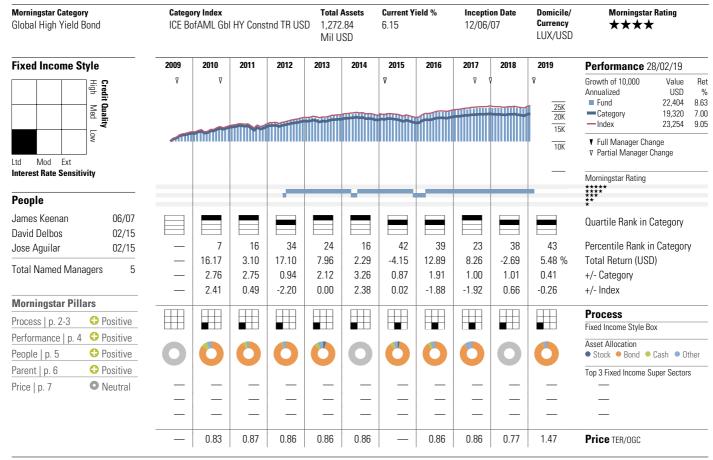
LU0297941899

Morningstar Analyst Rating

17 Oct 2018
14:00, UTC0500



Analyst View

Mara Dobrescu, CFA, Director

A solid contender in the global high-yield space.

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Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Rating Spectrum

♥ Gold ♀ Silver ♀ Bronze

ze Neutral Negative

The Morningstar Analyst Rating for Funds is a forward-looking analysis of a fund. Morningstar has identified five key areas crucial to predicting the future success of a fund: People, Parent, Process, Performance, and Price The pillars are used in determining the Morningstar Analyst Rating for a fund. Morningstar Analyst Ratings are assigned on a five-tier scale running from Gold to Negative. The top three ratings, Gold, Silver, and Bronze, all indicate that our analysts think highly of a fund; the difference between them corresponds to differences in the level of analyst conviction in a fund's ability to outperform its benchmark and peers through time, within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). Neutral represents funds in which our analysts don't have a strong positive or negative conviction over the long term (defined as a full market cycle or at least five years) and Negative represents funds that possess at least one flaw that our analysts believe is likely to significantly hamper future performance over the long term (defined as a full market cycle or at least five years). Past performance of a security may or may not be sustained in future and is no indication of future performance. For detailed information about the Morningstar Analyst Rating for Funds, please visit http://global.morningstar.com/managerdis

17 Oct, 2018 | BGF Global High Yield's managers have demonstrated their ability to maintain the fund's edge over time, making the most of an expansive tool kit to navigate various market environments. The fund's fees have come down slightly over the past year, which is a move in the right direction, though they are not yet cheap enough to give this fund a significant tailwind over the competition. Overall, the fund earns a Morningstar Analyst Rating of Bronze.

Instead of targeting a sweet spot on the credit-quality spectrum, this fund's managers aim to make the most of their flexible approach, turning cautious when riskier bonds offer paltry compensation and bold when risk-taking pays. Given the strategy's girth--this \$1.4 billion fund represents only a fraction of the team's nearly \$45 billion high-yield market footprint--staying nimble in the cash bond market is easier said than done. The team attempts to overcome those challenges by broadening the fund's scope to include investment-grade corporates and collateralised loan obligations on the defensive side and equities (up to 10%) on the aggressive end. (Contrary to its USdomiciled version, this UCITS vehicle does not invest in bank loans). In recent years, this strategy has also used exchange-traded funds, credit default swaps, and total return swaps to quickly gain diversified market exposure when cash bonds are scarce. While the managers still viewed the high-yield market as attractive in 2018 and weren't anticipating a downturn, they were focused on earning income and mitigating downside risk. Over the course of 2018, the team became more cautious, preferring CLO securities to short-duration high-yield assets and higher-quality, lower-coupon high-yield bonds. In parallel, the team has increased its net long equity exposure (2.7% as of the end of September 2018), which has been the main contributor for the year to date through September 2018.

The fund's eclectic style won't always work. While the team got the energy call right in 2015, its equity exposure weighed on returns. Over time, though, this approach has impressed: The fund's since-inception 8.9% annualised return, under Jimmy Keenan's watch, through September 2018, largely outpaced the global high-yield Morningstar Category average (4.7%) without being significantly more volatile.



Morningstar Analyst Rating Bronze

17 Oct 2018 14:00, UTC-0500

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Process: Approach

Morningstar Category Global High Yield Bond **Category Index** ICE BofAMI GbI HY Constnd TR USD

Adaptable.

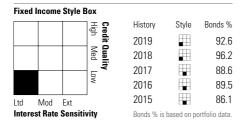
Process Pillar



17 Oct, 2018 | A versatile approach that makes the most of BlackRock's credit capabilities and risk management resources earns a Positive Process rating. Jimmy Keenan sets the portfolio's top-down themes based on input from the highyield team plus insights from across the firm's broader fundamental fixed-income and equity

platforms. Comanagers Dave Delbos, Mitch Garfin, José Aguilar, and Stephen Gough then work with the team's traders and research analysts to populate the portfolio from the bottom up. Given the nearly \$45 billion in active high-yield assets run by BlackRock, the fund is less nimble than some of its competitors. It invests mainly in the market's larger, more-liquid issues, and it can be challenging for the team to express macro themes quickly and efficiently in the high-yield cash bond market. The process aims to overcome those limitations by expanding the opportunity set, occasionally substituting investment-grade corporates or CLOs for BBs, for instance, and equities (up to 10%) in place of CCCs. (Unlike its US-domiciled sibling, this UCITS vehicle does not invest in bank loans.) The team manages liquidity and tweaks the fund's market and industry exposures through a mix of high-yield ETFs, credit default swaps, and high-yield-focused total-return swaps. A risk committee regularly reviews the portfolio to see where it may be taking on too much risk in terms of market exposure, correlations, industry, and individual security exposure.

Style Surveyed 28/02/19



Style Box Factors

Credit Quality	Fund	3-Yr Avg	Category
Average Credit Quality	В	В	В
Investment Grade %	17.9	9.8	12.8
Below Invest Grade %	78.4	84.3	81.6
Interest Rate Sensitivity			
Avg Effective Duration	3.49	3.72	3.70
Avg Modified Duration	_	_	3.54
Avg Effective Maturity	_	_	6.44

Income	28/02/19

	Fund	3-Yr Avg	Category
Current Yield	_	_	5.5
12-Month Yield	0.0	_	_
Average Coupon	5.9	6.2	5.6
Average Coupon 28/02/19			

Asset Allocation 28/02/19 **Current Allocation**



1.3

49

3-Year Average

0.9

6.3

4.4

1.5

Regional Exposure 28/02/19

Cash

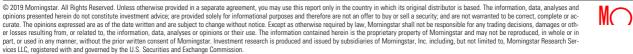
Other

Top 5 Countries Bonds %	Fund	3-Yr Avg	Category
United States	47.5	60.2	63.3
Netherlands	8.5	5.9	4.8
United Kingdom	5.1	5.4	4.5
Canada	4.4	4.3	3.8
Germany	3.3	3.6	3.2

Sectors 28/02/19

Fixed Inc	come Sup	er Secto	rs			
Assets %					■ Fund	Category
100						
75						
50						
25						
0	ijij	0	<u>.</u>	72	Ļ	Other

Fixed Income Sectors	Fund	3-Yr Avg	Category	
₩ Government	0.7	_	11.7	
Corporate	86.4	_	81.9	
Corporate Bond	83.4	_	80.6	
Bank Loan	0.0	_	0.0	
Convertible	2.5	_	1.2	
Preferred	0.5	_	0.0	
Securitized ■ Sec	8.1		1.1	
Agency Mortgage-	0.0	_	0.2	
Backed				
Non Agency Residential	0.0	_	0.0	
Commercial MBS	0.0	_	0.1	
Asset-Backed	8.1	_	0.7	
Covered Bond	0.0	_	0.0	
Municipal	0.0	_	0.0	
Cash & Equivalents	1.1	_	0.2	
Other	1.0	_	4.4	





Morningstar Analyst Rating Bronze

17 Oct 2018 14:00, UTC-0500

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Process: Portfolio

Morningstar Category Global High Yield Bond **Category Index** ICE BofAMI GbI HY Constnd TR USD

Still overweighting CCC bonds, but preparing for the later stages of the credit cycle.

Process Pillar

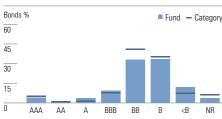
Positive

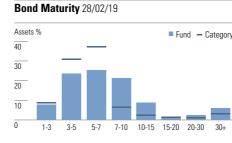
17 Oct, 2018 | While the managers still viewed the high-yield market as attractive in 2018 and weren't anticipating a downturn, they were focused on earning income and mitigating downside risk. They kept 88% of the fund's assets in high-yield cash bonds (as of September 2018) but saw more value in off-benchmark securitised fare

(7.5%) such as CLOs than in short-duration highyield assets or in higher-quality, low-coupon highyield bonds. The fund thus retained an underweighting in BB bonds (31.8% of assets versus 50% in its ICE BofAML Global High Yield Constrained Index benchmark), and to a lesser extent B bonds (35.4% versus 37.6%). Conversely, it was more heavily tilted to CCC rated bonds (14.3% of assets compared with 10.3% for the benchmark), though this sleeve consisted mostly of loweryielding CCC+ bonds that the team considered candidates for an upgrade. Significant issuer-level

overweightings included Platform Specialty Products in the chemicals sector and gaming company The Stars Group. Otherwise, the fund's profile has been fairly stable. Its 1.6% cash position is only marginally higher than its historical average, and the fund's net exposure to equity and equity futures has increased slightly to 2.7% at the end of September 2018 (of which 1% is common equity) from roughly 1% a year ago.

Credit Quality Surveyed 28/02/19





Maturity (Voora)

Coupon Range 28/02/19 Assets % Fund - Category 60 45 30 15

Credit Quality	Fund	3-Yr Avg	Category
AAA	3.9	3.1	4.7
AA	0.9	0.3	0.3
A	3.7	1.8	0.6
BBB	9.4	4.6	7.1
BB	33.1	32.6	40.3
В	33.4	36.5	34.6
Below B	11.8	15.2	6.7
Not Rated	3.8	5.9	5.7

iviaturity (Years)	Fund	3-Yr Avg	category
1 to 3	7.6	_	8.5
3 to 5	23.5	_	30.5
5 to 7	25.2	_	37.0
7 to 10	21.3	_	6.1
10 to 15	8.9	_	2.0
15 to 20	1.0	_	1.1
20 to 30	2.3	_	0.9
Over 30	6.0	_	2.9

2 Vr Ava

Coupon Range	Fund	3-Yr Avg	Category
0% or Paid In Kind	0.5	_	0.5
) to 2	2.2	_	7.3
2 to 4	9.5	_	19.4
1 to 6	42.3	_	28.3
6 to 8	29.5	_	27.7
3 to 10	9.3	_	11.1
More than 10	1.9	_	0.4

Portfolio Holdings 30/11/18

Bond Holdings	Equity Holdings	Other H	oldings		Assets in Top 10 H	loldings	Turnover Ratio (Reported	Current Yield
1,178	6	110			11%		_	_
Top 10 Holdings		Country	Currency	Assets %	Super Sector	Primary Sect	or	Secondary Sector
Icee: (Cdx.Na.Hy.31.V1) 5	5 12/20/2023 Icee	USA	_	5.03	Other	Swap		Credit Default Swap
Trswap: Iboxhy Index		USA	_	1.69	_			
Blackstone CQP Holdco 6	5.5%	USA	USD	1.18	Corporate	Corporate	Bond	Financial Services
Petrobras Global Finance	e B.V. 4.38%	NLD	USD	0.84	Corporate	Corporate	Bond	Financial Services
Platform Specialty Produ	icts Corporation 6.5%	USA	USD	0.54	Corporate	Corporate	Bond	Basic Materials
Altice Luxembourg S.A. 7	7.75%	GBR	USD	0.50	Corporate	Corporate	Bond	Communication Services
Teva Pharmaceutical Fina	ance Netherlands III B.V. 2.8%	NLD	USD	0.49	Corporate	Corporate	Bond	Financial Services
HCA Inc. 5.5%		USA	USD	0.48	Corporate	Corporate	Bond	Health-Care
HD Supply, Inc. 5.38%		USA	USD	0.47	Corporate	Corporate	Bond	Basic Materials
BWAY Holding Company	4.75%	USA	EUR	0.47	Corporate	Corporate	Bond	Consumer Cyclical

Bronze

Morningstar Analyst Rating 17 Oct 2018 14:00, UTC-0500

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Performance

Morningstar Category Global High Yield Bond Category Index ICE BofAMI GbI HY Constnd TR USD

A strong performance record.

Performance Pillar

Positive

17 Oct, 2018 | Some high-yield funds stick with a preferred spot on the credit-quality spectrum, which can work for or against them when risktaking is punished or rewarded. This team aims to be more flexible. For instance, a heavier allocation to CCCs buoyed the fund ahead of 93% of competitors in 2010's risk-on environment, while

a defensive shift out of energy names helped the fund hold up better than most in 2014. At other times, the team's decision to foray beyond highyield bonds into investment-grade corporates on the cautious end and equities on the more daring side, has proved rewarding, as it did in 2013 and 2017. For the year to date through September 2018, a tactical net long equity position (mostly preferred equities) helped the fund outperform 75% of its rivals. The team hasn't always timed these calls perfectly. In 2015, for instance, the fund's allocation to equities in place of CCC bonds held it back somewhat, while a cautious stance toward risk has kept the fund near the middle of the pack in 2016. Over time, though, the team has used the fund's flexibility to its advantage more often than not. The fund's since-inception 8.9% annualised return under Jimmy Keenan's watch through September 2018 largely outpaced its category average (4.7%) without significantly greater volatility, supporting a Positive Performance Pillar rating.

Morningstar Rating and Risk 28/02/19

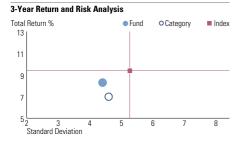
Overall Ra	ntina		++++
10 Years	_	_	_
5 Years	Above Avg	Avg	****
3 Years	Above Avg	Avg	****
Period	Morningstar Ret vs Cat	Morningstar Risk vs Cat	Morningstar Rating

Risk Analysis 28/02/19

3-Year Risk Measures

Upside Capture Ratio

Downside Capture Ratio



Fund

Category

77.3

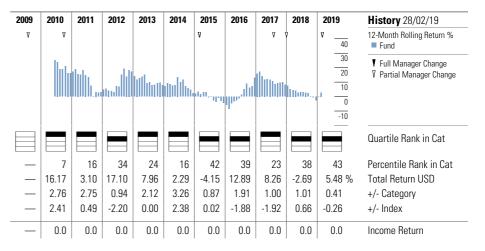
85.2

86.1

78.3

Index

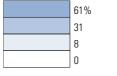
Upside/Downside	Fund	Category	Index
Max Drawdown (Months)	9	20	19
Valley Date	01/16	02/16	01/16
Peak Date	05/15	07/14	07/14
Max Drawdown (%)	-9.24	-12.24	-11.05
Maximum Drawdown	Fund	Category	Index
Alpha	0.62	-0.65	_
Beta	0.79	0.79	_
R-Squared	87.97	82.79	_
Sharpe Ratio	1.53	1.26	1.48
Standard Deviation	4.40	4.60	5.26
		5 7	



Returns 28/02/19

Trailing Returns	Total	Investor	Rank	Cat	Index
	Ret %	Ret %	in Cat	Ret %	Ret %
1 Year	2.81	2.22	38	1.57	2.14
3 Years	8.28	9.48	23	6.98	9.40
5 Years	3.71	3.41	24	2.71	3.83
10 Years	_	_	_	8.77	11.48
Tenure 06/07	8.64	_	_	4.49	6.75
Inception 06/07	8.64	_	_	4.59	6.85

Rolling-Returns Summary

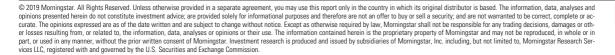


36-Month Rolling Periods 89 Observations, 7 Years

The shading and percentages correspond to how often the fund returns landed in each category quartile.



Year	Income	Income %	Capital	Capital %
	Ret %	Rank in Cat	Ret %	Rank in Cat
2015	0.00	39	-4.15	28
2016	0.00	47	12.89	22
2017	0.00	100	8.26	15
2018	0.00	36	-2.69	27
02/19	0.00	30	5.48	33





Morningstar Analyst Rating Bronze

17 Oct 2018 14:00, UTC-0500

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People

Morningstar Category Global High Yield Bond **Category Index** ICE BofAMI GbI HY Constnd TR USD

Well-resourced despite some recent changes in the European team.

People Pillar

Positive

17 Oct, 2018 | This fund benefits from an experienced portfolio management team and analyst breadth, earning a Positive People rating. Jimmy Keenan, a veteran with two decades of investment experience, took over as lead manager in mid-2007 and initially comanaged the fund with European high-yield specialist Michael Phelps. In

2015, this duo was joined by three other portfolio managers: Mitch Garfin, who worked at Black-Rock for nearly two decades in various credit research and portfolio management roles, David Delbos, who joined the firm in 2002 as a credit analyst before managing portfolios in 2012, and José Aguilar, who joined BlackRock in 2009. However, Michael Phelps left the firm by the end of 2017, leaving the day-to-day management of the fund's European sleeve to José Aguilar and new addition Stephen Gough. In October 2018, BlackRock also hired James Turner, who formerly managed high-yield strategies at Oaktree, in its European high-yield team. Phelps' departure was a loss for the European team, and it will take some time to evaluate how the new additions are settling in, but there is sufficient continuity in the fund's overall resources to maintain our positive view here. The team is supported chiefly by 14 credit analysts in the United States, split between experienced and more junior staff, a European team that has grown to 12, and seven dedicated quantitative analysts.

Management Team



Number of Managers	Longest Tenure	Manager Retention Rate	Average Manager Tenure
5	11.75 Years	5-Year	4.82 Years
		%	

Advisor

BlackRock Investment Management (UK) Ltd.

Suhadvisor

BlackRock Inv Management (UK) Ltd.

James Keenan 06/07 to Present

Years on Managed Funds

Years on Managed Funds

14	11
Fund AUM	Current Funds Managed
	Current runus manageu

Years on Fund

Years on Fund

Largest Funds Managed	Tenure Dates	Role	Fund Size	Investment	Tenure	Index
			Bil USD	Mil USD	Ret %	Ret %
BlackRock High Yield Bond Portfolio	12/07 to Present	1 of 4	16.15	>1	7.31	3.70
BlackRock Floating Rate Income Fund	07/10 to Present	1 of 7	3.26	>1	4.38	2.82
BGF US Dollar High Yield Bond Fund	06/07 to Present	1 of 3	2.28	_	5.10	6.90
BlackRock Corporate High Yield Fund	05/09 to Present	1 of 2	1.44	_	12.04	3.53
BGF Global High Yield Bond Fund	06/07 to Present	1 of 5	1.27	_	3.59	6.17

David Delbos 02/15 to Present

16	4
Fund AUM	Current Funds Managed
23,512.09 Mil USD	12

Largest Funds Managed	Tenure Dates	Role	Fund Size Bil USD	Investment Mil USD	Tenure Ret %	Index Ret %
BlackRock High Yield Bond Portfolio	03/14 to Present	1 of 4	16.15	>1	4.32	2.45
BlackRock Floating Rate Income Fund	08/18 to Present	1 of 7	3.26	None	0.90	2.03
BGF US Dollar High Yield Bond Fund	02/15 to Present	1 of 3	2.28	_	3.65	5.20
BGF Global High Yield Bond Fund	02/15 to Present	1 of 5	1.27	_	2.23	3.84
BlackRock High Yield V.I. Fund	03/14 to Present	1 of 4	0.52	None	3.95	2.45

Jose Aguilar 02/15 to Present

Years on Managed Funds	Years on Fund
4	4
Fund AUM	Current Funds Managed

Largest Funds Managed	Tenure Dates	Role	Fund Size	Investment	Tenure	Index
goot i anao managoa	Tonaro Batos	11010	Bil USD	Mil USD	Ret %	Ret %
BlackRock Global Long/Short Credit Fund	07/17 to Present	1 of 4	3.27	<0.05	0.96	1.07
BGF Global High Yield Bond Fund	02/15 to Present	1 of 5	1.27	_	2.23	3.84
BlackRock Credit Strategies Income Fund	07/16 to Present	1 of 5	0.75	<0.05	4.83	0.73
JNL/BlackRock Global Long Short CreditFd	07/17 to Present	1 of 4	0.09	None	0.67	1.07
BGF European High Yield Bond Fund	07/15 to Present	1 of 3	0.07	_	3.60	3.91



LU0297941899

Morningstar Analyst Rating Bronze

17 Oct 2018 14:00, UTC-0500

Parent

Morningstar Category Global High Yield Bond Category Index ICE BofAMI GbI HY Constnd TR USD

Acting in enlightened self-interest.

Parent Pillar

Positive

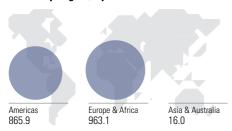
01 Nov, 2018 | BlackRock's successful balancing act retains a positive Parent rating.

The \$6.3 trillion colossus' institutional and retail clients span the globe, and its publicly traded shares have beaten virtually all industry peers and most fellow S&P 500 denizens since the company's 1999 IPO. Both its clients and public shareholders have high expectations, but BlackRock has shown it understands it must be a capable fiduciary to keep delivering enviable longterm stock returns. Its investment fees continue to fall and managers invest more in their strategies. The firm invests heavily in technology and people and makes versions of its institutional risk and portfolio analysis tools available to advisors. Its iShares unit's efforts to defend its leading exchange-traded fund market position has helped drive asset-management costs down. The firm has expanded into alternatives and private equity.

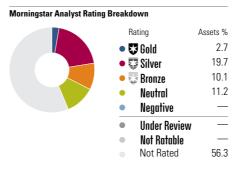
Biggest is not always best, though. Black-Rock has turned around its fixed-income platform since the global financial crisis, but its active equity lineup has sputtered and been through two major restructurings in six years. Its manager retention and tenure rates for U.S. mutual funds are lower than most other top 20 fund families. While it has shown more fund launch discipline, it has its share of niche vehicles, such as the iShares Robotics and Artificial Intelligence ETF.

Still, BlackRock has used its size and operational savvy to clients' benefit.

Assets By Region, By Domicile Bil USD

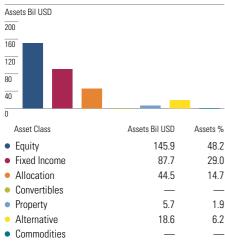


Fund Family Details Europe (*)





Asset Class Breakdown Europe (ex Money Mkt)



Fund Family Details Europe

Top Performing Funds	Category Name	Fund Size Mil USD	Return % 3-Year	Rank in Cat 3-Year
BlackRock Strategic Funds - Emerging Markets Equity Strategies Fund Z2 USD	Global Emerging Markets Equity	309.0	24.55	1
iShares Edge EM Fundamental Weighted Index Fund (IE) Flexible A Acc GBP	Global Emerging Markets Equity	496.7	20.47	1
BlackRock Global Funds - China Bond Fund D3 USD	RMB Bond	157.3	6.08	1
Largest Funds	Category Name	Fund Size Mil USD	Return % 3-Year	Rank in Cat 3-Year
BlackRock Global Funds - Global Allocation Fund A2	USD Moderate Allocation	15,420.1	5.87	55
iShares Developed World Index Fund (IE) Flexible Acc USD	Global Large-Cap Blend Equity	13,117.0	12.83	12
BlackRock Global Funds - Euro Short Duration Bond Fund A2 EUR	EUR Diversified Bond - Short Term	12,609.5	1.57	41
Recent Fund Launches	Category Name	Fund Size Mil USD	Return % Inception	Inception Date
BSF Global Equity Absolute Return Fund Z2 USD	Alt - Long/Short Equity - Global	20.3	3.28	12/12/18
BlackRock Strategic Funds - European Unconstrained Equity Fund I2 EUR	Europe Large-Cap Blend Equity	5.9	9.81	06/12/18
BlackRock Global Funds - Market Navigator Fund I2 EUR	EUR Flexible Allocation - Global	36.0	3.13	16/11/18



Bronze

Morningstar Analyst Rating 17 Oct 2018 14:00, UTC-0500

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Price

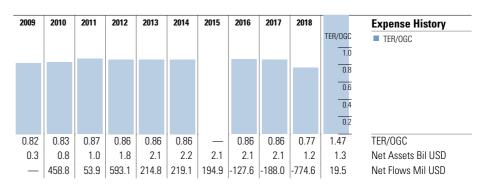
Morningstar Category Global High Yield Bond **Category Index** ICE BofAML GbI HY Constnd TR USD

A recent fee cut brings the fund's fees in line with the competition.

Price Pillar

Neutral

17 Oct, 2018 | The fund's rebate-free share class D2 bears an annual ongoing charge of 0.77% as of January 2018, down from 0.86% in previous years. That's good news for investors, although it's not enough to make the fund's fees competitive just yet. It earns a Neutral Price Pillar rating.



1.47

0.65

Expense Breakdown Ongoing charge

Ongoing charge 11/02/19

Selected Components

Max Management Fee Performance Fee

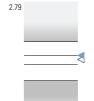
Fee Level

Fee Level Avg

0.09

Peer Group Global High Yield Bond Retail Broad

Fee Level Breakpoints



High >1.81 Above Average 1.47-1.81 Average 1.25-1.47 Below Average 0.85-1.25 < 0.85 Low

■ Fund

1.47 ✓ Peer Median 1.37

Share Class Information

Share Class

BGF Global High Yield Bond D2 LU0297941899 USD BGF Global High Yield Bond A6 USD LU0764618640 BGF Global High Yield Bond A2 USD LU0171284937 BGF Global High Yield Bond E5 EUR LU0500207039 BGF Global High Yield Bond I2 USD LU0369584726 BGF Global High Yield Bond D2 EUR LU0368267034 Hedged

Identifier

Morningstar Category	TER/OGC	Max Mgmt Fee	Performance Fee	Maximum Inital Charge	Minimum Initial Inv	Assets Bil USD
Global High Yield Bond	0.77	0.65	_	5.00	100,000	0.05
Global High Yield Bond	1.47	1.25	_	5.00	5,000	0.19
Global High Yield Bond	1.46	1.25	_	5.00	5,000	0.17
Global High Yield Bond - EUR Hedged	1.97	1.25	_	3.00	_	0.13
Global High Yield Bond	0.61	0.65	_	0.00	10,000,000	0.10
Global High Yield Bond - EUR Hedged	0.76	0.65	_	5.00	_	0.07



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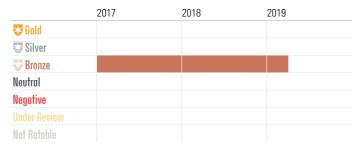
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The Morningstar Analyst Rating™ for Funds is a forward-looking analysis of a fund. The Analyst Rating does not express a view on a given asset class or peer group; rather, it seeks to evaluate each fund within the context of its objective, an appropriate benchmark, and peer group.

The date shown next to the Morningstar Analyst Rating is the date on which Morningstar Manager Research Analyst assigned or reaffirmed the current rating for the fund based on the analyst's latest review and research report for the

The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of funds: People, Parent, Process, Performance, and Price, Each pillar is evaluated when assessing a fund as well as the interaction between the pillars, which we believe is crucial to understanding a fund's overall merit.

The overall quality of a fund's investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a fund's investment team requires that analysts assess several relevant items including how key decisions are made.

Parent

We believe the parent organization is of utmost importance in evaluating funds. The fund's management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

We look for funds with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

We do not believe past performance is necessarily predictive of future results, and this factor accordingly receives a relatively small weighting in our evaluation process. In particular, we strive not to anchor on short-term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a fund is

To reflect actual investor experience, price is evaluated within the context of the relevant market or cross-border region—for example, the United States, Australia, Canada, or Europe. In recognition of differences in scale and distribution costs in various markets, the level at which a fund is penalised for high fees or rewarded for low fees can vary with region. In Europe, for example, funds are penalised if they land in the most expensive quintile of their Morningstar category and are rewarded if they land in the cheapest quintile. The assessment is made using annual expense ratios, but in the case of funds with performance fees, expenses are evaluated excluding any performance fees and then the structure of the performance fee is evaluated separately.

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Gold

Represents funds that our analyst has the highest-conviction in for that given investment mandate. By giving a fund a Gold rating, we are expressing an expectation that it will outperform its relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years). To earn a Gold rating, a fund must distinguish itself across the five pillars that are the basis for our analysis.

Silve

Represents funds our analyst has high-conviction in, but not in all of the five pillars. With those fundamental strengths, we expect these funds will outperform their relevant performance benchmark and/or peer group within the context of the level of risk taken over the long term (defined as a full market cycle or at least five years).

Bronze

Represents funds that have advantages that clearly outweigh any disadvantages across the pillars, giving analyst the conviction to award them a positive rating. We expect these funds to beat their relevant performance benchmark and/or peer group within the context of the level of risk taken over a full market cycle (or at least five years).

Noutral

Represents funds in which our analysts don't have a strong positive or negative conviction. In our judgment, these funds are not likely to deliver standout returns, but they aren't likely to seriously underperform their relevant performance benchmark and/or peer group either.

Negative

Represents funds that possess at least one flaw that our analysts believe is likely to significantly hamper future performance, such as high fees or an unstable management team. Because of these faults, we believe these funds are inferior to most competitors and will likely underperform their relevant performance benchmark and/or peer group, within the context of the level of risk taken, over a full market cycle.

Morningstar may also use two other designations in place of a rating:

Under Review

This designation means that a change that occurred with the fund or at the fund company requires further review to determine the impact on the rating.

Not Ratable

This designation is used only where we are providing a report on a new strategy or on a strategy where there are no relevant comparators, but where investors require information as to suitability.

For more information about our Analyst Rating methodology please go to http://corporate1.morningstar.com/ResearchLibrary/

Morningstar Star Rating

The Morningstar Star Rating is a proprietary data point that is quantitatively driven. Funds are rated from one to five stars based on how well the fund performed (after adjusting for risk and accounting for sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive five-stars and the bottom 10% receives one-star. Funds are rated for up to three time periods—three-, five-, and ten-years—and these ratings are combined to produce an overall star rating, which is noted within the Report. Funds with less than three years of history are not rated. Morningstar Star Ratings are based entirely on a mathematical evaluation of past performance Morningstar Star Ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

Equity-Related Data Points

The Report lists the fund's top ten holdings as of the dated noted. For each underlying holding, a series of data points is provided including, where applicable, that security's Economic Moat as of the date noted.

Economic Moat

The concept of an economic moat plays a vital role in our equity analyst's qualitative assessment of a firm's long-term investment potential, but also in the actual calculation of its fair value estimate. An economic moat is a structural feature that allows a firm to sustain excess profits over a long period of time. We define economic profits as returns on invested capital (or ROIC) over and above our estimate of a firm's cost of capital, or weighted average cost of capital (or WACC). Without a moat, profits are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

Companies with a <u>narrow moat</u> are those we believe are more likely than not to achieve normalized excess returns for at least the next 10 years. <u>Wide-moat</u> companies are those in which we have very high confidence that excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. The longer a firm generates economic profits, the higher its intrinsic value. We believe low-quality, <u>no-moat</u> companies will see their normalized returns gravitate toward the firm's cost of capital more quickly than companies with moats.

For more information about methodology in analysing stocks, please go to http://global.morningstar.com/equitydisclosures.

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