

Economic Update

The ultimate strength of the US lies "in its wealth... its capacity to create still more wealth, and its seemingly bottomless imagination in developing new ways to use that wealth productively."

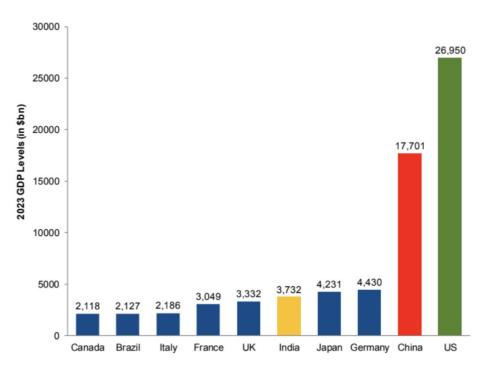
- John Steele Gordon



US Strength

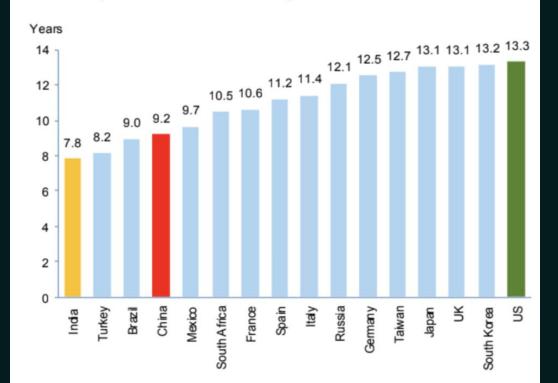


1. Top 10 Countries Ranked by 2023 Nominal GDP

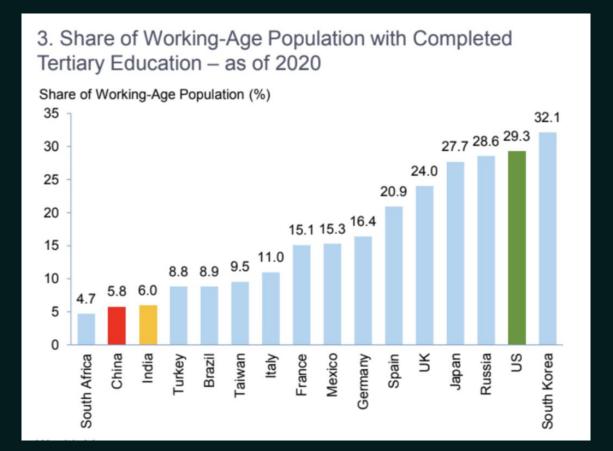




2. Average Years of Schooling – as of 2020

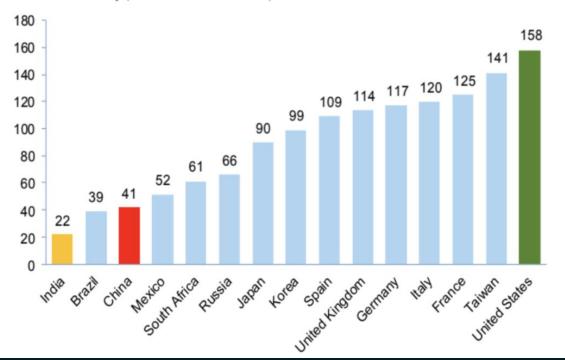








4. Labor Productivity - as of 2022



Labor Productivity (2022 PPP*, Thousands)



The US has more arable land than any other country, making it the largest exporter of agricultural commodities.

The US is the largest producer of oil and natural gas liquids. The US accounts for 22% of global LNG exports, exceeding both Qatar's and Australia's.

The US is at the forefront of technological innovation: the global leader in share of semiconductor sales at 48%.



Election Year & Economy



| | Donald Trump | Kamala Harris |
|--------------------|--|--|
| Tax Policy | Extend and possibly expand 2017 tax cuts | Extend 2017 personal income tax cuts for those earning less than \$400k per annum after 2025. Increase the top rate to 39.6% Corporate: Proposed 28% from 21% Wealth: Proposed a "Billionaire Minimum Income Tax" - 20% minimum tax rate on "full income, including unrealized appreciation" |
| Spending | Would cut domestic spending, but not cut "a single penny" from Medicare or Social Security | Expand education, health care, and other programs |
| Trade Policy | 10% across-the-board tariffs, 60% China tariffs, Trump Reciprocal Trade Act | Some tariffs, export controls, entity list additions, investment restrictions |
| Immigration Policy | Tighten: "largest deportation operation in American history" | Implemented new border policies, would likely pursue much of the Senate's bipartisan border agreement |



We expect only small changes to the overall fiscal stance after the election, regardless of the winner. The deficit is likely to remain wide. A sweep for either party has the most potential for some fiscal expansion.



If Trump wins, tariffs are likely to be the most immediate macro issue. A significant increase in tariffs is likely to initially be inflationary, but trade uncertainty is likely to weigh on growth. In most scenarios we don't see a significantly more hawkish Fed.



Net immigration is likely to decline in all scenarios, meaning potential growth falls from its recent elevated rate. In our view, only severe and abrupt deportation schemes would meaningfully increase inflation.



History reminds us that macroeconomic fundamentals, and whether the economic expansion continues, are far more important to US equities than who wins the election or changes to tax rates.



Outside of recessions, US equities produced favorable returns following presidential elections regardless of the winning party.







The Fed's median projection for real GDP growth in 2024 is now 1.5%, with a central tendency range of 1.3% to 1.7% and a full range of 0.9% to 2.0%. These modest growth expectations suggest cautious optimism, with a realistic expectation of slower growth compared to stronger post-pandemic recovery years.







REAL GDP GROWTH IN 2024:

Q1: Real GDP increased at an annual rate of **1.4%**, a slight upward revision from earlier estimates of 1.3%.

Q2: Real GDP grew by **3.0%**, reflecting strong consumer spending, private inventory investment, and business investment. This is an increase from earlier projections of 2.8%.



Inflation



The 2.5% annual inflation rate for the last 12 months (as of July 2024) marks a significant improvement compared to the previous 12-month period (when inflation was closer to 6%), reflecting the residual effects of supply chain disruptions.

This decrease indicates that pressures are easing, in line with the Fed's efforts to bring inflation closer to its 2% target, driven by tighter monetary policies and stabilizing economic factors.







As of July 2024, the U.S. unemployment rate is 4.3% (7.2M people), reflecting an increase from 4.1% in June 2024. This rate is higher than the 3.5% recorded in July 2023, indicating a gradual rise in unemployment over the past year.

A stable unemployment rate around 4% suggests that labor market conditions are expected to remain relatively strong.



Stock Market



The S&P 500 was up 2.28% in August, bringing its YTD return to 18.42%.

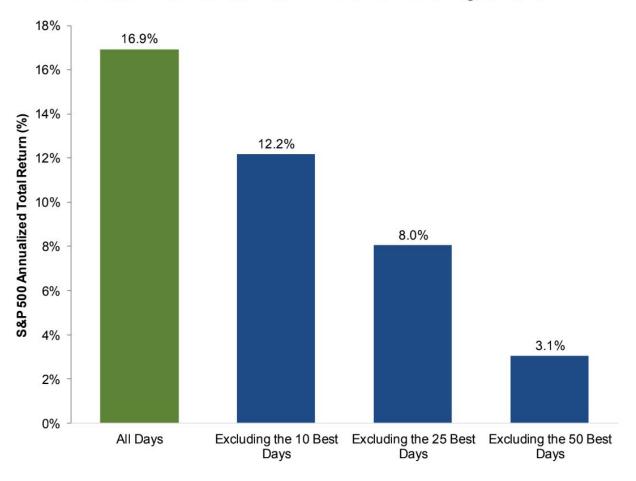
The Dow Jones Industrial Average increased 1.76% for the month and was up 10.28% YTD.



2. S&P 500 Bull and Bear Markets Over the Post-WWII Period¹



S&P 500 Annualized Total Return – March 9, 2009 to August 23, 2024



Markets Monitor

| | 1Y Price Range | 8/13/2024 | WTD | Last Week ¹ | YTD |
|-----------------|---|-----------|--------|------------------------|--------|
| S&P 500 | | 5,434 | 1.7% | 0.0% | 13.9% |
| Comm Svcs | | 299 | 0.8% | 0.8% | 21.5% |
| Cons Disc | •• | 1,428 | 2.1% | -1.0% | 0.7% |
| Cons Staples | + | 848 | 0.0% | -0.3% | 11.2% |
| Energy | | 683 | -0.5% | 1.2% | 6.7% |
| Financials | | 706 | 0.4% | 0.5% | 12.8% |
| Health Care | • • | 1,761 | 0.8% | -0.6% | 10.7% |
| Industrials | | 1,057 | 0.6% | 1.2% | 9.6% |
| Info Tech | | 4,174 | 3.9% | -0.2% | 22.9% |
| Materials | | 561 | 0.6% | -1.7% | 4.0% |
| Real Estate | | 262 | 0.1% | -0.2% | 4.3% |
| Utilities | | 376 | 0.7% | -0.9% | 16.8% |
| NASDAQ | | 17,188 | 2.6% | -0.2% | 14.5% |
| VIX | | 18.12 | (2.25) | (3.02) | 5.67 |
| 3M Yield | • | 5.18% | -0.03% | 0.03% | -0.16% |
| 1yr Yield | • | 4.39% | -0.09% | 0.12% | -0.37% |
| 10yr Yield | • | 3.84% | -0.10% | 0.15% | -0.04% |
| 30yr Yield | | 4.16% | -0.06% | 0.11% | 0.13% |
| HY Spread (bps) | | 345 | 6 | -20 | 22 |
| 3M LIBOR | + | 5.38% | 0.00% | -0.12% | -0.22% |

| | 1Y Price Range | 8/13/2024 | WTD | Last Week ¹ | YTD | |
|----------------------------|----------------|-----------|-------|------------------------|-------|--|
| MSCI AC World | +- | 963 | 1.4% | -0.1% | 10.9% | |
| MSCI EAFE | | 1,467 | 1.1% | -0.3% | 5.3% | |
| TOPIX | > | 2,554 | 2.8% | -2.1% | 7.9% | |
| Euro Stoxx 50 | | 4,695 | 0.4% | 0.8% | 3.8% | |
| DAX | | 17,812 | 0.5% | 0.3% | 6.3% | |
| FTSE MIB | | 32,006 | 0.7% | -0.7% | 5.5% | |
| FTSE 100 | | 8,235 | 0.8% | -0.1% | 6.5% | |
| MSCI EM | | 66,322 | 0.7% | -0.3% | 7.8% | |
| MSCI China | | 57 | 0.9% | 1.5% | 1.3% | |
| MSCI India | + | 2,944 | -0.2% | -1.4% | 18.3% | |
| MSCI Brazil | | 319,365 | 1.5% | 3.4% | -4.7% | |
| | | | | | | |
| USD Trade Weighted | | 89.13 | -0.4% | -0.3% | 2.0% | |
| EUR | +- | 1.0993 | 0.7% | 0.1% | -0.4% | |
| JPY | | 146.84 | -0.2% | -0.1% | -3.9% | |
| GBP | | 1.2862 | 0.8% | -0.3% | 1.0% | |
| EM Currencies ² | | | 0.0% | 0.7% | 0.1% | |
| CNH | | 7.1480 | 0.4% | -0.1% | -0.3% | |
| WTI Crude Oil | | 78.35 | 2.0% | 4.5% | 9.4% | |
| Gold Spot Price | | 2,465 | 1.4% | -0.5% | 19.5% | |

1Y Low 1Y High

Goldman Sachs

Interest Rates



As of August 1, 2024, the Federal Reserve maintained the federal funds rate target range at 5.25% to 5.5%.

30-year fixed-rate mortgages are projected to be around 6.5% to 6.9% for Q3 2024.



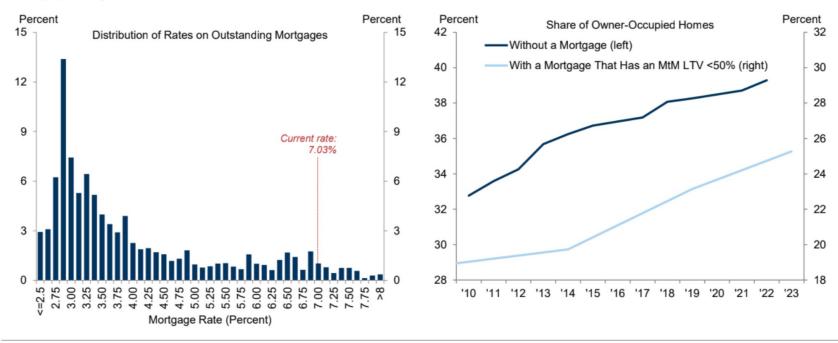
US: 3 cuts in 2024 starting in September Euro Area: 3 cuts in 2024 starting in June UK: 2 cuts in 2024 starting in August Japan: 3 hikes (10-15bp) in 2024 starting in March







Exhibit 3: Nearly All Borrowers Have Mortgage Rates Well Below Current Market Rates, Although a Higher Share of Homeowners Without a Mortgage Dampens that Financial Disincentive to Move



Source: eMBS, Department of Commerce, Black Knight, Goldman Sachs Global Investment Research



Sustained higher mortgage rates will continue to have their most pronounced impact on housing turnover, and the recent run-up in rates is likely to push existing home sales lower in the coming months. 95% of mortgage borrowers have interest rates below current market rates, and almost 80% have rates 2pp below market rates, strongly disincentivizing them from moving. As a result, we expect the fewest annual existing home sales since the early 1990s at just under 4.1mn.



Real Estate



Home prices in the U.S. are expected to appreciate by 4.5% in 2024. This is a slight upward revision from previous forecasts of 3.9 to 4.2%. Several factors contribute to this outlook, including the anticipation of lower mortgage rates and resilient income growth.



As of the second quarter of 2024, the median home sales price in the United States was \$412,300, according to the Federal Reserve. This is a decrease of \$14,500 from the previous quarter and \$6,200 from the previous year.



Exhibit 21: Existing home sales are down 4% year to date through June

Pending and existing home sales



Source: NAR, Goldman Sachs Global Investment Research

Approximately 37% of owner-occupied housing in the U.S. is owned free and clear of any mortgage debt. This reflects the stability of homeownership across various demographics and regions in the country.



Housing Market Activity Scale



Exhibit 13: We forecast home prices will appreciate by 4.5% in 2024 and 4.4% in 2025

GS housing and mortgage forecasts

| Variable | | 2024 | | | | Annual Data | | | |
|---|-------|-------|-------|-------|-------|-------------|-------|--|--|
| Variable | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 | | |
| Housing Measures | | | | | | | | | |
| Housing Starts (SAAR, Thousands) | 1,448 | 1,450 | 1,443 | 1,450 | 1,421 | 1,450 | 1,541 | | |
| Single Family | 1,071 | 1,059 | 1,061 | 1,059 | 1,026 | 1,059 | 1,111 | | |
| Multi Family | 377 | 391 | 382 | 391 | 401 | 391 | 430 | | |
| Case-Shiller National House Prices (YoY %Chg) | 6.0 | 5.1 | 4.1 | 4.5 | 5.7 | 4.5 | 4.4 | | |
| Interest Rates | | | | | | | | | |
| 10-Year Treasury (%) | 4.2 | 4.4 | 4.2 | 4.3 | 4.0 | 4.3 | 4.1 | | |
| PMMS 30-Year Fixed-Rate Mortgage (%) | 6.8 | 6.9 | 6.6 | 6.5 | 6.8 | 6.5 | 6.1 | | |
| Mortgage Originations | | | | | | | | | |
| Total 1-4 Family (\$Billions) | 377 | 426 | 532 | 502 | 1,639 | 1,838 | 2,360 | | |
| Purchase Originations | 291 | 310 | 407 | 364 | 1,325 | 1,373 | 1,684 | | |
| Refinance Originations | 86 | 116 | 125 | 138 | 314 | 465 | 676 | | |
| Gross Issuance of Agency MBS (\$Billions) | 211 | 273 | 373 | 351 | 986 | 1,209 | 1,699 | | |
| Refinance Share (%) | 23 | 27 | 23 | 27 | 19 | 25 | 29 | | |

Note 1: Annual data for housing starts are annual averages. Annual data for Case-Shiller national house prices are year-end numbers. Annual data for mortgage originations are the sum of quarterly originations.

Note 2: The Case-Shiller National House Price index is a weighted average of metro-level HPIs for 381 metro cities where the weights are dollar values of housing stock reported in the American Community Survey.

Note 3: Interest rates refer to period end values.

Note 4: Sources for historical data are Census Bureau, NAR, Moody's Analytics, Federal Reserve, Freddie Mac, and MBA.

Exhibit 39: New York year-over-year house price growth is the highest of the top 20 metro areas

Metro level housing indicators

| City | 1/2000 to Current HPA (%) | Annualized HPA 1/2000- Current (%) | YoY HPA (%) | Serious Delinq. (%) | Unemploy- ment Rate (%) | Vacancy Rate (%) | Median Price (\$Th) | Median Income (\$Th) | НОІ | Average FICO |
|---------------|---------------------------------|--|----------------|---------------------------|-------------------------------|------------------------|---------------------------|----------------------------|-----|-----------------|
| New York | 210 | 5 | 9.4 | 3.2 | 4.4 | 0.8 | 667 | 113 | 13 | 742 |
| San Diego | 346 | 6 | 9.1 | 0.7 | 4.4 | 0.3 | 828 | 117 | 4 | 761 |
| Las Vegas | 196 | 5 | 8.6 | 1.4 | 5.4 | 1.1 | 432 | 84 | 14 | 739 |
| Los Angeles | 344 | 6 | 8.4 | 1.0 | 4.9 | 0.4 | 905 | 105 | 3 | 754 |
| Miami | 340 | 6 | 7.6 | 2.2 | 2.7 | 0.9 | 451 | 85 | 22 | 730 |
| Cleveland | 92 | 3 | 7.5 | 2.5 | 4.0 | 0.8 | 186 | 94 | 71 | 730 |
| Chicago | 107 | 3 | 7.5 | 2.5 | 4.7 | 0.5 | 347 | 125 | 51 | 738 |
| Boston | 237 | 5 | 7.2 | 1.4 | 3.1 | 0.7 | 632 | 140 | 23 | 751 |
| Charlotte | 180 | 4 | 7.2 | 1.6 | 3.5 | 0.6 | 389 | 103 | 37 | 741 |
| Seattle | 294 | 6 | 7.1 | 0.8 | 4.5 | 0.5 | 673 | 139 | 25 | 757 |
| Detroit | 88 | 3 | 6.9 | 2.9 | 3.9 | 0.6 | 226 | 95 | 66 | 726 |
| Washington DC | 229 | 5 | 6.1 | 1.7 | 2.8 | 0.2 | 517 | 150 | 46 | 747 |
| Atlanta | 148 | 4 | 5.7 | 2.2 | 3.1 | 0.8 | 375 | 104 | 40 | 734 |
| Phoenix | 228 | 5 | 4.4 | 1.2 | 3.0 | 1.0 | 440 | 99 | 22 | 745 |
| San Francisco | 265 | 5 | 4.3 | 0.5 | 4.2 | 1.1 | 1108 | 158 | 9 | 768 |
| Tampa | 287 | 6 | 3.3 | 1.9 | 3.4 | 1.1 | 359 | 89 | 31 | 736 |
| Dallas | 201 | 5 | 2.6 | 1.8 | 3.8 | 1.0 | 376 | 103 | 28 | 738 |
| Minneapolis | 141 | 4 | 2.4 | 1.3 | 2.7 | 0.6 | 350 | 125 | 60 | 752 |
| Denver | 223 | 5 | 2.1 | 0.8 | 3.8 | 0.1 | 560 | 126 | 24 | 757 |
| Portland | 228 | 5 | 1.0 | 0.9 | 4.1 | 0.6 | 500 | 114 | 18 | 757 |

Source: Black Knight, Goldman Sachs Global Investment Research

Economic Story



What, How & Social Proof



Average Price: Average Payment: Average Appreciation in Dollars:

