



Trade and trust

- At an inflection point around monetary, fiscal and geopolitical policies
- The credit and business cycles still need to unwind a bit further
- Central banks are driving markets like never before

The Robeco Multi-Asset team has just issued its latest 5year Expected Returns publication, entitled 'The Age of Confusion'. The report reflects on the many cyclical, secular and geopolitical inflection points we need to juggle as market participants. The Credit team agrees.

One example is the fact that global supply chains only work in peace time. 'Eurussia' no longer works, and Chimerica, the largest bilateral relationship in the world, needs watching carefully. The theory of trade expectations tells us that trade works if there is trust. We are now entering a phase of deglobalization or — as the Global Macro team prefers to phrase it — re-globalization along the lines of emerging military alliances.

These secular trends overlay cyclical trends in which central banks continue their own war: a war on inflation. For now we take them at face value, and hence discount the dual mandates these might have, that inflicting pain on the economy is needed to bring inflation (expectations) back in

line. This means more recession pain is to come in terms of earnings, investments, defaults in leveraged loans and market volatility in general. Valuations have cheapened but this has not been broad-based enough.

We do acknowledge that the corporate sector is healthier at the start of this recession compared to similar points in

Outlook

For professional investors Q4 2022

Victor Verberk & Sander Bus Co-heads Credit team

Jamie Stuttard Credit Strategist



previous cycles, and that earnings are actually very resilient. But we need more proof that a full-blown recession is priced. Technically, central banks will hike more and in many cases QT still has to start. All in all, we push out our forecast of the bottom of the cycle slightly, to later this year.

Fundamentals

The last decade or so policy makers have been horribly wrong in forecasting growth or inflation trends. We experienced a decade of almost no inflation and QE, which resulted in asset price inflation. We were then told that inflation was supposed to be transitory. Yet we have now entered a phase in which central banks worry about inflation becoming entrenched in the economy via wages and corporate pricing power. It tells you how inherently difficult inflation forecasting is, as well as the process of managing it. There is no textbook for central banks. This means that policy mistakes have to be expected.

'Central banks believe they have to inflict pain on the economy, on the demand side, to bring down inflation expectations'

Central banks believe they have to inflict pain on the economy, on the demand side, to bring down inflation expectations. For now, do not count on the Fed's dual mandate to manage the employment side of their objective. In fact, expect the opposite. The Fed will only stop hiking when one of three conditions is satisfied: inflation comes down, the economy slows significantly or financial conditions have tightened a lot more. That is why we have pushed out our forecast for the bottom of this cycle a bit further into the future.

We have done some historical analysis to get guidance on what the nature of this pain could be and what we can learn about the timing and potentially the depth of the upcoming recession. Let us give a few examples.

First, history shows us that as the ISM falls from 60 to 50, spreads tend to widen. Only once recession is acknowledged, typically when ISMs and PMIs fall below the 47-48 region, is the downturn usually priced in. If the ISM or PMIs are good indications this time again, we are not there yet. By the way an average recession shaves off 5% of GDP and is a good number to watch.

Second, payrolls growth on average decelerates to under 200k at the end of the tightening cycle. The US economy is still way above that.

Third, median financial conditions in recessions were historically much tighter than at present. The impact on rates, oil and equity has further to run on this metric.

Fourth, sticky inflation like rents is still trending up. Also, the Atlanta Fed wage tracker does not show meaningful moderation yet.

Fifth, the housing market does show some deceleration driven by higher mortgage rates. At this stage this is more visible in home sales than in prices, but it will have a corresponding impact on durable goods spending.

These are just a few of many examples we've looked at. The overall conclusion is that, in terms of the economic cycle, we are not there yet by most metrics.

Then there is the market cycle. Historically, credit bear markets associated with recession last for at least 1.5 years. We have so far reached only nine months. Furthermore, the magnitude of the spread widening is typically at least 150 bps, while we've seen less than half of that move to date. On a more optimistic note, carry has increased, and spread peaks are often temporary, meaning that at some stage one can expect positive excess returns over a 12-month horizon.

We also must point out that central banks have a habit, shown time and again throughout history, to overtighten and then to have to undo most of it. It is impossible to know precisely when we are approaching the end of the tightening cycle, but once conditions are restrictive versus estimated neutral rates, we know we are in an overtightening zone.

We do know that interest rates historically peak before credit spreads. We also know that interest rates peak, on average, around the time of the second-to-last rate hike. Based on this framework, our conclusion is that we might get there somewhere in November or December this year. If we are wrong about this, it is likely because the peak turns out to be later rather than earlier. Markets tell us Q1 2023 will give us the peak in rates.

Corporate balance sheets, as we mention in the introduction, seem generally healthy. Of course, we know that earnings drop around 20% to 30% in a downturn. It is remarkable, though, that the last few weeks' earnings revisions recovered from the much lower levels of the previous period.



Our discussions included a debate on the nominal economy versus the real economy. We observe that real yields, as measured by US TIPS, are rising rather fast. In general, this sucks money out of risky assets like housing, equity, credit and commodities. So, that is a negative signal from an investment perspective. On the other hand, we must be open to the fact that corporates as well as governments might have their revenues linked more to the nominal economy. When earnings inflate via higher price levels and tax revenues, corporate earnings and government proceeds rise relative to the outstanding nominal debt stock.

Another simple explanation for the current level of corporate health is the fact that corporates simply have not yet had the time since the Covid crisis to engage in the typical bull market re-leveraging of their balance sheets. That probably is why rising stars still outweigh fallen angels, although we do not attach a lot of value to this lagging indicator.

'It is evident that we should not expect the old locomotive of the global economy to do its job again this time'

We spent little time on China this quarter. It is evident that we should not expect the old locomotive of the global economy to do its job again this time. We seriously worry about growth expectations, debt levels and very high youth unemployment, for example. Economically restrictive Covid policies are also not helping.

The conclusion is that we do not want to sound too bearish but at the same time we need to be somewhat more patient about entering the last phase of the credit cycle. We are wary of the fact that a credit team might have a behavioral bias of being a touch too bearish, may tend to extrapolate Fed policies too far or lean towards being too confident based on historical analysis that might not tell us which is the right future path.

There are a few positive tail risks that might change the base case. First, an unexpected end to the Ukrainian war or the recession itself might cause oil to drop a lot further. This would have benign implications for inflation and growth and might give the Fed a reason to pause. Second, maybe corporate pricing power will be better than expected, which in turn is good for corporate health. All considered, we do not think we have seen all phases of the bear market yet but we are slowly getting there.

Valuations

On an optimistic note, the very painful positive correlation between credit, government bonds and equity so far in 2022 has led to much better valuations. A typical 60/40 balanced fund has lost 18% and bond markets have experienced the worst sell-off in total return terms for years. The flipside of the coin is that pricing has started to move towards more attractive levels. We describe a few parts of the market separately since the composition of corporate yields has become rather complex.

Starting at the lowest risk part of the spectrum, we are very constructive on European swap spreads. Cross-sectional relative value shows that is the cheapest part of the market on a risk-adjusted basis compared to its own history. This is driven by Bund scarcity and very tight repo markets, which in turn is one of the many side effects of QE. It means that European credit spreads have become cheaper than US credit spreads if the investor has government bonds as a reference benchmark. It has made high-quality investment grade credit like covered bonds or agencies very cheap. On an ASW or spread-over-swaps metric, credit spreads do not look cheap yet. A reversal of Bund scarcity could be triggered by some kind of QT program by the ECB in the coming months.

Another element in European markets are Italian spreads. Given where Italy is headed politically and given the financial health of its government, we do not think Italian spreads reflect the right risk premium. Despite the potential for the ECB to limit the pain in Italian spreads after a certain threshold, we remain cautious on Italian corporate exposure.

For US high yield, the average OAS has historically been 540 bps. We are close to that now, but recessions often see spreads twice that level. Current spreads do not reflect a premium for rising default rates or other unexpected risk premia. Still, as markets weaken, we are likely to enter the phase in which excess returns on a 12-month horizon become positive.

US investment grade spreads tend to widen to over 200 bps in a recession. We are not there yet, with current spreads around 150 bps. In Europe, spreads have widened a bit further due to the swap spread, but basically the risk premium for credit risk rather than liquidity risk is not there yet to justify a long beta position on an index basis. Here too, there are pockets of the market that have repriced a lot, like banks or cyclicals, which might warrant a long position already. And here too, there are scenarios where the excess return on a 12-month horizon is becoming positive.



Dispersion metrics such as for spreads between BBB and AAA, or within CCCs, suggest that dispersion still has some more to go before one can call the credit market cheap. BBB spreads for example can easily reach 400 bps OAS, compared to current levels of only 200 bps.

Derivative credit spreads as reflected by iTraxx or CDX series seem to be further along in their journey to peak historic spread levels. The basis remains positive since we have not yet observed forced selling in cash credit markets. In any case, a lot of hedging seems to have been done and derivatives appear to us to be the first choice of instrument to go long beta.

'The European market is cheap versus the US market. It does make sense if one considers that most of the more severe fundamental risks are impacting the European continent'

> The European market is cheap versus the US market. It does make sense if one considers that most of the more severe fundamental risks are impacting the European continent. Whether it is political risk, behind-the-curve central bank policy or the Ukrainian conflict, it all has a far greater impact on Europe than the US. However, these are all known risk factors. Markets move based on incremental risk or new risk factors. We do believe Europe should be overweight versus the US. European-denominated bonds in global capital structures trade cheap.

> We also looked at earnings and equity valuations as a reference. This was the part of the day when we realized the dangers of going too far in extrapolating weak trends. A few facts here. First, 50% of the NASDAQ constituents are down over 50%. Second, global fintech stocks on a price-tosales ratio are arguably at oversold levels. Third, FAANG stocks (with real cash flow and business models) are down 30% to 70% from peak to current. Finally, European cyclicals/value stocks are at an all-time oversold level versus defensives. Clearly, long-duration assets got hammered and a recession to a certain extent has been priced in.

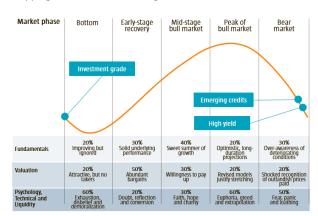
> There is one observation to be made about a special part of the credit market. The leveraged loan market in the US is over USD 1 trn in size (of which a whopping 80% is rated B/CCC). This has become largely covenant lite since the massive demand over prior years, driven by CLOs. High yield bond issuance volumes have therefore been disappointing. Given the very weak B-rated credit in these structures, forced selling (deleveraging) might be on the cards if downgrades hit the CCC bucket.

This market is less visible to most market participants but it is the segment where overleveraged balance sheets are. There is a fundamental impact on loan borrowers, too: we should expect accidents here, driven by higher yields, since higher interest costs will be priced one-for-one into lower earnings for borrowers with floating-rate debt structures, as rates ratchet higher every three months as the reference borrowing benchmarks reset.

The conclusion is that valuations have become more attractive. We are wary about fierce bear market rallies, which have occurred in recent months. We will be slowly adjusting from neutral positions into long positions over the coming months.

Figure 1 | The market cycle

Mapping our view on market segments



Source: Robeco, September 2022

Technicals

Whether one is long or short, the conclusion on technicals would be the same: technicals drive markets nowadays. Central bank liquidity withdrawal is still the driving factor, as we forecast at the December 2021 Credit Quarterly Outlook. Equity and credit returns continue to correlate with the changes in the aggregate balance sheets of the world's major central banks. A move from QE to QT means a lot of deflation in asset prices. It is the reversal of the last decade.

Given the very clear message from central banks that bringing inflation back in line remains their key priority, we do not expect a QE program any time soon to save the market. Instead, we should expect more volatility. One blessing in disguise is that creating new bubbles will be much more difficult.

This document is for information purposes only and not intended to be an investment advice in any way.



As Richard Koo has written for many years, reversing QE at the same time that one has to hike rates is very difficult. Excess reserves have to be mopped up and one could even expect political debates around central bank subsidies to commercial banks, by reimbursing higher yields on excess

These policies have important ramifications in our markets. The sheer size of central banks in bond markets over recent years means that secondary market liquidity has dried up significantly in 2022. The market has, at times, become a one-way street. The withdrawal of central banks means the market will have to find a new equilibrium on its own. In the interim, the lack of a volatility cushion means there is a greater vulnerability to larger shocks.

The conclusion on technicals is that we respect the old adage: do not fight the Fed or any other central bank for that matter. For now, we are still a few months away from the second-to-last rate hike and even once rates have stabilized, history suggests we may first undergo a period of falling yields and rising spreads.

Conclusion

The age of confusion has started. Inflection points in the business cycle, the monetary cycle as well as some secular cycles around demographics (are we headed for permanent labor shortages?) and geopolitics make the current period confusing to analyze.

For now, we believe that if history teaches us any lessons, it is that the business cycle has to unwind a little further, there is a risk that central banks will overreact and the market in general is not yet priced for a full-blown recession. We are aware of wider spreads, and in some pockets of the market we have started to buy, but a bit more patience is prudent before making a long beta call.

Positioning

We prefer European spreads over US spreads. This is driven purely by the risk factors mentioned above, which has resulted in Europe becoming cheap versus the US markets.

We like swap spreads and hence higher-quality European credits.

We also like the banking sector, primarily banks with simple 'loaned up' balance sheets that will benefit from rising yields. Senior and senior unsecured spreads are very attractive.

In high yield we prefer to have a continued focus on quality. Here, too, we are overweight Europe and still favor more stable non-cyclical companies. Portfolio credit betas have been moved to less underweight and we are watching derivatives before taking the next step.

	Constructive	Neutral	Cautious
Fundamentals			~
Valuations		~	
Technicals			~
IG credit		~	
HY credit		~	
Financials	~		
Non-financials		~	
Emerging			~

Source: Robeco, September 2022

Guests: We would like to thank the quests who contributed to this quarterly outlook with their valuable presentations and discussions. The views of Rikkert Scholten, Martin van Vliet and Jamie Stuttard (Robeco), Kamil Amin (UBS), Mislav Matejka (JPMorgan) and Matt King (Citi) have been taken into account in establishing our credit views.

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 gualifying 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, the prices used for the performance figures of the Luxembourg-based Funds are the end-of-month transaction prices net of fees up to 4 August 2010. From 4 August 2010, the transaction prices net of fees will be those of the first business day of the month. Return figures versus the benchmark show the investment management result before management and/or performance fees; the Fund returns are with dividends reinvested and based on net asset values with prices and exchange rates as at the valuation moment of the benchmark. 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 Investor Information Document for the Robeco Funds can all be obtained free of charge from Robeco's websites.

Additional Information for US investors

Robeco is considered "participating affiliated" 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 advisor. 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 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 fewer 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.

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 in 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 Investor Information Documents (KIIDs), 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 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, 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 Fund has not been registered with the Superintendencia del Mercado de Valores (SMV) and is being placed by means of a private offer. SMV has not reviewed the information provided to the investor. This document is only for the exclusive use of institutional investors in Peru and 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 your 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 althorized 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 app

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 47-14°, 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: Affolternstrasse 56, 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 Investor Information Documents (KIIDs), 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. RobecoSAM-branded financial instruments and investment strategies referring to such financial instruments are generally managed by Robeco Switzerland Ltd. 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 temporarily 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 Uruguayan. The Fund corresponds to investment funds that are not investment funds regulated by Uruguayan law 16,774 dated September 27, 1996, as amended.