Market Outlook
Q4 2017

Morningstar, Inc.

Contents

Talking Points

- The S&P 500 gained 6.64% during the third quarter and 21.83% for the year.
- Consumer cyclical, technology, financial services, and basic materials stocks outperformed during the quarter. Technology stocks performed best among all sectors in 2017.
- Communication services and utilities stocks barely eked out gains for the quarter, while energy stocks finished the year in the red.
- The market-cap-weighted price/fair value estimate ratio for our equity analysts' coverage universe is 1.06, suggesting that the market overall is slightly overvalued.
- Communication services is the most undervalued sector, with a price/fair value ratio of 0.93. Basic materials is the most overvalued sector, with a price/fair value ratio of 1.39.
- The large growth category led the pack this quarter among style-based fund categories, and growth styles overall outperformed in 2017. The small value category brought up the rear for the quarter and the year.
- With the exception of the Latin America stock category, international-equity Morningstar Categories enjoyed gains during the quarter, with India equity funds enjoying double-digit gains. China region and India equity funds were the best performers among international stock fund categories in 2017.
- Long government bond funds led the fixed-income pack during the quarter, while emerging-market bond funds generated double-digit returns for the year.

Stock Market Outlook: A Dearth of Opportunity Amid the Rally

4- and 5-star stocks are harder to come by in today's market, but a few stock-specific stories are still out there.

By Elizabeth Collins, CFA
Published 12/27/17

- The Morningstar Global Markets Index has returned more than 23% over the past year.
- The market-cap-weighted price/fair value ratio for our equity analysts' coverage universe is 1.06.
- Communication services is the most undervalued sector, with a price/fair value ratio of 0.93. Basic materials is the most overvalued sector, with a price/fair value ratio of 1.39.

Although communication services does stand out as the most undervalued sector when looking at price/fair value of the companies we cover, we don't have any 5-star ratings on communication services companies, and in fact only 12 companies in this sector sport a 4-star rating.

This speaks to the overall dearth of 5-star or even 4-star opportunities we see today. That said, one of the most important stories we're telling about the communication services sector is that China Mobile CHL is undervalued, based on our expectations for market share gains and the competitive benefits of the industry shift to 4G. The Chinese telecom market is one of our analysts' favorites in the region, with organic growth stemming from favorable consumption growth over the next 10 years.

Another stock-specific story we're telling is for Wells Fargo WFC, although we don't see the financial services sector as being particularly undervalued overall when looking at price/fair value. (In fact, the financial services sector's market-cap-weighted price/fair value ratio is about 1.04.) Our analysts argue that the market is overlooking Wells Fargo's high-quality deposit base and continued ability to produce high returns on assets.

More broadly speaking, the most emphatic message from our coverage universe is that the basic materials sector is overvalued. The miners we cover are particularly overvalued, reflecting our expectation of a structural change in demand growth from China as its economy matures and transitions toward less commodity-intensive economic growth.

Take BHP Billiton BHP, which is trading at a roughly 45% premium to our fair value estimate. The company's future profits will be determined primarily by prices for iron ore, copper, and metallurgical coal. In addition to the shift away from China's commodity-intensive economic growth, these metals are likely to suffer from the bearish forces of rising scrap availability, which will add material amounts of supply to the market.

The Year in U.S. Equity Funds: Growth Was King

Tech-heavy large-growth funds fared best while small-value funds posted smaller gains.

By David Kathman
Published 10/2/17

U.S. stocks continued their relentless march upward in 2017, extending one of the longest bull markets in history. (Only the 1990s bull market lasted longer.) The year began with a lot of market optimism due to the business-friendly agenda of the incoming Donald Trump administration, and even though dysfunction in Washington ended up tempering many of those expectations, the economy continued to hum along and corporate earnings were generally solid. The S&P 500 gained 22% for the year to date through December 23, and the tech-heavy NASDAQ Composite Index returned 31%.

In general, growth funds performed better than value funds in 2017, and large-caps outpaced small-caps. Among the nine Morningstar Style Box categories, large-growth funds posted the highest average gains (28%), and small-value funds had the lowest (9%). This pattern was driven by the strong stock performance of big tech names such as Apple AAPL, Amazon.com AMZN, and Facebook FB, each of which gained more than 50% for the year. The same trend drove the impressive gains of technology sector funds, which were up almost 40% on average.

To investors with a long memory, all this may sound uncomfortably similar to the peak of the late-1990s bull market, when big tech stocks were red-hot and anything value-oriented was shunned. More than one person has compared the recent speculative frenzy in bitcoin to the dot-com bubble of the late 1990s, when Internet stocks with shaky to nonexistent business models were bid up to stratospheric valuations before crashing hard. On the other hand, some commentators have argued that this bull market is more substantial than the 1999 one, and that stocks aren't nearly as expensive.

Although just about everybody made money in 2017, some domestic stock funds performed much better than others. Here are some of the most prominent individual winners and losers of the past year, illustrating key trends.

Winners

Morgan Stanley Institutional Growth MSEQX and its mid-cap counterpart Morgan Stanley Institutional Mid Cap Growth MPEGX are both managed by former Morningstar Domestic Equity Fund Manager of the Year Dennis Lynch and his team, and both have Morningstar Analyst Ratings of Bronze. They were among the best performers in their Morningstar Categories (large-growth and mid-cap growth, respectively) in 2017. That’s not too surprising to anyone familiar with the team’s strategy, which results in concentrated portfolios filled with the type of emerging-growth names that gained big this year. As of Sept. 30, almost 20% of the Institutional Growth portfolio was in Amazon, Alphabet GOOG, and Facebook, and it also got a boost from such holdings as Illumina ILMN and Intuitive Surgical ISRG. Institutional Mid Cap Growth didn’t hold Amazon, Alphabet, or Facebook, but otherwise benefited from many of the same holdings.

Two other funds that benefited from 2017 market trends were Harbor Capital Appreciation HACAX and its clone Prudential Jennison Growth PJFAX, which are managed by Sig Segalas and his growth team at Jennison. Like the Morgan Stanley funds, these offerings follow a fairly aggressive large-growth strategy, and they benefited from big positions in Apple, Facebook, and Amazon, which together made up 15% of their portfolios as of Sept. 30. But these funds also got a big boost from top-10 positions in Chinese Internet giants Alibaba Group BABA and Tencent Holdings TCEHY, which roughly doubled in price this year.

While the above funds took full advantage of a market favorable to their investing styles in 2017, other funds excelled despite facing major headwinds. Two good examples are the mid-cap value AllianzGI NFJ Mid-Cap Value PQNAX and the small-value Royce Opportunity RYPNX. These two Bronze-rated funds each gained more than 20% and ranked in the top 1% of their respective categories for 2017, despite not owning the big tech names that were the year's star performers. The Allianz fund achieved this through a combination of strong stock-picking (half of its top 10 holdings gained more than 50% for the year) and an avoidance of energy, real estate, and utilities stocks, which the managers consider too expensive. The Royce fund also had a lot of very successful stock picks, such as top holdings Dana DAN, Meritor MTOR, and Comtech Telecommunications CMTL, and it helped that the fund was particularly heavy in technology, which made up 27% of the portfolio as of Sept. 30.

Losers

The worst 2017 return of any U.S. stock fund covered by Morningstar Analysts belongs to Fairholme FAIRX, a once-hot large-value fund that has struggled mightily in recent years. As of August 31, manager Bruce Berkowitz had about one third of the portfolio in preferred shares of mortgage lenders Fannie Mae and Freddie Mac, which suffered steep losses in the first half of 2017 and dragged down the fund's returns, even after a third-quarter rebound. It also didn't help that top holding The St. Joe Co JOE, which takes up 20% of the portfolio, suffered a modest loss for the year. Berkowitz's all-in bets on sometimes illiquid securities worked very well from 2000 through 2009, but when things go bad here, they can get ugly, as this year has shown.

FPA Capital FPPTX is another one-time high-flier that has gone through a rough time lately, and which ranked at the bottom of its mid-cap value category in 2017. The fund has struggled since the retirement of longtime manager Bob Rodriguez in 2009, largely because its deep-value approach has been very much out of step with the long and often heady bull market. That was especially true in 2017, when 12 of its 19 stock holdings lost money, including top holding ARRIS International ARRS and all five of its energy holdings, led by Cimarex Energy XEC and Noble Energy NBL.

Fairholme and FPA Capital both have Neutral ratings due to the protracted nature of their recent struggles, but other funds performed poorly in 2017 for reasons that are more specific to this year. Silver-rated Invesco Diversified Dividend LCEAX has been a respectable performer over the past decade, but in 2017 it ranked near the bottom of the large-value category. That was due mainly to the fund's big stakes in utility and consumer defensive stocks such as PPL PPL and General Mills GIS, which put up generally lackluster returns in a year when dividend payers were not in favor. Another Silver-rated fund, the mid-cap blend Longleaf Partners Small-Cap LLSCX, has ranked in its category's top decile in three of the past six years, but this year it landed in the bottom decile when several holdings in its highly concentrated portfolio suffered losses, including top holding Level 3 Communications.

A Rewarding Year for International-Stock Funds

Rising stock prices and strong currencies fuel major gains in 2017.

By Gregg Wolper
Published 1/4/18

By and large, 2017 was highly rewarding for shareholders of international-stock funds. Stock markets around the world enjoyed gains almost across the board.

Expectations of stronger growth in the United States fueled part of that surge; and in most of Europe, cautious optimism and modest but encouraging rates of growth replaced years of concern about weak economies, heavy debt burdens, and political turmoil. (An exception was the United Kingdom, where the ongoing negotiations over the country's prospective exit from the European Union brought uncertainty and concern.) Japan's economy also perked up.

Meanwhile, emerging markets were especially strong, bolstered most spectacularly by stunning gains in Chinese Internet and technology stocks. Some of these companies rose 60% or more in 2017, with one of the heavyweights, Internet conglomerate Alibaba BABA, nearly doubling in price.

The extent of the gains for other emerging markets was equally astounding, as illustrated by the 46.8% return enjoyed by the India stock Morningstar Category. But not every emerging market was that strong—the gains in Russia and Mexico were more pedestrian, for instance. But overall, the diversified emerging-markets category posted a very healthy 34.2% average return.

The vast majority of currencies around the world also strengthened against the U.S. dollar. That provided a boost for nearly all U.S.-based stock funds investing in foreign markets. When these funds translate the returns of their stock holdings into dollars for their U.S. investors, the returns include not just the increase in price of their stocks but the increase in currency value as well. The only funds that didn't receive this extra bonus were the few that fully hedged their foreign-currency exposure into the U.S. dollar.

The impact of currency gains was substantial. The MSCI Europe Index, for example, rose 13.1% in local-currency terms, but gained a mighty 25.5% when translated into U.S. dollars.

With markets so robust overall, the international-stock funds that failed to keep pace typically held more than a few percentage points of assets in cash, or they shied away from the high-flying, market-leading Internet and technology stocks.

Invesco International Growth AIIEX, which had a strong long-term record entering 2017, brought up the rear of the foreign large-growth category (while still posting a not-exactly-shabby 22.6% return). Its managers believed that Internet leaders such as Tencent and Alibaba were overpriced, and they had similar trepidation about strong-performing stocks from other areas, such as luxury-goods makers Kering and LVMH. The absence of these stocks from the fund's portfolio cost it relative to many rivals; a high-single-digit cash stake also held down returns. First Eagle Overseas SGOVX landed near the bottom of the foreign large-blend category for similar reasons.

Toward the other end of the spectrum stood T. Rowe Price Emerging Markets Stock PRMSX. Tencent was that fund's top holding all year, with Alibaba also in the top five; those two companies alone contained more than 12% of assets as of Sept. 30. The fund had a minimal cash stake, and a number of big winners outside the tech and Internet arena could also be found among its larger holdings. One was Sberbank, which defied the Russian market's otherwise sluggish year to post a strong gain; another was Asian insurance firm AIA. Both rose more than 40%. This fund gained 42.9% for the year, beating roughly 90% of its diversified emerging-markets category rivals and topping the MSCI Emerging Markets Index by nearly 6 percentage points.

Owning the Chinese stars wasn't necessary to stand out, though. Oakmark International OAKIX had a good year without Alibaba, Tencent, or JD.com, posting a 29.8% return that comfortably beat the MSCI ACWI ex USA Index and nine tenths of its foreign large-blend rivals. (It did own Baidu, which didn't gain as much as those three.) The fund held big gainers Kering and LVMH from the luxury-goods field and a wide variety of other winners from areas outside of the tech sector, such as Diageo and Glencore.

The Year in Bond Funds: 2017

Despite monetary and fiscal policy adjustments, bond markets remained steady for 2017, providing a subtle encore to the prior year's risk-on fervor.

By Emory Zink
Published 1/9/18

Continued strength in the U.S. economy underpinned a slow but steady shift in the Federal Reserve's monetary policy guidelines, including actions to reduce its balance sheet and to hike interest rates, despite stubbornly low inflation.

The economic optimism, further fueled by serious tax cuts in the United States and recovering oil prices across the globe, continued to support credit fundamentals, and led to another year of risk-on fervor.

The Bloomberg Barclays U.S. Aggregate Index, a proxy for expected typical core bond performance, delivered 3.5% for 2017, while the intermediate-term bond Morningstar Category generated 3.7% by comparison. Funds courting more risk, either from significant allocations to credit or emerging-markets debt, and with non-U.S.-dollar currency exposures to the euro or yen, had an advantage.

Monetary Policy Shifts Under Way, With Long-Dated Bonds Leading the Way

Three interest-rate hikes (March, June, and December) signaled the Federal Reserve's improving confidence in the U.S. economy and resulted in a federal-funds rate that rose above 1% for the first time since September 2008, while long rates didn't budge much.

Ultimately, the U.S. Treasury yield curve flattened, with the difference between the 10-year and two-year points steadily narrowing from 1.30% in January 2017 to 0.51% by the end of December. The yield on the 10-year U.S. Treasury served as a loose fulcrum—it started January at 2.45%, fluctuated between a range of 2.05% and 2.62%, and ended the year roughly where it began at 2.40%.

Subsequently, the short end of the curve lifted in parallel in anticipation of a more active Fed, rewarding short-term bond funds with significantly less duration (a measure of interest-rate sensitivity) than their typical category peer; the short-term bond category returned 1.7% for the year. The longest-maturity bonds saw yields drop modestly, a function of steady demand, preemptively priced-in rate hikes, and persistently low inflation expectations. As a result, the long-government bond category gained 8.4%.

Early in 2017, the Federal Reserve communicated that it would begin paring back its balance sheet in October by reducing the reinvestment of principal payments on securities that it acquired through quantitative easing. Unlike the raucous taper tantrum of 2013, this announcement and subsequent policy initiation was implemented with minimal volatility to underlying U.S. Treasury and agency-backed mortgage pass-through markets, with these sectors gaining an albeit modest 2.3% and 2.5%, respectively.

Robust Appetites for Credit Continued

Following 2016's bullish credit markets, there was a general sentiment that credit spreads—the additional yield investors in corporate bonds get to compensate for default risk—couldn't tighten much further. Still 2017 saw continued strength in riskier bonds.

Oil prices, which dropped beneath $30 a barrel in February 2016, ravaging many energy-related names, continued a steady ascent throughout 2017, reaching nearly $60 a barrel by year-end. That contributed to further rebounds in the prospects of oil-related companies and oil-producing countries alike.

Further, the Federal Reserve's slow and steady monetary policies extended an already-heated credit market, with the Bloomberg Barclays U.S. Corporate High Yield Index and U.S. Investment Grade Corporate Index returning 7.5% and 6.4%, respectively. The lowest-quality bonds continued to flourish in a market hungry for yield, and bond funds with significant allocations to CCC rated debt were rewarded accordingly.

Aggressive offerings in the high-yield category include Fidelity Capital & Income FAGIX, which can hold equities and handily topped its peers with an 11.7% gain for 2017, as well as BlackRock High Yield BHYIX, which overweighted CCC securities and contributed to the fund's 8.2% return.

Within the densely populated intermediate-term bond category, funds with greater exposures to credit, as well as emerging-markets holdings and currency flexibility, such as Western Asset Core Plus Bond WACPX, were among the biggest winners.

Central Banks Across the Globe Contend With the Dollar While Geopolitical Risks Continue to Mount

Emboldened by continued U.S. economic growth, the U.S. dollar appeared poised to strengthen for much of 2017, but continued accommodative monetary policies by European and Japanese central banks kept the dollar behind. The market returns on the euro and yen versus the U.S. dollar were 13.9% and 3.5% for the year, respectively, while the Bloomberg Barclays Global Aggregate Ex USD Index generated a 10.5% gain that was well ahead of the 3.5% of its U.S. Aggregate counterpart.

Negative yields continued to persist amongst the typical culprits, including the five-year German bund and Japanese government bonds, though overall negative-yielding debt stock decreased from 2016.

Ultimately, funds with heavier exposures to commodity-driven countries and companies, such as Brazil and Petrobras, as well as broad currency flexibility, bounded to the front of the world-bond category, with Prudential Global Total Return PGTQX posting a particularly strong gain of 13.6% for the year.

Still recovering from painful losses in 2013, 2014, and 2015, local-currency emerging-markets bond indexes bounced back in 2016 with an 11.7% return and did even better in 2017, generating a 15.2% gain. Hard-currency emerging-markets indexes had a good, though not quite as impressive year with a 9.3% return, despite tricky political situations in Venezuela, Turkey, and Russia. But rising oil prices continued to benefit many commodity-driven emerging-markets contributors, except for Venezuelan debt, which defaulted and sank by 34% for the year.

Geopolitical risks remained a serious concern throughout 2017—including tensions related to North Korea's nuclear threats—yet broad economic projections remained optimistic. The International Monetary Fund anticipated 3.6% global growth for 2017, followed by 3.7% for 2018.

Municipals Held Steady, Despite Policy Anxieties

The Bloomberg Barclays Municipal Bond Index delivered 5.5% return despite uncertainty surrounding tax and health care policy. During a lengthy though ultimately unsuccessful campaign to repeal and replace the Affordable Care Act, the healthcare sector experienced some anxiety. This was followed by the tax overhaul passed in early December that lowered the corporate tax rate from 35% to 21% and eliminated the tax exemption on advanced refunding bonds.

A wave of advanced refunding issuance was swiftly brought to market before the law was enacted at the start of 2018, and that, coupled with continued strength in demand for municipal securities, lifted the index to its second-highest monthly return for the entire year that December.

Against the backdrop of generally strong performance for muni debt, prices on already troubled Puerto Rico bonds plummeted in the wake of Hurricane Maria. 2017 was a year that rewarded funds with appetites for non-investment-grade securities—as exhibited by the broad high-yield municipal category return of 7.4%, ahead of the municipal-national intermediate category's 4.6%—and in particular those that managed to simultaneously steer clear of Puerto Rico, such as Nuveen Intermediate Duration Municipal Bond NUVBX.

Index Returns

Category	Name	Q4 2017	1 Year	3 Year	5 Year	10 Year	15 Year
Broad U.S. Market	Morningstar US Market TR USD	6.46	21.47	11.21	15.62	8.71	10.41
	DJ Industrial Average TR USD	10.96	28.11	14.36	16.37	9.28	10.26
	S&P 500 TR USD	6.64	21.83	11.41	15.79	8.50	9.92
	NASDAQ Composite TR USD	6.55	29.64	14.72	19.40	11.26	—
U.S. Style	Morningstar US Large Cap TR USD	6.61	22.69	11.58	15.77	8.37	9.74
	Morningstar US Large Core TR USD	5.95	22.43	11.32	16.79	9.53	10.72
	Morningstar US Large Growth TR USD	7.25	31.15	12.87	16.85	9.48	9.64
	Morningstar US Large Value TR USD	6.55	15.09	10.49	13.69	5.99	8.61
	Morningstar US Mid Cap TR USD	6.52	19.50	10.41	15.55	9.48	12.11
	Morningstar US Mid Core TR USD	6.68	19.88	9.93	15.39	10.26	12.23
	Morningstar US Mid Growth TR USD	6.61	25.67	9.93	14.35	7.98	11.78
	Morningstar US Mid Value TR USD	6.18	13.02	11.30	16.92	10.15	12.12
	Morningstar US Small Cap TR USD	4.78	15.03	9.58	14.17	9.55	11.96
	Morningstar US Small Core TR USD	4.95	13.17	9.77	14.30	9.48	11.77
	Morningstar US Small Growth TR USD	5.19	23.77	10.63	14.50	8.87	11.67
	Morningstar US Small Value TR USD	4.02	8.40	8.21	13.60	10.25	12.27
U.S. Stock Sector	Morningstar US Basic Materials TR USD	7.04	23.79	10.56	11.23	5.41	10.16
	Morningstar US Communication Svc TR USD	0.35	3.95	9.88	12.05	9.29	10.34
	Morningstar US Consumer Cyclical TR USD	9.90	24.47	11.84	16.76	12.48	11.78
	Morningstar US Consumer Dfnsve TR USD	7.19	13.27	8.57	13.85	10.24	10.67
	Morningstar US Energy TR USD	6.43	–1.56	–0.90	2.47	2.35	11.20
	Morningstar US Financial Svc TR USD	8.14	22.67	13.86	18.67	4.68	6.02
	Morningstar US Healthcare TR USD	1.59	22.71	8.27	17.92	11.49	10.63
	Morningstar US Industrials TR USD	6.51	22.43	12.21	17.01	8.89	11.50
	Morningstar US Real Estate TR USD	1.73	6.67	5.39	8.91	6.78	10.32
	Morningstar US Technology TR USD	8.63	37.14	17.61	19.98	11.57	12.77
	Morningstar US Utilities TR USD	0.54	12.61	7.81	12.79	6.66	11.02
Economic Moat	Morningstar Wide Moat Focus TR USD	6.42	23.79	13.19	15.89	13.54	14.41
Foreign Markets	MSCI ACWI Ex USA NR USD	5.00	27.19	7.83	6.80	1.84	8.75
	MSCI EAFE NR USD	4.23	25.03	7.80	7.90	1.94	8.11
Bond: Broad Market	Morningstar Intermediate Core TR	–0.04	2.63	2.27	2.24	4.21	4.40
	Morningstar Long-Term Core TR	1.93	8.39	3.90	3.75	6.68	6.26
	Morningstar Short-Term Core TR	–0.24	1.12	1.12	1.00	2.15	2.60
	Morningstar US Core Bd TR USD	0.40	3.64	2.41	2.25	4.19	4.30
	Bloomberg Barclays US Agg Bond TR USD	0.39	3.54	2.24	2.10	4.01	4.15
Bond: Corporate	Morningstar Inter-Term Corp TR	0.08	4.49	3.42	3.06	5.50	5.28
	Morningstar Long-Term Corp TR	2.33	10.14	5.24	4.67	7.45	6.90
	Morningstar Short-Term Corp TR	–0.04	2.33	2.01	1.88	3.09	3.40
	Morningstar US Corp Bd TR USD	1.10	6.40	3.87	3.42	5.57	5.39
Bond: Government	Morningstar Intermediate US Govt TR	–0.52	1.53	1.48	1.11	3.62	3.77
	Morningstar Long-Term US Govt TR	1.43	6.30	2.60	2.83	5.81	5.62
	Morningstar Short-Term US Govt TR	–0.33	0.53	0.71	0.64	1.76	2.28
	Morningstar US Govt TR	0.10	2.41	1.43	1.29	3.31	3.57
Bond: Other	Morningstar Mortgage TR	0.13	2.62	2.31	2.49	4.20	4.35
	Morningstar TIPS TR USD	1.31	3.10	2.03	0.19	3.58	4.48

Source: Morningstar Direct. Data as of 12-31-17. 3-, 5-, 10-, and 15-year returns annualized.

Fund Category Returns

Category	Name	Q4 2017	1 Year	3 Year	5 Year	10 Year	15 Year
U.S. Equity	Large Blend	6.41	20.44	9.70	14.24	7.61	9.24
	Large Growth	6.44	27.67	11.06	15.29	8.31	9.95
	Large Value	5.99	15.94	8.65	13.33	6.92	9.01
	Mid-Cap Blend	5.44	15.93	8.16	13.28	7.86	10.47
	Mid-Cap Growth	6.02	23.91	9.40	13.73	7.67	10.68
	Mid-Cap Value	5.35	13.22	8.19	13.25	8.06	10.34
	Small Blend	3.54	12.28	8.71	12.99	8.13	10.71
	Small Growth	4.70	21.50	9.97	13.96	8.42	11.02
	Small Value	3.50	8.54	8.25	12.23	8.22	10.76
Allocation	Allocation—15% to 30% Equity	1.22	6.25	3.33	3.45	3.98	5.32
	Allocation—30% to 50% Equity	2.16	9.86	4.67	5.69	4.67	6.06
	Allocation—50% to 70% Equity	3.41	13.21	5.91	8.03	5.53	7.31
	Allocation—70% to 85% Equity	4.06	15.80	6.56	9.22	5.38	7.79
	Allocation—85%+ Equity	4.72	18.41	7.97	11.40	5.93	8.37
	Convertibles	1.87	12.18	5.33	8.58	5.75	7.94
	Tactical Allocation	3.54	12.63	4.22	5.36	3.78	5.57
	Target Date 2000-2010	2.33	10.15	4.98	5.78	4.19	5.96
	Target Date 2015	2.62	11.29	5.36	6.47	4.44	—
	Target Date 2020	2.92	12.46	5.67	6.76	4.54	6.87
	Target Date 2025	3.46	14.67	6.50	7.93	4.94	—
	Target Date 2030	3.98	16.57	7.22	8.74	5.12	7.68
	Target Date 2035	4.38	18.43	7.87	9.66	5.40	—
	Target Date 2040	4.71	19.52	8.23	10.03	5.49	8.20
	Target Date 2045	4.90	20.51	8.55	10.45	5.66	—
	Target Date 2050	5.01	20.67	8.62	10.48	5.68	8.01
	Target-Date 2055	5.04	21.08	8.79	10.87	6.82	—
	Target-Date 2060+	5.13	21.27	9.24	11.59	—	—
	Target-Date Retirement	2.01	8.81	4.17	4.48	4.07	4.65
	World Allocation	3.21	14.79	5.18	5.90	4.22	7.13
International Equity	China Region	6.23	42.40	11.11	9.59	3.14	11.58
	Diversified Emerging Mkts	6.27	34.17	7.95	4.09	1.63	11.88
	Diversified Pacific/Asia	7.30	30.33	11.10	9.69	4.85	9.58
	Europe Stock	1.58	23.70	7.94	8.05	1.79	8.63
	Foreign Large Blend	3.94	25.12	7.73	7.27	1.79	7.95
	Foreign Large Growth	4.33	30.87	9.04	8.51	2.75	8.49
	Foreign Large Value	3.42	22.08	6.72	6.49	1.36	7.62
	Foreign Small/Mid Blend	5.04	31.59	12.15	10.90	5.11	12.43
	Foreign Small/Mid Growth	6.09	36.19	12.55	11.33	5.27	11.91
	Foreign Small/Mid Value	4.49	27.52	10.18	9.40	3.06	10.44
	India Equity	13.70	46.78	11.85	11.87	3.20	15.27
	Japan Stock	8.50	25.51	13.33	14.24	5.99	7.52
	Latin America Stock	–1.76	29.90	5.49	–3.67	–2.50	12.86
	Pacific/Asia ex-Japan Stk	8.07	37.39	9.98	7.50	4.32	12.75
	World Large Stock	4.98	23.61	8.89	10.76	4.80	8.81
	World Small/Mid Stock	5.00	25.44	10.62	11.90	4.76	10.40

Source: Morningstar Direct. Data as of 12-31-17. 3-, 5-, 10-, and 15-year returns annualized.

Fund Category Returns (Continued)

Category	Name	Q4 2017	1 Year	3 Year	5 Year	10 Year	15 Year
Taxable Bond	Bank Loan	0.98	3.48	3.71	3.39	3.75	4.19
	Corporate Bond	0.88	5.79	3.61	3.36	5.22	5.06
	Emerging Markets Bond	0.71	10.25	5.96	2.82	6.32	8.81
	Emerging-Markets Local-Currency Bond	0.81	13.55	2.17	–1.43	3.24	—
	High Yield Bond	0.46	6.47	4.91	4.63	6.43	7.49
	Inflation-Protected Bond	1.14	2.72	1.63	–0.18	2.99	3.81
	Intermediate Government	–0.19	1.58	1.11	1.05	3.18	3.31
	Intermediate-Term Bond	0.29	3.71	2.22	2.05	4.06	4.17
	Long Government	2.22	8.40	2.58	3.26	6.47	6.13
	Long-Term Bond	2.00	9.74	4.55	4.56	6.69	6.10
	Multisector Bond	0.65	6.07	3.76	3.26	5.27	6.30
	Nontraditional Bond	0.48	4.06	2.73	2.00	3.82	4.47
	Preferred Stock	0.51	9.78	5.41	5.24	7.39	6.38
	Short Government	–0.20	0.56	0.48	0.33	1.58	2.00
	Short-Term Bond	–0.04	1.73	1.47	1.15	2.31	2.60
	Ultrashort Bond	0.28	1.44	1.02	0.80	1.09	1.76
	World Bond	0.64	6.87	2.01	0.91	3.47	4.45
Municipal Bond	High Yield Muni	1.10	7.38	4.06	3.87	4.34	4.45
	Muni California Intermediate	0.35	4.62	2.22	2.44	3.73	3.58
	Muni California Long	1.08	5.91	3.26	3.57	4.60	4.27
	Muni Massachusetts	0.49	4.06	2.18	2.09	3.57	3.66
	Muni Minnesota	0.68	4.38	2.33	2.36	3.80	3.77
	Muni National Interm	0.39	4.61	2.34	2.35	3.68	3.58
	Muni National Long	1.00	5.71	3.01	2.96	4.16	3.98
	Muni National Short	–0.29	1.69	0.81	0.80	1.85	2.13
	Muni New Jersey	0.61	4.71	2.48	2.37	3.71	3.77
	Muni New York Intermediate	0.26	3.94	2.18	2.20	3.52	3.44
	Muni New York Long	0.43	4.48	2.75	2.57	3.85	3.83
	Muni Ohio	0.39	3.68	2.20	2.18	3.42	3.51
	Muni Pennsylvania	0.50	4.35	2.54	2.44	3.68	3.68
	Muni Single State Interm	0.38	3.59	1.96	1.97	3.38	3.36
	Muni Single State Long	0.32	3.27	2.05	1.99	3.44	3.62
	Muni Single State Short	–0.64	1.47	0.77	0.84	2.18	2.38
Alternatives	Bear Market	–7.48	–27.04	–19.89	–22.83	–21.48	–17.71
	Long/Short Credit	0.39	2.44	1.65	1.49	3.10	2.76
	Long/Short Equity	3.44	11.18	3.93	6.23	4.43	5.81
	Managed Futures	4.74	3.05	0.07	3.26	–1.83	—
	Market Neutral	0.79	2.37	0.87	1.13	0.91	2.33
	Multialternative	1.76	5.14	1.79	2.65	1.16	4.27
	Multicurrency	–0.37	0.77	0.43	–0.34	–0.10	2.38
	Option Based	2.23	9.08	4.59	5.41	3.05	5.07
Commodities	Commodities Agriculture	–1.51	–7.21	–11.62	–12.83	–5.26	—
	Commodities Broad Basket	5.67	3.66	–4.34	–8.27	–8.04	1.09
	Commodities Energy	10.31	–0.45	–10.22	–14.34	–15.56	—
	Commodities Precious Metals	1.82	12.30	1.51	–6.67	2.31	—

Source: Morningstar Direct. Data as of 12-31-17. 3-, 5-, 10-, and 15-year returns annualized.

Fund Category Returns (Continued)

Category	Name	Q4 2017	1 Year	3 Year	5 Year	10 Year	15 Year
Sector Equity	Communications	0.71	7.27	7.32	9.65	4.60	10.26
	Consumer Cyclical	8.74	21.49	8.52	13.76	10.74	10.64
	Consumer Defensive	6.67	15.21	8.46	13.07	9.51	9.78
	Energy Limited Partnership	–0.76	–5.78	–8.33	–0.05	9.62	—
	Equity Energy	6.49	–4.84	–5.23	–3.66	–2.85	7.76
	Equity Precious Metals	1.53	11.33	9.19	–10.16	–4.79	4.64
	Financial	5.74	16.72	11.64	15.47	5.27	6.59
	Global Real Estate	4.45	15.12	5.22	6.13	3.04	9.04
	Health	0.43	24.31	6.39	17.28	11.87	11.99
	Industrials	6.31	22.52	11.34	16.00	8.96	11.72
	Infrastructure	1.77	17.00	5.13	9.06	3.52	8.25
	Natural Resources	7.16	16.61	4.89	2.65	0.66	8.79
	Real Estate	2.09	6.22	5.14	8.68	6.76	10.22
	Technology	5.82	35.35	16.70	19.49	10.33	12.39
	Utilities	0.27	11.83	6.30	11.08	5.49	10.33

Source: Morningstar Direct. Data as of 12-31-17. 3-, 5-, 10-, and 15-year returns annualized.

About Morningstar

Morningstar, Inc. is a leading provider of independent investment research in North America, Europe, Australia, and Asia. The company offers an extensive line of products and services for individual investors, financial advisors, asset managers, and retirement plan providers and sponsors.

www.morningstar.com

22 West Washington Street
Chicago, IL 60602 USA