

A Tour of the Global Economy (in one chart pack)

Chief Analyst, Head of International Macro Jakob Ekholdt Christensen +45 4512 8530 jakc@danskebank.dk

Senior ECB/ Euro area Analyst Piet P. H. Christiansen 45 45 13 20 21 phai@danskebank.dk

2 July 2019

Chief Analyst
Allan von Mehren
+45 45 12 80 55
alvo@danskebank.dk

Analyst
Aila Mihr
+45 45 12 85 35
amih@danskebank.dk

Senior Analyst Mikael Olai Milhøj +45 45 12 76 07 milh@danskebank.com



Key observations

We aim this chart pack at readers who like to deep dive into the global macro economy. It takes around 15 minutes to flip through all the charts but readers should have a good sense of the current state of the world once they are through.

The chart pack is a supplement to MacroScope – Tactical opportunities open up amid moderate global recovery, 25 June. While the MacroScope model is forward looking, this chart pack gives a an overview of key economic indicators for and drivers of the global economy.

- The global business cycle continued to deteriorate in June, as *PMI new orders* and *OECD leading indicators* fell further.
- The weakness is driven, in particular, by soft *investments*, while *private consumption* has held up better supported by robust real income growth.
- Geographically, the most weakness is found in euro area manufacturing, not least in German manufacturing orders. However, China has also softened again and US manufacturing indicators point to an industrial recession.
- A few rays of light are to be found in the *US MacroScope model* and *US financial conditions impulse*, which point to some improvement in H2. However, the latest tariff increases provide a headwind that will weigh in the short term.

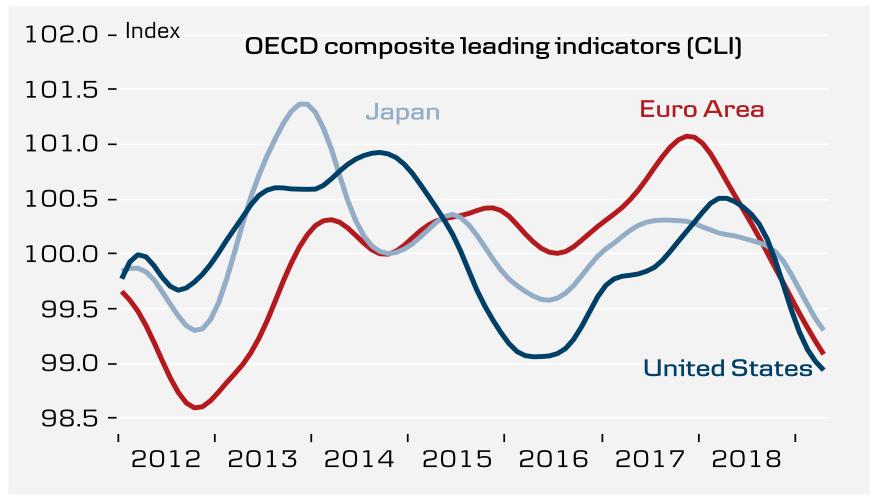


Contents

Global overview
<u>US</u>
<u>Euro</u>
<u>China</u>
<u>Japan</u>
<u>Other</u>

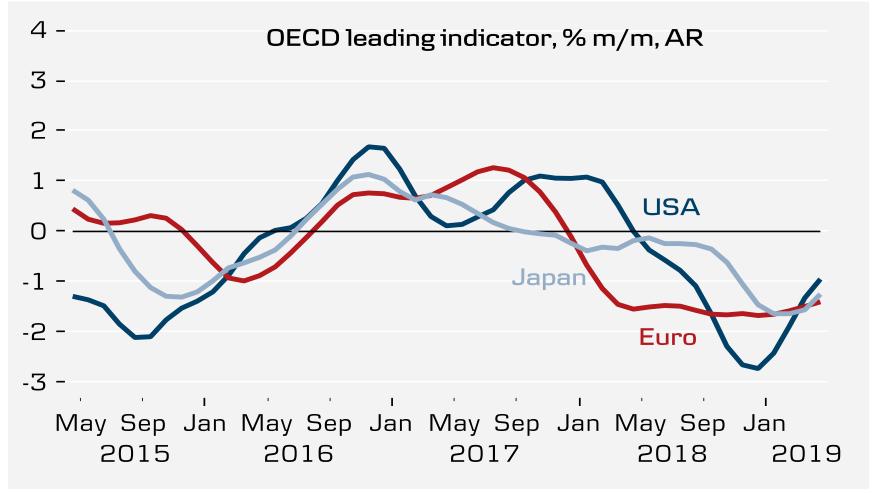


OECD leading indicators - levels





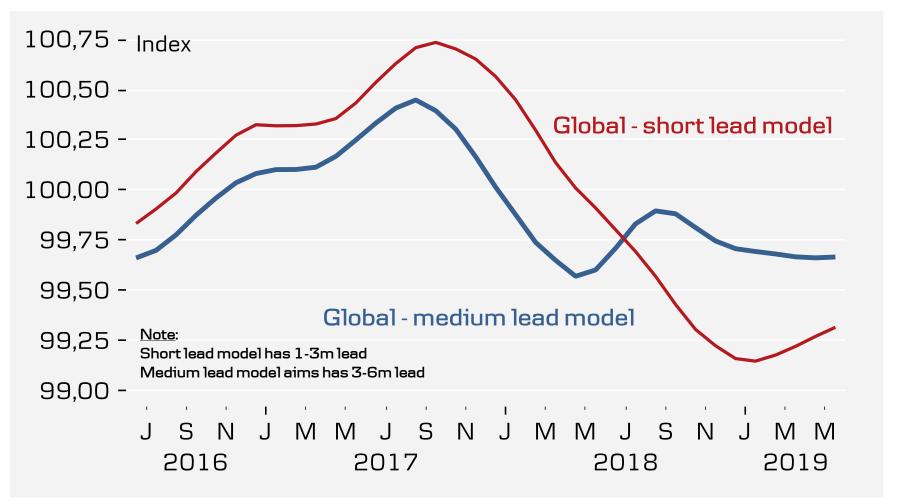
OECD leading indicators - monthly momentum





Global MacroScope models

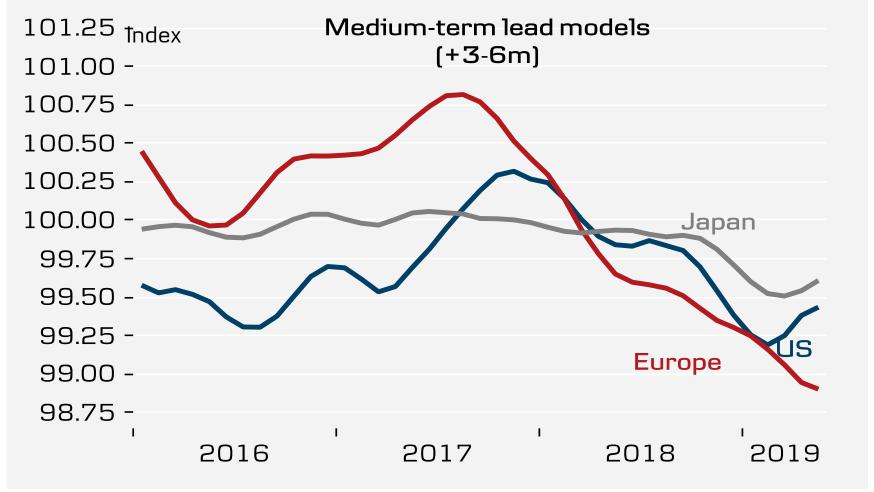
(for OECD Composite Leading Indicators - CLI)



Source: Danske Bank



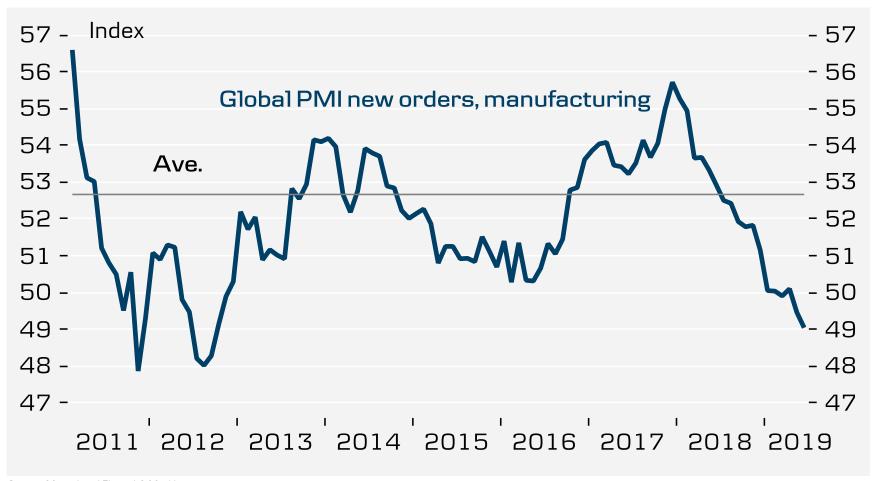
MacroScope medium lead models - across regions (for OECD Composite Leading Indicators - CLI)



Source: Danske Bank



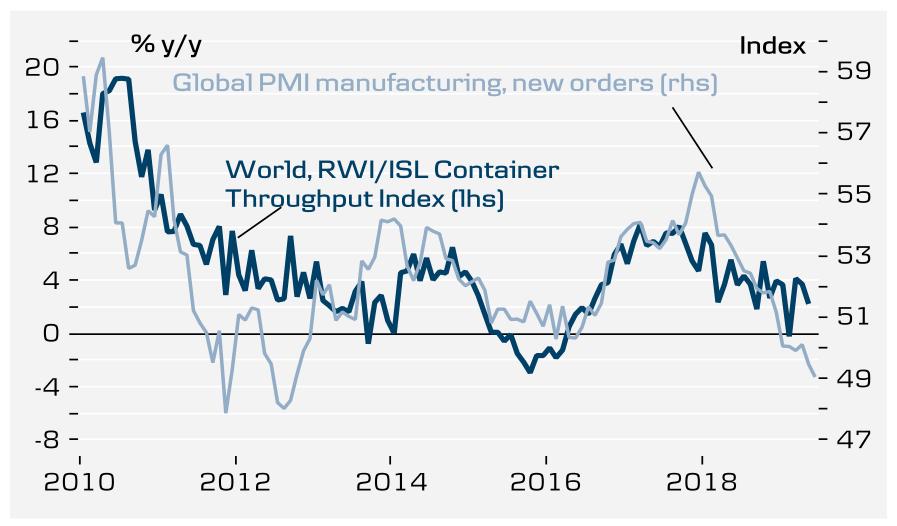
Global PMI



Source: Macrobond Financial, Markit

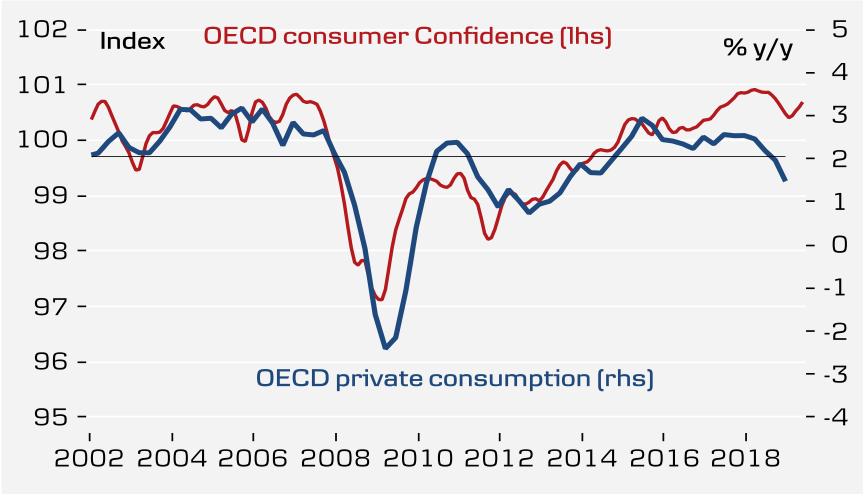


Container index vs PMI



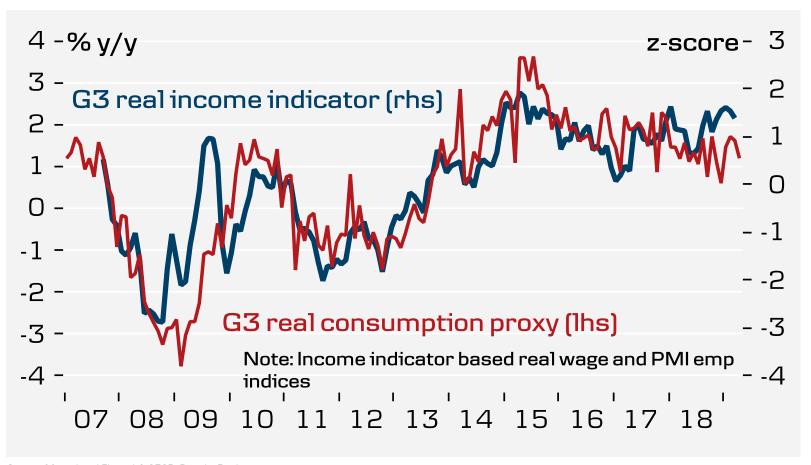


OECD consumer





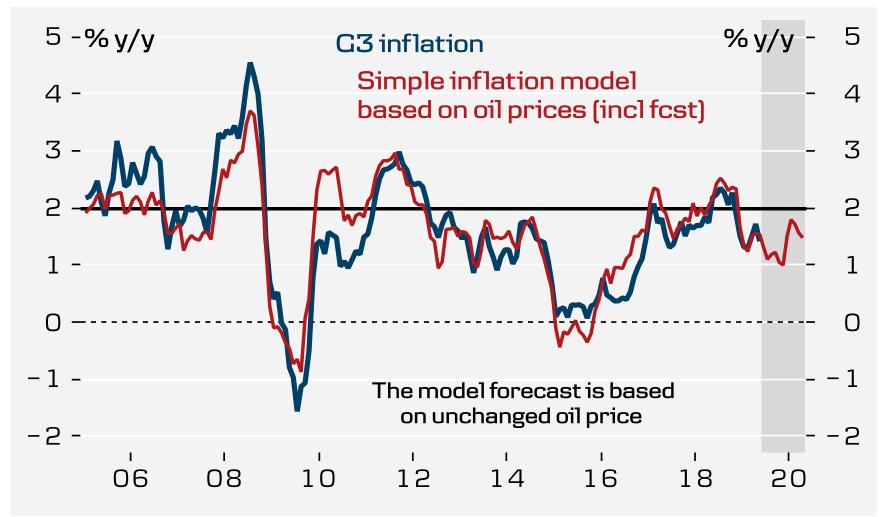
G3 real income proxy for consumers



Source: Macrobond Financial, OECD, Danske Bank

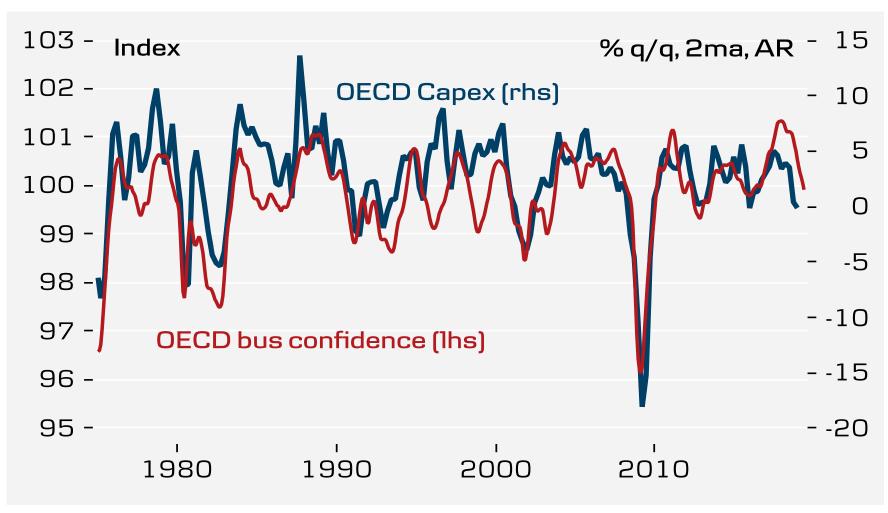


G3 inflation - simple model on oil





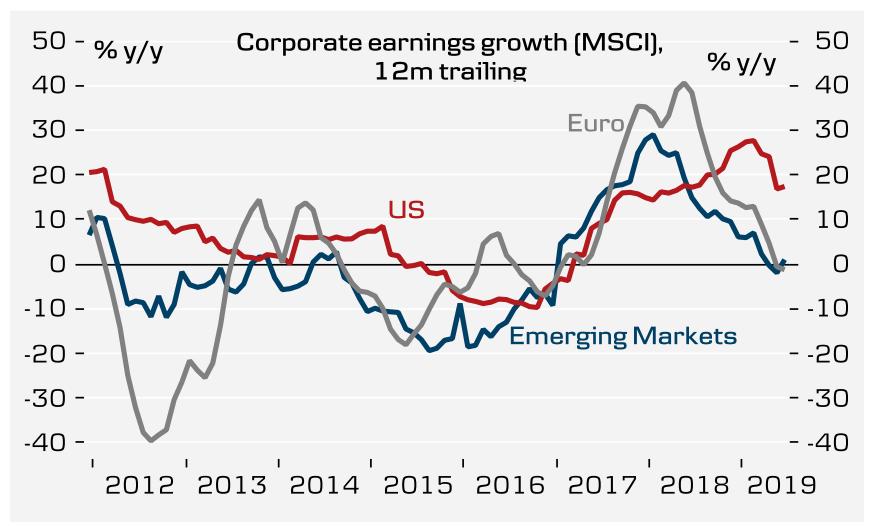
OECD capex



Source: Macrobond Financial, OECD, Danske Bank



Profit growth

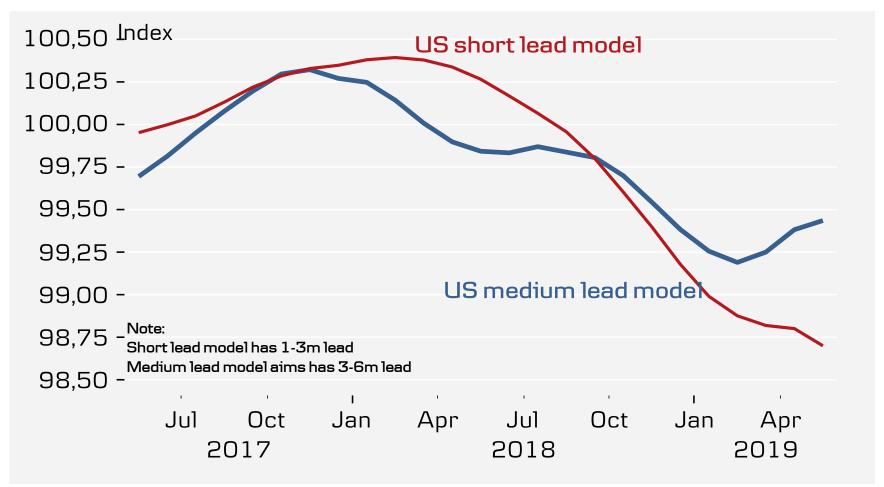


US



MacroScope models for US

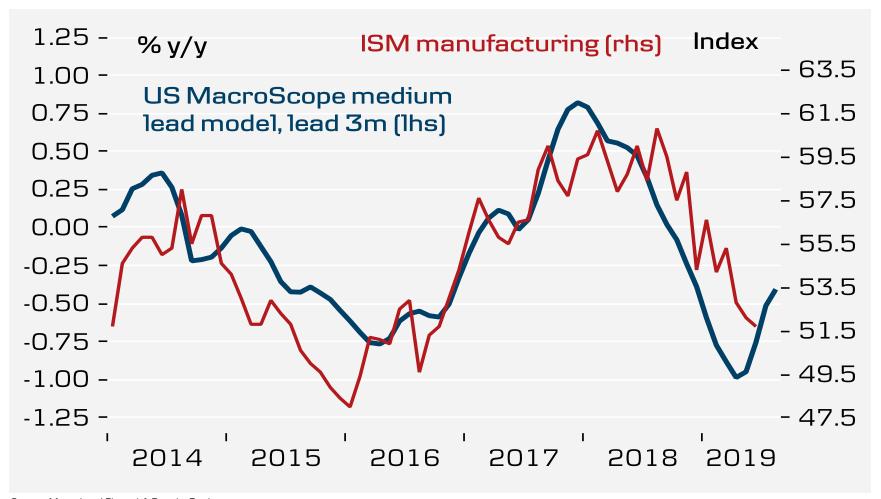
(for OECD Composite Leading Indicators - CLI)



Source: Danske Bank



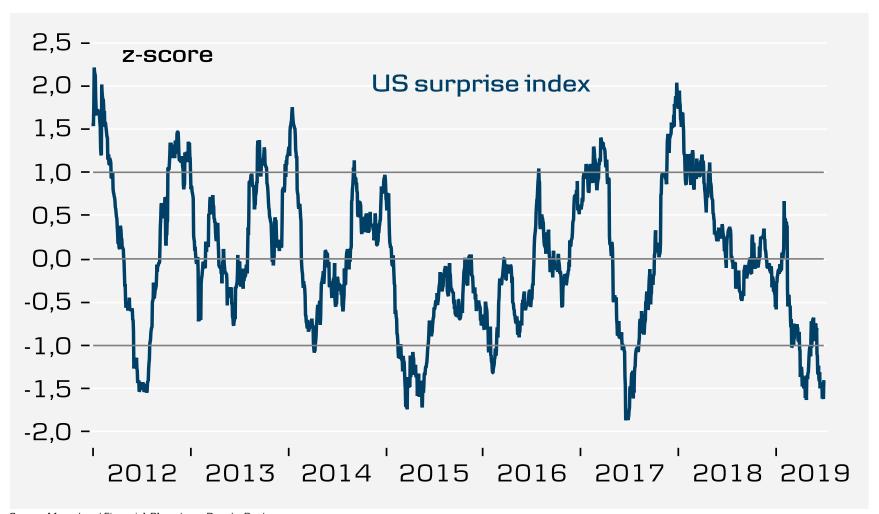
MacroScope vs ISM manufacturing index



Source: Macrobond Financial, Danske Bank



US surprise index

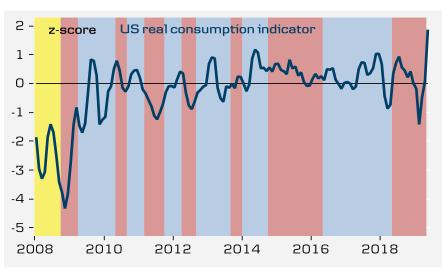


Source: Macrobond Financial, Bloomberg, Danske Bank



US sector overview vs US quadrants

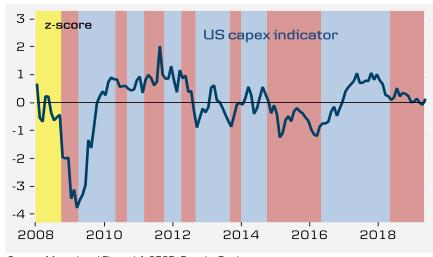




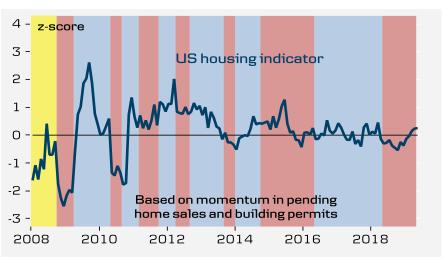
Source: Macrobond Financial, OECD, Danske Bank



Source: Macrobond Financial, OECD, Danske Bank



Source: Macrobond Financial, OECD, Danske Bank



Source: Macrobond Financial, OECD, Danske Bank



US overview - level charts



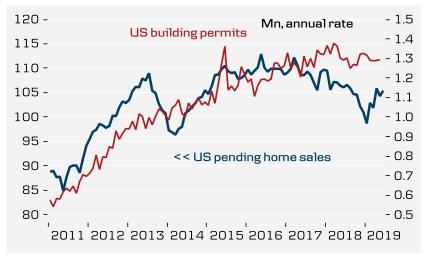
Source: Macrobond Financial, BLS



Source: Macrobond Financial, BLS



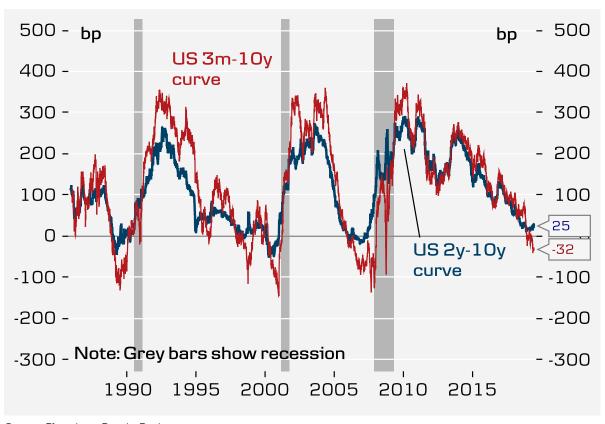
Source: Macrobond Financial, BLS



Source: Macrobond Financial, BLS



Yield curves vs recessions



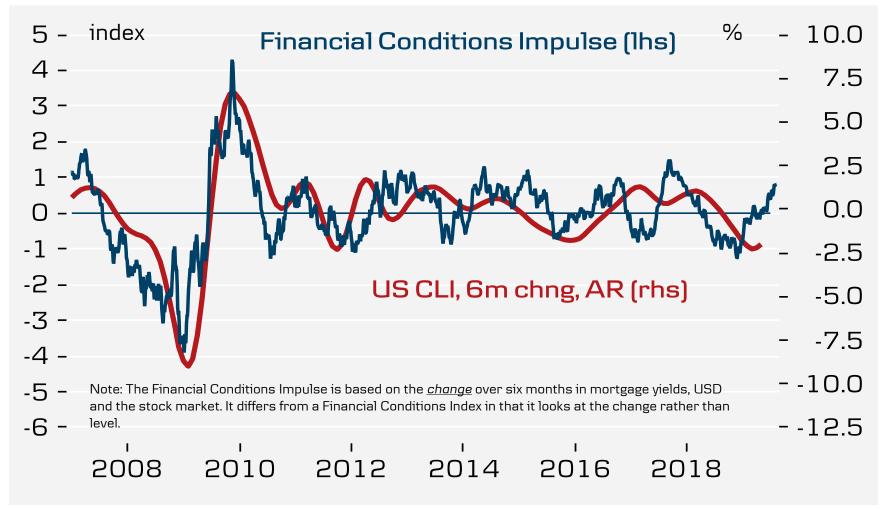
2y-10y yield curve inversion date	Recession start	Recession # of years after inversion
30-12-1988	01-07-1990	1,5
25-05-1998	01-03-2001	2,8
26-12-2005	01-12-2007	1,9
Ave.		2,1
3m-10y yield curve inversion date		
10-11-1988	01-07-1990	1,6
13-11-1997	01-03-2001	3,3
14-12-2005	01-12-2007	2,0
Ave.		2.3

Source: Bloomberg, Danske Bank

Source: Bloomberg, Danske Bank



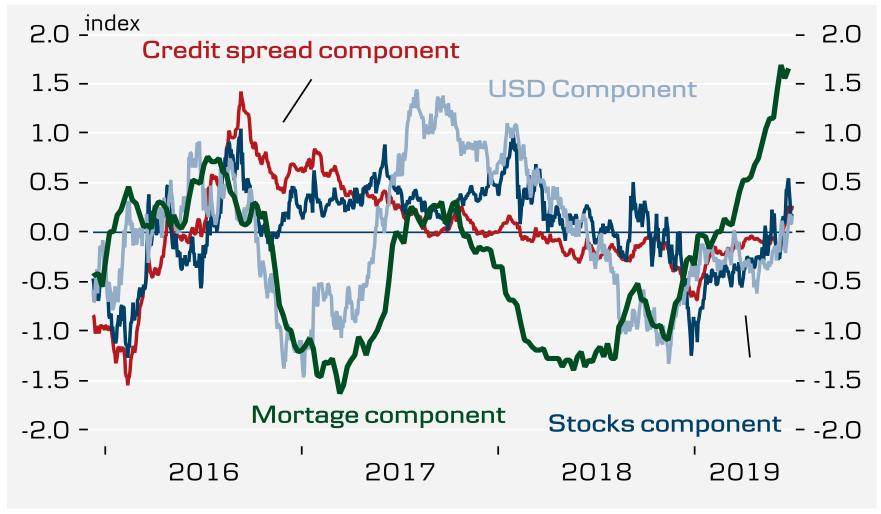
Financial conditions vs CLI change



Source: Macrobond Financial, Bloomberg, Danske Bank

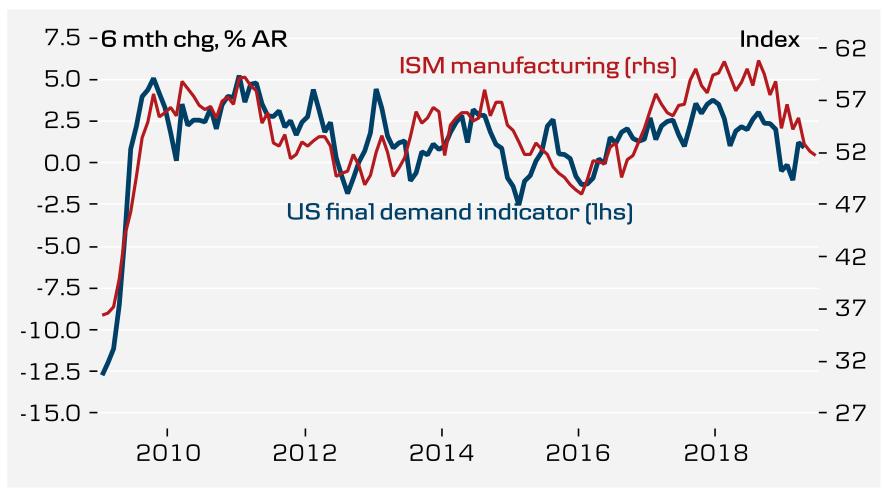


Financial Conditions Impulse components





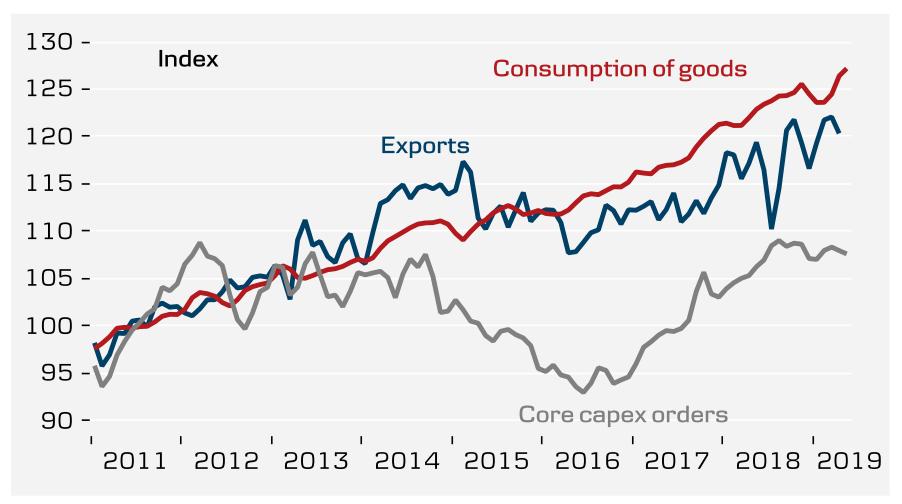
ISM manufacturing vs US demand indicator



Source: Macrobond Financial, ISM, Danske Bank



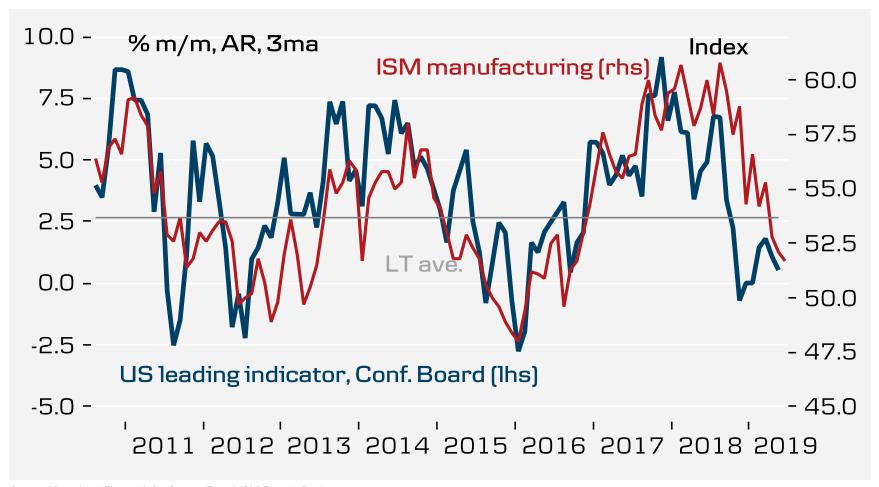
Components in demand indicator



Source: Macrobond Financial, BLS



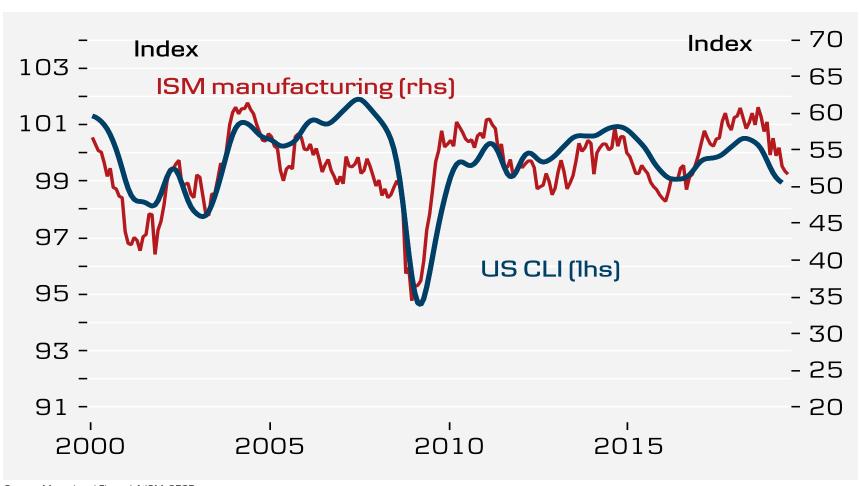
ISM vs Conference Board leading indicator



Source: Macrobond Financial, Conference Board, ISM, Danske Bank



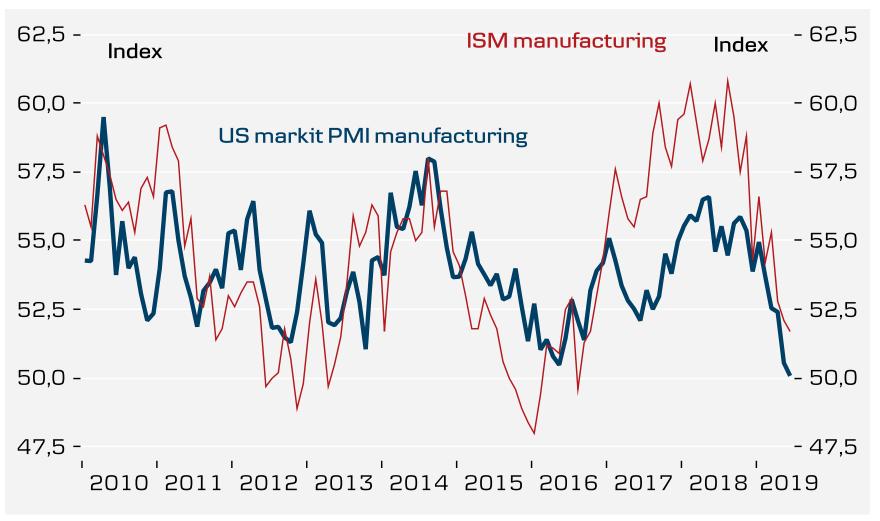
ISM manufacturing



Source: Macrobond Financial, ISM, OECD



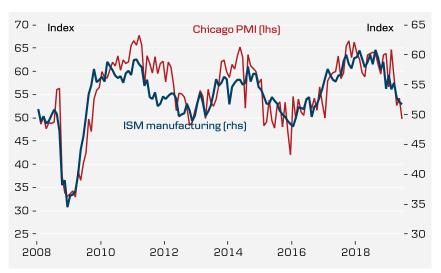
ISM manufacturing vs. US PMI manufacturing



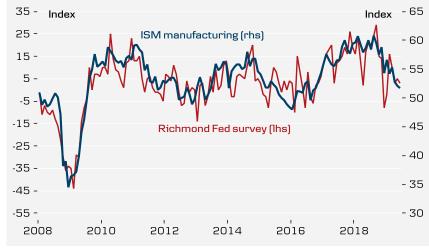
Source: Macrobond Financial, Markit,



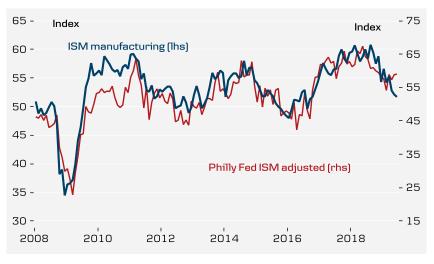
ISM manufacturing vs. regional surveys



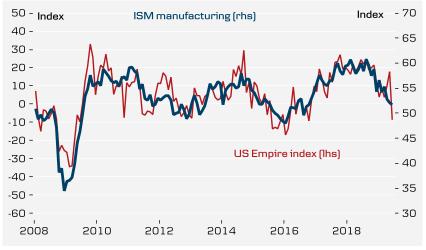
Source: Macrobond Financial, ISM



Source: Macrobond Financial, ISM



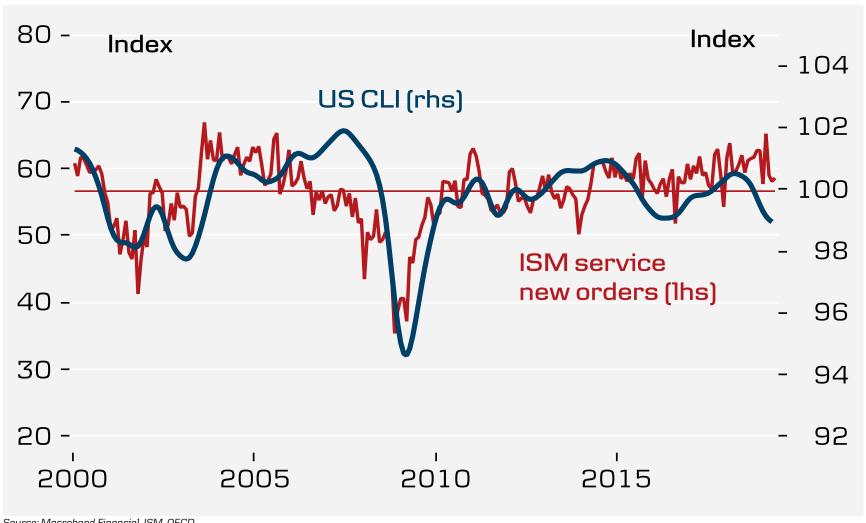
Source: Macrobond Financial, ISM



Source: Macrobond Financial, ISM



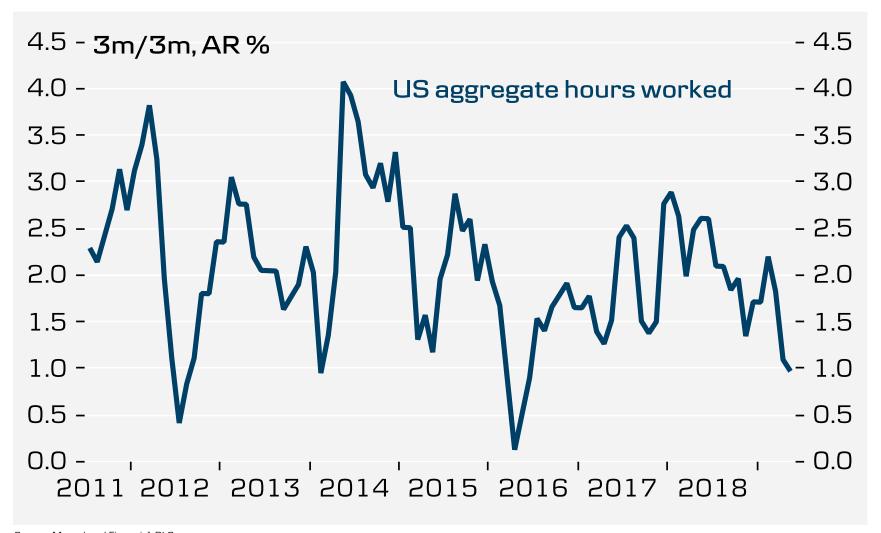
ISM service



Source: Macrobond Financial, ISM, OECD

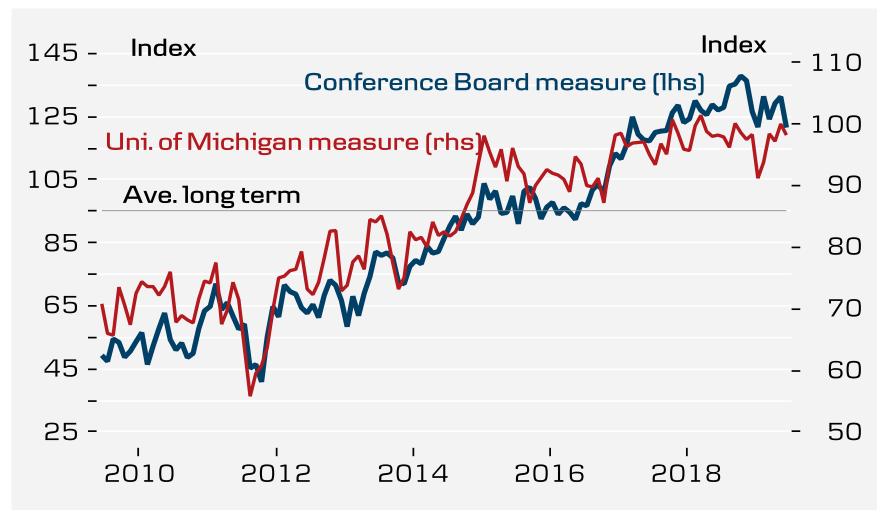


Aggregate hours worked



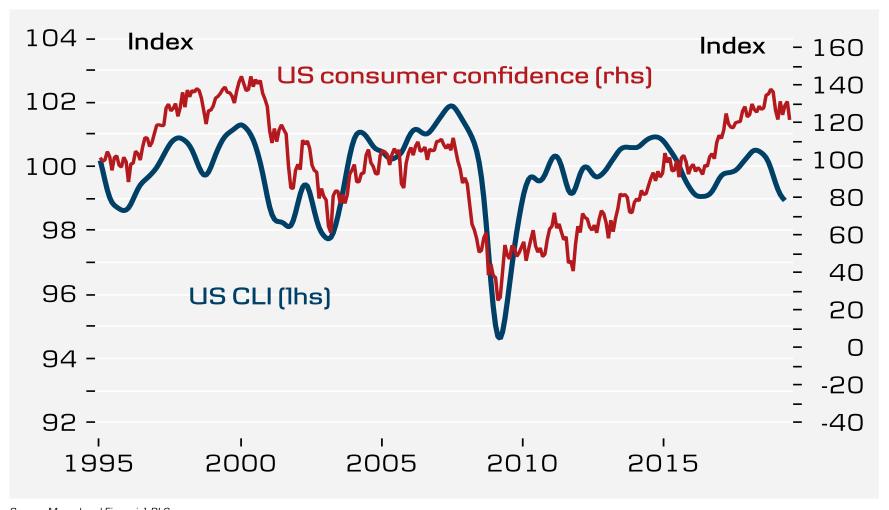


Consumer confidence





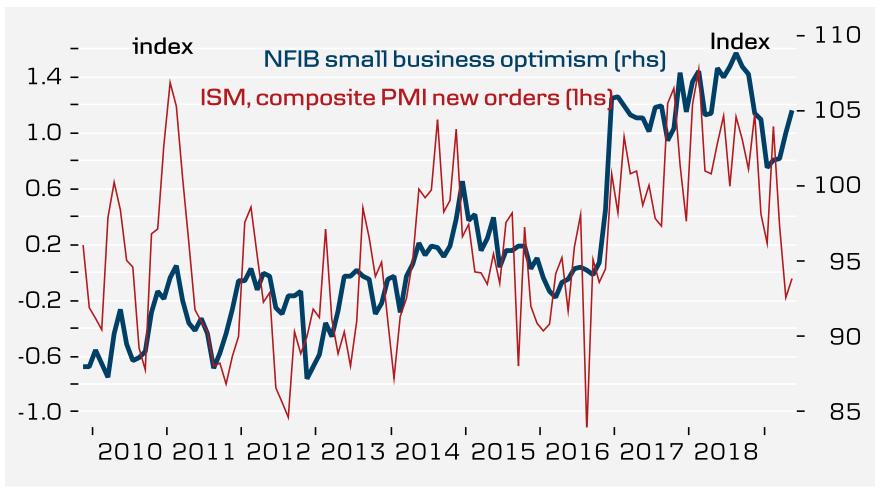
Consumer confidence vs CLI



Source: Macrobond Financial, BLS



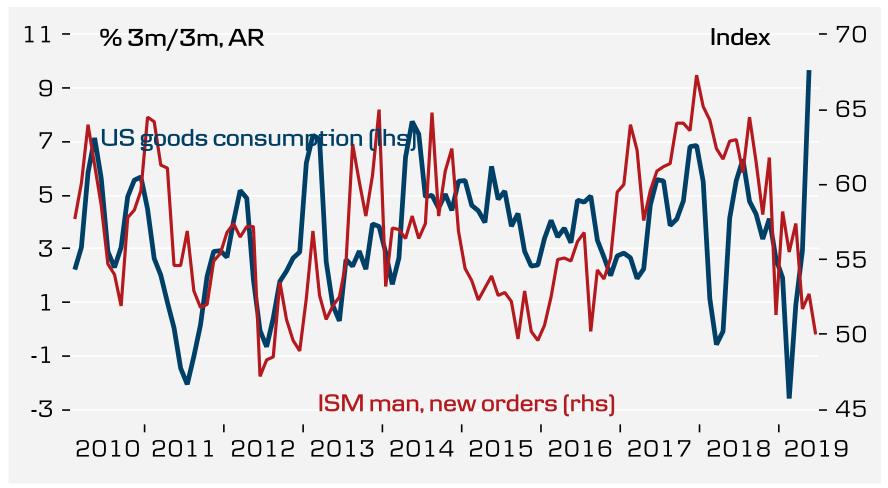
Small business optimism



Source: Macrobond Financial, ISM, NFIB



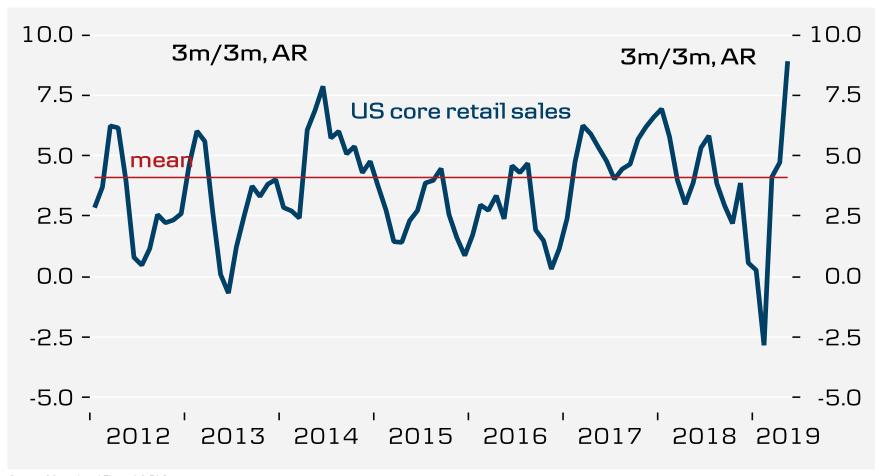
Goods consumption and ISM



Source: Macrobond Financial, BLS, ISM



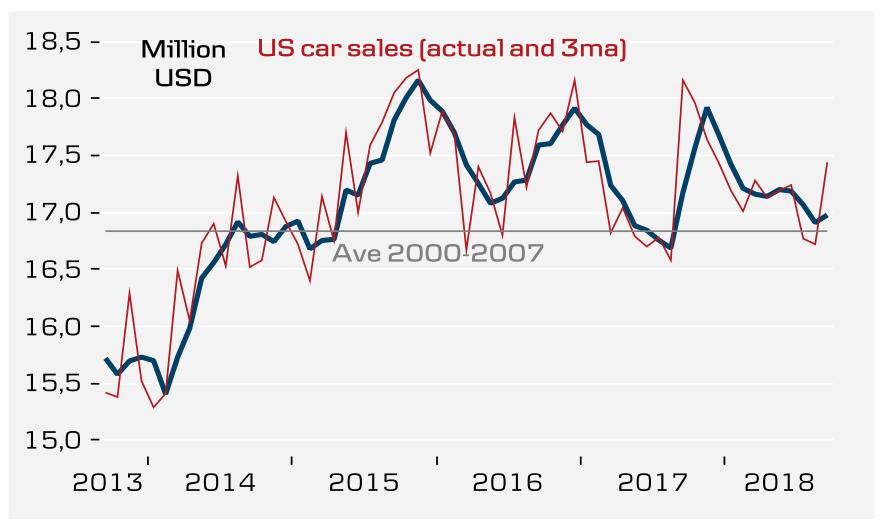
Consumption: retail sales



Source: Macrobond Financial, BLS

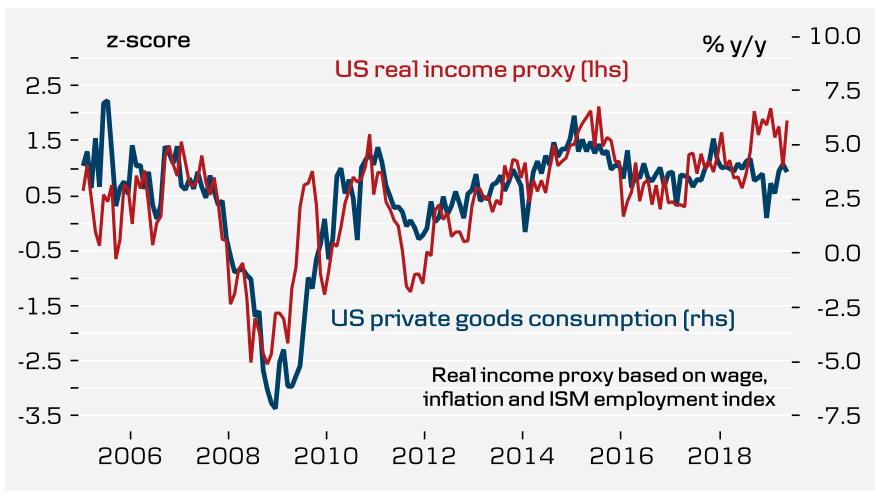


Consumption: car sales





Real income vs goods consumption



Source: Macrobond Financial, BLS, Danske Bank



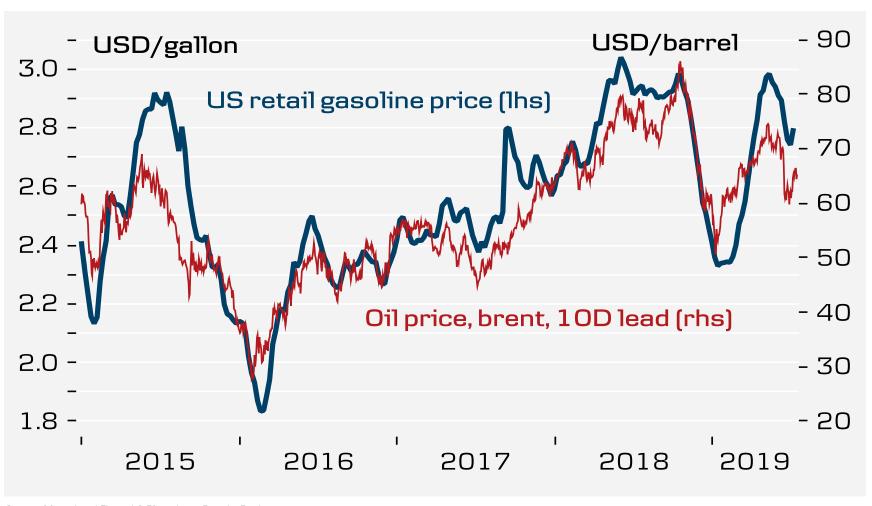
US real wage growth



Source: Macrobond Financial, BLS, Danske Bank



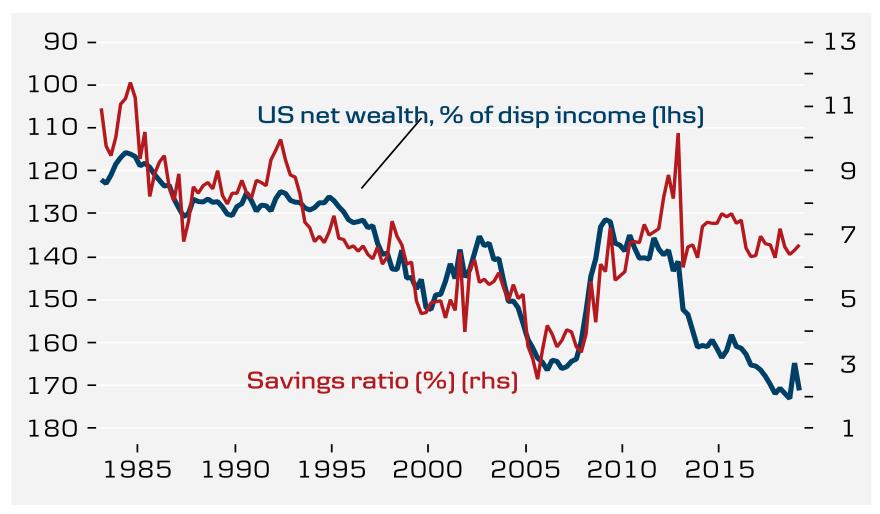
Consumption: energy costs



Source: Macrobond Financial, Bloomberg, Danske Bank



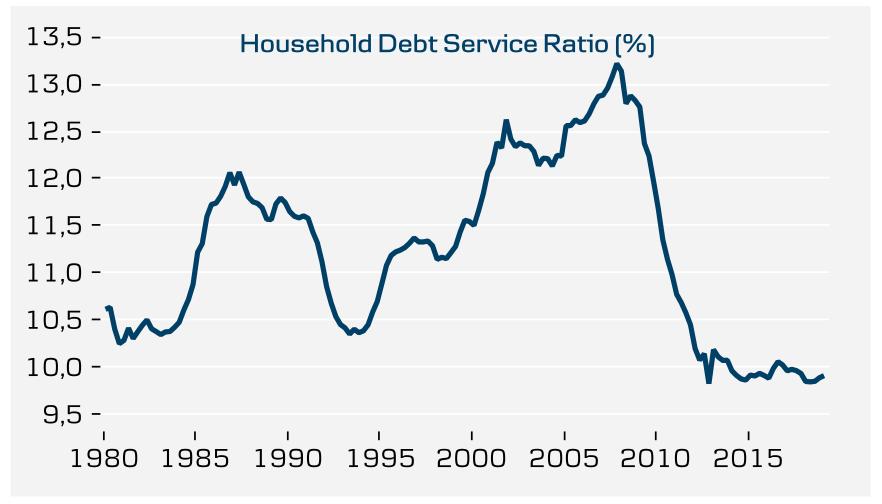
Consumer: wealth



Source: Macrobond Financial, BLS, Danske Bank

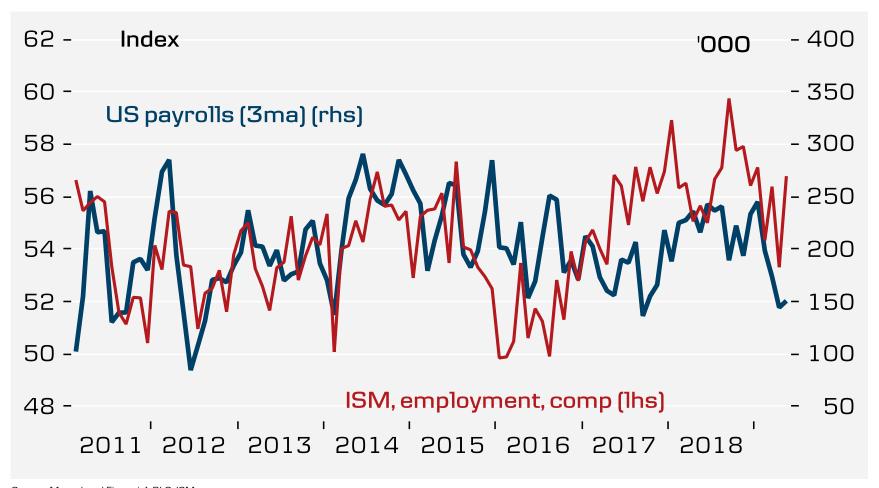


Consumer: debt cost



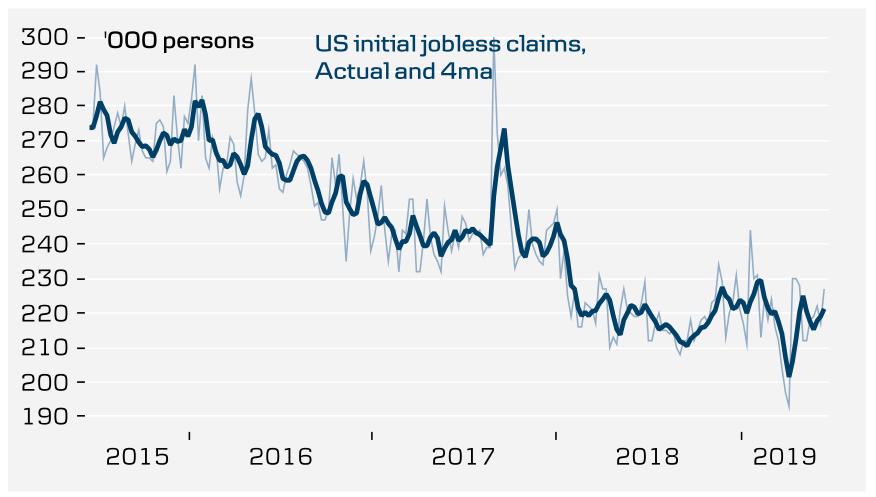


Labour market: ISM





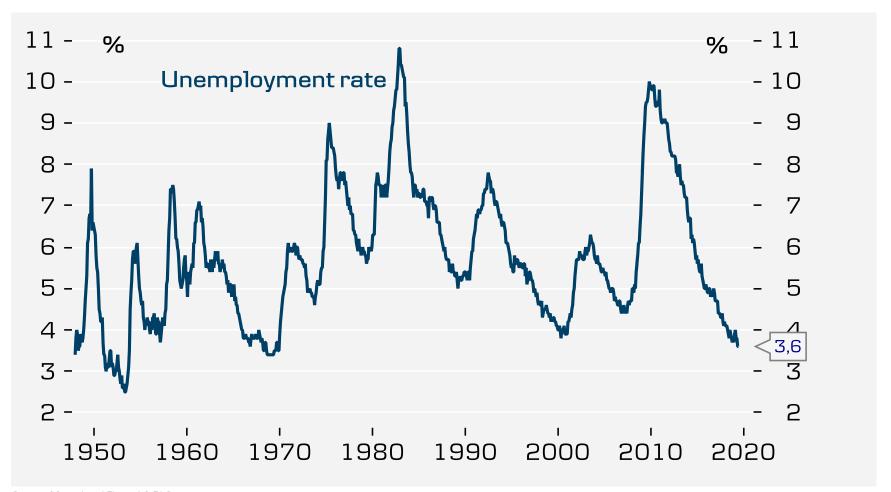
Labour market: claims



Source: Macrobond Financial, BLS, Danske Bank

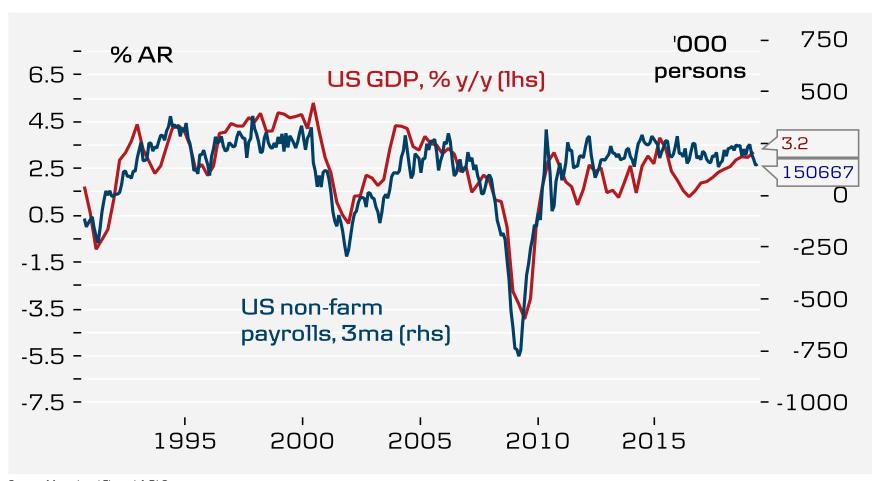


Labour market: unemployment



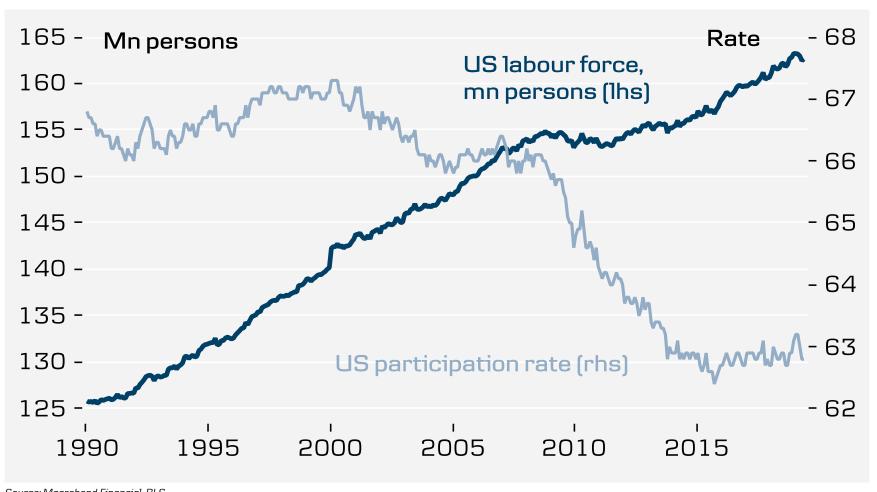


Labour market: employment and GDP



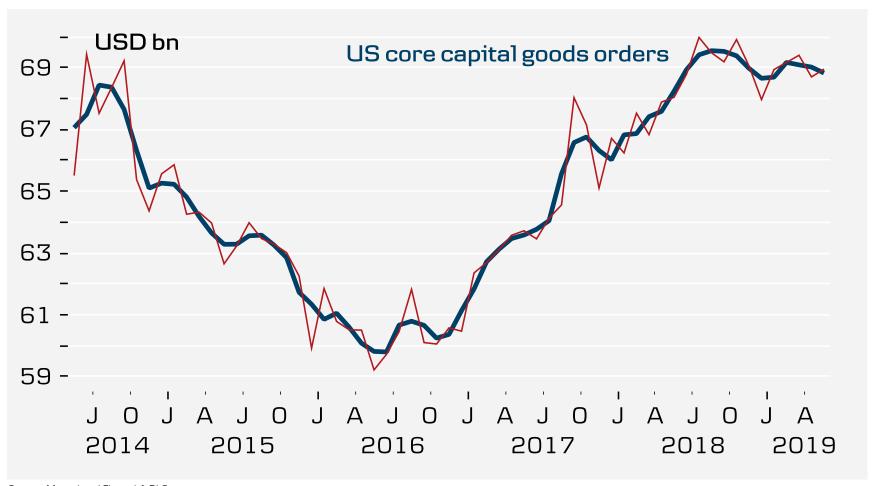


Labour market: participation and labour force



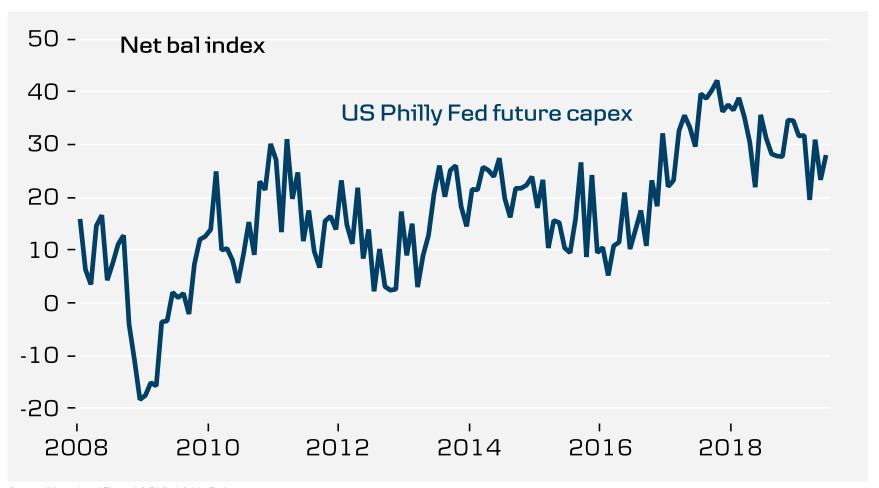


Capex: durable goods orders





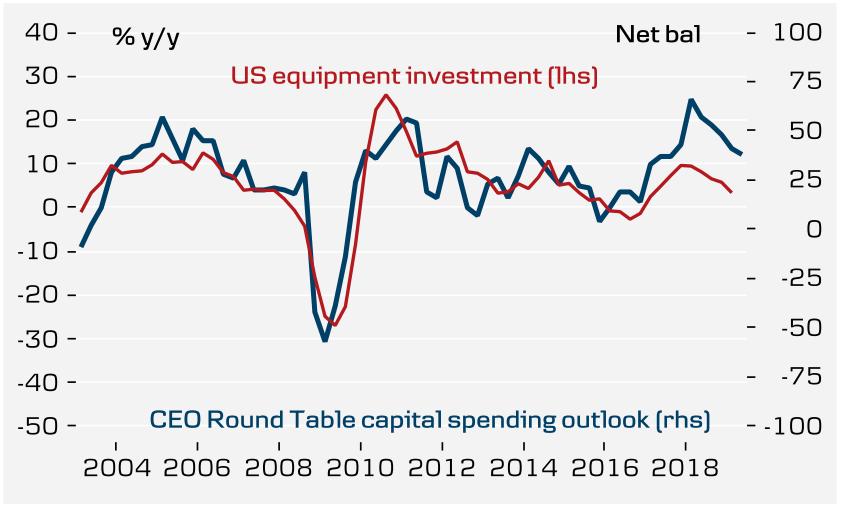
Capex: Philly Fed capex outlook



Source: Macrobond Financial, Philadelphia Fed

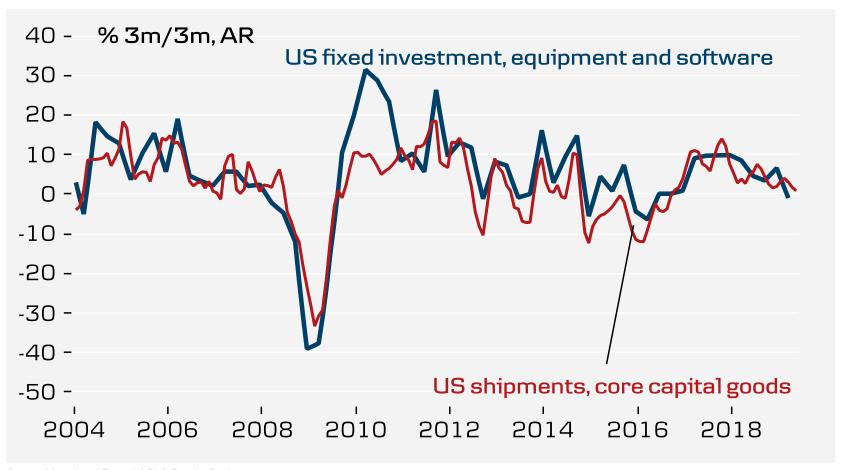


Capex: CEO Round Table capex outlook





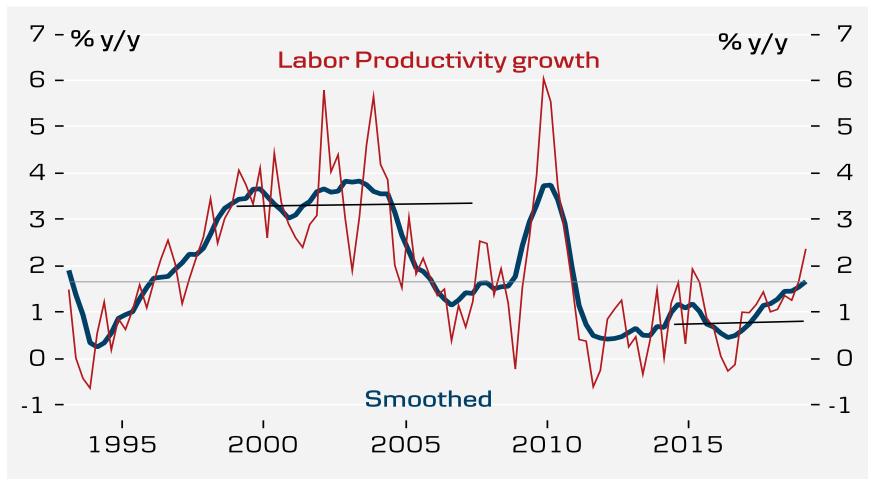
Capex: shipments



Source: Macrobond Financial, BLS, Danske Bank



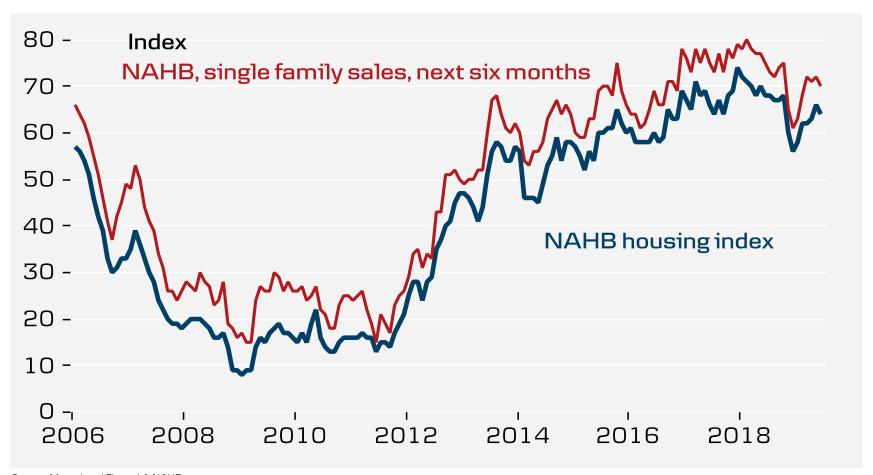
US productivity



Source: Macrobond Financial, BLS, Danske Bank

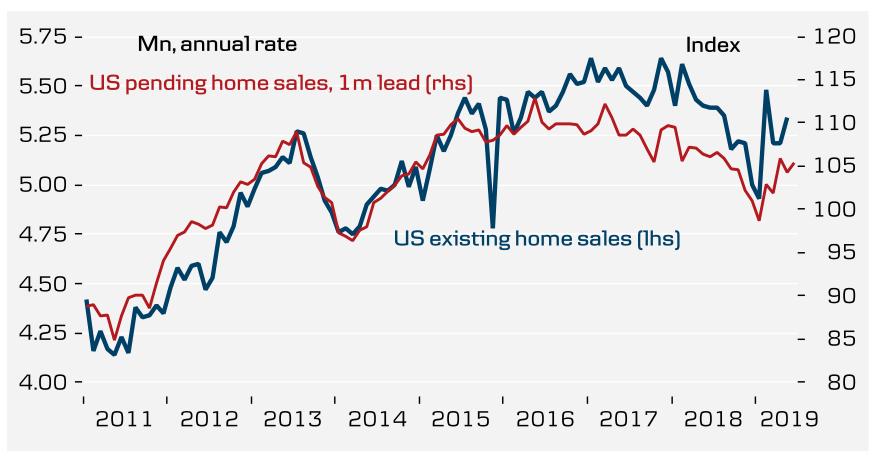


Housing: confidence





Housing: home sales



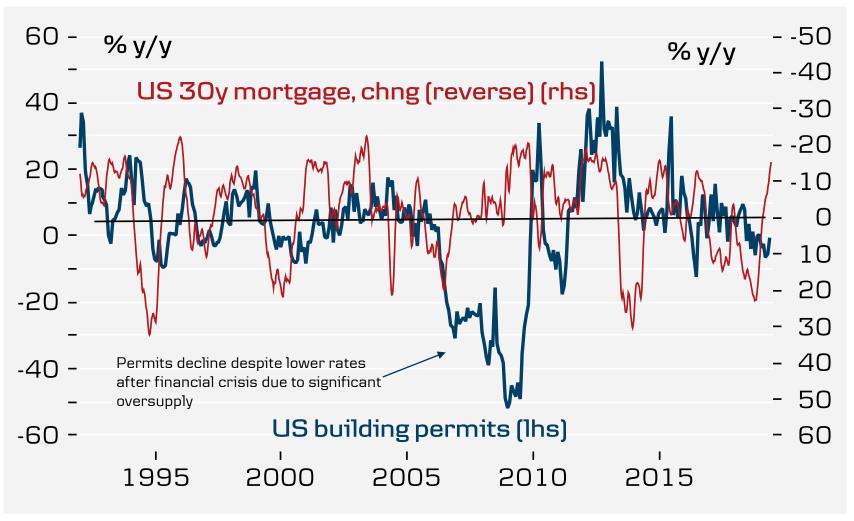


Housing: permits and starts



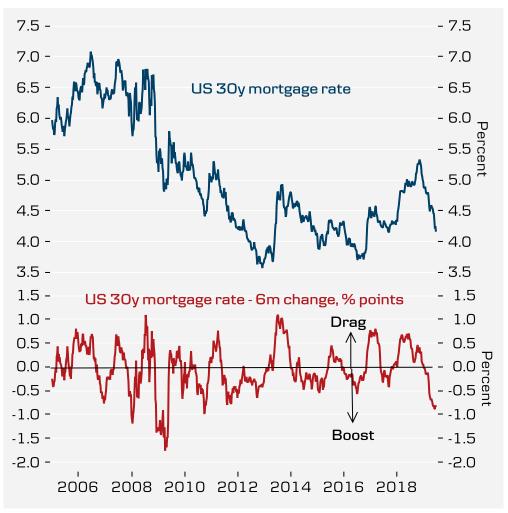


Housing: permits vs mortgage rates





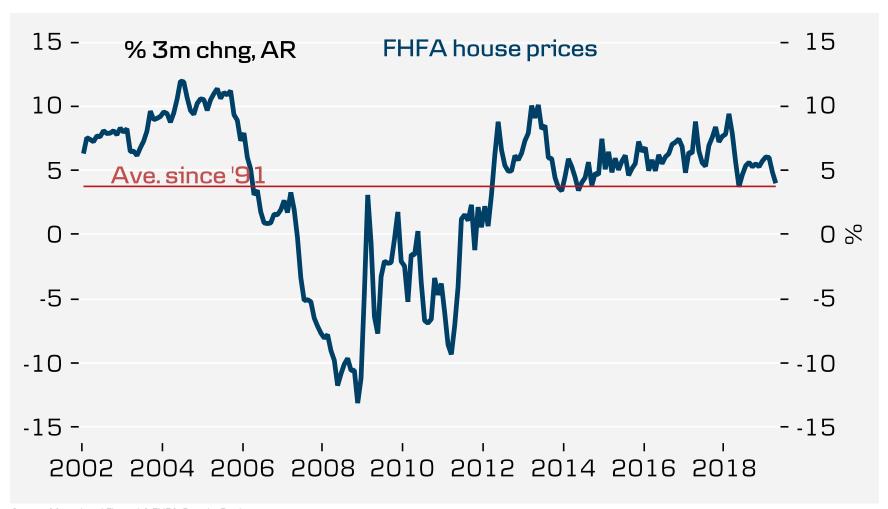
Housing: US impulse from mortgage rates



Source: Macrobond Financial, Bloomberg, Danske Bank



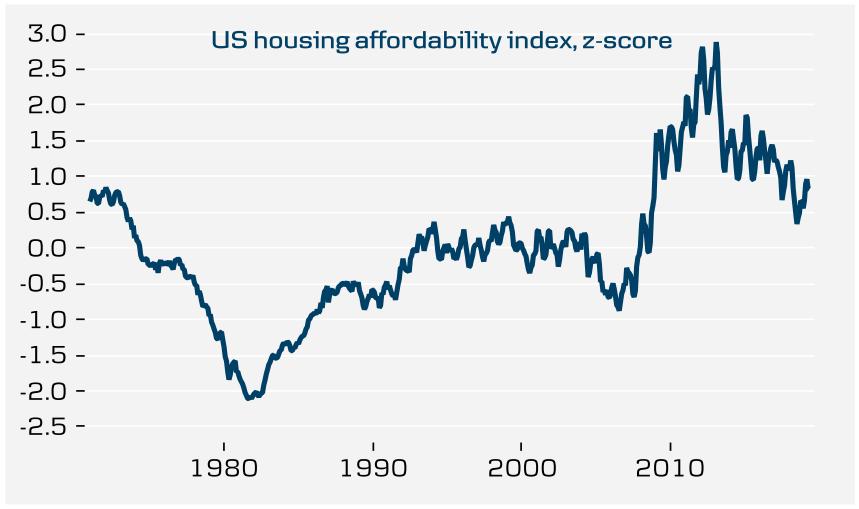
Housing: prices



Source: Macrobond Financial, FHFA, Danske Bank



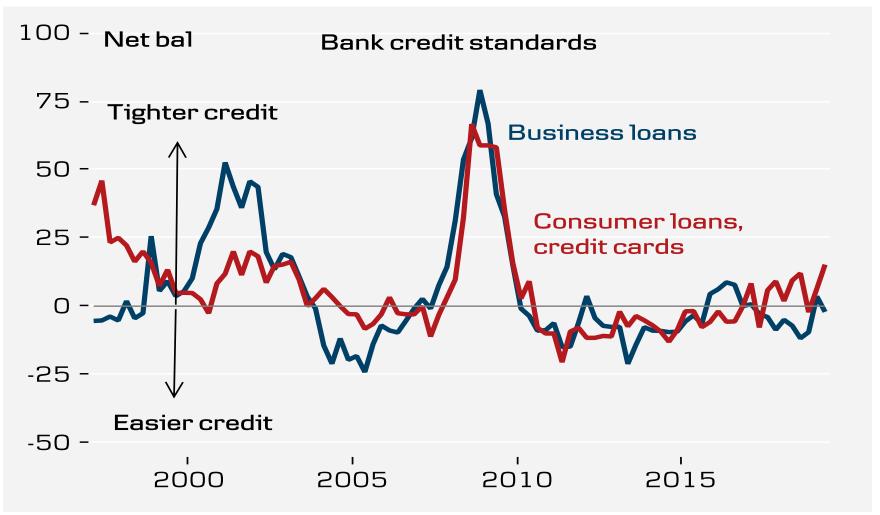
Housing - affordability



Source: Macrobond Financial, National Association of Realtors, Danske Bank



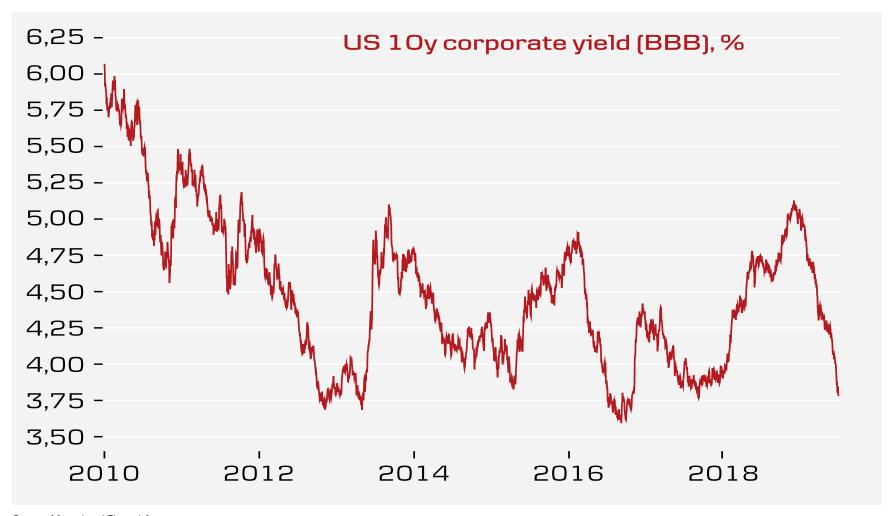
Credit: lending standards



Source: Macrobond Financial, Federal Reserve

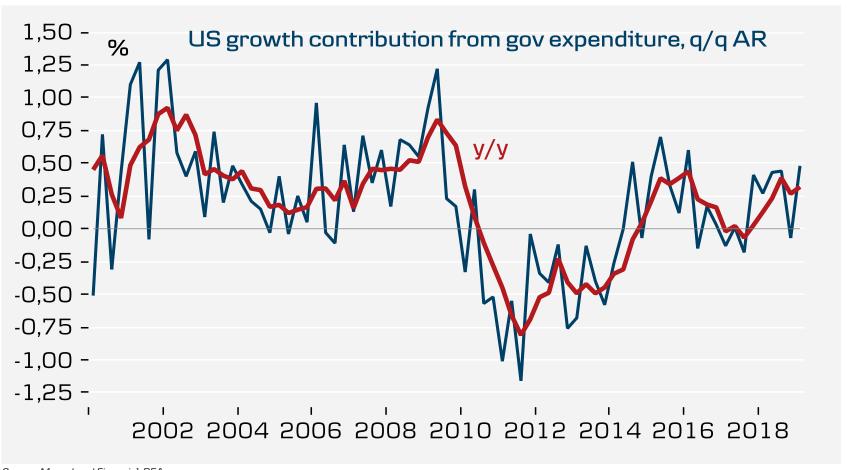


Credit yields



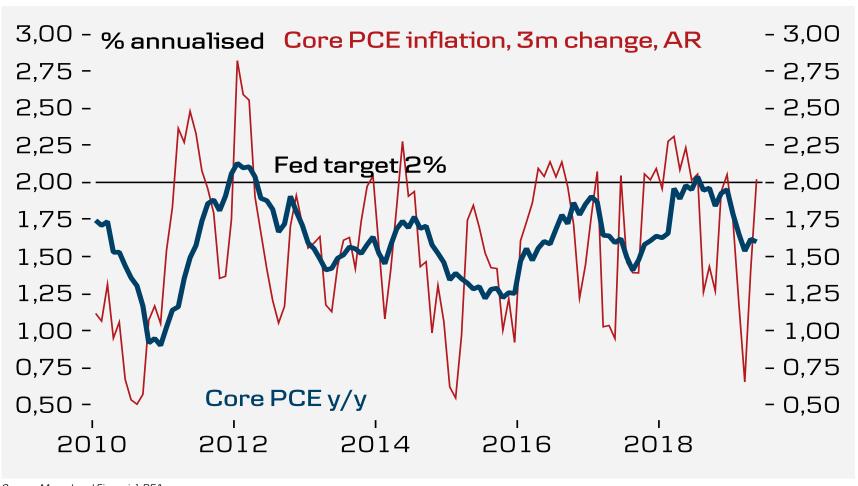


Public expenditure



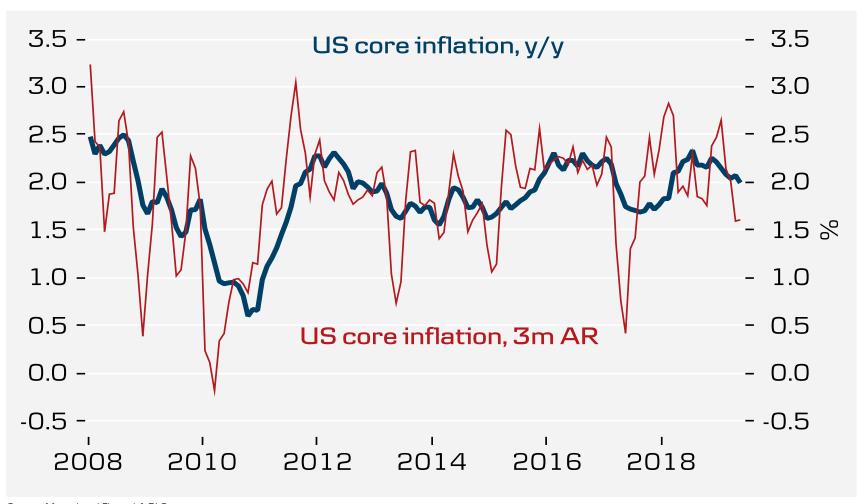


Inflation - core PCE



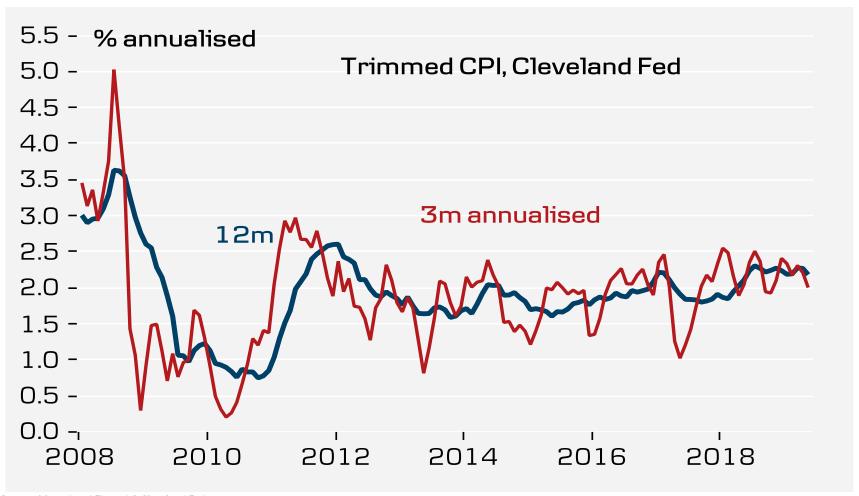


Inflation - core CPI





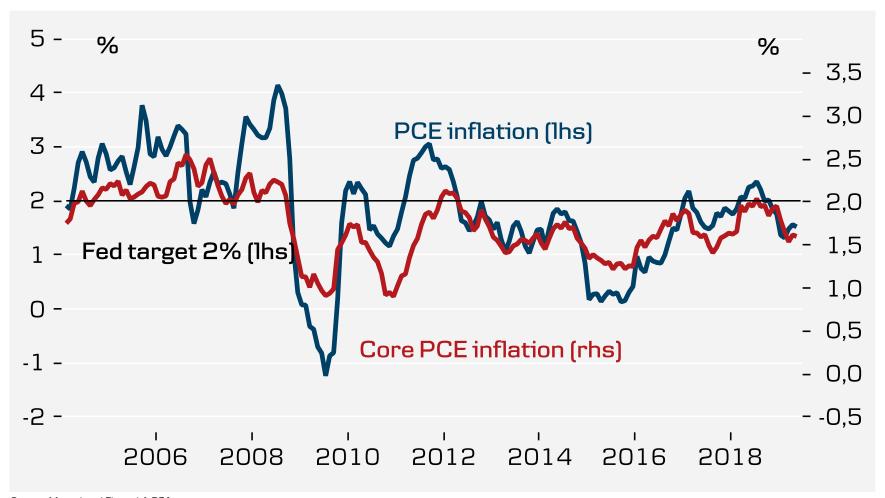
Inflation - trimmed CPI



Source: Macrobond Financial, Cleveland Fed

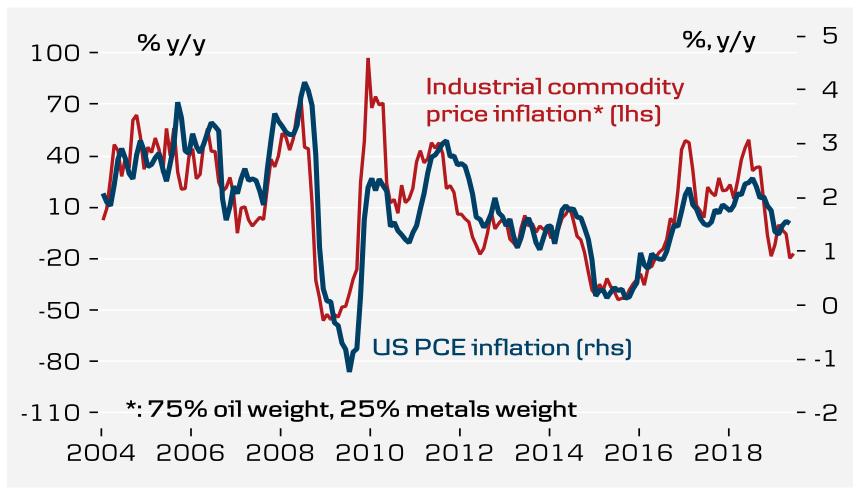


Headline vs core PCE inflation





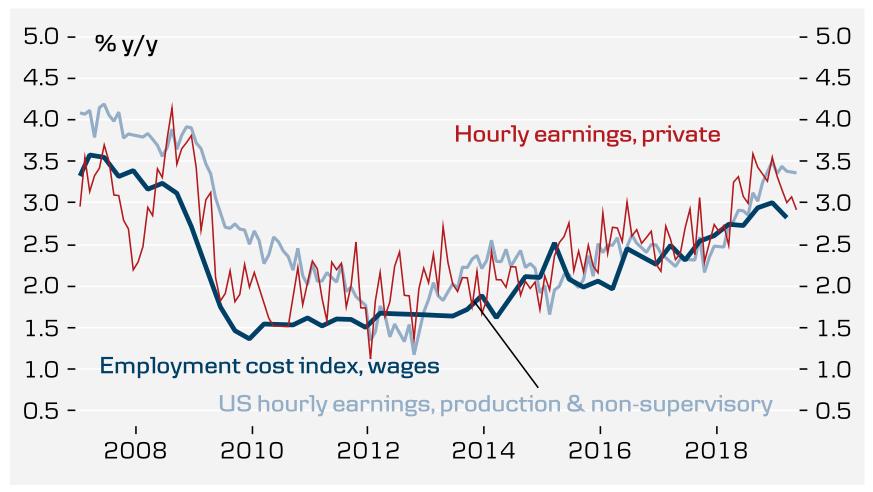
Inflation - commodity prices vs headline



Source: Macrobond Financial, BEA, ICE, LME

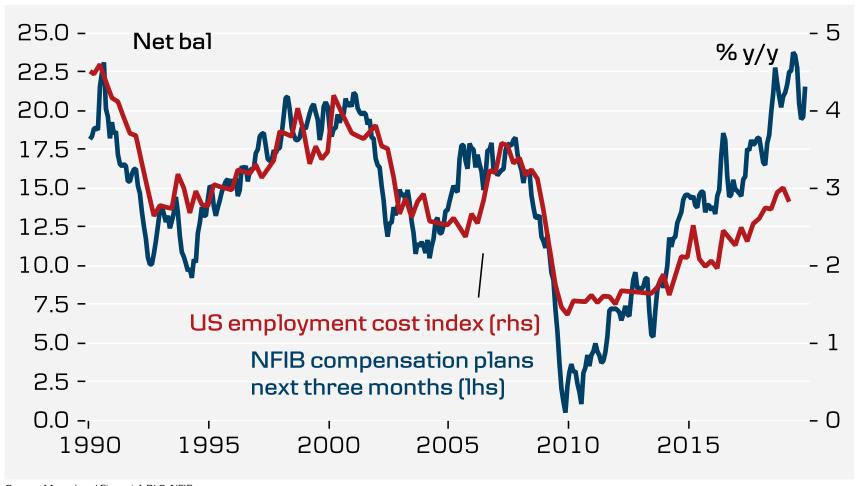


Inflation – different wage measures



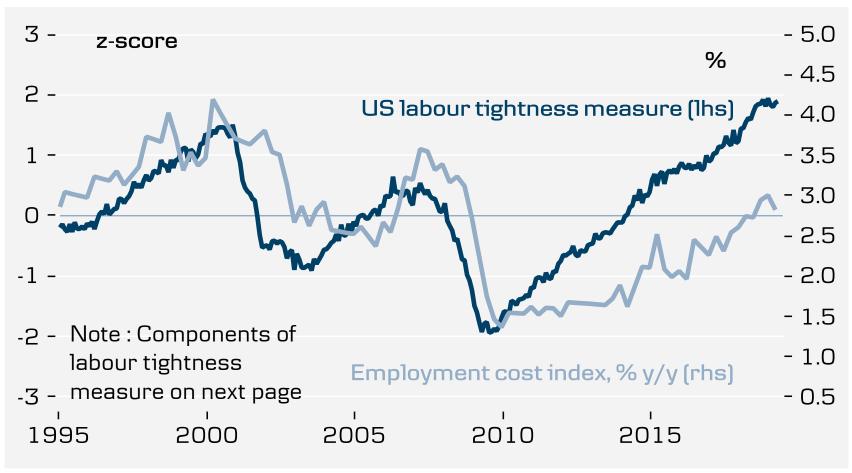


Inflation - NFIB and Employment Cost Index



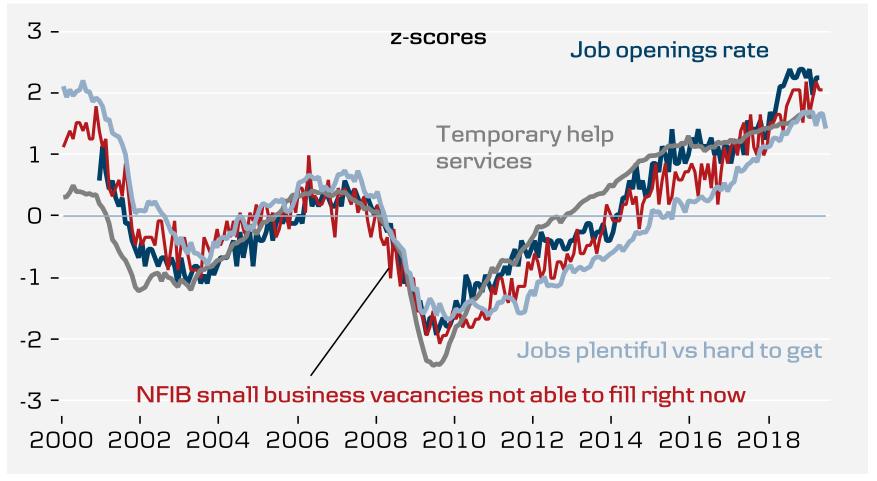


Inflation – labour market tightness indicators





Inflation – labour market tightness indicators



Source: Macrobond Financial, BLS, Conference Board, NFIB



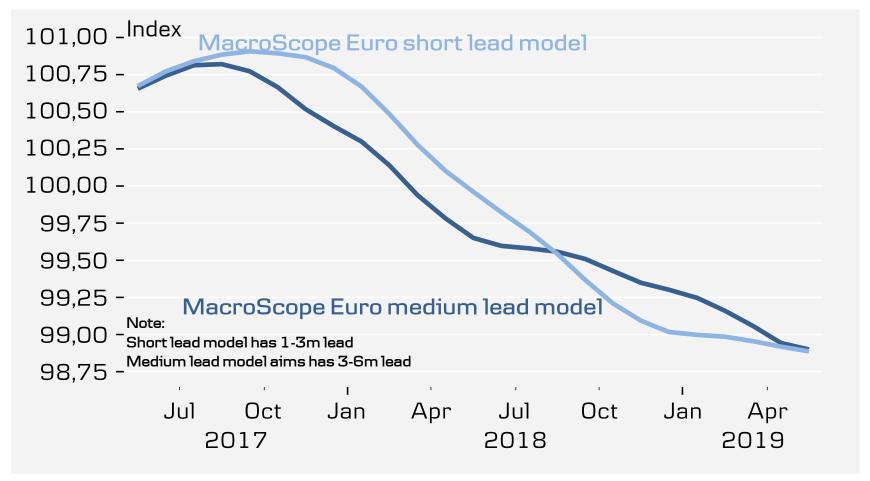
U6 unemployment



Euro



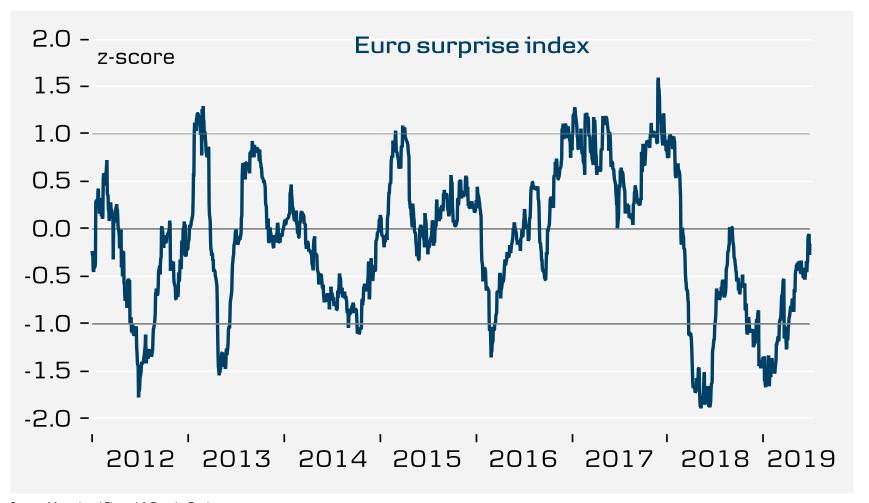
MacroScope models



Source: Danske Bank



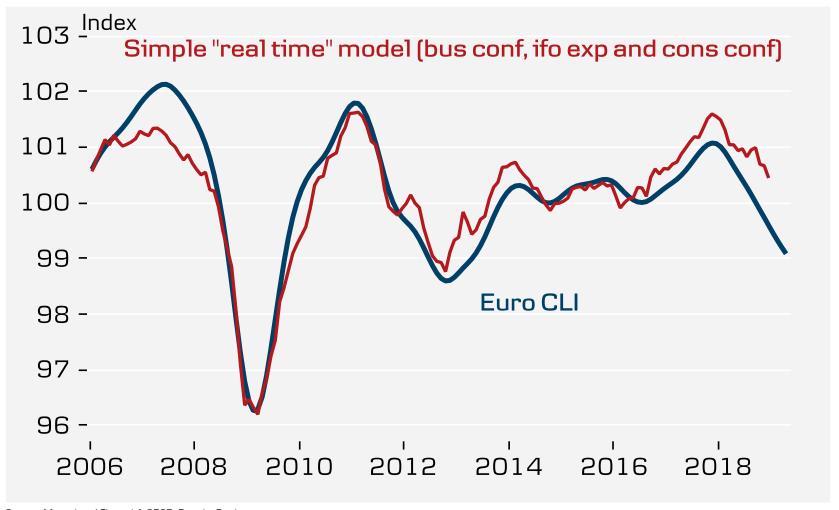
Euro surprise index



Source: Macrobond Financial, Danske Bank



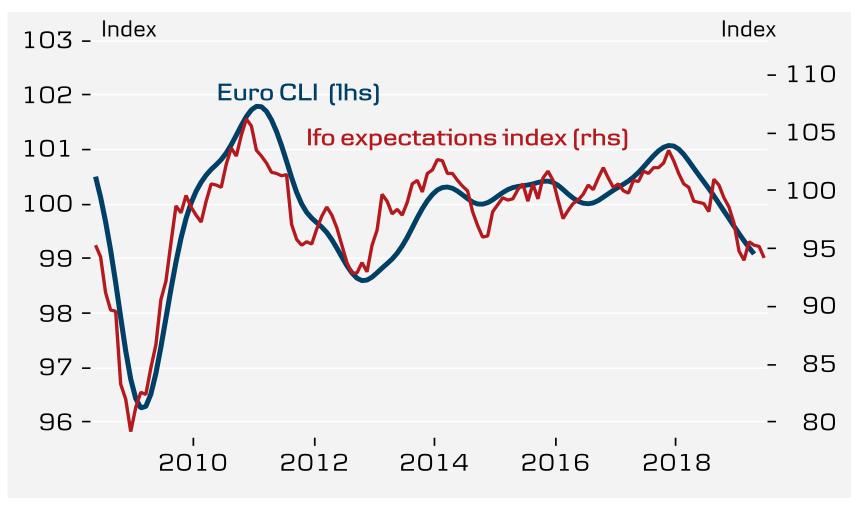
Euro confidence vs OECD leading indicator (CLI)



Source: Macrobond Financial, OECD, Danske Bank



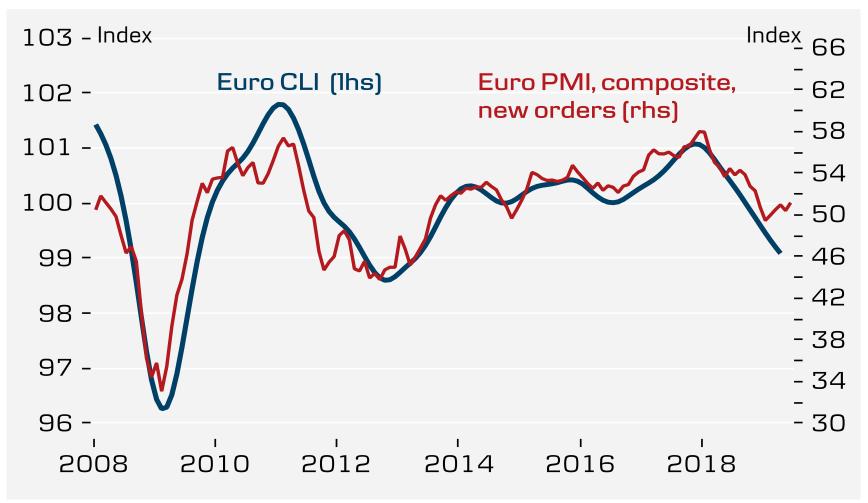
German ifo vs CLI



Source: Macrobond Financial, IFO, OECD, Danske Bank



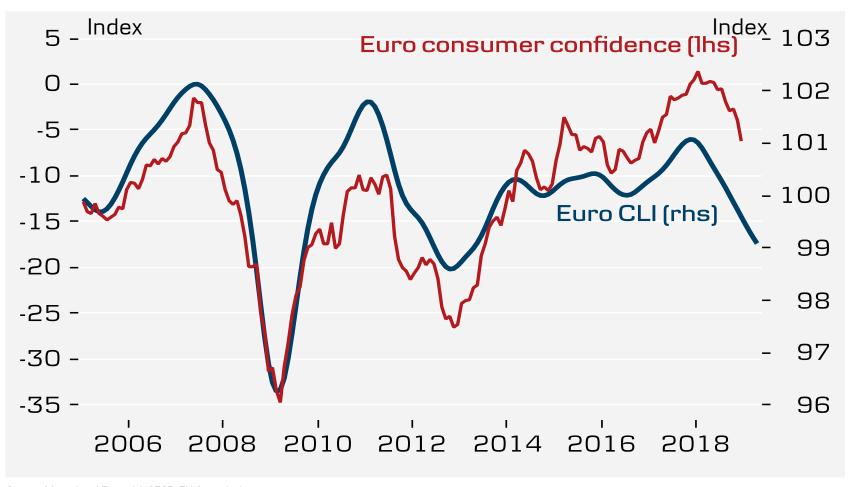
Composite PMI vs CLI



Source: Macrobond Financial, Markit, OECD, Danske Bank



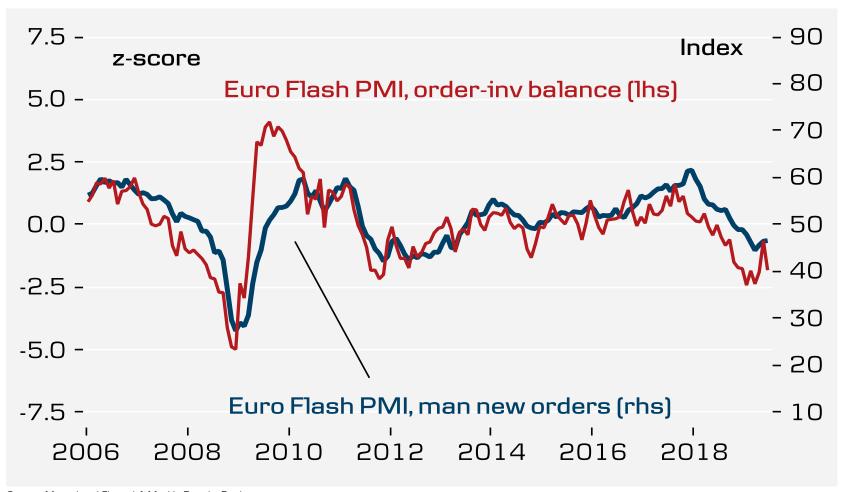
Consumer confidence vs CLI



Source: Macrobond Financial, OECD, EU Commission



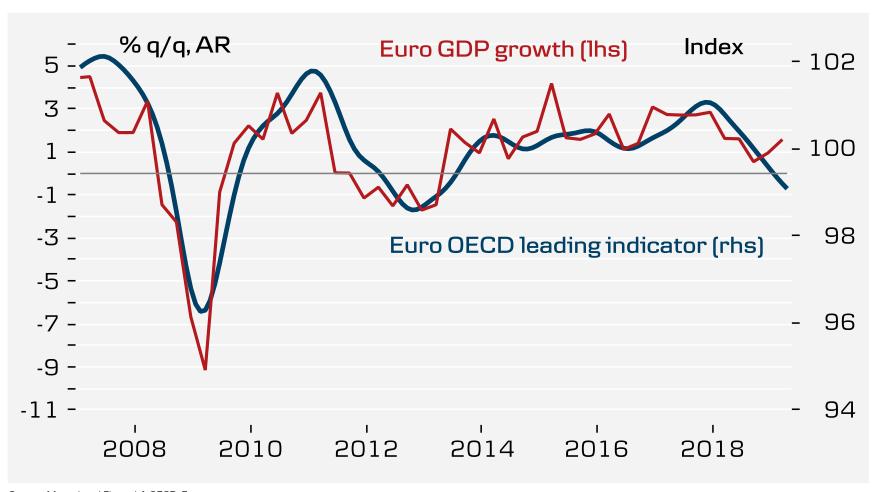
Order-inventory balance vs PMI



Source: Macrobond Financial, Markit, Danske Bank



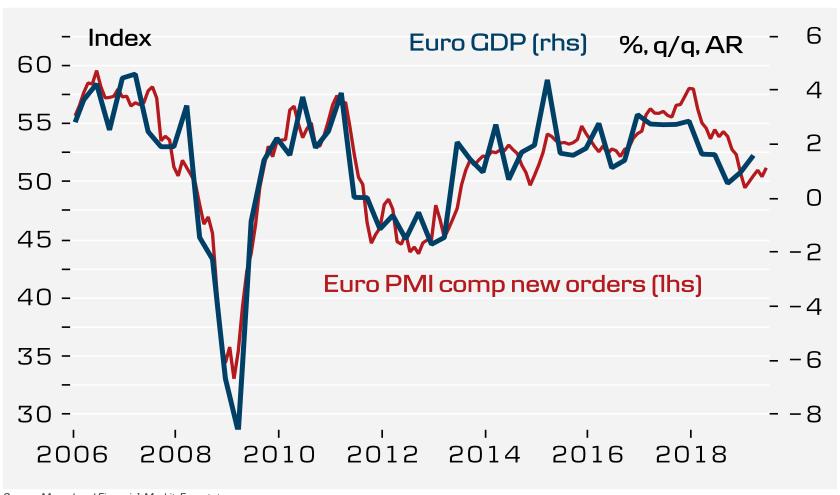
Euro leading indicator vs GDP



Source: Macrobond Financial, OECD, Eurostat



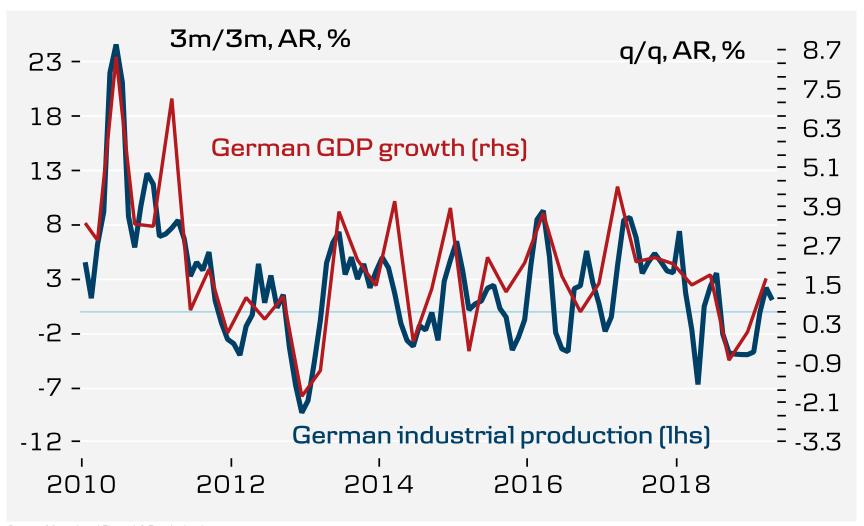
Euro PMI vs GDP growth



Source: Macrobond Financial, Markit, Eurostat



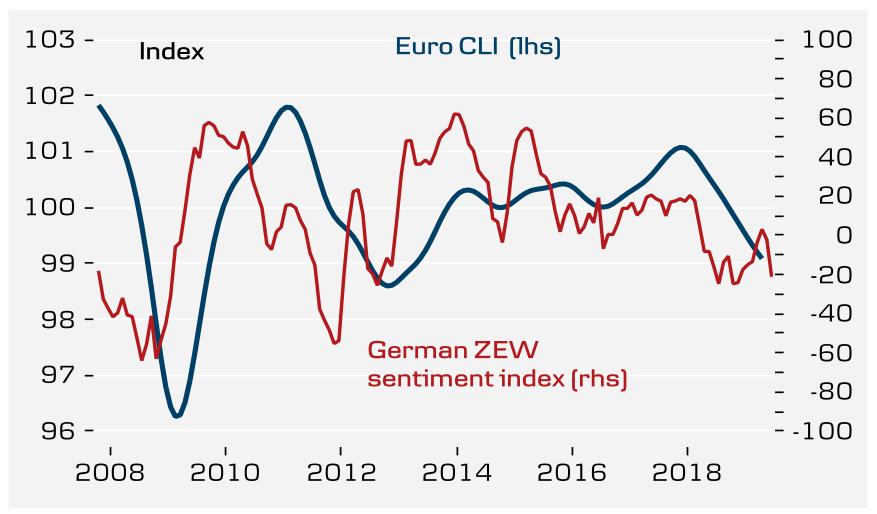
German IP vs GDP



Source: Macrobond Financial, Bundesbank



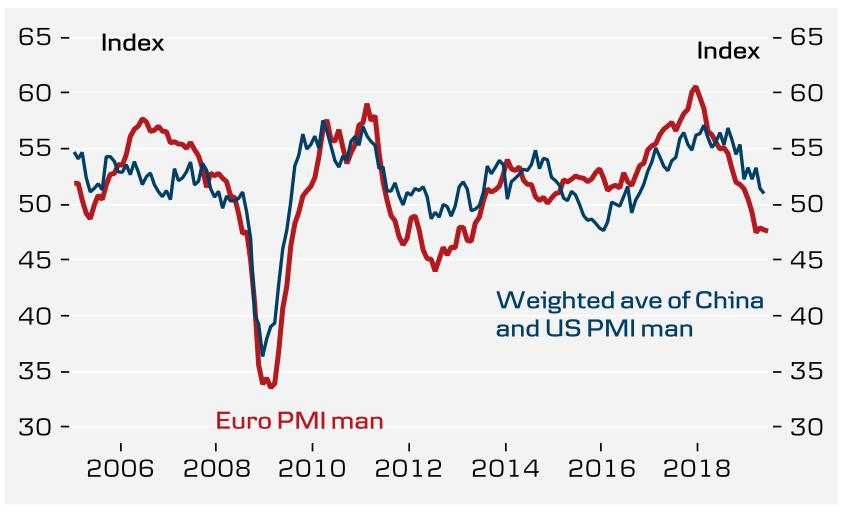
Euro - ZEW vs CLI



Source: Macrobond Financial, OECD, ZEW



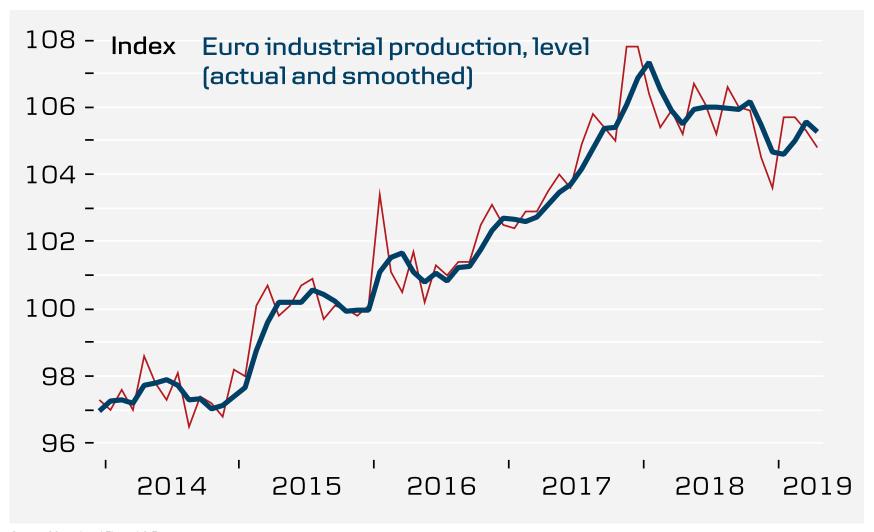
Euro PMI vs China and US PMI



Source: Macrobond Financial, Markit, Danske Bank



Industrial production – level





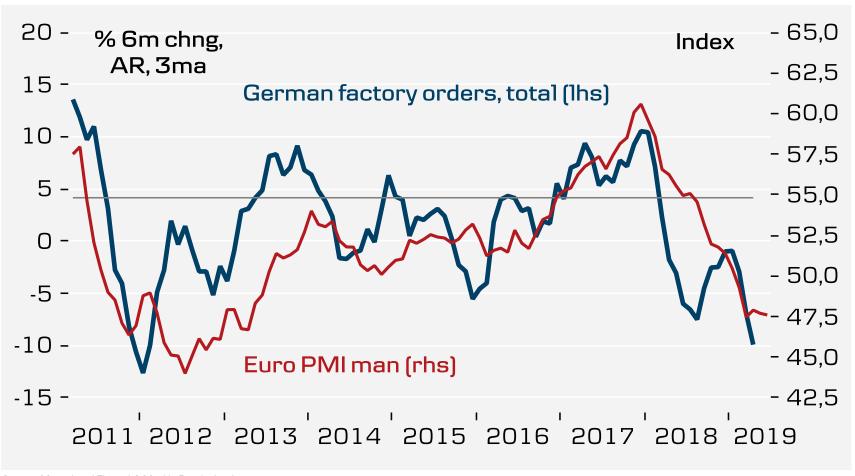
German orders - level



Source: Macrobond Financial. Bundesbank



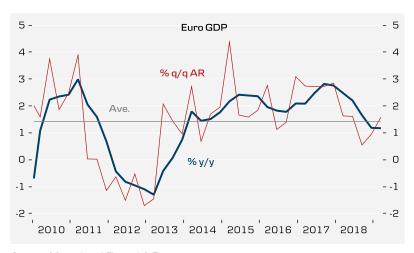
German orders – growth vs Euro PMI



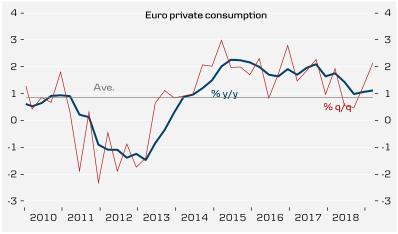
Source: Macrobond Financial, Markit, Bundesbank



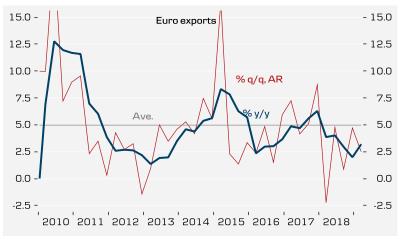
GDP and demand sub-components



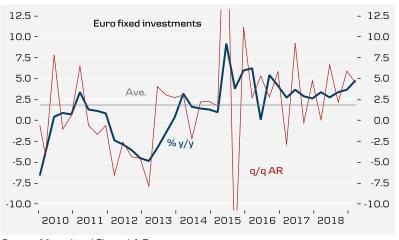
Source: Macrobond Financial, Eurostat



Source: Macrobond Financial, Eurostat



Source: Macrobond Financial, Eurostat

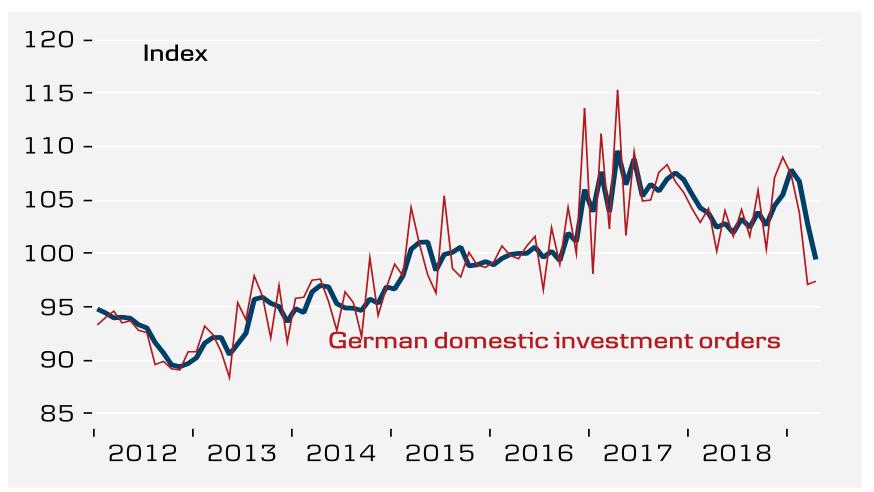


Source: Macrobond Financial, Eurostat

Euro



German orders - capex level



Source: Macrobond Financial, Bundesbank



Investment growth

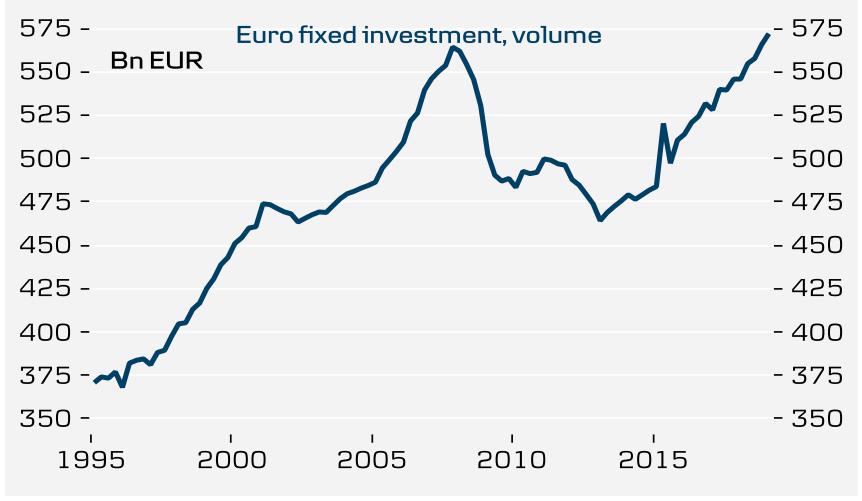


Source: Macrobond Financial, Eurostat

Euro



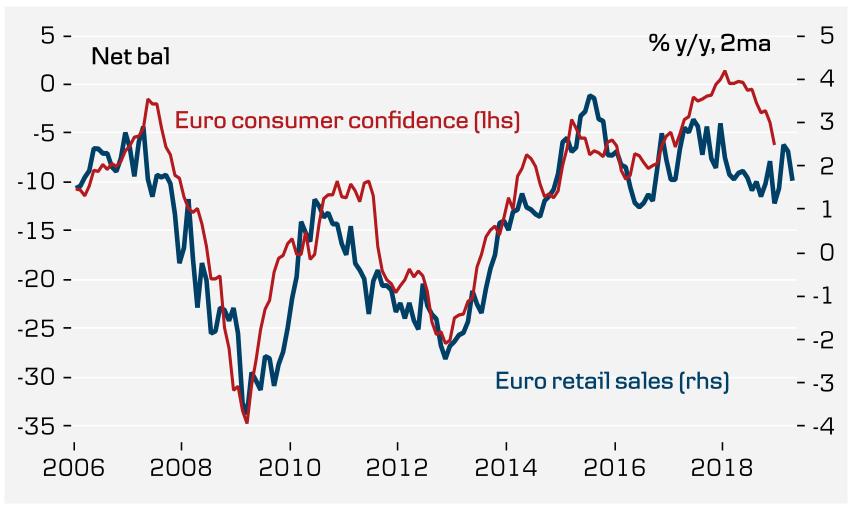
Investment level



Source: Macrobond Financial, Eurostat



Retail sales and consumer confidence



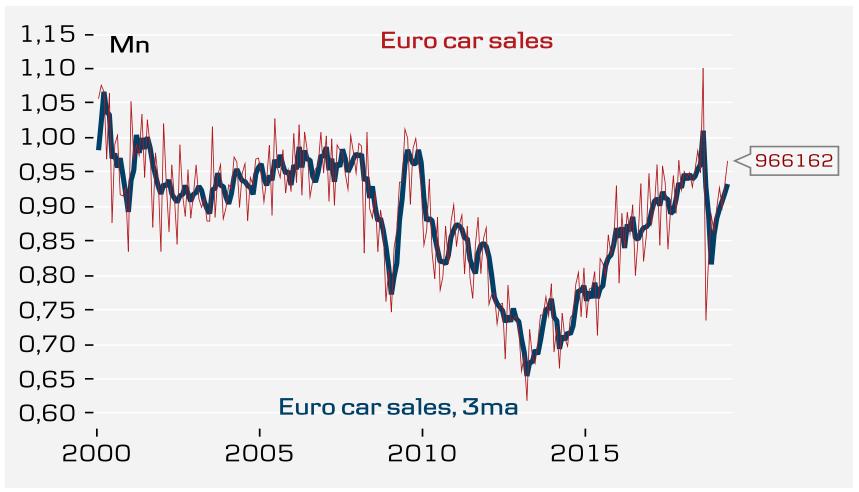


Retail sales - level





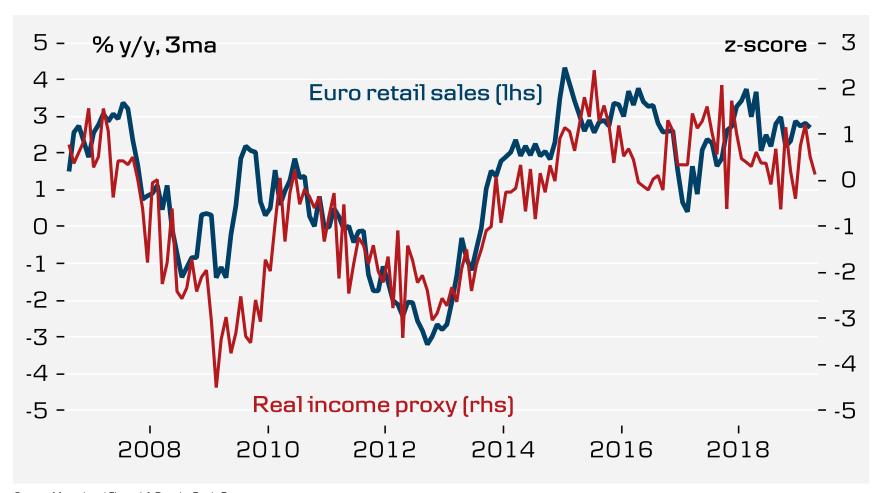
Car sales



Source: Macrobond Financial, ACEA



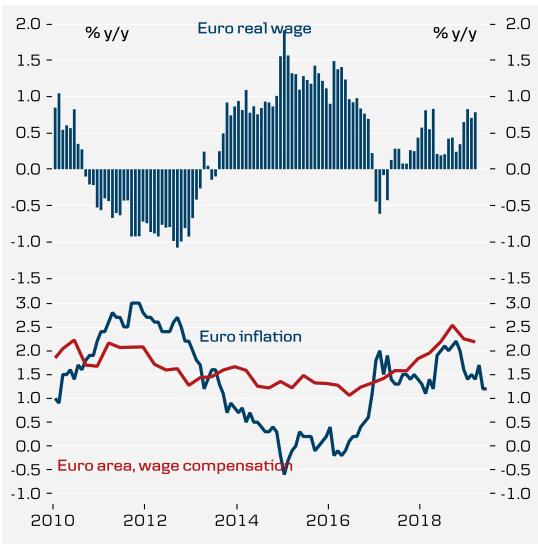
Real income



Source: Macrobond Financial, Danske Bank, Eurostat



Real wage growth

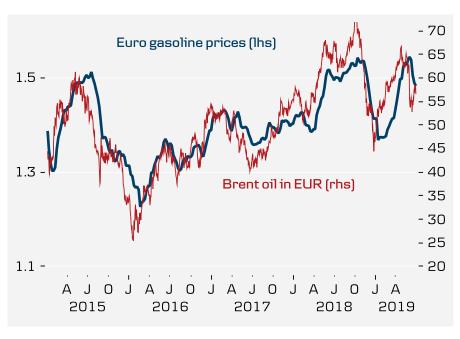


Source: Macrobond Financial, Eurostat, ECB

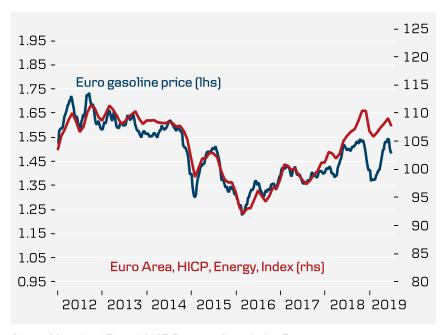
Euro



Euro gasoline prices



Source: Macrobond Financial, ICE, European Commission, Eurostat



Source: Macrobond Financial, ICE, European Commission, Eurostat



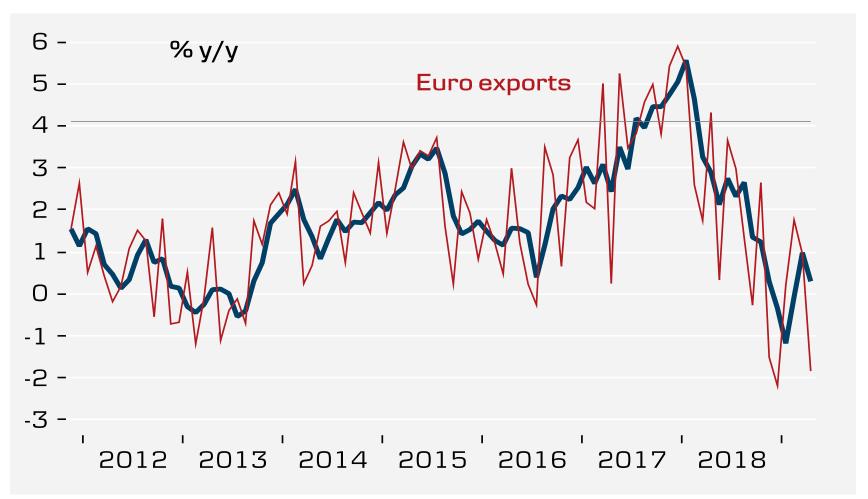
Exports - PMI



Source: Macrobond Financial, Markit, Eurostat

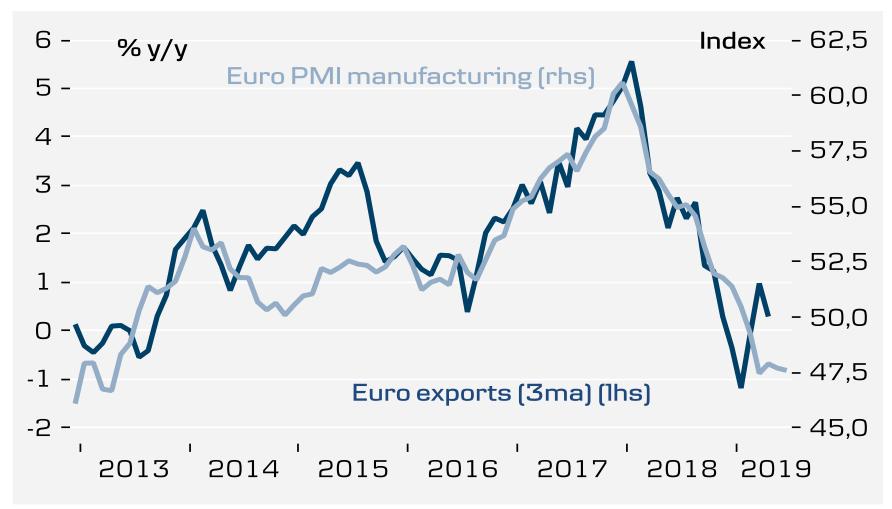


Exports - growth





Exports - growth and PMI





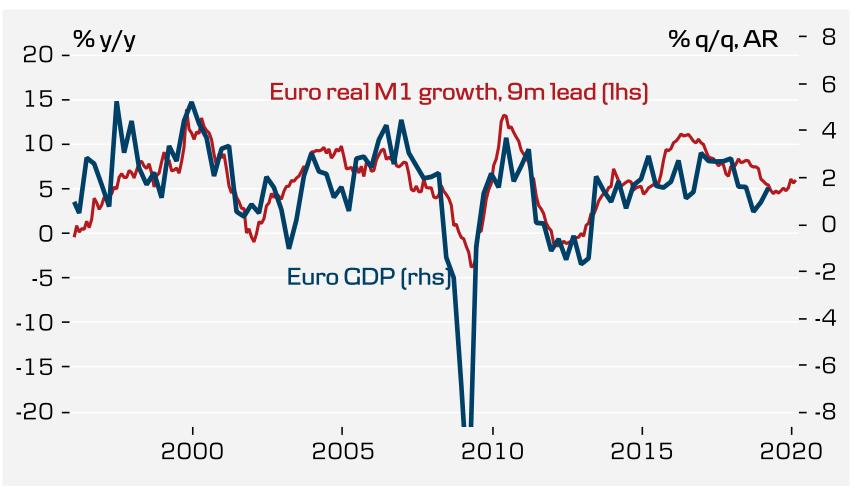
Exports - exchange rate impulse



Source: Macrobond Financial, Bank of England



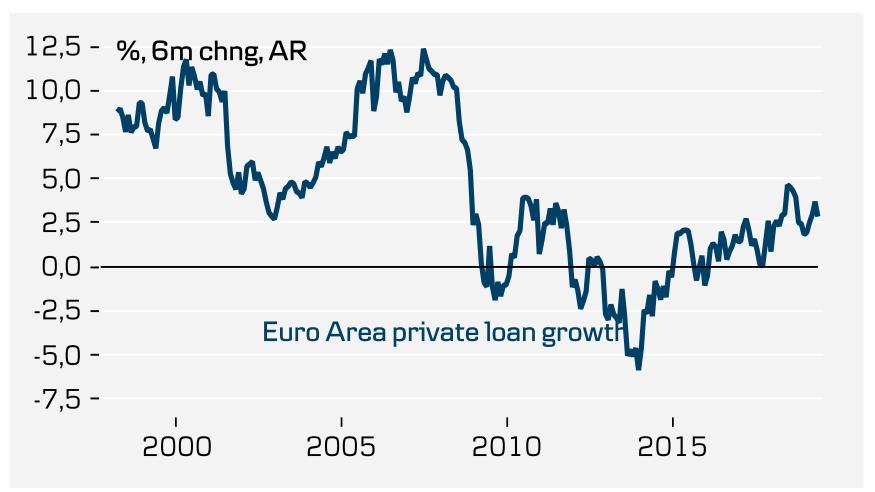
Money and GDP



Source: Macrobond Financial, ECB, Eurostat



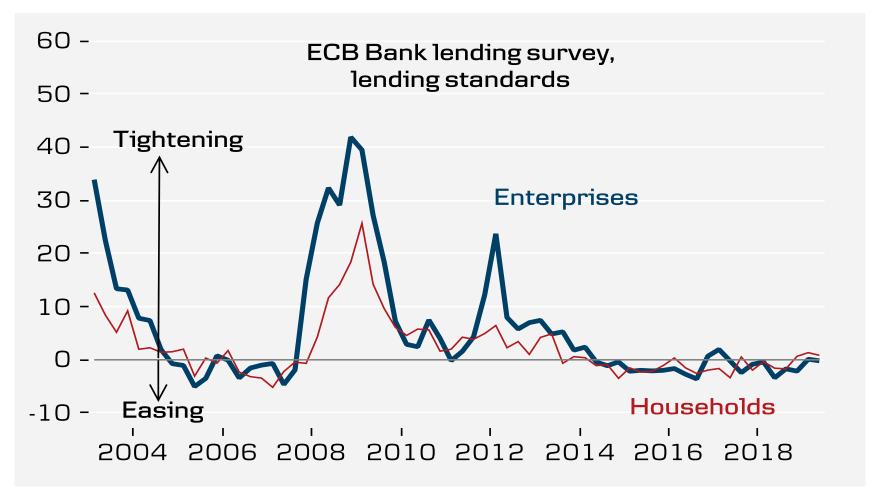
Credit - loan growth



Source: Macrobond Financial, ECB



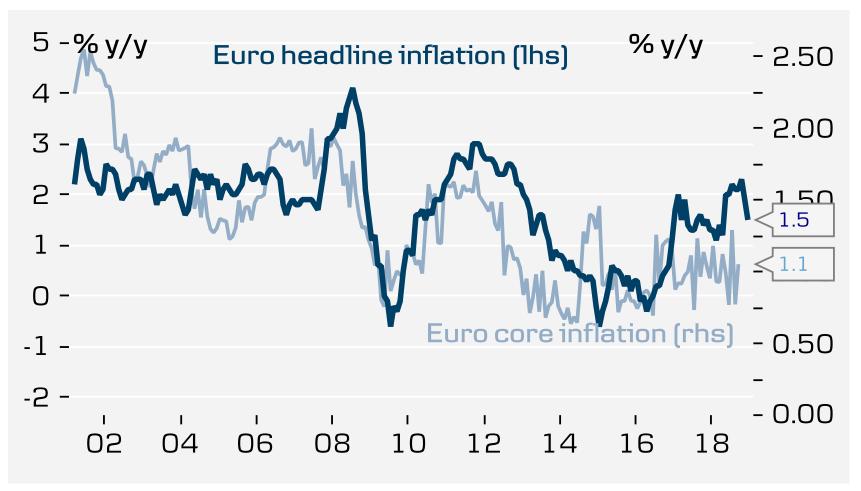
Credit - lending standards



Euro



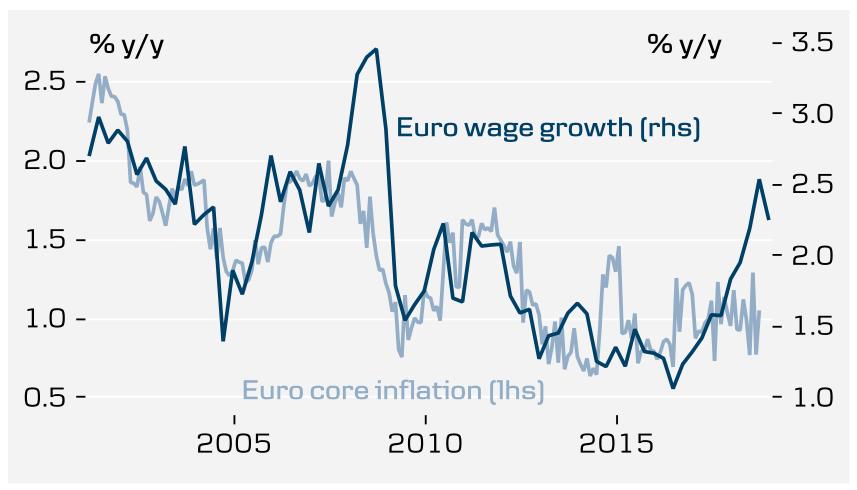
Inflation – core vs headline



Source: Macrobond Financial, Eurostat



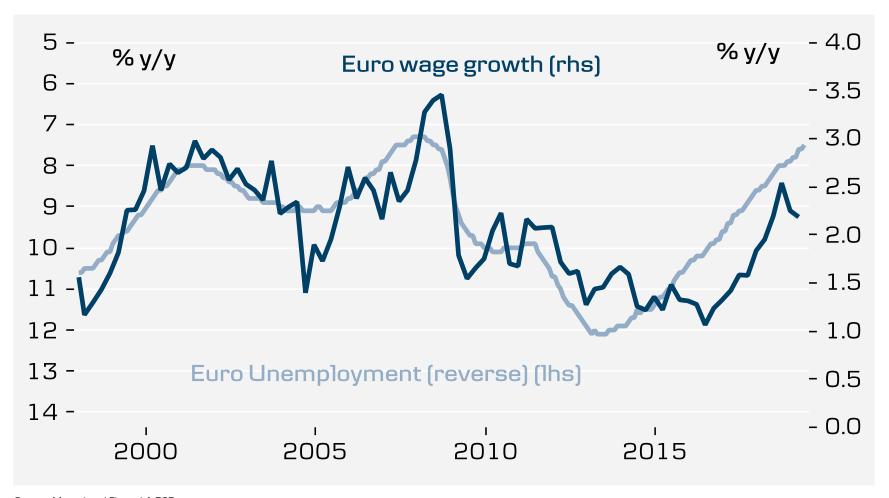
Inflation - core vs. wage inflation



Source: Macrobond Financial, ECB, Eurostat



Inflation - wage inflation vs unemployment

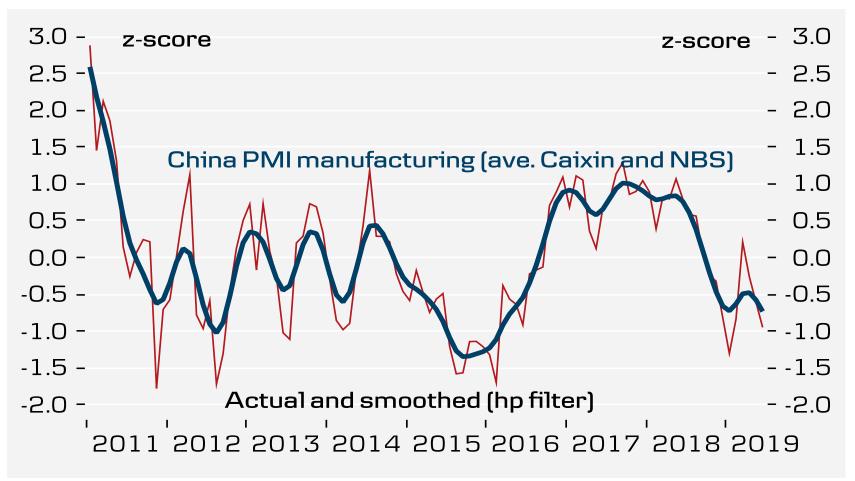


Source: Macrobond Financial, ECB

China

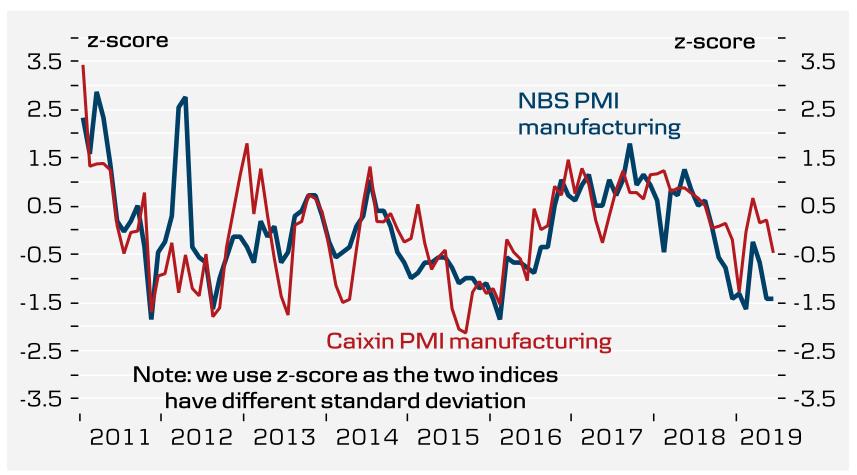


PMI indicator (average of Caixin and NBS)





NBS vs Caixin PMI





Metal prices vs PMI





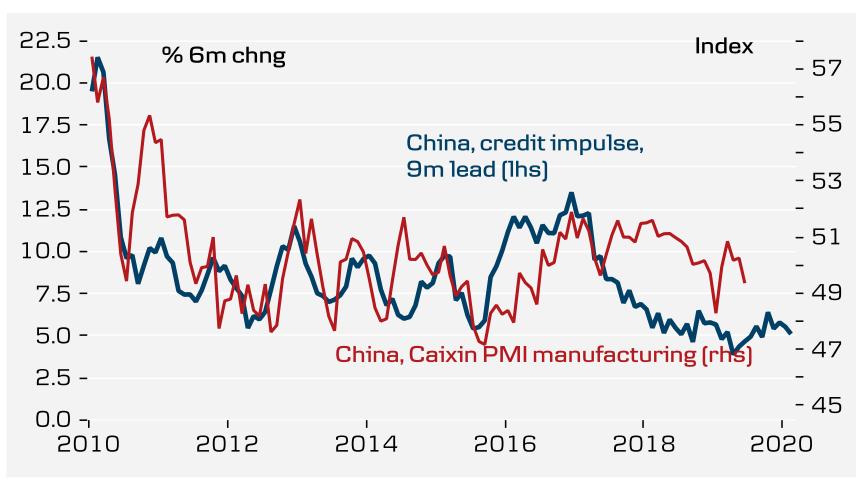
Money growth and PMI



Source: Macrobond Financial, Markit, People's Bank of China



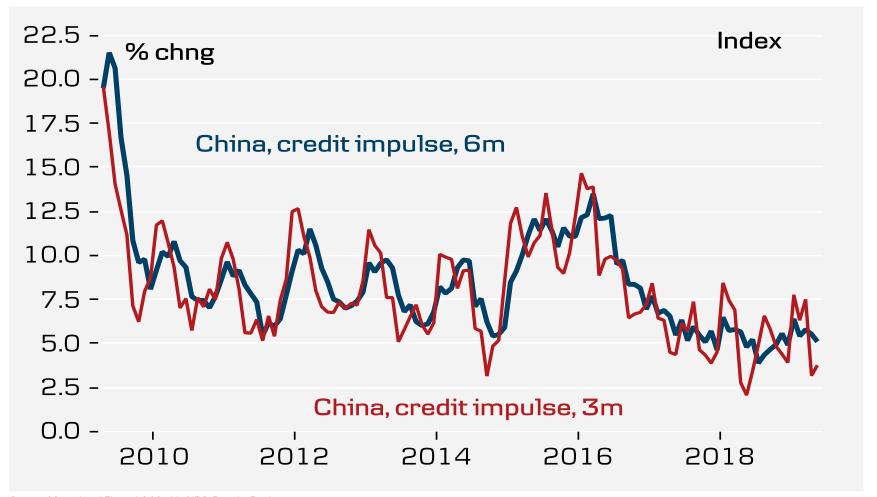
Credit impulse and PMI



Source: Bloomberg, People's Bank of China, Danske Bank



Credit impulse momentum



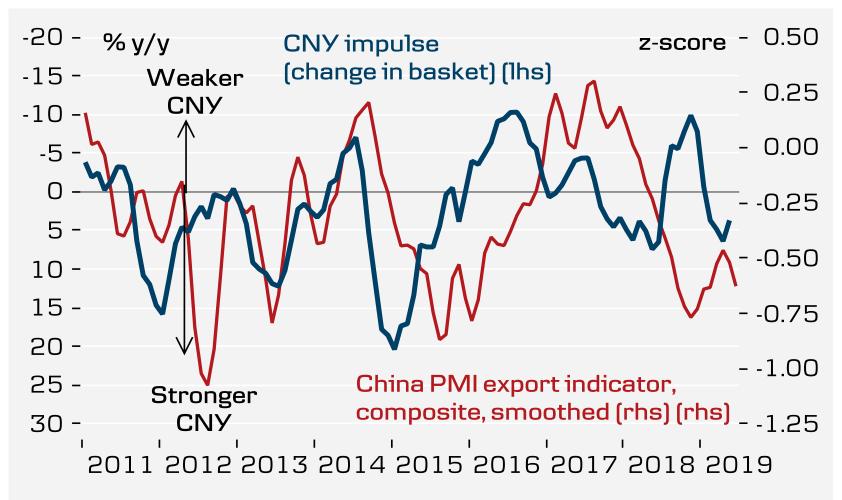


Exports - model





Exports - currency impulse



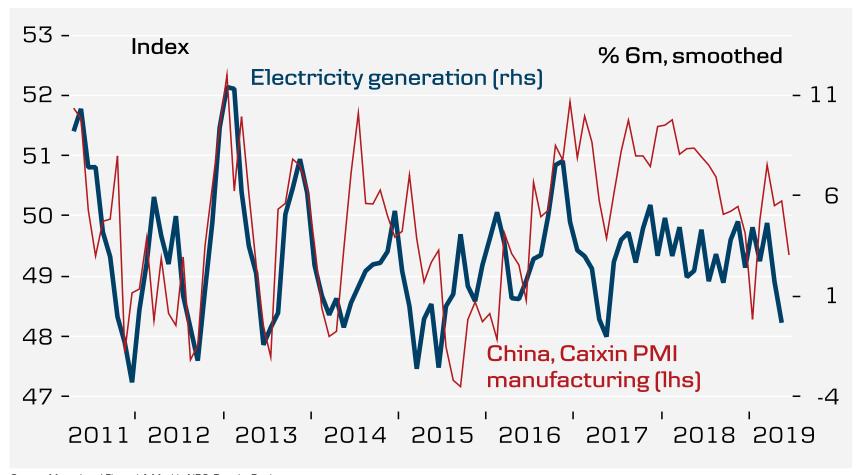


Exports - hard data and PMI export orders



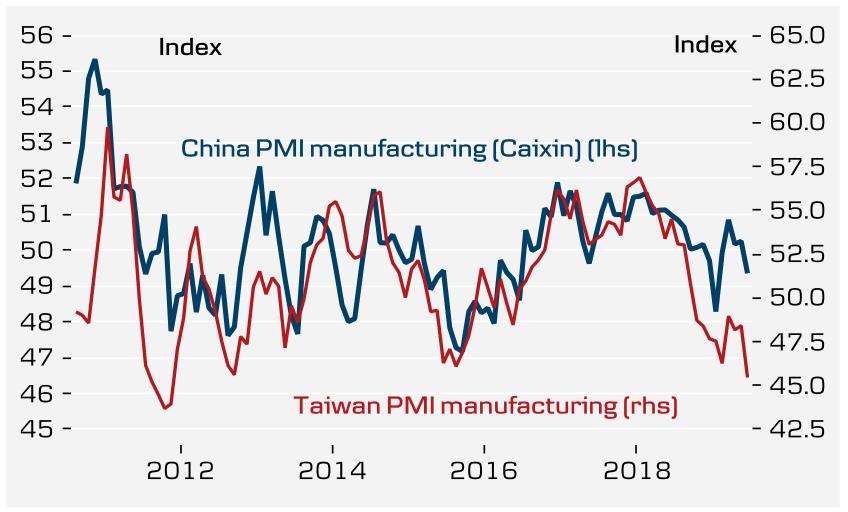


Electricity generation vs PMI





Taiwan PMI vs China PMI



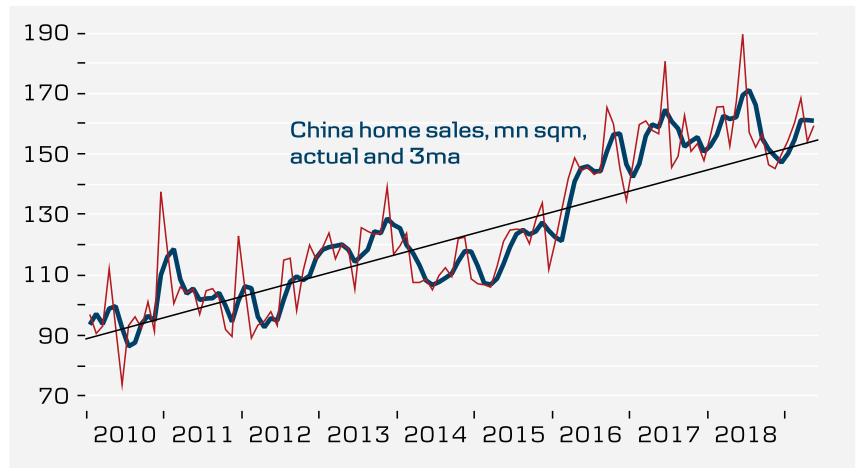


Hong Kong PMI vs China PMI





Housing - home sales level





Housing - home sales and household credit



 $Source: Macrobond\ Financial,\ Markit,\ NBS,\ People's\ Bank\ of\ China,\ Danske\ Bank$



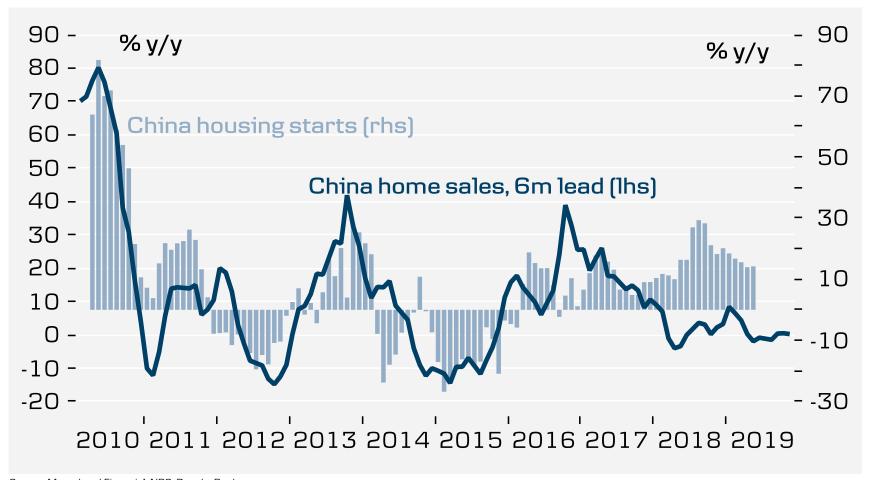
Housing - yields vs home sales



Source: Macrobond Financial, NBS, People's Bank of China, Danske Bank

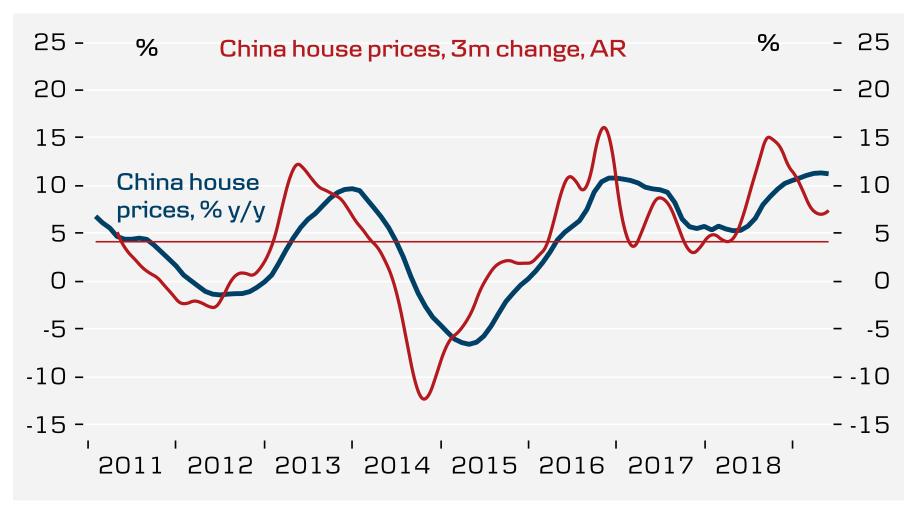


Housing - home sales and housing starts





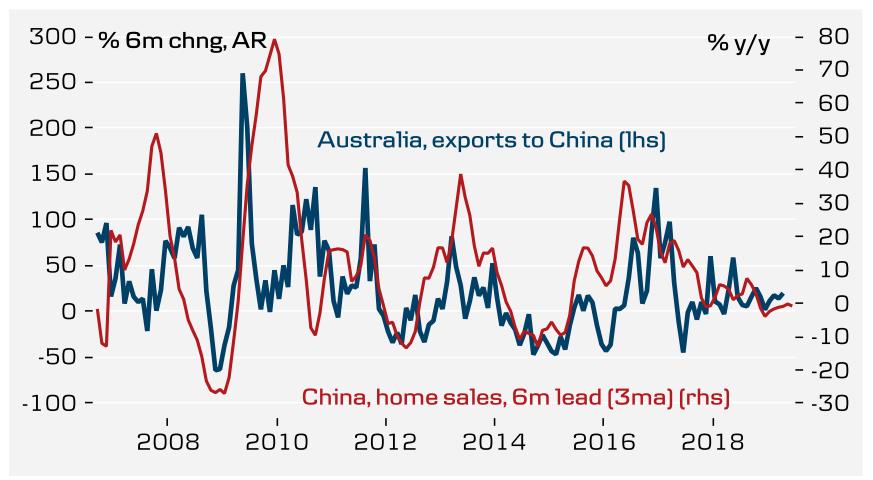
Inflation - house prices



Source: 70-city house prices, Bloomberg

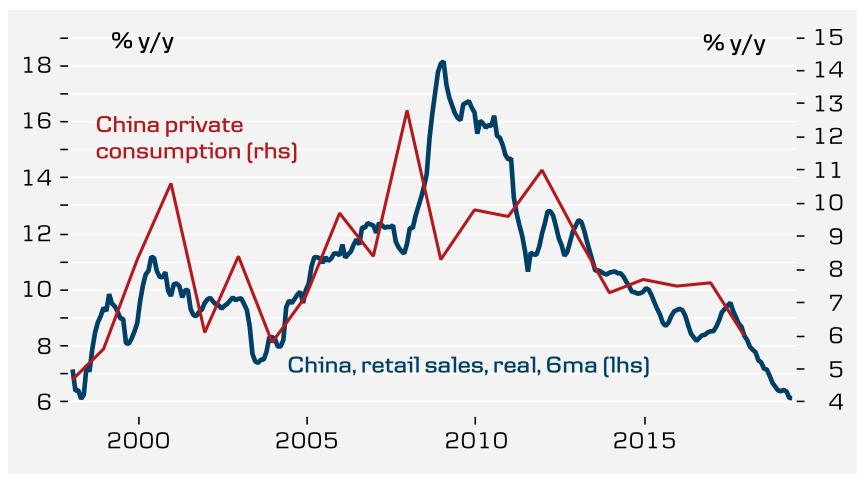


Housing - Australia exports to China vs home sales



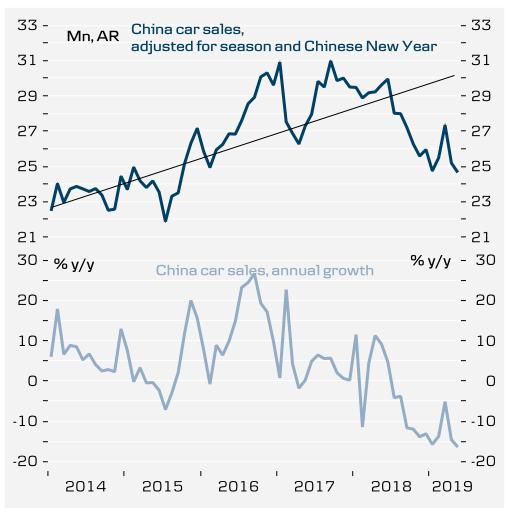


Consumer - retail sales



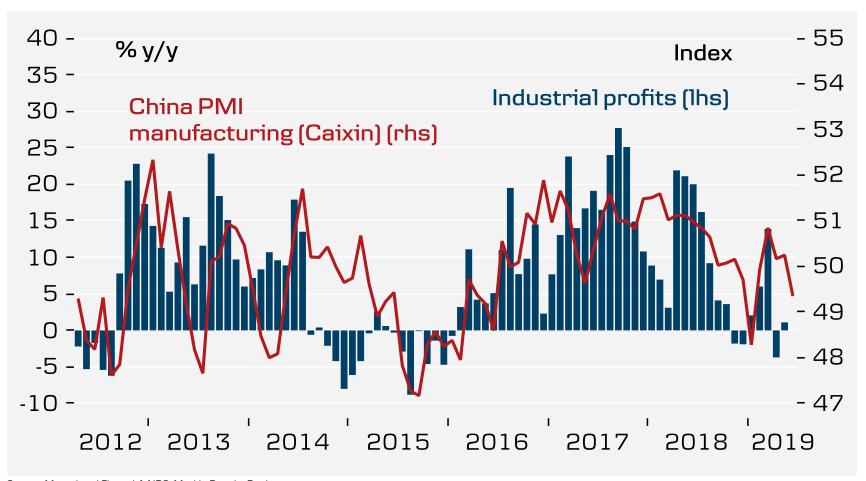


Consumer – car sales



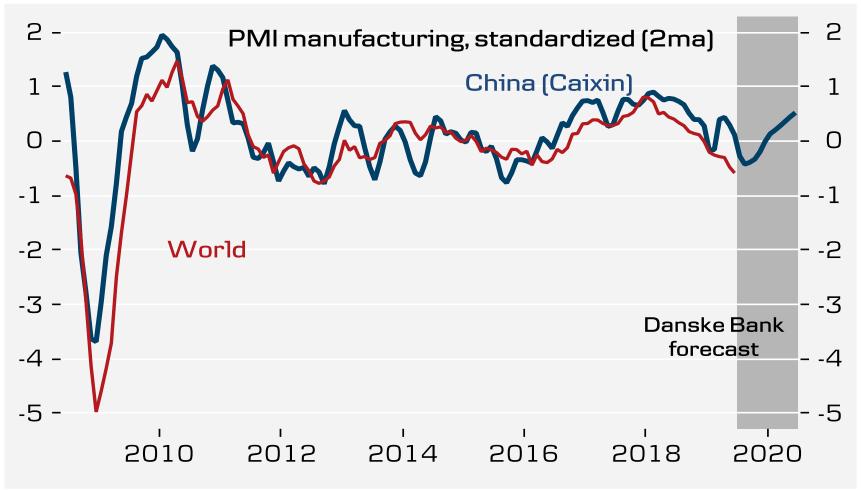


Profits vs PMI



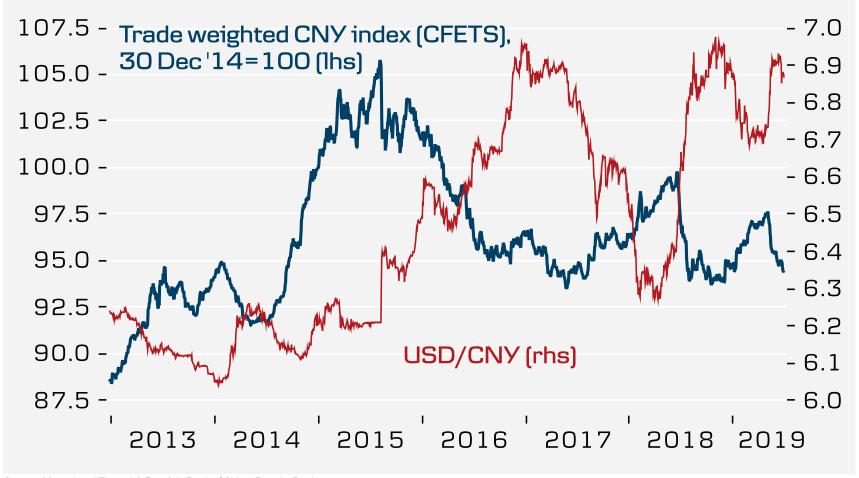


Domestic vs global cycle





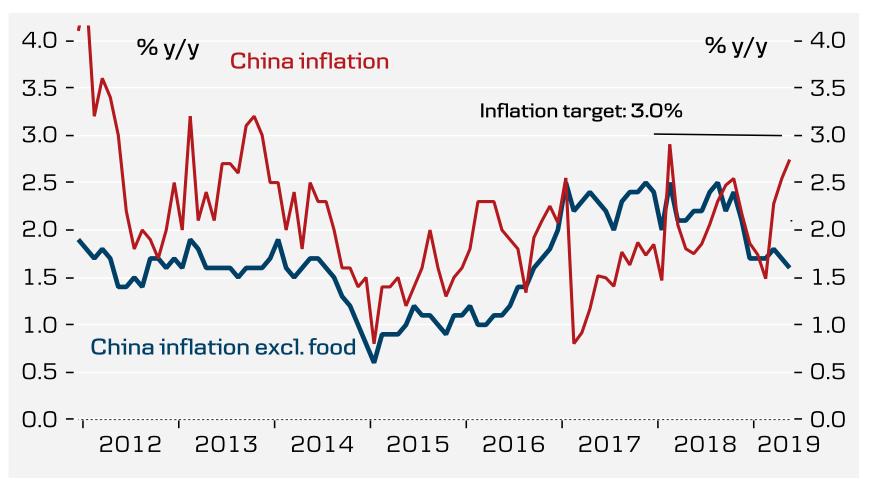
USD/CNY and CNY basket



Source: Macrobond Financial, People's Bank of China, Danske Bank



Inflation - CPI



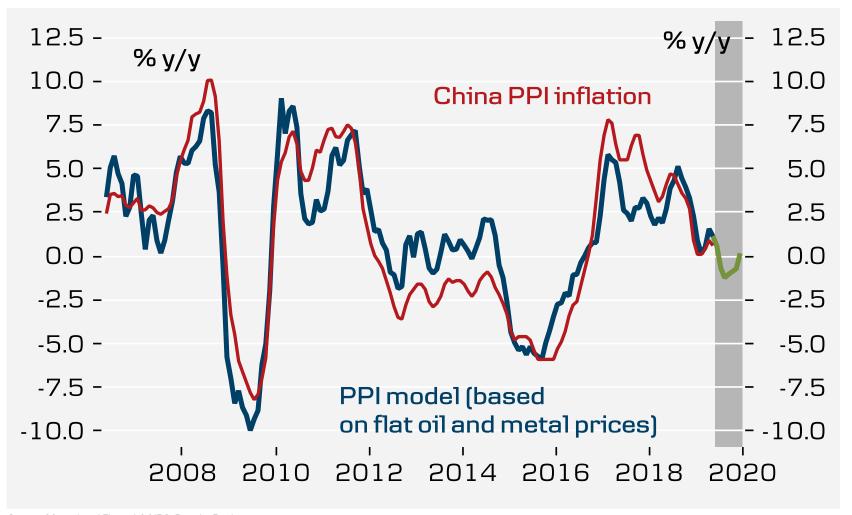


Inflation - PPI



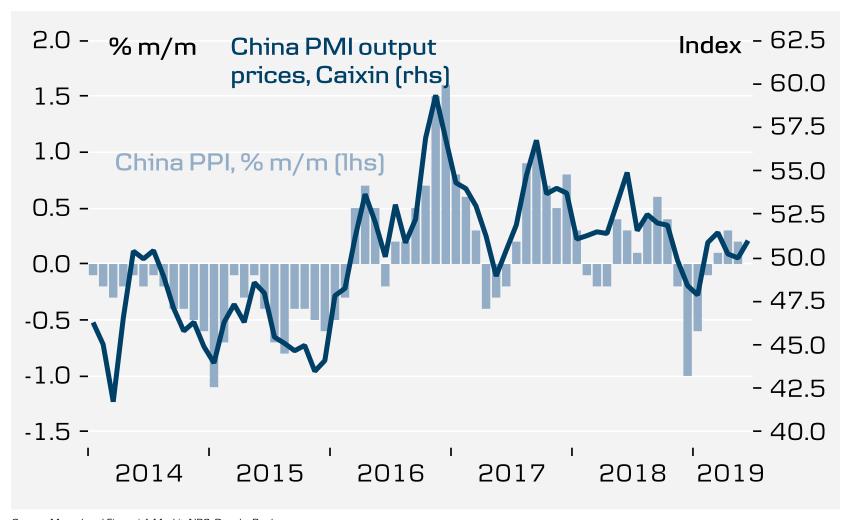


Inflation - PPI model



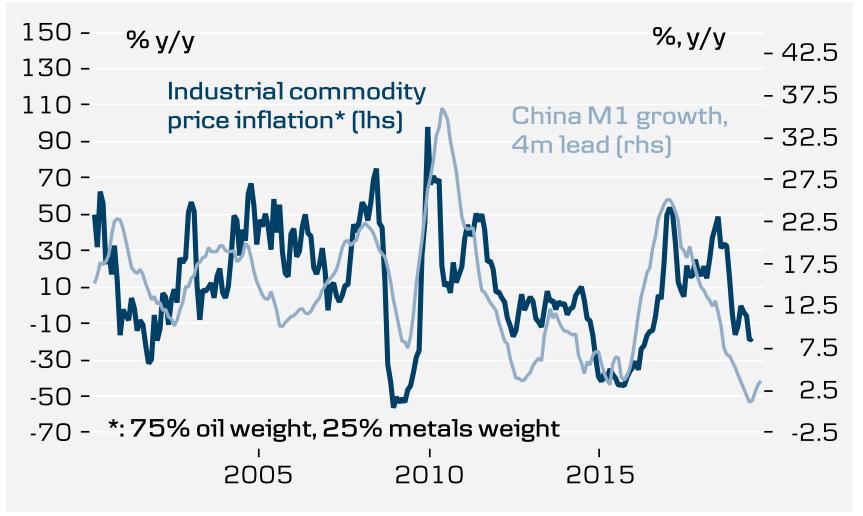


Inflation - PMI output prices and PPI m/m



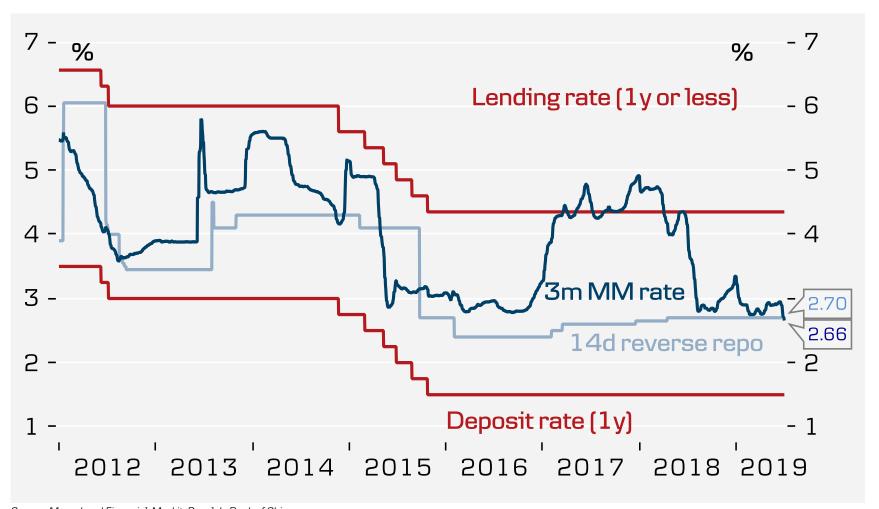


M1 and industrial commodity prices





Monetary policy - rates

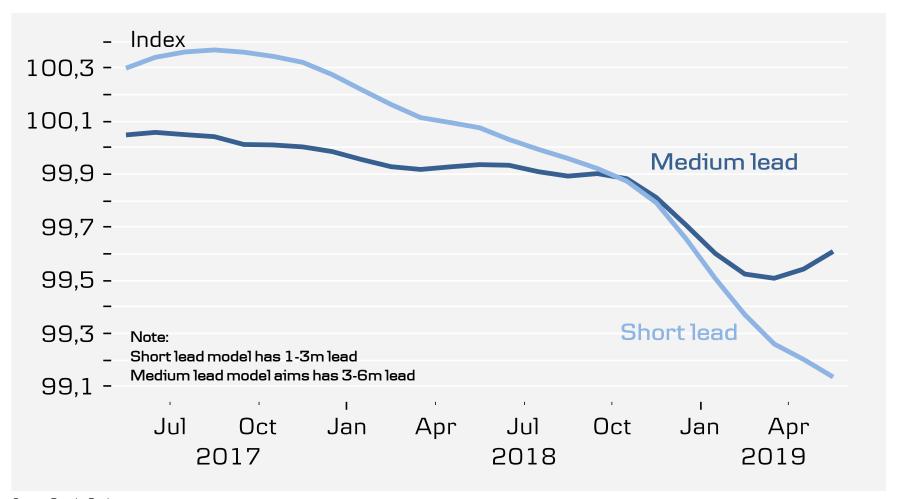


Source: Macrobond Financial, Markit, People's Bank of China

Japan



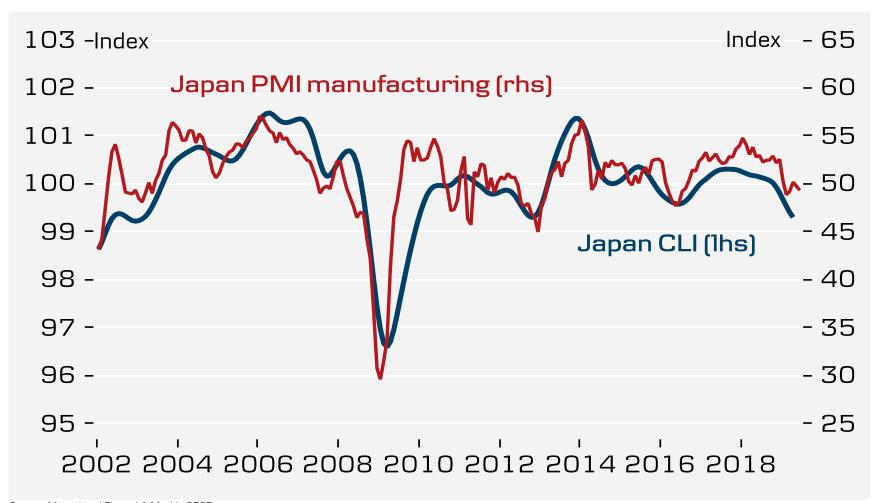
MacroScope models



Source: Danske Bank

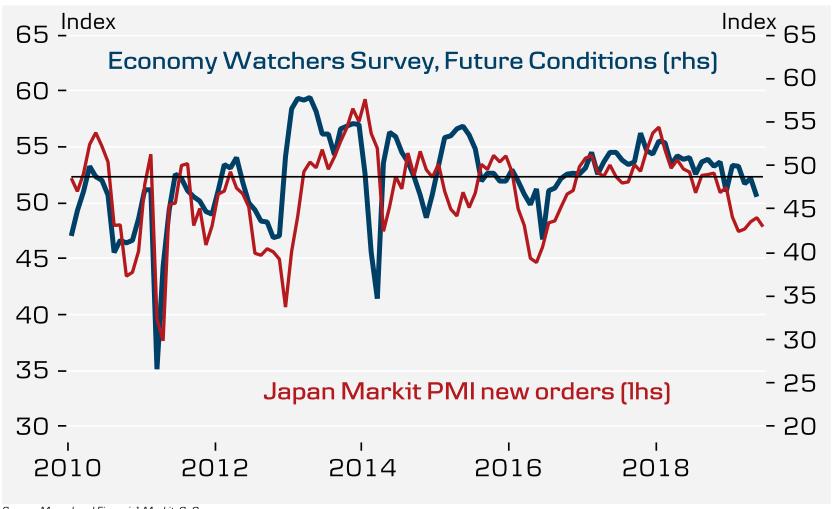


PMI vs CLI



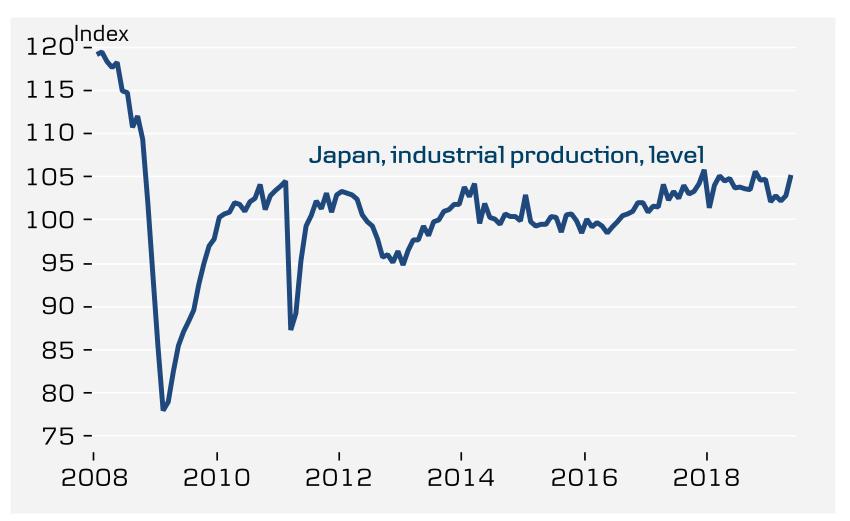


Economy Watchers vs PMI



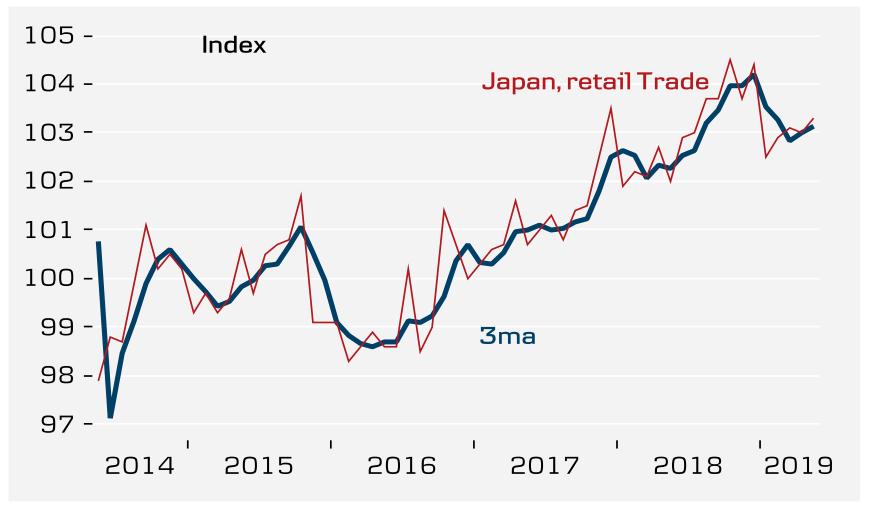


Industrial production





Consumer - retail sales





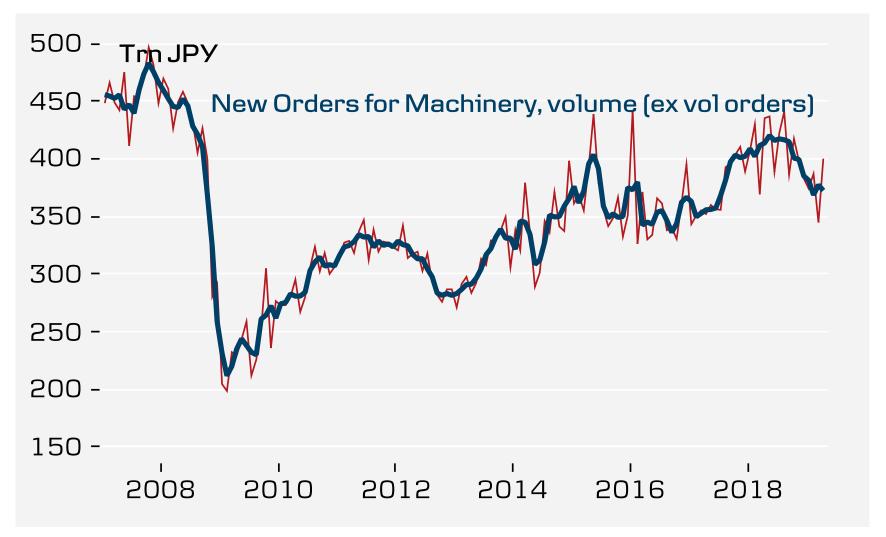
Retail sales, change



Source: Macrobond Financial, MITI

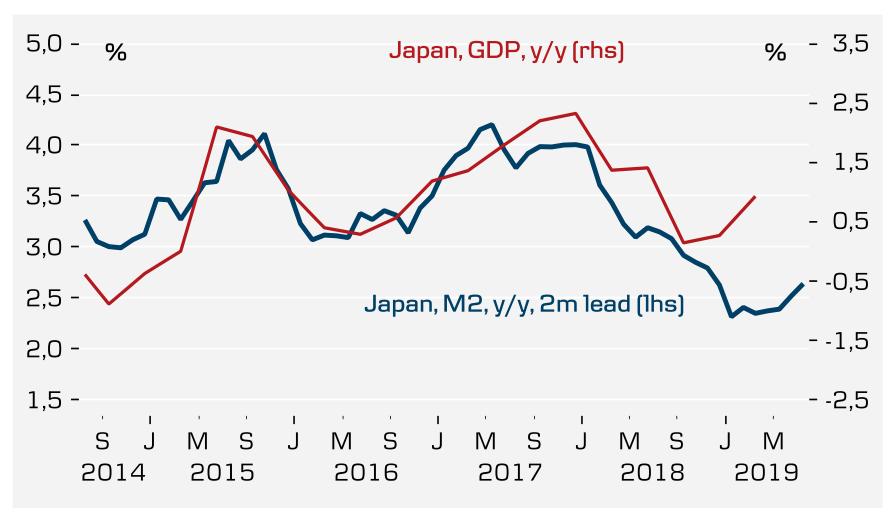


Machine orders





M2



Other



BRIC PMI



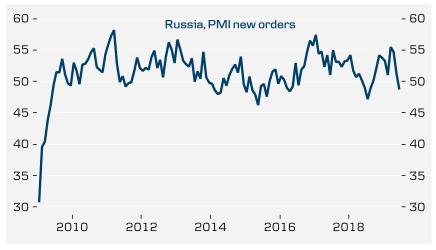
Note: All axes are indices Source: Macrobond Financial, Markit



Note: All axes are indices Source: Macrobond Financial, Markit



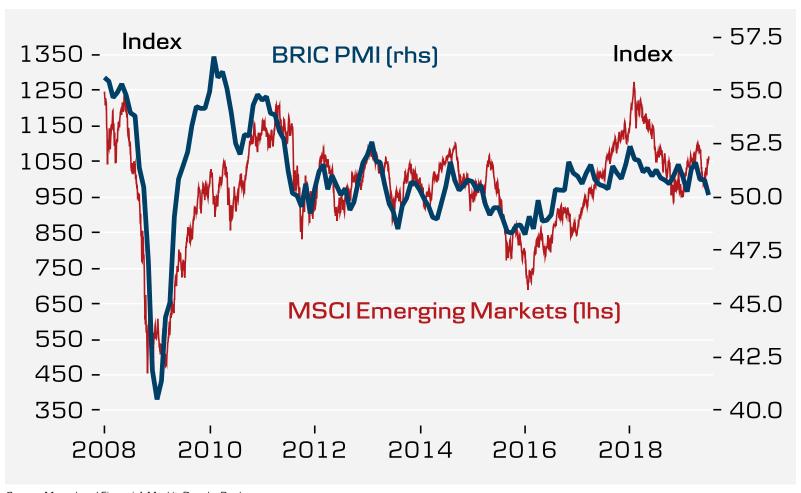
Note: All axes are indices Source: Macrobond Financial, Markit



Note: All axes are indices
Source: Macrobond Financial. Markit



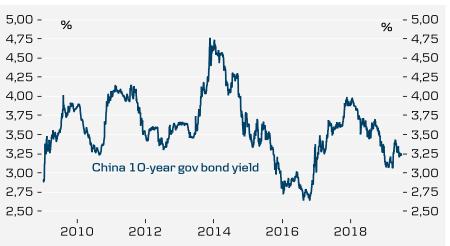
China - PMI vs emerging markets



Source: Macrobond Financial, Markit, Danske Bank

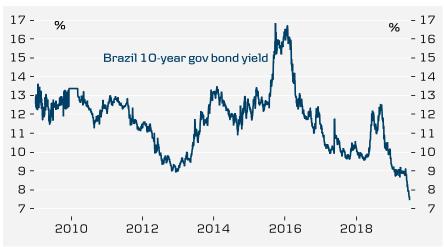


BRIC bond yields

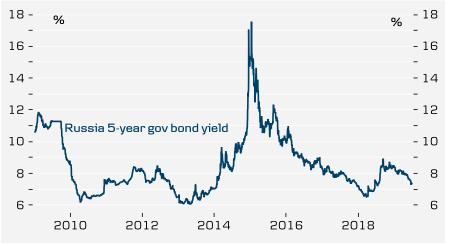




Source: Macrobond Financial



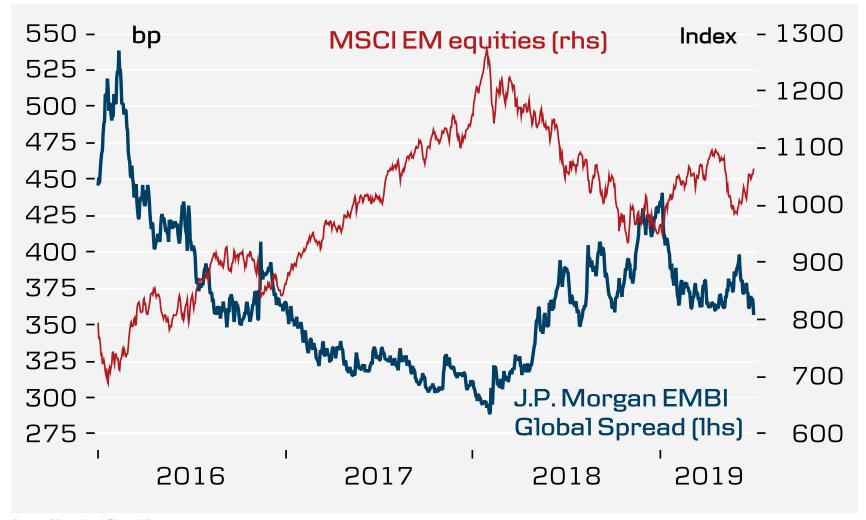
Source: Macrobond Financial



Source: Macrobond Financial Source: Macrobond Financial



EMBI bond spread and emerging market equities



Source: Macrobond Financial



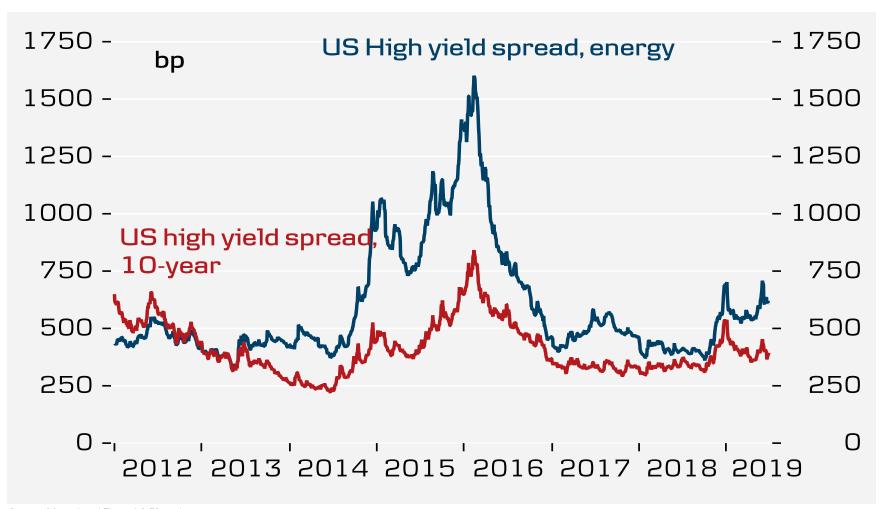
'Fragile five' currencies



'Fragile five' are the emerging market countries with the biggest imbalances in terms of fiscal and current account deficits, external debt, etc. Source: Macrobond Financial

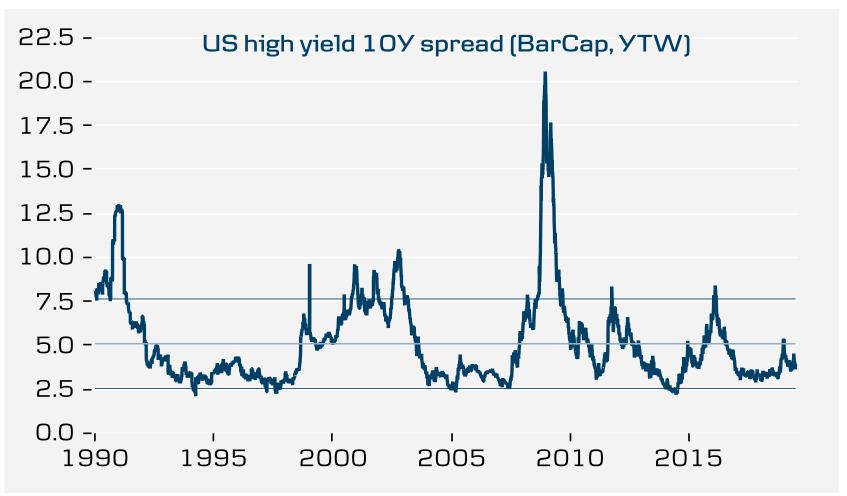


US high yield





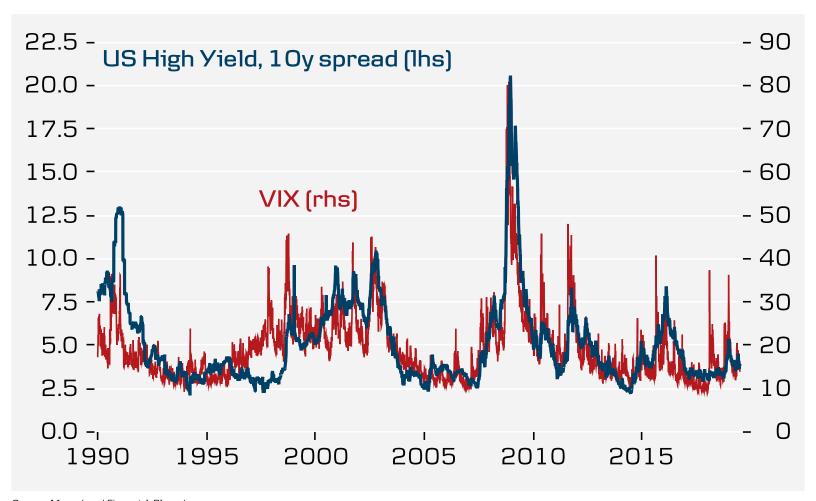
US high yield



Source: Macrobond Financial, Bloomberg



US high yield vs VIX



Source: Macrobond Financial, Bloomberg



Disclosures

This research report has been prepared by Danske Bank A/S ('Danske Bank'). The authors of this research report are Jakob Christensen (Chief Analyst), Allan Von Mehren (Chief Analyst), Mikael Milhøj (Senior Analyst), Piet P. H. Christiansen (Senior Analyst) and Aila Mihr (Analyst).

Analyst certification

Each research analyst responsible for the content of this research report certifies that the views expressed in the research report accurately reflect the research analyst's personal view about the financial instruments and issuers covered by the research report. Each responsible research analyst further certifies that no part of the compensation of the research analyst was, is or will be, directly or indirectly, related to the specific recommendations expressed in the research report.

Regulation

Danske Bank is authorised and subject to regulation by the Danish Financial Supervisory Authority and is subject to the rules and regulation of the relevant regulators in all other jurisdictions where it conducts business. Danske Bank is subject to limited regulation by the Financial Conduct Authority and the Prudential Regulation Authority (UK). Details on the extent of the regulation by the Financial Conduct Authority and the Prudential Regulation Authority are available from Danske Bank on request.

Danske Bank's research reports are prepared in accordance with the recommendations of the Danish Securities Dealers Association.

Conflicts of interest

Danske Bank has established procedures to prevent conflicts of interest and to ensure the provision of high-quality research based on research objectivity and independence. These procedures are documented in Danske Bank's research policies. Employees within Danske Bank's Research Departments have been instructed that any request that might impair the objectivity and independence of research shall be referred to Research Management and the Compliance Department. Danske Bank's Research Departments are organised independently from, and do not report to, other business areas within Danske Bank.

Research analysts are remunerated in part based on the overall profitability of Danske Bank, which includes investment banking revenues, but do not receive bonuses or other remuneration linked to specific corporate finance or debt capital transactions.

Financial models and/or methodology used in this research report

Calculations and presentations in this research report are based on standard econometric tools and methodology as well as publicly available statistics for each individual security, issuer and/or country. Documentation can be obtained from the authors on request.

Risk warning

Major risks connected with recommendations or opinions in this research report, including as sensitivity analysis of relevant assumptions, are stated throughout the text.

Expected updates

Ad hoc.

Date of first publication

See the front page of this research report for the date of first publication.



General disclaimer

This research report has been prepared by Danske Bank A/S. It is provided for informational purposes only and should not be considered investment advice. It does not constitute or form part of, and shall under no circumstances be considered as, an offer to sell or a solicitation of an offer to purchase or sell any relevant financial instruments (i.e. financial instruments mentioned herein or other financial instruments of any issuer mentioned herein and/or options, warrants, rights or other interests with respect to any such financial instruments) ('Relevant Financial Instruments').

The research report has been prepared independently and solely on the basis of publicly available information that Danske Bank considers to be reliable. While reasonable care has been taken to ensure that its contents are not untrue or misleading, no representation is made as to its accuracy or completeness and Danske Bank, its affiliates and subsidiaries accept no liability whatsoever for any direct or consequential loss, including without limitation any loss of profits, arising from reliance on this research report.

The opinions expressed herein are the opinions of the research analysts responsible for the research report and reflect their judgement as of the date hereof. These opinions are subject to change and Danske Bank does not undertake to notify any recipient of this research report of any such change nor of any other changes related to the information provided herein.

This research report is not intended for, and may not be redistributed to, retail customers in the United Kingdom or the United States.

This research report is protected by copyright and is intended solely for the designated addressee. It may not be reproduced or distributed, in whole or in part, by any recipient for any purpose without Danske Bank's prior written consent.

Disclaimer related to distribution in the United States

This research report was created by Danske Bank A/S and is distributed in the United States by Danske Markets Inc., a U.S. registered broker-dealer and subsidiary of Danske Bank A/A, pursuant to SEC Rule 15a-6 and related interpretations issued by the U.S. Securities and Exchange Commission. The research report is intended for distribution in the United States solely to 'U.S. institutional investors' as defined in SEC Rule 15a-6. Danske Markets Inc. accepts responsibility for this research report in connection with distribution in the United States solely to 'U.S. institutional investors'.

Danske Bank is not subject to U.S. rules with regard to the preparation of research reports and the independence of research analysts. In addition, the research analysts of Danske Bank who have prepared this research report are not registered or qualified as research analysts with the NYSE or FINRA but satisfy the applicable requirements of a non-U.S. jurisdiction.

Any U.S. investor recipient of this research report who wishes to purchase or sell any Relevant Financial Instrument may do so only by contacting Danske Markets Inc. directly and should be aware that investing in non-U.S. financial instruments may entail certain risks. Financial instruments of non-U.S. issuers may not be registered with the U.S. Securities and Exchange Commission and may not be subject to the reporting and auditing standards of the U.S. Securities and Exchange Commission.

Report completed: 2 July 2019, 08:56 CEST

Report first disseminated: 2 July 2019, 10:20 CEST