William Blair

Equity Research Economics

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Economics Weekly

The Government Debt Problem

Please refer to important disclosures on pages 12 and 13. Analyst certification is on page 12.

> Chair Powell: *[W]e don't see ourselves as, you know, the judges of appropriate fiscal policy. I will say, and many of my predecessors have said, that we're on an unsustainable fiscal path and that needs to be addressed over time. But I think trying to get into that with lawmakers would be—would be kind of inappropriate, given our independence and our need to stick to our knitting.*
>
> Edward Lawrence: *Is there any conversation then about the Federal Reserve financing some of that debt that we're seeing coming down the pike?*
>
> Chair Powell: *No. Under no circumstances.*
>
> – FOMC Meeting June 2023

The downgrading of U.S. government debt from AAA to AA+ by the rating agency Fitch has once again put U.S. government debt back into the spotlight. It was preceded several days earlier by the Treasury's announcement that it would be issuing even more debt going forward than the markets had anticipated. Yields on 10-year U.S. Treasury notes increased from 3.96% on the day of the announcement to 4.18% in the following few days. The move has started to spook investors, who are still recovering from last year's collapse in bond prices—one of the largest drawdowns in the market's history—as well as yet another seat-of-the-pants debt ceiling standoff. **In speaking with clients, government debt dynamics are once again top of mind, and therefore the topic of this *Economics Weekly*.**

Is Downgrading U.S. Debt Meaningful?

The answer, unfortunately, like just about every question in economic is, it depends.

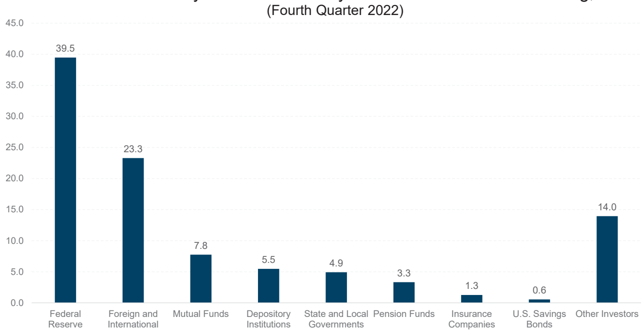
The reality is that the United States will never *un*intentionally default on its debt, and there is no known tipping point beyond which U.S. debt-to-GDP becomes a major problem. The United States also has a floating currency, has control of its own monetary policy, and importantly issues all of its debt in its own currency. It is also still the world's reserve currency of choice, and this is something that is unlikely to change for many years to come. From this perspective, judging U.S. debt against other AAA countries, such as Germany or the Netherlands, which do not have control of their own monetary policy nor their own free-floating currency, is not an apples-to-apples comparison.

Another important point to note is that very few holders of U.S. Treasurys are sensitive to the ratings that may be assigned to them by private sector rating agencies—i.e., it is doubtful that many investors felt the need to dump their Treasury holdings following the downgrade.

Furthermore, because the dollar is the world's reserve currency, many holders are also relatively insensitive to the actual yield on the debt itself. A breakdown of U.S. Treasurys shareholders (exhibit 1) shows that 39.5% are held by the Federal Reserve, 5.5% by banks, 1.3% by insurance companies, and 23.3% by the rest of the world (the majority of which includes foreign central banks as reserve assets). Thus, more than 50% of Treasurys are held by entities for reasons other than yield, i.e., currency management, liability matching, or regulatory purposes.

Exhibit 1.

Share of Publically Held US Treasury Debt Market Debt Outstanding, %
(Fourth Quarter 2022)



Sources: US Treasury, William Blair Equity Research

It is also worth remembering that as long as countries such as China want to maintain their current growth strategies, which crucially includes maintaining a 2% current account surplus, they have little choice but to invest in safe dollar assets such as U.S. Treasurys. There is no other market in the world that is large enough and open enough to be able to absorb the size of capital flows that China needs to send abroad in order to maintain this structure. China does not yet have the social structures in place to enable the private sector to save less; in fact, the severity of COVID lockdowns seems to have only heightened households' desire to save and has not resulted in the kind of post-pandemic spending surge seen across Western countries. Similarly, as the economist Michael Pettis has noted, the United States would also have to actively restrict and limit access to its markets by foreign investors and increase its savings rate.

Lastly, as we have written previously, one also needs to look at the math of the debt-to-GDP ratio, which is based on the simple formula:

$$D/Y_t = [1+(r-g)](D/Y)_{t-1} + d$$

Where D = debt, Y = output, r = interest rate, g = nominal GDP growth, d = primary deficit, and t = time.

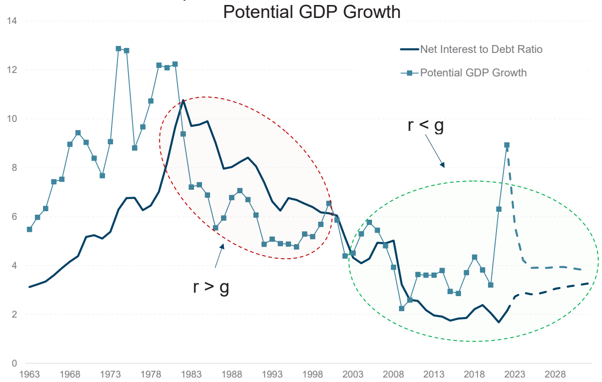
Essentially, this formula is telling us that debt-to-GDP growth in the current year is simply a function of the debt-to-GDP ratio last year, plus interest paid on that debt less revenue growth (i.e., nominal GDP), plus whatever the primary budget deficit is (i.e., increase in spending minus revenues outside of any interest costs on the debt).

French economist Olivier Blanchard has argued that, based on this formula, for the debt to be sustainable, the rate of net interest paid, or "r," has to be lower than the growth rate of the economy, or "g." If that is not the case, the country would need to scale back its primary deficit, or "d," (i.e., its spending excluding interest costs). With r less than g, the debt can increase with little fiscal cost and taxes do not have to be raised.

Exhibit 2 shows that r was greater than g through the 1980s, a period associated with spiraling inflation and an unsustainable increase in the debt-to-GDP ratio. Over the last decade, r has been less than g, which has meant that the debt was more sustainable than might have been believed. Looking forward, the CBO's forecasts point to a situation where the r-versus-g gap starts to get much tighter as we move into the next decade, and the demographic burden starts to become much heavier.

Exhibit 2.

Net Interest Expense to Federal Government Debt vs Nominal Potential GDP Growth



Sources: Bureau of Economic Analysis, CBO, William Blair Equity Research

Caveats Attached

There is of course a tremendous amount of uncertainty around this view. Certainly, the debt ratio cannot continue to rise indefinitely, and at some point, constraints will bite, though we cannot say exactly when. Such constraints have even been acknowledged by the proponents of the Modern Monetary Theory, who believe government spending is sustainable only as long as inflation is not high and rising, i.e., higher inflation is a signal that government spending has helped push the economy beyond its capacity to produce.

Furthermore, the data also shows that while r<g for much of history, this is not always the case. There is always a temptation to run large deficits, and difficulties arise for governments when that spending is increasingly used for nonproductive purposes—such as paying interest on the debt—as opposed to investment, which can increase the economy's potential rate of GDP growth, or "g." These kind of dynamics can also help to spook investors, who start to demand a larger premium, and taxpayers, who start to question how productively their tax dollars are being spent.

There is, therefore, a decent argument to be made that President Biden's IRA, CHIPS, and Infrastructure Investment and Jobs Act are the right kind of spending that will expand capacity and increase the economy's ability to be productive and increase "g."

Of somewhat greater concern, however, has been the fact that there has been little debate around mandatory spending on entitlements, and to what extent they are actually productive and sustainable, especially as the population ages and these costs soar. Both political parties in the recent debt standoff segregated this spending as an untouchable third rail, which meant that the debate was focused entirely on quibbles about the already small, steadily shrinking discretionary spending share of the pie.

The recent debt downgrade from Fitch has highlighted that all areas should be open to debate, the nation's debt is not an inexhaustible fund to be dipped into at will, and there are situations when its sustainability can change for the worse. While the agency was heavily criticized for its timing of the downgrade, it would no doubt have also been heavily criticized if it were to downgrade the debt in the midst of a crisis. Hence, there is certainly some logic to acting now when growth has been quite solid, and when fiscal policymakers should theoretically be reining in their future spending. Lastly, while the United States may not be in a dire predicament today, if recent history has taught us anything, it is that events are becoming increasingly unpredictable, and having a greater amount of fiscal space to respond to such unexpected and often adverse shocks would be a healthy choice for policymakers to pursue.

Conclusion

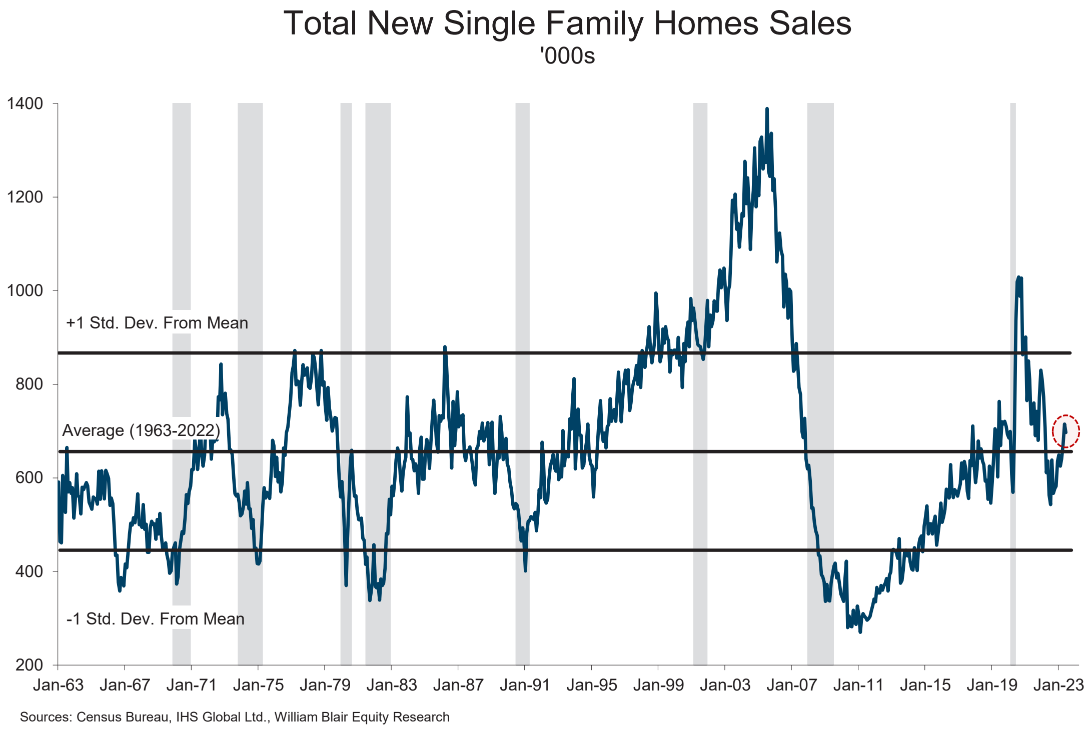
The recent downgrading of U.S. government debt has once again put the question of debt sustainability into the spotlight. While the actual rating change from AAA to AA+ is not overly meaningful for a country such as the United States—which is the world's reserve currency of choice, has control of its own monetary policy, and also has all of its debt issued in dollars—such a change is unlikely to have resulted in any forced sales of bond holdings. Nevertheless, it was a useful reminder that the U.S. capacity to issue debt is not limitless. Debt sustainability is simply a function of the primary deficit, the rate of interest paid on the debt, and the growth rate of the economy. Meaning that, as for anyone in the private sector, the debt is only sustainable as long as income growth is in excess of the cost of servicing the debt—or if the amount of spending adjusts accordingly. At the moment, it is still the case in the U.S. that the economy's growth rate is greater than the cost of interest on the debt; however, this is not guaranteed to always be the case. Furthermore, the current trajectory of government debt suggests that the sustainability gap becomes increasingly tight in the coming decade as spending on aging-related social support increases. At the very least, it would make sense not to add to this burden with even more debt being devoted to nonproductive interest payments.

Highlights in the Week Ahead

Date	Time (EDT)	Indicator	Last	Consensus	WB Estimate	Actual
23 Aug	8:30 a.m.	New Home Sales (July)	-2.5%	1.9%	1.0%	
24 Aug	8:30 a.m.	Durable Goods Orders (July)	4.6%	-4.0%	-3.1%	
		Orders Less-transportation	0.5%	0.2%	0.2%	

Sources: Bloomberg, William Blair Equity Research

Indicator of the Week: New Home Sales



Economic Scorecard

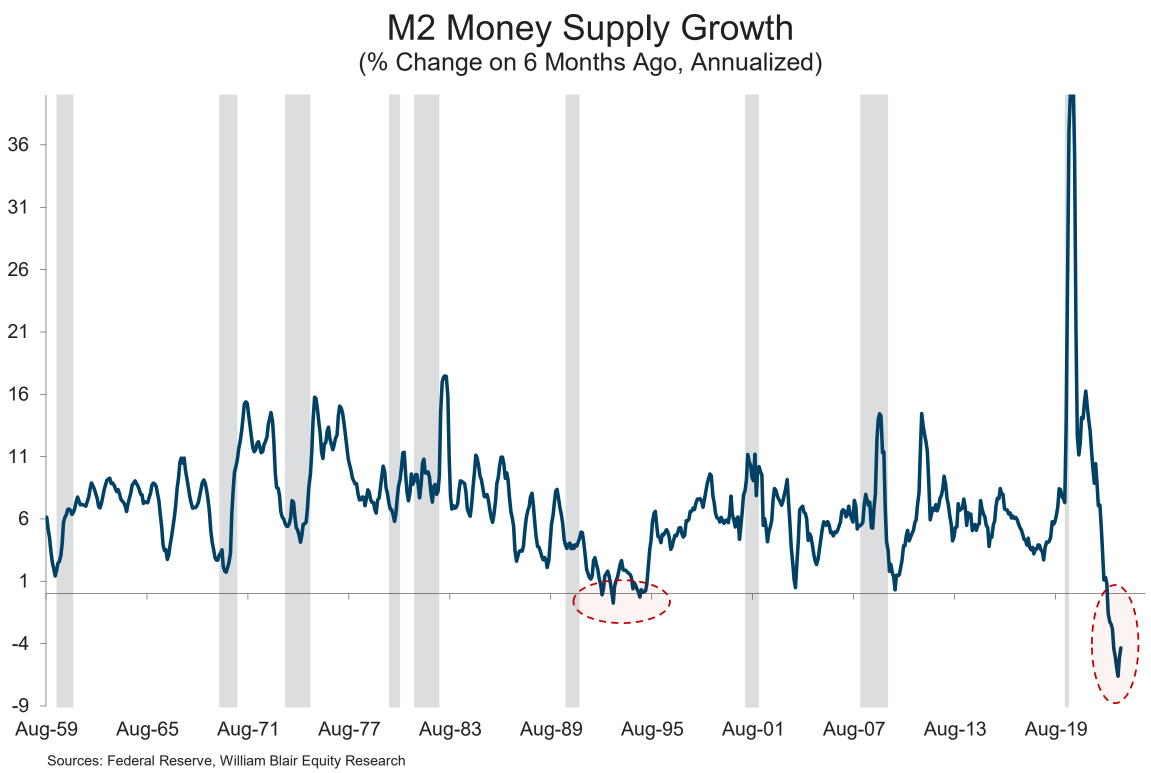
Rolling monthly heat map, % Change on Year Ago (unless otherwise noted)

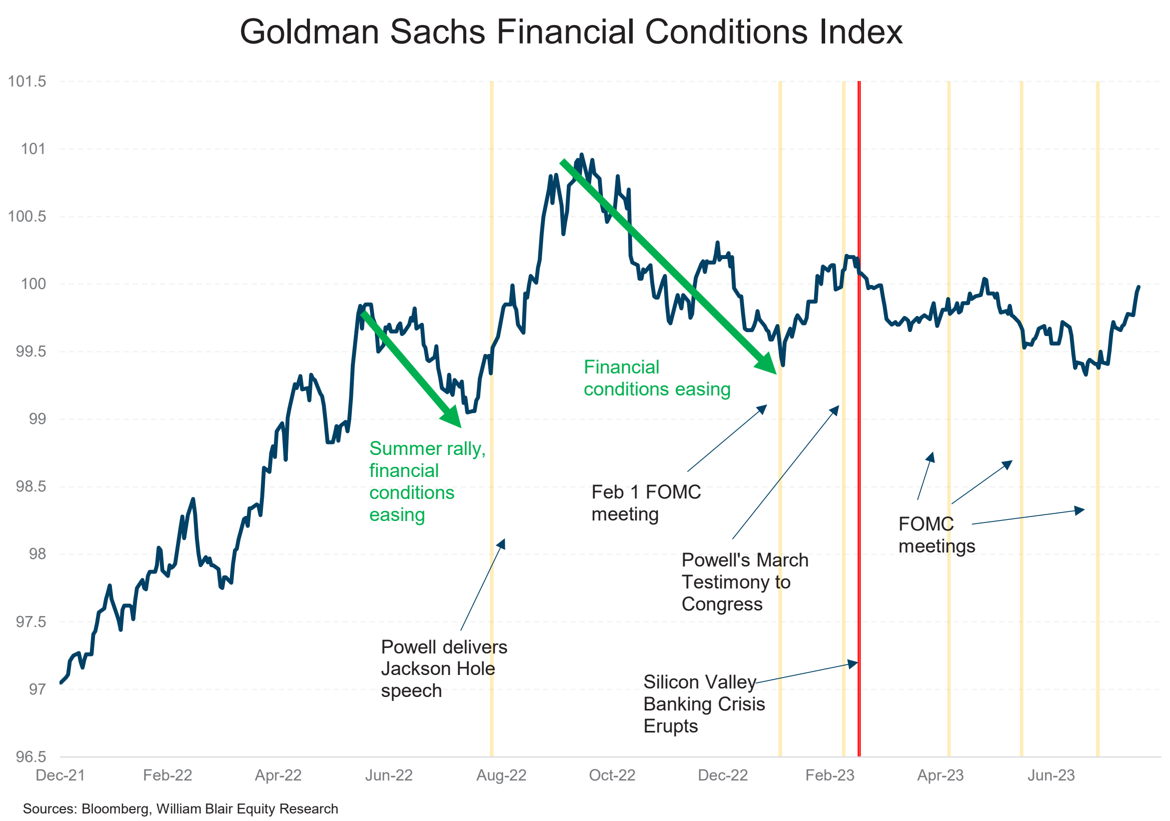
	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Growth																			
US Leading Indicators	7.0	6.0	4.4	2.8	1.3	-0.3	-1.1	-1.6	-3.2	-4.6	-6.0	-6.0	-6.8	-7.9	-8.0	-7.8	-7.7	-7.5	
US Coincident Indicators	4.1	2.6	2.6	2.4	1.8	2.0	2.2	2.4	1.9	1.4	1.5	1.5	1.3	1.4	1.3	1.7	1.9	1.7	
US Lagging Indicators	2.1	6.4	4.8	5.5	6.7	6.6	7.4	7.5	7.4	7.6	7.5	6.7	6.7	5.6	5.1	3.9	3.0	2.6	
Consumer																			
Total Retail Sales	17.8	8.4	8.9	9.7	9.5	10.2	10.2	9.4	8.8	6.1	6	7.4	5.3	2.2	1.3	2.1	1.6	3.2	
Personal Income	5.6	-12.1	1.4	3.9	4.3	3.9	4.2	5.6	5.4	5	4.9	5.8	5.6	5.5	5.5	5.5	5.3		
Real Disposable Personal Income	-3.4	-21.6	-7.4	-4.8	-4.7	-4.6	-4.1	-2.6	-2.3	-2	-1.5	2.4	2.8	3.5	3.6	4.1	4.7		
Real Personal Consumption	6.7	2.3	2.4	2.6	2.1	2.2	2.3	2.1	1.7	1.4	1.9	2.6	2.4	2.1	2.2	2.2	2.4		
Personal Saving Rate (%)	4.5	3.8	3.6	3.4	2.7	3.5	3.2	3	3	3.5	3.7	4	4.3	4.6	4.3	4.6	4.3		
Consumer Confidence (Conference Board)**	105.7	107.6	108.6	103.2	98.4	95.3	103.6	107.8	102.2	101.4	109	106	103.4	104	103.7	102.5	110.1	117	
Employment																			
Employment Growth	5.2	4.9	4.9	4.8	4.5	4.4	4.2	4.0	3.7	3.4	3.2	3.3	2.8	2.7	2.6	2.6	2.5	2.2	
ASA Temporary Staffing Index	17.9	13.9	11.6	11.2	9.2	9.3	9.3	5.4	1.1	0.2	1.0	-2.1	-6.1	-6.5	-6.8	-5.9	-6.6	-4.7	
ISM Employment Index Manufacturing*	52.7	55.3	51.2	50.2	48.1	49.8	54.2	49.3	49.9	48.9	50.8	50.6	49.1	46.9	50.2	51.4	48.1	44.4	
ISM Employment Index Services*	49	53.5	49.7	50.3	48.7	49.5	50.2	52.3	49.2	50.6	49.4	50	54	51.3	50.8	49.2	53.1	50.7	
Unemployment Rate, %	3.8	3.6	3.6	3.6	3.6	3.5	3.7	3.5	3.7	3.6	3.5	3.4	3.6	3.5	3.4	3.7	3.6	3.5	
Average Hourly Earnings	5.3	5.9	5.8	5.5	5.4	5.4	5.4	5.1	4.9	5	4.8	4.4	4.7	4.3	4.4	4.3	4.4	4.4	
Initial Jobless Claims (avg. wkly. chg. '000s)	222	218	216	212	217	216	210	191	202	213	209	200	219	238	239	230	254	228	
Jop Openings	49.5	43.2	26.6	16.3	8.9	4.6	-7.0	-0.3	-7.9	-4.3	-5.0	-8.0	-14.0	-19.0	-12.2	-16.0	-12.6	-15.8	
Layoff Announcements	-55.9	-30.1	6	-15.8	58.8	36.3	30.3	67.6	48.3	416.5	129.1	440	410.1	319.4	175.9	286.7	25.2	-8.2	
Housing Market																			
Housing Starts	24.5	0.8	21.5	-3.6	-6	-13.9	-4.5	-6.2	-8.9	-16.6	-24.1	-19.7	-18.9	-19.4	-25.2	2.6	-10.4	5.9	
New Home Sales	1	-16.8	-24.6	-11	-21.4	-28.6	-7.5	-23.6	-15.1	-24.6	-23.4	-19.9	-19.1	-9.5	9.8	12.4	23.8		
Existing Home Sales	-4.1	-5.5	-6.5	-8.9	-14.8	-19.9	-20.2	-24.0	-28.2	-35.2	-34.0	-36.9	-23.1	-22.1	-23.0	-20.4	-18.9		
Median House Price (Existing Homes)	18.1	21.2	21.7	15.4	15.5	17.8	8.9	15.6	16.3	7.4	17	0.4	1.4	0.7	-10.4	-7.4	-4		
Existing Homes Inventory (Mths' supply)	1.9	2.1	2.2	2.4	2.7	2.9	3	3	3.2	3.4	3.5	3.4	2.9	2.8	2.8	2.8	2.8		
New Homes Inventory (Mths' supply)	6.2	7	8.5	8.3	9.5	10.1	8.7	9.7	9.7	9.4	8.5	8.1	8.4	8.1	7.7	7.2	7.4		
NAHB Homebuilder Sentiment*	81	79	77	69	67	55	49	46	38	33	31	35	42	44	45	50	55	56	
Inflation																			
Consumer Price Index	7.9	8.5	8.3	8.6	9.1	8.5	8.3	8.2	7.7	7.1	6.5	6.4	6	5	4.9	4	3	3.2	
CPI Less-food & energy	6.4	6.5	6.2	6	5.9	5.9	6.3	6.6	6.3	6	5.7	5.6	5.5	5.6	5.5	5.3	4.8	4.7	
Producer Price Index	10.4	11.7	11.2	11.1	11.2	9.7	8.7	8.5	8.2	7.4	6.4	5.7	4.7	2.7	2.2	1.1	0.2	0.8	
PPI Less-food & energy	8.9	9.7	9	8.6	8.3	7.6	7.2	7.2	6.9	6.3	5.7	5	4.6	3.3	3.1	2.8	2.4	2.4	
PCE Price Index	6.4	6.8	6.4	6.5	7	6.4	6.3	6.3	6.1	5.7	5.3	5.4	5	4.2	4.3	3.8	3	3	
PCE Prices Less-food & energy	5.4	5.4	5.0	4.9	5.0	4.7	4.9	5.2	5.1	4.8	4.6	4.7	4.7	4.6	4.6	4.6	4.1	4.1	
Business Activity - US																			
Industrial Production	6.6	4.4	4.6	3.7	3.2	3.0	3.1	4.5	3.1	1.9	0.6	1.5	0.9	0.2	0.3	0.0	-0.8	-0.2	
New Cap Gds Orders less-aircraft & parts	9.3	8	4.8	9.5	7.6	6.3	8.2	5.6	5	3.2	1	5.6	2.7	1.9	1	3.2	1.5		
Business Inventories	14.3	15.4	17.9	19	20.1	20.6	19.6	19.4	18.3	16.8	15.1	12.6	10.7	8.8	6.2	5.2	3.3	2	
ISM Manufacturing PMI*	58.4	57	55.9	56.1	53.1	52.7	52.9	51	50	49	48.4	47.4	47.7	46.3	47.1	46.9	46	46.4	
Markit US Manufacturing PMI*	57.3	58.8	59.2	57	52.7	52.2	51.5	52	50.4	47.7	46.2	46.9	47.3	49.2	50.2	48.4	46.3	49	
ISM Services Index*	57.2	58.4	57.5	56.4	56	56.4	56.1	55.9	54.5	55.5	49.2	55.2	55.1	51.2	51.9	50.3	53.9	52.7	
Markit US Services PMI*	56.5	58	55.6	53.4	52.7	47.3	43.7	49.3	47.8	46.2	44.7	46.8	50.6	52.6	53.6	54.9	54.4	52.3	
Business Activity - International																			
Germany Manufacturing PMI Markit/BME*	58.4	56.9	54.6	54.8	52	49.3	49.1	47.8	45.1	46.2	47.1	47.3	46.3	44.7	44.5	43.2	40.6	38.8	
Japan Manufacturing PMI Jibun Bank*	52.7	54.1	53.5	53.3	52.7	52.1	51.5	50.8	50.7	49	48.9	48.9	47.7	49.2	49.5	50.6	49.8	49.6	
Caixin China Manufacturing PMI*	50.4	48.1	46	48.1	51.7	50.4	49.5	48.1	49.2	49.4	49	49.2	51.6	50	49.5	50.9	50.5	49.2	
China Manufacturing PMI*	50.2	49.5	47.4	49.6	50.2	49	49.4	50.1	49.2	48	47	50.1	52.6	51.9	49.2	48.8	49	49.3	
UK Manufacturing PMI Markit/CIPS*	58	55.2	55.8	54.6	52.8	52.1	47.3	48.4	46.2	46.5	45.3	47	49.3	47.9	47.8	47.1	46.5	45.3	
France Manufacturing PMI Markit*	57.2	54.7	55.7	54.6	51.4	49.5	50.6	47.7	47.2	48.3	49.2	50.5	47.4	47.3	45.6	45.7	46	45.1	
Currencies* **																			
Euro (EUR/USD)	-7.1	-5.7	-12.3	-12.2	-11.6	-13.9	-14.9	-15.4	-14.5	-8.2	-5.8	-3.3	-5.7	-2.1	4.5	-0.4	4.1	7.6	
Renmimbi (USD/CNY)	-2.5	-3.2	2.1	4.7	3.8	4.4	6.7	10.4	14.0	11.4	8.5	6.2	9.9	8.4	4.7	6.5	8.3	5.9	
Yen (USD/Yen)	7.9	9.9	18.7	17.4	22.1	21.5	26.3	30.1	30.5	22.0	13.9	13.0	18.4	9.2	5.1	8.3	6.3	6.8	
Sterling (GBP/USD)	-3.7	-4.7	-9.0	-11.3	-12.0	-12.5	-15.5	-17.1	-16.2	-9.3	-10.7	-8.4	-10.4	-6.1	-0.1	-1.3	4.3	5.5	
Canadian $ (USD/CAD)	-0.5	-0.5	4.6	4.8	3.8	2.6	4.1	9.1	10.0	5.0	7.3	4.7	7.7	8.1	5.5	7.3	2.9	3.1	
Mexican Peso (USD/MXN)	-1.9	-2.8	0.9	-1.5	0.9	2.5	0.3	-2.4	-3.7	-10.2	-5.0	-8.7	-10.6	-9.2	-11.9	-10.0	-14.9	-17.8	
US Equities																			
S&P 500	14.8	14.0	-1.2	-1.7	-11.9	-6.0	-12.6	-16.8	-15.9	-10.7	-19.4	-9.7	-9.2	-9.3	0.9	1.2	17.6	11.1	
S&P 400 Midcap	6.6	3.2	-8.3	-7.8	-15.8	-7.1	-11.7	-16.6	-12.9	-4.8	-14.5	0.7	-2.3	-6.7	-0.4	-4.3	15.6	8.6	
S&P 600 Smallcap	2.9	-0.1	-9.7	-9.9	-18.0	-7.6	-13.4	-20.0	-13.1	-7.4	-17.4	-2.5	-5.1	-10.4	-5.5	-8.9	7.8	3.4	
Russell 2000	-6.9	-6.8	-17.8	-17.8	-26.1	-15.3	-18.9	-24.5	-19.6	-14.2	-21.6	-4.8	-7.4	-12.9	-5.1	-6.1	10.6	6.3	

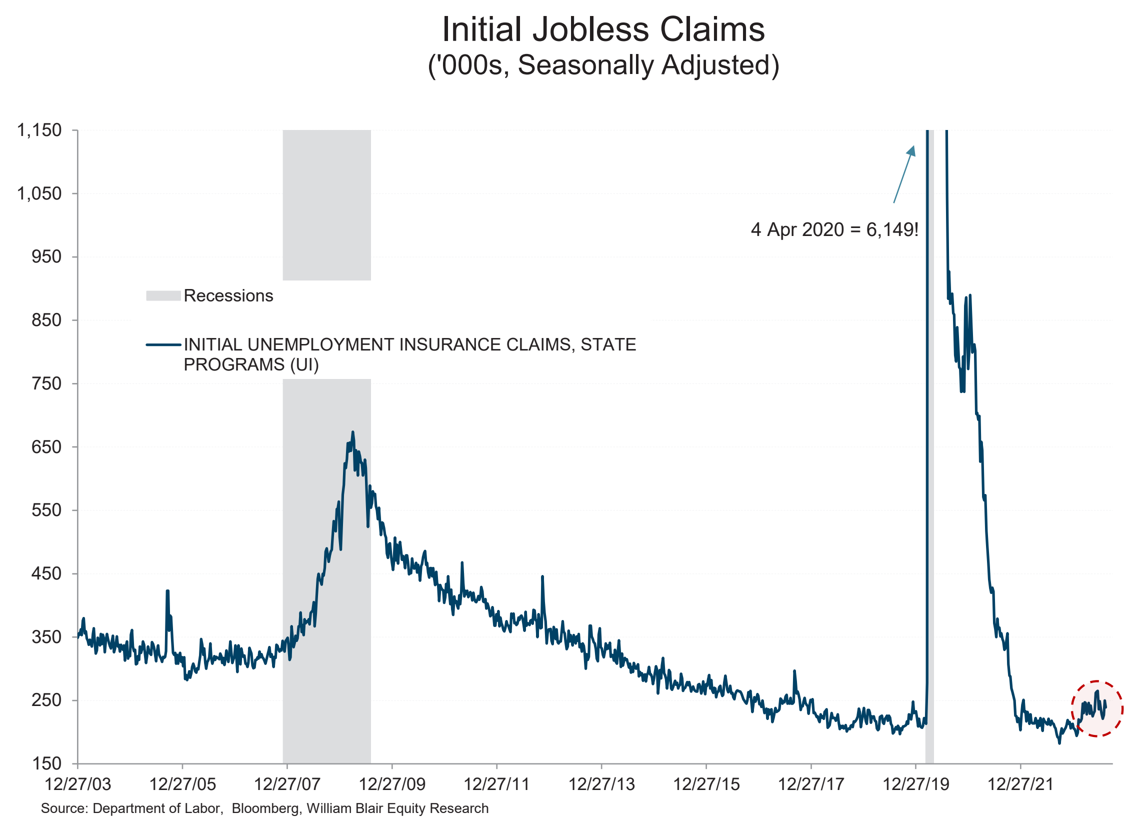
* Diffusion Index, **1985=100, ***Currencies - green/red = strengthening/weakening foreign currency vs dollar

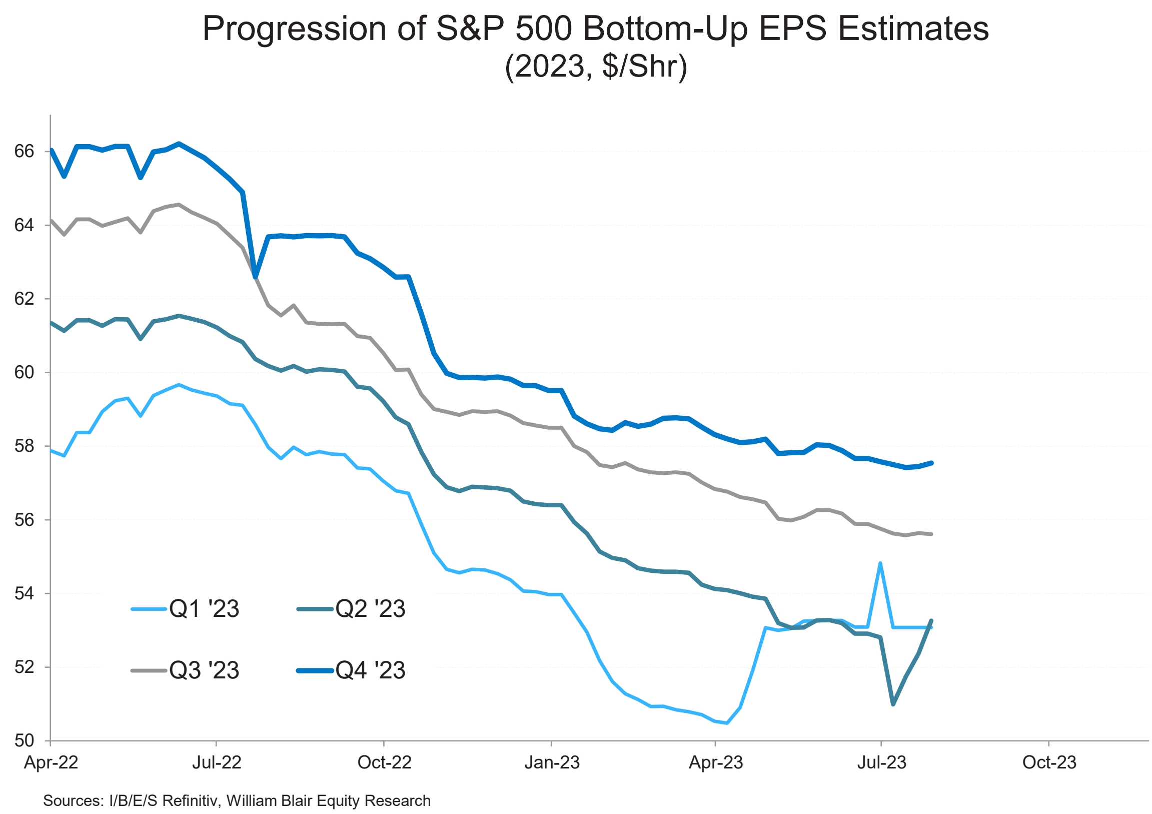
Source: ISM, Federal Reserve, Census Bureau, Bureau of Labor Statistics, Conference Board, Bloomberg, William Blair

Other Economic Indicators

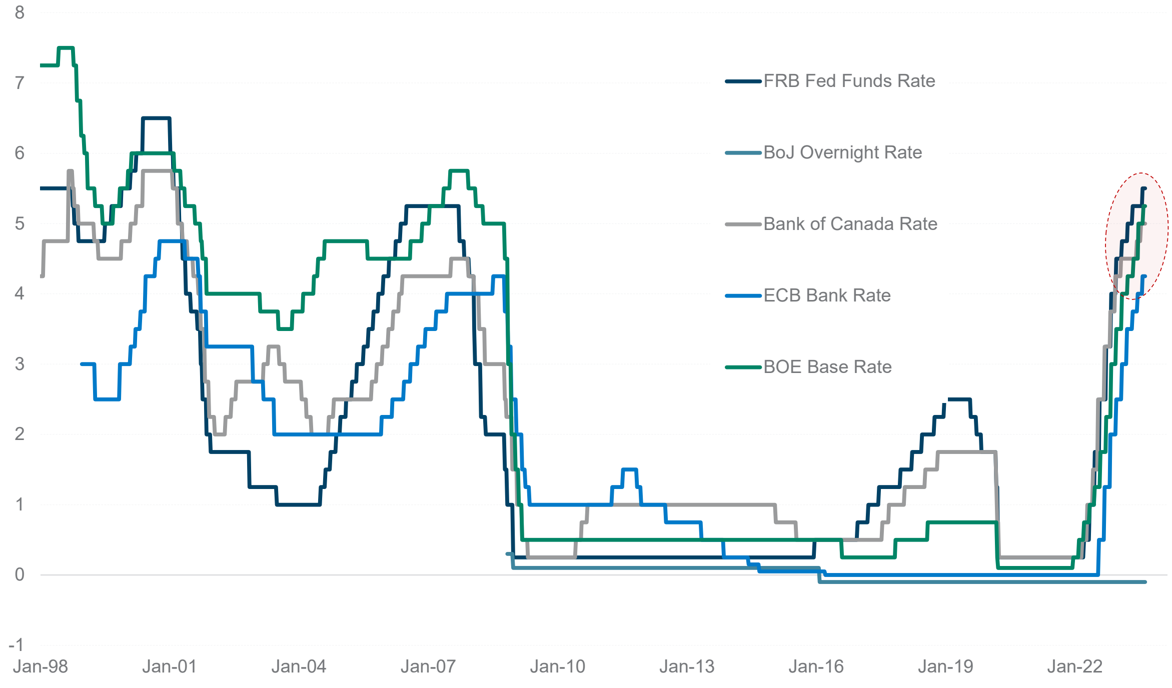





Initial Jobless Claims
('000s, Seasonally Adjusted)
1,150
1,050
950
850
750
650
550
450
350
250
150
4 Apr 2020 = 6,149!
Recessions
INITIAL UNEMPLOYMENT INSURANCE CLAIMS, STATE PROGRAMS (UI)
12/27/03
12/27/05
12/27/07
12/27/09
12/27/11
12/27/13
12/27/15
12/27/17
12/27/19
12/27/21
Source: Department of Labor, Bloomberg, William Blair Equity Research

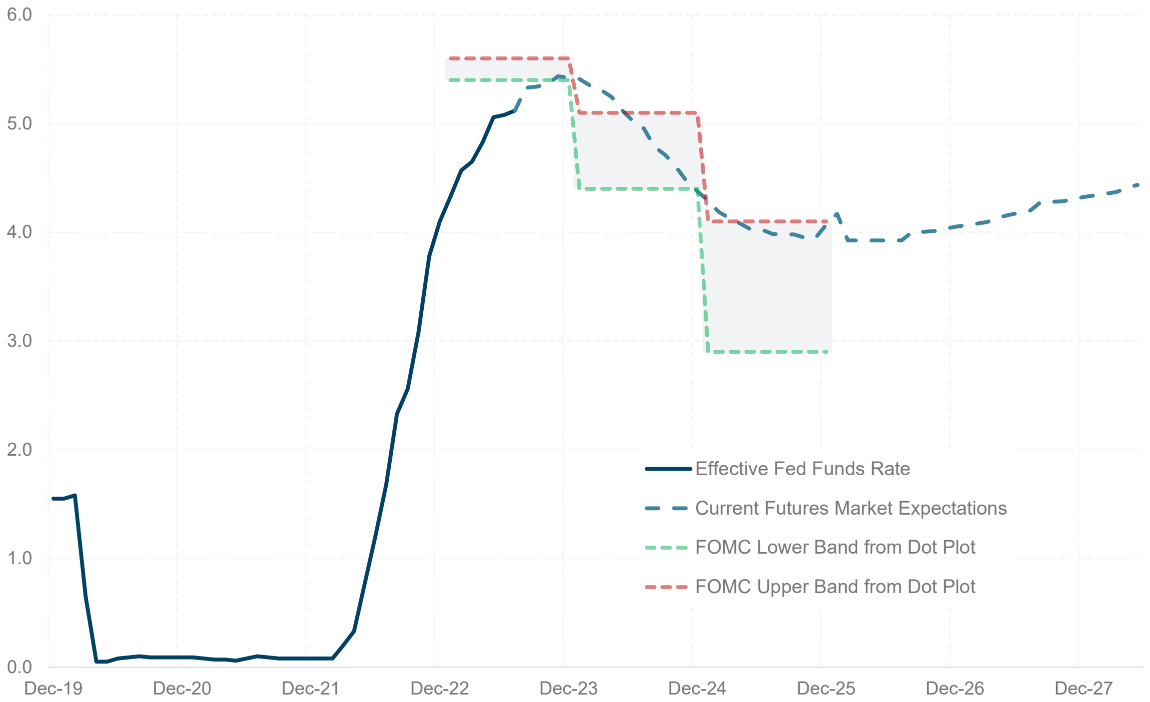

Progression of S&P 500 Bottom-Up EPS Estimates
(2023, $/Shr)
66
64
62
60
58
56
54
52
50
Q1 '23
Q2 '23
Q3 '23
Q4 '23
Apr-22
Jul-22
Oct-22
Jan-23
Apr-23
Jul-23
Oct-23
Sources: I/B/E/S Refinitiv, William Blair Equity Research

Central Bank Target Short-term Interest Rates, %



Sources: Bloomberg, William Blair Equity Research

Fed Funds Rate, Futures Market Expectations & FOMC Projections, %



Sources: Bloomberg, William Blair Equity Research

S&P 500 Sector Performance

Global Industry Classification System	Current Weight* 17-Aug-23	Week Ago 10-Aug-23	Month Ago 17-Jul-23	Qtr-to-Date 30-Jun-23	Year-to-Date 30-Dec-22
S&P 500 Index	**100.00**	**-2.20**	**-3.37**	**-1.80**	**13.83**
S&P400 MidCap Index		**-3.38**	**-4.45**	**-1.96**	**5.79**
S&P600 SmallCap Index		**-3.92**	**-4.02**	**-1.67**	**3.33**
Dow Jones Industrials		**-1.99**	**-0.32**	**0.20**	**4.01**
Nasdaq Composite		**-2.95**	**-6.51**	**-3.42**	**27.23**
Communication Services	**9.12**	**-2.25**	**-0.14**	**2.22**	**38.59**
Advertising	0.07	-2.54	-20.23	-17.23	-3.76
Broadcasting	0.07	-4.94	-2.85	-5.11	-0.51
Cable & Satellite	0.68	0.40	10.49	12.08	29.41
Integrated Telecommunication Services	0.64	-0.41	4.43	-11.55	-19.55
Interactive Home Entertainment	0.34	-1.41	-7.40	0.08	13.97
Interactive Media & Services	5.82	-2.04	0.06	5.35	65.78
Movies & Entertainment	1.03	-6.47	-5.20	-5.82	17.38
Publishing & Printing	0.03	2.32	2.05	6.77	14.35
Wireless Telecommunication Svcs	0.43	-0.99	-1.18	-1.82	-2.59
Consumer Discretionary	**11.15**	**-4.06**	**-6.30**	**-3.21**	**28.08**
Apparel Retail	0.37	1.54	3.42	3.20	6.82
Apparel & Accessories & Luxury Goods	0.05	-0.71	-8.97	-8.32	-12.21
Auto Parts & Equipment	0.10	-6.39	-12.35	-5.78	6.33
Automobile Manufacturers	2.11	-9.70	-23.41	-16.55	60.73
Automobile Retail	0.32	-0.64	-3.41	-2.04	3.39
Broadline Retail	3.79	-3.27	-0.06	2.52	29.67
Casinos & Gaming	0.21	-7.65	-8.62	-4.88	18.87
Computer & Electronics Retail	0.05	-3.35	-5.53	-5.16	-3.10
Consumer Electronics	0.05	-1.93	-4.33	-2.40	10.30
Distributors	0.13	-4.00	-7.22	-8.69	-2.35
Footwear	0.34	-3.65	-3.37	-4.82	-10.22
Home Furnishings	0.02	-5.61	-13.75	-5.69	-4.83
Home Improvement Retail	1.22	-0.81	1.21	2.75	5.27
Homebuilding	0.28	-4.67	-7.96	-4.20	36.04
Hotels, Resorts & Cruise Lines	0.74	-3.95	1.29	5.75	45.56
Household Appliances	0.02	-4.03	-11.46	-9.73	-5.05
Housewares & Specialties	0.01	-3.19	7.37	18.84	-20.95
Leisure Products	0.02	-2.16	-0.49	-1.68	4.38
Restaurants	1.17	-2.75	-5.46	-5.37	6.69
Other Specialty Retail	0.15	-1.90	-0.76	-3.10	-5.44
Consumer Staples	**7.35**	**-2.62**	**-1.81**	**-2.01**	**-2.05**
Agricultural Products	0.16	-3.13	5.17	11.41	-10.72
Brewers	0.03	-3.34	-8.56	-5.57	20.67
Hypermarkets	2.11	-2.65	-0.50	-0.23	7.33
Distillers & Vintners	0.18	-4.13	1.18	3.79	9.10
Drug Retail	0.06	-7.08	-6.73	-4.67	-27.30
Food Distributors	0.10	-0.85	-2.66	-3.69	-6.53
Food Retail	0.09	-4.77	0.43	-0.55	4.85
Household Products	1.35	-2.56	0.40	-1.56	-0.23
Packaged Foods & Meats	0.93	-3.00	-4.41	-6.09	-7.16
Personal Products	0.10	-4.64	-15.88	-17.48	-34.68
Soft Drinks	1.65	-1.59	-1.59	-1.06	-2.03
Tobacco	0.59	-3.39	-5.81	-4.92	-7.42
Energy	**4.46**	**-1.06**	**7.54**	**7.31**	**-0.47**
Integrated Oil & Gas	2.11	-1.19	5.85	1.59	-5.23
Oil & Gas Equipment & Services	0.50	-1.87	2.62	16.29	8.18
Oil & Gas Exploration & Production	1.18	-0.38	10.19	12.17	0.48
Oil & Gas Refining & Marketing & Transportation	0.41	-1.66	17.29	18.18	12.16
Oil & Gas Storage & Transportation	0.34	-0.76	3.84	5.07	2.29
Financials	**12.43**	**-2.47**	**-1.88**	**0.58**	**-0.94**
Asset Management & Custody Banks	0.67	-4.01	-4.24	-2.24	-4.32
Consumer Finance	0.52	-4.03	-10.42	-8.61	6.69
Diversified Banks	2.79	-4.00	-2.93	1.18	-0.30
Financial Exchanges & Data	1.15	-1.16	-1.68	1.28	12.71
Insurance Brokers	0.66	-0.57	-2.45	-3.34	9.15
Investment Banking & Brokerage	1.01	-4.13	0.19	2.13	-10.83

Life & Health Insurance	0.42	-1.11	2.72	6.28	-6.62
Multi-line Insurance	0.19	-2.95	-0.09	1.51	-5.55
Multi-Sector Holdings	1.24	-1.06	2.60	3.58	14.34
Property & Casualty Insurance	0.81	0.45	3.76	1.37	-4.84
Regional Banks	0.30	-6.60	-4.70	3.27	-35.58
Reinsurance	0.04	-3.18	-3.30	1.56	4.81
Health Care	**13.82**	**-1.01**	**1.73**	**0.38**	**-1.96**
Biotechnology	2.06	-0.76	5.86	6.58	-4.85
Health Care Distributors	0.33	-4.05	-2.92	-4.93	9.20
Health Care Equipment	2.54	-2.26	-9.00	-9.10	2.23
Health Care Facilities	0.21	-1.14	-10.06	-13.37	7.67
Health Care Services	0.56	-6.97	-4.56	-2.91	-20.01
Health Care Supplies	0.14	-1.21	-6.44	-3.19	33.86
Life Sciences Tools & Services	1.64	-2.95	1.31	1.20	-4.63
Managed Health Care	1.82	-1.84	3.17	2.94	-8.18
Pharmaceuticals	4.52	1.85	8.86	4.04	2.26
Industrials	**8.67**	**-2.52**	**-2.87**	**-1.34**	**7.76**
Aerospace & Defense	1.70	-2.53	-3.49	-3.38	-4.50
Agricultural & Farm Machinery	0.33	-3.55	-0.34	3.45	-2.24
Air Freight & Logistics	0.58	-3.76	-3.51	-1.59	10.84
Building Products	0.43	-2.80	-6.80	-2.28	11.91
Construction & Engineering	0.08	-0.01	0.55	2.02	40.64
Construction Machinery & Heavy Trucks	0.63	-2.61	1.62	6.07	13.51
Data Processing & Outsourced Services	0.06	-0.43	7.11	7.82	32.01
Diversified Support Svcs	0.24	-1.23	-6.01	-4.11	20.81
Electrical Components & Equipment	0.58	-1.39	-1.43	-0.22	16.16
Environmental & Facilities Services	0.35	-0.94	-5.14	-7.22	5.28
Human Resource & Employment Services	0.49	-1.58	0.95	8.46	12.68
Industrial Conglomerates	0.80	-1.90	-4.72	-3.89	7.92
Industrial Machinery	0.87	-2.96	-3.64	-2.97	13.06
Passenger Airlines	0.21	-5.98	-11.44	-12.36	15.37
Railroads	0.66	-2.76	-1.11	0.04	0.24
Research & Consulting Svcs	0.23	-2.11	-3.76	-2.16	9.82
Trading Companies & Distributors	0.26	-2.22	-2.69	-4.31	24.81
Information Technology	**27.40**	**-1.81**	**-7.89**	**-5.46**	**34.31**
Application Software	2.32	-1.92	-5.60	0.03	35.80
Communications Equipment	0.92	1.92	5.28	4.44	16.36
Electronic Components	0.21	-2.57	-1.41	-2.64	7.98
Electronic Equipment & Instruments	0.19	-0.63	-8.36	-6.47	-3.36
Electronic Manufacturing Services	0.11	-5.30	-10.46	-8.79	11.36
Internet Software & Services	0.10	-2.42	-0.32	-1.98	6.47
IT Consulting & Services	1.07	-1.91	-2.09	0.88	6.05
Semiconductor Equipment	0.83	-5.08	-8.22	-5.86	21.56
Semiconductors	6.29	-1.29	-8.35	-2.37	70.53
Systems Software	7.76	-1.74	-8.55	-7.13	32.20
Technology Distributors	0.07	-1.15	5.65	9.16	12.18
Technology Hardware, Storage & Peripherals	7.54	-2.30	-10.03	-9.94	33.28
Materials	**2.48**	**-2.56**	**-3.04**	**-2.55**	**3.90**
Commodity Chemicals	0.19	-3.76	4.23	2.82	10.56
Construction Materials	0.15	-5.35	-5.15	-5.88	24.68
Copper	0.15	-6.51	-2.08	-0.95	4.26
Diversified Chemicals	0.03	-2.90	-3.85	-0.65	2.13
Fertilizers & Agricultural Chemicals	0.20	-2.95	-2.40	-4.76	-15.07
Gold	0.08	-2.96	-13.36	-9.38	-18.10
Industrial Gases	0.66	-1.32	-2.40	-2.23	8.49
Metal & Glass Containers	0.05	-2.55	-1.02	-4.83	8.33
Paper Packaging	0.18	-3.94	2.03	3.39	-6.86
Specialty Chemicals	0.66	-2.27	-6.05	-4.32	3.94
Steel	0.16	1.65	-0.19	0.74	21.08
Real Estate	**2.45**	**-3.33**	**-6.26**	**-4.40**	**-2.63**
Health Care REITs	0.19	-3.59	-2.29	-2.23	6.28
Hotel & Resort REITs	0.03	-5.10	-9.35	-6.06	-1.50
Industrial REITs	0.30	-1.60	-6.07	-1.98	6.63
Office REITs	0.08	-5.11	0.37	4.61	-16.17
Real Estate Service	0.15	-3.04	-10.91	-6.61	-0.92
Residential REITs	0.34	-2.40	-6.13	-4.10	4.90
Retail REITs	0.29	-4.42	-6.53	-2.84	-6.74
Specialized REITs	0.13	-4.11	-5.41	-2.62	0.80

Utilities	**2.49**	**-1.89**	**-4.80**	**-3.98**	**-10.86**
Electric Utilities	1.64	-1.82	-4.60	-3.92	-10.78
Gas Utilities	0.05	-0.24	-2.52	0.29	4.11
Independent Power Producers & Energy Traders	0.03	-7.95	-15.57	-12.92	-37.24
Water Utilities	0.07	-0.92	-4.08	-3.19	-9.33
Multi-Utilities	0.69	-1.94	-4.90	-3.98	-10.24

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

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DOW JONES: 34500.70
S&P 500: 4369.71
NASDAQ: 13474.60

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Market Perform (Hold)	27	Market Perform (Hold)	4
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