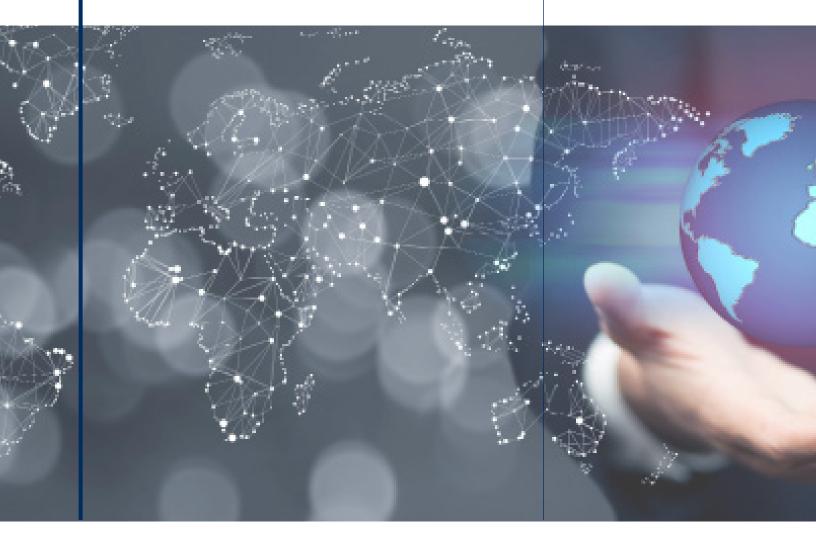


Equity Research Macroeconomics

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Economics Weekly Valuations and Bubbles



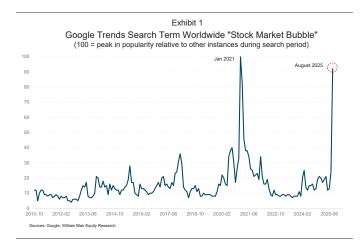
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It feels a little like investors have returned from their August beach holiday, and, with a fresh pair of eyes at the start of September, looked at the stock market and its valuations and once again started to question whether we are in the midst of an equity market bubble. In the last few weeks, we have had a large number of investors sending us uncomfortable looking charts of stock market valuations as proof the market is in bubble territory. In this *Economics Weekly* we again discuss the issue of a stock market bubble, with the view that parts of the market are very richly valued on some measures and market return expectations should be tempered, but today's market would not yet seem to qualify as a bubble.

Reasons for Concern...

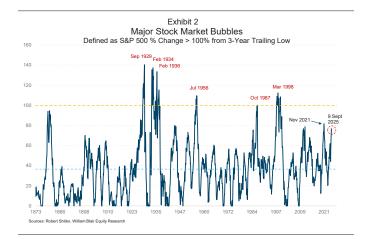
High Valuations Today Suggest Lower Returns Tomorrow In the last few days we have seen both the S&P 500 and the NASDAQ indices hitting record highs. While this may not be particularly shocking, we have also continued to see staggering increases in what are already global mega-cap companies. For example, this week saw a 36% *one-day* gain by Oracle (market cap \$933 billion). This gain is also a good example for investors of the difficulty in trying to time the market.

Nevertheless, with these sorts of gains it is no surprise that we are once again hearing plenty of banter about bubbles and growing fears about a stock market correction. Indeed, a quick scan of the internet using Google Trends suggests we are clearly not alone in hearing this kind of talk or reading numerous articles on the subject (exhibit 1). The last time the bubble trend count was this high was notably during the GameStop frenzy of early 2021.

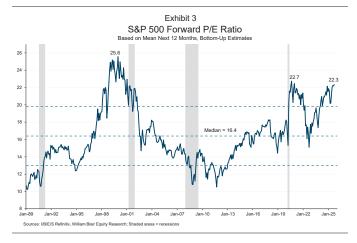


While there is no official definition of a bubble, it is generally associated with a sharp increase in price (normally a doubling) in a short time, followed by a swift decline—bubbles

are really only known after the fact, in that if there isn't a crash, then it probably wasn't a bubble. Exhibit 2, for example, shows the percentage change in the market from the low over the previous three years. The current reading shows the market is 76.8% higher than its three-year low, so not yet in bubble territory by this comparison.

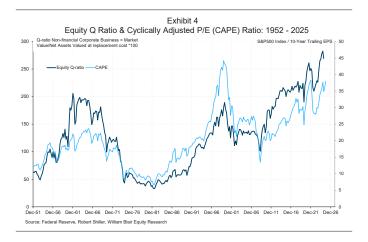


It is roughly the same reading as in 2021, which was also the last time the S&P 500 forward P/E multiple was as high as it is today at 22.3x relative to its historical median of 16x. It is not, however, as high as during what was a pure equity market bubble in the late 1990s, when the multiple reached 25.6x (exhibit 3).



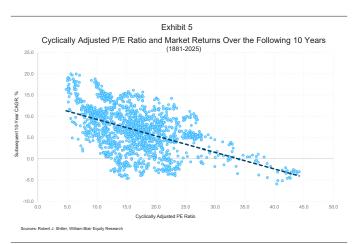
The higher the multiple, of course, the more investors are willing to pay for uncertain expected future earnings; and, therefore, the more sensitive and vulnerable they become to a future that may not turn out to be quite as perfect as they had previously expected. Given that such high multiples continue to reduce the margin for error, some investors are quite naturally starting to feel more uncomfortable about the market.

Other measures, meanwhile, such as the CAPE (cyclically adjusted P/E ratio) and the equity Q ratio—both independent of each other, and both mean reverting—are similarly elevated (exhibit 4). Unfortunately, neither of these are very good market timing tools.



While such readings do not mean a crash is imminent, they suggest that future returns are likely to be lower. Why? Because if an equity return is the sum of the dividend yield, inflation, real earnings growth, and a change in the P/E multiple, then it would suggest that there is now very little room for further multiple expansion to juice that return. In fact, the multiple is much more likely to act as a significant drag on the return, thereby putting more of the onus on real earnings growth, dividends, and inflation to drive price appreciation.

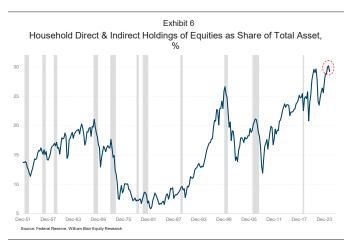
Looking back at what kind of returns today's CAPE reading has been associated with in the subsequent 10 years is sobering. Exhibit 5 plots the CAPE ratio against the subsequent 10-year real CAGR. It suggests that the current CAPE of 37.97x would be associated with an inflation-adjusted total return of -1.61%, or essentially flat in nominal terms.



Household Exposure to the Equity Market Is High

Another reason we should be wary of high multiples and the risk of potential future volatility in the stock market is that households' exposure to the equity market has never been higher.

Exhibit 6 shows that the current value of households' holdings of equities (\$55.6 trillion) relative to their total asset portfolio (\$190.1 trillion) is 29%.

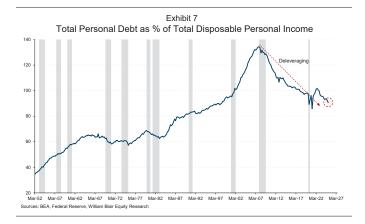


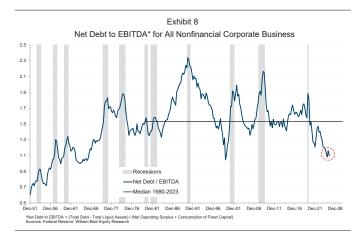
This increase has been a result of the rapid appreciation of the equity market and what we suspect is likely to be a second factor: many households, put off by high mortgage rates and elevated house prices, may have logically decided to allocate what funds they had been saving for a mortgage down payment into the rapidly rising stock market.

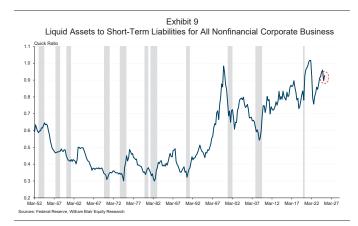
...But Not to Panic

Private Sector Balance Sheets Are in Good Shape

While equity valuations are elevated and household exposure to the equity market is high, their debt levels are extremely low across all standard metrics (exhibit 7). Similarly, cash levels or total liquid assets (e.g., deposits and money market mutual fund holdings) are also high, and this is also the case for the corporate sector (exhibits 8 and 9).





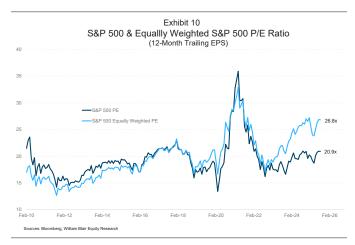


This suggests that while equity markets have been rising, they have not been accompanied by a major private sector credit boom (the special sauce that typically turns a mild downturn into a recession or depression). As a result, the private sector is well placed to absorb volatility and has the balance sheet space to respond to lower interest rates should they be required. This was definitely not the case following the GFC, when interest rates went

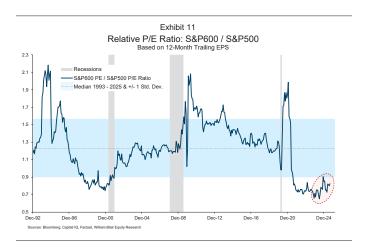
to zero and beyond, and the private sector was still reluctant to borrow.

Valuations Are Being Skewed by the Largest Stocks It is also noteworthy that the aggregate stock market's valuations are being very heavily skewed by largest-cap companies in the index, i.e., the Mag 7. Exhibit 10, for example, shows that the S&P 500 P/E based on 12-month trailing EPS is currently an elevated 26.8x, but the rest

of the S&P 500 as proxied by the equally weighted index has not followed the rise and is sporting a relatively much lower multiple of 20.9x.



Moving even further down the market cap spectrum reveals even lower multiples, with the S&P 600 the most attractive it has been since the late 1990s relative to the large caps (exhibit 11), consistent with the view that this part of the market has had plenty of bad news already priced in.



Marrying the Numbers and the Narrative

As Professor Aswath Damodaran likes to say, valuation is not a science, it is an art; and it is a blend between the narrative and the numbers.

Focusing entirely on the numbers and ignoring the narrative gives the illusion of precision: just because something is quantified does not mean it is accurate or meaningful; the illusion of objectivity: all valuations are biased, and numbers can be used selectively to support preconceived conclusions; and the illusion of control: complex models can intimidate others and mask the fact that valuations may be built on shaky assumptions.

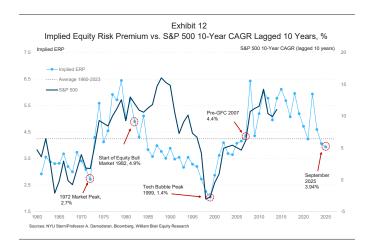
Damodaran tells us that without a guiding narrative, valuations become mechanical exercises that can end up describing companies that only exist in "spreadsheet nirvana." Still, focusing too much on the narrative can also be risky, as narratives can quickly become fantasy, are subject to emotional bias, and are where good storytelling can overshadow poor fundamentals, leading to overvaluation.

In short, "numbers without narrative is just modeling. Narrative without numbers is just storytelling. Good valuation is where the two meet."

While the numbers today are not overly attractive for the largest-cap stocks, they are attractive for the smaller and midcap stocks. And when it comes to the narrative, the opposite seems to be true—for the mega caps there is clearly a strong narrative around the likelihood that the economy is undergoing a major structural change with the advent of AI, though this narrative has yet to permeate the mid- and smaller-cap stocks.

As we have done in the past, we continue to track Damodaran's implied equity risk premium (ERP), which is a marriage between both the numbers and the narrative. The implied forward-looking ERP incorporates the narrative of forward earnings estimates against the numbers of current prices and interest rates (a spreadsheet of the data and inputs can be found here).

As indicated in exhibit 12, the latest reading for September 1 is 3.94%. This level looks to be consistent with investors demanding a lower risk premium relative to what they have been requiring in the years following the GFC. Looking back to 1960, however, shows the premium is just below the historical average, and, importantly, nowhere near the lows reached at the height of the internet bubble in the late 1990s. The current reading would be associated with a subsequent return 10-year CAGR closer to 5%.



Conclusion

Equity market valuations today for the aggregate stock market are high. History shows that subsequent returns following such high multiples are often low given there is little room for further contribution to the return from P/E expansion, and it is more likely that the expansion becomes contraction.

In today's market, however, there is a seeming lack of frenzy. IPOs are not flying off the shelf, though investors have been making more concentrated bets in a small handful of mega-cap stocks—and as Oracle demonstrated this week, these bets have the potential of paying off. Private sector balance sheets, meanwhile, are in good shape; households have not been loading up on credit, and they have plenty of space to respond to lower interest rates.

If market valuation is a marriage between the narrative and the numbers, the ERP is one way to gauge the state of this marriage. It currently shows that returns are likely to be lower than in more recent years, but not as dire as some numbers-oriented metrics suggest, and we are still far from the heady days of late 1960s and 1990s.

Highlights in the Week Ahead

Date	Time (ET)	Indicator	Last	Consensus	WB Estimate	Actual
16 Sep	8:30 a.m.	Advance Retail Sales (August)	0.5%	0.2%	0.1%	
		Sales Less-Autos	0.3%	0.4%	0.4%	
16 Sep	9:15 a.m.	Industrial Production (Aug)	0.5%	0.2%	-0.3%	
		Capacity Utilization	77.5%	77.4%	77.4%	
16 Sep	10:00 a.m.	Business Inventories (Aug)	0.2%	0.2%	0.2%	
17 Sep	8:30 a.m.	Housing Starts (Aug)	5.2%	-4.1%	-2.5%	
		Building Permits	-2.2%	0.6%	0.0%	
17 Sep	2:00 p.m.	FOMC Meeting	4.5%	4.25%	4.25%	
18 Sep	10:00 a.m.	Leading Economic Indicators (Aug)	-0.1%	-0.1%	-0.1%	

Sources: Bloomberg, William Blair Equity Research

Indicator of the Week: Advance Retail Sales

Retail Sales by Sector % Change on Previous Month												
•	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25
Total Retail Sales	-0.2	0.8	0.6	0.6	0.8	-0.9	0.0	1.5	-0.1	-0.8	0.9	0.5
Total Sales Less-Motor Vehicles &												
parts dealers	-0.1	0.9	0.3	0.0	0.7	-0.3	0.4	0.6	0.0	-0.1	0.8	0.3
GAFO*	-0.6	0.7	0.3	0.2	1.0	-0.1	-0.1	0.6	-0.3	0.2	0.5	N/A
Furniture & Home Furnishing	-0.2	1.5	-0.9	1.7	2.6	-1.4	0.6	0.1	0.0	-0.5	0.1	1.4
Electronics & Appliances	-2.4	-3.2	2.6	0.4	0.3	-0.6	0.8	1.4	0.1	-0.4	-0.3	-0.6
Building Materials, Garden												
Equipment Supply	-0.3	1.0	0.7	-0.4	-1.5	-1.8	-0.2	2.0	0.5	-2.7	1.3	-1.0
Food & Beverage	-0.5	1.0	0.2	-0.2	0.9	0.1	0.2	0.0	0.0	-0.6	0.8	0.5
Health & Personal Care	0.5	2.2	-0.8	-0.4	-0.5	-1.1	3.0	1.1	-0.3	0.6	1.0	0.4
Gasoline Stations	-1.3	-1.3	-0.1	0.1	2.0	1.1	-0.7	-2.8	-0.4	-0.7	0.6	0.7
Clothing Accessories	-0.7	0.8	0.8	-0.2	1.1	-0.5	-0.1	1.1	0.2	0.5	1.1	0.7
Sporting Goods, Hobbies, Books	1.2	1.0	-0.4	-0.2	2.8	-3.1	-0.6	3.8	-2.9	0.9	-0.7	0.8
General Merchandise	-0.7	0.8	0.3	0.0	0.6	0.7	-0.3	0.0	0.0	-0.1	0.5	0.4
Miscellaneous	0.7	2.7	-0.2	-3.8	5.0	0.6	2.0	1.3	-3.4	4.6	2.7	-1.7
Nonstore Retailers	0.9	1.4	0.6	0.4	1.0	-1.0	1.4	0.5	0.1	0.7	0.9	0.8
Food Svcs & Drinking Places	0.3	1.1	0.7	0.3	0.0	0.2	-0.5	2.5	0.8	-0.2	0.6	-0.4
Motor Vehicles & parts dealers	-0.6	0.2	2.0	3.4	1.0	-3.3	-1.4	5.3	-0.7	-3.8	1.4	1.6

*General Merchandise, Apparel and Accessories, Furniture and Other Sales

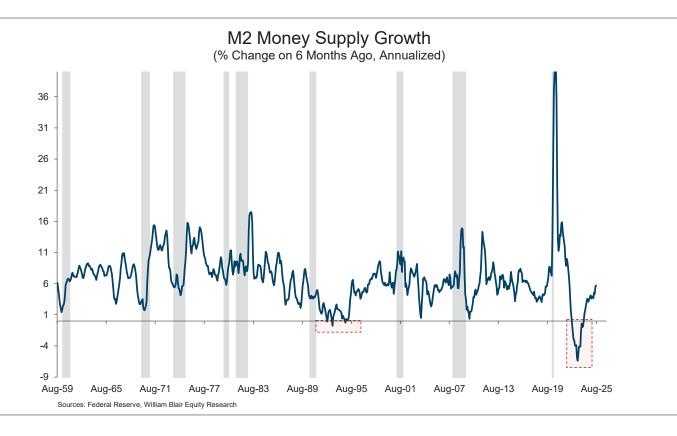
Source: U.S. Census Bureau, William Blair Equity Research

Economic Scorecard

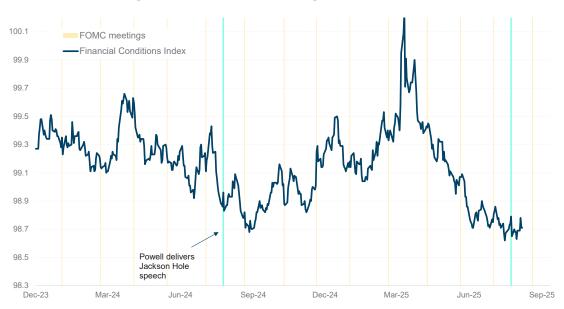
	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25
rowth	E E	E A	5 0	4 5	47	16	4.2	2.7	2.0	2.0	2.7	2.0	2.6	4.2	2.0	4.0	2.6	
US Leading Indicators US Coincident Indicators	-5.5 2.1	-5.4 1.7	-5.0 1.9	-4.5 2.1	-4.7 1.7	-4.6 1.7	-4.3 1.6	-3.7 1.6	-3.0 1.3	-3.0 1.7	-2.7 1.5	-3.0 1.5	-3.6 1.9	-4.3 2.0	-3.9 1.5	-4.0 1.4	-3.6 1.5	
	1.2	1.4	1.9	1.1	1.0	0.8	0.3	0.1	0.0	0.1	-0.1	0.1	-0.1	0.0	0.8	0.7		
US Lagging Indicators	1.2	1.4	1.2	1.1	1.0	0.8	0.3	0.1	0.0	0.1	-0.1	0.1	-0.1	0.0	0.8	0.7	8.0	
consumer																		
Total Retail Sales	3.4	2.6	2.8	2.3	3	1.9	2	3.1	3.9	4.6	4.6	3.9	5.1	5	3.4	4.4	3.9	
Personal Income	5.9	5.7	5.5	5.4	5.3	5	4.8	5.2	5.1	5.2	4.3	4.6	4.7	5.3	4.6	4.7	5	
Real Disposable Personal Income	3.1	2.8	2.8	2.7	2.6	2.4	2.4	2.5	2.3	2.2	1.3	1.5	1.9	2.7	1.7	1.7	2	
Real Personal Consumption	2.7	2.4	2.8	2.9	2.9	2.9	3.2	3.1	3.1	3.1	2.9	2.5	2.8	2.9	2.2	2.2	2.1	
Personal Saving Rate (%)	5.2	5.1	4.9	4.8	4.3	4.2	3.8	4.1	3.9	3.5	4.2	4.4	4.4	5	4.5	4.4	4.4	
Consumer Confidence (Conference Board)**	103.1	97.5	101.3	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	97.4
mployment																		
Employment Growth	1.5	1.5	1.4	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
ASA Temporary Staffing Index	-8.2	-9.3	-10.2	-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
ISM Employment Index Manufacturing*	47.5	48.2	50.4	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
ISM Employment Index Services*	48.5	46.6	47.5	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
Unemployment Rate, %	3.9	3.9	4	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
Average Hourly Earnings	4.2	3.9	4.1	3.9	3.6	4.2	3.9	4.1	4.2	4.1	3.9	3.9	3.9	3.8	3.8	3.7	3.9	3.7
	216	210	222	237	237	230	225	236	219	222	218	227	223	226	235	241	221	231
Initial Jobless Claims (avg. wkly. chg. '000s) Jop Openings	-15.5	-23.7	-15.1	-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	-4.3	-6.1
					9.2	-17.6									_			
Layoff Announcements	0.7	-3.3	-20.3	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
ousing Market																		
Housing Starts	-4.7	2.3	-16.9	-6.6	-13.4	5.6	-1	-1.2	-14.5	-0.5	-1.7	-4	3.3	0.9	-2.6	2.3	12.9	
New Home Sales	6.3	8.1	-10	-0.4	1.1	7.4	5.3	-8.8	10.7	11.7	-2.8	-2.4	-4.6	-1.8	-5.3	-2.2	-8.2	
Existing Home Sales	-3.3	-2.6	-3.1	-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	
Median House Price (Existing Homes)	-0.6	-0.5	-1.6	-0.9	-1.6	-8	-1.2	2.1	-7.4	1.1	-0.2	-1.4	-5.4	-0.4	2.1	-1.6	-5.9	
Existing Homes Inventory (Mths' supply)	3.5	3.5	3.5	3.8	3.7	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)	8.1	7.7	8.5	8.4	7.9	8.2	7.9	9.3	8.7	8.2	9	9.3	9.2	8.5	9.6	9.2	9.2	
NAHB Homebuilder Sentiment*	51	51	45	43	41	39	41	43	46	46	47	42	39	40	34	32	33	32
nflation																		
Consumer Price Index	3.5	3.4	3.3	3	2.9	2.5	2.4	2.6	2.7	29	3	2.8	2.4	2.3	2.4	2.7	27	2.9
CPI Less-food & energy	3.8	3.6	3.4	3.3	3.2	3.2	3.3	3.3	3.3	3.2	3.3	3.1	2.4	2.8	2.4	2.7	3.1	3.1
Producer Price Index	2.0	2.3	2.5	2.9	2.4	2.1	2.1	2.8	2.9	3.5	3.8	3.4	3.2	2.4	2.7	2.9	3.1	2.6
PPI Less-food & energy	2.3	2.5	2.7	3.3	2.6	2.8	3.3	3.6	3.4	3.7	3.9	3.7	3.8	3.1	3.2	2.6	3.4	2.8
PCE Price Index	2.8	2.7	2.6	2.4	2.5	2.3	2.1	2.3	2.5	2.6	2.6	2.7	2.3	2.2	2.4	2.6	2.6	
PCE Prices Less-food & energy	3.0	2.9	2.7	2.6	2.7	2.7	2.7	2.8	2.8	2.9	2.7	2.9	2.7	2.6	2.7	2.8	2.9	
susiness Activity - US																		
Industrial Production	-0.3	-0.8	0.0	0.9	-0.5	-0.1	-0.7	-0.4	-0.9	0.4	1.4	1.1	1.1	1.3	0.8	0.8	1.4	
New Cap Gds Orders less-aircraft & parts	-1.5	2.1	-2.8	-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	4.6	
Business Inventories	0.3	0.2	0.6	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	
ISM Manufacturing PMI*	49.8	48.8	48.5	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
Markit US Manufacturing PMI*	51.9	50	51.3	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
ISM Services Index*	51.3	49.6	53.5	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
Markit US Services PMI*	51.7	51.3	54.8	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
	01	01.0	01.0	00.0	00	00.7	00.2	00	00.1	00.0	02.0	0.	0 1 1	00.0	00.7	02.0	00.7	01.0
usiness Activity - International																		
Germany Manufacturing PMI Markit/BME*	41.9	42.5	45.4	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
Japan Manufacturing PMI Jibun Bank*	48.2	49.6	50.4	50	49.1	49.8	49.7	49.2	49	49.6	48.7	49	48.4	48.7	49.4	50.1	48.9	49.7
Caixin China Manufacturing PMI*	51.1	51.4	51.7	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
China Manufacturing PMI*	50.8	50.4	49.5	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
UK Manufacturing PMI Markit/CIPS*	50.3	49.1	51.2	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
France Manufacturing PMI Markit*	46.2	45.3	46.4	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
urrencies***																		
Euro (EUR/USD)	-0.5	-3.2	1.5	-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
Renmimbi (USD/CNY)	5.1	4.7	1.9	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
Yen (USD/Yen)	13.9	15.8	12.9	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
Sterling (GBP/USD)	2.3	-0.6	2.4	-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
Canadian \$ (USD/CAD)	0.2	1.7	0.4	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
		1.7 -4.8								22.7								
Mexican Peso (USD/MXN)	-8.2	-4.8	-3.8	7.0	11.2	15.8	13.0	11.0	17.2	22.1	20.1	20.5	23.6	14.4	14.3	2.3	1.4	-5.4
S Equities																		
S&P 500	27.9	20.8	26.3	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
S&P 400 Midcap	21.3	14.9	23.9	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
S&P 600 Smallcap	13.8	10.4	18.1	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
Russell 2000	17.9	11.6	18.3	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

^{*} 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

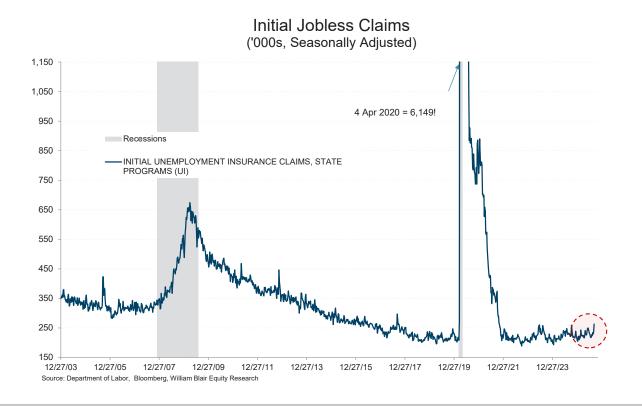
Other Economic Indicators

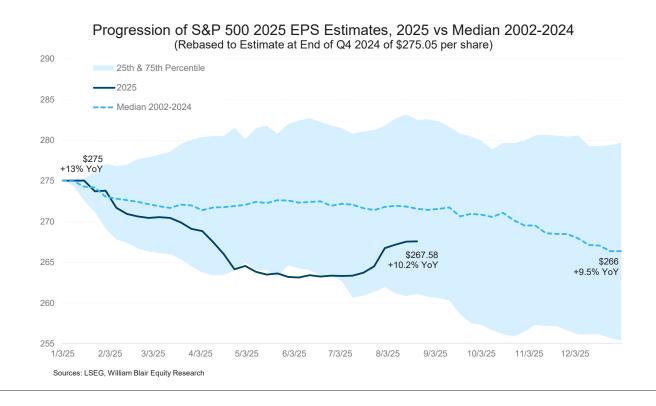


Goldman Sachs Financial Conditions Index



Sources: Bloomberg, William Blair Equity Research

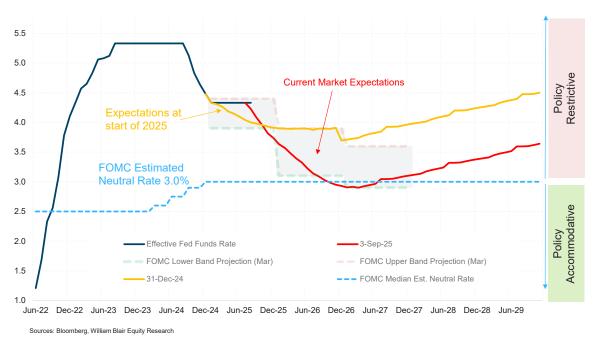




Central Bank Target Short-Term Interest Rates, %



Fed Funds Rate Futures Market Expectations & FOMC Projections, %



S&P 500 Sector Performance

Global Industry Classification System	Current Weight* 11-Sep-25	Week Ago 04-Sep-25	Month Ago 11-Aug-25	Qtr-to-Date 30-Jun-25	Year-to-Date 31-Dec-24
S&P 500 Index S&P 400 MidCap Index S&P 600 SmallCap Index Dow Jones Industrials Nasdaq Composite	100.00	1.31 1.17 1.09 1.07 1.54	3.36 6.69 8.22 4.85 3.08	6.16 6.97 9.56 4.57 8.21	12.00 6.35 3.77 8.38 14.15
Communication Services	10.35	1.17	7.86	12.02	23.91
Advertising	0.08	-6.56	-4.15	-24.61	-35.88
Broadcasting	0.07	0.29	16.88	7.96	26.19
Cable & Satellite	0.27	-1.08	5.58	-13.00	-13.29
Integrated Telecommunication Services	0.66	-0.20	3.58	1.95	19.81
Interactive Home Entertainment	0.15	1.80	3.37	3.80	24.19
Interactive Media & Services	7.27	2.21	10.06	20.19	27.29
Movies & Entertainment	1.37 0.03	-1.67 -0.12	2.37 2.52	-6.39 -2.01	26.27 6.91
Publishing & Printing Wireless Telecommunication Svcs	0.45	-0.12 -4.25	-3.00	1.31	9.36
Wifeless Teleconfinumcation sycs	0.43	-4.23	-3.00	1.31	9.30
Consumer Discretionary	10.80	0.59	5.51	8.52	3.93
Apparel Retail	0.34	-0.37	5.58	15.07	12.08
Apparel & Accessories & Luxury Goods	0.09	-7.67	-2.58	-4.15	-18.12
Auto Parts & Equipment	0.03	4.06	25.37	22.72	32.71
Automobile Manufacturers	2.22	8.16	8.65	15.92	-6.79
Automobile Retail	0.29	2.62	5.91	16.71	30.48
Broadline Retail	4.18	-2.40	3.77	5.13	5.44
Casinos & Gaming	0.11	-0.87	6.32	17.03	7.94
Computer & Electronics Retail	0.03	1.83	14.39	16.88	-8.56
Consumer Electronics	0.08	1.48	5.32	15.55	16.93
Distributors	0.07	2.25	8.30	9.01 6.16	5.68
Footwear Home Furnishings	0.18 0.01	-1.97 3.20	2.93 16.52	33.30	-12.03 17.31
Home Improvement Retail	0.96	2.88	10.32	17.34	9.25
Homebuilding	0.23	1.68	14.96	30.04	19.95
Hotels, Resorts & Cruise Lines	0.90	-0.87	6.91	2.23	13.32
Leisure Products	0.02	-0.56	3.07	8.30	42.99
Restaurants	0.92	-1.66	-1.07	-3.14	1.52
Other Specialty Retail	0.09	-1.19	2.42	12.81	15.91
Consumer Staples	5.56	0.26	-1.86	-0.66	4.40
Agricultural Products	0.08	-0.35	3.77	12.10	16.73
Brewers	0.02	-1.56	-2.35	2.16	-14.29
Distillers & Vintners	0.06	-2.12	-14.46	-9.80	-34.02
Drug Retail	0.02	0.00	1.01	4.36	28.40
Food Distributors	0.06	-1.78	1.46	7.00	5.99
Food Retail	0.07	-0.90	-9.58	-6.27	9.94
Household Products	0.87	-0.22	1.49	-1.30	-6.19
Packaged Foods & Meats	0.47	0.84	0.79	-1.83	-5.98
Personal Care Products	0.09	-5.67	-8.27	-4.37	-3.45
Soft Drinks	0.98	-1.47	-3.98	-0.37	2.19
Tobacco	0.62	2.79	-0.69	-2.39	35.42
Energy	2.83	0.03	5.10	4.26	3.28
Integrated Oil & Gas	1.42	-0.06	4.87	6.41	5.41
Oil & Gas Equipment & Services	0.20	0.45	10.39	12.78	-1.49
Oil & Gas Exploration & Production	0.58	-1.38	1.97	0.68	-1.96
Oil & Gas Refining & Marketing & Transportation	0.26	1.33	15.29	12.43	24.85
Oil & Gas Storage & Transportation	0.36	1.39	1.20	-6.70	-5.85

Financials	12.06	0.06	4.20	2.00	11 52
Financials	12.96 1.11	-0.06 2.74	4.20 2.84	2.88 10.84	11.52 9.12
Asset Management & Custody Banks Consumer Finance		-0.65	9.59	4.93	9.12 17.74
Diversified Banks	0.67 3.12	0.26	6.75	4.93 6.52	21.65
Diversified Financial Services	7.72	-0.03	3.44	2.37	9.81
					12.41
Financial Exchanges & Data	1.14	1.96	-2.01	-0.77	
Insurance Brokers	0.54	-0.24	1.59	-3.18	0.93
Investment Banking & Brokerage	1.21	1.81	5.12	8.83	28.80
Life & Health Insurance	0.30	-0.68	4.97	2.12	0.72
Multi-Sector Holdings	1.15	-1.97	6.93	2.29	9.63
Property & Casualty Insurance	0.99	-0.40	2.57	-1.53	6.31
Regional Banks	0.27	-2.31	7.79	7.40	8.56
Reinsurance	0.02	0.93	5.46	2.53	-3.86
Transaction & Payment Processing	2.31	-1.61	2.23	-2.66	1.76
Health Care	8.78	1.62	7.12	3.30	1.22
Biotechnology	1.50	2.59	5.42	8.44	12.44
Health Care Distributors	0.32	3.46	3.97	-2.73	27.57
Health Care Equipment	1.96	-0.44	0.72	-1.58	7.56
Health Care Facilities	0.18	-1.49	5.97	5.18	29.69
Health Care Services	0.38	1.07	10.72	0.93	30.22
Health Care Supplies	0.06	1.14	-0.31	-11.76	-20.44
Life Sciences Tools & Services	0.81	0.00	4.00	9.60	-9.80
Managed Health Care	0.76	9.80	30.20	2.07	-26.81
Pharmaceuticals	2.80	0.96	8.76	4.28	-0.20
Industrials	7.98	0.84	1.37	3.17	15.52
Aerospace & Defense	2.08	0.07	1.06	5.15	32.78
*	0.22	0.07	-6.02	-6.30	12.45
Agricultural & Farm Machinery					
Air Freight & Logistics	0.25	1.06	1.64	-4.11	-20.32
Building Products	0.49	0.50	0.26	-1.03	11.06
Cargo Ground Transportation	0.08	-0.50	3.94	-6.20	-15.84
Construction & Engineering	0.10	3.60	1.44	3.06	23.28
Construction Machinery & Heavy Trucks	0.58	2.44	4.96	10.33	13.16
Data Processing & Outsourced Services	0.05	1.11	-3.28	4.85	12.71
Diversified Support Svcs	0.22	-1.52	-3.99	-5.40	0.03
Electrical Components & Equipment	0.56	3.16	2.71	4.03	10.60
Environmental & Facilities Services	0.36	-0.56	-3.72	-1.97	11.96
Heavy Electrical Equipment	0.29	5.90	-2.55	19.84	92.79
Human Resource & Employment Services	0.32	-0.99	0.00	-2.85	0.60
Industrial Conglomerates	0.37	1.00	0.68	-3.20	4.46
Industrial Machinery	0.66	1.50	4.62	4.16	4.43
Passenger Airlines	0.15	1.47	15.61	21.74	3.41
Passenger Ground Transportation	0.33	2.94	4.53	1.49	56.97
Railroads	0.42	-1.99	-2.92	-1.52	1.10
Research & Consulting Svcs	0.19	3.10	3.28	-0.56	6.30
Trading Companies & Distributors	0.28	-2.59	5.60	12.90	20.92
Information Technology	32.27	2.42	1.54	8.42	16.77
3,0					
Application Software	2.39	-0.44	-2.99	-1.81	5.09
Communications Equipment	0.94	2.75	1.90	12.71	19.76
Electronic Components	0.35	6.61	10.81	26.69	68.03
Electronic Equipment & Instruments	0.15	3.16	3.66	6.99	7.09
Electronic Manufacturing Services	0.14	2.17	3.39	17.10	48.74
Internet Software & Services	0.10	3.35	9.45	-7.33	-4.35
IT Consulting & Services	0.76	0.65	5.80	-16.03	-11.54
Semiconductor Equipment	0.72	10.07	3.48	6.09	29.42
Semiconductors	12.03	5.98	2.91	14.63	34.26
Systems Software	8.56	2.31	-0.47	2.48	21.02
Technology Distributors	0.04	-0.31	3.48	-7.20	-4.77
Technology Hardware, Storage & Peripherals	6.09	-3.60	1.88	12.46	-6.41
Materials	1.78	1.53	4.80	5.70	10.95
Commodity Chemicals	0.06	3.53	17.54	-4.90	-32.65
Construction Materials	0.13	2.59	5.48	15.32	19.64
Copper	0.11	-0.33	10.76	5.93	20.59
F F	*	3.00	0		20.07

Fertilizers & Agricultural Chemicals	0.12	1.20	1.78	-3.74	20.89
Gold	0.15	6.37	15.65	36.71	114.00
Industrial Gases	0.49	2.19	3.01	3.37	12.10
Metal & Glass Containers	0.02	1.39	-4.73	-8.86	-7.27
Paper Packaging	0.17	-1.10	-0.67	1.15	-12.24
Specialty Chemicals	0.44	0.46	3.82	4.04	2.48
Steel	0.09	0.31	6.14	8.63	21.07
Real Estate	1.89	1.78	3.57	2.33	4.08
Data Center REITs	0.23	5.24	3.02	0.22	-10.14
Health Care REITs	0.29	1.03	2.30	9.71	20.39
Hotel & Resort REITs	0.02	0.51	15.48	15.10	0.91
Industrial REITs	0.18	1.96	10.32	9.22	8.62
Multi-Family Residential REITs	0.00	1.29	5.97	-2.98	-7.79
Office REITs	0.02	1.25	22.74	12.99	2.52
Other Specialized REITs	0.11	3.08	5.05	-0.81	3.75
Real Estate Service	0.14	0.44	1.60	13.83	24.21
Retail REITs	0.25	1.43	7.59	8.22	5.67
Self-Storage REITs	0.14	1.79	7.10	0.55	-1.25
Single-Family Residential REITs	0.14	1.79	7.10	0.55	-1.25
Telecom Tower REITs	0.26	0.78	-6.14	-10.59	5.28
Timber REITs	0.03	1.10	2.17	0.55	-8.24
Utilities	2.19	1.47	-1.42	3.52	11.54
Electric Utilities	1.40	1.25	-1.54	3.12	10.83
Gas Utilities	0.04	0.97	0.82	7.97	19.48
Independent Power Producers & Energy Traders	0.13	6.65	1.80	7.01	40.15
Water Utilities	0.05	-1.37	-4.07	0.38	12.16
Multi-Utilities	0.57	1.13	-1.80	3.62	7.50

 $[\]hbox{*Current Weight is market cap based, based on calculations by William Blair Intl. Ltd.}\\$

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DOW JONES: 46108.00 S&P 500: 6587.47 NASDAQ: 22043.10

Additional information is available upon request.

Current Rating Distribution (as of September 12, 2025):

Coverage Universe	Percent	Inv. Banking Relationships *	Percent	
Outperform (Buy)	73	Outperform (Buy)	10	
Market Perform (Hold)	27	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.

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