

Investment Institute Macroeconomics

US debt ceiling impasse: Unnecessary and unavoidable

A review of US public finances and the impending political clash



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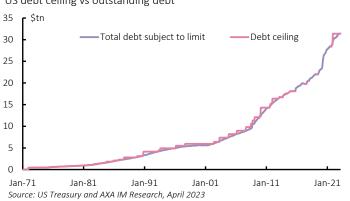
Key points

- The US is projected to see fiscal deficits average 5.5% over the next five years. Official forecasts see debt rising to 195% of GDP in 30 years' time from 98% if policy is unchanged
- We argue that there is no specific point at which debt becomes unsustainable but look at various thresholds where markets may demand an increasing premium to lend to the US. Current debt projections exceed those thresholds
- A debate about long-term fiscal policy is overdue. It should consider long-term spending commitments, how they are financed and how effectively they are used. The upcoming debt ceiling impasse does not seem the appropriate vehicle for that debate and threatens financial stability
- While timing is fluid, the debt ceiling debate currently looks to come to a head around late July
- We do not expect the US to default on its obligations, but
 we do foresee material market volatility while a resolution is
 sought, which we argue is a necessary part of the process.
 We also see scope for a lasting weakening in risk appetite if
 fiscal policy tightens materially as part of any resolution

Debt ceiling not the way to negotiate fiscal reform

The US Treasury has reached its statutory debt ceiling – a limit imposed by Congress on the federal government's ability to borrow (Exhibit 1). It is currently employing extraordinary measures to keep paying its dues domestically and overseas. Congress – led by a minority group of House Republicans – has drawn battle lines threatening to refuse to raise this limit without simultaneously identifying a sharp deficit reduction (i.e., spending cuts). Without an increase in the limit, the Treasury will soon be unable to pay some of its bills – which would be an unprecedented voluntary default. While the timeline is uncertain, the current expectation is for the Treasury to run out of funds in August, suggesting political brinkmanship will play out in July.

Exhibit 1: US debt and the debt limit US debt ceiling vs outstanding debt





In this note we review two aspects of this drama. First, the outlook for the US public finances, to consider whether the looming game of chicken with the nation's financial obligations is legitimate. Our analysis highlights that US public finances are deteriorating, and projections based on current laws see public debt rising to unsustainable levels over the coming decades. Our findings suggest that the US needs to implement changes to its longer-term fiscal framework. However, we argue that crisis is not imminent; that it is fundamentally a matter of choice of political direction; and that in the short term it need not be negotiated in a potentially financially destabilising manner.

Second, we look to the more immediate issue of raising the debt ceiling itself. We argue that despite being well anticipated, this episode is likely to introduce material financial market volatility, which we believe is a necessary part of the process to deliver an eventual political compromise and avoid a more damaging default. We consider the implications of this view.

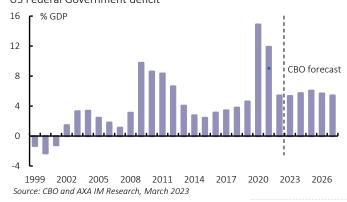
The US outlook for rising debt

Over the last decade, US debt has risen by 40% as a proportion of GDP¹. At 97% of GDP in 2022, US debt was over two-and-a-half times larger than the average debt over the first decade of the 2000s². The Congressional Budget Office (CBO) conducts long-term forecasts on the assumption that budget laws are unchanged. Exhibit 2 presents its long-run view of US debt, projecting a rise to 108% by the end of this decade, to 137% by the next and reaching 195% of GDP in 30 years' time – the highest on records dating back to 1790³. These projections are based on assumptions of unchanged policy and do not allow for downside surprises such as recessions, financial crises, wars and pandemics that have historically led to step increases in the debt profile.

Exhibit 2: US debt on a rising path Federal Debt Held by the Public

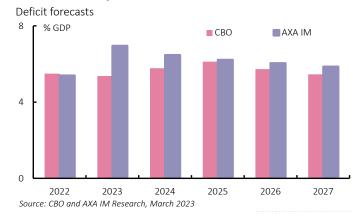


Exhibit 3: Deficits projected to remain elevated US Federal Government deficit



Moreover, our own forecast for the deficit outlook (Exhibit 4) suggests upside risk to near-term deficit projections. Our own projections differ from the CBO's primarily in expectation of a recession this year and weaker near-term growth thereafter that should have a further detrimental impact on borrowing.

Exhibit 4: Differing deficit outlook



How much debt is too much?

Exhibit 3 illustrates why US debt is projected to rise so sharply, with the CBO projecting an annual deficit averaging over 5.5% of GDP over the next five years and our own forecasts higher. That compares to European fiscal rules that seek to avoid "excessive deficits" greater than 3%. The compounded effect of these large increases drives debt higher, but is this a bad thing?

An assessment of public indebtedness encompasses several elements. These include a debate about the appropriate timing for debt reduction (critically absent in 2011 and 2013), which needs to take into account fiscal multipliers, which vary at different points in the economic cycle. There is a broader debate about the appropriate level of debt overall: Rising debt is a sign of increased spending now at the expense of future spending. One view is that this leaves one generation spending

¹ OMB, St. Louis Fed, 2012-2022.

² Peter G. Peterson Foundation, 3 March 2023.

³ Quartz, The Atlantic, 13 November 2012.



at the expense of future generations. Another is that investment in mitigating climate change is needed now to ensure the health of future generations. There is also a debate about the economic implications of high levels of debt, considering whether it raises overall interest rates (crowding out) or whether highly indebted nations underperform economically. There is, moreover, a whole field of study associated with welfare economics, which considers social and other broader implications of debt reduction.

In this note we consider the question of what constitutes too much debt through a relatively narrow lens of fiscal sustainability: Does the US borrowing profile set it on an unsustainable path?

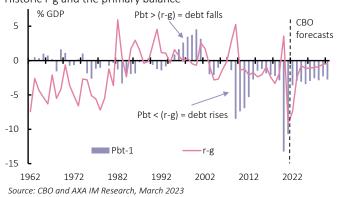
To analyze this, we reprise the framework we used to review fiscal stability in the aftermath of the pandemic³, built on the International Monetary Fund (IMF) metrics⁴. We concur now, as then, with CBO Director Philip Swagel's conclusion: "There is no set tipping point at which a fiscal crisis becomes likely or imminent, nor is there an identifiable point at which interest costs as a percentage of GDP become unsustainable — but as debt grows, the risks become greater." In part this reflects that, at some level of borrowing, markets demand a higher return to lend to more indebted borrowers to compensate for the increased risk of default — a credit spread. This rise in borrowing rates can tip an economy into fiscal crisis. The following framework helps to indicate when broader market concerns about a country's fiscal outlook might start to emerge.

Our previous research³ showed mathematically that the limit to a country's borrowing should theoretically be determined by the relative ratio of future nominal interest and growth rates and the maximum primary public surplus⁵ an economy can sustain before public resistance to austerity demands a change, a point of so-called "fiscal fatigue."

In recent years the US has seen nominal growth (g) exceed its interest rate (r), with the exception of during the pandemic in 2020, the 2008-2009 financial crisis and the downturn at the start of the 2000s. This combination allows a country to reduce its debt level while still running a deficit, and in the case of the US has served to limit the increase in overall debt, despite large budget deficits (Exhibit 5, Exhibit 6).

Our central assumption is that this condition is set to persist. To illustrate, we assume nominal growth to be determined by real growth of around 1.75% and a GDP deflator in line with consumer inflation at 2%. If we project this forward against an expected interest rate of around 3% in a steady state, the US would be able to run a primary deficit of around 0.75% of GDP and maintain a stable debt level. Such an assumption is itself favorable – and was not the case between 1980 and 2000.

Exhibit 5: The primary balance and its relationship to r and g Historic r-g and the primary balance



Establishing a debt level that could plausibly generate fiscal concerns then depends on determining the point of fiscal fatigue, relative to these future growth and rate combinations. In the last sixty years, the US has seen just five years of outright surplus — one in 1969, the rest between 1998 and 2001. However, it has seen more persistent primary surpluses (excluding debt interest). These occurred in the 1960s (eight out of nine years) and between 1995 and 2003, with other more isolated periods. The surpluses of the late 1990s ended with the election of a tax-cutting government — something that seems to show fiscal fatigue. We take the average of primary surpluses in the 1960s and 1990s periods (1.3% of GDP) and suggest this marks the maximum political acceptability of austerity, while being wary of the limits of relying on historical precedents.

We use historical interest and growth rates from 1995 to 2022 – a period that on average saw growth exceed average interest rates by around 1ppt. However, fiscal sustainability based solely on the ongoing outperformance of growth over interest rates may still cause concern. As such, we estimate the debt limit under a "stressed" scenario where the real interest rate⁶ suffers a positive shock. ⁷ Importantly, we assume this lifts the nominal interest rates in excess of nominal growth.

³ Page, D., "How governments can respond to the COVID-19 debt surge", AXA IM Research, 7 October 2020.

⁴ Debrum, X., Ostry J.D., Willems T. and Wyplosz, C. "Public Debt Sustainability", Chapter 4 in "Sovereign Debt: A Guide for Economists and Practitioners", IMF, 2018.

⁵ A primary surplus, before including interest costs.

⁵ The appropriate metric as discussed is the difference between the nominal interest rate and growth rate (r-g). However, insofar as both can be influenced by shifts in inflation expectations, we focus on changes in the real interest rate and specifically on estimates of the neutral rate as an anchor to steady states.

 $^{^6}$ We estimate a 2 standard-deviation positive shock to the neutral rate. Following decades of evidence that financial markets display power laws, rather



Exhibit 6: Primary balance, r and g and the change in debt Change in US debt and PBt - (r-g) formulation

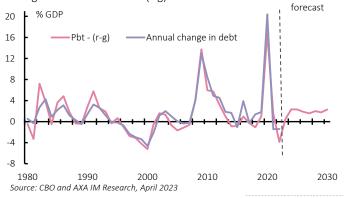
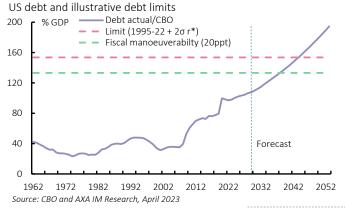


Exhibit 7 illustrates these calculations. The limit defines the point at which debt interest costs, after allowing for nominal growth, exceeds the primary balance. On our assumptions, a primary surplus of 1.3% would stabilize US debt even allowing for a large positive real interest rate shock up to a debt level of 153%. Above that, debt interest after growth would exceed the primary balance and add to debt. This may prove a level below which investors remain confident in US debt stability.

Exhibit 7: Estimated limits that would raise concerns



This assessment is sensitive to the assumption of fiscal fatigue. If this were 0.5ppt lower, the limit would drop to a little over 95% – around its 2022 level. Moreover, this analysis does not allow for exogenous fiscal shocks. The recent pandemic saw debt rise by 20ppt of GDP in a single year⁷ – a similar order of magnitude to adjustments in World War I and during the Great Depression (World War II saw three successive years of such increases). This reminds us that exogenous events can raise debt levels sharply and investors may be cautious some way before an actual limit is reached.

This underlines the difficulty of establishing a specific level that might prompt investor concern and an increasing cost of

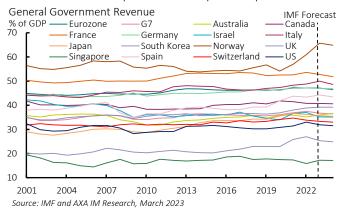
than normal distributions, we do not suggest that this is a particularly extreme shock.

borrowing. It also illustrates the extreme sensitivity to different assumptions about future interest and growth rates and future public appetite for austerity. Yet perhaps more importantly, it also shows that the projected US debt path is set to exceed each of these warning levels.

A genuine debate is necessary

Against this background, we suggest that a debate about the US fiscal outlook is indeed overdue. Exhibit 8 shows how abnormal US Federal tax policies are compared with those of other advanced economies. The US deficit and debt profile could be quickly resolved if the US were to adopt other advanced economy levels of general taxation. However, as noted, every country has different levels of tolerance for taxation.

Exhibit 8: US tax and spend rates compared to peers



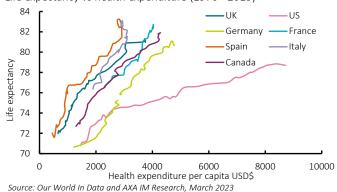
The US should also consider its longer-term spending commitments, which also are generally lower than in other advanced economies. Much of the expected increase in spending over the coming decades is associated with healthcare spending: The CBO expects Medicare to rise to 5.5% of GDP, from 3.1% this year; Medicaid to 3.0% from 2.6%; and social security to 6.4% from 5.1%. By contrast, other mandatory spending is projected to fall to 2.3% from 3.7% and discretionary spending to 5.8% from 6.6%. The US must decide how much of a social safety net it wants to provide to an aging population and other vulnerable groups. Tellingly, the CBO also envisages interest costs rising to 7.2% of GDP from 2.4%.

The US should also consider the effectiveness of its spending. Exhibit 9 illustrates that how a country spends its money is as important as how much it spends. The US spends significantly more per capita on healthcare than many other advanced economies. However, in terms of outcome – at least as measured by life expectancy – it falls far short.

⁷ CBO, 24 April 2020.



Exhibit 9: Could US healthcare spend be more effective? Life expectancy vs health expenditure (1970 - 2015)



Hence, we argue that there are significant grounds for a rootand-branch review of US fiscal policy against the outlook of an aging society⁸. We suggest that a bipartisan approach – with

time to consider different options – before public consultation would be best. In that context, the upcoming debt ceiling stand-off seem to present the opposite of those conditions.

Debt ceiling a cause for concern after false alarms

Since the debt ceiling was first politicized in 2011 – using Congress' statutory requirement to lift the borrowing limit to affect broader policy change – there have been several threatened repeats, but only 2011 and 2013 culminated in real tension. This time feels more concerning for several reasons.

First, there are legitimate concerns about fiscal policy. These include the long-term outlook for federal debt, but also a growing acceptance that recent fiscal stimuli under former President Donald Trump and President Joe Biden in hindsight appear excessive, adding to inflationary pressures — with suggestions from some quarters that they have even added to recent bank pressures.

Second, once again a small faction of House Republicans is pushing this debate. This small number managed to exert itself during the election of Speaker Kevin McCarthy, instigating rule changes that will make it easier to pressure the House Speaker over the debt ceiling. This includes electing a large number of this group to the Houses Rules Committee, which oversees how legislation comes to the floor, and a change in the rules for a "motion to vacate," allowing just one congressperson to call a vote of no confidence in the House Speaker. This creates a large influence for a small subset of House Republicans whose goals may not be aligned with the broader Republican Party —

particularly in the run-up to a presidential election year – let alone the broader national economic interest.

Third, this hard-line Republican faction is contending with a Democratic Party that believes compromises made during the 2011 and 2013 debt ceiling episodes were mistakes, with eventual spending cuts doing fundamental damage both to the economic recovery and their political standing. Many Democrats believe that they have learned the lessons from those episodes and appear to be taking a firmer line now.

Finally, some protagonists this time appear to believe that the consequences of a US default may not be as bad as considered a decade ago. Official records around the time of the last episodes showed the Treasury planned "that principal and interest on Treasury securities would continue to be made on time ... [and] that other payments may be delayed." This suggested the Treasury could avoid damaging defaults on international securities by delaying payment on other domestic obligations, for example government worker salaries, pension payments, or payments to domestic firms. Some conclude that in the short term, this might avoid severe financial repercussions of default and soften the debt ceiling deadline.

However, the sharp effective fiscal tightening caused by such delayed payments would have a large real economic impact, while financial markets would additionally react to the increased uncertainty that a prolonged period of financial paralysis would bring. We note that the Federal Reserve's (Fed) assessment even then was still that the "effects of a default... [would be] extremely uncertain, ranging from a temporary blip ... to a major crisis" Nevertheless, a perception that the consequences of a temporary default may be "manageable" may reduce current incentives to avoid it.

How this debt ceiling event likely unfolds

The most immediate question is when will the debt ceiling actually be reached? The US Treasury is already employing "extraordinary measures" to continue government operations. Treasury Secretary Janet Yellen had suggested these measures would be exhausted sometime after mid-June, the so-called X-date. The actual date depends on cash flows. April included significant tax receipt inflows which helped determine the size of the cash buffer that the Treasury can run down over subsequent months. Tax receipts have been coming in below last year's, suggesting a risk of less of a buffer (Exhibit 10).

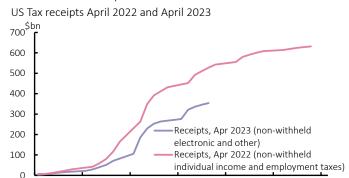
⁸ Though aging, the US does not have an elderly population by comparison with other advanced economies

⁹ Conference call of the Federal Open Market Committee on 1 August 2011, Federal Reserve Board (FRB).

¹⁰ Engen, E., Follette, G. and Laforte, J.P., "Possible Macroeconomic effects of a Temporary Federal Debt Default", FRB, October 2013, published November 2019



Exhibit 10: Tax receipts



3-Apr-23 10-Apr-23 17-Apr-23 24-Apr-23 1-May-23 8-May-23 15-May-23 Source: US Treasury and AXA IM Research, May 2023

Judging by the government's cash account at the Fed, around \$300bn at the end of April, this should mean an X-date of late July. But the risk is that this date could come sooner. Secretary Yellen's latest update suggested that the Treasury's special measures could be exhausted "by early June, and potentially as early as June 1." Separately, the CBO expects this in July. It is unclear whether the Treasury's earlier date reflects prudent risk management, or more technically that its forecast comes close to its margin of error, of around \$30bn. An X-date as early as June 1 could bring an additional complication of Congress raising the debt limit for a matter of weeks or months, shifting the effective X-date without fundamentally resolving the issue.

Exhibit 11: T-bills illustrate dates of concern

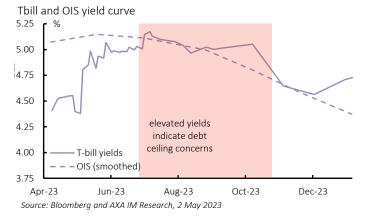


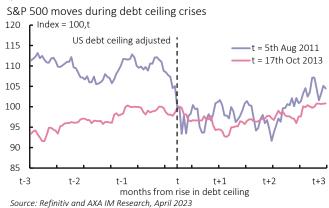
Exhibit 11 illustrates how this timing uncertainty is already having an impact on financial instruments with Treasury bills (T-bills) due for maturity around this time trading with an additional risk premium to overnight indexed swap (OIS) yields.

Our conviction is that the US administration will not voluntarily default on any of its obligations, but that a resolution to the debt limit standoff will be just days (possibly hours) before it does and that financial markets will likely have to consider a material chance that it *could* default before it is resolved. We also consider it likely that there will be some agreement to future fiscal tightening as part of this deal, although the detail

of this may be finalized later, echoing 2011's resolution. Hence the broader economic impact of the debt ceiling is likely to only play out in 2024 and beyond – and for now we forecast only a modest impact on the growth outlook.

We consider more reaction likely in financial markets. Indeed, while it is unusual for such a foreseen event to ultimately impact markets, we believe that in this instance it will provide the necessary motivation for both political sides to make the necessary compromises required for resolution. We therefore see some form of financial market volatility as a necessary part of the resolution process.

Exhibit 12: Equities around time of previous debt ceiling episodes



Source: Rejinitiv and AXA IIVI Research, April 2023

Short-term political uncertainty should not have a lasting impact on asset prices. The two previous major debt ceiling episodes of 2011 and 2013 both saw different effects across asset classes, making it difficult to draw conclusions. In both previous episodes, equity markets suffered. In 2011, the S&P 500 equity index fell by 17% during the brinkmanship leading up to the debt ceiling increase, which ultimately included S&P downgrading its US sovereign credit rating and a commitment to material fiscal tightening over the coming decade (this also took place across the unfolding backdrop of the Eurozone debt crisis). Equities had not recovered their pre-debt ceiling level three months later. In 2013, the S&P500 also retraced by around 5% as the crisis resolved (Exhibit 12). We expect a similar period of volatility around the resolution this time and an overall risk-off environment, also reflecting expectations for future fiscal tightening.

Other asset classes saw less distinct reactions. In 2011, again including the Eurozone debt crisis, the risk-off environment encouraged 2-year and 10-year yields lower, but in 2013 there was little discernible reaction. We do not expect this summer's events to have a lasting impact on yields. The dollar has also seen mixed fortunes, rising after the 2011 debt ceiling episode, but falling during the 2013 event. Recent dollar weakness has primarily reflected US banking system concerns, rather than gains on a broader risk-off sentiment, suggesting that further US-centric disruption could add to dollar weakness.



There is also likely to be significant political risk surrounding this event. We have argued that only a small faction of House Republicans appears to be driving this – indeed several other House GOP members tried to submit amendments to Speaker McCarthy's recent bill to make it less partisan, a bill that scraped through the House with 217 votes to 215. This small faction likely holds enough votes to block the passage of any bipartisan efforts with only Republican support. This could leave House Speaker McCarthy eventually relying on House Democrat votes to finally pass a compromise bill and avert default. It will remain to be seen whether this results in a motion to oust McCarthy in the wake of any such compromise.

Alternative outcomes

There are alternative ways to resolve the current debt ceiling impasse. One proposed solution is to mint a \$1trn coin. This would be minted by the Treasury and passed to the Fed to add to the government's account and hence provide a significant additional buffer. While some observers suggest this as a novel solution, we would argue that it is simply analogous to printing notes to fund government deficits. Such an approach is far from novel, with historic precedent even before being used in Zimbabwe or Germany's Weimar Republic that attached notoriety to the process through resulting hyperinflation. This appears an unlikely solution for an inflation-fighting government.

A second option considers the Executive branch's legal obligations to avoid default, as stated under the Constitution's 14th Amendment (section IV), which states "the validity of the public debt of the United States shall not be questioned." Some thus argue that President Biden should ignore the debt ceiling as it would not be legal to default on US obligations. However, in reality the US government is driven by conflicting legal obligations: To deliver the goods and services as dictated by Congress' budget; to borrow within the limit of the debt ceiling; and to avoid default. The Treasury *could* argue that it was obeying one law over another in respect of honoring Article 14. However, this would almost certainly result in a legal challenge, which would leave material uncertainty over the validity of US securities for an indefinite period, which would also likely have a material impact on US assets.

In conclusion, we argue that the US political system's checks and balances are designed to be difficult to circumvent and place an obligation on political compromise to provide a firm foundation for democracy. The focus is back to compromise. The final consideration, therefore, should be whether a lack of compromise, through mistake or miscalculation, does result in US default. When the Fed considered this prospect in 2013, it stated that such a default would be "highly uncertain" in part

because the Fed itself had "only a limited understanding of the dynamics of the financial system." We can only concur with that assessment 10 years later.

At that time, the Fed carried out a macroeconomic simulation based on the assumption that a temporary default would have no lasting financial market implications. This simulation suggested that GDP would be 3.5ppt lower after three years, with unemployment rising by 5ppt (Exhibit 13). Admittedly this analysis was carried out in 2013 and the macroeconomic simulation would likely look different if run today¹¹, but the Fed clearly viewed it as a material economic shock.

Exhibit 13: Macroeconomic deviation from base of temporary default

Percentage point variation from headline	Y0	Y1	Y2	Y3	Y4
GDP	-1.3	-1.7	-0.5	+0.4	+1.2
Unemployment	+0.2	+1.3	+1.7	+1.5	+0.8
Core PCE	0.0	0.0	-0.1	-0.3	-0.4
FFR	0.0	0.0	-0.7	-1.8	-2.0
10yr UST	+0.6	+0.3	+0.1	-0.4	-0.6
BBB	+2.2	+1.8	+1.3	+0.4	-0.3

Source: Federal Reserve Bank - Oct. 2013, and AXA IM Research, published Nov. 2019

The Fed also considered implications for financial markets. Again, amidst high uncertainty, it argued that UST Treasury yields could rise markedly – conceivably converging on US AAA rated corporates. This could have a material knock-on effect to other borrowing rates where US Treasury yields provide a benchmark. It also argued that financial markets could be impaired for a period, impacting repurchase markets and conceivably resulting in money market fund liquidity issues. It further suggested that international markets could be affected, perhaps by a reluctance for foreign investors to hold Treasuries or broader US securities, and with possible ramifications for the dollar and a higher perceived country risk.

Conclusions

The scope of this note – to gauge the fiscal sustainability of the US and place it in the context of the current debt ceiling debate – has been broad. However, we boil it down to what we consider a few truisms.

Projections show that current policy will result in an unsustainable rise in US debt over the long term. As such, a fundamental review and change of policy will be required at some point. However, the US has time to make such adjustments and while it would be easier to address sooner rather than later, change could take place over the next few years.

¹¹ The Fed's assessment was carried out in 2013 when the Fed Funds Rate (FFR) was at its effective lower bound of 0-0.25%. This limited any potential

monetary policy response to such a shock. In the current alignment, we expect the FFR to be at 5.25% with plenty of scope for policy easing to cushion the immediate negative impact on growth.



- The debt ceiling limit is not an appropriate vehicle to hijack to force a quick political fix to a complex and long-term problem, itself creating financial stability risks.
- The US has a comprehensive set of checks and balances that make alternatives to democratic processes – political compromises – difficult.

Beyond that, we expect the debt ceiling impasse to create market volatility and to come to a conclusion in late July, although we are watching developments that could potentially bring this date forward. We expect a period of market volatility, particularly for equity markets, around its resolution – indeed we see this as a necessary part of the resolution. Equities may well end up persistently lower, depending in part on any associated spending cuts that accompany a decision to raise the limit. We also see downside risks to the dollar. Finally, we really do not expect the US to voluntarily default on any of its obligations. However, such a default could have far-reaching and unpredictable impacts on the outlook for US and global financial markets. Financial markets may have to palpably fear such an outcome before a resolution can arrive that would prevent it emerging.

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