

CHIEF INVESTMENT OFFICE

Capital Market Outlook



All data, projections and opinions are as of the date of this report and subject to change.

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Macro Strategy—Elevated Inflation Uncertainty A Persistent Headwind To Growth:

Tightening global oil market conditions have pushed the price of oil sharply higher over the past two months, creating potential new risks to economic growth. Heightened uncertainty about oil prices also exacerbates already elevated uncertainty about the inflation outlook.

According to recent Federal Reserve (Fed) research, inflation uncertainty has remained at three standard deviations above its mean over the past two years, a 60-year high. A shock to uncertainty of this magnitude is estimated to have a significant negative effect on real economic variables, including industrial production, investment and consumer spending 12 months out.

Market View—*The Era Of Low Borrowing Costs May Be Over—But The Impact Of Near Zero Interest Rate Policies Is Here For Years To Come:* The bite of higher interest rates is just beginning to be felt across private and public debt markets. Despite outsized growth in debt in the investment-grade market, higher borrowing costs present a minor challenge for most issuers—and could drive more conservative capital allocation going forward.

Lower-quality loan and high-yield issuers have less financial flexibility and remain most at risk to higher refinancing costs as maturity walls climb in 2024 and 2025.

Thought of the Week—*No Government Shutdown but Still Maintaining a Wary Eye on Washington*. While a U.S. government shutdown has been avoided—at least for the next 45 days—what's not avoidable is the challenging finances of the U.S. government.

We continue to monitor and track the "Formidable Five"—or the five massive government spending commitments that consumed roughly 72% of total government outlays in Fiscal Year 2023. The five include the mandatory spending programs of Social Security, Medicare, and Medicaid, in addition to defense spending and interest payments on our national debt. The latter has emerged as one of the fastest growing line items owing to the backup in U.S. interest rates. To wit, the era of cheap money is over, and Uncle Sam's interest bills are getting larger.

MACRO STRATEGY ▶

CIO Macro Strategy Team

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THOUGHT OF THE WEEK

Joseph P. Quinlan

Managing Director and Head of CIO Market Strategy

MARKETS IN REVIEW

Data as of 10/2/2023, and subject to change

Portfolio Considerations

We expect corporate earnings for Q3 to come in with a small beat again. Longer-term investors should consider using excess cash on a dollar-cost averaging approach into Equities over the last quarter of the year. Given both tailwinds and headwinds, we continue to maintain a balanced tactical portfolio strategy view and a high-quality bias in the near term.

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MACRO STRATEGY

Elevated Inflation Uncertainty A Persistent Headwind To Growth

CIO Macro Strategy Team

With inflation still high in numerous countries and oil prices widely anticipated to increase further in coming months due to tightening global oil-market conditions, a new downside risk to U.S. and global growth and inflation has emerged. Basically, oil production gains outside the Organization of the Petroleum Exporting Countries (OPEC) and Russia are not enough to prevent a significant tightening of the oil market this year in the face of stronger-than-expected global demand and unexpected supply cuts elsewhere.

Indeed, oil consumption has boomed in line with skyrocketing demand for air travel, strong U.S. gasoline demand, and record first-half Chinese crude oil imports. China is seen accounting for more than 70% of the increase in global oil demand this year. According to the Energy Information Agency (EIA), in the first half of 2023, it imported 12% more than the 2022 annual average, with imports from Russia up by 23% and imports from the U.S. more than doubling.

At the same time, Saudi Arabia and Russia have significantly cut supply, causing global volumes to fall short of demand this year, forcing consumers to increasingly dip into inventories. In the U.S., for example, commercial crude oil inventories have already dropped to the low end of their 2015-2023 range, according to the EIA, and the strategic petroleum reserve is at multidecade lows.

As a result, following a big year-long decline that greatly benefited the U.S. and the global economy, oil prices have taken off in the past two months, raising new concerns about the economic outlook. According to the ElA's September Short-Term Energy Outlook, Brent oil is likely to average \$93/barrel in Q4, with expectations for slower oil demand growth and rising inventories in 2024 suggesting a potential moderation to about \$88/barrel on average next year. Heightened geopolitical tensions, OPEC budgetary pressures, insufficient global oil investment, and recent concerns about underground water pollution from U.S. fracking activity in Ohio, suggest risks are to the upside, however.

Still, uncertainty remains high, keeping overall uncertainty about economic growth and inflation at unusually elevated levels, itself a headwind to growth, according to new research. In their Global Inflation Uncertainty and its Economic Effects, Fed researchers create a measure of real economic uncertainty (REU) that reflects the predictability of the economy based on economic fundamentals. Using a data-driven econometric methodology, they calculate an index of how far off month-ahead forecasts for 130 macroeconomic variables are from reported values at each point in time. The forecasts are based on over 200 monthly domestic and global financial and economic predicting variables. The higher the value of this economic uncertainty measure, the harder it is to predict how the economy will evolve, and the higher the uncertainty facing households and businesses when making their economic and financial decisions. Not surprisingly, this measure spikes during recessions, when uncertainty about the economy is understandably high. However, according to the report, its increase early in the pandemic was unprecedented. What's more, it has remained exceptionally elevated compared to the past 60 years.

To identify the drivers of this uncertainty, the authors decomposed it into subcomponents related to inflation, labor-market conditions, output and other components. While uncertainty rose significantly across all components during the pandemic, they find that the sources of uncertainty behaved differently after 2021, with inflation becoming the dominant factor, especially since the start of the Ukraine War. Moreover, the authors find significant negative effects from large increases in inflation uncertainty on the economy

Investment Implications

Uncertainty about the path of inflation and interest rates suggests that a balanced tactical portfolio strategy with a high-quality bias remains prudent.

¹ Global Inflation Uncertainty and its Economic Effects, Juan M. Londono, Sai Ma, and Beth Anne Wilson, Federal Reserve Board, September 25, 2023.

(including on investment, consumption, and production) 12 months later. In their view, "This rise in U.S. inflation uncertainty may be acting as a headwind to U.S. growth..." The rise in inflation uncertainty has also been a global phenomenon over the last two years, according to the analysis, with evidence of international transmission of foreign inflation uncertainty through several potential channels that, however, require additional future research.

Importantly, the report confirms that measures of monetary policy uncertainty also increased as rates were lifted off the effective lower bound in 2022, with the current level of monetary policy uncertainty well above historical averages. This makes sense given unusually elevated inflation uncertainty, and is no doubt related to the pandemic-related spike in inflation following two decades of tame readings and lack of agreement about what caused this surge in the first place and how to identify the neutral level of interest rates.

The rejection of the role of money supply shocks in the inflation process has not helped. Neither has doubted the overtightening signals coming from almost a year of deep yield curve inversion. The fact that the Phillips curve² often breaks down further increases monetary policy uncertainty. According to a European Central Bank (ECB) "rate setter" quoted in a September 5, 2023, Wall Street Journal article, there is no single Phillips curve, but a set of different curves pointing to different paces of disinflation across sectors and countries. Moreover, according to the official, the slope of the Phillips curve is likely to vary over time.

Such ambiguity greatly undermines the value of the Philips Curve as a guide for central bank monetary policy, leaving forecasters in a cloud of uncertainty. According to former St. Louis Fed President Bullard, with the Phillips curve broken, policymakers have to look elsewhere for direction.³ With that direction still undetermined, however, it's easy to see why the difficulty of predicting inflation is at a 60-year high, and uncertainty about monetary policy remains unusually elevated.

In sum, while inflation expectations have long been established as an important determinant of future inflation, and thus have been used as inputs in monetary policy decision-making, inflation uncertainty also appears important. According to recent Fed research, it has significant quantifiable negative effects on the real economy 12 months out. This effect appears particularly relevant this time around when inflation uncertainty remains extremely elevated.

² According to which high inflation corresponds to low unemployment, and vice versa.

³ What Is the Phillips Curve (and Why Has It Flattened)? January 14, 2020, St. Louis Fed.

MARKET VIEW

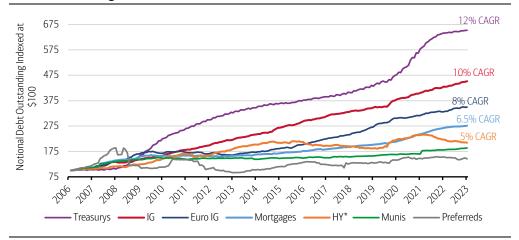
The Era Of Low Borrowing Costs May Be Over—But The Impact Of Near Zero Interest Rate Policies Is Here For Years To Come

CIO Fixed Income Strategy Team

Borrowing costs have surged materially for corporates and governments alike amid decades-high inflation and a coordinated tightening of monetary policy by global central banks. Despite tighter financial conditions, access to debt capital markets has not yet been a significant concern for the majority of borrowers save the lowest-quality issuers. However, with central bankers talking tough on employment and inflation, the era of cheap debt may be over, at least for now. Borrowers (both public and private) will need to deal with the repercussions of almost 15 years of near-zero interest rate policies, which drove a significant increase in aggregate debt levels across public and private markets. This has several important implications, particularly for lower-quality, high-yield and loan issuers, where debt-service burdens are higher relative to earnings, and defaults are already on the rise. For Investment-grade (IG) investors, the answer is more nuanced. While debt growth in the IG corporate market has led to a notable deterioration in credit quality over time, this is a well understood trend, and we expect that most IG issuers will face just minor challenges should rates indeed stay higher for longer. Furthermore, in the longer term, higher debt costs could lead to more conservatism on behalf of management teams with regard to balance sheet leverage and management. A bigger potential longer-term worry, however, could be growing U.S. government debt as issuance needs remain elevated given rising deficits. This is a key risk factor that we see supporting the higher-for-longer view on yields and will be something to watch closely over the next several quarters.

Spurred on by record-low borrowing costs following the 2008/2009 Global Financial Crisis, IG corporates were incentivized to increase the amount of debt in their capital structures. Stirring animal spirits drove more aggressive capital allocation as companies outspent internally generated cash flows and levered up to pursue growth capital expenditures, returns to shareholders, and large-scale leveraging mergers and acquisitions deals. In some cases, management teams pushed balance sheet leverage to the limit compared to what was normally considered appropriate for an IG-rated entity, touting scale and diversification benefits along with commitments to prioritizing debt reduction. From year-end 2006, total notional debt outstanding in the ICE BofA U.S Corporate Index has increased to \$8.6 trillion from \$1.9 trillion, an impressive 10% compound annual growth rate (CAGR), and more than double the growth of U.S. gross domestic product—paling only in comparison to the growth in U.S. Government debt, which increased at a 12% CAGR over the same period (Exhibit 1).

Exhibit 1: Near-Zero Interest Rates Have Driven a Significant Increase in Notional Debt Outstanding Across Public and Private Markets.



*High Yield. Source: ICE BofA Indexes. Data as of August 31, 2023. Past performance is no guarantee of future results. Please refer to index definitions at the end of this report. It is not possible to invest directly in an index.

Investment Implications

Advocate an up-in-quality bias across Fixed Income as the economic cycle matures. Credit spreads continue to price in a very low probability of a recession over the next 12 months—and we see risks of modest spread widening as corporate credit fundamentals slowly deteriorate. Watching U.S. Treasury net issuance which could support the higher-forlonger thesis in yields.

For IG investors, one outcome of elevated corporate debt issuance was that a number of large and highly rated industrial companies sacrificed their single-A ratings in favor of more aggressive capital allocation decisions and were subsequently downgraded to the BBB category. Also contributing to the quality deterioration in the IG market was an increase in the amount of debt issued by already BBB-rated companies. Currently, we estimate that roughly around 60% of the liquid IG nonfinancial market is rated BBB compared to around 35% to 40% 10 years ago.

Initially, this wave of downgrades and elevated BBB-rated issuance, which came to a head around the 2016–2018-time frame was seen as a sign of excess risk building in the market. The consensus view, at that time, was that higher debt levels and leverage would increase the probability of future ratings downgrades and potentially be a driver of elevated credit spread volatility going forward relative to prior cycles. However, we believe that market participants now have a better understanding of the new paradigm in which a majority of issuers are BBB-rated. Fortunately, despite stretched balance sheets, management teams have, on balance, stuck to their commitments to defend and maintain IG ratings through several difficult market periods—with some even achieving ratings upgrades, albeit over a multiyear period. This has provided a level of comfort for credit investors who no longer view the BBB "bulge" as a major concern, in our view. Furthermore, with the era of cheap debt over and with a more uncertain economic backdrop, we believe corporate issuers could manage their balance sheets more conservatively going forward—which, longer term, could potentially lead to a reduction in nonfinancial IG debt outstanding.

IG-rated companies are more resilient and have greater financial flexibility to service higher-cost debt through an economic cycle than are lower-quality high-yield issuers. Fortunately, aggregate debt growth in the high-yield market over the last 15 years has been more measured at 5%, and underlying credit trends have actually been more positive relative to the aforementioned deterioration in the IG market. Looking at overall credit quality in the high-yield senior unsecured market, it has improved meaningfully over the last several years, with double-B's now comprising 50% of the market as compared to 38% in 2007, although it should be noted that some of the lower-quality debt issuance has migrated to the leveraged loan and/or private credit markets. Still, this "high grading" of the high-yield bond market has also been a function of two to three mini credit cycles over the last 10 years (e.g., Oil Slick of 2016 and the 2020 pandemic), which saw a significant number of issuers restructure their over-levered balance sheets and emerge on more sound financial footing.

We expect that the pinch of higher borrowing costs could be felt more acutely for lower-quality, high-yield and loan issuers that have less financial flexibility and ability to service higher interest expense. This risk could come to a head in late 2024 and 2025 as maturity walls approach. We estimate that only 5% of the high-yield market has repriced to current market rates/coupons. Looking at new-issue coupons this year, they have averaged 8.4%, up 120 basis points (bps) from 2021 and almost 325 bps from 2020. Fortunately, there is a lag with regard to the effect of higher borrowing costs and a company's ability to service and refinance debt. It will likely be several years until historically low coupons in the high-yield market have been fully replaced with new, higher-cost debt, leaving management teams with some runway and levers to pull in order to help mitigate this potential longer-term headwind and to wait and hope that lower rates return.

THOUGHT OF THE WEEK

No Government Shutdown but Still Maintaining a Wary Eye on Washington

Joseph P. Quinlan, Managing Director and Head of CIO Market Strategy

While a U.S. government shutdown has been avoided—at least for the next 45 days—what's not avoidable is the challenging finances of the U.S. government.

Exhibit 2 highlights the growth of the "Formidable Five"—or the five massive government spending commitments that consumed roughly 72% of total government outlays in Fiscal Year (FY) 2023, according to our estimates. The five in brief:

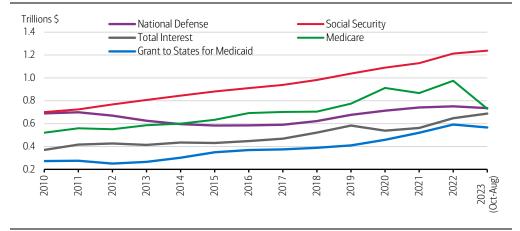
Defense spending is a growth industry given the geopolitical realities of today. The conflict in Ukraine, tensions over Taiwan, and increasing cyber threats at home all portend healthy U.S. military outlays over the balance of this decade. Through the first eleven months of FY 2023, national defense spending consumed 13.4% of federal outlays.

Meanwhile, an aging population and work force, coupled with greater life expectancies, helped boost outlays on the nation's largest mandatory spending programs (Social Security, Medicare, Medicaid) by 12% in the first eleven months of FY 2023. Social security benefits soared 11% due to cost-of-living adjustments, while enrollment increases have meant rising spending on Medicare and Medicaid. The three programs combined consumed just over 46% of total fiscal outlays in FY 2023.

Finally, the fastest growing line item of the federal budget pivots on gross interest payments, which totaled roughly \$690 billion in the first eleven months of FY 2023. As interest rates have climbed over the past 18 months, so has the cost of servicing America's expanding budget deficits. Interest payments consumed 12.5% of total federal outlays in the first eleven months of FY 2023.

Taken together, America's finances are straddling a different world. The peace dividend is gone, as is the era of cheap money. Overlaid with strained geopolitics, and an aging population in general, and work force in particular, the future knock-on effects could include higher for longer interest rates to fund future deficits; the crowding out effects of other social programs as mandatory spending shifts higher; a potentially weaker U.S. dollar; and the need for growth-slowing fiscal consolidation at some point in the future. Given this backdrop, we continue to keep a wary eye on Washington.

Exhibit 2: The Formidable Five: U.S. Federal Outlays for Social Security, Medicare, Medicaid, Defense and Gross Interest Payments.



Sources: Congressional Budget Office; Bureau of Economic Analysis; Haver Analytics. Data as of 2023 (2023 data as of October 2022 through August 2023 period).

Investment Implications

America's challenging finances adds an element of complexity and uncertainty to portfolio construction. The greater the market worries and frets over America's finances, the greater the potential for higher interest rates, deferred social spending, a weaker U.S. dollar and fiscal consolidation.

MARKETS IN REVIEW

Equities

	Total Return in USD (%)				
	Current	WTD	MTD	YTD	
DJIA	33,507.50	-1.3	-3.4	2.7	
NASDAQ	13,219.32	0.1	-5.8	27.1	
S&P 500	4,288.05	-0.7	-4.8	13.1	
S&P 400 Mid Cap	2,502.12	0.3	-5.3	4.3	
Russell 2000	1,785.10	0.6	-5.9	2.5	
MSCI World	2,853.24	-0.9	-4.3	11.1	
MSCI EAFE	2,031.26	-1.4	-3.4	7.1	
MSCI Emerging Markets	952.78	-1.1	-2.6	1.8	

Fixed Income[†]

	Total Return in USD (%)			
	Current	WTD	MTD	YTD
Corporate & Government	5.30	-0.82	-2.34	-0.85
Agencies	5.20	-0.11	-0.62	1.40
Municipals	4.32	-1.53	-2.93	-1.38
U.S. Investment Grade Credit	5.39	-0.96	-2.54	-1.21
International	6.04	-1.18	-2.67	0.02
High Yield	8.88	-0.42	-1.18	5.86
90 Day Yield	5.45	5.47	5.44	4.34
2 Year Yield	5.04	5.11	4.86	4.43
10 Year Yield	4.57	4.43	4.11	3.87
30 Year Yield	4.70	4.52	4.21	3.96

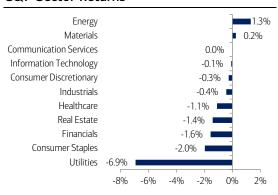
Commodities & Currencies

	Total Return in USD (%)				
Commodities	Current	WTD	MTD	YTD	
Bloomberg Commodity	237.42	-1.2	-0.7	-3.4	
WTI Crude \$/Barrel ^{††}	90.79	8.0	8.6	13.1	
Gold Spot \$/Ounce ^{††}	1,848.63	-4.0	-4.7	1.3	

	Total Netulli III 05D (70)					
		Prior	Prior	2022		
Currencies	Current	Week End	Month End	Year End		
EUR/USD	1.06	1.07	1.08	1.07		
USD/JPY	149.37	148.37	145.54	131.12		
USD/CNH	7.29	7.30	7.28	6.92		

Total Paturn in LISD (%)

S&P Sector Returns



Sources: Bloomberg; Factset. Total Returns from the period of 9/25/2023 to 9/29/2023. †Bloomberg Barclays Indices. ††Spot price returns. All data as of the 9/29/2023 close. Data would differ if a different time period was displayed. Short-term performance shown to illustrate more recent trend. Past performance is no guarantee of future results.

Economic Forecasts (as of 9/29/2023)

	2022A	Q1 2023A	Q2 2023A	Q3 2023E	Q4 2023E	2023E
Real global GDP (% y/y annualized)	3.6	=	-	-	=	3.0
Real U.S. GDP (% q/q annualized)	1.9	2.2	2.1	2.0	1.5	2.1
CPI inflation (% y/y)	8.0	5.8	4.0	3.5	3.4	4.2
Core CPI inflation (% y/y)	6.1	5.6	5.2	4.4	3.9	4.8
Unemployment rate (%)	3.6	3.5	3.5	3.6	3.8	3.6
Fed funds rate, end period (%)	4.33	4.83	5.08	5.33	5.63	5.63

The forecasts in the table above are the base line view from BofA Global Research. The Global Wealth & Investment Management (GWIM) Investment Strategy Committee (ISC) may make adjustments to this view over the course of the year and can express upside/downside to these forecasts. Historical data is sourced from Bloomberg, FactSet, and

Haver Analytics. There can be no assurance that the forecasts will be achieved. Economic or financial forecasts are inherently limited and should not be relied on as indicators of future investment performance.

A = Actual. E/* = Estimate.

Sources: BofA Global Research; GWIM ISC as of September 29, 2023.

Asset Class Weightings (as of 9/5/2023) CIO Equity Sector Views

	CIO View				
Asset Class	Unde	rweight	Neutral	Over	weight
Global Equities	•	•	0	•	•
U.S. Large Cap Growth	•	•	0	•	•
U.S. Large Cap Value	•	•	• (•
US. Small Cap Growth	•	•	0	•	•
US. Small Cap Value	•	•	0	•	•
International Developed	•		•	•	•
Emerging Markets	•	•	0	•	•
Global Fixed Income	•	•	0	•	•
U.S. Governments	•	•	• ()	•
U.S. Mortgages	•	•	0	•	•
U.S. Corporates	•	•	0	•	•
High Yield	•	0	•	•	•
U.S. Investment Grade Tax Exempt	•	•	•	•	•
U.S. High Yield Tax Exempt	•		•	•	•
International Fixed Income	•	•	0	•	•
Alternative Investments*					
Hedge Funds			•		
Private Equity					
Real Assets					

	CIO View					
Sector	Underweight		Neuti	al Ove	Overweight	
Healthcare	•	•	•	•	•	
Energy	•	•	•	0	•	
Utilities	•	•	•	0	•	
Consumer Staples	•	•	0	•	•	
Information Technology	•	•	0	•	•	
Communication Services	•	•	0	•	•	
Industrials	•	•	0	•	•	
Financials	•	•	0	•	•	
Materials	•	0	•	•	•	
Real Estate	•	•	•	•	•	
Consumer Discretionary	•	•	•	•	•	

*Many products that pursue Alternative Investment strategies, specifically Private Equity and Hedge Funds, are available only to qualified investors. CIO asset class views are relative to the CIO Strategic Asset Allocation (SAA) of a multi-asset portfolio. Source: Chief Investment Office as of September 5, 2023. All sector and asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs and risk tolerance. Not all recommendations will be in the best interest of all investors.

Index Definitions

Securities indexes assume reinvestment of all distributions and interest payments. Indexes are unmanaged and do not take into account fees or expenses. It is not possible to invest directly in an index. Indexes are all based in U.S. dollars.

S&P 500 Index is a stock market index tracking the stock performance of 500 of the largest companies listed on stock exchanges in the United States.

ICE BofA U.S Corporate Index measures market performance of USD-denominated investment grade corporate debt publicly issued in the U.S. domestic market with a remaining term to final maturity between 5 and 10 years.

ICE BofA Treasury Index tracks the performance of U.S. dollar-denominated sovereign debt publicly issued by the U.S. government in its domestic market.

ICE BofA Investment-grade (IG) Index designed to measure the performance of USD-denominated investment grade hybrid capital corporate and preferred securities publicly issued in the U.S. domestic market

ICE BofA Euro Investment-grade (IG) Index tracks the performance of EUR- denominated investment grade corporate debt publicly issued in the eurobond or Euro member domestic markets.

ICE BofA Mortgages Index tracks the performance of U.S. dollar-denominated, fixed-rate and hybrid residential mortgage pass-through securities publicly issued by U.S. Agencies in the domestic market.

ICE BofA High Yield (HY) Index tracks the performance of U.S. dollar denominated below investment grade corporate debt publicly issued in the U.S. domestic market.

ICE BofA Municipal (Munis) Index is designed to track the performance of USD-denominated taxable municipal debt publicly issued by U.S. states and territories, and their political subdivisions, in the U.S. market.

ICE BofA Preferreds Index tracks the performance of fixed-rate US dollar-denominated preferred securities issued in the US domestic market including all real estate investment trusts.

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Keep in mind that dollar cost averaging cannot guarantee a profit or prevent a loss. Since such an investment plan involves continual investment in securities regardless of fluctuating price levels, you should consider your willingness to continue purchasing during periods of high or low price levels.

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