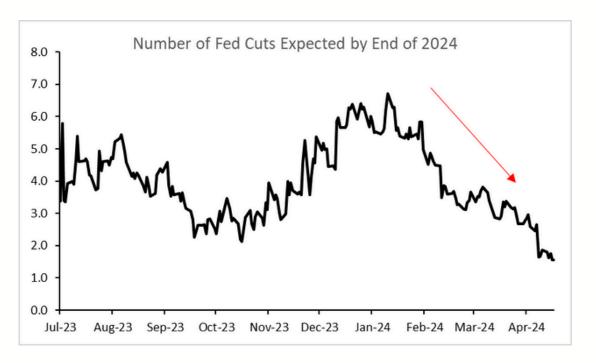


2024 First Quarter Review

Economy Remains Resilient as Innovation Spurs Growth

Taming inflation is hard, and stocks and bonds diverged last quarter as the economy remains resilient while interest rates remained higher for longer. The stock market continued to churn upward in the first quarter of 2024. The MSCI All Country World Index rose by 8.1%, and the S&P 500 Index increased by 10.6%. By contrast, bonds struggled as interest rates rose, with the Bloomberg Aggregate Bond Index down 0.8%. Equity returns drifted down in April as investors begin to digest the Federal Reserve's determination to deter inflation's stubborn crawl upward.

Chart 1: Forecasted interest cuts declined from 6 to 2



Source: Bloomberg as of 4/30/2024

There is a broadening out of stock returns this year beyond the largest companies in the index. The gap between the market cap-weighted index (up 10.6%) and the equal-weighted index (up 8%) is much smaller than last year, and some of the largest firms such as Tesla and Apple are struggling, while NVIDIA and Amazon continue to outperform.

Full Year 2023 Q1 2024 200% 0% 50% 100% 150% 250% -30% 0% 30% 60% 90% NVIDIA 239% NVIDIA 82% Tesla 102% Amazon 19% 11% Amazon S&P 500 Index 49% Apple -11% S&P 500 Index 26% Tesla -29%

Chart 2: Total Return – Mega Caps diverging

Source: FactSet as of 3/31/24

Why are stocks continuing to climb higher? Economic spending is beating nearly all the pundits' predictions. Unemployment remains low and wage growth now exceeds the inflation rate, increasing household purchasing power.



Chart 3: Wages growing faster than inflation supports household spending

Source: Bloomberg as of 3/31/24

In addition, survey data point to expansion in the manufacturing sector and continued growth in services. This economy continues to support higher corporate earnings and stock prices.

Inflation is now a lesser concern but remains a lingering issue, since its deceleration has stalled above the Federal Reserve's 2% target. To date, the economy has weathered the steep movement to higher interest rates without showing any real widespread stress or a slowdown in company profits and the stock market.

ISM Manufacturing PMI Above 50 = Growing US Manufacturing Activity Below 50 = Contracting US Manufacturing Activity

Chart 4: Manufacturing activity expanding

Source: Bloomberg, Institute for Supply Management (ISM), Purchasers' Manager Index (PMI) as of 3/31/24

Let's take a closer look at corporate trends in growth, profitability and valuation for the S&P 500 index in aggregate.

Growth tailwinds persist: 2024 corporate sales growth is expected to be above 4%, which is in line with the 15-year average top line increase and better than the slowdown predicted a year ago. Furthermore, investors expect sales growth to continue into 2025.



Chart 5: S&P 500 growth estimates accelerating

Source: FactSet and S&P as of 4/30/24

In addition, earnings growth expectations remain stable at 11% above last year, which provides support for current stock prices. However, investors may need faster growth to drive equity returns significantly higher. We would rate this as a neutral factor for now.

Profitability remains high: The current margin trends point to a relatively optimistic picture. Operating margin for the S&P is expected to increase from 2023 and remains above the historical average since 2010.





Source: FactSet and S&P as of 4/30/24



Valuation: Valuation is often the best prism for investors to interpret market sentiment. Stock investors are usually optimists, in the aggregate, and have already imbedded the positive revenue and earnings growth into equity valuations. For stocks to move higher, we would need to see persistence or acceleration in expected growth and profitability.



Chart 7: Investor optimism reflected in elevated S&P 500 valuation

Source: FactSet and S&P as of 4/30/24

Thus, the stock market is vulnerable to any adverse changes in these expectations. We would rate valuation as challenging.

Seismic innovative transitions: There are several significant innovation trends driving our domestic economic engine -- including biotech discovery, electrification of our energy usage, and general Artificial Intelligence (AI). We will dig into AI here and look for opportunities beyond the primary semiconductor beneficiary, NVIDIA. One opportunity is the tremendous energy demand to power massive AI data centers and the additional infrastructure to support this demand. According to research from Bernstein, data center power consumption is expected to grow 9% per year through 2030, and the data center share of overall electricity demand is expected to triple, growing from 2.5% to 7.5%. This is because AI server racks use much more energy than non-AI server racks. Our current electricity grid has not grown in decades and is not capable of supporting this demand surge (See chart 8 below).

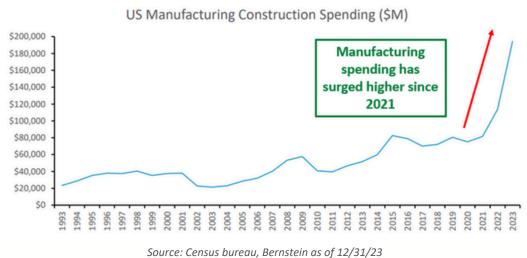
US Electricity Generation (Trillions of KwH) 5.0 4.5 4.0 3.5 after almost twenty years of zero 3.0 growth, electricity demand is rising 2.5 2.0 1986 1990 2002 2006 2010 2014 2018 2022 1994 1998

Chart 8: US electricity demand set to grow for first time in nearly twenty years

Source: Bloomberg and EIA as of 3/31/24

In addition, companies are taking advantage of the Inflation Protection Act to rebuild and expand American factories, which is accelerating the manufacturing capital expenditures that will drive more robust and diversified supply chains.

Chart 9: Annual manufacturing spend within the US



Investment in AI and manufacturing provides massive support to the industrial economy. Industry in the US is also supported by our cost advantage for energy in comparison to Europe and Asia. Currently, the cost of natural gas in Europe and Asia is five times more expensive than US domestic prices. This creates a significant competitive advantage to reshoring heavy, energy intensive industrial processes. As an aside, both Europe and the US have seen a normalization of natural gas prices after the significant increase post-COVID and after the onset of the war in Ukraine.

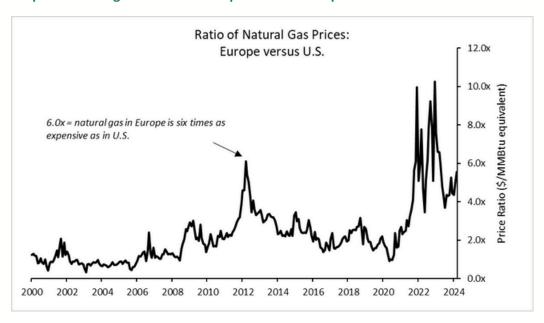


Chart 10: European natural gas is 5.0X more expensive than US prices

Source: FactSet as of 4/30/24

In summary, the economy is adapting to the significant challenges and obstacles that surface during these innovative transitions. We seek to listen and learn to better position our clients for this changing environment. We see the current situation as neutral for stocks, with positive profitability tailwinds and valuation as a slight headwind. The strong returns in Q1 came from investors bidding up stocks on the expectation that current growth will be higher and persist for longer.

We remain optimists, but the above average GDP growth will eventually recede. Importantly, since 1926, the S&P has posted positive calendar year returns 73% of the time, so owning stocks in line with your strategic target is an appropriate baseline. We will be monitoring unemployment, inflation, and key leading economic indicators to watch for future signs of weakness.

We look forward to hearing from you, and please reach out with any questions. We look forward to updating you on your portfolio and on our outlook for the next year.

Best regards,
The ChoateIA Investment Team

For More Information

Providing objective, independent, institutional-quality investment management tailored to the needs of each client, Choate Investment Advisors offers comprehensive, integrated wealth management to high net worth individuals and families, providing a range of well-diversified investment strategies across the risk spectrum. Our open-architecture approach and substantial assets allow us to select from a wide array of asset classes and to work with the highest quality investment vehicles. As a subsidiary of Choate Hall & Stewart, our clients receive world-class estate tax planning and other family office services.

If you have any questions, please contact your Choate Investment Advisors team.

Lanny Thorndike	617-248-4062	lthorndike@choateia.com
Tamer Alamuddin, CFA	617-248-4822	talamuddin@choateia.com
Henry Dormitzer	617-248-2123	hdormitzer@choateia.com
Diana B. Malcom	617-248-4778	dmalcom@choateia.com
Erin Kerr, CFA	617-248-4716	ekerr@choateia.com
Jake Kidder CFA	617-248-4038	jkidder@choateia.com
Alison Svizzero	617-248-4882	asvizzero@choateia.com
Jessica C. Welch, CFP	617-248-4875	jwelch@choateia.com
Christine Wright, CFP®	617-248-2125	cwright@choateia.com
Harrison Odaniell, CFA	617-248-4901	hodaniell@choateia.com
Jonathan M. Bentley, CFA	617-248-4925	jbentley@chaoteia.com
Benjamin P. Lewis, CFA	617-248-4808	blewis@choateia.com
Dennis Maier	617-248-4033	dmaier@choateia.com
Louis Marchant	617-248-5105	lmarchant@choateia.com
Kelsey Sullivan	617-248-4707	ksullivan@choateia.com
Malik Daley	617-248-4841	mdaley@choateia.com
Hideyoshi Watanabe	617-248-2112	hwatanabe@choateia.com
Deven Swim	617-248-4842	dswim@choateia.com
Joseph M. Sicilian	617-248-4063	jsicilian@choateia.com
Nicole F. Gagliardi	617-248-5120	ngagliardi@choateia.com
Courtney King	617-248-5258	cking@choateia.com
Max Sands	617-248-5038	msands@choateia.com
Andrew Burnside	617-248-4016	aburnside@chaoteia.com
Brian Suitor	617-248-2119	bsuitor@choateia.com
Kara Hayhurst	617-248-4070	khayhurst@choateia.com

CHOATE IA

DISCLOSURES

This report is prepared by Choate Investment Advisors LLC ("ChoateIA"), a subsidiary of Choate, Hall & Stewart LLP. ChoateIA is registered as an investment advisor with the Securities and Exchange Commission. Registration does not imply a certain level of skill or training. More information about the firm can be found in its Form ADV Part 2, which is available upon request by emailing info@choateia.com.

This presentation is for informational purposes and does not constitute investment advice. None of the information contained in this report constitutes, or is intended to constitute, a recommendation of any particular security, trading strategy or determination by ChoatelA that any security or trading strategy is suitable for any specific person. Investing involves the risk of loss of principal. To the extent any of the information contained herein may be deemed to be investment advice, such information is impersonal and not tailored to the investment needs of any specific person.

The opinions expressed are solely those of ChoateIA. The information contained in this report has been obtained and derived from publicly available sources believed to be reliable, but ChoateIA cannot guarantee the accuracy or completeness of the information. Past performance is no guarantee of future results.

The S&P 500 is the Standard & Poor's Composite Index of 500 stocks and is a widely recognized unmanaged index of common stock prices.

The Bloomberg US Aggregate Bond Index is an unmanaged index that covers the investment grade fixed rate bond market index components for government and corporate securities, mortgage pass-through securities, and assetbacked securities.

© Copyright 2024 CHOATE INVESTMENT ADVISORS LLC

