

# Double delight: Seizing the dual discount

- Emerging markets equities offer a substantial discount over developed markets
- EM value strategies are currently trading at historically low valuations
- Robeco Quant EM strategies are designed to efficiently capture both market and factor premiums

**Is now the optimal time to invest in emerging markets? Based on historical valuation metrics, both absolute and relative, we firmly believe the answer is 'Yes'. This note outlines the 'double discount' opportunity presented by emerging markets' factor-based equities and discuss how Robeco Quant Equities strategies are poised to leverage this opportunity.**

For more than a decade, investors in developed markets have benefited from a favorable environment of continuously declining – and at times even negative – interest rates. This low interest rate landscape has elevated equity markets, with growth stocks reaching historically high valuations. However, this beneficial scenario has reversed: central banks in developed countries have been forced to raise interest rates rapidly to combat surging inflation, particularly as labor markets remain constrained.<sup>1</sup>

At the beginning of the year, there was anticipation that emerging markets would eclipse developed ones. This expectation was rooted in the belief that emerging markets would outperform once the US Federal Reserve (Fed) had contained inflation and begun to reduce interest rates. However, due to stickier-than-expected inflation, the Fed had to enact higher rate hikes than initially anticipated. Although developed markets have outperformed their emerging counterparts so far this year, we maintain that the investment case for emerging markets remains strong, especially as interest rate policies in both the US and Europe are expected to stabilize for the rest of the year.

Setting aside short-term macroeconomic fluctuations, the medium and long-term investment case for owning or increasing emerging markets equities appears stronger today than at any other point over the last decade. To illustrate, Figure 1 highlights the development of price-to-earnings ratios in both developed and emerging markets. While these ratios moved in parallel during the global financial crisis of 2008 and the subsequent recovery, they began to diverge as interest rates in developed markets plummeted during the European sovereign debt crisis of 2011 and the subsequent initiation of quantitative easing in the US.

<sup>1</sup> A popular question is whether value returns are driven by interest rates changes. Although this relationship has been evident over the 2018-2020 period, it became weaker over the last three years and is much weaker over the long run. See, e.g., Hanauer, M. X, Baltussen, G., Blitz, D., and Schneider, S., November 2022, "Short-sightedness, rates moves and a potential boost for Value".

## ARTICLE SEPTEMBER 2023

Marketing material for professional investors, not for onward distribution



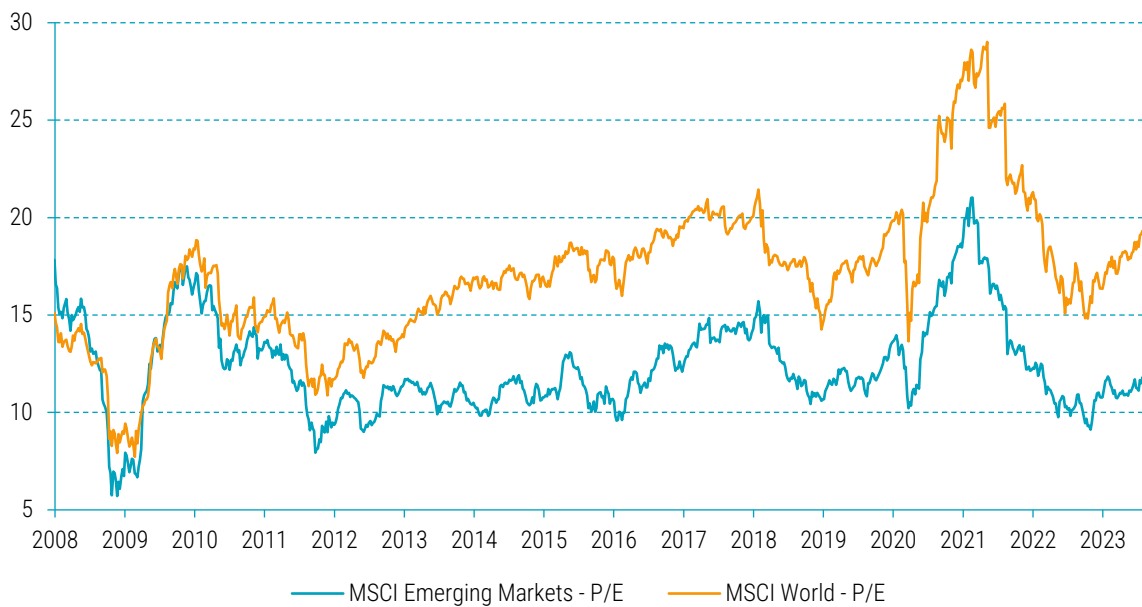
Matthias Hanauer, PhD, CFA  
Quant Selection Research



Jan de Koning, CFA, CAIA  
Head Quant Client Portfolio Management

During this equity boom, large-cap growth stocks, often referred to by catchy acronyms like 'The Magnificent Seven,' 'FANGMAN,' or 'FAANG' in particular, captured Wall Street's attention, leading to inflated valuations. Although the brief bear market of 2022 crushed the valuations of these stocks, resulting in a multiple contraction both in emerging and developed markets, the valuation premium for developed markets remains intact.

Figure 1 – Historical P/E of emerging and developed markets (January 2008 to July 2023)



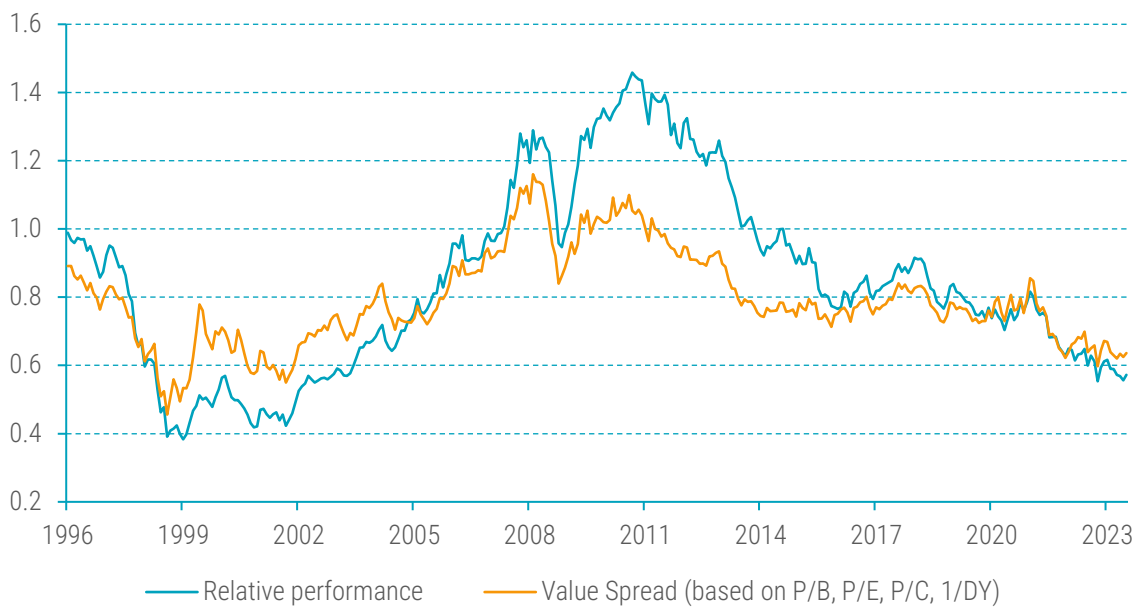
Source: Robeco, MSCI. The figure shows the price-to-earnings (P/E) ratio for the MSCI Emerging Market Index and the MSCI World Index. The sample period is January 2008 to July 2023.

### A new dawn for emerging markets?

For the past decade, the perceived underperformance of emerging markets relative to developed ones has led to skepticism about the viability of an emerging market risk premium. However, the situation is more nuanced than it initially seems. Changes in relative valuations between these two kinds of markets have significantly impacted their comparative performance.

Illustrated in Figure 2, our data shows that emerging markets outperformed developed ones from 1999 to 2011 but have lagged behind since. The data also reveals that emerging markets tend to outperform when they become relatively more expensive than developed markets and underperform when they become cheaper. Currently, the value spread between emerging and developed markets is at levels last seen 20 years ago – right when emerging markets began to outperform their developed counterparts.

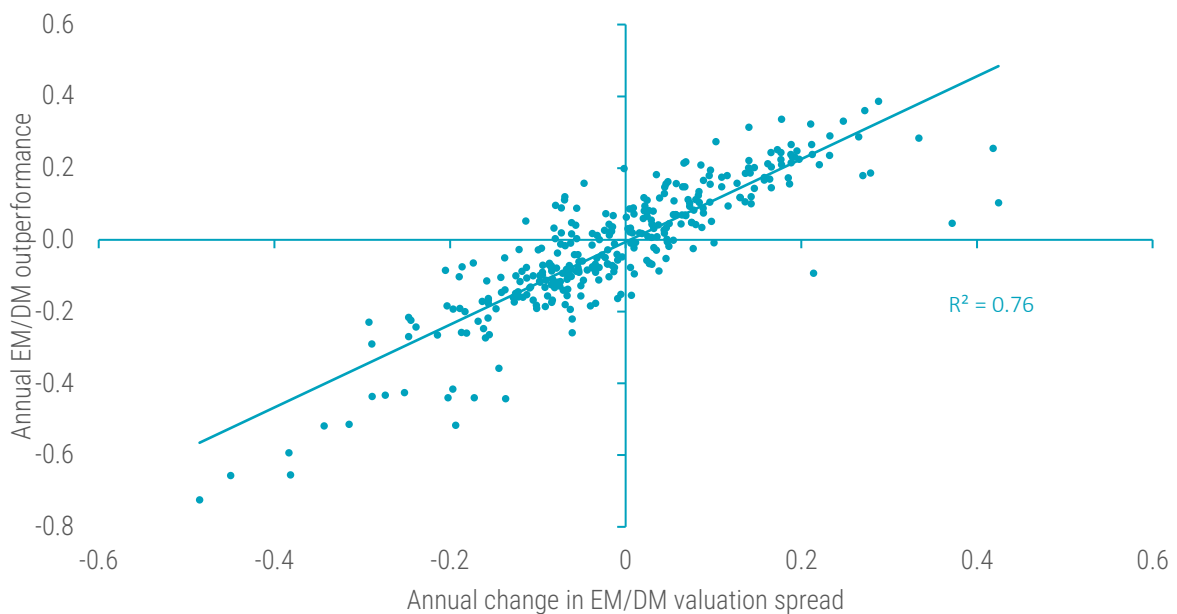
**Figure 2** – Relative performance and valuation of emerging markets versus developed markets (January 1996 to July 2023)



**Source:** Robeco, MSCI. The figure shows the relative performance and valuation spread of the MSCI Emerging Market Index vs. the MSCI World Index. Performance is measured via the total return index, and the valuation spread is based on four bottom-up-calculated multiples (price-to-book, price-to-earnings, price-to-cash EPS, and price-to-dividend). For each multiple, the valuation ratio of the MSCI Emerging Markets Index is divided by the same valuation ratio for the MSCI World Index. The sample period is January 1996 to July 2023.

In essence, the decline of emerging markets over the past decade has been more a function of changes in relative valuation rather than deteriorating fundamentals. In fact, annual fluctuations in these valuations account for over 75% of the variation in performance between emerging and developed markets, as seen in Figure 3.

**Figure 3** – Relative performance and valuation of emerging versus developed markets



**Source:** Robeco, MSCI. The figure shows the relationship between the relative performance and changes in valuation spreads for the MSCI Emerging Market Index versus the MSCI World Index. Relative performance is the continuously compounded 12-month relative performance, while the change in the valuation spread is the log of the ending value spread minus the log of the starting valuation spread. Performance is

measured via the total return index and the valuation spread is based on four bottom-up-calculated multiples (price-to-book, price-to-earnings, price-to-cash EPS, and price-to-dividend). For each multiple, the valuation ratio of the MSCI Emerging Markets Index is divided by the same valuation ratio for the MSCI World Index. The sample period is January 1996 to July 2023.

While the possibility of emerging markets becoming even cheaper cannot be ruled out, the current valuation is as attractive as it was in early 2000. A convergence in relative valuations in the coming months and years, which some anticipate, could mean emerging markets substantially outperforming their developed counterparts.

### The double discount: finding value in undervalued emerging markets?

Understanding market-wide valuation differences is crucial, but it's equally important to consider valuation discrepancies within a particular market. We have extensively analyzed the 'value of value' in both developed and emerging markets in the last three years.<sup>2</sup> Figure 4 shows this valuation spread for developed and emerging markets, meaning the differences in valuation multiples of value and growth stocks.

As we control for valuation differences normally observed between both portfolios, a valuation spread above one indicates cheapness, while a reading below one implies that value stocks are relatively expensive from a historical perspective.<sup>3</sup> While the poor performance delivered by value strategies from 2018 to 2020 was accompanied by an extreme widening of the value spreads, these have shrunk only modestly during the strong comeback of the last three years. More specifically, the spreads were still wider at the end of July 2023 than at the beginning of the value winter in 2018. While in developed markets the spread is about 1.5x wider than "normal", the spread in emerging markets is still twice as wide.

Furthermore, the current spreads are about as wide as they were at the peak of the dot-com bubble in 2000. This leads us to the view that emerging markets exhibit not only an attractive valuation compared to developed markets, but also that valuation differences are very pronounced *within* emerging markets: value in emerging markets comes cheap.

<sup>2</sup> Cf., Hanauer, M. X., and Schneider, S., May 2021, "Spring has sprung for Value investing", Baltussen, G., Hanauer, M. X., Schneider, S., and Swinkels, L., September 2021, "What valuations and interest rates tell us about equity factors", or Hanauer, M. X., Baltussen, G., Blitz, D., and Schneider, S., November 2022, "Short-sightedness, rates moves and a potential boost for Value".

<sup>3</sup> We define value and the value spread as in Blitz, D. C., and Hanauer, M. X., January 2021, "Resurrecting the value premium", *Journal of Portfolio Management*. More specifically, the value strategy is based on a composite of book-to-market (R&D adjusted), EBITDA/EV, CF/P, and NPY. Value stocks are sorted into quintile portfolios based on the valuation composite and in a region and sector respectively country neutral manner for developed and emerging markets. Quintile portfolios are equal-weighted and reformed monthly. The value spread is expressed as the ratio of a basket of valuation multiples of the top and bottom quintile value portfolios. We control for value spread differences that are normally observed between both portfolios, such that a value spread above one indicates cheapness. Since cheap stocks by definition have higher fundamental value to price ratios than their expensive peers, it is particularly important for the value factor to scale the value spread by its historical normal level.

Figure 4 – Value trading at a historic discount in developed markets and even more so in emerging markets



**Source:** Robeco, Refinitiv. The figure shows the valuation spread between the top and bottom quintile portfolios of a value strategy for developed and emerging markets. Details regarding the definition of the value strategy and the valuation spread are provided in footnote 3. The investment universe consists of constituents of the MSCI World and MSCI Emerging Markets indices. Before 2001, we use the FTSE World Developed Index for developed markets (going back to December 1985), and for emerging markets, the largest 800 constituents of the S&P Emerging BMI at the semi-annual index rebalance (going back to December 1995). The sample period is December 1985 and December 1995 to July 2023 for developed and emerging markets, respectively.

**Good times ahead**

Why is it that despite a recent recovery in value, these stocks are still trading at a considerable discount compared to their 2018 levels? While changes in the value spread account for a significant part of the returns, they don't explain the entire picture. Other factors – such as carry (+), portfolio migration (+), and change in fundamentals – also contribute to what we call the 'structural alpha', a more stable component of returns.<sup>4</sup> In contrast, the revaluation alpha stems from changes in the value spread. Regressing continuously compounded annual value returns on annual changes in the log value spread helps us to disentangle the two components:

$$\text{Annual value return} = 11.19\% \text{ structural alpha} - 0.45 * \text{change in value spread revaluation alpha}$$

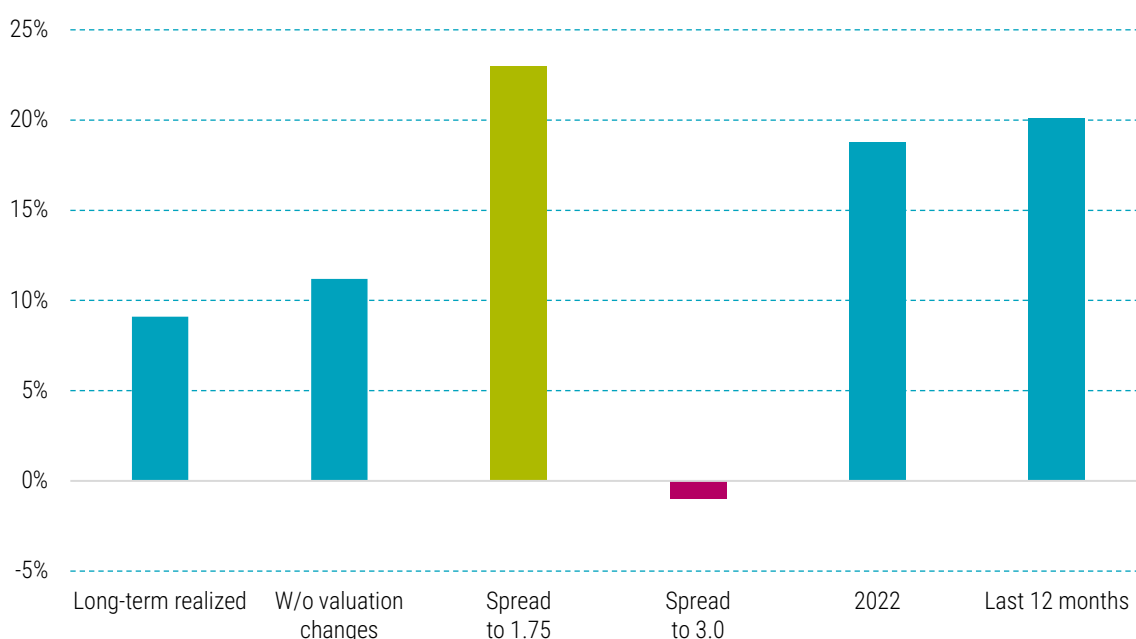
We observe a robust negative relationship between value returns and changes in the value spread, with the latter accounting for roughly one-third of the variation in the former. Crucially, we estimate the structural alpha (the intercept of the regression) to be more than 11%. This can be interpreted as a cleaner estimate of the value premium for a hypothetical long-minus-short value factor, given that it is purged of the time-varying effects of multiple expansions and compressions. This is why we expect high positive value returns even if the value spread remains at current elevated levels. At more than 11%, the structural alpha is even higher than the average realized value return (9.11%, continuously compounded) over our sample period. This is due to the substantial net spread widening that occurred over this interval, as shown in Figure 4.

<sup>4</sup> For details regarding these components and the following analysis we refer to Hanauer, M. X, Baltussen, G., Blitz, D., and Schneider, S., November 2022, "Short-sightedness, rates moves and a potential boost for Value".

This analysis also allows us to form medium-term return expectations for the value factor based on changes in the value spread, for example, if it reverts toward its long-term average. Given the relationship estimated above and the current value spread of 2.28, we can conduct a scenario analysis for the expected top-minus-bottom value portfolio (continuously compounded) return over the next 12 months as outlined below:

- The value spread reverts to 1.75 as at September 2019 (pre-Covid level).
- The value spread widens back to 3.0, exceeding its previous all-time high of 2.82 as at December 2021.
- Because these returns represent top-minus-bottom gross returns, we add the top-minus-bottom returns for 2022 and the last 12 months for reference purposes.

**Figure 5** - Return expectations of the value premium in emerging markets – July 2023 (current spread 2.28)



**Source:** The chart shows the continuously compounded annual value return over the full sample, the expected value return assuming no changes in the value spread and assuming that the value spread will go to 1.75 and 3.0 within the next 12 months. Furthermore, we show the continuously compounded annual value return for 2022 and the last 12 months. The relation between expected value returns and changes in the valuation spread are derived from a regression of the continuously compounded annual value returns on the annual changes in the log value spread. The investment universe consists of constituents of the MSCI Emerging Markets Index. Before 2001, we use the largest 800 constituents of the S&P Emerging BMI at the semi-annual index rebalance (going back to December 1995). The sample period is January 1996 to July 2023.

In Figure 5 we show that the strong value returns generated over the last years might not be fleeting. If valuations revert to more ‘normal’ levels, these stocks could deliver similar or higher gains than those we have seen since the value rotation started. Conversely, we would expect the value factor to deliver slightly lower but still very solid returns if valuation levels remain elevated, although we cannot rule out the possibility of value spreads widening substantially from current levels. This would result in lower expected value returns over the next 12 months.

### Realistic expectations for value factor returns

It is important to acknowledge that these numbers only apply to a hypothetical, equally weighted long-minus-short value factor. In practical terms, these estimates need to be adjusted accordingly for several reasons:

- The short side's contribution is limited in long-only strategies, which are usually benchmarked against a value-weighted index.
- The calculations do not account for transaction costs.
- The actual returns from an investment will depend on its specific exposure to the value factor.

For context, in 2022, the value factor contributed about 1% and 3% to our Enhanced Indexing and Active Quant Emerging Markets strategies, respectively.

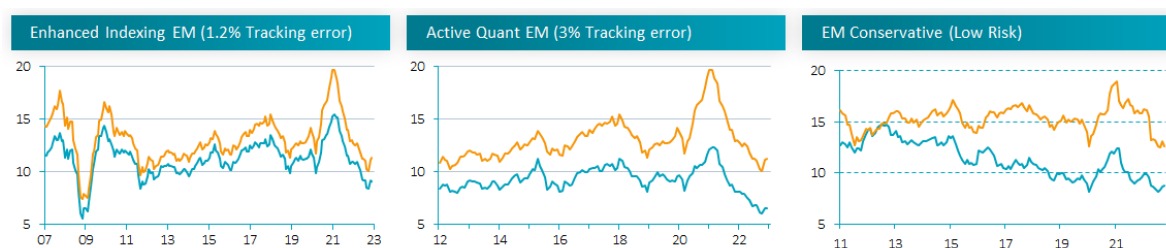
### Seizing the double discount

To leverage the double discount currently available in emerging markets, investors should adopt a systematic approach to value investing. At Robeco, we've provided clients with access to emerging markets portfolios designed to capture the value premium since 2007. Our offerings range from Enhanced Indexing Emerging Markets portfolios with a tracking error of around 1.2% to Active Quant Emerging Markets portfolios with a tracking error of around 3%. These strategies incorporate multiple factors, such as value, quality, momentum, analyst revisions and novel next-gen factors and have a proven track record dating back to 2007 and 2008.

Although all our strategies integrate various dimensions of sustainability while aiming to deliver a strong excess return, Robeco also has Enhanced Indexing and Active Quant EM strategies (also for mandates) available that specifically aim to deliver high risk-adjusted returns while targeting significant improvement of sustainable investment dimensions versus the benchmark.

For investors looking to capture emerging markets premiums with lower volatility, our EM Conservative Equities strategy aims to match or exceed benchmark returns while reducing downside risk. This strategy favors stocks with low historical and forward-looking risk profiles, high dividend yields, attractive valuation, strong momentum and positive analyst revisions. As shown in Figure 6 these strategies managed – since their inception dates – to deliver a consistent exposure to various value factors.

**Figure 6** - Consistent value exposure for Robeco EM flagship strategies as measured by P/E



**Source:** Robeco. Graphs highlight the historical P/E of the respective Robeco strategy (blue line) versus the benchmark (orange line), whereby for the left and middle graph the benchmark is MSCI Emerging Markets and for graph right the MSCI Emerging Markets Minimum Volatility index.

### Conclusion

The adage 'To a man with a hammer, everything looks like a nail' can apply to asset managers, who are often perpetually bullish on their asset classes. While it's true that emerging markets have gained attractiveness over recent years, the current 'double discount' is a unique opportunity. Historically, these markets have yielded respectable returns when valuation metrics reached current levels. As central banks in the US and Europe near the end of their monetary tightening cycles, we believe an exceptional buying opportunity is emerging for the astute investor.

For more information on Robeco Quant Emerging Markets strategies please see Figure 7 below and consult your Robeco contact person for further information.

Figure 7 - Product overview Robeco Quant Emerging Markets strategies

	Enhanced Indexing		Active Quant			Conservative	
	Emerging Markets	Emerging Markets Sustainable	Emerging Markets	Emerging Markets Sustainable	Chinese A-share Active	Emerging Markets	Chinese A-share Active
	Efficient alternative to passive investing		Complementary to fundamental investing			Defensive & higher income	
Performance objective	High Information ratio & consistent outperformance		High Information ratio & higher outperformance			High Sharpe ratio & downside protection	
Factors	Value, Momentum, Quality, Analyst Revisions & Short-term timing		Value, Momentum, Quality, Analyst Revisions & Short-term timing			Low-risk, Income and Sentiment*	
Benchmark	MSCI EM	MSCI EM	MSCI EM	MSCI EM	MSCI China A International	MSCI EM	MSCI China A International
Information Ratio Target	1.0	0.7	0.8	0.7	0.8	-	-
Tracking error**	1.2%	1.5%	3%	3%	3%	Unbound	Unbound
ESG profile	Better than index	10% better than index	Better than index	10% better than index	Better than index	Better than index	Better than index
Exclusions	Level 1	Level 2	Level 1	Level 2	Level 1	Level 1	Level 1
Active ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Carbon reduction versus index	similar	30% lower	similar	30% lower	similar	Similar	Similar
SDG exclusions***	-	Worst scoring	-	Worst scoring	-	-	-
SFDR Classification	8	8	8	8	8	8	8
# stocks in portfolio	500	400	250	180	200	200 - 250	100 - 150
Active share**	35%	45%	70%	70%	50%	85%	85%
Max off-benchmark	5%	5%	20%	20%	20%	30%	30%
Country/sector limit	0.3%/1%	0.3%/2%	2%/2%	2%/2.5%	-/3%	10%/10%	10%/10%
Inception date	May 2007	September 2019	January 2008	July 2017	November 2017	February 2011	August 2018
Customization	Tracking Error Investment Universe Sustainability profile		Tracking Error Investment Universe Sustainability profile			Investment Universe Sustainability profile	

\* Within Conservative Equities, Robeco refers to value & quality as Income and, momentum & revisions as Sentiment. \*\* expected average/level \*\*\*based on Robeco proprietary UN SDG framework, scoring companies -3 to +3 on UN SDGs, worst scoring refers to -3 and -2.



### Important information

Robeco Institutional Asset Management B.V. has a license as manager of Undertakings for Collective Investment in Transferable Securities (UCITS) and Alternative Investment Funds (AIFs) ("Fund(s)") from the Netherlands Authority for the Financial Markets in Amsterdam. This marketing document is intended solely for professional investors, defined as investors qualifying as professional clients, who have requested to be treated as professional clients or are authorized to receive such information under any applicable laws. Robeco Institutional Asset Management B.V. and/or its related, affiliated and subsidiary companies, ("Robeco"), will not be liable for any damages arising out of the use of this document. Users of this information who provide investment services in the European Union have their own responsibility to assess whether they are allowed to receive the information in accordance with MiFID II regulations. To the extent this information qualifies as a reasonable and appropriate minor non-monetary benefit under MiFID II, users that provide investment services in the European Union are responsible for complying with applicable recordkeeping and disclosure requirements. The content of this document is based upon sources of information believed to be reliable and comes without warranties of any kind. Without further explanation this document cannot be considered complete. Any opinions, estimates or forecasts may be changed at any time without prior warning. If in doubt, please seek independent advice. This document is intended to provide the professional investor with general information about Robeco's specific capabilities but has not been prepared by Robeco as investment research and does not constitute an investment recommendation or advice to buy or sell certain securities or investment products or to adopt any investment strategy or legal, accounting or tax advice. All rights relating to the information in this document are and will remain the property of Robeco. This material may not be copied or shared with the public. No part of this document may be reproduced or published in any form or by any means without Robeco's prior written permission. Investment involves risks. Before investing, please note the initial capital is not guaranteed. Investors should ensure they fully understand the risk associated with any Robeco product or service offered in their country of domicile. Investors should also consider their own investment objective and risk tolerance level. Historical returns are provided for illustrative purposes only. The price of units may go down as well as up and past performance is no guarantee of future results. If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. The performance data do not take account of the commissions and costs incurred when trading securities in client portfolios or for the issue and redemption of units. Unless otherwise stated, performances are i) net of fees based on transaction prices and ii) with dividends reinvested. Please refer to the prospectus of the Funds for further details. Performance is quoted net of investment management fees. The ongoing charges mentioned in this document are the ones stated in the Fund's latest annual report at closing date of the last calendar year. This document is not directed to or intended for distribution to or for 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, document, availability or use would be contrary to law or regulation or which would subject any Fund or Robeco Institutional Asset Management B.V. to any registration or licensing requirement within such jurisdiction. Any decision to subscribe for interests in a Fund offered in a particular jurisdiction must be made solely on the basis of information contained in the prospectus, which information may be different from the information contained in this document. Prospective applicants for shares should inform themselves as to legal requirements which may also apply and any applicable exchange control regulations and taxes in the countries of their respective citizenship, residence or domicile. The Fund information, if any, contained in this document is qualified in its entirety by reference to the prospectus, and this document should, at all times, be read in conjunction with the prospectus. Detailed information on the Fund and associated risks is contained in the prospectus. The prospectus and the Key Information Document (PRIIP) for the Robeco Funds can all be obtained free of charge from Robeco's websites.

### Additional information for US investors

Robeco is considered "participating affiliate" and some of their employees are "associated persons" of Robeco Institutional Asset Management US Inc. ("RIAM US") as per relevant SEC no-action guidance. Employees identified as associated persons of RIAM US perform activities directly or indirectly related to the investment advisory services provided by RIAM US. In those situations these individuals are deemed to be acting on behalf of RIAM US, a US SEC registered investment adviser. SEC regulations are applicable only to clients, prospects and investors of RIAM US. RIAM US is a wholly owned subsidiary of ORIX Corporation Europe N.V. and offers investment advisory services to institutional clients in the US.

### Additional information for US Offshore investors – Reg S

The Robeco Capital Growth Funds have not been registered under the United States Investment Company Act of 1940, as amended, nor the United States Securities Act of 1933, as amended. None of the shares may be offered or sold, directly or indirectly in the United States or to any US Person. A US Person is defined as (a) any individual who is a citizen or resident of the United States for federal income tax purposes; (b) a corporation, partnership or other entity created or organized under the laws of or existing in the United States; (c) an estate or trust the income of which is subject to United States federal income tax regardless of whether such income is effectively connected with a United States trade or business. In the United States, this material may be distributed only to a person who is a "distributor", or who is not a "US person", as defined by Regulation S under the U.S. Securities Act of 1933 (as amended).

### Additional information for investors with residence or seat in Australia and New Zealand

This document is distributed in Australia by Robeco Hong Kong Limited (ARBN 156 512 659) ("RIAM BV"), which is exempt from the requirement to hold an Australian financial services license under the Corporations Act 2001 (Cth) pursuant to ASIC Class Order 03/1103. Robeco is regulated by the Securities and Futures Commission under the laws of Hong Kong and those laws may differ from Australian laws. This document is distributed only to "wholesale clients" as that term is defined under the Corporations Act 2001 (Cth). This document is not intended for distribution or dissemination, directly or indirectly, to any other class of persons. In New Zealand, this document is only available to wholesale investors within the meaning of clause 3(2) of Schedule 1 of the Financial Markets Conduct Act 2013 (FMCA). This document is not intended for public distribution in Australia and New Zealand.

### Additional information for investors with residence or seat in Austria

This information is solely intended for professional investors or eligible counterparties in the meaning of the Austrian Securities Oversight Act.

### Additional information for investors with residence or seat in Brazil

The Fund may not be offered or sold to the public in Brazil. Accordingly, the Fund has not been nor will be registered with the Brazilian Securities Commission (CVM), nor has it been submitted to the foregoing agency for approval. Documents relating to the Fund, as well as the information contained therein, may not be supplied to the public in Brazil, as the offering of the Fund is not a public offering of securities in Brazil, nor may they be used in connection with any offer for subscription or sale of securities to the public in Brazil.

### Additional information for investors with residence or seat in Brunei

The Prospectus relates to a private collective investment scheme which is not subject to any form of domestic regulations by the Autoriti Monetari Brunei Darussalam ("Authority"). The Prospectus is intended for distribution only to specific classes of investors as specified in section 20 of the Securities Market Order, 2013, and must not, therefore, be delivered to, or relied on by, a retail client. The Authority is not responsible for reviewing or verifying any prospectus or other documents in connection with this collective investment scheme. The Authority has not approved the Prospectus or any other associated documents nor taken any steps to verify the information set out in the Prospectus and has no responsibility for it. The units to which the Prospectus relates may be illiquid or subject to restrictions on their resale. Prospective purchasers of the units offered should conduct their own due diligence on the units.

### Additional information for investors with residence or seat in Canada

No securities commission or similar authority in Canada has reviewed or in any way passed upon this document or the merits of the securities described herein, and any representation to the contrary is an offence. Robeco Institutional Asset Management B.V. relies on the international dealer and international adviser exemption in Quebec and has appointed McCarthy Tétrault LLP as its agent for service in Quebec.

### Additional information for investors with residence or seat in the Republic of Chile

Neither Robeco nor the Funds have been registered with the *Comisión para el Mercado Financiero* pursuant to Law no. 18.045, the *Ley de Mercado de Valores* and regulations thereunder. This document does not constitute an offer of or an invitation to subscribe for or purchase shares of the Funds in the Republic of Chile, other than to the specific person who individually requested this information on their own initiative. This may therefore be treated as a "private offering" within the meaning of Article 4 of the *Ley de Mercado de Valores* (an offer that is not addressed to the public at large or to a certain sector or specific group of the public).

### Additional information for investors with residence or seat in Colombia

This document does not constitute a public offer in the Republic of Colombia. The offer of the fund is addressed to less than one hundred specifically identified investors. The fund may not be promoted or marketed in Colombia or to Colombian residents, unless such promotion and marketing is made in compliance with Decree 2555 of 2010 and other applicable rules and regulations related to the promotion of foreign funds in Colombia. The distribution of this Prospectus and the offering of Shares may be restricted in certain jurisdictions. The information contained in this Prospectus is for general guidance only, and it is the responsibility of any person or persons in possession of this Prospectus and wishing to make application for Shares to inform themselves of, and to observe, all applicable laws and regulations of any relevant jurisdiction. Prospective applicants for Shares should inform themselves of any applicable legal requirements, exchange control regulations and applicable taxes in the countries of their respective citizenship, residence or domicile.

### Additional information for investors with residence or seat in the Dubai International Financial Centre (DIFC), United Arab Emirates

This material is distributed by Robeco Institutional Asset Management B.V. (DIFC Branch) located at Office 209, Level 2, Gate Village Building 7, Dubai International Financial Centre, Dubai, PO Box 482060, UAE. Robeco Institutional Asset Management B.V. (DIFC Branch) is regulated by the Dubai Financial Services Authority ("DFSA") and only deals with Professional Clients or Market Counterparties and does not deal with Retail Clients as defined by the DFSA.

### Additional information for investors with residence or seat in France

Robeco Institutional Asset Management B.V. is at liberty to provide services in France. Robeco France is a subsidiary of Robeco whose business is based on the promotion and distribution of the group's funds to professional investors in France.

### Additional information for investors with residence or seat in Germany

This information is solely intended for professional investors or eligible counterparties in the meaning of the German Securities Trading Act.

### Additional information for investors with residence or seat in Hong Kong

The contents of this document have not been reviewed by the Securities and Futures Commission ("SFC") in Hong Kong. If there is any doubt about any of the contents of this document, independent professional advice should be obtained. This document has been distributed by Robeco Hong Kong Limited ("Robeco"). Robeco is regulated by the SFC in Hong Kong.

### Additional information for investors with residence or seat in Indonesia

The Prospectus does not constitute an offer to sell nor a solicitation to buy securities in Indonesia.

**Additional information for investors with residence or seat in Italy**

This document is considered for use solely by qualified investors and private professional clients (as defined in Article 26 (1) (b) and (d) of Consob Regulation No. 16190 dated 29 October 2007). If made available to Distributors and individuals authorized by Distributors to conduct promotion and marketing activity, it may only be used for the purpose for which it was conceived. The data and information contained in this document may not be used for communications with Supervisory Authorities. This document does not include any information to determine, in concrete terms, the investment inclination and, therefore, this document cannot and should not be the basis for making any investment decisions.

**Additional information for investors with residence or seat in Japan**

This document is considered for use solely by qualified investors and is distributed by Robeco Japan Company Limited, registered in Japan as a Financial Instruments Business Operator, [registered No. the Director of Kanto Local Financial Bureau (Financial Instruments Business Operator), No.2780, Member of Japan Investment Advisors Association].

**Additional information for investors with residence or seat in South Korea**

The Management Company is not making any representation with respect to the eligibility of any recipients of the Prospectus to acquire the Shares therein under the laws of South Korea, including but not limited to the Foreign Exchange Transaction Act and Regulations thereunder. The Shares have not been registered under the Financial Investment Services and Capital Markets Act of Korea, and none of the Shares may be offered, sold or delivered, or offered or sold to any person for re-offering or resale, directly or indirectly, in South Korea or to any resident of South Korea except pursuant to applicable laws and regulations of South Korea.

**Additional information for investors with residence or seat in Liechtenstein**

This document is exclusively distributed to Liechtenstein-based, duly licensed financial intermediaries (such as banks, discretionary portfolio managers, insurance companies, fund of funds) which do not intend to invest on their own account into Fund(s) displayed in the document. This material is distributed by Robeco Switzerland Ltd, postal address: Josefstrasse 218, 8005 Zurich, Switzerland. LGT Bank Ltd., Herrengasse 12, FL-9490 Vaduz, Liechtenstein acts as the representative and paying agent in Liechtenstein. The prospectus, the Key Information Documents (PRIIP) the articles of association, the annual and semi-annual reports of the Fund(s) may be obtained from the representative or via the website.

**Additional information for investors with residence or seat in Malaysia**

Generally, no offer or sale of the Shares is permitted in Malaysia unless where a Recognition Exemption or the Prospectus Exemption applies: NO ACTION HAS BEEN, OR WILL BE, TAKEN TO COMPLY WITH MALAYSIAN LAWS FOR MAKING AVAILABLE, OFFERING FOR SUBSCRIPTION OR PURCHASE, OR ISSUING ANY INVITATION TO SUBSCRIBE FOR OR PURCHASE OR SALE OF THE SHARES IN MALAYSIA OR TO PERSONS IN MALAYSIA AS THE SHARES ARE NOT INTENDED BY THE ISSUER TO BE MADE AVAILABLE, OR MADE THE SUBJECT OF ANY OFFER OR INVITATION TO SUBSCRIBE OR PURCHASE, IN MALAYSIA. NEITHER THIS DOCUMENT NOR ANY DOCUMENT OR OTHER MATERIAL IN CONNECTION WITH THE SHARES SHOULD BE DISTRIBUTED, CAUSED TO BE DISTRIBUTED OR CIRCULATED IN MALAYSIA. NO PERSON SHOULD MAKE AVAILABLE OR MAKE ANY INVITATION OR OFFER OR INVITATION TO SELL OR PURCHASE THE SHARES IN MALAYSIA UNLESS SUCH PERSON TAKES THE NECESSARY ACTION TO COMPLY WITH MALAYSIAN LAWS.

**Additional information for investors with residence or seat in Mexico**

The funds have not been and will not be registered with the National Registry of Securities or maintained by the Mexican National Banking and Securities Commission and, as a result, may not be offered or sold publicly in Mexico. Robeco and any underwriter or purchaser may offer and sell the funds in Mexico on a private placement basis to Institutional and Accredited Investors, pursuant to Article 8 of the Mexican Securities Market Law.

**Additional information for investors with residence or seat in Peru**

The Superintendencia del Mercado de Valores (SMV) does not exercise any supervision over this Fund and therefore the management of it. The information the Fund provides to its investors and the other services it provides to them are the sole responsibility of the Administrator. This Prospectus is not for public distribution.

**Additional information for investors with residence or seat in Singapore**

This document has not been registered with the Monetary Authority of Singapore ("MAS"). Accordingly, this document may not be circulated or distributed directly or indirectly to persons in Singapore other than (i) to an institutional investor under Section 304 of the SFA, (ii) to a relevant person pursuant to Section 305(1), or any person pursuant to Section 305(2), and in accordance with the conditions specified in Section 305, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. The contents of this document have not been reviewed by the MAS. Any decision to participate in the Fund should be made only after reviewing the sections regarding investment considerations, conflicts of interest, risk factors and the relevant Singapore selling restrictions (as described in the section entitled "Important information for Singapore Investors") contained in the prospectus. Investors should consult their professional adviser if you are in doubt about the stringent restrictions applicable to the use of this document, regulatory status of the Fund, applicable regulatory protection, associated risks and suitability of the Fund to your objectives. Investors should note that only the Sub-Funds listed in the appendix to the section entitled "Important information for Singapore Investors" of the prospectus ("Sub-Funds") are available to Singapore investors. The Sub-Funds are notified as restricted foreign schemes under the Securities and Futures Act, Chapter 289 of Singapore ("SFA") and invoke the exemptions from compliance with prospectus registration requirements pursuant to the exemptions under Section 304 and Section 305 of the SFA. The Sub-Funds are not authorized or recognized by the MAS and shares in the Sub-Funds are not allowed to be offered to the retail public in Singapore. The prospectus of the Fund is not a prospectus as defined in the SFA. Accordingly, statutory liability under the SFA in relation to the content of prospectuses does not apply. The Sub-Funds may only be promoted exclusively to persons who are sufficiently experienced and sophisticated to understand the risks involved in investing in such schemes, and who satisfy certain other criteria provided under Section 304, Section 305 or any other applicable provision of the SFA and the subsidiary legislation enacted thereunder. You should consider carefully whether the investment is suitable for you. Robeco Singapore Private Limited holds a capital markets services license for fund management issued by the MAS and is subject to certain clientele restrictions under such license.

**Additional information for investors with residence or seat in Spain**

Robeco Institutional Asset Management B.V., Sucursal en España with identification number W0032687F and having its registered office in Madrid at Calle Serrano 47-14º, is registered with the Spanish Commercial Registry in Madrid, in volume 19.957, page 190, section 8, sheet M-351927 and with the National Securities Market Commission (CNMV) in the Official Register of branches of European investment services companies, under number 24. The investment funds or SICAV mentioned in this document are regulated by the corresponding authorities of their country of origin and are registered in the Special Registry of the CNMV of Foreign Collective Investment Institutions marketed in Spain.

**Additional information for investors with residence or seat in South Africa**

Robeco Institutional Asset Management B.V. is registered and regulated by the Financial Sector Conduct Authority in South Africa.

**Additional information for investors with residence or seat in Switzerland**

The Fund(s) are domiciled in Luxembourg. This document is exclusively distributed in Switzerland to qualified investors as defined in the Swiss Collective Investment Schemes Act (CISA). This material is distributed by Robeco Switzerland Ltd, postal address: Josefstrasse 218, 8005 Zurich. ACOLIN Fund Services AG, postal address: Leutschenbachstrasse 50, 8050 Zürich, acts as the Swiss representative of the Fund(s). UBS Switzerland AG, Bahnhofstrasse 45, 8001 Zurich, postal address: Europastrasse 2, P.O. Box, CH-8152 Opfikon, acts as the Swiss paying agent. The prospectus, the Key Information Documents (PRIIP), the articles of association, the annual and semi-annual reports of the Fund(s), as well as the list of the purchases and sales which the Fund(s) has undertaken during the financial year, may be obtained, on simple request and free of charge, at the office of the Swiss representative ACOLIN Fund Services AG. The prospectuses are also available via the website.

**Additional information relating to RobecoSAM-branded funds/services**

Robeco Switzerland Ltd, postal address Josefstrasse 218, 8005 Zurich, Switzerland has a license as asset manager of collective assets from the Swiss Financial Market Supervisory Authority FINMA. The RobecoSAM brand is a registered trademark of Robeco Holding B.V. The brand RobecoSAM is used to market services and products which entail Robeco's expertise on Sustainable Investing (SI). The brand RobecoSAM is not to be considered as a separate legal entity.

**Additional information for investors with residence or seat in Taiwan**

The contents of this document have not been reviewed by any regulatory authority in Hong Kong. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice. This document has been distributed by Robeco Hong Kong Limited ("Robeco"). Robeco is regulated by the Securities and Futures Commission in Hong Kong.

**Additional information for investors with residence or seat in Thailand**

The Prospectus has not been approved by the Securities and Exchange Commission which takes no responsibility for its contents. No offer to the public to purchase the Shares will be made in Thailand and the Prospectus is intended to be read by the addressee only and must not be passed to, issued to, or shown to the public generally.

**Additional information for investors with residence or seat in the United Arab Emirates**

Some Funds referred to in this marketing material have been registered with the UAE Securities and Commodities Authority ("the Authority"). Details of all Registered Funds can be found on the Authority's website. The Authority assumes no liability for the accuracy of the information set out in this material/document, nor for the failure of any persons engaged in the investment Fund in performing their duties and responsibilities.

**Additional information for investors with residence or seat in the United Kingdom**

Robeco is deemed authorized and regulated by the Financial Conduct Authority. Details of the Temporary Permissions Regime, which allows EEA-based firms to operate in the UK for a limited period while seeking full authorization, are available on the Financial Conduct Authority's website.

**Additional information for investors with residence or seat in Uruguay**

The sale of the Fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627. The Fund must not be offered or sold to the public in Uruguay, except under circumstances which do not constitute a public offering or distribution under Uruguayan laws and regulations. The Fund is not and will not be registered with the Financial Services Superintendency of the Central Bank of Uruguay. The Fund corresponds to investment funds that are not investment funds regulated by Uruguayan law 16,774 dated 27 September 1996, as amended.