The Investment Engineers

Multi-asset market outlook

The power of chips: The most strategic commodity in the world

October 2023

Sustainable Investing Expertise by

For professional investors

General overview

Risk off but not growth collapse…

MULTI ASSET	1mo	3mo	YTD	1YR	3YR	5YR
Oil Index (USD)	9.8%	32.3%	18.4%	23.5%	42.6%	-4.1%
GSCI Commodities (USD)	6.7%	19.5%	8.1%	2.6%	34.0%	7.5%
Cash (EUR)	0.3%	0.9%	2.3%	2.7%	0.6%	0.2%
EMD hard currency (UH, EUR)	0.0%	0.6%	1.9%	0.5%	-1.5%	1.5%
Emerging Markets (UH, EUR)	-0.2%	0.0%	2.6%	3.4%	1.7%	2.4%
EMD local currency (UH, EUR)	-0.7%	-0.4%	3.4%	3.2%	0.7%	2.3%
Global high yield (H, EUR)	-1.2%	0.0%	3.6%	9.3%	-1.0%	0.0%
Emerging Markets (LC)	-1.8%	-1.4%	4.0%	10.9%	0.6%	2.7%
MSCI World (UH, EUR)	-1.9%	-0.5%	12.0%	12.8%	11.8%	9.3%
Global Gov Bonds (H, EUR)	-2.0%	-2.8%	-1.5%	-2.3%	-6.4%	-1.7%
Global investment grade bonds (H, EUR)	-2.1%	-2.1%	-0.4%	1.9%	-5.7%	-1.1%
Global inflation-linked bonds (H, EUR)	-2.7%	-3.6%	-3.4%	-4.1%	-6.1%	-1.6%
Global real estate (UH, EUR)	-3.6%	-2.6%	-0.8%	-3.6%	4.1%	1.9%
MSCI World local currency	-3.7%	-2.6%	12.1%	20.4%	9.5%	8.0%
MSCI World (H, EUR)	-3.9%	-3.0%	10.6%	18.1%	7.8%	6.1%
Gold (USD)	-4.7%	-3.9%	1.3%	10.9%	-1.4%	8.1%

Source: Robeco, Bloomberg

Explaining market movements is difficult even in hindsight because the analysis highlights inconsistencies and contradictions. September and Q3 reflected a sell-off in both risk and safe haven assets, since the correlation between equities and bonds was positive, leading to concerns about the expected returns of balanced portfolios due to a lack of diversification. Research shows that most of the risk taken in a balanced portfolio comes from equities until you have less than a 30% allocation – i.e. it has a low risk-on spectrum, where the risk is more balanced between equities and bonds.

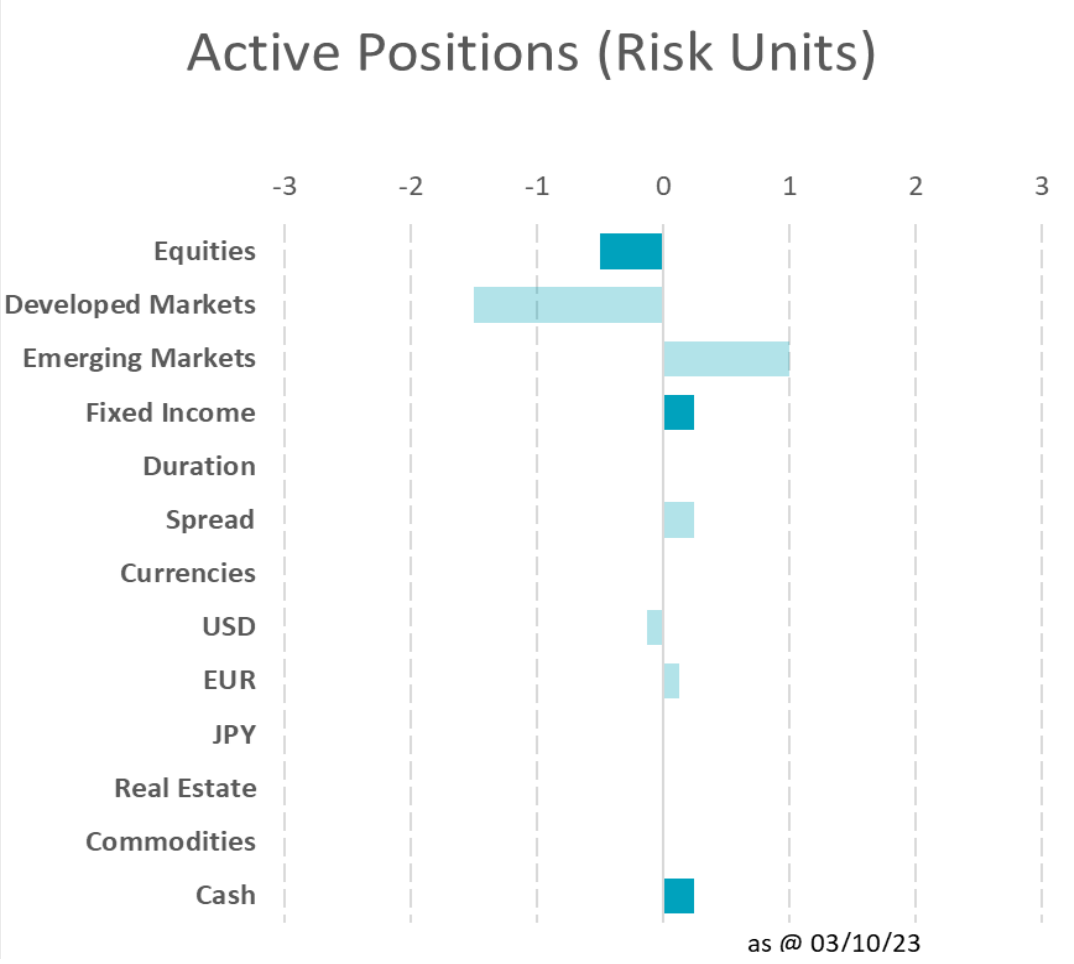
Returning to market moves, oil performed very well as the price momentum exploded following supply cuts by Saudi Arabia. This dragged up the broader commodities index. Looking at this in isolation implies that economic demand outlook is strong, which is contrary to our view that economies are slowing, and that China's recovery has deferred. Hence, we don't expect the rapid rise in oil prices to continue.

The higher-for-longer message from central banks has started to sink in. The effect of this headwind has been more pronounced for growth stocks and government bonds. US 10-year government bond yields reached their highest level since the global financial crisis, while German Bund yields are at their highest level since before the European debt crisis. Consequently, real interest rates have risen across the global, except in Japan, which is maintaining an increasing shaky yield curve control (YCC) policy, causing gold to sell off despite it being considered a 'risk' hedge.

Despite the stronger US dollar, emerging markets (MSCI definition) assets outperformed their developed market counterparts (equities and bonds), again signally better economic times ahead.

Robeco Multi-Asset views

Sustainable Multi-Asset Solutions views



Source: Refinitiv Datastream, Robeco

Our more cautious stance on risk assets had not delivered so far this year, but we increasingly see more risks to the downside for the rest of 2023, and so have maintained a lower equity exposure. We believe that equity markets remain too expensive given the current fundamentals. What's more, we are seeing early signs that the stock market is starting to wake up to the realisation that it can no longer ignore the rise in bond yields.

Also, the speculative froth seems to have been coming out of artificial intelligence stocks – which had been one of the main drivers for the equity market in the first half of this year. Within equities, we continue to hold on to our preference for emerging market stocks. The valuation case remains compelling, and we are seeing an increased willingness from the Chinese authorities to take actions to support their economy. This is important, as we think that China holds the key to unlocking value in emerging market equities.

After closing out our long duration position at the start of September, waiting for better levels to re-engage with the US bond market, we are conscious that we do not want to fight the upward momentum of the recent rise in government bond yields. In addition, the rapid rise of oil prices may not be an immediate threat – but if oil prices stay elevated, it could start to upset the disinflationary process we have enjoyed in recent months. We tend to agree with the market that one last rate hike in the US remains a possibility, and another one is signalled. Our view of higher for longer is more extreme than the current market consensus since we think there is more to come; hence, we are holding back on increasing bond risk.

In September, the multi-asset strategy benefited from the de-rating in equities and our slight overweight to emerging market stocks. This was further helped by strong security selection from our stock pickers, given that the wind came out of the sails of frothy growth stocks during the quarter.

Theme of the month

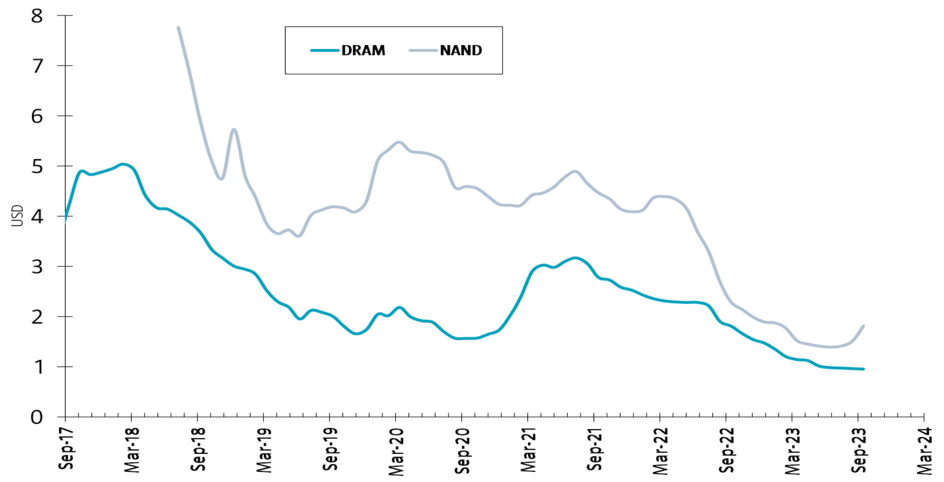
Semiconductors - memory prices down, stock prices up

Last year at this time, close to the bottom of the equity correction, we dared to be upbeat on the outlook for what are seen as pinnacles of cyclicality: chips and ships. Upon reflection we see that prices of basic goods and services remained weak – memory chips are down 45% and shipping rates are down 40% – and contrary to our expectation, we have seen some losses in the industry (e.g. at SK Hynix). In the equity market, however, memory chip producers have rallied about 30% over the past 12 months, even though inventories only peaked in Q1 2023. The bellwether SOX index even rose 60% before a recent correction. Supply discipline has been key when 'bit demand' growth from memory chips dropped to single digits in 2022 and 2023, following growth of more than 20% in 2020 and 2021. Similar to Saudi production cuts in oil, the 'memory cartel' cut chip supply in response to demand weakness. For 2024 a solid demand recovery is on the cards, supported by a PC upturn, the resumption of server growth and the AI-wave that will likely add 5% alone to global bit demand. The potential of 2024 has been the main reason for the stocks rallying in 2023. Also, multiples of semiconductor companies have expanded to 5-6x enterprise value over sales (see chart) as margins on more sophisticated semiconductors are deemed to be higher and more sustainable. Recently, we have witnessed a pullback in the sector due to the reversal of some Covid-era imbalances resulting in fading pricing power for those that can ship the chips.

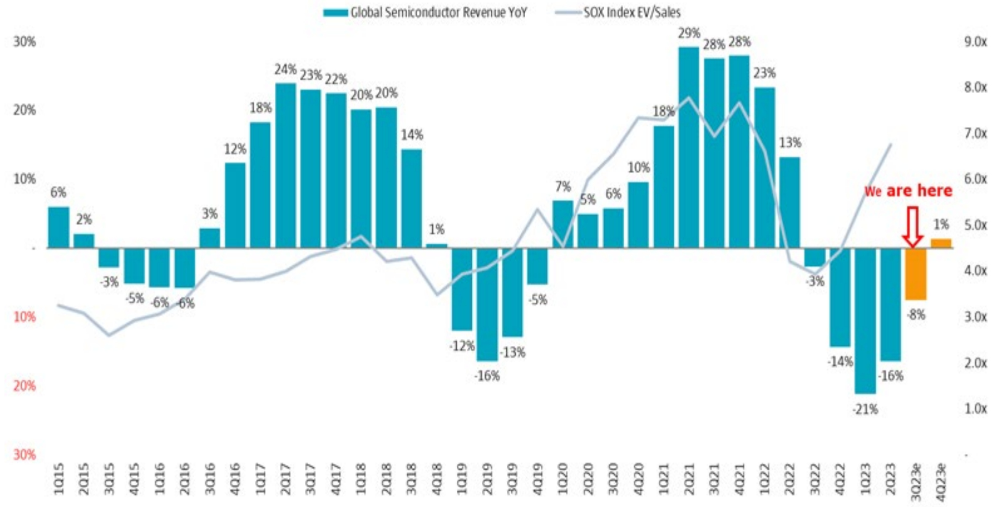
An important raw material for sustainable investors

The Sustainable Multi Asset Solutions team is heavily involved in this market now that we offer multi-thematic solutions to clients. Semiconductors are a big driver of innovation and are essential for the energy transition: they are key elements of solar panels, electric vehicles, power inverters and storage devices. Semiconductors are heavily weighted in many of Robeco's thematic strategies, especially in Smart Energy (38%) and Smart Mobility (38%). In total, they comprise nearly 15% of our impact equity allocation in the Multi Asset Sustainable strategy. Semis drive performance: return correlations for the Industrial Innovation and Smart Mobility strategy are very high with the SOX index. Semiconductors have many commodity-like characteristics, such as market pricing, fungibility, standardization, liquidity and trading in global markets. But unlike mined or farmed commodities, semiconductors are man-made and with increased complexity and design features, it is no longer a homogenous market. Anyone can make a DRAM but only one company can make a GPU that can run your AI.

Memory prices: no inflation here



Semi stocks respond three quarters before demand growth bottoms



Source: Robeco, Bloomberg, Morgan Stanley

ROBECO

Theme of the month

The most strategic commodity

An important new feature of semiconductors as commodities is that they have geopolitical relevance. We used to fight wars over gold, copper and iron ore. Now, next to the risk of wars over lithium and cobalt for batteries, we also see strategic tensions between the US and China over (access to) semis. Semiconductors can safely be said to be staples for global economies. They are considered of strategic importance to future economic development, and most production now comes from Asia. Europe seems marginalized, but it does hold the trump card of being the champion in lithography needed to facilitate further miniaturization.

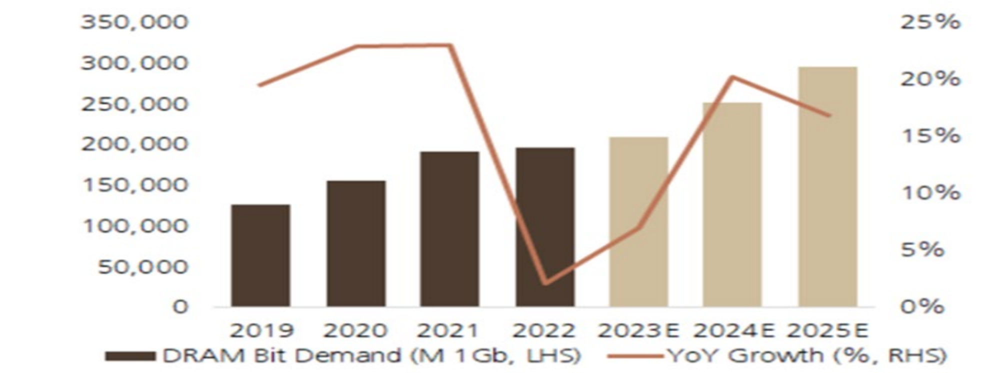
With rising trade tensions, major economies want to be independent for both their energy and chip supply. It is risky to have chip manufacturing done by an outsider, let alone by a company that is based on Taiwan, an island to which China lays claim. Politicians have belatedly realized this vulnerability and now have big plans to reduce it. European and American governments are offering very large subsidies for foundries to be built on their home soil. The Chips Act for Europe came into effect last month and aims to invest more than EUR 43 billion, with the ambition to get back to 20% market share in global chip production from less than 10% today (and mostly at the lower end). The US Chips and Science Act is more geared to preventing advanced chips reaching China, but here too foundries are being enticed to produce leading-edge chips in the US. The three leading chip producers have agreed to build fabrication plants (fabs) outside their home country for a total of USD 100 billion, with USD 30 billion in subsidies (see table). It will be interesting to see if these fabs can be as competitive as the ones in Taiwan, South Korea and China.

The new oil: this geopolitical hedge needs a futures market

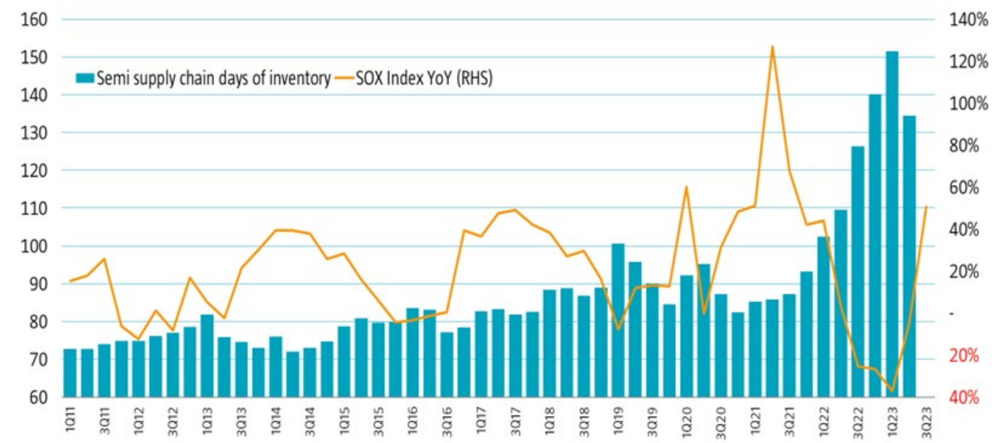
The near-term outlook is not an easy call for thematic investors, now that an upturn is already priced in, strong pricing power due to tight supply has passed its peak, and sales multiples have gone up. The long-term strategic importance of the sector, however, clearly justifies a premium above historical averages for companies that have defensible intellectual property.

Finally, as semiconductors become a strategic commodity, we would make a case for a regulated futures market in memory chips. It has differentiated cycles and thus offers nice diversification benefits. It can also offer insurance against any further geopolitical upheaval, just like oil used to do. Though purified water usage is very high for many fabs, silicon-based memory chips do have a carbon footprint a lot lower than oil.

Demand for computing power to accelerate in 2024



Stocks rally when inventories peak



Strategic fabs to be built in US and Europe

Company	Regions	Investment
TSMC	US (2) & Europe (1)	USD 40 bln + 10 bln
Samsung	US	USD 17 bln
Intel	Germany	USD 30 bln

Source: UBS, Morgan Stanley, Refinitiv, OECD, SIA

ROBECO

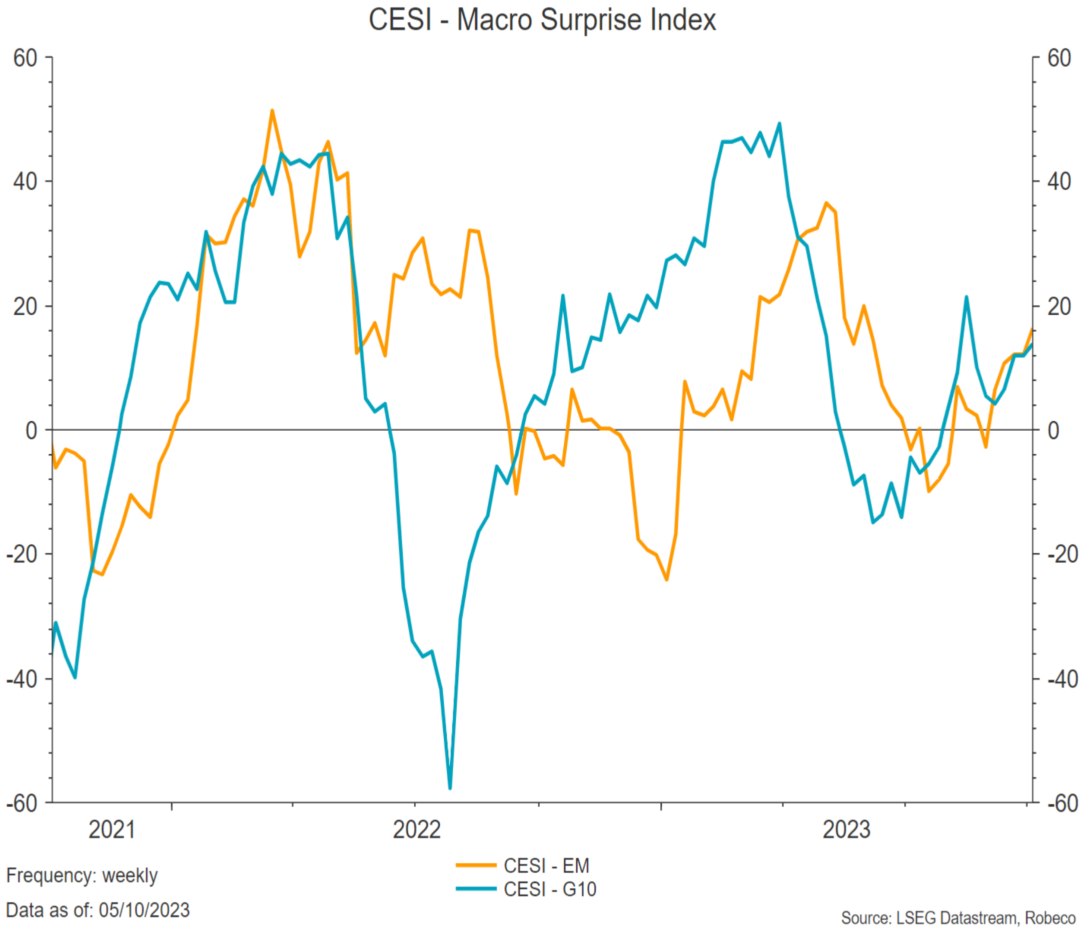
Economy

While our economic models signal a continuing slowdown, macro surprises in both emerging and developed markets turned more positive during September. This indicates that this business cycle is stretching its legs. Though the pivotal services sector seems to be cooling, judging by a decline in the global services PMI for September to 50.8, hiring in the sector is still strong in the US. A bumper increase of 336,000 new jobs in the US economy was concentrated in services such as leisure and hospitality. The Atlanta Fed GDP nowcast points towards 4.9% Q3 GDP growth, which is stronger than the consensus expected. ISM manufacturing likely troughed during the summer, with the September data showing a declining contraction in activity. The inventory overhang of last year has vanished, while China's manufacturing activity has somewhat stabilized over recent months.

Yet, the recent bear steepening of the curve after peak inversion in July shows that a US recession is underway – if history rhymes. Typically, seven months after peak inversion, a recession of some sort enters the scene, the exception being the 1968 soft landing. Although US unemployment remained at 3.8% in September, recent data does hint at some cooling. The decrease in the quits rate, the decline in the NFIB 'jobs hard to fill' rate, and a deterioration in NAHB housing sentiment indicate that a notable easing of tight labor market conditions is ahead of us.

Concerning inflation, central banks can't yet claim victory even as headline inflation continued its downward trend. In the Eurozone, CPI declined to 4.3% from 5.2% in August, but bringing inflation well below the 3% mark will become increasingly difficult. Likely, an almost absent trade-off between unemployment and inflation facilitating the 'immaculate disinflation' observed so far will resurface. In the US, it is worth noting that core PCE has become predominantly demand-driven again, according to San Fransico Fed data, suggesting that the Fed still has no reason to abandon its hawkish stance.

Macro surprises are positive for EM and DM



Source: Refinitiv Datastream & Robeco

ROBECO

Important information

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 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. 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 documents are considered for use solely by qualified investors and are being 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 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

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 www.robeco.ch.

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 do 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 Liechtenstein

This document is exclusively distributed to Liechtenstein-based duly licensed financial intermediaries (such as e.g. banks, discretionary portfolio managers, insurance companies, fund of funds, etc.) 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 wwww.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.