MAIRS & POWER

FOCUSED INVESTING FOR THE LONG-TERM

White Paper - April 2016

Recently we released the first Mairs & Power white paper titled "Why Minnesota Works for Investors," in which we described the reasons why focusing an investment portfolio on Minnesota and Upper Midwest companies has proven to be a successful formula.Now we are pleased to present our second white paper, "Focused Investing for the Long-Term." Here we explore why a low-turnover, buy-and-hold strategy works for investors and in particular how, in the current, short-term focused market, such a strategy can deliver an advantage to long-term oriented investors. We create these white papers, not only to articulate the thinking that informs and guides our own investment process here at Mairs & Power, but also to help our clients and friends better understand the foundations of our success and our focus into the future.

We welcome your comments and questions.

Focused Investing for the Long-Term

"The stock market is a highly efficient mechanism for the transfer of wealth from the impatient to the patient." - Warren Buffett

There is no shortage of ideas about how to achieve investment success. The financial press, bloggers and books provide a continuing stream of opinions, theories and strategies, from the simple to the arcane. One often cited piece of street lore is to take advantage of the "January effect," buying stocks at the start of the year when markets typically rise, while the flip side is captured in the expression "sell in May and go away." Another widespread practice, known as market timing, challenges investors to anticipate market swings as they rotate into defensive stocks when they expect the economy to slow, then move into growth stocks as they anticipate the start of a recovery. Still others chart technical patterns to reveal buy and sell signals. And the financial media, newsletters, commentators and bloggers fuel trading in stocks rumored to be takeover targets. Some investors are able to profit for a period of time following these and other trading strategies. However, as famed investor Warren Buffet indicated, investing to build wealth over time requires patience, discipline and consistency.[1]

Researchers studying the markets over a long period of time have revealed a simple truth. The long-term patient investor consistently outperforms the impatient investor.[2] Investment strategist and author Michael Mauboussin reviewed a select group of actively managed mutual funds that consistently beat the S&P 500 Index over a ten year period. He found that among their common attributes, the first was low turnover in portfolio holdings. He also cited a 1997 Morningstar Research study that found the lowest turnover mutual funds (turnover less than 20% per year) consistently outperformed higher turnover funds for 1-, 3-, 5- and 10- year periods. Mauboussin updated the research more than a decade later and found essentially the same results.[3]

Portfolio Turnover & Long-Term Performance

Turnover %	1-yr Annual Return %	3-yr Annual Return %	5-yr Annual Return %	10-yr Annual Return %
<20%	27.0	23.9	17.2	12.9
20%-50%	23.1	21.9	16.6	12.5
50%-100%	21.8	21.8	17.0	12.6
>100%	17.6	19.8	15.0	11.3

Source: Mauboussin, More Than You Know, Columbia University Press, New York, 2013. p. 63 from 1. Lowenstein, Alice "The Low Turnover Advantage" Morningstar Research, 1997. Portfolio as defined by Morningstar U.S. Equity Funds.

Past performance does not guarantee future results.

The remainder of this paper examines the reasons why long-term, low turnover investing outperforms other investing styles.

A Market Obsessed with the Short-Term

Wall St. Journal columnist Jason Zweig, among the many observers noting that the rate of buying and selling stocks has been rising for several decades, recently commented that "investors appear to be getting twitchier." He reported that as recently as the year 2000, the average holding period for U.S. stocks was around two years. Today the average U.S. equity mutual fund reports more than 100% annual turnover, in effect selling the equivalent of every stock in the entire portfolio every 12 months. [4]

Over the last several years, we have seen profound changes in the way markets operate, with significant implications for investors. The introduction of new investment vehicles such as Exchange Traded Funds (ETFs), and lightning-fast trading technologies have created an investment landscape where rapid buying and selling of entire baskets of stocks, wild price swings across whole markets and declining holding periods for individual equities now seem the norm. Zweig also noted that in 2014 the 20 largest ETFs traded at an average turnover rate of 1,244%, which translates into an average holding period of 29 days.

Holding stocks for less than a month can hardly be considered investing focused on earnings, dividends and balance sheets, since companies only report their progress via financial results once a quarter.

One of the most significant and visible changes over the past several years has been the rise of computer assisted high-frequency trading (HFT) where holding periods are measured in fractions of a second. This type of trading now drives the majority of trading volume in the global equity markets. In 2010, HFT was estimated to have accounted for 56% of the entire equity trading volume in the U.S., up from 21% in 2005. Today, HFT is estimated to account for as much as three-quarters of trading volume for the most highly liquid stocks.[5]

While the emergence of high-frequency trading has increased the market's short-term focus, it did not create that myopia. Many investors attempt to chase individual stocks, driven by headlines of quarterly earnings surprises, product announcements, merger and acquisition (M&A) activity or other business developments. In the current media-saturated global market, T.V. talking heads increase the volume of noise as they incessantly repeat rumors and fast-breaking news while the internet delivers minute-by-minute real time updates of portfolio value to distracted, headline-chasing investors. Other investors shift assets from one sector to another as financial and economic news such as interest rates, foreign exchange rates, Gross Domestic Product (GDP) growth, unemployment, consumer confidence and inflation affect the consensus outlook for different industries. In either approach, investors seek to profit essentially by trying to jump in front of an expected wave of buying or selling following the near instantaneous spread of financial news and market data with resulting high turnover of stocks. Economist John Maynard Keynes called this phenomena "forecasting the psychology of the market."[6] Compounding both headline chasing and market timing approaches, researchers have long observed "herding behavior" where large numbers of investors will mimic the trading activity of one another, magnifying the short-term impacts of trend chasing.[7]

Growth of 'Impatient Capital' Creates Opportunities for Long-Term Investing

To some, the idea of investing in the stock of a good company as a way to participate in the long-term success of the business may seem antiquated and out of place amidst this rapid fire buying and selling. While many observers lament the market's obsession with short-term profits, immediate gratification and 'now' results, as investors we naturally ask ourselves: "Does this lopsided focus create an opportunity for long-term investors?" The answer is an emphatic 'Yes!' on several counts.

The data suggests that rapid trading and high turnover adds risks and costs without yielding better investment results. A study by Standard & Poor's looking at every significant pullback in the S&P 500 Index since 1945 concluded that investors were better off riding out the market dips rather than trying to trade around them. The 59 pullbacks between 5% and 10% took one month on average for the decline to unfold and two months to recover to pre-decline levels. Of 19 market corrections between 10% and 20%, the decline occurred over five months on average and recovery occurred in four months. The twelve significant bear market declines (20% or more) took 14 months to reach bottom and 25 months, on average, to recover. So investors hoping to limit losses by selling into a decline during the more frequent shallow market pullbacks are likely to miss much of the upside recovery. They also risk having to buy back into the market at a higher level and will absorb increased transaction costs incurred in their in-and-out trading activity. While some studies do show higher trading activity can result in returns equivalent to lower turnover funds, those studies measure returns over periods from a month to a year, hardly a long-term investment horizon.[8]

Many observers have pointed out that trying to time the market means an investor has to be right

twice, both getting in and getting out of positions, but only has to be wrong once to turn impatience into a loss. Market timers also incur the added risk of being caught on the wrong side of unforeseen macro-economic shifts or random short-term events such as natural disasters or unexpected geo-political developments.

By contrast, the patient investor believes the market is the place for price discovery based on economic fundamentals. This investor builds a portfolio of companies expected to outperform their peers over the market cycle most relevant to the bottom-up fundamental investor: the economic business cycle fluctuating between periods of expansion and contraction. Such a portfolio structured to successfully ride through market fluctuations avoids the risks inherent in market timing strategies. The long-term investor does not ignore shorter-term market moves, but instead uses periodic shifts between unsupported optimism and unjustified pessimism to inform his or her judgements on valuation as part of a disciplined investment process. These price swings provide the opportunity to trim positions that may have become overvalued while adding to other positions that present compelling investment value. Looking through day-to-day "noise," this investor only has to make one right decision, whether to buy an individual security, and is otherwise free to concentrate on what matters: closely monitoring the progress of portfolio companies against an original investment thesis.[9]

The long-term, low turnover investor gains other advantages as well. One obvious point is that staying invested keeps your money working uninterrupted while shifting in and out of the market incurs opportunity costs. Chasing short-term profits sacrifices what Albert Einstein called "the eighth wonder of the world," the wealth-building power of compounding. In addition, moving in and out of the market actually increases one's risk of losing purchasing power to inflation over the long-term.[10]

Another seldom cited advantage is the lessened competition that fundamental bottom-up, long-term investors face with the market's increasing focus on short-term trading and rapid portfolio turnover. By way of illustration, a 2004 study found that 56% of investment advisers, a category that includes mutual funds, were "quasi-indexers" taking small positions across a large number of stocks irrespective of company fundamentals, and holding them for a relatively long time. Another 37% were "transient investors" taking relatively small positions in a large number of stocks and holding them for the shortest periods of time. The study's author described this group as having "short investment horizons and likely… little incentive to understand drivers of long-run value." The smallest group, "dedicated investors," made up only 7% of investment advisers, taking concentrated, large stakes in a relatively small number of companies, and holding them for the longest period of time. In the ten-plus years since this study was published, the emphasis on transient, short-term holdings and quasi-indexing has undoubtedly increased. As a result, the long-term investor searching out excellent companies at fair prices has little competition from the vast majority of today's market participants.[11]

Employee Ownership Matters

Another factor that has driven many institutional investors toward higher turnover and a shorter-term focus can be found within their own corporate structures. Over the last several decades, investment management firms large and small have transformed themselves from privately held partnerships into publicly traded corporations or subsidiaries of large conglomerates. According to the most recent data from Pensions and Investments Magazine, 36 of the 50 largest institutional investment firms globally are now public companies. This handful of public companies hold more than half the entire assets under management of all money managers. This is a shift of assets from patient private hands, where managers are also owners of the business with the independence to pursue long-term buy-and-hold strategies, toward less patient public company hands. Industry legend and Vanguard Funds founder John Bogle commenting on this

trend described the mutual fund industry as having transitioned "from profession to business" with many fund companies' focus shifting from trusteeship to marketing and asset accumulation.[12] As the ownership structure of investment management has shifted, any investment professional may have witnessed intense pressure at some firms to produce short-term results.

Beyond the ownership structure of the investment firm, the consequences on investment performance extend down to the individual fund level. A recent study by American Funds found that among all actively managed mutual funds, those with high manager ownership of the funds and low fees consistently outperform their peers and the market index. The lower the turnover and the longer the time period that performance is measured, the more this performance advantage manifests itself. For example, on 1-year rolling periods over each month of the past 20-year period, funds with low turnover and high manager ownership averaged 10.1% annual returns, beating the index 55% of the time. The S&P 500 averaged 9.8% and the average for all active funds was 8.7% over the same 20-year period ending in 2015.[13]

Cost Matters

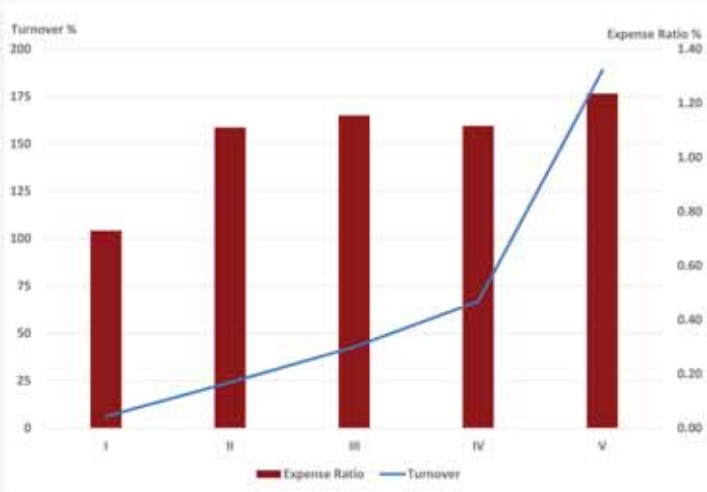
"Whether markets are efficient or inefficient, investors as a group must fall short of the market return by the amount of the costs they incur."

-John Bogle

While an obvious statement, every investor should be concerned about costs. Numerous academic studies and industry practioners have weighed in on the performance drag due to fund expenses. Vanguard's Bogle estimated that the "costs of our system of financial intermediation—the sum total of all those advisory fees, marketing expenditures, sales loads, brokerage commissions, transaction costs, custody and legal fees, and securities processing expenses totaled nearly 3% of the value of all equity assets under management."[14]

And here the long-term, low-turnover investor also benefits because a low-turnover investment approach is inherently a lower cost approach. Ranking funds by turnover and comparing the average cost in each quintile reveals a strong relationship between turnover and cost, particularly at the lowest and highest turnover quintiles.

Fund Turnover vs. Expense Ratio



Source: Morningstar Research, December 12/31/2014

Past performance does not guarantee future results.

The relationship between turnover and cost makes intuitive sense since a fund that engages in high turnover trading strategies has to build a massive staff focused on uncovering short-term opportunities or invest in high speed networks, proprietary software and high performance computers to compete in the hyper-competitive market of high frequency trading. The job of the long-term fund manager is less focused on those labor and capital intensive investments and more focused on understanding portfolio company performance over the long-term. Stating the obvious, less overhead means lower cost which translates into lower management fees charged to investors.

Fund Turnover vs. Expense Ratio

Quintile	Turnover	Expense Ratio
I	6.21%	0.73%
II	24.11%	1.11%
III	42.84%	1.15%
IV	66.88%	1.12%
V	188.62%	1.24%

Source: Morningstar Reserch, December 31, 2014

Past performance does not guarantee future results.

But reported costs are only part of the picture. "Invisible costs" that are particularly sensitive to turnover, such as trading costs and taxes, can further detract from an investor's total return. In other words, the more a fund trades in and out of stocks, the higher its overall trading costs in the form of brokerage fees and bid/ask spreads and the higher its potential tax exposure. One study found "a strong negative relation between aggregate trading cost and fund return performance," where the funds in the highest quintile for trading costs underperformed those in the lowest quintile by an average of 1.78% points per year.[15]

Cost conscious investors are rightly concerned about tax efficiency as well. Realized net capital gains resulting from the sale of a fund's portfolio assets will result in a tax expense to the fund in a given year. Gains on the sale of investments owned for one year or less are taxed as ordinary income which generally is at a higher rate than long-term capital gains tax rates. So the higher a fund's turnover rate, the more likely it is to incur higher tax expenses on those gains. Conversely, portfolios with the lowest turnover tend to be among the most tax efficient.[16]

Focused Investing for the Long-Term

Nearly seven decades ago in his book "The Intelligent Investor," Benjamin Graham described the difference between true investing and speculation when he wrote: "everyone who buys a so-called 'hot' common-stock issue, or makes a purchase in any way similar thereto, is either speculating or gambling." Another giant in the investment industry, Jack Treynor, whose early work led to the Capital Asset Pricing Model underlying modern finance today, succinctly described the relationship between the speed at which information spreads and its value. Investment ideas based on information "whose implications are straight forward and obvious, take relatively little education or special expertise to evaluate, and consequently travel quickly (e.g., 'hot stocks')." Those ideas are not as valuable as investment ideas generated by information and developments "that require reflection, judgment, special expertise… for their evaluation, and which consequently travel slowly."[17]

Both these giants in the investment industry succinctly described the difference between seeking investment insight and chasing news headlines. The rapid turnover, short-term obsessed trading environment we see around us increases investors' risk, costs and tax expenses all to the detriment of long-term performance, wealth building and wealth preservation. Building a portfolio of outstanding companies that will reward investors and build wealth over the long-term requires a disciplined investment process, consistently applied and maintained over time.

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Disclosures

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The S&P 500 Total Return (TR) Index is an unmanaged index of 500 common stocks that is generally considered representative of the U.S. stock market. It tracks both the capital gains of a group of stocks over time, and assumes that any cash distributions, such as dividends, are reinvested back into the index. It is not possible to invest directly in an index.

Market timing is the strategy of making buy or sell decisions of financial assets (often stocks) by attempting to predict future market price movements.

Morningstar Large Blend Category , as defined by Morningstar are stocks in the top 70% of the capitalization of the U.S. equity market are defined as large cap. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Morningstar Moderate Allocation Category, as defined by Morningstar are moderate-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash.

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