DEAR BARON DISCOVERY FUND SHAREHOLDER:

PERFORMANCE

"The winner ain't the one with the fastest car, it's the one who refuses to lose." – Dale Earnhardt

"To finish first, you must first finish." - Juan Manuel Fangio

"What's behind you doesn't matter." - Enzo Ferrari

"It's not really about the competition. Your biggest challenge in a race is yourself." – Summer Sanders

There is so much collective wisdom in these quotes. Three are from famous race car drivers, one of whom also happened to create one of the most iconic car companies in the world. The last is from a four-time Olympic medal winning female swimmer. Unless you are involved in a pure sprint, there is so much more to manage in a race than maximum speed and acceleration. Corner entry angles, braking zones, gear-shifting, and situational awareness are some of the many factors that professional race car drivers must manage to be the fastest driver over the course of what could potentially be a multihour race. Risk must be taken in a balanced way, and you must compete within yourself, without worrying about what the other competitors are doing. Thus, winning entails a constant moment-by-moment, self-effectuated process, with an eye toward the longer-term aspect of grinding out the best overall time over many sections and many laps of a racetrack.

Table I.
Performance†
Annualized for periods ended June 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
1.04%	1.08%	2.75%	4.30%
20.84%	21.01%	20.36%	18.54%
5.33%	5.57%	(0.49)%	10.42%
23.71%	24.04%	14.69%	14.19%
11.77%	12.05%	8.63%	10.71%
15.18%	15.46%	9.36%	12.51%
125.41%	128.54%	67.24%	96.93%
	Discovery Fund Retail Shares ^{1,2} 1.04% 20.84% 5.33% 23.71% 11.77%	Discovery Fund Retail Shares¹¹² Discovery Fund Institutional Shares¹² 1.04% 1.08% 20.84% 21.01% 5.33% 5.57% 23.71% 24.04% 11.77% 12.05% 15.18% 15.46%	Discovery Fund Retail Shares¹¹² Discovery Fund Institutional Shares¹² Russell 2000 Growth Index¹ 1.04% 1.08% 2.75% 20.84% 21.01% 20.36% 5.33% 5.57% (0.49)% 23.71% 24.04% 14.69% 11.77% 12.05% 8.63% 15.18% 15.46% 9.36%

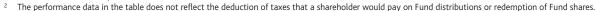


This is perfectly analogous to the way we manage Baron Discovery Fund (the "Fund"). We are in this to win the race (seeking to outperform our peers with superior returns, investing in companies for the long term), by managing our daily process (active stock selection coupled with active risk management) without reacting to what our competitors are doing (worrying about what factors are in vogue at a particular moment in time). We may not race every section of the track perfectly, but we are confident that we will finish the race at the top of the pack by being consistently better over the entirety of those sections. While the second quarter was not ideal, as the Fund underperformed the broader market, this was just one turn on the track, and not even one lap of the race. We believe we are still well positioned in the field for the year (a single lap in the race), and like the legendary Enzo Ferrari, we are looking forward, not behind, for superior performance. In the words of Dale Earnhardt, we refuse to lose.

The photo above was taken in June of 2015, when we attended a three-day racing school at Lime Rock Track in Connecticut. It was a great team building exercise, and we learned that we are much better investors than we are racers!

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 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. Russell 2500° Growth Index measures the performance of small to medium-sized U.S. companies that are classified as growth. 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.



Not annualized.



[†] 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.

Baron Discovery Fund

There were a variety of factors that caused the Fund's underperformance in the quarter. First, larger market capitalization companies outperformed smaller companies during the quarter. This becomes apparent when comparing the second quarter performance of the stocks in the top quartile, sorted by market cap, of the Russell 2000 Growth Index. The top quartile of the index increased by 5.60%, on average, outperforming the bottom half, which increased by 0.78%, on average. Given the Fund's weighted average market capitalization is somewhat smaller than that of the Russell 2000 Growth Index our relative performance was affected by the outperformance of the larger market cap companies. Despite our smaller companies being relatively out of favor today, we believe that over the longer term, smallercapitalization companies will come back in vogue with investors and what today is a headwind will become a tailwind again. Therefore, our process does not change during these periods. Additionally, Health Care was out of favor, which is atypical in a "risk off" environment since it is generally viewed as a more defensive area. Health Care in the index returned 0.50% in the quarter, with pharmaceuticals at (9.72)%, versus the full return of 2.75% for the Russell 2000 Growth Index. This was due to sector-specific political rhetoric as we approach the 2020 Presidential election. Politicians on the left are pressing for government run health care, and politicians on both sides are looking to increase price transparency and lower drug costs. The increased uncertainty has made investors nervous about health care generally, leading to Health Care sector underperformance. Our Health Care investments are in companies that provide better care for patients at lower costs than current standards of care, so we believe that unless the entire health care system becomes dysfunctional, we will win with our investments. Nevertheless, when a sector is out of favor, and businesses within that sector don't execute perfectly, which certainly occurred with a couple of our holdings as laid out below, there will be valuation corrections. However, if our management teams execute as we expect, these stock declines should prove to be temporary setbacks.

We've also not had a single acquisition within our portfolio in 2019, which is a bit unusual as we typically have a few of our companies agree to be acquired each year. Nevertheless, there has been a lot of merger activity among larger-cap companies that can have positive downstream effects on our holdings. For example, AbbVie has agreed to acquire Allergan for \$63 billion in total value. Allergan created Botox, a drug used for aesthetic and therapeutic purposes. Our holding in **Revance Therapeutics, Inc.**, which has a long-acting version of a drug with the same active ingredient as Botox, should benefit from validation of interest in the drug. Revance's drug should be approved in early 2020. Another example is United Technologies acquiring Raytheon for \$90 billion in a blockbuster defense transaction. At an acquisition multiple of about 17 times Raytheon's cash flow, we believe that our investment in **Mercury Systems, Inc.** looks cheap at a similar multiple and with much higher growth. We believe our smaller companies are strategically well positioned and will soon have their moment in the sun.

So, the race is not yet over, and we have a firm hand on the wheel and our eye on the prize—our long-term targeted returns (and our annualized since inception numbers are right there). We are confident that if we continue to relentlessly pursue our process on a daily basis (as we always have), that we will end up on the podium. Note, there is no guarantee that this goal will be met.

Table II.

Top contributors to performance for the quarter ended June 30, 2019

	Percent Impact
Endava plc	0.82%
Kinsale Capital Group, Inc.	0.78
Silk Road Medical, Inc.	0.75
RIB Software SE	0.61
SiteOne Landscape Supply, Inc.	0.55

Endava plc provides outsourced software development to business customers. The stock outperformed after reporting excellent quarterly results and raising full-year guidance. During the March quarter, revenue grew 25% and earnings grew 46% due to strong client demand combined with significant margin expansion. The share price also likely benefited from a secondary offering that increased trading liquidity, removed an overhang from pre-IPO shareholders, and increased awareness to new investors. We continue to own the stock because we believe Endava will continue gaining share in a very large global market for IT services.

Kinsale Capital Group, Inc. is a Property and Casualty (P&C) insurance carrier focused exclusively on the higher value-added Excess and Surplus segment. This segment accounts for \$40 billion in premiums and has historically grown faster and generated greater returns than the overall insurance market. Kinsale's stock outperformed during the quarter after reporting excellent first quarter results that exceeded expectations. Premium growth accelerated to 33% due to share gains, higher pricing, and favorable market conditions as large competitors retrenched. Underwriting margins were especially strong due to favorable reserve development and price increases exceeding loss trends. We continue to be optimistic about Kinsale's prospects given the company's long runway for growth in an attractive segment of the P&C insurance market.

Silk Road Medical, Inc. was a new IPO in the quarter and is an exciting investment for the Fund. The company produces a medical device that creates a minimally invasive surgical (MIS) technique to remove plaque from a patient's carotid artery and to place a stent to keep the artery open. This is called TCAR (trans-carotid arterial revascularization), and it effectively reverses blood flow in the carotid artery away from the brain during the surgery to prevent a stroke caused by plaque moving downstream in the artery to the brain. Currently, the most pervasive method to accomplish this is called CEA (carotid endarterectomy), which is an invasive scalpel-based procedure comprising 85% of surgical interventions. As mounting clinical evidence is proving TCAR to be as safe or safer than CEA, with fewer side effects, we believe Silk Road can convert this market to its method, which is worth about \$650 million per year for the currently FDA approved patient candidates (over 100,000) for surgeries that are at high risk of adverse events from a CEA. Another \$350 million market is addressable for surgical candidates (about 60,000) that are at average risk for adverse events under CEA, though Silk Road will need another FDA approval for this label. And there are another 250,000 patients in a "watchful waiting" category (have stroke symptoms and carotid blockages, but aren't candidates for invasive surgery) that could potentially be treated safely with TCAR. The market value in this cohort could be worth another \$1.5 billion. Like other MIS techniques in vascular surgery, we believe TCAR has the potential to take

80% or more market share for such carotid surgeries. And in the future, we think that the technique created by Silk Road's device could make it useful to improve other types of neurological or cardiological surgeries.

RIB Software SE is a German company that develops and markets high-end construction software. RIB's core iTwo software package combines threedimensional (3D) computer aided design (CAD) software (its own or other leading third-party packages) with integrated project time and cost calculations (the combination of which is called 5D by the company). RIB is free cash flow positive and has a strong balance sheet. In March 2018, RIB raised 130 million Euro of equity to support growth. We invested after the capital raise occurred, when shares dropped over 50%. Since then, the company has acquired majority interests in five managed-services providers (MSP's) which gives RIB global reach to integrate its products with customers, and it has also acquired a handful of small software companies that enhance its iTwo product. We are excited by the company's push to take iTwo software and market it to a broader potential user base via a subscription-oriented, cloud-based version (called MTwo). This will occur in three ways: (1) through Microsoft Dynamics as a partner, (2) via its own MSP network, and (3) through an e-commerce channel where RIB will get paid on a percentage of sale basis for coordinating sales of construction materials for projects. RIB is targeting adding up to two million new software users over time for this product. Thus, we believe that RIB could potentially grow cash flow by hundreds of millions of Euro over the next few

SiteOne Landscape Supply, Inc. is the largest distributor of wholesale supplies to the professional landscaping market. Despite first quarter earnings missing expectations due to weather challenges, investors were much more focused on the company's commentary highlighting double-digit organic growth in late March and April. This strong start to the important spring selling season bodes well for the company hitting or exceeding their financial targets for the year. We remain bullish on SiteOne's organic and inorganic (via "bolt on" acquisitions) growth opportunities and, by extension, its equity.

Table III.

Top detractors from performance for the quarter ended June 30, 2019

	Percent Impact
TherapeuticsMD, Inc.	-1.10%
2U, Inc.	-1.03
Sientra, Inc.	-0.69
Intersect ENT, Inc.	-0.57
Myriad Genetics, Inc.	-0.50

TherapeuticsMD, Inc. is developing drugs that address the multi-billion dollar hormone replacement market. The company now has three FDA approved drugs that it is beginning to market. Its first drug for Vulvar Vaginal Atrophy (Imvexxy, with a current available market of about \$1.7 billion per year with only 7% estimated current penetration) has been putting up very good prescription growth, and its second drug for hot flashes in menopause (Bijuva, with a market opportunity of \$4 billion to \$5 billion) launched in April. It will also market a new non-pill birth control product (Annovera) starting in the second half of this year. The opportunity for non-pill, long-acting contraceptives is \$2 billion, and it is growing at 15% per year while pill-based solutions are falling out of favor. Shares sold off in the quarter for two reasons in our opinion, neither of which will affect the long-term prospects for the company. First, politicians on both sides of the

aisle are looking for more price transparency and lower drug costs, which has hurt sentiment in the specialty pharmaceutical segment. Since TherapeuticsMD's drugs are relatively low priced, and are already in line with competitors, we don't see this as a company-specific issue. Second, at its recent investor day, the company gave 2019 revenue guidance that at \$30 million was \$6 million lower than Wall Street estimates. We are not concerned as most of the variance was due to the company's legacy vitamin business, which has no value in our model. We believe that as payers finalize reimbursement of the company's FDA approved drugs in the second half of 2019 and in early 2020, revenues and margins will accelerate dramatically, and investors will be amply rewarded for their patience.

2U, Inc., a technology and services provider that enables universities to deliver high-quality online degree programs, detracted from performance. The stock underperformed due largely to a disappointing earnings announcement that saw guidance lowered for the remainder of 2019. The main issues were in the core graduate program business where multiple schools lowered their admission rates and more potential students got stuck during the application process. Although 2U is benefiting from the rise in demand for high-quality online education and has a large pipeline of programs ahead, we are reevaluating our view on the company's future growth prospects.

Sientra, Inc. shares lost ground in the quarter due to a slight (one-to-two quarter) delay in ramping its third-party breast implant facility to full capacity, as well as industry concerns around textured implant safety (which have dampened overall industry procedure volume). Sientra's textured implants have far fewer incidences per implant versus competitors, and there was no negative effect when an FDA industry oversight meeting occurred in late March. The company also raised \$115 million in an equity offering in the quarter, which should get the company at least close to free cash flow breakeven. We expect shares to rebound as Sientra ramps production of implants in the second half of 2019.

Intersect ENT, Inc. produces drug-coated, bioabsorbable stents to help sinus sufferers deal with recurrent problems after they have had invasive sinus surgery. While we believe the company has broad prospects for its portfolio of unique products in a big market, it has stumbled with the launch of its SINUVA product which targets usage in doctor's offices (versus in-hospital surgical use). Our due diligence with physicians indicated that the product would be very well received by patients, but the company has had trouble dealing with a complex reimbursement pathway. We believe that this is manageable, but we are wary of the timing of the departure of the company's CEO right after reporting a disappointing sales quarter for SINUVA. Therefore, we sold about half of our position in the quarter while we evaluate the current situation.

Myriad Genetics, Inc. is a provider of high-end genetic testing for hereditary cancer, compatibility with anti-depressant drugs, and many other conditions. Concerns from last quarter have carried over to this quarter, including whether private payers will cover the company's GeneSight test for patient compatibility with antidepressant drugs. In addition, a sell side analyst report claimed that a June meeting among CMS contractors was about exploring whether to eliminate current Medicare reimbursement of GeneSight (now worth about \$120 million in revenues per year to Myriad). In fact, the meeting was about whether to expand coverage beyond psychiatrist prescribers to the general medical practitioner community. Such an expansion could more than double current revenues for the test. While critics of the company have a story to tell, we believe that Myriad's leading market positioning, potential for significant increases in volumes of

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reimbursed tests, and a high-quality management team can lead to a doubling or even tripling of currently high free cash flow per share. Given that the company currently trades at under 14 times its current free cash flow per share, we see tremendous upside for Myriad.

PORTFOLIO STRUCTURE

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

	Year Acquired	Quarter End Investment Value (millions)	Percent of Net Assets
Mercury Systems, Inc.	2015	\$18.0	3.2%
Kinsale Capital Group, Inc.	2016	16.5	2.9
ViewRay Incorporated	2018	16.4	2.9
Americold Realty Trust	2018	16.2	2.9
Myriad Genetics, Inc.	2016	15.1	2.7
RIB Software SE	2018	14.9	2.7
SiteOne Landscape Supply, Inc.	2016	13.9	2.5
CareDx, Inc.	2018	13.4	2.4
Endava plc	2018	13.1	2.3
Veracyte, Inc.	2019	12.9	2.3

The top 10 positions in the portfolio represented 26.8% which is slightly lower than our historical 30% weighting. As of June 30, 2019, the Fund had \$558.7 million of assets under management. Our cash represented 6.2% of the Fund, which is typical of our mid-single-digit target levels.

RECENT ACTIVITY

Table V.

Top net purchases for the quarter ended June 30, 2019

	Year Acquired	Quarter End Market Cap (billions)	Amount Purchased (millions)
Veracyte, Inc.	2019	\$1.4	\$11.2
Trex Company, Inc.	2019	4.2	9.5
Silk Road Medical, Inc.	2019	1.5	8.6
Blue Prism Group plc	2019	1.4	8.1
Aerie Pharmaceuticals, Inc.	2019	1.4	7.4

We initiated a position in **Veracyte, Inc.** in the quarter. This is a medical diagnostics company specializing in the characterization of thyroid and lung cancer as well as a deadly condition called idiopathic pulmonary fibrosis (IPF). In our opinion, Veracyte has the highest quality (or only) tests for these indications in the market, and it now has CMS (Medicare) reimbursement for all of its tests, which have combined market opportunities of nearly \$2 billion. It is working on private insurance as well. The company's tests help to qualify with a high degree of accuracy whether a patient with suspicious initial medical findings (from a needle aspiration for thyroid, or CT scan for lung cancer or IPF) needs to be followed up with a higher risk, expensive invasive medical procedure such as a full tissue biopsy. The company is run by a dynamic CEO, Bonnie Anderson, and Veracyte's team continues to add new tests to its menu while continuously improving the accuracy of existing tests. At a recent visit to the company's labs in

Silicon Valley we saw the sophisticated workflow including next generation sequencing of test samples, and better understood how the company is building a database of complex genetic findings to better aid the accuracy of its results.

Trex Company, Inc. is the leader in composite (i.e., non-wood) decking with more than two times the market share of its next biggest competitor. This was a former holding of the Fund. We had always been admirers of the company's competitive positioning and business model, but we waited to repurchase the stock until we felt more comfortable with the company's strategy to go after the mass market. During the second quarter, the company announced its low cost (mass market) decking line called Trex Enhance Basics. This product had been in the R&D pipeline for years, but until now it did not have an acceptable gross margin. Through a combination of product redesign, capacity optimization, and general cost efficiencies, the company was finally able to put out a composite decking product that costs a consumer only 5% more than a wood deck and has significantly lower maintenance costs. This is a monumental change for the company, as it doubles the addressable market. We also think this new product line will accelerate the shift from wood to composite (currently composite is 18% of the \$5 billion decking industry with the remaining 82% still wood). This product has limited availability today, but it should achieve broad distribution in 2020. Importantly, early signs indicate that Enhance Basics has not cannibalized Trex's more premium offerings. The bottom line is that we think the market is underestimating the impact that Enhance Basics will have on Trex's earnings growth the next couple of years.

Blue Prism Group plc is a leader in the Robotic Process Automation (RPA) sector. RPA is a business process automation technology that uses metaphorical software "robots" that automate business tasks in order to improve workflow and lower costs. We purchased Blue Prism during the quarter as we believe the market opportunity is massive (consulting from McKinsey estimates \$10 trillion is spent on employees doing data entry/extraction related work) and its value proposition to customers is significant (customers typically get paid back on their investment within one year). Blue Prism is early in its growth trajectory and has faced some challenges in managing that growth (including recent challenges in ramping its sales force productivity), but we believe management has put in place the right infrastructure to execute on its growth plan and will overcome its current challenges with time. We also believe the stock is undervalued given its growth opportunities over the next couple of years.

Aerie Pharmaceuticals, Inc. is in the midst of launching a novel franchise of glaucoma medications called Rhopressa and Rocklatan. In 2018, Glaucoma was a \$3 billion (35 million prescription) market in the U.S., a \$1 billion (91 million prescription) European market and a \$800 million (54 million prescription) Japanese market with the majority of this market highly genericized. Given that 50% of patients are treated with a frontline prostaglandin agent (a common generic) and the rest cycling between a handful of less effective and more frequent dosage eye drops, we think Aerie has major advantages. With its once-daily dosage drugs, that have a novel mechanism of action that is best in class, its two drugs are primed to take market share. Assuming Aerie can capture 10% to 15% of the market (for reference, third-line drugs capture about this amount at peak), we think Aerie's franchise can generate \$1 billion to \$1.5 billion in sales.

Table VI.

Top net sales for the quarter ended June 30, 2019

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	Year Acquired	Market Cap When Acquired (billions)	Quarter End Market Cap or Market Cap When Sold (billions)	Amount Sold (millions)
Coherent, Inc.	2013	\$1.5	\$3.3	\$7.6
Flexion Therapeutics Inc.	2016	0.4	0.4	7.1
Intersect ENT, Inc.	2018	1.0	0.7	5.1
IntriCon Corporation	2018	0.2	0.2	4.6
QAD Inc.	2016	0.5	0.7	4.1

Coherent, Inc. is a company that sells industrial lasers for manufacturing as well as for OLED flat panel production. Given the overall trade war situation with China, combined with some near- to mid-term softness in smart phones (the primary current user of OLED panels), we decided to significantly reduce our exposure. We still believe that the company has significant longer-term prospects in all of its end markets. We sold our position in Flexion Therapeutics Inc. after a lackluster launch of the company's new knee pain management drug and the departure of its head of sales, whom we believed was a key to the success of the launch. IntriCon Corporation manufactures components for medical devices, primarily for the diabetes and hearing aid markets. The company has very good prospects as it expands its diabetes business with Medtronic and has a large opportunity in hearing aids if Federal legislation ultimately breaks the overly restrictive regulatory environment (requiring licensed audiologists to prescribe hearing aids). We sold our

position as we realized during the quarter that Medtronic's products seem to be falling behind technologically to some cutting-edge competitors. The hearing aid opportunity is exciting but it is still a couple of years away, so the overall investment became too risky for our comfort. We sold our position in **QAD Inc.** due to a combination of subscription revenue growth coming in lower than we expected and a valuation that fully reflected the company's current prospects.

OUTLOOK

We believe that valuations for our current investments leave room for significant upside over the medium and long term (which we define as a three- to five-year period). We continue to look for our targeted returns on each of our investments on an individual basis. Our vigor has not waned a bit, and we continue to analyze, visit, and question management teams for each of our portfolio companies as well as for many other companies that could become new portfolio companies. As always, we greatly appreciate the support we receive from Baron, our families, and most importantly, our investors. Thank you for joining us on this exciting ride!

Randy Gwirtzman & Laird Bieger Portfolio Managers

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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.

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