Large Cap Growth Managed Account

Strategy Facts

The strategy seeks to invest in companies with sustainable competitive advantages, long-term structural growth drivers, attractive cash flow returns on invested capital, and management teams focused on creating long-term value for shareholders. The strategy's portfolio manager also aims to invest in companies when they trade at a significant discount to the estimate of intrinsic value.

Strategy AUM	$46.3 billion
Inception	7/1/2006**
Benchmark	Russell 1000® Growth
Portfolio Manager	Aziz Hamzaogullari
Manager Since	Inception

Portfolio Review

- The strategy posted positive returns of 6.27% (gross) and 5.50% (net wrap fee) vs. 2.20% for the Russell 1000® Growth Index, outperforming the benchmark by 4.07% gross during the fourth quarter. Boeing, Oracle, Visa, Nvidia, and Netflix were the five largest contributors to performance during the quarter. Tesla, Amazon, Alphabet, Meta Platforms, and PayPal Holdings were the five lowest contributors to performance.
- Stock selection in the information technology, industrials, communication services, and consumer staples sectors, as well as our allocations to the healthcare, consumer discretionary, and industrials sectors, contributed positively to relative performance. Stock selection in the healthcare and consumer discretionary sectors, as well as our allocations to the communication services, consumer staples, and information technology sectors, detracted from relative performance.
- The strategy is actively managed with a long-term, private equity approach to investing. Through our proprietary bottom-up research framework, we look to invest in those few high-quality businesses with sustainable competitive advantages and profitable growth when they trade at a significant discount to intrinsic value (our estimate of the true worth of a business, which we define as the present value of all expected future net cash flows to the company).

Top Ten Holdings (%)

Visa Inc.	6.9
Boeing Company	6.5
Alphabet Inc.	6.0
Microsoft Corporation	5.1
Oracle Corporation	4.9
NVIDIA Corporation	4.7
Amazon.com, Inc.	4.3
Monster Beverage Corporation	4.1
Netflix, Inc.	4.0
Autodesk, Inc.	3.7
Total	50.2

Data is based on total gross assets before any fees are paid; any cash held is included. The portfolio is actively managed and holdings are subject to change. References to specific securities or industries should not be considered a recommendation. Holdings may combine more than one security from the same issuer and related depositary receipts. Portfolio weight calculations include accrued interest. For current holdings, please visit www.loomissayles.com.

Large Cap Growth Managed Account Composite Performance as of December 31, 2022 (%)

	CUMULATIVE TOTAL RETURN		AVERAGE ANNUALIZED RETURN				
	3 MONTH	YTD	1 YEAR	3 YEAR	5 YEAR	10 YEAR	SINCE INCEPTION**
PURE GROSS*	6.27	-27.12	-27.12	5.00	8.59	13.85	11.94
NET WRAP FEE	5.50	-29.31	-29.31	1.94	5.44	10.56	8.70
BENCHMARK	2.20	-29.14	-29.14	7.79	10.96	14.10	10.72

**Pure Gross of fee account returns are time-weighted rates of return that do not reflect the deduction of any trading costs, fees, commissions or expenses. Net of fee account returns are the gross returns less the effective management fee for the measurement period.*

The Large Cap Growth Managed Account Composite's returns were calculated on a total return basis, and assume the reinvestment of dividends, capital gains and other earnings. The effective fee for an account is derived by applying the highest applicable fee based on the current standard fee schedule for the Composite. The fee amount is divided by the assets for an annual effective fee. The monthly effective fee is based on 1/12 of the annual effective fee. Net-of-total-wrap-fee results are calculated by taking the highest applicable fee for a managed account that a sponsor would have charged on an annual basis, and deducting one-twelfth of this annual fee from each monthly gross return. On an annual basis, the wrap fee schedule is 3.00% which includes trading costs, portfolio management, custody, advisory and other administrative fees.

For periods after November 1, 2020, 100% of the accounts are Managed/Bundled fee accounts which do not reflect the deduction of any trading costs, fees, commissions or expenses. Prior to November 1, 2020, 0.00% of the accounts are Managed/Bundled fee accounts which reflect the deduction of transaction costs because performance is from the Large Cap Growth Institutional Composite.

***Composite inception 7/1/2006. The portfolio manager for the Large Cap Growth Managed Account Composite joined Loomis Sayles on May 19, 2010, and performance prior to that date was achieved at his prior firm.*

Benchmark: Russell 1000® Growth Index.

There is no guarantee that the investment objective will be realized or that the strategy will generate positive or excess return. Actual accounts have the potential for loss as well as profit.

Past performance is no guarantee of future results.

Contributors

Boeing, Oracle, Visa, Nvidia, and Netflix were the five highest contributors during the quarter. We highlight the top three contributors, Boeing, Oracle, and Visa, below.

- Founded in 1916, **Boeing** is a global leader in the commercial and defense aerospace industries. The company manufactures commercial aircraft for passenger and cargo traffic as well as manned and unmanned military aircraft, missile and defense systems, satellites and launch systems, and other space and security systems. The company operates primarily through three segments: commercial airplanes (historically around 60% of revenues), defense, space and security (historically 20-25% of revenues), and global services (historically 15-20% of revenues). Along with Airbus, Boeing is part of a global duopoly that accounts for almost all commercial planes sold with greater than 125 seats – the largest market segment. The company serves customers in over 150 countries and non-US sales typically account for greater than 40% of total revenues.

  A strategy holding since the first quarter of 2020, Boeing's most-recently reported quarterly financial results were below consensus expectations for revenues and operating profit and included significant charges related to their defense business. However, the company generated positive quarterly free cash flow (FCF) for only the second time since the 737 MAX was first grounded in the first quarter of 2019. Shares also responded positively to the company's investor day projection that Boeing could generate $10 billion in annual free cash flow by the middle of the decade. Boeing continues to face execution issues across several programs. Despite the near-term challenges, we do not view the issues as structural and believe the long-term earnings power of the company remains unchanged and significantly underappreciated. Although supply chain issues continue to depress deliveries, Boeing has made significant progress with the 737 MAX, which is now cleared to fly in most countries with the major exception of China. The company had originally anticipated the MAX would be approved in China in 2022, but a combination of ongoing Covid flare-ups, an accident in March involving a predecessor to the MAX, and ongoing geopolitical tensions have left timing uncertain. As a result, given the very strong customer demand elsewhere and a significant backlog that equates to about a five-year waiting list, the company is looking to remarket some of the 138 aircraft currently being held in inventory for Chinese clients. Boeing has also faced challenges with its 787 model. After deliveries were halted for almost two years to address manufacturing flaws in the body of the aircraft and other faults, the company resumed deliveries during the third quarter and expects to clear its remaining inventory over the next two years. We believed the issues were temporary, not structural, and despite the halt the 787 was the most used widebody aircraft during the pandemic. We estimate that Boeing has approximately $43 billion of aircraft currently in inventory, including 270 MAXs and 115 787s, which will generate substantial revenue and cash flow as they are likely delivered over the next 12-to-24 months. As of September quarter-end, the backlog of $381 billion, or over 4,300 aircraft, was up 4% year over year. Despite still uneven quarterly results, air traffic recovery is underway, and absent further issues with the MAX and 787 we believe the company's long-term earnings power remains intact. The company's defense business incurred charges that spanned a number of its programs, with the common themes of labor availability, supply chain issues, price inflation, and macro uncertainty all contributing negatively. While the company expects cash flow in the segment to remain negative in 2023, the segment has historically been a strong free cash flow generator, which included a cumulative $7 billion in FCF over the prior two years.

  Boeing's financial results remain significantly impacted by the decline in global air travel due to Covid-19. At its low point in April 2020, travel demand, as measured by revenue passenger kilometer (RPK), which represents distance flown by paying passengers, had declined 94% from April 2019. And while demand has substantially improved outside of Asia, where China's since-lifted Covid restrictions depressed regional travel until recently, as an indicator, in November of 2022 RPK ex-Asia still remained 10% below November of 2019. We believe the impact of Covid-19, along with the 2019 grounding of the 737 MAX, the fourth generation of its most profitable airplane model, represented temporary, not structural, issues that created the opportunity to initiate our position. Since 1980, RPK has grown at a 5.3% compounded annual rate, and had been negative on just three prior occasions: during the 1991 Gulf War, following 9/11, and in 2009 after the financial crisis. While 2020 represented the fourth and by far the largest such occasion due to Covid-19, RPK has historically grown at approximately 1.5-times global GDP, which we expect will continue. We took advantage of this steepest-ever decline in global air travel to initiate our position in Boeing. While it may be a few years before travel returns to 2019 levels, over our long-term investment horizon we believe demand for global air travel will continue to grow at a mid-single-digit rate. More importantly, we believe that, as with many other cyclical growth businesses we successfully purchased in prior downturns. It is not the exact timing of the recovery, but rather the margin of safety that is created between the expectations embedded by the marketplace and what we believe will happen directionally over the long term that matters. We believe Boeing is one of only two companies globally which possess the requisite expertise and scale to profitably serve the global demand for commercial aircraft, and that its strong and sustainable competitive advantages would be very difficult to replicate.

Cyclical businesses often give rise to investor overreaction during the inevitable peaks and troughs. We believe the current market price is embedding expectations that the company will likely not return to its 2018 level of deliveries in the next ten years, and that margins are structurally impaired – both of which we believe are overly pessimistic versus our long-term expectations. As a result, we believe the company is selling at a significant discount to our estimate of intrinsic value and offers a compelling reward-to-risk opportunity.

- **Oracle** is a leader in the enterprise software market, with a strong market position in database, infrastructure and application software, and cloud-based software and services. The company's competitive advantages include its large direct sales force, a founder-driven management team that reinvests relentlessly to maintain a differentiated product suite and leading intellectual property portfolio, and a large installed base of clients with high switching costs where it consistently achieves client renewal and retention rates in the mid-90% range. We believe Oracle is well positioned to benefit from the continuing growth in data storage and enterprise application software, as well as the shift to cloud-based solutions.

  A holding in the portfolio since inception, Oracle's most recently reported quarterly financials were strong and better than consensus expectations for revenues, earnings before interest and taxes (EBIT), and earnings per share (EPS). Including the company's recent acquisition of Cerner, which was also a holding within our large and all cap growth portfolios, total revenue of $12.3 billion rose 25% year over year in constant currency. Organic revenue, excluding the Cerner acquisition, rose 9% year over year and was also above consensus expectations. At $10 billion, software sales represented 82% of total revenue and rose 14% year over year. Oracle's infrastructure business (53% of total software, cloud services and support revenue) grew 9% year over year – a sequential improvement from 7% growth in the previous quarter, benefiting from the company's autonomous database offering, which grew 50% in the quarter and already has thousands of customers following its 2018 launch. Oracle's cloud infrastructure grew by 69% versus the prior-year quarter. Oracle's applications business (47% of total software, cloud services and support revenue) generated 9% organic growth in constant currency. Driven by 26% growth in its strategic back office applications, which include its Fusion suite of cloud-enabled enterprise software solutions, the company experienced strong growth in several key cloud products such as enterprise resource planning (ERP), its NetSuite small-business ERP offering, and its software-as-a-service offerings, demonstrating the company's progress in transitioning to a cloud-based model and positioning the company to improve its growth rate over time. Collectively, the company's cloud revenues grew 48% year over year, and the company expects cloud revenues will grow in excess of 30% for the full 2023 fiscal year. While Oracle remains a world leader in its largest business segment, enterprise database software used in customer on-premise IT environments, the company continues to focus on transitioning its business from a traditional on-premise, up-front software licensing and maintenance revenue model to a cloud-computing subscription-based model where software revenue is recognized over the life of the client's contract. While there has been pressure on year-over-year overall revenue comparisons during this transition as up-front license revenue shifts to subscription revenue, we expect this to lead to faster growth over time due to a higher customer lifetime value as the transition progresses. The cloud model also allows Oracle to monetize its services and technology more efficiently and yield savings to the customer.

In Oracle's hardware segment, revenue of $850 million rose 16% year over year, which was also above consensus expectations. The hardware business accounted for approximately 7% of total revenue and a smaller percentage of total cash flow. With the ongoing transition to the cloud and faster growth in its larger software businesses, we expect hardware to continue to decline as a percentage of revenue and cash flow. In its services segment (about 11% of revenue), revenue of $1.4 billion rose 83% compared with the same quarter last year, benefiting from the acquisition of Cerner.

Even though the company is in the midst of a major business model transition, we believe Oracle's financials remain strong. Adjusted EBIT of $5.1 billion rose 18% versus the prior-year quarter in constant currency and was above consensus expectations. Operating margins declined approximately 500 basis points to 41%, due primarily to the inclusion of Cerner, which we expect will improve over time as the acquired company benefits from Oracle's technology and scale. Over the trailing twelve months, Oracle generated $8.4 billion in free cash flow, which rose 18% year over year and represented 18% of total revenue. Capital expenditures were up over 100% during that same period as Oracle continues to build capacity to support the strong growth in its cloud services. Following the acquisition of Cerner, the company continues to have a high degree of financial leverage, with long-term debt to capital of 82%. However, given its persistently strong cash flow and resulting debt servicing capability, we believe the balance sheet remains solid and expect the company to focus on decreasing leverage in the near to immediate term. We believe Oracle's stock price embeds free cash flow growth assumptions that are well below our long-term forecast. As a result, we believe its shares are selling at a significant discount to our estimate of intrinsic value and offer a compelling reward-to-risk opportunity.

- **Visa** is one of the largest payments technology companies in the world, with a comprehensive offering of digital payment products, including credit cards, debit cards – which Visa invented – a range of value-added services, and transaction security services known as tokenization. Visa has one of the world's most recognized brands, which took decades and significant investment to build. Through its open-loop, multi-party network, Visa has built a massive global network, orchestrating transaction settlements between merchants, merchants' banks, card-issuer banks, and cardholders in more than 200 countries. Visa does not issue cards or extend credit. It provides processing capabilities, each day authorizing hundreds of millions of transactions by cardholders, the exchange of financial information, and the settlement of funds to merchants. Visa receives fees for these services from both the card issuers and merchants' banks. The company has extensive client relationships, partnering with approximately 15,000 card-issuing banks. A growing global network with 4 billion Visa-branded payment credentials that are accepted by over 80 million merchants worldwide creates a powerful virtuous cycle, reinforcing Visa's difficult-to-replicate competitive advantages.

A holding in the strategy since its initial public offering (IPO) in the first quarter of 2008, Visa reported quarterly financial results that were strong and above consensus expectations for payment volumes, revenues, earnings before interest and taxes (EBIT), and earnings per share (EPS). Visa also provided its initial revenue guidance for 2023 which calls for revenue growth in the mid-teens in constant currency when excluding the impact of suspending its Russian operations which are expected to lower growth by two percentage points. We believe industry leader Visa remains well positioned to benefit from the long-term, global shift from cash and checks to digital payments. Despite the ongoing, near-term impact of Covid-19, Visa continues to manage and invest with a long-term focus to digitize the cash in consumer payments through technology, increased endpoint acceptance, and partnerships to capture new payment flows, and to drive growth in value-added services. Between Visa's card credentials and network-of-networks strategy, the company now reaches over 5 billion consumers, globally.

For the quarter, net operating revenues rose 23% in constant currency to $7.8 billion. Total payment volumes increased 10% compared with the same quarter last year, with 4% growth in debit card transactions and 17% growth in credit volumes. Services revenue represented 33% of gross revenue and increased 11% year over year, driven by payment volumes. Data processing revenue accounted for 35% of gross revenue and also grew 10% year over year, driven by processed transactions as well as value added services. International transaction revenue accounted for approximately 27% of revenue and rose 52% versus the prior year quarter, driven by a recovery in cross-border volumes (excluding intra-European transactions), which rose 49%. Value-added services, which are reflected in multiple reporting segments, grew just under 20% year over year. Visa operates in a large addressable market and continues to benefit from a long-term secular shift from cash and checks to digital payments. We believe the company's primary addressable market is the approximately $45 trillion of global personal consumption expenditures (PCE) outside of China, where the company is not currently operating. Of this amount we estimate that over 50% of the dollar volume and a greater share of transaction volumes are still paper-based. While Visa captures an estimated 60% share of global electronic payments outside of China, Visa's share represents only about 24% of global PCE, and we believe its growth opportunities remain very large. In addition to its consumer payments business, Visa has large growth opportunities stemming from its ability to offer value-added services as well as network solutions arising from new payment flows. In aggregate, these new segments represent an estimated $185 trillion of addressable spending.

Attractive operating margins of 65% were flat versus the prior year. The company continues to invest significantly in its long-term initiatives, including accelerating revenue growth through consumer payments, new flows, and value added services, while simultaneously investing in its brand, security, technology, and talent – all of which we view favorably. Free cash flow of $5.6 billion increased 48% year over year and reflected a strong conversion rate of 71% of revenues. Management continues to be active in returning capital to shareholders, repurchasing about $2 billion in outstanding shares and paying $794 million in dividends during the quarter. The Board also authorized a new $12 billion repurchase plan. The balance sheet is solid, with $20.6 billion in cash and investments and total debt to equity of approximately 57%. Visa ended the quarter with 4 billion payment credentials globally, up 9% year over year.

In November, Visa announced that CEO Al Kelly would step down effective February 1, 2023, and be replaced by Visa's current president, Ryan McInerney. Kelly, who has served as CEO since 2016 and Chairman of the Board since 2019, will transition to the role of executive chairman. McInenery has served as President since joining the company in 2013 and his experience at Visa has included running its global business, market teams, business units, product and merchant teams, and client services. Prior to joining Visa, he served as the CEO of consumer banking at JPMorgan and has a strong background in all aspects of the payments value chain, including global financial institutions, merchant acquirers, partners, and governments. We have met McInerney over the years and have found him to be a solid strategic thinker, who as President of Visa developed and implemented the current strategy which includes a focus on new payment flows and value-added services that we believe will contribute positively to long-term growth. We believe McInerney was being groomed to eventually succeed Kelly and don't expect any change in the company's strategy as a result of the transition.

We expect Visa to generate low-double-digit revenue growth over our investment time horizon as the company continues to benefit from the secular growth in digital payments. We believe the assumptions embedded in Visa's share price underestimate the company's significant long-term growth opportunities and the sustainability of its business model. As a result, we believe the company's shares currently sell at a significant discount to our estimate of intrinsic value and offer a compelling reward-to-risk opportunity.

Detractors

Tesla, Amazon, Alphabet, Meta Platforms, and PayPal Holdings were the five lowest contributors to performance during the quarter. We highlight the top three detractors, Tesla, Amazon, and Alphabet, below.

- Founded in 2003, **Tesla** is the global leader in the design, manufacturing, and sales of high-performance fully electric vehicles (EVs). The company's automotive unit sells its products directly to customers through its website and retail locations and continues to grow its customer-facing infrastructure through a global network of vehicle service centers, mobile service technicians, body shops, Supercharger stations, and Destination Chargers to accelerate widespread adoption of its products. Tesla also designs, manufactures, sells, and installs solar energy generation and energy storage products to residential, commercial, and industrial clients through its energy generation and storage unit. The company generates approximately 95% of its sales from its automotive segment and 5% from its energy generation and storage segment. From a geographic standpoint, the US and China are the company's two largest markets, accounting for approximately 45% and 25% of sales, respectively, while the rest of the world collectively accounts for approximately 30%.

  We believe Tesla's strong and sustainable competitive advantages include its brand, focus and business model, scale, and entrepreneurial culture. With a mission that includes accelerating the world's transition to sustainable energy, no other brand is more-closely associated with EVs, and the company has become the dominant global EV manufacturer with over 20% global market share. Tesla's focus and business model have enabled it to substantially disrupt the automotive industry, maintain a first-mover advantage, and capture structural cost advantages. We believe it could take peers more than a decade to replicate Tesla's collective competitive advantages if they are able to do so at all.

A new purchase in the first quarter of 2022, Tesla's most-recently reported quarterly financial results were slightly below consensus expectations but nonetheless reflected impressive growth and profitability and included record revenue, operating profit, and free cash flow. Share price declines may reflect investors' concern with a slowdown in the pace of sales, especially in China, a decline in market share as measured by EV unit volume, recent price reductions, and Founder and CEO Elon Musk's purchase of Twitter, which raises potential questions both about Musk's focus as well as the risk that Musk's political views could alienate some would-be Tesla buyers. While we recognize these as legitimate concerns and continue to monitor each, they do not impact our structural investment thesis for the company. Due to economic weakness across many economies, in particular China, we have seen a slowdown in overall automotive sales which has also impacted the EV market. Tesla, while possessing a higher EV revenue share than its EV unit share, has seen both its unit and revenue share fall. However, this was largely a function of the company not yet having adequate capacity to meet global demand despite its factories operating at over 95% production utilization. Tesla recently expanded EV capacity through its Texas and Berlin factories which have increased its capacity from 1.3 million vehicles to over 2 million vehicles, which we believe will be sufficient capacity to meet future demand.

With respect to recent price reductions, the company has a pricing strategy under which it prices its vehicles to maximize overall profit dollars. Historically the company had reduced prices annually as it leveraged its growing scale to lower the total cost of ownership for potential buyers and drive EV adoption. However, over the last year as the company faced production limitations due to its already high production utilization, the company utilized pricing to recover elevated cost pressures while sustaining strong EV demand. Now with production utilization declining to approximately 70% due to the addition of Texas and Berlin Gigafactories, along with broader economic weakness resulting in weaker demand that we believe is short term, Tesla has reduced prices on its Model 3 and Model Y brands to spur demand. We believe this is the correct strategy as long as Tesla continues to protect its brand equity, which is one of the most important intangible assets for the Company. Given Tesla manufacturing factories have high fixed costs which benefit from scale, so increasing EV sales from current levels would improve production utilization and generate higher profit per vehicle. Even through this industry slowdown, Tesla has continued to show market share gains as a percentage of total light duty vehicles. We believe as near-term cyclical economic weakness subsides overall automotive sales in China and other markets will recover and Tesla will grow even faster.

In 2022, based on Kantar Millward Brown's Global Brands research, Tesla expanded its already leading brand equity among automotive companies to more than twice that of its nearest competitor, Toyota. In addition, among all global brands surveyed, the Tesla brand ranked 4th with respect to brand equity growth in 2022, behind only Cartier, YouTube, and Google. We believe this reflects the company's still-strong brand equity and ongoing consumer loyalty and demand. And while we recognize that Musk's actions and statements as the owner of Twitter could potentially impact Tesla's brand with some consumers and prefer that his sole focus was on building and broadening Tesla's brand appeal to minimize risk, we will continue to monitor any long-term impact and continue to communicate with the company that protecting this great intangible asset is key to the future of the company. .

We have invested successfully in a number of companies such as Oracle and Amazon where visionary founders have at times found themselves at odds with investors and the public in the course of creating tremendous shareholder value. While we continue to monitor any potential impact to Tesla, we view Musk's decision to step down as CEO of Twitter once he finds a suitable successor as a positive development. And while questions remain about his focus, we believe Musk has long demonstrated an ability to multi-task that exceeds most individuals. Even during Tesla's earlier days when it had yet to demonstrate long-term viability, Musk was also simultaneously running his SpaceX and Boring Co ventures. And while Musk is by far the most visible member of Tesla management, we believe the company has a strong team that includes many key engineers that have enabled the company to achieve its success to date. Importantly, given the long-tailed nature of the opportunity and the planning required to capture that opportunity, we believe the company has already taken the actions and established the road map that will help sustain its business over our investment horizon. The company has already constructed the factories that will support growth in its current line-up of EV models, and it has established plans for the build-out of future factories. The company's full self-driving (FSD) software, which we believe will drive substantial incremental profitability over the next decade, is already in beta testing and is now available to all cars capable in North America as of year-end. As a result, we believe the company's key value drivers are in place as a result of visionary, long-term decisions made long ago by Musk, and that execution should be far more seamless than during earlier phases of business development. Because of the platform he has built and the principles he has institutionalized, we believe the company's road map over the next decade is solid and could be successfully executed by a competent management team. Because much of the near-term planning has been done, it is already allowing Musk to focus his efforts on the next 15 and 20 years as he is doing with Tesla's research into robots and other initiatives. Finally, we believe Musk's ownership and compensation structure are closely aligned with the interests of long-term shareholders.

Gross margins declined from the previous quarter due to higher commodity inflation and production inefficiencies at its now ramped Berlin and Texas Gigafactories. However, operating margins expanded over 260 basis points year over year to 17%, and the company's trailing-twelve-month operating margins already exceed all major auto manufacturers. In October, the company announced that it was lowering prices on its Model 3 and Model Y vehicles in China after material price increases in 2021. While some have viewed these actions as evidence of softening demand (which has occurred) and growing competition in China, the new pricing level enables the cars to qualify for EV subsidies in China and is consistent with the company's history of passing on cost savings to consumers and lowering the total cost of ownership versus internal combustion engine vehicles. Despite greater competition that includes a number of pure EV players, we believe Tesla's brand will enable it to sustain its China market share in the double digits, with a greater share of revenue and profits. As a result of EV market growth, we expect Tesla to expand its share of China's total light vehicle sales from the low-single digits to approach a mid-teens share. Importantly, while the EV market in China is currently growing in part due to the introduction of lower cost EVs from manufacturers that have yet to demonstrate profitability, contributing to a near-term decline in Tesla's share of EVs on a unit basis, we do not view these companies as Tesla's core competitors. We believe consumers buying EV models that can cost as little as 25% of some Tesla models are not likely Tesla buyers. In China, we estimate that Tesla's revenue share is two times its unit share, and that it captures an even larger share of the profitability of the industry as most competitors are still unprofitable.

We believe the secular growth driver for Tesla is increasing penetration of electric vehicles as a share of global automotive sales. Around the world, EVs accounted for almost 10% of new light vehicle sales in 2022, with penetration rates ranging from mid-single digits in North America to low double-digits in Western Europe and almost 20% in China. We believe the pace of EV adoption will accelerate, driven by advances in battery technology that will drive cost parity, lower ongoing cost of ownership for consumers, government incentives, and numerous global initiatives to phase out internal combustion engine sales over the next two decades. Tesla is the global leader in EV sales, with approximately 20% unit share, 25% revenue share, and a much higher share of industry profitability. While we expect competition to increase substantially, we believe Tesla's superior brand, focus, technology leadership, and strong ongoing consumer demand will help enable the company to maintain its leading global market share. Tesla recently announced an enhanced autopilot feature for customers who only want self-driving functionality on highways. While we believe most consumers will adopt full self-driving (FSD functionality over the long term, at 50% of the cost of FSD, we believe the enhanced autopilot option will accelerate uptake of its software offerings. Both software offerings possess significant profit margins over the current company average and we believe they will drive strong profit growth. Over time, we believe uptake of high-margin software capabilities, which we believe can increase from 0% of profits today to approximately 25%, will contribute to expanding the company's already leading operating margins. We believe the assumptions embedded in Tesla's share price underestimate the company's significant long-term growth opportunities and the sustainability of its global market share. We believe the company's shares currently sell at a significant discount to our estimate of intrinsic value and thereby offer a compelling reward-to-risk opportunity. We took advantage of near-term price weakness to add to our position on multiple occasions during the quarter.

- Online retailer **Amazon** offers millions of products – sold by Amazon or by third parties – with the value proposition to consumers of selection, price, and convenience. Amazon's enterprise IT business, Amazon Web Services (AWS), offers a suite of secure, on-demand, cloud-computing services, with a value proposition to clients of speed, agility, and savings. In both of its core markets, Amazon possesses strong and sustainable competitive advantages that would be difficult for competitors to replicate. In e-commerce, these include its brand, scale, technology platform, network advantage, and logistics and distribution systems. AWS benefits from its brand, technology platform, and massive scale which allows it to pass along cost savings while continuing to innovate. Growing well in excess of their underlying markets, both of Amazon's businesses are gaining market share. Led by visionary founder and Executive Chairman Jeff Bezos, Amazon invests aggressively to expand and leverage its customer base, brand, and infrastructure, targeting businesses with strong financial returns that are anticipated to offer large and enduring growth opportunities.

  A portfolio holding since strategy inception, Amazon's most-recently reported quarterly financial results were fundamentally solid and included revenue and operating profit that were above management guidance but in line with or below consensus expectations. The company also provided guidance for the fourth quarter that was below expectations for revenue and operating profit and reflected macroeconomic weakness the company began to experience in the third quarter. Amazon has been facing short-term cost inflation that contributed to an incremental $4 billion in expense during the prior quarter. While a portion of the additional expense is outside of Amazon's direct control, including higher shipping, fuel, and labor costs, approximately two-thirds stemmed from Amazon's strategic decision to invest in labor to make up for Covid-related employee absences, as well as investments undertaken to ensure that its fulfillment and transportation network remained unconstrained during the pandemic. In the most recent quarter, the company reported $1 billion of cost improvements driven by higher leverage of its fixed costs and productivity improvement in fulfillment. While expense pressures are expected to persist for the foreseeable future, the company expects to further lower costs in the first half of 2023. We expect that Amazon will continue to take steps to mitigate external cost inflation and that given its long-tailed secular growth opportunities, it will realize greater productivity and fixed cost leverage over time from its investments in labor, fulfillment, and distribution. We believe Amazon is one of the best-positioned companies in e-commerce and enterprise IT – in each case addressing large, underpenetrated markets that benefit from secular growth that is still in its early stages. In both of its core markets, we believe Amazon possesses strong and sustainable competitive advantages that would be difficult for competitors to replicate. The company's near-term expense challenges do not impact our long-term view of Amazon's quality, growth, or the attractiveness of its reward-to-risk proposition.

For the quarter, net sales of $127 billion increased 19% year over year in constant currency. E-commerce and related revenue, including third-party services, advertising, and retail subscription services such as Prime membership and digital media subscriptions, accounted for approximately 80% of total net sales and grew by a mid-teens percentage year over year. The company recently broke out its advertising revenue for the first time, which was $9.5 billion in the quarter and grew approximately 30% year over year, well above the growth in advertising as a whole. North America accounted for approximately 74% of e-commerce and physical store sales, while Amazon's international segment contributed approximately 26%. Comprising 16% of total net sales at $20.5 billion, AWS revenue grew 28% in constant currency compared with the year-ago quarter, significantly faster than our estimate for global enterprise IT spending. Amazon is the world's largest cloud vendor, almost two times the size of the next largest competitor, Microsoft, and as large as the next four competitors combined.

Amazon's sales mix has been shifting over the past few years to higher-margin product categories such as third-party e-commerce sales, AWS, and advertising. Gross margins for the quarter rose 150 basis points year over year to 45%. Overall, Amazon reported adjusted operating income of $8.1 billion, down 1% compared with the year-ago quarter as the company continues to invest heavily. Overall operating margins declined 80 basis points from the year-ago quarter to 6.4%. From a segment standpoint, North America generated an operating loss of $0.4 billion, and operating margins of -0.5% were below prior year margins of 1.3%. Amazon's international segment generated an operating profit margin of -8.9%, which declined from -3% in the prior-year period. AWS grew operating income by 11% to $5.4 billion, with operating margins of 26% that declined 400 basis points versus the year-ago quarter. Over the trailing twelve months, the company generated positive operating cash flow of $40 billion, but recorded a free cash outflow of $19.7 billion due largely to capital expenditures, elevated cost pressures, and heavy investment spending. These near-term costs and investments do not impact our long-term view of the quality of Amazon's financial profile.

On a global basis, e-commerce represents approximately 12% of an estimated $20 trillion of global retail sales outside of China, where Amazon does not have a substantial presence. We estimate that Amazon generated approximately $550 billion in gross merchandise volume in 2021, which would represent market share of total e-commerce across these markets in the mid-20% range and approximately 3% of total retail sales. We believe a long-term, secular shift from traditional brick-and-mortar retail to e-commerce is still in its early stages and that e-commerce will come to represent a significantly higher portion of the global retail market. We believe Amazon's structural operational advantages, network effect, and relentless focus on customer service position the company to grow faster and more efficiently than its traditional or online retail competitors. We also believe AWS is well positioned in the nascent and underpenetrated cloud-computing services market. We estimate the segment can realize mid-teens compounded annual revenue growth with operating margins improving to the mid-30% range. As a result, we believe the long-term operating profit potential of AWS can approach 50% or more of the company's core retail opportunity. Over our investment time horizon, we believe Amazon can sustain low-teens revenue growth and faster growth in operating profits and free cash flow that is not currently reflected in the share price. As a result, we believe the company is selling at a significant discount to our estimate of intrinsic value and offers a compelling reward-to-risk opportunity.

- **Alphabet** is a holding company which owns a collection of businesses, the largest and most important of which by far is Google. Google is the global leader in online search and advertising and also offers cloud solutions to businesses and consumers globally, with a goal of organizing the world's information and making it universally accessible and useful. Google dominates the US and global search market with a greater than 80% share of search volumes. As a function of seeing more searches, Google is able to provide better search results, resulting in a higher customer conversion rate for advertisers and enabling Google to capture a leading share of search revenue. Google's large network of consumers, advertisers, and publishers is a powerful business ecosystem as third-party participants such as marketing affiliates and independent software vendors add value to the user experience. As a result, consumers get their best and most relevant search results and advertisers get the best returns on their advertising dollars. Such a robust ecosystem attracts increasing numbers of participants and thereby creates a virtuous cycle for a sustainable business model and long-term growth. In its emerging cloud business, we estimate that Google captures less than 10% market share of the global market for public cloud services. We believe Google remains one of the few global companies that has the scale, R&D, and technical talent to effectively compete in this market over the long term. Non-Google businesses comprise less than 1% of Alphabet revenues and are held in the company's Other Bets segment.

  A holding in the portfolio since inception, Alphabet reported quarterly financial results that were generally below consensus expectations due to significant currency impacts, elevated investments, and some cyclical weakness in advertising. These inevitable periods of macroeconomic weakness and elevated investment cycles do not impact our long-term view of Alphabet's quality and growth, or the attractiveness of its reward-to-risk proposition.

  Total revenue of $69 billion represented an 11% increase year over year in constant currency which was approximately 2.7% below consensus expectations. Reported earnings per share declined 24% and were 17% below expectations, due in part to lower-than-expected operating income and unrealized losses in the value of its equity investments. Alphabet reports results in three segments: Google Services, Google Cloud, and Other Bets. Google Services reported quarterly revenue of $61.4 billion, which rose 2% year over year and represented approximately 90% of total revenue. Advertising revenue accounted for 89% of Google Services revenue and grew 3% compared with the year-ago quarter, benefiting from the secular shift of advertising to online and mobile platforms. Advertising revenue growth was driven by the search business, which benefited from strong growth in retail and a recovery in travel spending and rose 4% year over year. The company did see a continued slowdown from some advertisers in its YouTube and network advertising businesses, which each saw a 2% decline in revenues. YouTube's growth followed strong 43% growth in the prior-year period and was also negatively impacted by currency effects. As with other platforms, the company is transitioning to short-form videos, where monetization is currently lower. However, the company reported that YouTube Shorts were being watched each month by over 1.5 billion signed-in users, and that they were receiving over 30 billion daily views. Non-advertising revenue, which includes Google Play, hardware, and YouTube non-advertising revenues such as subscriptions, represented 11% of Google Services revenues and increased 2% year over year. The company experienced strong growth in YouTube subscriptions such as Premium Music and YouTube TV and growth in hardware that was partially offset by a decline in Google Play revenues following a 2021 reduction of fees intended to support the growth of its app developers.

Google Cloud reported quarterly revenue of $6.9 billion, which rose 38% year over year and represented 10% of total revenue. Google's cloud business includes Google Cloud Platform (GCP), the company's infrastructure- and platform-as-a-service offerings, and G Suite, which includes the company's software-as-a-service offerings such as Gmail, Docs, Drive, and Calendar. Cloud growth was led by GCP, which grew well above the overall cloud business, benefiting from growth in infrastructure and platform services. The segment generated an operating loss of $699 million on EBIT (earnings before interest and taxes) margins of -10%, which improved by 300 basis points year over year. The operating loss reflects substantial up-front investments that the company is making to drive long-term growth in advance of revenue. Significant areas of investment include a direct sales force that has tripled over the past few years and substantial expansion of distribution via partners, large investments in its product offerings that are being tailored for six industry verticals, and expansion of network computing capacity to serve customers around the world. Alphabet's Other Bets segment reported revenue of $209 million that increased 15% year over year and represented 0.3% of total revenues. Many of these businesses are still early stage and results are volatile on a quarterly basis. Revenue in this segment is currently driven by Fiber and Verily. We believe Google's key revenue drivers of mobile search, YouTube, programmatic advertising, and an emerging cloud business that is Google's fastest growing business, each continue to benefit from secular drivers including increased mobility, video advertising, better use of advertising technology to drive performance, and increased penetration of public cloud services.

Alphabet continues to have a high-quality financial profile and strong financial position. The company reported adjusted operating margins of 30%, which declined 900 basis points year over year due to a decline in gross margins arising from an increase in other cost of goods sold, as well as increases in hiring, R&D, and advertising and promotional spending. The company previously announced that it would be moderating its hiring and increasing its cost focus which should begin to be reflected in 2023 results. Google's attractive financial model generates strong free cash flow and earns high returns on invested capital, enabling it to reinvest significantly in its business. Over the past five years, Google has invested over $120 billion in R&D, an amount very few other companies could replicate. In the quarter, Alphabet generated free cash flow of $16 billion that declined 14% year over year and represented 23% of revenue. Capital expenditures increased by 7% year over year to $7.3 billion and represented 10% of gross revenue. The company's capital expenditures continue to focus on technical infrastructure spending required to support growth, including servers.

We believe market expectations underestimate Alphabet's long-term sustainable growth rate. Therefore, we believe the company is selling at a significant discount to our estimate of intrinsic value and offers a compelling reward-to-risk opportunity.

Outlook

- Our investment process is characterized by bottom-up, fundamental research and a long-term investment time horizon. The nature of the process has led to a lower-turnover portfolio in which sector positioning is the result of stock selection.

- At quarter end, we were overweight in the communication services, healthcare, industrials, and financials sectors. We were underweight in the information technology, consumer staples, and consumer discretionary sectors. We held no positions in the energy, real estate, materials, or utilities sectors. We remain committed to our long-term investment approach to invest in those few high quality businesses with sustainable competitive advantages and profitable growth when they trade at a significant discount to intrinsic value. Though we have no stated portfolio turnover target, as a result of our long-term investment horizon, our estimated annualized portfolio turnover is approximately 12.6% since the inception of the strategy on July 1, 2006. The overall portfolio discount to intrinsic value was approximately 48.0% as of December 31, 2022.

Important Disclosure

Loomis, Sayles & Co., L.P. ("Loomis Sayles") acts as a discretionary investment manager or non-discretionary model provider in a variety of separately managed account or wrap fee programs (each, an "SMA Program") sponsored by a third party investment adviser, broker-dealer or other financial services firm (a "Sponsor"). When acting as a discretionary investment manager, Loomis Sayles is responsible for implementing trades in SMA Program accounts. When acting as a non-discretionary model provider, Loomis Sayles' responsibility is limited to providing non-discretionary investment recommendations (in the form of a model portfolio) to the SMA Program Sponsor or overlay manager, and the Sponsor or overlay manager may utilize such recommendations in connection with its management of its clients' SMA Program accounts. In such "model-based" SMA Programs ("Model-Based Programs"), it is the Sponsor or overlay manager, and not Loomis Sayles, which serves as the investment manager to, and has trade implementation responsibility for, the Model-Based Program accounts, and may customize each client account according to the reasonable restrictions or customization that a client may request.

Key Risks: *Equity Risk, Market Risk, Non-US Securities Risk, Liquidity Risk. Investing involves risk including possible loss of principal.*

Gross returns are net of trading costs. Net returns are gross returns less wrap fees.

The portfolio manager for the Large Cap Growth Managed Account Composite joined Loomis Sayles on May 19, 2010, and performance prior to that date was achieved at his prior firm.

Top and bottom holdings may not be representative of current or future holdings and will evolve over time. The examples above do not represent all securities purchased, sold or recommended for client accounts. They should not be considered specific investment recommendations or representative of other investments made by Loomis Sayles. A list showing the contribution of each holding to the overall performance of the representative account during the measurement period is available upon request.

Holdings analysis is shown for a representative account as supplemental information. Due to systems limitations it is difficult to analyze holdings on a composite basis. This representative account was selected because it closely reflects the Loomis Sayles Large Cap Growth investment strategy. Due to guideline restrictions and other factors, there is some dispersion between the returns of this account and other accounts managed in the Large Cap Growth investment style.

This marketing communication is provided for informational purposes only and should not be construed as investment advice. Any opinions or forecasts contained herein reflect the subjective judgments and assumptions of the authors only and do not necessarily reflect the views of Loomis, Sayles & Company, L.P. Investment recommendations may be inconsistent with these opinions. There is no assurance that developments will transpire as forecasted and actual results will be different. Information, including that obtained from outside sources, is believed to be correct, but Loomis cannot guarantee its accuracy. This information is subject to change at any time without notice. Market conditions are extremely fluid and change frequently.

The Large Cap Growth Managed Account Composite includes all discretionary Managed Accounts with market values greater than $100 thousand managed by Loomis Sayles that seek to produce long-term excess returns at or below benchmark risk over a full market cycle relative to the Russell 1000 Growth Index and generally within the market capitalization range of the Index. As of November 1, 2020, the Composite was redefined to include only Managed Accounts. Prior to the redefinition, the Composite included separate and commingled accounts. Performance results prior to November 1, 2020 are those of the Large Cap Growth Composite. The Composite inception date is July 1, 2006. The Composite was created in 2019.For additional information on this and other Loomis Sayles strategies, please visit our web site at www.loomissayles.com.

Diversification does not ensure a profit or guarantee against a loss.

Any investment that has the possibility for profits also has the possibility of losses, including the loss of principal.

There is no guarantee that the investment objective will be realized or that the strategy will generate positive or excess return. Actual accounts have the potential for loss as well as profit.

Past performance is no guarantee of future results.