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The Dollar Dilemma

Please refer to important disclosures on pages 14 and 15. Analyst certification is on page 14.

The U.S. economy is going through a number of major regime changes—from a low and stable inflation regime to a mostly low but also more volatile one; from a financialized and hyperglobalized world to a more regionalized pattern of trade where capital is less free flowing; and from a monetary policy dominant model to one dominated by fiscal policy. Among all of this it would make sense to expect to see one other major area of regime change—the dollar; but despite previous reports to the contrary, the Trump administration is not declaring that it wants a weaker dollar. **While we expect further softening in the exchange rate, in this *Economics Weekly,* we discuss why the U.S. is likely still unable to shed its exorbitant privilege and reserve currency status anytime soon, even if there are many reasons to think it might want to.**

It's All We've Got for Now

The truth is that fears related to the adverse impact of being the world's reserve currency of choice are nothing new. The "exorbitant privilege" has its advantages of bestowing deeper and more liquid capital markets, lower interest rates, and a large demand for debt, as well as providing control of the global financial system. However, these advantages are accompanied by the "exorbitant burden" of a persistently overvalued exchange rate, a likelihood of taking on too much debt, a deterioration in the export base and more unbalanced trade, and a buildup of global instability.

Economist Robert Triffin wrote about this in the 1960s, with the Triffin dilemma. He noted that being the world's reserve currency and satisfying the global need for deep and liquid capital markets also means running large current account deficits. Furthermore, as that deficit increased, so too would foreigners' concerns that the system was becoming increasingly unbalanced and vulnerable to a loss of faith—potentially leading to a major currency crisis. Hence, doing everything to maintain that faith in the "fiat" currency was deemed essential.

Former Fed Chair Paul Volcker also had a keen understanding of the U.S. financial system and was one of the key architects of President Nixon's 1971 shock depegging of the dollar from gold. In 2005, Volcker again became highly concerned about the potential for another currency crisis and penned An Economy on Thin Ice, in which he wrote:

> *What holds it all together is a massive and growing flow of capital from abroad, running to more than $2 billion every working day, and growing. There is no sense of strain. As a nation we don't consciously borrow or beg. We aren't even offering attractive interest rates, nor do we have to offer our creditors protection against the risk of a declining dollar....*
>
> *It's all quite comfortable for us.... [a]nd it's comfortable for our trading partners and for those supplying the capital.*
>
> *The difficulty is that this seemingly comfortable pattern can't go on indefinitely.... And at some point, both central banks and private institutions will have their fill of dollars. I don't know whether change will come with a bang or a whimper, whether sooner or later. But as things stand, it is more likely than not that it will be financial crises rather than policy foresight that will force the change....*
>
> *There is a wide area of agreement among establishment economists about a textbook pretty picture: China and other continental Asian economies should permit and encourage a substantial exchange rate appreciation against the dollar. Japan and Europe should work promptly and aggressively toward domestic stimulus and deal more effectively and speedily with structural obstacles to growth. And the United States, by some combination of measures, should forcibly increase its rate of internal saving, thereby reducing its import demand. But can we, with any degree of confidence today, look forward to any one of these policies being put in place any time soon, much less a combination of all?*
>
> *The answer is no. So I think we are skating on increasingly thin ice.*

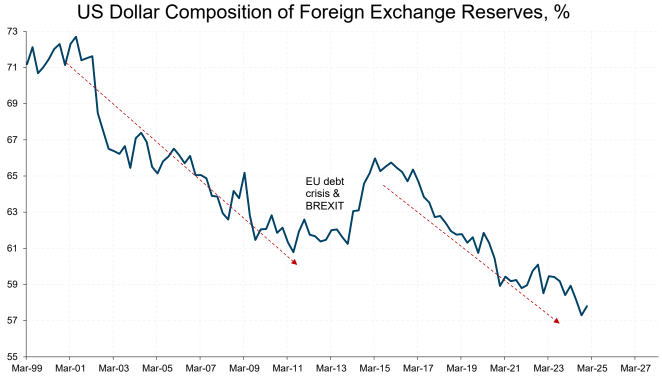
Similarly, in 2019, the now Canadian Prime Minister Mark Carney, who was governor of the Bank of England at the time, presented the view that the dollar's strength and status was increasingly becoming a major destabilizing force for the global economy. Carney suggested the solution was to create a synthetic hegemonic currency (SHC), or a modern version of J.M. Keynes' proposed bancor.

> *An SHC could dampen the domineering influence of the U.S. dollar on global trade. If the share of trade invoiced in SHC were to rise, shocks in the U.S. would have less potent spillovers through exchange rates, and trade would become less synchronised across countries. By the same token, global trade would become more sensitive to changes in conditions in the countries of the other currencies in the basket backing the SHC. The*

dollar's influence on global financial conditions could similarly decline if a financial architecture developed around the new SHC and it displaced the dollar's dominance in credit markets. By reducing the influence of the U.S. on the global financial cycle, this would help reduce the volatility of capital flows to EMEs. Widespread use of the SHC in international trade and finance would imply that the currencies that compose its basket could gradually be seen as reliable reserve assets, encouraging EMEs to diversify their holdings of safe assets away from the dollar. This would lessen the downward pressure on equilibrium interest rates and help alleviate the global liquidity trap.

The reality is that no one is entirely happy with the current system and the vulnerabilities it creates. This combined with more recent moves to weaponize the dollar has only further encouraged foreign central banks to continue to slowly diversify away from the currency (exhibit 1)—more recently into gold.

Exhibit 1
US Dollar Composition of Foreign Exchange Reserves, %



Sources: IMF, William Blair Equity Research

Nevertheless, it remains the case that no other market comes anywhere close to having capital markets that are as deep, as open, and as liquid as the U.S. capital markets. And, importantly, this also includes the roughly $14 trillion offshore Eurodollar market.

The reality is that as long as large surplus countries such as China want to continue to pursue their export and investment-led growth strategies, which necessarily generate massive current account surpluses, they have little option but to recycle them back into dollars as the only market large enough to absorb them.

While this will not last forever, alternatives like the euro, stable coins, or multipolar currency blocs (the most likely alternative) are still many years away.

Does Trump Want a Stronger or Weaker Dollar, or Both?

If we had been playing Trump 4D chess and assuming a Mar-a-Lago Accord-type view of the situation, the strategy on the dollar would have been that this administration ultimately wants a weaker dollar ... but not just yet.

If there is any kind of playbook here, maybe it would run something like: as the tariffs were announced, expect the dollar to increase. That rise would help absorb some of the inflationary impact on prices from the tariffs while trade negotiations take place. Then, as part of the negotiations to reduce those tariffs, the U.S. would demand its foreign trading partners to take steps to appreciate their currencies in order to help the U.S. ease the return of manufacturing and increase competitiveness.

This would have been much like the Plaza Accord of 1985, but on a bilateral basis (where Trump seems to feel he holds more of an advantage), as opposed to a grand multilateral basis (which he feels he does not). This accord led to a roughly 40%-50% depreciation in the value of the dollar.

If this was indeed at least the initial plan, it has either been quickly abandoned or financial markets have dictated otherwise in light of the sharp decline in the currency after the April 2 tariff announcement.

Furthermore, countries such as Japan are already making statements to the effect that they have no intention of playing along and revaluing their exchange rates. And possibly concerned with the recent volatility, Treasury Secretary Scott Bessent has also notably been remarking that he wants a strong dollar.

As far as we can tell, President Trump very much wants the dollar to continue to be the world's reserve currency of choice. That is, he wants to retain all the advantages that come with reserve currency status but none of the accompanying disadvantages.

The president made this clear when he warned the so-called BRICS nations that they should revalue their exchange rates upward. He also warned that they would be heavily tariffed should they make any overt moves to form their own currency bloc or make any changes that could be interpreted as a move away from supporting the dollar's reserve status.

It is important to note that if the president succeeds in renegotiating trade agreements that will help engineer a reduction in the current account deficit, this will, by definition, reduce the capital account surplus. And if countries slow or cease to trade with the U.S. or if they encourage more domestic purchases of U.S. goods, there would also necessarily be a reduced willingness and ability to hold more dollars in reserve.

This in turn raises the question of how the U.S. will achieve those reduced capital inflows without devaluing the dollar in the process.

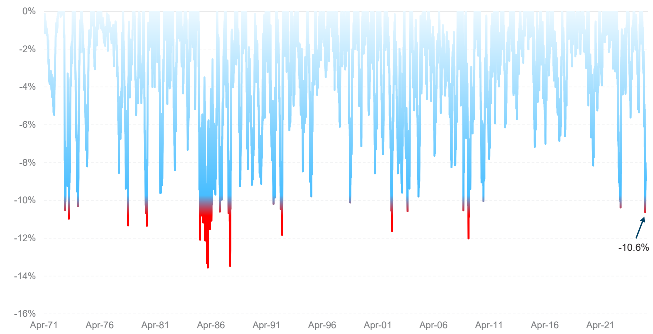
What Happens Next?

Financial market participants are asking themselves this very same question, and it is one reason for the spate of capital flight from the U.S. (exhibit 2). It resulted in a 10.6% decline in the value of the dollar from its recent high—a historically very sharp, but not unprecedented, decline over a 70-day period (exhibit 3).

Exhibit 2
2 Year T-Note Yield Spread with 2 Year German Bund & Euro FX Rate

Sources: Bloomberg, William Blair Equity Research

Exhibit 3
Dollar Index Drawdowns From 70-Day Highs



Sources: Bloomberg, William Blair Equity Resarch

Over the last week, there has also been an extremely abrupt, but also very telling, appreciation in the Taiwan dollar and the South Korean won (exhibit 4). Taiwan does much of its trade with the U.S., relies on the U.S. for security, and also sends most of its surplus back to the U.S. as dollar reserves. As a result, the Taiwan dollar rally has raised fears that Asian countries are indeed starting to diversify away from U.S. dollars, and perhaps even starting to discuss the establishment of their own currency bloc.

Exhibit 4
Taiwan Dollar Exchange Rate
(1 USD to TWD)

Sources: Bloomberg, William Blair Equity Research

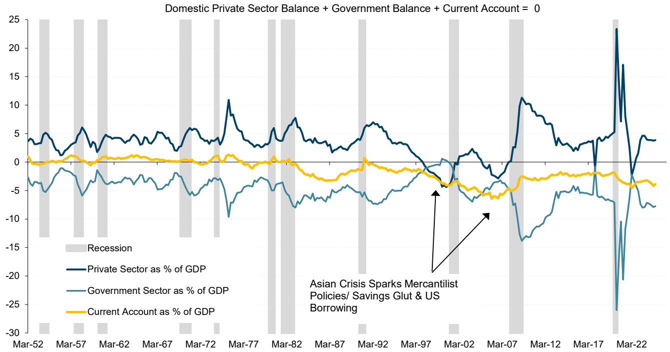
If this administration wants to achieve a much reduced trade deficit while retaining its reserve status and without further depreciation of the dollar, it can really only achieve this in three ways—increase domestic savings, strengthen foreign capital outflows, and via capital controls. Investors will be closely watching how this plays out to assess the dollar's value going forward.

Increase Domestic Savings

The first of these choices would be to increase domestic savings and reduce government spending. The U.S. capital account surplus is not just the result of foreigners being overly generous with their funds and seeking out what have admittedly been much higher returns emanating from the U.S. It is also the result of decisions made at home by the government to spend more than the domestic private sector can provide in savings. If those funds are not found domestically through increased domestic private sector savings, the investment gap must come from abroad (exhibit 5).

This spending reduction/savings increase seems to be the Trump administration's favored route, and it is attempting to address it through: 1) budget efficiencies like the DOGE, and Bessent's stretch-goal of reducing the 6% budget deficit to 3%, as well as 2) raising tariffs to reduce the trade deficit and encourage more domestic production.

Exhibit 5
Sector Balances As % Of GDP
Domestic Private Sector Balance + Government Balance + Current Account = 0



Source: Federal Reserve, William Blair Equity Research

Strengthen Foreign Capital Outflows

The second route might be to encourage U.S. corporations and households to invest more abroad, i.e., increase U.S. dollar outflows in an effort to offset the foreign capital inflows. This might include households purchasing more foreign-currency denominated assets (e.g., bonds and equities) as well as the U.S. corporate sector purchasing and investing in more foreign companies and assets.

Capital Controls

The third and least attractive choice, and one normally chosen by emerging markets, would be to establish capital controls to limit the convertibility of dollars into foreign exchange.

While this is not going to happen in the U.S., we have not been entirely shocked to have heard this being discussed as a potential scenario. It is also worth remembering that the U.K. had capital controls from 1939 right up until Prime Minister Thatcher abolished them in 1979.

The fact that all of these choices are extremely difficult to achieve and none are particularly appealing from a political standpoint has increased concerns that ultimately the dollar will be left to function as the pressure release valve should nothing else prove successful.

Conclusion

While having the dollar as the world's reserve currency of choice comes with many powerful benefits for both the U.S. and for foreigners, the status is also accompanied by a series of not insignificant problems. These problems have been recognized and feared by the likes of J.M. Keynes at the time of the original Bretton Woods agreement, Robert Triffin, and Paul Volcker—as well as today by some members of the Trump administration.

One of President Trump's stated goals is to dramatically reduce or even eliminate the U.S.'s account deficit. Yet, he seemingly wants to achieve this in a way that does not reduce the value of the dollar, nor weaken its reserve currency status. Given that a reduced current account deficit means lower capital inflows to the capital account, reducing those flows without also reducing the value of the dollar is a tough ask.

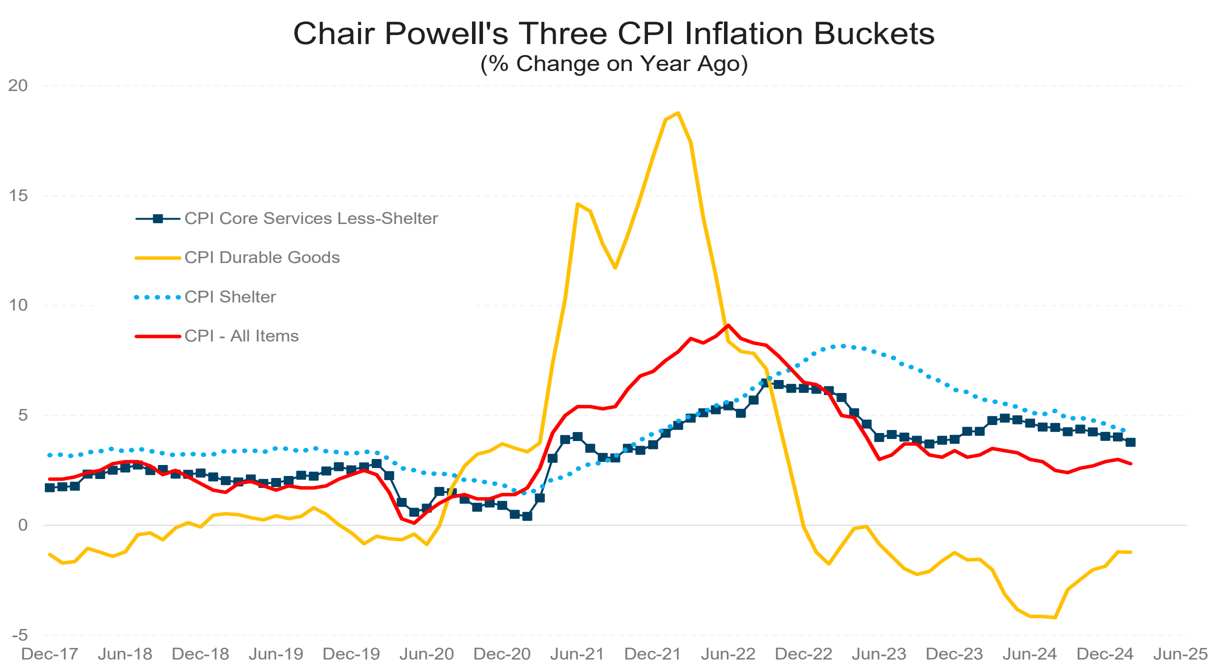
There are three basic ways of achieving this: 1) increasing domestic savings and reducing government spending, 2) encouraging Americans to buy more foreign assets abroad than foreigners are purchasing in the U.S., and 3) introduce capital controls. President Trump is choosing a mix of the first two options, via the DOGE, tariffs, and trade negotiations. However, given the difficulty of achieving this, it seems reasonable to believe that what we will also end up with is a controlled depreciation of the dollar.

Highlights in the Week Ahead

Date	Time (ET)	Indicator	Last	Consensus	WB Estimate	Actual
13 May	6:00 a.m.	NFIB Small Business Survey (Apr)	97.4	94.3	NA	
13 May	8:30 a.m.	Consumer Price Index (Apr)	-0.1%	0.3%	0.3%	
		Core CPI	0.1%	0.3%	0.2%	
15 May	8:30 a.m.	Advance Retail Sales (Apr)	1.5%	0.0%	-0.5%	
		Sales Less-autos	0.6%	0.3%	0.1%	
15 May	8:30 a.m.	Producer Price Index (Apr)	-0.4%	0.2%	0.2%	
		PPI Less-food & energy	-0.1%	0.2%	0.1%	
15 May	9:15 a.m.	Industrial Production (Apr)	-0.3%	0.2%	-0.1%	
		Capacity Utilization	77.8%	77.9%	77.8%	
16 May	8:30 a.m.	Housing Starts (Apr)	-11.4%	3.3%	1.0%	
		Building Permits	0.5%	0.0%	-0.1%	

Sources: Bloomberg, William Blair Equity Research

Indicator of the Week: Consumer Price Index



Sources: Bureau of Labor Statistics, Bloomberg, William Blair Equity Research

Economic Scorecard

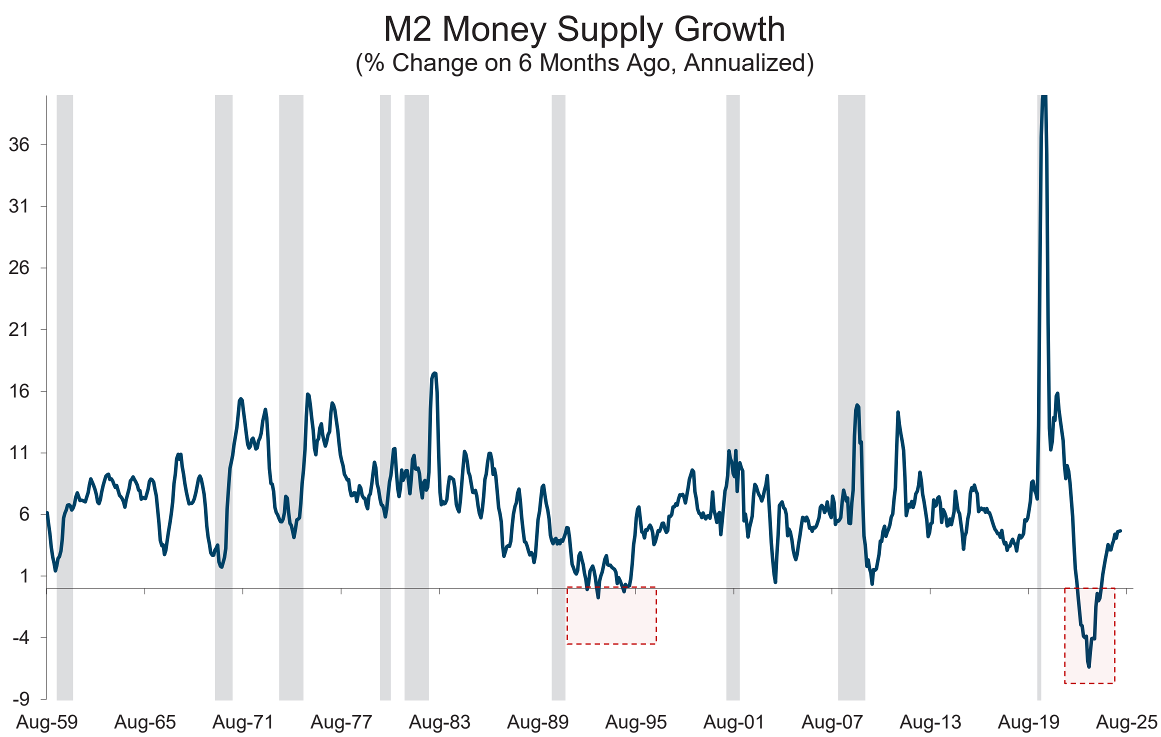
Rolling monthly heat map, % Change on Year Ago (unless otherwise noted)

	Nov-23	Dec-23	Jan-24	Feb-24	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
Growth																			
US Leading Indicators	-7.5	-6.8	-7.0	-6.5	-5.5	-5.4	-5.0	-4.5	-4.7	-4.6	-4.3	-3.7	-3.0	-3.0	-2.7	-3.0	-3.5		
US Coincident Indicators	2.2	2.4	1.6	2.0	2.1	1.7	1.9	2.1	1.7	1.7	1.6	1.6	1.3	1.6	1.6	1.5	1.5		
US Lagging Indicators	1.3	0.3	1.2	1.2	1.2	1.4	1.2	1.1	1.0	0.8	0.3	0.1	0.0	0.1	-0.1	0.1	0.0		
Consumer																			
Total Retail Sales	3.9	5.3	0	2	3.5	2.7	2.6	2	3	1.9	2	3.1	3.9	4.6	4.6	3.9	4.9		
Personal Income	5.2	5.2	6	5.9	5.9	5.7	5.5	5.4	5.3	5	4.8	5.1	5	4.9	4.2	4.5	4.3		
Real Disposable Personal Income	4.8	4.7	3.7	3.3	3.1	2.8	2.8	2.7	2.6	2.4	2.4	2.4	2.1	2	1.2	1.5	1.7		
Real Personal Consumption	3.1	3.6	1.9	2.1	2.7	2.4	2.8	2.9	2.9	2.9	3.2	3.1	3.1	3.1	3.1	2.9	3.3		
Personal Saving Rate (%)	4.6	4.4	5.5	5.4	5.2	5.1	4.9	4.8	4.3	4.2	3.8	4	3.7	3.3	3.9	4.1	3.9		
Consumer Confidence (Conference Board)**	101	108	110.9	104.8	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	86	
Employment																			
Employment Growth	1.6	1.7	1.5	1.4	1.5	1.5	1.4	1.3	1.3	1.2	1.3	1.2	1.3	1.3	1.3	1.2	1.2	1.2	
ASA Temporary Staffing Index	-7.6	-5.5	-12.2	-9.4	-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	
ISM Employment Index Manufacturing*	46.2	47.6	47.2	46.1	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	
ISM Employment Index Services*	50.1	43.7	50.2	48	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	
Unemployment Rate, %	3.7	3.8	3.7	3.9	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	
Average Hourly Earnings	4.1	4.1	4.3	4.2	4.2	4	4.1	3.9	3.6	4	3.9	4.1	4.2	4	3.9	3.9	3.8	3.8	
Initial Jobless Claims (avg. wkly. chg. '000s)	218	205	210	211	216	210	222	237	237	230	225	236	219	222	218	227	223	226	
Jop Openings	-18.4	-21.1	-18.5	-14.2	-15.5	-23.7	-15.1	-19.4	-12.8	-17.6	-23.5	-10.9	-7.3	-12.5	-8.3	-11.4	-11.1	-5.6	
Layoff Announcements	-40.8	-20.2	-20	8.8	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	
Housing Market																			
Housing Starts	6.3	17	1.1	10.1	-3.2	0.7	-16.9	-6.1	-14.3	5.7	-0.6	-1.5	-13.6	-2.7	-1.1	-3.4	1.9		
New Home Sales	2.5	3.5	3.9	2.9	6.1	7.1	-9.3	0.9	1	6	4.6	-7.4	10.6	10.1	-1.5	4.8	6		
Existing Home Sales	-6.9	-5.6	-2.0	-3.4	-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		
Median House Price (Existing Homes)	0.4	-2.2	5.4	-2.9	-0.6	-0.5	-1.6	-0.9	-1.6	-8	-1.2	2.1	-7.4	1.1	0.2	-2.2	-7.5		
Existing Homes Inventory (Mths' supply)	3.5	3.5	3.5	3.3	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		
New Homes Inventory (Mths' supply)	8.8	8.2	8.3	8.7	8.2	7.6	8.4	8.4	7.9	8.2	7.8	9.2	8.6	8.2	9.1	8.9	8.3		
NAHB Homebuilder Sentiment*	34	37	44	48	51	51	45	43	41	39	41	43	46	46	47	42	39	40	
Inflation																			
Consumer Price Index	3.1	3.4	3.1	3.2	3.5	3.4	3.3	3	2.9	2.5	2.4	2.6	2.7	2.9	3	2.8	2.4		
CPI Less-food & energy	4	3.9	3.9	3.8	3.8	3.6	3.4	3.3	3.2	3.2	3.3	3.3	3.3	3.2	3.3	3.1	2.8		
Producer Price Index	0.8	1.1	1	1.6	2	2.3	2.5	2.9	2.4	2.1	2.1	2.8	2.9	3.4	3.7	3.2	2.7		
PPI Less-food & energy	1.9	1.8	2	2.1	2.3	2.5	2.7	3.3	2.6	2.8	3.3	3.6	3.4	3.7	3.8	3.5	3.3		
PCE Price Index	2.7	2.7	2.6	2.6	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		
PCE Prices Less-food & energy	3.2	3.0	3.1	2.9	3.0	2.9	2.7	2.6	2.7	2.7	2.7	2.8	2.8	2.9	2.7	3.0	2.6		
Business Activity - US																			
Industrial Production	-0.2	0.8	-1.2	-0.1	-0.3	-0.8	0.0	0.9	-0.5	-0.1	-0.7	-0.4	-0.9	0.5	1.8	1.5	1.3		
New Cap Gds Orders less-aircraft & parts	1.4	0.8	-0.2	3.2	-0.9	2.8	-0.5	-2.2	2	-1.5	0.5	1.8	-0.4	2.9	2.2	-1.3	1.6		
Business Inventories	0.1	-0.2	0	0	0.6	0.4	0.7	1.4	1.8	2.3	2.3	2	2.3	2.6	1.8	2.3	2.1		
ISM Manufacturing PMI*	46.9	46.9	48.9	47.6	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	
Markit US Manufacturing PMI*	49.4	47.9	50.7	52.2	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	
ISM Services Index*	52.6	50.6	53.2	52.2	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	
Markit US Services PMI*	50.8	51.4	52.5	52.3	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	
Business Activity - International																			
Germany Manufacturing PMI Markit/BME*	42.6	43.3	45.5	42.5	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	
Japan Manufacturing PMI Jibun Bank*	48.3	47.9	48	47.2	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	
Caixin China Manufacturing PMI*	50.7	50.8	50.8	50.9	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	
China Manufacturing PMI*	49.4	49	49.2	49.1	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	
UK Manufacturing PMI Markit/CIPS*	47.2	46.2	47	47.5	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	
France Manufacturing PMI Markit*	42.9	42.1	43.1	47.1	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	
Currencies* **																			
Euro (EUR/USD)	4.6	3.1	-0.4	2.2	-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	
Renmimbi (USD/CNY)	0.6	2.9	6.1	3.6	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	
Yen (USD/Yen)	7.3	7.6	12.9	10.1	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	
Sterling (GBP/USD)	4.7	5.4	3.0	5.0	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	
Canadian $ (USD/CAD)	1.1	-2.3	1.0	-0.5	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	
Mexican Peso (USD/MXN)	-9.8	-13.0	-8.6	-6.8	-8.2	-4.8	-3.8	7.0	11.2	15.8	13.0	11.0	17.2	22.7	20.1	20.5	23.6	14.4	
US Equities																			
S&P 500	12.0	24.2	18.9	28.4	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	
S&P 400 Midcap	-0.5	14.4	3.0	11.1	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	
S&P 600 Smallcap	-5.9	13.9	-0.1	4.5	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	
Russell 2000	-4.1	15.1	0.8	8.3	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	

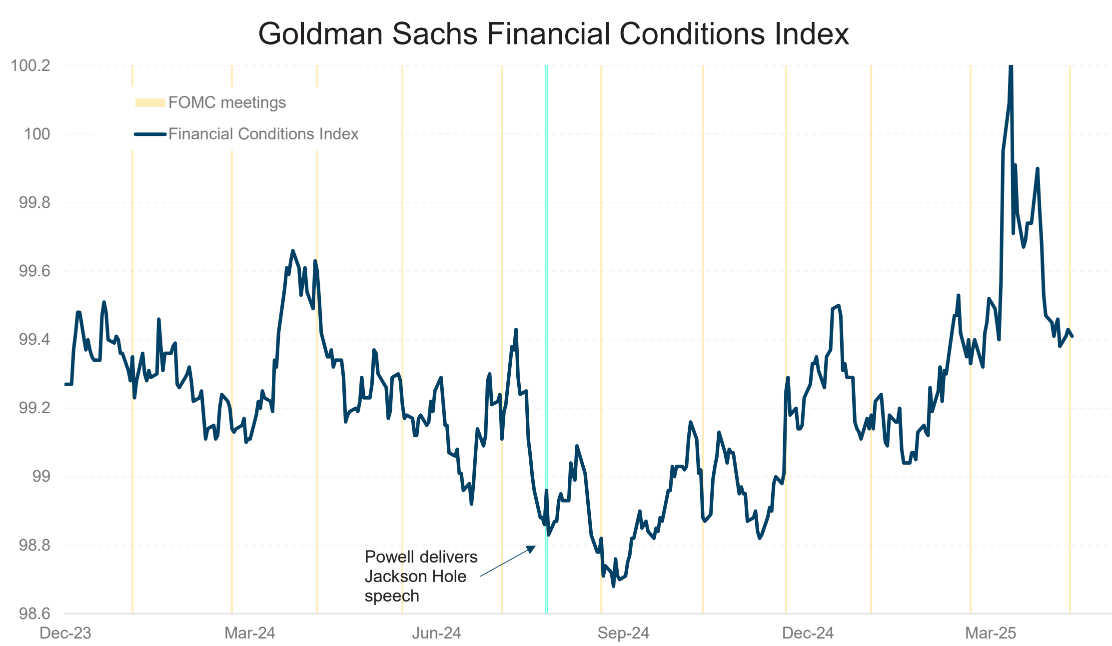
* Diffusion Index, **1985=100, ***Currencies - green/red = strengthening/weakening foreign currency vs dollar

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

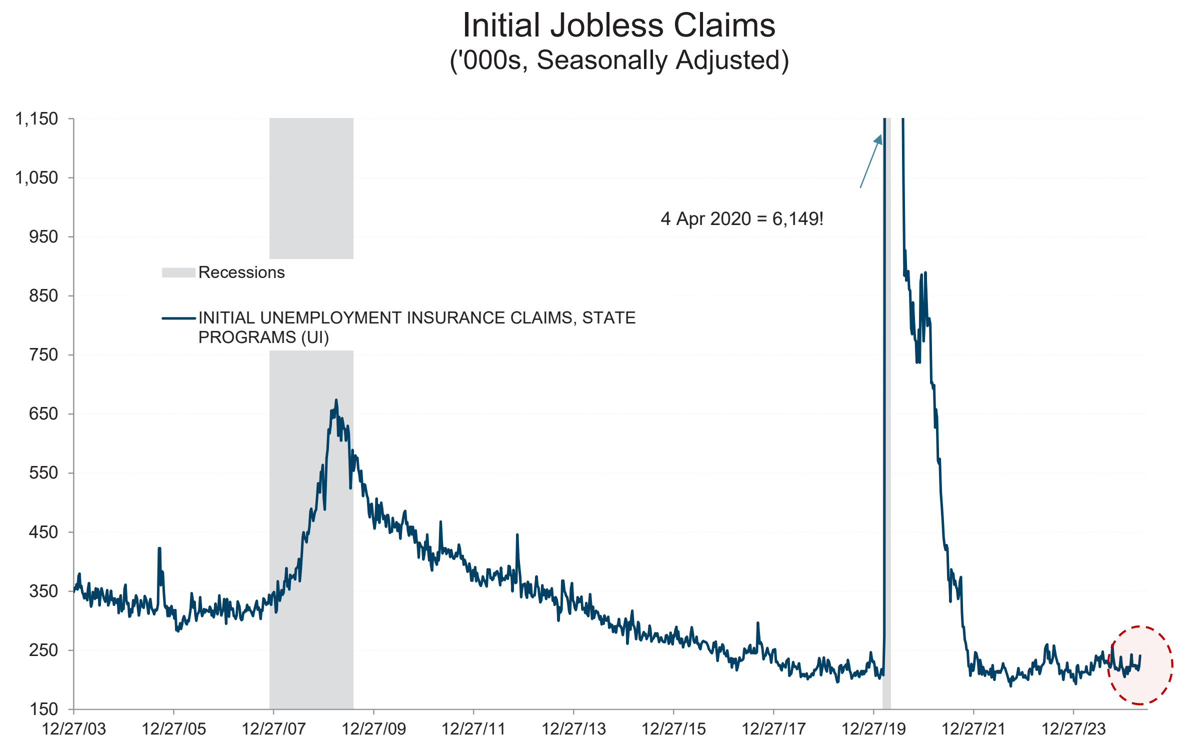
Other Economic Indicators



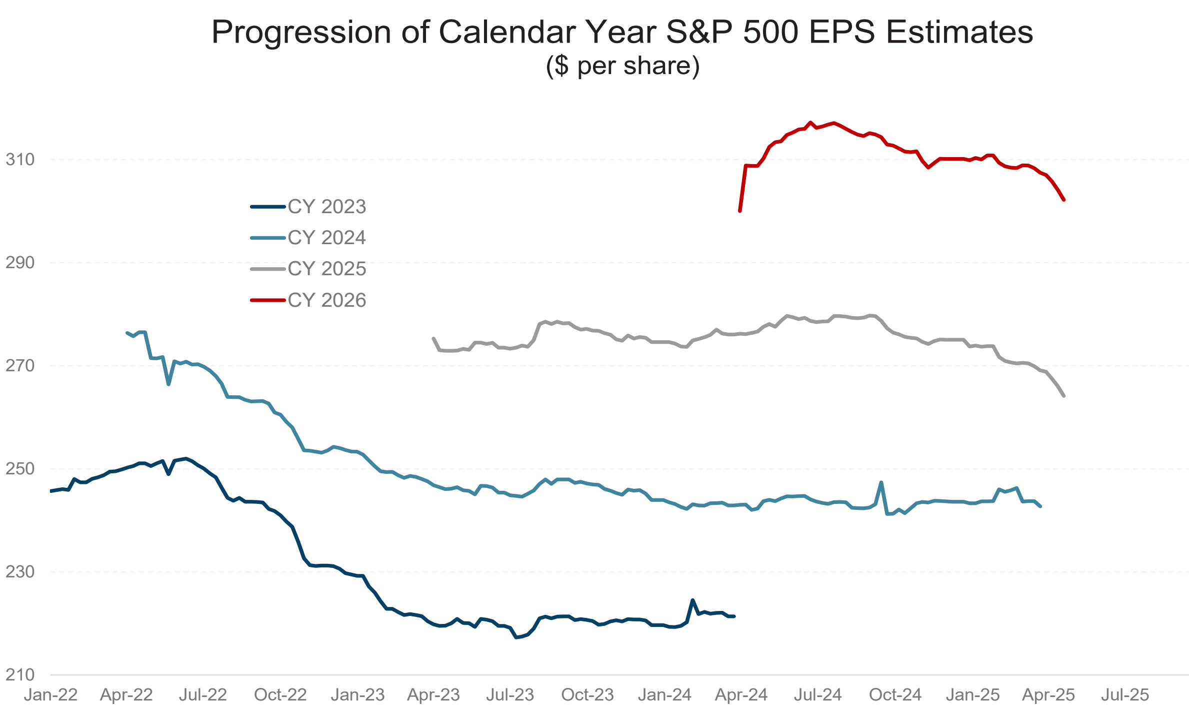
Sources: Federal Reserve, William Blair Equity Research



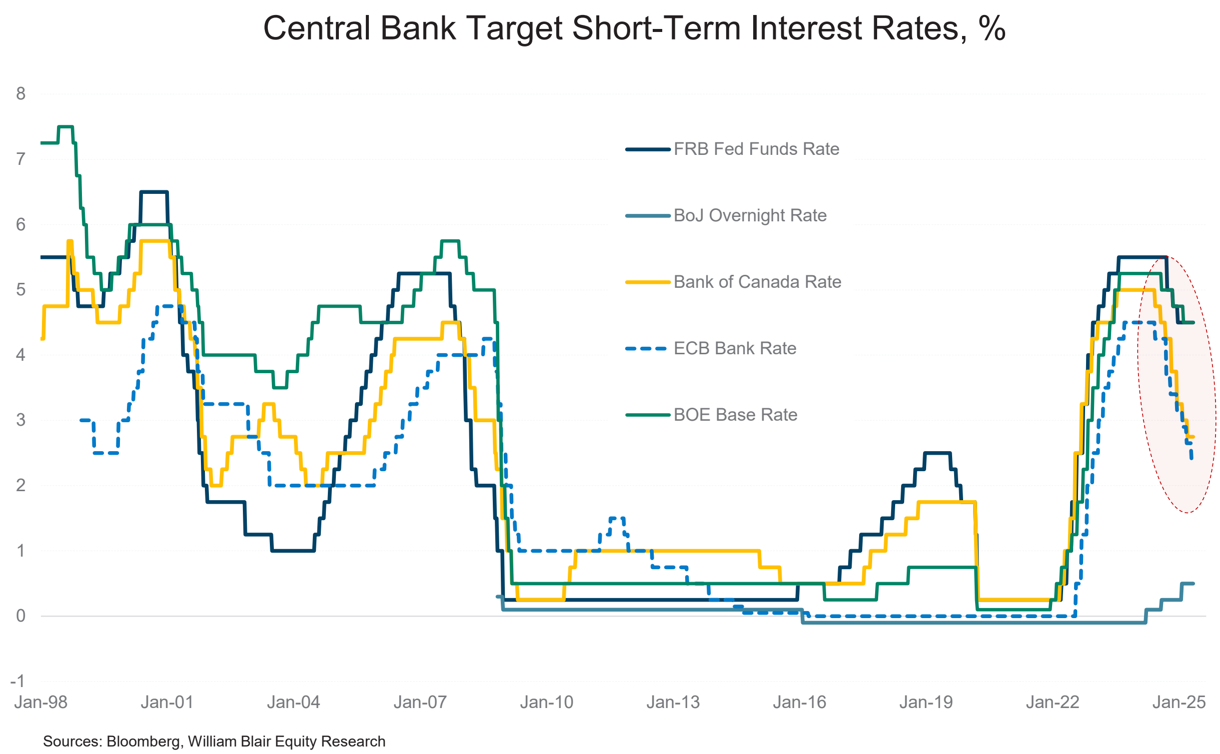
Sources: Bloomberg, William Blair Equity Research

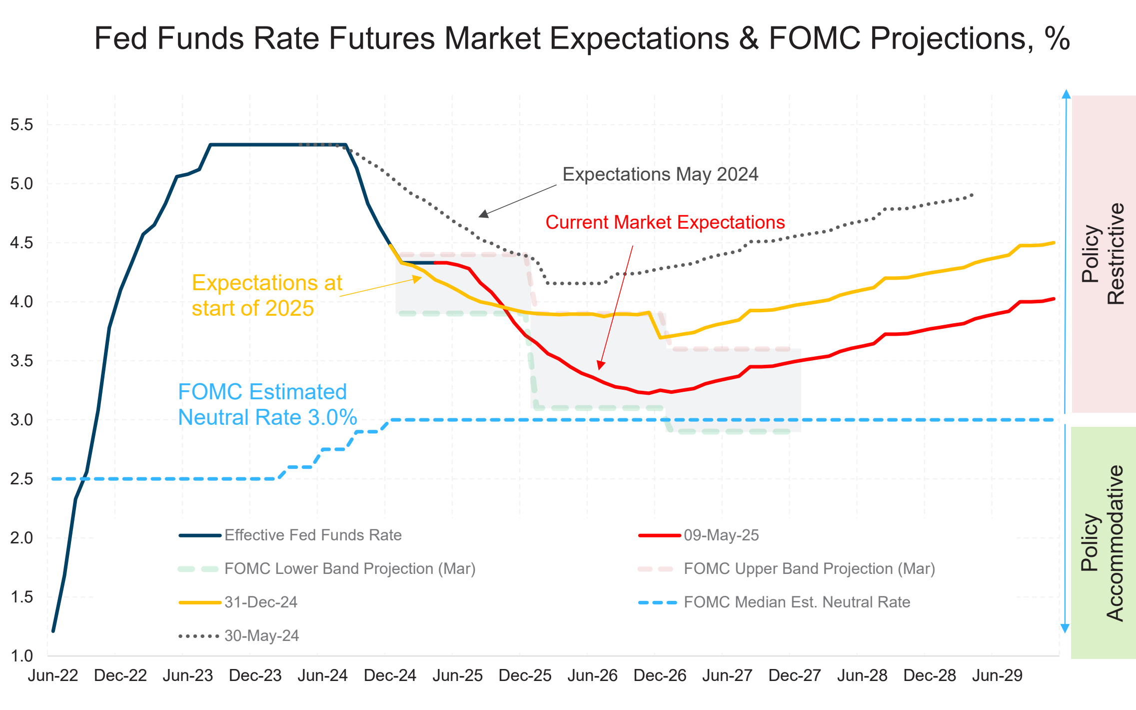


Source: Department of Labor, Bloomberg, William Blair Equity Research



Sources: LSEG, I/B/E/S, William Blair Equity Research


Central Bank Target Short-Term Interest Rates, %
FRB Fed Funds Rate
BoJ Overnight Rate
Bank of Canada Rate
ECB Bank Rate
BOE Base Rate
8
7
6
5
4
3
2
1
0
-1
Jan-98
Jan-01
Jan-04
Jan-07
Jan-10
Jan-13
Jan-16
Jan-19
Jan-22
Jan-25
Sources: Bloomberg, William Blair Equity Research


Fed Funds Rate Futures Market Expectations & FOMC Projections, %
Expectations May 2024
Current Market Expectations
Expectations at start of 2025
FOMC Estimated Neutral Rate 3.0%
Policy Restrictive
Policy Accommodative
Effective Fed Funds Rate
09-May-25
FOMC Lower Band Projection (Mar)
FOMC Upper Band Projection (Mar)
31-Dec-24
FOMC Median Est. Neutral Rate
30-May-24
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
Jun-22
Dec-22
Jun-23
Dec-23
Jun-24
Dec-24
Jun-25
Dec-25
Jun-26
Dec-26
Jun-27
Dec-27
Jun-28
Dec-28
Jun-29
Sources: Bloomberg, William Blair Equity Research

S&P 500 Sector Performance

Global Industry Classification System	Current Weight* 08-May-25	Week Ago 01-May-25	Month Ago 08-Apr-25	Qtr-to-Date 31-Mar-25	Year-to-Date 31-Dec-24
S&P 500 Index	**100.00**	**1.07**	**13.67**	**0.93**	**-3.70**
S&P 400 MidCap Index		**2.95**	**15.14**	**1.01**	**-5.52**
S&P 600 SmallCap Index		**2.77**	**14.27**	**-1.03**	**-10.24**
Dow Jones Industrials		**1.51**	**9.89**	**-1.51**	**-2.76**
Nasdaq Composite		**1.23**	**17.42**	**3.64**	**-7.16**
Communication Services	**9.68**	**0.46**	**12.59**	**2.64**	**-3.95**
Advertising	0.05	1.02	9.22	-7.51	-10.67
Broadcasting	0.06	1.79	7.46	-8.60	5.63
Cable & Satellite	0.37	2.17	8.52	-3.80	-3.75
Integrated Telecommunication Services	0.77	0.02	3.77	-3.34	14.76
Interactive Home Entertainment	0.16	1.24	16.15	8.24	13.83
Interactive Media & Services	6.16	-0.62	10.94	1.45	-10.41
Movies & Entertainment	1.50	4.69	29.55	15.85	15.03
Publishing & Printing	0.03	4.91	18.61	5.22	4.25
Wireless Telecommunication Svcs	0.57	0.20	0.48	-7.21	12.12
Consumer Discretionary	**10.89**	**1.37**	**14.18**	**2.03**	**-12.22**
Apparel Retail	0.38	1.05	8.20	6.82	3.00
Apparel & Accessories & Luxury Goods	0.12	7.62	21.38	4.78	-11.52
Auto Parts & Equipment	0.03	7.28	23.81	2.70	-3.13
Automobile Manufacturers	2.02	1.69	26.87	9.02	-27.46
Automobile Retail	0.30	-2.31	3.09	-5.20	11.61
Broadline Retail	4.18	1.05	12.66	1.01	-12.07
Casinos & Gaming	0.10	6.26	26.81	5.63	-14.08
Computer & Electronics Retail	0.03	3.55	23.59	-5.69	-19.09
Consumer Electronics	0.07	1.95	9.66	-12.31	-7.69
Distributors	0.08	2.07	6.90	-3.79	-1.36
Footwear	0.18	5.65	13.10	-3.59	-26.21
Home Furnishings	0.01	-1.26	6.57	-7.94	-11.77
Home Improvement Retail	0.99	1.61	8.10	-1.32	-6.95
Homebuilding	0.21	0.69	8.28	-1.98	-10.01
Hotels, Resorts & Cruise Lines	0.94	3.58	23.21	9.00	-2.40
Household Appliances	0.01	5.49	3.14	-11.38	-30.23
Leisure Products	0.02	1.76	21.83	0.47	10.50
Restaurants	1.09	-0.62	6.15	-3.38	0.13
Other Specialty Retail	0.09	0.78	11.28	-2.06	-6.34
Consumer Staples	**6.73**	**0.16**	**7.10**	**0.45**	**5.04**
Agricultural Products	0.07	-0.72	12.74	-0.51	-4.45
Brewers	0.02	-5.22	-7.26	-10.86	-5.34
Hypermarkets	2.64	0.58	14.37	7.80	6.65
Distillers & Vintners	0.09	2.96	11.70	3.96	-12.58
Drug Retail	0.02	2.11	5.38	-0.09	19.61
Food Distributors	0.07	2.07	5.29	-4.58	-6.36
Food Retail	0.10	-0.51	8.20	6.09	17.43
Household Products	1.07	-0.36	0.07	-6.76	-4.76
Packaged Foods & Meats	0.60	-0.99	1.95	-4.58	-1.03
Personal Products	0.12	1.24	14.26	-1.56	3.39
Soft Drinks	1.19	-0.52	0.51	-4.62	2.67
Tobacco	0.75	1.34	13.37	6.10	34.11
Energy	**3.16**	**0.75**	**6.26**	**-12.76**	**-4.65**
Integrated Oil & Gas	1.49	0.45	3.88	-13.47	-3.36
Oil & Gas Equipment & Services	0.20	1.14	5.63	-18.18	-13.91
Oil & Gas Exploration & Production	0.77	-0.31	7.88	-13.14	-5.71
Oil & Gas Refining & Marketing & Transportation	0.26	6.86	20.08	-5.63	0.83
Oil & Gas Storage & Transportation	0.44	-0.18	4.50	-10.94	-5.55

Financials	**14.14**	**2.20**	**13.32**	**-0.14**	**2.97**
Asset Management & Custody Banks	1.10	3.92	17.56	0.66	-10.98
Consumer Finance	0.69	5.47	24.38	6.52	-0.67
Diversified Banks	3.16	3.07	17.44	1.51	0.75
Financial Exchanges & Data	1.18	2.64	14.32	1.84	6.85
Insurance Brokers	0.68	2.96	3.26	-6.83	7.45
Investment Banking & Brokerage	1.11	3.40	21.29	5.09	1.82
Life & Health Insurance	0.35	2.81	9.65	-5.23	-3.15
Multi-line Insurance	0.10	1.22	5.34	-5.89	12.39
Multi-Sector Holdings	1.39	-3.20	4.18	-3.63	13.23
Property & Casualty Insurance	1.23	2.75	9.12	-1.52	9.67
Regional Banks	0.28	3.49	14.99	-2.26	-8.12
Reinsurance	0.03	2.92	4.57	-4.43	-4.20
Transaction & Payment Processing	2.78	2.89	13.53	-0.37	4.28
Health Care	**10.20**	**-1.83**	**0.67**	**-8.23**	**-2.65**
Biotechnology	1.62	-5.91	-0.52	-11.93	0.57
Health Care Distributors	0.37	-1.24	7.42	3.15	21.90
Health Care Equipment	2.33	2.20	10.80	0.36	5.71
Health Care Facilities	0.19	3.47	6.47	1.72	15.41
Health Care Services	0.46	-0.88	4.65	1.32	27.76
Health Care Supplies	0.08	2.09	16.16	-0.10	-8.68
Life Sciences Tools & Services	0.88	-0.14	5.48	-11.06	-18.85
Managed Health Care	1.05	-2.05	-23.43	-20.07	-15.58
Pharmaceuticals	3.21	-3.44	2.35	-9.62	-5.72
Industrials	**8.66**	**2.78**	**16.71**	**3.65**	**3.10**
Aerospace & Defense	2.13	2.50	17.61	5.50	12.70
Agricultural & Farm Machinery	0.27	2.08	18.64	4.40	15.65
Air Freight & Logistics	0.30	2.65	7.15	-10.95	-20.21
Building Products	0.56	2.71	22.99	10.97	4.59
Construction & Engineering	0.10	1.34	33.14	28.35	3.23
Construction Machinery & Heavy Trucks	0.56	3.06	15.62	-1.73	-9.85
Data Processing & Outsourced Services	0.06	3.50	8.65	-2.66	4.38
Diversified Support Svcs	0.30	2.38	13.11	6.48	13.20
Electrical Components & Equipment	0.57	4.68	20.46	7.57	-7.57
Environmental & Facilities Services	0.45	0.47	9.49	1.59	15.06
Human Resource & Employment Services	0.41	3.15	12.11	0.59	5.00
Industrial Conglomerates	0.43	1.99	14.99	-0.60	-0.38
Industrial Machinery	0.74	3.16	14.97	-0.68	-3.82
Passenger Airlines	0.15	14.12	34.76	7.21	-16.49
Railroads	0.47	1.64	6.06	-6.13	-6.14
Research & Consulting Svcs	0.22	3.77	17.55	7.37	6.30
Trading Companies & Distributors	0.28	0.57	15.24	4.95	1.20
Information Technology	**30.39**	**1.43**	**21.17**	**5.32**	**-8.15**
Application Software	2.72	3.84	23.73	11.37	1.87
Communications Equipment	0.89	0.32	13.22	-0.47	-6.55
Electronic Components	0.27	1.98	28.52	15.33	9.59
Electronic Equipment & Instruments	0.16	5.18	17.98	-0.96	-8.84
Electronic Manufacturing Services	0.12	4.12	25.41	9.16	6.63
Internet Software & Services	0.13	-0.36	18.32	6.35	4.86
IT Consulting & Services	1.03	4.74	13.49	1.27	-0.13
Semiconductor Equipment	0.67	4.51	20.03	3.75	-0.85
Semiconductors	9.58	5.30	24.05	8.69	-11.39
Systems Software	8.48	2.67	23.86	16.00	2.75
Technology Distributors	0.05	10.89	23.32	12.37	3.48
Technology Hardware, Storage & Peripherals	6.27	-6.96	15.10	-10.46	-20.72
Materials	**1.94**	**1.02**	**13.43**	**-1.73**	**0.53**
Commodity Chemicals	0.08	-3.25	10.79	-17.31	-25.43
Construction Materials	0.14	2.66	19.07	14.18	4.59
Copper	0.11	2.94	28.31	-1.01	-1.58
Fertilizers & Agricultural Chemicals	0.14	6.33	22.77	7.52	11.96
Gold	0.12	2.60	17.49	9.42	41.93
Industrial Gases	0.55	0.70	9.39	-4.01	4.52

Metal & Glass Containers	0.03	1.09	15.22	-0.56	-6.08
Paper Packaging	0.18	1.76	5.41	-8.86	-15.38
Specialty Chemicals	0.50	-0.35	13.66	-2.73	-3.15
Steel	0.09	-2.33	13.82	-1.07	4.40
Real Estate	**2.21**	**-0.16**	**11.35**	**-1.35**	**1.34**
Data Center REITs	0.28	1.06	18.63	9.50	-7.66
Health Care REITs	0.31	-1.03	5.34	-6.12	8.08
Hotel & Resort REITs	0.02	2.20	16.93	4.50	-15.24
Industrial REITs	0.20	2.34	17.52	-5.64	-0.20
Multi-Family Residential REITs	0.00	-0.93	10.14	-4.84	-2.20
Office REITs	0.02	-1.15	11.75	-5.43	-14.55
Real Estate Service	0.14	0.42	7.02	-4.13	0.10
Retail REITs	0.28	0.15	11.56	-2.47	-2.79
Self-Storage REITs	0.17	-0.09	14.30	0.00	-0.33
Single-Family Residential REITs	0.17	-0.09	14.30	0.00	-0.33
Telecom Tower REITs	0.35	-2.61	8.08	0.89	17.05
Timber REITs	0.04	0.48	4.52	-11.40	-7.84
Utilities	**2.49**	**1.07**	**9.47**	**1.42**	**5.60**
Electric Utilities	1.61	1.57	9.41	1.49	5.84
Gas Utilities	0.05	0.67	9.81	4.31	15.79
Independent Power Producers & Energy Traders	0.11	3.44	32.34	14.04	-0.75
Water Utilities	0.06	-0.70	3.21	-1.44	16.80
Multi-Utilities	0.66	-0.31	7.02	-0.58	4.61

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

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DOW JONES: 41368.40
S&P 500: 5663.94
NASDAQ: 17928.10

Additional information is available upon request.

Current Rating Distribution (as of May 8, 2025):

Coverage Universe	**Percent**	**Inv. Banking Relationships ***	**Percent**
Outperform (Buy)	72	Outperform (Buy)	9
Market Perform (Hold)	28	Market Perform (Hold)	1
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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