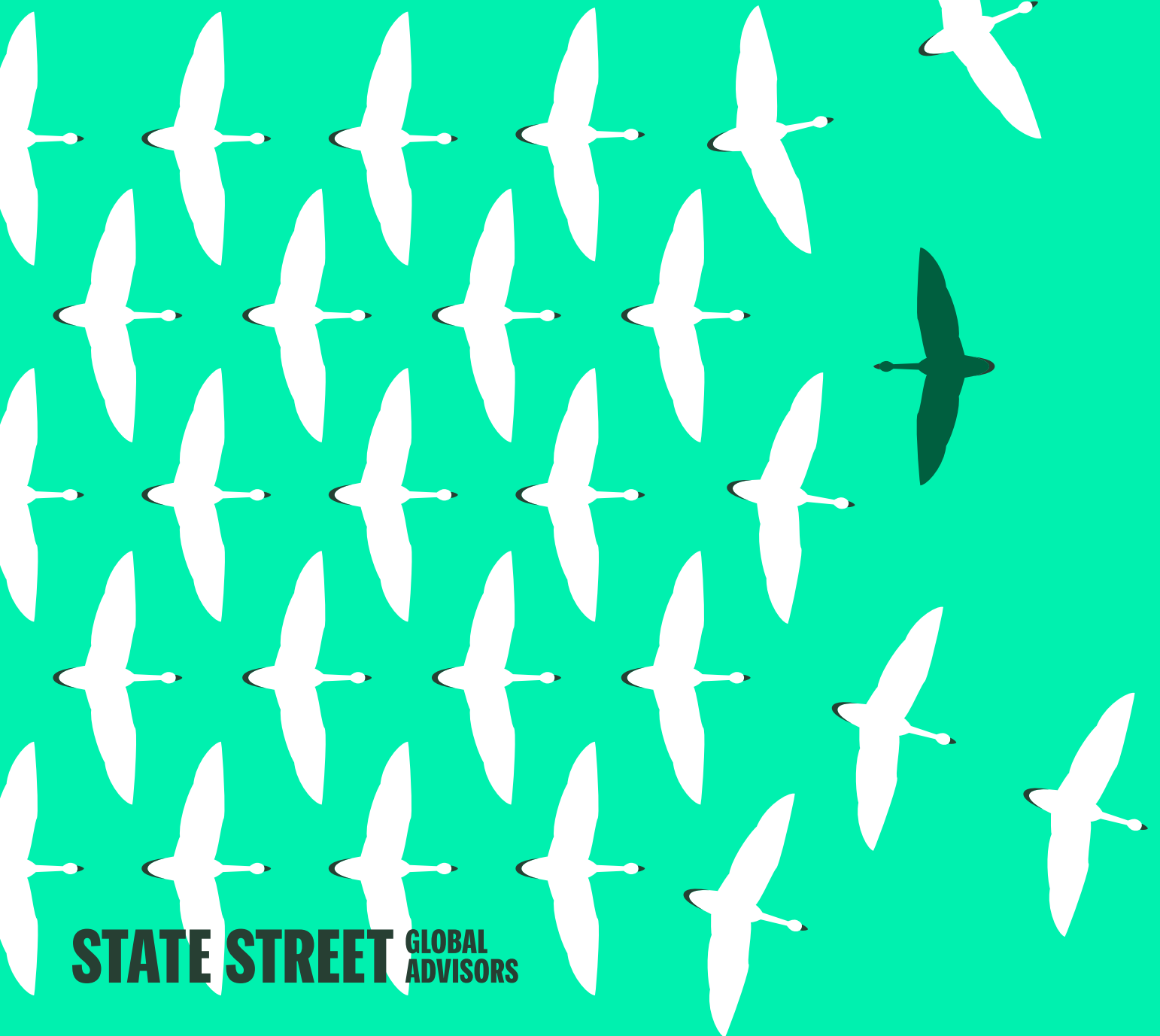


---

# Six Grey Swans That Could Move Markets in 2024



---

# Six Grey Swans That Could Move Markets in 2024

---



**Lori Heinel, CFA**  
Global Chief  
Investment Officer

---

At State Street Global Advisors, our definition of a Grey Swan is a scenario that typically has a very low likelihood of occurring, yet carries the risk of broad investment implications. If a Grey Swan event were to occur, it could meaningfully shift our outlook and our portfolio positioning.

---

That the future is always uncertain is a given, yet thinking about scenarios that diverge from a base case helps inform the risk-aware approaches we apply across our portfolios. We believe that contemplating such alternative scenarios should form a part of investor thinking as it allows for quicker reaction to revise portfolio allocations should these or similar situations materialize. And despite widespread perceptions to the contrary, these need not necessarily be negative. By teasing out possible outcomes at the outset, investors should be better placed to determine whether and how to implement any hedging strategies. Whether or not any such eventualities come to pass, there is always value to be gained from pressure-testing positions and expectations.

For insight on how we expect 2024 to unfold, our base case views are reflected in our [2024 Global Market Outlook](#). Yet we have also identified several alternative scenarios — our Grey Swans — that could develop and we assess their potential investment implications.

---

---

## 1. Regulators Move to Break Up the Magnificent Seven

The US equity market, as measured by the S&P 500 Index, ended 2023 within shouting distance of a record high. However, this somewhat disguises the extent to which a small cohort of stocks has driven returns. The index is currently experiencing an all-time high in terms of concentration, with the top ten stocks comprising about 32% of this benchmark. Seven stocks (the Magnificent Seven)<sup>1</sup> contributed 65% of the S&P 500 Index's return in the year.<sup>2</sup> Earnings growth was also centered on those same stocks, as the rest of the market had negative growth in 2023 (Figure 1). Such disparities inevitably draw attention and there are always going to be divergent opinions around the growth of such behemoths, the perception of a concentration of wealth, and the potential for market distortion. But what if regulators concluded that one or more of the Magnificent Seven needed their wings clipped?

---

In this scenario, the concentration of massive power among the few reignites antitrust discussions, on both the campaign trail and in Congress. Regulators increase their scrutiny of the Magnificent Seven's potential anti-competitive business practices, abuse of market dominance, and the resulting harm such concentrated power could have on inflation, consumers, entrepreneurs, and economic equality. Legal cases work their way through the judicial system with the power to set a negative precedent on antitrust violations by Big Tech companies.

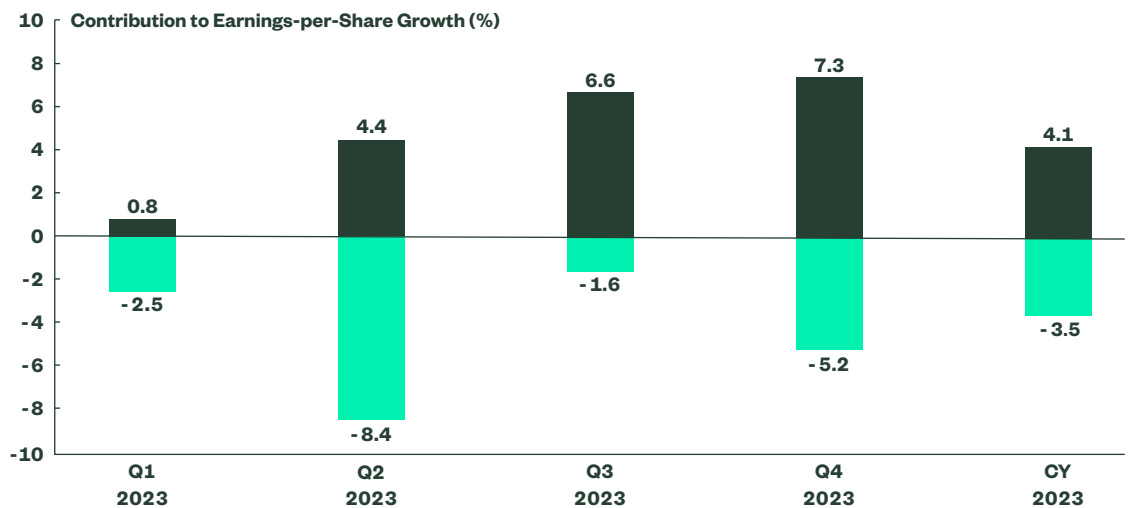
Yet this is not just a US-specific trend, as there is global pressure as well — evidenced by the European Commission's antitrust case against Apple that may lead to a fine of as much as 10% of the firm's annual sales.<sup>3</sup> There is also the looming implementation in 2024 of the European Union's Digital Markets Act, a list of rules that has the potential to impact Big Tech's profitable operations.<sup>4</sup>

Increased regulatory pressure alongside more antitrust cases may impair the Magnificent Seven's operational efficiency and business models, reducing investor enthusiasm that the entities that exist today will remain contiguous and as profitable in the future.

If so, look for not-so-magnificent returns in 2024 from this cohort, leading to a change in style (the Magnificent Seven make up more than half of the S&P 500 Growth Index)<sup>5</sup> and sectoral leadership. This could also change regional leadership, as non-US stocks may be able to outperform US benchmarks if there is weakness at the top of the US markets — reversing the trend in 2023 where the US beat non-US by 11%.<sup>6</sup>

Figure 1  
**Earnings Power Centered  
On Seven Stocks**

■ Magnificent 7  
■ S&P 500 ex-Magnificent 7



Source: FactSet as of December 15, 2023. Past performance is not a reliable indicator of future performance.

## 2. Bank Lending and the Non-Bank Financial Sector: Swan Comes Home to Roost

At a time when markets are anticipating an easing of tight central bank policies and a soft landing for the global economy, this Grey Swan speculates on how credit developments in the non-bank financial sector<sup>1</sup> could portend a nastier outcome. Large parts of this rapidly-growing sector, which includes venture capital, private equity and commercial real estate, alongside mutual funds and insurance companies, are opaque, involving hidden leverage as well as liquidity mismatch.<sup>7</sup> And it is here where this swan may begin to take flight.

Currently, private and public debt levels are at record highs and financial conditions are extremely tight. Alongside the sharp rise in interest rates since the start of 2022, central banks are in the process of shrinking their balance sheets. Money supply has been contracting and bank lending standards have become significantly more restrictive.

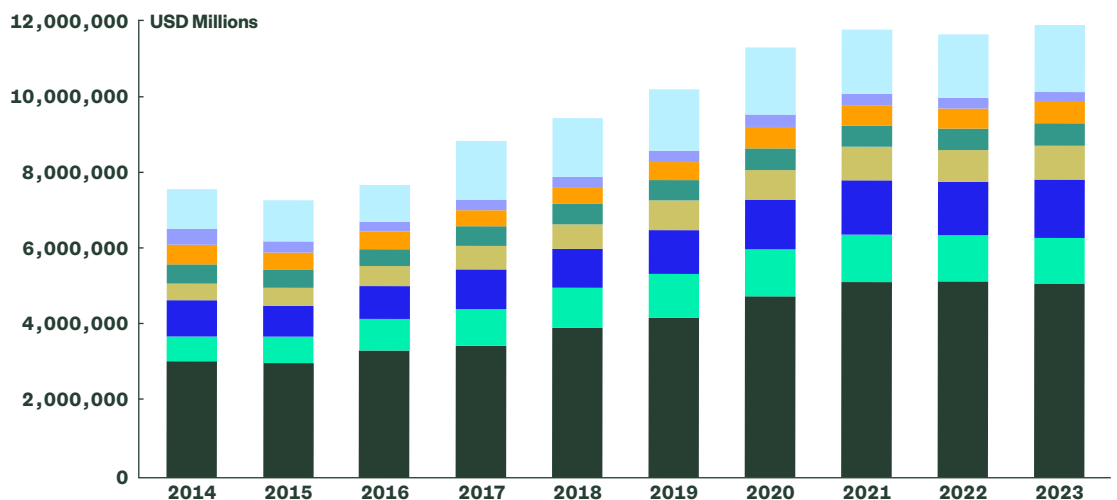
With much riding on a rollback of rate hikes, a stalling or reversal of the disinflationary trend could re-harden the “higher for longer” scenario with serious credit losses then materializing. To get a sense of the potential size of any shock, data for Bank for International Settlements (BIS) reporting countries show bank claims on the non-bank financial sector at \$11.8 trillion at the end of June 2023 (see Figure 2). Private market deals reached a multi-decade high of around \$500 billion globally at the end of 2021.<sup>8</sup>

Private equity and private credit funds have also had a significant impact on corporate borrowing. With borrowing costs up, highly-leveraged companies could face problems with debt refinancing and repaying their debt, a large proportion of which is estimated to mature within the next three years.<sup>9</sup> Meanwhile in commercial real estate, where shifting working patterns have led to a reduction in required office space, further asset value declines would worsen investors’ woes. A real estate downturn could trigger considerable withdrawals from REITs, as could corporate credit defaults from mutual funds and ETFs. The opaqueness of some markets could generate panic that ripples across other sectors at just the ‘wrong’ moment.

The blowback on banks would be exacerbated by ongoing poor governance and controls in parts of the industry, despite huge regulatory effort to overhaul the banking system since 2008.<sup>10</sup> Bank supervisors have already indicated they are not entirely satisfied in how well some banks manage their counterparty risk and there are also concerns around how some control and limit their risk concentrations. Moreover, different jurisdictions and a lack of common criteria can make overexposure to a single counterparty or connected exposures harder to identify.<sup>11</sup>

Amid market disruption, intense speculation over the systemic risk from bank exposures could drive a “dash for safety” with a resultant dumping of debt securities and downward price spirals in those segments under most stress. If dealers’ balance sheets become “used up” due to rapid and high volume market moves, this could also mean some financial markets cease to function.

Figure 2  
**The Rise in Bank Exposures to Non-Bank Financials**



Source: Bank for International Settlements as of November 22, 2023. (Total claims on a guarantor basis, all instruments, all maturities).

### 3. Geopolitical Turbulence Spurs Oil, Gold, and US Dollar Higher

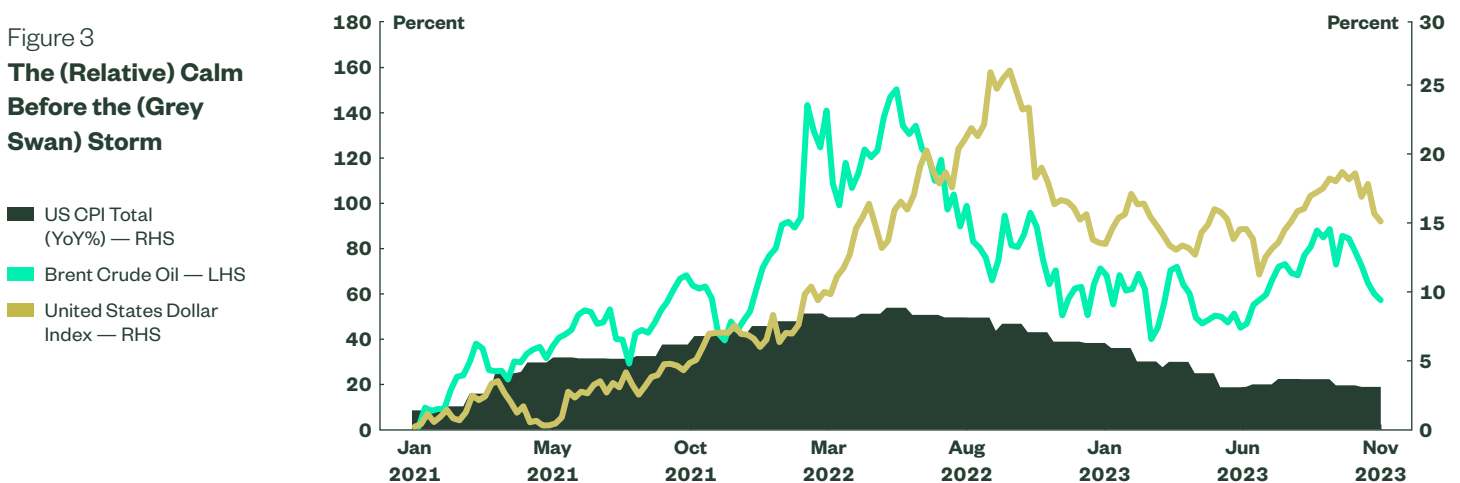
While the geopolitical landscape at the start of 2024 is marked by a number of concerns, markets have been relatively unruffled by their development over the last years (and months), with investors typically tending to look through and beyond such threats. Yet what if that were to change significantly in the coming year? The geopolitical tensions with China, and wars in Ukraine and the Middle East reverberate throughout 2024, creating more episodic events, and putting an already fragmented global economy on high alert. A cascade of elections around the globe adds to geopolitical disruptions to oil production and shipping, with worries over additional supply risks widening the risk premium in commodities. Oil prices march higher, but in a step-change formation where prices first level off before charging ahead after the unfolding of each subsequent escalation.

In this scenario, global inflation rises without immediately implying a growth shock, so central banks are quick to pivot, reversing course on previously-signaled dovish flight paths. Rattled by this turn of events, the Federal Reserve Board's (Fed) 'dot plot' of members' expectations points toward higher policy rates as the Fed calls a halt to rate cuts. In doing so, investors are caught by surprise, with equities succumbing to a sharp drawdown of over 20%. Against this backdrop, the US dollar benefits from two simultaneous forces: higher relative yield expectations given its status as a major oil producer; and a flight to quality, providing a significant bid for the greenback.

The US dollar takes out 2002 highs, an approximate 16% move from 102.5 today<sup>12</sup> and zeroes in on the 1985 highs, representing a whopping 30% rally. The primary risk to the global system is once again inflation. In contrast to previous oil price shocks, oil is now more closely correlated with a stronger dollar, amplifying the inflationary effect on the global economy amid tightening financial conditions. Oil approaches highs of \$140/barrel, a rally of more than 70%.<sup>13</sup>

At the same time, with the threat from geopolitical instability growing, gold breaks higher to surge past the high of \$2152/oz achieved in December 2023, as the precious metal glitters in the face of risk aversion and inflation. As we close out on the year 2024, the US election delivers another injection of upward momentum to gold traders as the US fiscal position is temporarily flattered by 'safe haven' flows even as the structural fiscal path continues to worsen.

Figure 3  
The (Relative) Calm Before the (Grey Swan) Storm



Source: FactSet as of December 15, 2023. Cumulative price returns of Brent Crude and US Dollar since January 1, 2021. Past performance is not indicative of future performance.

## 4. Yen Breaks Through 100

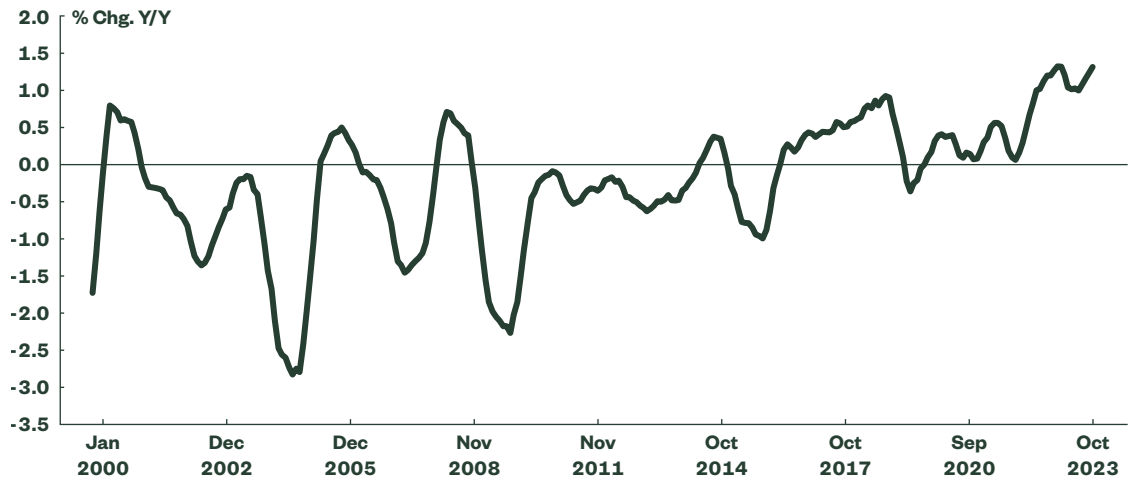
As the end of 2023 drew near, extreme negative interest rate differentials had weakened the Japanese yen to about Y150/US\$ before recovering slightly. While the US Fed has raised interest rates by 525 basis points (bps) since 2022, the Bank of Japan (BoJ) has maintained a negative policy rate throughout, although it has tweaked its yield curve control (YCC) policy. But this is a peak rate differential moment; the delta is bound to shrink dramatically over the coming year. But what if the rate gap narrowed by far more than markets anticipate?

Broadly speaking, we expect the Fed to deliver 150 bps worth of cuts in 2024 (without a recession) and to match that in 2025. The magnitude and timing of Fed cuts would be augmented and brought forward should a recession actually take hold (to which we assign a 25% probability). So far, so unremarkable. But then, after a very timid start to the policy normalization process, the BoJ exits negative interest rates early in 2024 and embarks on a much more aggressive tightening campaign than previously anticipated. The confidence-sapping deflation era is finally overcome as wage negotiations yield robust outcomes (aided also by government tax incentives) and a virtuous cycle takes hold. Under pressure from rising labor costs and under threat of delisting following the implementation of new rules for firms listed on the Tokyo Stock Exchange, Japanese companies embrace a more aggressive pricing approach. Higher pricing power in parts of the economy breeds higher pricing power in others. Capital flows are reversed as investors identify opportunities and Japanese companies and individuals repatriate funds for investment at home as the yen carry trade falters. With inflation sustained near 2.0%, the BoJ raises policy rates by 150 basis points over a period of 18 months. The yen appreciates dramatically and breaks through 100/USD.

While such a scenario would entail the yen appreciating by more than 30% in 2024, it is worth noting that our FX team's estimate of yen fair value (based on long-term PPP<sup>14</sup> models) is in the neighborhood of 76. So the yen at 100 is not nearly as extreme an outcome as it may seem at first glance. In fact, it would simply mark a return to the average that prevailed in the decade pre-Covid.

Figure 4  
**Japanese Wage Inflation Bound for Decades' High**

■ Japan Contractual Cash Earnings, Scheduled Industries Covers (5+ employees), 6m Moving Avg.



Source: Macrobond, State Street Global Advisors Economics, Japan Ministry of Health, Labor and Welfare as of December 18, 2023.

## 5. Boom Returns in Positivity Miracle

The low growth, low inflation world that defined the years between the Global Financial Crisis and the pandemic was abruptly replaced by a reopening growth boom and a supply-exacerbated inflation spike. A new broadly-shared concern soon emerged though — that reshoring and the green transition would usher in an extended period of low growth and above-target inflation, essentially a mild version of stagflation. In this Grey Swan, the reality turns out to be far more constructive as a convergence of forces deliver an unexpectedly strong and lasting productivity and growth boom.

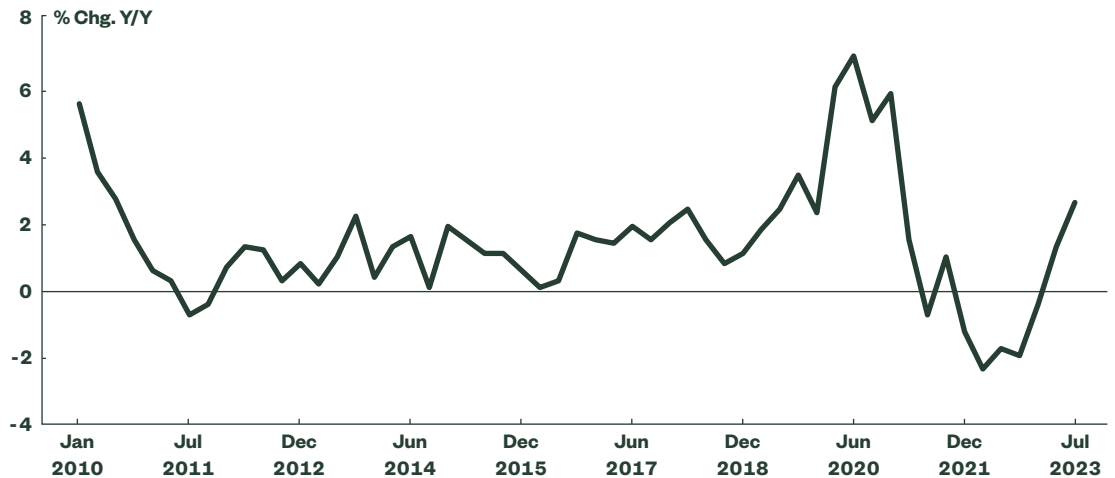
In this scenario, fears around green transition and deglobalization prove overdone. After some initial challenges as the world adjusts to a faster transformation timeline forced by the war in Ukraine and US-China tensions, a new equilibrium is found. Energy policy globally makes a subtle but important adjustment toward energy solutions rather than merely energy transition. A holistic approach to ensure continuity and resilience of supply is implemented with a hugely positive impact. Meanwhile, deglobalization fears prove wildly overdone as new supply centers like India and Latin America emerge at scale, fueled by heavy investments. The world is far from struggling with insufficient productive capacity.

Rapid technological advancements, specifically in artificial intelligence (AI), have compounding positive effects on productivity across the economy, but especially in service industries. Product development timelines across industries are dramatically reduced. Healthcare and education are transformed by broad AI implementation. Labor productivity soars, inflation is kept well under control, real incomes surge, and growth enters a sustained higher trajectory.

For investors, the implications of this scenario unfolding would likely drive a focus on growth assets, in particular those that are leveraged to the AI boom and green transition. Technology companies continue to lead, US exceptionalism continues. Areas of the market that may prove less appealing in this development include bonds, TIPs, and commodities.

Figure 5  
**US Productivity Growth Rebounds**

■ US Nonfarm Labor Productivity (Output per hr), SA



Source: Macrobond, State Street Global Advisors Economics, US Bureau of Labor Statistics as of January 8, 2024.

## 6. Blurred Space: Digital Assets Disrupt the Entertainment Industry

The evolution of the digital assets space has continued apace despite the extreme volatility experienced from time to time in parts of the market. In our final Grey Swan, we imagine the embrace of the technology by a well-recognized artist energizing retail investors to accelerate their adoption of digital assets as a means to invest and trade in experiences. Other digital influencers and celebrities *swiftly* recognize the power of these technologies to broaden their reach, take ownership of, monetize, and align their brands with their core values. This leads to a period of disruption for the business models in entertainment industries, and knock-on effects for financial services. Smaller artists get to bypass traditional industry infrastructure and raise funds through tokenized offerings, leading to a more decentralized and equitable distribution of profits in the industry.

As this movement gathers momentum, fans start to think of themselves more as asset owners and traders, connecting directly with each other and artists. A virtuous circle of greater transparency and trust, and lower costs and complexity emerges, creating a tradable asset class where individuals can buy, sell, or trade their ownership or access rights to experiences easily and efficiently, valuing exclusivity and community over traditional investment returns. Fractional ownership of experiences through digital assets democratizes the marketplace as fans with smaller budgets get to participate.

Financial services providers, particularly those focused on retail, see the opportunities of digital assets as a diversifier from traditional asset classes, and a way of providing greater personalization of their clients' portfolios.

In this Grey Swan scenario, the growing adoption of digital assets has a tsunami effect. Most directly, this new form of engagement and monetization bypasses traditional intermediaries, such as concert venues, ticket sellers, entertainment labels, and streaming platforms, leading to rationalization and transformation.

Traditional financial institutions scramble to create valuation models for non-financial attributes such as unique experiences, and explore ways to integrate digital assets into their products and services. They launch funds that invest in these assets, while developing approaches for incorporating them into model portfolios. This effectively moves the intrinsic value of experiences through the collectibles arena and into mainstream finance. New disruptors emerge to cater specifically to this growing market as digital assets become legitimized as a medium of exchange, and a store of value.

Following retail, institutional asset owners seize on this new and growing asset class as a way to diversify portfolios and gain exposure to new sources of growth. This leads to a revaluation of traditional assets, a recognition of the possibility to securitize and democratize anything of value, and a growing demand for new investment products that incorporate digital assets.

Figure 6  
The Transition from Internet Renters to Internet Owners

	Web1 1990-2004	Web2 2004-Present	Web3 Present-
<b>Content Creation</b>	Platform Operators Create	Platform Users Create	Platform Users Create
<b>Governance/Control</b>	Platform Operators Govern	Platform Operators Govern	Platform Users Govern
<b>Trust</b>	Non-Verifiable	Non-Verifiable	Verifiable
<b>Ownership</b>	Platform Operators Own	Platform Operators Own	Platform Users Own
<b>Profit</b>	Platform Operators Profit	Platform Operators Profit	Platform Users Profit

Source: BofA Global Research.



---

## Contributors

### **Simona Mocuta**

Chief Economist

### **Elliot Hentov, Ph.D.**

Head of Macro Policy Research

### **Altat Kassam, CFA**

EMEA Head of Investment  
Strategy & Research

### **Matthew Nest, CFA**

Global Head of Active Fixed Income

### **Matthew J Bartolini, CFA, CAIA**

Head of SPDR Americas Research

### **Esther Baroudy, CFA**

Portfolio Manager, Fundamental Equity Team

### **Dane Smith**

Head of North American Investment  
Strategy & Research

### **Aaron R Hurd, FRM**

Senior Portfolio Manager, Currency

---

## Endnotes

- 1 Apple, Microsoft, Alphabet, Meta, Amazon, Nvidia, and Tesla.
- 2 Bloomberg Finance L.P. as of December 15, 2023 based on the S&P 500 Index.
- 3 "Apple Set to Be Hit by EU Antitrust Order in Spotify Clash," Bloomberg December 13, 2023.
- 4 "Apple Set to Be Hit by EU Antitrust Order in Spotify Clash," Bloomberg December 13, 2023.
- 5 Bloomberg Finance L.P. as of December 15, 2023 based on the S&P 500 Growth Index.
- 6 Bloomberg Finance L.P. as of December 15, 2023 based on the S&P 500 Index and the MSCI ACWI Ex-US Index.
- 7 Liquidity mismatch is the market liquidity of assets compared to the funding liquidity of liabilities.
- 8 BIS Annual Economic Report 2023.
- 9 BIS Annual Economic Report 2023.
- 10 2008 financial crash or Great Financial Crisis (GFC).
- 11 *Challenges in supervising banks' large exposures*, Vasily Pozdyshev, Jean-Philippe Svoronos and Rize-Mari van Zyl. FSI Insights on policy implementation No. 52, November 2023. Bank of International Settlements.
- 12 US Dollar Index (DXY) as of January 3, 2024.
- 13 Based on Brent Crude Oil price of approximately \$78 on January 3, 2024.
- 14 Purchasing power parity.

## About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 29 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's fourth-largest asset manager\* with US \$3.69 trillion<sup>†</sup> under our care.

\* Pensions & Investments Research Center, as of December 31, 2022.

<sup>†</sup> This figure is presented as of September 30, 2023 and includes approximately \$58.13 billion USD of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

## ssga.com

### Marketing communication

### State Street Global Advisors Worldwide Entities

**Abu Dhabi:** State Street Global Advisors Limited, ADGM branch is regulated by the Financial Services Regulatory Authority (FSRA). This document is intended for Professional Clients or Market Counterparties only as defined by the FSRA and no other person should act upon it. State Street Global Advisors Limited, ADGM Branch, Al Khatem Tower, Suite 42801, Level 28, ADGM Square, Al Maryah Island, P.O. Box 76404, Abu Dhabi, United Arab Emirates. Regulated by the ADGM Financial Services Regulatory Authority. T: +971 2 245 9000. **Australia:** State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services License (AFSL Number 238276). Registered office: Level 14, 420 George Street, Sydney, NSW 2000, Australia. T: +612 9240-7600. F: +612 9240-7611. **Belgium:** State Street Global Advisors Belgium, Chaussée de La Hulpe 185, 1170 Brussels, Belgium. T: +32 2 663 2036. State Street Global Advisors Belgium is a branch office of State Street Global Advisors Europe Limited, registered in Ireland with

company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Canada:** State Street Global Advisors, Ltd., 1981 McGill College Avenue, Suite 500, Montreal, Qc, H3A 3A8, T: +514 282 2400 and 30 Adelaide Street East Suite 800, Toronto, Ontario M5C 3G6. T: +647 775 5900. **France:** State Street Global Advisors Europe Limited, France Branch ("State Street Global Advisors France") is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors France is registered in France with company number RCS Nanterre 899 183 289, and its office is located at Coeur Défense – Tour A – La Défense 4, 33e étage, 100, Esplanade du Général de Gaulle, 92 931 Paris La Défense Cedex, France. T: +33 1 44 45 40 00. F: +33 1 44 45 41 92. **Germany:** State Street Global Advisors Europe Limited, Branch in Germany, Brienner Strasse 59, D-80333 Munich, Germany ("State Street Global Advisors Germany"). T: +49 (0)89 55878 400. State Street Global Advisors Germany is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and

whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Hong Kong:** State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103-0288. F: +852 2103-0200. **Ireland:** State Street Global Advisors Europe Limited is regulated by the Central Bank of Ireland. Registered office address 78 Sir John Rogerson's Quay, Dublin 2. Registered Number: 49934. T: +353 (0)1 776 3000. F: +353 (0)1 776 3300. **Italy:** State Street Global Advisors Europe Limited, Italy Branch ("State Street Global Advisors Italy") is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors Italy is registered in Italy with company number 11871450968 – REA: 2628603 and VAT number 11871450968, and its office is located at Via Ferrante Aporti, 10 - 20125 Milan, Italy. T: +39 02 32066 100. F: +39 02 32066 155. **Japan:** State Street Global Advisors (Japan) Co., Ltd., Toranomon Hills Mori Tower 25F 1-23-1 Toranomon, Minato-ku, Tokyo 105-6325 Japan. T: +81-3-4530-7380. Financial Instruments Business Operator, Kanto Local Financial Bureau (Kinsho #345), Membership: Japan Investment Advisers Association, The Investment Trust Association, Japan, Japan Securities Dealers'

Association. **Netherlands:** State Street Global Advisors Netherlands, Apollo Building 7th floor, Herikerbergweg 29, 1101 CN Amsterdam, Netherlands. T: +31 20 7181 000. State Street Global Advisors Netherlands is a branch office of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Singapore:** State Street Global Advisors Singapore Limited, 168, Robinson Road, #33-01 Capital Tower, Singapore 068912 (Company Reg. No: 200002719D, regulated by the Monetary Authority of Singapore). T: +65 6826-7555. F: +65 6826-7501. **South Africa:** State Street Global Advisors Limited is regulated by the Financial Sector Conduct Authority in South Africa under license number 42670. **Switzerland:** State Street Global Advisors AG, Beethovenstr. 19, CH-8027 Zurich. Registered with the Register of Commerce Zurich CHE-105.078.458. T: +41 (0)44 245 70 00. F: +41 (0)44 245 70 16. **United Kingdom:** State Street Global Advisors Limited. Authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 2509928. VAT No. 577659181. Registered office: 20 Churchill Place, Canary Wharf, London, E14 5HJ. T: 020 3395 6000. F: 020 3395 6350. **United States:** State Street Global Advisors, 1 Iron Street, Boston, MA 02210-1641. T: +1 617 786 3000.

## Important Risk Information

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent.

The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

All information is from SSGA unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

The views expressed in this material are the views of State Street Global Advisors through the period ended January 12, 2024 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed to be forward-looking statements. All statements, other than historical facts, contained within

this article that address activities, events or developments that SSGA expects, believes or anticipates will or may occur in the future are forward-looking statements. These statements are based on certain assumptions and analyses made by SSGA in light of its experience and perception of historical trends, current conditions, expected future developments and other factors it believes are appropriate in the circumstances, many of which are detailed herein. Such statements are subject to a number of assumptions, risks, uncertainties, many of which are beyond SSGA's control. Readers are cautioned that any such statements are not guarantees of any future performance and that actual results or developments may differ materially from those projected in the forward-looking statements. The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss regulation. This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research and (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.

**The information provided does not constitute investment advice as such term is defined under the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss regulation and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell any investment. It does not take into account any investor's or potential investor's particular investment objectives, strategies, tax status, risk**

**appetite or investment horizon. If you require investment advice you should consult your tax and financial or other professional advisor.**

All material has been obtained from sources believed to be reliable. There is no representation or warranty as to the accuracy of the information and State Street shall have no liability for decisions based on such information. Investing involves risk including the risk of loss of principal.

All the index performance results referred to are provided exclusively for comparison purposes only. It should not be assumed that they represent the performance of any particular investment.

Equity securities may fluctuate in value in response to the activities of individual companies and general market and economic conditions.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates raise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities.

Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Investing in high yield fixed income securities, otherwise known as "junk bonds", is considered speculative and involves greater risk of loss of principal and interest than investing in investment grade fixed income securities. These lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer.

There are risks associated with investing in Real Assets and the Real Assets sector, including real estate, precious metals and natural resources. Investments can be significantly

affected by events relating to these industries. Commodities investing entail significant risk as commodity prices can be extremely volatile due to wide range of factors. A few such factors include overall market movements, real or perceived inflationary trends, commodity index volatility, international, economic and political changes, change in interest and currency exchange rates.

Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations. Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

Past performance is not a reliable indicator of future performance.

Diversification does not ensure a profit or guarantee against loss.

Asset Allocation is a method of diversification which positions assets among major investment categories. Asset Allocation may be used in an effort to manage risk and enhance returns. It does not, however, guarantee a profit or protect against loss.

© 2024 State Street Corporation.

All Rights Reserved.

ID1956745-5413907.2.1.GBL.RTL 0124

Exp. Date: 01/31/2025