



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 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



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

Investment Results (%)

As of 30 June 2019	Average Annual Total Returns						
	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	Inception ¹
Composite — Gross	10.40	34.78	21.12	17.74	11.49	17.12	15.38
Composite — Net	10.15	34.19	20.02	16.67	10.47	16.05	14.31
Russell Midcap® Growth Index	5.40	26.08	13.94	16.49	11.10	16.01	9.53
Russell Midcap® Index	4.13	21.35	7.83	12.16	8.63	15.15	10.28

Annual Returns (%) 12 months ended 30 June

	2015	2016	2017	2018	2019
Composite — Gross	10.25	-4.25	18.30	13.91	21.12

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

Despite a meaningful May correction, markets landed mostly in the black in Q2, with US markets leading, followed by non-US developed and emerging markets. Investors continued mulling the potential for slowing growth in major economies, including Europe and China. Further, global trade tensions remained top of mind—though as the quarter concluded, China and the US signaled they would resume negotiations. Brexit also remained an ongoing source of uncertainty, with PM May announcing she would step down as the leader of the Conservative Party but would remain PM until her successor is chosen. As of this writing, the UK is set to leave the EU as of October 31, with the manner of the country's exit still an open question. These concerns aside, however, corporate earnings were solid with many economic indicators relatively robust—helping soothe investor nerves and contributing to June's bounce-back.

On the monetary policy front, major global developed world central banks left interest rates unchanged during Q2 as expected. However, several—notably, the Fed—indicated they will remain accommodative as economic conditions and the ongoing trade negotiations evolve in the coming months. Interest rates were pressured following the announcements, while equity markets seemed bolstered.

At the sector level, information technology led as investors' appetite for growth-oriented stocks has remained robust, despite the aforementioned concerns about the global growth trajectory. Conversely, energy and health care were the primary laggards. Oil prices fell for much of Q2 as supply is abundant and alternatives are becoming increasingly competitive. Though oil prices bounced sharply in June as Middle East tensions flared, they were insufficient to lift energy from among the bottom-contributing sectors for the quarter. The health care sector has been pressured amid amplifying US political rhetoric ahead of the presidential primary, which has increased uncertainty about the future of the insurance industry and pharmaceutical pricing. From a size perspective, small stocks trailed their larger counterparts during Q2—though mid cap leads YTD, followed by large stocks and small.

Performance Discussion

Our portfolio outperformed the Russell Midcap® and Russell Midcap® Growth Indices in Q2 and remains ahead of both indices YTD. Returns were strong from an absolute and relative perspective as macroeconomic worries and falling rates represented a positive market environment for many of our holdings, whose profit cycles tend to be driven by secular trends, innovation and internal change (as opposed to global GDP dynamics). Those profit cycles were on full display during the quarter, as most CropSM holdings reported solid quarterly results. At the sector level, our information technology holdings were the strongest performers, followed by our health care holdings. In both cases, positive stock selection was aided by our ongoing focus on cloud-based software franchises. Conversely, consumer discretionary was the primary negative contributor at the

sector level in Q2, tied mainly to Canada Goose's performance, which we'll discuss in further detail later in this communication.

It's worth highlighting that performance in Q2 was helped by well-received M&A activity which impacted several of our CropSM holdings, including Tableau and Global Payments. Tableau Software was acquired at a meaningful premium by Salesforce in June, validating our conviction in the data analytics trend and Tableau's leading position. Global Payments announced an all-stock merger with TSYS which we think will lead to revenue and cost synergies under Global Payments' capable management team. In addition, while the Harris Corp/L3 Technologies and Worldpay/FIS mergers were announced in previous quarters, those stocks outperformed in Q2 as investors' conviction in the merged companies' growth prospects strengthened as the deals neared closing.

Among our top contributors in Q2 were Tableau, Global Payments and Veeva Systems. Tableau is a provider of unique, interactive data visualization software allowing enterprise clients to quickly translate complex data into compelling graphics. The aforementioned acquisition by Salesforce caps a successful investment campaign as we recognized early that Tableau's new management team was positioning the company for faster, more reliable growth by shifting to a subscription-based business model and doubling down on continually improving its analytics tools for customers. However, we have mixed feelings about the acquisition, as we think over time the stock would have surpassed the value of Salesforce's offer based on our future cash flow projections. Because we expect the deal to close—and because shareholders are receiving shares of Salesforce's stock, which is far beyond our mid-cap mandate—we have been harvesting our position.

Shares of Global Payments were rewarded following solid quarterly results that exhibited the strength of the company's strategic focus on software-enabled payments, as well as management's consistent execution. Further, we believe Global Payments' aforementioned merger with TSYS—another leading provider of payments processing and related services—is a strong strategic fit. We anticipate the international marriage of Global Payments' global scale and existing relationships with TSYS's sticky software solutions can help scale the latter's business, which is particularly attractive for its high margins. We believe the secular trend toward digital payments remains in its relatively early innings and consequently believe there is ample runway ahead of high-quality franchises like Global Payments.

Veeva Systems continues winning new life-science industry customers and selling additional software tools to existing customers, which is driving strong revenue growth. Further, the efficiency of Veeva's operating model (a modern technology platform, products that have earned high customer satisfaction and a mature sales force footprint) is translating into very impressive margin expansion. During Q2, Veeva won its first contract with a top-20 pharmaceuticals customer to capture and manage clinical trial data from the point of care. Veeva

is a relative newcomer to this large market. Based on the quality of Veeva's software and the synergies between clinical data capture and the broader Vault product suite, we expect this segment to be a key driver of the company's growth in future years. Though we pared our exposure in accordance with our valuation discipline, it remains a core CropSM holding.

Among our bottom contributors in Q2 were Canada Goose, Arista Networks and Alexion Pharmaceuticals. Premium outerwear brand Canada Goose delivered strong quarterly results in Q2 which exhibited continued global growth for the brand. However, investors have grown to expect even higher levels of growth and are questioning the company's ability to support off-season sales with product extensions into new categories, spring wear, accessories, etc. Further, ongoing macro headwinds in China, where Canada Goose is actively expanding, have clouded the near-term outlook there. Based on our research, the brand continues to appear healthy, and the growth opportunities globally continue to look attractive—hence, we have maintained our position.

Arista is the market leader for cloud networking equipment who has been gaining market share within large cloud computing customers globally. We first initiated our position as we anticipated Arista's differentiated software would enable significant customer savings over legacy solutions, allowing it to continue taking share from legacy hardware-centric incumbents. In the company's recently reported Q1 results, investors were caught off-guard by slowing orders from large customer Microsoft, who appears to be digesting significant purchases from Arista over the last year. Based on our knowledge of Microsoft's cloud computing plans and Arista's competitive position, we strongly suspect this to be a temporary issue. Further, Arista is in the early stages of extending its franchise from large cloud and telecom networking to enterprise networking components, which we believe will represent a compelling growth opportunity over time. Therefore, as shares declined, we viewed it as an opportunistic chance to add capital.

Alexion Pharmaceuticals is a global biopharmaceutical company focused on rare diseases. Alexion's underperformance during the quarter represented a bit of a puzzle to us. The company's relatively new management team continues to meet or exceed all its targets. Notably, Alexion's core product, Soliris[®] for various rare diseases, continues to see solid growth as prescriptions grow within current indications and as the company receives approvals for new rare diseases. In fact, toward the end of Q2, the company received its latest label expansion for Soliris[®] to treat neuromyelitis optica spectrum disorder—a rare and severe autoimmune disease that attacks the central nervous system without warning. Meanwhile, after inheriting a relatively sparse new product pipeline, the management team has made excellent progress through internal R&D and business development activity to build an interesting and diversified set of potential new products. We suspect the general lack of enthusiasm for larger biotechnology stocks is the reason for the underperformance. We certainly understand the focus on drug-price legislation in

Washington, D.C., but believe we have appropriately factored that risk into our valuation expectations and despite that, see a solid profit cycle ahead for Alexion.

Portfolio Activity

We initiated several new positions during Q2—among them, Zoom Video, Masco and Spotify. Zoom Video is a cloud platform for video, voice, content sharing and chat across mobile devices, desktops, telephones and room systems. We think Zoom represents a disruptive entrant into the corporate communication and collaboration landscape. While video conferencing has been a staple in businesses for a number of years, it has tended to require expensive investments in hardware and the ease of use of the tools has left much to be desired, thus limiting the use of video conferencing. Zoom's compelling cloud-based hardware and software both lowers the cost of video conferencing and significantly improves the ease of use for employees. While the stock has appreciated meaningfully from the IPO, the company's key metrics (new client momentum, expansion within existing customers, and margin efficiency) combined with our customer due diligence suggests to us that this has the potential to be a much bigger company over time.

Masco is a global leader in the design, manufacture and distribution of branded home improvement and building products. We've long observed that certain building products segments are more attractive: They tend to be more resilient in down cycles, are brand-driven as opposed to commoditized, and are often consolidated rather than fragmented. Masco's paint and plumbing segments are two of the industry's best, and it occupies strong franchise positions in both, led by brands Behr[®], Delta[®] and Hansgrohe[®]. While industry trends have softened over the last year as we get further into the recovery post the great recession, we were attracted by the company's announcement that it plans to divest its lower-margin, more cyclical windows and doors segments. Assuming management can execute these transactions, we see the potential for a stronger overall profit cycle, and importantly, likely multiple expansion as investors grow confident in the more resilient and higher return profile of the remaining businesses.

We have been impressed by the global growth of music streaming and view Spotify as the leading global franchise based on its market share and its high-quality library and user interface. Our questions around the business have focused on the company's ability to expand margins over time, due to the concentrated market power of the large music labels as well as the competitive environment with Apple and Amazon, which are certainly intent on growing their music-streaming businesses as well. Our research in recent quarters has made us optimistic that Spotify's competitive position is secure and that its investments and expansion within podcasts—where content is not controlled by powerful music labels—represent a promising source of margin leverage in the business longer term. In addition, we're optimistic Spotify can use its massive database of music trends and user preferences to provide additional value to both artists and labels.

The holding remains in the GardenSM while we watch for signs that thesis is likely to be correct.

In addition to the aforementioned Arista Networks, we also added to Ceridian and Argenx in Q2. We initiated a position in Ceridian, a cloud-based provider of payroll and related software, in Q1 as it has the characteristics we like in a software business. First, it addresses a large payroll processing market globally. Second, its core software suite, Dayforce, was designed for the cloud-computing era and therefore is taking market share from larger legacy incumbents whose software is less nimble and more limited in its functionality and interoperability. Finally, the company's operating metrics (sales force efficiency, cash flow) are solid and point to high economic return potential over time. Quarterly results were noisy as they were impacted by foreign exchange volatility and some of the company's smaller legacy business lines. However, the core software-suite trends remain impressive, and we took the opportunity to make it a larger GardenSM position in Q2.

Argenx is a good example of the type of small- to mid-cap biotechnology company we seek, with many of the traits we look for in emerging franchises. While not profitable today, it has several pipeline products that we believe have been significantly de-risked over the past year, positioning the company for strong future cash flows. The first of those is both a product and a platform, ARGX-113, which has shown promising data in several severe autoimmune diseases. In addition, Argenx's antibody drug for acute myeloid leukemia has shown compelling early anti-cancer data and has been further de-risked by the lucrative partnership investment by Johnson & Johnson. Based on our conviction in these product opportunities, in addition to the company's earlier-stage pipeline products, we increased it to a larger GardenSM position in Q2.

Conversely, we concluded our campaigns in MarketAxess, DocuSign and Albemarle in Q2. MarketAxess is a leading franchise in electronic fixed-income trading. Trends in the business remain solid, and we are optimistic that longer term, the electrification of these markets will lead to continued growth for the company. However, the valuation reached levels we couldn't quite understand, and therefore, we harvested the position.

DocuSign helps organizations connect and automate how they prepare, sign, act on and manage agreements. While we continue to see opportunities for DocuSign to grow as businesses around the globe undergo digital transformations and use DocuSign's e-signature and workflow automation tools as part of that, we have seen more compelling opportunities elsewhere in cloud-based software. We consequently decided to conclude our GardenSM campaign and used DocuSign as a source of funds.

Albemarle is the leading global lithium supplier—which we view as a growth market as electric vehicle (EV) penetration rises in the future. However, our investment campaign was ill-timed as global supply investments in recent years have ramped up to meet this forecasted

demand, casting doubt on future pricing and returns for this commodity. We have other technology providers into EVs where we believe the competitive dynamics are more stable and durable—such as Cree and Aptiv—and we've therefore chosen to focus on those franchises.

As valuations have risen and M&A activity has picked up, we have maintained our valuation discipline, as evidenced in the aforementioned trims of Veeva Systems and MarketAxess. We also pared our exposure to Progressive and Cintas in Q2. Progressive continues to deliver excellent results, and we have high conviction it will continue to take profitable market share in the personal auto and homeowners insurance markets, based on the strength of its brand as well as its competitive advantages in technology and data. We recognize, however, that we've been in a very favorable part of the personal auto insurance cycle, which has driven Progressive's margins above levels that are likely sustainable. As we factor in a normalization of that margin profile in the coming years, combined with the stock's appreciation, we've begun to gradually harvest our position.

Cintas has also been an excellent stock. We first purchased it on the thesis that the acquisition of G&K created significant opportunities for revenue and cost synergies. We had high confidence in Cintas's management team to achieve those synergies, and we have been rewarded accordingly for that conviction. We think the stock's valuation now more appropriately reflects the strength of the franchise and profit cycle, and therefore we have reduced the position.

Portfolio Statistics

As of June 30, the portfolio had a median market cap of \$14 billion and a 3-5 year forecasted weighted average earnings growth rate of 16%. Our holdings were selling at a weighted harmonic average P/E (excluding negative earnings) of 30X FY1 earnings and 26X FY2 earnings. As of quarter end, we held 62 positions. Our top 20 holdings accounted for roughly 53% of portfolio assets as of quarter end. Our top 30 holdings represented about 68% of portfolio assets.

Perspective

Strong earnings growth has been a nice contributor to the portfolio's attractive YTD returns. But multiple expansion has clearly played an important role as well. As we have communicated in prior letters, we entered the year (following Q4 2018's decline) believing valuations in the portfolio were quite attractive—hence, some multiple recovery was to be expected. Beyond that dynamic, we believe valuations have been boosted in recent quarters by falling interest-rate expectations and global macro concerns that have created a scarcity premium for many of our holdings (businesses whose profit growth is driven by innovation, internal initiatives and secular trends, more than by global economic expansion).

While we expect the portfolio to exhibit continued solid earnings growth in the second half of the year, our expectations for continued

multiple expansion are far more restrained. In fact, as market participants (most of whom we believe have shorter investment time horizons than we do) watch US-China trade developments, Fed actions and political indicators in an attempt to call the market's next turn, we wouldn't be shocked to see profit-taking in our holdings to fund bets in either more cyclical—or more defensive—equities.

While our time horizon is reasonably long—and while our investment process guides our stock selection toward high-quality franchises with visible profit cycle drivers and solid balance sheets—we're always comparing the relative attractiveness of our portfolio to what we *don't* own. Our observation today is that pockets of "value" in the market—banks, autos and cyclical industrials, for example—require investors to shoulder meaningful cyclical economic risk. On the other end of the spectrum, "defensive" stocks (those with very stable earnings trends and limited cyclical risk) have experienced meaningful multiple expansion as investors have looked for safety in an uncertain global economy. So while many of our holdings have seen their valuations expand to the upper end of reasonable YTD, it's not obvious to us that trading down in quality for cyclical value stocks, or giving up dynamic earnings growth for expensive safety, are attractive alternatives.

So while we're maintaining our valuation discipline—this letter gives several examples of recent valuation trims such as Veeva, Cintas and MarketAxess—we also maintain our conviction that many of the profit cycles in the portfolio offer further opportunity for long-term compounding of value. For example, software usage is steadily proliferating across the economy—a trend that benefits not only our fastest-growing Silicon Valley companies (Atlassian, Veeva, Tableau, etc.), but also forward-looking diversified franchises across industrials (Fortive, Roper, Trimble), financials (Broadridge, Global Payments) and consumer (Hasbro, Chipotle). Our combined biotechnology holdings are as attractive as we've seen in the last seven to eight years. And approximately one fifth of the portfolio is led by relatively new management teams who we believe are in the early stages of driving profit acceleration based on improved strategies and execution. As such, a short-term market pullback would likely present us with multiple opportunities to add to high-conviction investments at more opportunistic prices.

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.

Securities of the same issuer are aggregated to determine a holding's weight in the portfolio. Securities referenced may not represent all of the securities in the portfolio. If certain information is unavailable for a particular security Artisan Partners may use data from a related security to calculate portfolio characteristics. All information in this report is as of the date shown in the upper right hand corner unless otherwise 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 Midcap[®] Growth Index measures the performance of US mid-cap companies with higher price/book ratios and forecasted growth values. Russell Midcap[®] Index measures the performance of roughly 800 US mid-cap companies. The index(es) are unmanaged; include net reinvested dividends; do not reflect fees or expenses; and are not available for direct investment.

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.

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 30 Jun 2019. 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.

Portfolio statistics are intended to provide a general view of the entire portfolio, or Index, at a certain point in time. Statistics are calculated using information obtained from various data sources. Artisan Partners excludes outliers when calculating portfolio characteristics. If information is unavailable for a particular security Artisan Partners may use data from a related security to calculate portfolio statistics. **Median** is the data's midpoint value. **Weighted Harmonic Average** is a calculation of weighted average commonly used for rates or ratios. **Weighted Average** is the average of values weighted to the data set's composition. **Market Cap** is the aggregate value of all of a company's outstanding equity securities. **Earnings Growth Rate** is the annual rate at which a company's earnings are expected to grow. **Price-to-Earnings (P/E)** is a valuation ratio of a company's current share price compared to its per-share earnings. **Private Market Value** is an estimate of the value of a company if divisions were each independent and established their own market stock prices.

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. This material 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 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. 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. 0C351201). Registered office: Reading Bridge House, Floor 4, George St., Reading, Berkshire RG1 8LS. In Ireland, issued by AP Europe. Location and registered office: Fitzwilliam Hall, Fitzwilliam Pl, Ste. 202, Dublin 2, D02 T292 (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.

Bailiwick of Guernsey: The financial services referred to in this material and this document are not being made available in the Bailiwick of Guernsey (Guernsey) to more than 50 persons in Guernsey and the financial services may not be accepted by more than 50 persons in Guernsey.

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.

© 2019 Artisan Partners. All rights reserved.

For Institutional Investors Only — Not for Onward Distribution



Artisan U.S. Mid-Cap Growth Strategy

Quarterly Contribution to Return (%)

As of 30 June 2019

Top Contributors	Average Weight	Contribution to Return	Ending Weight
Tableau Software Inc	2.85	1.01	1.71
Veeva Systems Inc	3.76	1.00	3.45
Global Payments Inc	5.42	0.93	5.54
Atlassian Corp PLC	4.05	0.65	3.95
IHS Markit Ltd	3.57	0.61	3.77
Exact Sciences Corp	1.61	0.53	1.81
Gardner Denver Holdings Inc	2.25	0.50	2.30
L3Harris Technologies Inc	2.64	0.49	2.64
Motorola Solutions Inc	2.32	0.44	2.45
The Progressive Corp	3.10	0.36	2.47
Boston Scientific Corp	2.89	0.32	3.04
DexCom Inc	0.99	0.32	1.55
Advanced Micro Devices Inc	1.60	0.31	1.90
Zynga Inc	1.92	0.29	2.04
Worldpay Inc	3.34	0.27	3.29
Temenos AG	1.23	0.25	1.24
Pageseguro Digital Ltd	0.75	0.25	1.28
Broadridge Financial Solutions Inc	1.12	0.25	1.14
Cintas Corp	1.27	0.22	0.91
Hasbro Inc	1.11	0.22	1.22
Roper Technologies Inc	2.69	0.20	2.64
First Solar Inc	0.99	0.18	1.15
TransUnion	1.66	0.16	1.70
Lonza Group AG	1.61	0.16	1.70
Take-Two Interactive Software Inc	0.81	0.16	0.84
The Trade Desk Inc	0.71	0.15	0.45
West Pharmaceutical Services Inc	1.09	0.15	1.10
Under Armour Inc	0.66	0.13	0.69
lululemon athletica inc	1.17	0.12	1.14
ServiceMaster Global Holdings Inc	1.00	0.12	0.96
Trimble Inc	1.00	0.11	1.05
Genmab A/S	1.93	0.11	1.98
Sage Therapeutics Inc	0.73	0.11	0.77
Guidewire Software Inc	2.30	0.10	2.52
Argenx SE	0.63	0.10	0.95
MarketAxess Holdings Inc	0.23	0.08	0.00

Bottom Contributors	Average Weight	Contribution to Return	Ending Weight
Canada Goose Holdings Inc	1.27	-0.28	1.18
Albemarle Corp	0.66	-0.23	0.00
Arista Networks Inc	1.22	-0.22	1.51
Ctrip.com International Ltd	0.65	-0.12	0.62
Agilent Technologies Inc	1.17	-0.11	1.12
ABIOMED Inc	1.04	-0.10	1.15
Alexion Pharmaceuticals Inc	1.97	-0.09	2.01
Edwards Lifesciences Corp	1.03	-0.06	0.97
Cognex Corp	0.88	-0.05	0.87
Skyworks Solutions Inc	0.69	-0.05	0.64
First Republic Bank	1.89	-0.05	1.74
SVB Financial Group	0.48	-0.03	0.00
Ceridian HCM Holding Inc	0.76	-0.02	0.98
Centene Corp	0.10	-0.02	0.47
Cree Inc	2.04	-0.02	1.78
The New York Times Co	1.32	-0.02	1.48
Wayfair Inc	1.53	-0.01	1.49
Fortive Corp	1.21	-0.01	1.39
Ascendis Pharma A/S	0.92	-0.01	1.03
Expedia Group Inc	1.18	-0.01	0.00
Align Technology Inc	0.49	-0.00	0.00
FLIR Systems Inc	0.01	0.00	0.00
WellCare Health Plans Inc	0.87	0.01	0.79
Masco Corp	0.27	0.01	0.70
Zoom Video Communications Inc	0.18	0.02	0.84
Coupa Software Inc	0.01	0.02	0.31
DocuSign Inc	0.06	0.02	0.00
Cash Holdings	3.51	0.02	4.23
Aptiv PLC	1.46	0.02	1.42
Chipotle Mexican Grill Inc	0.72	0.03	0.78
HubSpot Inc	1.45	0.03	1.44
Ollie's Bargain Outlet Holdings Inc	0.07	0.03	0.00
Spotify Technology SA	0.13	0.03	0.52
TD Ameritrade Holding Corp	0.39	0.04	0.00
Zscaler Inc	0.34	0.05	0.52
MSCI Inc	0.46	0.08	0.62
Insulet Corp	0.59	0.08	0.00

Source: Artisan Partners/FactSet. Performance is historical and is not a reliable indicator of future results. As of 30 Jun 2019. 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.