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A Long Look at Short-Termism

Questioning the Premise

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"The . . . specific task of managers is to harmonize in every decision and action the requirements of the immediate and long-range future. Managers cannot sacrifice either without endangering the enterprise."

Peter F. Drucker
People and Performance

- Short-termism is said to plague all parties in the investment community, including investment managers, companies, and investors. However, it is very difficult to prove.
- To assess and evaluate the impact of market short-termism, the right level of analysis is not what individuals say but rather what the stock market does.
- For many companies, a contraction in time horizon is a proper response to economic reality.
- Corporate executives and investors who suffer from short-termism are partners in a dance who are attracted to one another based on their characteristics.
- The holding period that is relevant in portfolio construction is the time an investor is exposed to an asset class, not the turnover for a particular stock or fund.
- We provide specific recommendations to deal with the pressures of short-termism for investment managers, companies, and investors.

Introduction

"Short-termism" is widely accepted as a major problem in the investment industry. Short-termism is the tendency to make decisions that appear beneficial in the short term at the expense of decisions that have a higher payoff in the long term. For example, a company exhibits short-termism when it cuts its research and development budget to deliver higher earnings this year, forsaking larger profits in the future. Likewise, an investor who forgoes a stock that trades at a steep discount to intrinsic value to buy a stock based on an anticipated near-term price move engages in short-termism.

Short-termism is said to plague all parties in the investment community, including investment managers, companies, and investors. The typical story is that investors demand short-term results, forcing investment managers to dwell on immediate gains, which ultimately spur investment managers to press companies for quarterly results. Short-termism has caused a great deal of hand-wringing.[1]

The problem is that short-termism is very difficult to prove. As we will see, many of the common perceived symptoms of short-termism don't hold up to scrutiny, and there are some legitimate reasons for the shortening of time horizons. While there remains plenty of room for improvement, especially when it comes to incentives, the issue of short-termism deserves more care than it has received in the popular discourse. With little exception, the debate appears to be very one-sided.[2]

A quote from a recent article by Dominic Barton, a consultant at McKinsey & Company, and Mark Wiseman, president and chief executive officer (CEO) of the Canada Pension Plan Investment Board, captures the prevailing mood:

> ". . . the shadow of short-termism has continued to advance—and the situation may actually be getting worse. As a result, companies are less able to invest and build value for the long term, undermining broad economic growth and lowering returns on investment for savers.
>
> The main source of the problem, we believe, is the continuing pressure on public companies from financial markets to maximize short-term results."[3]

While the discussion of short-termism has gone from a mild simmer to a rolling boil following the financial crisis, concerns about short-termism have been around for a long time. Consider the following quotations:

> "The average holding period of stocks has declined from over seven years in 1960 to about two years today. This decline implies a dramatic shift in the frequency with which investors buy and sell corporate equities. It is perhaps the most telling evidence of shortening investor horizons." - Michael E. Porter (1992)[4]
>
> "Given the large buying power of their institutions, there is an obvious risk that speculative in-and-out trading of this type may virtually corner the market in individual stocks. And in any event, activity of this kind tends to create undesirably volatile price fluctuations. I find this trend disquieting. However laudable the intent may be, it seems to me that practices of this nature contain poisonous qualities." - William McChesney Martin (1967)[5]
>
> "For most of [the professional investors and speculators] are, in fact, largely concerned, not with making superior long-term forecasts of the probable yield of an investment over its whole life, but with foreseeing changes in the conventional basis of valuation a short time ahead of the general public. They are concerned, not with what an investment is really worth to a man who buys it 'for keeps,' but with what the market will value it at, under the influence of mass psychology, three months or a year hence." - John Maynard Keynes (1935)[6]

Complaints about short-termism echo the laments about the contemporary standard of writing. Every generation thinks that writing is going to hell and pines for the good old days when authors wrote with clarity, verve, and proper punctuation.[7] Most generations have a sense that at least some things were better in the past than in the present and that life would improve if we could revert to how things used to be.

Upon closer examination, of course, the good old days were rarely as idyllic as memory suggests. This is certainly true for markets. Investors are now more informed (and uniformly so because of Regulation FD), better trained, have access to superior computing power, and face lower transaction costs than those of the past. The same is true for companies. Today's companies are more sophisticated, better managed, and deliver better products at a lower cost than ever before. Legislation, such as Sarbanes-Oxley, has improved governance practices in the past decade. So why the palpable sense of trouble?

Why Short-Termism Feels More Acute Than Ever

The "micro-macro" problem creates a major challenge in analyzing whether investors are more short-term oriented today than in the past. Say you want to analyze an ant colony, a system made up of thousands of individual ants. You can study the behaviors of the individual ants, carefully documenting the tasks they carry out, how they interact with their sisters, and how long they live. That is the micro approach. Alternatively, you can examine the colony, observing how it forages, defends, and ages. That is the macro approach.

An ant colony is a complex adaptive system that emerges as the result of the interaction of the individual ants. Complex adaptive systems generally have properties and features that are difficult to predict by examining the individual agents. Phil Anderson, a physicist who won the Nobel Prize, captured this idea in the pithy phrase, "more is different."[8] In a nutshell, the micro-macro problem says that it is very difficult to understand a system by examining only its parts. If you want to understand the colony, study the colony. If you want to understand the ants, study the ants.[9]

The stock market is a classic example of a complex adaptive system. To assess and evaluate the impact of short-termism, the right level of analysis is not what individuals say but rather what the stock market does. A case for short-termism that rests primarily on the views of executives or investors runs headlong into the micro-macro problem.

Indeed, much of the concern about short-termism appears to be based on the perceptions of individuals. For example, a recent survey of executives and board members confirms the concern about short-termism. Almost two-thirds of the participants said the pressure to generate short-term results had increased over the previous five years and nearly 90 percent declared that a longer time horizon in business decisions would have a positive effect on corporate performance. The board members suggested the demands for short-termism were the result of "short-term pressures from investors, including institutional shareholders."[10] These perceptions are real and they can influence behavior. But are they well-founded?

If investors are the problem, a proper evaluation of short-termism requires an analysis of the stock market. This analysis does not offer much evidence of short-termism. The vibrant market for initial public offerings (IPOs), including deals for companies that have modest revenues and profits currently, suggests that investors anticipate long-term payoffs. Multi-billion-dollar mergers and acquisitions (M&A) of companies barely beyond the start-up phase, such as Facebook's purchase of WhatsApp or Google's acquisition of Nest, also require that the buyers take a long-term view. Indeed, if you accept that the value of a company is the present value of future cash flow, in most cases you must project cash flow many years into the future—the long term—to justify today's valuations in the public markets.[11]

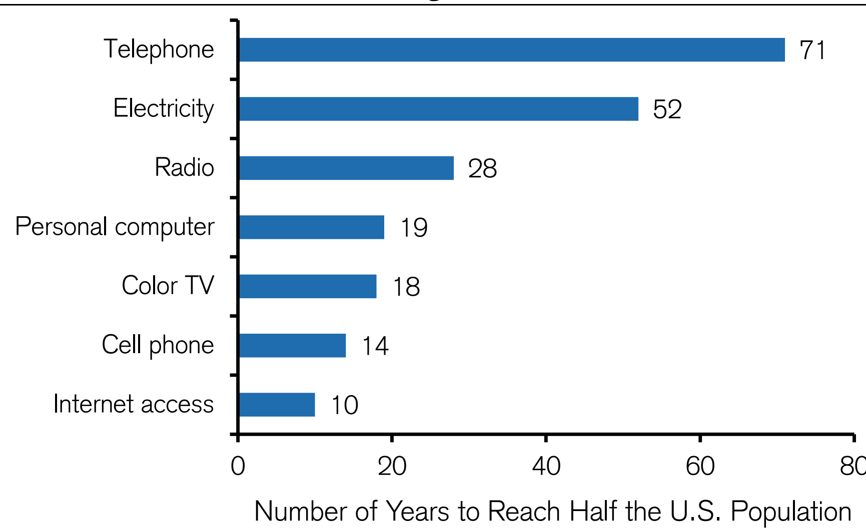
If your reaction is, "Yes, but the IPO and M&A markets are frothy and stock prices appear fully valued," recognize that you can't have it both ways. High valuations mean that the market is paying for the long term. A market with a short-term horizon is unwilling to pay much for the future. Indeed, one analysis concluded that short-termism prevailed in the stock market's valuation of technology stocks surrounding the dot-com boom.[12] If the dot-com bubble is evidence for the stock market's short-termism, it is hard to imagine what period of time suffices as the long term.

We will examine investor behavior, including holding periods as a proxy for time horizon, in a moment. But for now let's emphasize that if short-termism is a problem there should be clear evidence of it in the stock market. The micro-macro problem tells us that to understand the market we need to examine its features rather than extrapolating the beliefs of individuals. Much of the sense of short-termism comes from the perceptions of participants in the market rather than from the market itself.

Short-termism also comes from the sensation that the world is speeding up. Betting on the future feels imprudent if change is rapid. Indeed, academic research shows that the period of competitive advantage is shrinking for companies.[13] If the sustainability of a company's economic profit is fleeting, there is less reason to place great value on the future.

A number of facts suggest that change is speeding up. Exhibit 1 shows how long it took half of the U.S. population to adopt a number of significant new technologies. This is a measure of the rate of diffusion. For example, it took 71 years for half of the U.S. population to have a telephone and 52 years for electricity, but only 19 years for a personal computer and 10 years for Internet access. New technologies not only have obvious primary benefits but also ancillary effects that ripple through the economy. As these diffusions speed up, so does change.

Exhibit 1: The Rate of Diffusion of New Technologies



Source: Adam Thierer and Grant Eskelsen, "Media Metrics: The True State of the Modern Media Marketplace," The Progress & Freedom Foundation, *Summer 2008, 18.*

The average asset life of companies in the U.S. is shortening, which also suggests faster change. When a company makes an investment in capital equipment, the accountants require the company to record a useful life for the asset on the balance sheet. (These asset lives also serve as the basis for depreciation schedules.) Companies that expect their assets to pay off for a long time will take a more extended view than companies that have short asset lives. This makes sense.

Exhibit 2 shows the asset lives for nine sectors, ranging from 29 years for utilities to less than 7 years for information technology. Importantly, the composition of the market has changed, and sectors with short asset lives are now more prominent than they used to be. For example, energy, materials, and industrials were 51 percent of the market capitalization of the top 1,500 public companies in the U.S. in 1980 and had an average asset life of roughly 16 years.[14] Today, those sectors are less than one-quarter of the market even as their asset lives have lengthened a bit.

At the same time, healthcare and information technology, with an average asset life of 11 years in 1980, only comprised 17 percent of the market. Currently, those sectors are 30 percent of the market and have an average asset life of 8 years. So the asset life of the companies within the market, weighted by market capitalization, has shrunk in the past 30 years.

Exhibit 2: Average Asset Life by Sector, 2013

	Asset Life
Information Technology	6.6
Healthcare	11.4
Consumer Discretionary	12.4
Consumer Staples	15.1
Industrials	15.4
Telecommunication Services	16.1
Energy	17.6
Materials	18.6
Utilities	29.4

Source: Credit Suisse HOLT.
Note: Top 1,000 non-financial firms.

Shorter asset lives suggest shorter time horizons over which managers should invest, a reasonable reflection of the business world. Executives of many technology companies, for example, can't plan for decades in the way a utility company can because the rate of change is simply too fast. So for many companies a contraction in time horizon is a proper response to economic reality.

Executive compensation is also considered a cause and result of short-termism. The thinking is that executive compensation based on the stock price has increased materially in recent decades, compelling CEOs to focus on the short-term stock price of their company.[15] For example, the percentage of pay tied to the stock market for the CEOs of U.S. companies was negligible in the early 1980s, rose to about one-quarter in the early 1990s, peaked at roughly one-half in the early 2000s, and remains near 40 percent today.[16] CEOs who expect to retire or leave the company may have a time horizon shorter than that of their investors, encouraging short-termism.[17] The average tenure for the CEOs of the world's 2,500 largest public firms is about seven years, based on figures from 2013.[18]

Were compensation the simple root of the problem, then correction through regulation or other market forces would be relatively straightforward. But a link between pay and short-termism is difficult to establish. Academic research shows that CEO pay has closely followed the size of the firms in the economy independent of the form of remuneration.[19] Further, executive compensation has moved toward long-term incentives, boards of directors are more independent than in the past, and governance committees are "nearly universal."[20] Reviewing the challenges of conclusively demonstrating short-termism, one scholar wrote, "[I am] aware of no empirical evidence establishing that executive pay term is inadequately focused on long-term performance from either a shareholder or societal perspective, systematically."[21]

Now, there is evidence that companies that rely heavily on equity compensation are more likely to manipulate their reported earnings through discretionary accruals.[22] While this is not direct evidence of short-termism (companies can conceivably invest for the long term even as they boost earnings through accounting) it clearly appears to be an effort to sway the capital markets.

More direct evidence of short-termism comes from a comparison of matched private and public companies. That work shows that private companies invest more than public companies, consistent with the notion that public companies seek to boost near-term profits.[23] This case is furthered by surveys of financial executives that reveal that a large percentage of them are willing to forgo value-creating projects in order to deliver short-term earnings.[24] These strands of inquiry certainly suggest that short-termism is playing a real role in shaping the decisions companies make.

But the story is a little more subtle. There is also research showing a process of sorting, where short-term-oriented investors gravitate toward companies that provide lots of information and hence trading opportunities. Brian Bushee, a professor of accounting at the Wharton School of the University of Pennsylvania, sorts institutional investors into three categories: transient, quasi-indexer, and dedicated. Transients hold small stakes for a short time. Quasi-indexers own small stakes for a long time. And dedicated investors hold large stakes for a long time. Based on 20 years of data, he determined that 61 percent of institutions fall in the quasi-indexer category, 31 percent in transient, and 8 percent in dedicated.[25]

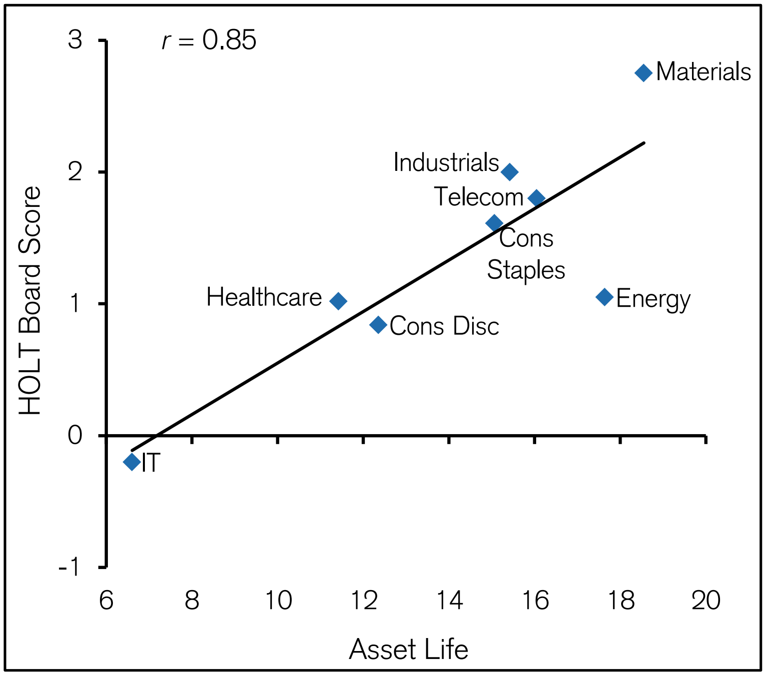
Bushee found that transient investors are attracted to companies with a larger proportion of the value in near-term earnings, those that have done well recently, and those that provide more disclosure—or what academics call "information events." Companies with a high percentage of transient owners are more likely to manage earnings or cut research and development in an apparent effort to keep their investors appeased. However, transient investors are quick to sell when a string of favorable events ends.[26]

Companies owned mostly by transients also have investment sensitivity, or a willingness to invest when opportunities present themselves, that is below average. Companies that spend the same from year to year generate lower returns for their shareholders than companies that are flexible in their investment spending.[27] This, too, pairs companies and investors as transient investors are not keen to stick around if investment spending rises too much.

In effect, corporate executives and investors who suffer from short-termism are partners in a dance who are attracted to one another based on their characteristics. Bushee's prescription to cultivate an investor base with a long-term view is to be thoughtful about disclosure, both in frequency and content. He writes, "my research suggests that changes in disclosure practices have the potential to shift the composition of a firm's investor base away from transient investors and toward more patient capital. This shift will remove some of the external pressures for short-term results and encourage managers to return their focus to establishing a culture based on long-run value maximization."[28]

Our research revealed another link that bears on this discussion. Exhibit 3 shows that there is a close relationship between average asset life by sector and the Board Score, a measure of the quality of corporate governance that our HOLT® team developed. HOLT analysts combed proxy statements for 1,500 companies and granted points for good governance practices (long-term orientation, economically sound measures) and subtracted points for poor practices (limited disclosure, short-term targets only).[29]

Exhibit 3: Average Asset Life and HOLT Board Score by Sector



Source: Credit Suisse HOLT.
Note: Excludes financials and utilities; Asset life and Board Score figures are for 2013.

One interpretation of this finding is that corporate governance tends to be better in sectors where asset lives are long than in sectors where asset lives are short. Where monitoring long-term investments is most relevant, corporate governance is the best developed.

To summarize, a proper test of short-termism should address the micro-macro problem by relying on the outcome of the market pricing process rather than the views of individuals. While many constituents feel the market is short-term oriented—a feeling that has been expressed through the decades—asset prices don't support this sense.

That said, the appropriate period of evaluation has shrunk as the composition of the market has shifted from companies more reliant on long-term assets to companies with shorter asset lives. This is not short-termism but rather a clear-eyed reflection of the changes in the underlying economy. It also appears that governance is strongest, on average, for those sectors with the longest asset lives.

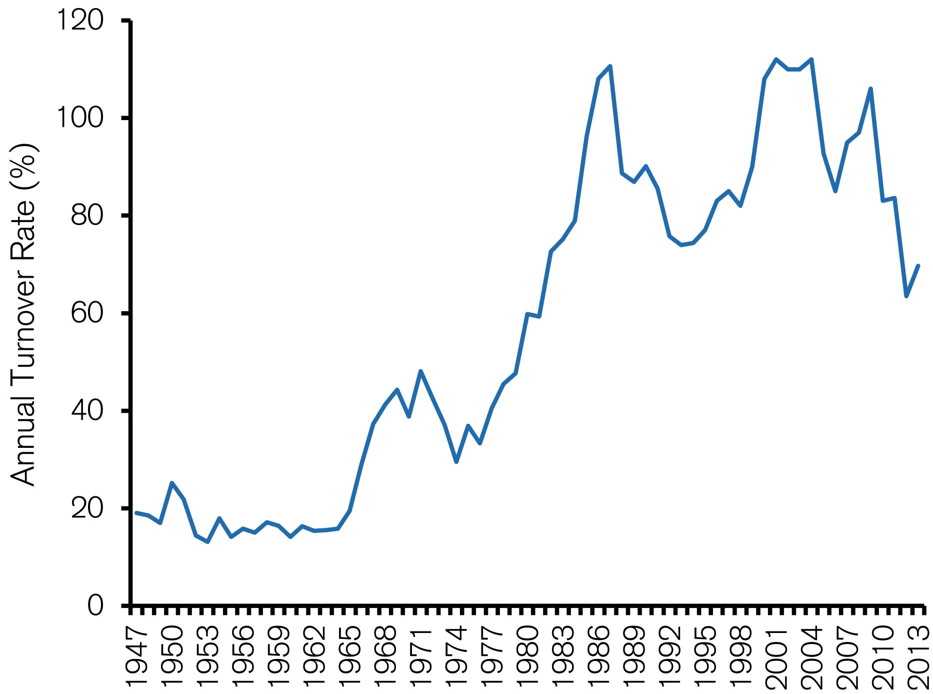
Finally, while transient investors do take a short view, they are attracted to companies that provide lots of information events. It is these companies that appear most willing to trade value-creating investments to deliver short-term results. But that game is limited, as reality eventually catches up and transient investors dump the stocks.

As Warren Buffett said in the Berkshire Hathaway letter to shareholders in 1979, "In large part, companies obtain the shareholder constituency that they seek and deserve. If they focus their thinking and communications on short-term results or short-term stock market consequences they will, in large part, attract shareholders who focus on the same factors. And if they are cynical in their treatment of investors, eventually that cynicism is highly likely to be returned by the investment community."[30] The research largely supports this view.

Arguments that Are Overused and Under-Scrutinized

Perhaps the most commonly cited evidence for investor short-termism is the shrinking holding period for stocks.[31] The lament is that holding periods in the 1960s were in the range of six to seven years but are less than two years today. Exhibit 4 shows the average portfolio turnover rate since 1947. You impute the holding period by dividing one by the rate. For instance, a 20 percent turnover rate equals a five-year holding period (1/.20 = 5). By this measure, investor time horizons have shortened since the 1960s but have actually *lengthened* in recent years from one year to about one-and-a–half years. Still, the change in holding period in the last half century is a poor argument for short-termism.

Exhibit 4: Average Turnover Rate (1947- 2013)



Source: Bogle Financial Markets Research Center; Morningstar, Credit Suisse.

To begin, the holding period that is relevant in portfolio construction is the time an investor is exposed to an asset class, not how long an investor owns a particular stock or fund.[32] Think of it this way: In a largely efficient market, the expected value of a portfolio's risk-adjusted excess return is approximately zero, before costs. While lots of activity creates costs that diminish a portfolio's return, the duration of the exposure to the asset class is the appropriate way to think about an investor's time horizon. As a result, what matters is the long-term return of that asset class less costs the investor incurs. Investors make short-term bets on long-term outcomes.

Another essential point is that the ownership of stocks has changed a great deal in the past half century. Fifty years ago, individuals held most stocks and the institutional money management industry was just getting going. Today, about 70 percent of stocks are held by institutions.[33] Individuals in the 1960s had poor access to information, limited training, little if any access to computers, onerous tax rates, and high transaction costs. Given the circumstances, it is little wonder they did not trade actively.

If you return to exhibit 4, you will notice that the largest sustained increase in annual turnover occurred between 1975 and 1985. The reason for this is the deregulation of stock commission rates on May 1, 1975.

Prior to that date, the New York Stock Exchange and other exchanges set minimum commissions that were always binding. Exhibit 5 shows the minimum commission per 100 shares that prevailed from 1959 through 1968.[34] After May 1, 1975, brokerage firms could compete based on price. Competition paired with technological advances has cut transaction costs dramatically.

Exhibit 5: Transaction Costs in the 1960s

Amount of transaction	Minimum commission per 100 shares
$100-400	$3 + 2% of amount traded ($6 minimum)
$400-2,400	$7 + 1% of amount traded
$2,400-5,000	$19 + 0.5% of amount traded
$5,000+	$39 + 0.1% of amount traded

Source: Charles M. Jones, "A Century of Stock Market Liquidity and Trading Costs," Working Paper*, May 22, 2002.*

As an example, trading 10,000 shares of a $40 stock would have cost $0.43 *per share* in the mid-1960s. Trading costs today are roughly 1/100th of that rate for institutional investors. Further, the bid-ask spreads were substantially wider then than now and capital gains tax rates were higher. So it is plausible that the long holding period was the consequence of unsophisticated individual investors facing relatively significant transaction costs rather than some benevolent long-term view.

Of course, the sharp reduction in transaction costs allows short-term investment strategies to be viable. Firms such as Renaissance Technologies could not have existed in the 1960s or 1970s. Markets are akin to ecosystems, where diversity of time horizons and investment strategies tends to be healthy.[35] The question is: Who among the short-termism critics would trade today's markets and businesses for the higher costs, inferior technology, and lesser sophistication of the past? Arguments for short-termism based on shorter holding periods need to endorse such a trade-off.

Those who claim the pervasiveness of short-termism frequently cite a phrase attributed to the father of security analysis, Ben Graham: "In the short run the market is a voting machine, in the long run it is a weighing machine."[36] The connotation is that in the short term emotions run hot but over time the market reveals true value.[37] Graham's line sounds like a case for short-termism but doesn't stand up to scrutiny in that context.

Here's the problem: Today's short term was yesterday's long term. Say you pick three years as the long term, which suggests that the market will be a weighing machine then.[38] By the same logic you would have said three years ago that today is the long term. The phrase itself says very little, if anything, about short-termism.

A more reasonable way to interpret Graham's line is that there are periodic mispricings in the market (voting machine) but that price and value generally converge over time (weighing machine). Implicit in the argument is that markets are not perfectly efficient, but they are sufficiently efficient to eventually recognize value. Indeed, if markets were perpetually inefficient, there would be no reason to invest because there would be no reason to believe that gaps between price and value would ever narrow. Active investors must believe both in inefficiency and efficiency to make a credible case for their vocation.

What about market efficiency? How good are markets at incorporating new information? Here again, there is a perception that the market takes a short-term view as it digests new information such as earnings releases or merger announcements. But the empirical evidence suggests the market is quite good at reflecting information and that detecting systematic and exploitable biases is not easy.

The first strand of research examines cases where earnings and cash flow diverge based on a particular announcement or development. In other words, when earnings go one direction and cash flow another, which does the stock market follow? Instances that researchers have examined in detail include a shift from first-in, first-out to last-in, first-out accounting for inventory (earnings down, cash flow up), expensing employee stock options (earnings down, cash flow unaffected), and the adoption of an accounting rule that ceased goodwill amortization (earnings up, cash flow unaffected). In each instance, the research shows that the market was able to look through the earnings impact and properly reflect the cash flow. When earnings and cash flow diverge, the market tends to follow the cash.[39]

Executives complain about the quarterly earnings per share (EPS) game, where the company feels compelled to meet or exceed the consensus forecast for EPS every quarter of the year. Michael Dell, the CEO of the company that bears his name and that he took private after being public for 25 years, calls the pressure "the 90-day shot clock."[40] Research shows that the market generally rewards earnings that are below expectations as the result of value-creating investments. Earnings that exceed the consensus based on non-economic factors are received poorly.

Leaders of companies that truly miss expectations must recognize that the earnings announcement is new information that the market uses to revise the expectations for long-term cash flow. Indeed, the only way that a modest earnings disappointment can lead to a large downward price move is if the market revises down its long-term cash flow forecasts. One academic paper on the topic concluded as follows: "[our results] suggest that share prices respond to changes in short-term earnings only insofar that they are signals of long-term earnings potential."[41]

M&A announcements are an area where executives feel the market's reaction is particularly short-term oriented. For example, after investors dumped the shares of Hewlett-Packard Company following the firm's announcement to acquire Compaq Computer Corporation in 2001, HP's former CEO, Carly Fiorina, remarked, "You don't make this kind of move and judge its success by the short-term stock price."[42]

Mark Sirower and Sumit Sahni, consultants with an academic background, examined total shareholder returns, relative to industry peers, for 302 M&A deals both in the short run (five days) and over a longer period (one year).[43] They found that the market had a positive reaction to 103 of the deals (34 percent) in the short term and that 52 of those deals remained positive a year later. Of the 199 deals where the market's reaction was initially negative (66 percent), 133 remained negative after a year.

One reasonable interpretation of these results is that the market is not always correct in its initial reaction but does not seem to have a systematic bias. As one academic summarized, "the evidence we have suggests that the initial market response is a fairly reliable predictor of how the deals are going to turn out."[44]

Believers in short-termism are particularly flummoxed by companies that say they take a long-term view and that the market prices accordingly. The poster child for this is international electronic commerce company, Amazon.com, led by its founder, Jeff Bezos. In the company's letter to shareholders in 1997, the year the company went public, Bezos laid out the company's principles. The company republishes the letter each year as a reminder that the company's approach remains steadfast.

Bezos's second point, following one about customer focus, is this: "We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term profitability considerations or short-term Wall Street reactions."[45] The company continues to invest heavily today, consistent with the principle, and investors have accorded the business a substantial market capitalization despite scant current profits.

The market's willingness to take the long view has left some journalists bordering on incredulous. "Only a Wall Street darling, a firm whose senior leadership has the confidence of markets, could get away with being as daring as Amazon is," wrote one.[46] Another said, "Amazon has this permission because it has trained its shareholders to believe that everything will work out in the end."[47]

It remains to be seen whether Amazon.com lives up to the expectations of its stock price.[48] But even the existence of the Amazon.com's of the world create a problem for those who fret about rampant short-termism. The idea that a company that has been public for 17 years is loved only because it has trained its shareholders doesn't fit the story of a market that can't take a long-term view. Indeed, Amazon.com's largest shareholder, after Bezos, owns a sizeable stake and is known for holding stocks for a long time—a classic dedicated investor. Here's how Bezos sums up his philosophy: "As far as investors go, our job is to be superclear about our approach, and then investors get to self-select."[49] Perhaps Amazon.com has obtained the shareholder constituency it deserves.

Where Short-Termism Is a Problem for Individuals

While we've argued that short-termism is not the problem is appears to be, there are still a number of behaviors in the investment industry that we can improve. These tend to be the result of either organizational or psychological shortcomings. It's important to underscore that just because there are micro mistakes doesn't mean that there is macro inefficiency. But there are ways for us to get better.

Classic agency theory addresses the case when the interests of an agent differ from those of the principal he serves, encouraging the agent to put his interests first. For instance, executives of a firm, as agents, may grant themselves expensive perquisites such as country club memberships, corporate jets, and lavish offices, leaving less profit for the shareholders, the firm's principals. The parallel in money management is when investment managers (agents) make decisions to grow fees, including launching new products in hot areas or spending substantial resources on marketing, rather than focus on delivering excess returns for their investors (principals).[50]

But agents taking advantage of principals isn't the only problem. Consider a serious issue that doesn't get enough attention: The influence investors have on the investment managers who serve them. Substantial research shows the proclivity of investors to buy after a fund has done well and to sell following poor results.[51] These flows from investors amplify the results of the fund. For example, recent research shows that hedge funds that have positive flows tend to buy what's already in their portfolio, pushing up asset prices and leading to continued good results. This process can take up to a couple of years to reverse fully. Researchers estimate that one-third of the alpha from the hedge fund industry is the result of these flows.[52]

What works on the upside also works on the downside. Outflows force selling and additional poor results. As a consequence, investment managers may be unwilling to invest in assets that promise excellent returns in the long term but are volatile in the short run because they know that poor near-term results may prompt disgruntled investors to leave the fund.

The obvious answer to this problem is to structure a fund as closed-end, which prevents new money from coming in or out, versus open-end, which allows money to move in and out.[53] But the open-end structure embeds a valuable option for the investment manager in the case of good results, even if they come through luck. The option is the opportunity to increase assets under management, which leads to higher fees and larger profits. One model of the investment industry suggests that skillful managers take on assets to the point where their expected risk-adjusted excess return, or alpha, approaches zero.[54]

The idea is that poor behavior can run in two directions. Investment managers may do things that are not best for their investors, but investors also do things that hamper the investment manager's ability to take a long-term view.

As we saw earlier, companies say that the pressure to focus on the short term comes from investment managers. Investment managers, in turn, say the pressure is from their investors. A careful analysis of the connection found that short-term investors cause short-termism in investment managers. And the more pressure a fund manager feels, the shorter is his or her investment horizon.[55]

You might expect a pattern of buying high and selling low from individual investors who are less sophisticated, on average, than institutional investors such as pension funds, endowments, and sovereign wealth funds. The numbers bear that out. John Bogle, founder and former CEO of the Vanguard Group, calculates that because investors in actively-managed mutual funds trade at inopportune times, they earn 120 basis points less per year than they would with a simple buy-and-hold strategy.[56]

But that performance drag isn't limited to mom and pop. A study of institutional investors over twenty years found that they do much the same as individuals. The researchers concluded that these institutions, who control thousands of products, sacrificed $170 billion in value as a result of buying high and selling low. One-third of this slippage in value is the result of moving from one asset class to another, say from stocks to bonds, and the other two-thirds is from switching from one manager to another within an asset class.[57]

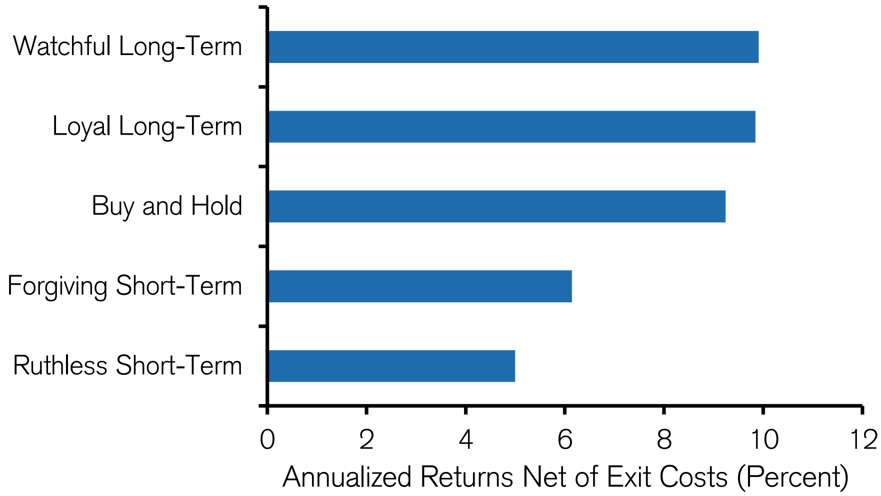
Professional investors know that there is too much variance in short-term results to rely on annual figures. As a result, the most common evaluation period in the institutional investment industry is about three years. But one statistical approach suggests that you need more than a dozen years of results to confidently conclude that a money manager is skillful.[58] Longer periods allow you to better assess skill but also carry the risk of being stuck with an unskillful manager. So what evaluation period is best?

A trio of researchers set out to answer this question.[59] Rather than relying on historical data, they used a simulation. The value of simulation is that you can evaluate a range of outcomes given different starting assumptions. Their model included 1,000 investment managers, and they endowed 10 percent of them with skill. They then created a population of chief investment officers (CIOs) who used algorithms, based on their personalities, to hire and fire investment managers.

For example, the "ruthless short-term" CIOs only hired managers who finished in the top 10 percent in the prior year, fired all managers who oversaw a portfolio that dipped 10 percent, and never rehired managers. The "loyal long-term" CIOs hired managers who were in the top 10 percent over 5 years, fired those who were in the bottom 10 percent over 5 years, and would rehire managers who were in the top 10 percent.

Exhibit 6 shows the results of the simulation over a ten-year period. The long-term CIOs outperformed both the short-term CIOs and the buy-and-hold CIOs. And the watchful long-term CIOs, who were more proactive in pruning managers than the loyal long-term CIOs, came out on top. The evaluation period that worked best was longer than three years. The researchers conclude that, "the most profitable degree of patience is very different from that found in current industry practice."

Exhibit 6: Short-Termers Underperform Watchful Long-Term Investors



Source: David L. Donoho, Robert A. Crenian, and Matthew H. Scanlan, "Is Patience a Virtue? The Unsentimental Case for the Long View in Evaluating Returns," Journal of Portfolio Management, *Fall 2010, 115.*

The pattern of buying high and selling low, which is clear for individuals and institutions, is a good example of short-termism. What's behind it? For individuals, the answer is probably psychological. Small investors can suffer from recency bias, the tendency to overweight recent experience in assessing the future. So, for example, when a stock is going up, we expect it to continue going up. As a general rule, investors want to do today what they should have done in the recent past.

Institutional investors should be more sophisticated but often make the same mistake. Here, part of the explanation may be organizational. Agency theory is devoted to the conflict of interests between agents and principals. But in fact a lot of the interaction in the institutional world is agent to agent, or even agent to agent to agent. Take, for example, a modest university endowment that an investment committee oversees. The principal in this case is the university and its community. It would be common for the investment committee (agent) to hire a consulting firm (agent) to find a money manager (agent). Each step along the way, the agents are expected to *do* something. But experience shows that doing less generally leaves the principals with more.

Again, these behaviors at the micro level can be consistent with a macro outcome, the stock market, which recognizes the long term. But the interests of agents and the costs they impose can detract from the final returns that the principals earn in the market.

Another factor that contributes to short-termism is stress. When surveyed, Americans cite money, work, relationships, and family responsibilities as common causes of stress.[60] Not surprisingly, these are all psychological stressors. Stress comes from a sense of a lack of predictability and control. Given that markets have a lot of variance that arises by luck and that investors are quick to yank funds for underperformance, investment management has a lot of stress.

Our stress response is designed primarily to deal with physical threats, such as the big fierce predator that has made you the target for lunch. The stress response causes a rise in blood pressure, mobilization of energy to the tissues that need it most, and heightened acuity of short-term memory and vision. Just as importantly, the body shuts off resources to systems that are relevant only for the long term, including those for digestion, immunity, and reproduction. The stress response gets you ready to deal with the very short term, and works brilliantly in an emergency.

Here's the key: Your body doesn't distinguish between physical and psychological provocations. They trigger similar physiological responses. If you are chronically stressed, your body breaks down. High blood pressure. Digestive problems. Sickness. Reproductive issues. Here's what Robert Sapolsky, a neurobiologist at Stanford University and renowned stress researcher, says about the things that occur in reaction to stress, "They are generally shortsighted, inefficient, and penny-wise and dollar-foolish."[61] In a nutshell, stress causes short-termism.

This relates to investing through the concept of myopic loss aversion, an idea that two economists, Shlomo Benartzi and Richard Thaler, developed to explain the equity risk premium. The equity risk premium is the return that stocks earn in excess of bonds over time. It had been higher than theory suggested, puzzling financial economists.[62]

Benartzi and Thaler's approach to the problem combines two concepts. The first is loss aversion, which says that humans suffer from losses roughly twice as much as they enjoy comparable gains. So you are twice as upset at losing $10 as you are happy at finding $10. Of course, the ratio for each of us is different because some of us feel losses more acutely than others, and our own personal ratio varies as a result of our recent experience. Losing money after ten days of gains does not feel the same as losing money after ten days of losses.[63]

The second idea is myopia, or in this case how frequently you look at your portfolio. The stock market tends to go up over time, but does so with lots of squiggles and turns along the way. So the probability that you will see a gain in your stock portfolio is just in excess of 50 percent in an hour, a shade over 51 percent for a day, about 53 percent for a week, and almost 75 percent for a year. Go out 10 years or more and the probability that you'll see a profit is very close to 100 percent.

Here's what happens when you put those ideas together: The more frequently you look at your portfolio, the more likely you are to see losses and hence suffer from loss aversion. As a consequence, people who examine their portfolios all the time demand higher returns to compensate for their suffering than those who examine their portfolios infrequently. Said differently, long-term investors are willing to pay more than short-term investors for the same asset.[64]

Benartzi and Thaler estimate that the evaluation period consistent with the realized equity risk premium through the early 1990s was about one year. No one can entirely sidestep the sense of loss aversion, but frequency of portfolio evaluation is a choice. Institutional money managers often feel that they can't underperform their benchmarks for long without putting their career at risk. By the same token, investors who can take a longer view have the opportunity to generate excess risk-adjusted returns.[65]

Even in the realm of gains, our minds struggle with short-termism. For example, if you give people a choice between $10 today and $11 tomorrow, many people select the $10. If you offer them $10 one year from now or $11 in one year and a day, they prefer the $11.[66] Animals make a similar trade-off with food choices.[67] It appears that different parts of our brains mediate short-term versus long-term decisions. Parts of the limbic system, which deals with more basic functions and is similar in structure to that of other animals, handle short-term decisions. Parts of the prefrontal cortex, an area of the human brain known for executive function and planning, make long-term decisions.[68]

Choice architecture is a useful mechanism to deal with short-termism.[69] The idea is that the way choices are presented to a decision maker will influence how he or she decides. For example, given the choice between a lump sum payment and an annuity that has a higher expected value, individuals generally select the lump sum.[70] Using choice architecture, the organization offering the choices may grant the annuity by default and only provide the lump sum if the individual requests it.

How You Can Avoid the Pull of Short-Termism

There appears to be a broad consensus that short-termism exists and that its effects are deleterious. Much of the evidence for short-termism is based on the perceptions of individuals rather than on the evidence of the stock market itself. Further, some reduction in investment horizon may be a legitimate result of shortening asset lives, which reflect the shift in the global economy. Indeed, the quality of corporate governance appears to be highest for sectors that have the longest asset lives.

There also appears to be a sorting mechanism in place. That is, companies that provide lots of information and are willing to compromise investment to meet a near-term target attract transient shareholders who share their shortsightedness. Companies that focus on the long term, such as Berkshire Hathaway, appeal to dedicated shareholders who share the company's long-term horizon.

The argument for investor short-termism based on portfolio turnover has a couple of problems. The proper measure of an investor's holding period is the duration of the exposure to an asset class, not the amount of trading within that asset class. Further, the dramatic decline in transaction costs in the equity market suggests that low turnover was more due to friction than farsightedness.

On balance, empirical research suggests that the stock market is reasonably good at reflecting new information of economic consequence. In specific instances when earnings per share and cash flow diverge, the market generally follows the cash. Analysis of M&A announcements, in particular, shows that while the market is not always correct in its initial assessment, there does not appear to be a systematic bias.

All of that said, there remains palpable pressure for investment managers, companies, and investors to perform in the short term.[71] This pressure, which is the result of organizational structure and psychological factors, has some redeeming elements but can also lead to poor choices. Here are some specific recommendations to deal with those pressures for each constituency:

Investment Managers

- **Create an investment process that results in edge**. The process itself can be short- or long-term oriented. In markets we need both. But the key is to have a clear sense of why you believe that the market is mispricing an asset and how your process can identify such mispricings over time. Skill in the investment business is built on the foundation of process, and process allows you to take advantage of opportunities that others can't see or exploit.

- **Make sure your behavior is congruent with your process**. In communicating their process to clients, investment managers generally dwell on what they aspire to do rather than what actually happens. An investment organization should strive to make its actions congruent with its stated process. There is good evidence that what investment managers say and what they do are different. For instance, a recent analysis of more than 800 funds found that 65 percent of them had higher portfolio turnover than they expected to have, which means that they were trading more than they said they would.[72] Identify gaps between words and actions and take steps to close them.

- **Find the right clients**. The dream scenario is a client who understands what you do and is willing to give you money when you see opportunity and withdraw money only when prospects are less attractive. Great opportunities in the market tend to follow poor results, and poor opportunities follow great results. Since most clients suffer from recency bias, they behave opposite to the dream scenario. This behavior has an influence on results, as we have seen. Solutions to the client challenge include finding permanent capital (an advantage for family offices), using closed-end funds, closing funds with limited potential, and marketing funds that are unpopular currently but that have good prospects.

Companies

- **Balance the short and long term**. The long term is an aggregation of short terms, and executives have to deal with both. Peter Drucker, the management consultant and author, wrote that the main task of managers is "to harmonize in every decision and action the requirements of the immediate and long-range future. Managers cannot sacrifice either without endangering the enterprise."[73] Too much emphasis on the short term leads to a failure to lay the groundwork for the future. But too much focus on the long term means that problems or inefficiencies can fester.

- **Be very mindful of communication**. If you want to attract short-term oriented investors, give them lots of reasons to trade. Those reasons are often based on corporate communications. Explicitly tailor your communication to the type of investor you want to attract. Transient investors like news. Quasi-indexers like good historical data and the means to track results. Dedicated shareholders want to understand strategy and capital allocation practices. Earnings guidance, in particular, can lead to compromising behavior.

- **Make incentives consistent with the strategy**. Ideally, a company should articulate its governing objective, a statement of what a company is trying to achieve, and align its incentives and controls to serve that objective. A governing objective should relate to building long-term value per share and provide specificity about how management intends to cope with the trade-offs that inevitably arise in business. While our research shows that sectors with long asset lives have better governance than sectors with short asset lives, incentives need to balance the short and long term. Management should try to be flexible enough to increase or decrease investment spending based on the opportunities that exist.

Investors

- **Understand reversion toward the mean**. Reversion toward the mean says that outcomes that are far from average will be followed by outcomes with an expected value closer to the average. High past returns attract investors and poor returns turn them off, which means that they often put money in at the top and remove it at the bottom. The antidote is a thoughtful assessment of long-term expected returns from an asset class and a policy of asset allocation that is consistent with those expectations.

- **Recognize the value of inactivity.** In life, we are generally taught that hard work and effort pay off. In investing, activity does not always lead to better outcomes and more often than not it leads to worse outcomes. There are three pitfalls to activity. First, the more frequently you assess your portfolio the more likely you are to suffer from loss aversion. Second, close monitoring makes you susceptible to recency bias because you see clearly what's done well and what's done poorly. Finally, activity creates costs that detract from portfolio returns. As we saw, the best time horizon for evaluation is longer than what is standard in the industry.

- **Your behaviors influence your returns.** An investment manager is a hired agent who is supposed to make the interests of the investor paramount. But the fact is that the behavior of investors helps shape the results that investment managers generate. We saw earlier that positive fund flows might account for one-third of the excess returns in the hedge fund industry, and we know that outflows cause unwanted selling. So if you are a large investor who deals with investment managers, it is important to understand your influence on results.

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profits even though the market recognized the economic consequences. Third, the stock market had above-average results in the 1980s and 1990s, which conferred substantial benefit to those executives who took equity-based pay. Finally, starting with a robust market for corporate control in the 1980s, boards came to recognize that a company's stock price reflects expectations for financial performance.

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writings better than anyone else alive, was surprised when I walked him through the same two passages you cited. He had presumed, like many of us, that Graham had written these words. After a few minutes of thinking it through aloud, he realized that he might never have read the maxim after all, but rather that he had heard Graham say these words many times in class and around the office. Even if Graham never wrote them down in canonical form, he stated this view many times to those who were closest to him.
In its most commonly cited form, I think the short-run-voting-machine-long-run-weighing-machine apothegm comes from Buffett, not Graham. In one of the Berkshire Hathaway annual reports (1987? I don't remember which one, to be honest), Buffett attributes the maxim to Graham, in quotation marks. That's the closest to their original form that I believe anyone will find them in. The only other possibility is that one of Graham's students captured these words in some of the lecture notes that are preserved from Graham's value-investing classes from the early 1930s. I haven't read through them all to see if this saying can be found there. But I don't think it's likely. I regard Warren Buffett as an unimpeachable source in this case and, in my opinion, the case is closed: Graham said it, even if he never wrote it."
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Important information

Important Credit Suisse HOLT Disclosures

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