



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 also assess key environmental, social and governance (ESG) issues that could impact future stock returns. 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



Craigh A. Cepukenas, CFA
Portfolio Manager (Lead)



James D. Hamel, CFA
Portfolio Manager



Matthew H. Kamm, CFA
Portfolio Manager



Jason L. White, CFA
Portfolio Manager

Investment Results (% USD)

As of 31 March 2020	Average Annual Total Returns						
	QTD	YTD	1 Yr	3 Yr	5 Yr	10 Yr	Inception ¹
Composite — Gross	-14.74	-14.74	-1.99	13.52	11.20	14.49	10.55
Composite — Net	-14.97	-14.97	-2.97	12.40	10.10	13.37	9.48
Russell 2000 [®] Growth Index	-25.76	-25.76	-18.58	0.10	1.70	8.88	6.61
Russell 2000 [®] Index	-30.61	-30.61	-23.99	-4.64	-0.25	6.90	7.56

Annual Returns (% USD) 12 months ended 31 March

	2016	2017	2018	2019	2020
Composite — Gross	-6.96	24.96	26.12	18.39	-1.99

Source: Artisan Partners/Russell. Returns for periods less than one year are not annualized. ¹Composite inception: 1 April 1995.

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

Despite a relatively quiet and positive start to 2020, the COVID-19 pandemic and the threat of an oil price war decimated global equity markets in the back half of Q1. The MSCI AC World Index delivered the worst return since the global financial crisis, and massive volatility became the new norm with the CBOE volatility index hitting a record high. The energy sector lagged, followed by financials, while health care and information technology proved relatively resilient. Growth meaningfully outperformed value.

Governments around the globe have taken unprecedented actions to flatten the curve of new COVID-19 cases. In the US, many states have shut down businesses not deemed essential—airlines, hotels, restaurants, malls, sporting venues, gyms, etc.—to limit social interactions. Countries affected earlier in the pandemic—China, Italy, Spain and Germany—have taken similar or more extreme shutdown measures and have seemingly slowed the infection rate of the virus. These decisions are taking an extraordinary toll on the global economy, though it is a price many governments seem willing to pay to curtail the spread of the virus.

To help offset the economic damage and stabilize financial markets, governments and central banks are providing historic levels of fiscal and monetary stimulus. The US federal government passed a \$2 trillion stimulus bill in late March, providing direct payments to individuals and families, loans and grants to businesses to help offset zero revenues, enhanced unemployment benefits and additional resources for health care providers. The Fed massively expanded its reverse repo operations—adding \$2 trillion of liquidity to the banking system to help keep money markets stable, restarting quantitative easing with the purchase of ~\$1 trillion in Treasuries and mortgage-backed securities, lowering bank reserve requirements to zero and lowering its benchmark interest rate 150bps to 0-25bps.

While the length and magnitude of the global economic impact from the pandemic remain to be seen, initial estimates and data points in the US alone have been eye-opening. A record 6.9 million US jobless claims were filed in the last week of March, following 3.3 million the week prior and nearly 10 to 20 times the historical average of ~350,000 weekly jobless claims. Furthermore, flagging sentiment on the Street has led to revised unemployment and Q2 GDP growth expectations. Some are forecasting unemployment will top out at 16% and Q2 GDP growth will decline at an annualized rate of up to -40%.

Performance Discussion

While our portfolio was negative on an absolute basis during the quarter, we were pleased with its resilience relative to the Russell 2000® Growth Index. Our Q1 performance is not a result of a decision made in the quarter, but rather a reflection of our investment philosophy and a confluence of decisions made over recent months, quarters and years. These decisions have been governed by our team's longstanding investment process, which requires us to focus on high-quality businesses with plenty of headroom for continued growth, to concentrate our capital in our highest conviction holdings and to avoid companies lacking visible profit-cycle opportunities.

Risk management is ingrained in our portfolio construction process. While we seek companies with the greatest prospects for profit acceleration, our underlying objective is to compound the portfolio's value, and avoiding permanent capital impairment is key to the powerful math of compounded returns. We seek to manage risk by 1) investing in high-quality businesses ("franchises," in our parlance) with strong management teams and business models capable of generating cash flows through various cycles, 2) ensuring portfolio holdings have solid balance sheets and 3) exercising valuation discipline.

Once we have identified high-quality franchises that meet these general requirements, our capital allocation process is intended to concentrate capital in our top ideas. While we encourage creative risk-taking in our GardenSM holdings in an attempt to find big future profit cycles early, stocks that become CropSM holdings (roughly our top 20 holdings, comprising nearly 56% of the capital in the portfolio) must have clear profit cycles underway, with clear headroom for continued growth and valuations that are still reasonable. Portfolio performance in any given period is almost always driven by our CropSM holdings (by design), and the strength of our CropSM investments was on full display in Q1: The weighted average return of our top 20 holdings was well ahead of the benchmark, and only 4 of our top 20 holdings underperformed the Russell 2000® Growth Index (-25.8% return in Q1).

While our relative performance in the quarter was supported by stock selection across our software, health care, consumer discretionary and industrials holdings, we also benefited from our below-benchmark exposures to some of the hardest hit areas of the economy: energy, retail and credit-sensitive financials. We have consistently noted that we see more compelling profit cycle opportunities in innovative sectors of the economy rather than businesses whose growth is heavily dependent on a strong global economy. While we certainly didn't see a halt to the global economy coming, in general, this positioning helped protect capital in Q1. In fact, as we discuss in the perspective section, some of these innovative businesses are benefiting by being part of society's response to the crisis, while some heavily leveraged low-growth cyclical businesses are being pushed to the brink by the economic shock.

Among our top individual contributors in Q1 were DexCom and Zscaler. DexCom, a market leader for continuous glucose-monitoring systems (CGM), has recently made meaningful market-share gains both in the US and abroad as the company benefits from growing CGM demand, improving market access and growing manufacturing capacity. Furthermore, in late 2020, DexCom expects to launch its new G7 product—a slimmer, fully disposable CGM sensor—which we believe can open up the opportunity to gain share in non-insulin dependent type 2 diabetes and gestational diabetes, as well as in hospitals. While we believe the growth runway ahead is significant given a sizable global market and the company's leading CGM technology portfolio, we are harvesting our position as the company's market cap no longer meets our small-cap mandate.

Cybersecurity remains a top concern for businesses and governments alike as cyberattacks can have devastating financial and reputational consequences. Furthermore, managing the security needs of legacy on-premise applications, a growing number of cloud-based applications (Office 365, Salesforce, etc.) and a remote workforce makes operating IT infrastructures increasingly complex. Zscaler's scalable, cloud-based security platform is a more secure and efficient way to connect users and applications, which eliminates the need for several layers of security (firewalls, VPNs, etc.) developed and built over the last couple of decades. While the pandemic crisis is likely disrupting some areas of Zscaler's new sales funnel, the company is particularly well-suited to scale and accelerate our market share-gain thesis. Ninety percent of employees are remotely connecting to the enterprise IT network in today's inverted world, as opposed to prior solutions which are geared to support 10%-20% of workers connecting remotely with the rest connecting from within the walls of a corporate network. Many employees have used traditional VPN connections to log into their networks remotely, but Zscaler's platform offers a more secure connection without exposing an entire internal network, is easier to configure and is less costly to operate at scale. Given the trend toward connecting remote devices over the Internet backbone, solid gross margins and a recurring revenue base, we added to our position during the quarter.

Among our bottom contributors were ACI Worldwide and Webster Financial. ACI Worldwide is a provider of financial payment software and subscription-based services. Shares have been pressured amid widespread concerns about a meaningful reduction in consumer spending. The company also hired a new CEO, putting recent takeout speculation to rest. We believe the company is well-positioned to benefit from the ongoing trend toward digital payments and are remaining patient for now.

Webster Financial Corporation is a bank holding company with one of the largest health savings account (HSA) platforms in the US and a banking subsidiary which provides a wide range of financial services to individuals, families and businesses throughout southern New England and eastern New York state. Webster is the only credit-sensitive company in our portfolio, and before the COVID-19 pandemic, there was little evidence of a contraction in the credit cycle. That said, recent results demonstrated slowing growth in the company's HSA business, and we admittedly have no ability to determine when a profit acceleration in the company's banking subsidiary could transpire with a full-blown contraction in the credit cycle underway. We have been harvesting our position and reinvesting the proceeds in companies whose profit cycles are driven by more idiosyncratic dynamics.

Portfolio Activity

We tend to be most active in periods of volatility—and Q1 provided ample opportunity for activity as we drew down our cash position to initiate new positions and added to existing positions at what we believe are attractive valuations relative to our growth expectations over the next two to three years.

We started new investment campaigns in Lattice Semiconductor, Casey's General Stores and Papa John's International. Lattice Semiconductor is an Oregon-based fabless vendor of field

programmable gate array (FPGA) chips—hardware circuits customers can program/configure after manufacturing. Lattice's FPGA chips are used in personal computers, 5G infrastructure, routers and switches, servers, industrial Internet of things devices, factory automation, automobiles and TVs to name a few. After two decades of mismanagement, Lattice now has a new board and management team—the current CEO joined from leading microprocessor provider Advanced Micro Devices in late 2018—which have embarked on a product-transformation journey. The company has refreshed its FPGA products in the small/low power segment of the market, carving itself a niche behind the two market leaders Xilinx and Intel Corporation. The product set is now more focused to address high return on investment use cases centered around small (low-end) and power efficient applications—a rapidly growing market to which Lattice brings unique intellectual property versus a broad set of peers in the semiconductor industry. In addition to providing FPGA chips to data centers and new 5G infrastructure—particularly compelling opportunities given these end markets are and will continue benefiting from strong secular tailwinds—we believe the company is well-positioned to tap into low power/reprogrammable chips as well as industrial and automotive end markets.

Casey's General Stores, akin to 7-Eleven, engages in the management and operation of convenience stores and gasoline stations that serve rural customers throughout the Midwest. A new leadership team took over in 2019 and has since laid out a plan to transition Casey's to a modern-day retailer which should provide a tailwind to profit growth. To make this transition, management has a long list of initiatives: procurement savings (merchandise and food ingredients), increased private label penetration, labor cost optimization, a loyalty program and frozen beverages. While the company will be impacted by decreased in-store traffic over the near term from measures municipalities are taking to flatten the curve of new COVID-19 cases, we believe the franchise is well-positioned to excel on the other side of the pandemic.

Papa John's is a global operator and franchisor of pizza delivery and carryout restaurants. The company has been plagued in recent years by operational woes and a series of negative headlines—primarily related to its founder—that have damaged the brand. The company recently overhauled its entire executive management team to right the ship—notably, hiring a new CEO, Rob Lynch, to spearhead a turnaround effort. Mr. Lynch brings previous leadership experience at large franchisors Arby's and Taco Bell—where he worked alongside current Chipotle CEO Brian Niccol—and a marketing background at P&G. At Arby's, Mr. Lynch led a turnaround effort where he shaped the company's successful marketing campaign “We have the meats!” Mr. Lynch is focused on reestablishing Papa John's premium positioning by focusing on introducing new food options (recently launching Papadias and jalapeño poppers), supportive ads and operational cost-cutting measures to improve margins. While the turnaround efforts are early, we believe the business is positioned to make it through the pandemic and gain market share on the other side as the CEO's turnaround plan begins bearing fruit. We used the pullback to initiate a new investment campaign and build a position at an attractive valuation, in our view.

We concluded our campaigns in Canada Goose and First Solar. Premium outerwear brand Canada Goose has experienced recent turbulence in China—Hong Kong protests, COVID-19—which has stalled our thesis that the country would be a key driver of sales growth. Aside from COVID-19, the company has shown other signs of slowdown—elevated inventory levels, slowing growth in most mature markets—and our confidence in the investment thesis has waned. With no near-term catalysts on the horizon, we decided to upgrade our capital into better-positioned franchises.

First Solar is a leading global producer of solar panels. We initiated our campaign in late 2018 under the premise alternative energy sources—particularly solar and wind—were at an inflection point as prices come down and production is increasingly economically viable without reliance on subsidies. First Solar, in particular, was entering a new product cycle with its Series 6 panels which would establish it as the low-cost producer in the industry—making it an attractive partner for US utilities shifting their power generation mix toward renewables—and it had expertise in developing full solar power plants and possessed a very strong balance sheet. While much of this thesis still holds true, we believe a marked increase in Chinese solar manufacturing capacity in 2021 will introduce a meaningful amount of competition and supply into the market and put pressure on First Solar's ability to be the low-cost producer in this market. This development is a deal-breaker and threatens First Solar's designation as a franchise; thus, we decided to exit our position.

In addition to the aforementioned add to Zscaler, we also added to Halozyme, NeoGenomics and Zynga. Halozyme is a biotechnology firm that licenses to pharmaceutical companies the use of its proprietary enzyme—its ENHANZE® platform—which aids delivery of biologics subcutaneously, as opposed to intravenously. The benefit is improved absorption and convenience to patients and physicians. The company has established partnerships with leading biopharma companies—Roche, Johnson & Johnson (JNJ), Bristol-Myers Squibb and Argenx—and ENHANZE is already used in three approved products. A fourth approval is pending for JNJ/Genmab's Darzalex SC, a subcutaneous treatment for multiple myeloma, which we believe will come through later this year and become a large driver of royalty revenue over time. Furthermore, the company decided in late 2019 to fully exit its highly capital-intensive drug-development business, which we believe simplifies the business, reduces the company's exposure to binary events and should lead to significant cash flow growth and margin expansion over time. We used the recent market pullback to add to our position at what we believe was an attractive valuation.

NeoGenomics is the largest oncology lab in the US with significant scale and broad distribution to pathologists and hospitals across the country, enabling the company to take share from other labs. Furthermore, the company's pharmacy services business has experienced meaningful growth over recent quarters as its access to patients both during drug development and commercialization have enabled it to build a meaningful backlog of bookings. Lastly, the company's on-track integration of recently acquired Genoptix—a cancer-focused genetic testing business specializing in hematology and solid tumor testing—and ongoing investments in next-gen molecular sequencing, should all add to future profit-growth

potential. We believe the company is the preeminent cancer-focused genetic laboratory and added to our position.

Zynga is a leading social game developer with its games—including CSR Racing, Merge Dragons!, Empires and Puzzles, Words with Friends and Zynga Poker—played primarily on mobile devices including Apple's iOS, Google's Android, Facebook and the company's eponymous website. Games are typically played in "freemium" mode—free to play with in-game monetization opportunities (advertising, purchases of in-game content). We have owned the company for a couple of years and initiated our position when a proven management team took over what was a dysfunctional mobile gaming company. Management has made the business more predictable and profitable over the past few years by bringing operational rigor and steadily evolving its core game franchises to keep players engaged over longer periods of time. Furthermore, it has completed several acquisitions to bring in new creative studios. Shares outperformed in the quarter given the relative protection of this franchise in the wake of the COVID-19 pandemic, and we believe it is well-positioned in the current environment with a balance sheet flush with cash. With the capability to make additional opportunistic acquisitions and a solid pipeline of games under development, we believe the company's profit cycle remains in motion, and we added to our position.

Portfolio Statistics

As of March 31, 2020, the portfolio had a 3-5 year forecasted weighted average earnings growth rate of 19%, and our holdings were selling at a weighted average P/E of 34X FY1 earnings and 28X FY2 earnings. The portfolio held 65 companies with 33% of portfolio capital committed to the top 10 holdings and 56% of capital committed to the top 20 positions. The portfolio's weighted average market capitalization was \$5.4 billion.

Perspective

The COVID-19 pandemic has presented unfamiliar challenges our society has not had to work through in generations. Like many people, our team members' professional and family routines have been upended. From our home offices, we've quickly adapted to the new working environment, staying in close communication with each other, our portfolio holdings' management teams and our clients. While we are proud of how the team has responded, witnessing the health and economic consequences of this pandemic on our communities, friends and families has been a painful experience. It is a challenging time, and we hope everyone is staying safe and adapting well to the disruptive changes.

The current economic environment is unlike any we have seen over our investment careers. Social distancing efforts have led to dramatic short-term impacts, with businesses in the travel, leisure, lodging, retail, energy and financials sectors impacted the hardest. Relatively defensive areas of the economy are also being affected more severely than in past periods of economic duress. The magnitude of the intervention by governments, central banks and individual citizens (by social distancing) to help flatten the curve and offset the economic damage has been unprecedented. The resulting signs of plateauing COVID-19 case counts and surging fiscal and monetary stimulus have

helped markets recover sharply off the lows in recent weeks. However, we believe volatility will likely remain until the pandemic's future path is more certain and investors can better assess the full impact on consumers and corporations.

We have been closely monitoring the COVID-19 trajectory and the societal debate over how to balance flattening the curve with the economic and other social costs. We have asked one of our health care analysts to lead our efforts to monitor the key virus indicators—cases, testing capacity, therapeutics/vaccines, etc.—and it has been a daily topic of discussion for the team. We are optimistic social distancing will help control the short-term crisis and the scientific and industrial communities will bring forth more medical supplies, diagnostic tests and therapeutic options in the coming months. However, we currently expect the struggle to control COVID-19 to persist, likely in waves across nations and regions, until sufficient quantities of an effective vaccine become available.

As such, while the current stay-at-home environment should represent the low point of economic activity, the recovery post an initial partial snap-back could be prolonged and frustrating. Consumers' savings (for people fortunate enough to have them) are being depleted, some small businesses will struggle to regain their footing and corporate balance sheets (which had taken on increasing levels of debt during the low interest rate-fueled economic expansion) need to be strengthened. While some level of normalcy may return as we get closer to summer, the looming prospect of returning waves of COVID-19 infections (and lockdowns) will almost certainly make both consumers and businesses extremely careful in their spending decisions. Given the likelihood the current environment further widens income inequality and threatens access to affordable health care, we would not be surprised to see meaningful political ramifications in the coming years, which introduces additional uncertainty regarding the shape of corporate profit recovery.

While crises naturally pose threats, they also present opportunities. The world is now conducting business remotely—and more digitally—and we expect this trend to be sustainably boosted even once the current restrictions are lifted. Beneficiaries include Zscaler (whose modern cloud-based security platform is well suited for more virtual organizations), Chegg (who provides digital scholastic products and services), and Hubspot (a provider of cloud-based inbound marketing and sales software). Social distancing is driving increased demand for digital entertainment services, which also benefits our holdings in video games (Zynga). The team is also doing work to understand the potential for increased future spending on infectious disease preparedness, contactless payments technology and localized supply chains, which could benefit several of our current portfolio holdings. Finally, we also suspect that within retail and restaurants, a limited number of franchises with strong balance sheets, value-based offerings and strong digital capabilities could be positioned to gain market share coming out of this crisis. We include Wingstop, Papa John's and Ollie's Bargain Outlet in this category.

We have been active throughout this crisis, adding to many of the beneficiaries mentioned above, but also to franchises whose profits should be relatively stable in the upcoming quarters and whose longer-term growth does not depend on a strong economic

backdrop. Amid the market collapse, we saw compelling prices for even these more stable businesses and took advantage of the opportunities. We've also made some cautiously brave buys of franchises such as Ollie's Bargain Outlet, Casey's General Stores, Wingstop and Papa John's whose businesses will be severely impacted in the short term, but which should begin to noticeably recover as we begin to emerge from the harshest of lockdowns.

Leveraged, cyclical businesses in areas such as travel, hospitality, retail, energy and credit-sensitive financials have bounced sharply in recent days as the markets have regained some ground. While we expected this to play out given the extreme price dislocations during the selloff, we have not been tempted to begin investment campaigns in these types of securities. In a surprisingly rapid economic rebound, this decision could serve as a headwind for our portfolio's relative performance. But given our view the recovery will likely be slow and profit-growth scarce, we believe beyond this initial bounce, investors will continue to pay a premium for businesses who are able to grow amid a challenging global economy.

Circumstances are highly uncertain and are changing daily—it is difficult to know what the next few months will look like. We are keeping a long-term perspective and thus are confident this crisis will pass. For investors with similar time horizons, history would suggest dislocations like this serve as potent starting points for future returns. We wish everyone well and appreciate your ongoing support and patience through good and bad times.

For more information: Visit www.artisanpartners.com

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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 U.S. Small-Cap Growth Strategy

Quarterly Contribution to Return (% USD)

As of 31 March 2020

Top Contributors	Average Weight	Contribution to Return	Ending Weight
DexCom Inc	3.56	0.75	3.31
Zscaler Inc	1.47	0.67	2.17
Accelaron Pharma Inc	1.24	0.59	1.47
Teladoc Health Inc	0.84	0.53	0.90
Alteryx Inc	0.44	0.25	0.00
Zynga Inc	3.10	0.25	3.80
Clarivate Analytics PLC	2.07	0.25	2.53
Tabula Rasa HealthCare Inc	1.63	0.16	1.95
Iovance Biotherapeutics Inc	1.34	0.12	1.73
Coupa Software Inc	2.41	0.06	2.46
Trex Co Inc	0.08	0.04	0.49
Y-mAbs Therapeutics Inc	0.09	0.03	0.46
Adaptive Biotechnologies Corp	0.37	0.03	0.55
Wingstop Inc	0.02	0.03	0.28
Avalara Inc	1.46	0.03	1.69
Glu Mobile Inc	0.16	0.02	0.00
Repligen Corp	0.02	0.01	0.24
Virtu Financial Inc	0.26	0.01	0.00
Cash Holdings	3.44	0.01	3.19
Papa John's International Inc	0.14	0.01	0.62
NeoGenomics Inc	2.56	-0.01	2.92
iRhythm Technologies Inc	0.21	-0.02	0.35
Paylocity Holding Corp	0.05	-0.04	0.21
Monolithic Power Systems Inc	2.02	-0.05	2.22
Mesa Laboratories Inc	0.62	-0.06	0.65
Aspen Technology Inc	0.17	-0.07	0.52
First Solar Inc	0.41	-0.07	0.00
Tactile Systems Technology Inc	0.17	-0.07	0.00
Tyler Technologies Inc	2.51	-0.08	2.67
RealPage Inc	1.09	-0.08	1.15
Casey's General Stores Inc	0.14	-0.10	0.73
Evo Payments Inc	0.06	-0.11	0.23
Canada Goose Holdings Inc	0.43	-0.11	0.00
Lattice Semiconductor Corp	0.62	-0.12	1.28
Ambarella Inc	0.80	-0.12	0.78
Halozyme Therapeutics Inc	2.74	-0.13	3.53

Bottom Contributors	Average Weight	Contribution to Return	Ending Weight
Q2 Holdings Inc	4.03	-1.19	3.52
Webster Financial Corp	1.23	-0.96	0.22
John Bean Technologies Corp	2.56	-0.96	2.30
ACI Worldwide Inc	2.17	-0.87	1.88
Glaukos Corp	1.71	-0.86	1.19
Guidewire Software Inc	3.14	-0.85	2.69
Ingersoll Rand Inc	2.40	-0.79	2.13
Ingevity Corp	0.95	-0.77	0.18
LivePerson Inc	2.47	-0.77	2.02
Bright Horizons Family Solutions Inc	1.74	-0.76	1.37
Teledyne Technologies Inc	4.23	-0.63	4.10
Floor & Decor Holdings Inc	1.11	-0.56	0.87
HubSpot Inc	2.72	-0.51	2.61
Cubic Corp	1.25	-0.50	1.02
Donaldson Co Inc	1.27	-0.50	1.13
Ollie's Bargain Outlet Holdings Inc	1.50	-0.47	1.63
PROS Holdings Inc	0.78	-0.46	0.71
Ascendis Pharma A/S	2.16	-0.44	2.41
HealthEquity Inc	1.23	-0.43	1.07
Orchard Therapeutics plc	0.80	-0.42	0.60
Argenx SE	1.94	-0.31	2.03
BWX Technologies Inc	1.64	-0.31	1.21
Cree Inc	1.60	-0.31	1.44
World Wrestling Entertainment Inc	0.42	-0.27	0.00
Sage Therapeutics Inc	0.30	-0.26	0.19
Morningstar Inc	0.89	-0.25	0.90
Radius Health Inc	0.60	-0.24	0.50
Novanta Inc	2.24	-0.22	2.33
LiveRamp Holdings Inc	0.66	-0.20	0.70
Coherent Inc	0.50	-0.20	0.44
Chegg Inc	3.32	-0.19	3.47
Altair Engineering Inc	0.59	-0.17	0.30
Tricida Inc	0.20	-0.17	0.30
The New York Times Co	1.48	-0.16	1.50
Cognex Corp	0.73	-0.15	0.70
Veracyte Inc	1.65	-0.15	2.11
Blackline Inc	3.04	-0.14	3.17

Source: Artisan Partners/FactSet. Performance is historical and is not a reliable indicator of future results. As of 31 Mar 2020. 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.