Goldman Sachs | Asset Management

Market Know-How | 2Q 2024

PRESSURE RELIEF

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RELATIVE ASSET CLASS CALENDAR-YEAR PERFORMANCE

Best Performance

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 YTD
							Commodities: 26.0%		
			Cash: 2.0%				Cash: 1.2%		
			US Municipal: 1.3%				Bank Loans: -1.1%		
			Bank Loans: 1.1%				Hedge Funds: -4.7%		
			US Agg. Bonds: 0.0%				US Municipal: -8.5%		
		EM Equity: 37.8%	Hedge Funds: -4.0%				High Yield: -12.7%		
Int. Small Cap: 5.9%		Int. Small Cap: 32.3%	High Yield: -4.1%				US Agg. Bonds: -13.0%		
US Real Estate: 4.5%	US Small Cap: 21.3%	Int. Equity: 25.0%	US Real Estate: -4.2%		US Small Cap: 20.0%	US Real Estate: 45.9%	Int. Equity: -14.5%		
US Municipal: 3.3%	High Yield: 14.3%	Int. Real Estate: 22.1%	EM Debt: -4.3%		EM Equity: 18.7%	Commodities: 40.4%	EM Debt: -17.8%		
US Large Cap: 1.4%	US Large Cap: 12.0%	US Large Cap: 21.8%	US Large Cap: -4.4%	US Large Cap: 31.5%	US Large Cap: 18.4%	US Large Cap: 28.7%	US Large Cap: -18.1%	US Large Cap: 26.3%	US Large Cap: 7.1%
EM Debt: 1.2%	EM Equity: 11.6%	US Small Cap: 14.6%	Int. Real Estate: -8.7%	US Small Cap: 25.5%	Int. Small Cap: 14.2%	US Small Cap: 14.8%	EM Equity: -19.7%	Int. Equity: 18.2%	Commodities: 5.4%
US Agg. Bonds: 0.5%	Commodities: 11.4%	High Yield: 10.4%	US Small Cap: -11.0%	Int. Small Cap: 24.5%	Hedge Funds: 10.9%	Int. Equity: 11.3%	US Small Cap: -20.4%	US Small Cap: 16.9%	Int. Equity: 2.4%
Cash: 0.2%	EM Debt: 10.2%	EM Debt: 10.3%	Int. Equity: -13.8%	US Real Estate: 23.1%	Int. Equity: 7.8%	Int. Small Cap: 9.5%	Int. Small Cap: -21.5%	High Yield: 14.0%	Hedge Funds: 2.4%
Hedge Funds: -0.3%	Bank Loans: 9.9%	Hedge Funds: 7.8%	Commodities: -13.8%	Int. Equity: 22.0%	US Agg. Bonds: 7.5%	Int. Real Estate: 9.4%	Int. Real Estate: -24.1%	Int. Small Cap: 14.0%	Bank Loans: 1.7%
Bank Loans: -0.4%	US Real Estate: 6.6%	Commodities: 5.8%	EM Equity: -14.2%	Int. Real Estate: 20.6%	High Yield: 7.0%	Hedge Funds: 6.2%	US Real Estate: -26.0%	Bank Loans: 13.0%	US Small Cap: 1.5%
Int. Equity: -0.8%	Int. Small Cap: 3.7%	US Municipal: 5.4%	Int. Small Cap: -18.5%	EM Equity: 18.9%	EM Debt: 5.3%	Bank Loans: 5.4%		US Real Estate: 11.9%	Cash: 0.8%
Int. Real Estate: -1.2%	US Agg. Bonds: 2.6%	Bank Loans: 4.2%		Commodities: 17.6%	US Municipal: 5.2%	US Municipal: 1.5%		EM Debt: 11.1%	High Yield: 0.6%
High Yield: -2.7%	Int. Real Estate: 1.6%	US Real Estate: 3.8%		EM Debt: 15.0%	Bank Loans: 2.8%	High Yield: 1.0%		EM Equity: 10.3%	EM Debt: -0.1%
US Small Cap: -4.4%	Int. Equity: 1.0%	US Agg. Bonds: 3.5%		High Yield: 12.6%	Cash: 0.7%	Cash: 0.1%		Int. Real Estate: 8.4%	EM Equity: -0.1%
EM Equity: -14.6%	Hedge Funds: 0.5%	Cash: 1.1%		US Agg. Bonds: 8.7%	Int. Real Estate: -5.3%	US Agg. Bonds: -1.5%		Hedge Funds: 6.6%	US Municipal: -0.4%
Commodities: -32.9%	Cash: 0.5%			Hedge Funds: 8.4%	US Real Estate: -11.2%	EM Debt: -1.8%		US Municipal: 6.4%	US Real Estate: -0.4%
	US Municipal: 0.2%			Bank Loans: 8.2%	Commodities: -23.7%	EM Equity: -2.2%		US Agg. Bonds: 5.5%	US Agg. Bonds: -1.7%
				US Municipal: 7.5%				Cash: 5.2%	Int. Small Cap: -2.0%
				Cash: 2.3%				Commodities: -4.3%	Int. Real Estate: -6.7%

Worst Performance

Source: MSCI, Bloomberg, and Goldman Sachs Asset Management. As of February 29, 2024. This example is for illustrative purposes only to show the performance dispersion between various asset classes over time and the potential importance of diversification. Diversification is the process of allocating capital in a way that reduces the exposure to any one particular asset or risk. **Past performance does not predict future returns and does not guarantee future results, which may vary.** Diversification does not protect an investor from market risks and does not ensure a profit. Please see additional disclosures on page 14.

PRESSURE RELIEF

Relief valves are one of the most important components of pressurized systems, controlling for excess strains that are caused by fluctuations in operating conditions. Their utility becomes especially apparent as conditions become less predictable. Macro policy and market dynamics can also create conditions where excesses emerge and should be addressed. Global inflation elicited aggressive monetary responses, which led to higher interest rates and, in turn, slowed growth. Meanwhile, higher short-term rates and elevated cost of capital have intensified demand for reliably profitable companies, embodied by the Magnificent 7, and money market funds, which experienced a 46% year-over-year increase in flows.

Today, we see two very common shortfalls in portfolio exposure: 1) high cash balances, that may provide excellent liquidity but often leave investors underinvested in risk assets during a favorable macro backdrop, and 2) burgeoning concentrated stock exposures, reflecting extremely narrow stock market leadership. We believe each of these pressures can be actively and efficiently relieved through tactful portfolio design and investment strategy.

In this edition of the Market Know-How, we consider how investors may relieve the pressures of excess cash and single stock concentration by:

- Using exchange funds to swap large single stock positions for a diversified basket without triggering a capital gains tax.
- Transitioning concentrated positions into liquid, diversified portfolios in a tax-efficient manner via tax-advantaged SMAs.
- Extending duration to exploit hedging capacity and low costs of being early with potential Fed cuts on the horizon.

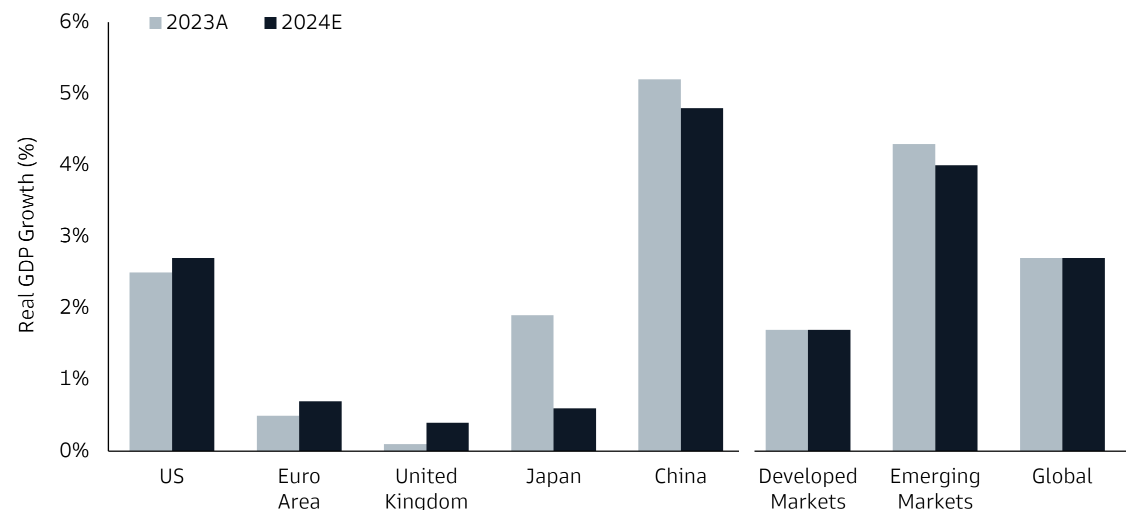
Source: Goldman Sachs Asset Management. As of March 15, 2024. The "Magnificent 7" refers to the seven technology companies driving S&P 500 returns: MSFT, AMZN, NVDA, META, TSLA, GOOG, and AAPL. "SMA" refers to Separately Managed Account. "Fed" refers to the Federal Reserve. Diversification does not protect an investor from market risk and does not ensure a profit. There is no guarantee that objectives will be met. Views and opinions are current as of March 15, 2024, and may be subject to change. They should not be construed as investment advice. Goldman Sachs does not provide accounting, tax, or legal advice. Please see additional disclosures at the end of this document.

MACRO

We expect global growth to remain firm and global disinflation to continue. Major central banks are approaching the final inflationary stretch with some caution, signaling that monetary policy is not on a preset course. Growth is likely to be dictated by consumer spending, global elections, and heightened geopolitical tensions, but inflation risks look more balanced, in our view.

Not So Fast

Resilient growth across most developed market economies has created a wide dispersion of views. The aversion of a US recession in 2023 does not mean that an eventual recession was merely pushed back, in our view. We believe that risks to US growth have largely abated, and we see current levels of growth as commensurate with reaching the Fed's inflation target. In Europe, the outlook for activity remains weak, though we expect a gradual recovery due in part to a pick-up in consumption. In Asia, while Japan entered a technical recession in 4Q, growth is likely to improve as wage increases continue and fiscal policy stays supportive, in our view.



Source: Goldman Sachs Global Investment Research and Goldman Sachs Asset Management. As of March 13, 2024. "We" refers to Goldman Sachs Asset Management. "Disinflation" refers to a reduction in the rate of inflation. "Fed's inflation target" refers to Core PCE at 2.0% on a year-over-year basis. "A" refers to actual. "E" refers to expected. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document. **Past performance does not predict future returns and does not guarantee future results, which may vary.**

Key Insights

MONETARY POLICY

We believe many central banks have concluded their hiking campaigns and are now focusing on the specific timing of cuts. Central bankers prefer to remain patient, as any signal of a less restrictive approach could lead to easing financial conditions, risking reinflationary pressures. Our colleagues in GIR expect the Fed, ECB, and BoE to begin cutting policy rates in June.

INFLATION

Inflation is trending down in the US, the Euro area, and the UK, with each region facing its own idiosyncratic nuances. In the US, shelter disinflation has been slower than originally thought by forecasters, though we expect core PCE to reach 2.5% year-over-year in May. In the Euro area and the UK, labor market resilience is causing moderating, but still elevated, wage growth pressures.

US ELECTION

Candidates have secured enough delegates to become their parties' presumptive nominees, however the 2024 Presidential election outcome remains murky. We are unable to predict market movements on the back of the election, but we expect episodic volatility and a wider distribution of outcomes. Sweeping policy changes are more likely under unified government, and macro fundamentals should continue to drive equity prices.

GEOPOLITICS

The geopolitical landscape is evolving with several countries actively opposing western interests. Ultimately, Red Sea disruptions may boost inflation, especially in the Euro area, and specific election results may beget episodic market volatility. Markets have absorbed tensions thus far, but geopolitical escalation remains one of our key risks throughout 2024.

CHINA

We remain cautiously optimistic on the Chinese economy while acknowledging near-term risks. Coordination across fiscal, monetary, property, and consumption policies has improved, but widescale support remains unlikely, in our view. Housing prices may continue to decline, though we do not expect the fall in prices to have a lasting drag on GDP growth.

JAPAN

The BoJ recently ended its negative interest rate policy even as Japan has faced sluggish real consumption, on below-trend services spending. We expect BoJ rate hikes to continue for three main reasons: 1) BoJ rhetoric has remained hawkish despite low spending, 2) wage hikes have begun to accelerate, and 3) the Kishida Cabinet may start applying tax breaks and subsidy payments beginning in 2H.

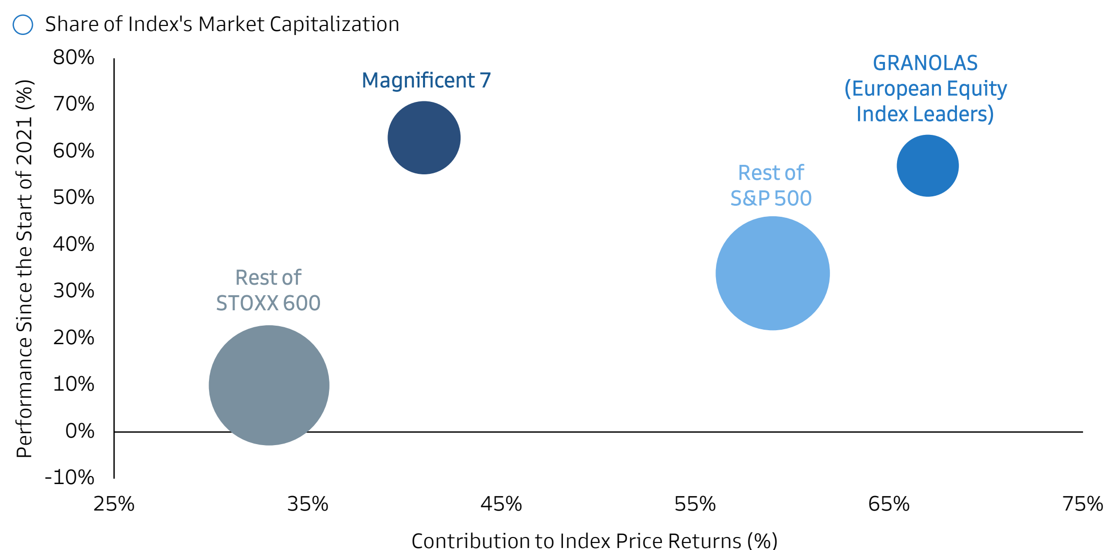
Source: Goldman Sachs Global Investment Research and Goldman Sachs Asset Management. As of March 13, 2024. "GIR" refers to Goldman Sachs Global Investment Research. "Fed" refers to Federal Reserve. "ECB" refers to European Central Bank. "BoE" refers to Bank of England. "PCE" refers to personal consumption expenditures. "GDP" refers to Gross Domestic Product. "BoJ" refers to Bank of Japan. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document.

MARKETS

Risk assets in various regions remain in a state of tension between elevated valuations and friendly cyclical forces, such as impending monetary easing. The latter should prevail and drive modestly constructive near-term returns, in our view. Meanwhile, despite increased debt supply, further progress on inflation and historically elevated yields support allocations to rates markets.

Asset Class Outlook

It is no secret that a small number of US companies, though large in market capitalization, have outsized influence on the broader market today. Perhaps less apparent is a similar trend seen in Europe, with a small basket of quality growth compounders providing large contributions to index returns. While eventual monetary easing may result in broader participation, select corporate performance among top index constituents may continue to dominate market returns. Uncertain timing of rate cuts among global central banks and major elections may drive increasing volatility, which longer-duration fixed income, rather than cash, is well positioned for, in our view. Holding neutral strategic allocations across portfolios appears prudent in this environment.



Source: Goldman Sachs Global Investment Research and Goldman Sachs Asset Management. As of March 15, 2024. "We" refers to Goldman Sachs Asset Management. "Magnificent 7" refers to Apple, Microsoft, Meta, Amazon, Tesla, Nvidia, and Google. "GRANOLAS" refers to GSK, Roche, ASML, Nestle, Novartis, Novo Nordisk, L'Oreal, LVMH, AstraZeneca, SAP, and Sanofi. For illustrative purposes only. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document. **Past performance does not predict future returns and does not guarantee future results, which may vary.**

Key Insights

DM EQUITIES

Near-term equity returns in the US and Europe may be earnings-led. Revenue growth among corporations has kept pace with strong nominal GDP growth, while margin expansion has been limited to the strongest business models. This backdrop, alongside challenging US valuations, may call for a selective approach. In Japan, healthy inflation, corporate reform, and strong earnings may unlock further demand for equities, allowing for continued strong performance. Optimistic US pricing and supportive conditions abroad warrant a return to strategic international equity weights.

EM EQUITIES

Opportunities continue to diverge among emerging markets. While premiums assigned to Indian equity valuations persist, strong economic growth and its historically tight relationship with equity returns may be reasons for optimism. In China, we believe policy support is unlikely to offset property market deleveraging and its negative implication for government financing in the near term.

VOLATILITY

Equity volatility may pick up from its subdued state in the months prior to the US presidential election, as has historically been the case. Meanwhile, elevated rate volatility may persist as investors continue to adjust their expectations for central bank rate cuts.

RATES

Intermediate-duration interest rates have oscillated around fair value, in our view, with global sovereign yield curves remaining inverted. Although monetary relief may drive more short-end rate relaxation than long, curve dis-inversion has historically taken place after intermediate rates have fallen meaningfully, undermining its usefulness as a signal to extend duration. This partly informs our preference for longer-dated bonds over cash.

MUNICIPAL BONDS

Bond investors positioned below their target duration may take attractive opportunities offered by munis to expedite movement to a neutral position. New issue supply may pick up following historically low issuance last year but should be met by strong demand. Credit quality may naturally deteriorate as reserves are drawn down, but current spread levels should compensate for this and advocate for a high-yield allocation.

CREDIT

The credit outlook remains healthy given a supportive macro backdrop and resilient fundamentals, but tight spreads cap upside and increase tail risk. That said, we see potential opportunities in EUR IG, given the much less severe valuation constraint, and EM Corporates, which provide further diversification benefits.

Source: Goldman Sachs Global Investment Research and Goldman Sachs Asset Management. As of March 20, 2024. "We" refers to Goldman Sachs Asset Management. "DM" refers to developed markets. "GDP" refers to gross domestic product. "EM" refers to emerging markets. "EUR IG" refers to European investment grade. Diversification does not protect an investor from market risk and does not ensure a profit. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document. **Past performance does not predict future returns and does not guarantee future results, which may vary.**

EXCHANGE FUNDS

OUTLOOK

Eggs in One Basket

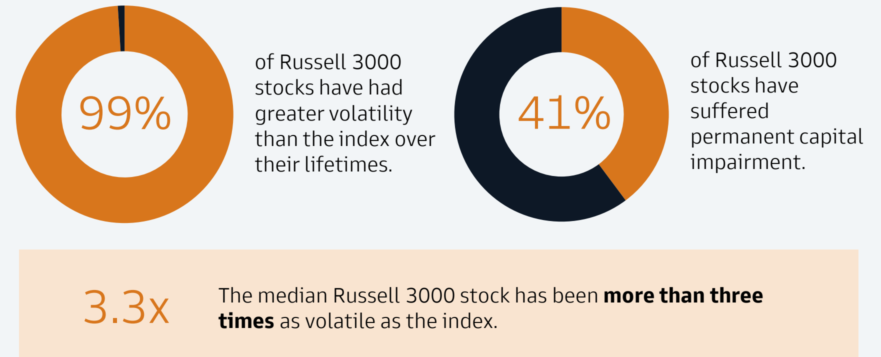
Concentrated stock positions can originate from a variety of situations, such as early investment, executive compensation, and gifted stock. Owning large single stock positions can lead to substantial wealth creation, but these positions may also expose investors to concentration risks and large tax burdens upon liquidation. Considering that the median Russell 3000 stock is 3.3x more volatile than the index itself, we believe that diversification benefits are important in helping a given investor meet his/her objectives. One viable solution to alleviate these pain points is exchange funds. Exchange funds combine concentrated shares into a single investment pool, allowing investors to capture diversification benefits that come with owning a portfolio of securities.

Scrap That Tax Drag

In addition to concentration risks, selling a low cost-basis, highly-appreciated stock to diversify a portfolio can quickly erode amassed wealth. Exchange funds facilitate a tax-free swap of public or private securities for shares in a partnership. No immediate capital gains tax is triggered upon entering the partnership, allowing for tax-deferred growth of an investor's position. One consideration of exchange funds is that they typically must be held for a minimum of seven years. In the event of liquidation at year seven, however, we find that the after-tax value of an illustrative exchange fund holding is higher than that of an investor independently diversifying and selling his/her own basket.

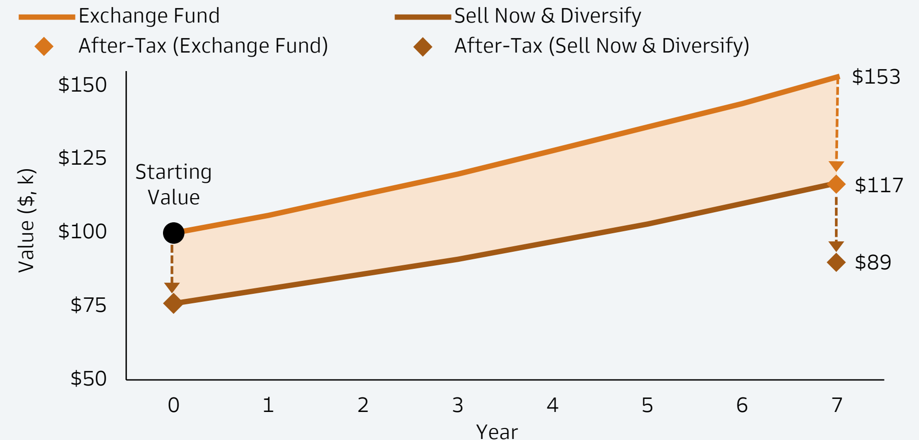
SOLUTIONS

Ebbs and Flows



Source: FactSet and Goldman Sachs Asset Management.

Taxing Situation



Source: Goldman Sachs Asset Management.

As of March 13, 2024. Top Right Section Notes: Results shown are based off an analysis of Russell 3000 securities from 1986 through 2023. Bottom Right Section Notes: These examples are for illustrative purposes only and are not actual results. If any assumptions used do not prove to be true, results may vary substantially. Diversification does not protect an investor from market risk and does not ensure a profit. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Goldman Sachs does not provide accounting, tax, or legal advice. Please see additional disclosures and assumptions at the end of this document. **Past performance does not predict future returns and does not guarantee future results, which may vary.**

TAX-ADVANTAGED SMAs

OUTLOOK

Unlocking Captive Wealth

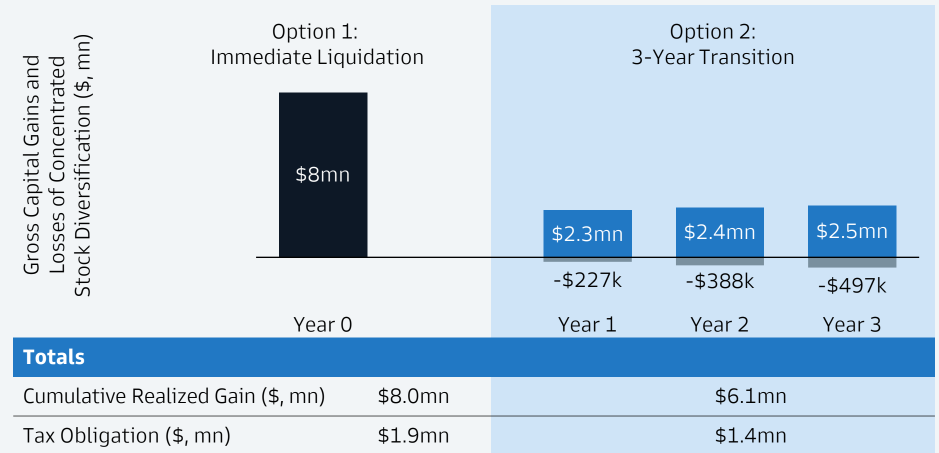
Tax-advantaged SMAs are another powerful tool to manage concentrated stock positions and can be complimentary to exchange fund holdings. This solution provides unique benefits in that it doesn't require qualified purchaser status, can be funded with a wide range of securities, and offers daily liquidity. As such, this strategy can unlock captive wealth in a tax-efficient manner while still achieving portfolio diversification. For example, diversifying a $10mn stock position over a three-year period through a tax-advantaged SMA, rather than immediately liquidating that position and redeploying the capital, results in an estimated ~$450k in tax savings, made possible through the realization of losses on other portfolio positions offsetting realized gains on the concentrated stock.

Competing Priorities

Managing competing priorities can be a balancing act. Equity investors seeking to de-risk concentrated stock positions may need to consider the tradeoff between taxes and tracking error, or how closely portfolio returns differ from that of the benchmark. To limit the risk that a single stock's poor performance will weigh on overall portfolio returns, an investor may seek to reduce tracking error, often at the expense of paying taxes. Tax-advantaged equity SMAs can help strike this balance, offering investors the unique ability to implement their personal preferences in pursuit of predictable tax obligations and greater portfolio balance.

SOLUTIONS

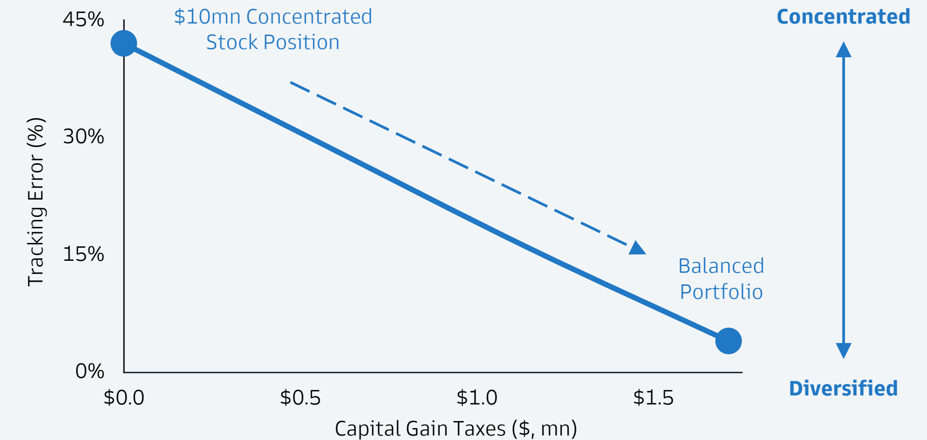
Managing Gains



Totals	Option 1	Option 2
Cumulative Realized Gain ($, mn)	$8.0mn	$6.1mn
Tax Obligation ($, mn)	$1.9mn	$1.4mn

Source: Goldman Sachs Asset Management.

Balancing Act



Source: Goldman Sachs Asset Management.

As of March 13, 2024. Top Right Section Notes: Chart shows the estimated capital gains and taxes associated with an immediate liquidation of a $10mn single-stock position with a $2mn cost basis versus a 3-year transition to a diversified portfolio. Bottom Right Section Notes: These examples are for illustrative purposes only and are not actual results. If any assumptions used do not prove to be true, results may vary substantially. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Goldman Sachs does not provide accounting, tax, or legal advice. Please see additional disclosures and assumptions at the end of this document. **Past performance does not predict future returns and does not guarantee future results, which may vary.**

DURATION EXTENSION

OUTLOOK

Better Early Than Never

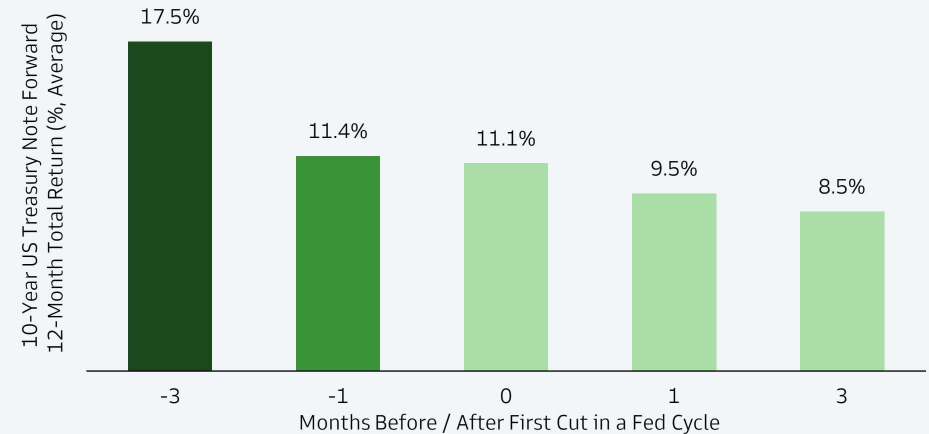
In addition to the favorable return asymmetry and capacity to hedge, the 10-Year US Treasury note has a very low cost of being early, in our view. Elevated cash yields have prompted many investors to extend duration only when they know that the Fed is cutting—a strategy that may be imprudent. Historically, 12-Month forward returns for the 10-Year US Treasury note have been highest beginning three months prior the first cut in a Fed cycle, and extending duration three months early has outperformed extending duration “on-time” or one month late by 6.4 and 8.0 pp, respectively. Furthermore, average 12-Month forward returns have been above 14% in every starting month from two-months prior to six-months prior to the first cut. We believe it is better to be early—whether by a little or a lot—than it is to be late.

Cash Out

A tactical cash tilt provided robust returns for portfolios in 2023, but as Fed cuts begin, we believe investors may consider incrementally moving out of money-market funds. Investors awaiting a specific signal, such as the dis-inversion of a yield curve, may be too late, as intermediate yields have historically declined materially by the time this dis-inversion occurs. The duration of a portfolio may be different for everyone, though we feel that at least short or intermediate duration is preferable to little or none. Investors have historically foregone 8 pp of upside on average when moving from cash to a 10-Year US Treasury note three months following the first Fed cut and 11 pp of upside on average when staying in cash in the long term.

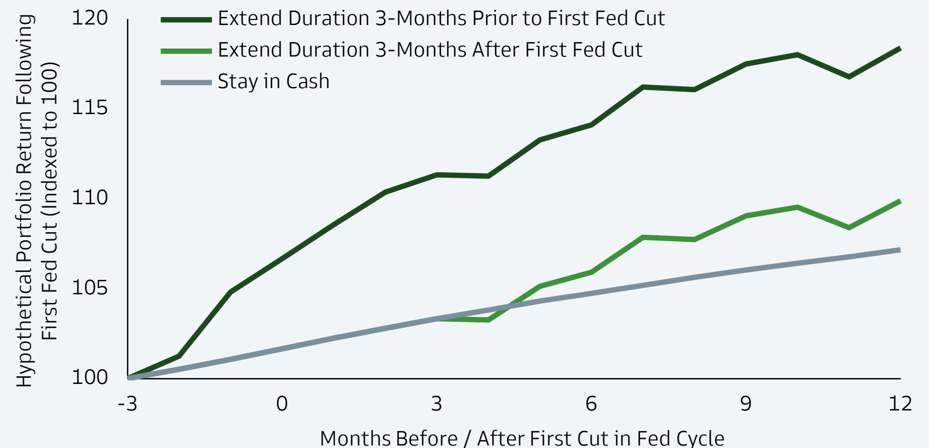
SOLUTIONS

The Cost of Being Late



Source: Barclays and Goldman Sachs Asset Management.

ABC…Anything But Cash



Source: Barclays and Goldman Sachs Asset Management.

As of March 13, 2024. “Fed” refers to Federal Reserve. “Pp” refers to percentage points. “Fed cycle” refers to a period in which the Federal Reserve is raising and/or lowering the federal funds rate. Months of first cuts for prior six Fed cycles used are September 1984, June 1989, July 1995, January 2001, September 2007, and August 2019. Top Right Section Notes: Chart shows average twelve month forward return of the 10-Year US Treasury note in proximity to the first Fed cut in a cycle. Bottom Left Section Notes: “Dis-inversion” refers to the 10-Year less 2-Year US Treasury yield spread going from a negative to a positive value. Bottom Right Section Notes: Chart shows forward returns for three hypothetical portfolios in proximity to first Fed cut in a cycle. **Past performance does not predict future returns and does not guarantee future results, which may vary.**

MARKET SOLUTIONS

In a world of macro uncertainty, there may be a menu of asset classes serving as potential solutions.

		Fixed Income		Equities					Alternatives		
		Core	Municipal	Down-in-Cap	Direct Indexing	International Developed Markets	Emerging Markets	Buy-Write	Real Estate & Infrastructure	Private Credit	Absolute Return Strategies
ALWAYS	Equity Volatility	●	●		●			●	●	●	●
	Income Generation	●	●			●		●	●	●	
	Tax Efficiency		●		●				●	●	
DEFENSIVE	Elevated Rates	●	●			●			●	●	●
	Recession Risk	●	●					●			●
RECOVERY	Global Recovery			●	●	●	●	●	●	●	

Source: Goldman Sachs Asset Management. As of March 13, 2024. Goldman Sachs does not provide accounting, tax, or legal advice. Please see additional disclosures at the end of this document. A Buy-Write strategy refers to an investment that receives call premium on an underlying equity position to generate income. An absolute return strategy refers to an investment strategy intended to deliver positive returns, regardless of broader market conditions. This material is provided for educational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities. For illustrative purposes only.

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GLOSSARY

Equities

The **Dow Jones US Select Real Estate Securities Index** tracks companies that are both equity owners and operators of real estate in the US.

The **MSCI All Country World (ACWI) Index** is a market capitalization weighted index designed to provide a broad measure of equity-market performance throughout the world. It comprises of stocks from 23 developed countries and 24 emerging markets.

The unmanaged **MSCI EAFE Index (unhedged)** is a market capitalization weighted composite of securities in 21 developed markets.

The **MSCI Emerging Markets Equity Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets.

The **Russell 2000 Index** measures the performance of the small-cap segment of the US equity universe. The Russell 2000 Index is a subset of the Russell 3000 Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.

The **Russell 3000 Index** measures the performance of the largest 3,000 US companies representing approximately 96% of the investable US equity market. The Russell 3000 Index is constructed to provide a comprehensive, unbiased and stable barometer of the broad market and is completely reconstituted annually to ensure new and growing equities are included.

The **STOXX Europe 600 Index** is a subset of the STOXX Global 1800 Index. With a fixed number of 600 components, the STOXX Europe 600 Index represents large, mid and small capitalization companies across 17 countries of the European region: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The **S&P 500 Index** is the Standard & Poor's 500 Composite Stock Prices Index of 500 stocks, an unmanaged index of common stock prices. The index figures do not reflect any deduction for fees, expenses or taxes. It is not possible to invest directly in an unmanaged index.

The **S&P Developed ex-US Property Index** measures the performance of real estate companies domiciled in countries outside the United States.

The **S&P Developed ex-US Small Cap Index** covers the smallest 15% of companies from developed countries (excluding the US) ranked by total market capitalization.

Fixed Income

The **Bloomberg US Aggregate Bond Index represents** an unmanaged diversified portfolio of fixed income securities, including US Treasuries, investment grade corporate bonds, and mortgage backed and asset-backed securities.

The **Bloomberg EM USD Aggregate Index** is a flagship hard currency Emerging Markets debt benchmark that includes USD denominated debt from sovereign, quasi-sovereign, and corporate EM issuers.

The **Bloomberg Global Aggregate Bond Index** measures global investment grade debt from 24 local currency markets, including treasury, government-related, corporate, and securitized fixed-rate bonds from both developed and emerging market issuers.

The **Bloomberg Global High Yield Index** provides a broad-based measure of the global high-yield fixed income market.

The **Bloomberg Municipal Bond Index** covers the USD-denominated long-term tax-exempted bond market, including state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds.

The **Bloomberg Ten-Year U.S. Treasury Bellwethers Index** is a universe of Treasury bonds and is used as a benchmark against the market for long-term maturity fixed-income securities.

The **Bloomberg Three-Month US Treasury Bellwether Index** measures the total return of a rolling investment in a short-term fixed income instrument with a three-month maturity.

The **Bloomberg US High Yield Index** covers the universe of fixed rate, non-investment grade debt.

The **Credit Suisse Leveraged Loan Index** tracks the investable leveraged loan market by representing tradable, senior-secured, US-dollar denominated, non-investment grade loans.

The **J.P. Morgan EMBI Global Composite Index** is an unmanaged index tracking dollar-denominated debt instruments issued in emerging markets.

The **S&P/LSTA US Leveraged Loan 100 Index** is designed to reflect the performance of the largest facilities in the leveraged loan market.

The **US Treasury Bond** is a debt obligation backed by the United States government and its interest payments are exempt from state and local taxes. However, interest payments are not exempt from federal taxes.

Other

Basis points (bps) refers to a unit represented by one hundredth of one percent.

Duration is a measure of the sensitivity of the price of a fixed income investment to a change in interest rates.

Gross Domestic Product (GDP) is the value of finished goods and services produced within a country's borders over one year.

The **HFRI Fund of Funds Composite Index** is an equal weighted, net of fee, index composed of approximately 800 fund-of-funds which report to HFR.

The **HFRX Global Hedge Fund Index** is designed to be representative of the overall composition of the hedge fund universe. It is comprised of all eligible hedge fund strategies falling within four principal strategies: equity hedge, event driven, macro/CTA, and relative value arbitrage.

OPEC+ refers to the broader Organization of the Petroleum Exporting Countries, which is a group consisting of 14+ of the world's major oil-exporting nations.

A recession is characterized by a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.

Risk assets refers to assets that carry a degree of price volatility.

RISK AND GENERAL DISCLOSURES

Investors should also consider some of the potential risks of alternative investments: Alternative Strategies. Alternative strategies often engage in leverage and other investment practices that are speculative and involve a high degree of risk. Such practices may increase the volatility of performance and the risk of investment loss, including the entire amount that is invested. Manager experience. Manager risk includes those that exist within a manager's organization, investment process or supporting systems and infrastructure. There is also a potential for fund-level risks that arise from the way in which a manager constructs and manages the fund. Leverage. Leverage increases a fund's sensitivity to market movements. Funds that use leverage can be expected to be more "volatile" than other funds that do not use leverage. This means if the investments a fund buys decrease in market value, the value of the fund's shares will decrease by even more. Counterparty risk. Alternative strategies often make significant use of over-the-counter (OTC) derivatives and therefore are subject to the risk that counterparties will not perform their obligations under such contracts. Liquidity risk. Alternative strategies may make investments that are illiquid or that may become less liquid in response to market developments. At times, a fund may be unable to sell certain of its illiquid investments without a substantial drop in price, if at all. Valuation risk. There is risk that the values used by alternative strategies to price investments may be different from those used by other investors to price the same investments. The above are not an exhaustive list of potential risks. There may be additional risks that should be considered before any investment decision.

Equity securities are more volatile than fixed income securities and subject to greater risks. Small and mid-sized company stocks involve greater risks than those customarily associated with larger companies.

International securities entail special risks such as currency, political, economic, and market risks.

Emerging markets securities may be less liquid and more volatile and are subject to a number of additional risks, including but not limited to currency fluctuations and political instability.

Investments in fixed-income securities are subject to credit and interest rate risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and principal. This risk is higher when investing in high yield bonds, also known as junk bonds, which have lower ratings and are subject to greater volatility. All fixed income investments may be worth less than their original cost upon redemption or maturity.

Although Treasuries are considered free from credit risk, they are subject to interest rate risk, which may cause the underlying value of the security to fluctuate.

Income from municipal securities is generally free from federal taxes and state taxes for residents of the issuing state. While the interest income is tax-free, capital gains, if any, will be subject to taxes. Income for some investors may be subject to the federal Alternative Minimum Tax (AMT).

Concentration in infrastructure-related securities involves sector risk and concentration risk, particularly greater exposure to adverse economic, regulatory, political, legal, liquidity, and tax risks associated with MLPs and REITs.

An investment in real estate securities is subject to greater price volatility and the special risks associated with direct ownership of real estate.

Investments in master limited partnerships ("MLPs") are subject to certain risks, including risks related to limited control and limited rights to vote, potential conflicts of interest, cash flow risks, dilution risks, limited liquidity and risks related to the general partner's right to force sales at undesirable times or prices.

Investing in REITs involves certain unique risks in addition to those risks associated with investing in the real estate industry in general. REITs whose underlying properties are concentrated in a particular industry or geographic region are also subject to risks affecting such industries and regions. The securities of REITs involve greater risks than those associated with larger, more established companies and may be subject to more abrupt or erratic price movements because of interest rate changes, economic conditions and other factors.

Buy-write strategies are subject to market risk, which means that the value of the securities in which it invests may go up or down in response to the prospects of individual companies, particular sectors and/or general economic conditions. They are also subject to the risks associated with writing (selling) call options, which limits the opportunity to profit from an increase in the market value of stocks in exchange for up-front cash at the time of selling the call option. In a rising market, the strategy could significantly underperform the market, and the options strategies may not fully protect it against declines in the value of the market.

There may be additional risks that are not currently foreseen or considered.

Page 2 Relative Asset Class Calendar-Year Performance Notes: 'Bank Loans' are represented by the Credit Suisse Leveraged Loan Index. 'Commodities' are represented by the S&P GSCI Commodity Index. 'Emerging Market (EM) Debt' is represented by the JPM EMBI Global Composite Index. 'Emerging Market (EM) Equity' is represented by the MSCI Emerging Markets Index. 'Hedge Funds' are represented by the HFRI Fund of Funds Index. 'High Yield' is represented by the Bloomberg Global High Yield Index. 'International Equity' is represented by the MSCI EAFE Index. 'International Real Estate' is represented by the S&P Developed ex-US Property Index. 'International Small Cap' is represented by the S&P Developed ex-US Small Cap Index. 'US Aggregate Bonds' are represented by the Bloomberg US Aggregate Bond Index. 'US Large Cap' is represented by the S&P 500 Index. 'US Municipal' is represented by the Bloomberg Municipal Bond Index. 'US Real Estate' is represented by the Dow Jones US Select Real Estate Securities Index. 'US Small Cap' is represented by the Russell 2000 Index.

Page 8 Top Right Section Notes: Capital impairment is defined as a stock that loses more than 75% of its value and has not recovered to 50% of its original value, as of December 31, 2022.

Page 9 Right Section Notes: Top Left Section Notes: "Qualified purchaser" refers to any person or family-owned business that owns at least $5 million in investments. Top Right Section Notes (cont.): Immediate liquidation refers to the scenario in which an investor immediately sells a concentrated $10mn position with a $2mn cost basis to transition to a balanced portfolio. 3-year transition refers to the gradual sell-off of this concentrated position into a balanced portfolio over a 3-year timeline, while using capital losses in other areas of the portfolio to limit gains. A federal tax rate of 23.8% is used. There is no guarantee that objectives will be met. The Tax Loss Harvesting strategy seeks to diversify the existing portfolio with the goal of reducing risk relative to the benchmark while minimizing the tax cost. Post-transition estimated loss harvesting may vary significantly depending on market environment. The estimated realized gains/losses from this analysis are for informational purposes only as of the date of this presentation. Bottom right chart shows the tradeoff between tracking error and capital gains taxes in a hypothetical scenario where an investor transitions from a $10mn concentrated stock position to a balanced portfolio over the span of 3 years. Tracking error refers to the divergence of price performance between a position or portfolio and the price performance of a benchmark. This paper makes no implied or express recommendations concerning how a client's account should be managed and is not intended to be used as a general guide to investing or as a source of any specific investment recommendations.

RISK AND GENERAL DISCLOSURES

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