Global Fixed Income Macro Outlook

Upside bounce, downside risks

- Credit growth suggests a near-term bounce, but recession risks remain
- After a year of beta tailwinds, it is time to get active in fixed income...
- ...with a barbell of short-end US Treasuries, EUR IG, Italy and Spain

Since our last quarterly, in economic data:

- Money supply has continued to expand and credit has grown
- Amid stabilization in the PMIs, some leading Asian data has started to hook up
- Yet US CFOs continue to expect recession in 2020.

In politics:

- The US and China agreed to a 'Phase One' trade deal
- The UK electorate returned Boris Johnson to power – amid the Conservative Party's largest electoral victory since 1987. This ends 3 years of hung parliament, 4 years of the Corbyn/McDonnell threat, 9 years of austerity and, in time, 46 years of EU membership
- Hong Kong protests garnered global attention, while Taiwan faces elections on 11 January
- Ahead of the US 2020 election, President Trump became the third US President in history to be impeached (after Johnson and Clinton – Nixon jumped first)

At central banks:

- The Fed has announced that the remedy of 3x25bps rate cuts will be enough to insure against a mid-cycle correction turning into something worse. They omitted to mention 2019 is already the third correction of this US expansion, after 2011-12 and 2015-16, or that successful easing cycles of only 75bps have only happened twice in thirty years

Outlook
For professional investors
January 2020

Robeco Global Macro Fixed Income Team

All examples mentioned are for information purposes only and not intended as investment advice in any way.
The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

- Claiming the mantle of an owl, Christine Lagarde began her term in charge of the ECB and continued Mario Draghi's policies of negative rates and renewed QE.

In markets:

- Many equity indices hit new all-time highs. Our analysis finds this can occur early, mid or late cycle, therefore telling us little about 2020 outcomes
- The US yield curve re-steepened a little – as it has done heading into both recessions and mid-cycle recoveries, therefore also telling us little about 2020 cyclical outcomes
- Meanwhile, the lesser-watched US single B curve inverted, a potential sign of credit stress...
- ...yet in December, CCCs recovered, putting in their best month since January 2019, following OPEC supply cuts, growing speculative longs in oil futures and distressed CCC valuations
- Corporate defaults in China increased, including at State Owned Enterprises, such as Tewoo Group Corp.

Key views and investment implications for the next quarter

Business cycle: a small China-driven bounce, but end-of-cycle risks

We view the Chinese economy as key to the global business cycle. Recently, Chinese leading indicators have improved. The credit impulse, for example, which measures the change in the flow of new credit to the private sector as a percentage of GDP, has turned positive. There is a correlation between the credit impulse and global business confidence, even if there are other influences too on the latter. Both the OECD Leading Indicator and PMIs have risen off their lows too.

'We expect the bounce in Chinese credit to be more muted than in 2012-13 and 2015-16'

While markets have become more optimistic recently, we expect the bounce in Chinese credit to be more muted than in 2012-13 and 2015-16. The Chinese authorities seem willing to accept slower economic growth than in the past, as part of their effort to de-lever the economy and de-risk the financial system. Ongoing corporate defaults suggest China stimulus will be both modest and ultimately ephemeral. While defaults are required to cleanse the system in the long run, they risk first having a deleterious effect on activity.

So, a modest bounce suggests a modest improvement in the export orders of important trading partners. Growth of South Korean and German exports to China has remained subdued so far. These developments will remain key to global growth.

The overall picture for the European economy remains one of modest, though seemingly stabilizing, growth. Consumer spending is decent, but there are signs of slower momentum in the labor market. Weakness in manufacturing has already spilled over to the labor market and to services in Germany.

The US should benefit in the short term from a lift in sentiment in the aftermath of the headlines of the 'Phase One' US-China trade deal. Still, we see plenty of end-of-cycle characteristics, which pose downside risks to growth. Growth is predominantly driven by consumer spending. Business investment remains absent and CEO and CFO confidence surveys caution this could remain the case. Corporate profits are eroding as labor costs are on the rise and we see a growing risk that cost cutting could start to have an impact on the labor market. However, macroeconomic and market trends have been slow this cycle, so the pace of this process will probably fit that template.

We are concerned about consumption being the single engine of growth: market participants may have forgotten that during most of the 2001 recession, consumption continued to grow. Some cyclically sensitive measures of discretionary spending by consumers have started to weaken. We think a disappointment in the current wave of optimism, perhaps some time in late Q1 or early Q2, is very possible.

Trade and politics: big picture tariffs, 2020 election

The composition of the White House's proposed December 2019 tariffs were self-damaging for US interests, as they would have hurt the US consumer ahead of an election year. So we should perhaps not be surprised by their recent repeal in the 'Phase One' deal. Yet for all the hoopla around the recent agreement, average economy-wide US-China tariff levels are still higher than the levels which so roiled markets in August 2019.

CEO and CFO confidence may well be linked to the challenge of making large long-term investment decisions amid such a fluid trade landscape. Their desire for stability will be hampered for most of 2020 by what looks to be a

All examples mentioned are for information purposes only and not intended as investment advice in any way.
The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

closer-than-usual White House contest. Uncertainty over who will win the November election may start to dominate markets from midyear. In the interim, we have the Democrat primaries in March. Who could go full steam ahead with corporate investment with both the geopolitical and domestic political windscreen so fogged up?

In the UK, the next election is now likely to be in 2024, following the convincing Conservative electoral win. This takes the rolling domestic uncertainty and parliamentary stasis of the last twelve months off the table. In terms of negotiating the future relationship between the UK and the EU, however, it is only the end of the beginning, to paraphrase Churchill. There is still scope for disagreement over the details and timing of trade agreements, and progress could be slowed by protectionist stances in front of specific domestic audiences and by insecurity in Brussels over large countries successfully leaving the EU. Still, we note that it took a hard deadline to concentrate minds – leading to compromise – in October 2019, so some tight deadlines are probably a harsh necessity in 2020.

'There is still scope for disagreement over the details and timing of trade agreements'

Elsewhere, while USMCA is progressing towards ratification, regional tensions such as those between Japan and South Korea illustrate the more complex nature of global trade relations. Not every dispute hinges on the Trump administration, either. Also in the Far East, while media attention has focused on events in Hong Kong, the Taiwanese Presidential election on 11 January could pose an early test to the market's perception of a rapprochement between the US and China. Meanwhile the Hong Kong protests rumble on.

Monetary policy: ECB continuity, Fed clinging to the 'three cuts' narrative

The guidance from the Fed and ECB has been clear: both institutions prefer to remain on hold for the time being, and for both the bar to hike rates looks high. A pronounced rise in underlying inflation could spoil that outlook, but we expect core inflation in these economies to remain close to current levels.

In the Eurozone, new ECB President Lagarde has separated the long-term review of monetary policy aims and tools on the one hand, from the normal course of policy on the other. On policy, the 12 December meeting made clear that Draghi's policy decisions from September (renewed asset purchases and negative rates) are here to stay. That is positive for EUR IG credit and peripheral sovereign bonds, and means an anchoring of the front end – the latter in contrast to Sweden where the Riksbank is now one of only two major central banks to have hiked rates this year.

In the US, if the Fed were right about the 1998 parallel that Clarida has identified, then hikes would follow given the Fed hiked 6 times after the 3 cuts in 1998. We are skeptical of that path however, given that real GDP was 4% at that time, and IPOs were doubling in price. At the other end of the probability distribution, if growth worsens, the Fed may need to cut to zero quite quickly. That scenario seems more plausible given the current late phase of the business cycle. The Fed will try to keep rates on hold for as long as it can, but events are very likely to move it off the fence eventually.

Global rates – time to get active

Given our medium to longer-term business cycle outlook, we still see risks to front-end rates as being skewed to the downside. This skew is much more pronounced in the US than in the Eurozone, given the different starting level of rates in each market. After strong beta returns in 2019, it is time to differentiate much more across different global government markets. Yield curves, too, need an active approach: longer-term rates have the potential to bounce further on the back of more evidence of a near-term bottoming out of the global business cycle, particularly where valuations are full. Hence we are positioned for steeper curves: bull steepeners in some markets, bear steepeners in others.

We like retaining – and look to build – overweight exposure at the front end of the US Treasury curve. If required, the Fed has scope to cut rates by meaningful amounts, something only matched in larger government markets by China and, to a lesser degree, Australia and the UK. Given we view the prospect of 1999-style rate hikes as unlikely, a long position in 2-year Treasuries has attractive asymmetry in our view: yields could fall by much more than they could plausibly rise.

In EM, we can identify several IG-rated sovereigns where easing is likely: especially Mexico but also Russia and perhaps Malaysia. Any backup in global rates markets may create attractive entry points here.

However, away from the front end of the above handful of DM and EM curves, we have become less positive on duration in the near term – no more so than in pan-Europe where 10-year Bund yields at -0.20%, 10-year UK

All examples mentioned are for information purposes only and not intended as investment advice in any way.
The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

at 0.85% or 10-year Switzerland at -0.5% hold little appeal for us.

Ultimately, the sell-off in bond markets that has materialized since September may be only temporary: any lack of follow through in real activity data and growth in Q1 could see yields roll over again. As a result, we view 10-year US Treasury yields just below or around 2% as having symmetric risk, so beyond the 2-year point we prefer more benchmark-neutral exposure. By lightening up in longer-dated duration in Q4 2019, we have created room to add in 2020, for a scenario of growth disappointments as the year evolves.

All told, the need to use curves, with a focus on front ends and country selection, particularly in those markets where central banks have room to cut, argues for a global and flexible approach that seeks out value and asymmetry: after 2019's beta tailwinds, it is time to get active in fixed income!

Periphery

Concerns around the stability of the new Italian coalition government and profit-taking ahead of year-end led to significant selling of BTPs in Q4 2019. BTPs have been one of the strongest-performing fixed income assets in 2019 and investors were quick to reduce any adverse impact on their portfolios. Recent profit-taking has broadened to Spain and Portugal, albeit in a much more contained manner. We reduced peripheral exposure at the start of November, partly locking in profits and aiming to further mitigate the possible adverse impact of increased spread volatility into year-end. Nonetheless, while the periphery is smaller in size, we remain mildly constructive on the region going into 2020 and are aiming to add to positions again once valuations improve. This is based on our view that the hunt for yield will remain a powerful force.

'Running fiscal deficits has become a fashionable policy stance in ECB eyes'

The political landscape, most notably in Italy, remains fragile. Even so, the odds of a budget clash between Italy and the EU, one of the key risks seen to BTPs earlier this year, has diminished dramatically. Running fiscal deficits has become a fashionable policy stance in ECB eyes – for the first time since the bank's creation twenty years ago. We also expect the restart of ECB net QE to provide considerable support: 2020 net issuance dynamics, consequently, will improve considerably versus 2019. Indeed, through its net asset purchases, the ECB will buy a significant percentage of peripheral supply. Recession risks in the Eurozone also seem to be fading, but we are not counting on a strong recovery. We expect the ECB to continue its ultra-loose policy for the foreseeable future. We estimate that investor positioning in the periphery has lightened up bit. So, should market dynamics deteriorate and spreads widen, we think investors are more likely to take a wait-and-see approach and possibly even be inclined to add to positions again, instead of selling out of recently loss-making holdings. The situation in BTPs requires more caution than elsewhere given fundamental and political concerns. Political event risks to watch in early 2020 include regional elections and the delayed ESM reform.

The 10-year BTP-Bund spread at 160bps is just below the 2015-2019 average of 169bps but still well above the 100bps and 115bps lows seen in early 2016 and 2018 respectively. This indicates that, in a supportive environment, BTPs still have scope to rally, adding to the conviction of our constructive view. The 10-year SPGB-Bund spread at 65bps has now rallied to the lower end of its 5-year range, but still should have some scope to rally further, too, as the growth backdrop in Spain remains relatively favorable.

FX

The outlook for cyclical currencies is somewhat brighter than last quarter, given the political improvement in the UK and market sentiment over the US-China 'Phase One' trade deal. Still, the underlying narrative for our outlook on the USD remains the same. It remains overvalued based on real effective exchange rates, yet its trading pattern, range-bound but strong, is consistent with relatively stronger economic fundamentals in the US versus the rest of the world.

The US dollar has weakened recently, but managed to remain firm during 2019 despite 75bps of Fed easing, reflecting supportive risk aversion-related flows. Therefore, if downside risks to the world economy were to materialize, we think the USD would strengthen further. We think the USD will weaken only if US data weakens materially and external conditions and financial markets are calm – a rare combination in our view. On the other hand, the global industrial recession has led many other EM and DM central banks to ease policy (lowering rates) in a meaningful way. Take Australia and New Zealand, where rate cuts have put downward pressure on nominal and real interest rate differentials versus the US.

Furthermore, many emerging markets are struggling with a mix of geo-political risks and low growth (for some even

All examples mentioned are for information purposes only and not intended as investment advice in any way.
The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

negative growth), induced by a slow but steadily moving trend of de-industrialization. As many EM economies are also experiencing a decline in inflation rates, we expect a large number of EM central banks to keep lowering rates. This should see downward pressure on EM FX and yields. Overall, we retain the view of a rangebound USD while EM FX should gradually depreciate further, albeit with winners and losers.

We therefore see value in particular country-specific crosses. We like being short the ZAR versus long BRL, as long-term economic and credit fundamentals between the two countries diverge sharply. As markets embrace the idea of a more optimistic short-term growth outlook for Q1 2020, we favor a small short-term overweight in more cyclical commodity currencies such as the CAD and the NOK.

Emerging markets – staying local

We remain positive on a few specific individual EM local rates markets, despite our general caution on EM FX. In light of weak global demand, the growth outlook remains challenging, particularly for manufacturing, export-driven and commodity issuers/sovereigns, despite recent signs of stabilization in the macroeconomic data. The benign inflationary environment has helped EM central bank easing, which we think should provide opportunities in selected local front-end bonds in 2020. Still, one needs to discriminate carefully: domestic political unrest amid social inequality may increase in 2020.

‘We continue to see dispersion in spread performance based on quality and rating within EM sovereign spreads’

The market technical environment has improved with positive inflows of USD 64bn into EM debt in 2019, with EM hard-currency taking over 80% of the flows to date. New-issuance dynamics have continued to improve, too, with sovereigns tapping the debt capital markets to extend their maturity profile. However, we continue to see dispersion in spread performance based on quality/rating within EM sovereign spreads, as the spread differential between IG and HY sovereigns is trading at its widest ranges in the past decade.

On valuations, the JPM EMBI trades in the top 20% historic percentile rank. Z scores versus other spread products rank among the most expensive. In local markets, though, we see some relative value with attractive real yields amid the easing central bank backdrop. We believe quality and selection dispersion trends will continue into 2020. As mentioned in our previous Central Bank Watcher, we remain constructive on China rates whilst underweight the currency. When Treasuries sell off, Chinese yields often hold in well, offering attractive diversification properties. The spread differential between CGB and US Treasuries remains appealing too. We also are overweight HGBs (Hungary), currency hedged. Finally, we are overweight short-duration EM HC (hard currency) bonds from BBB sovereigns such as Indonesia and Mexico.

Credit – still about the Sortino ratio

In credit, the cycle continues to get older, yet, unlike 2018, central banks are now back. In investment grade we favor a small short-term overweight: the market is just not yet rich enough for an outright short, January tends to be supportive for credit returns and in EUR, support from the reactivated CSPP program – and reinvestments – is meaningful. USD IG spreads remain cheaper in relative terms, but we continue to be skeptical that cross-border flows will resemble the ECB easing of 2016, as higher interest rate differentials mean higher hedging costs. USD IG spreads are also much more expensive on a volatility-adjusted basis, particularly in financials.

In high yield, we are more cautious and the beta of our bottom-up exposure is fully hedged. We are alert to the challenges of rising defaults in CCCs, the nascent cracks in single Bs and expensive valuations in BBs. Still, while the default rate looks set to rise – possibly sharply – 90% of the issuers in the market are highly likely to be going concerns this time next year, so we expect plenty of bottom-up opportunities.

Having discussed the underperformance of CCCs versus BBs for nearly a year now, we have been looking closely at single Bs given that, if the cracks in CCCs are to portend anything about broader credit markets, they need to spread to the next level of quality. We find several warning signs, including rising dispersion within single Bs, underperformance of the overall HY index versus senior HY issues, negative price action in the Collateralized Loan Obligation (CLO) market and weakness at the front end of single Bs. On the latter, we find that while investors have paid a lot of attention to the US Treasury curve since August, they have focused less on credit curves. Our analysis finds short-maturity (1-3 year) single B-rated bonds historically start underperforming longer-dated (7-10 year) B-rated bonds at the beginning of cyclical credit bear markets. This is now happening, and represents yet another warning for credit investors. It is early days – and the higher oil price in December has

All examples mentioned are for information purposes only and not intended as investment advice in any way.
The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

offered some relief for the energy sector – but it is time to be alert and, ultimately, how far default rates rise in 2020 is contingent on top-down US economic performance, where we think recession risks remain.

In contrast, we view early signs from the ECB's renewed APP as very constructive for EUR IG corporates. While ECB purchases have fallen from EUR 6bn in November, to EUR 3bn over the last four weeks, the percentage share of corporate purchases is the highest ever. Given the evidence so far, the ECB could easily buy EUR 50bn of credit in 2020 – EUR 35bn of net new purchases and EUR 15bn of reinvestments. No other credit market globally enjoys this status.

Investment Implications

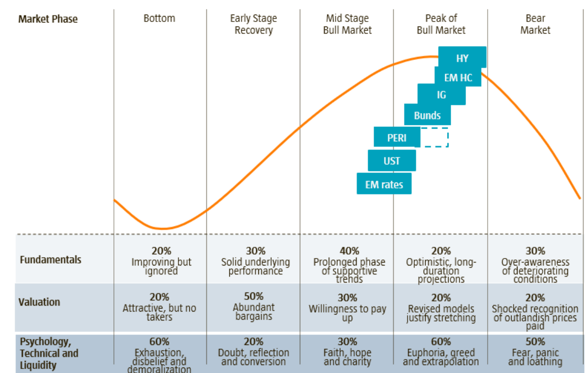
Asset class cycle positioning
Fixed income returns have been excellent in 2019, as they have for the last 3, 5 and 10 years. As yields have fallen and spreads tightened, the consensus view has consistently been to call time on the duration trade and look for higher yields. But the consensus has missed the structural trends: the demand for duration-matching at pension funds and life insurers, demand for income from an ageing society, and a need for capital stability in retirement. These secular trends will remain in place – and indeed intensify – in the 2020s.

> 'A far more active approach is required – in curve, country and credit'

With all that said, we do not expect the same total returns in 2020 as in 2019. That means a far more active approach is required – in curve, country and credit. We can identify areas that we like for 2020, but it is also important to choose areas on which to be cautious, following such strong total returns. The best way to do that is using our asset class positioning framework (see Figure 1).

The team's highest conviction is that the rally in Bunds is more fully done than that in US Treasuries. Total returns in both have been excellent. Yet with discussion of reversal rates and an inability to cut EUR rates by material amounts from here, the scope for yield falls at the EUR front end are clearly limited. By contrast, in the US, the scope for returns is greater, particularly at the front end.

Figure 1 | The market cycle



Source: Robeco, Morgan Stanley, December 2019

Second, the team also sees high yield as more tapped out than investment grade. HY spreads inside of +400 are not cyclically appealing for funds that can invest across the fixed income universe – and where there is sufficient patience to take long-term value-driven investment decisions. On the other hand, while IG has performed very well in 2019, there is strong support from the ECB while valuation differentials across IG markets present some opportunities.

All examples mentioned are for information purposes only and not intended as investment advice in any way.
The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

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 document is solely intended for professional investors, defined as investors qualifying as professional clients, 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 to comply 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. It is intended to provide the professional investor with general information on 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 and/or to adopt any investment strategy and/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 used 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 that they fully understand the risk associated with any Robeco product or service offered in their country of domicile ("Funds"). 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 the past performance is not indicative of future performance. 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 on trading securities in client portfolios or on 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 of 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 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 also applying and any applicable exchange control regulations and applicable 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 at www.robeco.com.

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 situation 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 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) ("Robeco"), 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 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 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 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. is relying 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 the issuer nor the Funds have been registered with the Superintendencia de Valores y Seguros 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 his 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.

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

This material is being 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 is at liberty to provide services in France. Robeco France (only authorized to offer investment advice service to professional investors) has been approved under registry number 10683 by the French prudential control and resolution authority (formerly ACP, now the ACPR) as an investment firm since 28 September 2012.

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 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 SFC in Hong Kong.

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 being distributed by Robeco Japan Company Limited, registered in Japan as a Financial Instruments Business Operator, Kanto Local Finance Bureau (FIBO) registration number 2780, Member of Japan Investment Advisors Association.

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 Shanghai

This material is prepared by Robeco Overseas Investment Fund Management (Shanghai) Limited Company ("Robeco Shanghai") and is only provided to the specific objects under the premise of confidentiality. Robeco Shanghai has not yet been registered as a private fund manager with the Asset Management Association of China. Robeco Shanghai is a wholly foreign-owned enterprise established in accordance with the PRC laws, which enjoys independent civil rights and civil obligations. The statements of the shareholders or affiliates in the material shall not be deemed to a promise or guarantee of the shareholders or affiliates of Robeco Shanghai, or be deemed to any obligations or liabilities imposed to the shareholders or affiliates of Robeco Shanghai.

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. You 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 are invoking 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 would 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 BV, Branch in Spain is registered in Spain in the Commercial Registry of Madrid, in v.19.957, page 190, section 8, page M-351927 and in the Official Register of the National Securities Market Commission of branches of companies of services of investment of the European Economic Space, with the number 24. It has address in Street Serrano 47, Madrid and CIF W0032687F. 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

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 RobecoSAM AG, 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 www.robeco.ch.

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 subject to limited regulation in the UK by the Financial Conduct Authority. Details about the extent of our regulation by the Financial Conduct Authority are available from us on request.

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 in 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 September 27, 1996, as amended.

Additional Information concerning RobecoSAM Collective Investment Schemes

The RobecoSAM collective investment schemes ("RobecoSAM Funds") in scope are sub-Funds under the Undertakings for Collective Investment in Transferable Securities (UCITS) of MULTIPARTNER SICAV, managed by GAM (Luxembourg) S.A., ("Multipartner"). Multipartner SICAV is incorporated as a Société d'Investissement à Capital Variable which is governed by Luxembourg law. The custodian is State Street Bank Luxembourg S.C.A., 49, Avenue J. F. Kennedy, L-1855 Luxembourg. The prospectus, the Key Investor Information Documents (KIIDs), the articles of association, the annual and semi-annual reports of the RobecoSAM Funds, as well as the list of the purchases and sales which the RobecoSAM Fund(s) has undertaken during the financial year, may be obtained, on simple request and free of charge, via the website www.robecosam.com.

© Q2/2019 v.3 Robeco