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Economics Weekly

The Next Leg of the Capex Revival

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

For almost a decade, one of the central themes in our research has been the unfolding productivity and capex revival. While we were an early adopter of this idea (e.g., here, here, here, and here), the actual progress around this narrative admittedly has been a very slow burn. Nevertheless, evidence suggests that momentum has started to pick up over the last few years as a result of several structural economic dynamics now having a more marked impact. These include innovation, demographics, geopolitics, and government support. There is also the potential for some more cyclical growth developments to also have a positive impact here. **In this *Economics Weekly*, we once again review the developing productivity and capex revival, taking stock of where we are today and where growth is heading next.**

The Three (or Now Four) Legged Stool

The unfolding capital investment boom is being built on three and more recently four key developments.

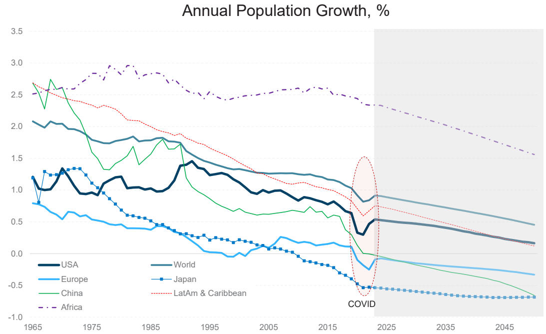
The Structurally Tighter Labor Market

The first leg relates to an emerging structurally tight labor market and probable rise in the relative cost of labor to the cost of capital (plant, equipment, and machinery).

With respect to labor supply, population growth is negative across Europe, China, and Japan, and it remains just above zero in the U.S. and Latin America (exhibit 1). The populations is also aging quite rapidly in many of these areas.

Exhibit 1

Annual Population Growth, %



Source: United Nations Population Division, William Blair Equity Research

This is an important and tangible change for the corporate sector, given that over the last several decades, the pool of available labor has been very deep and very wide.

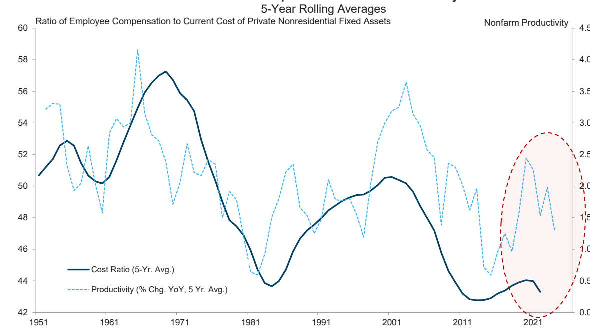
Whether it was a result of women entering the workforce through the 1970s and 1980s or the march of globalization in the subsequent years—most importantly including China's entry into the WTO in 2000—companies were increasingly able to arbitrage wages and squeeze labor costs. The result was a steady decline in the cost of labor compensation relative to the cost of capital.

This is depicted in exhibit 2, which crudely attempts to show the ratio of the cost of labor to the cost of capital. The exhibit also highlights the unsurprising result of what happens when there is an excess supply of labor over capital—i.e., weaker productivity growth. That is, if workers are easy to hire and fire (thanks also to the collapse of the labor unions) and wage-bargaining power has been crushed via actual or threatened outsourcing, the option for more labor over capital was the most sensible choice for the corporate sector.

Exhibit 2

Labor vs. Capital Ratio & Productivity

5-Year Rolling Averages



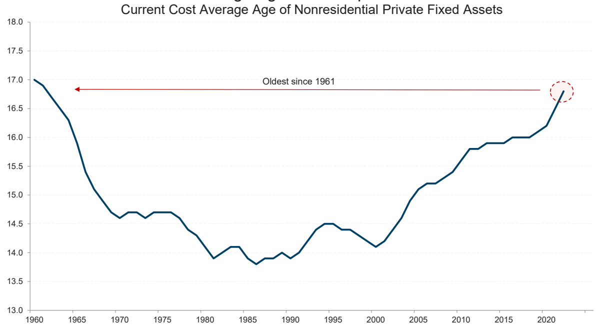
Sources: Bureau of Economic Analysis, Peter L. Bernstein, William Blair Equity Research

Going forward, with the supply of labor becoming structurally tighter, this ratio is likely to turn back toward capital investment, as companies increasingly seek productivity efficiencies in an attempt to maintain elevated profit margins.

An Aging Capital Stock

The second leg of this capex revival rests with the fact that the capital stock in the U.S. is extremely old and desperately needs updating (exhibit 3). This was an uncomfortable truth that many companies uncovered during the pandemic, when workers were scarce, and the creaking infrastructure and lack of investment were laid bare.

Exhibit 3
Average Age of the Capital Stock
Current Cost Average Age of Nonresidential Private Fixed Assets



Sources: Bureau of Economic Analysis, William Blair Equity Research

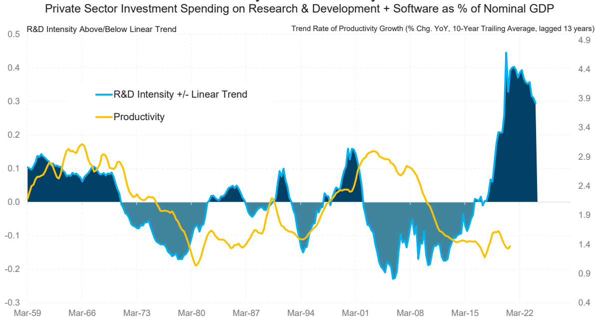
The Innovation Wave

The third leg of this stool is a function of the fact that we are in the midst of yet another powerful innovation wave. Technological innovation has been a steady current running for the past decade or so, but in the last two years it has dramatically emerged with a massive boost from generative AI.

While productivity growth is one of the hardest variables to forecast in economics, we do know that this growth is the result of innovation, and innovation, in turn, is the result of R&D spending. Hence, more R&D spending, should—with lag—result in faster productivity growth.

This has generally proved to be the case, with 10-year lagged productivity growth roughly coinciding with R&D intensity for the U.S. economy, as shown in exhibit 4.

Exhibit 4
R&D Intensity vs. Productivity Growth
Private Sector Investment Spending on Research & Development + Software as % of Nominal GDP



Sources: Bureau of Economic Analysis, William Blair Equity Research

Furthermore, as is being evidenced by the speed at which ChatGPT has taken the world by storm, the lags from innovation to adoption are seemingly far shorter than for any other technological development in history.

Fiscal Incentives

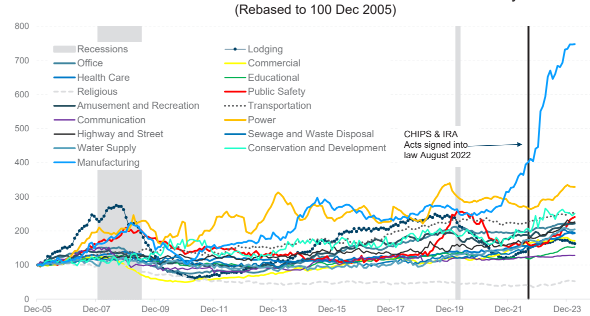
The fourth leg is a relatively newer driver and relates to fiscal incentives. Government-provided tax inducements to invest domestically in areas of strategic interest—in light of rising geopolitical tensions and following the COVID supply chain disruptions—are proving attractive. These are being provided via the Infrastructure Investment and Jobs Act ($1.2 trillion), the CHIPS and Science Act ($53 billion), and the Inflation Reduction Act ($780 billion).

Stage 1—Investment in (Manufacturing) Structures Has Soared

Employment of the incentives provided in these recent acts has been substantial, with demand for CHIPS-related subsidies reported to already be close to double the allotted amount. And while Europe has launched its own European Chips Act ($43 billion) as a countermeasure, there has yet to be any notable increase in investment there. This is in large part due to the EU's still fragmented fiscal union, which has made it difficult for these available funds to be accessed and dispersed.

Meanwhile, in the U.S. the rise in structural investment has been stunning, as shown in exhibit 5. The vast majority of the growth is related to manufacturing, and more specifically, investment in computer, electronic, and electrical areas (i.e., new semiconductor fabrication plants); however, this has notably not crowded out investment in other areas. This growth is also being given a strong boost by a more general desire to reshore production activity.

Exhibit 5
Total Real Nonresidential Business Investment in Structures by Sector
(Rebased to 100 Dec 2005)



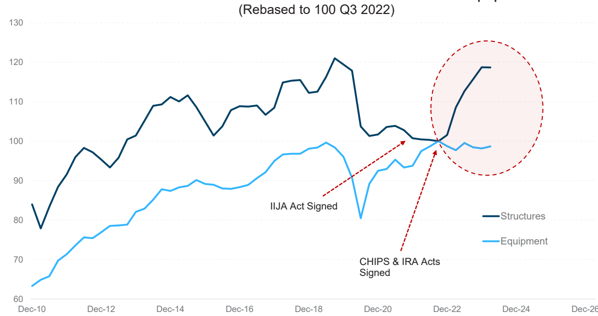
Sources: Census Bureau, William Blair Equity Research

Stage 2—Where's the Equipment Spending?

While there is a compelling case being made for greater investment in the supply of energy needed to support the voraciously thirsty information and data industry over the coming years—a theme that is currently playing out in the renewed interest in the utilities sector—what is seemingly being overlooked, however, is the potential for rising demand for equipment. The reality is the more plants, factories, and facilities that are built, the more equipment that will be needed to fill them.

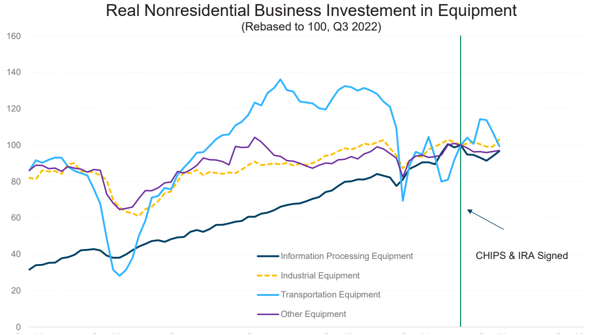
Yet, as exhibits 6 and 7 show, while there has been a strong increase in structures investment since the government's fiscal incentives were signed, there has yet to be any notable increase in equipment investment, which has actually been in slow decline.

Exhibit 6
Nonresidential Business Investment Structures vs Equipment
(Rebased to 100 Q3 2022)



Sources: Bureau of Economic Analysis, William Blair Equity Research

Exhibit 7
Real Nonresidential Business Investement in Equipment
(Rebased to 100, Q3 2022)



Sources: Bureau of Economic Analysis, William Blair Equity Research

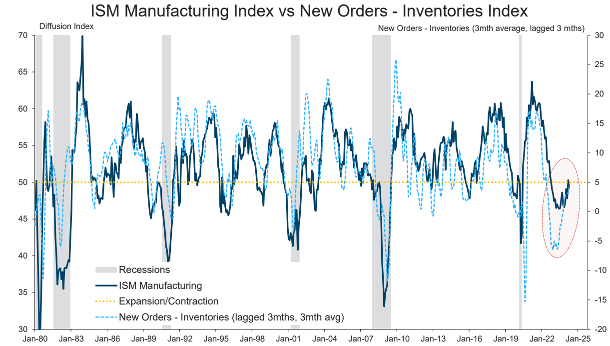
The reality is that the manufacturing sector has been in a cyclical recession for most of the past two years, with the ISM Manufacturing Index below 50 (in contraction territory) for 17 of the last 18 months.

Many of these companies have been wrestling with the headwinds of excess inventories following the COVID-related supply-chain disruptions, volatile pricing, geopolitical uncertainty (including the upcoming U.S. elections and numerous other elections globally), and the impact from higher interest rates.

Yet, manufacturing was one of the first sectors impacted by this rolling economic slowdown, and there is growing evidence that it may have hit the cyclical bottom and is tentatively starting to stabilize—with some industries even experiencing moderately improving conditions.

This is showing up in the economic data. For example, the ISM Inventories Index shows that the bulk of the inventory contraction is now far behind us. Furthermore, when compared to new orders, the index is still pointing to improving activity ahead despite a small pullback in April (exhibit 8).

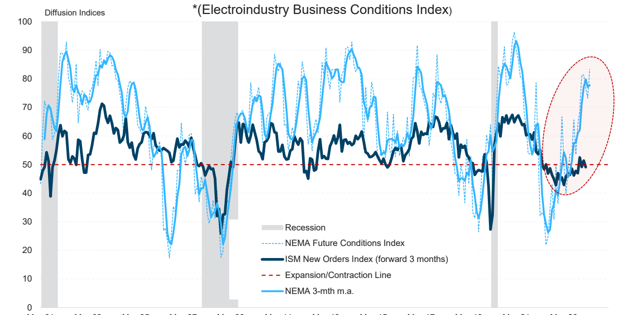
Exhibit 8
ISM Manufacturing Index vs New Orders - Inventories Index



Sources: Institute for Supply Management; William Blair Equity Research, Shaded Area = Recessions

Comments from the Fed's Beige Book and the various regional Fed surveys have also been a little more mixed of late, as opposed to resolutely negative. This sentiment is highlighted in the sharp rise in the NEMA Future Business Confidence Index (National Electroindustry Manufacturers Association, exhibit 9).

Exhibit 9
NEMA Futures Conditions Index* vs ISM New Orders
*(Electroindustry Business Conditions Index)



Sources: National Electrical Manufacturers Association (NEMA), Institute for Supply Management (ISM), William Blair Equity Research

While volatile, this index has tended to lead the ISM index by about three months, given that electrical equipment manufacturers are most often the starting point for the manufacturing process.

This is not to suggest that the aggregate economy is rapidly reaccelerating; in fact, there are growing signs that the rolling slowdown may now be rotating toward to the services side, as consumers start to face increasing pressures. Nevertheless, there are plenty of reasons to believe that, at a minimum, manufacturing activity has found a base and should start to improve as rates fall and other secular growth forces help to support future expansion. The fact that equipment spending has so far lagged the recovery in structures would suggest there is room for catch-up in the coming quarters, helped by strong structural tailwinds and an easing of the cyclical headwinds.

Conclusion

The current economic cycle has been an unusual one in the sense that the economy is still dealing with many of the repercussions from the pandemic long after the crisis has passed. As a result, rather than seeing a smooth and synchronized recovery, we have seen rolling pockets of strength and weakness across different parts of the economy at different points in time. These unusual cyclical movements have been one of the main reasons that many of what have historically been the most robust leading economic indicators of growth have struggled to accurately reflect the pace of this expansion this time around.

These near-term fluctuations in the business cycle are also being increasingly buffeted by a number of structural growth dynamics currently at play. These include a secular tightening of the labor force, reshoring and deglobalization, a major innovation wave against an aging and decrepit capital stock, and more recently a resurgence in industrial growth policies guiding powerful fiscal support.

The most notable area of initial impact for this confluence of factors—what we are referring to as stage 1 of the capex revival—has been a rapid rise in investment in structures. Companies have, for example, been ramping up construction of new semiconductor fabs, as well as warehouses and data centers. There are likely to be further spillover effects to come in other areas of commercial development, where growth has been positive but not nearly as marked.

However, where we have yet to see much of an upside response is on the equipment side. While the manufacturing sector is still facing a number of cyclical headwinds, many economic indicators of manufacturing are showing signs of stability or even tentative signs of expansion, despite the services side of the economy looking a little softer. More importantly, the creation of more factories, plants, and facilities, or stage 1 of the capex revival, should increasingly transition toward stage 2, a rise in investment in the equipment ultimately needed to fill and run these facilities.

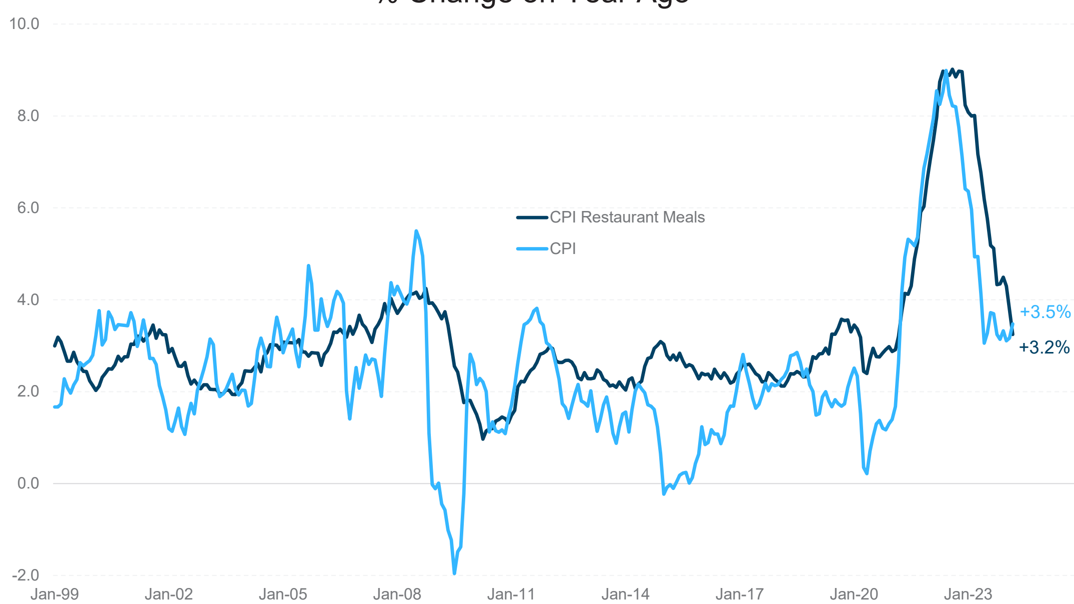
Highlights in the Week Ahead

Date	Time (ET)	Indicator	Last	Consensus	WB Estimate	Actual
14 May	6:00 a.m.	NFIB Small Business Optimism (April)	88.5	88.2	NA	
14 May	8:30 a.m.	Producer Prices Index (April)	0.2%	0.3%	0.3%	
		PPI Less-food & energy	0.2%	0.2%	0.2%	
15 May	8:30 a.m.	Consumer Price Index (April)	0.4%	0.4%	0.3%	
		CPI Less-food & energy	0.4%	0.3%	0.3%	
15 May	8:30 a.m.	Advance Retail Sales (April)	0.7%	0.4%	0.5%	
		Sales Less-autos	1.1%	0.2%	0.2%	
16 May	8:30 a.m.	Housing Starts (April)	-14.7%	9.0%	5.0%	
		Building Permits	-4.3%	1.6%	2.0%	
16 May	8:30 a.m.	Industrial Production (April)	0.4%	0.2%	0.1%	
		Capacity Utilization	78.4%	78.4%	78.4%	
17 May	10:00 a.m.	Leading Economic Indicators (April)	-0.3%	-0.2%	-0.2%	

Sources: Bloomberg, William Blair Equity Research

Indicator of the Week: Consumer Price Index

CPI Full Service Meals & Snacks & Headline CPI Index
% Change on Year Ago



Sources: Bureau of Labor Statistics, William Blair Equity Research

Economic Scorecard

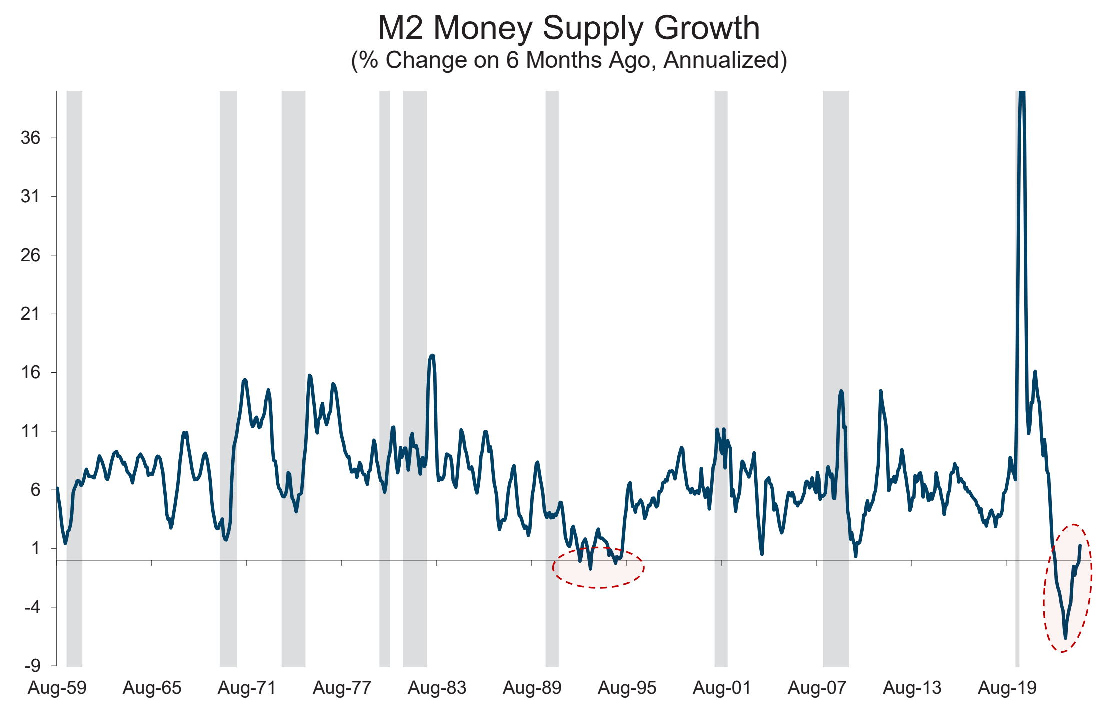
Rolling monthly heat map, % Change on Year Ago (unless otherwise noted)

	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
Growth																			
US Leading Indicators	-5.1	-6.4	-6.1	-7.0	-8.0	-8.3	-8.2	-8.1	-7.8	-7.9	-8.1	-8.1	-7.7	-7.2	-7.2	-6.4	-5.5		
US Coincident Indicators	0.8	0.8	1.5	1.4	1.4	1.4	1.7	1.8	1.7	1.4	1.3	1.4	1.9	2.1	1.4	1.4	1.5		
US Lagging Indicators	7.4	7.4	6.3	6.1	5.5	4.9	3.7	2.9	2.3	1.8	1.0	1.3	1.3	0.3	0.9	1.0	1.0		
Consumer																			
Total Retail Sales	5.6	5.4	7.7	5.5	2.2	1.4	2.2	1.6	2.9	3	4.2	2.7	4	5.5	0.3	2.4	4.3		
Personal Income	4.6	4.5	5.8	5.7	5.8	5.7	5.6	5.4	4.9	4.9	4.8	4.4	4.7	4.9	4.9	4.7	4.7		
Real Disposable Personal Income	-1.6	-0.9	3.2	3.5	4.4	4.5	5	5.3	4.4	4.1	3.9	3.8	4.2	4.2	2.1	1.7	1.4		
Real Personal Consumption	0.9	1.3	2.3	2.3	1.7	1.6	1.8	2.1	2.5	2	2.1	2.1	2.9	3.3	1.9	2.3	3.1		
Personal Saving Rate (%)	3.3	3.4	4.4	4.7	5.2	5.2	5.3	4.8	4.4	4.5	3.9	4	4	3.9	4.1	3.6	3.2		
Consumer Confidence (Conference Board)**	101.4	109	106	103.4	104	103.7	102.5	110.1	114	108.7	104.3	99.1	101	108	110.9	104.8	103.1	97	
Employment																			
Employment Growth	3.3	3.0	3.2	2.8	2.5	2.5	2.5	2.4	2.1	2.1	2.0	1.9	1.9	2.0	1.8	1.8	1.9	1.8	
ASA Temporary Staffing Index	0.2	1.0	-2.1	-6.1	-6.5	-6.8	-5.9	-6.6	-4.7	-4.8	-5.5	-7.5	-7.6	-5.5	-12.2	-9.4	-8.2	-9.3	
ISM Employment Index Manufacturing*	49.3	50.2	50	48.8	47.8	49.4	50.3	49.1	45	48.6	50.9	47.1	46.1	47.5	47.1	45.9	47.4	48.6	
ISM Employment Index Services*	50.4	49.8	50.4	53.6	51.1	51.2	49.7	52.9	50.9	54.1	52.5	50.4	50.6	43.8	50.5	48	48.5	45.9	
Unemployment Rate, %	3.6	3.5	3.4	3.6	3.5	3.4	3.7	3.6	3.5	3.8	3.8	3.8	3.7	3.7	3.7	3.9	3.8	3.9	
Average Hourly Earnings	5.1	4.9	4.6	4.7	4.6	4.7	4.6	4.7	4.7	4.5	4.5	4.3	4.3	4.3	4.4	4.3	4.1	3.9	
Initial Jobless Claims (avg. wkly. chg. '000s)	210	208	203	214	224	217	227	252	234	245	217	211	218	206	210	209	215	210	
Jop Openings	-4.3	-4.4	-7.3	-15.8	-21.0	-15.9	-18.8	-18.6	-23.7	-7.5	-13.7	-17.5	-16.5	-19.2	-16.1	-10.5	-11.8	-14.3	
Layoff Announcements	416.5	129.1	440	410.1	319.4	175.9	286.7	25.2	-8.2	266.9	58.2	8.8	-40.8	-20.2	-20	8.8	0.7	-3.3	
Housing Market																			
Housing Starts	-16.6	-24.1	-19.7	-18.9	-19.4	-25.2	2.6	-9.2	5.8	-13.3	-7.3	-3.9	6	15.4	2.6	7.9	-4.3		
New Home Sales	-24.6	-23.4	-19.9	-19.1	-9.5	11.1	11.6	21.3	34.1	2.5	23.1	16.1	4.6	2.8	3.4	1.9	8.3		
Existing Home Sales	-34.8	-33.7	-36.7	-23.1	-22.7	-23.7	-20.9	-19.4	-16.7	-15.2	-15.3	-14.3	-6.7	-5.8	-1.7	-3.3	-3.7		
Median House Price (Existing Homes)	7.4	17	0.4	1.4	0.7	-8.9	-6.5	-3.5	-8.9	0.1	-10.8	-16	-7.1	-12.8	-2.5	-6.2	-1.9		
Existing Homes Inventory (Mths' supply)	3.4	3.3	3.3	2.9	2.9	2.9	2.9	2.9	3	3	3.2	3.4	3.5	3.6	3.5	3	3.4		
New Homes Inventory (Mths' supply)	9.4	8.5	8.1	8.4	8.1	7.6	7.2	7.5	7.1	7.9	7.5	7.9	8.8	8.3	8.2	8.8	8.3		
NAHB Homebuilder Sentiment*	33	31	35	42	44	45	50	55	56	50	44	40	34	37	44	48	51	51	
Inflation																			
Consumer Price Index	7.1	6.5	6.4	6	5	4.9	4	3	3.2	3.7	3.7	3.2	3.1	3.4	3.1	3.2	3.5		
CPI Less-food & energy	6	5.7	5.6	5.5	5.6	5.5	5.3	4.8	4.7	4.3	4.1	4	4	3.9	3.9	3.8	3.8		
Producer Price Index	7.4	6.4	5.7	4.7	2.7	2.3	1.1	0.3	1.1	1.9	1.8	1.1	0.8	1.1	1	1.6	2.1		
PPI Less-food & energy	6.3	5.7	5	4.6	3.3	3.1	2.8	2.5	2.7	2.5	2.3	2.2	1.9	1.8	2	2.1	2.4		
PCE Price Index	5.9	5.4	5.5	5.2	4.4	4.4	4	3.2	3.3	3.3	3.4	2.9	2.7	2.6	2.5	2.5	2.7		
PCE Prices Less-food & energy	5.1	4.9	4.9	4.8	4.8	4.8	4.7	4.3	4.2	3.7	3.6	3.4	3.2	2.9	2.9	2.8	2.8		
Business Activity - US																			
Industrial Production	1.9	0.6	1.5	0.9	0.2	0.4	0.1	-0.4	0.1	-0.1	-0.2	-0.8	-0.1	1.1	-0.7	-0.3	0.0		
New Cap Gds Orders less-aircraft & parts	3.2	1	5.6	2.7	1.9	1	3.2	1.4	0.4	0.6	0.5	0.8	1.4	0.8	-0.2	3.2	-1		
Business Inventories	16.9	15.3	12.7	10.7	8.7	6.2	5.1	3.3	1.8	1.4	1	1	0.6	0.3	0.4	0.5	1		
ISM Manufacturing PMI*	48.9	48.1	47.4	47.7	46.5	47	46.6	46.4	46.5	47.6	48.6	46.9	46.6	47.1	49.1	47.8	50.3	49.2	
Markit US Manufacturing PMI*	47.7	46.2	46.9	47.3	49.2	50.2	48.4	46.3	49	47.9	49.8	50	49.4	47.9	50.7	52.2	51.9	50	
ISM Services Index*	55.2	49	54.7	55	51.2	52.3	51	53.6	52.8	54.1	53.4	51.9	52.5	50.5	53.4	52.6	51.4	49.4	
Markit US Services PMI*	46.2	44.7	46.8	50.6	52.6	53.6	54.9	54.4	52.3	50.5	50.1	50.6	50.8	51.4	52.5	52.3	51.7	51.3	
Business Activity - International																			
Germany Manufacturing PMI Markit/BME*	46.2	47.1	47.3	46.3	44.7	44.5	43.2	40.6	38.8	39.1	39.6	40.8	42.6	43.3	45.5	42.5	41.9	42.5	
Japan Manufacturing PMI Jibun Bank*	49	48.9	48.9	47.7	49.2	49.5	50.6	49.8	49.6	49.6	48.5	48.7	48.3	47.9	48	47.2	48.2	49.6	
Caixin China Manufacturing PMI*	49.4	49	49.2	51.6	50	49.5	50.9	50.5	49.2	51	50.6	49.5	50.7	50.8	50.8	50.9	51.1	51.4	
China Manufacturing PMI*	48	47	50.1	52.6	51.9	49.2	48.8	49	49.3	49.7	50.2	49.5	49.4	49	49.2	49.1	50.8	50.4	
UK Manufacturing PMI Markit/CIPS*	46.5	45.3	47	49.3	47.9	47.8	47.1	46.5	45.3	43	44.3	44.8	47.2	46.2	47	47.5	50.3	49.1	
France Manufacturing PMI Markit*	48.3	49.2	50.5	47.4	47.3	45.6	45.7	46	45.1	46	44.2	42.8	42.9	42.1	43.1	47.1	46.2	45.3	
Currencies*																			
Euro (EUR/USD)	-8.2	-5.8	-3.3	-5.7	-2.1	4.5	-0.4	4.1	7.6	7.8	7.9	7.0	4.6	3.1	-0.4	2.2	-0.5	-3.2	
Renmimbi (USD/CNY)	11.4	8.5	6.2	9.9	8.4	4.7	6.5	8.3	5.9	5.3	2.6	0.2	0.6	2.9	6.1	3.6	5.1	4.7	
Yen (USD/Yen)	22.0	13.9	13.0	18.4	9.2	5.1	8.3	6.3	6.8	4.7	3.2	2.0	7.3	7.6	12.9	10.1	13.9	15.8	
Sterling (GBP/USD)	-9.3	-10.7	-8.4	-10.4	-6.1	-0.1	-1.3	4.3	5.5	9.0	9.2	6.0	4.7	5.4	3.0	5.0	2.3	-0.6	
Canadian $ (USD/CAD)	5.0	7.3	4.7	7.7	8.1	5.5	7.3	2.9	3.1	2.9	-1.8	1.8	1.1	-2.3	1.0	-0.5	0.2	1.7	
Mexican Peso (USD/MXN)	-10.2	-5.0	-8.7	-10.6	-9.2	-11.9	-10.0	-14.9	-17.8	-15.4	-13.5	-8.9	-9.8	-13.0	-8.6	-6.8	-8.2	-4.8	
US Equities																			
S&P 500	-10.7	-19.4	-9.7	-9.2	-9.3	0.9	1.2	17.6	11.1	14.0	19.6	8.3	12.0	24.2	18.9	28.4	27.9	20.8	
S&P 400 Midcap	-4.8	-14.5	0.7	-2.3	-6.7	-0.4	-4.3	15.6	8.6	8.8	13.6	-2.7	-0.5	14.4	3.0	11.1	21.3	14.9	
S&P 600 Smallcap	-7.4	-17.4	-2.5	-5.1	-10.4	-5.5	-8.9	7.8	3.4	3.6	8.1	-9.3	-5.9	13.9	-0.1	4.5	13.8	10.4	
Russell 2000	-14.2	-21.6	-4.8	-7.4	-12.9	-5.1	-6.1	10.6	6.3	3.0	7.2	-10.0	-4.1	15.1	0.8	8.3	17.9	11.6	

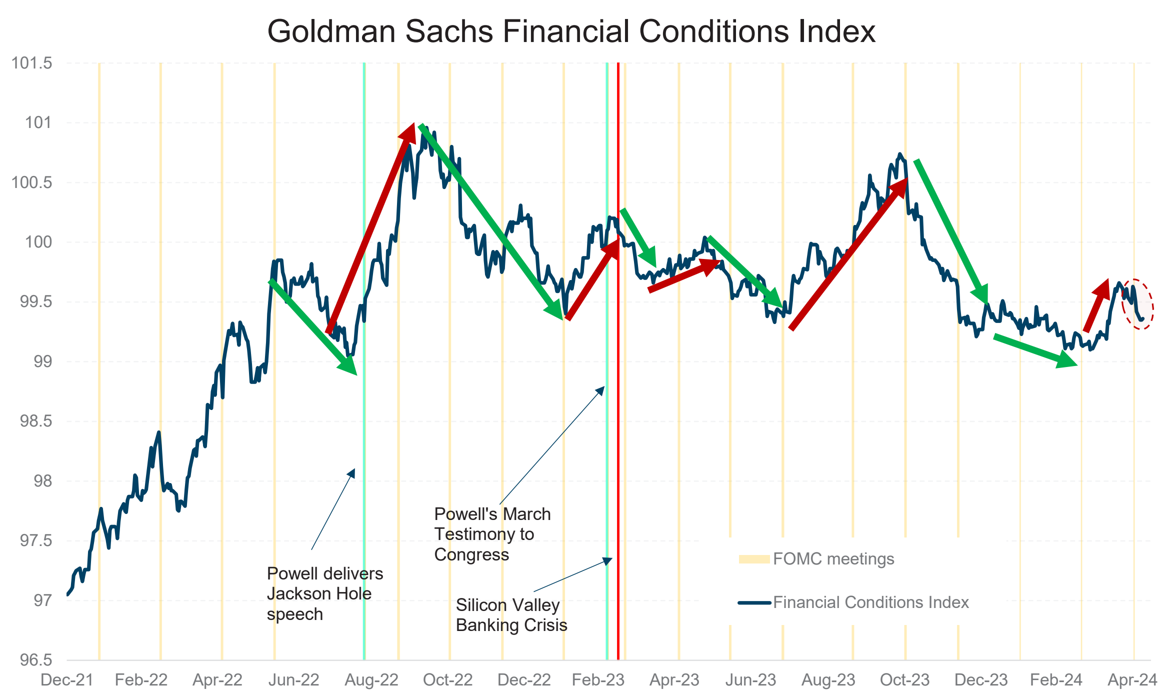
* Diffusion Index, **1985=100, ***Currencies - green/red = strengthening/weakening foreign currency vs dollar

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

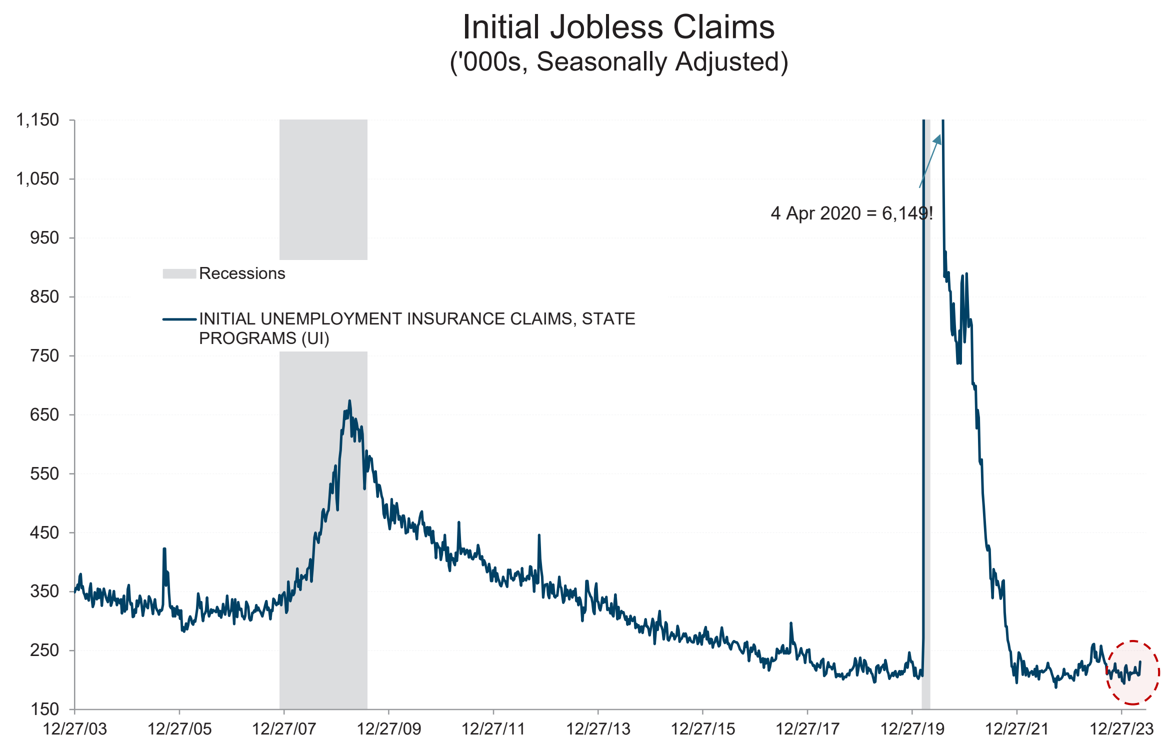
Other Economic Indicators



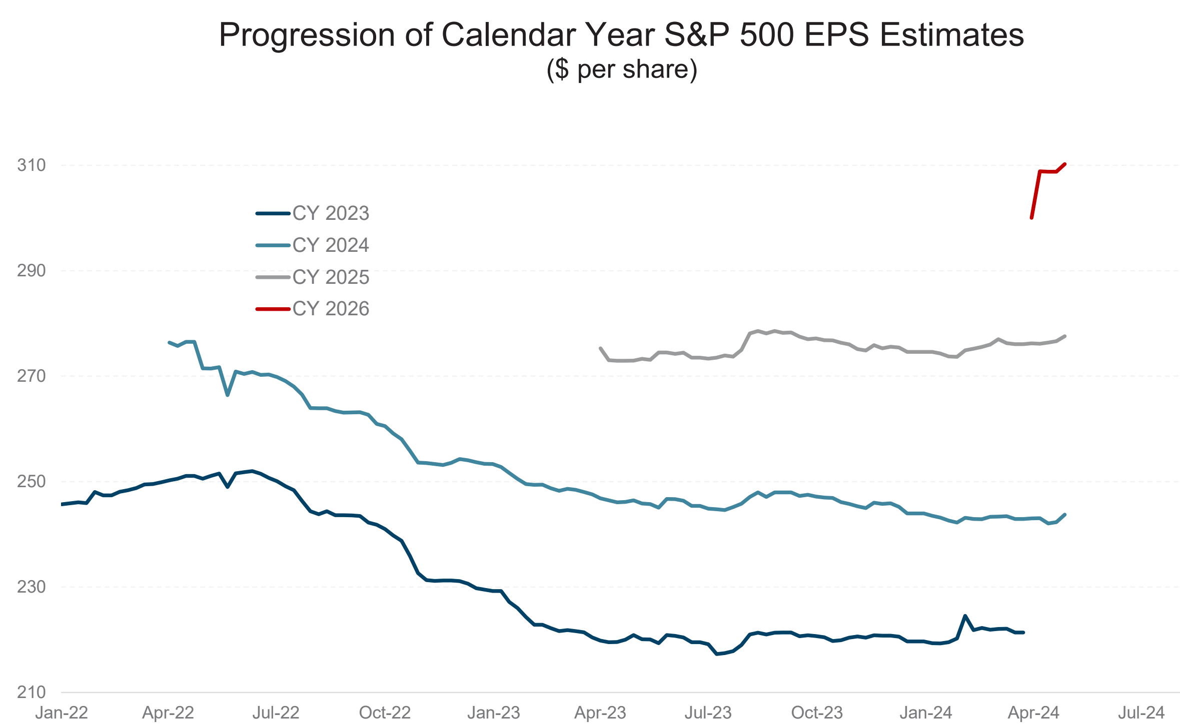
Sources: Federal Reserve, William Blair Equity Research



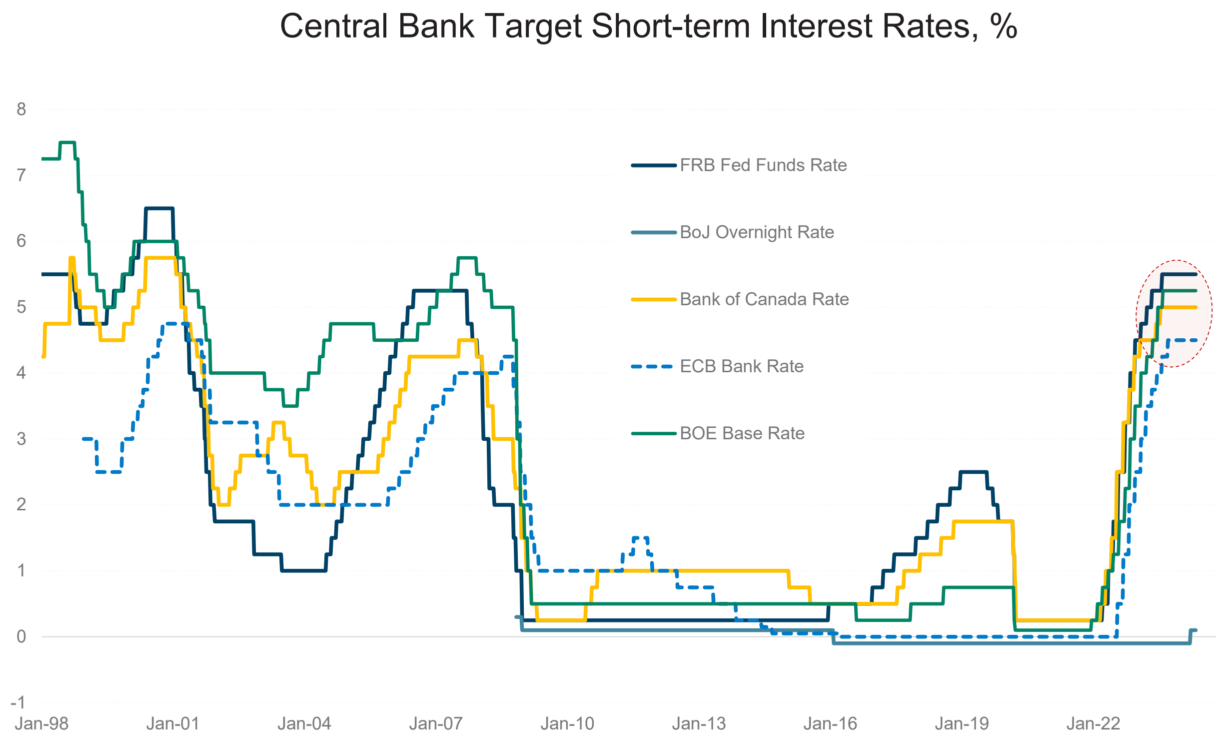
Sources: Bloomberg, William Blair Equity Research



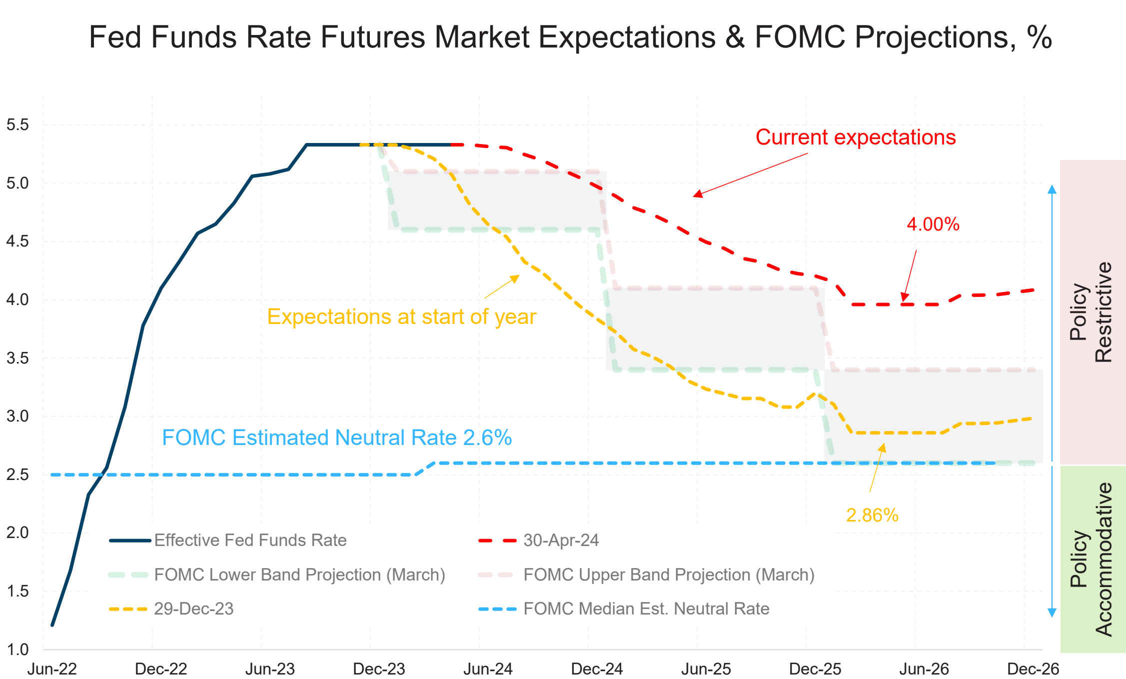
Source: Department of Labor, Bloomberg, William Blair Equity Research



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



Sources: Bloomberg, William Blair Equity Research



Sources: Bloomberg, William Blair Equity Research

S&P 500 Sector Performance

Global Industry Classification System	Current Weight* 09-May-24	Week Ago 02-May-24	Month Ago 09-Apr-24	Qtr-to-Date 28-Mar-24	Year-to-Date 29-Dec-23
S&P 500 Index	**100.00**	**2.96**	**0.08**	**-0.77**	**9.31**
S&P 400 MidCap Index		**3.30**	**-0.29**	**-1.64**	**7.72**
S&P 600 SmallCap Index		**2.97**	**0.46**	**-1.11**	**0.87**
Dow Jones Industrials		**3.04**	**1.30**	**-1.05**	**4.51**
Nasdaq Composite		**3.19**	**0.24**	**-0.20**	**8.89**
Communication Services	**9.51**	**3.23**	**0.42**	**2.98**	**19.01**
Advertising	0.07	2.87	0.44	-2.40	4.27
Broadcasting	0.05	1.25	10.57	8.33	2.74
Cable & Satellite	0.42	0.51	-3.83	-10.82	-15.74
Integrated Telecommunication Services	0.64	2.18	-0.83	-4.02	4.18
Interactive Home Entertainment	0.13	0.15	-4.08	-3.22	-8.11
Interactive Media & Services	6.64	3.91	1.84	6.75	25.82
Movies & Entertainment	1.10	1.92	-5.26	-5.96	18.27
Publishing & Printing	0.03	3.29	-2.82	-5.33	0.63
Wireless Telecommunication Svcs	0.43	-0.13	2.29	0.90	2.72
Consumer Discretionary	**10.68**	**1.49**	**-0.72**	**-1.41**	**3.28**
Apparel Retail	0.35	4.62	0.23	-4.16	3.01
Apparel & Accessories & Luxury Goods	0.13	1.32	-2.20	-10.90	-23.12
Auto Parts & Equipment	0.07	7.11	6.00	6.00	-3.76
Automobile Manufacturers	1.43	-3.82	-3.08	-2.55	-25.42
Automobile Retail	0.27	1.94	-5.19	-8.29	9.59
Broadline Retail	4.42	2.60	1.94	4.84	24.25
Casinos & Gaming	0.15	1.88	-11.19	-10.30	-6.65
Computer & Electronics Retail	0.04	2.38	-10.16	-9.59	-5.26
Consumer Electronics	0.07	2.40	14.10	13.73	31.71
Distributors	0.11	1.31	-4.73	-6.89	0.92
Footwear	0.30	1.69	2.32	-1.75	-13.63
Home Furnishings	0.02	3.55	-4.34	-8.53	15.68
Home Improvement Retail	1.06	3.35	-3.73	-8.84	1.84
Homebuilding	0.30	3.00	-3.28	-6.55	5.73
Hotels, Resorts & Cruise Lines	0.85	1.61	-2.29	-3.86	3.69
Household Appliances	0.01	0.68	-18.53	-20.46	-21.86
Leisure Products	0.02	-0.26	6.44	7.96	19.51
Restaurants	0.97	0.08	-1.36	-4.50	-3.10
Other Specialty Retail	0.13	2.34	-0.82	-8.61	4.55
Consumer Staples	**6.60**	**2.00**	**3.52**	**1.08**	**7.97**
Agricultural Products	0.10	4.82	-2.06	0.45	-8.60
Brewers	0.03	1.75	-12.65	-12.55	-3.92
Hypermarkets	2.13	3.89	3.08	1.35	14.49
Distillers & Vintners	0.14	2.43	-1.64	-4.50	2.93
Drug Retail	0.03	-1.60	-10.06	-20.47	-33.93
Food Distributors	0.08	1.21	-3.05	-7.43	2.76
Food Retail	0.09	-0.16	-0.76	-3.73	20.32
Household Products	1.23	1.22	5.93	2.56	13.36
Packaged Foods & Meats	0.74	-0.41	1.36	-0.79	1.12
Personal Products	0.15	2.61	-5.18	-9.36	-7.18
Soft Drinks	1.37	1.59	4.67	2.03	4.76
Tobacco	0.51	2.02	8.17	6.43	7.40
Energy	**3.91**	**1.88**	**-3.31**	**-0.11**	**12.56**
Integrated Oil & Gas	1.97	2.15	-0.94	2.80	15.06
Oil & Gas Equipment & Services	0.37	2.13	-8.55	-7.82	-3.77
Oil & Gas Exploration & Production	0.89	1.11	-3.64	0.44	10.63
Oil & Gas Refining & Marketing & Transportation	0.39	1.19	-11.60	-8.68	18.47
Oil & Gas Storage & Transportation	0.36	2.79	0.87	1.50	14.70

Financials	**12.63**	**2.91**	**0.24**	**-1.31**	**10.50**
Asset Management & Custody Banks	0.83	3.50	-3.09	-4.55	-0.23
Consumer Finance	0.61	1.81	5.18	1.50	19.99
Diversified Banks	3.03	2.91	1.26	-0.01	15.23
Financial Exchanges & Data	1.06	4.15	-1.40	-1.51	-1.39
Insurance Brokers	0.59	2.83	-2.31	-4.71	6.90
Investment Banking & Brokerage	1.03	3.75	6.22	5.52	11.28
Life & Health Insurance	0.37	3.84	0.41	-2.57	5.81
Multi-line Insurance	0.14	2.34	4.96	1.14	16.11
Multi-Sector Holdings	1.18	2.05	-1.42	-2.79	14.62
Property & Casualty Insurance	0.99	2.17	2.46	-0.39	22.00
Regional Banks	0.29	2.45	1.34	0.12	6.92
Reinsurance	0.04	2.27	2.43	-4.27	7.62
Transaction & Payment Processing	2.47	3.04	-1.84	-3.24	7.28
Health Care	**12.11**	**1.95**	**-0.15**	**-3.21**	**4.92**
Biotechnology	1.84	3.17	1.33	-3.20	1.96
Health Care Distributors	0.33	1.84	-0.79	-2.95	11.03
Health Care Equipment	2.32	1.43	-3.06	-4.65	4.86
Health Care Facilities	0.21	4.22	-1.39	-3.41	18.51
Health Care Services	0.47	1.44	-10.00	-13.89	-6.32
Health Care Supplies	0.11	1.06	-8.59	-10.18	-0.99
Life Sciences Tools & Services	1.38	1.67	-2.57	-2.32	5.18
Managed Health Care	1.53	2.97	8.08	1.55	-2.26
Pharmaceuticals	3.91	1.35	0.48	-2.81	10.67
Industrials	**8.79**	**2.94**	**0.24**	**-0.44**	**10.08**
Aerospace & Defense	1.98	2.51	5.17	6.15	8.43
Agricultural & Farm Machinery	0.25	3.29	-0.60	-0.42	2.28
Air Freight & Logistics	0.44	0.57	-2.37	-3.41	-3.30
Building Products	0.52	4.28	3.44	2.71	17.09
Construction & Engineering	0.09	5.95	5.37	3.99	25.19
Construction Machinery & Heavy Trucks	0.66	4.27	-4.11	-3.60	19.14
Data Processing & Outsourced Services	0.05	-1.17	-6.84	-5.76	-6.17
Diversified Support Svcs	0.27	3.52	0.32	-1.39	14.27
Electrical Components & Equipment	0.66	5.86	1.34	1.54	19.45
Environmental & Facilities Services	0.42	1.81	2.30	0.10	15.58
Human Resource & Employment Services	0.38	1.73	-3.92	-3.32	0.60
Industrial Conglomerates	0.41	2.70	2.24	-0.03	14.01
Industrial Machinery	0.85	3.59	-1.85	-2.59	9.04
Passenger Airlines	0.17	3.14	8.14	4.03	17.22
Railroads	0.59	2.12	-1.97	-3.96	-0.74
Research & Consulting Svcs	0.22	3.39	1.19	-1.66	6.70
Trading Companies & Distributors	0.29	2.26	-5.58	-7.48	13.41
Information Technology	**29.24**	**3.96**	**-0.20**	**-1.35**	**10.96**
Application Software	2.26	2.48	-4.85	-5.90	-3.31
Communications Equipment	0.81	5.07	-2.74	-2.28	3.90
Electronic Components	0.23	4.52	9.41	8.79	24.09
Electronic Equipment & Instruments	0.17	0.54	-4.68	-4.78	-1.13
Electronic Manufacturing Services	0.13	3.83	-4.63	-2.87	0.88
Internet Software & Services	0.07	1.80	-7.66	-8.12	-15.51
IT Consulting & Services	0.96	0.90	-10.36	-12.34	-8.15
Semiconductor Equipment	0.93	3.82	-2.29	-1.53	19.94
Semiconductors	8.88	3.51	0.47	-3.03	37.06
Systems Software	8.13	3.26	-3.51	-2.45	8.91
Technology Distributors	0.07	2.09	-12.30	-12.83	-1.91
Technology Hardware, Storage & Peripherals	6.60	6.57	8.04	6.78	-4.18
Materials	**2.31**	**3.47**	**-1.47**	**-1.31**	**7.01**
Commodity Chemicals	0.17	3.94	-1.59	1.34	7.82
Construction Materials	0.16	2.31	0.30	-1.29	20.08
Copper	0.16	4.72	-0.43	8.63	19.99
Fertilizers & Agricultural Chemicals	0.16	2.78	-2.41	-2.69	6.67
Gold	0.11	4.36	7.99	19.53	3.50
Industrial Gases	0.58	2.52	-4.06	-5.32	1.59

Metal & Glass Containers	0.05	2.38	3.34	3.34	21.02
Paper Packaging	0.17	4.52	3.26	2.07	12.50
Specialty Chemicals	0.62	4.32	0.04	-1.87	5.05
Steel	0.14	2.53	-11.31	-10.98	4.33
Real Estate	**2.18**	**3.28**	**-3.34**	**-4.20**	**-5.51**
Data Center REITs	0.26	7.36	-2.86	-4.22	-0.33
Health Care REITs	0.20	2.86	6.64	6.39	4.99
Hotel & Resort REITs	0.03	-0.16	-11.10	-10.93	-5.39
Industrial REITs	0.22	3.46	-14.35	-16.95	-18.87
Multi-Family Residential REITs	0.00	3.35	3.41	5.84	5.36
Office REITs	0.07	2.09	-6.65	-6.31	-7.46
Real Estate Service	0.14	1.34	-6.47	-7.40	-0.16
Retail REITs	0.28	1.69	-0.20	-1.98	-2.34
Self-Storage REITs	0.18	4.45	-5.27	-3.23	-9.33
Single-Family Residential REITs	0.18	4.45	-5.27	-3.23	-9.33
Telecom Tower REITs	0.33	3.50	-3.86	-6.05	-14.81
Timber REITs	0.05	0.39	-11.14	-13.32	-10.48
Utilities	**2.39**	**5.09**	**8.05**	**8.53**	**12.43**
Electric Utilities	1.56	5.45	8.36	9.19	14.85
Gas Utilities	0.04	0.54	2.62	0.69	3.27
Independent Power Producers & Energy Traders	0.10	10.97	14.86	17.16	9.13
Water Utilities	0.06	6.70	10.28	9.96	1.81
Multi-Utilities	0.63	3.23	6.21	6.02	7.64

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

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DOW JONES: 39387.80
S&P 500: 5214.08
NASDAQ: 16346.30

Additional information is available upon request.

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Coverage Universe	Percent	Inv. Banking Relationships *	Percent
Outperform (Buy)	72	Outperform (Buy)	8
Market Perform (Hold)	28	Market Perform (Hold)	3
Underperform (Sell)	1	Underperform (Sell)	0

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