



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. GardenSM investments are small positions in the early part of their profit cycle that may warrant more sizeable allocations as their profit cycle accelerates. CropSM investments are positions that are being increased to a full weight because they are moving through the strongest part of their profit cycles. HarvestSM 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



Craigh A. Cepukenas, CFA
Portfolio Manager (Lead)



James D. Hamel, CFA
Portfolio Manager



Matthew H. Kamm, CFA
Portfolio Manager



Jason L. White, CFA
Portfolio Manager



Jay C. Warner, CFA
Portfolio Manager

Investment Results (% USD)

As of 31 March 2022	Average Annual Total Returns						
	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	Inception ¹
Composite — Gross	-17.76	-17.76	-20.39	12.42	16.23	14.09	11.26
Composite — Net	-17.98	-17.98	-21.20	11.31	15.08	12.97	10.17
Russell 2000 [®] Growth Index	-12.63	-12.63	-14.33	9.87	10.32	11.20	8.04
Russell 2000 [®] Index	-7.53	-7.53	-5.79	11.73	9.74	11.03	9.42

Annual Returns (% USD) 12 months ended 31 March

	2018	2019	2020	2021	2022
Composite — Gross	26.12	18.39	-1.99	82.14	-20.39

Source: Artisan Partners/Russell. Returns for periods less than one year are not annualized. ¹Composite inception: 1 April 1995.

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

The Russell 2000® Index was volatile and notched an 8% Q1 decline in response to the event-filled start to 2022. With inflation readings elevated, the Fed pointing to policy tightening ahead and the outbreak of war between Russia and Ukraine, many market participants positioned for higher interest rates. Companies whose valuations are dependent on profits further into the future (growth companies) underperformed with Internet, information technology and health care innovation among the weakest sectors. Energy stocks moved sharply higher along with spiking commodity prices, while more defensive sectors such as utilities, big pharma and consumer staples outperformed as investors hedged their bets regarding the future direction of global GDP growth.

The late February outbreak of war between Ukraine and Russia is giving the post-Cold War order its greatest test. The US, Europe, Australia and Japan, among other countries, levied varying degrees of sanctions against Russia's economy—blocking Russian banks' access to the SWIFT international payment system, restricting aircraft travel, stymying transactions with the Russian central bank and targeting Russian oligarchs through travel bans and asset freezes, among many others. Not only have the war and these sanctions impacted Russia's equity market directly (iShares MSCI Russia ETF declined over 80% in Q1), but they have also had reverberating effects across the global economy—further stressing global supply chains and contributing to a 39% rise in Brent crude oil's price in Q1.

Energy independence has come to the forefront, particularly in Europe where the continent derives 40% of gas, 27% of oil and 46% of coal from Russia. On March 8, the European Commission outlined structural changes to the European Union's energy strategy and its current and long-term decoupling from Russian energy imports. One solution is a step up in renewable energy development, evidenced by Germany recently increasing installation ambitions for wind (5X by 2027) and solar (4X by 2028).

Inflation readings in the US remain elevated, and the Federal Open Market Committee (FOMC) kicked off what the market believes will be a rate hike cycle. Consumer Price Index accelerated to 8.5% YoY in March, the largest increase since the early 1980s. The FOMC's 25bps rate hike in March is the first since 2018, and the market expects 175bps of increases by year end. Rising prices in energy (oil and gasoline), used cars and trucks, electricity and food were all contributors to YoY inflation in March.

Meanwhile, the rising cost of basic goods is weighing on US consumers' purchasing power (household spending makes up approximately 70% of GDP). In addition to the inflation drivers mentioned above, other notable indicators include a declining personal savings rate (falling from its pandemic peak of ~34% to ~6%) as well as rapidly rising mortgage rates and home prices. The recent 158bps spike in 30-year mortgages over the past 90 days, to 4.95%, is

the fastest rise since the early 1990s, and home prices have climbed ~10% and ~19% in each of the last two years.

Performance Discussion

The market's expectation for more rapid and sustained inflation was a key driver of our disappointing Q1 relative results. Commodity businesses were in favor, and growth stock multiples compressed. Much of our underperformance was driven by tech being out of favor and having no exposure to energy and materials. We have historically been underweight energy and materials as it is difficult to identify small-cap companies with franchise characteristics and solid balance sheets. Meanwhile, our tech holdings' profit cycles are firmly in motion—particularly those in our top 20—though their share prices have been penalized in this rising rate environment as their intrinsic value is based more on their intermediate and long-term profit potential. While we work to ensure our tech holdings are free cash flow positive or are on a very clear path to achieving it over the near-to-intermediate term, this was not enough to offset the broader market headwinds in Q1.

To a lesser extent, our relative performance was also hindered by a few other detractors. The market appears to be anticipating a difficult backdrop for the US consumer, which is playing out among housing and housing related stocks. Our building products companies—Trex and AZEK, both GardenSM positions—suffered disproportionately. Shares of both companies pulled back on fear a rise in mortgage rates could significantly curtail demand for their outdoor products. Furthermore, the inflationary environment is prompting the market to question whether both companies will be able to pass along price increases to their customers to maintain their margin profiles.

We remain confident in the demand backdrop for both companies. Counter to how both companies' share prices have reacted, we have not seen any evidence of a slowdown in demand. The pandemic has accelerated wood deck conversions as education levels about composite decking's low/no maintenance feature have materially improved. Additionally, the industry's move to innovate around lower priced decking options has increased conversion among all end market consumer income levels. Finally, we expect higher oil prices will have a limited impact on both companies' recycled plastic given our belief in their capabilities to pass on higher input costs to their customers.

NeoGenomics (NEO) drove our Q1 relative underperformance in health care. NEO is the largest cancer diagnostics lab in the US with the broadest menu of tests and deepest reach to oncologists and pathologists, particularly in rural areas where 80% of cancer testing occurs. Our thesis has focused on NEO's scale and competitive position as cancer treatment becomes personalized. Diagnostics such as those offered by NEO are ever more important as they allow doctors to choose the right therapy. We wrongly held on to our CropSM

position in 2H21 as we believed cancer testing volumes would recover when COVID-19's impact faded. More recently, we concluded the company's pandemic struggles were not entirely due to the virus's impact. Late in Q1, the CEO unexpectedly resigned amid a period of uncontrolled lab expense growth—implying a lack of adequate operational controls and management expertise. While these problems should ultimately prove fixable, it will first require attracting capable new leadership and implementing numerous operational improvements. With our thesis stalled, we began harvesting our position.

Blackline and Lattice Semiconductor were other key Q1 detractors. Demand for the company's cloud-based accounting software remains solid as businesses look to improve and automate complex, manual and repetitive accounting processes. Another year of solid top-line growth is expected in 2022, but shares have been weaker alongside a recent step up in investments to drive out-year growth. We believe the company is appropriately investing from a position of strength, but profit growth will take a pause this year. We are remaining patient as the longer term growth runway remains compelling—its solutions can lead to cost savings, enhance real-time visibility and improve data integrity.

Lattice's recent quarterly results were thesis confirming. Multiple product and program launches throughout the year should sustain the company's solid fundamental momentum in 2022. We believe the company is well-positioned to provide field-programmable gate array chips to data centers and new 5G infrastructure and to tap into low power/reprogrammable chips as well as industrial and automotive end markets. Furthermore, its solid pipeline of new chips should expand its addressable market and increase margins over time.

Among our top Q1 contributors were Zynga, Chegg and Shockwave Medical. Zynga is being acquired by Take-Two Interactive at a 64% premium to the prior day's closing share price. We believe a large pipeline of new games should accelerate growth, and Zynga's mobile gaming capabilities should help Take-Two maximize the value of its intellectual property across console and mobile devices. However, the combined entity's market cap exceeds our small-cap mandate. Thus, we have been harvesting our position, capping a successful investment campaign that began in 2017.

We discussed Chegg in last quarter's letter after a pattern of steady long-term growth in US subscribers surprisingly came to an end. Despite this, we stuck by the holding given our belief the stock price selloff was overdone given several tailwinds behind this company's profit cycle—international expansion, cross-selling existing users, expanding into new areas and longer term changes in higher education (e.g., more remote learning, more focus on student outcomes, pressure on tuition). The company's recently reported Q4 results showed signs of stability and are encouraging. Given our longer term thesis is intact, valuation is attractive, and the balance sheet is solid, we continue to hold this security.

Shockwave is an early-stage medical device company developing and commercializing products to treat calcified cardiovascular disease across two primary end markets: peripheral artery disease and coronary artery disease. The company has developed a proprietary technology—intravascular lithotripsy (IVL)—based on principles similar to kidney stone treatment: IVL cracks calcium in arterial vessels through the application of sound waves, allowing the vessel to be more easily and safely expanded to restore blood flow. The company's FDA-approved C2 coronary intravascular lithotripsy catheter is making solid progress capturing share from stenting cases with further runway ahead.

Portfolio Activity

We initiated new GardenSM positions in Sprout Social and Procore Technologies during Q1. Sprout Social provides a cloud-based platform for businesses to manage social media engagement, publishing and analytics. Sprout's industry-leading platform empowers businesses of all sizes to leverage social media—Facebook, Twitter, Instagram, LinkedIn and Pinterest—for marketing, customer care, intelligence gathering, public relations and collecting product feedback, among other use cases. Our profit cycle thesis is predicated on several drivers. The pace at which the company is adding new customers is inflecting as the importance of social media and the need to connect with customers grows. Brands are increasingly going directly to consumers as more products are purchased online and through social platforms. We also see opportunity for the company to grow within its existing customer base via new product introductions. Lastly, the company has an efficient sales model, receiving nearly all its business through more sophisticated techniques such as inbound marketing. With a clean balance sheet, positive free cash flow and a compelling growth runway ahead, we initiated a GardenSM position.

Procore Technologies is a construction management software company with several products used for project management, quality and safety, and project financials. Its customers include building owners (developers, universities, etc.), general contractors and sub-contractors (electricians, plumbers, masons, etc.). We believe the company is well-positioned to cross-sell into its large existing customer base (which helps move margins higher). Furthermore, we believe the company can gain additional market share (currently 4% of the global construction market) as it proves out the use case for a technology solution, delivers immediate ROI and garners additional user adoption. Lastly, the company should benefit from construction volume normalizing as the US comes out of the pandemic.

We ended our LivePerson, Casey's General Stores and Array Technologies investment campaigns in Q1. LivePerson is a leading provider of mobile and online messaging solutions. Our thesis has been predicated on the company leading the customer service shift from voice to digital communications via its cloud-based LiveEngage platform. The market opportunity is substantial, going well beyond digital conversations in service contexts and into areas such as sales,

marketing and possibly social media monitoring. With recent departures of two key executive leaders—CTO in Q4, Head of Sales more recently—coupled with a marked deceleration in sales growth and a round of investments into its sales force, we ended our investment campaign with our profit cycle thesis impaired.

Casey's General Stores, akin to 7-Eleven, engages in the management and operation of convenience stores and gasoline stations serving rural customers throughout the Midwest. A new leadership team took over in 2019 and has since laid out a plan to transition Casey's into a modern-day retailer. To make this transition, management has a long list of initiatives: procurement savings (merchandise and food ingredients), increased private label penetration, labor cost optimization, a loyalty program and frozen beverages. Unfortunately, our expectation for higher-than-expected operating costs over the near to intermediate term, a slower-than-expected ramp in our profit cycle thesis and a long-term risk the company may be slow to transition its business model to support the rise of electric vehicles prompted us to conclude our investment campaign during Q1.

Array Technologies is a global manufacturer of ground-mounting systems used in solar energy projects. Array's core product, DuraTrack®, provides steel supports, electric motors, gearboxes and electronic controllers mounted below solar panels. DuraTrack® moves solar panels throughout the day to maintain an optimal orientation to the sun which increases energy production by up to 25%. Our thesis has been based on the power grid transitioning to renewable energy sources over the coming decades. However, several management missteps throughout the course of our campaign and a lack of clarity on when these issues will get resolved prompted us to exit our position during Q1.

We added to Workiva, Live Oak and Ambarella during Q1. Workiva is a leading provider of cloud software for financial reporting with approximately 70% of its business tied to SEC reporting through its core Wdesk offering. Over the past decade, the SEC has phased in requirements for companies to file their financials using an XBRL data-tagging format, enabling Workiva to disrupt and capture significant market share from traditional printing vendors, including RR Donnelly & Merrill. Our profit cycle thesis is based on the company's capability to identify and quickly roll out new products, expand beyond North America and benefit from the potential ramp up of ESG regulatory reporting longer term. The company has spent over a decade building an engine for SEC reporting, and it can repurpose this platform for compiling ESG metrics. The ESG capability requires some investments this year, but the company is making them from a position of strength. With our longer term thesis intact, we added to our position.

Live Oak is the largest Small Business Administration and US Department of Agriculture lender in the US. The company is experiencing strong loan originations, setting a record of \$1 bn in Q2 2021 and eclipsing it in Q3 2021. Live Oak is taking a targeted industry vertical approach that we believe can lead to outsized market share gains over time, particularly when operating in underserved markets.

Lastly, we have confidence in their credit underwriting culture, which is enhanced by their ability to get more frequent financial data from their customer base as compared to competitors. We expect Live Oak to continue to drive substantial earnings growth in the future.

Ambarella is the leading supplier of computer vision (CV) chips. Ambarella's advanced, single-chip CV solutions enable high-performance, high-efficiency video processing, at lower cost and power consumption. The company has a technological advantage—namely, low power consumption—which has helped it stay ahead of its competition. We believe CV chips are evolving into a must-have technology across security, automotive, warehouse automation and industrial robotics markets. CV chips have twice the average selling price of a non-CV product and higher margins than Ambarella's legacy non-CV product. Thus, we anticipate substantial profit acceleration as CV sales ramp. Given the company's strong growth runway and a reasonable valuation, we added to our position.

We trimmed our YETI and Bright Horizons positions during Q1. YETI is a manufacturer of premium outdoor recreation products, including coolers and equipment, drinkware, and brand apparel and accessories. We believe the company has an opportunity to extend into additional categories over time (currently ~90% of sales are coolers and drinkware) and increase its brand awareness both domestically and internationally. However, we trimmed the position back into the GardenSM of the portfolio during Q1 for several reasons. We expect supply chain pressures to weigh on the company's fundamentals over the near to intermediate term, and it is difficult to pinpoint when they will unwind. Furthermore, the pressures on the US consumer discussed earlier in this letter—rising prices in energy (oil and gasoline), used cars and trucks, electricity and food—could weigh on demand for more discretionary products such as YETI's.

Bright Horizons is a leading provider of corporate-sponsored childcare and early education centers in the US. The company primarily provides services through multi-year contracts with employers who offer childcare, early education and other dependent care benefits to employees. Over the course of our investment campaign, which began in 2014, the company's capital efficient business model has experienced a high degree of revenue growth, and it has made several accretive acquisitions. Unfortunately, it remains uncertain whether the company's network of centers is well matched to the working patterns of parents post-COVID. Namely, work from home could hinder growth in corporate-sponsored childcare centers. These variables, coupled with shares approaching our PMV estimate, led us to begin harvesting our successful investment campaign during the quarter.

Our ESG Journey

We are proud to share our second annual sustainability report was recently published to our website. In 2021, we completed the third year of our team's ESG journey. In our report, we discussed our two key initiatives, knowledge development and engagement, in detail.

Furthermore, we made a concerted effort to provide more insight into how we thought about and engaged with our holdings on three key issues we believe are important to our clients and society: modern slavery within the global supply chain, diversity, equity and inclusion, and environmental sustainability.

We generally use these letters to provide ESG commentary and case studies related to portfolio holdings. This quarter, we thought it might be informative to illustrate how our ESG framework can occasionally lead us to not invest in otherwise interesting new ideas. Our team recently evaluated a US drug distributor whose share price is not only trading at an attractive valuation but also has an early profit cycle underway. The company is using relatively low-growth cash flows from its core distribution franchise to fund several newer health care services businesses with strong growth prospects.

A key component of our ESG integration framework is to conduct an Issues that Matter Assessment (ITMA) as part of our research into new investment ideas. In this case, our ITMA was dominated by the company's (along with its peers') historical involvement in the nation's opioid abuse crisis. As analysts, we tend to initially think about this risk through a financial lens. In fact, as we were doing our research, the distributors finalized a (sizeable) monetary settlement with state attorneys general. We felt comfortable the monetary impact of this crisis was knowable and factored it into our PMV assessment. However, our primary focus in assessing this risk from an ESG standpoint was to ensure the company had learned from its missteps, to see evidence it had made the necessary changes (to processes, personnel and culture) and took steps to avoid similar crises in the future. While it took some important steps—growing its compliance department, creating a freestanding compliance board committee and separating the roles of chief legal and chief compliance officers—our interaction with the company did not adequately satisfy our concerns. Leadership changes at the board and executive level were not as widespread as we might have expected, and we didn't observe a strong sense of internal reflection and/or acknowledgement on the company's part that it bore some responsibility for such a tragic public health disaster. While we weren't looking for "perfect" answers to our questions, we wanted assurance the company's culture was evolving for the better.

To be clear, our decision not to invest based on ESG concerns may be proven wrong—assessing corporate culture dynamics from the outside is an imperfect science to be sure, and the opioid crisis will most likely prove to be a "100-year flood" event for the pharmaceutical supply chain. However, our long history following US health care services companies has taught us there are frequent tensions between optimizing profits and serving patients and taxpayers. These issues often appear as grey areas—hence, our interest in assessing how this company's cultural instincts would direct it in future grey-area decisions. Left with insufficient confidence in how these decisions would be made, we concluded our work and moved on to other new idea research.

Perspective

In recent quarters—particularly in early 2022—the market has been reacting to some disruptive macroeconomic forces. Inflation has reached levels not seen in decades as pandemic-driven supply chain and labor constraints have left businesses struggling to keep up with pent-up consumer demand. These supply challenges have sadly been further exacerbated by Russia's invasion of Ukraine. The Fed (along with many of its global counterparts) has understandably begun to tighten the money supply to counter these inflationary pressures, leading to a sharp move up in interest rates.

While earnings results for many of our CropSM holdings remain solid (either because they're not overly sensitive to the broader economy or because they have sufficient pricing power to offset rising costs), recent stock performance has been poor due to multiple compression. Investors have repositioned away from more highly valued secular growth stocks toward cheaper securities, especially those benefiting from rising commodity prices and those with recession-resistant characteristics. Essentially, as the cost of capital has risen, investors are putting greater weight on today's profits and less on how much a business can potentially earn five years from now.

It's reasonable to think some of these macro dynamics could represent a new ongoing reality. For several decades, stocks have enjoyed secularly declining interest rates while economic globalization has helped corporate margins expand. Today, interest rates are rising, and "de-globalization" has become a popular buzzword as businesses struggle to adapt to increasing levels of supply chain friction (trade restrictions, shipping bottlenecks, commodity shortages). While the intensity of some of these recent trends may moderate (for example, there remain good arguments why interest rates can rise, but not extraordinarily), we would not be surprised to see lower portfolio returns for a period of time relative to the 15% annualized net return achieved over the past five years.

With that said, and with a difficult start to 2022 fresh in our minds, we still see the ability to outperform the market over reasonable periods of time. In the short term, we face a challenging environment for our process, as markets rapidly reposition away from high-quality secular growth stocks toward lower multiple securities. While commodity-sensitive stocks as well as perceived defensive industries such as utilities, consumer staples and big pharma have relative momentum in this market, we think it's getting a bit late for investors to reposition into those areas. For one, commodity price-driven profit cycles tend to be derailed as economic activity slows (a likely consequence of today's macro forces). While more staple-like businesses tend to resist such slowdowns, after their recent outperformance, we consider their valuations stretched relative to profit growth that does not seem to be accelerating. Meanwhile, secular growth stock valuations have come down noticeably on both absolute and relative terms. As profit cycle trends in our larger CropSM holdings remain solid, we foresee a day when these securities will be viewed as increasingly attractive as

higher interest rates and global trade disruption likely take a toll on GDP growth.

Our team has experienced similar periods of short-term headwinds in the past, and by consistently following our process, we have rebounded to deliver outperformance over full market cycles. As is always the case during periods of volatility, we have been opportunistically adding to several of our highest conviction holdings (Ascendis Pharma, Lattice Semiconductor, Ambarella), including others mentioned earlier in this letter, while also introducing several attractive franchises such as Sprout Social and Procore Technologies into the GardenSM. As always, we consider our longer time horizon (made possible by the trust and patience of our clients) to be one of our team's most important assets.

ARTISAN CANVAS

Timely insights and updates from our investment teams and firm leadership

Visit www.artisancanvas.com

For more information: Visit www.artisanpartners.com

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 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.

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.

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.

Russell 2000[®] Growth Index measures the performance of US small-cap companies with higher price/book ratios and forecasted growth values. Russell 2000[®] Index measures the performance of roughly 2,000 US small-cap companies. The index(es) are unmanaged; include net reinvested dividends; do not reflect fees or expenses; and are not available for direct investment.

Artisan Partners is not affiliated with iShares, and this commentary is not an offering of any products or services other than those offered by Artisan Partners.

Frank Russell Company ("Russell") is the source and owner of the trademarks, service marks and copyrights related to the Russell Indexes. Russell[®] is a trademark of Frank Russell Company. Neither Russell nor its licensors accept any liability for any errors or omissions in the Russell Indexes and/or Russell ratings or underlying data and no party may rely on any Russell Indexes and/or Russell ratings and/or underlying data contained in this communication. No further distribution of Russell Data is permitted without Russell's express written consent. Russell does not promote, sponsor or endorse the content of this communication.

MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used to create indices or financial products. This report is not approved or produced by MSCI.

The Global Industry Classification Standard (GICS[®]) is the exclusive intellectual property of MSCI Inc. (MSCI) and Standard & Poor's Financial Services, LLC (S&P). Neither MSCI, S&P, their affiliates, nor any of their third party providers ("GICS Parties") makes any representations or warranties, express or implied, with respect to GICS or the results to be obtained by the use thereof, and expressly disclaim all warranties, including warranties of accuracy, completeness, merchantability and fitness for a particular purpose. The GICS Parties shall not have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of such damages.

This summary represents the views of the portfolio manager as of 31 Mar 2022. Those views and portfolio holdings are subject to change and Artisan Partners disclaims any obligation to advise investors of such changes. The discussion of portfolio holdings does not constitute a recommendation of any individual security. For a complete list of holdings by contribution to the strategy, refer to the Contributors to Return chart.

Private Market Value is an estimate of the value of a company if divisions were each independent and established their own market stock prices. **Return on Investment (ROI)** measures the amount of return on an investment relative to the investment's cost. **Free Cash Flow** is a measure of financial performance calculated as operating cash flow minus capital expenditures.

Our capital allocation process is designed to build position size according to our conviction. Portfolio holdings develop through three stages: GardenSM, CropSM and HarvestSM. GardenSM 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. CropSM investments are holdings where we have gained conviction in the company's profit cycle, so positions are larger. HarvestSM investments are holdings that have exceeded our estimate of intrinsic value or holdings where there is a deceleration in the company's profit cycle. HarvestSM investments are generally being reduced or sold from the portfolios.

This material is provided for informational purposes without regard to your particular investment needs and shall not be construed as investment or tax advice on which you may rely for your investment decisions. Investors should consult their financial and tax adviser before making investments in order to determine the appropriateness of any investment product discussed herein. In no event shall Artisan Partners have any liability for direct, indirect, special, incidental, punitive, consequential (including, without limitation, lost profits) losses or any other damages resulting from the use of this material.

Artisan Partners Limited Partnership (APLP) is an investment adviser registered with the U.S. Securities and Exchange Commission (SEC). Artisan Partners UK LLP (APUK) is authorized and regulated by the Financial Conduct Authority and is a registered investment adviser with the SEC. APEL Financial Distribution Services Limited (AP Europe) is authorized and regulated by the Central Bank of Ireland. APLP, APUK and AP Europe are collectively, with their parent company and affiliates, referred to as Artisan Partners herein. Artisan Partners is not registered, authorised or eligible for an exemption from registration in all jurisdictions. Therefore, services described herein may not be available in certain jurisdictions. This material does not constitute an offer or solicitation where such actions are not authorised or lawful, and in some cases may only be provided at the initiative of the prospect. Further limitations on the availability of products or services described herein may be imposed.

This material is only intended for investors which meet qualifications as institutional investors as defined in the applicable jurisdiction where this material is received, which includes only *Professional Clients* or *Eligible Counterparties* as defined by the Markets in Financial Instruments Directive (MiFID) where this material is issued by APUK or AP Europe. This material is not for use by retail investors and may not be reproduced or distributed without Artisan Partners' permission.

In the United Kingdom, issued by APUK, 25 St. James's St., Floor 3, London SW1A 1HA, registered in England and Wales (LLP No. OC351201). Registered office: Reading Bridge House, Floor 4, George St., Reading, Berkshire RG1 8LS. In Ireland, issued by AP Europe, Fitzwilliam Hall, Fitzwilliam Pl, Ste. 202, Dublin 2, D02 T292. Registered office: 70 Sir John Rogerson's Quay, Dublin 2, D02 R296 (Company No. 637966).

Australia: This material is directed at wholesale clients only and is not intended for, or to be relied upon by, private individuals or retail investors. Artisan Partners Australia Pty Ltd is a representative of APLP (ARBN 153 777 292) and APUK (ARBN 603 522 649). APLP and APUK are respectively regulated under US and UK laws which differ from Australian laws and are exempt from the requirement to hold an Australian financial services license under the Australian Corporations Act 2001 in respect to financial services provided in Australia.

Canada: This material is distributed in Canada by APLP and/or Artisan Partners Distributors LLC, which conduct activities in Canada under exemptions from the dealer, portfolio manager and investment fund manager registration requirements of applicable Canadian securities laws. This material does not constitute an offer of services in circumstances where such exemptions are not available. APLP advisory services are available only to investors that qualify as "permitted clients" under applicable Canadian securities laws.

© 2022 Artisan Partners. All rights reserved.

For Institutional Investors – Not for Onward Distribution

A R T I S A N



P A R T N E R S

Artisan U.S. Small-Cap Growth Strategy

Quarterly Contribution to Return (% USD)

As of 31 March 2022

Top Contributors	Average Weight	Contribution to Return	Ending Weight
Zynga Inc	2.75	1.00	1.74
Shockwave Medical Inc	2.68	0.53	3.44
Chegg Inc	2.09	0.47	2.54
iRhythm Technologies Inc	0.71	0.19	0.92
Halozyme Therapeutics Inc	5.47	0.18	6.17
Silvergate Capital Corp	1.21	0.09	1.49
Bright Horizons Family Solutions Inc	1.37	0.09	1.01
Freshpet Inc	0.81	0.08	0.91
Monolithic Power Systems Inc	3.94	0.08	4.42
Paycor HCM Inc	0.73	0.07	0.85
Wolfspeed Inc	1.43	0.04	1.63
Option Care Health Inc	0.73	0.04	0.83
Sprout Social Inc	0.06	0.03	0.41
BTRS Holdings Inc	0.37	0.00	0.43
Cash Holdings	0.58	0.00	1.70
Casey's General Stores Inc	0.09	-0.01	0.00
2U Inc	0.02	-0.02	0.00
Procore Technologies Inc	0.23	-0.02	0.32
Cargurus Inc	0.09	-0.03	0.23
Installed Building Products Inc	0.03	-0.03	0.00
Global-e Online Ltd	0.21	-0.03	0.61
Bentley Systems Inc	1.06	-0.05	1.24
Orchard Therapeutics PLC	0.13	-0.08	0.04
Compass Inc	0.54	-0.08	0.77
Valmont Industries Inc	3.11	-0.09	3.28
Seer Inc	0.21	-0.09	0.20
Iovance Biotherapeutics Inc	0.90	-0.10	0.98
Leslie's Inc	0.68	-0.12	0.71
Denali Therapeutics Inc	0.39	-0.12	0.37
Workiva Inc	2.48	-0.12	2.81
Avid Bioservices Inc	0.50	-0.13	0.59
DoubleVerify Holdings Inc	0.60	-0.13	0.69
Eventbrite Inc	0.89	-0.14	0.98
Genius Sports Ltd	0.32	-0.15	0.25
Traeger Inc	0.39	-0.18	0.31
Shoals Technologies Group Inc	0.62	-0.18	0.62

Bottom Contributors	Average Weight	Contribution to Return	Ending Weight
NeoGenomics Inc	2.13	-2.03	0.77
Blackline Inc	3.64	-1.20	3.31
Lattice Semiconductor Corp	5.12	-1.13	5.22
Veracyte Inc	2.77	-1.02	2.69
LivePerson Inc	1.17	-0.98	0.00
Wingstop Inc	2.30	-0.85	1.91
Floor & Decor Holdings Inc	1.89	-0.79	1.51
Q2 Holdings Inc	2.85	-0.70	2.76
Ingersoll Rand Inc	3.15	-0.64	2.98
Novanta Inc	3.09	-0.63	3.12
Trex Co Inc	0.77	-0.56	0.57
BigCommerce Holdings Inc	1.13	-0.52	0.93
HubSpot Inc	1.82	-0.52	1.79
YETI Holdings Inc	1.22	-0.47	0.92
Ambarella Inc	0.75	-0.44	0.71
Guidewire Software Inc	2.47	-0.44	2.46
Papa John's International Inc	2.00	-0.43	1.95
OptimizeRx Corp	0.79	-0.40	0.68
Tyler Technologies Inc	2.36	-0.40	2.35
Avalara Inc	1.57	-0.39	1.55
Live Oak Bancshares Inc	0.85	-0.37	1.00
ThredUp Inc	0.64	-0.35	0.57
Morningstar Inc	1.71	-0.35	1.66
Ascendis Pharma A/S	3.63	-0.30	3.76
Bandwidth Inc	0.26	-0.30	0.00
Azenta Inc	1.52	-0.29	1.48
Allegro MicroSystems Inc	1.30	-0.27	1.31
Freshworks Inc	0.73	-0.25	0.64
Vapotherm Inc	0.67	-0.24	0.60
Advanced Drainage Systems Inc	1.98	-0.23	2.04
The AZEK Co Inc	0.38	-0.23	0.38
Argenx SE	3.41	-0.21	3.71
Olo Inc	0.50	-0.21	0.55
Y-mAbs Therapeutics Inc	0.12	-0.20	0.00
Repligen Corp	0.65	-0.20	0.65
Array Technologies Inc	0.26	-0.20	0.00

Source: Artisan Partners/FactSet. Performance is historical and is not a reliable indicator of future results. As of 31 Mar 2022. These investments made the greatest contribution to, or detracted most from, performance during the period based on a representative account within the strategy Composite. Upon request, Artisan will provide: (i) the calculation methodology and/or (ii) a list showing the contribution of each holding to overall performance during the measurement period. Securities of the same issuer are aggregated to determine the weight in the portfolio. % Contribution to Return is calculated by FactSet by multiplying a security's weight in the portfolio by its in portfolio return for the period referenced and does not take into account expenses of the portfolio. Purchases/sales are accounted for by using end of the day prices, which may or may not reflect the actual purchase/sale price realized by the portfolio.