WJ Charts of the Month

December 2024

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WJ Charts of the Month Intro

"WJ Charts of the Month" is a comprehensive monthly slide deck designed to showcase recent significant financial events and data. The presentation is organized into four sections, beginning with a "Highlights" slide that sets the stage for the subsequent content.

1. What Happened Last Month: This section features a curated collection of charts and images from various publications, offering a visual summary of the previous month's key events.

2. WJ State of the Economy: Our team at WJ has created an array of charts to emphasize crucial economic factors and trends.

3. WJ State of the Markets: Similarly, this section comprises a series of charts crafted by WJ to provide an overview of the core markets we monitor.

We strive to maintain consistency across the charts to facilitate easy comparison month-over-month. However, we may adjust or emphasize specific charts if their relevance shifts over time.

Our objective with this publication is to establish a "One-Stop Shop" for the most vital financial information, presented in a concise and easily digestible format. **We value your feedback to help us achieve this goal.** If you have suggestions regarding the format, or if there's particular information you'd like to see in future editions, please don't hesitate to let us know.

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Highlights

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What Happened

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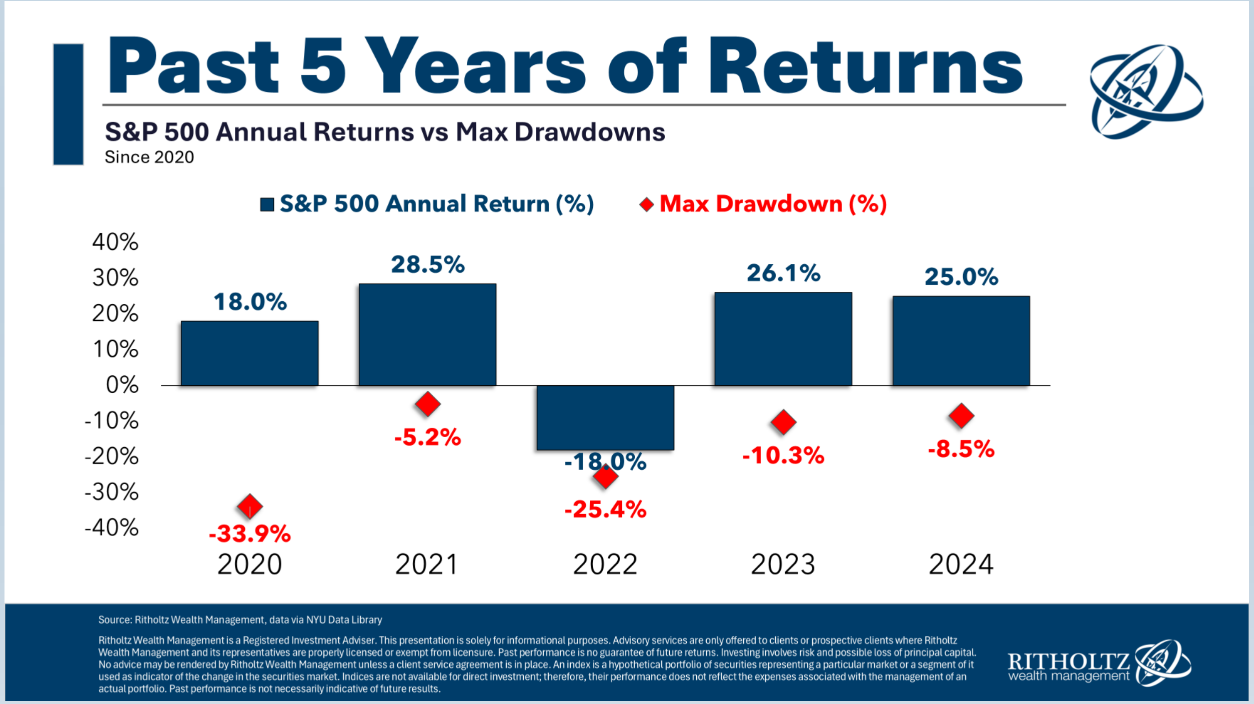
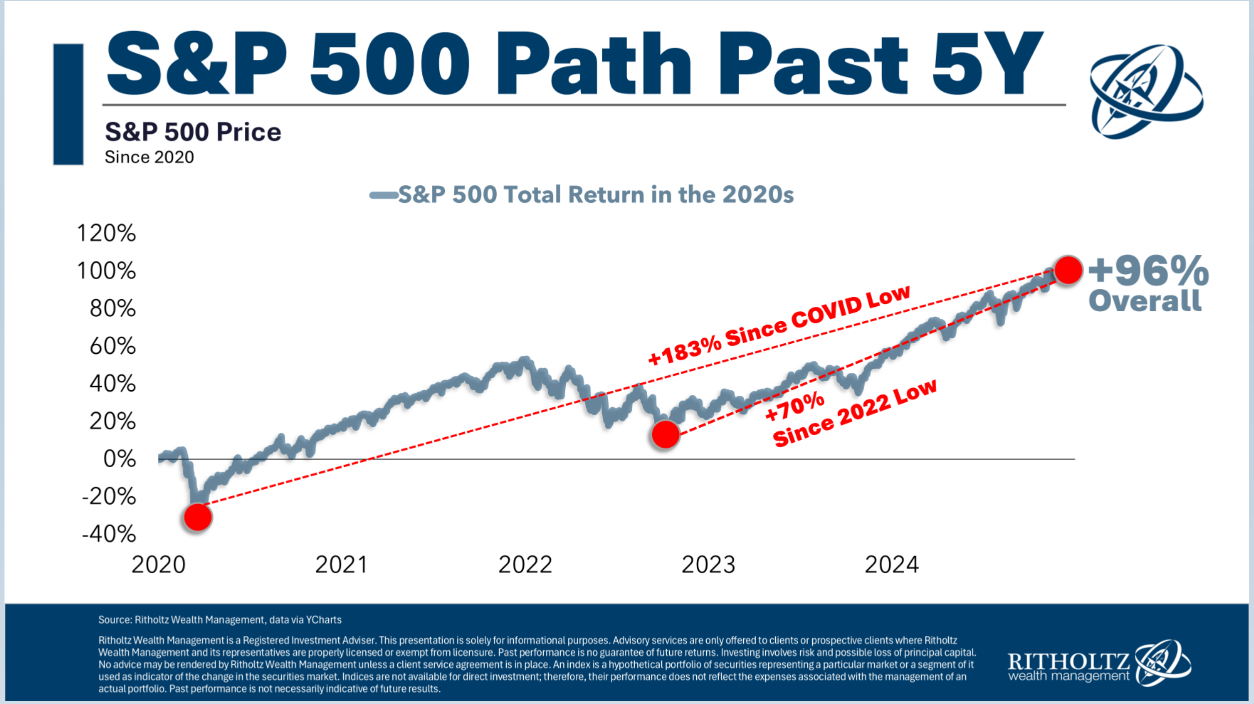
Another Strong Year in US Stocks

In what seems like an annual tradition, US Large stocks have had another incredible year. Excluding 2022, where stocks fell 20% due to rapidly increasing inflation, interest rate hikes, and the start of war in Ukraine, stocks have increased around 20%-30% in 4 of the last 5 years.

In fact, from the covid low, US stocks have returned over 183%. Since late 2022, just over 2 years, US stocks are up over 70%.





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US Tech Dominates

The same can't be said for pretty much any other type of stock. International and Emerging market stocks are up 3-5% annually in the same period. Even US Small cap companies have dramatically underperformed the SP500.

The red/yellow chart shows the difference in both returns and earnings (profits) for US vs international companies.

The charts below show how reliant US Stocks have been on a small group of companies (Magnificent 7). Those 7 stocks have been remarkable in both their share price and earnings growth over the last 7 years. Of course, their high valuations reflect that.

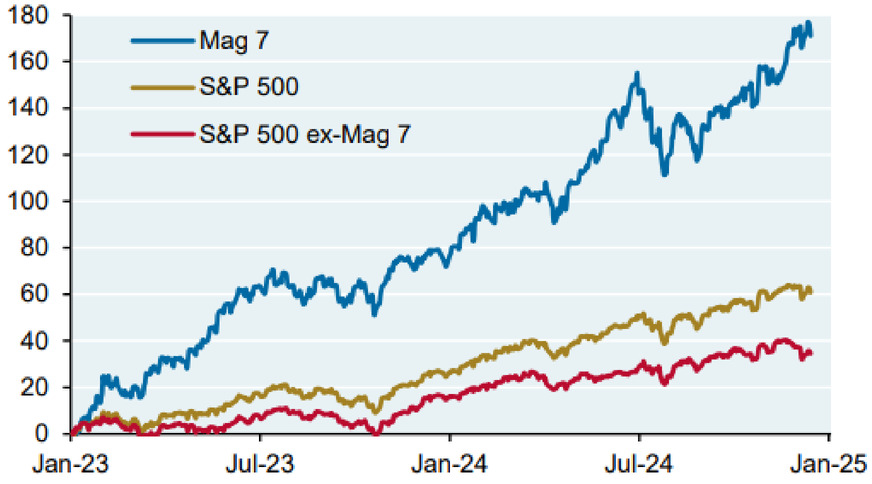
Hardening divergence

U.S. equity performance vs. the rest of the world, 2010-2024

U.S. stocks have benefitted from impressive earnings growth.
(Source: BlackRock)

S&P 500 and Mag 7 cumulative total return

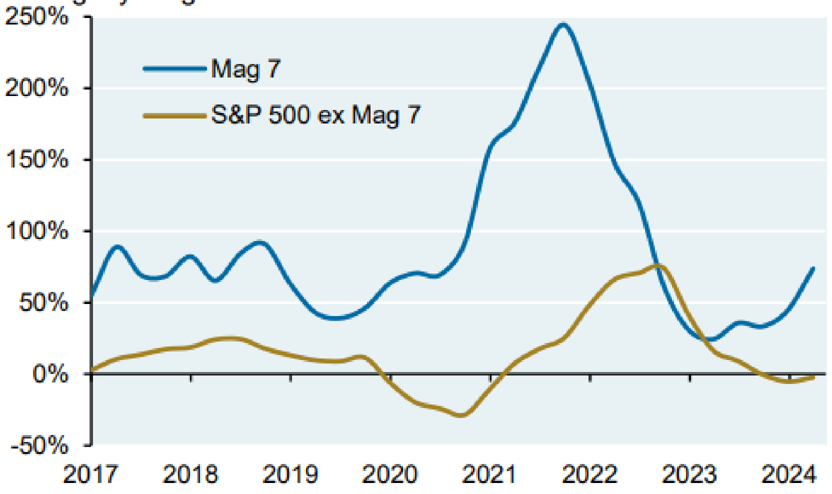
Cumulative total return, Jan 2023 = 0



Source: Bloomberg, JPMAM, December 27, 2024

Earnings per share growth

Rolling 2 year growth



Source: Bloomberg, JPMAM, September 30, 2024

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What Happens After 2 Great Years?

Considering we've had two consecutive years of 20%+ growth in US stocks, one might wonder if we're due for a correction? History is a bit of a mixed bag on that.

The table's first 2 columns are periods where there were 2 consecutive years of 20%+ growth, with the current period at the bottom.

The last 2 columns are the years after. Returns were generally lower as you'd probably expect. But outside of the great depression era, returns stayed decent.

Keep in mind, we're focusing on the S&P 500 a lot lately because it's big and American and has performed well as of late. But its only a piece of most people's portfolios, and other assets can do well should it perform poorly.

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S&P 500: Two consecutive years of 20%+ total returns and what followed

1879	**1880**	**1881**	**1882**
48%	24%	8%	2%
1924	**1925**	**1926**	**1927**
25%	29%	14%	35%
1927	**1928**	**1929**	**1930**
35%	37%	-3%	-23%
1935	**1936**	**1937**	**1938**
46%	36%	-31%	20%
1950	**1951**	**1952**	**1953**
28%	26%	17%	1%
1954	**1955**	**1956**	**1957**
47%	34%	6%	-9%
1975	**1976**	**1977**	**1978**
38%	23%	-6%	8%
1985	**1986**	**1987**	**1988**
31%	24%	0%	19%
1995	**1996**	**1997**	**1998**
38%	23%	33%	29%
2023	**2024**	**2025**	**2026**
26%	27%	??	??

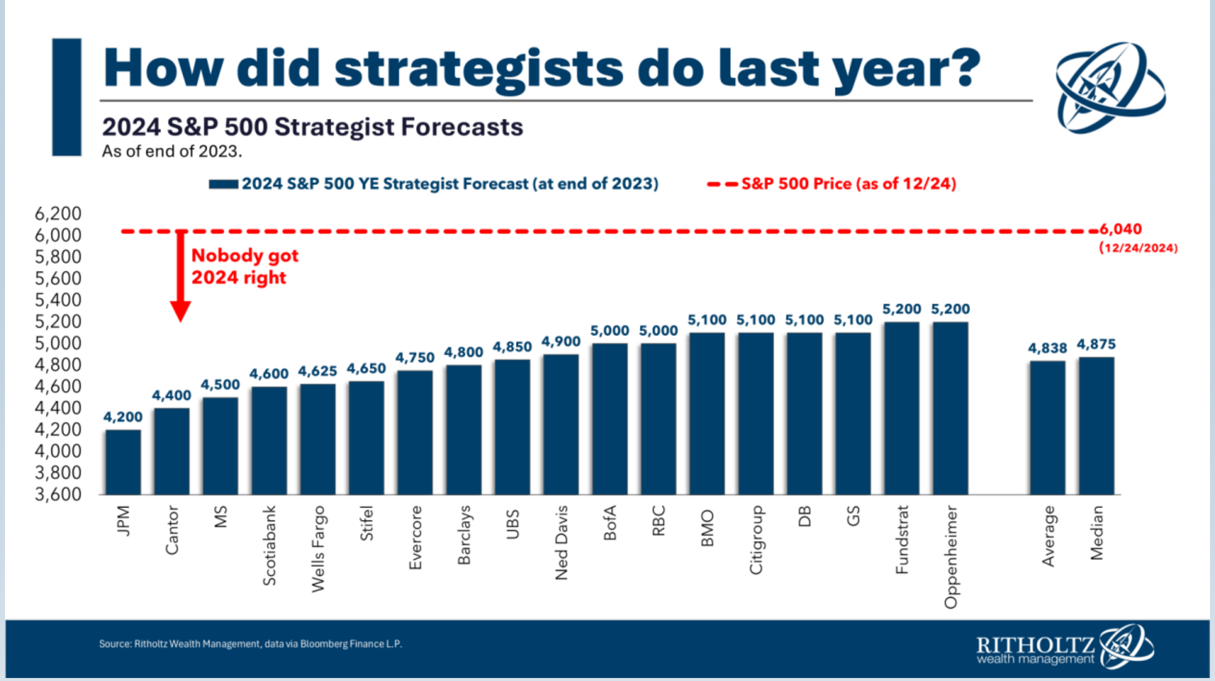
Source: Shiller, BBG, JPMAM, December 30, 2024

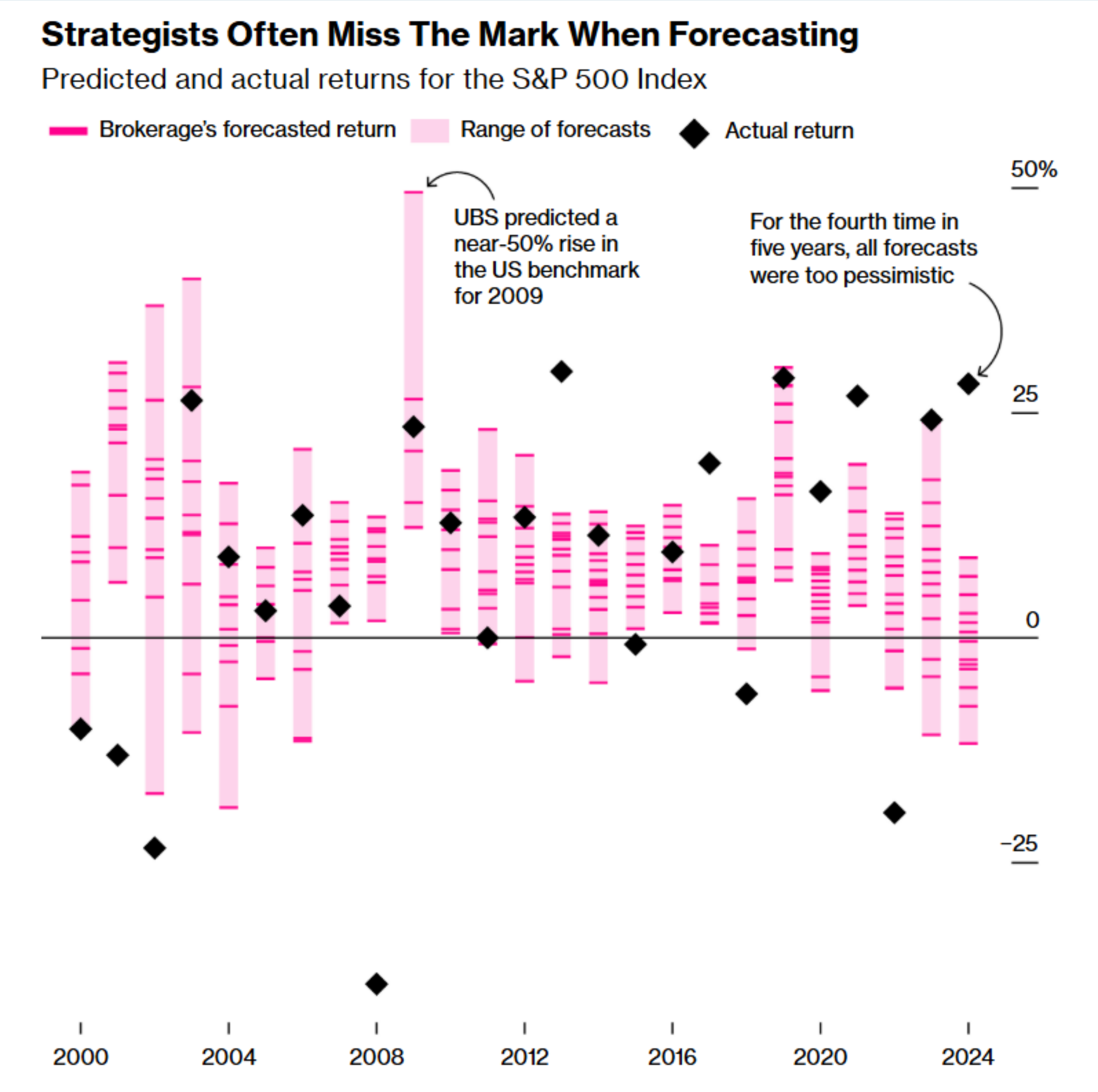
2024 Was a Bad Year for Forecasters

Last year I made my 10 predictions for 2024. I know predicting markets/economy is impossible, but its still a fun exercise to note how and what I think about the current environment. I'm preparing to publish a recap of how I did in 2024 and look ahead to 2025.

As far as predictions go, top market strategists had a terrible year predicting the stock market. Nobody was close to predicting how strong it would be. That's especially evident by looking at the last pink bar to see the range of estimates, and the black diamond sitting way above it.

Just for fun, take a look at 2008 on the pink chart. Not a single strategist thought the market would be down. No one said this game was easy.





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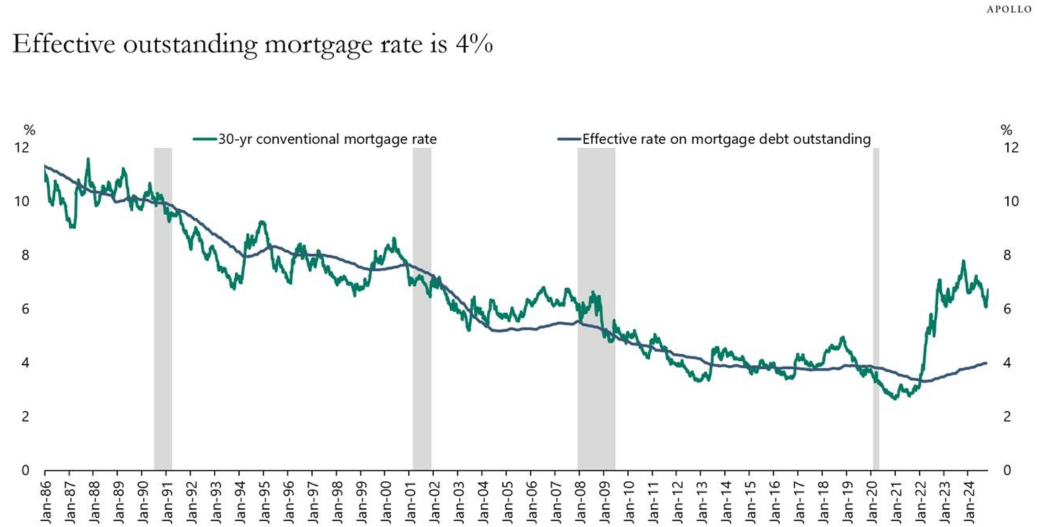
Did Fed Hikes Work?

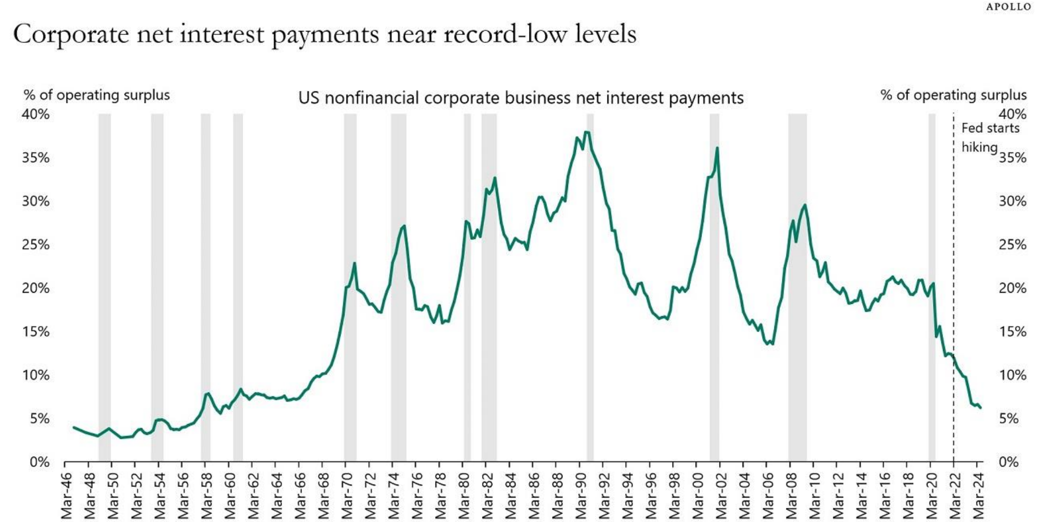
The Fed uses a blunt tool to try and control inflation, which is setting interest rates. That is, they set the Fed Funds Rate, which is effectively the rate that banks can lend to each other. The idea is if rates are higher, it will reduce borrowing which in turn will reduce consumption, or demand, and eventually lead to lower prices. A simple example would be raising rates to increase mortgage rates, which lowers demand for housing and decreases home prices.

Only that didn't happen. Despite mortgage rates more than doubling, home prices have continued upwards. The first chart shows that while current mortgage rates are high, most people were able to refinance right before the Fed hiked, and lock in a low rate. lower-than-expected while demand for housing has gone down as intended, existing homeowners didn't want to sell their home and trade up to a higher mortgage rate, thus reducing supply right along with it.

A similar dynamic occurred in corporate borrowing. Though interest rates have risen since 2022, the amount that companies pay in interest is near all time lows. Companies smartly issued a lot of debt right before rates were hiked, and thus have a down and debt burden.

The net result is that Fed hikes haven't had the effect they hoped for. Regardless, inflation has slowly but surely come down and done so without any major damage to the economy.





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Can the Government Cut Spending?

A big push going into the next administration is to cut wasteful government spending. Trump has asked Elon Musk and Vivek Ramaswamy to head up the Department of Government Efficiency (DOGE) to try and identify and make recommendations on how to cut $2 trillion of government spending.

Doing so is going to be very difficult. The charts are busy so stick with me. The top left shows how small discretionary spending is relative to entitlements. This is the “low hanging fruit” essentially, and there isn’t much of it anymore. This will get worse as the population ages.

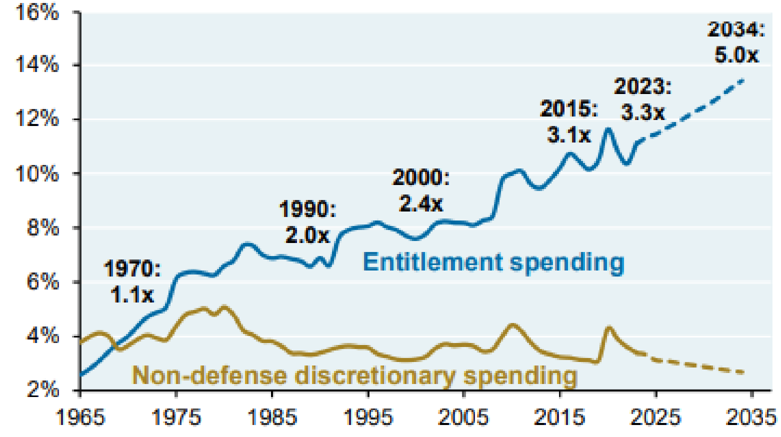
The next chart digs into entitlement spending to see where there's room to cut. Cutting social security and medicare is unpopular, and there isn’t much to cut beyond that.

Musk has said that there's too much bloat within the government, and savings can be had by cutting unnecessary staff. But federal employees as a % of all government staff is near all time lows. In addition, the last chart shows that most of that staff is in defense, VA, and the postal service.

I’m hopeful there are opportunities to make the government more efficient and reduce the deficit, but it won’t be easy.

What does the Federal government spend money on?

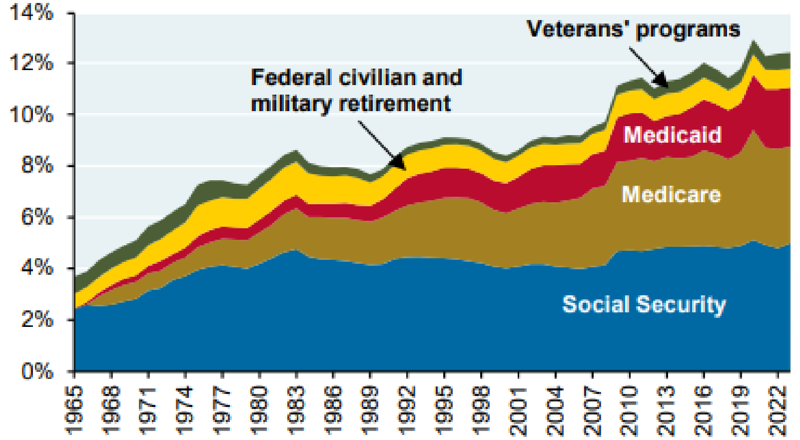
% of GDP, with ratio of entitlement to non-defense discretionary



Source: CBO, JPMAM, 2024. Dots are CBO projections

Breakdown of US entitlement spending

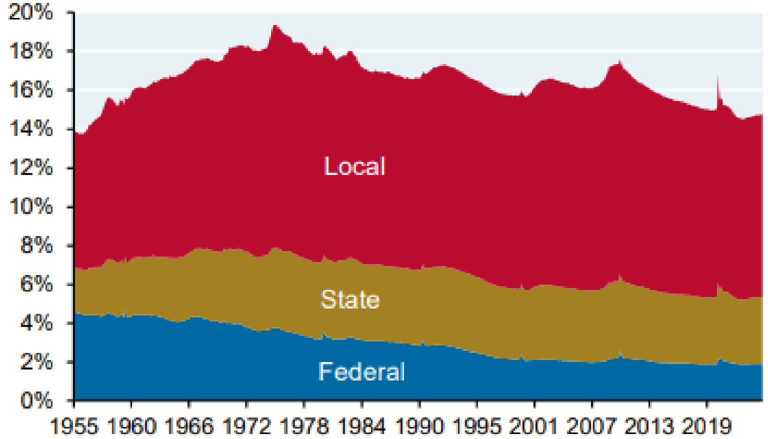
% of GDP



Source: CBO, JPMAM, 2024

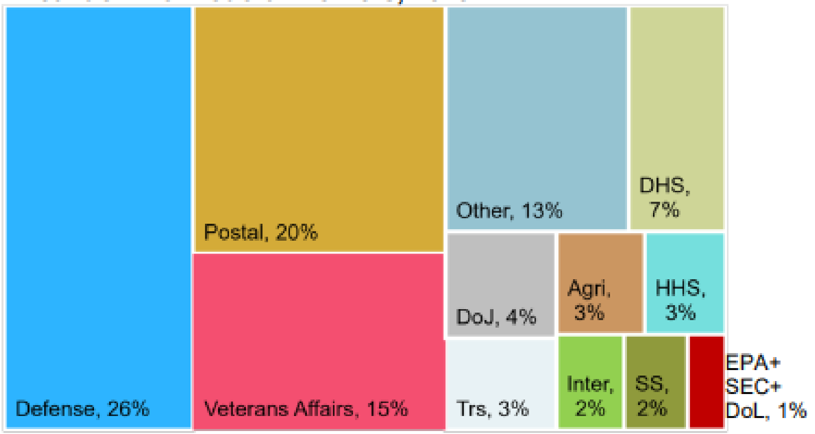
Government employees as share of all employees

Percent of all employees



Source: FRED, JPMAM, October 2024

Breakdown of Federal workers, 2023



Source: Bloomberg, JPMAM, November 2024

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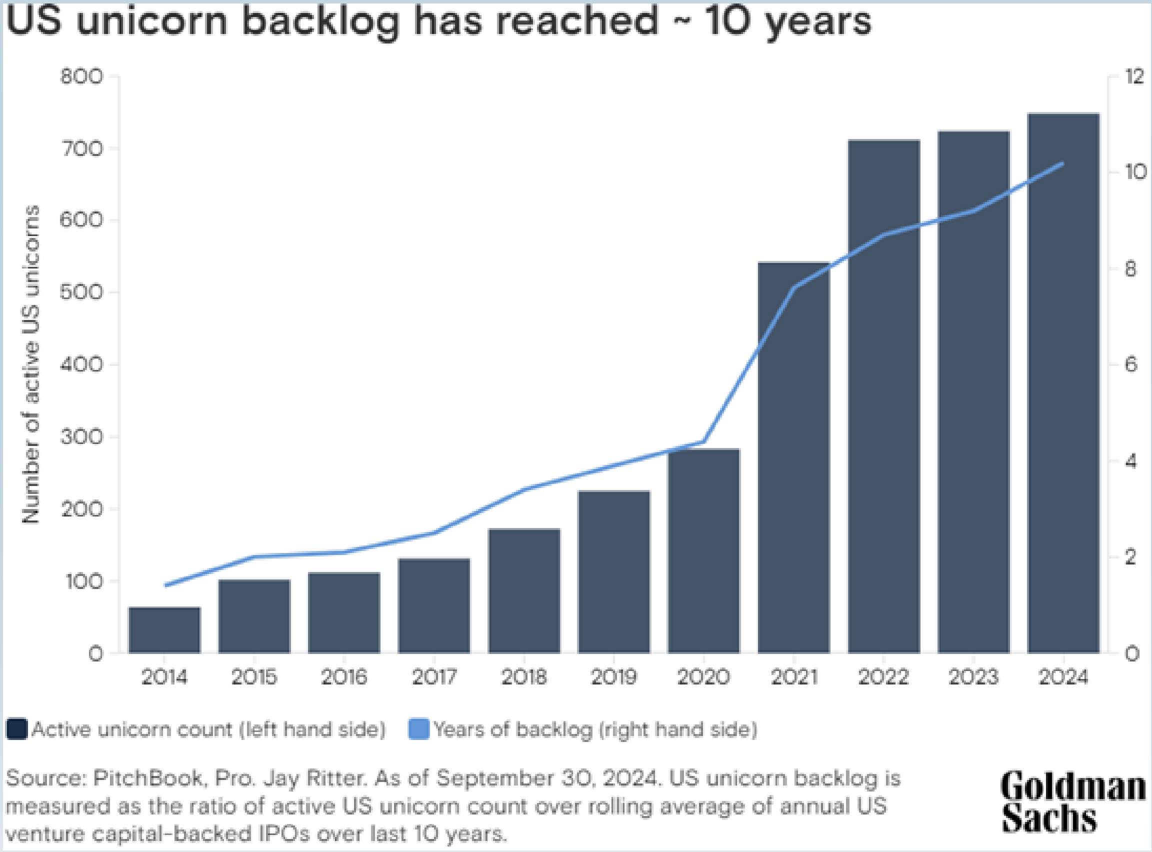
The Structure of the Market has Changed

A major change has been underway in the US market for a while now. With the abundant funding available via private markets, many companies that would have gone public in the past, are choosing to stay private. The first chart shows this dramatic shift since 2000. Public equities have shrunk from 7000 to under 5000 during the 21 years. Conversely, private companies have increased nearly 5-fold.

These aren't just small companies, many are considered "unicorns", or companies valued at over $1 billion. The chart on the right shows that there are over 700 unicorns that are staying private, and it would take over 10 years for them to all go public at current rates. It will be interesting to see if this trend continues going forward, and how it affects the structure of the market.



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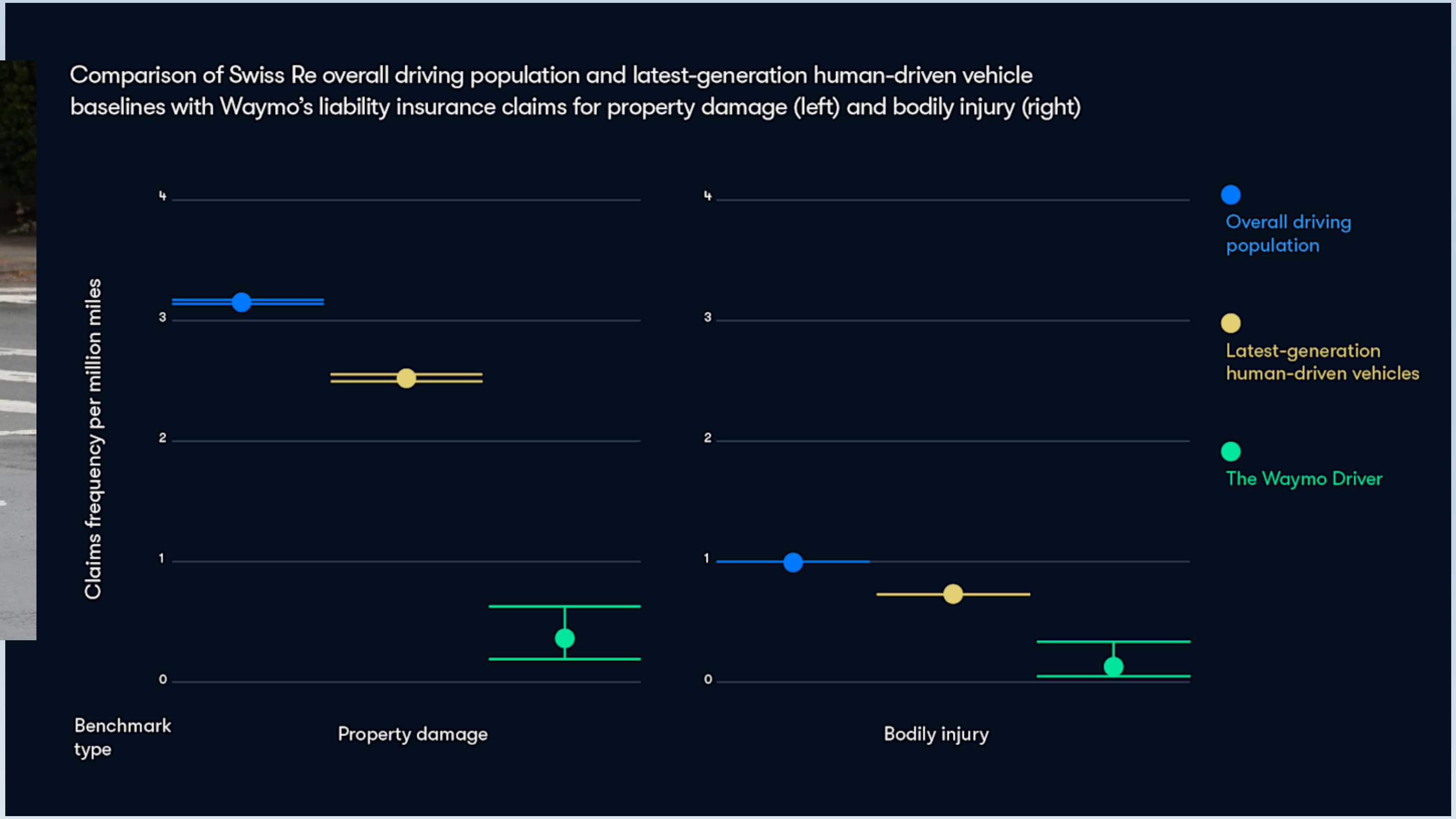
Would You Take a Driverless Taxi?

Waymo is a Google owned company that is trying to make driverless cars a reality. They recently published their study with Swiss Re, which highlights Waymo's safety record vs human drivers. Waymo's data shows that in 25.3 million fully autonomous miles driven, they've had 9 property damage claims and two bodily injury claims, which are both still open. For that same distance, humans would be expected to have 78 and 26 respectively, an 88% and 92% reduction. They are currently in Phoenix, San Francisco, LA, and Austin, and plan to expand in 2025.

Would you take a ride in one?



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WJ State of the Economy

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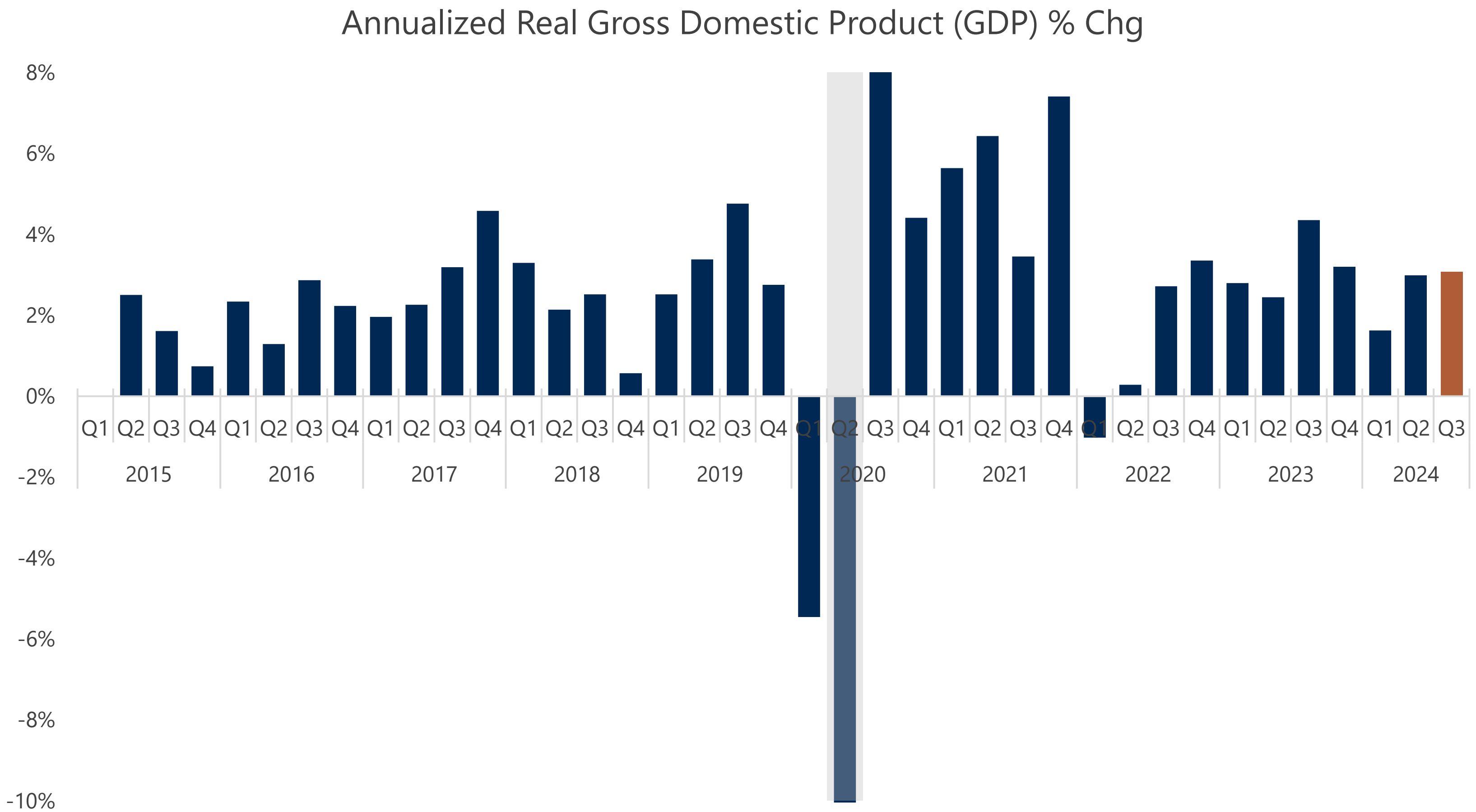
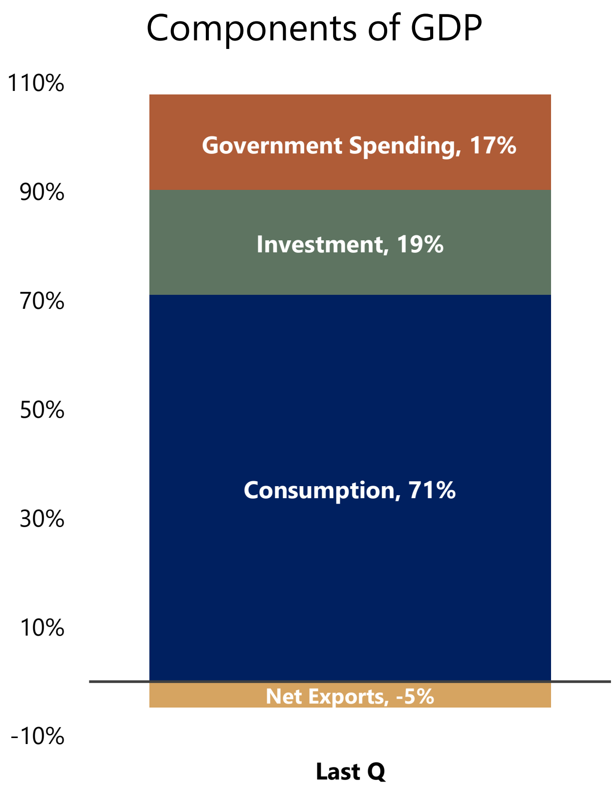
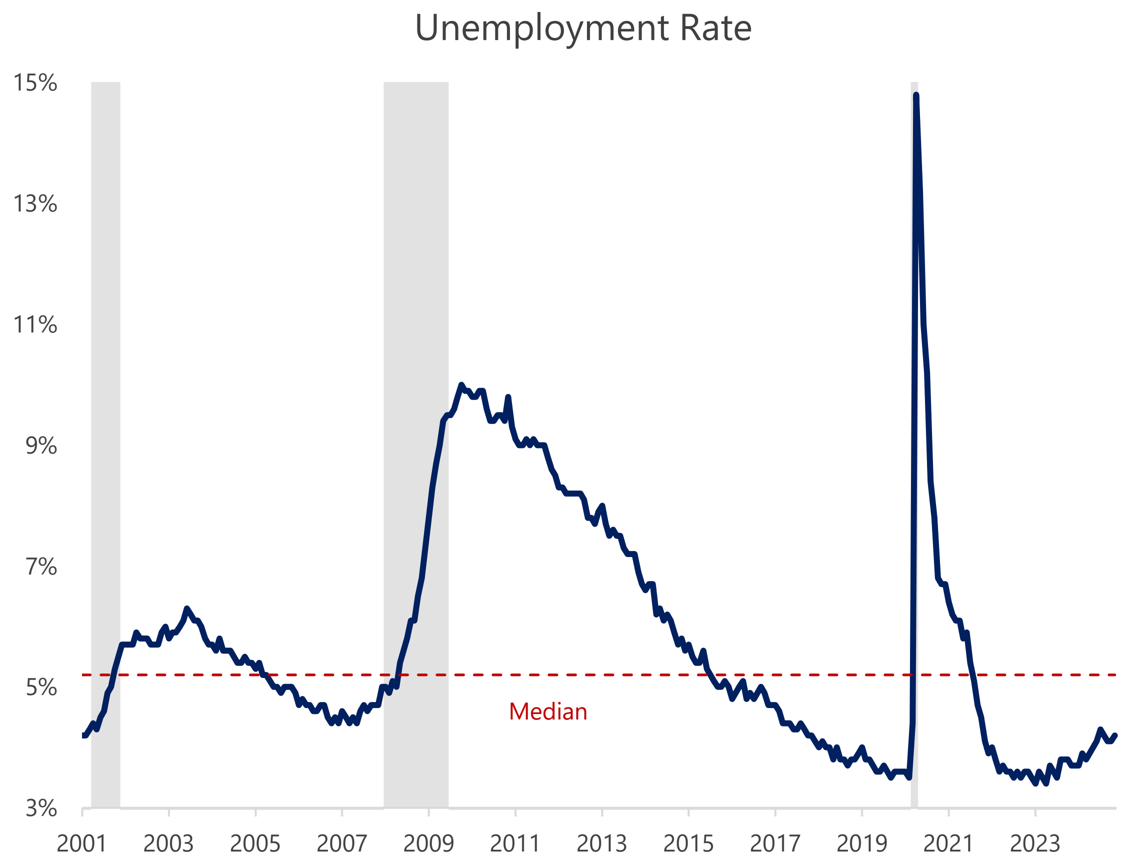
Q3 GDP Revised Up to 3.1%





Source: Federal Reserve Economic Database (FRED). Real Gross Domestic Product (left). Components from U.S. Bureau of Economic Analysis, "Table 1.1.6. Real Gross Domestic Product, Chained Dollars" (right). Recessions from NBER based Recession Indicators for the United States from the Period following the Peak through the Trough

Employment Situation Remains Strong



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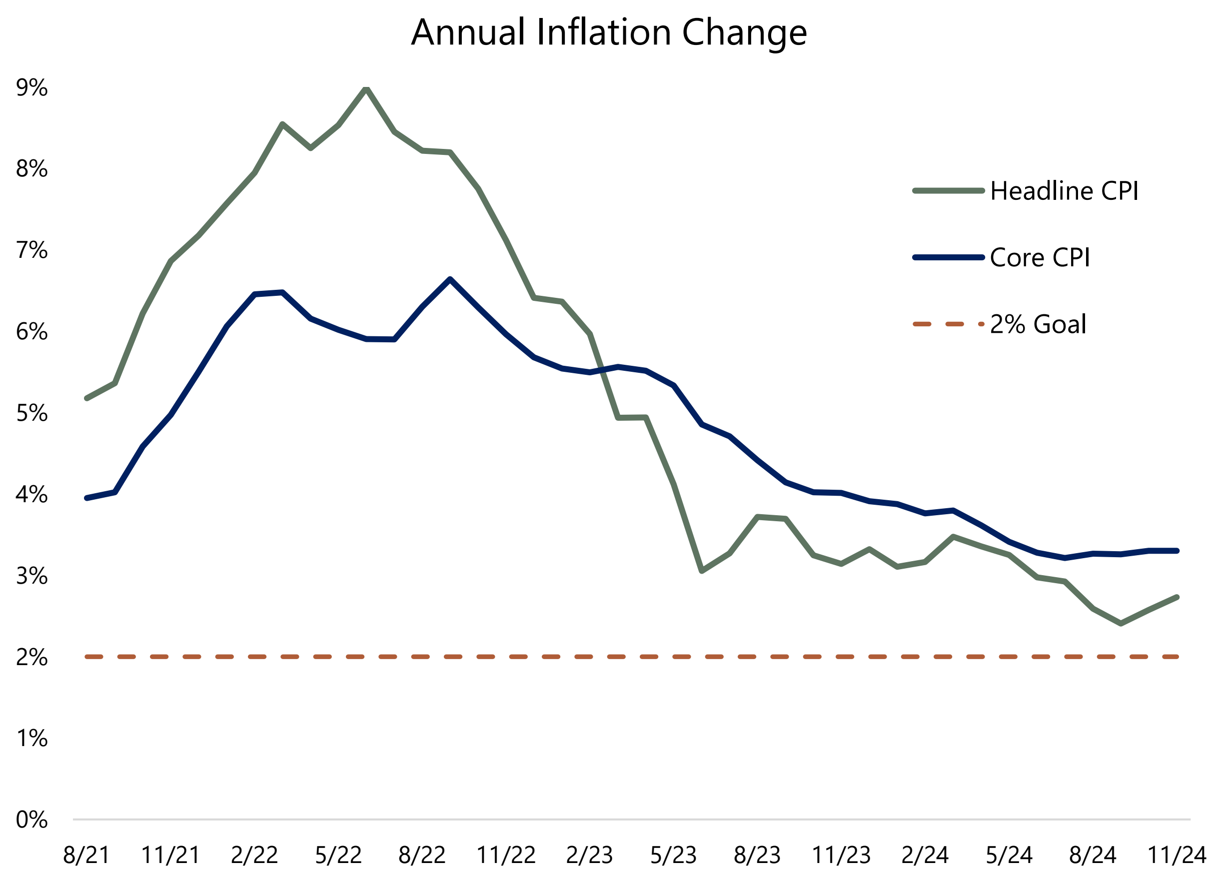
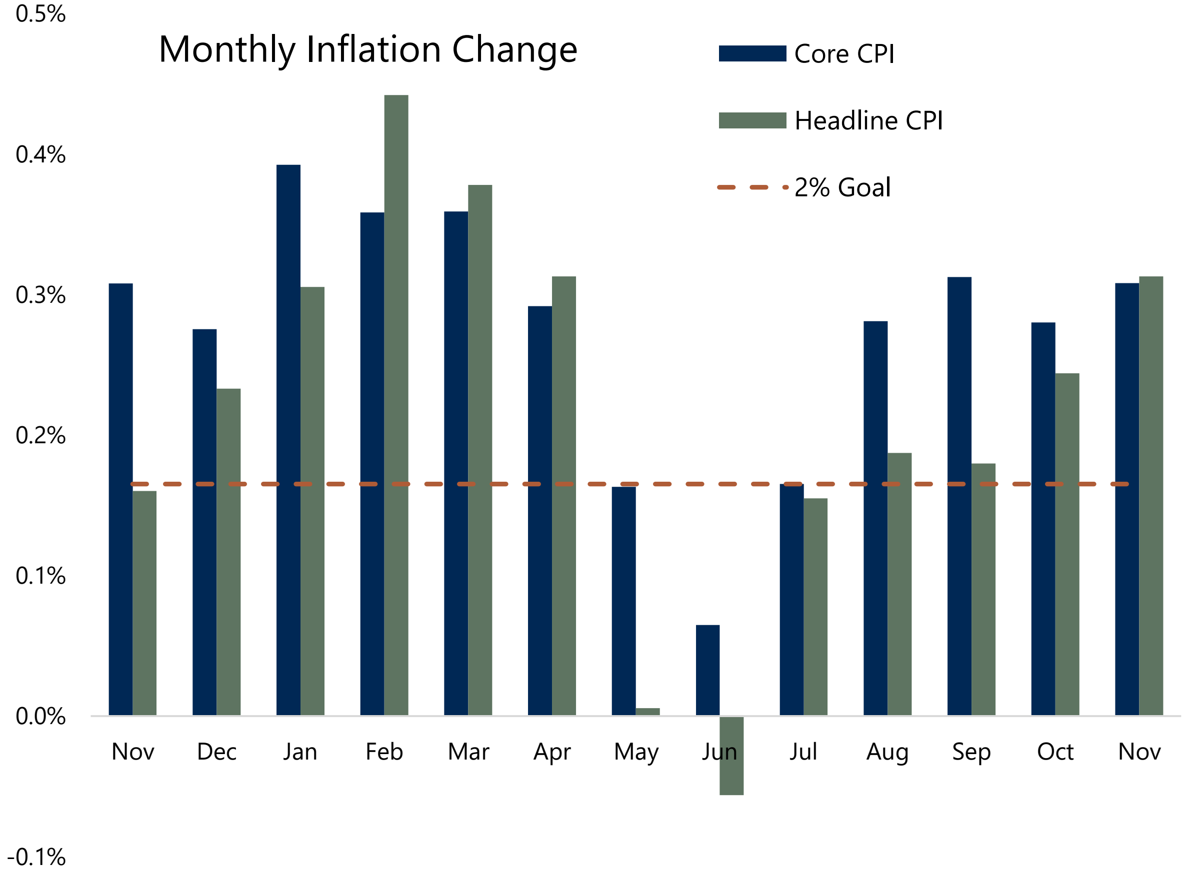
Source: Federal Reserve Economic Database (FRED). Unemployment Rate (left) and Job Openings: Total Nonfarm divided by Unemployment Level as well as Quits: Total Nonfarm (right). Recessions from NBER based Recession Indicators for the United States from the Period following the Peak through the Trough

Inflation Staying Stubborn





Source: Federal Reserve Economic Database (FRED). Consumer Price Index. Annual CPI Forecasts are made by WJ using past month over month CPI data and extrapolating forward with different growth rates.

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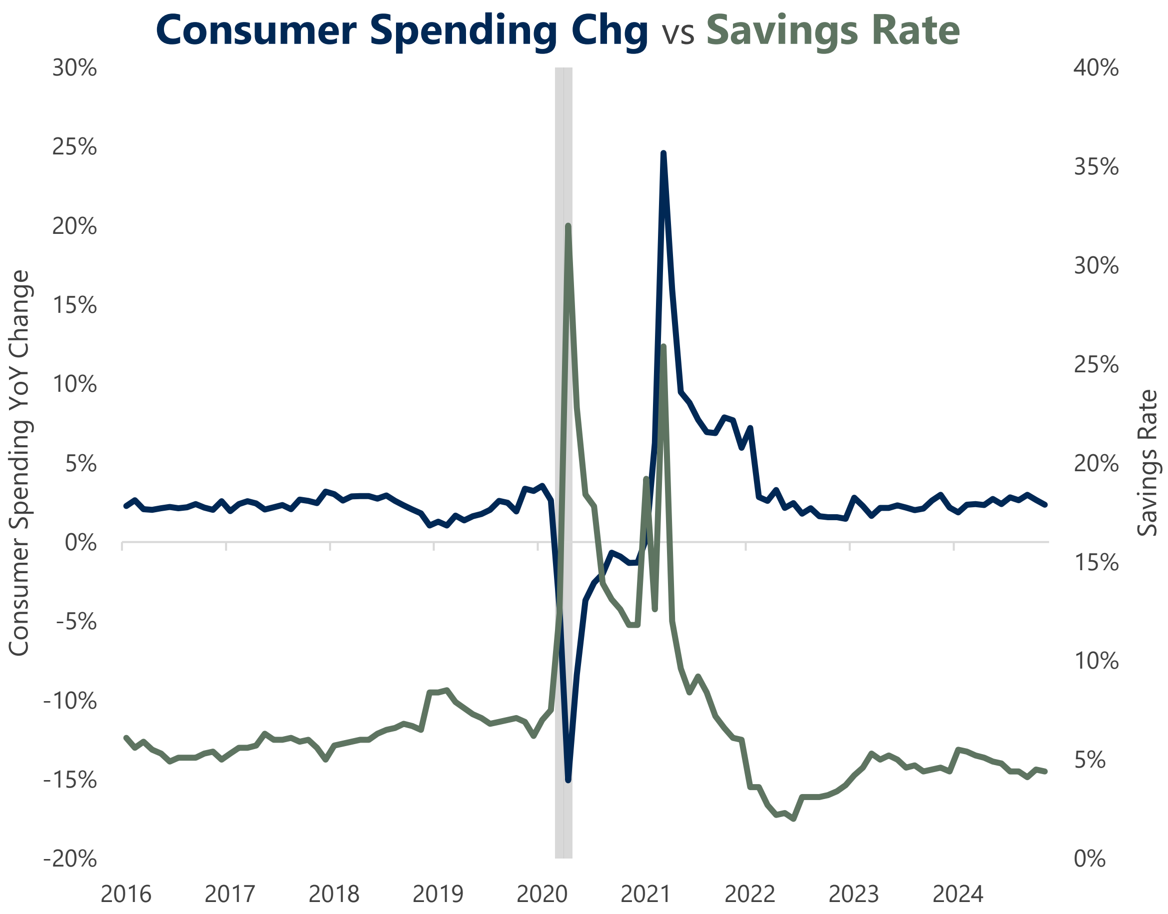
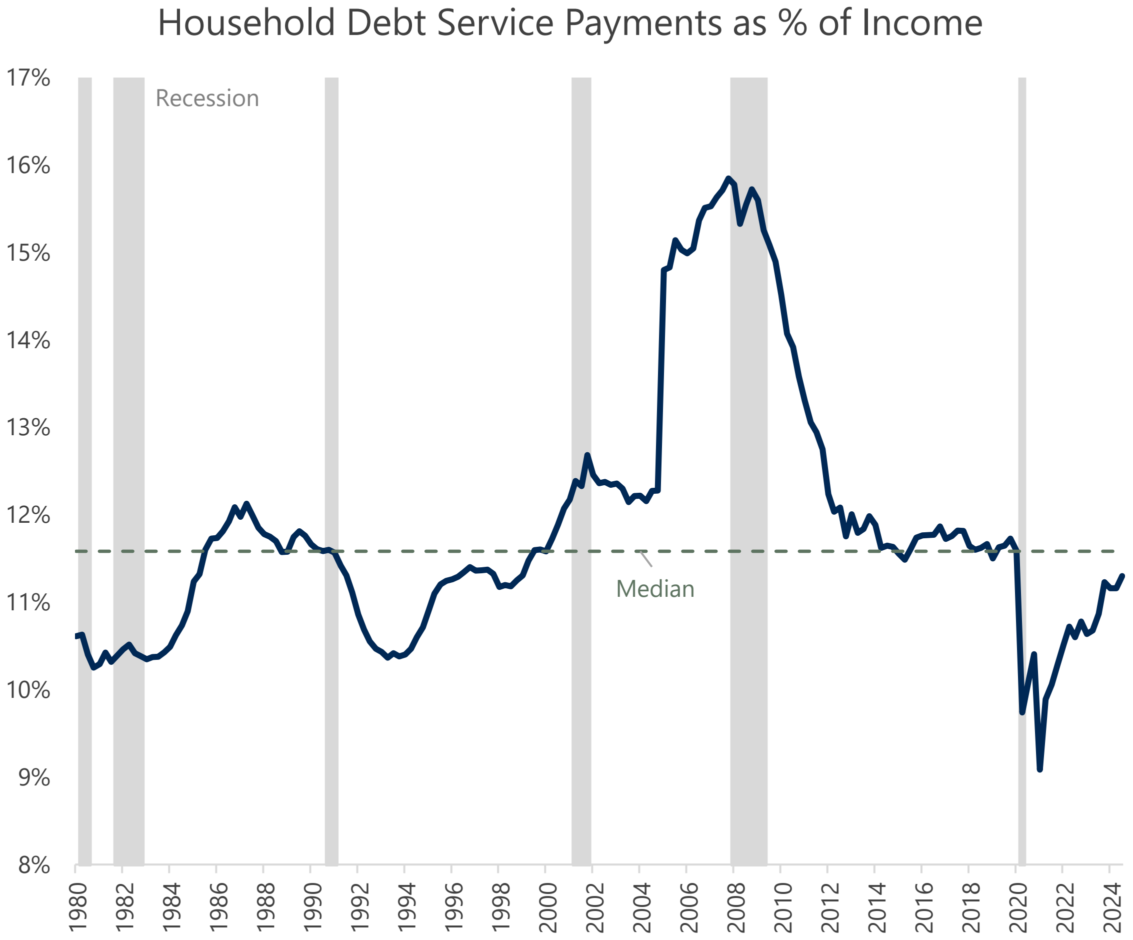
Consumer is Still Strong





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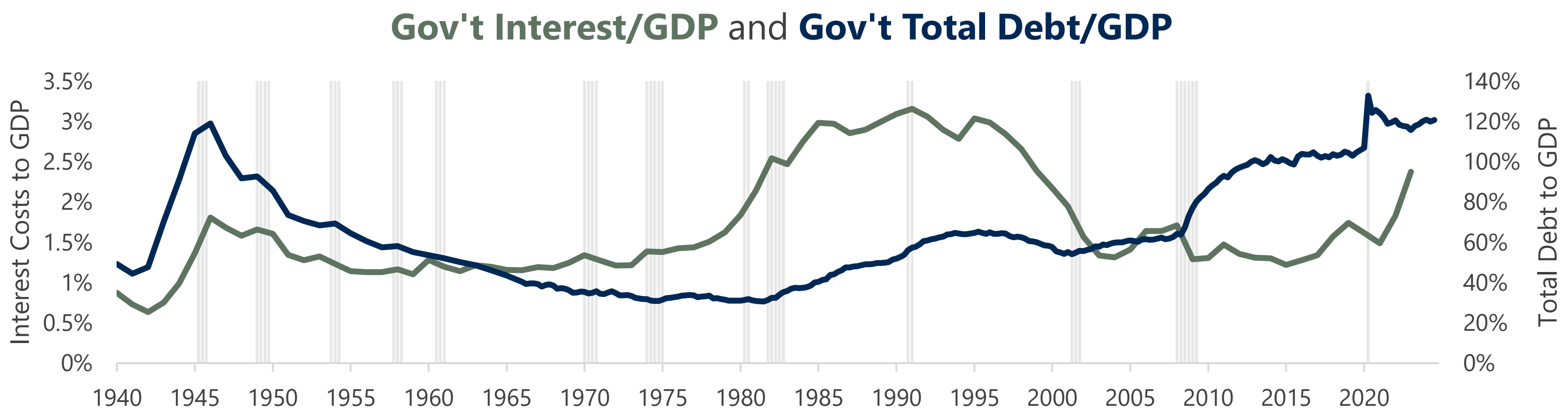
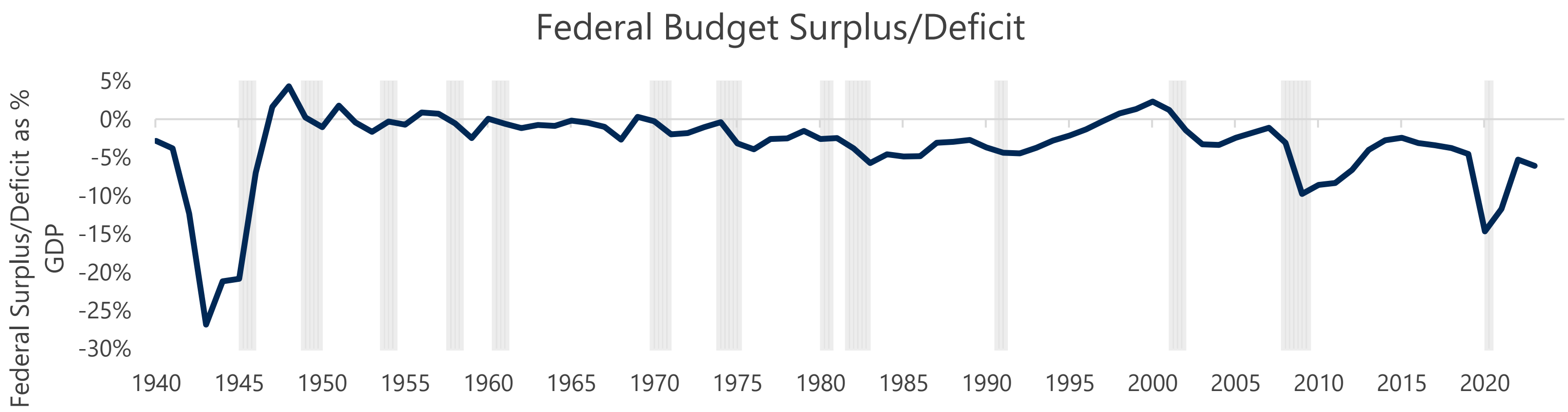
Source: Federal Reserve Economic Database (FRED). Personal Saving Rate plus Real Personal Consumption Expenditures (left) and Household Debt Service Payments as a Percent of Disposable Personal Income (right). Recessions from NBER based Recession Indicators for the United States from the Period following the Peak through the Trough

Government Budget Deficit Increased





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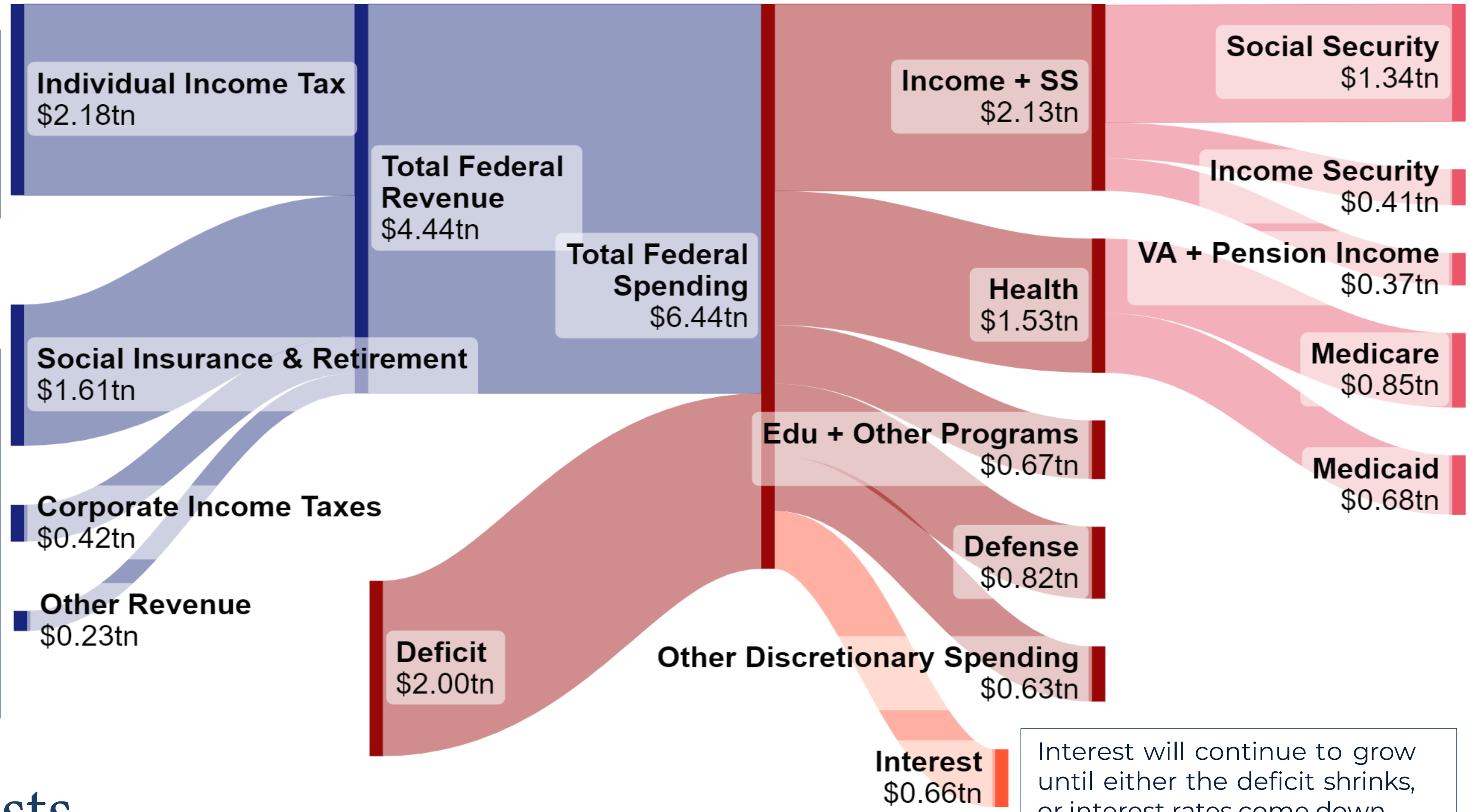
Source: Federal Reserve Economic Database (FRED) Federal Surplus or Deficit [-] as Percent of Gross Domestic Product (top) and Federal Debt: Total Public Debt as Percent of Gross Domestic Product plus Federal Outlays: Interest as Percent of Gross Domestic Product (bottom). Recessions from NBER based Recession Indicators for the United States from the Period following the Peak through the Trough

Government Expenditures 2023

This is an in depth look at how the US makes and spends money. On the spending side, the top 3 categories are known as “mandatory spending” and are unable to change without major reform. That leaves “Defense” and “Other Discretionary Spending” as the two categories congress can change on any year.

Income taxes receipts were lower than budgeted, partly due to a bad 2022 that produced low capital gains taxes.

A major part of “other revenue” the last decade has been Federal Reserve Remittances, Where the Fed pays the Treasury any interest it makes over what it pays. With the Fed Funds Rate high, this income has gone away, but could return if rates went down.



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Social Security and Medicare are forecasted to grow rapidly as baby boomers enter retirement. Other programs will fall as a percent of spending.

Interest will continue to grow until either the deficit shrinks, or interest rates come down.

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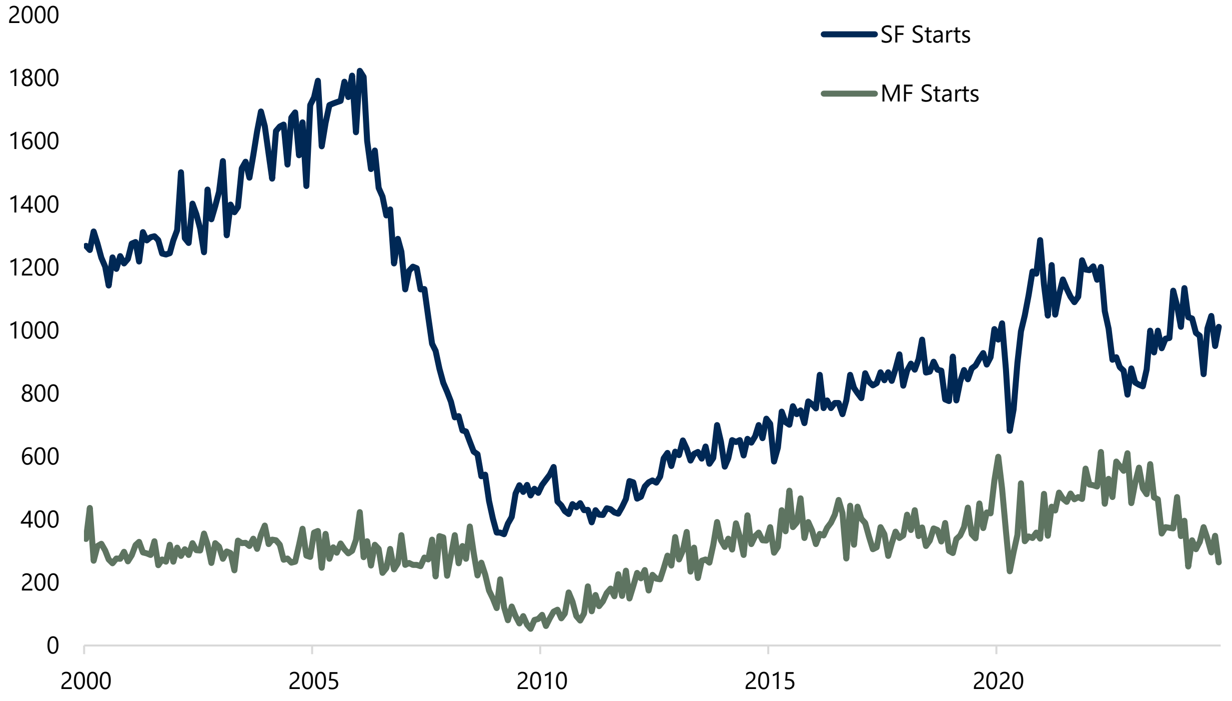
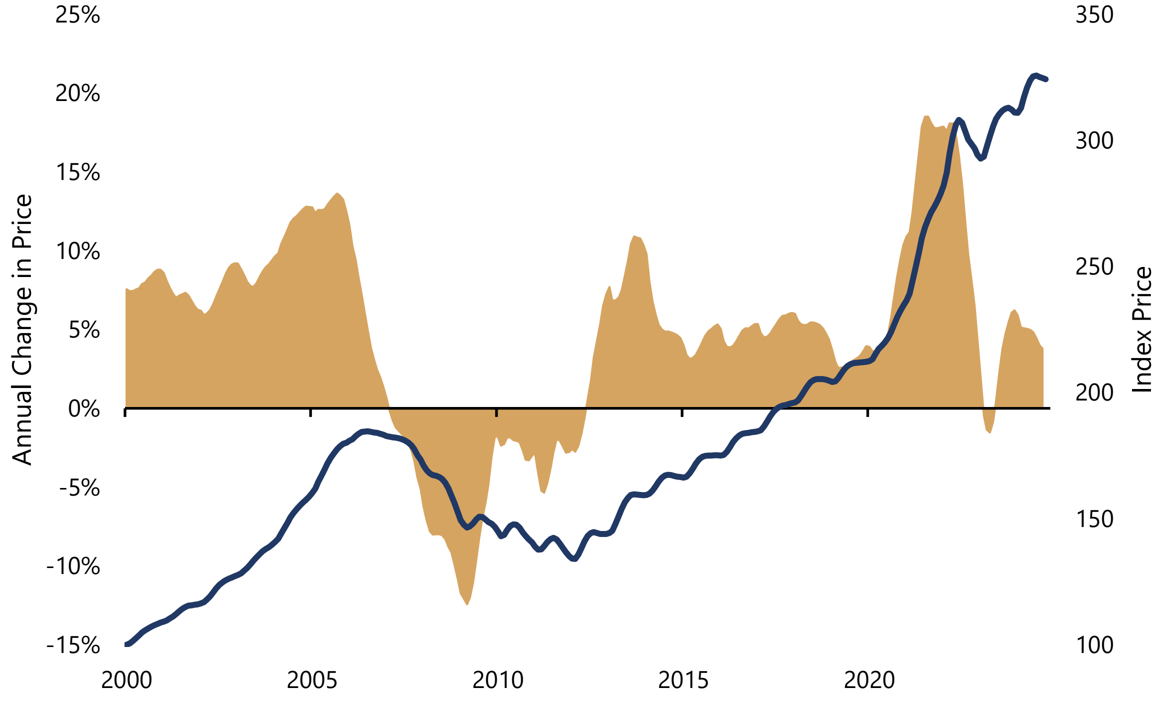
Source: https://www.cbo.gov/publication/59544/html

Housing Prices High While Starts Low

Housing Starts and Completes



Home Prices



A housing start is the beginning of construction on a new residential housing unit and indicates how much new housing supply is on the horizon. On the right we show home prices over time, as well as the annual rate of change. Prices surged in 2021-2022 but have stopped growing altogether. What they do next will depend on how much pent-up demand there is, and how much housing we build going forward. Note of how significantly starts dropped after the 2008 crisis, and led to the undersupply we have today.

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Source: Federal Reserve Economic Database (FRED) (LEFT)New Privately-Owned Housting Units Starts: Single-Family Units and New Privately-Owned Housting Units Started: Units in Buildings with 5 units or More. (RIGHT) S&P CoreLogic Case-Shiller U.S. National Home Price Index

WJ State of the Markets

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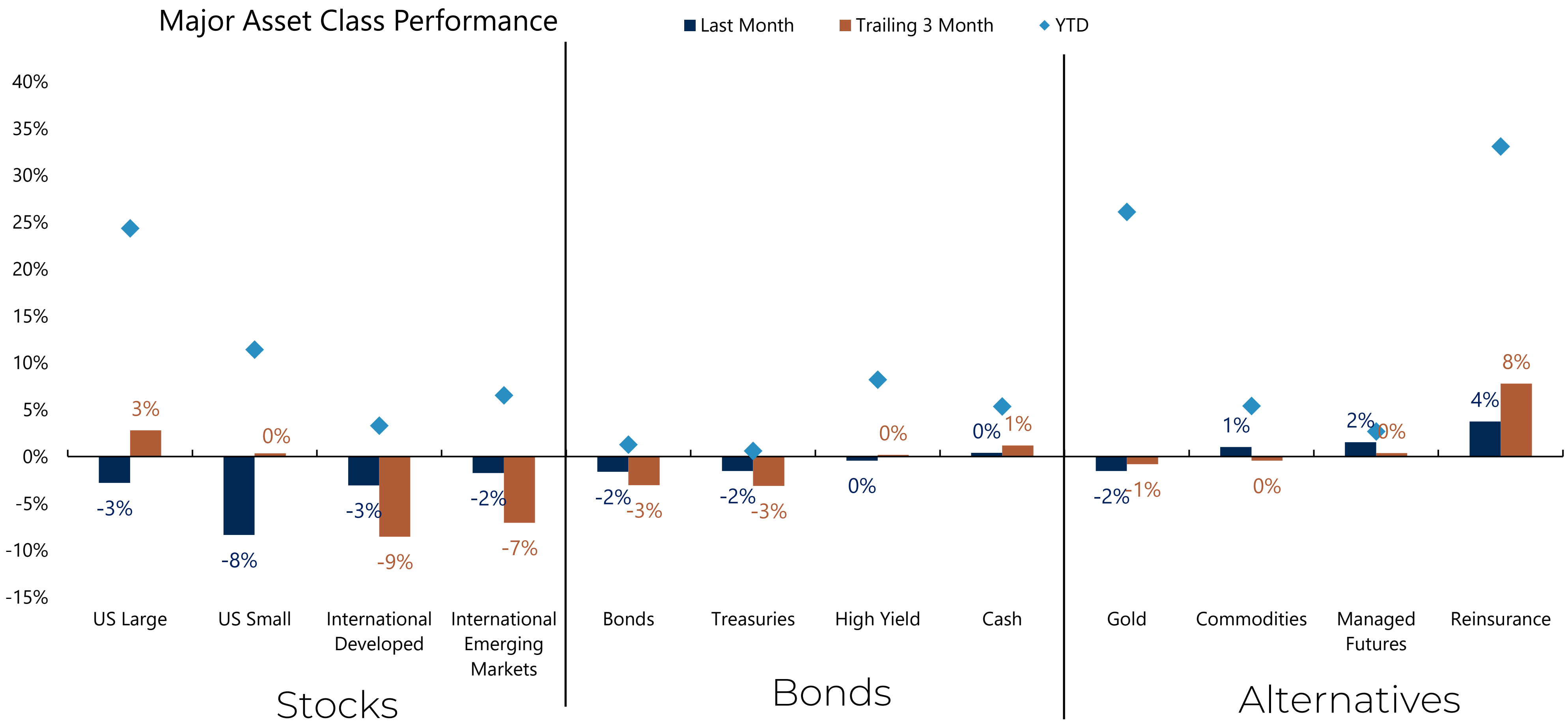
A Strong 2024 Overall



To recap 2024, the big story is the continued dominance of US large stocks, though all stock categories did well.

For bonds, more credit exposure was better, while more duration was worse. Cash yields have started to go down, so bonds are more attractive going forward.

On the alternatives side, it was another banner year for reinsurance with a 31% gain. This is of course following a 44% gain in 2023, and is the best performing asset class over the last 5 years, beating US stocks.

Managed Futures treaded water throughout the year, as did commodities. Gold had an especially good year as well.

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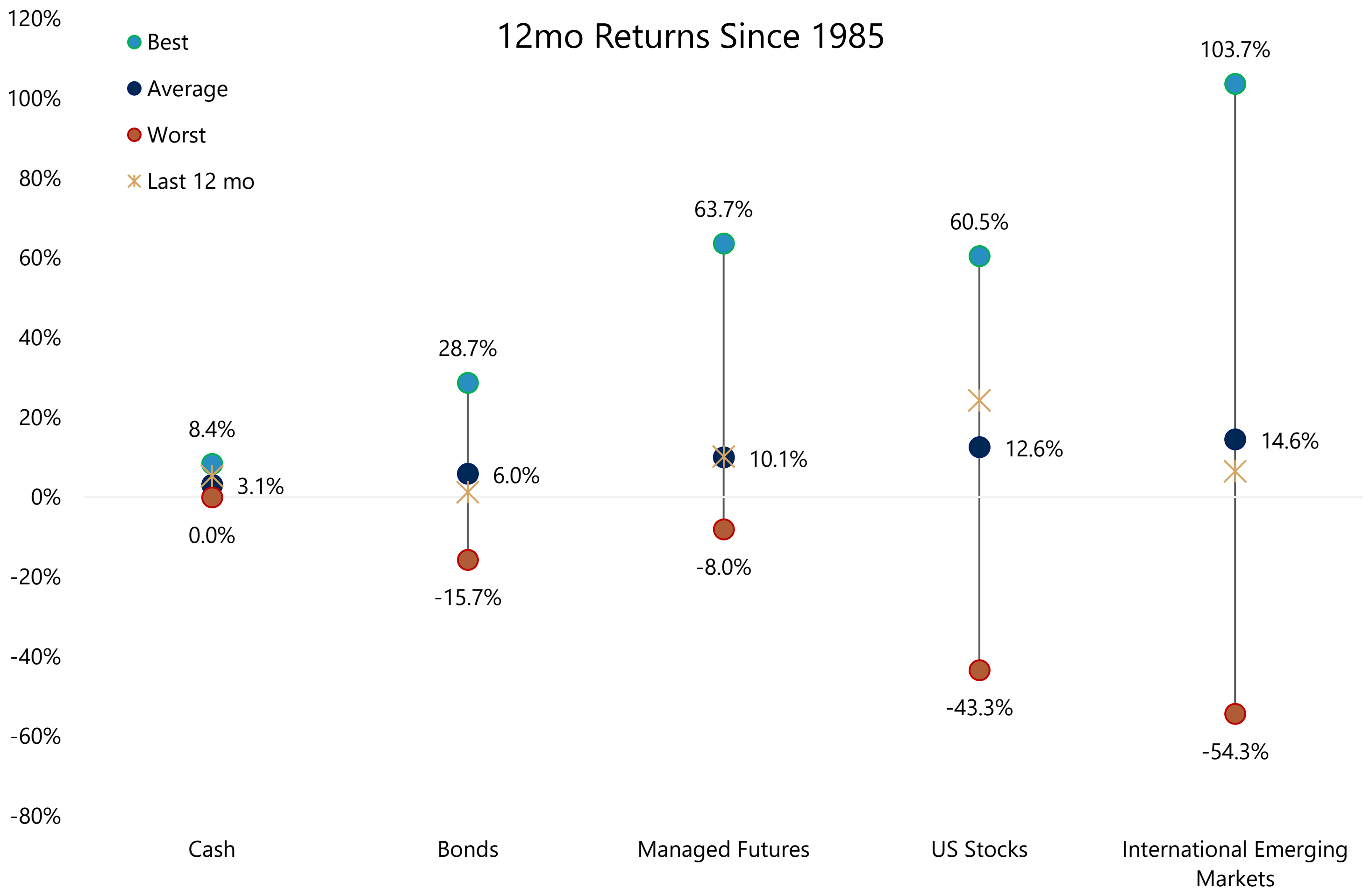
Source: Morningstar Direct. Categories in table are represented by (left to right) iShares Russell 1000 (IWB), iShares Russell 2000 (IWM), iShares Core MSCI EAFE (IEFA), iShares Core MSCI EM (IEMG), Bloomberg US Agg Bond TR, Bloomberg US Treasury TR USD, Bloomberg US Corporate High Yield TR USD, IA SBBI US 30 Day TBill TR USD, SPDR Gold Shares, Bloomberg Commodity TR USD, CISDM CTA EW USD, Stone Ridge Reinsurance Fund

Historical Asset Class Return Range



This chart shows the range of 12 month returns historically, by asset class. As you'd expect, the riskier investment leads to a greater potential gain, as well as loss.

The X on the line represents the last 12 months.

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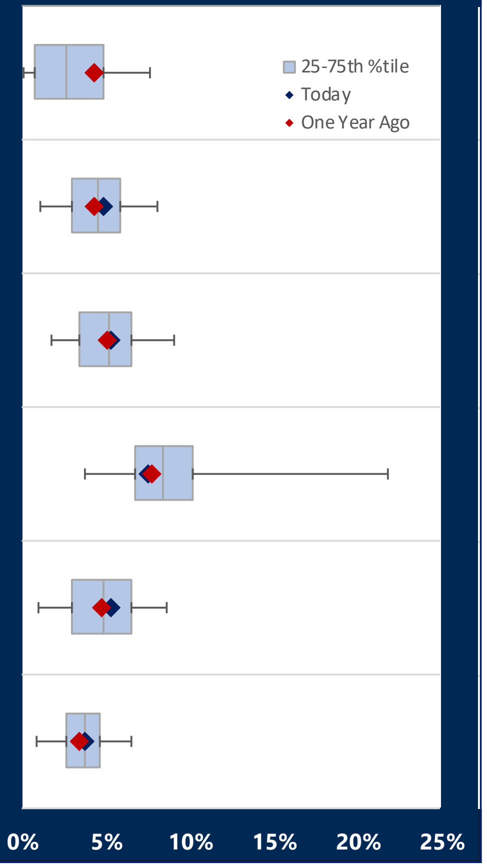
Source: Morningstar Direct. Categories in table are represented by (left to right) IA SBBI US 30 Day TBill TR US, Bloomberg US Agg Bond TR USD, CISDM CTA EW USD, iShares Russell 1000 (IWB), iShares Core MSCI EM (IEMG). Historical data starts at common inception in 1985.

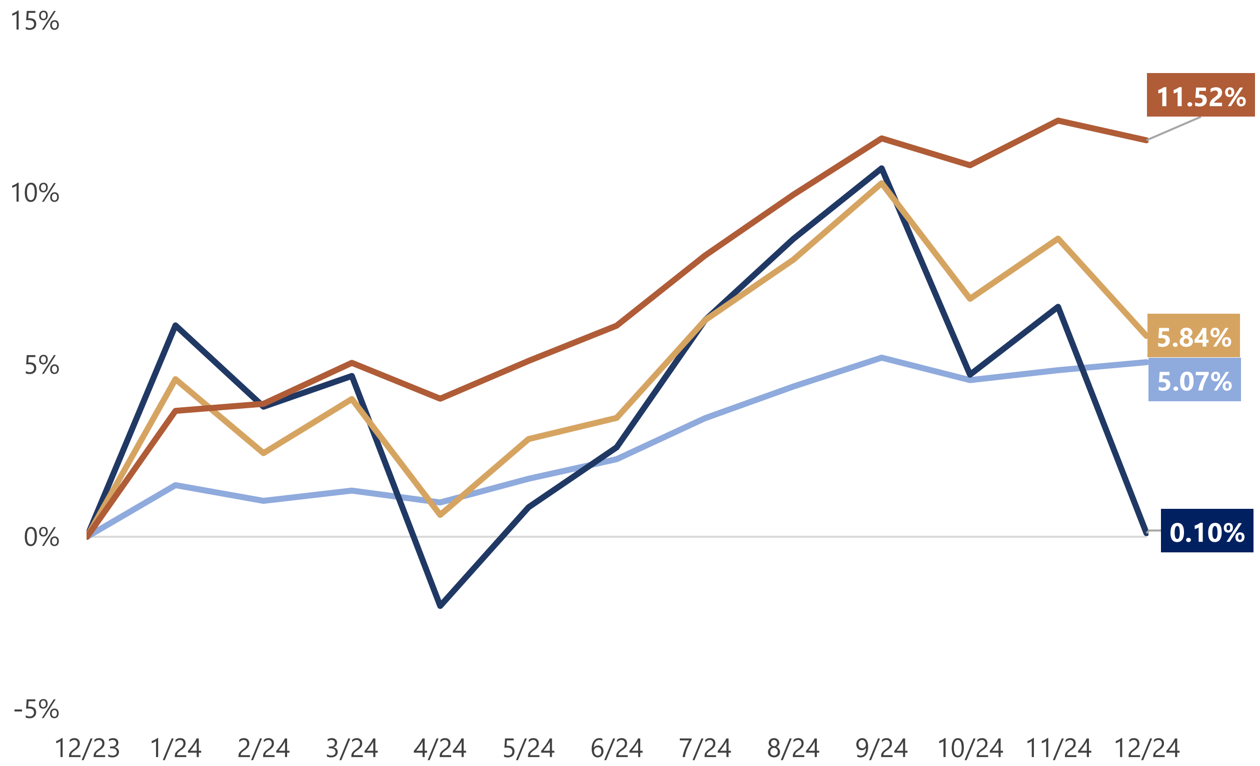
Bonds Were Cruising Until Q4

Bond Type	Yield (%) Last Month	Last Year	Change
ST Treasury	4.26	4.28	-0.02
LT Treasury	4.87	4.31	0.56
Investment Grade	5.33	5.11	0.22
High-Yield	7.49	7.8	-0.31
Mortgage-Backed	5.27	4.8	0.47
Municipal Bonds	3.74	3.37	0.37

Yield History



Short vs Long-Term Treasuries and Investment Grade vs Junk Credit



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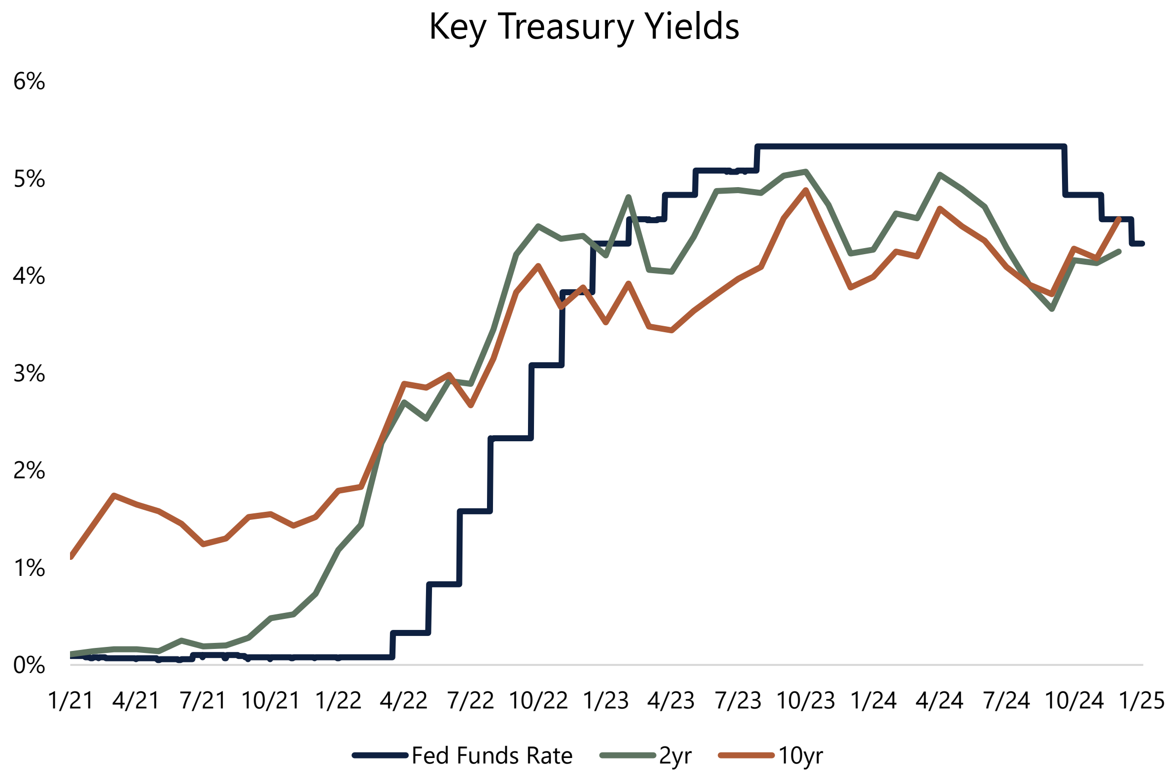
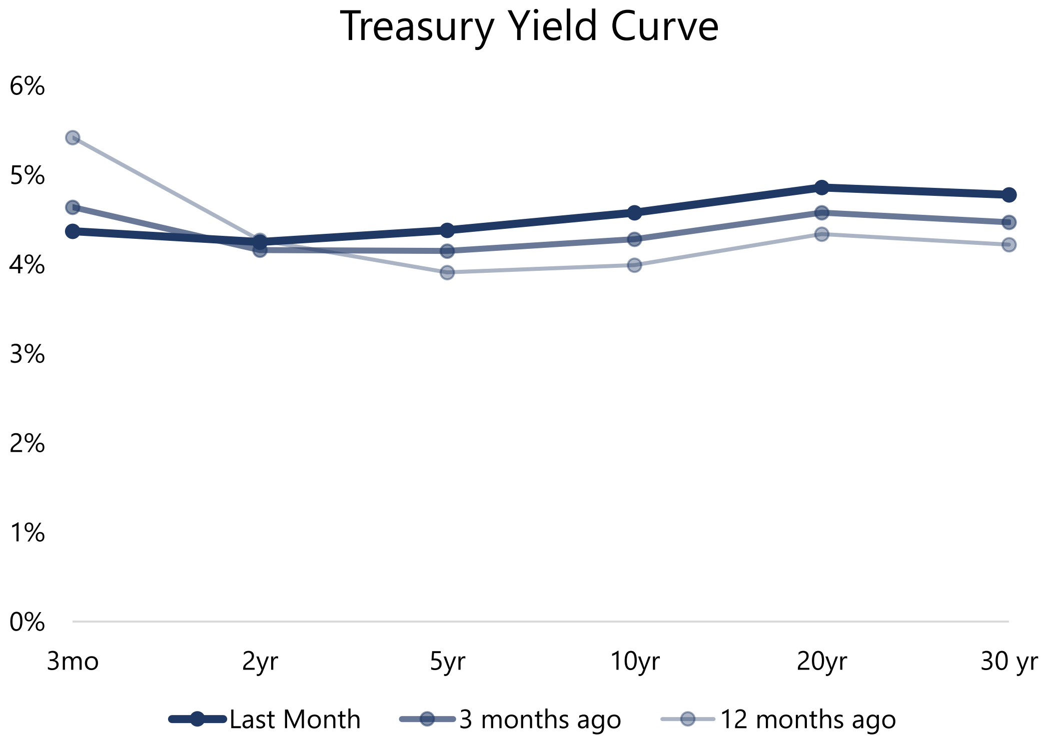
Source: Morningstar Direct. Categories in table are represented by (top to bottom) Bloomberg US Treasury 1-3 Yr Yld USD, Bloomberg US 20+Yr Yld USD, Bloomberg US Corp Bond Yld USD, Bloomberg US Corp High Yield Yld USD, Bloomberg US MBS Yld USD, Bloomberg Municipal Yld USD

The Yield Curve is Normalizing as Fed Cuts Rates





	3mo	2yr	5yr	10yr	20yr	30 yr
Last Month	4.4%	4.3%	4.4%	4.6%	4.9%	4.8%
3 months ago	4.6%	4.2%	4.2%	4.3%	4.6%	4.5%
12 months ago	5.4%	4.3%	3.9%	4.0%	4.3%	4.2%

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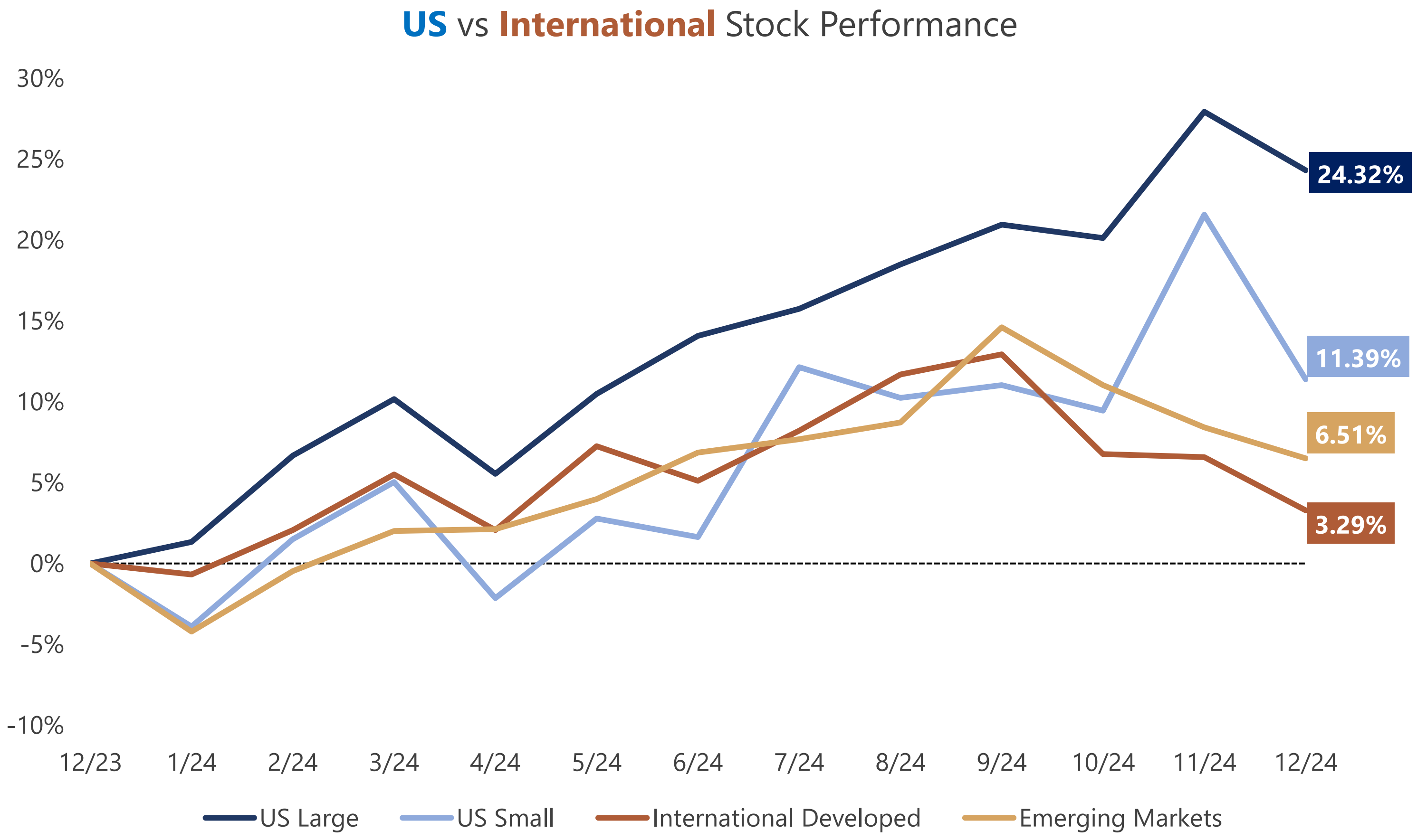
Source: Morningstar Direct. USTREAS T-Bill Cnst Mat Rate 3mo, USTREAS T-Bill Cnst Mat Rate 2 yr, USTREAS T-Bill Cnst Mat Rate 5yr, USTREAS T-Bill Cnst Mat Rate 10 Yr, USTREAS T-Bill Cnst Mat Rate 20 Yr, USTREAS T-Bill Cnst Mat Rate 30 Yr. Effective Fed Funds Rate from FRED Database.

Painful December for Small Caps

	Stock Type	Last Month	Last 3 Months	Last 12 Months
Core	US Large	-2.8%	2.8%	24.3%
	US Small	-8.4%	0.3%	11.4%
	International Developed	-3.1%	-8.5%	3.3%
	International Emerging	-1.8%	-7.1%	6.5%
Other	US Value	-6.9%	-2.0%	14.2%
	US Growth	0.9%	7.0%	33.1%
	Nasdaq	0.4%	4.9%	25.6%



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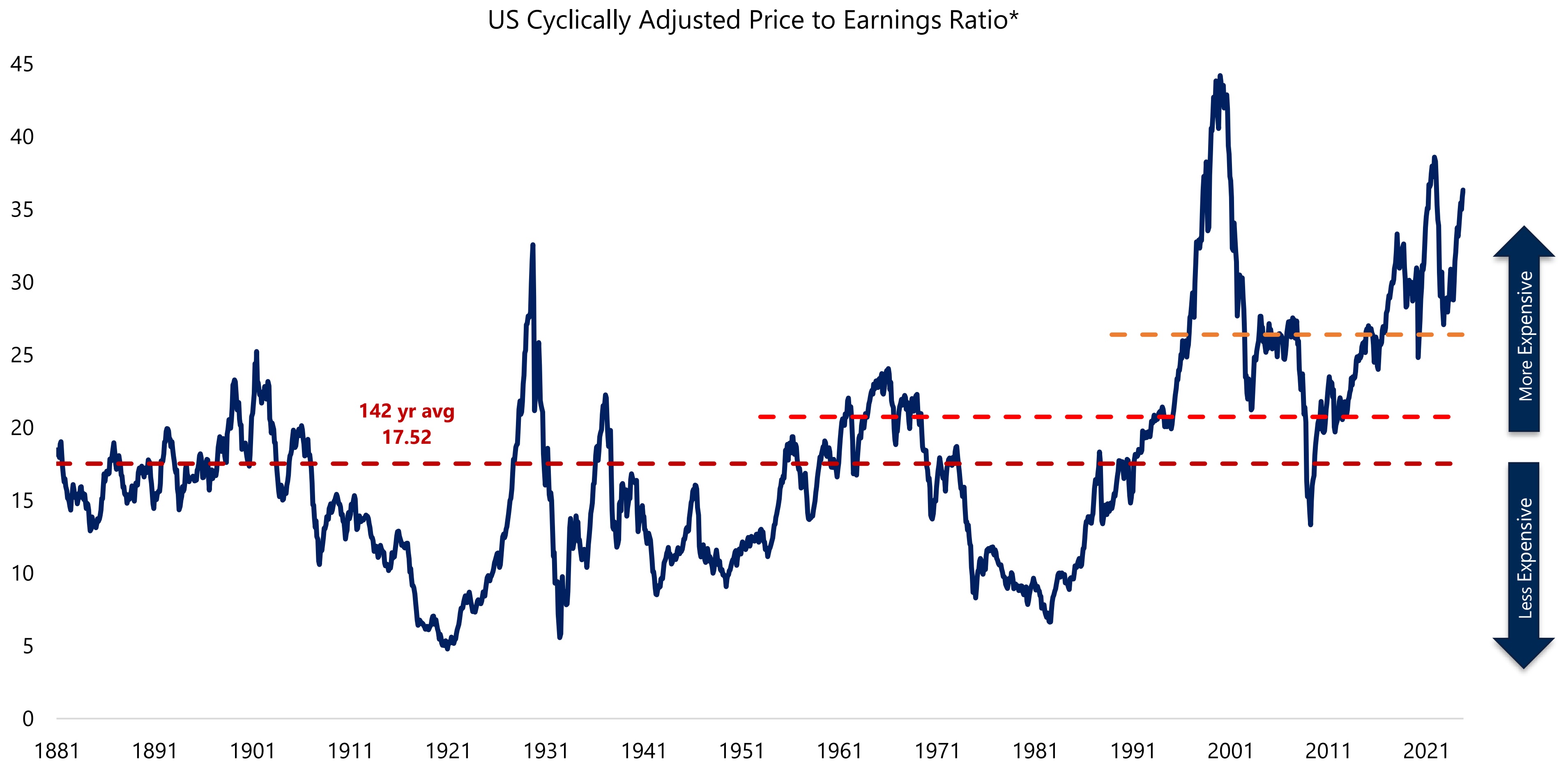
US Stocks Valuation High Historically



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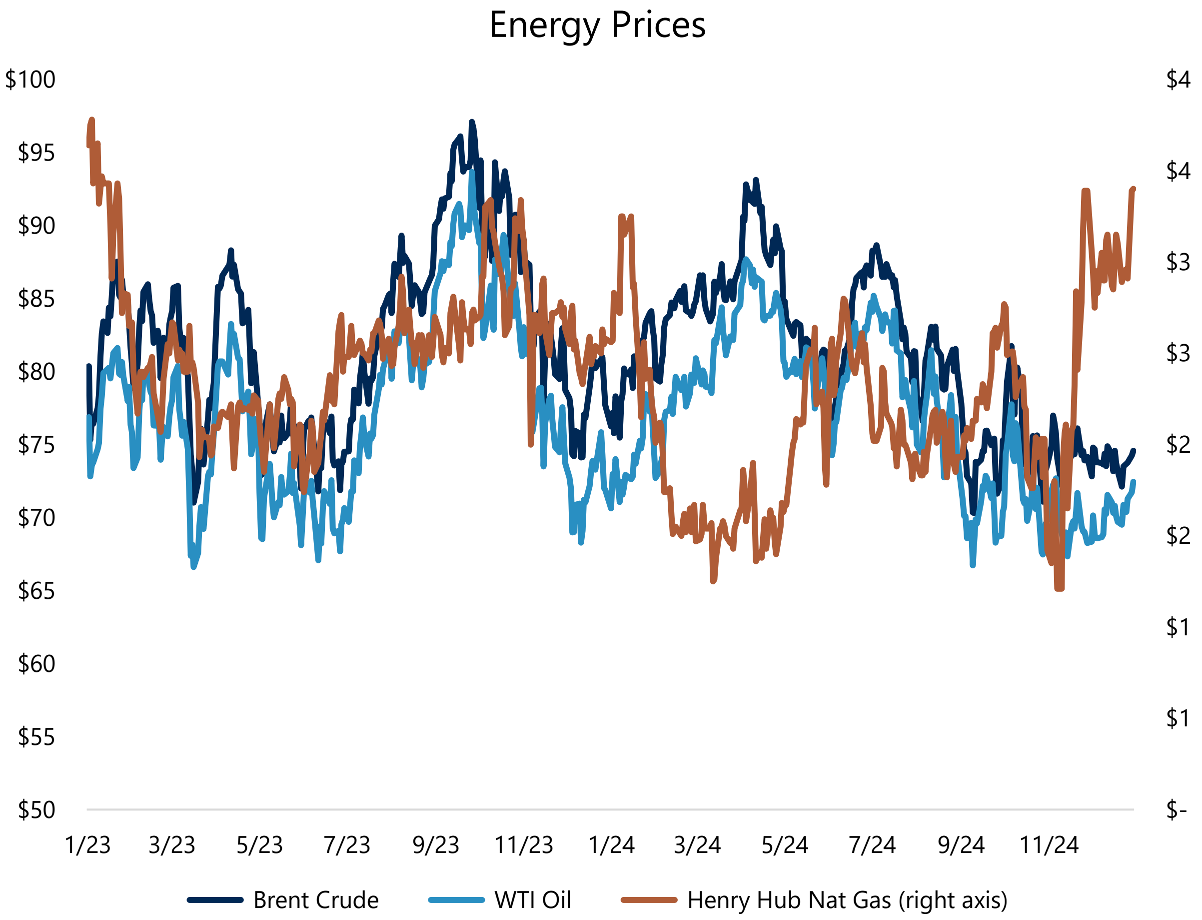
CAPE or Cyclically Adjusted Price to Earnings Ratio takes the current price and divides it by the last 10 years average earnings for the S&P 500 and adjusts it for inflation. It is thought to be more predictive of future returns than trailing 12 month or Forward PE.

Source: Data and CAPE Ratio were developed by Robert Shiller using various public sources.

Commodities Staying Calm



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Source: Bloomberg Commodity TR USD (left) and Crude Oil Prices: West Texas Intermediate (WTI) - Cushing, Oklahoma, Crude Oil Prices: Brent – Europe, Henry Hub Natural Gas Spot Price from U.S.

Energy Information Administration (right)

Periodic Table of Asset Class Returns

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2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Reinsurance 8%	US Small Stock 22%	Intl Emerging Stk 37%	Cash 2%	US Large Stock 31%	US Large Stock 21%	US Large Stock 26%	Trend Following 22%	Reinsurance 44%	Reinsurance 31%
Bonds 2%	US Large Stock 12%	Intl Developed Stk 27%	Bonds 0%	US Small Stock 25%	US Small Stock 20%	US Small Stock 15%	Reinsurance 3%	US Large Stock 26%	US Large Stock 24%
US Large Stock 1%	Intl Emerging Stk 10%	US Large Stock 22%	US Large Stock -5%	Intl Developed Stk 23%	Intl Emerging Stk 18%	Intl Developed Stk 12%	Cash 2%	Intl Developed Stk 18%	TAA 12%
Cash 0%	Moderate Blended Port 6%	TAA 19%	Moderate Blended Port -8%	TAA 20%	Moderate Blended Port 13%	Moderate Blended Port 11%	Bonds -12%	Moderate Blended Port 17%	US Small Stock 11%
Intl Developed Stk 0%	Reinsurance 6%	Moderate Blended Port 17%	Reinsurance -6%	Moderate Blended Port 20%	Intl Developed Stk 8%	TAA 10%	TAA -12%	US Small Stock 17%	Moderate Blended Port 11%
Trend Following 0%	TAA 5%	US Small Stock 15%	TAA -8%	Intl Emerging Stk 18%	Reinsurance 7%	Trend Following 5%	Moderate Blended Port -15%	Intl Emerging Stk 12%	Intl Emerging Stk 7%
Moderate Blended Port 0%	Intl Developed Stk 2%	Bonds 5%	US Small Stock -11%	Bonds 8%	Bonds 7%	Cash 0%	Intl Developed Stk -15%	TAA 12%	Cash 5%
TAA -4%	Bonds 1%	Trend Following 2%	Trend Following -13%	Trend Following 4%	Trend Following 3%	Bonds -1%	US Large Stock -19%	Bonds 6%	Intl Developed Stk 3%
US Small Stock -4%	Cash 0%	Cash 1%	Intl Developed Stk -14%	Cash 2%	Cash 0%	Intl Emerging Stk -1%	Intl Emerging Stk -20%	Cash 5%	Trend Following 3%
Intl Emerging Stk -14%	Trend Following -6%	Reinsurance -11%	Intl Emerging Stk -15%	Reinsurance -4%	TAA -2%	Reinsurance -5%	US Small Stock -20%	Trend Following -3%	Bonds 1%

Through Last Month End 12/31/2024

5 Yr	10 Yr
Reinsurance 15%	US Large Stock 13%
US Large Stock 14%	US Small Stock 8%
US Small Stock 7%	Moderate Blended Port 7%
Moderate Blended Port 7%	Reinsurance 6%
Trend Following 6%	Intl Developed Stk 5%
Intl Developed Stk 5%	TAA 5%
TAA 4%	Intl Emerging Stk 4%
Cash 3%	Cash 2%
Intl Emerging Stk 2%	Bonds 2%
Bonds 0%	Trend Following 1%

Disclaimer

PAST PERFORMANCE IS NOT A GUARANTEE OF CURRENT OR FUTURE RESULTS. Examples of historical information included in this presentation do not, nor are they intended to, constitute a promise of similar future results. Specific client portfolio allocations, risks and returns can and may deviate from these examples depending on accounts and types of investments available through each account. Future market views by WJ Interests, LLC may vary significantly from the historical examples presented herein and no one receiving this summary should assume that WJ Interests, LLC will be able to replicate successful views in the future.

Moderate Blended Portfolio is for illustrative purposes only. It is calculated by taking a weighted average of the following asset classes and represents a moderate risk portfolio incorporating leverage and the asset classes in the table:

28%	US Large Stock	iShares Russell 1000 (IWB)
6%	US Small Stock	iShares Russell 2000 (IWM)
21%	Intl Developed Stock	iShares Core MSCI EAFE (IEFA)
6%	Intl Emerging Stock	iShares Core MSCI Emerging Markets (IEMG)
41%	Bonds	Vanguard Total Bond Market (BND)
-18%	Cash	Morningstar USD 1M Cash TR USD
4%	Reinsurance	Stone Ridge Reinsurance Fund (SRRIX)
6%	Managed Futures	SG Trend Index, PIMCO Trends (PQTIX), Virtus Alphasimplex (ASFYX), Standpoint (BLNDX)
6%	TAA	GMO Benchmark Free (GBMIX) and Strategy Shares Nwfnd/Rslv Rbt ETF (ROMO)

Assumes annual rebalancing. All data represents total return for stated period.

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