
Market Outlook

Q3 2018

Morningstar, Inc.

Talking Points

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- ▶ The S&P 500 gained 7.7% during the third quarter.
- ▶ Healthcare, industrials, and technology stocks outperformed during the quarter while basic materials, energy, and real estate stocks lagged.
- ▶ The market-cap-weighted price/fair value estimate ratio for our equity analysts' coverage universe is 1.04, suggesting that the market overall is slightly overvalued.
- ▶ Communication services is the most undervalued sector while technology and healthcare now rank among the most expensive sectors.
- ▶ Growth-oriented funds continued to outperform value-oriented fare during the quarter, while large caps outperformed small caps.
- ▶ Many international equity categories were either flat or suffered losses during the quarter.
- ▶ Among bond fund categories, longer-term and high-quality categories lagged shorter-term and lower-quality categories.

Stock Market Outlook: Left-Behind Communication Services Sector Offers the Most Value Today

Tech and healthcare look expensive.

By Dan Rohr, CFA
Published 9/27/18

- ▶ The Morningstar Global Markets Index has risen 4.5% year to date.
- ▶ Weighted by market capitalization, our coverage universe looks slightly overvalued.
- ▶ Communication services looks cheap, while tech and healthcare are pricey.

Following a flattish first half, global equities enjoyed a fairly strong third quarter, with the Morningstar Global Markets Index now up 4.5% year to date. In aggregate, our equity coverage of roughly 1,500 stocks now looks slightly overvalued, trading at a 4.5% premium to fair value on a capitalization-weighted basis.

Scanning for opportunities at the sector level, communication services appears the cheapest, trading at a 13% discount to our fair value on a cap-weighted basis as of Aug. 31. While the sector had a solid third quarter, rising 5.2%, it remains down for the year and has been generally left behind in the global bull market. Our top picks across our global coverage include European telecoms Telefonica [TEF](#) and BT Group [BT](#) and U.S.-based Comcast [CMCSA](#).

Technology and healthcare, which have enjoyed very strong performance in 2018 (global indexes are up 12.1% and 13.1%, respectively), now rank among the most expensive sectors based on our fundamental research, trading at 8.0% and 6.4% premiums to fair value, respectively. Still, we continue to see pockets of value in each. For example, we see considerable upside in leading semiconductor names Intel [INTC](#) and Broadcom [AVGO](#). ■■■

Third Quarter in U.S. Stock Funds: Pressing On, Regardless

Major U.S. market indexes reached all-time highs even as threats loomed.

By Tony Thomas
Published 10/1/18

U.S. stocks fended off various challenges in 2018's third quarter, bolstered by the strength of the domestic economy.

International stocks, especially in emerging markets, struggled in the third quarter because of tariff tiffs, currency moves, and political and economic disruptions. Back home, however, the story was different. The S&P 500 closed at an all-time high on Sept. 20 and spent much of the quarter in record-high territory. The index posted a solid 7.4% total return for the quarter. Investors showed their love for good growth stories by driving Apple AAPL and Amazon.com AMZN to \$1 trillion valuations. Even so, there were some brutal reminders of growth stocks' limitations. Elon Musk considered taking Tesla TSLA private only to back away (the SEC sued over the matter in late September), giving Tesla's stock a wild ride for the quarter. Theranos, the once-promising Silicon Valley startup that tried to disrupt the blood-testing market, faded into oblivion.

For many investors, the strength of the U.S. economy offered reasons for optimism. August's unemployment rate was 3.9%—a low not seen since December 2000. Another quarter-point Federal Reserve rate hike in September still left interest rates historically low. Despite the international backdrop, the U.S. economy continued the run it started 10 Septembers ago after the global financial crisis.

Winners

Healthcare was the third quarter's top-performing sector, pushing Vanguard Health Care VGHCX to the top of the Morningstar 500 (a list of funds in the Morningstar FundInvestor newsletter that meet or clear some fundamental hurdles) with a 12.9% quarterly gain through Sept. 27. Pharmaceuticals drove the strong performance, led by healthy gains in large caps such as Eli Lilly LLY (up 26%), Bristol-Myers Squibb BMY (up 13%), and Allergan AGN (up 15%). Although the portfolio, which has a Morningstar Analyst Rating of Gold, is currently focused on U.S. firms, lead manager Jean Hynes will look across the globe for innovators. She's held Japanese drugmaker Eisai since 1999; the stock surged 36% in the quarter.

Gold-rated Brown Capital Management Small Company BCSIX has benefited from two tailwinds recently: a strong market for U.S.-focused small-cap stocks and hefty stakes in technology and healthcare. Small caps have been among the market's brightest segments year to date, with the Russell 2000 gaining 7.7% so far in 2018. The strategy is loaded with technology stocks (they took up an average of 53% of the fund's assets in the period), including top performer Paycom Software PAYC. The provider of human-resources solutions spiked 57% in the quarter. On the healthcare side, Inogen INGN—a maker of oxygen tanks for patients with respiratory problems—jumped 31%.

Silver-rated Mairs & Power Growth [MPGFX](#), with its conservative definition of growth, rose a respectable 10.9% after a lackluster 2017 and early 2018. Managers Mark Henneman and Andy Adams hunt for firms that can grow faster than the overall economy, and that typically leads them to established firms with defensible competitive positions. More than a fifth of its assets were in healthcare during the quarter, including more-staid large caps such as medical-technology firm Medtronic [MDT](#) and device maker Abbott Laboratories [ABT](#), both of which posted nice gains.

Losers

The Fed's rate hike added pressure to rate-sensitive sectors such as real estate, and that drove Fidelity Event Driven Opportunities [FARNX](#) down 1.7% in the period. Real estate firms took up nearly a fourth of the July 2018 portfolio. That included CorePoint Lodging [CPLG](#), one of the fund's top holdings, whose shares dropped nearly 25%. The company, which had its initial public offering in June 2018, owns a collection of midtier hotels. Real estate wasn't the whole story here, however. Diebold Nixdorf [DBD](#), the automated-teller-machine specialist, shed over 60% of its value as it continued to struggle with its 2016 Nixdorf acquisition.

It wasn't all sunshine in the world of technology strategies, either. T. Rowe Price Science and Technology [PRSCX](#) limped to a 1.5% decline. Worries about China's economy dragged down Ctrip.com International [CTRP](#) — the country's leading online travel agency (and one of the portfolio's top five holdings) — during the quarter. U.S. tech holdings also posed problems, including Facebook [FB](#), Micron Technology [MU](#), and Lam Research [LRCX](#). The strategy also counted a small Tesla position in its June 2018 portfolio, though manager Kennard Allen had cut it significantly in the second quarter.

Finally, tiny Perritt MicroCap Opportunities [PRCGX](#) didn't benefit from the good market for smaller companies. The \$180 million fund fell 2.8% despite the portfolio's sector diversification across industrials, financials, technology, and basic materials. BlueLinx Holdings [BXC](#), a building products distributor and a top-five holding, lost 15% — but the stock has more than tripled since Jan. 1. Construction project manager Hill International dropped over 30% following news of a delay in the company's SEC reporting and a delisting from the New York Stock Exchange. ■■■

Third Quarter in Non-U.S. Stock Funds: Tariff Tiff Tremors

Non-U.S. strategies lagged U.S.-focused managers again as both the dollar and trade fears increased.

By Daniel Culloton and Tony Thomas
Published 10/2/18

Non-U.S. equity strategies continued to lag U.S.-focused portfolios in 2018's third quarter. Emerging markets, such as China and India, were particularly weak, while Latin America staged a comeback and Japan continued to rally.

The Vanguard Total International Stock Index *VGTSX* rose slightly more than 1% annualized for the quarter through Sept. 27, 2018, but was still down more than 2.5% for the year. Vanguard Emerging Markets Stock Index *VEMAX* fell 1.3% for the quarter to date, adding to an 8.4% loss for the year. In contrast, the Vanguard Total Stock Market Index *VTSAX*, a proxy for the U.S. market, jumped 7% in the quarter and 10.6% for the year.

The backdrop for this performance included developments that shook some overseas markets and raised serious doubts about the endurance of the period of synchronized global growth lauded early in the year. The U.S. and China's tariff tiff led to new levies from both. That brought some high-flying Chinese stocks back to earth. For example, Chinese Internet giant Tencent *TCTZF*, which more than doubled in 2017, fell 17.6% in the quarter through Sept. 27. Meanwhile, a strong U.S. dollar, coupled with local political and economic disruption, hammered Turkey's lira and drew attention to weakness in other emerging markets, which explains the losses of indexes tracking those regions.

The China Syndrome

The China region Morningstar Category was among the worst groups of the third quarter, falling by an average of 6.7% annualized for the quarter to date and 10.4% for the year through Sept. 27. Matthews China *MCHFX*, which has a Morningstar Analyst Rating of Bronze, lost more than 9.8% in both the quarter and year to date; it ranked in the bottom fourth of the peer group in the quarter and its bottom half for the year. The portfolio felt the pain of the U.S./China tariff row and worries about Chinese debt levels. Alibaba *BABA*, its top holding, dropped more than 10% after cofounder Jack Ma announced he would retire from the e-commerce titan. Tencent's weakness also hurt. What's more, the healthcare theme that worked well in the U.S. didn't in China. The strategy's one healthcare holding, Sino Biopharmaceutical, fell nearly 37% and ranked among the top detractors. The strategy's difficult third quarter followed a great 2017, showing how quickly the tide can turn in emerging markets. Negative-rated Clough China *CHNAX* shed nearly 10% for the quarter and more than 12.5% for the year and lagged most category rivals through Sept. 27. Its nearly 18% stake in Tencent did most of the damage.

India (Red) Ink

The India equity category was the next-worst group with a loss of 6.5% annualized in the quarter and 17% for the year, as the Indian rupee plunged to an all-time low versus the dollar. In local-currency

terms, some Indian stock indexes, such as MSCI India, were actually up for the quarter and year. The only Morningstar Medalist in the group, Bronze-rated Matthews India MINDX, lost more than 8% in the quarter and nearly 13% for the year. Automaker Eicher Motors ECORY, a top-five position at the end of June, dropped by double digits in the quarter to date, while air cooler manufacturer Symphony plunged by more than 30%.

China and India's troubles weighed on more-diversified emerging-markets offerings. Silver-rated Harding Loevner Emerging Markets HLEMX retreated 4.9%. China was the largest country weighting (averaging 23% of assets during the period), but the portfolio also suffered from declines in Russian, Indian, and Brazilian stocks. Among the top detractors were two banks: Russia's Sberbank SBRCY, which sank over 16%, and India's HDFC Bank HDB, which lost nearly 12%.

A heavy emerging-markets stake took the shine off Silver-rated T. Rowe Price Global Technology PRGTX. It faded 3.5% in the quarter, though it was still up by 3% for the year. Tencent, a top holding, hurt; so did chipmaker Applied Materials AMAT, which fell nearly 17%.

Ranging the Globe

World large stock was the best international category, up 3.8% for the quarter to date and nearly 4% for the year. It was a U.S. story—the best performers in the group tended to have more U.S. equity exposure.

Neutral-rated Oppenheimer Global Opportunities OPGIX ranked ahead of at least 90% of its peers for the quarter and year to date. It had nearly 50% in the U.S. and 29% in developed Europe. Five of its top-10 performing stocks for the year have been based in the U.S., including biotech stock Arrowhead Pharmaceuticals ARWR and semiconductor-maker Advanced Micro Devices AMD. Tech and biotech played a big role in the quarter as well, as Arrowhead and AMD continue to do well.

China and Tech were among the culprits behind a couple of Bronze-rated world large-stock strategies' bottom-quartile rankings for the quarter and year: Thornburg Global Opportunities THOAX and Davis Global DGFAX. Davis has a remarkable 28% in China, and Thornburg 6%. Online retailer JD.com JD and South African Tencent investor Naspers NPSNY and other China-related picks took big bites out of Davis' returns, while Macau casino operators, MGM China Holdings MCHVF and Galaxy Entertainment GXYEF, pummeled Thornburg.

Latin Beat

The Latin America category, which remains among the worst groups for the year with a more than 13.5% loss through Sept. 27, rallied in the quarter, gaining nearly 3.2%. Lone Medalist T. Rowe Price Latin America PRLAX kept pace with the peer group average in the quarter to date and lost less than most of its peers for the year. The Bronze-rated T. Rowe Price Latin America's focus on industry leaders with strong fundamentals have helped buoy it. A large position in Brazilian bank Itau Unibanco Holding ITUB helped. So did a top-five position in Wal-Mart de Mexico. ■■

Fixed-Income Funds Remained Resilient in Third Quarter

Uncertainties abounded over the period, though strong technical backdrops provided some stability.

By Emory Zink
Published 10/9/18

Despite anxiety over an ever-lengthening credit cycle, contentious trade negotiations, and tightening monetary policy, U.S. fixed-income markets remained resilient over the summer. The Bloomberg Barclays U.S. Aggregate Bond Index delivered a meager 0.02% return in the third quarter. The most rate-sensitive sectors suffered modest losses as yields pushed higher, with the index's U.S. Treasury and mortgage components each losing 0.59% and 0.12%, respectively, over that period. Investment-grade credit provided a countering lift by generating 0.97% following two quarters of losses.

The broad intermediate-term bond Morningstar Category average returned 20 basis points in the third quarter, but across its constituents, those with shorter durations (a measure of interest-rate sensitivity) and higher allocations to U.S. corporate credit—in particular mid- and lower-quality tiers—generally outperformed. For example, Gold-rated Loomis Sayles Investment Grade Bond LSIIX has one of the shortest durations in the category as well as a noticeably higher allocation to below-investment-grade corporate credit; this positioning boosted performance to 0.96% over that period. In contrast, Silver-rated JPMorgan Core Bond JCBUX, a more securitized-centric option with an up-in-quality bias and longer duration, generated 0.03%, lagging its more intrepid peers.

Rates Continue Onward and Upward

The Federal Reserve raised rates one fourth of a basis point to 2.25% in September, the third rate hike this year, and that's not the last anticipated move upward given positive economic indicators including low unemployment and increased wage growth. The yield curve remained flat over the period, as the spread between a five-year and 30-year U.S. Treasury waffled between a historically narrow range of 20-30 basis points. Yields also climbed modestly during the quarter; the 10-year U.S. Treasury yield surpassed 3.0% in late September, a peak it hadn't crossed since May 2018, up from 2.9% at the beginning of July.

The intermediate-government category average lost 0.31% for the quarter, while GNMA-focused funds within that group fared better than peers with significant U.S. Treasury stakes. For example, Gold-rated Vanguard GNMA VFIIX, which focuses exclusively on GNMA securities, lost 0.17%. Silver-rated BlackRock U.S. Government Bond PNIGX, with its diversified investment menu that includes half of its portfolio in U.S. Treasuries in addition to modest slivers of non-U.S. sovereign exposure, lost 0.60%. Government bond funds with the flexibility to own some structured credit, such as asset-backed securities, generally fared a bit better (the investment-grade ABS index gained 0.49%).

The Credit Cycle Continues to Lengthen

Investment-grade U.S. corporate credit was under pressure in the first two quarters of 2018, but given improving U.S. economic data and a combination of lighter issuance with strong demand in July and

August, the index delivered a 0.97% gain for the third quarter as credit spreads narrowed. While the current credit cycle continues to lengthen, analysts question the underlying fundamentals of the richly priced sector. Corporate leverage ratios sit above historical norms, while increased company cash flows from the recently passed tax reform and overseas earnings repatriation have been used for share repurchases rather than strengthening balance sheets (which would bolster credit fundamentals). Interest rates continue to rise, and diminished liquidity coupled with uncertainties surrounding the effects of in-negotiation trade policies have generated more questions than confidence.

U.S. high yield posted a healthy 2.4% return for the third quarter, supported by a strong corporate earnings season and generally favorable supply-demand dynamics. Primary subsector contributors included mid-stream energy, which delivered 2.6% over the period and benefited from climbing oil prices. Transportation also delivered attractive relative returns, generating 3.1%, while the telecommunications sector provided 3.2%. Generally, lower-quality tiers outperformed higher-quality tiers, with CCC bonds outperforming B and BB bonds. Funds with ample CCC stakes such as Bronze-rated Artisan High Income APHFX, which gained 2.4%, outpaced the high-yield category average's 2.0% gain for the quarter.

Non-U.S. Bond Markets Dominated by Politics and Currency Volatility

Non-U.S. developed bond markets struggled in the shadow of political tensions. Though Britain is scheduled to depart the European Union in March of 2019, the details of its separation remain under negotiation, with neither party expressing willingness to compromise on critical factors, in particular, access to the EU's single market. As a result, global financial institutions with offices in London have begun to execute contingency plans by bolstering their resources on the continent. Meanwhile, the pound sterling experienced a precipitous fall relative to the U.S. dollar in mid-August, though it recovered to end the quarter roughly in the same position as at the start of the period. The euro followed a similar pattern, but its August dip was attributable to concerns around Italy's budget and widening yields on its debt.

The continued strength of the U.S. dollar coupled with a barrage of idiosyncratic risks across emerging-markets countries contributed to a tough environment for the sector. Turkey, which pursued aggressive economic growth policies over the preceding years, was under pressure as its central bank's credibility eroded. Argentina's bonds and currency also struggled, as the IMF agreed to accelerate and increase the size of its bailout. While steep losses for Turkey's and Argentina's local currency debt (down 27% and 35% for the quarter, respectively, mainly owing to currency depreciation) dominated headlines, the pain wasn't widespread. The hard-currency JPMorgan EMBI Global Index resisted contagion and generated a 1.9% return for the quarter, for instance.

Slow and Steady for Municipals

The supply of new municipal issuance was low over the third quarter, a continued consequence of the glut of issuance in late 2017, as well as a typical seasonal downturn for municipals in the summer months. When combined with continued investor demand, the technical backdrop supported municipal performance. Similar to corporates, investors were rewarded for taking more credit risk; the investment-

grade Bloomberg Barclays Municipal Index lost 15 basis points for the quarter, while its sibling high-yield index returned 76 basis points. Of note, battered high-yield Puerto Rico holdings generated 8.7% for the quarter, while high-yield municipal tobacco, which has often served as a performance differentiating position over recent quarters, eked out a modest 2 basis points of return. While the municipal intermediate category average lost 16 basis points for the quarter, funds with the flexibility to hold slivers of lower-quality holdings, such as Nuveen Intermediate Duration Municipal Bond [NUVBX](#), outperformed and generated a positive though modest 0.08% over the period. ■■

Index Returns

Category	Name	Q3 2018	YTD	1 Year	3 Year	5 Year	10 Year	15 Year	
Broad U.S. Market	Morningstar US Market TR USD	7.22	10.51	17.66	17.08	13.56	12.10	10.04	
	DJ Industrial Average TR USD	9.63	8.83	20.76	20.49	14.57	12.22	9.97	
	S&P 500 TR USD	7.71	10.56	17.91	17.31	13.95	11.97	9.65	
	NASDAQ Composite TR USD	7.41	17.48	25.17	21.70	17.72	15.72	11.64	
U.S. Style	Morningstar US Large Cap TR USD	8.24	11.36	18.72	17.70	14.20	11.89	9.59	
	Morningstar US Large Core TR USD	9.90	7.74	14.15	17.30	13.71	12.12	10.36	
	Morningstar US Large Growth TR USD	7.16	20.38	29.11	20.03	17.23	14.29	9.74	
	Morningstar US Large Value TR USD	6.94	4.08	10.89	15.03	11.15	9.05	8.25	
	Morningstar US Mid Cap TR USD	4.78	7.94	14.97	15.24	12.18	12.71	11.22	
	Morningstar US Mid Core TR USD	3.99	3.52	10.44	13.37	11.74	12.74	11.08	
	Morningstar US Mid Growth TR USD	7.86	17.03	24.76	17.07	12.85	12.83	11.28	
	Morningstar US Mid Value TR USD	2.37	3.29	9.68	15.08	11.82	12.42	11.08	
	Morningstar US Small Cap TR USD	3.70	9.23	14.45	15.92	10.84	12.03	10.77	
	Morningstar US Small Core TR USD	1.39	4.70	9.88	14.42	10.29	11.30	10.56	
	Morningstar US Small Growth TR USD	7.61	20.07	26.30	19.32	12.34	13.15	10.82	
	Morningstar US Small Value TR USD	1.86	3.19	7.34	13.73	9.72	11.53	10.71	
U.S. Stock Sector	Morningstar US Basic Materials TR USD	-1.20	-3.37	3.44	16.33	8.48	7.62	9.12	
	Morningstar US Communication Svc TR USD	8.73	1.55	1.91	10.16	9.39	12.76	10.00	
	Morningstar US Consumer Cyclical TR USD	6.01	18.61	30.35	17.91	14.63	17.00	11.58	
	Morningstar US Consumer Dfnsve TR USD	5.33	-2.53	4.48	8.12	9.65	10.31	9.87	
	Morningstar US Energy TR USD	0.72	8.39	15.35	10.54	0.67	4.95	11.15	
	Morningstar US Financial Svc TR USD	4.91	3.94	12.40	17.46	13.97	8.63	5.14	
	Morningstar US Healthcare TR USD	13.87	17.74	19.60	14.82	15.53	14.66	11.15	
	Morningstar US Industrials TR USD	9.85	6.85	13.81	18.35	13.27	12.14	10.80	
	Morningstar US Real Estate TR USD	0.88	2.88	4.66	8.21	9.18	7.07	8.90	
	Morningstar US Technology TR USD	9.25	20.40	30.79	26.93	21.19	16.60	12.04	
	Morningstar US Utilities TR USD	2.62	3.70	4.26	11.55	11.22	9.45	10.26	
	Economic Moat	Morningstar Wide Moat Focus TR USD	7.45	10.59	17.70	21.06	13.55	14.33	13.61
	Foreign Markets	MSCI ACWI Ex USA NR USD	0.71	-3.09	1.76	9.97	4.12	5.18	7.20
MSCI EAFE NR USD		1.35	-1.43	2.74	9.23	4.42	5.38	6.80	
Bond: Broad Market	Morningstar Intermediate Core TR	0.01	-1.18	-1.21	1.10	2.13	3.78	4.10	
	Morningstar Long-Term Core TR	-0.26	-4.50	-2.66	2.56	4.17	6.44	5.55	
	Morningstar Short-Term Core TR	0.31	0.14	-0.09	0.77	0.95	1.98	2.41	
	Morningstar US Core Bd TR USD	0.03	-1.67	-1.27	1.36	2.25	3.86	3.93	
	Bloomberg Barclays US Agg Bond TR USD	0.02	-1.60	-1.22	1.31	2.16	3.77	3.78	
Bond: Corporate	Morningstar Inter-Term Corp TR	0.89	-1.08	-1.00	2.45	2.94	6.07	4.71	
	Morningstar Long-Term Corp TR	1.29	-4.41	-2.18	4.50	4.97	8.11	5.96	
	Morningstar Short-Term Corp TR	0.69	0.46	0.42	1.72	1.74	3.53	3.06	
	Morningstar US Corp Bd TR USD	1.02	-2.19	-1.12	3.14	3.51	6.16	4.73	
Bond: Government	Morningstar Intermediate US Govt TR	-0.27	-1.41	-1.93	0.05	1.17	2.97	3.45	
	Morningstar Long-Term US Govt TR	-2.04	-4.64	-3.28	0.37	3.43	4.85	5.05	
	Morningstar Short-Term US Govt TR	0.13	0.00	-0.34	0.33	0.61	1.38	2.14	
	Morningstar US Govt TR	-0.57	-1.69	-1.59	0.25	1.35	2.70	3.28	
Bond: Other	Morningstar Mortgage TR	-0.07	-1.11	-0.99	1.20	2.30	3.69	4.08	
	Morningstar TIPS TR USD	-0.81	-0.80	0.50	2.08	1.41	3.35	3.98	

Source: Morningstar Direct. Data as of 9-30-18. 3-, 5-, 10-, and 15-year returns annualized.

Fund Category Returns

Category	Name	Q3 2018	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
U.S. Equity	Large Blend	6.67	8.42	15.35	15.17	11.93	10.84	8.84
	Large Growth	7.54	15.64	23.18	17.68	14.02	12.60	9.84
	Large Value	5.49	4.50	10.84	13.45	10.19	9.69	8.38
	Mid-Cap Blend	3.94	5.94	11.68	12.85	9.78	10.76	9.51
	Mid-Cap Growth	6.48	13.42	20.31	15.81	11.68	11.97	10.14
	Mid-Cap Value	3.05	3.27	8.93	12.59	9.33	10.41	9.13
	Small Blend	2.79	8.24	12.14	14.73	9.71	10.67	9.72
	Small Growth	7.00	18.94	24.44	18.39	11.75	12.57	10.49
	Small Value	1.03	4.71	8.41	13.75	8.36	10.03	9.34
Allocation	Allocation—15% to 30% Equity	1.17	0.20	1.46	4.21	3.14	4.91	4.61
	Allocation—30% to 50% Equity	1.77	1.08	3.30	6.30	4.74	6.05	5.38
	Allocation—50% to 70% Equity	3.19	3.11	6.75	8.80	6.67	7.58	6.75
	Allocation—70% to 85% Equity	3.50	3.94	8.52	10.41	7.54	7.92	7.13
	Allocation—85%+ Equity	3.94	5.10	10.08	12.40	8.72	9.01	7.73
	Convertibles	2.89	7.54	9.60	9.62	7.21	8.83	7.46
	Tactical Allocation	2.57	1.78	5.60	7.02	4.66	5.96	4.98
	Target Date 2000-2010	1.43	1.09	3.40	6.33	4.87	5.92	5.26
	Target Date 2015	1.76	1.55	4.24	7.04	5.34	6.40	—
	Target Date 2020	1.93	1.68	4.70	7.51	5.59	6.56	5.99
	Target Date 2025	2.37	2.30	5.85	8.80	6.39	7.33	—
	Target Date 2030	2.72	2.76	6.89	9.88	7.06	7.56	6.74
	Target Date 2035	3.17	3.47	8.03	11.01	7.74	8.20	—
	Target Date 2040	3.34	3.67	8.60	11.56	8.07	8.20	7.24
	Target Date 2045	3.59	4.10	9.22	12.14	8.42	8.54	—
	Target Date 2050	3.55	3.98	9.23	12.16	8.45	8.38	7.48
	Target-Date 2055	3.68	4.25	9.51	12.41	8.71	9.09	—
	Target-Date 2060+	3.76	4.33	9.74	12.66	8.44	—	—
	Target-Date Retirement	1.31	0.71	2.74	5.19	3.98	5.19	4.18
	World Allocation	1.40	0.02	3.46	7.38	4.42	6.18	6.58
International Equity	China Region	-6.52	-10.30	-4.81	11.17	6.80	8.10	8.98
	Diversified Emerging Mkts	-2.47	-9.37	-3.63	10.09	2.54	4.91	9.15
	Diversified Pacific/Asia	-0.07	-3.96	3.42	12.34	6.24	8.17	7.64
	Europe Stock	0.15	-2.31	-0.75	7.74	4.24	5.45	7.28
	Foreign Large Blend	0.79	-2.30	1.55	8.71	4.05	4.98	6.48
	Foreign Large Growth	0.21	-0.20	4.08	10.28	5.74	6.41	7.23
	Foreign Large Value	0.94	-3.55	-0.23	8.10	3.02	4.41	6.18
	Foreign Small/Mid Blend	-1.50	-4.01	0.82	10.89	5.95	8.53	9.48
	Foreign Small/Mid Growth	-1.30	-0.77	5.37	11.59	7.59	9.88	9.74
	Foreign Small/Mid Value	-1.60	-5.82	-1.55	9.19	4.83	6.49	8.33
	India Equity	-7.77	-18.23	-8.05	5.85	11.84	6.90	10.98
	Japan Stock	3.35	0.68	9.13	12.46	9.18	8.62	5.62
	Latin America Stock	2.07	-14.46	-16.04	16.07	-4.23	-0.42	9.58
	Pacific/Asia ex-Japan Stk	-2.66	-7.01	0.54	11.46	5.82	8.27	9.80
	World Large Stock	3.47	3.69	8.87	12.44	8.24	8.25	7.82
	World Small/Mid Stock	2.04	2.32	7.31	13.75	8.13	8.24	8.85

Source: Morningstar Direct. Data as of 9-30-18. 3-, 5-, 10-, and 15-year returns annualized.

Fund Category Returns (Continued)

Category	Name	Q3 2018	YTD	1 Year	3 Year	5 Year	10 Year	15 Year	
Taxable Bond	Bank Loan	1.64	3.23	4.23	4.48	3.38	4.94	4.00	
	Corporate Bond	0.97	-1.95	-1.04	3.23	3.51	5.81	4.45	
	Emerging Markets Bond	1.03	-4.27	-3.56	5.59	3.10	6.66	7.04	
	Emerging-Markets Local-Currency Bond	-2.43	-8.48	-7.66	3.45	-1.44	1.87	—	
	High Yield Bond	2.02	1.84	2.36	6.41	4.31	7.62	6.42	
	Inflation-Protected Bond	-0.63	-0.74	0.42	1.95	0.97	2.89	3.35	
	Intermediate Government	-0.31	-1.45	-1.62	0.20	1.23	2.73	3.11	
	Intermediate-Term Bond	0.20	-1.37	-1.06	1.65	2.14	4.21	3.75	
	Long Government	-2.88	-5.77	-3.68	0.51	4.37	5.44	5.52	
	Long-Term Bond	-0.04	-3.49	-1.42	4.02	5.23	7.03	5.38	
	Multisector Bond	0.89	-0.10	0.59	4.05	3.15	5.73	5.39	
	Nontraditional Bond	0.84	0.60	1.11	3.43	2.25	4.51	3.88	
	Preferred Stock	1.08	-0.15	0.37	5.61	5.43	10.40	5.60	
	Short Government	0.10	0.02	-0.17	0.20	0.46	1.29	1.88	
	Short-Term Bond	0.50	0.45	0.43	1.36	1.24	2.52	2.36	
	Ultrashort Bond	0.59	1.33	1.62	1.36	0.98	1.29	1.72	
	World Bond	-0.25	-1.80	-1.23	2.53	1.05	3.52	3.68	
	Municipal Bond	High Yield Muni	0.30	1.90	3.05	4.13	5.73	5.55	4.33
Muni California Intermediate		-0.16	-0.25	0.03	1.56	2.78	3.90	3.33	
Muni California Long		-0.30	-0.29	0.78	2.53	4.34	5.17	4.03	
Muni Massachusetts		-0.42	-1.17	-0.45	1.38	2.90	3.95	3.34	
Muni Minnesota		-0.28	-0.67	0.02	1.58	2.96	4.11	3.49	
Muni National Interim		-0.16	-0.41	-0.03	1.81	2.88	3.98	3.30	
Muni National Long		-0.34	-0.82	0.17	2.34	3.87	4.75	3.72	
Muni National Short		0.03	0.47	0.14	0.75	0.94	1.82	1.94	
Muni New Jersey		0.17	0.78	1.35	2.62	3.51	4.35	3.59	
Muni New York Intermediate		-0.32	-0.67	-0.42	1.40	2.61	3.69	3.09	
Muni New York Long		-0.23	0.13	0.58	2.28	3.82	4.55	3.61	
Muni Ohio		-0.32	-0.92	-0.26	1.53	2.88	3.90	3.27	
Muni Pennsylvania		-0.12	0.16	0.65	2.05	3.46	4.28	3.49	
Muni Single State Interim		-0.22	-0.75	-0.39	1.23	2.43	3.59	3.11	
Muni Single State Long		-0.23	-0.46	0.15	1.61	3.17	4.10	3.41	
Muni Single State Short		0.09	0.77	0.08	0.78	1.16	2.28	2.22	
Alternatives		Bear Market	-7.20	-12.73	-19.14	-25.34	-20.60	-25.32	-17.12
		Long/Short Credit	0.88	0.81	1.32	3.17	1.94	3.88	—
	Long/Short Equity	2.86	2.56	5.98	6.02	4.66	5.30	5.98	
	Managed Futures	1.59	-2.39	2.38	-1.22	2.86	-1.93	—	
	Market Neutral	0.30	-0.20	0.42	1.13	0.81	1.28	2.24	
	Multialternative	1.01	-0.02	1.77	2.56	1.98	2.84	3.79	
	Multicurrency	-0.35	-1.13	-1.56	0.59	-0.34	-0.41	1.77	
	Option Based	3.33	3.14	5.11	6.75	4.80	3.54	4.61	
Commodities	Commodities Agriculture	-5.42	-11.15	-14.02	-9.46	-12.60	-5.47	—	
	Commodities Broad Basket	-1.80	-0.17	5.62	1.92	-6.76	-6.81	0.06	
	Commodities Energy	4.25	20.80	33.67	2.51	-12.10	-12.44	—	
	Commodities Precious Metals	-5.48	-10.16	-8.48	1.45	-4.41	1.47	—	

Source: Morningstar Direct. Data as of 9-30-18. 3-, 5-, 10-, and 15-year returns annualized.

Fund Category Returns (Continued)

Category	Name	Q3 2018	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Sector Equity	Communications	6.23	4.12	5.17	10.59	7.23	8.99	9.39
	Consumer Cyclical	3.89	9.28	18.85	12.04	9.75	13.47	10.11
	Consumer Defensive	2.22	-1.99	4.12	7.64	8.63	10.28	8.85
	Energy Limited Partnership	3.13	1.80	1.04	3.02	-2.28	11.57	—
	Equity Energy	0.35	6.23	13.16	7.26	-5.59	-0.07	7.37
	Equity Precious Metals	-15.35	-21.61	-20.37	10.67	-4.98	-4.04	1.55
	Financial	1.72	1.13	6.61	13.49	10.65	8.27	5.46
	Global Real Estate	-0.74	-0.94	3.49	6.19	5.13	5.75	7.14
	Health	10.56	19.30	19.89	13.35	14.62	14.98	11.85
	Industrials	7.66	5.02	11.65	17.22	11.86	12.02	11.00
	Infrastructure	0.36	-2.40	-0.98	8.00	6.31	6.97	—
	Natural Resources	-0.32	-1.12	6.07	13.53	1.55	3.97	7.70
	Real Estate	0.58	1.22	3.39	7.24	8.56	7.13	8.82
	Technology	5.62	17.24	24.23	24.64	18.14	15.73	11.17
Utilities	2.94	4.38	4.61	11.12	9.51	8.55	9.63	

Source: Morningstar Direct. Data as of 9-30-18. 3-, 5-, 10-, and 15-year returns annualized.

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22 West Washington Street
Chicago, IL 60602 USA

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