



Higher Deficits to Impact Equity Valuations, Market Leadership

Key Takeaways

- ▶ Surging government spending during and after the pandemic led to Fitch's recent downgrade of the U.S. long-term credit rating to AA+ from AAA, highlighting growing risk to the economy's fiscal health.
- ▶ One byproduct of larger deficits is likely to be higher long-term interest rates, as investors demand additional compensation to lend money for longer periods.
- ▶ Although the effects are likely to be uneven across the market, the knock-on impacts of higher deficits and long-term rates should include lower equity valuations, a scenario that potentially benefits cyclical and higher volatility equities.

Worrying Fiscal Path Drives U.S. Government Debt Downgrade

Last month Fitch Ratings downgraded the United States' long-term credit rating from AAA to AA+, citing an "expected fiscal deterioration over the next three years, a high and growing general government debt burden, and the erosion of governance relative to 'AA' and 'AAA' rated peers over the last two decades".¹ This followed Standard & Poor's lowering its credit rating for the U.S. in August of 2011, leaving Moody's as the sole remaining major credit rating agency to assign a AAA rating to U.S. government debt.

In recent years, downgrades due to the path of fiscal spending by the Federal government have seemed probable. While every U.S. state except Vermont has a balanced budget requirement,² the Federal government faces no such obligation and has run a deficit every year since 2001 as well as 45 of the last 50 years according to the U.S. Treasury.³

Congress took steps to shrink the deficit with budget sequestration in 2013 that followed large spending increases during, and immediately following, the global financial crisis (GFC). However, this proved short-lived, and the deficit began growing faster than nominal GDP in 2016, an unusual occurrence outside of a recession.

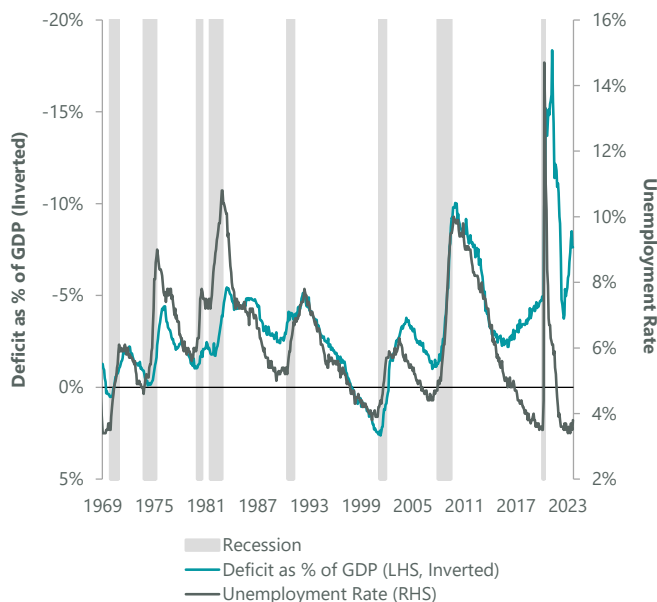
¹ <https://www.fitchratings.com/research/sovereigns/fitch-downgrades-united-states-long-term-ratings-to-aa-from-aaa-outlook-stable-01-08-2023>.

² <https://taxfoundation.org/research/all/state/fy-2020-state-budgets-fy-2021-state-budgets/-aaa-outlook-stable-01-08-2023>.

³ <https://fiscaldata.treasury.gov/americas-finance-guide/national-deficit>.

Historically, the deficit has directionally tracked the unemployment rate, a proxy for the health of the economy given consumer spending represents just over two-thirds of nominal GDP, and the strong linkage between changes in aggregate weekly payrolls and consumption. More recently, an unusual dynamic has unfolded with the deficit (relative to GDP) moving directionally opposite from unemployment during the back half of the last economic expansion (2015-19) and again since mid-2022.

Exhibit 1: Deficit and Unemployment Correlations Breaking Down



Data as of Sept. 15, 2023. Source: BEA, BLS, NBER, U.S. Treasury, and Bloomberg.

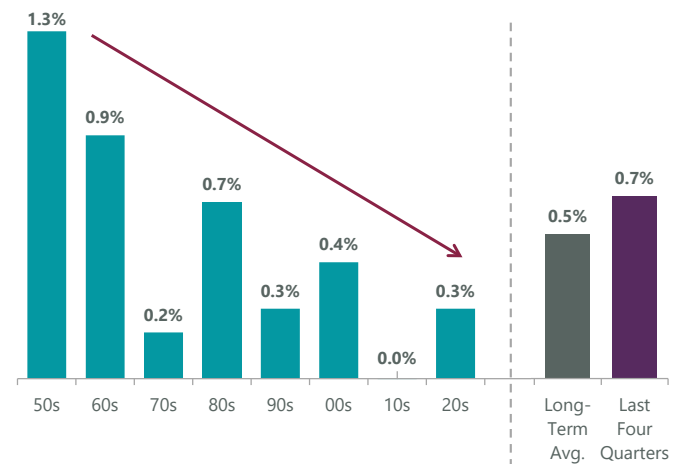
The latest deviation has come in the aftermath of the COVID-19 pandemic, which put fiscal spending into overdrive following a series of unprecedented and substantial fiscal stimulus bills deemed necessary to avoid the economy slipping into a depression. This (and the prior 2015-19 period) has proven challenging for investors who appear to have underappreciated the economic boost fiscal spending has had. Importantly, both periods occurred amidst a backdrop of monetary tightening that was expected to weigh on the economy and financial markets but thus far has had limited impact.

Government Spending Increasingly Important to GDP Growth, but on a Concerning Path

The boost from fiscal spending is clear when evaluating the contribution to GDP growth, where it has contributed an average of nearly 70 bps over the last

four quarters. This inflection follows a clear downtrend in recent decades, and while the 2010s saw essentially no contribution to GDP from government spending, that decade is really a tale of two halves. Growth averaged -36 bps during the first five years, driven by budget sequestration, but rebounded to average +35 bps over the second five years.

Exhibit 2: Federal Government Contribution to GDP



Data as of Sept. 15, 2023. Source: BEA and Bloomberg.

The debt ceiling deal reached in May should curb fiscal spending in the near term. The agreement included increases in defense spending, but the Congressional Budget Office (CBO) estimates the deal will reduce deficits by about \$1.5 trillion over the coming decade.⁴ However, only \$4.4 billion of this will come in 2023, and an estimated \$69.5 billion in 2024, as it steadily ramps up towards \$200 billion by 2033. This is a small but important step toward rightsizing the deficit although, in our view, more needs to be done in the coming years.

The current path of fiscal spending affords little cushion against a future recession, during which tax receipts typically plummet as workers are laid off (less individual income and corporate tax) and financial markets turn lower (less capital gains tax). This reduction in government revenues would materially alter the trajectory of the deficit even before any potential fiscal stimulus package was considered which, if enacted, would only further worsen key ratios like debt to GDP and net interest expense as a % of GDP.

Debt to GDP typically rises sharply during and following recessions due to a combination of lower GDP (as a result of the recession itself) and the fiscal response that follows. Over the past eight recessions, the ratio has worsened by 5.2% on average and the three most recent recessions (2020, GFC, and 2001) have seen substantially larger deteriorations of -13.4%, -8.8%, and

-6.2%, respectively. While debt to GDP is a measure many investors focus on, we believe it is not the best measure of debt sustainability. Debt to GDP compares a stock (debt) to a flow (GDP), while credit analysts typically compare stocks with stocks or flows with flows. There is no good source for the inventory of assets of the U.S. government. The Treasury Department estimates it at \$5 trillion,⁵ however this ignores the 27.4% of all land in the country that the Federal government owns and the associated natural resources.

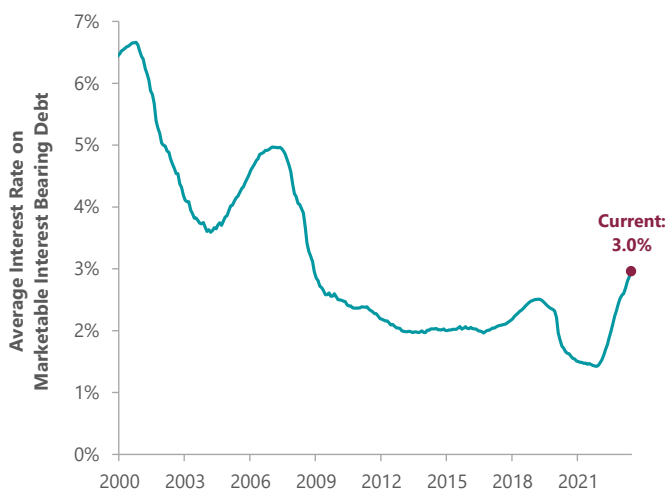
As a result, we believe investors can be better served by evaluating net interest expense as a % of GDP (which compares a flow to a flow). Net interest expense as a % of GDP is a solid proxy for how sustainable debt payments are relative to the potential tax base, so keeping incremental spending in-line with the growth of the economy is a reasonable approach. Further, lower rates can allow government spending to sustainably drift higher if they are locked in or remain low.

In the wake of the GFC, as interest rates fell to then-historic lows, the Treasury Department took steps to lock in those rates. The weighted average maturity of U.S. debt outstanding was just over four and a half years at the end of 2009 and had been in that range since 2004 after reaching a peak of just under six years in early 2001. By issuing proportionally more long- than short-term debt, the Treasury was able to extend the weighted average maturity of U.S. debt outstanding further, approaching six years by mid-2017. In late 2021 and early 2022, the Treasury was able to take advantage of historically low rates to push the weighted average maturity even further to slightly beyond six years (74 months) by mid-year 2023.

By extending the maturity profile of the national debt, the Treasury was able to lock in historically low interest rates and keep interest service manageable even in the face of an escalating debt load. Even with the current fed-funds rate in the 5.25-5.5% range and the 30-year Treasury trading around 4.3%, the average interest rate on the entirety of the United States' marketable interest-bearing debt is still just 3.0% due to much of the debt being issued in prior, lower interest rate years. As a result, the average rate will continue to rise in the coming years, but at a somewhat measured pace (Exhibit 3).

If all U.S. Treasury debt was to hypothetically be re-priced overnight at current market yields, the interest rate would rise to 4.8%. However, only 36% of currently existing Treasuries will reach maturity in 2023 or 2024, and 69% by 2028. As a result, the drift higher in interest service will take several years if rates stay at current

Exhibit 3: Average Interest Rate on Government Debt Heading Higher



Data as of Sept. 15, 2023. Source: U.S. Treasury and Bloomberg.

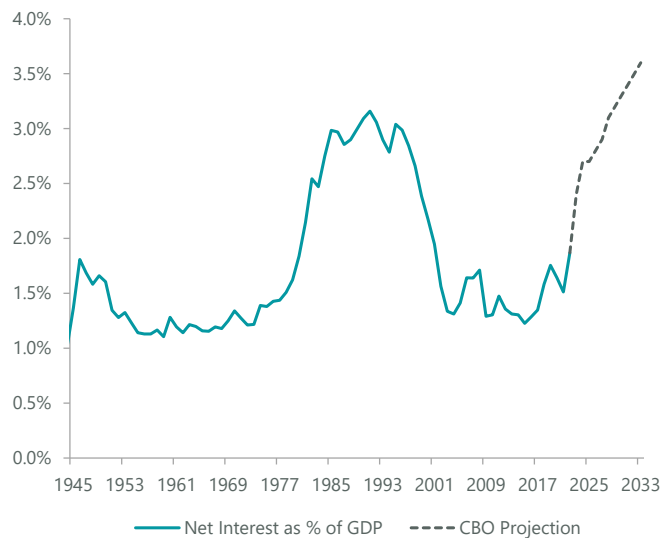
levels, although this is already under way. The current 3.0% average interest rate is already substantially higher than the low of 1.4% seen in early 2022. This sharp jump was the result of the Federal Reserve's aggressive tightening campaign, which pushed short-term Treasury Bill (which re-rate quicker than longer-term Notes or Bonds) rates dramatically higher.

However, with the Fed appearing to be near the end of their tightening campaign, the pressure on short-term rates should abate. This means the pace of interest rate increases for the national debt should slow as Bills will be rolling over at similar rates to what is already being paid on them. Further, historically the 10-Year Treasury has peaked right around when the Fed has completed their hiking cycle, meaning longer-term yields **may stabilize in the coming months**. Looking ahead, it appears that almost all Note and Bond maturities will be rolled over at higher yields, which should continue to put upward pressure on interest costs over the next several years (Exhibit 4).

In fact, the most recent CBO projection shows the net interest expense as a % of GDP rising to just 3.2% over the next decade.⁶ We believe these estimates are likely too low given they were made in February and assume both long- and short-term interest rates that are meaningfully below current levels. However, the GDP assumptions employed are already on the conservative side (including just 0.1% for 2023), which means the net interest expense metric shouldn't change too much in the next round of projections. Regardless, the interest burden for the U.S. is clearly set to move higher in the coming decade and could eclipse the previous peak seen in the late 1980s and early 1990s.

⁵ <https://www.fiscal.treasury.gov/reports-statements/financial-report/where-we-are-now.html>.

⁶ <https://www.cbo.gov/publication/58946>.

Exhibit 4: Net Interest Expense Also on the Upswing

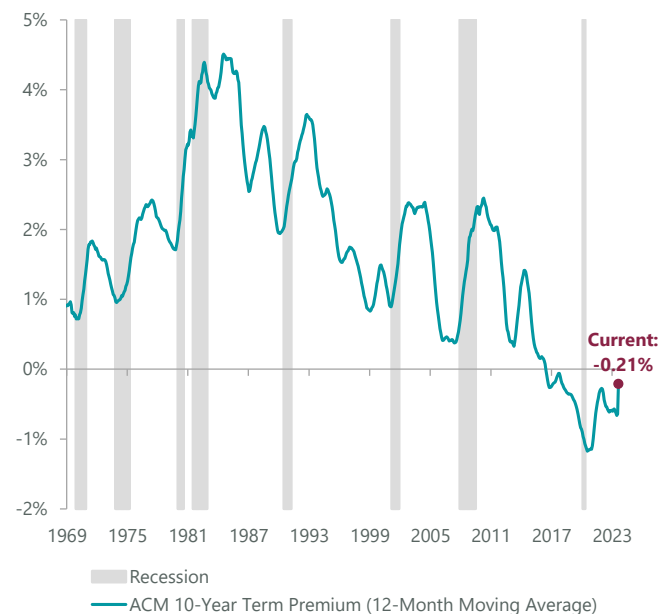
Data as of Sept. 15, 2023. Source: Congressional Budget Office, U.S. Treasury and Bloomberg.

While this measure was elevated in the 1980s, it ultimately fell during the 1990s for several reasons. First, both long- and short-term interest rates trended lower throughout the 1990s following Paul Volcker's successful campaign to curb inflation in the 1980s. Second, the conclusion of the Cold War meant that defense spending remained relatively stable in dollar terms and shrunk as a % of GDP from 6.9% at the start of the decade to 4% by the end. Finally, favorable demographics meant that mandatory spending such as Social Security remained in check, as overall non-defense Federal spending grew roughly in-line with the broader economy over the decade.

The current environment appears less favorable. First, interest rates have been trending higher along with inflation since the COVID-19 pandemic, making sustained higher rates a bigger risk. Second, demographics are generally less favorable, with rising mandatory spending expected to balloon in the coming years. The CBO estimates Social Security, Medicare, and Medicaid combined could see their costs increase from a collective 10.4% of GDP in 2022 to 12.7% by 2033. Combined with the rising interest burden and defense spending, policymakers may be facing tough choices in the coming years as these three programs already account for over 70% of the Federal budget, a figure expected to approach 75% by the end of this decade.⁷ The alternative is to allow for even higher levels of debt, which could have important ramifications for financial markets.

The Impact of Higher Deficits on Financial Markets

Although it will take several years for the full effects to be felt, the growing deficit and rising interest burden have already begun to impact financial markets as evidenced by rising bond yields. Yields on fixed income can conceptually be decomposed into three parts: inflation expectations, economic growth, and term premium. Term premium is the additional compensation investors require beyond the first two components to justify lending their money for longer periods of time. However, term premiums are difficult to observe and calculate directly. One of the most commonly applied methods is the Adrian, Crump, and Moench (ACM) model maintained by the Federal Reserve Bank of New York.⁸ According to the ACM model, the term premium reached historic lows in the wake of the GFC and even turned negative later in the decade as investors sought the safety of Treasuries. More recently, it has been on the rise with many observers noting that renewed uncertainty around inflation and large deficits are the most likely drivers.

Exhibit 5: 10-Year Treasury Term Premium Estimates

Data as of Sept. 15, 2023. Source: Federal Reserve Bank of New York and Bloomberg.

If the term premium moves higher in the coming years, it could have important ramifications for financial markets, with higher Treasury yields having a significant impact on corporate credit, currencies, and equities. The most direct impact to equities would likely be in terms of higher interest expense, resulting in lower operating

⁷ <https://www.cbo.gov/publication/58946>.

⁸ https://www.newyorkfed.org/research/data_indicators/term-premia-tabs#/overview.

margins. Currently, this does not pose much of a concern due to many companies' large cash balances and little debt, but could prove challenging for smaller capitalization companies.

More importantly, a higher discount rate would translate into lower valuations, all else equal. As companies' future cash flows are discounted by a larger amount, this has the effect of reducing their computed present value. An approach more grounded in logic offers a similar conclusion, as higher interest rates mean investors can find more attractive yields on offer in fixed income, reducing the appeal of equities and their associated dividends.

Not all equities are impacted by higher rates to the same degree, however, as some companies offer higher or lower dividend yields. Further, higher yields tend to be associated with faster economic growth. Periods of faster economic growth tend to drive cyclical companies to deliver superior earnings growth relative to their more defensive peers. With an evolution within the S&P 500 toward defensives and less of an emphasis on cyclicals, the broader market multiple can be pushed lower when rates rise as investors express less of a preference for a larger share of the benchmark.

This notion is also supported by theory. If we transform the dividend discount model (DDM) by dividing both sides of the equation by earnings, we can now solve for multiples or a P/E ratio. This approach is similar to [previously published research](#) from the ClearBridge Quantitative Research team. From there, we can use the capital asset pricing model (CAPM) to determine the cost of equity capital. Substituting the CAPM into the equation allows the risk-free rate to become a direct input when solving for valuation, although keen observers will notice a change in the risk-free rate does not directly impact the theoretical P/E if all other variables are held equal because the risk-free rate nets to zero. However, in the real world, changes in the risk-free rate are accompanied by changes in other variables in this equation (Exhibit 6).

We employ this model – despite its oversimplification – because it shows how beta can have a substantial impact on the theoretical P/E even if we assume other inputs remain constant. We have explored this area of research in the past with our ClearBridge colleagues to evaluate market leadership and how two similar companies can be valued differently by the market.

Exhibit 6: Company Valuations Dependent on Beta

Valuation: Theory

Dividend Discount Model (DDM)

$$P = \frac{Div}{K - G}$$

DDM with Valuation (P/E) Transformation

$$\frac{P}{E} = \frac{\frac{Div}{E}}{K - G} = \frac{Payout}{K - G}$$

DDM with Valuation (P/E) & CAPM Transformation

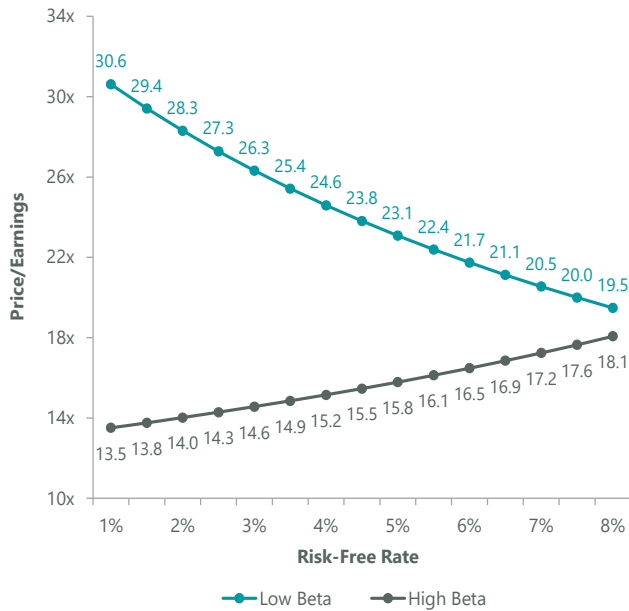
$$\frac{P}{E} = \frac{Payout}{(R_f + B(R_m - R_f)) - G}$$

Source: ClearBridge Investments.

P = value of stock; Div = expected value of dividends one year from now; K = required rate of return for equity investors; G = expected growth rate; E = equity; Payout = expected dividends per share; R_f = risk free cost of capital; B = beta, the sensitivity of the expected excess asset returns to the expected excess market returns; R_m = market risk premium.

Beta can be thought of as a proxy for volatility. Companies with more steady earnings streams, such as defensives, tend to have lower betas (<1) and thus higher valuations. By contrast, companies with variable earnings that rise and fall more dramatically with the course of the economic cycle, known as cyclicals, tend to have higher betas (>1) and lower valuations. For example, if we look at the beta of the Consumer Staples sector (a defensive group) relative to the S&P 500 using weekly data over the last five years, we find it to be 0.68 while the more cyclical Consumer Discretionary sector had a beta of 1.13 over the same period.

Notably, the behavior of low relative to high beta multiples in the model is not the same if the interest rate assumption is changed. When interest rates fall, low beta equities translate into higher P/Es, while high beta equities see their valuations drop. This is supported by the logic above, as lower bond yields tend to occur in periods of decelerating economic growth that drive investors to prefer defensive (low beta) equities – which often offer more attractive dividend yields as well – while the earnings prospects for cyclicals (high beta) are deteriorating. When interest rates increase, the reverse occurs.

Exhibit 7: Impact of Risk-Free Rates on Valuations of Low and High Beta Stocks

Source: Federal Reserve, S&P, Bloomberg, and FactSet. Inputs are Risk-Free Rate as Shown, 0.9 Low Beta, 1.1 High Beta, 37.5% Payout, 8.75% Market Return, 6.75% LT Growth Rate.

If the coming years are marked by a higher term premium on the back of increased deficit or interest burden worries, investors should expect an environment more favorable for cyclicals and high beta equities relative to defensives and low beta. Given greater exposure in the benchmark for defensives, this would have the effect of lowering overall market multiples as well. Finally, this would also likely mean that value equities hold up better relative to growth than they have over the last ~15 years, given their shorter duration and greater focus on present cash flow as opposed to future cash flows (that will be discounted by a larger amount) relative to growth peers. Put differently, higher deficits could prove a catalyst for a shift in equity market leadership.

We are not convinced that such a shift has occurred and believe defensive leadership could outperform in the near term with long-term interest rates stabilizing or declining in the coming months. This view is based upon the notion that long-term rates have historically dropped following the conclusion of a Fed tightening cycle regardless of economic outcome. Longer term, however, the trend in Federal deficits and term premiums lead us to believe investors would be well suited to prepare for the possibility of a regime change.

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