Artisan Global Equity Strategy

QUARTERLY
Commentary

As of 31 December 2019

Investment Process

We seek to invest in companies, within our preferred themes, with sustainable growth characteristics at attractive valuations that do not fully reflect their long-term potential.

Themes

We identify long-term secular growth trends with the objective of investing in companies that have meaningful exposure to these trends. Our fundamental analysis focuses on those industry leaders with attractive growth and valuation characteristics that will be long-term beneficiaries of any structural change and/or trend.

Sustainable Growth

We apply a fundamental approach to identifying the long-term, sustainable growth characteristics of potential investments. We seek high-quality companies that typically have a sustainable competitive advantage, a superior business model and a high-quality management team.

Valuation

We use multiple valuation metrics to establish a target price range. We assess the relationship between our estimate of a company's sustainable growth prospects and its current valuation.

Team Overview

Our team approach combines the benefits of strong leadership with the creative ideas of a deep and highly experienced team of research analysts. We believe this approach allows us to leverage a broad set of perspectives into dynamic portfolios.

Portfolio Management

Mark L. Yockey, CFA
Portfolio Manager

Charles-Henri Hamker
Portfolio Manager

Andrew J. Euretig
Portfolio Manager

Investment Results (% USD)

As of 31 December 2019	QTD	YTD	Average Annual Total Returns 1 Yr	3 Yr	5 Yr	10 Yr	Inception[1]
Composite — Gross	**7.75**	**32.84**	**32.84**	**20.20**	**12.04**	**—**	**13.34**
Composite — Net	**7.50**	**31.57**	**31.57**	**19.03**	**10.94**	**—**	**12.23**
MSCI All Country World Index	8.95	26.60	26.60	12.44	8.40	—	8.67

Annual Returns (% USD) 12 months ended 31 December

	2015	2016	2017	2018	2019
Composite — Gross	**2.18**	**-0.48**	**33.31**	**-1.95**	**32.84**

Source: Artisan Partners/MSCI. Returns for periods less than one year are not annualized. [1]Composite inception: 1 April 2010.

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

Positive sentiment around US-China trade, Brexit and a potential reacceleration in global growth powered global equity indices higher in Q4. A weak US dollar versus most major currencies (including the euro and British pound) was a tailwind for USD-based returns. All regions and sectors participated. Dispersion of returns by region was nominal, with European, US and Japanese indices all returning between 7% and 9%. Emerging markets led developed markets, rising almost 12%, aided by 14%+ gains in China and Brazil. By sector, returns were led by technology and health care. Interest-rate sensitive and defensive groups—utilities, real estate and consumer staples—albeit positive returners, were laggards. Stylistically, growth stocks outperformed value during the quarter.

Q4 capped off one of global equities' strongest years in recent history as the MSCI All Country World Index's return was its strongest in 10 years. All regions and sectors participated in the upswing. Developed markets outperformed emerging markets, as was also true in 2018. Likewise, the US continued to outpace Europe and Japan, while growth remained favored versus value. Technology was the leading sector, advancing roughly 47%. Aside from energy, which was up about 13%, all other sectors had 20%+ total returns.

Although 2019's outsized returns stand in sharp contrast to 2018's declines, the economic backdrop didn't substantially change from the prior year. Economic growth rates around the world remained sluggish, inflation quiescent and interest rates near historic lows. Primarily, markets climbed the proverbial "wall of worry" in 2019, as economic and business fundamentals were better than expected and fears about slowing growth or worsening trade tensions were largely unrealized. Also noteworthy was a dovish pivot by the Federal Reserve, which eased three times in 2019 after hiking its benchmark rate four times in 2017 and three times in 2018.

Performance Discussion

In a strong quarter and year for global equities, our portfolio generated attractive absolute returns for both time periods. Our portfolio trailed the MSCI AC World Index in Q4 but finished solidly ahead for the year, adding to our positive longer-term performance record over the three-year, five-year and since-inception periods.

Underperformance in Q4 was largely attributable to global payments company Wirecard, our biggest detractor and one of our top holdings at the start of Q4. Shares sold off as the *Financial Times* resumed its negative coverage of the company, questioning its accounting practices. The company responded with a statement rejecting each of the FT's new claims and subsequently commissioned KPMG to conduct a new independent audit to fully clarify the allegations in the FT's article. This new audit follows the external audit by the Singaporean law firm Rajah & Tann and a clean audit opinion received from Wirecard's accountant Ernst & Young. We continue to have high conviction in the management team and the business's long-term growth trajectory but decided it was prudent to reduce the position given ongoing scrutiny. As always, we are in dialogue with the company and its management. Our investment case in Wirecard remains focused on sustainable growth in electronic payments processing due to the secular tailwinds of e-commerce and the convergence of mobile, online and offline payments—augmented by market-share gains, new value-added services and global footprint expansion. Shares are attractively valued in our view, selling at a PEG ratio of 0.6X our estimates of 2020 earnings per share and at a P/E multiple of 20X our estimates of 2020 earnings per share. In January 2020, as we write this letter, Wirecard announced that former Deutsche Boerse chief financial officer Thomas Eichelmann has been named the new chairman. Mr. Eichelmann has been a strong proponent of an independent review into the company's accounting.

Aside from Wirecard, other detractors included Dollar Tree, a US discount retailer, and Medacta Group, a medical devices company. Though Dollar Tree continues to grow its top line as expected, the stock was volatile on poor communication from management and disappointment over margin pressures. Margins were held back by higher freight and distribution costs, a mix shift to lower-margin products and one-off expenses. The company is seeing solid foot traffic at its stores and is executing on a turnaround plan for Family Dollar through store re-banners and remodels. We believe due to improvement at Family Dollar, store openings and the introduction of multiple price points, the company has a long runway to grow its same-store sales. The company is also well-positioned, in our view, to capture US consumption growth enabled by rising wages. Lastly, valuation is attractive, with the stock trading at a meaningful discount to peers.

Medacta is a Swiss-based producer of orthopedic and neurosurgical medical devices. In a consolidated market with high barriers to entry, Medacta is outgrowing its larger competitors due to its differentiated product offering based on newer technology that involves less-invasive surgical techniques, which reduce recovery times. The stock pulled back in December when management reduced its 2019 revenue growth guidance to 10%-12% due to weaker-than-expected demand, primarily in the US. Though near-term growth has come in below our expectations, we believe the company has a long runway for growth due to still-low penetration of its newer technology in many markets. Further, the company has been increasing its distribution in the US, Japan and Australia and has expanded its product line to include additional implants, including for the knees and spine.

Despite weakness in Medacta, health care was an area of strength overall for our portfolio in Q4 as we had more than 10 health care holdings with double-digits percentage gains. Top performers included ACADIA Pharmaceuticals and Amarin. Both were new purchases in 2019. ACADIA is a biopharmaceutical company and maker of Nuplazid® (pimavanserin), the only approved treatment for Parkinson's disease psychosis. It was a top performer in Q3 as well. Shares have risen following the positive trial outcome for pimavanserin in dementia-related psychosis, for which there are currently no approved products. The positive trial outcome moves up

the timeline for regulatory approval and reinforces our investment thesis centered on the potential for label expansion, as ACADIA is engaged in multiple late-stage programs to broaden pimavanserin's clinical use beyond Parkinson's disease psychosis.

Amarin is a pharmaceuticals company focused on developing therapeutics to improve cardiovascular health. Our initial investment thesis was based on our view that FDA-approved Vascepa®—a type of omega-3 fatty acid that has been proven to reduce triglycerides—had blockbuster potential due to the large market of statin-treated patients with elevated triglycerides, possible label expansion, and the drug's relatively low price compared to newer cardiovascular drugs. In December, the FDA approved a broad label for Vascepa® that will target a large population of patients, including those with cardiovascular disease and diabetes—bolstering our investment case that the sales potential of Vascepa® is underappreciated.

For the overall portfolio, our top Q4 contributor was AVEVA, a leading provider of industrial design software. AVEVA is continuing to successfully convert its business from traditional licensed software to a subscription model. Relative to licensed software, we believe a subscription model offers a greater customer lifetime value, higher operating margins and a greater mix of recurring revenue. We also believe the company can significantly expand margins through a combination of operating leverage and additional cost synergies from its 2017 merger with Schneider Electric's industrial software business.

Positioning

Despite a relatively weak global economy, we are finding pockets of sustainable growth. Examples include industrial gases, cloud software, e-commerce, health care innovation and energy efficiency. And although markets had a banner year, there are still stocks to be found selling at reasonable valuations based on our estimates of future earnings growth rates. Among our new purchases in Q4 were Air Liquide, Alibaba, La Francaise des Jeux (FDJ), Ingersoll-Rand and GlaxoSmithKline (GSK).

- Air Liquide is a leading industrial gases supplier that competes with Linde. Both companies were top-10 holdings in the portfolio as of the end of December. We have owned Air Liquide previously. The company operates in a consolidated industry where just four companies comprise over 70% of the market, and the technical and capital requirements to compete deter new entrants. These companies tend to be defensive in weaker operating environments due to strong and highly predictable cash flows. Further, we believe the recent Linde-Praxair merger should lead to more pricing discipline within the industry. Though we have a sizable weighting in the industrials gases industry, we are comfortable with our outsized exposure due to the diversified global end markets that these companies sell into, including manufacturing, materials, energy, food and pharmaceuticals.
- Alibaba is China's largest e-commerce company. Like Amazon, which we also hold, Alibaba is experiencing strong organic growth in its core e-commerce business, driven by user growth and improving user engagement. Alibaba's core e-commerce business generates strong free cash flow that funds growth initiatives. Though still a small component of overall revenue (<10%), the company's cloud business is growing rapidly and, as the leader in China, is well-positioned to become more profitable as it scales up and improves its ARPU by offering more value-added services.
- FDJ, the operator of France's national lottery games, was taken public in November as its majority owner—the French government—sought privatization. The company has an exclusive 25-year license to run the French national lottery, making for a highly visible cash flow and growth profile. Historically, the company has been able to grow regardless of the macro environment. In recent years, the company has diversified into sports betting and online gaming, offering additional avenues for growth.
- Ingersoll-Rand is a holding in our energy efficiency theme. The company offers an array of products and services, including compressors and pumps, to improve the energy efficiency of HVAC systems in homes and commercial buildings. The company is merging its industrial segment with Gardner Denver and spinning off its climate business into a new standalone entity. The new industrial business will be the No. 2 player globally in industrial compressors, making it well-positioned to benefit from the long-term trend in urbanization and increasing focus of governments and companies to address climate change. Additionally, the merger should generate over $250 million in cost synergies (about 4% of revenues).
- GSK is a health care conglomerate operating in three business lines: pharmaceuticals, vaccines and consumer products. After years of poor capital allocation in the pharma division, we believe the company's late-stage pharma pipeline is becoming more visible under new leadership. Additionally, the company's plans to spin off its higher-margin consumer division should help close the current market valuation discount for the remaining pharmaceuticals/vaccines business.

We exited several holdings as shares approached our valuation targets—including Anaplan, a cloud-based software platform; Facebook, a social networking company; and PayPal Holdings, a digital payments provider. We also sold European data center operator InterXion Holding after the company agreed to be acquired by Digital Realty, a peer data center company. Other than Facebook, which is categorized in the communication services sector, the other stocks were in the technology sector. These sales, along with the

reduced position in Wirecard, led to a decline in our overall technology sector weighting from 27% to ~18%. Technology is still a large exposure, however, and we continue to hold several software and electronic payments companies, including Microsoft, AVEVA Group, Mastercard and Fidelity National Information Services, to name a few, based on both company-specific and secular growth drivers.

Outlook

Cautious optimism is an appropriate way to characterize our current perspective on equity markets. Overall corporate fundamentals remain healthy; however, valuations are richer today than they were a year ago as equity returns have been driven primarily by multiple expansion rather than earnings growth. Increasingly, we find ourselves choosing between secular growth stocks that are priced relatively richly, and stable growers with strong cash flow characteristics that are selling at more reasonable valuations. Among our Q4 new purchases, Alibaba is an example of the former, whereas Air Liquide and GSK are examples of the latter.

Our experience investing over several market cycles has taught us the importance of identifying companies with exposure to secular growth themes and sustainable growth characteristics. As part of our search for sustainable growth, we pursue companies possessing particular attributes, including industry leadership, offering of an essential product or service, provision of a differentiated solution or ownership of unique assets. We believe high-quality companies with one or more of these attributes can enjoy sustainable competitive advantages, positioning them well to generate long-term earnings growth. Our approach to generating attractive long-term returns is also supported by our valuation discipline, which we believe is especially important at this point in the cycle. We believe our bottom-up process will serve our investors well, yielding fundamentally sound companies with sustainable growth characteristics, trading at reasonable valuations, that are capable of standing up to varied market environments.

Sustainable Investing Update

In 2019, our team added a data-driven, ESG-risk review process to provide an objective and independent evaluation of ESG considerations. We also developed a formal Sustainable Investing Policy Statement, reproduced below. In addition, our team will publish a 2019 review of its activities related to sustainability.

Sustainable Investing Policy Statement

Overview

We have been applying our investment philosophy and process for nearly 25 years. Over that time, we have acquired enormous experience in assessing the sustainability of businesses and the quality and integrity of management teams. By focusing on sustainable growth, high-quality management teams and corporate governance, we have naturally incorporated numerous ESG considerations into our philosophy and process. In addition, in 2018, our firm signed the United Nations-supported Principles for Responsible Investment, and more recently in 2019, our team added a data-driven ESG risk review process to provide an objective and independent evaluation of ESG considerations.

Sustainable Growth

Sustainable growth has always been a pillar of our investment philosophy and leads us to companies that are investing for the long-term. Compared to companies focused on maximizing near-term metrics, we believe companies having sustainable growth characteristics are more likely to align their products, services and corporate practices with broader, positive ESG considerations, such as environmental awareness, stronger employee relations and better corporate governance.

In addition, as part of our search for sustainable growth, we identify broad investment themes that in many cases recognize issues of social importance, such as:

- Health care for aging populations
- Nutrition and wellness
- Expanded access to technology and financial services

Corporate Engagement

Our investment philosophy and process also emphasizes high-quality management teams, which helps us to screen out companies engaged in short-sighted, elevated risk, or exploitive corporate practices.

Our team members spend significant time meeting and interacting with company management. During meetings and company site visits and through other correspondence, we seek to validate the consistency of business practices with management's disclosures and stated policies and engage on ESG issues, particularly corporate governance issues.

After making initial investments, we continue to closely monitor the corporate governance of our portfolio companies, and we exercise our influence and voting rights to encourage best practices in corporate governance, executive compensation and fair treatment of minority shareholders.

ESG Risk Review

Beginning in 2019 we implemented a review of material ESG factors that adds greater objectivity and independence to our consideration of ESG risks. As part of this process, we use Refinitiv's quantitative ESG scoring to evaluate our portfolio companies on over 400 ESG metrics. When these scores indicate elevated risk, our team's Chief Operating Officer escalates the issue and works with the appropriate research analyst to revisit our investment thesis and reassess our estimate of the company's fundamental value.

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.

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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 Index measures the performance of 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.

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This summary represents the views of the portfolio manager as of 31 Dec 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.

Earnings per Share (EPS) is the portion of a company's profit allocated to each outstanding share of common stock. The **PEG Ratio** (an indicator of a stock's potential value) measures the ratio of the P/E of a company to the growth rate. **Price-to-Earnings (P/E)** is a valuation ratio of a company's current share price compared to its per-share earnings. **Free Cash Flow** is a measure of financial performance calculated as operating cash flow minus capital expenditures.

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A R T I S A N  P A R T N E R S

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Artisan Global Equity Strategy

Quarterly Contribution to Return (% USD)

As of 31 December 2019

Top Contributors	Average Weight	Contribution to Return	Ending Weight
AVEVA Group PLC	1.85	0.58	2.02
Jeol Ltd	1.92	0.50	2.10
ACADIA Pharmaceuticals Inc	2.12	0.45	1.81
Linde PLC	3.98	0.43	3.94
Petroleo Brasileiro SA	3.13	0.40	2.42
La Francaise des Jeux SAEM	0.86	0.38	2.11
ViewRay Inc	0.90	0.37	1.14
Amarin Corp PLC	1.12	0.35	1.31
InterXion Holding NV	1.24	0.35	0.00
Airbus SE	2.17	0.33	1.79
Alphabet Inc	3.06	0.30	3.04
ING Groep NV	2.02	0.30	1.69
Mastercard Inc	2.43	0.22	2.34
Microsoft Corp	1.59	0.22	1.80
IHS Markit Ltd	1.74	0.22	1.70
PerkinElmer Inc	1.50	0.20	1.49
Obic Co Ltd	1.09	0.20	1.10
OBIC Business Consultants Co Ltd	1.17	0.19	1.25
Fidelity National Information Services Inc	3.79	0.19	3.76
Halozyme Therapeutics Inc	1.21	0.19	1.44
Genmab A/S	2.01	0.19	1.95
AIA Group Ltd	1.69	0.18	1.71
Nibe Industrier AB	0.48	0.18	0.79
Bio-Rad Laboratories Inc	1.56	0.18	1.50
Lamb Weston Holdings Inc	0.99	0.17	1.08
Lonza Group AG	2.18	0.17	2.20
Air Liquide SA	1.66	0.16	2.12
Amazon.com Inc	2.83	0.16	3.07
Idorsia Ltd	0.65	0.16	0.75
GlaxoSmithKline PLC	1.08	0.15	1.33
MorphoSys AG	0.50	0.13	0.78
Facebook Inc	0.34	0.13	0.00
Cigna Corp	0.62	0.12	1.07
Bristol-Myers Squibb Co	0.59	0.12	0.00
Recruit Holdings Co Ltd	0.53	0.12	0.56
The TJX Cos Inc	1.19	0.12	1.17
Intesa Sanpaolo SpA	0.95	0.11	0.91
Global Payments Inc	0.72	0.11	0.74
JUMBO SA	0.85	0.10	0.86
KION Group AG	0.20	0.09	0.00
Ingersoll-Rand PLC	0.84	0.09	1.47
Kinaxis Inc	0.48	0.08	0.73
Varonis Systems Inc	0.78	0.08	1.21
Willis Towers Watson PLC	0.86	0.08	1.18
Danaher Corp	1.38	0.08	1.42
Mowi ASA	0.55	0.07	0.00
uniQure NV	0.21	0.06	0.91
Alibaba Group Holding Ltd	0.26	0.06	0.98

Bottom Contributors	Average Weight	Contribution to Return	Ending Weight
Wirecard AG	2.42	-1.00	1.24
Dollar Tree Inc	1.74	-0.36	1.55
Medacta Group SA	1.33	-0.12	1.22
Anaplan Inc	0.30	-0.10	0.00
L3Harris Technologies Inc	1.84	-0.10	1.82
PayPal Holdings Inc	0.55	-0.09	0.00
The Progressive Corp	1.10	-0.09	1.00
Norfolk Southern Corp	0.04	-0.08	0.00
World Wrestling Entertainment Inc	0.12	-0.05	0.00
Almirall SA	0.62	-0.05	0.00
Ariake Japan Co Ltd	0.38	-0.04	0.00
Quanta Services Inc	0.64	-0.04	0.92
Canada Goose Holdings Inc	0.02	-0.03	0.00
Dolby Laboratories Inc	0.05	-0.03	0.00
WEX Inc	0.65	-0.03	0.00
Clarivate Analytics PLC	0.43	-0.02	0.94
Daiichi Sankyo Co Ltd	0.05	-0.02	0.00
Nestle SA	1.48	-0.01	1.39
Carlsberg A/S	0.13	-0.01	0.00
Petrobras Distribuidora SA	0.04	-0.00	0.00
Ipsen SA	0.02	-0.00	0.00
Aramark	1.25	-0.00	1.32
CAE Inc	0.09	-0.00	0.00
RELX PLC	0.01	-0.00	0.00
Varun Beverages Ltd	0.03	-0.00	0.00
London Stock Exchange Group PLC	0.01	0.00	0.00
IPG Photonics Corp	0.42	0.01	0.00
DWS Group GmbH & Co KGaA	0.08	0.01	0.18
CME Group Inc	0.04	0.01	0.00
HubSpot Inc	0.15	0.01	1.23
Scout24 AG	0.07	0.01	0.52
Daikin Industries Ltd	0.17	0.01	0.23
Morningstar Inc	0.54	0.01	0.59
Mondelez International Inc	1.14	0.01	1.22
Raytheon Co	0.20	0.01	0.44
Davide Campari-Milano SpA	0.96	0.01	0.92
Baxter International Inc	0.24	0.01	0.00
Cash Holdings	2.46	0.01	0.54
Deutsche Boerse AG	4.48	0.02	4.34
Synopsys Inc	0.48	0.02	0.88
Safran SA	0.47	0.02	0.00
Allianz SE	0.93	0.02	1.14
Intercontinental Exchange Inc	3.21	0.02	3.03
TMX Group Ltd	1.47	0.03	1.59
UniCredit SpA	0.32	0.03	0.71
ANTA Sports Products Ltd	0.31	0.03	0.00
Bandwidth Inc	0.15	0.04	1.34
Eidos Therapeutics Inc	0.46	0.05	1.00

Source: Artisan Partners/FactSet. **Performance is historical and is not a reliable indicator of future results.** As of 31 Dec 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.