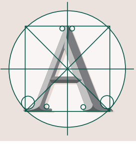

Artisan U.S. Mid-Cap Growth Strategy

QUARTERLY
Commentary

As of 31 December 2022

Investment Process

We seek to invest in companies that possess franchise characteristics, are benefiting from an accelerating profit cycle and are trading at a discount to our estimate of private market value. Our investment process focuses on two distinct elements—security selection and capital allocation. We overlay our investment process with broad knowledge of the global economy.

Security Selection

We seek to identify companies that have franchise characteristics (e.g., low-cost production capability, possession of a proprietary asset, dominant market share or a defensible brand name), are benefiting from an accelerating profit cycle and are trading at a discount to our estimate of private market value. We also assess key environmental, social and governance (ESG) issues that could impact future stock returns. We look for companies that are well positioned for long-term growth, which is driven by demand for their products and services, at an early enough stage in their profit cycle to benefit from the increased cash flows produced by the emerging profit cycle.

Capital Allocation

Based on our fundamental analysis of a company's profit cycle, we divide the portfolio into three parts. Garden℠ investments are small positions in the early part of their profit cycle that may warrant more sizeable allocations as their profit cycle accelerates. Crop℠ investments are positions that are being increased to a full weight because they are moving through the strongest part of their profit cycles. Harvest℠ investments are positions that are being reduced as they near our estimates of full valuation or their profit cycles begin to decelerate.

Broad Knowledge

We overlay the security selection and capital allocation elements of our investment process with a desire to invest opportunistically across the entire global economy. We seek broad knowledge of the global economy in order to find growth wherever it occurs.

Team Overview

We believe deep industry expertise, broad investment knowledge, a highly collaborative decision-making process and individual accountability are a powerful combination. Since the inception of the team, we have been committed to building a team of growth investors that retains these attributes and is solely dedicated to our process and approach.

Portfolio Management

Matthew H. Kamm, CFA
Portfolio Manager (Lead)

James D. Hamel, CFA
Portfolio Manager

Craigh A. Cepukenas, CFA
Portfolio Manager

Jason L. White, CFA
Portfolio Manager

Jay C. Warner, CFA
Portfolio Manager

Investment Results (% USD)

As of 31 December 2022	QTD	YTD	1 Yr (Average Annual Total Returns)	3 Yr	5 Yr	10 Yr	Inception[1]
Composite — Gross	**-0.89**	**-36.04**	**-36.04**	**4.51**	**9.18**	**11.30**	**13.90**
Composite — Net	**-1.12**	**-36.65**	**-36.65**	**3.55**	**8.18**	**10.28**	**12.84**
Russell Midcap® Growth Index	6.90	-26.72	-26.72	3.85	7.64	11.40	8.96
Russell Midcap® Index	9.18	-17.32	-17.32	5.87	7.10	10.95	9.86

Annual Returns (% USD) 12 months ended 31 December

	2018	2019	2020	2021	2022
Composite — Net	**-3.64**	**38.52**	**58.38**	**10.66**	**-36.65**

Source: Artisan Partners/Russell. Returns for periods less than one year are not annualized. [1]Composite inception: 1 April 1997.

Past performance does not guarantee and is not a reliable indicator of future results. Current performance may be lower or higher than the performance shown. Composite performance has been presented in both gross and net of investment management fees.

Investment Risks: Investments will rise and fall with market fluctuations and investor capital is at risk. Investors investing in strategies denominated in non-local currency should be aware of the risk of currency exchange fluctuations that may cause a loss of principal. These risks, among others, are further described near the back of this document, which should be read in conjunction with this material.

Investing Environment

Stock markets rounded off a tumultuous year with gains in Q4. Investor focus seemed to bounce between ongoing caution from the Federal Reserve (Fed) and indications that the pace of elevated inflation could be cooling. The latest consumer price index (CPI) print in November showed inflation slowed to 0.1% (month-on-month) versus 0.4% in October. At 7.1% year on year, inflation remains elevated but is trending downward from the 9.1% high reached in June.

The Fed's final rate hike of the year was pared back to 50bps after four consecutive 75bp moves, and the Federal Funds rate target now stands at 4.25%–4.50%, a 15-year high. The cumulative 4.25% increase experienced in 2022 will go down as one of the fastest paces of financial tightening in history and will likely continue its upward trajectory in 2023 with the Fed's "dot plot" messaging that the current intent is for another 75bps in increases. Following the December meeting, Fed Chair Jerome Powell indicated that inflation data during Q4 has been encouraging but that it will take "substantially more evidence" to ensure that modest price increases are sustainable.

Various data released toward the end of the year (manufacturing indices, retail sales, housing activity, etc.) showed evidence that economic activity is slowing, suggesting the tightened financial conditions are having their desired impact to slow the economy and bring inflation down to target levels. However, complicating this narrative is the continued resilience of the labor market. Job growth remains solid as nonfarm payrolls increased 223,000 (versus 200,000 expectations) in December and the unemployment rate ticked down from 3.7% to 3.5%, reinforcing the Fed's aggressive action.

The Russell 3000® Index returned 7% for the quarter. The best performing sectors were energy (+21%), industrials (+17%) and materials (+16%). The two sectors producing losses were consumer discretionary (-7%) and communication services (-2%). Energy stocks posted especially strong gains, with sector heavyweights Exxon and Chevron posting record profits in the quarter. Consumer discretionary weakness was largely driven by the outsized influence of Amazon and Tesla, which fell -26% and -54%, respectively. From a size perspective, small cap underperformed large cap, and stylistically, growth stocks underperformed value. The NASDAQ 100 Index posted a slightly negative return, weighed down by information technology stocks that broadly released underwhelming earnings in the quarter.

Elsewhere in the world, both developed and emerging markets performed well in Q4 with the MSCI Emerging Markets Index returning 10% and the MSCI EAFE Index returning 17% in USD terms. Within emerging markets, China rallied in November after US President Joe Biden and Chinese leader Xi Jinping signaled a desire to improve US-China relations at a meeting ahead of the G20 summit in Indonesia. And the recovery continued in December after China loosened its pandemic restrictions that have constrained economic growth. Foreign developed markets rallied in Q4, supported by generally positive inflation developments across the euro zone. Specifically in the UK, markets rebounded after the resignation of prime minister Liz Truss and the abandonment of her fiscal spending and tax cut plan. Non-US markets also benefited (in USD terms) from USD weakness as the dollar index lost -8% in Q4, though ended 2022 8% higher than a year ago.

Performance Discussion

Our portfolio trailed the Russell Midcap® Growth Index in Q4. We attribute the relative underperformance to two broad factors. First, several of our Crop℠ holdings reported disappointing earnings results, leading to poor security selection within information technology, financials and health care. Second, we witnessed an unusual macro environment during the quarter, in which more cyclical businesses within industrials, financials and consumer discretionary saw resilient earnings trends despite slowing economic growth and falling consumer and business confidence.

Normally, we would expect business trends and stock prices in more cyclical sectors to fall off entering a recession. The early phase of this downcycle has been different, we believe, because some economically sensitive areas of the economy are being protected by record sales backlogs that were built up after supply chain constraints prevented shipping to meet demand earlier in the year. Also, consumer and financial businesses are still being helped by strong (but fading) consumer balance sheets. As the economy continues to slow in the face of tighter monetary conditions, however, we'd expect these sectors to begin tracking historical patterns of performance.

Meanwhile, our software holdings did experience macroeconomic pressure as customers looked to slow their digital transformation investments after several years of strong spending, and as customers within the technology sector (startups and mega caps alike) trimmed jobs and spending in the face of new economic realities. Weak results in several of our health care holdings, conversely, do not seem tied to the economic slowdown but are rather the result of a faster-than-expected decline in COVID vaccine volumes, which we expect to be a short-lived headwind.

The portfolio's disappointing Q4 performance capped off a difficult year (the type we tend to experience about once per full market cycle over our team's history). For most of 2022, our investment process was out of favor as rapidly rising interest rates led to multiple contraction for longer duration growth stocks. For the full year, our underperformance was relatively broad-based across sectors and was compounded by very strong gains in the energy sector (where we tend to have minimal exposure due to our difficulty finding high-quality franchises and durable profit cycles that fit our process).

While we are not happy with our performance this year, we understand it. If we had foreseen the unprecedented pace and magnitude of interest rate increases ahead of us, we would have expected our long-duration growth style to be out of favor. With the

benefit of hindsight, we certainly wish we had trimmed certain holdings more aggressively earlier in the year. However, we believe we erred on the side of protecting the long-term profit growth potential of the portfolio, which we would expect to pay off once the Fed's tightening cycle runs its course.

Among our bottom contributors were Atlassian, SVB Financial Group and Catalent. The tougher macro environment caught up with Atlassian in the quarter as the company is seeing slower software user additions as customers of all sizes moderate hiring and spending. However, the company still expects to grow sales at a mid-20s rate in Q4 and grow its strategically important cloud revenues 40%–45%. These are slower rates than we expected, and could slow further, but Atlassian's growth metrics remain solid in light of the environment. In the short term, slower revenue growth will likely pressure margins and profitability given the company's rapid hiring expansion in recent periods. But we detect a meaningful shift in tone from management on expense growth and margins now that top-line growth is slowing. While we fully expect Atlassian to keep investing in its large growth opportunities, we think a prudent reprioritization of this spending will lead to margin tailwinds in the medium term. We are sensitive to the slowing near-term growth dynamics but believe remaining invested is appropriate given the longer term profit growth potential.

SVB Financial Group is a leading provider of banking services to the innovation economy. Headquartered in Silicon Valley, SVB offers financial products to clients in the technology, life science/health care and private equity/venture capital end markets. The rapid shift in the funding and interest rate environment is having a significant near-term impact on its business. First, the funding of SVB's clients has slowed, while at the same time spending levels at those clients has increased. This funding dynamic, along with rapidly rising interest rates, has resulted in net interest margin compression. Given our comfort with the company's credit risk exposure (loans to early-stage tech companies are only 2% of SVB's loan book versus 11% in 2008 and 30% in the dot.com era) and our belief that its margin pressures are short term in nature, we consider our longer term thesis still intact and have therefore remained invested with a modest position.

Catalent underperformed meaningfully in the quarter based on disappointing earnings results and a fiscal 2023 outlook reduction. There are several issues impacting revenue and margins. The company is grappling with declining COVID vaccine revenues, while other customers who were concerned about supply chain shortages during the pandemic are now reducing safety stock inventories. Despite this bad news, Catalent's underlying biologics manufacturing growth remains quite strong, and the second half of its fiscal year should improve based on new program wins and the potential FDA approval of a major gene therapy product. The company is also rightsizing costs to adapt to the lower level of near-term revenue, which should help to boost margins. We're disappointed and monitoring our thesis carefully but continue to view the company's long-term prospects as solid. The company's recent misfortunes have driven the stock's valuation to levels well below peers and past M&A transactions in this sector, which could present an opportunity once the profit cycle resumes. We would note that several other health care holdings (West Pharmaceuticals, Repligen) are also experiencing COVID vaccine "hangovers" due to the lower-than-expected uptake of booster shots. While this is weighing on the portfolio's short-term performance, our longer term vaccine estimates were already quite modest, and we look forward to reaccelerating growth later this year as the tough vaccine comparisons ease.

Among our top contributors were Lattice Semiconductor, Ingersoll Rand and Dexcom. Lattice Semiconductor is a fabless vendor of field programmable gate array (FPGA) chips which customers can program and configure to their specifications. These chips are used in numerous applications, from data centers and 5G infrastructure to routers, switches, PCs, industrial Internet of things devices, factory automation and automobiles, to name a few. Shares rallied after Lattice reported YoY revenue growth, gross margins and operating margins of 31%, 69.5% and 39.7%, respectively. These were all records and ahead of expectations. We were encouraged by Lattice's continued solid results in the face of a slowing economic environment, which testifies to the new management team's progress in reinvigorating both its chip offerings and its software tools for customers. While a recession could cause short-term bumps in the profit cycle in 2023, we were excited to be present in December for the unveiling of the company's new midrange FPGA offering Avant, which we estimate more than doubles Lattice's addressable market and should serve as a meaningful growth catalyst starting in 2024.

Ingersoll Rand is a global market leader in a broad range of mission-critical flow creation technologies (pumps, compressors, etc.) for industrial and medical applications. Recent earnings results beat expectations and revealed record orders and revenues. Management also raised its full-year guidance for 2022, sending shares higher. Notably, orders within its largest segment were up 16% organically, driven by strong growth in compressors vacuums and blowers. We are cognizant of cyclical industrial risks in the quarters ahead but think Ingersoll's compressed air technologies will remain in demand as customers seek to operate using less energy and water, while generating fewer emissions. We also continue to be impressed by management's internal execution in areas such as acquisition integration, marketing lead generation, new product development and employee engagement.

Dexcom is the leader in continuous glucose-monitoring (CGM) systems. We believe it is well-positioned to continue penetrating the Type 1 diabetes market and drive adoption in the much larger Type 2 diabetes market, where data supporting the clinical and economic case for CGM sensors is building. The company experienced several pieces of good news this quarter. Third quarter sales and profits accelerated, Medicare announced it will reimburse CGM devices for non-insulin intensive Type 2 diabetes patients in 2023, and, importantly, the company received FDA approval for its next-gen G7 sensor. The launch of its G7 product—60% smaller than G6, fully

disposable, interoperable with a variety of insulin delivery technologies—should enable the company to gain further share of non-insulin dependent Type 2 diabetes and gestational diabetes patients.

Portfolio Activity

During the quarter, we began new Garden℠ positions in Bentley Systems, Halozyme and Saia. Bentley Systems is the leading provider of engineering software used to design roads, bridges, tunnels, rail systems and other public works. Construction is one of the least digitized verticals of the economy, and there are significant opportunities for software to increase the productivity of civil engineering projects. Business momentum is strengthening, and we view Bentley as well positioned to support the infrastructure spending that's encouraged by the Infrastructure Investment and Jobs Act and Inflation Reduction Act. In fact, civil engineers may prove hard-pressed to respond to accelerating project opportunities under these accelerated market conditions, further enhancing the importance of Bentley's design tools. At a time when growth rates in software are generally seeing pressure, we believe this company has the potential to maintain its current pace, or even accelerate slightly, into 2023 given this backdrop.

Halozyme is a biotechnology firm with a unique technology platform enabling the conversion of intravenous (IV) formulated biologic and small molecule drugs to a subcutaneous (SC) formulation. Pharmaceutical companies license this technology to optimize their valuable therapies, generating predictable and durable royalties for Halozyme. The company has a robust pipeline of 16 products and over 10 companies leveraging its ENHANZE® platform, including a partnership with Argenx (another portfolio holding) for a subcutaneous format of efgartigimod, which could obtain approval in 2023. Today, Halozyme receives royalties on commercial sales of five products. Over the next five years, we believe its base of royalty-generating products could triple.

Saia operates in a relatively attractive transportation subsector, less-than-truckload (LTL) shipping, which features several solid franchises supported by real estate assets and network advantages. Saia has been opening new terminals across the Northeast, and its terminal count has increased from 151 at the end of 2016 to 187 as of Q3 2022. Now that the Northeast expansion is largely complete, Saia is entering a new phase of growth which should unlock additional operating leverage. In addition, we believe Saia has the virtuous opportunity to grow its delivery network at a healthy pace while realizing higher prices as this strengthened network results in higher quality service levels to customers. We are very cognizant of the slowing economy and the likelihood that the industry's (and Saia's) shipment volumes will decline in the coming quarters. But with signs of continued strong industry discipline around pricing, we viewed the stock's selloff during the quarter as an opportunity to start a Garden℠ position in what could be a solid long-term profit cycle.

We ended our investment campaigns in Entegris, Generac and Trimble during Q4. Entegris is one of the largest suppliers of advanced materials (high purity gases/chemicals) and filtration systems used in semiconductor manufacturing. Our investment in Entegris was based on the belief that the industry's incredibly complex production environment is getting increasingly onerous—more process steps, greater purity requirements—which is expected to drive higher demand for Entegris' products and systems over time. Unfortunately, the company completed a large acquisition in 2022, leaving its balance sheet stretched just as cyclical pressures on its memory customers began to weigh on profits, leading us to harvest the position to fund higher conviction investments within semiconductors.

Generac is a provider of residential backup generators in the US with a dominant market position. Our thesis was based on climate change causing more frequent and severe storms and power grid failures, both of which should bolster demand for Generac's generators. In addition, the company's residential solar backup battery business could also enhance its overall profit cycle potential over time. That said, we now believe generator demand (and potentially residential solar backup sales) may be entering a cyclical downturn as homeowners face inflation and rising interest rates. With sales and profits likely to come under pressure, we decided to harvest the position.

Trimble is an industrial technology company that is bringing software, sensor and device solutions to areas of the economy that have been historically relatively slower to adopt new technology—such as agriculture, transportation and construction. While Trimble has made progress shifting its business toward software, its remaining hardware business is beginning to come under cyclical pressure. In addition, the company is taking on additional debt to fund an acquisition in its transportation technology segment, which is an area of the business we find less attractive. We believe Bentley System's greater focus on civil construction software leaves it better positioned for the next few years, so we decided to harvest Trimble to fund this new investment.

Other notable adds in the quarter included CoStar Group, Agilent Technologies and Five Below. CoStar Group, a leading provider of information services to the global real estate industry, is driving an attractive profit cycle premised on CoStar Suite, a compelling product set that generates consistent, subscription-based recurring revenues. The company reported 17% organic revenue growth in the quarter, with a little over half of that coming from adding new customers. These revenues should prove to be relatively resilient in the face of an economic slowdown. In fact, we believe parts of CoStar's business, such as Apartments.com and LoopNet, could improve in a recession as the customer base will need to spend more on advertising as vacancies increase.

Agilent Technologies provides analytical instruments, consumables and services to the life sciences, environmental analysis and chemical industries. Over the course of our investment campaign, we've been impressed by Agilent's strategic progress. They've continued to shift the business toward recurring revenue (services, consumables and diagnostic tests), boosting profit visibility alongside its healthy instrumentation business. They've also invested (organically and via targeted acquisitions) in new adjacent growth opportunities: specialized contract manufacturing, cell analysis, PFAS ("forever chemical") testing and EV battery testing. We added to our position as the stock pulled back during the quarter and were then encouraged to see the company's strong quarterly results and positive initial outlook for fiscal 2023.

Five Below is a value-oriented discretionary retailer offering an evolving assortment of trend-right products oriented to kids (tweens/teens). The company reported a solid beat on both top- and bottom-line results along with continued strong growth in new stores. Management is playing offense with a "triple-double" strategy, aiming to triple Five Below's number of stores by 2030 and double revenue by 2025. Our consumer spending outlook remains uncertain given the slowing economy and inflationary pressures, but Five Below has shown an ability to adapt to changing market conditions over time while continuing to offer consumers compelling merchandise and value. We are particularly attracted to its stores' high returns on invested capital, which should continue to support strong profit growth as the company grows its footprint over time. With our confidence in the profit cycle rising, we added to the position within the Garden℠.

We pared our exposure to LPL Financial, Genmab and Advanced Drainage Systems in Q4. LPL Financial is the largest independent broker-dealer in the US, and the largest provider of outsourced wealth management services to banks. The company equips over 21,000 financial advisors with the tools—research, technology, compliance and administrative support—to grow their businesses and help their retail clients with wealth management and financial planning. In recent years, a new leadership team has invested to improve advisor technology and remove friction within advisors' workflows, driving a 50% increase in productivity while increasing advisor retention to ~98%. We believe LPL is well-positioned to capture further market share and benefit from a migration of advisors away from wire houses to the independent channel. We also feel optimistic that their outsourcing contract wins with third-party banks and traction in the company's new service offerings could further accelerate growth. Lastly, LPL has benefited from higher interest rates. However, as the share price now reflects more of these tailwinds, we modestly pared our position.

Genmab is a developer of monoclonal antibody products for the treatment of life-threatening and debilitating diseases. Growth remains strong (+35% YoY in the most recent quarter) for Darzalex, the company's leading therapy for multiple myeloma, and we continue to find Genmab's new product pipeline as attractive. However, we trimmed the position based on valuation to support more compelling opportunities within biotech.

Advanced Drainage Systems is a leading manufacturer of high-performance thermoplastic corrugated pipe and related products serving the non-residential construction, residential construction, agriculture and infrastructure markets throughout North America. Shares declined after a disappointing earnings release as end markets softened faster than anticipated, especially its residential business where rising interest rates have cooled construction activity. We continue to believe the company is well-positioned to capitalize on the long-term shift in the pipe industry away from concrete and toward plastic materials, which are typically greener and more durable, but we reduced our position until these cyclical pressures wane.

ESG Update

Board diversity remains an area of focus for the Artisan Partners Growth Team. We strongly believe that board diversity facilitates qualitative and quantitative benefits that can enhance a company's value. A group comprised of people with different backgrounds and life experiences approaches problems from multiple viewpoints, fostering ingenuity and surfacing a greater range of potential solutions. More specifically, benefits of diversity include increased creativity and innovation, a reduced potential for groupthink and bias entrenchment, and more openness to a wider variety of value creation strategies. Research has also shown diversity has historically correlated with better financial performance.

In 2021, we updated the team's 2022 proxy voting guidelines by raising the minimum gender diversity standard for our board of director voting criteria, implementing a "2 and 20%" standard—at least two female directors and at least 20% female representation. In cases where companies do not meet this standard, we will issue an against vote for any nominating committee member(s) up for re-election (or the most appropriate senior member(s) if a company does not have a separate and distinct nominating committee). In conjunction with the update, we sent letters to the board of directors of 26 portfolio holdings across all our strategies that did not meet our updated standard. The letters outlined our beliefs around the importance of board diversity, the details of our new policy and informed them of our voting plans should they continue to not meet the standard at their next annual meeting. Many of those companies followed up with engagements to discuss the policy either during their off-cycle reach-outs or during proxy season. We are pleased to share that 17 of the companies (65%) who received our 2021 letter have added at least one new female director to their board. In total, 24 new female directors have been added across those 17 companies.

In Q4 2022, we sent follow-up letters to portfolio holdings who have not yet met our standards and initial letters to new holdings in our portfolios. We intend to follow up with the companies during the

2023 proxy season where appropriate. We understand that organizational diversity efforts take time and intend to continue monitoring our portfolio holdings for signs of positive direction of travel.

Perspective

Longer duration growth equities faced significant headwinds in 2022 as interest rates rose at an unprecedented pace following a long period of loose monetary conditions. Inflationary pressures remain, making us hesitant to anticipate a reversal of this trend in 2023. But given central banks' tightening efforts to date, signs of slowing in the economy and some evidence that inflation is moderating, it does seem reasonable to assume that the most severe multiple contraction is behind us for growth investments. From here, we suspect earnings trends—not multiples—will be the key determinant of stock price performance. From a high level, we are not very constructive on the outlook for corporate earnings. Central banks are acting to slow economic activity, and they seem to be producing the desired effect. Of course, markets are discounting mechanisms, and the stabilization in fundamentals will be discounted well in advance, making market timing decisions extremely difficult. When that time comes, we believe a more stable economic outlook, combined with the lower starting multiples and resilient secular growth drivers benefiting the companies we own, will lead to an attractive backdrop for the portfolio.

We have explained in this letter how disappointing results within information technology led to our underperformance late in the year. So, it's fair to ask why we consider this (significant) area of the portfolio to be well-positioned. Importantly, we would not make this case for the sector in its entirety—some areas of tech (cryptocurrencies and unprofitable, capital-intensive business models, for example) face major challenges, in our view. But we believe our cloud software holdings (such as Atlassian, HubSpot, Zscaler, Veeva Systems and Datadog)—while falling short of high expectations in the second half of 2022 after a period of torrid enterprise software growth—continue to possess superior long-term outlooks (based on market share gains and product portfolio expansions) and resilient business models (high levels of recurring revenues, robust balance sheets). While growth may be slower in a tough economy, we believe software applications that enhance productivity and collaboration should remain in demand, especially in a structurally tight labor market. And perhaps the surprise story of 2023 will be the margin leverage demonstrated by leading cloud software franchises as they apply greater cost discipline in a more challenging environment. Put simply, while software businesses were early to face economic pressure in 2022, we suspect their growth attributes will return to favor in the medium term once the slowing economy catches up with other cyclical industries. Tech was "first in" to the downturn, and we suspect it may be "first out."

Before turning from the technology sector, we have a few observations regarding our semiconductor holdings (Lattice, ON Semiconductor, Monolithic Power, Synposys). In late 2022, signs of semiconductor demand pressure emerged, as the industry's more cyclical end markets (PCs, smartphones) slowed at a time when supply chain shortages since the pandemic have led to excessive inventory levels for some chip types. While we expect our holdings to be somewhat protected from these headwinds (since they are positioned in faster growing segments and less competitive technologies), we expect their profit cycles to slow in early 2023 before reaccelerating later in the year. Industry news in recent months regarding rapid advancements in artificial intelligence—plus our team's own research and travels—has further increased our conviction in the positioning of our holdings, which play key roles in enabling the data center innovation (faster processing, more power, lower latency) needed to support further AI progress. This trend, alongside other key secular semiconductor drivers such as electric vehicles and industrial automation, supports our long-term optimism for these investments.

As discussed earlier, we were disappointed that health care—which we would expect to be a relative safe haven in times of uncertainty—was a source of weakness in 2022. It should be noted that there were a number of bright spots within our health care holdings. In addition to Agilent and Dexcom (discussed earlier), biotech holdings Argenx, Ascendis Pharma and Genmab each made solid progress ramping their key approved therapies and advancing high-potential pipeline therapies. We see compelling catalysts ahead for Argenx, Ascendis and BioNTech in particular. Our research into innovative biopharmaceutical companies (globally, across all market capitalization ranges) is what gives us confidence that 2022's underperformers—companies like West Pharmaceuticals, Catalent and Repligen that support the production of biologic medicines—will return to solid growth in the medium term. Pharmaceutical companies are investing heavily into biologic therapies (monoclonal antibodies, bispecific antibodies, gene therapies, cell therapies). Producing these medicines requires high-value equipment and consumables from a concentrated set of suppliers. And more companies are looking to outsource this complicated manufacturing work to focused service providers. While the COVID vaccine push created a boom-and-bust cycle that has dominated recent financial results, we remain confident that the strong underlying trends will increasingly show through as 2023 plays out. While fundamentals in the quarter ahead remain challenged, we believe the stocks' now-discounted valuations provide some downside risk mitigation short term—and offer solid risk-rewards for our longer term time horizon.

Conditions prior to 2022 had been extremely favorable for growth investing, and we knew the absolute and relative performance we enjoyed during this period would be difficult to sustain. So while 2022's negative returns are explainable given the high starting valuations and rapid increase in interest rates, we were disappointed in the magnitude of our absolute and relative underperformance. Our team's 25-year history, however, has taught us that there are moments within each full market cycle where our process is out of step with markets—and that holding fast to our investment process

during these periods is critical to our ability to rebound and sustain solid long-term results. For all of 2022's frustrations, our team remained focused on franchise quality and long-term profit cycles. In fact, compared to prior cycles, we think our assessment of profit cycle sustainability has been enhanced by our more rigorous approach to assessing companies' environmental, social and governance risks. Our ability to weather short-term underperformance and stay focused on generating strong long-term returns is enabled by our clients' patience and trust. Our team is grateful for and motivated by this and eager to justify it over the next market cycle.

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Investment Risks: International investments involve special risks, including currency fluctuation, lower liquidity, different accounting methods and economic and political systems, and higher transaction costs. These risks typically are greater in emerging and less developed markets, including frontier markets. Securities of small- and medium-sized companies tend to have a shorter history of operations, be more volatile and less liquid and may have underperformed securities of large companies during some periods. Growth securities may underperform other asset types during a given period. These risks, among others, are further described in Artisan Partners Form ADV, which is available upon request.

Unless otherwise indicated, the Artisan Strategy characteristics relate to that of an investment composite or a representative account managed within a composite. It is intended to provide a general illustration of the investment strategy and considerations used by Artisan Partners in managing that strategy. Individual accounts may differ, at times significantly, from the reference data shown due to varying account restrictions, fees and expenses, and since-inception time periods, among others. Where applicable, this information is supplemental to, and not to be construed with, a current or prospective client's investment account information. References to individual security performance relate to a representative account in the composite. Individual holding periods may differ.

For the purpose of determining the portfolio's holdings, securities of the same issuer are aggregated to determine the weight in the Strategy. The holdings mentioned above comprised the following percentages of a representative account within the Artisan U.S. Mid-Cap Growth Strategy Composite's total net assets as of as of 31 Dec 2022: Atlassian Corp 2.5%, SVB Financial Group 1.1%, Catalent Inc 2.5%, Lattice Semiconductor Corp 3.7%, Ingersoll Rand Inc 3.0%, Dexcom Inc 1.7%, Bentley Systems Inc 0.7%, Halozyme Therapeutics Inc 0.9%, Saia Inc 0.5%, CoStar Group Inc 1.5%, Agilent Technologies Inc 2.7%, Five Below Inc 1.3%, LPL Financial Holdings Inc 1.1%, Advanced Drainage Systems Inc 0.4%, Genmab A/S 0.5%, HubSpot Inc 3.8%, Zscaler Inc 2.5%, Veeva Systems Inc 4.5%, Datadog Inc 1.4%, ON Semiconductor Corp 2.5%, Monolithic Power Systems Inc 1.7%, Synopsys Inc 2.5%, Argenx SE 3.6%, Ascendis Pharma A/S 4.0%, BioNTech SE 1.3%, West Pharmaceutical Services Inc 2.4%, Repligen Corp 1.4%. Securities named in the Commentary, but not listed here are not held in the portfolio as of the date of this report.

Securities referenced may not be representative of all portfolio holdings. Securities of the same issuer are aggregated to determine a holding's portfolio weight. Portfolio statistics calculations exclude outlier data and certain securities which lack applicable attributes, such as private securities. Artisan Partners may substitute information from a related security if unavailable for a particular security. This material is as of the date indicated and is subject to change without notice. Totals may not sum due to rounding.

ESG assessments represent one of many pieces of research available and the degree to which it impacts holdings may vary based on manager discretion.

Attribution is used to evaluate the investment management decisions which affected the portfolio's performance when compared to a benchmark index. Attribution is not exact, but should be considered an approximation of the relative contribution of each of the factors considered.

Net-of-fees composite returns were calculated using the highest model investment advisory fees applicable to portfolios within the composite. Fees may be higher for certain pooled vehicles and the composite may include accounts with performance-based fees. All performance results are net of commissions and transaction costs, and have been presented gross and net of investment advisory fees. Dividend income is recorded net of foreign withholding taxes on ex-dividend date or as soon after the ex-dividend date as the information becomes available to Artisan Partners. Interest income is recorded on the accrual basis. Performance results for the Index include reinvested dividends and are presented net of foreign withholding taxes but, unlike the portfolio's returns, do not reflect the payment of sales commissions or other expenses incurred in the purchase or sale of the securities included in the indices.

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Our capital allocation process is designed to build position size according to our conviction. Portfolio holdings develop through three stages: Garden℠, Crop℠ and Harvest℠. Garden℠ investments are situations where we believe we are right, but there is not clear evidence that the profit cycle has taken hold, so positions are small. Crop℠ investments are holdings where we have gained conviction in the company's profit cycle, so positions are larger. Harvest℠ investments are holdings that have exceeded our estimate of intrinsic value or holdings where there is a deceleration in the company's profit cycle. Harvest℠ investments are generally being reduced or sold from the portfolios.

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