

Economic Navigator

From AI to Oil: The Forces Redefining Growth

Jeffrey Roach, PhD
Chief Economist

Executive Summary

- **New Risks for Younger Workers:** Workers just out of school are having a harder time entering the labor market. Likely reasons are an economic slowdown and competition from artificial intelligence (AI) tools.
- **Transportation Sector Has Rising Share of Oil Demand:** Among residential, commercial, industrial, electricity, and transportation, all but one have taken a smaller share of consumption since the 1950s and 60s.
- **U.S. is Net Exporter:** Among G7 countries, Canada and the United States are net exporters of petroleum products (which includes more than just crude), while Japan, Germany, France, Italy, and the U.K. are net importers.
Stagflation-Lite: Higher oil prices coupled with a weak job market have increased the odds of stagflation this year.

Why the Navigator?

The macroeconomic context is a key component of the institutional investment process. Every asset class — whether credit, equities, currencies, commodities, real estate, or infrastructure — ultimately responds to the forces shaping the global economy. Inflation trends, interest rate cycles, fiscal and monetary policy shifts, and economic growth trajectories all influence market behavior and risk-adjusted returns. Ignoring these dynamics means missing the bigger picture.

So, how can economic growth continue despite a weakening job market? How will higher oil prices impact businesses and consumers? Where are the risks that investors should monitor?

In this edition of the *Economic Navigator*, we will give you an update on two key factors for understanding the current macro landscape.

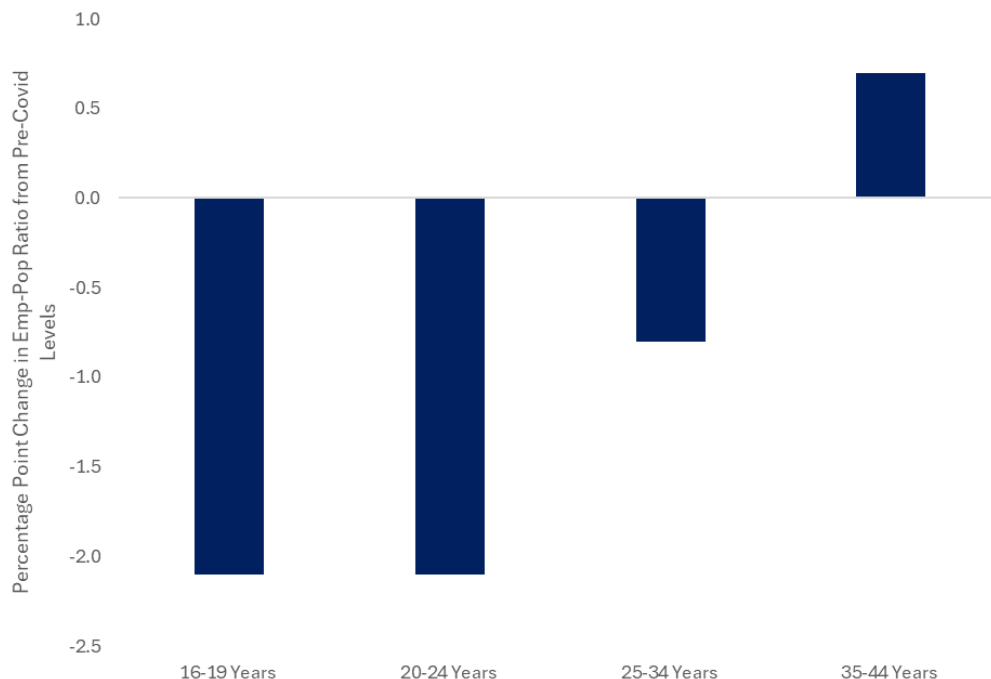
Entry-Level Workers Will Likely Be Most Impacted by AI

The rise of AI tools has increased the concern that AI will decrease the demand for human workers. We think it's too early to make a strong case for whether AI will be complementary or substitutive, but in general, we should approach AI as a new opportunity rather than an emerging threat. We are noticing some evolving trends, particularly with younger workers.

Recent labor market data show that younger workers have had a more difficult time gaining a foothold in the job market. Employment among individuals ages 16–24 has softened, with the youth employment-population ratio declining from 52.5% in February 2020 to 50.4% in February 2026, and unemployment for the cohort rising to 9.5% over the same period, reflecting weaker demand for workers with limited experience. This trend is consistent with broader evidence that employers have slowed entry-level hiring, causing unemployment among the youngest workers to grow at a much faster pace than for older groups. In contrast, workers ages 35–44 have seen far more stable labor market outcomes: their unemployment rate has risen only modestly from 2.8% to 3.3% over the past six years, indicating stronger employment conditions than those faced by younger entrants as illustrated by rising

employment relative to the population (as noted in the “Younger Workers Are Disproportionately Impacted by Changing Conditions” chart).

Younger Workers Are Disproportionately Impacted by Changing Conditions



Source: LPL Research, Bureau of Labor Statistics 03/11/26

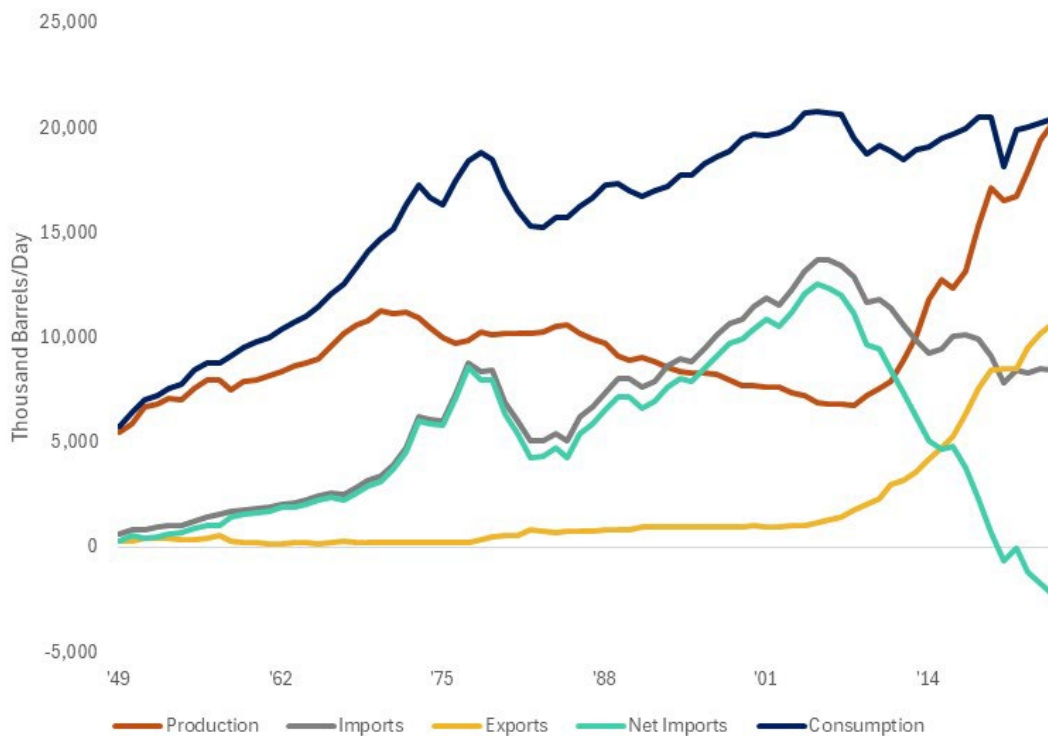
Productivity Growth Could Support Job Market — Not Hamper It

In a typical economic expansion, productivity tends to rise in the later stages of the cycle, yet strong demand often keeps hiring robust. So, improving productivity does not necessarily signal that firms are cutting workers. But during recessions, productivity can briefly spike as companies shed labor more quickly than output declines, reflecting weaker demand and tighter hiring conditions. In the current business cycle, the interplay between AI adoption and the job market hinges on how emerging technologies interact with human labor. AI that complements workers, especially in creative, analytical, and problem-solving roles, has the potential to boost hiring by enhancing output and expanding the scope of high-skill tasks. But AI that substitutes for routine work, such as back-office functions or repetitive process-driven tasks, may reduce hiring in those areas as firms automate and streamline the workforce.

Productivity growth has long generated debate because it simultaneously creates and displaces jobs. On the one hand, higher productivity allows firms to expand production, raise wages, and increase employment. But also, because more efficient firms can produce the same output with fewer workers, productivity gains can directly reduce labor demand. The overall relationship depends on the balance between this direct labor-saving effect and an opposing indirect effect. Productivity-enhancing technologies may spur new tasks, new roles, and greater demand for goods and services. These indirect channels especially arise when productivity-driven expansions lower prices, boost sales, and stimulate labor needs across related industries.

Recent research indicates that during periods of economic growth (even slow growth), the positive effects of productivity growth have outweighed the labor-saving forces contributing to overall job growth. While firm-level evidence generally shows increased employment as higher productivity supports expansion, the gains are unevenly distributed across different worker groups. Again, younger workers are at higher risk. Technological change reshapes labor markets, which can be an opportunity to enhance total employment while simultaneously transforming, and sometimes shrinking, particular segments of the workforce.

The U.S. Became a Net Exporter of Petroleum Products in 2020



Source: LPL Research, Energy Information Administration 03/11/26

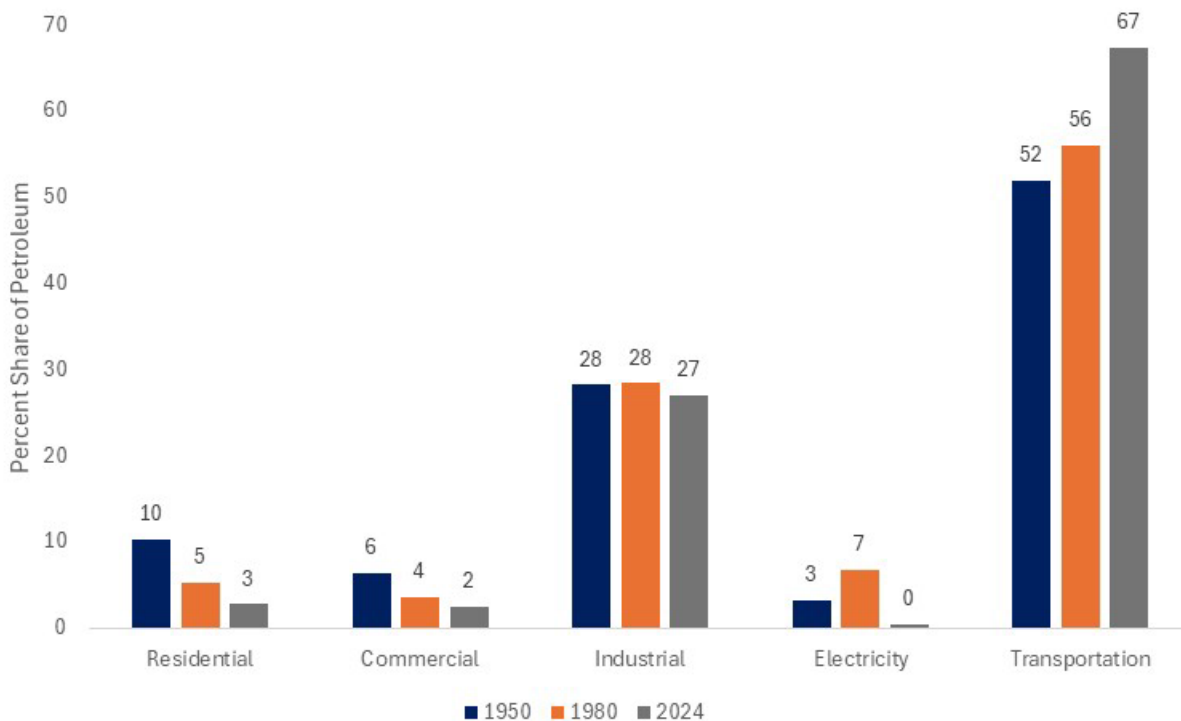
U.S. Less Exposed to Oil Shocks

The latest data from the U.S. Energy Information Administration shows that the U.S. has firmly established itself as a net exporter of total petroleum products, a shift that first occurred in 2020 and has continued for several years. In 2024, U.S. petroleum exports averaged about 11 million barrels per day, exceeding imports of about 8.4 million barrels per day, marking the sixth consecutive year in which the U.S. held net-exporter status. This structural change reflects not only higher domestic production but also the growing role of refined petroleum products and liquids flowing to global markets. As the U.S. continues to expand its export footprint, it becomes less impacted from oil-price shocks that have historically weighed on domestic economic performance.

Globally, however, not all advanced economies share this strategic position. Japan, in particular, remains acutely exposed to international oil market volatility because it relies on imports to meet over 90% of its crude oil needs, with approximately 88% coming from the Middle East. This heavy dependence puts Japan in a vulnerable position as geopolitical tensions and supply disruptions drive price uncertainty. Oil prices converted to the weakening yen also compound the negative impacts on the Japanese economy. Among the G7 economies, only Canada and the U.S. are

net exporters of petroleum products, while Japan — along with Germany, France, Italy, and the U.K. remains a net importer and is therefore more sensitive to global price spikes. In the current environment, the U.S. benefits from a partial buffer against oil shocks, while Japan must navigate heightened risk as global energy markets fluctuate.

Transportation Sector Has Increased Share of Consumption



Source: LPL Research, Energy Information Administration 03/11/26

Transportation Sector Is Dominant User of Oil

Over the past several decades, the structure of U.S. oil demand has shifted dramatically, with the transportation sector emerging as the dominant consumer of petroleum. In the 1950s, transportation accounted for roughly 52% of total oil demand, but by 2024 its share had risen to 67%, reflecting the continued expansion of vehicle use, freight movement, air travel, and the broader mobility needs of a modern economy. Meanwhile, the roles of the residential and commercial sectors have steadily diminished. The residential sector saw its share of oil consumption fall sharply, from about 10% in the 1950s to just 3% in 2024, as households transitioned toward natural gas, electricity, and more efficient heating technologies. These shifts illustrate how oil consumption has become increasingly concentrated in transportation, while improved efficiency and fuel switching have greatly reduced oil use in other sectors.

The changing composition of oil consumption may explain why investors have so far shrugged off the blockage at the Strait of Hormuz and the corresponding spike in oil prices. After President Trump dialed up the threats to Iran on Monday, March 9, Brent crude prices fell below \$90 per barrel after reaching an intraday high of \$119 per barrel. It

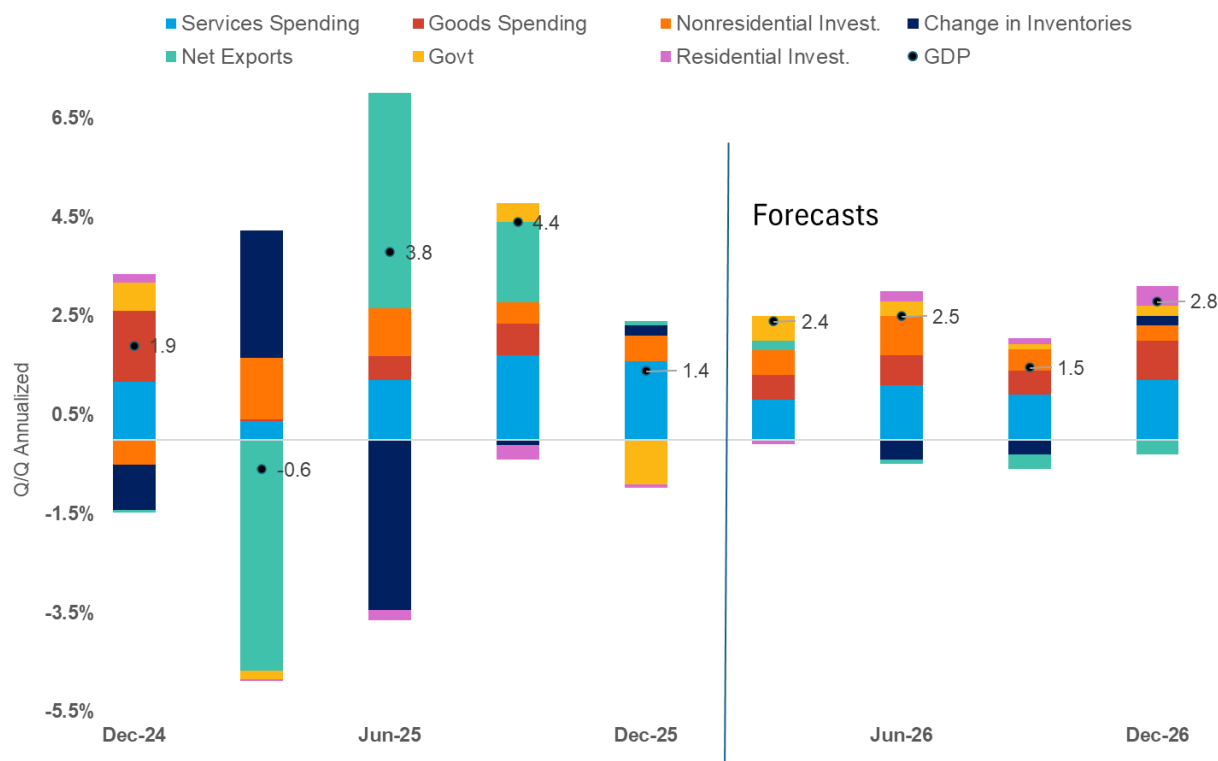
may not be just complacency that has buoyed capital markets, but the reality of the domestic economy’s waning reliance on oil.

\$200 per Barrel?

A recent article at the American Enterprise Institute detailed the decline in energy usage in the U.S. Despite the likelihood that energy expenditures will increase because of the war in Iran, “the price of a barrel of oil would need to increase to greater than \$200 to approach a rate of expenditure consistent with the 5% of GDP of 1980.”¹

We are far from that level of oil prices, and investors do not expect prices to reach this level. This country is much less reliant on foreign energy than it once was, which explains the belief that this oil shock will be short lived and should not significantly alter the path of growth and inflation in the longer run.

Growth Should Rebound in Q2 As Geopolitical Unrest Simmers



Source: LPL Research, U.S. Bureau of Economic Analysis 03/11/26

¹ <https://www.aei.org/articles/the-shrinking-economic-weight-of-energy-2/>

What Are the Risks to Forecasts?

The most obvious risk to the macro outlook is the geopolitical fighting in the Middle East and the secondary effects spilling into global logistics, commodity prices, and overall supply chains. Two key factors to handicap the outlook given the geopolitics are magnitude and duration of the shock. Commodity prices would have to stay elevated for at least several weeks for the outlook to materially change. And given the declining oil intensity metrics, oil prices would need to breach \$140 per barrel. A more sustained risk to growth in 2026 is the warning signs we have from the job market. Job growth is weakening (demand side), and unemployment remains low (supply side). If labor supply was short, firms would have many more job openings, and push compensation higher, but that is currently not the case. We do expect job growth to deteriorate further. Average monthly gains in 2026 could hover around 50,000 per month. Inflation is another risk. We expect Personal Consumption Expenditures (PCE) inflation will print around 2.2% by December 2026, but the path to that rate will be long and bumpy, especially if Middle East conflicts impact supply chains. If energy prices remain elevated over the coming months, headline inflation may begin to reaccelerate, bringing the Fed to pause for the next several meetings. But as we slowly march toward 2.2% by the end of the year, the Fed will likely cut rates twice later this year.

Key Takeaways

While 2026 presents notable headwinds, such as a slowing labor market, lingering inflation pressures, trade policy uncertainty, and now a war in the Middle East, the resilience of the domestic economy should propel growth for another year. Fiscal stimulus and policy support provide a solid foundation for demand, while AI-driven investment and productivity gains enhance efficiency and growth potential. We also note the U.S. economy's declining reliance on foreign oil as oil intensity measures soften. "Oil intensity" measures the amount of oil consumed per unit of economic output, typically expressed in barrels per \$1,000 of gross domestic product (GDP), serving as a key indicator of energy efficiency. It has shown a consistent, linear decline since 1984, dropping by 56% from 1973 to 2019.² Further, we are currently in the early innings of AI utilization with immense capital costs and questionable output, but nonetheless, the potential appears promising. Improving supply chain dynamics and falling interest rates further ease cost pressures, and steady corporate and household balance sheets reinforce financial stability. Taken together, these forces suggest that the positive momentum from technological innovation, policy support, and resilient balance sheets will outweigh cyclical headwinds, positioning the U.S. economy for continued expansion in 2026.

Structural changes — an aging population, a productive labor force, and easing services inflation — give the Fed room to cut rates this year, although the temporary spike in energy prices may delay the continuation of the rate easing cycle.

² <https://www.energypolicy.columbia.edu/publications/oil-intensity-curiously-steady-decline-oil-gdp/>

Forecasts Imply 2026 Will Be a Pivotal Year

	2025				2026				2024	2025	2026
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Growth											
Nominal GDP (Y/Y %)	4.7	4.6	5.4	5.6	6.2	5.9	5.0	4.9	6.6	5.1	5.8
Real GDP (Yr/Yr %)	2.0	2.1	2.3	2.2	3.2	3.1	2.6	2.4	2.8	2.2	2.5
Real GDP (Q/Q Annualized)	-0.6	3.8	4.4	1.4	2.4	2.5	1.5	2.8			
Consumer Spending	0.6	2.5	3.5	2.4	1.9	2.2	1.8	2.0	2.9	2.7	2.2
Government Spending	-1.0	-0.1	2.2	-5.1	5.3	0.8	0.3	0.6	3.2	1.1	1.2
Private Investment	23.3	-13.8	0	3.8	2.3	3.1	2.9	3.2	3.0	2.0	2.3
Exports	0.2	-1.8	9.6	-0.9	2.1	4.1	1.1	1.8	3.6	1.7	2.2
Imports	38	-29.3	-4.4	-1.3	1.6	2.5	3.8	2.5	5.8	2.7	2.4
Real disposable income (Q/Q Ann.)	2.3	1.8	0	0.1	1.5	1.5	1.6	1.6	2.9	2.1	1.7
Real Final Sales to Domestic Purchasers (Q/Q Ann.)	1.4	2.4	2.8	1.1	2.9	2.4	1.9	2.0	3.1	2.5	2.6
Business Sector											
Nonfarm Productivity (Q/Q Annualized)	-0.9	4.2	5.2	2.8	1.8	4.1	2.2	3.9	2.8	3.0	3.1
Corporate Profits After Taxes (Yr/Yr %)	7.5	4.8	10.8	5.2	5.9	6.2	4.6	4.8	3.9	7.3	5.8
Industrial Production (Yr/Yr %)	0.7	0.5	1.7	1.7	1.5	1.1	0.8	1.2	-0.3	1.1	1.0
Consumer											
Retail Sales (Yr/Yr %)	4.5	4.3	4.4	2.9	2.8	3.1	2.9	4.0	2.6	4.0	3.1
Retail Sales Ex-Autos (Yr/Yr %)	4.2	3.9	4.2	3.7	3.0	3.2	2.9	3.5	2.8	4.1	2.9
Consumer Confidence	99.8	93.1	97.4	94.2	85.0	92.0	95.0	98.0	104.5	96.1	92.5
Total Vehicle Sales (Mil. Units, SAAR)	16.9	16.6	17.0	16.1	16.0	16.3	16.4	16.1	15.9	16.2	16.2
Jobs & Housing											
Unemployment rate (%)	4.1	4.2	4.3	4.5	4.5	4.5	4.6	4.5	4.0	4.2	4.5
Nonfarm Payroll (Change in Thousands)	61	101	70	-116	85	175	150	175	1459.0	116.0	585
Housing Starts (Mil. Units)	1.4	1.35	1.35	1.33	1.33	1.36	1.35	1.38	1.4	1.4	1.36
Existing Home Sales (Annualized, Millions)	4.10	4.01	4.05	4.16	4.12	4.01	4.40	4.50	4.1	4.1	4.40
Inflation											
Consumer Price Index (CPI) (Q/Q Annualized)	3.7	1.7	3.1	2.4	3.1	2.9	2.6	2.4	2.9	2.7	2.5
Core CPI (Q/Q Annualized)	3.4	2.1	2.8	1.9	2.9	2.7	2.4	2.3	3.4	2.9	2.3
PCE Inflation (Q/Q Annualized)	3.4	2.1	2.8	2.9	2.9	2.7	2.5	2.4	2.6	2.6	2.6
Core PCE Inflation (Q/Q Annualized)	3.3	2.6	2.9	2.7	2.7	2.6	2.5	2.2	2.9	2.8	2.4
Brent Crude Spot Price (Average, \$)	75.81	68.01	68.97	63.63	72.00	68.00	65.00	61.00	79.9	69.1	66.50
Rates											
Fed Funds (% Upper Bound, Period End)	4.50	4.50	4.25	3.75	3.75	3.50	3.50	3.25	4.50	4.25	3.50
Mortgage Rates (30-year Fixed, Period End)	6.79	6.77	6.39	6.27	5.94	5.82	5.75	5.68	6.49	6.60	5.71

Source: LPL Research, Federal Reserve Bank of Philadelphia, Bloomberg 03/11/26

Disclosures: Past performance is no guarantee of future results. Forecasts may not materialize as predicted and are subject to change.

Shaded areas are forecasts and are subject to change as additional data is published.

Important Disclosures

This material is for general information only and is not intended to provide specific advice or recommendations for any individual. There is no assurance that the views or strategies discussed are suitable for all investors or will yield positive outcomes. Investing involves risks including possible loss of principal. Any economic forecasts set forth may not develop as predicted and are subject to change.

References to markets, asset classes, and sectors are generally regarding the corresponding market index. Indexes are unmanaged statistical composites and cannot be invested into directly. Index performance is not indicative of the performance of any investment and do not reflect fees, expenses, or sales charges. All performance referenced is historical and is no guarantee of future results.

Any company names noted herein are for educational purposes only and not an indication of trading intent or a solicitation of their products or services. LPL Financial doesn't provide research on individual equities.

All information is believed to be from reliable sources; however, LPL Financial makes no representation as to its completeness or accuracy.

Because of their narrow focus, sector investing will be subject to greater volatility than investing more broadly across many sectors and companies.

The Bloomberg U.S. Aggregate Bond Index is an index of the U.S. investment-grade fixed-rate bond market, including both government and corporate bonds.

All index data from FactSet.

This research material has been prepared by LPL Financial LLC.

Not Insured by FDIC/NCUA or Any Other Government Agency Not Bank/Credit Union Guaranteed Not Bank/Credit Union Deposits or Obligations May Lose Value

For Public Use | Tracking #1076854 | #1076855 (Exp. 03/27)