William Blair

Equity Research
Macroeconomics

12 December 2025

Richard de Chazal, CFA
rdechazal@williamblair.com
+44 20 7868 4489

Louis Mukama
lmukama@williamblair.com
+1 312 364 8867

Economics Weekly

Dissent at the Fed and What Will Happen in 2026

> *There's been a lot of debate about this in the U.S. that, we're a very consensus-driven policy committee and that leads to accusations of groupthink.... But we have to make a decision every six weeks, we don't get to kick the can down the road, that means you have to compromise on your positions at times....*
>
> *People who are accusing us of this*—**get ready, you might see the least groupthink you've seen from the FOMC in a long time....** *I don't find for myself personally the sense that that's problematic, it doesn't mean anything about the Chair's leadership to have disagreements, that's the whole point in having a committee—to have different points of view. The only real problem is that if it gets really down to 7 to 5 for us, and that one person then switches at the next meeting, then the whole trajectory changes. And that's kind of the danger with these razor-thin, one vote things. It doesn't give people confidence what the next vote will necessarily be.* [Emphasis added]
>
> – Fed Governor Christopher Waller, November 17, 2025

This week's FOMC meeting saw the most dissent since 2019, when, similar to this week's vote, one voted for a larger cut, while two voted for no change in rates. Back then, St. Louis Fed President James Bullard voted for a 50-basis-point cut and Kansas City's Esther George and Boston's Eric Rosengren both voted for no change in rates, as opposed to the majority vote for a 25-basis-point cut. This week, Fed Governor Stephen Miran also voted for a cut of 50 basis points, while Chicago Fed President Austan Goolsbee and Kansas City Fed President Jeffrey Schmid voted for no change in rates.

The issue of dissent on the board is becoming a much hotter topic for investors, as questions continue to mount around the degree of Fed independence and the potential appointment of Kevin Hassett as the new Fed chair. Foreshadowing what might come, at a dinner we attended in London several weeks ago, Fed Governor Waller stated that we should get ready for the least groupthink FOMC in a long time. **In this *Economics Weekly*, we look at the history of dissent at the Fed and how the makeup of the FOMC looks heading into 2026.**

A History of Consensus

The Fed is well known for its preference for a show of unity and consensus on the outcome of its FOMC meetings. As Fed Governor Waller noted, this is helpful when it comes to forward guidance and creating better economic stability. If every policy meeting resulted in a knife-edge decision on rates, this would tend to lower transparency and weaken forward guidance, which would likely diminish private sector confidence in both investment and consumption, but also increase financial market volatility. On the other hand, some level of dissent is helpful and healthy for better policymaking.

This is similar to the decision-making process for the European Central Bank, which does not publish the voting results of its meetings but will often announce whether the vote was unanimous or not if asked during the press conference.

The Bank of Canada similarly does not publish the results of policy votes and strongly favors consensus and unity. The Bank of Japan is more like the Fed, with the outcome of votes published in the post-meeting statements, but individual votes are not disclosed until the release of the minutes at a later date—though dissent for the Bank of Japan is even less frequent than at the Fed. Conversely, at the opposite end of the scale is the Bank of England where dissent has been very common since it gained its independence in 1997.

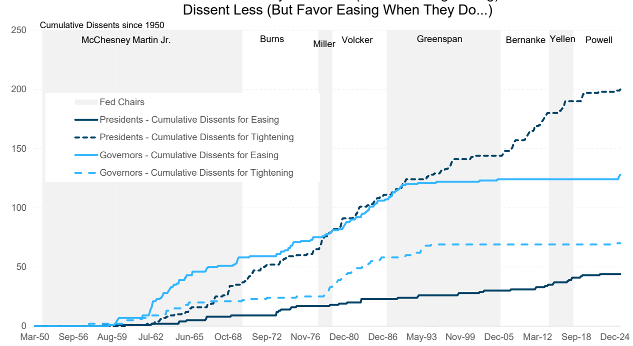
It is worth noting that the heads of the central banks are always part of the majority vote; you never see a dissenting vote by one of them. This promotes greater stability, unity, and control over the committee.

Fed Presidents More Hawkish (and More Frequent Dissenters) Than Governors

Exhibit 1 shows the cumulative history of the number of dissents in favor of easing, the number in favor of tightening, and the division between the regional Fed presidents and governors.

Exhibit 1

Fed Presidents Are Much More Likely to Dissent (in Favor of Tightening) vs. Governors Who Dissent Less (But Favor Easing When They Do...)



Sources: Bloomberg, William Blair Equity Research

The exhibit shows that Fed presidents have dissented a total of 244 times since 1950. Amazingly, only 18% of those have been in favor of an easing policy, as opposed to 82% in favor of a tighter policy.

When it comes to Fed governors, the reverse is true. Since 1950, governors have dissented 198 times, but 65% of those have been in favor of easing, or three times more often than the Fed presidents' dissents.

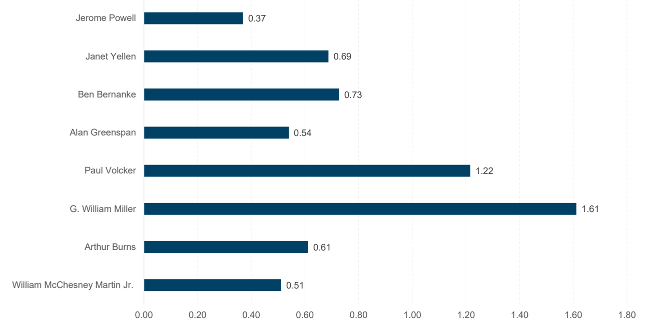
Also noteworthy, while the annual number of dissents from presidents has been quite steady throughout this entire period, the number of dissents from governors since 1990 has stagnated.

There are several reasons for the governors' behavior with regard to preferring to ease more than tighten. First, governors are political appointments; they are vetted and chosen by the U.S. president before they are confirmed by the Senate. They reside in Washington and tend to be more visible, with their views carrying a little more weight than the regional Fed presidents. They also know that the public tends to favor rate cuts versus hikes. Second, governors are supposed to take a more national perspective, which includes gauging risks toward financial stability; whereas regional Fed presidents are expected to have more of a state and local view of things and tend to be less attuned to financial stability concerns (excluding the New York Fed president, who is at the coalface of markets). Lastly, from the 1990s onward we have largely been in a disinflationary environment, where the risks of easing too much seemed lower than overtightening.

The fact that dissents have been much more infrequent since 1990 is likely also a legacy of former Fed Chair Alan Greenspan, who was not a fan of dissent, and, as other Fed chairs have done since, had a tendency to coordinate votes ahead of each meeting. This would include telephone calls or private meetings to assess who might be on the verge of dissenting, and try to convince them otherwise.

Exhibit 2 ranks the amount of dissent per meeting by Fed chair. The lowest so far has been Chair Powell, who generally seems to have been able to drive a steady consensus each meeting. The highest score goes to Jimmy Carter–appointed and short-tenured Fed Chair G. William Miller, who historically was one of the least effective chairs ever.

Exhibit 2
Number of Dissents per FOMC Meeting by Fed Chair



Sources: Bloomberg, St. Louis Fed, William Blair Equity Research

Every Vote Is Equal, but Doves Get More Votes Than Hawks

Every vote on the FOMC counts equally, but not all committee members get to vote each time. The FOMC is made up of 19 members—7 on the board of governors and 12 regional Fed presidents. All 19 members have a chance to contribute their views at each meeting as well as their estimates on the dot plot and the Summary of Economic Projections, yet only 12 vote at the meeting.

These 12 include the 7 Fed governors, who have a permanent vote, and only 5 regional Fed presidents, whose voting power rotates annually among 4 of the presidents while the New York Fed president retains a permanent vote.

Typically the chair also chooses when they speak at each meeting, which is indicative of their style of leadership. Fed Chair Greenspan, for example, liked to speak after everyone had spoken so he could assess and rebut (if necessary) any views that might not coincide with his own, whereas Bernanke preferred to speak ahead of the other members to help frame a more consensual discussion.

Yet, the fact that the governors have 7 of the 12 votes and that they tend to be much more dovish than the presidents skews the committee toward being more dovish than hawkish over time.

Governors are also appointed for 14-year terms (staggered every two years), whereas the chair and vice chair are appointed for 4-year renewable terms. Fed presidents, conversely, have synchronized fixed 5-year terms. However, they can also be reappointed upon completion. Which is what just happened yesterday—a process that was seemingly accelerated this time around, possibly due to fears about President Trump seeking to block some changes to yield greater control over the Committee. Fed presidents are supposed to retire at 65 (or 70 if they are appointed after the age of 55).

The Committee in 2026

Exhibit 3 shows the current list of voting and nonvoting members in 2026, and their FOMC hawkish or dovish spectrometer scores. The governors again skew dovish, which is consistent with history.

Exhibit 3
FOMC in 2026

	Board of Governors		**Term Ends**	**+Hawkish / - Dovish**
	Nominated by the President, Confirmed by the Senate			
Permanent Vote	**Jerome H. Powell**	Chair / Governor	May 2026 / Jan 2028	0
Permanent Vote	**Philip N. Jefferson**	Vice Chair / Governor	May 2027 / Jan 2036	0
Permanent Vote	**Michelle W. Bowman**	Vice Chair of Supervision	May 2029 / Jan 2034	-2
Permanent Vote	**Michael S. Barr**	Governor	31-Jan-32	0
Permanent Vote	**Lisa D. Cook**	Governor	31-Jan-38	-2
Permanent Vote	**Stephen I. Miran**	Governor	31-Jan-26	-2
Permanent Vote	**Christopher J. Waller**	Governor	31-Jan-30	-2

	Regional Bank Presidents	**Term Ends**		**Hawk/ Dove Count**
	Nominate by Regional Fed Board of Directors, Confirmed by Fed's Board of Governors			
	John C. Williams – New York	28-Feb-31	-1	
Voting member in 2026	Beth M. Hammack – Cleveland	28-Feb-31	2	2
Voting member in 2026	Anna Paulson – Philadelphia	28-Feb-31	-1	
Voting member in 2026	Lorie K. Logan – Dallas	28-Feb-31	1	
Voting member in 2026	Neel Kashkari – Minneapolis	28-Feb-31	0	
Voter in 2025	Alberto G. Musalem – St. Louis	28-Feb-31	1	3
Voter in 2025	Jeffrey R. Schmid – Kansas City	28-Feb-31	2	
Voter in 2025	Austan D. Goolsbee – Chicago	28-Feb-31	0	
Voter in 2025	Susan M. Collins – Boston	28-Feb-31	0	
Non-Voters	Tom Barkin – Richmond	28-Feb-31	1	
Non-Voters	Raphael Bostic – Atlanta *(announced resignation)*	28-Feb-26	0	
Non-Voters	Mary C. Daly – San Francisco	28-Feb-31	-1	

Sources: Bloomberg Fed Spectrometer, William Blair Equity Research

Stephen Miran's short term ends at the end of January (he was slotted in to finish the term for Adriana Kugler, who departed six months early). It is likely that the president's chosen new Fed chair will be given Miran's seat on the board, to then assume the position of chair from Powell in May. Chair Powell could stay on to finish out his term as governor until 2028, though this would be very much against convention.

If Trump swaps Kevin Hassett (the current also dovish frontrunner for Fed chair) for Miran (a super dove), this would likely do little to alter the stance of the committee, though the committee could turn more dovish once the president replaces Powell's governorship. It is even possible that Miran could return to take up Powell's remaining two years of governorship.

Changes among the regional Fed presidents were also looking to skew slightly more dovish than hawkish according to Fed spectrometer scores, with a cumulative rating of 3 for the 4 replacements, compared to 2 for the current group.

However, this week's dot plot revealed that six members of the committee believed that the Fed should not have lowered rates at this past meeting. As we know, two dissented in favor of no change, meaning that the other four are, therefore, nonvoting members—some, or all of whom could be rotating to becoming voting members next year—indicating that the committee could turn more hawkish than believed. Interestingly, three Committee members this week also placed dots at 3.875% in 2026, i.e., expecting the Fed to actually raise rates next year.

Conclusion

The recent rise in dissent within the FOMC marks a significant departure from the decades-long tradition of more consensus-driven decision-making.

While unity has historically been viewed as essential for maintaining market confidence and policy predictability, the growing diversity of views—particularly with potential leadership changes ahead—signals a more dynamic and potentially less predictable policy environment in 2026. Nevertheless, this is likely to be balanced with a committee that seems to be tilting more dovish than hawkish in 2026—at least with respect to the vote from the governors, perhaps now less so with the presidents given this week's dot plot.

From where we stand today looking out over the next 12 months, we would not count on more rate cuts, given the current economic data on employment and inflation, in addition to already extremely accommodative financial conditions; however, given the changes afoot, we certainly would not rule one out.

14 December 2025

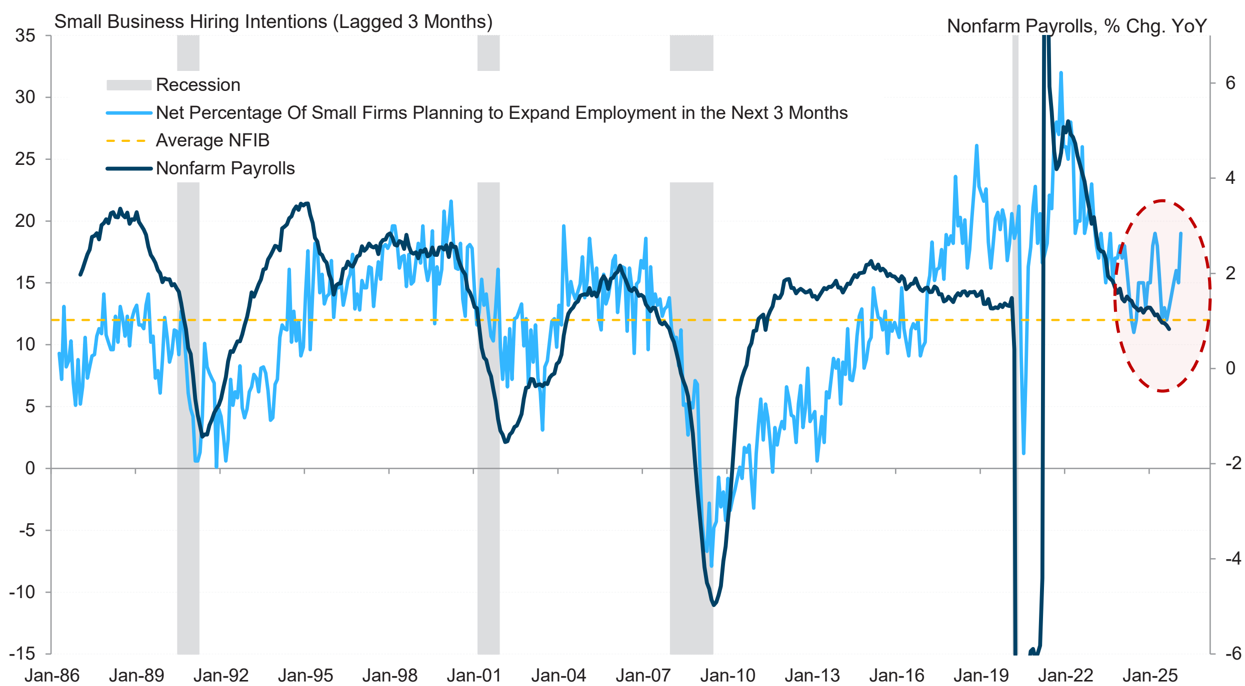
Highlights in the Week Ahead

Date	Time (ET)	Indicator	Last	Consensus	WB Estimate	Actual
16 Dec	8:30 a.m.	Nonfarm Payrolls (Nov)	NA	40K	60K	
		Unemployment Rate	NA	4.4%	4.4%	
		Average Hourly Earnings	NA	3.7%	3.6%	
16 Dec	8:30 a.m.	Advance Retail Sales (Oct)	0.2%	0.3%	0.3%	
		Sales Less-Autos	0.3%	0.3%	0.2%	
18 Dec	8:30 a.m.	Consumer Price Index (Nov)	NA	NA	0.2%	
		CPI Less-Food & Energy	NA	NA	0.2%	

Sources: Bloomberg, William Blair Equity Research

Indicator of the Week: Employment Situation

Small Business' Hiring Intentions vs Nonfarm Payroll Annual Growth, %



Source: NFIB, Bureau of Labor Statistics , William Blair Equity

Economic Scorecard

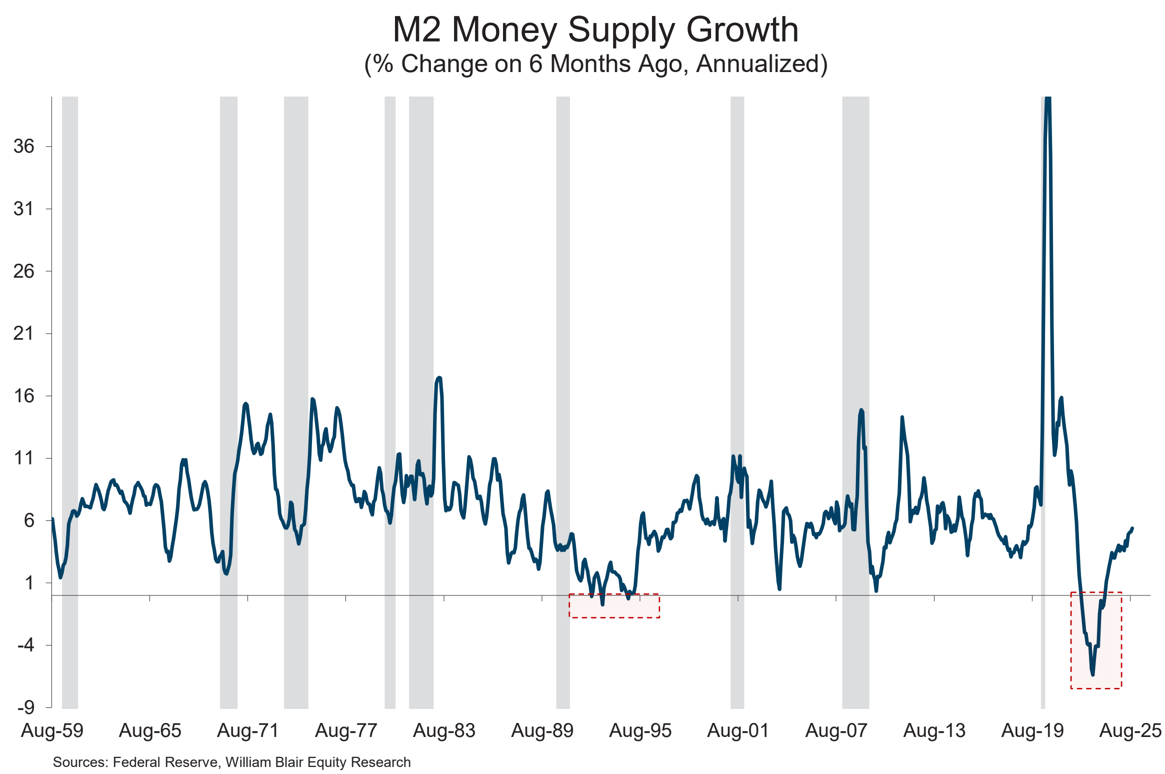
Rolling monthly heat map, % Change on Year Ago (unless otherwise noted)

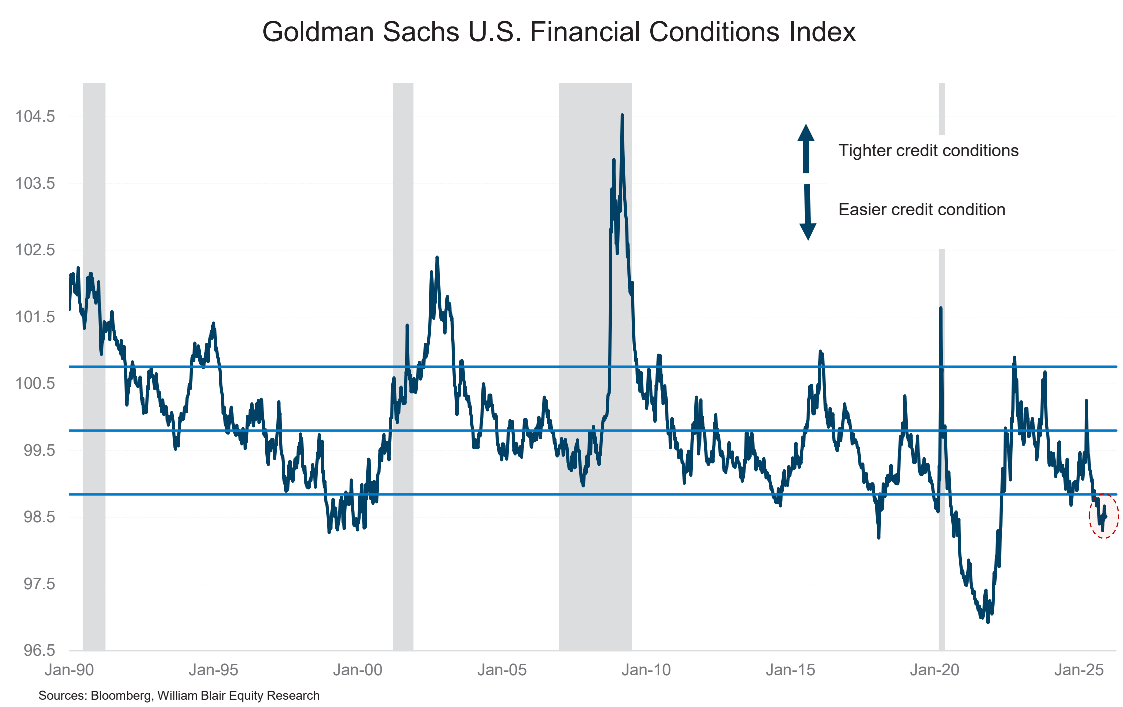
	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
Growth																			
US Leading Indicators	-4.5	-4.7	-4.6	-4.3	-3.7	-3.0	-3.0	-2.7	-3.0	-3.6	-4.3	-3.9	-3.9	-3.4	-3.4	-3.3			
US Coincident Indicators	2.1	1.7	1.7	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	1.1	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	2.3	3	1.8	2	3.1	3.9	4.6	4.6	3.9	5.1	5	3.4	4.4	4.1	5	4.3			
Personal Income	5.7	5.6	5.4	5.3	5.5	5.3	5.3	5	5	5.2	5.8	4.9	4.7	5	5.2	5.2			
Real Disposable Personal Income	3.1	2.9	2.8	2.8	2.7	2.4	2.2	1.8	1.8	2.3	3	1.9	1.6	1.9	2	1.9			
Real Personal Consumption	3.1	3	3	3.4	3.3	3.2	3.6	3.3	2.7	3.2	3.1	2.5	2.5	2.5	2.6	2.1			
Personal Saving Rate (%)	5.7	5.3	5.2	4.8	5	4.9	4.3	5.1	5.2	5.1	5.7	5.2	5	4.9	4.7	4.7			
Consumer Confidence (Conference Board)**	97.8	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	88.7	
Employment																			
Employment Growth	1.3	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			
ASA Temporary Staffing Index	-9.9	-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	
ISM Employment Index Manufacturing*	48.4	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	
ISM Employment Index Services*	46.7	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	
Unemployment Rate, %	4.1	4.2	4.2	4.1	4.1	4.2	4.1	4	4.1	4.2	4.2	4.2	4.1	4.2	4.3	4.4			
Average Hourly Earnings	3.9	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	3.8			
Initial Jobless Claims (avg. wkly. chg. '000s)	237	237	230	225	236	219	222	218	227	223	226	235	241	221	231	235	225		
Jop Openings	-19.4	-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	0.7	-4.5	
Layoff Announcements	19.8	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	
Housing Market																			
Housing Starts	-6.6	-13.4	5.6	-1	-1.2	-14.5	-0.5	-1.7	-4	3.3	0.9	-2.6	4.1	13	-6				
New Home Sales	-0.4	1.1	7.4	5.3	-8.8	10.7	11.7	-2.8	-2.4	-4.6	-1.8	-5.7	0.7	-6.5	15.4				
Existing Home Sales	-5.1	-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				
Median House Price (Existing Homes)	-0.9	-1.6	-8	-1.2	2.1	-7.4	1.1	-0.2	-1.4	-5.4	-0.4	2.5	-2.5	-7.9	1.9				
Existing Homes Inventory (Mths' supply)	3.8	3.7	3.9	3.9	4	3.9	3.8	3.7	3.9	3.8	4.2	4.3	4.3	4.4	4.3				
New Homes Inventory (Mths' supply)	8.4	7.9	8.2	7.9	9.3	8.7	8.2	9	9.3	9.2	8.5	9.6	8.9	9	7.4				
NAHB Homebuilder Sentiment*	43	41	39	41	43	46	46	47	42	39	40	34	32	33	32	32	37	38	
Inflation																			
Consumer Price Index	3	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			
CPI Less-food & energy	3.3	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			
Producer Price Index	2.9	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	2.7			
PPI Less-food & energy	3.3	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	2.6			
PCE Price Index	2.5	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			
PCE Prices Less-food & energy	2.8	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			
Business Activity - US																			
Industrial Production	-1.5	-3.0	-2.6	-3.4	-3.0	-3.5	-2.2	0.9	0.8	0.6	0.9	0.1	0.5	1.6	0.9	1.6			
New Cap Gds Orders less-aircraft & parts	-4	-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			
Business Inventories	1.2	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			
ISM Manufacturing PMI*	48.3	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	
Markit US Manufacturing PMI*	51.6	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	
ISM Services Index*	49.2	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	
Markit US Services PMI*	55.3	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	
Business Activity - International																			
Germany Manufacturing PMI Markit/BME*	43.5	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	
Japan Manufacturing PMI Jibun Bank*	50.1	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	
Caixin China Manufacturing PMI*	51.8	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	
China Manufacturing PMI*	49.5	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	
UK Manufacturing PMI Markit/CIPS*	50.9	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	
France Manufacturing PMI Markit*	45.4	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	
Currencies* **																			
Euro (EUR/USD)	-1.8	-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	
Renmimbi (USD/CNY)	0.2	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	
Yen (USD/Yen)	11.5	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	
Sterling (GBP/USD)	-0.5	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	
Canadian $ (USD/CAD)	3.3	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	
Mexican Peso (USD/MXN)	7.0	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	
US Equities																			
S&P 500	22.7	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	
S&P 400 Midcap	11.7	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	
S&P 600 Smallcap	6.6	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	
Russell 2000	8.4	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	

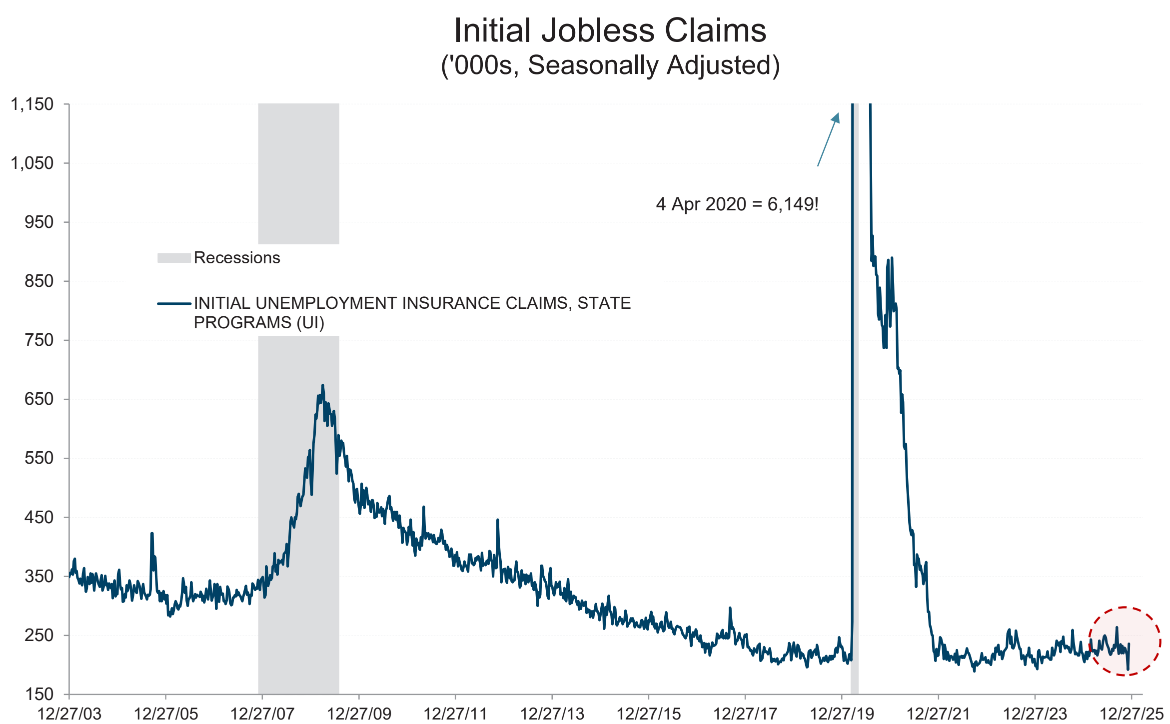
* Diffusion Index, **1985=100, ***Currencies - green/red = strengthening/weakening foreign currency vs dollar

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

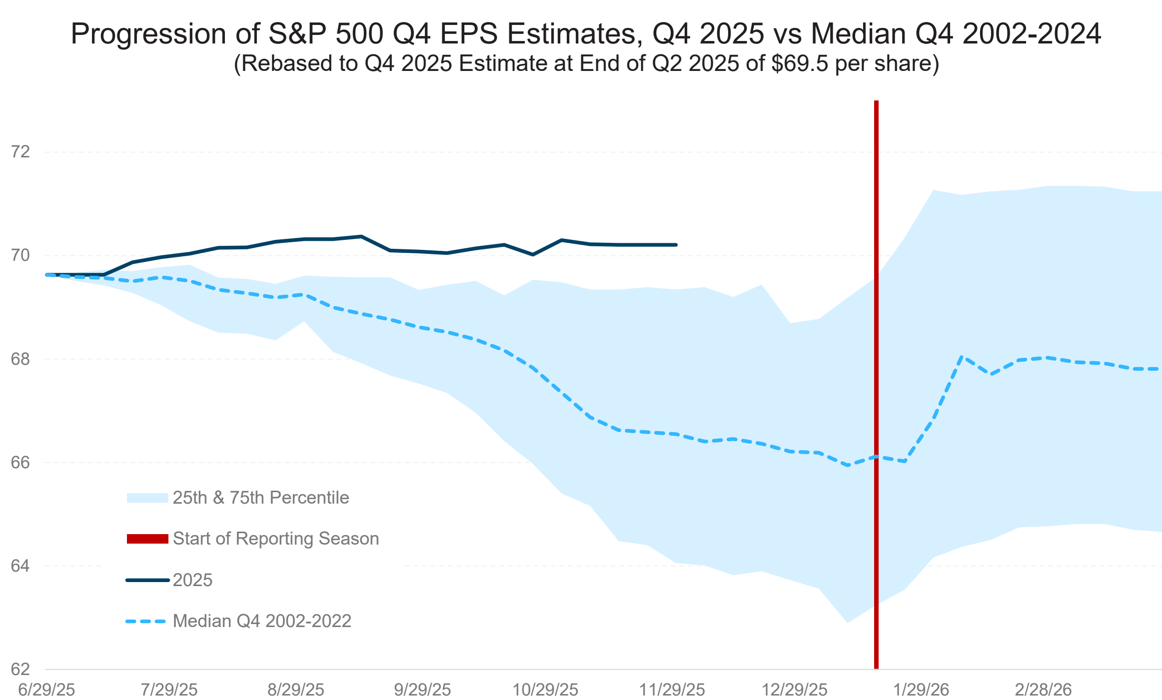
Other Economic Indicators



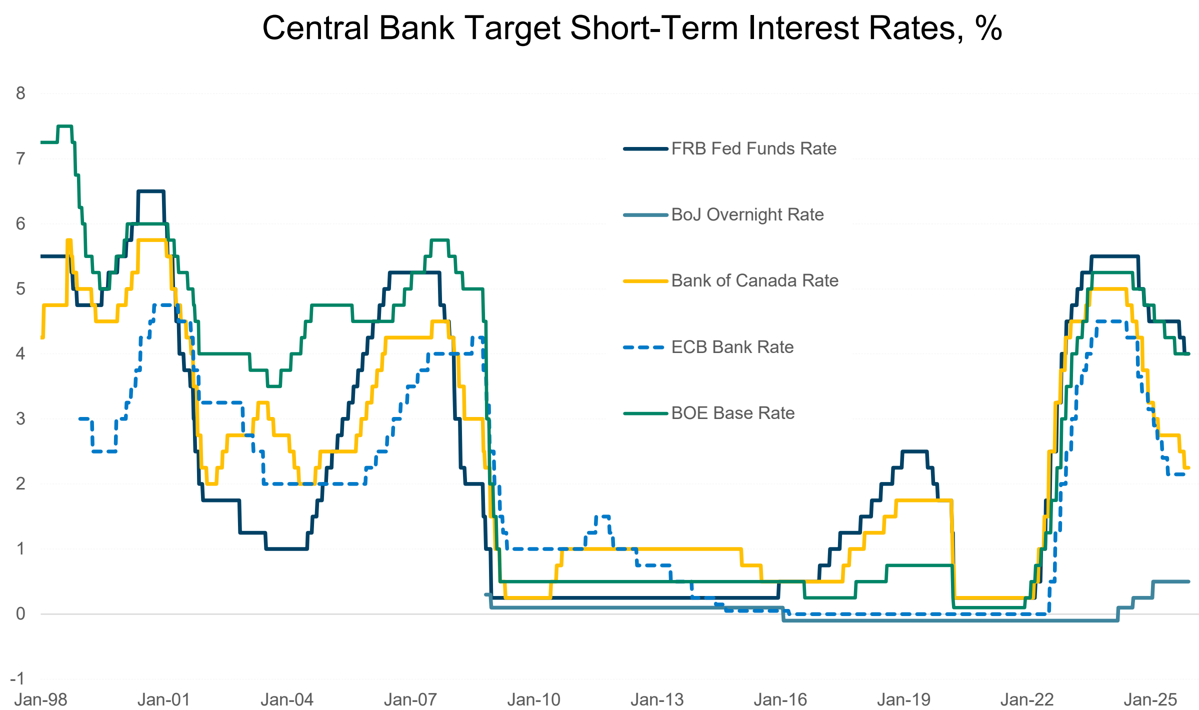




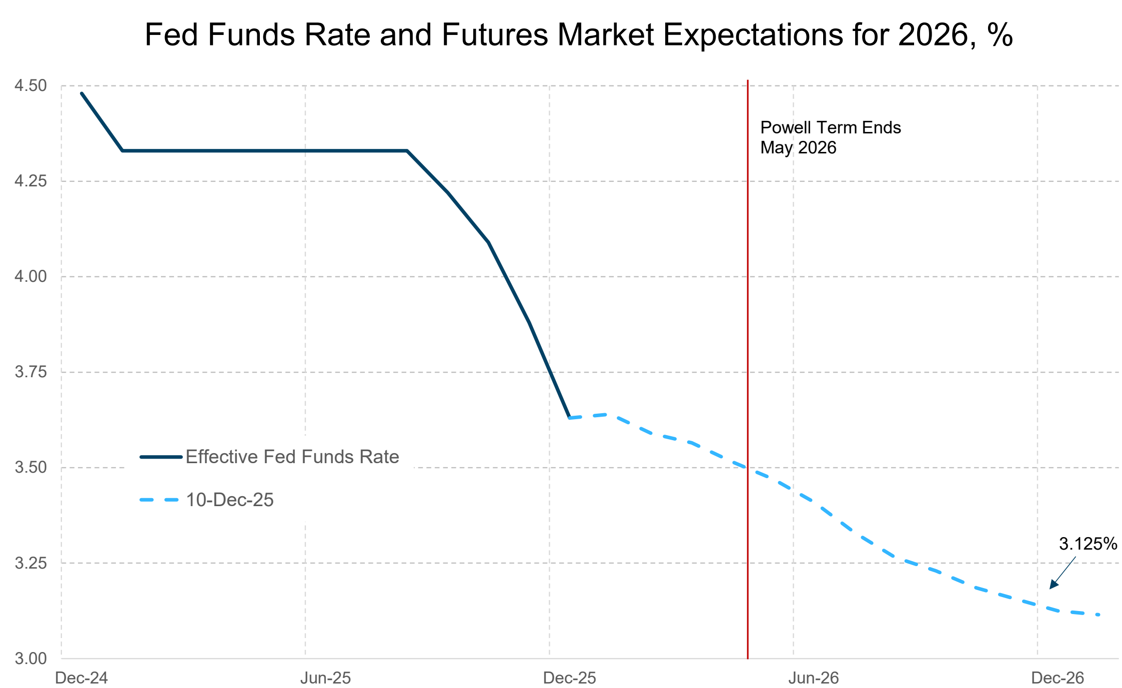
Source: Department of Labor, Bloomberg, William Blair Equity Research



Sources: LSEG, William Blair Equity Research



Sources: Bloomberg, William Blair Equity Research



S&P 500 Sector Performance

Global Industry Classification System	Current Weight* 11-Dec-25	Week Ago 04-Dec-25	Month Ago 11-Nov-25	Qtr-to-Date 30-Sep-25	Year-to-Date 31-Dec-24
S&P 500 Index	**100.00**	**0.64**	**0.79**	**3.18**	**17.33**
S&P 400 MidCap Index		**2.31**	**4.05**	**4.03**	**8.79**
S&P 600 SmallCap Index		**2.98**	**4.79**	**5.32**	**8.40**
Dow Jones Industrials		**1.78**	**1.62**	**4.97**	**14.48**
Nasdaq Composite		**0.38**	**0.54**	**4.12**	**22.18**
Communication Services	**10.50**	**-1.60**	**3.26**	**6.32**	**31.50**
Advertising	0.07	5.32	-2.80	-12.06	-40.06
Broadcasting	0.07	4.01	2.97	4.60	42.44
Cable & Satellite	0.20	2.18	0.68	-14.11	-28.67
Integrated Telecommunication Services	0.55	-3.43	-2.37	-11.34	3.61
Interactive Home Entertainment	0.15	-0.94	0.79	-2.58	34.76
Interactive Media & Services	7.89	-1.50	6.35	13.32	43.98
Movies & Entertainment	1.20	-2.10	-9.16	-11.66	11.46
Publishing & Printing	0.02	1.74	-2.58	-14.86	-4.59
Wireless Telecommunication Svcs	0.35	-6.10	-7.86	-18.40	-11.51
Consumer Discretionary	**10.49**	**0.66**	**-1.55**	**0.87**	**5.65**
Apparel Retail	0.37	3.49	7.94	10.60	26.70
Apparel & Accessories & Luxury Goods	0.10	4.39	14.52	9.47	-6.07
Auto Parts & Equipment	0.03	4.53	-2.08	-7.33	26.66
Automobile Manufacturers	2.58	-1.02	2.28	2.33	13.49
Automobile Retail	0.22	-7.35	-6.30	-15.39	8.15
Broadline Retail	3.99	0.55	-7.49	4.65	5.41
Casinos & Gaming	0.11	0.74	1.54	11.91	20.22
Computer & Electronics Retail	0.03	1.23	-3.49	-0.86	-12.62
Consumer Electronics	0.06	4.31	5.58	-14.39	2.20
Distributors	0.06	3.01	1.37	-7.53	-6.84
Footwear	0.15	3.46	9.42	-2.42	-20.58
Home Furnishings	0.01	0.63	3.50	-12.61	-5.43
Home Improvement Retail	0.79	1.50	-1.90	-9.06	-5.84
Homebuilding	0.19	-2.76	2.43	-6.29	4.76
Hotels, Resorts & Cruise Lines	0.83	4.87	4.10	1.08	9.60
Leisure Products	0.02	2.58	7.05	10.69	50.16
Restaurants	0.85	0.85	3.39	-3.84	-2.20
Other Specialty Retail	0.09	2.48	1.85	-1.06	13.53
Consumer Staples	**5.22**	**-0.08**	**0.98**	**0.02**	**2.06**
Agricultural Products	0.07	0.27	1.59	4.42	19.24
Brewers	0.01	3.27	-0.21	4.00	-17.90
Distillers & Vintners	0.06	7.43	12.95	11.64	-30.01
Food Distributors	0.06	1.08	-1.67	-9.85	-2.92
Food Retail	0.07	-1.47	-4.32	-7.71	1.73
Household Products	0.73	-2.53	-4.30	-8.52	-17.23
Packaged Foods & Meats	0.37	-0.34	-1.27	-6.20	-12.37
Personal Care Products	0.09	1.82	8.77	12.10	-0.81
Soft Drinks	0.98	-0.29	-0.02	5.95	6.16
Tobacco	0.53	1.31	-2.51	-8.21	21.18
Energy	**2.75**	**-0.11**	**-0.20**	**2.30**	**6.67**
Integrated Oil & Gas	1.35	0.76	-1.44	1.94	7.18
Oil & Gas Equipment & Services	0.21	1.00	2.73	9.57	9.03
Oil & Gas Exploration & Production	0.57	-0.97	1.55	3.10	1.49
Oil & Gas Refining & Marketing & Transportation	0.27	-0.15	-3.27	1.08	33.00
Oil & Gas Storage & Transportation	0.35	-2.61	2.75	-0.73	-3.55

Financials	**12.62**	**2.23**	**3.04**	**1.54**	**13.20**
Asset Management & Custody Banks	1.10	4.31	6.75	0.28	7.09
Consumer Finance	0.72	4.11	6.50	14.92	32.30
Diversified Banks	3.15	1.72	4.12	4.76	30.42
Diversified Financial Services	7.48	2.44	2.60	1.01	9.78
Financial Exchanges & Data	1.00	0.46	-0.84	-1.80	4.83
Insurance Brokers	0.46	0.41	-0.52	-10.39	-10.03
Investment Banking & Brokerage	1.42	2.76	5.18	5.88	41.50
Life & Health Insurance	0.29	3.91	3.51	2.84	4.63
Multi-Sector Holdings	1.09	-1.47	-0.25	-1.37	9.39
Property & Casualty Insurance	0.94	1.85	2.57	0.19	6.96
Regional Banks	0.28	4.80	10.82	6.73	15.75
Reinsurance	0.02	3.40	-0.02	-7.39	-10.51
Transaction & Payment Processing	2.08	4.43	1.27	-2.67	-3.14
Health Care	**9.21**	**-0.29**	**1.74**	**9.95**	**11.27**
Biotechnology	1.54	-2.14	0.00	6.82	21.16
Health Care Distributors	0.36	0.72	-4.41	11.16	48.67
Health Care Equipment	1.86	-2.19	-1.67	1.96	7.13
Health Care Facilities	0.20	-1.30	3.73	12.70	54.92
Health Care Services	0.36	2.92	0.54	-0.31	28.43
Health Care Supplies	0.07	2.92	13.42	20.53	-6.43
Life Sciences Tools & Services	0.90	0.47	1.66	17.60	5.84
Managed Health Care	0.71	2.81	5.92	0.51	-27.59
Pharmaceuticals	3.23	0.44	4.56	18.80	19.72
Industrials	**7.86**	**1.73**	**2.08**	**1.97**	**19.38**
Aerospace & Defense	2.01	1.03	-2.10	-2.71	34.65
Agricultural & Farm Machinery	0.21	-1.47	-0.42	4.09	12.33
Air Freight & Logistics	0.29	4.21	6.45	21.02	-3.05
Building Products	0.44	0.94	-2.49	-2.77	6.40
Cargo Ground Transportation	0.08	4.49	15.52	23.01	-2.26
Construction & Engineering	0.16	0.51	2.75	8.12	40.08
Construction Machinery & Heavy Trucks	0.74	3.83	10.27	25.58	51.43
Data Processing & Outsourced Services	0.04	0.27	3.87	-2.80	2.39
Diversified Support Svcs	0.18	1.58	-1.30	-10.17	-12.69
Electrical Components & Equipment	0.55	2.94	1.14	2.38	12.77
Environmental & Facilities Services	0.33	-1.73	2.87	-5.09	5.70
Heavy Electrical Equipment	0.30	11.94	22.24	14.52	114.09
Human Resource & Employment Services	0.27	1.92	2.92	-9.74	-11.90
Industrial Conglomerates	0.34	0.32	-1.94	1.95	3.92
Industrial Machinery	0.65	2.55	3.36	5.98	9.98
Passenger Airlines	0.16	6.15	20.31	20.57	15.91
Passenger Ground Transportation	0.28	-6.10	-8.72	-12.79	41.65
Railroads	0.44	0.32	4.64	0.54	10.95
Research & Consulting Svcs	0.16	-0.38	-2.00	-9.84	-5.79
Trading Companies & Distributors	0.24	3.14	2.10	-7.92	10.60
Information Technology	**33.36**	**1.04**	**-0.09**	**3.58**	**26.11**
Application Software	2.72	3.71	3.65	1.00	10.79
Communications Equipment	0.89	2.45	5.36	2.53	20.27
Electronic Components	0.40	3.27	0.38	13.76	100.81
Electronic Equipment & Instruments	0.15	2.03	8.77	3.26	10.74
Electronic Manufacturing Services	0.15	5.28	1.71	10.38	68.80
Internet Software & Services	0.08	-2.20	-3.65	-5.79	-14.61
IT Consulting & Services	0.84	1.06	4.26	10.61	3.13
Semiconductor Equipment	1.02	3.43	9.21	25.16	88.43
Semiconductors	12.54	1.53	0.39	6.70	46.60
Systems Software	7.48	-0.09	-5.88	-8.42	13.11
Technology Distributors	0.03	3.68	5.04	-5.91	-13.89
Technology Hardware, Storage & Peripherals	7.05	-0.35	1.31	9.45	13.31
Materials	**1.60**	**1.85**	**2.10**	**-0.65**	**7.03**
Commodity Chemicals	0.05	6.28	7.16	0.55	-38.92
Construction Materials	0.12	2.03	1.64	-1.26	19.25
Copper	0.11	7.85	17.14	22.67	26.34

Fertilizers & Agricultural Chemicals	0.10	-0.12	-1.15	-8.23	6.84
Gold	0.17	9.59	10.53	17.92	167.11
Industrial Gases	0.39	-1.69	-5.83	-14.14	-6.67
Metal & Glass Containers	0.02	0.74	4.15	-2.40	-10.74
Paper Packaging	0.15	2.32	2.10	-5.66	-19.20
Specialty Chemicals	0.38	0.22	0.86	1.89	1.01
Steel	0.10	2.65	14.82	23.41	46.03
Real Estate	**1.74**	**-0.71**	**-2.29**	**-3.11**	**0.25**
Data Center REITs	0.21	1.66	-7.20	-5.57	-16.39
Health Care REITs	0.29	-7.60	-3.64	0.16	25.70
Hotel & Resort REITs	0.02	5.65	1.00	6.52	3.48
Industrial REITs	0.19	1.86	3.41	14.02	23.52
Multi-Family Residential REITs	0.00	-0.68	-0.19	-5.68	-15.24
Office REITs	0.02	1.51	-1.10	-3.66	-3.68
Other Specialized REITs	0.09	1.85	-10.48	-13.71	-9.99
Real Estate Service	0.12	-0.79	1.66	-7.70	9.84
Retail REITs	0.23	-1.11	-1.33	-4.86	1.52
Self-Storage REITs	0.12	-0.07	-1.17	-5.39	-9.60
Single-Family Residential REITs	0.12	-0.07	-1.17	-5.39	-9.60
Telecom Tower REITs	0.23	2.14	-2.39	-4.61	-1.03
Timber REITs	0.03	8.42	2.03	-6.41	-17.58
Utilities	**2.11**	**-1.65**	**-4.47**	**-1.96**	**12.87**
Electric Utilities	1.38	-1.63	-4.17	0.00	14.95
Gas Utilities	0.04	-2.26	-6.48	-2.15	19.98
Independent Power Producers & Energy Traders	0.11	-0.64	-2.45	-8.63	23.98
Water Utilities	0.04	0.90	0.06	-6.54	4.50
Multi-Utilities	0.53	-2.02	-5.78	-5.04	5.83

*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: 48704.00
S&P 500: 6901.00
NASDAQ: 23593.80

Additional information is available upon request.

Current Rating Distribution (as of December 11, 2025):

Coverage Universe	Percent	Inv. Banking Relationships *	Percent
Outperform (Buy)	71	Outperform (Buy)	10
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 & Company, L.L.C. licenses and applies the SASB Materiality Map® and SICSTM in our work.