



Investment Process

We seek to invest in companies that possess franchise characteristics, are benefiting from an accelerating profit cycle and are trading at a discount to our estimate of private market value. Our investment process focuses on two distinct elements—security selection and capital allocation. We overlay our investment process with broad knowledge of the global economy.

Security Selection

We seek to identify companies that have franchise characteristics (e.g. low cost production capability, possession of a proprietary asset, dominant market share or a defensible brand name), are benefiting from an accelerating profit cycle and are trading at a discount to our estimate of private market value. We look for companies that are well positioned for long-term growth, which is driven by demand for their products and services, at an early enough stage in their profit cycle to benefit from the increased cash flows produced by the emerging profit cycle.

Capital Allocation

Based on our fundamental analysis of a company's profit cycle, we divide the portfolio into three parts. GardenSM investments are small positions in the early part of their profit cycle that may warrant more sizeable allocations as their profit cycle accelerates. CropSM investments are positions that are being increased to a full weight because they are moving through the strongest part of their profit cycles. HarvestSM investments are positions that are being reduced as they near our estimates of full valuation or their profit cycles begin to decelerate.

Broad Knowledge

We overlay the security selection and capital allocation elements of our investment process with a desire to invest opportunistically across the entire global economy. We seek broad knowledge of the global economy in order to find growth wherever it occurs.

Team Overview

We believe deep industry expertise, broad investment knowledge, a highly collaborative decision-making process and individual accountability are a powerful combination. Since the inception of the team, we have been committed to building a team of growth investors that retains these attributes and is solely dedicated to our process and approach.

Portfolio Management



James D. Hamel, CFA
Portfolio Manager (Lead)



Matthew H. Kamm, CFA
Portfolio Manager



Craigh A. Cepukenas, CFA
Portfolio Manager



Jason L. White, CFA
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	-15.16	-7.92	-7.92	8.84	7.86	16.10	9.27
Composite — Net	-15.35	-8.71	-8.71	7.92	6.94	15.09	8.37
MSCI All Country World Index	-12.75	-9.41	-9.41	6.59	4.26	9.45	3.90

Annual Returns (%) 12 months ended 31 December

	2014	2015	2016	2017	2018
Composite — Gross	3.75	9.12	5.53	32.73	-7.92

Source: Artisan Partners/MSCI. Returns for periods less than one year are not annualized. ¹Composite inception: 1 February 2007.

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

Consistent investor concerns—namely, ratcheting trade tensions, particularly between the US and China; major developed-world central banks' apparent shift to a moderately tighter policy stance; and the potential for slower growth, especially in China and Europe—contributed to persistent heightened volatility throughout 2018. Most major indices closed in negative territory for Q4 and the year. After a rockier start, emerging markets held up better than their developed-world counterparts in Q4 but still trailed for 2018 overall. The US was among the bottom-performing indices in Q4 but led most major indices for the year—despite being the S&P 500® Index's worst since the global financial crisis's conclusion.

On the monetary policy front, the Fed lifted rates 25bps as expected in December. Investors divined a more dovish tone from the board's 2019 projections, but markets remained volatile through the end of the year. Globally, most developed-world central banks have begun moving toward modestly tighter stances—including the ECB, which formally announced the end of its bond-buying program in December, concluding a roughly €2.6tn program. Across the channel, the BOE has raised rates twice since the country's Brexit referendum in June 2016 but has recently indicated it was prepared to pivot as necessary once the formal exit takes place in early 2019. The Bank of Japan has long been in its own monetary policy lane, remaining by far the most accommodative of the major global central banks.

Emerging markets central banks have meanwhile faced their own travails—primarily centered around the security of central bank independence, particularly in Turkey and India. For now, the question in both countries seems to be largely settled in favor of independence—a positive for markets—but as is often the case in EM, that doesn't preclude the issue's resurfacing down the road.

At the sector level, energy and technology were the notable laggards in Q4, though materials, financials and industrials led the way down in 2018. Only utilities and health care concluded the year in the black as investors shunned more cyclically oriented names—especially in Q4. Value stocks also generally declined less than growth in Q4—though they trailed for the year. From a size perspective, larger companies tended to hold up better in Q4 and 2018 overall as volatility likely swayed investors' preference toward larger stocks.

Performance Discussion

Against the backdrop of a sharp, three-month selloff, our portfolio trailed the MSCI AC World Index in Q4 but outperformed for the year. In deep bear markets, our approach has historically offered relative downside protection given our focus on high-quality franchises with positive profit cycles and reasonable valuations. But in sharp and fast corrections, our experience is typically more varied. In Q4, we witnessed some "sell the winner" dynamics that punished a number of our holdings whose fundamentals were among the strongest for the year. This was particularly the case among our communication services holdings, which detracted from relative results in Q4.

At the sector level, the worst performing areas were generally those most exposed to the potential fall-out of ongoing global trade tensions, which has weighed on both consumer and investor sentiment as time has passed with little sign of a meaningful resolution. This was particularly true in the industrials and consumer sectors, where investors watched tensions between the US and China escalate to real, retaliatory tariffs, with the potential for another step-up in tariff rates in 2019. Compounding these concerns were slowing economic momentum and similar signs in Europe—a combination of headwinds which has led many companies to rein in spending and earnings expectations for 2019. Though our industrials holdings held up better than index peers, they were in the red for the quarter, and our consumer staples holdings were the primary source of relative underperformance in Q4.

Conversely, our health care holdings—though negative on an absolute basis—held up better than index peers. We believe we own a compelling mix of high-quality health care franchises that are well-positioned relative to meaningful secular trends—including Genmab, AstraZeneca and Lonza, among others.

Turning to individual holdings, Fevertree, Temenos and Activision Blizzard were among our bottom contributors in Q4. Shares of Fevertree have retrenched as investors weigh the company's growth prospects in the sizeable US market. Compounding this concern is the fact that Fevertree only reports results twice a year—with the most recent release over the summer. Given heightened volatility in both markets and global macro circumstances since then, investors' nerves have been rattled about the outlook for consumer-oriented companies such as Fevertree. However, we believe it is largely a matter of how quickly—not whether—Fevertree will penetrate the US market. Even at a more moderate rate, we believe the profit-cycle potential remains compelling.

Temenos was pressured in Q4 as investors chose to sell some of their winners amid rising macro uncertainty. However, the company has executed at a very high level, particularly among European-centric banks, and it has a growing pipeline in the US. As we have written in previous communications, we believe Temenos is well-positioned to take share among global banks with its best-in-class core banking software systems. Importantly, customers tend to be quite sticky once they've selected a software provider for what is likely to be a once-in-a-generation implementation. With regulatory headwinds in the financials industry largely lifted and healthy balance sheets, we believe the runway ahead of Temenos remains sizeable.

Shares of leading video-game developer Activision Blizzard were pressured in Q4 amid a particularly challenging quarter for the business. The holiday season video game slate proved particularly competitive, with a large number of high-quality, top names hitting the market. From a business standpoint, the company's Blizzard division is undergoing a reorganization and rebuilding period—increasing costs and weighing on growth. Further clouding the near-

term outlook, several key personnel, including the CFO, have either left or have been asked to leave. Since the quarter concluded, Activision has announced it is ending its partnership with video-game developer Bungie on the Destiny franchise, citing its unwillingness to continue funding the franchise's growth. Given the raft of news, we are evaluating management's most recent measures to address the combination of headwinds.

Among our top individual contributors in Q4 were HDFC, Cree and Agilent—a new purchase in the quarter. HDFC Bank shares had previously been pressured amid general concerns about India's banking environment. In particular, a shake-up at the Reserve Bank of India (RBI) introduced the possibility that the government would intervene in monetary policy, threatening the RBI's independence. As these pressures have abated and the central bank's independence appears secure, HDFC Bank has stood out as a solid bank with particularly good governance and underwriting standards. As a credit-sensitive financial in a rapidly growing country, we believe HDFC Bank is well-positioned for the period ahead.

Cree's silicon-carbide (SiC) business—which we think is well-positioned for a future with electric vehicles—has expanded its manufacturing capacity and customer contracts. The company's LED and lighting fixtures businesses have faced recent macro pressures, including trade-related headwinds, though their slow-down last quarter was insufficient to entirely offset the growth in Cree's SiC business. We are mindful these legacy businesses could be a source of volatility in coming quarters—however, we anticipate growth in Cree's SiC business should ultimately outpace a slowdown elsewhere.

It's rare for us to mention a new buy as a top contributor in the quarter—though that was the case with Agilent Technologies, a life sciences instrumentation franchise exposed to multiple secular trends, including biopharmaceutical research, cancer diagnostics and gene sequencing. The company is also making solid progress enhancing its services and consumables businesses, which provide healthy margins and enhanced revenue visibility. The stock sold off in Q4 tied to macro concerns about the company's China exposure, but we believe its Chinese business is tied to long-term trends that aren't highly dependent on high GDP growth. We capitalized on the pullback to initiate a GardenSM position at an attractive valuation, increasing it to a small CropSM by quarter end.

Portfolio Activity

The year's relative volatility allowed us to be more active in the portfolio than in prior years. Consistent with our process, we were diligent in upgrading our capital where it made sense in Q4—paring our exposure to or exiting altogether campaigns which have become relatively less attractive, in favor of introducing new or adding to high-quality franchises trading at what we find to be compelling valuations. One example was our decision to trim our holding in Visa in favor of increasing our exposure to Worldpay. We have held Visa for its attractive position relative to global growth in digital payments, which has contributed to consistent, low double-digit revenue growth. However, as the valuation has risen, we believe Worldpay is relatively

more attractive—both from a valuation perspective and given it is earlier in its profit cycle. We consequently chose to reallocate some of our capital accordingly in Q4.

We also added to our position in Burberry during the quarter. We purchased Burberry, a leading global luxury brand with deep British heritage, in Q3. Though the company benefits from strong global brand awareness, its design offerings had stagnated over the last several years. In an effort to revitalize the brand—particularly among millennial customers—Burberry recently brought in a new CEO and creative designer. The company has also taken steps to begin restoring some of its exclusivity—limiting recent product drops to a small number of stores and eliminating its presence altogether in others. Though it's early to say whether these efforts will bear fruit, we believe there is potential under a new designer and management team for the brand to reconnect with consumers, driving an improved top and bottom line as well as an attractive level of margin growth.

We introduced Veeva Systems to the GardenSM in Q4. We know Veeva well from our investments in our other portfolios. It is a leading provider of cloud-based SaaS solutions for the pharmaceutical and life sciences industries. The company's Vault applications continue to be rapidly adopted by life sciences customers looking to enhance their clinical, regulatory, manufacturing and commercial operations by introducing modern cloud-based software tools—uptake which has resulted in contracts with a majority of the top-20 pharmaceutical firms and in turn is translating into healthy subscription revenue growth. Importantly, Veeva is adding new products—which remain meaningfully underpenetrated among many of its existing customers. The company is also adding new markets, including other regulated industries where document control and quality assurance are critical. Given this combination, the runway for growth ahead remains attractively long.

We pared our exposure to Shiseido and Sands China in Q4, as they face growing China macro-related headwinds. Both companies are heavily dependent on demand from Chinese consumers to drive revenue growth. While we believe Shiseido and Sands China remain high-quality franchises with appealing exposure to meaningful secular catalysts, we have pared our exposure while we await a clearer near-term macro outlook.

We concluded our campaigns in LKQ, S&P Global and State Street in Q4. LKQ is a leading value-added distributor of vehicle parts and accessories. Shares were pressured over the course of the year as the company struggled with several operational and logistical challenges which drove costs up—particularly in the US and Europe. With more interesting and earlier profit cycles available elsewhere, we harvested our position over the course of the year, exiting completely in Q4.

Similarly, we exited S&P Global as its thesis had largely matured and its valuation expanded. We had held S&P Global as it proved a resilient franchise under new management coming out of the global financial crisis. During our campaign, it made smart acquisitions and divestitures, improved its standing with regulators and drove profits

higher across its business segments. Over time, the management team's impressive margin expansion progress naturally left less room for improvement moving forward. We thus concluded our campaign in Q4.

State Street, a custody services and investment management provider, has faced mounting headwinds—including increasingly stiff competition from JP Morgan. The company arguably compounded this challenge with its recent acquisition of Charles River—a legacy platform which we anticipate will be dilutive to earnings. We consequently decided to upgrade our capital in Q4.

Portfolio Statistics

As of December 31, 2018, the portfolio had a 3-5 year forecasted weighted average earnings growth rate of 19% and our holdings were selling at a weighted harmonic average P/E (excluding negative earnings) of 21X FY1 earnings and 18X FY2 earnings. The portfolio held 46 companies with 38% of portfolio capital committed to the top 10 holdings and 61% of capital committed to the top 20 positions. The portfolio's weighted average market capitalization was \$94.4 billion.

Perspective

After nearly 10 years of a solid, if grinding, bull market, the combination of a number of macro influences has tested demand for growth equities. The simultaneous impact of heightened global trade tensions, rising interest rates and political instability has created something of a toxic mix. The ongoing US government shutdown (as of this writing) only exacerbates the negative sentiment that's characterized year end.

Taken individually, none of these factors seems particularly catastrophic. Global interest rates aren't especially high by historical standards. Trade tensions are undoubtedly a concern, but they seem contained and remain largely on the margin for now. And the US government has shut down over 20 times since 1976 with negligible long-term impacts on either the economy or markets. However, the combination has introduced fears of a near-term recession—an event which we acknowledge has a non-zero probability. That said, there are other possible outcomes as well, including a continuation of low, slow global growth for a longer period. We profess no unique insight into which of these outcomes (or a myriad of others) is likeliest. Rather, our focus is on concentrating our capital in companies we believe will be able to grow in various economic environments.

What's more, valuations—which had been a concern earlier in the year—are now certainly much more favorable as we enter 2019. If anything, the premium of secular growth companies to more cyclically oriented businesses has expanded during this downturn. But given our confidence in these companies' ability to compound profits in a reasonably wide range of economic scenarios, we have been capitalizing on the recent sell-off to upgrade into our highest conviction holdings—including the aforementioned Worldpay and Burberry.

Stated otherwise, we believe there remain ample compelling investing opportunities globally, despite rising uncertainty and volatility. Today these stocks are trading at valuations we find particularly attractive given the sizeable opportunities ahead of them. Regardless of markets' future course, we will maintain our disciplined approach, which has historically served us well against a wide variety of investing backdrops.

For more information: Visit www.artisanpartners.com

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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.

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This summary represents the views of the portfolio manager as of 31 Dec 2018. 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.

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Our capital allocation process is designed to build position size according to our conviction. Portfolio holdings develop through three stages: GardenSM, CropSM and HarvestSM. GardenSM investments are situations where we believe we are right, but there is not clear evidence that the profit cycle has taken hold, so positions are small. CropSM investments are holdings where we have gained conviction in the company's profit cycle, so positions are larger. HarvestSM investments are holdings that have exceeded our estimate of intrinsic value or holdings where there is a deceleration in the company's profit cycle. HarvestSM investments are generally being reduced or sold from the portfolios.

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Artisan Global Opportunities Strategy

Quarterly Contribution to Return (%)

As of 31 December 2018

Top Contributors	Average Weight	Contribution to Return	Ending Weight
HDFC Bank Ltd	2.21	0.24	2.56
Genmab A/S	2.16	0.15	2.53
Cree Inc	0.81	0.11	0.94
Atlassian Corp PLC	1.73	0.09	2.24
Agilent Technologies Inc	0.78	0.04	1.64
Amazon.com Inc	0.07	0.04	0.85
Cash Holdings	5.14	0.03	5.68
State Street Corp	0.01	0.01	0.00
S&P Global Inc	0.02	-0.00	0.00
Vestas Wind Systems A/S	0.03	-0.00	0.48
Tencent Holdings Ltd	2.04	-0.01	2.43
Veeva Systems Inc	0.52	-0.02	1.10
Burberry Group PLC	0.71	-0.07	1.11
Xiaomi Corp	0.08	-0.08	0.00
Sands China Ltd	1.49	-0.08	1.44
Vivendi SA	2.14	-0.10	2.25
Harris Corp	0.38	-0.10	1.28
Tiffany & Co	0.19	-0.11	0.48
AstraZeneca PLC	3.05	-0.13	3.29
Keyence Corp	1.20	-0.15	1.25
Advanced Micro Devices Inc	0.46	-0.15	0.51
Anthem Inc	3.37	-0.16	3.18
ING Groep NV	0.94	-0.18	0.19
Booking Holdings Inc	1.38	-0.18	1.44
Daifuku Co Ltd	1.25	-0.18	1.05
LKQ Corp	0.78	-0.22	0.00

Bottom Contributors	Average Weight	Contribution to Return	Ending Weight
Fevertree Drinks PLC	2.05	-1.01	1.79
Pioneer Natural Resources Co	2.78	-0.78	2.53
Activision Blizzard Inc	1.50	-0.76	1.53
IHS Markit Ltd	7.04	-0.76	6.99
Lonza Group AG	2.80	-0.74	2.64
Nintendo Co Ltd	2.45	-0.74	2.28
Visa Inc	6.31	-0.70	5.51
Temenos AG	2.41	-0.68	2.34
Amadeus IT Group SA	2.44	-0.67	2.09
Aptiv PLC	2.38	-0.67	2.14
Techtronic Industries Co Ltd	3.44	-0.65	3.56
Bank of America Corp	3.69	-0.60	3.55
Worldpay Inc	2.08	-0.52	2.11
Shiseido Co Ltd	1.68	-0.44	1.24
Noble Energy Inc	1.09	-0.43	0.00
The Progressive Corp	2.49	-0.40	2.46
ASML Holding NV	2.31	-0.39	2.24
Pagseguro Digital Ltd	1.09	-0.38	0.89
Lowe's Cos Inc	1.96	-0.37	2.04
Treasury Wine Estates Ltd	1.88	-0.34	1.89
Umicore SA	1.08	-0.34	1.01
Alphabet Inc	2.66	-0.33	2.72
Boston Scientific Corp	3.40	-0.26	3.51
London Stock Exchange Group PLC	1.97	-0.25	2.02
Salesforce.com Inc	1.22	-0.25	0.00
adidas AG	1.69	-0.25	1.66
Fortive Corp	1.19	-0.22	1.34

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.