













## ETF Ranking Methodology & Inputs

factor and can include ETFs without an overall ETF ranking. In cases where sufficient analytical measures are not available on holdings data, the ranking will be displayed as "NA" for Not Available.

ETF are classified by region (e.g., U.S. Domestic Equity or Asia Developed Markets), type or style (Growth, Value or Core), Market Capitalization (Large-Cap, Mid-Cap or Small-Cap), and one of ten GICS sectors.

ETFs are not assigned Buy, Hold or Sell ratings. Overweight, Marketweight and Underweight are not the equivalent of buy, hold and sell recommendations but represent recommended relative weightings (as described above).

For disclosure purposes only and to satisfy regulatory requirement, Overweight ranking corresponds to a buy recommendation; Marketweight to a hold recommendation and Underweight to Sell recommendation. The Overweight/Buy, Marketweight/Hold, and Underweight/Sell ranking distribution is a fixed distribution based on the relative weightings describe above. Overweight/Buy represents 25% of the total distribution and ETFs in the top quartile. Marketweight/Hold represents 50% of the total distribution and ETFs in the 2 middle quartiles. Underweight/Sell represents 25% of the total distribution and ETFs in the bottom quartile.

## Other disclaimers

### About CFRA Equity Research's Distributors:

This report is published and originally distributed by Accounting Research & Analytics, LLC d/b/a CFRA, with the following exceptions: In the UK/EU/EEA, it is published and originally distributed by CFRA UK Limited, an Appointed Representative of Hutchinson Lilley Investments LLP, which is regulated by the Financial Conduct Authority (No. 582181), and in Malaysia by Standard & Poor's Malaysia Sdn. Bhd ("S&P Malaysia"), which is regulated by Securities Commission Malaysia (No. CMSL/A0181/2007), under license from CFRA. These parties and their subsidiaries maintain no responsibility for reports redistributed by third parties such as brokers or financial advisors.

## General Disclaimers

### Notice to all jurisdictions:

**Where ETF Reports are made available in a language other than English** and in the event of inconsistencies between the English and translated versions of a ETF Reports, **the English version will control and supersede any ambiguities associated with any part or section of a ETF Report that has been issued in a foreign language.** Neither CFRA nor its affiliates guarantee the accuracy of the translation.

The content of this report and the opinions expressed herein are those of CFRA based upon publicly-available information that CFRA believes to be reliable and the opinions are subject to change without notice. This analysis has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While CFRA exercised due care in compiling this analysis, CFRA AND ALL RELATED ENTITIES SPECIFICALLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, to the full extent permitted by law, regarding the accuracy, completeness, or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of CFRA. The Content shall not be used for any unlawful or unauthorized purposes. CFRA and any

third-party providers, as well as their directors, officers, shareholders, employees or agents do not guarantee the accuracy, completeness, timeliness or availability of the Content.

**Past performance is not necessarily indicative of future results.** This document may contain forward-looking statements or forecasts; such forecasts are not a reliable indicator of future performance.

This report is not intended to, and does not, constitute an offer or solicitation to buy and sell securities or engage in any investment activity. This report is for informational purposes only. Recommendations in this report are not made with respect to any particular investor or type of investor. Securities, financial instruments or strategies mentioned herein may not be suitable for all investors and this material is not intended for any specific investor and does not take into account an investor's particular investment objectives, financial situations or needs. Before acting on any recommendation in this material, you should consider whether it is suitable for your particular circumstances and, if necessary, seek professional advice.

Additional information on a subject company may be available upon request.

CFRA's financial data provider is S&P Global Market Intelligence. THIS DOCUMENT CONTAINS CONFIDENTIAL AND TRADE SECRET MATERIAL DISTRIBUTED UNDER LICENSE FROM S&P GLOBAL MARKET INTELLIGENCE. FOR RECIPIENT'S INTERNAL USE ONLY.

The Global Industry Classification Standard (GICS®) was developed by and/or is the exclusive property of MSCI and S&P Global Market Intelligence. GICS is a service mark of MSCI and S&P Global Market Intelligence and has been licensed for use by CFRA.

## Other Disclaimers and Notices

Certain information in this report is provided by S&P Global, Inc. and its affiliates and subsidiaries (collectively "S&P Global"). Such information is subject to the following disclaimer and notices: "Copyright © 2017, S&P Global Market Intelligence and its affiliates as applicable). All rights reserved. Nothing contained herein is investment advice and a reference to a particular investment or security or rating or any observation concerning a security or investment provided by S&P Global is not a recommendation to buy, sell or hold such investment or security or make any other investment decisions. This may contain information obtained from third parties, including ratings from credit ratings agencies. Reproduction and distribution of S&P Global's information and third party content in any form is prohibited except with the prior written permission of S&P Global or the related third party, as applicable. Neither S&P Global nor its third party providers guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such information or content. S&P GLOBAL AND ITS THIRD PARTY CONTENT PROVIDERS GIVE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE AND ALL S&P GLOBAL INFORMATION IS PROVIDED ON AN AS-IS BASIS. S&P GLOBAL AND ITS THIRD PARTY CONTENT PROVIDERS SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, EXEMPLARY, COMPENSATORY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, COSTS, EXPENSES, LEGAL FEES, OR LOSSES (INCLUDING LOST INCOME OR PROFITS AND OPPORTUNITY COSTS OR LOSSES CAUSED BY NEGLIGENCE) IN CONNECTION WITH ANY USE OF THEIR INFORMATION OR CONTENT, INCLUDING RATINGS. Credit ratings are statements of opinions and are not statements

of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice."

Certain information in this report may be provided by Securities Evaluations, Inc. ("SE"), a wholly owned subsidiary of Intercontinental Exchange. Such information is subject to the following disclaimers and notices: "Copyright © 2017, Securities Evaluations, Inc. (and its affiliates, as applicable). Reproduction of BondMark and BondScreen in any form is prohibited except with the prior written permission of SE. Odd-lot prices and odd-lot ranges represent an opinion, and not a statement of fact, or a recommendation to make an investment decision, and readers of this information have the right to accept or reject such opinion, at their discretion. Odd-lot prices and odd-lot ranges do not represent a determination of the fair market value of any security or the 'best execution' price in the market for a security, and that readers of this information will be responsible for complying with any applicable best execution requirements, as defined in FINRA Rule 5310, and for complying with any disclosure requirements as may be required under any applicable laws or regulations. None of its affiliates or its suppliers guarantees the accuracy, completeness or availability of any information and is not responsible for any errors or omissions, regardless of the cause or for the results obtained from the use of such information. In no event shall SE, BondDesk Group, LLC, their affiliates or any of their third-party information providers be liable for any damages, costs, expenses, legal fees, or losses (including lost income or lost profit and opportunity costs) in connection with the use of SE content. (2017). BondMark and BondScreen may include data provided by BondDesk Group, LLC."

Any portions of the fund information contained in this report supplied by Lipper, A Thomson Reuters Company, are subject to the following: "Copyright 2017 © Thomson Reuters. All rights reserved. Lipper shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon."

## For residents of the European Union/European Economic Area:

ETF Reports are originally distributed by CFRA UK Limited (company number 08456139 registered in England & Wales with its registered office address at 131 Edgware Road, London, W2 2AP, United Kingdom). CFRA UK Limited is an Appointed Representative of Hutchinson Lilley Investments LLP, which is regulated by the UK Financial Conduct Authority (No. 582181).

**For residents of Malaysia:** ETF Reports are originally distributed by S&P Malaysia, under license from CFRA. S&P Malaysia is regulated by Securities Commission Malaysia (License No. CMSL/A0181/2007).

**For residents of all other countries:** Research reports are originally distributed by CFRA.

ETF reference data is provided by Lipper.

Copyright © 2017 CFRA. All rights reserved.

CFRA and STARS are registered trademarks of CFRA.