Julius Bär

FINANCIAL MARKET OUTLOOK

18 January 2019

12:00 CET

HOUSE VIEW SUMMARY

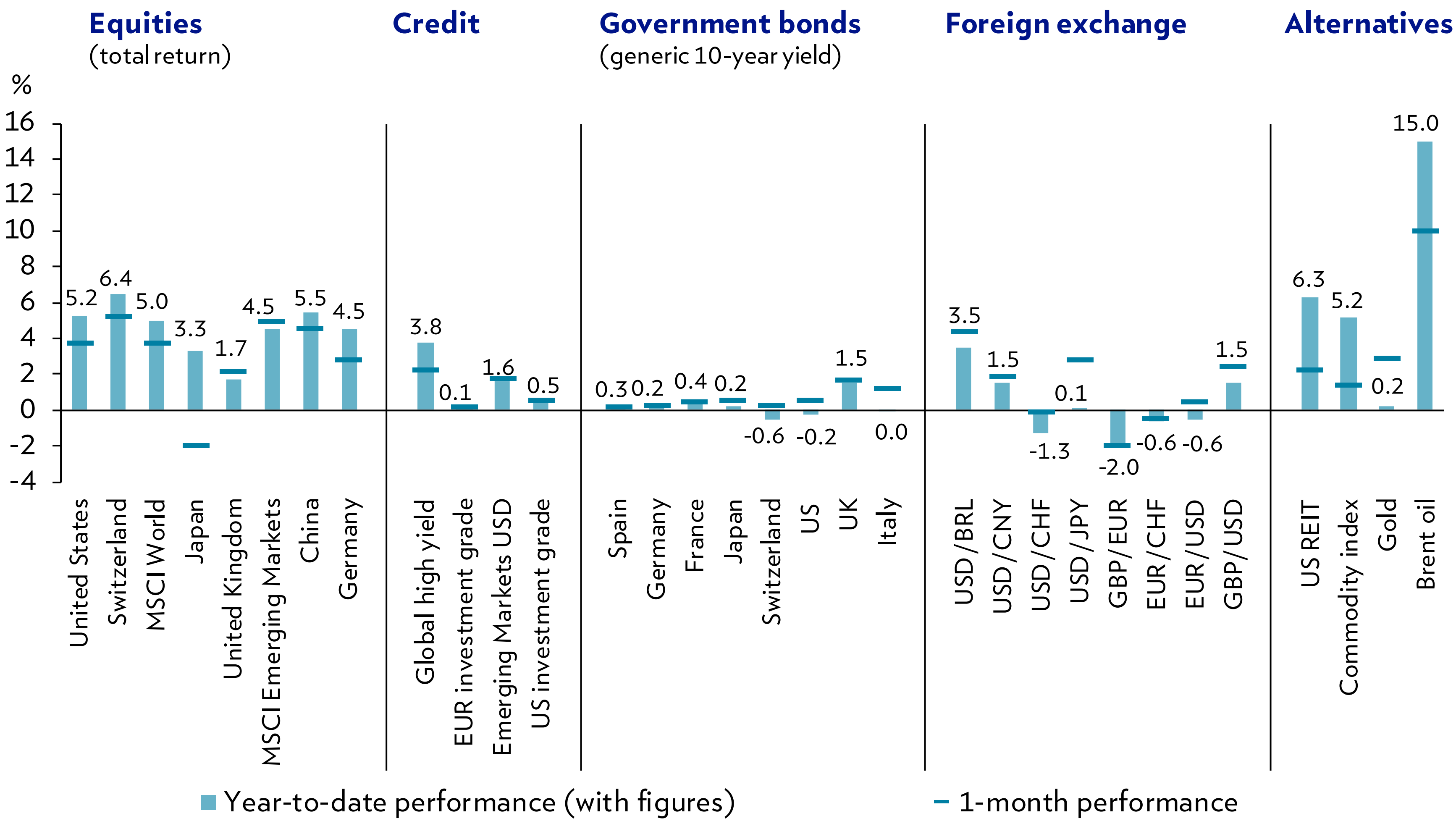
Conclusions

- Recent economic indicators suggest that downside risks have increased. Although the global growth dynamic is set to ease, the recession risk remains relatively low for now.
- Against this background, the Federal Reserve's (Fed) statement on 19 December 2018 that quantitative tightening was on 'autopilot' proved to be a policy mistake and triggered an equity market dislocation not seen in a December since the Great Depression.
- Because the US economy has become more sensitive to asset prices than interest rates, the Fed 'blinked' in early January. It signalled patience with further interest rate increases and pledged flexibility to its balance sheet reduction plans, which has led to a rebound in equity markets.
- We took advantage of the significant recovery since the low on 24 December and tactically sold our position in Nasdaq 100 stocks. The proceeds are held in cash and will be reinvested if and when opportunities arise.
- We remain wary that the Fed may return to a more hawkish tone, should equity markets continue to increase sharply. This would be a policy mistake and increase the probability of a US recession.
- In China, economic data has surprised negatively although the effects from the trade conflict with the US have been relatively moderate so far. This indicates that the slowdown is more pronounced than anticipated. The outcome of the ongoing trade negotiations as well as further fiscal and monetary stimulus measures will be crucial for Chinese and global growth.
- Meanwhile, the European Central Bank is cornered, willing to normalise its monetary policy but faced with a slowing economy.

Source: Julius Baer
As of 17/01/2019

MARKET PERFORMANCE (1/3)

Review of one-month and year-to-date performance

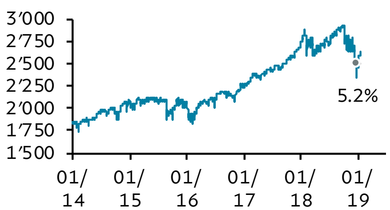


Source: Bloomberg Finance L.P., Julius Baer
Data as of: 18/01/2019; 11:27 CET

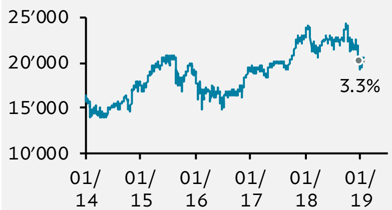
MARKET PERFORMANCE (2/3)

Review of five-year and year-to-date performance

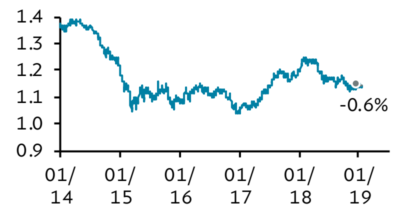
S&P 500



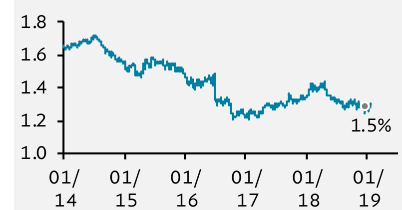
Nikkei 225



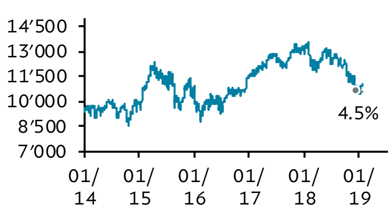
EUR/USD



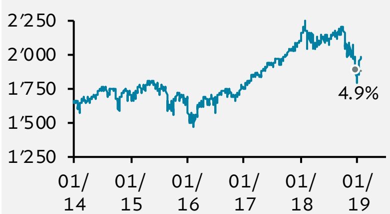
GBP/USD



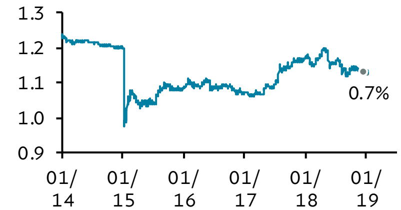
DAX 30



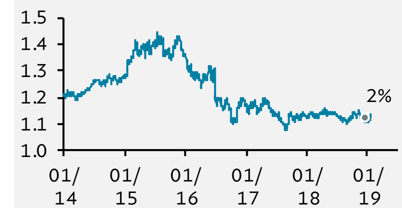
MSCI World



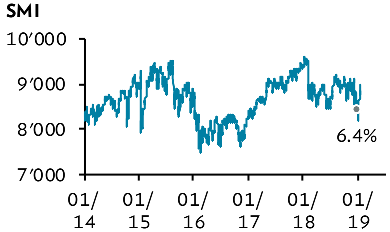
EUR/CHF



GBP/EUR

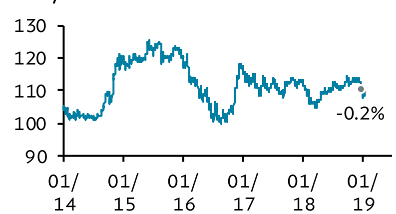


SMI

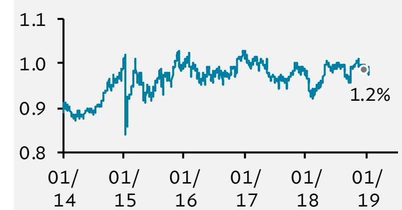


MSCI Emerging Markets

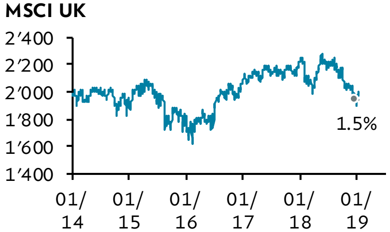
USD/JPY



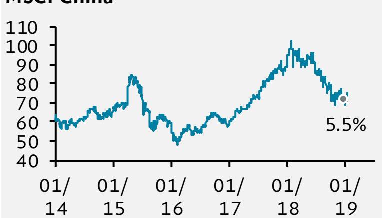
USD/CHF



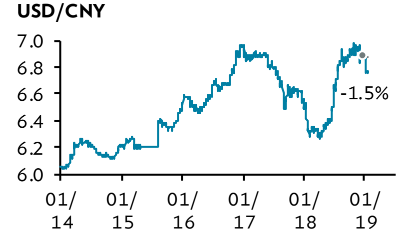
MSCI UK



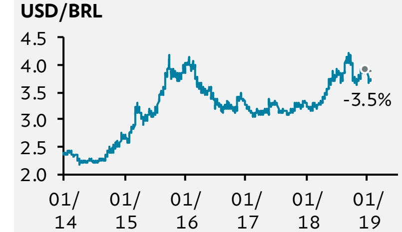
MSCI China



USD/CNY



USD/BRL

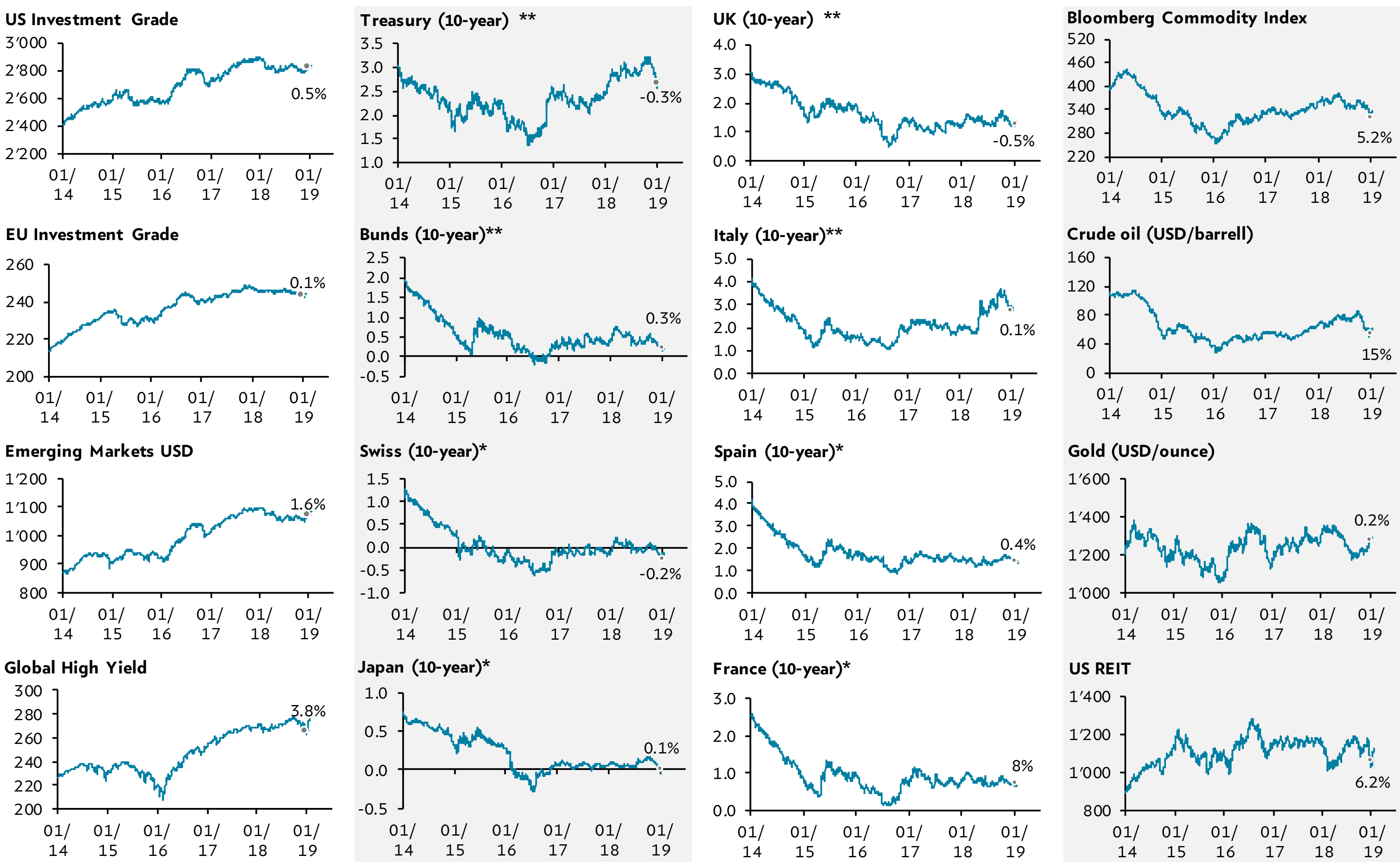


Data as of: 18/01/2019; 11:27 CET

Source: Bloomberg Finance L.P., Julius Baer

MARKET PERFORMANCE (3/3)

Review of five-year and year-to-date performance



Data as of: 18/01/2019; 11:27 CET

Source: Bloomberg Finance L.P., Julius Baer

**Returns depict investment yield; REIT = Real Estate Investment Trust

HOUSE VIEW

Key views per asset class

Asset class views

View	Asset class	Risk category	Focus on ...	Avoid ...
►	**Cash**			
►	**Bonds**	Conservative	Inflation-protected securities	Core European government bonds
		Quality	USD money market instruments	EUR corporate bonds
		Opportunistic	USD mid-duration Baa bonds with yield above 4%, Chinese investment-grade real estate bonds	
		Speculative	Chinese high-yield real estate bonds, short-duration US high-yield bonds, emerging market hard-currency bonds	
▲	**Equities**	Conservative	Healthcare	Consumer defensives, utilities; US dividend growers
		Medium	Japan, Chile; financials, information technology, oil & gas, industrials; European small caps, European high dividend	Consumer cyclicals, real estate
		Opportunistic	Philippines, Vietnam	India, Russia
►	**Commodities**		Gold, silver	Iron ore
►	**Currencies**		USD, CHF, CAD, INR, KRW	JPY, GBP, CNY, HUF, ZAR
	Next Generation	Thematic	Asian tourism, Cleaner China, Cloud computing & Artificial Intelligence, Cybersecurity, Digital commerce, Digital content (video games), Digital health, FinTech (digital payments), Future mobility, Genomics 3.0, Global education, Healthy China, Made in China 2025	

Vietnam: Julius Baer makes no offering in local markets.
Philippines: For locals residents, investments into the local market are bound by legal restrictions.

Source: Julius Baer; ▲ = positive, ► = neutral, ▼ = negative; equity sector classification: JBFI (Julius Baer Financial Instruments)

CURRENT ASSET ALLOCATION

Current asset allocation of the Income, Balanced and Growth mandates

Asset classes

	Income (portfolio weights)	**Balanced** (portfolio weights)	**Growth** (portfolio weights)
Cash	7%	8%	10%
Bonds	61%	43%	20%
Investment grade	41%	20%	0%
Inflation linked	4%	4%	0%
High yield	2%	3%	0%
Growth markets	7%	7%	5%
Subordinated	2%	4%	4%
Unconstrained	5%	5%	11%
Equities	28%	44%	64%
Home bias	7%	12%	20%
Core: Global	14%	20%	27%
Core: Special Focus	5%	6%	9%
Satellites	2%	6%	8%
Alternative Investments	4%	5%	6%

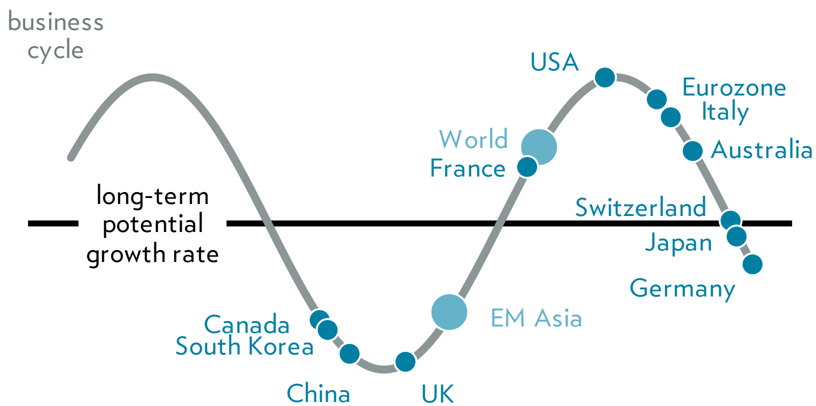
Data as of: 18/01/2019; 11:27 CET

Source: Julius Baer

MACROECONOMIC OUTLOOK

Year of transition, but not of recession

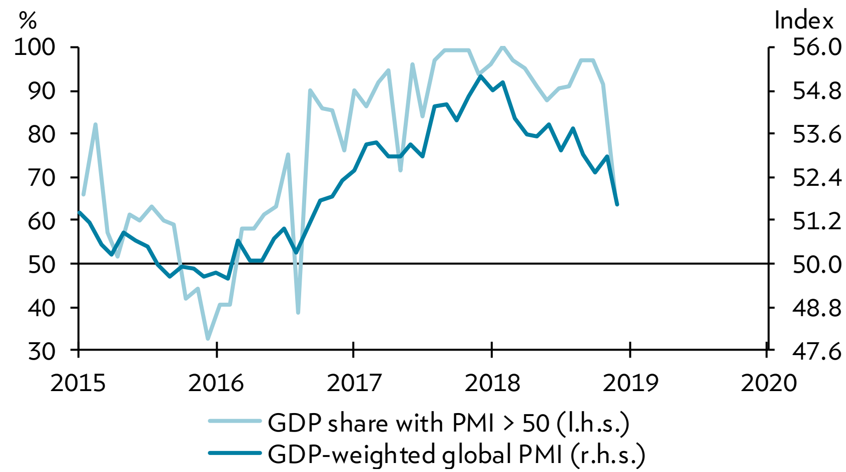
Global business cycle



Source: Julius Baer

- Further deterioration of leading indicators shows that the global cooling continues in early 2019.
- Fears of an unfolding recession this year appear overdone. The slowdown is triggered by capacity constraints in labour markets and production, not by inherent weakness in consumption.

Economic momentum: Downtrend continues



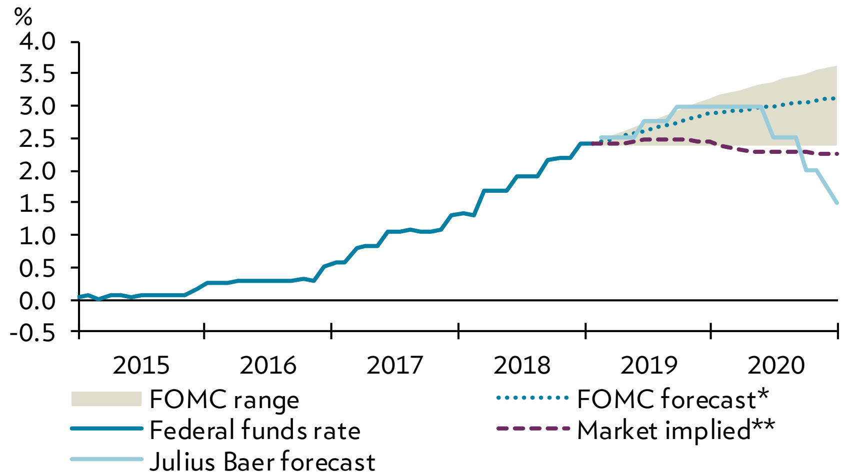
Source: Netherlands Bureau for Economic Policy Analysis (CPB), Julius Baer

- Weakness is increasingly evident in the major European economies, as well as in China.
- The US economy is still showing resilience and is yet to peak in the first half of 2019, before convergence to the downside will likely set in later this year.

MACROECONOMIC OUTLOOK

Monetary policy banks adopt wait-and-see stance in early 2019

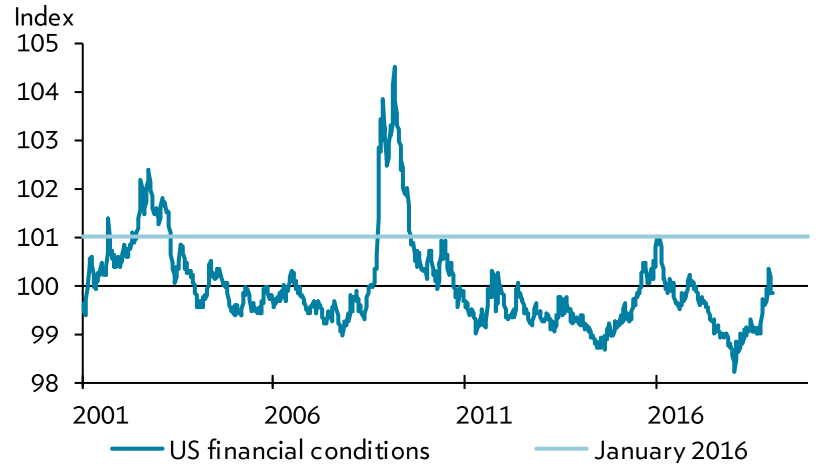
Fed rate outlook: Pause in the first half of 2019



- The bleaker global growth outlook causes the large central banks to pause interest rate normalisation.
- Despite markets being positioned otherwise, we expect interest rate hikes by the US Fed to resume in summer, as inflation pressure from the labour market remains present.

Source: Source: Federal Reserve, Bloomberg Finance L.P., Julius Baer; FOMC = Federal Open Market Committee; * median of 'dots'; ** implied by the OIS curve

US financial conditions: Not historically tight

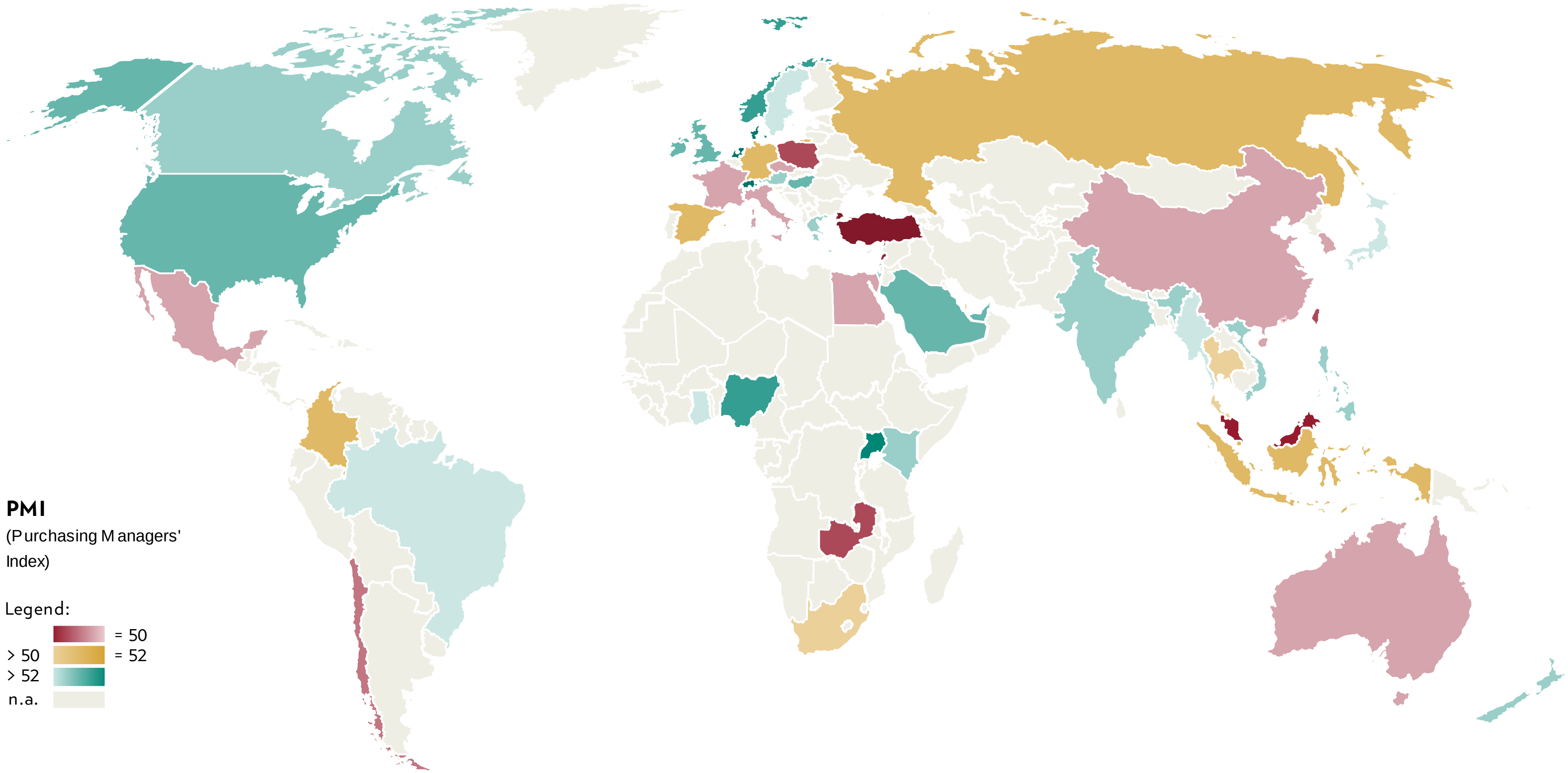


- Besides structural and political risks, concerns are rising that the Fed has been overly ambitious with regards to monetary policy normalisation.
- While the federal funds target has indeed tightened financial conditions considerably, levels do not yet indicate the triggering of a recession.

Source: Goldman Sachs, Julius Baer

PMI WORLD MAP – DECEMBER 2018

Cyclical weakness increasingly evident in developed European economies



Source: Markit Economics, Datastream, Bloomberg Finance L.P., Julius Baer. November 2018 values: Israel, New Zealand.
Values > 50 signal economic expansion, values < 50 signal economic contraction.

CURRENCIES

USD is now the most attractive safe-haven currency

G10 currency views

	Bearish	Neutral	Bullish
USD (United States dollar)			■
EUR (Euro)		■	
JPY (Japanese yen)	■		
GBP (UK pound sterling)	■		
CHF (Swiss franc)			■
SEK (Swedish krona)		■	
NOK (Norwegian krone)		■	
CAD (Canadian dollar)			■
AUD (Australian dollar)		■	
NZD (New Zealand dollar)		■	

- A soft global economy supports the USD. Federal funds rate outlook repricing went to extremes.
- The JPY is no longer the most attractive safe-haven currency, as it became expensive recently.
- Although we are long-term Bullish on the GBP, the market seems complacent on hard-Brexit risks.

Source: Datastream, Julius Baer; Fed = Federal Reserve

Emerging market currency views

	Bearish	Neutral	Bullish
CNY (Chinese yuan renminbi)	■		
INR (Indian rupee)			■
IDR (Indonesian rupiah)		■	
KRW (Korean won)			■
SGD (Singapore dollar)		■	
BRL (Brazilian real)		■	
MXN (Mexican peso)		■	
HUF (Hungarian forint)	■		
PLN (Polish zloty)		■	
RUB (Russian rouble)		■	
TRY (Turkish lira)		■	
ZAR (South African rand)	■		

- Looser monetary policy in China will weaken the CNY, once the USD has overcome the drag from the repricing of the federal funds rate path.
- Global liquidity stress due to a strong USD and higher rates remains a headwind for emerging market currencies.

Source: Datastream, Julius Baer

FIXED INCOME

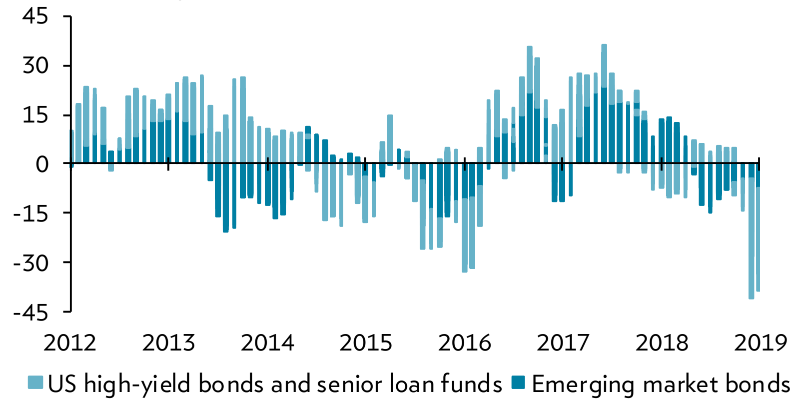
Turning somewhat more risk friendly

Fixed Income views

		Underweight	Neutral	Overweight
USD	10-year government bond		■	
	TIPS*			■
	Investment-grade corporate bonds		■	
	High-yield bonds		■	
	Emerging market bonds			■
EUR	10-year Germany	■		
	Investment-grade corporate bonds	■		
	High-yield bonds		■	
GBP	10-year government bond	■		
	Investment-grade corporate bonds	■		
CHF	5-year Switzerland	■		
	High-quality corporate bonds	■		
	A/BBB-rated corporate bonds	■		
	Emerging market bonds local currency		■	

Funds fled from riskier segments

12-week trailing fund flows, USD bn



- 2018 ended in a heavy correction, leaving investors with more opportunities to start with in 2019. We turn tactically more risk friendly.
- We have upgraded US high-yield bonds to Neutral from Underweight and favour low-grade issuers in the investment grade segment.

- Risk assets had their stress test in December 2018, leading to huge fund outflows.
- The underlying US corporate debt problem and vulnerabilities, such as surging credit costs, are still present but risk compensation improved as well.

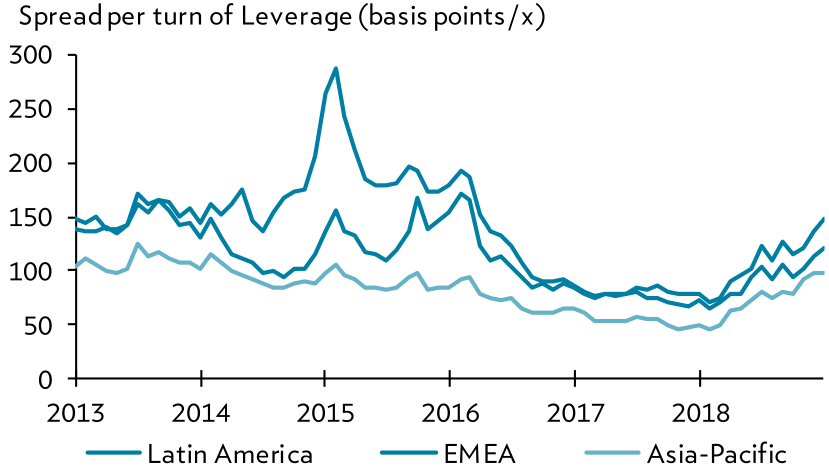
Source: Julius Baer; *TIPS = Treasury inflation-protected securities

Source: ICE Bank of America Merill Lynch, Julius Baer

FIXED INCOME

Credit risk favourites: EM hard-currency and US low-grade debt

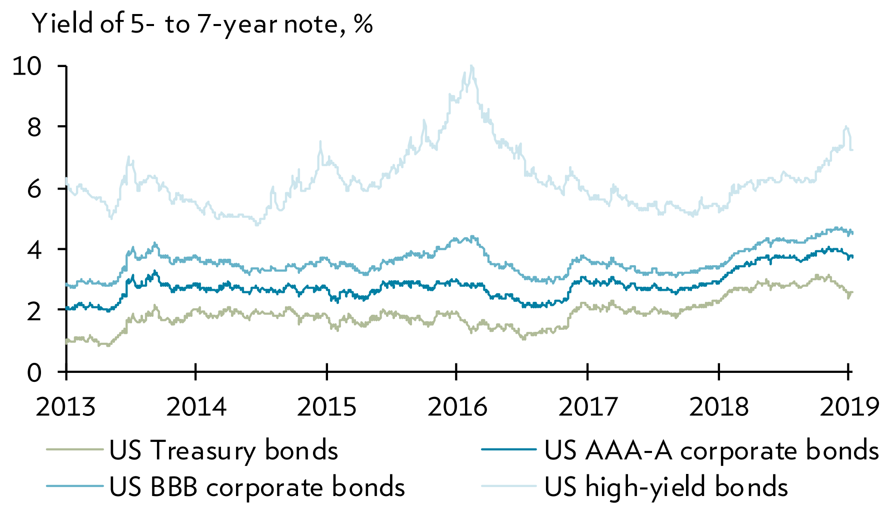
EM credit compensation edged higher in 2018



- Emerging market (EM) credit spreads are surprisingly resilient and provide a cushion against moves in the US Treasury curve.
- We keep our Overweight stance on EM hard-currency debt but shift our focus from Latin America to Asia.

Source: ICE Bank of America Merill Lynch, Julius Baer

US credit: We turn slightly more risk friendly



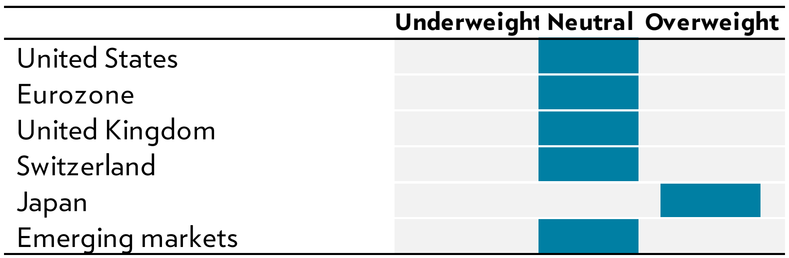
- With only low recession probability, a more cautious Fed and higher investor compensation, we add to our credit risk exposure.
- We like US low-investment-grade debt and have upgraded US high-yield bonds back to Neutral.

Source: ICE Bank of America Merill Lynch, Datastream, Julius Baer

EQUITIES

Stock market has overreacted albeit recession risk has slightly increased

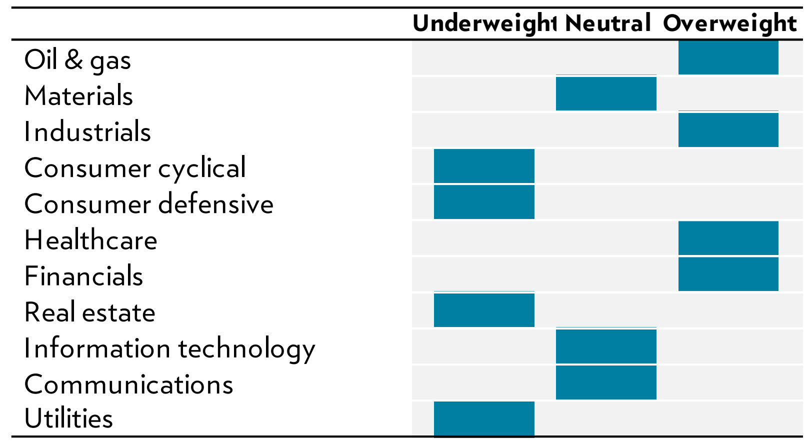
Developed market views



- Start of a bear market has historically required a recession, which we do not expect this year.
- S&P 500 has, on average, returned +17% whenever the de-rating was between 20%–30%.
- We upgraded UK equities amid record low relative valuations, while earnings revisions are stabilising.

Source: Bloomberg Finance L.P., Julius Baer

Global sector views



- We maintain our cyclical tilt but become more defensive to take into account the reduced visibility going forward.
- We upgrade healthcare to Overweight in light of low valuations, a strong secular growth story and solid balance sheets.

Source: Bloomberg Finance L.P., Julius Baer; Equity sector classification: Julius Baer Financial Instruments

EQUITIES

Emerging markets – ‘DonXi’ put*

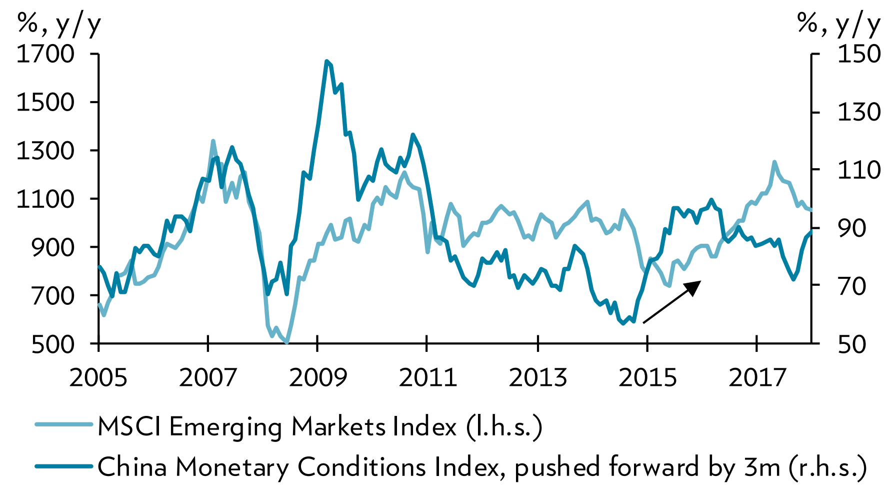
Emerging market views

	Underweight	Neutral	Overweight
South Africa		X	
Russia	X		
Turkey		X	
Poland		X	
Brazil		X	
Mexico		X	
China		X	
South Korea			X
Taiwan		X	
India	X		
Indonesia			X
Thailand		X	
Vietnam (Frontier Market)			X

- EM equities started to outperform recently amid USD weakness and progress in trade talks.
- A tariff deal between the US and China before the March deadline is largerly priced in.
- We upgraded the EMEA region to Overweight in light of low valuations and diminishing headwinds.

Source: Datastream, Julius Baer; EMEA = Eastern Europe, Middle East and Africa

EM dependent on Chinese monetary conditions



- Given the recent weak economic data from China, we expect more fiscal and monetary support measures to be announced in the near term.
- While Chinese equities are likely to trade range-bound and react highly sensitive to new economic data, the long-term investment case is still intact.

Source: Datastream, International Monetary Fund, Julius Baer; * The expression suggests the leaders of China and the US will act to prevent a global sell-off.

COMMODITIES

In the eye of slowdown storm

Commodity rating overview

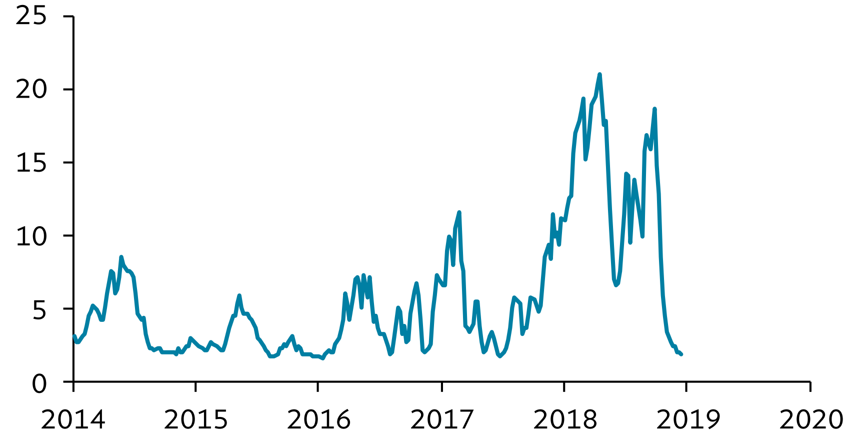
	Bearish	Neutral	Bullish
Crude oil		■	
Natural gas		■	
Aluminium		■	
Copper		■	
Iron ore	■		
Palladium		■	
Platinum			■
Gold			■
Silver			■
Corn		■	
Soybeans		■	
Sugar		■	
Wheat		■	

- Growth pessimism caused a commodity sell-off late last year. We see no immediate recession, but growth is neither strong nor soft enough to provide a clear price trend for the asset class.
- A brightening mood lends tailwinds, while the political noise keeps uncertainty high.

Source: Julius Baer

Oil futures positions hit rock bottom

Long-short ratio (hedge fonds)



- Oil should settle in a range. Supply curbs and a brightening mood are positive near term, but the shale boom keeps a lid on prices longer term.
- The equity sell-off underpinned gold's safe-haven status. Prices and sentiment recovered, but we still recommend buying gold for the long term.

Source: Bloomberg Finance L.P., Julius Baer

KEY FORECASTS

Key forecasts per asset class

Gross domestic product
(real, % yearly growth)

	2017	2018E	2019E
World	3.5	3.6	3.2
United States	2.2	2.9	2.6
Eurozone	2.5	1.8	1.2
Germany	2.2	1.5	1.1
Switzerland	1.7	2.6	1.2
Japan	1.9	0.7	0.9
United Kingdom	1.8	1.4	1.1
China	6.9	6.6	5.9

Inflation
(consumer price index, %)

	2017	2018E	2019E
World	3.9	4.0	4.2
United States	2.1	2.4	1.9
Eurozone	1.5	1.7	1.5
Germany	1.7	1.9	1.8
Switzerland	0.5	0.9	0.9
Japan	0.5	1.0	0.7
United Kingdom	2.7	2.5	2.2
China	1.5	1.9	2.6

Yields & Currencies

	Spot	3m	12m
US 10y Treasuries	2.77	3.10	3.50
EUR 10y Bund	0.27	0.65	1.10
EUR/USD	1.14	1.13	1.17
EUR/CHF	1.13	1.12	1.15
EUR/GBP	0.88	0.92	0.86
USD/JPY	109.5	113.0	115.0

Equities & Commodities

	Spot	3m	12m
S&P 500	2'636	2'670	2'900
Eurostoxx 50	3'105	3'125	3'300
MSCI UK	1'976	2'000	2'050
Gold (USD/oz)	1'285	1'300	1'350
Oil Brent	61.9	65.0	60.0

Source: Bloomberg Finance L.P., Julius Baer; E = Estimate

Data as of: 18/01/2019, 11:27 CET

IMPORTANT LEGAL INFORMATION (1/8)

This publication constitutes investment research and has been produced by Bank Julius Baer & Co. Ltd., Zurich, which is authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA). This publication series is issued regularly. Information on financial instruments and issuers will be updated irregularly or in response to important events.

IMPRINT

Authors:
Patrik Lang, Head of Equities Research, patrik.lang@juliusbaer.com [1)]
Dario Messi, Fixed Income Research, dario.messi@juliusbaer.com [1)]
Mathieu Racheter, Equity Strategy Research, mathieu.racheter@juliusbaer.com [1)]
Norbert Rücker, Head of Macro & Commodity Research, norbert.ruecker@juliusbaer.com [1]
David Alexander Meier, Economic Research, davidalexander.meier@juliusbaer.com [1)]
Sanja Rogic, Event Driven Research, sanja.rogic@juliusbaer.com [1)]

1) This analyst is employed by Bank Julius Baer & Co. Ltd., Zurich, which is authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA).

APPENDIX

Analyst certification
The analysts hereby certify that views about the companies discussed in this report accurately reflect their personal view about the companies and securities. They further certify that no part of their compensation was, is, or will be directly or indirectly linked to the specific recommendations or views in this report.

Methodology
Please refer to the following link for more information on the research methodology used by Julius Baer analysts:
www.juliusbaer.com/research-methodology

Structure
References in this publication to Julius Baer include subsidiaries and affiliates. For additional information on our structure, please refer to the following link:
www.juliusbaer.com/structure

Price information
Unless otherwise stated, the price information reflects the closing price of the previous trading day.

Disclosure
No specific disclosures.

IMPORTANT LEGAL INFORMATION (2/8)

Strategy research rating system and risk rating system

Countries, sectors and investment styles are rated 'Overweight', 'Neutral' or 'Underweight'. These ratings are based on our e xpectations for relative performance versus regional and global benchmark indices.

Overweight	Expected to outperform regional or global benchmark indices in the coming 9-12 months, unless otherwise stated.
Neutral	Expected to perform in line with regional or global benchmark indices in the coming 9-12 months, unless otherwise stated.
Underweight	Expected to underperform regional or global benchmark indices in the coming 9-12 months, unless otherwise stated.

Equity investments are divided into three different risk segments. Risk here is defined as the historical five -year volatility based on monthly returns in CHF. Based on the data of all segments considered (developed markets, emerging markets, global sectors, in vestment styles) the following distinction is made:

Conservative	Investments whose historical volatility is in the bottom quartile of the universe described above.
Medium	Investments whose historical volatility is in the middle two quartiles of the universe described above.
Opportunistic	Investments whose historical volatility is in the top quartile of the universe described above.

Risk categories for fixed income research

Conservative	Incorporates supranational issuers, top-rated sovereign issuers and bodies that are directly and fully guaranteed by these insti tutions. These issuers are most likely to preserve their top rating throughout the business cycle.
Quality	Incorporates sovereigns and corporate issuers that are very likely to service and repay debt within a five -year credit scenario. They are likely to preserve their investment grade rating throughout a normal business cycle.
Opportunistic	Incorporates issuers that are quite likely to service and repay debt within the five -year credit scenario. Such issuers have an attractive risk/return profile in the current credit scenario but are subject to rating downgrade risk and, thus, might be exchanged per iodically.
Speculative	Incorporates sub-investment-grade issuers in Europe and the USA as well as local issuers in emerging markets. Issuers are likely to service and repay debt in the current credit scenario. Investors must note that these issuers are subject to a higher downgrade and defau lt frequency and that an active management of these positions is crucial.

IMPORTANT LEGAL INFORMATION (3/8)

Fixed income market segment ratings

Overweight	Segments that are expected to yield a return that is above the ten-year historical average.
Neutral	Segments that are expected to yield a return that is in line with the ten-year historical average.
Underweight	Segments that are expected to yield a return that is below the ten-year historical average.

Credit rating definition

Credit ratings used in our publications follow the definitions and systematic of Moody's (www.moodys.com).

	Moody's	Standard & Poor's	Fitch/IBCA	Credit rating definition
Investment-grade	Aaa	AAA	AAA	Obligations rated Aaa are judged to be of the highest quality, with minimal credit risk.
	Aa1 Aa2 Aa3	AA+ AA AA-	AA+ AA AA-	Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.
	A1 A2 A3	A+ A A-	A+ A A-	Obligations rated A are considered upper-medium grade and are subject to low credit risk.
	Baa1 Baa2 Baa3	BBB+ BBB BBB-	BBB+ BBB BBB-	Obligations rated Baa are subject to moderate credit risk. They are considered medium-grade and as such may possess certain speculative characteristics.
Non-investment-grade	Ba1 Ba2 Ba3	BB+ BB BB-	BB+ BB BB-	Obligations rated Ba are judged to have speculative elements and are subject to substantial credit risk.
	B1 B2 B3	B+ B B-	B+ B B-	Obligations rated B are considered speculative and are subject to high credit risk.
	Caa1 Caa2 Caa3	CCC+ CCC CCC-	CCC+ CCC CCC-	Obligations rated Caa are judged to be of poor standing and are subject to very high credit risk.
	Ca	CC C	CC C	Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.
	C	D	D	Obligations rated C are the lowest rated class of bonds and are typically in default, with little prospect for recovery of principal or interest.

IMPORTANT LEGAL INFORMATION (4/8)

DISCLAIMER

General: The information and opinions expressed in this publication were produced as of the date of writing and are subject to change without notice. This publication is intended for information purposes only and does not constitute an offer or an invitation by, or on behalf of, Julius Baer to buy or sell any securities or related financial instruments or to participate in any particular trading strategy in any jurisdiction. Opinions and comments of the authors reflect their current views, but not necessarily of other Julius Baer entities or any other third party. Other Julius Baer entities may have issued, and may in the future issue, other publications that are inconsistent with, and reach different conclusions from, the information presented in this publication. Julius Baer assumes no obligation to ensure that such other publications are brought to the attention of any recipient of this publication.
Suitability: Investments in the asset classes mentioned in this publication may not be suitable for all recipients. This publication has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Before entering into any transaction, investors should consider the suitability of the transaction to individual circumstances and objectives. Any investment or trading or other decision should only be made by the client after a thorough reading of the relevant product term sheet, subscription agreement, information memorandum, prospectus or other offering document relating to the issue of the securities or other financial instruments. This publication should not be read in isolation without reference to the full research report (if available) which may be provided upon request. Nothing in this publication constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to individual circumstances, or otherwise constitutes a personal recommendation to any specific investor. Any references to a particular tax treatment depend on the individual circumstances of each investor and may be subject to change in the future. Julius Baer recommends that investors independently assess, with a professional advisor, the specific financial risks as well as legal, regulatory, credit, tax and accounting consequences.
Insofar as **contingent convertible bonds (so-called 'CoCo bonds')** are mentioned in this publication, please note that the German securities regulator (BaFin– Federal Financial Supervisory Authority) does not regard CoCo bonds as a suitable investment for private clients due to their complex product structure, their intended use, the fact that they are difficult to value and the potential conflict of interest on the part of the bank. Private clients wishing to purchase CoCo bonds on their own initiative should carefully consider the specific features and risks involved when making their decision. According to the Product Intervention (Contingent Convertible Instruments and Mutual Society Shares) Instrument 2015, enacted by the U.K. Financial Conduct Authority (FCA), this/these product(s) must not be purchased by retail investors domiciled in the European Economic Area ('EEA' – EU, Liechtenstein, Norway and Iceland), unless one of the following conditions is met: annual income of at least GBP 100,000 (or equivalent) or net assets (excluding property, insurance and other benefits) of at least GBP 250,000 (or equivalent) at disposal.
Information / forecasts referred to: Although the information and data herein are obtained from sources believed to be reliable, no representation is made that the information is accurate or complete. In particular, the information provided in this publication may not cover all material information on the financial instruments or issuers of such instruments. Bank Julius Baer & Co. Ltd., its subsidiaries and affiliated companies do not accept liability for any loss arising from the use of this publication. Important sources for the production of this publication are e.g. national and international media, information services (e.g. Thomson Reuters, Bloomberg Finance L.P.), publicly available databases, economic journals and newspapers (e.g. Financial Times, Wall Street Journal), publicly available company information, publications of rating agencies. Ratings and appraisals contained in this publication are clearly marked as such. All information and data used for this publication relate to past or present circumstances and may change at any time without prior notice. Statements contained in this publication regarding financial instruments or issuers of financial instruments relate to the time of the production of this publication. Such statements are based on a multitude of factors which are subject to continuous change. A statement contained in this publication may, thus, become inaccurate without this being published. Potential risk regarding statements and expectations expressed in this publication may result from issuer specific and general (e.g. political, economic, market, etc.) developments.
Risk: The price and value of, and income from investments in any asset class mentioned in this publication may fall as well as rise and investors may not get back the amount invested. Risks involved in any asset class mentioned in this publication may include but are not necessarily limited to market risks, credit risks, currency risks, political risks and economic risks. Investments in emerging markets are speculative and may be considerably more volatile than investments in established markets. **Past performance is not a reliable indicator of future results. Performance forecasts are not a reliable indicator of future performance. The Julius Baer fixed-income ratings apply exclusively to bonds of the specific issuer ranked senior unsecured or higher. They are therefore not valid for debentures junior to the mentioned ranking unless mentioned explicitly.** Particular risks in connection with specific investments featured in this publication are disclosed prominently hereinabove in the text of this publication. Any investment should only be made after a thorough reading of the current prospectuses and/or other documentation/information available.

IMPORTANT LEGAL INFORMATION (5/8)

Shares, bank debt securities (e.g. interest bearing bank bonds and certificates) as well as other claims against financial institutions are subject to special regulations such as the 'Bank Recovery and Resolution Directive' and the 'Single Resolution Mechanism Regulation'. These regulations can have a negative effect for the investor/ contractual partner of the financial institution in case of a default and the necessity of a resolution of the financial institution. For further details, please refer to: www.juliusbaer.com/legal-information-en.

Conflict of interest: We are required to disclose important information about our interests and potential conflicts. In order to prevent conflicts of interest from adversely affecting the interests of its clients, Julius Baer has implemented the necessary organisational and administrative arrangements to manage conflicts of interests. Julius Baer's arrangements include putting in place information barriers that ensure the separation of its research departments from other areas of the business so that no other area of the business will know the contents of any planned research until the research has been distributed to clients. Adherence to these procedures is monitored by the Julius Baer Compliance Department. Unless explicitly stated in this publication, its information and analysis has not been disclosed to the issuer of the securities referred to herein or a Julius Baer entity before the publication has been published or disseminated. A Julius Baer entity may, to the extent permitted by law, participate or invest in other financing transactions with the issuer of the securities referred to herein, perform services or solicit business from such issuers, have a position or effect transactions in the securities or options thereof, have any other significant financial interest regarding the issuers of the securities referred to herein and/or may have done so in the past. For further information about our interest in the investments featured in this publication, see the company-specific disclosures above.

Important distribution information

This publication and any market data contained therein shall only be for the personal use of the intended recipient and shall not be redistributed to any third party, unless Julius Baer or the source of the relevant market data gives their approval. This publication is not directed to any person in any jurisdiction where (on the grounds of that person's nationality, residence or otherwise) such publications are prohibited.

External Asset Managers/External Financial Advisors: In case this research publication is provided to an External Asset Manager or an External Financial Advisor, Julius Baer expressly prohibits that it is redistributed by the External Asset Manager or the External Financial Advisor and is made available to their clients and/or third parties. By receiving any research publication the External Asset Managers or the External Financial Advisors confirm that they will make their own independent analysis and investment decisions, if applicable.

Austria: Julius Baer Investment Advisory GesmbH, authorised and regulated by the Austrian Financial Market Authority (FMA), distributes research to its clients.

Chile: This publication is for the intended recipient only. Financial instruments mentioned in this publication are neither registered with nor under the supervision of the Registro de Valores Extranjeros (Foreign Securities Registry) maintained by the Superintendencia de Valores y Seguros de Chile (Chilean Securities and Insurance Commission or 'SVS'). If such securities are offered within Chile, they will be offered and sold only pursuant to General Rule 336 of the SVS (an exemption to the registration requirements in the Foreign Securities Registry), or in circumstances which do not constitute a public offering of securities in Chile within the meaning of Article 4 of the Chilean Securities Market Law, Law No. 18,045.

Dubai International Financial Centre: This publication has been provided by Julius Baer (Middle East) Ltd. and does not constitute or form part of any offer to issue or sell, or any solicitation to subscribe for or purchase any securities or investment products in the UAE (including the Dubai International Financial Centre) and should not be construed as such. Furthermore, this publication is being made available on the basis that the recipient acknowledges and understands that the entities and securities to which it may relate have not been approved, licensed by or registered with the UAE Central Bank, the UAE Securities and Commodities Authority or the Dubai Financial Services Authority or any other relevant licensing authority or governmental agency in the UAE. It may not be relied upon by or distributed to retail clients. Please note that Julius Baer (Middle East) Ltd. offers financial products or services only to professional clients who have sufficient financial experience and understanding of financial markets, products or transactions and any associated risks. The products or services mentioned will be available only to professional clients in line with the definition of the Dubai Financial Services Authority (DFSA) Conduct of Business Module. Julius Baer (Middle East) Ltd. is duly licensed and regulated by the DFSA.

Germany: Bank Julius Bär Deutschland AG, authorised and regulated by the German Federal Financial Supervisory Authority (BaFin), distributes this publication to its clients. If you have any queries concerning this publication, please contact your relationship manager.

Guernsey: This publication is distributed by Bank Julius Baer & Co Ltd., Guernsey Branch, which is licensed in Guernsey to provide banking and investment services and is regulated by the Guernsey Financial Services Commission.

IMPORTANT LEGAL INFORMATION (6/8)

Hong Kong: This publication is distributed in Hong Kong by and on behalf of, and is attributable to, Bank Julius Baer & Co. Ltd., Hong Kong branch, which holds a full banking licence issued by the Hong Kong Monetary Authority under the Banking Ordinance (Chapter 155 of the Laws of Hong Kong SAR). The Bank is also a registered institution under the Securities and Futures Ordinance (SFO) (Chapter 571 of the Laws of Hong Kong SAR) licensed to carry on Type 1 (dealing in securities), Type 4 (advising on securities) and Type 9 (asset management) regulated activities with Central Entity number AUR302. This document must not be issued, circulated or distributed in Hong Kong other than to 'professional investors' as defined in the SFO. The contents of this publication have not been reviewed by any regulatory authority. If you have any queries concerning this publication, please contact your Hong Kong relationship manager. Bank Julius Baer & Co. Ltd. is incorporated in Switzerland with limited liability.
India: This is not a publication of Julius Baer Wealth Advisors (India) Private Limited (JBWA) (a group company of Julius Baer, Zurich) or any of its Indian subsidiaries under the SEBI Research Analyst Regulations, 2014. This publication has been produced by Bank Julius Baer & Co. Ltd. (Julius Baer), a company incorporated in Switzerland with limited liability and it does not have a banking license in India. This publication should not be construed in any manner as an offer, solicitation or recommendation by JBWA or any Julius Baer entity globally.
Israel: This publication is distributed by Julius Baer Financial Services (Israel) Ltd. (JBFS), licensed by the Israel Securities Authority to provide investment marketing and portfolio management services. Pursuant to Israeli law, 'Investment Marketing' is the provision of advice to clients concerning the merit of an investment, holding, purchase or sale of securities or financial instruments, when the provider of such advice has an affiliation to the security or financial instrument. Due to its affiliation to Bank Julius Baer & Co. Ltd., JBFS is considered to be affiliated to certain securities and financial instruments that may be connected to the services JBFS provides, and therefore any use of the term 'investment advice' or any variation thereof, in this publication should be understood as Investment Marketing, as explained above. This publication does not constitute investment advice and has been prepared by Bank Julius Baer & Co. Ltd. and distributed by JBFS for information purposes only, without taking into account the objectives, financial situation or needs of any particular client, and does not constitute an offer, a recommendation or an invitation by or on behalf of JBFS to make any investment.
Japan: This publication may have been distributed by or on behalf of a member company of Julius Baer Group for the sole purpose of advertisement of Julius Baer.
Kingdom of Bahrain: Julius Baer (Bahrain) B.S.C.(c), an investment business firm, which is licensed and regulated by the Central Bank of Bahrain (CBB), distributes this publication to its expert and accredited investor clients. Please note that Julius Baer (Bahrain) B.S.C.(c) offers financial products or services only to expert and accredited investor clients in line with the definition of the CBB's rulebook that contains regulations, directives and rules pursuant to the CBB rulemaking powers under the CBB law. This publication may not be relied upon by or distributed to retail clients. The CBB does not take any responsibility for the accuracy of the statements and information contained in this publication nor shall it have any liability to any person for any damage or loss resulting from reliance on any statement or information contained herein.
Lebanon: This publication has been distributed by Julius Baer (Lebanon) S.A.L., which is an entity supervised by the Lebanon Capital Markets Authority (CMA). It has not been approved or licensed by the Lebanon CMA or any other relevant authority in Lebanon. It is strictly private and confidential and is being issued to a limited number of individual and institutional investors upon their request and must not be provided to, or relied upon, by any other person. The information contained herein is as of the date referenced and Julius Baer (Lebanon) S.A.L. shall not be liable to periodically update said information. The quotes and values provided herein are for indicative purpose only and shall in no way refer to tradable levels.
Luxembourg: This publication is distributed by Bank Julius Baer Europe S.A., a société anonyme incorporated and existing under the laws of the Grand Duchy of Luxembourg, with registered office at 25, rue Edward Steichen, L-2540 Luxembourg, registered with the Luxembourg Register of Commerce and Companies under number B 8495, and authorised and regulated by the Commission de Surveillance du Secteur Financier, 283, route d'Arlon, L-1150 Luxembourg. This publication has not been authorised or reviewed by the CSSF and it is not intended to be filed with the CSSF.
Monaco: Bank Julius Baer (Monaco) S.A.M., an institution approved by the Minister of State for Monaco and the Bank of France, is sending to its clients this publication. Julius Baer Wealth Management (Monaco) S.A.M., an asset management company authorised in Monaco, is distributing to its clients this publication.
Netherlands: Julius Baer (Netherlands) B.V., authorised and regulated by the Netherlands Authority for the Financial Markets (AFM) and authorised to (i) receive and transfer orders from clients, and (ii) provide investment advice, disseminates this publication to its clients. Bank Julius Baer Europe S.A. is authorised and regulated by the Commission de Surveillance du Secteur Financier (CSSF), 283, route d'Arlon, L-1150 Luxembourg, and authorised to provide banking and certain investment services in the Netherlands on a passported basis.

IMPORTANT LEGAL INFORMATION (7/8)

Panama: The relevant services and/or products mentioned in this publication shall only be provided in Panama by a Julius Baer entity authorised to provide such services/products in Panama. This publication is for the intended recipient only. Financial instruments mentioned in this publication are neither registered with nor under the supervision of the Superintendence of the Securities Market (formerly the National Securities Commission). The exemption from registration is based on Article 129 of Decree Law 1 of 8 July 1999 as amended and organised into a single text by Title II of Law 67 of 2011 (the 'Securities Law'). In consequence, the tax treatment established in Articles 334 to 336 of the Securities Law does not apply to them.
Republic of Ireland: Bank Julius Baer Europe S.A. Ireland Branch is authorised and regulated by the Commission de Surveillance du Secteur Financier (CSSF), 283, route d'Arlon, L-1150 Luxembourg, and is regulated by the Central Bank of Ireland (CBI) for conduct of business rules. Bank Julius Baer Europe S.A. is a société anonyme incorporated and existing under the laws of the Grand Duchy of Luxembourg, with registered office at 25, rue Edward Steichen, L-2540 Luxembourg, registered with the Luxembourg Register of Commerce and Companies (RCSL) under number B 8495. Bank Julius Baer Europe S.A. Ireland Branch distributes this publication to its clients. Some of the services mentioned in this publication, which are available to clients of the Ireland branch, may be provided by members of the Julius Baer Group based outside of the Grand Duchy of Luxembourg or the Republic of Ireland. In these cases, rules made by the CSSF and the CBI for the protection of retail clients do not apply to such services, and the CSSF and the Irish Financial Services and Pensions Ombudsman will not be able to resolve complaints in respect of such services.
Singapore: This publication is available from Bank Julius Baer & Co. Ltd., Singapore branch, for accredited investors only. As Bank Julius Baer & Co. Ltd., Singapore branch, has a Unit exemption under Section 100(2) of the Financial Advisers Act, Cap. 110 of Singapore (the FAA), it is exempted from many of the requirements of the FAA, amongst others, the requirement to disclose any interest in, or any interest in the acquisition or disposal of, any securities or financial instruments that may be referred to in this publication. Further details of these exemptions are available on request. This publication has not been reviewed by and is not endorsed by the Monetary Authority of Singapore (MAS). Any document or material relating to the offer or sale, or invitation for subscription or purchase, of securities or investment funds (i.e. collective investment schemes) may not be circulated or distributed, nor may such securities or investment funds be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 or 304 respectively of the Securities and Futures Act, Cap. 289 of Singapore (the SFA), (ii) to a relevant person (which includes an accredited investor), or any person pursuant to Section 275(1A) or 305(2) respectively, and in accordance with the conditions, specified in Section 275 or 305 respectively of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. In particular, for investment funds that are not authorised or recognised by the MAS, units in such funds arenot allowed to be offered to the retail public; any written material issued to persons as aforementioned in connection with an offer is not a prospectus as defined in the SFA and, accordingly, statutory liability under the SFA in relation to the content of prospectuses does not apply, and investors should consider carefully whether the investment is suitable for them. Please contact a representative of Bank Julius Baer & Co. Ltd., Singapore branch, with respect to any inquiries concerning this publication. Bank Julius Baer & Co. Ltd. is incorporated in Switzerland with limited liability.
South Africa: This publication is distributed by Julius Baer South Africa (Pty) Ltd, which is an authorised financial services provider (FSP no. 49273) approved by the Financial Sector Conduct Authority.
Spain: Julius Baer Agencia de Valores, S.A.U. and Julius Baer Gestión S.G.I.I.C, S.A., both authorised and regulated by the Comisión Nacional del Mercado de Valores (CNMV), disseminate research to their clients.
Switzerland: This publication is distributed by Bank Julius Baer & Co. Ltd., Zurich, authorised and regulated by the Swiss Financial Market Supervisory Authority (FINMA).
The Bahamas: This publication is distributed by Julius Baer Bank (Bahamas) Limited, an entity licensed by the Central Bank of The Bahamas and regulated by the Securities Commission of The Bahamas. This publication does not constitute a prospectus or a communication for the purposes of the Securities Industry Act, 2011, or the Securities Industry Regulations, 2012. In addition, it is only intended for persons who are designated or who are deemed 'non-resident' for the purposes of Bahamian Exchange Control Regulations and Rules.
United Arab Emirates: This publication has not been approved or licensed by the UAE Central Bank, the UAE Securities and Commodities Authority or any other relevant authority in the UAE. It is strictly private and confidential and is being issued to a limited number of sophisticated individual and institutional investors upon their request and must not be provided to, or relied upon, by any other person.

IMPORTANT LEGAL INFORMATION (8/8)

United Kingdom: Julius Baer International Limited, which is authorised and regulated by the Financial Conduct Authority (FCA), distributes this publication to its clients and potential clients. Where communicated in the UK, this publication is a financial promotion that has been approved by Julius Baer International Limited for distribution in the UK. Some of the services mentioned in this publication may be provided by members of the Julius Baer Group outside the UK. Rules made by the FCA for the protection of retail clients do not apply to services provided by members of the Julius Baer Group outside the UK, and the Financial Services Compensation Scheme will not apply. Julius Baer International Limited does not provide legal or tax advice. If information on a particular tax treatment is provided, this does not mean that it applies to the client's individual circumstances, and it may be subject to change in the future. Clients should obtain independent tax advice in relation to their individual circumstances from a tax advisor before deciding whether to invest. Julius Baer International Limited provides advice on a limited range of investment products (restricted advice).
Uruguay: In the case this publication is construed as an offer, recommendation or solicitation for the sale or purchase of any securities or other financial instruments, the same are being placed relying on a private placement exemption (oferta privada) pursuant to Section 2 of Law No°18,627 and are not and will not be registered with the Financial Services Superintendence of the Central Bank of Uruguay to be publicly offered in Uruguay. In the case of any closed-ended or private equity funds, the relevant securities are not investment funds regulated by Uruguayan Law No.°16,774 dated September 27, 1996, as amended. If you are located in Uruguay, you confirm that you fully understand the language in which this publication and all documents referred to herein are drafted and you have no need for any document whatsoever to be provided in Spanish or any other language.

United States: NEITHER THIS PUBLICATION NOR ANY COPY THEREOF MAY BE SENT, TAKEN INTO OR DISTRIBUTED IN THE UNITED STATES OR TO ANY US PERSON.

This publication may contain information obtained from third parties, including ratings from rating agencies such as Standard & Poor's, Moody's, Fitch and other similar rating agencies. Reproduction and distribution of third-party content in any form is prohibited except with the prior written permission of the related third party. Third-party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third-party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third-party content providers shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees or losses (including lost income or profits and opportunity costs) in connection with any use of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the market value of securities or the suitability of securities for investment purposes and should not be relied on as investment advice.