DEAR BARON ASSET FUND SHAREHOLDER:

PERFORMANCE

U.S. equity indexes were mixed during the first quarter. The year commenced with rapid market gains, which reversed in late January as the prospect of faster inflation coupled with rising interest rates spooked investors. Volatility persisted throughout the remainder of the quarter, as various political developments, most notably the prospect of a "trade war," further unsettled the markets. Within this environment, growth stocks generally outperformed value stocks, and small- and mid-cap growth indexes outperformed large-cap indexes. Against this backdrop, Baron Asset Fund (the "Fund") gained 4.68% (Institutional Shares) during the quarter. The Russell Midcap Growth Index (the "Index") gained 2.17%, and the S&P 500 Index fell 0.76%.

ANDREW PECK

PORTFOLIO MANAGER

Retail Shares: BARAX
Institutional Shares: BARIX
R6 Shares: BARUX

Table I.
Performance
Annualized for periods ended March 31, 2018

	Baron Asset Fund Retail Shares[1,2]	Baron Asset Fund Institutional Shares[1,2,3]	Russell Midcap Growth Index[1]	S&P 500 Index[1]
Three Months[5]	4.61%	4.68%	2.17%	(0.76)%
One Year	19.87%	20.19%	19.74%	13.99%
Three Years	10.63%	10.93%	9.17%	10.78%
Five Years	13.27%	13.58%	13.31%	13.31%
Ten Years	9.84%	10.10%	10.61%	9.49%
Fifteen Years	12.14%	12.32%	12.12%	10.10%
Since Inception (June 12, 1987)	11.50%	11.59%	10.13%[4]	9.73%

The best performing sectors in the Index during the quarter included Information Technology ("IT") and Health Care, which make up nearly half the Fund's assets. The IT sector built on last year's outperformance, with gains driven by companies in the software and internet software & services industries. Performance of the Health Care sector was led by health care equipment, pharmaceuticals, and health care supplies companies. The Energy sector declined despite the rise in oil prices, while Real Estate was pressured by the sell-off in REITs over concerns surrounding rising interest rates. The Materials and Consumer Discretionary sectors also declined during the quarter.

Many of the Fund's best performing stocks were in the IT sector. As discussed below, **CoStar Group, Inc.**, a real estate information company, and **Zillow Group, Inc.**, an operator of real estate websites, both gained after reporting strong business trends in the most recent quarter. Financial technology vendor **SS&C Technologies Holdings, Inc.** gained after announcing a large acquisition. Investments in several application software companies that we believe are disrupting existing markets, such as **Guidewire Software, Inc.** and **The Ultimate Software Group, Inc.** all performed well. **IDEXX Laboratories, Inc.**, a veterinary diagnostic company, **Bio-Techne Corporation**, a supplier of proteins to life sciences research, and **Veeva Systems Inc.**, a leading provider of cloud-based software solutions for the life sciences market, were standouts in the Health Care sector.

As is often the case, the Fund's performance was hindered by a couple of large holdings that were hurt by idiosyncratic issues. **Mettler-Toledo International, Inc.**, a weighing instruments manufacturer, fell on concerns about the difficult growth comparisons it faces after outstanding performance last year. **Gartner, Inc.**, which provides research on the IT sector, fell on concerns about the pace with which it is integrating a large recent acquisition. **West Pharmaceutical Services, Inc.**, which manufactures pharmaceutical packaging devices, fell after reporting quarterly results that were marred by several factors that we believe to be short term in nature.

Performance listed in the above table is net of annual operating expenses. Annual expense ratio for the Retail Shares and Institutional Shares as of September 30, 2017 was 1.31% and 1.04%, respectively. *The performance data quoted represents past performance. Past performance is no guarantee of future results. The investment return and principal value of an investment will fluctuate; an investor's shares, when redeemed, may be worth more or less than their original cost. The Fund's transfer agency expenses may be reduced by expense offsets from an unaffiliated transfer agent, without which performance would have been lower. Current performance may be lower or higher than the performance data quoted. For performance information current to the most recent month end, visit www.BaronFunds.com or call 1-800-99BARON.*

1 The indexes are unmanaged. The Russell Midcap® Growth Index measures the performance of medium-sized U.S. companies that are classified as growth and the S&P 500 Index of 500 widely held large cap U.S. companies. The indexes and the Fund are with dividends, which positively impact the performance results. Russell Investment Group is the source and owner of the trademarks, service marks and copyrights related to the Russell Indexes. Russell is a trademark of Russell Investment Group.
2 The performance data in the table does not reflect the deduction of taxes that a shareholder would pay on Fund distributions or redemption of Fund shares.
3 Performance for the Institutional Shares prior to May 29, 2009 is based on the performance of the Retail Shares, which have a distribution fee. The Institutional Shares do not have a distribution fee. If the annual returns for the Institutional Shares prior to May 29, 2009 did not reflect this fee, the returns would be higher.
4 For the period June 30, 1987 to March 31, 2018.
5 Not annualized.

Table II.
Top contributors to performance for the quarter ended March 31, 2018

	Year Acquired	Percent Impact
IDEXX Laboratories, Inc.	2006	1.23%
CoStar Group, Inc.	2016	0.42
SS&C Technologies Holdings, Inc.	2014	0.39
Zillow Group, Inc.	2015	0.36
Verisk Analytics, Inc.	2009	0.33

IDEXX Laboratories, Inc., the leading player in the market for veterinary diagnostics, was the largest contributor to performance. The company's latest quarterly results exceeded Wall Street's expectations, as its organic revenue growth accelerated to 12%. This led management to raise its estimates for revenue and earnings growth for the full year 2018. Notably, placements of the company's flagship Catalyst instruments into veterinary offices continued to track at impressive rates. This is significant because these instrument placements result in ongoing sales of highly profitable reagents to these same customers. We are also excited about the launch of IDEXX's proprietary SDMA test for kidney disease and fecal antigens into vets' offices. We believe that this test will boost the company's overall organic revenue and earnings growth over time. In addition, operating margins have continued to move higher, and we believe there is meaningful room for continued expansion over the next several years.

Shares of **CoStar Group, Inc.**, a real estate information and marketing services company, gained in response to strong near-term business trends. CoStar announced that its fourth quarter 2017 sales jumped approximately 50% year-over-year. We remain excited by the company's successful experience upselling customers of its Loopnet Premium Searcher to its flagship CoStar product, which we believe can contribute an incremental $150 million to $200 million of highly profitable, recurring revenue. We believe CoStar has an even larger opportunity to drive profits by optimizing its Premium Lister product, and we expect the company's recent acquisition of ForRent to be meaningfully accretive.

Shares of financial technology vendor **SS&C Technologies Holdings, Inc.** contributed to performance as the company announced its largest acquisition–the approximately $6 billion purchase of DST Systems, Inc., a key player in long-only portfolio administration. SS&C has amassed a strong M&A track record, and we expect that meaningful synergies will be recognized from this deal. In addition, SS&C reported solid earnings results and shared a positive outlook for 2018. We believe the company will generate attractive ongoing revenue growth through market share gains, cross-sales of its expanded services portfolio, and new product introductions.

Zillow Group, Inc. operates the leading online real estate sites in the U.S. These sites offer information on homes for sale and rent, as well as a marketplace to find mortgages. The company also owns StreetEasy, the leading real estate site for New York City. Shares of Zillow gained based on its strong financial results and positive forward outlook. Zillow makes money primarily by selling new home leads to real estate agents, and we believe the company can increase agents' spending meaningfully over time. We believe that Zillow remains in the early stage of taking market share in the estimated $8 billion market for online real estate advertising.

Shares of **Verisk Analytics, Inc.**, a leading vendor of data and analytics, reported good earnings results, highlighted by impressive growth in its Insurance segment, improved results in its Financial Services segment, and accelerating growth in its Energy segment. Verisk also issued optimistic commentary about its performance in 2018. We remain positive about the competitive positioning, long-term growth, margin, and capital deployment prospects for this longtime holding.

Table III.
Top detractors from performance for the quarter ended March 31, 2018

	Year Acquired	Percent Impact
Mettler-Toledo International, Inc.	2008	–0.36%
Gartner, Inc.	2007	–0.27
West Pharmaceutical Services, Inc.	2014	–0.20
Arch Capital Group Ltd.	2003	–0.17
Equinix, Inc.	2007	–0.16

Shares of **Mettler-Toledo International, Inc.**, the world's largest provider of weighing instruments for use in laboratory, industrial and food retailing applications, detracted from performance. Although the company reported strong fourth quarter 2017 results, Mettler faces difficult growth comparisons after an exceptionally strong 2017. This led management to forecast a more normalized growth rate in 2018, which pressured the stock. We continue to believe Mettler is an exceptionally well-managed, competitively differentiated business that can compound earnings at attractive rates.

Shares of **Gartner, Inc.**, the largest provider of syndicated research on the IT sector, detracted from performance. Gartner continued to integrate its approximately $3 billion acquisition of CEB, Inc., which provides research on corporate best practices. This integration is proceeding ahead of schedule, and Gartner has chosen to increase its investment to pursue CEB's large market opportunity. This investment will likely reduce margins in the near term, but we believe it will ultimately drive faster revenue growth. Separately, we believe that key forward looking metrics in Gartner's core IT research business are solid, with contract value growth and sales productivity both improving.

Shares of **West Pharmaceutical Services, Inc.**, a designer and manufacturer of pharmaceutical packaging and delivery systems, declined. West reported a weak fourth quarter 2017 because of several factors we believe to be temporary, including its decision to exit the Venezuelan market and lost sales due to power outages at a plant in Puerto Rico impacted by recent hurricanes. We continue to believe West has a competitively advantaged business that can grow 6% to 8% per year on the top line, with mid-teens earnings growth driven by volume, price and product mix shift.

Arch Capital Group Ltd. is a Bermuda-based specialty insurance and reinsurance company, which also has a large segment that provides mortgage insurance. Although Arch reported 10% growth in book value per share during the most recent quarter, its stock underperformed as industry pricing trends remained challenging. In addition, Freddie Mac introduced a pilot program for distributing mortgage insurance that sparked concern about looming competition in that market.

Equinix, Inc. operates a global network of carrier-neutral colocation data centers. Its shares fell after releasing 2018 earnings guidance that was short of Wall Street's expectations. We remain optimistic about the company's longer-term outlook based on meaningful ongoing demand among businesses to adopt cloud-based software and to outsource more IT services. We believe that Equinix holds a coveted position as one of the only operators with a global platform, coupled with a history of successful acquisitions.

PORTFOLIO STRUCTURE

At March 31, 2018, Baron Asset Fund held 57 positions. The Fund's 10 largest holdings represented 40.4% of assets, and the 20 largest represented 62.1% of assets. The Fund's largest weighting was in the IT sector at 23.0% of assets. This sector includes software companies, IT consulting firms, and data processing firms. The Fund held 22.8% of its assets in the Health Care sector, which includes investments in life sciences companies and health care equipment and supplies companies. The Fund held 18.6% of its assets in the Industrials sector, which includes investments in research and consulting companies, industrial machinery companies, and conglomerates. The Fund also had significant weightings in Financials at 15.2% of assets and Consumer Discretionary at 11.9% of assets.

Table IV.
Top 10 holdings as of March 31, 2018

	Year Acquired	Market Cap When Acquired (billions)	Quarter End Market Cap (billions)	Amount (millions)	Percent of Net Assets
IDEXX Laboratories, Inc.	2006	$2.5	$16.7	$208.2	6.5%
Gartner, Inc.	2007	2.9	10.7	180.9	5.7
Vail Resorts, Inc.	1997	0.2	9.0	149.5	4.7
Mettler-Toledo International, Inc.	2008	2.4	14.6	142.7	4.5
Verisk Analytics, Inc.	2009	4.0	17.2	134.2	4.2
The Charles Schwab Corp.	1992	1.0	70.3	116.1	3.6
Guidewire Software, Inc.	2013	2.8	6.5	101.9	3.2
ANSYS, Inc.	2009	2.3	13.1	85.5	2.7
Arch Capital Group Ltd.	2003	0.9	11.7	85.2	2.7
FactSet Research Systems, Inc.	2006	2.5	7.8	84.1	2.6

RECENT ACTIVITY

During the past quarter, the Fund established three new positions and added to six others. The Fund eliminated one holding and reduced its holdings in 14 others.

Table V.
Top net purchases for the quarter ended March 31, 2018

	Quarter End Market Cap (billions)	Amount Purchased (millions)
Waters Corporation	$15.7	$33.3
Sage Therapeutics, Inc.	7.4	14.9
TransUnion	10.4	13.1
Wix.com Ltd.	3.7	8.0
Veeva Systems Inc.	10.3	6.2

We initiated a position in **Waters Corporation**, a leading supplier of analytical instruments, such as liquid chromatographers and mass spectrometers. These devices are used by testing laboratories in markets including biopharmaceuticals, industrial, and quality assurance for applications that include drug discovery and development, quality control, nutritional safety analysis, and environmental testing.

We believe that Waters' business is driven by favorable secular trends, most notably increased regulation and rising quality standards for prescription medicines, food, and water. A key end market for Waters is the biopharmaceutical industry where market trends appear quite positive for Waters' products. We believe that Waters should benefit from increased drug volumes, increased use of generic drugs and biologics, and heightened FDA requirements regarding data quality. In addition, Waters' analytical instruments play an important role in food safety testing. Highly publicized incidents, such as the Chinese milk scandal (melamine found in baby milk) and the scandal involving horse meat in beef burgers in Britain, are driving more demand for food testing, as food manufacturers seek to protect their brands. Increased regulations, such as the Food Safety Modernization Act in the U.S., and new food safety laws in Asian countries are also driving more food testing requirements.

We believe Waters has several competitive advantages. The company sells sophisticated, high-precision instruments that are protected by intellectual property and know-how. Because of regulatory requirements, switching from one company's product to a competitor's product is very difficult for customers. This has resulted in sticky market share divided among a few entrenched companies, each of which has a large installed base of instruments and longstanding customer relationships. Waters has a large sales and service force with roughly 3,600 field representatives, and the company annually invests more than $100 million in research and development.

In our opinion, Waters' business has attractive financial characteristics. The company generates a portion of its revenues from recurring sources, including disposable chromatography columns and service revenue. The company has industry-leading margins, ROIC, and free cash flow. We think the company has a long runway for mid-to-high single-digit revenue growth and faster earnings growth. We also think the company has multiple opportunities to deploy its capital to create shareholder value.

Table VI.
Top net sales for the quarter ended March 31, 2018

	Amount Sold (millions)
Henry Schein, Inc.	$19.8
Arch Capital Group Ltd.	15.0
CBRE Group, Inc.	13.1
Booking Holdings, Inc.	10.7
SBA Communications Corp.	10.5

We exited our position in **Henry Schein, Inc.**, a distributor of dental, medical, and animal health products. We remained concerned about potential competition from online distributors, particularly Amazon.com, and the company's disappointing 2018 earnings guidance. We trimmed our position in insurer **Arch Capital Group Ltd.** on concerns about the outcome of a changing regulatory environment for its profitable mortgage insurance unit. We trimmed our position in commercial real estate services firm **CBRE Group, Inc.** on concerns about the possible impact of rising interest rates on the real estate market. We trimmed our position in longtime holding **Booking Holdings, Inc.**, the leading online travel agency, as its market cap increased to nearly $100 billion. We reduced our position in longtime holding **SBA Communications Corp.** as its shares reached new highs during the quarter.

Outlook

We remain optimistic about the environment for U.S. equities, despite the more volatile market conditions experienced thus far in 2018. The global economy continues to grow in concert across nearly all geographies, which bodes well for continued improvements in corporate earnings. Although interest rates have moved modestly higher, inflation remains tame. And we have seen several takeovers of mid-sized companies at attractive premiums, particularly in the IT and Health Care sectors.

We think that our portfolio of what we believe are well-managed, competitively advantaged, fast growing companies will continue to perform well in this environment, although we cannot guarantee that they will. We continue to believe that high-quality, mid-sized growth stocks represent a compelling long-term investment opportunity. During the past 15-, 20- and 30-year periods, mid-cap growth stocks, as a category, have outperformed small-cap and large-cap growth stocks. However, mid-caps have underperformed both these asset classes during the past 10 years. We are optimistic that this trend will reverse, presenting an attractive opportunity for the mid-cap growth asset class in the future.

Thank you for investing in Baron Asset Fund.

Our entire Firm and our research department, in particular, are committed to justifying your ongoing confidence and support. I remain a significant investor in the Fund alongside you.

Sincerely,

Andrew Peck
Portfolio Manager

Investors should consider the investment objectives, risks, and charges and expenses of the investment carefully before investing. The prospectus and summary prospectus contains this and other information about the Funds. You may obtain them from its distributor, Baron Capital, Inc., by calling 1-800-99BARON or visiting www.BaronFunds.com. Please read them carefully before investing.

The Adviser believes that there is more potential for capital appreciation in mid-sized companies, but there also may be more risk. Specific risks associated with investing in mid-sized companies include that the securities may be thinly traded and they may be more difficult to sell during market downturns. The Fund may not achieve its objectives. Portfolio holdings are subject to change. Current and future portfolio holdings are subject to risk.