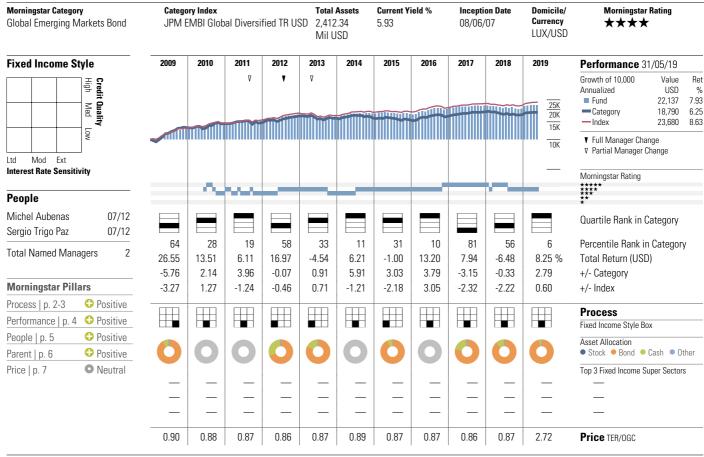
LU0297941386

Morningstar Analyst Rating 9 Oct 2018 Bronze 14:00, UTC-0500



Analyst View

Mara Dobrescu, CFA, Director

A dependable option.

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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

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

09 Oct, 2018 | A stable core of decision-makers, applying a proven investment process that focuses on limiting drawdowns, earns this fund a Morningstar Analyst Rating of Bronze.

BlackRock's emerging-markets debt team underwent wholesale change in mid-2012, following the recruitment of team head Sergio Trigo Paz and his team from BNP Paribas. Michel Aubenas is the fund's lead manager and sets the tone for hard-currency sovereign bonds. He and Trigo Paz have been working together since 2010, which provides continuity here, though we note that the broader EMD team, outside of the hardcurrency group, has seen some turnover in the past five years.

The process combines an awareness of the global environment with in-depth country analysis. Trigo Paz implemented a similar process back at BNP Paribas in 2009. The managers are also aware of the potential impact of exogenous global factors on emerging-markets bonds and therefore undertake ongoing scenario analysis to inform their view of market sentiment. The investment philosophy is geared towards limiting drawdowns; to this end, the manager has significant leeway against the index to manage the fund's duration, beta, and to a lesser extent country allocation. That's not to say the fund shies away from risk altogether. Its portfolio can include exposure to less-liquid frontier markets that the team deems to be supported by specific investment themes or relative value considerations as its current overweightings to countries like Oman, Egypt, and Ghana illustrate. Emerging-markets credit default swaps and US or eurozone interest-rate futures can also be used to partially hedge credit and/or interest-rate risk.

Over the team's tenure since 2012, this mix of daring and cautious bets has enabled the fund to build a strong risk-adjusted record against its global emerging-markets bond Morningstar Category peers, though it has not outperformed its JPM EMBI Global Diversified Index. As expected, the fund's losses in bear markets, such as 2013 and the year to date, have been less pronounced than peers. All in all, the team's effective application of an active yet risk-controlled process makes this a solid offering within its peer group.



Morningstar Analyst Rating Bronze

9 Oct 2018 14:00. UTC-0500

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Process: Approach

Morningstar Category Global Emerging Markets Bond

Category Index JPM FMBI Global Diversified TR USD

Well-structured thematic process with good risk awareness.

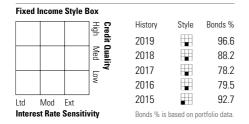
Process Pillar



09 Oct, 2018 | The process combines an awareness of the global environment with in-depth country analysis. Sergio Trigo Paz implemented a similar process back at BNP Paribas in 2009. The subsector specialists undertake detailed country and issuer research to identify and exploit both local and global investment themes. This is complemented at the portfolio construction level by a strategic asset allocation based upon the team's broader expectations for market behaviour and country developments. The managers are also aware of the potential impact of exogenous global factors on emerging-markets bonds and therefore undertake ongoing scenario analysis to inform their view of market sentiment. The investment philosophy as a whole is geared towards limiting drawdowns. The fund is managed with a tracking-error target of 3.5% relative to the JPM EMBI Global Diversified Index, which gives the

manager sufficient leeway to express the team's views, in terms of duration (plus or minus two years relative to the benchmark), market beta (with a historical bandwidth of 0.8-1.4), and to a lesser extent country allocation (maximum plus or minus 3% vs. the index). The fund may also invest in corporates up to 15% and up to 10% in local-currency bonds. The team's effective application of this investment process over time earns it a Positive Process rating.

Style Surveyed 28/02/19



Style Box Factors

Credit Quality	Fund	3-Yr Avg	Category
Average Credit Quality	_	BB	BB
Investment Grade %	44.9	44.9	43.1
Below Invest Grade %	54.6	54.6	49.2
Interest Rate Sensitivity			
Avg Effective Duration	_	5.09	5.83
Avg Modified Duration	_	_	5.84
Avg Effective Maturity	_	_	9.04

Income 31/05/19

	Fund	3-Yr Avg	Category
Current Yield	_	_	5.1
12-Month Yield	0.0	_	_
Average Coupon	6.1	6.0	6.2
Average Coupon 30/04/19			

Current Allocation 3-Year Average Net Assets % 3-Yr Ava Category 0.0 Equity 0.0 0.1 96.6 79.6 94.4 Fixed Income Cash 3.4 20.3 5.3

Regional Exposure 30/04/19

Other

Asset Allocation 30/04/19

Top 5 Countries Bonds %	Fund	3-Yr Avg	Category
Mexico	5.6	5.0	5.5
Ukraine	4.9	3.7	2.3
Ecuador	4.5	3.0	2.8
Argentina	4.5	3.4	3.8
Egypt	4.3	2.2	2.3

0.2

Other

Sectors 30/04/19 **Fixed Income Super Sectors** Assets % ■ Fund — Category 100 75 50 25 0 ή 0 企 72 وْما

rixeu iliculle Sectors	runu	3-11 Avy	category
₩ Government	83.9	_	68.5
Government	68.4	_	60.5
Agency/Quasi-Agency	14.5	_	9.2
Supranational	1.0	_	0.5
Other Government Related*	0.0	_	0.0
○ Corporate	12.4	_	22.8
Securitized ■ Sec	0.0		0.0
Agency Mortgage- Backed	0.0	_	0.0
Non Agency Residential	0.0	_	0.0
Commercial MBS	0.0	_	0.0
Asset-Backed	0.0	_	0.0
Covered Bond	0.0	_	0.0
Municipal	0.0	_	0.0
□ Cash & Equivalents	3.4	_	3.0

N 1

1.6



Morningstar Analyst Rating Bronze

9 Oct 2018 14:00. UTC-0500

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Process: Portfolio

Morningstar Category Global Emerging Markets Bond

Category Index JPM FMBI Global Diversified TR USD

Underweight duration while emphasizing higher-yielding bonds.

Process Pillar

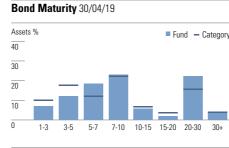
Positive

09 Oct, 2018 | As of August 2018, the fund maintained its overall duration below the benchmark's (6.1 vs. 6.6 years) while overweighting higheryielding emerging-markets bonds, which the team believes provide a better insulation against rising rates. The portfolio's average yield (6.2%) was thus higher than the index's (5.85%). However, the team also used credit default swaps tactically to reduce the portfolio's risk over the course of 2018; as of August, these represented close to 5% of the fund's market value. The team's decision to favour countries that benefit from IMF policy support or reform momentum drove overweightings in Ukraine (5.3% of assets vs. 2.6% for the index), Ecuador, Egypt, and Ghana. The portfolio also features relative value trades, such as a significant overweighting in Oman (4.6% of assets vs. 2.6% for the index) against an underweighting in Lebanon in the Middle East region.

The team also sought to avoid countries they deem most sensitive to shifts in developed-markets monetary policy, leading to underweightings in Philippines and Malaysia. The portfolio retained a 2.7% exposure to Venezuela's stateowned energy company PDVSA (though down from 4.3% a year ago, this is still a material overweighting over the index's 1%) as the team continued to believe in the prospects of a positive political transition for the country over the long term.

Credit Quality Surveyed 28/02/19





Cou	upon Kar	ige 30	J/04/19				
Asse 60	ts %				•	Fund —	Category
45							
30							
15							
0	0% to PIK	0-2	2-4	4-6	6-8	8-10	10+

Credit Quality	Fund	3-Yr Avg	Category
AAA	4.4	4.4	4.2
AA	0.2	0.2	3.7
A	6.3	6.3	8.4
BBB	34.1	34.1	26.8
BB	16.9	16.9	18.5
В	32.7	32.7	27.6
Below B	5.0	5.0	3.1
Not Rated	0.4	0.4	7.7

Maturity (Years)	Fund	3-Yr Avg	Category
1 to 3	6.9	_	9.7
3 to 5	12.2	_	17.2
5 to 7	18.3	_	11.7
7 to 10	22.9	_	21.9
10 to 15	5.6	_	6.3
15 to 20	1.9	_	3.2
20 to 30	22.3	_	15.3
Over 30	3.9	_	3.7

Coupon Range	Fund	3-Yr Avg	Category
0% or Paid In Kind	1.1	_	0.5
O to 2	0.5	_	0.1
2 to 4	9.8	_	9.4
4 to 6	44.3	_	35.4
6 to 8	29.6	_	30.3
8 to 10	9.0	_	12.5
More than 10	2.3	_	4.2

Portfolio Holdings 28/02/19

Bond Holdings	Equity Holdings	Other H	loldings		Assets in Top 10 Ho	Idings Turnover Ratio (Re	ported) Current Yield
506	0	73			-19%	_	_
Top 10 Holdings		Country	Currency	Assets %	Super Sector	Primary Sector	Secondary Sector
US 10 Year Note (CBT) June19	USA	USD	-8.01	Government Government	Government Related	Treasury Future
Euro BUND Future Ma	nr19	DEU	EUR	-5.76	Government Government	Government Related	Treasury Future
lcee: (Cdx.Na.Hy.31.V	3) 5 12/20/2023 Icee	USA	_	-4.05	Other	Swap	Credit Default Swap
Ukraine (Republic of)	7.38%	UKR	USD	1.60	Government Government	Government	Treasury
Scds: (Russia) 1 12/20)/2023 Boasw	RUS	_	-1.56	Other	Swap	Credit Default Swap
Cds: (Cdx.Em.30.V1) 1	12/20/2023 Boasw	USA	_	-1.54	Other	Swap	Credit Default Swap
Scds: (Colom) 1 12/20	/2023 Boasw	COL	_	-1.46	Other	Swap	Credit Default Swap
Cds: (Turkey) 1 12/20/	'2023 Hsbbk	TUR	_	-1.36	Other	Swap	Credit Default Swap
Petroleos de Venezuel	la SA 0%	VEN	USD	1.34	Government Government	Government Related	Agency/Quasi Agency
Republic of Ecuador 7	.95%	ECU	USD	1.32	Government Government	Government	Treasury
Republic of Ecuador 7	.95%	ECU	USD	1.32	Government	Government	Treasury

Bronze

Morningstar Analyst Rating 9 Oct 2018 14:00. UTC-0500

LU0297941386

Performance

Morningstar Category Global Emerging Markets Bond

Category Index JPM FMBI Global Diversified TR USD

A strong risk-adjusted record.

Performance Pillar

Positive

09 Oct, 2018 | Under Michel Aubenas' watch, from July 2012 through September 2018 the fund's annualized return (3.3% in USD) outperformed the category (2%), although it lagged its JPM EMBI Global Diversified Index. As expected, given the team's focus on limiting losses, the fund's downside-capture ratio has so far been

lower than peers', as has its maximum drawdown (-8.9% vs. -11.7%). On a risk-adjusted basis (as measured by Sharpe ratio), the fund has thus far outpaced its category average, as well as passive competitors such as Silver-rated iShares JPMorgan \$ Emerging Markets Bond ETF, earning a Positive Performance rating. It hasn't always been smooth sailing in the short term, however. After contributing positively to returns in 2016, an overweighting in Venezuela hurt the fund in 2017 and the beginning of 2018. In 2017, returns also suffered from the team's decision to

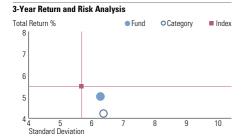
underweight Turkey and Mexico, though overall, this defensive fund's bottom-quartile placing in a strong bull market for emerging-markets debt last year should not come as a surprise. Over the first eight months of 2018, the fund's overweighting in Argentina cost 42 basis points of returns relative to the index, but smaller exposures to outperforming frontier markets (Egypt and Kazakhstan, under 3% of assets each) were beneficial. Modest helpings of emerging-markets credit default swaps and a short position on US interest rates also helped limit losses.

Morningstar Rating and Risk 31/05/19

Overall Ra	ating		****
10 Years	Above Avg	Below Avg	****
5 Years	Above Avg	Below Avg	****
3 Years	Above Avg	Avg	****
Period	Cat	Cat	Rating

Risk Analysis 31/05/19

3-Year Risk Measures



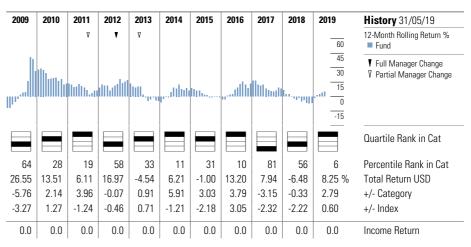
3-1 Cui mak Mcuaurca	Tullu	outcyory	IIIuux
Standard Deviation	6.27	6.37	5.67
Sharpe Ratio	0.58	0.50	0.72
R-Squared	91.58	77.58	_
Beta	1.06	0.97	_
Alpha	-0.65	-1.09	_
Maximum Drawdown	Fund	Category	Index
Max Drawdown (%)	-8.80	-11.72	-9.58
Peak Date	05/13	07/14	05/13
Valley Date	08/13	01/16	08/13
Max Drawdown (Months)	4	19	4

Category

Index

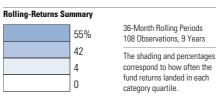
Fund

Max Drawdown (%)	-8.80	-11.72	-9.58
Peak Date	05/13	07/14	05/13
Valley Date	08/13	01/16	08/13
Max Drawdown (Months)	4	19	4
Upside/Downside	Fund	Category	Index
Upside Capture Ratio	101.2	90.4	_
Downside Capture Ratio	110.8	104.9	_
	110.0	101.0	



Returns 31/05/19

Trailing Returns	Total	Investor	Rank	Cat	Index
	Ret %	Ret %	in Cat	Ret %	Ret %
1 Year	5.13	5.91	35	3.13	7.46
3 Years	5.00	5.97	32	4.09	5.46
5 Years	4.10	4.51	11	1.52	4.67
10 Years	7.17	5.78	17	5.42	7.58
Tenure 07/12	4.20	_	_	2.37	4.77
Inception 06/07	6.04	_	_	4.07	6.73





Year	Income	Income %	Capital	Capital %
	Ret %	Rank in Cat	Ret %	Rank in Cat
2015	0.00	33	-1.00	20
2016	0.00	41	13.20	9
2017	0.00	59	7.94	59
2018	0.00	28	-6.48	40
05/19	0.00	26	8.25	5



Morningstar Analyst Rating Bronze

9 Oct 2018 14:00. UTC-0500

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People

Morningstar Category Global Emerging Markets Bond

Category Index JPM FMBI Global Diversified TR USD

A stable core of decision-makers, with sufficient resources at their disposal.

People Pillar

Positive

09 Oct, 2018 | BlackRock's emerging-markets debt team underwent wholesale change in mid-2012, following the recruitment of team head Sergio Trigo Paz and his team from BNP Paribas. Trigo Paz had joined Fortis (subsequently acquired by BNP Paribas) in 2004 and worked as an EMDtrader prior to that. Michel Aubenas is the fund's lead manager and sets the tone for hard-currency sovereign bonds, with Trigo Paz also implementing active trades in the fund and occasionally stepping in when he thinks the fund might be drifting away from its process, though this has seldom happened. He and Aubenas have been working together since 2010. While the team focusing on hard-currency bonds is seasoned (15 years of experience on average), the broader EMD team has seen some turnover in recent years. The corporate-bond team lost one of its key members with the departure of Chris Kelly in 2014. Raphael

Marechal (local rates) left the team early 2016. The team has gradually grown with the recruitment of Michal Wozniak, who later replaced Marechal, an investment strategist (Pablo Goldberg) and some junior managers. We believe BlackRock's EMD team remains sufficiently resourced and we value the stable core of key decision-makers on the hard-currency strategy, which earns this fund a Positive People rating. We also appreciate that Aubenas is personally invested in the fund, which strengthens the alignment of his interests with those of investors.

Management Team



Number of Managers	Longest Tenure	Manager Retention Rate	Average Manager Tenure
2	6.92 Years	5-Year ——%	6.92 Years

Advisor

BlackRock Investment Management (UK) Ltd.

Subadvisor

Michel Aubenas 07/12 to Present

Years on Managed Funds	Years on Fund
20	6
Fund AUM	Current Funds Managed
2 727 90 Mil USD	5

Largest Funds Managed	Tenure Dates	Role	Fund Size	Investment	Tenure	Index
			Bil USD	Mil USD	Ret %	Ret %
BGF Emerging Markets Bond Fund C	07/12 to Present	1 of 2	2.41	_	3.61	4.77
BGF ESG Emerging Markets Bond Fund 0	07/18 to Present	1 of 6	0.27	_	5.30	7.29
BGF ESG Emerging Markets Corporate CBd Fd	07/18 to Present	1 of 6	0.03	_	6.40	7.62
BlackRock Emerging Markets Bond FundO	07/17 to Present	1 of 2	0.02	None	1.97	3.04

Sergio Trigo Paz 07/12 to Present

Vears on Managed Funds

rouro on managou ranao	routo on runu
30	6
Fund AUM	Current Funds Managed
10,265.97 Mil USD	11

Veare on Fund

Largest Funds Managed Te	enure Dates	Role	Fund Size Bil USD	Investment Mil USD	Tenure Ret %	Index Ret %
BGF Emerging Markets Local Ccy Bd Fd 0	7/12 to Present	1 of 3	4.40	_	-1.57	-0.61
BSF Emerging Markets Flexi Dynamic 0 Bd Fd	06/13 to Present	1 of 3	2.82	_	1.93	5.41
BGF Emerging Markets Bond Fund 0	7/12 to Present	1 of 2	2.41	_	3.61	4.77
BGF Emerging Markets Corporate Bond 0 Fund	02/13 to Present	1 of 3	0.25	_	4.33	4.35
BlackRock Local Emerging Markets Bd 0 Fund	06/12 to Present	Lead	0.19	_	0.18	-0.05

Morningstar Analyst Rating Bronze

9 Oct 2018 14:00. UTC-0500

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Parent

Morningstar Category Global Emerging Markets Bond

Category Index JPM FMBI Global Diversified 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.

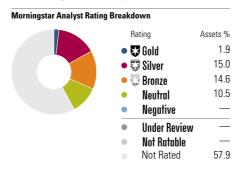
Biggest is not always best, though. Black-Rock has turned around its fixed-income platform since the global financial crisis, but its active equity lineup has sputtered and been through two major restructurings in six years. Its manager retention and tenure rates for U.S. mutual funds are lower than 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 Global Funds - World Technology Fund A2 EUR	Sector Equity Technology	1,649.4	26.55	1
BlackRock Strategic Funds - Emerging Markets Equity Strategies Fund Z2 USD	Global Emerging Markets Equity	560.5	18.41	1
iShares Edge EM Fundamental Weighted Index Fund (IE) Flexible A Acc GBP	Global Emerging Markets Equity	448.1	14.63	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	14,993.9	3.96	64
iShares Developed World Index Fund (IE) Flexible Acc USD	Global Large-Cap Blend Equity	14,011.7	9.18	14
BlackRock Global Funds - Euro Short Duration Bond Fund A2 EUR	EUR Diversified Bond - Short Term	12,686.9	-0.14	50
Recent Fund Launches	Category Name	Fund Size Mil USD	Return % Inception	Inception Date
iShares ESG Screened Euro Corporate Bond Index Fund Q Acc EUR	EUR Corporate Bond	_	-0.68	08/05/19
Blackrock Common Contractual Funds - CCF Developed World (ESG Screened) Index Fund X1 EUR Hedged Acc	Other Equity	_	-4.04	26/04/19
BlackRock Funds I ICAV - BlackRock Global High Yield ESG and Credit Screened Fund D USD Acc	Global High Yield Bond	111.6	-0.96	11/04/19

(*) All data is based on Branding name and refers to funds domiciled in Europe



Bronze

Morningstar Analyst Rating 9 Oct 2018 14:00, UTC-0500

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Price

Morningstar Category Global Emerging Markets Bond

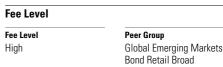
Category Index JPM EMBI Global Diversified TR USD

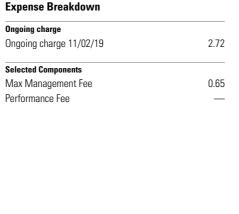
In line with the competition.

Price Pillar Neutral

09 Oct, 2018 | At 0.87% as of February 2018, this fund's rebate free share class' ongoing charge is in line with its global emerging-markets bond category median for similar clean share classes. We maintain our Neutral Price Pillar rating.

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		Expense History
										TER/OGC	■ TER/OGC
										1.0	
										0.8	
										0.6	
										0.4	
										0.2	
0.90	0.88	0.87	0.86	0.87	0.89	0.87	0.87	0.86	0.87	2.72	TER/OGC
0.3	0.6	0.8	1.3	1.1	1.2	1.5	2.6	4.0	2.7	2.4	Net Assets Bil USD
_	0.3	0.1	0.4	-0.2	0.1	0.5	0.8	1.1	-0.9	-0.4	Net Flows Bil USD





Fee Level Bı	eakpoints		
2.82	4	High	>1.91
		Above Average	1.57-1.91
		Average	1.29-1.57
		Below Average	0.83-1.29
		Low	< 0.83
		▼ Fund	2.72
0.05		✓ Peer Median	1.44

Share Class	Identifier
BGF Emerging Markets Bond D2 USD	LU0297941386
BGF Emerging Markets Bond A2 C7K	LU1791181735
BGF Emerging Markets Bond I2 USD	LU1180455567
BGF Emerging Markets Bond A2	LU0200680600
BGF Emerging Markets Bond A2	LU0413376566
EUR Hedged BGF Emerging Markets Bond X2 EUR Hedged	LU0343170543

Share Class Information

Morningstar Category	TER/OGC	Max Mgmt Fee	Performance Fee	Maximum Inital Charge	Minimum Initial Inv	Assets Bil USD
Global Emerging Markets Bond	0.87	0.65	_	5.00	100,000	0.13
Global Emerging Markets Bond	1.48	1.25	_	5.00	_	_
Global Emerging Markets Bond	0.71	0.65	_	0.00	10,000,000	0.55
Global Emerging Markets Bond	1.47	1.25	_	5.00	5,000	0.30
Global Emerging Markets Bond - EUR Biased	1.47	1.25	_	5.00	_	0.21
Global Emerging Markets Bond - EUR Biased	0.06	_	_	0.00	_	0.18



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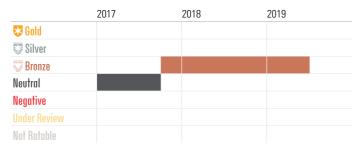
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The date shown next to the Morningstar Analyst Rating is the date on which Morningstar Manager Research Analyst assigned or reaffirmed the current rating for the fund based on the analyst's latest review and research report for the

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.

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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.

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