

Orphaned Funds

A Morningstar study on sub-scale funds lying dormant and their disservice to investors.

Morningstar Manager Research Services, EMEA

25 February 2019

Jonathan Miller
Director, Head of UK Manager Research
+44 (0)203-107-0025
jonathan.miller@morningstar.com

Important Disclosure

The conduct of Morningstar's analysts is governed by Code of Ethics/Code of Conduct Policy, Personal Security Trading Policy (or an equivalent of), and Investment Research Policy. For information regarding conflicts of interest, please visit:

https://shareholders.morningstar.com

Executive Summary

There are far too many funds in the European fund universe relative to the pool of invested assets. As a result, many are too small to be cost-effective. Languishing with little assets, disregarded and saddled with high fees, these funds deliver poor investor outcomes.

We've termed such funds as "orphaned funds," and this paper aims to show the extent to which they are prevalent in Europe. We define orphaned funds for our purposes here as those with all the following characteristics:

- Assets of under EUR 100 million.
- A track record of five years or more.
- Net inflows/outflows of EUR 10 million or less in each of the five calendar years to the end of 2017.

Key Takeaways

- ▶ Of the 15,339 funds in our total universe that have a five-year track record, over 50% have assets under management of less than EUR 100 million.
- ▶ Orphaned funds represent nearly 25% of the total universe with a median size of just EUR 16.6 million.
- Through the lens of the Morningstar Quantitative Rating™ for funds, which is designed to learn from our analysts' work and mimic their outcomes as closely as possible, nearly a third of orphaned funds hold a Negative rating, and just 21.8% attain a positive rating.
- ▶ Orphaned funds have a median track record of 12.5 years. However, when it comes to manager tenure, the shortest is on Negative-rated funds, with a median of 5.1 years.
- Of the Negative-rated orphaned funds at the end of 2017, 54.3% were in the fourth quartile in their Morningstar Category based on their five-year returns from 31 Dec 2007 to 31 Dec 2012.
- ▶ Allocation funds have the most orphaned funds of any asset class. Negative-rated orphaned funds in the allocation asset class carry a median fee of 2.19%.
- ▶ The median fee for an orphaned Gold equity fund is 1.14%, half that of a Negative-rated fund.
- ▶ By domicile, France has the most orphaned funds, followed by Luxembourg, Germany, Spain, and Austria. Groups with the most orphaned funds are Amundi, Allianz Global Investors and BNP Paribas.

Determining the Fund Universe

We used Morningstar Direct to analyse all funds domiciled in European countries, limiting our universe to the oldest share class of each fund with a minimum five-year track record. Our analysis excluded the following Morningstar Categories and category types, which do not support the assignment of Morningstar Quantitative Ratings (see Page 3) on which a portion of this study relies:

Alternatives

Capital Protected

Fixed-Term Bond

Guaranteed

Money Market

Other

Other Allocation

Other Bond

Other Equity

Deciding on Orphan Funds' Characteristics

As this study seeks to analyse funds that are so small they risk being at a structural disadvantage to rivals, we excluded offerings with more than EUR 100 million in net assets (generally regarded as the level at which a fund becomes economically viable for an asset manager to run). All else equal, a fund that reaches this milestone should be less likely to be closed or merged than a smaller offering. Not surprisingly, it is also the level where a fund can gain traction with larger investors such as wealth managers and private banks, which tend to shun smaller funds given their higher risks of being shut down. Notably for others in the fund, the presence of these larger investors can bring enough assets to help dilute the fund's administrative costs.

To avoid pulling funds into our study that are too early in their growth arc to be fairly termed as orphans, we excluded funds with less than five years of history (judged by the inception date of the oldest share class in Morningstar Direct TM).

We also applied a net inflow screen to identify the extent to which a fund is capturing investor interest in a concrete fashion. Low flows in either direction are a further indication that a fund has failed to capture investor interest. We therefore screened our remaining universe for funds that had net inflows/outflows of EUR 10 million or less in each of the past five calendar years.

The Scale of Orphaned Funds in Europe

The count and total assets under management of our fund universe after applying each screen are shown in Exhibit 1.

Exhibit 1 Different Fund Universes and Their Total AUM

Characteristics	Number of Funds	Total AUM (EUR)
Whole universe with 5-year track record	15,339	8.81 trillion
5-year track record and AUM under EUR 100m	8,044	290 billion
5-year track record, AUM under EUR 100m and net in/outflows of less than EUR 10 million in each of the past 5 calendar years	3,751	80 billion

There are more than 15,000 funds that have track records of at least five years. Collectively, these offerings hold assets approaching EUR 9 trillion. However, more than half of these funds (8,044) have assets of less than EUR 100 million even though they have been in existence for five years or more. Screening those 8,044 funds down to those with net inflows/outflows below EUR 10 million in each of the past five calendar years leaves us with only funds meeting all three of our stringent criteria. Altogether, there are 3,571 of them, which means that nearly 25% of our total starting universe is orphaned funds as we have defined them. The sheer number of these funds shows the industry has launched far too many funds that are unwanted by investors. And though the total level of assets in these offerings is small, our analysis below shows that investors who have put money in them are often being disadvantaged. Further, if the fund companies aren't recouping the costs of running orphaned funds, then their continuing presence is effectively being subsidised by fees on the remaining funds, suggesting that even investors in perfectly good funds could have lower fees if firms were more disciplined in closing tiny funds.

Looking at Orphaned Funds Through the Lens of the Morningstar Quantitative Rating

As a way of examining characteristics of orphaned funds, we opted to use the Morningstar Quantitative Rating for funds. The quantitative rating extends the work of Morningstar's global team of qualitative fund analysts by using machine learning to learn the analysts' decision processes and apply them to funds that they don't cover directly. It therefore allows Morningstar to provide investors with a view on our five qualitative pillars (People, Process, Parent, Performance, and Price) as well as an overall rating of Gold, Silver, Bronze, Neutral, or Negative for funds not under analyst coverage. As with the Morningstar Analyst Rating, we expect Gold, Silver, and Bronze funds all to outperform their benchmark or peers over a market cycle, with our confidence highest for Gold, Silver, and Bronze, respectively. Neutral-rated funds are not strongly expected to out- or underperform, while Negative funds are expected to underperform.

The main advantage of the quantitative rating over other measures we might have chosen for this paper is that it is forward-looking as it seeks to predict how funds will perform in the future instead of purely measuring the past. In so doing, it relies on the totality of historical decisions taken by our experienced team of independent qualitative analysts, bringing that team's judgments and insights to a quantitatively generated and therefore scalable package.

Dealing With Multiple Share Classes

The quantitative rating is generated on a share-class level. As it is therefore possible for share classes of a single fund to have different ratings (primarily because of fee differences across classes), we used the following methodology to select one class per fund to include in our study:

- ► Each of the five ratings rungs was assigned a score according to its quantitative rating: Gold (5), Silver (4), Bronze (3), Neutral (2), Negative (1).
- ▶ When multiple share classes with different quantitative ratings arose, their scores were averaged and the share class with the score closest to the calculated average was used.
- ► To be conservative in our approach, where a fund's classes were evenly split across two ratings levels, and therefore the average score fell exactly between the scores assigned to those ratings levels, we selected the class with the higher rating.
- ▶ Where a fund had more than one class carrying the selected ratings level based on the above methodology, we chose to use the lowest-cost class at that level. For example, if a fund had five share classes respectively rated Gold, Silver, Bronze, Neutral, and Negative, the average score would be 3, so we would select the Bronze-rated class to represent the fund in the study. For a fund with two Gold-rated classes and two Neutral-rated classes, we would select the Gold class with the lowest costs. However, if there were three Bronze classes and one Silver class, we would select the cheapest Bronze-rated class as being closer to the average score of 3.25 than Silver.

Orphaned Funds Through the Lens of the Morningstar Quantitative Rating

Having established the share class most relevant for each fund's overall rating, we can shine a light on quantitative rating outcomes within the universe of 3,751 orphaned funds.

Exhibit 2 Morningstar Quantitative Ratings for Orphaned Funds, Fees, and Fund Size

Morningstar Quant Rating	Number of Orphaned Funds	Median KIID Ongoing Charge (%)	Median Fund Size (EUR)
Gold	138	1.14	23.5 million
Silver	258	1.21	20.5 million
Bronze	424	1.42	20.3 million
Neutral	1,773	1.64	17.3 million
Negative	1,158	2.18	12.9 million
Total Median		1.71	16.6 million

Source: Morningstar Direct. Data as of 31/12/2017

Nearly a third of orphaned funds have a Negative rating, and just 21.8% attain a positive rating. Whereas across the whole European universe, around 15% of funds have a Negative rating. Perhaps unsurprisingly, the level of fees is a key determinant in the ratings: Negative-rated orphaned funds have a median KIID ongoing charge of 2.18%, while the median for Gold funds is nearly half that. There is also a stark reminder here of the minuscule fund sizes at play: Negative-rated funds have a paltry median fund size of EUR 12.9 million, while Gold funds have a median of just EUR 23.5 million. You have to seriously question how so many of these are still in existence.

There is a possible valid reason for assets remaining in these small funds, in that investors might be facing a hit on capital gains tax if they were to sell their holdings. In this situation, remaining invested might be the preferred option.

On the flip side, fund groups can always merge tiny funds into another. But the fund where the assets are moving to would still require a similar objective. If that's not the case, the investor may feel compelled to redeem. Furthermore, some of these orphaned funds are part of very small firms that don't have a multitude of funds on offer so may not have a relevant fund to switch into.

Exhibit 3 Morningstar Quantitative Ratings for Orphaned Funds, Fund Longevity, and Manager Tenure

Morningstar Quant Rating	Number of Orphaned Funds	Median of Longest Running Share Class (Years)	Median of Longest Manager Tenure (Years)
Gold	138	14.7	10.8
Silver	258	14.1	10.0
Bronze	424	12.6	9.8
Neutral	1,773	12.4	8.1
Negative	1,158	12.4	5.1
Total Median		12.5	8.9

Source: Morningstar Direct. Data as of 31/12/2017

A further finding is that the orphaned funds captured by our criteria have been in existence for a median of 12.5 years based on the longest-running share class for each. There is a slight distinction by ratings in that Gold and Silver funds have had a median shelf life of over 14 years, but the Neutral and Negative ones still have a significant history. Again, the extent to which these funds continue to survive, makes one question how customers are being treated fairly.

We can then delve deeper by looking at the fund manager tenure to identify characteristics. The data point here from Morningstar Direct takes the tenure in years of the longest-serving manager. Given that funds can have multiple lead managers starting at different times, this helps to take the longest track record on the fund.

Yet again, a pattern emerges that sees a steep change from the top rating to the bottom one, starting with a median 10.8-years manager tenure for Gold-rated funds, all the way to 5.1 years for Negative-rated funds. The data shows that much longer tenure is being found on Gold funds, so at least there is some sort of stability and positive attributes.

Taking Negative funds at the end point of this study (31 Dec 2017) and seeing how they performed in the 31 Dec 2007 to 31 Dec 2012 period, will provide some insights on the preceding five-year timeframe.

Exhibit 4 Negative-Rated Funds and Their Category Quartile Rank From 31 Dec 2007 to 31 Dec 2012

Quartile	Number of Funds	Total Percentage (%)
1st quartile	46	6.3
2nd quartile	96	13.2
3rd quartile	189	26.1
4th quartile	394	54.3
Total	725	

Of the Negative-rated funds at the end of 2017, 725 had a five-year track record at the end of December 2012. At that point, 54.3% were in the fourth quartile in their Morningstar Category based on their five-year returns from 31 Dec 2007 to 31 Dec 2012. Conversely, just 6.3% of first-quartile funds at that point went on to hold a Negative rating at 31 Dec 2017. This shows that most of the struggling funds continued to do so.

Asset-Class Analysis

Breaking our analysis out by asset class provides further insights.

Exhibit 5 Allocation Asset Class—Morningstar Quantitative Ratings for Orphaned Funds, Fees, and Fund Size

Morningstar Quant Rating	Number of Orphaned Funds	Median KIID Ongoing Charge (%)	Median Fund Size (EUR)
Gold	77	1.20	17.9 million
Silver	132	1.29	19.2 million
Bronze	222	1.51	20.1 million
Neutral	930	1.71	15.9 million
Negative	540	2.19	11.4 million
Total	1,901		

Source: Morningstar Direct. Data as of 31/12/2017

The allocation asset class contains the most orphaned funds at just over 50% of the total. Investors looking for diversified solutions have a median fee of 2.19% for Negative-rated funds. For this rating, the EUR 11.4 million median fund size is the lowest across allocation, convertibles, equity, and fixed income.

Exhibit 6 Convertibles—Morningstar Quantitative Ratings for Orphaned Funds, Fees, and Fund Size

Morningstar Quant Rating	Number of Orphaned Funds	Median KIID Ongoing Charge (%)	Median Fund Size (EUR)
Bronze	3	1.51	22.3 million
Neutral	13	1.24	19.2 million
Negative	10	2.04	35.4 million
Total	26		

Compared with the others, the convertibles asset class is fairly small, but the median fund size for the Negative rating is the highest. The analysis so far has shown a general sequence, whereby from the top rating to the bottom rating, the median fund size gets smaller, but that's not the case here.

Exhibit 7 Equities—Morningstar Quantitative Ratings for Orphaned Funds, Fees, and Fund Size

Morningstar Quant Rating	Number of Orphaned Funds	Median KIID Ongoing Charge (%)	Median Fund Size (EUR)
Gold	45	1.14	30.2 million
Silver	86	1.31	24.6 million
Bronze	137	1.64	20.2 million
Neutral	613	1.83	19.5 million
Negative	515	2.27	14.8 million
Total	1,396		

Source: Morningstar Direct. Data as of 31/12/2017

The equities asset class contains 37% of the orphaned funds. The common tendency of assets falling and charges increasing at each rating level is apparent here. One caveat is that there are more Neutral-rated funds than Negative-rated ones. But when fees are considered, the 2.27% median charge for the Negative funds is double that of Gold funds.

Exhibit 8 Fixed Income—Morningstar Quantitative Ratings for Orphaned Funds, Fees, and Fund Size

Morningstar Quant Rating	Number of Orphaned Funds	Median KIID Ongoing Charge (%)	Median Fund Size (EUR)
Gold	16	0.66	21.7 million
Silver	40	0.65	19.8 million
Bronze	62	0.72	23.2 million
Neutral	217	0.87	18.2 million
Negative	93	0.65	13.6 million
Total	428		

The fixed-income asset class contains 11.4% of the orphaned funds, and within the asset class, Neutral makes up just over half of the ratings. Fees in this space have a fairly low dispersion for positively rated funds, compared with other asset classes. But it breaks wider when the median fee of 1.23% for a Negative fund is borne in mind. The quantitative rating is showing that 72.4% of orphaned fixed-income funds do not get a positive rating, with just over half holding a Neutral.

Orphaned Funds by Domicile

Breaking out the domicile of funds provides an overview of countries where the scale of orphaned funds is most prevalent.

Exhibit 9 Top 10 Domiciles for Orphaned Funds

Country of Fund Domicile	Number of Orphaned Funds
France	1,036
Luxembourg	762
Germany	394
Spain	302
Austria	301
United Kingdom	194
Liechtenstein	135
Ireland	92
Switzerland	85
Denmark	63

Source: Morningstar Direct. Data as of 31/12/2017

At 27.6%, France has the lion's share of orphaned funds. Luxembourg then follows, but it acts more as a hub for groups selling their funds across jurisdictions. Germany, Spain, and Austria then make up the top five.

Most European countries have tied distribution where banks and insurance companies dominate the landscape. One of the few exceptions is the United Kingdom, where independent financial advisors are important. Direct investing via platforms is also usually more prevalent in the UK and Scandinavia than in other European countries. Homing in on the domicile is a way of attracting regulators' attention on the outcomes for local investors, where suitability of outcomes springs to mind.

Orphaned Funds by Asset-Management Group

At the group level, a number of asset-management companies have local entities in various countries across the continent. These have been aggregated together under a single banner when calculating the totals.

Exhibit 10 Top 10 Asset-Management Groups With Orphaned Funds

Asset Management Group	Number of Orphaned Funds
Amundi	102
Allianz Global Investors	50
BNP Paribas	49
Crédit Mutuel	46
Renta 4	42
Lazard	42
Rothschild	41
UBS	40
Natixis	34
CNP	32

Source: Morningstar Direct. Data as of 31/12/2017

Given that France is the country with the most orphaned funds (see Exhibit 9), it is not surprising that, at a group level, French houses dominate. Amundi tops the list, with funds sold across France, Italy, Austria, and Spain, via their local subsidiaries, making up the numbers.

Allianz Global Investors' total of 50 also comes from funds domiciled in a number of countries. The general leaning to France then comes from BNP Paribas, Crédit Mutuel, Lazard (courtesy of Lazard Frères Gestion having a big impact), Rothschild, Natixis (through a number of its affiliates), and CNP. The Spanish group Renta 4 is in fifth position, where a host of allocation funds in their market come through in this analysis.

These are large players, many of them operating on an international stage, with huge fund ranges that on the face of it seem ripe for rationalisation. Providing investors with improved alternatives could also be possible based on the volume of funds on their rosters. While this is true for large players, smaller shops may not have a relevant fund to switch into. In such instances, investors should be mindful of potential warnings: the firm's profitability, its ability to provide sufficient resources to manage their investments, and the risk it might not be around in the future.

In Morningstar's qualitative analysis of funds, our assessment of the group, as part of the Parent Pillar, delves into stewardship of client assets and alignment of interests coming to the fore. Having a large book of subscale funds that increase costs for investors, complexity in managers running multiple funds, and disappointing outcomes would be seen as red flags.

Conclusion

There has been a long-held view that the amount of funds available to European investors is far too large. However, we have seen little evidence of that changing. The amount of subscale funds is clear to see, and by moving the debate on to orphaned funds, the magnitude of the issue goes even deeper. Client suitability is a key part of MiFID II, and the analysis we have provided gives little comfort on the extent to which this is in play across the board. There could be valid reasons why assets remain in orphaned funds, such as a tax impact or lack of paperwork from deceased relatives, but overall it's clear investors are losing out.

It remains to be seen if MiFID II and the issues of orphaned funds can be brought to the fore by regulators. It's evident that investor outcomes are being affected, and this is an issue which should get the wider attention it deserves.

Morningstar Manager Research Services, EMEA Report Disclosure

This Report is for informational purposes, intended for financial professionals and/or sophisticated investors ("Users") and should not be the sole piece of information used by such Users or their clients in making an investment decision.

The analysis within this report is prepared by the person(s) noted in their capacity as an analyst for Morningstar. The opinions expressed within the Report are given in good faith, are as of the date of the Report and are subject to change without notice. Neither the analyst nor Morningstar commits themselves in advance to whether and in which intervals updates to the Report are expected to be made. The written analysis and Morningstar Analyst Rating within this Report are statements of opinions; they are not statements of fact.

Morningstar believes its analysts make a reasonable effort to carefully research information contained in their analysis. The information on which the analysis is based has been obtained from sources which are believed to be reliable such as, for example, the fund's prospectus and shareholder reports (or their equivalents), fund company website, interviews with fund company personnel, and relevant and appropriate press sources as well as data, statistics and information within Morningstar's own database. Morningstar does not perform an audit or seek independent verification of any of the data, statistics, and information it receives.

Unless otherwise provided in a separate agreement, Users accessing this Report may only use it in the country in which the Morningstar distributor is based. Unless stated otherwise, the original distributor of the report is Morningstar Inc., a U.S.A. domiciled financial institution.

This Report is for informational purposes only and has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. This publication is intended to provide information to assist institutional investors in making their own investment decisions, not to provide investment advice to any specific investor. Therefore, investments discussed and recommendations made herein may not be suitable for all investors; Users and User clients must exercise their own independent judgment as to the suitability of such investments and recommendations in the light of their own investment objectives, experience, taxation status and financial position.

The information, data, analyses and opinions presented herein are not warranted to be accurate, correct, complete or timely. Unless otherwise provided in a separate agreement, Morningstar makes no representation that the Report contents meet all of the presentation and/or disclosure standards applicable in the jurisdiction the recipient is located.

Except as otherwise required by law or provided for in a separate agreement, the analyst, Morningstar and its officers, directors and employees will not be responsible or liable for any trading decisions, damages or other losses resulting from, or related to, the information, data, analyses or opinions within the report. Morningstar encourages Users and User clients to read all relevant issue documents (e.g., prospectus) pertaining to the security concerned, including without limitation, information relevant to its investment objectives, risks, and costs before making an investment decision and when deemed necessary, to seek the advice of a legal, tax, and/or accounting professional.

The Report and its contents are not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Morningstar or its affiliates to any registration or licensing requirements in such jurisdiction.

This Report may be distributed in certain localities, countries and/or jurisdictions ("Territories") by independent third parties or independent intermediaries ("Distributors"). Such Distributors are not acting as agents or representatives of the analyst or Morningstar. In Territories where a Distributor distributes our Report, the Distributor, and not the analyst or Morningstar, is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established by local and/or regional regulatory bodies, including laws in connection with the distribution third-party research reports.

For a list of funds which Morningstar currently covers and provides written analysis on please contact your local Morningstar office. For information on the historical Morningstar Analyst Rating for any Fund Morningstar covers, please contact your local Morningstar office.

Please note that investments in securities (including mutual funds) are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. Morningstar's Risk, Return and Star Rating serves as useful data points with respect to evaluating a fund's risk profile.

A current yield percentage is not a reflection of the actual return an investor will receive in all cases as market prices for securities are constantly changing due to such things as market factors. Where a security is denominated in a different currency than the currency of the User or User's clients, changes in rates of exchange may have an adverse effect on the value, price or income of or from that investment.

Indexes noted within the report are unmanaged, their returns do not include payment of any sales charges or fees an investor would pay to purchase securities, and cannot be invested in directly.

In certain jurisdictions, the Report contents, except for the Morningstar Analyst Rating and key analysis/opinions, may be shared with the fund company prior to publication. In the unlikely event that Morningstar would change their analysis/opinions and/or the Morningstar Analyst Rating based on feedback as result of such review, the Report would disclose such a fact.

Conflicts of Interest

- Analysts may own (actual or beneficial) interests in the financial products that are the subject of the Report. No material interests are held by Morningstar, the analyst or their immediate family in the financial products that are the subject of the Report.¹
- Analysts' compensation is derived from Morningstar's overall earnings and consists of salary, bonus and in some cases restricted stock. Analysts' receive no compensation or material benefits from product issuers or third parties in connection with the Report.²
- Morningstar does not receive commissions for providing research and does not charge financial product issuers to be rated.
- Analysts may not pursue business and employment opportunities outside Morningstar within the investment industry (including but not limited to, working as a financial planner, an investment adviser or investment adviser representative, a broker-dealer or broker-dealer agent, a financial writer, reporter, or analyst).
- Morningstar may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship and website advertising.
- ► Morningstar affiliates (i.e., its investment management group) may have arrangements with a fund company's affiliate to provide investment consulting advice some of which an analyst may issue an investment research reports on one or more of the fund company's funds. However, analysts do not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them.
- Morningstar, Inc. is a publically traded company (Ticker Symbol: MORN) and thus a fund which is the subject of this Report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s proxy statement, "Security Ownership of Certain Beneficial Owners and Management" section http://investorrelations.morningstar.com/sec.cfm?doctype=Proxy&year=&x=12. A fund's holding of Morningstar stock has no bearing on and is not a requirement for funds Morningstar determines to cover.

Analysts do not have any other material conflicts of interest at the time of publication. Users wishing to obtain further information should contact their local Morningstar office or refer to https://corporate.morningstar.com/us/asp/subject.aspx?xmlfile=540.xml.

¹ The Conflicts of Interest disclosure above also applies to relatives and associates of Manager Research Analysts in India

² The Conflicts of Interest disclosure above also applies to associates of Manager Research Analysts in India. The terms and conditions on which Morningstar Investment Adviser India Private Limited offers Investment Research to clients, varies from client to client, and are detailed in the respective client agreement.

The Morningstar Analyst Rating™

The Morningstar Analyst Rating 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 Five 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.

People

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.

Process

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.

Performance

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 delivering to our expectations.

Price

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 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.

Morningstar Analyst Ratings

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.

₩ 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.

🛂 Silver

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).

Neutral

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/

The Morningstar Rating for Funds

The Morningstar Rating is a proprietary data point that is quantitatively driven. Funds are rated from 1 to 5 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 5 stars and the bottom 10% receive 1 star. Funds are rated for up to three time periods—three, five, and 10 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 Ratings are based entirely on a mathematical evaluation of past performance. Star ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

For Recipients in Australia: This Report has been issued and distributed in Australia by Morningstar Australasia Pty Ltd (ABN: 95 090 665 544; ASFL: 240892). Morningstar Australasia Pty Ltd is the provider of the general advice ('the Service') and takes responsibility for the production of this report. The Service is provided through the research of investment products. To the extent the Report contains general advice it has been prepared without reference to an investor's objectives, financial situation or needs. Investors should consider the advice in light of these matters and, if applicable, the relevant Product Disclosure Statement before making any decision to invest. Refer to our Financial Services Guide (FSG) for more information at www.morningstar.com.au/fsg.pdf.

For Recipients in Hong Kong: The Report is distributed by Morningstar Investment Management Asia Limited, which is regulated by the Hong Kong Securities and Futures Commission to provide services to professional investors only. Neither Morningstar Investment Management Asia Limited, nor its representatives, are acting or will be deemed to be acting as an investment advisor to any recipients of this information unless expressly agreed to by Morningstar Investment Management Asia Limited. For enquiries regarding this research, please contact a Morningstar Investment Management Asia Limited Licensed Representative at https://shareholders.morningstar.com.

For Recipients in India: This Investment Research is issued by Morningstar Investment Adviser India Private Limited. Morningstar Investment Adviser India Private Limited is registered with the Securities and Exchange Board of India (Registration number INA000001357) and provides investment advice and research. Morningstar Investment Adviser India Private Limited has not been the subject of any disciplinary action by SEBI or any other legal/regulatory body. Morningstar Investment Adviser India Private Limited is a wholly owned subsidiary of Morningstar Investment Management LLC. In India, Morningstar Investment Adviser India Private Limited has one associate, Morningstar India Private Limited, which provides data related services, financial data analysis and software development.

The Research Analyst has not served as an officer, director or employee of the fund company within the last 12 months, nor has it or its associates engaged in market making activity for the fund company

For Recipients in Japan: The Report is distributed by Ibbotson Associates Japan, Inc., which is regulated by Financial Services Agency. Neither Ibbotson Associates Japan, Inc., nor its representatives, are acting or will be deemed to be acting as an investment advisor to any recipients of this information.

For Recipients in Singapore: This Report is distributed by Morningstar Investment Adviser Singapore Pte Limited, which is licensed by the Monetary Authority of Singapore to provide financial advisory services in Singapore. Investors should consult a financial adviser regarding the suitability of any investment product, taking into account their specific investment objectives, financial situation or particular needs, before making any investment decisions.

About Morningstar Manager Research

Morningstar Manager Research provides independent, fundamental analysis on managed investment strategies. Analyst views are expressed in the form of Morningstar Analyst Ratings, which are derived through research of five key pillars — Process, Performance, Parent, People, and Price. A global research team issues detailed Analyst Reports on strategies that span vehicle, asset class, and geography. Analyst Ratings are subjective in nature and should not be used as the sole basis for investment decisions. An Analyst Rating is an opinion, not a statement of fact, and is not intended to be nor is a guarantee of future performance.

About Morningstar Manager Research Services

Morningstar Manager Research Services combines the firm's fund research reports, ratings, software, tools, and proprietary data with access to Morningstar's manager research analysts. It complements internal due-diligence functions for institutions such as banks, wealth managers, insurers, sovereign wealth funds, pensions, endowments, and foundations. Morningstar's manager research analysts are employed by various wholly owned subsidiaries of Morningstar, Inc. including but not limited to Morningstar Research Services LLC (USA), Morningstar UK Ltd, and Morningstar Australasia Pty Ltd.

For More Information

Jackie Beard
Director of Manager Research Services, EMEA +44 20 3194-1133



1 Oliver's Yard 55-71 City Road London EC1Y 1HQ

©2019 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses, and opinions presented herein do not constitute investment advice; are provided solely for informational purposes and therefore are not an offer to buy or sell a security; and are not warranted to be correct, complete, or accurate. The opinions expressed are as of the date written and are subject to change without notice. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages, or other losses resulting from, or related to, the information, data, analyses, or opinions or their use. The information contained herein is the proprietary property of Morningstar and may not be reproduced, in whole or in part, or used in any manner, without the prior written consent of Morningstar. To license the research, call +1 312 696-6869.