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Passive Investing and Stock Market Structure

Election fireworks dominated the news cycle in the most recent quarter. In the meantime the US economy, financial markets, and ACR portfolios ambled along – not too hot, not too cold. Seemingly pedestrian economic conditions were no match for the entertainment offered by our Presidential candidates.

The United States, in our opinion, is bigger politically and economically than any single President. While ACR takes into account relevant laws and regulatory policies at all levels of government as they pertain to our investment holdings, we see no reason to change our overall portfolio strategy due to the potential outcome of the election. So rather than comment on politics, however entertaining, we will focus on a controversial subject of a different kind.

Chatter in the investment industry has focused in recent weeks on the classic investment struggle between passive and active investing. A series of prominently placed articles in the Wall Street Journal declared the supremacy of passive investing.[1] Everyone from asset managers and industry trade rags to online financial pundits is weighing in. Normally this would be the perfect opportunity to take a pass. However, this is an important topic about which there is much misinformation, so we feel obliged to weigh in ourselves.

Passive and active investing defined. While particular definitions may vary, we think of *passive investing* as the ownership of a financial market, or representative portion thereof, without assessing the value or relative merits of the individual securities involved. The purchase of an investable stock market index is an example of passive investing. The Vanguard Total Stock Market ETF (VTI) owns 3,613 US stocks and in effect represents the entire capitalization of the US stock market. The annual fee as a percentage of assets is 0.05% or $50 per year on a $100,000 investment. The foremost virtue of passive investing is low cost. In terms of bang for the buck, it's practically free.

Active investing refers to the selection of a group of securities to provide superior returns compared to an overall financial market. Whereas passive investing is almost free, active investing can be expensive. A traditional active stock management fee is 1% per year or $1,000 on a $100,000 investment, and many hedge funds charge management fees of 2% plus 20% of

[1] Source: WSJ Series: "The Passivists— A series exploring the rise of passive investing." October 17-24, 2016.

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profits. Note that "active" does not necessarily mean more activity. While most active managers do lots of buying and selling, ACR has lower portfolio turnover than many passive funds (turnover is typically measured as the percentage of securities sold or purchased each year). Our EQR stock strategy's average historical turnover has been 14.6% per year since 2000, and in 2015 was 13.4%. The mean turnover was 20.1% for the top 340 passively managed index funds in 2015 (as calculated by ACR using data supplied by Bloomberg LP).

Capitalism would not work without active investing, and passive investing would not work without active investing. A functioning capitalist system requires the allocation of capital to enterprises which are capable of providing better goods and services at lower costs. Active investing is the method by which capital is allocated to such worthy enterprises. Without active investing, the economy would come to a grinding halt. Additionally, passive investors rely on active investors to keep security prices near their intrinsic values. Passive investors in effect ride the coat tails of active investors. Put another way, capitalism and passive investing could not exist without skilled active investors who in effect "make markets" in undervalued (and overvalued) securities. Passive fund managers who say active management will go the way of the dinosaur are dead wrong; however, passive fund managers are right to criticize active fund manager performance.

Active manager performance in general has been abysmal. The question is, why? We believe there are three reasons: (i) most active manager fees are too high relative to the risk adjusted returns generated, (ii) active portfolio construction, due to longstanding industry norms, is fundamentally flawed, and (iii) most active managers are high turnover price *speculators* rather than long term *investors*. The high fee problem is self-evident. The solution is simple: active managers should charge a lower fee which is in proper proportion to the excess return they generate. Active manager construction of fundamentally flawed portfolios and short term speculation are more subtle problems.

Fundamentally flawed active portfolios. Based on academic theories which gained prominence in the 60s and 70s, the investment industry developed the notion that risk should be defined as market volatility and variance relative to a market benchmark or index. Volatility can in our opinion be a rough ex-post proxy for risk, but is not risk itself. Risk is the unanticipated decline in the cash flows of an enterprise, or the inability of a debtor to pay you back. More to our point, minimizing variance relative to the market radically transforms the portfolio construction process. The fund manager's selection criteria is determined more by volatility characteristics than fundamental value and risk.

The end result is closet indexing. Closet indexing refers to portfolios which are managed to limit portfolio market value variance relative to a market benchmark. The fatal flaw is it's really tough to beat the market net of fees when you are the market. Additionally, the misplaced application of financial theory resulted in the "style box" asset allocation model, the categorization of the stock market into tiny submarkets each with its own benchmark. Style boxes exacerbated the problem of closet indexing further by dictating portfolio construction based on arbitrary and overly narrow market categories rather than basing portfolio construction purely on fundamental value and risk.

The following table shows the percentage of active mutual funds that survived and generated a return in excess of their category's average passive fund return over the period, according to the Morningstar's traditional style box framework. The last two columns illustrate how fees make matters even worse.

Exhibit 1 Active Funds' Success Rate by Category (%)

Category	1-Year	3-Year	5-Year	10-Year	10-Year (Lowest Cost)	10-Year (Highest Cost)
U.S. Large Blend	27.7	27.8	16.3	16.6	19.7	10.7
U.S. Large Value	36.5	34.6	19.6	33.7	48.4	22.2
U.S. Large Growth	49.3	18.9	11.9	12.2	20.4	8.9
U.S. Mid-Blend	42.1	34.6	27.7	11.0	10.8	5.6
U.S. Mid-Value	53.5	28.6	22.7	42.3	53.6	18.5
U.S. Mid-Growth	41.4	32.6	26.1	32.5	43.8	26.4
U.S. Small Blend	50.2	34.9	32.8	24.7	36.4	16.3
U.S. Small Value	66.7	54.1	38.0	38.3	43.3	23.3
U.S. Small Growth	22.3	28.6	20.6	23.2	33.3	10.8
Foreign Large Blend	63.6	47.6	44.7	33.9	50.0	23.8
Diversified Emerging Markets	63.0	55.9	61.2	42.3	61.1	23.5
Intermediate-Term Bond	28.5	45.4	57.3	39.7	50.7	30.7

Source: Morningstar. Data and calcuations as of 12/31/15.

Source: Ben Johnson, CFA; "Morningstar's Active/Passive Barometer — A new yardstick for an old debate." Morningstar, April 2016. Page 2.

The other dirty secret about closet indexing is that it was really a self-preservation strategy: in the past a fund manager was rarely fired for underperforming the market by just a little. Things have changed. The strategy of keeping close to the market worked well in the bull markets of the 80s and 90s, when returns were so high that few cared about higher fees and a little underperformance relative to the market. The beginning of the millennium and the 2008 financial crisis marked a new era. Performance and fees matter again.

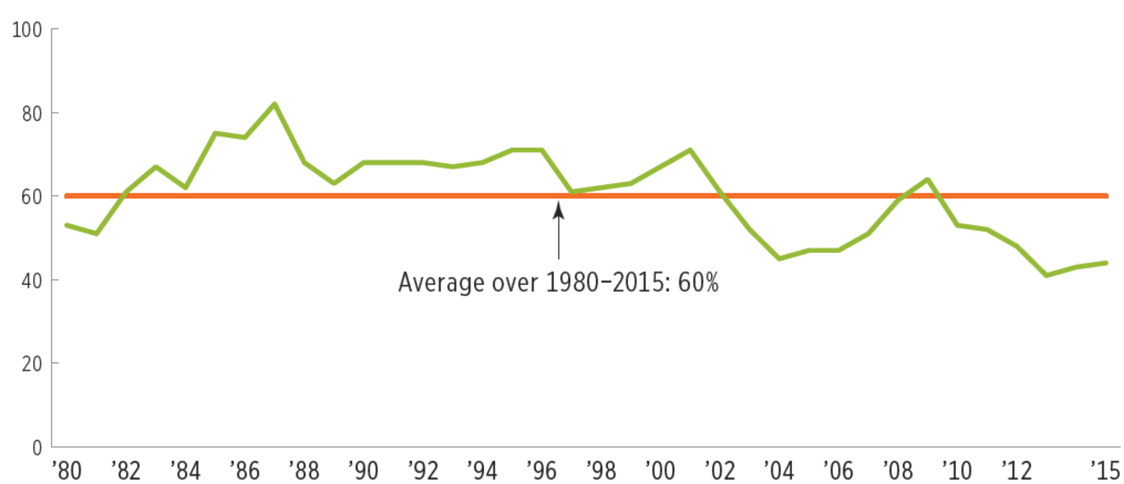
Speculation and short-termism. The final nail in the coffin of unsatisfactory active fund manager performance has been short term speculation. Stock *investment* is the purchase of a business at a price which assures a satisfactory return based on the future net cash flows of the business. Investment is a long term commitment by nature. Stock *speculation* is the anticipation of an increase (or decrease) in stock price by attempting to forecast the price itself. Speculation is short term by nature. Unfortunately the average equity mutual fund has the holding period of a speculator.

The following chart shows the turnover rate experienced by equity fund investors.

FIGURE 2.6

Turnover Rate Experienced by Equity Fund Investors

1980–2015



Note: The turnover rate is an asset-weighted average. Data exclude mutual funds available as investment choices in variable annuities.

Sources: Investment Company Institute, Center for Research in Security Prices, and Strategic Insight Simfund

Source: Investment Company Institute. *2016 Investment Company Fact Book*. WWW.ICIFACTBOOK.ORG

Active manager recipe for success which very few managers follow. Active manager success requires an exclusive focus on fundamental value and risk (our discussion applies to fundamental investors rather than price based investment strategies such as high frequency trading). How this focus works in practice is in our opinion widely misunderstood. A framework which explains the nature of active investing will be helpful. To begin, the market is mostly "efficient": the price of most stocks represents a best guess of company value most of the time. Let us say the stock market consists of 5,000 investable stocks, and at any one point in time, there are 250 humanly discernable undervalued stocks. The exact number is of course unknown. The point is the number of undervalued securities is small in proportion to the overall market.

The second element of the framework is that one skilled investor no matter how talented will only have enough insights to identify a few undervalued securities at a time. One of the most brilliant economic thinkers of all time, John Maynard Keynes, who was also a highly successful value investor, made this strikingly humble statement: "It is a mistake to think that one limits one's risk by spreading too much between enterprises about which one knows little and has no reason for special confidence… One's knowledge and experience are definitely limited and there are seldom more than two or three enterprises at any given time in which I personally feel myself entitled to put full confidence."

A successful active portfolio consists of rare insights into a relatively small, idiosyncratic collection of undervalued securities, and the discipline to hold cash until they are identified. Many active manager portfolios underperform largely because they are not that.

A paper by Martijn Cemers and Ankur Pareek in the November 2016 issue of the *Journal for Financial Economics* entitled "Patient Capital Outperformance: The Investment Skill of High Active Managers who Trade Infrequently" shows the results of the few active managers who avoid closet indexing by being selective and investing long term. The paper's conclusions:

> *Among high Active Share portfolios – whose holdings differ substantially from their benchmark – only those with patient investment strategies (with holding durations of over two years) on average outperform, over 2% per year. Funds trading frequently generally underperform, including those with high Active Share.*

The following chart of empirical work from the paper shows cumulative institutional portfolio performance categorized by shorter holding periods (low duration) and longer holding periods (long duration), combined with a measure of the portfolios' degrees of differentiation from their respective benchmarks (with a high Active Share implying little overlap with a portfolio's benchmark).

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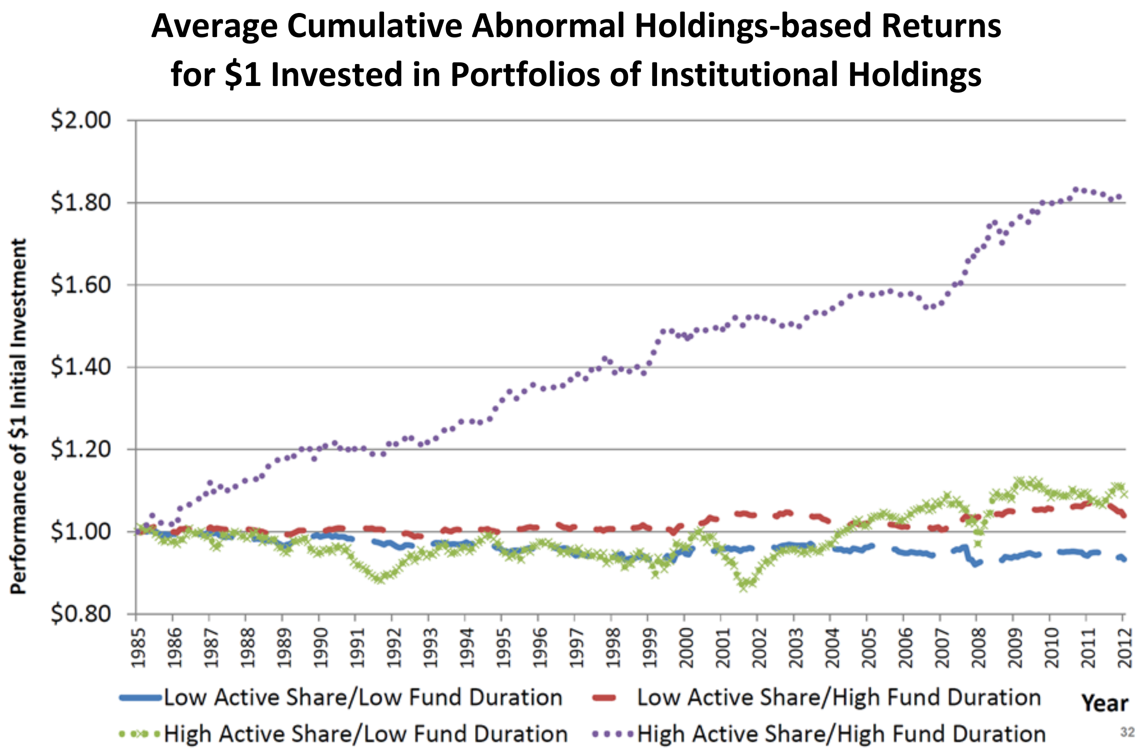

Source: Cremers, Martijn, and Ankur Pareek. "Patient capital outperformance: The investment skill of high active share managers who trade infrequently." ***Journal of Financial Economics (JFE)*****, November 2016. Chart from Presentation of journal paper "Patient capital outperformance" by Martijn Cremers to International Centre for Pension Management, 2015.**

ACR considers our own historical results a case in point (ACR investment strategy returns can be found at www.acr-invest.com in the performance section). EQR, our largest and longest running strategy, has performed better than the S&P 500 over its 16½ year history, including the cash we held, after fees.

We also believe that EQR beat the market while taking less risk. Unfortunately measuring risk is impossible. While risk is not volatility, ex post volatility can be a valid data point for assessing risk in liquid markets. The following chart shows EQR's ranking compared to all US stock fund managers based on returns and volatility (the combination of higher returns and lower volatility generates a higher Sharpe Ratio).

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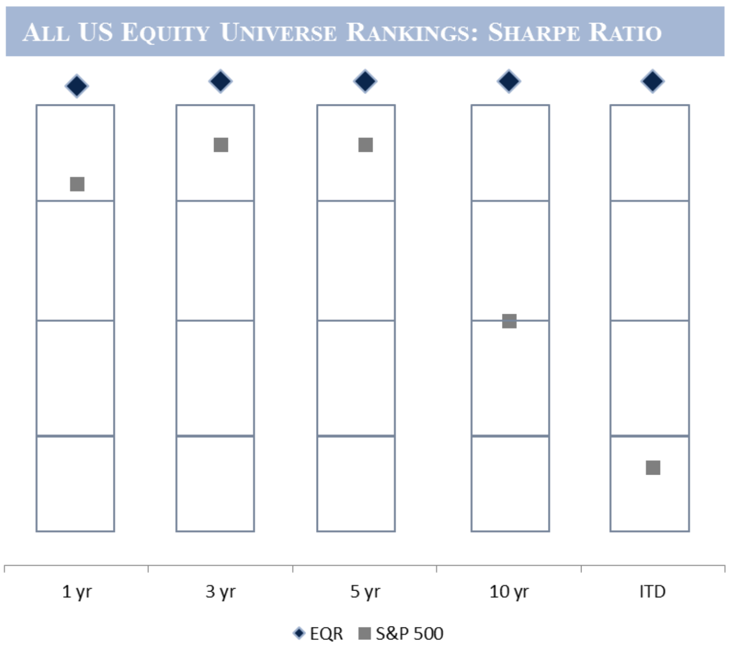
EQR Ranking Compared to All US Equity Fund Managers



	1 yr		3 yr		5 yr		10 yr		ITD	
	Sharpe Ratio	%tile Rank	Sharpe Ratio	%tile Rank	Sharpe Ratio	%tile Rank	Sharpe Ratio	%tile Rank	Sharpe Ratio	%tile Rank
EQR	1.80	**2**	1.52	**1**	1.73	**1**	.76	**1**	.84	**1**
S&P 500	1.22	**22**	1.02	**14**	1.47	**14**	.42	**50**	.18	**80**
Total Products		3346		3191		2990		2384		1322

As of 9/30/16. Source: eVestment calculations

The bar chart ranks performance in quartiles from the top 5% to bottom 95% of equity products. EQR is off the chart because it is has been above the top 5% of all US equity products in every time period. The Sharpe Ratio is computed by subtracting the return of the risk-free index (typically 91-day T-bill) from the return of the manager to determine the risk-adjusted excess return. This excess return is then divided by the standard deviation of the manager. A manager taking on risk, as opposed to investing in cash, is expected to generate higher returns, and the Sharpe Ratio measures how well the manager generated returns with that risk. The higher the Sharpe Ratio, the greater efficiency produced by the manager.

Market structure as it should be. An equilibrium market structure consists of just enough active capital to maintain efficient prices with all else passive. Today we believe closet indexers represent a very large, inefficient pool of near passive capital, and active management fees in general are too high. The good news is that the market is correcting the problem: closet indexers are being displaced by passive funds, and underperforming high cost hedge funds are being displaced by more effective active and passive solutions. These are positive developments in the financial markets we hope will continue. In the end we believe market structure will contain fewer closet indexers, fewer skilled managers charging too much, and very few unskilled managers – and a lot more truly passive capital.

Nick Tompras
October 2016

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Past performance is not indicative of future returns. Data in this Commentary represents past performance and investors should understand that investment returns and principal values fluctuate, so that when you redeem your investment it may be worth more or less than its original cost. Performance has been calculated on a total return basis, which combines principal and dividend income changes for the periods shown. Principal changes are based on the difference between the beginning and closing values for the period and assume reinvestment of all dividends and distributions paid. Adviser's fees are disclosed in the Firm Disclosure Brochure, ADV Part 2A. All applicable expenses such as advisory fees have been included in calculating performance. It should not be assumed that recommendations made in the future will be profitable or will equal the performance of the examples discussed. You should consider any strategy's investment objectives, risks, and charges and expenses carefully before you invest. The volatility of the Indexes portrayed may be materially different than the composite presented. Investors cannot invest directly in an index.

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The Equity Quality Return (EQR) Advised / SMA Composite consists of equity portfolios managed for non-wrap fee and wrap fee clients according to the Firm's published investment policy. The composite investment policy includes the objective of providing satisfactory absolute and relative results in the long run, and to preserve capital from permanent loss during periods of economic decline. EQR invests only in publicly traded marketable common stocks. Please refer to our full composite performance presentation with disclosures published under the performance section of our web site at www.acr-invest.com.

The Index Benchmark is the S&P 500 Total Return (TR) Index. The S&P 500 TR Index best represents the quality of the composite holdings. The S&P 500 TR Index is a broad-based stock index including reinvestment of dividends and is widely regarded as an indication of domestic stock market performance. The S&P 500 TR index is unmanaged and cannot be purchased by investors.

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