2023 US Debt Ceiling Analysis
Contingencies and Outlook

April 27, 2023

The United States of America has never defaulted on a debt payment. We do not expect this to change now. Indeed, the notion of the nation's debt has been enshrined in The Constitution and has been a matter of regular discussion and change over the course of history. Prior to 1917 Each individual issue was approved until Congress passed the Second Liberty Bond Act of 1917 and replaced this inefficient and cumbersome system with the Debt Ceiling – a preset limit of total allowable debt outstanding anytime. There have been several "Debt Ceiling Crises", most recently in 2011, 2013, 2015 and 2019. The 2011 episode was perhaps the most relevant to today's situation. Then the US Treasury enacted "Extraordinary Measures" to avoid default and legislation was passed prior to the exhaustion of those Extraordinary Measures. Default was avoided but Standard & Poor's downgraded the credit rating of the United States one notch, from AAA to AA+. Fast forward to January 2023. The US Treasury started implementing elements of prior Extraordinary Measures and, in tandem, Standard and Poor's placed the US on negative watch.

Why were / are Extraordinary Measures needed? The US Treasury is charged with paying the government's bills. This is everything from employee salaries to the military, to rent and repairs on buildings, and far beyond. How this is allocated is a matter of law. Most better know it as the Budget. The highest-level allocation is included in every taxpayer's annual forms. There are two ways for the government to receive money: taxes (income, excise, and otherwise) or debt. Extraordinary Measures gives the government added leeway on how it meets those obligations and which sources of reserve funds can be used. In order to pay its debts to people, vendors, and the like, the US generally needs to borrow money in the form of Treasury Bonds.

When those Extraordinary Measures expire (the "X-date") is a moving target. An important piece of that puzzle arrived this week: lower than hoped for April taxes received. This brings X-date closer to today, perhaps into early June. If the US Treasury can somehow get through early June, there are June taxes and other measures available to push the X-date into a July – August timeframe. We expect that Janet Yellen will update Congress soon on the status of the Extraordinary Measures and provide a revised, estimated X-date.

Why is the X-date so hard to predict? It may seem awkward (or worse) that we do not know exactly when the government runs out of money. It is, however, normal and expected from such a large organization. Tax receipts are not entirely predictable (including those who will just not pay at all) and expenditures are not so fixed as to be exactly predictable on a day-to-day basis.

What happens if we hit the X-date? The US Treasury did have a contingency plan in 2011, and it seems likely that Treasury would follow the contours of that plan if we hit the X-date. Under the 2011 plan, there would be no default on Treasury securities. The US Treasury would continue to pay interest on those Treasury securities as it comes due. And, as securities mature, Treasury would pay that principal by auctioning new securities for the same amount (and thus not increasing the overall stock of debt held by the public). Other obligations would be paid as the cash accumulates to pay a full day's obligations.

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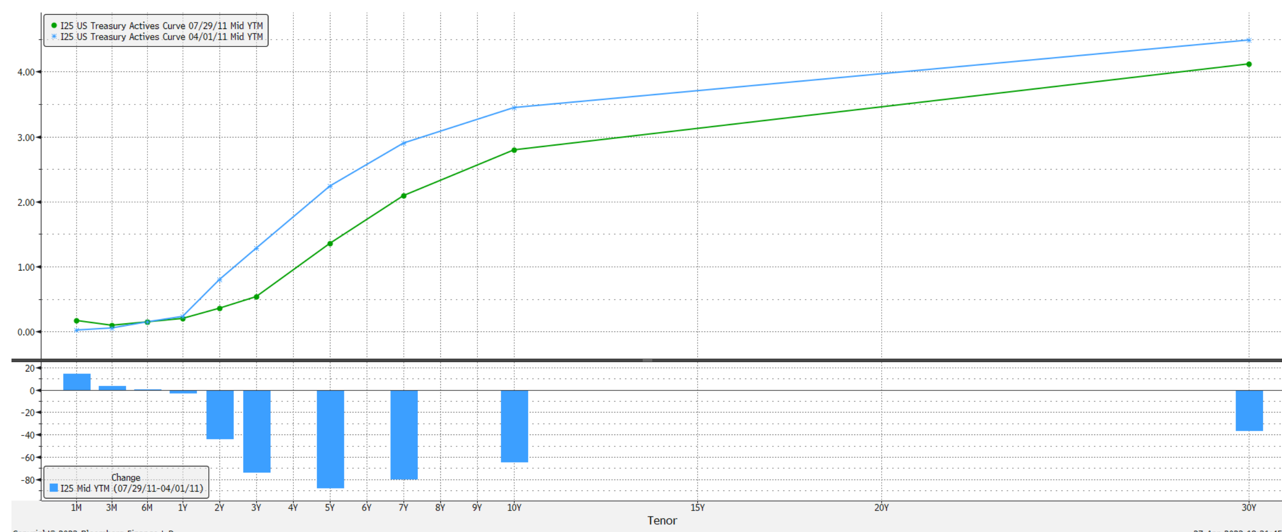
What will the US Benchmark Series do if we pass X-date? Each ETF will follow their respective index. ICE Data Services (ICE) informs us they will continue to follow existing published methodology, there is no rating requirement for US Treasury debt in the indices and ICE will continue to assume timely payment and issuance for any existing or forthcoming auctions. Assuming there are no new US Treasuries issued, ICE informs us, in the short run, the indices for The US Treasury 3-month Bill ETF (TBIL) & The US Treasury 6-month Bill ETF (XBIL) will roll to the next available maturing bill. The index for the US Treasury 12-month Bill ETF (OBIL) would hold its last issue. Similarly, the indices for the US Treasury 2-year Note ETF (UTWO), the US Treasury 3-year Note ETF (UTRE), US Treasury 5-year Note ETF (UFIV), US Treasury 7-year Note ETF (USVN), US Treasury 10-year Note ETF (UTEN), US Treasury 20-year Bond ETF (UTWY), and the US Treasury 30-year Bond ETF (UTHY) would also hold the last issue. Beyond the short run they would follow market consensus.

What can happen in the markets? That is difficult to predict with any certainty. Let's assume the US Treasury can avoid a default on US Treasuries, perhaps the market in 2011 can give us insight. April 4, 2011, Tim Geithner, the Secretary of The Treasury informed Congress of the need for extraordinary measures and an X-Date of August 2, 2011. The graph below shows the yield curve on April 1, 2011 (Blue) and the height of the market turmoil July 29, 2011 (Green). The chart below the yield curves shows the basis point change from April 1st to July 29th for each Tenor.

So, in 2011 as the X-date approached, rates on short US Treasury Bills rose as investors grew concerned about timely payment of the principal and interest. Interestingly, the yield to maturity on US Treasury Notes fell (prices rose), as investors sought the traditional safe haven.



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Investments

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The next chart is the ICE US Treasury 3-month Bill Index starting April1, 2011 through August 31, 2011. The 3-month treasury bill market (shown by the index) was sanguine until July 20, 2011, when the index reached 688.056 then it proceeded to correct to 687.987 on July 29, 2011. This represented a correction of 0.01%.

If this market reacts similarly to 2011, the US Treasury 2-year Note or longer maturities would be good places to potentially profit from the crisis.

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Sources:
The Brookings Institution, Board of Governors of the Federal Reserve System, Wikipedia

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Investors should consider the investment objectives, risks, charges and expenses carefully before investing. For a prospectus or summary prospectus with this and other information about the Fund, please call 1-800-617-0004 or visit our website at www.ustreasuryetf.com. Read the prospectus carefully before investing.

Investments involve risk. Principal loss is possible.

As with all ETFs, Shares may be bought and sold in the secondary market at market prices. Interest rate risk is the risk of losses attributable to changes in interest rates. In general, if prevailing interest rates rise, the values of debt instruments tend to fall, and if interest rates fall, the values of debt instruments tend to rise.

ICE BofA US 3-Month Treasury Bill Index is comprised of a single issue purchased at the beginning of the month and held for a full month. At the end of the month that issue is sold and rolled into a newly selected issue. The issue selected at each month-end rebalancing is the outstanding Treasury Bill that matures closest to, but not beyond, three months from the rebalancing date. To qualify for selection, an issue must have settled on or before the month-end rebalancing date.

ICE Data Services (ICE) is the index provider of the US Benchmark Series ETFs and earns a fee from the advisor for providing each of the indexes.

Fund Risks: The value of each Fund's investments may decrease, which will cause the value of each Fund's Shares to decrease. As a result, you may lose money on your investment in each Fund, and there can be no assurance that each Fund will achieve its investment objective.

While U.S. Treasury obligations are backed by the "full faith and credit" of the U.S. Government, such securities are nonetheless subject to credit risk (i.e., the risk that the U.S. Government may be, or be perceived to be, unable or unwilling to honor its financial obligations, such as making payments).

TBIL Fund Risks: The UST 3 Month Bill Fund may be susceptible to an increased risk of loss, including losses due to adverse events that affect the UST 3 Month Bill Fund's investments more than the market as a whole, to the extent that the UST 3 Month Bill Fund's investments are concentrated in a particular issue, issuer or issuers, country, market segment, or asset class.

XBIL Fund Risks: The UST 6 Month Bill Fund may be susceptible to an increased risk of loss, including losses due to adverse events that affect the UST 6 Month Bill Fund's investments more than the market as a whole, to the extent that the UST 6 Month Bill Fund's investments are concentrated in a particular issue, issuer or issuers, country,

market segment, or asset class.

The U.S. Treasury yield curve refers to a line chart that depicts the yields of short-term Treasury bills compared to the yields of long-term Treasury notes and bonds. The line chart shows the relationship between the interest rates and the maturities of U.S. Treasury fixed-income securities. The Treasury yield curve shows yields at fixed maturities, such as one, two, three, and six months and one, two, three, five, seven, 10, 20, and 30 years. Because Treasury bills and bonds are resold daily on the secondary market, yields on the notes, bills, and bonds fluctuate.

Basis points (BPS) are a unit of measurement used in finance to describe changes in percentage values, such as interest rates or the yield of an investment. One basis point equals 0.01% or 0.0001 in decimal form.

Yield to Maturity is the discount rate that equates the present value of a bond's cash flows with its market price (including accrued interest). The Fund Average Yield to Maturity is the weighted average of the fund's individual bond holding yields based on Net Asset Value ('NAV'). The measure does not include fees and expenses. For callable bonds, this yield is the yield-to-worst.

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