Active and Passive Strategies: An Opportunistic Approach

INTRODUCTION

For decades, debate has raged among proponents of the active and passive approaches to equity investing. Many argue that the sophistication and experience of professional active managers is necessary in the ever-changing investment landscape; others point to the better long-term performance of passive approaches, in part due to lower management fees. Investors will often take sides and allocate exclusively to either active or passive funds. Our work suggests neither approach is always better and, instead, the optimal choice depends on the investment backdrop. Thus, we believe that allocating to active and passive strategies opportunistically, and making full use of manager selection tools, represents the best possible approach. ■

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Executive Summary

While there is little disagreement that equities are a cornerstone of most investment portfolios, there is fierce controversy over how best to gain exposure to the asset class. Many have argued for the superiority of either actively or passively managed equities, usually concluding one to be structurally better and deserving of a full allocation. The Global Investment Committee challenges this traditional framing. This paper explains why the better choice varies with market conditions and is often a measured combination of the two approaches. We believe that acting on the opportunity presented by current circumstances, combined with use of the latest thinking in selecting investment managers, can provide significant performance benefits.

Here, we develop a systematic means of translating historical observations into optimal allocations of active and passive equity funds across market cap and style. As a first step, we looked to the market and identified signals that give indications of how the current environment promotes success for active managers. To gain entry into our model, these signals must have proven effective in predicting periods of active manager outperformance, as well as be in accord with economic intuition. Using this standard, we isolate nine measures that, in combination, guide the recommendations of the current outlook to assess the relative attractiveness of active and passive management.

To allocate between active and passive, we first couple our model-driven view of the current environment with the long-term performance of active strategies across styles. Synthesizing these provides an allocation: We will recommend being fully active when the environment is most attractive, fully passive when least attractive and more balanced when moderate. Based on our analysis, both active and passive strategies have shown strong outperformance when their respectively attractive conditions exist.

Finally, selecting a portion of a portfolio to be actively managed is not a complete recommendation. Manager selection is vital for performance, and we have developed cutting-edge methodologies to identify managers with the potential to outperform across environments. Combining optimal active and passive allocations with high-conviction managers delivered our best implementation for equity portfolios. ■

Introduction

Investors today face an increasing number of choices for adding exposure to equity beta. Historically, actively managed funds have been the overwhelming favorite. The concept is enticing: Individuals can hire professional managers to select securities and construct diversified portfolios in hopes of beating the market. This active management should be particularly effective in times of market stress and downturns, when more focused stock selection can reduce the damage that might be inflicted by exposure to the broad index.

Recently, however, periods in which active managers underperformed and increased focus on costs have prompted growth in passively managed products. These typically charge lower fees but abandon the goal of outperformance instead attempting to merely keep pace with the market. Providers of these indexed or passive products argue that, over time, market efficiency inhibits the efficacy of active managers.

During the past 30 years, scores of academic studies have argued for the superiority of either approach, with few definitive conclusions for portfolio construction. The result has been that most investors and advisors have adopted a philosophical approach to their portfolio design, choosing either a largely passive approach or a largely active approach based on intuitive presumptions about market efficiency in a particular asset class. Given the impact that performance differentials and fees can have over long time horizons, these choices can have a material impact on client investment outcomes. In that spirit, the Global Investment Committee (GIC) recently embarked on a proprietary study to assess whether a more dynamic approach to portfolio construction decisions between active and passive strategies was worthwhile.

Based on our analysis of the historical data, our findings confirm that a simple 50% active/50% passive approach to the standard nine investment styles in US equities outperformed a purely active approach over time. More important, our work suggests a dynamic, hybrid approach is even more powerful. Allocating to active and passive strategies in the proportions suggested by market conditions beat being always active or passive, with incremental annual performance premiums over passive-only strategies of 75 to 150 basis points net of fees. Finally, combining this model with our manager selection process added meaningfully to performance.

This paper reviews our approach to incorporating active and passive strategies in a portfolio and the systematic framework we have developed in an attempt to maximize performance from traditional, diversified equity products. Our discussion intends to answer the following questions: First, for each major domestic equity asset class, how can we determine if the environment appears favorable for active managers overall? Second, how might we construct a portfolio favorably allocated between active and passive products? Finally, what tools are available to identify those managers who we believe can deliver outperformance?

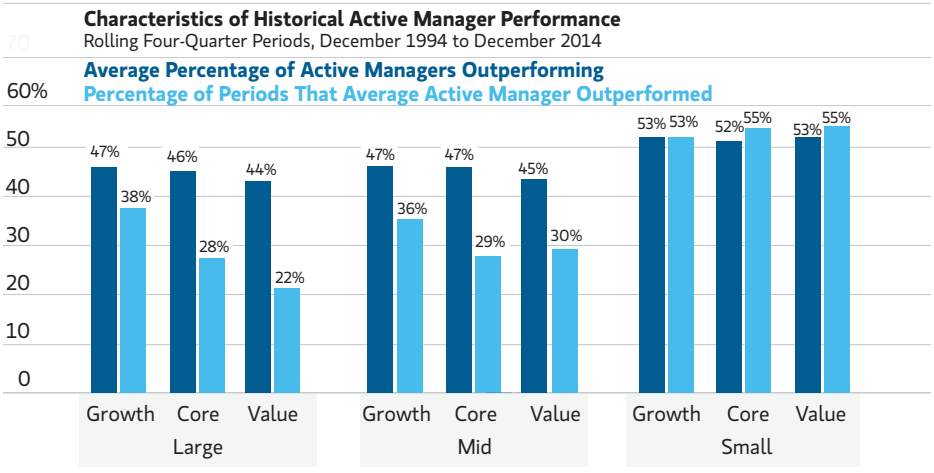
Our current model, based on data through January 2015, suggests that optimal allocations for the next year lean passive except for even splits in small-cap growth and small-cap core, and an active tilt for mid-cap growth. We plan to rerun the model every month and anticipate that annual turnover in recommendations will be less than 30%.

Framing the Debate: Active Performance Often Justifies Higher Fees

Within traditional equity products, active management does carry a higher price tag. On average, active products typically charge an additional 65 to 90 basis points per year versus passive equivalents. Are the higher prices charged by active managers indicative of an ability to beat their passive equivalents over the long term? To examine this, we compared the performance records of passive (by a procedure described in Appendix 3, page 15) and active strategies for a 20-year period using two approaches, which gave differing results.

The first approach, more commonly used yet less relevant, looks at average returns among active managers. This is the return implied by selecting an active manager at random, under the assumption that investment manager analysis is unable to

Exhibit 1: Underperformance of the Average Active Manager Is Only Half the Story



Source: Morningstar, Morgan Stanley Wealth Management as of Dec. 31, 2014

Past performance is no guarantee of future results. Performance does not take into account fees, taxes or other expenses. If this were so, performance would be lower.

identify managers most likely to outperform. Under this construct, active managers in large-cap styles outperformed somewhat infrequently (ranging, for large-cap styles, from 22% for value to 39% for growth, with full detail in Exhibit 1). Among proponents of static passive strategies, comparisons of this sort are often cited.[1]

Of course, no one invests with the "average" active manager. Almost universally, investors will concentrate in a relatively small number of active managers who have verifiable track records that show past outperformance. Because of this, we believe that performance metrics related to the ability to select outperforming managers are much more appropriate.

The second approach measures the percentage of active managers who have outperformed their benchmarks. As applied to the investment process, this measures the probability of selecting outperforming managers. This approach is more applicable for investors working with Financial Advisors, where the manager decision has major impact, and the selection decision is typically informed through intensive professional vetting. Under this metric, the comparison is much closer across styles and averaged over rolling four-quarter periods, roughly 44% to 53% of all managers beat their benchmarks (see Exhibit 1, page 3).

It is vital to note that historical averages of performance metrics do not present the complete picture. That is because it is not simply the probability of a manager's outperformance that matters, but the magnitude of the gains. Specifically, the reward for determining these favorable periods is large. Based on our analysis of the historical data in Exhibit 2, identifying advantageous periods for active management produced excess returns relative to a passive index of roughly 1% to 3% among large-cap stocks, 2% to 4% for mid-cap stocks, and 4% to 10% in small-cap stocks after fees. (Performance is reported net of product fees and does not reflect wealth management fees.) Clearly, attempting to identify these periods is an endeavor worth pursuing.

Exhibit 2: Large Incentives Exist for Determining Favorable Periods for Active Management

Active vs. Passive Performance Spread and Percentage of Active Managers Outperforming
History Relative Percentiles, December 1994 to December 2014

	Large Cap			Mid Cap			Small Cap		
Percentile*	Growth	Core	Value	Growth	Core	Value	Growth	Core	Value
One-Year Average Manager Active vs. Passive Return									
90th Percentile	2.8%	1.2%	1.8%	3.8%	1.9%	3.2%	9.8%	5.3%	3.6%
75th Percentile	1.2%	0.1%	-0.5%	0.9%	0.2%	0.7%	3.8%	3.0%	1.8%
Median	-1.0%	-1.0%	-1.6%	-1.2%	-1.2%	-2.0%	0.5%	0.2%	0.3%
Four Quarter Averaged Percentage of Active Managers Outperforming									
90th Percentile	60.8%	57.2%	58.1%	58.0%	57.4%	57.3%	66.1%	62.5%	63.1%
75th Percentile	54.3%	53.4%	50.0%	53.5%	54.7%	52.9%	60.7%	58.9%	58.5%
Median	46.2%	44.5%	43.7%	47.6%	47.4%	42.5%	53.3%	52.6%	53.2%

*For example, 90th percentile indicates 90% of one-year indicated periods have lower values than indicated
Source: Morningstar, Morgan Stanley Wealth Management as Dec. 31, 2014

Performance is reported net of product fees and does not reflect wealth management fees.

[1] While many papers, both academic and from industry, exist on this topic, the seminal work is Jensen, M. C. (1968). "The Performance of Mutual Funds in the Period 1945-1964." *The Journal of Finance*, 23: 389-416. doi: 10.1111/j.1540-6261.1968.tb00815.x

Our Framework: Predicting Attractive Active Management Regimes

To determine periods when greater numbers of actively managed strategies might outperform, we looked at various factors that might relate to effectiveness of active stock selection. We list these factors in Exhibit 3, and discuss each in detail and present the analytical support for each in Appendix 4 (see page 16). Taken in combination, we believe we have produced a comprehensive model to assess the relative attractiveness of active and passive managers.

Exhibit 3: Different Indications Provide Pieces of the Attractiveness Puzzle

Factors Indicative of a Favorable Environment for Active Managers	
Indication	**Why Does This Help?**
Lower Return Correlation	Stock selection is more effective when companies trade distinctly
Higher Near-Term Value Dispersion	Greater differences in prices versus next year's earnings signals exploitable uncertainty
Higher Deep-Value Dispersion	Larger gaps between "attractive" and "expensive" prices versus book values suggests actionable neglect of deep value
Higher Earnings Estimate Dispersion	Controversy among analysts allows for benefit from research-driven "surprise"
Higher Flows to Active Funds	Inflows perpetuate success of consensus growth favorites
Higher Return Dispersion	Differing returns raises the reward for owning outperformers
Flat Yield Curve	Signals elevated chance of market correction; active benefits due to quality bias
Shifting Yield Curve Slope	Active managers position for many investment theses, while benchmarks depend on only growth or value; risk aversion shifts, which are visible in yield curve slope changes, lead to passive outperformance
Recent Active Manager Success	Favorable periods for active managers have demonstrated persistence

Source: Morgan Stanley Wealth Management

Lower Return Correlation

A commonly cited reason to attempt active management is low correlation among stock returns. Markets with low return correlation are synonymous with a "market of stocks," and are ideal for managers attempting to deliver outperformance through security selection. In such markets, companies trade more distinctly, with the driver of individual performance more related to the individual character of companies, rather than market-wide or exogenous forces. This goes to the essence of stock picking, where the goal is to find attractive companies underappreciated by the market and create value in a more focused portfolio of company-specific bets.

In contrast, high-correlation markets have companies realizing their best and worst days concurrently. When companies trade in-line with the market, stock pickers typically suffer, as stock picking reduces to an exercise in market timing, which is not a typical strength of active managers. A recent example is the "risk on/risk off" period following the recent US financial crisis. From the onset of the end of the crisis in early 2009 through early 2012, markets thrived, but active managers' performances relative to their benchmarks generally suffered. Though the markets were favorable, correlations were high, with strength oscillating between volatile (risk on) and more defensive (risk off) companies, with little regard for valuation and fundamentals. During this period, active managers were forced to rely less on fundamental analysis, a core strength, and more on short-term market timing, which is extremely difficult. All told, relative performance suffered.

Higher Near-Term Value Dispersion

Investors across strategies often attempt to outperform by purchasing "undervalued" securities. The next two factors size the current opportunity in two flavors of value.

First, we consider the market value of companies compared with their expected earnings for the next year. This measure is highly levered to near-term success and execution, with attractively valued securities appearing to price some level of disappointment versus expectations; i.e., low price/forward earnings. A manager seeking outperformance could buy companies with favorable near-term valuation where concerns about the next year's execution appear overstated.

Near-term valuation dispersion sizes this opportunity by measuring the difference between "attractive" and "expensive" companies and comparing the current difference with what has been observed historically. When there is high valuation dispersion in markets, it suggests that investors are discriminating among companies with different earnings achievability. When valuation dispersion is low, the market is pricing all companies similarly. In periods of wide valuation dispersion, companies in which there are concerns about short-term earnings growth trade at deeper discounts, which creates larger opportunities for active managers. Often, these will occur during periods of significant market stress, when heightened risk aversion creates opportunity among companies typically considered to be moderate in risk. Because of the short horizon and the focus on forward earnings, near-term value applies across all types of managers.

Higher Deep-Value Dispersion

A second screen for "undervalued" securities compares current pricing to metrics of overall company value, which may include long-term earnings expectations, cash on the balance sheet or, as we use here, book value. These measures of "deep value" are most applicable for companies with slowing growth or in distress.

Similar to near-term value, we measure the opportunity within deep value with

dispersion. We observe the current spread between attractive and expensive based on price/book value, and then compare this spread with its history. Periods with wider spreads benefit managers in the value style boxes, and, similar to near-term value, tend to occur during periods of elevated market stress.

Because growth managers tend to be underweight these deepest-value companies, the ability for this factor to predict their success is limited, and so we limit consideration to value and core managers.

Higher Earnings Estimate Dispersion

Skilled active managers are able to assess company fundamentals, and take positions where their views differ from prevailing expectations. Situations in which a manager's view agrees with what is widely held, even if correct, provides little opportunity. In contrast, if there is little agreement on the potential of a stock, similar foresight could be more fully rewarded.

Earnings estimate dispersion attempts to measure the prevailing level of controversy among analysts. Similar estimates of company earnings by sell-side analysts create little opportunity, but widespread differences among estimates provide more opportunities to earn alpha related to the surprise from resolving uncertainty.

Higher Flows to Active Funds

In addition to selecting companies and constructing portfolios, active portfolio managers also must accommodate investor flows. Fund liquidity creates asset movement in and out of funds that, at times, may be beneficial or disruptive.

Here, we focus on growth and core managers whose portfolios include both growth and value stocks. Popular and successful growth ideas tend to be more visible due to strong sales and earnings-growth numbers, visible products and high valuations. All of these conditions tend to attract attention and bring about widespread participation and crowding. In the context of comparing actively and passively managed portfolios, this is important. Active growth and core managers tend to be overweight in these most popular stocks and, as flows enter these funds, managers continue to buy consensus favorites and perpetuate their outperformance.

This argument is less relevant within value, where the characteristics that tend to generate outperformance include prudent valuations and disciplined use of capital. These tend to attract less attention, with lower profile or contrarian investments mean-reverting to generate outperformance. Based on this, we avoid considering flows within value.

Higher Return Dispersion

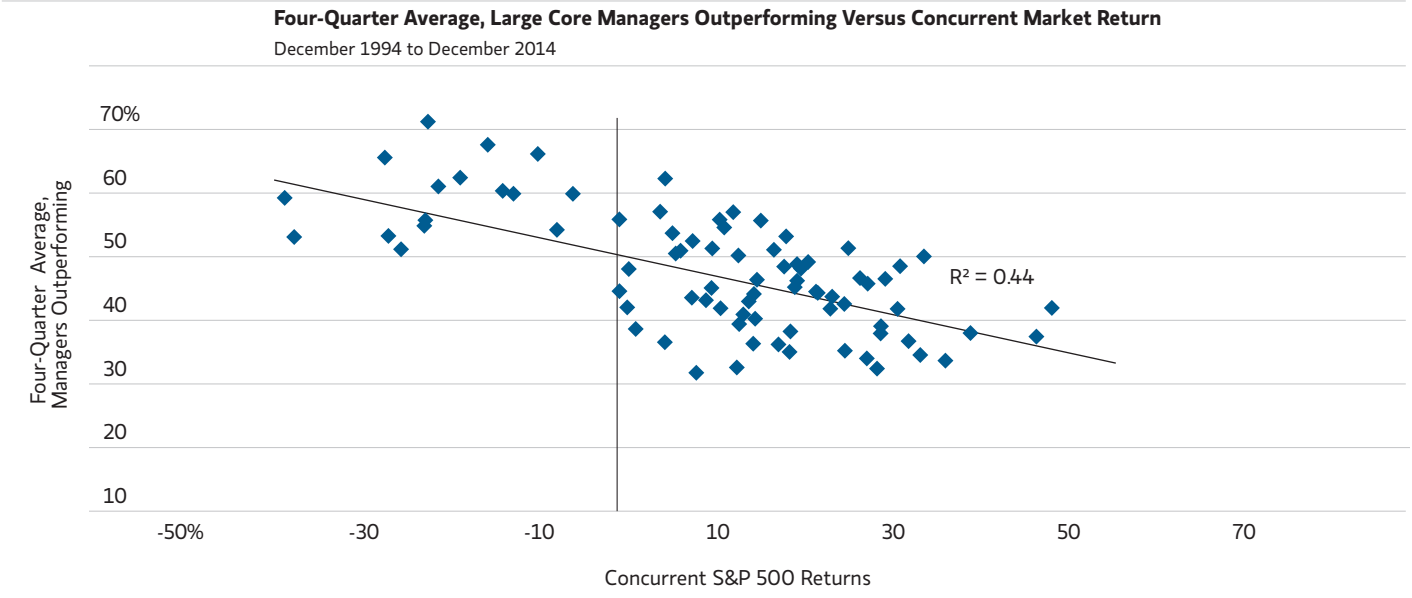
Skilled managers are often able to overweight market segments that subsequently outperform. However, the reward for these successful positions varies with time. For periods in which there are greater differences in realized return between the best- and worst-performing stocks, active managers are better able to beat their benchmarks.

Return dispersion gives a formalized measure of the performance spread in equities. Markets can display high return dispersion, such as the recovery from the 2009 credit crisis, when deep value and low-quality names dramatically outperformed their higher-quality and growth counterparts. In contrast, recent markets have seen much smaller differences between outperforming and underperforming styles.

Flat Yield Curve

An unusually flat yield curve signals an outsized chance of recession, and it suggests

Exhibit 4: Quality Tilts Benefitted Active Managers in Market Declines and Periods of Risk Aversion



Source: Bloomberg, Morgan Stanley Wealth Management as of Dec. 31, 2014

complacency among market participants. This raises the likelihood of market corrections. During market turbulence, active funds typically outperform due to an overweight of high-quality companies, leading to superior performance in market declines. Because of this, a flatter yield curve is expected to benefit active exposure across styles.

We can surmise that the performance advantage of active managers during market corrections derives from their inherent quality bias. To support the point, we took historical active versus passive returns for the large-cap styles, and compared this with returns for a number of different quantitative characteristics. The factors include the price/earnings ratio, a measure of valuation; capital expenditures/sales ratio, a measure of capital use; return on equity (ROE), a measure of profitability; recent performance, a measure momentum; and the variability of ROE, a measure of quality. Our findings are that active managers generally outperformed when high-quality companies outperformed. This is fully consistent with the common description of professional investors gravitating toward companies with superior management and capital use and the defensive nature of high quality, which leads to outperformance during periods of risk aversion. We show the relationship between active versus passive performance and concurrent markets in Exhibit 4 (see page 6), with active usually performing strongest during the most difficult markets.

Shifting Yield Curve Slope

In addition to the slope of the yield curve, we gathered information from its changes. Many active managers categorize their portfolios as either growth or value. Typically, this indicates a strong focus in growth or value strategies, but in practice, they can contain investments across different strategies. In contrast, growth and value benchmarks are constructed to contain growth and value components exclusively.

Because of this, when value or growth experiences strong returns, active funds will typically lead the broad market, but lag their specific growth or value benchmark. This is the result of the variety of positions taken by active funds, which serve to be dilutive of the overall growth or value character. As a result of this, versus passive equivalents, active growth tends to be underweight growth, and active value tends to be underweight value.

Timing when value or growth strategies might outperform is difficult. However, in recent years, there have been several multiyear periods in which value or growth strategies have enjoyed persistent success, typically in conjunction with the business cycle. We can infer the current point on the cycle based on changes in the slope of the yield curve, where flattening indicates early-cycle expansion that typically favors active growth, and steepening indicates later-cycle deceleration under which active value usually benefits.

Recent Active Manager Success

We have observed that periods that favor both active and passive managers tend to persist, often for several years. The reason is intuitive; sometimes markets are driven more by systemic or passive beta factors, like recovery from recession or central bank action, such as the Federal Reserve's extraordinary monetary policy since 2009, but sometimes markets are driven by innovations or secular trends that are idiosyncratic, such as the technology boom from 1994 to 2000 and the run-up in housing prices between 2003 and 2007. Because of this, an indication of the environment for active performance is the performance itself.

Additionally, this factor acts as a safeguard for maintaining this model's efficacy. Although we have identified several preceding factors as effective in evaluating the potential for active manager outperformance, it is likely that factors will evolve to become more or less important than what is represented in this sample. Additionally, secondary factors could emerge with significant effect. As long as active managers benefit from persistent environments, this factor will capture these changes.

Putting the Pieces Together: Modeling Active Versus Passive Performance From Predictive Factors

We have examined several factors, each of which provides one aspect of whether the environment is favorable for active managers. Next, we explore how best to put these pieces together.

The first step is to limit consideration of factors to only market segments where they are relevant. Consolidated from our discussion of individual factors, we list factors and the segments to which they are applicable. Correlation and trailing percentage outperformance, as well as near-term value, earnings estimate and return

Exhibit 5: Factors We Use to Evaluate Manager Potential

Summarized Weights for Percentage of Outperforming Active Managers by Style and Factor

	Return Correlation	Return Dispersion	Earnings Estimate Dispersion	Near-Term Value Dispersion	Deep Value Dispersion	Flows to Active Funds	Yield Curve Slope	Trailing % Managers Outperforming
Growth	23	20	8	3		25	16	5
Value	26	6	17		20		31	
Core	33	19	17		13	11	2	6

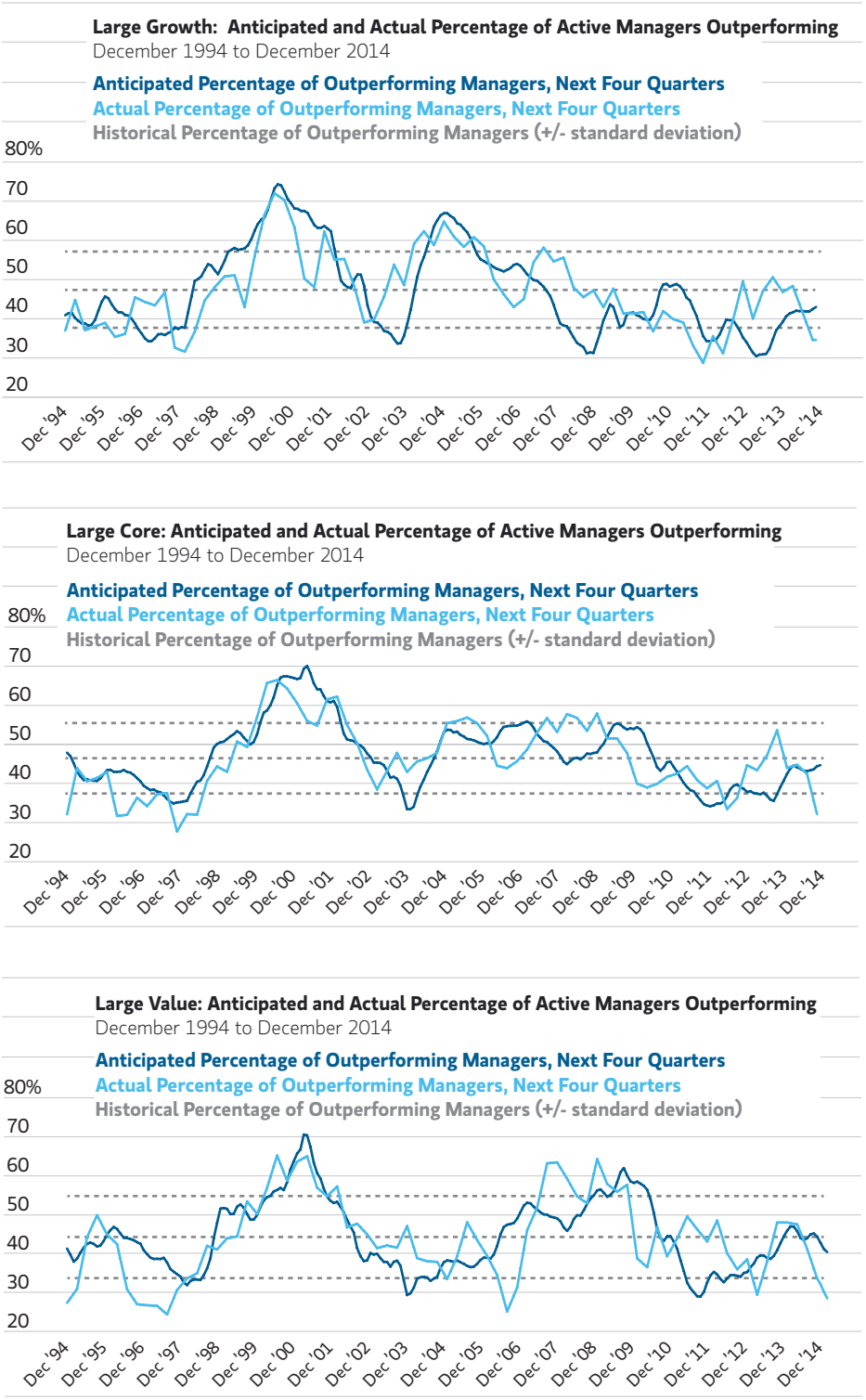
Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

dispersion, are universally applicable. The trend of the yield curve's slope applies to growth directly and value inversely, while the overall level of steepness — where being very flat benefits active — applies to all funds. Finally, we limit the final two factors to their relevant styles: flows to active funds for growth and core, and deep value dispersion to value and core (see Exhibit 5, page 7).

Using these factors, we can construct models to predict indications of the environment. Because of the importance of manager selection, we begin with the key question of whether a sufficiently large percentage of managers are expected to outperform their style benchmark in the following year. To this end, we attempt to fit historical standardized factor values against the proportion of managers outperforming during the following four quarters. Many variables display significant, non-normal distributions, from which we mitigate skew through statistical transformations (see Appendix 2, page 14). We take precautions against overfitting, including omitting irrelevant and negatively weighted factors. We also maximize the ability to anticipate periods in which a majority of managers outperform as a binary indicator, rather than actual percentage outperformance; this alternative construction reduces the noise in the fit and minimizes the effect of spurious correlation. Fitting in this manner weighs factors as summarized below, with a full breakdown in the appendix.

The product of this process is a means to translate factor values into the expected proportion of outperforming active managers. Based on the percentage of managers expected to outperform — taking historical factor values, plugging them into this model, and observing the percentage of managers who outperformed over the following four quarters — results in a largely accurate picture of the proportion of managers who have outperformed, as shown for the large-cap styles (see Exhibit 6).

Exhibit 6: Historical Analysis Shows Periods of Outperformance Correspond With Real Results



Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Models across market-cap cohorts also display good anticipatory power. In Exhibit 7, we summarize by showing the active versus passive return for periods in which the probability of active outperformance is high, (greater than 55%) versus those in which probability of outperformance is low (less than 45%).

Across the nine style boxes, the predicted and subsequently realized percentages of managers outperforming have been strongly related, and we include those analytics in Appendix 3 (see page 15).

With these nine style box models, we have a means to estimate the proportion of active managers who may outperform their passive counterparts in the following year based on observable characteristics of the investment landscape. In periods with higher expected proportions of managers outperforming, it makes sense to raise allocations to those active managers most likely to realize outperformance. Further, as we discuss below, several tools and principles can greatly inform the selection of which active managers are most likely to deliver higher realized returns from the active components of portfolios. Leveraging these approaches, like the Morgan Stanley Wealth Management Focus List, with managers that have favorable Adverse Active Alpha℠ scores may improve these results even further. For information on managers with favorable scores, see *Selecting Managers With Adverse Active Alpha;℠* Consulting Group Investment Manager Research, Nov. 19, 2014.

Exhibit 7: Anticipatory Power Exists Across Investment Styles

Annualized Active Versus Passive Performance
Expected Outperfomance > 55% Less Expected Outperformance < 45%
December 1994 to December 2014

	Growth	Core	Value
Large	3.55%	2.63%	2.61%
Mid	3.81%	2.24%	3.90%
Small	8.42%	3.71%	2.07%

Note: Estimates of future performance may not be realized.
Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Constructing Thoughtful Active/Passive Portfolios

We have developed a model to anticipate the likely amount of outperforming managers across fund styles. How do we best construct a portfolio based on these results?

Allocating between active and passive is inherently return centric. Ordinarily, in constructing a portfolio, one uses areas of low correlations among portfolio asset returns to reduce overall risk from diversification effects. Here, for each style, we choose only between active or passive. These two assets provide little ability to offset each other, as performance for both is dominated by market returns. With this less nuanced portfolio dynamic, construction is best kept simple, and we must rely on the potential for outperformance to dictate holdings.

To guide allocation between active and passive, we develop a rule for each style reflecting both the current environment for active managers, as well as the long-term propensity for active managers to outperform. First, we observe the percentage of periods in which even the average active managers outperform (see Exhibit 1, page 3). We want to be fully active during this proportion of periods in which active appears most attractive. So, for example, in large-cap growth, the data show that in 25% of the periods the average active manager outperforms. Thus, we want to be fully active 25% of the time. We then repeat that exercise for the other eight styles. When the distinction is clear, we split the portfolio in increments of 25%; it can be 50% or 75%. When active is substantially out of favor, we allocate 100% to passive strategies.

The preeminent hurdle to any dynamic active/passive strategy revolves around the strong beliefs about the merits of each approach. Frequently, investors will stick with either active or passive, and refuse to consider the other. What evidence could we offer an investor with a closely held preference for active or passive to persuade them to consider the other?

Our answer is shown in the Exhibits 8A, 8B and 8C (see page 10). For active strategies, when in favor, these strategies have historically outperformed. Since the purpose of isolating periods of high outperformers is for selecting managers, we assume three scenarios of reasonable benefit from manager selection: a low case, in which managers performed in line with the average active manager; a moderate case, in which managers outperformed the average by 75 basis points per year; and a higher case, in which managers outperformed by 150 basis points per year. We believe that active strategies deliver significant outperformance when in favor, and they are highly levered to manager selection benefit.

We observed a similar pattern for periods favoring passive strategies. When in favor, there were performance incentives to going passive. Notably, as the ability to select outperformers improved, the benefits to the passive strategy declined. However, it is more difficult to achieve a substantial manager selection benefit in the environments where passive is favored.

Finally, we examine the historical data. Here, for the past 20 years, we observed the environment and allocated accordingly to active and passive. Performance is attenuated somewhat by a significant period in which active and passive have roughly equal attractiveness and so allocations are split. Overall, this model substantially outperformed passive strategies in the presence of even modest manager selection.

Viewing this back test over time adds perspective. Overall, allocating to active and passive strategies when favored, coupled with having selected the right managers, delivered consistent outperformance — and accumulated substantial returns.

What Is Attractive Today?

To determine recommendations today, we examine our factors in Exhibit 9. For factors common to all styles, return correlation and earnings-estimate dispersion are near historical averages, while near-term earnings dispersion and return dispersion slightly favor passive strategies. Recent underperformance by active managers is a significant drag to potential outperformance. Finally, a slowing of inflows to actively managed funds during the last year acted as a drag on growth and core funds.

Adding this together, the current environment appears to largely favor passive strategies except for even splits in small-cap growth and small-cap core, and an active tilt for mid-cap growth. A suggested allocation consistent with our analysis is in Exhibit 10 (see page 11).

Exhibit 8A: Investing in Active Managers During Periods of Opportunity Was Profitable…

Investing in Active Funds During Favorable Periods Delivered Outperformance
Next-12-Month Returns of Active Versus Passive Funds When Active Is Favorable According to Our Models
December 1994 to December 2014

	Allocating Based on Expected % Managers Outperforming, with Manager Selection Benefit Assumed			
	0%	0.75%	1.50%	Frequency
Large Average	0.86%	1.61%	2.36%	29%
Mid Average	1.07%	1.82%	2.57%	32%
Small Average	3.09%	3.84%	4.59%	56%
Average	1.67%	2.42%	3.17%	39%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Exhibit 8B: …as It Was With Passive Managers

Investing in Passive Funds During Favorable Periods Delivered Outperformance
Next-12-Month Returns of Passive Versus Active Funds When Passive Is Favorable According to Our Models
December 1994 to December 2014

	Allocating Based on Expected % Managers Outperforming, with Manager Selection Benefit Assumed			
	0%	0.75%	1.50%	Frequency
Large Average	2.48%	1.73%	0.98%	36%
Mid Average	2.84%	2.09%	1.34%	33%
Small Average	1.88%	1.13%	0.38%	8%
Average	2.40%	1.65%	0.90%	26%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Exhibit 8C: The Dynamic Model Produced Consistent and Solid Results Versus the 100% Passive Approach

	Allocating Based on Expected % Managers Outperforming, with Manager Selection Benefit Assumed		
	0%	0.75%	1.50%
	vs. Passive	vs. Passive	vs. Passive
Large Average	0.13%	0.47%	0.81%
Mid Average	0.17%	0.53%	0.90%
Small Average	1.60%	2.15%	2.70%
Average	0.63%	1.05%	1.47%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Exhibit 9: The Current State of Factors Driving Active Attractiveness

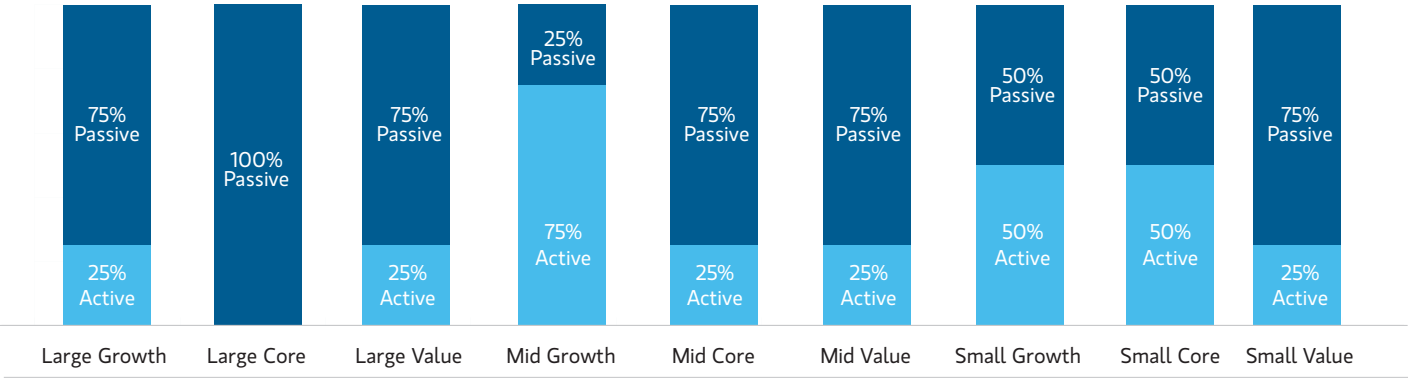
Current Recommendations: Active vs. Passive Model Factors by Style
As of End-January, 2015 History-Relative Percentile (100=Active Preferred, 0=Passive Preferred)

	Return Correlation	Near-Term Earnings Dispersion	Earnings Estimate Dispersion	Returns Dispersion	Trailing Percentage Outperformers	Shifting Yield Curve Slope	Flows to Active Funds	Deep Value Dispersion
Growth	45	39	49	45	8	49	24	
Core					7	94		50
Value					7	95		

Source: Morgan Stanley Wealth Management as of Jan. 31, 2015

Exhibit 10: The Model Suggests Investors Lean Passive in Large- and Mid-Cap, Split in Small-Cap

Suggested Allocation to Active and Passive Managers by Style Box, Based on Current Market Environment



Source: Morgan Stanley Wealth Management as of Jan. 31, 2015

Adding Value Through Superior Manager Selection

While the average active manager may have difficulty outperforming over time, investors typically endeavor to find managers that can add incremental value relative to indexes and peers. To the extent that active management is utilized, manager selection is a critical component. In order to justify active management fees and avoid paying these fees simply to replicate index performance, investors should emphasize managers with high active exposure. At the same time, simply looking different from a benchmark is not enough to ensure success. Therefore, investors should additionally seek managers with a history of strong relative performance in a variety of market environments and consistent and repeatable investment processes.

The MSWM approach to manager selection emphasizes a fundamental approach devoted to deep due diligence of investment process and stock selection methodology in addition to style and market capitalization consistency. In addition, we have built proprietary quantitative tools like the Adverse Active Alpha℠ model to identify managers who build their portfolios with active share inputs and have shown the ability to manage against adverse market headwinds. The active share calculation sums the absolute values of each portfolio holding weight minus the benchmark weight and divides by two, in effect measuring how different a portfolio looks from its benchmark. Higher active share can be achieved through active over or under weights relative to the index, or from holding securities outside of the index. Overall, the MSWM manager selection process identifies high conviction managers on three levels — Approved, Focus List and Tactical Opportunities (see Exhibit 11). For more information on MSWM manager selection and the Adverse Active Alpha℠ tool, see our most recent overview.[2]

Exhibit 11: MSWM Manager Selection Process Produces Three Levels of Conviction

Note: The Approved List, Focus List and Tactical Opportunities List are available to advisory clients only.
Source: Morgan Stanley Wealth Management

[2] *See Consulting Group Investment Advisor Research: Manager Selection Process*, Sept. 8, 2014.

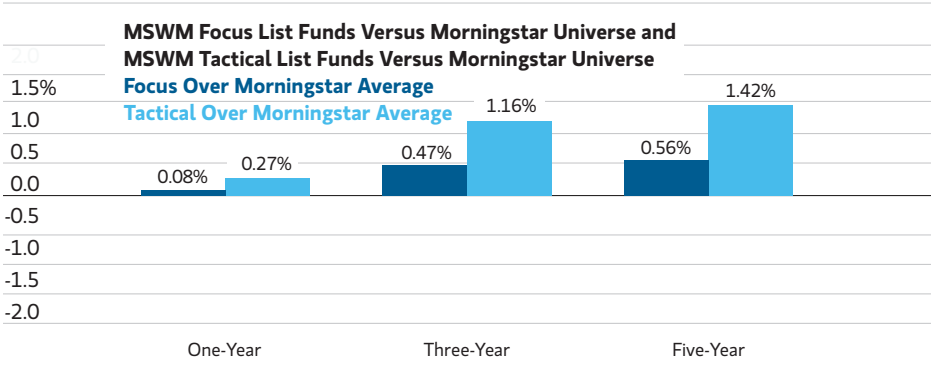
Importantly, our framework demonstrates our ability to identify high-confidence active managers, with Focus and Tactical Opportunities lists delivering measurable performance advantages over the broad universe of approved active managers (see Exhibit 12).

Conclusion

As investors and their Financial Advisors grapple with a low-growth, low-interest rate and potentially low-return world, optimizing fee budgets becomes ever more important. Key to that ambition is understanding when to choose active managers versus taking a lower-cost, passive, index fund approach. While investors may lean toward all-or-nothing approaches based on their beliefs about asset-class efficiency, the GIC has developed a more dynamic method that utilizes the markets' every-changing opportunity set.

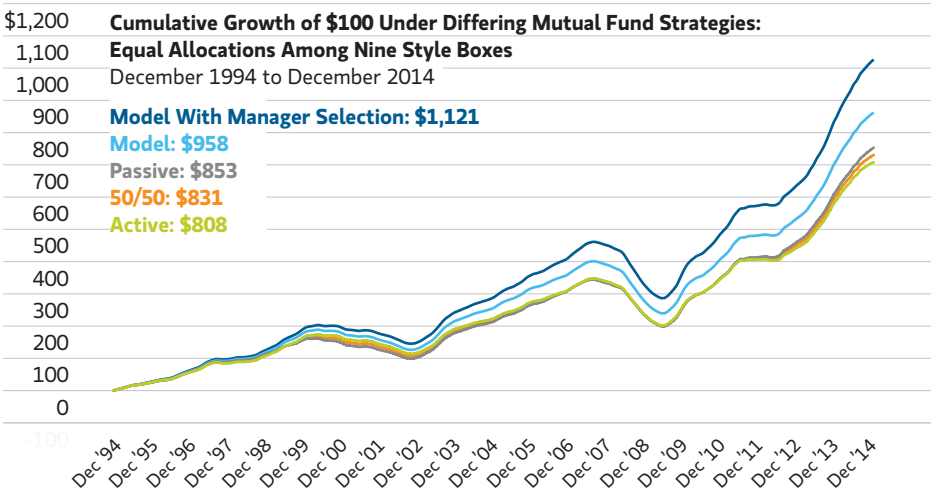
Our findings confirm that in US equities, a simple 50% active/50% passive approach to the standard nine style boxes outperformed a purely active approach over time (see Exhibit 13), but allocating to active and passive in dynamic proportions suggested by market conditions, as defined by our nine-factor framework, beat being always active or passive alone with incremental annual performance premiums over passive-only strategies of 75 to 150 basis points (net of fees). Combining this allocation approach with our manager selection process for periods when active management is recommended also added a performance premium and represents a sound approach, in our view. ■

Exhibit 12: Higher Conviction Managers Have Outperformed Their Peers



Source: Morningstar, Morgan Stanley Wealth Management as of Dec. 31, 2014

Exhibit 13: Combining Tactical Active/Passive Allocation With Manager Selection Significantly Outperformed Static Mutual Fund Strategies



Source: Morningstar, Morgan Stanley Wealth Management as of Dec. 31, 2014

Appendix 1

Full Model Weights

Detailed Model Percentage Weights by Factor and Style Box

		Return Correlation		Return Dispersion		Earnings Estimate Dispersion		Near-Term Value Dispersion		Deep Value Dispersion		Flows to Active Funds		Yield Curve Slope			Trailing % Managers Outperforming
		Level	Trend	Level	Trend	Level	Trend	Level	Trend	Level	Trend	Level	Trend	Level	Trend	Inverted Trend	Level
Growth	Large		22		2		8	8				5	32			13	9
	Mid	11		31	14								8	30			6
	Small	35		9	4	15							31	5		2	
Value	Large	13	7	1	7	3	15			15	14			7	18		
	Mid		23		11		5			1	29			4	26		
	Small	17	17			29					1			3	34		
Core	Large	7	14				17			5	19		15	6			17
	Mid	35		28	16	2				6	7	6	1				
	Small	35	8	15		31							11				

Source: Morgan Stanley Wealth Management as of Jan. 31, 2015

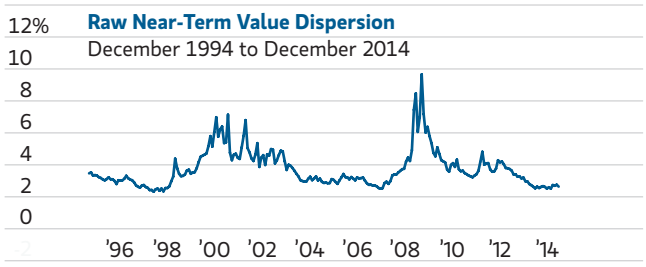
Appendix 2

A TECHNICAL ASIDE—MANAGING FACTOR ASYMMETRY

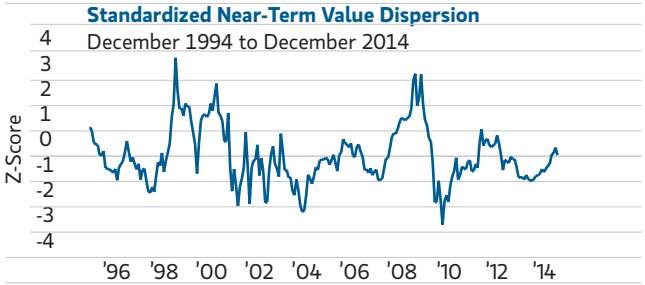
A more technical complication arises from the non-normal distributions of several factors. A model combining normally distributed variables is transparent, gives an output that is easy to interpret and allows for use of many useful statistical tools. This model is complicated by the fact that some of these variables have distributions that deviate significantly from normality, including the example of year-over-year changes to near-term valuation dispersion, given below. A notable difference is the lack of symmetry; valuation dispersions are asymmetric because valuations tend to carry moderate-to-low dispersions during lengthy, more normalized markets, then see extreme increases during short bursts of market stress. This creates a pronounced skew and, as a result, markets more frequently carry below-average valuation dispersions.

To alleviate skew in our component variables, we utilize statistical transformations.[3] This takes data points and applies them to a function that reshapes the distribution of points while preserving the original. In the case of near-term valuation dispersion, this applies the function f(x) = -log(1+x), which effectively stretches the left tail and compresses the right tail. The result, as shown below, redistributes points with less skew and greater symmetry. We apply similar transformations to other factors as necessary, allowing their normalized analogs to be combined in a straightforward manner suitable for modeling.

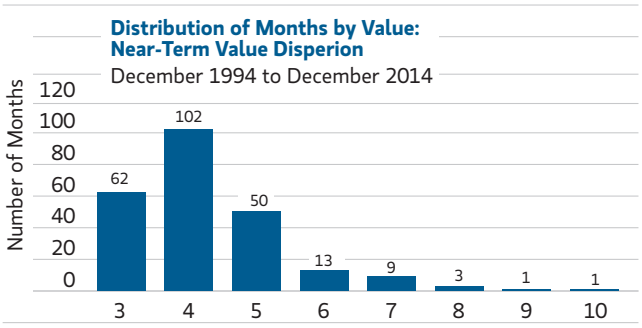
Standardization Reduces Factor Skew and Normalizes Distribution



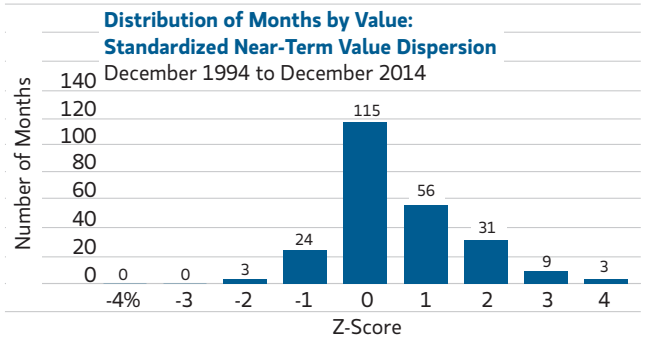
Source: Morgan Stanley Wealth Management as of Dec. 31, 2014



Source: Morgan Stanley Wealth Management as of Dec. 31, 2014



Source: Morgan Stanley Wealth Management as of Dec. 31, 2014



Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

[3] See Box, George E. P.; Cox, D. R. (1964). "An Analysis of Transformations." Journal of the Royal Statistical Society, Series B 26 (2): 211–252. JSTOR 2984418. MR 192611.

Appendix 3

EXTENDING A TRACK RECORD FOR PASSIVE PERFORMANCE

For active fund performance, there is a long track record of open-end funds grouped by characteristics of underlying holdings, including market cap; large cap, mid cap and small cap; and style, growth, core and value. Funds are classified by style box, and performance is reported net of fees. To best represent the cross section of fund choices, we take the simple average of fund performance. Broadly, these numbers give an indication of the returns realized by a shareholder in a typical actively managed fund by market cap and style.

Developing a comparable history for passive strategies is complicated because the track record is shorter. We wanted to explore investment in passives prior to their relatively short histories, which fall well below 20 years. Direct comparison to an index is not appropriate, as these funds face headwinds from transaction costs, slippage and management fees. To model historical returns, we used history from funds tied to appropriate indexes as the mechanism to implement passive strategies (see Exhibit 2, page 4). We view these choices as providing ample liquidity, low performance risk and a very good approximation to actual index investment. We took the recent drag observed between these funds and their underlying indexes (three to 26 basis points per year), and projected the historical index returns less this difference as a proxy for actual passive returns.

Appendix 4

Active Versus Passive Performance by Factors

Return Correlation: Historical Performance by Trend
December 1994 to December 2014

		Large Growth		Large Core		Large Value	
Trend	Percentage of Months Occurring	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns
Declining Correlation	34%	51.1%	1.24%	47.4%	-0.53%	49.9%	-0.93%
Stable Correlation	33%	46.5%	-1.09%	43.5%	-1.16%	45.5%	-1.36%
Increasing Correlation	34%	43.8%	-1.76%	41.4%	-2.00%	43.5%	-2.31%
Favorable vs. Unfavorable		7.3%	3.00%	6.0%	1.47%	6.3%	1.38%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Return Dispersion: Historical Performance by Trend
December 1994 to December 2014

		Large Growth		Large Core		Large Value	
Trend	Percentage of Months Occurring	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns
Increasing Dispersion	34%	48.8%	0.24%	46.5%	-0.73%	48.6%	-0.48%
Stable Dispersion	32%	46.1%	-0.83%	42.6%	-1.56%	44.7%	-2.16%
Declining Dispersion	34%	46.5%	-1.00%	43.2%	-1.41%	45.6%	-1.99%
Favorable vs. Unfavorable		2.3%	1.24%	3.3%	0.68%	3.0%	1.51%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Earnings Estimate Dispersion: Historical Performance by Trend
December 1994 to December 2014

		Large Growth		Large Core		Large Value	
Trend	Percentage of Months Occurring	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns
Increasing Dispersion	34%	52.6%	0.44%	49.0%	-0.30%	52.0%	-0.81%
Stable Dispersion	33%	49.1%	0.68%	44.0%	-0.49%	48.2%	-1.32%
Declining Dispersion	34%	39.8%	-2.67%	39.3%	-2.89%	38.8%	-2.47%
Favorable vs. Unfavorable		12.8%	3.10%	9.6%	2.59%	13.2%	1.67%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Appendix 4

Active Versus Passive Performance by Factors (continued)

Near-Term Value Dispersion: Historical Performance by Trend
December 1994 to December 2014

		Large Growth		Large Core		Large Value	
Level	% Months Occurring	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns
Increasing Dispersion	34%	48.1%	0.73%	45.8%	-0.62%	48.1%	-0.60%
Stable Dispersion	33%	46.1%	-1.45%	42.8%	-1.64%	45.9%	-1.88%
Declining Dispersion	34%	47.1%	-0.89%	43.6%	-1.44%	45.0%	-2.14%
Favorable vs. Unfavorable		1.0%	1.61%	2.2%	0.82%	3.1%	1.53%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Deep-Value Dispersion: Historical Performance by Trend
December 1994 to December 2014

		Large Core		Large Value	
Trend	Percentage of Months Occurring	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns
Increasing Dispersion	34%	47.9%	-0.53%	49.0%	-0.43%
Stable Dispersion	33%	43.5%	-1.44%	46.4%	-1.82%
Declining Dispersion	34%	40.9%	-1.73%	43.6%	-2.36%
Favorable vs. Unfavorable		7.0%	1.20%	5.3%	1.93%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Flows to Active Funds: Historical Performance by Trend
December 1994 to December 2014

		Large Growth		Large Core	
Trend	Percentage of Months Occurring	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns
Increasing Flows	33%	54.7%	2.43%	47.6%	-0.46%
Stable Flows	33%	48.3%	-0.62%	44.8%	-0.61%
Declining Flows	33%	42.6%	-1.57%	46.0%	-1.02%
Favorable vs. Unfavorable		12.2%	4.00%	1.6%	0.56%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Appendix 4

Active Versus Passive Performance by Factors (continued)

Yield Curve Slope, 10-Year Versus Two-Year US Treasury Yield: Historical Performance by Level
December 1994 to December 2014

		Large Growth		Large Core		Large Value	
Level	Percentage of Months Occurring	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns
Very Flat	20%	50.40%	0.12%	43.22%	-1.46%	48.58%	-1.36%
Normal Slope	60%	46.11%	-0.67%	43.61%	-1.32%	45.23%	-1.55%
Very Steep	20%	46.84%	-0.76%	46.48%	-0.73%	47.29%	-1.68%
Favorable vs. Unfavorable		3.56%	0.88%	-3.26%	-0.73%	1.28%	0.32%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Yield Curve Slope, 10-Year Versus Two-Year US Treasury Yield: Historical Performance by Trend
December 1994 to December 2014

		Large Growth (Flattening is Favorable)		Large Value (Steepening is Favorable)	
Trend	Percentage of Months Occurring	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns
Steepening	34%	47.4%	-0.67%	48.8%	-0.77%
Stable	33%	44.1%	-0.79%	43.2%	-1.87%
Flattening	34%	49.8%	-0.12%	46.9%	-1.98%
Favorable vs. Unfavorable		2.4%	0.55%	1.9%	1.21%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Trailing Percentage of Outperforming Managers: Historical Performance by Trend
December 1994 to December 2014

		Large Growth		Large Core		Large Value	
Trend	Percentage of Months Occurring	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns	Average Managers Outperforming	Average Annual Returns
More Outperformers	34%	52.4%	0.31%	48.7%	-0.60%	48.9%	-1.19%
Typical Outperformers	32%	46.3%	-0.50%	45.3%	-0.81%	45.3%	-1.86%
Fewer Outperformers	34%	42.6%	-1.39%	38.4%	-2.26%	44.8%	-1.58%
Favorable vs. Unfavorable		9.7%	1.69%	10.2%	1.66%	4.1%	0.39%

Source: Morgan Stanley Wealth Management as of Dec. 31, 2014

Index Definitions

RUSSELL MIDCAP INDEX This index measures the performance of the mid-cap segment of the US equity universe. The Russell Midcap Index is a subset of the Russell 1000 Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership.

RUSSELL MIDCAP GROWTH INDEX This index measures the performance of the growth portion of the mid-cap segment of the US equity universe. These are the companies with higher price-to-book ratios and higher forecasted growth rates.

RUSSELL MIDCAP VALUE INDEX This index measures the performance of the value portion of the mid-cap segment of the US equity universe. These are the companies with lower price-to-book ratios and lower forecasted growth rates.

RUSSELL 1000 INDEX This index measures the performance of the 1,000 largest US companies based on market capitalization.

RUSSELL 1000 GROWTH INDEX. This index measures the performance of the growth portion of the Russell 1000 Index. These are the companies with higher price-to-book ratios and higher forecasted growth rates.

RUSSELL 1000 VALUE INDEX This index measures the performance of the value portion of the Russell 1000. These are the companies with lower price-to-book ratios and lower forecasted growth rates.

RUSSELL 2000 INDEX This index measures the performance of the smallest 2,000 in the 3,000 largest US companies.

RUSSELL 2000 GROWTH INDEX This index measures the performance of the growth portion of the Russell 2000. These are the companies with higher price-to-book ratios and higher forecasted growth rates.

RUSSELL 2000 VALUE INDEX This index measures the performance of the value portion of the Russell 2000. These are the companies with lower price-to-book ratios and lower forecasted growth rates.

S&P 500 INDEX This capitalization-weighted index includes a representative sample of 500 leading companies in leading industries in the US economy.

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