WJ Charts of the Month

April 2024

WJ Interests, LLC
WEALTH ADVISORS

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.

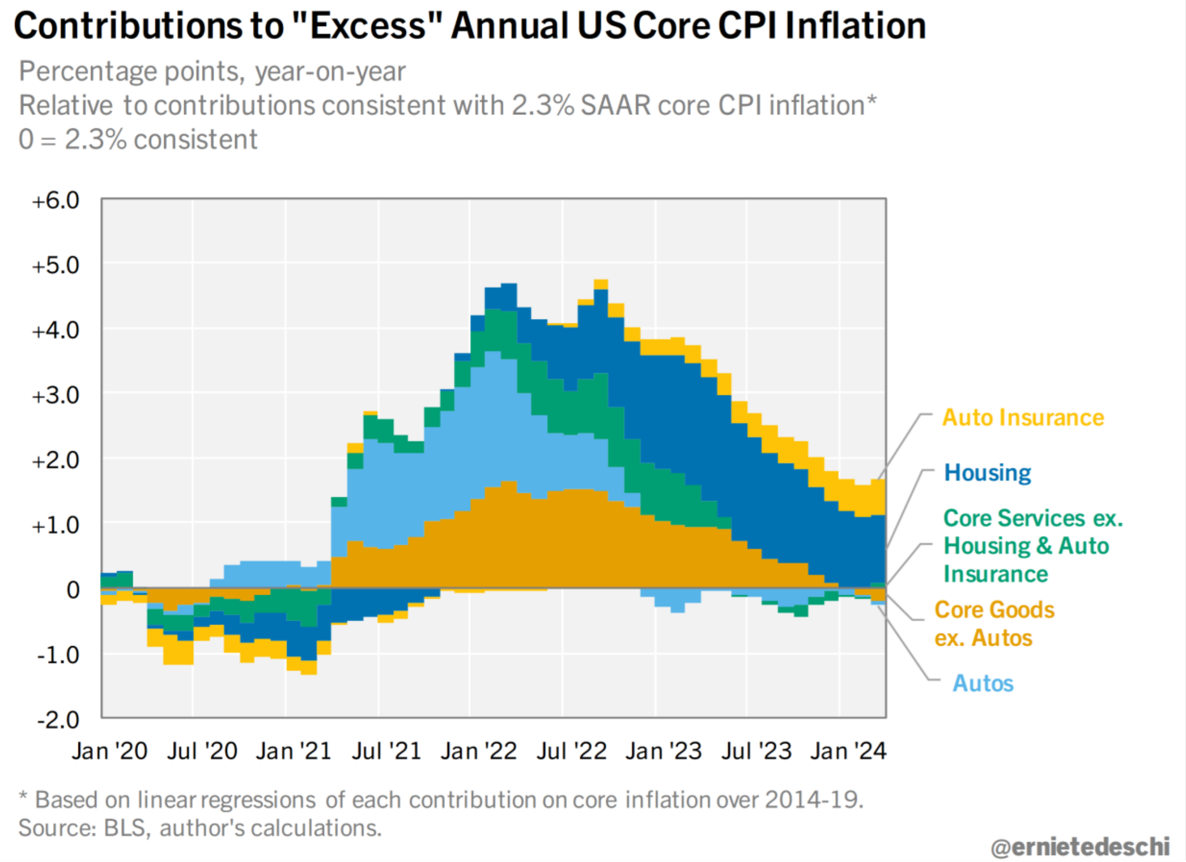
WJ Interests, LLC
WEALTH ADVISORS

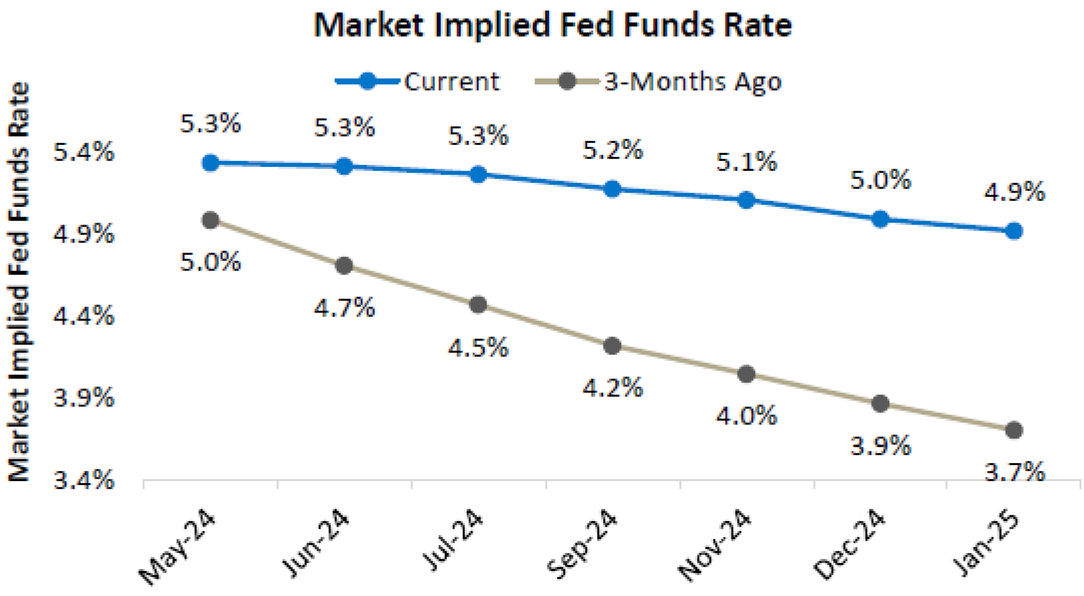
Highlights

- Another Hot Inflation Report…
- Violent Crime is Falling
- Electricity Demand is Going Way Up
- Immigration Holding Up Employment?
- Total Solar Eclipse
- Q1 GDP Lower Than Expected
- Employment Situation Slightly Worsening
- Tough Month for All but Alts

What Happened

Another Hot Inflation Report





For the 3rd month in a row, CPI inflation came in hotter than expected. The chart on the left breaks down what is contributing to "excess inflation", which is the inflation above or below what was normal in the past. Overwhelmingly, the excess inflation is from Housing and Auto Insurance.

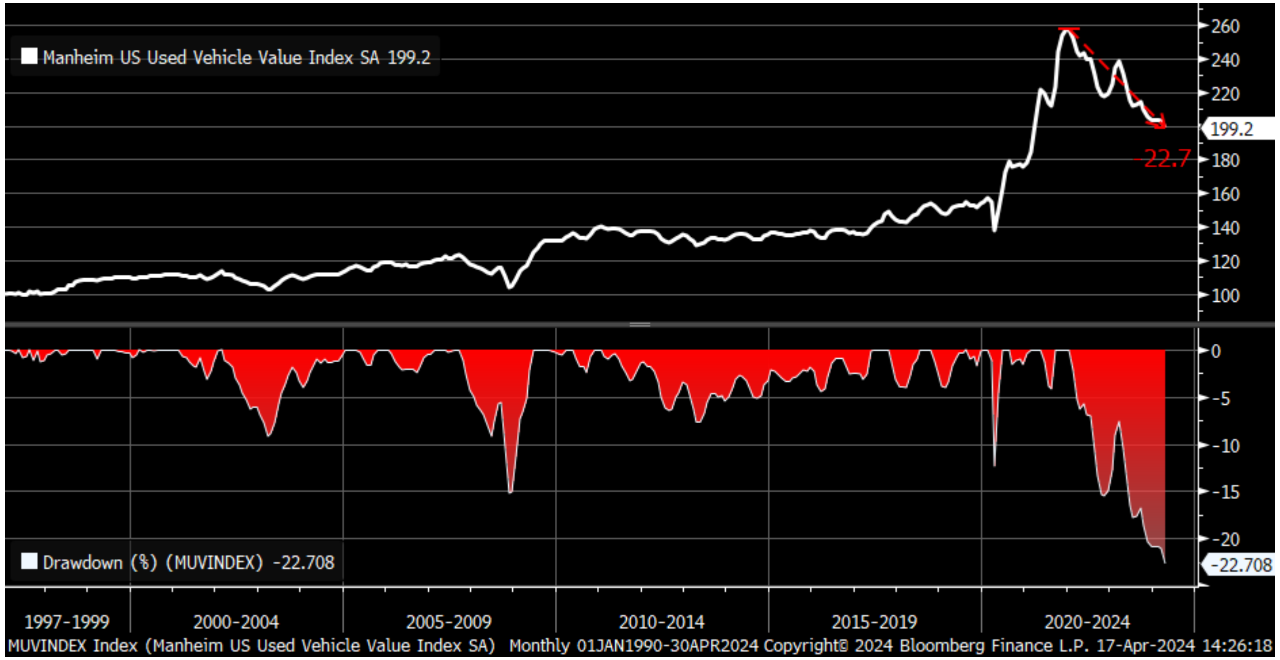
As a result, the market adjusted its expectations of what the Fed will do this year. 3 months ago, the market expected rates to be cut over 1% by the end of the year. After the 3 higher inflation prints, it now expects only about a .25% cut.

WJ Interests, LLC
WEALTH ADVISORS

Though Real Time Rent and Auto prices are falling

Interestingly, however, the Fed's more current index of housing inflation (blue line) fell to 0.42% year over year, rather than the 5.9% (orange line) used in CPI. We'd expect these two lines to meet in the next year or so. In addition, the Manheim US Used Vehicle index declined 2.3% in April alone, and 14% over the last year. Used car prices are the primary input cost to auto insurance, which you'll recall was the 2nd largest contributor to CPI.

It would be interesting to know to what degree the Fed considers how lagged indicators contribute to each months inflation print, and whether they internally adjust for them. That may determine how they react later in the year.

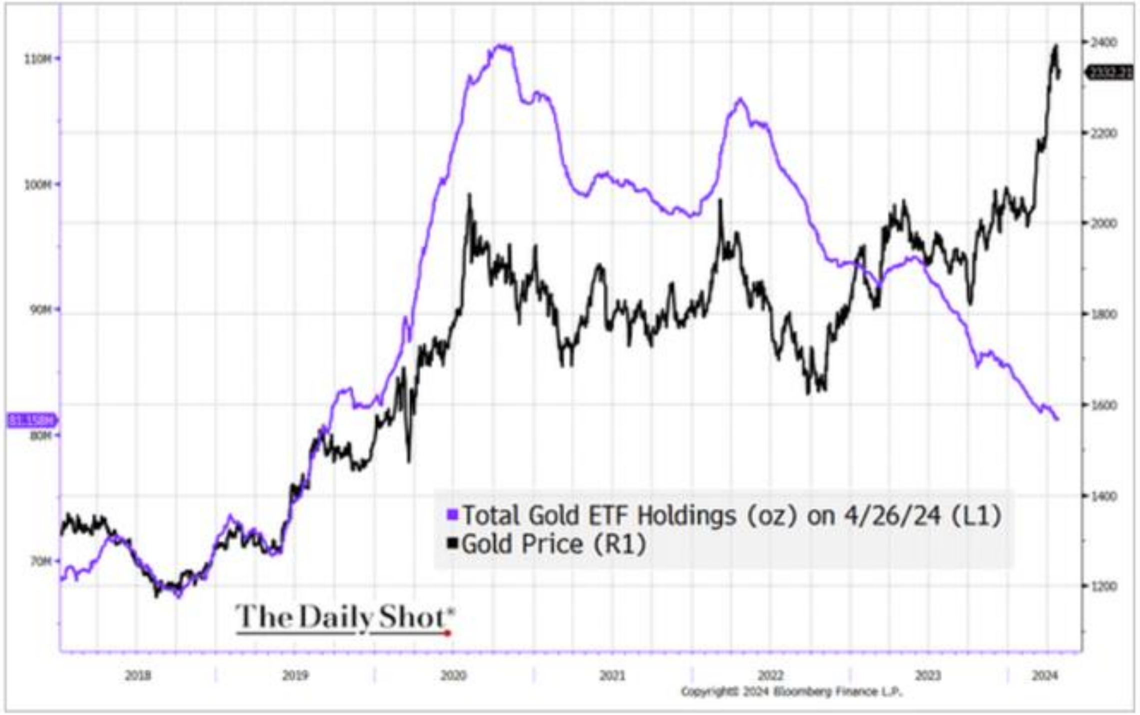


WJ Interests, LLC
WEALTH ADVISORS

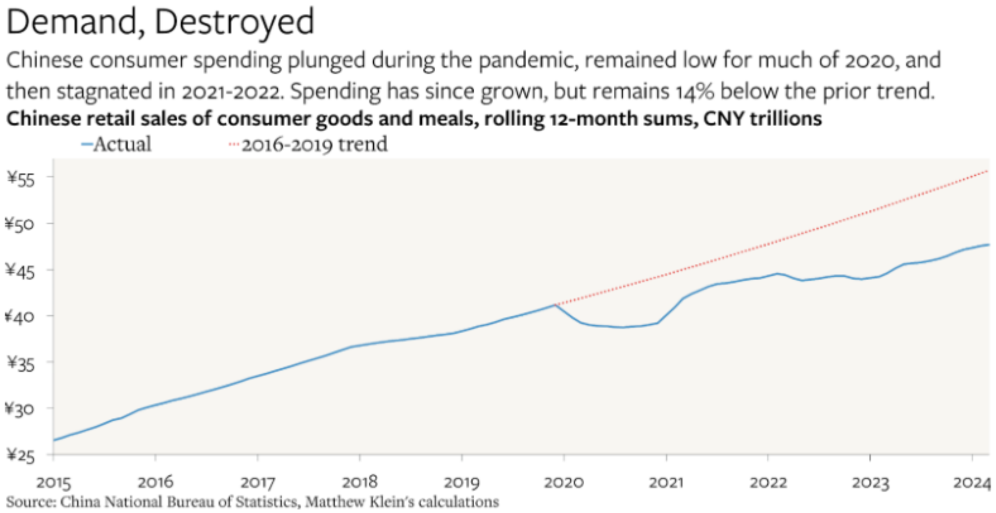
China’s Weakness is Gold’s Tailwind

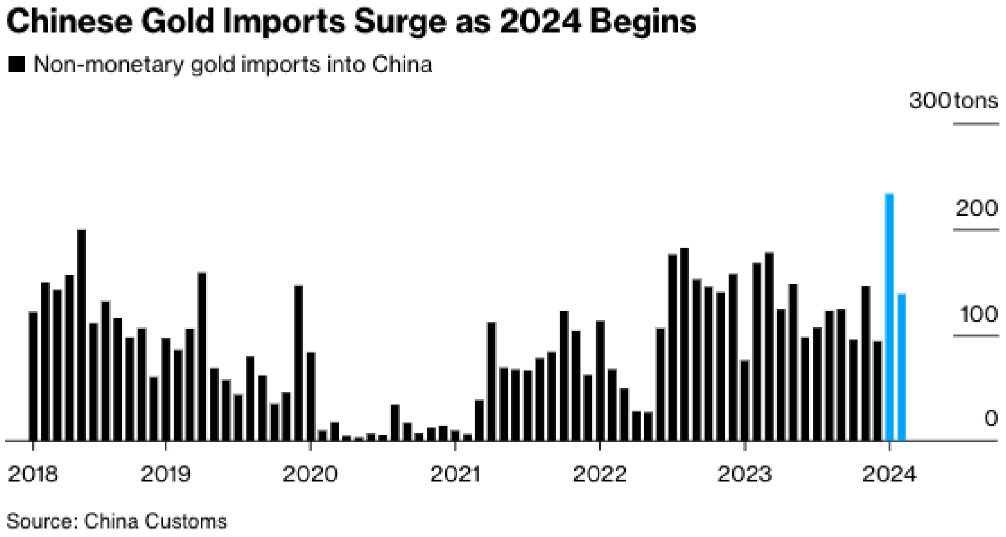
Gold has had quite the rally recently, but interestingly, the gold ETF (GLD) has lost assets over this time. So who’s buying? China’s consumer demand has been weak, the currency is under pressure as real estate and stock valuations have crashed, and the government feels it has too much reliance on the US dollar.

In response, both Chinese citizens as well as the People’s Bank of China (PBC) have been loading up on gold, causing the price to rise.

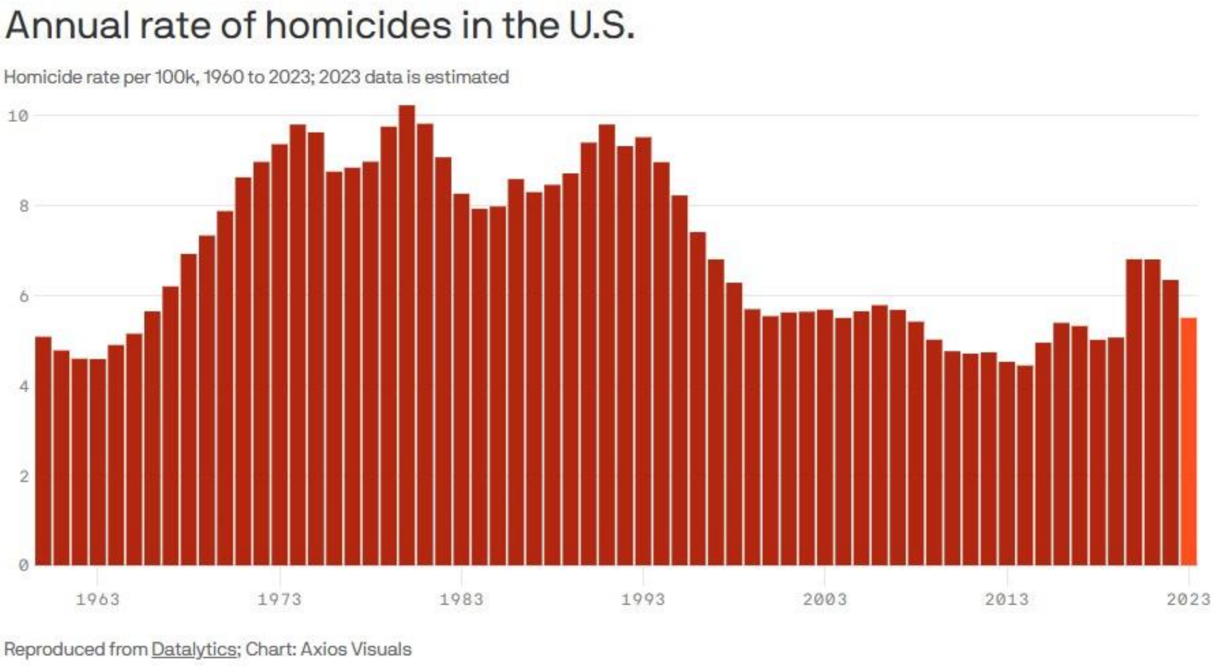


Source: @TheTerminal, Bloomberg Finance L.P.





Violent Crime is Falling



Violent crime has fallen by almost 50% in the last 30 years or so. However, during and immediately after the pandemic, crime spiked.

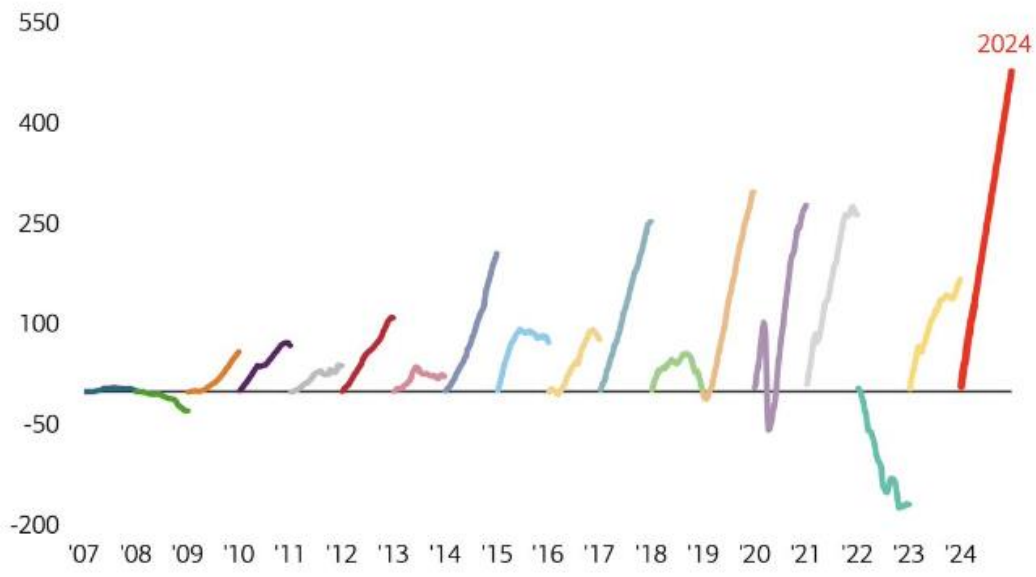
Fortunately, it looks likely that the spike was more due to the strange nature of the pandemic and is on its way to continue the pre-pandemic trend downwards.

People are Buying a Lot of Bonds/Cash

Last month, I posted some charts about how tight credit spreads are, and how that's reflective of the low perceived risk of corporate credit. The chart on the right is another illustration of that, as inflows are on pace for a record year of investment grade (IG) corporate bond buying.

The dramatic inflows into money market funds (MMFs) have also continued into this year, however it is slowing from last year.

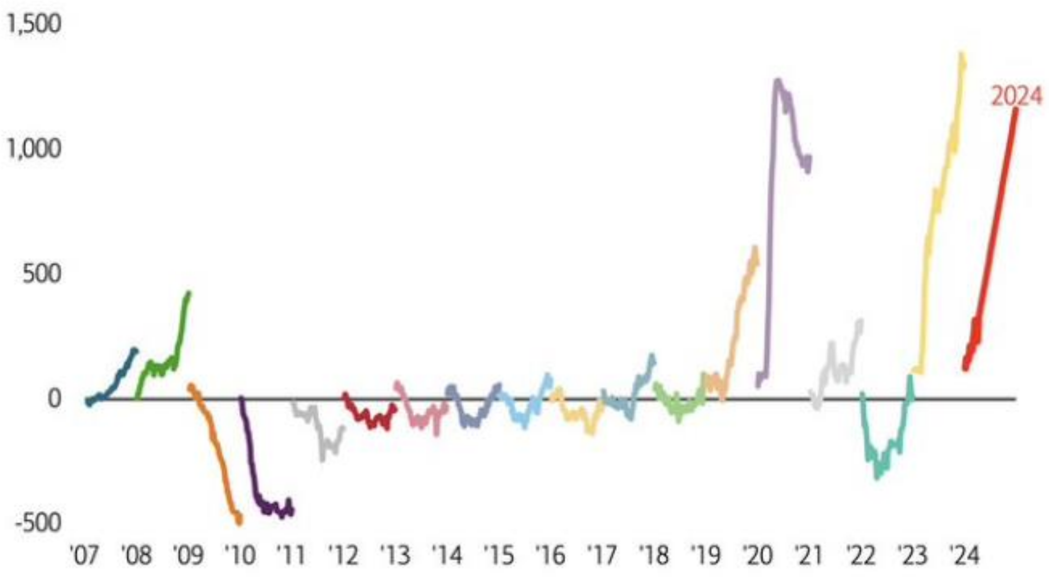
Chart 13: Inflows to IG bonds YTD on pace for record year
Cumulative annual flows to IG bond funds ($bn)



Source: BofA Global Investment Strategy, EPFR

BofA GLOBAL RESEARCH

Chart 11: Inflows to MMFs on pace for 2nd highest year on record
Cumulative annual flows to money market funds ($bn)



Source: BofA Global Investment Strategy, Bloomberg.

BofA GLOBAL RESEARCH

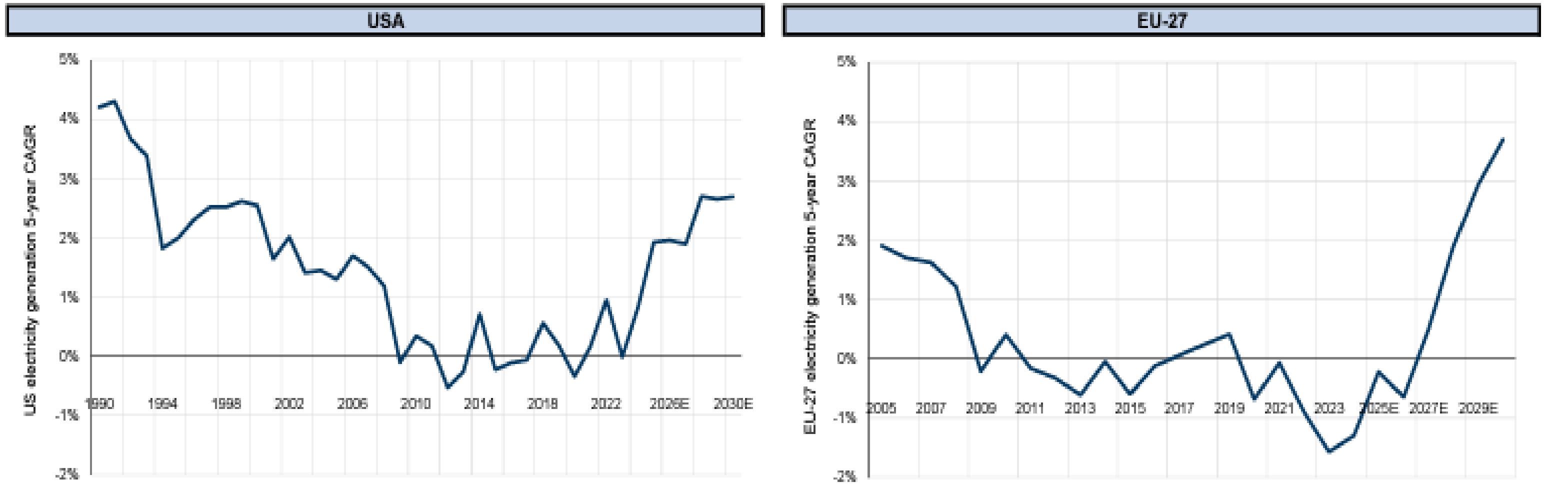
Electricity Demand is Going Way Up

The charts below from Goldman Sachs research team shows the amount of electricity we'll need to generate in the coming years to support the electrification of everything (heat pumps, vehicles, data centers). There is going to be an enormous amount of infrastructure spending on both renewable and nonrenewable sources, transmission, and distributed energy storage. Another major factor for that increased energy usage will be due to AI (artificial intelligence), and the amount of energy it takes to train, and use the large models becoming popular today.

For a great read on the electrification of everything, I'd highly recommend reading "Electravision" from JP Morgan.

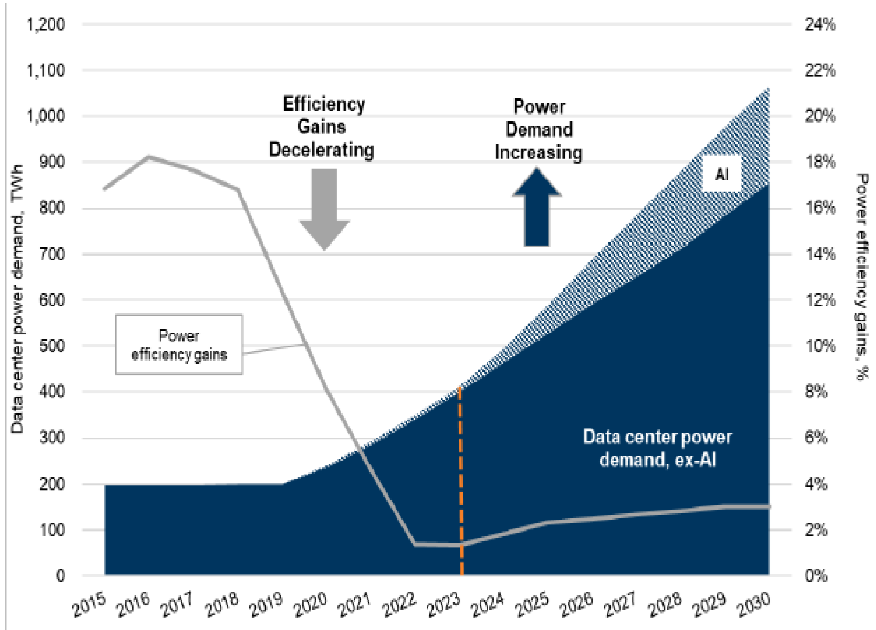
Exhibit 2: Generational Growth: Our Utilities Research teams now expect USA and EU-27 electricity consumption accelerating through the end of the decade to levels not seen in 20+ years

5-yr CAGR for US and European electricity demand; forecasts from our US and Europe Utilities Research teams



Source: EIA, EMBER, Goldman Sachs Global Investment Research

Data center electricity consumption, TWh (LHS) and power efficiency gains ex-AI, % (RHS)



Goldman Sachs

WJ Interests, LLC
WEALTH ADVISORS

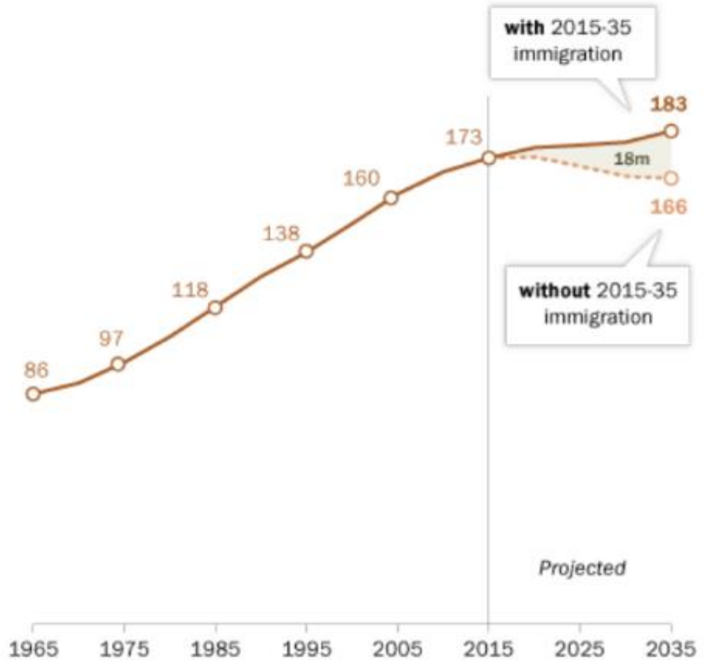
Surging Immigration has Supported Unemployment

I knew immigration had a large impact on the employment situation, but I was surprised to find that immigrants made up all new jobs since the pandemic. I'd assume much of the drop off in native born employment is from aging demographics and early retirements.

Not sure to what extent this trend will continue, or if overall employment might start to fall with decreasing immigration. I do know however that a strong job market has been one of the Fed's primary reasons not to lower interest rates, and it appears this dynamic is entirely supported by immigration.

Without future immigrants, working-age population in U.S. would decrease by 2035

Working-age population (25-64), in millions

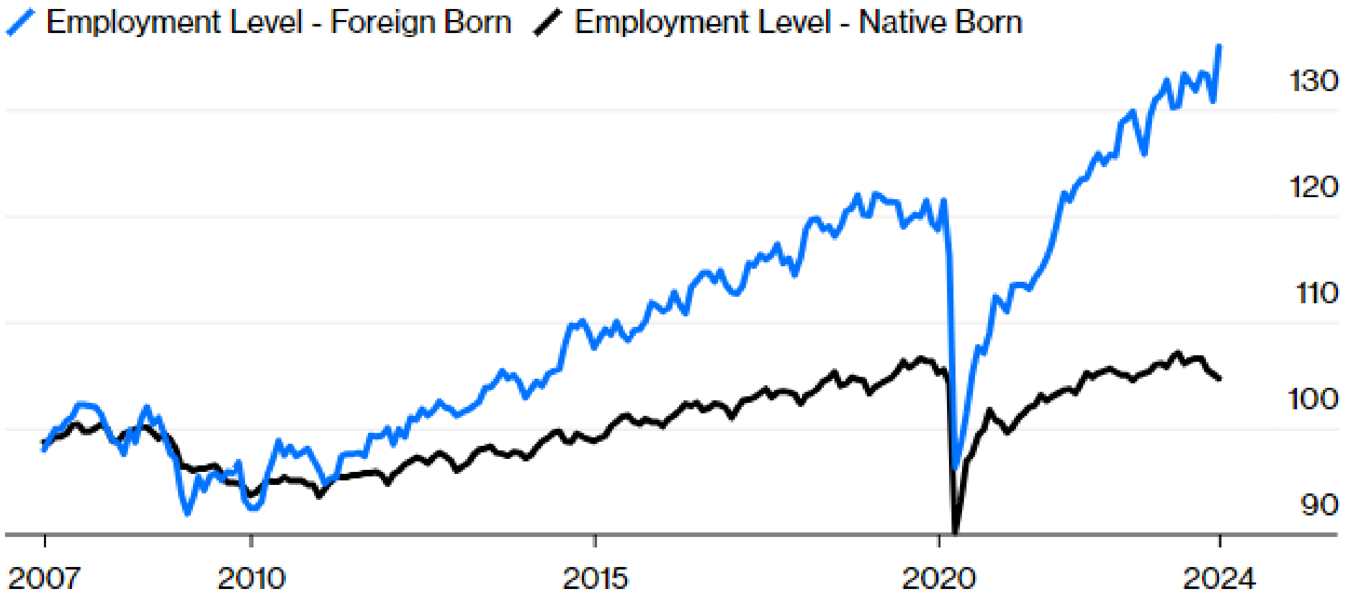


Note: Numbers for 2015 onward are projections.
Source: Pew Research Center estimates for 1965-2015 based on adjusted census data; Pew Research Center projections for 2015-2035.

PEW RESEARCH CENTER

Big Immigration

All US employment growth in the pandemic era comes from immigrants

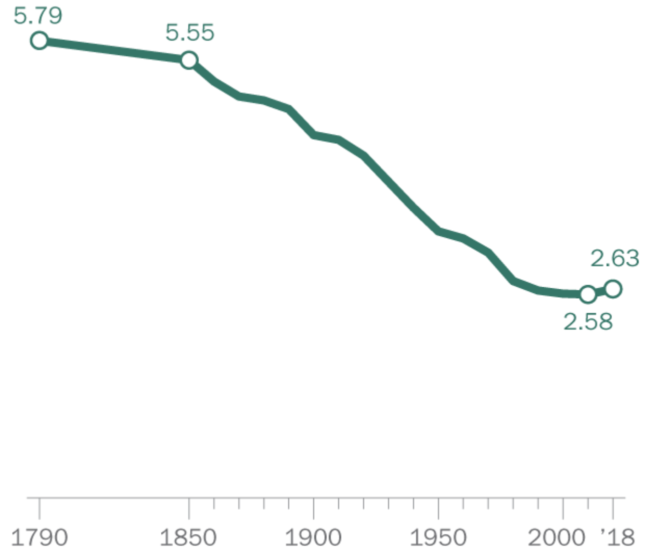


Source: Federal Reserve Bank of St Louis FRED Service
Note: Re-based: 12/01/2007 = 100

Housing In America

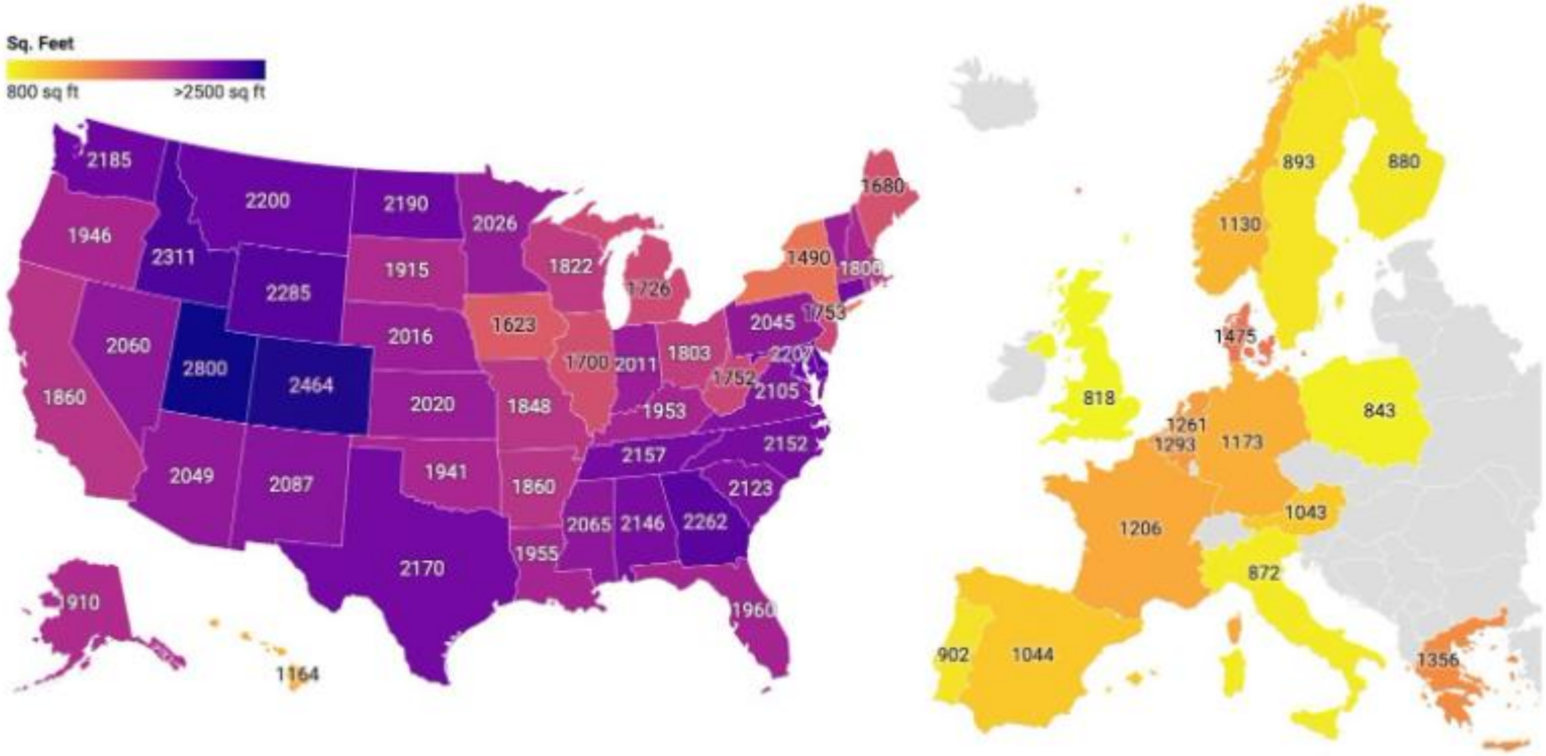
This decade will likely be the first in at least 160 years in which American households have more people

Average number of people per household



Note: Data labels are for 1790, 1850, 2010 and 2018. Average household size is not available for the years between 1790 and 1850.
Source: Pew Research Center analysis of Census historical statistics, 2010 Census SF1 data and 2018 American Community Survey.

PEW RESEARCH CENTER



Above are the average square footage of homes in the US vs in Europe. Homes in the US are about double the size in Europe, and about 61% larger than 40 years ago.

This is despite the average number of people living in a home decreasing over time.

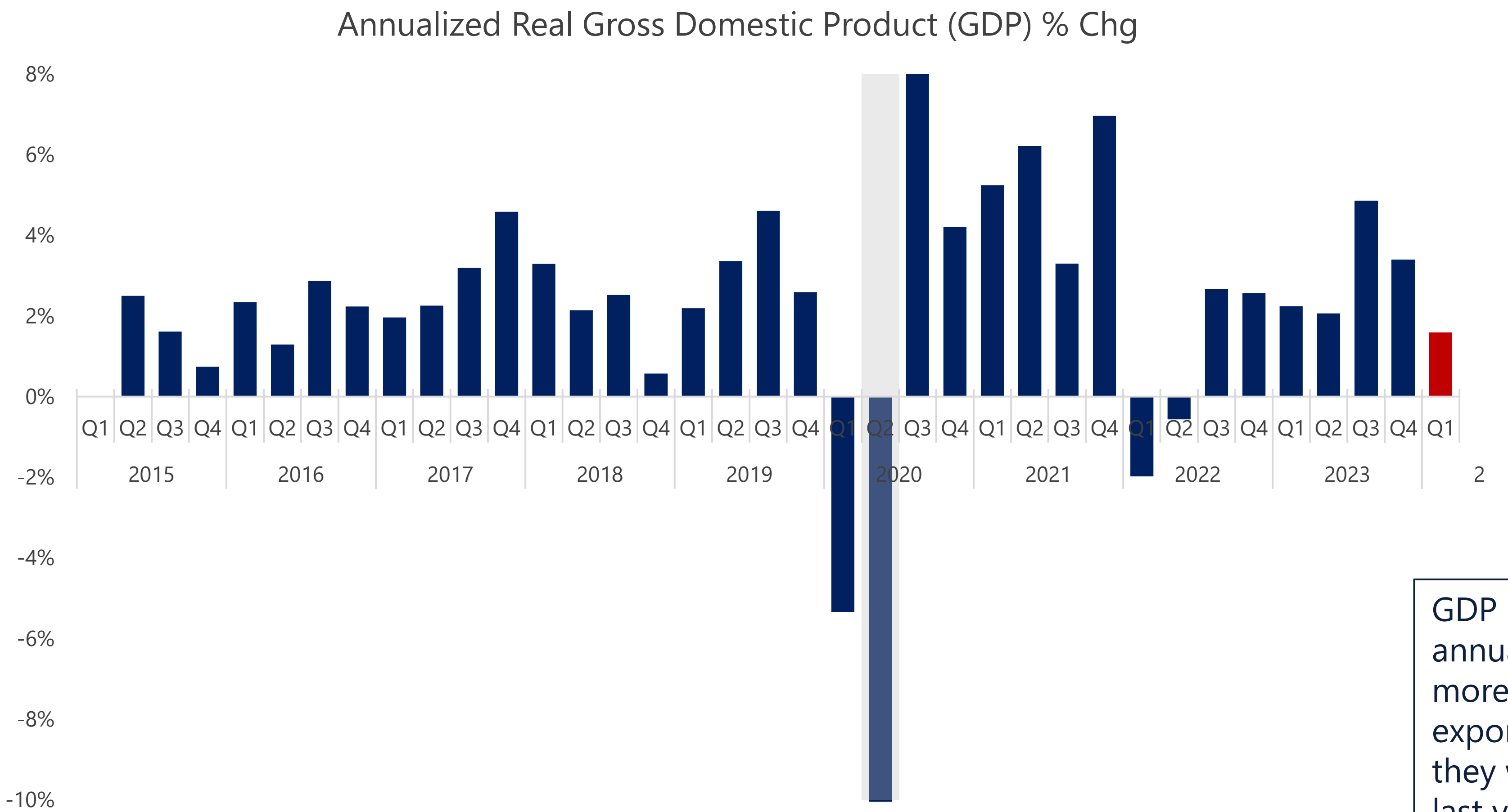
WJ Interests, LLC
WEALTH ADVISORS

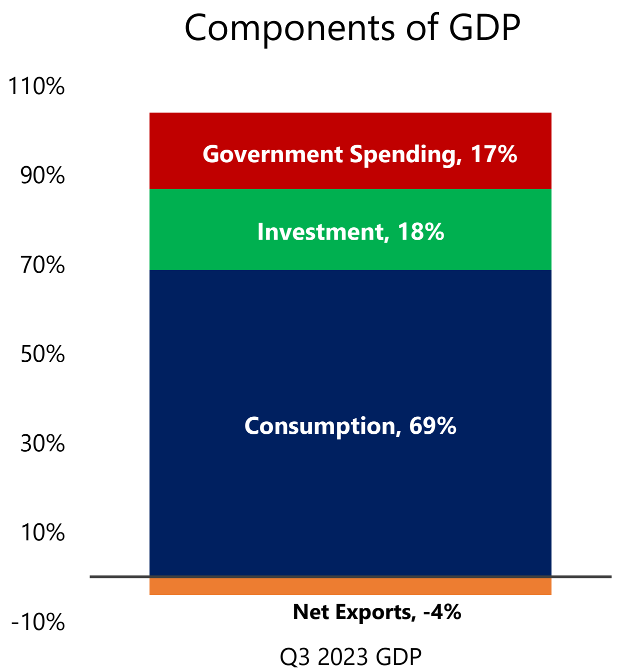
We Had a Total Solar Eclipse!

One of our clients is a photographer and has shared many incredible photos of his travels with us. Last month, he traveled to Waco, about 40 miles from the center of totality, and was able to take this composite of amazing photos despite all the cloud cover! Appreciate this one, because we won’t see another Solar eclipse from Texas until 2044.

WJ State of the Economy

US Economic Growth at 1.6%



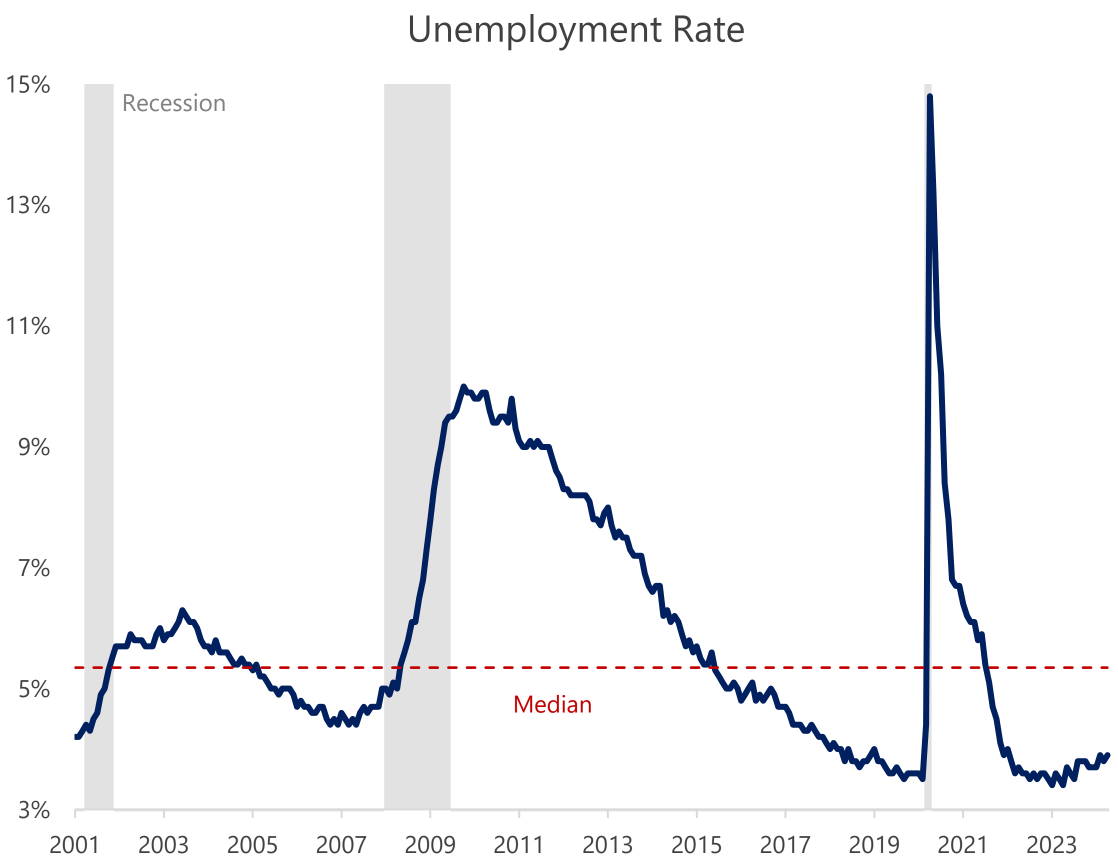


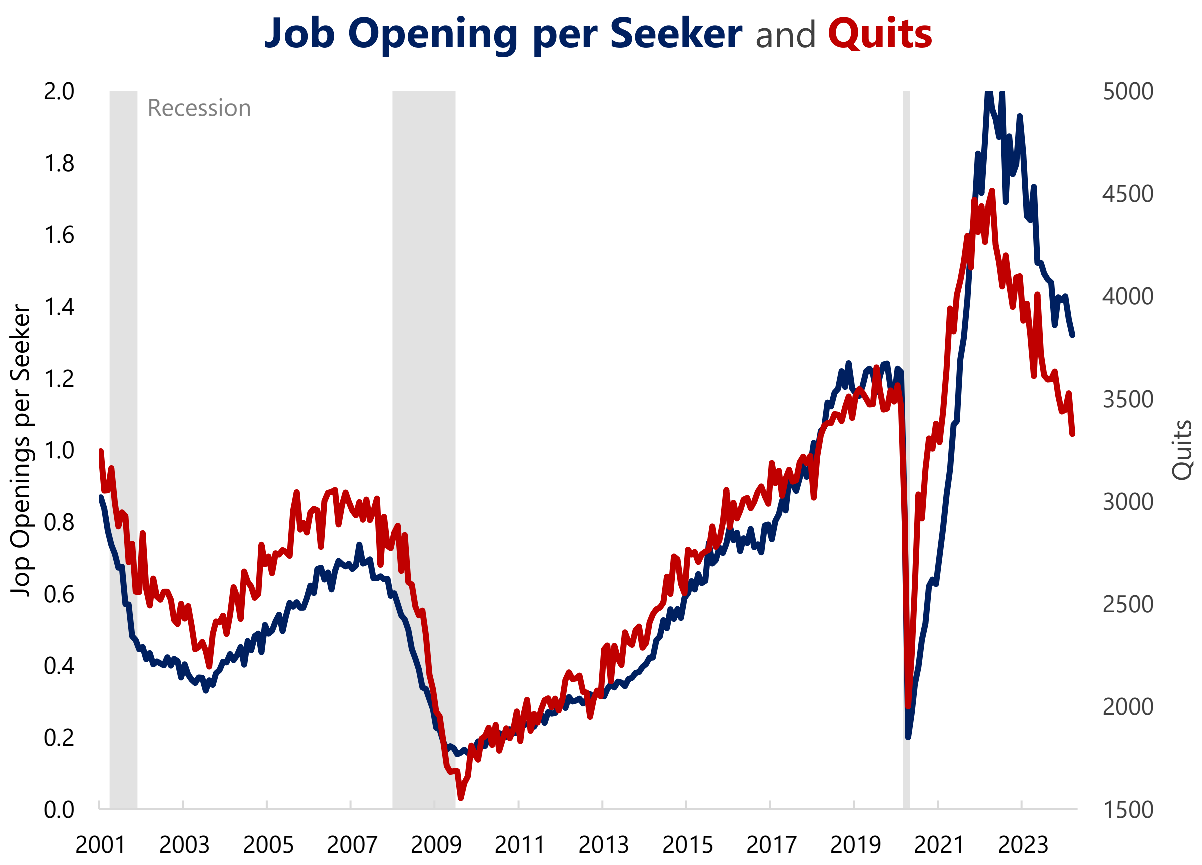
GDP came in below expectations, at an annualized 1.6%. Some of this is from the more volatile components, like inventory and exports, being lower than average. However, they were above average in the high prints last year as well.

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

WJ Interests, LLC
WEALTH ADVISORS

Unemployment Rate Up, Quits and Job Openings Going Down

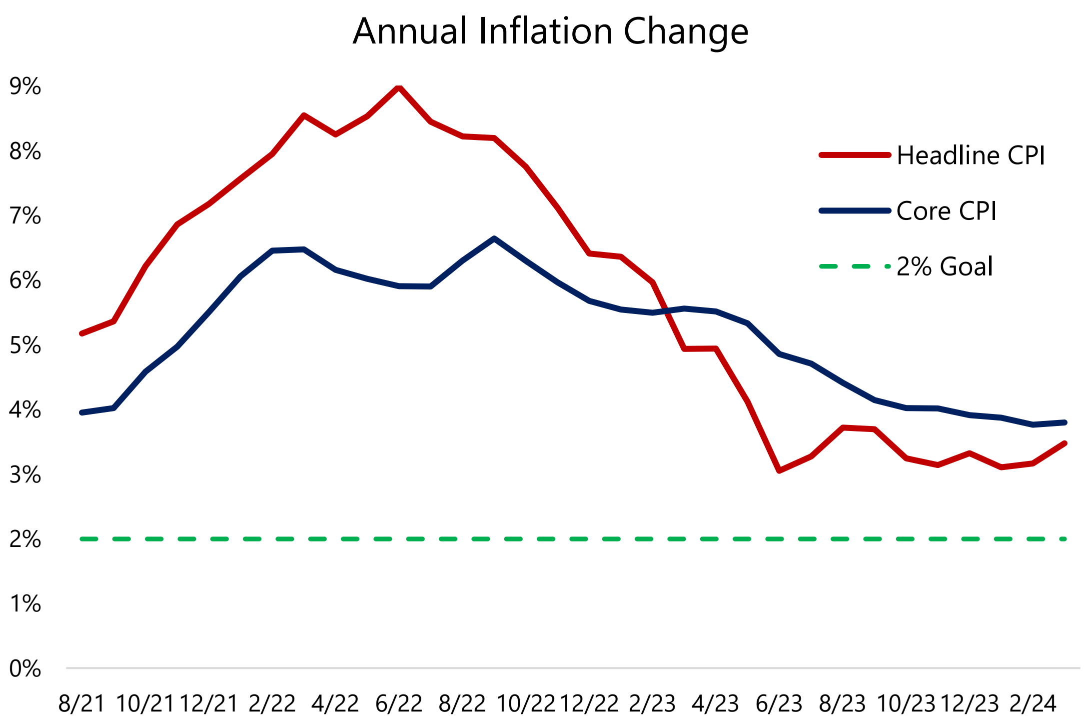


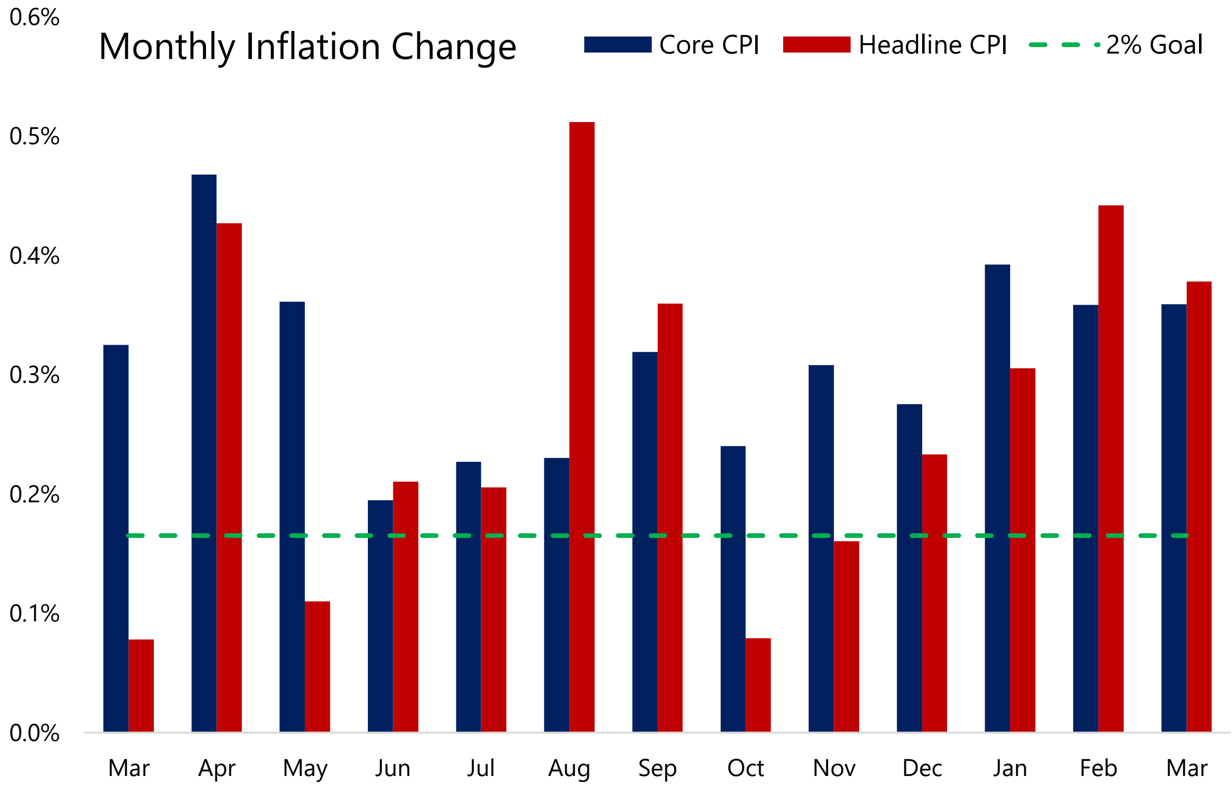


Source: Federal Reserve Economic Database (FRED). Unemployment Rate (left) and Job Openings: Total Nonfarm divided by Unemployment Level as well as Quits: Total Nonfarm (right). Recessions from NBER based Recession Indicators for the United States from the Period following the Peak through the Trough

WJ Interests, LLC
WEALTH ADVISORS

Inflation Continues to Be Stubborn

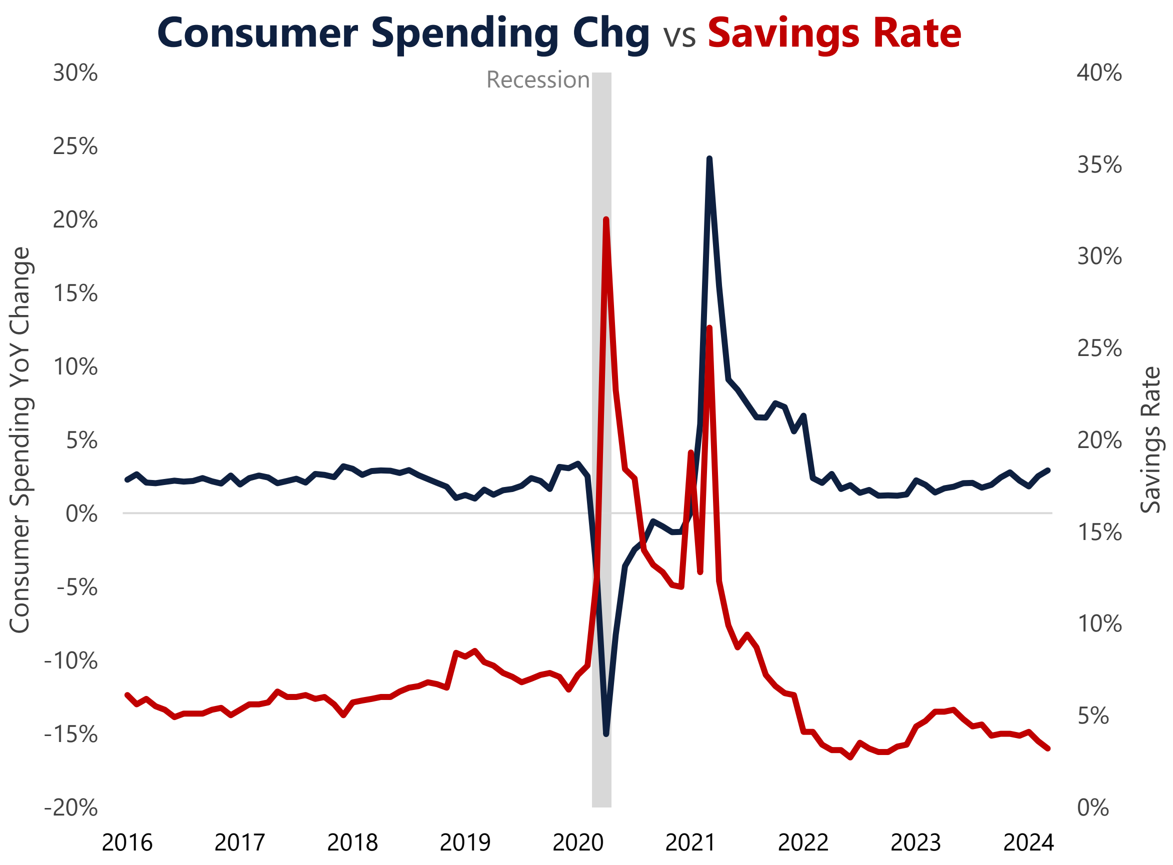


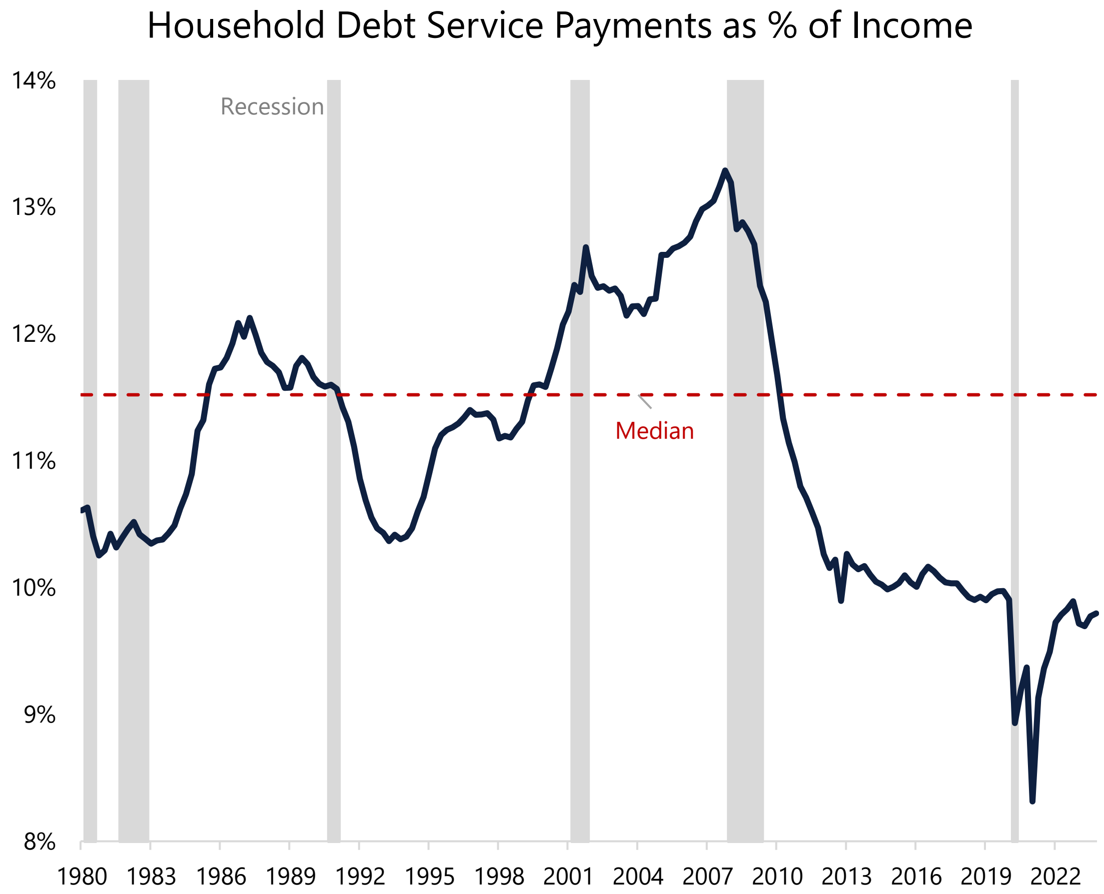


CPI continues to be higher than the Fed wants. Though some of this might be construction issues with the index, it likely will lead the Fed to leave interest rates higher for longer.

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.

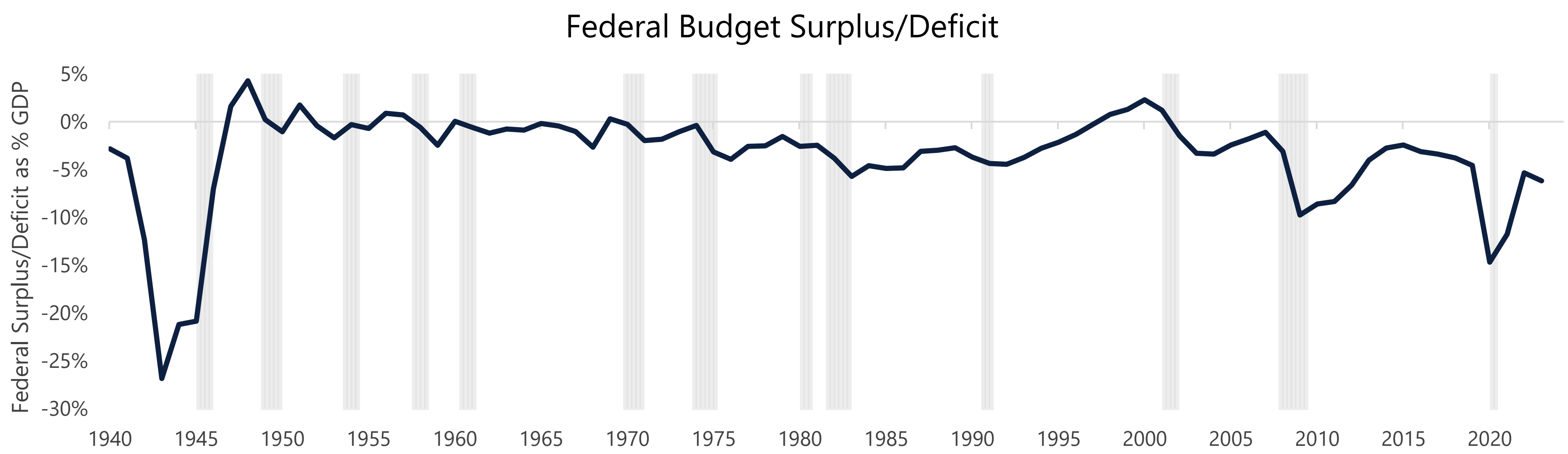
Household Spending is Still Strong

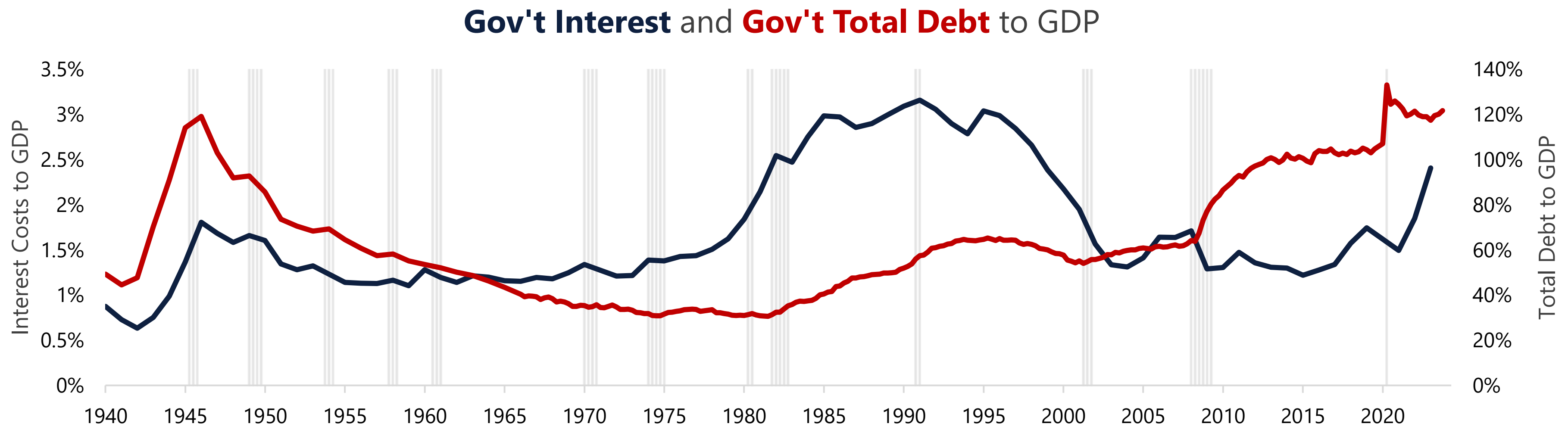




Source: Federal Reserve Economic Database (FRED). Personal Saving Rate plus Real Personal Consumption Expenditures (left) and Household Debt Service Payments as a Percent of Disposable Personal Income (right). Recessions from NBER based Recession Indicators for the United States from the Period following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

Government Budget Deficit Increased





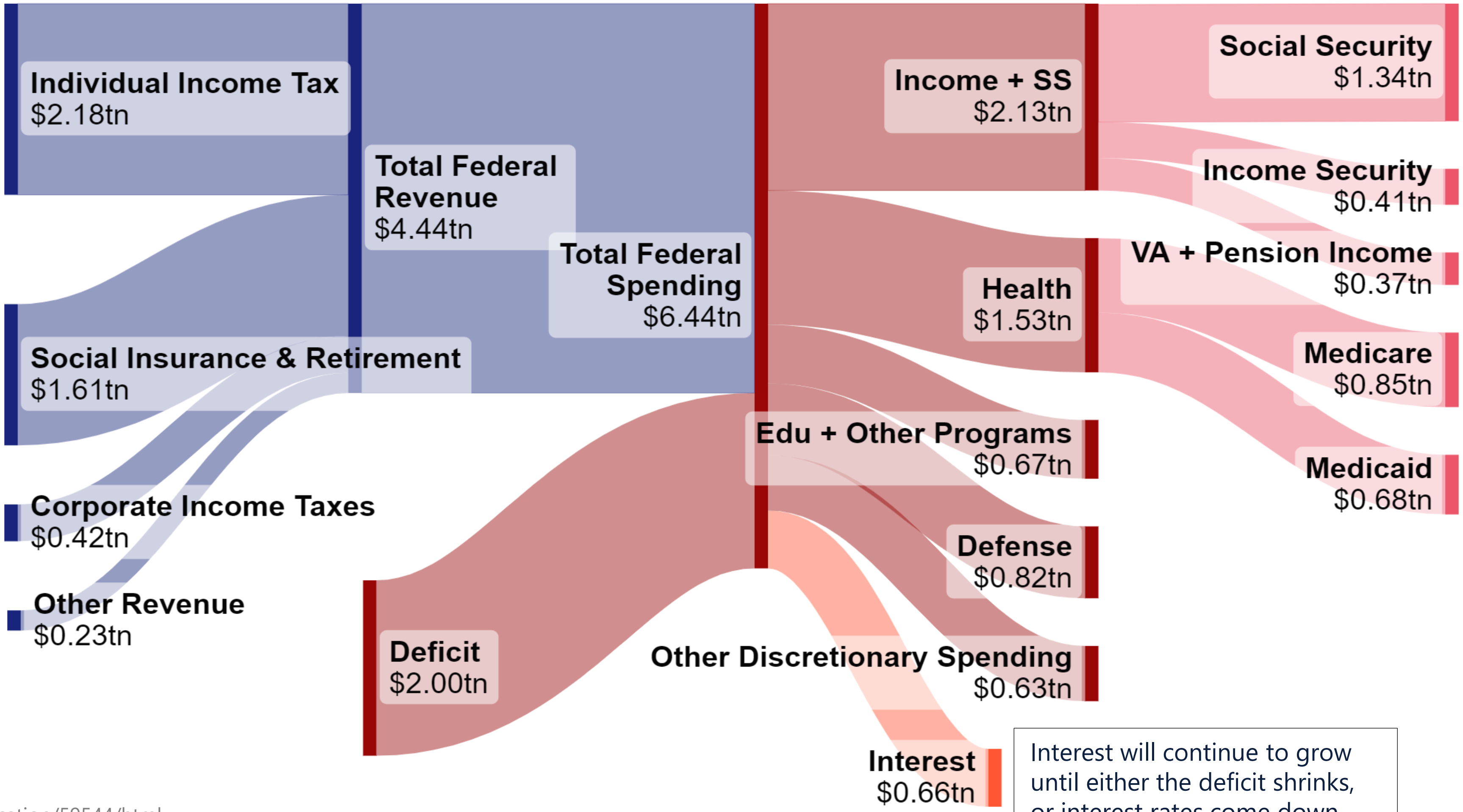
Source: Federal Reserve Economic Database (FRED) Federal Surplus or Deficit [-] as Percent of Gross Domestic Product (top) and Federal Debt: Total Public Debt as Percent of Gross Domestic Product plus Federal Outlays: Interest as Percent of Gross Domestic Product (bottom). Recessions from NBER based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

WJ Interests, LLC
WEALTH ADVISORS

Government Expenditures 2023

This is a new chart we've made that we'll update as new expenditure/budget data comes out. It's an in depth look at how the US makes money, and how it spends it. 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.



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

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.

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

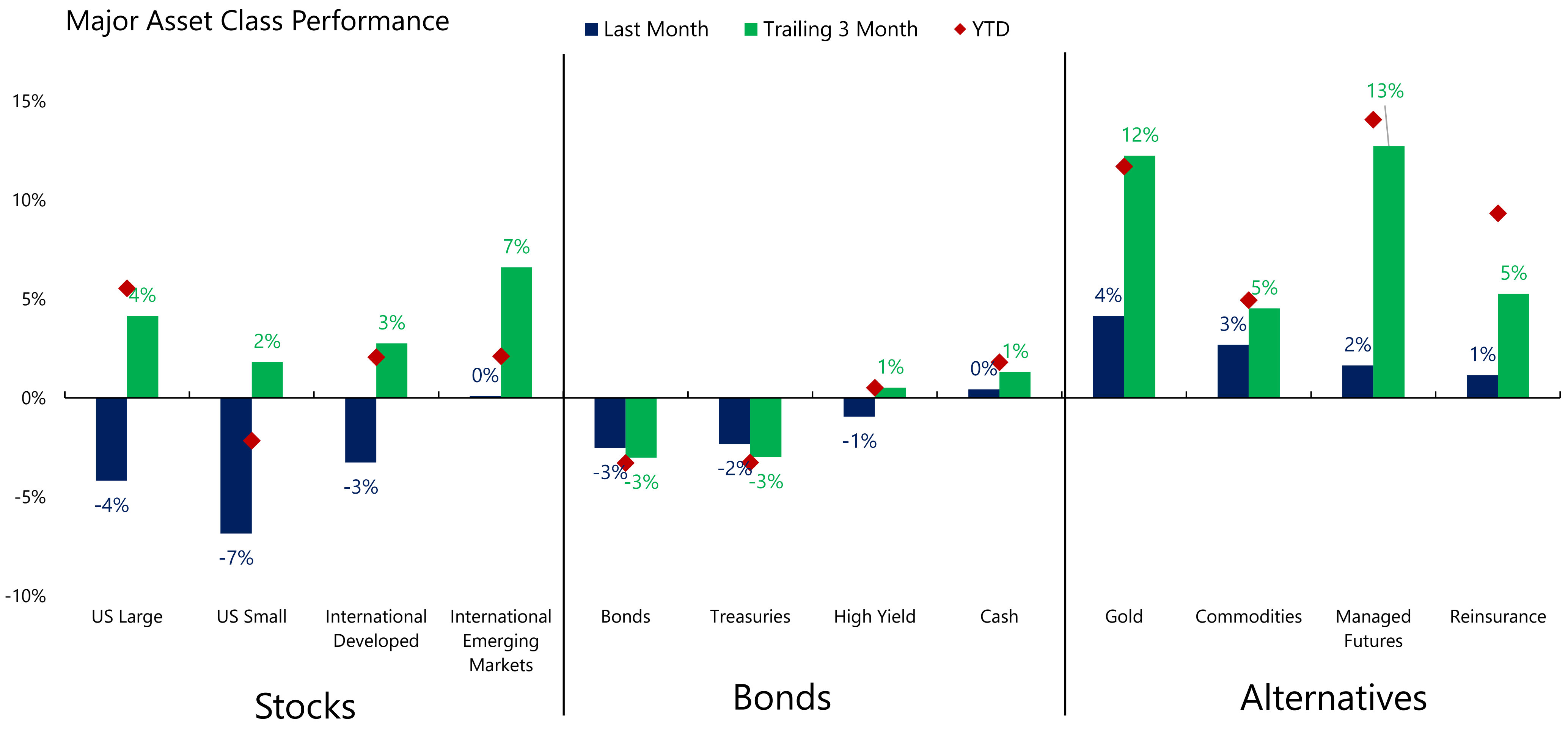
Source: https://www.cbo.gov/publication/59544/html

Made at SankeyMATIC.com

WJ Interests, LLC
WEALTH ADVISORS

WJ State of the Markets

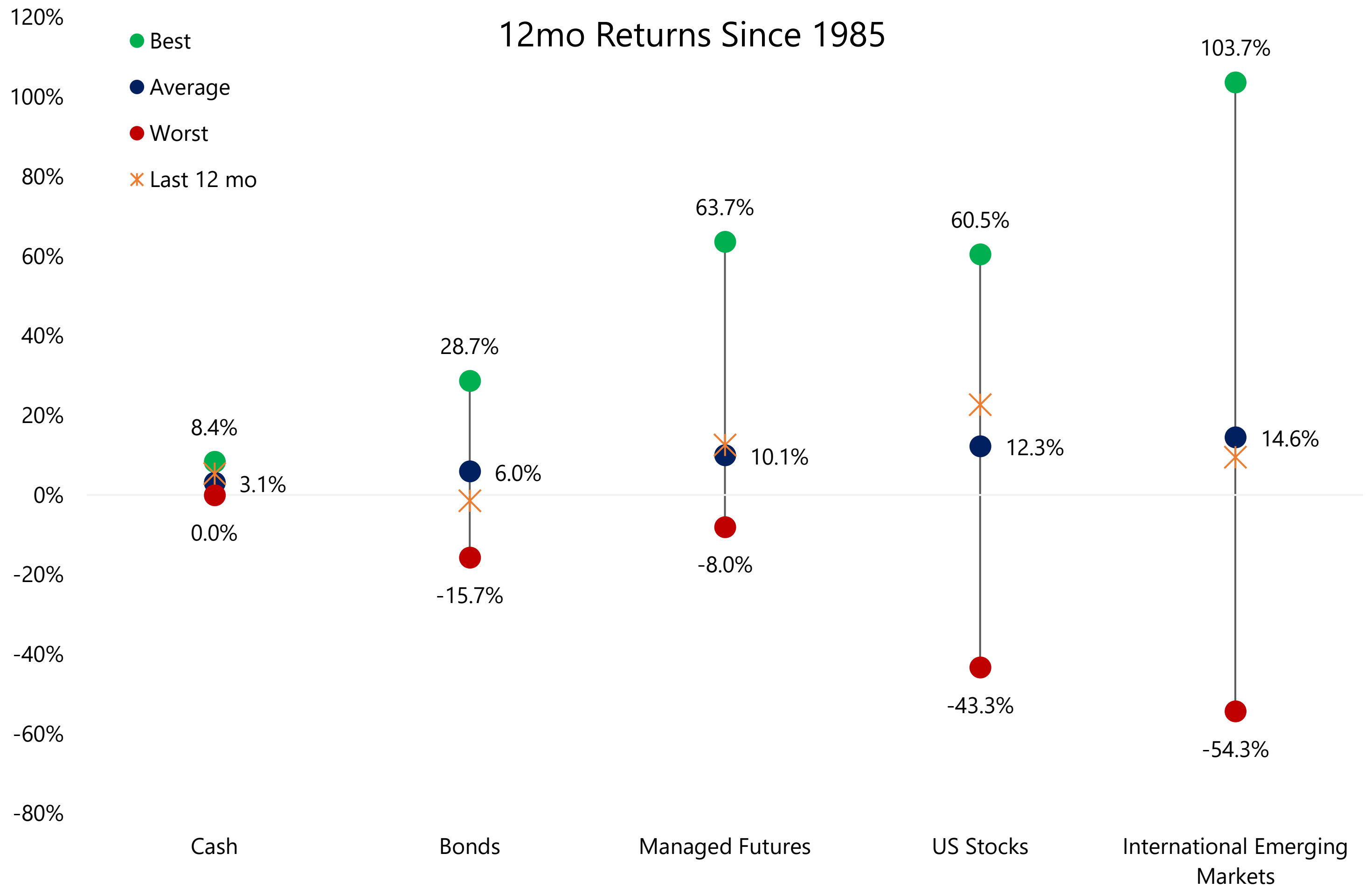
Bad Month for All but Alts



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

WJ Interests, LLC
WEALTH ADVISORS

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.

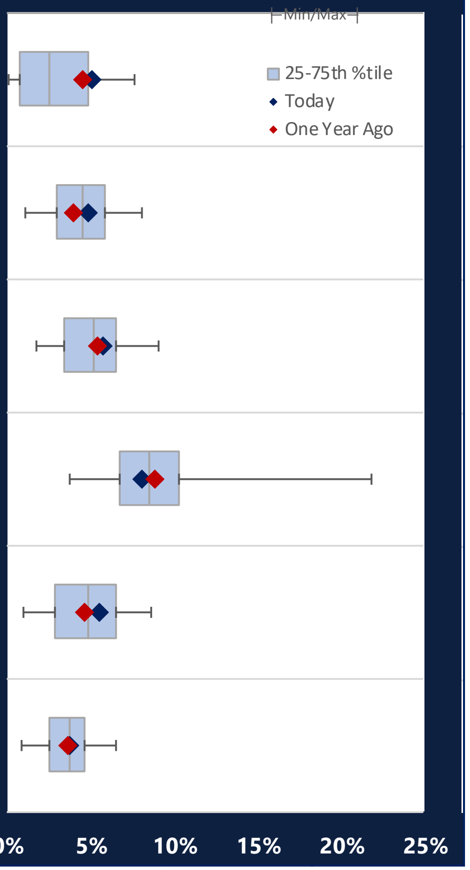
Source: Morningstar Direct. Categories in table are represented by (left to right) IA SBBI US 30 Day TBill TR US, Bloomberg US Agg Bond TR USD, CISDM CTA EW USD, iShares Russell 1000 (IWB), iShares Core MSCI EM (IEMG). Historical data starts at common inception in 1985.

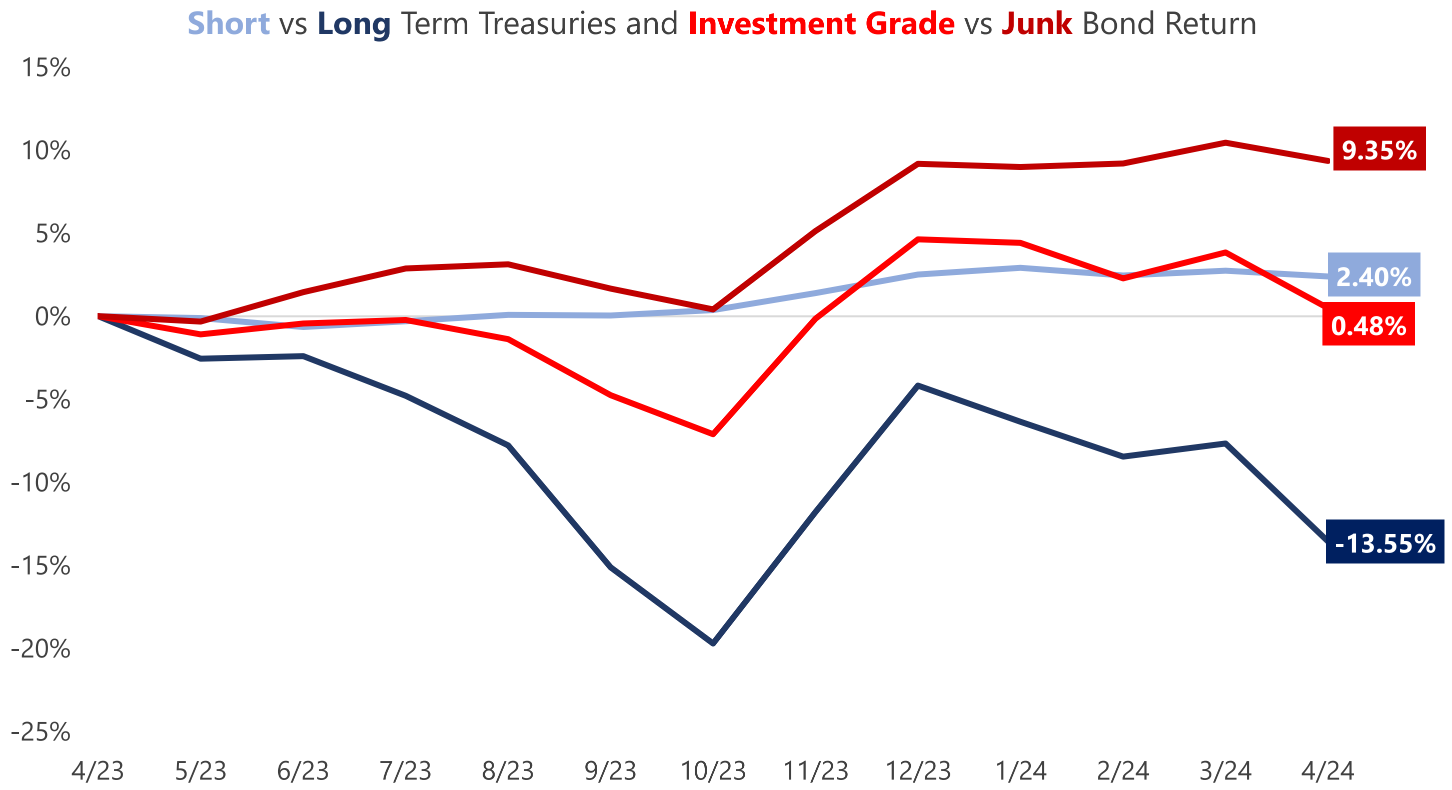
WJ Interests, LLC
WEALTH ADVISORS

Treasury Bonds Continue to Struggle

Bond Type	Yield (%) Last Month	Last Year	Change
ST Treasury	5.07	4.51	0.56
LT Treasury	4.85	3.94	0.91
Invesment Grade	5.73	5.37	0.36
High-Yield	8.11	8.81	-0.7
Mortgage-Backed	5.57	4.61	0.96
Municipal Bonds	3.77	3.64	0.13

Yield History

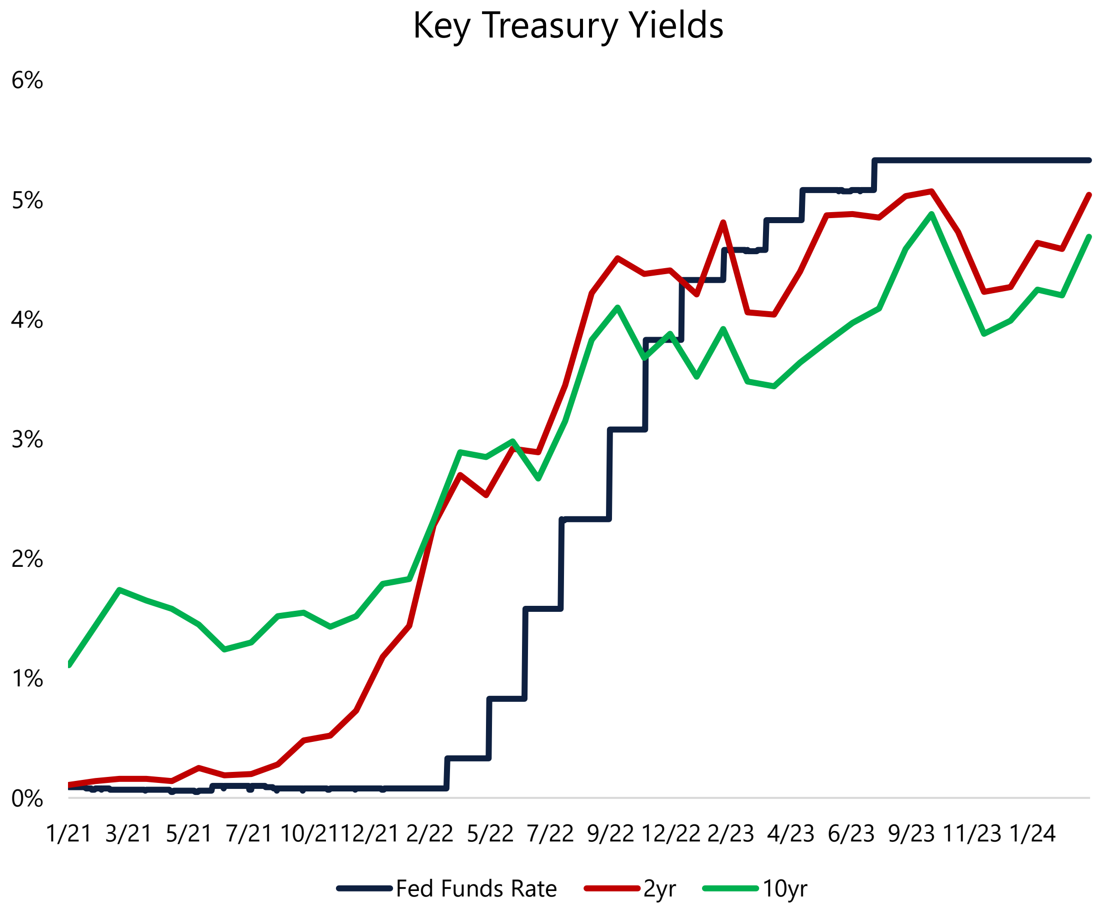


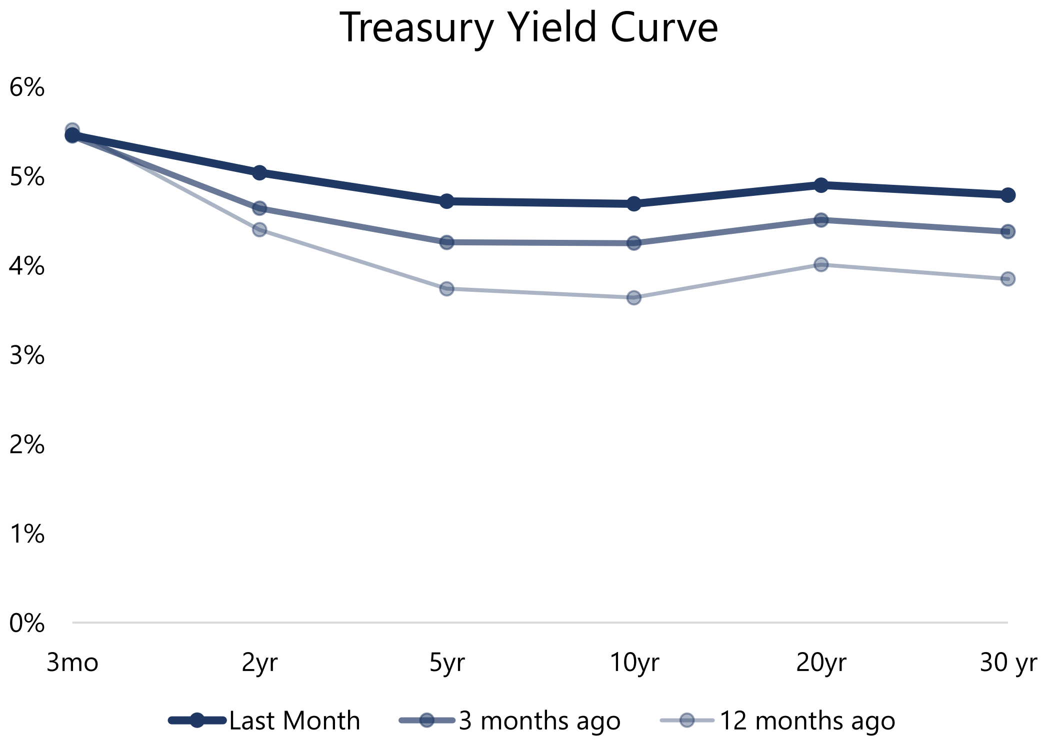


Source: Morningstar Direct. Categories in table are represented by (top to bottom) Bloomberg US Treasury 1-3 Yr Yld USD, Bloomberg US 20+Yr Yld USD, Bloomberg US Corp Bond Yld USD, Bloomberg US Corp High Yield Yld USD, Bloomberg US MBS Yld USD, Bloomberg Municipal Yld USD

WJ Interests, LLC WEALTH ADVISORS

Yields Are Going Back Up With Stubborn Inflation



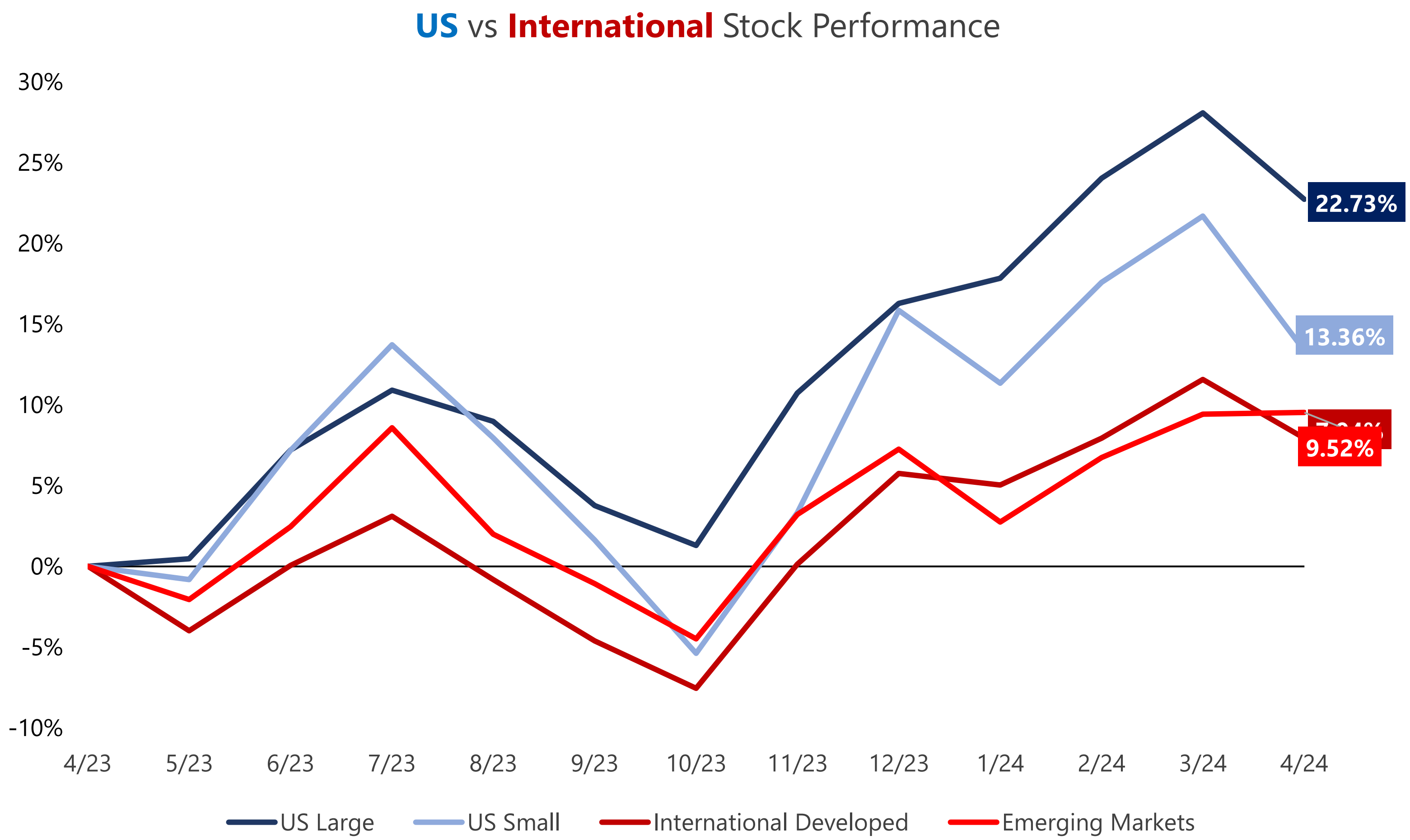


	3mo	2yr	5yr	10yr	20yr	30 yr
Last Month	5.5%	4.6%	4.2%	4.2%	4.5%	4.3%
3 months ago	5.4%	4.3%	3.9%	4.0%	4.3%	4.2%
12 months ago	5.1%	4.0%	3.5%	3.4%	3.8%	3.7%

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.

Tough Month For Stocks

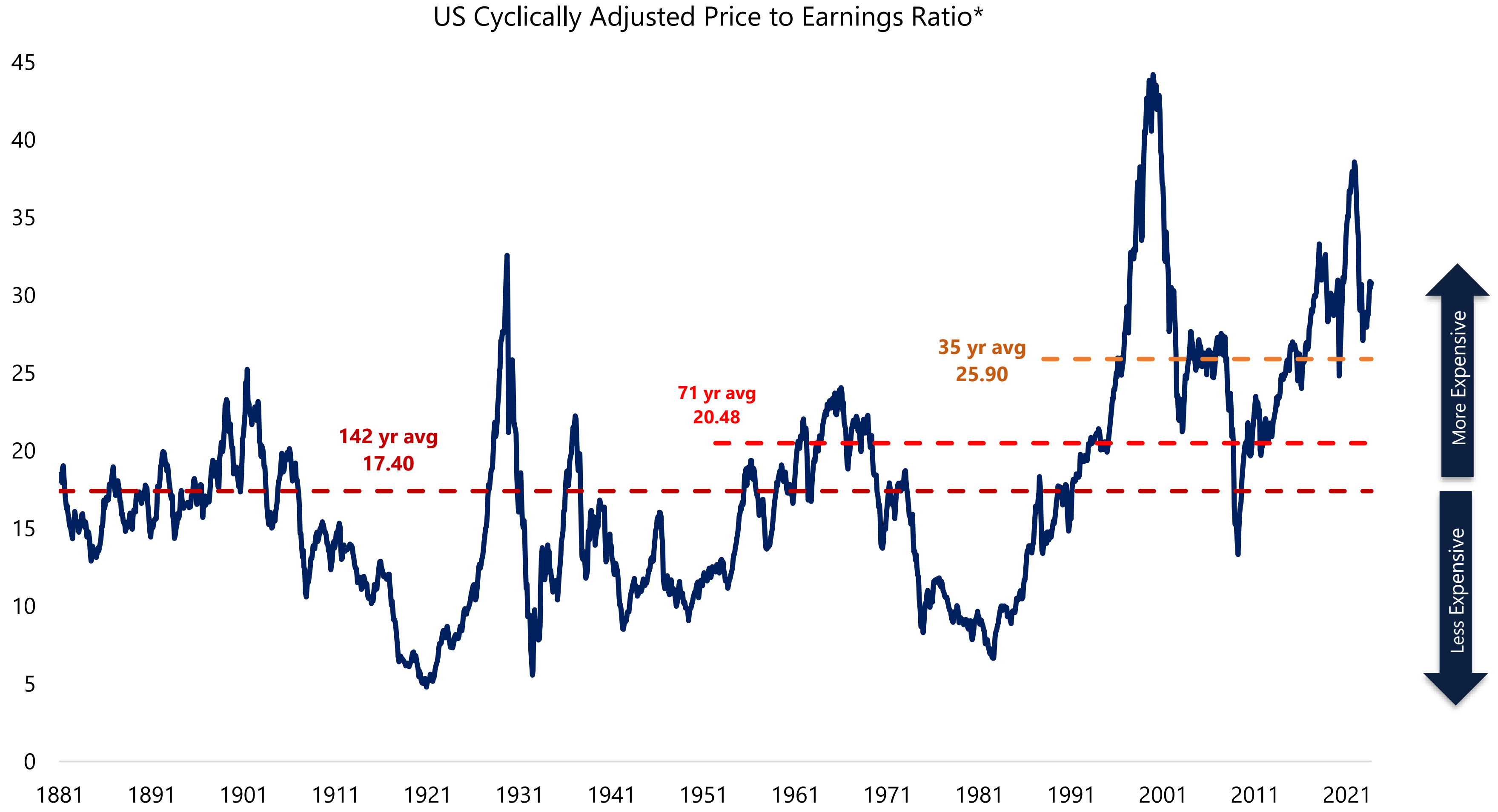
	Stock Type	Last Month	Last 3 Months	Last 12 Months
Core	US Large	-4.2%	4.2%	22.7%
Core	US Small	-6.8%	1.8%	13.4%
Core	International Developed	-3.3%	2.8%	7.9%
Core	International Emerging	0.1%	6.6%	9.5%
Other	US Value	-4.3%	4.2%	13.2%
Other	US Growth	-4.3%	4.0%	31.6%
Other	Nasdaq	-4.4%	1.9%	32.5%



Source: Morningstar Direct. Categories in table are represented by (top to bottom) iShares Russell 1000 (IWB), iShares Russell 2000 (IWM), iShares Core MSCI EAFE (IEFA), iShares Core MSCI Emerging Markets (IEMG), iShares Russell 1000 Value ETF (IWD), Russell 1000 Growth ETF (IWF), Nasdaq 100 ETF (QQQ).

WJ Interests, LLC
WEALTH ADVISORS

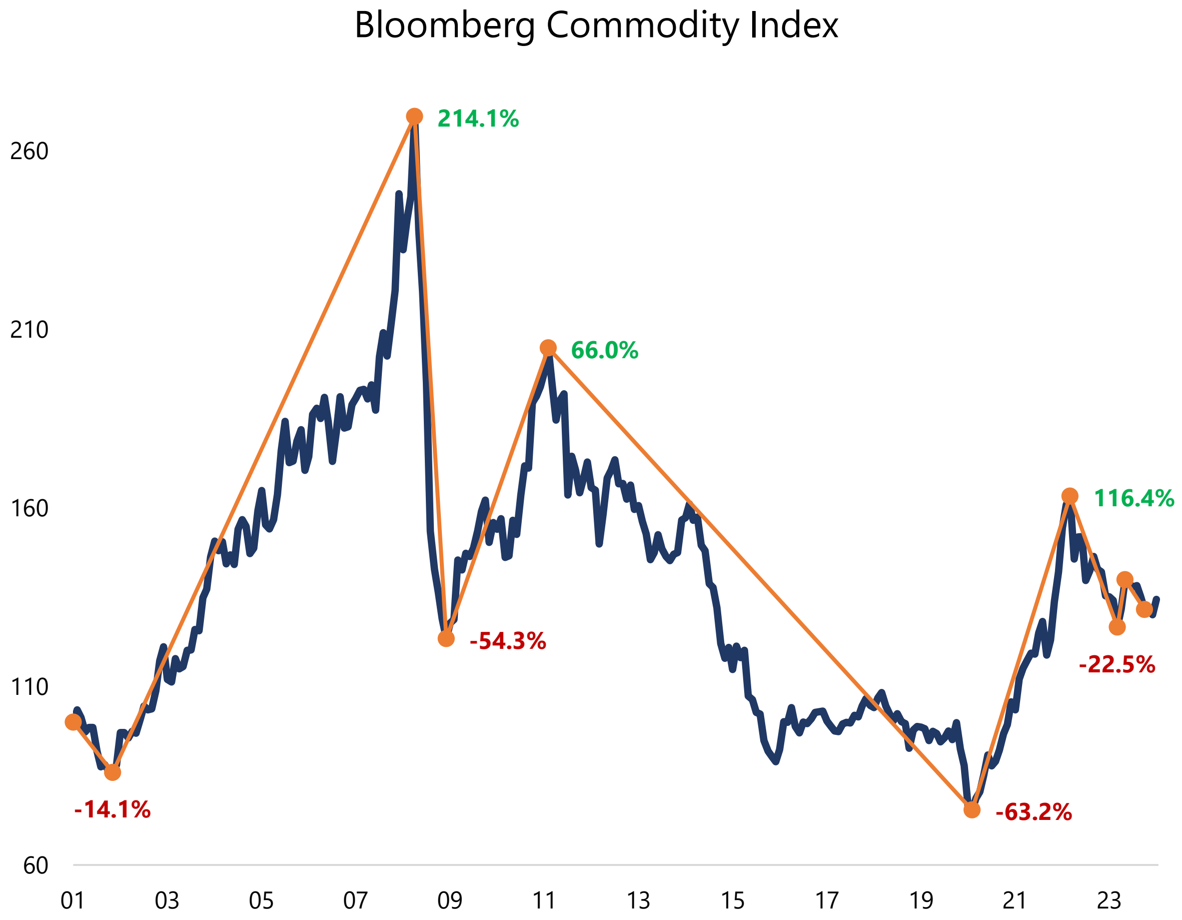
US Stocks Valuation Still High

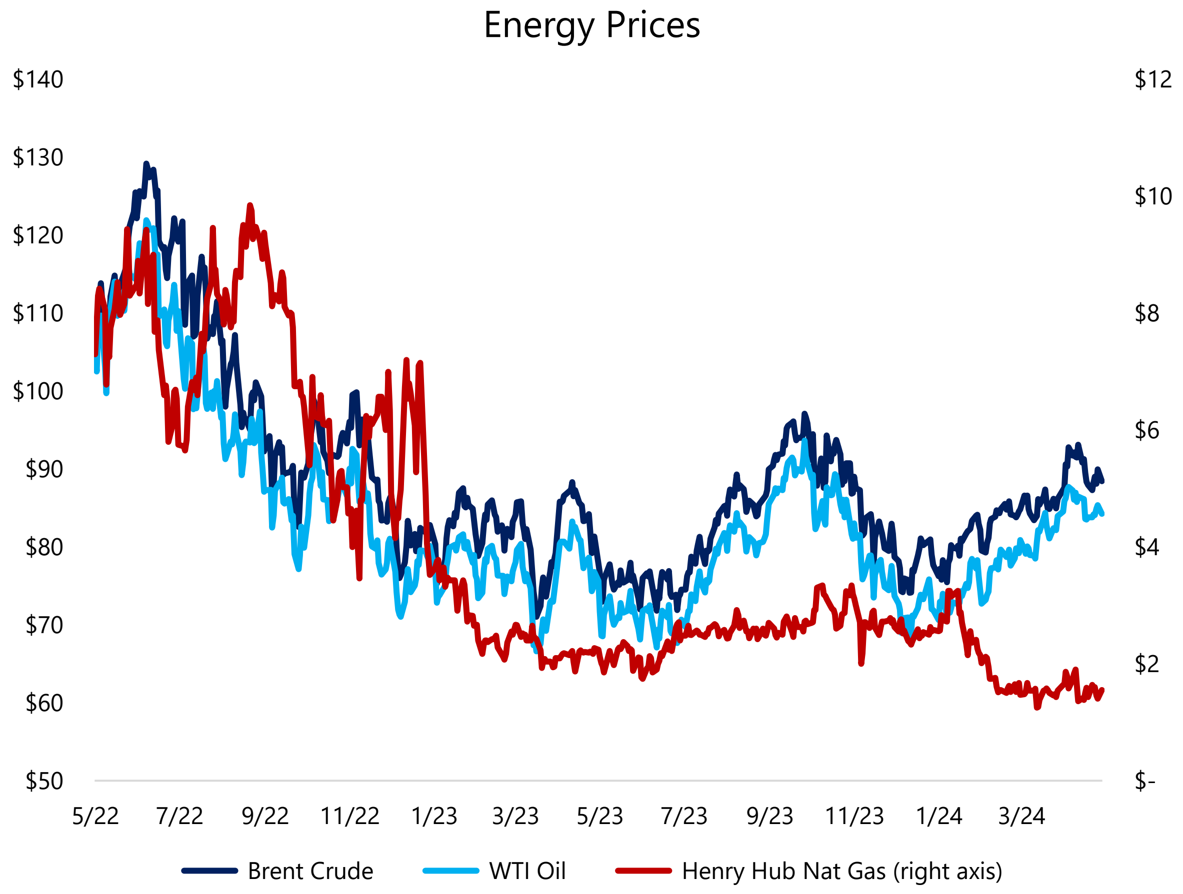


*CAPE or Cyclically Adjusted Price to Earnings Ratio takes the current price and divides it by the last 10 years average earnings for the S&P 500 and adjusts it for inflation. It is thought to be more predictive of future returns than trailing 12 month or Forward PE.
Source: Data and CAPE Ratio were developed by Robert Shiller using various public sources.

WJ Interests, LLC
WEALTH ADVISORS

Oil Has Settled, and Nat Gas Remains Low





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)

WJ Interests, LLC
WEALTH ADVISORS

Periodic Table of Asset Class Returns

											Through Last Month End 4/30/2024	
2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024 YTD**	**5 Yr**	**10 Yr**
Trend Following 20%	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%	Trend Following 9%	US Large Stock 13%	US Large Stock 12%
US Large Stock 13%	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%	Reinsurance 9%	Reinsurance 10%	US Small Stock 7%
Reinsurance 11%	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%	US Large Stock 6%	Trend Following 7%	Moderate Blended Port 6%
Bonds 8%	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%	TAA 4%	Moderate Blended Port 6%	Reinsurance 5%
Moderate Blended Port 8%	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%	Intl Emerging Stk 2%	Intl Developed Stk 6%	Intl Developed Stk 5%
US Small Stock 5%	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 Developed Stk 2%	US Small Stock 6%	Trend Following 4%
TAA 5%	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%	Moderate Blended Port 2%	TAA 3%	TAA 4%
Cash 0%	TAA -4%	Bonds 1%	Trend Following 2%	Trend Following -13%	Trend Following 4%	Trend Following 3%	Bonds -1%	US Large Stock -19%	Bonds 6%	Cash 2%	Intl Emerging Stk 2%	Intl Emerging Stk 3%
Intl Emerging 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%	US Small Stock -2%	Cash 2%	Bonds 2%
Intl Developed Stk -5%	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 -3%	Bonds 0%	Cash 1%

Disclaimer

PAST PERFORMANCE IS NOT A GUARANTEE OF CURRENT OR FUTURE RESULTS. Examples and 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.