



# Artisan Non-U.S. Small-Mid Growth Strategy

QUARTERLY  
Commentary

As of 30 September 2019

## Investment Process

We seek long-term investments in high-quality businesses exposed to structural growth themes that can be acquired at sensible valuations in a contrarian fashion and are led by excellent management teams.

### Investing with Tailwinds

We identify structural themes at the intersection of growth and change with the objective of investing in companies having meaningful exposure to these trends. Themes can be identified from both bottom-up and top-down perspectives.

### High-Quality Businesses

We seek future leaders with attractive growth characteristics that we can own for the long term. Our fundamental analysis focuses on those companies exhibiting unique and defensible business models, high barriers to entry, proven management teams, favorable positions within their industry value chains and high or improving returns on capital. In short, we look to invest in small companies that have potential to become large.

### A Contrarian Approach to Valuation

We seek to invest in high-quality businesses in a contrarian fashion. Mismatches between stock price and long-term business value are created by market dislocations, temporary slowdowns in individual businesses or misperceptions in the investment community. We also examine business transformation brought about by management change or restructuring.

### Manage Unique Risks of International Small- and Mid-Cap Equities

International small- and mid-cap equities are exposed to unique investment risks that require managing. We define risk as permanent loss of capital, not share price volatility. We manage this risk by having a long-term ownership focus, understanding the direct and indirect security risks for each business, constructing the portfolio on a well-diversified basis and sizing positions according to individual risk characteristics.

## Team Overview

Our team is intellectually curious about the world and how it is changing. Each team member is passionate about small company investing and discovering businesses with meaningful and open-ended growth opportunities.

### Portfolio Management



Rezo Kanovich  
Portfolio Manager

### Investment Results (%)

| As of 30 September 2019                       | QTD          | YTD          | Average Annual Total Returns |      |      |       |                        |
|-----------------------------------------------|--------------|--------------|------------------------------|------|------|-------|------------------------|
|                                               |              |              | 1 Yr                         | 3 Yr | 5 Yr | 10 Yr | Inception <sup>1</sup> |
| <b>Composite — Gross</b>                      | <b>-1.78</b> | <b>21.86</b> | —                            | —    | —    | —     | <b>21.86</b>           |
| <b>Composite — Net</b>                        | <b>-2.04</b> | <b>20.92</b> | —                            | —    | —    | —     | <b>20.92</b>           |
| MSCI All Country World ex USA SMID Index      | -1.47        | 10.96        | —                            | —    | —    | —     | 10.96                  |
| MSCI All Country World ex USA Small Cap Index | -1.19        | 10.28        | —                            | —    | —    | —     | 10.28                  |

### Annual Returns (%) 12 months ended 30 September

2015 2016 2017 2018 2019

|                          |   |   |   |   |   |
|--------------------------|---|---|---|---|---|
| <b>Composite — Gross</b> | — | — | — | — | — |
|--------------------------|---|---|---|---|---|

Source: Artisan Partners/MSCI. Returns for periods less than one year are not annualized. <sup>1</sup>Composite inception: 1 January 2019.

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. The portfolio's returns may vary greatly over shorter periods due to the limited operating period since inception.

**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

Following a strong first half of the year, non-US equities modestly weakened in Q3 as softening global growth and the US-China trade conflict returned to the fore of investor concerns. Also weighing on market sentiment was an uncertain geopolitical landscape due to Brexit, Hong Kong protests and ongoing conflict in the Middle East. While Japan advanced, small-cap stocks in Europe, the US and emerging markets finished lower. Reflecting macro uncertainties, returns were weak among cyclicals, such as energy, industrials and financials. Interest rate proxies (real estate and utilities) were the best performers amid sustained bond market rallies. Although overall corporate fundamentals remain healthy, slowing global growth, reduced earnings growth expectations and continued uncertainty from the US-China trade conflict remain headwinds.

The macro backdrop is something we're aware of, particularly since it may provide us opportunities to invest at more attractive prices, but short-term market fluctuations are not a focus of our process. We are very selective about the companies we invest in. We look for small companies we believe can become meaningfully larger over a five-year time horizon. Our long-term orientation is evident in our low portfolio turnover. Most companies are not going to meet our investment criteria. They may produce commoditized products, be slaves to government regulation or occupy unfavorable positions in their supply chains.

A couple examples that demonstrate our willingness to be contrarian in the face of negative macro headlines are Howden Joinery and SolarEdge Technologies. Howden Joinery is a British supplier of home items like kitchen cabinets, doors, etc. Given Brexit-related headlines, it wouldn't seem to be an attractive investment, but Howden has a unique business model in how it distributes and sells its goods. The company intentionally focuses on serving the professional tradesman rather than competing with the big DIY box stores. We were willing to own Howden Joinery despite Brexit fears because Brexit should not erode the company's structurally differentiated business model. The other example is SolarEdge, a maker of solar photovoltaic inverters. Due to trade war dynamics, much of the market thought that cost and pricing for inverters would increase materially and would dampen demand for solar power. We took the view that over the long run, solar power as a cleaner source of energy is structurally going to grow—on par with other power sources. Moreover, SolarEdge fundamentally has a more efficiently designed product, evidenced by its ability to go from having effectively no share in the US residential market five years ago to the #1 player today. So, although trade war headlines sound bad, our analysis led us to remain confident in our original thesis focused on better technology and a structurally growing end market.

We also want to emphasize that we are not momentum investors or interested in fads such as the recent spate of failed or poor performing IPOs in which unprofitable private companies are coming to market at steep valuations. Instead we look to create a diversified portfolio of reasonably valued companies that are benefiting from structural

growth tailwinds and are led by strong management teams. Our universe allows us to create a diverse collection of themes and stocks. The success of these companies is much more a function of idiosyncratic factors, such as managements and technologies, than the cyclical market backdrop.

### Performance Discussion

Our portfolio modestly trailed the MSCI ACWI ex USA SMID Index in Q3 yet remains solidly ahead YTD. Among our biggest Q3 detractors were New Work, SG Holdings, Aston Martin Lagonda Global Holdings and IMCD. New Work (formerly Xing) is a German online business networking platform operator similar to US-based LinkedIn. After a strong run-up in the first half of the year, the stock fell sharply in Q3—tied partly to obvious fear the business cycle is slowing in Europe. An upcoming leadership change is also creating uncertainty: The existing CEO is retiring, and the new CEO will take over in May 2020. We believe the business is more defensive than people think and continue to like its positioning in the structurally growing professional social networking market. As always, we are in dialogue with the company and its management.

SG Holdings is a Japanese provider of logistics and delivery services. Profitability in the prior quarter was hampered by a particularly long Golden Week holiday that reduced productivity. In addition, after growing operating profit 25% year over year in the company's fiscal year 2018, it expects low single-digit growth in the current fiscal year due to increased labor costs and spending on its delivery network. We believe these factors are short-term and that innovation in warehousing technology, including the routing of vehicles and delivery systems, is underappreciated and will ultimately lead to operating leverage in the business. We are willing to be patient given long-term tailwinds from steady volume growth and customers' willingness to pay higher rates. We remain attracted to the company's competitive advantage in Japan's consolidated parcel delivery market that is based on the company's superior parcel collection network built over many years.

Shares of Aston Martin, a luxury sports car maker, fell after the company lowered its sales forecast for the year on weakness in the UK and Europe. Investors are also concerned about the company's financial position given a large debt load and negative cash flow in the recent quarter due partly to a planned inventory build and heavy investment in new products. Our interest in the company is based on the growth potential from a model line expansion, including the launch of its new DBX sports utility vehicle. When we conceived our investment case, we looked to the success Ferrari has had in scaling itself up and generating luxury market-level margins. Yet Aston Martin is contending with a tougher macro backdrop for large luxury purchases and has a weaker balance sheet. Unless it can reduce its cash burn, the company may look to raise capital, possibly via a debt offering. If the DBX SUV is successful, there is tremendous operating leverage potential. If it doesn't work out, we would anticipate the sale of the business to a larger auto manufacturer with greater scale. The stock remains a small position in the portfolio.

Shares of IMCD have been held back by the company's exposure to cyclical end markets. IMCD is a Dutch specialty chemicals distributor, distributing high-value items such as specialty food ingredients, flavors and fragrances to varied end markets, including food and nutrition, pharmaceuticals and personal care products. The company also provides customers with its expertise in the development of new products and formulations. IMCD is an example of a holding in what we call our high value-added bottlenecks theme. These are businesses that provide high-value inputs within their respective supply chains and earn higher returns on capital as a result. We are not concerned with the recent weakness in the share price and hope to own the company for a long time.

SolarEdge Technologies, ACADIA Pharmaceuticals, Ossur and Rakus were our top Q3 contributors. SolarEdge is an Israel-based producer of solar photovoltaic systems. After a few quarters of weak gross margins due to higher manufacturing costs and customer support expenses, shares have rallied on a rebound in margins and continued strong top-line growth. We believe the company's intellectual property positions it well to benefit from the sustainability of solar power. The cost of solar, which is already on par with coal, is continuing to come down. We also expect that due to its expertise in power optimization, which is relevant in other fields (e.g., utility-scale solar, charging stations for electric vehicles), the company can develop into a broader electrical power company, while benefiting from the platform nature of its technology.

ACADIA is a biopharmaceutical company and maker of Nuplazid® (pimavanserin), the only approved treatment for Parkinson's disease psychosis. The company's late-stage trial for pimavanserin in dementia-related psychosis—for which there are currently no approved products—achieved its primary endpoint with respect to time of relapse. The positive trial outcome moves up the timeline for regulatory approval and reinforces our investment thesis centered on the potential for label expansion beyond the narrow indication around Parkinson's, as ACADIA is engaged in multiple late-stage programs to broaden pimavanserin's clinical use. We continue to believe this option value is not appropriately reflected in ACADIA's stock price.

Ossur is an Icelandic designer and maker of prosthetics for amputees and the second-largest player in the global prosthetics market. The company is performing well due to continued innovation in high-margin, high-tech bionics that are driving profitability and the technological intensity of its products higher. The company has developed mind-controlled technology that allows the peripheral nervous system to gain control of artificial limbs. Ossur is a good example of an interesting small technology company that has grown in value over time. The company continues to be highly cash generative and to buy back its stock.

Rakus is a provider of cloud software to small businesses in Japan. The company provides software for various corporate functions, including accounting, payroll and travel and reimbursement. The company is a

holding in our cloud computing theme about which we've previously written. We believe certain markets are still early in the cycle of conversion to the cloud with many years of structural growth ahead.

## Outlook and Positioning

Despite seemingly fragile equity market conditions, we are positive on the prospects for our specific set of small- and mid-cap portfolio companies. Selectively, we continue to find attractive valuation entry points in undiscovered or misunderstood businesses with a focus on long-term outcomes. While price-multiple expansion and compression on a broad basis can be sentiment driven, we believe our most attractive investments are poised to meaningfully grow their earnings bases regardless of the cycle, through revolutionary products, technologies or business models disrupting their respective industries.

We have been active in our efforts to create a portfolio of outstanding small businesses that we believe will be future leaders. We travel globally to discover these opportunities, as innovation is occurring all over the world, not just in Silicon Valley. Industries are perpetually changing with new players emerging, and this constant process of creative destruction is to be observed and valued. We hope that this is evident in our discussions of holdings in these quarterly letters.

Two of the new purchases in Q3 were sourced in Israel: Kornit Digital and Tel Aviv Stock Exchange. Kornit Digital is a leader in commercial printing solutions (i.e., equipment, software and ink) for the garment, apparel and textile industries. The company's proprietary "wet-on-wet" technology enables digital ink jet printing direct to textiles, such as t-shirts and furniture, without large batch dye use. The company is a supplier to Amazon.com, which is also a meaningful investor. Kornit is benefiting from the apparel industry's growing structural demand for automation, fast fashion and customization requiring production in small runs with reduced inventory. This can drive its customers' margins structurally higher, since customized products can command higher prices and lower inventories help them avoid having to mark down items to clear inventory. The economics of the business are also very attractive. Kornit possesses a closed-end system of equipment and ink, with ink making up about half of revenue and recurring at much higher gross margins than the printing equipment. Lastly, we hold management in high esteem and think the stock is reasonably valued given the company's differentiated and corresponding large greenfield opportunity set.

Tel Aviv Stock Exchange is the primary securities exchange in Israel. After 66 years in existence, the company demutualized and became a public company in August. The company has several growth initiatives aimed at enhancing liquidity, increasing the number of stock exchange members, developing new products, and upgrading technological infrastructure. Like other financial exchanges the company benefits from the post-financial crisis regulatory push for more transparent on-exchange trading. There is also plenty of domestic savings to be mobilized in the domestic financial market,

while a positive domestic backdrop is supportive for growth. Israel has made tremendous progress economically and in the development of its capital markets. For example, in 2019, Israel was ranked the world's fifth most innovative country by the Bloomberg Innovation Index. This is a favorable environment for entrepreneurship and innovation that can lead to future growth in exchange listings.

The biggest sales in the quarter were IMI, a UK engineering firm, and Tech Mahindra, an Indian provider of IT outsourcing, particularly to the telecom space. IMI has interesting businesses and is active in end markets we like, but a recent management change has led to increased M&A appetite in contrast to the previous management team's focus on operational improvements, organic growth and R&D for product development. Tech Mahindra has been a successful turnaround investment since it undertook multiple poor acquisitions in 2015 and 2016; however, we think the next chapter of the story for this IT outsourcer is less interesting. The company's deep knowledge base establishing telecom networks—key for 5G development—is increasingly being kept in-house to be developed by equipment providers and the customers themselves. We also exited our small positions in Boozt, a Swedish online fashion retailer, and Boku, a provider of online mobile payment services, in favor of better opportunities.

Given our long-term orientation and the flat construction of the portfolio—we'll rarely have position sizes of 3% or more—portfolio performance over time should be driven by many interesting individual ideas rather than by market timing or concentration. We look forward to updating you on our portfolio in future letters.

---

For more information: Visit [www.artisanpartners.com](http://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.

MSCI All Country World ex USA SMID Index measures the performance of small- and mid-cap companies in developed and emerging markets excluding the US. MSCI All Country World Small Cap Index measures the performance of small-cap companies in developed and emerging markets. The index(es) are unmanaged; include net reinvested dividends; do not reflect fees or expenses; and are not available for direct investment.

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 disclaims 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 Sep 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.

**Return on Capital (ROC)** is a measure of how effectively a company uses the money (borrowed or owned) invested in its operations.

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, puritive, 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. 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 *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 or professional clients 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 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.

**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 US Institutional Investors and MiFID Eligible Counterparties — Not for Onward Distribution

# Artisan Non-U.S. Small-Mid Growth Strategy

Quarterly Contribution to Return (%)

As of 30 September 2019

| Top Contributors                        | Average Weight | Contribution to Return | Ending Weight |
|-----------------------------------------|----------------|------------------------|---------------|
| SolarEdge Technologies Inc              | 1.63           | 0.50                   | 1.75          |
| ACADIA Pharmaceuticals Inc              | 1.11           | 0.37                   | 1.21          |
| Ossur HF                                | 1.15           | 0.29                   | 1.28          |
| Rakus Co Ltd                            | 1.01           | 0.24                   | 0.80          |
| Altus Group Ltd                         | 1.10           | 0.24                   | 1.21          |
| Treasury Wine Estates Ltd               | 1.05           | 0.19                   | 1.17          |
| JD Sports Fashion PLC                   | 0.77           | 0.18                   | 0.91          |
| Tel Aviv Stock Exchange Ltd             | 0.31           | 0.17                   | 0.51          |
| boohoo Group PLC                        | 0.86           | 0.17                   | 0.95          |
| Carl Zeiss Meditec AG                   | 1.18           | 0.17                   | 1.22          |
| Notre Dame Intermedica Participacoes SA | 0.73           | 0.16                   | 0.79          |
| Rohm Co Ltd                             | 1.18           | 0.16                   | 1.24          |
| Azbil Corp                              | 1.56           | 0.16                   | 1.64          |
| Ariake Japan Co Ltd                     | 0.72           | 0.15                   | 0.78          |
| Nippon Shinyaku Co Ltd                  | 0.84           | 0.15                   | 0.98          |
| Nice Ltd                                | 3.03           | 0.14                   | 2.86          |
| Carlsberg A/S                           | 1.23           | 0.14                   | 1.27          |
| JCR Pharmaceuticals Co Ltd              | 0.51           | 0.13                   | 0.56          |
| Model N Inc                             | 0.36           | 0.13                   | 0.51          |
| ConvaTec Group PLC                      | 0.80           | 0.11                   | 0.88          |
| The Medicines Co                        | 0.12           | 0.10                   | 0.29          |
| Morneau Shepell Inc                     | 1.01           | 0.10                   | 1.04          |
| Cellavision AB                          | 0.82           | 0.10                   | 0.78          |
| B&M European Value Retail SA            | 1.03           | 0.10                   | 1.07          |
| Megaport Ltd                            | 0.34           | 0.10                   | 0.38          |
| Rumo SA                                 | 0.94           | 0.09                   | 1.01          |
| Britvic PLC                             | 1.21           | 0.09                   | 1.32          |
| Genmab A/S                              | 0.83           | 0.08                   | 0.86          |
| Jeol Ltd                                | 1.19           | 0.08                   | 1.25          |
| Harmonic Drive Systems Inc              | 0.53           | 0.07                   | 0.59          |
| MorphoSys AG                            | 0.73           | 0.07                   | 0.84          |
| Howden Joinery Group PLC                | 1.02           | 0.07                   | 1.06          |
| The Descartes Systems Group Inc         | 0.61           | 0.06                   | 0.66          |
| Nuflare Technology Inc                  | 0.36           | 0.05                   | 0.37          |
| AIXTRON SE                              | 0.66           | 0.04                   | 0.65          |
| Fortnox AB                              | 0.33           | 0.04                   | 0.35          |
| Vaisala Oyj                             | 0.03           | 0.03                   | 0.32          |
| Obic Co Ltd                             | 1.73           | 0.02                   | 1.77          |
| Cognex Corp                             | 0.51           | 0.02                   | 0.55          |
| MonotaRO Co Ltd                         | 0.23           | 0.02                   | 0.25          |
| LivaNova PLC                            | 0.65           | 0.02                   | 0.62          |
| Symrise AG                              | 1.08           | 0.01                   | 1.11          |
| Galapagos NV                            | 0.10           | 0.01                   | 0.09          |
| Joules Group PLC                        | 0.23           | 0.01                   | 0.24          |
| Baloise Holding AG                      | 1.27           | 0.01                   | 1.25          |
| DBV Technologies SA                     | 0.20           | 0.01                   | 0.18          |
| Kinaxis Inc                             | 0.22           | 0.01                   | 0.23          |
| Heron Therapeutics Inc                  | 0.46           | 0.01                   | 0.68          |
| Cash Holdings                           | 3.14           | 0.01                   | 3.52          |
| Kornit Digital Ltd                      | 0.52           | 0.01                   | 0.58          |
| Boku Inc                                | 0.02           | 0.01                   | 0.00          |
| Hookipa Pharma Inc                      | 0.06           | 0.01                   | 0.06          |
| Lonza Group AG                          | 1.16           | 0.01                   | 1.12          |

| Bottom Contributors                               | Average Weight | Contribution to Return | Ending Weight |
|---------------------------------------------------|----------------|------------------------|---------------|
| New Work SE                                       | 1.04           | -0.46                  | 0.75          |
| ViewRay Inc                                       | 0.30           | -0.29                  | 0.13          |
| SG Holdings Co Ltd                                | 2.05           | -0.27                  | 1.88          |
| IMCD NV                                           | 1.14           | -0.26                  | 1.04          |
| Gardner Denver Holdings Inc                       | 1.19           | -0.24                  | 1.08          |
| Aston Martin Lagonda Global Holdings PLC          | 0.31           | -0.24                  | 0.24          |
| Cree Inc                                          | 1.73           | -0.21                  | 1.76          |
| Jenoptik AG                                       | 0.76           | -0.21                  | 0.69          |
| BlackBerry Ltd                                    | 0.60           | -0.20                  | 0.55          |
| Fluidigm Corp                                     | 0.21           | -0.20                  | 0.12          |
| Thule Group AB                                    | 0.74           | -0.20                  | 0.66          |
| Tecan Group AG                                    | 2.23           | -0.19                  | 2.12          |
| Argenx SE                                         | 0.85           | -0.17                  | 0.75          |
| NanoString Technologies Inc                       | 0.52           | -0.17                  | 0.42          |
| Abcam PLC                                         | 0.56           | -0.16                  | 0.51          |
| Teva Pharmaceutical Industries Ltd                | 0.51           | -0.15                  | 0.45          |
| Belimo Holding AG                                 | 1.33           | -0.15                  | 1.31          |
| SSP Group PLC                                     | 1.20           | -0.15                  | 1.07          |
| AVEVA Group PLC                                   | 1.28           | -0.14                  | 1.22          |
| OBIC Business Consultants Co Ltd                  | 1.12           | -0.13                  | 1.15          |
| Intersect ENT Inc                                 | 0.50           | -0.13                  | 0.53          |
| Spirax-Sarco Engineering PLC                      | 0.63           | -0.12                  | 0.58          |
| BK Brasil Operacao e Assessoria a Restaurantes SA | 0.74           | -0.12                  | 0.70          |
| Vericel Corp                                      | 0.51           | -0.11                  | 0.44          |
| Davide Campari-Milano SpA                         | 1.24           | -0.10                  | 1.18          |
| MIPS AB                                           | 0.59           | -0.10                  | 0.56          |
| Lectra                                            | 0.32           | -0.09                  | 0.28          |
| Basler AG                                         | 0.34           | -0.09                  | 0.33          |
| Almirall SA                                       | 1.56           | -0.08                  | 1.56          |
| IMI PLC                                           | 0.35           | -0.08                  | 0.00          |
| Blue Prism Group PLC                              | 0.20           | -0.08                  | 0.16          |
| Quotient Ltd                                      | 0.46           | -0.08                  | 0.37          |
| CAE Inc                                           | 1.40           | -0.08                  | 1.33          |
| Salvatore Ferragamo SpA                           | 0.31           | -0.08                  | 0.26          |
| St James's Place PLC                              | 0.61           | -0.08                  | 0.58          |
| Grupo Catalana Occidente SA                       | 0.53           | -0.07                  | 0.48          |
| Beijer Ref AB                                     | 0.97           | -0.07                  | 0.73          |
| Moneysupermarket.com Group PLC                    | 0.60           | -0.07                  | 0.60          |
| Elekta AB                                         | 0.71           | -0.07                  | 0.68          |
| Biotage AB                                        | 0.57           | -0.07                  | 0.54          |
| Auto Trader Group PLC                             | 0.69           | -0.06                  | 0.65          |
| SimCorp A/S                                       | 0.68           | -0.06                  | 0.65          |
| Yamaha Corp                                       | 1.10           | -0.06                  | 1.08          |
| Metso Oyj                                         | 1.25           | -0.05                  | 1.21          |
| Oxford Biomedica PLC                              | 0.20           | -0.05                  | 0.17          |
| Hypoport AG                                       | 0.62           | -0.05                  | 0.57          |
| Odonate Therapeutics Inc                          | 0.16           | -0.05                  | 0.12          |
| Fuji Soft Inc                                     | 1.30           | -0.05                  | 1.24          |
| Yokogawa Electric Corp                            | 0.84           | -0.05                  | 0.82          |
| Sagami Rubber Industries Co Ltd                   | 0.36           | -0.05                  | 0.32          |
| ALK-Abello A/S                                    | 0.34           | -0.04                  | 0.33          |
| Linx SA                                           | 0.22           | -0.04                  | 0.21          |
| Amarin Corp PLC                                   | 0.18           | -0.04                  | 0.15          |

Continued on next page.

# Artisan Non-U.S. Small-Mid Growth Strategy

Quarterly Contribution to Return (%)

As of 30 September 2019

| <b>Top Contributors (continued)</b> | Average Weight | Contribution to Return | Ending Weight |
|-------------------------------------|----------------|------------------------|---------------|
| Fujitec Co Ltd                      | 0.00           | 0.00                   | 0.15          |
| Rohto Pharmaceutical Co Ltd         | 0.60           | 0.00                   | 0.61          |
| Cellnex Telecom SA                  | 0.01           | -0.00                  | 0.00          |
| Boozt AB                            | 0.02           | -0.00                  | 0.00          |
| YouGov PLC                          | 0.59           | -0.00                  | 0.58          |
| Morinaga & Co Ltd                   | 1.12           | -0.01                  | 1.12          |
| Kobe Bussan Co Ltd                  | 0.98           | -0.01                  | 1.02          |
| AC Immune SA                        | 0.05           | -0.01                  | 0.00          |
| BELLUS Health Inc                   | 0.02           | -0.01                  | 0.06          |
| Ambu A/S                            | 0.17           | -0.01                  | 0.54          |
| Rotork PLC                          | 0.45           | -0.01                  | 0.51          |
| SailPoint Technologies Holding Inc  | 0.25           | -0.01                  | 0.21          |
| HomeServe PLC                       | 0.75           | -0.01                  | 0.77          |
| Electrocomponents PLC               | 1.11           | -0.01                  | 1.18          |

| <b>Bottom Contributors (continued)</b> | Average Weight | Contribution to Return | Ending Weight |
|----------------------------------------|----------------|------------------------|---------------|
| Vestas Wind Systems A/S                | 0.37           | -0.04                  | 0.35          |
| SCSK Corp                              | 1.11           | -0.04                  | 1.07          |
| IPG Photonics Corp                     | 0.26           | -0.03                  | 0.26          |
| Tech Mahindra Ltd                      | 0.28           | -0.03                  | 0.00          |
| Codemasters Group Holdings PLC         | 0.51           | -0.03                  | 0.52          |
| Radware Ltd                            | 0.87           | -0.03                  | 0.91          |
| Valneva SE                             | 0.22           | -0.03                  | 0.20          |
| Koninklijke DSM NV                     | 1.59           | -0.03                  | 1.53          |
| DSV Panalpina A/S                      | 0.80           | -0.02                  | 0.83          |
| Burckhardt Compression Holding AG      | 0.59           | -0.02                  | 0.60          |
| Orchard Therapeutics plc               | 0.15           | -0.02                  | 0.12          |
| ASOS PLC                               | 0.32           | -0.02                  | 0.31          |
| Ypsomed Holding AG                     | 0.30           | -0.02                  | 0.28          |
| Petrobras Distribuidora SA             | 0.78           | -0.01                  | 0.84          |
| Gerresheimer AG                        | 0.53           | -0.01                  | 0.49          |

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