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BUILDING BETTER INSIGHTS®

LENGTHENING THE INVESTMENT TIME HORIZON

IN BRIEF

- Investors are increasingly short term in their orientation, even while demographic trends point to longer life expectancy and the need for larger pools of retirement funds.
- Various reasons have been posited for this short-term view; they include the role of incentives, media and financial reporting and numerous decision-making biases identified by behavioral researchers.
- An arbitrage opportunity exists for managers with a longer investment horizon: There are more opportunities for differentiated performance when one holds securities for longer time periods.

The spectacle of modern investment markets has sometimes moved me towards the conclusion that to make the purchase of an investment permanent and indissoluble, like marriage, except by reason of death or other grave cause, might be a useful remedy for our contemporary evils. For this would force the investor to direct his mind to the long-term prospects and to those only.

– John Maynard Keynes

One wonders what Keynes would make of the investment environment today given the short-term view that characterizes so much of both individual and institutional investor behavior. We now live in a world in which people are living longer and in need of retirement funds with a longer shelf-life, and yet, paradoxically, investors are typically more short-term in their focus than ever.

A review of the data clearly reveals the short-term nature of much investment behavior today. Stocks are being held for record-short periods of time, and professional investment managers are generally also taking a short-term view in their management of assets. Wall Street's research coverage is focused on near-term corporate earnings rather than on sustainable earnings growth over the medium term. Moreover, markets have a tendency to overreact to short-term events, particularly missed quarterly earnings estimates, and this fosters the quarterly earnings frenzy.

The financial media is paid to manufacture market noise and has become an over-revved engine in constant need of fuel. In addition, the structure of compensation incentives in the investment management industry further encourages the short-term focus; a surprisingly large number of investment professionals have less than half of their compensation based on longer-term performance measures.

As we will discuss in this paper, we hold the view that there is a time horizon arbitrage opportunity in the marketplace, which managers with a disciplined investment process can capitalize on. Company fundamentals do not change nearly as much as equity market prices, and herein lies the opportunity for investors with a longer-term view.

Numerous market players concur with this view. For instance, CalPERS (California Public Employees' Retirement System pension fund) recently published its 10 investment beliefs; among them is the belief that "a long term investment horizon is a responsibility and an advantage" that leads them to "favor investment strategies that create long-term, sustainable value."

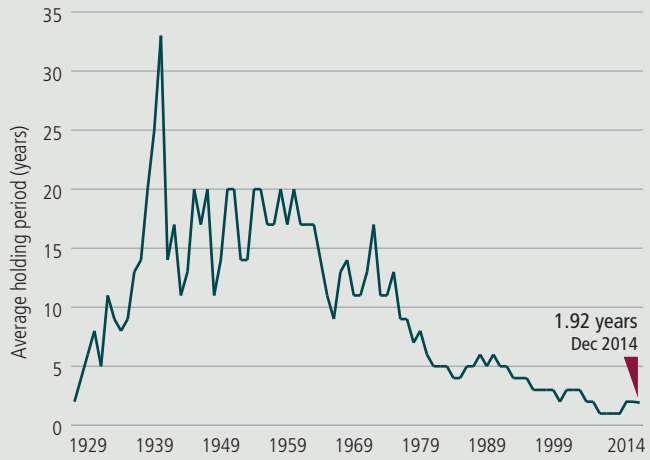
The shrinking time horizon in the market

Stocks are being held for shorter periods than at any time since the 1920s, as the New York Stock Exchange (NYSE) average holding period data shown in Exhibit 1 reveals. On average, a stock is being held for 1.92 years, less than eight quarters. This reflects investment transactions driven by both individuals and institutional investors. Until the 1970s, the investment landscape was largely dominated by wealthy individuals and families; this has since changed markedly, with professional investors now accounting for the largest share of investment activity, though it should be noted that these professionals manage significant mutual fund asset pools that are driven by retail investors.

One might expect that professional investment managers would have a more long-term perspective; however, the data suggests that investment managers take an equally short-term view in their investment approach. Exhibit 2 depicts the average holding periods of investment managers of stocks in equity mutual funds. On average, investment managers turn over their companies every 1.45 years. This analysis uses the inversion of turnover as a simplified alternative to holding periods, which could differ based on the specific securities purchased or sold.

Exhibit 1: Investors are holding stocks for shorter time periods

NYSE average holding periods, 1929 – 2014



Source: Ned Davis Research, December 2014.

A number of reasons have been posited for the short-term investor behavior observed. These include incentives, media and financial reporting and decision-making biases.

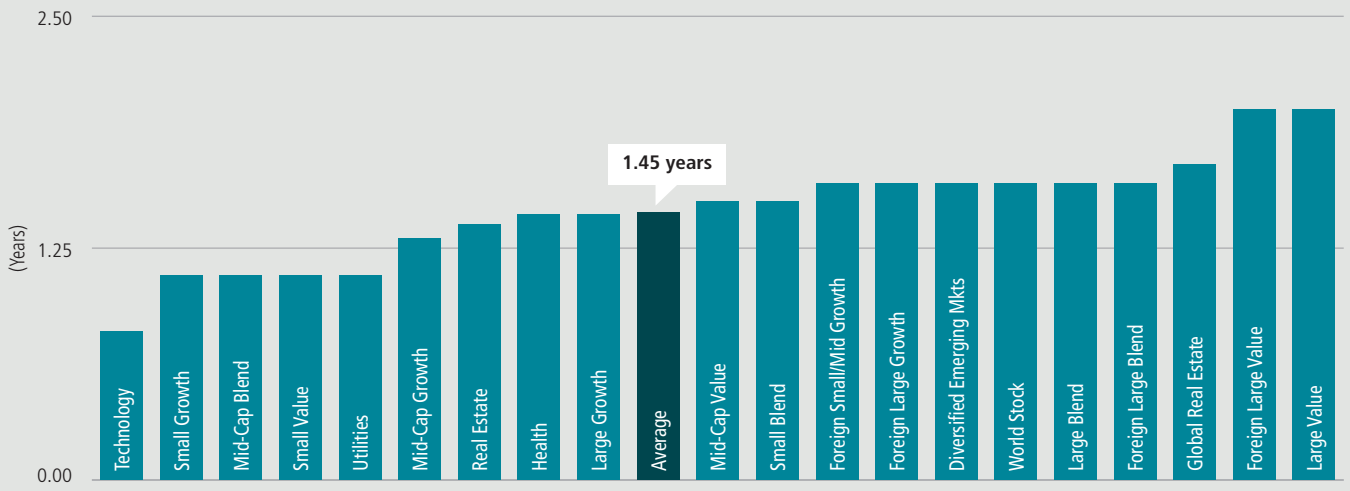
Incentives

It is a truism that individuals respond to incentives. In recent decades, changes in incentives have included the significant revamping of executive compensation, firms increasingly outsourcing investment decisions to external advisors such as consultants as well as outsourcing the CIO function (O-CIO), and many investment firms changing their ownership structure from being private partnerships to being subsidiaries within large financial conglomerates.

While many asset owners have longer time horizons, the investment management industry remains focused on compensation incentives geared to the short term. Exhibit 3 below shows the results of a compensation study of more than 1,100 investment management professionals conducted by the CFA Institute. As the exhibit reveals, a significant proportion of

Exhibit 2: Reasons for short-term orientation

Stock holding periods by investment managers for 20 largest Morningstar equity categories

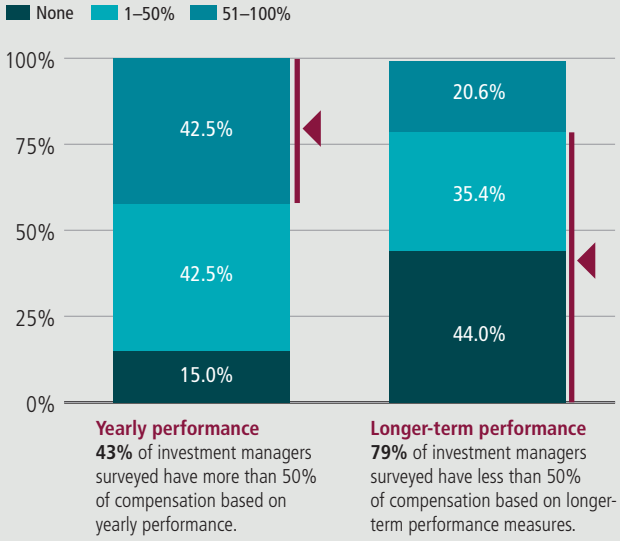


Source: MFS, Morningstar. Data reflects largest 20 US open-end mutual fund categories as of 31 December 2014. Holding periods were calculated by taking 1 minus the 2014 turnover ratio for each category.

investment management professionals (43%) receive more than half of their compensation based on their annual performance; similarly, nearly 80% of investment management professionals surveyed have less than half of their compensation based on longer-term performance measures.

Exhibit 3: Short-term incentives for investment managers

What percentage of your compensation is related to the following?



Source: CFA Institute Short-Termism Survey, May 2008 (over 1,100 portfolio managers and analysts surveyed).

Consider the example of a portfolio manager compensated based on annual investment performance relative to a benchmark. In this case, compensation in the current year is completely independent of compensation in the prior or subsequent years. How long is the portfolio manager's time horizon at the end of October, when investment performance is lagging the benchmark, one might ask? Unsurprisingly, it is eight weeks.

The incentive structure in place encourages the manager to take excessive risk in order to optimize his or her compensation in the current period. The risks taken may not be appropriate for the portfolio and are also likely not reflective of the fact that most clients have a time horizon that is longer than eight weeks. Furthermore, investment performance in this eight-week time frame is more likely driven by market noise than relevant investment signals.

Media and financial reporting

The media, analysts and various pundits churn out a vast amount of information and commentary on the markets. While investors need information from various sources to make decisions, it is important to make a distinction between general market noise and relevant investment signals. Nassim Taleb highlighted the way in which the media is paid to generate noise when he said, "People do not realize that the media is paid to get your attention. For a journalist, silence

The following case studies illustrate how an investor can arrive at a different valuation for a security based on taking a longer-term view.

CASE STUDY: GLOBAL E-COMMERCE RETAILER

The company is a leading global provider in the retail e-commerce marketplace. It has a history of incurring high capital costs to build fulfillment infrastructure, with the concomitant effect of depressed earnings. The current market price/earnings ratio reflects these relatively lower earnings estimates. One can make the argument that the market is not pricing in the following factors, which would point to higher revenue projections in the 2016 time frame:

- The industry will double in size. E-commerce currently accounts for 10% of total commerce; this is expected to rise to 20% or more in the coming years.
- The company's share of this growing pie is expected to rise on the basis of the scale that has been built out.
- Capital expenditures (capex) are expected to decline quite markedly as the business matures and is able to rely on the infrastructure build-out that has taken place.
- Strong future revenue growth combined with declining capex should lead to a significant improvement in margins and profits.

When these longer-term factors are incorporated into the earnings models, one arrives at a much more reasonable valuation that represents an investment arbitrage opportunity.

CASE STUDY: GLOBAL INTEGRATED RESORT DEVELOPER

The company is a leading player in the global integrated resort industry. The stock has been a strong performer, resulting in a number of sell-side analyst downgrades, with many analysts citing valuation as the reason for the sell call. Others argue that the Street is not looking far enough ahead and giving the company credit for new resorts being developed in Asia, in particular in Cotai, a Peninsula close to Macau.

The Cotai development has the potential to double the company's earnings on the back of substantial revenue growth, with capex declining after the initial build-out, resulting in operating leverage and substantial profit growth. The near-term focus of investors in this case — in effect not appropriately weighting the probability of longer-term earnings growth — has provided other investors with the opportunity to purchase a free or low-cost call option on what may be high earnings growth potential.

This is another example of the near-term focus of investors not fully accounting for the longer-term earnings potential of a company.

rarely surpasses any word."[1] In short, the media thrives on market noise, and in their world, the more chatter the better. It is the professionals' responsibility to distinguish the signals from the noise.

The emphasis on quarterly earnings is another example of the short-term focus of the investment community. While there is an abundance of short-term earnings estimates, there is a dearth of longer-term estimates, *i.e.*, those that are three-plus years out. Exhibit 4 below shows the disparity between the 2016 and 2018 earnings estimates for two of the largest companies in the technology and financial services sectors. The focus on earnings estimates underscores the fascination of the market with trying to forecast quarterly earnings. It is also worth noting that sell-side firms that provide earnings estimates typically stand to gain from the additional revenue generated from more frequent trading activity. The lack of sell-side research that extends beyond the near term, along with the additional uncertainty implicit in taking a longer-term view, suggests that there is a role for independent research focused on adding value over longer time horizons.

Exhibit 4: Research coverage has short-term focus

Earnings-per-share estimates for two global large-cap companies as of February 2015

	Financial services	Technology
2016 *Well covered*	Number of earnings estimates: **25** Range: £0.50 – £0.81	Number of earnings estimates: **42** Range: $5.52 – $9.81
2018 *Minimal coverage*	Number of earnings estimates: **1** £0.71	Number of earnings estimates: **0**

Source: Factset

Decision-making biases

The field of behavioral finance has shone a spotlight on the psychological reasons why individuals fall prey to certain decision-making pitfalls, including short-term behavior that prejudices long-term investment performance. These include loss aversion, which refers to one's tendency to strongly prefer avoiding losses to acquiring gains; the availability bias that occurs when one makes judgments about the probability of events based on how easy it is to think of examples (the

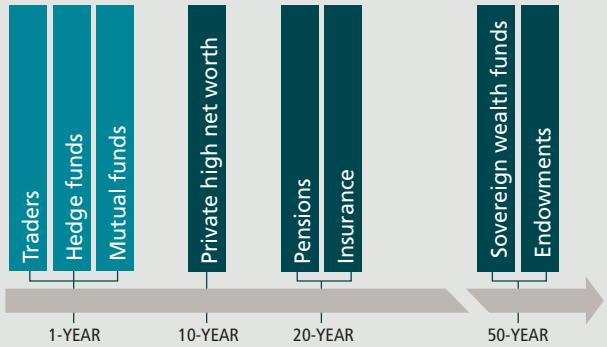
availability heuristic operates on the notion that if something can be recalled, it must be important); and the recency bias, or party effect, which operates when stock market participants evaluate their portfolio performance based on their perspective on recent results. These biases, along with others, result in less than optimal results for the investor in the longer-term.

The increased short-term focus of investors indicates a misalignment with those asset owners with a long-term time horizon.

Misalignment of asset owner and investor goals

When we examine the investment time horizon of clients — ranging from high-net worth private clients to pension funds, insurance companies, endowments and sovereign wealth funds — we find that the clients typically have time horizons of a decade or more, and, in many instances, have an explicit multigenerational objective (see Exhibit 5, which highlights typical clients' time horizons). For example, endowments, foundations, sovereign wealth funds and many private high-net-worth clients fall into a group that invests for both current and future generations. This suggests that it would be rational for these investors, in particular, to adopt a longer-term perspective in their investment practices. The increased short-term focus of investors indicates a misalignment with those asset owners with a long-term time horizon.

Exhibit 5: Aligning with client's longer time horizons



Source: Based on "Making Good Investment Decisions", Morningstar, 2012.

Furthermore, demographic trends point to even longer time horizons. The demographic shifts taking place in the world at large — both the continued rise in life expectancy and the fall in fertility rates — are a global megatrend with important implications for investment behavior. The fall in fertility rates in both the developed and developing world means that a shrinking working-age populace will be called upon to finance the rising retirement costs of an aging population, further exacerbating the societal impact of longevity risk. The Bank for International Settlements (BIS), regards longevity risk — the risk of needing to make pension and annuity payments for longer than anticipated — as "significant when measured from a financial perspective."[2] No doubt individual and institutional investors alike will increasingly need to take longevity risk into account, in concert with investment risk, when thinking about various types of investment products and strategies. This may in turn drive more long-term investment behavior over time.

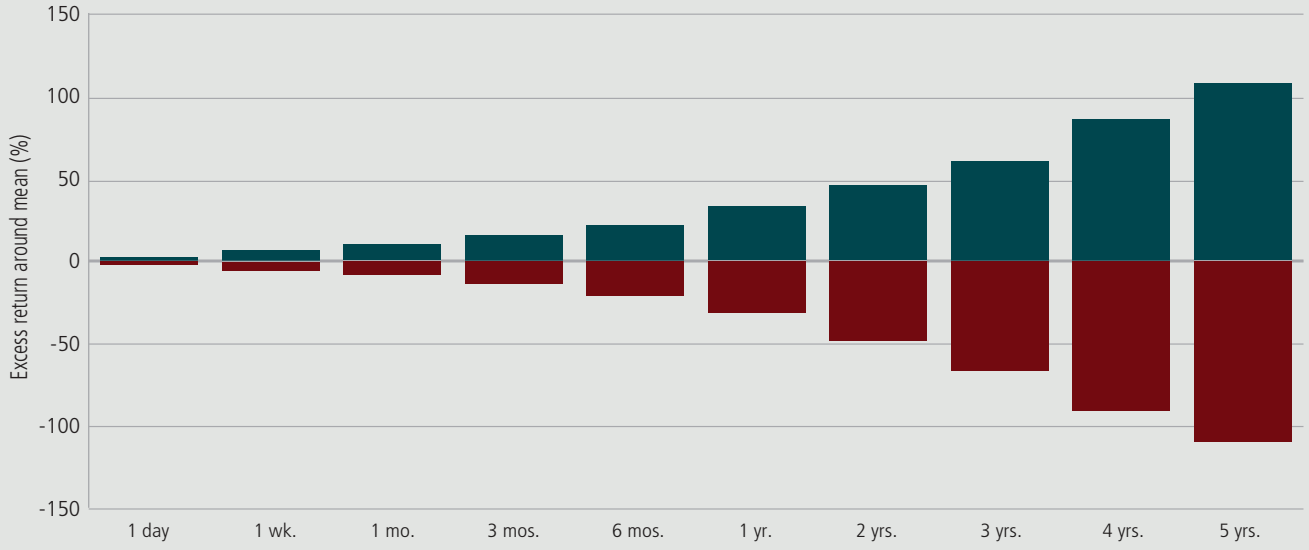
Arbitrage opportunities with a longer investment horizon

From our standpoint, investment managers with a longer-term view and a focus on stock selection can find abundant investment opportunities. This point is illustrated in Exhibit 6, which shows the return dispersion for stocks held for various time periods ranging from one day to five years. There is greater return dispersion between the tenth and ninetieth percentiles as the holding period extends, bolstering the view that there are more opportunities for differentiated performance when one holds securities for three to five years.

How does this impact investment strategy, one might ask? It is difficult for a portfolio manager to profitably trade markets on a weekly basis because stocks tend to move in tandem in the short term and the opportunity to add value after trading costs is very limited. However, five years out there is much greater return dispersion in the market, which creates the potential for investment managers to post strongly differentiated performance relative to the benchmark. We consider this time horizon arbitrage opportunity to be a significant factor in generating long-term performance. Over a longer time period, there is an opportunity for investors to focus on meaningful investment signals that point to sustainable earnings growth in the medium-to-long term and express differentiated views that translate into positive performance.

Exhibit 6: Return dispersion grows with time

MSCI World total return dispersion around the mean return (2010–2014)



Source: MFS research. MSCI World holdings as of 1 January 2010. Forward total cumulative returns around the mean in USD within the 10th to 90th percentile range.

Conclusion

Keynes famously used the analogy of a beauty contest to explain why stock prices can differ from their fundamental value. He describes the actions of rational agents in a market using an analogy based on a fictional newspaper contest, in which entrants are asked to choose the six prettiest women from a hundred photographs. Those who picked the most popular face are then eligible for a prize. A naive strategy would be to choose the face that, in the opinion of the entrant, is the most beautiful. A more sophisticated contest entrant, wishing to maximize the chances of winning a prize, would think about what the majority perception of beauty is, and then make a prediction based on some knowledge of the public's perceptions.[3]

Keynes believed that similar behavior was at work in the stock market, *i.e.*, that investors often ignore underlying conditions, and instead try to extrapolate short-term market psychology as a way to derive investment returns. It is likely Keynes would see this mindset reflected in current investment behavior where the focus is often on short-term trading activity in reaction to market noise, *i.e.*, what other market participants are thinking, rather than investment decisions based on the fundamental longer-term value of an enterprise.

With demographic trends pointing to a greater focus on longevity risk and more attention being placed on the downside of short-term investment behavior by governments, regulators and even the financial media, the tide may turn in the coming years. Regardless, we believe an arbitrage opportunity exists for managers with a longer investment horizon: There are more opportunities for differentiated performance when one holds securities for longer time periods.

NOTES

[1] Nassim Nicholas Taleb, *Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets*, 2nd ed., (New York: Thompson Texere, 2004), 61.

[2] BIS website (10/15/2013) https://www.bis.org/publ/joint31.htm

[3] John Maynard Keynes, *The General Theory of Employment, Interest and Money* (1936), Chapter 12.

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