By Patrick Fearon-Hernandez, CFA, and Thomas Wash

[Posted: December 2, 2024 – 9:30 AM ET] Global equity markets are generally higher this morning. In Europe, the Euro Stoxx 50 closed up 0.6% from its prior close. In Asia, the MSCI Asia Apex 50 Index closed up 1.1%. Chinese markets were higher, with the Shanghai Composite up 1.1% from its previous close and the Shenzhen Composite up 1.8%. Conversely, US equity index futures are signaling a lower open.

With 483 companies having reported so far, S&P 500 earnings for Q3 are running at \$63.10 per share compared to estimates of \$60.44, which is up 4.2% from Q3 2023. Of the companies that have reported thus far, 75.3% have exceeded expectations, while 17.8% have fallen short of expectations.

The Confluence macro team publishes a plethora of research reports and multimedia offerings on a weekly and quarterly basis, all available on our <u>website</u>. We highlight recent publications below with new items of the day in bold (*there will be no Geopolitical Report published this week*):

Bi-Weekly Geopolitical Report

Implications of
North Korean
Soldiers in the
Ukraine War
(11/18/24)
+ podcast

Asset Allocation Bi-Weekly

Bonds and the Post-Election Environment (11/25/24) + podcast

Asset Allocation Quarterly

Q4 2024 Report

Q4 2024 Rebalance Presentation

Of Note

Confluence of Ideas Podcast
The Q4 Asset
Allocation
Rebalance

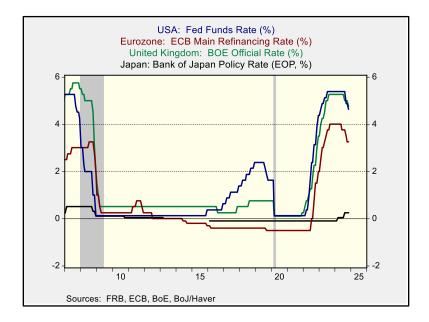
Our *Comment* today opens with further evidence that the Bank of Japan is likely to hike its benchmark interest rate again later this month. We next review several other international and US developments with the potential to affect the financial markets today, including an effort by the European Parliament's biggest political group to scrap the EU's ban on selling autos with internal combustion engines by 2035 and President-elect Trump's weekend threat to impose 100% tariffs against countries that try to stop using the US dollar for trade.

Japan: In an interview published Saturday, Bank of Japan Governor Ueda <u>hinted that the central bank could hike its benchmark short-term interest rate again when its policy board next meets on December 18-19. According to Ueda, the timing of the next rate hike is "approaching" as the data on Japanese wage growth, consumer spending, and price inflation continues to move in line</u>



with the central bank's forecasts. The statement will act as confirmation for the modest majority of market participants who already expected a rate hike this month.

- The BOJ's benchmark interest rate currently stands at just 0.25%. If the central bank hikes rates in December, it would be the first policy change since a rate hike in July.
- The BOJ's slow pace of rate hikes and the continuing wide disparity between Japanese rates and the major Western rates have weighed on the yen (JPY) over the last couple of months. Despite Ueda's statement, the currency has weakened about 0.2% today and is currently trading at 150.00 per dollar (\$0.0067).



China: The yield on long-term Chinese bonds <u>fell below Japanese yields for the first time</u> on Friday. China's 30-year government bond declined to just 2.21% versus 2.27% on 30-year JGBs. The fall in Chinese yields reflects investor concerns that China faces years of slow economic growth, deflation, and ultralow interest rates similar to what Japan faced starting around 1990. The concern is generally consistent with our view that the Chinese economy has hit several big structural headwinds, such as high debt and poor demographics.

- Despite the Chinese economy's unfavorable long-term outlook, the government's recent modest stimulus program has given a small boost to the factory sector.
- The government on Saturday <u>said its official November purchasing managers' index for manufacturing rose to a seasonally adjusted 50.3</u>, up from 50.1 in October. Like most major PMIs, the Chinese one is designed so that readings over 50 indicate expanding activity. The figures therefore suggest China's factory sector has now grown modestly for two straight months. Before that, however, the index had shown that the sector had declined for five straight months.



European Union: On Friday, the *Financial Times* scooped that the largest political group in the European Parliament, the center-right European People's Party, is <u>working to scrap the EU's planned 2035 ban on selling automobiles with internal combustion engines</u>. Working with aligned national leaders, it also wants to reverse the EU's interim rules imposing fines on carmakers that exceed certain emissions limits.

- The auto industry is a huge part of the EU economy, but it is struggling with challenges ranging from threatened US import tariffs and electric-vehicle dumping by China to high energy costs and the EU's own stringent regulations.
- The new initiative to soften the regulatory burden likely stems at least in part from the recent political shift to the right in the US and the EU. Since the regulatory burden isn't the only headwind for Europe's automakers, the EPP initiative isn't a silver bullet. However, if successful, it could ease some of the pressure on the auto industry.

France: Prime Minister Barnier's minority government today is on the brink of collapse after the far-right populist National Rally (RN) <u>signaled it might trigger a no-confidence vote over the austerity policies in the proposed 2025 budget</u>. Barnier is desperately trying to control France's ballooning budget deficit, which has started to spook investors, but he responded to RN by dumping a proposed hike in electricity taxes. Now, RN insists that he restore cost-of-living adjustments for pensions and reverse other spending cuts, which may be a bridge too far for Barnier.

- On a more positive note, President Macron on Friday was given a tour of Notre Dame cathedral, which has finally been repaired and refurbished after its 2019 fire. Initial reports say the new stonework and cleaned older stone have brightened its interior, giving viewers a sense of what it must have been like when it first opened in 1260.
- The cathedral is <u>due to be reopened to the public on December 7</u>.

Ireland: After elections on Friday, centrist party Fianna Fáil <u>appears on track to win the largest number of seats in parliament and continue its coalition with the center-right Fine Gael</u>. To gain a majority, however, it will have to strike a deal with some small parties and independents after the Greens, a former coalition partner, suffered a dramatic loss of support. The results make Ireland a rare island of relative political stability in Europe.

Romania: In yesterday's parliamentary elections, initial tallies suggest the center-left PSD party came in first with about 22.5% of the vote, while two center-right parties got about 15% each. The nationalist far-right AUR group garnered 18%, and another far-right group, SOS Romania, got about 5%. If confirmed, the results mean Romania will also continue to be governed by mainstream parties, despite a populist right-wing nationalist winning the first round of the presidential election last week.

• The parliamentary election came exactly one week after pro-Russia, NATO-skeptic candidate Călin Georgescu came out of nowhere to win the first round of the presidential election. Liberal candidate Elena Lasconi came in second.



- Under law, Georgescu and Lasconi would normally compete in the presidential run-off election scheduled for next Sunday. However, the run-off election is now in limbo after the country's top court on Thursday ordered a recount of the first round.
- The court and election officials <u>are suspicious of Georgescu's sudden rise from obscurity after only campaigning on the Chinese-owned social media platform TikTok</u>. The authorities are probing whether Georgescu's first-round win was the result of a covert Russian interference operation utilizing thousands of fake TikTok accounts, perhaps with the connivance of TikTok's Chinese owners and/or the Chinese government.
- There are also suspicions that widely followed social media influencers in Romania were paid off to channel viewers to Georgescu's posts. Several influencers had reportedly admitted to being paid for those services. However, Georgescu's campaign filings have shown no expenses whatsoever.
- Officials from the European Union have also been brought in to investigate whether TikTok violated its new Digital Services Act, which requires big social media platforms to take action against disinformation and electoral interference.

Georgia: In another sign that Russia is managing to bring some Eastern European countries back into its orbit, Prime Minister Irakli Kobakhidze on Thursday <u>said he will suspend Georgia's process of EU accession until 2028 and decline all grants from the bloc</u>. The announcement has sparked mass protests and clashes with police in the capital of Tbilisi every night since then.

Russia-Ukraine: While it's now widely acknowledged that the Kremlin's forces are gradually reducing the Ukrainians' salient in the Russian region of Kursk, new reporting shows the Russians <u>have also suddenly started to take more territory in eastern Ukraine</u>. The Russian momentum will likely put further pressure on Kyiv to start peace negotiations, even beyond the pressure that is likely to come from the US once President-elect Trump is back in office.

Syria-Russia-Turkey: The rebels who have been battling the Assad government for years staged a surprise offensive over the weekend, capturing much of the major city of Aleppo and wide swaths of western and northwestern Syria. Underlining the international dimension of the civil war, the rebels are reportedly being aided by Turkish-backed fighters. In return, the Assad government and its Russian allies are fighting back with airstrikes, and Iran has sent its foreign minister to Damascus in a show of support.

- The offensive is yet another spark that could lead to a broader conflict in the Middle East and threaten its energy output.
- Importantly, the meddling by outside powers such as Russia, Iran, and Turkey has the potential to spark fighting between major powers.

United States-China: The outgoing Biden administration today <u>imposed new restrictions on</u> <u>sending advanced semiconductors and related equipment to China</u>. Under the new initiative, the US's previous export curbs will be extended to cover memory chips used in artificial-intelligence applications and certain types of chipmaking equipment. The move also adds 140 Chinese

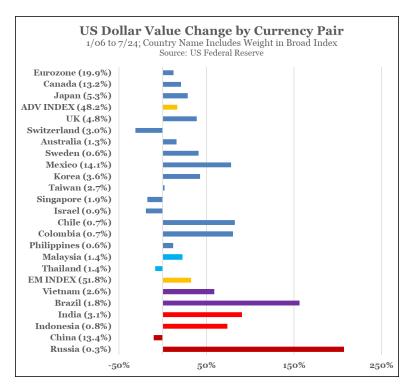


companies to the US export blacklist. Even though the administration has taken a flexible approach to applying the rules, the new move is likely to further exacerbate US-China tensions.

US Trade and Currency Policy: President-elect Trump on Saturday warned the BRICS group of developing countries that he will impose 100% import tariffs against them if they keep trying to create their own currency to use in place of the dollar. The warning appears to reflect concerns that reduced use of the greenback for trade would undermine its value or its role as the world's reserve currency. However, Trump and his advisors have also floated the idea of weakening the dollar to help eliminate the US trade deficit.

- As we noted in our <u>Bi-Weekly Geopolitical Report from September 9, 2024</u>, the dollar's share in global central bank currency reserves has been falling gradually for more than two decades as countries make greater use of non-dollar currencies in trade. Nevertheless, the dollar remains in a bull market and is trading close to a record high. It has appreciated the most against major BRICS currencies, even as those countries try to reduce their use of the greenback.
- In our view, the value of the dollar is more driven by international capital flows than by its use in trade. Given the US economy's superior growth, deep and well-regulated financial markets, and better protections for private property, capital flows into the US are likely to keep supporting the dollar in the near term.
- All the same, some public policy observers note that the strong dollar exacerbates the US trade deficit by making US exports more expensive and imports less expensive. That's probably why some politicians have suggested taking steps to weaken the dollar, perhaps by imposing a tax on foreign capital inflows. Trump now appears to be siding with the strong-dollar advocates, which may make it harder to achieve his goal of bringing US trade back into balance.





US Postal System: The US Postal Service <u>has finally started rolling out its new delivery trucks</u>, and initial reports suggest mail carriers are happy with them. The new trucks, which will replace the current boxy vehicles introduced in the 1980s, are not only electrified, but they also finally have air conditioning and are designed for better access to parcels stored in the back. Sadly, however, they're also being panned as extremely ugly!



(Source: US Postal Service)



US Economic Releases

There were no economic releases prior to publication time. The following table lists the economic releases and Fed events scheduled for the rest of today.

| No economic releases for the rest of today | | | | | | | |
|---|--|--|----------------------|----------|-------|--------|--|
| ET | Indicator | | | Expected | Prior | Rating | |
| 9:45 | S&P Global US Manufacturing PMI | m/m | Nov F | 49 | 48.8 | *** | |
| 10:00 | Construction Spending MoM | m/m | Oct | 0.20% | 0.10% | * | |
| 10:00 | D:00 ISM Manufacturing | | Nov | 47.6 | 46.5 | ** | |
| 10:00 | ISM Prices Paid | m/m | Nov | 56 | 54.8 | ** | |
| 10:00 | ISM New Orders | m/m | Nov | | 47.1 | ** | |
| 10:00 | ISM Employment | m/m | Nov | | 44.4 | * | |
| Federal Reserve | | | | | | | |
| No Fed speakers or events for the rest of today | | | | | | | |
| ET | T Speaker or Event | | District or Position | | | | |
| 15:15 | Christopher Waller Gives Keynote at Fed Framework Conference | Member of the Board of Governors | | | | | |
| 16:30 | John Williams Takes Gives Keynote Remarks | /illiams Takes Gives Keynote Remarks President of the Federal Reserve Bank of New York | | | | | |

Foreign Economic News

We monitor numerous global economic indicators on a continuous basis. The most significant international news that was released overnight is outlined below. Not all releases are equally significant, thus we have created a star rating to convey to our readers the importance of the various indicators. The rating column below is a three-star scale of importance, with one star being the least important and three stars being the most important. We note that these ratings do change over time as economic circumstances change. Additionally, for ease of reading, we have also color-coded the market impact section, which indicates the effect on the foreign market. Red indicates a concerning development, yellow indicates an emerging trend that we are following closely for possible complications, and green indicates neutral conditions. We will add a paragraph below if any development merits further explanation.



| Country | Indicator | | | Current | Prior | Expected | Rating | Market Impact |
|-----------------|--|------------|--------|---------|---------|----------|---------|-------------------------------|
| ASIA-PACIFIC | mulcator | 1 | Į. | Current | 11101 | Lxpecteu | itating | Warket Impact |
| Japan | Housing Starts | у/у | Oct | -2.9% | -0.6% | -2.0% | ** | Equity bearish, bond bullish |
| заран | Annualized Housing Starts | y/y | Oct | 0.779m | 0.800m | 0.789m | * | Equity and bond neutral |
| | Capital Spending | y/y y/y | 3Q | 6.7% | 7.4% | 7.0% | ** | Equity and bond neutral |
| Australia | S&P Global Australia Manufacturing PMI | m/m | Nov F | 49.4 | 49.4 | 7.070 | *** | Equity and bond neutral |
| Australia | Melbourne Institute Inflation | у/у | Nov | 2.9% | 3.0% | | *** | Equity and bond neutral |
| | Building Approvals | m/m | Oct | 4.2% | 5.8% | 1.3% | *** | Equity bullish, bond bearish |
| | Retail Sales | m/m | Oct | 0.6% | 0.1% | 0.4% | *** | Equity and bond neutral |
| New Zealand | Building Permits | m/m | Oct | -5.2% | 2.4% | 0.470 | ** | Equity and bond neutral |
| South Korea | Trade Balance | m/m | Nov | \$5610m | \$3153m | \$5050m | * | Equity and bond neutral |
| Journ Rolea | Exports | у/у | Nov | 1.4% | 4.6% | 2.8% | *** | Equity bearish, bond bullish |
| | Imports | y/y | Nov | -2.4% | 1.7% | -0.9% | ** | Equity bearish, bond bullish |
| | S&P Global South Korea PMI Manufacturing | m/m | Nov | 50.6 | 48.3 | 0.570 | *** | Equity and bond neutral |
| China | Official Composite PMI | m/m | Nov | 50.8 | 50.8 | | * | Equity and bond neutral |
| Cillia | Official Manufacturing PMI | m/m | Nov | 50.3 | 50.1 | 50.2 | *** | Equity and bond neutral |
| | Official Services PMI | m/m | Nov | 50.0 | 50.1 | 50.2 | ** | Equity and bond neutral |
| | Caixin Manufacturing PMI | m/m | Nov | 51.5 | 50.3 | 50.6 | *** | Equity and bond neutral |
| India | HSBC India PMI Mfg | m/m | Nov F | 56.5 | 57.3 | 30.0 | *** | Equity and bond neutral |
| IIIuiu | GDP | у/у | 3Q | 5.4% | 6.7% | 6.5% | *** | Equity bearish, bond bullish |
| EUROPE | ODF | у/ у | JQ | 3.470 | 0.770 | 0.570 | | Equity bearish, bolid bullish |
| Eurozone | СРІ | у/у | Nov P | 2.3% | 2.0% | 2.3% | *** | Equity and bond neutral |
| Luiozone | Core CPI | y/y y/y | Nov P | 2.7% | 2.7% | 2.8% | ** | Equity and bond neutral |
| | HCOB Eurozone Manufacturing PMI | m/m | Nov F | 45.2 | 45.2 | 45.2 | *** | Equity and bond neutral |
| | Unemployment Rate | m/m | Nov F | 6.3% | 6.3% | 6.3% | ** | Equity and bond neutral |
| Germany | Import Price Index | у/у | Oct | -0.8% | -1.3% | -1.2% | ** | Equity and bond neutral |
| Germany | Retail Sales | y/y y/y | Oct | 3.6% | 1.4% | 3.3% | * | Equity and bond neutral |
| | HCOB Eurozone Germany PMI | m/m | Nov F | 43.0 | 43.2 | 43.2 | *** | Equity and bond neutral |
| | Unemployment Change | m/m | Nov | 7.0k | 26.0k | 20.0k | *** | Equity bullish, bond bearish |
| | Unemployment Claims Rate | m/m | Nov | 6.1% | 6.1% | 6.1% | ** | Equity and bond neutral |
| France | Consumer Spending | у/у | Oct | 0.1% | -0.1% | 0.170 | * | Equity and bond neutral |
| riunce | CPI, EU Harmonized | y/y | Nov P | 1.7% | 1.6% | 1.8% | ** | Equity and bond neutral |
| | CPI | y/y y/y | Nov P | 1.3% | 1.2% | 1.4% | *** | Equity and bond neutral |
| | GDP | y/y y/y | 3Q F | 1.2% | 1.3% | 1.3% | ** | Equity and bond neutral |
| | PPI | y/y y/y | Oct | -5.7% | -6.90% | 1.570 | * | Equity and bond neutral |
| | HCOB France Manufacturing PMI | m/m | Nov F | 43.1 | 43.2 | 43.2 | *** | Equity and bond neutral |
| Italy | Industrial Sales WDA | у/у | Sep | -5.7% | -4.9% | 43.2 | * | Equity and bond neutral |
| reary | CPI, EU Harmonized | y/y y/y | Nov P | 1.6% | 1.0% | 1.4% | *** | Equity and bond neutral |
| | CPI NIC Including Tobacco | y/y y/y | Nov P | 1.4% | 0.9% | 1.4% | ** | Equity and bond neutral |
| | HCOB Italy Manufacturing PMI | m/m | Nov | 44.5 | 46.9 | 46.0 | *** | Equity and bond neutral |
| | Unemployment Rate | m/m | Oct | 5.8% | 6.0% | 6.1% | ** | Equity and bond neutral |
| | GDP WDA | у/у | 3Q F | 0.4% | 0.4% | 0.1% | ** | Equity and bond neutral |
| UK | Net Lending Sec. on Dwellings | m/m | Oct | 3.4b | 2.6b | 2.7b | * | Equity and bond neutral |
| OK . | Mortgage Approvals | m/m | Oct | 68.3k | 66.1k | 64.5k | *** | Equity and bond neutral |
| | M4 Money Supply | у/у | Oct | 3% | 4% | 04.58 | * | Equity and bond neutral |
| | Nationwide House Price Index | y/y y/y | Nov | 1.2% | 2.4% | 2.4% | *** | Equity bullish, bond bearish |
| | S&P Global UK Manufacturing PMI | m/m | Nov F | 48.0 | 48.6 | 48.6 | *** | Equity and bond neutral |
| Switzerland | GDP | у/у | 3Q | 2.0% | 1.5% | 1.8% | ** | Equity and bond neutral |
| - Trice Criania | Real Retail Sales | y/y y/y | Oct | 1.4% | 1.8% | 1.0/0 | ** | Equity and bond neutral |
| | PMI Manufacturing | m/m | Nov | 48.5 | 49.9 | 49.5 | *** | Equity and bond neutral |
| | PMI Services | m/m | Nov | 51.8 | 51.8 | 45.5 | * | Equity and bond neutral |
| | Domestic Sight Deposits CHF | w/w | 29-Nov | 450.9b | 451.0b | | * | Equity and bond neutral |
| | Total Sight Deposits CHF | w/w | 29-Nov | 459.0b | 451.0b | | * | Equity and bond neutral |
| Russia | Money Supply, Narrow Definition | w/w | 22-Nov | 18.27t | 18.34t | | * | Equity and bond neutral |
| | S&P Global Russia Manufacturing PMI | m/m | Nov | 51.3 | 50.6 | | *** | Equity and bond neutral |
| AMERICAS | Joan Copar Rassia Manaractaring (1911 | 1, | 1.101 | 31.3 | 50.0 | | | Equity and bond neutral |
| Canada | GDP | у/у | Sep | 1.6% | 1.3% | 1.6% | ** | Equity and bond neutral |
| Brazil | Net Debt % GDP | m/m | Oct | 62.1% | 62.4% | 62.4% | ** | Equity and bond neutral |
| D. 0211 | National Unemployment Rate | m/m | Oct | 6.2% | 6.4% | 6.2% | * | Equity and bond neutral |
| | inational officiapioyment Nate | 111/111 | JUL | 0.2/0 | 0.4/0 | J 0.2/0 | | Lyanty and bond licution |



Financial Markets

The table below highlights some of the indicators that we follow daily. Again, the color coding is similar to the foreign news description above. We will add a paragraph below if a certain move merits further explanation.

| Fixed Income | Today | Prior | Change | Trend |
|-----------------------------|-------|-------------|--------|-------|
| 3-mo Libor yield (bps) | 485 | 485 | 0 | Down |
| 3-mo T-bill yield (bps) | 437 | 438 | -1 | Down |
| U.S. Sibor/OIS spread (bps) | 447 | 447 | 0 | Down |
| U.S. Libor/OIS spread (bps) | 445 | 445 | 0 | Down |
| 10-yr T-note (%) | 4.21 | 4.17 | 0.04 | Down |
| Euribor/OIS spread (bps) | 293 | 294 | -1 | Down |
| Currencies | 3 Mo | | | |
| Dollar | Down | US | | Down |
| Euro | Down | Euro | | Up |
| Yen | Up | Japan | Japan | |
| Pound | Up | UK | UK | |
| Franc | Up | Switzerland | | Up |

Commodity Markets

The commodity section below shows some of the commodity prices and their change from the prior trading day, with commentary on the cause of the change highlighted in the last column.

| | Price | Prior | Change | Explanation | | | | | |
|--------------------|------------|------------|--------|-----------------|--|--|--|--|--|
| Energy Markets | | | | | | | | | |
| Brent | \$72.56 | \$71.84 | 1.00% | | | | | | |
| WTI | \$68.69 | \$68.00 | 1.01% | | | | | | |
| Natural Gas | \$3.16 | \$3.36 | -6.10% | Supply Optimism | | | | | |
| Crack Spread | \$16.12 | \$15.72 | 2.59% | | | | | | |
| 12-mo strip crack | \$19.34 | \$18.93 | 2.17% | | | | | | |
| Ethanol rack | \$1.74 | \$1.74 | 0.00% | | | | | | |
| Metals | | | | | | | | | |
| Gold | \$2,639.19 | \$2,643.15 | -0.15% | | | | | | |
| Silver | \$30.36 | \$30.63 | -0.85% | | | | | | |
| Copper contract | \$412.25 | \$414.00 | -0.42% | | | | | | |
| Grains | | | | | | | | | |
| Corn contract | \$431.25 | \$433.00 | -0.40% | | | | | | |
| Wheat contract | \$544.25 | \$548.00 | -0.68% | | | | | | |
| Soybeans contract | \$987.00 | \$989.50 | -0.25% | | | | | | |
| Shipping | | | | | | | | | |
| Baltic Dry Freight | 1,354 | 1,419 | -65 | | | | | | |



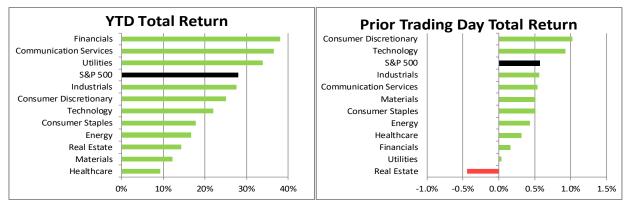
Weather

The 6-to-10-day and 8-to-14-day forecasts currently call for warmer-than-normal temperatures west of the Mississippi River, with cooler-than-normal temperatures in the Mid-Atlantic. The precipitation outlook calls for wetter-than-normal conditions in the Northern Rockies, with dry conditions on the Pacific Coast.



Data Section

US Equity Markets – (as of 11/29/2024 close)



(Source: Bloomberg)

These S&P 500 and sector return charts are designed to provide the reader with an easy overview of the year-to-date and prior trading day total return. Sectors are ranked by total return; green indicating positive and red indicating negative return, along with the overall S&P 500 in black. These charts represent the new sectors following the 2018 sector reconfiguration.

Asset Class Performance – (as of 11/29/2024 close)



This chart shows the year-to-date returns for various asset classes, updated daily. The asset classes are ranked by total return (including dividends), with green indicating positive and red indicating negative returns from the beginning of the year, as of prior close.

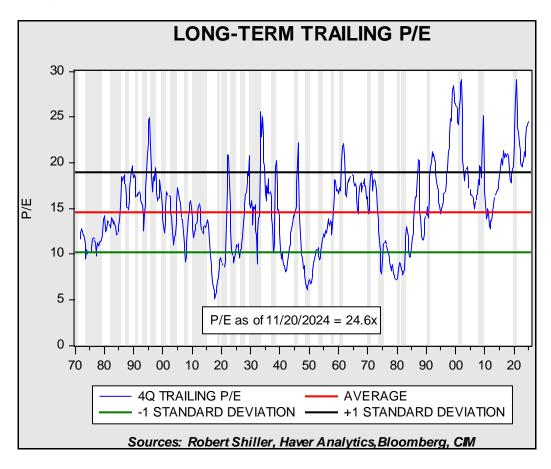
Asset classes are defined as follows: Large Cap (S&P 500 Index), Mid Cap (S&P 400 Index), Small Cap (Russell 2000 Index), Foreign

Developed (MSCI EAFE (USD and local currency) Index), Real Estate (FTSE NAREIT Index), Emerging Markets (MSCI Emerging Markets (USD and local currency) Index), Cash (iShares Short Treasury Bond ETF), US Corporate Bond (iShares iBoxx \$ Investment Grade Corporate Bond ETF), US Government Bond (iShares 7-10 Year Treasury Bond ETF), US High Yield (iShares iBoxx \$ High Yield Corporate Bond ETF), Commodities (Bloomberg total return Commodity Index), Value (S&P 500 Value), Growth (S&P 500 Growth).



P/E Update

November 21, 2024



Based on our methodology,¹ the current P/E is 24.6x, up 0.1 from our last report. The increase in the multiple was driven by an increase in the stock price index.

This report was prepared by Confluence Investment Management LLC and reflects the current opinion of the authors. It is based upon sources and data believed to be accurate and reliable. Opinions and forward-looking statements expressed are subject to change. This is not a solicitation or an offer to buy or sell any security.

¹ This chart offers a running snapshot of the S&P 500 P/E in a long-term historical context. We are using a specific measurement process, similar to *Value Line*, which combines earnings estimates and actual data. We use an adjusted operating earnings number going back to 1870 (we adjust as-reported earnings to operating earnings through a regression process until 1988), and actual operating earnings after 1988. For the current quarter, we use the Bloomberg estimates which are updated regularly throughout the quarter; currently, the four-quarter earnings sum includes three actual quarters (Q1, Q2 and Q3) and one estimate (Q2). We take the S&P average for the quarter and divide by the rolling four-quarter sum of earnings to calculate the P/E. This methodology isn't perfect (it will tend to inflate the P/E on a trailing basis and deflate it on a forward basis), but it will also smooth the data and avoid P/E volatility caused by unusual market activity (through the average price process). Why this process? Given the constraints of the long-term data series, this is the best way to create a long-term dataset for P/E ratios.