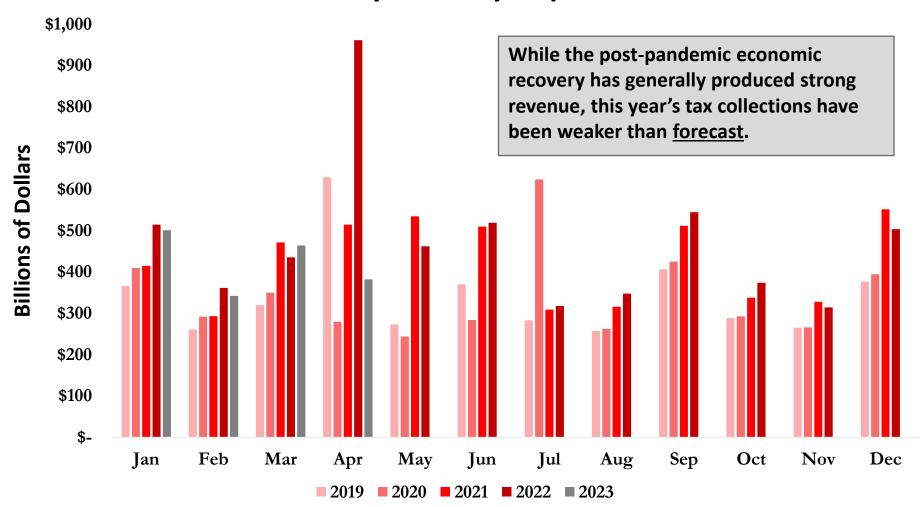
Recession Fears and Banking Sector Instability

- If economic conditions take a turn for the worse, spending and revenue flows can be greatly impacted, thereby affecting the X Date.
- BPC continues to closely <u>monitor</u> recent developments in the U.S. banking sector and potential impacts on the X Date range.

REVENUE UNCERTAINTY IS GREATER THAN USUAL



U.S. Treasury Monthly Deposits



WEATHER-RELATED DELAYS IN TAX COLLECTIONS



- In BPC's prior projection on February 22, we <u>underscored</u> the importance of 2023 tax season revenues on the timing of this year's X Date and cautioned that depressed collections could force a "<u>too close for</u> <u>comfort</u>" situation prior to quarterly tax receipts due on June 15.
- In the days following that release, disaster-area taxpayers in most of <u>California</u> and parts of <u>Alabama</u> and <u>Georgia</u> that were previously granted one-month filing extensions to May 15 were further extended to October 16.
 - In the state of California, the nation's most populous state, nearly all taxpayers are eligible for delayed filing.
 - This is significant because the federal government collects approximately 16% of all its income tax revenue from taxpayers in California.
- Weather-impacted taxpayers in several counties across other <u>designated</u> disaster areas have since been granted filing extensions as well through the spring and summer.



Prioritization

BEYOND THE X DATE



- Treasury has stated that it has no secret bag of tricks to finance government operations past the X Date.
 - Treasury will not attempt to "fire sale" assets as a way to avoid or delay congressional action on the debt limit.
- Other ideas have been deemed impractical, illegal, and/or inappropriate and would add significant reputational harm to existing market risks:
 - Minting a <u>trillion-dollar coin</u> to deposit at the Federal Reserve
 - <u>Issuing IOUs</u> that could be sold and traded in private markets
 - Unilaterally declaring that the Constitution's <u>14th Amendment</u> nullifies the debt limit

"The failure to [raise the debt limit] is something that could result in severe damage to the economy and to financial markets and it's just not something we should contemplate. No one should assume the Fed or anyone else can fully protect the markets or the economy in the event of a failure."

- Federal Reserve Chair Jerome Powell on crossing the X Date

HOW WOULD TREASURY PROCEED?



- If the X Date is reached, Treasury might either <u>prioritize</u> payments or make full days' worth of payments once they receive sufficient revenues to cover all of a day's obligations.
 - Treasury may have the technological capability to prioritize interest payments on the federal debt over other obligations.
 - In 2014, Treasury sent a <u>letter</u> to the House Financial Services Committee stating it is technically capable of prioritizing interest payments.
- Scenario #1: Pay some bills, but not others
 - Treasury might attempt to prioritize some types of payments over others. Prioritized payments would be made on time, others would not.
 - This option would raise operational and legal challenges for Treasury. It would involve sorting and choosing from hundreds of millions of monthly payments.

CONSEQUENCES



 Realistically, on a day-to-day basis, fulfilling all payments for important and popular programs (e.g., Social Security, Medicare, Medicaid, defense, military active duty pay) would quickly become impossible.

The reality would inevitably be chaotic:

- Unfair results, unanswered questions
- Treasury picking winners and losers
- Public uproar
- Financial market uncertainty

Economic disruption could include:

- Immediate cut in federal spending (macroeconomic impacts on unemployment/growth)
- Many service providers unpaid
- Individuals and business owners not receiving government checks
- Widespread uncertainty as decisions are made day-by-day
- Potential legal challenges over payment prioritization

PRIORITIZATION – COULD IT BE DONE?



- The Treasury Department's Office of Inspector General (OIG) released a report in 2012 on post-X Date strategies that Treasury was considering during the summer of 2011.
- Some senior Treasury officials were skeptical of the prioritization scenario for two reasons:
 - Choosing to pay certain obligations before others would be of questionable legality
 - Given the sheer number of daily payments and Treasury's computerized payment system, prioritization would require a massive overhaul and reprogramming of these operations that may be impossible
- The Treasury Department and the New York Federal Reserve <u>likely</u> have the technical capability to make principal and interest payments on Treasury securities while delaying other payments.

HOW WOULD TREASURY PROCEED? SCENARIO #2



Scenario #2: Delay all bills

- Treasury might wait until enough revenue is deposited to cover an entire day's payments, and then make all those payments at once.
- For example, upon reaching the X Date, it might take two days of revenue collections to raise enough cash to make all payments due on day 1. Thus, the first day's payments would be made one day late. This, in turn, would delay the second day's payments to a later day, and so on.
- In the 2012 OIG <u>report</u>, some senior Treasury officials stated that they believed this to be the most plausible and least harmful course of action.
- Since debt operations (interest and principal payments) are handled by a separate computer system, those payments could likely still be prioritized under this scenario, although legal and operational question marks would remain.

SELECT TRANSACTIONS THAT COULD BE MISSED – JUNE 2023



Monday	Tuesday	Wednesday	Thursday	Friday
29	30	31	 \$47b Medicare \$12b Mil & Civil Retirement \$12b Veterans Benefits 	\$25b Social Security\$2b Medicaid
\$2b Medicare\$1b Defense Vendors	\$6b Medicaid\$2b Defense Vendors	\$3b Medicaid\$1b Tax Refunds	\$6b Medicaid\$1b Education Programs	\$5b Medicaid\$4b Federal Salaries
\$2b Federal salaries\$1b SNAP Benefits	\$3b Defense Vendors\$2b Medicare	\$25b Social Security\$1b Tax Refunds	 Quarterly Revenues Due \$4b Military Salaries \$2b Interest on Treasury Securities \$2b Highway Administration 	\$2b Medicare\$1b Defense Vendors
Juneteenth	 \$3b Defense Vendors \$2b Education Prgms. \$1b SNAP Benefits 	 \$25b Social Security \$2b Defense Vendors 	 \$8b ACA Marketplace Pymts. \$5b Medicaid \$1b Tax Refunds 	 \$4b Federal Salaries \$1b Federal Employee Health Insurance
 \$2b Federal Salaries \$1b Education Programs 	\$2b Defense Vendors\$2b Medicare	\$25b Social Security\$1b Tax Refunds	\$4b Medicaid\$1b Federal Salaries	 \$49b Medicare \$13b Interest on Treasury Securities

Note: These are select transactions chosen for illustrative purposes given their magnitude and are not exhaustive of all cash flows on a particular day. Source: BPC projections based upon daily Treasury statements, subject to significant uncertainty and variability of cash flows.

SELECT TRANSACTIONS THAT COULD BE MISSED – JULY 2023



Monday	Tuesday	Wednesday	Thursday	Friday
 \$25b Social Security \$6b Civil Retirement \$3b Housing Programs 	4 Independence Day	\$2b Defense Vendors\$2b Medicare	\$5b Medicaid\$1b Thrift Savings Plan	\$4b Federal Salaries\$3b Medicaid
\$2b Federal Salaries\$1b SNAP Benefits	\$7b Medicaid\$4b Tax Refunds	\$25b Social Security\$5b Medicaid	\$2b Medicare\$2b Defense Vendors	\$5b Defense Vendors\$3b Military Salaries
 \$6b Interest on Treasury Securities \$2b Defense Vendors 	\$2b Medicaid\$2b Defense Vendors	\$25b Social Security\$2b Medicare	\$3b Medicaid\$2b Thrift Savings Plan	\$8b ACA Marketplace Payments\$4b Federal Salaries
\$2b Defense Vendors\$2b Federal Salaries	\$2b Defense Vendors\$2b Medicaid	\$25b Social Security\$2b Medicare	\$6b Medicaid\$2b Defense Vendors	\$2b Medicaid\$2b Medicare
 \$17b Interest on Treasury Securities \$1b Education Prgms. 	1	2	3	4

Note: These are select transactions chosen for illustrative purposes given their magnitude and are not exhaustive of all cash flows on a particular day. Source: BPC projections based upon daily Treasury statements, subject to significant uncertainty and variability of cash flows.



Market Risk

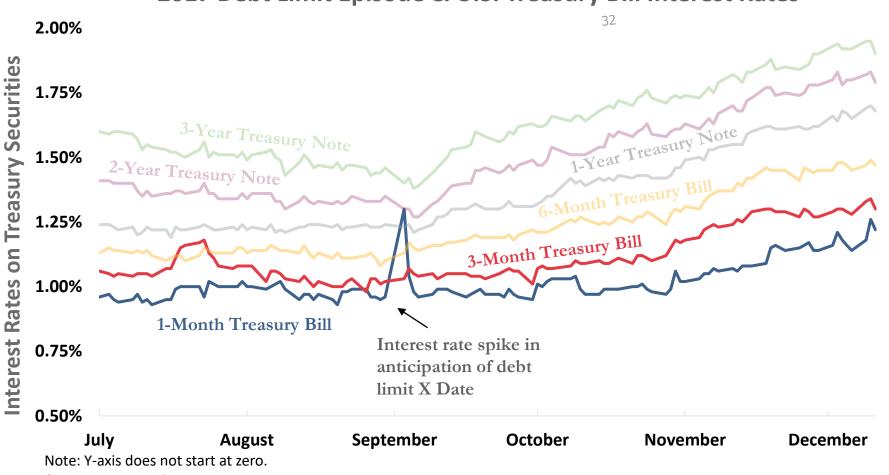


- American taxpayers foot the bill for additional borrowing costs that come from delays in extending the debt limit.
 - In 2013, Fidelity's money-market funds <u>refused</u> to hold any U.S. government debt maturing in late October and early November (the period surrounding the projected X Date in that year).
 - Both the Federal Reserve and GAO <u>found</u> that approaching the X Date in 2011 and 2013 increased the government's borrowing costs by hundreds of millions of dollars, stemming from elevated interest rates on U.S. Treasury securities issued leading up to the date when the debt limit was extended.
 - The costs continue to accrue far beyond the debt limit episode because many of the securities issued at elevated rates remain outstanding and accruing interest for several years.
- State and local governments are negatively impacted by debt limit episodes.
 - On May 1, 2023, Treasury suspended the issuance of State and Local Government Series (SLGS) securities that help them comply with tax regulations, yielding additional expenses and administrative costs.



During the 2017 debt limit episode, market uncertainty increased interest rates on some Treasury bills maturing near the October X Date range.

2017 Debt Limit Episode & U.S. Treasury Bill Interest Rates

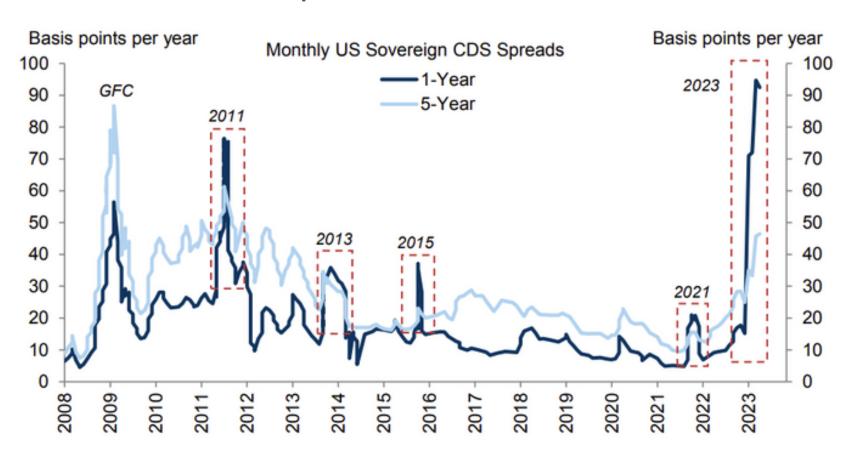


Source: TreasuryDirect.



• U.S. credit default spreads (CDS) continue to rise, now exceeding levels seen during the 2011 debt limit episode.

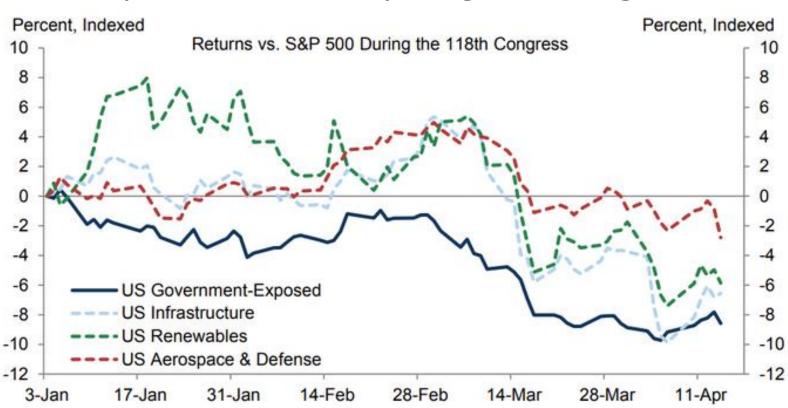
U.S. CDS 1-Year Spreads Have Climbed to Levels Above 2011





 Stocks of companies with greater exposure to government spending are also showing greater signs of pricing in debt limit risks, indicating impacts already felt across financial markets.

Stocks Exposed to Government Spending are Reflecting Market Risk



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TREASURY SECURITY MARKET DISRUPTION



- Treasury securities are normally considered safe and liquid, treated as the foundation of the global financial system because of the perception that the risk of default is negligible.
- When a Treasury security matures, Treasury must pay back the principal plus interest due.
- Under normal circumstances, Treasury would simply "roll over" the security by auctioning new debt to pay off the maturing principal.
- Between June 1 and June 15 alone, Treasury must roll over approximately \$600 billion in maturing debt.

DEBT MATURING IN JUNE 2023



Date	Debt Maturing	
June 1	\$105 billion	
June 6	\$136 billion	
June 8	\$102 billion	
June 13	\$86 billion	
June 15	\$180 billion	
June 20	\$81 billion	
June 22	\$102 billion	
June 27	\$81 billion	
June 29	\$102 billion	
June 30	\$124 billion	

Note: Does not include estimates of 4-week maturities that have yet to be auctioned. *Source: TreasuryDirect.*

TREASURY SECURITY MARKET DISRUPTION



- In a post-X Date environment, the roll over operation <u>may not run</u> as smoothly.
- Two elements of market risk:
 - Treasury will have to pay higher interest rates to attract new buyers.
 - It is possible, if unlikely, that not enough bidders would appear at an auction, forcing Treasury to either use cash on hand to pay off securities that came due or, in a worst-case scenario, default on the debt.
- The 2012 OIG <u>report</u> found that there was substantial concern about this issue among Treasury officials during the 2011 debt limit event.
- In 2013, Fidelity's money-market funds <u>refused</u> to hold any U.S. government debt maturing in late October and early November (the period surrounding the projected X Date in that year).

CREDIT RATING RISK



- Further rating agency <u>downgrades</u> are possible this year.
 - S&P: In 2011, S&P <u>downgraded</u> U.S. government debt citing political brinkmanship alone. There is uncertainty about the effects of another downgrade, since many funds are prohibited from holding non-AAA or AA+ securities.
 - <u>Fitch</u>: "Repeated near-default episodes brought on by debt limit debates could erode confidence that the US government's repayment capacity is resilient to political dysfunction and may affect Fitch's view of the sovereign credit profile."



GAO on Treasury securities, market risk, and how to reduce it:

- "The United States benefits from the confidence investors have that debt backed by the full faith and credit of the United States will be honored. Because Treasury securities are viewed as one of the safest assets in the world, they are broadly held by individuals—often in pension funds or mutual funds—and by institutions and central banks for use in everyday transactions. Treasury securities are also the cheapest and one of the most widely used forms of collateral for financial transactions. In many ways U.S. Treasury securities are the underpinning of the world financial system."
- "As we have also previously reported, delays in raising the debt limit can create uncertainty in the Treasury market. To avoid such uncertainty and the disruption to the Treasury market that it creates as well as to help inform the fiscal policy debate in a timely way, we have suggested in our February 2011 and July 2012 reports related to the debt limit that Congress should consider ways to better link decisions about the debt limit with decisions about spending and revenue at the time those decisions are made."



- Market risks beyond the X Date:
 - Treasury market, interest rates
 - Equity markets (including 401(k)s, IRAs, and other pensions)
 - U.S. economy, including missed payments to businesses and individuals
 - The global financial system
- No guarantee of the outcome; risks are risks



Methodology & Assumptions

BPC METHODOLOGY



- Analyze financial data from the Treasury Department
 - Daily Treasury Statements
 - Government Account Statements
- Project monthly operating cash flow and change in intragovernmental debt using:
 - Historical financial data
 - CBO analysis of spending and revenue growth
 - Adjustments for anticipated issues (e.g., extraordinary measures that become available on certain dates)
 - Adjustments for changes in revenue and spending due to COVID-19, pandemic aftermath, persistent inflation, etc.

Assumptions:

 No major shocks (e.g., deep recession, natural disaster, new overseas conflict) that could materially affect government finances.

OTHER RESOURCES



BPC's Debt Limit Analysis

Home page for all of <u>BPC's debt limit analysis</u>—past and present—including information on our <u>X Date range</u> and <u>reform proposal</u>.

Treasury Department

Leading up to and during a Debt Issuance Suspension Period, Treasury
 <u>releases</u> updates to the public on the status of extraordinary measures and
 available headroom.

Congressional Budget Office (CBO)

■ CBO's <u>Budget and Economic Outlook</u> forecasts 10-year spending and revenue patterns, and the agency projects its own estimate of when extraordinary measures and Treasury's existing cash on hand will exhaust.

Congressional Research Service (CRS)

 CRS has <u>chronicled</u> each recent debt limit episode since 2011, and provides useful <u>explainers</u> on several fiscal issues, including the debt limit.

Government Accountability Office (GAO)

 GAO <u>summarizes</u> information for the public on the federal debt and offers its own analysis of our country's debt management challenges.



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