



Investment Process Highlights

Our investment approach is based on thematic idea generation, a systematic framework for analyzing companies and proactive risk management. Utilizing this approach, we seek to construct a focused portfolio designed to maximize alpha while limiting downside risk over the long term.

Thematic Idea Generation

We believe a key element in alpha generation is finding areas where our views on industry fundamentals differ from consensus estimates. In this pursuit, we seek to identify inflections in multi-year trends which may be caused by changes in supply/demand dynamics, societal behavior, market conditions, technology, laws/regulations and business models, among other variables. We believe these inflections are often misunderstood by market participants, and can lead to powerful re-ratings of industries and companies. Identifying themes helps us develop a focused universe of companies to analyze more thoroughly.

Systematic Analytical Framework

We apply a systematic framework for analyzing companies across sectors and themes, creating a repeatable and methodical decision-making process. Our proprietary company models focus on multi-year earnings power differentiation, expected outcome scenario analysis, return on invested capital and discounted cash flow valuations. Visual outputs are then produced through our internally developed technology solutions, allowing us to consistently evaluate positions across the portfolio.

Proactive Risk Management

We incorporate risk management into all stages of our investment process. Metrics evaluated include crowding, correlation, volatility, stress tests, liquidity, factor analysis and macro drivers, all of which inform portfolio construction and position sizing. We also use various instruments, such as options, in an effort to magnify alpha and minimize downside.

Team Leadership

The investment team applies the same approach to thematic idea generation and fundamental company analysis that Portfolio Manager Chris Smith has honed throughout his career. Research analysts are sector specialists with deep knowledge of their coverage areas. Our process blends a collaborative team mentality with individual accountability.

Portfolio Management



Christopher Smith
Portfolio Manager

Investment Results (%)

As of 31 March 2019	Average Annual Total Returns						
	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	Inception ¹
Composite — Gross	13.80	13.80	18.61	—	—	—	29.75
Composite — Net	13.53	13.53	17.44	—	—	—	28.49
S&P 500® Index	13.65	13.65	9.50	—	—	—	11.66

Annual Returns (%) 12 months ended 31 March

	2015	2016	2017	2018	2019
Composite — Gross	—	—	—	—	18.61

Source: Artisan Partners/S&P. Returns for periods less than one year are not annualized. ¹Composite inception: 1 May 2017.

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 Strategy's investments in initial public offerings (IPOs) made a material contribution to performance. IPO investments may contribute significantly to a small portfolio's return, an effect that will generally decrease as assets grow. IPO investments may be unavailable in the future.

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.



Performance Discussion

In Q1, our portfolio performed in line with the S&P 500® Index and remains solidly ahead over the prior 12 months and since inception. Performance in Q1 was driven by positive contributions from all of our current themes. Security selection relative to the index was additive, though offset by weaker sector allocation.

Our data monetization theme was the top contributor in Q1 and since inception, followed closely by our software theme—another since-inception standout. Data monetization remains our largest and most diverse theme. As discussed in previous letters, the theme is based on an explosion of data driving a proliferation of data analytics tools and systems. In turn, more companies are attempting to monetize their significant data sets through new products and applications for customers. These companies tend to have license-based, recurring revenue business models, which contribute to higher incremental margins and stickier client relationships—we believe this should lead to structurally higher ROICs and expanding multiples.

Payments processor Worldpay, a top Q1 contributor, is a data monetization theme holding. The company continued benefiting from secular growth in e-commerce, the global trend away from cash payments and synergies from its merger with Vantiv. Worldpay shares rallied in March on the announced acquisition by payments giant Fidelity National Information Services (FIS), another data monetization theme holding. The transaction marks the largest merger in the quickly consolidating payments industry, as companies look to gain pricing power, increase market share and cut costs. The Worldpay acquisition combines a leader in merchant acquiring with FIS's strengths in servicing financial institutions with core banking software, payments capabilities and capital markets software. The combined entity should benefit from scale and the ability to cross-sell payments services into FIS's bank and global customer bases. Importantly, significant synergies are possible that could provide additional upside to longer-term growth prospects.

The portfolio's top contributor was VMware, a software theme holding. VMware has a near monopoly in the core server virtualization software segment. But as that market has become more saturated and mature, the company has reinvented its growth prospects with a strong and broadening product portfolio focused on the underpenetrated market of multi- and hybrid-cloud solutions. The company has aggressively built a robust cloud provider partnership portfolio through alliances with hyperscale infrastructure providers like Amazon Web Services and IBM. VMware also has key emerging growth engines in its network visualization platform and its storage solutions—critical as data moves to the cloud. In Q1, VMware paid a special dividend, which removed an overhang of skepticism around its Dell partnership. The resolution of the government shutdown in Q1 also alleviated a mounting worry, as VMware has a large exposure to US government spend.

Automatic Data Processing (ADP), a cash flow inflection theme holding held in the portfolio since Q3 2017, was another top

contributor. ADP has been transforming itself from a business services model to a software model, leveraging its position as the largest provider of human capital solutions. We believe the company is hitting a period of inflection driven by an operational overhaul that has reduced headcount and improved back-office efficiencies. With headwinds lapping and new booking trends accelerating, momentum from its transformation initiatives are being reflected in improved operational leverage that has translated into significant margin expansion. Together with ADP's strong fundamental underpinnings, investors warmed to ADP's margin expansion story, sending the stock higher in Q1.

Key Q1 detractors included CME Group (CME), a data-monetization theme holding. CME is one of the largest financial exchanges in the world, with an effective monopoly on most futures, currencies, equities and Treasuries, giving it significant pricing power. It is also a lower-beta holding which at times has played an important role in our approach to portfolio construction. However, the suppressed market volatility to start 2019 challenged expectations for significant growth in trading volumes in the near term. We exited CME in February in favor of opportunities we believe have more near-term upside potential. Though we have managed our position sizing, we have had exposure to CME for much of the time since inception.

Other Q1 detractors included medical device company Medtronic, a life sciences theme holding. As one of the largest medical technology companies, Medtronic has leadership positions in most of its major markets, helped by a diversified product set across key areas of cardiac and vascular, diabetes and neurosurgery. During the quarter, Medtronic was hit by negative regulatory and tax changes after reporting its tax rate for fiscal 2020 would be higher than expected, triggering downward earnings revisions. More impactful, though, was a change in heart transplant regulations. Bridge-to-transplant therapy guidelines were adjusted such that cardiac recipients who received one of Medtronic's ventricular-assist devices were assumed to have better outcomes and were subsequently deprioritized for a heart transplant. As a result, patients waiting for a transplant are choosing other methods in order to maintain their priority for transplantation. A change in patient preference caused a sharp drop in sales in Medtronic's cardiac and vascular revenue, weighing on the share price.

Portfolio Positioning¹

As of 31 Mar 2019, the portfolio consisted of seven themes. The largest three themes by weight were data monetization (27.8%), cash flow inflection (16.7%) and software (16.1%). At quarter end, we held 33 companies, with the largest 5 holdings comprising 24.0% of the portfolio's net assets. Non-US companies comprised 21.4% of net assets, and the weighted average market cap of the portfolio was \$143.6 billion².

Portfolio Exposure by Current Theme¹

Themes	% of net assets
Data Monetization	27.8
Cash Flow Inflection	16.7
Software	16.1
Digital Advertising	13.4
Industrial Gases	9.4
Life Sciences	8.7
Communications Infrastructure	5.5
TOTAL	97.6%

Source: Artisan Partners. Theme categorizations are at the sole discretion of the team and exclude market hedges and idiosyncratic positions, which are issuers held outside of a theme. ¹% of net assets represents the portfolio's exposures based on the economic value of investments and options are delta-adjusted. Cash and cash equivalents represented -9.0% of net assets. Statistics shown exclude ETFs and ETF options, which represented 0.0% and 0.0% of net assets, respectively. ²Weighted average market cap excludes cash and equivalents, ETFs and ETF options.

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Investment Risks: A non-diversified portfolio may invest a larger portion of assets in securities of a smaller number of issuers and performance of a single issuer may affect overall portfolio performance greater than in a diversified portfolio. The portfolio's use of derivative instruments may create additional leverage and involve risks different from, or greater than, the risks associated with investing in more traditional investments. High portfolio turnover may adversely affect returns due to increased transaction costs and creation of additional tax consequences. 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. 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. 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 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.

This commentary represents the views of the manager as of 31 Mar 2019 and do not necessarily represent those of Artisan Partners. The views and opinions expressed are based on current market conditions, which will fluctuate and those views are subject to change without notice. While the information contained herein is believed to be reliable, there is no guarantee to the accuracy or completeness of any statement in the discussion. Any forecasts contained herein are for illustrative purposes only and are not to be relied upon as advice or interpreted as a recommendation.

The discussion of portfolio holdings does not constitute a recommendation of any individual security. For a list of the top and bottom contributors to return for the strategy, refer to the Contributors to Return chart. Attribution is used to evaluate the investment management decisions which affected the portfolio's performance when compared to a benchmark index. Attribution and Contribution are not exact, but should be considered an approximation of the relative contribution of each of the factors considered.

Theme classifications are at the sole discretion of the team. Themes and constituents are as of the date indicated and are subject to change. Certain holdings have been reclassified subsequent to initial investment, which has impacted theme performance during the period. Portfolio sector classifications are defined by the investment team based on GICS.

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. All options positions are displayed on a delta-adjusted basis. Delta adjustment is necessary to properly account for the sensitivity of options to changes in price of the underlying security, as well as for making exposure comparisons to the underlying security (options exposure measured as premium will understate economic exposure and risk, while exposure measured as notional value will overstate the economic exposure). Delta-adjusted exposure estimates the approximate exposure to the equity market created by the options and is subject to change over time as a function of the size and composition of the options positions.

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.

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Market Cap is the aggregate value of all of a company's outstanding equity securities. **Return on Invested Capital (ROIC)** is a measure of how well a company generates cash flow relative to capital invested in the business. **Weighted Average** is the average of values weighted to the data set's composition. **Beta** is a measure of the volatility of a security or a portfolio in comparison to the market as a whole.

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Artisan Thematic Strategy

Contributors to Return (%)

As of 31 March 2019

Top Contributors	Average Weight	Contribution to Return	Ending Weight
VMware Inc	4.22	1.34	2.84
Worldpay Inc	3.08	1.31	6.49
Automatic Data Processing Inc	3.71	0.84	1.80
IHS Markit Ltd	5.38	0.78	5.06
Equinix Inc	3.00	0.69	3.87

Bottom Contributors	Average Weight	Contribution to Return	Ending Weight
SPDR S&P 500 ETF Trust	-0.79	-0.26	0.00
Medtronic PLC	3.54	-0.20	2.98
Intercontinental Exchange Inc	1.60	-0.17	0.00
Bottomline Technologies de Inc	0.50	-0.15	0.00
CME Group Inc	1.08	-0.15	0.00

Source: Artisan Partners/FactSet. Portfolio weights based on the economic value of investments and options are delta-adjusted. Performance is historical and is not a reliable indicator of future results. As of 31 Mar 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.

For the purpose of determining the portfolio's holdings, exposures are delta-adjusted at the issuer level and may include multiple securities of the same issuer. The holdings mentioned above comprise the following percentages of a representative account within the Composite's total net assets as of 31 Mar 2019: Fidelity National Information Services Inc 4.3%. Securities named in the commentary, but not listed on this page are not held in the portfolio as of the date of this report. Portfolio holdings are subject to change without notice and are not intended as recommendations of individual securities.