PERSPECTIVES

September 2016

Active Equity Investing for the Long-Term

Claudia Bertino
Head of Financial Communication
Global Strategy & Marketing

Laura Fiorot
Financial Communication Specialist
Global Strategy & Marketing

Giovanni Liccardo
Financial Communication Specialist
Global Strategy & Marketing

12%
Average annualized return for the S&P500 index on a 10-year horizon

+1.4%
Average excess return for managers with a high AS and low downside capture ratio (DCR)

+4.4%
Average excess return for managers with high AS and low DCR when S&P annualized return was between -5% and +5%

+233%
Cumulative performance of the current bull market (duration 88 months)

Key Insights

Looking at past history, equity investing has provided the best return opportunities for investors with a long-term horizon. Taking a long-term approach to equity investing has helped to reduce the risk of experiencing negative returns. Moreover, staying invested has helped reduce the risk of mistakes due to market timing.

Looking at the past performance of active managers in the US large cap equity market, we see that the ability to deliver outperformance depends both on how active a manger is and their ability to manage downside risk. On average, managers with high conviction and good risk management were able to deliver positive excess returns and attract more inflows than their peers. Of course, past performance is no guarantee of future results.

Portfolios with high conviction and good downside risk management were able to limit losses in down markets and enhance returns during range-bound market phases.

Looking ahead, we believe the current bull market, that started in 2009 after the great financial crisis and is already one of the longest in history, might be reaching a mature phase. In our opinion, the future may see lower returns on all asset classes, including equities. Nevertheless, equities could continue to offer investors desirable long-term return potential.

The dispersion of equity returns seems to be rising as we enter a less bullish phase, and we believe this could benefit active managers.
A new era of stock picking opportunities may be underway: it's time to take a fresh look at equity investing with a long-term active management approach.

For details on methodologies and analysis please see the following pages of the paper.

PIONEER Investments®

The Role of Equity Investing in a Portfolio

Investing in equities may suit a range of different investor objectives. In the short-term, equity investing may be beneficial for investors in search of tactical or speculative opportunities.

With a focus on the on the medium/long-term, investors can fully exploit the opportunities of equity investing: equities may be suitable for income and diversification[1] purposes within a portfolio.

Looking at past history, taking a medium/long-term approach to equity investing has provided three major benefits:

1. Equity investing has offered the best return opportunities for investors with a long-term horizon. Looking at past performance, from 1972 to 2016, equity investing has been able to provide the best return opportunities among different asset classes and along different time periods (see Figure 1).
2. Taking a long-term approach has helped to reduce the risk of experiencing negative returns. With a longer time horizon, data has shown that the variability of returns was significantly reduced and the probability of gains increased. An analysis of the performance of the S&P500 from 1972 to 2016 shows that all investors that remained invested for at least 15 years have accumulated a gain at the end of the period.[2]
3. Staying invested has also helped reduce the risk of mistakes due to market timing. Most equity market positive performance has tended to be concentrated in phases of a strong market rally. This means that being out of the market during these bull phases would have substantially eroded performance.

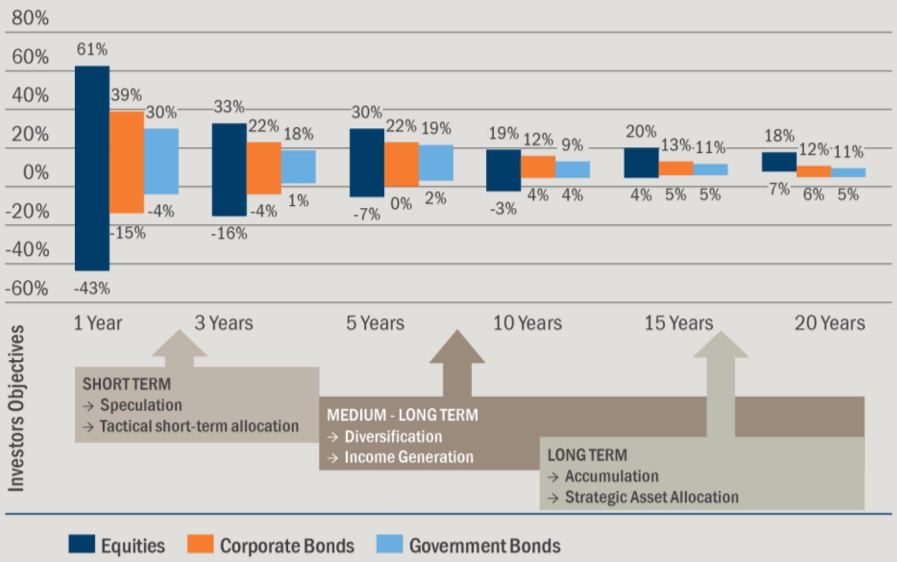
+35%

Extra relative performance of Equities vs Corporate Bonds on a 10 year horizon

+45%

Extra relative performance of Equities vs Government Bonds on a 10 year horizon

Figure 1. Range of Annualized Returns for Different Asset Classes on Different Time Frames



Source: Pioneer Investments, Bloomberg. Analysis of monthly data from December 31, 1972 to June 30, 2016. Equities = S&P500 Index, Government Bonds = Bank of America Merrill Lynch US Treasury & Agency, Corporate Bonds = Bank of America Merrill Lynch US Corporate Master. All indexes are in USD, total return. Data represents past performance, which is no guarantee of future results.

[1] Diversification does not guarantee a profit or protect against a loss.

[2] The S&P500 index is used as a proxy for an investment in U.S. equities. An index is unmanaged and returns assume reinvestment of dividends, and, unlike Fund returns, do not reflect any fees or expenses. It is not possible to invest directly in an Index.

Staying focused on the long-term give equity investing the time and opportunity to recover any losses incurred and fully exploit their long-term return potential.

Equity investing is subject to risk. Market value can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical, and other conditions. Equity investing is typically more volatile in the short-term.

The "Good" Active Manager in Equities

We believe that high conviction and the ability to manage risk effectively are very important features of being a "good "active manager. The question is whether funds that have in the past exhibited high Active Share (used as a proxy for high-conviction) and low Downside Capture Ratio (DCR) are more likely to generate excess return in the future.

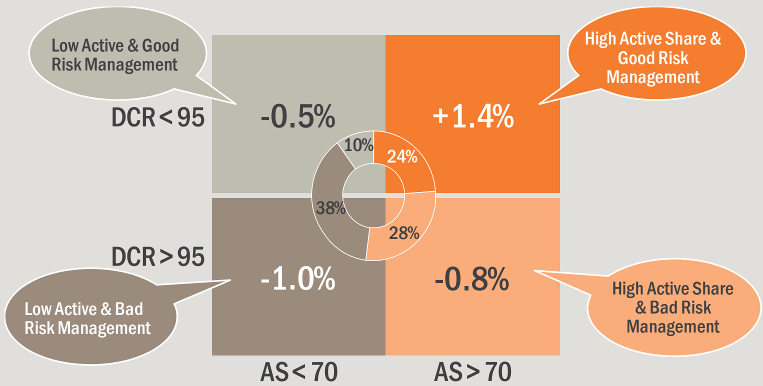
As we can see from Figure 2, the subset of funds with a combination of high Active Share and low Downside Capture Ratio exhibited, on average, outperformance of 1.4%, beating the other groups of funds, which were not able to deliver positive excess returns to investors over the period analyzed.

On the other hand, the group of funds with low Active Share and high Downside Capture Ratio (which could be seen as an indicator of bad risk management) was the worst performing, while the remaining two groups displayed average excess returns in negative territory.

+1.4%

Average Excess Return for managers with high active share and low downside capture ratio.

Figure 2. Average Excess Returns by level of Active Share (AS) and Downside Capture Rate (DCR)



Source: Pioneer Investments, Morningstar. Analysis on 3 Years Annualized Excess Returns in the period June 30, 1999 – June 30, 2016. For the definition of the sample and methodology of the analysis, see Table 3. Data in the internal pie shows the percentage of observation in each box of the matrix. Data is based on past performance, which is no guarantee of future performance.

The combination of high conviction and sound risk management proved able to deliver good performance and, accordingly, to attract positive net flows. It's worth noting that the top performing group of funds has been able to attract far higher inflows than their peers in aggregate, despite representing only a quarter of all the analyzed funds in the sample.

As a matter of fact, our analysis shows that average annual net flows of funds with high active share and low downside capture ratio in the period 1999-2016 were

On average, managers with high conviction and good risk management were able to deliver positive excess returns and attract more inflows than their peers.

around positive 170 million USD, while the average annual net flows for all other funds was negative 90 million USD.

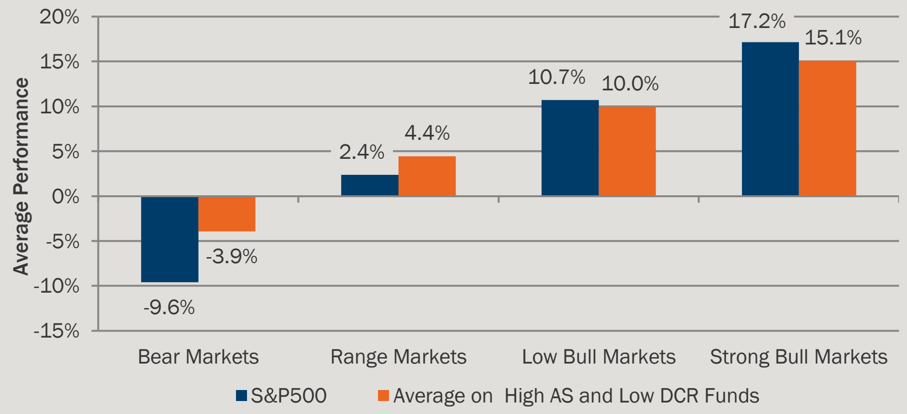
In our view, investors should not rely on any stand-alone criteria for selecting an equity portfolio manager, since a multiplicity of factors come into play.
For instance, choosing funds with high-conviction (Active Share) and strategies for limiting the magnitude of potential losses during market declines (low Downside Capture Ratio) should be a fundamental consideration for the investor's long-term goals of pursuing sustainable outperformance.

Opportunity Ahead for "Good" Active Managers

Starting from March 2009 the S&P500 has been in one of its longest upward trends of all time, which has now lasted seven years without registering any correction greater than -25%. We believe that the long-term uptrend might continue, albeit with some corrections along the way.
Greater dispersion among sectors and stocks, as recent evidence has suggested, may offer stock picking opportunities and increase the potential outperformance of a high conviction approach.
Therefore, this environment could be beneficial for an active management approach. Bear and range-bound markets[3] offered opportunities for active managers, with our High AS and Low DCR sample almost doubling the performance of the index (Figure 3).

While managers with high conviction and good risk management tended to underperform in strong bull markets, they were able to limit losses in down markets and enhance returns in range-bound market phases.

Figure 3. 3-Year Average Annualized Returns in Different Equity Market Phases



Source: Pioneer Investments, Bloomberg. Analysis on monthly data from June 30, 1999 to June 30, 2016. The average performance is calculate as the average annualized returns on a 3 years basis on the different periods under analysis. For the funds the average performance is calculated as the Average Performance for S&P500 + Average Excess Return on the High AS and Low DCR Funds. Data represents past performance, which is no guarantee of future results.

At Pioneer Investments, we believe that the investment process of every good active manager should start with an understanding of investor needs and goals. Starting from this premise, we identify robust research, rigorous risk management, and high conviction as the keys to designing investor portfolios.

[3] We identify a Bear market when annualized returns on a 3-year basis are lower than -5% and a Range market when annualized returns on a 3-year basis are between -5% and +5%.

PIONEER Investments®

Each of these three elements is critical in identifying the best market opportunities and building an equity portfolio able to deliver sustainable alpha over the long-term.

In our opinion, a new era of opportunities for stock picking may be underway. For investors, it's time to take a fresh look at long-term equity investing with an active management approach.

Investing involves risk, and there are other factors involved, aside from Active Share and Downside Capture Rate. The investments you choose should correspond to your financial needs, goals, and risk tolerance.
For assistance in determining your financial situation, please consult an investment professional.

Appendix

Analysis Methodology for Figure 2

Instrument	Objective
Source	Morningstar
Time Period	June 30, 1999 to June 30, 2016.
Fund Sample	241 funds, selected as the largest (by AUM) US domiciled funds in the US Equity Large Cap Morningstar category, with Benchmark S&P500TR and with Active Share data available. This sample should help avoid the benchmark, fund size and cap size biases of the Active Share statistics. Only funds that has not been closed or merged into another fund as of June 30, 2016 have been included in the sample. The fund size may change depending on the year of analysis. The sample avoids double counting multiple share classes, using only the primary share class in the Morningstar database.
Sample Size	The full sample includes 3609 observations = 241 funds x 15 years analyzed.
Active Share	Active Share is defined as "the share of portfolio holdings that differ from the benchmark index holding". For each fund we have used the Active Share statistics as an easy and available measure of active management. We believe that this is not a comprehensive measure of active management and is subject to multiple limitations.
Structure of the Analysis	We have considered as evaluation date June 30 of each year. Therefore, for each year we have considered the Active Share at June 30, and all other statistics at this date. As performance date we have used the excess return for the 3 years following the evaluation date. For example, with respect to Active Share as of June 30, 2000, the annualized average monthly excess return is for July 1, 2000, through June 30, 2003.
Number of Periods Analyzed	15 Periods. For all periods the excess return is calculated from June 30 at Year T to June 30 at Year T+3 (after 3 years).

Source: Pioneer Investments.

Definition of Threshold: High and Low Levels of Active Share and Downside Capture Ratio

	Active Share (AS)	Downside Capture Ratio (DCR)
Definition of the Statistics	Active Share is defined as "the share of portfolio holdings that differ from the benchmark index holding".	Downside Capture Ratio (DCR) measures a manager's performance in down markets. Down-market is defined as those periods (months or quarters) in which the market return is negative.
Definition of the Threshold	HIGH = AS > 70 LOW = AS < 70	HIGH = DCR > 95 LOW = DCR < 95
Methodology	We selected the value 70 as being the mid value between the average and the median of the full sample.	We selected the value 95 as being the median value of the DCR for the funds that delivered positive ER.

Source: Pioneer Investments, Morningstar. Data as at June 30, 2016.

PIONEER Investments®

Definition of S&P500 Equity Market Phases for Figure 3

Phases	Definition	Phases Analyzed
Bear Markets	When annualized returns on a 3-year basis are lower than -5%	Jun 1999-Jun 2002 Jun 2000-Jun 2003 Jun 2006-Jun 2009 Jun 2007-Jun 2010
Range Markets	When annualized returns on a 3-year basis are between -5% and +5%	Jun 2001-Jun 2004 Jun 2005-Jun 2008 Jun 2008-Jun 2011
Low Bull Markets	When annualized returns on a 3-year basis are between +5% and +15%	Jun 2002-Jun 2005 Jun 2003-Jun 2006 Jun 2004-Jun 2007 Jun 2013-Jun 2016
Strong Bull Markets	When annualized returns on a 3-year basis are above +15%	Jun 2009-Jun 2012 Jun 2010-Jun 2013 Jun 2011-Jun 2014 Jun 2012-Jun 2015

Source: Pioneer Investments. All periods analyzed refer to last day of the month, Data as of June 30, 2016.

Important Information

Follow us on:

www.pioneerinvestments.com

PIONEER Investments®

REF-53