Goldman Sachs | Asset Management

Investment Commentary

4Q 2024

Class A: GITAX Class I: GITIX
Class C: GITCX Class S: GITSX

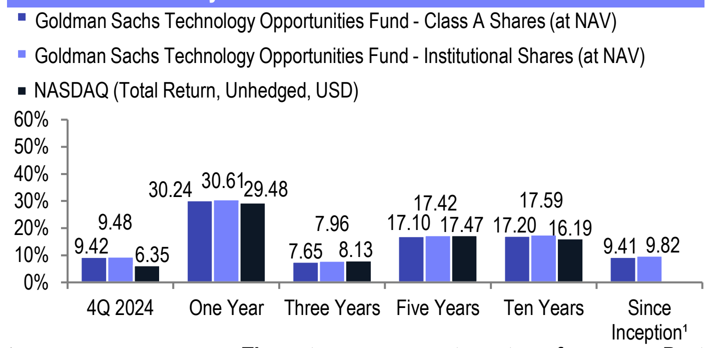
Goldman Sachs Technology Opportunities Fund

Market Overview & Outlook

The S&P 500 Index increased by 2.41% (total return, USD) in the fourth quarter of 2024. The market saw its largest rally of the quarter following the US presidential election as a reduction of market volatility, coupled with positive momentum from expectations of corporate tax cuts, helped to improve sentiment and bolster returns. While third quarter corporate earnings were well-received by the market, outperformance narrowed as strength within mega cap technology led the standard S&P 500 index to outperform the equal-weighted index. In contrast, small-cap stocks, represented by the Russell 2000 Index, underperformed despite momentum from a domestic focused administration and renewed optimism among small business owners - reflecting increased confidence that the new administration may lead to significant shifts in fiscal policy to spur economic growth. However, small cap optimism was tempered by concerns over tighter credit conditions and persistent inflationary pressures, which weighed on sentiment for more cyclical and levered small-cap constituents. The Federal Open Market Committee (FOMC) enacted two 25-basis point rate cuts, but intimated that future rate cuts will occur at a slower cadence, which negatively impacted market confidence. A series of stalled Consumer Price Index reports (CPI) and firm labor market data further reinforced the FOMC's defensive positioning. The best performing sectors within the S&P 500 were Consumer Discretionary, Communication Services, and Financials, while the worst performing sectors were Materials, Health Care, and Real Estate.

The fourth quarter closed out the year with a resurgence in investor optimism fueled by resilient economic growth, strong quarterly earnings, the resolution of election uncertainty, and long-awaited monetary easing, despite worries surrounding elevated valuations and high levels of market concentration. As we expect the return structure of the US equity market to broaden in 2025 underpinned by the US Administration's domestic focus and a favorable economic growth outlook, we view active management as a key approach to navigating the volatility of the equity landscape and providing diversified sources of returns. We also believe taking an active approach in today's environment benefits investors seeking to traverse the everchanging macroeconomic and geopolitical backdrop, while seeking to avoid the low-quality constituents that a passive investor would have direct exposure to. As we navigate this period of elevated uncertainty, we are focused on remaining nimble and capitalizing on idiosyncratic areas of the market uncovered through active stock selection. We continue to prioritize our quality-oriented approach to investing – focusing on having a long-term viewpoint on the portfolio, seeking businesses with healthy balance sheets, and partnering with management teams that are excellent stewards of capital. In our view, we are optimistic that a fundamental approach may generate excess return in the long run for our clients.

Performance History as of 12/31/2024



[1] Since Inception 10/01/99. **The returns represent past performance. Past performance does not guarantee future results. The Fund's investment return and principal value will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted above. Please visit our Web site at: www.GSAMFUNDS.com/ETFs to obtain the most recent month-end returns.** The Since Inception Benchmark Return represents the time period of the shareclass with the earlier inception date, when the A and I shareclasses have different inception dates. Performance reflects cumulative total returns for periods of less than one year and average annual total returns for periods of greater than one year. All Fund performance data reflect the reinvestment of distributions.

Standardized Total Returns for Period Ended 12/31/2024

Period	Class A Shares	Class I Shares
One Year	30.24%	30.61%
Five Years	17.10%	17.42%
Ten Years	17.20%	17.59%

The Standardized Total Returns are average annual total returns or cumulative total returns (only if the performance period is one year or less) as of the most recent calendar quarter end. They assume reinvestment of all distributions at net asset value. These returns reflect the maximum initial sales charge of 5.50% for Class A Shares. Because Institutional Shares do not involve a sales charge, such a charge is not applied to their Standardized Total Returns.

Expense Ratios

	Class A Shares	Class I Shares
Current Expense Ratio (Net)	1.17%	0.89%
Expense Ratio Before Waivers (Gross)	1.39%	1.03%

The expense ratios of the Fund, both current (net of any fee waivers or expense limitations) and before waivers (gross of any fee waivers or expense limitations) are as set forth above. Pursuant to a contractual arrangement, the Fund's waivers and/or expense limitations will remain in place through at least December 29, 2025 and prior to such date the investment adviser may not terminate the arrangements without the approval of the Fund's Board of Trustees.

Source: Goldman Sachs Asset Management, as of 31-Dec-2024.

Portfolio Review & Attribution

The tech market continued its run of strong performance in 2024, driven by robust earnings, with most companies reporting strong returns on the back of a healthier operating environment.

Demand for leading edge semis remains healthy, driven by continued growth in AI training infrastructure.

On the cloud and AI front, strong demand for AI infrastructure continues to accelerate with large tech companies reporting a surge in AI bookings.

IT service companies continue to see more evidence that AI investment is not incremental, but rather re-prioritization from other technology spend. AI spending continues to rapidly increase, and management teams have made it clear that they believe it is better to potentially overspend than be left behind.

The ASIC growth outlook continues to accelerate with large contracts awarded to key players in the space with spending remaining largely robust. We remain very bullish on the investment opportunity as key players in the space continue to experience strong demand and increased interest from innovating companies.

An area of the market we are very excited about is Cybersecurity, which include names like CrowdStrike (CRWD) and Zscaler (ZS). We believe these companies are well positioned to benefit from accelerating spend in information technology security as digital transformation across industries continues to drive demand for sophisticated cybersecurity solutions.

We believe we are in the early stages of a durable tech cycle driven by AI. Many of the key growth drivers we have previously identified remain intact and should accelerate as frontier model capabilities advance.

During the fourth quarter, the Goldman Sachs US Technology Opportunities Fund returned 9.48% net of fees, outperforming its benchmark – the NASDAQ Composite Index, which returned 6.35% – by **+314** bps net of fees. In 2024, the portfolio returned 30.61% net of fees, outperforming the benchmark by **+113 bps**, which returned 29.48%.

Throughout the quarter, our exposure to software drove the majority of relative underperformance. Companies within the space continue guide ahead of analyst's price targets and have seen strong growth on the back of increased AI spend. We remain very constructive on the outlook of the sector and believe the market is underappreciating the benefits AI will have on software names.

On the other hand, our exposure to Entertainment, namely Netflix, drove the majority of relative underperformance during the period. While the stock has performed very well, it was our timing in which we initiated our position that caused the stock to lag. While we missed out on some of the strong performance toward the second half of the year, we believe the stock will continue to experience strong growth, NFLX continues to report very strong earnings, supported by healthy price increases, a scaling ad business, and continued innovation in content.

Top/Bottom Contributors to Return (as of 12/31/2024)

Top Ten	Ending Weight (%)	Relative Contribution (bps)
AppLovin Corp.	1.72	+178
Marvell Technology, Inc.	4.19	+161
Broadcom Inc.	4.17	+58
Salesforce, Inc.	2.91	+57
HubSpot, Inc.	1.74	+47
Alphabet Inc.	9.00	+41
Datadog Inc	1.97	+29
Visa Inc.	2.61	+22
Snowflake, Inc.	1.43	+19
CrowdStrike Holdings, Inc.	2.01	+13
Bottom Ten	**Ending Weight (%)**	**Relative Contribution (bps)**
KLA Corporation	3.06	-93
Applied Materials, Inc.	1.88	-51
MercadoLibre, Inc.	1.42	-36
Micron Technology, Inc.	1.71	-32
NVIDIA Corporation	5.16	-27
Adobe Inc.	1.43	-26
Atlassian Corp.	2.00	-25
Netflix, Inc.	2.23	-23
Oracle Corporation	1.45	-21
Texas Instruments Inc.	1.56	-18

Source: FactSet as of 12/31/2024. Attribution data shown is from a third party data provider and may slightly differ from official Goldman Sachs Asset Management performance due to pricing differences/methodologies. The attribution returns are gross and do not reflect the deduction of investment advisory fees, which will reduce returns. **Past performance does not guarantee future results, which may vary.**

Marvell Technology, Inc. (4.19%) – a leading semiconductor company – was a top contributor to performance during the quarter. Performance was largely driven by the stocks second consecutive beat/raise as revenue growth in core data center, driven by strength in AI custom compute and optics, continues to accelerate. The market reacted favorably to the release of the company's third quarter earnings results, in which forward guidance was revised higher. Driven by growth in the company's artificial intelligence custom compute and optics capabilities, revenue from the core data center vertical continues to accelerate. As supported by Marvell Technology's business model, this substantial topline growth is expected to translate to long term margin and earnings expansion. The company also announced new custom computing architecture this month, aimed to increase performance and efficiency of its current systems, which further propelled the stock higher. We believed that the continuous development of custom-built products for hyperscale and cloud applications will translate into resilient margin and earnings expansions in the future. We remained constructive on the company's long-term growth outlook and continued to view Marvell as one of the key enablers of Generative AI.

AppLovin Corp. (1.72%) – a service that enables mobile app developers of all sizes to market, monetize, analyze, and publish their apps through its mobile advertising, marketing, and analytics platforms - was a top contributor to performance during the quarter. The stock continues to perform very well, supported by strong growth within its software segment and improving margins across the business. We believe APP is one of the most open-ended growth opportunities in the market. The ongoing normalization of both the mobile app and advertising industry continues to lift the stock higher, while solid execution, operational efficiency, and strong positioning relative to peers all remain key drivers of current and future growth. We believe AppLovin is well-positioned to benefit from long term, secular growth trends as it continues to leverage AI to benefit from the increasing demand for its programmatic mobile advertising platform as mobile publishers and developers seek to market and monetize their applications at an accelerated pace. We remain constructive on the stock and continue to believe that AppLovin's new machine learning model is more performant than any other solution on the market, positioning the company well within this ecosystem.

KLA Corp. (3.06%) – was a top detractor from returns during the quarter. The semiconductor manufacturing company provides best in class products and services to semiconductor companies. The company's shares came under pressure after a competitor reported earnings with a drawdown on bookings during the quarter which put into question the future demand of the foundry/logic market in which the company has more leverage to. That being said, the company did report earnings during the period, beating expectations and raising future guidance. This was driven by strong demand in advanced packaging and WFE (wafer fabrication equipment) supported by growth in strategic adaptations given China's challenges which led to a continued decrease of revenue proportion derived from the region. The company's strength alleviated some concerns around foundry/logic, and we continued to view the company positively. KLA Corporation is a favorite among the semiconductor capital equipment as it continues to outperform peers, and we believe that it is well positioned to benefit from current secular growth trends.

Top Ten Holdings

Company	Portfolio (%)
Alphabet Inc.	9.00
Microsoft Corp.	8.75
Meta Platforms Inc.	6.83
NVIDIA Corp.	5.16
Apple Inc.	4.92
Amazon.com, Inc.	4.77
Marvell Technology, Inc.	4.19
Broadcom Inc.	4.17
KLA Corp.	3.06
Equinix, Inc.	2.97

Data as of 12/31/2024.
Fund holdings and allocations shown are unaudited, and may not be representative of current or future investments. Fund holdings and allocations may not include the Fund's entire investment portfolio, which may change at any time. Fund holdings should not be relied on in making investment decisions and should not be construed as research or investment advice regarding particular securities. Current and future holdings are subject to risk.

Top Ten Overweights

Company	Overweight (%)
Marvell Technology, Inc.	3.89
Salesforce, Inc.	2.91
KLA Corp.	2.79
Meta Platforms Inc.	2.77
Equinix, Inc.	2.68
Visa Inc.	2.61
Dynatrace, Inc.	2.50
Accenture Plc.	2.29
Motorola Solutions, Inc.	2.26
Alphabet Inc.	2.13

Data as of 12/31/2024.
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Source: Goldman Sachs Asset Management, as of 31-Dec-2024.

Applied Materials Inc. (1.88%) – was a top detractor from relative returns during the quarter. AMAT is an American corporation that designs and manufactures systems to produce semiconductor chips and other advanced displays. Underperformance was largely driven by a slowdown in demand, as another semiconductor equipment maker (ASML) reported weak 3Q24 bookings and lowered its 2025 revenue outlook. Despite an underwhelming earnings report from ASML negatively impacting AMAT's performance, we believe this is an ASML specific issue. We remain constructive and believe AMAT is supported by one of the broadest technology and product portfolios in the industry, servicing a vital part of the semiconductor value chain which we believe will continue to experience strong demand from ongoing growth in AI and cloud computing. We view the stock as a long-term winner in the semi's equipment space with a strong track record of identifying tech inflections and addressing related customer requirements.

Portfolio Trades

Netflix Inc. (Buy, 2.23%) – We initiated Netflix Inc., the leading global streaming platform. We believe the stock is poised for growth over the next few years driven by subscriber expansion (<50% TAM penetration), pricing power fueled by market consolidation, unmatched content leadership and first-mover advantage in scaling its advertising platform. With engagement growing and strong operating leverage, we believe Netflix is well positioned to benefit from increased demand for streaming services.

Snap Inc. (Sell, 0.76%) – We exited our position in Snap, Inc., a technology and social media company known for its flagship product Snapchat, during the quarter. Ultimately, we decided to exit our position in the stock to reallocate capital into other names we believe are better positioned in the market and provide a stronger risk/reward profile.

Source: Goldman Sachs Asset Management, as of 31-Dec-2024.

OUTLOOK

Over the long-term, we believe there is a tremendous opportunity for innovative tech given the secular growth drivers of these businesses are accelerating.

We believe that:

- **A broadening opportunity set is driving increased innovation, creating new winners.** To date, key beneficiaries from the excitement around GenAI were concentrated in a narrow group of stocks. However, we continue to see several reasons why the investment landscape is likely to broaden, driving new opportunities for innovating companies. For example, we have trimmed some winners in the AI frenzy and allocated to the next set of beneficiaries (Data & Security and Applications), which we believe are well positioned for innovative growth in 2025.
- **The biggest beneficiaries exist in the public market, rather than the private equity market**. Unlike in previous tech transformations—where small, new, and often still private firms disrupted incumbents—public market companies appear best positioned to benefit from GenAI given their ability to fund the huge capital expenditure requirements and their access to vast datasets used to train AI models. Additionally, we are positive on the ROI from Hyperscalers related to AI as companies are beginning to capitalize and benefit from significant AI spending.
- **Careful stock selection and active management will be critical**. Looking ahead, we think there will be other semiconductor winners beyond NVIDIA. The need for robust datasets may focus investors' attention on data management companies, and embedding distilled, or less resource intensive and capable, AI models, on-device may kick off a new device replacement cycle. In a rapidly changing environment, we believe active management will be critical to investment success.

As the world continues to evolve and technological advancement occurs at a rapid pace, we believe active management is particularly important when seeking to capture the long-term wealth creation opportunity that AI presents.

Our alpha generation has been rooted in our quality focus and proprietary bottom-up fundamental analysis.

The stocks we own in the portfolio have shown strong fundamentals, margin expansion, and improved guidance despite a challenging macroeconomic environment, which we believe will continue to drive tech stocks higher in 2025 and beyond.

Source: Goldman Sachs Asset Management, as of 31-Dec-2024.

Definitions

Disinflation – when price inflation slows down temporarily

Soft landing – refers to a moderate economic slowdown following a period of growth

Bullish – Belief that prices will rise. Opposite of bearish.

REITs refers to **Real Estate Investment Trusts**

R&D refers to **Research and Development**

FX refers to **Foreign Exchange**

EV refers to Electric Vehicles

NTM P/E refers to a version of the ratio of price-to-earnings that uses forecasted earnings over the next 12 months for the P/E calculation

Consumer Price Index is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services

Mega Cap Tech Stocks is defined as companies with market capitalizations in excess of $100Bn

Magnificent 7 Tech Vendors is a group of seven (Apple, Alphabet, Amazon, Microsoft, Meta, NVIDIA, and Tesla) mega cap tech stocks

Personal Consumption Expenditure Index is a measurement of consumer payments and is used to reflect consumer behavior.

Total Addressable Market (TAM) refers to the size of a given opportunity.

Risk Considerations

The Goldman Sachs Technology Opportunities Fund invests primarily in equity investments in high quality technology, services, media or telecommunications companies that adopt or use technology to improve their cost structure, revenue opportunities or competitive advantage. The Fund's investments 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 or governments and/or general economic conditions. Because the Fund **concentrates its investments** in certain specific industries, the Fund is subject to greater risk of loss as a result of adverse economic, business or other developments affecting those industries than if its investments were more diversified across different industries. **Stock prices of technology and technology-related companies** in particular may be especially volatile. The securities of **mid- and small-capitalization companies** involve greater risks than those associated with larger, more established companies and may be subject to more abrupt or erratic price movements. **Foreign and emerging markets** investments may be more volatile and less liquid than investments in U.S. securities and are subject to the risks of currency fluctuations and adverse economic, social or political developments. **Different investment styles** (e.g., "growth", "value" or "quantitative") tend to shift in and out of favor, and at times the Fund may underperform other funds that invest in similar asset classes..

References to indices, benchmarks or other measures of relative market performance over a specified period of time are provided for your information only and do not imply that the portfolio will achieve similar results. The index composition may not reflect the manner in which a portfolio is constructed. While an adviser seeks to design a portfolio which reflects appropriate risk and return features, portfolio characteristics may deviate from those of the benchmark.

Index Benchmarks

Indices are unmanaged. The figures for the index reflect the reinvestment of all income or dividends, as applicable, but do not reflect the deduction of any fees or expenses which would reduce returns. Investors cannot invest directly in indices.

The indices referenced herein have been selected because they are well known, easily recognized by investors, and reflect those indices that the Investment Manager believes, in part based on industry practice, provide a suitable benchmark against which to evaluate the investment or broader market described herein.

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