

Prepared for

Deferred Compensation Board

State of Wisconsin

February 9, 2017



Vanguard[®]

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Biographies



Robert L. Lawler is a relationship executive responsible for 20 large institutional clients, including the Federal Reserve Employee Benefits System, United Airlines, BASF Corporation, and Honda North America. After beginning his Vanguard career as a senior accountant in the Private Label Group, Mr. Lawler moved to the Institutional Investor Group in 1990. He earned a B.S. from Albright College.



Eric Simons is a sales executive in Vanguard Institutional Investor Group. He joined the Fund Accounting Department in 1987 and, since 1992, has served large corporations, professional firms, and public entities within the defined contribution and defined benefit marketplace. He has held a variety of positions within client services, recordkeeping, and sales support. Since 1999, his responsibilities have focused on business development and relationship management for large market retirement plan sponsors.

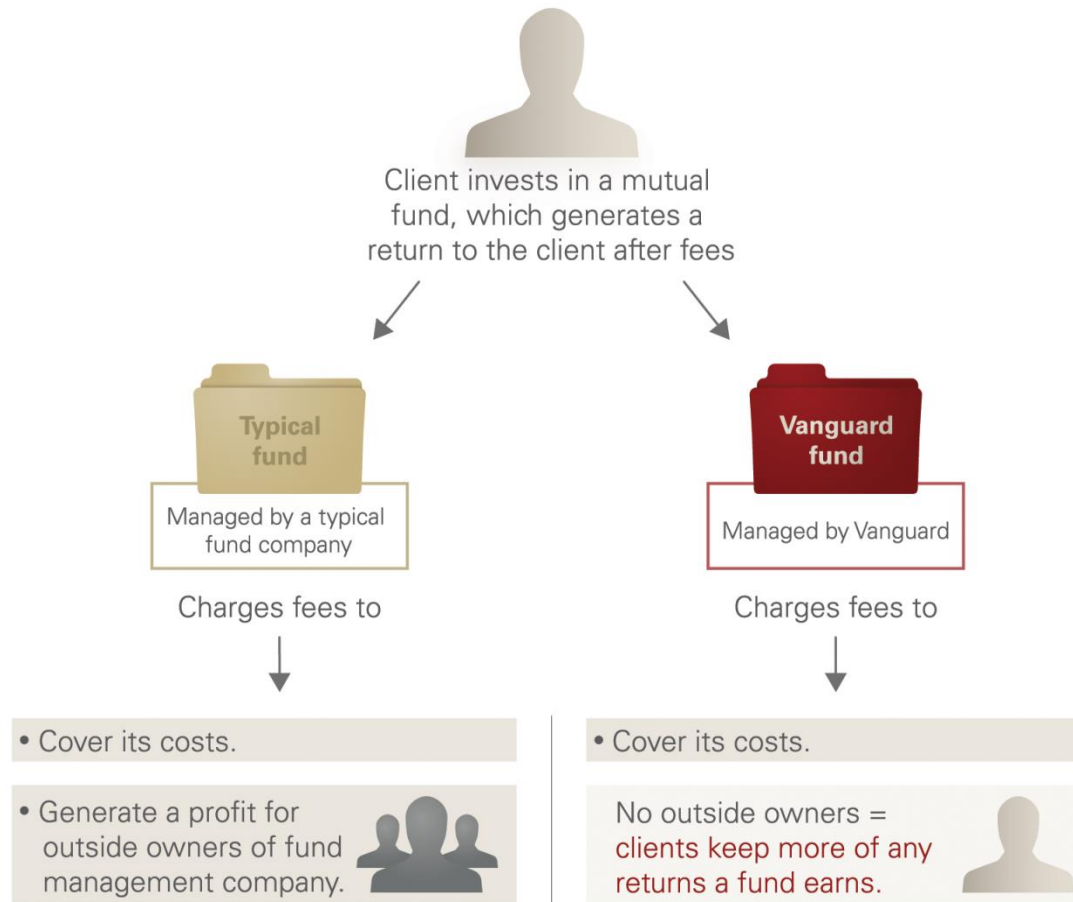
Mr. Simons earned a B.A. in accounting from West Chester University and an M.B.A. from Widener University. He holds FINRA Series 7 and 63 licenses.



Hugh Watters is a product manager in Vanguard Portfolio Review Department, which oversees Vanguard's mutual fund lineup. In this role, he provides specialized product expertise on positioning, servicing, and supporting of Vanguard's active equity products. Mr. Watters has spent the majority of his career in the Portfolio Review Department, with responsibilities ranging from oversight and selection of institutional money managers to conducting investment reviews with institutional clients to address the performance of Vanguard's funds, their philosophy and approach, and how they fit a client's investment needs. Mr. Watters also spent four years in Vanguard's London office, where he managed the team of product specialists who supported Vanguard's European-domiciled products.

Vanguard overview

Vanguard is different from the rest—and here’s how your participants benefit



The typical fund management company is owned by third parties, either public or private stockholders, not by the funds it serves. The fund management companies have to charge fund investors fees that are high enough to generate profits of the companies' owners. In contrast, the Vanguard funds own the management company known as Vanguard—a unique arrangement that eliminates conflicting loyalties. Under its agreement with the funds, Vanguard must operate "at-cost"—it can charge the funds only enough to cover its cost of operations. No wonder Vanguard's average fund expense ratio in 2015 was 0.18%, less than one-fifth that of the 1.01% industry average*. That means Vanguard fund investors keep more of any return their funds earn.

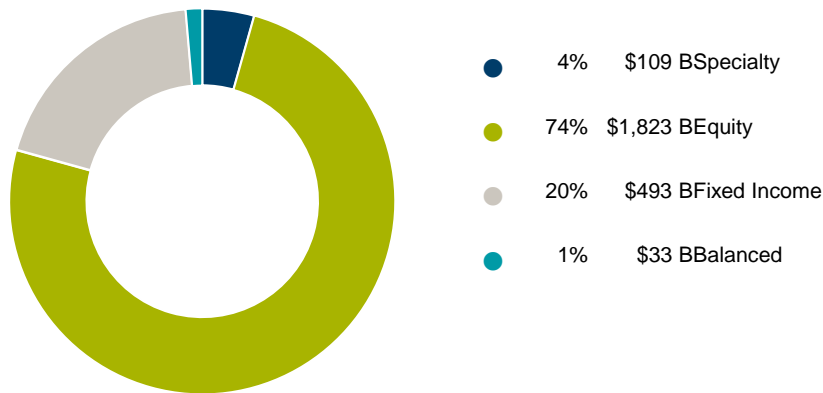
* Sources: Sources: Vanguard and Lipper, a Thomson Reuters Company, as of December 31, 2015.

Oversight at Vanguard is comprehensive of all Vanguard funds and managers

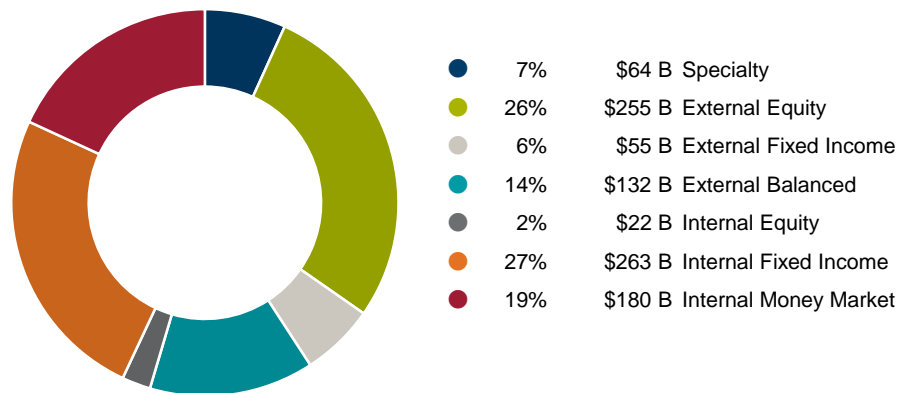
Total assets under management: 3.5T



Passively managed assets: 2.5T



Actively managed assets: \$1.0T



* U.S.-based fund assets as of September 30, 2016
See appendix for complete list of funds managed by external advisors.

Our size, scale, and reputation provides access to distinguished investment managers and diversity of thought

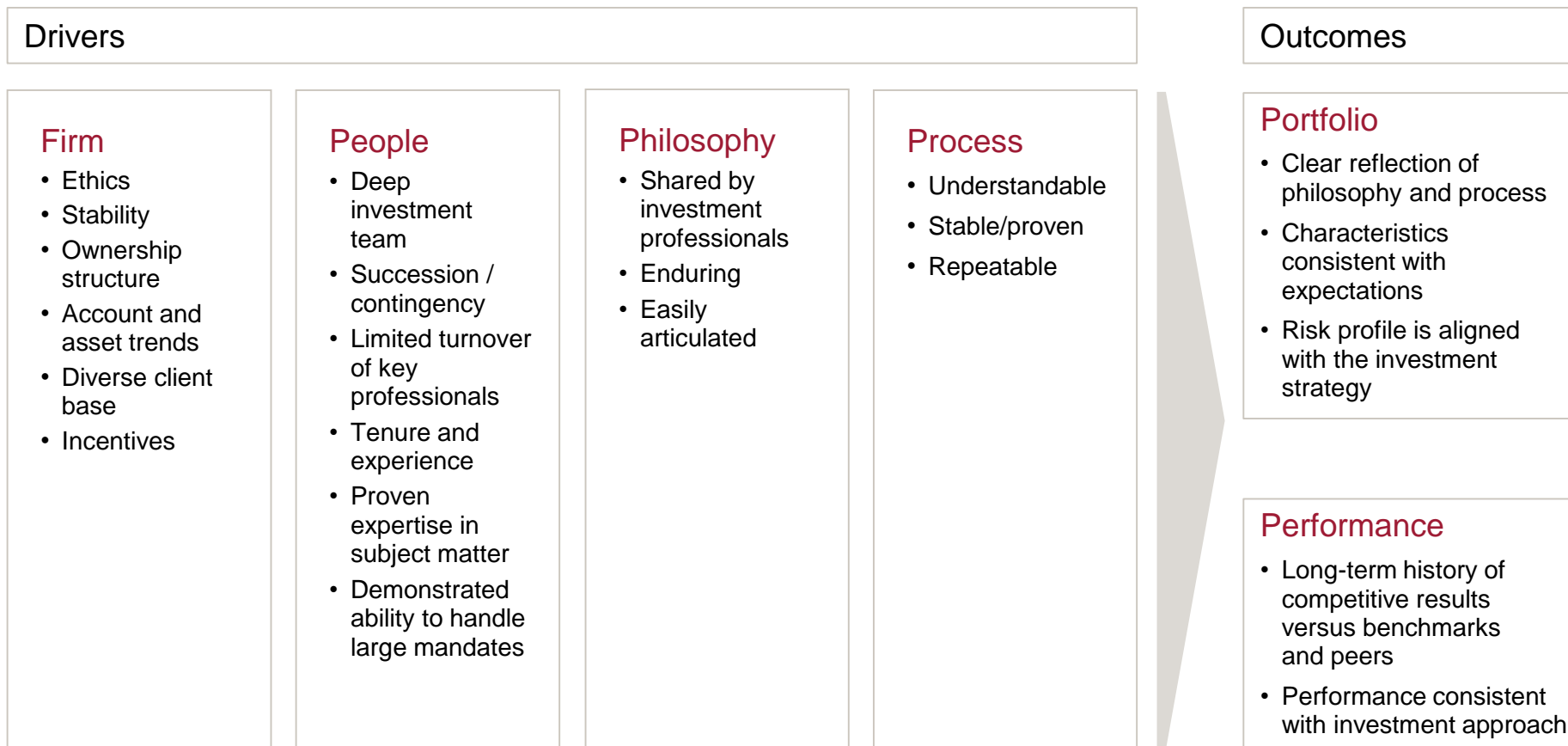
\$1,063 billion



- 9% U.S. Growth
 - Arrowpoint Partners
 - Baillie Gifford Overseas Ltd.
 - Century Capital Management, LLC
 - Chartwell Investment Partners, Inc.
 - Frontier Capital Management Co., LLC
 - Granahan Investment Management, Inc.
 - Jackson Square Partners, LLC
 - Jennison Associates LLC
 - Kalmar Investment Advisers
 - PRIMECAP Management Company
 - Stephens Investment Management Group, LLC
 - Wellington Management Company, LLP
 - William Blair & Company, LLC
- 9% U.S. Value
 - Barrow, Hanley, Mewhinney & Strauss, LLC
 - Cardinal Capital Management, L.L.C.
 - Donald Smith & Co., Inc.
 - Frontier Capital Management Co., LLC
 - Hotchkis & Wiley Capital Management, LLC
 - Lazard Asset Management LLC
 - Pzena Investment Management, LLC
 - Sanders Capital, LLC
 - Vanguard Quantitative Equity Group
 - Wellington Management Company, LLP
- 53% U.S. Fixed Income
 - Wellington Management Company, LLP
 - Vanguard Fixed Income Group
- 4% Non-U.S. & Global
 - Acadian Asset Management, LLC
 - ARGA Investment Management, LP
 - Baillie Gifford Overseas Ltd.
 - Edinburgh Partners Limited
 - Lazard Asset Management LLC
 - M&G Investment Management Limited
 - Marathon Asset Management LLP
 - Oaktree Capital Management, LP
 - Pzena Investment Management, LLC
 - Schroder Investment Management North America Inc.
 - Wellington Management Company, LLP
- 14% U.S. Balanced
 - Wellington Management Company, LLP
- 5% U.S. Core
 - D. E. Shaw Investment Management, LLC
 - Los Angeles Capital Management and Equity Research, Inc.
 - PRIMECAP Management Company
 - Vanguard Quantitative Equity Group
 - Wellington Management Company, LLP
- 6% Specialty
 - M&G Investment Management Limited
 - Oaktree Capital Management, LP
 - Wellington Management Company, LLP
 - Vanguard Quantitative Equity Group

Source: The Vanguard Group. Data as of September 30, 2016.
Due to rounding, percentages may not equal 100%.

Our framework for evaluating current and prospective managers emphasizes qualitative criteria, not short-term performance



What makes Vanguard's fund oversight and manager selection process distinctive?

- Unique corporate ownership* structure and large scale
- Places clients' interests first and reduces costs
- A philosophy that employs internal or external managers based upon the nature of the assignment
 - Aligns the best managers with the appropriate strategies
- CEO-led oversight and manager search program that focuses on the drivers and maintains a long-term perspective
 - Ensures process consistency and avoids “manager timing”
- A proactive and multifaceted approach to fund oversight and manager search, employed by a deep and experienced full-time staff
 - Helps provide fiduciary comfort that there are resources focused on the day-to-day evaluation of current managers as well as building a deep “bench” of potential managers

* Vanguard fund shareholders own the funds, which own Vanguard.

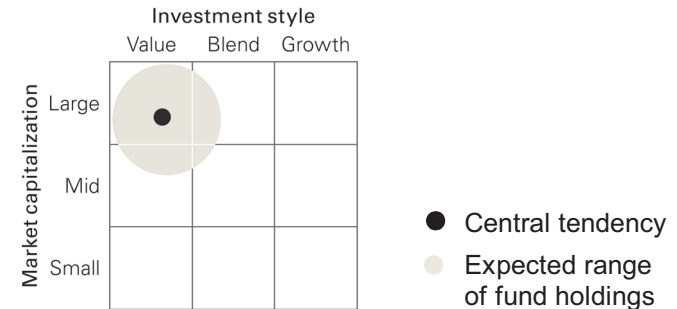
Vanguard Equity Income Fund

Vanguard Equity Income Fund (VEIRX)

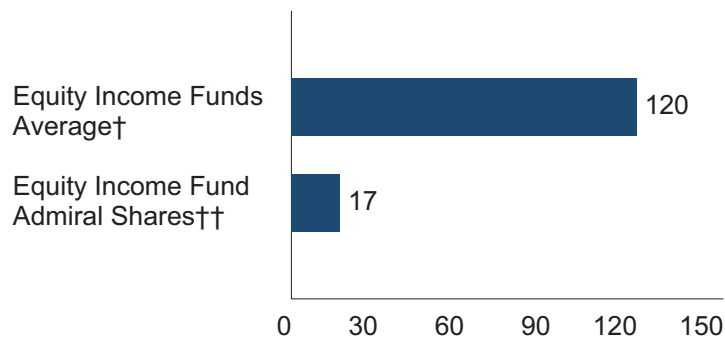
Product summary

- Primarily large-cap value equity.
- Seeks an above average level of current income and reasonable long-term capital appreciation.
- Multimanager structure combines two distinct strategies.
- Broadly diversified.
- Fund assets (in millions): \$23,602
 - Admiral™ Shares assets: \$18,115
- Fund inception date: 03/21/1988
 - Admiral Shares inception date: 08/13/2001
- CUSIP: 921921300

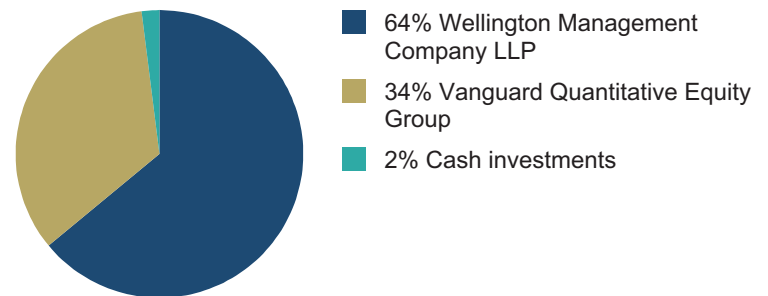
Investment focus



Expenses (in basis points)



Fund advisors



† Equity Income Funds Average: Derived from data provided by Lipper, a Thomson Reuters Company, as of 12/31/2015.

†† As reported in the most recent prospectus.

All data as of September 30, 2016, unless otherwise noted.

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Vanguard®

Vanguard Equity Income Fund—Managers

The fund employs a multimanager approach. By combining high-caliber managers who have differentiated strategies, the fund seeks to improve the relative predictability of outperformance.

Fund Managers

	Vanguard QEG	Wellington Management Company LLP
Manager Start Date	2003	2000
Portfolio Manager (start date)	Binbin Guo (2010) James Stetler (2003) Michael Roach (2012)	Mike Reckmeyer (2007)
Current Allocation (as of September 30, 2016)	34%	64%
Investment Focus	Mid- and large-cap dividend-paying equity	Mid- and large-cap dividend-paying equity
Investment Style	Value	Value
Characteristics	<ul style="list-style-type: none"> • The quantitative investment process results in a diversified, risk-controlled portfolio. • The manager aims to achieve outperformance through stock selection, as exposures to common risk factors are neutralized. 	<ul style="list-style-type: none"> • The long-term, contrarian investment approach generally results in a portfolio with market-like projected growth rates, a higher dividend yield, and a valuation discount. • Capital flow analysis seeks to identify out-of-favor industries marked by insufficient capital spending and poised for improvement. • Each security purchased for the subportfolio pays a dividend.

Vanguard Quantitative Equity Group—Firm Overview

Vanguard Quantitative Equity Group (QEG) has advised Vanguard Equity Income Fund since 2003.

Firm Background

- Founded in 1975
- Headquartered in Malvern, PA
- Active equity AUM of more than \$24 billion as of December 31, 2015
- Approximately 22-member team dedicated to modeling, fund management, and analysis
- Vanguard's Equity Investment Group is led by Tim Buckley, CIO of Vanguard, and John Ameriks, Ph.D., Principal and head of the Quantitative Equity Group

Portfolio Management

James P. Stetler, Principal

- Portfolio manager.
- Advised the fund since 2003.
- Worked in investment management since 1996.
- B.S., Susquehanna University.
- M.B.A., Saint Joseph's University.

Michael R. Roach, CFA

- Portfolio manager.
- Advised the fund since 2012.
- Worked in investment management since 2001.
- B.S., Bloomsburg University.
- M.S., Drexel University.

Binbin Guo, Principal, Head of Equity Research and Portfolio Strategies

- Portfolio manager.
- Advised the fund since 2010.
- Worked in investment management since 1998.
- B.S. and M.S., Tsinghua University.
- Ph.D. and M.Phil., Yale University.

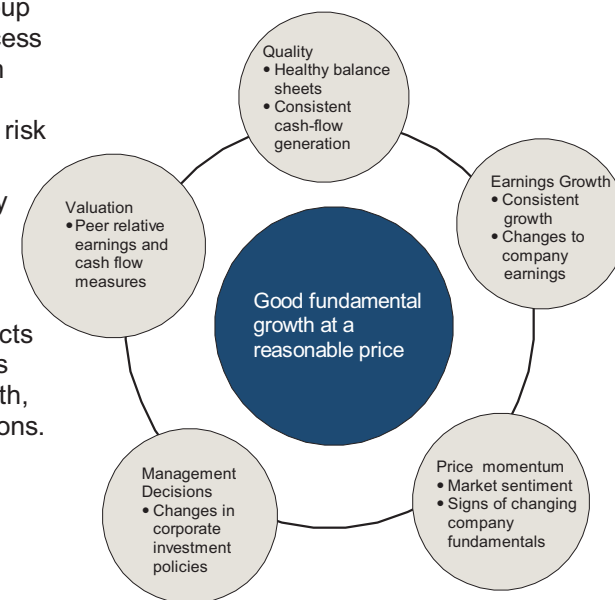
Manager Highlights

- The portfolio managers use a disciplined, risk-controlled process that chooses quality companies with below-average valuations, above-average earnings growth, and good momentum.
- Models are focused on measuring the fundamental economic prospects of firms and the business foundation for future returns.

Investment Philosophy/Process

- Vanguard's Quantitative Equity Group uses a quantitative investment process that attempts to provide a long-term return greater than that of the benchmark, while tightly controlling risk relative to the benchmark.
- The process integrates a proprietary stock-selection methodology with a disciplined and consistently applied risk-control framework.
- The Quantitative Equity Group selects individual stocks based on variables that include valuation, quality, growth, sentiment, and management decisions.

Stock Selection Model Overview



Investment Focus

Asset class	Investment style	Annual turnover (target range)	Number of holdings (target range)
U.S. large-cap equity	Quantitative	40%-50%	Approximately 100

Wellington Management Company LLP—Firm Overview

Wellington Management Company LLP has advised the Vanguard Equity Income Fund since 2000.

Firm Background

- Founded in 1928
- Headquartered in Boston, MA
- More than \$925 billion in assets under management as of December 31, 2015
- More than 2,000 employees worldwide
- Serves as an investment advisor to nearly 2,000 institutions
- Investment strategies offered include equity, fixed income, and multi-strategy/alternative asset classes

Portfolio Management

W. Michael Reckmeyer, III, CFA, Senior Managing Director

- Portfolio manager.
- Advised the fund since 2007.
- Worked in investment management since 1984.
- B.S., University of Wisconsin.
- M.B.A., University of Wisconsin.

Manager Highlights

- Michael Reckmeyer employs a disciplined, long-term investment process, and is supported by Wellington's well-resourced fundamental research capabilities.
- Michael uses a large, dedicated team of analysts in addition to the firm's global industry analysts.

Investment Philosophy/Process

- The portfolio manager believes that the stock market overacts to both positive and negative information in the short term, presenting an opportunity for disciplined, long-term investors.
- The portfolio manager looks to invest in high-quality companies in out-of-favor industries that will generate superior returns. The portfolio is made up predominantly of large-cap stocks with a valuation discount to the market and a yield premium.
- Investment opportunities are derived primarily from four factors: misunderstood negative events, consolidating industry structures, low but improving return on capital, and management that is new or has appropriate capital incentives.
- An assessment of industry capital flows is integral to the investment process, as insufficient capital spending in out-of-favor industries allows for increases in return on capital.

Investment Focus

Asset class	Style	Annual turnover (target range)	Number of holdings (target range)
U.S. equity large-cap	Value	20%-30%	60-75

Vanguard Equity Income Fund Portfolio

Equity characteristics

	Equity Income	FTSE High Dividend Yield Index
Number of stocks	211	414
Median market cap	\$102.0B	\$108.8B
P/E ratio (trailing earnings)	20.5x	20.7x
P/B ratio	2.6x	2.7x
Return on equity (5-year average)	17.7%	17.7%
Earnings growth rate (5-year)	1.9%	1.0%
Equity yield (dividend)	3.2%	3.2%
Foreign holdings	8.6%	—
Turnover (fiscal year end)	32.1%	—

Total fund volatility measures

	Spliced Equity Income Index	DJ U.S. Total Market FA Index
R-squared	0.99	0.91
Beta	0.98	0.88

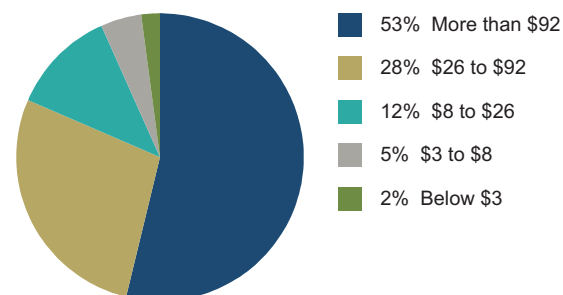
R-squared and beta are calculated from trailing 36-month fund returns relative to the associated benchmark.

Sector diversification as a % of common stock

Sector	Equity Income	FTSE High Dividend Yield Index
Financials	16.0%	13.2%
Information Technology	14.5	15.6
Consumer Staples	12.9	14.6
Health Care	12.6	11.4
Industrials	12.3	11.5
Energy	11.6	10.6
Utilities	7.8	8.2
Consumer Discretionary	5.0	5.8
Telecommunication Services	4.4	5.6
Materials	2.8	3.5

Sector categories are based on the Global Industry Classification Standard system.

Market Cap Breakdown (billions)



Vanguard Equity Income Fund Equity Positioning

Ten Largest Holdings

	% of Total Net Assets
Microsoft Corp.	4.6%
Johnson & Johnson	3.3
JPMorgan Chase & Co.	3.0
General Electric Co.	2.7
Wells Fargo & Co.	2.6
Philip Morris International Inc.	2.5
Cisco Systems Inc.	2.5
Exxon Mobil Corp.	2.5
Merck & Co. Inc.	2.4
Verizon Communications Inc.	2.4
Top ten as a % of total net assets	28.5%

The holdings listed exclude any temporary cash investments and equity index products.

Top Contributors—12 Month

	12 Month Return	Total Effect	Ending Weight	Bench Weight
Kinder Morgan Inc.	-39.6%	0.2%	0.0%	0.5%
Marsh & McLennan Companies Inc.	31.7	0.2	1.6	0.0
TransCanada Corporation	32.7	0.1	0.7	0.0
ConocoPhillips	-6.3	0.1	0.0	0.6
Eaton Corp. Plc	33.0	0.1	1.3	0.3

Top Detractors—12 Month

	12 Month Return	Total Effect	Ending Weight	Bench Weight
AT&T Inc.	31.2%	-0.2%	0.8%	2.9%
Marathon Oil Corporation	-48.8	-0.2	0.0	0.0
Novartis AG	-10.6	-0.2	0.8	0.0
Roche Holding AG	-2.4	-0.2	0.7	0.0
Procter & Gamble Company	29.0	-0.1	1.1	2.7

Vanguard Equity Income Fund Performance Analysis

12 Month Attribution

	Portfolio			Benchmark			Attribution		
	Average Weight	12 Mo. Return	Contrib. Return	Average Weight	12 Mo. Return	Contrib. Return	Alloc. Effect	Select Effect	Total Effect
Consumer Staples	11.5%	21.6%	2.5%	14.8%	20.4%	3.1%	-0.1%	0.1%	0.1%
Consumer Discretionary	5.2	9.3	0.5	6.3	9.0	0.7	0.1	0.0	0.1
Information Technology	13.2	28.8	3.5	14.3	28.2	3.7	-0.1	0.1	0.0
Real Estate	0.0	-2.6	0.0	0.0	45.3	0.0	0.0	0.0	0.0
Financials	16.4	9.5	1.5	13.6	7.3	0.8	-0.3	0.4	0.0
Industrials	12.1	22.2	2.7	11.7	22.7	2.5	0.0	-0.1	0.0
Utilities	8.6	17.3	1.7	8.3	19.3	1.7	0.1	-0.2	-0.1
Telecommunication Services	4.4	24.0	1.1	5.5	27.7	1.5	-0.1	-0.1	-0.2
Materials	2.6	25.0	0.6	3.4	28.2	0.9	-0.1	-0.1	-0.2
Energy	10.7	12.9	1.5	10.4	16.0	1.8	0.0	-0.3	-0.3
Health Care	12.2	15.4	1.8	11.7	18.6	2.1	0.0	-0.4	-0.4
Cash	3.1	0.1	0.0	0.0	0.0	0.0	-0.6	0.0	-0.6
TOTAL	100.0%	17.4%	17.4%	100.0%	19.0%	19.0%	-1.0%	-0.6%	-1.6%

The portfolio attribution data shown above is provided by FactSet based on information provided by Vanguard about the fund's daily portfolio holdings as of the market close. Because the fund buys and sells stocks throughout the trading day and not necessarily at the market close, the attribution data shown above is an estimate and may not precisely reflect actual attribution information. Information noted above does not reflect fair-value adjustments to prices of foreign securities held in the portfolio.

Vanguard Equity Income Fund Performance

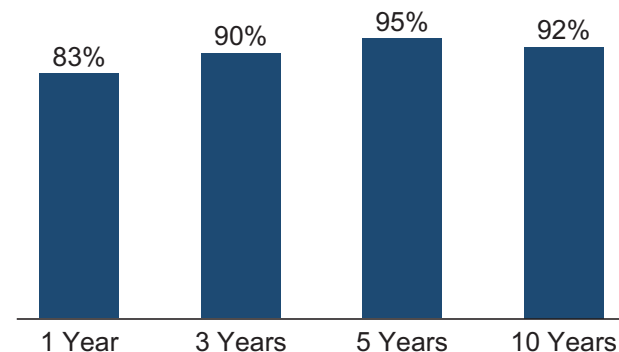
Total returns: Admiral Shares

	Equity Income	Spliced Equity Income Index	Equity Income Funds Average
Periods ended September 30, 2016			
1 Year	17.35%	18.89%	13.93%
3 Years	10.29	11.31	7.67
5 Years	15.67	15.92	12.93
10 Years	7.73	7.40	5.79
Calendar year performance			
2006	20.77	22.25	18.25
2007	4.99	1.27	3.69
2008	-30.86	-32.32	-33.65
2009	17.26	17.74	22.98
2010	14.99	14.36	14.72
2011	10.69	10.65	2.82
2012	13.58	12.75	12.19
2013	30.19	30.34	27.36
2014	11.38	13.58	9.58
2015	0.86	0.39	-3.71
Year to Date	9.58	10.52	9.01
3rd Quarter	1.73	1.67	2.52

Spliced Equity Income Index: Russell 1000 Value Index through July 31, 2007; FTSE High Dividend Yield Index thereafter.

Performance versus competitors

Percentage of Equity Income Funds outperformed by Vanguard Equity Income Fund Admiral Shares



Source: Lipper, a Thomson Reuters Company. Based on total returns as of September 30, 2016. Number of funds in category: 1-year, 480; 3-year, 412; 5-year, 301; 10-year, 199. Results will vary for other time periods.

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month end, visit our website at vanguard.com/performance.

Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Investment Commentary

The third quarter of 2016 was characterized by unusually low levels of volatility as investors looked to the late-September Federal Reserve meeting to provide future market direction. Overall, stocks performed well, supported by a combination of an improving U.S. economy, slow-but-steady growth, and the Fed's decision to continue its accommodative monetary policy. In this environment, larger-capitalization U.S. stocks (+4.03%), as measured by the Russell 1000 Index, underperformed smaller-caps (+9.05%), as measured by the Russell 2000 Index. Vanguard Equity Income Fund performed in line with its benchmark, the Spliced Equity Income Index (+1.67%), but lagged the average return of its peers (+2.52%).

Overall, the fund benefited from underweighted allocations to the consumer staples and telecommunication services sectors, which both produced negative returns. Within consumer staples, underweighted exposures to tobacco companies Reynolds American (-12%) and Altria Group (-7%) were supportive. Cheap gas prices had helped tobacco producers as consumers purchased more cigarettes, but that trend dissipated as oil prices rebounded. An underweighted allocation to AT&T (-7%) aided results in telecommunication services. Information technology was the best-performing sector for both the fund and the benchmark index. The fund's underweighted allocation hurt, but this was somewhat offset by positive selection. The top technology contributors included Cisco Systems (+12%), Maxim Integrated (+13%), and Analog Devices (+15%). But Qualcomm (+29%) was the biggest relative detractor, as the stock surged following a rumored potential acquisition.

For the 12 months ended September 30, the Equity Income Fund lagged its benchmark (+18.89%) but outperformed its peer average (+13.93%). The fund benefited from strong selection among financial stocks but was hampered by selection in health care and energy.

In financials, the fund received a boost from Marsh & McLennan (+32%). In health care, exposure to non-U.S. pharmaceutical companies Novartis (-11%) and Roche (-2%) dragged on relative performance. Marathon Oil (+4%) and Suncor Energy (+8%) were the top detractors in the energy sector.

Appendix

Fund oversight and manager search at Vanguard is integrated and multilevel

Vanguard Board of Directors

Fiduciary oversight of funds and final approval of decisions about funds and advisors

- 7 board meetings held each year
- Meet with internal and external managers



Vanguard Global Investment Committee

Ongoing fund oversight and decision-making (Senior-management panel led by CEO Bill McNabb)

- Monthly meetings to discuss markets, portfolios, investment mandates, and managers
- Annual meeting with each manager, including internal and external advisors
- Strategically assess the fund line-up semiannually
- Frequent communication with Portfolio Review Department



Vanguard Portfolio Review Department

Full-time responsibility for fund oversight and manager search

- Weekly meetings to discuss recent interactions and prepare for upcoming manager visits
- Formally evaluate drivers and outcomes for each manager on a monthly basis
- Ongoing interactions, including conference calls and site visits, with current managers
- 200 meetings with potential managers each year

Vanguard board of directors



F. William McNabb III

- Chairman of the board and chief executive officer
- Vanguard board member since 2008



Amy Gutmann

- President of the University of Pennsylvania
- Vanguard board member since 2006



Mark Loughridge

- Retired senior vice president and chief financial officer at IBM (since 2004)
- Fiduciary member of IBM's Retirement Plan Committee
- Vanguard board member since 2012



Peter F. Volanakis

- Retired president and chief operating officer and former director of Corning Inc.
- Vanguard board member since 2008



Emerson U. Fullwood

- Retired chief staff and marketing officer for North America and corporate vice president of Xerox Corporation
- Vanguard board member since 2008



JoAnn Heffernan Heisen

- Retired corporate vice president, chief global diversity officer, member of the executive committee, former vice president and chief information officer of Johnson & Johnson
- Vanguard board member since 1998



Scott C. Malpass

- Chief investment officer and vice president of the University of Notre Dame
- Vanguard board member since 2012



Rajiv L. Gupta

- Retired chairman and chief executive officer and former president of Rohm and Haas Co.
- Vanguard board member since 2001



F. Joseph Loughrey

- Retired president and chief operating officer and former vice chairman of the board of Cummins Inc.
- Vanguard board member since 2009



André F. Perold

- Chief investment officer and co-managing partner of HighVista Strategies LLC.
- Vanguard board member since 2004

Responsibilities:

- Review of fund performance data
- Fund and manager reviews
- Meeting with fund managers
- Manager selection
- Oversight of GIC and Portfolio Review Department

Our approach seeks to improve the odds of success by employing a long-term perspective and focusing on the following elements

Low costs

Average expense ratios*

- Industry active / index equity: 1.17% / 0.78%
- Industry active / index fixed income: 0.79% / 0.47%
- Vanguard active / index equity: 0.39% / 0.14%
- Vanguard active / index fixed income: 0.16% / 0.13%

Rigorous fund oversight and manager search

- Integrated multi-level oversight with an experienced full-time staff
- Proactive manager search process builds depth and conviction
- Fund oversight and manager search efforts focus on drivers, not performance
- Vanguard's fund and manager oversight program is ongoing and multifaceted

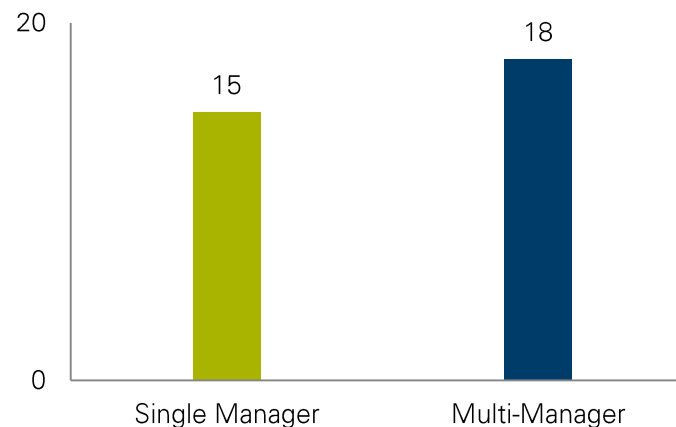
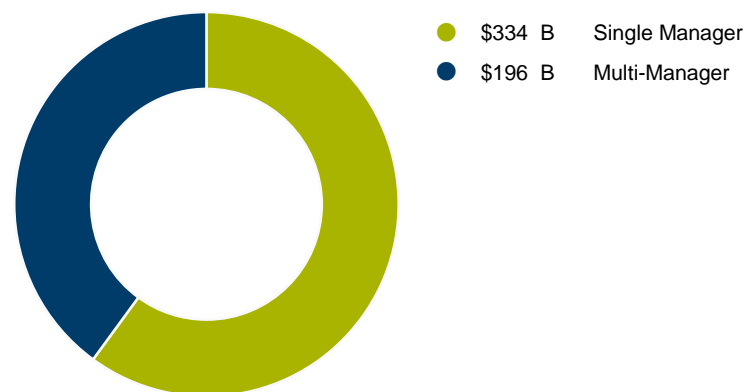
Access to a diverse group of talented managers

- Internal fixed income and equity investment groups are responsible for more than \$2 trillion
- 30 external partners manage more than \$503 billion in global assets
- Partner with more than 120 portfolio managers and 500 analysts

* Vanguard calculations using data from Morningstar, Inc. Data as of December 31, 2015.

Vanguard offers both single- and multi-manager funds

Assets under management



Vanguard will offer a single-manager or multi-manager approach on a fund-by-fund basis:

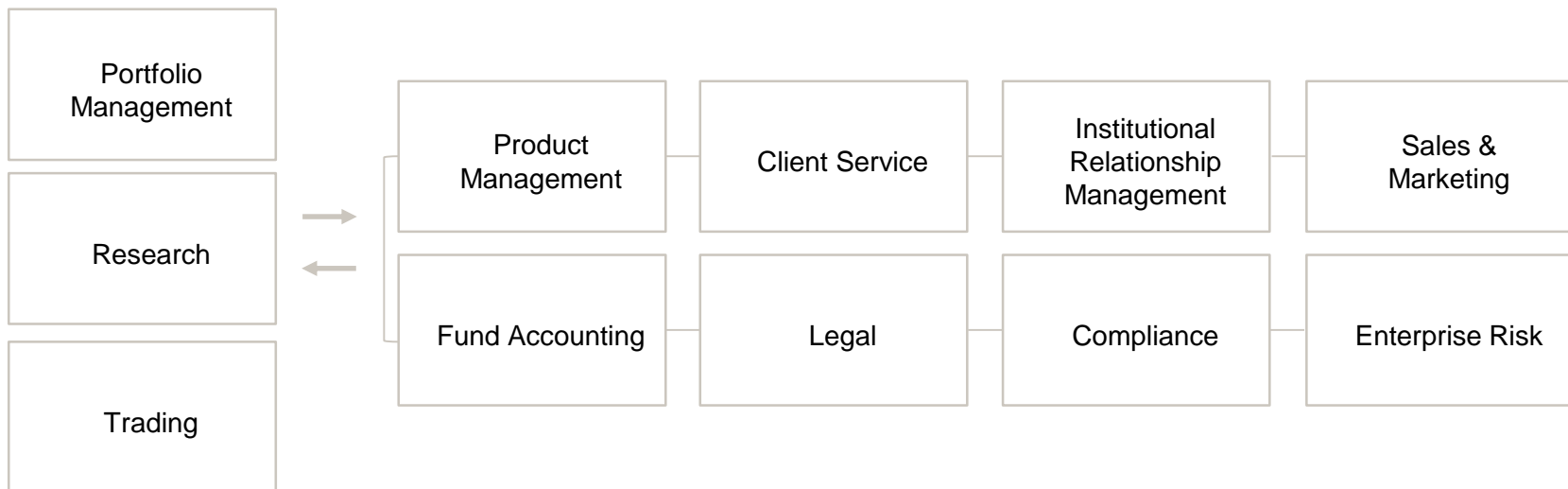
- A single-manager strategy may be used for specialized funds and will often involve a long-term strategic partnership
- A multi-manager strategy may be used when there is opportunity to combine managers with complementary approaches and potentially improve performance predictability

In each case, Vanguard must have a high level of conviction in a manager's ability to add value over the long-term, developed through our extensive due diligence process.

Our goal is to engage in long-term and mutually beneficial partnerships with our external managers

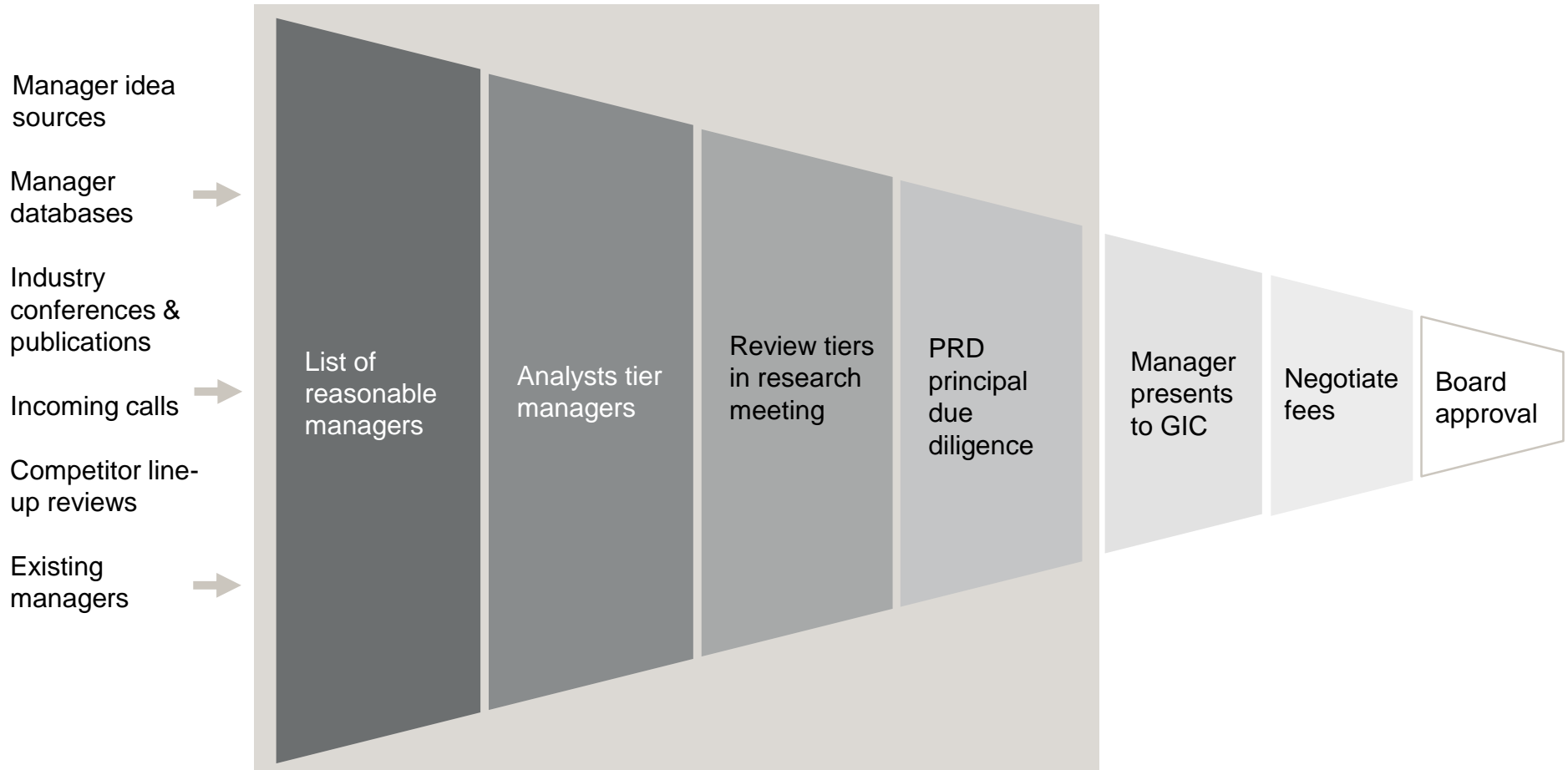
Manager

Vanguard



This structure provides external managers the ability to spend the majority of their time on investment management activities.

Our approach to manager search is ongoing and proactive;
it confirms our conviction and deepens our “bench”



A multi-year process that includes numerous interactions with key members of the investment team, including conference calls and site visits.

Vanguard's fund and manager oversight program is continuous and multifaceted

Qualitative Assessment

- Asset and account trends for the firm and relevant strategies
- Ownership structure
- Succession planning
- Investment team turnover
- Depth & expertise
- Changes in investment approach

Portfolio Analysis

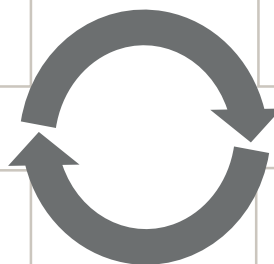
- Buy / sell activity
- Exposure by sector, country/region, factor
- Active share; concentration
- Tracking error; ex-ante and ex-post
- Valuation/growth profile
- Market capitalization profile
- Portfolio turnover

Risk, Trading & Compliance

- Pre-hire review of compliance program
- Regular conference calls
- Annual compliance certification
- Onsite visits
- Extensive process, cost, and liquidity trading analysis

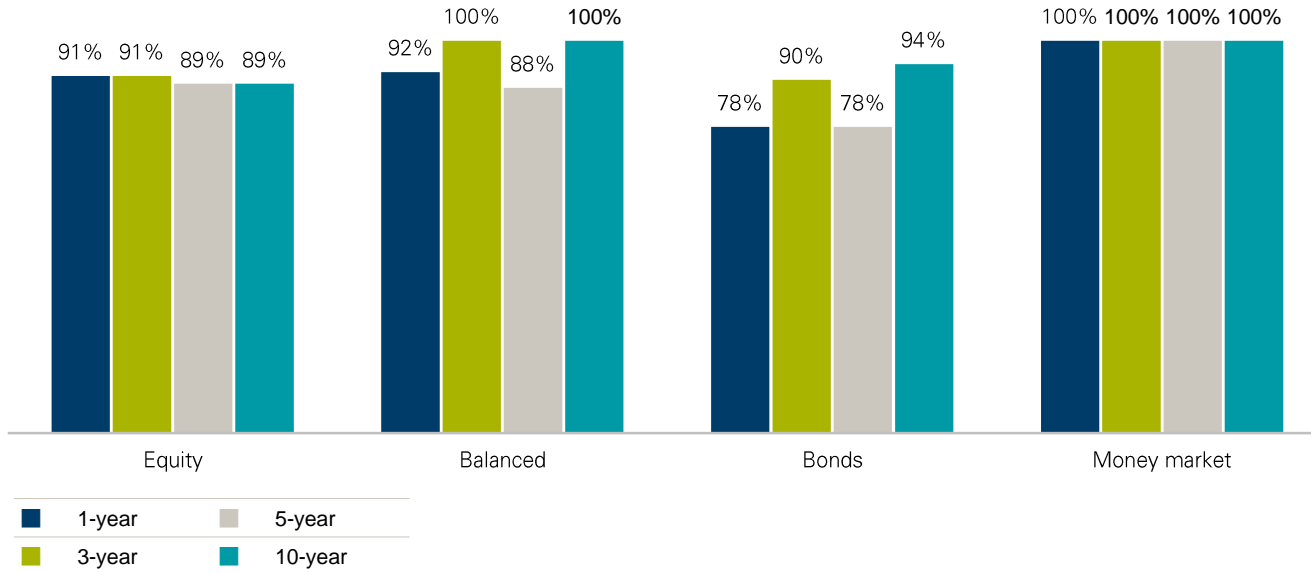
Performance Analysis

- Short- and long-term performance vs. benchmark(s) & peers
- Risk-adjusted results
- Rolling returns
- Attribution analysis (by sector/industry, region/country, factor)



A focus on low costs and rigorous fund oversight has contributed to a history of competitive performance across asset classes

Percentage of all Vanguard funds in each asset class outperforming Lipper peer group averages for periods ended September 30, 2016



Source: Lipper, a Thomson Reuters Company.

Number of Vanguard funds that outperformed their Lipper peer-group averages for periods ended September 30, 2016: For the one-year period, 10 of 10 Vanguard money market funds, 83 of 106 bond funds, 36 of 39 balanced funds, and 191 of 209 stock funds, or 320 of 364 Vanguard funds outperformed their Lipper averages. For the three-year period, 10 of 10 Vanguard money market funds, 87 of 97 bond funds, 26 of 26 balanced funds, and 181 of 200 stock funds, or 304 of 333 Vanguard funds outperformed their Lipper averages. For the five-year period, 10 of 10 Vanguard money market funds, 65 of 83 bond funds, 22 of 25 balanced funds, and 178 of 199 stock funds, or 275 of 317 Vanguard funds outperformed their Lipper averages. For the ten-year period, 10 of 10 Vanguard money market funds, 51 of 54 bond funds, 23 of 23 balanced funds, and 118 of 133 stock funds, or 202 of 220 Vanguard funds outperformed their Lipper averages. Only funds with a minimum quarter-, one-, three-, five-, or ten-year history, respectively, were included in the comparison. Results will vary for other time periods.

Note that the competitive performance data shown represent past performance, which is not a guarantee of future results, and that all investments are subject to risks. For the most recent performance, visit our website at www.vanguard.com/performance.

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