

Equity Research
Macroeconomics

16 January 2026

[Richard de Chazal, CFA](#)
rdechazal@williamblair.com
+44 20 7868 4489

[Louis Mukama](#)
lmukama@williamblair.com
+1 312 364 8867

Economics Weekly

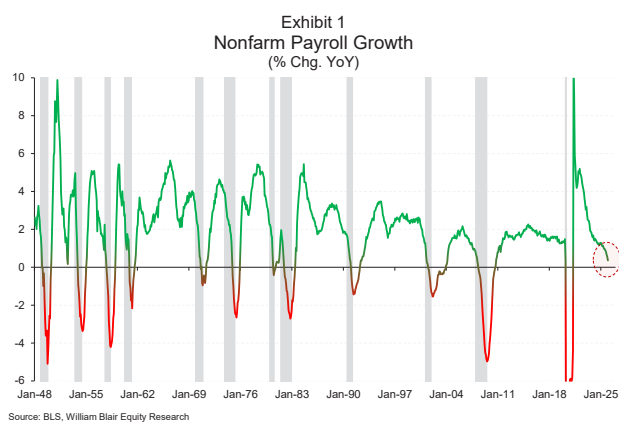
The Labor Market May Not Be Quite as
Weak as Believed



Over the last two quarters, the Fed has shifted its emphasis away from the inflation half of its dual mandate and back toward the employment side. It is taking the view that inflation will continue to decelerate, but employment growth is starting to more tangibly slow and further rate cuts were needed to shore up growth and prevent further deterioration. In our view, while there is a clear deceleration in job growth taking place, it looks to be driven as much, if not more, by supply-side dynamics, as opposed to what would be more concerning demand ones. **Following the release of last Friday's December employment report in this *Economics Weekly*, we reexamine the labor market data and the current market narrative of an unfolding deceleration in employment growth that is putting the economy on the verge of a recession.**

To What Extent Is Job Growth Slowing?

The U.S. economy has gone from exceptionally strong rates of payroll growth over the last few years to a sharp deceleration seemingly overnight. In 2023 nonfarm payrolls grew by 2.5 million, in 2024 by 2.0 million, and in 2025 by just 584,000, with the average monthly change dropping to 69,000 from 168,000 in 2024. Meanwhile, the annual rate of change in nonfarm payroll growth has slowed to just above zero—a rate below zero has historically been consistent with the onset of recessions (exhibit 1).



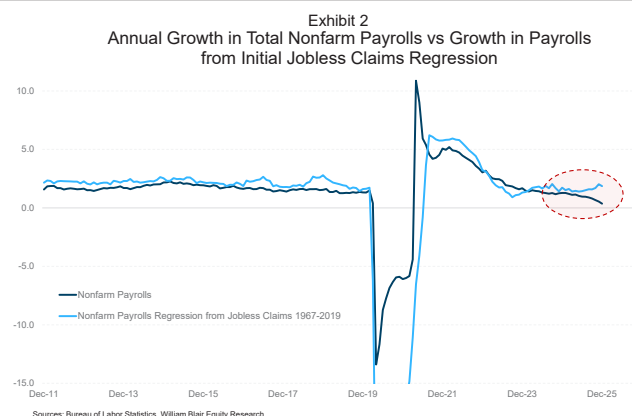
But has the labor market actually deteriorated as much as the establishment survey payroll data seem to be telling us?

Mixed Signals

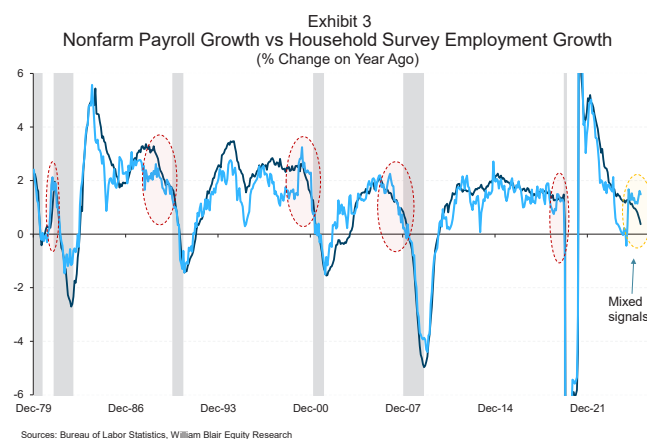
The fact is that the weekly initial jobless claims data—which were not impacted by the shutdown and do not suffer from data revisions—have remained remarkably low

and stable. The data are showing rates that are far from those that might normally raise eyebrows.

If we run a single factor regression of annual rates of change for jobless claims and payrolls from 1967-2019 (just before the pandemic) with a correlation coefficient of 64%, it shows that payroll growth would have increased by 2.3 million in 2025, rather than the reported 584,000 (exhibit 2).



Moreover, employment growth in the household survey of employment has similarly shown no signs of moderation. In fact, there has been a slight acceleration in hiring (exhibit 3).



Historically, investors have tended to view the establishment (nonfarm payroll) survey as the better gauge of employment growth. Not only is the sample size much larger than the household survey, but it also involves sampling companies, not “knocking on doors” as the household survey does. As such, the establishment data is less volatile and less skewed by factors such as demographic shifts

(e.g., changes in immigration) or misperceptions around what constitutes being employed by the general public.

Companies also normally count undocumented or illegal workers as employed on their books. This is because while workers are required to present their work permits, employers are not obligated to authenticate their documents beyond a “reasonable” inspection. It is also more detrimental for the employer to be caught hiring illegal workers, not declaring them, and not paying tax on their labor, than it is when including them on the books but “finding out” later that their papers didn’t match required standards. As a result, the establishment payroll data tend to better capture actual employment.

However, this survey comes with its own set of measurement issues; it is an incomplete sample taken each month, with an imputed births-deaths model to account for new or closing businesses. This is then reconciled with broader tax collection data at the end of each year.

Unfortunately, the monthly mismeasurement from this model in recent years has been substantial; establishment survey growth data were revised down by 818,000 jobs in the year to March 2024 and by 911,000 in the year to March 2025. In his last post-FOMC press conference, Chair Powell stated that the Fed believes that payrolls in the most recent few months are likely being overstated by approximately 60,000 jobs per month—i.e., the Fed would view December’s headline increase of 50,000 as a decrease of 10,000.

What Is Driving the Slowdown?

On the supply-side, the two biggest factors contributing to the growth slowdown are the sharp reversal in net immigration and the steady exit of retiring baby boomers from the labor force.

Brookings estimates that the U.S. experienced a negative net migration flow in 2025 for the first time in many decades. This follows very substantial annual net inflows of 2 million-3 million in the few years up to 2024. This reduction in the supply of labor needs to be taken into account when assessing the pace of monthly payroll growth, as it reduces the breakeven level of growth needed to maintain a stable unemployment rate—fewer inflows of people mean fewer jobs are needed.

Whereas between 2022 and 2024 roughly 150,000 to 200,000 jobs were required to stabilize the unemployment rate (the number of unemployed/labor force), in the second half of 2025 this breakeven rate fell to just 20,000

to 50,000. Brookings [estimates](#) that in 2026 this will decline further, reaching a lower range estimate of -20,000 to 20,000 and an upper range of 10,000 to 50,000.

This would imply that even if we start to see some negative nonfarm payroll prints in the coming months, they might still be compatible with a growing economy and an unchanged unemployment rate—and as such, not necessarily something that the Fed needs to aggressively respond to.

The Market Is Now Focusing on the Unemployment Rate

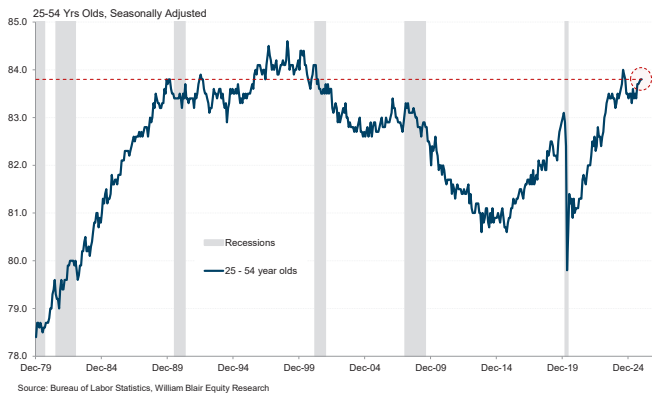
Due to these substantial and rapid supply-side changes, financial market participants have quite clearly decided that the best way to cut through all of these measurement issues is to effectively ignore the payroll numbers and focus entirely on the unemployment rate. This rate rose from a low of 3.4% in 2023 to a November peak of 4.5%, before dipping back to 4.4% in December.

According to the Sahm Rule, such an increase has just about always been associated with the onset of a recession. But that clearly is not happening today. GDP growth in the third quarter increased 4.3% (including a 3.5% increase in consumer spending), and the Atlanta Fed’s GDPNow index is pointing to a 5.3% increase in the fourth quarter (even subtracting the impact from trade, that is a stunning figure).

We think a couple factors may help to explain this new scenario. First, the core members of the labor market—i.e., prime-aged workers 25-54 years old—are still fully employed. Their participation rate has been stable at a high level, as depicted in exhibit 4. Such a high level of participation is inconsistent with a weak labor market, i.e., when companies would be looking to shed labor.

Exhibit 4

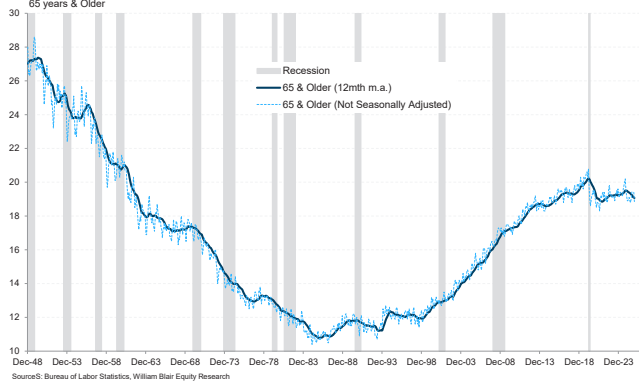
Labour Force Participation Rate for Prime Age Workers, %



Second, while baby boomers are retiring and pushing down labor force growth and participation rates (exhibit 5), they are also moving out of employment by choice. They have good balance sheets, assets that have been steadily appreciating for years now, and savings that are earning close to 4% just by sitting in money market funds. Furthermore, as they leave the labor force of their own volition, they are often freeing up space for younger workers to enter and step into their shoes.

Exhibit 5

Participation Rates for Those Aged 65 & Older, %



More Workers Have Been Coming Off the Sidelines to Look for Work

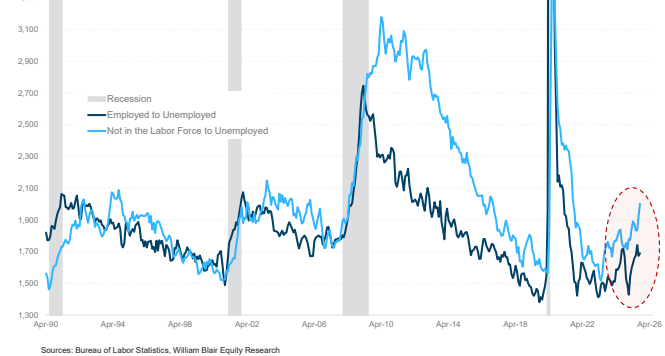
Another factor that has been pushing the unemployment rate higher—but for good reasons—has been an increase in the share of workers stepping off the non-participation labor force sidelines. These individuals are returning to the labor force to actively search for work (and thereby being reclassified as unemployed), as opposed to the ranks of unemployed rising due to workers moving from employment

to unemployment (exhibit 6). This is encouraging and consistent with at least some rising demand for labor—likely more than what the market seems to believe.

Exhibit 6

Flows Into Unemployment

Movement from "Not in the Labor Force to Unemployment" vs "Employment to Unemployment"



Small Businesses Have a Labor Shortage Problem

The rising flow of workers back into the labor force is also consistent with what we are hearing from some other surveys such as anecdotal data from this week's Fed Beige Book, and more specifically from the more cyclical end of the employment spectrum, i.e., small businesses.

For example, the latest December release of the [NFIB's](#) small business survey included the following quotes from respondents:

We are unable to find anyone willing to work. We have to pass on jobs because we do not have enough employees. – Manufacturing, TN

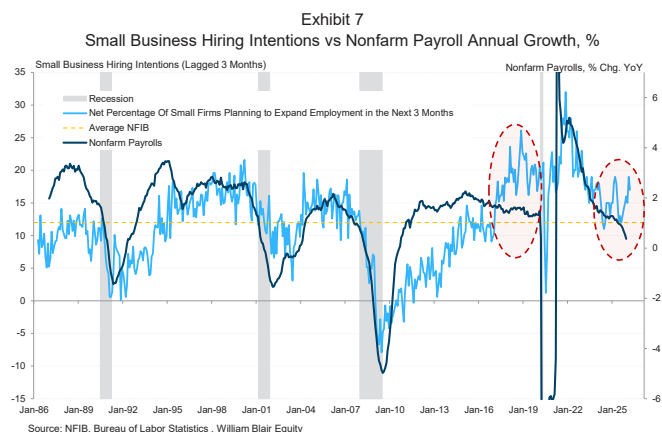
We are a niche business, requiring highly skilled employees. We lost three and are struggling to meet customers' expectations. Most of our work is custom fabrication of vehicles, including engine swaps, custom paint and body modifications. Very difficult to find and retain people with these specialized skills. – Services, TX

Businesses that find a way to improve the number of skilled employees and maintain that aspect of business will be able to exceed expectations they set for themselves. The construction industry is lacking currently with skilled numbers of employees and the future looks worse. This holds back any possibility of a small business expansion, simply

because there is a lack of people to get them there.
– Construction, MO

Qualified applicants? Where are they? – Retail, MO

This sentiment is quite similar to what we were hearing back in 2016-2019, when the labor market was also exceptionally tight, and smaller companies were raising their hiring intentions while similarly finding it difficult to find workers (exhibit 7).



Is Productivity Really a Problem?

Economists have spent the last two decades writing volumes on the “productivity puzzle,” i.e., secular stagnation, what was causing it, and what was the best way to fix it. However, now that we actually seem to be at the start of a genuine productivity boom, we find many of those same economists complaining that it’s not the right kind of productivity boom—i.e., the one that brings jobs with it. Some economists are even effectively arguing that we should put a halt to the whole thing (e.g., let’s get rid of the tractors and put the horse and plow back in the fields).

At the moment, most surveys on AI use would suggest that it is so far having only a limited impact on the labor market. Wednesday’s Beige Book, for example, noted that for most companies, “AI’s current impact on employment was limited, with more significant effects anticipated in the coming years rather than immediately.” Rather, most of the gains we are seeing today are likely due to capital deepening decisions taken in the years immediately following the pandemic, when workers were very hard to find. This does not mean that we should not expect AI-related job losses or friction unemployment in the future.

As we discussed in our [Economic Outlook for 2026](#), strong productivity and rising profit margins might be termed a high-class problem, and they are only a problem if workers don’t reap any of the rewards. This was exactly what happened in the early years of the industrial revolution—the so-called “Engels’ pause”—when it was the owners of capital who kept the profits while the workers remained impoverished. Exactly how this plays out today will bear watching closely; however, institutional frameworks and workers’ rights have significantly evolved since the late 1700s.

Conclusion

The Fed and investors are almost entirely focused on the employment side of the Fed’s dual mandate and are paying less attention to the inflation side of the mandate. They believe that employment growth is slowing sharply, and there is a growing risk of recession. Given what we view as the nature of employment, we believe this is less of a risk today than might have been the case in the recent past.

In our view, while growth in employment is slowing, the weakness seems to be more related to supply-side developments (an aging population and reduced immigration) than a sharp contraction in demand.

In fact, many small businesses (who tend to be far more sensitive to the economic cycle than the large ones) are increasing their hiring plans and finding that worker shortages are becoming their biggest constraint, rather than weak sales. Where demand has declined, it has in part been due to notable uncertainty about the economic outlook. Undoubtedly, some of that weakness has also been related to stronger productivity growth, which is arguably more of a high-class problem than faltering consumption and falling profit margins (both of which have so far held up very well). Looking forward, as AI does start to play a greater role in lifting productivity growth in the coming years, policymakers will have to find ways to balance the benefit with what are likely to be higher levels of friction unemployment and worker displacement.

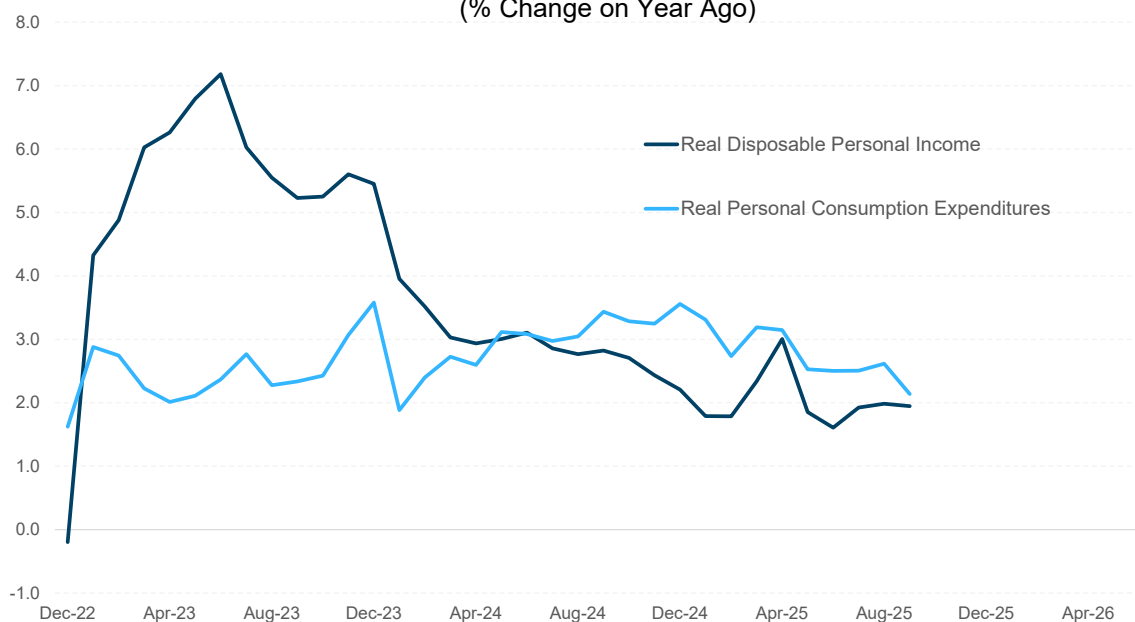
Highlights in the Week Ahead

Date	Time (ET)	Indicator	Last	Consensus	WB Estimate	Actual
21 Jan	10:00 a.m.	Index of Leading Economic Indicators (Dec)	-0.3%	NA	NA	
22 Jan	8:30 a.m.	GDP (Q3 Final Revision)	4.3%	4.3%	4.3%	
22 Jan	8:30 a.m.	Personal Income (Nov)	0.4%	NA	0.3%	
		Personal Spending	0.5%	NA	0.3%	

Sources: Bloomberg, William Blair Equity Research

Indicator of the Week: Personal Income

Total Real Personal Disposable Income vs Real Personal Consumption Expenditure
(% Change on Year Ago)



Sources: Bureau of Economic Analysis, William Blair Equity Research

Economic Scorecard

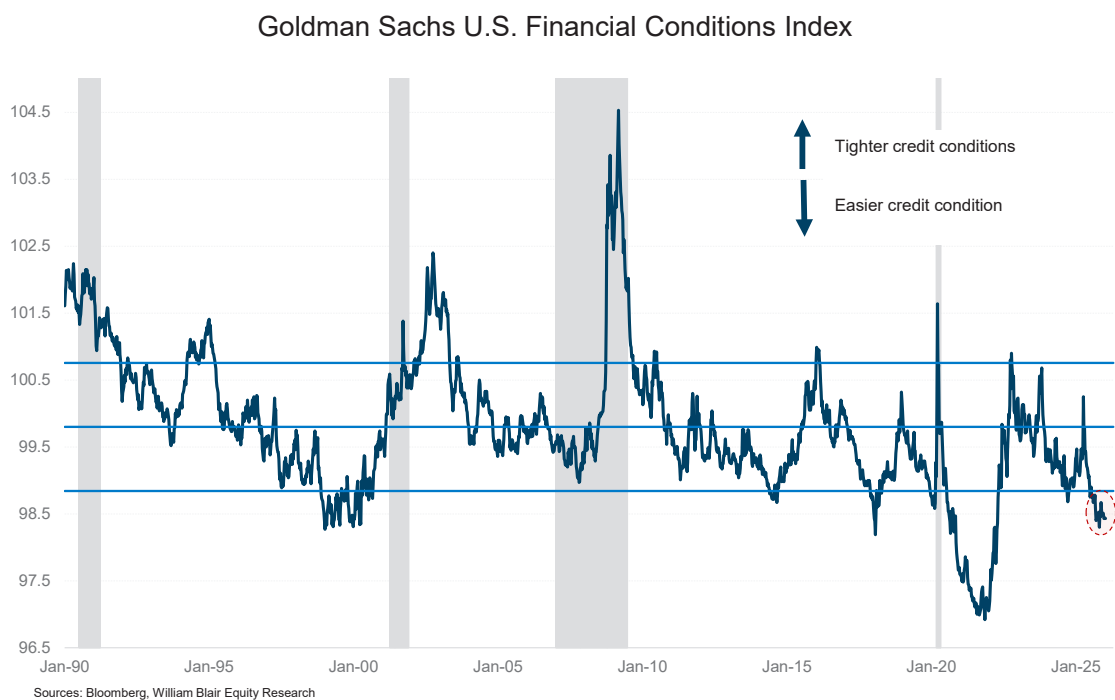
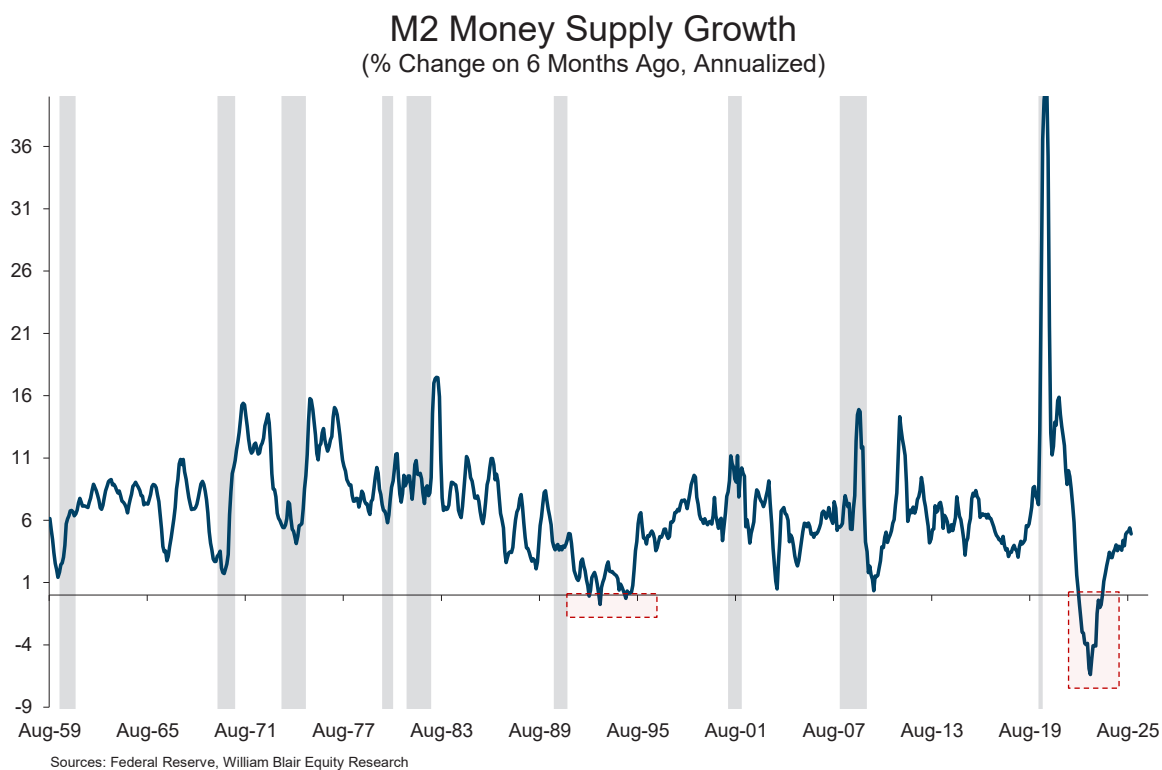
Rolling monthly heat map, % Change on Year Ago (unless otherwise noted)

	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26
Growth																			
US Leading Indicators	-4.7	-4.6	-4.3	-3.7	-3.0	-3.0	-2.7	-3.0	-3.6	-4.3	-3.9	-3.9	-3.4	-3.4	-3.3				
US Coincident Indicators	1.7	1.7	1.6	1.6	1.3	1.7	1.5	1.5	1.8	2.0	1.4	1.4	1.6	1.5	1.4				
US Lagging Indicators	1.0	0.8	0.3	0.1	0.0	0.1	-0.1	0.1	-0.1	-0.2	0.7	0.4	0.4	0.5	1.1				
Consumer																			
Total Retail Sales	3	1.8	2	3.2	3.9	4.6	4.6	3.9	5.1	5	3.4	4.4	4.1	5	4.1	3.3	3.3		
Personal Income	5.6	5.4	5.3	5.5	5.3	5.3	5	5	5.2	5.6	4.5	4.3	4.6	4.8	4.8	4.8			
Real Disposable Personal Income	2.9	2.8	2.8	2.7	2.4	2.2	1.8	1.8	2.3	2.8	1.5	1.2	1.5	1.6	1.5	1.5			
Real Personal Consumption	3	3	3.4	3.3	3.2	3.6	3.3	2.7	3.2	3.1	2.5	2.5	2.6	2.8	2.4	2.4			
Personal Saving Rate (%)	5.3	5.2	4.8	5	4.9	4.3	5.1	5.2	5.1	5.5	4.9	4.6	4.3	4.1	4	4			
Consumer Confidence (Conference Board)**	101.9	105.6	99.2	109.6	112.8	109.5	105.3	100.1	93.9	85.7	98.4	95.2	98.7	97.8	95.6	95.5	92.9	89.1	
Employment																			
Employment Growth	1.3	1.2	1.3	1.2	1.3	1.3	1.3	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.8	0.7	0.5	0.4	
ASA Temporary Staffing Index	-12.5	-12.2	-12.0	-9.5	-6.6	-21.0	-8.2	-7.5	-8.7	-6.4	-5.8	-5.3	-0.8	-0.9	0.8	1.5	4.5	7.3	
ISM Employment Index Manufacturing*	43.6	45.8	44.6	44.8	48.1	45.4	50.3	47.6	44.7	46.5	46.8	45	43.4	43.8	45.3	46	44	44.9	
ISM Employment Index Services*	51	49.6	48.2	52.2	50.9	51.3	52.3	53.9	46.2	49	50.7	47.2	46.4	46.5	47.2	48.2	48.9	52	
Unemployment Rate, %	4.2	4.2	4.1	4.1	4.2	4.1	4	4.2	4.2	4.2	4.3	4.1	4.3	4.3	4.4	4.4	4.5	4.4	
Average Hourly Earnings	3.6	4	3.9	4.1	4.2	4	3.9	3.9	3.9	3.8	3.8	3.7	3.9	3.8	3.7	3.7	3.6	3.8	
Initial Jobless Claims (avg. wkly. chg. '000s)	237	230	225	236	219	222	218	227	223	226	235	241	221	231	235	225	215	219	
Jop Openings	-12.8	-17.6	-23.5	-10.9	-7.3	-12.5	-8.3	-11.4	-11.0	-2.9	-2.4	-0.7	-3.9	-5.5	7.8	-2.2	-11.0	-4.8	
Layoff Announcements	9.2	1	53.4	50.9	26.8	11.4	-39.5	103.2	204.8	62.7	47	-1.6	139.8	13.3	-25.8	175.3	23.5	-8.3	
Housing Market																			
Housing Starts	-13.4	5.6	-1	-1.2	-14.5	-0.5	-1.7	-4	3.3	0.9	-2.6	4.1	12.3	-7.2	-3.8	-7.8			
New Home Sales	1.1	7.4	5.3	-8.8	10.7	11.7	-2.8	-2.4	-4.6	-1.8	-5.7	-1.3	-10	2.6	2.9	18.7			
Existing Home Sales	-2.5	-3.7	-3.0	3.1	6.7	9.7	2.3	-0.9	-2.4	-2.0	-0.5	0.0	0.8	1.8	3.9	2.0			
Median House Price (Existing Homes)	-1.6	-8	-1.2	2.1	-7.4	1.1	-0.2	-1.4	-5.4	-0.4	2.5	-1.2	-7.4	3.5	-3.6	-8			
Existing Homes Inventory (Mths' supply)	3.7	3.9	3.9	3.9	3.8	3.7	3.9	3.8	4.2	4.3	4.3	4.3	4.3	4.3	4.4				
New Homes Inventory (Mths' supply)	7.9	8.2	7.9	9.3	8.7	8.2	9	9.3	9.2	8.5	9.6	9.1	9.3	8.3	7.9				
NAHB Homebuilder Sentiment*	41	39	41	43	46	46	47	42	39	40	34	32	33	32	32	37	38	39	
Inflation																			
Consumer Price Index	2.9	2.5	2.4	2.6	2.7	2.9	3	2.8	2.4	2.3	2.4	2.7	2.7	2.9	3	3	2.7		
CPI Less-food & energy	3.2	3.2	3.3	3.3	3.3	3.2	3.3	3.1	2.8	2.8	2.8	2.9	3.1	3.1	3	3	2.6		
Producer Price Index	2.4	2.1	2.1	2.8	2.9	3.5	3.8	3.4	3.2	2.4	2.7	2.4	3.2	2.7	3	2.8	3		
PPI Less-food & energy	2.6	2.8	3.3	3.6	3.4	3.7	3.9	3.7	3.8	3.1	3.2	2.7	3.5	2.9	2.9	2.9	3		
PCE Price Index	2.6	2.4	2.3	2.5	2.6	2.7	2.6	2.7	2.4	2.3	2.5	2.6	2.6	2.7	2.8	2.8			
PCE Prices Less-food & energy	2.8	2.9	2.8	3.0	3.0	3.0	2.8	3.0	2.7	2.6	2.8	2.8	2.9	2.9	2.8	2.8			
Business Activity - US																			
Industrial Production	-0.9	-0.4	-1.2	-1.0	-1.6	-0.3	0.9	0.8	0.6	0.9	0.1	0.6	1.9	1.2	1.9	2.2	2.5		
New Cap Gds Orders less-aircraft & parts	-0.6	-1.8	0.5	0.2	-1.1	1.9	3.3	-0.9	2.2	0.5	2.2	4.5	4.4	2.5	5.3	6.4	6.4		
Business Inventories	1.6	2.1	2.1	1.9	2.2	2.6	1.9	2.5	2.3	2.5	2.2	1.7	1.6	1.4	1	1.2	0		
ISM Manufacturing PMI*	47	47.5	47.5	46.9	48.4	49.2	50.9	50.3	49	48.7	48.5	49	48	48.7	49.1	48.7	48.2	47.9	
Markit US Manufacturing PMI*	49.6	47.9	47.3	48.5	49.7	49.4	51.2	52.7	50.2	50.2	52	52.9	49.8	53	52	52.5	52.2	51.8	
ISM Services Index*	51.4	51.6	54.5	55.8	52.5	54	52.8	53.5	50.8	51.6	49.9	50.8	50.1	52	50	52.4	52.6	54.4	
Markit US Services PMI*	55	55.7	55.2	55	56.1	56.8	52.9	51	54.4	50.8	53.7	52.9	55.7	54.5	54.2	54.8	54.1	52.5	
Business Activity - International																			
Germany Manufacturing PMI Markit/BME*	43.2	42.4	40.6	43	43	42.5	45	46.5	48.3	48.4	48.3	49	49.1	49.8	49.5	49.6	48.2	47	
Japan Manufacturing PMI Jibun Bank*	49.1	49.9	49.7	49.2	49	49.6	48.7	49	48.4	48.7	49.4	50.1	49	49.7	48.6	48.2	48.7	50	
Caixin China Manufacturing PMI*	49.8	50.4	49.3	50.3	51.5	50.5	50.1	50.8	51.2	50.4	48.3	50.4	49.5	50.5	51.2	50.6	49.9	50.1	
China Manufacturing PMI*	49.4	49.1	49.8	50.1	50.3	50.1	49.1	50.2	50.5	49	49.5	49.7	49.3	49.4	49.8	49	49.2	50.1	
UK Manufacturing PMI Markit/CIPS*	52.1	52.5	51.5	49.9	48	47	48.3	46.9	44.9	45.4	46.4	47.7	48	47	46.2	49.7	50.2	50.6	
France Manufacturing PMI Markit*	44	43.9	44.6	44.5	43.1	41.9	45	45.8	48.5	48.7	49.8	48.1	48.2	50.4	48.2	48.8	47.8	50.7	
Currencies***																			
Euro (EUR/USD)	-1.6	1.9	5.3	2.9	-2.9	-6.2	-4.2	-4.0	0.2	6.2	4.6	10.0	5.4	5.8	5.4	6.0	9.7	13.4	
Renmibi (USD/CNY)	1.2	-2.3	-3.8	-2.7	1.6	2.8	1.1	1.2	0.5	0.4	-0.6	-1.4	-0.4	0.6	1.5	0.0	-2.4	-4.3	
Yen (USD/Yen)	5.4	0.4	-3.8	0.2	1.1	11.5	5.6	0.4	-0.9	-9.3	-8.4	-10.5	0.5	0.6	3.0	1.3	4.3	-0.3	
Sterling (GBP/USD)	0.2	3.6	9.6	6.1	0.9	-1.7	-2.3	-0.4	2.3	6.7	5.6	8.6	2.7	2.9	0.5	2.0	3.9	7.7	
Canadian \$ (USD/CAD)	4.7	-0.1	-0.4	0.4	3.3	8.6	8.2	6.5	6.3	0.2	0.8	-0.5	0.3	1.8	2.9	0.5	-0.2	-4.6	
Mexican Peso (USD/MXN)	11.2	15.8	13.0	11.0	17.2	22.7	20.1	20.5	23.6	14.4	14.3	2.3	1.4	-5.4	-7.0	-7.4	-10.2	-13.5	
US Equities																			
S&P 500	20.3	25.3	34.4	36.0	32.1	23.3	24.7	16.8	6.8	10.6	12.0	13.6	14.8	14.4	16.1	19.9	13.5	16.4	
S&P 400 Midcap	13.5	16.9	24.8	30.9	31.3	12.2	18.6	7.1	-4.2	-0.3	0.6	5.9	1.7	5.3	4.5	4.8	-1.7	5.9	
S&P 600 Smallcap	12.0	15.1	23.5	27.6	30.9	6.8	14.5	4.5	-5.0	-3.6	-3.4	2.8	-6.3	1.8	1.9	3.8	-4.0	4.2	
Russell 2000	12.5	16.7	24.9	32.1	34.6	10.0	17.5	5.3	-5.3	-0.5	-0.2	6.2	-1.9	6.7	9.3	12.9	2.7	11.3	

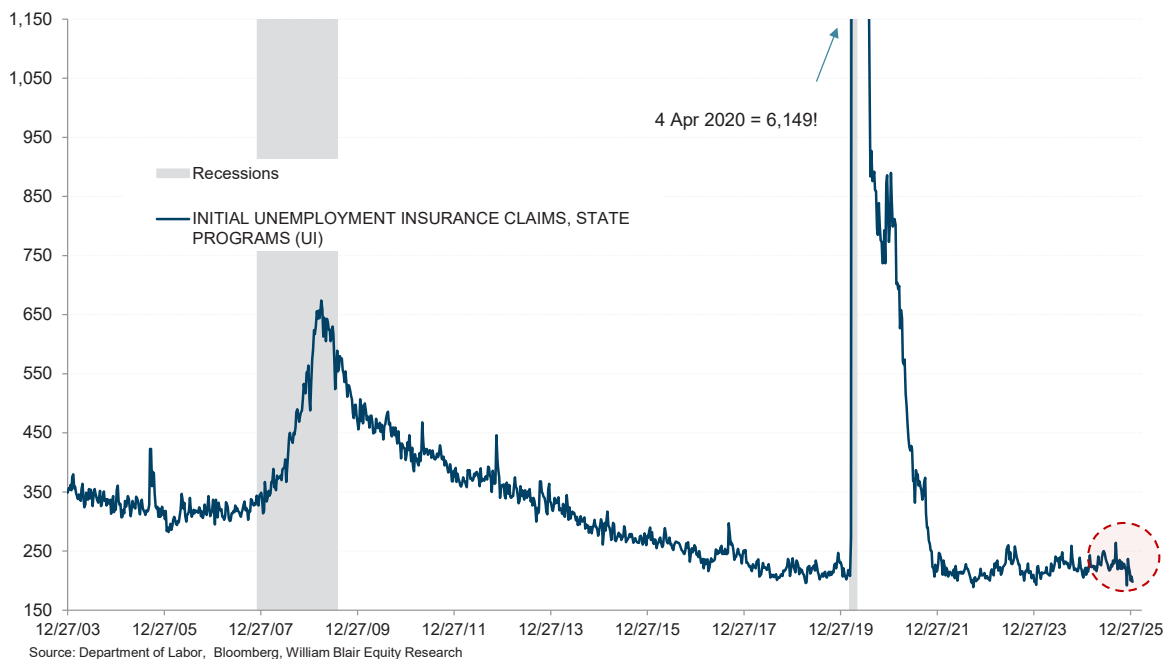
* Diffusion Index, **1985=100, ***Currencies - green/red = strengthening/weakening foreign currency vs dollar

Source: ISM, Federal Reserve, Census Bureau, Bureau of Labor Statistics, Conference Board, Bloomberg, William Blair

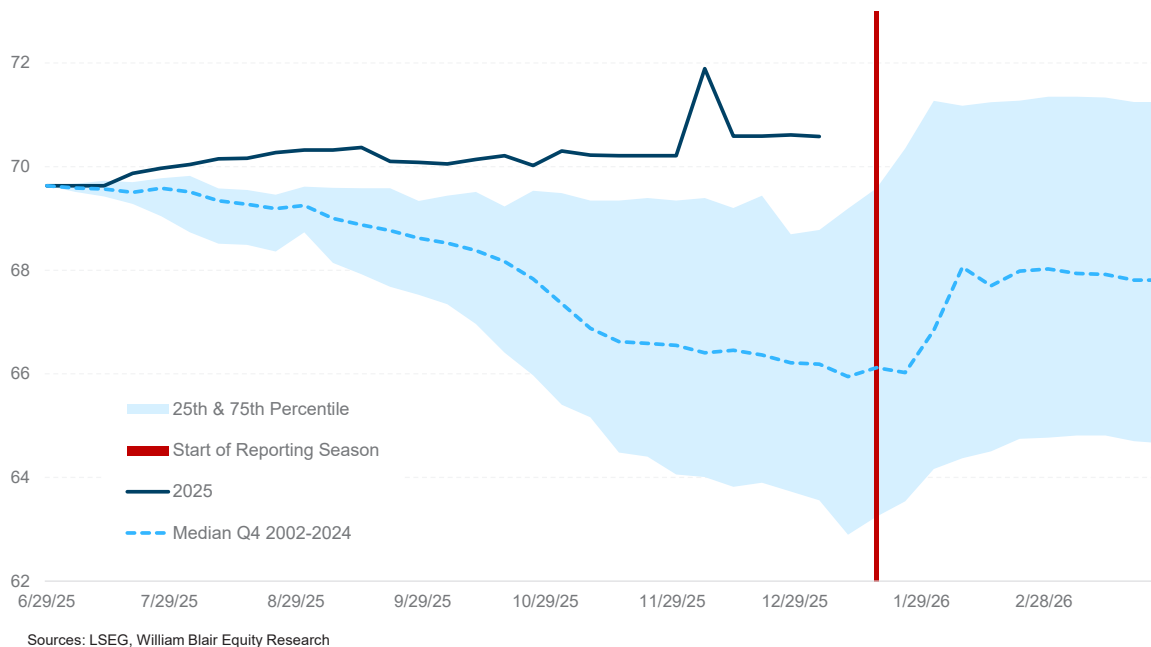
Other Economic Indicators



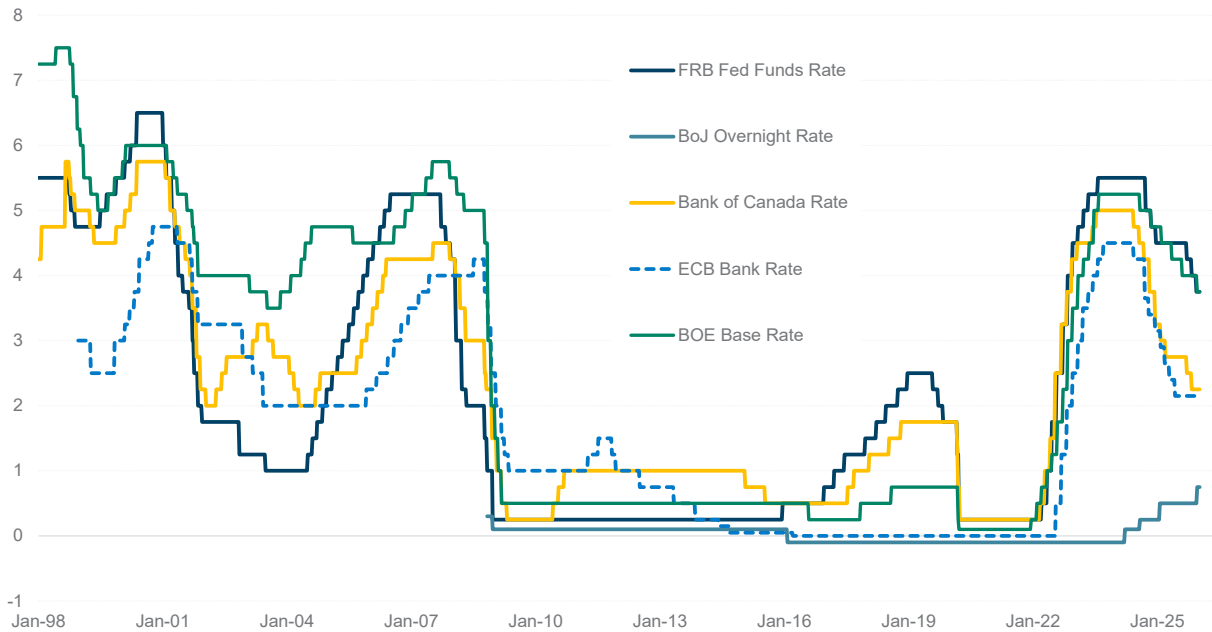
Initial Jobless Claims ('000s, Seasonally Adjusted)



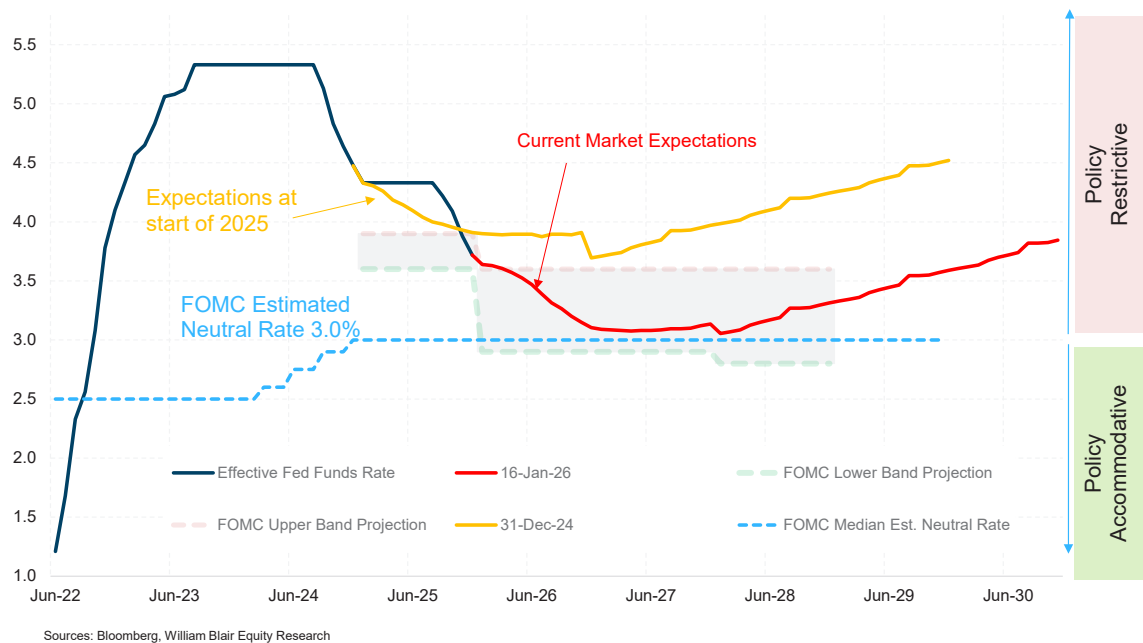
Progression of S&P 500 Q4 EPS Estimates, Q4 2025 vs Median Q4 2002-2024 (Rebased to Q4 2025 Estimate at End of Q2 2025 of \$69.5 per share)



Central Bank Target Short-Term Interest Rates, %



Fed Funds Rate Futures Market Expectations & FOMC Projections, %



S&P 500 Sector Performance

Global Industry Classification System	Current Weight* 15-Jan-26	Week Ago 08-Jan-26	Month Ago 15-Dec-25	Qtr-to-Date 31-Dec-25	Year-to-Date 31-Dec-25
S&P 500 Index	100.00	0.33	1.88	1.45	1.45
S&P 400 MidCap Index		2.51	5.22	6.41	6.41
S&P 600 SmallCap Index		2.83	4.68	7.30	7.30
Dow Jones Industrials		0.36	2.12	2.87	2.87
Nasdaq Composite		0.21	2.05	1.24	1.24
Communication Services	10.46	-0.08	2.74	1.15	1.15
Advertising	0.06	0.44	0.32	-1.73	-1.73
Broadcasting	0.07	-3.64	-0.12	-1.70	-1.70
Cable & Satellite	0.04	-7.20	-3.04	-7.61	-7.61
Integrated Telecommunication Services	0.68	-1.73	-2.07	-3.04	-3.04
Interactive Home Entertainment	0.15	-1.57	-0.06	-2.29	-2.29
Interactive Media & Services	7.96	0.43	4.20	2.53	2.53
Movies & Entertainment	1.13	-1.62	-3.02	-3.55	-3.55
Publishing & Printing	0.02	1.08	3.14	2.60	2.60
Wireless Telecommunication Svcs	0.33	-3.67	-2.81	-6.10	-6.10
Consumer Discretionary	10.57	-0.70	1.73	2.67	2.67
Apparel Retail	0.37	-0.36	1.06	3.17	3.17
Apparel & Accessories & Luxury Goods	0.10	-1.10	2.76	2.22	2.22
Auto Parts & Equipment	0.03	-4.44	6.80	8.57	8.57
Automobile Manufacturers	2.48	0.11	-7.07	-2.08	-2.08
Automobile Retail	0.31	3.49	-1.26	4.55	4.55
Broadline Retail	4.05	-3.14	7.19	3.31	3.31
Casinos & Gaming	0.10	-1.15	-8.00	-4.90	-4.90
Computer & Electronics Retail	0.02	-5.11	-6.52	1.81	1.81
Consumer Electronics	0.06	-0.40	2.59	4.80	4.80
Distributors	0.05	8.30	6.35	12.64	12.64
Footwear	0.14	-1.53	-4.08	1.06	1.06
Home Furnishings	0.01	8.24	10.93	13.15	13.15
Home Improvement Retail	0.83	6.22	7.66	11.51	11.51
Homebuilding	0.19	8.70	2.60	12.19	12.19
Hotels, Resorts & Cruise Lines	0.84	-3.80	-0.04	0.08	0.08
Leisure Products	0.02	-2.52	7.14	5.96	5.96
Restaurants	0.86	1.03	1.06	3.20	3.20
Other Specialty Retail	0.09	-0.02	3.95	5.74	5.74
Consumer Staples	5.35	4.82	3.70	5.71	5.71
Agricultural Products	0.08	9.66	12.70	17.73	17.73
Brewers	0.01	7.17	6.23	8.48	8.48
Consumer Staples Merchandise Retail	2.44	5.10	6.29	8.87	8.87
Distillers & Vintners	0.06	7.19	6.39	13.19	13.19
Food Distributors	0.06	6.61	4.97	7.45	7.45
Food Retail	0.06	4.52	-0.27	0.02	0.02
Household Products	0.74	2.71	0.95	2.17	2.17
Packaged Foods & Meats	0.37	5.56	1.37	4.06	4.06
Personal Care Products	0.09	3.08	6.38	4.60	4.60
Soft Drinks	0.96	2.81	-1.37	1.27	1.27
Tobacco	0.58	9.07	7.58	7.36	7.36
Energy	2.83	2.58	6.64	6.56	6.56
Integrated Oil & Gas	1.44	4.62	10.02	7.82	7.82
Oil & Gas Equipment & Services	0.23	3.84	15.73	17.78	17.78
Oil & Gas Exploration & Production	0.55	0.56	0.95	1.78	1.78
Oil & Gas Refining & Marketing & Transportation	0.26	-2.12	1.30	10.34	10.34
Oil & Gas Storage & Transportation	0.34	0.46	1.23	-0.27	-0.27

Financials	12.30	-2.79	-1.02	-0.90	-0.90
Asset Management & Custody Banks	1.09	2.53	4.53	5.80	5.80
Consumer Finance	0.66	-7.32	-4.47	-3.20	-3.20
Diversified Banks	3.02	-5.51	-2.47	-2.95	-2.95
Diversified Financial Services	7.39	-1.57	0.37	0.48	0.48
Financial Exchanges & Data	1.03	1.94	5.98	4.29	4.29
Insurance Brokers	0.45	-2.29	-1.88	-1.39	-1.39
Investment Banking & Brokerage	1.46	2.52	7.24	6.87	6.87
Life & Health Insurance	0.28	-1.50	-2.31	0.55	0.55
Multi-Sector Holdings	1.06	-1.43	-2.72	-2.00	-2.00
Property & Casualty Insurance	0.87	-4.34	-7.54	-6.44	-6.44
Regional Banks	0.28	-1.33	2.41	3.65	3.65
Reinsurance	0.02	-5.00	-2.26	-5.35	-5.35
Transaction & Payment Processing	1.95	-6.24	-4.73	-4.95	-4.95
Health Care	9.25	-0.79	0.92	1.37	1.37
Biotechnology	1.50	-2.74	-1.71	-2.50	-2.50
Health Care Distributors	0.36	4.49	3.06	3.81	3.81
Health Care Equipment	1.82	-2.92	-0.77	0.05	0.05
Health Care Facilities	0.19	0.43	0.00	2.24	2.24
Health Care Services	0.36	0.76	1.34	2.90	2.90
Health Care Supplies	0.07	-2.19	1.34	3.31	3.31
Life Sciences Tools & Services	0.93	2.29	6.92	6.93	6.93
Managed Health Care	0.72	-0.89	1.89	5.10	5.10
Pharmaceuticals	3.30	-0.19	1.10	1.18	1.18
Industrials	8.17	3.49	5.91	6.89	6.89
Aerospace & Defense	2.26	5.92	12.14	10.04	10.04
Agricultural & Farm Machinery	0.22	2.84	5.54	10.63	10.63
Air Freight & Logistics	0.31	2.13	9.76	9.11	9.11
Building Products	0.42	2.86	1.36	1.59	1.59
Cargo Ground Transportation	0.09	2.97	10.24	11.17	11.17
Construction & Engineering	0.21	9.49	7.05	10.16	10.16
Construction Machinery & Heavy Trucks	0.76	5.54	9.42	12.20	12.20
Data Processing & Outsourced Services	0.04	-1.59	-4.31	-1.71	-1.71
Diversified Support Svcs	0.18	3.79	4.79	4.48	4.48
Electrical Components & Equipment	0.54	3.74	4.02	7.43	7.43
Environmental & Facilities Services	0.33	0.88	0.60	0.78	0.78
Heavy Electrical Equipment	0.27	2.20	-5.74	-1.74	-1.74
Human Resource & Employment Services	0.26	-2.26	-2.44	0.22	0.22
Industrial Conglomerates	0.36	4.27	6.57	8.85	8.85
Industrial Machinery	0.66	3.10	4.84	6.72	6.72
Passenger Airlines	0.17	0.29	3.35	3.44	3.44
Passenger Ground Transportation	0.27	-3.67	3.08	3.26	3.26
Railroads	0.42	0.92	-3.41	0.03	0.03
Research & Consulting Svcs	0.15	0.17	2.54	2.88	2.88
Trading Companies & Distributors	0.25	2.54	6.84	9.69	9.69
Information Technology	31.71	0.24	1.06	-0.67	-0.67
Application Software	2.42	-5.20	-7.15	-6.90	-6.90
Communications Equipment	0.85	2.92	-0.28	-0.88	-0.88
Electronic Components	0.42	12.15	14.91	11.97	11.97
Electronic Equipment & Instruments	0.12	3.42	5.48	7.76	7.76
Electronic Manufacturing Services	0.15	8.19	7.34	7.59	7.59
Internet Software & Services	0.08	-0.21	-1.81	-2.26	-2.26
IT Consulting & Services	0.82	-0.50	-0.46	2.65	2.65
Semiconductor Equipment	1.23	11.67	26.28	25.32	25.32
Semiconductors	12.28	2.11	6.52	2.15	2.15
Systems Software	6.86	-4.16	-3.71	-5.36	-5.36
Technology Distributors	0.03	-0.17	-8.69	-2.87	-2.87
Technology Hardware, Storage & Peripherals	6.45	0.43	-4.46	-3.65	-3.65
Materials	1.83	3.01	8.85	7.69	7.69
Commodity Chemicals	0.06	7.40	18.44	18.71	18.71
Construction Materials	0.25	-0.55	-0.52	1.12	1.12
Copper	0.13	10.59	26.18	18.05	18.05

William Blair

Fertilizers & Agricultural Chemicals	0.11	2.07	8.06	7.53	7.53
Gold	0.19	6.85	14.57	14.38	14.38
Industrial Gases	0.41	0.46	6.19	4.17	4.17
Metal & Glass Containers	0.02	1.93	8.35	5.51	5.51
Paper Packaging	0.16	2.76	9.85	8.40	8.40
Specialty Chemicals	0.39	3.75	9.33	8.83	8.83
Steel	0.10	3.20	6.26	5.69	5.69
Real Estate	1.75	3.02	2.48	3.26	3.26
Data Center REITs	0.21	3.51	5.20	4.31	4.31
Health Care REITs	0.29	1.70	-0.14	2.12	2.12
Hotel & Resort REITs	0.02	1.43	-0.91	4.17	4.17
Industrial REITs	0.19	3.40	1.60	3.98	3.98
Multi-Family Residential REITs	0.00	-1.96	1.18	-1.66	-1.66
Office REITs	0.02	0.08	-6.30	-0.55	-0.55
Other Specialized REITs	0.09	3.92	5.15	5.85	5.85
Real Estate Service	0.12	3.06	4.55	1.73	1.73
Retail REITs	0.24	0.86	1.60	2.52	2.52
Self-Storage REITs	0.13	8.01	8.69	12.94	12.94
Single-Family Residential REITs	0.13	8.01	8.69	12.94	12.94
Telecom Tower REITs	0.23	6.57	0.61	2.34	2.34
Timber REITs	0.03	11.71	14.77	13.13	13.13
Utilities	2.13	3.89	1.60	2.17	2.17
Electric Utilities	1.40	3.28	1.06	1.42	1.42
Gas Utilities	0.04	1.90	-0.28	1.58	1.58
Independent Power Producers & Energy Traders	0.11	16.48	6.64	9.86	9.86
Water Utilities	0.04	3.16	-0.58	2.19	2.19
Multi-Utilities	0.54	3.43	2.34	2.72	2.72

*Current Weight is market cap based, based on calculations by William Blair Intl. Ltd.

IMPORTANT DISCLOSURES

This report is available in electronic form to registered users via R*Docs™ at <https://williamblairlibrary.bluematrix.com> or www.williamblair.com.

Please contact us at +1 312 236 1600 or consult <https://www.williamblair.com/equity-research/coverage> for all disclosures.

Richard de Chazal attests that 1) all of the views expressed in this research report accurately reflect his/her personal views about any and all of the securities and companies covered by this report, and 2) no part of his/her compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed by him/her in this report. We seek to update our research as appropriate. Other than certain periodical industry reports, the majority of reports are published at irregular intervals as deemed appropriate by the research analyst.

DOW JONES: 49442.40

S&P 500: 6944.47

NASDAQ: 23530.00

Additional information is available upon request.

Current Rating Distribution (as of January 15, 2026):

Coverage Universe	Percent	Inv. Banking Relationships *	Percent
Outperform (Buy)	72	Outperform (Buy)	11
Market Perform (Hold)	28	Market Perform (Hold)	3
Underperform (Sell)	1	Underperform (Sell)	0

*Percentage of companies in each rating category that are investment banking clients, defined as companies for which William Blair has received compensation for investment banking services within the past 12 months.

The compensation of the research analyst is based on a variety of factors, including performance of his or her stock recommendations; contributions to all of the firm's departments, including asset management, corporate finance, institutional sales, and retail brokerage; firm profitability; and competitive factors.

OTHER IMPORTANT DISCLOSURES

Stock ratings and valuation methodologies: William Blair & Company, L.L.C. uses a three-point system to rate stocks. Individual ratings reflect the expected performance of the stock relative to the broader market (generally the S&P 500, unless otherwise indicated) over the next 12 months. The assessment of expected performance is a function of near-, intermediate-, and long-term company fundamentals, industry outlook, confidence in earnings estimates, valuation (and our valuation methodology), and other factors. Outperform (O) - stock expected to outperform the broader market over the next 12 months; Market Perform (M) - stock expected to perform approximately in line with the broader market over the next 12 months; Underperform (U) - stock expected to underperform the broader market over the next 12 months; not rated (NR) - the stock is not currently rated. The valuation methodologies include (but are not limited to) price-to-earnings multiple (P/E), relative P/E (compared with the relevant market), P/E-to-growth-rate (PEG) ratio, market capitalization/revenue multiple, enterprise value/EBITDA ratio, discounted cash flow, and others. Stock ratings and valuation methodologies should not be used or relied upon as investment advice. Past performance is not necessarily a guide to future performance.

The ratings and valuation methodologies reflect the opinion of the individual analyst and are subject to change at any time.

Our salespeople, traders, and other professionals may provide oral or written market commentary, short-term trade ideas, or trading strategies to our clients, prospective clients, and our trading desks that are contrary to opinions expressed in this research report. Certain outstanding research reports may contain discussions or investment opinions relating to securities, financial instruments and/or issuers that are no longer current. Investing in securities involves risks. This report does not contain all the material information necessary for an investment decision. Always refer to the most recent report on a company or issuer. Our asset management and trading desks may make investment decisions that are inconsistent with recommendations or views expressed in this report. We will from time to time have long or short positions in, act as principal in, and buy or sell the securities referred to in this report. Our research is disseminated primarily electronically, and in some instances in printed form. Research is simultaneously available to all clients. This research report is for our clients only. No part of this material may be copied or duplicated in any form by any means or redistributed without the prior written consent of William Blair & Company, L.L.C.

This is not in any sense an offer or solicitation for the purchase or sale of a security or financial instrument.

The factual statements herein have been taken from sources we believe to be reliable, but such statements are made without any representation as to accuracy or completeness or otherwise, except with respect to any disclosures relative to William Blair or its research analysts. Opinions expressed are our own unless otherwise stated and are subject to change without notice. Prices shown are approximate.

This report or any portion hereof may not be copied, reprinted, sold, or redistributed or disclosed by the recipient to any third party, by content scraping or extraction, automated processing, or any other form or means, without the prior written consent of William Blair. Any unauthorized use is prohibited.

If the recipient received this research report pursuant to terms of service for, or a contract with William Blair for, the provision of research services for a separate fee, and in connection with the delivery of such research services we may be deemed to be acting as an investment adviser, then such investment adviser status relates, if at all, only to the recipient with whom we have contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing). If such recipient uses these research services in connection with the sale or purchase of a security referred to herein, William Blair may act as principal for our own account or as riskless principal or agent for another party. William Blair is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

For important disclosures, please visit our website at williamblair.com.

This material is distributed in the United Kingdom and the European Economic Area (EEA) by William Blair International, Ltd., authorised and regulated by the Financial Conduct Authority (FCA). William Blair International, Limited is a limited liability company registered in England and Wales with company number 03619027. This material is only directed and issued to persons regarded as Professional investors or equivalent in their home jurisdiction, or persons falling within articles 19 (5), 38, 47, and 49 of the Financial Services and Markets Act of 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not "relevant persons."

This report is being furnished in Brazil on a confidential basis and is addressed to the addressee personally, and for its sole benefit. This does not constitute an offer or solicitation for the purchase or sale of a security by any means that would constitute a public offering in Brazil under the regulations of the Brazilian Securities and Exchange Commission (*Comissão de Valores Mobiliários*) or an unauthorized distribution under Brazilian laws and regulations. The securities are authorized for trading on non-Brazilian securities markets, and this report and all the information herein is intended solely for professional investors (as defined by the applicable Brazilian regulation) who may only acquire these securities through a non-Brazilian account, with settlement outside Brazil in a non-Brazilian currency.

"William Blair" and "R*Docs" are registered trademarks of William Blair & Company, L.L.C. Copyright 2026, William Blair & Company, L.L.C. All rights reserved.

William Blair & Company, L.L.C. licenses and applies the SASB Materiality Map® and SICSTM in our work.