

# *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](mailto:jakc@danskebank.dk)

Senior ECB/ Euro area Analyst  
Piet P.H. Christiansen  
45 45 13 20 21  
[phai@danskebank.dk](mailto:phai@danskebank.dk)

Chief Analyst  
Allan von Mehren  
+45 45 12 80 55  
[alvo@danskebank.dk](mailto:alvo@danskebank.dk)

Analyst  
Aila Mihr  
+45 45 12 85 35  
[amih@danskebank.dk](mailto:amih@danskebank.dk)

Senior Analyst  
Mikael Olai Milhøj  
+45 45 12 76 07  
[milh@danskebank.com](mailto:milh@danskebank.com)

*10 May 2019*

# Key observations

*This chart pack is aimed at readers who prefer a deep dive into global macro. It takes around 15 minutes to flip through all the charts but it should give a good sense of the current state of the world once you have finished.*

*The chart pack is a supplement to the [MacroScope presentation](#) published on 11 April. While the MacroScope model is forward looking, this chart pack gives an overview of key economic indicators and drivers of the global economy.*

- **Leading indicators (LI):** Tentative signs of stabilisation in the global manufacturing sector with the first (small) increase in the [PMI new orders](#) and a rebound in the global [container](#) index.
- In the US, [leading indicators](#) are becoming less negative, while in Europe, [composite](#) and [order-inventory balance](#) are providing rays of light together with the rebound in [real GDP growth and industrial production](#). In China, [Caixin PMI and NBS](#) fell back in April after a sharp increase the month before, while [metal prices](#) have also eased a bit. However, [financial easing](#) should support the economy.
- **Consumers: Are still turning cautious globally despite healthy real income gains.** There are, however, regional differences, with still-strong confidence in the [US](#) (underpinned by easier [Financial Conditions](#), caused by [falling interest rates](#), and a small pick-up in [Japan](#)). In contrast, the [euro area](#) and [China](#) are still seeing weakening confidence. Real income growth remains strong (see [G3](#), [US](#) and [euro area](#)) and should underpin consumption growth in the coming months.
- **Capex:** Has found renewed momentum in the [US](#) and stabilisation in [Japan](#), while capex orders have started to weaken in [Germany](#).
- **Inflation: [G3 inflation \(headline\)](#) has dropped in recent months** but should stabilise if oil prices remain around current levels. In China, [CPI](#) inflation has rebounded, while recent [PPI](#) disinflation pressures have also ceased.
- **The financial surprise index** is in stretched negative territory in the [US](#), but more neutral in [Europe](#) after recovering over the past month. Hence, economic releases may work in favour of the US in coming months.

# Contents

[Global overview](#)

[US](#)

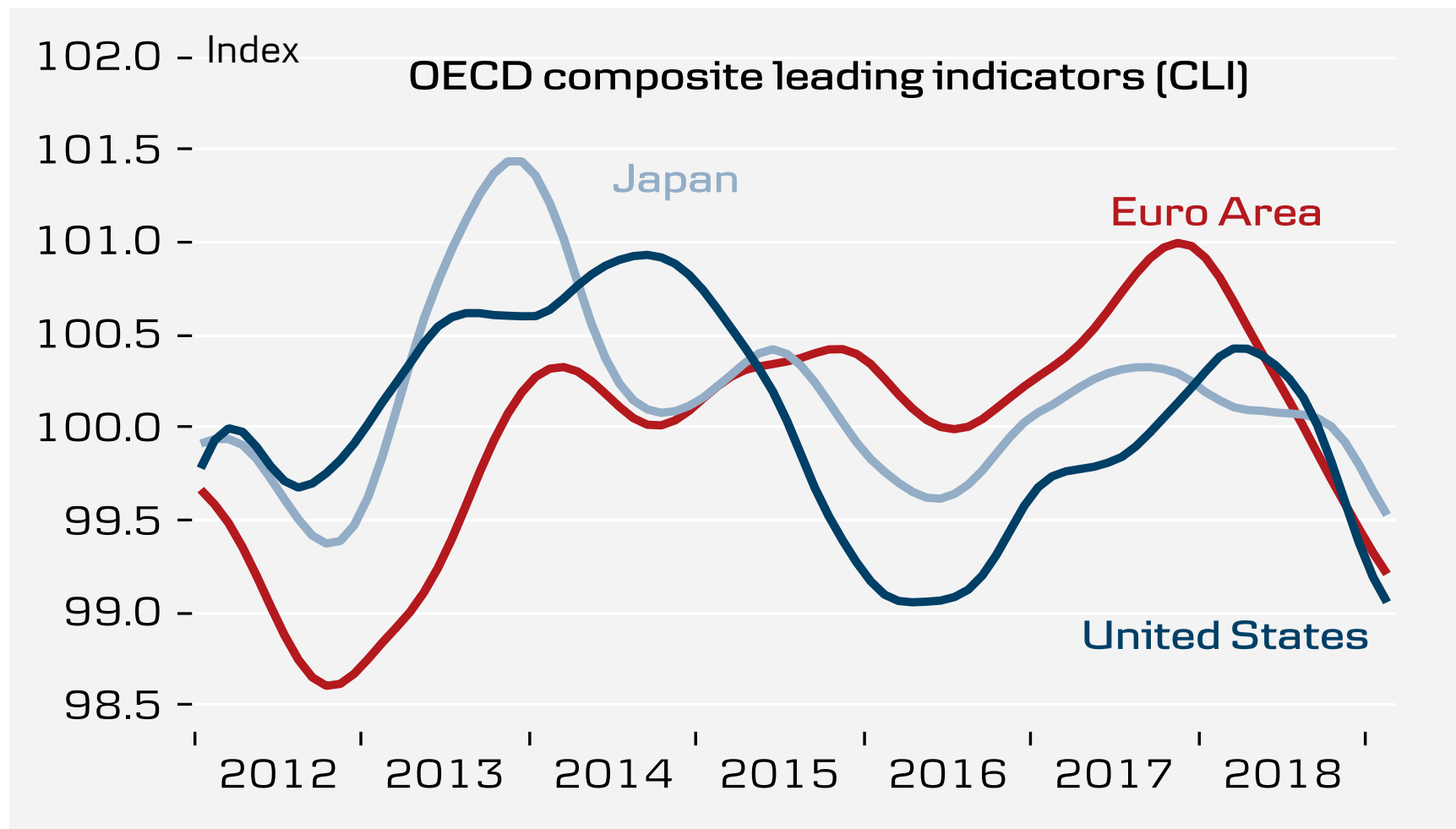
[Euro](#)

[China](#)

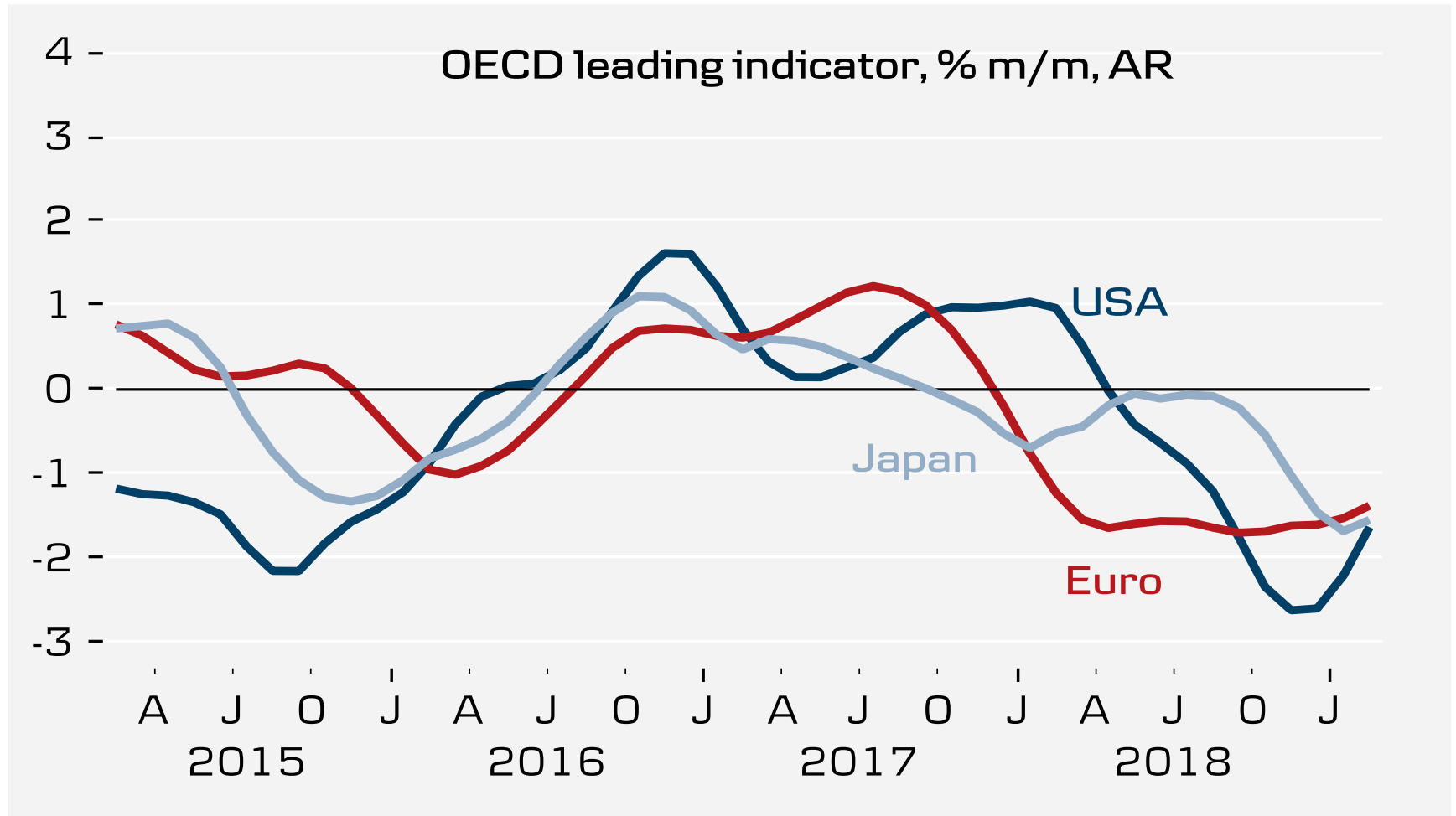
[Japan](#)

[Other](#)

## OECD leading indicators - levels



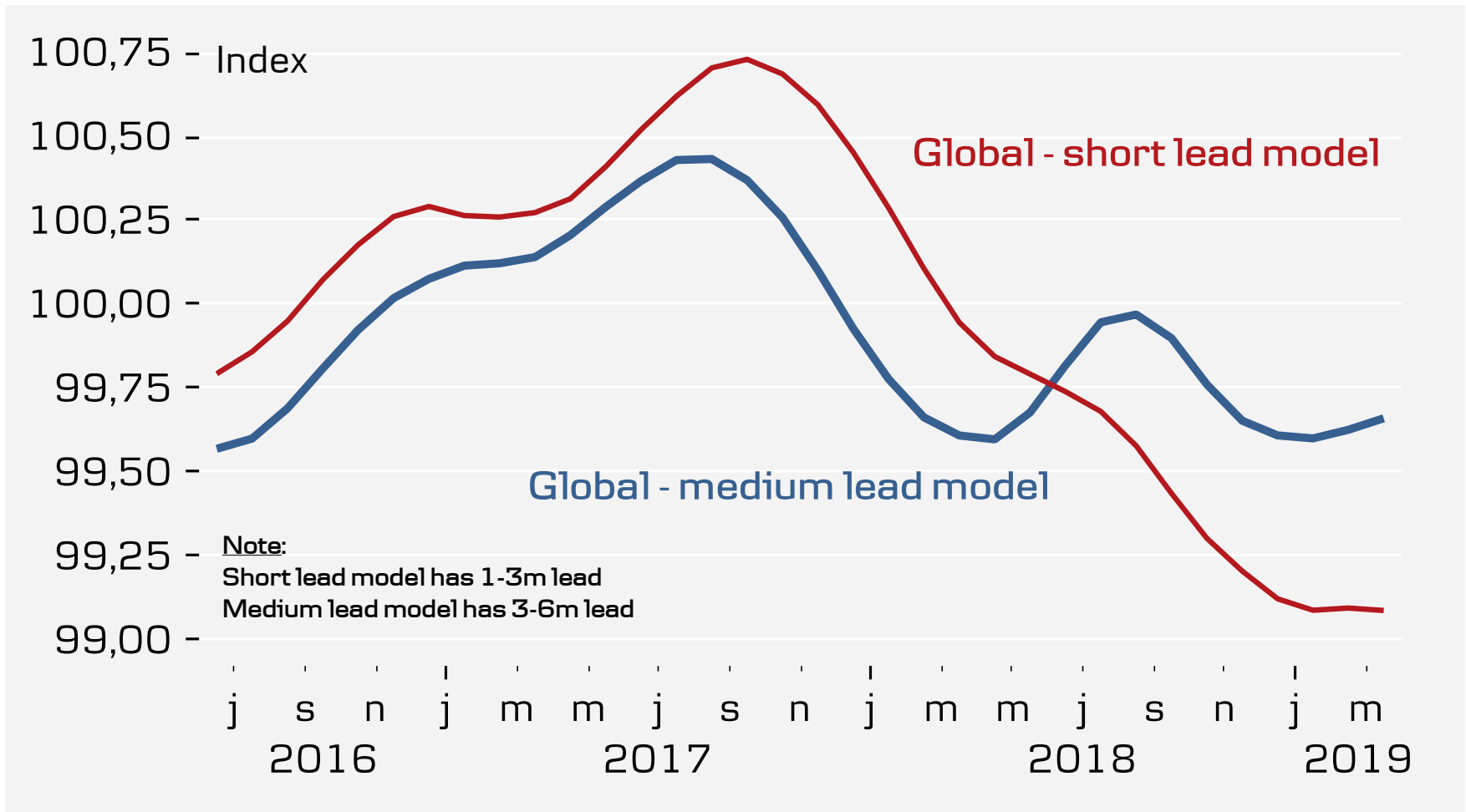
## OECD leading indicators - monthly momentum



## Global cyclical overview

### Global MacroScope models

(for OECD Composite Leading Indicators - CLI)

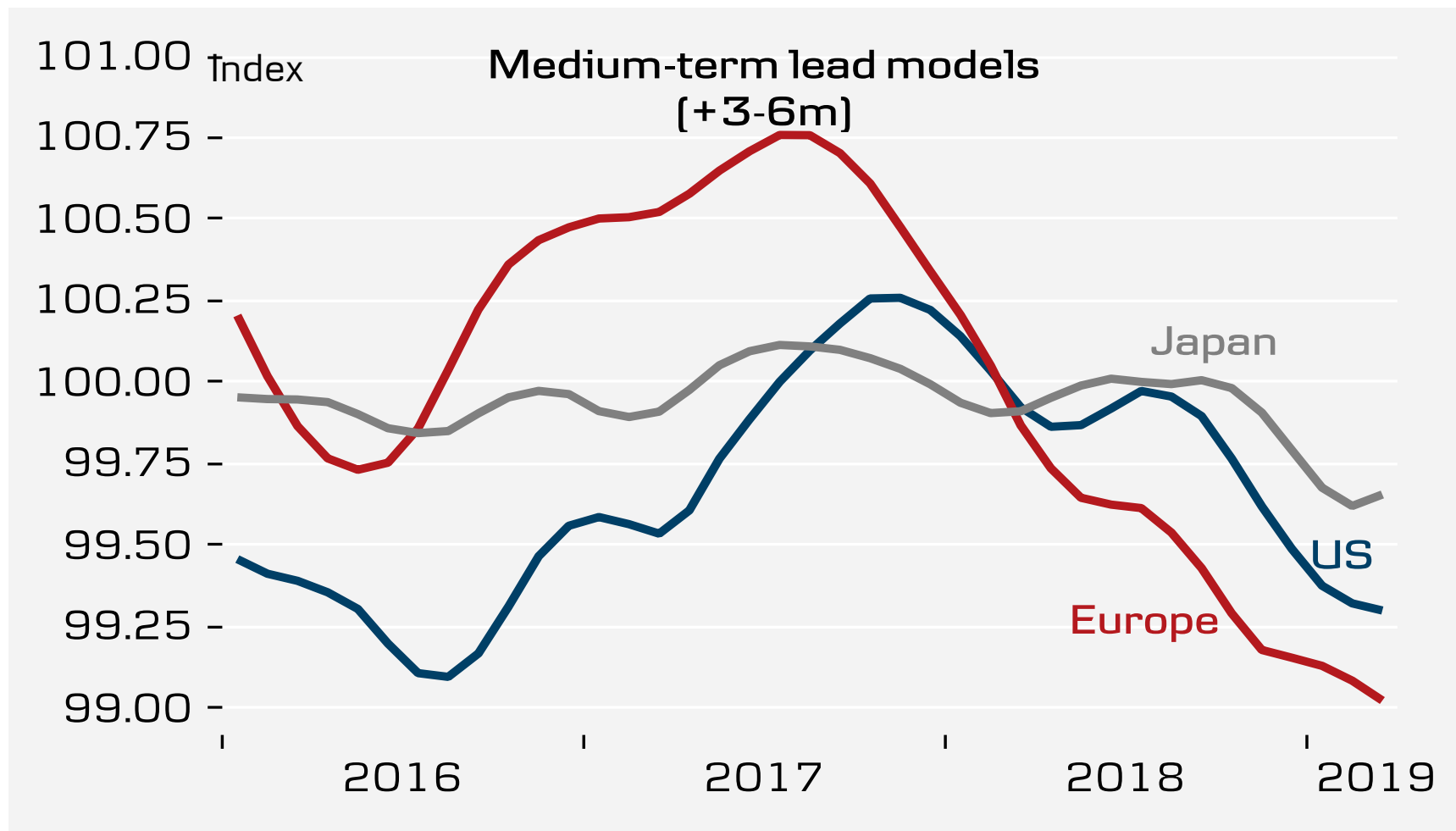


Source: Danske Bank

[Link to overview page](#)

## MacroScope medium lead models - across regions

(for OECD Composite Leading Indicators - CLI)

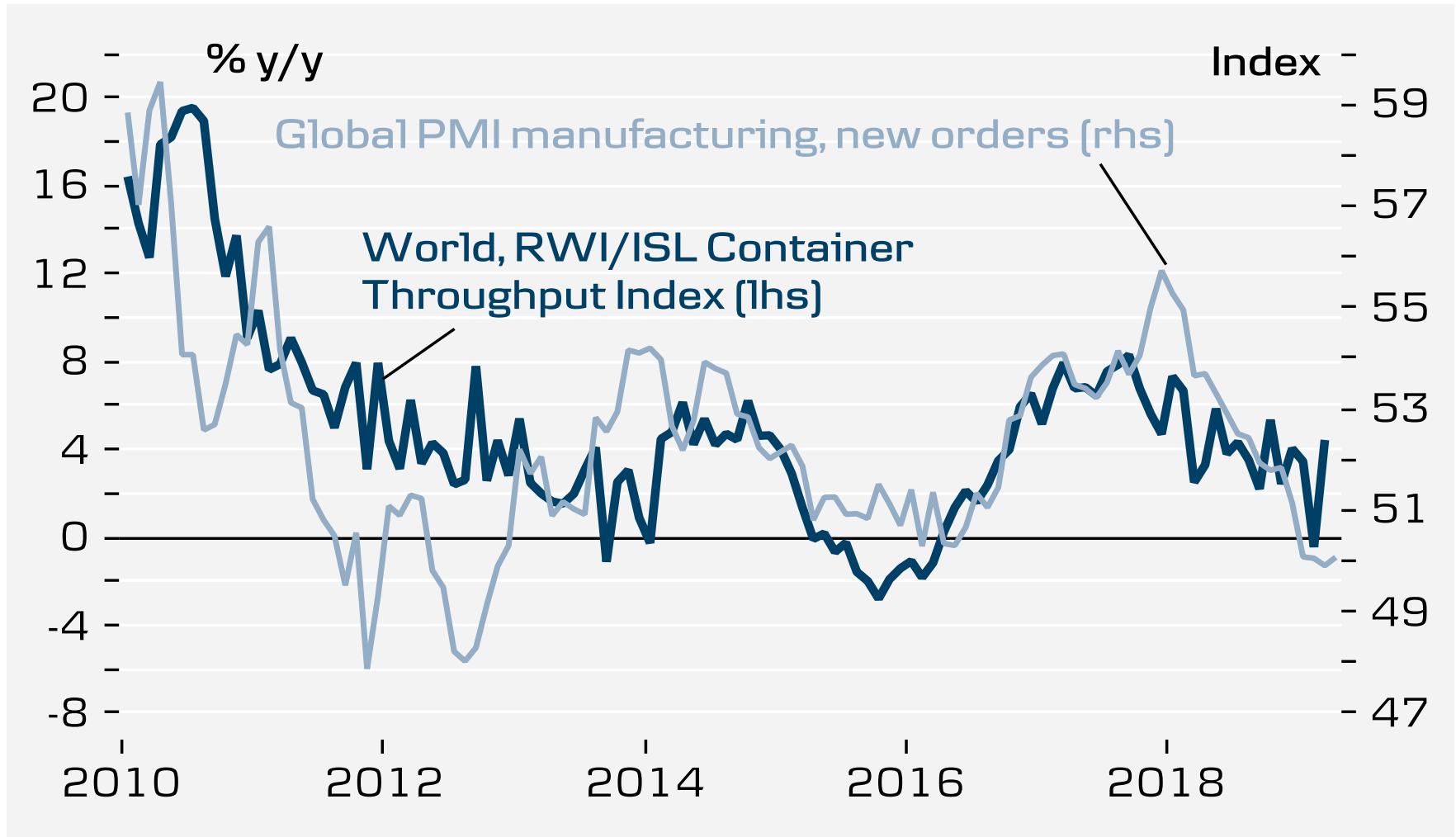


# Global PMI

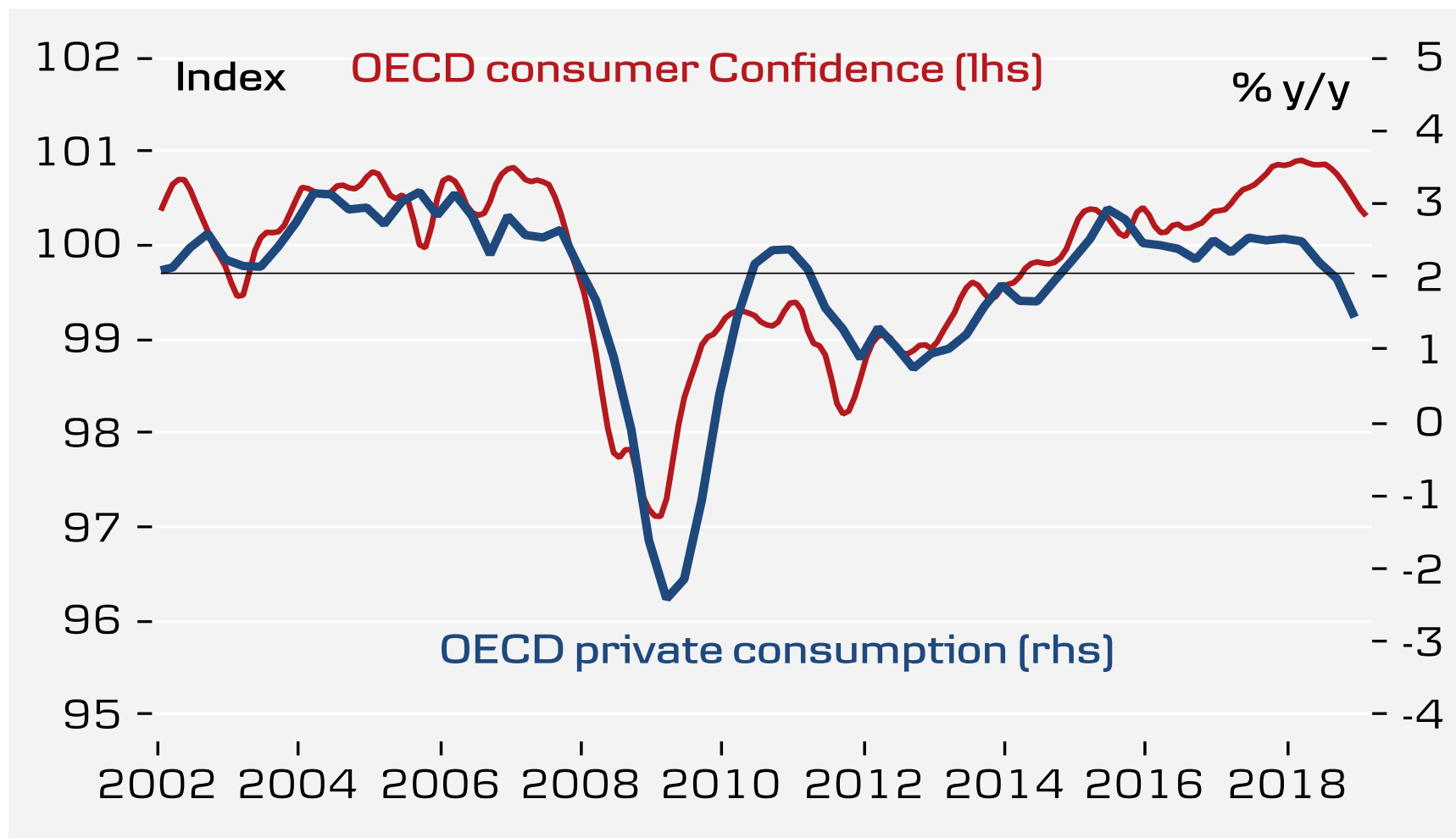




## Container index vs. PMI

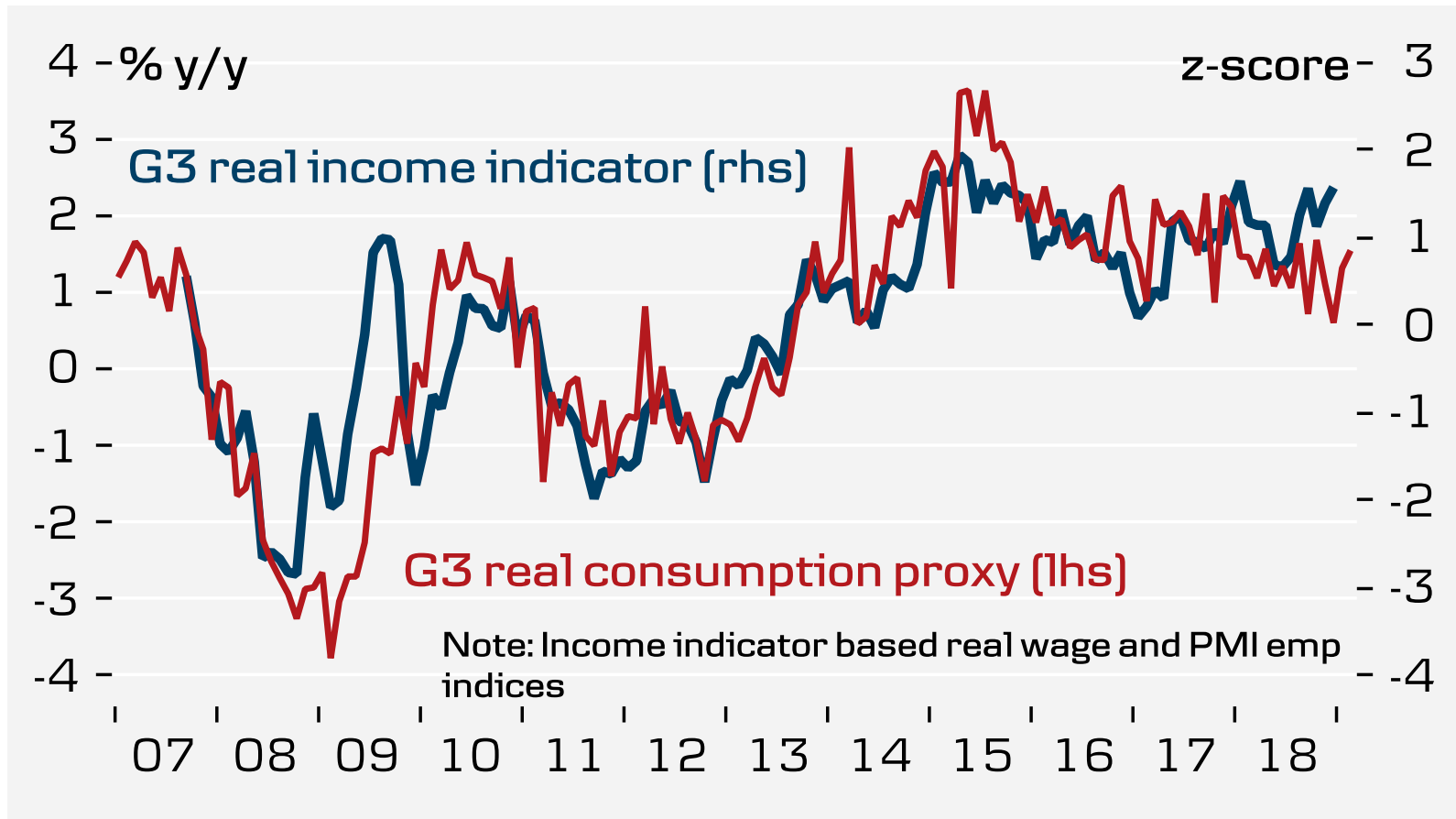


## OECD consumer



## Global cyclical overview

### G3 real income proxy for consumers

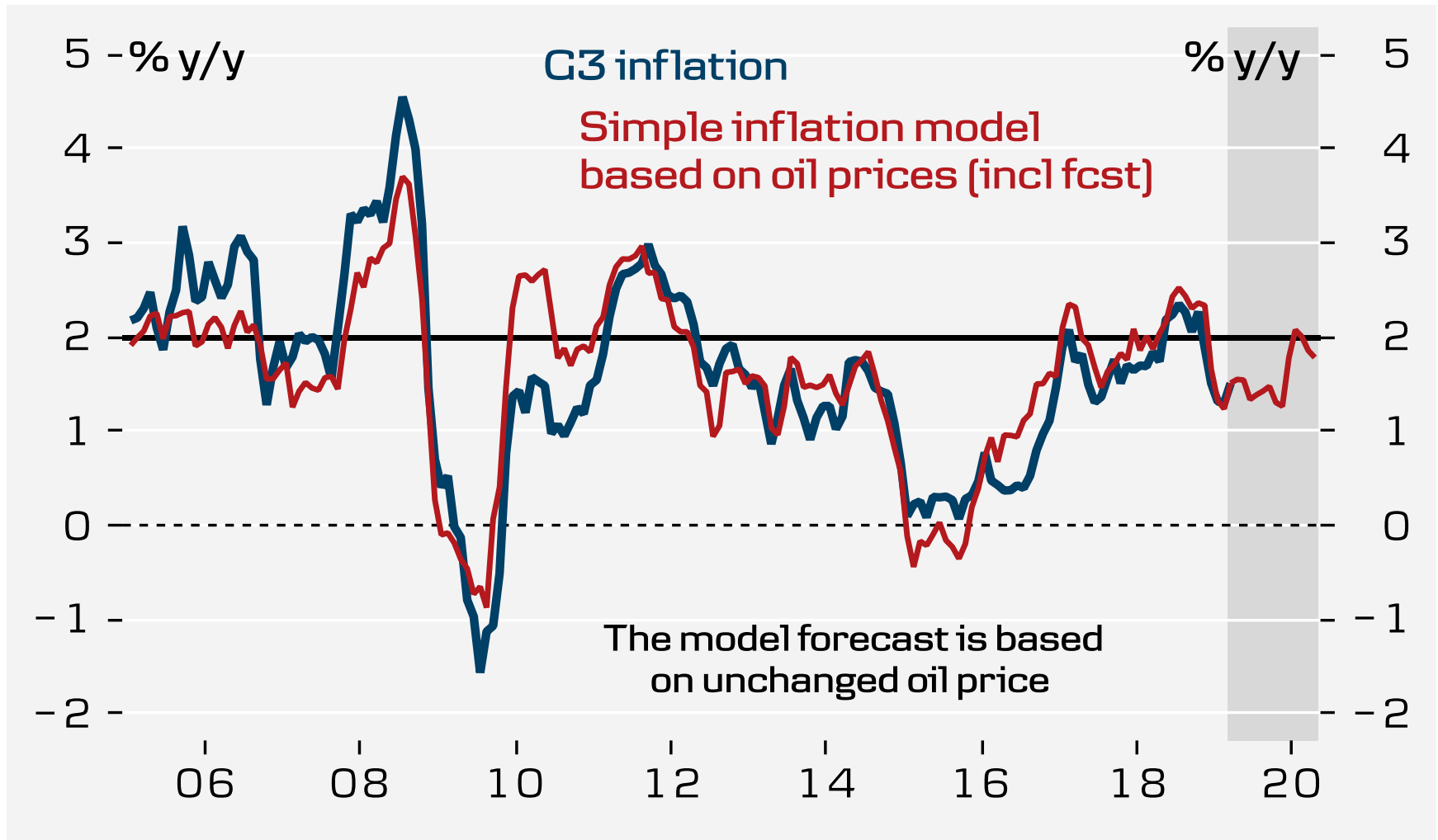


Source: Macrobond Financial, OECD, Danske Bank

[Link to overview page](#)

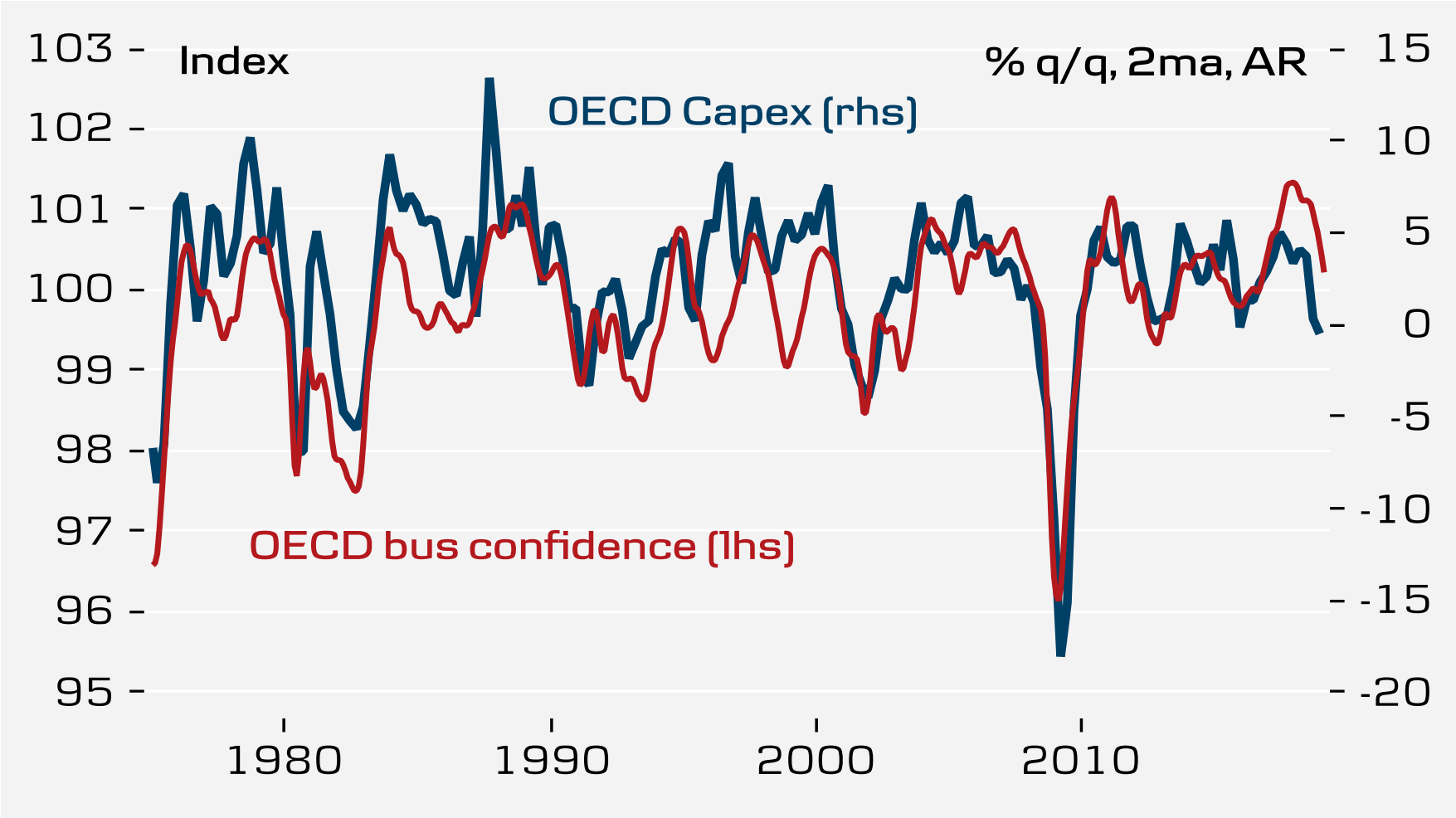
## Global cyclical overview

### G3 inflation - simple model on oil



Global cyclical overview

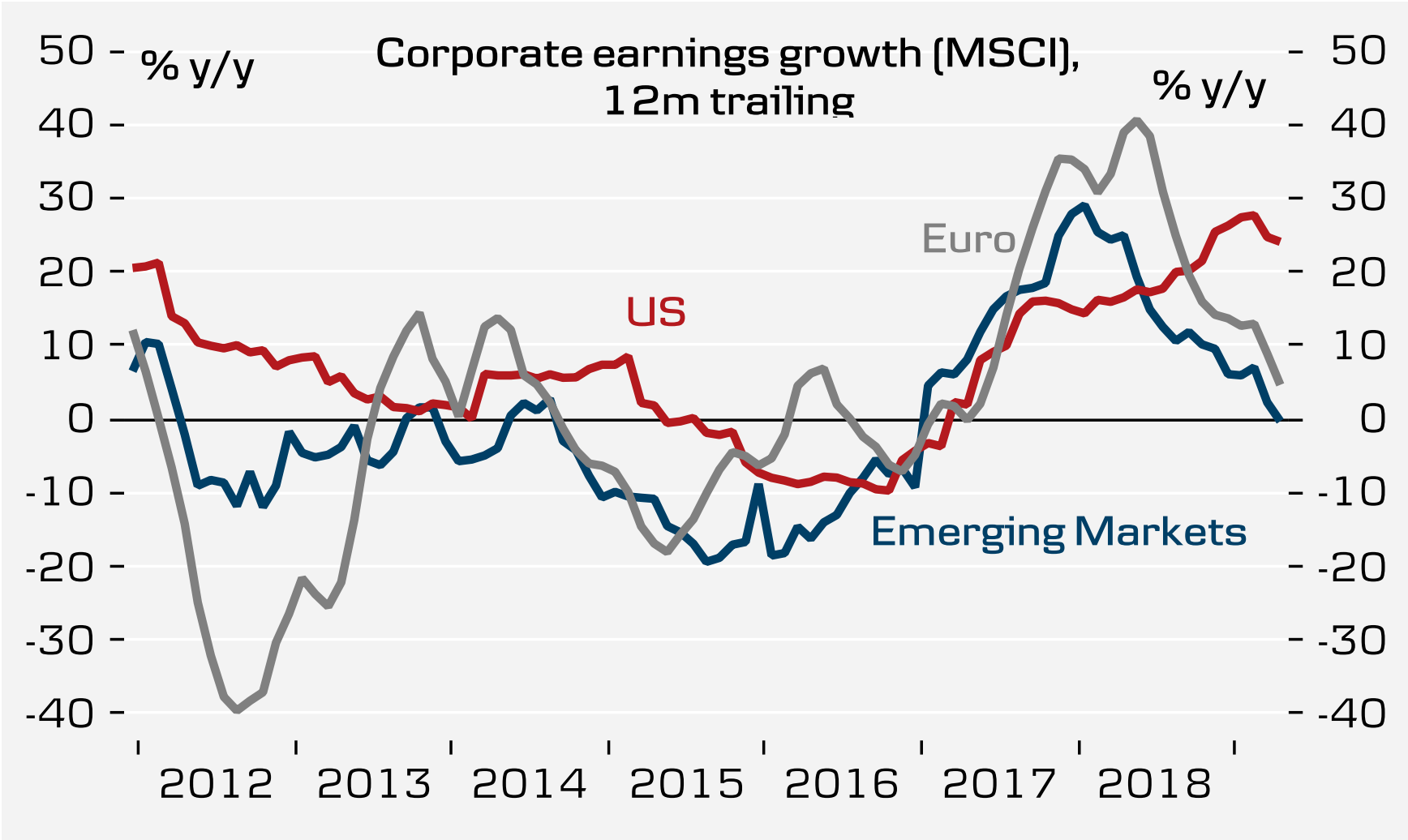
OECD capex



Source: Macrobond Financial, OECD, Danske Bank

Global cyclical overview

Profit growth

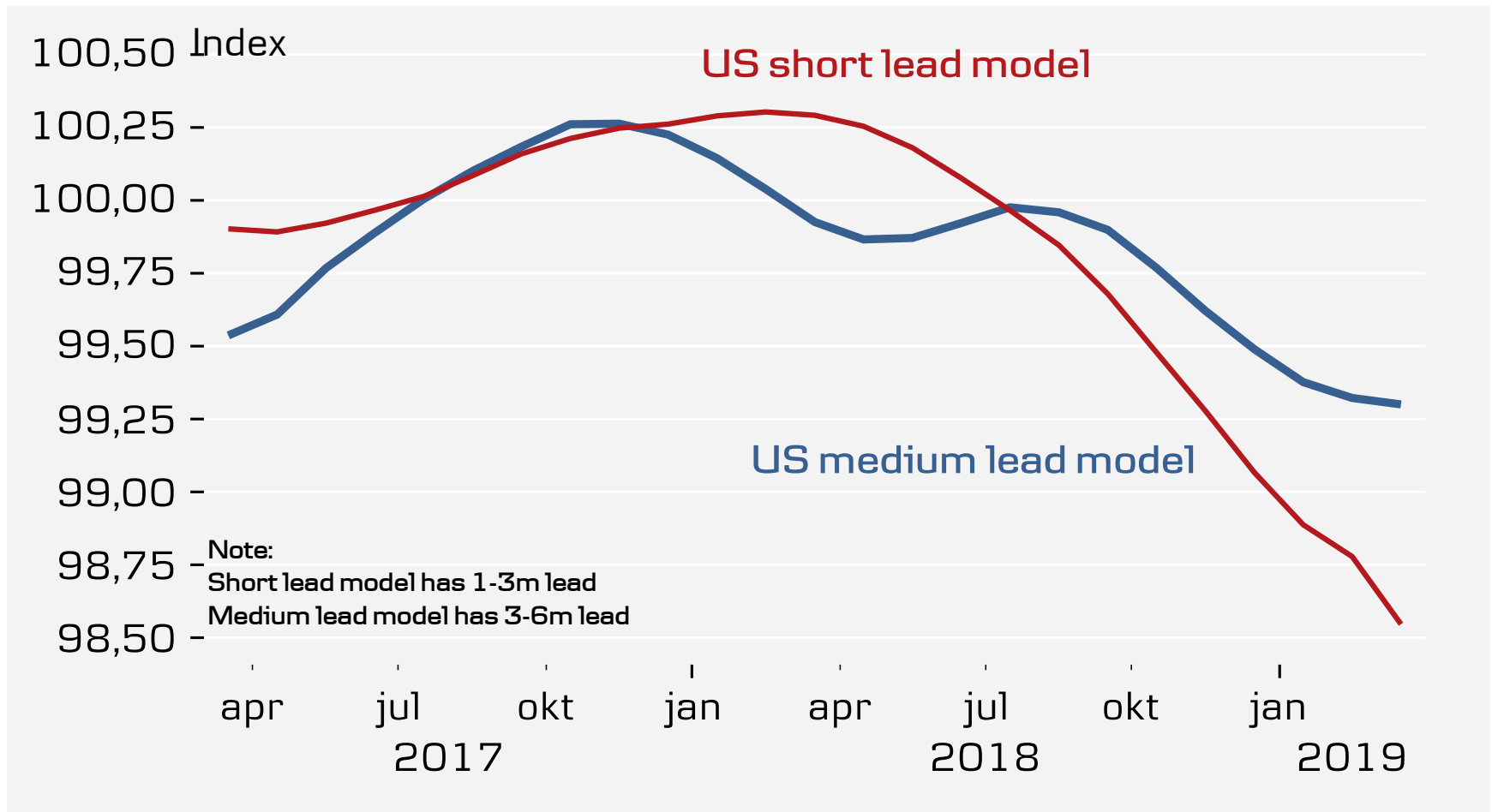


Source: Macrobond Financial, MSCI

*US*

US

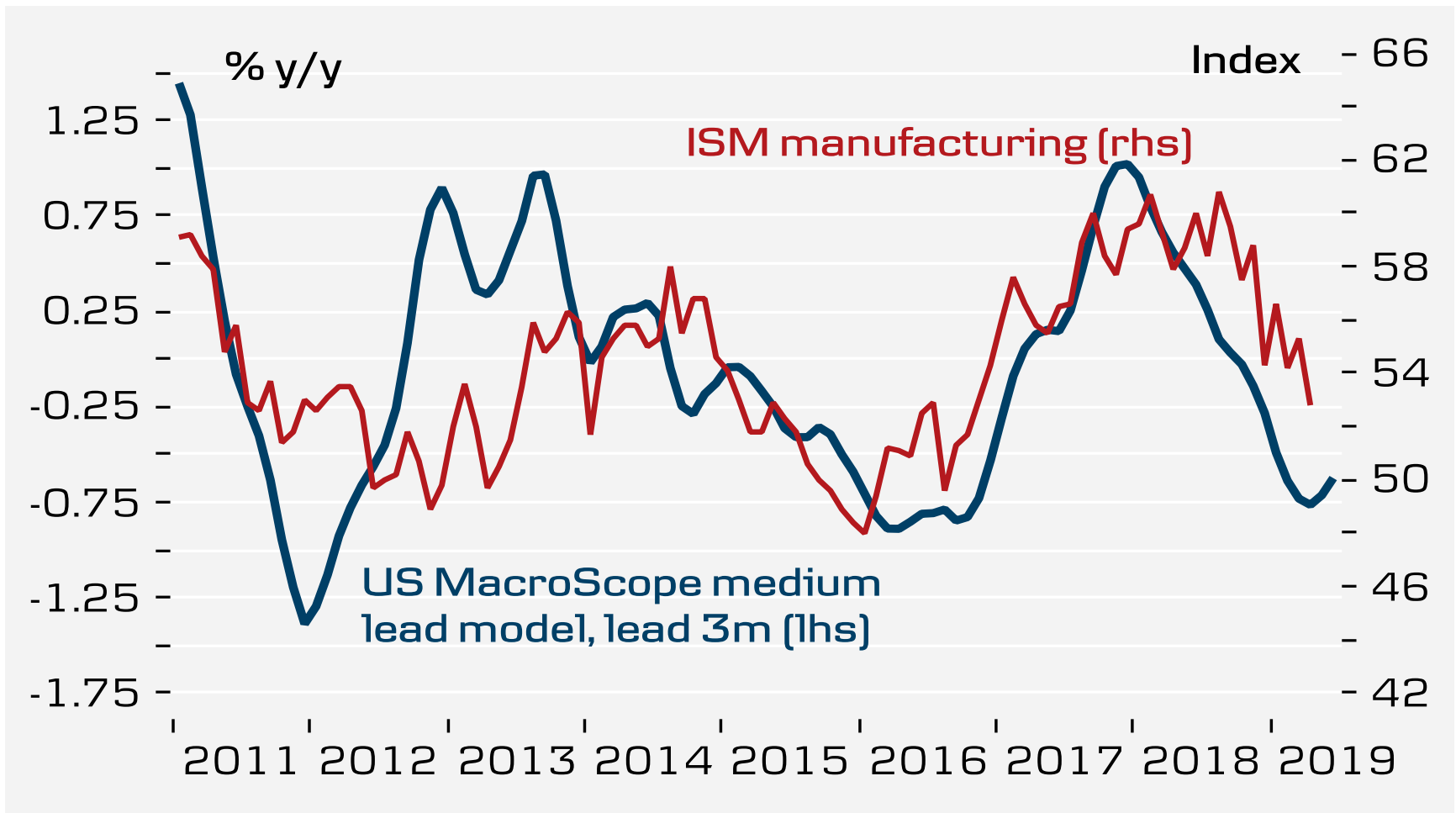
## MacroScope models for US (for OECD Composite Leading Indicators - CLI)





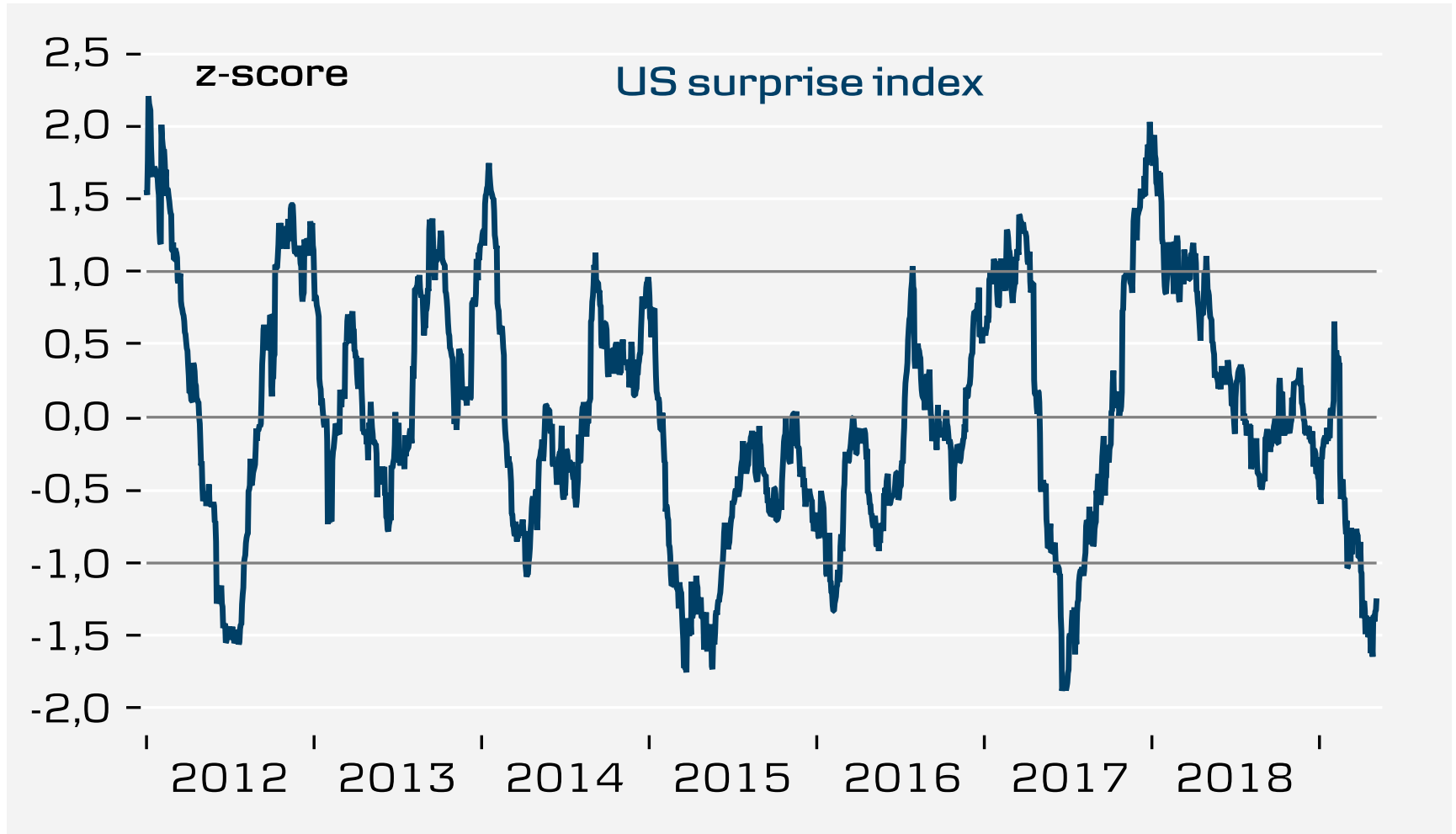
US

## MacroScope vs. ISM manufacturing index



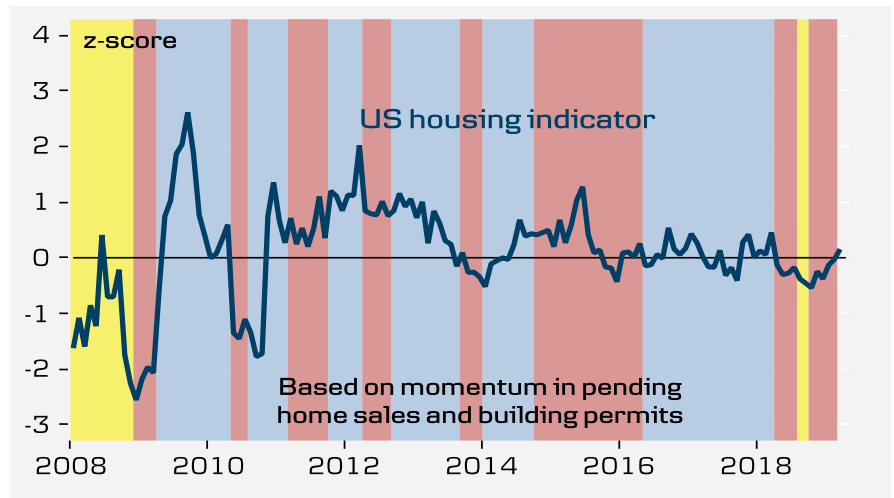
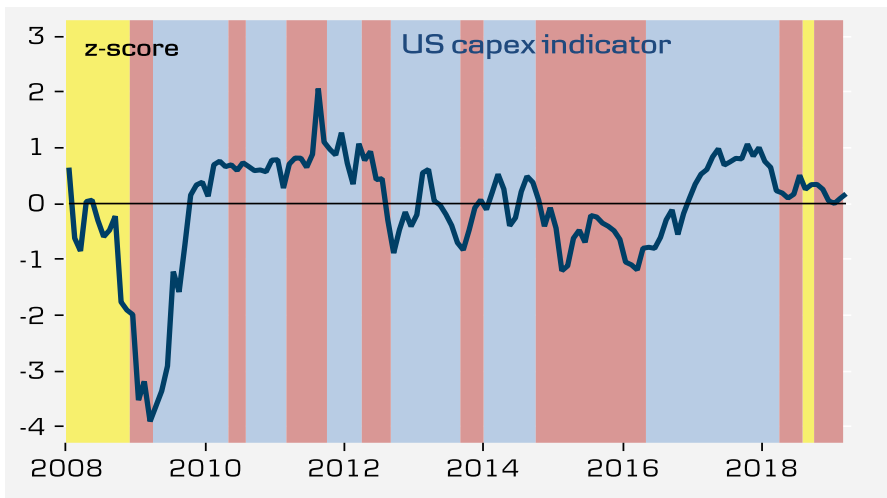
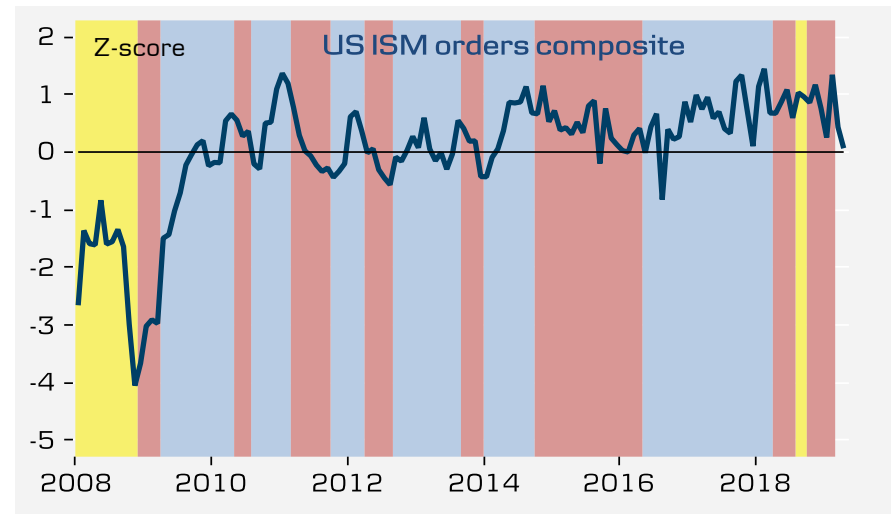
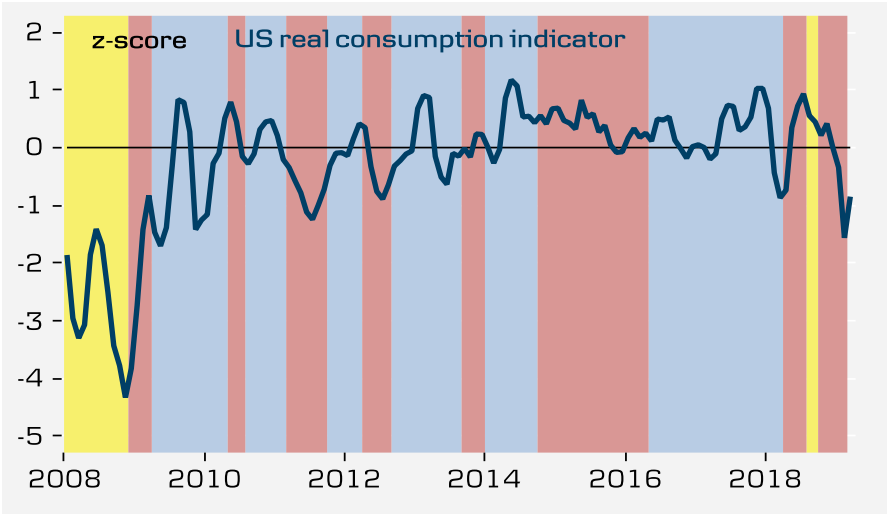
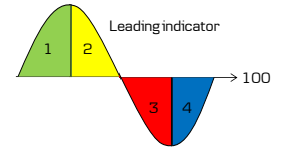
US

## US surprise index



US

# US sector overview vs US quadrants

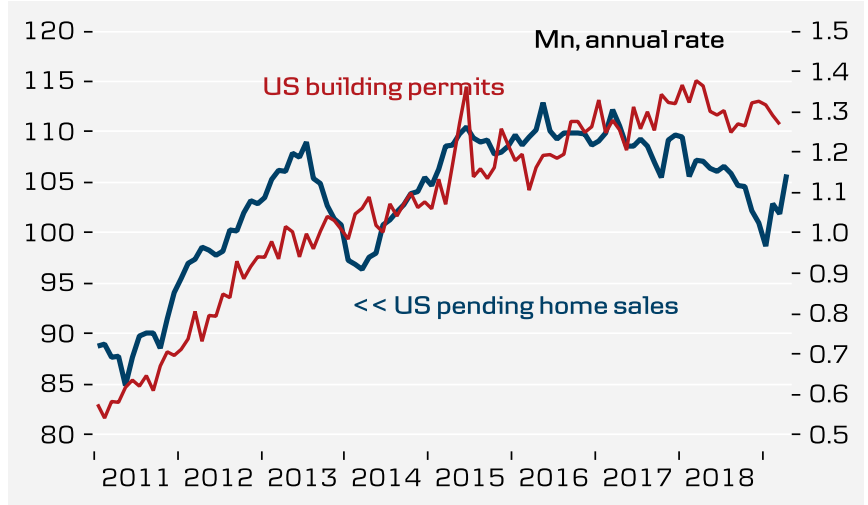
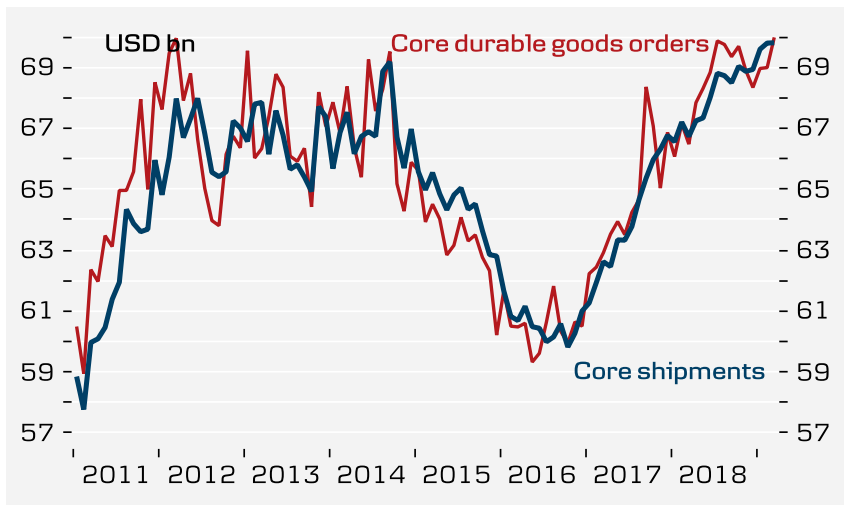
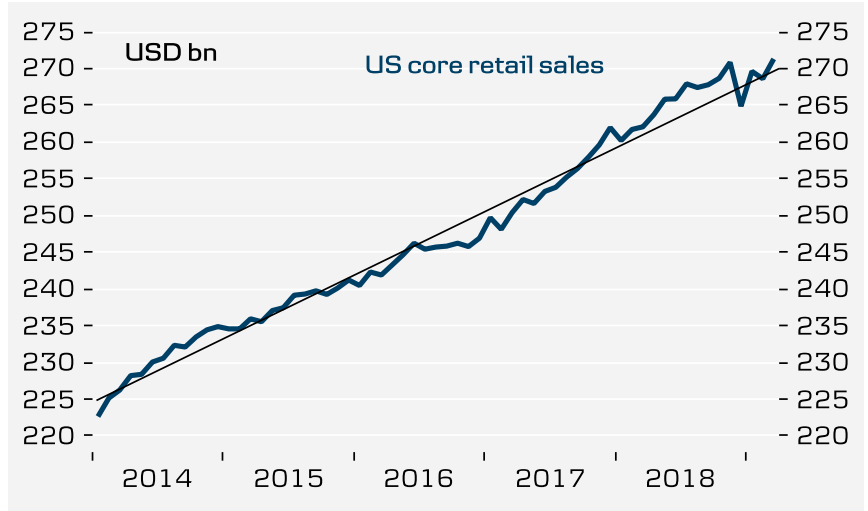
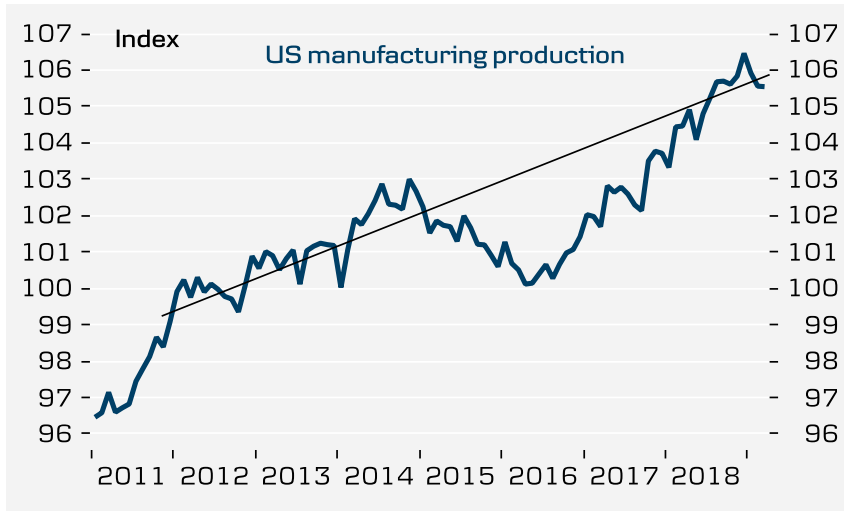


Source: Macrobond Financial, OECD, Danske Bank

[Link to overview page](#)

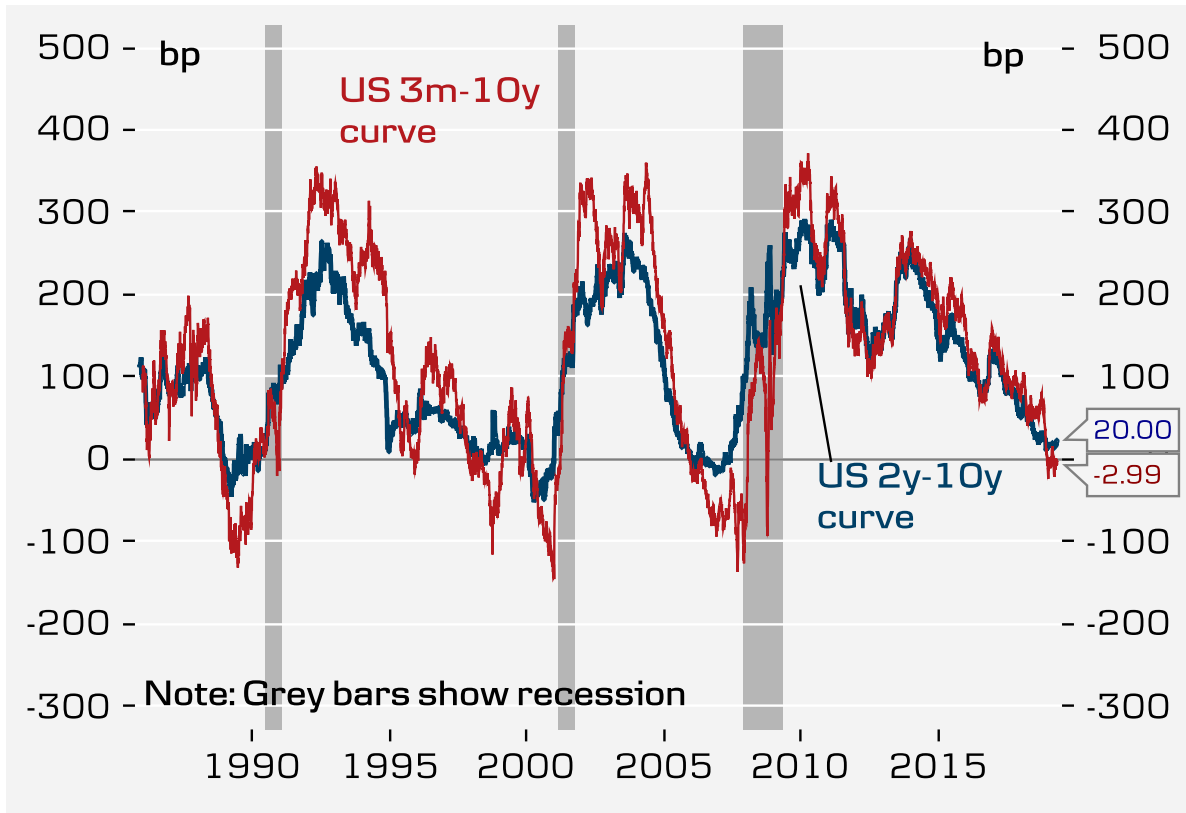
US

## US overview – level charts



US

# Yield curves vs. recessions



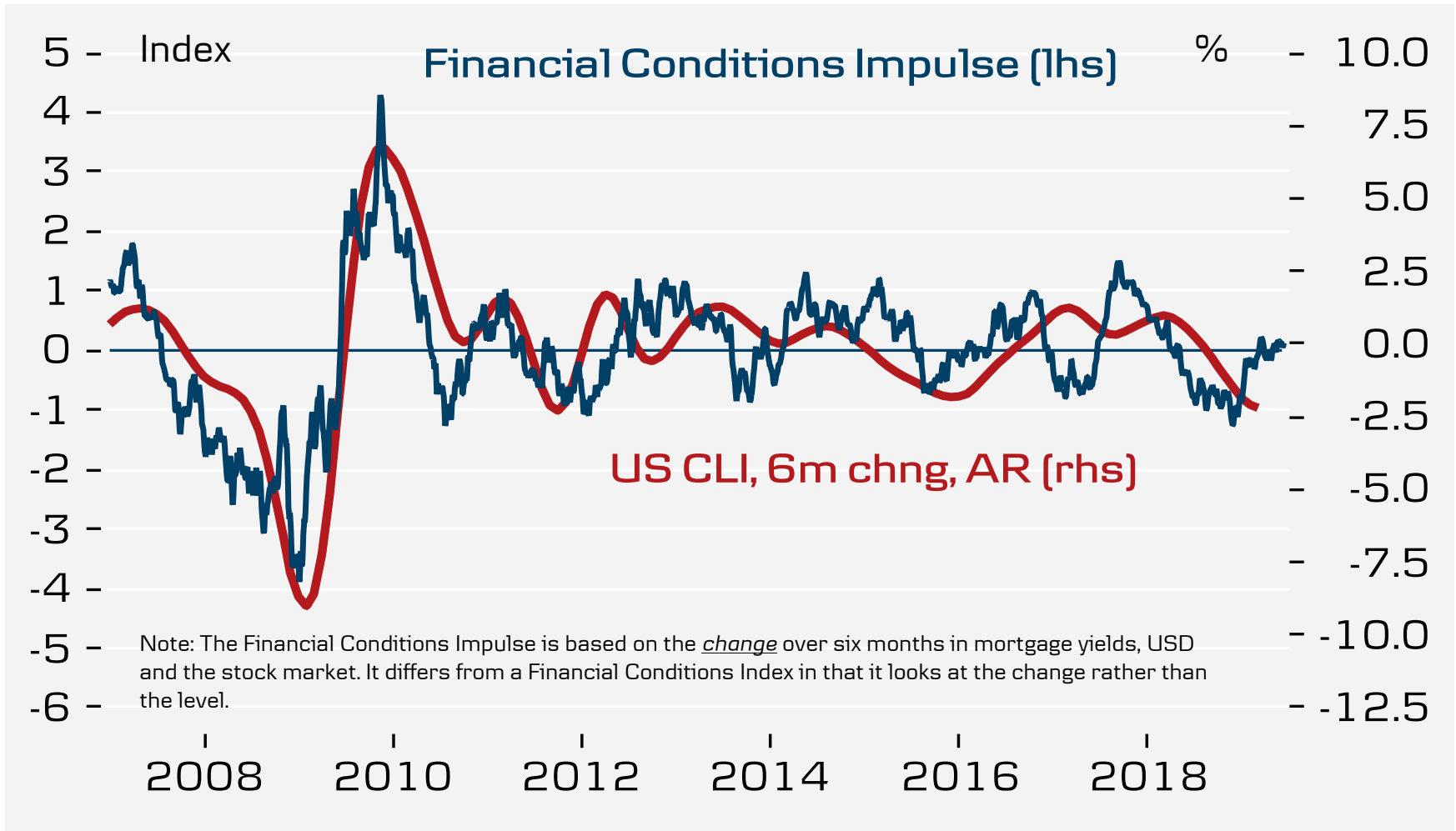
2y-10y yield curve inversion date	Recession start	Recession # of years after inversion
30-12-1988	01-07-1990	1,5
25-05-1998	01-03-2001	2,8
26-12-2005	01-12-2007	1,9
Ave.		2,1

3m-10y yield curve inversion date	Recession start	Recession # of years after inversion
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

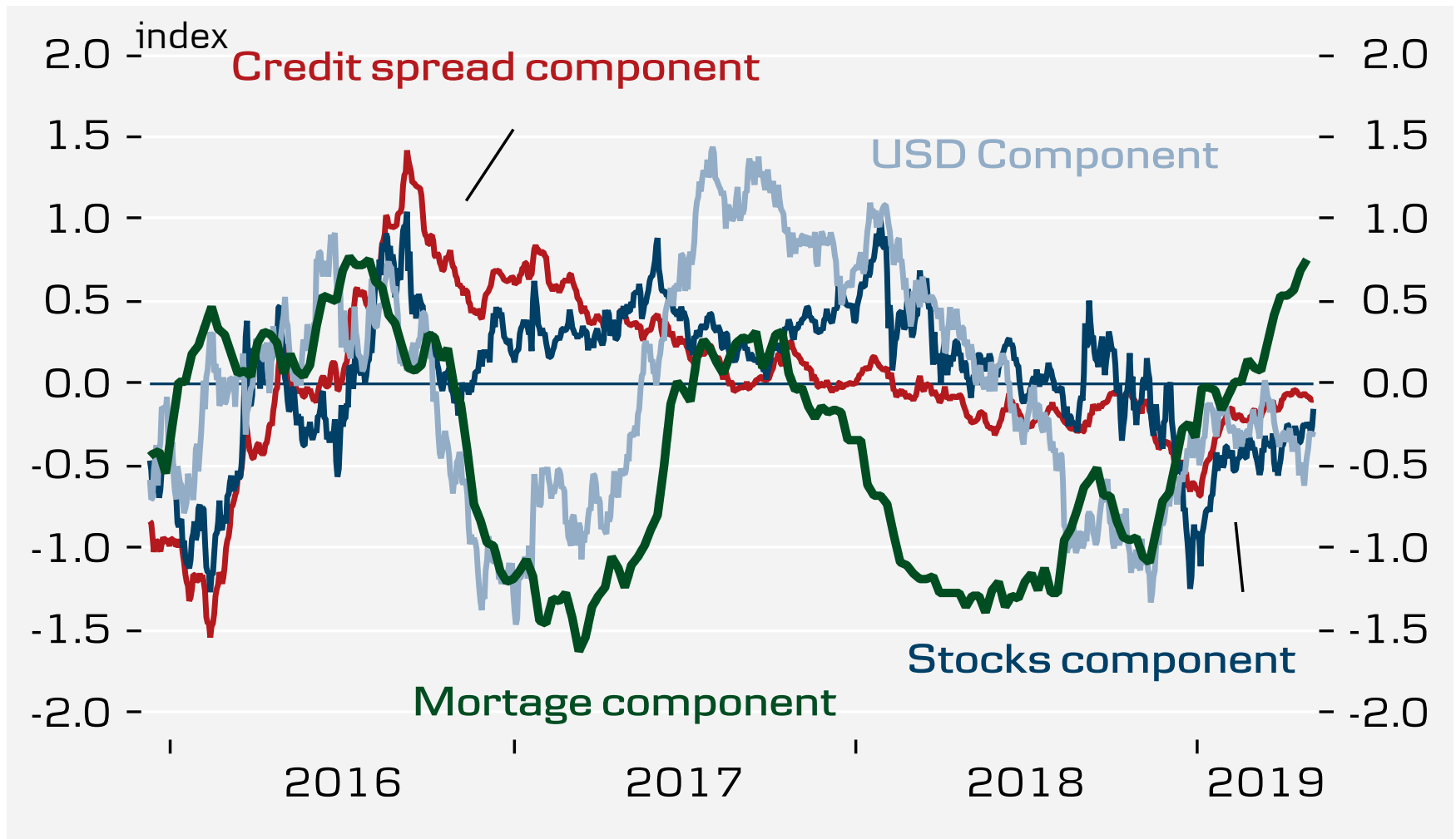
US

## Financial conditions vs CLI change



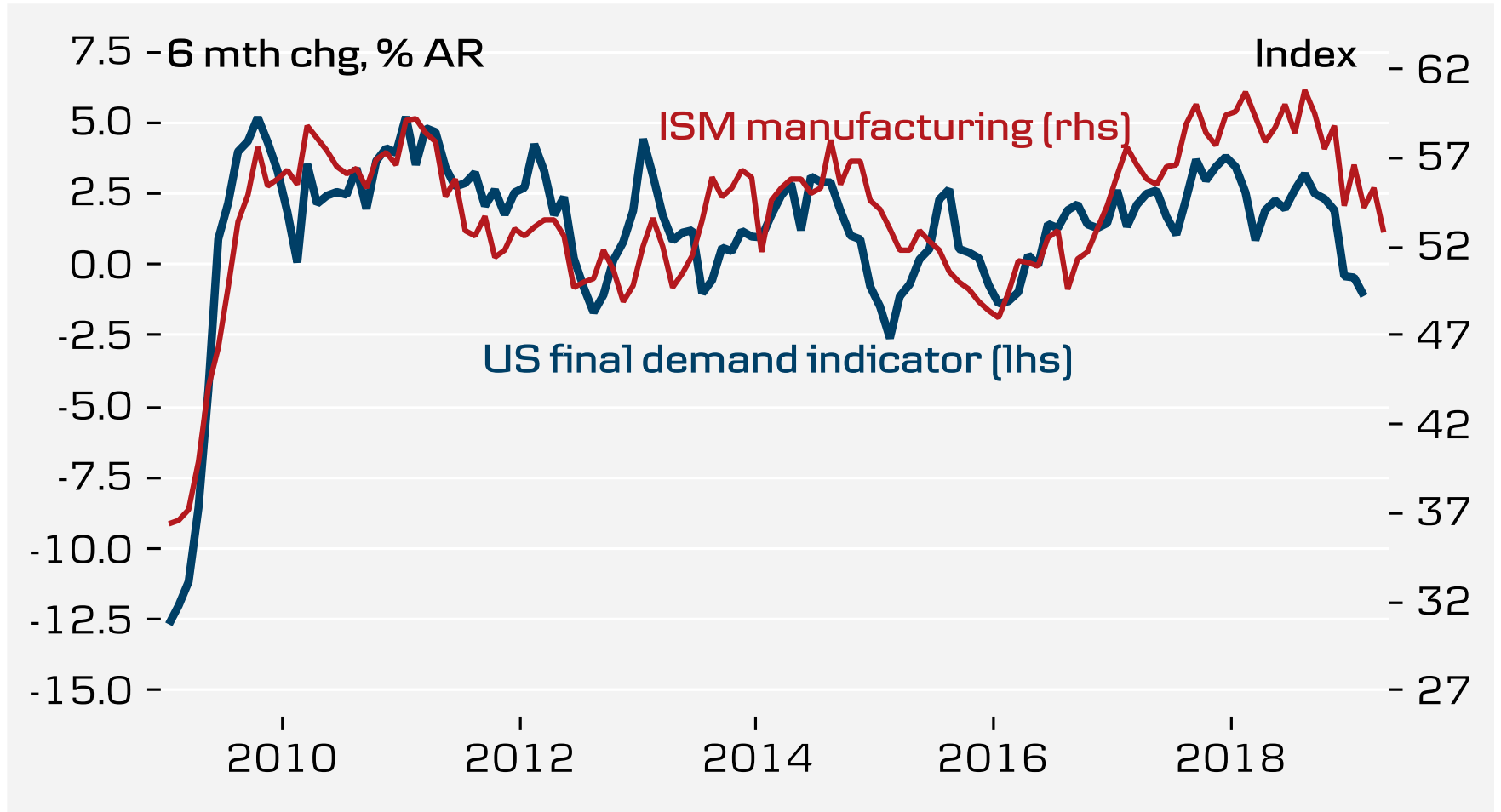
US

## Financial Conditions Impulse components



US

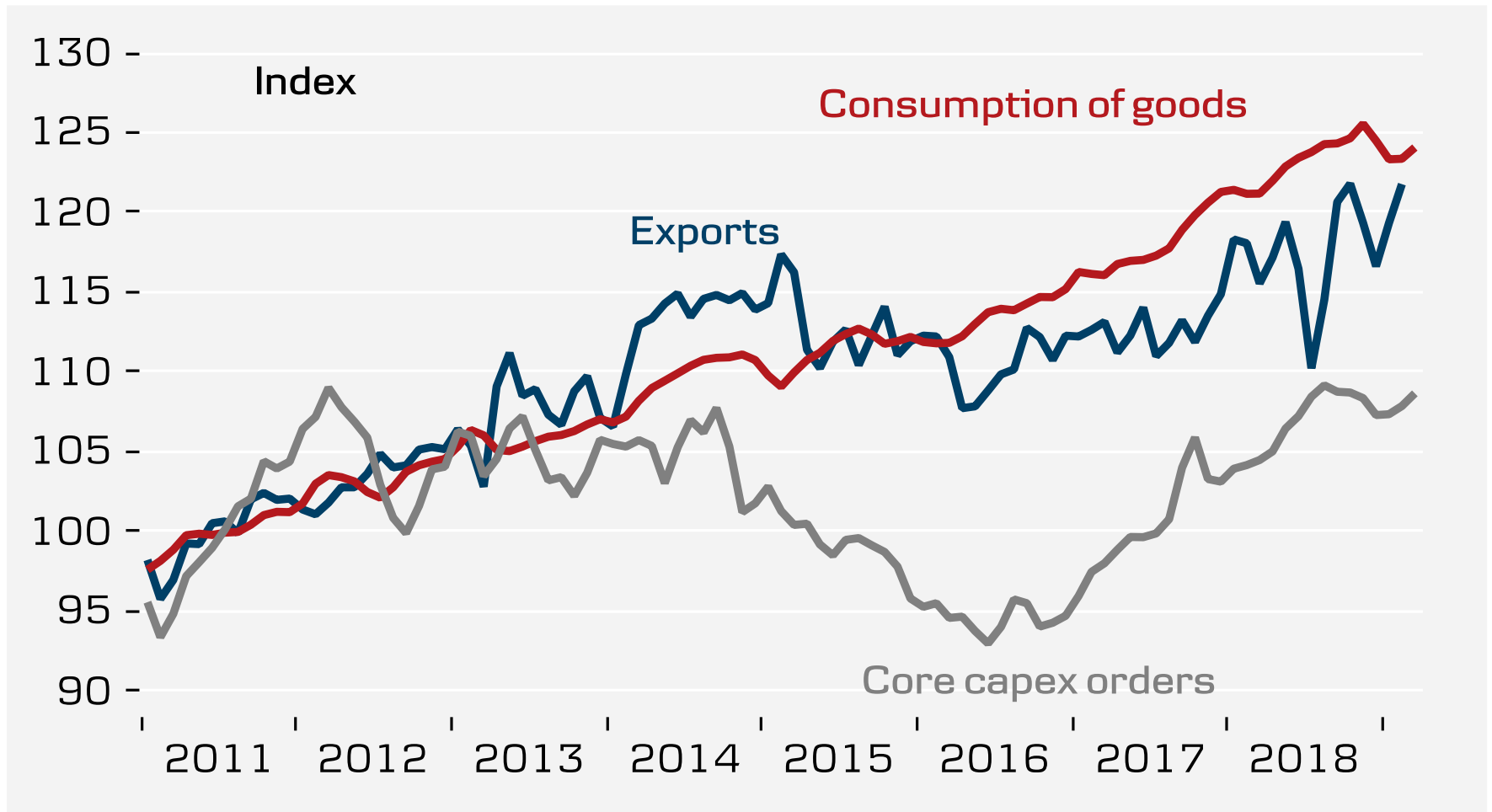
## ISM manufacturing vs US demand indicator





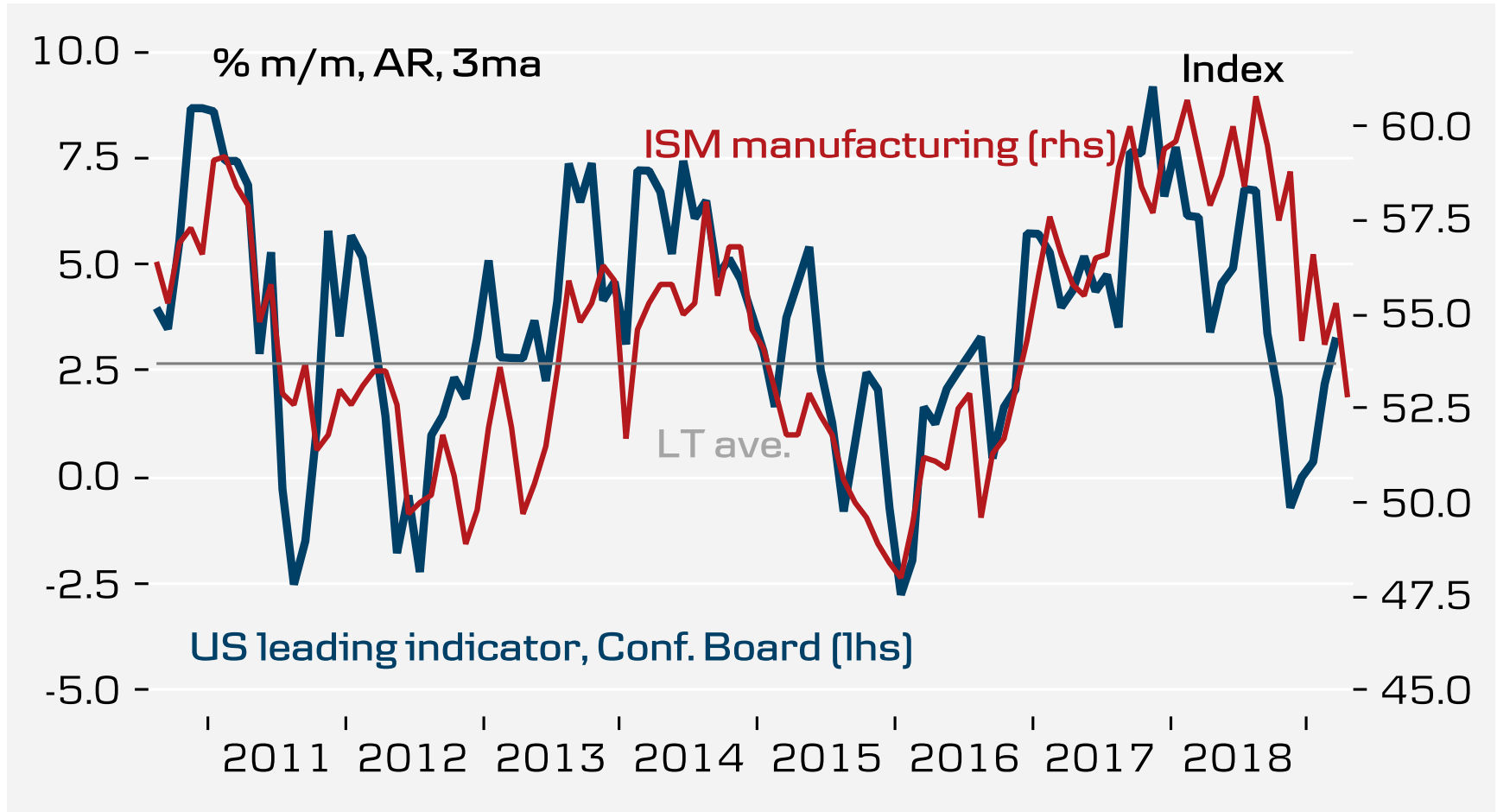
US

## Components in demand indicator



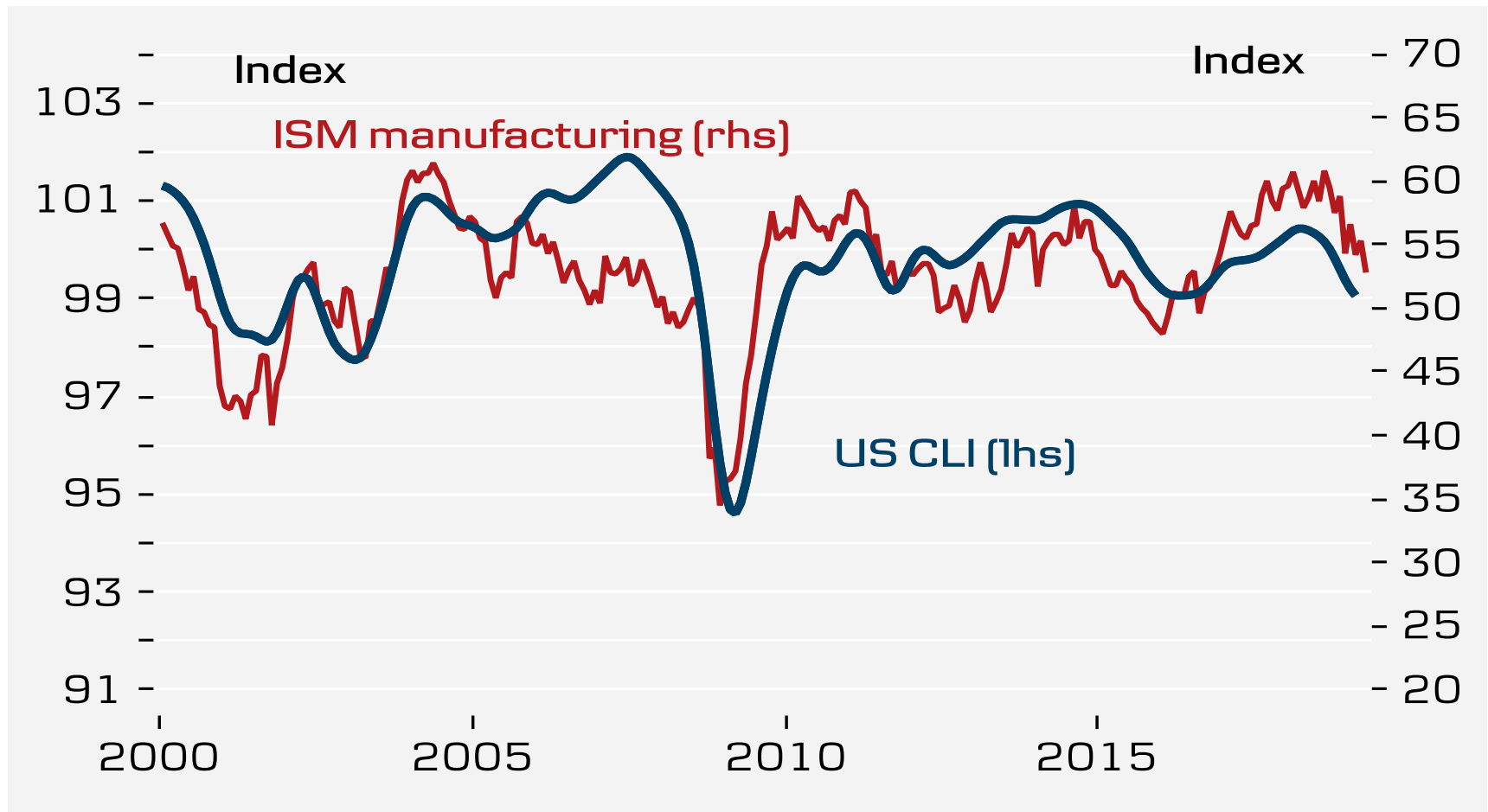
US

## ISM vs Conference Board leading indicator



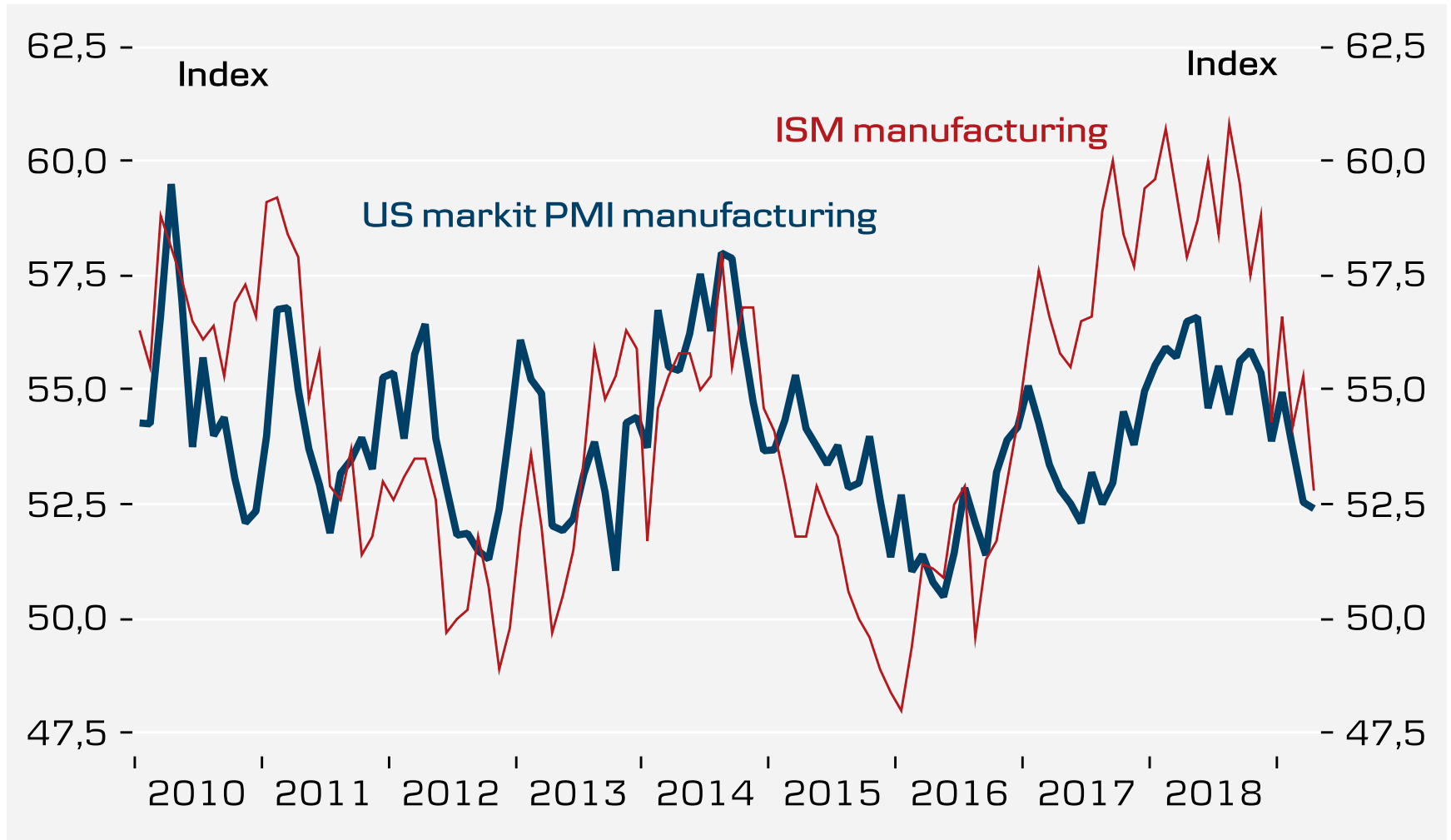
US

# ISM manufacturing



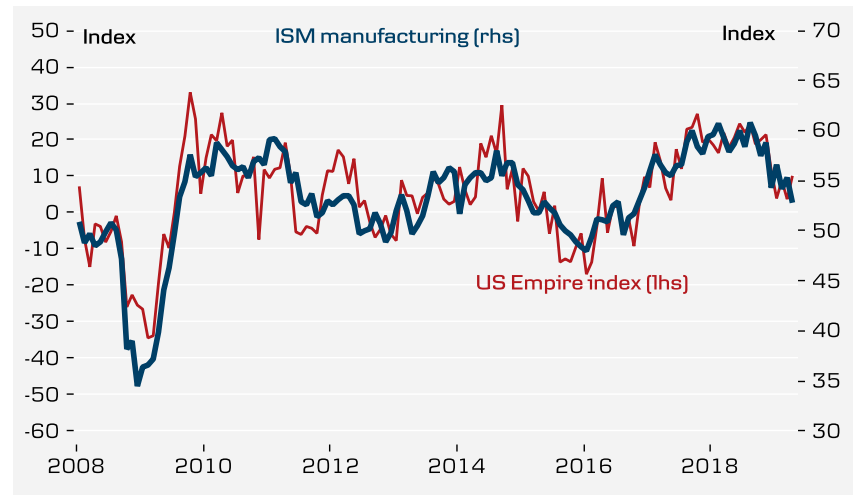
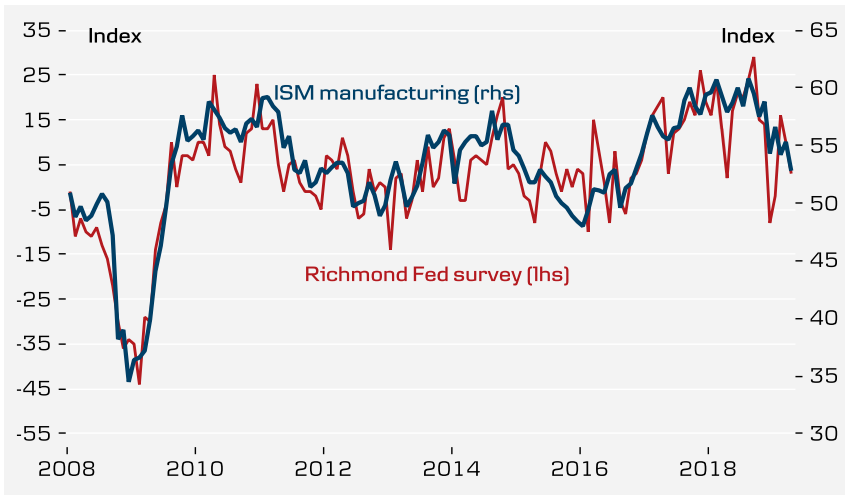
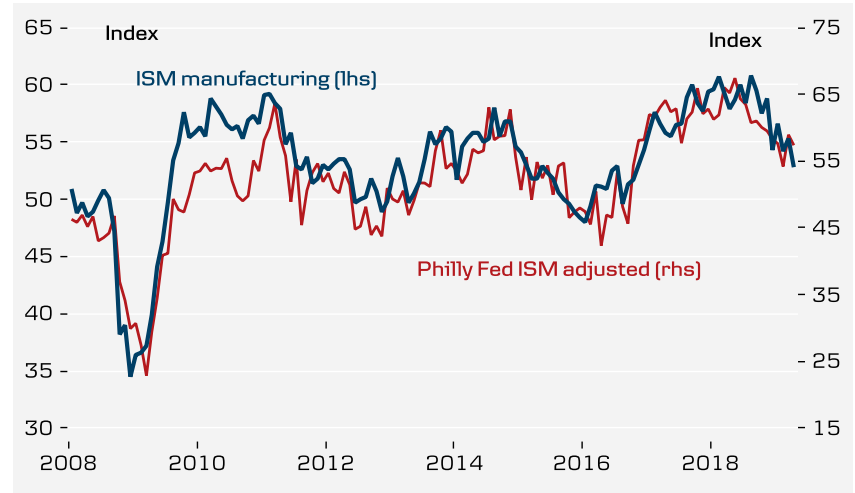
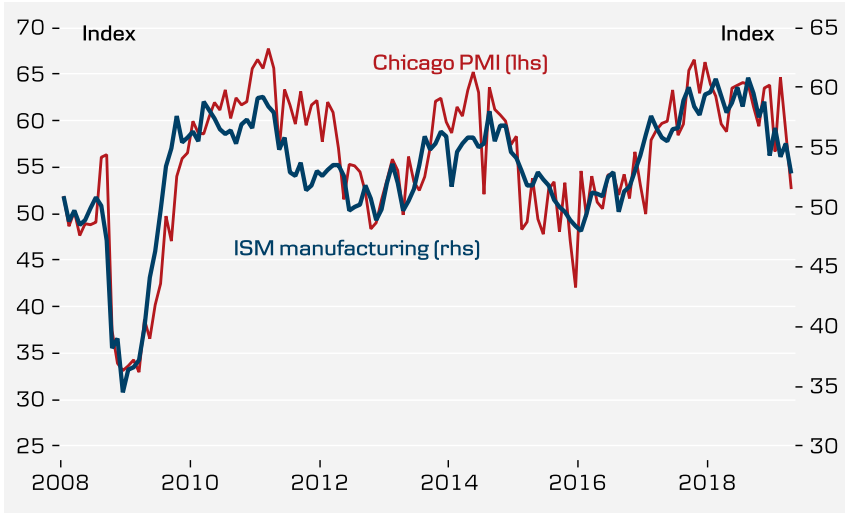
US

## ISM manufacturing vs. US PMI manufacturing



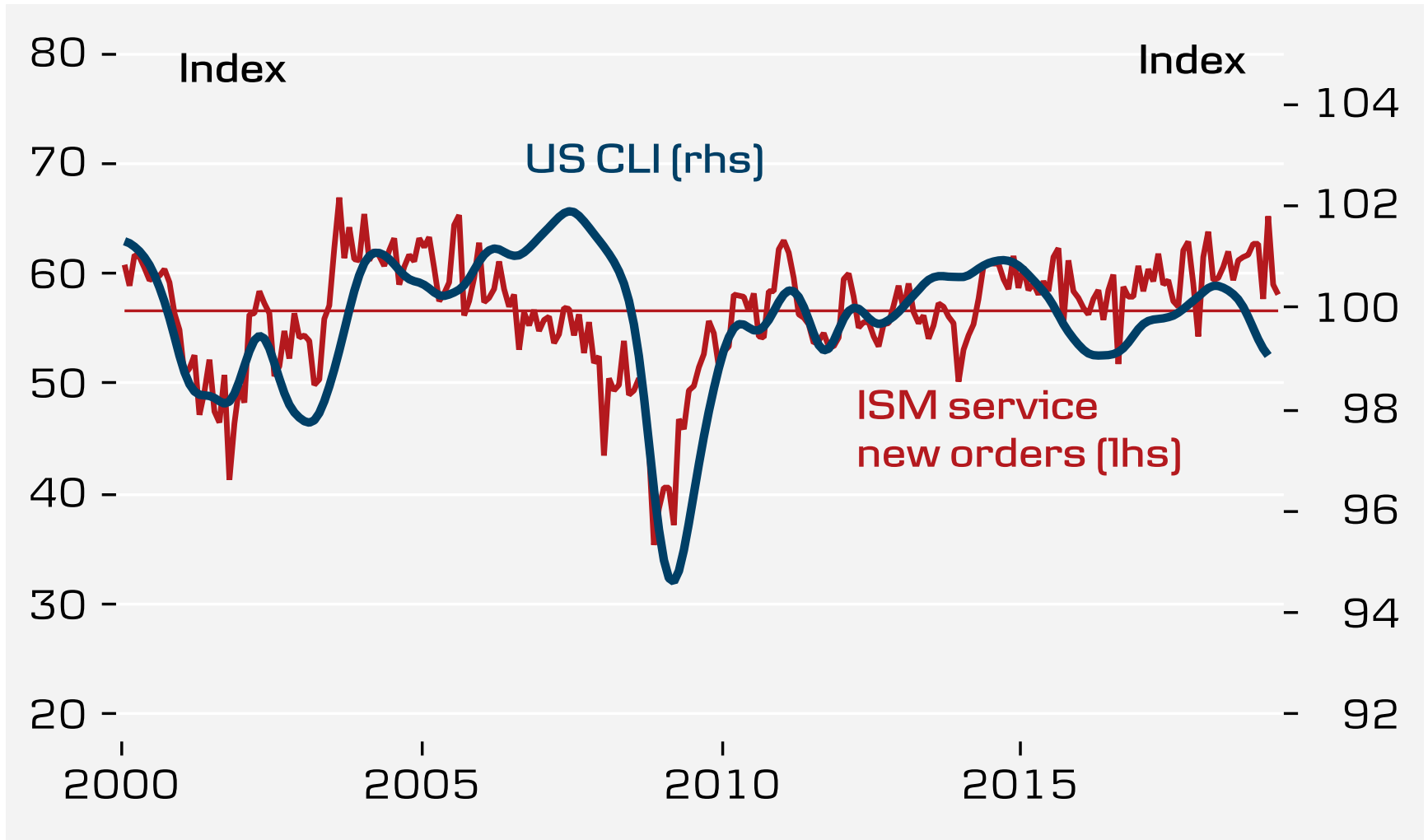
US

# ISM manufacturing vs. regional surveys



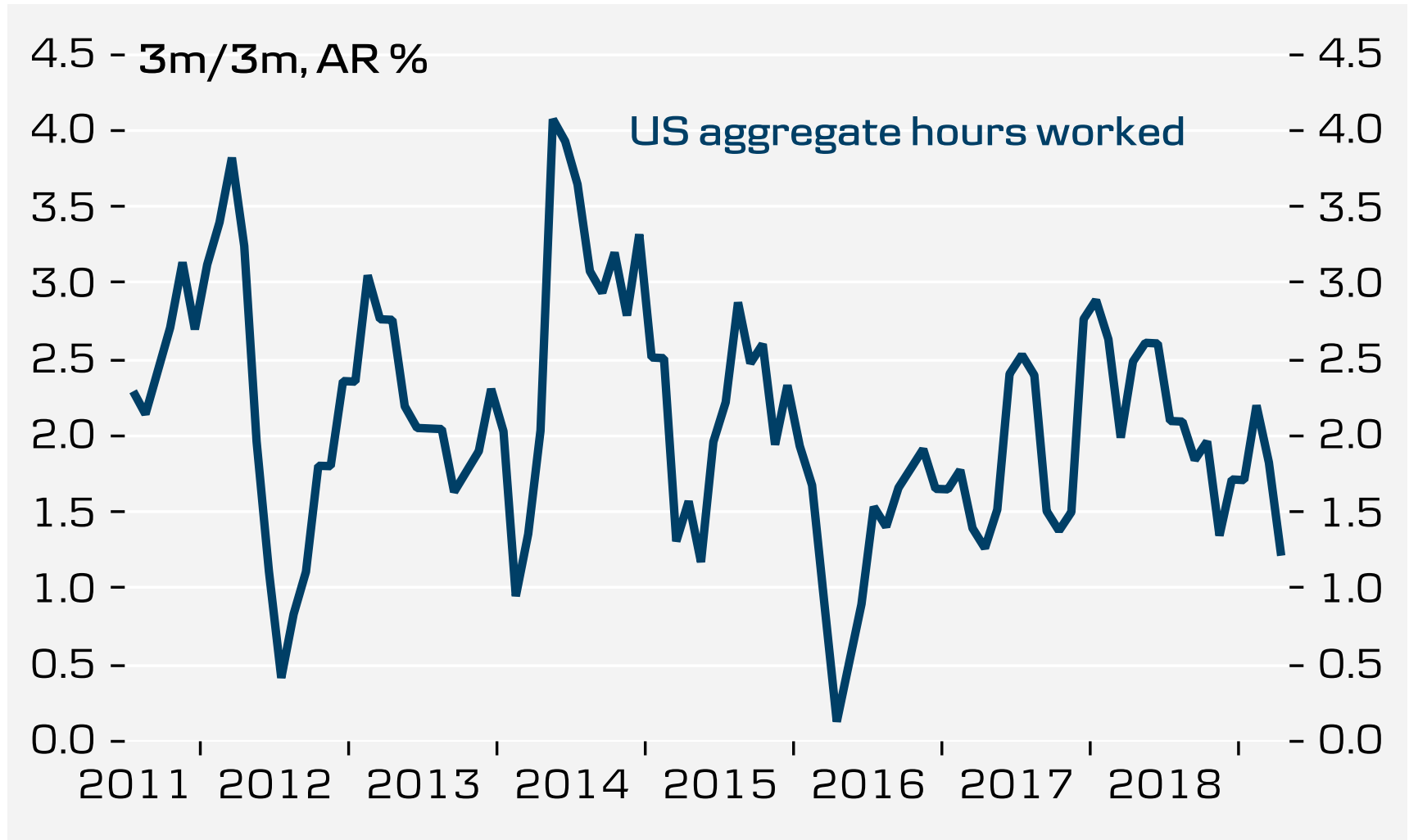
US

## ISM service



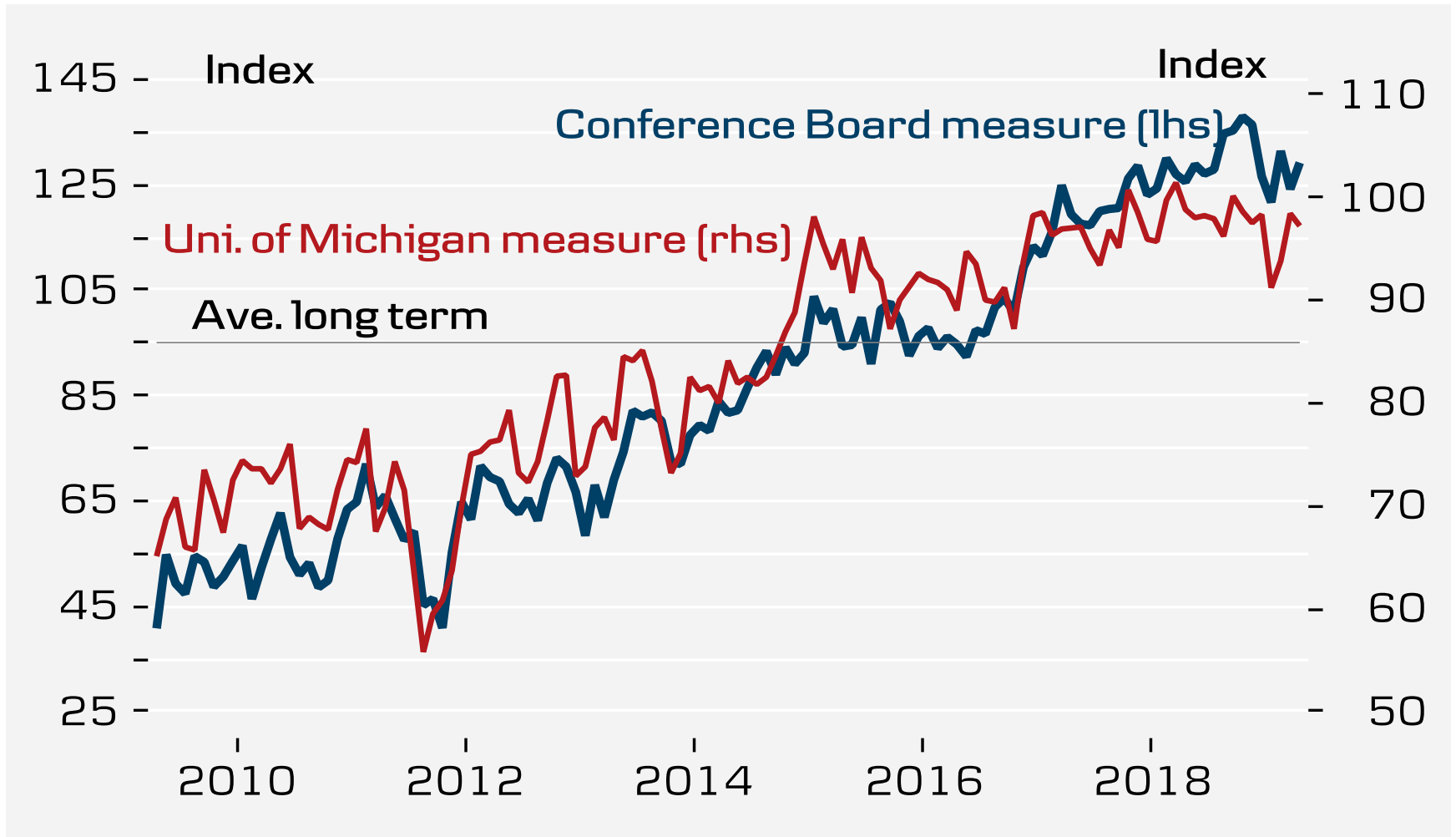
US

## Aggregate hours worked



US

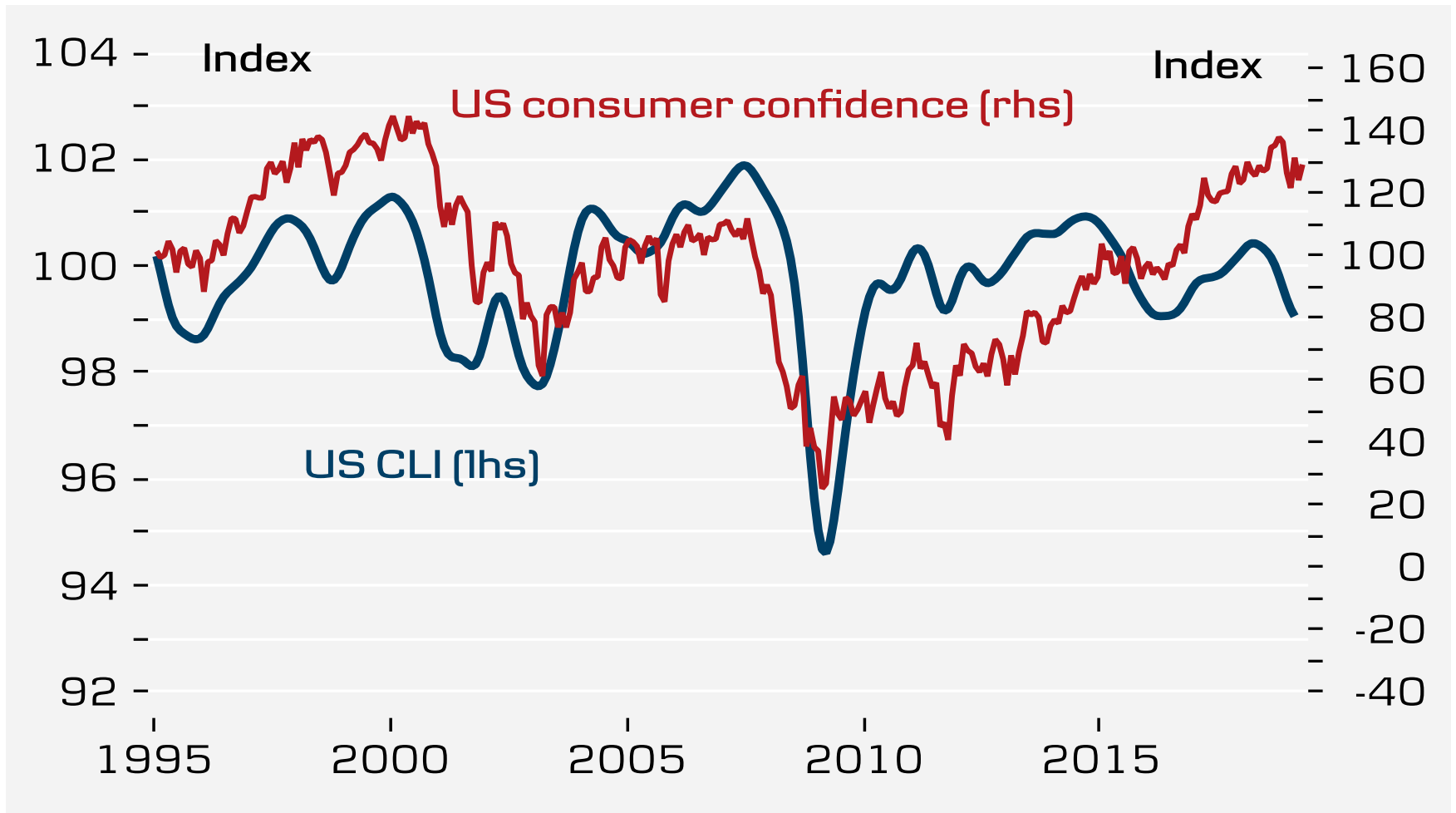
## Consumer confidence





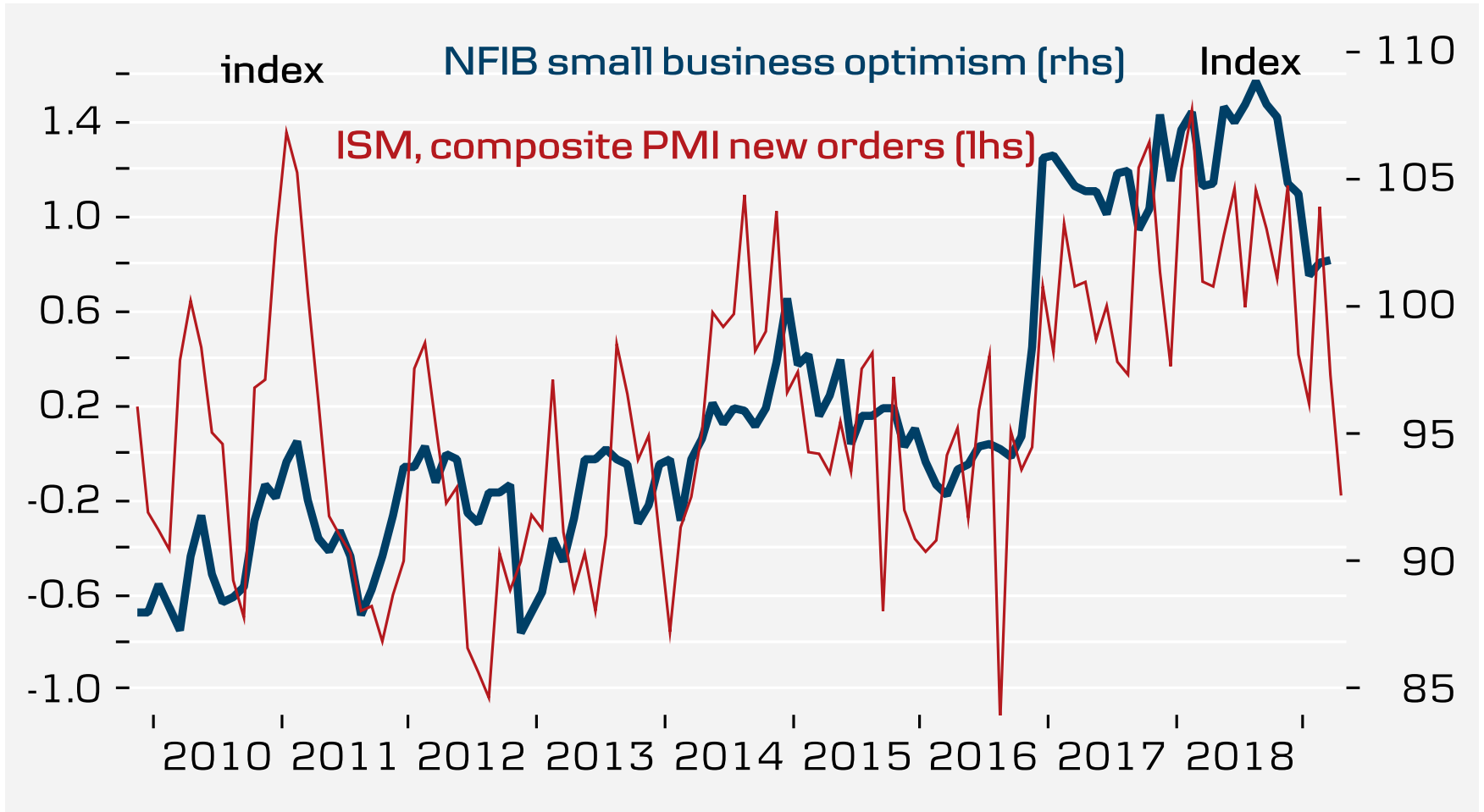
US

## Consumer confidence vs CLI



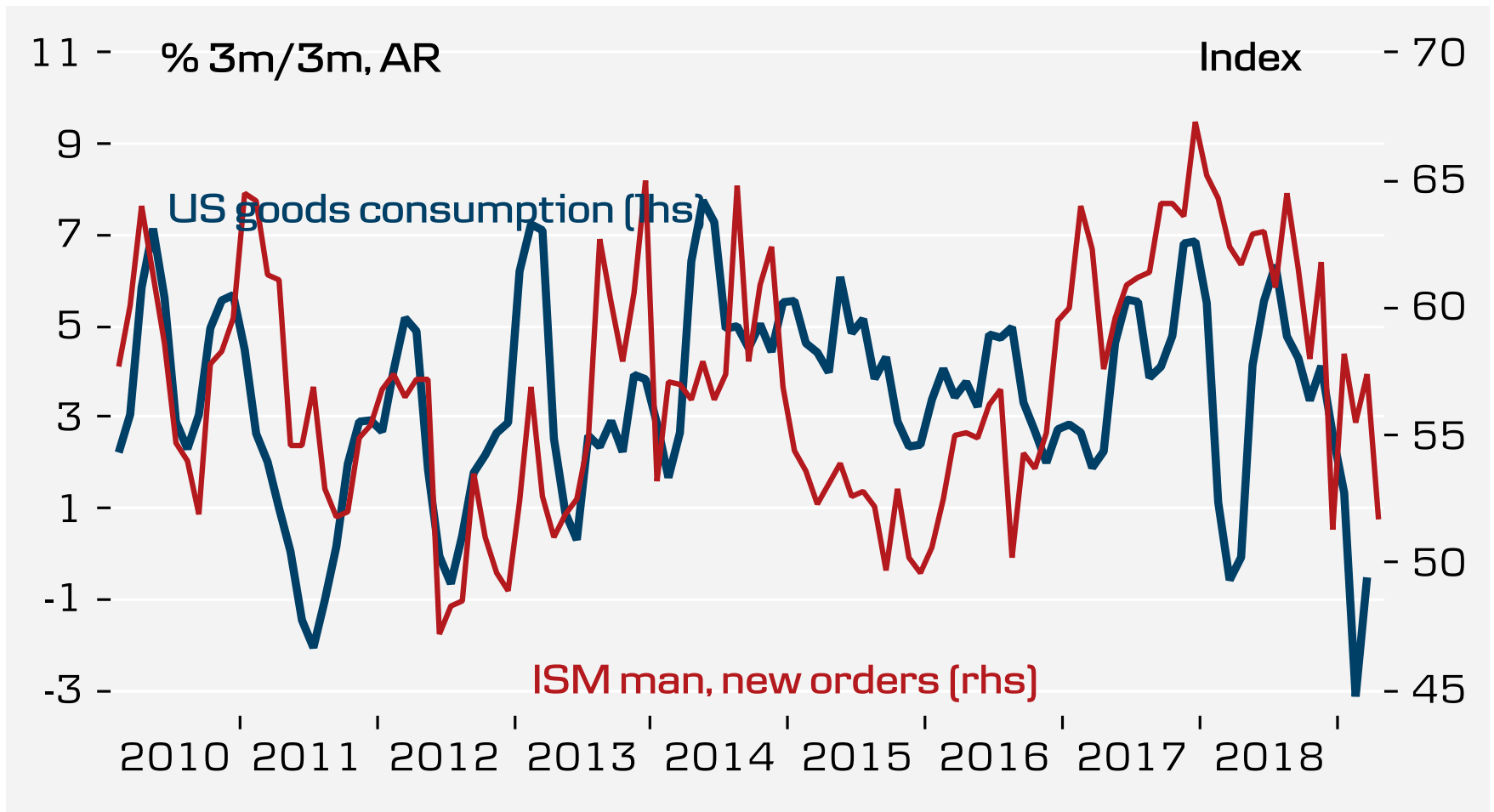
US

## Small business optimism



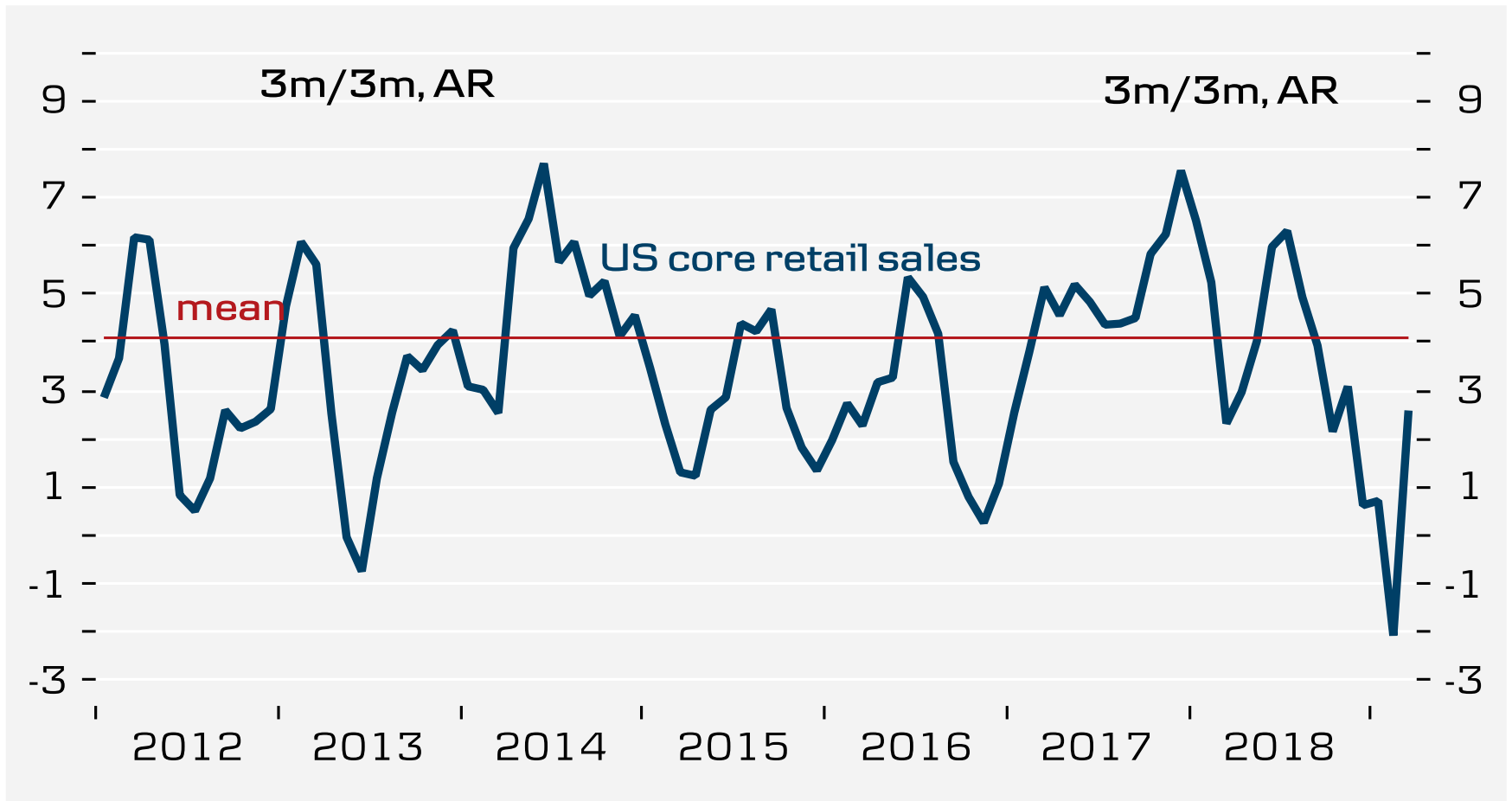
US

## Goods consumption and ISM



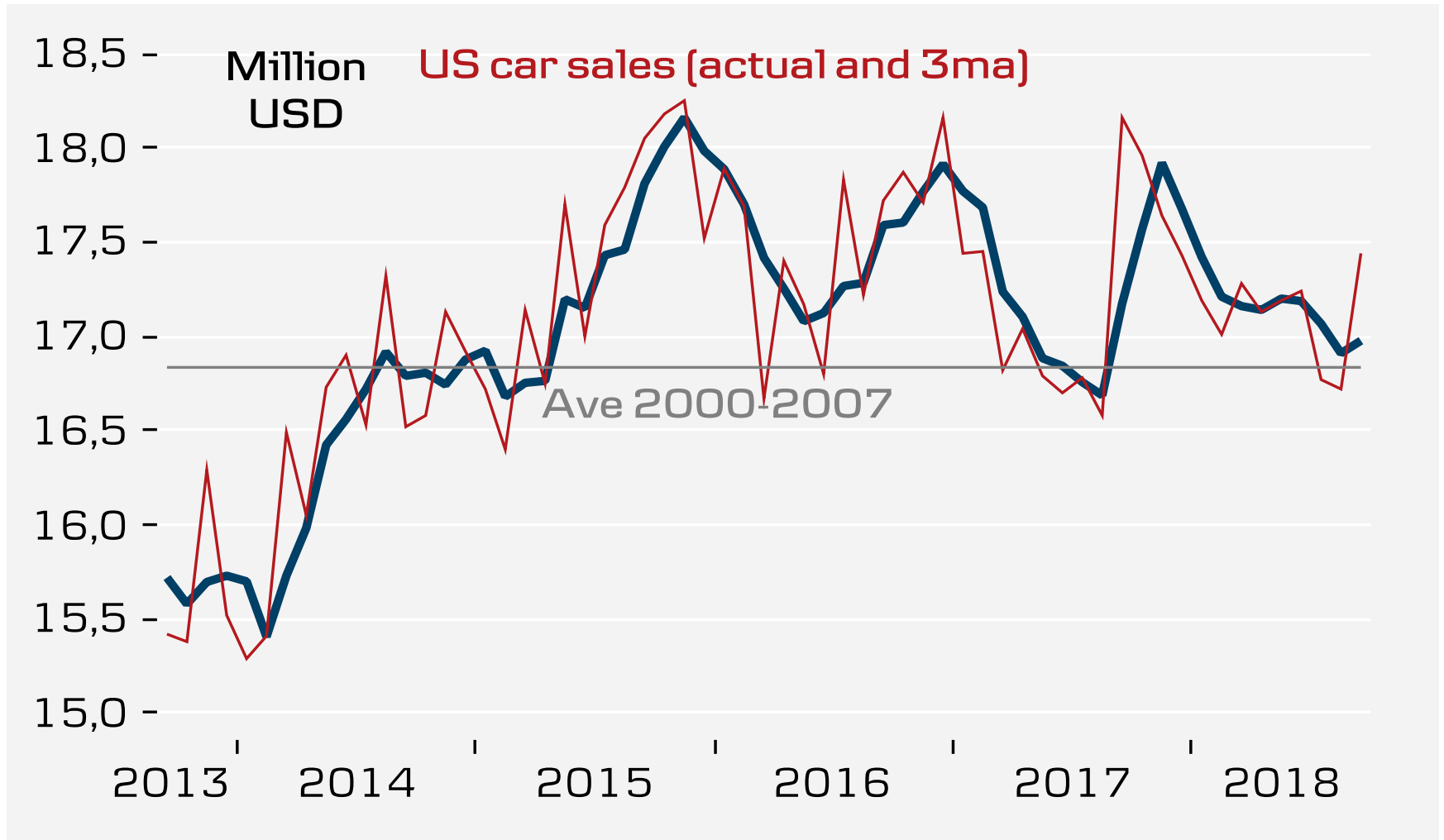
US

## Consumption: retail sales



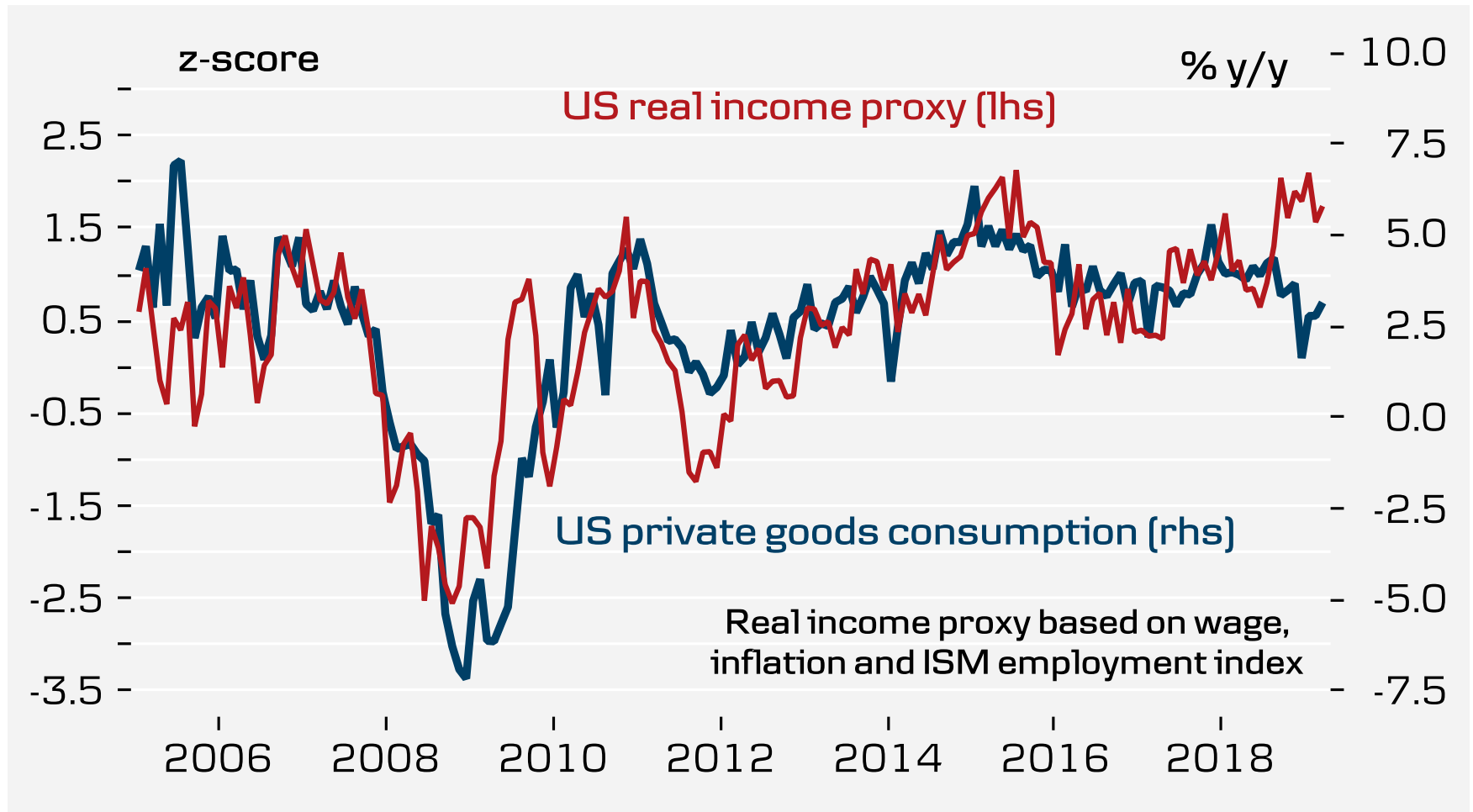
US

## Consumption: car sales



US

## Real income vs goods consumption



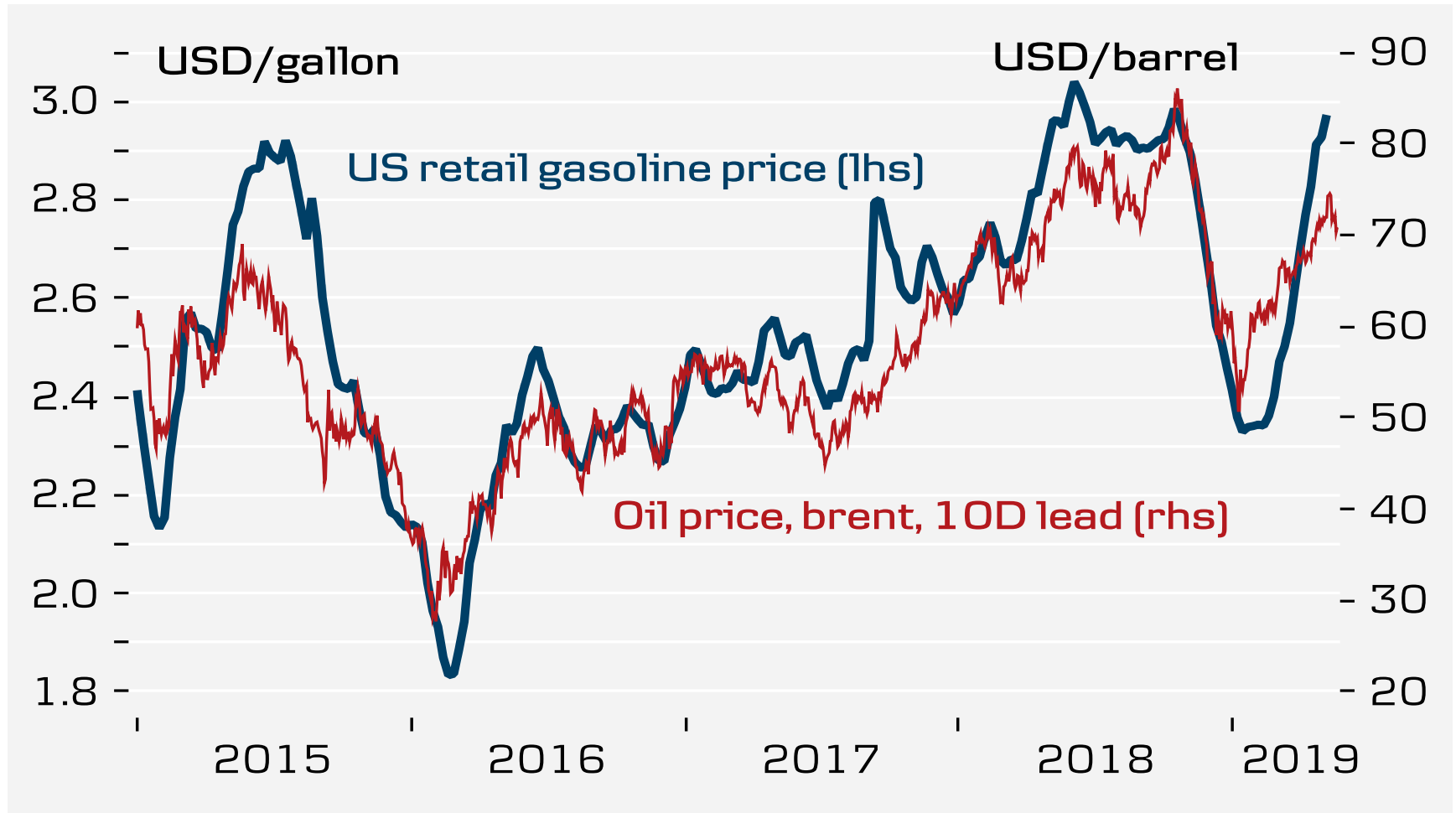
US

## US real wage growth



US

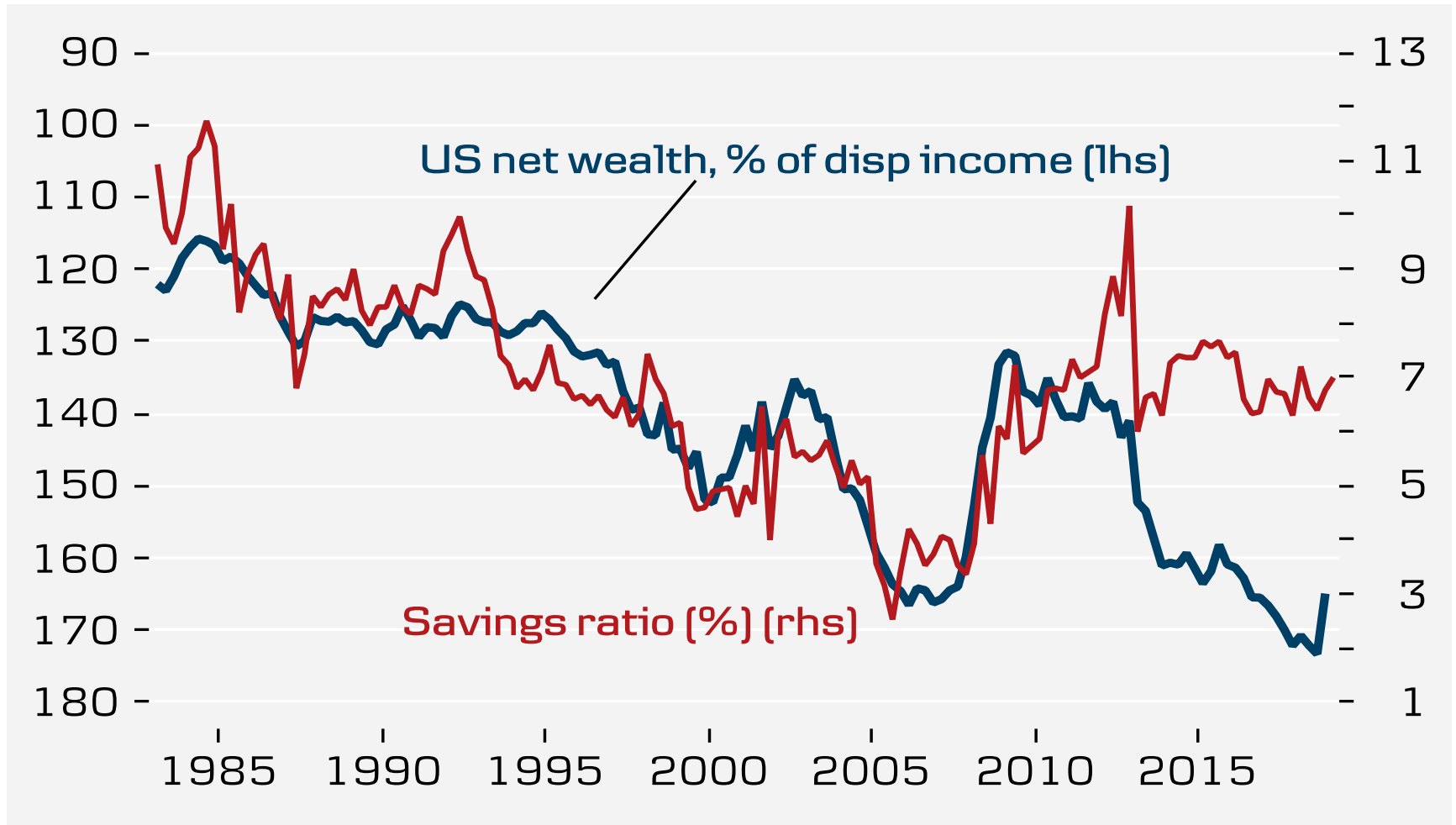
## Consumption: energy costs





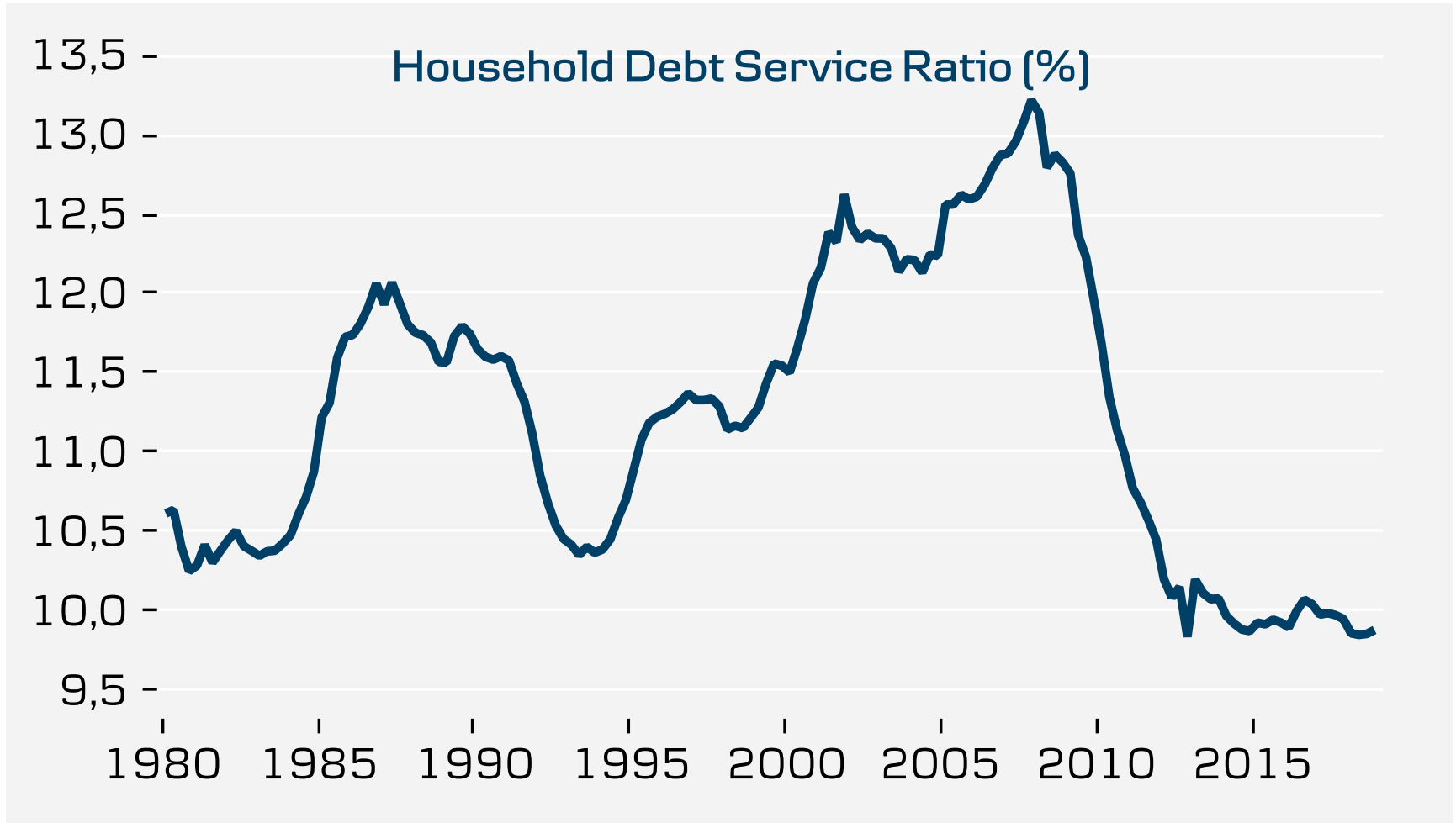
US

## Consumer: wealth



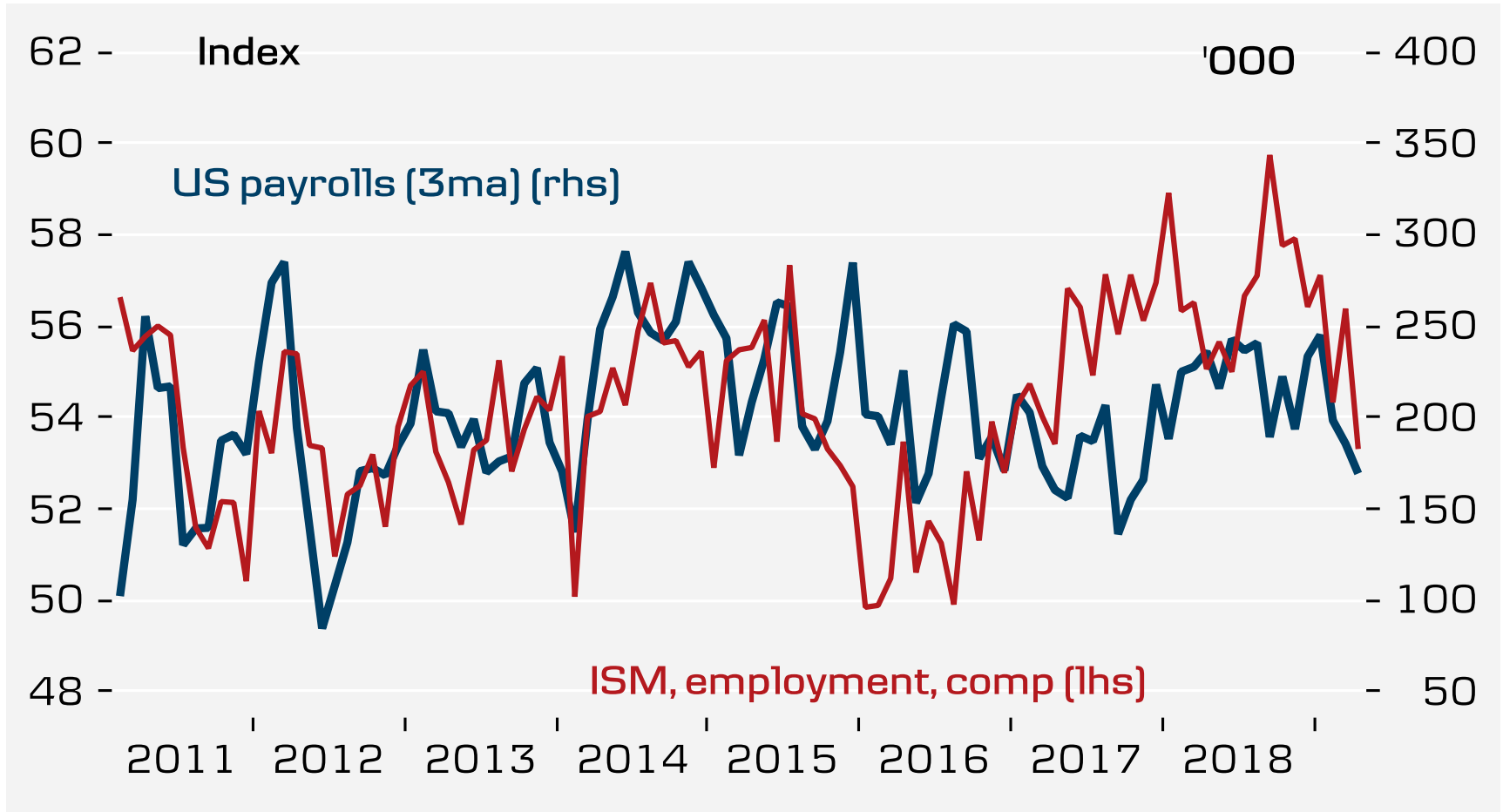
US

## Consumer: debt cost



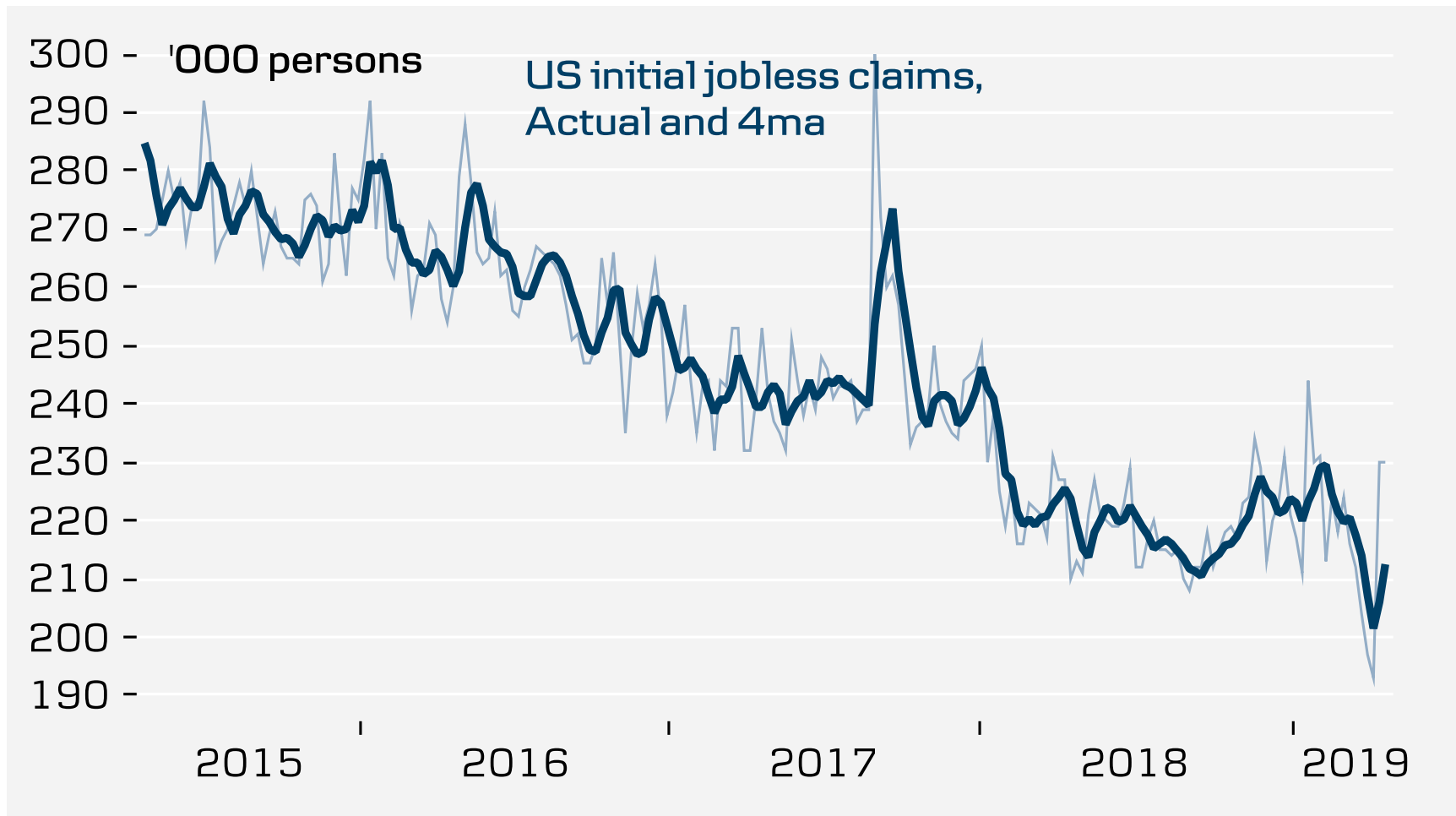
US

## Labour market: ISM



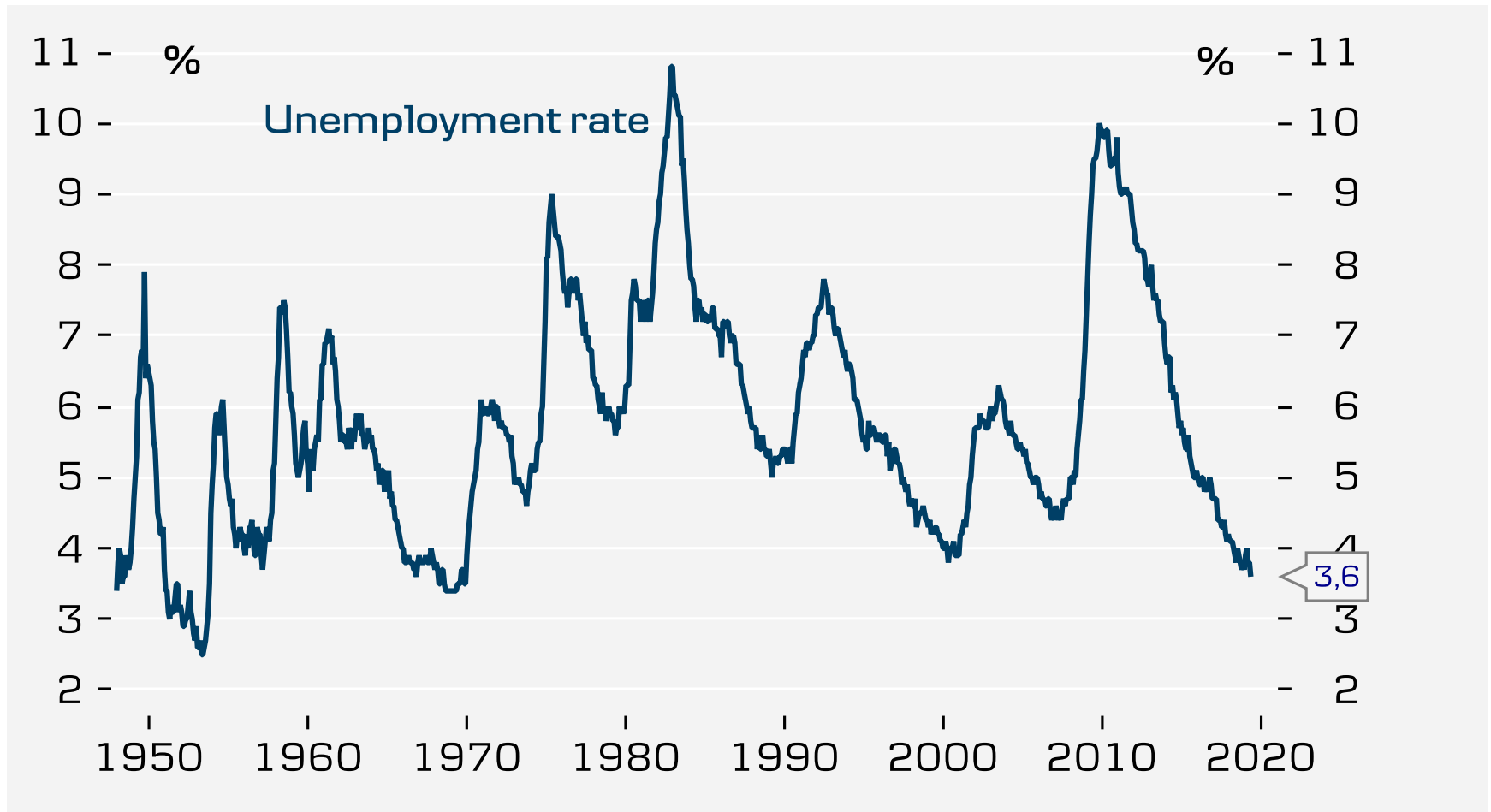
US

## Labour market: claims



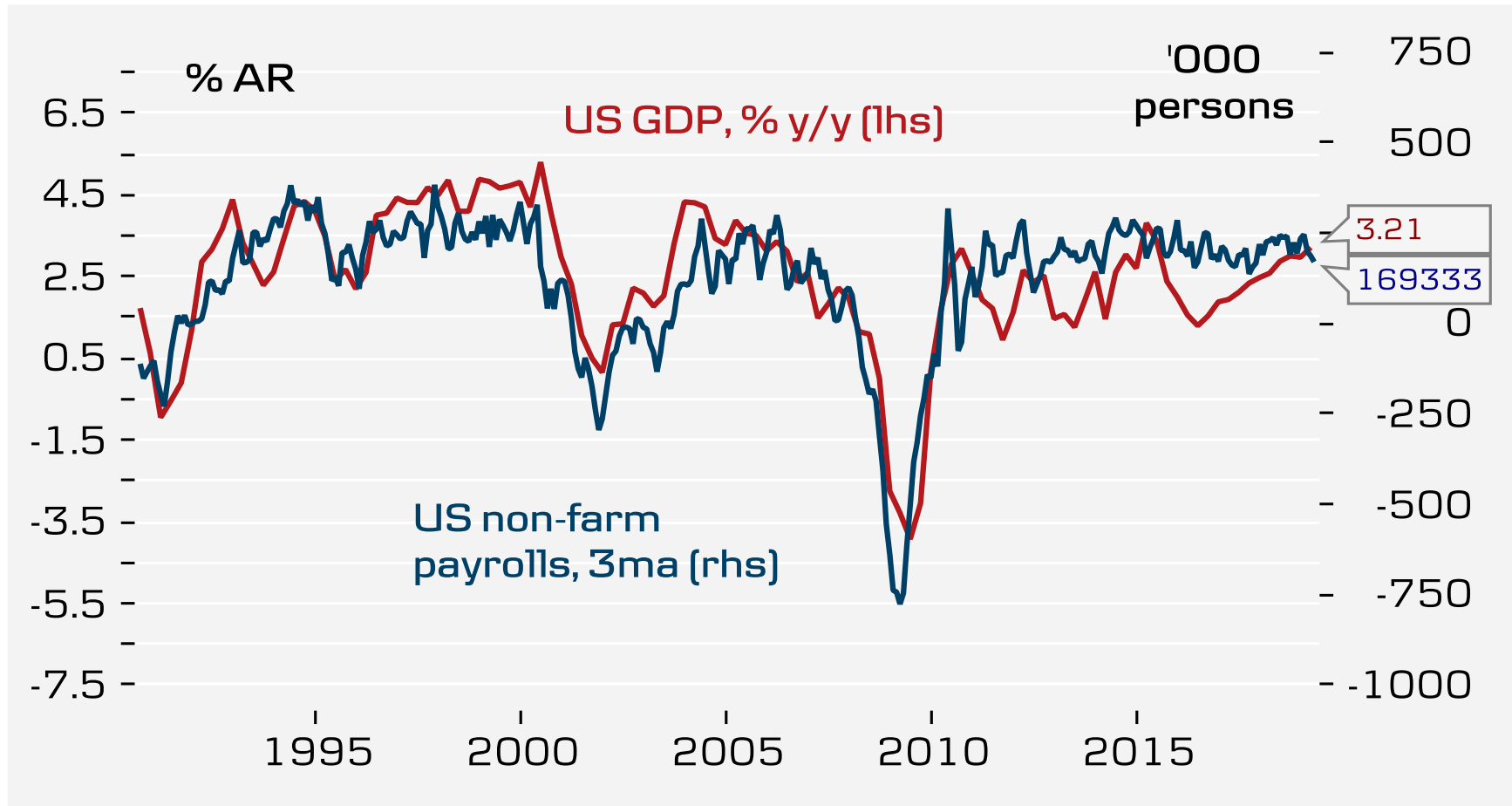
US

## Labour market: unemployment



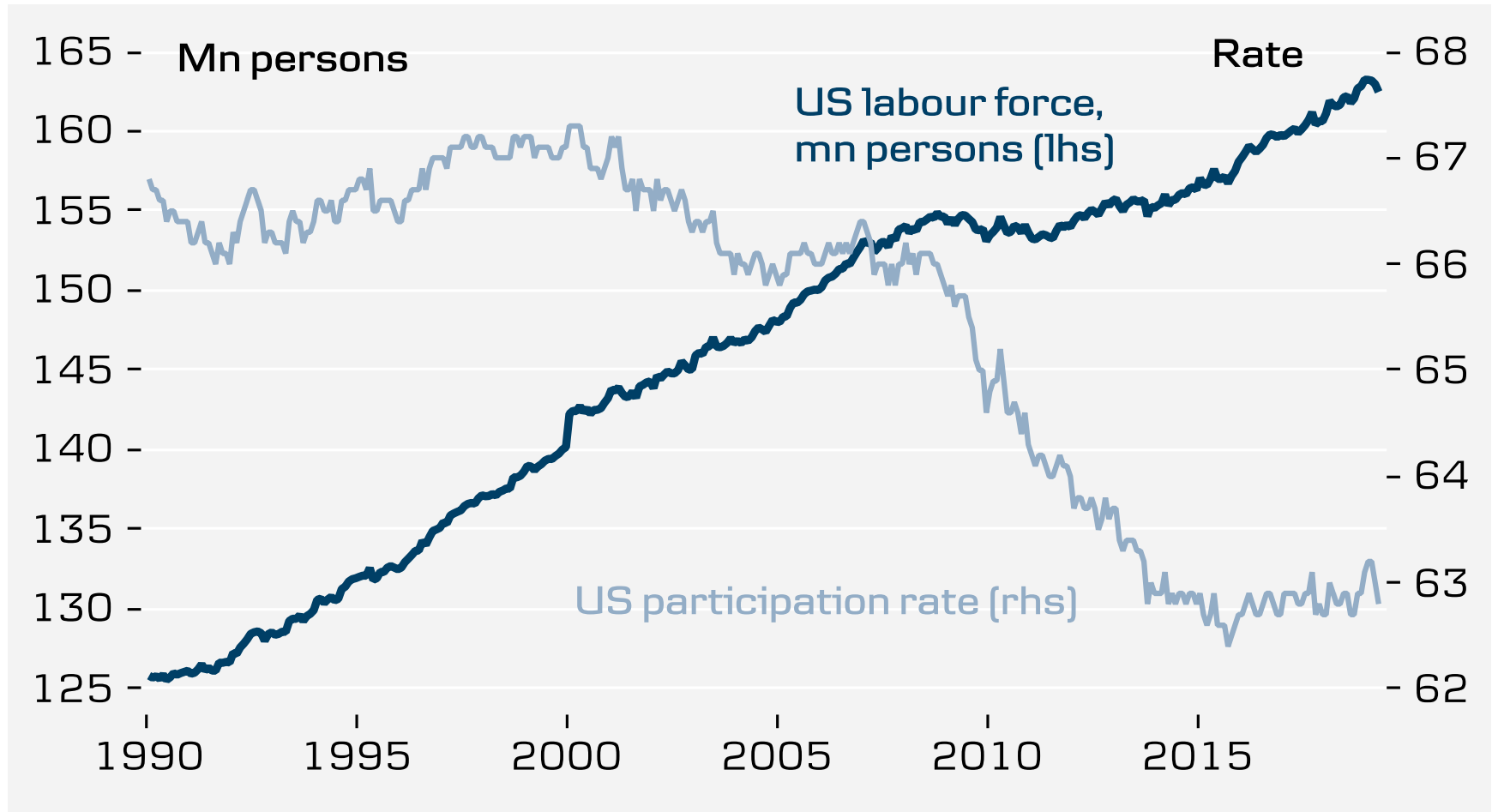
US

## Labour market: employment and GDP



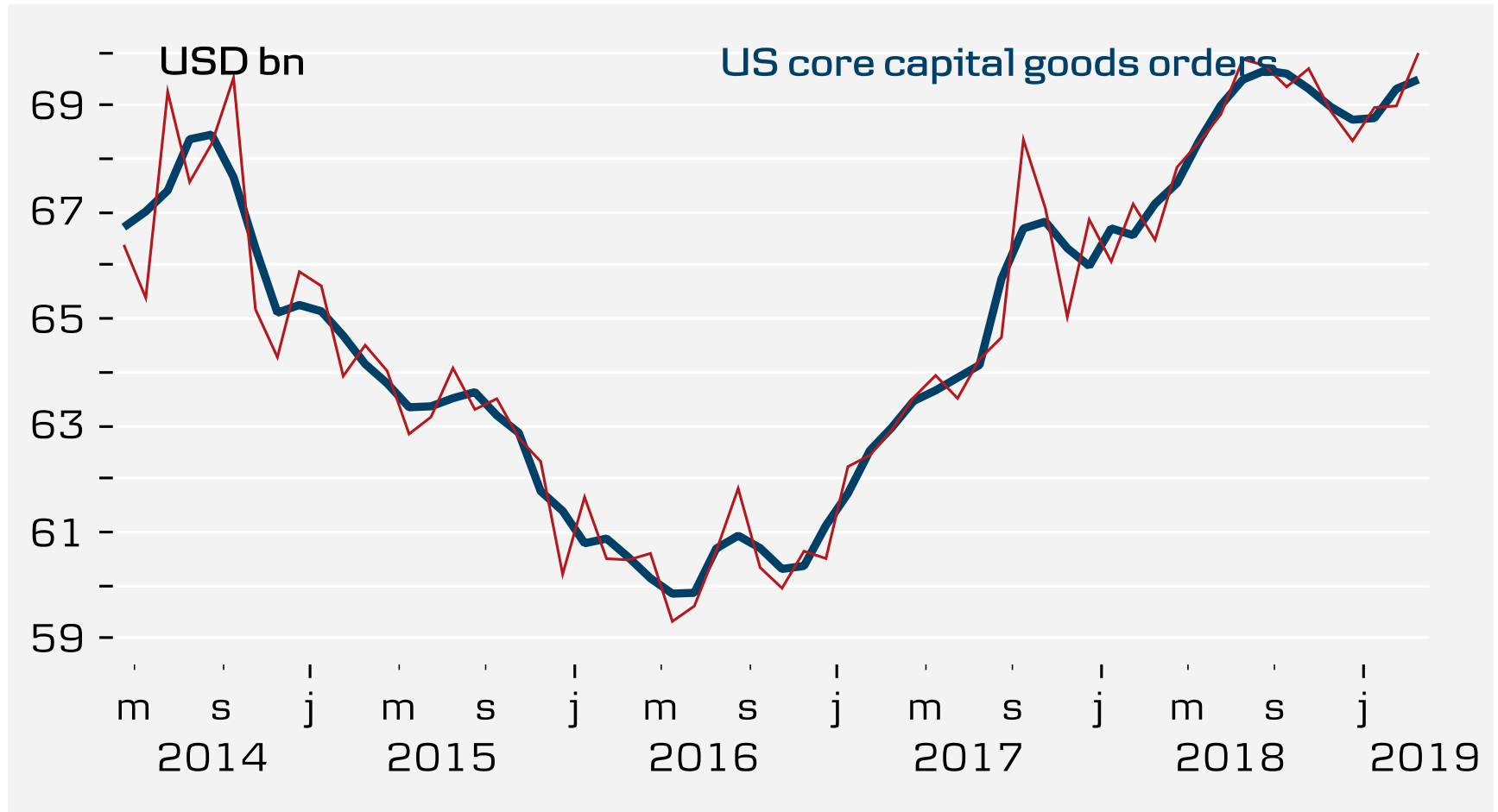
US

## Labour market: participation and labour force



US

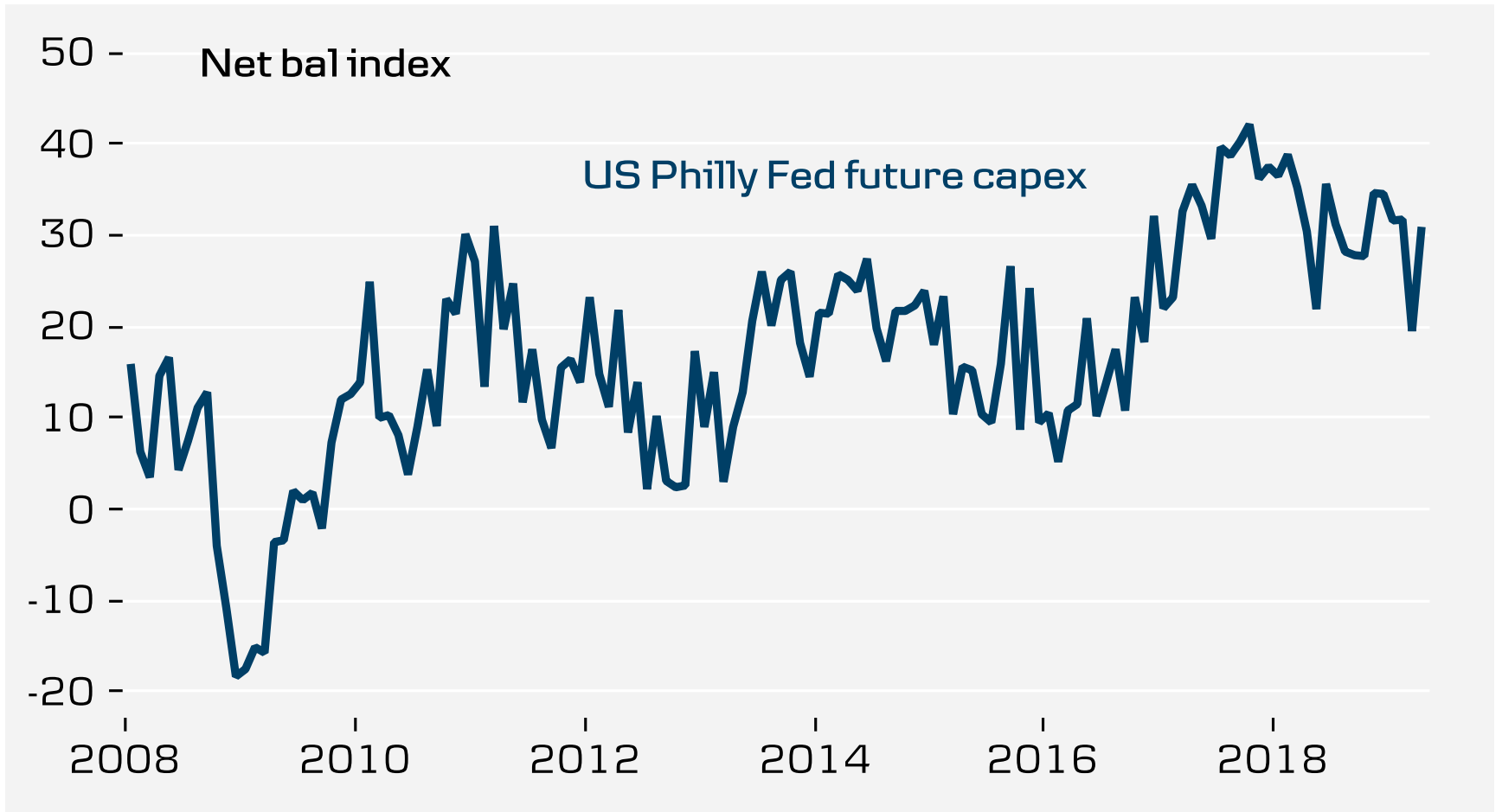
## Capex: durable goods orders





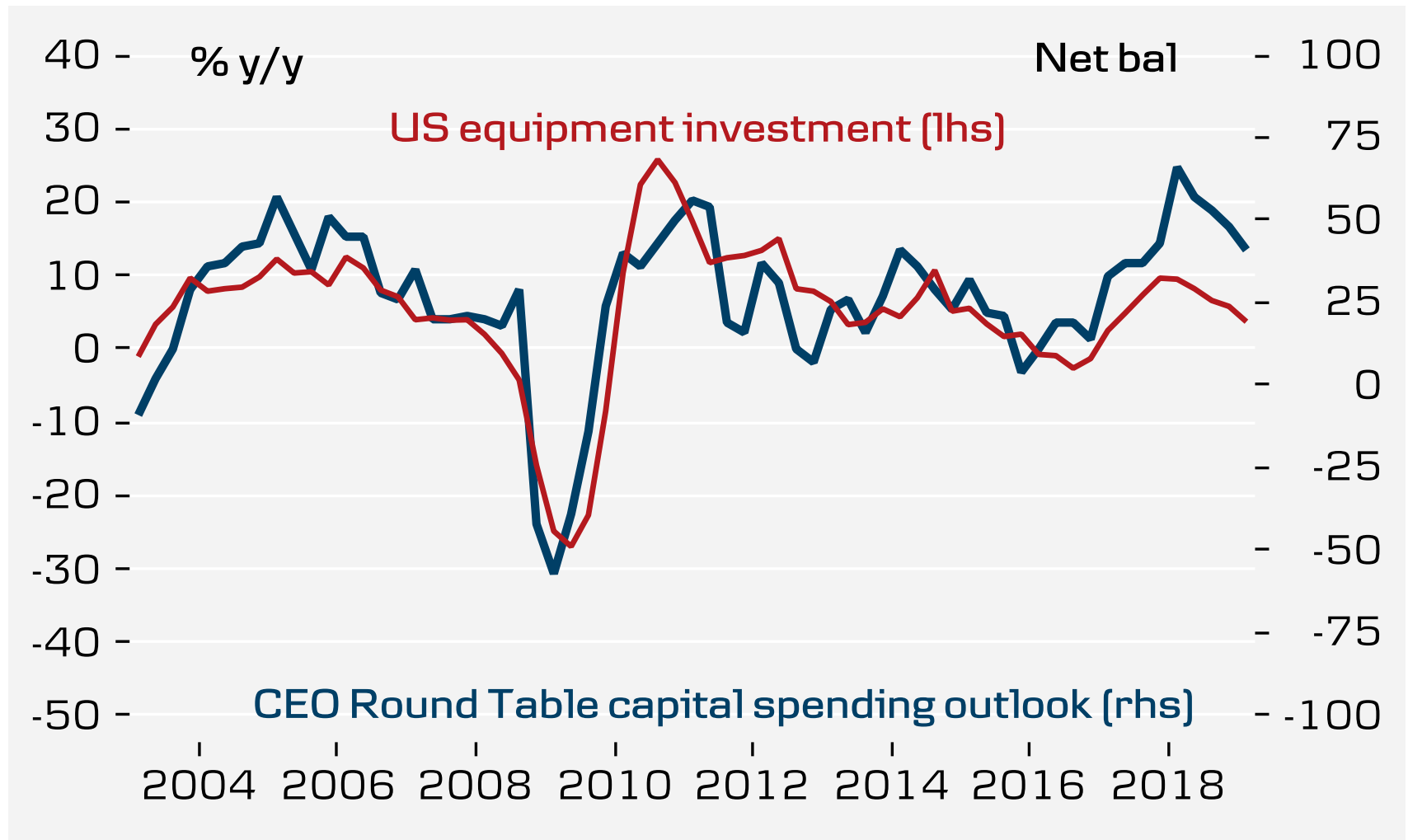
US

## Capex: Philly Fed capex outlook



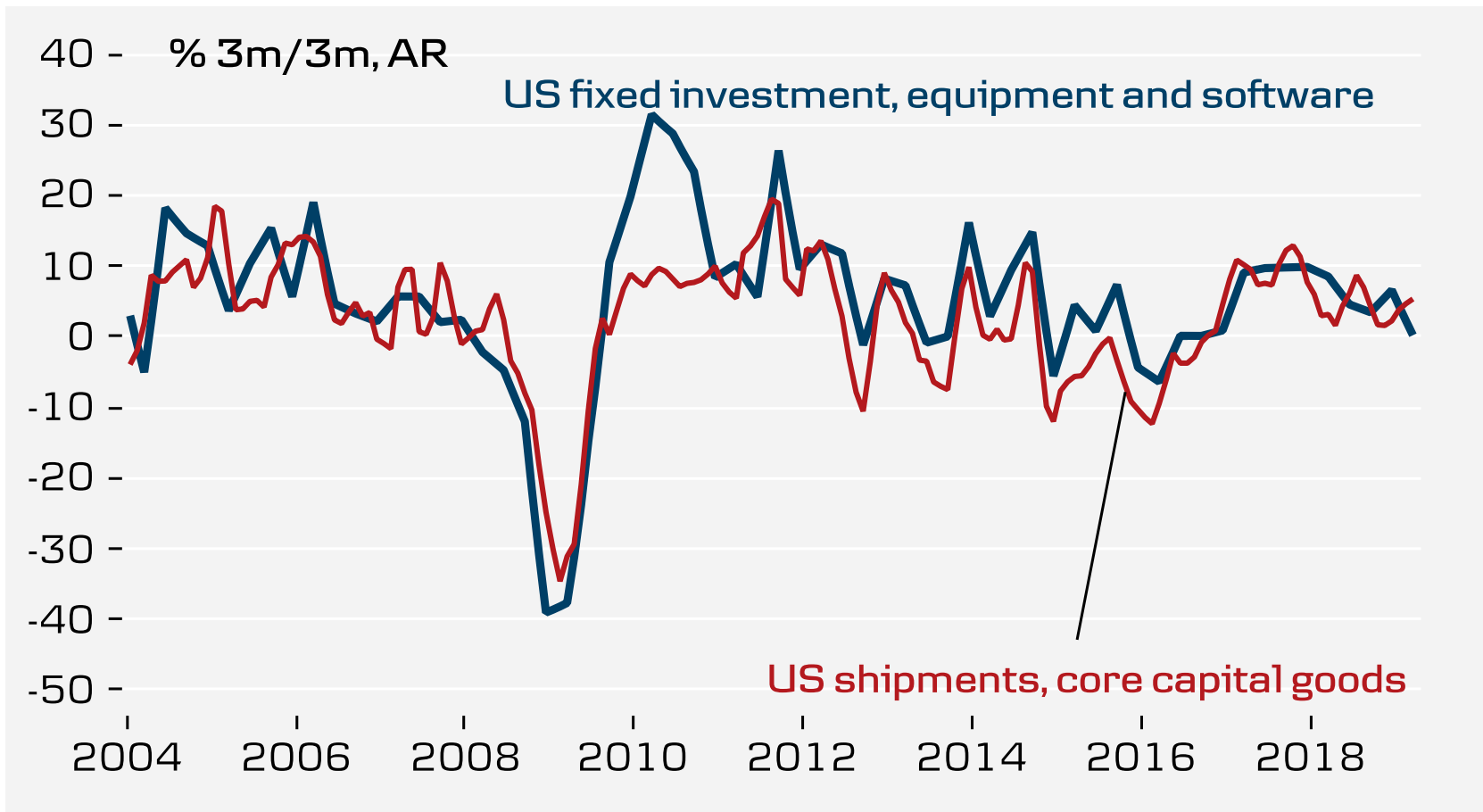
US

## Capex: CEO Round table capex outlook



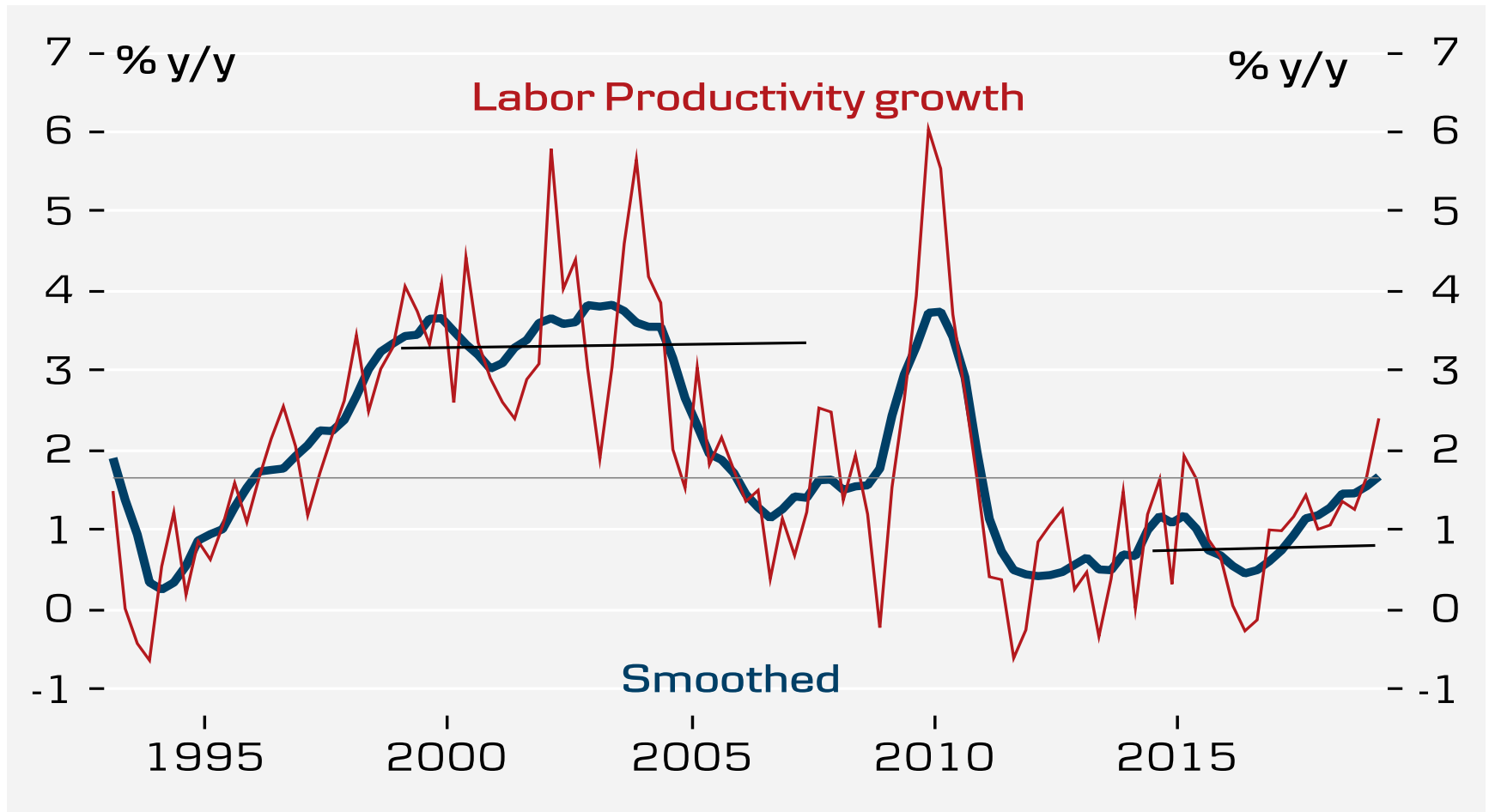
US

## Capex: shipments



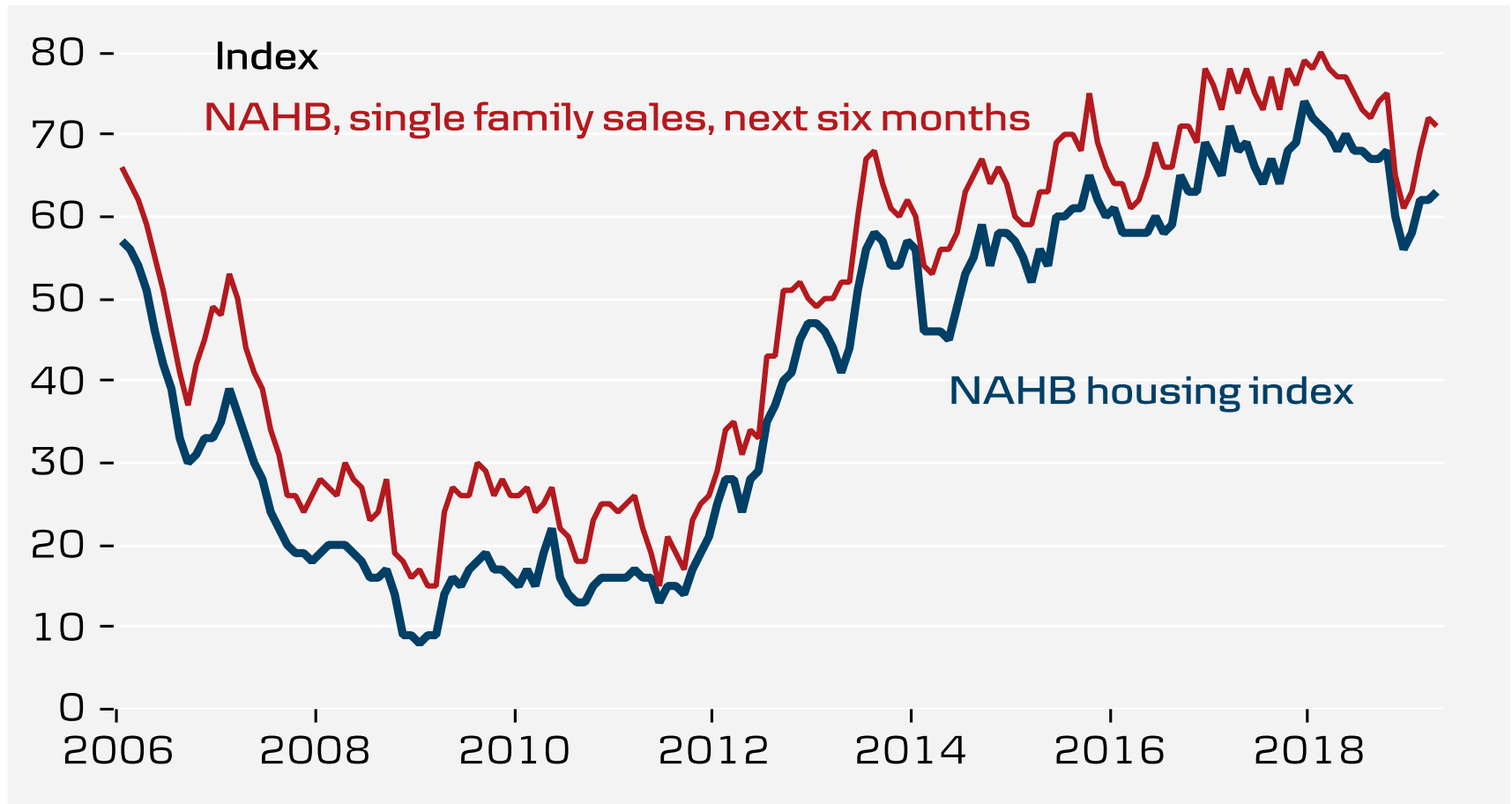
US

# US productivity



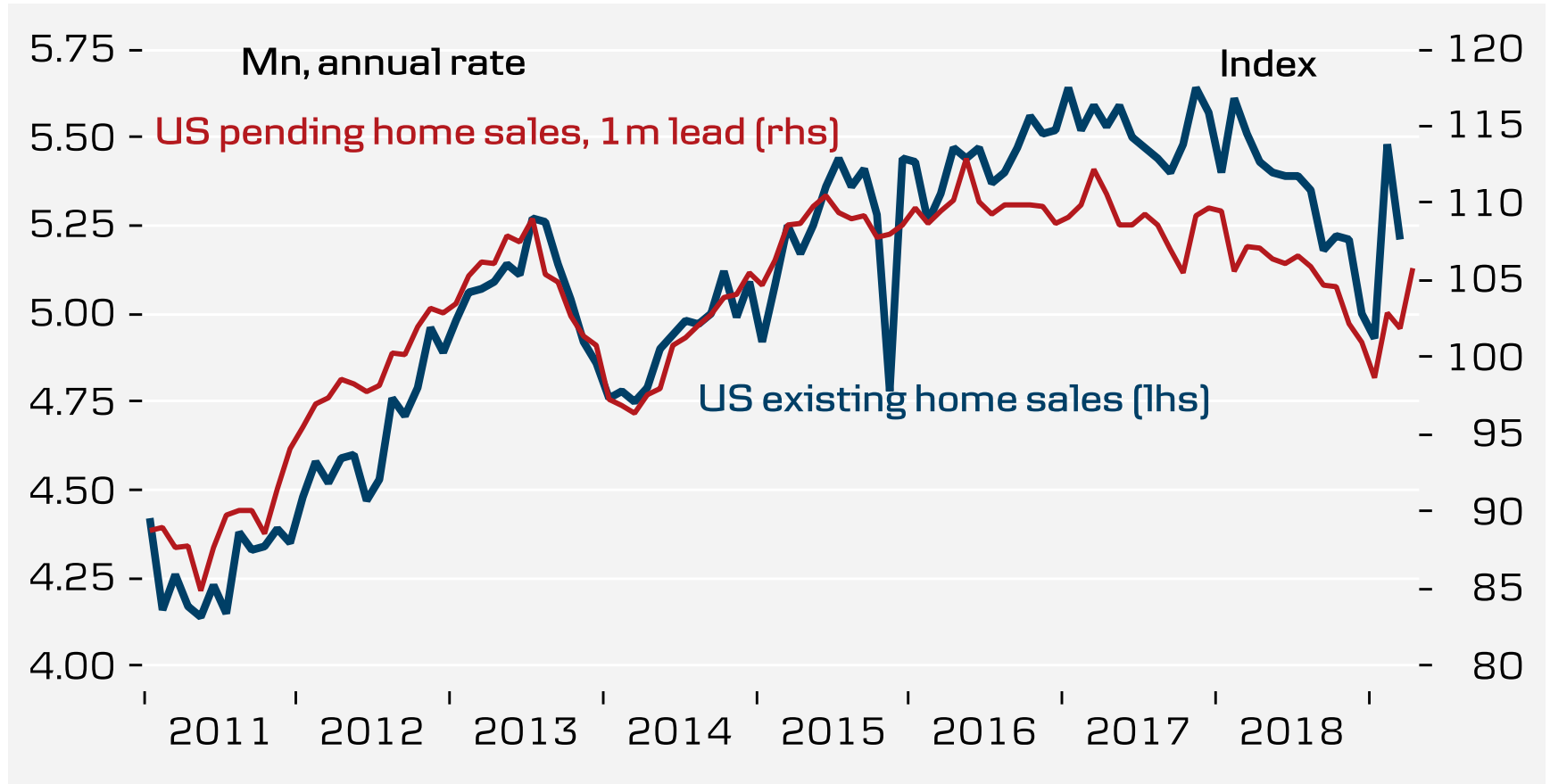
US

## Housing: confidence



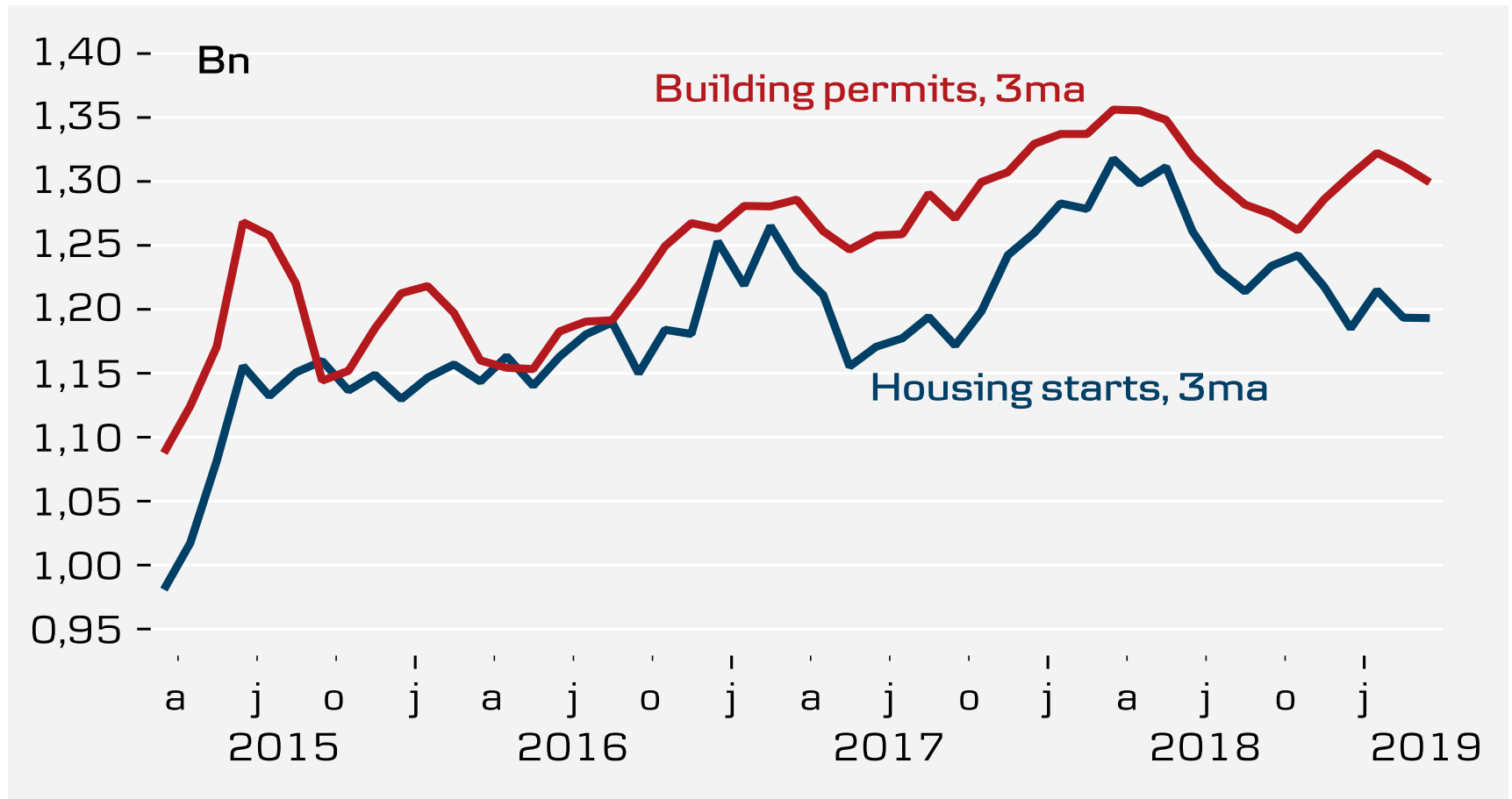
US

## Housing: home sales



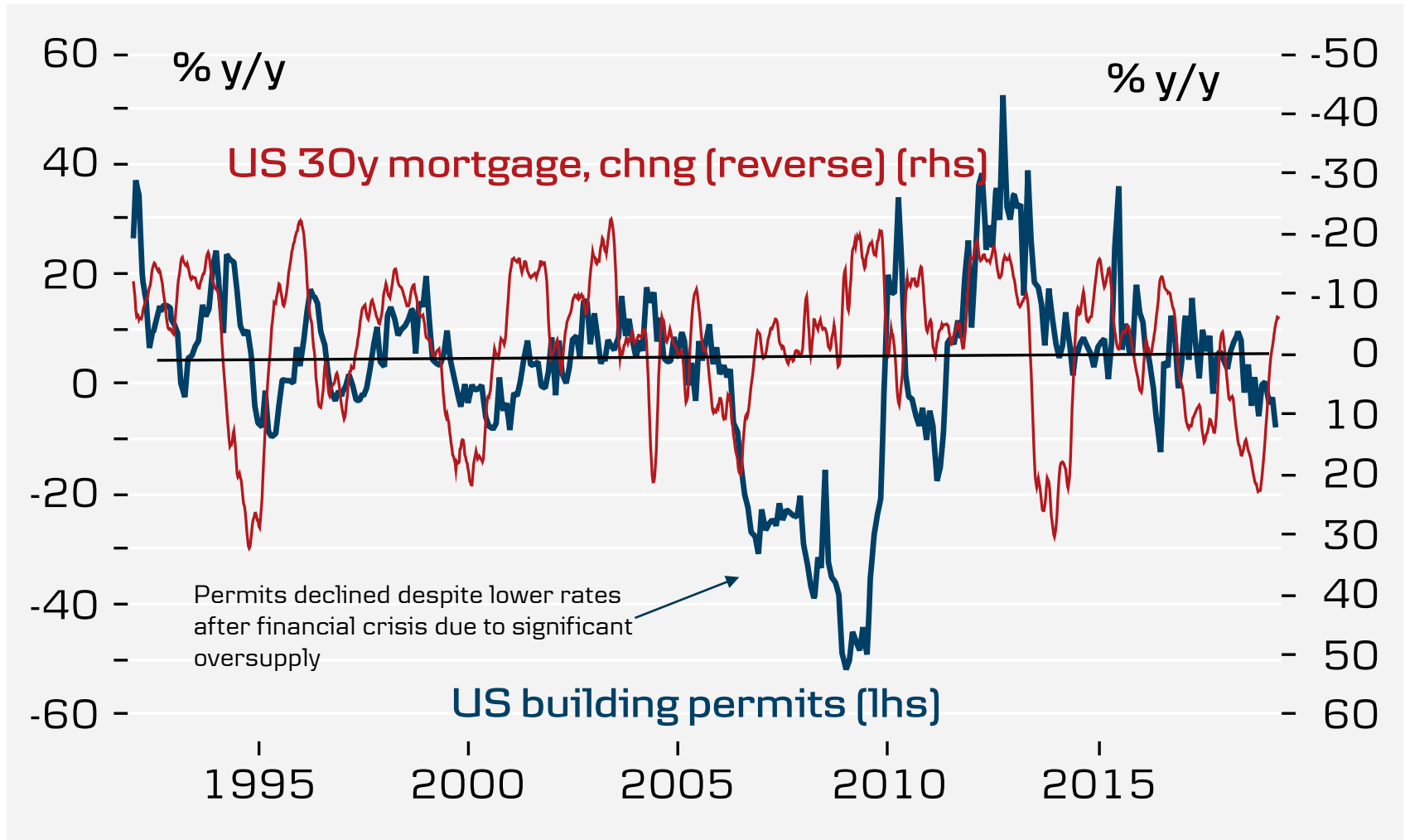
US

## Housing: permits and starts



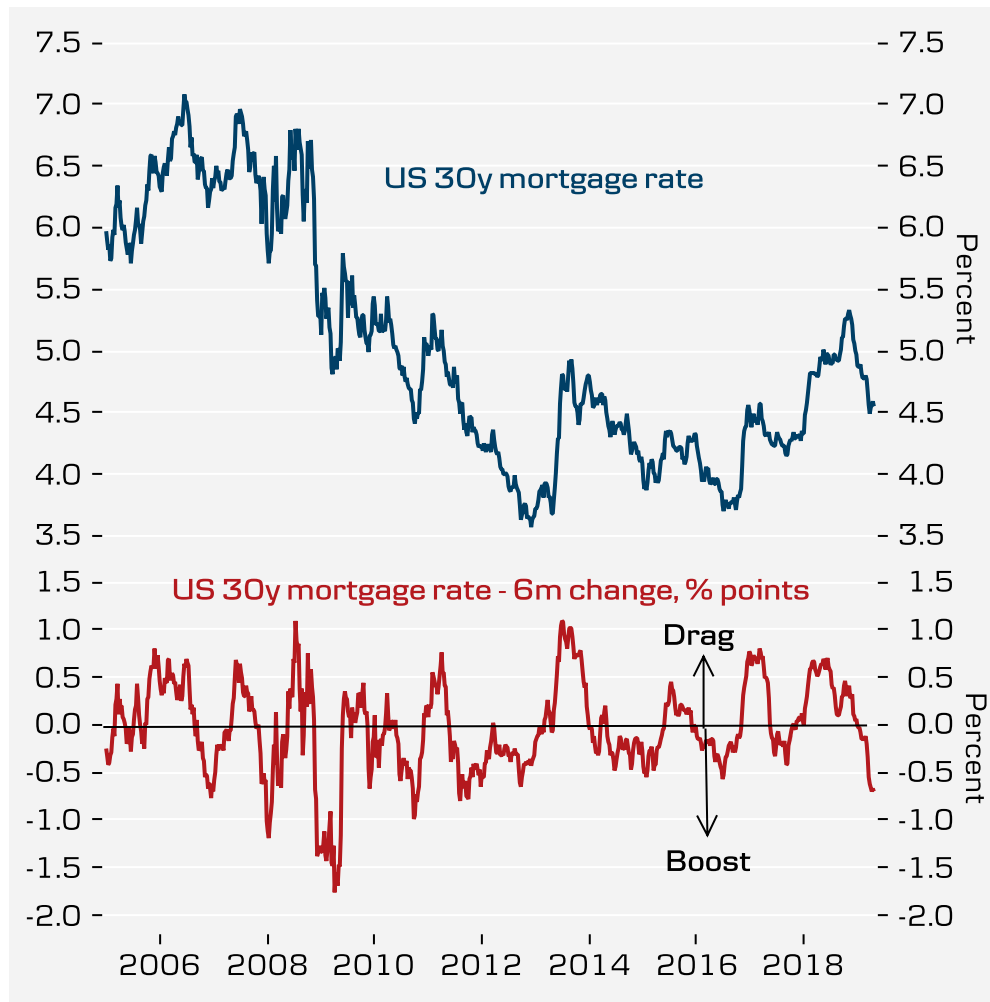
US

## Housing: permits vs mortgage rates



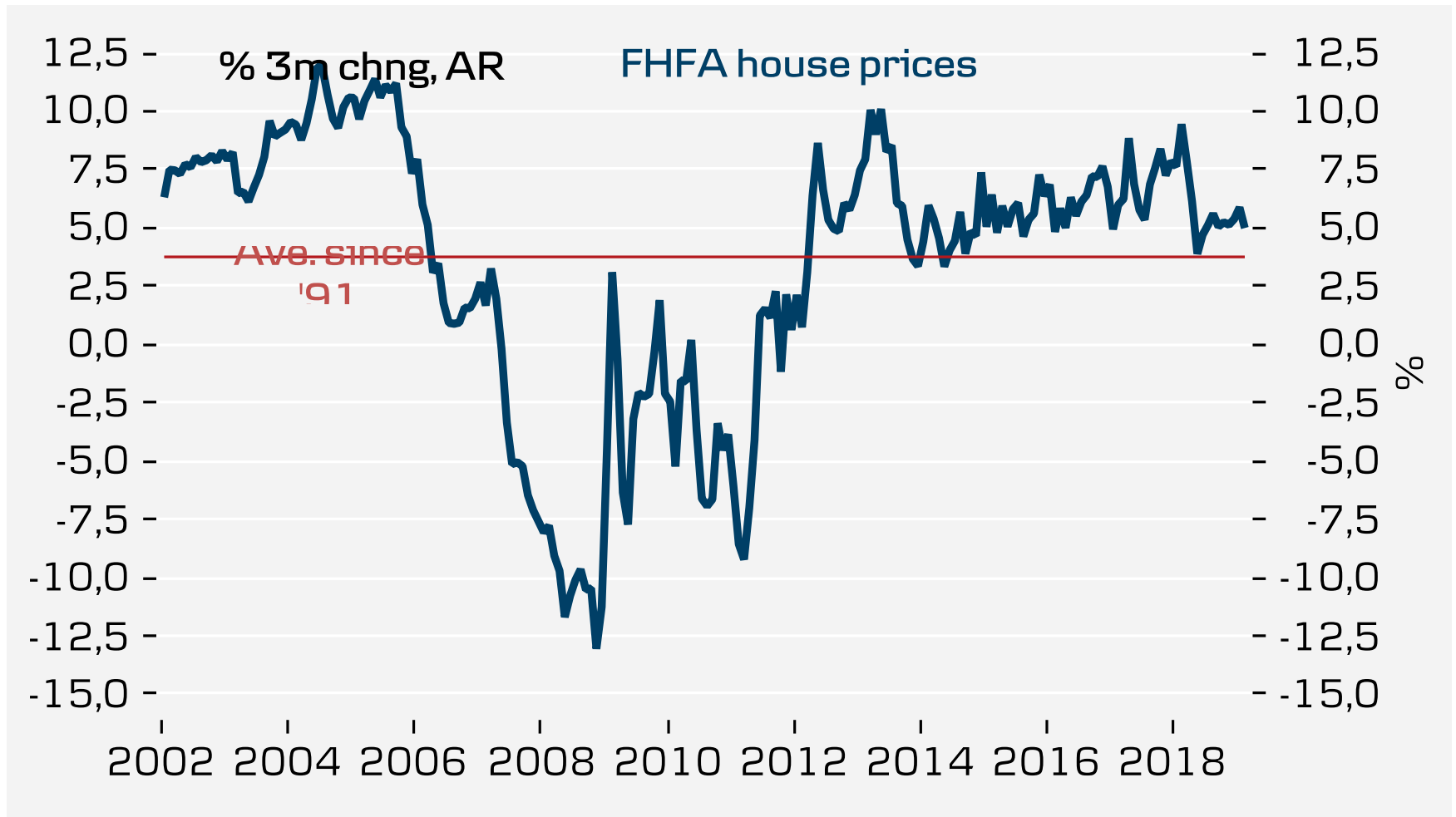


## Housing: US impulse from mortgage rates



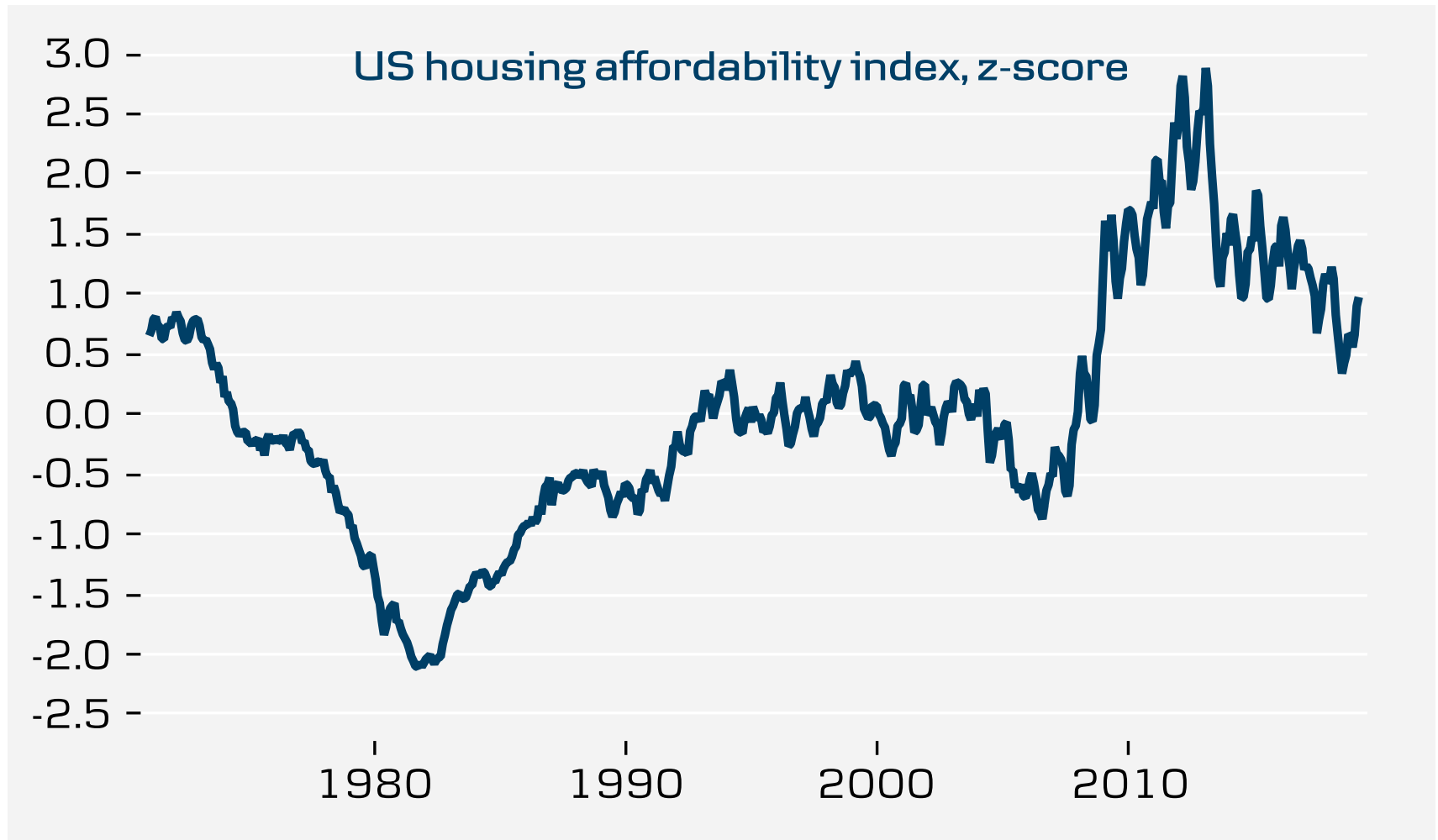
US

## Housing: prices



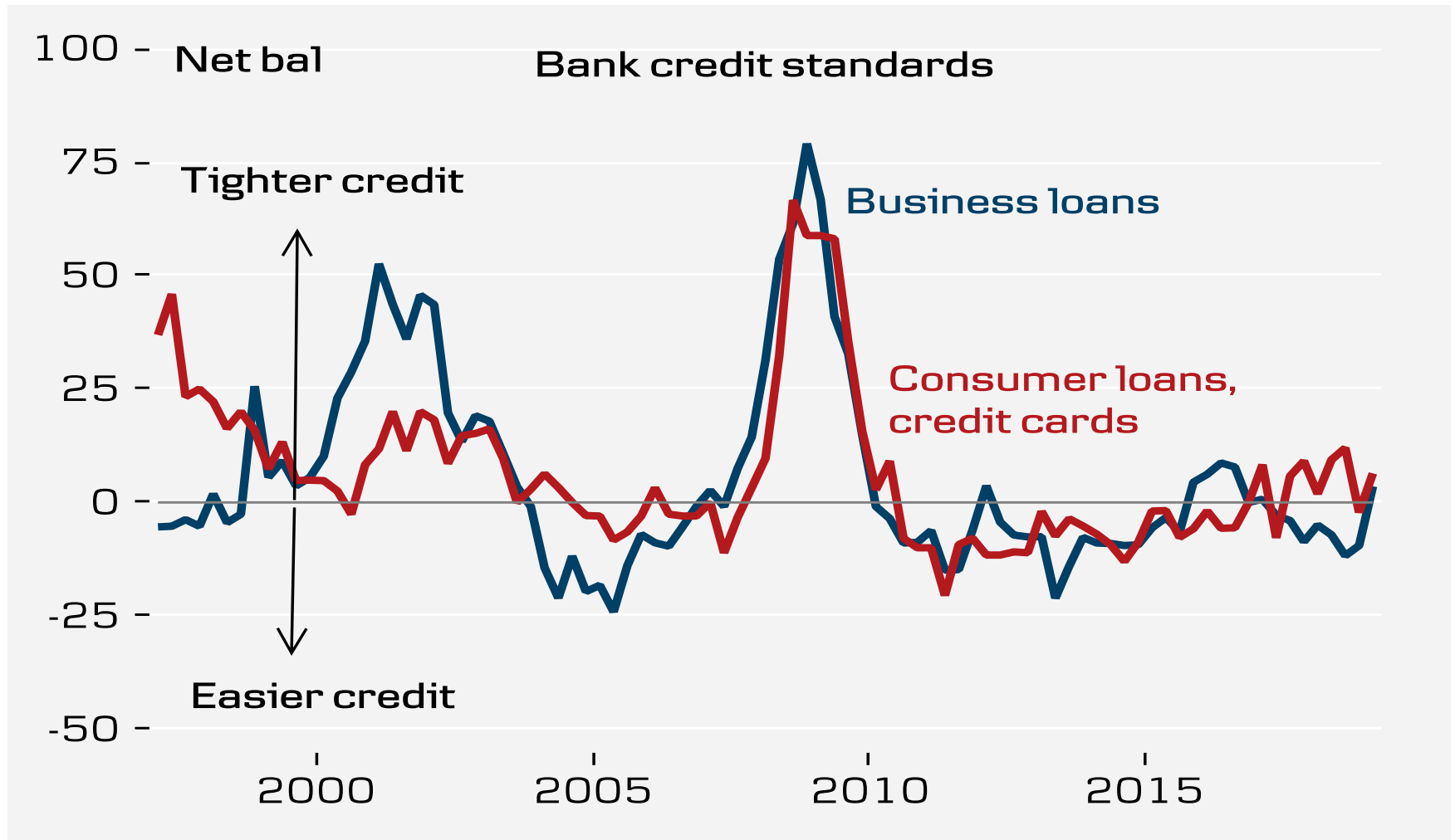
US

## Housing - affordability



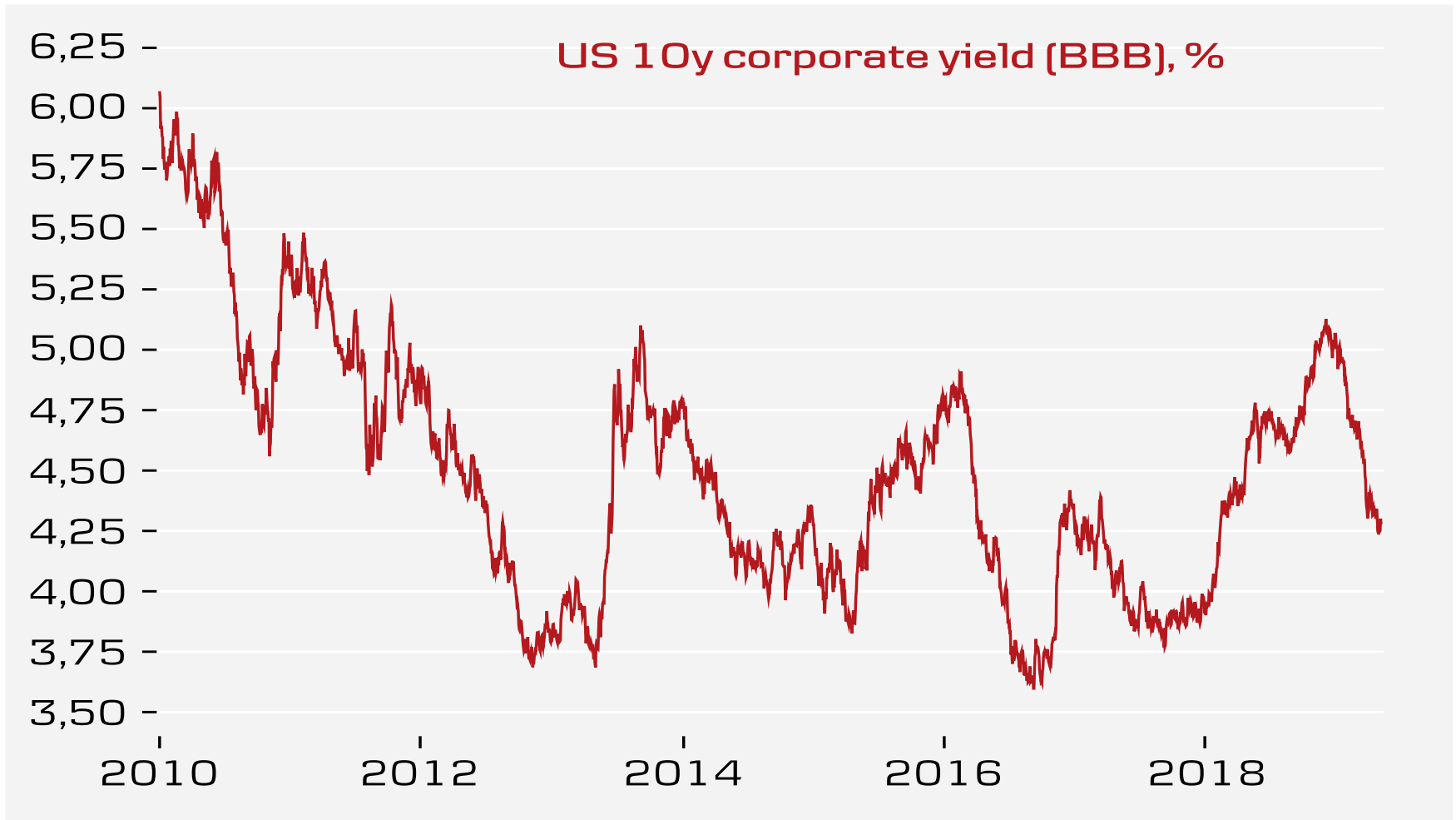
US

## Credit: lending standards



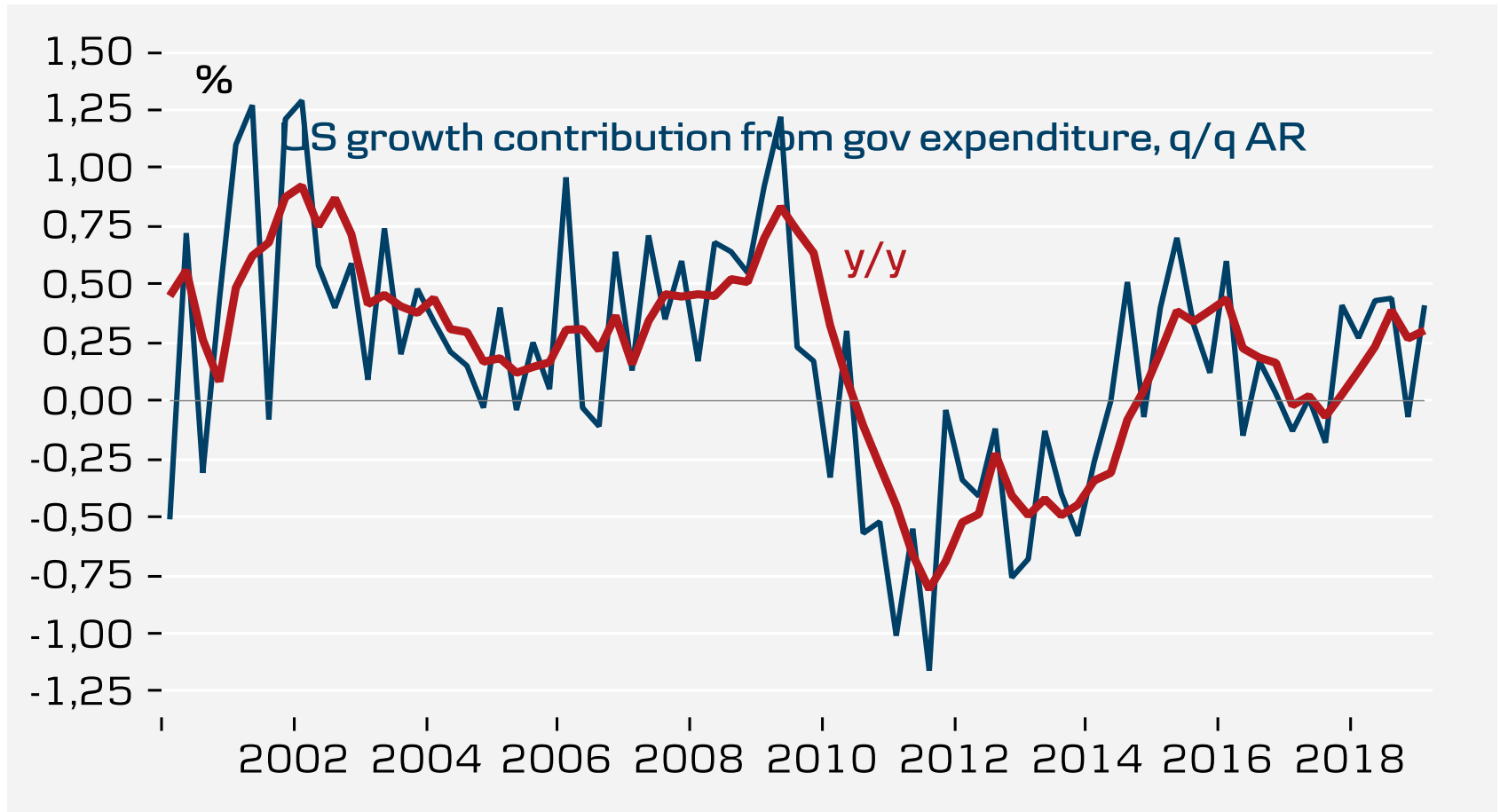
US

## Credit yields



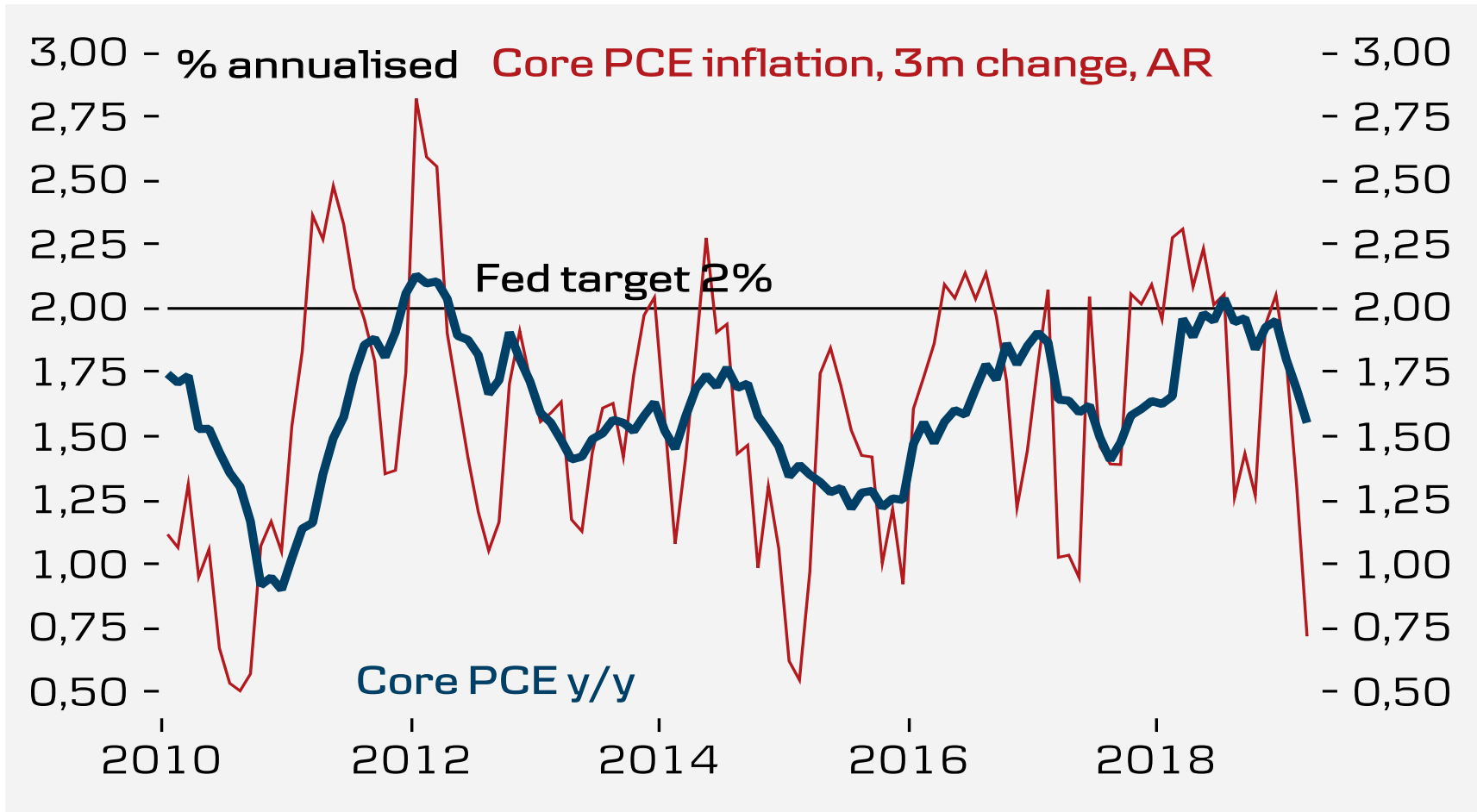
US

## Public expenditure



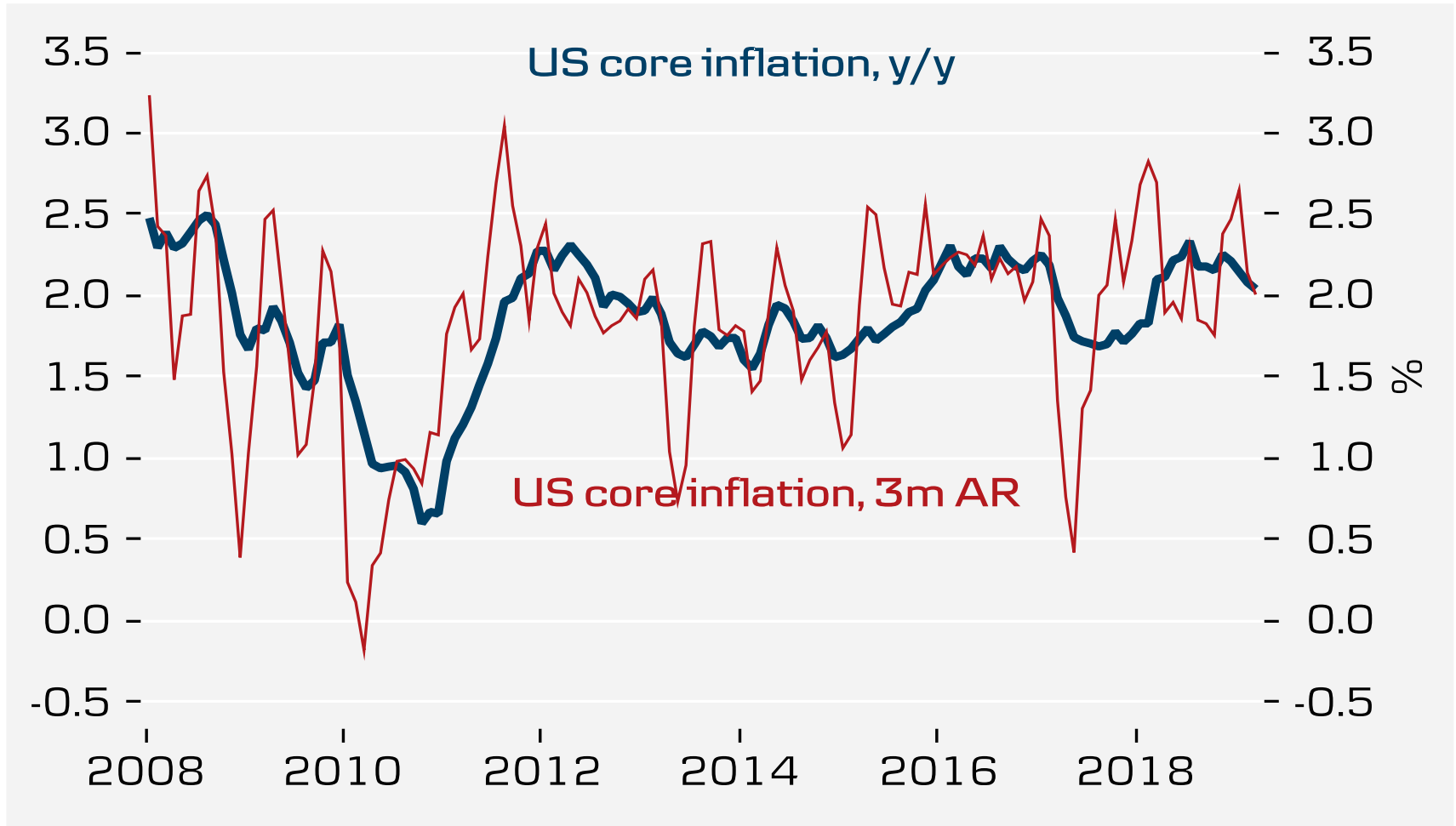
US

## Inflation - core PCE



US

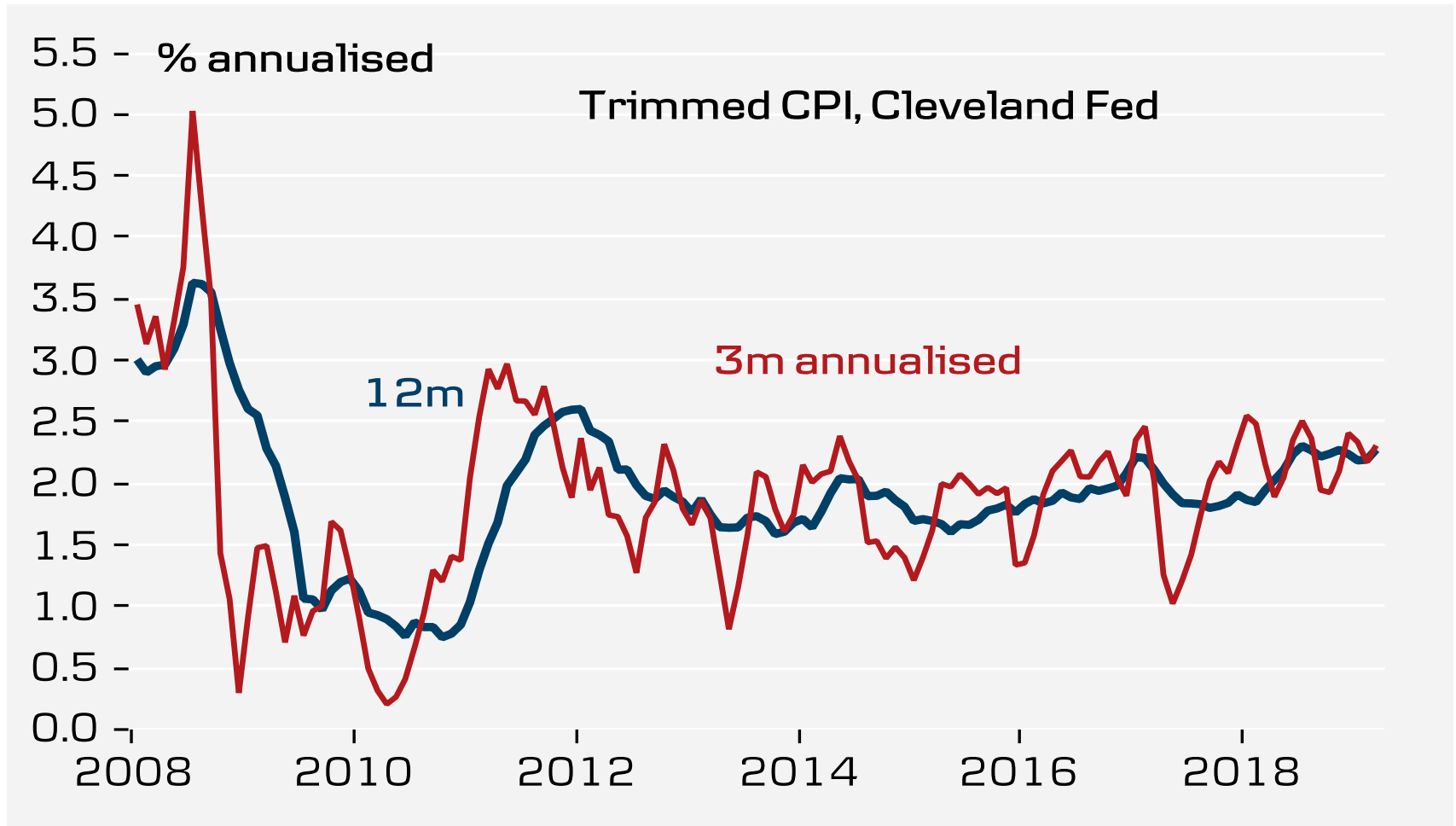
## Inflation - core CPI





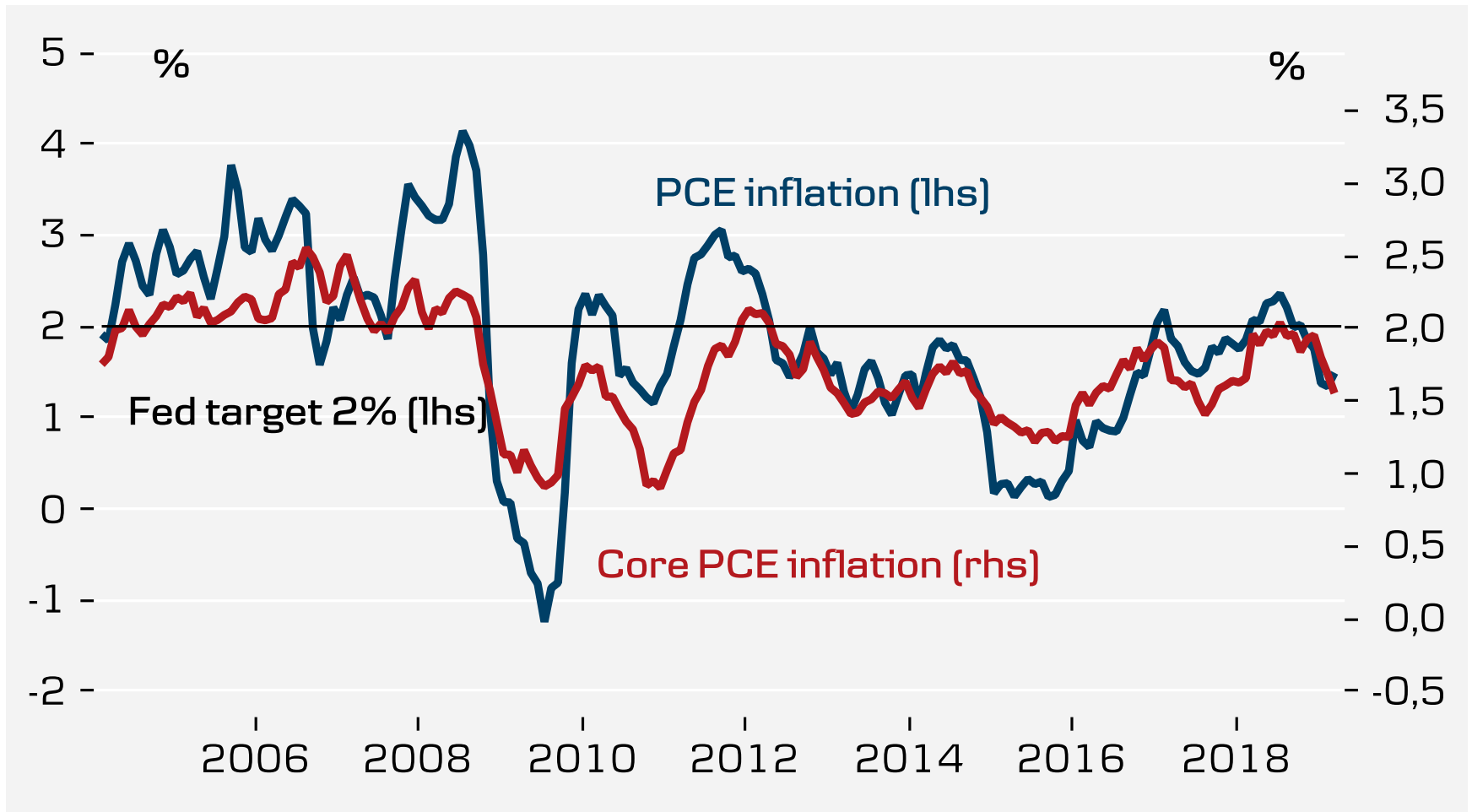
US

## Inflation - trimmed CPI



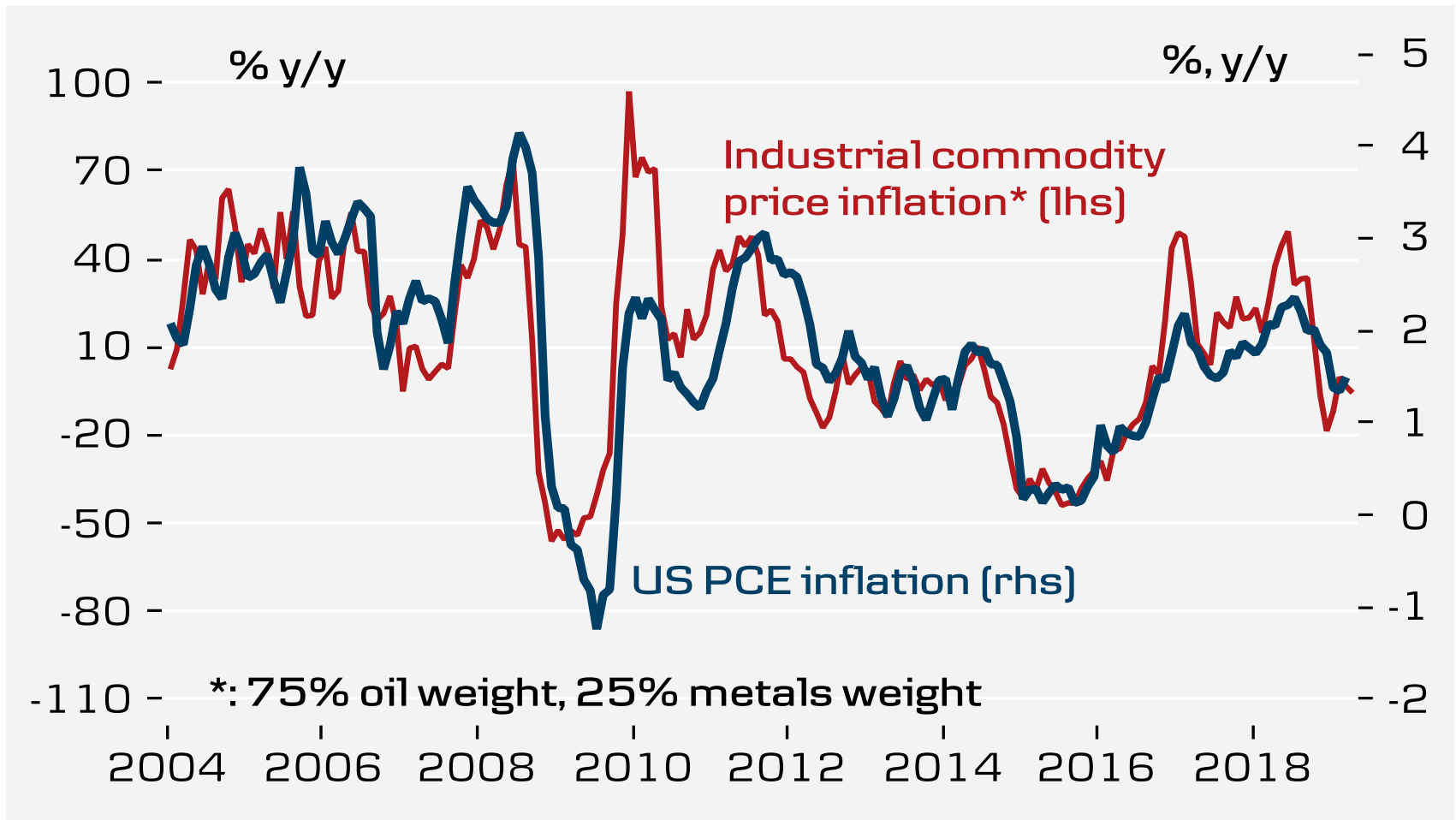
US

## Headline vs core PCE inflation



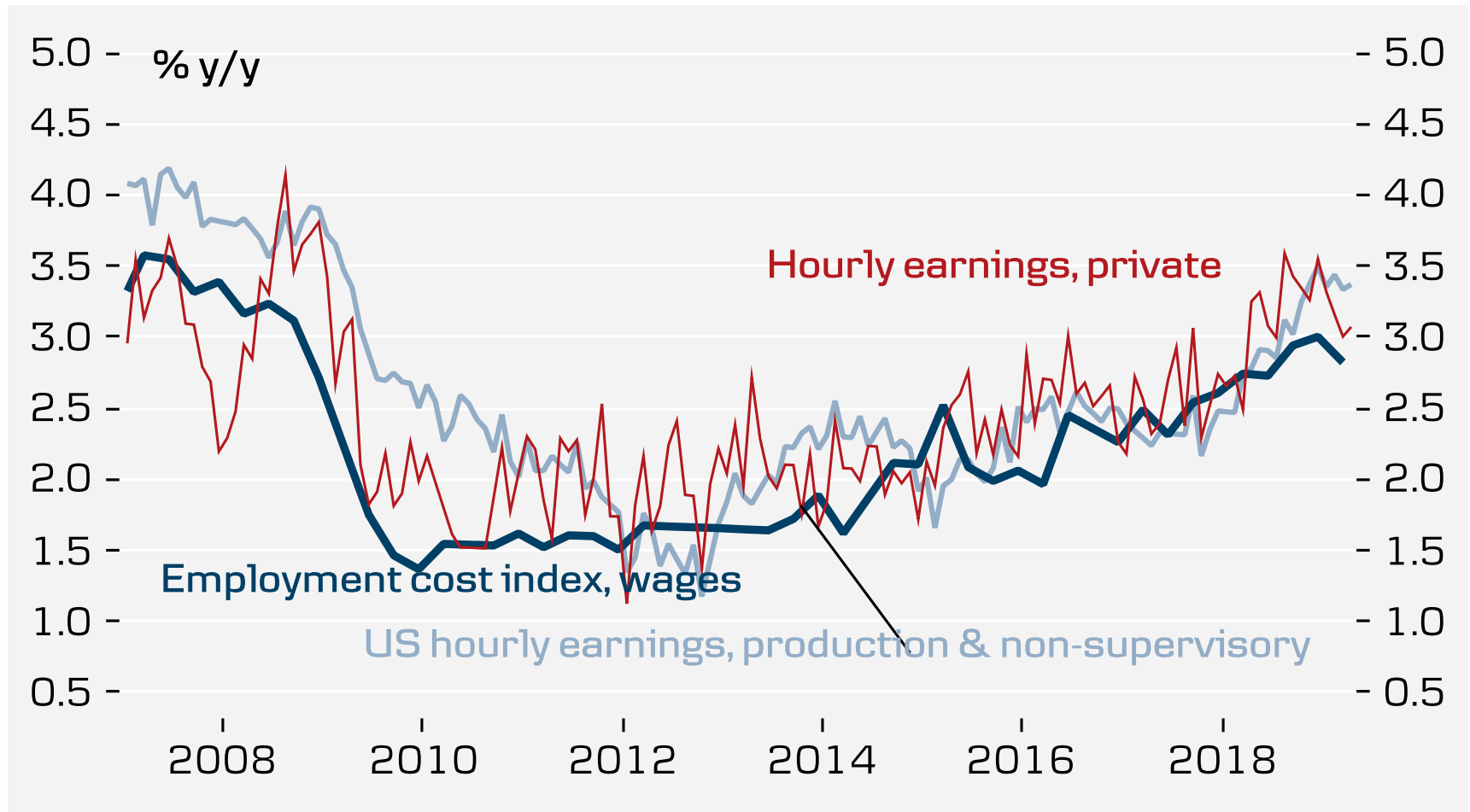
US

## Inflation - commodity prices vs headline



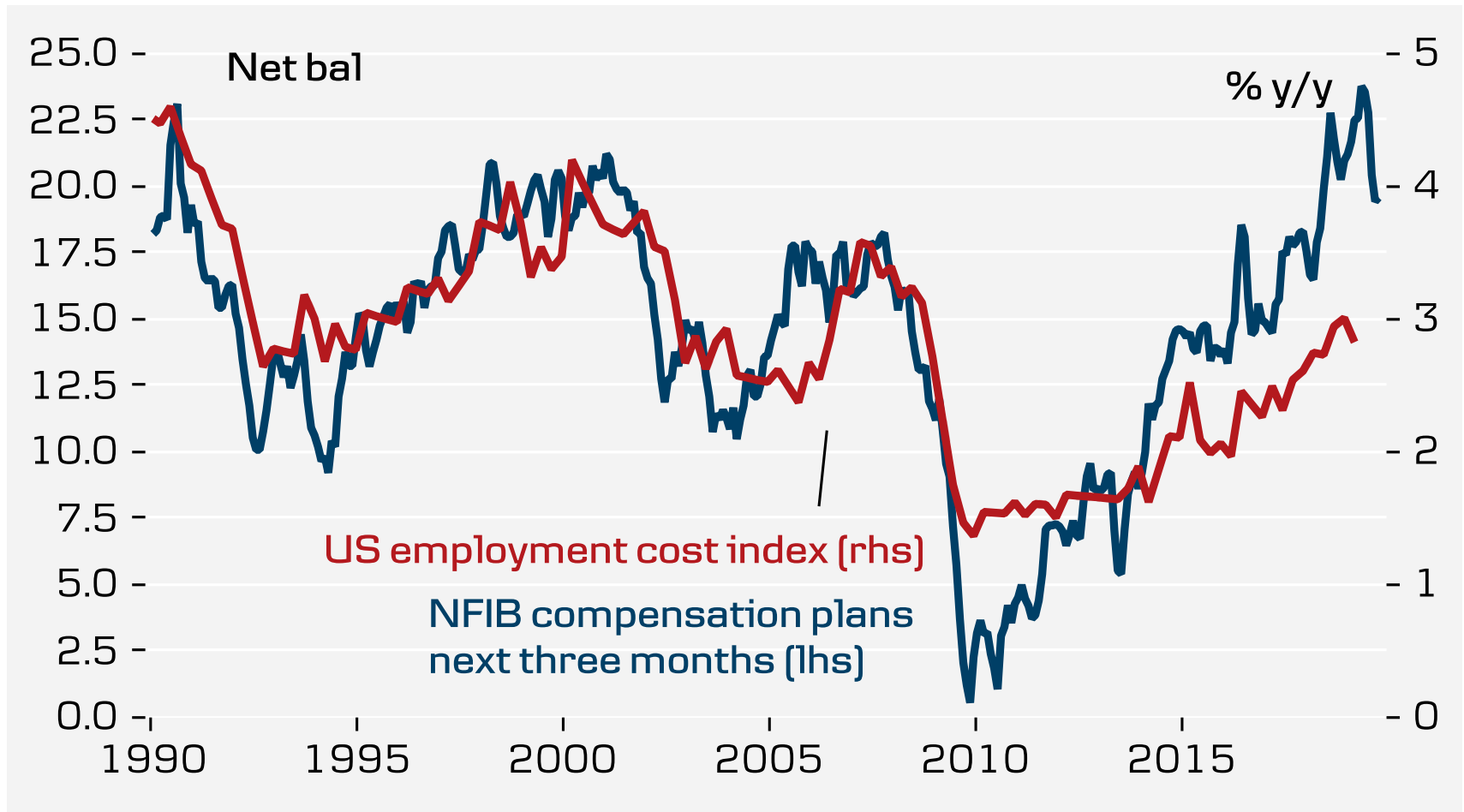
US

## Inflation - different wage measures



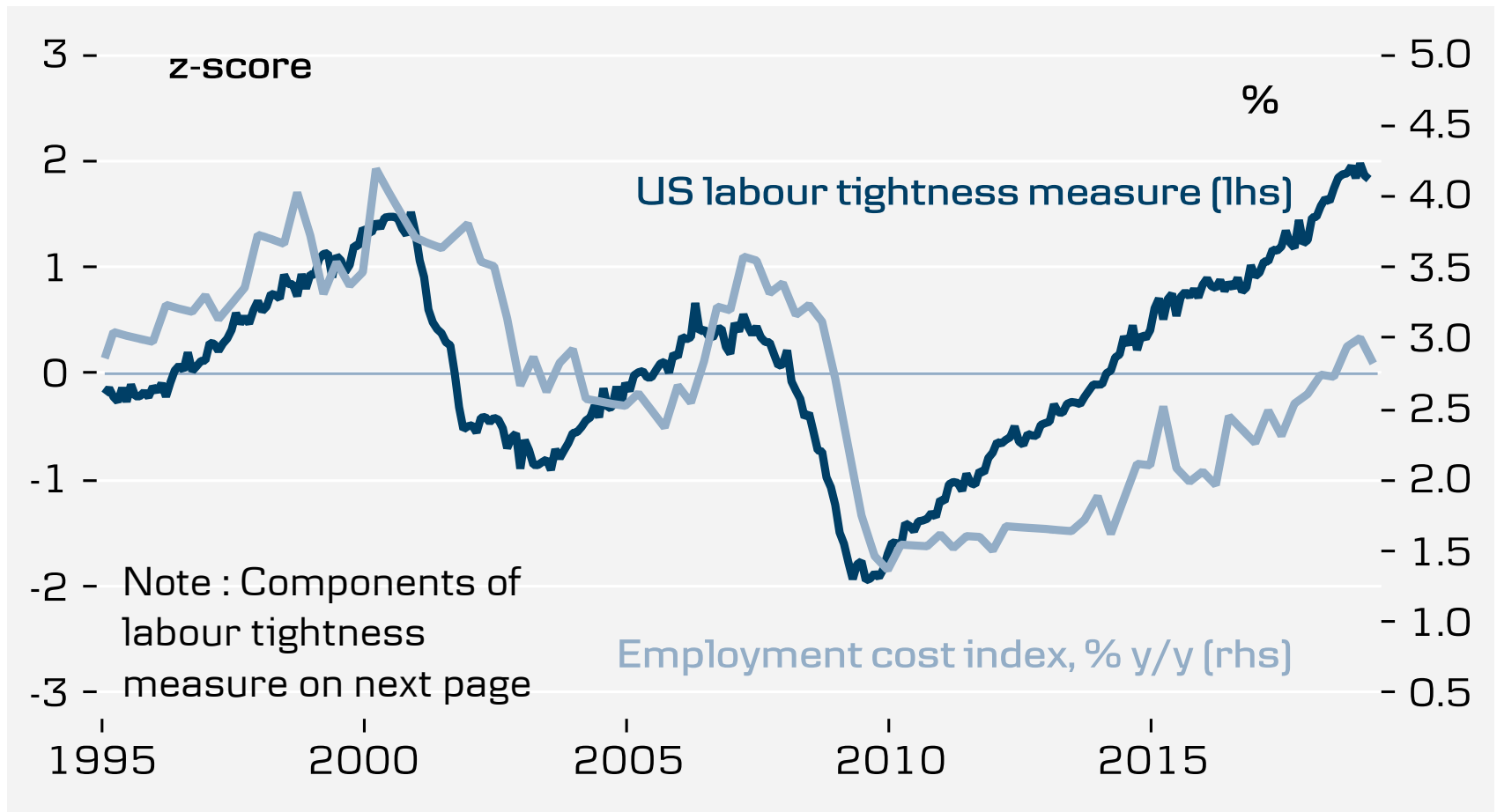
US

## Inflation - NFIB and Employment Cost Index



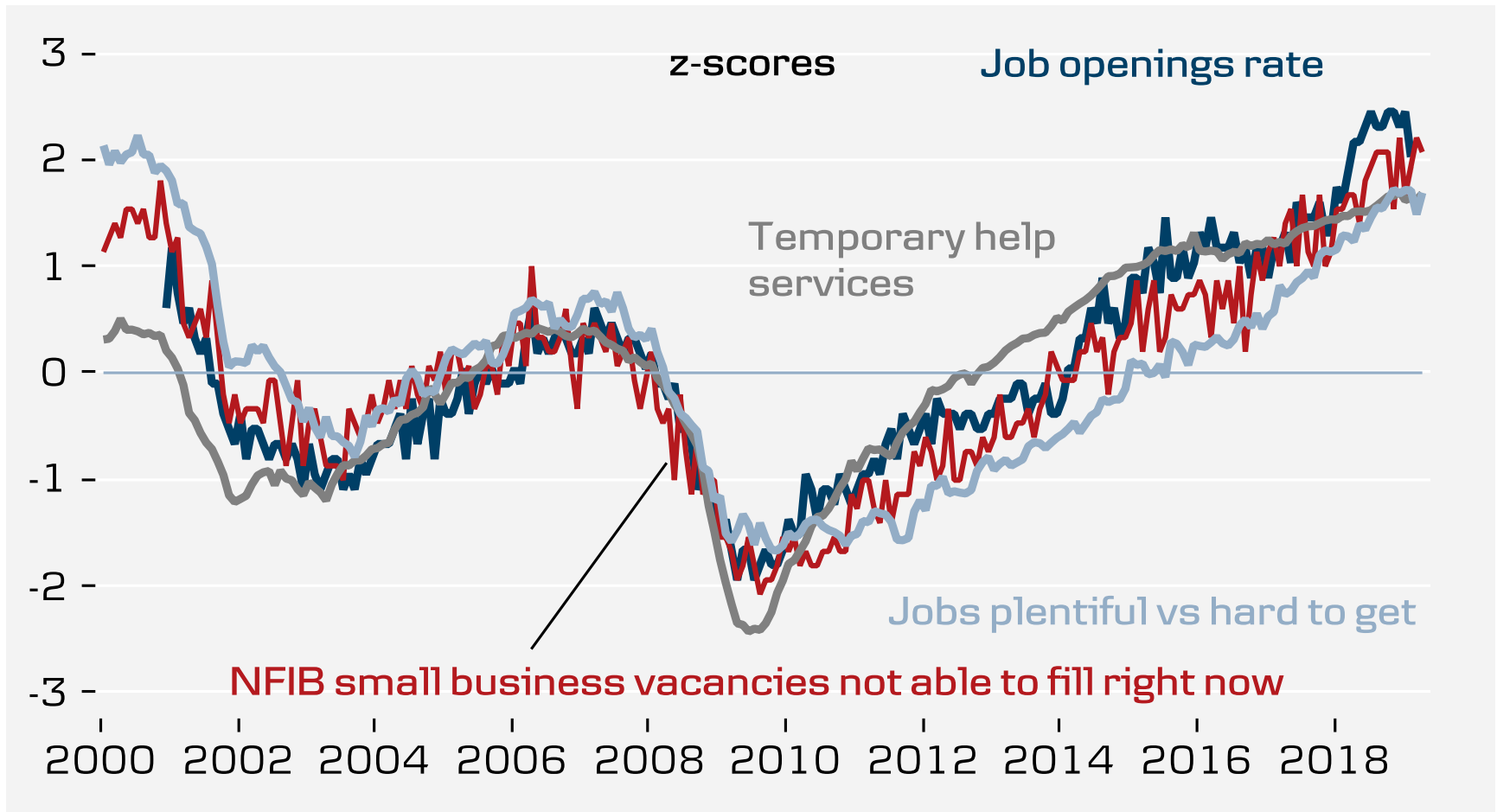
US

## Inflation - labour market tightness indicators



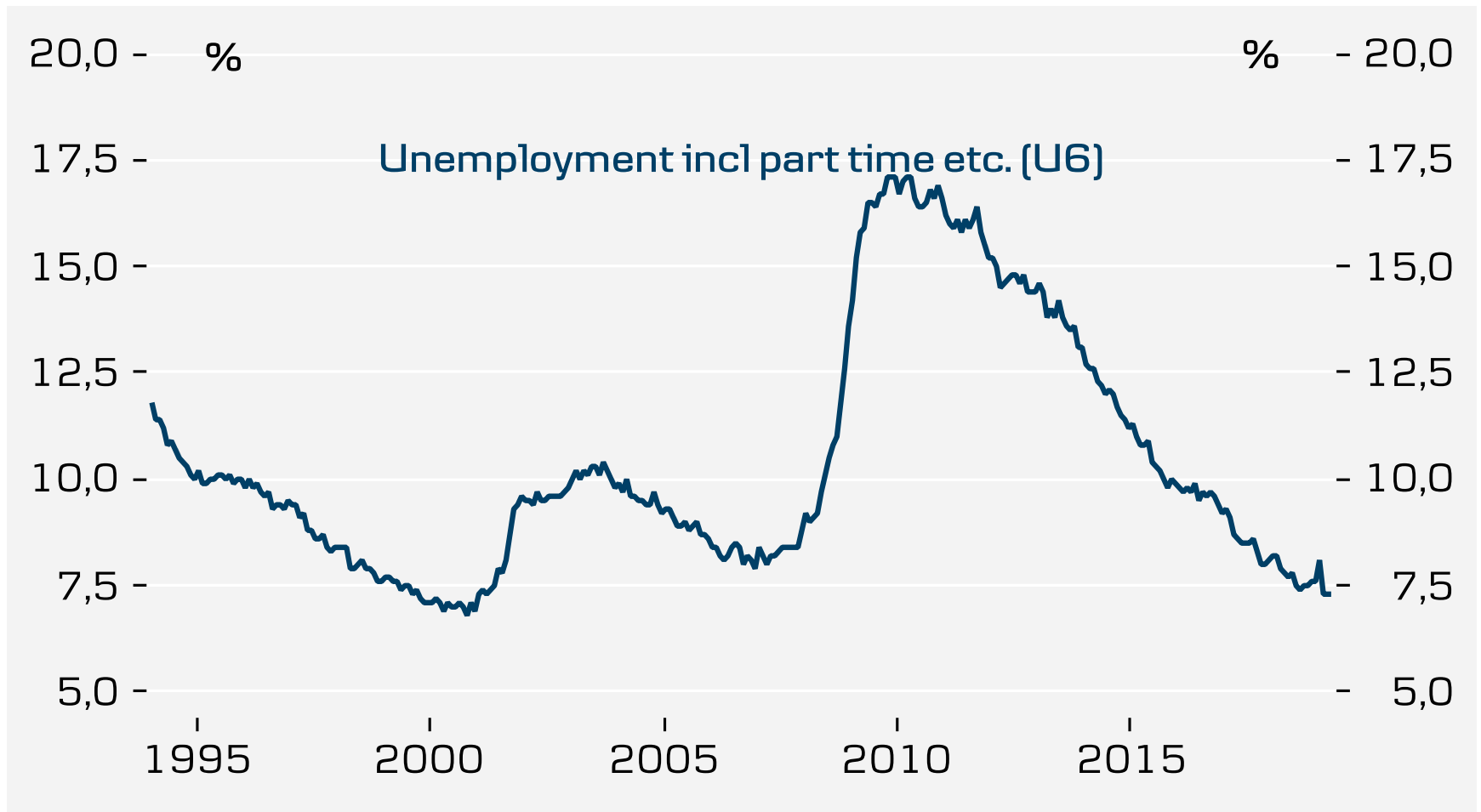
US

## Inflation - labour market tightness indicators



US

## U6 unemployment

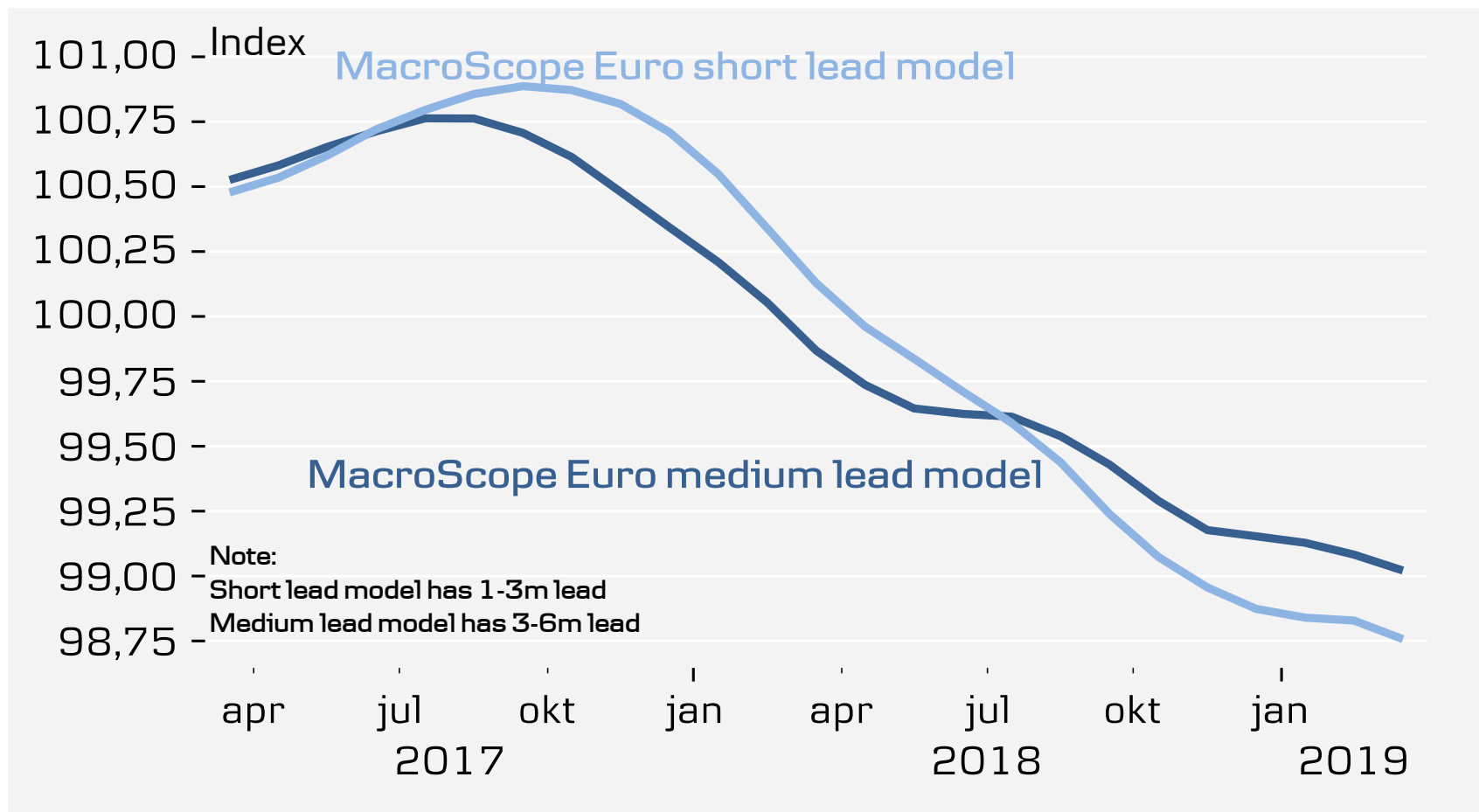




*Euro*

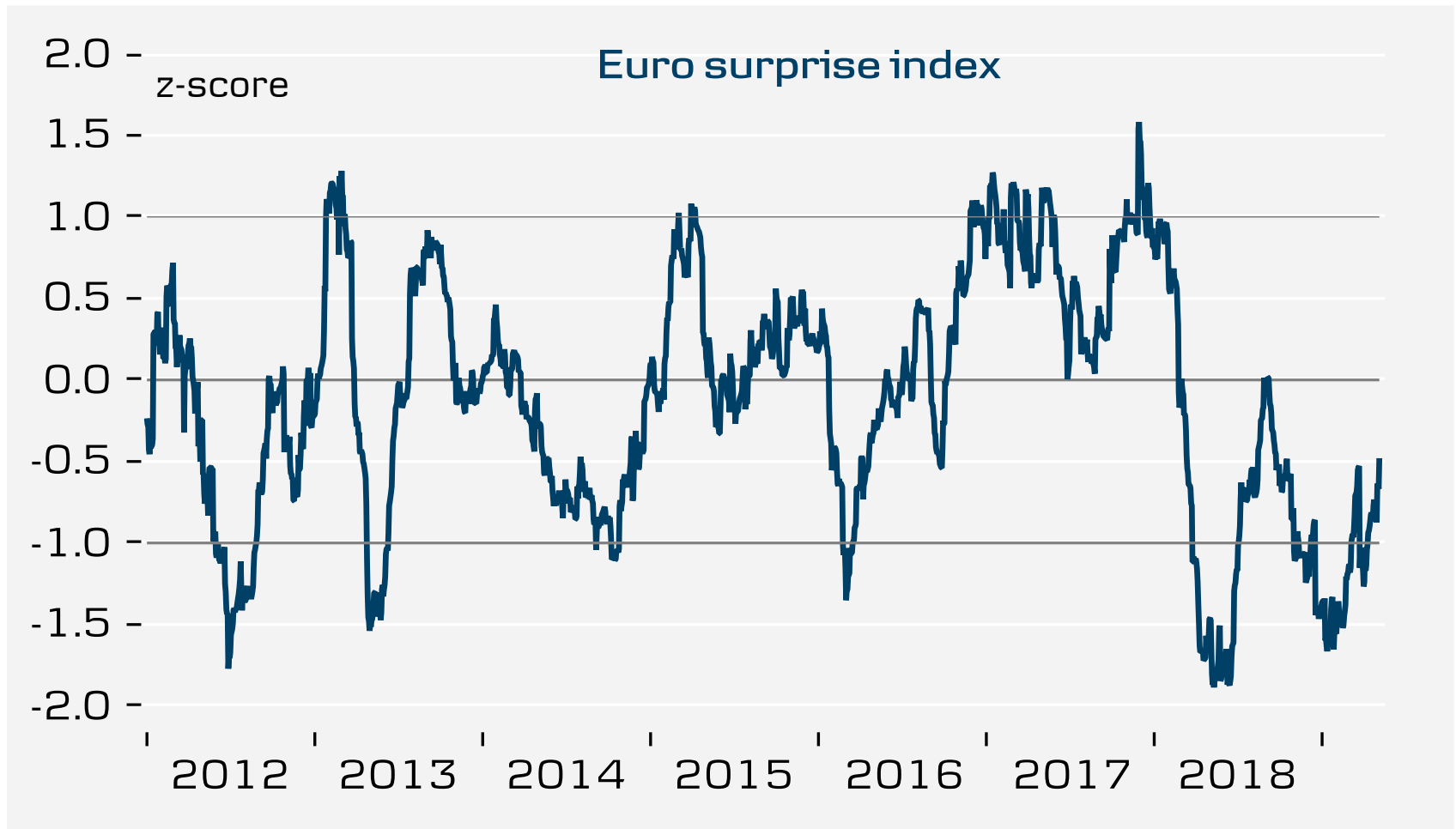
Euro

## MacroScope models



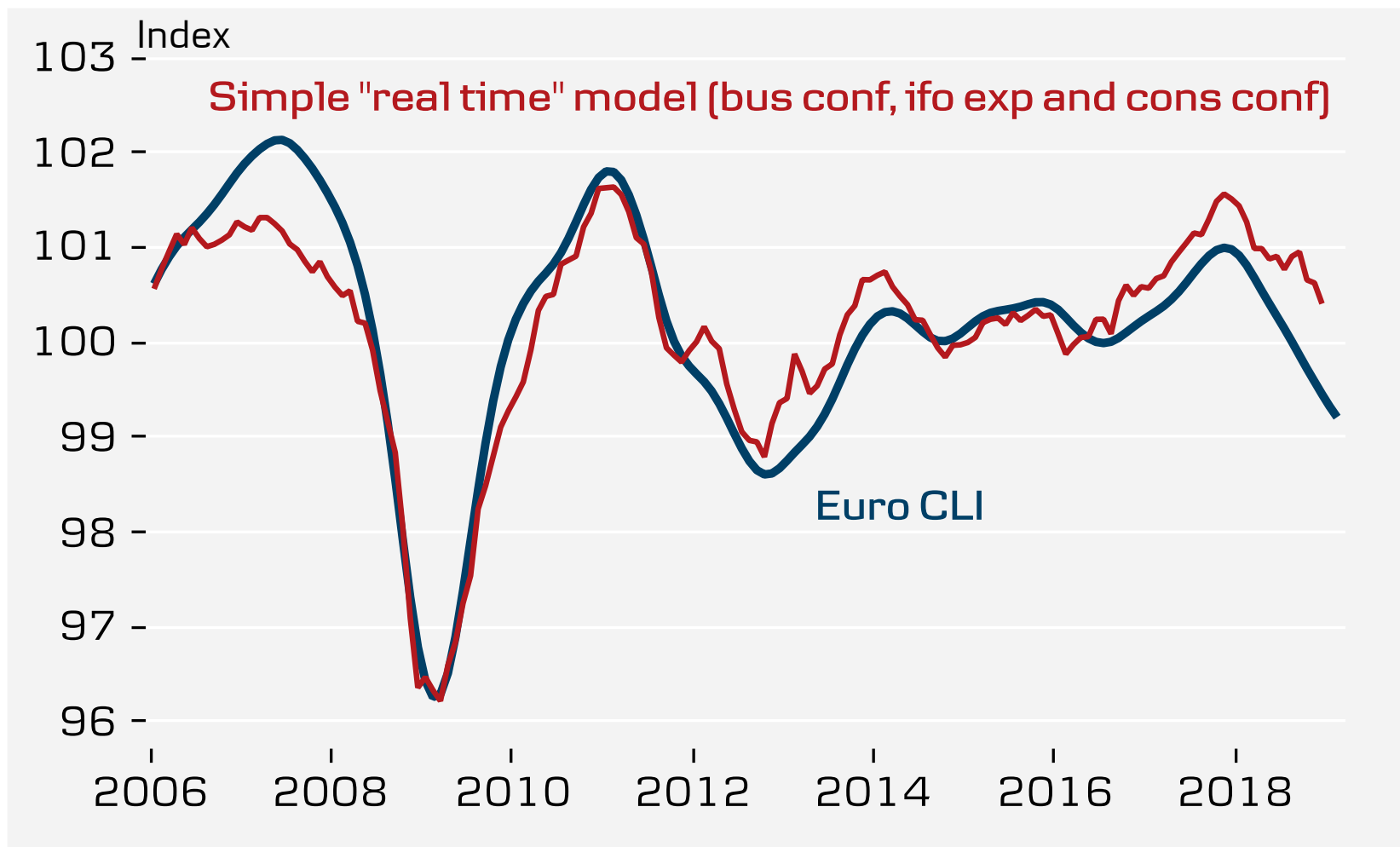
Euro

## Euro surprise index



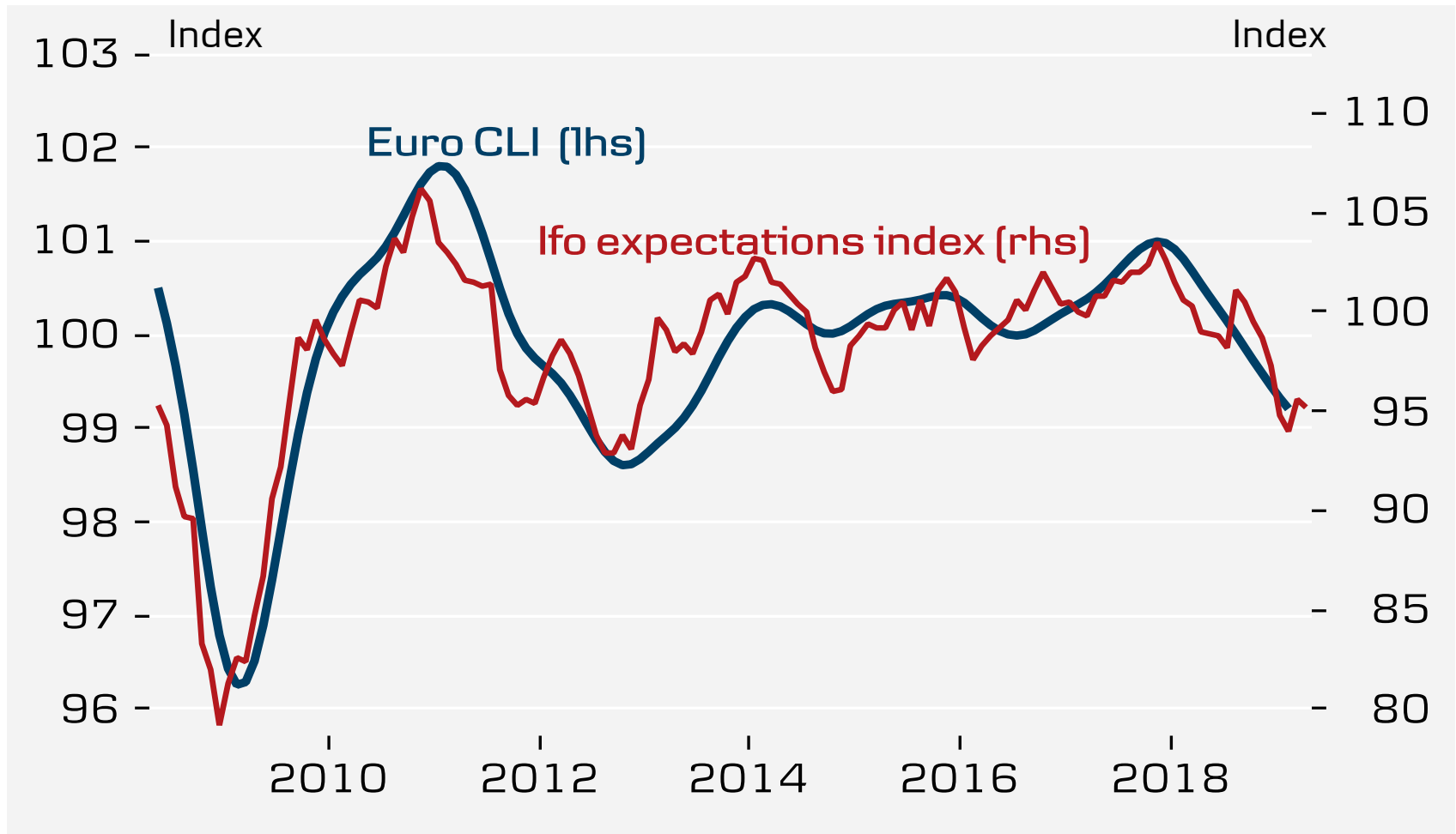
Euro

## Euro confidence vs OECD leading indicator (CLI)



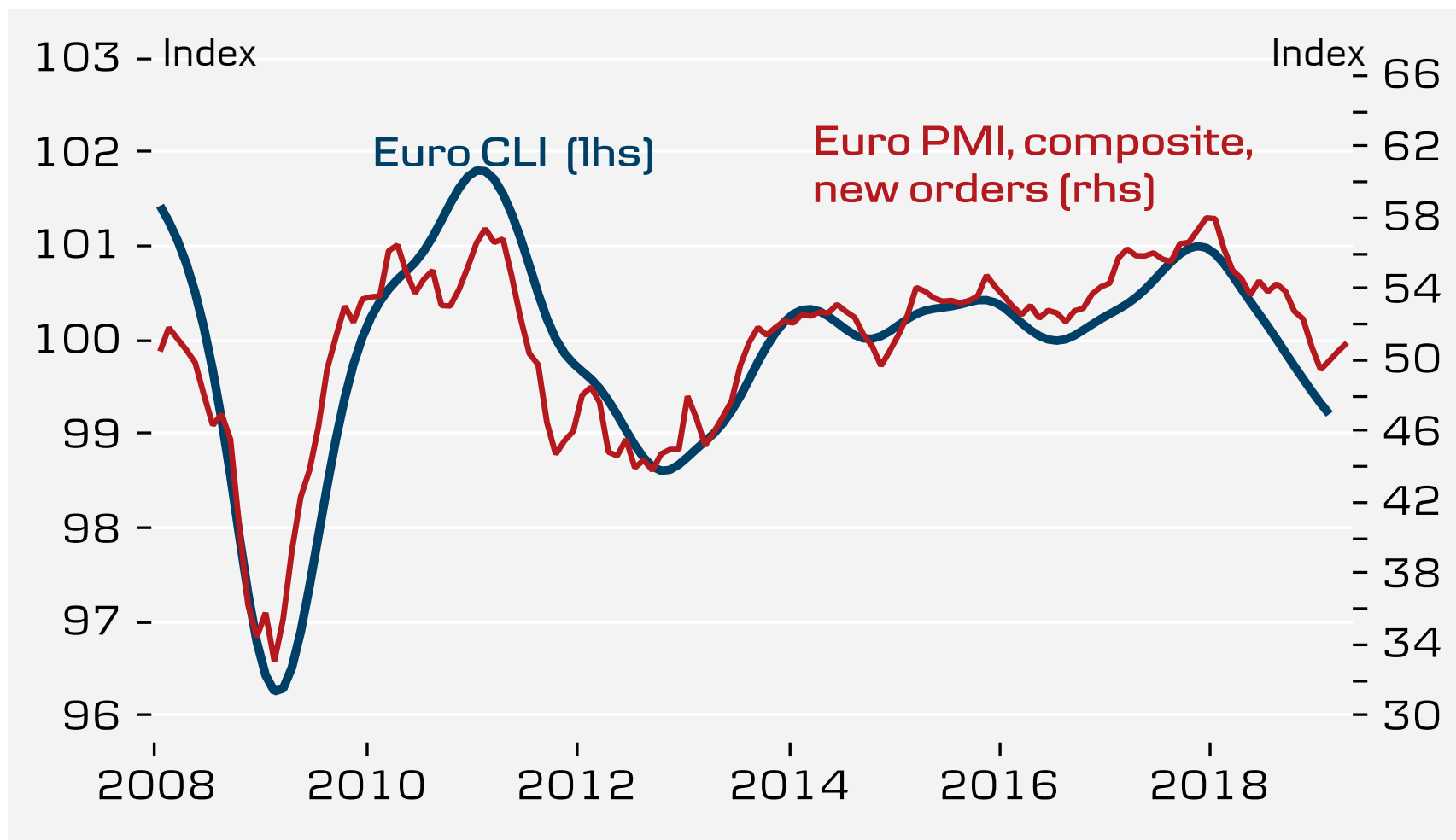
Euro

## German ifo vs CLI



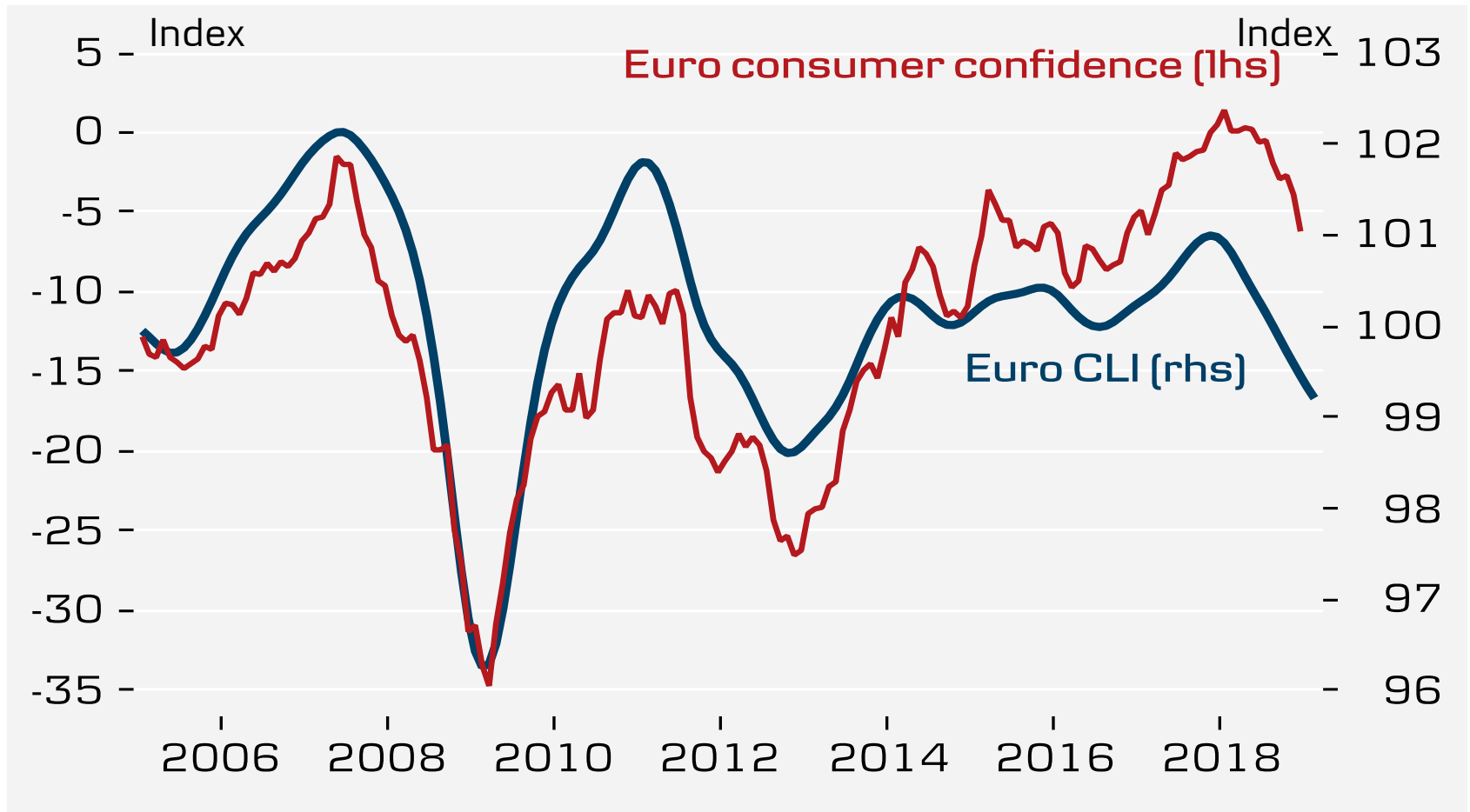
Euro

## Composite PMI vs CLI



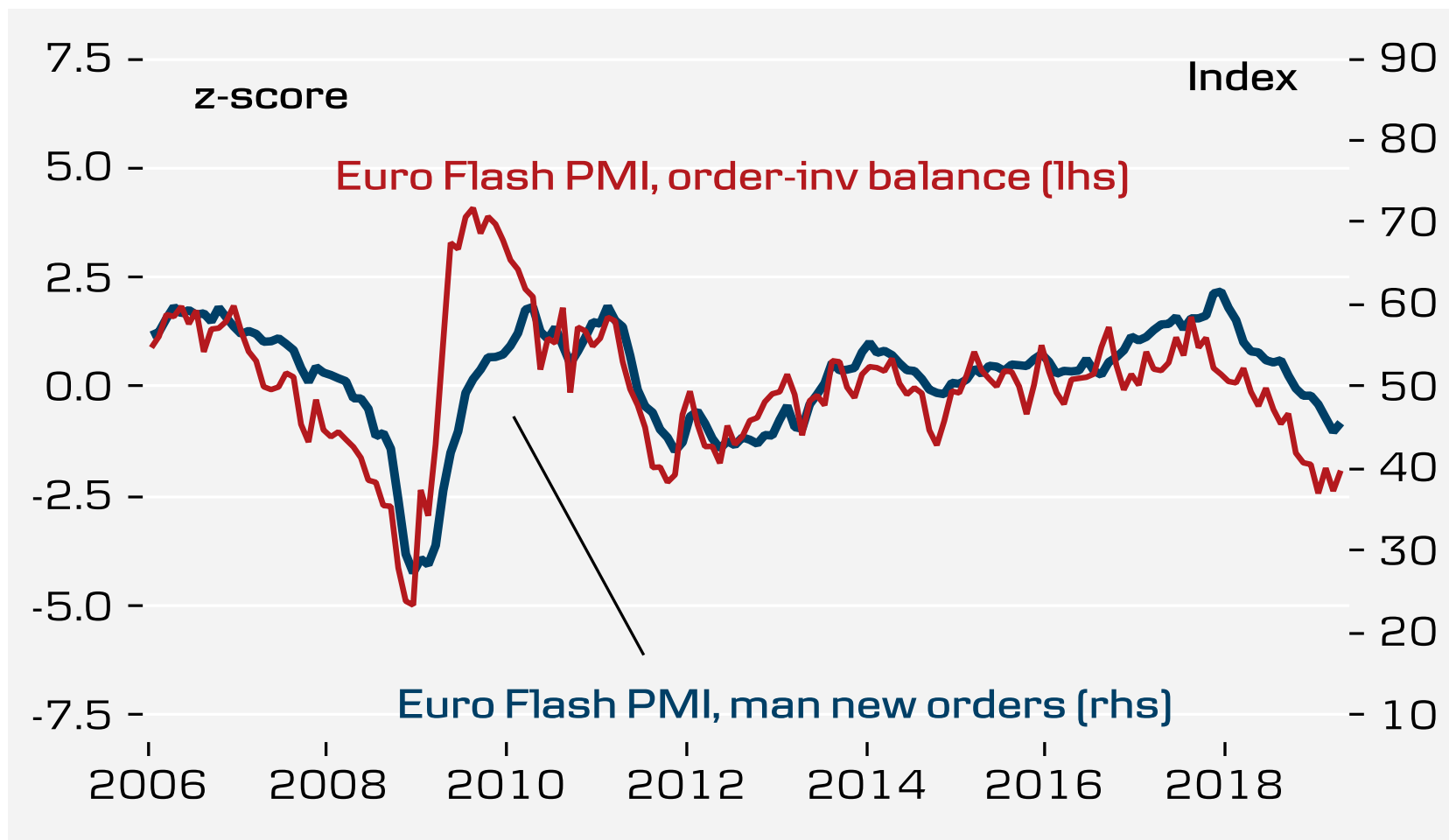
Euro

## Consumer confidence vs CLI



Euro

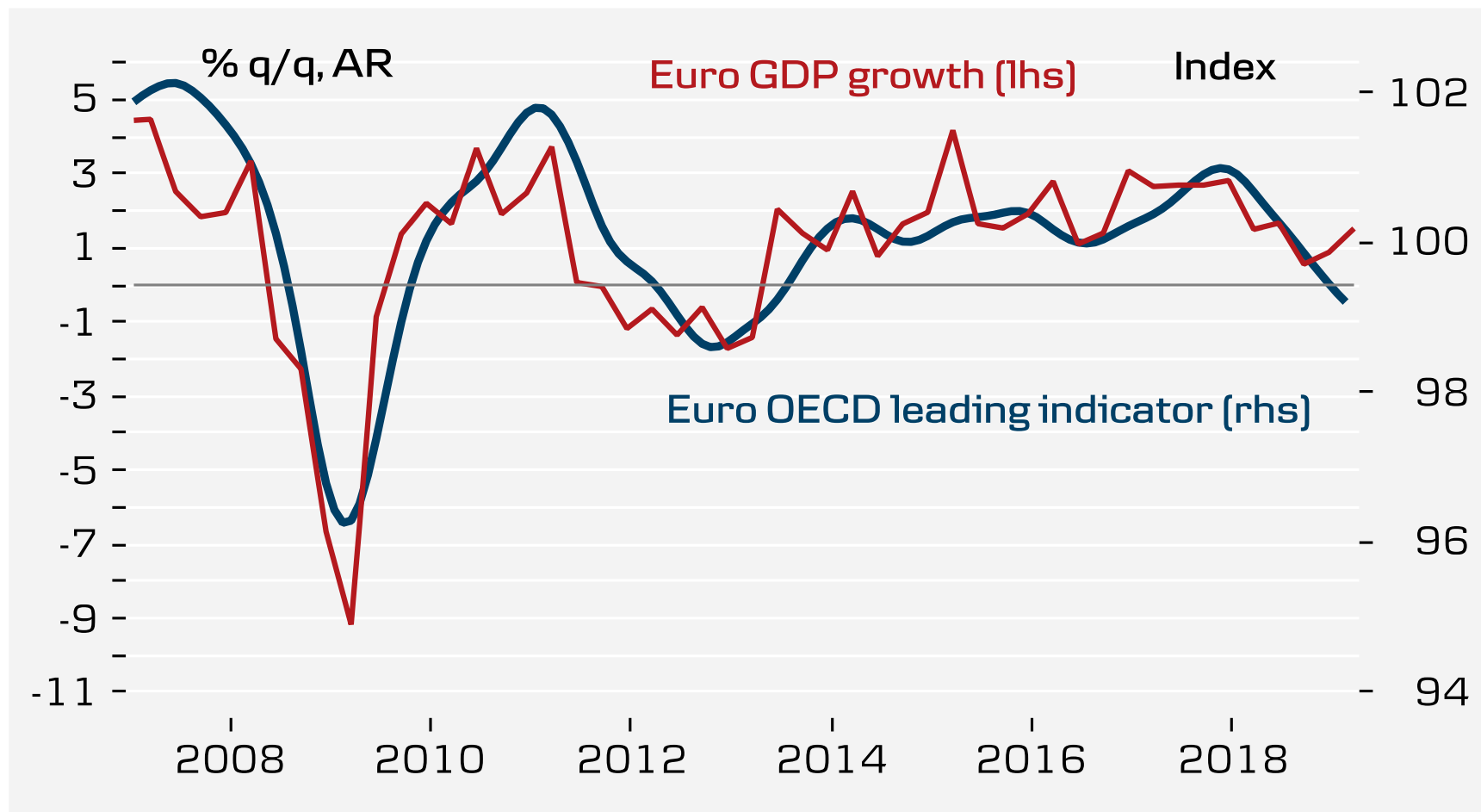
## Order-inventory balance vs PMI





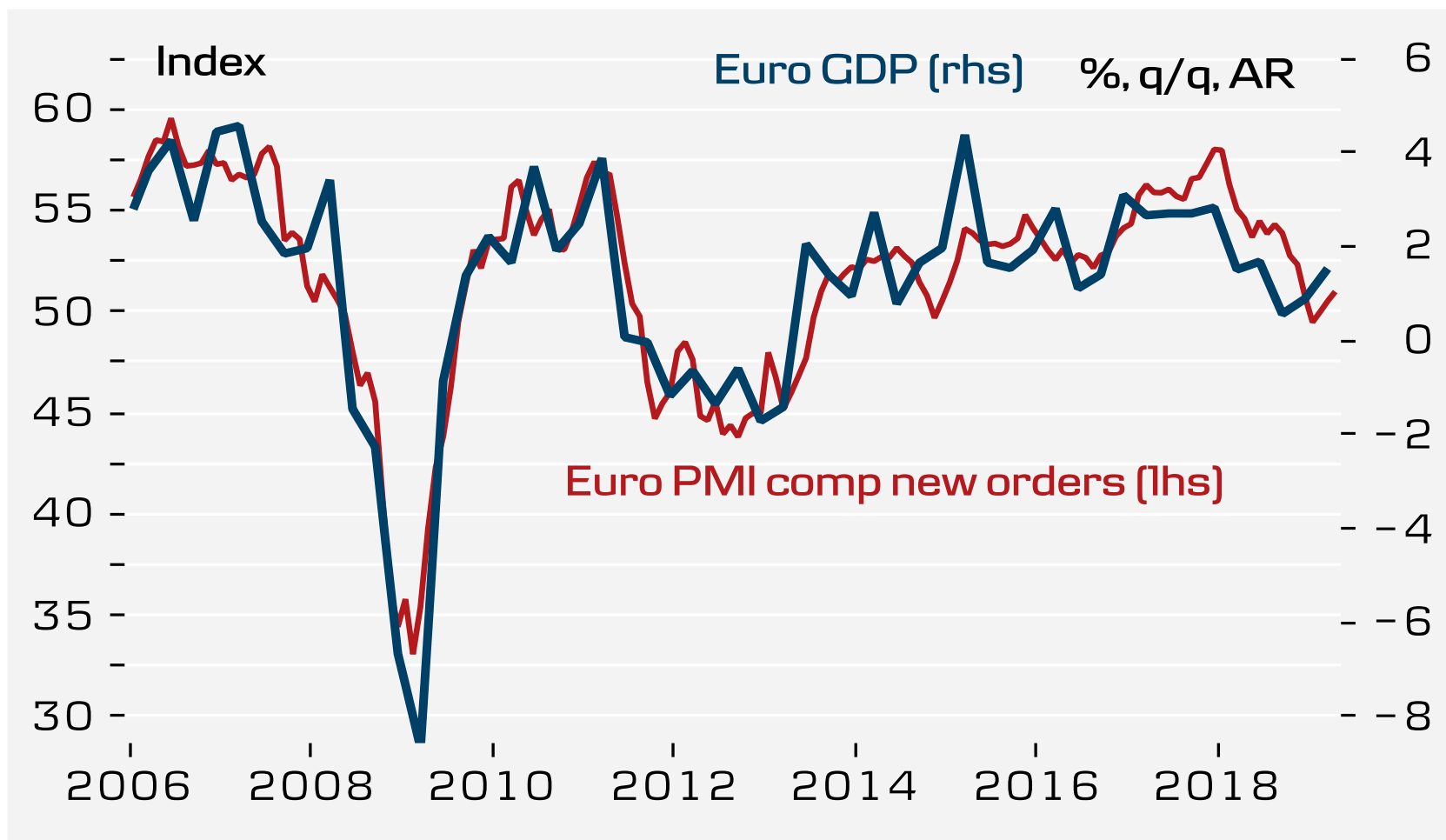
Euro

## Euro leading indicator vs GDP



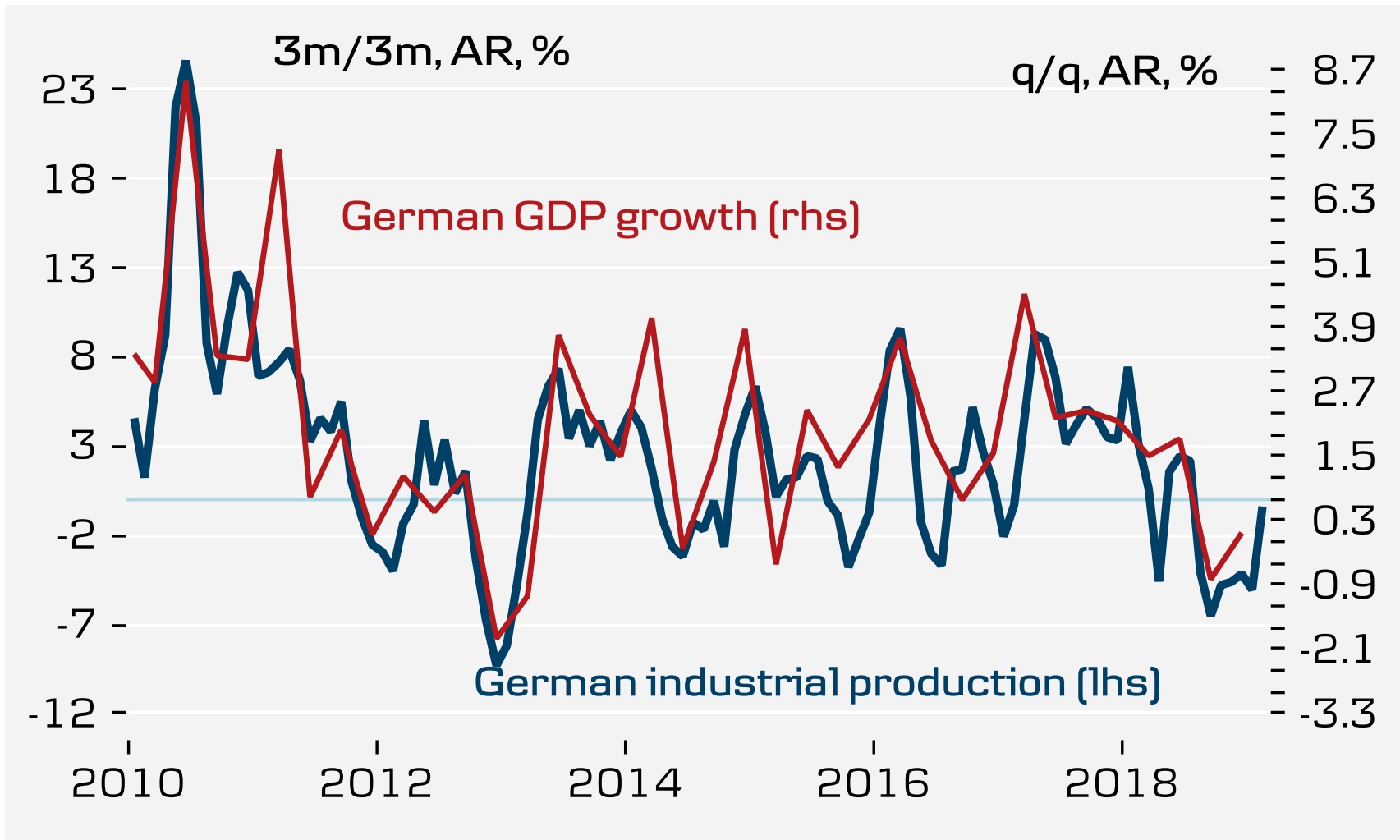
Euro

## Euro PMI vs GDP growth



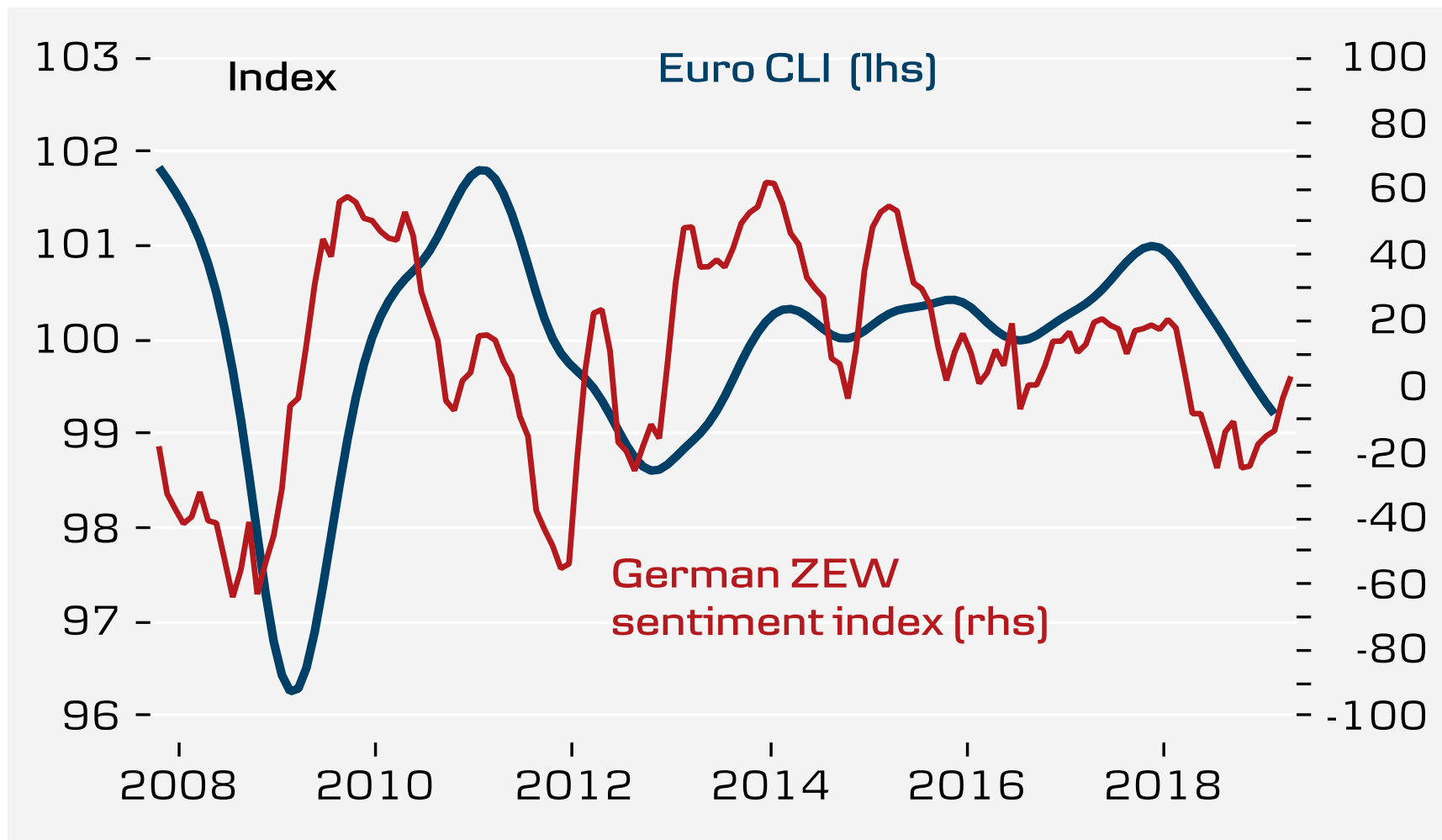
Euro

## German IP vs GDP



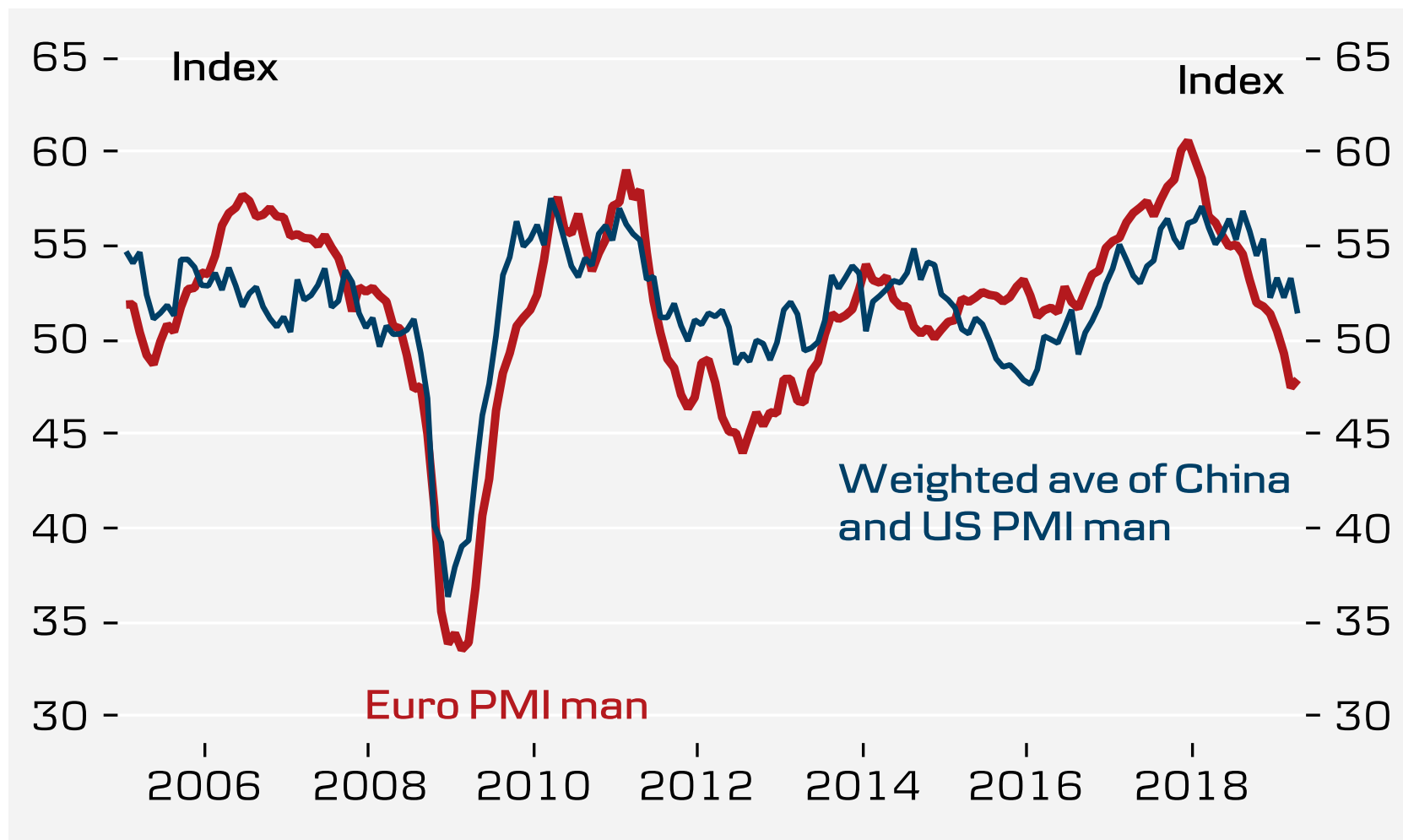
Euro

## Euro - ZEW vs CLI



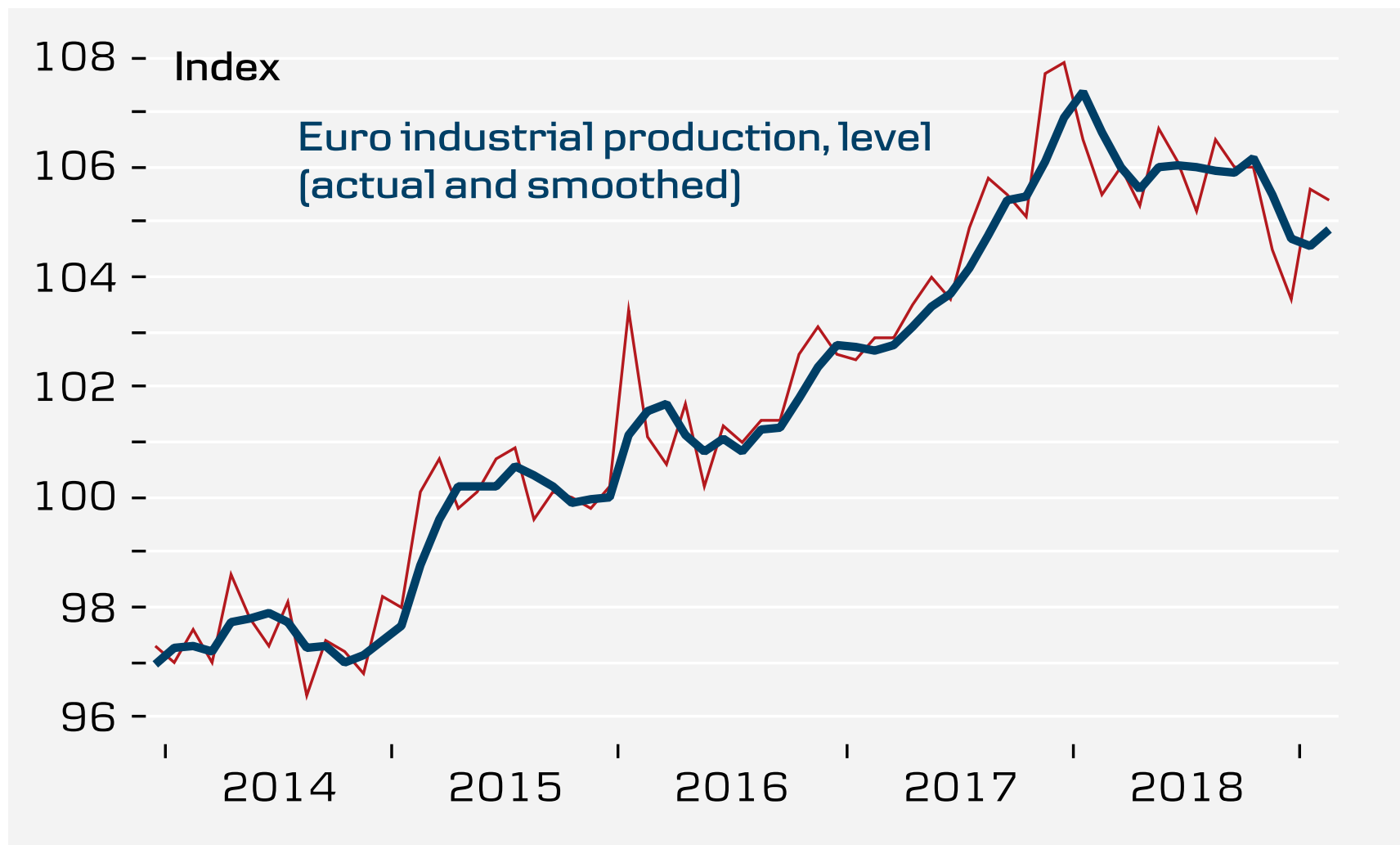
Euro

## Euro PMI vs China and US PMI



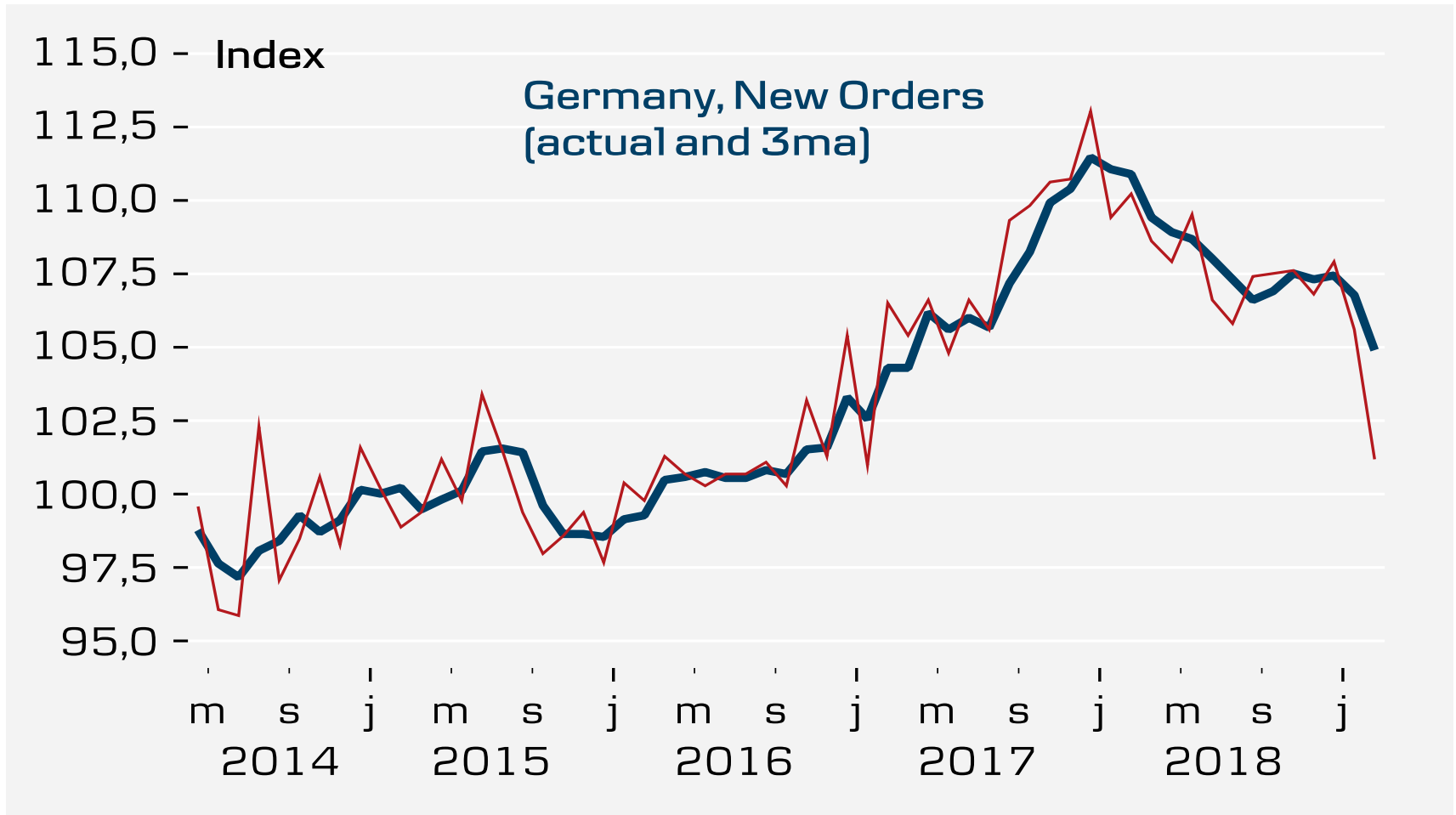
Euro

## Industrial production - level



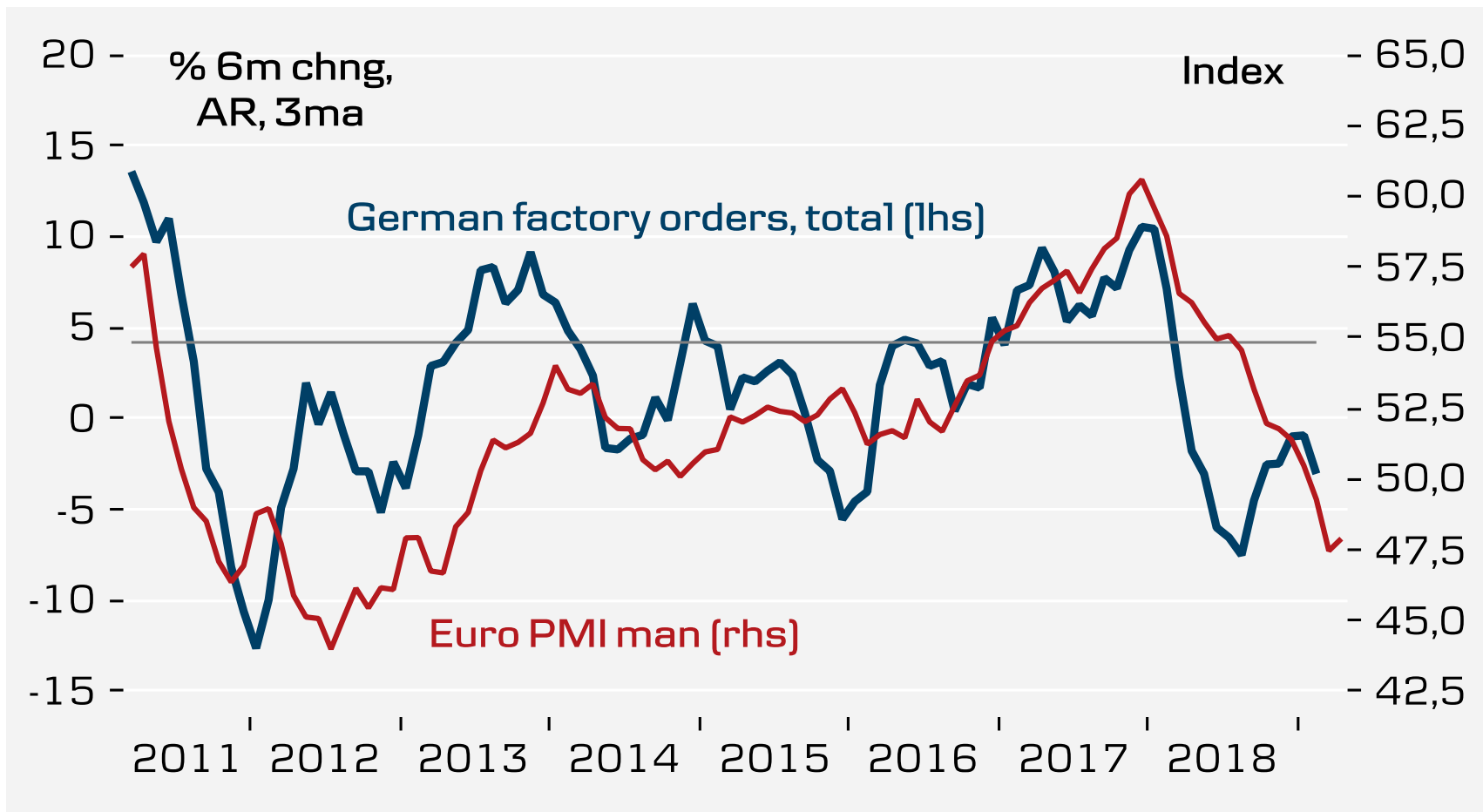
Euro

## German orders - level



Euro

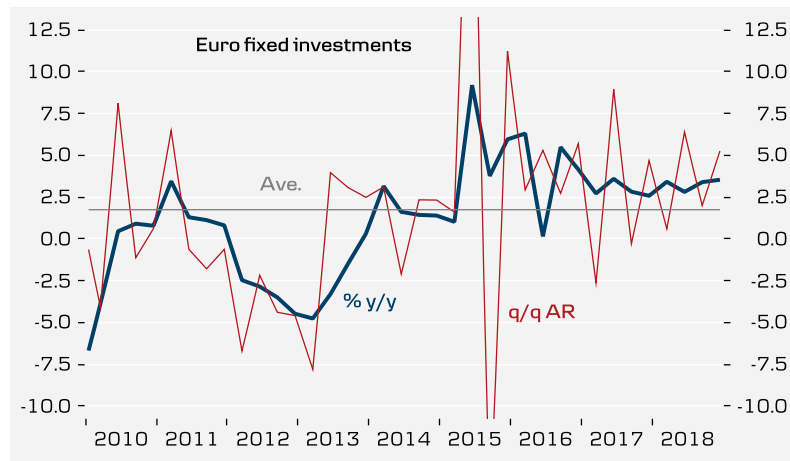
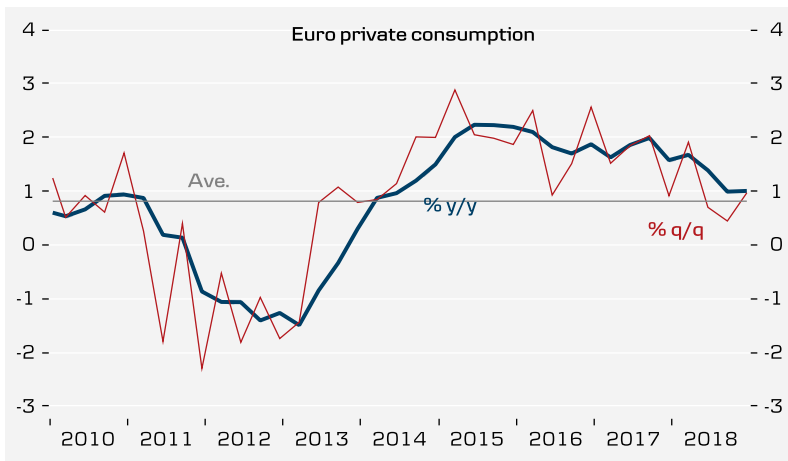
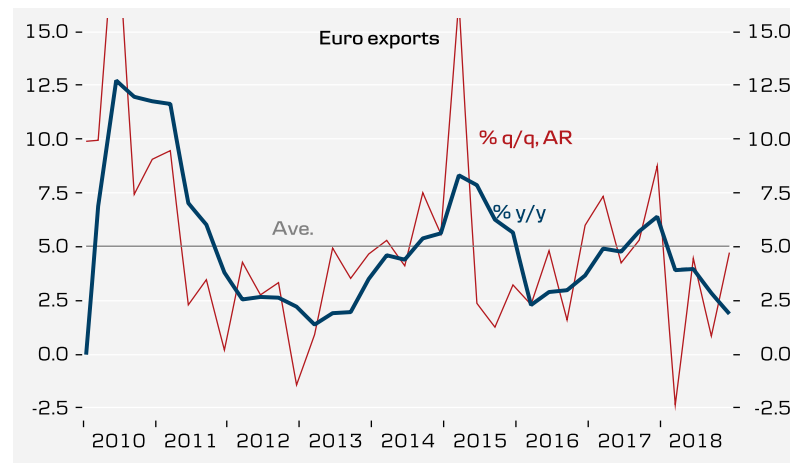
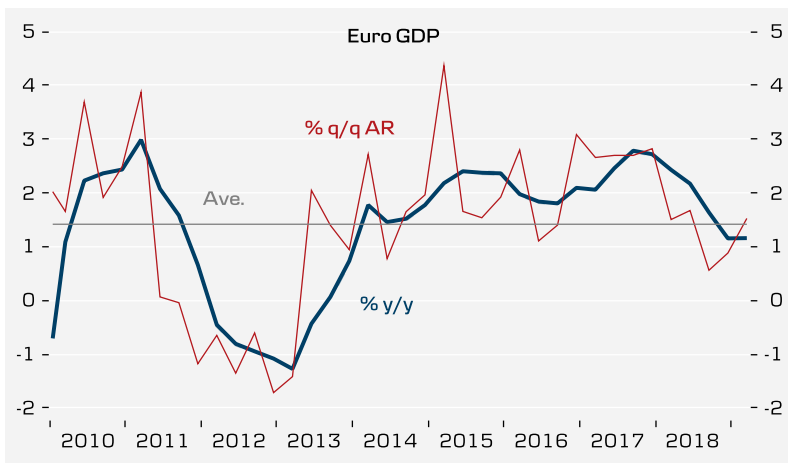
## German orders - growth vs Euro PMI





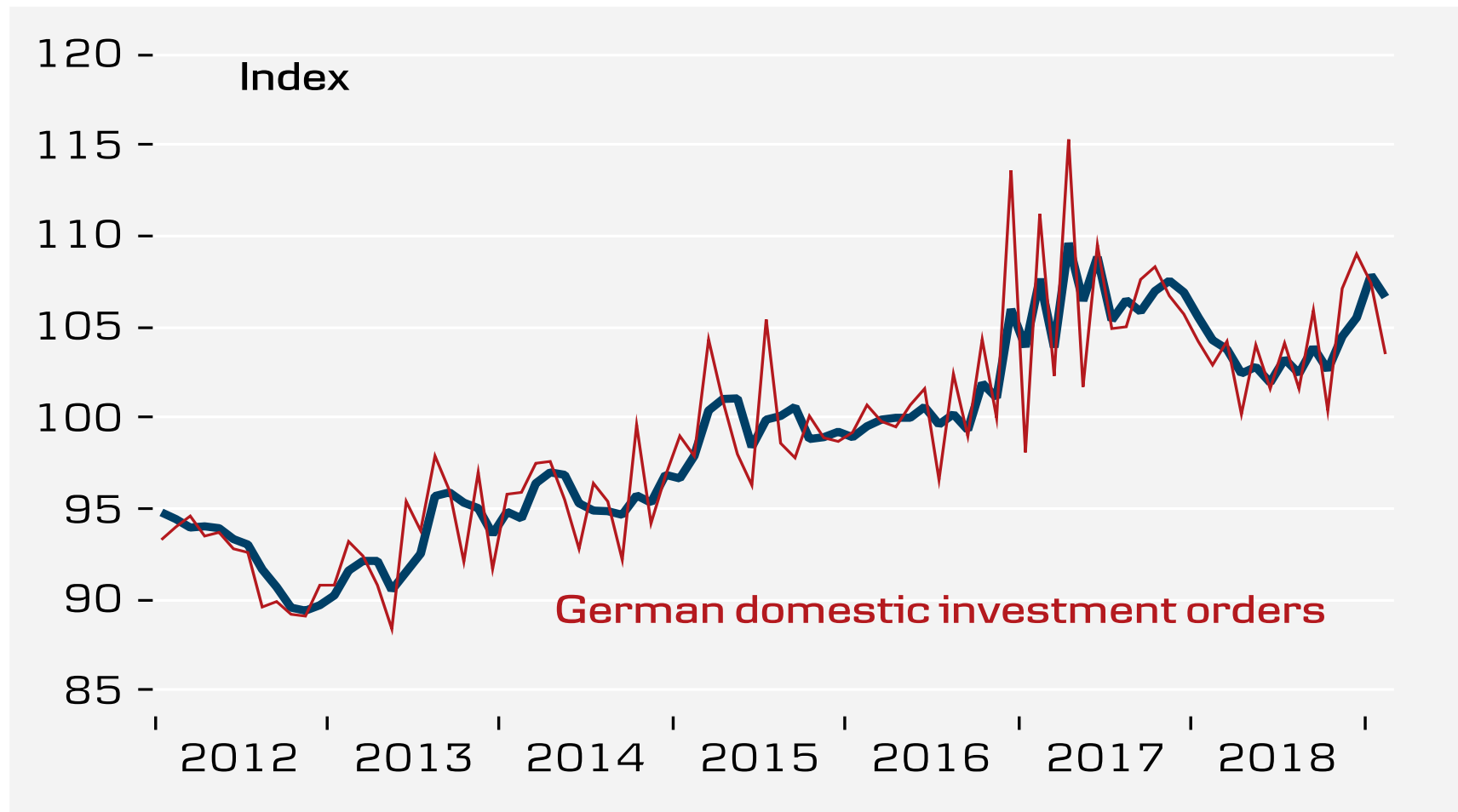
# Euro

## GDP and demand sub-components



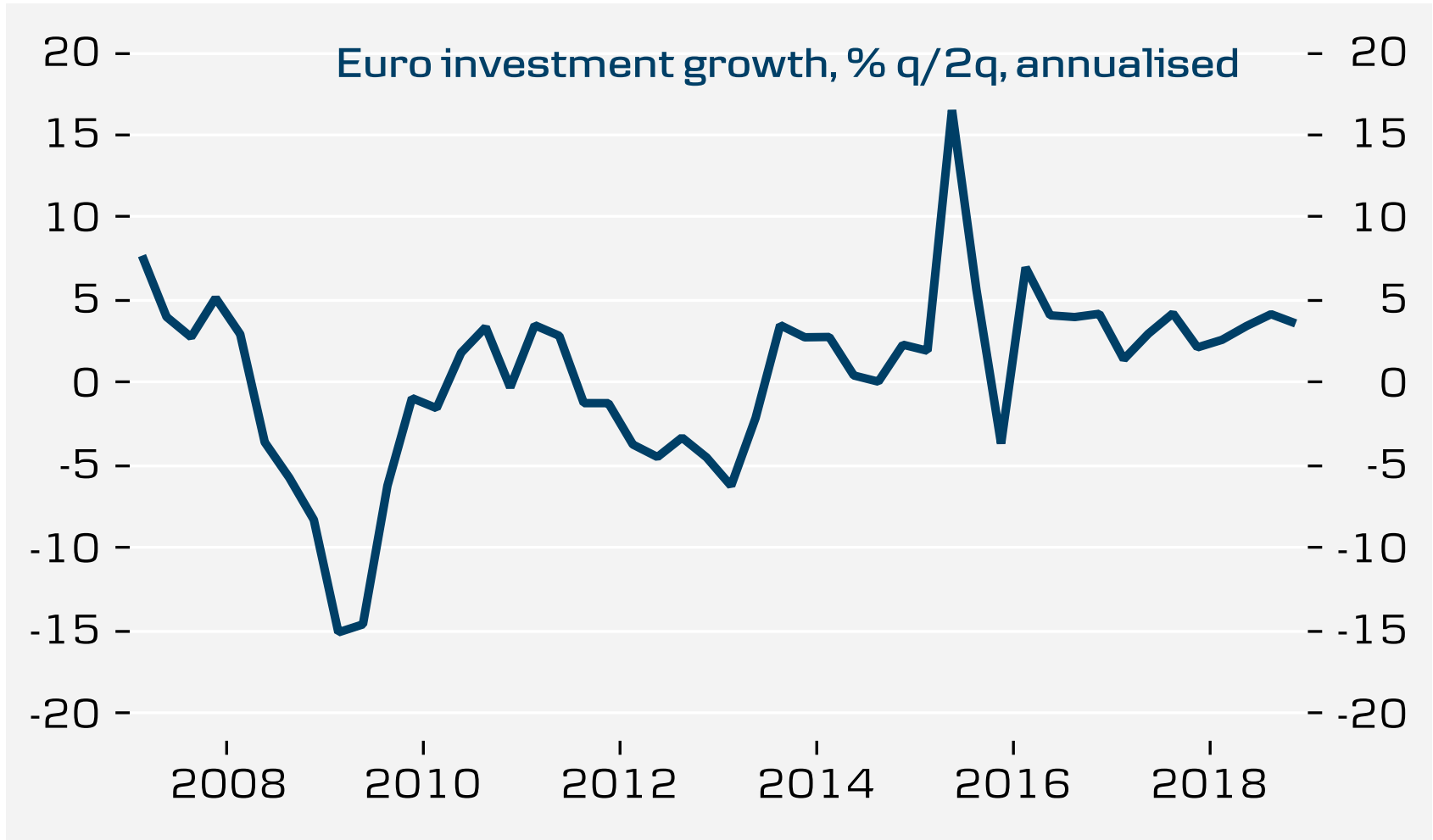
Euro

## German orders - capex level



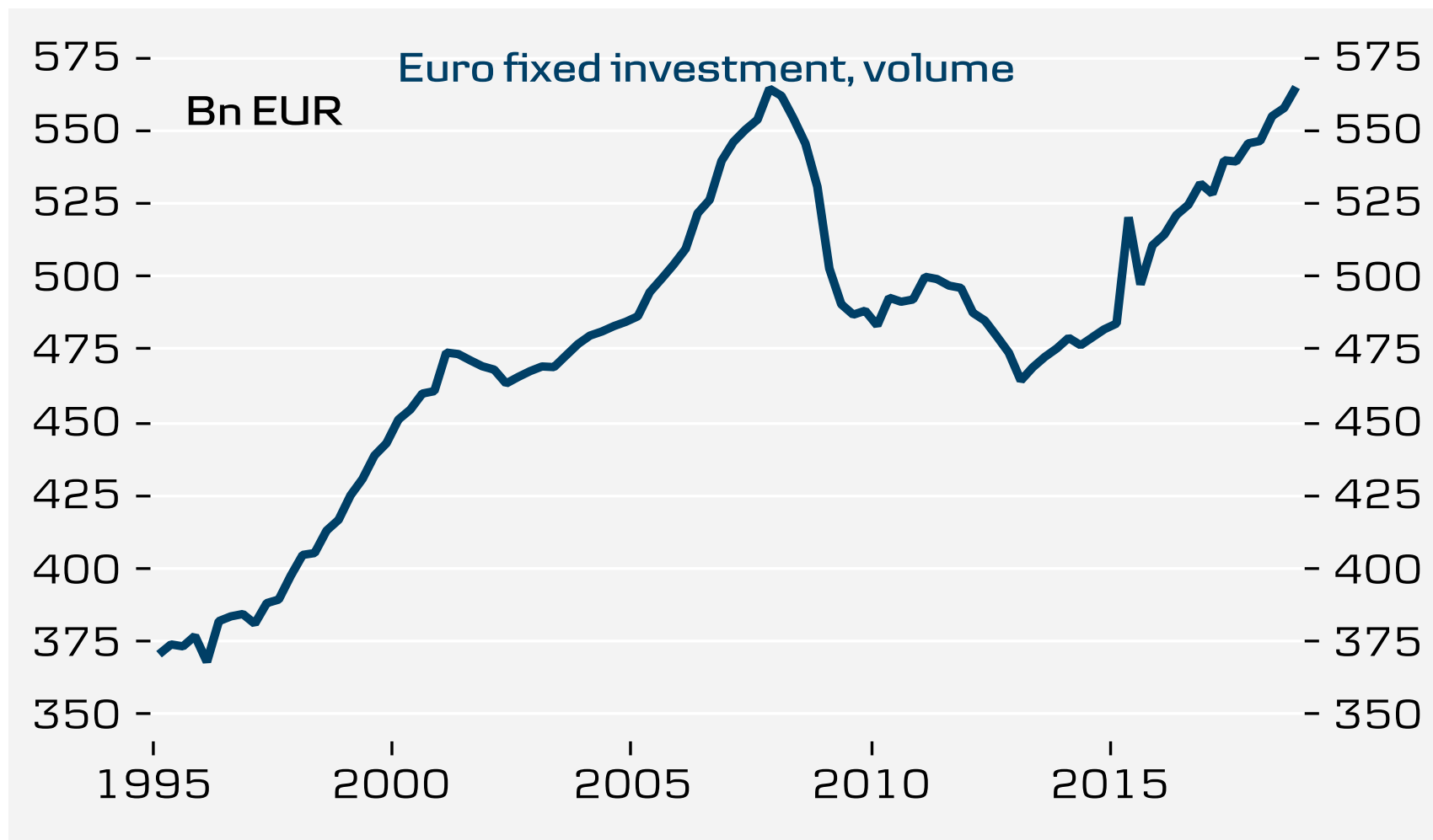
Euro

## Investment growth



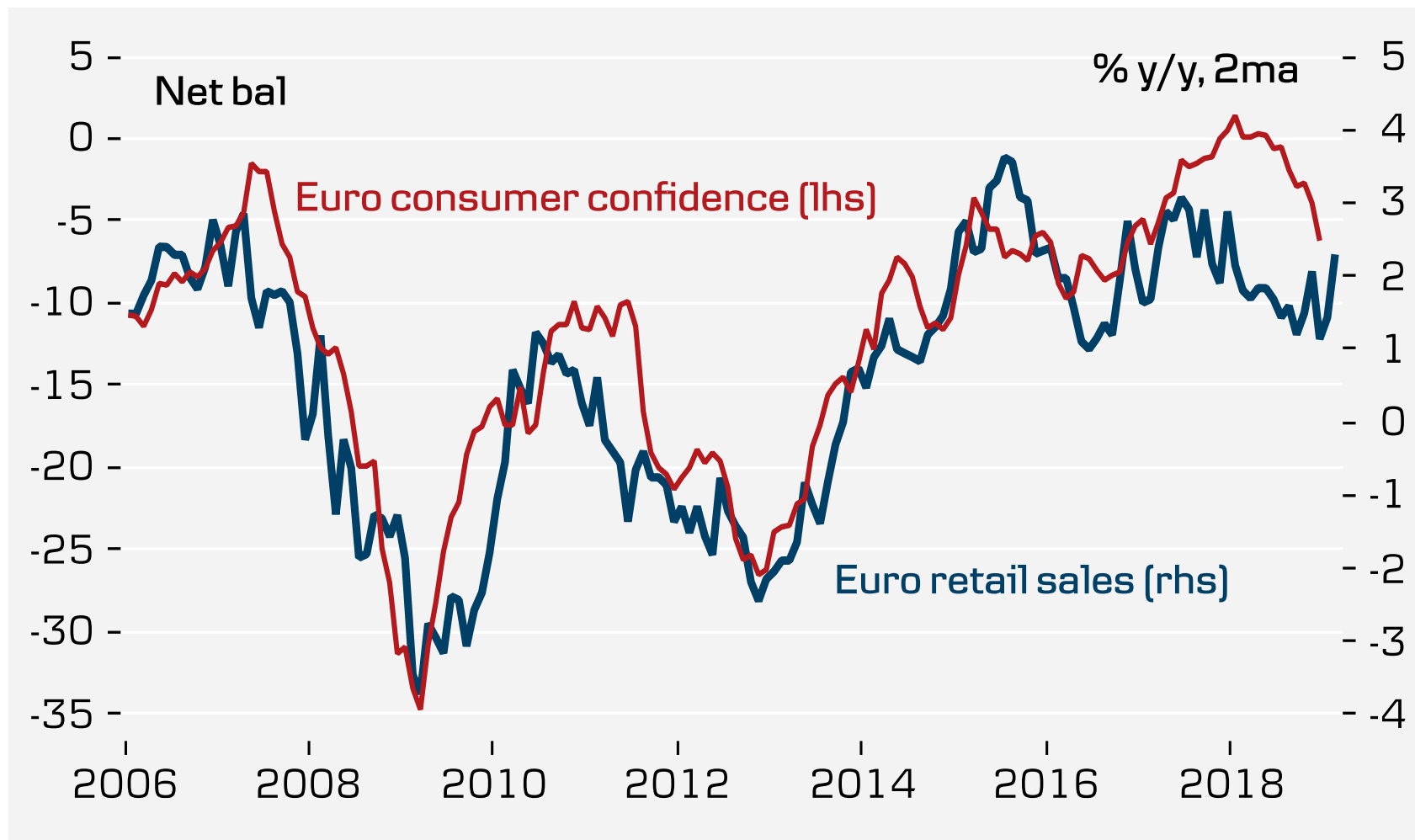
Euro

## Investment level



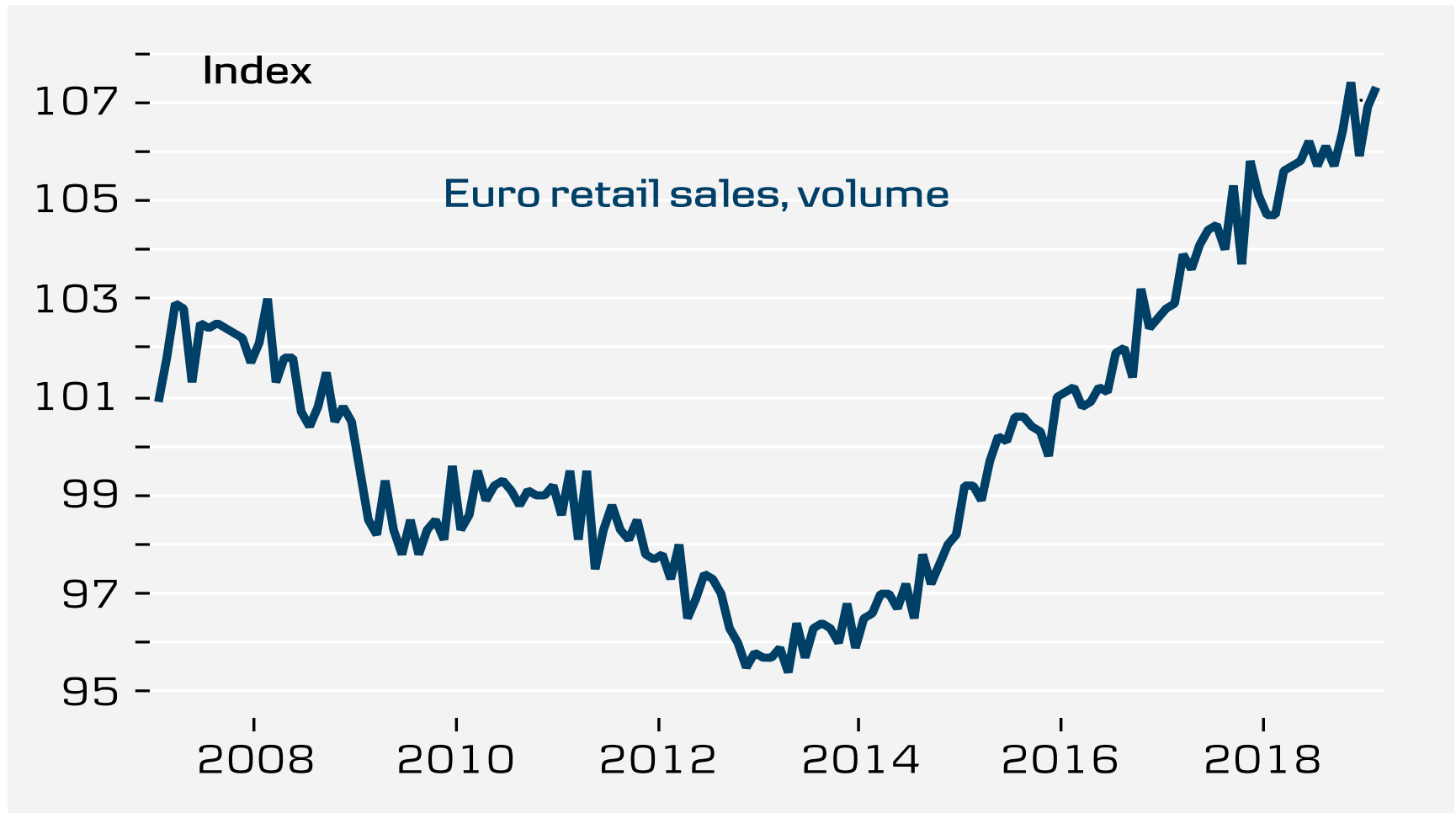
Euro

## Retail sales and consumer confidence



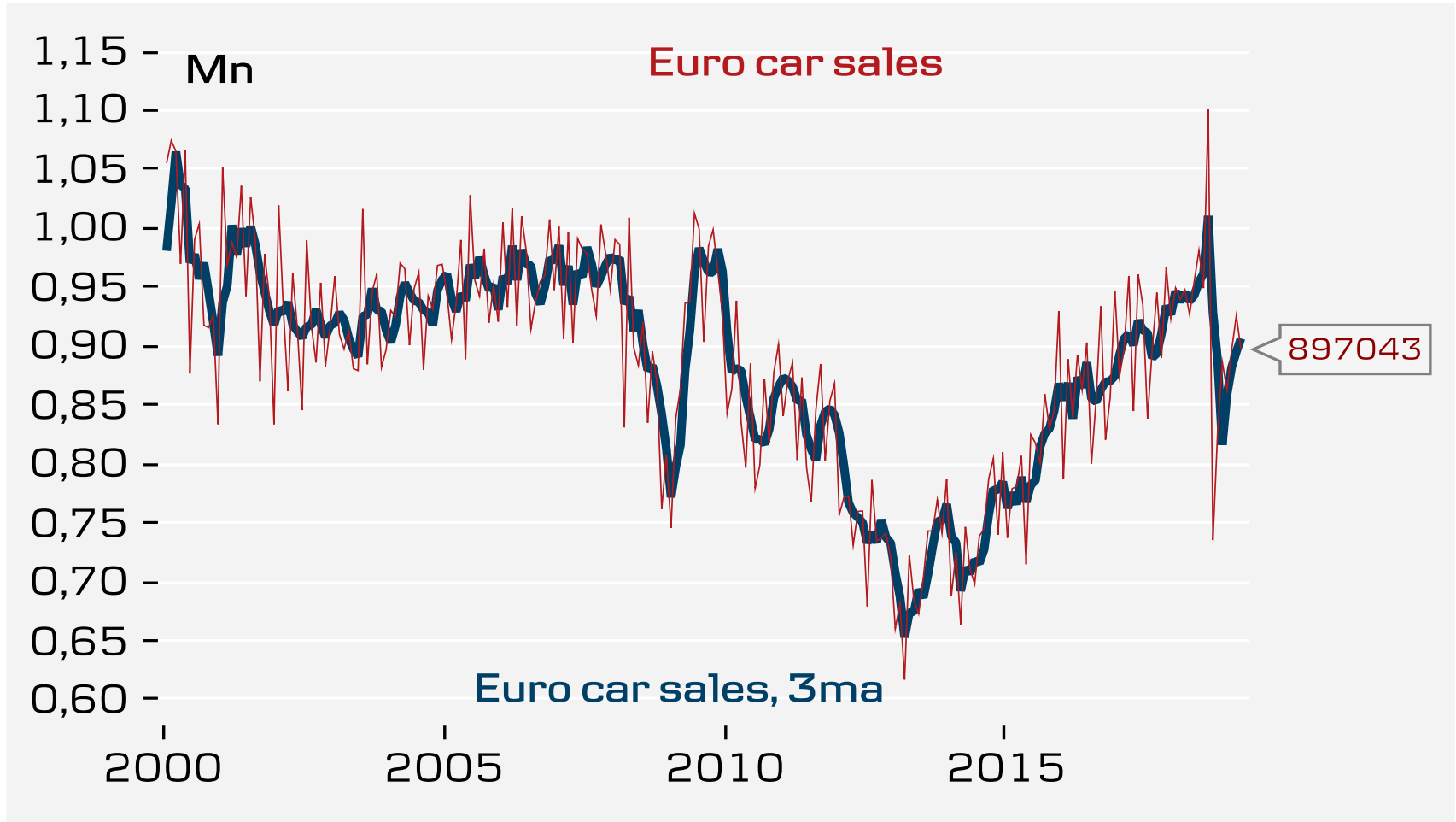
Euro

## Retail sales - level



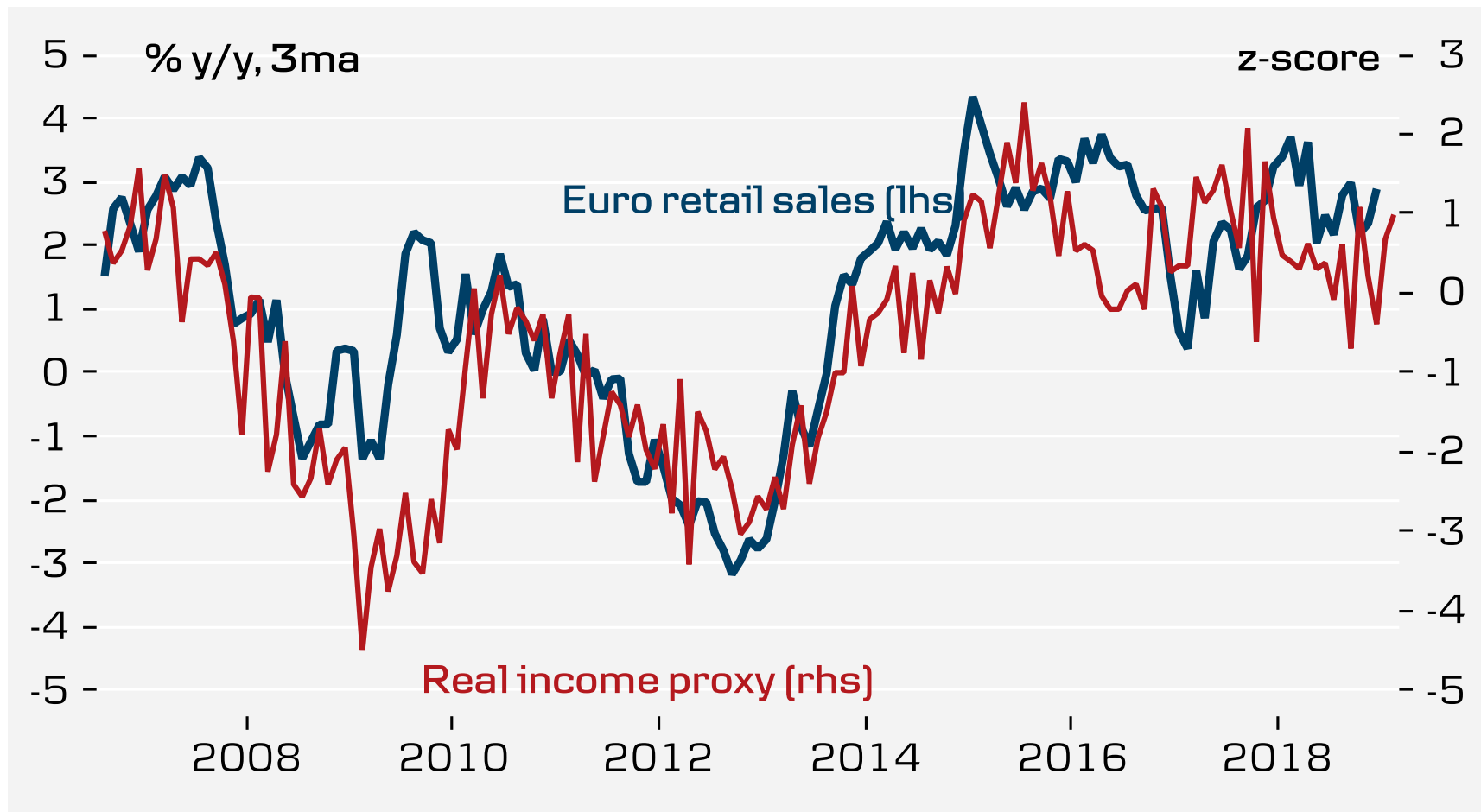
Euro

## Car sales



Euro

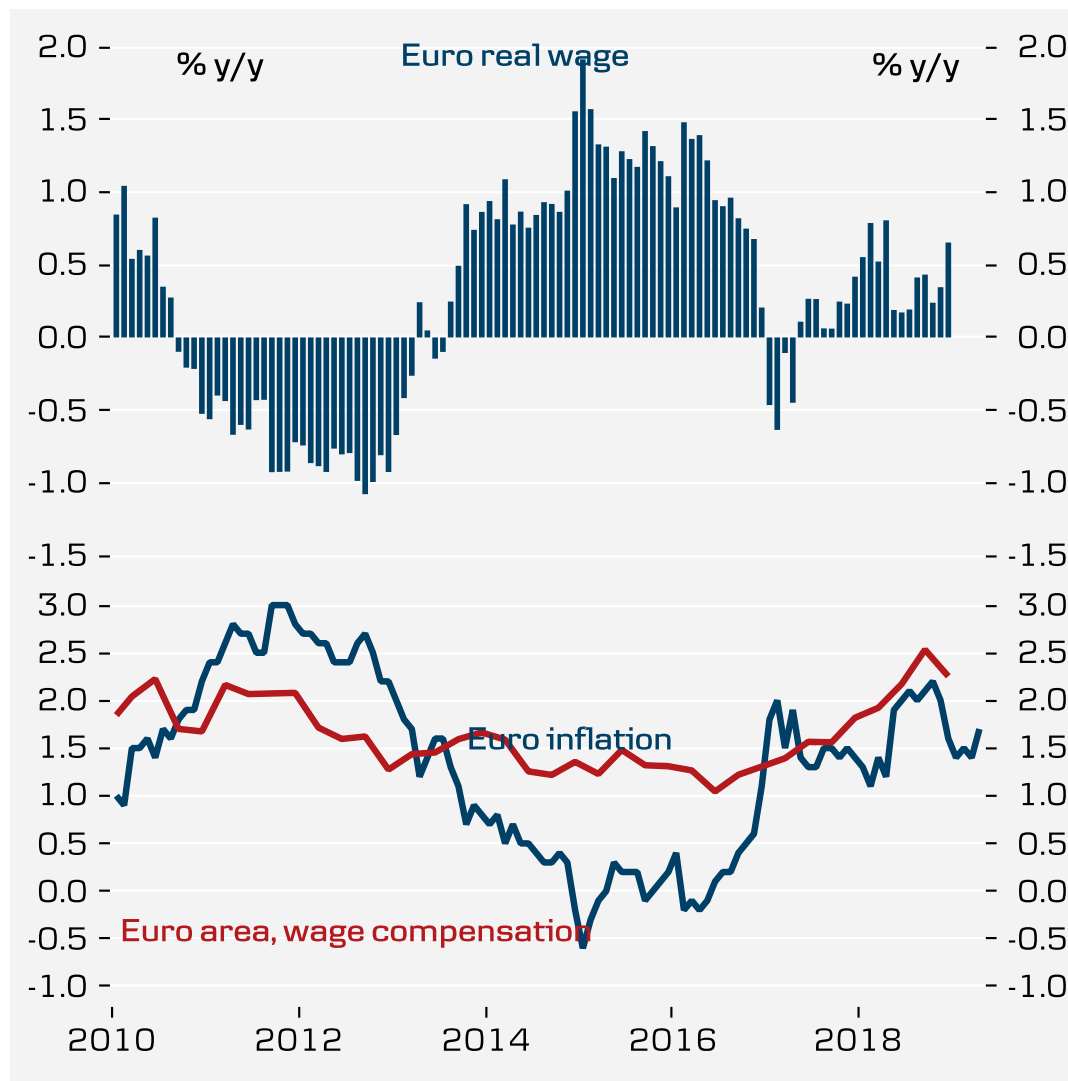
Real income





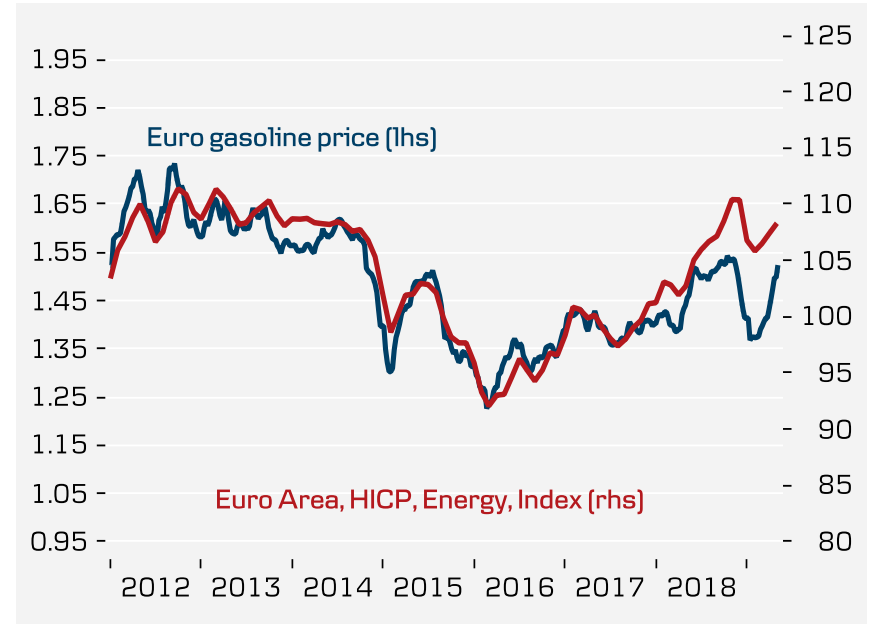
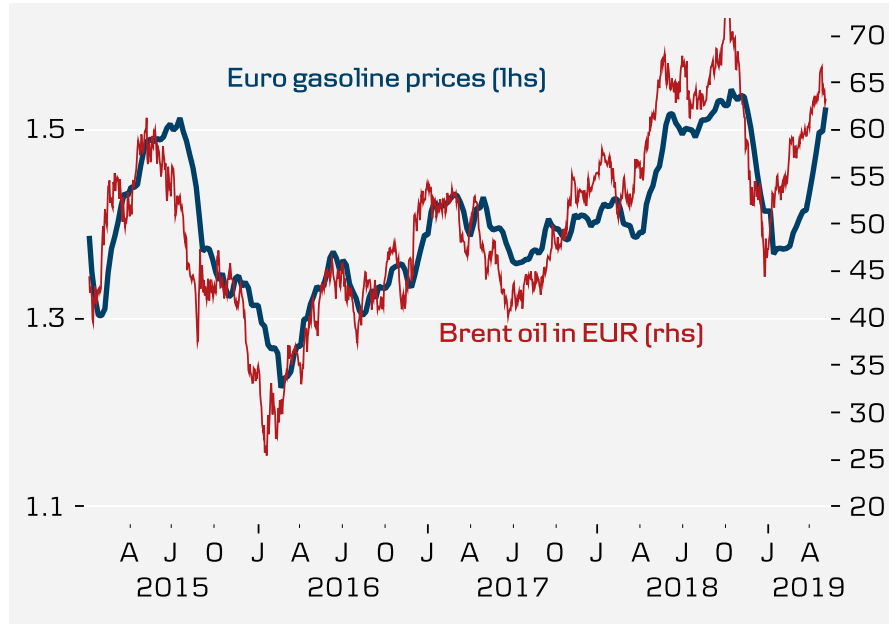
Euro

## Real wage growth



# Euro

## Euro gasoline prices



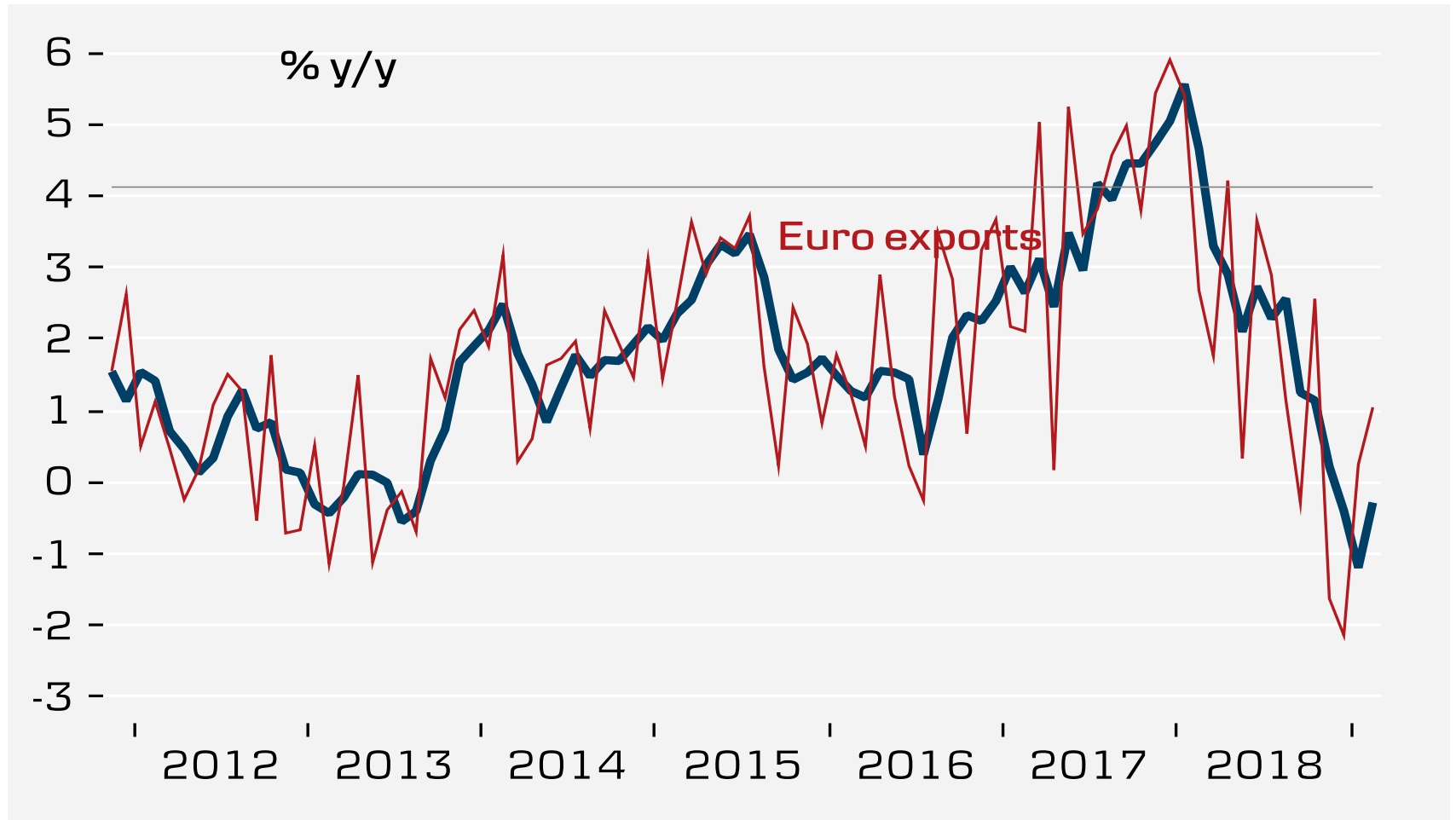
Euro

## Exports - PMI



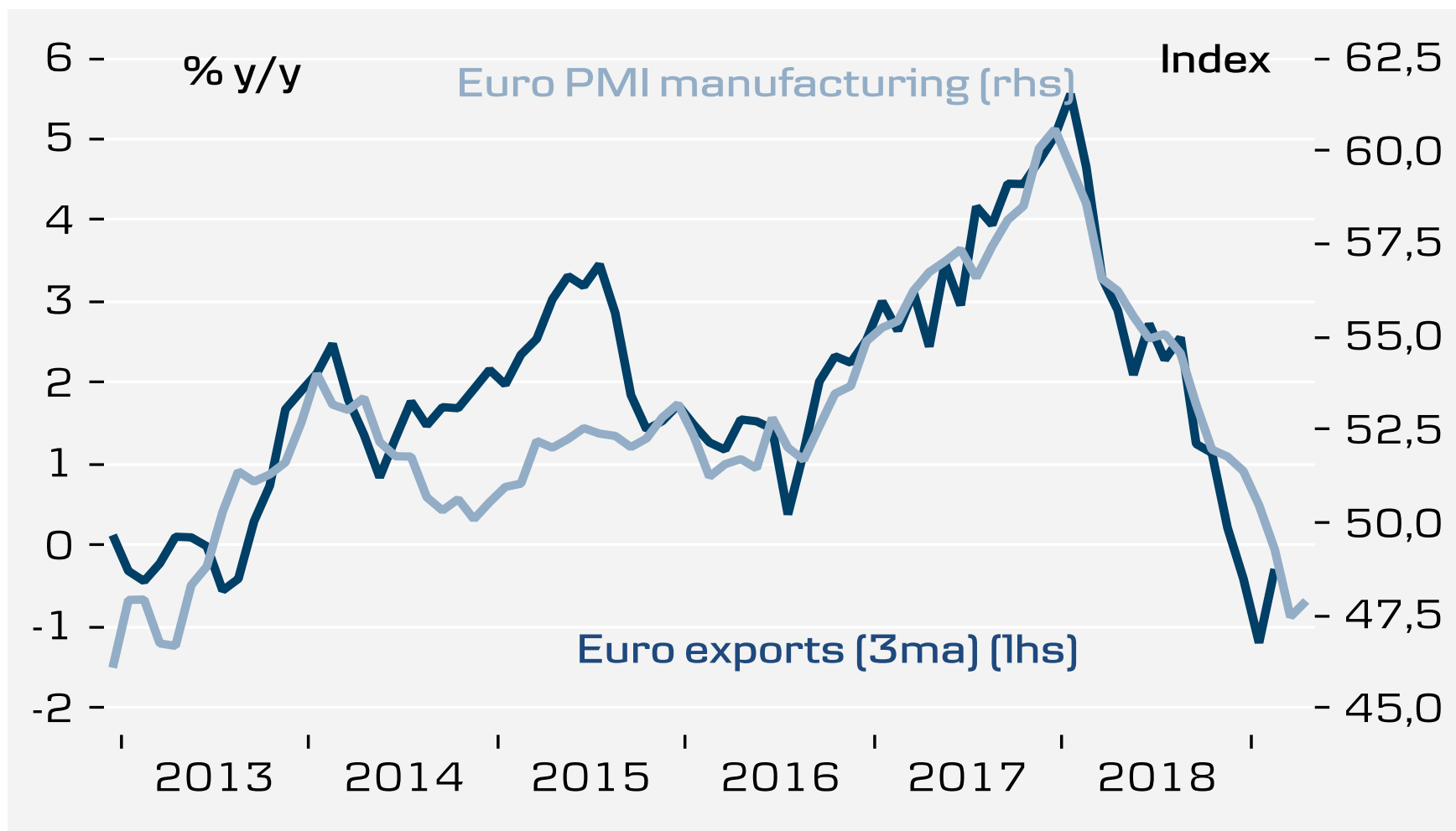
Euro

## Exports - growth



Euro

## Exports - growth and PMI



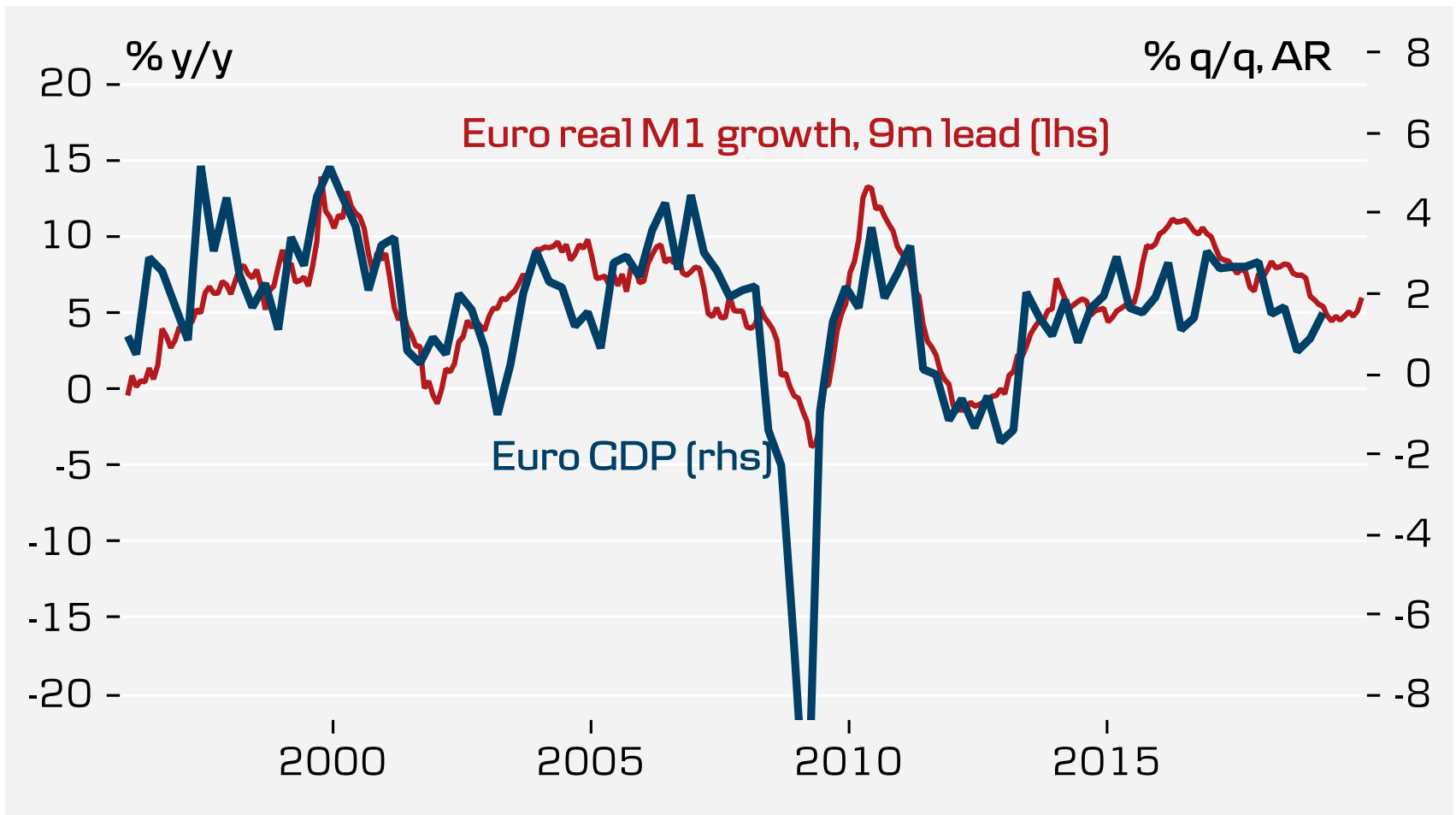
# Euro

## Exports - exchange rate impulse



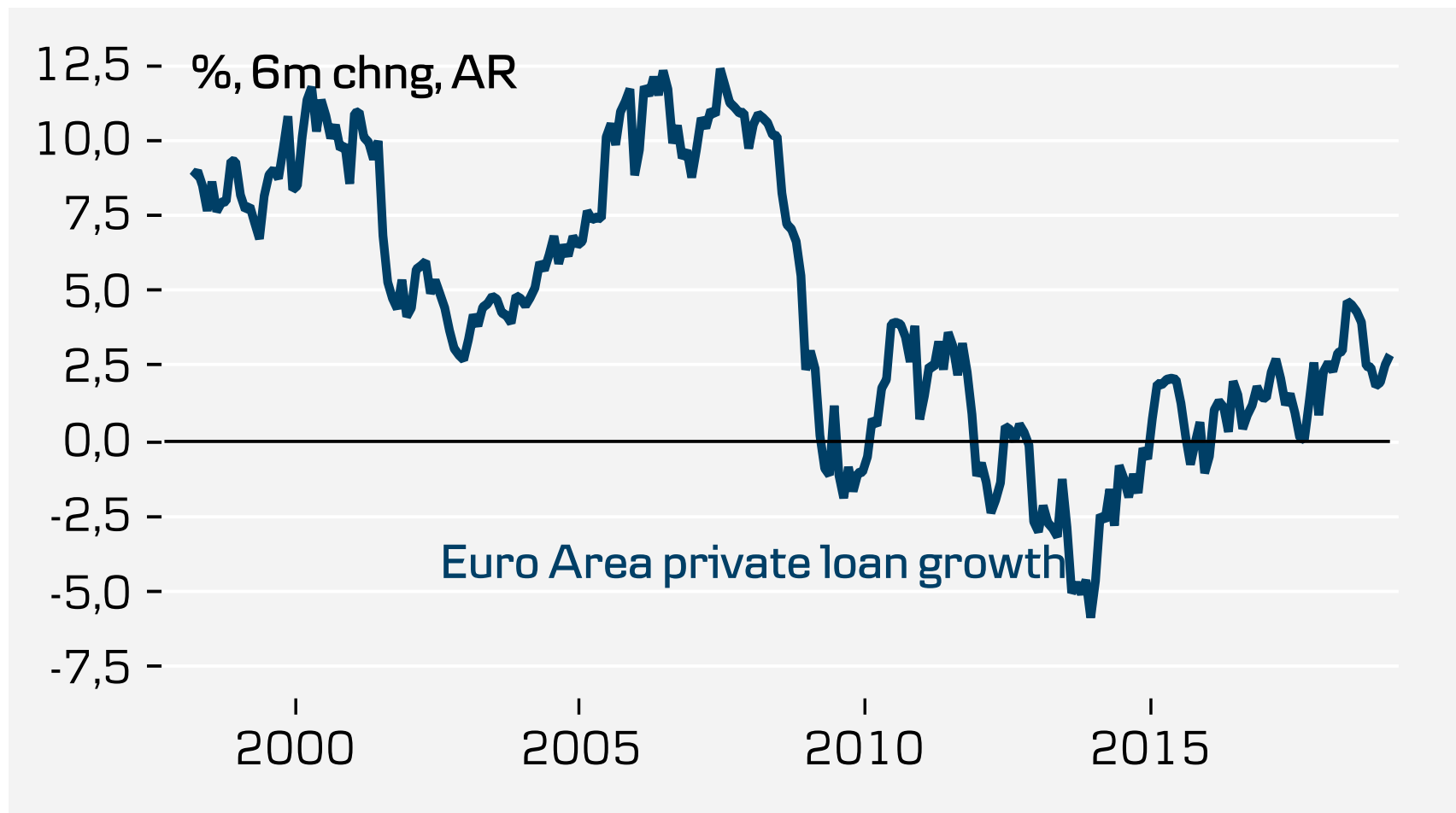
Euro

## Money and GDP



Euro

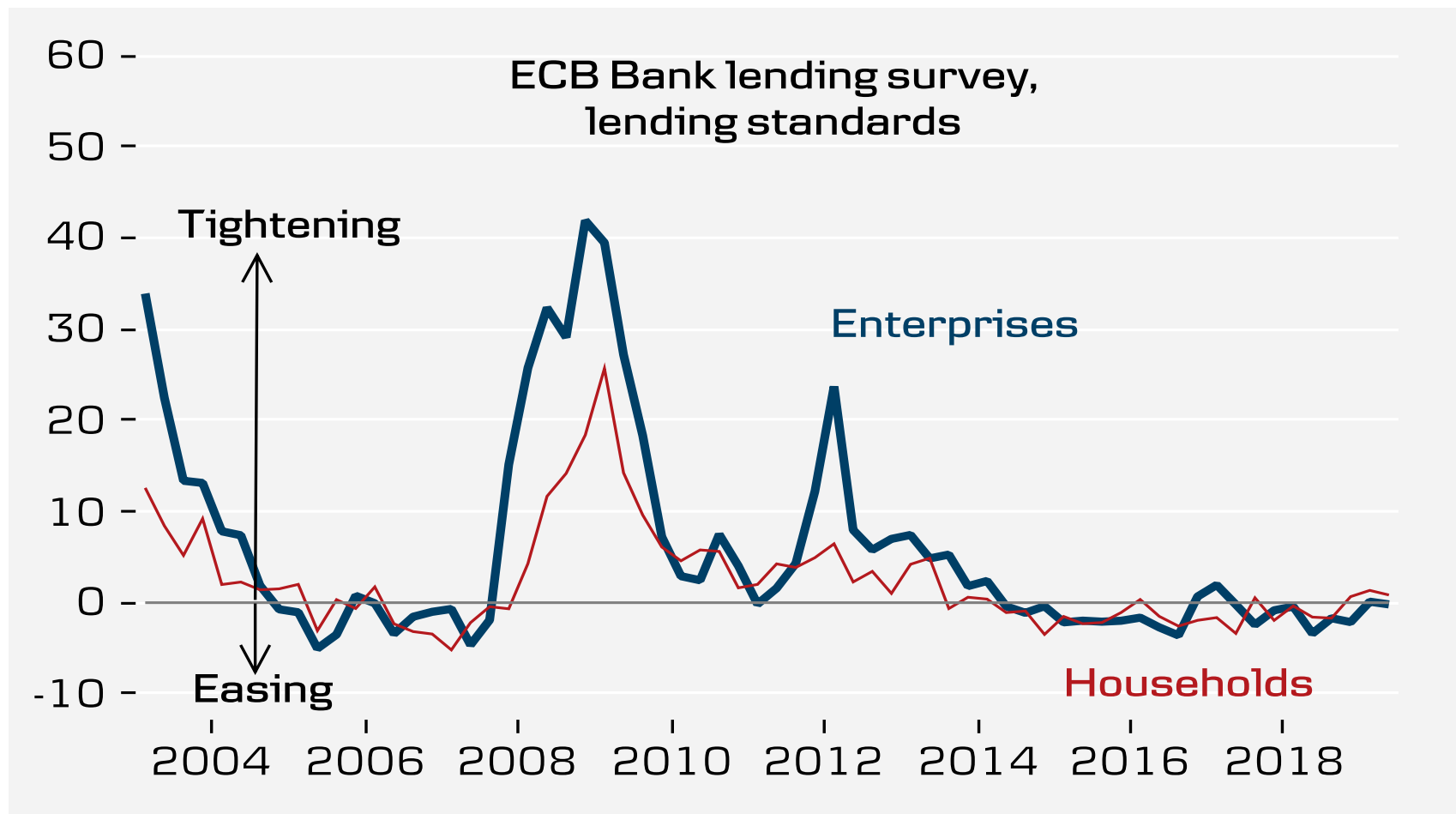
## Credit – loan growth





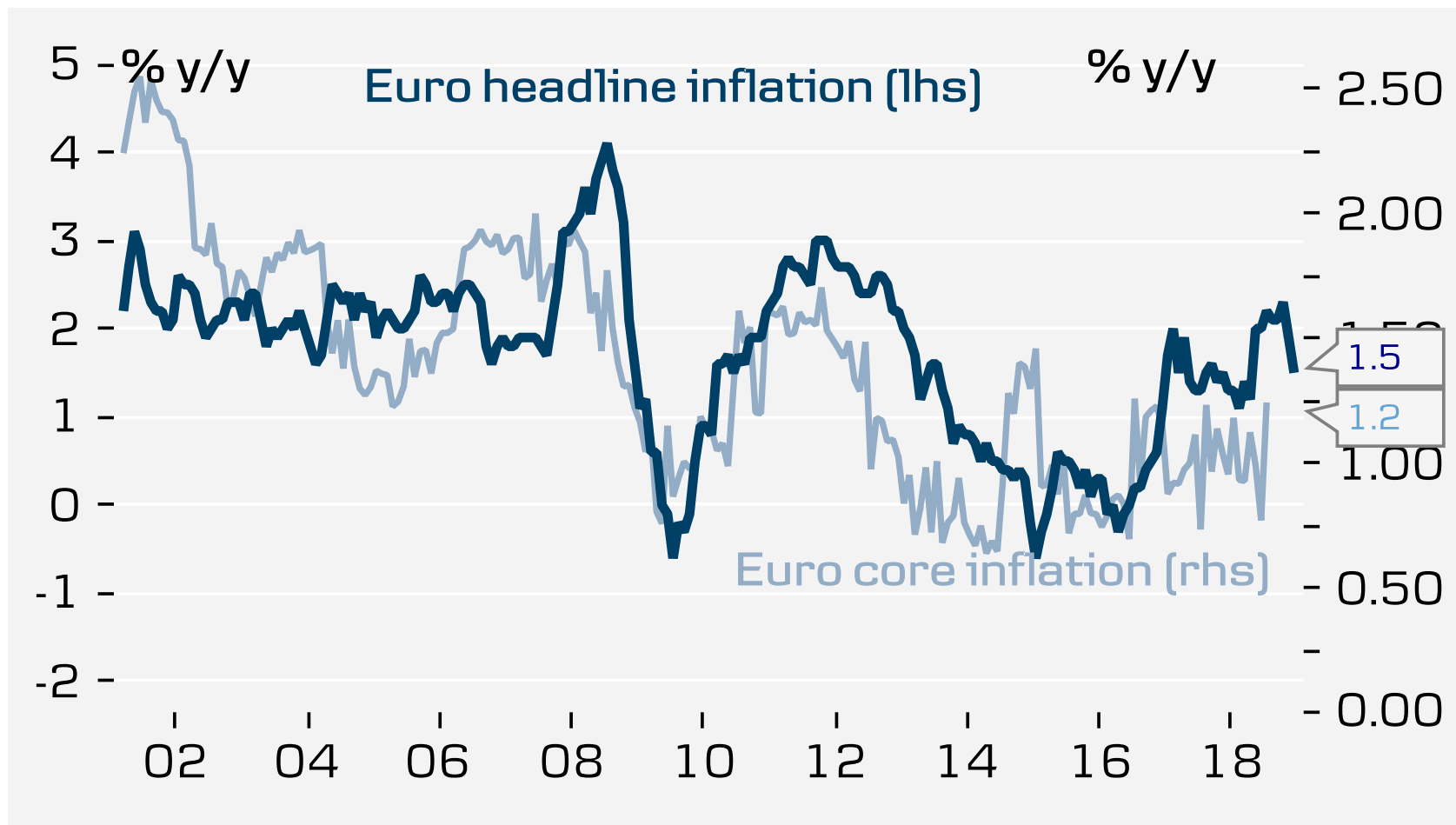
Euro

## Credit - lending standards



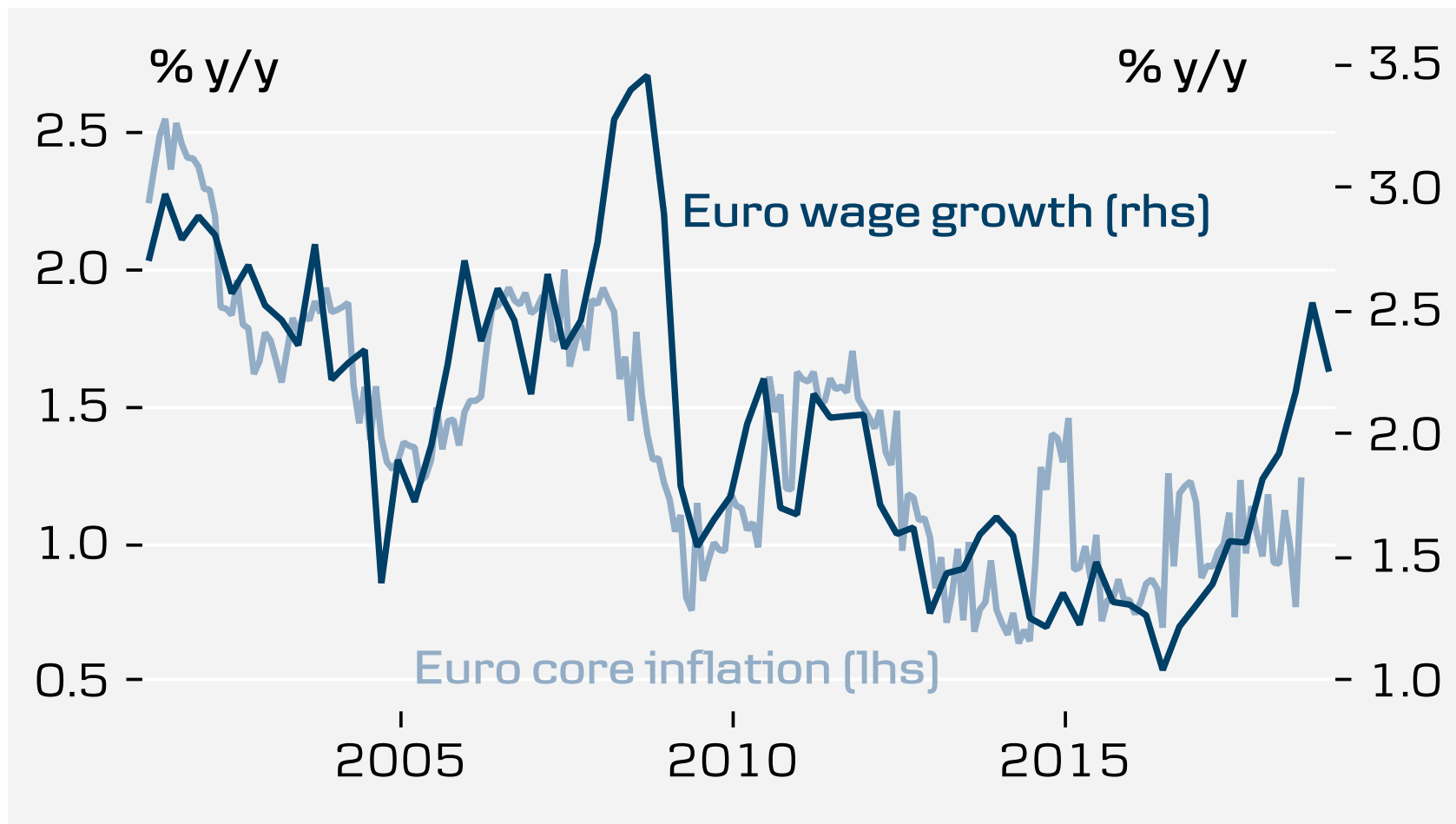
Euro

## Inflation - core vs headline



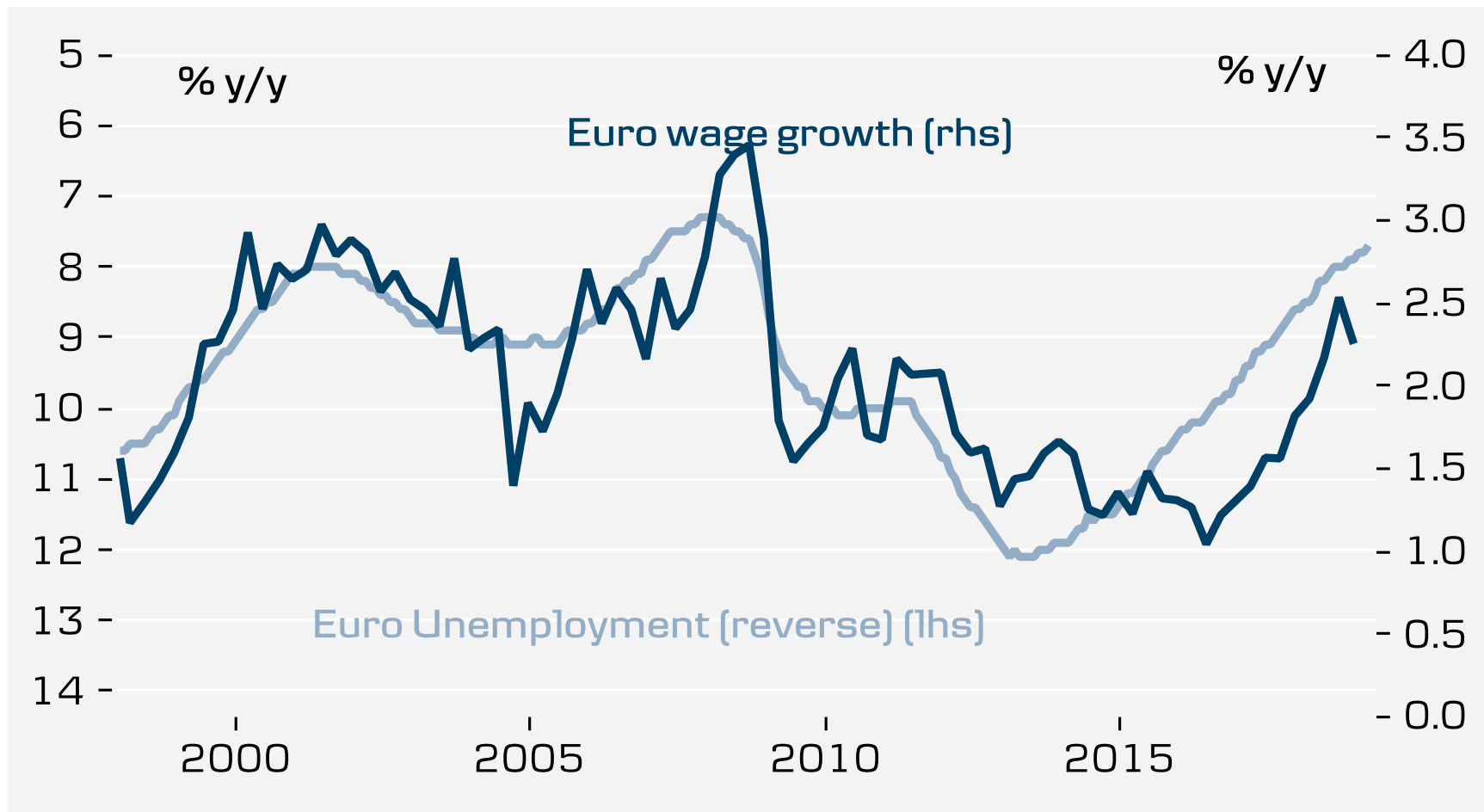
Euro

## Inflation - core vs. wage inflation



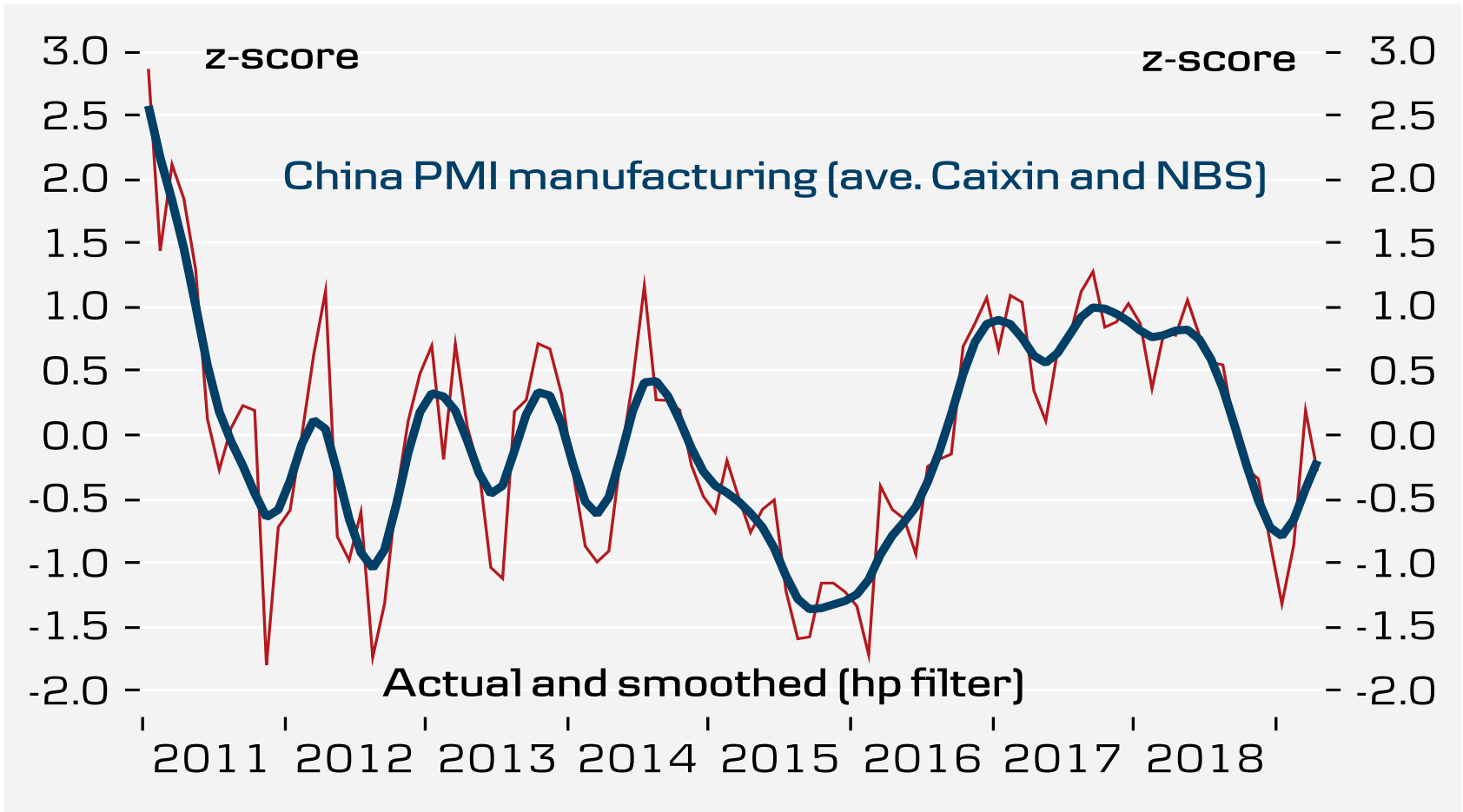
Euro

## Inflation - wage inflation vs. unemployment

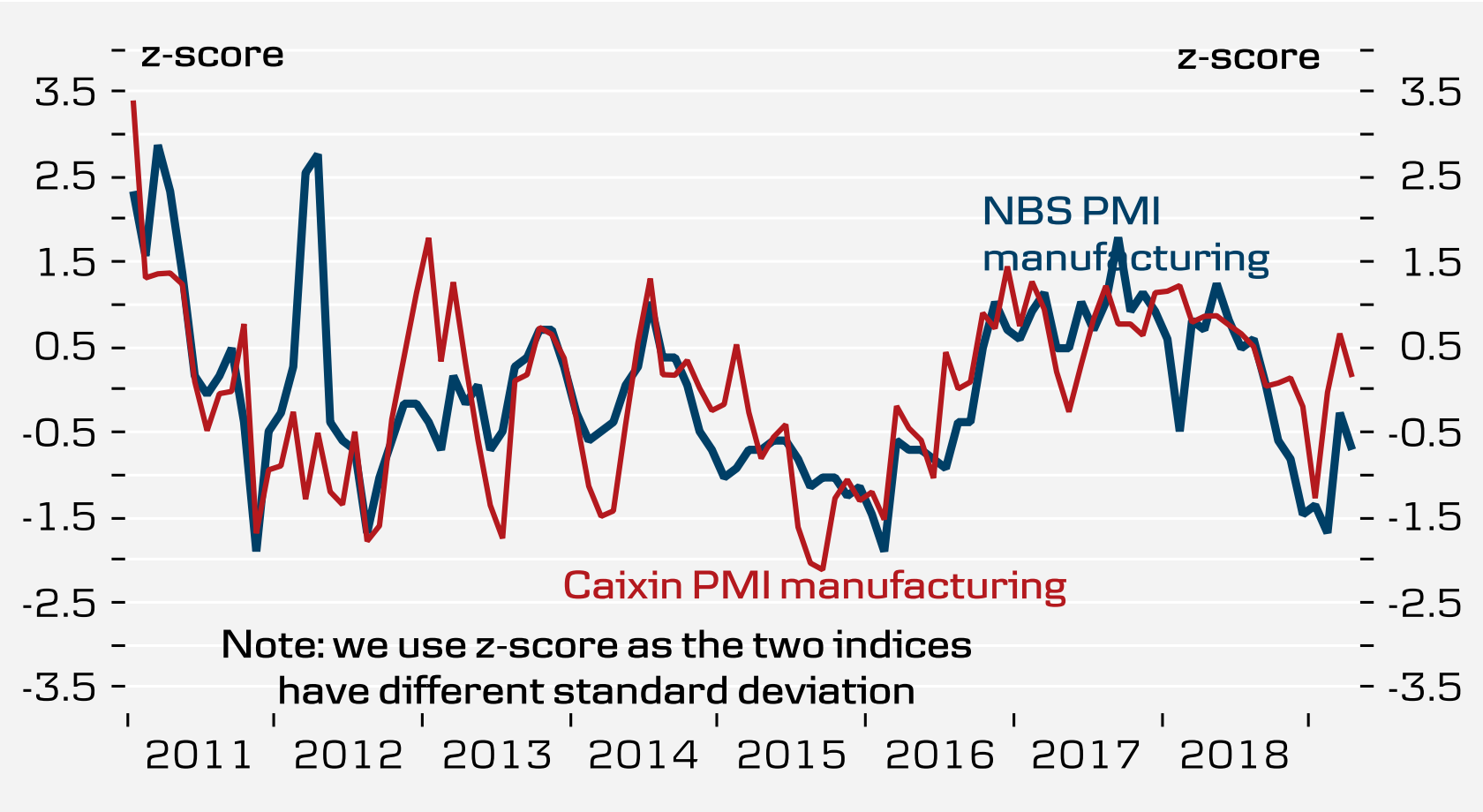


# *China*

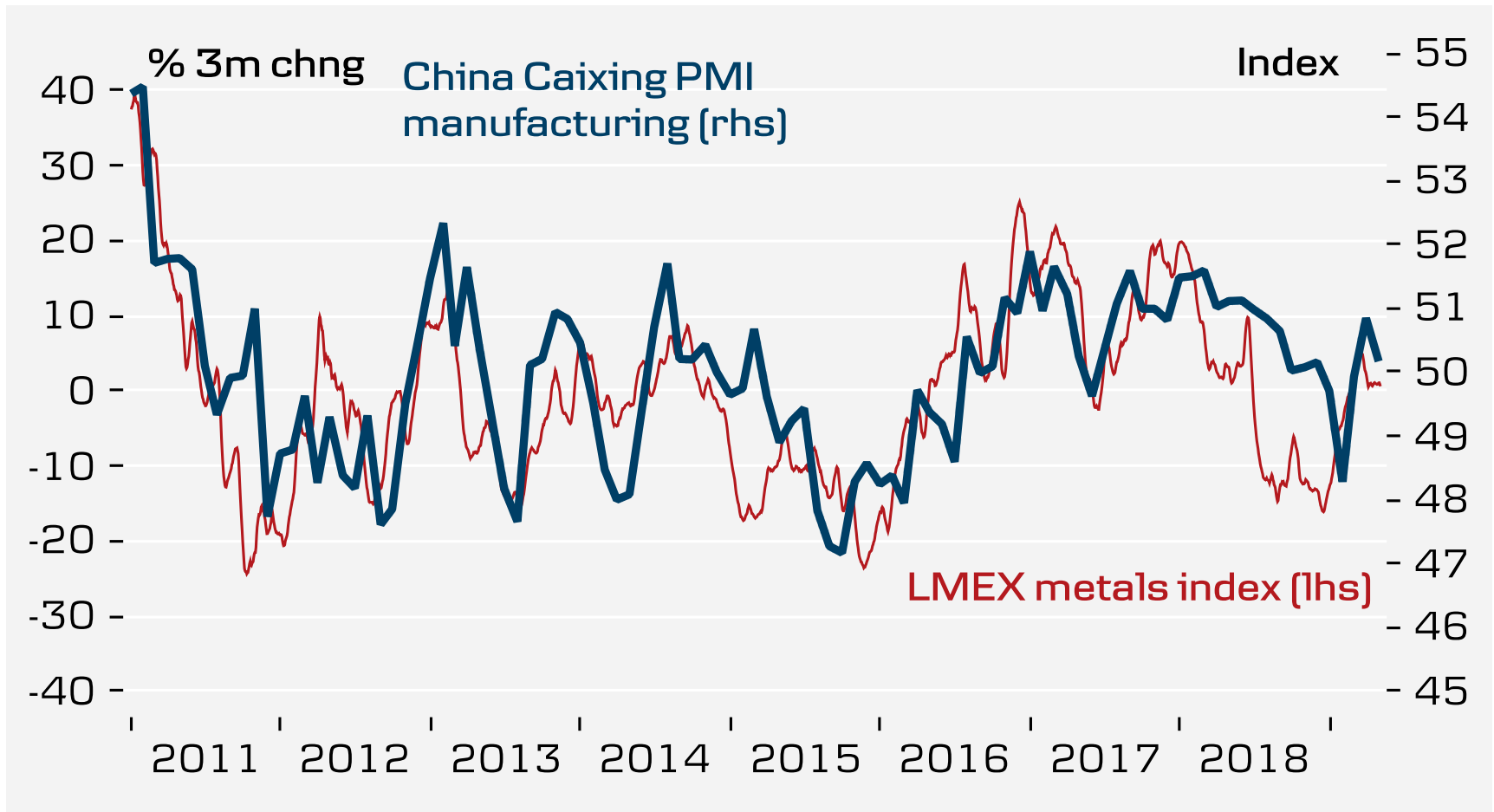
PMI indicator (average of Caixin and NBS)



# NBS vs Caixin PMI



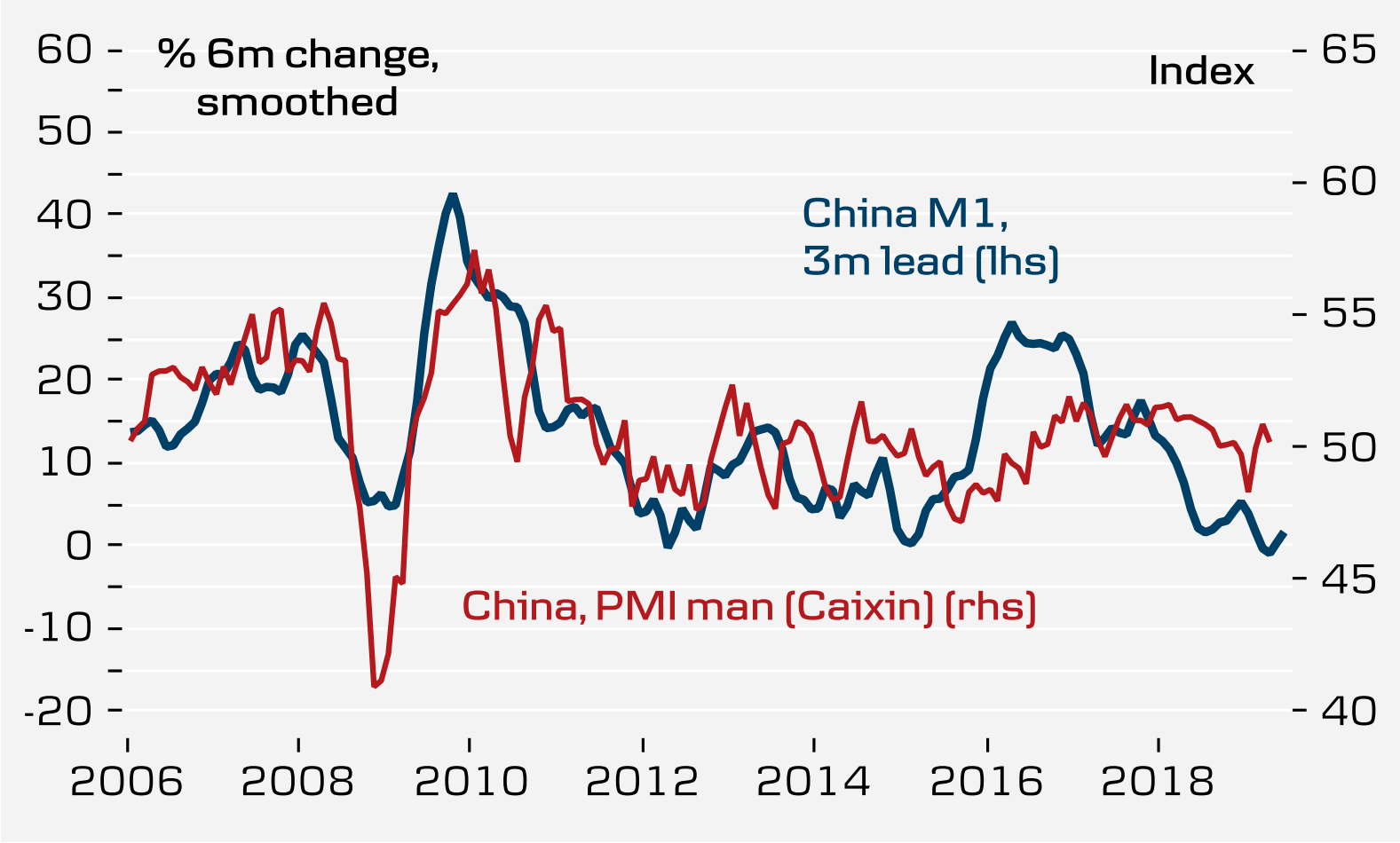
## Metal prices vs PMI





China

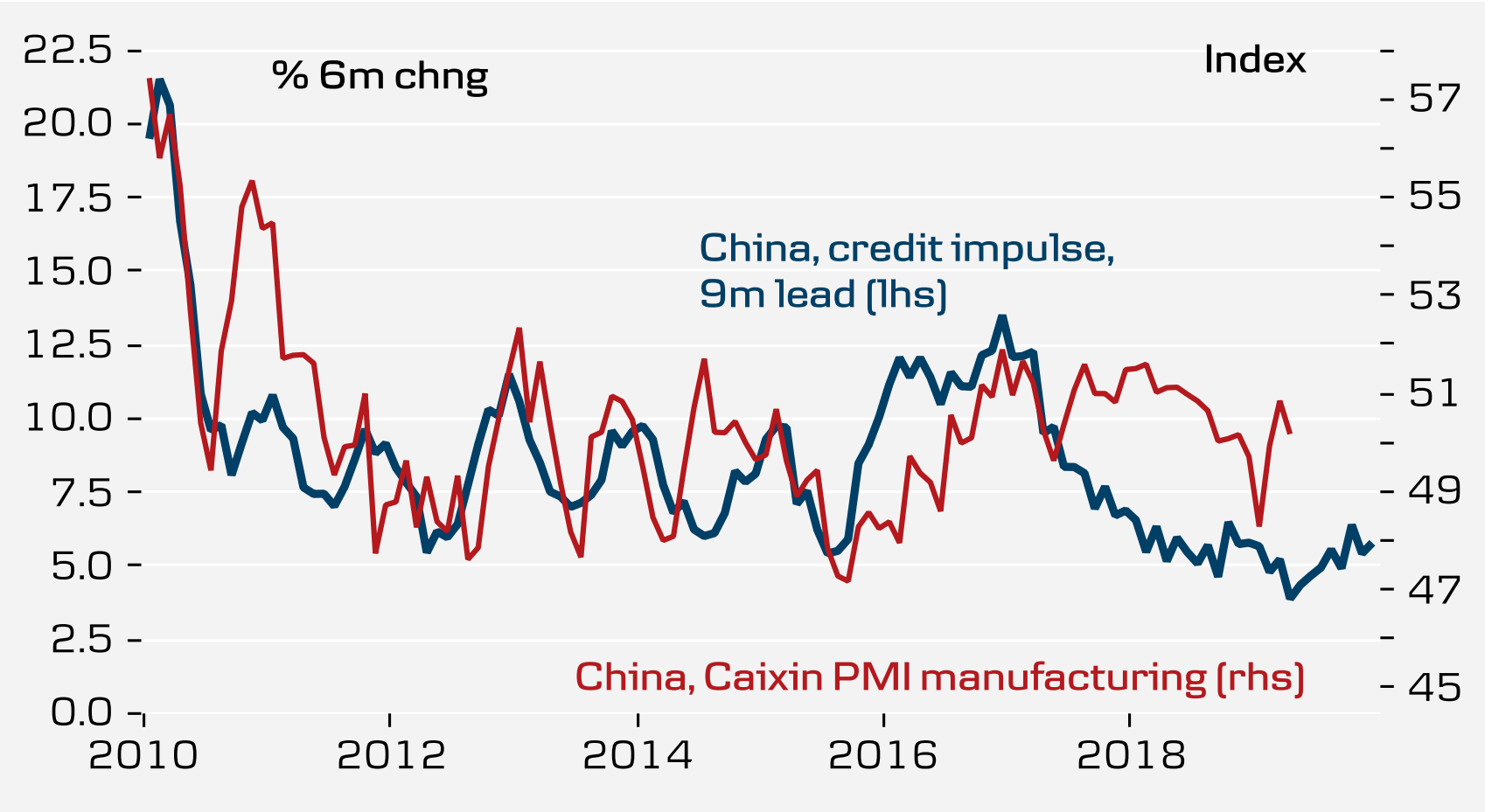
Money growth and PMI



Source: Macrobond Financial, Markit, PBoC

China

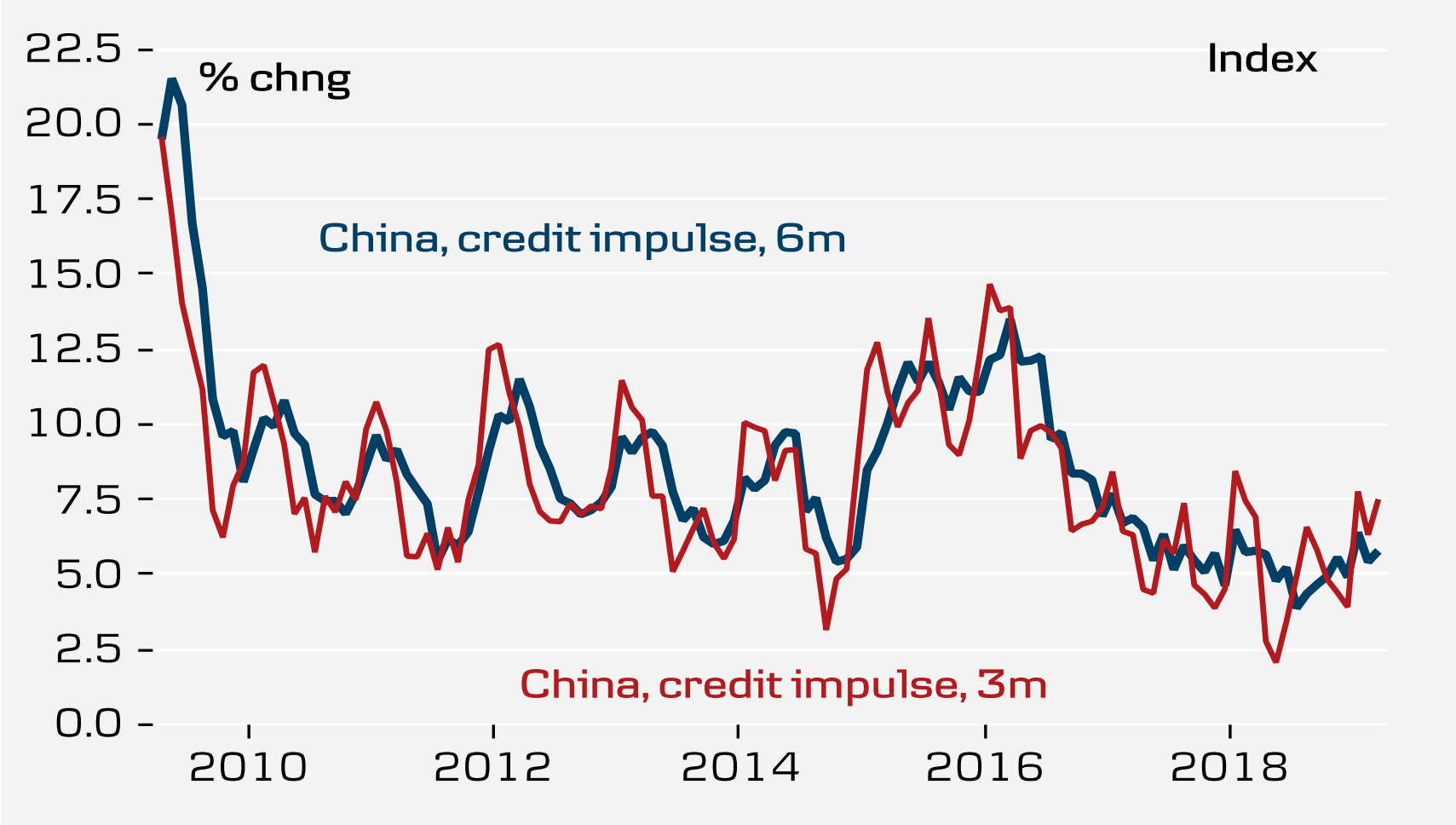
Credit impulse and PMI



Source: Bloomberg, PBoC, Danske Bank

China

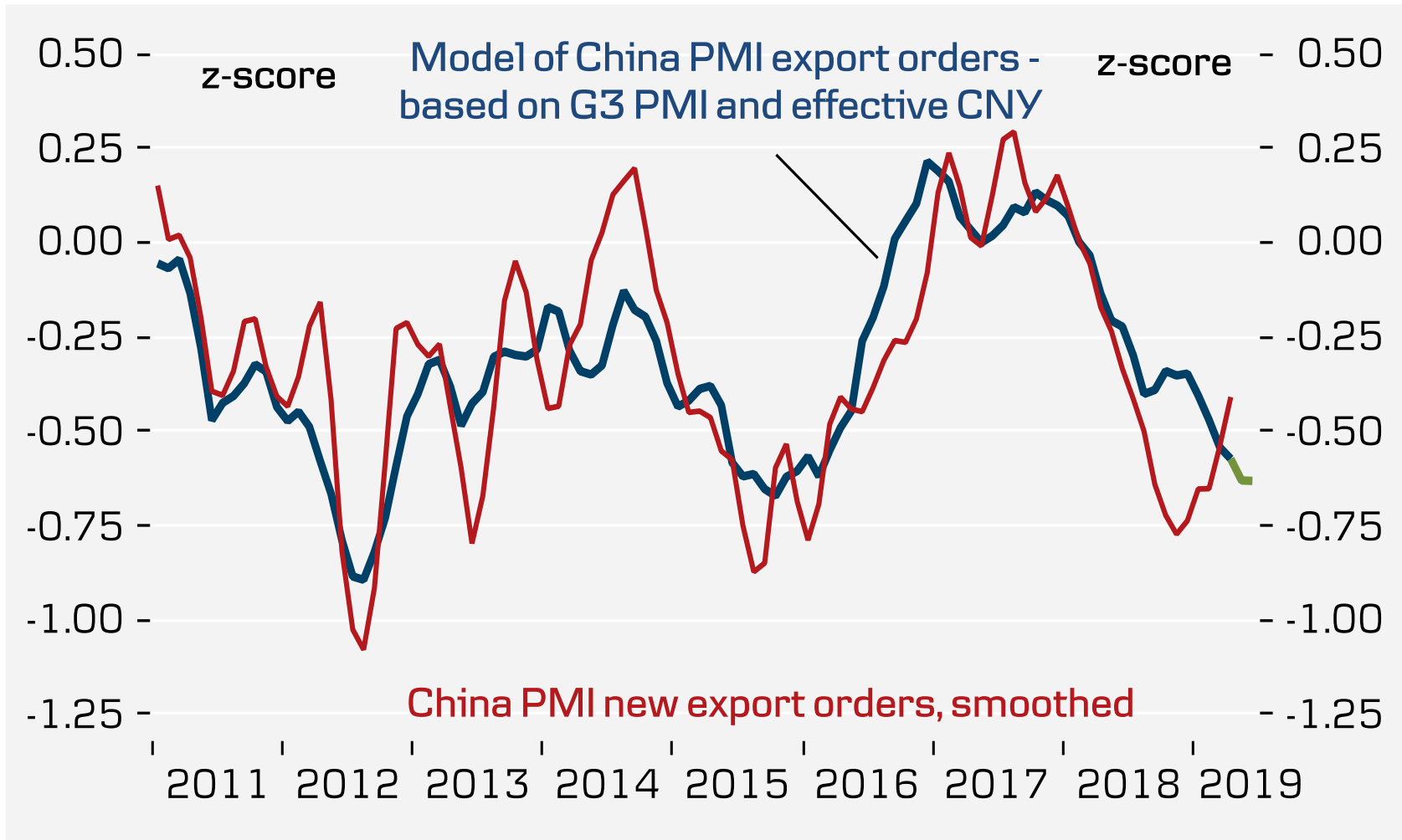
Credit impulse momentum



Source: Macrobond Financial, Markit, NBS, Danske Bank

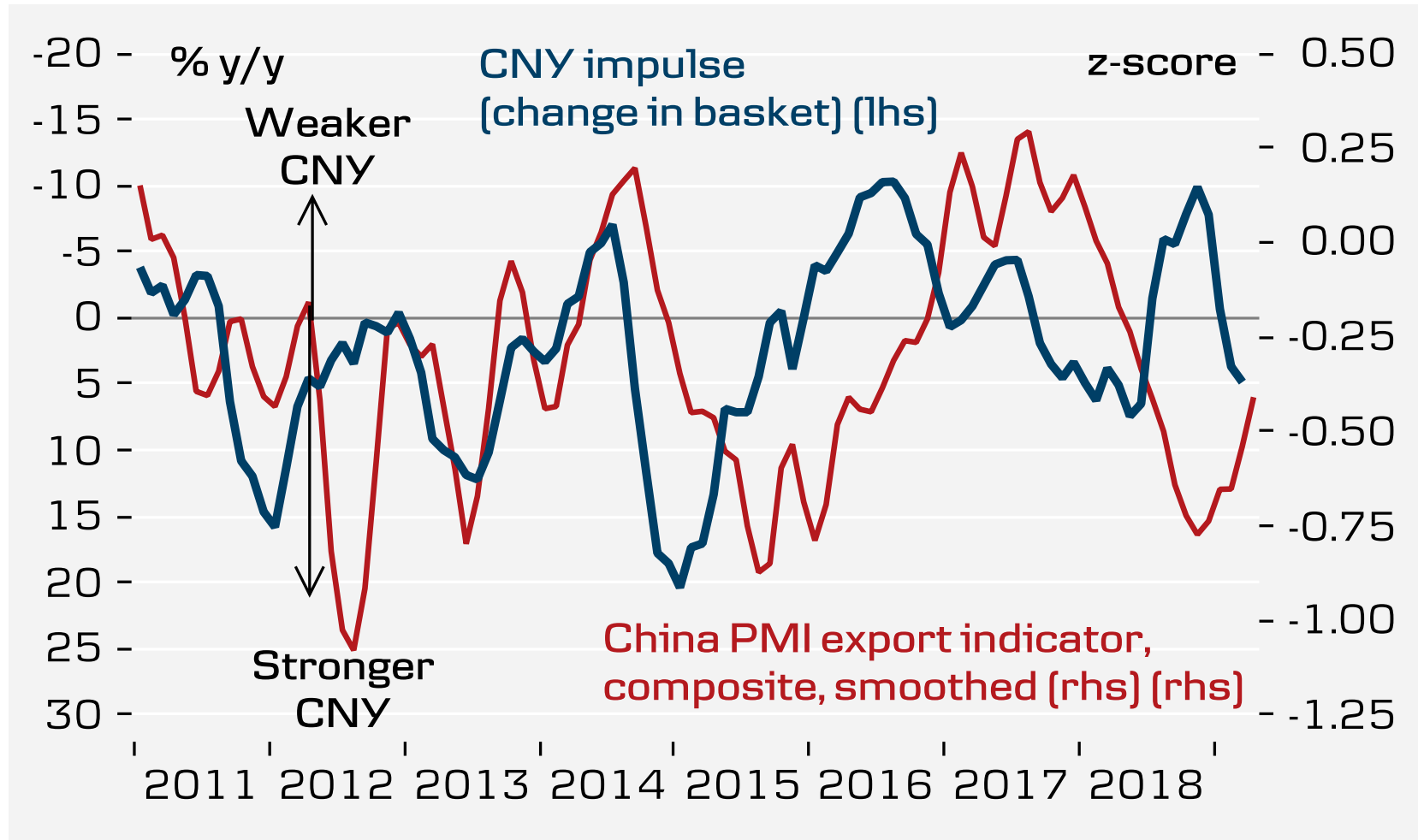
# China

## Exports - model

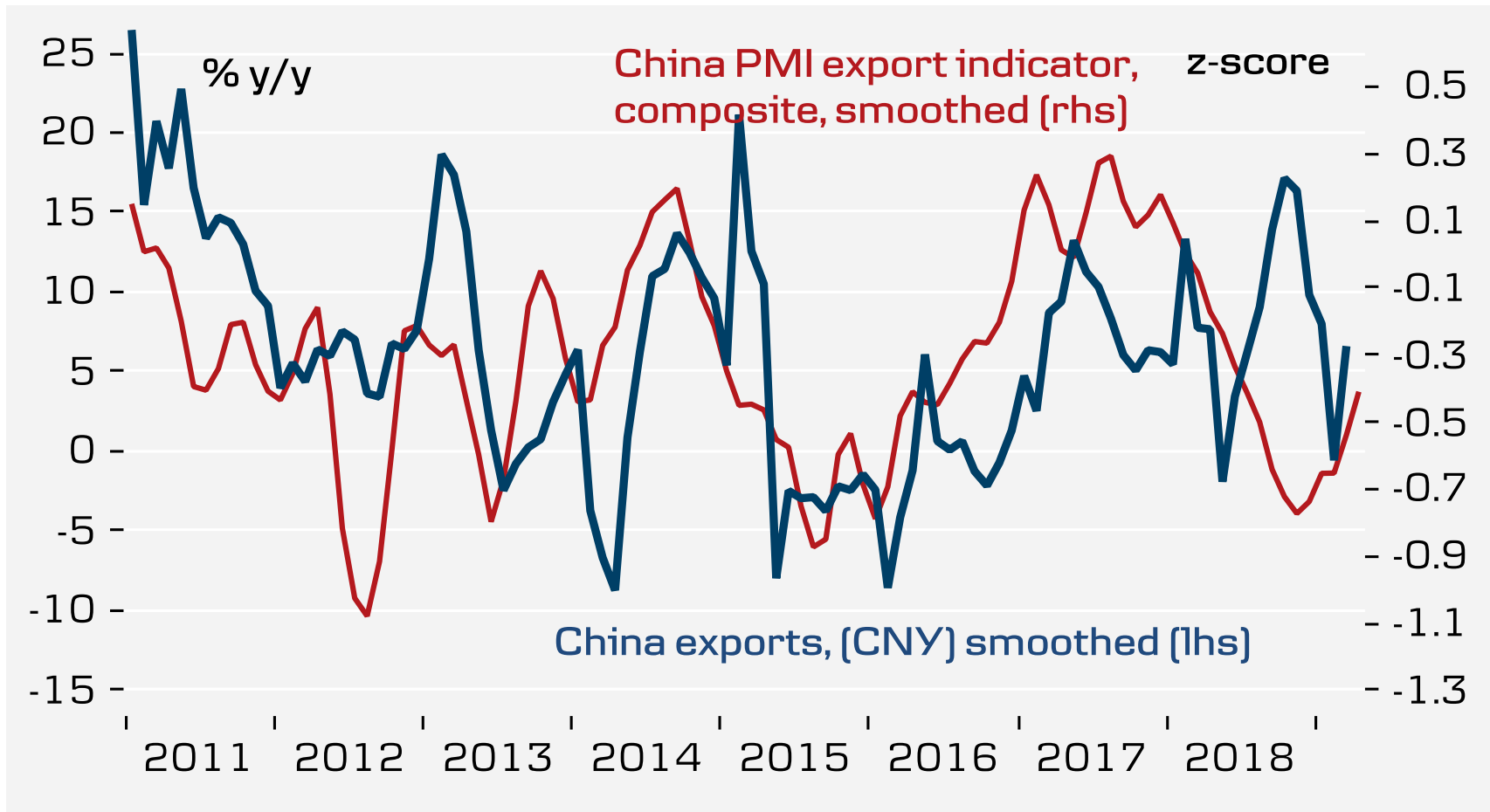


# China

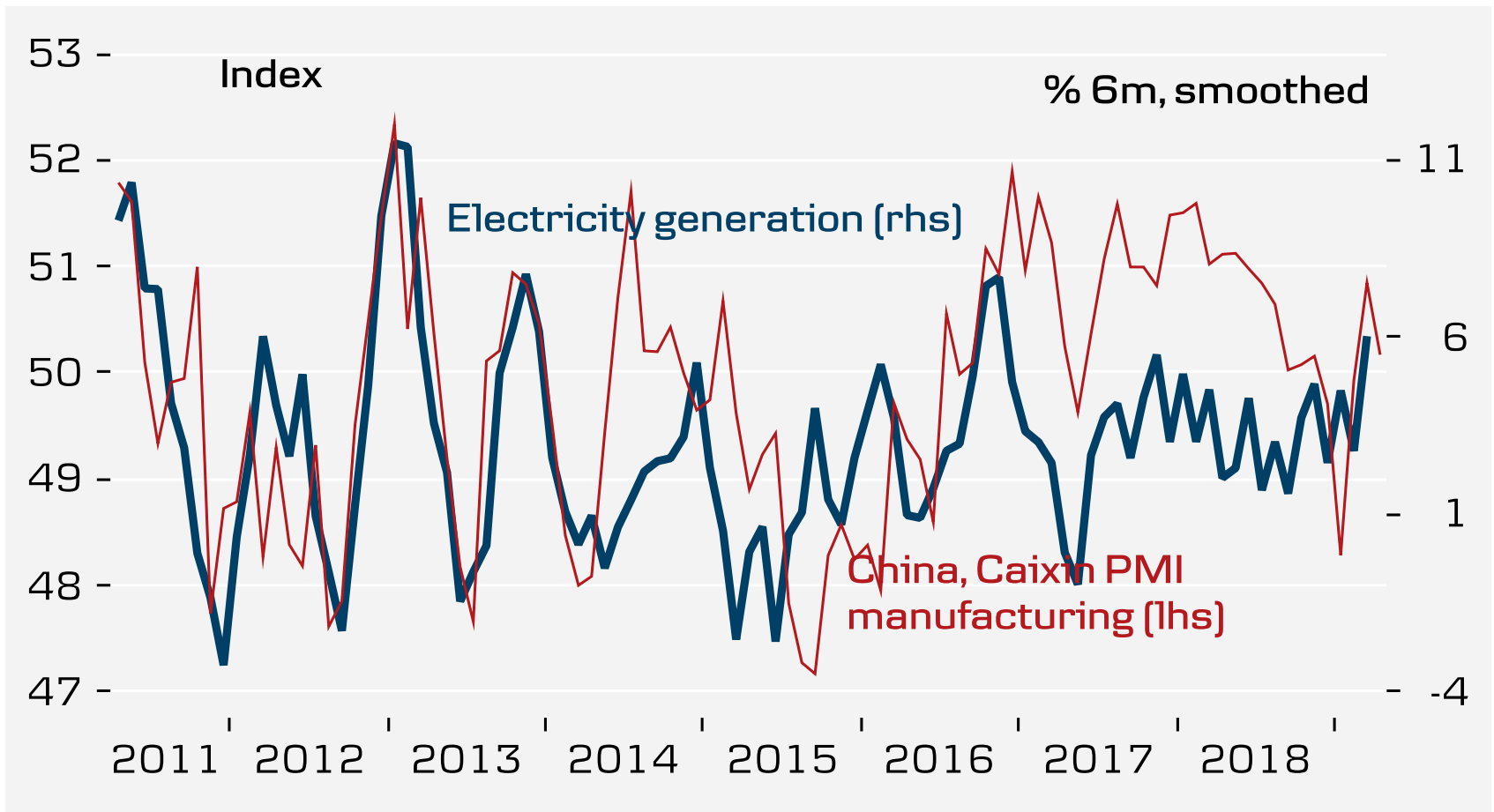
## Exports - currency impulse



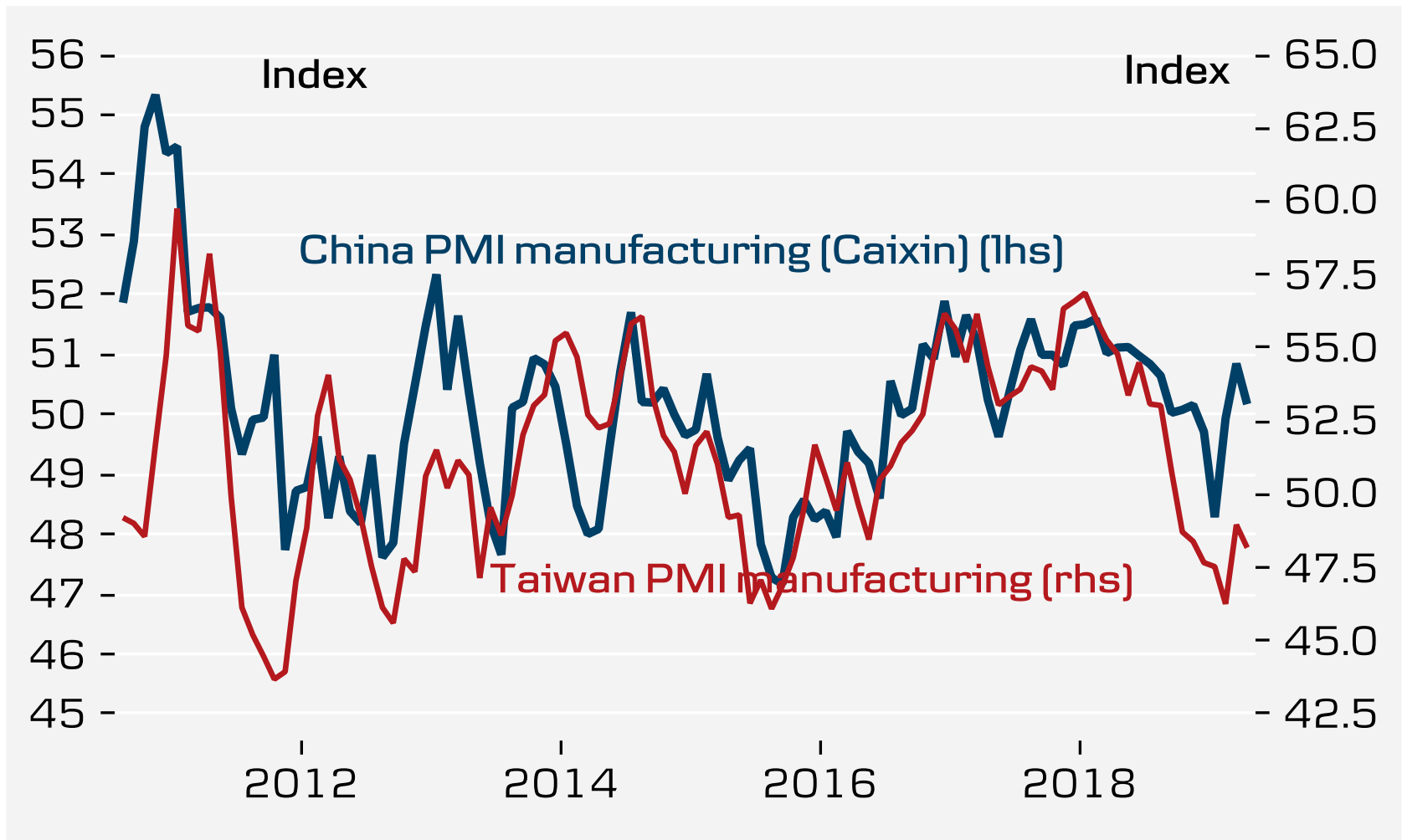
## Exports - hard data and PMI export orders



## Electricity generation vs PMI

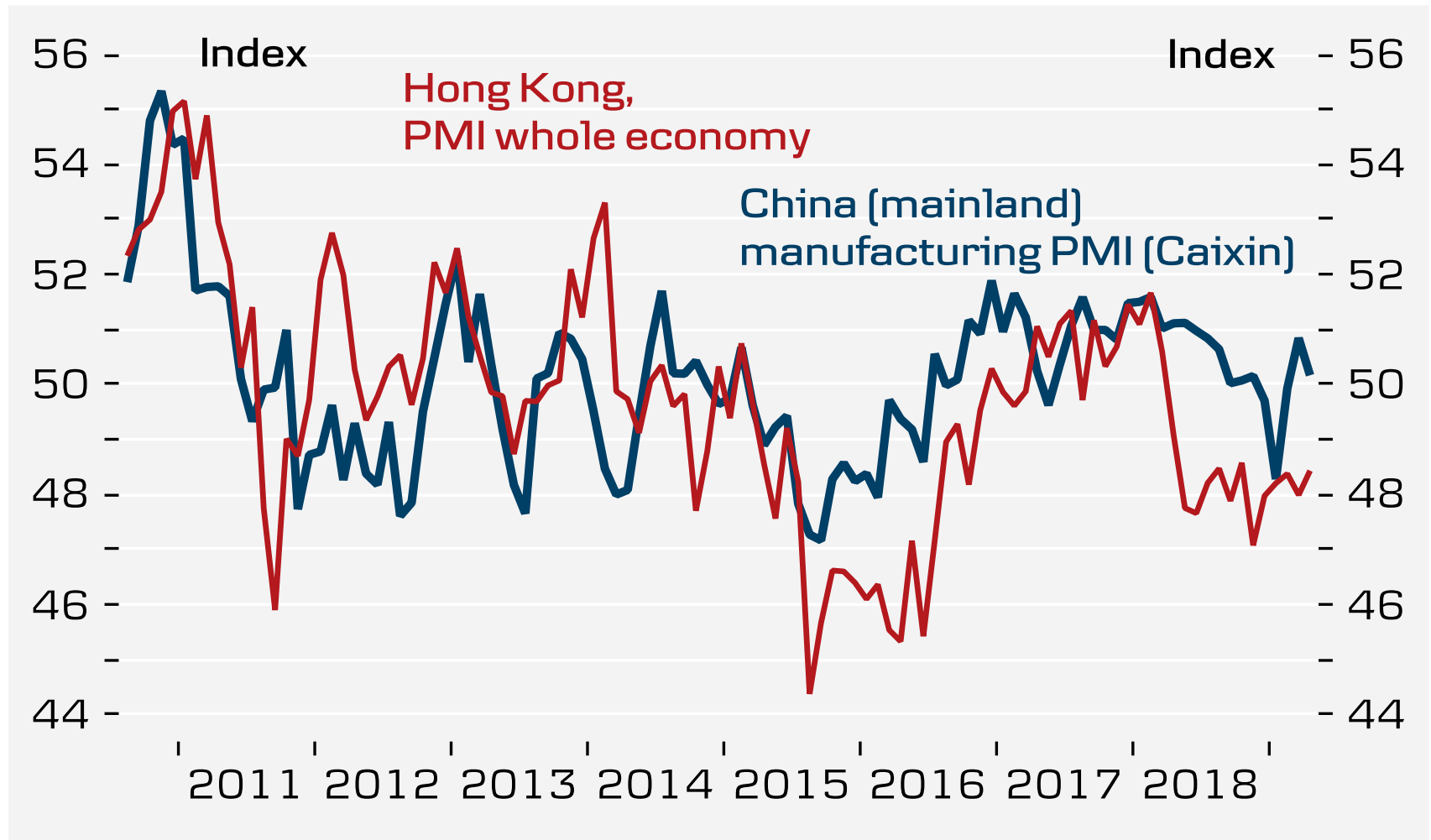


## Taiwan PMI vs China PMI



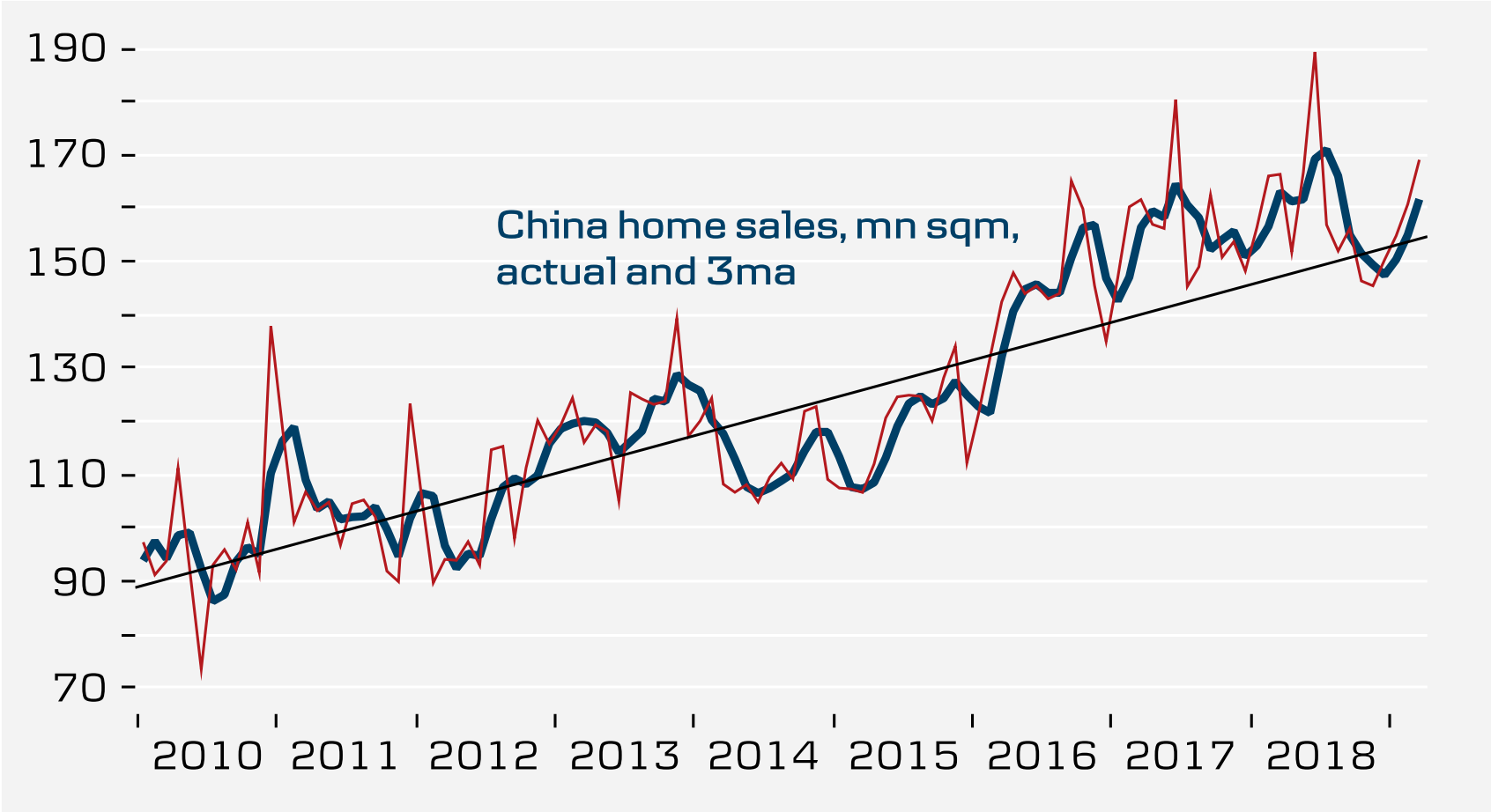


## Hong Kong PMI vs China PMI



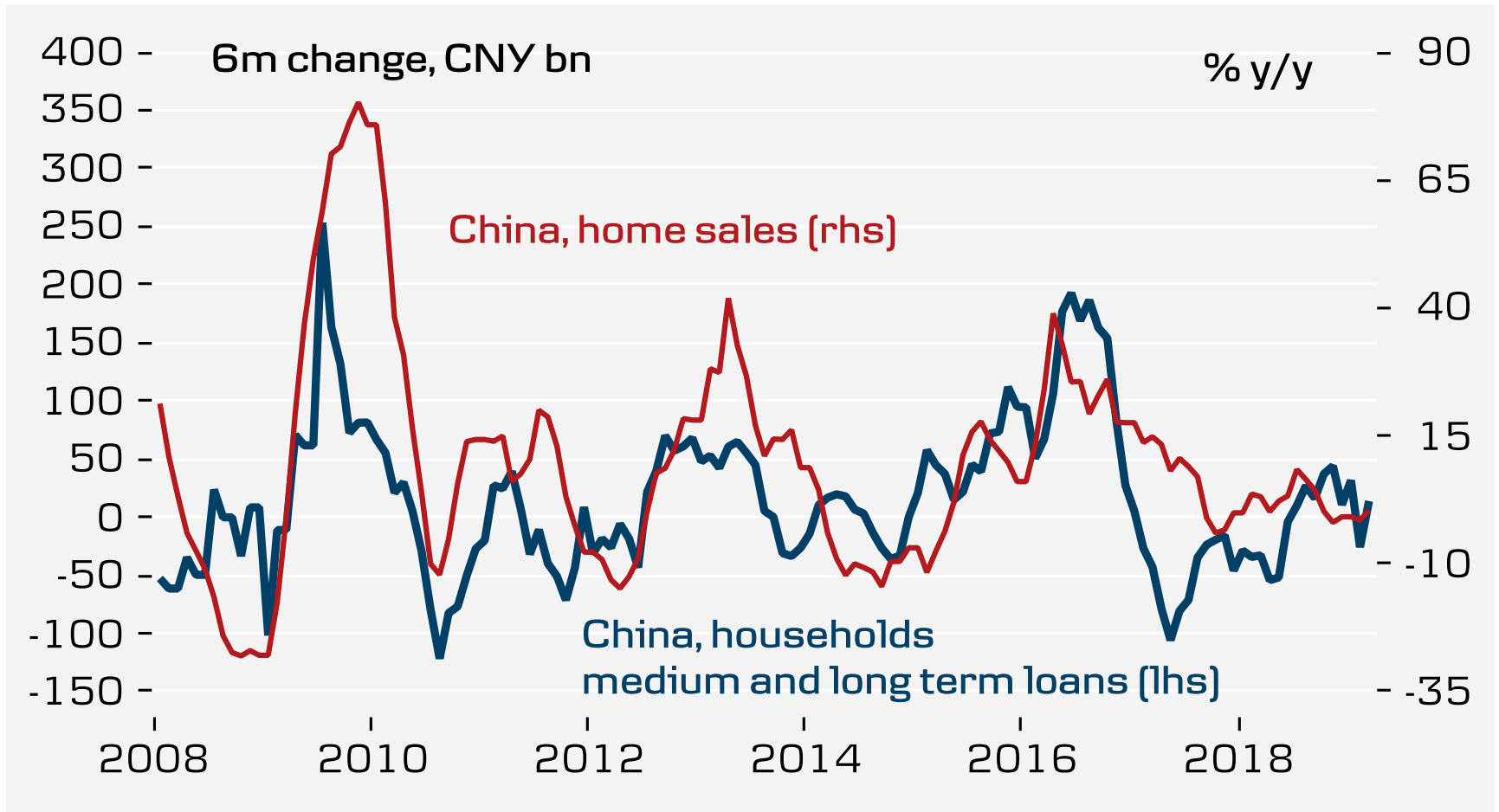
China

Housing - home sales level



Source: Macrobond Financial, NBS, Danske Bank

## Housing - home sales and household credit



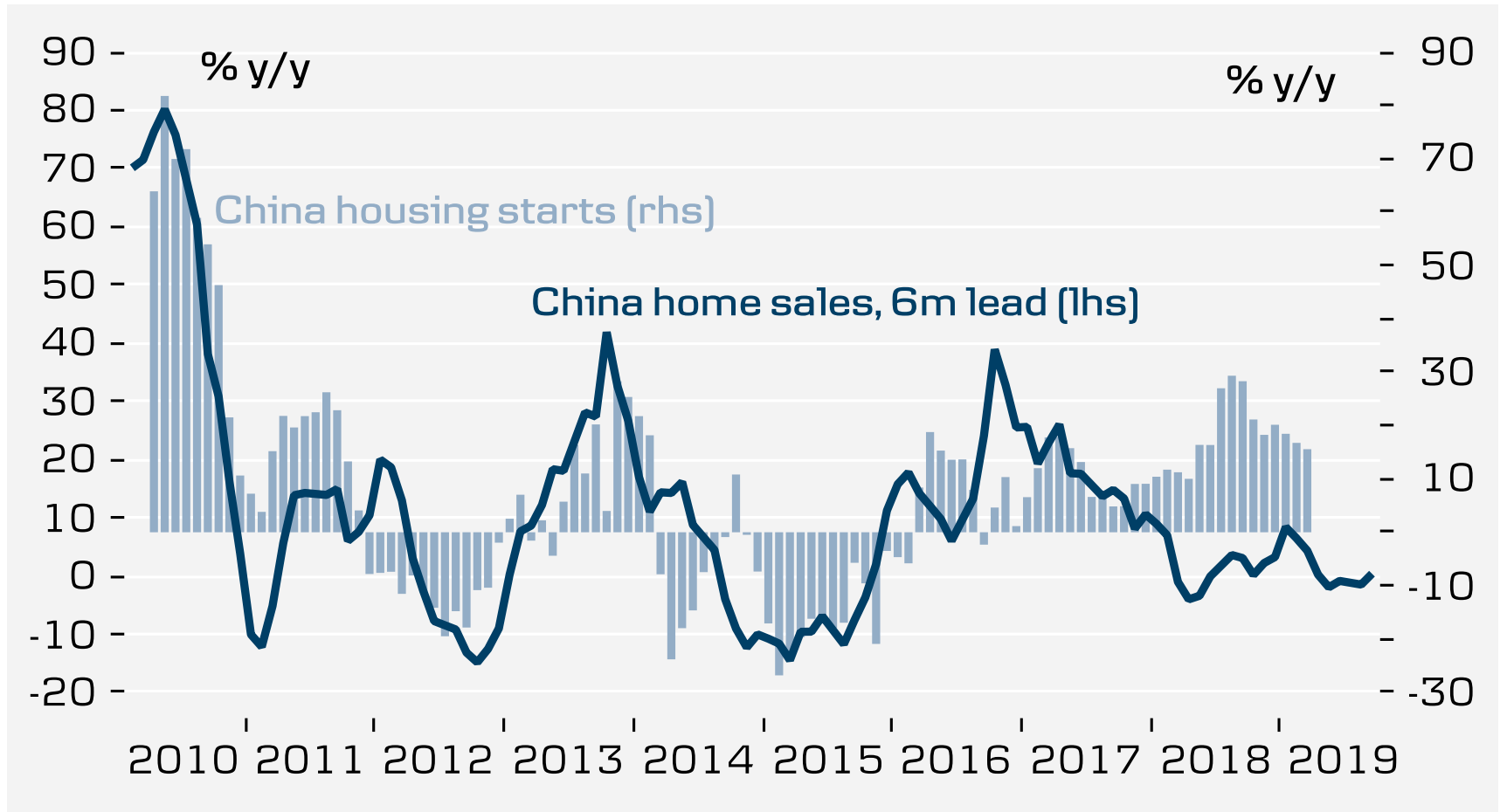
# China

## Housing - yields vs home sales



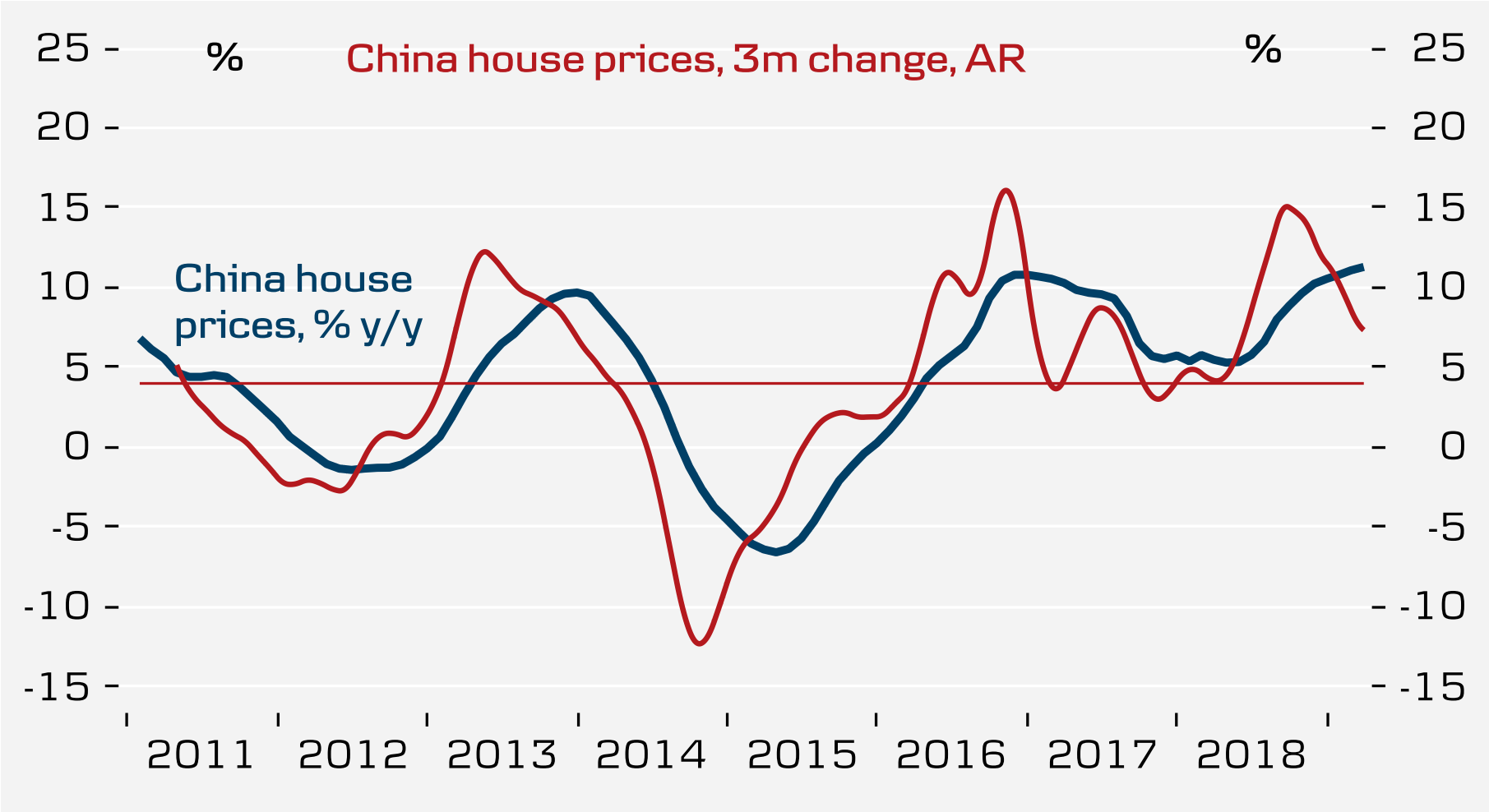
# China

## Housing - home sales and housing starts



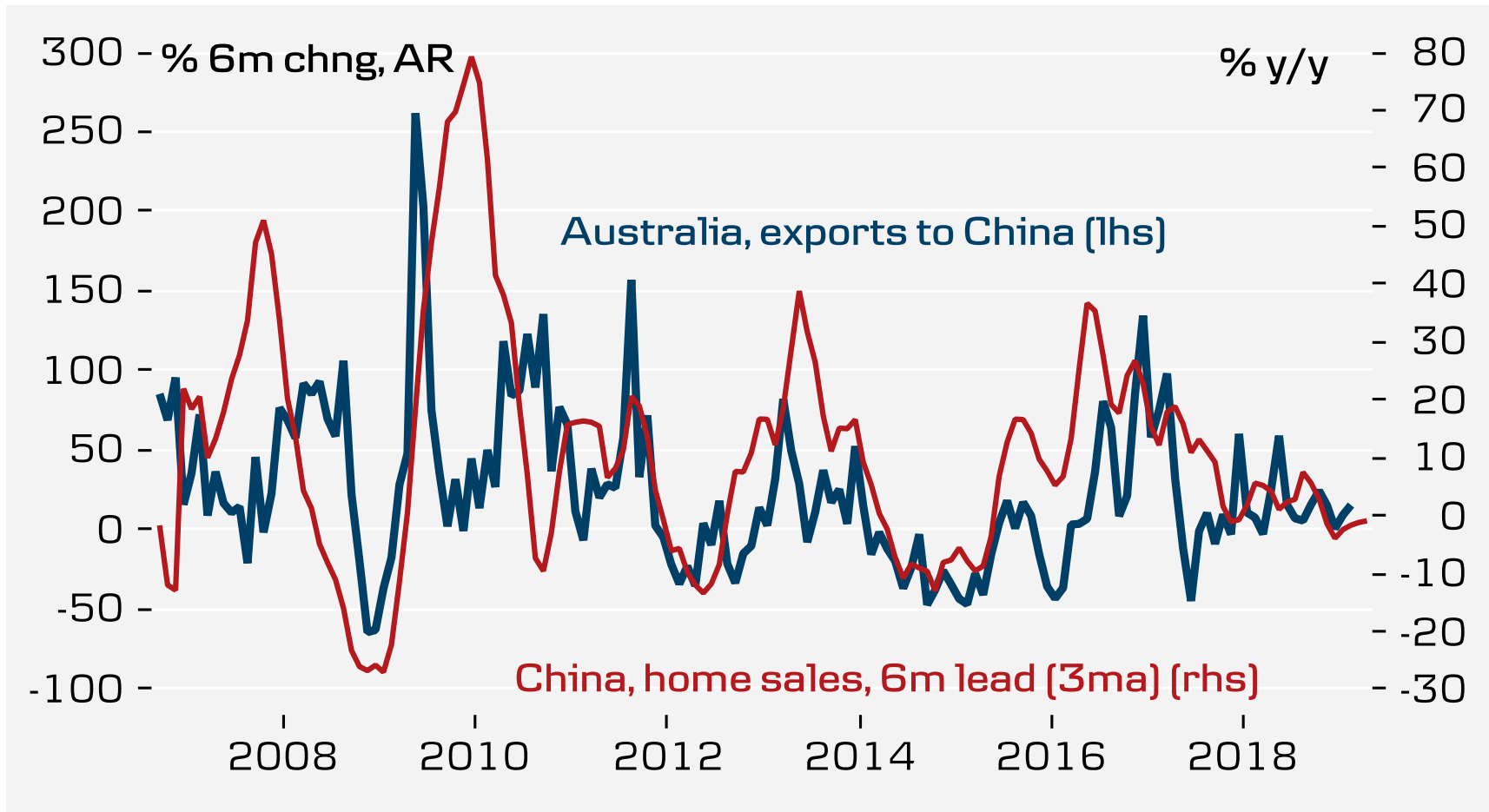
China

Inflation - house prices



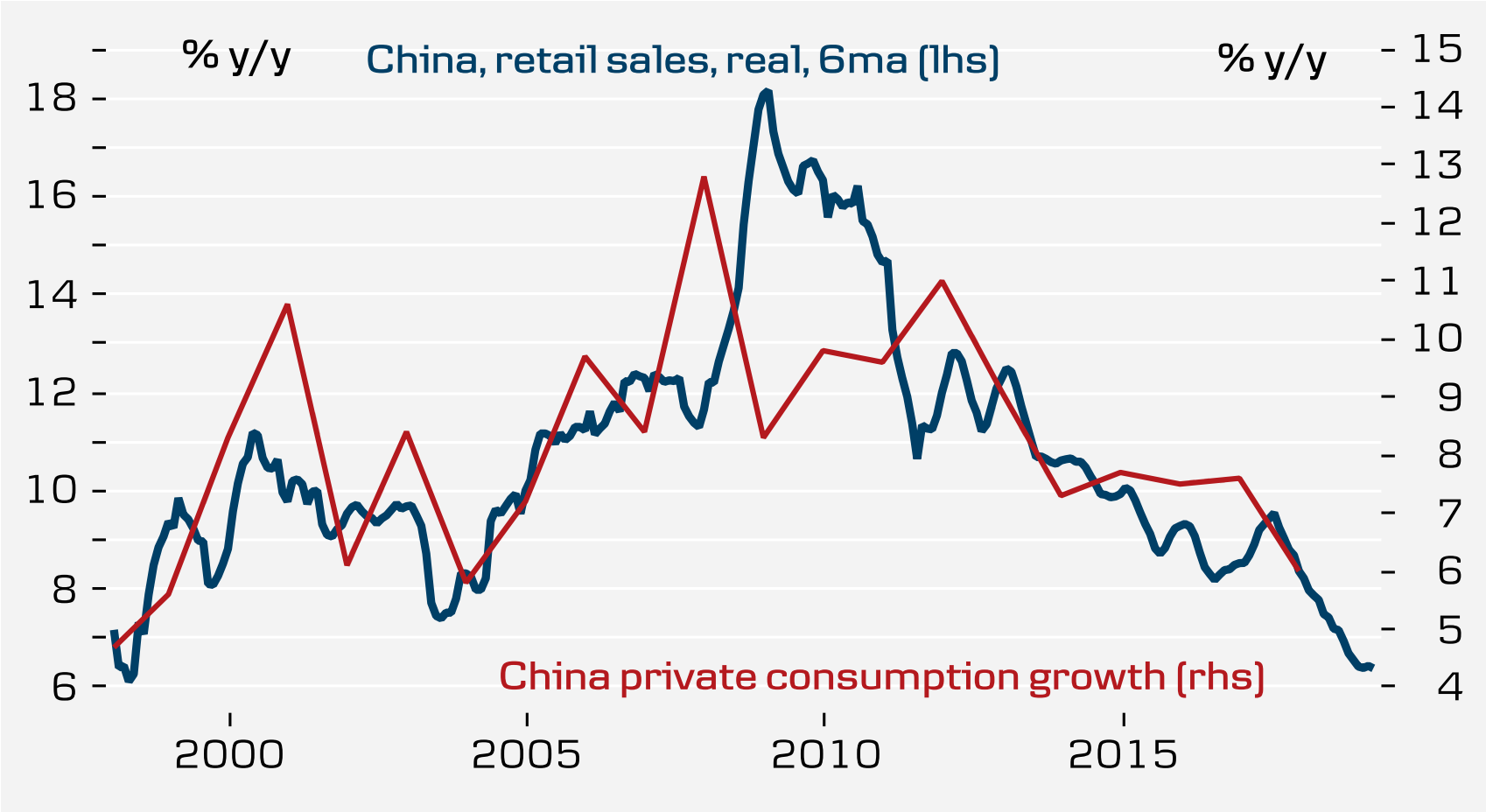
Source: 70-city house prices, Bloomberg

# Housing - Australian exports to China vs. home sales



China

Consumer - retail sales



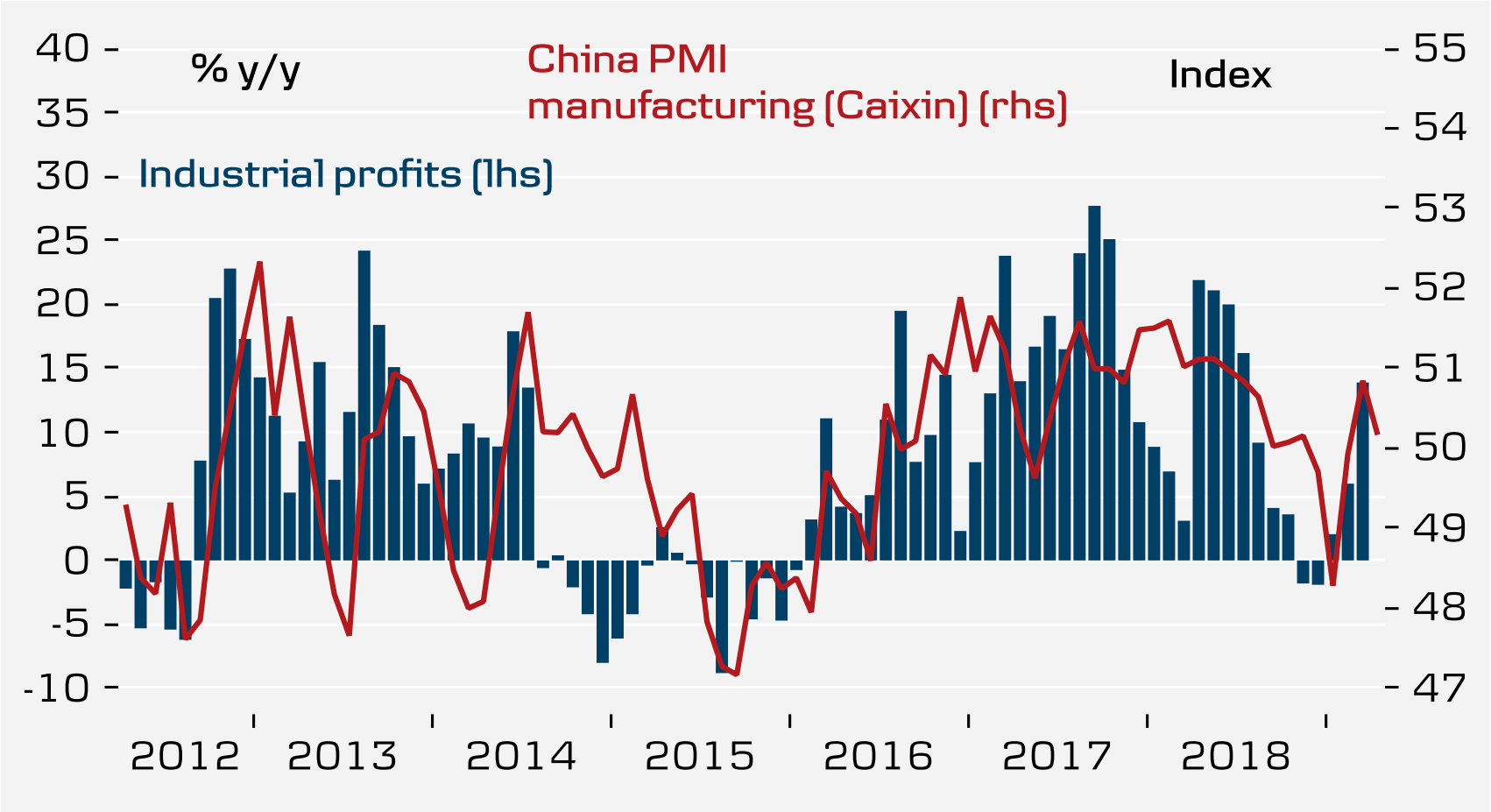
Source: Macrobond Financial, NBS, Danske Bank



# Consumer – car sales



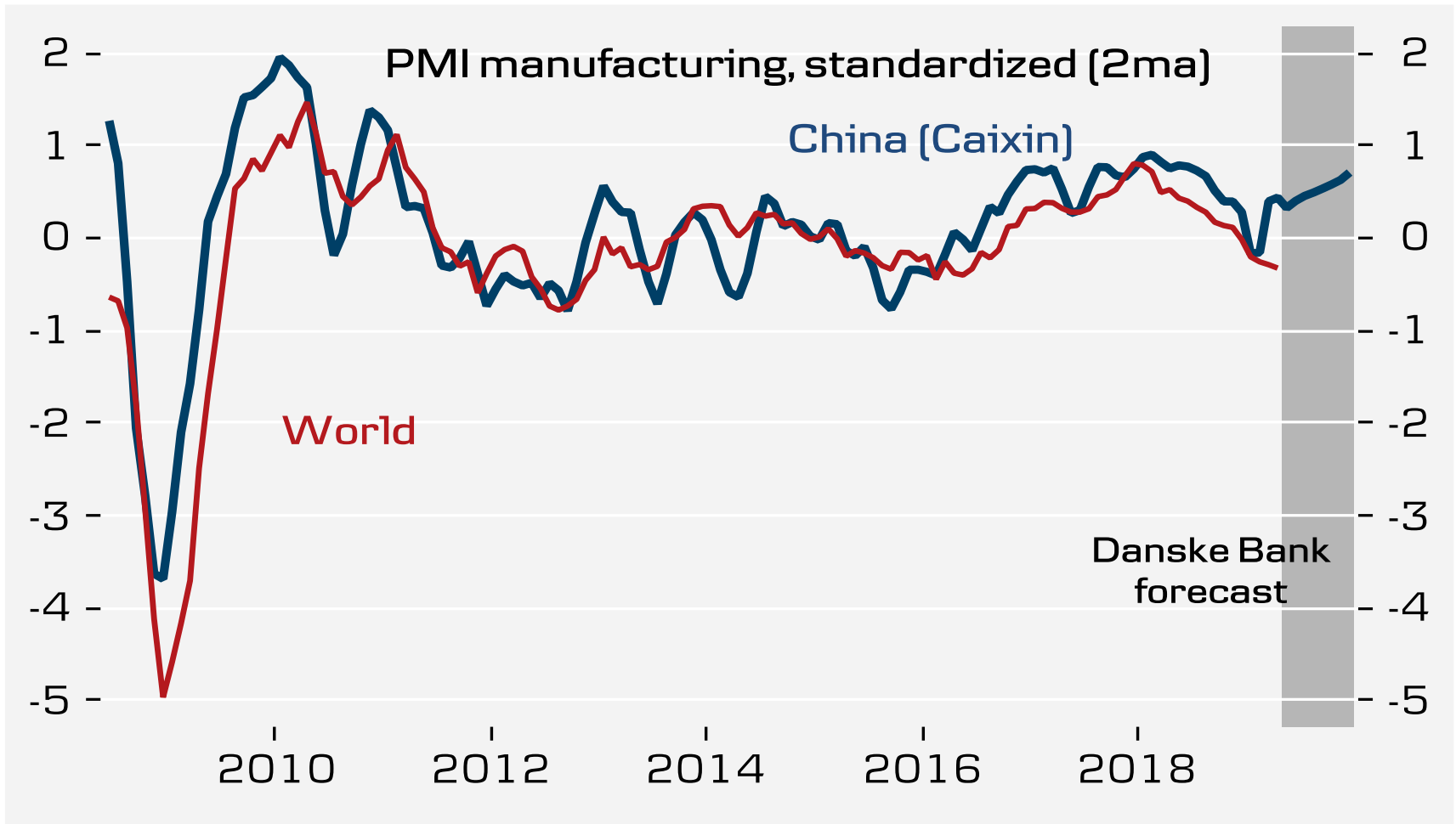
# Profits vs PMI



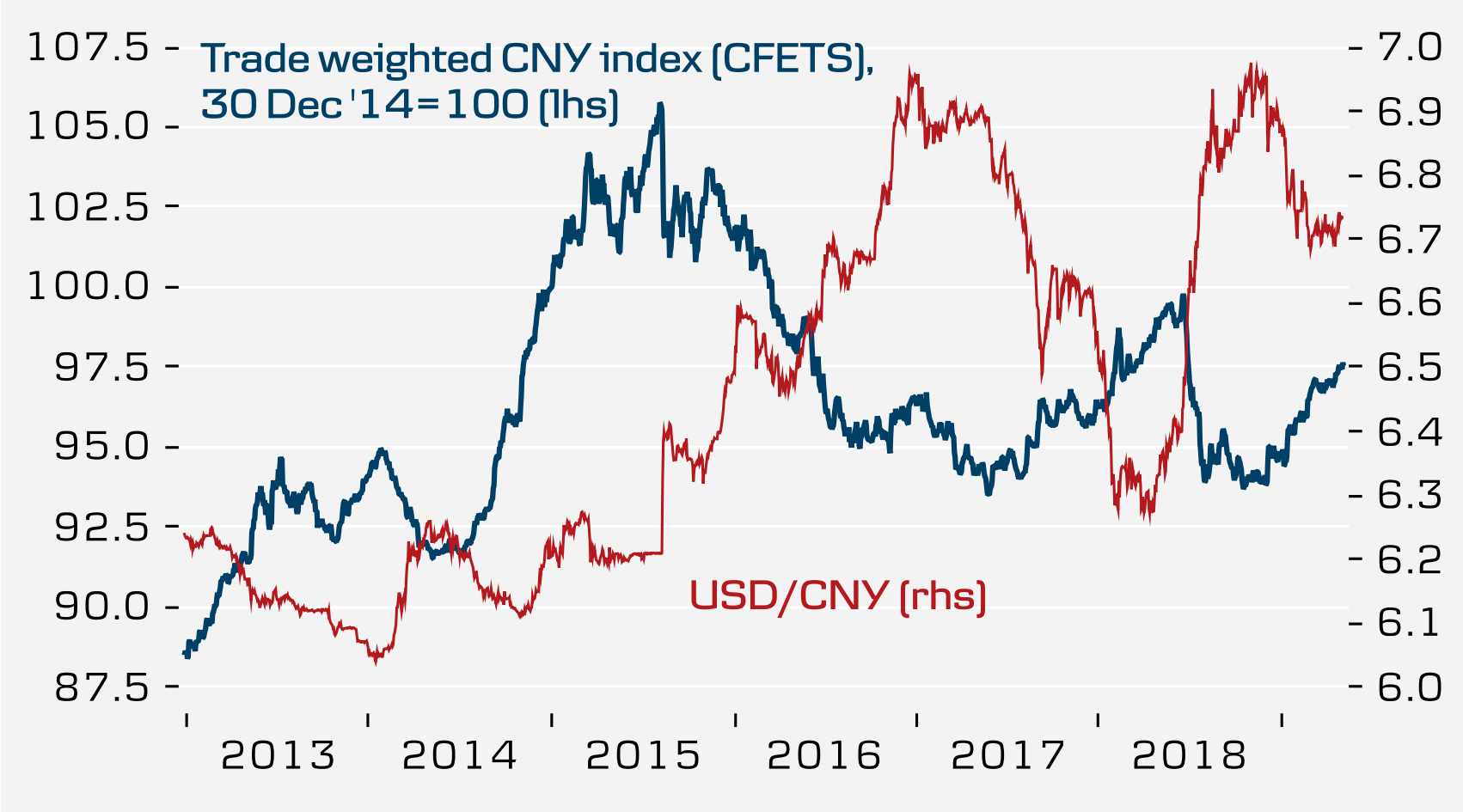
Source: Macrobond Financial, NBS, Markit, Danske Bank

# China

## Domestic vs global cycle



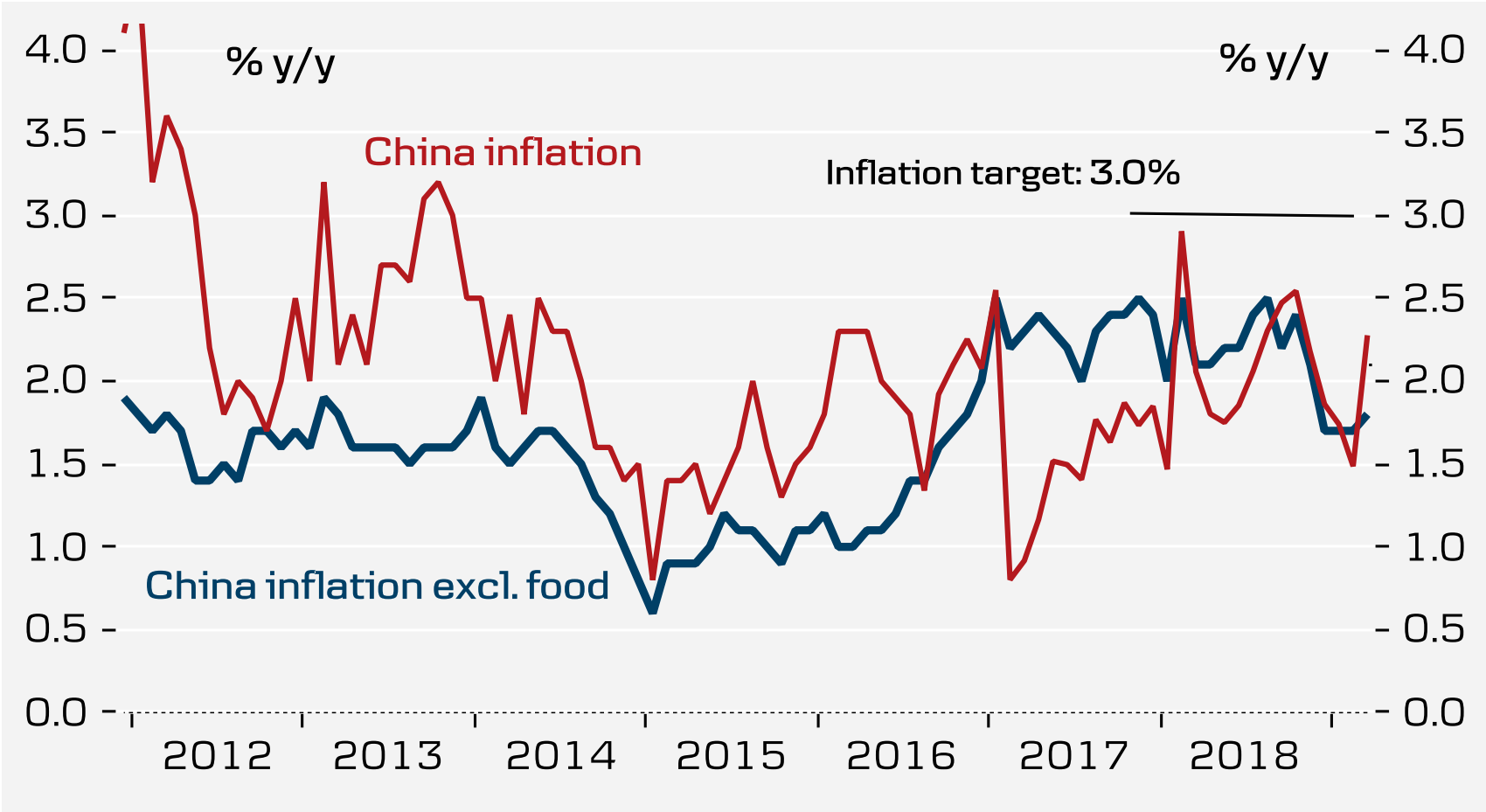
# USD/CNY and CNY basket



Source: Macrobond Financial, PBoC, Danske Bank

China

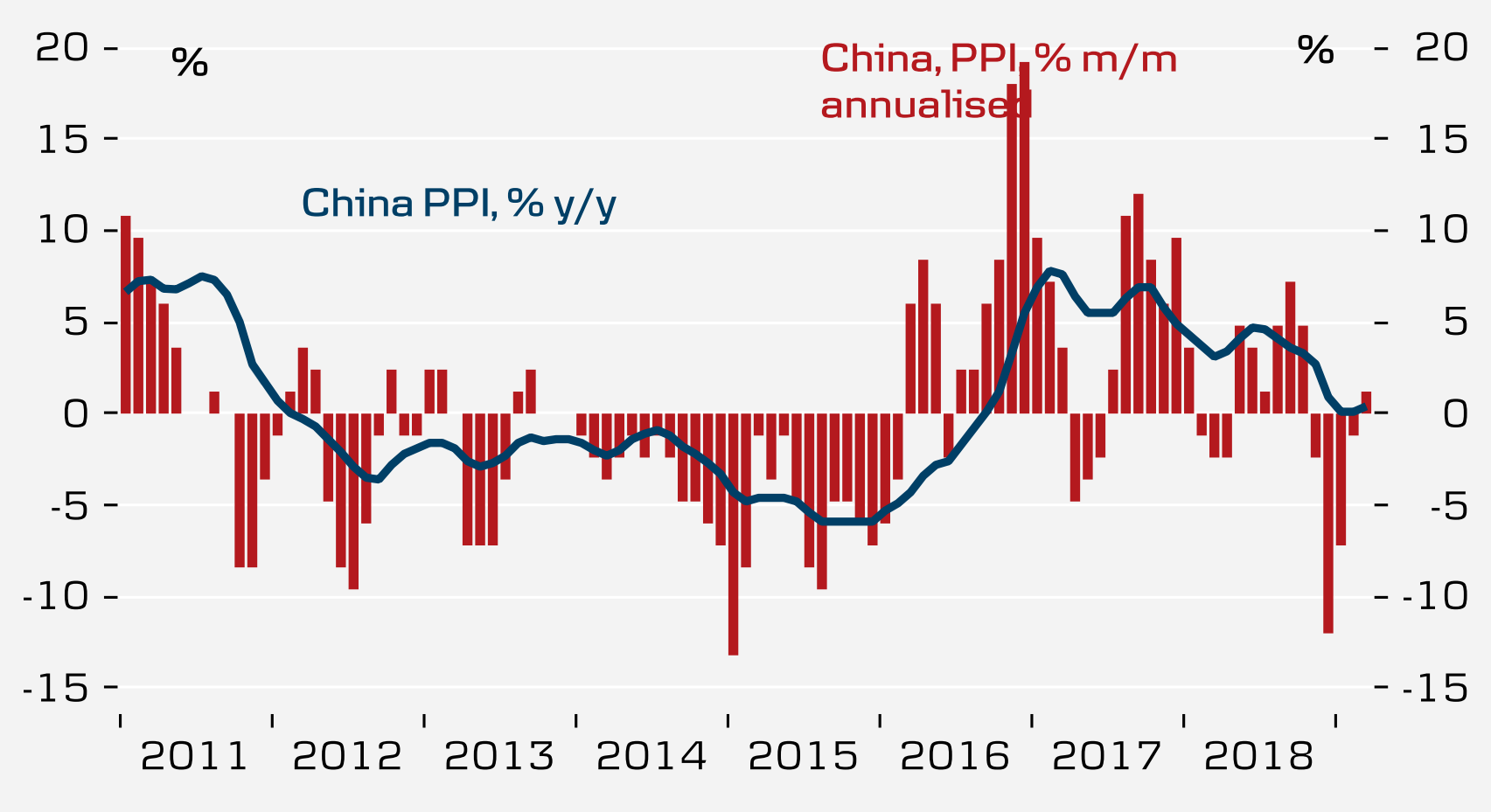
Inflation - CPI



Source: Macrobond Financial, NBS, Danske Bank

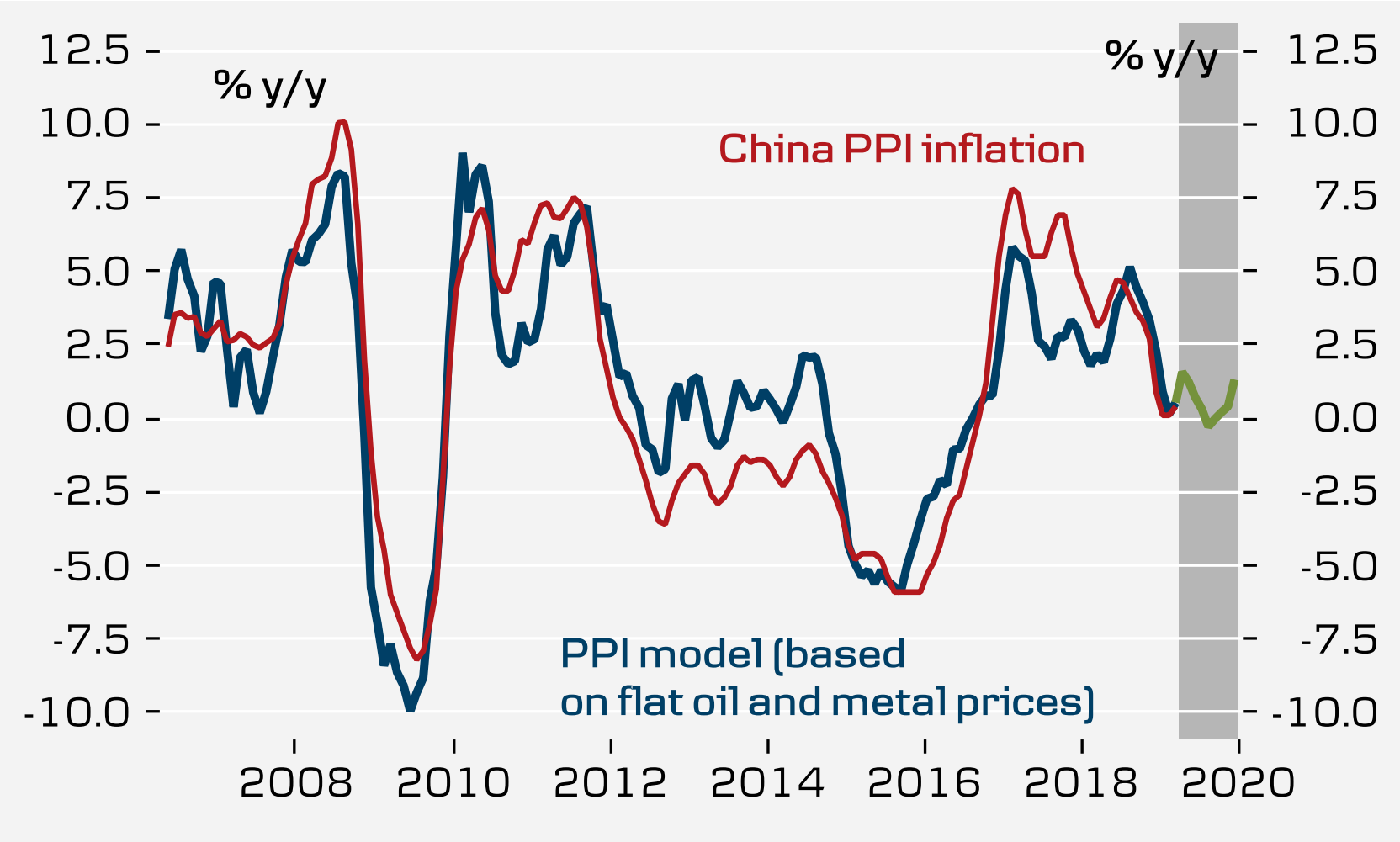
China

Inflation - PPI



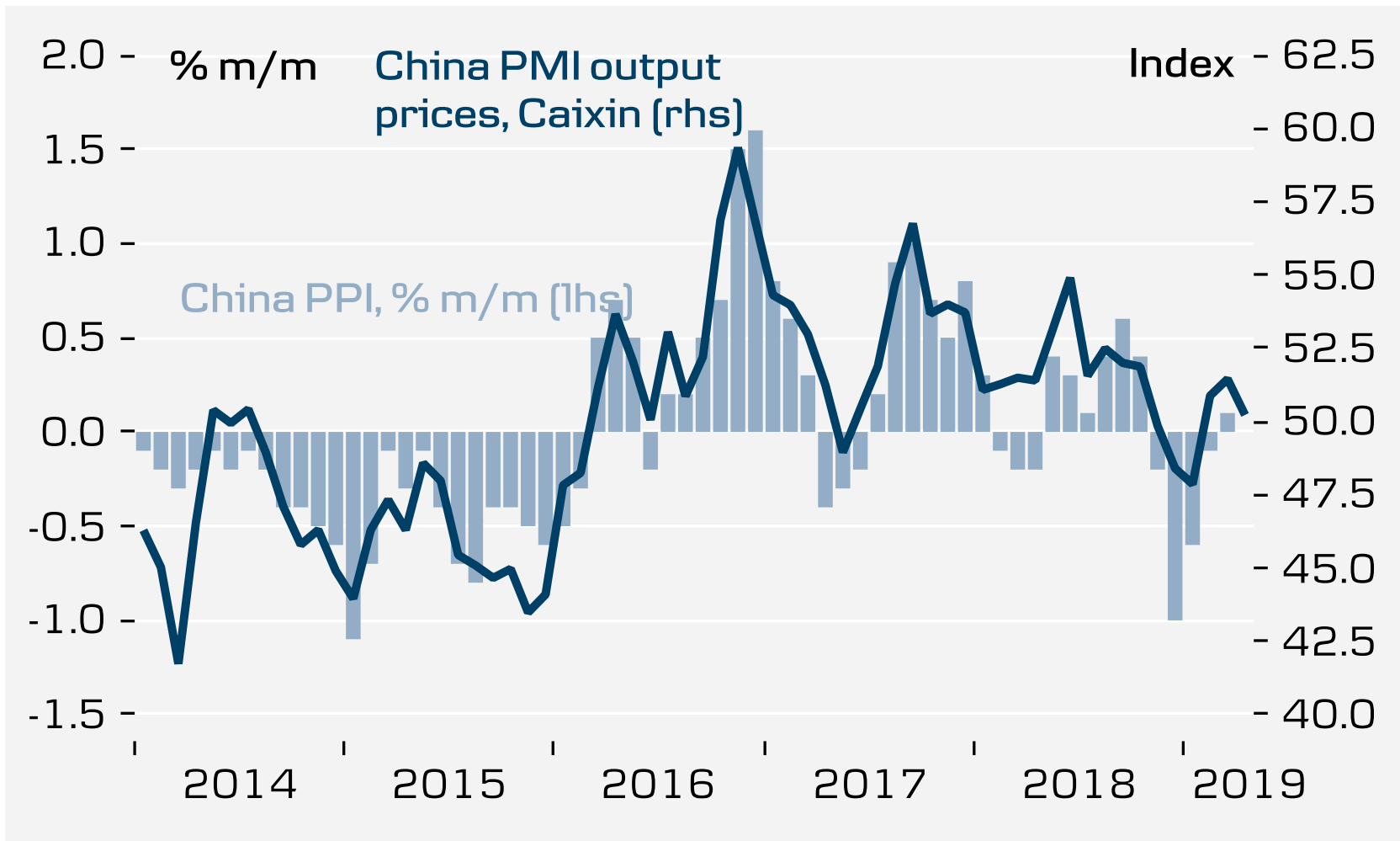
Source: Macrobond Financial, NBS, Danske Bank

# Inflation - PPI model



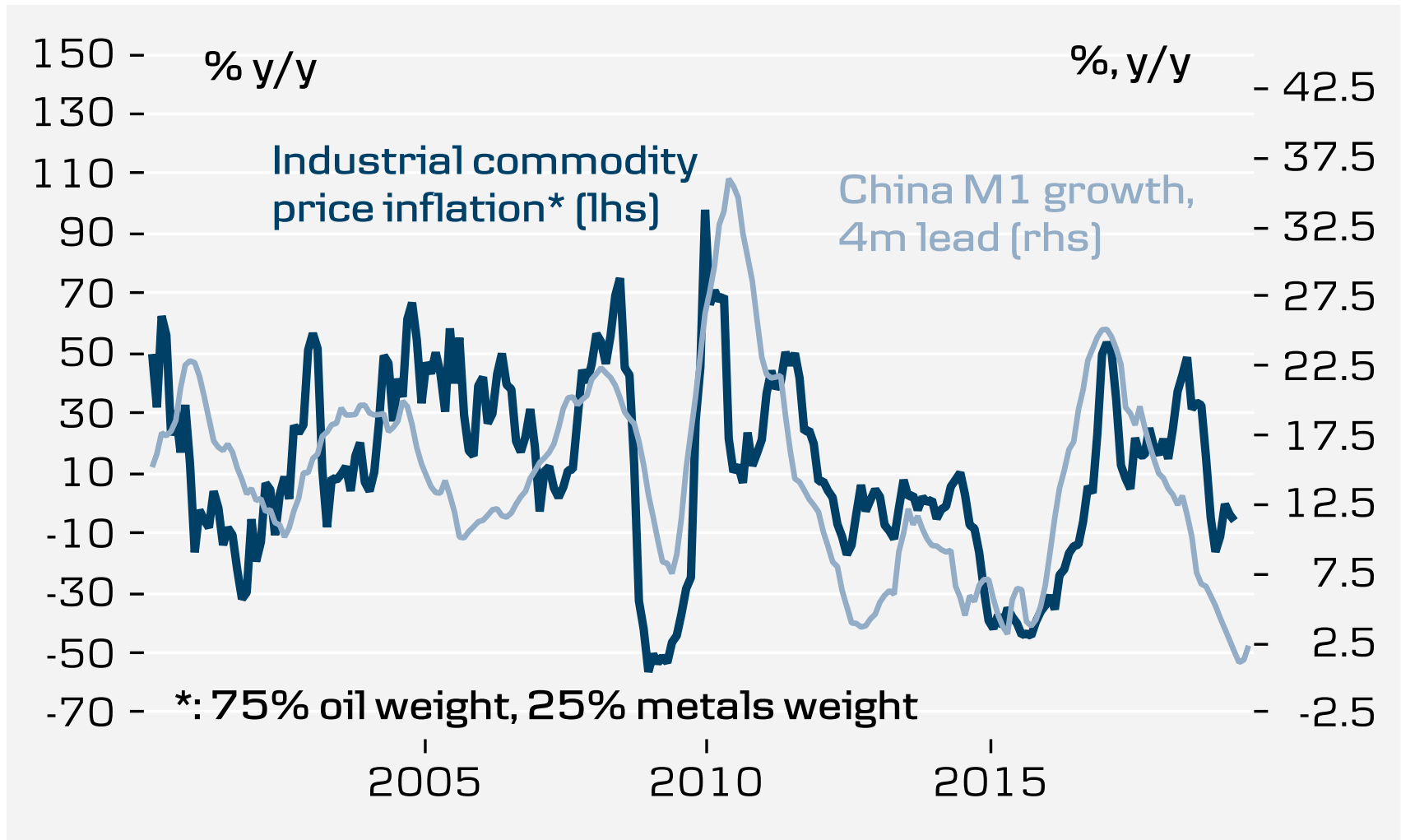
# China

## Inflation - PMI output prices and PPI m/m

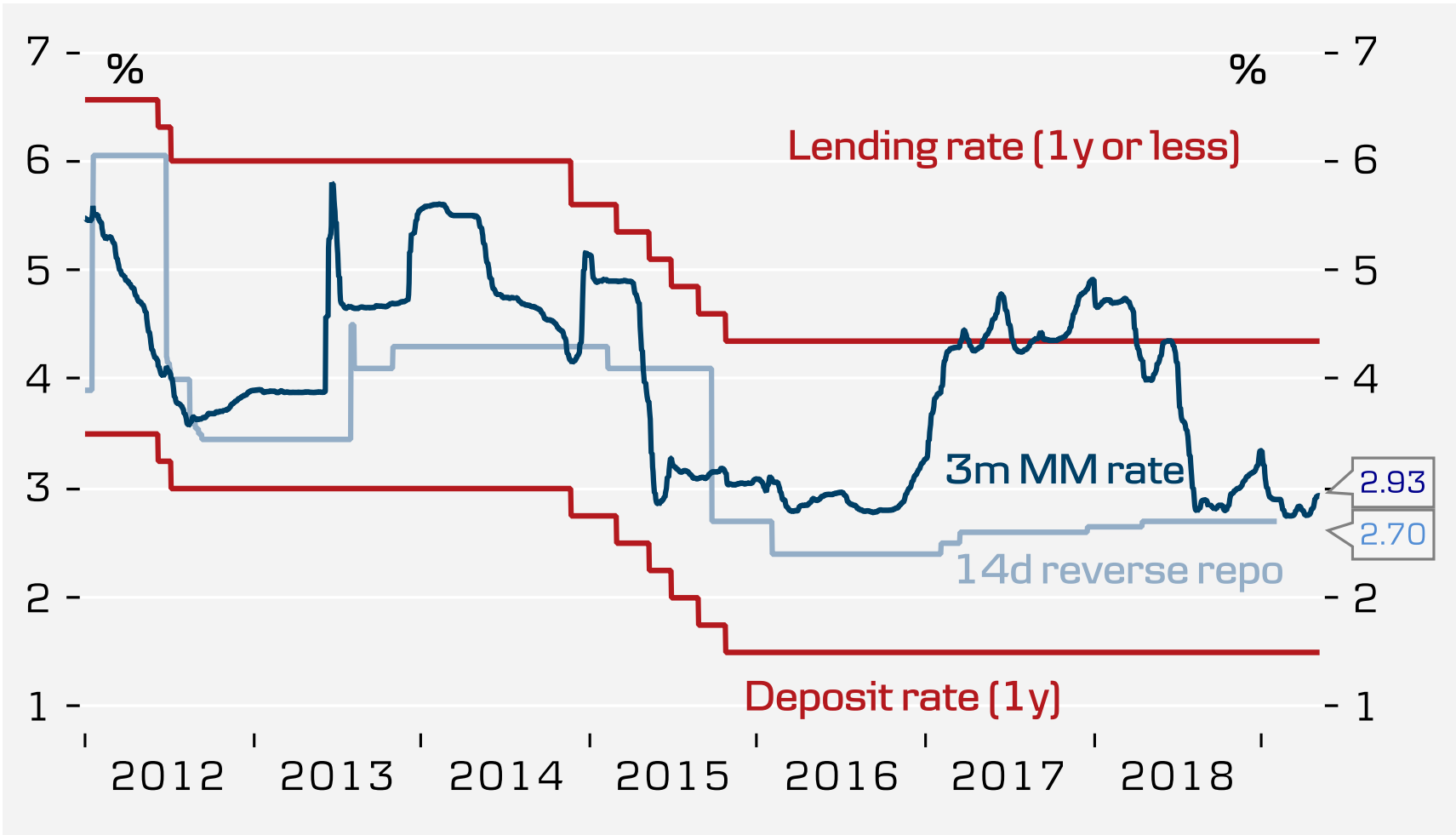




## M1 and industrial commodity prices



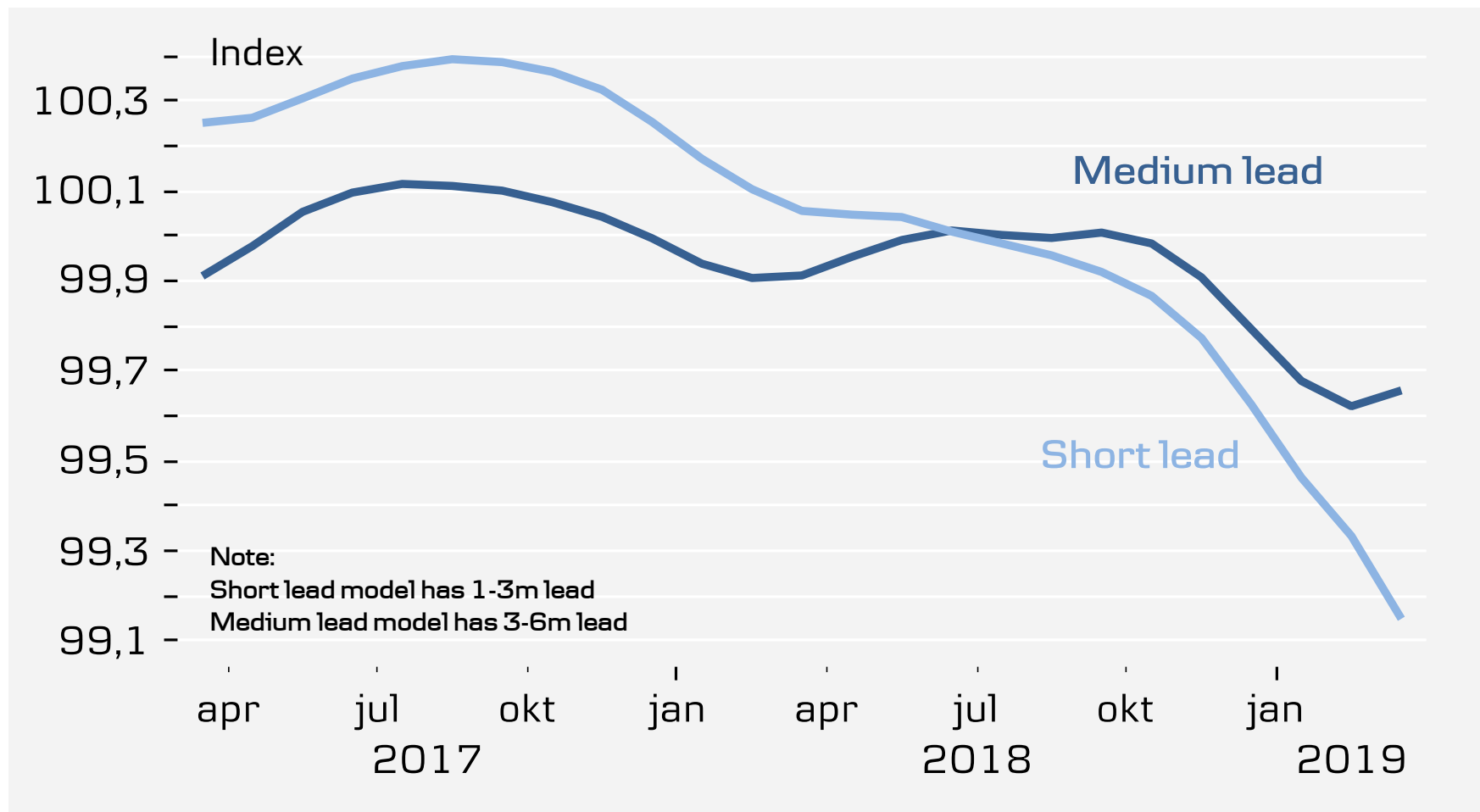
# Monetary policy - rates



# *Japan*

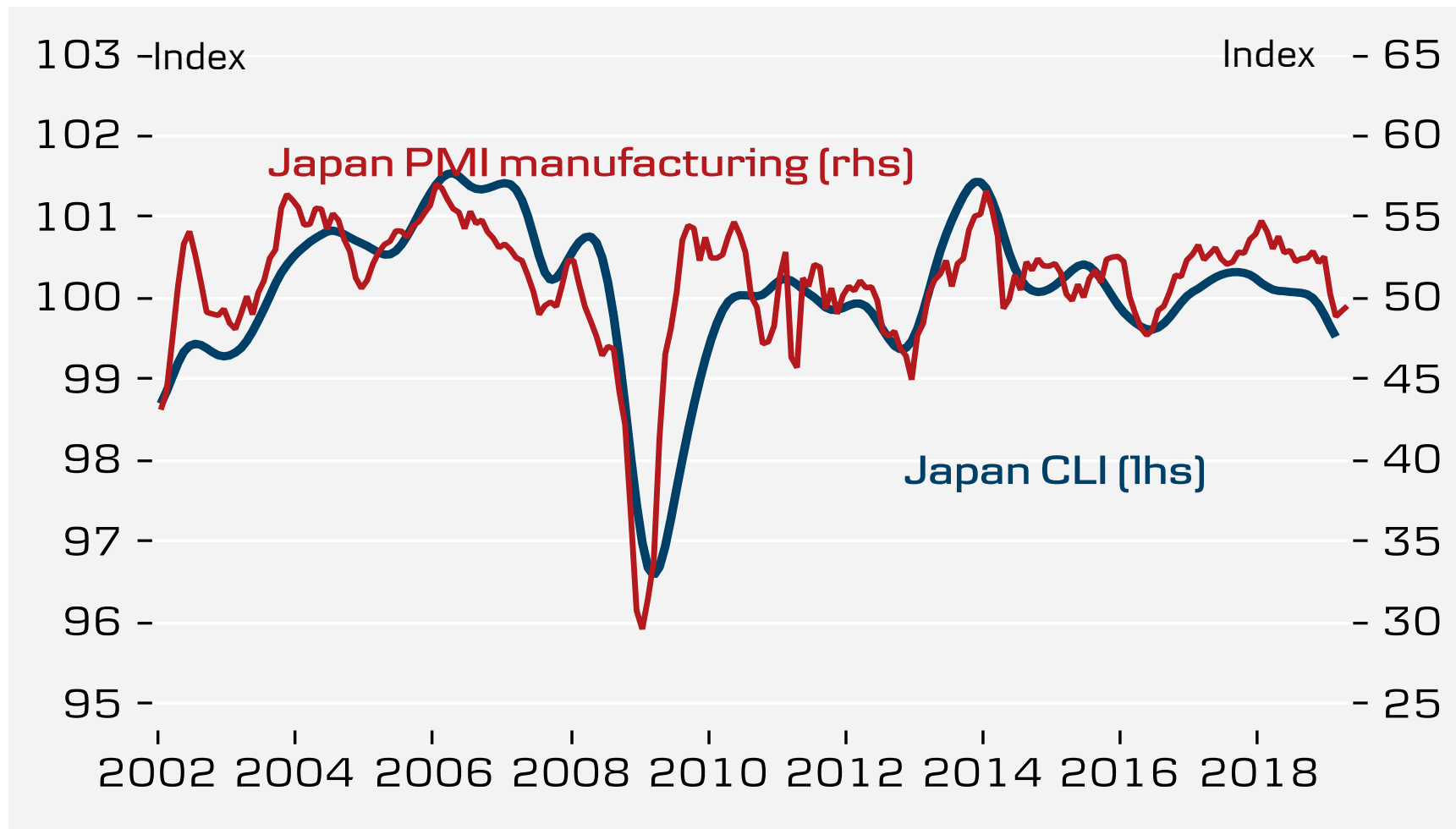
# Japan

## MacroScope models



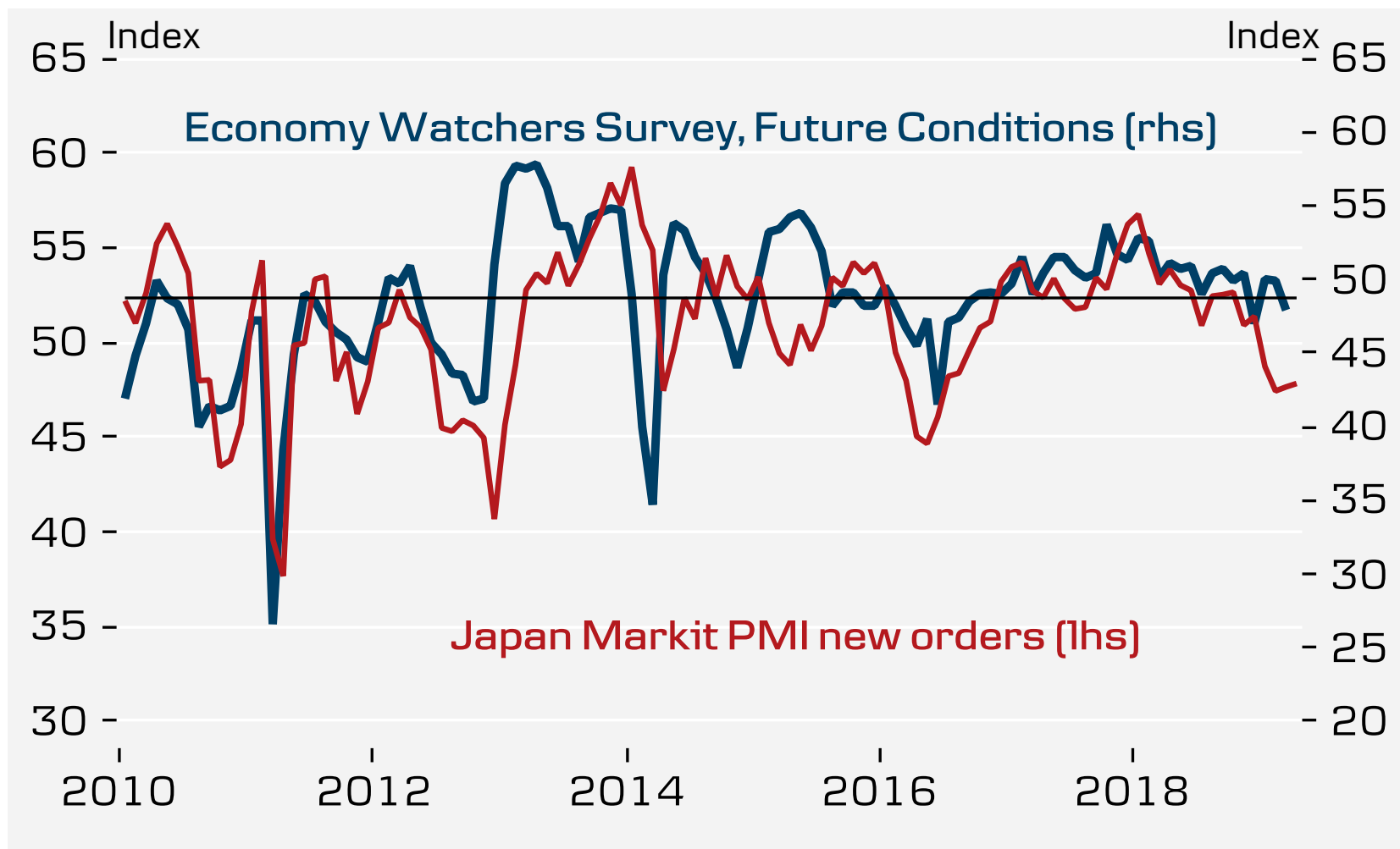
Japan

## PMI vs CLI



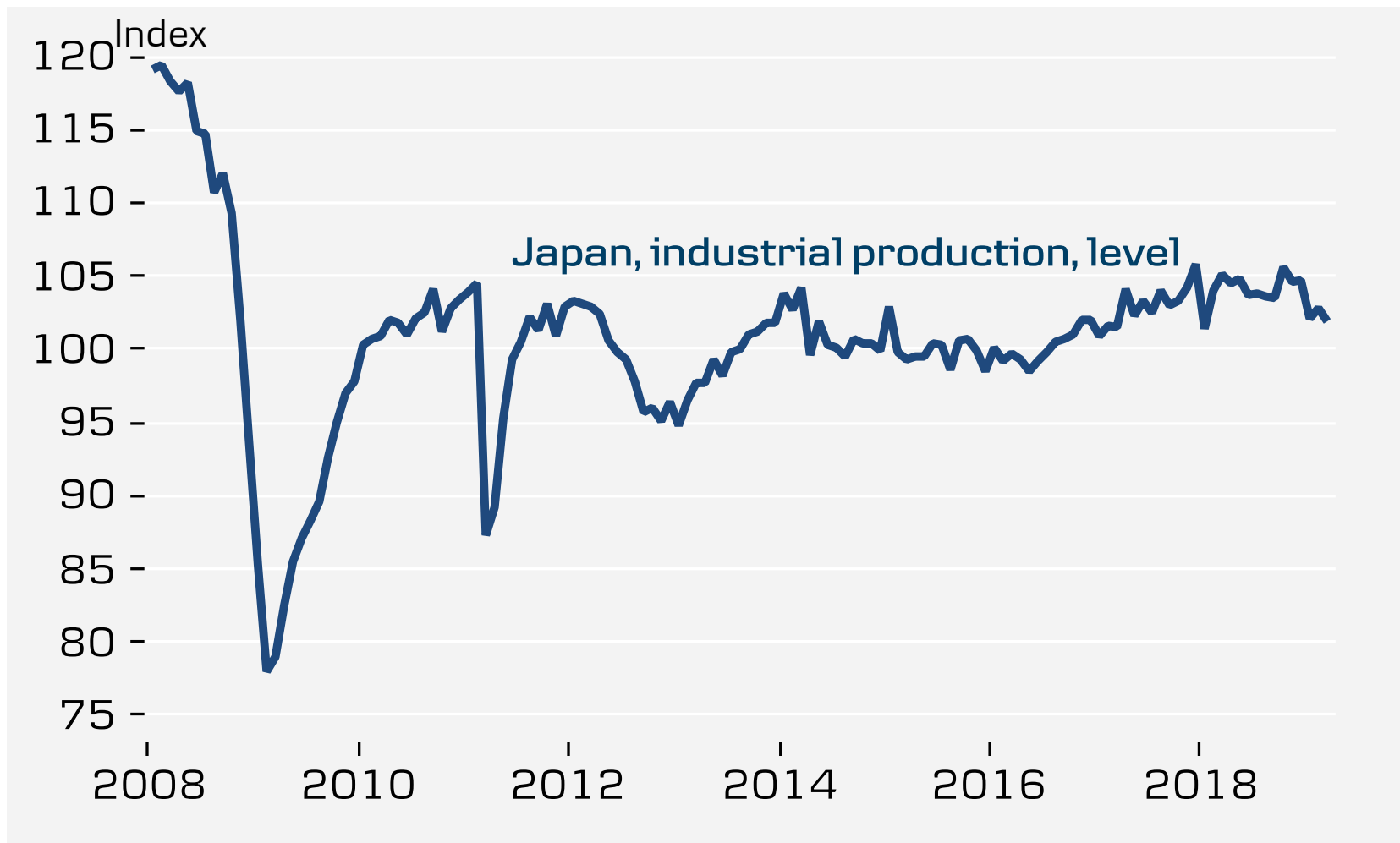
Japan

## Economy Watchers vs PMI



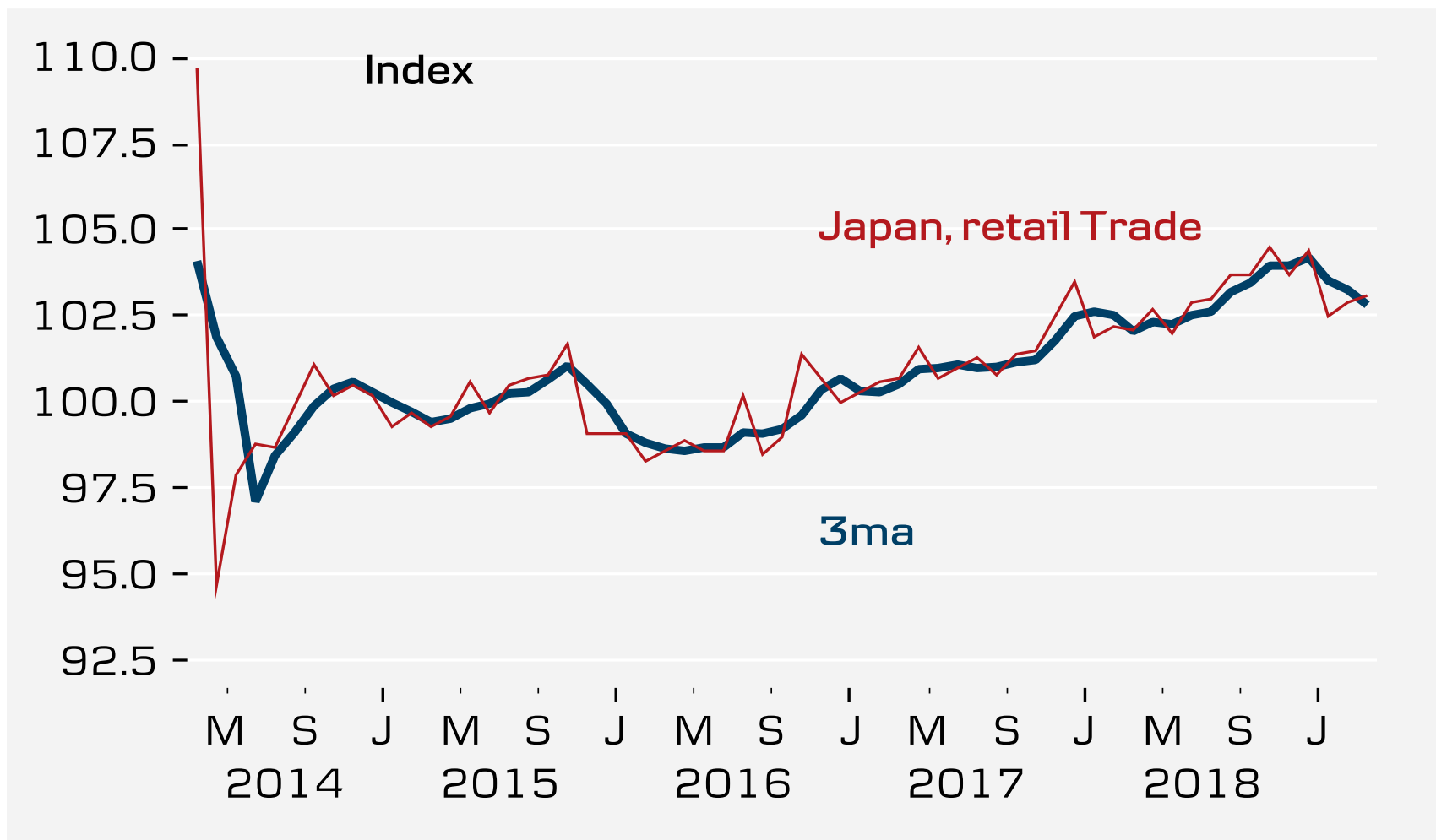
Japan

## Industrial production



Japan

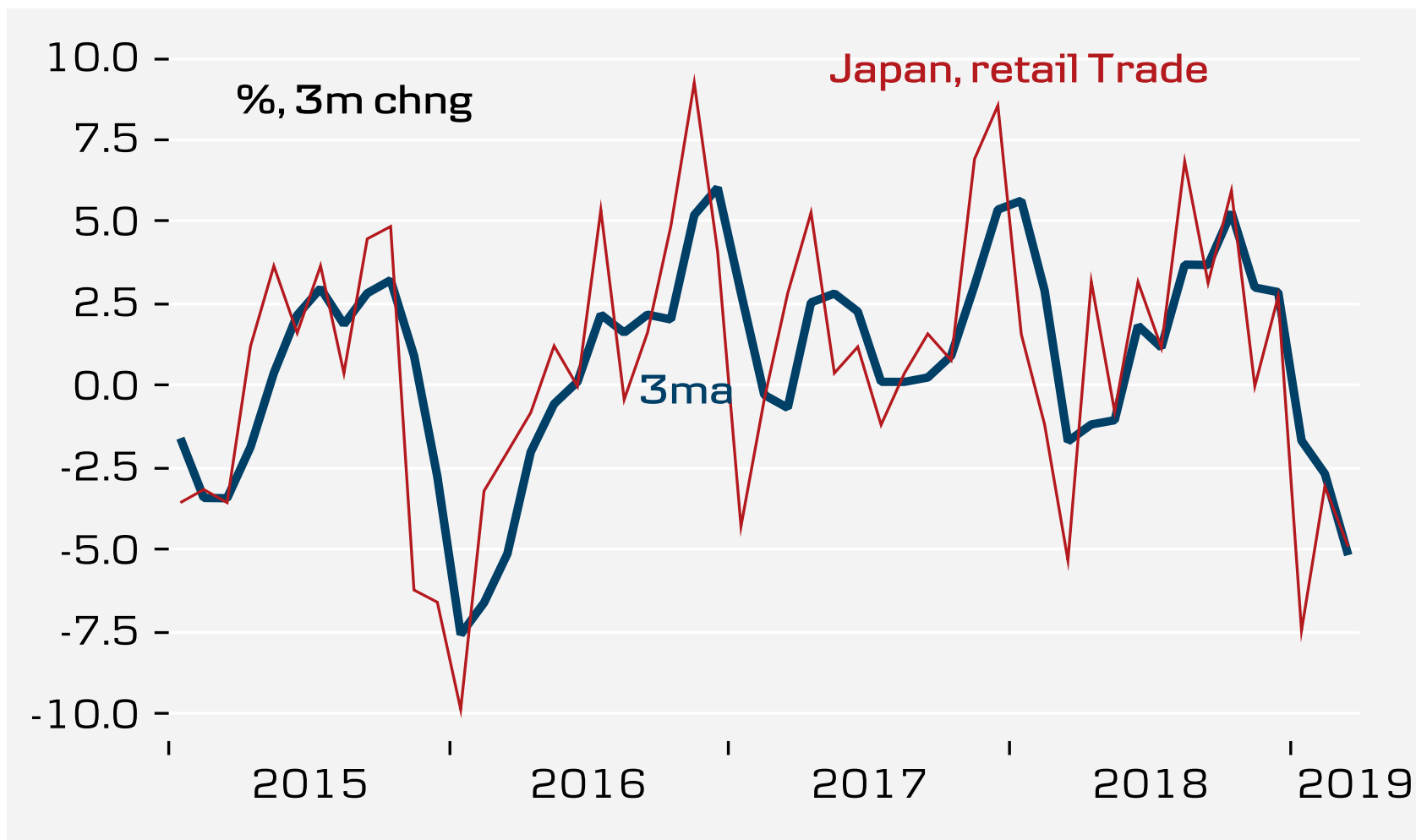
## Consumer - retail sales





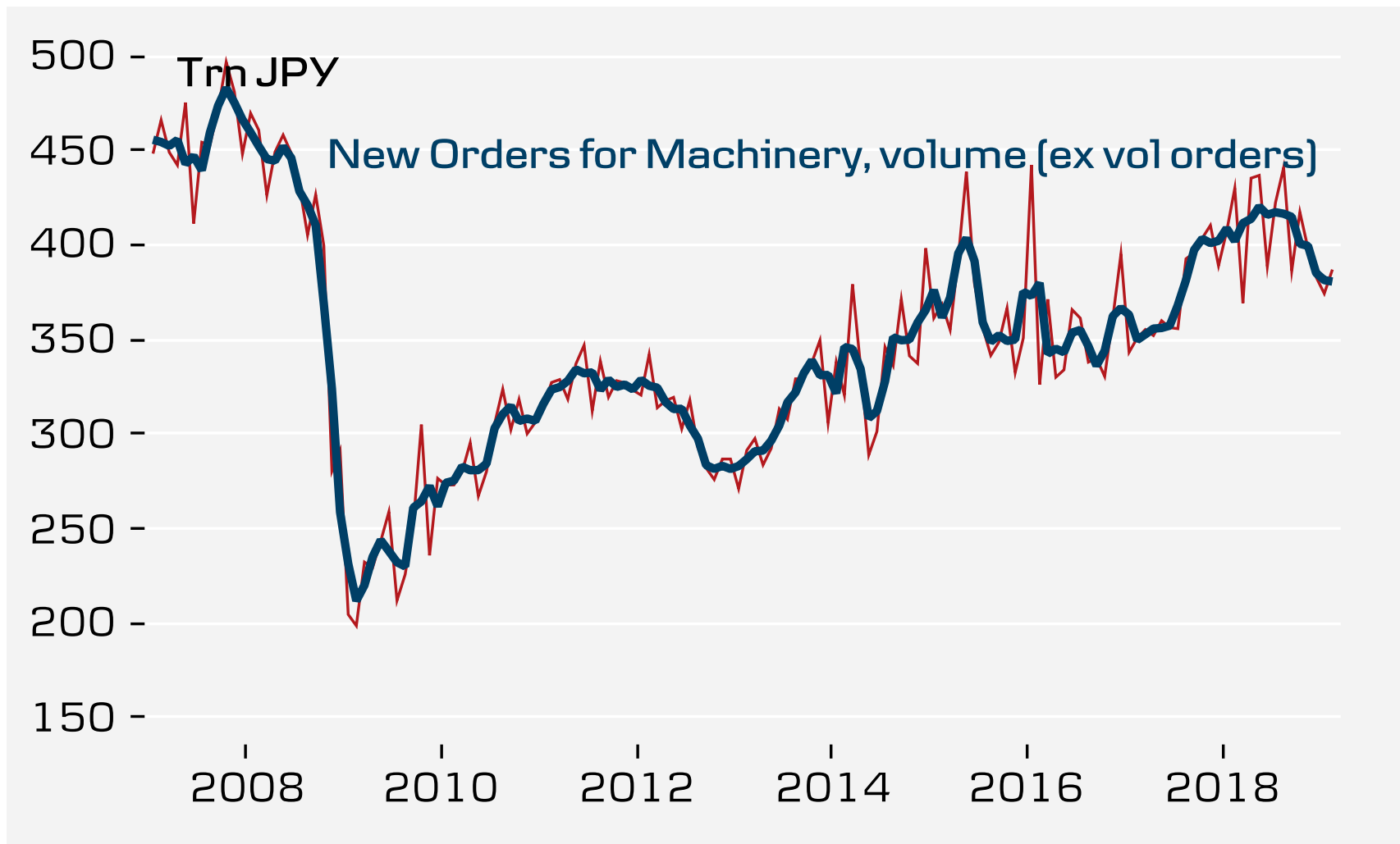
Japan

## Retail sales, change



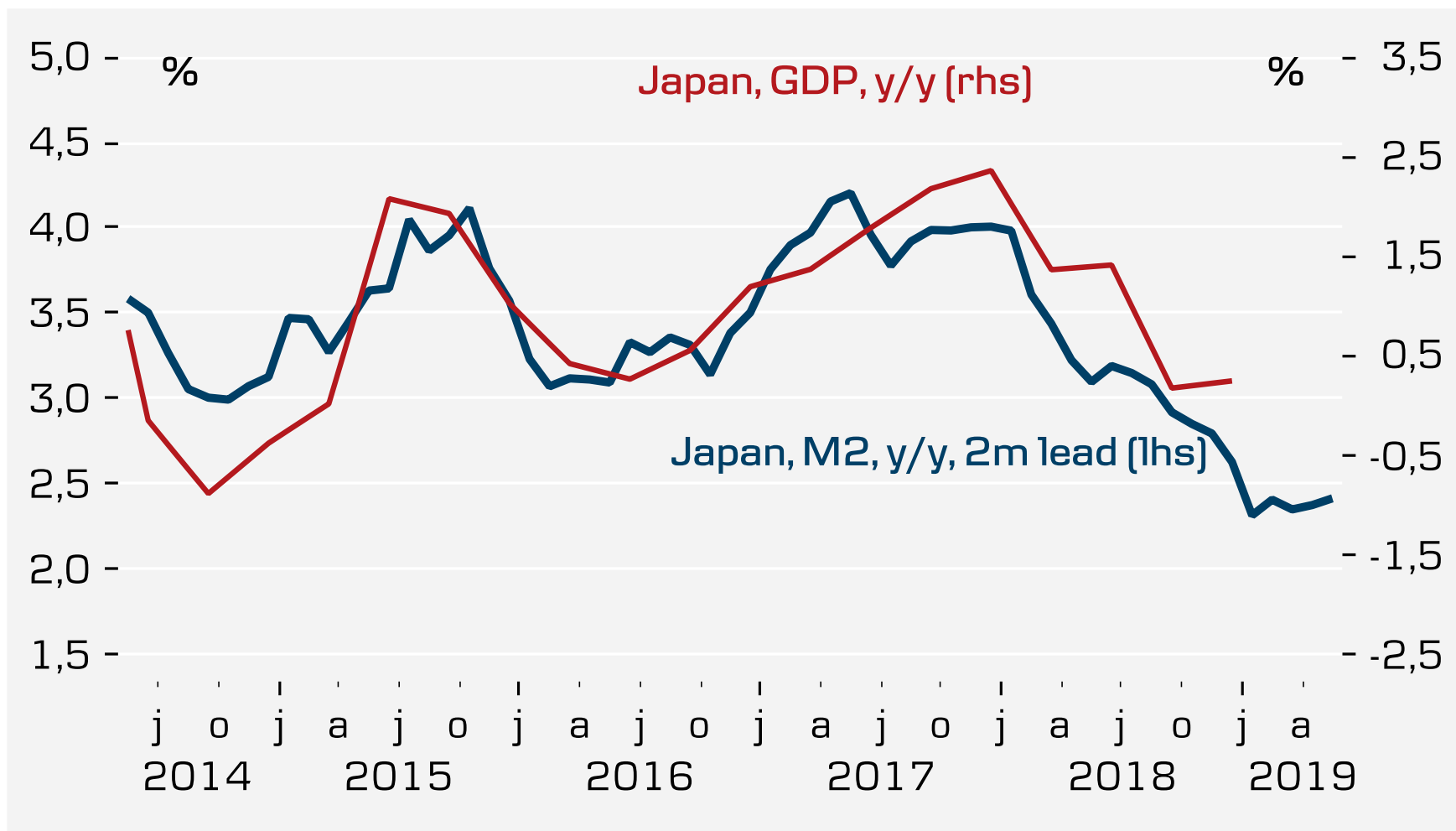
Japan

## Machine orders



Japan

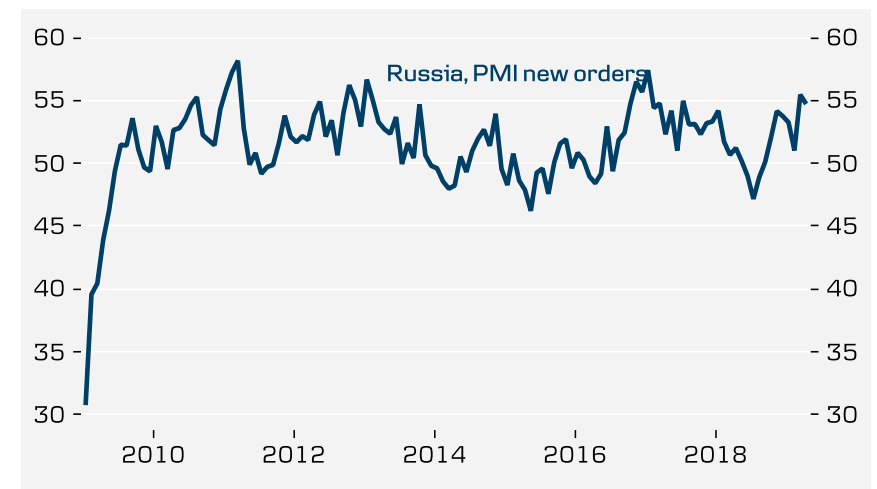
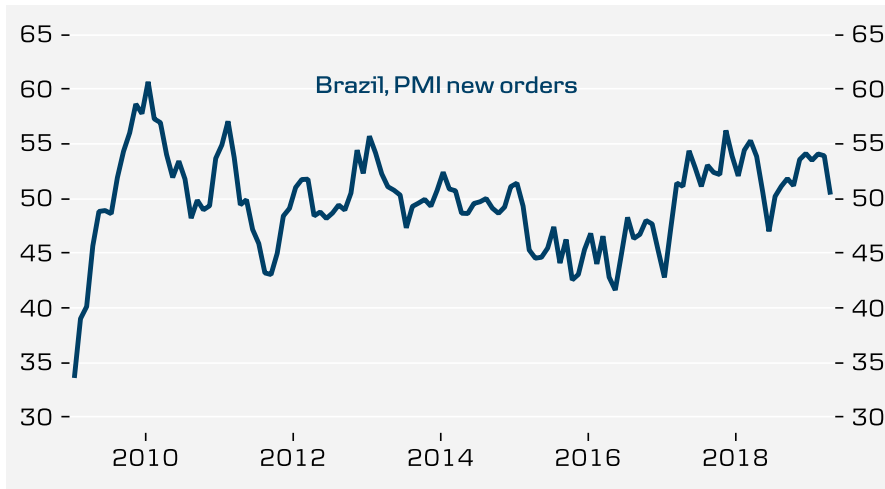
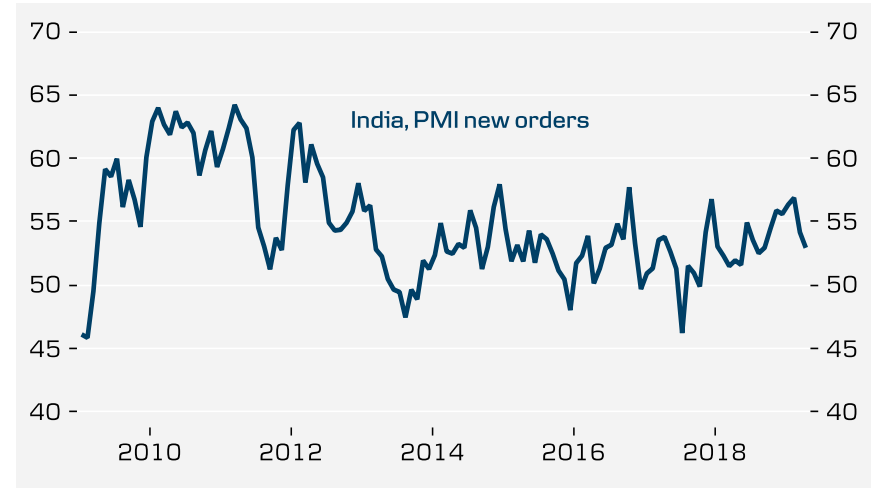
M2



*Other*

Other

# BRIC PMI

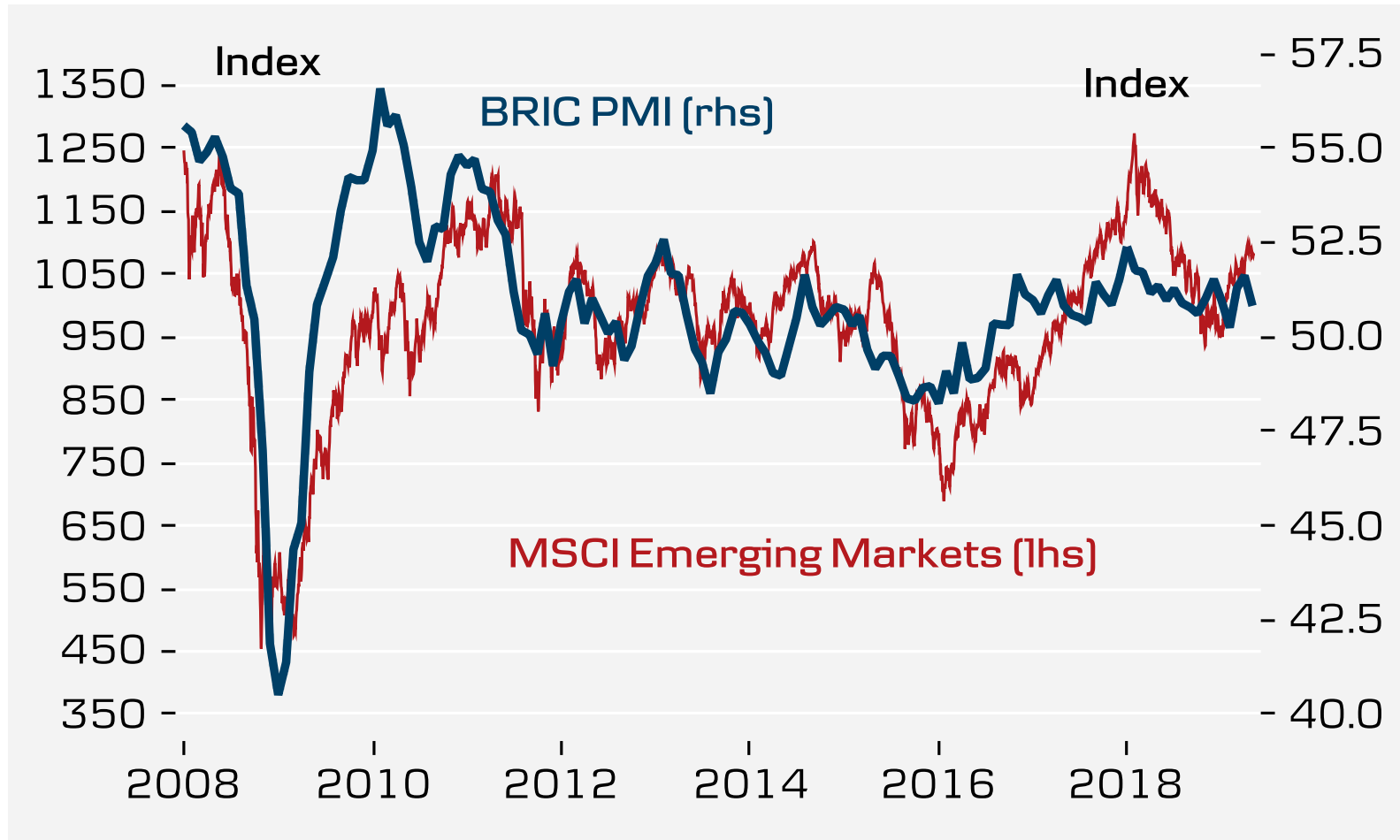


Note: All axes are indices

Source (all charts): Macrobond Financial, Markit

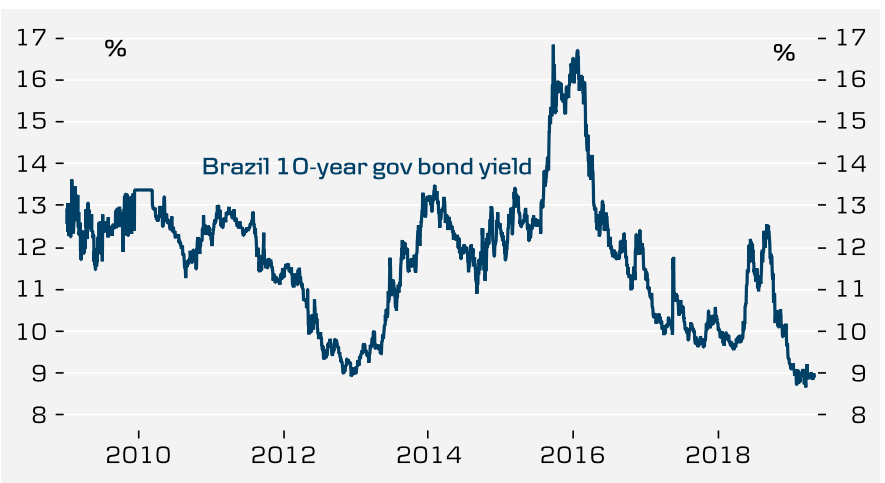
[Link to overview page](#)

China - PMI vs EM markets

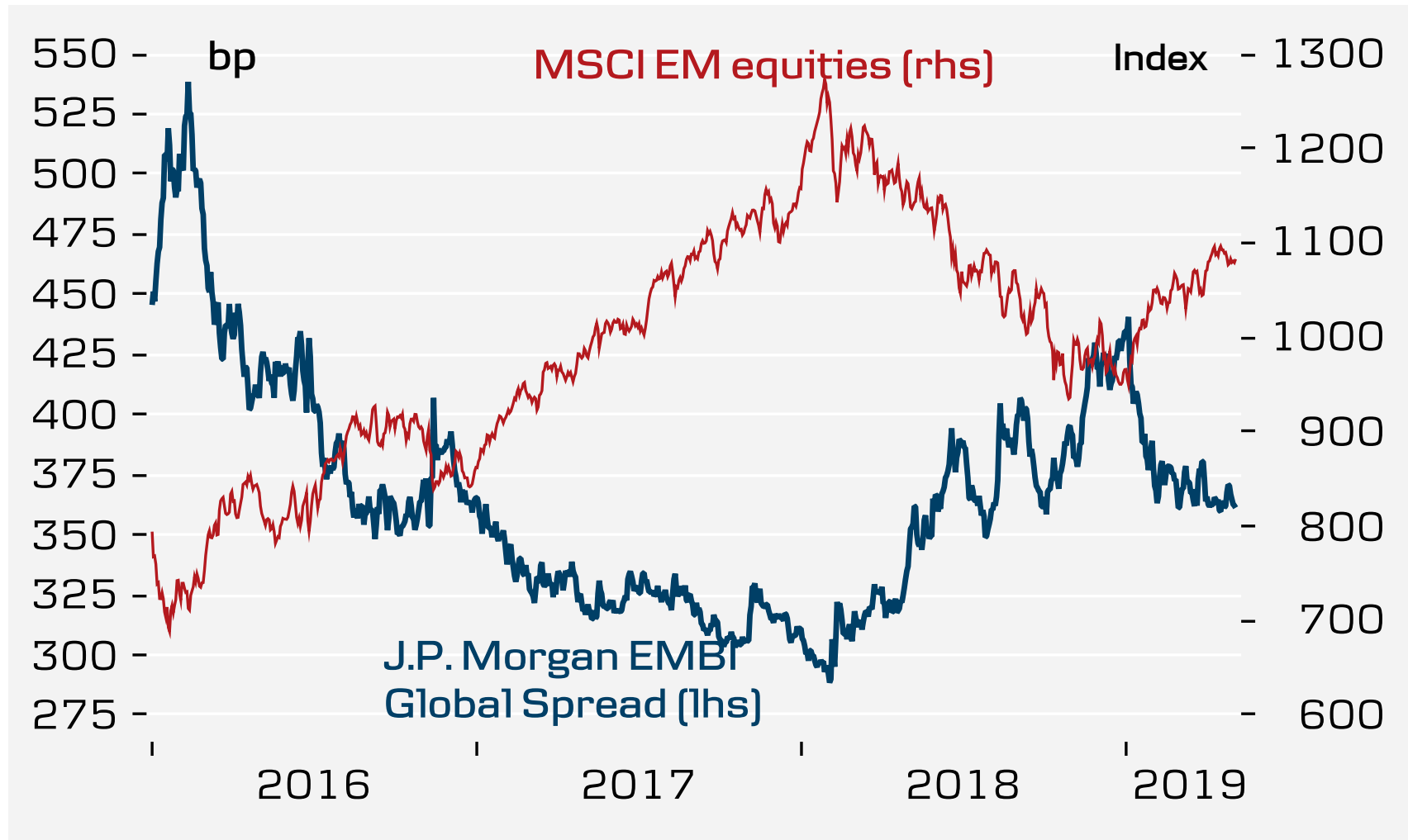


## EM - financial markets

### BRIC bond yields

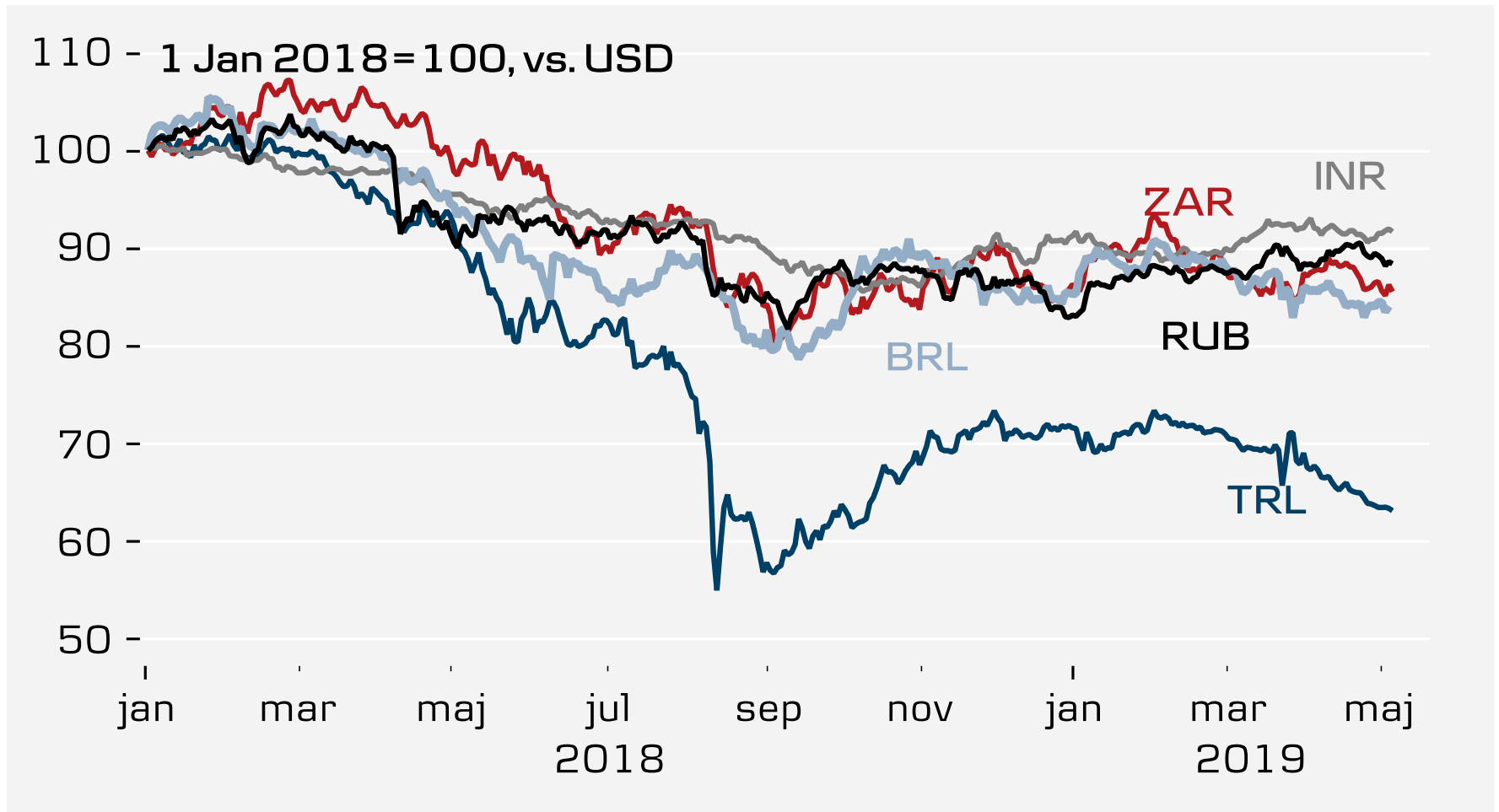


## EMBI bond spread and EM equities





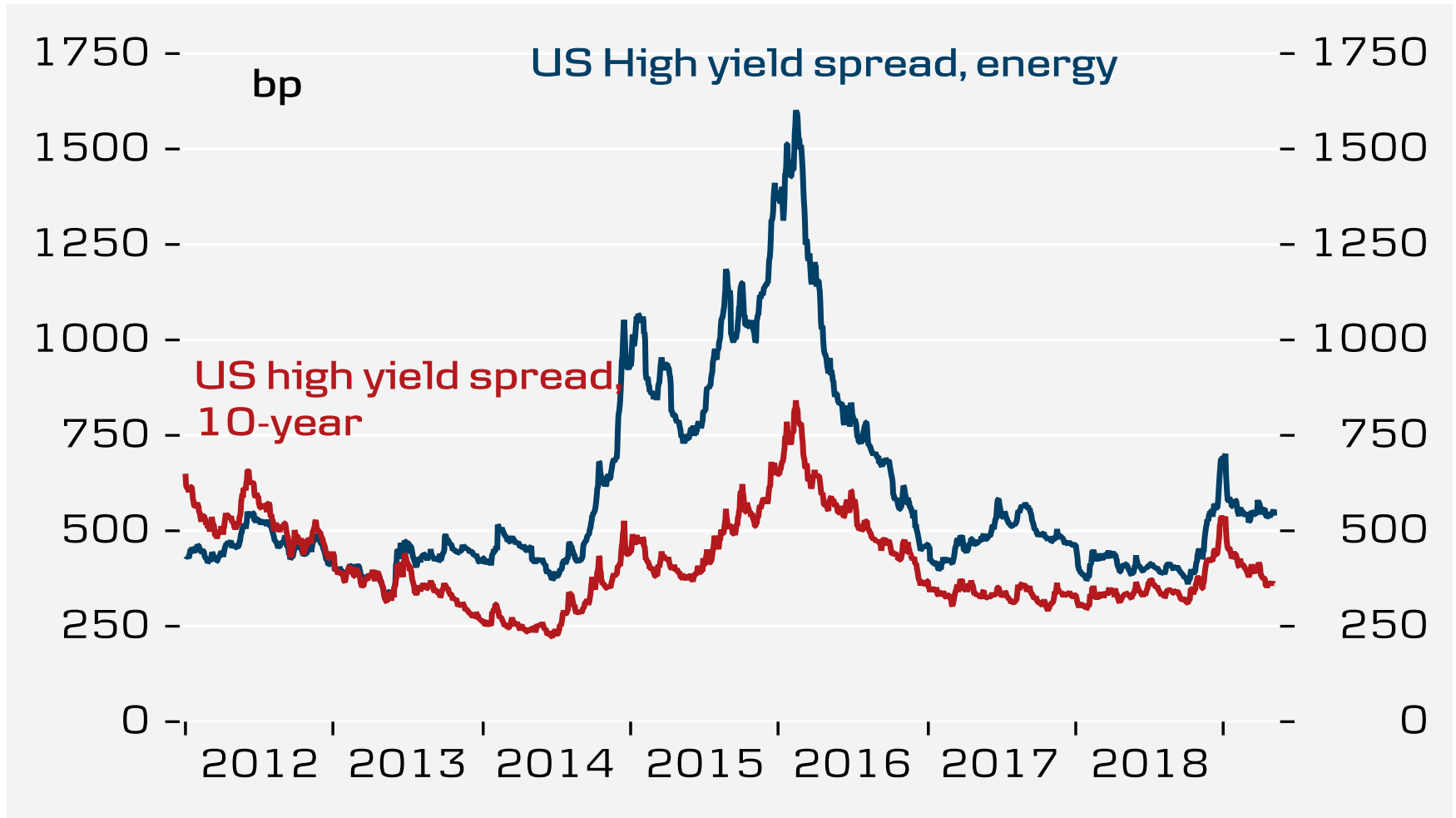
## 'Fragile five' currencies



'Fragile five' are the EM countries with the biggest imbalances in terms of fiscal and current account deficits, external debt, etc.

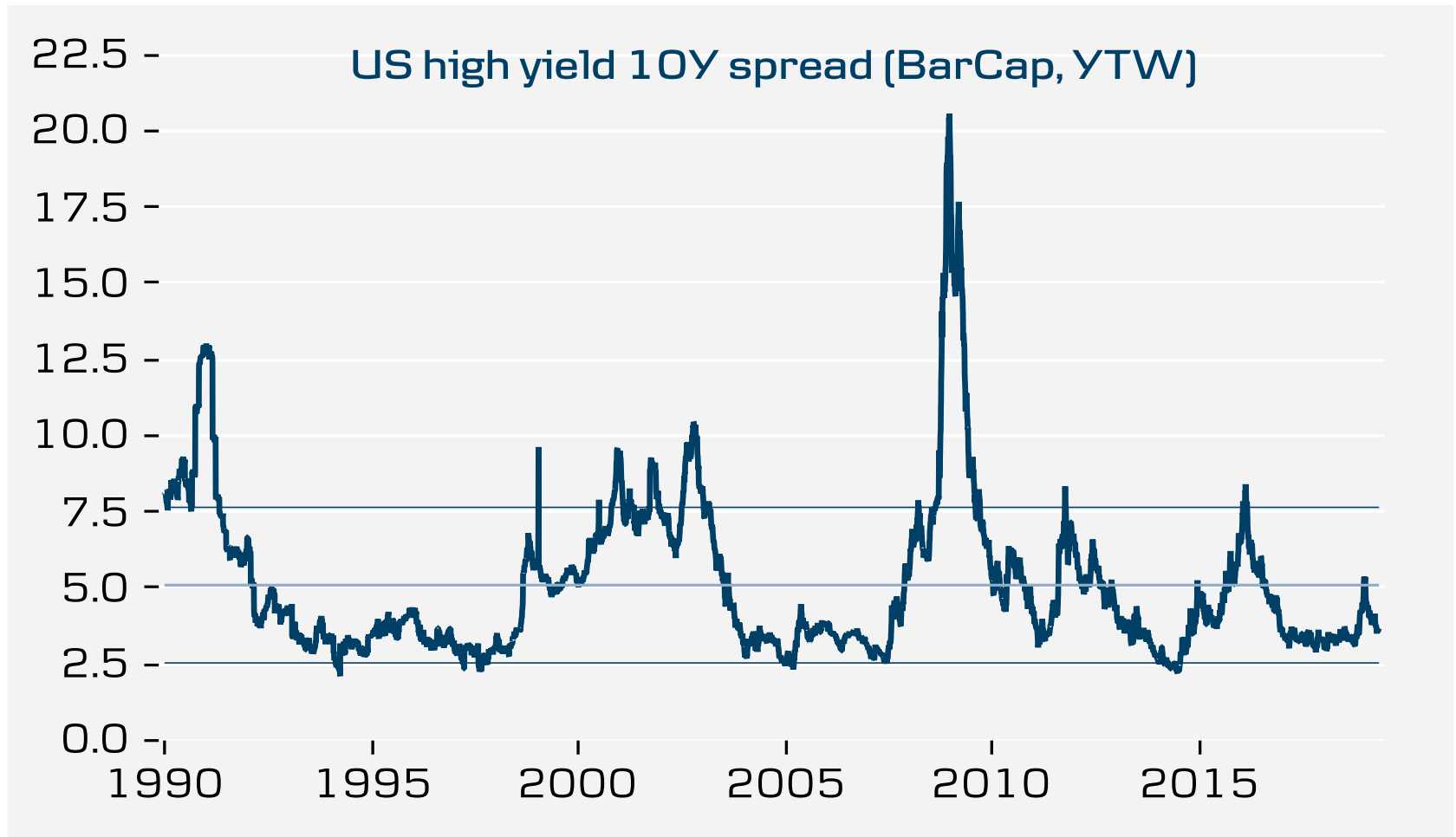
Other

## US high yield



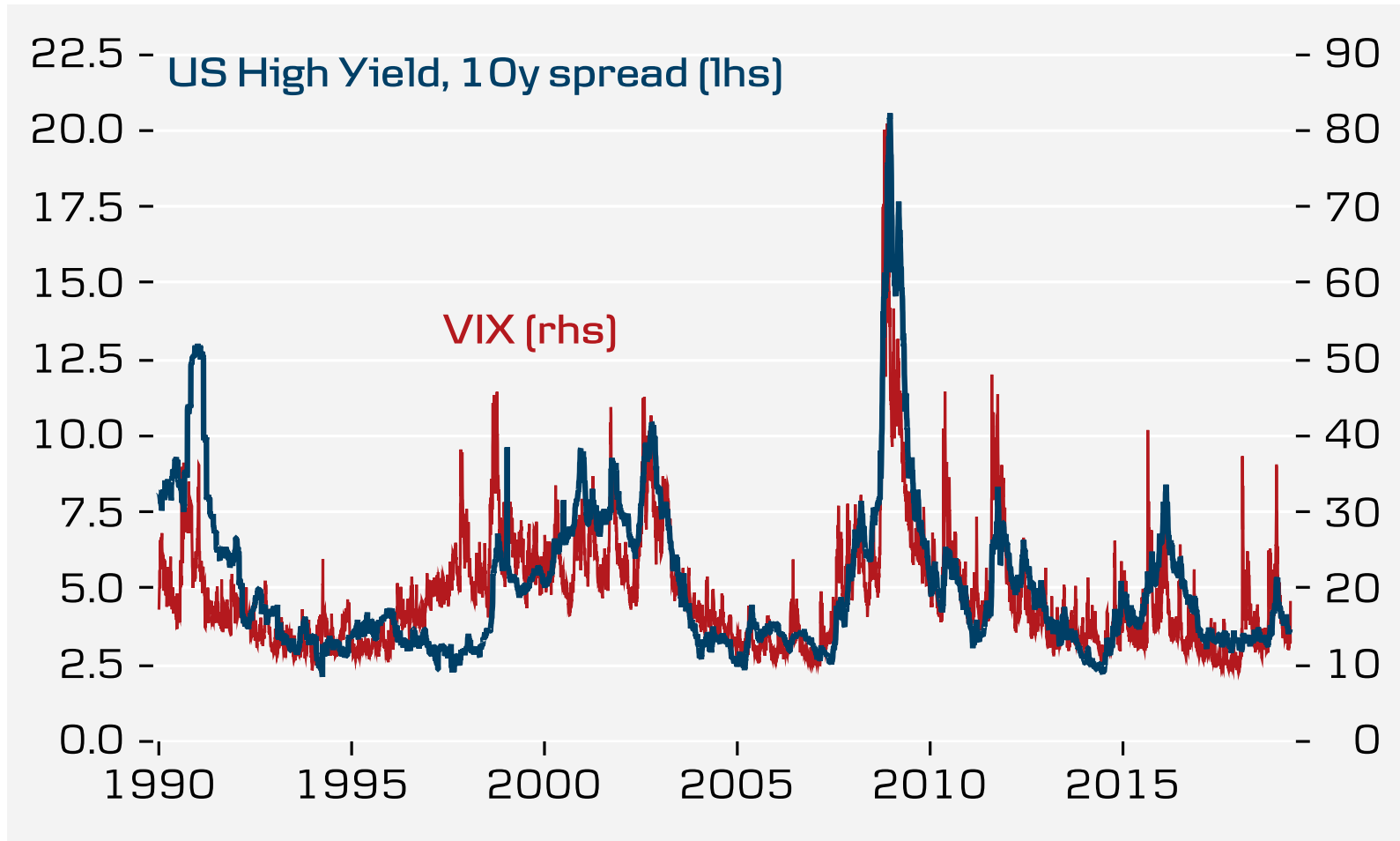
Other

## US high yield



Other

## US high yield vs VIX



## 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 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 division of Danske Bank A/S). It is provided for informational purposes only. 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:** 9 May 2019, 19:29 CEST

**Report first disseminated:** 10 May 2019, 06:00 CEST