



# Directors' dilemma: responding to the rise of passive investing

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## I. Directors' dilemma: responding to the rise of passive investing

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**The recent decline in active single-stock investing raises important considerations for corporate boards of directors.** The decline has been driven by a shift toward 'passive investing' and other forms of rule-based investing, such as index funds, factor-based investing, quantitative investing and exchange-traded funds (ETFs). The decline of active investing means that, in many cases, stock prices have become more correlated and more closely linked to a company's 'characteristics,' such as its index membership, ETF inclusion or quantitative-factor attributes. As a result, **companies' stock prices have become less correlated to their own fundamental performance.**

Accordingly, **market scrutiny of fundamental corporate performance has diminished, and stock prices have become less informative than they once were.** This can be problematic for boards of directors that utilize stock prices to assess company performance or to guide executive compensation decisions.

This does not mean that stock prices no longer matter – they do. Stock prices influence a company's cost of capital, which affects its competitiveness, and they guide much of the economics around mergers and acquisitions, as well as secondary capital raisings. Stock prices also still do respond to changing company fundamentals, at least over time. But **given the significantly lower turnover of passively managed investments and the extent to which equity prices now also move for *other* reasons, boards need to be able to separate 'characteristic-driven' or 'flow-driven' movements from fundamental ones in order to better evaluate underlying corporate performance.**

In some cases, disentangling corporate operating performance from market performance will become easier if boards shift their focus away from the widely used performance metrics of share price and total shareholder return (or TSR, which measures a firm's stock returns as well as its dividend payouts), which may not fully reflect underlying company fundamentals. **To gain a clearer picture of a firm's performance – particularly on a relative basis – boards may want to put greater emphasis on broader assessments, leveraging financial metrics that are both standardized and comparable across companies.** In our view, this may include focusing more on metrics such as cash returns on cash invested for non-financial firms, or return on tangible common equity for financial companies.

**In addition, when assessing relative performance, boards may want to heighten their scrutiny of the peer firms that are used to benchmark their own companies' performance.** For complex firms, boards might look more to 'sum of the parts' comparisons as they seek to assess the relative performance of specific business lines. This would help them to avoid overly broad comparisons that might mask key structural issues by conflating the performance of one business line with another.

**It is worth noting that an overreliance on share price or on TSR to evaluate management performance can result in incentives that may not be aligned with shareholders' long-term strategic interests.** When share prices fail to appropriately price in fundamentals, companies can become more focused on near-term tactical decision-making rather than on what is strategically best for the value of the firm over the long term.

Through a period in which interest rates have been historically low and equity markets have posted record highs, there have been relatively few opportunities for active investors to identify differentiated investment ideas. Less-expensive rules-based investing has thrived in this environment. But **the current market backdrop could change and become more supportive of active investing again. If it does, boards can help to ensure that their companies are well positioned for outperformance.**

As directors consider their oversight roles and responsibilities in an evolving market, we offer a brief snapshot of today's investing environment and the impact of rules-based investing on trading and stock-price movements. We then suggest a number of approaches that can help boards sharpen their assessments of company fundamentals, so that they can better assess relative performance. Finally, we discuss the natural tensions that exist between managing a company for the near-term stock price and managing a company to create long-term shareholder value.

## II. The growth and impact of rules-based investing

Rules-based investment strategies provide investors with greater liquidity, faster speed of execution, more transparency and lower transaction costs – attributes that are difficult to replicate with other financial instruments. Rules-based investing can take several forms, including index mutual funds, which aim to replicate the performance of a market index; exchange-traded funds (ETFs), which are tradable securities designed to track a basket of stocks; and factor-based portfolios, which highlight companies with similar features such as market capitalization, earnings-per-share (EPS) growth or dividend yield, to name a few.

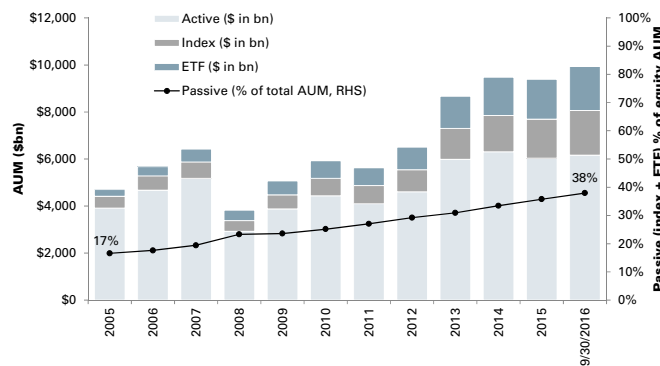
In general, passive investment vehicles tend to be backward-looking as they are based on back-tested results or prior performance. For example, an ETF might hold stocks in a given sector that has seen rapid growth in EPS over the past six months – but this doesn't necessarily mean that those same stocks will generate outsized EPS growth in the future.

**Below we provide a brief look at the growth of rules-based investing in recent years and discuss some of the drivers behind the shift away from active investing, as well as the ways this shift has affected US equity-market trading dynamics.**

### Rules-based investing has grown dramatically over the past decade

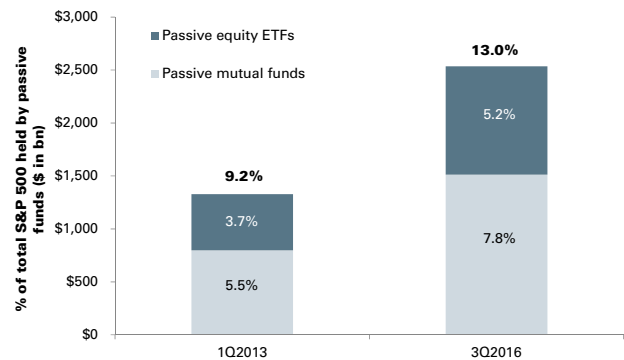
Nearly 40% of US equity assets under management (AUM) are held in passive vehicles, which is more than twice the level seen just a decade ago, as Exhibit 1 shows. Together, equity ETFs and passive mutual funds hold 13% of the S&P 500, up from 9% in early 2013, as Exhibit 2 shows.

**Exhibit 1: Passive investing accounts for nearly 40% of total US equity AUM, more than twice the level in 2005**  
AUM of US-domiciled equity mutual funds, index funds and ETFs; passive share of total AUM



Source: Strategic Insight, Goldman Sachs Global Investment Research.

**Exhibit 2: Passive mutual funds and ETFs together hold 13% of the S&P 500, up from 9% in early 2013**  
Estimated share of the dollar value of S&P 500 stocks held by US passive equity mutual funds and equity ETFs



Source: Bloomberg, Strategic Insight, Goldman Sachs Global Investment Research.

Passive ownership appears to be more prevalent in certain sectors that have traditionally had less dispersion across individual firm performance, or those sectors where stock performance has traditionally been linked with certain market conditions (for example, interest rates in the case of REITs). It also appears to be more prevalent among industries with lower market capitalization, with real estate and utilities currently reflecting the highest share of passive ownership. See Exhibit 3.

**Exhibit 3: Holdings by ETFs and passive mutual funds are higher in S&P 500 sectors with smaller market capitalizations**

Share of S&P 500 sector market cap held by passive investors

Sector	Market cap (\$bn)	% of market cap held by:		
		% ETFs	+ % passive MF	= % passive
Real Estate	\$593	10%	14%	24%
Utilities	\$615	8%	9%	17%
Materials	\$558	6%	8%	14%
Energy	\$1,385	6%	8%	14%
Industrials	\$1,882	5%	8%	13%
Health Care	\$2,809	5%	8%	13%
Discretionary	\$1,926	5%	8%	13%
Tech, Media and Telco	\$5,198	5%	7%	12%
Financials	\$2,407	5%	8%	13%
Staples	\$2,125	5%	7%	12%
<b>S&amp;P 500</b>		<b>5%</b>	<b>8%</b>	<b>13%</b>

Data are as of 9/30/16.

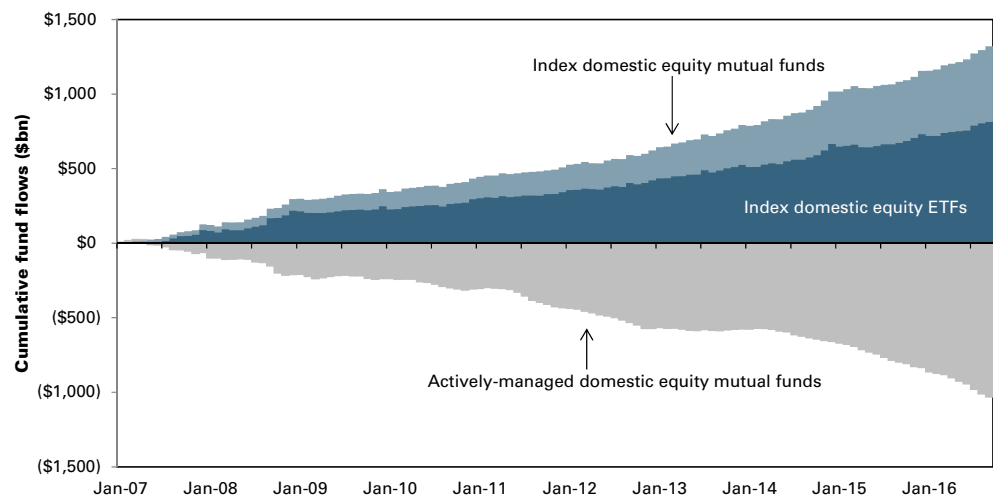
Source: Strategic Insight, Bloomberg, FactSet and Goldman Sachs Global Investment Research.

**Assets and sentiment move away from mutual funds and hedge funds**

As money has shifted out of actively managed mutual funds, there has been an influx of capital into ETFs and index funds, shown in Exhibit 4. This trend generally reflects investors’ preference to pay lower fees in a low-return environment. In just a decade, assets held in equity ETFs have grown to roughly one-third the size of equity mutual funds, as Exhibit 5 shows.

**Exhibit 4: Outflows from actively managed mutual funds have increasingly gone to ETFs and to index mutual funds**

Cumulative flows to and net share issuance of index domestic equity ETFs, index equity mutual funds and actively managed domestic mutual funds

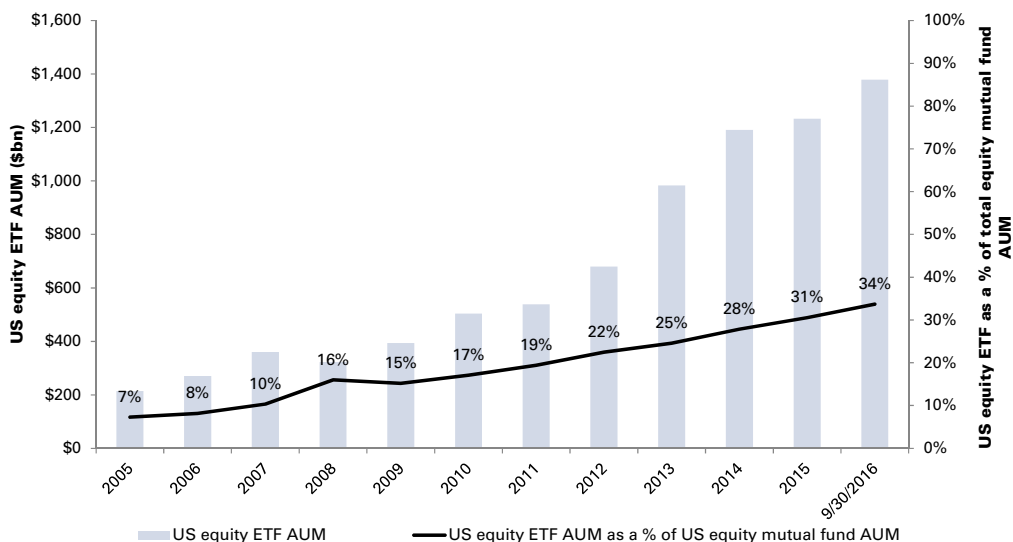


Data are as of 9/30/16.

Source: Investment Company Institute (ICI), Goldman Sachs Global Investment Research.

**Exhibit 5: US equity ETFs have grown to roughly one-third the size of traditional mutual funds**

Total US equity ETF AUM (\$bn) and as a share of total equity mutual fund AUM

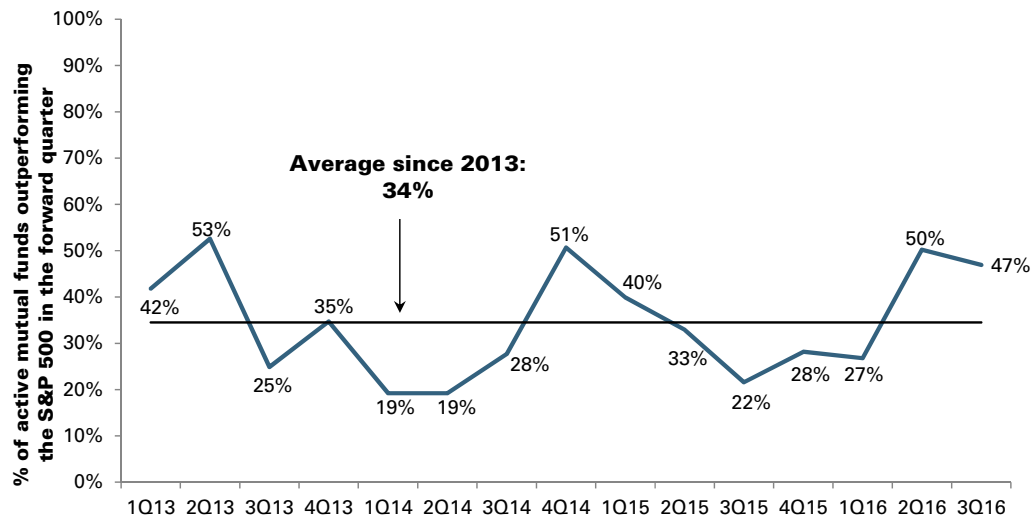


Source: ETF.com, Strategic Insight, Goldman Sachs Global Investment Research.

The growth in rules-based investing has occurred amid the generally weak performance of active mutual funds and hedge funds in recent years. On average, roughly one-third of actively managed equity mutual funds have outperformed the S&P 500 since 2013, as Exhibit 6 shows.

**Exhibit 6: Active mutual fund performance has lagged the S&P 500**

On average, roughly one-third of active mutual funds have outperformed the S&P 500 since 2013



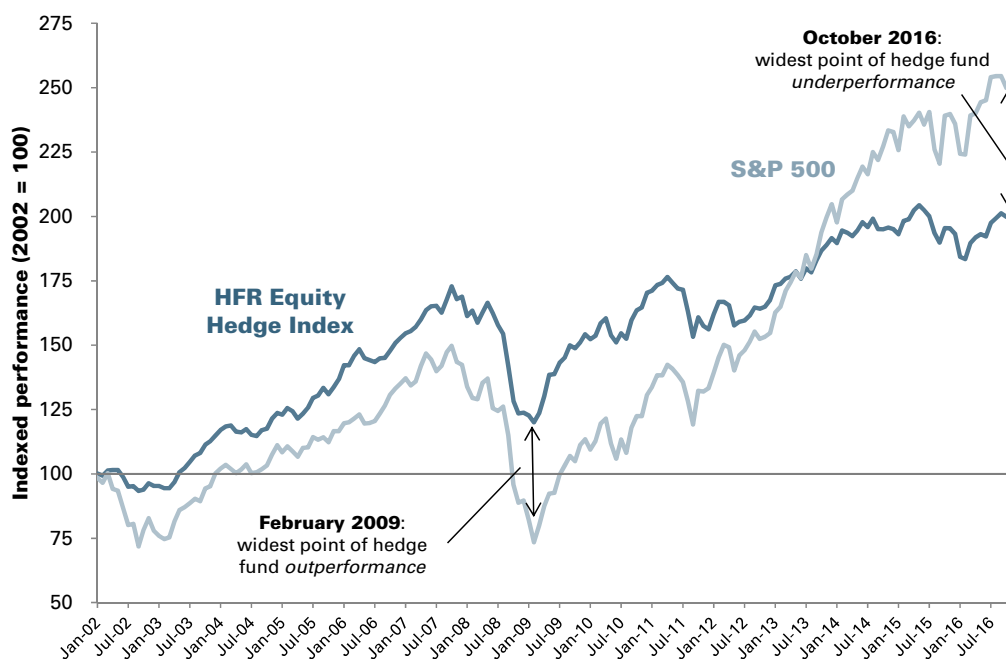
Source: Lionshares, FactSet, Goldman Sachs Global Investment Research.

In the aggregate, hedge funds have also posted disappointing returns since 2013, leading investors to push back on the traditional '2 and 20' fee model that hedge funds often use. Several large institutional investors have publicly announced plans to reduce their hedge fund holdings or to liquidate them entirely as a result of underperformance and fees that are high relative to the returns that some hedge funds are now generating.

Exhibit 7 highlights the current period of hedge fund underperformance versus the S&P 500, measured relative to the level in 2002. Consider that as of February 2009 hedge funds had *outperformed* the S&P 500 by the widest margin since 2002. That outperformance has since reversed, with hedge funds *underperforming* the S&P 500 by a similarly wide margin as of October 2016.

**Exhibit 7: After a decade of outperformance, equity hedge funds have sharply underperformed the S&P 500 since 2013**

S&P 500 performance vs. HFR Equity Hedge Index performance, indexed to the level in 2002



Data are as of 10/31/16.

Source: Hedge Fund Research (HFR), Goldman Sachs Global Investment Research.



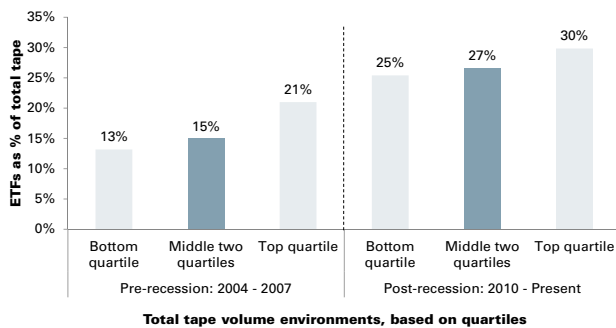
## Rules-based investing is changing market trading dynamics

The decline in active investing is affecting market trading dynamics in several ways, with the result that it may now take longer for share prices to reflect underlying company fundamentals.

This dynamic is evident in the increased usage of ETFs. Since 2010, ETF trading has routinely accounted for at least 25% of consolidated trading activity, compared to about 15% in the years leading up to the recent recession. An even larger share of trading shifts to ETFs in high-volume and more volatile markets, as Exhibits 8 and 9 both show.

### Exhibit 8: ETF trading activity now represents at least 25% of the consolidated tape, even on lower volume days

ETF volumes as a % of total tape volume

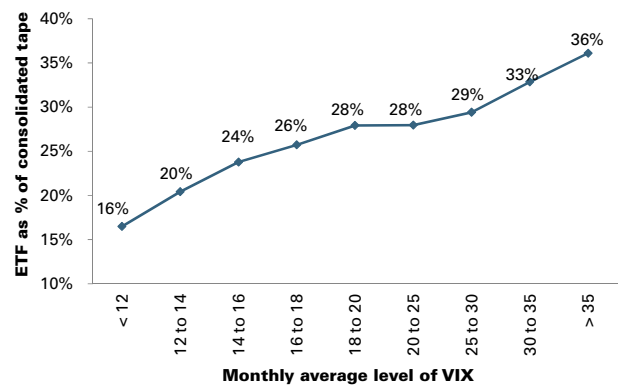


'Present' data as of 9/30/16.

Source: ArcaVision, Goldman Sachs Global Investment Research.

### Exhibit 9: ETF usage rises as market volatility increases

ETF \$ volumes as a % of the total tape, by average monthly VIX levels



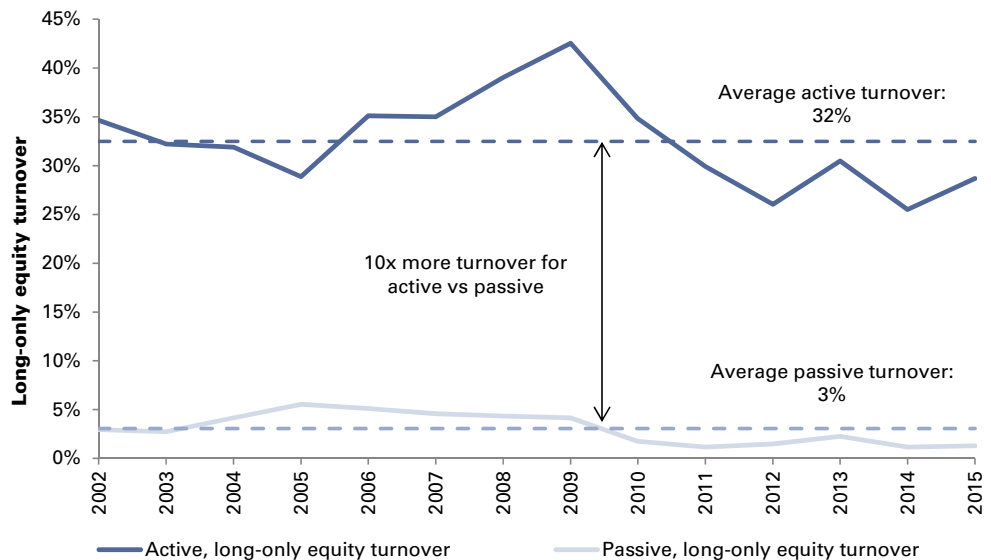
Data are from 2004 until 9/30/16.

Source: ArcaVision, Goldman Sachs Global Investment Research.

This growing reliance on ETFs is dampening equity turnover, with turnover in passive funds just a small fraction of that of active funds. Passive turnover has averaged just 3% per year since 2002, versus 32% for actively managed equity funds, as Exhibit 10 shows. Lower turnover, combined with a higher share of equity assets now held in rules-based investment vehicles, means that it is likely to take longer for share prices to reflect new company-specific information.

**Exhibit 10: Turnover in actively managed funds is 10 times that of passive funds**

Average turnover in active equity funds vs. passive equity funds (long-only funds with AUM of more than \$1bn), based on annual data between 2002 and 2015



Source: eVestment, Goldman Sachs Global Investment Research.

As the market moves away from trading company-specific fundamentals, intra-sector correlations have risen and are generally above their long-term levels, leading to lower dispersion of stock performance, as Exhibit 11 shows. These high correlations can drive sometimes-persistent deviations from levels that traditional investors might see as reflecting underlying fundamentals – especially in volatile markets.

**Exhibit 11: S&P 500 intra-sector correlations are well above long-term averages**

Intra-sector S&P 500 3-month realized correlations

S&P Sector	1 yr median	20 yr median	1yr median / 20 yr median
Telecom	0.62	0.45	140%
Staples	0.40	0.32	127%
Utilities	0.66	0.52	126%
Financials	0.62	0.54	114%
Healthcare	0.40	0.35	112%
Industrials	0.48	0.44	109%
Technology	0.45	0.42	109%
Discretionary	0.34	0.33	103%
Materials	0.42	0.44	95%
Energy	0.57	0.62	92%
<b>S&amp;P 500</b>	<b>0.35</b>	<b>0.31</b>	<b>111%</b>

Realized correlations are an estimate of the correlation between stocks in a given sector over the prior three months. Sectors are based on GICS breakdowns of S&P 500 stocks. Data are as of 1/4/17.

Source: Bloomberg, Goldman Sachs Global Investment Research.

### III. Factor-based investing reveals the market's preference for stability and value

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A review of rules-based investing generates a critical question: if investors who favor passive investment styles aren't principally focused on individual company performance, or on earning returns above portfolio benchmarks, then what *are* they evaluating?

One way to assess market preferences is to look at 'factors.' Often ETFs and related funds invest on the basis of a theme; sector-specific ETFs are a narrow example. The theme can also be based on 'factors,' which are attributes that help to explain securities' risks and returns, such as growth, value, dividends or size.<sup>1</sup> Investing on the basis of factors makes stocks that share common attributes more likely to move together, much as they would if they were in an index.

We can use an analysis of specific factor valuations to shed light on investor sentiment. This analysis reveals that **investors are currently prioritizing stability and value over growth and shows that they tend to rely on metrics that are not necessarily forward-looking.**

Exhibit 12 below shows a factor analysis for the more than 930 companies in our North American equity-research coverage universe.<sup>2</sup> Factors with 'stretched' or expensive valuations (those toward the left side of the chart) indicate popular trades and reflect the consensus investor viewpoint. Factors with relatively 'cheaper' valuations (those toward the right side of the chart) reflect attributes that are less favored.

These factor valuations suggest that investors are prioritizing stability and value, favoring stocks with bond-like characteristics. Among the most 'expensive' factors – or those most in demand by investors – are a low price-to-earnings ratio, inexpensive valuation more broadly, high dividend yield and low EPS growth. These attributes have historically been linked to companies and to stocks that investors believe offer the greatest level of stability and are typically associated with value-investing strategies.

At the same time, 'cheaper' factors – or those less in demand – include growth-oriented characteristics including a high rate of financial growth, a rich price-to-earnings ratio relative to history, and rich valuations – reflecting diminished investor interest in growth assets.

Exhibit 12 also shows that while virtually all factors have been trading above their five-year median levels, 'value' factors have generally been trading at the top of their five-year *ranges* – a clear indication of the market's willingness to reward stable companies with strong balance sheets.

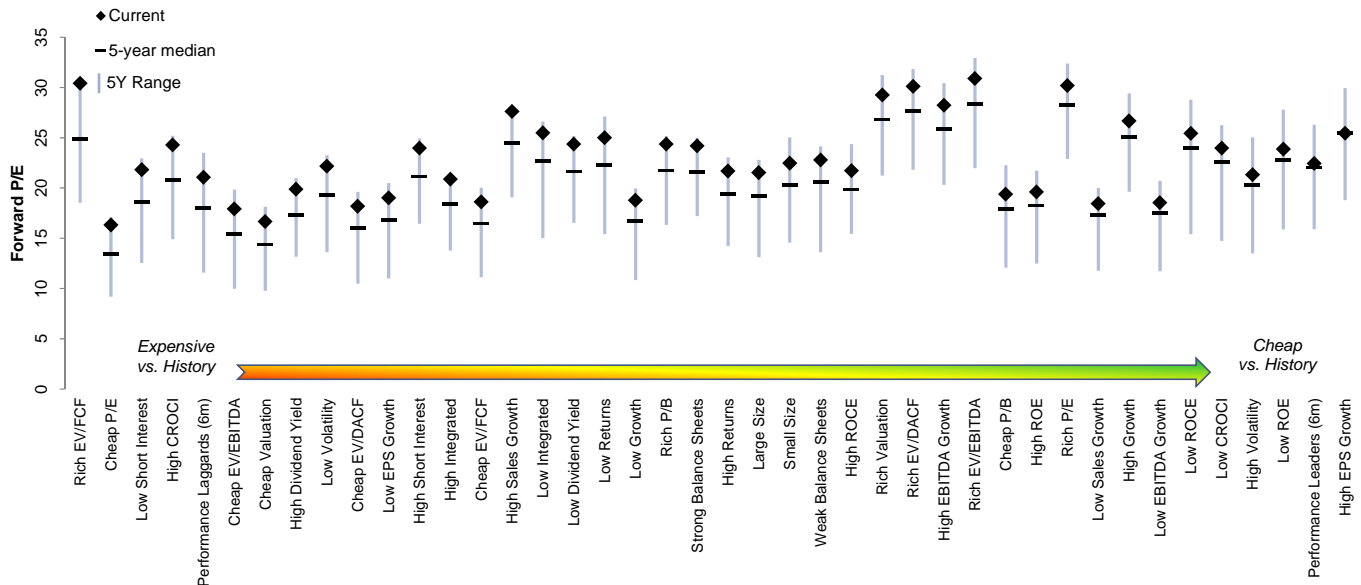
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<sup>1</sup> Factors can include fundamental company characteristics – like earnings growth or return on capital – or can be based on stocks' technical trading attributes – like recent price performance or volatility. Once an investor has selected which factors to highlight, these become the 'rule' that guides investment decisions. Investors can leverage factor investing in order to reduce portfolio volatility or unwanted exposure or, alternatively, to mimic active management with a reduced cost structure.

<sup>2</sup> The Goldman Sachs equity-research coverage universe for North America leverages our proprietary financial forecasts. Accordingly, this dataset is broad and offers significant granularity – allowing for an examination of more than 40 distinct factors – but it has a limited history. For additional detail on our factor analysis, please see: ['Quantamental Theory: The Seasons & Reasons of Factor Performance'](#) (July 2016).

**Exhibit 12: Factor valuations show that investors are favoring stability and bond-like characteristics**

Factor valuations as of December 2016



This analysis reflects the average P/E for both the Q1 (top-quintile) and Q5 (bottom-quintile) tails for each factor in the Goldman Sachs Investment Profile suite, which is based on our equity-research coverage universe spanning more than 930 companies in North America. This analysis leverages our in-house analyst models and estimates, which we believe provide a more forward-looking/accurate measurement of company expectations and performance. For additional detail please see ['Quantamental Theory: The Seasons & Reasons of Factor Performance'](#) (July 2016). Data are as of 12/14/16.

Source: FactSet, I/B/E/S, Goldman Sachs Global Investment Research.

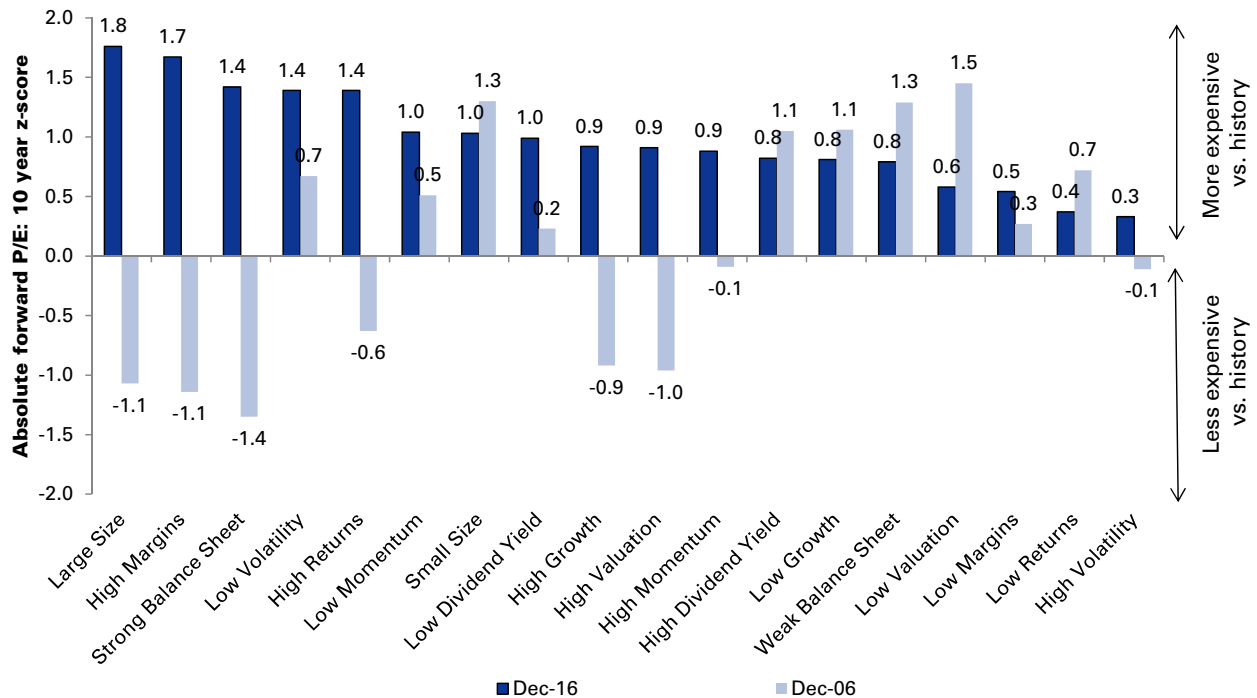
Exhibit 13 below tells a similar story over a longer time horizon. Here we use a dataset that provides a longer history (although for a smaller universe of companies) and yields broadly the same conclusions.<sup>3</sup> As of December 2016, all of the 18 factors that we evaluated were more expensive than the ten-year historical average. The most expensive factors included a large market capitalization, high net profit margins, a strong balance sheet and low stock-trading volatility. Again, these are characteristics associated with value investing and bond-like securities. Conversely, the least expensive factors included high stock-trading volatility, low returns, low margins and a weak balance sheet. Together, these findings support the notion that investors today are prioritizing stability over growth.

Exhibit 13 also shows that today's factor valuations are remarkably different than they were 10 years ago, when large size, high margins and a strong balance sheet were among the less expensive factors relative to history. At the same time, low returns, low valuation and a weak balance sheet were among the *most expensive* factors. Viewed in this historical context, it is apparent that investors are being more defensive today than they were in the relatively recent past.

<sup>3</sup> Although this dataset covers only the S&P 500, it extends back to the 1980s and therefore provides useful historical context.

**Exhibit 13: Factor valuation for S&P 500 companies, December 2016 vs. December 2006**

10-year z-scores are based on forward price-to-earnings ratios for each factor (z-scores greater than 0 indicate that the factor’s price-to-earnings valuation is more expensive than it has been historically, while negative z-scores indicate that the factor’s price-to-earnings ratio is less expensive)



For additional detail on our methodology, please see the GS Research publication, ‘Micro Equity Factors (MEF): Selecting the ‘types’ of stocks to own based on the investment cycle’ (July 2013).

Source: Compustat, FactSet, I/B/E/S, Goldman Sachs Global Investment Research. The exhibit shows 10-year z-scores for each factor at two points in time – December 2016 and December 2006 – based on forward four-quarter price-to-earnings ratios. A z-score (or a ‘standard score’) essentially indicates how much an outcome differs from the historical norm, with the difference measured in standard deviations. For the purposes of our analysis, a z-score that is equivalent to zero indicates that the factor’s price-to-earnings valuation is in line with the ten-year average, while a z-score greater than zero indicates that the factor is ‘more expensive’ relative to history. Conversely, a negative z-score indicates the factor is ‘less expensive’ relative to history.

**Today’s bias for stability and value creates incentives for companies to structure and operate their businesses to meet these market preferences.** Corporate managements recognize and are responding to these incentives, as we discuss in the next section.

## IV. The rise of passive investing affects incentives for management

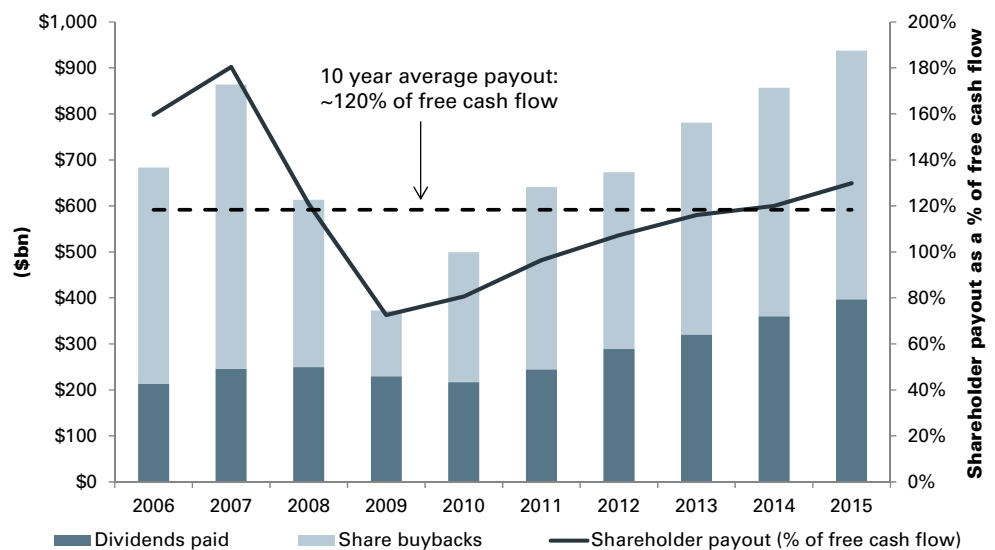
The market’s preference for performance based on near-term metrics creates certain incentives for management; these include incentives to build and maintain strong balance sheets today, rather than to invest for long-term organic growth that may take years to pay off. Recognizing these incentives, corporate management teams have adjusted their behavior to meet market demands, along several lines.

First, **companies have made payouts to shareholders a key priority.** The principal means of returning cash to shareholders is through share buybacks, which rose from \$140bn in 2009 to \$540bn in 2015 for S&P 500 companies (excluding financials and real estate). Measured as a proportion of free cash flow, share buybacks rose from 30% to 70% over the same period for the same set of companies. See Exhibit 14. In fact buybacks have been the largest source of US equity demand since 2010, according to the Goldman Sachs equity portfolio strategy team, who also anticipate a significant increase in 2017 if corporate tax reforms are enacted as expected.

Exhibit 14 also shows that dividends are another widely used method to boost total shareholder return. In 2015, S&P 500 companies (excluding financials and real estate) paid nearly \$400 billion in dividends – the highest level in 10 years. This figure equates to roughly 60% of their free cash flow. In 2006, S&P 500 companies had paid approximately \$215 billion in dividends, which equated to just 50% of their free cash flow during that period.

### Exhibit 14: Shareholder payouts account for a growing share of companies’ cash

Aggregated dividends and buybacks in \$bn and as a % of free cash flow for S&P 500 companies (ex-financials and real estate)



Source: Compustat, Goldman Sachs Global Investment Research.

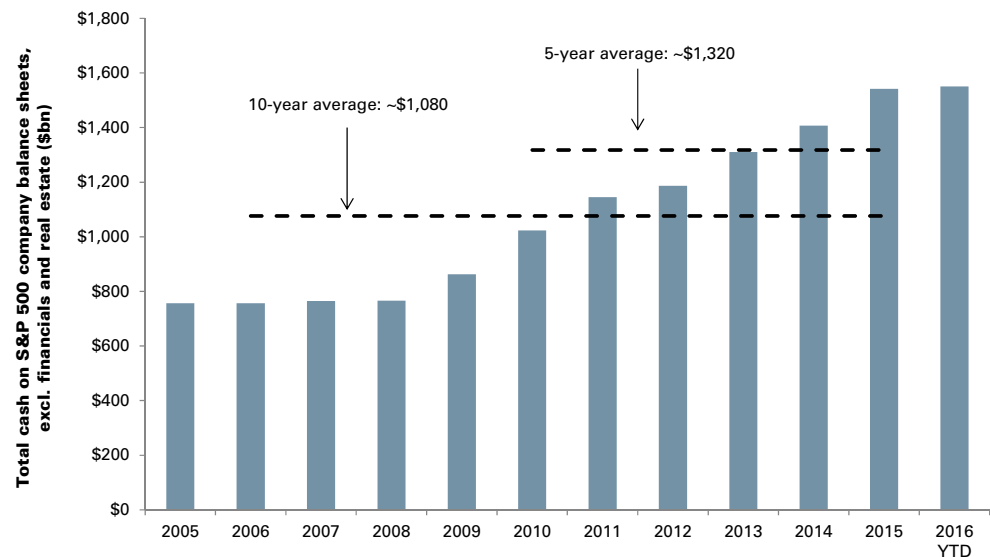
Second, **companies are increasingly holding cash on balance sheets rather than putting it toward long-term investments or R&D.** Cash on the balance sheets of S&P 500 companies (excluding financials and real estate) is now more than 40% higher than the average holdings over the last decade and more than 15% higher than the five-year average, as Exhibit 15 shows. In part this reflects an increase in leverage: new issuance of US investment-grade debt posted a record of more than \$1.3 trillion in 2016.

R&D spending as a share of total corporate spending has been fairly stable since 2010, suggesting that companies are focused on maintenance rather than expansion even as their assets have aged. Organic growth has clearly taken a back seat to the return of capital to shareholders: only once in the past six years have Russell 1000 companies grown their organic investments more than their returns to shareholders.

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#### Exhibit 15: Companies are increasingly holding cash on balance sheets

Total cash holdings, S&P 500 (ex-financials and real estate)



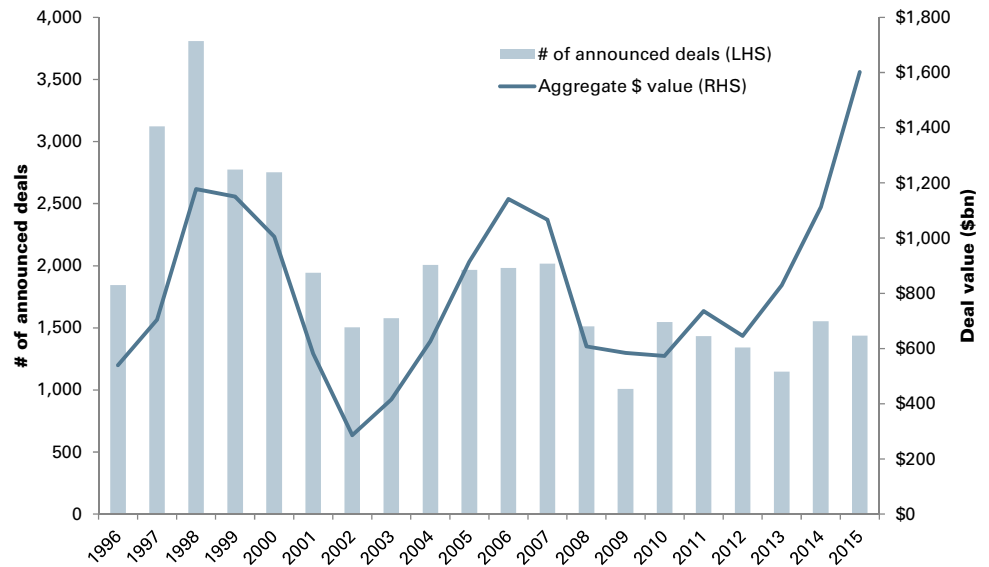
YTD data are as of 9/30/16.

Source: Compustat, Goldman Sachs Global Investment Research.

Third, **in some cases companies facing limited organic growth opportunities are choosing to jump-start future growth through mergers and acquisitions.** 2015 saw a new record of \$1.52 trillion in announced M&A deals by US-based companies, although the pace of activity moderated in 2016. Under persistently favorable debt-market conditions, new debt issuance earmarked to finance mergers and acquisitions accounted for 20% of 2016 total issuance by volume, the highest share in 15 years. Recent M&A transactions have tended to be 'big deals': during the six years following the end of the recession (2010-2015), US-based companies announced nearly 8,500 transactions worth an aggregate \$5.5 trillion. In contrast, in the six years prior to the recession (2002-2007), there were nearly 30% more announced transactions, but the aggregate total value was 20% lower (11,000 deals worth \$4.5 trillion). See Exhibit 16.

**Exhibit 16: Announced M&A activity by US companies set a record in 2015**

US-based acquirers making an outright purchase of another company, acquiring a majority stake or purchasing the remainder, as of the date of announcement



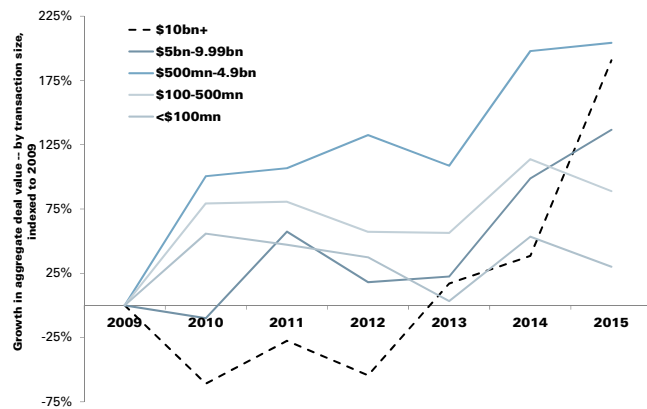
These data capture transactions with a disclosed purchase price.

Source: Dealogic, Goldman Sachs Global Investment Research.

Despite the trend toward large transactions, since 2009 there has also been a notable increase in the number of mid-sized deals, those with transaction values between \$100 million and \$10 billion. See Exhibits 17 and 18.

**Exhibit 17: The aggregate value of mid-sized M&A deals has been strong since 2009**

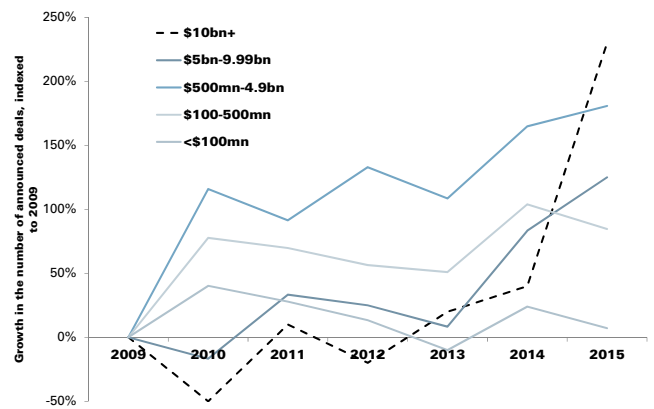
Growth in the aggregate value of announced deals (categorized by transaction size) – indexed to 2009



Source: Dealogic, Goldman Sachs Global Investment Research.

**Exhibit 18: The number of mid-sized M&A deals has been strong since 2009**

Growth in the number of announced deals (categorized by transaction size) – indexed to 2009



Source: Dealogic, Goldman Sachs Global Investment Research.



## V. Evolving market dynamics are affecting the oversight role of boards and raising questions about best practices

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At the board level, similar market-driven incentives are at play. The metrics that have gained greater prominence due to the growth in passive investing – share price and total cash returns to shareholders – are often the same metrics that boards use to evaluate management performance and to guide compensation decisions. They have also become the metrics by which the performance of boards themselves is often implicitly judged.

Yet when rules-based flows are such a critical driver of stock prices, relative share performance figures may not reflect key strategic issues as clearly or as quickly as they once did. A company's market value may no longer accurately reflect its market share, its revenue model or the value of its intellectual property or product innovation, for example – at least for a period of time.

This suggests that, in evaluating relative performance, boards may want to emphasize other metrics – ones that are more reflective of underlying company fundamentals, considering what will enhance long-term value for shareholders and identifying and evaluating key performance indicators on that basis. In our view, this means focusing on financial metrics that are standardized and comparable (and less on those that are affected by firm-specific adjustments) as well as benchmarking against appropriately comparable peer groups.

The fact that boards are charged with overseeing companies' fundamental performance is clearly not new. What is new is the fact that the decline in active investing has reduced investors' visibility into fundamental company performance, increasing both the importance and the value of board oversight. **Below we discuss a few best practices that boards may want to consider when assessing fundamental and comparative performance.**

### **Companies' financial results can be tricky to interpret**

**Corporate management has discretion over the way that a firm reports its financial results. For the board, understanding where and how this discretion can influence reported financial metrics – and create discrepancies in comparisons – is key.**

Companies are required to report earnings results that conform to generally accepted accounting principles (or GAAP standards). But they may choose to – and often do – provide and emphasize pro forma metrics. Pro forma results (also referred to as 'non-GAAP') exclude items that are not considered part of the 'normal' operations of the business or that do not have a cash basis during the reported period.

More often than not, pro forma results tend to look more favorable than the comparable GAAP measures do. In 2015, of the companies in our North American equity-research coverage universe<sup>4</sup> that reported pro forma results, nearly 90% reported non-GAAP EPS that was *higher* than the comparable GAAP metric, implying that fewer costs were taken into account on a pro forma basis.

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<sup>4</sup> This analysis includes only the companies in our North America coverage universe with financial history from 2010-2015 that reported both GAAP and non-GAAP EPS metrics in 2015 and where 'consensus' reflected a non-GAAP measure.

It is worth noting that the distinction between items that are 'real' and 'recurring' and those that are not isn't always clear-cut, and that this opens the door for broad use of discretionary adjustments. Consider that since 2010 the value of items commonly removed from 'adjusted' EPS has more than doubled for this same universe of stocks. Ultimately, pro forma metrics can be useful because they reflect a company's specific circumstances, normalizing for exceptional occurrences. However, they are less helpful for assessments of relative performance. Even in industries in which adjustments are common, using pro forma metrics for comparisons is challenging because the consistency and scope of any adjustments is variable. Standardized metrics are critical to being able to accurately evaluate relative performance.

Even if a company only reports and focuses on standard GAAP metrics, this does not entirely eliminate the scope for discretion in its financial statements. Companies still have the opportunity to decide which accounting methodology to use to depreciate an asset (whether on a straight-line or an accelerated basis), for example, or to determine whether to treat certain expenses as direct costs or as assets (which affects whether to expense them right away or to capitalize them over time). For companies that engage in mergers and acquisitions or that have significant foreign currency exposure, it can make sense to look at financial results on an organic basis (excluding the impact of M&A) or on a constant-currency basis (adjusting for foreign-exchange moves).

Additionally, items 'below the line' can affect reported financial results. The impact of a company's capital structure, financial investments and tax rate is important: a lower interest rate, outsized investment income or an abnormally low tax rate can inflate net income in the short term, potentially masking operating weaknesses. An awareness of how buybacks can affect per-share metrics is also critical to an assessment of a company's fundamental performance.

## **Standardized financial metrics can offer a clearer picture**

**Boards can gain a clearer picture of relative operating performance if they evaluate financial results on the basis of standardized measures or on cash terms, given that cash is less susceptible to discretionary adjustments or to accounting differences.**

While having a sense for a company's market value and overall profitability is important, we believe boards may want to focus more on profitability from the perspective of their shareholders. To this end, return on equity (ROE) is a simple measure of profitability. It is calculated by dividing a company's net income by its owners' equity (or by what is left of its assets after eliminating all of the company's liabilities) and shows the value that is available to the company's shareholders. A similarly straightforward measure is return on invested capital (or ROIC), which can be calculated by dividing a company's after-tax operating income by the book value of its invested capital. A company with a particularly low ROE or ROIC relative to its own history or to others in the same industry could be viewed as relatively less efficient, potentially revealing a structural flaw in the business, particularly if trends persist over time.

But because ROE and ROIC are derived using broad measures that can be subject to accounting differences (e.g., a company's approach to depreciation or accounting related to intangibles, even if using GAAP measures), boards may find narrower adaptations to be more useful for relative comparisons.

In particular, we believe cash returns on cash invested (CROCI) offers a useful indicator of non-financial companies' fundamental performance. This metric is derived by dividing a company's debt-adjusted cash flow by the average gross cash invested during the period.<sup>5</sup> In this way CROCI reveals the productive value of the company's invested cash. Because CROCI relies on cash flow, it eliminates distortions that can be caused by regional accounting differences or by a company's financial structure. For financial firms, a similarly useful metric is return on tangible common equity (ROTCE), which shows the net income that is available to common shareholders after removing hard-to-value assets (or dividing net income by what's left after excluding liabilities, intangible assets and preferred equity from total assets).

While other metrics are certainly worth evaluating – including ones that are industry-specific – both CROCI and ROTCE can help to provide a clearer view of underlying performance for a broad range of companies.<sup>6</sup> Ultimately, boards are right to be wary of relying on metrics that can create misaligned incentives when viewed in isolation. For example, while accelerated revenue growth is generally viewed favorably, the way it is achieved matters significantly. Sudden revenue growth can be associated with margin degradation or with reduced price or brand discipline that can negatively affect the company's long-term value.

## **Re-thinking incentive compensation and using appropriate peer groups for benchmarking purposes**

Boards may wish to keep these points in mind as they design incentive compensation programs for company executives. Performance-based pay is now the bulk of the average CEO compensation for many large public companies, with particular importance given to long-term and short-term equity performance-linked incentive programs. TSR has become the dominant performance metric for long-term incentive plans, with nearly 60% of non-financial S&P 500 firms incorporating this metric.

At one level this makes sense. Both share-price appreciation and TSR are straightforward to calculate and are intended to align incentives for management with those of investors. Both, at least on the surface, seem to provide a clear and direct way of measuring absolute and relative performance.

However, **share price and TSR may not be the best ways to evaluate management performance, particularly over the longer term.** It's true that TSR does correlate with market-friendly measures like stronger total cash returns to shareholders. But we have found that TSR – as a long-term incentive performance metric – historically has *not* led to superior stock performance. Instead, focusing on TSR, or 'solving for share price' or 'solving for shareholder payout,' by its very nature, tends to prioritize short-term results over long-term investments.

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<sup>5</sup> GS SUSTAIN 'Introduction to GS Sustain: Seeking alpha by owning leaders with high returns on capital' (March 31, 2015)

<sup>6</sup> For example, Institutional Shareholder Services Inc. (ISS) recently announced that it will use new financial performance metrics in its qualitative pay-for-performance analysis. Beginning with proxies filed on or after February 1, 2017, ISS will evaluate a company's performance relative to peers on six financial metrics (rather than on only total shareholder return). These metrics are a weighted average of return on equity; return on assets; return on invested capital; revenue growth; EBITDA growth; and cash flow (from operations) growth. Each will be analyzed on a three-year basis. <https://www.issgovernance.com/iss-announces-pay-performance-methodology-updates-2017/>

Even when TSR is included as part of 'long-term' incentive programs, these programs aren't necessarily truly long-term. 'Long-term' incentive programs typically have a three-year time horizon, which may make sense given that the median tenure of an S&P 500 CEO is just five years. But by relying on a rolling three-year metric, these plans can nod toward short-term performance. Managers' efforts to maximize the rewards for each tranche of compensation (i.e., year three of each tranche) can result in what is effectively more of a year-to-year focus on the share price. It is also easy to adjust future targets downward in response to one difficult year, and the limited transparency around metrics and targets can obscure these revisions.

**Regardless of how incentives are designed, it will be useful for boards to understand what is driving share-price performance, whether it is specific factors or company performance.**

**However boards choose to assess relative performance, the choice of an appropriate peer group for benchmarking is critical.** Simple benchmarking can be done using broad metrics such as market capitalization, industry identifier or business model. If incentive plans are principally designed as a tool to recruit and retain management talent, then these comparisons may be sensible. Such broad comparisons can also serve as valuable barometers of the business backdrop and macroeconomic conditions.

Yet peer analyses can vary dramatically in quality, comparability and depth. While the typical peer group includes between 15 and 25 companies, some firms compare themselves to 100 or more. In our view, the number of companies included in peer analyses is less important than the degree of comparability between firms. This does not mean that peers should be cherry-picked to reflect only companies that perform similarly. Excluding outperformers is not likely to be helpful: peer-group analyses are valuable precisely *because* they can shed light on relative performance differences. Rather, we would err on the side of reasonable inclusivity in crafting appropriate peer groups, meaning using peers whose business models most closely align. 'Sum of the parts' analyses can also be helpful for complex firms that encompass a broad range of business lines.

## VI. Implications for corporate strategy

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Taken together, the consequences of rules-based investing – lower turnover, the greater sensitivity of share prices to market flows and the diminished information content of individual share prices – have affected the oversight role of the board of directors. The decline in the shorter-term information content of share prices heightens the importance of the responsibility that boards, and particularly their independent directors, have to closely monitor and evaluate fundamental corporate performance.

To help companies achieve long-term success, it is important to recognize and address the potential conflicts that can emerge between governance that is geared toward managing what the market is pricing and rewarding today, on the one hand, and focusing on fundamental and longer-term company performance on the other.

Structuring governance and compensation programs to promote the metrics that the market prefers has – so far – been a sensible approach to prevailing market incentives. But the market focus on near-term shareholder returns will undoubtedly change. This could happen as interest rates rise. Or it could happen when rules-based investment vehicles own such a large share of the equity market that active investors see greater opportunities. Or it could happen when public attention seizes upon the fact that rules-based investing discourages long-term corporate investment – with negative implications for the broader economy. Whatever the trigger, the shift is likely to feel quite abrupt, to directors and management teams alike.

Balancing the short-term imperatives against the longer-term perspective is complicated, and there is no single right answer. But boards may be able to take several steps that can help them navigate this challenge. These include:

- Adjusting executive-compensation structures to leverage standardized metrics beyond share price and TSR, which can bolster flexibility;
- Emphasizing thorough and appropriate peer-group analyses for benchmarking, which can also help to ensure that companies look beyond share price and shareholder payout; and
- Ensuring disciplined stewardship of a firm's capital by focusing more on standardized measures such as CROCI or ROTCE, which might assist boards as they oversee lasting value creation.

As companies shift their focus away from near-term share-price performance and focus on long-term value, this should encourage and support greater research and development, innovation and job creation, ultimately supporting broader economic dynamism.



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