

Getting Focused – Economic Quarterly Review Focus Quantitative Methods

Capital Markets Analysis & 3rd Quarter 2026 Capital Markets Expectations

Real Gross Domestic Product

RGDP or Output's preliminary estimate shows an increase of 1.6% in the 2nd quarter, down from a 2.1% growth rate in the 1st quarter of 2026.

Consumer spending was up 3.2% at an annualized rate led by durable goods and services. Business investment was up 8.4% driven by equipment and A.I. associated spending. Imports were up 11.5% and inventories subtracted .7% from the GDP calculation acting as key drags on the economy. And Government spending was off .8% pulling down overall top line growth. Although, the reduction in Government spending will result in improved productivity as those services demanding to be maintained will be picked up by the private sector.

"First Trust", estimates the following - Consumption: real consumer spending growth of 2.2%, Business Investment: a 5.7% Growth rate, Home Building: residential unchanged for the quarter, Government: 1.2% growth, Trade: a growth rate of .8% and Inventories: plus .3%. Then when weighting these categories, it generates a 2.0% real GDP growth rate (Output).

An exponential regression from historic real GDP growth rates and Q2/2026 advanced estimates indicate that the 2nd quarter's growth rate is -12.7% below the trend established by the exponential regression and used because real GDP is growing exponentially.

Real GDP growth fell below trend out of the 2008-09 recession and continued below trend exacerbated by the 2020 mini recession.

From the Taylor Rule discussed later, the Fed is expected to raise interest rates when inflation rises and lower rates when Output declines. Thus, the Fed believes that if inflation rises too fast, it increases rates and lowers rates if Output falls below potential. Output is clearly below potential as noted by the exponential regression indicating real GDP growth is -12.7% below potential. Therefore, the Fed should have already lowered its Fed funds rate to stimulate economic activity.

It's clear from Milton Friedman that inflation is a monetary phenomenon as too much money chasing too goods causes a rise in the rate of inflation. He was aware that to reduce the growth rate of inflation, additional goods production (supply) is required to lower prices and reduce the rate of inflation.

This is basic supply/demand analysis. At any given level of demand an increase in supply (quantity) lowers prices. Furthermore, addition production (supply) will improve economic activity and lower the unemployment rate.

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Unfortunately, we are getting used to the Federal Reserve driving low real GDP growth rates that limit productivity growth. This stems from the misunderstanding that economic growth causes inflation. There is some correlation over a business cycle, but little causation, nonetheless such a belief makes it easy to look like - in front of Congress – that you are mitigating inflation by raising the Fed funds rate.

For perspective, out of the 2008/09 recession 2009 real GDP growth was off -2.6% and in 2020, during the covid shutdown recession, it was reduced to -2.1%. In addition, in 2011 with very low interest rates caused by Fed open market activities, it was up 1.6%, in 2016. Then it was down -28.0% in Q2/2020 then with increased money supply growth and excessive federal government spending it was up 34.9% in Q3/2020. As additional liquidity flooded the economy it caused the worse inflation since the 1980's. Finally in 2025 as the demand improved, real GDP was up 2.1% and the rate of inflation was declining.

As of August 18, the NOW real GDP forecast from the Atlanta Federal Reserve for the 3rd quarter of 2026 is 4.0%, a significant improvement from the 2nd quarter's 2.0% First Trust rate of growth. The NOW estimate is pure calculation without behavioral judgements and thus it's normally applied as a base line for real GDP growth estimates generally used for planning purposes. Furthermore, the New York Fed is forecasting a 2.5% rate of growth in the 3rd quarter, and this is at the upper end of the Blue-Chip consensus forecasts.

U.S. Tariff Policy

Tariff policy relies heavily on a new Section 301 forced-labor framework, with an average import tariff rate of approximately 11.1%. Effective July 24, 2026, a 10% rate applies to 17 economies (including the UK, Mexico and India) and a 12.5% rate applies to most other trading partners, including China and Vietnam.

The next four paragraphs are from A User's Guide to Restructuring the Global Trading System, by Stephen Miran, now a member of the Federal Reserve Board.

Economists and financial analysts believe international trade and the financial system have deteriorated substantially over the last decade. Thus, sweeping changes in dollar policy are proposed by raising tariffs and shifting away from a strong dollar policy. These will have historic ramifications fundamentally reorganizing global trade and financial systems.

“The economic imbalances observed today lie in the persistent dollar overvaluation that prevents the balancing of international trade, and this overvaluation is driven by inelastic demand for reserve assets. As global GDP grows, it becomes increasingly difficult for the U.S. to finance the provision for reserve

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assets and the defense umbrella, as the manufacturing and tradeable sectors bear the brunt of the costs.”

Tariffs provide revenue and if offset by currency adjustments present little effect on inflation. Tariffs are financed by the tariffed nation, whose real purchasing power and wealth decline and the revenue raised improves burden sharing for reserve asset provision.

The objective is to capture a portion of the benefits other nations receive from our reserve position. This can occur by reallocating aggregate demand from other countries to the U.S. resulting in an increase in revenue to the U.S. Treasury. This will help America bear the increasing cost of providing reserve assets to a growing global economy.

From “First Trust”, “Inflation, Tariffs, and the Fed”, tariffs may be expected to put upward pressure on prices, but inflation is always and forever a monetary phenomenon (from Milton Friedman) and as long as new tariffs are not accompanied by rising banking reserves (rising M2 money supply growth) - the loosening of Fed monetary policy – then higher prices for specific goods and services indicates that consumers have less money to spend on other goods and services.

Thus, demand and prices are expected to fall leaving the overall price level about the same as it would have been without tariffs. It follows that U.S. consumers looking for lower prices should take the lead of European and Japanese consumers and buy locally.

From “First Trust”, “One of the most dramatic shifts under President Trump has been a massive change in net migration.” It’s clear that much of the rapid job growth during the previous administration was because of immigrants both legal and illegal getting jobs. Since then, job growth has slowed but median weekly earnings are up 4.6% from a year ago for full-time wage and salary workers.

Productivity Growth

It is the cornerstone of economic activity in 2026 and beyond. AI-driven efficiency gains offer substantial upside, but the exact timing and scale of their impact is uncertain. Clearly, these advancements will set in motion an improvement in productivity. AI can counterbalance sluggish employment growth, elevated government debt levels and a long running decline in domestic investment that caused lower rates of productivity.

It’s important to note that government revenue comes from taxing the private sector and thereby reducing its rate of productivity growth. It is easily argued that the private sector’s rate of productivity growth surpasses that of government. Especially if one includes extensive government fraud.

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A solution to slow economic growth and rising prices is to increase productivity. From Robert Solow, the key is the promotion of technology, Solow's residual. This is best engineered by capital market innovations allowed by unencumbered - minimally regulated - access to the capital markets. As technology increases, so does capital and then demand for labor expands resulting in an increase in Output.

Non-farm productivities growth rate averaged 2.7%/year from Q1/1947 to Q4/1973. After WWII productivity was quite strong as the economy transitioned from a war to a civilian economy. However, from Q4/1973 to Q1/1980, productivity grew at 1.4%, a lesser rate, reflecting slower economic activity.

From Q1/1980's 1.4% growth rate productivity rose to 2.8% from Q1/2001 to Q4/2007, the highest rate of productivity since 1947. But from Q4/2007 to Q4/2019 it was up only 1.5%/year. It then rose substantially to 2.1%/year from Q4/2019 to Q1/2026. And over the measurement period from Q1/1947 to Q1/2026, productivities growth rate averaged 2.2%/year.

Improving productivity is in line with expectations driven by declining federal government employment, reduced onerous regulations and the introduction of systems to eliminate government waste fraud and abuse. Given that Output and productivity are inexorably related, limiting supply by excessive regulations causes high development costs that reduce productivity and economic activity.

Excessive Government Regulations Reduce Productivity

From "Government Regulation: The Good, The Bad & The Ugly", published June 12, 2017. Regulatory systems are intended to promote a healthy environment, safe workplaces, more innovative products and greater opportunities and prosperity for all Americans. Nonetheless, poorly designed regulations may cause more harm than good by stifling innovation, lowering economic growth and job creation, wasting limited resources, and undermining development with the effect of eroding the public's confidence in government.

Accordingly, excessive government regulation reduces economic growth and productivity by limiting technological innovation. And limiting technological innovation results in higher inflation. The regulatory burden falls on the backs of final consumers in the form of higher prices for goods and services, lower wages and fewer products and opportunities. An industrial economy runs on energy, therefore a lower cost for energy is the key to enhanced productivity, higher Output and stable prices. Unproductive "green energy" spending is limiting the growth in technological innovation, and this restricts the growth in capital. Consequently, "green energy" regulation is clearly "social engineering" under the guise of

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“climate change”, designed to appease climate change advocates who have provided campaign contributions to those politicians running for office, often pretending to support climate change. How can anyone believe that we are in a “climate crisis” when the earth’s temperature has increased only about 1.5 degrees centigrade over the last 100 years?

From “First Trust Monday Morning Outlook”, industrial production data show that manufacturing has only grown 4.3% over the last 25-years. This represents an annualized growth rate of .2%/year. Such a low growth rate indicates that manufacturing has been a drag on U.S. total factor productivity. In some cases, entire industries are uncompetitive without large government contracts like shipbuilding.

Undoubtedly, total productivity growth has been supported by soft productivity - information technology - as manufacturing has added little to total productivity over the last twenty-five years. Remember, taxing the private sector reduces its productivity. This places upward pressure on prices, lowers the growth rate of wages and limits job openings in the private sector.

Inevitably, reducing waste, fraud and abuse will have the effect of increasing productivity, reducing inflation, increasing wage growth and providing more job opportunities. If programs like DOGE are pursued.

As noted above, output and productivity are inexorably related. High inflation suppresses economic growth (Output) and productivity suffers. Accordingly, high productivity drives strong economic growth and low stable inflation.

The Tax & Jobs Act is intended to reduce taxes, regulations, waste fraud and abuse. Then the economy is expected to follow a deflationary course, demonstrating a significant rise in real growth, stable inflation and accompanied by a low unemployment rate.

The Kansas City Fed Labor Markets Conditions Indicators

It indicates that the level of activity as of 6/30/2026 rose to .248 from .165 in March, a gain of .083. And the measure of momentum is .369 for June surpassing the March rate of -.089 suggesting an improving labor market. For perspective, the Labor Market Conditions Indicators presented a level of .11 on Q2/2020. This occurred just prior to the mini-recession and fell to -11.29 on Q4/2022, essentially the end of the mini-recession. June’s level of .248 is above the Q2/2020 covid pre-recession level of .11, indicating enough spending to raise labor market conditions, even though Output is below trend. In addition, productivity has not had enough investment spending to significantly raise its growth rate.

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From Jeffrey Roach, Chief Economist for LPL, July payrolls shrank by 23,000 jobs but the unemployment rate fell to 4.1% from 4.2% in June. Total private payrolls grew by 30,000 slightly below the break-even rate.

The topline decline was primarily due to a decline in local government education payrolls (-49,000). In contrast federal and state payrolls were up a net 4,000. Healthcare jobs gained 22,000, slightly below the 12-month average gain of 36,000. Several categories, such as construction, manufacturing, oil and gas extraction showed little change.

There seems to be minimal stress in the labor markets despite July payrolls. The labor markets seem to be experiencing an orderly slowdown, and stress indicators remain historically low. The slowing rate of job growth is expected to support the Fed Chairman's no change in the Fed funds rate at the September meeting.

Interest Rates, Inflation and Money

The neutral rate of interest is the theoretical Fed funds rate in which Federal Reserve monetary policy neither adds nor suppresses Output growth (real GDP). It is considered the long-run equilibrium interest rate and is the short-term interest rate that would prevail when the economy is at full employment with stable inflation.

It's important because the Fed judges whether the interest rates it sets are stimulating or restraining economic activity. Hence, economists and financial analysts may believe that the present Fed funds rate is limiting the growth in economic activity, but this sentiment is not shared by the Fed as it failed to lower its Fed funds rate at its July 2026 policy meeting. The Fed funds rate of interest ranges from 3.50% to 3.75% with an effective Fed funds rate (EFFR) of 3.64%, in line with expectations.

The Taylor Rule is a formula designed to guide policy makers, and it is used to calculate a 2.75% Neutral Rate. It ties what the Fed funds rate of interest should be as compared to the current real Gross Domestic Product (Output) growth rate and inflation. It adjusts the equilibrium rate based on fluctuations of inflation and changes in real GDP.

The Fed is expected to raise interest rates when inflation rises and lower rates when Output declines. Thus, the Fed makes the most effective policy when they raise interest rates if inflation is rising too fast and lowers interest rates if economic growth is falling below its potential. When the Fed realizes that it's behind the curve, applying Taylor's Rule with a 2.75% neutral rate. It should reduce its Fed funds rate in 2026 by .89% (3.64%-2.75%). And as a result, three .25% rate cuts will bring the EFFR in line with the 2.75% neutral rate.

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Given an effective federal funds rate (EFFR) of 3.64% and a Neutral Rate from Taylor of 2.75%, the Fed is in violation of its directive to set Federal Reserve monetary policy that neither adds nor suppresses Output growth (real GDP). Undoubtedly, the EFFR is .89% too high and therefore is suppressing economic activity.

Inflation

From Jeffery Roach, PHD, LPL's Chief Economist: Consumer inflation rose .1% month over month in July, pulling the annual rate of inflation down to 3.4% from 3.5%, a move in the correct direction. With year's end inflation is expected to decelerate to 2.7% as transportation and health care costs ease. In June, the annual Core PCE inflation cooled to 3.3% from 3.4% in May. The monthly Core PCE gained .1% down from an expected .2% rise.

The 5-year Treasury Inflation Protected Security (TIPS) as of 7/6/2026 is 2.03%, an indication of what traders of this security believe annualized inflation will be in five years. For perspective, it reached a local high of 2.59% on 10/23/2023 and as shown recently declined to 2.03%. This value is in line with the Fed's 2.00% target rate of inflation. Controlling shipping through the Strait of Hormuz will allow unencumbered passage, allowing an increase in crude shipments that will raise supply and lower prices. As a result, the price of distillates used to produce a multitude of products will decline in price and transportation costs for delivery of goods will also decline, lowering the rate of inflation.

In terms of gas, a petroleum distillate, with inelastic demand owners of small fuel distributors paid for the fuel at a higher price and want to maintain their margins, therefore the price of fuel will not fall at the same rate as crude spot prices, but the price of fuel will decline as crude spot prices fall, but with a lower slope and some lag.

M2 Money Supply

Over the last year from 7/31/2025 to 6/30/2026 the M2 measure of the money supply grew from \$22.0 trillion to \$22.3 trillion, a 5.98% rate of growth. From 2/1/2020, the beginning of the mini recession, to 3/1/2022, its end, the M2 growth rate was 17.9%, more than twice as high as the historic growth rate about 6.7%/year. In contrast from 3/1/2022 about the end of the mini recession to 6/30/2026, the M2 growth rate fell to 1.24%/year.

The Fed limited M2 growth because federal fiscal policy was driving up spending through a multitude of programs designed to revitalize retail establishments that shutdown during the mini recession. The Fed was concerned that such a large increase in government spending would drive up the rate of inflation.

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Therefore, the Fed assumed that a low rate of M2 money supply growth would help reduce the growth rate of inflation. Unfortunately, the rise in QE offset any such effect.

Consequently, if the Fed fails to grow M2 money at the historically normal annualized rate of 6.7%, it may cause higher unemployment that primarily affects low income and minority workers. Accordingly, those least able to represent themselves shoulder the burden of poor monetary and fiscal policies.

Money Supply & Inflation

This relationship is straightforward: if the amount of money in circulation grows faster than the production of goods and services, each dollar buys a smaller amount, resulting in an increase in the price level. The Federal Reserve tries to manage inflation by raising or lowering its target range for the Fed funds rate. The interest rate banks charge each other for short-term loans. When the Fed lowers the rate, borrowing becomes less expensive for banks and consumers. The Fed can also raise the target range when inflation is too high, then borrowing becomes more expensive for everyone, which slows spending and investment. More expensive loans lower the demand for loans, and a reduced amount of new money gets added to the banking system – the money supplies growth rate slows, spending and investment is reduced and inflation's rate of growth is expected to decline.

It seems simple enough but the Fed's record of managing inflation is dismal. Why? The Fed supports the notion that economic growth causes inflation. Clearly inflation can follow growth at the beginning of a business cycle, but with a rising supply of goods and services as the economy expands, the rate of inflation declines and eventually stabilizes at a lower level. However, for this to occur federal fiscal authorities need to reduce the growth rate of deficit spending. Then bond yields will decline with the expectation of lower inflation, promoting an increase in economic activity.

Unfortunately, the Fed seems to be more concerned with pleasing Congress than accurately forecasting inflation and Output. It's easier to simply promote the notion that raising the Fed funds rate will lower inflation. Congress has been trained to accept this approach as it gives Congress cover with the voters.

The data does not support the notion that low M2 growth mitigates inflation. Economists from Allan Greenspan to Milton Friedman were aware that promoting growth through rising M2 balances can stimulate a rise in demand to sop up additional reserves in the banking system that reduces the rate of inflation.

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Loan Growth

Total loan growth increased by 4.22% from July 2024 to July 2025 and 7.01% from July 2025 to July 2026, a 66% increase in loan growth. The improvement was driven by resilient consumer and commercial demand.

This occurred while the Fed was incentivizing commercial banks to accept a fee instead of making a loan that would have a certain amount of risk. A fee is a “bird in the hand” no risk, thus limiting money supply growth. This is noted by the 1.24% growth rate in M2 from 3/31/2022 to 6/30/2026. Clearly this growth rate in the money supply did not contribute to the rise in inflation that occurred during the QE period.

The Fed believes that limiting the growth rate of the money supply will mitigate rising prices. But other factors are in play. Such as the Federal Reserve’s Balance Sheet. Core PCE, the Fed’s preferred measure of inflation, peaked at 5.4% from 1.4% based on a year-on-year measurement from 3/31/2021 to 3/31/2022, quite a change. Consequently, there’s no free lunch.

Hiring Demand

From Jeffrey Roach PHD, LPL’s Chief Economist: small business sentiment improved rising 2.4% to 99.8%, its highest level since 7/2025. The share of firms planning to add workers rose to its highest level since 10/2022, signaling greater confidence in future demand. And fewer business owners sighted inflation as their top concern.

Federal Reserve Policy Meeting

The Federal Reserve acts to maintain a vibrant economy through effective banking reserves management. It does this by acting as the governor of economic activity. By intending to support a healthy dollar; a high and sustainable, rate of economic growth, reasonably full employment, and stable prices.

At Kenin Warsh’s 2nd meeting as Chairman of the Federal Reserve, held on July 29, there was no change in its Fed Funds rate of interest. Thus, its range remains 3.50% to 3.75%. Of 12 voting members 3 voted to raise the Fed Funds rate by .25% and the remainder supported Warsh’s no vote.

From “First Trust”, Warsh described the economy as demonstrating solid output with strong Capex (capital expending) and productivity, in addition to a steady employment market. The Chairman was asked if the Fed’s 2.0% target rate of inflation was a “soft” measure. He stated that it was an actual target and the Fed intended to meet the 2.0% rate without fail. Inflation remains above its 2.0 target due primarily to higher crude oil prices, but the Fed cannot directly affect the price of crude oil, as the

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worldwide supply/demand sets its price. But the Fed could make the same mistake today as it did during the Covid business shutdown. It significantly raised the growth rate of the M2 money supply to act as an economic “band aid” but it drove up the rate of inflation and muted productivity and Output (real GDP growth).

Kevin realizes that the Fed’s charge is to manage the nation’s monetary affairs. Primarily through the tools of setting its Fed Funds rate, managing M2 money supply growth and limiting balance sheet growth. While Congress and the Administration are responsible for supplying the goods and services required to expand economic activity. And this expansion can occur more quickly if regulations and taxes are lowered, especially in the oil patch as an industrial economy runs on energy and a lower cost of energy raises the rate of economic growth (Output).

From “First Trust”, “Inflation remains a central concern, just as the Fed worried about tariff pressures in 2025, we believe that the FOMC’s concerns over higher oil prices are a bit misguided”. Also, the Fed needs to unwind QE and end the policy of paying banks interest on reserves that degrades the growth of M2 money. It will help meet Kevin’s statement that of providing adequate banking system reserves. In addition, balance sheet assets must continue declining to reduce the Balance Sheet’s effect on economic activity.

Federal Reserve Balance Sheet

The Fed’s balance sheet is one of the best indicators of the Fed’s direct intervention in the economy. Investment demand faltered during the 2008/09 recession as demonstrated by an effective Fed funds rate (EFFR) of .16%, the result of a Fed funds rate ranging from 0.00% to .25% essentially a 0% interest rate environment. The “mark to the market” accounting requirement caused bond prices to fall precipitately and therefore few buyers were willing to take the risk of buying bonds at fire sale prices. Thus, the Fed began large scale asset purchases as it was the purchaser of last resort, the beginning of Quantitative Easing (QE).

The Fed’s balance sheet held about \$1 trillion worth of assets as of 1/5/2009 and with additional purchases of fixed income assets, its Balance Sheet expanded to \$8.95 trillion of 4/11/2022 and as of 7/29/2026 it is about \$6.7 trillion. This is up from about \$6.5 trillion on 12/8/2025, indicating QE is again occurring. The QE reinstatement is termed by the Fed as a \$40 billion monthly “reserve management purchases” (RMPs) rather than traditional crisis-era quantitative easing. The move intends to prevent overnight repo spikes and funding market stress by keeping cash levels steady for banks. This change is in line with the Fed’s requirement to provide adequate banking system reserves.

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Inflation remains above the Fed's 2.0% targeted rate, and energy costs are rising, but M2 money supply growth is below historical trends, and higher energy prices are expected to be offset by consumers adjusting demand in other areas.

"First Trust" the "elephant in the room" is the growth rate of federal government spending less defense spending as a % of GDP. In the 1950's federal government spending was 7% of GDP. It was 10% in the 1960's and 14% in the 1970's. It stabilized from 1980 to 2000 and in the 2020's it has grown to 23% of GDP. Accordingly, real GDP grew less than potential from 2010 to 2020. If one includes federal, state and local spending, with the cost of regulation, the government directs or prevents more than 50% of total Output. This is not acceptable and undoubtedly limits the growth in productivity.

U.S Treasury

From LPL, Scott Basset Secretary of the Treasury, has decided to double the size of its long-end liquidity – support buybacks. It intends to lift the maximum size of operations in the 10-to 20-year and 20-to 30-year nominal sectors from \$2 billion to at least \$4 billion. The bond market rallied significantly with the 30-year yield showing a 10-basis point reduction.

"The announcement is a measured response to stretched long-end conditions and heavy speculative shorts. It provides useful liquidity support and has forced some near-term covering, but the scale remains constrained and temporary". Furthermore: Secretary Basset launches "Operation Outcast", the greatest degradation of Iranian financial economic activity that has ever been applied to an enemy combatant. Any country that trades with Iran will meet the ire of the U.S.

Equity Markets Volatility

The VIX index is used to measure the volatility of the S&P 500 Index. It provides an indication of implied volatility. It measures how much premium investors are willing to pay for options as insurance to hedge their equity positions. The VIX is calculated using a weighted average of implied volatility of At-the-Money and Near-the-Money options on S&P 500 index futures. The VIX is considered a likelihood estimator coming from a stochastic (random) process whose value changes over time in an uncertain way and thus we only know the distribution of possible values of the process at any point in time. VIX as of 6/30/2026 presented a level of 16.45%, a -34.88% change from 3/31/2026's level of 25.26%. The S&P 500 ETF (SPY) changed to 746.48 on 6/30/2026 from 650.24, a % change of 14.78% and consistent with the expected negative correlation. The VIX index is not intended to forecast the change in direction of SPY but provides a distribution of possible values for SPY at any point in time. It's the anticipation of equity markets

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volatility that drives equity price changes. In addition, equity traders normally respond quickly to a changing VIX level.

U.S. Treasury Yield Curve Analysis

Such analysis is critically important as economic activity is driven by debt, through loans that finance economic growth. The relationship between bond yields and bond prices are the key, they move in opposite directions. The Treasury Yield Curve shows Treasury yields from 1-month through 30-years. From 3/31/2026 to 6/30/2026 the Treasury yield curve generated positive differentials across the curve except for the 1-month, 1.5-month and 2-month yields of -.04%, -.01% and 0.00%. The highest differential was from the 3-year note at .38%, they continued to decline with the lowest differential from the 30-year note at .03%.

The shape and location of the yield curve demonstrate bond markets' reaction to the high end of the Fed funds range from 3.50% to 3.75%. Traders look at this rate to determine a "fair yield" for a given maturity of an asset. As such yields from 1-month through 5-years went from 3.70% to 4.19%, but longer yields such as the 10, 20 and 30-year notes were 4.44%, 4.93% and 4.91% respectively. The increasing bond yields indicate that market participants are concerned with Iran, inflation, and the federal deficit. Furthermore, the 2-year – 10-year Treasury yield spread is now .30% reached a high of 1.18% on 10/22/2021. The .30% spread indicates little need to extend duration for a higher coupon, as they are too close together to justify the acceptance of additional duration risk.

The 2-year note's yield peaked on 10/19/2023 at 5.14% and is now 4.14% and the 10-year note's yield peaked on 10/20/2023 at 4.93% and is now 4.44%. The lower 2 and 10-year Treasury yields support the notion that inflation is manageable.

The Treasury yield curve can be thought of as reflecting fixed income traders' understanding of changes in Federal Reserve policy and its implications for bond prices and yields. As fixed income traders try to anticipate financial and economic change, their trades generate the location and shape of the Treasury yield curve.

Treasury Yield Volatility

It can be measured by the Merrill Lynch Options Volatility Expectations (^MOVE) index. It measures the implied volatility of U.S. Treasury options across various maturities. The index is viewed by traders as a fundamental indicator of interest rate volatility in the U.S. Treasury market and creates bond market expectations concerning future volatility. It is also used to access market sentiment.

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When bond traders are concerned with potential volatility or economic uncertainties, they tend to bid up the prices of options, causing the index to rise. Conversely, when the bond markets are calm and confident the Δ MOVE index is expected to be lower.

For 6/30/2026, the Δ MOVE index was 95.05%, up from the 3/31/2026 level of 67.62%. This is a 29.60% change but a decline from the 3/31/2026 % change. Although the high level indicates concern with the geopolitical environment, inflation and the federal deficit. For perspective, the 1- year median is 85.40% with a range from 55.77% to 115.02%. This indicates that the bond markets (95.05%) are concerned with information concerning Iran and shipments through the Strait of Hormuz. Furthermore, the increase in Δ Move is consistent with rising Treasury yields across the curve. Such a rise over the quarter supports the notion that bond traders require higher yields to offset the uncertainty associated with the Iran war.

As an Investment Management firm, our objective is to “*Generate a Suitable Discounted Expectation of a Terminal Pay-off*”. A geometric Brownian motion/Weiner/Ito approach to asset pricing is used and then modified to determine the probability of loss greater than a -20%, generally associated with a recession. The probability of a loss greater than -20% in the 2nd quarter is quite low.

Equity Markets Expectations

Liquidity drives the equity markets in the short run. While VIX, Treasury yields, the Δ Move index and corporate earnings influence capital market participant’s trading activity. Nonetheless, in the short run stock traders are primarily concerned with changes in interest rates, corporate earnings, M2 money supply and prices.

The following presents a 3rd quarter return estimate for S&P 500 (Δ SPX). Estimate shows a return of 3.32% with a standard deviation of 2.73%, and a 5% 2-tail Confidence Interval (CI) ranging from 1.59% to 5.05%. This positive interval is supported by stock market volatility remaining about the same, but the mean (3.32%) is in play. The recent rise in bond yields may promote mediocre demand for equity investments, although corporate earnings are outstripping expectations and have become the watchword for traders.

The Bloomberg US Intermediate Aggregate bond index – it’s often used to represent bond market activity - and is forecasted. The mean or average estimate is 4.67% and a standard deviation of 2.15% a 5% 2-tail Confidence Interval (CI) ranges from 3.30% to 6.04%. The central tendency or mean estimate of 4.67% and the upper end of the (CI) at 6.04% are in play indicating stubbornly high consumer prices supporting higher bond yields or interest rates. Accordingly, Iran’s Islamic Revolutionary Gard Corps (IRGC) may

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continue to operate until the U.S is able to effectively constrain Iran’s ability to finance its economic activity.

The Treasury Yield Curve shows Treasury yields from 1-month through 30-years. From 3/31/2026 to 6/30/2026, the Treasury yield curve generated positive differentials across the curve except for 1-month, 1.5-months and 2-month yields of -.04% -.01% and 0.00% respectively. The highest differential was from the 3-year note at .38%, they continued to decline with the lowest differential from the 30-year note at .03%. This indicates that traders of Treasury and corporate debt are reasonably calm.

West Texas Intermedia Crude Oil is about \$83/barrel adding doubt to the Administration’s ability to effectively thwart Iran’s economic activity. But applying trade sanctions on any country doing business with Iran should clarify U.S. intentions. Hence, when Iran is unable to control shipping through the Strait and its economic activity is at a standstill, the price of crude is again expected to approach \$60/barrel.

In support of this notion, UAE is no longer a member of OPEC because it wants to raise production and not be limited by OPEC quotas designed to keep crude oil prices high. Also, Venezuela with U.S. oil companies is increasing crude oil output. These changes will raise supply and eventually lower the price of crude oil.

Investment Risk/Probability of Loss

Investment risk can be defined as the probability of loss over a specified holding period. We estimate the probability of the S&P 500 index, declining 20% or more over the next quarter, Q3/2026. This value is used for analysis because a 20% decline in the S&P 500 index rarely occurs in a normal capital markets environment. Although with the anticipation of an increase in stock markets volatility, an index decline of more than -20% can occur. Historically, there’s about a 4.6% chance of the S&P 500 declining by more than 20% each year.

For Perspective: From “*A Guide to Market Volatility*”, the S&P 500 index from 1949 to 2024, the average bear market generated a decline of 33%. But on average, they only lasted 12 months. In contrast during this period, the average bull market provided a total return of 265% and lasted 67 Months. As Bear markets normally coincide with recessions.

The bond markets response to Fed policy is uncertain but expected to be driven by the shape and location of the Treasury yield curve and its volatility.

If the yield curve rises relatively slowly from 1-month through 30-years as the year proceeds, the bond markets can expect a rise in inflation to be manageable, given a consistent level of volatility. When using

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a bond's yield as the discounting factor to measure stock valuations, slowly rising bond yields can support rising stock prices.

Robert Shiller has developed a valuation measure for the S&P 500, termed the S&P 500 Shiller CAPE Ratio. It is calculated by dividing the current price of the S&P 500 by the 10-year moving average of its inflation adjusted earnings. The Schiller PE Ratio as of August is 40.90. This is up from a local low of 15.17 in January 2009, in anticipation of a further decline in equity markets. Its all-time high occurred in July 1990 at 43.83, just before the "Dot Com Bust". The August level of 40.90 implies a lower stock market in 2027. However, with stronger economic activity in 2027, Schiller's PE Ratio (40.90) probably overstates the extent of reduction, if any in S&P 500.

Concluding Comments

The probability of a decline in the S&P 500 greater than -20% in Q3/2026 is 3.21%. Rising capital market volatility caused by Iran is being overcome by corporate earnings beating expectations, but we have interest rates rising, creating a "tough of war" between the two.

Point estimates represent the central tendency of the probability density of the S&P 500 log return estimates for Q3/2026. These are not estimates of the tail distributions of the S&P 500 index. We are trying to find the middle of the distribution of returns in Q3/2026, as it's the most likely outcome. Higher returns are uncertain due to lower-than-normal liquidity, but any lowering of the Fed funds rate will stimulate capital markets demand.

Intermediate and long-term Treasury yields continued to rise through 6/30/2026. But the .30% spread between the 2-year and 10-year yields indicate that the bond markets may soon see a change in rates.

Secretary Basset is launching "Operation Outcast", the greatest degradation of Iranian financial activity ever. It should drive crude oil prices down from about \$83/barrel to roughly \$60/barrel.

For perspective, the sum of segmented large cap returns like the S&P 500 from 0.00% to +20% has occurred about 60% of the time over 200 years. This year, we expect a return less than the 2025 return of 17.88%, but positive.

Moreover, negative equity market returns in 2026 are not anticipated even if the Fed fails to lower its fed funds rate in 2026. Why? If inflation does not decline as anticipated by the Fed, capital markets will recognize inflation remains too high and the Fed will not be expected to lower its Fed funds rate. Nonetheless, strong corporate earnings growth is expected to promote a rise in stock prices.

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The Kansas Fed Labor Market Conditions index indicates that the level of activity as of 6/30/2026 rose to .248 from .165 in March, a gain of .083. And the measure of momentum is .369 for June, surpassing the March rate of -.089 suggesting an improving labor market.

At Kenin Warsh's 2nd meeting as Chairman of the Federal Reserve held on July 29, there was no change in its Fed Funds rate of interest. Thus, its range remains 3.50% to 3.75%. Of 12 voting members 3 voted to raise the Fed Funds rate by .25% and the remainder supported Warsh's no vote.

Given an effective federal funds rate (EFFR) of 3.64% and a Neutral Rate of 2.75%, a difference of .89%, the Fed is in violation of its directive to set Federal Reserve monetary policy that neither adds nor suppresses Output growth (real GDP).

By the end of Q3/2026, the point estimate (3.32%) of the S&P 500 index's confidence interval has the highest chance of occurring. It depends on how capital market participants respond to the Iran war, the change in crude oil prices, rising corporate earnings, and higher bond yields. So, the probability of a loss greater than -20% from the S&P 500 in Q3/2026 is only about 3.21%.

Still, over the longer term a new set of income tax rates, reduced onerous regulations, especially in the oil patch and additional income from tariffs will stimulate a rise in productivity, stabilize prices, lower bond yields and generate an increase in economic activity.

Real GDP growth (Output) and productivity are inexorably related and expected to rise with implementation of the Tax & Jobs Act, as it reduces taxes, regulations, waste fraud and abuse.

Then the economy is expected to follow a deflationary course, demonstrating a significant rise in real growth, stable inflation and accompanied by a low unemployment rate.