DEAR BARON DISCOVERY FUND SHAREHOLDER:

PERFORMANCE

The third quarter of 2019 was a challenging one for both the stock market and Baron Discovery Fund (the "Fund"). During the quarter, the Fund was down 4.84% (Institutional Shares), which was 0.67% lower than the Russell 2000 Growth Index. That brings our year-to-date performance to being slightly below our benchmark after being somewhat above our benchmark at the end of the second quarter. Some of the headwinds we discussed in our second quarter letter (such as outperformance of the larger market cap companies within the Russell 2000 Growth Index) persisted into the third quarter. During the quarter, we also saw significant challenges within the Health Care sector (more on this below) despite being underweight Health Care stocks relative to the benchmark. Overall, it is not an understatement to say that the market felt significantly more challenging than the –4.84% performance indicates.

RANDY GWIRTZMAN AND LAIRD BIEGER
PORTFOLIO MANAGERS

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

Table I.
Performance†
Annualized for periods ended September 30, 2019

	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]	(4.90)%	(4.84)%	(4.17)%	1.70%
Nine Months[3]	14.92%	15.16%	15.34%	20.55%
One Year	(11.96)%	(11.75)%	(9.63)%	4.25%
Three Years	16.05%	16.33%	9.79%	13.39%
Five Years	12.91%	13.18%	9.08%	10.84%
Since Inception (September 30, 2013) (Annualized)	13.55%	13.83%	8.18%	12.27%
Since Inception (September 30, 2013) (Cumulative)[3]	114.37%	117.49%	60.26%	100.27%

Notwithstanding the outsized underperformance of Health Care in the quarter, we continue to be positively predisposed to the Health Care sector for all the reasons you would expect (aging demographic, $6.5 trillion spent on health care every year globally, etc.). More importantly, we see a tremendous amount of innovation taking place within the Health Care sector and outsized (and protected) profits for the companies that successfully develop these innovations. We like that there is a lot of dispersion within the Health Care sector because unlike the Financials sector for example, where stocks tend to trade in tandem with each other, stocks in the Health Care sector produce a significant number of outperforming and underperforming stocks. Because of that, we believe that stock pickers like us, using our bottom-up stock selection process, have the potential for significant alpha creation over the medium to long term. The bottom line is that we like when sectors to which we are positively predisposed are out of favor as it gives us opportunities to buy well-run secular growth companies at what we believe are large discounts to intrinsic value.

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, 2018 was 1.40% and 1.12%, but the net annual expense ratio was 1.35% and 1.10% (net of the Adviser's fee waivers), 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 reimburses certain Baron Fund expenses pursuant to a contract expiring on August 29, 2030, unless renewed for another 11-year term 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.*

† 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.

1 The indexes are unmanaged. The index performance is not Fund performance; one cannot invest directly into an index. 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.

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 Not annualized.

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Baron Discovery Fund

Table II.
Top contributors to performance for the quarter ended September 30, 2019

	Percent Impact
TherapeuticsMD, Inc.	0.70%
Floor & Decor Holdings, Inc.	0.53
Trex Company, Inc.	0.48
Mercury Systems, Inc.	0.45
Kinsale Capital Group, Inc.	0.43

TherapeuticsMD, Inc. is a developer of hormone-based drugs for women's health. It has three FDA approved drugs, two of which are already in limited launch. We believe that as payer reimbursement is solidified by early 2020, sales of all three drugs will accelerate dramatically. Shares have started to recover after a slide in the second quarter. The company surprised positively with its recent financial update, beating earnings and slightly increasing full-year 2019 guidance. We believe that shares are significantly undervalued and that 2020 will be a watershed year in establishing the company's maturity and growth.

Floor & Decor Holdings, Inc., a hard-surface flooring retailer, outperformed during the quarter following better-than-expected earnings and improved investor sentiment around housing and tariffs (the merchandising team has done a better-than-expected job of moving production out of China quickly to mitigate the tariff impact). We believe that Floor & Decor is a differentiated retail concept with a large long-term opportunity for store growth (106 stores today vs. a 400-store opportunity). Over the next few years, we expect the company to grow its square footage, sales, and EPS by more than 20% per annum.

Trex Company, Inc. contributed positively to performance during the third quarter. The company reported strong second quarter financial results and provided third quarter sales guidance, both of which exceeded expectations. Trex continues to enjoy robust demand for its decking products, driven by a secular shift towards composite from wood. Trex's recently launched, more affordable "Enhance" product is expanding its addressable market and further accelerating demand. Trex is expanding capacity by over 70% to capture this demand.

Mercury Systems, Inc., a defense electronics producer and integrator, had a very good earnings quarter, which led to outperformance of the shares. It generated 12% organic revenue growth (total growth 33%) and guided to at least 10% organic growth in fiscal 2020 year (ending 6/30/2020). Mercury also announced another acquisition (which complements its recent avionics processing acquisitions) and commented that its M&A pipeline looks solid. We continue to like Mercury for its diverse defense programs, strong cash flow, well-executed acquisition strategy, and unmatched positioning in the industry.

Kinsale Capital Group, Inc. is a property and casualty insurance carrier focused exclusively on the specialty excess and surplus (E&S) lines market. The E&S segment accounts for $50 billion of annual premiums and has historically grown faster and with higher margins than the overall insurance market. Kinsale's stock outperformed during the quarter as E&S market conditions continued to improve after retrenchment from several large competitors. The company reported strong financial results for the latest quarter with 36% growth in gross written premiums and a 17% ROE. The company completed a follow-on offering to take advantage of favorable market conditions.

Table III.
Top detractors from performance for the quarter ended September 30, 2019

	Percent Impact
ViewRay Incorporated	–1.92%
Silk Road Medical, Inc.	–0.80
Bloom Energy Corporation	–0.66
CareDx, Inc.	–0.52
TPI Composites, Inc.	–0.52

ViewRay Incorporated manufactures medical capital equipment which uses MRI imagery to guide cancer radiation treatment in real time. We believe that its technology (including software to automatically stop radiation when the tumor is out of field) is game changing. We also think that ViewRay can capture meaningful share in what could be a $2.5 billion market for such equipment. Unfortunately, this was a very tough quarter as ViewRay lowered full-year guidance by five units, causing a $30 million shortfall. These unit sales were delayed, not lost, but it still hurt from a financial perspective. This could meaningfully affect funding needs a year out. While we still like ViewRay's prospects and we think that management has multiple levers to pull in order to deal with these issues, we sold some of the position to reflect the increased financing risks associated with the delay in cash flow capture.

Silk Road Medical, Inc. designs and manufactures medical devices used to clear plaque from the carotid arteries of patients at high risk of stroke. We wrote about Silk Road in our last letter (it was a new IPO in the second quarter of 2019), and we are still extremely excited about its prospects. The device is minimally invasive, and we believe that 80%+ of the current procedure market, which is about $1 billion ($650 million in currently approved applications), could shift to Silk Road's device over the next few years. This has been the pattern when other forms of minimally invasive arterial surgery have entered the market. Shares disappointed in the quarter due to a secondary offering of some of the shares held by Silk's private equity sponsor, as well as a general shift out of well-performing stocks at the end of the quarter (Silk Road's share price had done very well in the second quarter of 2019 since its IPO this past April).

Bloom Energy Corporation is a manufacturer of fuel cell power equipment that creates electricity from natural gas without combustion. The cost of the electricity it generates is approaching that of electricity purchased from the grid in many states, and its equipment is located on site, allowing for high reliability as well as assured backup capacity in the event of a grid outage. In California, the company's Bloom Boxes should be in high demand because PG&E, the regional utility, recently announced it would institute planned blackouts when high winds affect wildfire prone areas, affecting millions of people. Yet in the quarter, Bloom guided for full-year 2019 metrics well below consensus. Issues involved delays in customer acceptance, regulatory headaches (including limitations on new natural gas hookups in New York and California), and a large planned price drop, which, with lower-than-anticipated volumes, will cause lower profitability due to dis-economies of scale. We sold our investment as we think the company's current situation is challenging, but we will continue to follow developments closely.

Shares in **CareDx, Inc.** a leader in organ transplant diagnostics, declined in the quarter after a significant run-up over the last year. Concerns centered around a competitor's entry into the market, the overall utility of cell-free DNA tests for kidney rejection monitoring, and a short seller's report that posited that the overall market opportunity is smaller than the $1.6 billion claimed by management. We reduced our position at higher prices after extensive due diligence with transplant surgeons, but still like CareDx's prospects (disagreeing with most of the issues raised by the short seller), and we would add exposure at appropriate valuation levels.

Shares of **TPI Composites, Inc.**, a manufacturer of composite blades for electricity generating wind turbines, and composite bodies for electric buses, were weak in the quarter. The company took down revenue and cash flow guidance for 2020 due to a higher-than-expected number of manufacturing line "transitions" by its customers. These transitions occur when a customer changes its product line (typically to shift to higher power turbines, which require longer blade lengths). This necessitates a temporary line shutdown to re-tool for the new blades. While management is second to none in terms of operationally dealing with these changes, they do result in line downtime, which causes revenue delays. This was disappointing, but shares now trade at single-digit multiples of cash flow, and are even cheaper when looking at the real free cash the company will generate in 2021 and beyond. Moreover, we believe that these transitions will stabilize going forward as more of the overall capacity of the company is now dedicated to higher power turbine blades, and the company is implementing steps to help better align customer actions with its manufacturing processes. These could include more advance notice, cost sharing, and minimum line life requirements. Furthermore, the company's vehicle composites business (which could add mass produced composite parts for trucks and electric passenger vehicles) is a potential growth vector that is not included in the current valuation. It is our belief that there is tremendous upside in TPI Composites' equity value at current levels.

Portfolio Structure

Table IV.
Top 10 holdings as of September 30, 2019

	Year Acquired	Quarter End Investment Value (millions)	Percent of Net Assets
Kinsale Capital Group, Inc.	2016	$20.5	3.8%
Mercury Systems, Inc.	2015	18.7	3.5
RIB Software SE	2018	16.7	3.1
Americold Realty Trust	2018	16.7	3.1
Floor & Decor Holdings, Inc.	2019	16.6	3.1
Emergent BioSolutions Inc.	2017	15.2	2.8
SiteOne Landscape Supply, Inc.	2016	14.8	2.7
TPI Composites, Inc.	2016	13.3	2.5
Rexford Industrial Realty, Inc.	2019	13.2	2.5
TherapeuticsMD, Inc.	2014	13.2	2.4

Our top 10 holdings represented just under 30% of the portfolio and our largest position was just under 4% of the portfolio. Both of these metrics are in ranges that are consistent with historical levels. Health Care and Information Technology represented a combined 51% of the portfolio which is also consistent with historical levels.

Exiting the quarter, we were overweight the Information Technology, Real Estate, and Industrials sectors. Conversely, we were most underweight the Consumer Discretionary, Materials, Health Care, Consumer Staples, Financials, and Utilities sectors. The weighted average market cap of the portfolio at the end of the quarter was $2.43 billion, which was slightly below that of our benchmark.

Recent Activity

Table V.
Top net purchases for the quarter ended September 30, 2019

	Year Acquired	Quarter End Market Cap (billions)	Amount Purchased (millions)
Medallia Inc.	2019	$3.5	$10.9
Ping Identity Corporation	2019	1.3	6.4
Advanced Drainage Systems, Inc.	2019	2.2	6.1
Varonis Systems, Inc.	2019	1.8	5.5
Inogen, Inc.	2019	1.1	4.7

Medallia Inc. provides a software-as-a-service (SaaS) solution for customer experience management. This solution enables customers to improve their own customer experiences, driving greater satisfaction, reducing churn, and increasing the agility of the enterprise. It's not a surprise, in our view, that the Medallia platform has become a mission-critical, widely used tool for its customers with over 50% of them using it daily. Medallia has 600 customers including some of the leading banks, media, and hospitality companies, among others. We believe that Medallia will benefit from the secular trends of digital transformation and the increasing focus on customer experience as it becomes a major determining factor for business outcomes (according to PwC LLP, 73% of customers value customer experience as an important factor in purchase decisions, but only 20% of companies deliver good customer experiences).* The Medallia platform, in our view, will enable organizations to become more agile, responsive, and data driven. Finally, we like Medallia's recurring revenue, asset-light model, "land and expand" sales opportunity, and favorable unit economics (high customer lifetime value and low churn); and we believe the company can become highly profitable over time.

Ping Identity Corporation is a software company that provides secure user identification, mainly for large enterprises. Examples of its products include multi-factor identification (which might use mobile text verification or a biometric identifier like a fingerprint to add to a password-protected identity) and single sign-on (SSO, which allows employees of a firm to log into multiple applications simultaneously). Ping secures over two billion identities globally. Its products are used by all 12 of the top financial institutions in the U.S., as well as 8 of the 10 largest biopharmaceutical companies and 5 of the top 7 retailers. Ping is a well-run company with rapid revenue growth, a strong balance sheet, and real free cash flow. The company recently had its IPO (in which we participated) at a reasonable valuation multiple. We believe that Ping has numerous opportunities to accelerate revenue growth (new products, new customers, more penetration within existing customers, and cross-selling), and it also has a significant margin expansion opportunity.

We initiated a position in **Advanced Drainage Systems, Inc.** ("ADS"), a leading U.S. manufacturer of high-performance thermo-plastic pipe for water management. We invested in the company after ADS announced its transformative acquisition of Infiltrator Water Technologies for $1 billion at the end of July. We liked the complementary nature of Infiltrator's product suite (plastic leach field and septic tanks), and we thought it expanded ADS' addressable opportunity and enhanced ADS' growth prospects. As the largest national player delivering directly to construction sites, ADS is poised to benefit from compelling market conversion trends away from concrete, steel, and PVC to plastic, given plastic's lighter weight, lack of corrosion, and approximate 20% cost advantage versus concrete.

* Source: PwC Future of Customer Experience Survey 2017/18.

We increased our position in **Varonis Systems, Inc.**, a cybersecurity software company that protects files stored on a firm's network. We had exited our investment this past February after the company announced a major shift in its business model from perpetual license sales to a subscription-based model. While the new model is better in a sense because revenue is recurring, it also extends revenue recognition and causes growth to slow rapidly in the near term. We've seen this in other software companies and have learned that it pays to be on the sidelines during such transitions. Remarkably for Varonis, the company has been converting clients at a much more rapid pace than we had expected, with subscriptions at 56% of total software license sales in the second quarter versus 31% in the first quarter. Varonis now expects its full-year subscription mix to be 45% versus its prior estimate of 25%. The company also added new customers at a nice pace (with 162 in the second quarter of 2019 vs. 133 in the first). When the conversion is done (much sooner than expected at the outset), the company will have mostly recurring revenues and should garner a higher valuation multiple.

We've come back to one of the Fund's best contributors since inception. In our letter for the June 2018 quarter, we wrote about **Inogen, Inc.,** a designer and manufacturer of portable oxygen concentrators used for patients with breathing disorders. We outlined how we purchased shares in Inogen's 2014 IPO for $16, and slowly sold shares up to $190 as we believed the company's valuation had reached extreme levels. While we felt a bit silly when shares briefly reached as high as almost $288 (!) after we sold, our instincts proved correct when the company subsequently lowered guidance, and its share price crashed to as low as just over $41. This is just an example of our risk management process in action, which requires us to objectively react to valuation in order to try to avoid getting "swamped" by reversals in momentum. We always keep what we think are great companies on our radar (even if current valuations keep us from investing), so we took the opportunity to spend time with management and rework our financial model. In our view, the company is now very reasonably valued and is a "fallen angel" type of investment. We believe that the main operational issue that caused the guidance reduction (a slip up in hiring sales reps for the direct-to-consumer channel) appears to be under control and is manageable. Finally, we are encouraged by an acquisition the company made that can leverage Inogen's existing sales channel to penetrate the market for ventilation (for more severe breathing disorders), and which is a new $400 million opportunity. We look forward to our "new" investment in Inogen and will keep you updated on the company's progress.

Table VI.
Top net sales for the quarter ended September 30, 2019

	Year Acquired	Market Cap When Acquired (billions)	Quarter End Market Cap or Market Cap When Sold (billions)	Amount Sold (millions)
The Trade Desk	2016	$1.2	$8.4	$10.5
Myriad Genetics, Inc.	2016	1.4	2.1	7.8
CareDx, Inc.	2018	0.5	1.0	6.5
Novanta Inc.	2017	0.9	2.9	4.5
GCI Liberty, Inc.	2017	4.7	6.8	3.8

We reduced our position in **The Trade Desk** significantly and sold our position in **GCI Liberty, Inc**. Both were among the largest market cap stocks in the portfolio, and we re-allocated proceeds into new smaller market cap investment ideas.

We reduced our position in **Myriad Genetics, Inc.** after what was a volatile quarter for the company. At the beginning of August, shares traded from $29 to $45 in one day after the company received insurer coverage from UnitedHealthcare for its GeneSight test, which matches patients to appropriate anti-depressant drugs based on genetics. We sold some shares at these levels given the magnitude of the run. Then, when the company reported earnings two weeks later, it guided its fiscal year 2019 below consensus and indicated that the FDA was reviewing some aspects of the way GeneSight results were reported. Shares dropped from $45 to $25.50 the next day. Given that we didn't know the nature of the FDA issues, we sold some shares in the high $20's. Since that time, we've gained comfort that a worst-case scenario is off the table, and we believe our current investment will provide a meaningful return from current levels.

We sold most of our holding in **Novanta Inc.**, a designer and manufacturer of precision photonics and motion control components and subsystems. The stock has been a strong performer for the Fund, but we sold more than three-quarters of our shares based on our view of valuation and concerns about weakening environments for industrial equipment in Europe and China. We continue to believe that this is an extremely well-managed company that has some good future opportunities.

Outlook

While the market posted negative returns in the quarter, we continue to be excited by our companies' growth prospects, particularly in the context of our long-term investing strategy.

Thank you so much for your support.

Randy Gwirtzman & Laird Bieger
Portfolio Managers

Investors should consider the investment objectives, risks, and charges and expenses of the investment carefully before investing. The prospectus and summary prospectus contain 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.

Alpha measures the difference between a fund's actual returns and its expected performance, given its level of risk as measured by beta. **Beta** measures a fund's sensitivity to market movements. The beta of the market is 1.00 by definition.