

FX: RANGES AND LOW VOLATILITY TO PERSIST

THE MACRO ECONOMIC PICTURE EXPLAINS WHY

Presentation to the ECB FXCG
September 24, 2019

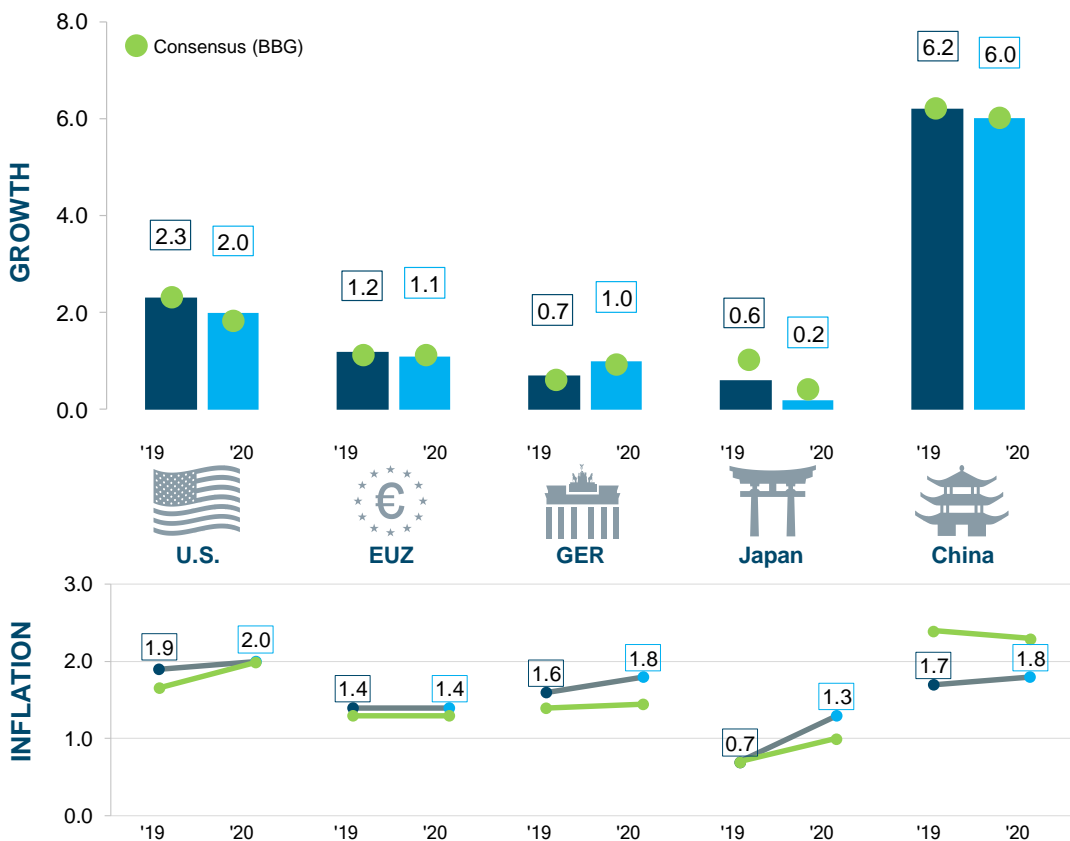


MACRO VIEW: GLOBAL ECONOMY 2019/2020



Growth is moderating but no recession on the horizon

OUR GROWTH AND INFLATION FORECASTS FOR 2019 AND 2020 VS CONSENSUS, IN %



REGIONAL VIEW

- U.S.**
 - GDP:** first round effects of the recent escalation of the trade war should have limited direct impact on GDP growth
 - Inflation:** in case of recent announced trade war measures were to persist, we expect inflation to converge to 2% target
 - Risk:** the constant back and forth regarding the U.S.-China trade conflict weights on the markets leading to more volatility
- EUZ**
 - GDP:** growth is mainly driven by the domestic sector. The rest of the industry still suffers due to trade conflict related uncertainty
 - Inflation:** so far no pass through of higher wages. Inflation expectations are too low, also in comparison with the target
 - Risk:** still no clearance on the outcome of Brexit. We stick to our base case of a "Soft Brexit"
- EM**
 - GDP:** in Asia we expect lower growth rates. LatAm's growth outlook has been revised due to ongoing downgrades of Brazil's forecast
 - Inflation:** inflation remains under control or even continues surprising to the downside in most of EM Asia and in Brazil
 - Risk:** the U.S-China trade conflict and various domestic reasons letting EM markets suffer

The information herein reflects our current views only, are subject to change, and are not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. DWS expectations/forecasts (F) as of August 22, 2019. Source: Bloomberg Finance L.P., DWS Investment GmbH as of August 2019

GLOBAL ECONOMY



Manufacturing dismal – service sector still keeping up its mood

PURCHASING MANAGERS' INDICES (PMI)

	Composite							Manufacturing							Service						
	Jan. 19	Feb. 19	Mrz. 19	Apr. 19	Mai. 19	Jun. 19	Jul. 19	Jan. 19	Feb. 19	Mrz. 19	Apr. 19	Mai. 19	Jun. 19	Jul. 19	Jan. 19	Feb. 19	Mrz. 19	Apr. 19	Mai. 19	Jun. 19	Jul. 19
World	52.1	52.6	52.8	52.2	51.2	51.2	51.7	50.8	50.6	50.5	50.4	49.8	49.4	49.3	52.7	53.3	53.7	52.7	51.6	51.9	52.5
United States	54.4	55.5	54.6	53	50.9	51.5	52.6	54.9	53	52.4	52.6	50.5	50.6	50.4	54.2	56	55.3	53	50.9	51.5	53
Eurozone	51	51.9	51.6	51.5	51.8	52.2	51.5	50.5	49.3	47.5	47.9	47.7	47.6	46.5	51.2	52.8	53.3	52.8	52.9	53.6	53.2
France	48.2	50.4	48.9	50.1	51.2	52.7	51.9	51.2	51.5	49.7	50	50.6	51.9	49.7	47.8	50.2	49.1	50.5	51.5	52.9	52.6
Germany	52.1	52.8	51.4	52.2	52.6	52.6	50.9	49.7	47.6	44.1	44.4	44.3	45	43.2	53	55.3	55.4	55.7	55.4	55.8	54.5
United Kingdom	50.3	51.5	50	50.9	50.9	49.7	50.7	52.8	52.1	55.1	53.1	49.4	48	48	50.1	51.3	48.9	50.4	51	50.2	51.4
Japan	50.9	50.7	50.4	50.8	50.7	50.8	50.6	50.3	48.9	49.2	50.2	49.8	49.3	49.4	51.6	52.3	52	51.8	51.7	51.9	51.8
Spain	54.5	53.5	55.4	52.9	52.1	52.1	51.7	52.4	49.9	50.9	51.8	50.1	47.9	48.2	54.7	54.5	56.8	53.1	52.8	53.6	52.9
Italy	48.8	49.6	51.5	49.5	49.9	50.1	51	47.8	47.7	47.4	49.1	49.7	48.4	48.5	49.7	50.4	53.1	50.4	50	50.5	51.7
Brazil	52.3	52.6	53.1	50.6	48.4	49	51.6	52.7	53.4	52.8	51.5	50.2	51	49.9	52	52.2	52.7	49.9	47.8	48.2	52.2
Russia	53.6	54.1	54.6	53	51.5	49.2	50.2	50.9	50.1	52.8	51.8	49.8	48.6	49.3	54.9	55.3	54.4	52.6	52	49.7	50.4
China	50.9	50.7	52.9	52.7	51.5	50.6	50.9	48.3	49.9	50.8	50.2	50.2	49.4	49.9	53.6	51.1	54.4	54.5	52.7	52	51.6
India	53.6	53.8	52.7	51.7	51.7	50.8	53.9	53.9	54.3	52.6	51.8	52.7	52.1	52.5	52.2	52.5	52	51	50.2	49.6	53.8
South Korea								48.3	47.2	48.8	50.2	48.4	47.5	47.3							
Taiwan								47.5	46.3	49	48.2	48.4	45.5	48.1							
Turkey								44.2	46.4	47.2	46.8	45.3	47.9	46.7							



* Values above 50 indicate an improving business development of the industry compared to the previous month, values below 50 indicate shrinking businesses
Sources: Bloomberg Finance L.P., DWS Investment GmbH; as of September 2019

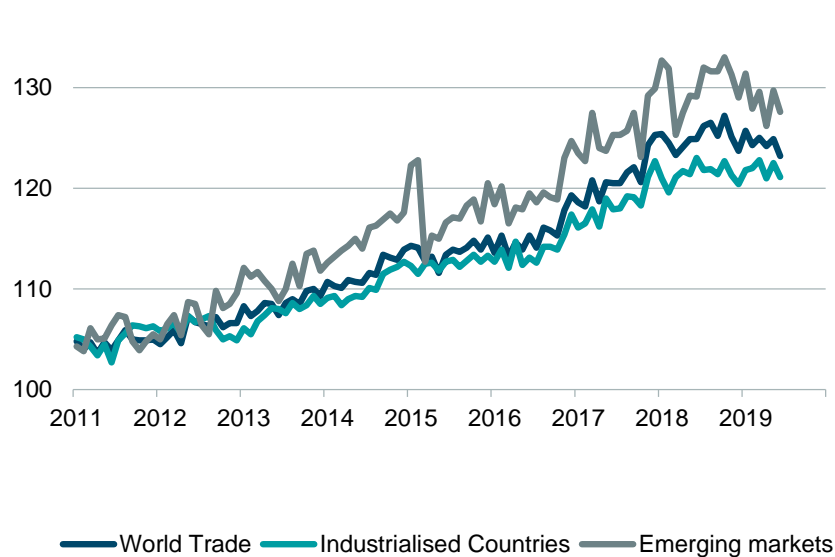
WORLD TRADE: UNDER PRESSURE



The adverse effects from higher US-China tariffs could intensify further

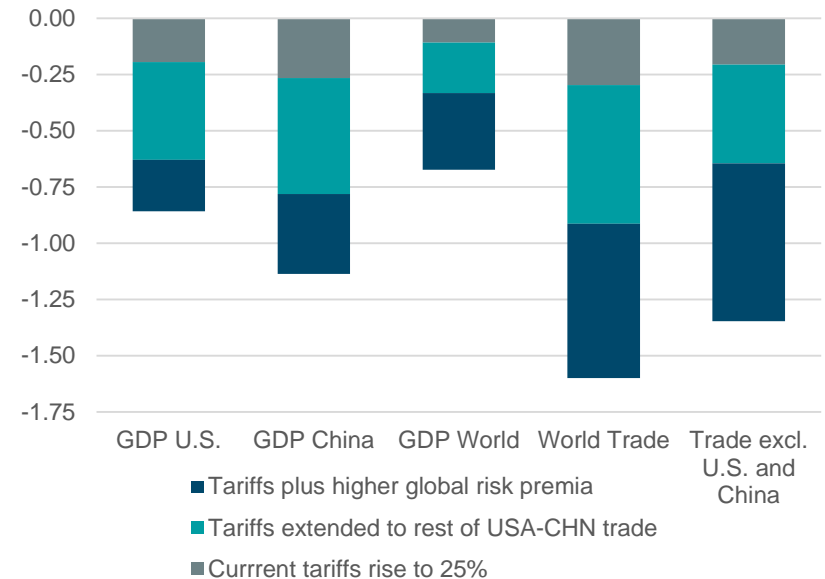
WORLD TRADE

Index (2010=100)



OECD¹: IMPACT ON THE LEVEL OF GDP AND TRADE BY 2021-22

% difference from baseline



¹ Calculation by OECD:

- The first scenario shows the impact of the United States raising tariffs on USD 200 billion of imports from China from 10% to 25% from mid-May 2019 (with reciprocal action by China on USD 60 billion of imports from the United States).
- The second scenario shows the additional impact if tariffs of 25% are imposed on all remaining bilateral non-commodity trade between China and the United States from July 2019.
- The final scenario adds in the impact from a global rise of 50 basis points in investment risk premia that persists for three years before slowly fading thereafter. All tariff shocks are maintained for six years. Based on simulations on NiGEM in forward-looking mode.

Sources: Haver Analytics Inc., OECD; DWS Investment GmbH. As of: September 2019

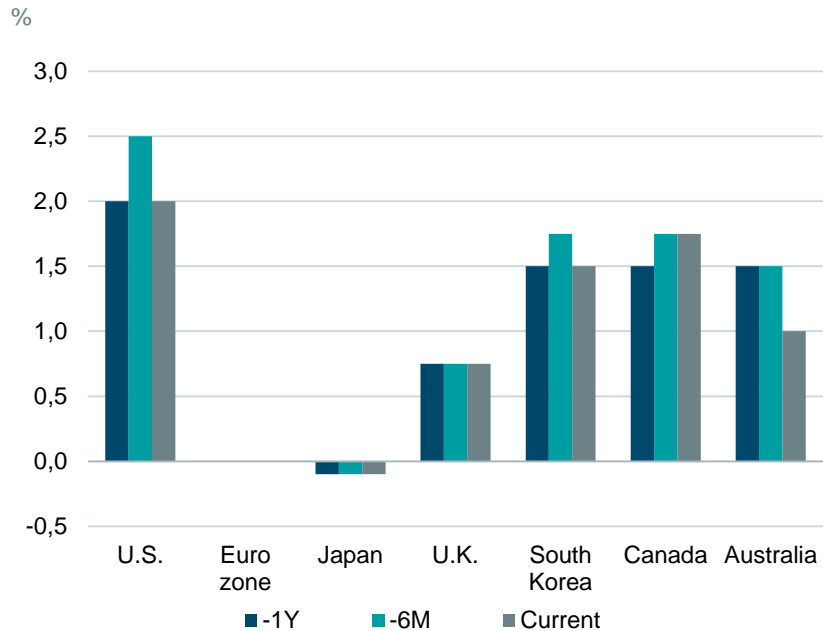
Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

MONETARY POLICY: OVERVIEW

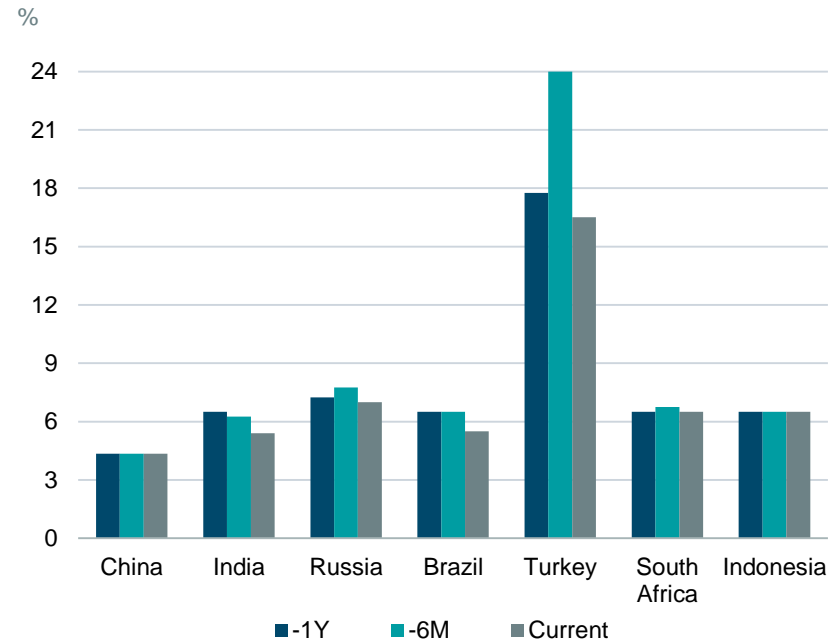
Doves to come?



KEY RATES OF INDUSTRIALIZED COUNTRIES¹



KEY RATES OF DEVELOPING COUNTRIES¹



NEXT STEP WILL BE DOWN

- _ Only a few months ago the general expectation was that central bank rates would rise.
- _ Now rates cuts are generally expected. Australia did the first already.

DEVELOPING COUNTRIES

- _ Also in developing markets most recent interest rate movements were cuts.

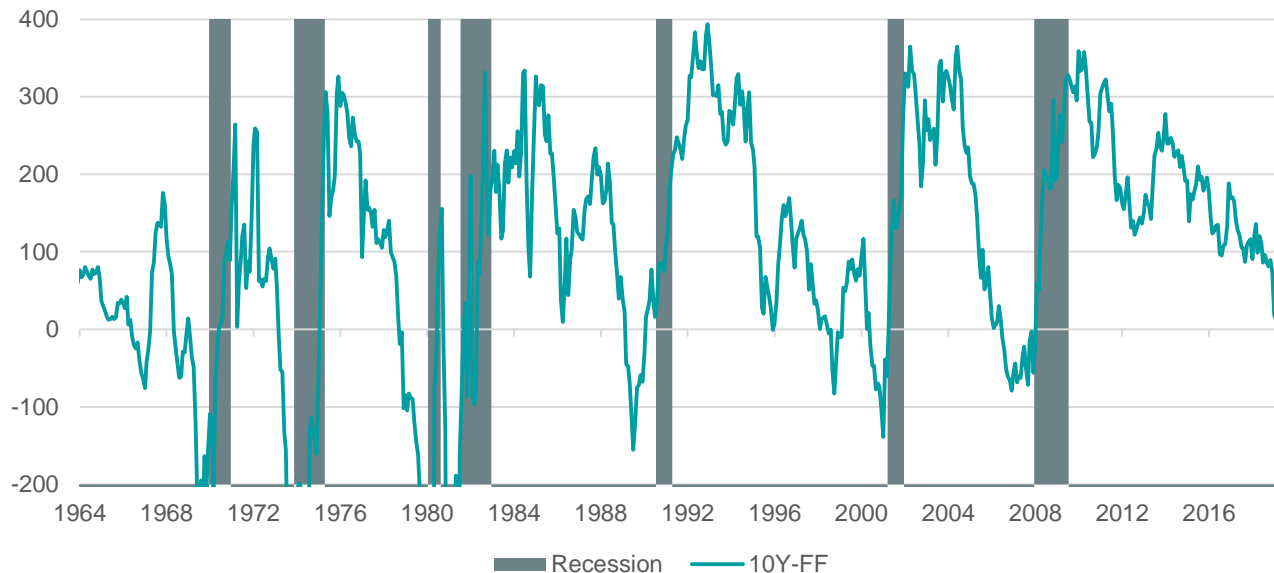
1): Differentiation according to the definition by the IMF. Sources: Bloomberg Finance L.P., DWS Investment GmbH; as of: September 2019

U.S. YIELD CURVE STEEPNESS

Yield curve as recession predictor: the experience since 1964

U.S. YIELD CURVE (10YR – FED FUNDS) VERSUS RECESSIONS

Basis points



Inversion	Recession	Months
05/1966	-	
04/1968	12/1969	20
02/1973	11/1973	9
09/1978	01/1980	16
02/1989	07/1990	17
11/1995	soft patch	
06/1998	soft patch	
05/2000	03/2001	10
06/2006	12/2007	18

- _ Since 1964, yield curve inversion has correctly predicted 2 out of 3 U.S. recessions
- _ Since the mid-1960s, an inverted yield curve was followed by a recession on average after 15 months
- _ The yield curve between 10yr Treasuries and Fed funds has inverted in March 2019
- _ A fed paper¹ concluded in 2018 that the near-term forward spread, i.e. market expectations of a monetary policy easing over the next 12-18 months, does a better job in predicting recessions than a yield curve inversion

¹ Eric C. Engstrom and Steven A. Sharpe: The Near-Term Forward Yield Spread as a Leading Indicator: A Less Distorted Mirror. Finance and Economics Discussion Series, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, Washington, D.C., 2018. Sources: Bloomberg Finance L.P., Federal Reserve Bank of St. Louis, DWS Investment GmbH; as of August 2019

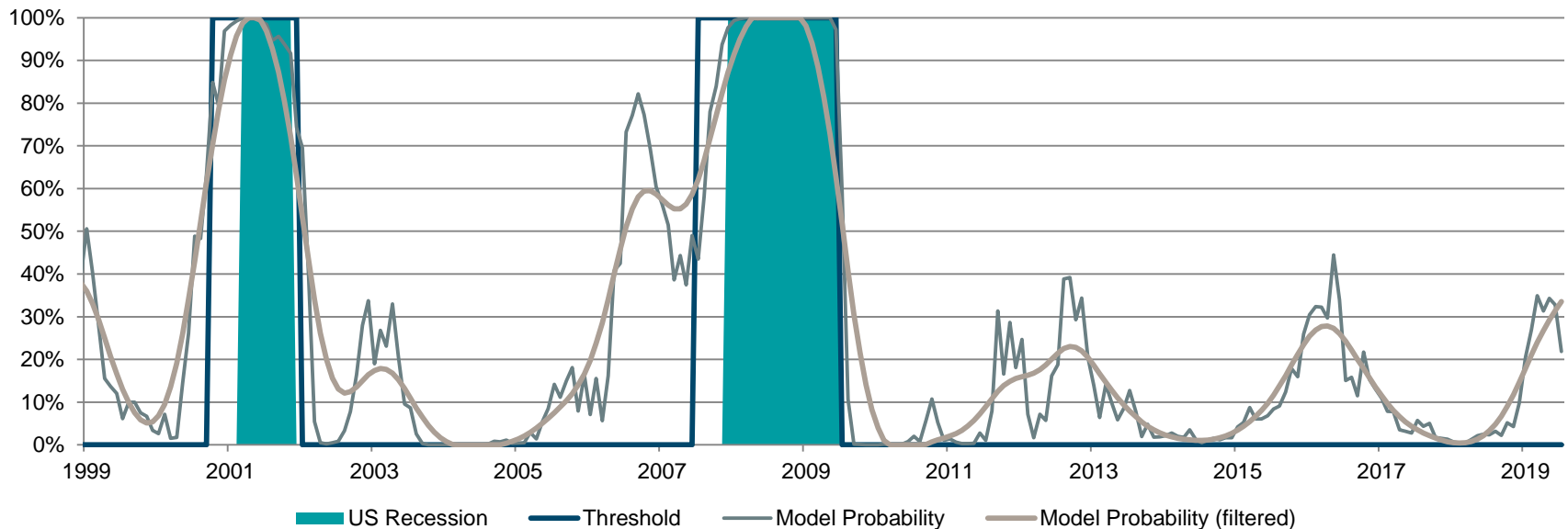
U.S. RECESSION PROBABILITY



~30% probability of a recession in the next 12 months

DWS U.S. RECESSION MODEL

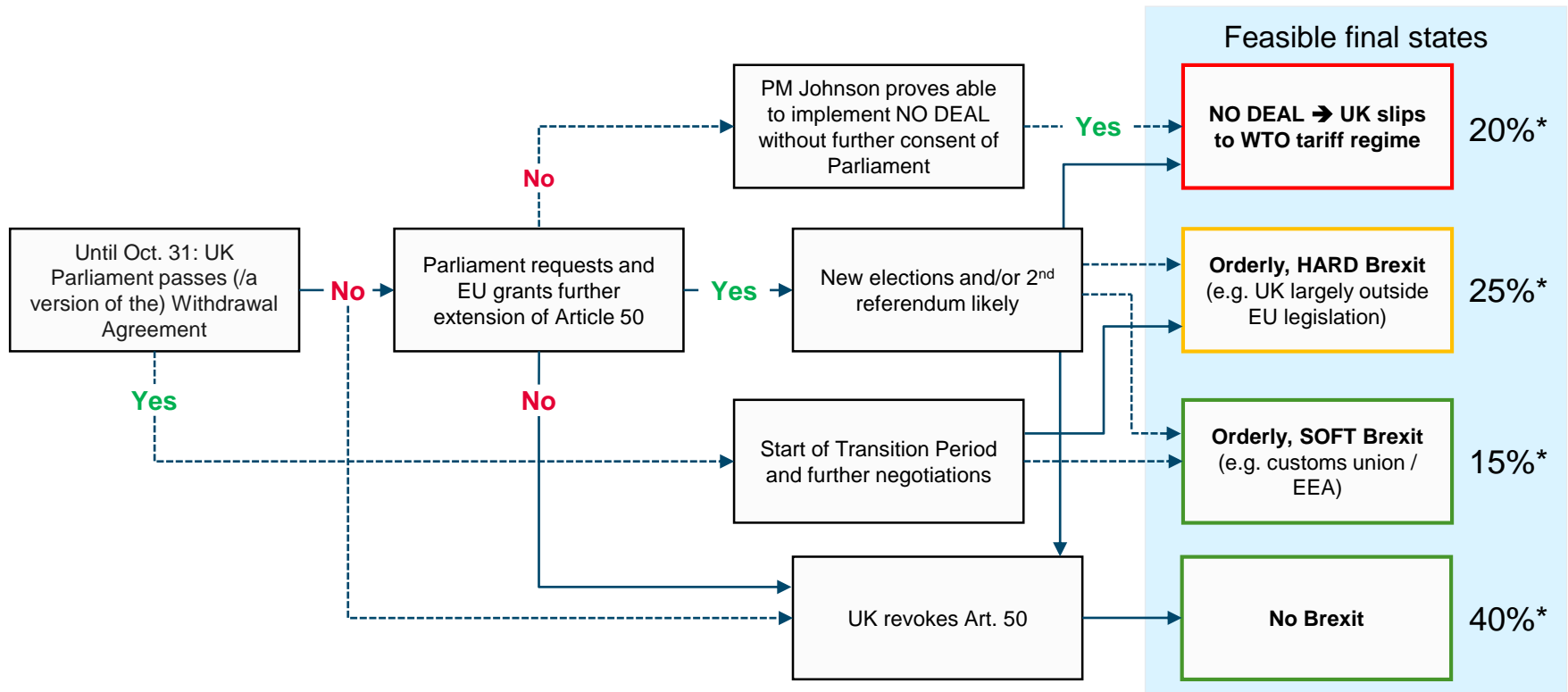
probability



- _ Our recession model incorporates a broader picture of the economy (~ 10 economic indicators) compared to pure market based models
- _ Historically the model provided a true signal if the filtered probability was increasing above 61%
- _ Recent estimations showed a slightly above 30% probability for 3 consecutive months

U.K. ECONOMY

Brexit Update – possible scenarios



WHAT WE ARE WATCHING:

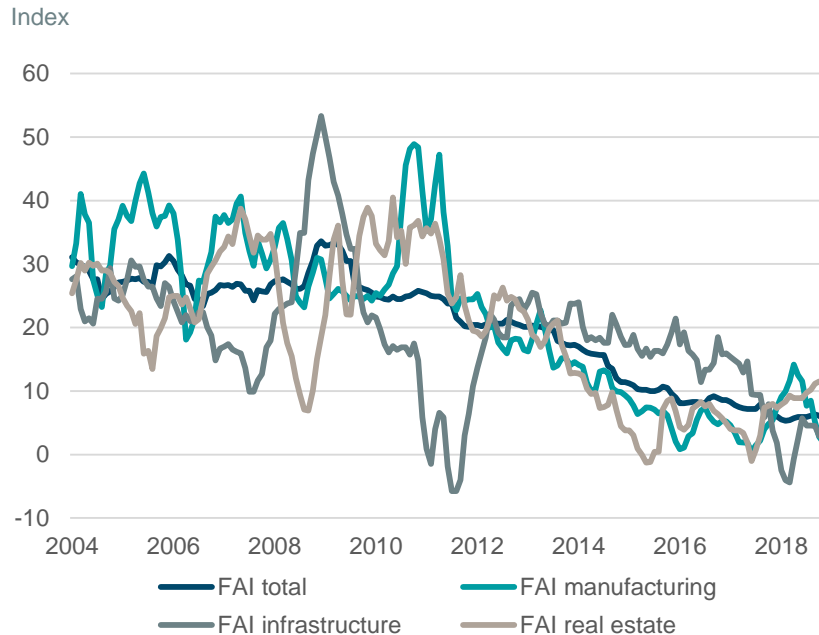
- 1) Willingness of EU 27 to compromise on the Irish backstop: => highly doubtful
- 2) Wide divergence in recent polling (esp. after the win of LibDem at the Brecon and Radnorshire by-election)

The information herein reflects our current views only, is subject to change, and is not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect. / * Reflects our assessment of the likelihood of each scenario. **Above scenarios provide a simplified overview only. Paths we judge to be less likely are marked with dotted lines.** Sources: DWS Investment GmbH, as of September 2019

CHINA: SUMMARY AND OUTLOOK

Still sluggish economic growth despite fiscal and monetary support

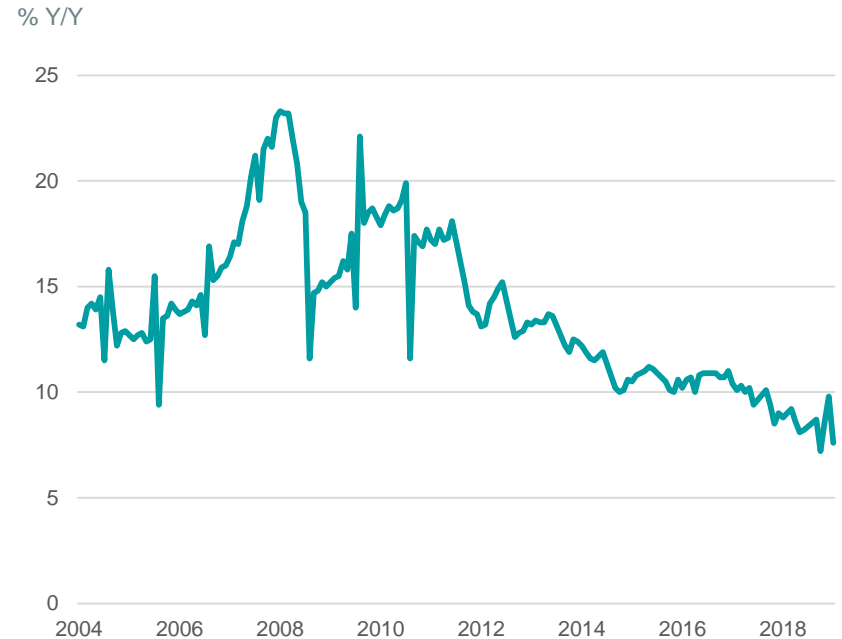
IMPACT OF TRADE CONFLICT ON INVESTMENT IS VISIBLE



GROWTH DYNAMICS SLOWED DUE TO US-CHINA TRADE CONFLICT

- The renewed trade conflict with the U.S. since May has clear impact on investment and production activities in China: July investment only at 5.7% yoy, industrial production at 4.8% and retail sales at 7.6%.
- The easy monetary policy did not have big impact on economic activities, but the huge tax cut for consumers and companies do which can be seen in latest retail sales data.

RETAIL SALES: CONSUMPTION RESILIENCY DUE TO TAX CUTS



FISCAL POLICY IS IN FOCUS

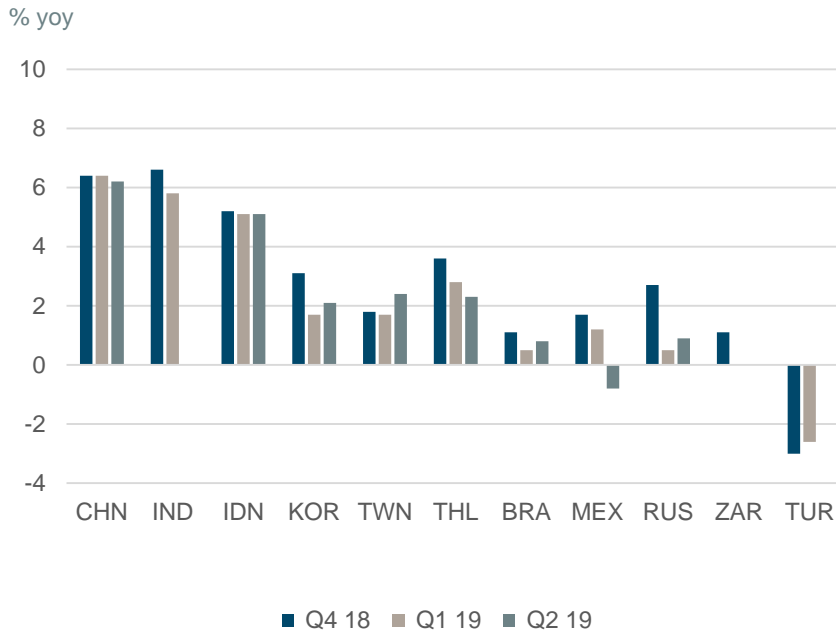
- The high debt level at corporate and private household level lead the government to rethink about long term risks posed on the economy and thus put the focus on fiscal policy.
- The government cut income tax, VAT and corporate tax in size of about 2.5% of GDP since the beginning of the year.
- Fiscal policy is expected to remain in focus if further policy action is needed.

EMERGING MARKETS GROWTH OUTLOOK

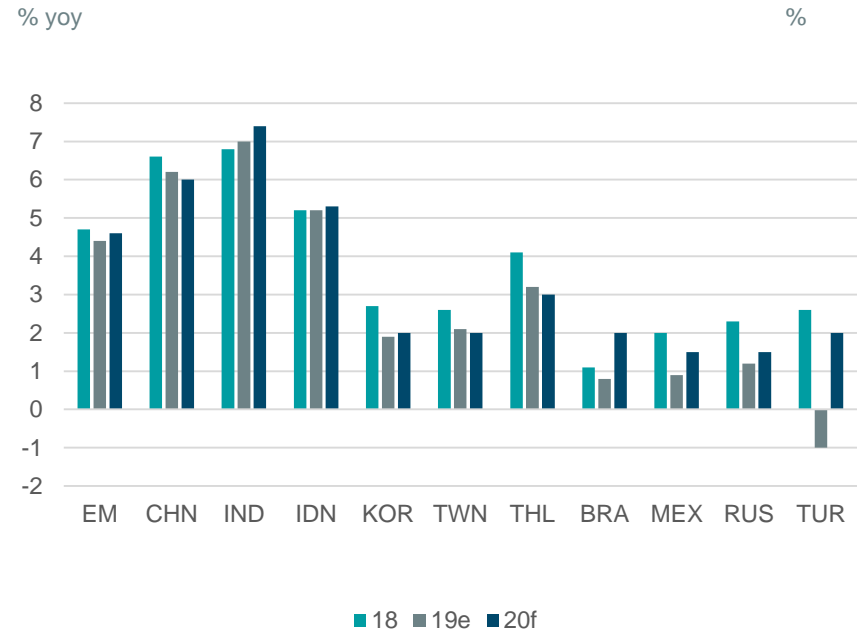


Most countries see lower growth this year

QUARTERLY GDP GROWTH



GDP GROWTH FORECASTS FOR 2019 AND 2020



GROWTH IN Q2 CONTINUES TO BE WEAK IN MOST EM COUNTRIES

- In some countries the drag by global trade conflict was compensated by strong domestic demand in Q2 (Korea, Taiwan). The direct and indirect effects are likely to be stronger in the coming quarters.
- In countries, home-made weakness dampened GDP growth (Brazil, Russia, South Africa, India).

ON AVERAGE: EM GDP GROWTH IS LIKELY TO RECOVER NEXT YEAR

- India is one of the few countries where we expect GDP growth to recover in the course of this year.
- The region with the biggest growth disappointment is Latin America.

PERFORMANCE OVER THE PAST 5 YEARS



12-month periods

	08/14 - 08/15	08/15 - 08/16	08/16 - 08/17	08/17 - 08/18	08/18 - 08/19
GER 2yr	0.1%	0.3%	-0.5%	-0.7%	0.0%
GER 10yr	2.3%	8.0%	-2.0%	1.2%	8.5%
GER 30yr	5.4%	18.6%	-7.7%	3.2%	21.8%
UK 10yr	5.4%	12.3%	-1.0%	-1.1%	9.2%
UST 2yr	0.8%	1.1%	0.5%	-0.1%	4.4%
UST 10yr	3.4%	7.0%	-1.4%	-3.1%	13.7%
UST 30yr	4.6%	16.7%	-5.4%	-2.8%	24.2%
Japan 10yr	2.0%	3.8%	-0.4%	-0.5%	3.6%
EUR IG Corp	0.4%	6.7%	0.6%	0.0%	6.7%
EUR HY	2.0%	6.8%	6.4%	1.2%	4.8%
US IG Corp	-0.4%	9.1%	1.9%	-1.0%	13.0%
US HY	-2.9%	9.1%	8.6%	3.4%	6.6%
EM Credit	-1.1%	10.9%	5.8%	-1.4%	11.8%
EM Sovereign	-3.0%	14.8%	4.5%	-4.6%	13.1%
Italy 10yr	4.7%	9.0%	-3.3%	-6.6%	22.1%
Spain 10yr	2.4%	10.9%	-0.2%	2.4%	12.5%
S&P 500	0.5%	12.6%	16.2%	19.7%	2.9%
Stoxx600	9.4%	-1.9%	12.5%	5.7%	3.0%

	08/14 - 08/15	08/15 - 08/16	08/16 - 08/17	08/17 - 08/18	08/18 - 08/19
Eurostoxx 50	5.7%	-4.8%	16.1%	1.8%	3.8%
DAX	8.3%	3.2%	13.8%	2.6%	-3.4%
SMI	5.0%	-3.7%	12.4%	4.0%	14.0%
FTSE 100	-5.0%	13.0%	14.0%	4.1%	1.4%
MSCI EM	-22.9%	11.8%	24.5%	-0.7%	-4.4%
MSCI Asia xJ	-16.1%	12.9%	24.8%	2.8%	-6.3%
MSCI Latam	-42.4%	19.8%	22.6%	-11.8%	8.9%
MSCI Japan	4.2%	2.9%	13.7%	9.0%	-5.6%
CAC 40	9.6%	-0.9%	18.3%	9.8%	4.9%
MSCI World Index	-4.1%	6.7%	16.2%	13.1%	0.3%

Past performance is not indicative of future returns.

Sources: Bloomberg Finance L.P., DWS Investment GmbH as of August 2019

IMPORTANT INFORMATION

UK



IMPORTANT INFORMATION – UK

Issued in the UK by DWS Investments UK Limited. DWS Investments UK Limited is authorised and regulated by the Financial Conduct Authority (Registration number 429806).

DWS is the brand name of DWS Group GmbH & Co. KGaA. The respective legal entities offering products or services under the DWS brand are specified in the respective contracts, sales materials and other product information documents. DWS, through DWS Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively “DWS”) are communicating this document in good faith and on the following basis.

This document is a financial promotion and is for general information purposes only and consequently may not be complete or accurate for your specific purposes. It is not intended to be an offer or solicitation, advice or recommendation, or the basis for any contract to purchase or sell any security, or other instrument, or for DWS to enter into or arrange any type of transaction as a consequence of any information contained herein. It has been prepared without consideration of the investment needs, objectives or financial circumstances of any investor.

This document does not identify all the risks (direct and indirect) or other considerations which might be material to you when entering into a transaction. Before making an investment decision, investors need to consider, with or without the assistance of an investment adviser, whether the investments and strategies described or provided by DWS, are suitability and appropriate, in light of their particular investment needs, objectives and financial circumstances. We assume no responsibility to advise the recipients of this document with regard to changes in our views.

We have gathered the information contained in this document from sources we believe to be reliable; but we do not guarantee the accuracy, completeness or fairness of such information and it should not be relied on as such. DWS has no obligation to update, modify or amend this document or to otherwise notify the recipient in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate. DWS does not give taxation or legal advice. Prospective investors should seek advice from their own taxation agents and lawyers regarding the tax consequences on the purchase, ownership, disposal, redemption or transfer of the investments and strategies suggested by DWS. The relevant tax laws or regulations of the tax authorities may change at any time. DWS is not responsible for and has no obligation with respect to any tax implications on the investment suggested.

This document contains forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. The forward looking statements expressed constitute the author’s judgment as of the date of this document. Forward looking statements involve significant elements of subjective judgments and analyses and changes thereto and/ or consideration of different or additional factors could have a material impact on the results indicated. Therefore, actual results may vary, perhaps materially, from the results contained herein. No representation or warranty is made by DWS as to the reasonableness or completeness of such forward looking statements or to any other financial information contained in this document.

PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

© DWS 2019

IMPORTANT INFORMATION

EMEA



This marketing communication is intended for professional clients only.

DWS is the brand name under which DWS Group GmbH & Co. KGaA and its subsidiaries operate their business activities. Clients will be provided DWS products or services by one or more legal entities that will be identified to clients pursuant to the contracts, agreements, offering materials or other documentation relevant to such products or services.

The information contained in this document does not constitute investment advice.

All statements of opinion reflect the current assessment of DWS Investment GmbH and are subject to change without notice.

Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical performance analysis, therefore actual results may vary, perhaps materially, from the results contained here.

Past performance, [actual or simulated], is not a reliable indication of future performance.

The information contained in this document does not constitute a financial analysis but qualifies as marketing communication. This marketing communication is neither subject to all legal provisions ensuring the impartiality of financial analysis nor to any prohibition on trading prior to the publication of financial analyses.

This document and the information contained herein may only be distributed and published in jurisdictions in which such distribution and publication is permissible in accordance with applicable law in those jurisdictions. Direct or indirect distribution of this document is prohibited in the USA as well as to or for the account of US persons and persons residing in the USA.

DWS Investment GmbH. As of: [20.09.2019]

IMPORTANT INFORMATION

APAC



DWS is the brand name of DWS Group GmbH & Co. KGaA. The respective legal entities offering products or services under the DWS brand are specified in the respective contracts, sales materials and other product information documents. DWS Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively “DWS Group”) are communicating this document in good faith and on the following basis.

This document has been prepared without consideration of the investment needs, objectives or financial circumstances of any investor. Before making an investment decision, investors need to consider, with or without the assistance of an investment adviser, whether the investments and strategies described or provided by DWS Group, are appropriate, in light of their particular investment needs, objectives and financial circumstances. Furthermore, this document is for information/discussion purposes only and does not constitute an offer, recommendation or solicitation to conclude a transaction and should not be treated as giving investment advice.

DWS Group does not give tax or legal advice. Investors should seek advice from their own tax experts and lawyers, in considering investments and strategies suggested by DWS Group. Investments with DWS Group are not guaranteed, unless specified.

Investments are subject to various risks, including market fluctuations, regulatory change, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you might not get back the amount originally invested at any point in time. Furthermore, substantial fluctuations of the value of the investment are possible even over short periods of time. The terms of any investment will be exclusively subject to the detailed provisions, including risk considerations, contained in the offering documents. When making an investment decision, you should rely on the final documentation relating to the transaction and not the summary contained herein. Past performance is no guarantee of current or future performance. Nothing contained herein shall constitute any representation or warranty as to future performance.

Although the information herein has been obtained from sources believed to be reliable, DWS Group does not guarantee its accuracy, completeness or fairness. No liability for any error or omission is accepted by DWS Group. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid. All third party data (such as MSCI, S&P, Dow Jones, FTSE, Bank of America Merrill Lynch, Factset & Bloomberg) are copyrighted by and proprietary to the provider. DWS Group or persons associated with it may (i) maintain a long or short position in securities referred to herein, or in related futures or options, and (ii) purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation.

The document was not produced, reviewed or edited by any research department within DWS Group and is not investment research. Therefore, laws and regulations relating to investment research do not apply to it. Any opinions expressed herein may differ from the opinions expressed by other DWS Group departments including research departments. This document may contain forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. The forward looking statements expressed constitute the author's judgment as of the date of this material. Forward looking statements involve significant elements of subjective judgments and analyses and changes thereto and/or consideration of different or additional factors could have a material impact on the results indicated. Therefore, actual results may vary, perhaps materially, from the results contained herein. No representation or warranty is made by DWS Group as to the reasonableness or completeness of such forward looking statements or to any other financial information contained herein.

This document may not be reproduced or circulated without DWS Group's written authority. The manner of circulation and distribution of this document may be restricted by law or regulation in certain countries, including the United States.

IMPORTANT INFORMATION

APAC (continued)



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, including the United States, where such distribution, publication, availability or use would be contrary to law or regulation or which would subject DWS Group to any registration or licensing requirement within such jurisdiction not currently met within such jurisdiction. Persons into whose possession this document may come are required to inform themselves of, and to observe, such restrictions.

Unless notified to the contrary in a particular case, investment instruments are not insured by the Federal Deposit Insurance Corporation ("FDIC") or any other governmental entity, and are not guaranteed by or obligations of DWS Group.

In Australia, this document is issued by DWS Investments Australia Limited (ABN: 52 074 599 401) (AFSL 499640) and the content of this document has not been reviewed by the Australian Securities Investment Commission.

© 2019 DWS Investments Australia Limited

© August 2019 DWS Investment GmbH

CRC 070669 (09/2019)