Dear Baron Asset Fund Shareholder:

Performance

During the fourth quarter, the presidential election and political squabbling over the deficit resulted in renewed equity market volatility. Equities sold off sharply following President Obama's re-election, then recovered on optimism that a bipartisan deal could be reached to avert the "fiscal cliff."

Lower quality stocks within the Russell Midcap Growth Index (the "Index") continued to outperform during the quarter, a trend that held true throughout 2012. The "quality" of a particular company can be defined several ways; Standard & Poor's assigns quality ratings to companies, and Morningstar assigns them economic moats, which we consider a proxy for quality.* According to the ratings assigned by both these third parties, lower quality companies within the Index outperformed higher quality companies by a wide margin during 2012.

Based on the Standard & Poor's data, during 2012 low quality companies within the Index returned 19.02%, while high quality companies rose 12.72%. Based on the Morningstar data, companies with no economic moat returned 22.23%, while companies with economic moats returned 14.60% during this period. Given Baron Asset Fund's (the "Fund") emphasis on purchasing higher quality companies, we were encouraged by the Fund's performance during the year.

Table I.
Performance (Retail Shares)
Annualized for periods ended December 31, 2012

	Baron Asset Fund[1,2]	Russell Midcap Growth Index[1]	S&P 500 Index[1]
Three Months[4]	1.29%	1.69%	–0.38%
One Year	15.31%	15.81%	16.00%
Three Years	10.73%	12.91%	10.87%
Five Years	1.16%	3.23%	1.66%
Ten Years	9.31%	10.32%	7.10%
Since Inception (June 12, 1987)	10.70%	9.16%[3]	8.71%

Performance listed in the above table is net of annual operating expenses. Annual expense ratio for the Retail Shares as of September 30, 2011 was 1.33%. *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.

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 For the period June 30, 1987 to December 31, 2012.

4 Not annualized.

ANDREW PECK
PORTFOLIO MANAGER

Retail Shares: BARAX
Institutional Shares: BARIX

Baron Asset Fund gained 1.29% during the three-month period ended December 31, 2012. The Russell Midcap Growth Index gained 1.69% and the S&P 500 Index fell 0.38% during this same period. During the year ended 2012, the Fund gained 15.31%. The Russell Midcap Growth Index gained 15.81% and the S&P 500 Index gained 16.00% during this same period.

During the quarter, the best performing stocks in the Fund included companies that we believe stand to gain most immediately from an improved domestic economic backdrop. In addition, several companies that had fallen earlier in 2012 on concerns about their exposure to European markets rebounded. The best performing sectors in the Fund included Industrials and Materials, where stocks' sensitivity to improving economic conditions is generally highest. The Fund's one large investment in the Telecommunications sector, **SBA Communications Corp.**, also performed well, as cellular tower companies continued to gain, based on their recurring revenue streams, pricing power, and their potential to convert to REIT structures. The Fund's Financials Sector investments, including three asset managers and brokerage **The Charles Schwab Corp.**, benefitted from the prospect of rising interest rates and improved flows into the equities market.

Table II.
Top contributors to performance for the quarter ended December 31, 2012

	Year Acquired	Percent Impact
SBA Communications Corp.	2007	0.50%
Mettler-Toledo International, Inc.	2008	0.38
CarMax, Inc.	2004	0.32
Fastenal Co.	2006	0.32
FleetCor Technologies, Inc.	2012	0.31

SBA Communications Corp. owns and operates cellular communications towers. All the major domestic wireless carriers lease space on SBA's towers to house key elements of their transmission networks. SBA's share price rose during the quarter, and throughout 2012, as the company's cash flow continued to be driven higher by the secular

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increase in data usage by smart phone customers. As consumers demand more wireless data bandwidth, carriers must augment their networks by placing more transmission equipment on towers, which generates high-margin, incremental cash flow for SBA. The company also has operations in several fast-growing international markets, and it just announced its first acquisition in Brazil. In addition, SBA may choose in the future to pursue conversion to a real estate investment trust (REIT), which we believe would lead investors to assign a higher multiple to the company's cash flows.

Mettler-Toledo International, Inc. manufactures sophisticated weighing instruments used in laboratory, industrial, and food retailing applications. The company has the leading market share throughout most of its key markets in the U.S. and Europe. It also generates roughly 17% of its revenue from China, where it has experienced rapid growth during the past several years. Mettler's shares rose during the quarter in response to positive economic data from China indicating that its economy is rebounding. We continue to believe that Mettler has solid long-term earnings prospects driven by its growth in emerging markets, increased focus by regulators on food safety (a market in which Mettler's products are leaders), pricing power, and ongoing manufacturing efficiencies.

With $11 billion in sales, **CarMax, Inc.** is the nation's largest retailer of used cars. The company's shares rose after it demonstrated positive momentum in its sales and earnings growth. We believe that several positive factors should set the stage for continued good results in 2013. These include a significantly improved supply of late model cars entering the used car market, which should drive better prices and sales volume; accelerating same store sales as more recently-opened stores enter the sales base; and, pent-up demand for used cars among drivers, resulting from an the high average age of cars currently on the road.

Shares of **Fastenal Co.**, the leading distributor of industrial supplies, performed well during the quarter, as sales across the company's 2,600 branches remained strong, rising approximately 7-10% over the prior year's figures. These results were attributable to a rebound in domestic manufacturing, continued gains in market share from smaller competitors in this fragmented market, and the company's successful introduction to its customer base of vending machines that dispense industrial supplies directly to the manufacturing factory floor.

FleetCor Technologies, Inc. is a niche provider of payment processing technology and private label fuel credit cards to owners of vehicle fleets and to gas station operators. The company's shares rose after its organic revenue growth rate continued to improve. FleetCor also demonstrated ongoing success in growing the profitability of its recent acquisitions in several fast-growing emerging markets, including Russia and Brazil.

Table III.
Top detractors from performance for the quarter ended December 31, 2012

	Year Acquired	Percent Impact
MSCI, Inc.	2008	–0.44%
IDEXX Laboratories, Inc.	2006	–0.26
Perrigo Co.	2011	–0.25
Splunk, Inc	2012	–0.23
ANSYS, Inc.	2009	–0.23

The Energy and Information Technology (IT) sectors hurt performance during the quarter. Energy stocks were negatively impacted by falling oil prices and a reduction in domestic oil and gas exploration. Several of the Fund's IT investments were pressured by concerns that uncertainty over the fiscal cliff would impact new software bookings before year-end. In addition, there were several company-specific events, including those discussed below.

Shares of **MSCI, Inc.**, which provides equity market indexes and investment decision support tools, declined after Vanguard, a large client, unexpectedly stopped using some of MSCI's indexes as benchmarks for Vanguard's exchange traded funds (ETFs). Instead, Vanguard switched its benchmarks to a competitor's product offering. Vanguard's decision negatively impacted MSCI's highest-margin revenue stream, and it caused us to question whether other large clients might follow suit, or press for a significant reduction in their own fee structures. As a result, we chose to exit our investment in the company.

Shares of **IDEXX Laboratories, Inc.**, a leading supplier of diagnostic products and tools to the veterinary market, retreated from all-time highs after the company modestly reduced its 2012 revenue expectations. Nevertheless, management provided better than expected revenue guidance for 2013. We remain excited about the company's significant long-term opportunity in veterinary diagnostics and testing. We believe the confluence of the company's emerging new technology platform, its escalating pace of new product introduction, secular trends toward wellness testing for pets, and a modest economic tailwind driving more traffic to veterinarians will lead to accelerating growth in 2013 and beyond.

Shares of **Perrigo Co.**, the largest manufacturer of store brand, over-the-counter pharmaceutical products, fell after quarterly revenues in its Nutritionals segment, which includes private label infant formula and vitamins, fell short of expectations. We believe that the shortfall was explained by a combination of short term factors, and we are optimistic that the company's infant formula revenues are poised for strong growth, particularly in China, where its points of distribution are increasing. We are also encouraged by Perrigo's recent accretive acquisition of Sergeant's Pet Care, through which the company entered the market for private-label pet medications.

Portfolio Structure

At December 31, 2012, Baron Asset Fund held 58 positions. The Fund's 10 largest holdings represented 34.6% of assets, and the 20 largest represented 57.4% of assets. The Fund's largest weighting was the Consumer Discretionary sector at 25.6% of assets. This sector includes the Fund's investments in retailers, gaming companies, hotels, ski resorts, and broadcasters. The Fund held 17.1% of its assets in the Information Technology sector, which includes investments in a technology research firm, a data center operator, software companies, and a payment processor. The Fund also had significant weightings in Industrials, which includes manufacturers, distributors, and information services firms, at 18.3% of assets; and Financials, including asset managers, brokerages and insurers, at 12.6% of assets.

Table IV.
Top 10 holdings as of December 31, 2012

	Year Acquired	Market Cap When Acquired (billions)	Quarter End Market Cap (billions)	Amount (millions)	Percent of Net Assets
SBA Communications Corp.	2007	$3.8	$9.0	$88.8	4.2%
Gartner, Inc.	2007	2.9	4.3	87.4	4.1
Verisk Analytics, Inc.	2009	4.0	8.5	81.6	3.9
IDEXX Laboratories, Inc.	2006	2.5	5.1	76.6	3.6
Fastenal Co.	2006	5.8	13.8	72.4	3.4
Arch Capital Group Ltd.	2003	0.9	6.0	68.2	3.2
Mettler-Toledo International, Inc.	2008	2.4	5.9	67.7	3.2
Equinix, Inc.	2007	2.7	10.0	67.0	3.2
Ralph Lauren Corp.	1997	1.6	13.7	63.7	3.0
priceline.com, Inc.	2009	6.8	31.0	59.0	2.8

Recent Activity

During the past quarter, the Fund established four new positions and added to two others. The Fund also sold three positions and reduced its holdings of 16 others.

Table V.
Top net purchases for the quarter ended December 31, 2012

	Quarter End Market Cap (billions)	Amount (millions)
MRC Global, Inc.	$2.8	$18.0
Western Gas Equity Partners LP	6.6	5.5
IHS, Inc.	6.3	4.5
The WhiteWave Foods Company	2.6	3.5
Hyatt Hotels Corp.	6.3	1.8

During the quarter, the Fund initiated a position in **MRC Global, Inc.** With approximately $6 billion in sales, MRC Global is the largest distributor of pipes, valves and fittings (PVF) to the energy end market. Though the company became public earlier in 2012, its predecessor businesses date back nearly a century. Based in Houston, MRC carries a broad portfolio of highly technical and mission-critical products found on a variety of energy infrastructure assets, ranging from pipelines to refineries to drilling rigs. The company's blue chip customer base includes Conoco, Exxon Mobil, BP and Royal Dutch Shell. These customers rely on value-added distributors like MRC to help them save costs, cut working capital and streamline their supply chains. In particular, MRC's 'one-stop-shop' approach allows global energy players the ability to consolidate their vendors and rely on one global supplier for all their PVF needs.

MRC has good visibility into its revenue stream, a factor that we find attractive. The majority of products MRC distributes are tied to maintenance and repair contracts, in which regular wear and tear at customer facilities generates recurring revenue. Customer renewal rates on these contracts run in excess of 90%. The company operates 400 facilities, including 200 service centers, 22 valve shops and 180 pipe yards that are strategically located near major shale and refining regions across the globe.

We are optimistic about the company's growth prospects for several reasons, including strong end market demand driven by promising new shale discoveries, unconventional drilling techniques, and the need to upgrade aging energy transmission infrastructure. Furthermore, MRC's business is well-diversified across the three key segments of the energy market: upstream, midstream and downstream.

In addition to posting double-digit organic growth during the last three years, MRC has also done a fine job acquiring smaller PVF distributors and gaining operational efficiencies. We envision ongoing acquisitions, particularly overseas where margins are higher and competition more fragmented. International revenues represent just 20% of the business today, whereas an estimated 75% of total global energy spending occurs outside North America.

Finally, we believe that MRC possesses a high quality management team. CEO Andrew Lane has a long track record in the energy sector, serving most recently as the COO of Halliburton until 2008, when he joined MRC prior to its IPO, citing its compelling growth prospects and market share opportunities.

Table VI.
Top net sales for the quarter ended December 31, 2012

	Amount (millions)
MSCI, Inc.	$–26.2
Equinix, Inc.	–21.8
Cerner Corp.	–18.9
Splunk, Inc.	–15.2
Arch Capital Group Ltd.	–11.1

The Fund continued to reduce its stake in a few of its largest holdings, such as **Equinix, Inc.** and **Arch Capital Group Ltd.** These sales were generally made after the stocks had moved higher throughout the quarter in order to maintain appropriate position sizes. As discussed above, the Fund also exited its investment in **MSCI, Inc.** after a large customer dropped its service.

Outlook

We continue to believe that stock market valuations are attractive, even after this past year's gains. We believe the U.S. housing market is in the early stage of an extended recovery, which should be an important positive catalyst for employment levels and the broader economy. U.S. interest rates remain near historically low levels, and the fixed income markets offer limited inflation-adjusted returns. Investors continue to hold substantial sums in cash, which we believe will eventually be deployed into equities. We believe that the Fund remains well positioned within a market environment that rewards high-quality companies with predictable and fast-growing earnings streams.

Baron Asset Fund

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
January 8, 2013

For more information about this Fund please scan this QR code with any bar code reader on your mobile device.

Investors should consider the investment objectives, risks, and charges and expenses of the investment carefully before investing. The Baron Family of Funds is described in prospectuses which contain this and other information about the Funds. You should carefully read the prospectus before investing. You can obtain a copy of the prospectus by contacting the Funds' distributor, Baron Capital, Inc., at 767 Fifth Avenue, New York, New York, 10153, or by calling 1-800-99BARON, or by going to our website at www.BaronFunds.com.

[*]For each stock it covers, Standard & Poor's computes basic scores for earnings and dividends, then adjusts the scores by a set of predetermined modifiers for growth, stability within long-term trend, and cyclicality. Adjusted scores for earnings and dividends are combined to yield a final score. The final score for each stock is measured against a scoring matrix determined by analyzing the scores of a large representative sample of stocks. Every stock covered by Morningstar receives an economic moat rating, which measures the company's competitive position. According to Morningstar, companies with the ability to withstand the competition for a long time receive Wide moat ratings, companies with moderate ability to withstand competitive pressures receive Narrow moat ratings, and companies without meaningful competitive advantages receive None moat ratings.

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. Prior to February 15, 2007, the Fund's strategy was to invest primarily in small and mid-sized growth companies. Since then, the Fund's investment strategy has shifted to mid-sized companies. 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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