

Q4 2024 Outlook

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07 October 2024

Deficits, Debt, and Inflation

"How did you go bankrupt?" Bill asked.

"Two ways," Mike said. "Gradually and then suddenly."

— Ernest Hemingway, The Sun Also Rises (1926)

By Michael Crook, Chief Investment Officer

Intro

n early September, the US Treasury reported two items of concern about our country's fiscal health. First, for the first time in US history, the federal government has spent more than \$1tr on debt service in a calendar year. Second, the federal budget deficit is closing in on \$2tr for fiscal year 2024, up 30% from 2023. These are jarring harbingers of our fiscal future, particularly since fiscal sustainability will require something that seems impossible: bipartisan agreement around changes to entitlement programs, discretionary spending, and taxes.

While our long-term fiscal outlook is bleak, we believe it is important to clearly state that we are not currently seeing any signs of currency or debt-related distress in US financial markets. The US dollar continues to trade at historically strong levels, inflation has subsided significantly, and Treasury yields are low. We expect near-term market performance to be driven by the economy, not fiscal challenges.

Even so, we've received many questions about the economic and market implications of the US fiscal situation, which we seek to address in this quarterly report. Unless stated otherwise, projections are based on the Congressional Budget Office's March 2024 "Long-Term Budget Outlook," which projects the 2024–2054 baseline based on current law.

How bad is the federal fiscal outlook?

The fiscal outlook for the US federal government can be best described as *unsustainable*.

Our current national debt is \$28tr, or approximately 100% of gross domestic product (GDP)² (Fig. 1, next page). For context, debt-to-GDP averaged 35% between 1955 and

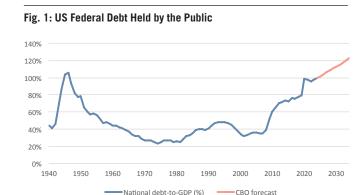
2008, but has risen rapidly since the great financial crisis. The CBO forecasts an annual budget deficit of \$1.5tr for 2024, accelerating to \$3tr, or 7% of GDP, per year by the end of the decade (Fig. 2). These increasingly large deficits push the national debt to \$50tr, or 120% of GDP, in 10 years. Debt-to-GDP is expected to exceed 230% by 2054.

Social Security and Medicare are the main drivers of our fiscal challenge. At current benefit levels, they face a combined shortfall of \$124tr over the next 30 years — nearly 4.5x our accumulated debt since the founding of the United States. In fact, the CBO projects that in 30 years these programs will run an annual budget deficit of 11.4% of GDP, whereas the remainder of the federal budget will run a 2.8% of GDP surplus.

While increased revenue (e.g., higher personal and corporate income taxes, payroll taxes, tariffs, and excise taxes) will inevitably be part of a fiscal solution for the US, Treasury revenue as a percentage of GDP is expected to approach the historically high level of 20% over the next five years. For historical context, US Treasury revenue as a percentage of GDP has consistently averaged just under 17% since World War II (Fig. 3).

We refer to this fiscal outlook as unsustainable because escalating interest payments will slowly consume an increasing share of tax revenue and, at some point, borrowing demands will overwhelm the ability of markets to supply capital. Net interest outlays (the interest we pay on Treasury debt) has increased fourfold over the last decade and is expected to nearly double again by 2034. By that time, absent significant changes, interest on the debt will be the largest spending item in the federal budget and consume over half of federal revenues.

Japan has a debt-to-GDP ratio of over 250% and is sometimes used to guiet concern about the fiscal outlook for the US. In our opinion, it does not represent a good comparison to the US, because Japan's total debt outstanding is equivalent to \$12tr USD, or 5-6 years of US deficits. Moreover, about 70% of newly issued Japanese government bonds are purchased by the Bank of Japan (BOJ) and the BOJ has maintained various caps and targets on government bond yields that largely insulate their bond market from market forces.



Source: Bloomberg, Mill Creek.

Fig. 2: US Annual Deficit as % of GDP 0.8 0.7 -5% 0.6 0.5 0.4 0.3 -15% 0.2 0.1 -20% 0 1996 2000 2004 2012 2016 2020 2024 2028 Deficit as % of GDP -CBO forecast

Source: Bloomberg, Mill Creek.

Fig. 3: Federal Revenues and Outlays as a % of GDP 35 30 25 20 10 1950 2010 2000

Outlays % GDP

Revenue % GDP

Source: Bloomberg, Mill Creek.

¹ https://www.cbo.gov/publication/59711

² The US Treasury has \$36tr of outstanding debt, of which \$28tr is held by the public. "Held by the public" refers to federal debt held by individuals, corporations, state or local governments, Federal Reserve Banks, foreign governments, and other entities outside the United States Government.

Is there a historical analogy to our current situation?

Yes. The US debt-to-GDP ratio was 118% in the aftermath of World War II and fell to 31% by 1981 through a combination of fiscal prudence, collusion between the Treasury and Federal Reserve to peg interest rates, unexpected inflation, and economic growth.

First, the US generally maintained a balanced budget, on average, between 1947 and 1963. This fiscal prudence allowed the overall economy to grow faster than the national debt, pushing down the debt-to-GDP ratio. Second, the Federal Reserve and US Treasury coordinated to peg interest rates on government bills and bonds from 1942 to 1951, which enabled the Treasury to finance our accumulated WWII debt obligations at below-market interest rates. Finally, the US experienced two bouts of substantial inflation between 1941 and 1980 that eroded the real value of outstanding federal debt. Inflation averaged 4.7% per year over the full 40-year period (Fig. 4).

However, there are some significant differences between post-WWII and our current situation. Most importantly, our greatest challenge comes from the future \$124tr Social Security and Medicare unfunded liability we face, not our current national debt. Inflation can erode the real value of outstanding debt, but the bulk of our future liabilities are tied to inflation and cannot be inflated away, absent Congressional action to place annual caps on future benefits.

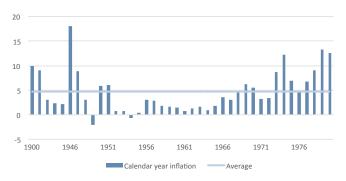
When does an unsustainable fiscal outlook become a crisis?

There's no economic consensus regarding the exact point where irresponsible fiscal policies tip into economic turmoil, but economists from the University of Pennsylvania believe that "financial markets cannot sustain more than the next 20 years of accumulated deficits projected under U.S. fiscal policy."3

Absent the Japanese-style interventions we discussed above, the loanable funds market is subject to the same laws of supply and demand that any other market faces. An increase in demand for loanable funds (increased borrowing by the federal government) will push interest rates higher. Higher borrowing costs exacerbate the cycle by requiring additional borrowing to pay the higher interest costs until at some point the market simply can't provide the funds necessary for the federal government to borrow at reasonable rates.

The economic and market consequences become dire. A government that borrows in its own currency (like the US) can avoid restructurings and default, but faces a number of suboptimal choices that are oriented toward bringing the fiscal outlook back into sustainable territory. These actions

Fig. 4: Calendar Year CPI Inflation, 1941-1980



Source: Bloomberg, Mill Creek.

typically include a combination of lower spending (austerity), efforts to increase government revenue through higher taxes, and monetization of the debt through interest rate pegs and inflation. Such actions are likely to happen on an ongoing, ad hoc basis when market conditions force policymakers to act.

Potential catalysts for these rolling crises include policy choices in DC that worsen the fiscal outlook even further.4 a severe recession that reduces expected federal revenue while increasing expenditures, an emergency that requires substantial unexpected deficit spending (e.g., a significant war), or the gradual erosion of our fiscal situation as described above.

Approximately one third of government bonds will need to be refinanced in 2025. What is the likely market impact?

The US Treasury generally maintains a consistent issuance pattern of bills (debt maturing within one year), notes (debt maturing between 1-10 years), and bonds (debt with a maturity of greater than 10 years). Predictability is valuable when it comes to placing trillions of dollars of debt each year.

However, the Treasury generally shifts this issuance pattern whenever unanticipated expenditures happen. Emergency spending measures are usually funded by issuing Treasury bills so as to not impact longer-term interest rates unexpectedly. Once the Treasury bills mature, the debt is "termed out" through the issuance of longer-maturity bonds.

For motivations that are unclear, the US Treasury has funded approximately 80% debt issuance over the last 12

³ https://budgetmodel.wharton.upenn.edu/issues/2023/10/6/ when-does-federal-debt-reach-unsustainable-levels

⁴ The Penn Wharton Budget Model estimates that the Harris and Trump budget proposals would both increase projected deficits over the next decade. (see https://budgetmodel.wharton.upenn.edu/)

months through bills issuance, resulting in about \$1tr of excess bills that will mature in 2025 and presumably need to be termed out (Fig. 5). There have been accusations that the excessive bills issuance has been politically motivated ahead of the election, but regardless of the Treasury's rationale, virtually all analysts agree on the impact: lower bond yields and more accommodative financial conditions than we otherwise would have experienced.5,6

Similarly, analysts generally agree on the eventual impact from terming out \$1tr of excess bills in 2025: higher bond yields, commensurately lower asset prices, and economic effects similar to a 2% hike in the fed funds rate.

The next Treasury secretary, regardless of who wins the election, will face a challenging period to work through.

How can investors hedge against a debt crisis?

Historically, the best assets for hedging against higher inflation and a weaker dollar tend to be non-dollar assets like international stocks and bonds and real assets like farmland, infrastructure, commodities, and real estate. US bonds and private credit have exhibited a near-zero correlation with the dollar, whereas US equities have been lowly but positively correlated to the dollar (Fig.6).

Our asset allocation targets, which represent a starting point for customization, contain about 20% in assets negatively correlated with the dollar (international equities and farmland), and 80% in assets that are lowly or positively correlated with the dollar. It is also important to note that most of our private credit exposure is short-duration with asset-based collateral (e.g., farmland, real estate, equipment, etc.) and we have modest exposure to crypto assets in our private equity strategies.

While the information presented in this article might imply that investors should quickly shift portfolios toward non-dollar and real assets, we caution against drastic action. Many investors were worried about these exact same issues after the 2008 financial crisis, but a move toward non-dollar assets and commodities would have been a mistake as those assets have underperformed US assets by a considerable margin. Even so, we're not dismissive of the fiscal catastrophe facing the US and we expect to add additional real asset and non-dollar exposure to our target portfolios over the next year.

⁵ https://www.hudsonbaycapital.com/documents/FG/hudsonbay/research/635102_Activist_Treasury_Issuance_-_Hudson_ Bay_Capital_Research.pdf

We generally seek exposure that provides both a strong investment case and the sought-after portfolio diversification so that the investment outcome will be accretive even if our fiscal fears are unfounded. Assets like farmland, real estate, and infrastructure generally meet those criteria, but assets reliant solely on price appreciation like gold and commodities rarely do. To that end, we hope our fears about the fiscal outlook come to nothing. A bipartisan agreement to face these challenges head-on will result in far better outcomes for investors and citizens alike.

Fig. 5: Treasury Bills as a % of Total Debt Outstanding



Source: Bloomberg, Mill Creek.

Fig. 6: Correlation of assets to USD

Correlation to USD	
International Bonds	-0.6
Farmland	-0.5
Infrastructure	-0.5
International Equity	-0.4
Commodities	-0.4
Gold	-0.4
Global CRE	-0.3
Timber	-0.3
US CRE	-0.3
Private Equity	-0.1
US Bonds	-0.1
Direct Lending	0.0
Hedge Funds	0.0
Bitcoin	0.2
US Large-Cap Equity	0.2
US Small-Cap Equity	0.2

Source: Bloomberg, PitchBook, Mill Creek.

⁶ Alon, Titan and Eric Swanson. "Operation Twist and the effect of large-scale asset purchases." Federal Reserve Bank of San Francisco Economic Letters, 2011.



House View Summary

Our Tactical Preferences

	Underweight	Neutral	Overweight
Cash		=	
Municipal Fixed Income	_		
State/Local GO	_		
Lease			+
Transportation	_		
Higher Education		=	
Health Care			+
Duration		=	
Taxable Fixed Income	_		
Corporate			+
Government	_		
Securitized			+
Duration	_		
Public Equity		=	
US Large-Cap			+
US Mid- and Small-Cap			+
US Growth		=	
US Value		=	
International Developed	_		
Emerging Markets	_		
Private Assets			+
Private Debt			+
Private Equity			+

Our Perspective

- 1. The US economy is experiencing a soft landing.
- 2. US economic growth remains solid. Real-time GDP trackers put Q3 GDP growth between 2.5-3%.
- 3. Inflation remains above the Fed's target, but continues to moderate toward 2%.
- **4.** The recent rise in the unemployment rate has been primarily due to immigration, not layoffs.
- 5. The Fed initiated rate cuts in September. The market is pricing in a 3% fed funds rate by December 2025. We don't believe the Fed will be able to cut that quickly.
- **6.** Even at a 3% cash rate, longer-term yields have little room to fall. We wouldn't be surprised if the 10-year Treasury yield eventually moves higher while the Fed cuts.
- 7. Within fixed income, we are underweight duration in our taxable bond portfolio and believe it is prudent to maintain high credit quality. We are also overweight new-issue MBS.
- 8. US equity valuations, particularly in the mega-cap growth space, remain elevated. Small-cap US equities are trading at the largest discount to largecap in 30 years.
- 9. We are overweight US equities, overweight US small-cap equities, and underweight the rest of the
- 10. We are overweight private credit and private equity.

Third Quarter 2024: Market Review

- PCE inflation has decelerated to 2.2% over the last twelve months.
- The US labor market remains firm. The rise in unemployment rate has been mainly due to immigration, not layoffs.
- The Atlanta Fed's GDP Now measure is tracking at 2.5% GDP growth for Q3.
- The Fed began a rate cutting cycle in September and is expected to further reduce policy rates in November and December.
- · Eurozone economic data shows increased signs of softening. Economists expect the European Central Bank to cut policy rates in October, earlier than was previously expected.
- · The People's Bank of China cut its key policy rate and also reduced bank reserve requirements in an effort to stimulate lending.
- · Stock and bond markets performed well during the third quarter. International equities and US small cap equities outperformed US large cap equities.

Index Returns	Q3 2024	2024 YTD	2023	2022	2021	2020	1 Year	3 Years	5 Years	10 Years
Global Equities	6.6%	18.7%	22.2%	-18.4%	18.5%	16.3%	31.8%	8.1%	12.2%	9.4%
US Equities	6.2%	20.6%	26.0%	-19.2%	25.7%	20.9%	35.2%	10.3%	15.3%	12.8%
Large Cap US	6.1%	21.2%	26.5%	-19.1%	26.5%	21.0%	35.7%	10.8%	15.6%	13.1%
Mid Cap US	9.2%	14.6%	17.2%	-17.3%	22.6%	17.1%	29.3%	5.8%	11.3%	10.2%
Small Cap US	9.3%	11.2%	16.9%	-20.4%	14.8%	20.0%	26.8%	1.8%	9.4%	8.8%
US Growth	3.4%	24.0%	41.2%	-29.0%	25.8%	38.3%	41.5%	11.3%	19.1%	16.0%
US Value	9.5%	16.2%	11.7%	-8.0%	25.4%	2.9%	27.6%	8.7%	10.6%	9.2%
Int'l Developed Equities	7.3%	13.0%	18.2%	-14.5%	11.3%	7.8%	24.8%	5.5%	8.2%	5.7%
Emerging Market Equities	8.7%	16.9%	9.8%	-20.1%	-2.5%	18.3%	26.1%	0.4%	5.7%	4.0%
US Taxable Bond Market	5.2%	4.4%	5.5%	-13.0%	-1.5%	7.5%	11.6%	-1.4%	0.3%	1.8%
US Municipal Bond Market	2.7%	1.9%	4.6%	-4.8%	0.5%	4.2%	7.4%	0.5%	1.4%	2.0%
Diversified Commodities	0.7%	5.9%	-7.9%	16.1%	27.1%	-3.1%	1.0%	3.7%	7.8%	0.0%
Hedge Funds	1.0%	7.9%	7.8%	-6.9%	9.7%	9.5%	12.7%	3.0%	6.0%	4.3%

Index Returns (as of March 31, 2023)	Q1 2024	2023	2022	2021	2020	1 Year	3 Years	5 Years	10 Years
Global Equities	8.2%	22.2%	-18.4%	18.5%	16.3%	23.2%	7.0%	10.9%	8.7%
Private Equity	2.6%	6.2%	-0.3%	36.1%	20.3%	5.6%	11.1%	14.2%	13.4%
US Taxable Bond Market	-0.8%	5.5%	-13.0%	-1.5%	7.5%	1.7%	-2.5%	0.4%	1.5%
Private Credit	2.9%	4.8%	1.4%	18.2%	2.8%	5.8%	6.4%	6.2%	6.8%

Key Rates (as of stated date)	Sep-2024	Dec-2023	Dec-2022	Dec-2021	Dec-2020	Dec-2019	Dec-2018	Dec-2017	Dec-2016	Dec-2015
US 10-Year Treasury	3.8%	3.9%	3.9%	1.5%	0.9%	1.9%	2.7%	2.4%	2.4%	2.3%
Barclays Aggregate Bond Index	4.2%	4.5%	4.7%	1.8%	1.1%	2.3%	3.3%	2.7%	2.6%	2.6%
BBarc Muni 1-10 Yr Blend (1-12) Index	2.9%	2.8%	3.0%	0.7%	0.6%	1.4%	2.2%	2.0%	2.1%	1.6%

Source: Bloomberg, Mill Creek. Returns for periods greater than one year are annualized. Index rates are yield to worst. As of 09/30/2024 unless otherwside stated.

Indices used to represent periodic capital markets returns include: MSCI ACWI (Global equities), Russell 3000 (US equities), Russell 1000 (Large Cap US), Russell Mid Cap US (Mid Cap US), Russell 2000 (Small Cap US), Russell 3000 Growth (US Growth), Russell 3000 Value (US Value), MSCI EAFE (International Developed), MSCI Emerging Markets Index (Emerging Markets Equities), Bloomberg Aggregate Bond Index (US Taxable Bonds), Bloomberg 1-10 Year Municipal Bond Index (US Municipal Bonds), HFRX Global Hedge Fund Index (Hedge Funds), Bloomberg Commodity Index TR (Diversified Commodities), Bloomberg Buyout PE Index (Private Equity), and Bloomberg Private Debt Index (Private Credit).

The historical index performance results are provided exclusively for comparison purposes over various time periods only. It is not possible to invest directly in an index. Index performance does not reflect any management fees, transaction costs, or other expenses that would be incurred by a portfolio or fund, or transactions in fund shares. Such fees, expenses, and commissions would reduce returns. It should not be assumed that any account holdings will correspond directly to any comparative index reflected herein. Data as of September 30, 2024

The Shifting Vibes in Private Markets

By Nora Pickens, Partner, Investment Strategy

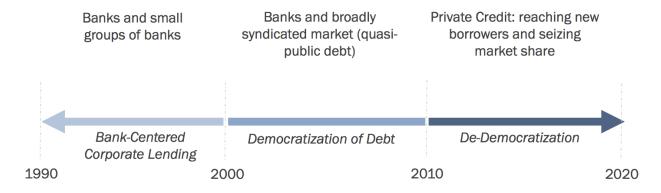
A recently published research paper titled "The Credit Markets Go Dark" explores the rising popularity of private credit and its far-reaching implications for capital markets. Specifically, the authors examine the growing trend of companies turning to private investors to meet not only their equity needs but their debt requirements as well. A few takeaways from the paper are below:

- Corporate governance: Private credit "represents perhaps the final major step towards investment funds owning US firms' entire capital structure — both equity and the debt." This shift means that mainstream investors and regulators are increasingly cut off from insight into a company's inner workings while a very small number of decision-makers (asset managers like Apollo, Blackstone, Carlyle, and KKR) have outsize influence on matters such as corporate governance. Although we acknowledge the benefits of improved capital efficiency and access, this dynamic has the potential to add fragility across the business ecosystem if not managed carefully.
- Improved asset-liability match: Banks use daily liquid customer deposits to fund long-term loans, aiming to earn a positive net interest margin (NIM). The inherent liquidity mismatch only becomes problematic when banks experience a run on deposits or face a solvency crisis.

The authors suggest that private investment vehicles, which are less leveraged than banks, use semi/closedended structures, and raise pools of capital from longterm limited partners, provide a better solution for this type of activity. We agree, as they offer improved market stability; however, there are always exceptions and nuances to consider.

Valuation: When financials are tightly controlled by a small group of investors, the usual signals from trading data are nonexistent. Historically, many private equityowned firms issued debt that traded publicly. Today's added layer of opacity in private markets increases the risk of managers postponing the recognition of losses (whether through loan amendments or forbearance), which leads to the misrepresentation of NAV and contributes to the creation of "zombie firms." As such, understanding a manager's philosophy and stated valuation policy prior to investing is a top priority.

Fig. 7: Evolution of US Corporate Loan Origination Market



Source: Mill Creek; Ellias, Jared A. and de Fontenay, Elisabeth, "The Credit Markets Go Dark" (July 1, 2024).

¹ Ellias, Jared A. and de Fontenay, Elisabeth, "The Credit Markets Go Dark" (July 1, 2024). 134 Yale Law Journal ____(2024), Duke Law School Public Law & Legal Theory Series No. 2024-45.

² The term "zombie firms" refers to companies that are close to insolvency but generate enough revenue to continue operating and service their debt. By tying up resources in businesses with no growth prospects, they prevent resources from being used more efficiently.

Around Mill Creek

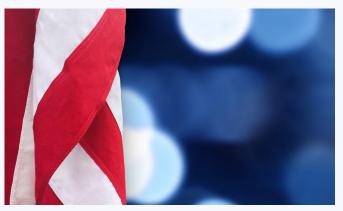
Firm highlights, milestones, events, and resources



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with Mike Townsend, Head of Legislative and Regulatory Affairs at Charles Schwab

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