



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 30 September 2018 | Average Annual Total Returns | | | | | | |
|--------------------------|------------------------------|--------------|--------------|------|------|-------|------------------------|
| | QTD | YTD | 1 Yr | 3 Yr | 5 Yr | 10 Yr | Inception ¹ |
| Composite — Gross | 7.72 | 22.07 | 35.10 | — | — | — | 38.32 |
| Composite — Net | 7.46 | 21.18 | 33.79 | — | — | — | 36.98 |
| S&P 500® Index | 7.71 | 10.56 | 17.91 | — | — | — | 17.49 |

Annual Returns (%) 12 months ended 30 September

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------------------|------|------|------|------|--------------|
| Composite — Gross | — | — | — | — | 35.10 |

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 on the second to last page, which should be read in conjunction with this material.



Performance Discussion

In Q3, the portfolio modestly trailed the S&P 500® Index, but it remains solidly ahead both year to date and since inception. Though stock selection has been the key driver of relative outperformance over longer periods, in Q3, stock selection overall was effectively neutral. From a theme standpoint, six of our seven current themes contributed positively.

Data monetization was our top-contributing theme, led by Bottomline Technologies, Amazon and Visa. Data monetization, which we discussed in detail in our Q2 letter, is currently our largest and most diverse theme. To recap, our data monetization 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 over time and, therefore, higher multiples.

Bottomline, a new holding in Q3, is a leading provider of payments technology and one of the only pure plays on the accelerating B2B payments ecosystem. The company is benefiting from business model shifts in its digital banking business (i.e., to subscription-based) as well as its B2B network business (i.e., to an interchange model). Visa, which we wrote about as a top contributor in Q2, was again among our top holdings as the company remains a transformation leader in the global transition to digital payments. As for Amazon, the company was a first-mover in monetizing massive proprietary customer data sets, and it continues to execute very well. However, consensus has been moving higher on Amazon after a long period of skepticism, so we believe we have greater opportunity for differentiation elsewhere. We exited the name in Q3.

Our software theme was another top-contributing theme, which we reduced this quarter as our holdings reached their target prices. Our defense theme, and particularly our holding Harris, bounced back from a tough Q2—the theme remains a top contributor since inception. Harris, which supplies sophisticated communications equipment, was pressured alongside other defense-related names in Q2 amid noise tied to the upcoming US midterm elections. Yet Harris continued to outpace the Street's expectations, and in Q3, the company announced a significant new contract to produce powerful processors for the F-35 joint strike fighter jet, which should provide a material boost to revenues.

Our video game theme detracted for the period and was our bottom-contributing theme, with Electronic Arts (EA) among our weakest-performing holdings. Our video game theme, which has been in the portfolio since inception, is based on our view that the rapid transformation of the industry to digital distribution formats results in superior economics, including higher gross margins. It also offers higher user engagement and thus expanded monetization opportunities and more stable, recurring revenues. We have focused

our efforts on those companies with proven abilities to generate iconic intellectual property, which we believe are best-positioned to benefit. We initiated our most recent holding in EA in January 2018, based on its efforts to shift its gaming toward subscription-based and streaming services. We also anticipated the World Cup would provide a boost to its FIFA digital franchise, but EA's Q2 results (released in Q3) showed it had failed to capitalize on the World Cup as we expected. During our holding period, our thesis for EA played out. However, we exited the position and reduced our video game theme more broadly as we believe we have more upside potential and differentiation in other areas of the portfolio.

We'd like to spend some time talking about a newer theme: life sciences. This theme is based on our belief that strong and accelerating secular tailwinds in biopharmaceuticals and precision medicine, innovation related to diagnostics speed, and proliferation of sequencing should drive organic growth above expectations for well-positioned companies. We also believe new product cycles in energy and chemical markets should create additional cyclical tailwinds. Companies in this space often have pricing power and low cyclicality, which can lead to attractive economics. They are often providing products and/or services of critical importance to customers, but those products are typically low-cost budget line-items, which should support attractive margin structures for the long term. There are also considerable opportunities for consolidation in this approximately \$150 billion market that remains fragmented, with larger players driving substantial revenue synergies through distribution and technology. The industry itself has rising barriers to entry, consolidation and growth that translate into higher operating leverage. And the rapid pace of innovation here creates opportunities for fundamental stock selection. We seek differentiation among companies that have substantial M&A firepower, low cyclicality and growing end markets.

Current life sciences theme holdings are Agilent, Danaher and Thermo Fisher Scientific. Agilent has a number of attractive product tailwinds in its laboratory consumables, services and software businesses. It also has a net cash balance sheet and a management team that is a smart allocator of capital. Danaher has low cyclicality and high exposure to growing end markets in diagnostics and core life sciences and pharma. Thermo Fisher has a very high level of recurring revenues, a diversified global footprint and is accelerating its competitive moat with one of the largest R&D budgets in the industry.

Portfolio Positioning¹

As of 30 September 2018, the portfolio consisted of seven themes. The largest three themes by weight were data monetization (21.8%), communications infrastructure (18.5%) and cash flow inflection (18.4%). Communications infrastructure is a new theme in the portfolio and includes data centers and towers companies that benefit from inflecting growth in cloud computing and increased data consumption. At quarter end, we held 28 companies, with the largest five holdings comprising 26.8% of the portfolio's net assets. Non-US

companies comprised 11% of net assets, and the weighted average market cap of the portfolio was \$88.9 billion².

Portfolio Exposure by Current Theme¹

| Themes | % of net assets |
|-------------------------------|-----------------|
| Data Monetization | 21.8 |
| Communications Infrastructure | 18.5 |
| Cash Flow Inflection | 18.4 |
| Defense | 13.6 |
| Life Sciences | 10.9 |
| Software | 9.9 |
| Video Games | 2.9 |
| TOTAL | 96.0% |

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 9.2% of net assets. Statistics shown exclude ETFs and ETF options, which represented 0.0% and -2.8% 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.

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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 Bloomberg Industry Classification System (BICS).

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.

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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.

S&P 500[®] Index measures the performance of 500 US companies focused on the large-cap sector of the market. The index(es) are unmanaged; include net reinvested dividends; do not reflect fees or expenses; and are not available for direct investment.

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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. **Weighted Harmonic Average** is a calculation of weighted average commonly used for rates or ratios. **Alpha** is a quantitative measure of the volatility of the portfolio relative to a designated index. A positive alpha of 1.0 means the fund has outperformed its designated index by 1%. Correspondingly, a similar negative alpha would indicate an underperformance of 1%.

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Artisan Thematic Strategy

Contributors to Return (%)

As of 30 September 2018

| Top Contributors | Average Weight | Contribution to Return | Ending Weight |
|--------------------------------|----------------|------------------------|---------------|
| Harris Corp | 6.00 | 1.09 | 5.28 |
| Bottomline Technologies de Inc | 2.09 | 0.76 | 1.49 |
| Alteryx Inc | 1.12 | 0.52 | 0.00 |
| Visa Inc | 3.66 | 0.48 | 2.99 |
| Amazon.com Inc | 2.44 | 0.46 | 0.00 |

| Bottom Contributors | Average Weight | Contribution to Return | Ending Weight |
|--------------------------------|----------------|------------------------|---------------|
| DowDuPont Inc | 0.35 | -0.31 | 0.86 |
| SPDR S&P 500 ETF Trust | -1.97 | -0.19 | -1.55 |
| Electronic Arts Inc | 0.99 | -0.15 | 0.00 |
| Acuity Brands Inc | 0.40 | -0.15 | 0.90 |
| PowerShares QQQ Trust Series 1 | -0.52 | -0.10 | -1.20 |

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 30 Sep 2018. 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.