

DEAR BARON ASSET FUND SHAREHOLDER:

PERFORMANCE

The strong rally in U.S. stocks persisted during the quarter ended September 30, 2017. The market remained focused on continued, widespread strength in the global economy, coupled with interest rates that have remained lower for longer than most observers expected. Stocks were further buoyed by the prospect of a large-scale reduction in the U.S. corporate tax rate, which would likely result in higher reported earnings for nearly all businesses.

Baron Asset Fund (the "Fund") continued to participate in this year's rally. The Fund (Institutional Shares) gained 3.38% during the quarter, bringing its year-to-date performance to 22.68%. The Russell Midcap Growth Index (the "Index") gained 5.28% during the quarter, bringing its year-to-date performance to 17.29%. The S&P 500 Index gained 4.48%, bringing its year-to-date performance to 14.24%.

Table I.
Performance

Annualized for periods ended September 30, 2017

	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	3.31%	3.38%	5.28%	4.48%
Nine Months ⁵	22.40%	22.68%	17.29%	14.24%
One Year	22.41%	22.76%	17.82%	18.61%
Three Years	11.48%	11.78%	9.96%	10.81%
Five Years	14.88%	15.19%	14.18%	14.22%
Ten Years	7.55%	7.79%	8.20%	7.44%
Fifteen Years	11.02%	11.19%	12.12%	10.04%
Since Inception (June 12, 1987)	11.43%	11.51%	9.99% ⁴	9.69%

The Fund's best-performing investments included ski operator **Vail Resorts, Inc.**, which continued to report impressive results. The Information Technology (IT) sector was the strongest sector in the Index, and several of the Fund's IT investments did well, notably **Guidewire Software, Inc.**, which targets the insurance market, **Verisign, Inc.**, the leading registrar of internet domains, and **Vantiv, Inc.**, a credit card processor. A few Health Care



ANDREW PECK

PORTFOLIO MANAGER

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

investments also outperformed, including **Mettler-Toledo International, Inc.**, a manufacturer of weighing devices, and **Illumina, Inc.**, a leader in next generation DNA sequencing.

The Fund's performance was hindered by the underperformance of a few stocks that paused after generating outsized returns earlier this year. **Zillow Group, Inc.** and **Gartner, Inc.** are both IT stocks that reported quarterly results which exceeded analyst expectations; however, both also indicated their intention to reinvest more aggressively into their businesses, and their share prices suffered. The Fund's lack of exposure to semiconductor-related stocks, which performed well, also hurt its relative results. Within the Industrials sector, **Westinghouse Air Brake Technologies Corporation** fell on poor earnings results; and, **Verisk Analytics, Inc.** declined after announcing a large investment. Within the Financials sector, **MarketAxess Holdings Inc.**, an electronic trading platform for fixed income instruments, fell as its trading volumes were pressured by the market-wide decline in volatility.

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, 2016 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 September 30, 2017.
⁵ Not annualized.



Baron Asset Fund

Table II.

Top contributors to performance for the quarter ended September 30, 2017

	Year Acquired	Percent Impact
Vail Resorts, Inc.	1997	0.64%
Guidewire Software, Inc.	2013	0.40
Mettler-Toledo International, Inc.	2008	0.34
Illumina, Inc.	2012	0.31
Verisign, Inc.	2013	0.30

Vail Resorts, Inc. is the largest global operator of ski resorts, with premier properties in the U.S., Canada, and Australia. Its shares increased after reporting that sales of its Epic ski pass had risen 16% for the upcoming ski season. Vail expects to achieve further growth in its Epic pass sales from customers at two resorts it recently acquired, Vermont's Stowe and Canada's Whistler. We expect Vail to use its sophisticated data management and marketing techniques to continue to gain ski industry market share, while also converting more of its visitors to season pass holders. This should result in a more recurring and visible revenue base, which we believe will enhance the company's value.

Shares of property and casualty (P&C) insurance software vendor **Guidewire Software, Inc.** contributed to performance. The P&C industry remains in the early stages of a large replacement cycle for core software systems, the company's key product. We believe Guidewire is the leading vendor in this market, as demonstrated by its near-perfect retention rates, a growing installed base, and its accelerating adoption by marquee clients. State Farm recently announced a landmark deal with Guidewire, and we believe this will serve as an outstanding reference customer for other large insurers. In addition, the company has recently tripled its addressable market through new product introductions and a cloud-based delivery option.

Mettler-Toledo International, Inc. is the world's largest provider of weighing instruments for use in laboratory, industrial, and food retailing applications. Its shares gained after the company reported impressive second quarter financial results, driven by particularly strong performance in China, the Americas, and in its industrial business. Management raised forward-looking financial guidance, which also positively impacted the shares. We continue to believe Mettler is an exceptionally well-managed business that should continue to compound earnings at attractive rates.

Illumina, Inc. is the leading manufacturer of tools used in next generation DNA sequencing. Its shares gained after the company reported strong financial results that exceeded investor expectations. Demand for NovaSeq, Illumina's new high-throughput sequencing instrument, was especially robust, with orders more than 30% above management's internal forecast. The company believes that falling prices for DNA sequencing have led to higher customer adoption rates. We anticipate a long growth runway for the company based on increased adoption of DNA sequencing in clinical markets such as cancer screening, diagnosis, and treatment, among others.

Verisign, Inc. provides internet infrastructure services worldwide, including the sole management of the '.com' and '.net' domains. Its shares gained based on strong quarterly results, highlighted by faster growth in the sales of new domain names. We continue to be positive on Verisign based on its strong competitive position, ongoing global growth in the number of internet domain names, and the company's ability to generate substantial free cash flow going forward.

Table III.

Top detractors from performance for the quarter ended September 30, 2017

	Year Acquired	Percent Impact
Zillow Group, Inc.	2015	-0.28%
Westinghouse Air Brake Technologies Corporation	2013	-0.26
Henry Schein, Inc.	2003	-0.22
IDEXX Laboratories, Inc.	2006	-0.22
MarketAxess Holdings Inc.	2016	-0.14

Zillow Group, Inc. operates the country's leading online real estate site. Its shares fell for two reasons. The consumer financial protection bureau (CFPB) is investigating whether mortgage brokers on the company's platform are allowed to pay in part for real estate agent advertising, a practice the CFPB could disallow. In addition, after reporting exceptional second quarter results, Zillow's full-year profitability outlook is lower than investors had hoped. We believe Zillow is wisely pursuing a large growth opportunity in online real estate advertising. We believe its long-term margins will be robust and short-term swings in profitability are less relevant as it invests against new growth initiatives.

Westinghouse Air Brake Technologies Corporation (Wabtec) is one of the world's largest providers of technology-based components for the global rail and transit industries. Shares fell on quarterly results that missed Street estimates and a reduction in full-year guidance because of a slowdown in after-market activity and delays in several large projects. Management expects growth to resume in its after-market sales in 2018. Wabtec's recent acquisition of Faiveley should also help reduce cyclicity as transit now represents a greater percentage of revenues.

Shares of **Henry Schein, Inc.**, a leading global distributor of dental, medical, and animal health products, dropped on concerns about potential competition from Amazon.com or other online providers. We believe that Schein's excellent customer service, consultative sales process, and the fact that a large percentage of its sales already occur through its own e-commerce channel will help insure its customers' loyalty. But, this is an issue that we continue to monitor closely.

Shares of veterinary diagnostics leader **IDEXX Laboratories, Inc.** detracted from performance as the stock retreated modestly after rising nearly 40% in the year's first half. We remain positive on IDEXX. Secular growth trends in the veterinary industry remain solid, the company's competitive position remains as strong as ever, it has a robust pipeline of new diagnostic tests, and the productivity of its sales force continues to improve.

MarketAxess Holdings Inc. operates the leading electronic platform for trading corporate and sovereign bonds. Its shares underperformed as weak market conditions, characterized by low interest rate volatility, and tough annual growth comparisons led to slower growth in trading volumes. We continue to believe the company has a long runway for growth as the prime beneficiary of the secular shift to electronic trading in the corporate bond market.

PORTFOLIO STRUCTURE

At September 30, 2017, Baron Asset Fund held 56 positions. The Fund's 10 largest holdings represented 42.7% of assets, and the 20 largest represented 63.6% of assets. The Fund's largest weighting was in the IT sector at 23.3% of assets. This sector includes software companies, IT consulting firms, and data processing firms. The Fund held 22.3% of its assets in the Health Care sector, which includes investments in life sciences companies, health care equipment and supplies companies, and health care distributors. The Fund held 16.9% of its assets in the Financials sector, which includes investments in insurance companies, investment brokers and financial exchanges. The Fund also had significant weightings in Industrials at 15.6% of assets and Consumer Discretionary at 12.7% of assets.

Table IV.
Top 10 holdings as of September 30, 2017

	Year Acquired	Market Cap When Acquired (billions)	Quarter End Market Cap (billions)	Amount (millions)	Percent of Net Assets
Gartner, Inc.	2007	\$2.9	\$11.3	\$192.8	6.4%
IDEXX Laboratories, Inc.	2006	2.5	13.6	174.3	5.8
Vail Resorts, Inc.	1997	0.2	9.1	165.4	5.5
Mettler-Toledo International, Inc.	2008	2.4	16.1	156.5	5.2
Arch Capital Group Ltd.	2003	0.9	12.9	125.6	4.2
Verisk Analytics, Inc.	2009	4.0	13.7	108.1	3.6
The Charles Schwab Corp.	1992	1.0	58.6	107.2	3.5
Guidewire Software, Inc.	2013	2.8	5.8	95.0	3.1
SBA Communications Corp.	2007	3.8	17.3	85.0	2.8
FactSet Research Systems, Inc.	2006	2.5	7.1	78.3	2.6

RECENT ACTIVITY

During the past quarter, the Fund established one new position and added to 12 others. The Fund reduced its holdings in eight positions.

Table V.
Top net purchases for the quarter ended September 30, 2017

	Quarter End Market Cap (billions)	Amount Purchased (millions)
The Toro Company	\$ 6.7	\$26.0
The Ultimate Software Group, Inc.	5.7	15.2
TransUnion	8.6	10.3
A. O. Smith Corporation	10.3	7.4
T. Rowe Price Group, Inc.	21.8	6.4

During the quarter, we initiated a position in **The Toro Company**. Toro is a leading provider of equipment and solutions to maintain outdoor environments. In its professional segment, Toro primarily sells products to the golf, landscaping, and agricultural irrigation end-markets. In the residential segment, Toro offers lawn, garden, and snow removal equipment. We believe that Toro is a well-managed company with commanding market share in its key markets. We expect Toro to sustainably grow its revenues at a mid-single digit organic growth rate while gradually increasing its margins through improved operating efficiencies and greater sales of higher-margin products.

We believe that Toro has multiple avenues available to drive its revenue growth. The company expects to realize 1% to 2% annual price increases, especially in its higher growth professional segment where customers are willing to pay for increased productivity. The company has also been gaining incremental market share and believes that it can continue this trend across a number of its end-markets. Toro is focused on new product development and has a strong reputation for innovation. The company spends more than 3% of its sales on research in order to maintain a robust new product pipeline. Toro also tracks a vitality index, which measures the percent of sales it derives from new products. Toro has a goal of achieving a 35% level on the vitality index and it has been successful in six of the last seven years. Additionally, Toro has the opportunity to expand its international presence as the company currently derives only a quarter of total sales from outside the U.S. Finally, we believe the company may pursue selective mergers to drive incremental growth.

We believe that Toro has a number of competitive advantages. Toro is the only company with a leading position in the markets for both landscaping equipment and irrigation systems for golf courses, creating a unique ability to package these sales to buyers. In addition, Toro has a long history and has built up a reputation for quality, innovation, and customer service. Moreover, Toro has deep industry relationships and a strong distribution system, which helps to assure the quality of sales, improve market presence, and provide robust after-market support. The company's long-standing commitment to product innovation also helps Toro stand out from its competition.

Table VI.
Top net sales for the quarter ended September 30, 2017

	Amount Sold (millions)
Westinghouse Air Brake Technologies Corporation	\$16.0
Nielsen Holdings plc	15.3
Universal Health Services, Inc.	4.1
Henry Schein, Inc.	4.0
Concho Resources, Inc.	3.7

We reduced our position in **Westinghouse Air Brake Technologies Corporation**, a manufacturer of key components for railroads and transit systems, because its business has proved more cyclical than we expected. We reduced our position in **Nielsen Holdings plc** because of concerns about challenges facing some of their important customers, including branded consumer packaged goods companies and broadcast networks. We reduced our position in hospital company **Universal Health Services, Inc.** given uncertainty about the future of the Affordable Care Act.

Baron Asset Fund

OUTLOOK

We remain optimistic about the environment for U.S. equities. Employment and housing trends are robust, and the industrial economy is following suit. 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.

Furthermore, we continue to believe that high-quality, mid-sized growth stocks represent a compelling long-term investment opportunity. During the past 30 years, mid-cap growth stocks, as a category, have meaningfully outperformed small-cap and large-cap growth stocks. However, mid-caps have underperformed both these asset classes during the past five years. We are hopeful 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.

The discussions of the companies herein are not intended as advice to any person regarding the advisability of investing in any particular security. The views expressed in this report reflect those of the respective portfolio managers only through the end of the period stated in this report. The portfolio manager's views are not intended as recommendations or investment advice to any person reading this report and are subject to change at any time based on market and other conditions and Baron has no obligation to update them.

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