



December 16, 2024

Morning Briefing

Inflation: The Good, The Bad & The Ugly

Check out the accompanying [chart collection](#).

Executive Summary: Lots of crosscurrents are converging to determine the course of inflation in 2025. So projecting that course takes seeing where those currents are headed, predicting with the aid of historical correlations how they'll likely impact inflation, then overlaying potential economic scenarios to see how they change the narrative. The result: Dr Ed's three inflation scenarios—the Good, the Bad, and the Ugly. In the Good, rising productivity growth moderates inflation even as it spurs economic growth; that's the crux of our Roaring 2020s economic scenario and is the most likely scenario to play out. The Bad is a witches' brew of possibilities with bearish inflationary consequences. The Ugly involves a geopolitical crisis catapulting oil prices. That '70s show seems farfetched these days. ... Also: Dr Ed reviews "Maria" (+).

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Inflation I: The Good. In our Roaring 2020s scenario, a productivity growth boom boosts real GDP growth, keeps a lid on inflation, drives up real labor compensation, and widens profit margins. Last week's [Productivity and Costs](#) report compiled by the Bureau of Labor Statistics (BLS) mostly included revised data for Q3-2024, which mostly supported this upbeat outlook.

The most significant revision was in unit labor costs (ULC), which determines the underlying inflation rate in the labor market. It is calculated by BLS as hourly compensation divided by productivity. Q3's ULC in the nonfarm business sector was revised down 1.1 percentage points to an increase of 0.8% (saar), reflecting an equivalent downward revision in hourly compensation to an increase of 3.1%. ULC increased 2.2% y/y, down from the 3.4% prior preliminary estimate ([Fig. 1](#)).

The y/y headline PCED inflation rate closely tracks the y/y ULC inflation rate ([Fig. 2](#)). The

former was up just 2.3% through October, while the latter rose 2.2%. Both are down from over 6.0% in 2022. In other words, the decline in the ULC inflation rate was the major reason that consumer price inflation has moderated since its summer 2022 peak.

During the summer of 2022, Debbie and I predicted this moderation in the PCED inflation rate ([Fig. 3](#)). We expect it will remain in the current 2.0%-3.0% range through the end of 2025 and probably through the end of the decade. However, we have some concern that the Fed's current monetary easing campaign might revive inflationary pressures in coming months by boosting demand for goods and services at the same time as fiscal policy remains very stimulative.

Regarding fiscal policy, Trump 2.0's impact on inflation is a "known unknown." Tax cuts would also boost demand for goods and services. Tariffs would likely cause a one-time increase in the inflation rate unless they are offset by a stronger dollar. Deregulation should be mostly disinflationary. Reductions in federal government spending would also be disinflationary, but they aren't likely to be significant enough to affect inflation much either way. More energy production could help hold down not only energy prices but prices broadly.

All these crosscurrents could make for a confusing and volatile inflation story next year. However, we are betting that productivity gains will keep a lid on ULC inflation and therefore overall inflation in 2025, and through the end of the decade, and possibly through the 2030s. Now let's focus on the latest productivity and ULC data in the context of our Roaring 2020s scenario:

(1) *Productivity growth booms*. Productivity growth is very volatile on a quarterly basis ([Fig. 4](#)). It is less so on a y/y basis. However, it is easier to see productivity's major growth cycles by focusing on its 20-quarter percent change at an annual rate in the series provided by the BLS for the nonfarm business sector ([Fig. 5](#)).

Based on the available data, there have been two major productivity growth busts—during the Great Inflation of the 1970s and during the first half of the 2010s after the Great Financial Crisis. There have been three distinct productivity growth booms including one in the late 1950s, another during most of the 1960s, and one during the second half of the 1990s. We think that a fourth one started during Q4-2015, when the trailing growth rate was just 0.6%. It rose to 1.9% by Q3-2024.

That's almost a four-fold increase. However, at 1.9%, the rate is only back to slightly below

its historical average of 2.1%—so far. As we've previously explained, we expect the current phase of the Digital Revolution to boost the trailing average of productivity growth we use to 3.5%, plus or minus 0.5%, by the end of the decade. This forecast might seem delusional, but it is consistent with the previous booms.

(2) *Productivity and real GDP.* Productivity is defined as real nonfarm business output divided by hours worked in the nonfarm business sector. The growth rate of this measure of output closely tracks the growth rate of real GDP, both on a y/y basis ([Fig. 6](#)). During Q3-2024, they were up 2.8% and 2.7%, respectively.

The arithmetic of real GDP is very simple: Its growth rate is the sum of the growth rates of productivity and hours worked. On average, since the start of the data in 1948, output is up 3.4%, while productivity is up 2.1% and hours worked is up only 1.3% ([Fig. 7](#)).

Productivity growth has been a major contributor to the growth rate of the economy. If it were to grow 3.5% with hours worked up 1.0%, real GDP would grow 4.5%. Is that conceivable? It is in our Roaring 2020s scenario. As noted above, it was achieved (and then some) during the previous productivity growth booms ([Fig. 8](#))!

(3) *Productivity and hours worked.* The average annual growth rate of hours worked has slowed significantly to only 0.6% over the past five years ([Fig. 9](#)). We think this reflects a structural shortage of labor, especially skilled workers, which is one of the main reasons we believe that the economy is in the early stages of another productivity growth boom. This one has a lot going for it, especially lots of technological innovations that can augment the productivity of the available labor force in almost every conceivable business.

(4) *Productivity and price inflation.* We've previously observed that one of the major flaws of the Phillips Curve model of inflation is that it ignores productivity. The model posits an inverse correlation between the unemployment rate and the inflation rate. This is a very Keynesian perspective that assumes that demand for goods and services drives the economy and inflation. When demand is strong (weak), the unemployment rate is low (high), driving up (down) wage inflation and price inflation.

In fact, there is an inverse correlation between productivity growth and the unemployment rate ([Fig. 10](#)). Tight (loose) labor markets will drive up (down) wage inflation, but that pressure on prices tends to be offset by rising (falling) productivity. In the current productivity growth boom, we expect that the tight labor market will stimulate more productivity growth.

(5) *Productivity and labor costs.* As noted above, ULC is equal to hourly compensation divided by productivity. In a competitive labor market, inflation-adjusted hourly compensation tends to be determined by productivity ([Fig. 11](#)). The so-called productivity-pay gap almost disappears when the price deflator used is the nonfarm business price deflator rather than the CPI. That makes sense since employers' compensation decisions are based on the prices they receive for their output, not on consumers' overall cost of living.

Not surprisingly, the 20-quarter percent change at an annual rate in real hourly compensation closely tracks the comparable growth rate in productivity ([Fig. 12](#)). In other words, the current productivity growth boom that started at the end of 2015 has been reflected in improved real hourly compensation since then, and real compensation is one of the best measures of purchasing power and the standard of living.

(6) *Productivity and profit margins.* There should be a close correlation between the growth rate in productivity (using our trailing series) and the level of the profit margin, defined as pre-tax profits from current production as a percent of nominal GDP ([Fig. 13](#)). There was a very close fit between the two from the 1950s through the 1980s. The fit was less tight during the 1990s and 2000s. It's been an inverse correlation since 2010. We don't know why. We do know that the profit margin has remained on an upward trend despite the weakness in productivity during the five years following 2010. It should remain on that trend now that productivity growth is on an upward trend too since late 2015.

The GDP measure of the profit margin on an after-tax basis closely tracks the S&P 500 profit margin ([Fig. 14](#)). Both have remained on uptrends since the early 1990s. They both suggest that productivity growth might have been stronger since 2010, when it diverged from these measures of the profit margin. In any case, our Roaring 2020s scenario should be bullish for the profit margin of the S&P 500, which we expect to see at new record highs over the next few years ([Fig. 15](#)).

(7) *Bottom line.* Productivity is like fairy dust. It makes everything better. When its growth increases, that boosts real GDP's growth rate, moderates inflation, allows real hourly compensation to rise faster, and lifts profit margins. That's what the Roaring 2020s is all about.

Inflation II: The Bad. So, what could possibly go wrong with our happy base-case scenario? It could be undone by one of the other scenarios we could see but view as less

likely.

We are still assigning a 55% subjective probability to the Roaring 2020s, 25% to a 1990s-style meltup, and 20% to a bearish “cauldron” that includes a geopolitical calamity—with the recognition that geopolitical crises don’t seem to perturb the US economy or stock market anymore.

What other “*toil and trouble*” simmer in this wicked cauldron, to quote Shakespeare’s three witches in *Macbeth*? A tariff and currency war are in this pot. So is a US Treasury debt crisis. Also in the cauldron is a possible rebound in the inflation rate that would force the Fed to stop easing monetary policy, or possibly to tighten monetary policy again.

And what about inflation in the meltup scenario? It has already been fueled by the Fed with an unnecessary 75bps cut in the federal funds rate since September 18. Additional cuts would pour more gasoline on the fire. The resulting positive wealth effect attributable to new highs in the prices of stocks, houses, real estate, bitcoin, and gold could also fuel consumer price inflation. That would force the Fed to raise interest rates, which would turn the meltup into a meltdown.

For now, the latest inflation news suggests that inflation might be getting stuck just north of the Fed’s 2.0% target:

(1) The latest core consumer price inflation as measured by the latest CPI for November and PCED for October showed increases of 3.3% and 2.8% ([Fig. 16](#)). The comparable PPI measure showed consumer prices up 3.4% during November. When it was reported last week, there were significant upward revisions in this third measure of inflation, which unlike the other two doesn’t include rent paid by consumers.

(2) The supercore components of these three measures of consumer price inflation track services less shelter and remained relatively hot over the past couple of months at 4.1% (CPI), 4.0% (PPI), and 3.5% (PCED) ([Fig. 17](#)).

(3) November’s survey of small business owners by the National Federation of Independent Business showed that 24% are raising prices and 28% are planning to do so ([Fig. 18](#)). Those are low readings compared to the spike during 2022. But they are still relatively high compared to the pre-pandemic history of both series.

Inflation III: The Ugly. Reflationists have observed that inflation during the first half of the

2020s has traced out a similar pattern to that of the first half of the 1970s, when it also surged and then moderated. They warn that it might now trace out a second inflationary wave as happened during the second half of the 1970s ([Fig. 19](#)). This scenario is one of the ingredients in our bearish cauldron. During the 1970s, two geopolitical crises in the Middle East caused oil prices to soar, resulting in the Great Inflation of the 1970s.

The current decade already has had two geopolitical crises with the potential to drive up oil prices, yet oil prices remain subdued ([Fig. 20](#)). That's because global oil supply remains ample, while global oil demand remains subdued.

Movie. "Maria" (+) ([link](#)) is a biopic directed, written, and produced by Pablo Larrain about Maria Callas, the world's greatest opera singer. He previously had produced "Spencer" about Lady Diana and "Jackie" about Jackie Kennedy Onassis. All are worth seeing. In this film, Angelina Jolie admirably portrays Maria during the last days of her life in 1970s Paris. There are lots of reflections on her life, including her relationship with Aristotle Onassis. Of course, the remarkable beauty and range of her operatic voice is what stands out most in her career and in this movie.

Calendars

US: Mon: M-PMI & NM-PMI Flash Estimates 49.4/55.7; NY Empire State Manufacturing Index 6.40. **Tues:** Retail Sales Total, Core, Ex Gas & Autos 0.6%/0.4%/0.4%; Headline Industrial Production 0.2%; Capacity Utilization 77.3; Business Inventories 0.2%; NAHB Housing Market Index 47; Atlanta Fed GDPNow 3.3%; 20-Year Bond Auction; Weekly Crude Oil Inventories. (FXStreet estimates)

Global: Mon: Eurozone, Germany, and France M-PMI Flash Estimates 45.3/43.1/43.2; Eurozone, Germany, and France NM-PMI Flash Estimates 49.5/49.5/46.9; Italy CPI 0.0%/m/m/1.6%/y/y; M-PMI & NM-PMI Flash Estimates 48.4/50.9; Lagarde, De Guindos; Schnabel; Macklem. **Tues:** Eurozone ZEW Economic Sentiment 11.8; Germany Ifo Business Climate Index Total, Current Assessment & Expectations 85.5/84.0/87.5; Germany ZEW Economic Sentiment 6.4; UK Unemployment Rate 4.6%; UK Claimant Count Change 28.2k; UK Average Earnings Including & Excluding Bonuses 4.5%/5.0%; Canada CPI 0.1%; Elderson. (FXStreet estimates)

Strategy Indicators

Global Stock Markets (US\$ Performance) ([link](#)): The US MSCI index fell 0.8% w/w from a record high. The AC World ex-US index underperformed with a 1.1% gain and is now 7.0% below its June 15, 2021 record high after being just 0.7% below at the end of September. EMEA was the best performing region last week, with a gain of 0.7%, followed by EM (0.2%), EM Asia (0.1), EM Latin America (-0.5), EMU (-1.0), and the AC World ex-US. EAFE and Europe were the worst regional performers, with declines of 1.5%. Just five of the 18 major selected country markets that we follow rose last week. The Korea MSCI index performed the best, with a gain of 1.8%, followed by South Africa (1.2), Mexico (1.2), China (0.4), and India (0.2). Spain was the worst performer, falling 3.0%, followed by Sweden (-2.9), Switzerland (-2.5), Canada (-2.1), and Australia (-1.9). The US MSCI's 27.2% ytd gain remains well ahead of the AC World ex-US index's (5.7). EM Asia is still ahead of the pack as the leading region ytd with a gain of 12.9%, followed by EM (8.1) and the AC World ex-US. The worst performing regions so far in 2024: EM Latin America (-25.3), Europe (2.2), EMU (2.8), EAFE (3.7), and EMEA (4.4). Looking at the major selected country markets that we follow, Taiwan is the best ytd performer with a gain of 32.7%, followed by the United States (27.2), India (17.6), China (16.8), and South Africa (15.2). The worst performing countries ytd: Brazil (-29.5), Mexico (-23.9), Korea (-19.1), France (-5.9), and Hong Kong (-2.9).

US Stock Indexes ([link](#)): Just six of 48 of the major US stock indexes that we follow rose w/w, down from 17 a week earlier and all 48 rising in the two weeks before that. The Nasdaq Industrials index was the best performer for a third straight week, the latest with a gain of 0.9%, ahead of Nasdaq 100 (0.7), Nasdaq Composite (0.3), S&P 500 LargeCap Growth (0.3), and Russell 1000 Growth (0.3). The Russell MidCap Growth index, with a decline of 3.6%, was the worst performer, followed by Russell 2000 Growth (-3.3), Dow Jones 15 Utilities (-3.1), S&P 500 Transportation (-2.6), and Russell 2000 (-2.6). Looking at their ytd performances, all 48 indexes are now positive so far. The S&P 500 LargeCap Growth index is now in the top spot as the best performer so far in 2024, with a gain of 38.8%, ahead of Russell 1000 Growth (36.5), Russell 3000 Growth (35.7), S&P 500 LargeCap Pure Growth (34.0), and Nasdaq Composite (32.7). The worst performing major US stock indexes ytd: S&P 500 Transportation (1.0), Dow Jones 20 Transports (5.1), S&P 400 MidCap Pure Value (8.0), S&P 600 SmallCap Pure Value (9.1), S&P 600 SmallCap Equal Weighted (10.4), and S&P 600 SmallCap Value (10.9).

S&P 500 Sectors Performance ([link](#)): Two of the 11 S&P 500 sectors rose last week, and

three were ahead of the S&P 500's 0.6% decline. That compares to three sectors rising a week earlier when three were ahead of the composite index's 1.0% gain. The outperformers last week: Communication Services (2.4%), Consumer Discretionary (1.4), and Information Technology (-0.2). The underperformers last week: Materials (-2.9), Utilities (-2.7), Real Estate (-2.4), Health Care (-2.4), Industrials (-2.3), Energy (-2.1), Financials (-1.9), and Consumer Staples (-0.7). The S&P 500 is up 26.9% ytd, with all 11 sectors in positive territory and four sectors ahead of the index. During the September 6 week, a ytd high of five sectors were ahead of the index for the first time since mid-May. Communication Services wears the crown as the best ytd performer, with a gain of 43.1%, ahead of Information Technology (38.5), Consumer Discretionary (35.4), and Financials (31.0). These sectors are lagging the S&P 500 so far in 2024: Health Care (3.1), Materials (3.7), Energy (5.7), Real Estate (6.3), Consumer Staples (16.5), Industrials (20.1), and Utilities (21.7).

US Economic Indicators

Producer Price Index ([link](#)): The PPI was hotter than expected in November. The *PPI for final demand* rose 0.4% in November, double the expected gain, and the largest monthly advance since June, pushing the yearly rate up to 3.0%. November's yearly rate was the highest since February 2023, accelerating from an upwardly revised 2.6% in October and nearly triple January's 1.05% rate. *Final demand goods* jumped 0.7% last month, after showing little growth the previous three months, with 80% of the broad-based advance in November final demand goods traced to the 3.1% increase in final demand foods. Meanwhile, *final demand services* rose 0.2% in November, slowing from gains of 0.3%, 0.4%, and 0.5% the prior three months. *Core prices* edged up 0.2%, in line with expectations, while *core prices excluding trade services* edged up 0.1%, following gains of 0.3% and 0.1% the previous two months, with the yearly rate holding at 3.5%, up from a recent low of 2.5% last November. The PPI for *personal consumption* accelerated for the second month to 3.1% y/y, after easing from 3.1% in June to 1.9% in September. The yearly rate for *personal consumption excluding food & energy* rose from a recent low of 2.1% last November to 3.4% y/y this June—which was the highest since February 2023—easing to 2.7% in July before moving up to 3.4% in November, matching June's recent high. The former and latter reached record highs of 10.4% and 8.1%, respectively, in March 2022.

Import Prices ([link](#)): *Import prices* edged up 0.1% in November for the second month, after falling 0.4% and 0.3% during September and August, respectively. Forecasts were for

import prices to dip 0.2% last month. Higher fuel prices accounted for the gain as tensions in the Middle East increased. Fuel prices advanced 1.0% in November, rebounding from October's 0.8% decline, though were 8.6% below a year ago. Over the past year, import prices are up 1.3%, the largest yearly gain since this July's 1.7%. Import prices excluding fuel were unchanged in November after increasing 0.2% in each of the prior two months; these prices have not declined on a monthly basis since this May's 0.2% downtick. The yearly rate rose to 2.3% in October, the largest gain since October 2022.

Global Economic Indicators

Eurozone Industrial Production ([link](#)): Eurozone industrial production held steady in October, though there was widespread weakness in the report. Headline production, which excludes construction, was unchanged in October, after falling two of the prior three months by 1.1%. Among the main industrial groups, only capital goods production (+1.7%) posted a gain in October, while intermediate goods output was flat. The steepest decline was in consumer nondurable goods (-2.3) production, followed by energy (-1.9), and consumer durable goods (-1.8) output. Compared to a year ago, total production contracted 1.2%, led by declines in intermediate goods (-3.5), consumer durable goods (-3.2), capital goods (-1.7), and energy (-1.0) output—with only consumer nondurable goods (3.3%) production in the plus column versus a year ago. Looking at the largest Eurozone economies, production rose on both a monthly and a yearly basis in October only in Spain (1.0% m/m & 3.0% y/y), while declines in France (-0.2 & -0.8%) were below 1.0% under both time spans. Meanwhile, Germany (-1.1 & -4.9) posted the biggest monthly and yearly declines during October, while Italy (0.0 & -3.6) was flat on a monthly basis, though contracted sharply versus a year ago.

Contact us by [email](#) or call 480-664-1333.

Ed Yardeni, President & Chief Investment Strategist, 516-972-7683
Eric Wallerstein, Chief Markets Strategist, 201-661-3575
Debbie Johnson, Chief Economist, 480-664-1333
Joe Abbott, Chief Quantitative Strategist, 732-241-6502
Melissa Tagg, Senior Global Investment Strategist, 516-782-9967
Mali Quintana, Senior Economist, 480-664-1333
Jackie Doherty, Contributing Editor, 917-328-6848
Valerie de la Rue, Director of Institutional Sales, 516-277-2432
Mary Fanslau, Manager of Client Services, 480-664-1333
Sandy Cohan, Senior Editor, 570-228-9102

