

DEAR BARON DISCOVERY FUND SHAREHOLDER:

PERFORMANCE

We are pleased to report that Baron Discovery Fund (the "Fund") increased 13.83% (Institutional Shares) during the third quarter, which was 8.31% better than the Russell 2000 Growth Index. The quarter's results were driven primarily by outperformance of our investments in the Information Technology, Health Care, and Industrials sectors. This third-quarter outperformance brings our year-to-date performance to 31.31% which is 15.55% better than our benchmark.

Table I.
Performance[†]

Annualized for periods ended September 30, 2018

	Baron Discovery Fund Retail Shares ^{1,2}	Baron Discovery Fund Institutional Shares ^{1,2}	Russell 2000 Growth Index ¹	S&P 500 Index ¹
Three Months ³	13.78%	13.83%	5.52%	7.71%
Nine Months ³	31.09%	31.31%	15.76%	10.56%
One Year	35.47%	35.74%	21.06%	17.91%
Three Years	29.82%	30.14%	17.98%	17.31%
Five Years and Since Inception (September 30, 2013) (Annualized)	19.48%	19.77%	12.14%	13.95%
Five Years and Since Inception (September 30, 2013) (Cumulative) ³	143.50%	146.44%	77.35%	92.10%

We are excited to report that September 30, 2018 marked the five-year anniversary of the Fund. As such, we thought it was important to emphasize the consistency of both the Fund's philosophy of seeking to invest in what we believe are "the most innovative and dynamic businesses" and the investment process we use to "discover" these businesses. The core principles that we laid out in our first letter remain in place today:

We will continue to use the same Baron investment process that is used in all Baron Funds. We will seek high growth companies with terrific managers and long-term competitive advantages. We will also seek to purchase those companies at what we believe are reasonable stock

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 1.47% and 1.23%, but the net annual expense ratio was 1.35% and 1.10% (net of the Adviser's fee waivers which the Adviser has contractually agreed to for so long as it serves as the adviser to the Fund), 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 Adviser has reimbursed certain Fund expenses (by contract as long as BAMCO, Inc. is the adviser to the Fund) and 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 Fund's historical performance was impacted by gains from IPOs and/or secondary offerings. There is no guarantee that these results can be repeated or that the Fund's level of participation in IPOs and secondary offerings will be the same.

² The indexes are unmanaged. The Russell 2000® Growth Index measures the performance of small-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.

³ 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.

⁴ Not annualized.

* Morningstar calculates the **US Fund Small Growth Category Average** using the Morningstar Fractional Weighting methodology. Morningstar rankings are based on total returns and do not include sales charges. Total returns do account for management, administrative, and 12b-1 fees and other costs automatically deducted from fund assets.

As of 9/30/2018, the category consisted of 702, 606, and 532 share classes for the 1-, 3-, and 5-year periods. Morningstar ranked **Baron Discovery Fund Institutional** Share Class in the 11th, 1st, and 1st percentiles, respectively, in the category for the 1-, 3-, and 5-year periods.



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Retail Shares: BDFFX
Institutional Shares: BDFIX
R6 Shares: BDFUX

PORTFOLIO MANAGERS

prices. We will also take a longer-term view than most other investment managers. We believe that by analyzing the investment over a longer-term horizon, we can gain an advantage over most market participants who are only focused on the short term.

Baron Funds Quarterly Report – December 31, 2013

We believe our five-year anniversary is an important milestone as it represents an appropriate period of time in which to measure our investment process. Using this criterion, we are excited to report that for the five-year period ended September 30, 2018, we achieved annualized performance of 19.77% or 7.63% better than the Russell 2000 Growth Index. This puts the Fund in the top 1% of funds in its category, according to Morningstar, a result we are especially proud of.* That being said, we think it is important to remind investors that our long-term focus does not necessarily work every quarter or even every year, but we believe that our strategy is the best way we can outperform the market over the long term.



Baron Discovery Fund

Table II.

Top contributors to performance for the quarter ended September 30, 2018

	Percent Impact
CareDx, Inc.	2.27%
The Trade Desk	2.03
Teladoc Health, Inc.	1.69
Mercury Systems, Inc.	1.34
Acxiom Corporation	1.12

CareDx, Inc. is the market leader in transplant diagnostics, with a presence in nearly all U.S. and EU centers. As we outlined last quarter, it is the current market leader in pre-transplant HLA typing (a \$500 million market opportunity), and heart transplant testing (a \$100 million market). And CareDx has a new kidney transplant test called AlloSure, which launched in the third quarter of 2017. This test addresses a large market opportunity (over \$2 billion), and AlloSure has higher margins than the existing CareDx tests. Shares rose in the quarter as sales of AlloSure were impressive, and concerns about a potential competitive product coming to the kidney market some time in 2019 faded. We believe that CareDx has many advantages versus this competitor, including substantial clinical data, reimbursement from insurers, and a long-term reputation in the end markets in which it operates (whereas this is a new market for the competitor).

The Trade Desk is a leading internet advertising Demand Side Platform (DSP). The company enables advertising agencies to more efficiently purchase digital advertising through PC, mobile, and online video channels. The company had exceptional results for the second quarter and raised its outlook for the year. After growing more than 50% year-over-year in 2017, we believe the company is on track to grow at a similar rate in 2018. We believe The Trade Desk has multiple tailwinds to growth going forward. These include a major upgrade of its core product in June, which we expect to drive incremental platform spend, a mix shift towards faster growing ad channels, growth in Asia (especially China), and momentum from recent advertiser wins. We remain positive on shares of The Trade Desk as we believe the company can continue to grow share in the fast growing programmatic advertising market.

Teladoc Health, Inc. is the leading worldwide provider of tele-health services. The company beat on revenues (which grew 112% and 23% organically), earnings, and cash flow when results were announced in August. Teladoc also executed on the integration of a recent acquisition (Advance Medical which expands its geographical reach to Asia and Latin America and provides chronic care and medication management capabilities). This acquisition further solidifies Teladoc's leadership position in the industry, and provides significant cross-selling opportunities. By the end of 2018, Teladoc will have 23 million members for which a monthly fee is paid, and an additional 10 million that pay on a per visit basis, for a total of 33 million people served in the system. We believe that this base can grow to 50 million or more over the next few years. And we believe that system utilization by members can go from 7% to over 15% (the company already has some clients at over 30%). We continue to be very excited about the company's prospects in the coming years.

Mercury Systems, Inc. is a provider of complex electronic subsystems to major defense contractors. During the third quarter, shares rebounded from the effects of a short sale report issued in the prior quarter. Our conviction that the claims were mistaken paid off in the quarter, as Mercury beat the quarter and guided above the Street for the next fiscal year ending June 30, 2019. The company also continued to execute on its long-term business plan, winning sizeable contracts and making solid tuck-in acquisitions.

Acxiom Corporation is a leader in marketing data services and identity management for enterprises. The company's technology platform combines an intricate web of customer data, business intelligence, and deep analysis that empowers 7,000+ global brands across several industries. Acxiom was a contributor in the quarter, as the company entered into an agreement to sell its legacy marketing services business to Interpublic Group. Acxiom closed on the sale in October and has changed the name of the company to LiveRamp Holdings, Inc. Going forward, LiveRamp will be a pure play marketing cloud software company.

Table III.

Top detractors from performance for the quarter ended September 30, 2018

	Percent Impact
Flexion Therapeutics Inc.	-0.62%
Intersect ENT, Inc.	-0.46
Red Rock Resorts, Inc.	-0.44
The KEYW Holding Corporation	-0.31
AxoGen, Inc.	-0.27

Flexion Therapeutics Inc., has developed an extended release steroid drug called Zilretta that is injected into patients' knees to relieve osteoarthritic pain. The drug was approved by the FDA in October 2017 and launched in late November 2017. It is early days, but we are encouraged that quarterly prescriptions have increased in the last three quarters since launch. The company should receive a billing code called a J-Code by January 2019, which will further help to accelerate sales. We believe that the company can meet or beat Street estimates of \$23 million in revenue this year, and that revenues should be well over \$100 million in 2019. With a multi-billion dollar U.S. opportunity in knees alone, we see tremendous value in the company. We are not concerned with the short-term price decline.

Intersect ENT, Inc. sells a drug coated stent-like device (Propel) that is implanted in the sinuses of patients immediately following invasive sinus surgery. The device keeps the sinuses open and gets medication to the place where it is needed to help the healing process. Recently Intersect ENT received approval for another device called SINUVA that will be used for patients with the recurrence of severe sinus symptoms in the months and years following surgery. SINUVA can be implanted in minutes in an outpatient setting, and studies are being done to show that it is safe for the device to be implanted multiple times per year if symptoms persist. Our due diligence suggests very positive patient and doctor reviews. However, management lowered guidance for SINUVA sales in 2018 due to the current difficulty in obtaining reimbursement prior to the approval of a J-Code (which we expect will be obtained and will be effective by January 2019). In our opinion, the addressable market for this product could be well over \$1 billion, so once reimbursement is in place sales should accelerate dramatically in 2019.

Shares of **Red Rock Resorts, Inc.,** a casino operator catering to residents of Las Vegas, decreased in the quarter. Data coming out of Las Vegas generally showed that this summer was weaker than expected, which weighed on the stocks of all Las Vegas casino operators including Red Rock. We view the weaker conditions as temporary and not the beginning of a dramatic slowdown in the Las Vegas locals market. The macro backdrop for Las Vegas remains strong. The population continues to grow 2%-3% a year, local wages continue to rise 2%-3% a year, and Las Vegas housing prices are at record levels. We view the stock as attractive at these levels.

The **KEYW Holding Corporation** is a provider of specialized cybersecurity and intelligence analytics products and services to government agencies. We exited the position after the company advised investors on their latest earnings call that a key contract for manned air surveillance was being terminated early by the prime contractor (KEYW is a subcontractor). We believe that this contract represented a material amount of revenue and profit to the company, and we decided to move to the sidelines as the effects ripple through.

AxoGen, Inc. is a provider of specialized nerve grafts created from cadaver nerves. We are confident that the company's array of products is unmatched in the industry, and that it will benefit from new uses such as breast reconstruction neurotization which enables nerve sensation after surgery. In all, AxoGen has an addressable market opportunity of over \$2 billion, and we believe that the company has significant competitive advantages in clinical data and intellectual property versus its competitors. Shares were down in the quarter after the company reported slightly lower-than-expected sales growth (36% instead of 40%) due to some challenges in its independent sales channel. The company has a high valuation, so stumbles like this can cause corrections. We believe that the company will recover its pace of growth, and we are confident that, over the next few years management can double and even triple its revenues beyond the \$85 million level we expect in 2018.

PORTFOLIO STRUCTURE

Table IV.
Top 10 holdings as of September 30, 2018

	Year Acquired	Quarter End Investment Value (millions)	Percent of Net Assets
The Trade Desk	2016	\$15.1	3.8%
CareDx, Inc.	2018	13.8	3.5
Teladoc Health, Inc.	2017	12.7	3.2
Mercury Systems, Inc.	2015	12.5	3.2
Myriad Genetics, Inc.	2016	12.0	3.0
Intersect ENT, Inc.	2018	11.2	2.9
IntriCon Corporation	2018	9.4	2.4
Sientra, Inc.	2016	9.0	2.3
TherapeuticsMD, Inc.	2014	8.9	2.3
Americold Realty Trust	2018	8.8	2.2

The top 10 holdings represented 28.8% of the portfolio which is in line with historical norm of approximately 30%.

RECENT ACTIVITY

Table V.
Top net purchases for the quarter ended September 30, 2018

	Year Acquired	Quarter End Market Cap (billions)	Amount Purchased (millions)
QTS Realty Trust, Inc.	2018	\$2.2	\$8.7
Intersect ENT, Inc.	2018	0.9	8.7
Ra Medical Systems, Inc.	2018	0.2	5.4
Esperion Therapeutics, Inc.	2017	1.2	4.1
Endava plc	2018	1.5	3.9

In the third quarter, we initiated a position in **QTS Realty Trust, Inc.**, a U.S.-based data center operator. The stock hit our radar screen after it sold off sharply earlier in the year when management announced it was transitioning out of its managed services business segment (15% of revenues) and took down full-year guidance. After researching QTS further and spending time with the management team, we determined that this step to simplify the business was a long-term positive and removed a low margin, less predictable revenue stream. We believe the company's currently discounted valuation doesn't reflect: i) the favorable demand backdrop for data centers broadly; ii) QTS's high margin and recurring revenue model; and iii) significant built-in growth potential (ability to double footprint in existing facilities). We believe QTS is well positioned as an increasing number of companies determine that it is more economical to outsource their IT needs to high tech data center firms such as QTS (60%-70% of IT workloads are still in-house). In addition, given the explosive growth of mobile data, internet traffic, and cloud computing, QTS is primed to benefit as the IT infrastructure provider. Lastly, we believe that the transition to the cloud is still in the early innings (e.g., Gartner, a consulting firm, projects that cloud spending could grow by approximately four times over the next five years). These favorable demand drivers should allow the company to compound cash flow per share in the high single-digit to low double-digit rate annually over the next several years.

We added to our position in **Intersect ENT, Inc.** after extensive due diligence revealed that the Company's new SINUVA product was gaining very positive patient and doctor reviews. We are confident that revenues will accelerate as the company continues to work on getting reimbursement for the product.

Ra Medical Systems, Inc. is a small medical device firm that we added to the portfolio at the end of the quarter when the company completed its IPO. The company designs, manufactures, and sells the Dabra laser system

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and disposable catheters used by physicians for the treatment of vascular blockages in the legs. It's a space we know well from a prior investment we made in a company called Spectranetics, Inc., which was bought by Koninklijke Philips N.V. in August 2017. We believe the Dabra laser system is unique because it is able to cross and debulk a wide variety of intravascular plaque, removing vascular blockages that other products are unable to cross without the use of a guidewire. In addition, unlike many other treatments for peripheral artery disease, Dabra employs photochemical ablation to disintegrate plaque and eliminate residual particles, while also minimizing injury to the arterial wall, which may minimize the rate of restenosis (recurrence of the blockage). The Dabra's single use catheters are priced at a significant discount versus competitor devices, as the company has verticalized its supply chain and can manufacture the catheters at a very low cost. The market opportunity for peripherals could be \$1 billion or more, and the company is looking to get approval for coronary artery applications, which could add another \$2 billion to the opportunity set. We believe that this could be a terrific undiscovered gem.

Esperion Therapeutics, Inc., a company focused on medication to lower LDL cholesterol in patients who are statin-intolerant, was another position that we increased in the quarter. The company continues to put out very favorable phase three clinical trial data, and we continue to expect approval of its drug in early 2020.

Endava plc provides outsourced software development to business customers. The company operates at the forefront of the digital revolution by helping clients find new ways to interact with their customers and enabling them to become more engaging, responsive, and efficient. Endava employs 4,700 highly skilled, low-cost software engineers in Eastern Europe and Latin America that support clients from ideation to production. Endava works on a variety of projects, including building a new operating platform for a payment processing company, designing a personalized in-store shopping experience for a fashion retailer, and enabling a shipping company to remotely adjust the settings on shipping containers to speed up or slow down the ripening of fruit. We initiated a position in Endava as part of the company's IPO in July. Endava benefits from growing demand for next-generation IT services from businesses around the world. Endava's strong technical capabilities and differentiated labor pool enable the company to work on higher-value client projects with better pricing than peers. We believe Endava will continue gaining share in a large, growing market by adding new clients and increasing wallet share with existing clients.

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.

Risks: The Adviser believes that there is more potential for capital appreciation in smaller companies, but there also may be more risk. Specific risks associated with investing in smaller 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 manager only through the end of the period stated in this report. The portfolio managers' 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.

This report does not constitute an offer to sell or a solicitation of any offer to buy securities of Baron Discovery Fund by anyone in any jurisdiction where it would be unlawful under the laws of that jurisdiction to make such offer or solicitation.

Table VI.

Top net sales for the quarter ended September 30, 2018

	Year Acquired	Market Cap When Acquired (billions)	Quarter End Market Cap or Market Cap When Sold (billions)	Amount Sold (millions)
Novanta Inc.	2017	\$0.9	\$2.4	\$4.9
The KEYW Holding Corporation	2013	0.5	0.4	4.2
Teladoc Health, Inc.	2017	1.3	6.0	4.0
The Trade Desk	2016	1.2	6.5	2.3
Quotient Technology Inc.	2014	1.3	1.3	2.2

As active managers we are concerned not only with actively picking the right investments, but also with managing those investments properly over time. A key part of our strategy is to be mindful of medium- and long-term valuations, and actively manage investments that become extended from a valuation perspective. We reduced our position in **Novanta Inc.** after a significant run up in share price left us believing that its valuation was high. We continue to hold a meaningful investment in the company and admire management and its strategy to build a very high-quality precision motion components company. For similar reasons, we trimmed our investments in **Teladoc Health, Inc.** and **The Trade Desk**. Lastly, we sold **Quotient Technology, Inc.** after the company shifted its priorities from transactional revenue to advertising revenue, a shift that we viewed negatively.

OUTLOOK

We are excited to share our five-year results with you. We also want our investors to know that we are looking through the windshield and not the rearview mirror. We come to work every day thinking not about the past, but instead focusing on how we can outperform the market for investors putting their money into the Fund today. Lastly, we want to thank our analyst team. We know our outperformance could not have been achieved without their contributions and hard work. They are an invaluable resource.

Thank you for investing in the Fund.



Randy Gwartzman & Laird Bieger
Portfolio Managers