



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
Associate Portfolio Manager



Andrew J. Euretig
Associate Portfolio Manager

Investment Results (%)

As of 31 December 2018	Average Annual Total Returns						
	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	Inception ¹
Composite — Gross	-11.14	-9.80	-9.80	2.90	1.31	9.30	9.56
Composite — Net	-11.35	-10.63	-10.63	1.96	0.39	8.31	8.55
MSCI EAFE Index	-12.54	-13.79	-13.79	2.87	0.53	6.31	4.22
MSCI All Country World ex USA Index ²	-11.46	-14.20	-14.20	4.47	0.68	6.57	4.66

Annual Returns (%) 12 months ended 31 December

	2014	2015	2016	2017	2018
Composite — Gross	0.78	-2.83	-8.87	32.55	-9.80

Source: Artisan Partners/MSCI. Returns for periods less than one year are not annualized. ¹Composite inception: 1 January 1996. ²Performance represents the MSCI ACWI ex USA (Gross) Index from inception to 31 Dec 2000 and the MSCI ACWI ex USA (Net) Index from 1 Jan 2001 forward.

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



Investing Environment

Non-US equities sold off sharply in Q4 as end-of-cycle ruminations centered around normalizing monetary policies, softening global growth and US-China trade tensions. This led to the MSCI EAFE Index's worst quarter since Q3 2011. No regions were unscathed. Europe, Japan and the US were each down double-digit percentages. Emerging markets, which trailed developed markets through the first three quarters of 2018, held up better. The EM index was down about 7% in Q4 but declined 14% for the full year in line with non-US developed markets.

Fading global growth expectations also sent commodities prices, especially oil, lower. The price of WTI crude tumbled by 40% from mid-\$70s a barrel to mid-\$40s. In turn, the energy sector was the weakest performer in Q4, followed by other cyclicals (industrials, technology and consumer discretionary). Defensives (consumer staples, health care) and interest-rate proxies (utilities, real estate) fared better to varying degrees.

Like the February 2018 selloff, the initial trigger originated from concerns about rising government bond yields and a potential reemergence of global inflationary pressures—largely non-existent since the global financial crisis. Another area of angst was decelerating economic and earnings growth due in part to a slowdown in Europe and Japan and the effects of the US-China trade war.

Political uncertainty remained another major theme in Q4. Besides the US-China trade war, investors kept a close eye on the ongoing Brexit negotiations as well as the standoff between the European Union and Italy over the country's budget deficit. After several months of back and forth between Italy and the EU—that had pushed up Italy's borrowing costs and knocked European bank stocks—Italy and the EU struck a deal in December.

In contrast to the rest of the world, the US economy strengthened in 2018. The substantial fiscal stimulus in the form of tax cuts contributed to stronger economic growth and corporate profits. US monetary policy diverged as well. Citing strong economic fundamentals, the Federal Reserve continued to normalize policy—hiking its benchmark rate in December for a fourth time in 2018 and continuing to unwind its balance sheet. Even so, conflicting signals about the underlying health of economic conditions and financial markets' weakness contributed to investors' questioning whether the Fed was being too aggressive in its approach. The ECB, BOE and BOJ kept their respective benchmark rates steady—maintaining stimulus. China's policymakers, amid the ongoing trade war with the US, continued to support their economy using a host of measures to incentivize bank lending and reduce borrowing costs.

Performance Discussion

Though absolute returns were disappointing, our portfolio held up slightly better than the MSCI EAFE Index in Q4 and solidly outperformed for the full year. Q4 outperformance was driven by stock selection. Top-10 holdings Linde and Petrobras were key

standouts. After several months of uncertainty over the approval of Linde's pending merger with fellow industrial gases producer Praxair, the companies received the last pending regulatory approval from the US Federal Trade Commission (FTC). The asset disposals required by the FTC were in line with market expectations. We estimate the combined entity should realize more than \$1 billion in cost synergies within three years.

Brazilian oil and gas company Petrobras—one of our weakest performers earlier in the year when a nationwide trucker strike forced the government to lower diesel prices—continued to recover. The political uncertainty that dogged the stock is now behind it following the country's October presidential election, easing concerns about Brazil's future energy policy. President Bolsonaro has echoed his support of the current fuel-pricing policy and is supportive of further deregulation in the sector. For its part, Petrobras is driving shareholder value through disciplined capital allocation. Besides divestitures of non-core assets, strong free cash flow at prevailing oil prices is enabling the company to rapidly deleverage. We believe the stock is meaningfully undervalued relative to its growth outlook, as it trades at a discount to other major oil producers despite a superior production profile.

Other big gainers were Housing Development Finance Corp (HDFC) and Bank Rakyat. Both are holdings in our demographics theme. HDFC is India's largest standalone mortgage financier. Shares rebounded from Q3 weakness on strong growth in earnings and loans and further improvement in asset quality as non-performing loans declined. In September, HDFC was caught up in an industry-wide stock selloff due to a liquidity crisis in Indian non-bank finance companies (NBFCs) when infrastructure lender IL&FS defaulted on debt payments. Because HDFC and many of the other large Indian NBFCs do not have the asset-quality issues of IL&FS, we viewed the Q3 selloff as largely indiscriminate and continued to hold HDFC.

Shares of Bank Rakyat, one of Indonesia's largest banks, advanced over 20% in USD terms. The company reported strong loan growth led by its micro and small commercial segments. We like Bank Rakyat's focus on micro loans, a segment which has proven profitable. In our view, the company remains well-positioned to leverage its extensive network of branches to produce sustainable long-term earnings growth.

Our weakest Q4 performers included Wirecard, Airbus, Deutsche Post and ConvaTec Group. Despite recent share-price weakness, electronic payments company Wirecard was our top contributor in 2018. The company is delivering robust organic growth as it's taking advantage of the secular growth in e-commerce and, in our view, should continue to benefit from the convergence of payments between online, mobile and in-store. Wirecard's valuation remains reasonable against our long-term earnings estimates.

Shares of Airbus, an aerospace and defense business, declined about 23% in Q4—slightly worse than the -20% return for the broader aerospace & defense industry (based on the MSCI EAFE Index). Airbus

continued to grow aircraft deliveries versus the prior year; however, supply chain bottlenecks led management to reduce its full-year delivery and free cash flow projections. The production delays appear temporary in our view. The company's long-term outlook remains underpinned by its decade-long, 6,000+ aircraft backlog and the potential to grow free cash flow as production increases and program ramp-up-related capital expenditures fall. Shares, however, took a further hit in December on reports the company was under a corruption investigation by the US Department of Justice alongside those already underway in the UK and France related to the company's use of intermediaries in negotiations abroad. If Airbus is found guilty of corruption, we believe the most likely outcome is a one-time fine, which would not materially affect the company's long-term value.

Deutsche Post is one of Europe's largest postal-service providers and the operator of the global DHL business. In addition to a softer economic outlook, the threat of increased competition from Amazon's expansion into shipping its own deliveries pressured the shares of the major global package delivery companies: Deutsche Post, FedEx and UPS. We think the risk from Amazon (which we also own in the portfolio) is real but not immediate. Recent results showed the company's self-help measures to improve profitability in its German parcel division are on track, and its DHL business continued to grow nicely, with revenues up 11% year over year excluding FX impacts, benefiting from the structural tailwind from e-commerce.

ConvaTec is a manufacturer of several medical products and technologies in the areas of wound management and skin care. Following the softening of end-market demand and company-specific execution challenges, the company lowered its FY18 guidance and announced its CEO was stepping down. We appreciate the company's growth challenges but believe the stock is attractively priced following further reductions in expectations. We also see the management change as a potential catalyst for internal improvements and anticipate improving organic sales growth due to upcoming product launches and potential gross margin expansion on cost controls.

For the full year, our portfolio benefited from strong stock selection. On a sector basis, our main sources of outperformance were the technology, financials and materials sectors. Conversely, our sector allocation was a headwind due to our above-benchmark exposure to financials and lighter weightings in utilities, health care and energy. Top individual contributors were a varied group, consisting of previously mentioned Wirecard and Linde, e-commerce and cloud services giant Amazon.com, medical devices company Medtronic and European exchanges operator Deutsche Boerse. Our biggest detractors for 2018 included Deutsche Post, European banks ING and BNP Paribas, alcoholic beverages company Anheuser-Busch InBev and Chinese Internet company NetEase.

Positioning

Increased volatility in Q4 provided us with an opportunity to initiate a few new positions at attractive valuations relative to our assessment of future earnings potential:

- We held Amazon.com, a global e-commerce and cloud-services provider, earlier in 2018. Employing our valuation discipline, we exited our position in Q3. When valuations improved in Q4, we returned to it. To reiterate our investment case, the company dominates the e-commerce landscape. Strong uptake of Amazon Prime continues to drive customer loyalty, increased purchase frequency and cross-category shopping. As the market leader in the enterprise cloud industry, AWS is a major beneficiary of the widespread migration of data storage to the cloud. This is a highly profitable business for Amazon, and customer switching costs are high—thus its early leadership position affords Amazon a strong competitive advantage.
- Danone is a French multinational food products company that is one of the largest dairy food and water producers in the world possessing a portfolio of strong brands (e.g., Danone/Dannon, evian, Activia, Silk, alpro) that we believe can achieve double-digit EPS growth via organic sales growth, margin improvement, rationalization of unprofitable products from the WhiteWave acquisition and growing brands into new channels and categories.
- Willis Towers Watson is a provider of insurance brokerage, reinsurance and risk management services with appealing free cash flow characteristics that should improve further as restructuring costs from the Towers Watson acquisition continue to decline, enabling solid return of capital via dividends and share buybacks. The company is also uniquely positioned to price climate risk and cyber security risk, which are areas of growth and have no underwriting risk.

We funded these purchases in part by selling our position in Glencore, a diversified natural resources company, due to disappointing production growth and concerns about the ongoing US Department of Justice investigation. We also exited our positions in SAP, an enterprise software provider, as shares approached our target valuation and Rohm, a semiconductor company, in favor of better opportunities.

Outlook

After the strong earnings growth delivered in 2018, we believe growth will be harder to come by in 2019. The tailwind from reduced corporate taxes will fade in coming quarters. In addition, the lagged effects of tightening US monetary policy have yet to be fully realized. Further, business and investor confidence have been negatively impacted by uncertainty from the US-China trade war. These

considerations are counterbalanced by the dramatic improvement over the past year in global equity valuations as prices fell and earnings continued to grow.

Our experience investing over several market cycles has taught us the importance of focusing on companies with exposure to secular growth themes and sustainable growth characteristics: dominant or growing market positions, strong pricing power and solid free cash flow. Consequently, we remain focused on our themes and believe we have invested in a portfolio of companies that can weather a changing political and economic environment. We believe our bottom-up process will serve our investors well, yielding fundamentally sound companies with sustainable growth characteristics that are capable of standing up to varied market environments.

Our investment philosophy and process takes us around the globe in search of investment opportunities which may be domiciled in or outside of the US. Using the same investment process as Artisan Non-U.S. Growth Strategy, our team also manages the Artisan Global Equity Strategy. Since its inception in 2010, returns for the Global Equity Strategy have been driven by stock selection based on our best ideas identified around the globe. For those interested in exploring our global strategy, please visit www.artisanpartners.com.

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 EAFE Index measures the performance of developed markets, excluding the US and Canada. MSCI All Country World ex USA Index measures the performance of developed and emerging markets, excluding the US. 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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Free Cash Flow is a measure of financial performance calculated as operating cash flow minus capital expenditures. **Earnings per Share (EPS)** is the portion of a company's profit allocated to each outstanding share of common stock.

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Artisan Non-U.S. Growth Strategy

Quarterly Contribution to Return (%)

As of 31 December 2018

Top Contributors	Average Weight	Contribution to Return	Ending Weight
Linde AG	2.04	0.39	0.00
Housing Development Finance Corp Ltd	2.11	0.33	2.47
Petroleo Brasileiro SA	4.32	0.26	4.19
Genmab A/S	1.62	0.14	2.04
Bank Rakyat Indonesia Persero Tbk PT	0.69	0.13	0.83
MMC Norilsk Nickel PJSC	1.25	0.10	1.29
Willis Towers Watson PLC	1.06	0.08	1.66
Rentokil Initial PLC	0.99	0.05	1.15
B3 SA - Brasil Bolsa Balcao	0.31	0.04	0.33
Cash Holdings	3.36	0.02	1.96
Taiyo Nippon Sanso Corp	0.38	0.00	0.69
Amazon.com Inc	0.06	0.00	0.60
RELX PLC	0.02	0.00	0.11
AVEVA Group PLC	0.01	0.00	0.04
Fortis Inc	0.01	-0.00	0.10
Dollarama Inc	0.03	-0.00	0.13
adidas AG	0.05	-0.01	0.30
Standard Chartered PLC	0.01	-0.01	0.00
Amundi SA	0.05	-0.01	0.20
SAP SE	0.04	-0.01	0.00
Credit Suisse Group AG	0.03	-0.02	0.00
Nippon Shinyaku Co Ltd	0.81	-0.02	1.19
Wynn Macau Ltd	0.06	-0.02	0.26
Rohm Co Ltd	0.33	-0.03	0.00
Danone SA	0.57	-0.04	0.77
Kweichow Moutai Co Ltd	0.25	-0.04	0.31
HSBC Holdings PLC	1.08	-0.04	1.15
WABCO Holdings Inc	0.33	-0.04	0.27
Assicurazioni Generali SpA	1.94	-0.05	2.06
Experian PLC	1.12	-0.05	1.21
Calbee Inc	1.23	-0.06	1.11
Japan Exchange Group Inc	0.66	-0.08	0.84
Schneider Electric SE	0.49	-0.08	0.41
Idorsia Ltd	0.19	-0.08	0.16
Akzo Nobel NV	0.61	-0.08	0.58

Bottom Contributors	Average Weight	Contribution to Return	Ending Weight
Wirecard AG	5.17	-1.75	4.85
Airbus SE	3.76	-0.95	3.43
Deutsche Post AG	3.39	-0.83	3.16
Deutsche Boerse AG	6.00	-0.62	6.07
ConvaTec Group PLC	1.05	-0.58	0.91
ING Groep NV	3.11	-0.55	3.01
Anheuser-Busch InBev SA/NV	2.08	-0.55	2.02
Ferguson PLC	1.92	-0.49	1.79
BNP Paribas SA	1.41	-0.41	1.38
Lonza Group AG	1.48	-0.39	1.43
Eiffage SA	1.27	-0.35	1.18
Linde PLC	4.28	-0.30	6.62
Ryanair Holdings PLC	1.58	-0.29	1.57
Koninklijke DSM NV	1.24	-0.28	1.27
Medtronic PLC	4.02	-0.28	4.22
Sonova Holding AG	0.98	-0.27	0.75
Allianz SE	2.44	-0.24	2.59
Symrise AG	1.10	-0.20	1.12
Canadian Pacific Railway Ltd	1.38	-0.20	0.65
British American Tobacco PLC	0.59	-0.20	0.53
Intesa Sanpaolo SpA	1.44	-0.18	1.52
AIA Group Ltd	2.91	-0.18	3.16
Aon PLC	2.77	-0.17	2.83
Vinci SA	1.38	-0.17	1.42
Safran SA	1.08	-0.16	0.87
Canadian National Railway Co	0.87	-0.15	0.59
London Stock Exchange Group PLC	1.13	-0.14	1.39
Glencore PLC	0.66	-0.13	0.00
Beiersdorf AG	1.82	-0.13	1.87
Fortum OYJ	1.02	-0.13	1.12
Henkel AG & Co KGaA	1.60	-0.12	1.50
Air Liquide SA	2.37	-0.11	2.65
ASML Holding NV	0.61	-0.10	0.37
Spotify Technology SA	0.26	-0.10	0.00
Nestle SA	3.69	-0.10	3.76

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