

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

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Key observations

We aim this chart pack at readers who like to dive deep 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 – position for long duration in bond market as 'Red' phase is here to stay, 17 September. 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 economy is at a precarious moment. While *OECD leading indicators* point to further downside, *PMI new orders* actually picked up, driven partly by *China* and stabilising *world trade* growth.
- Geographically, the most weakness is found in *euro area manufacturing*, not least in *German manufacturing orders*, and the *US manufacturing indicators* point to an industrial recession.
- The weakness is driven, in particular, by soft *investments* and business confidence globally, which are both at levels normally seen in G7 recessions, while corporate *earnings growth* is also waning or even negative in the euro area and emerging markets.
- The stalwart of the global economy so far, the *confidence* of private consumers has started to show weakness *despite still* robust *real income growth*. This is evident in *China* and to some extent *US* while *euro area* consumer confidence remains resilient.
- Monetary easing is showing up around the world: *US financial conditions impulse* is still positive (though waning a bit), *Chinese M1* and *euro area money growth* have picked up. There is increasingly *solid growth in private sector loans* in the euro area.
- This stimuli is important reason behind our call that the global economy will see a modest pickup next year, provided that the US-China trade war does not escalate.

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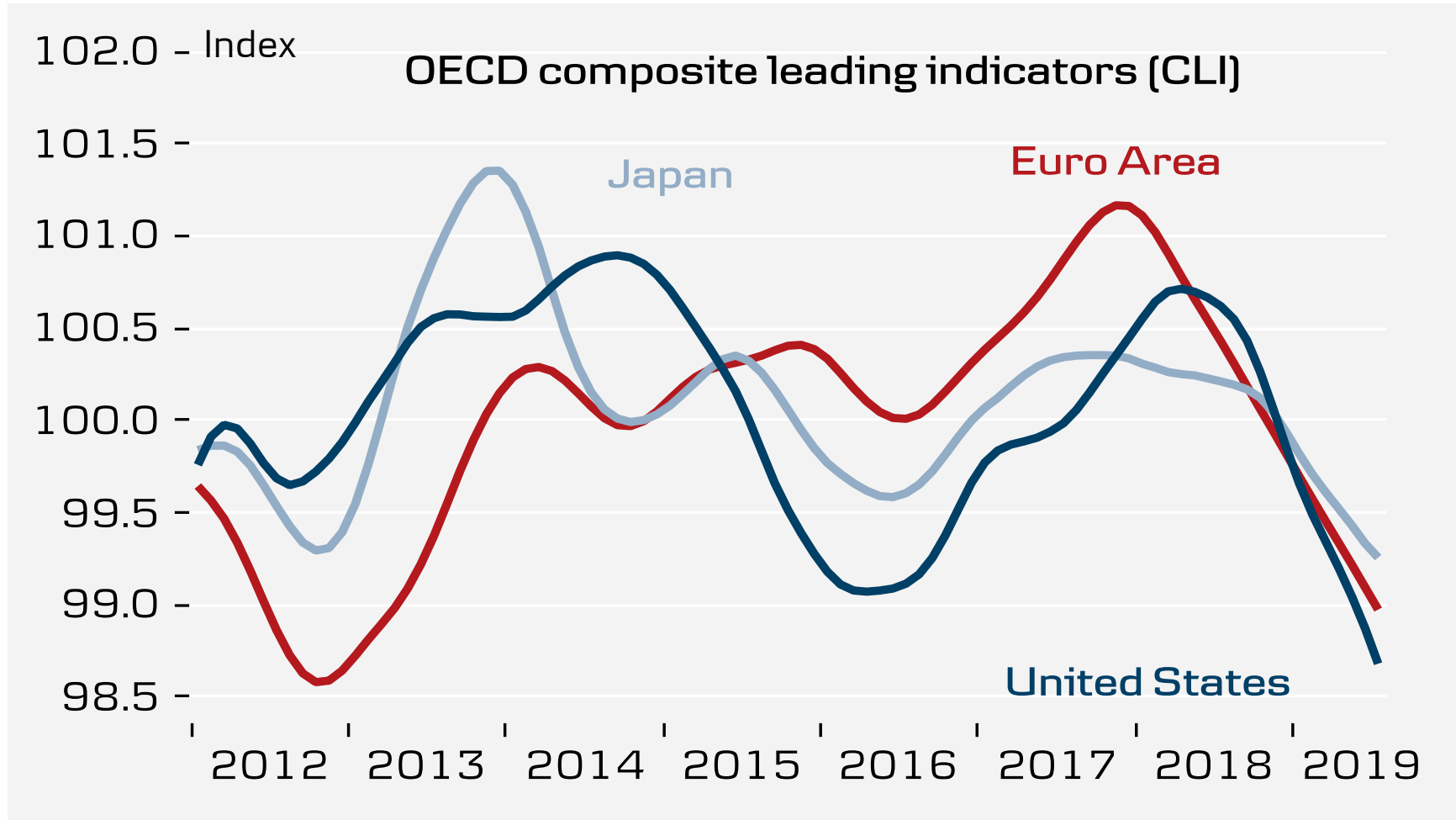
[Euro](#)

[China](#)

[Japan](#)

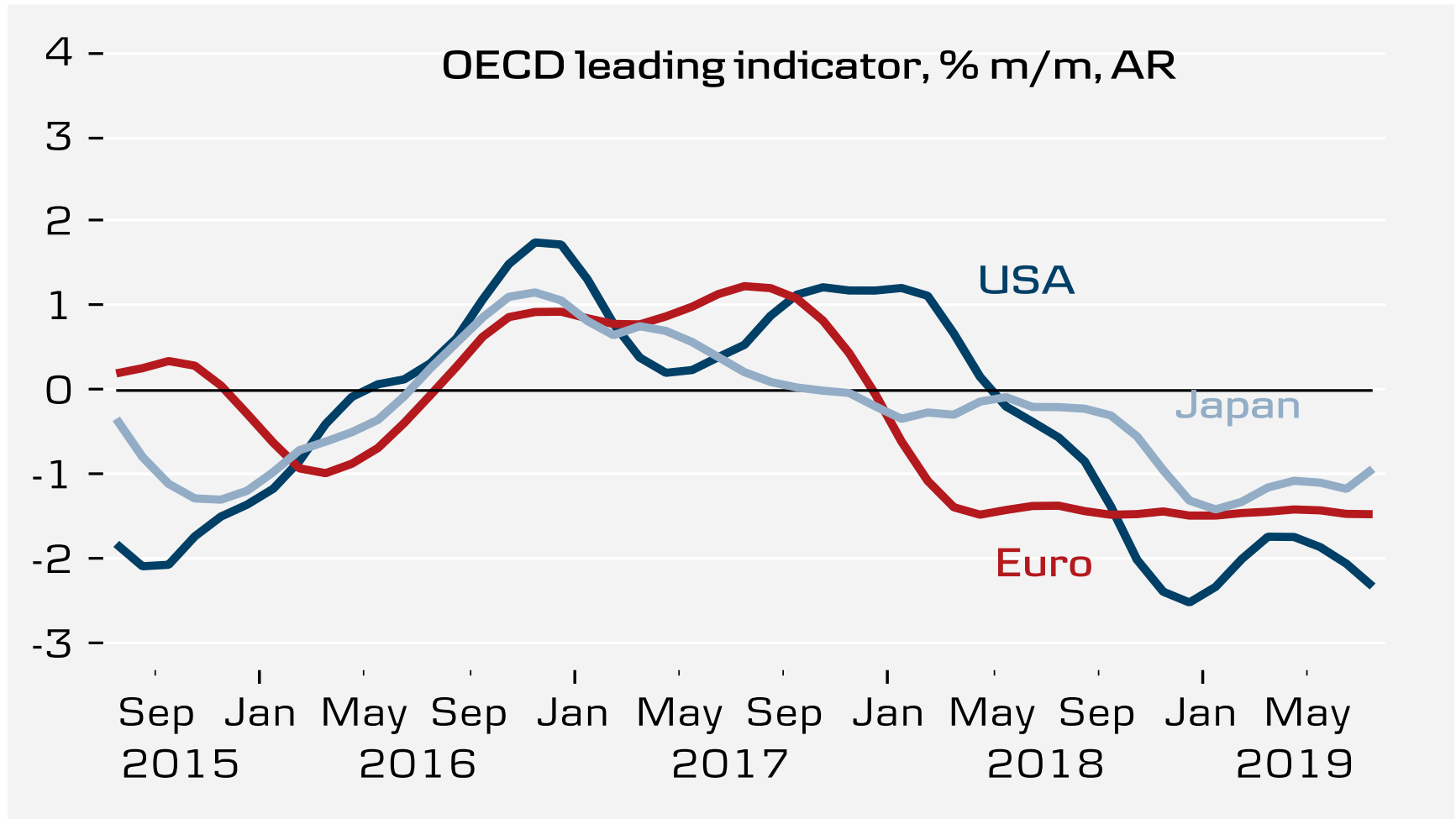
[Other](#)

OECD leading indicators - levels



Source: Macrobond Financial, OECD

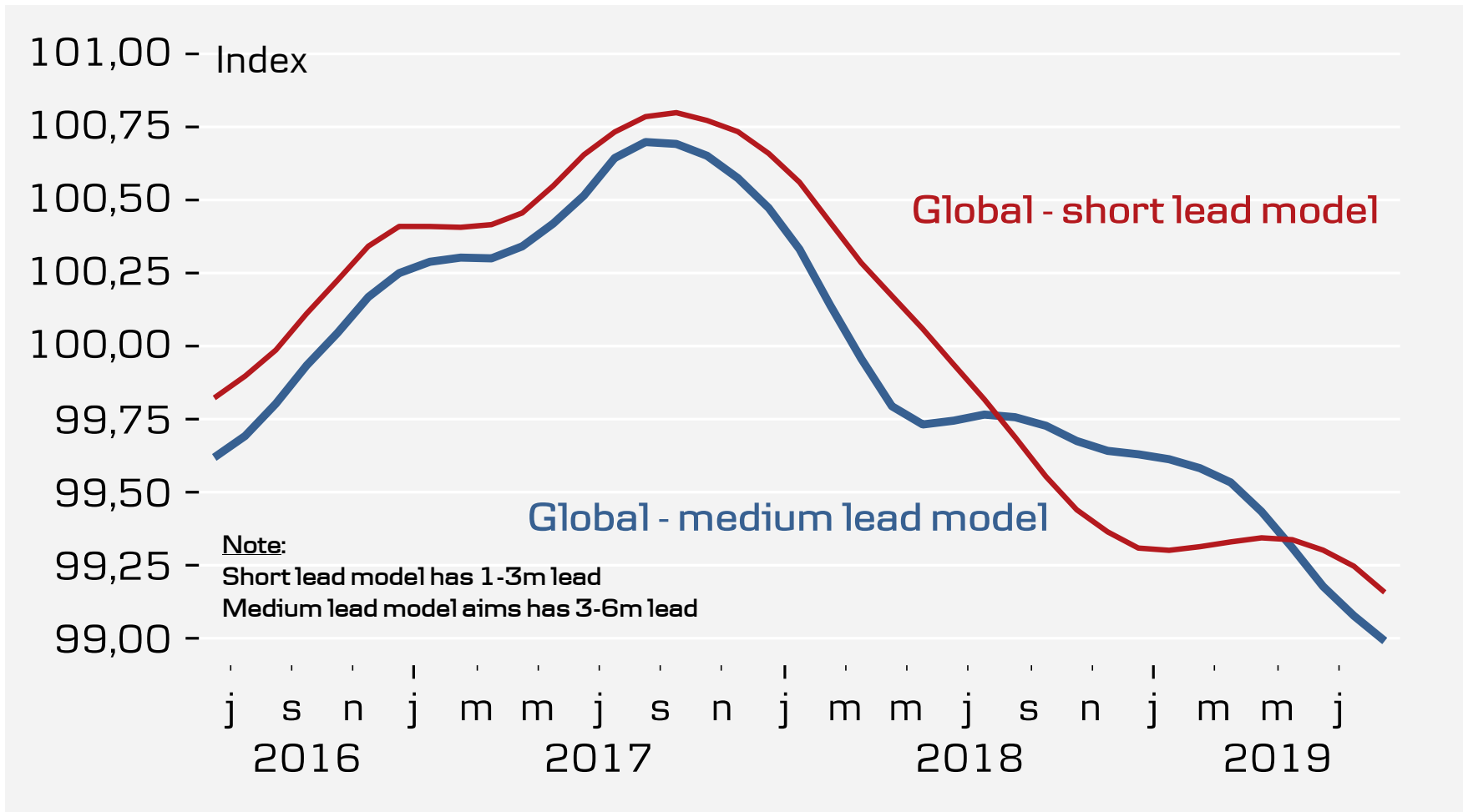
OECD leading indicators - monthly momentum



Source: Macrobond Financial, OECD

Global MacroScope models

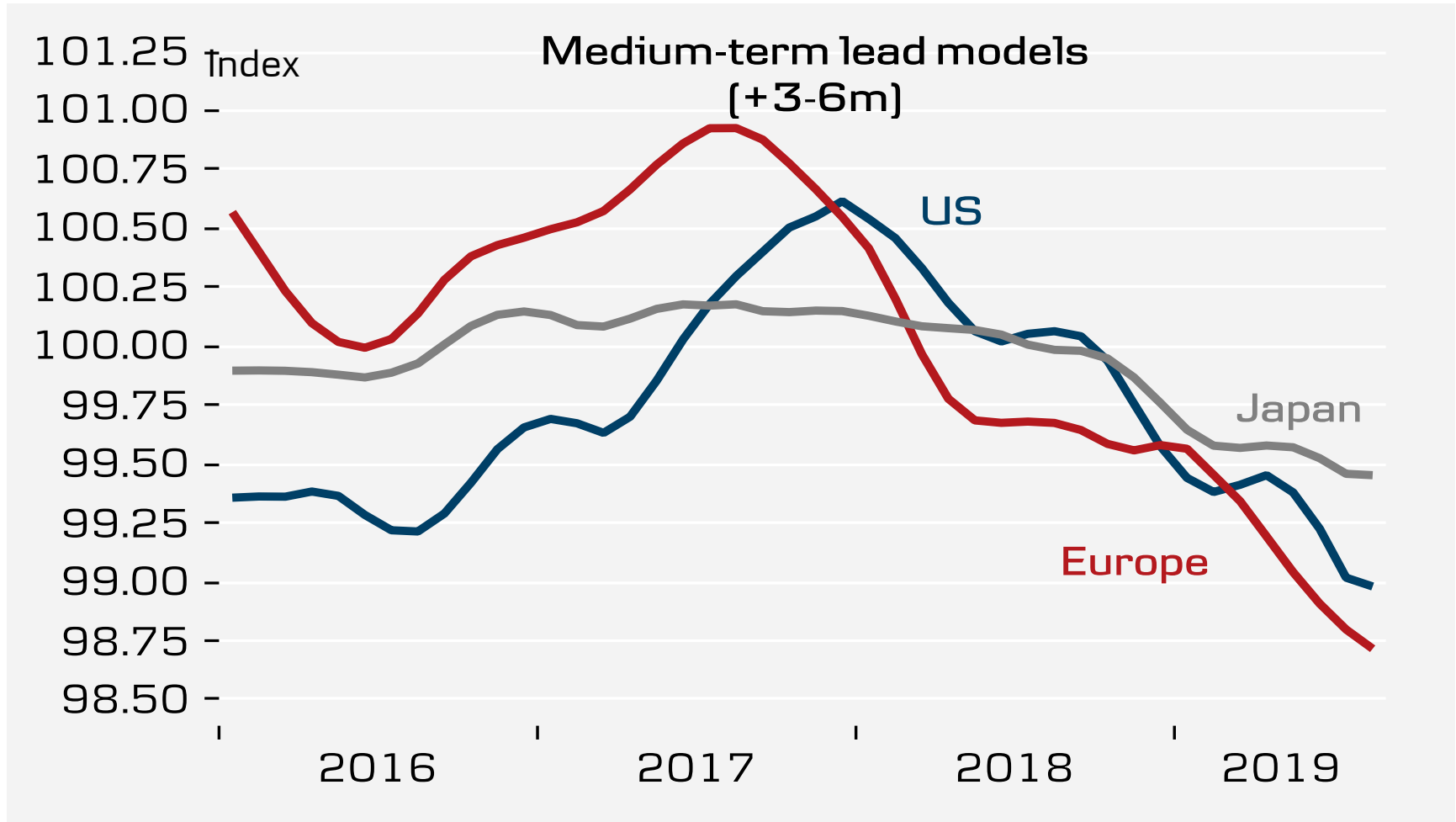
(for OECD Composite Leading Indicators - CLI)



Source: Danske Bank

MacroScope medium lead models - across regions

(for OECD Composite Leading Indicators - CLI)



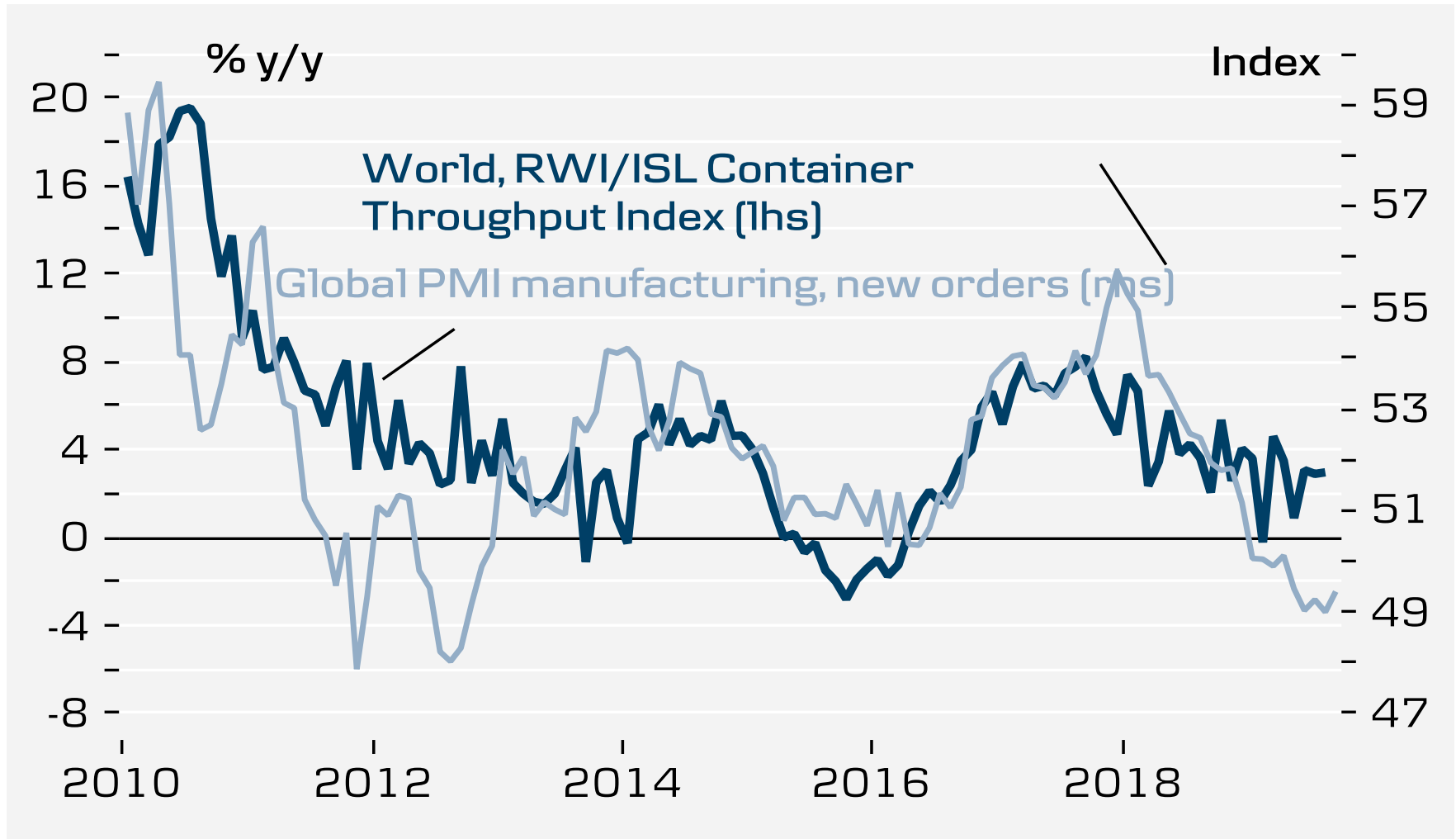
Source: Danske Bank

Global PMI



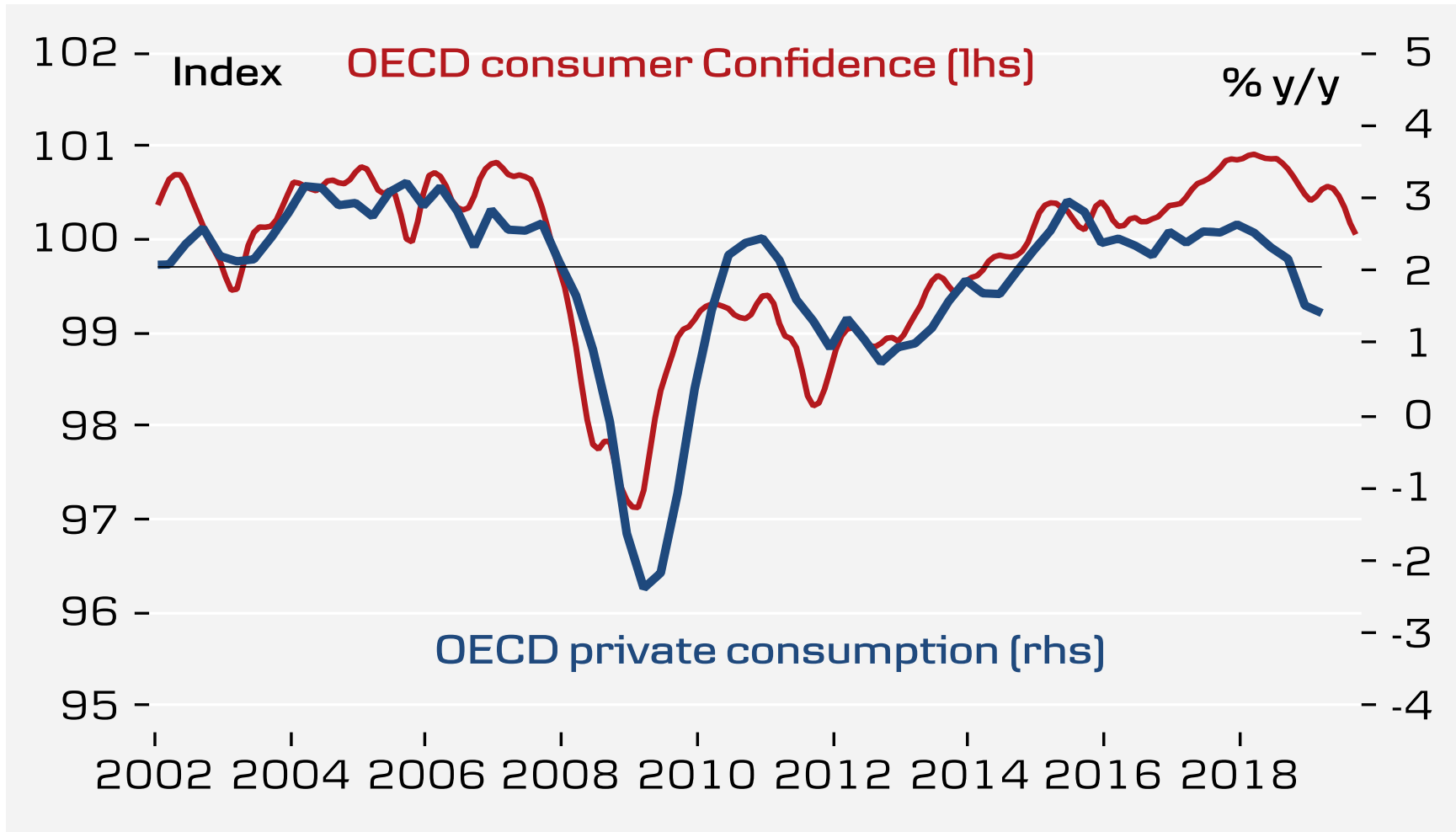
Source: Macrobond Financial, Markit

Container index vs PMI



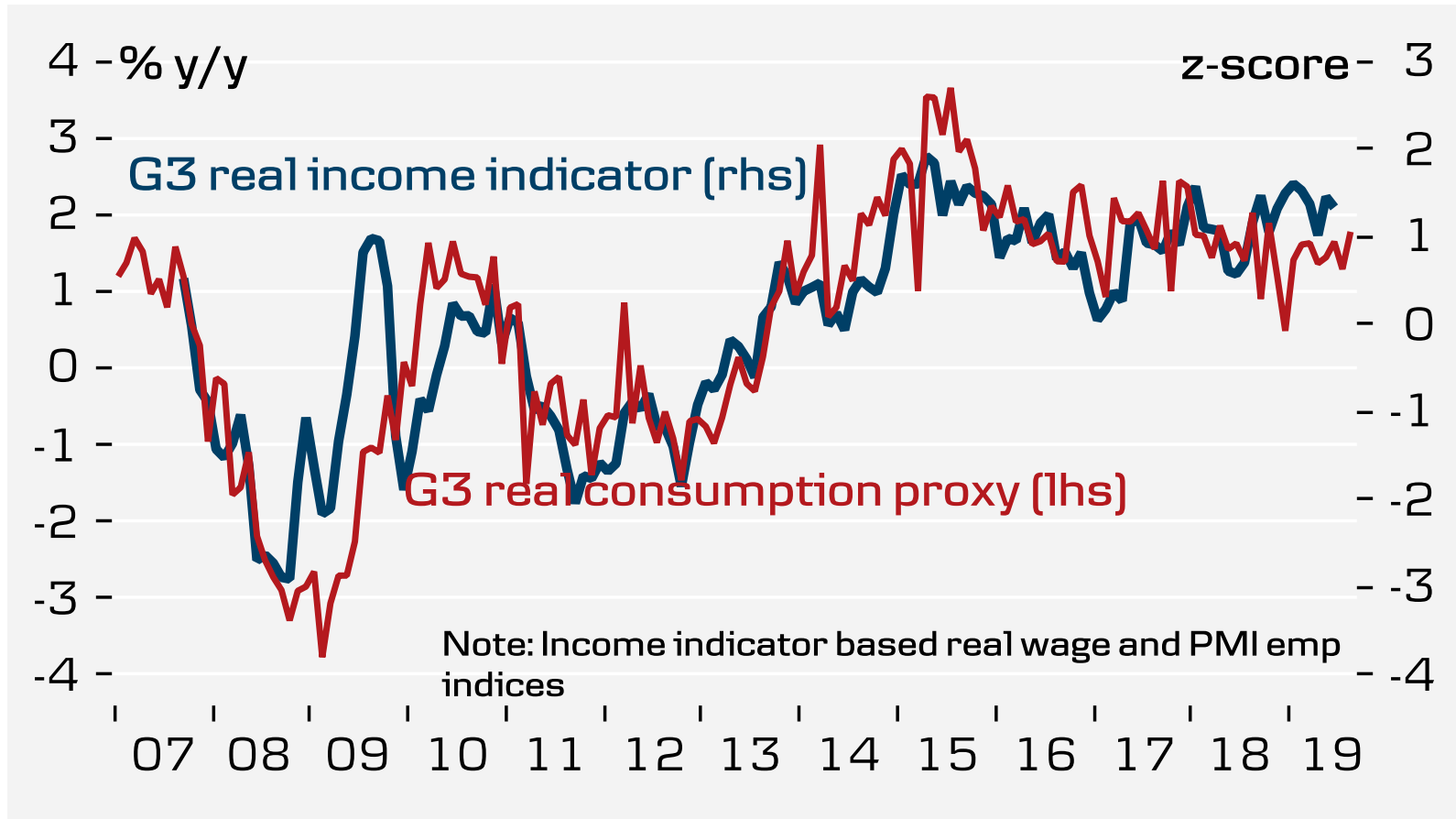
Source: Macrobond Financial, RWI, Danske Bank

OECD consumer



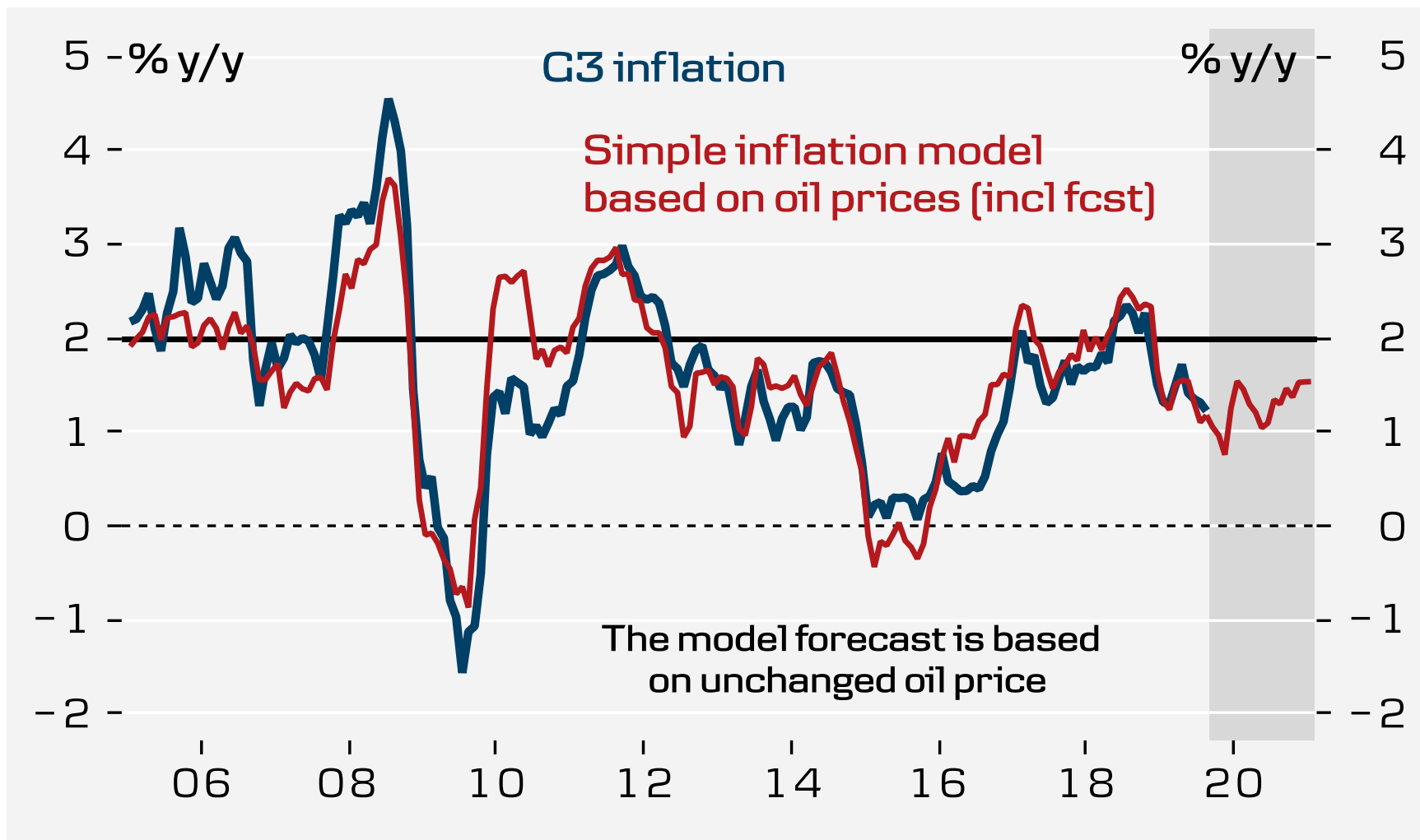
Source: Macrobond Financial, OECD, Danske Bank

G3 real income proxy for consumers



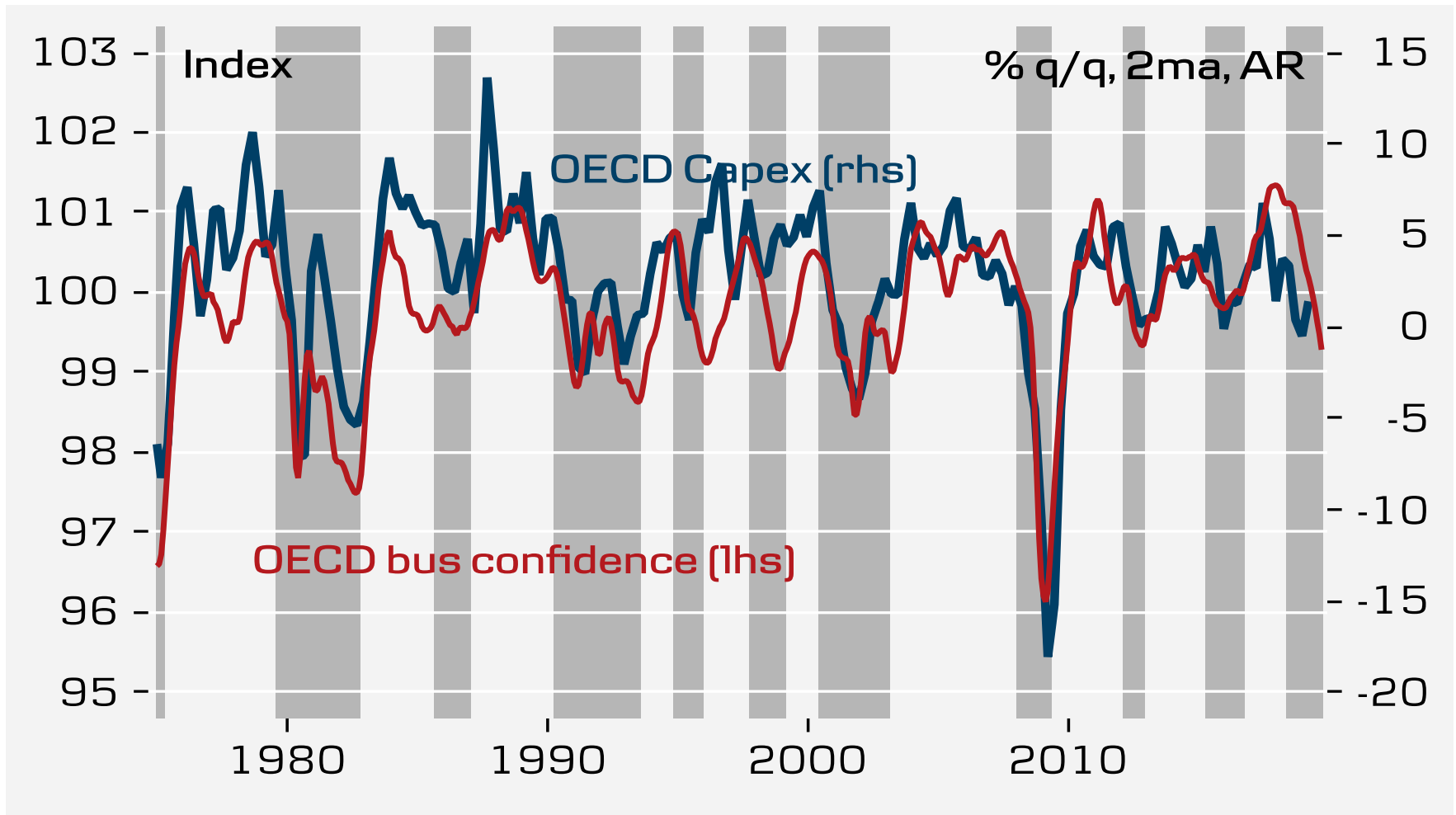
Source: Macrobond Financial, OECD, Danske Bank

G3 inflation - simple model on oil



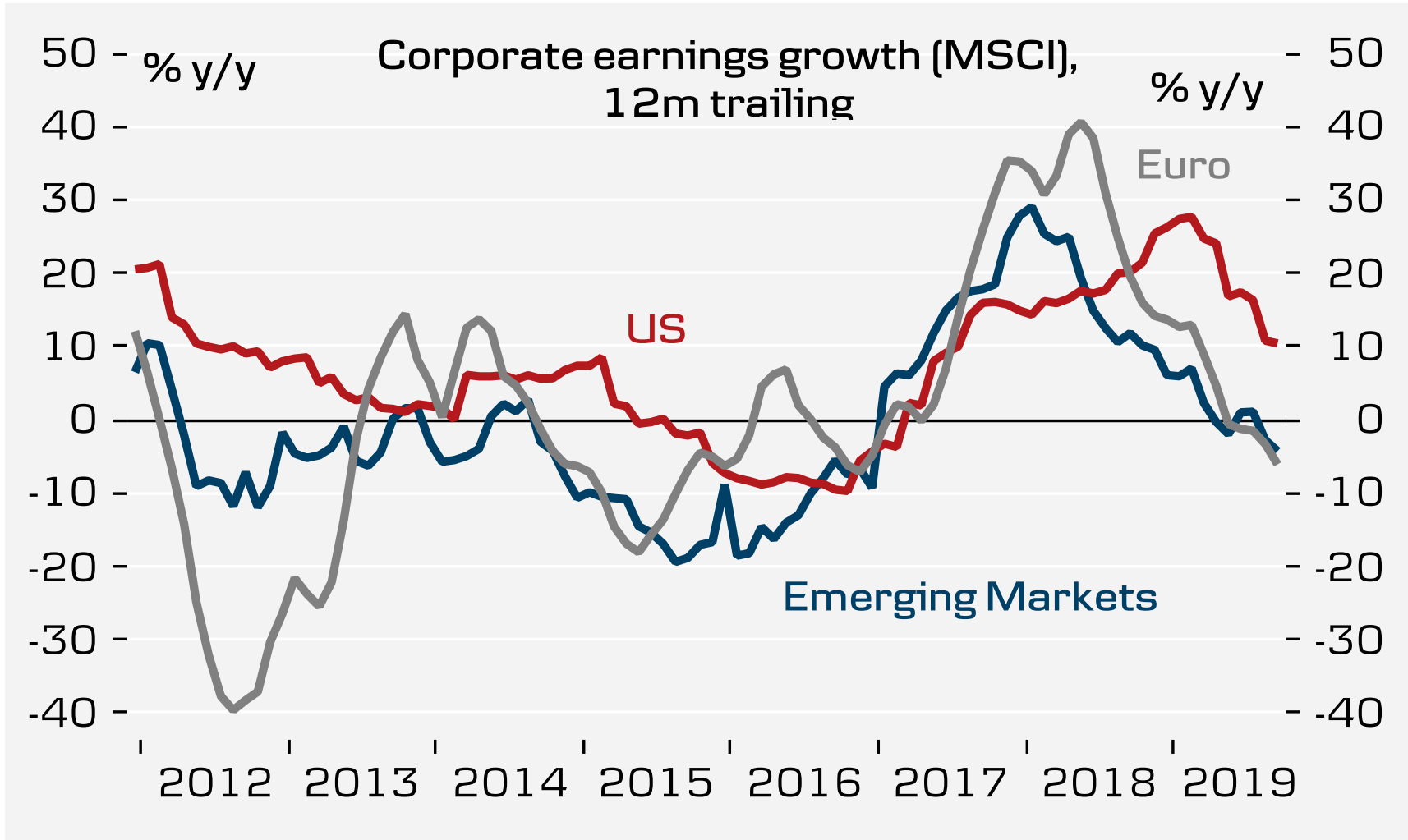
Source: Macrobond Financial, OECD, Danske Bank

OECD capex



Source: Macrobond Financia], OECD, Danske Bank

Profit growth

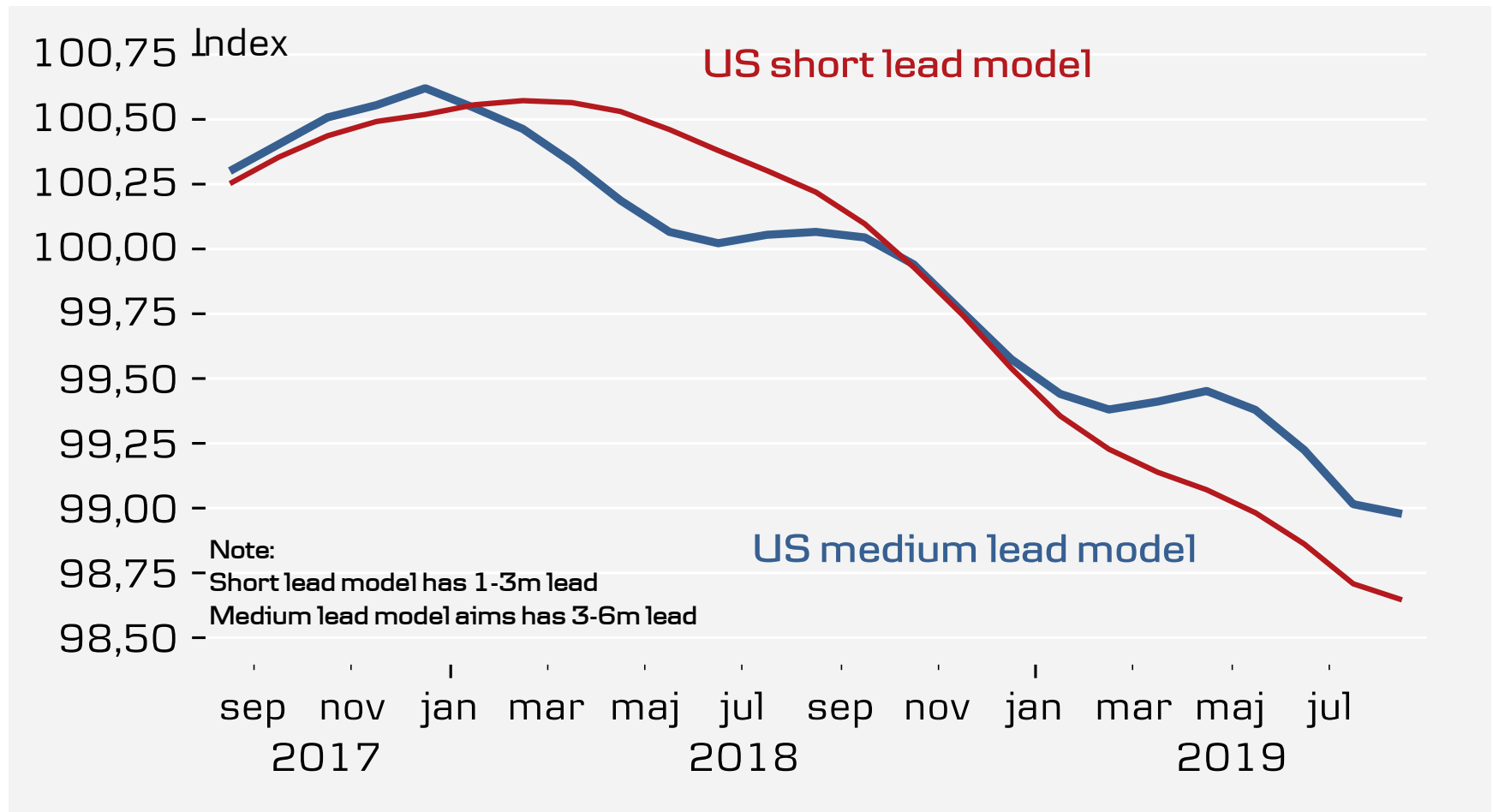


Source: Macrobond Financial, MSCI

US

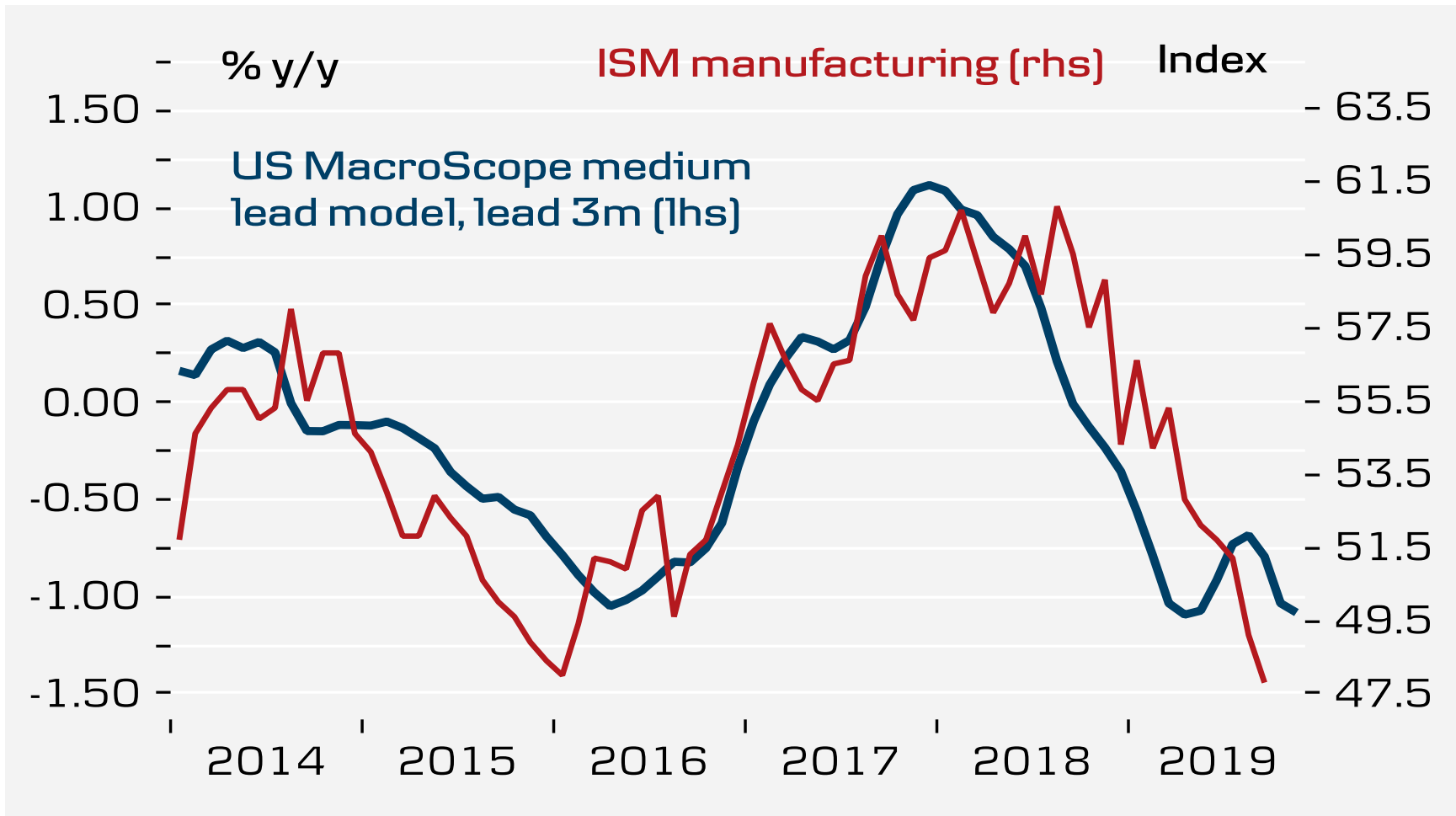
MacroScope models for US

(for OECD Composite Leading Indicators - CLI)



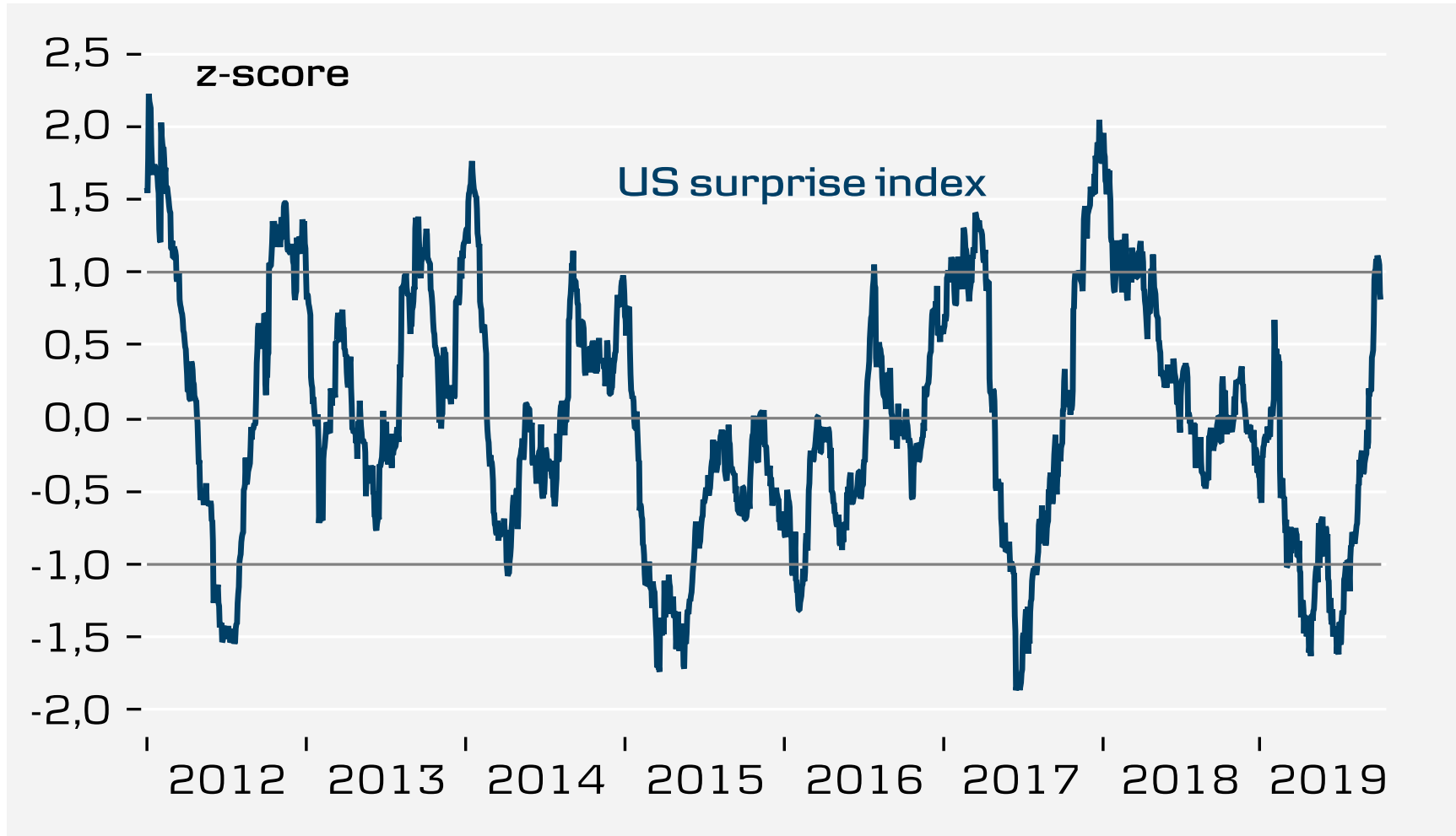
Source: Danske Bank

MacroScope vs ISM manufacturing index



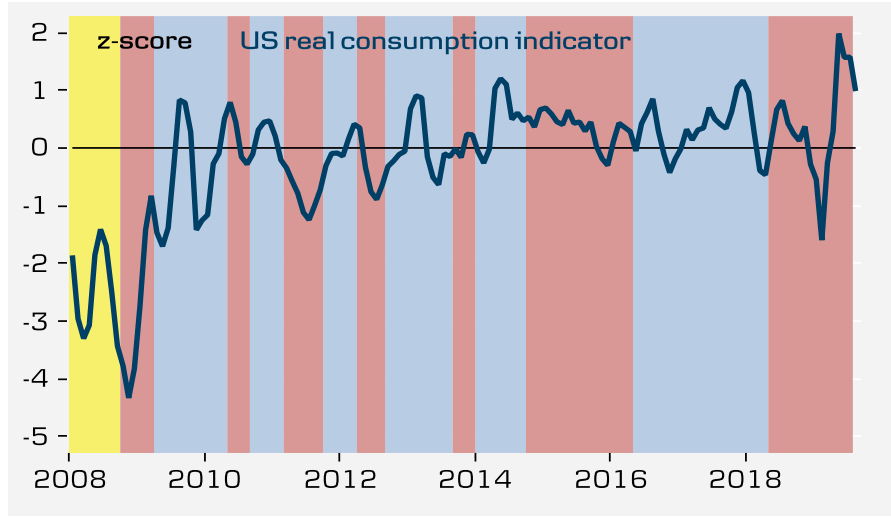
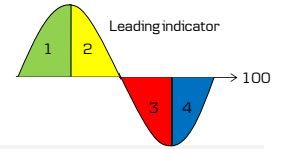
Source: Macrobond Financial, Danske Bank

US surprise index

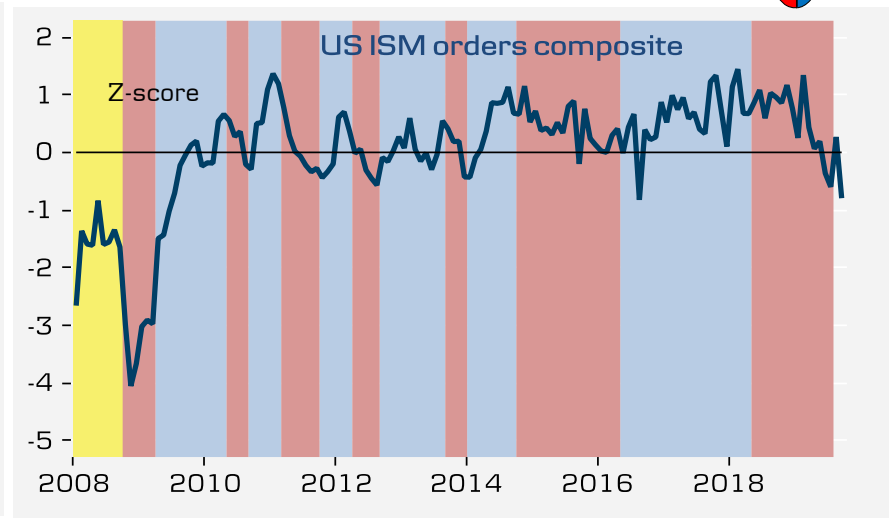


Source: Macrobond Financial, Bloomberg, Danske Bank

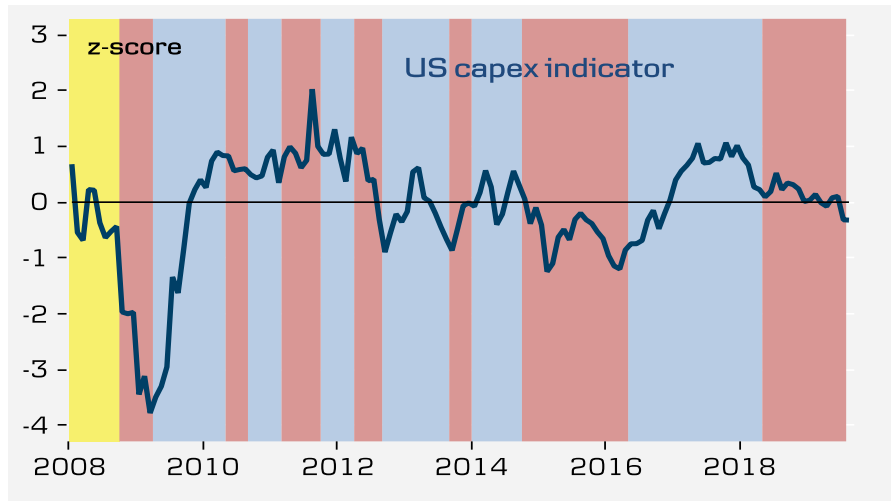
US sector overview vs US quadrants



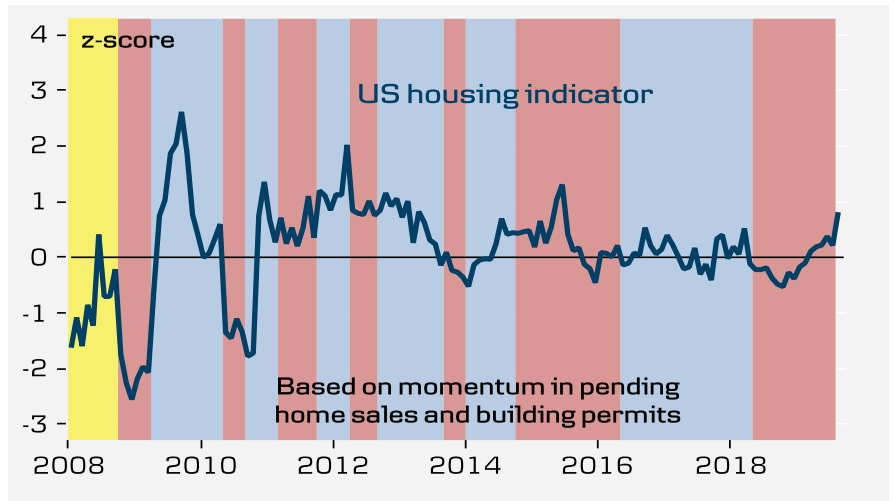
Source: Macrobond Financial, OECD, Danske Bank



Source: Macrobond Financial, OECD, Danske Bank

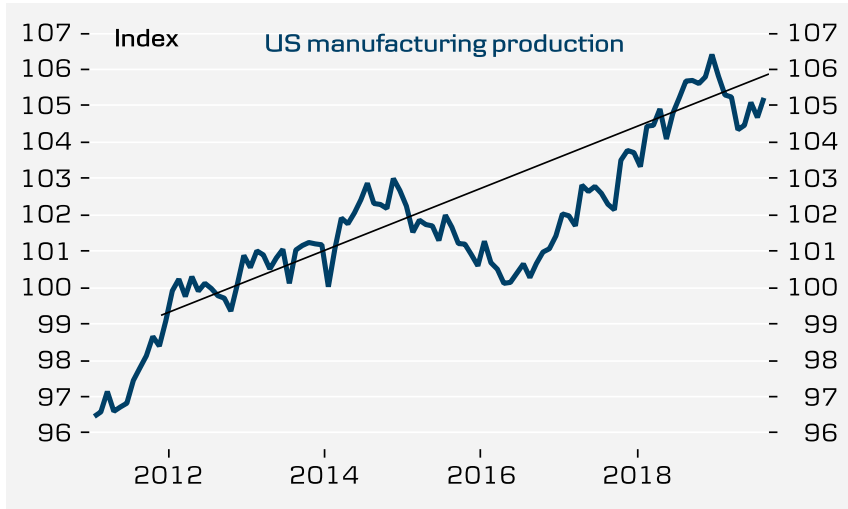


Source: Macrobond Financial, OECD, Danske Bank

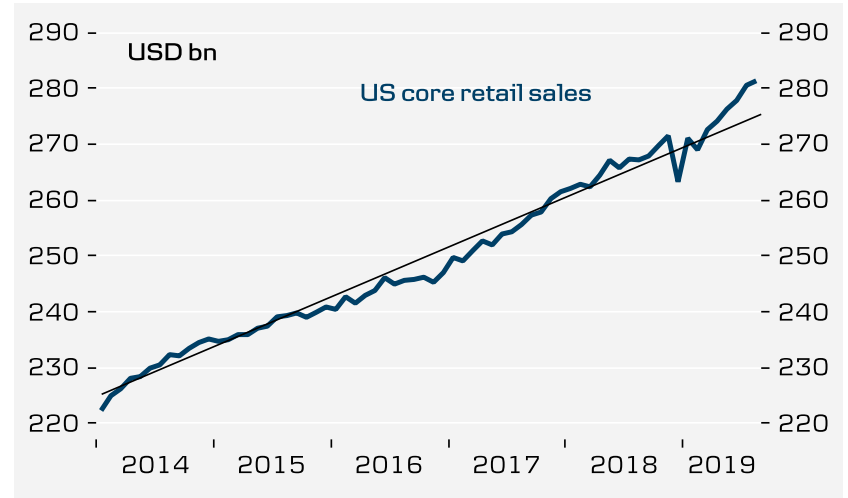


Source: Macrobond Financial, OECD, Danske Bank

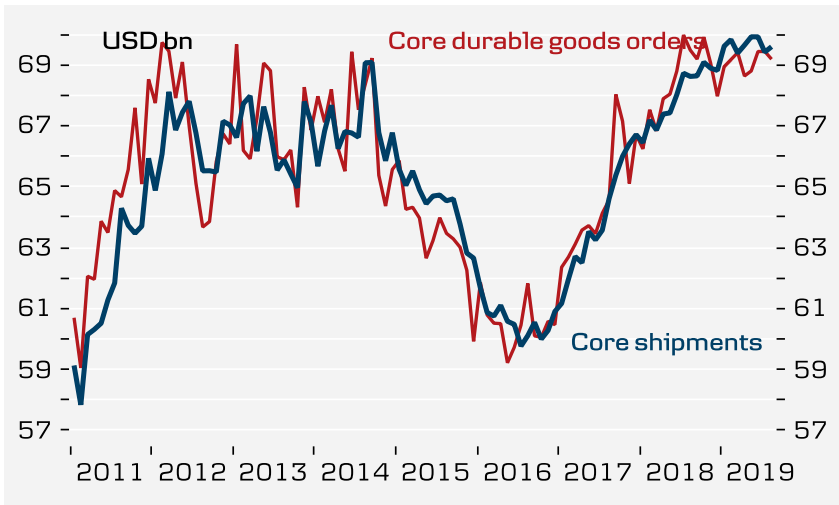
US overview – level charts



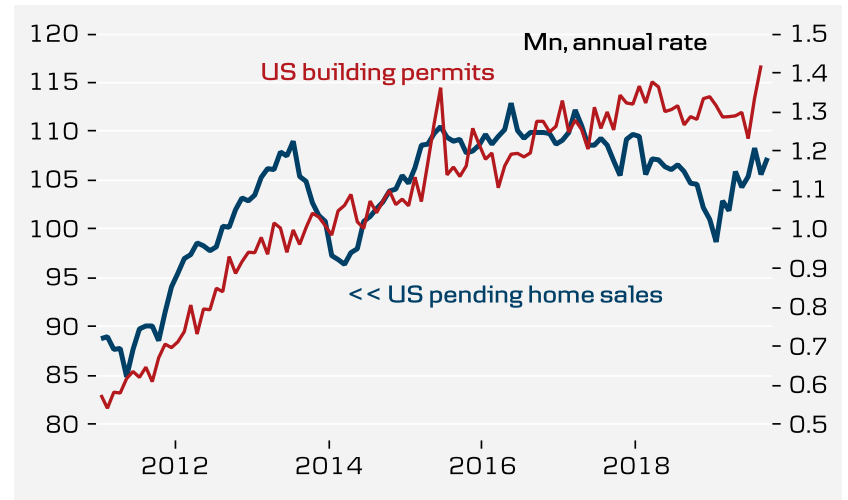
Source: Macrobond Financial, BLS



Source: Macrobond Financial, BLS

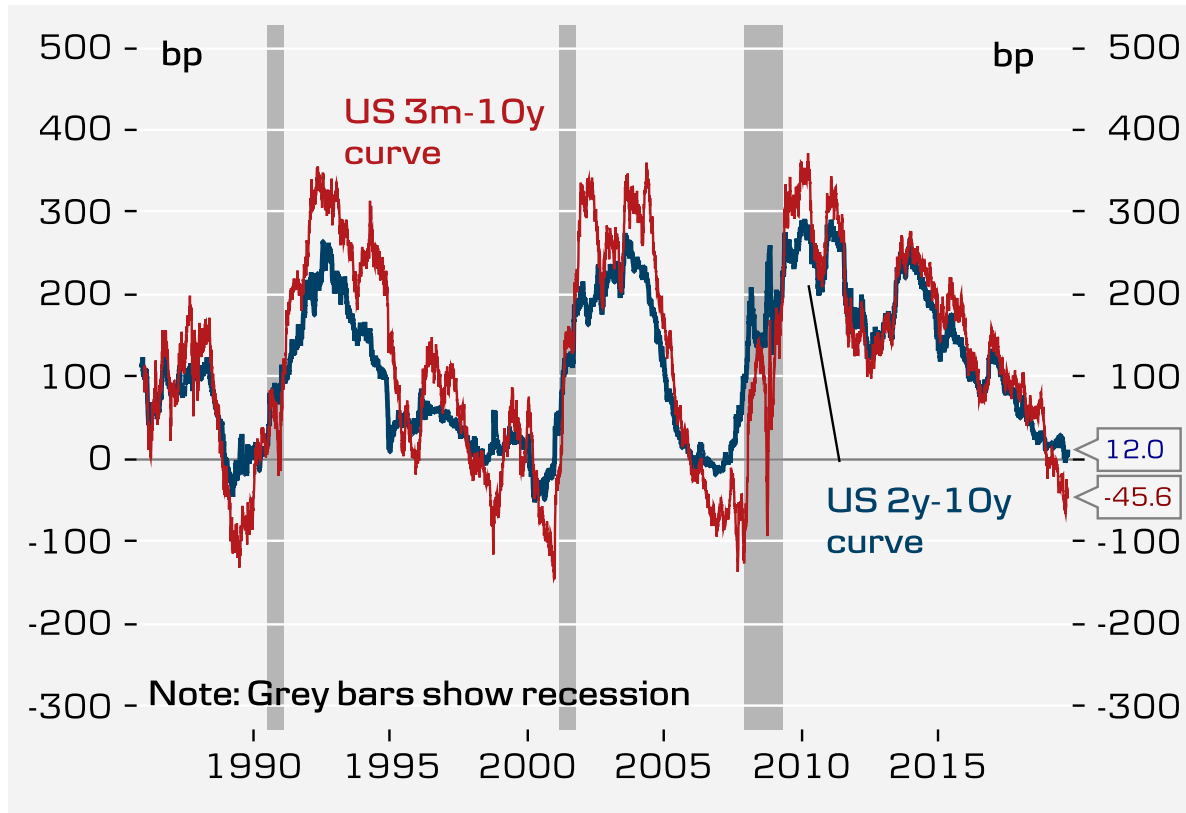


Source: Macrobond Financial, BLS



Source: Macrobond Financial, BLS

Yield curves vs recessions



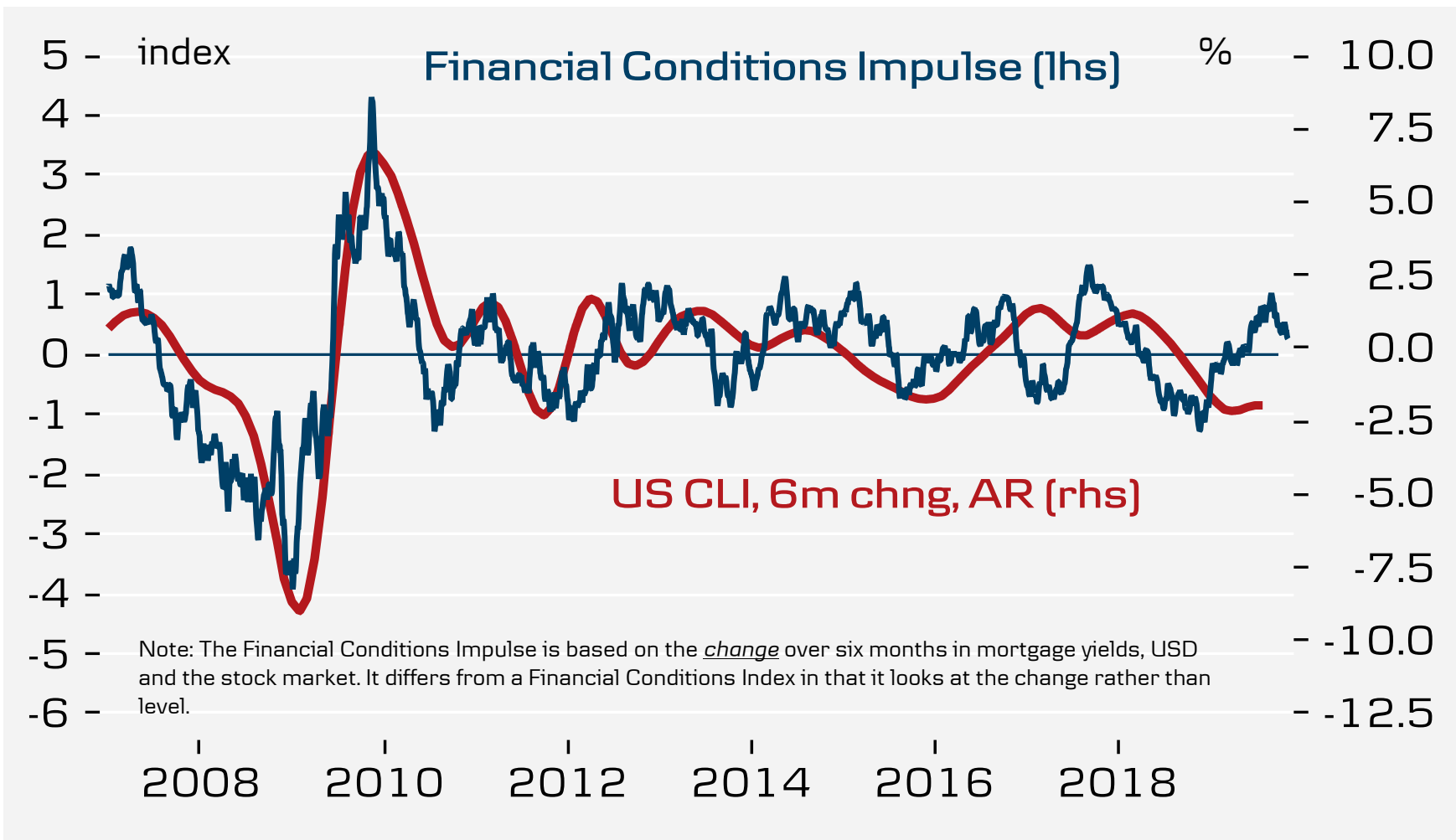
Source: Bloomberg, Danske Bank

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

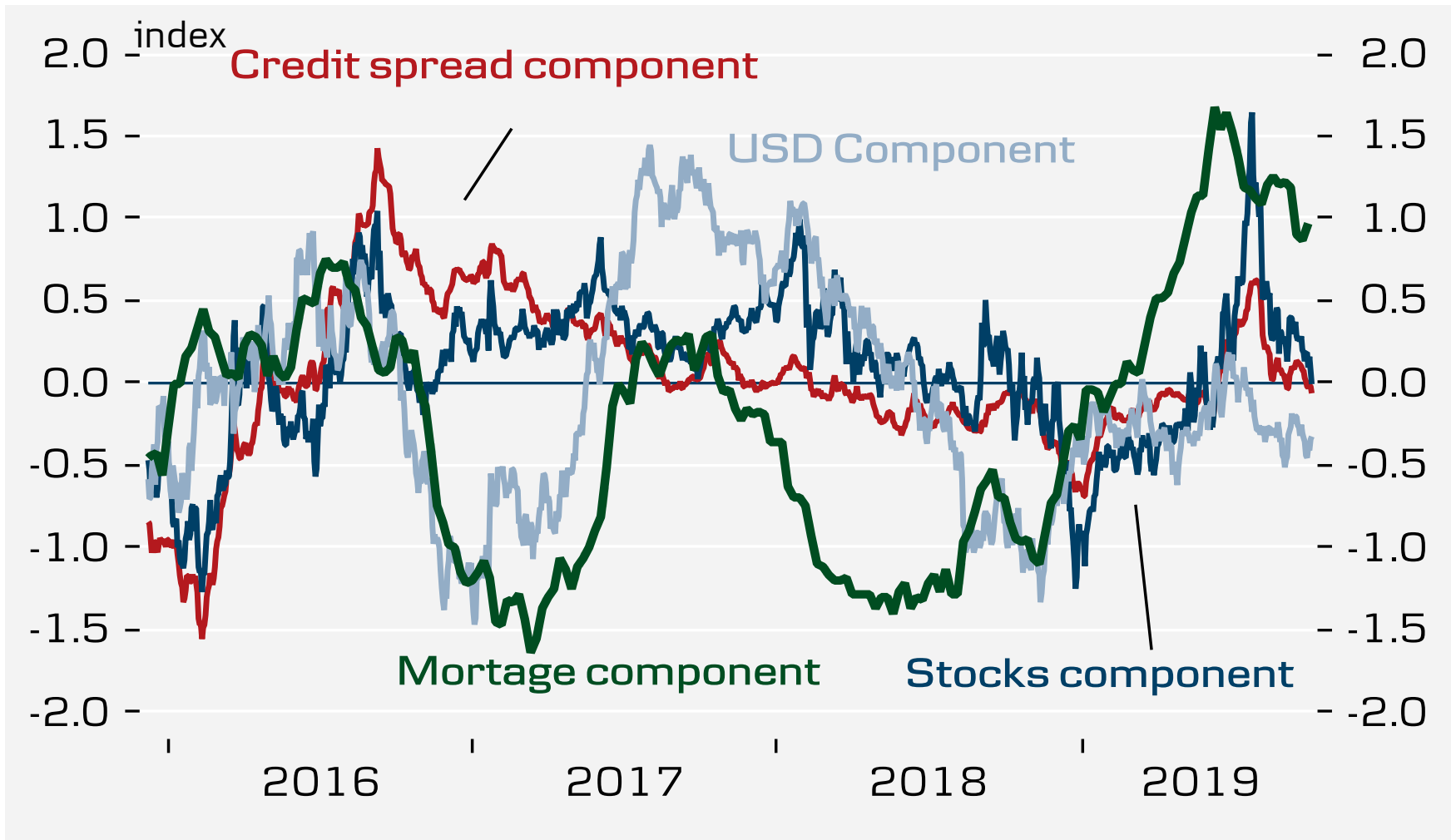
Source: Bloomberg, Danske Bank

Financial conditions vs CLI change



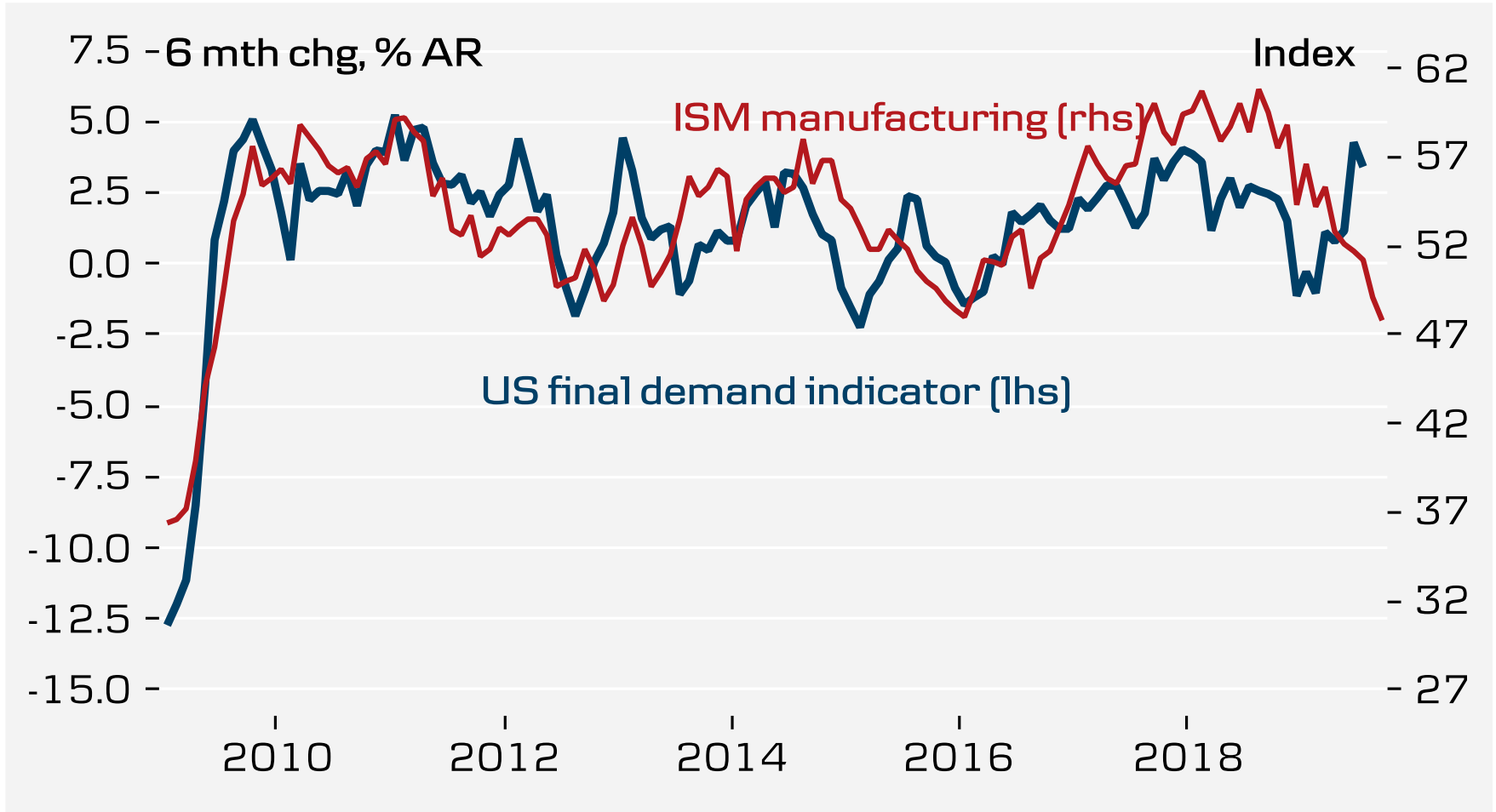
Source: Macrobond Financial, Bloomberg, Danske Bank

Financial Conditions Impulse components



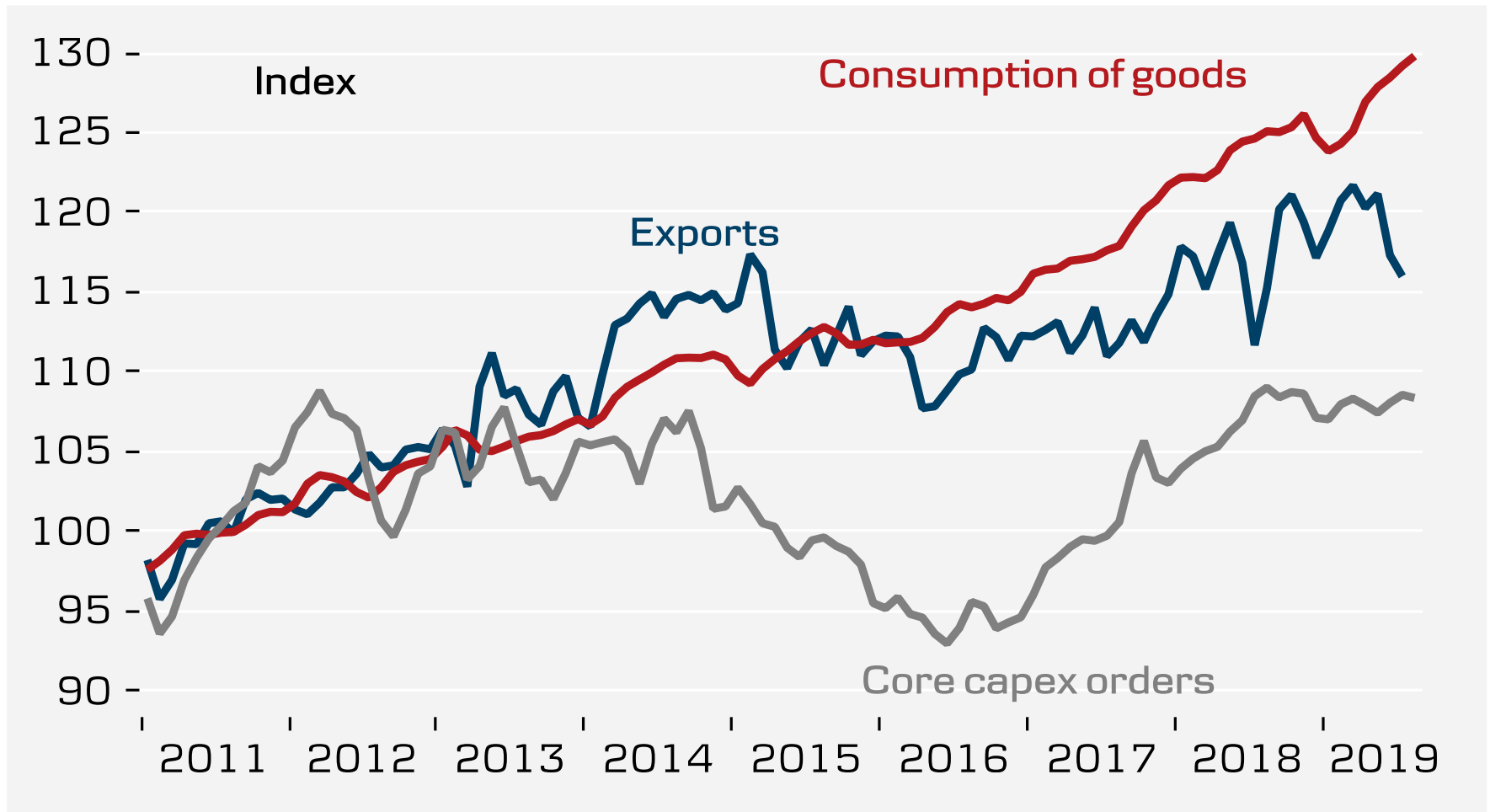
Source: Macrobond Financial, Bloomberg, Danske Bank

ISM manufacturing vs US demand indicator



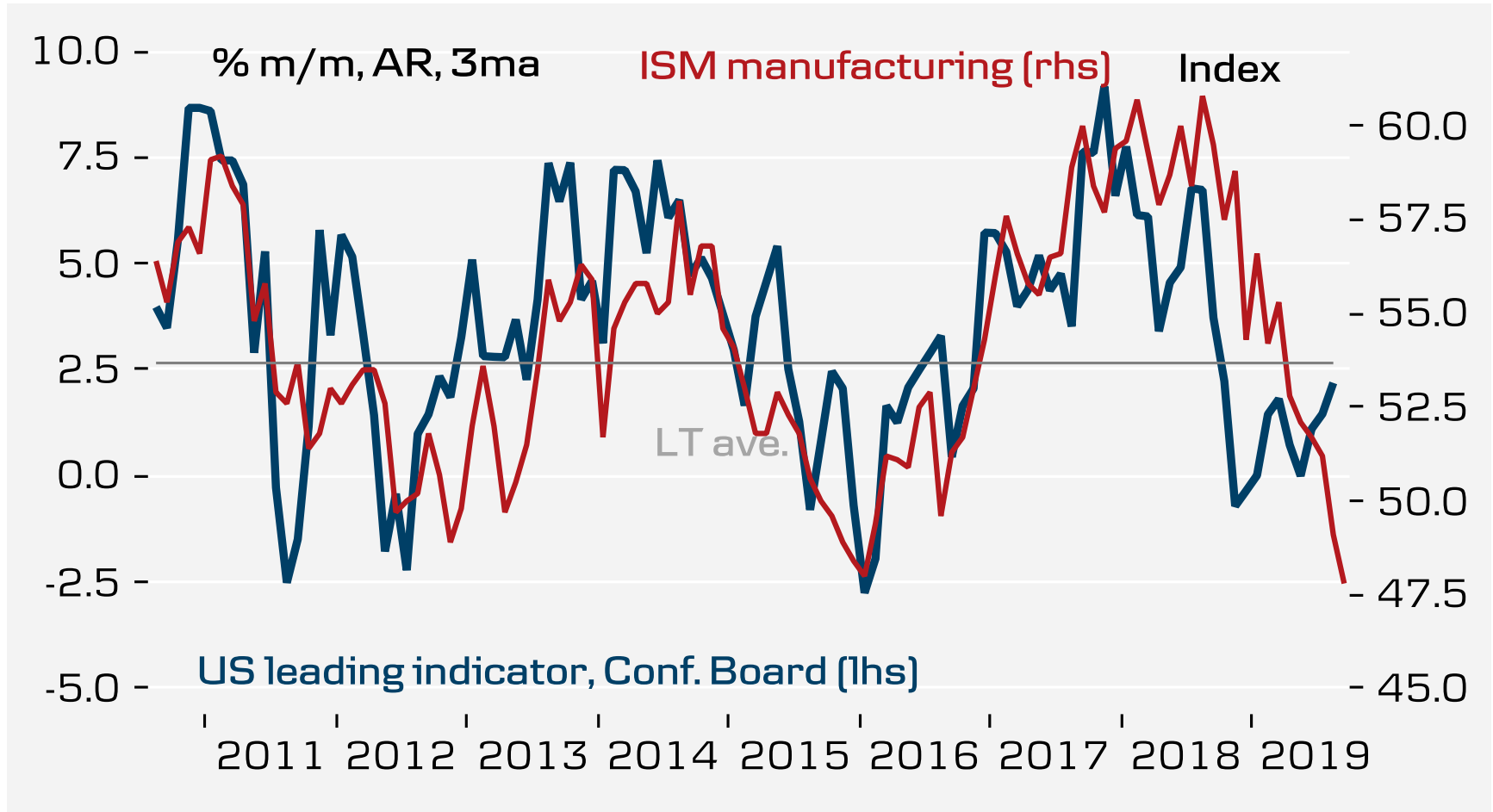
Source: Macrobond Financial, ISM, Danske Bank

Components in demand indicator



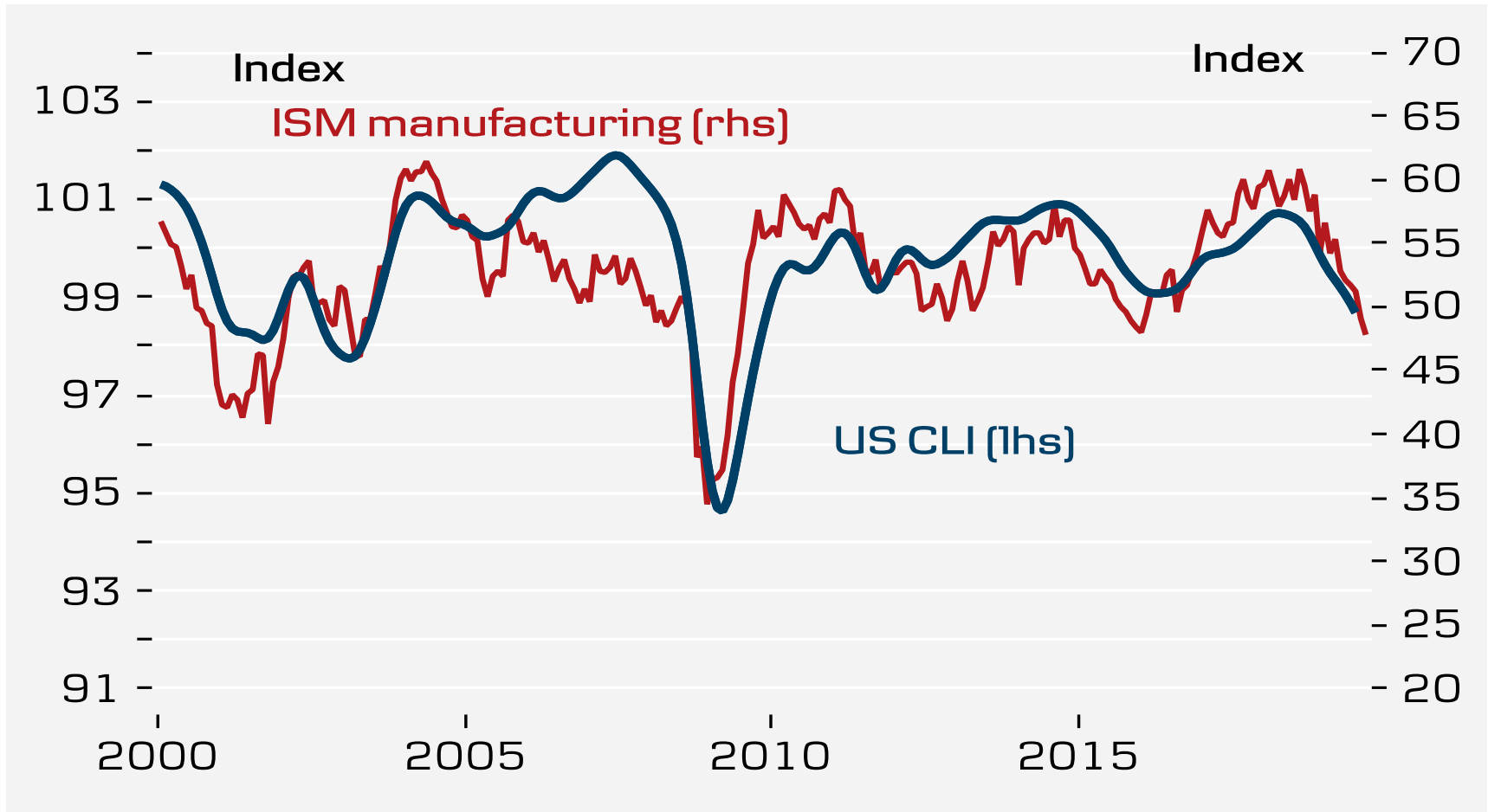
Source: Macrobond Financial, BLS

ISM vs Conference Board leading indicator



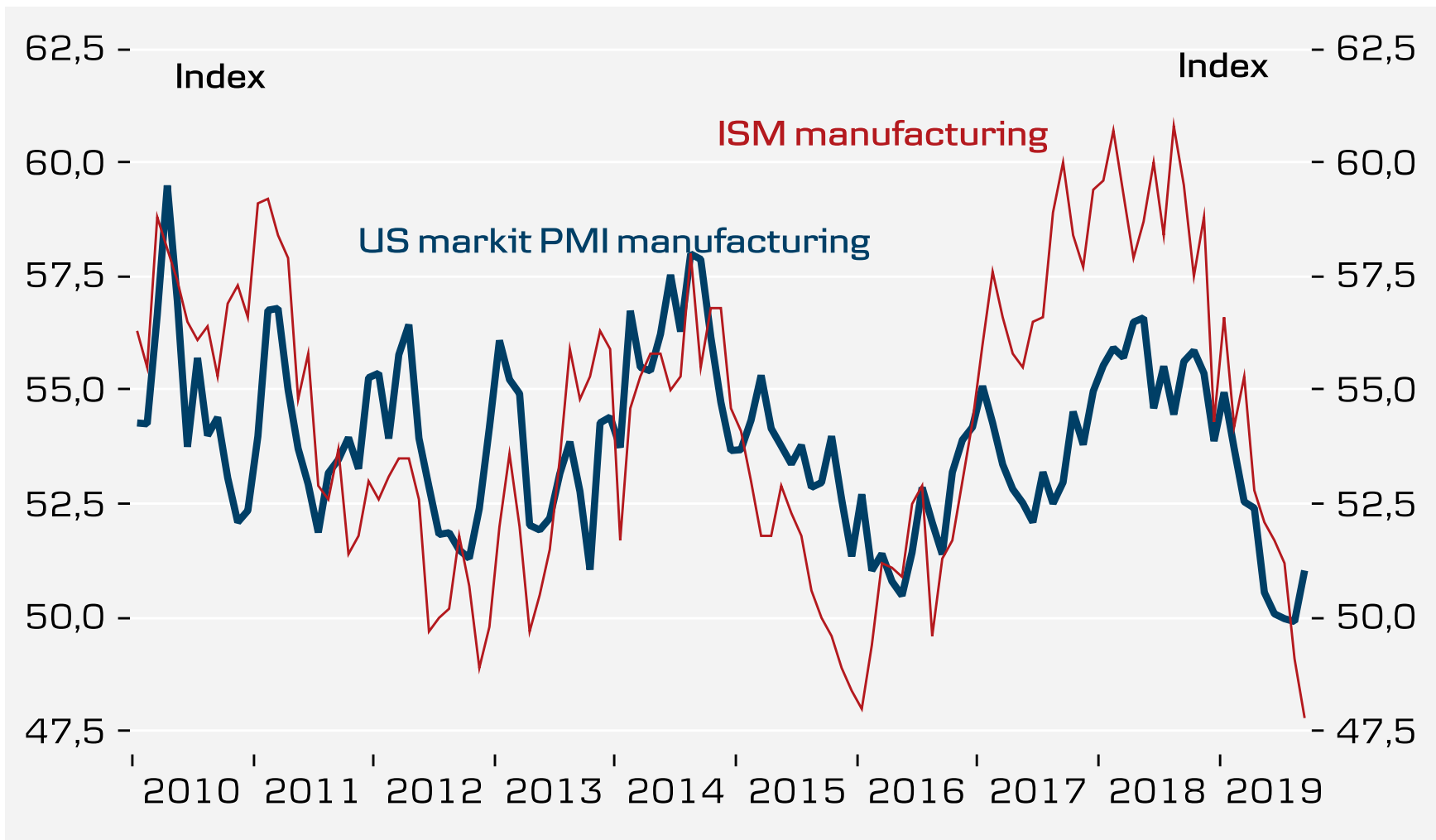
Source: Macrobond Financial, Conference Board, ISM, Danske Bank

ISM manufacturing



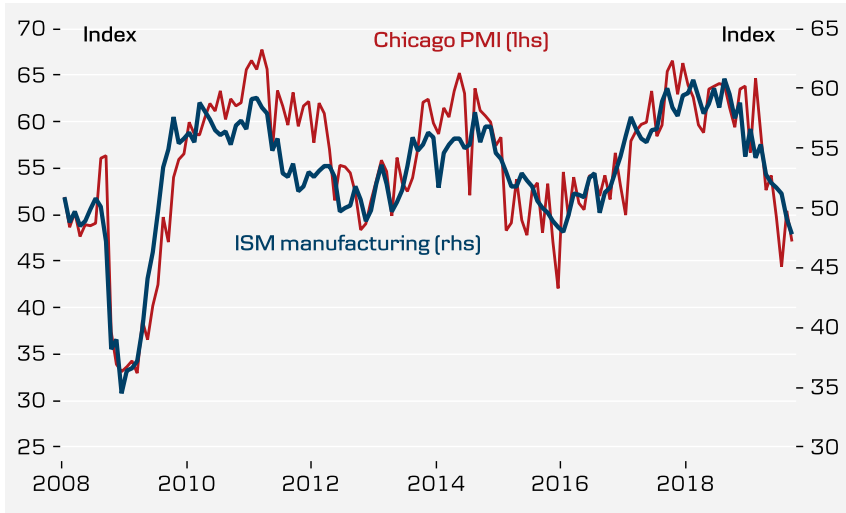
Source: Macrobond Financial, ISM, OECD

ISM manufacturing vs. US PMI manufacturing

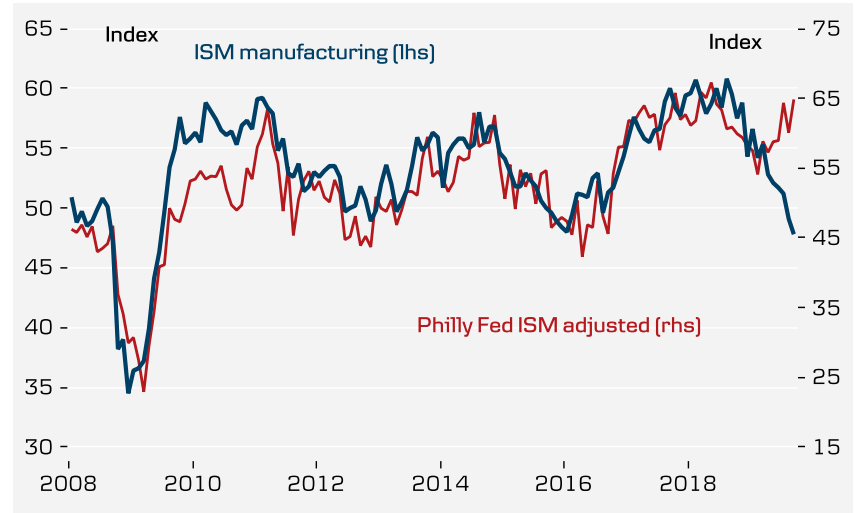


Source: Macrobond Financial, Markit,

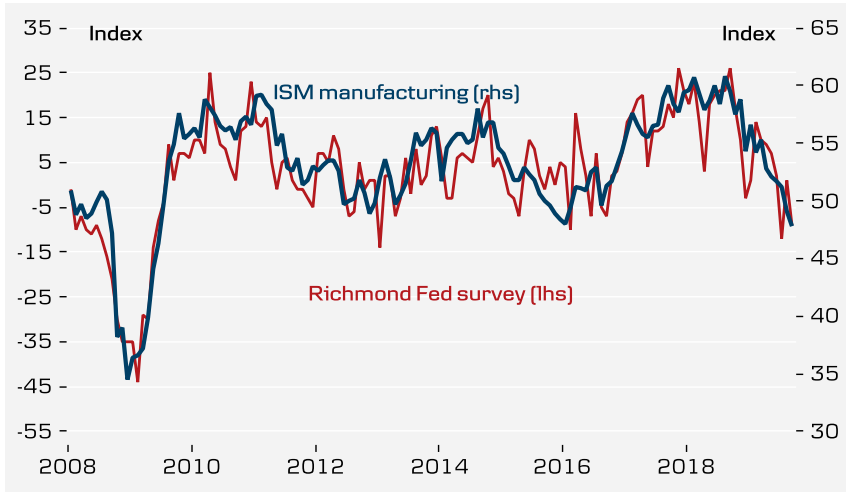
ISM manufacturing vs. regional surveys



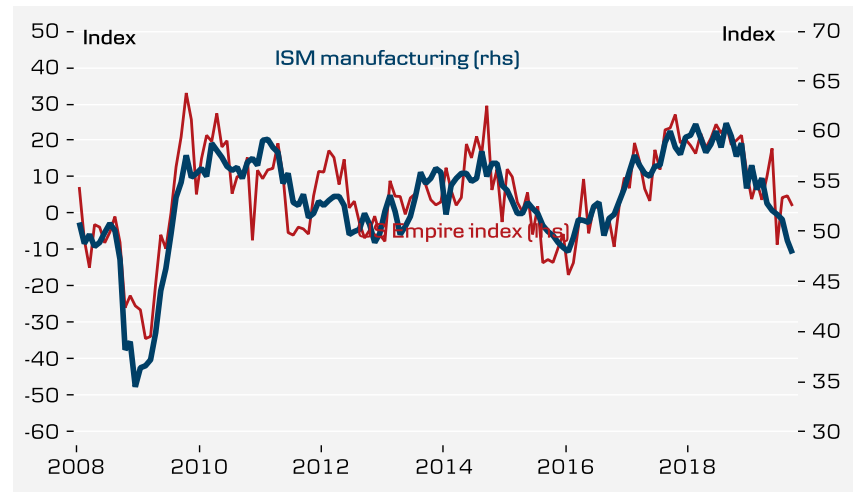
Source: Macrobond Financial, ISM



Source: Macrobond Financial, ISM

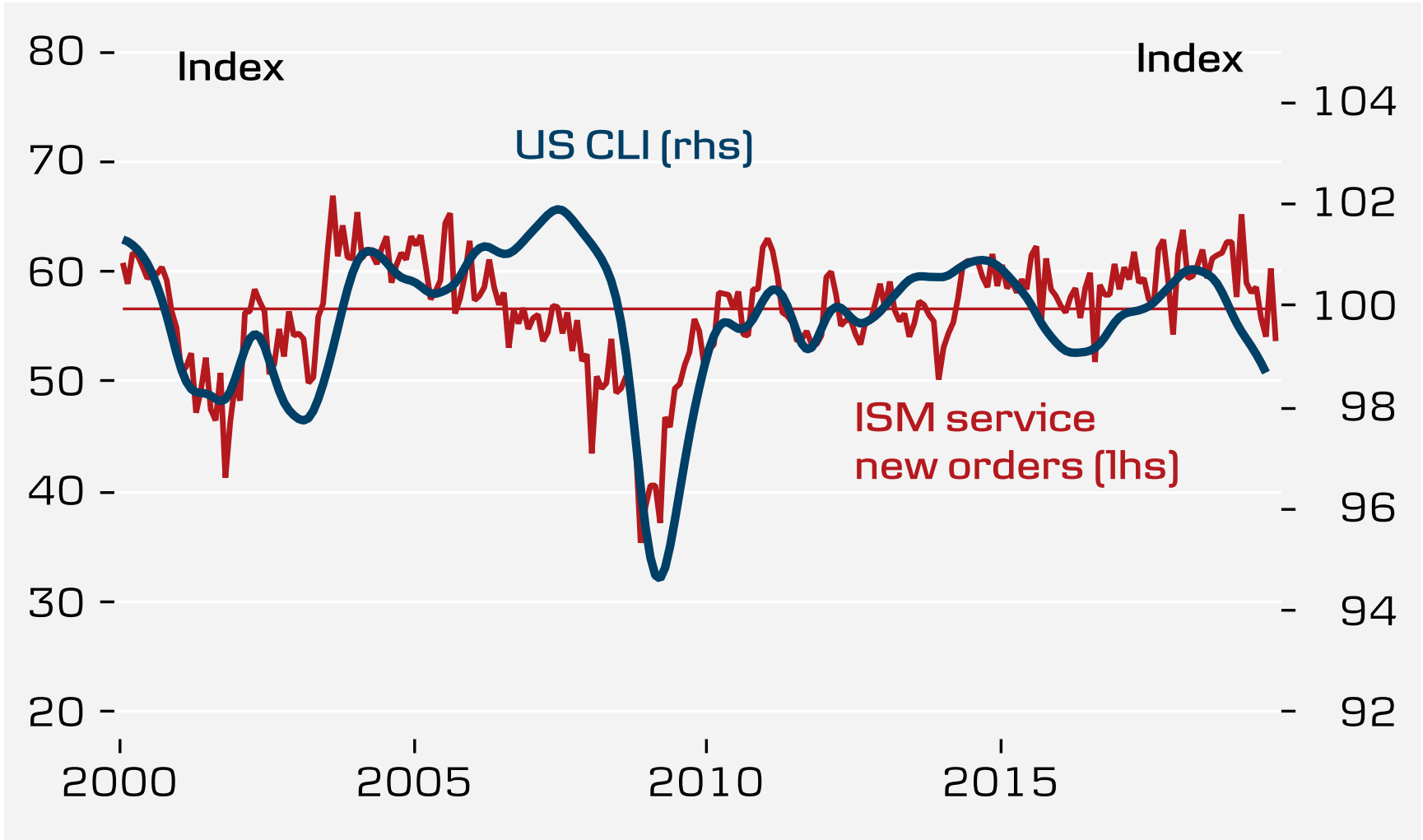


Source: Macrobond Financial, ISM



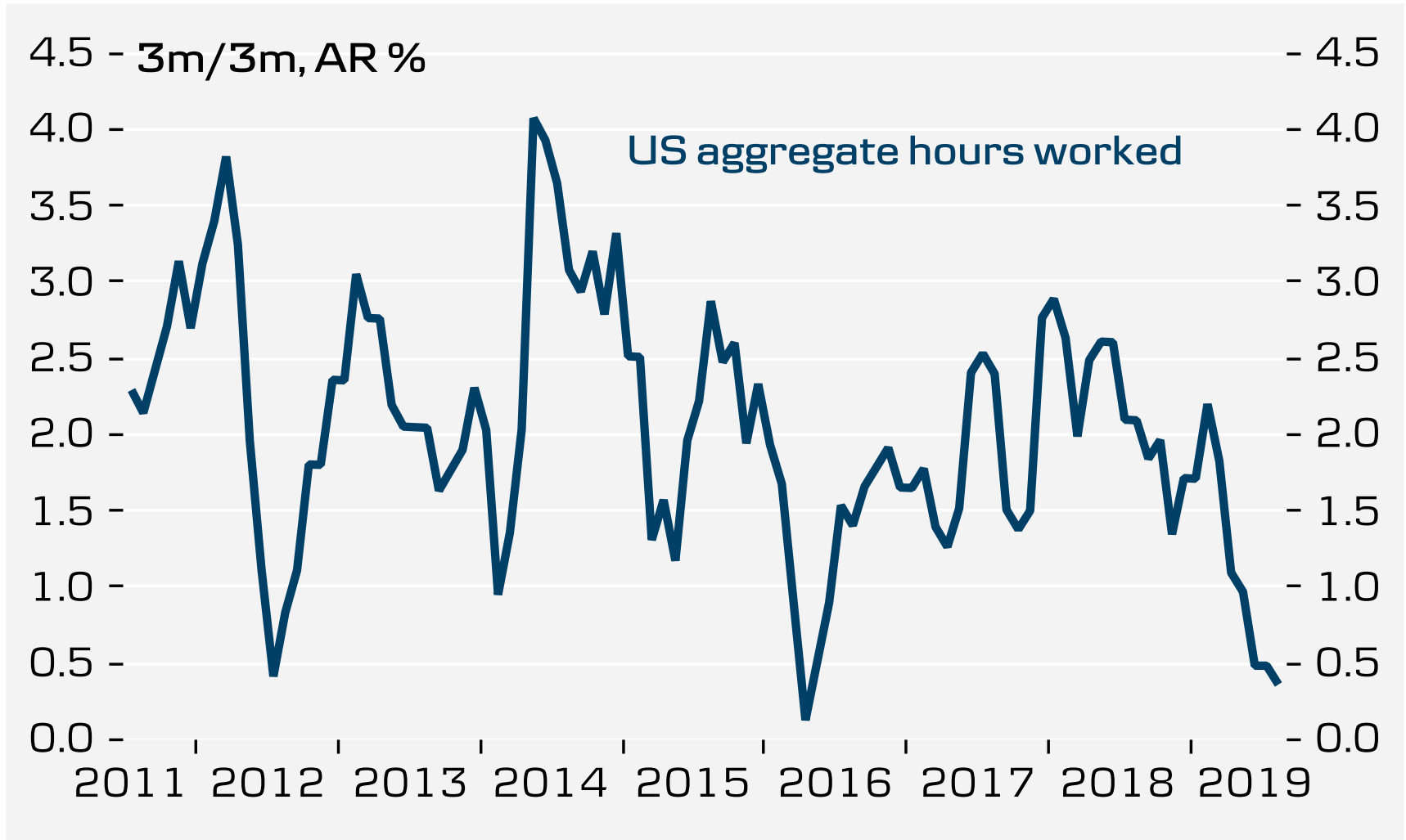
Source: Macrobond Financial, ISM

ISM service



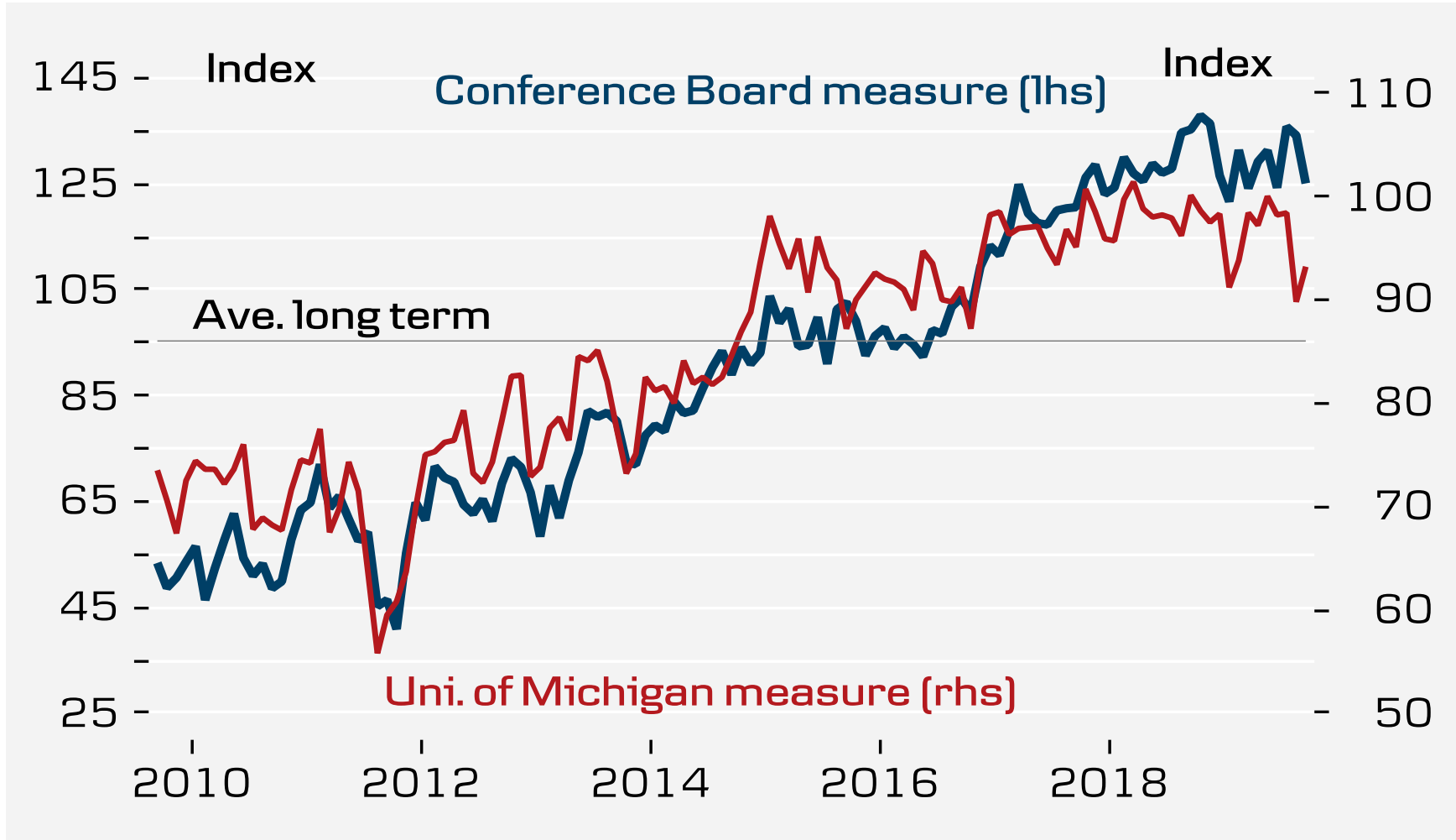
Source: Macrobond Financial, ISM, OECD

Aggregate hours worked



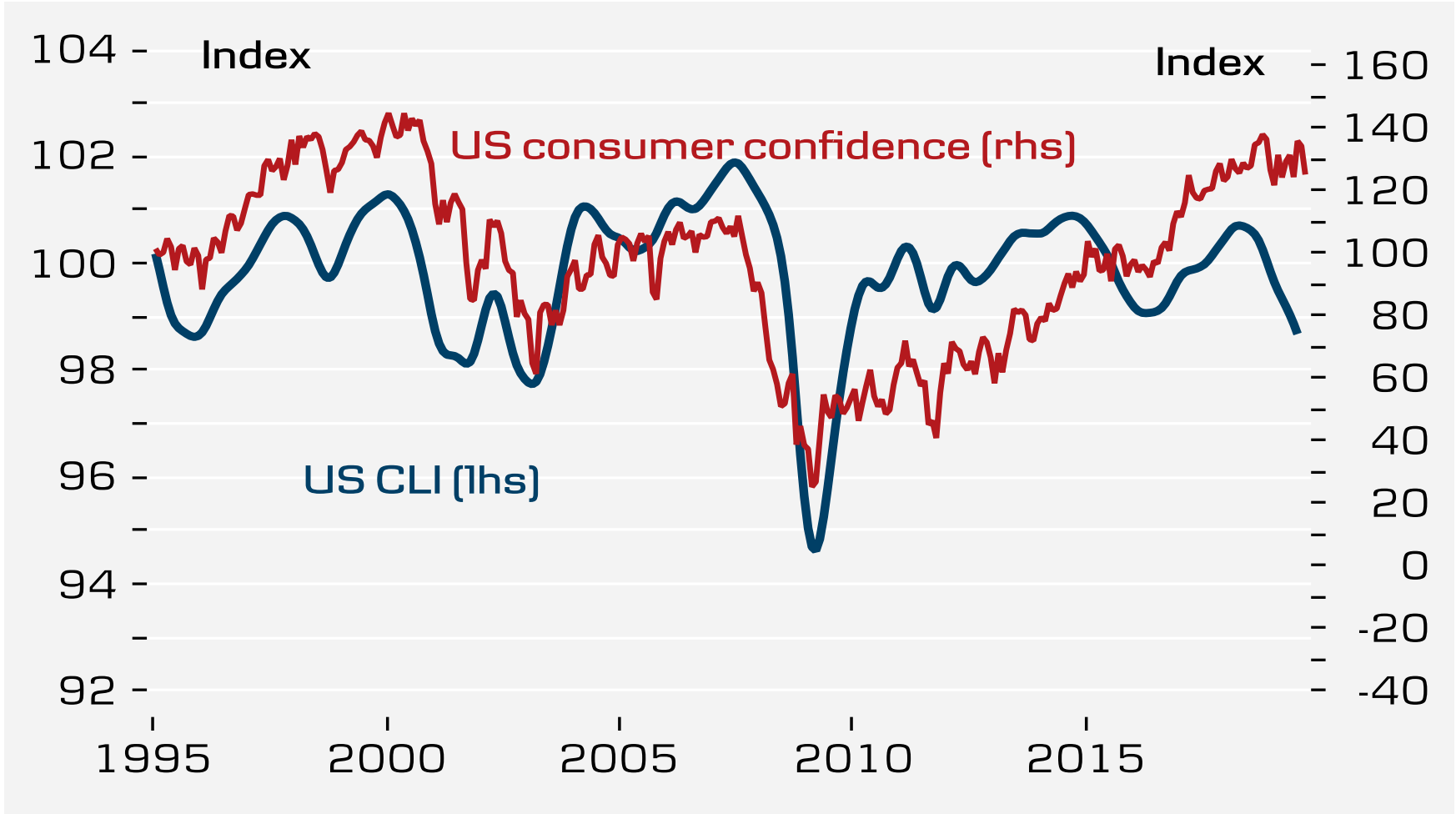
Source: Macrobond Financial, BLS

Consumer confidence



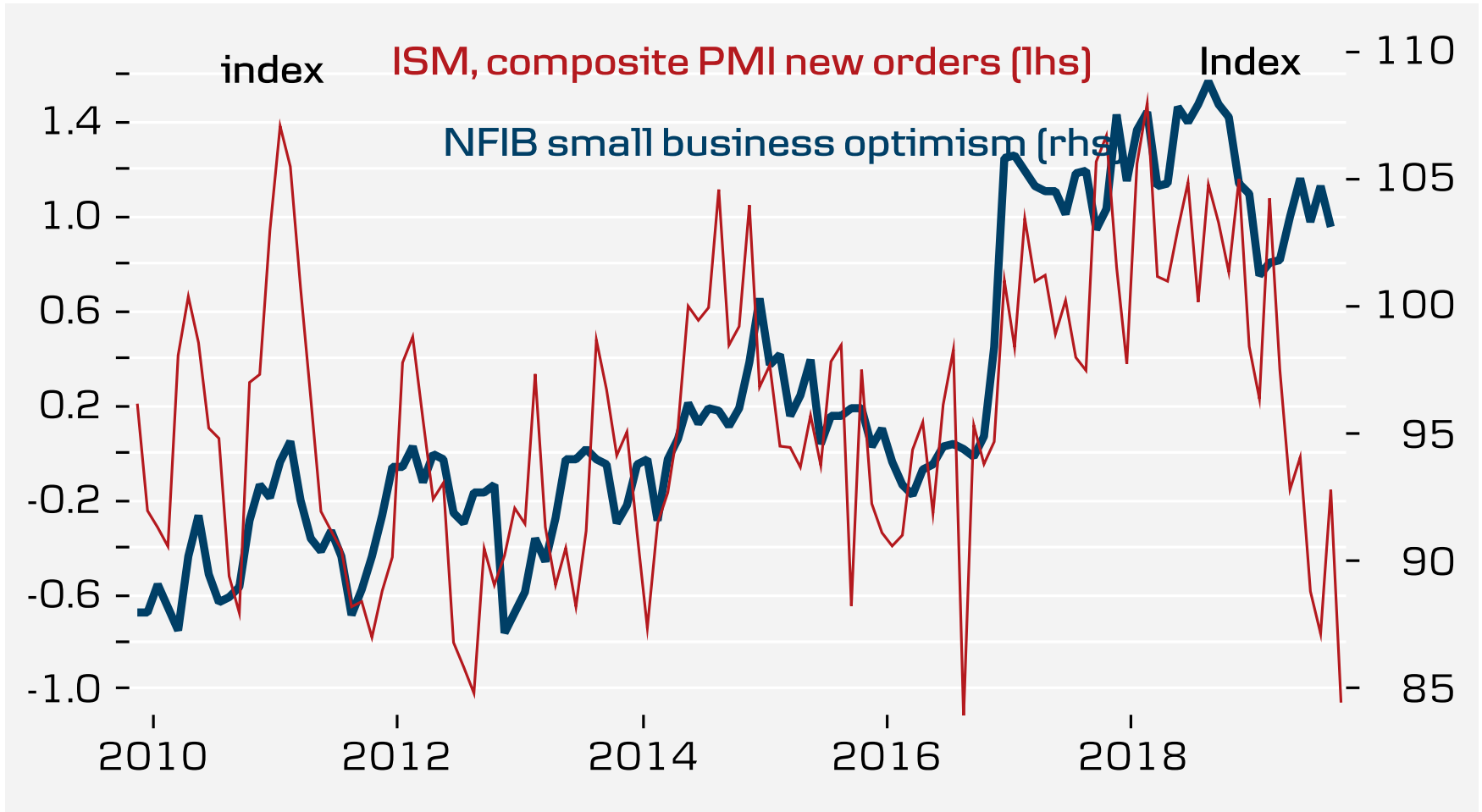
Source: Macrobond Financial, Conference Board, Bloomberg

Consumer confidence vs CLI



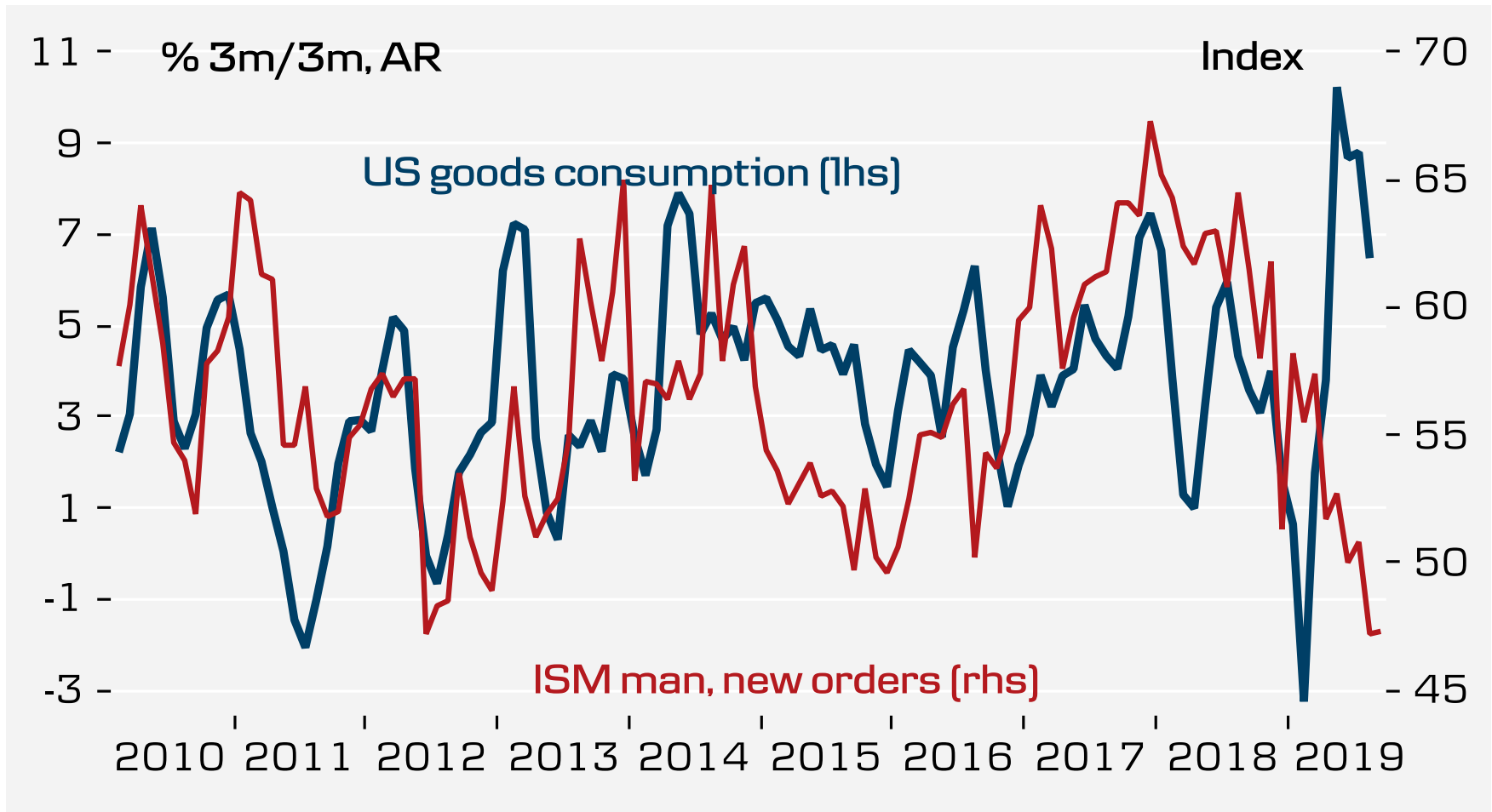
Source: Macrobond Financial, BLS

Small business optimism



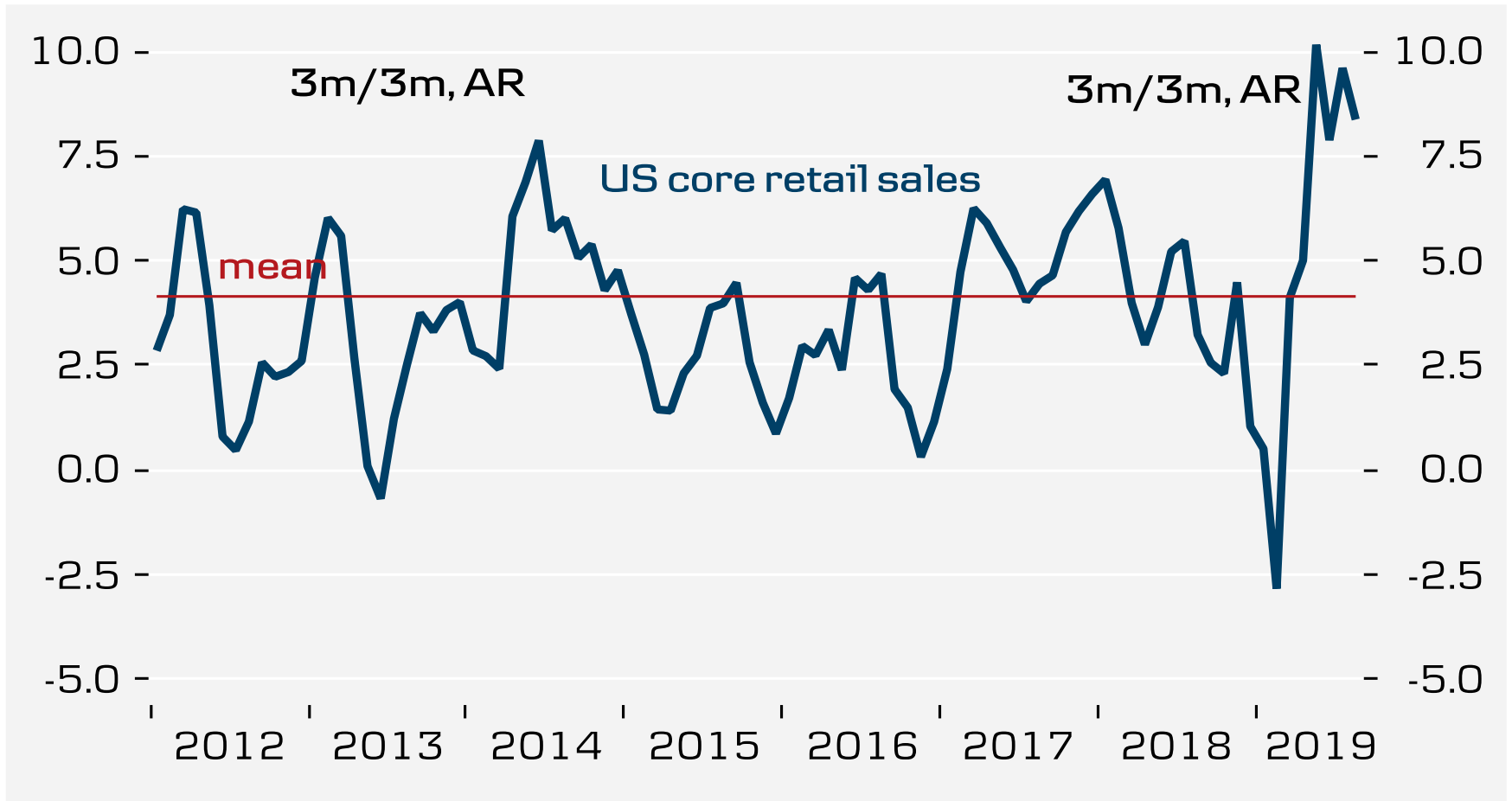
Source: Macrobond Financial, ISM, NFIB

Goods consumption and ISM



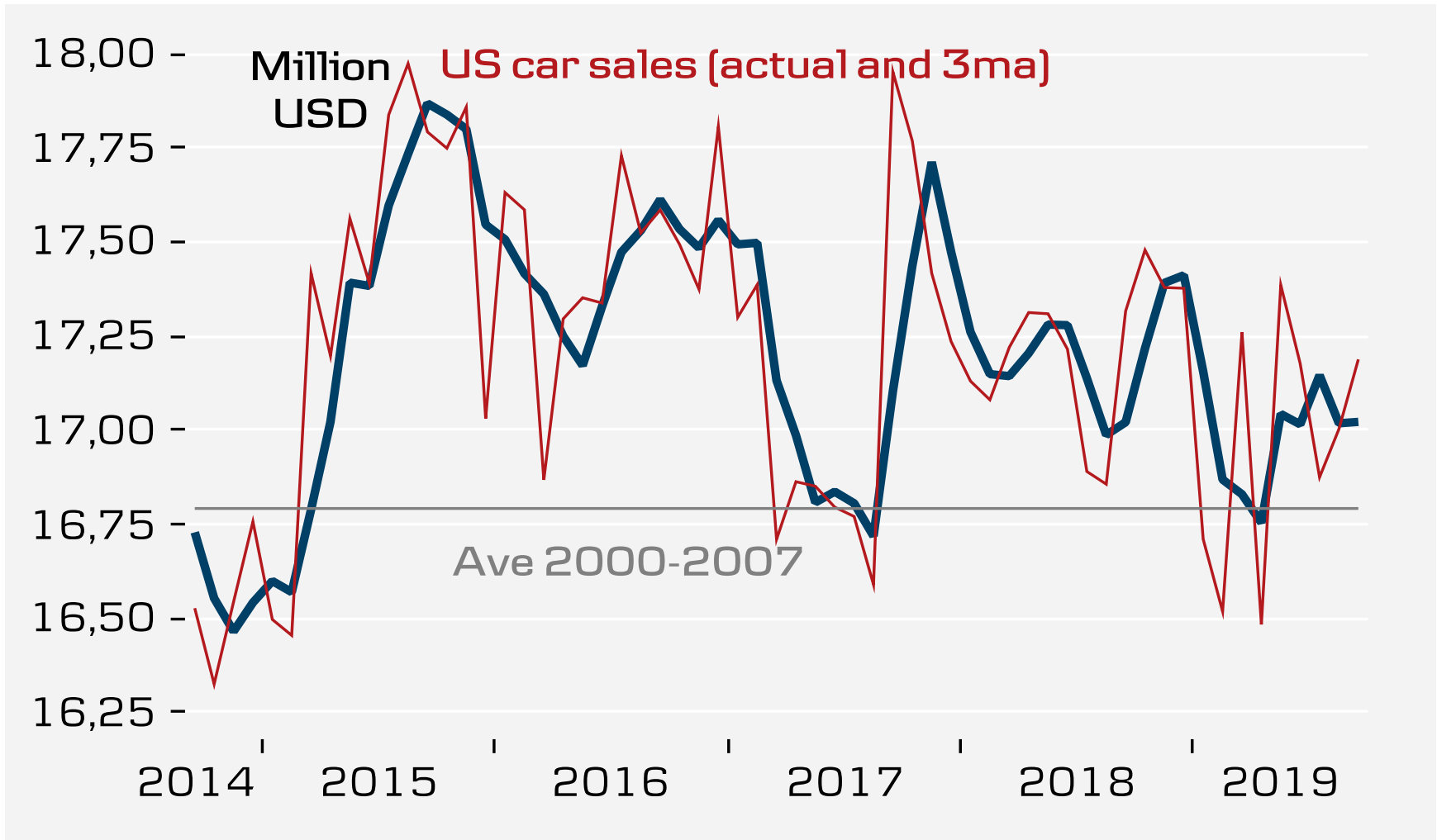
Source: Macrobond Financial, BLS, ISM

Consumption: retail sales



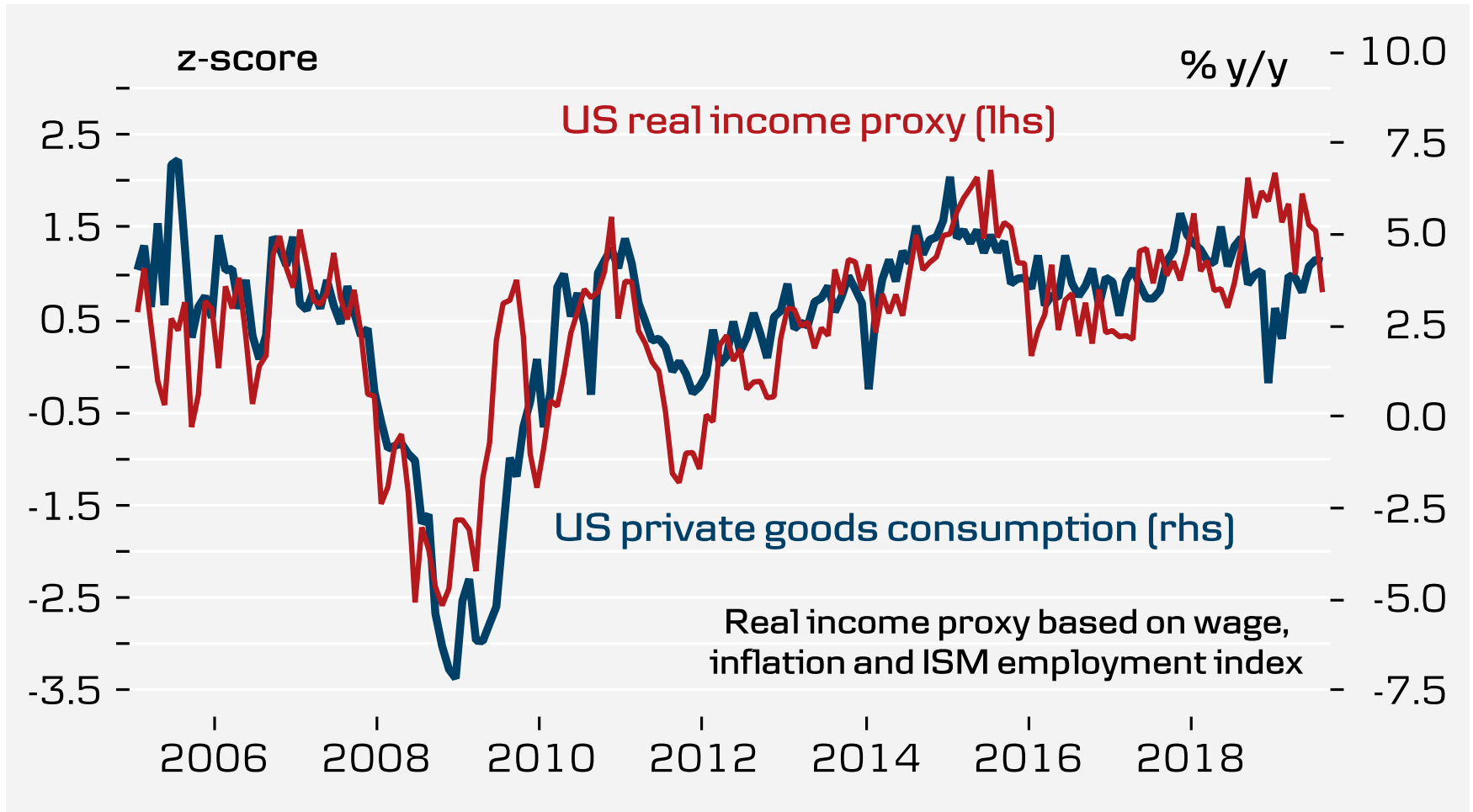
Source: Macrobond Financial, BLS

Consumption: car sales



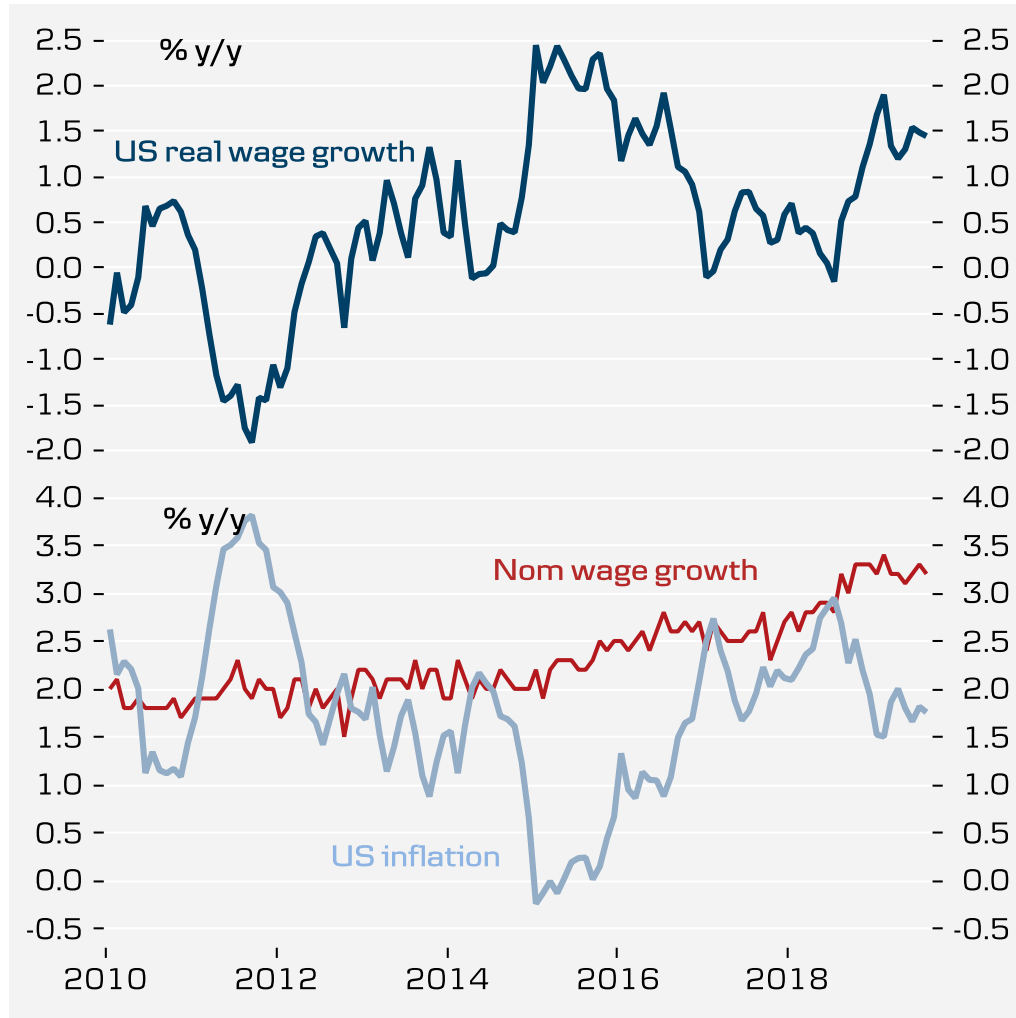
Source: Macrobond Financial, BLS

Real income vs goods consumption



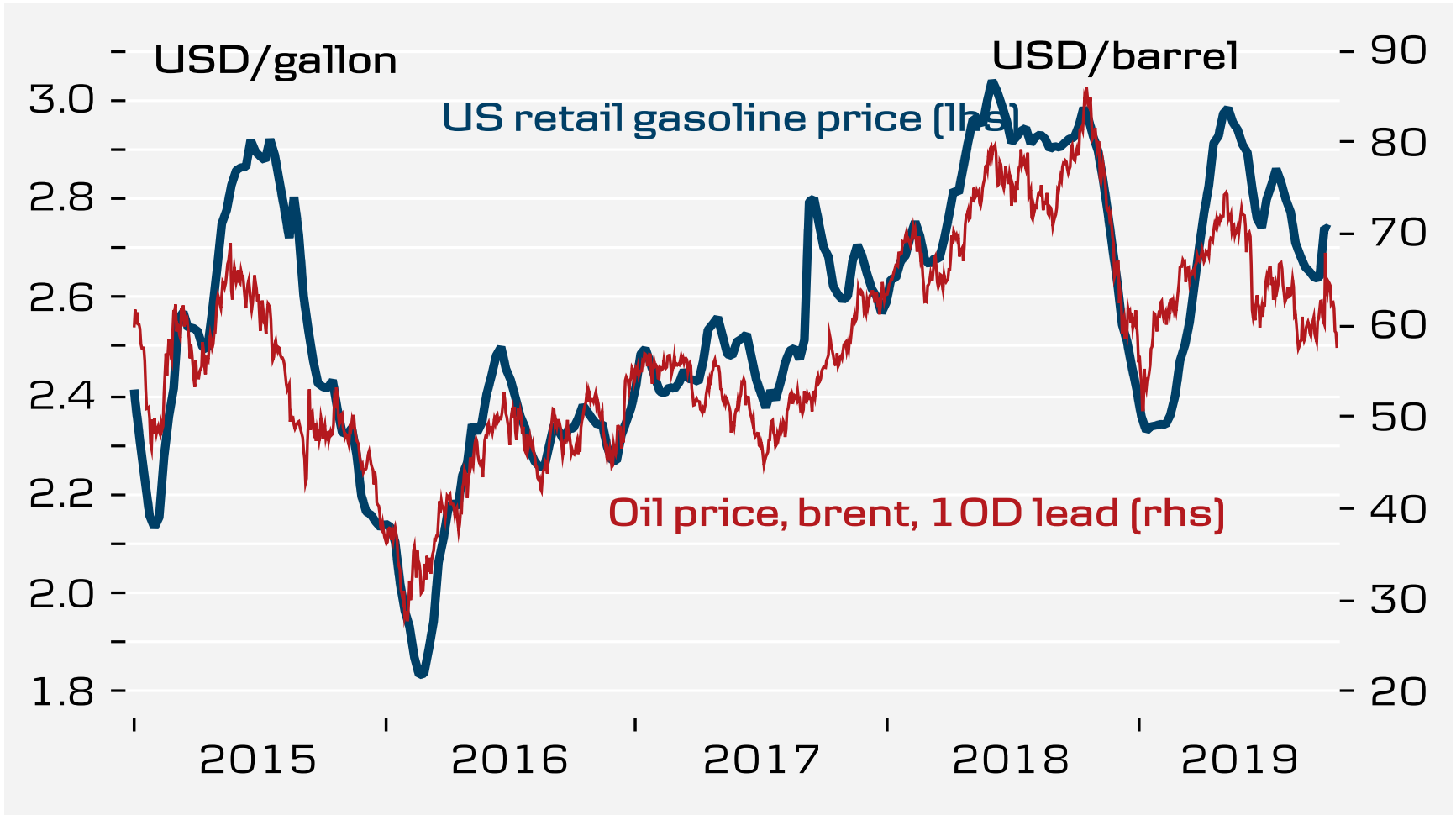
Source: Macrobond Financial, BLS, Danske Bank

US real wage growth



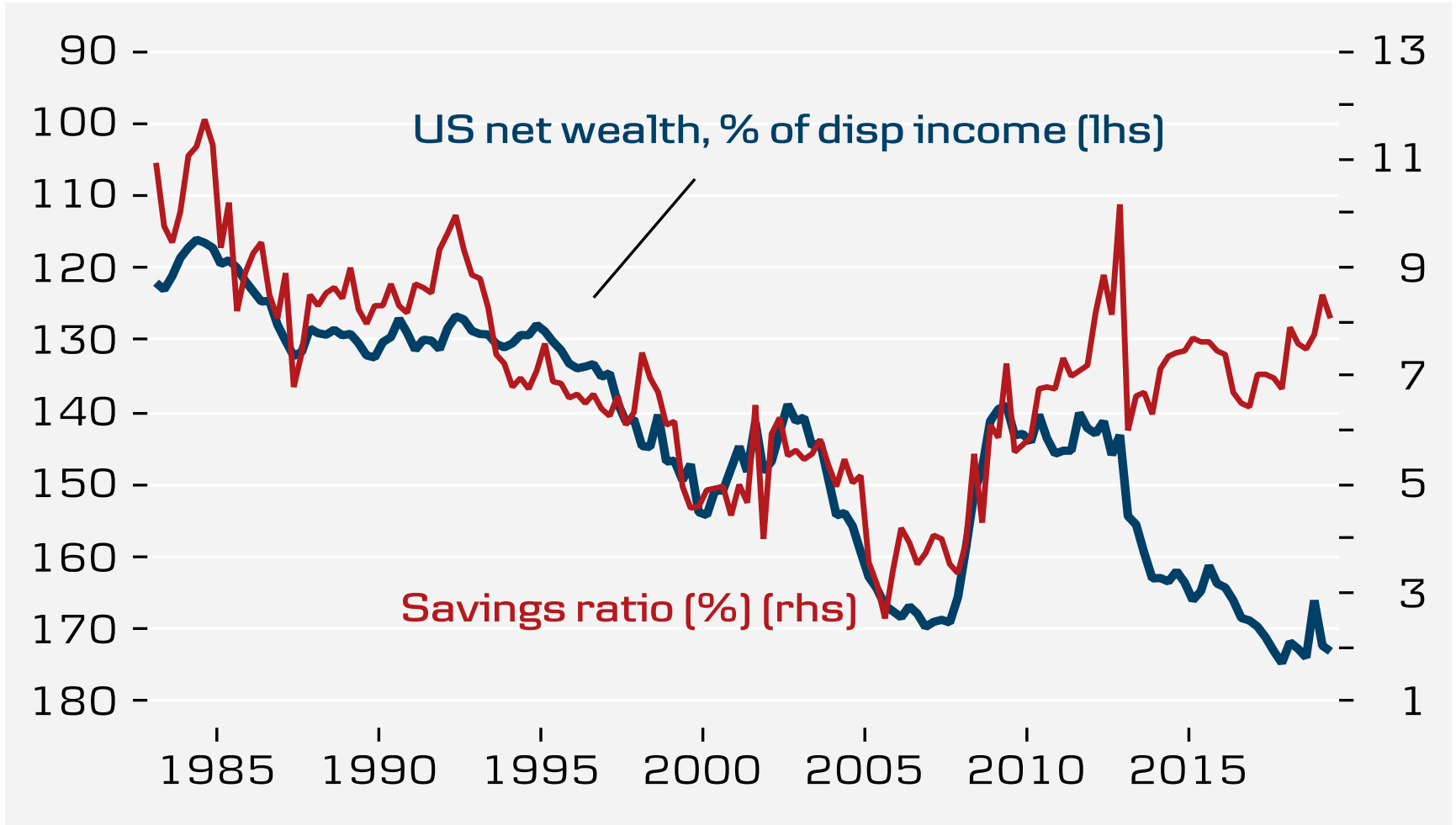
Source: Macrobond Financial, BLS, Danske Bank

Consumption: energy costs



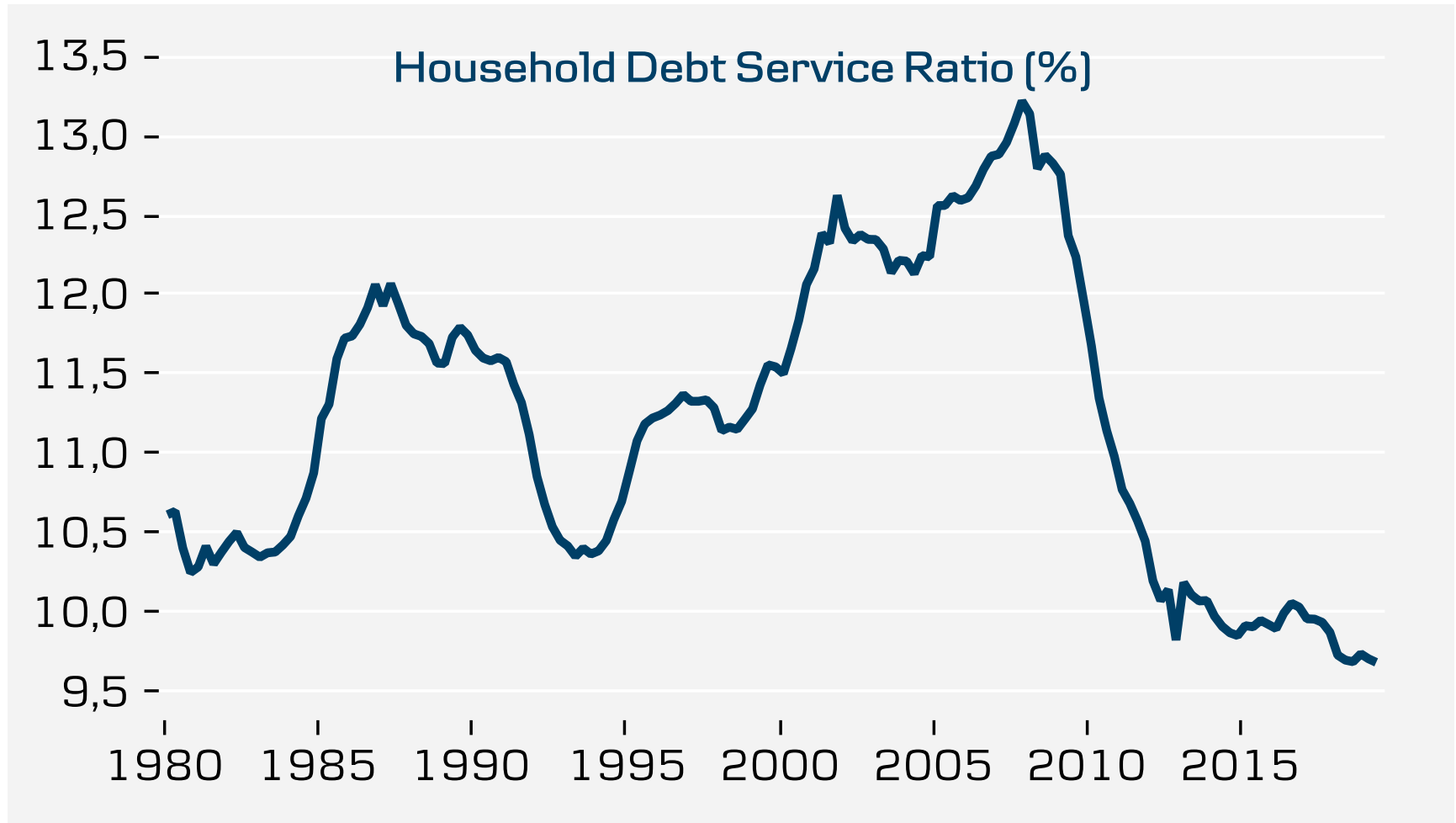
Source: Macrobond Financial, Bloomberg, Danske Bank

Consumer: wealth



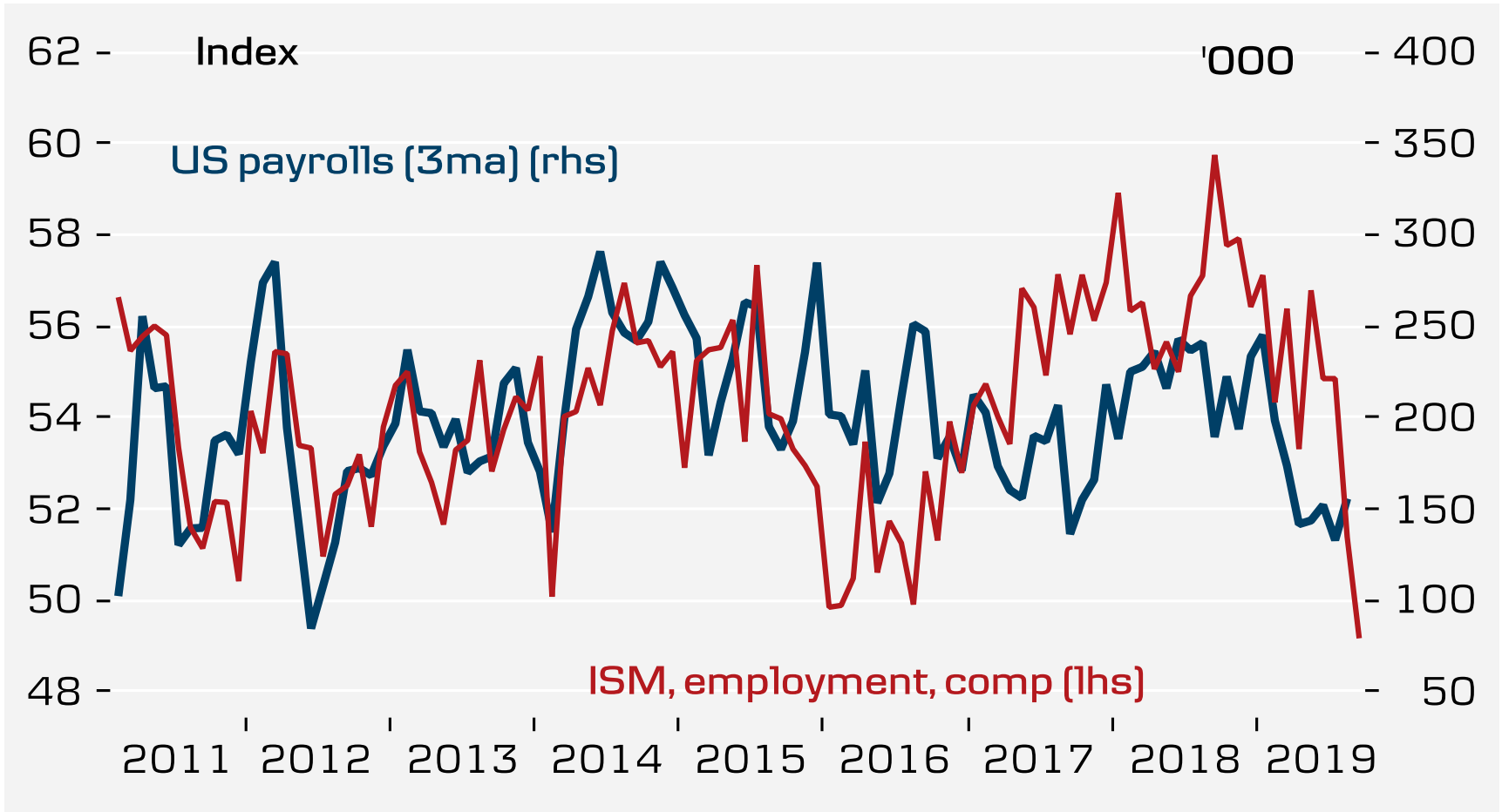
Source: Macrobond Financial, BLS, Danske Bank

Consumer: debt cost



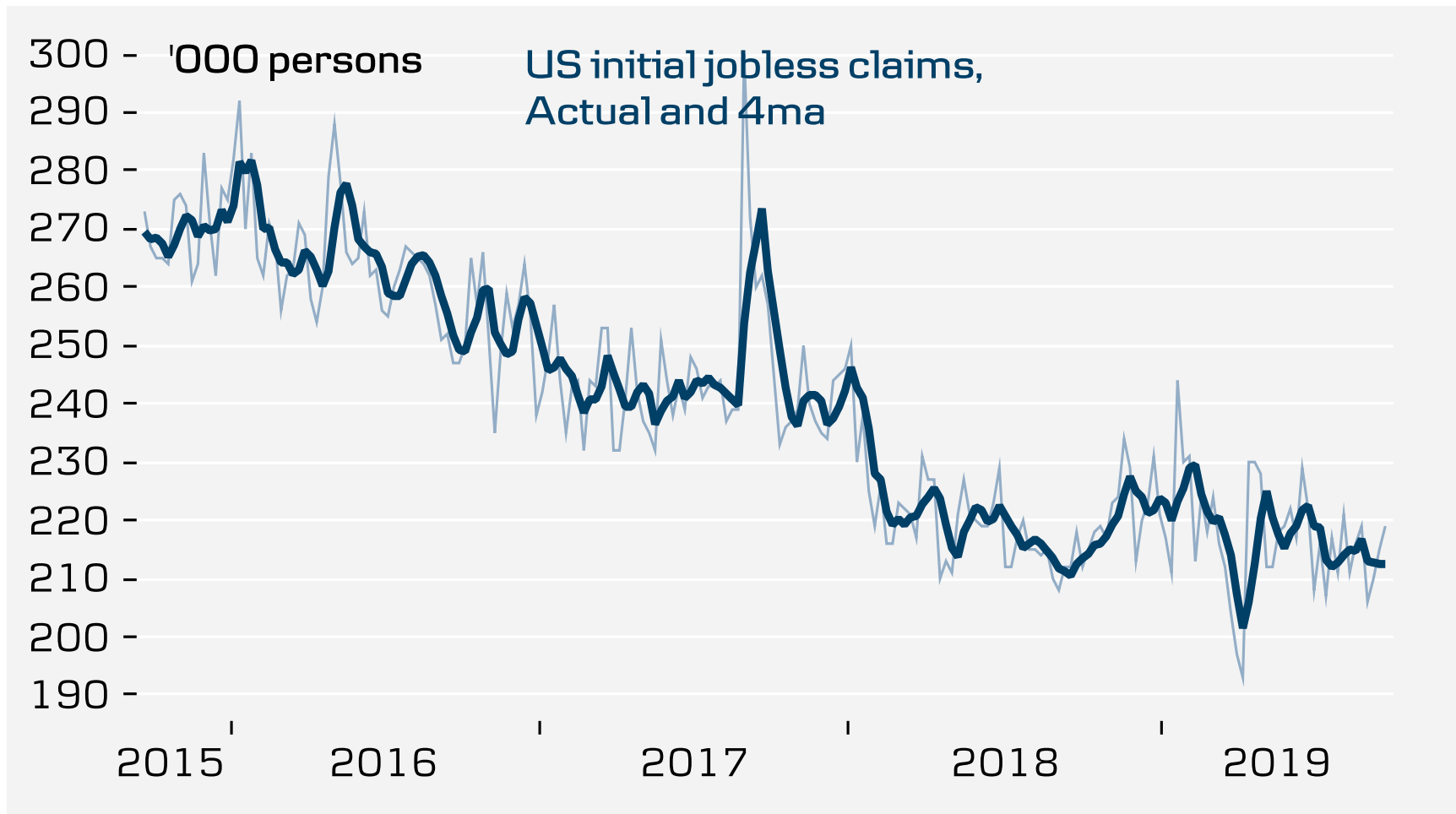
Source: Macrobond Financial, BLS

Labour market: ISM



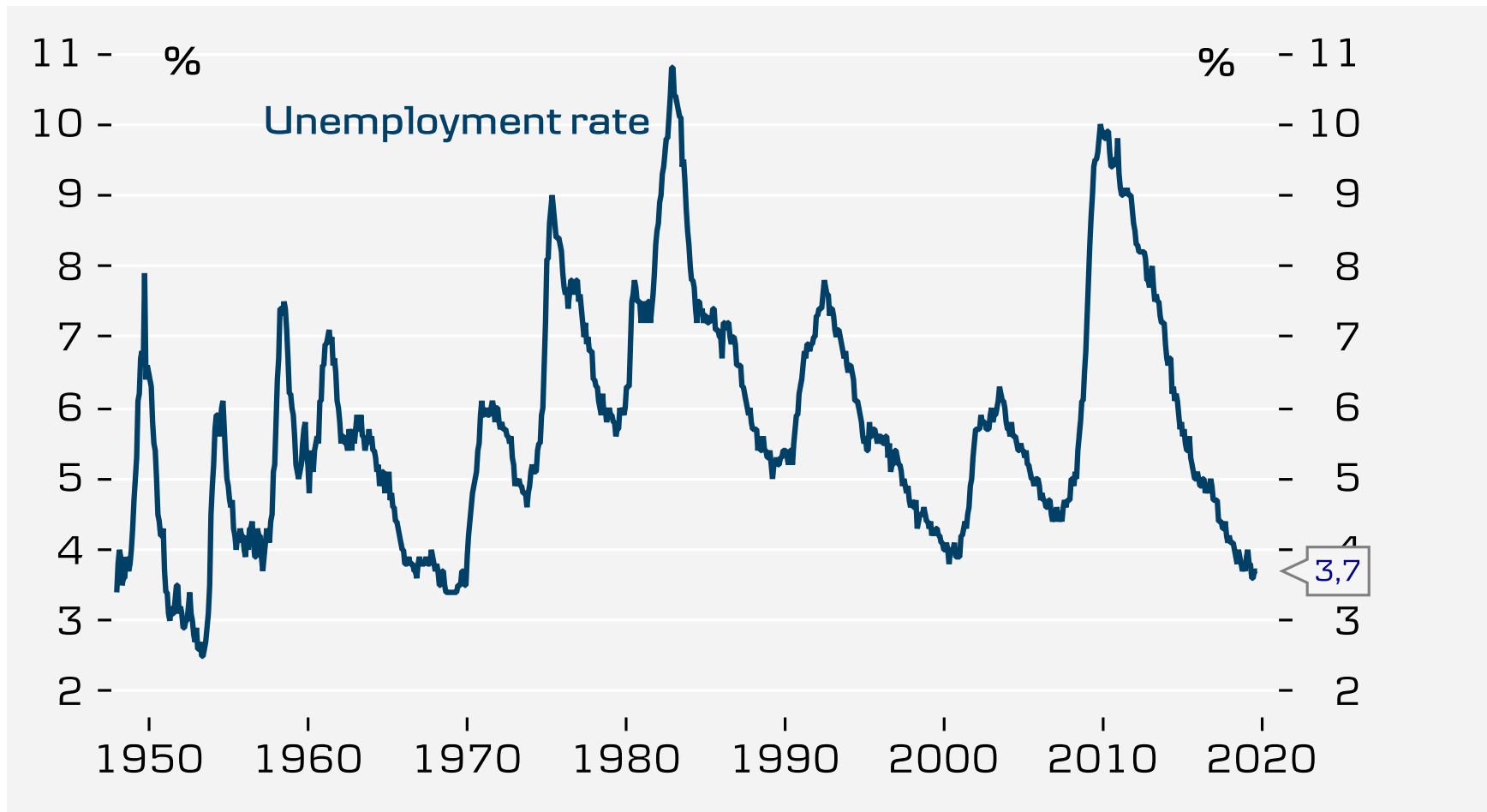
Source: Macrobond Financial, BLS, ISM

Labour market: claims



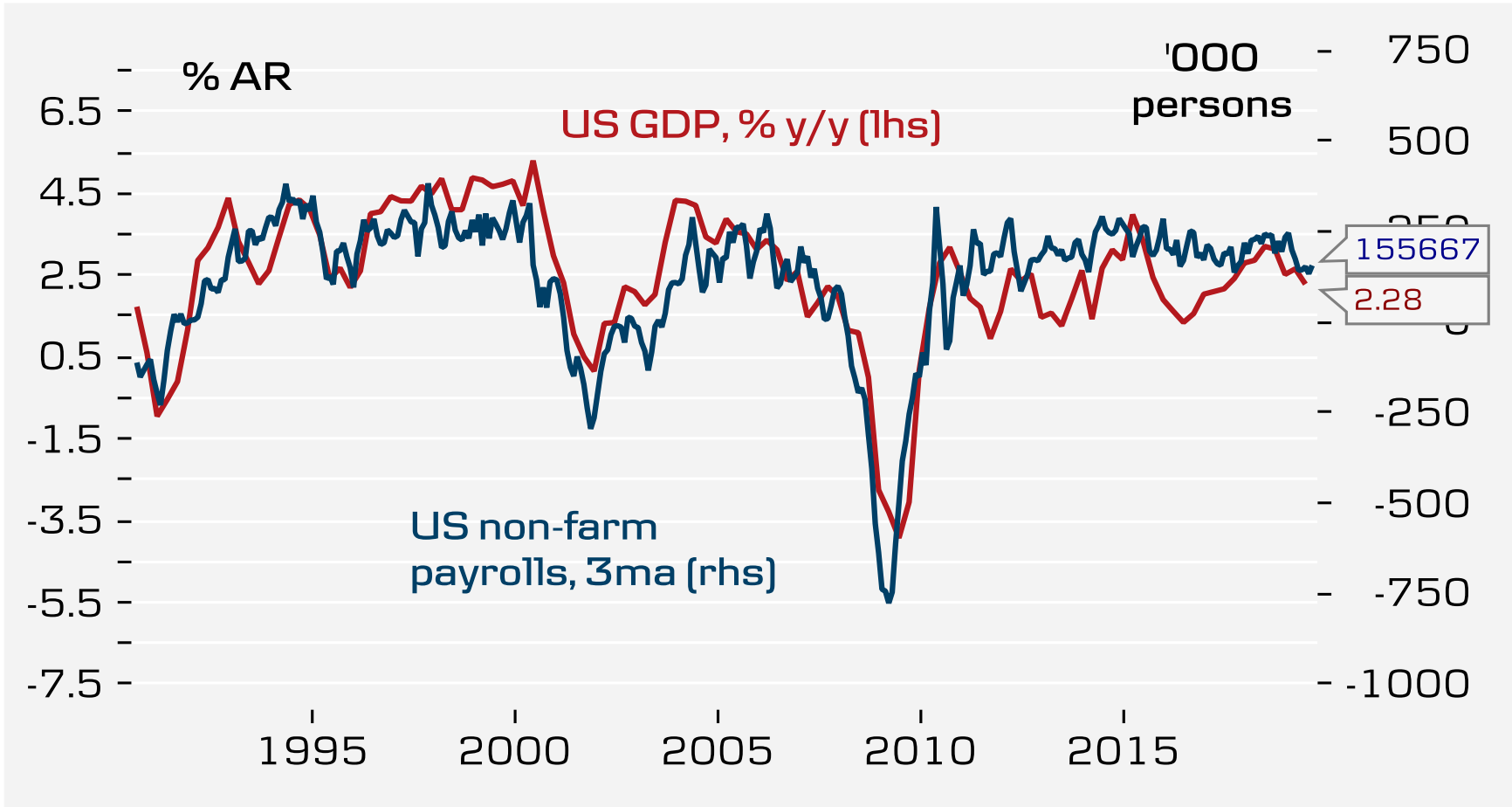
Source: Macrobond Financial, BLS, Danske Bank

Labour market: unemployment



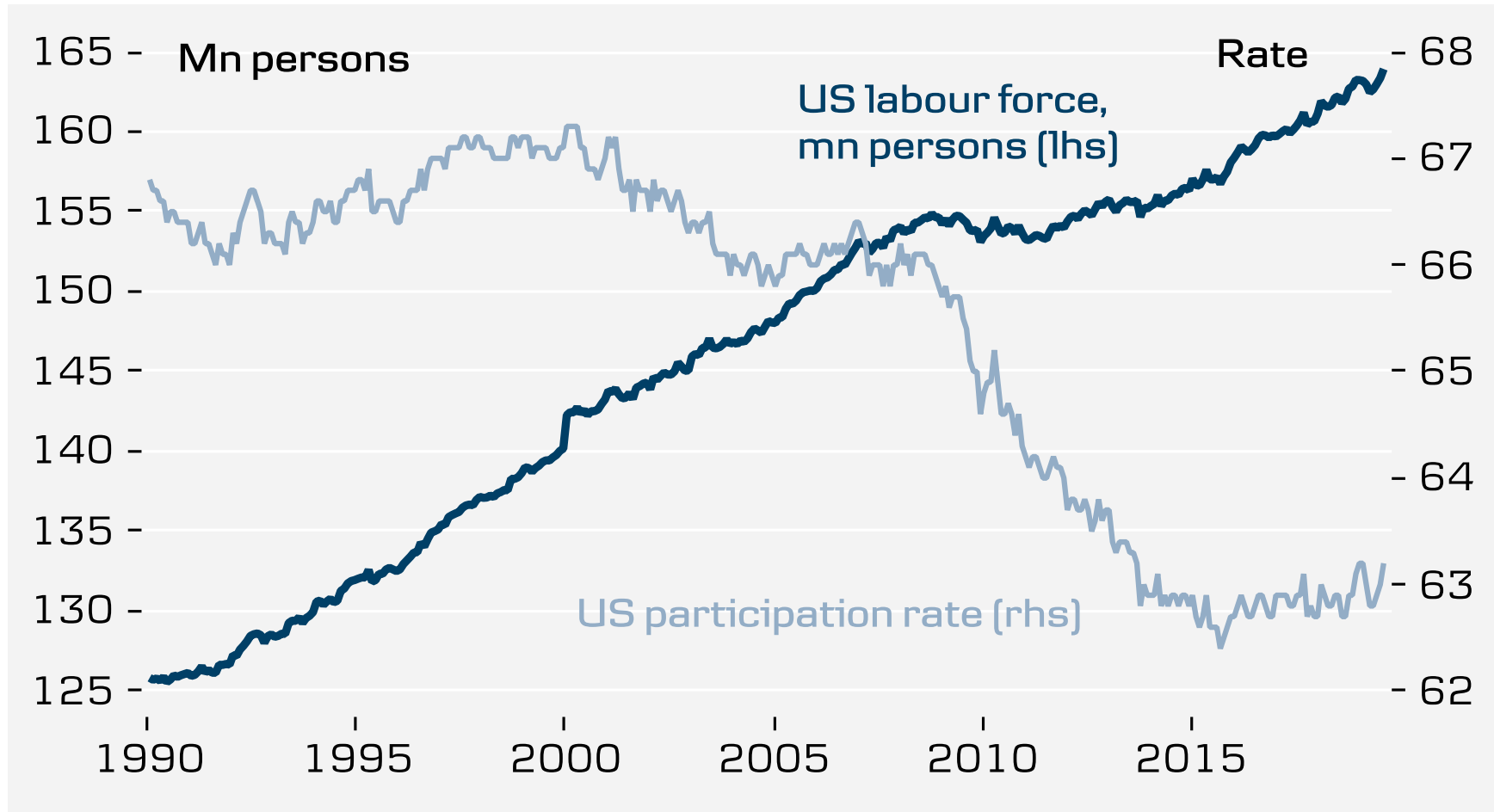
Source: Macrobond Financial, BLS

Labour market: employment and GDP



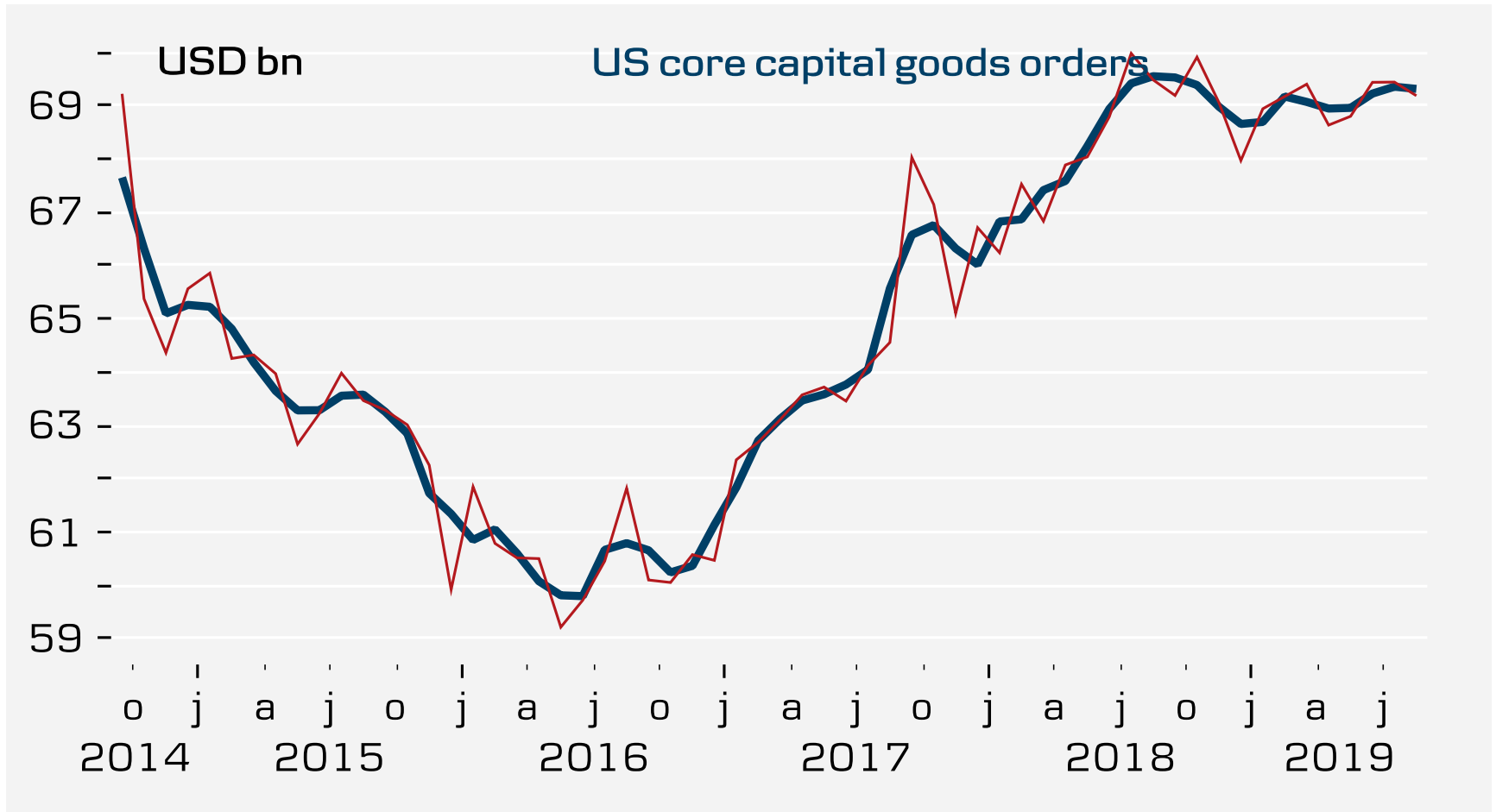
Source: Macrobond Financial, BLS

Labour market: participation and labour force



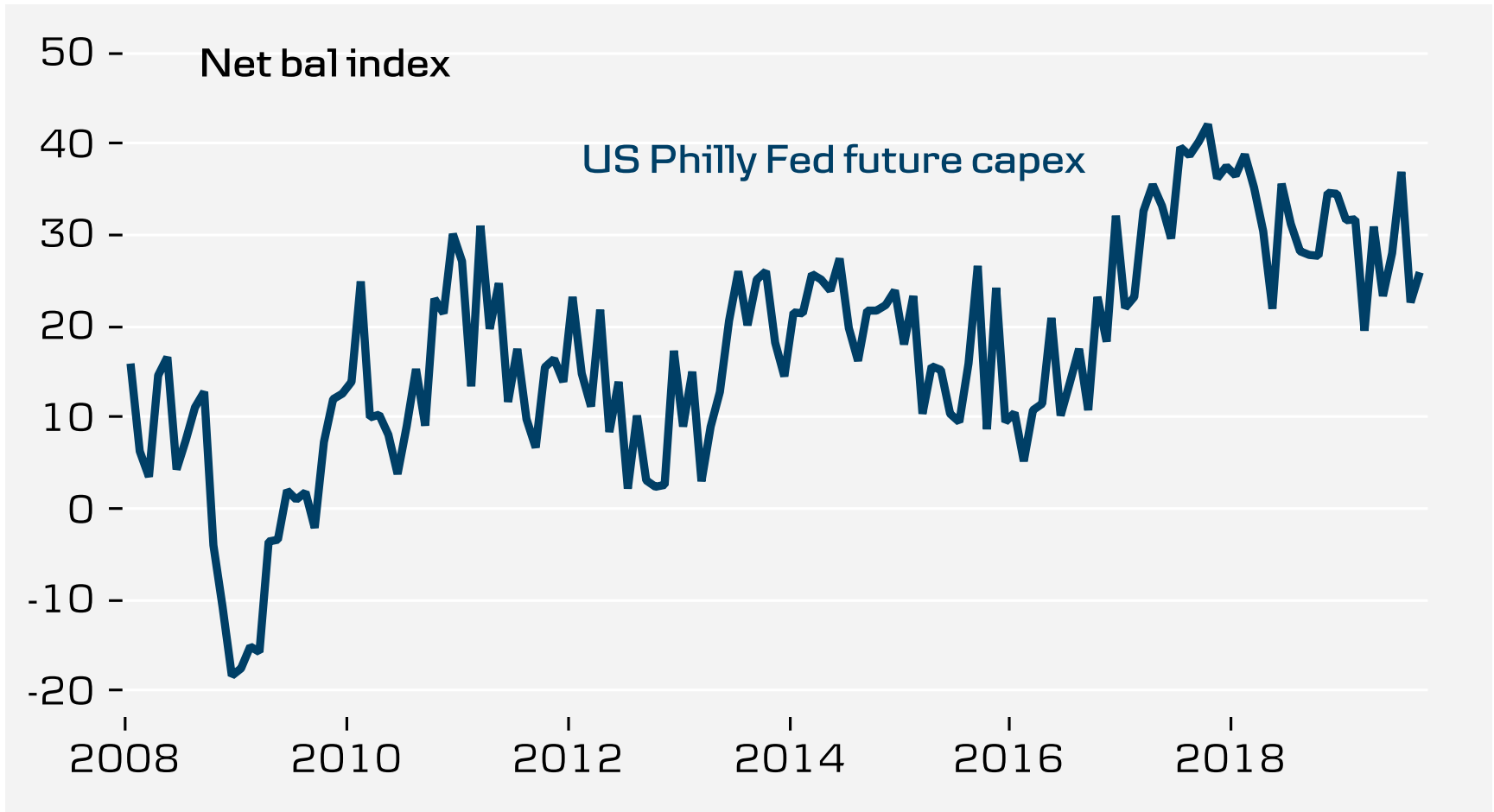
Source: Macrobond Financial, BLS

Capex: durable goods orders



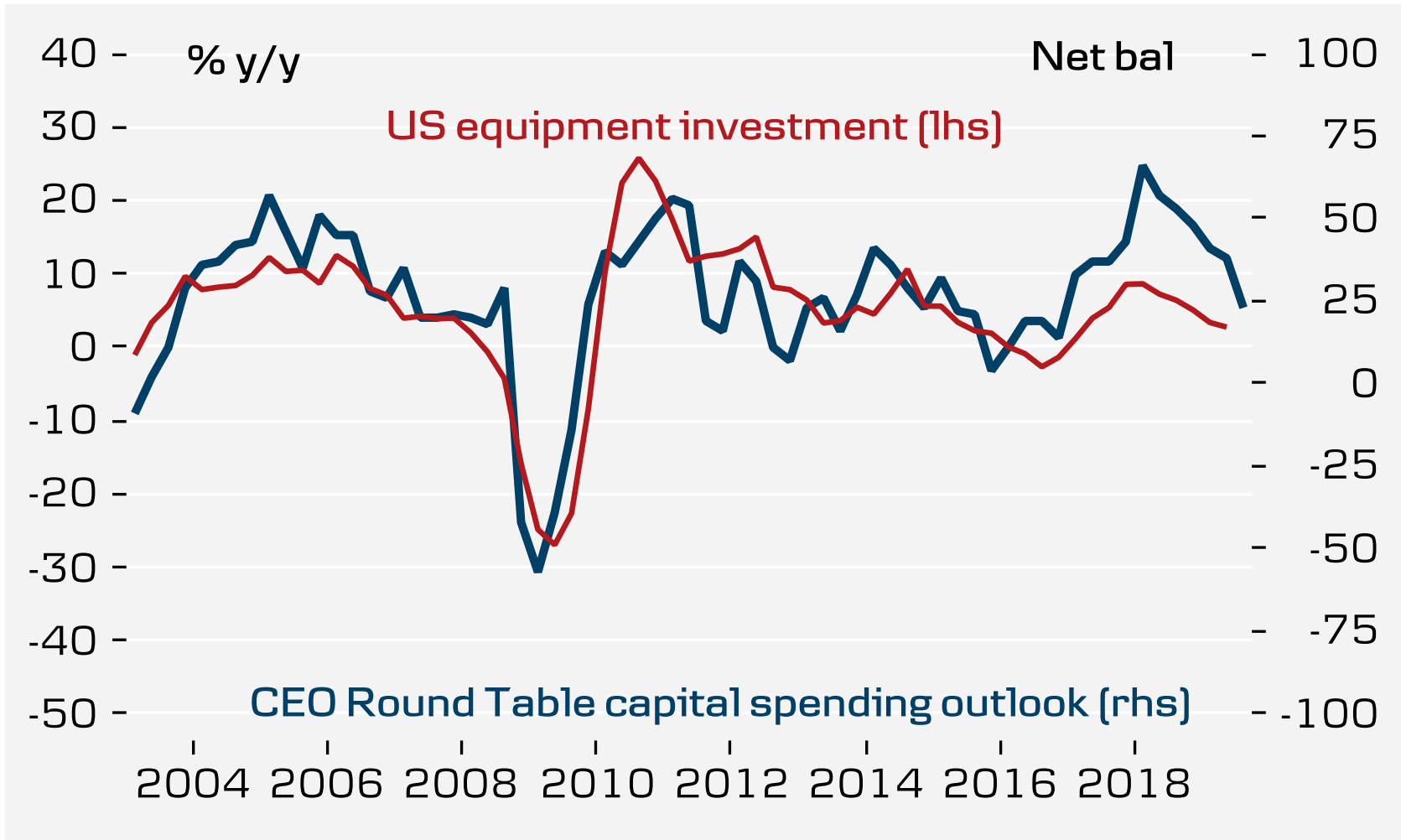
Source: Macrobond Financial, BLS

Capex: Philly Fed capex outlook



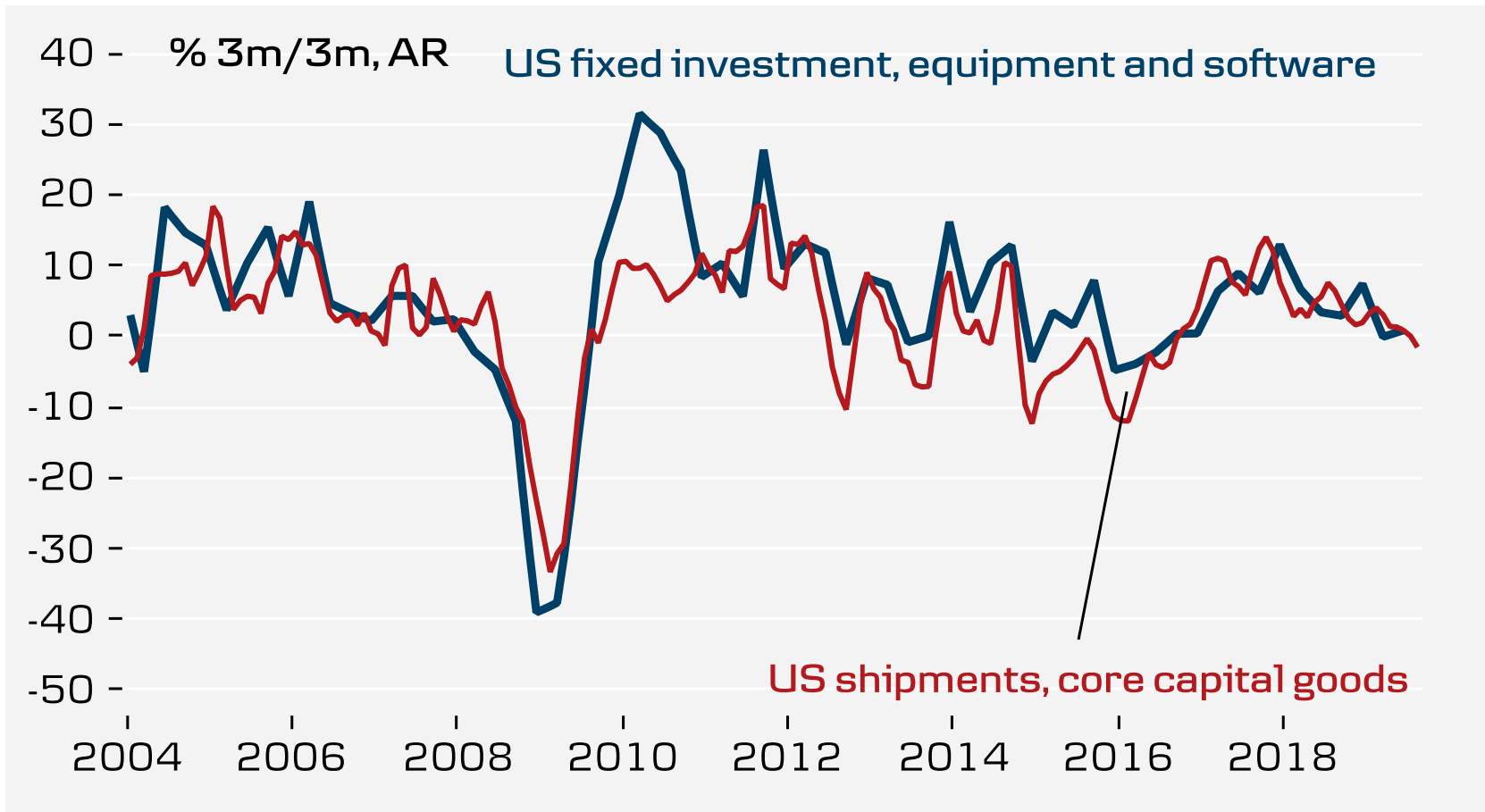
Source: Macrobond Financial, Philadelphia Fed

Capex: CEO Round Table capex outlook



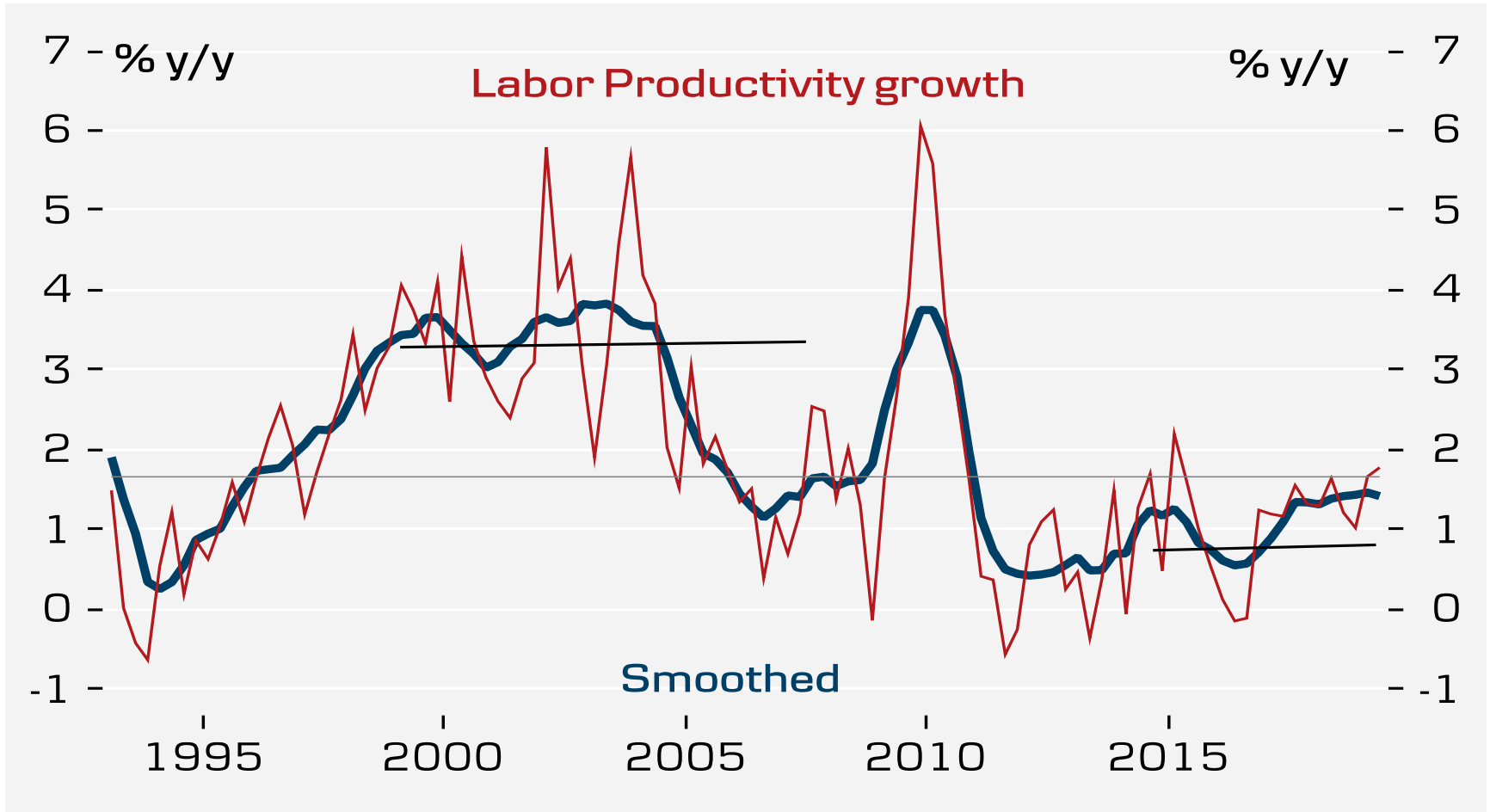
Source: Macrobond Financial, CEO Round Table, Danske Bank

Capex: shipments



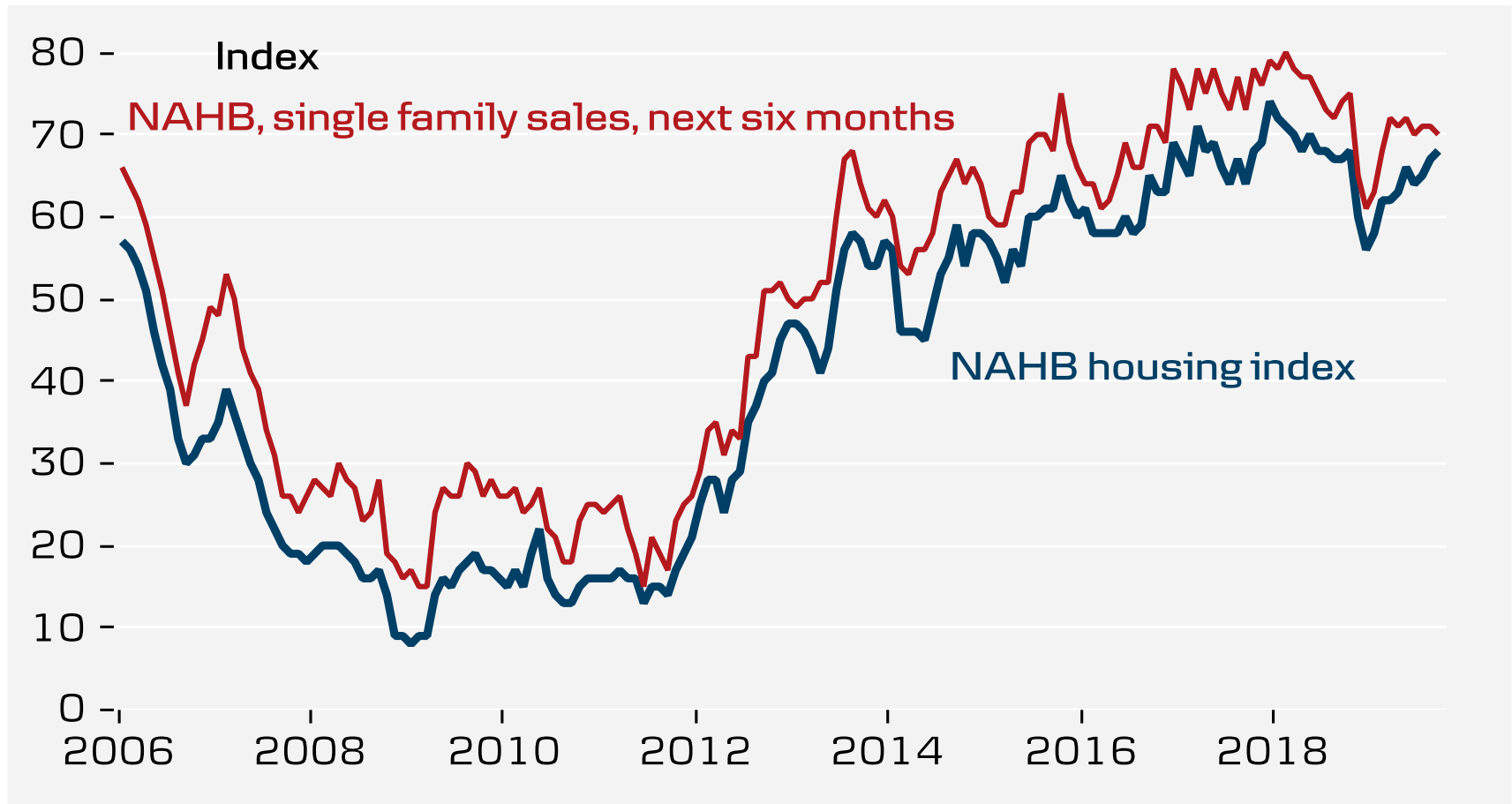
Source: Macrobond Financial, BLS, Danske Bank

US productivity



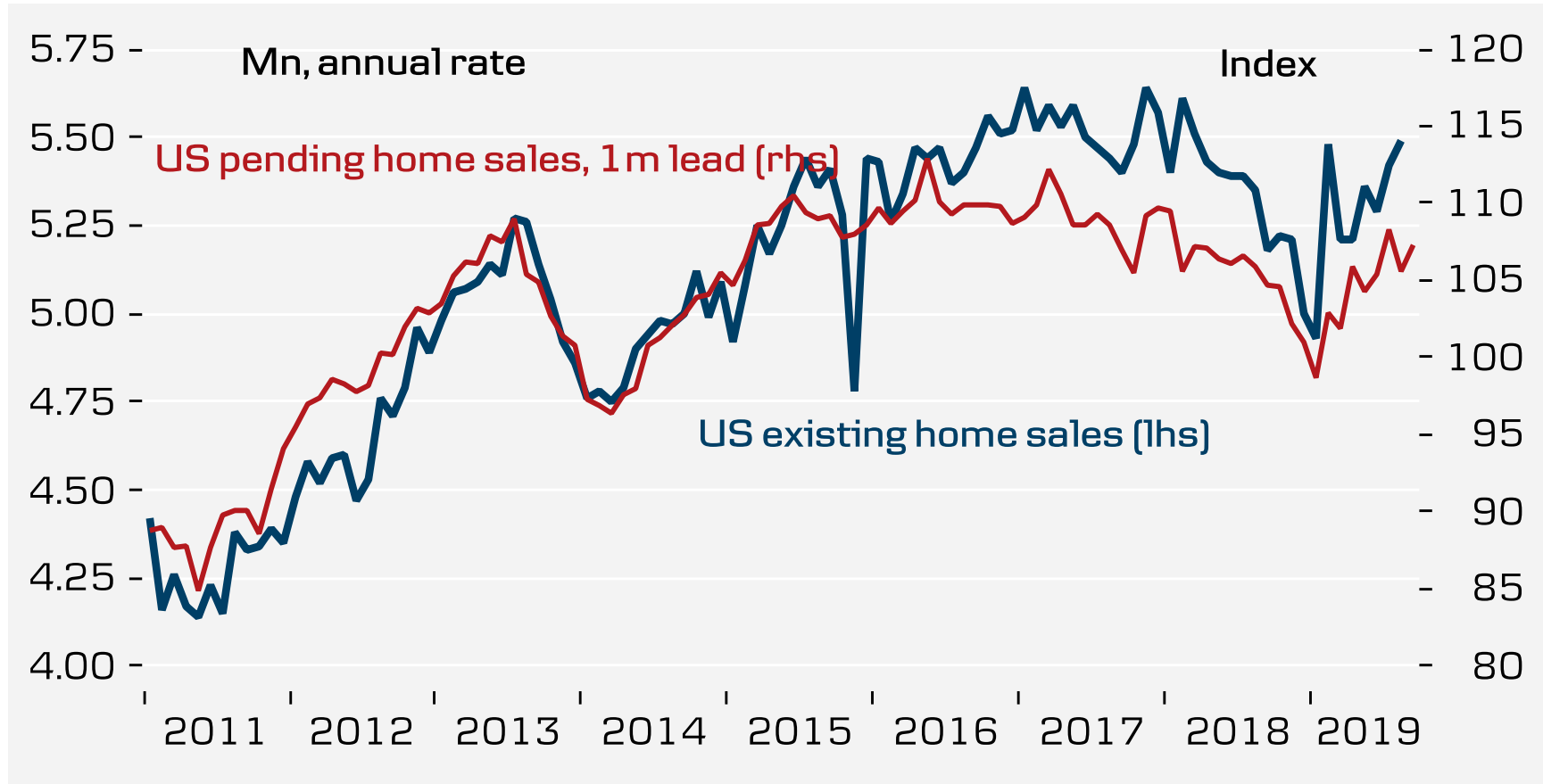
Source: Macrobond Financial, BLS, Danske Bank

Housing: confidence



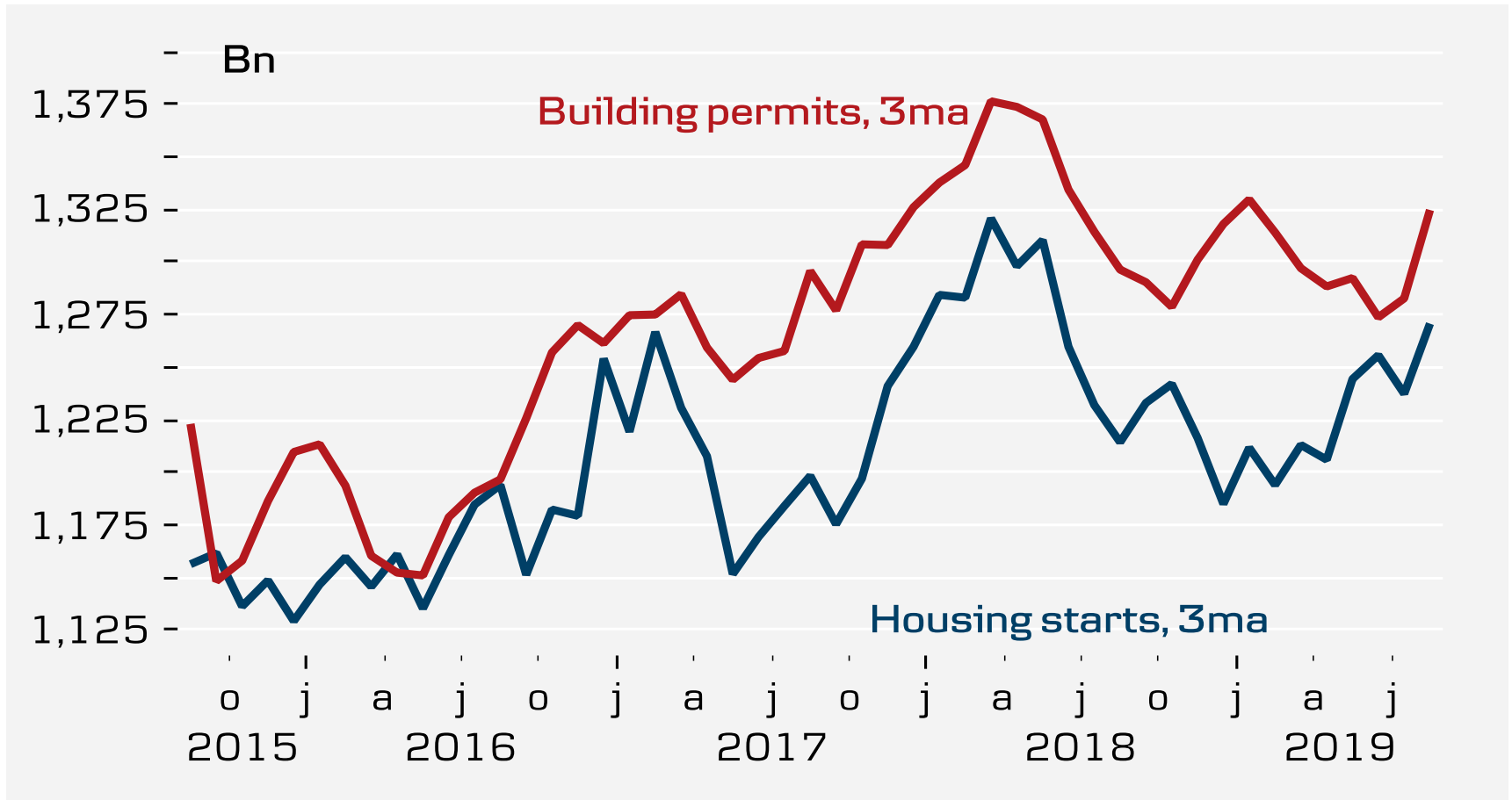
Source: Macrobond Financial, NAHB

Housing: home sales



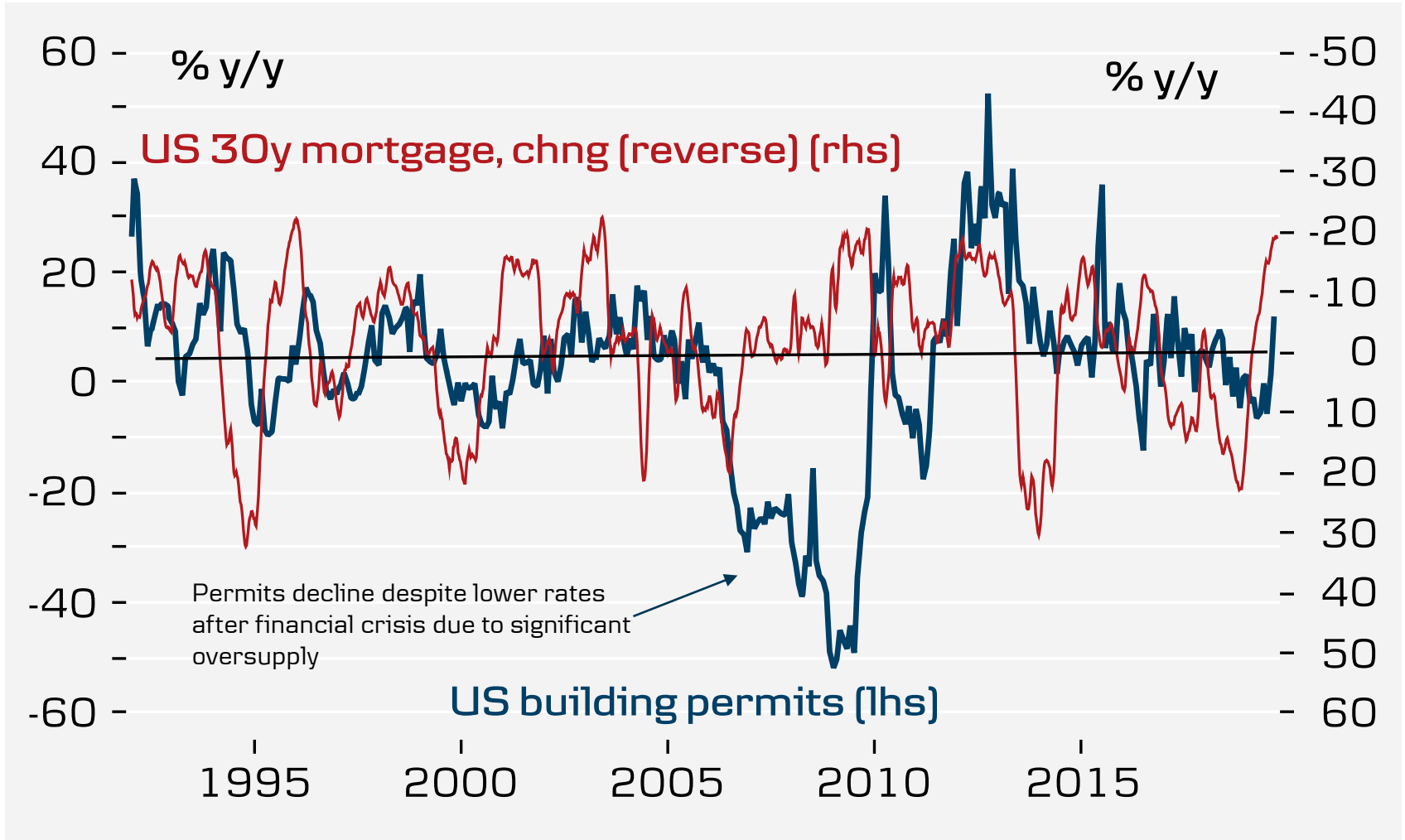
Source: Macrobond Financial, BLS

Housing: permits and starts



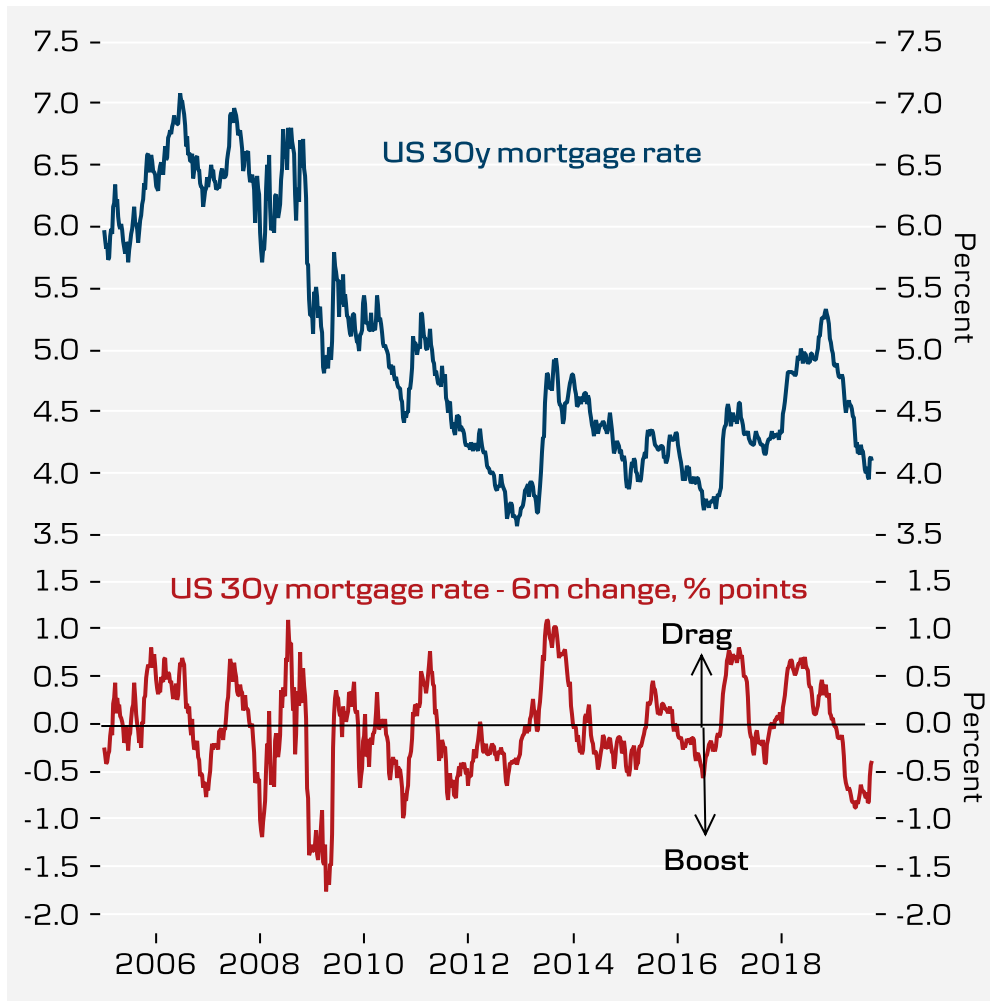
Source: Macrobond Financial, BLS

Housing: permits vs mortgage rates



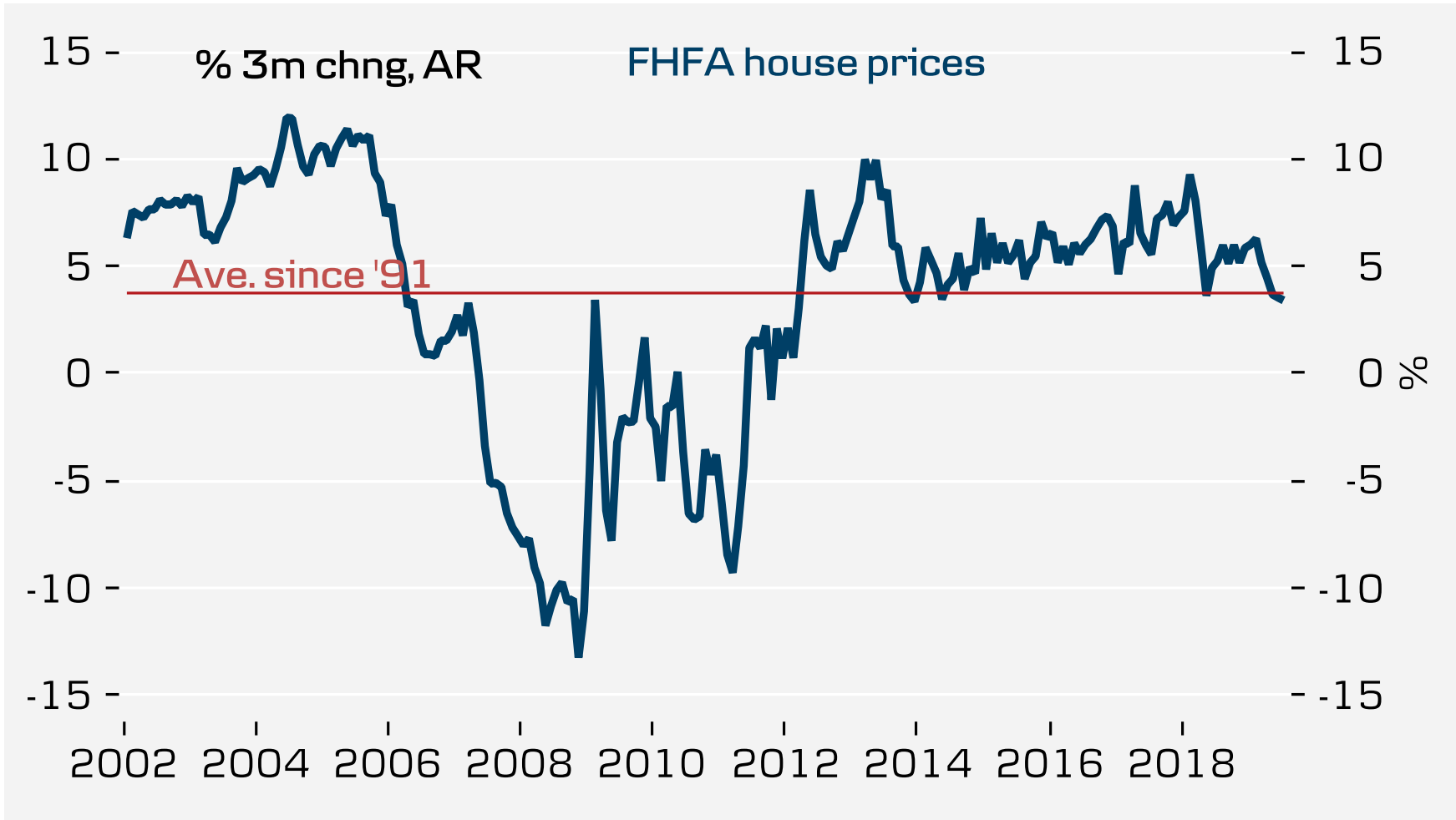
Source: Macrobond Financial, BLS, Danske Bank

Housing: US impulse from mortgage rates



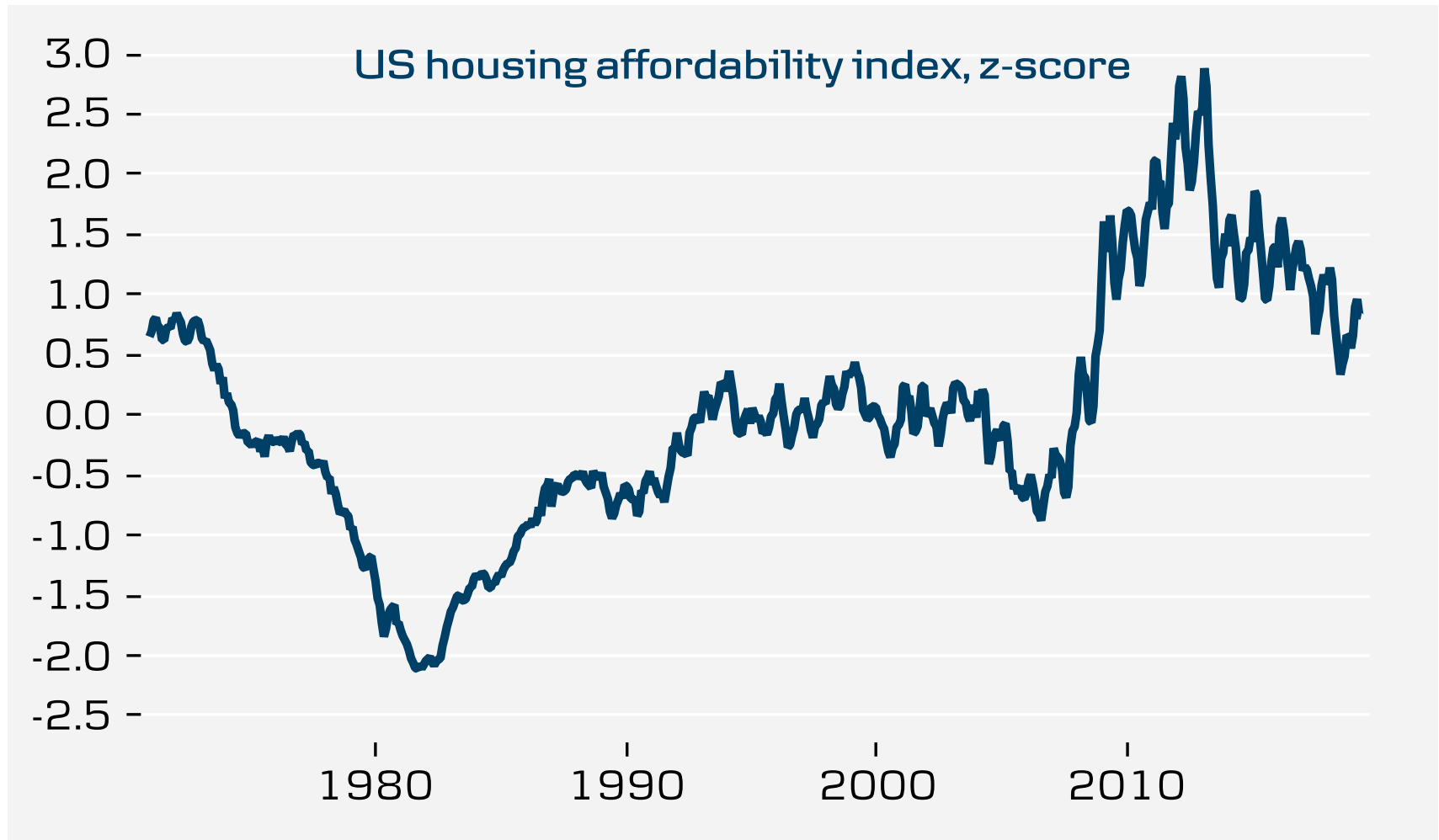
Source: Macrobond Financial, Bloomberg, Danske Bank

Housing: prices



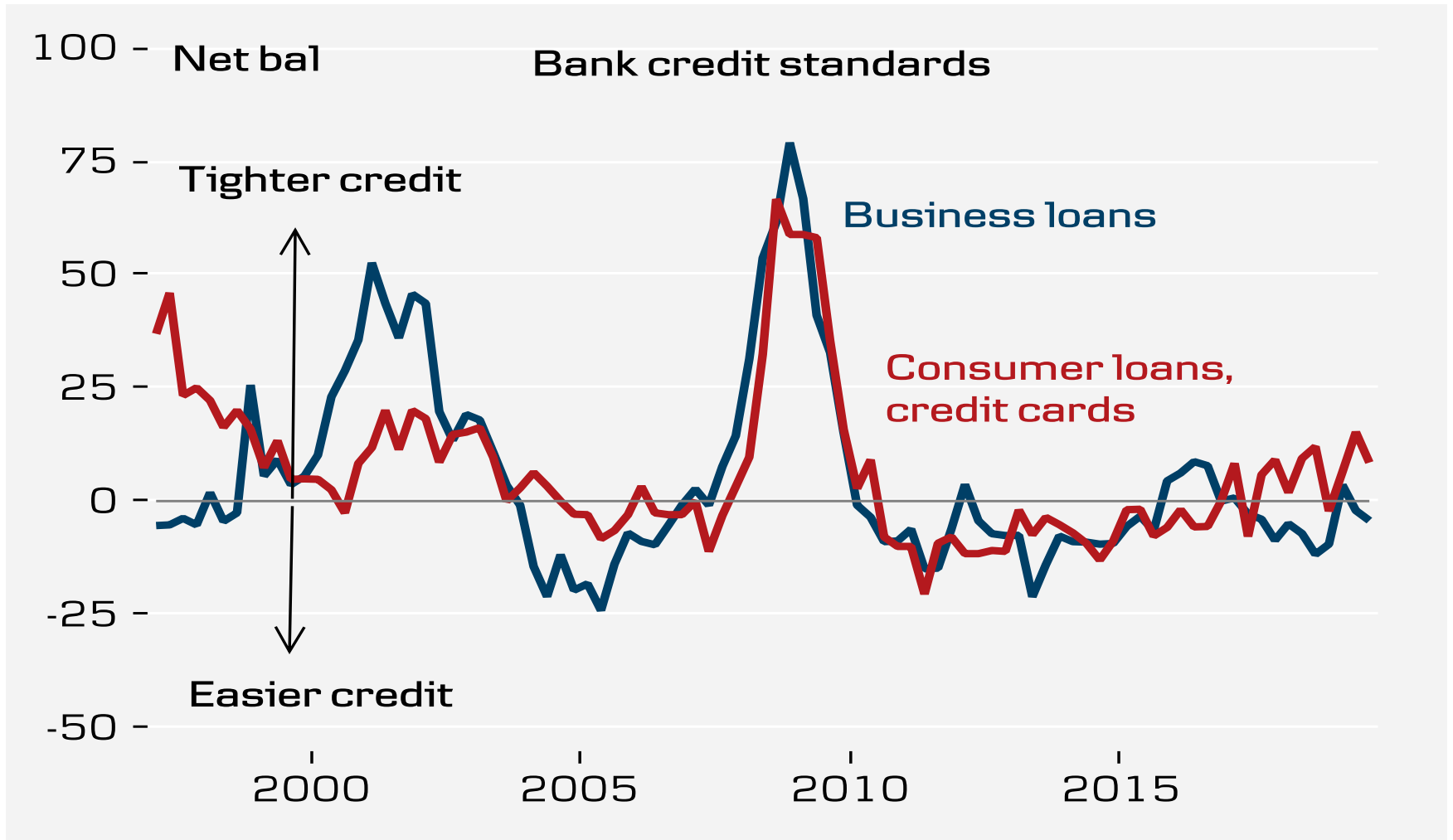
Source: Macrobond Financial, FHFA, Danske Bank

Housing - affordability



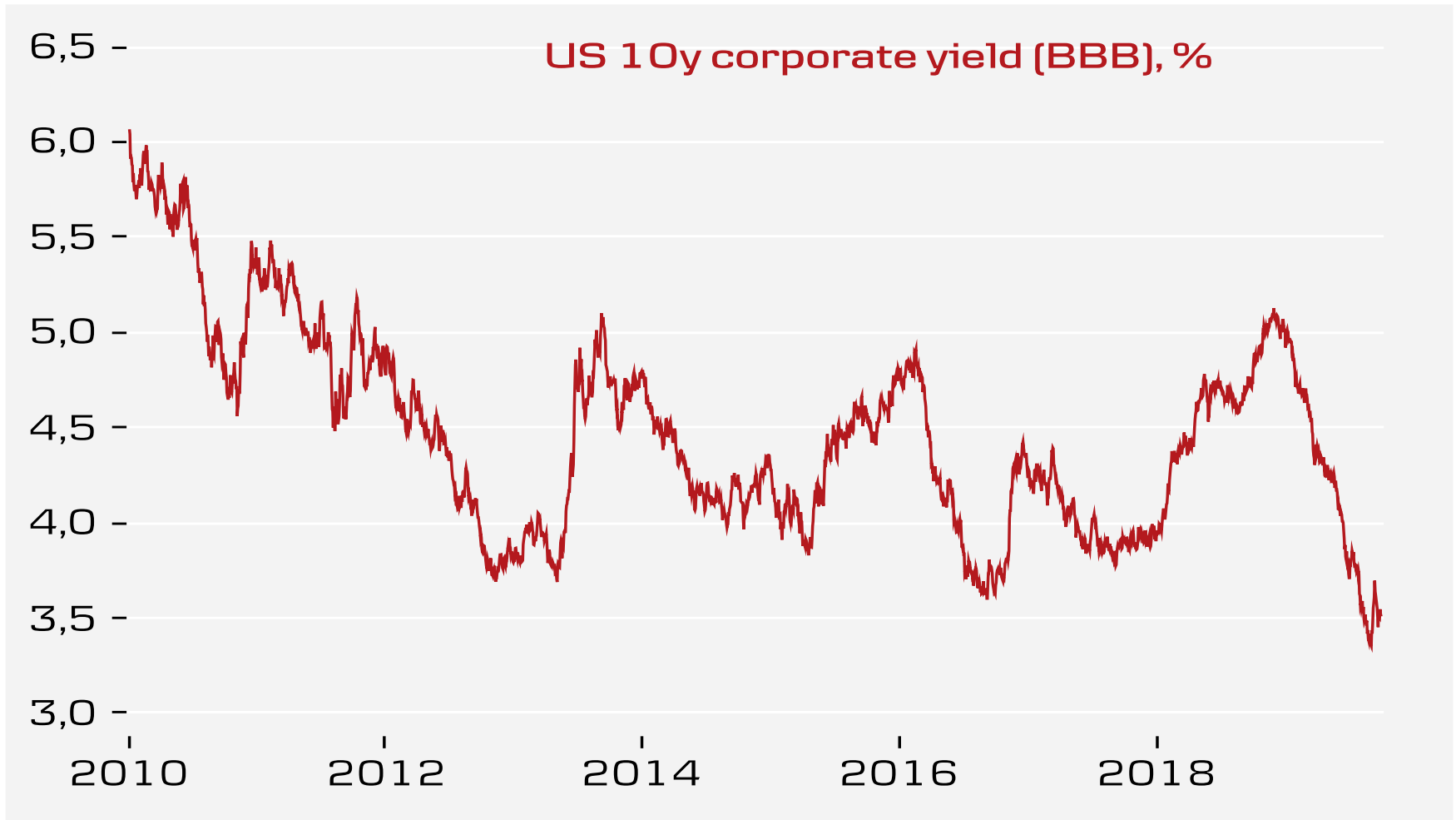
Source: Macrobond Financial, National Association of Realtors, Danske Bank

Credit: lending standards



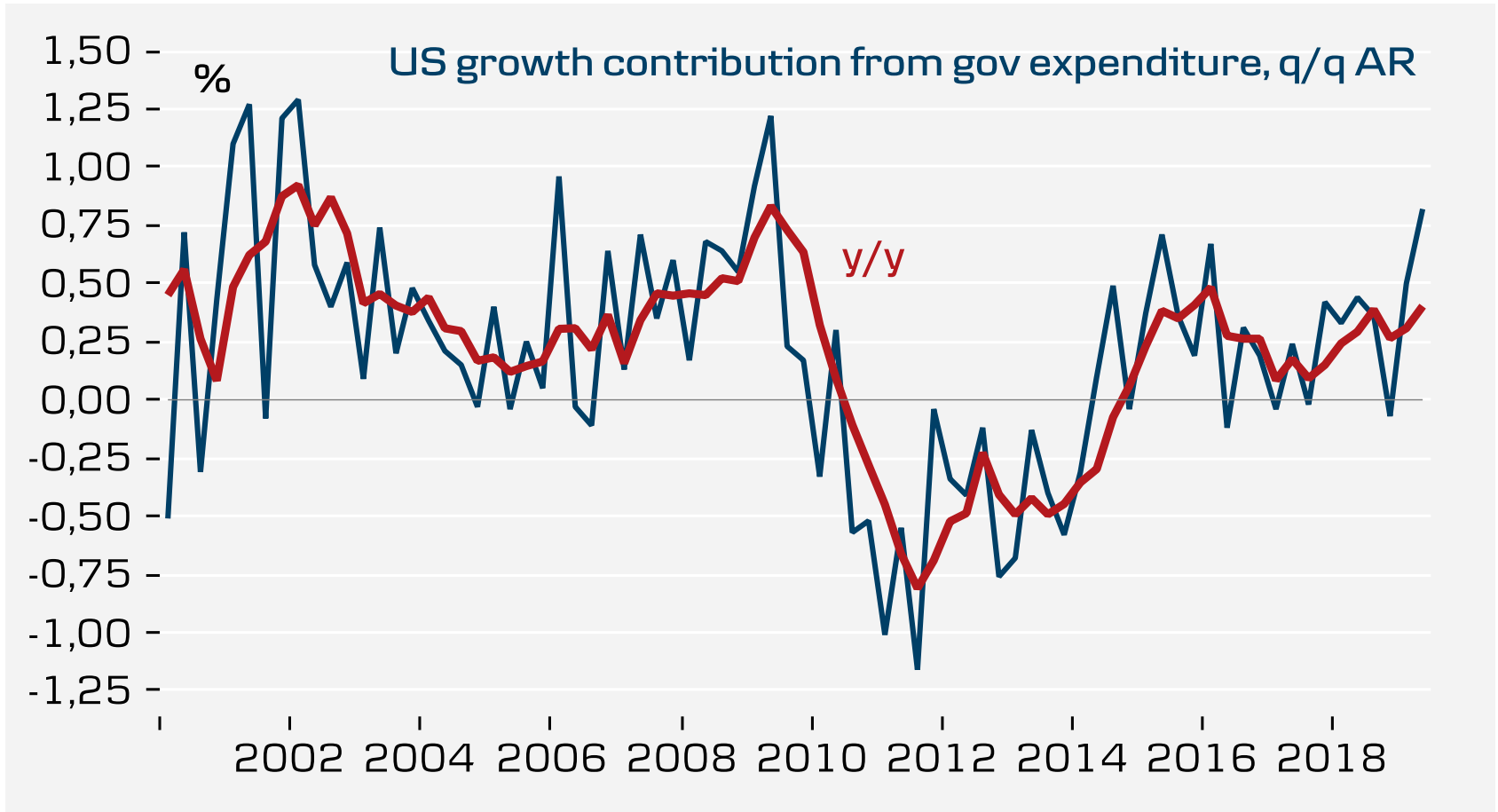
Source: Macrobond Financial, Federal Reserve

Credit yields



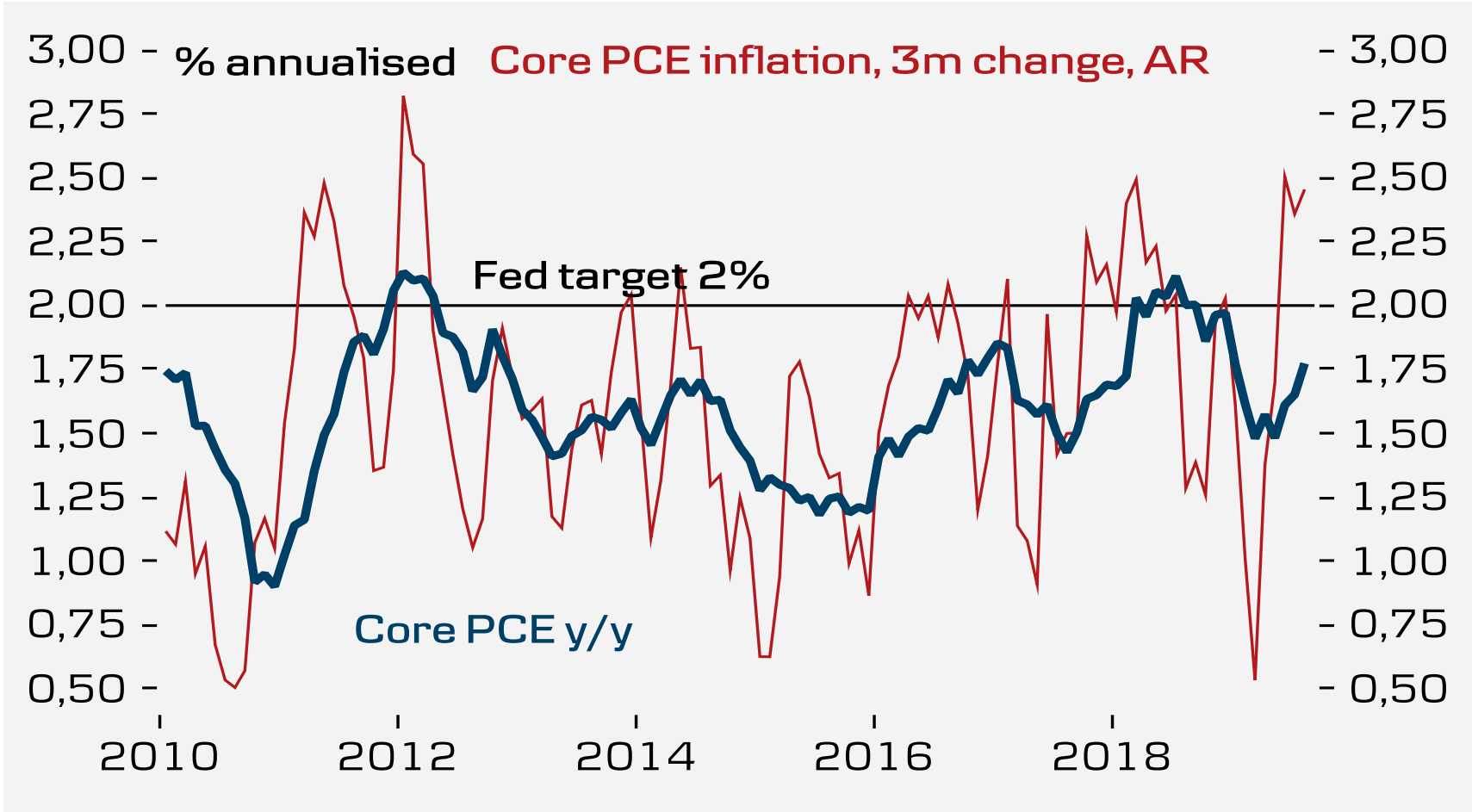
Source: Macrobond Financial

Public expenditure



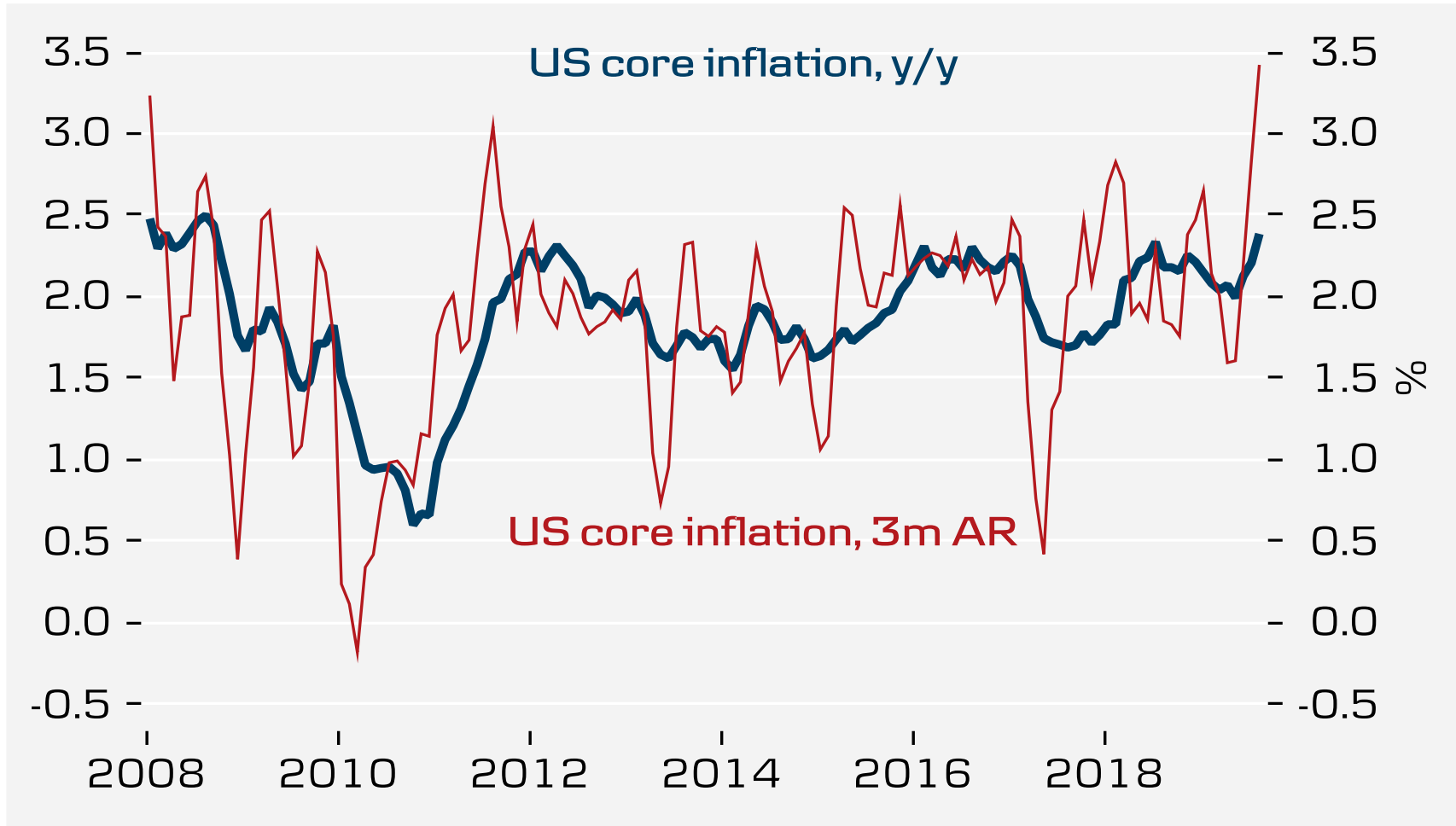
Source: Macrobond Financial, BEA

Inflation - core PCE



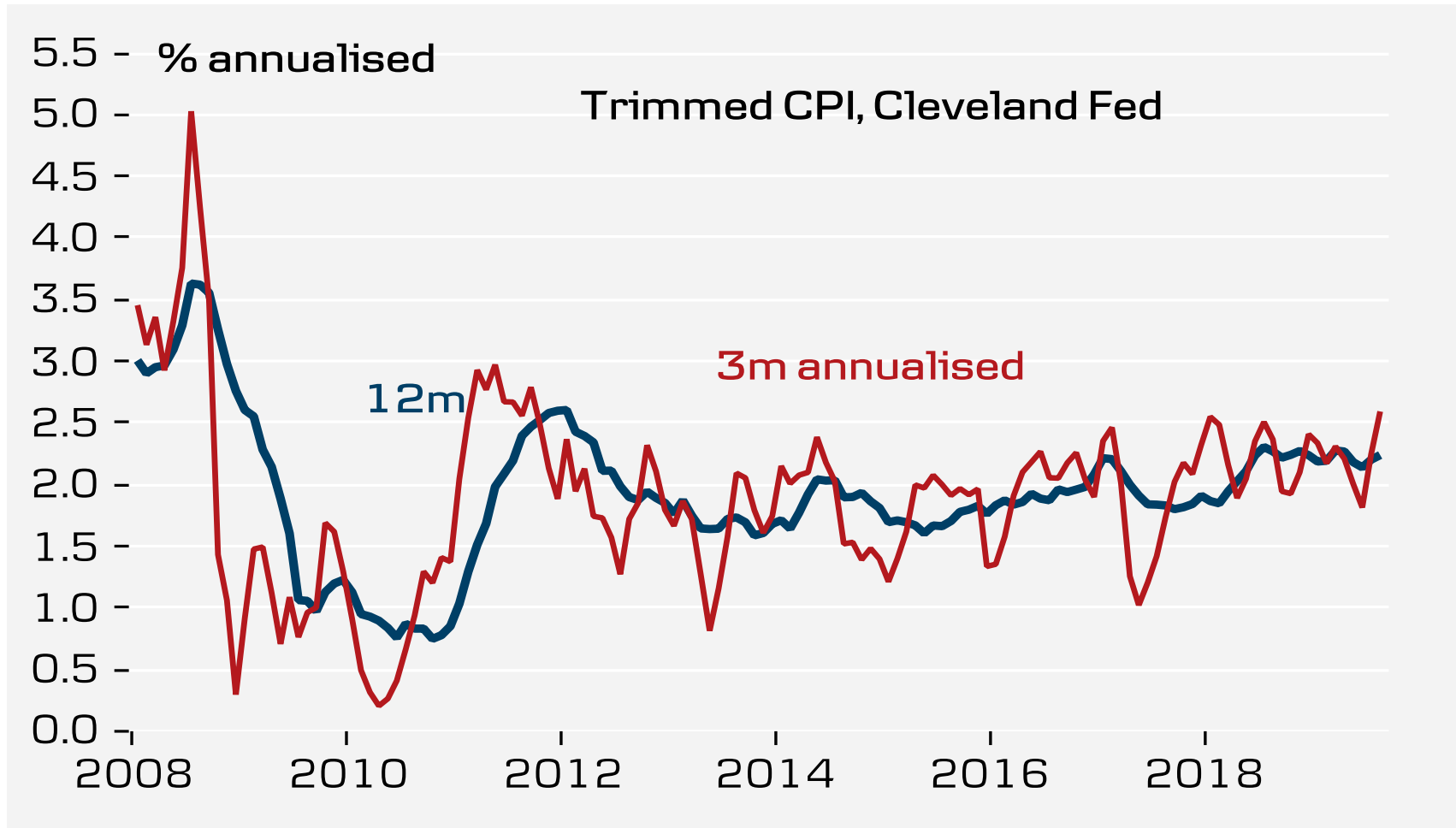
Source: Macrobond Financial, BEA

Inflation - core CPI



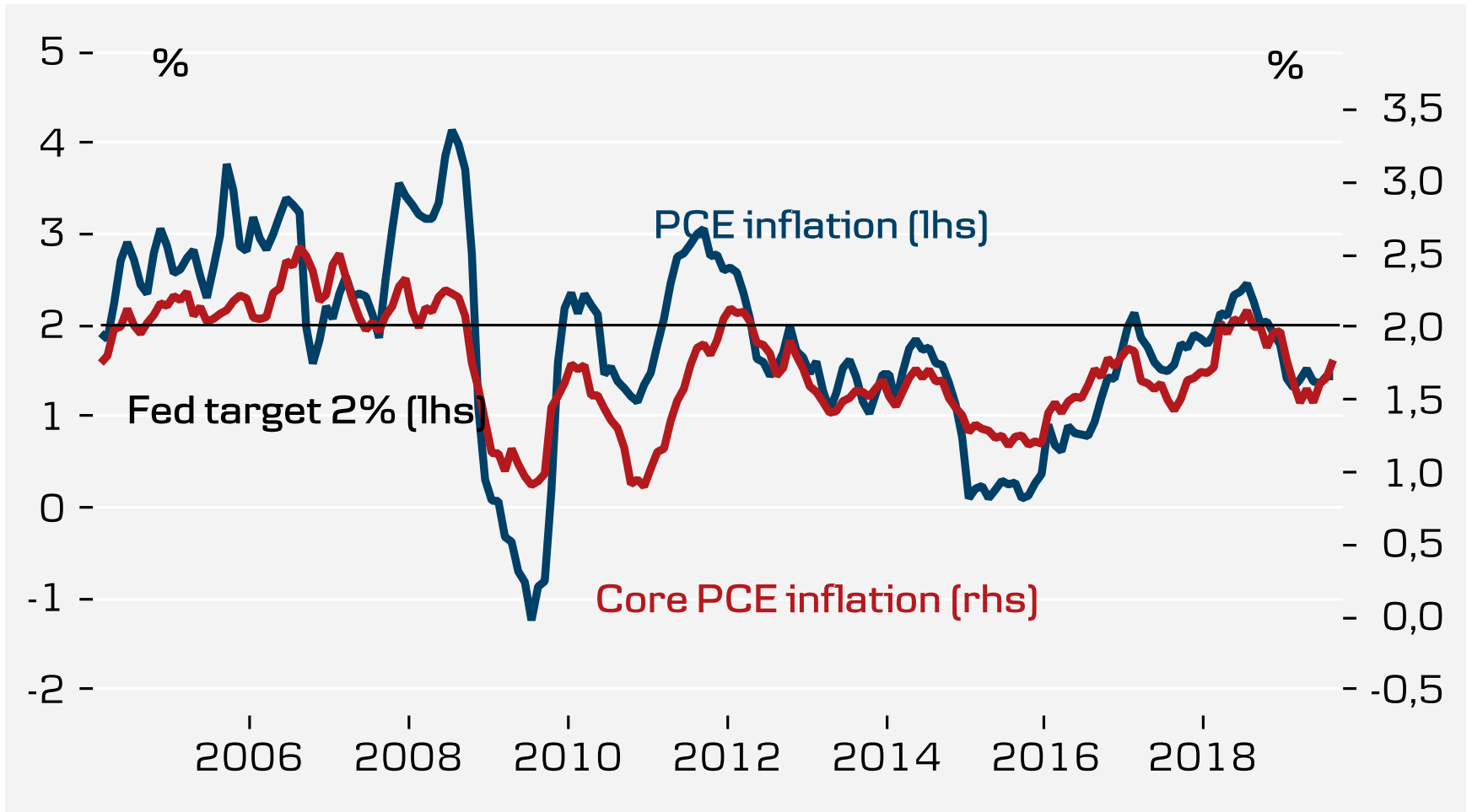
Source: Macrobond Financial, BLS

Inflation - trimmed CPI



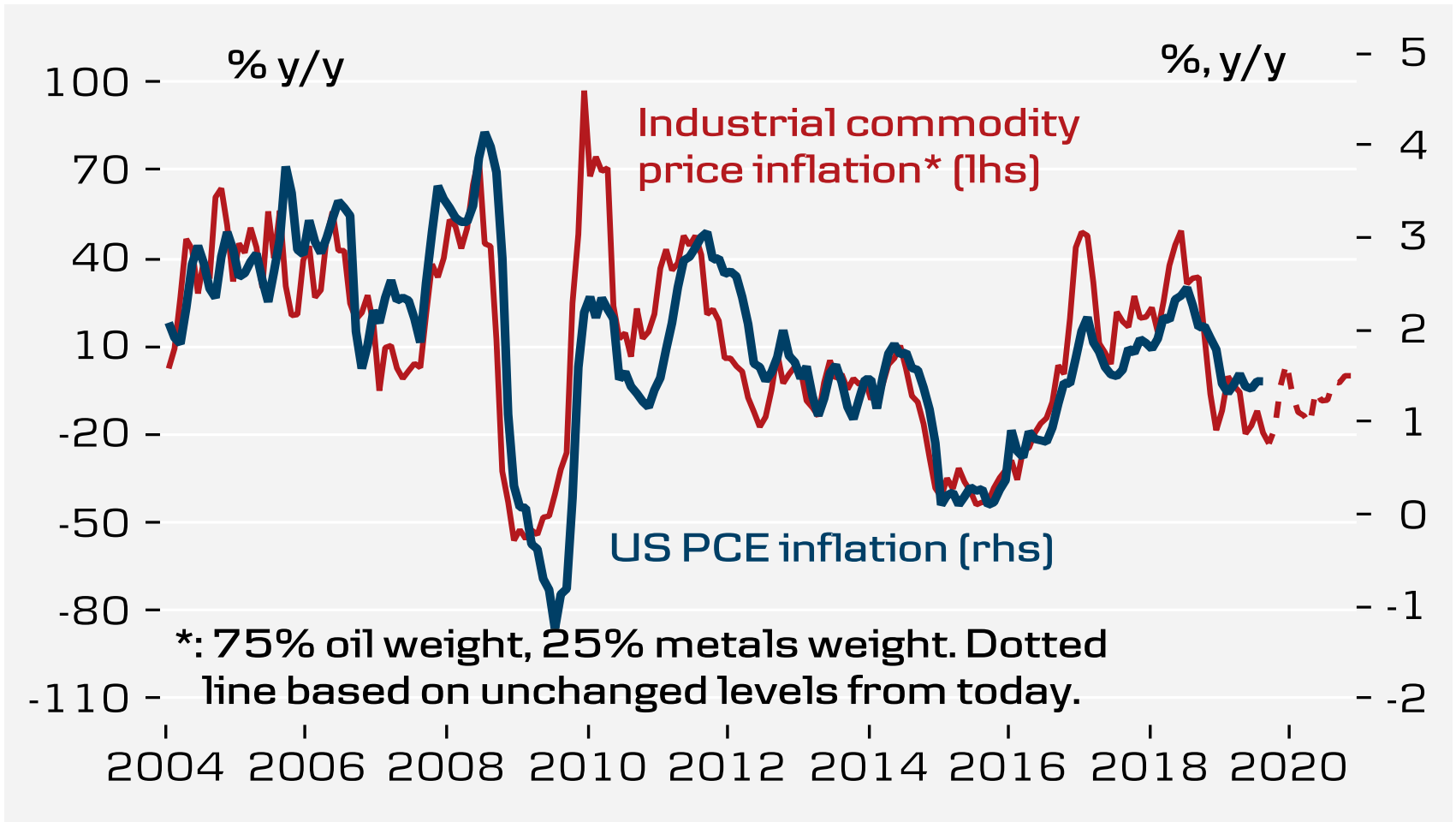
Source: Macrobond Financial, Cleveland Fed

Headline vs core PCE inflation



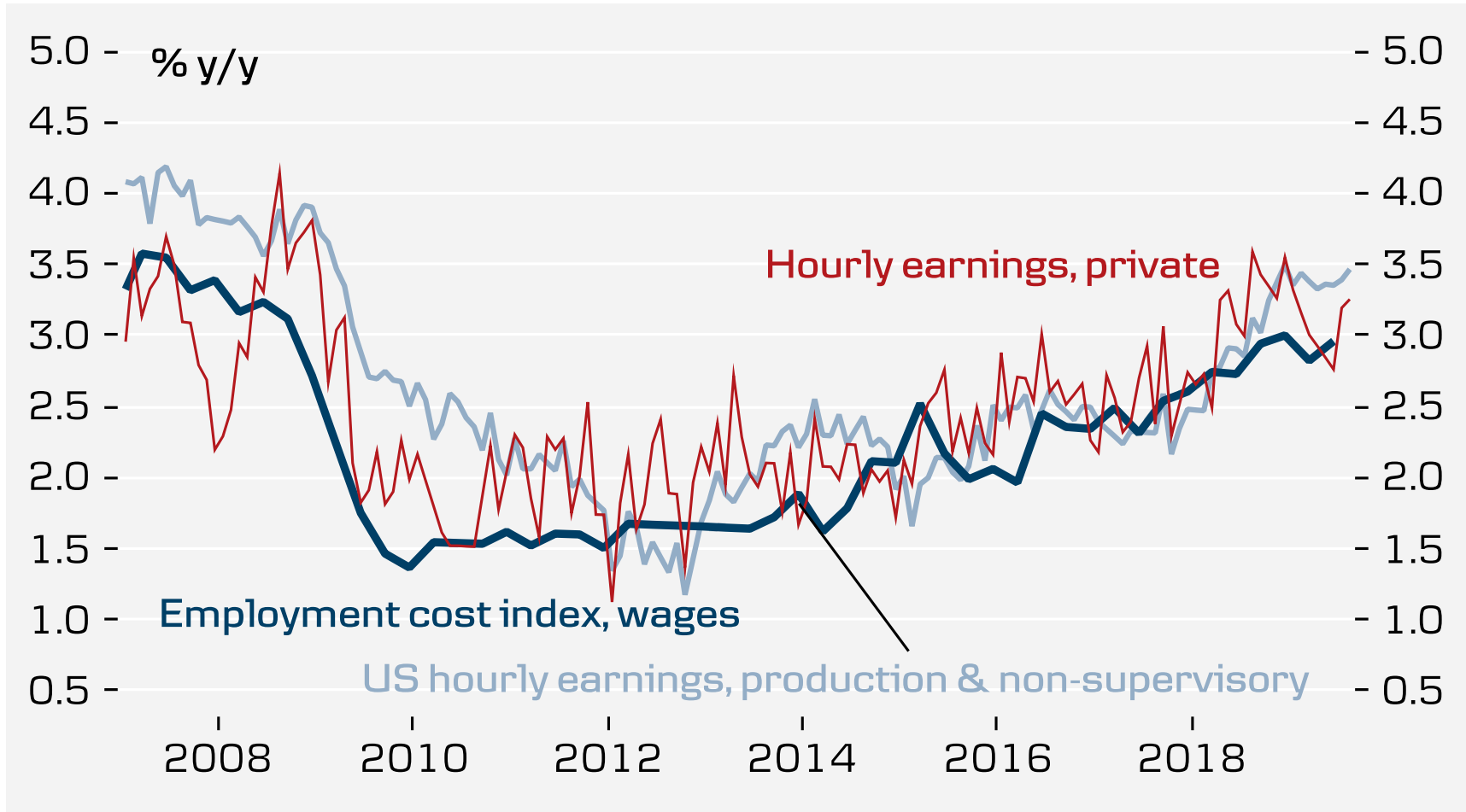
Source: Macrobond Financial, BEA

Inflation - commodity prices vs headline



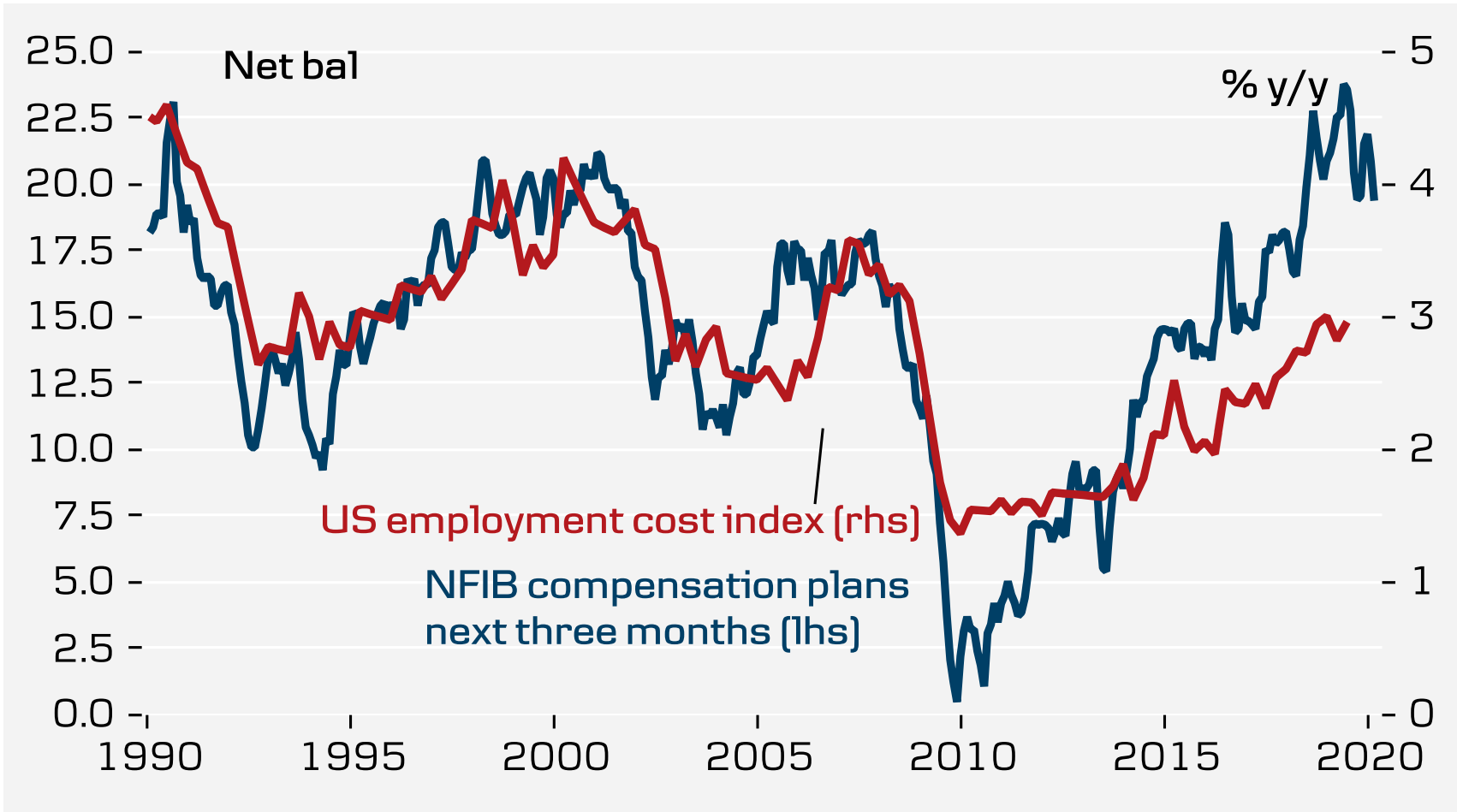
Source: Macrobond Financial, BEA, ICE, LME

Inflation - different wage measures



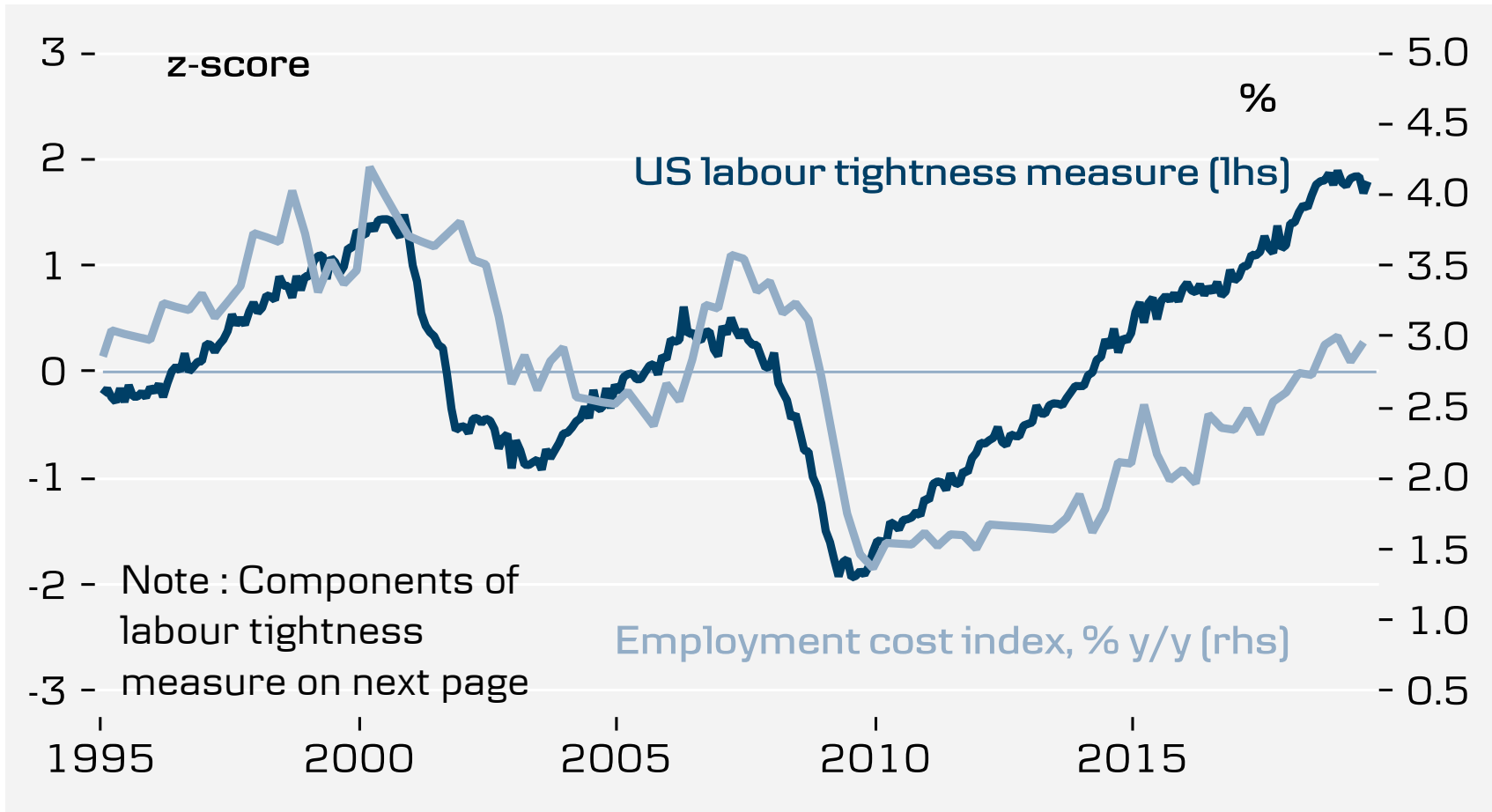
Source: Macrobond Financial, BLS

Inflation - NFIB and Employment Cost Index



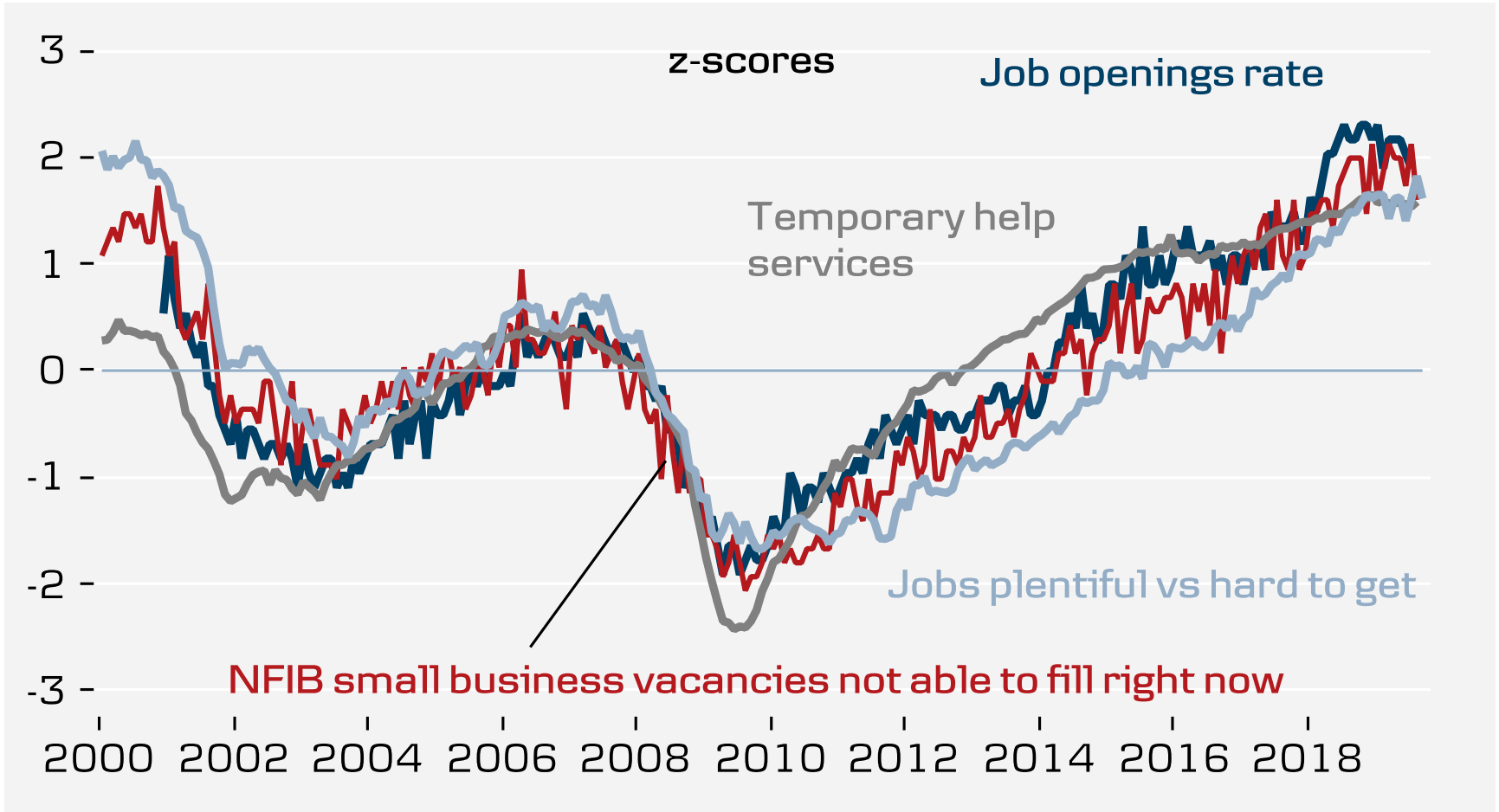
Source: Macrobond Financial, BLS, NFIB

Inflation – labour market tightness indicators



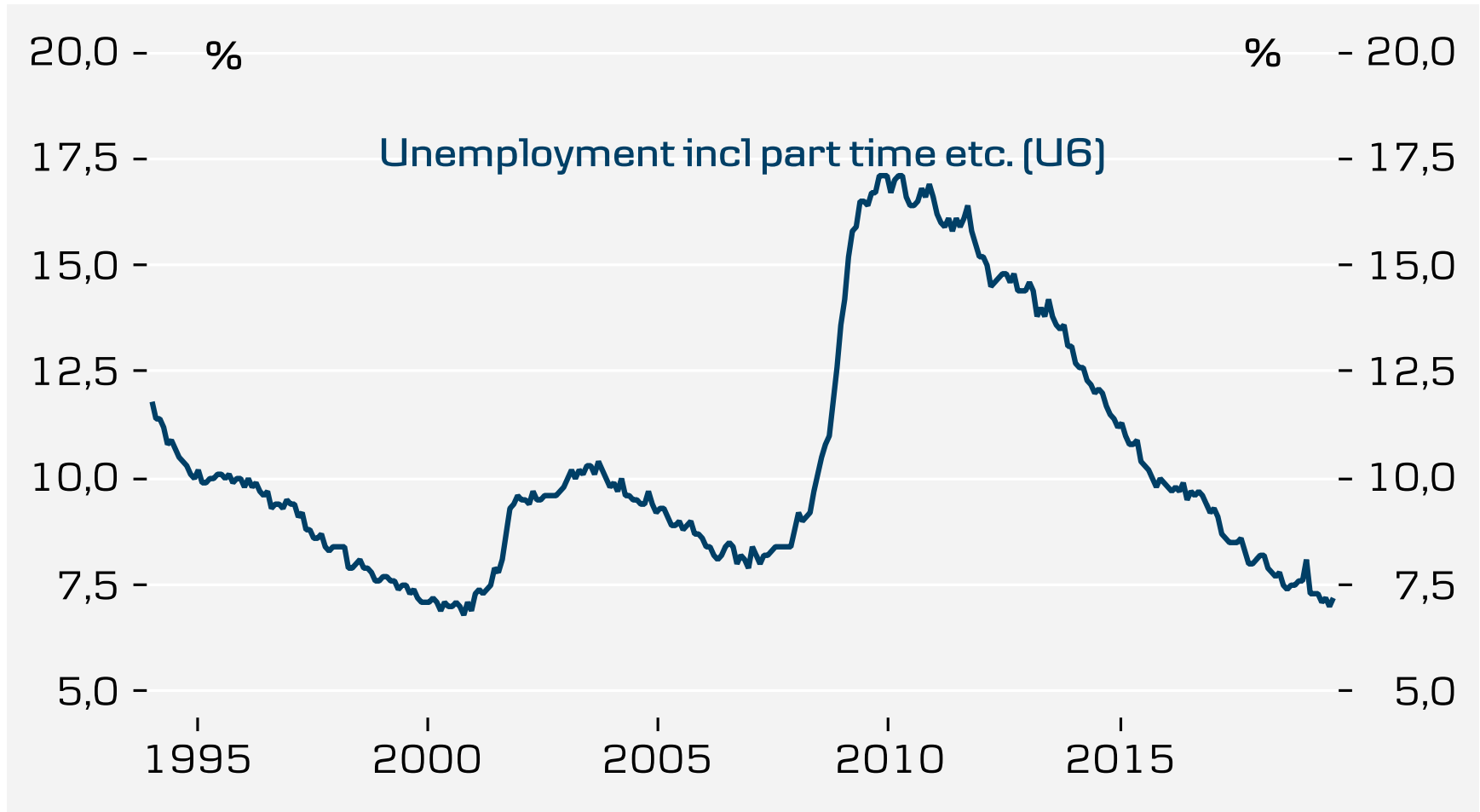
Source: Macrobond Financial, BLS, NFIB

Inflation - labour market tightness indicators



Source: Macrobond Financial, BLS, Conference Board, NFIB

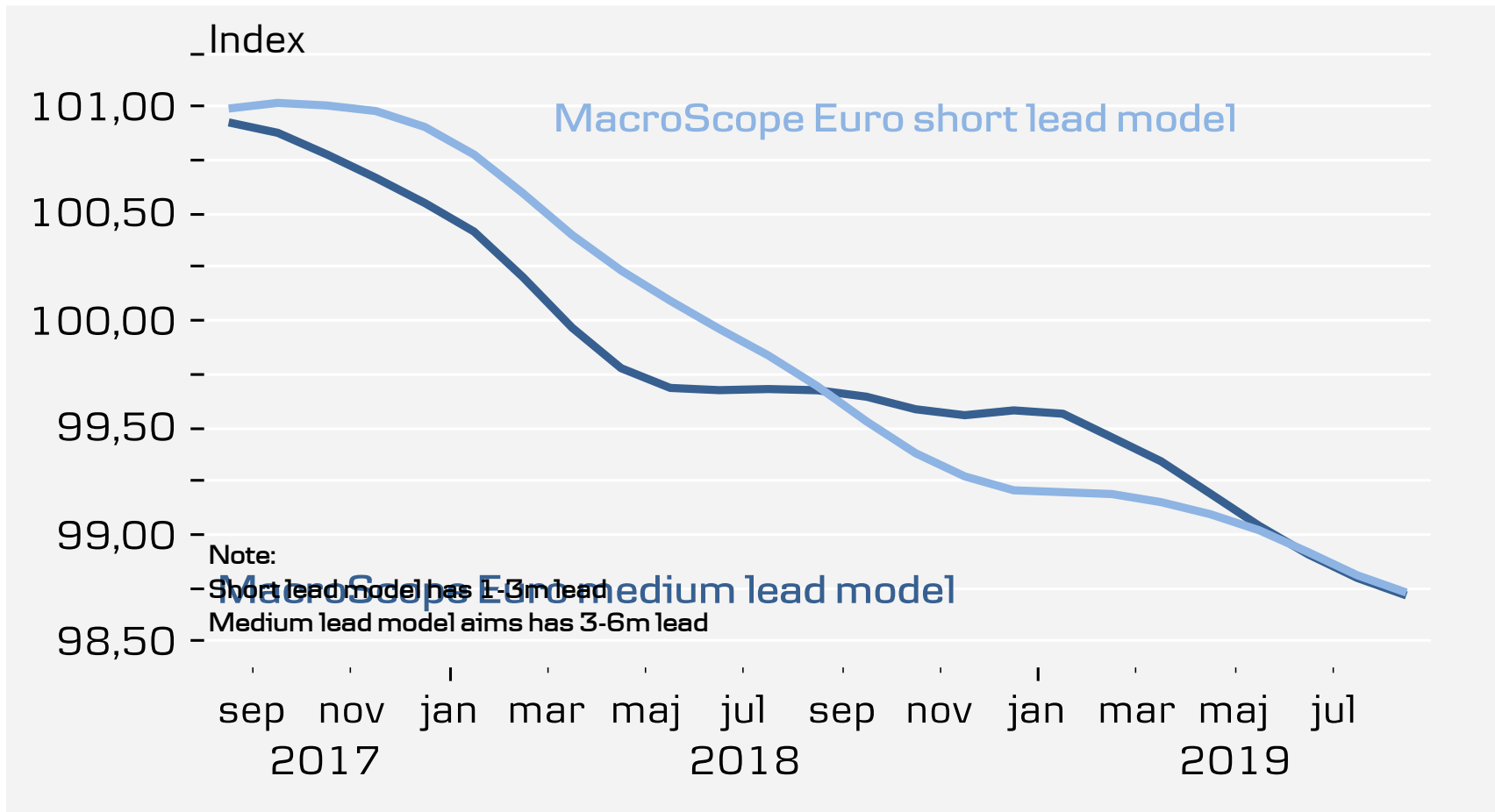
U6 unemployment



Source: Macrobond Financial, BLS

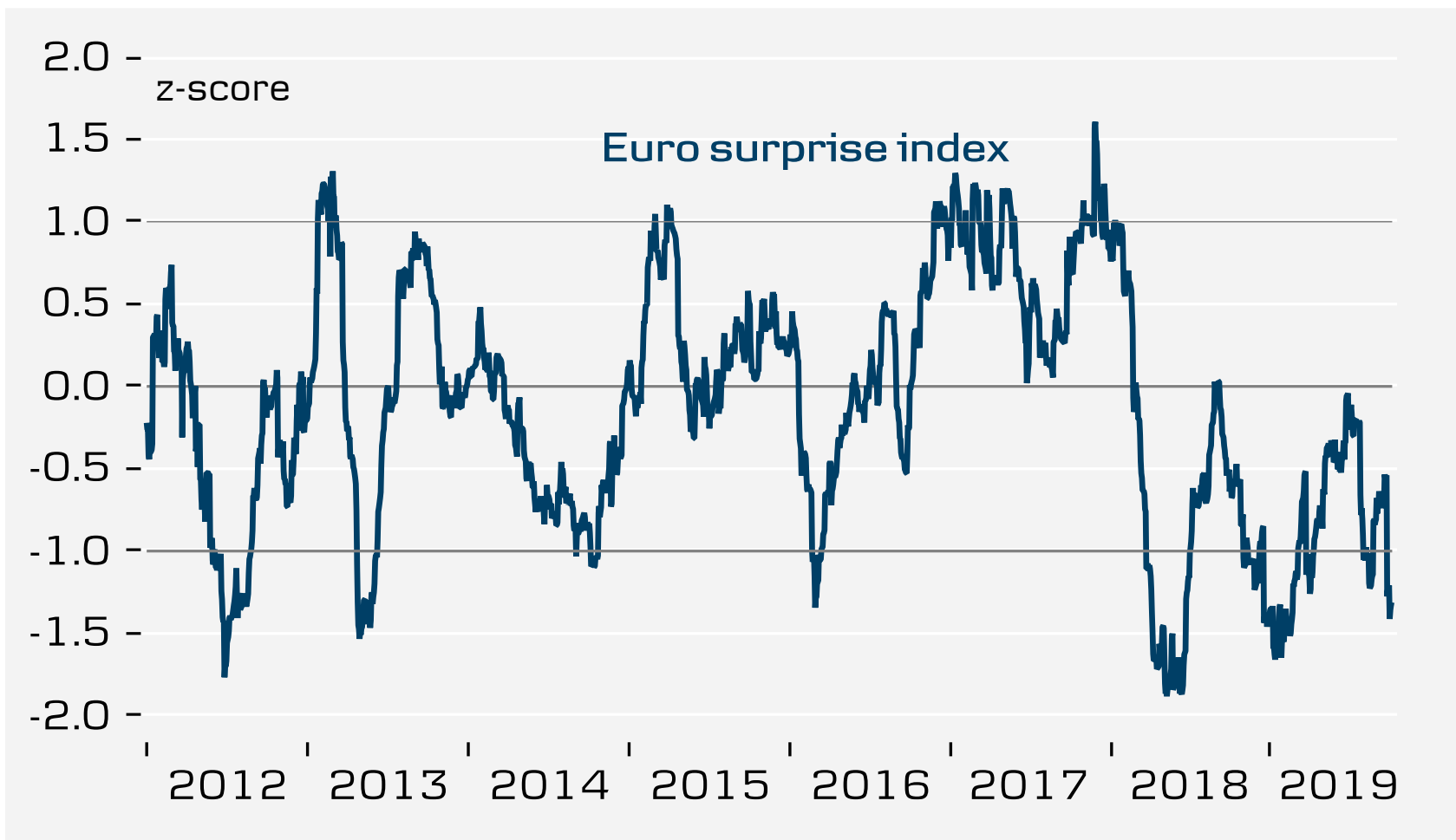
Euro

MacroScope models



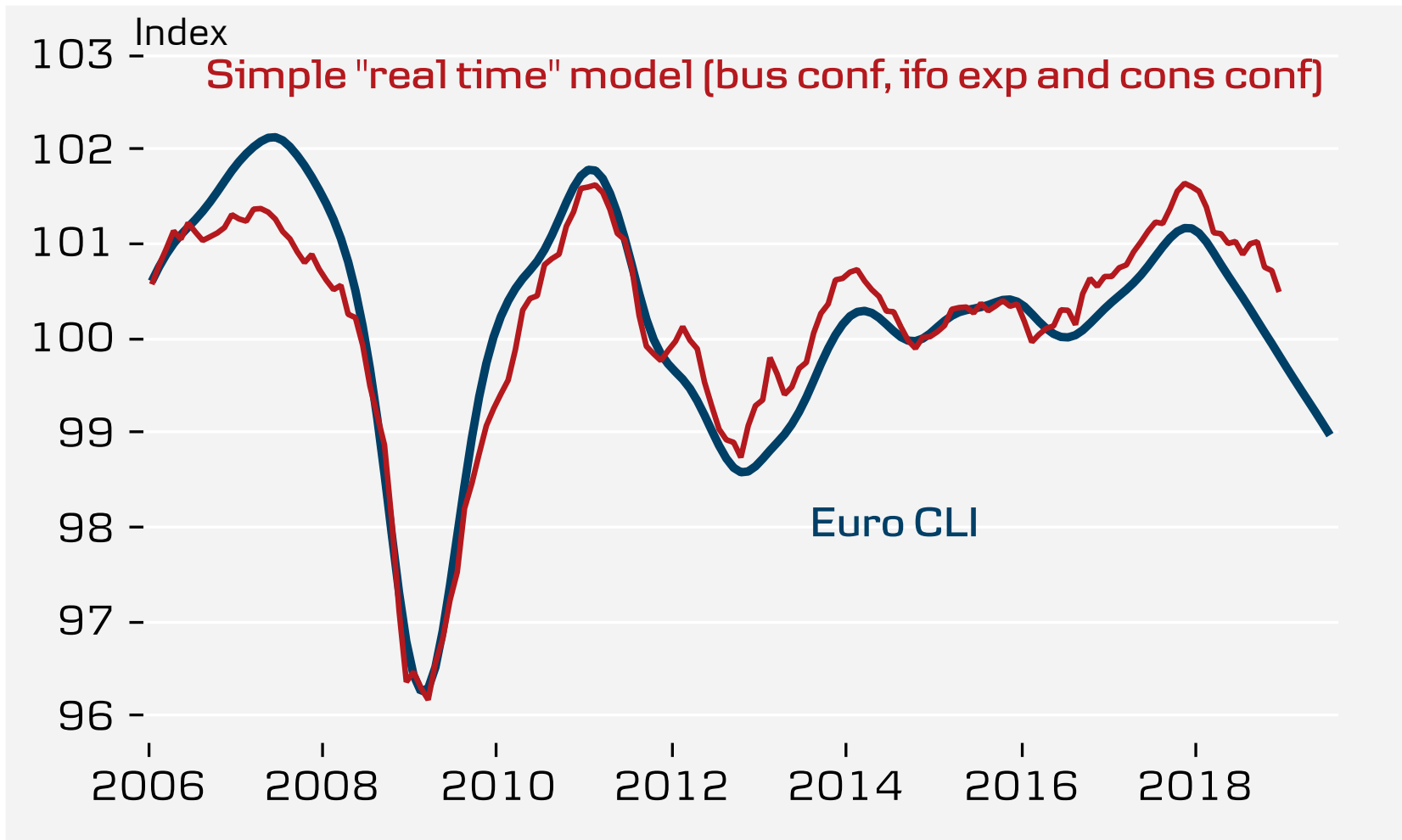
Source: Danske Bank

Euro surprise index



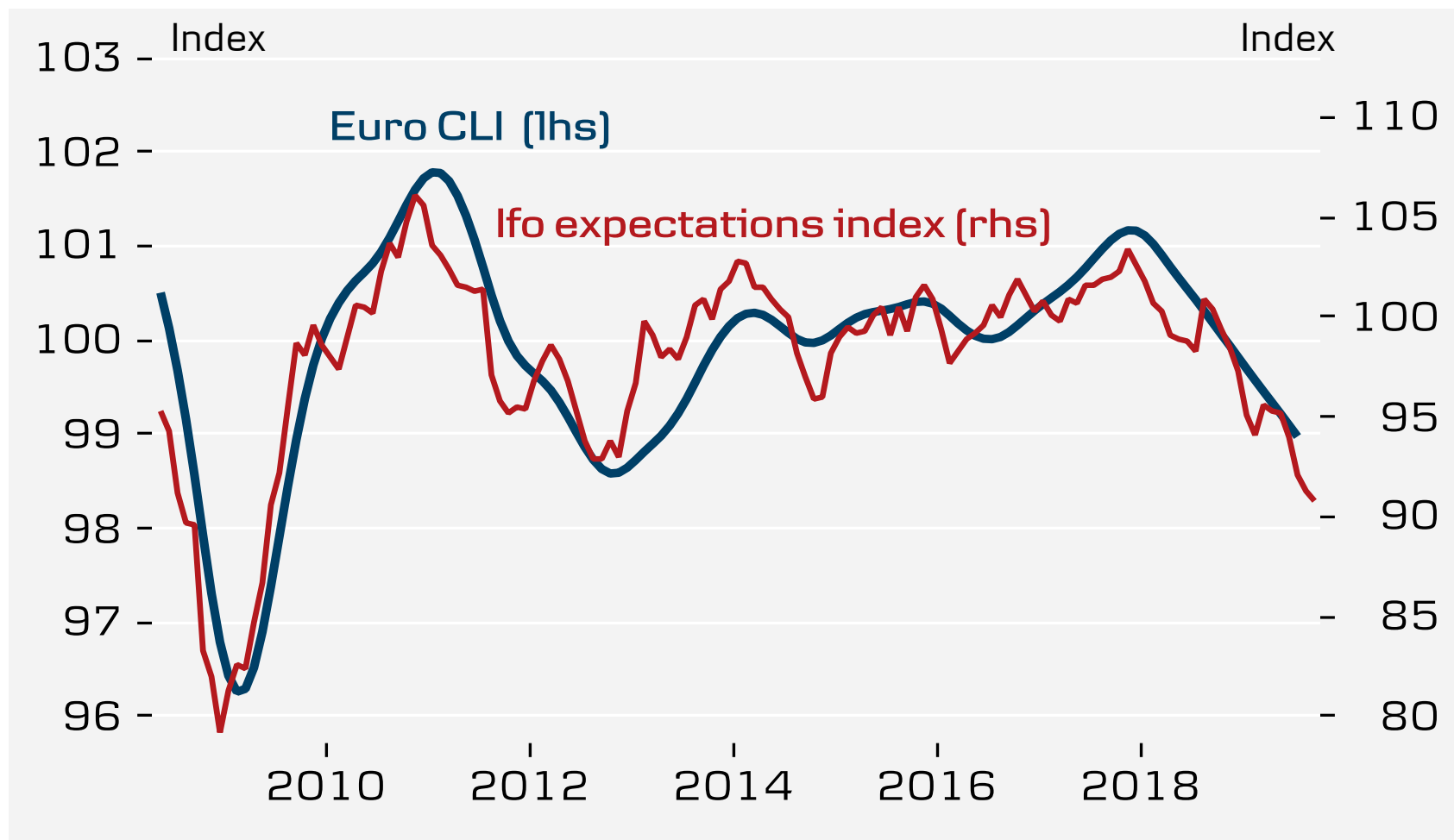
Source: Macrobond Financial, Danske Bank

Euro confidence vs OECD leading indicator (CLI)



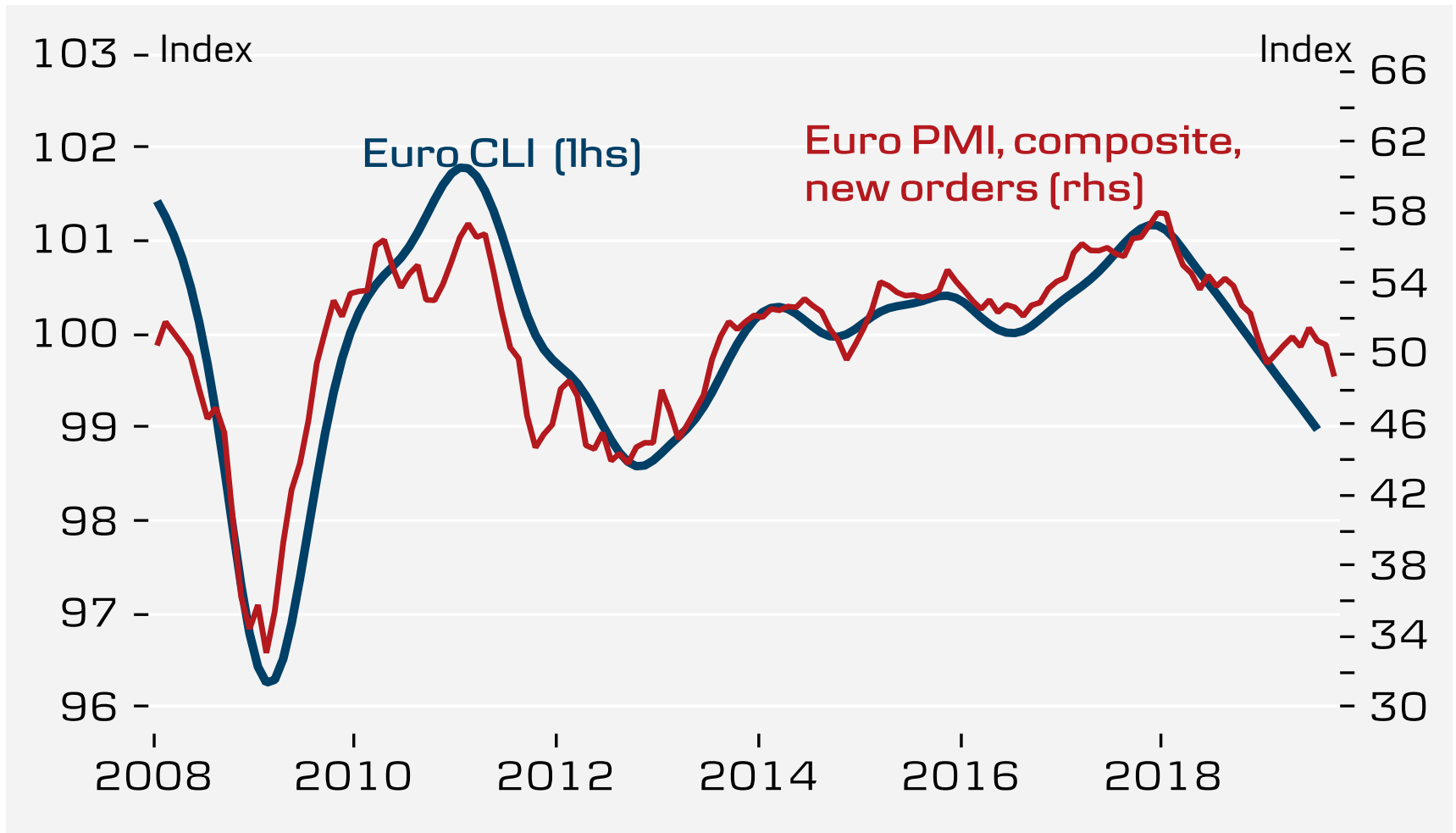
Source: Macrobond Financial, OECD, Danske Bank

German ifo vs CLI



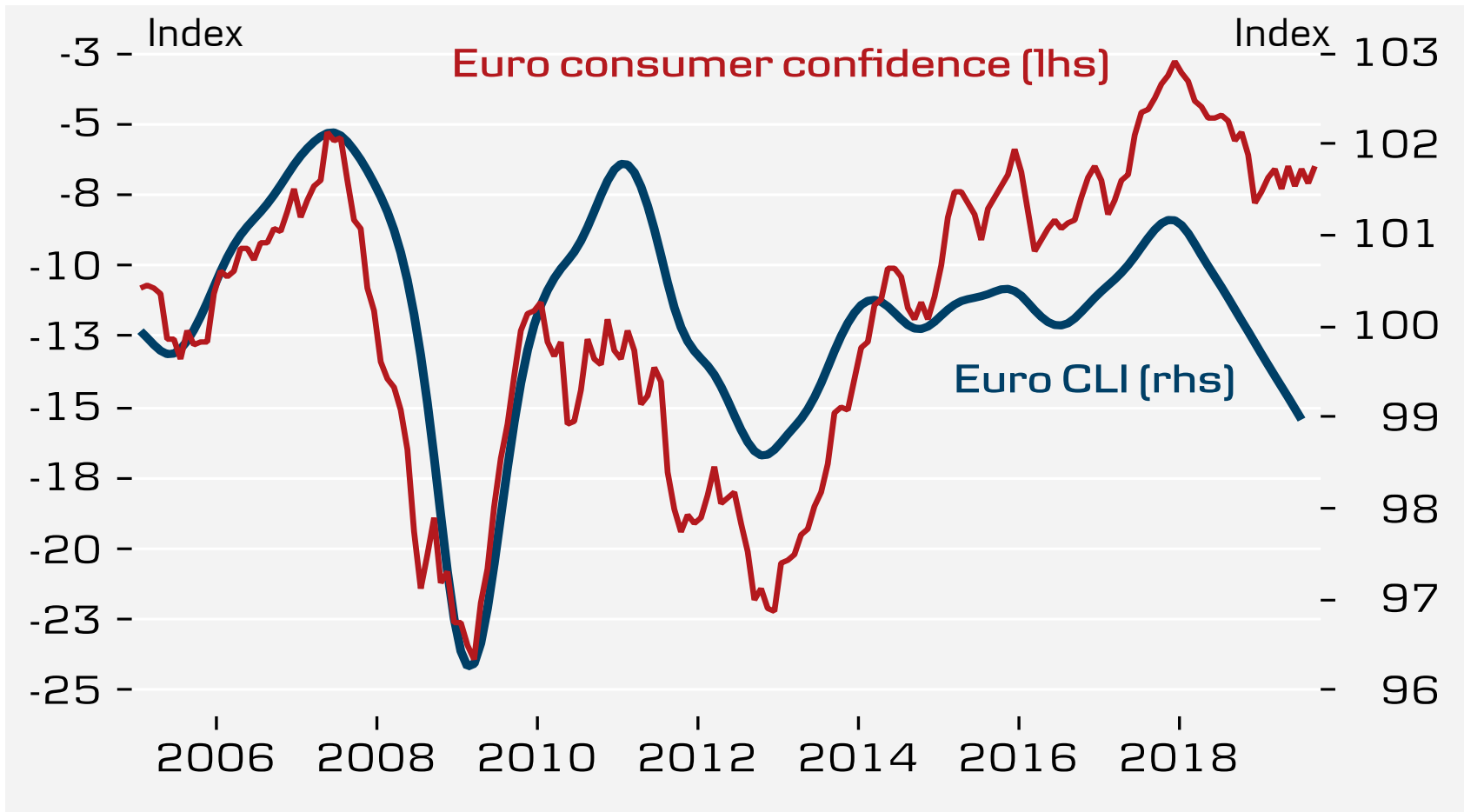
Source: Macrobond Financial, IFO, OECD, Danske Bank

Composite PMI vs CLI



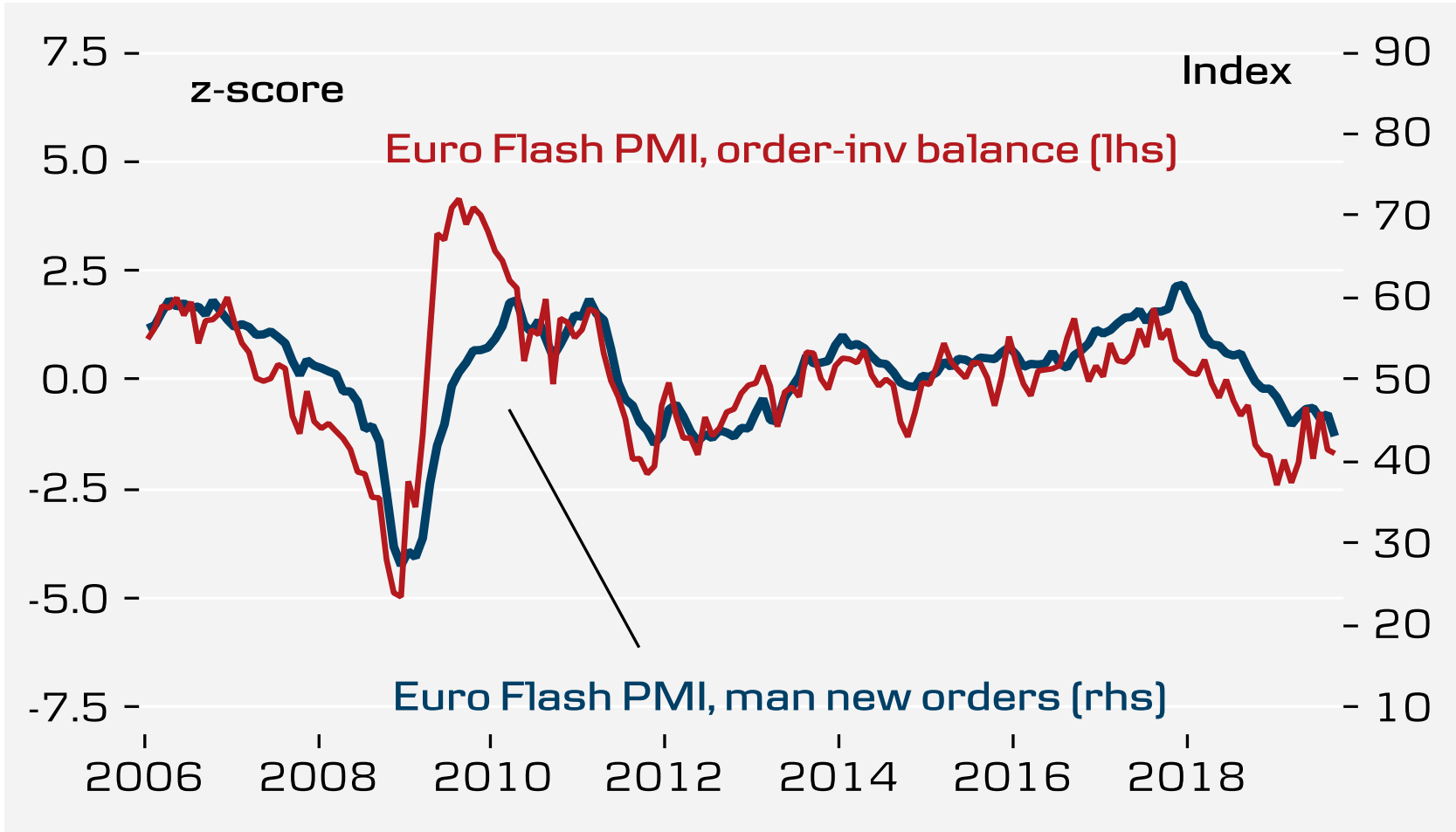
Source: Macrobond Financial, Markit, OECD, Danske Bank

Consumer confidence vs CLI



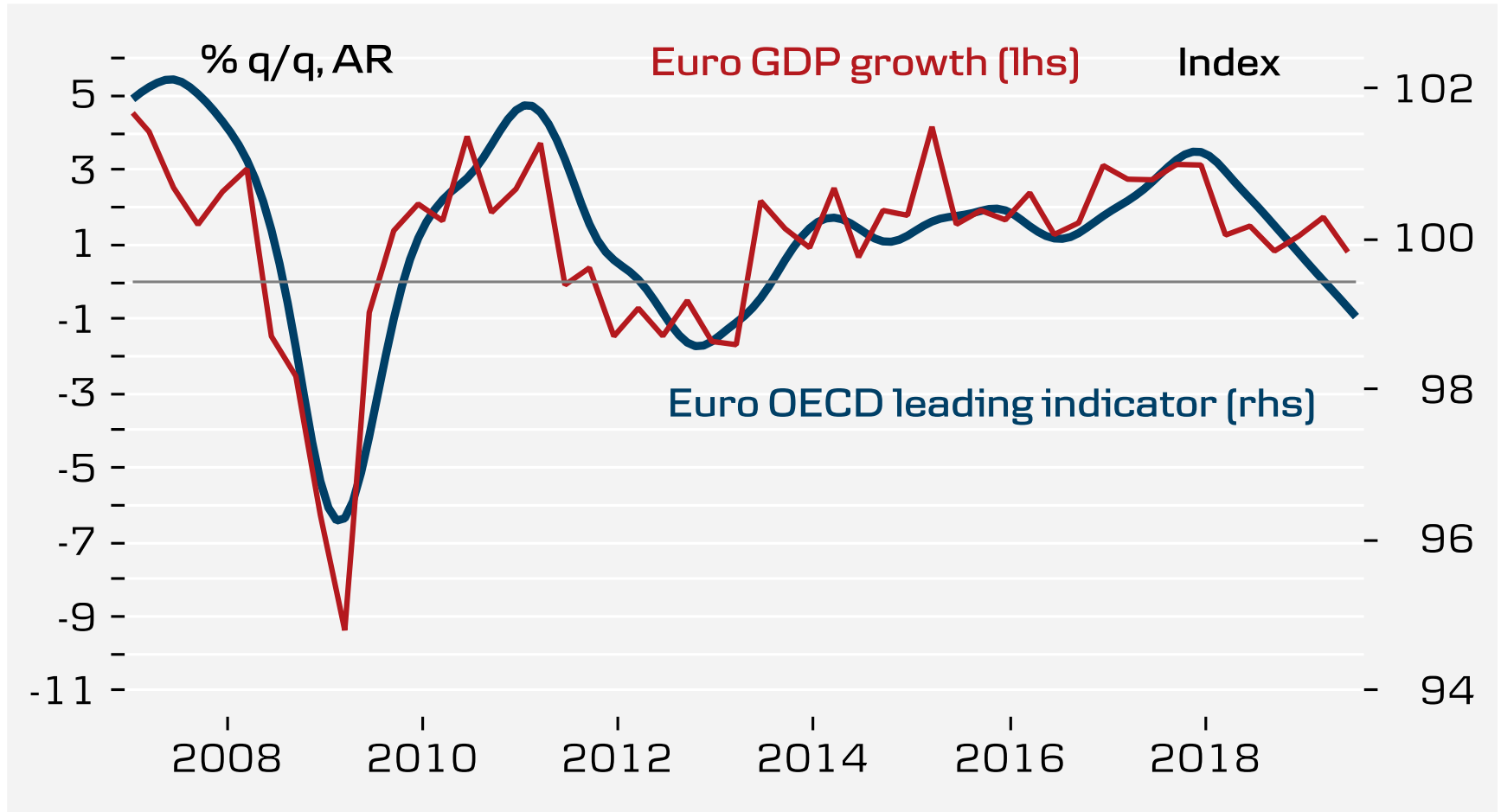
Source: Macrobond Financial, OECD, EU Commission

Order-inventory balance vs PMI



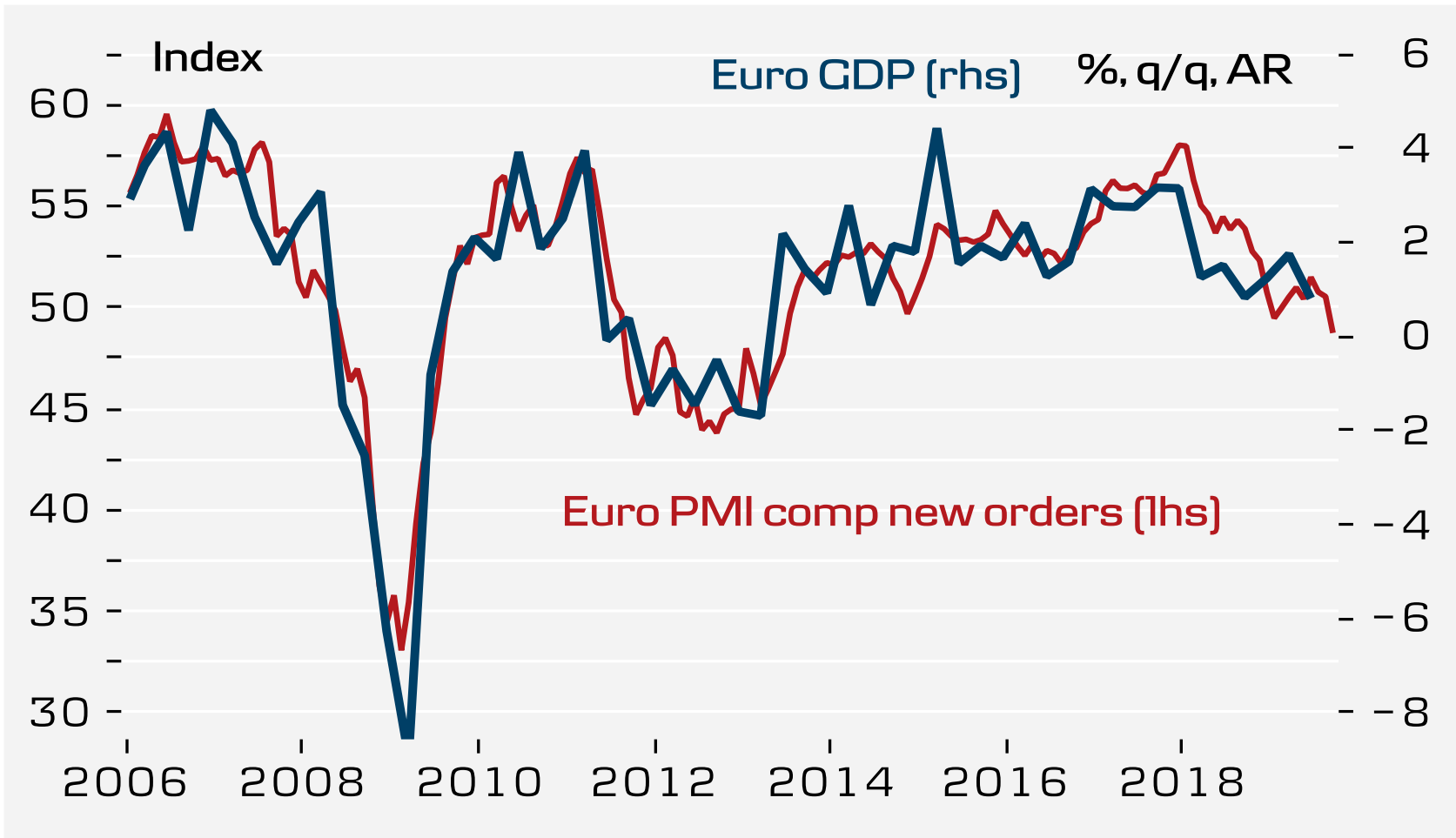
Source: Macrobond Financial, Markit, Danske Bank

Euro leading indicator vs GDP



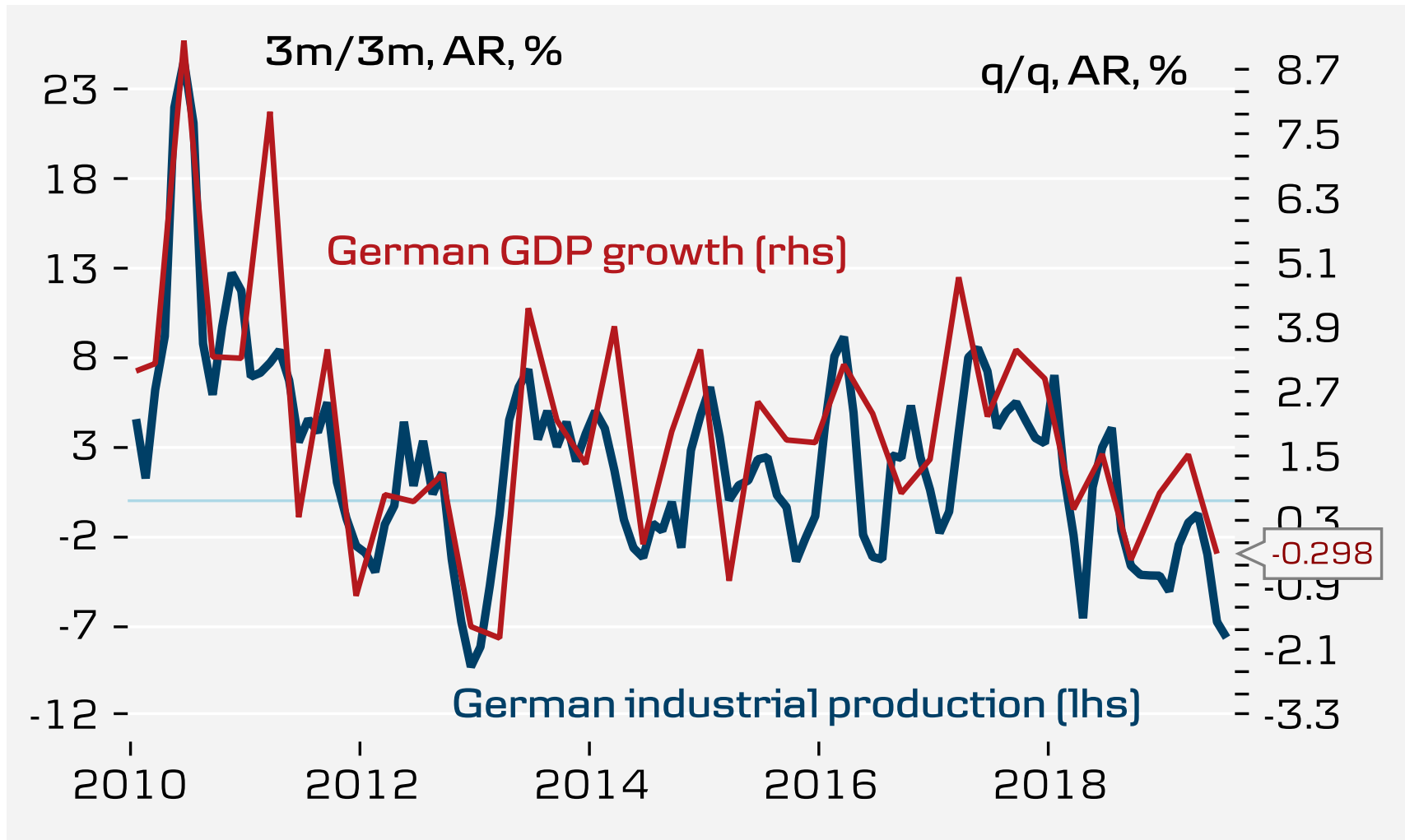
Source: Macrobond Financial, OECD, Eurostat

Euro PMI vs GDP growth



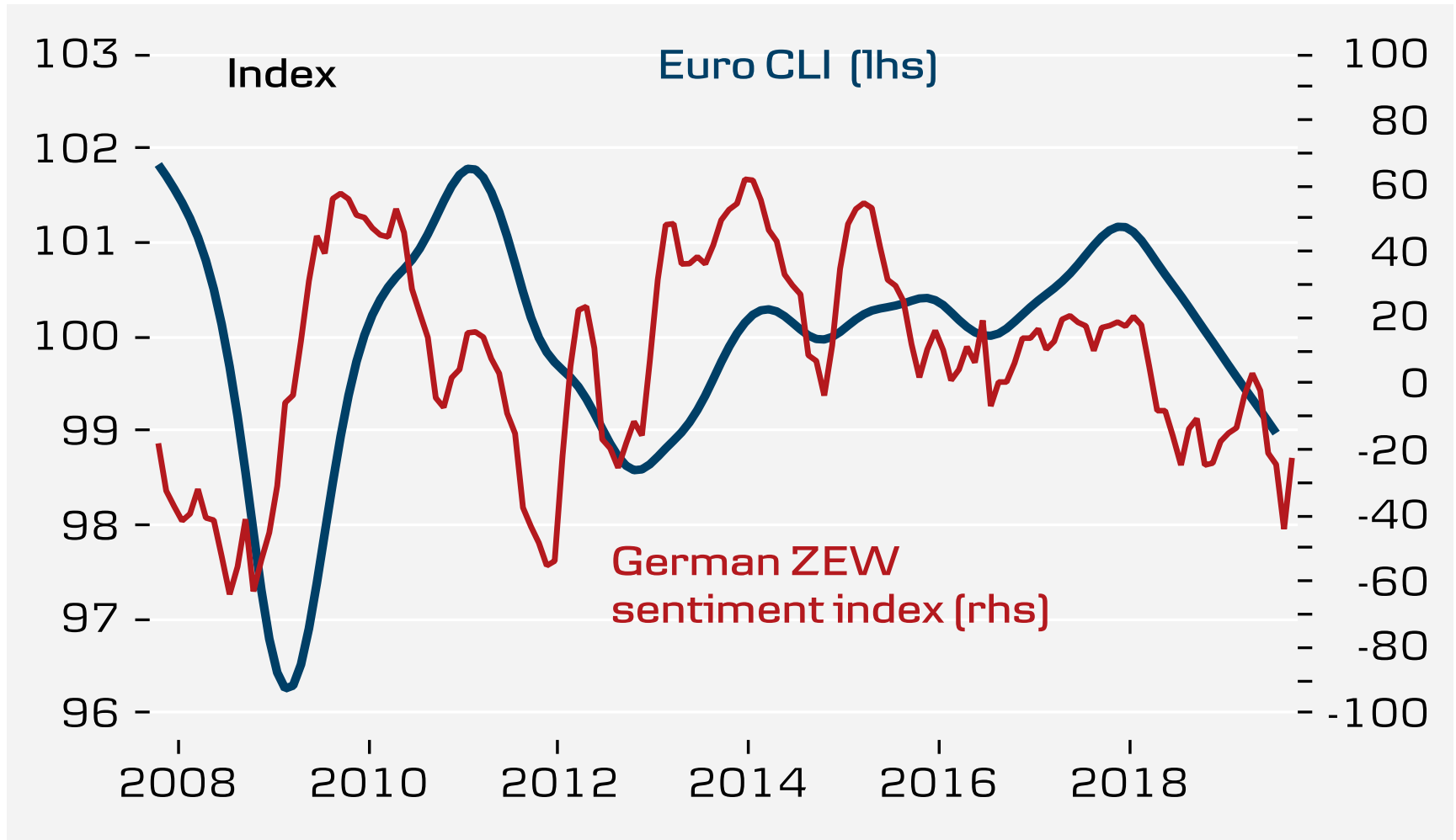
Source: Macrobond Financial, Markit, Eurostat

German IP vs GDP



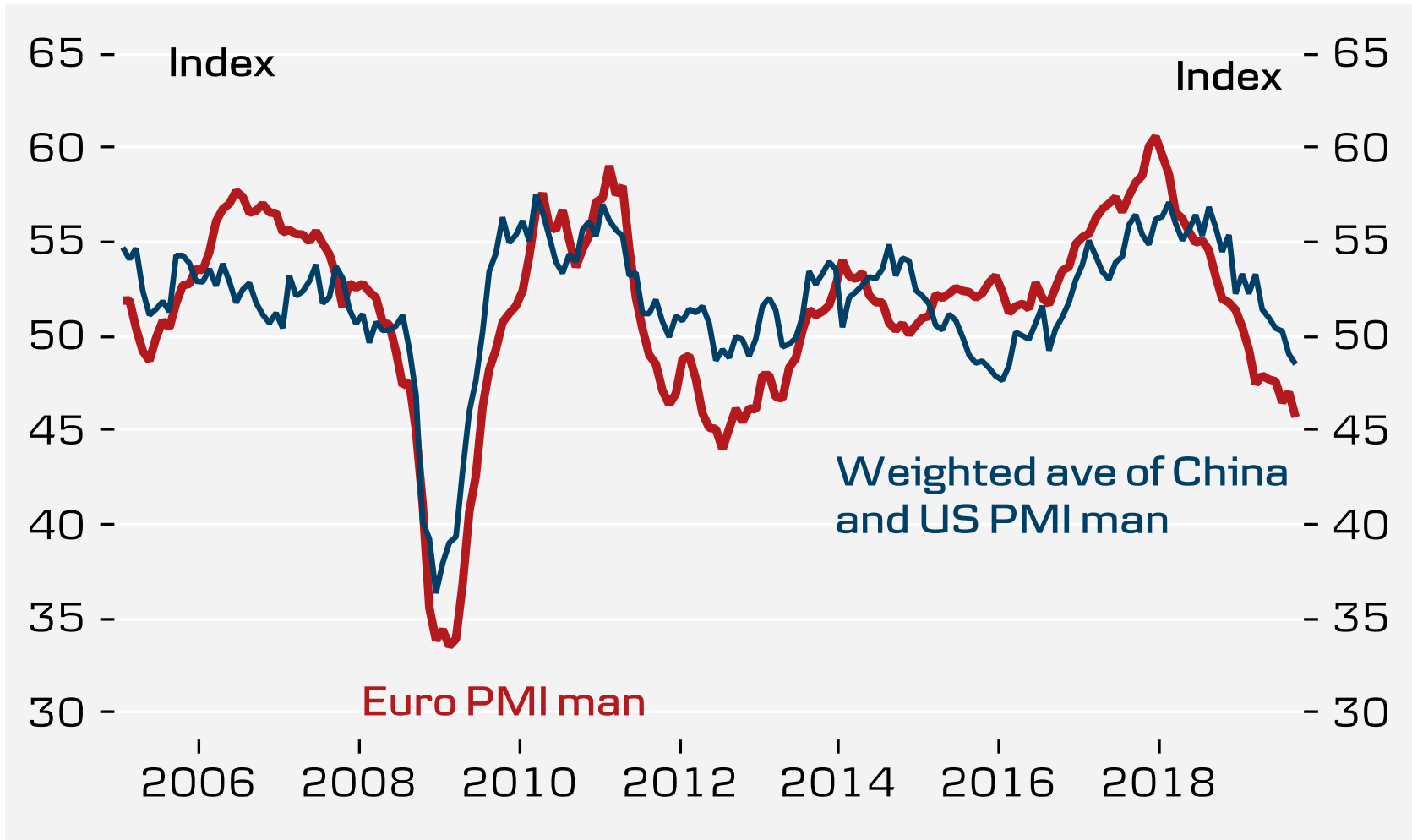
Source: Macrobond Financial, Bundesbank

Euro - ZEW vs CLI



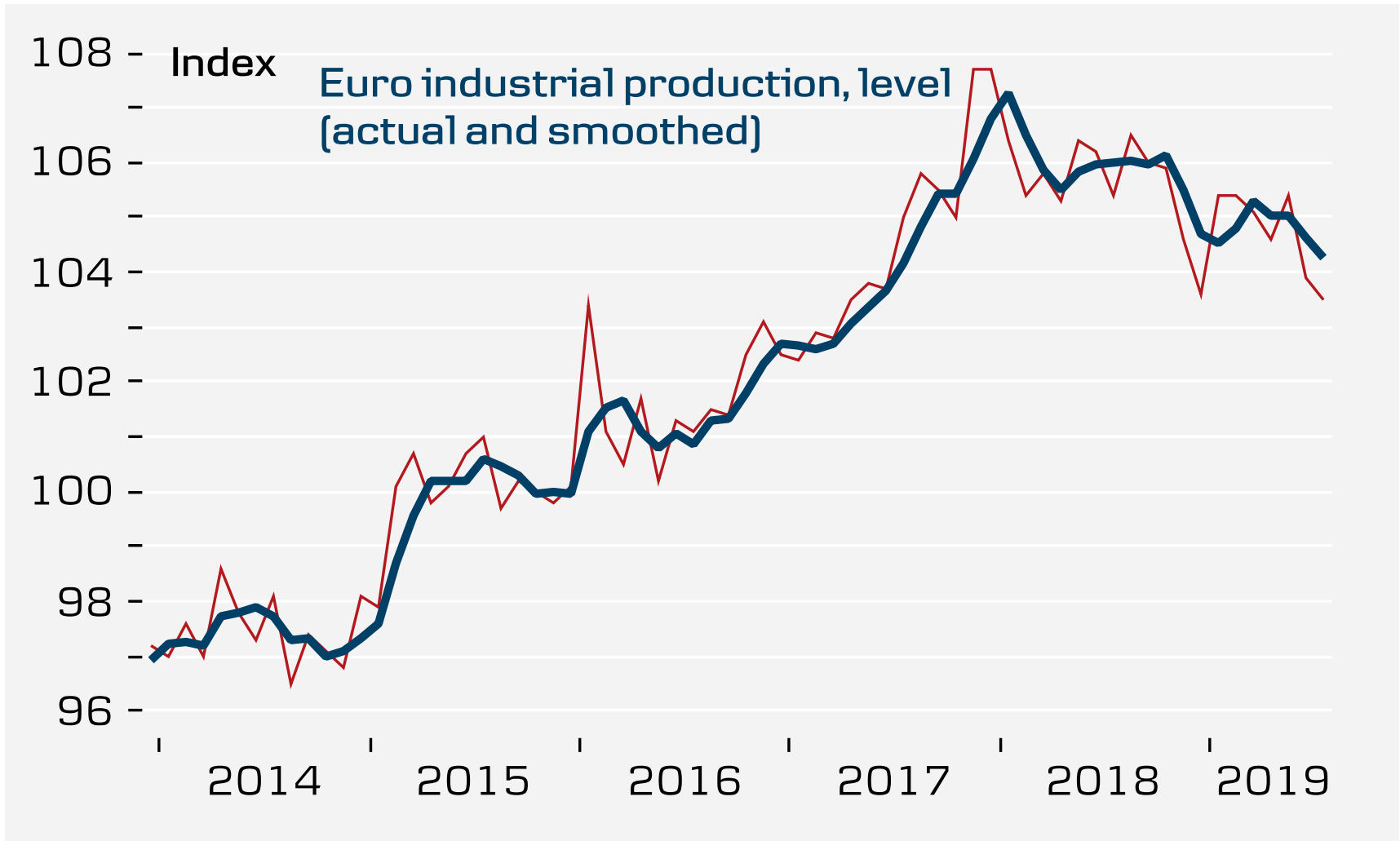
Source: Macrobond Financial, OECD, ZEW

Euro PMI vs China and US PMI



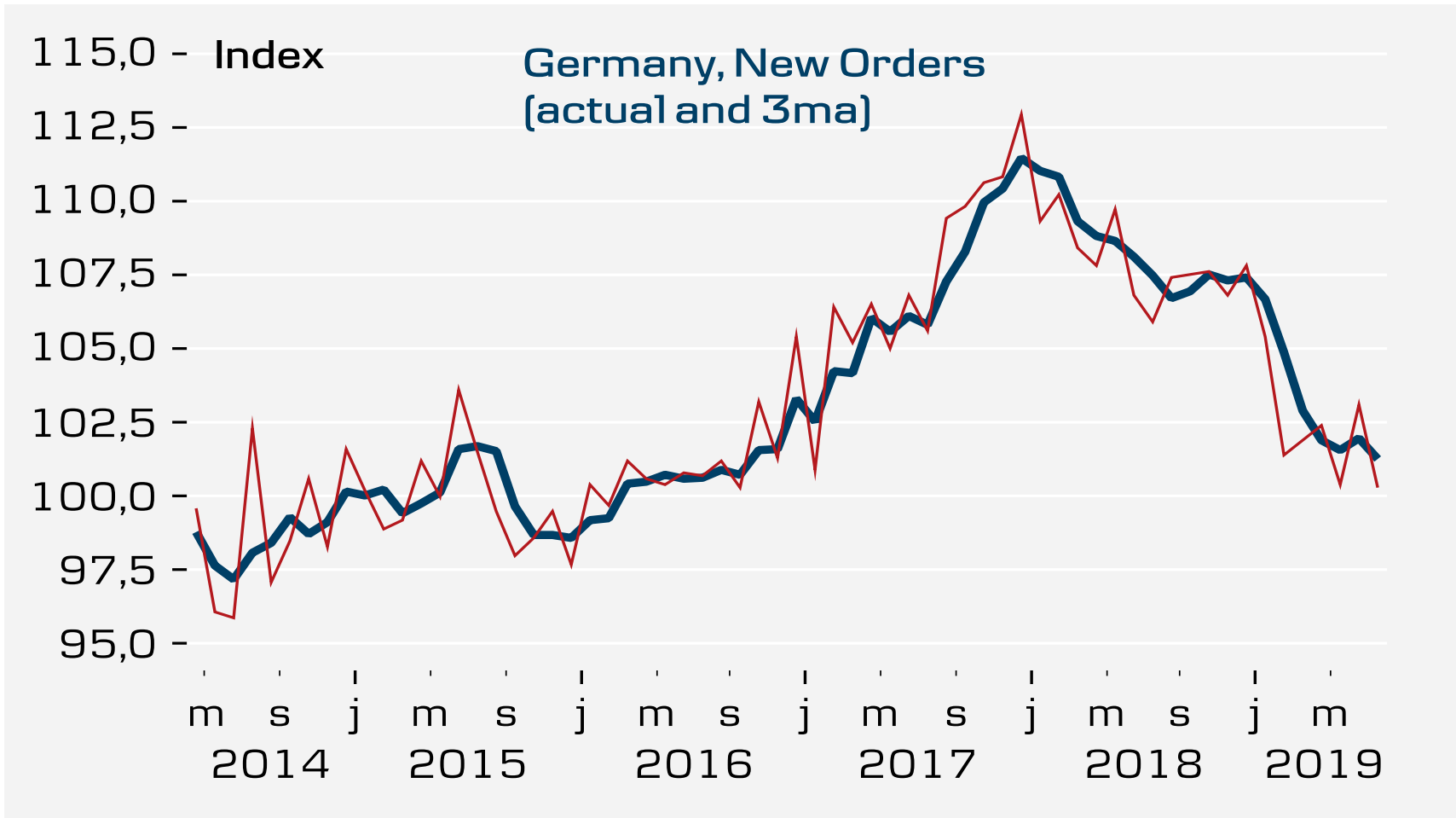
Source: Macrobond Financial, Markit, Danske Bank

Industrial production - level



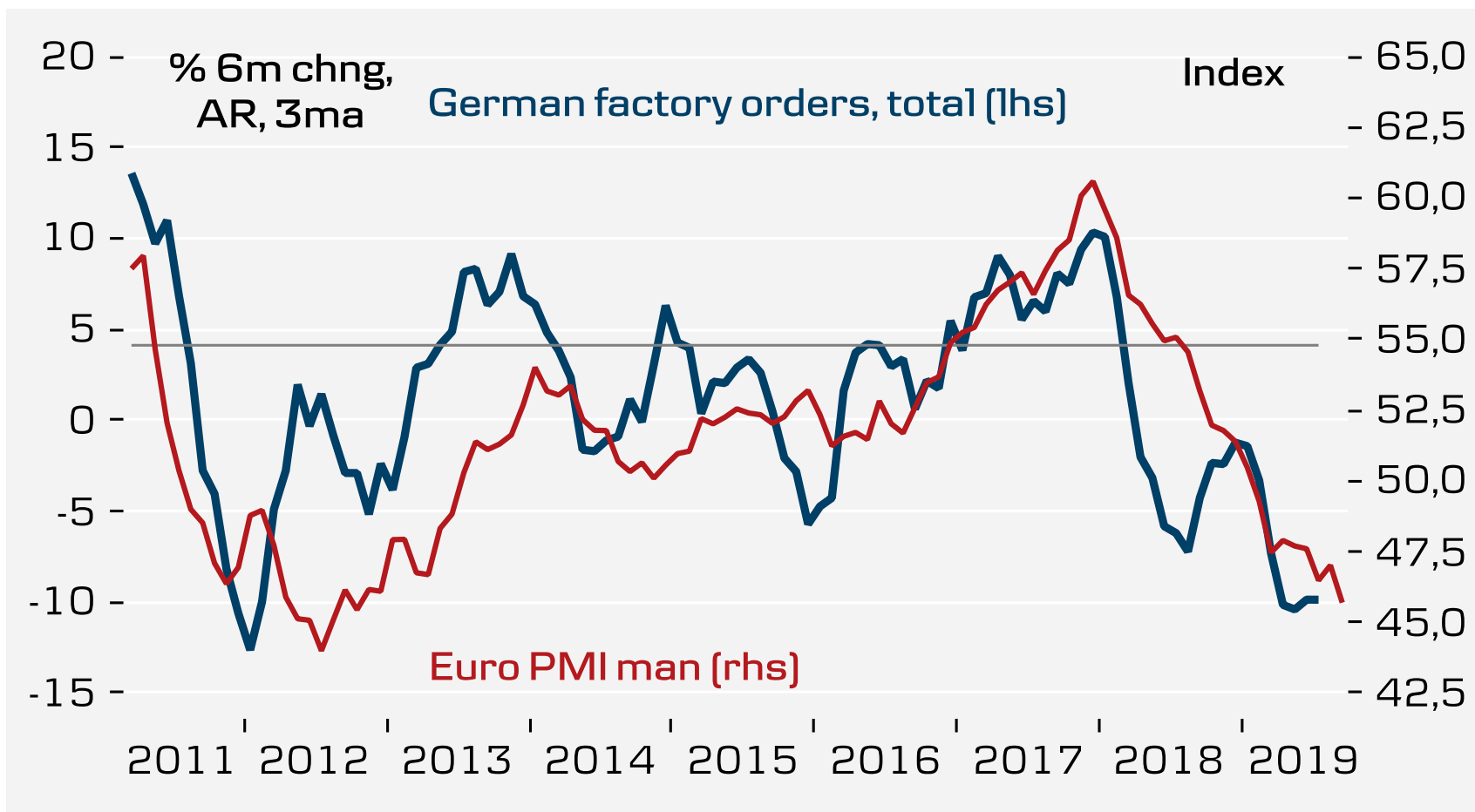
Source: Macrobond Financial, Eurostat

German orders – level



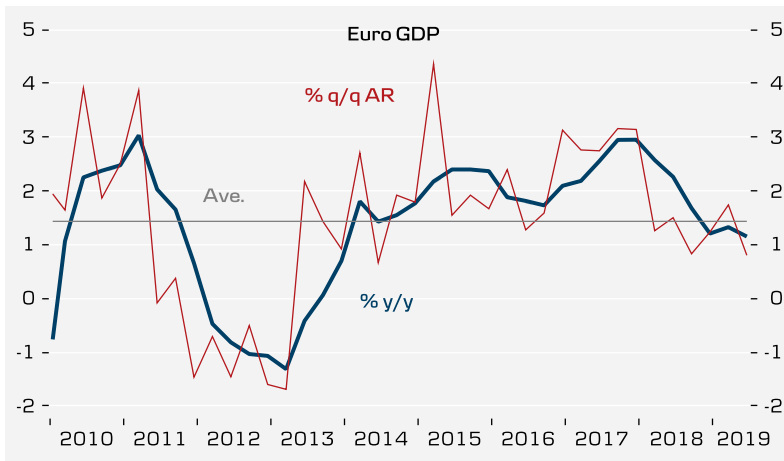
Source: Macrobond Financial, Bundesbank

German orders - growth vs Euro PMI

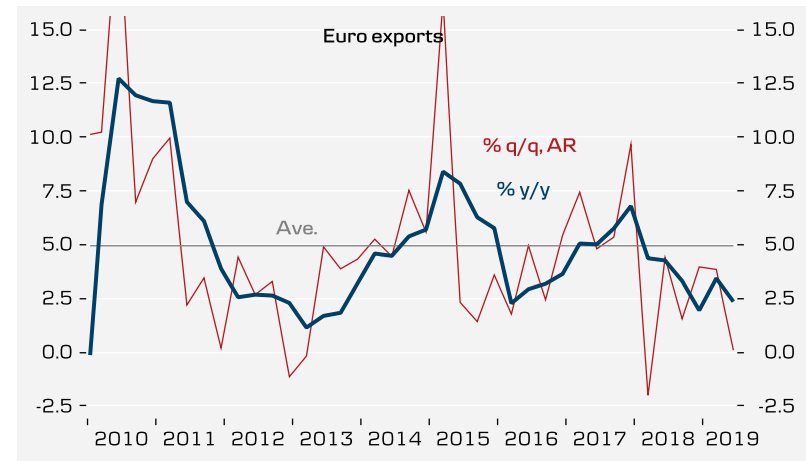


Source: Macrobond Financial, Markit, Bundesbank

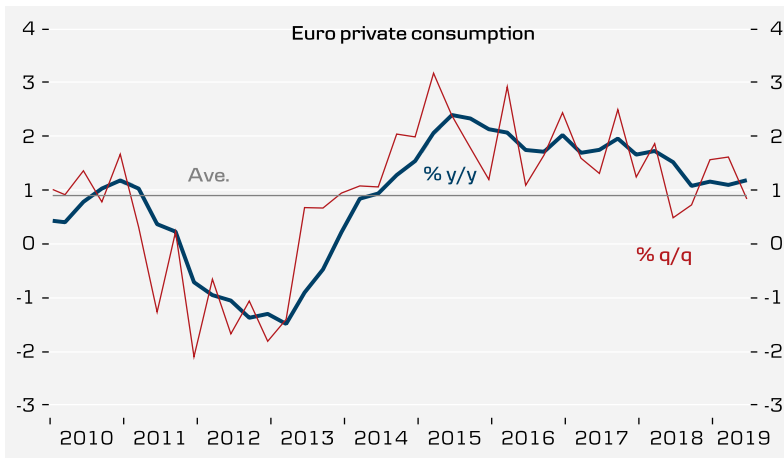
GDP and demand sub-components



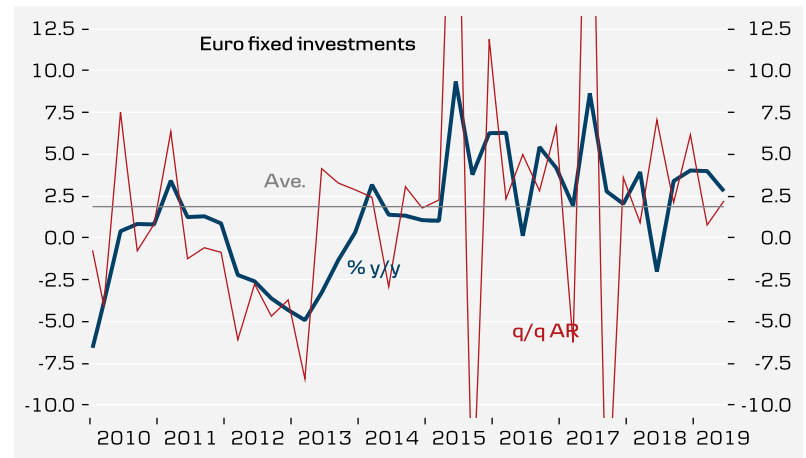
Source: Macrobond Financial, Eurostat



Source: Macrobond Financial, Eurostat

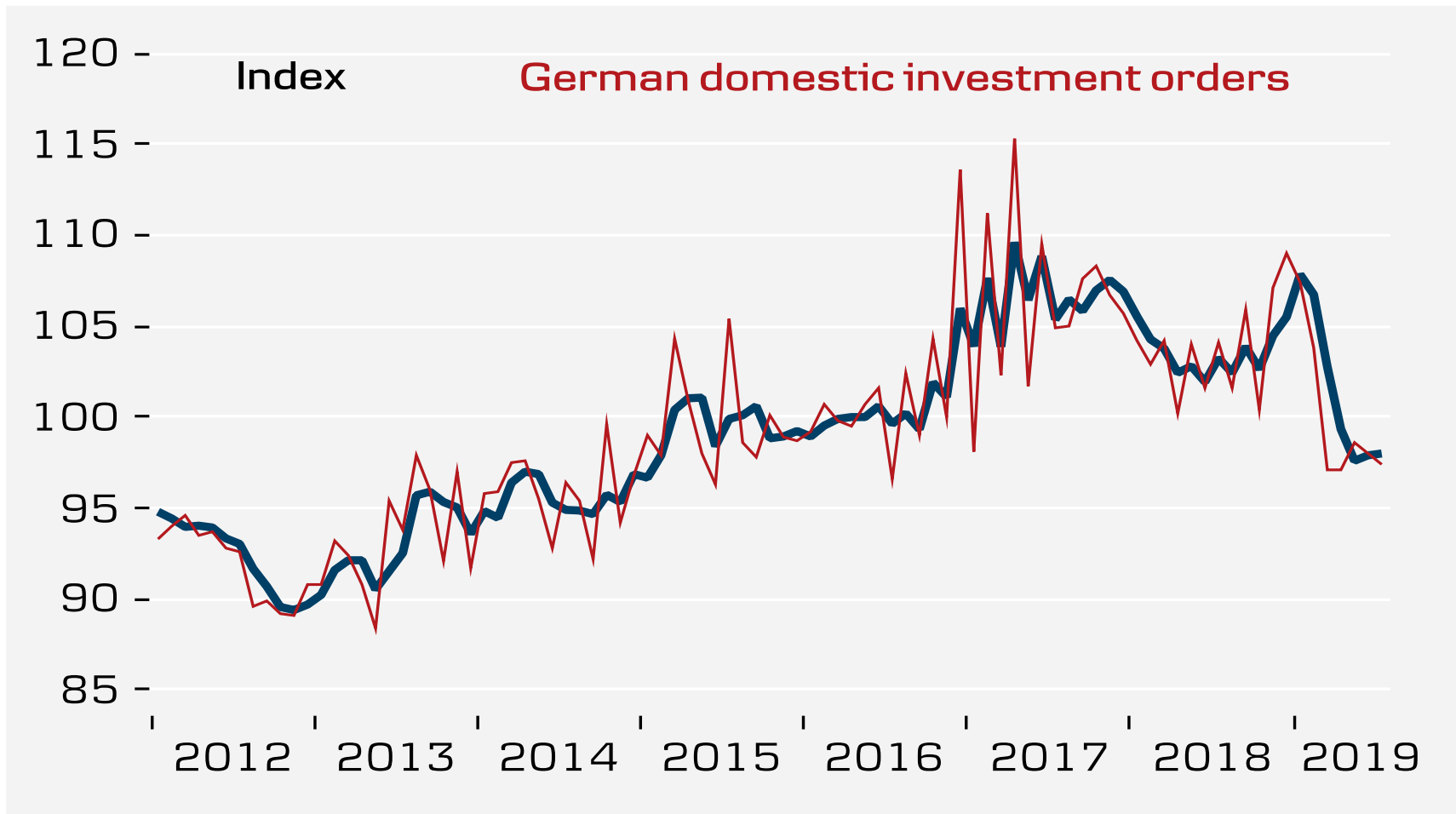


Source: Macrobond Financial, Eurostat



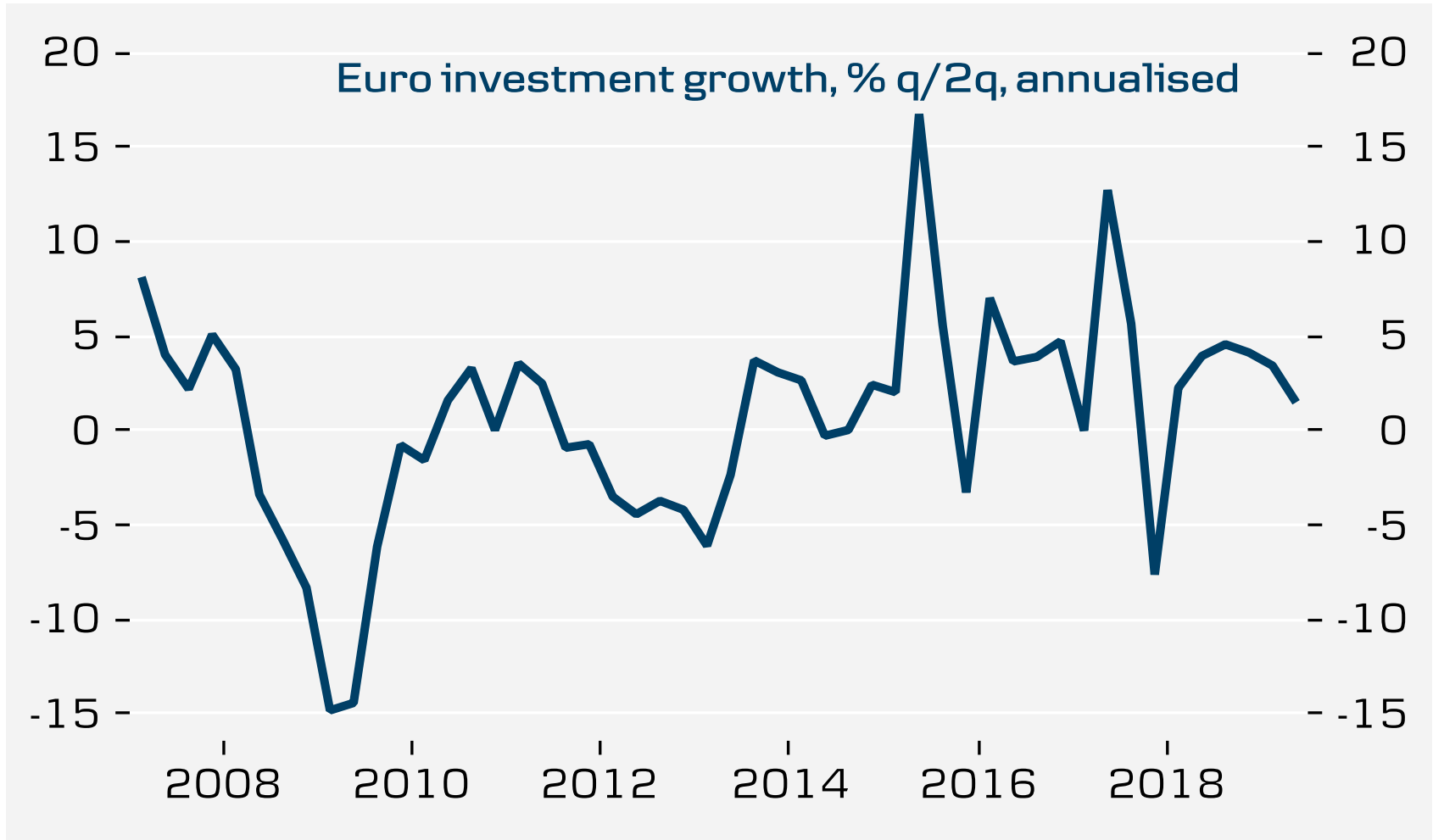
Source: Macrobond Financial, Eurostat

German orders - capex level



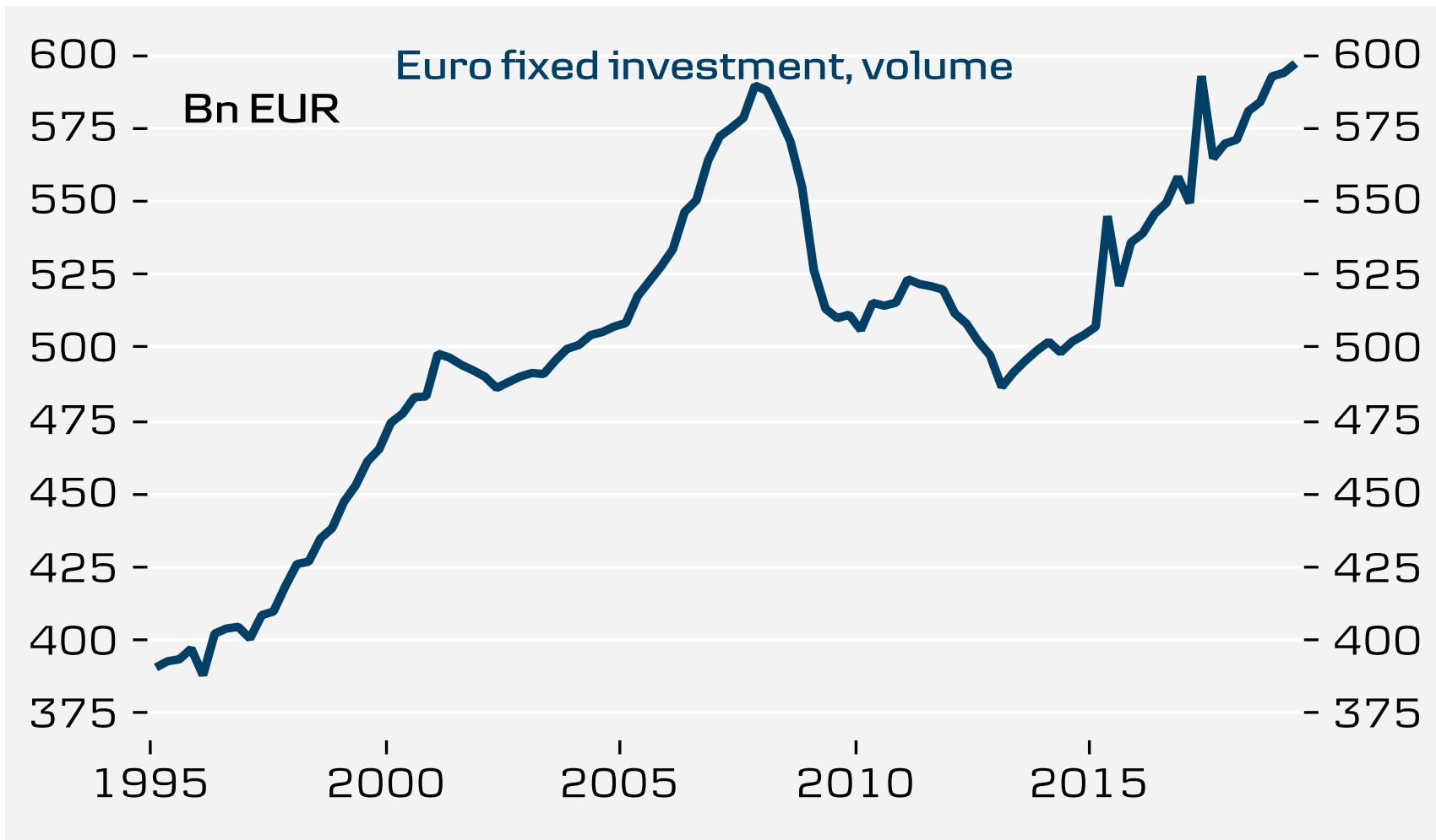
Source: Macrobond Financial, Bundesbank

Investment growth



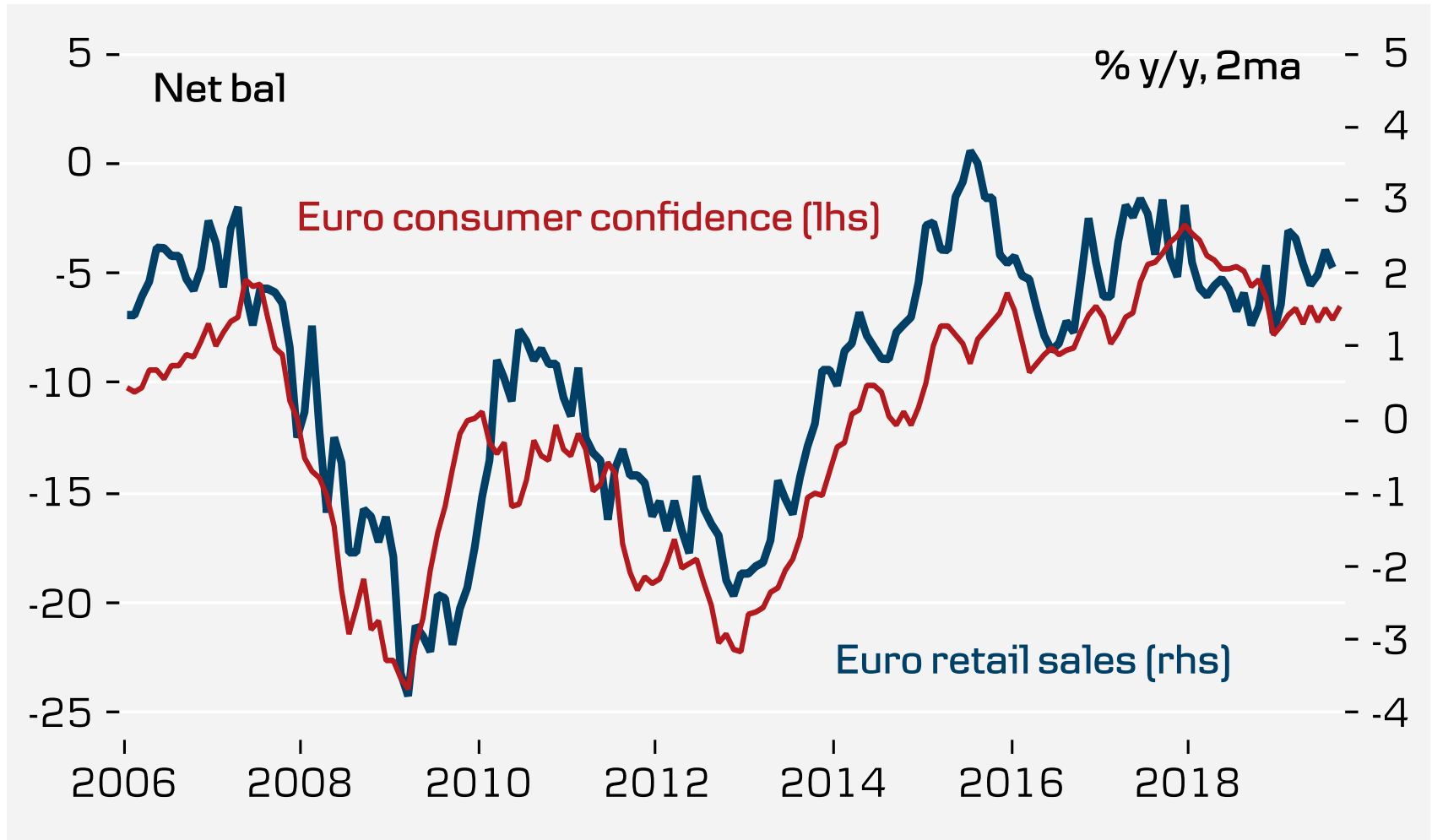
Source: Macrobond Financial, Eurostat

Investment level



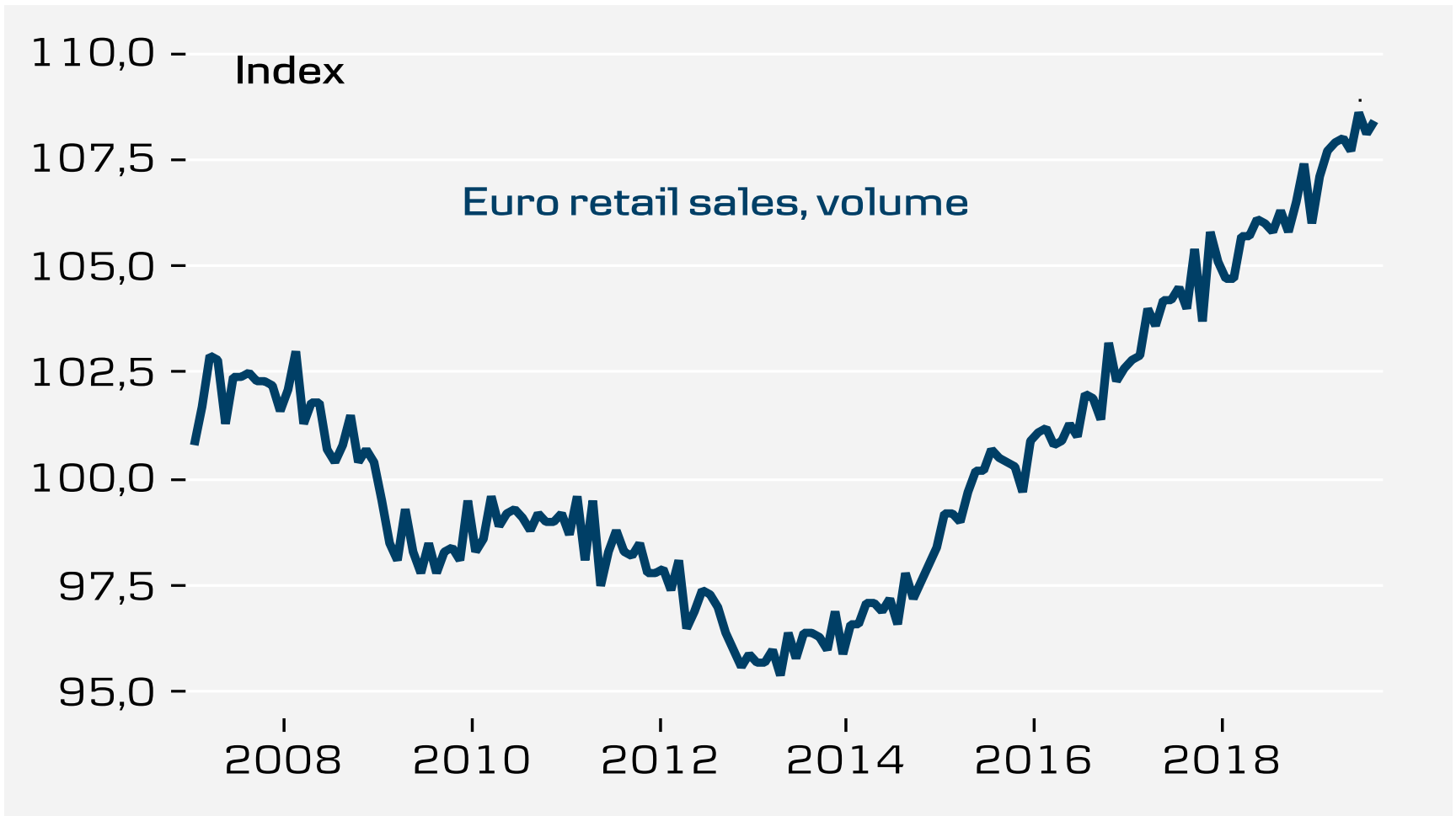
Source: Macrobond Financial, Eurostat

Retail sales and consumer confidence



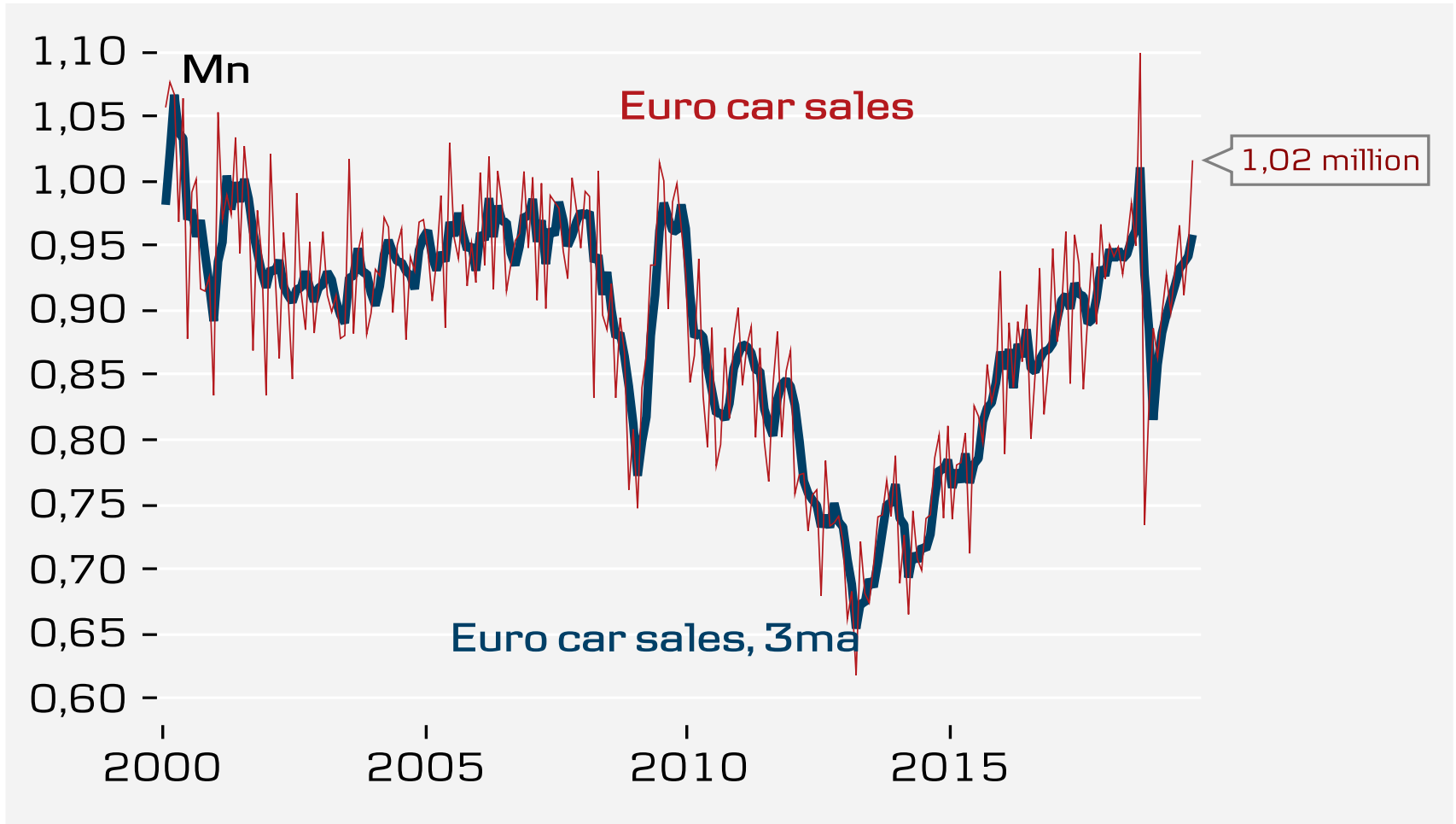
Source: Macrobond Financial, EU Commission, Eurostat

Retail sales - level



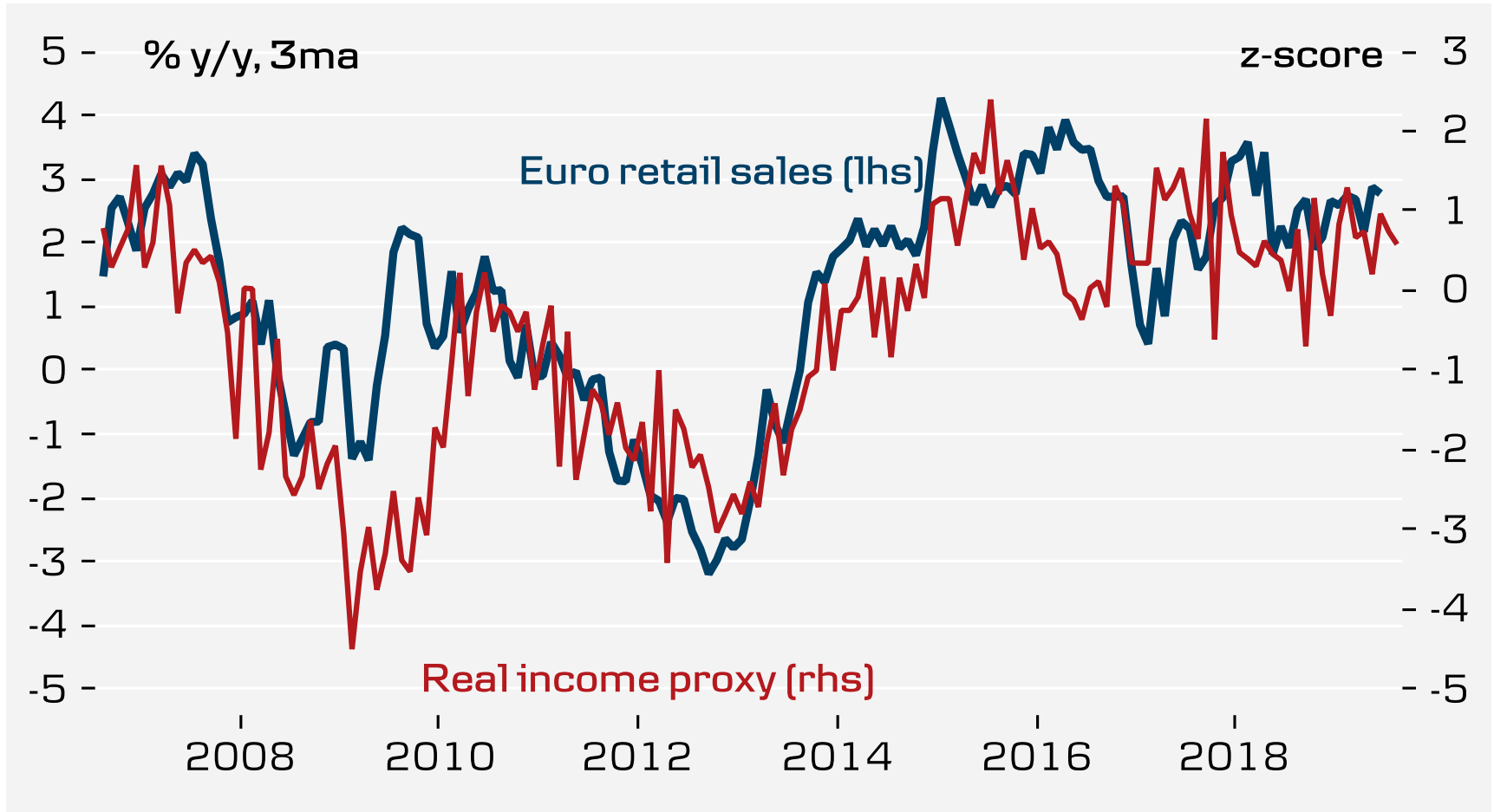
Source: Macrobond Finacial, Eurostat

Car sales



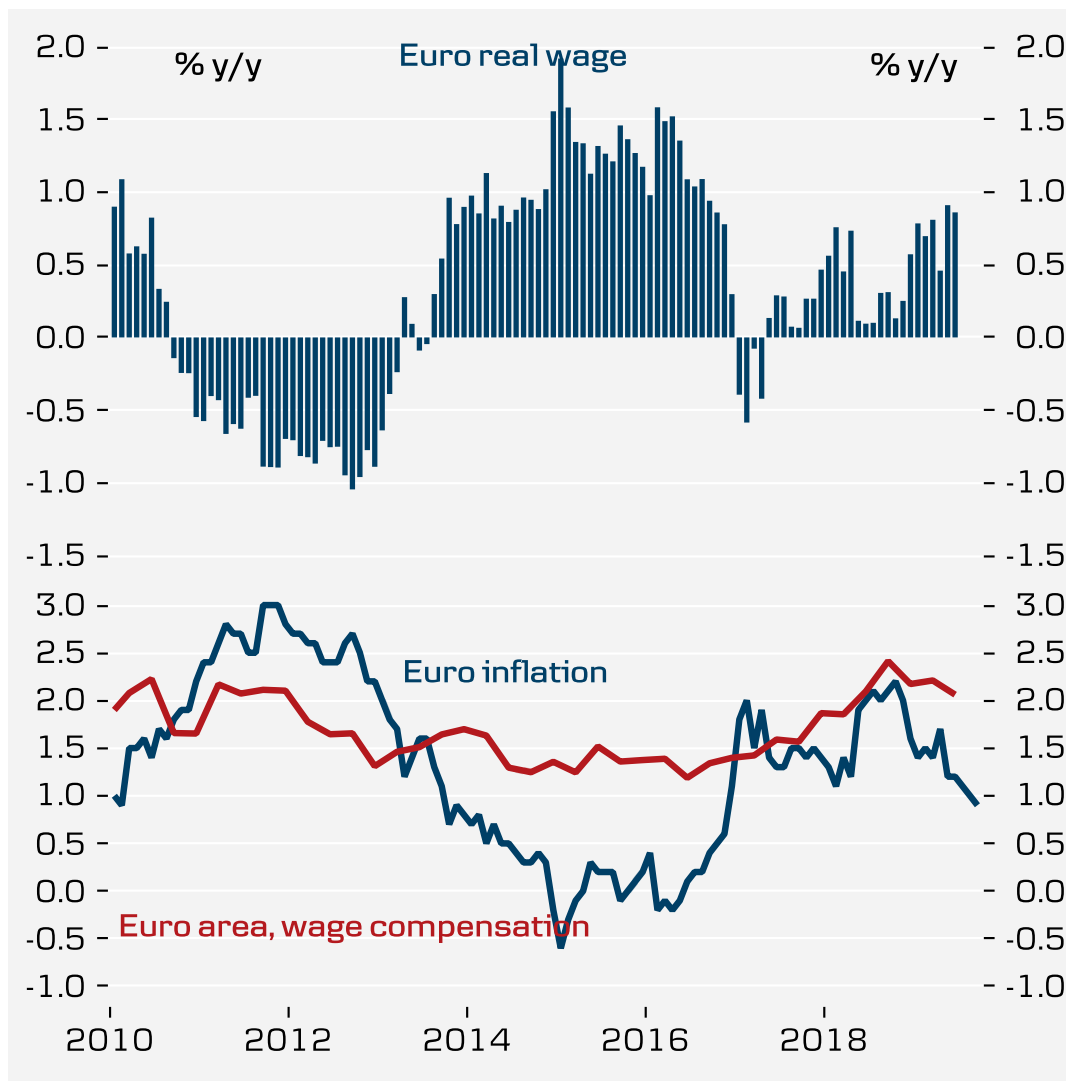
Source: Macrobond Financial, ACEA

Real income



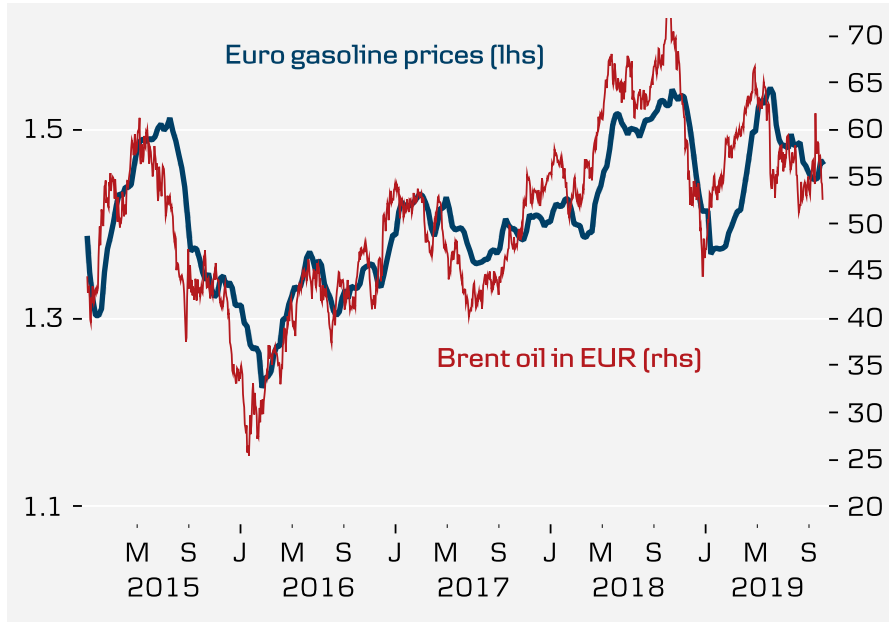
Source: Macrobond Financial, Danske Bank, Eurostat

Real wage growth

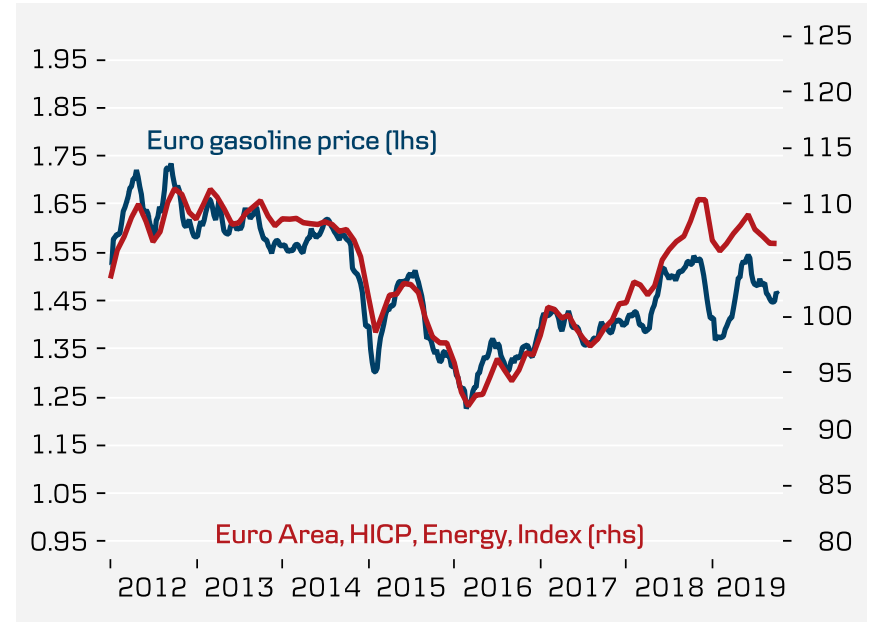


Source: Macrobond Financial, Eurostat, ECB

Euro gasoline prices



Source: Macrobond Financial, ICE, European Commission, Eurostat



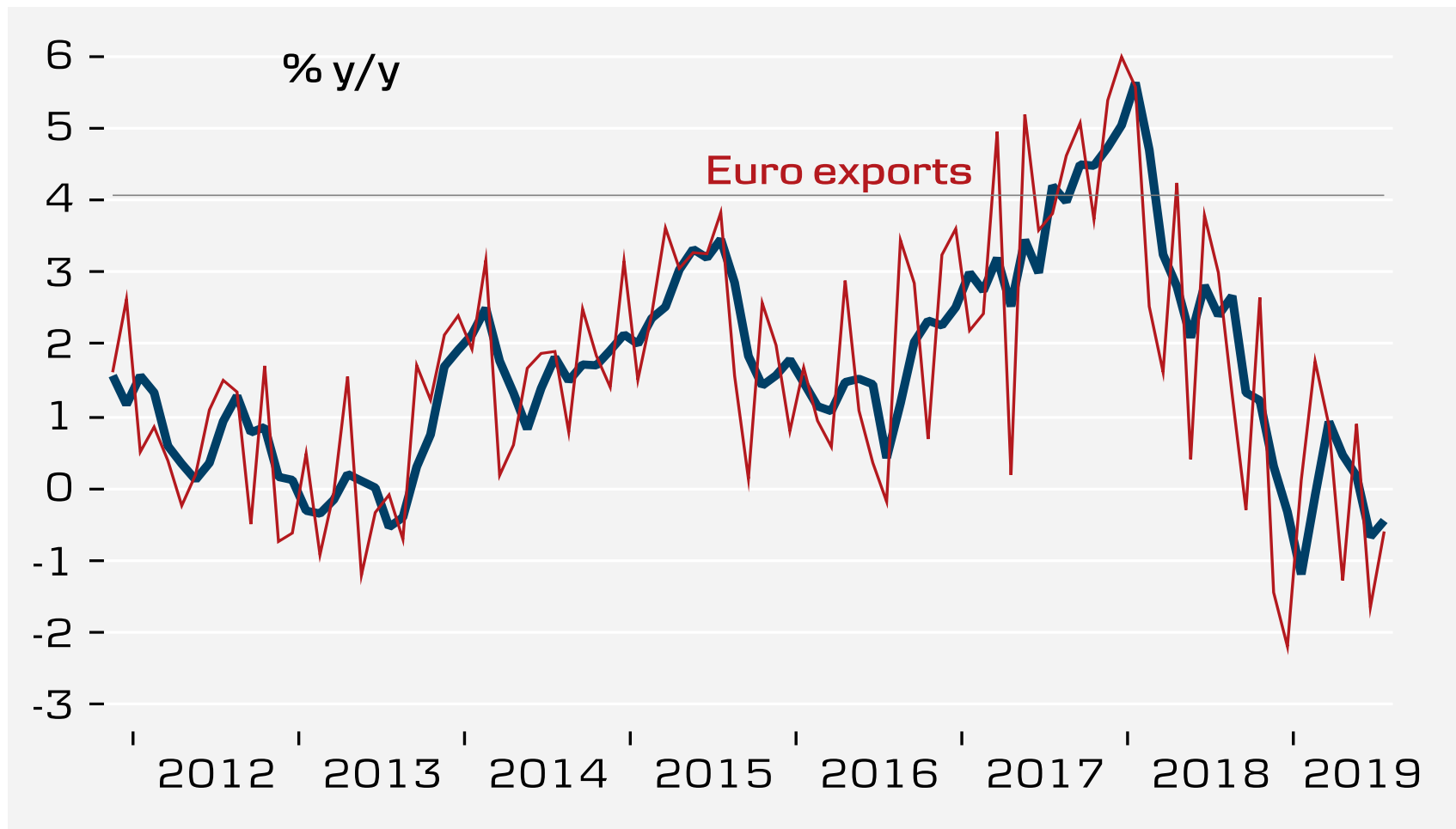
Source: Macrobond Financial, ICE, European Commission, Eurostat

Exports - PMI



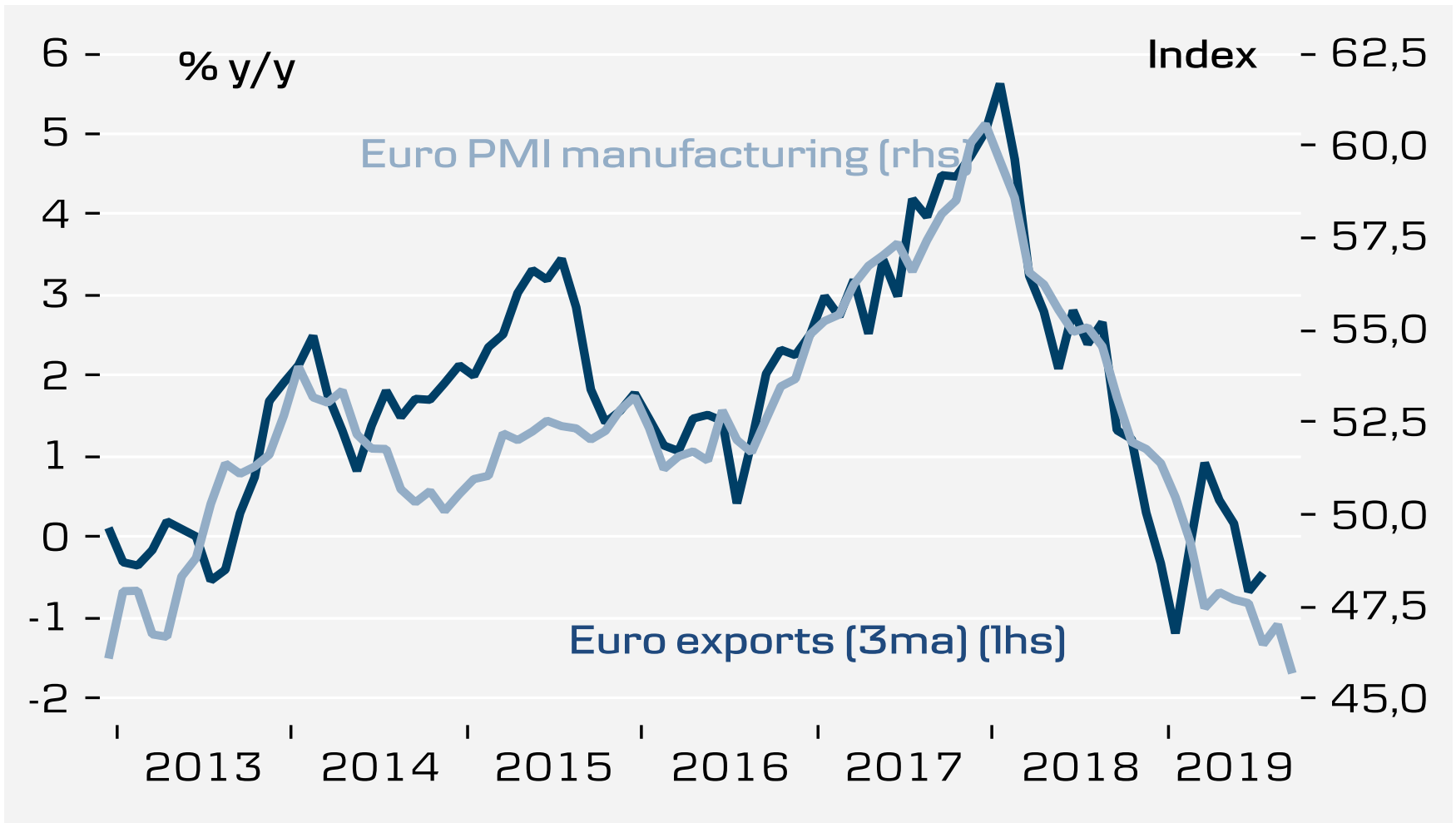
Source: Macrobond Financial, Markit, Eurostat

Exports - growth



Source: Macrobond Financial, Eurostat

Exports - growth and PMI



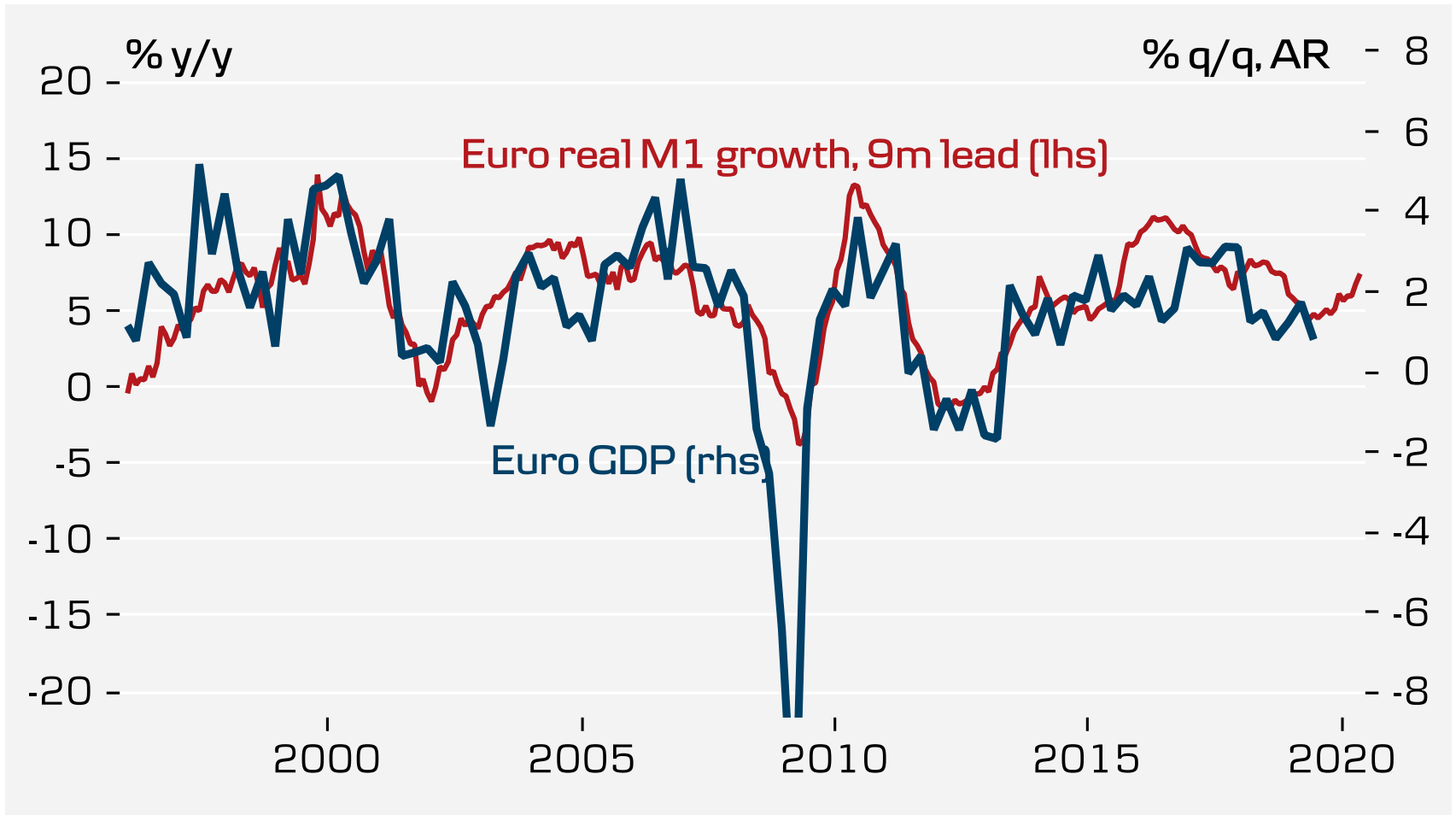
Source: Macrobond Financial, Markit, Eurostat

Exports - exchange rate impulse



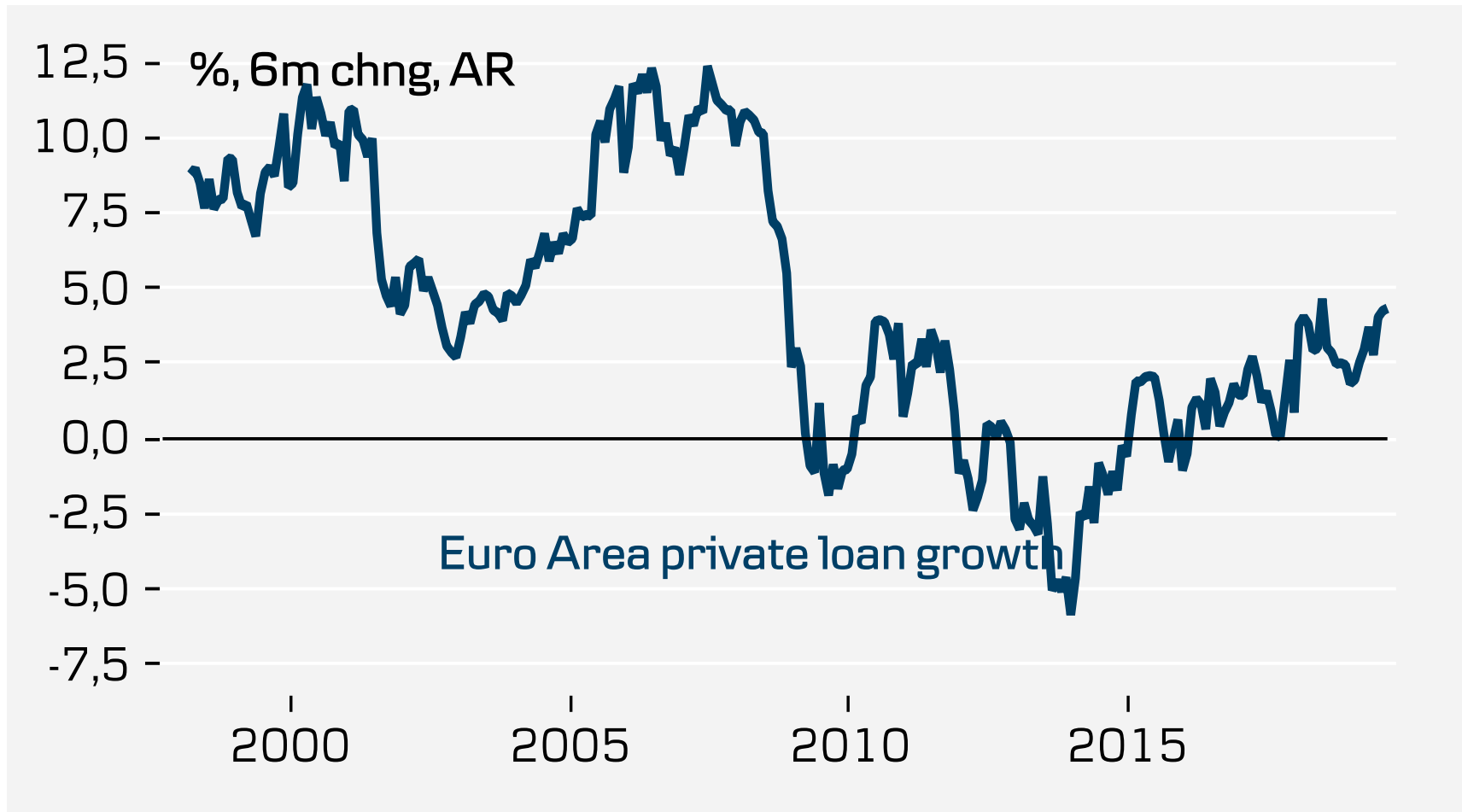
Source: Macrobond Financial, Bank of England

Money and GDP



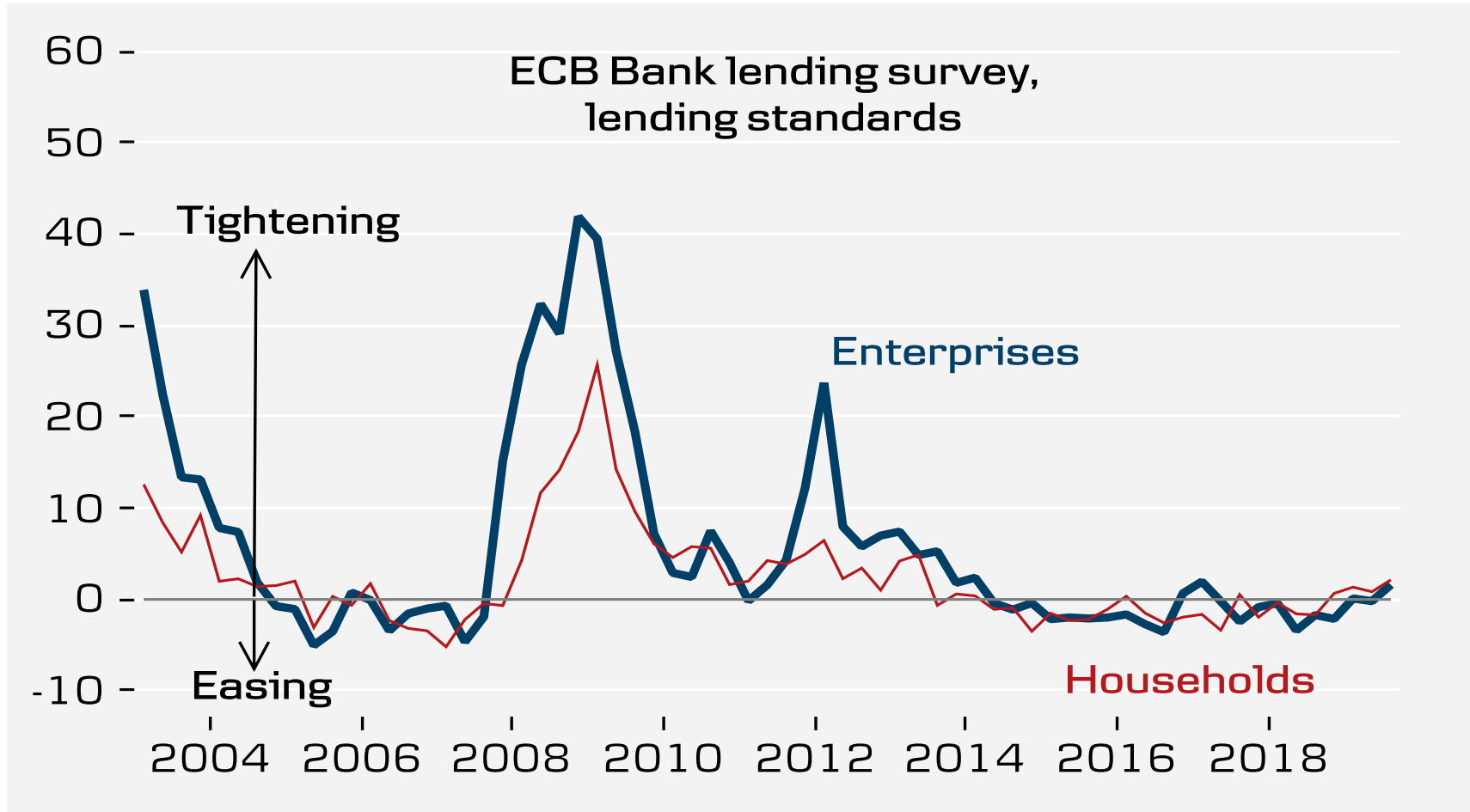
Source: Macrobond Financial, ECB, Eurostat

Credit – loan growth



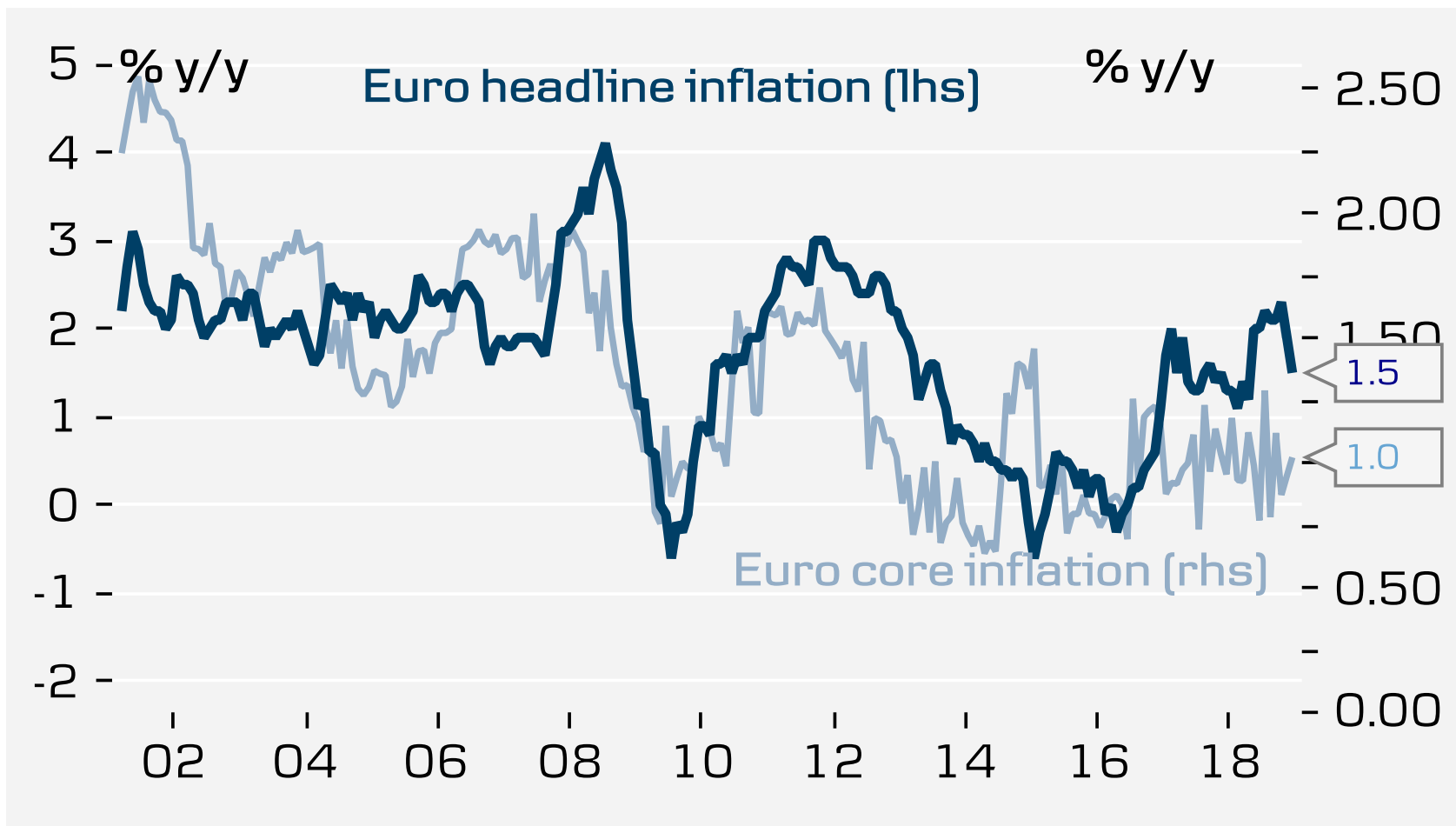
Source: Macrobond Financial, ECB

Credit - lending standards



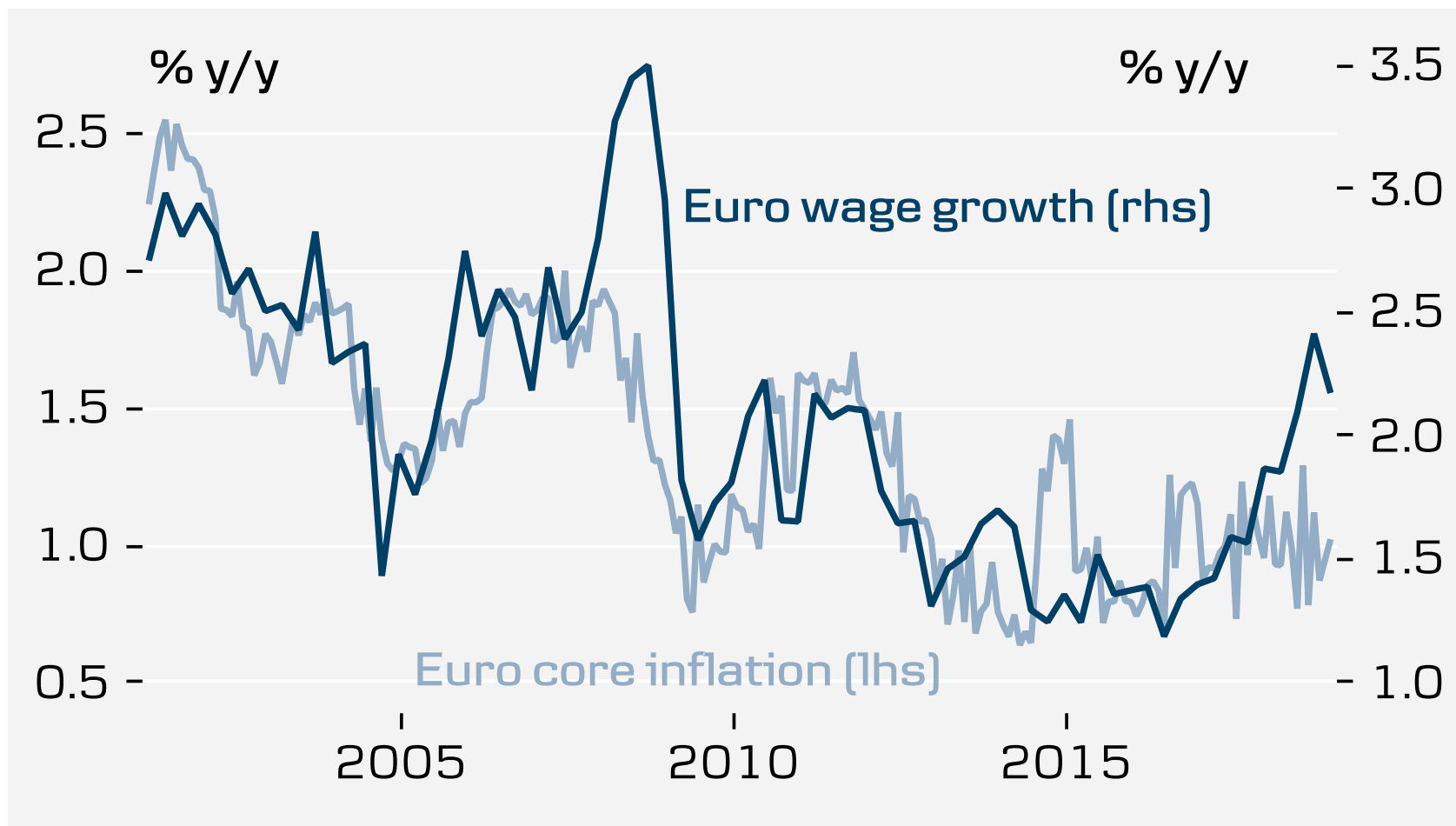
Source: Macrobond Financial, ECB

Inflation - core vs headline



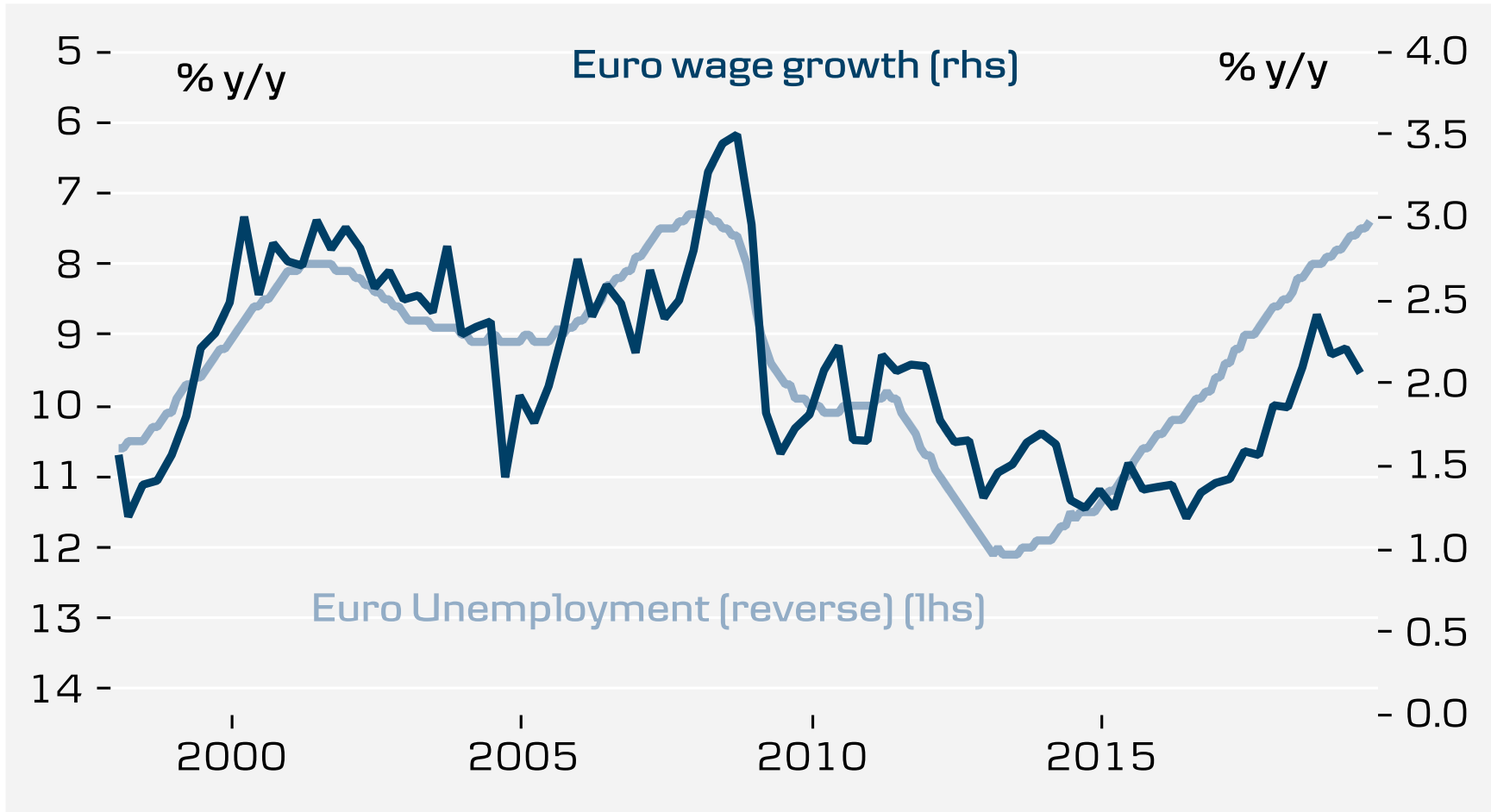
Source: Macrobond Financial, Eurostat

Inflation – core vs. wage inflation



Source: Macrobond Financial, ECB, Eurostat

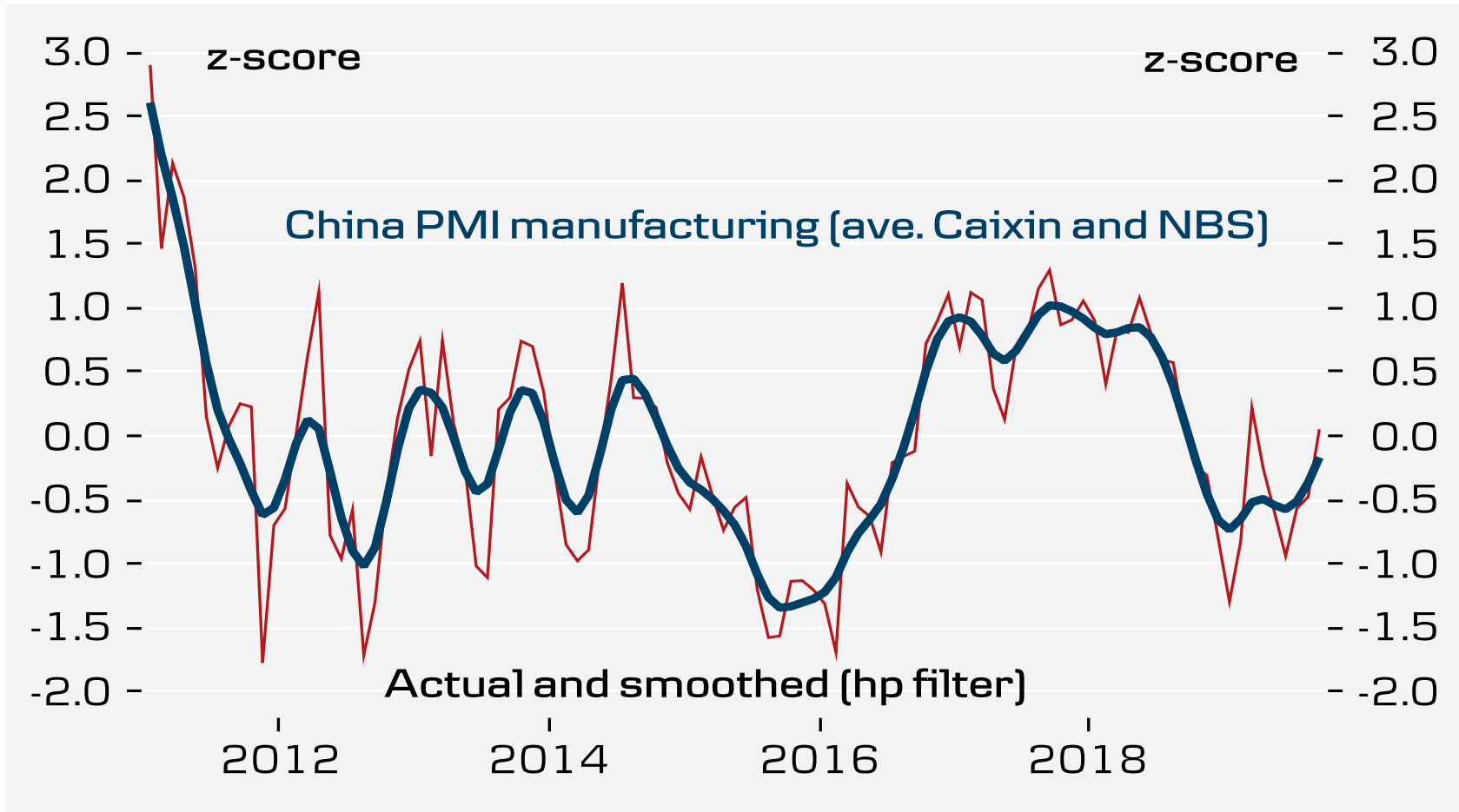
Inflation - wage inflation vs unemployment



Source: Macrobond Financial, ECB

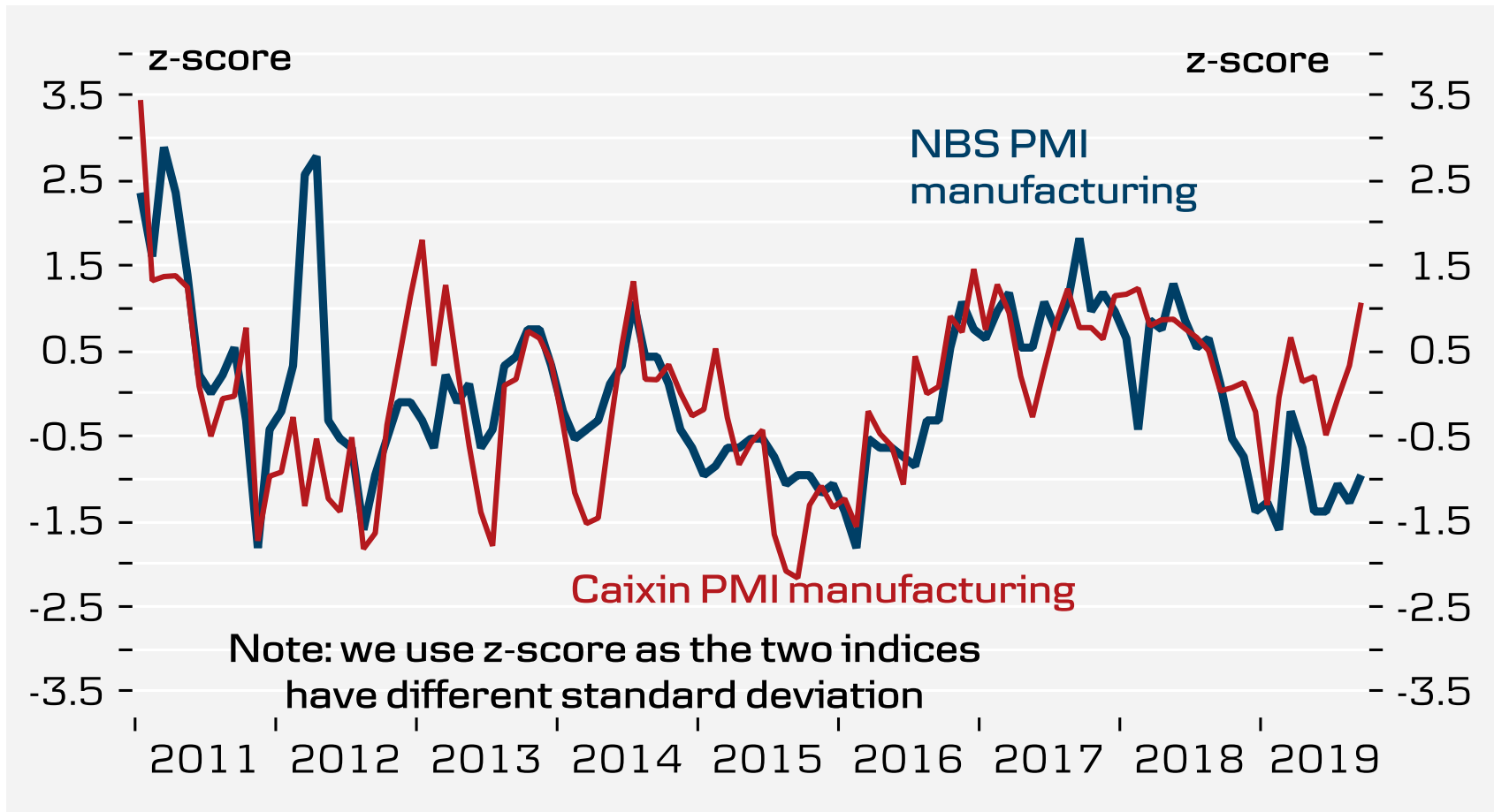
China

PMI indicator (average of Caixin and NBS)



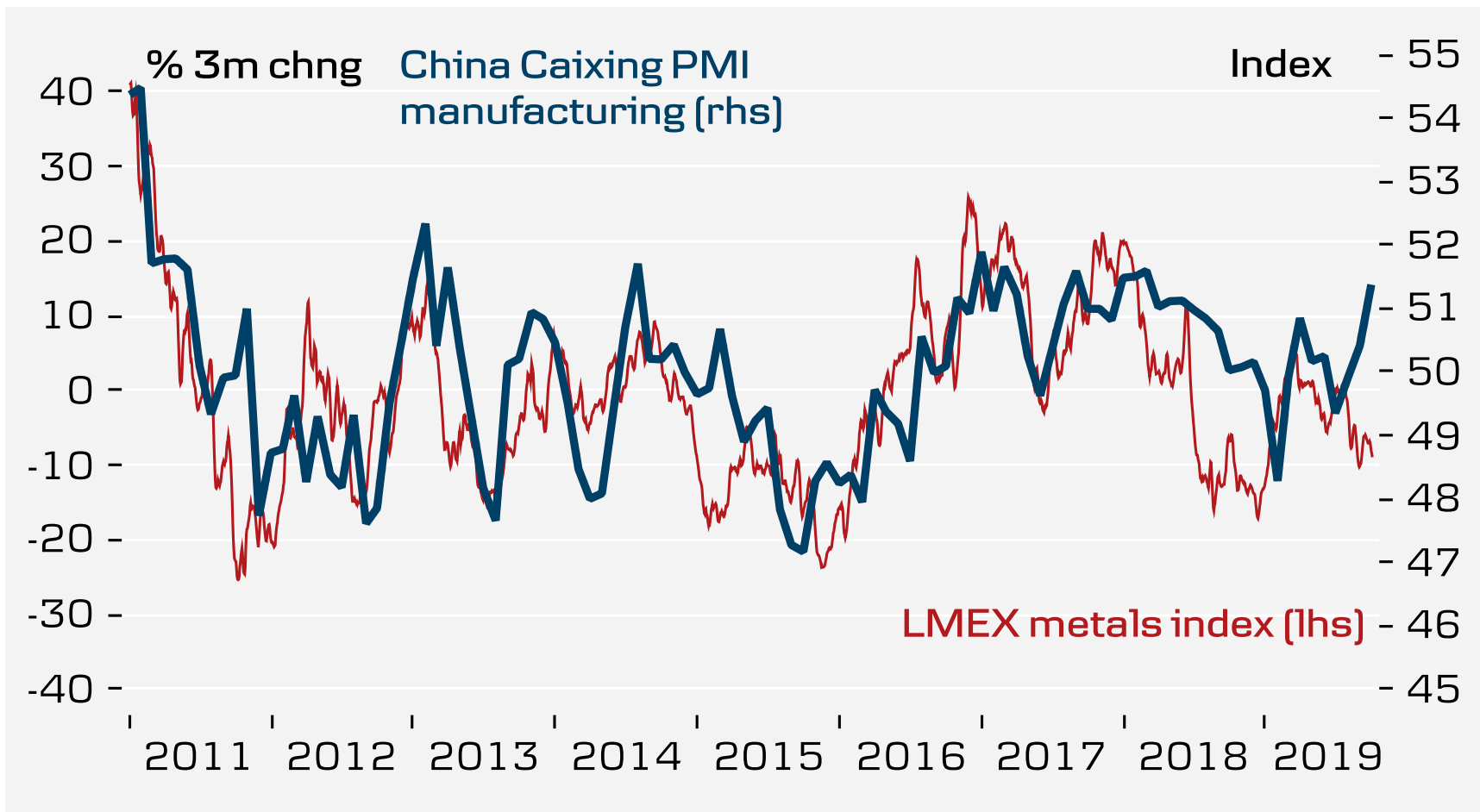
Source: Macrobond Financial, Markit, NBS, Danske Bank

NBS vs Caixin PMI



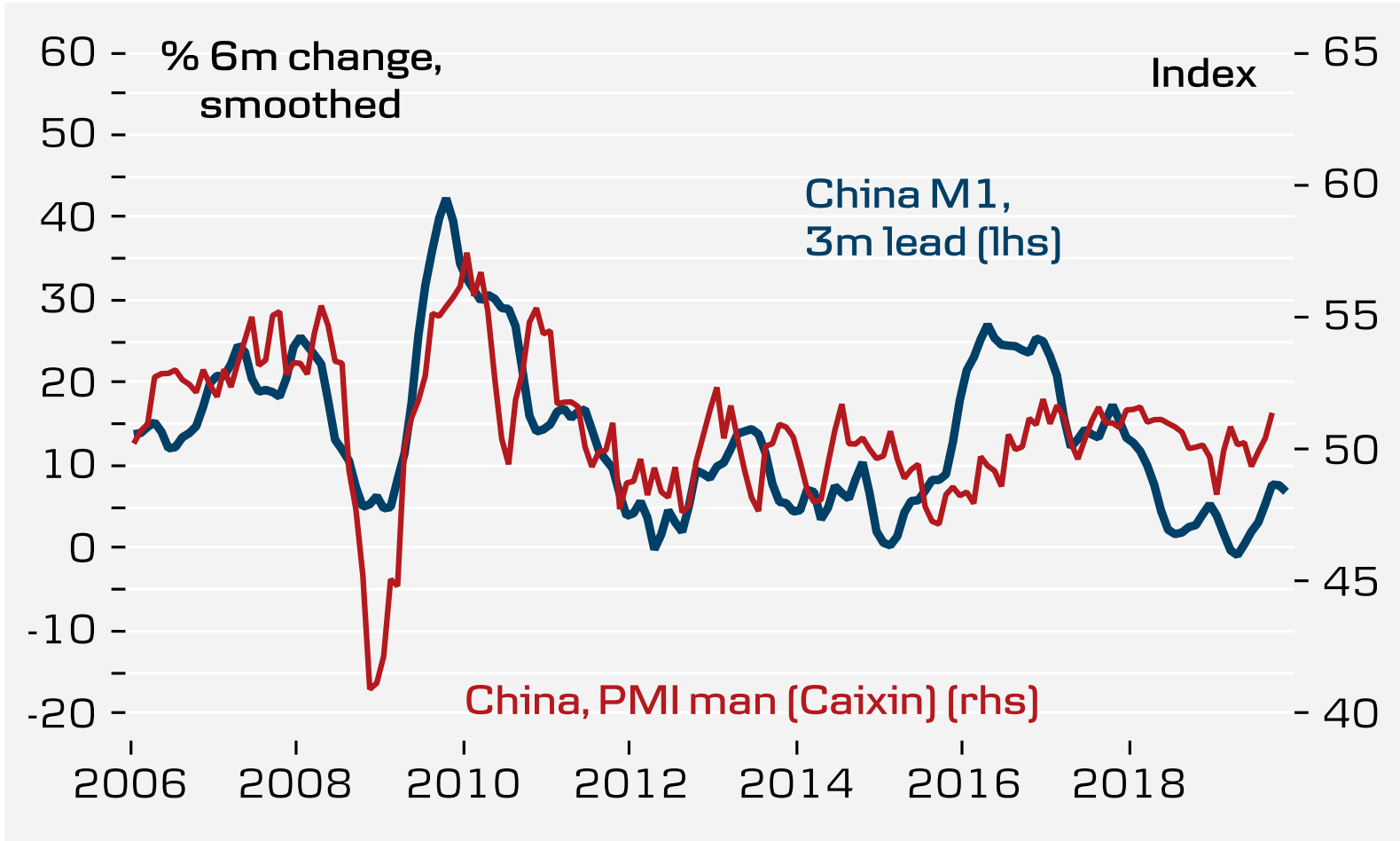
Source: Macrobond Financial, Markit, NBS, Danske Bank

Metal prices vs PMI



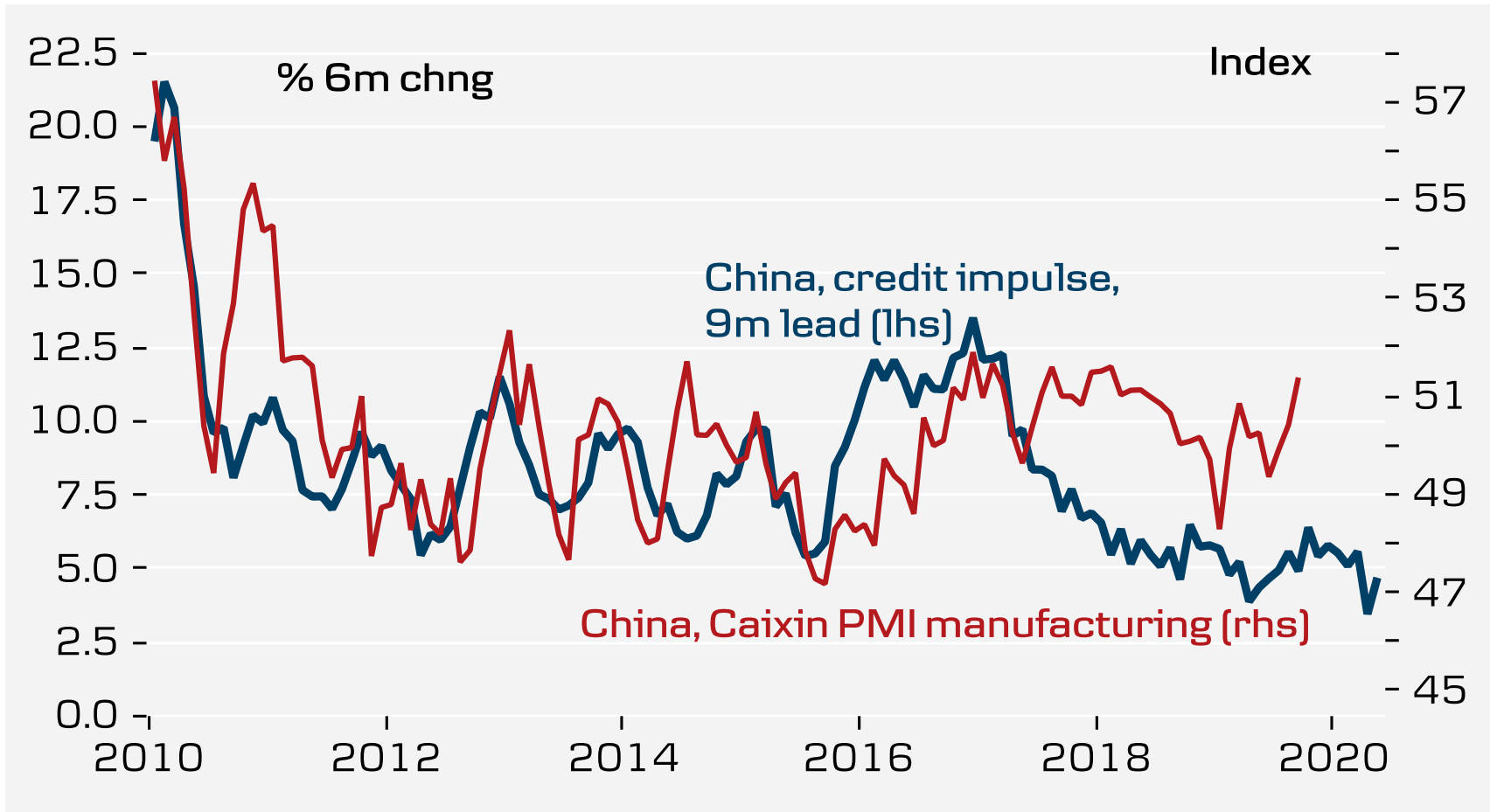
Source: Macrobond Financial, Markit, LME, Danske Bank

Money growth and PMI



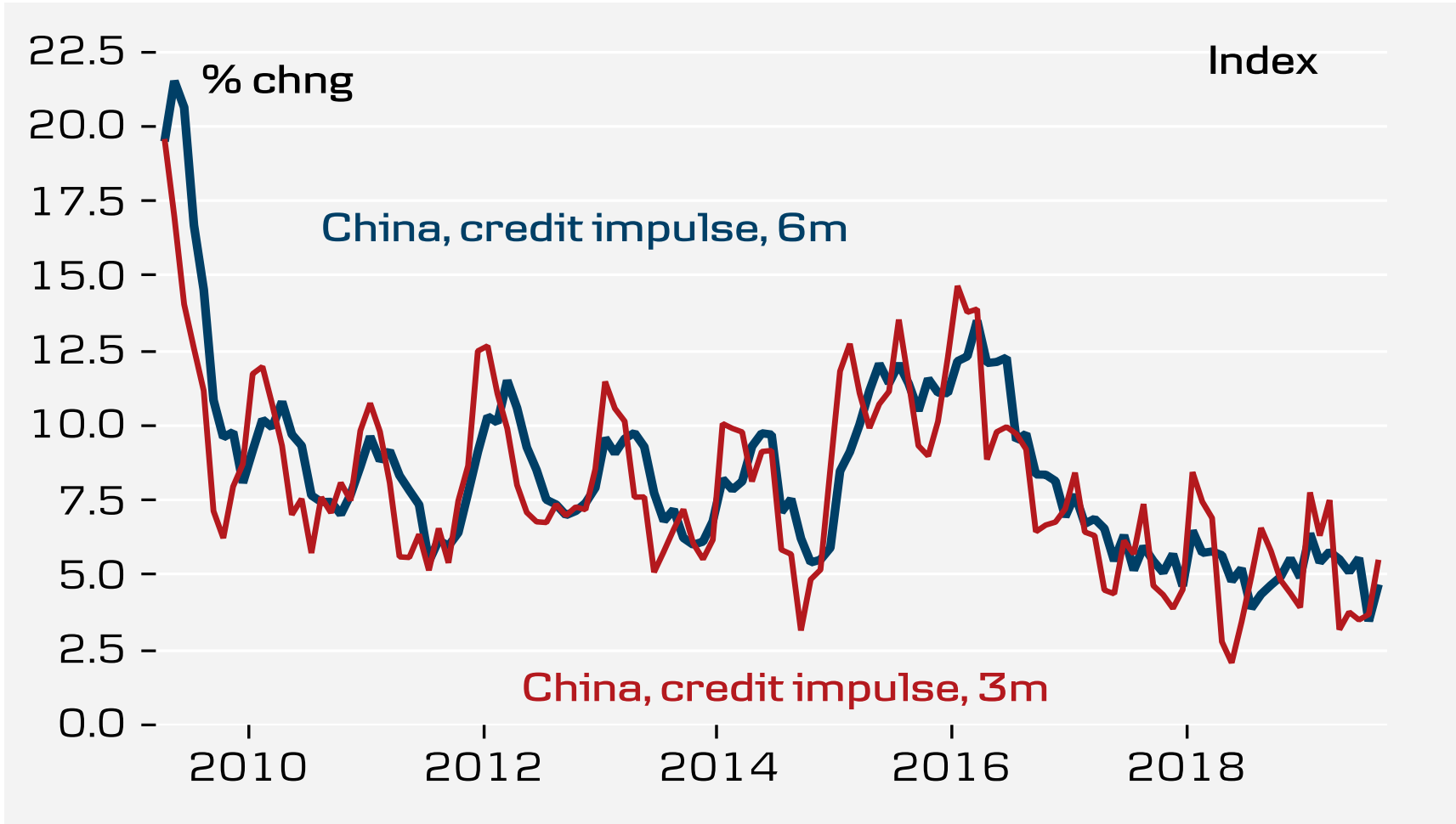
Source: Macrobond Financial, Markit, People's Bank of China

Credit impulse and PMI



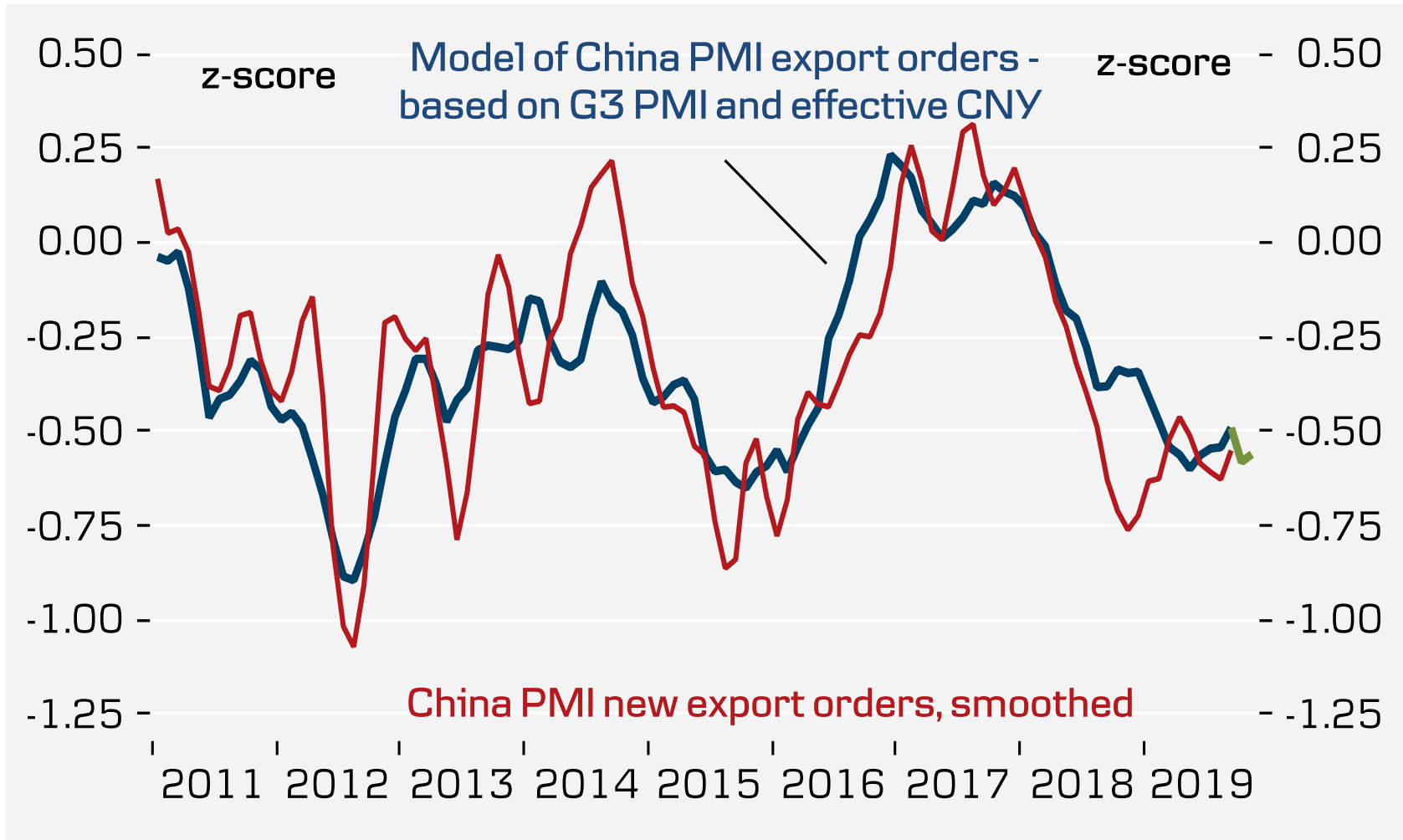
Source: Bloomberg, People's Bank of China, Danske Bank

Credit impulse momentum



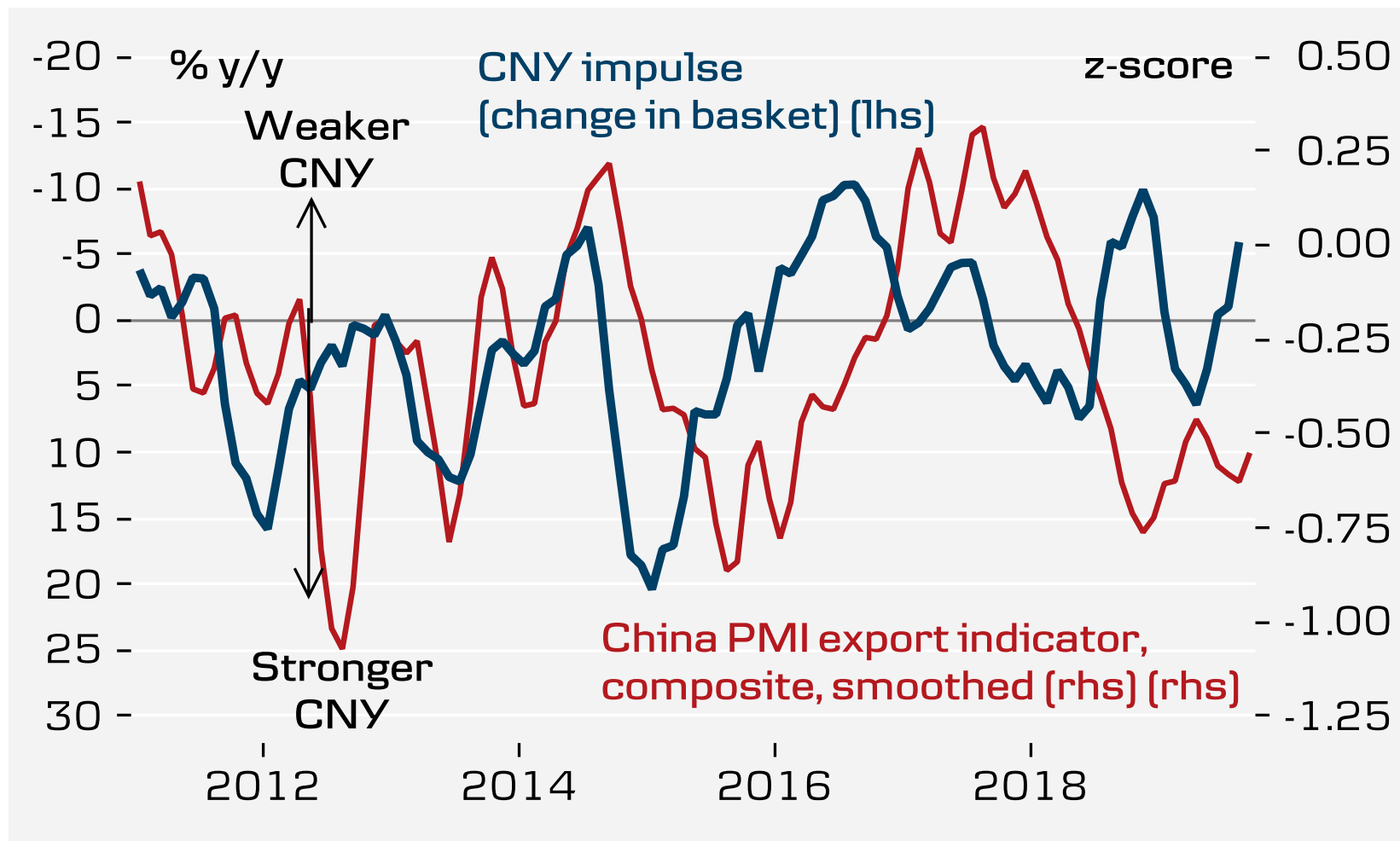
Source: Macrobond Financial, Markit, NBS, Danske Bank

Exports - model



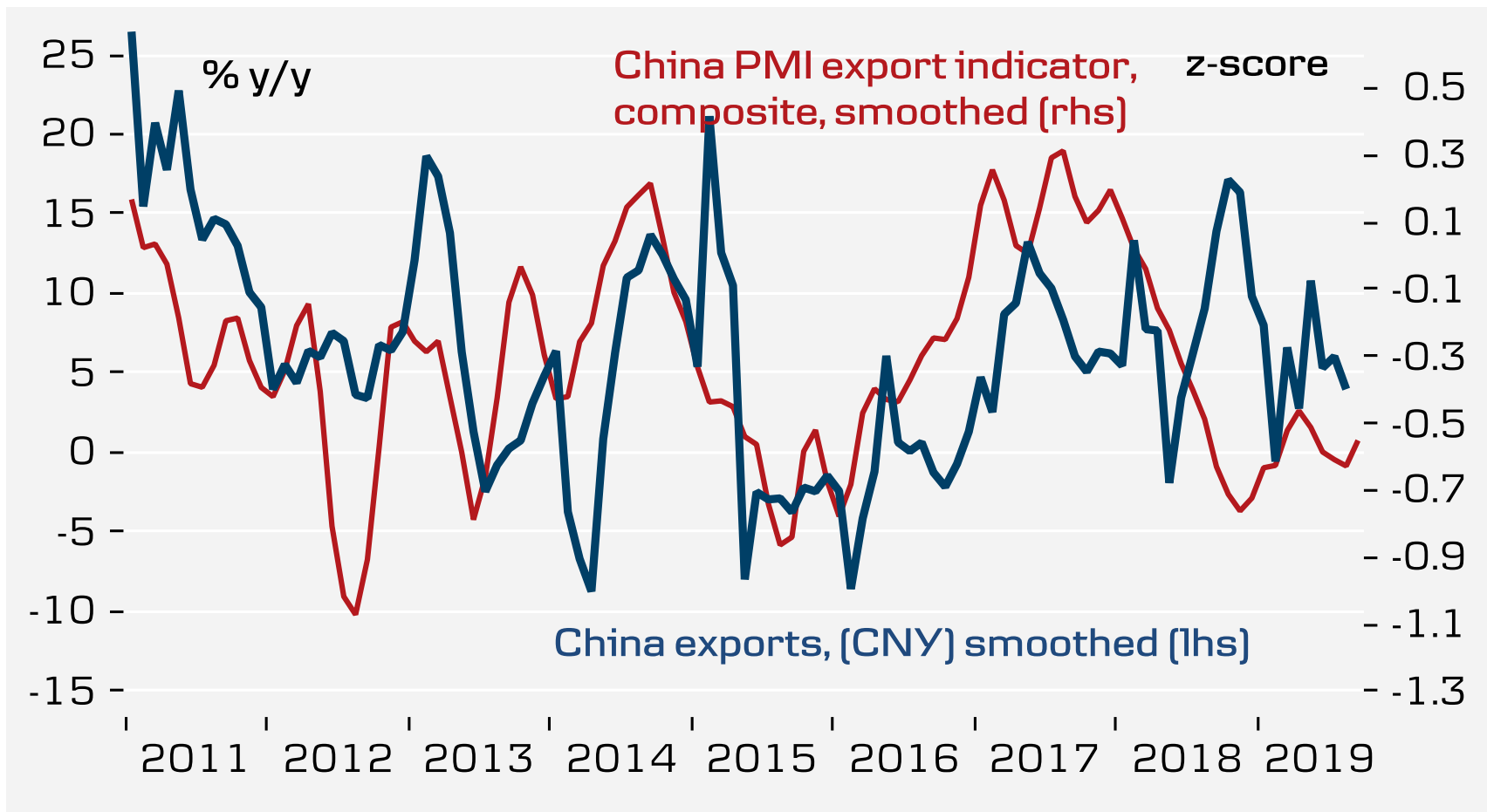
Source: Macrobond Financial, NBS, Markit, Danske Bank

Exports - currency impulse



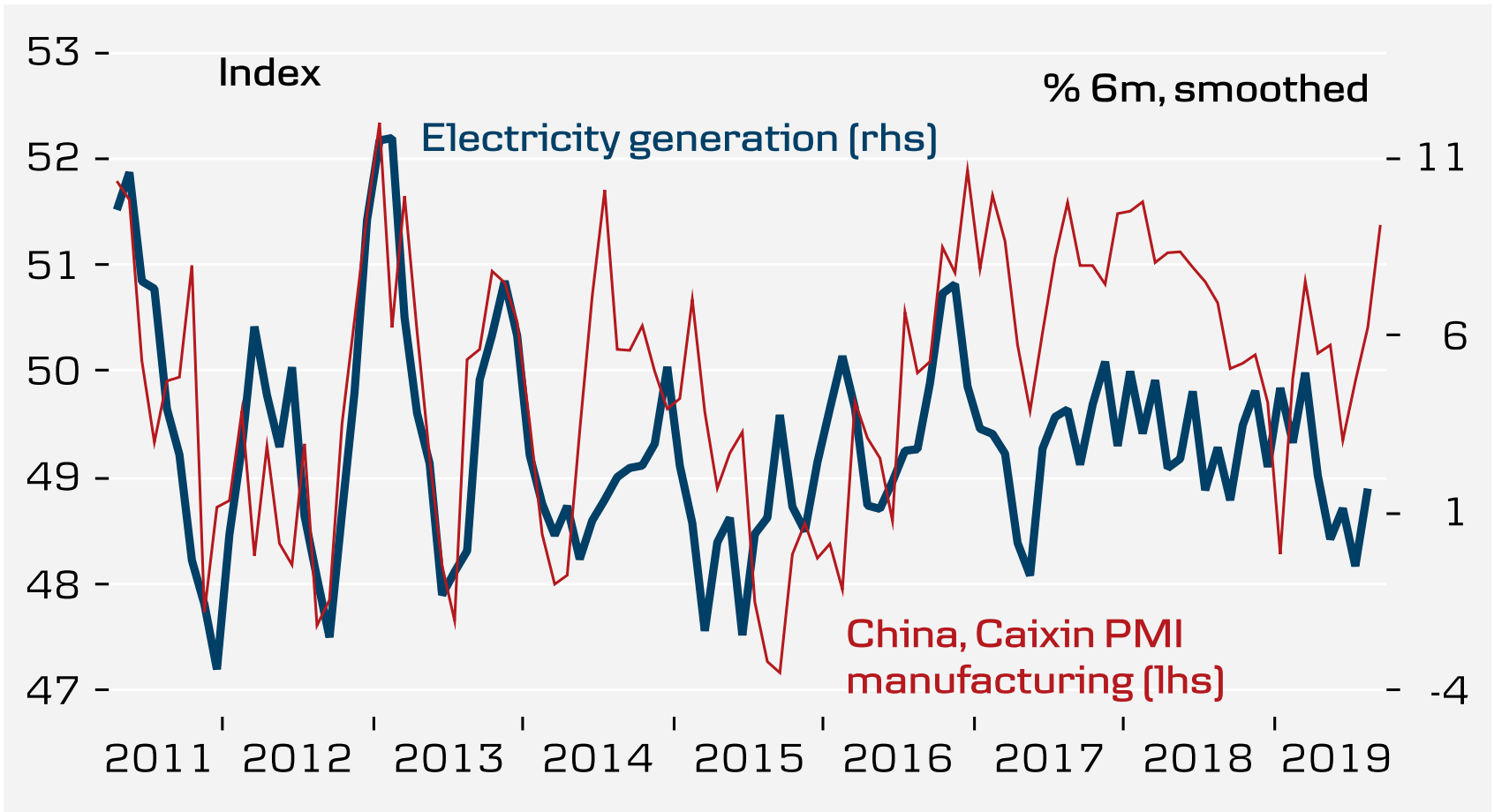
Source: Macrobond Financial, NBS, Markit, Danske Bank

Exports - hard data and PMI export orders



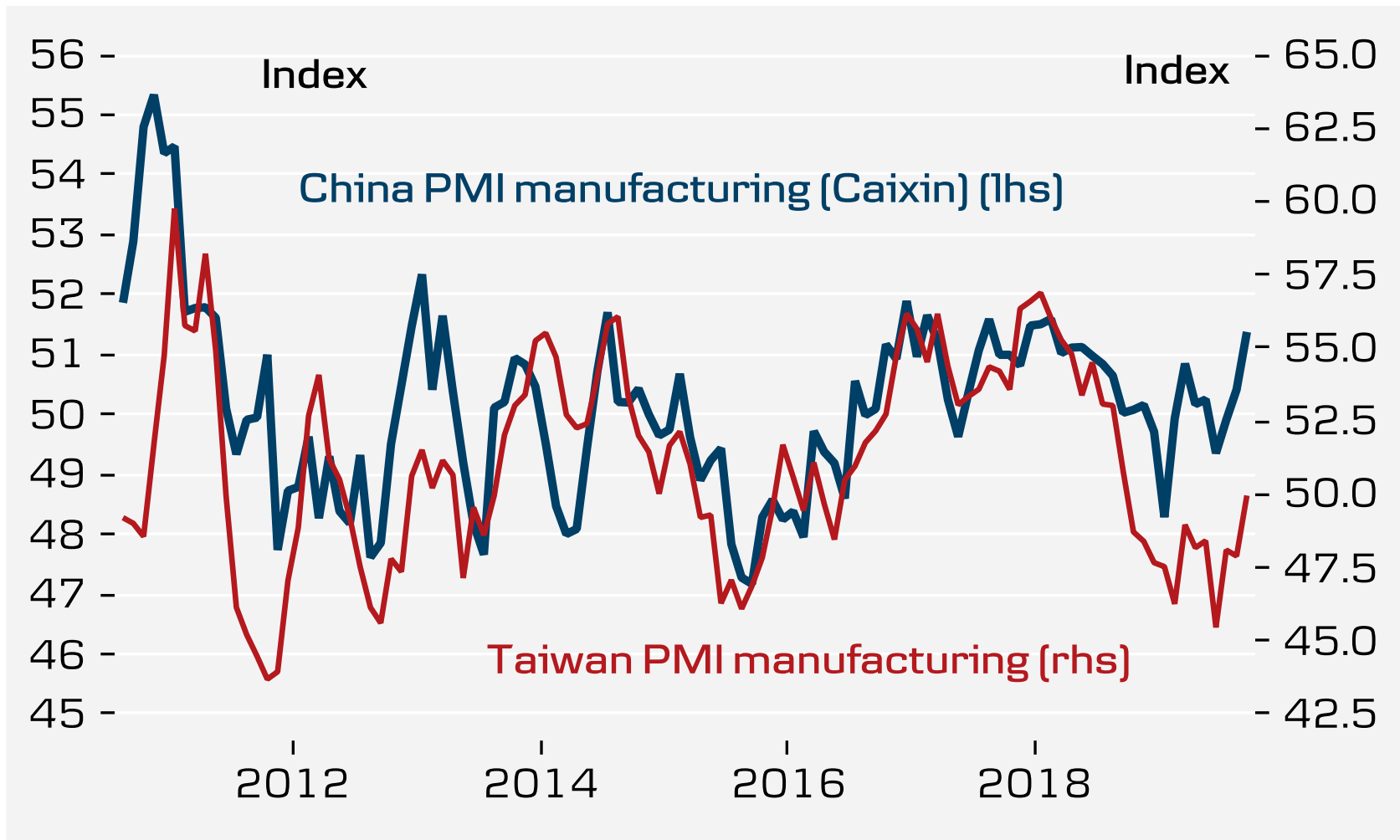
Source: Macrobond Financial, NBS, Markit, Danske Bank

Electricity generation vs PMI



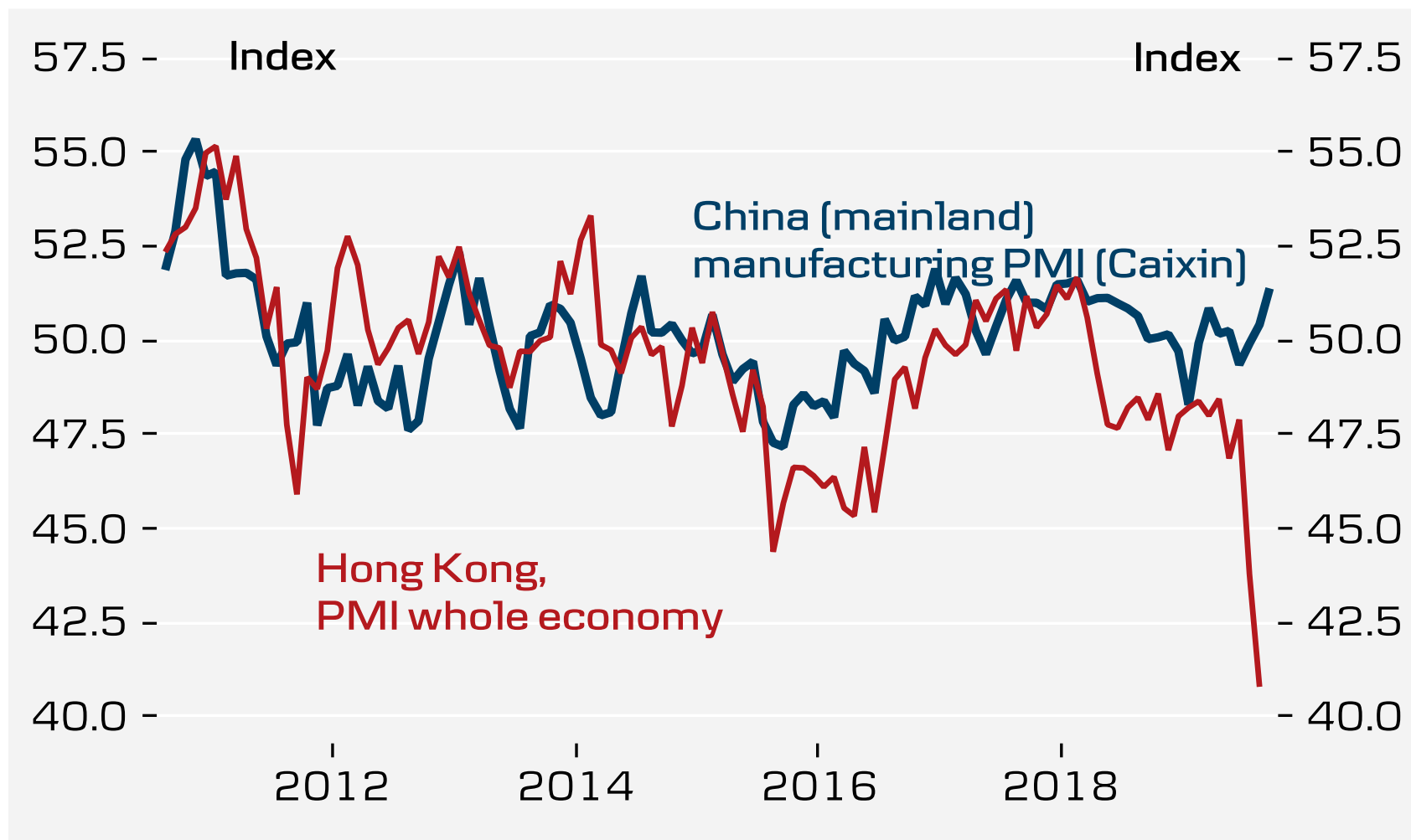
Source: Macrobond Financial, Markit, NBS, Danske Bank

Taiwan PMI vs China PMI



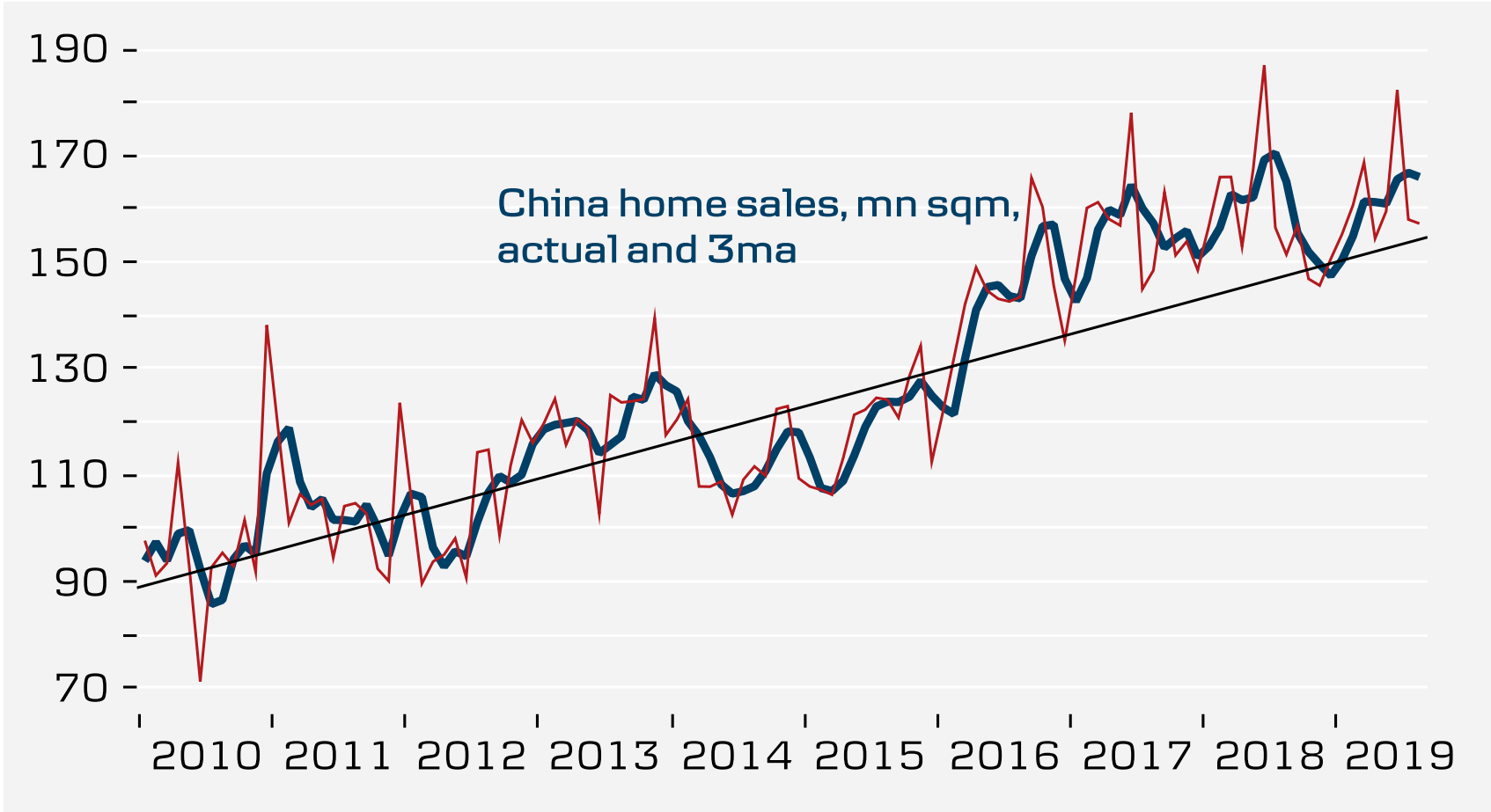
Source: Macrobond Financial, Markit, Danske Bank

Hong Kong PMI vs China PMI



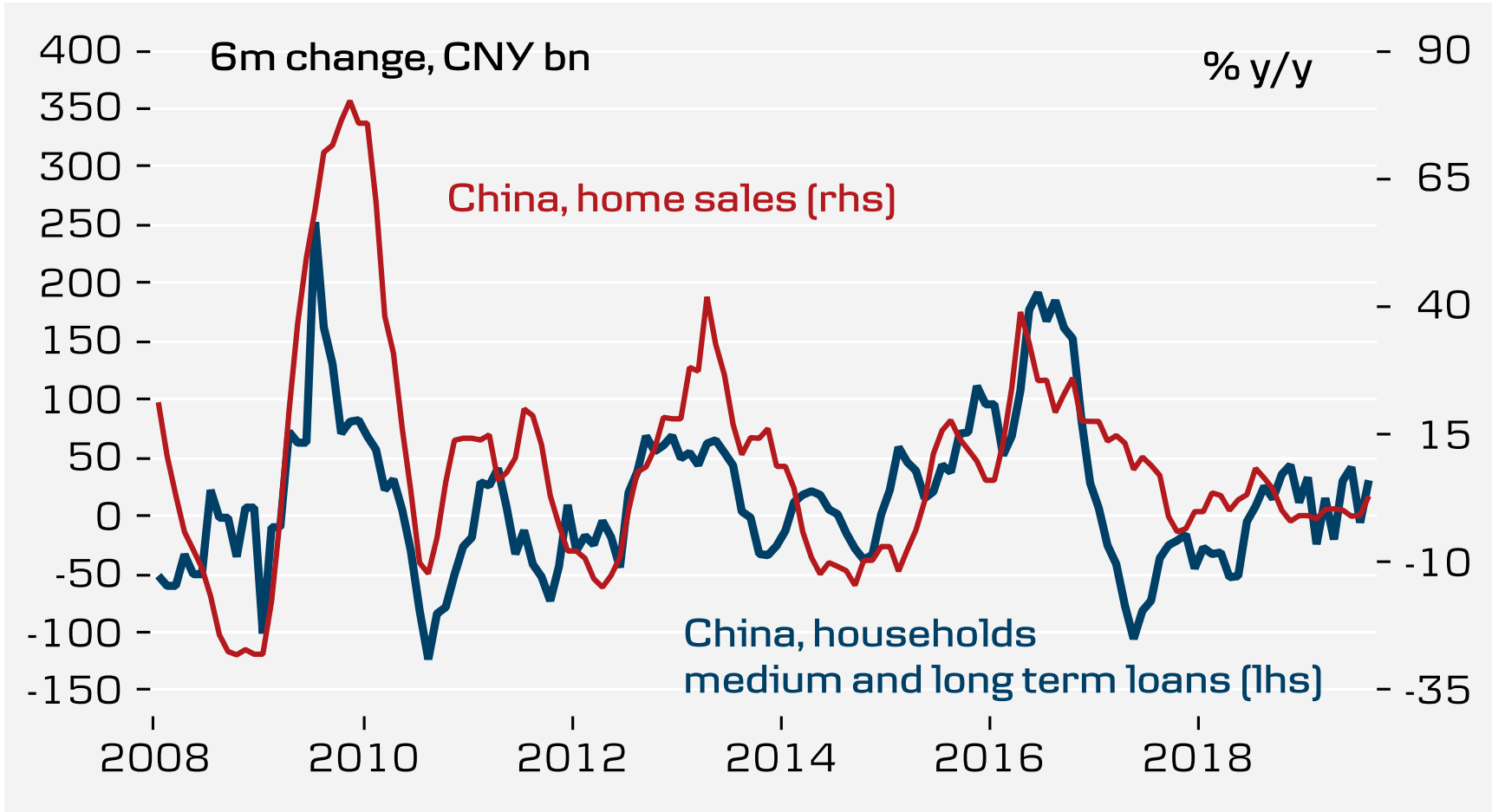
Source: Macrobond Financial, Markit, Danske Bank

Housing - home sales level



Source: Macrobond Financial, NBS, Danske Bank

Housing - home sales and household credit



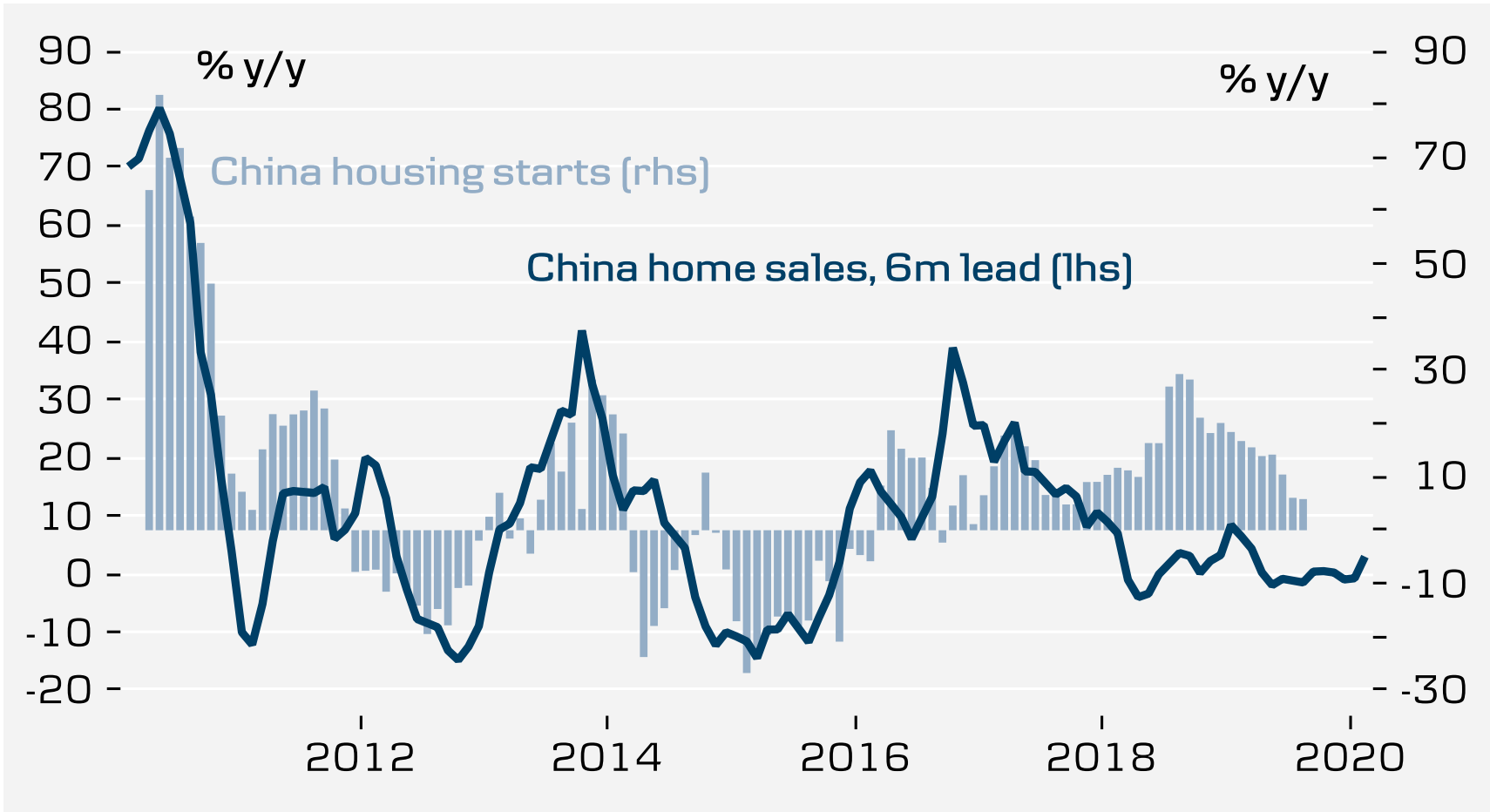
Source: Macrobond Financial, Markit, NBS, People's Bank of China, Danske Bank

Housing - yields vs home sales



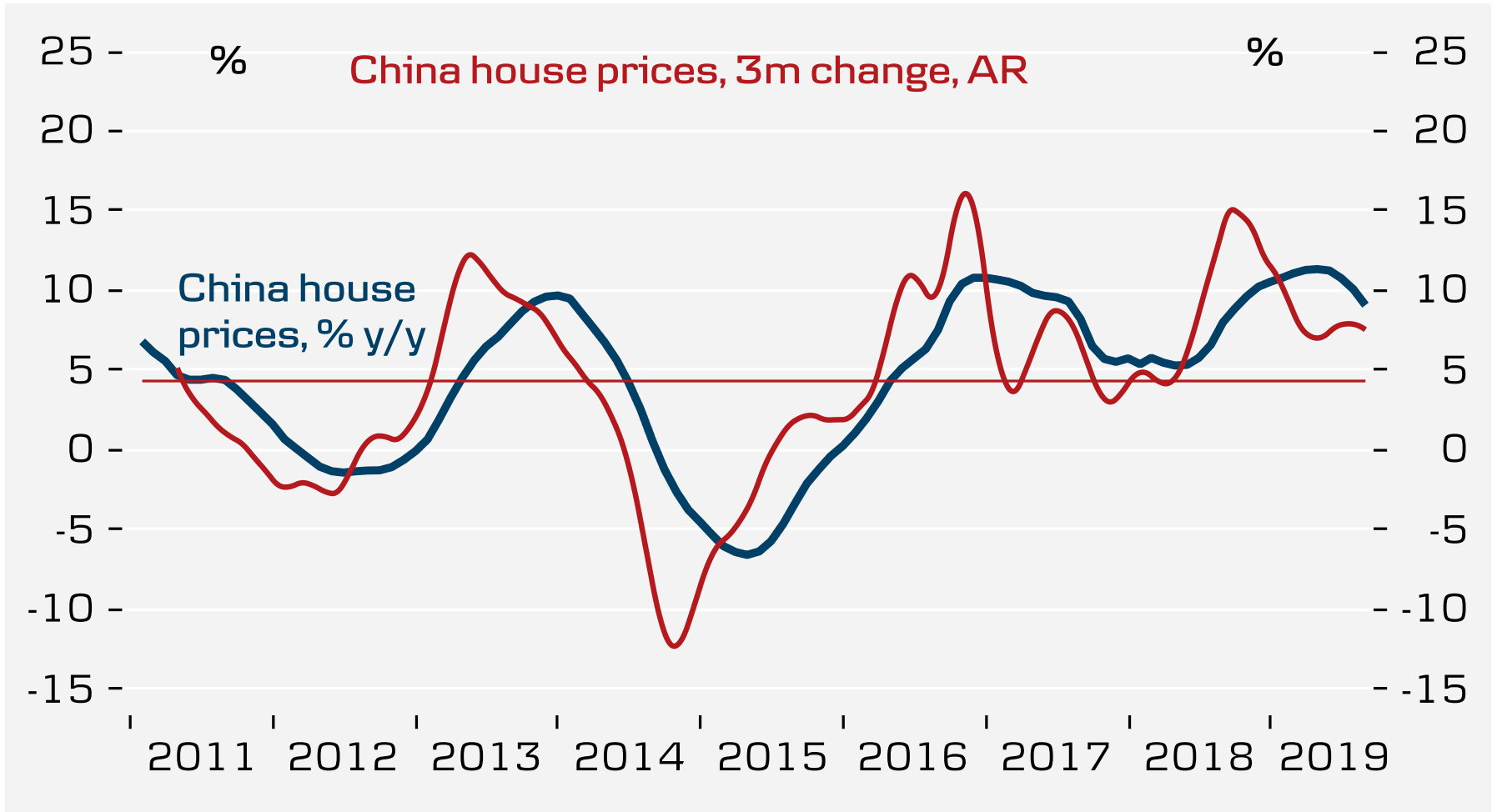
Source: Macrobond Financial, NBS, People's Bank of China, Danske Bank

Housing - home sales and housing starts



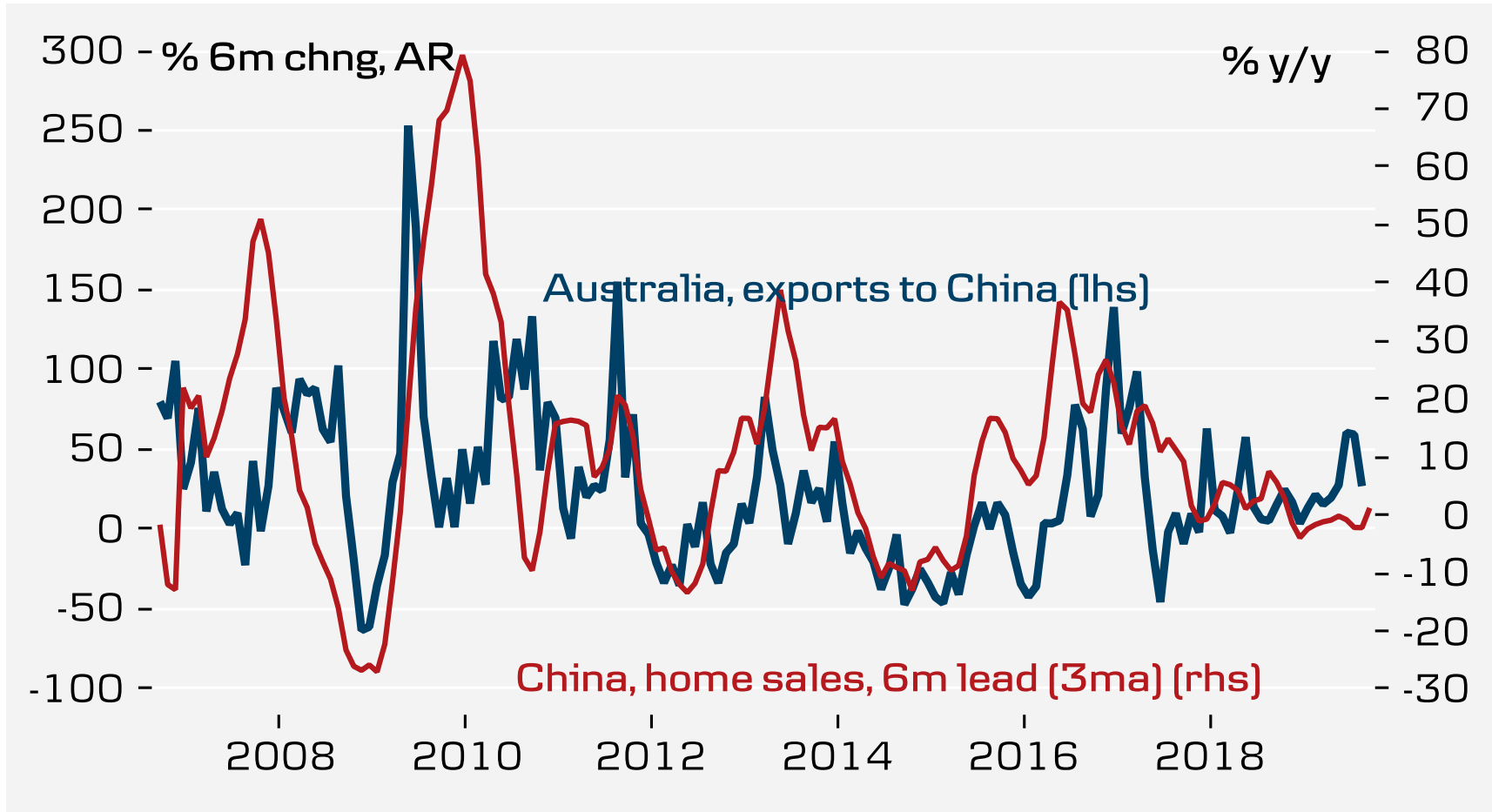
Source: Macrobond Financial, NBS, Danske Bank

Inflation - house prices



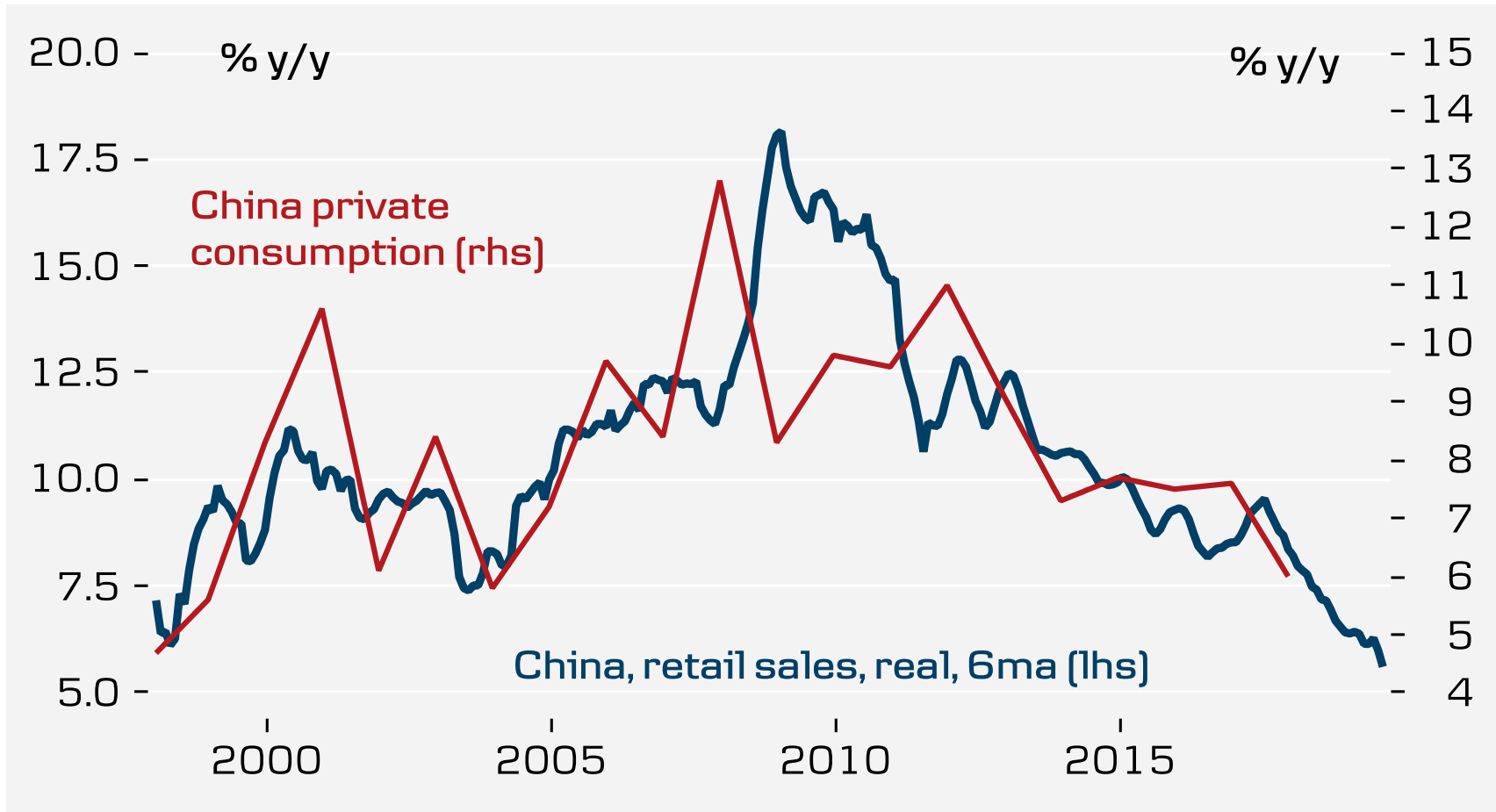
Source: 70-city house prices, Bloomberg

Housing - Australia exports to China vs home sales



Source: Macrobond Financial, NBS, Danske Bank

Consumer - retail sales



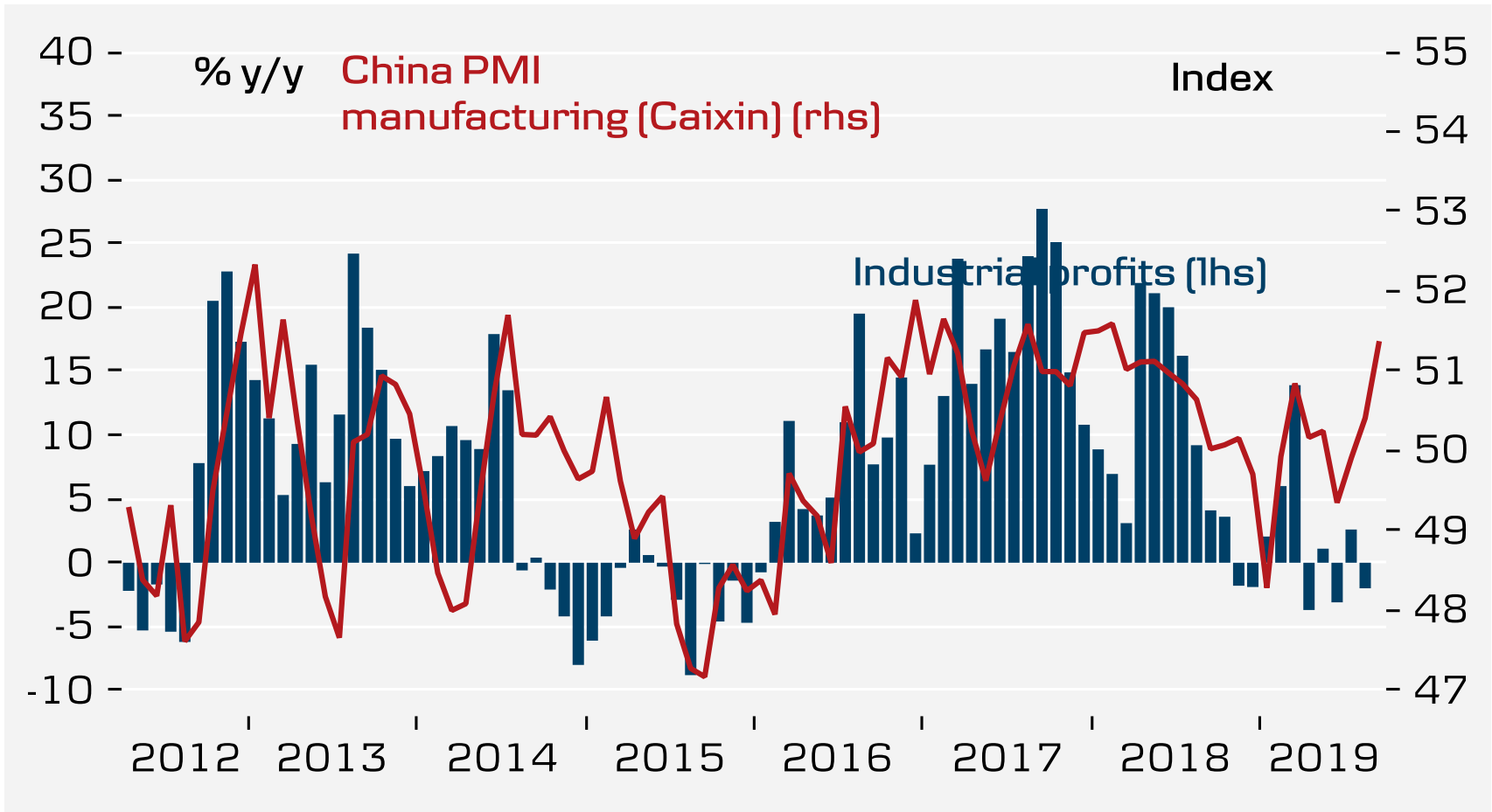
Source: Macrobond Financial, NBS, Danske Bank

Consumer – car sales



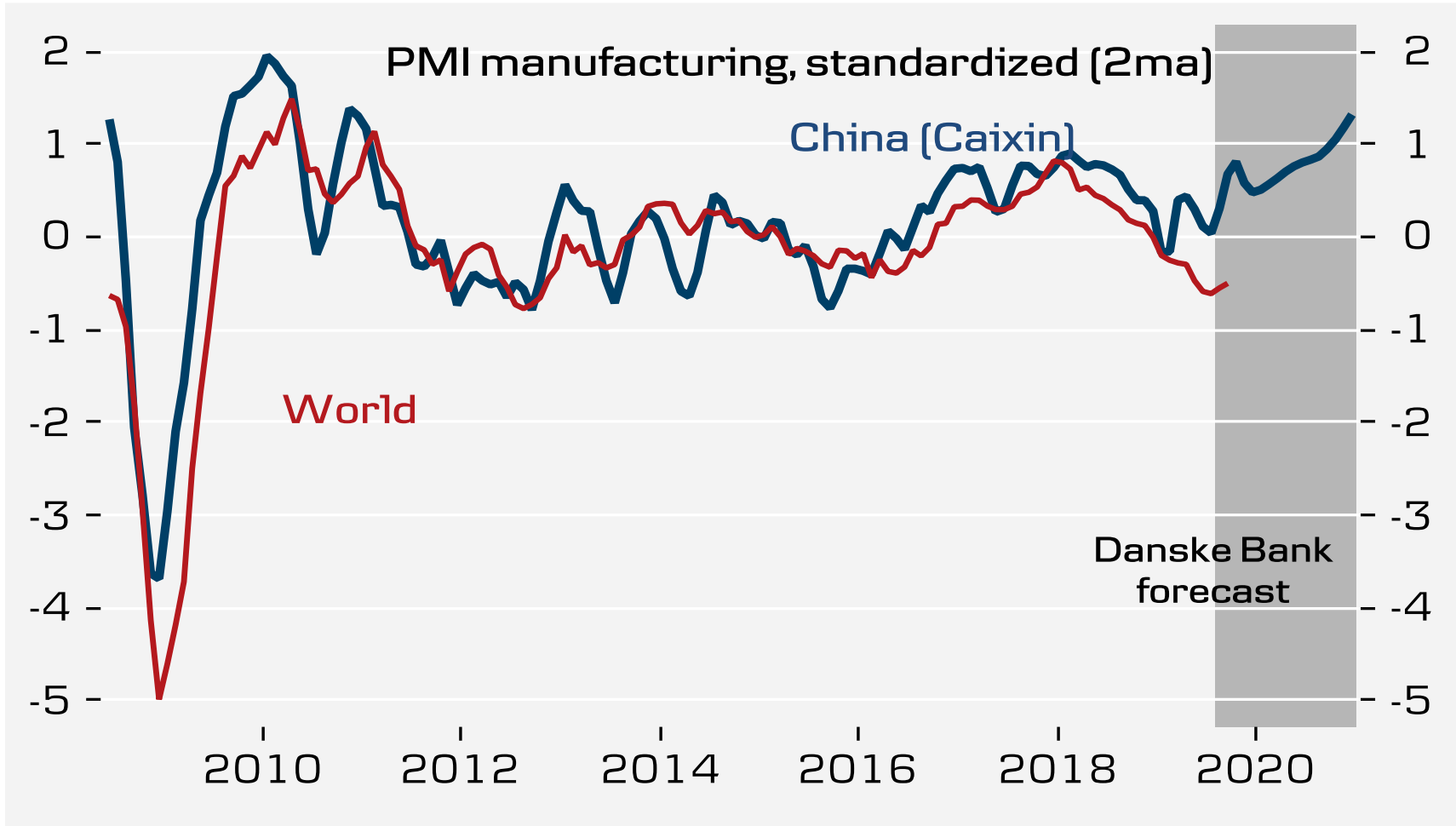
Source: Macrobond Financial, CAAM, Danske Bank

Profits vs PMI



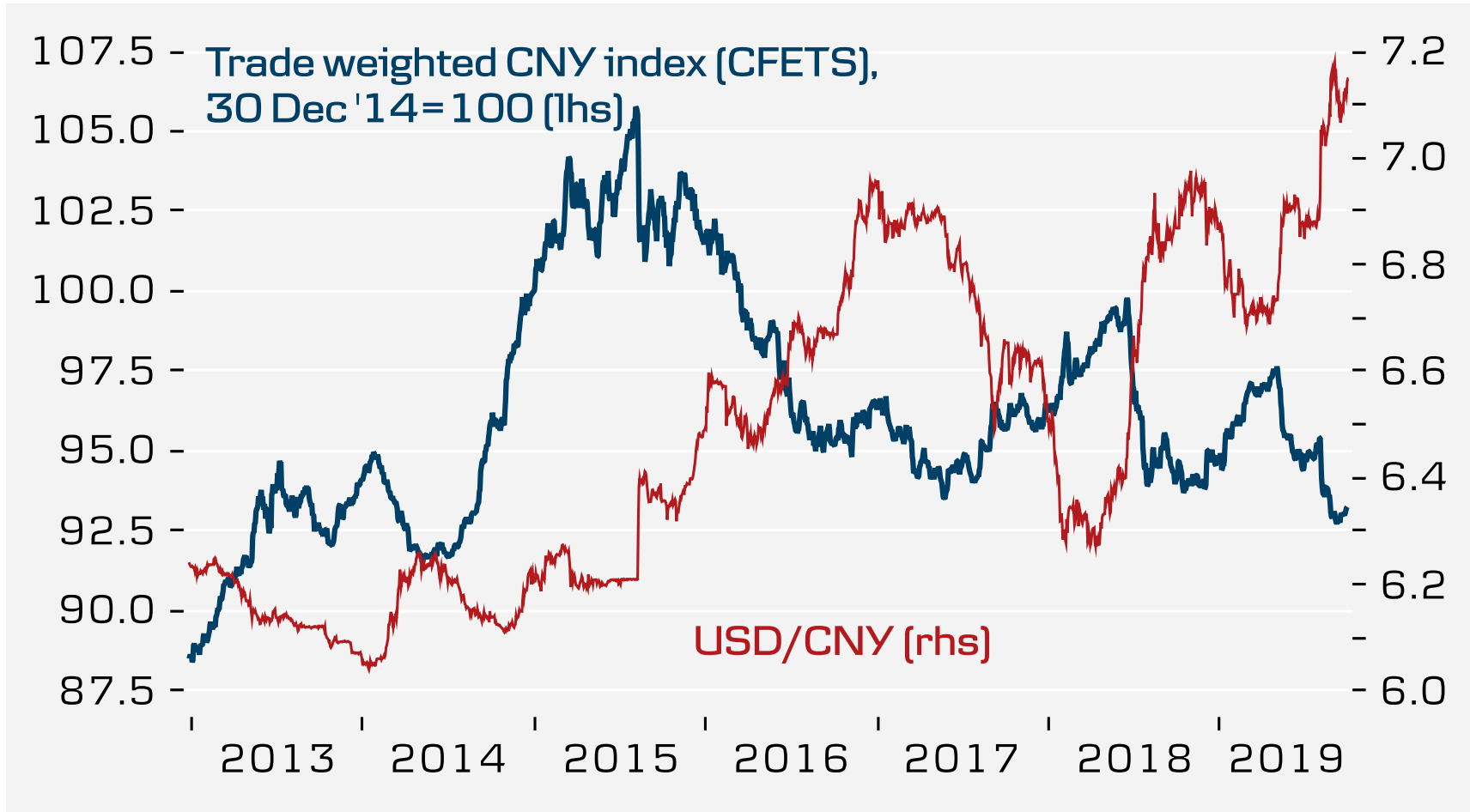
Source: Macrobond Financial, NBS, Markit, Danske Bank

Domestic vs global cycle



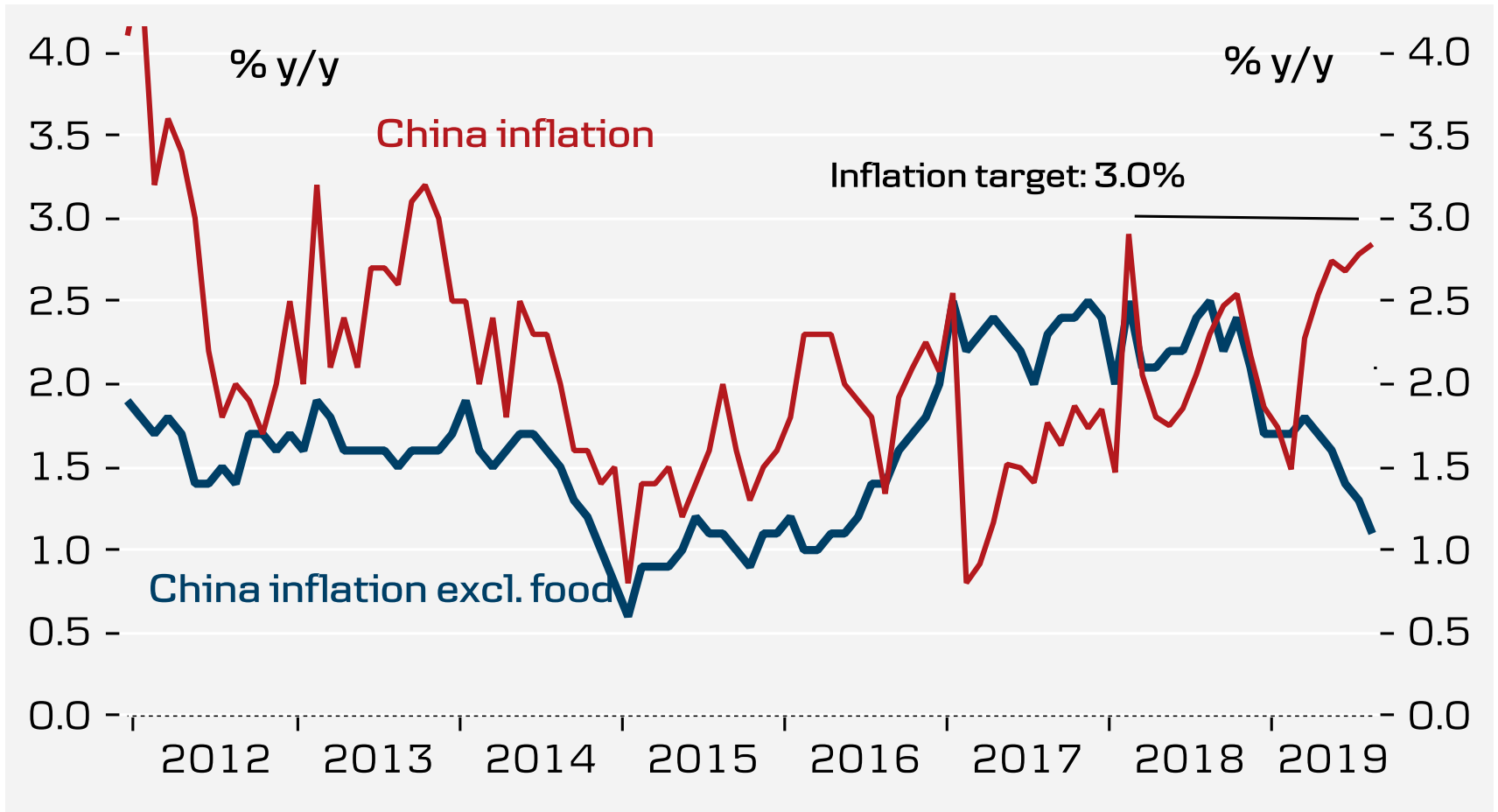
Source: Macrobond Financial, Markit, Danske Bank

USD/CNY and CNY basket



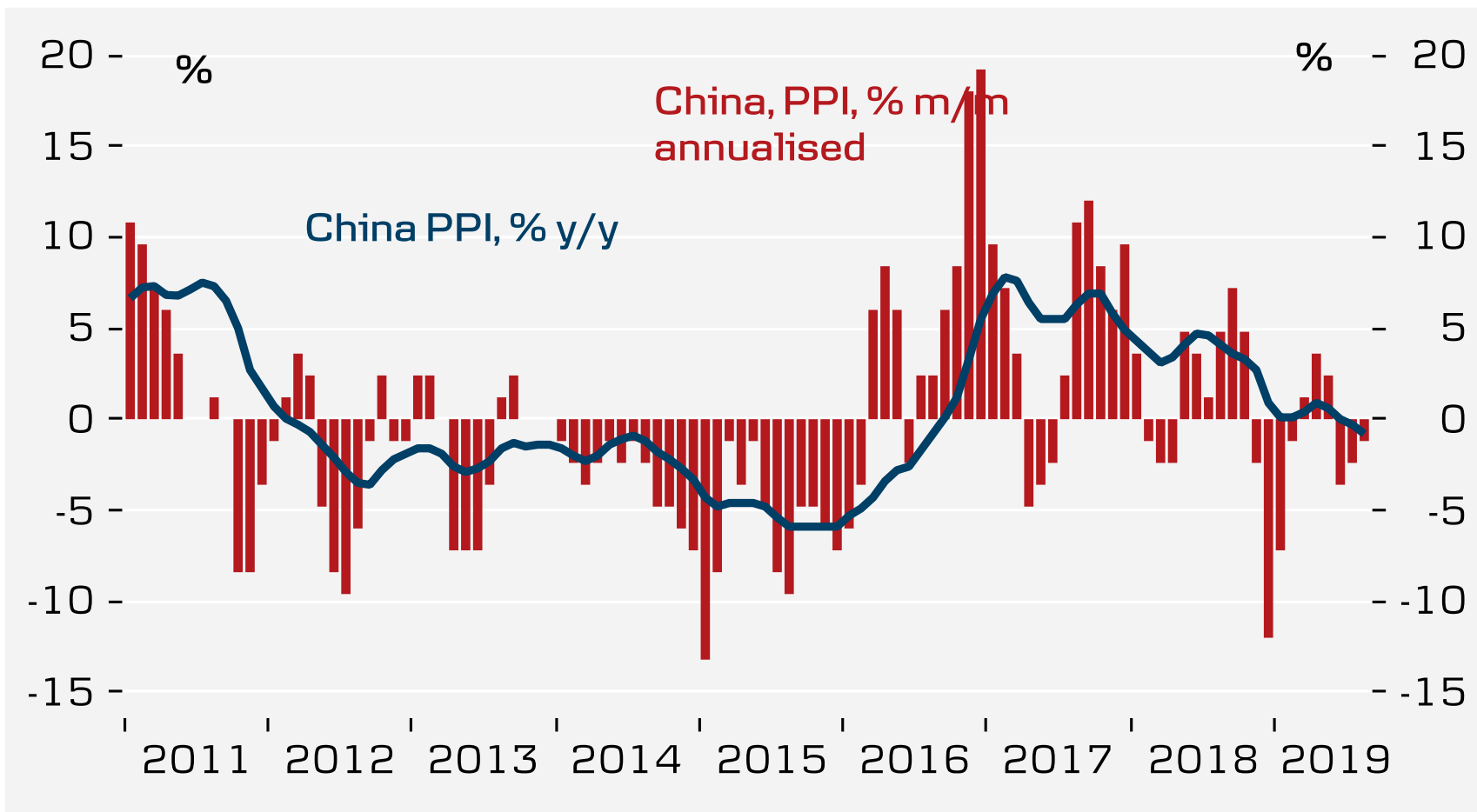
Source: Macrobond Financial, People's Bank of China, Danske Bank

Inflation - CPI



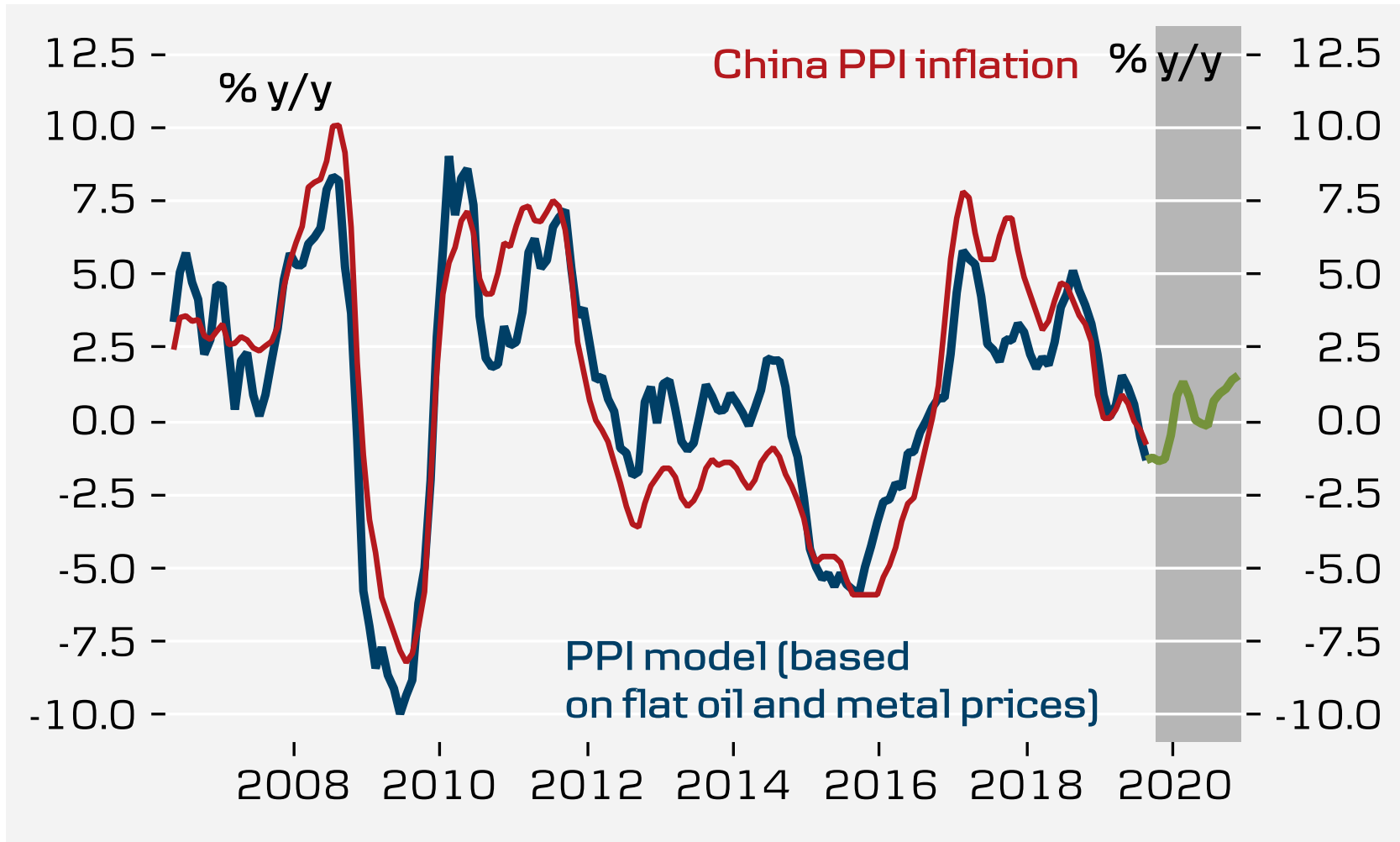
Source: Macrobond Financial, NBS, Danske Bank

Inflation - PPI



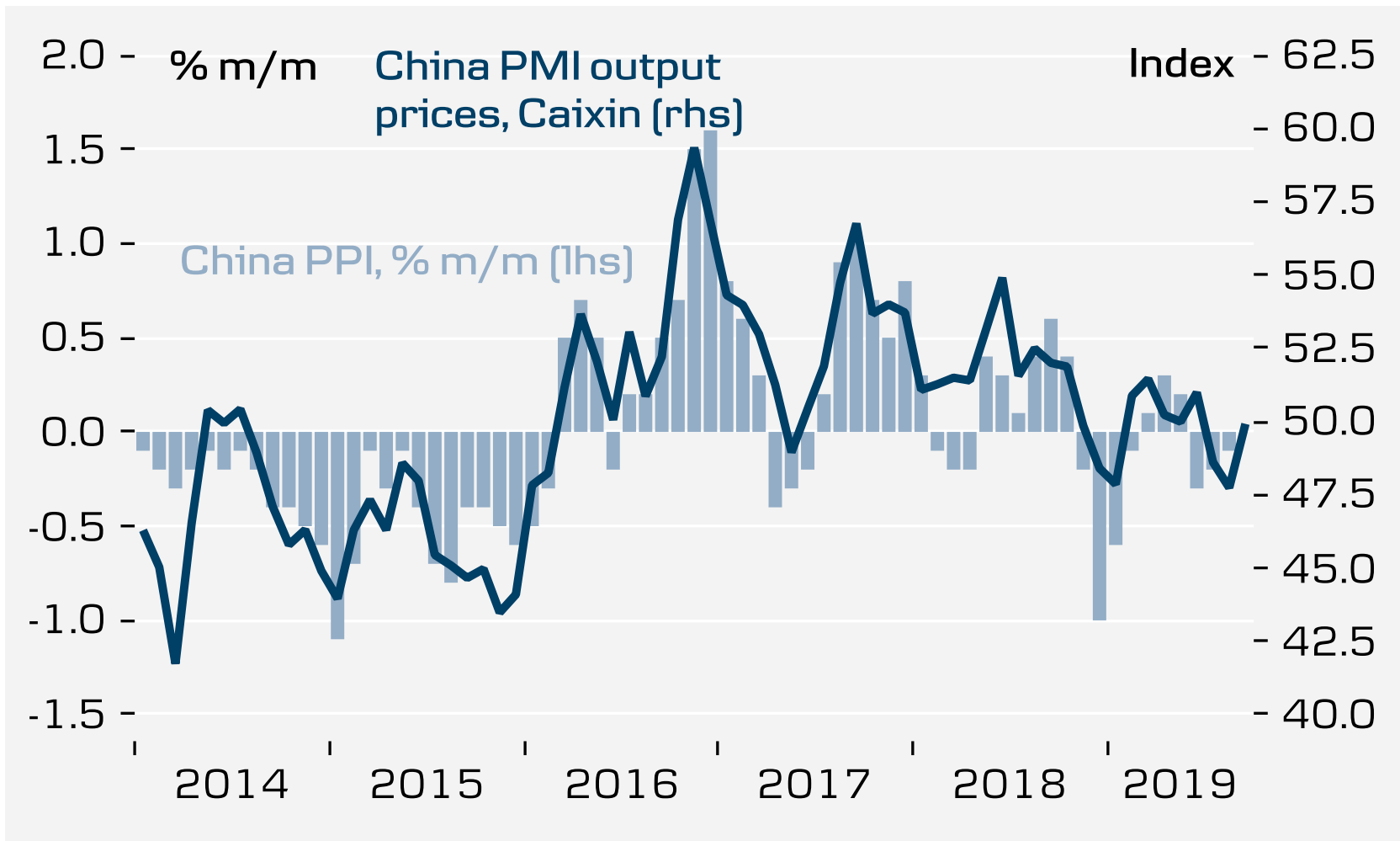
Source: Macrobond Financial, NBS, Danske Bank

Inflation - PPI model



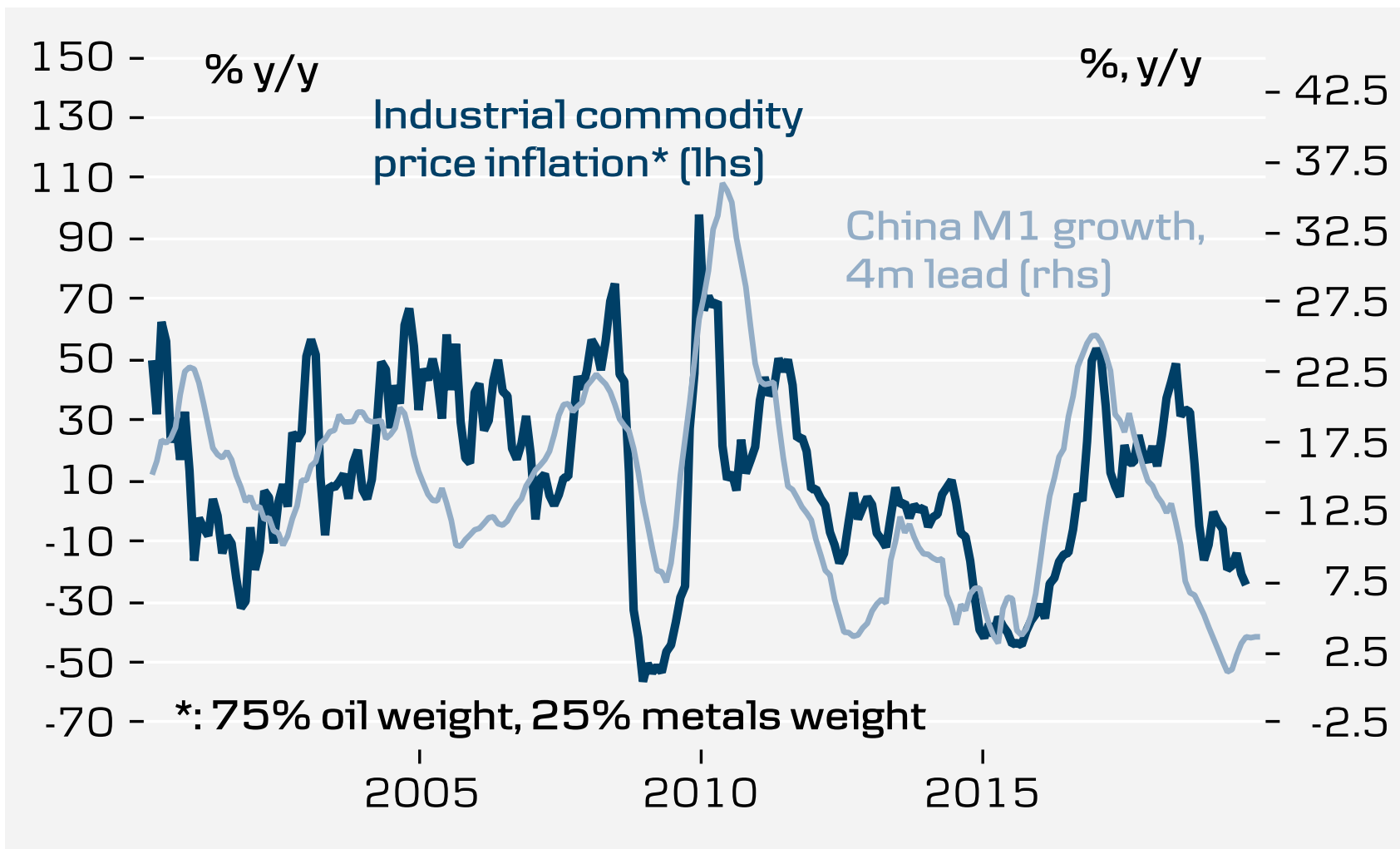
Source: Macrobond Financial, NBS, Danske Bank

Inflation - PMI output prices and PPI m/m



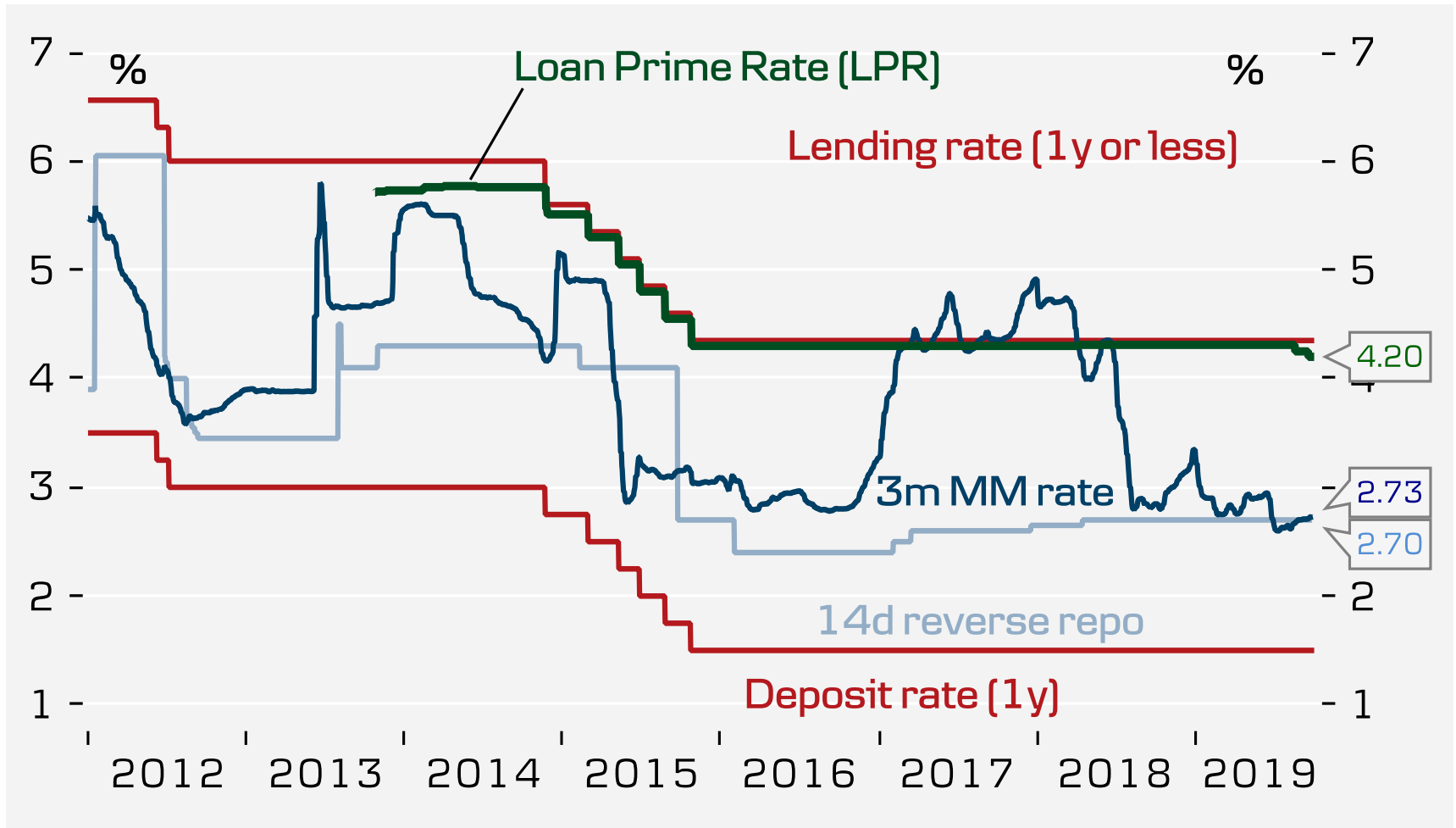
Source: Macrobond Financial, Markit, NBS, Danske Bank

M1 and industrial commodity prices



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

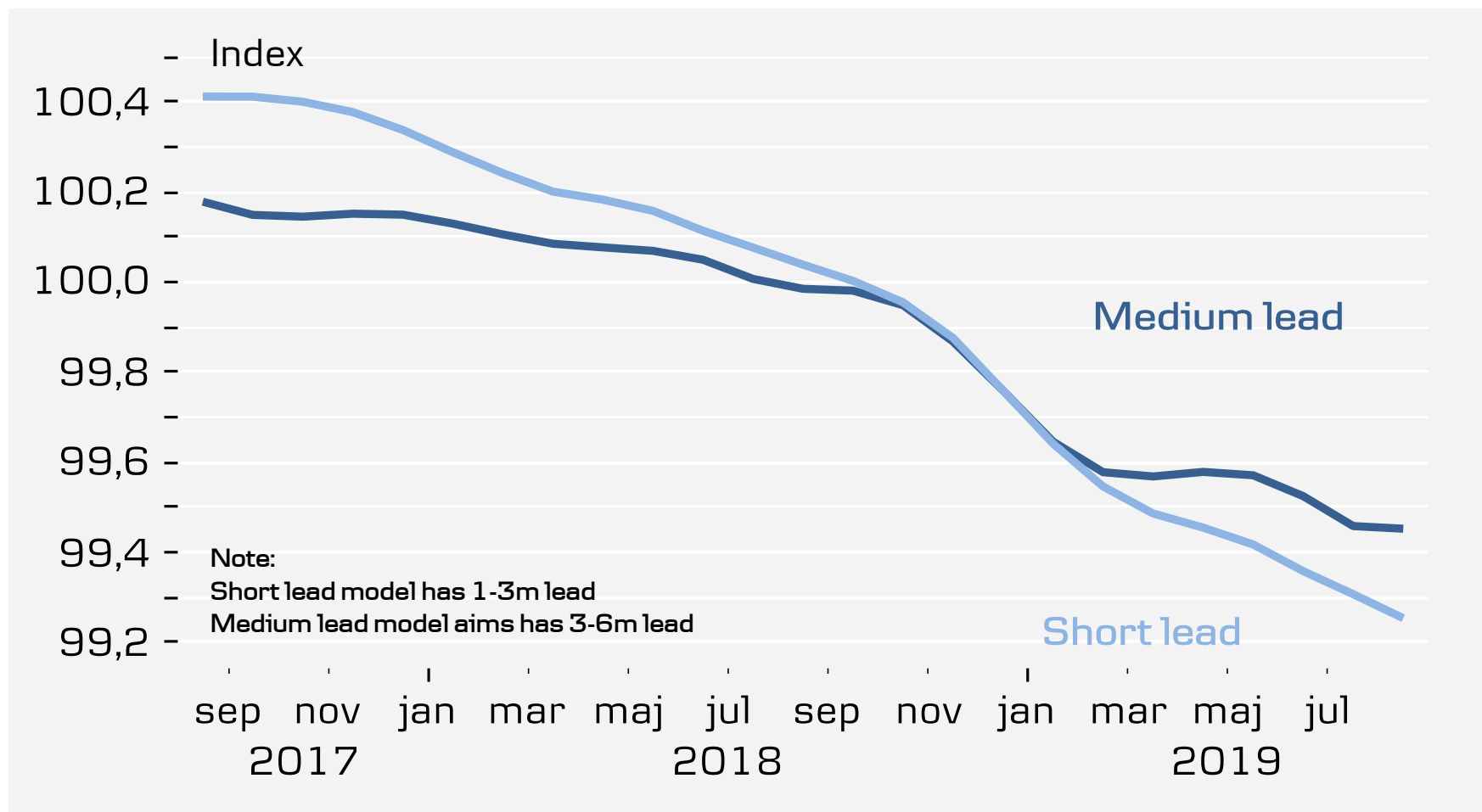
Monetary policy - rates



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

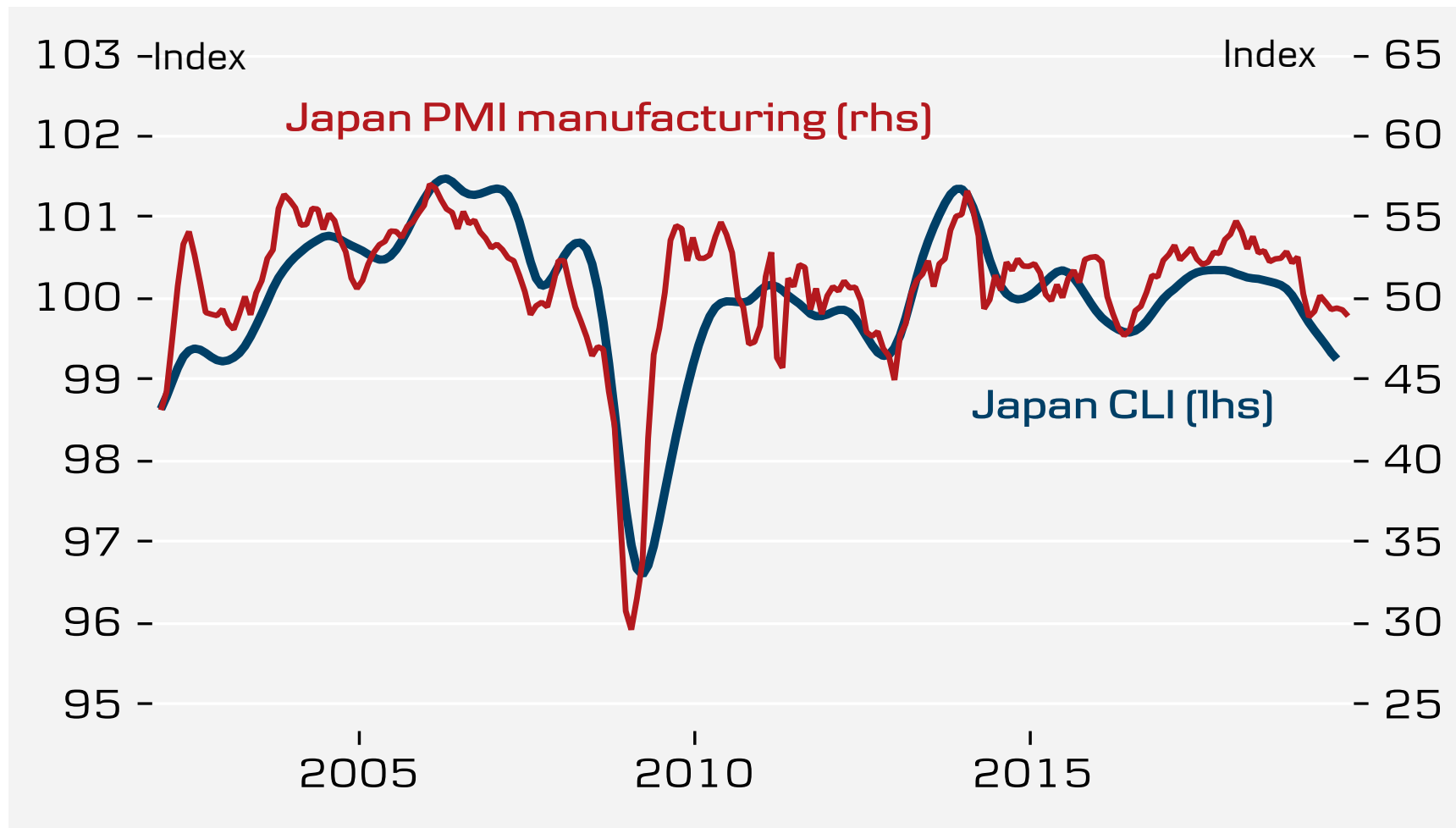
Japan

MacroScope models



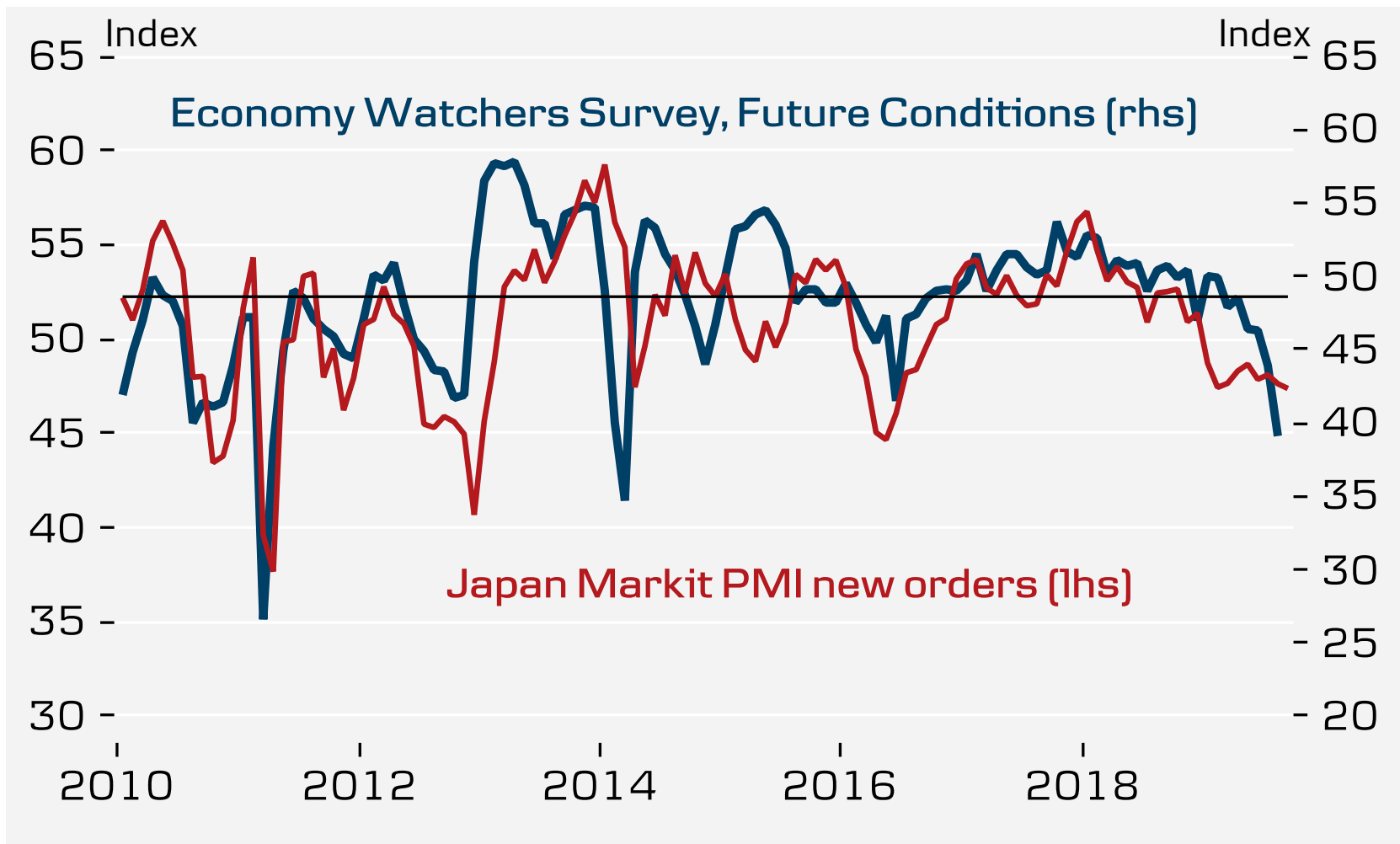
Source: Danske Bank

PMI vs CLI



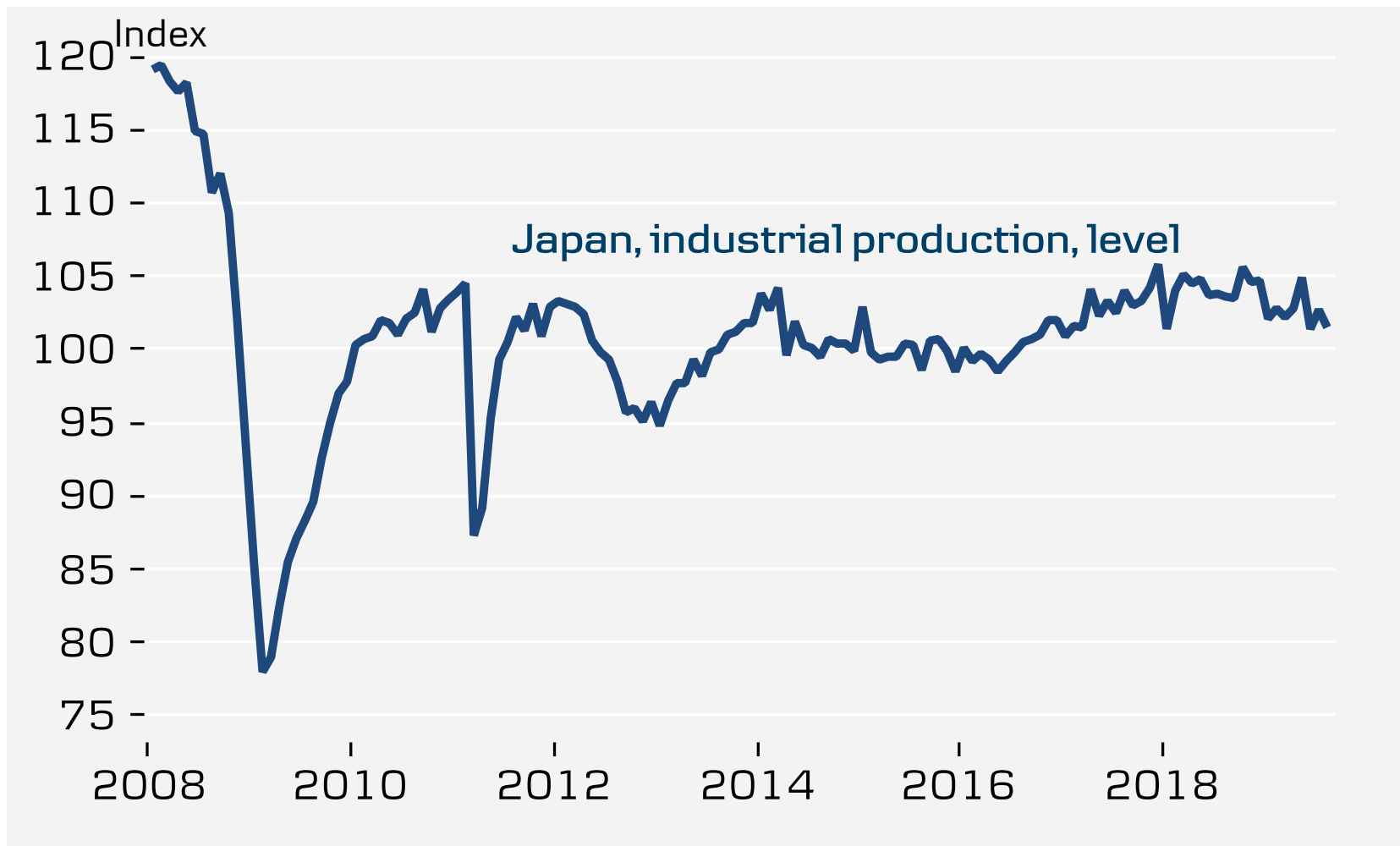
Source: Macrobond Financial, Markit, OECD

Economy Watchers vs PMI



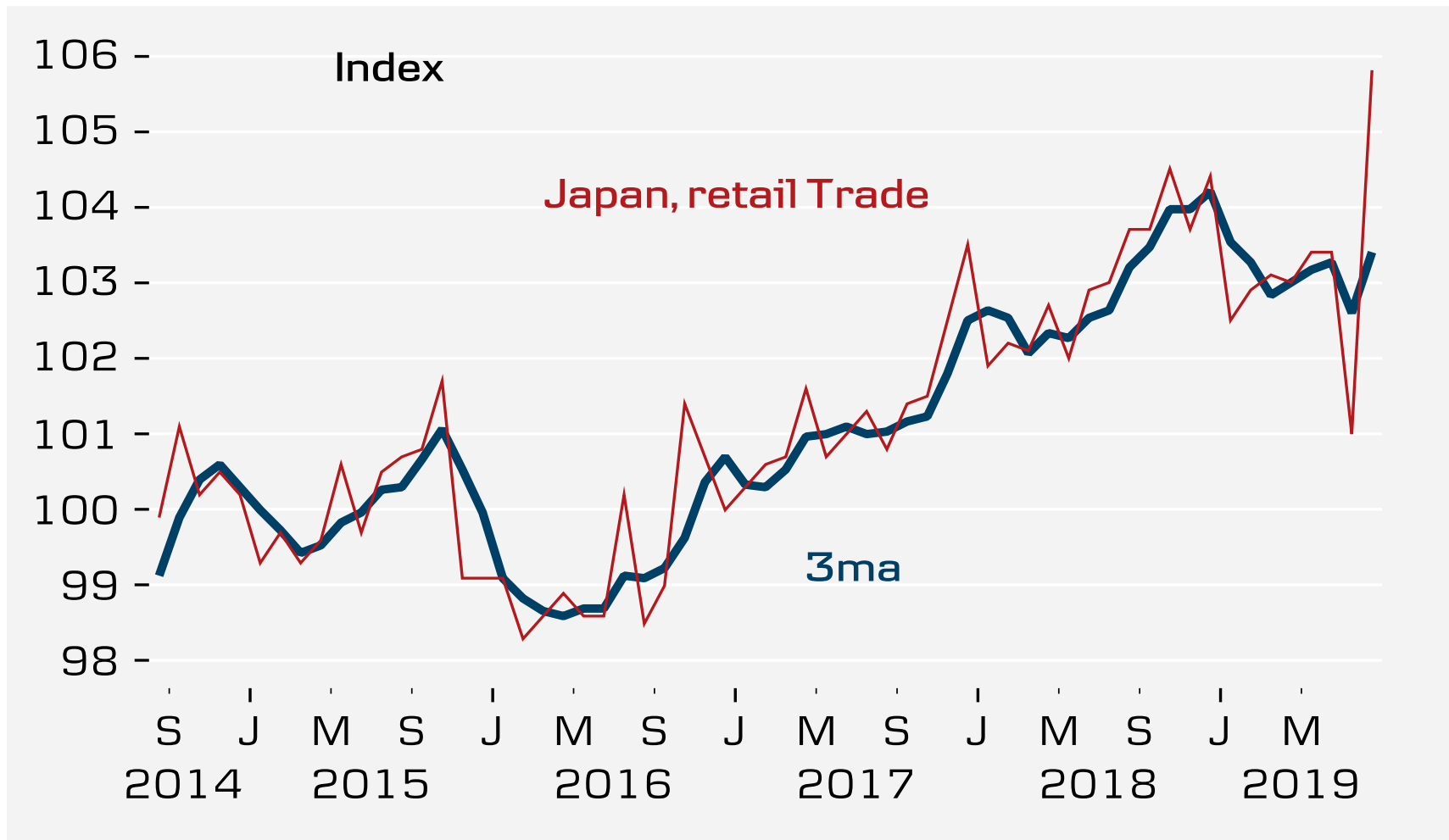
Source: Macrobond Financial, Markit, CaO

Industrial production



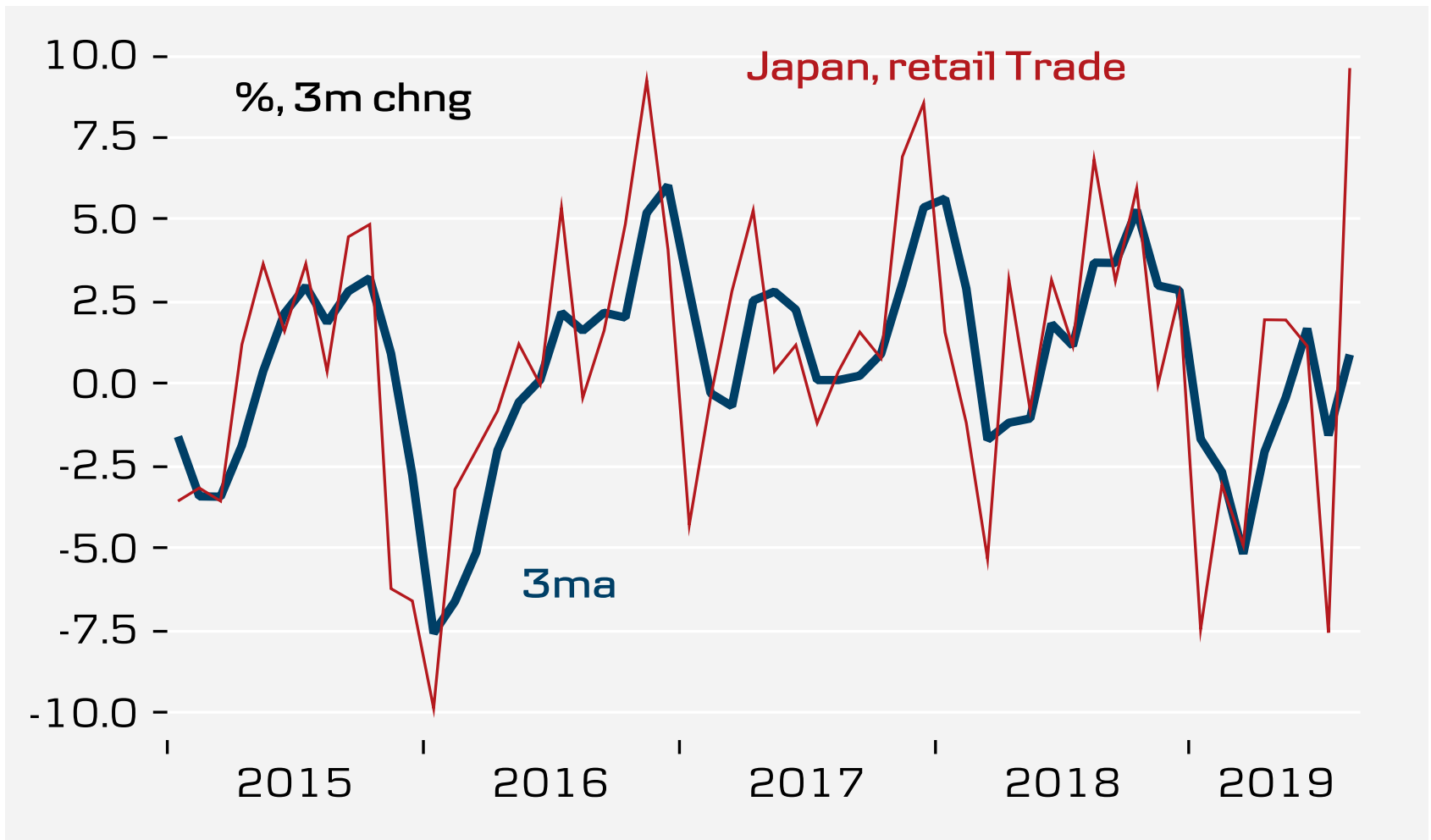
Source: Macrobond Financial, MITI

Consumer – retail sales



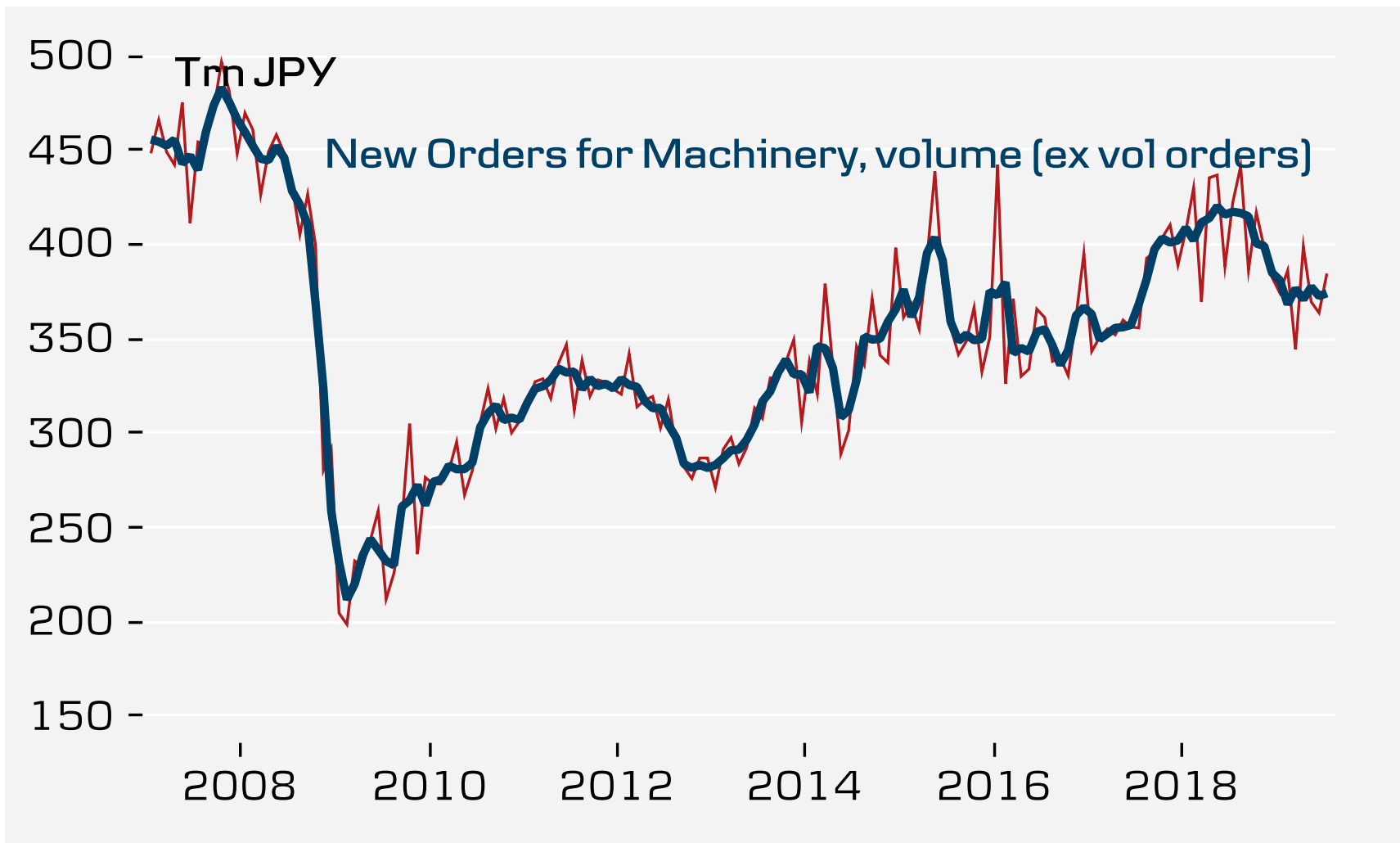
Source: Macrobond Financial, MITI

Retail sales, change



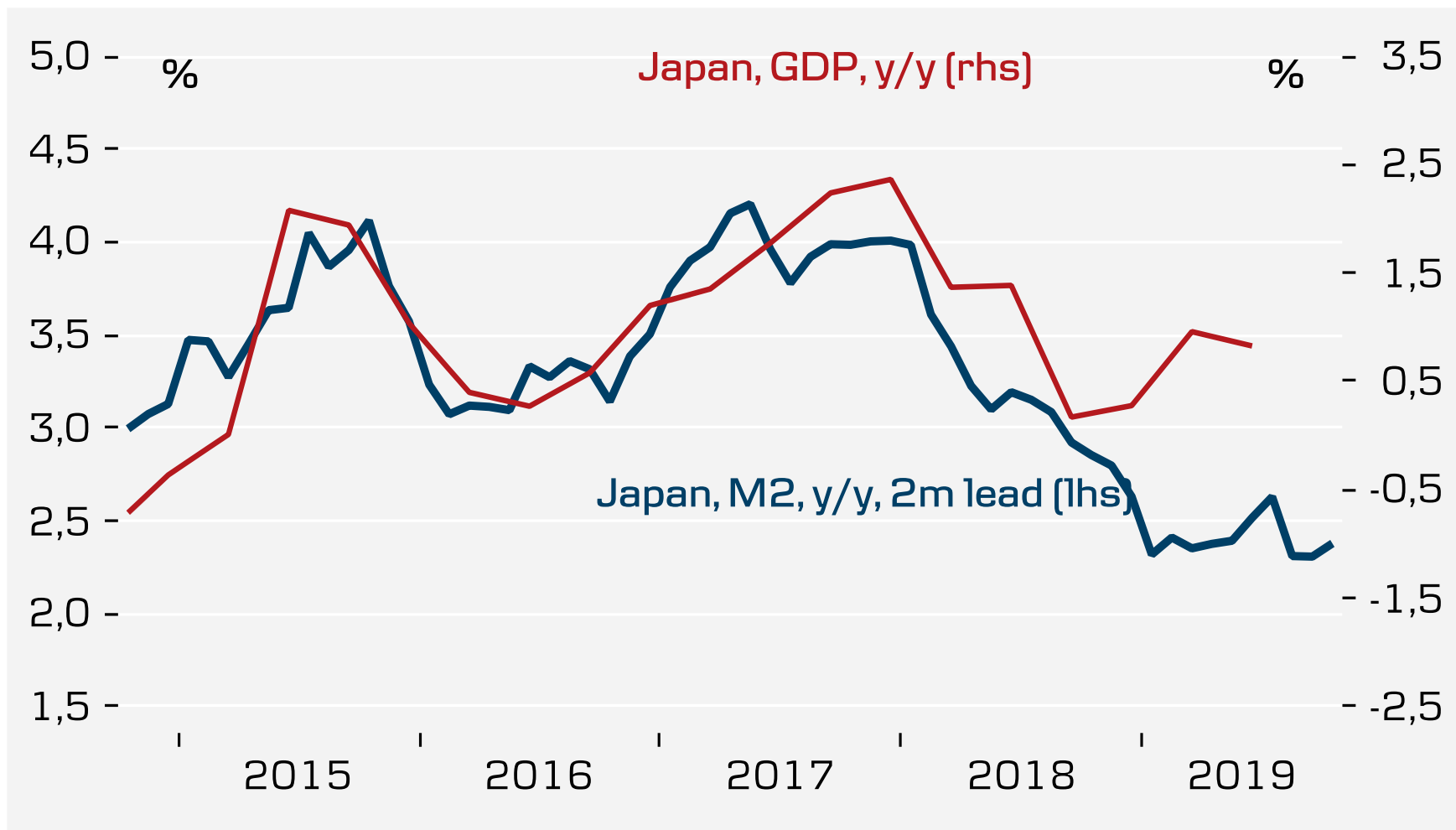
Source: Macrobond Financial, MITI

Machine orders



Source: Macrobond Financial, CaO

M2



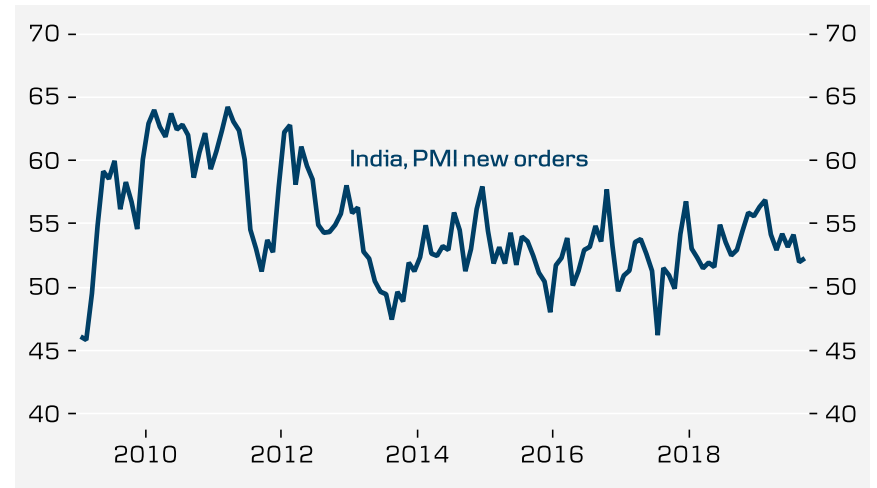
Source: Macrobond Financial, Bank of Japan

Other

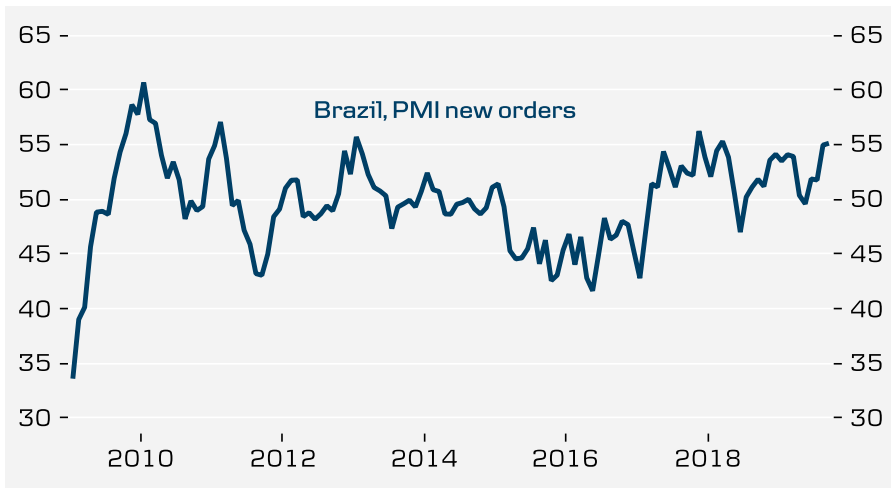
BRIC PMI



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



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

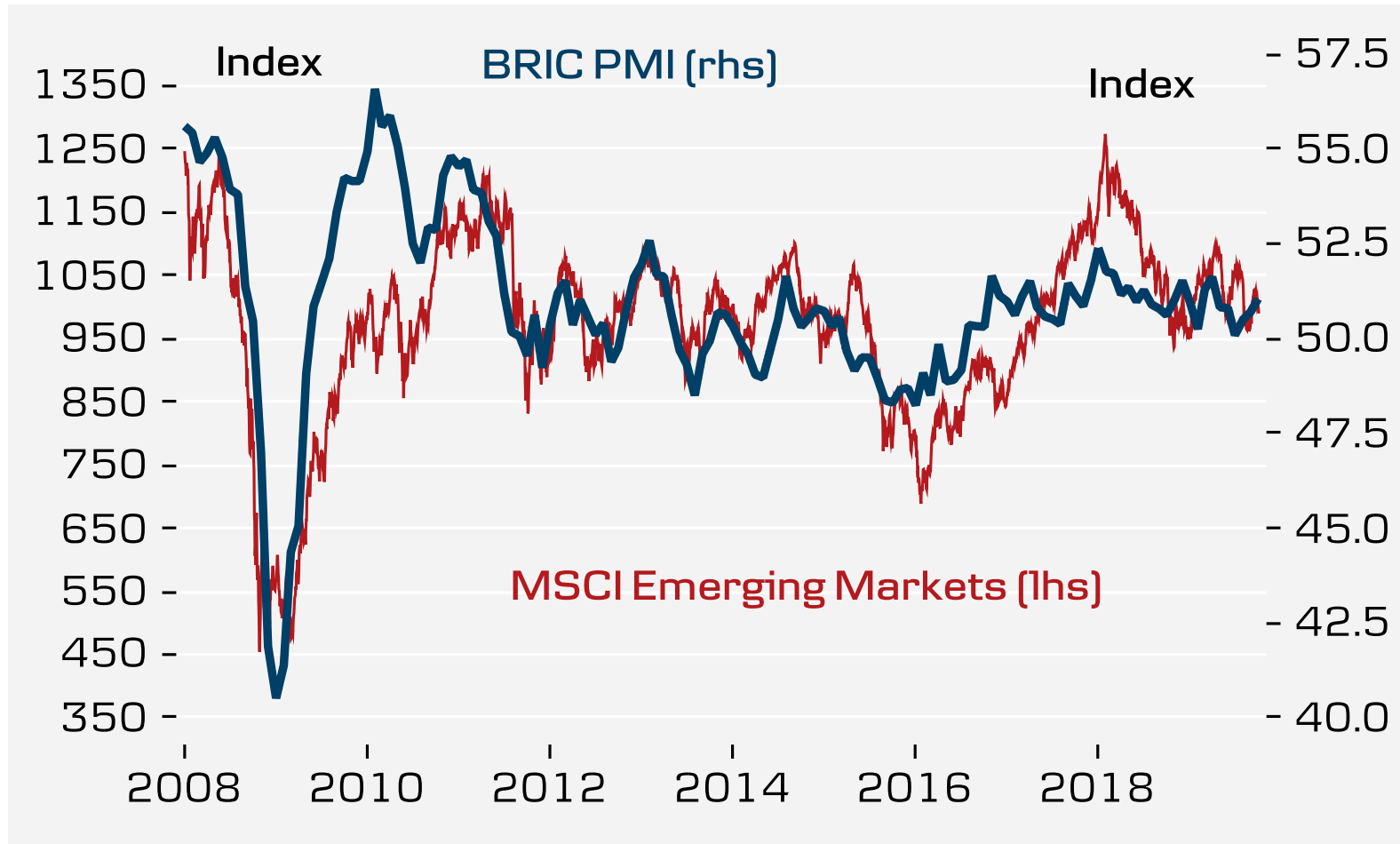


Note: All axes are indices
Source: Macrobond Financial, Markit



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

China – PMI vs emerging markets

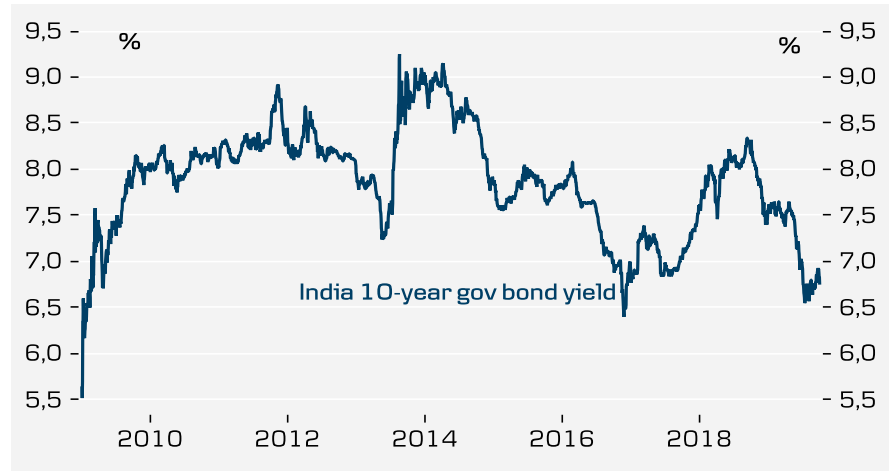


Source: Macrobond Financial, Markit, Danske Bank

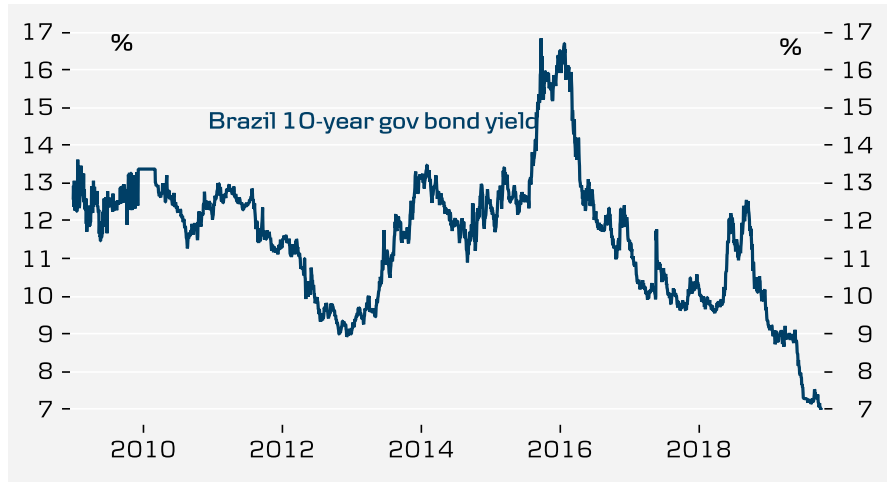
BRIC bond yields



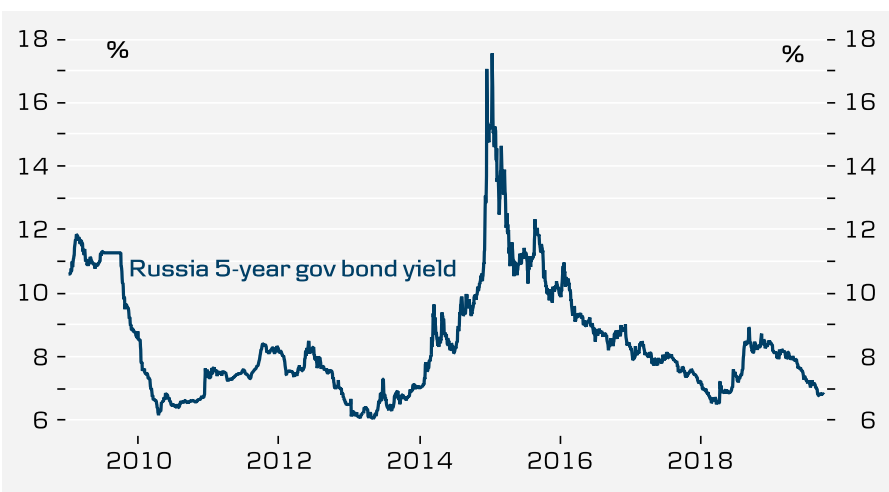
Source: Macrobond Financial



Source: Macrobond Financial

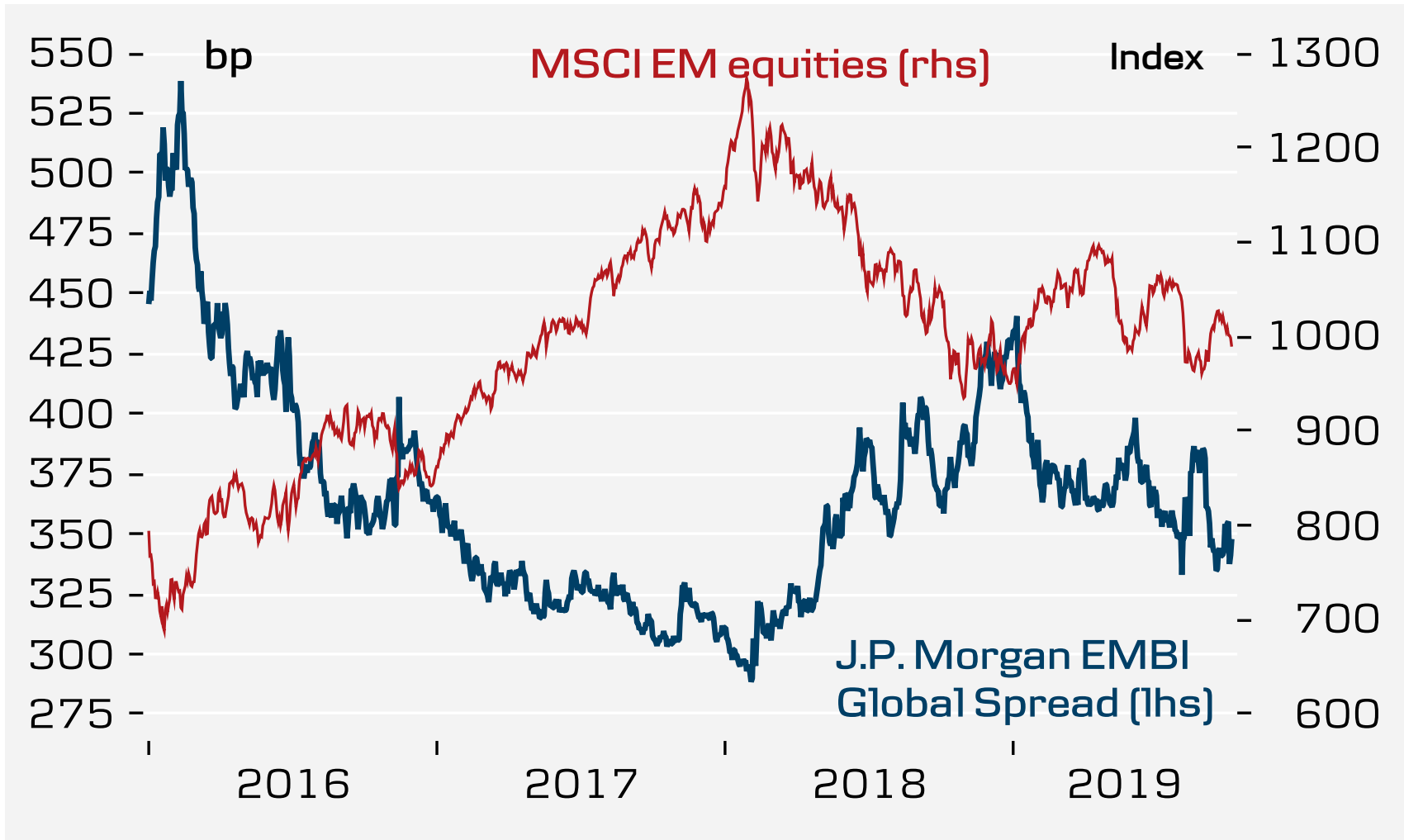


Source: Macrobond Financial



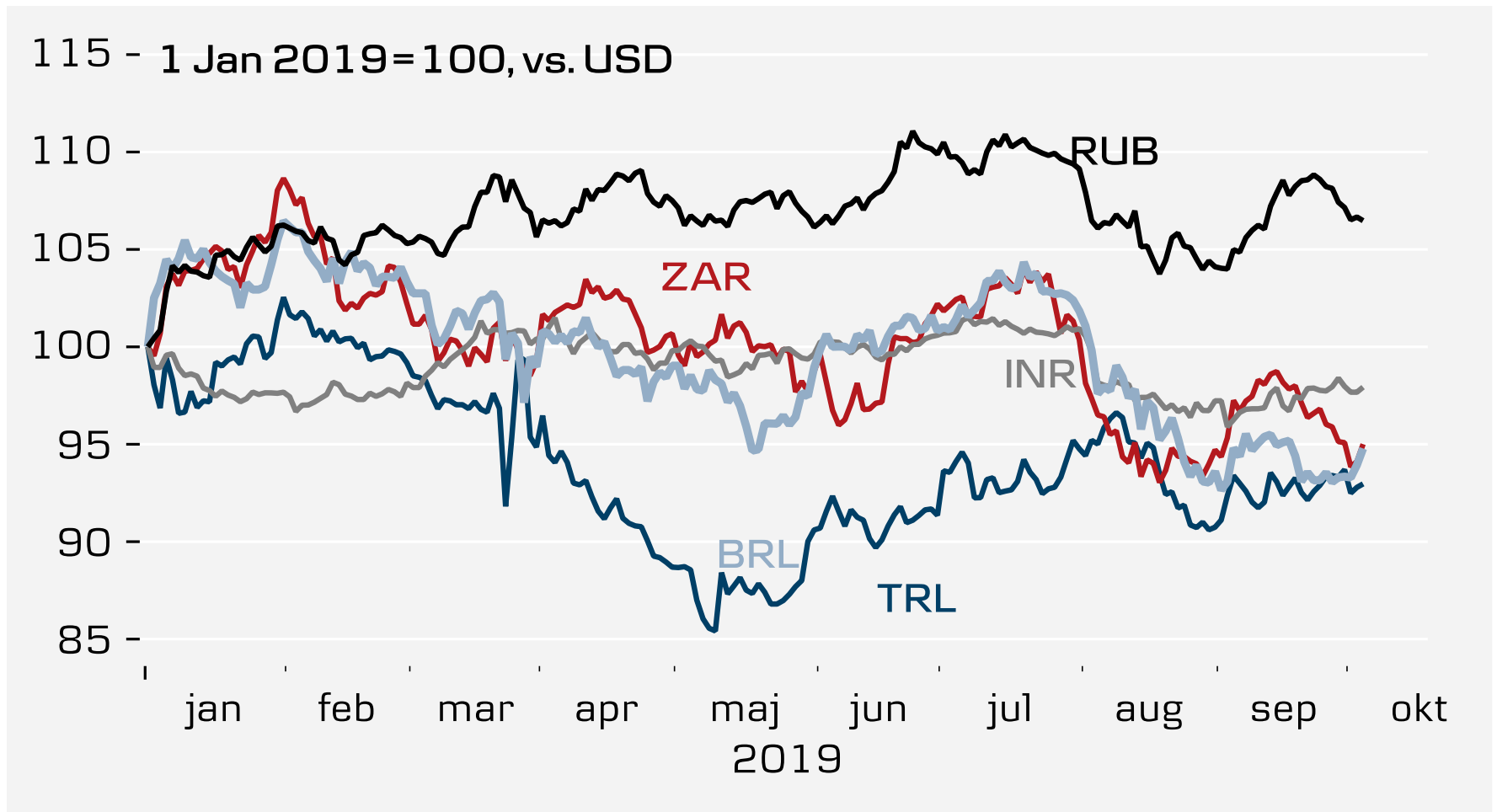
Source: Macrobond Financial

EMBI bond spread and emerging market equities



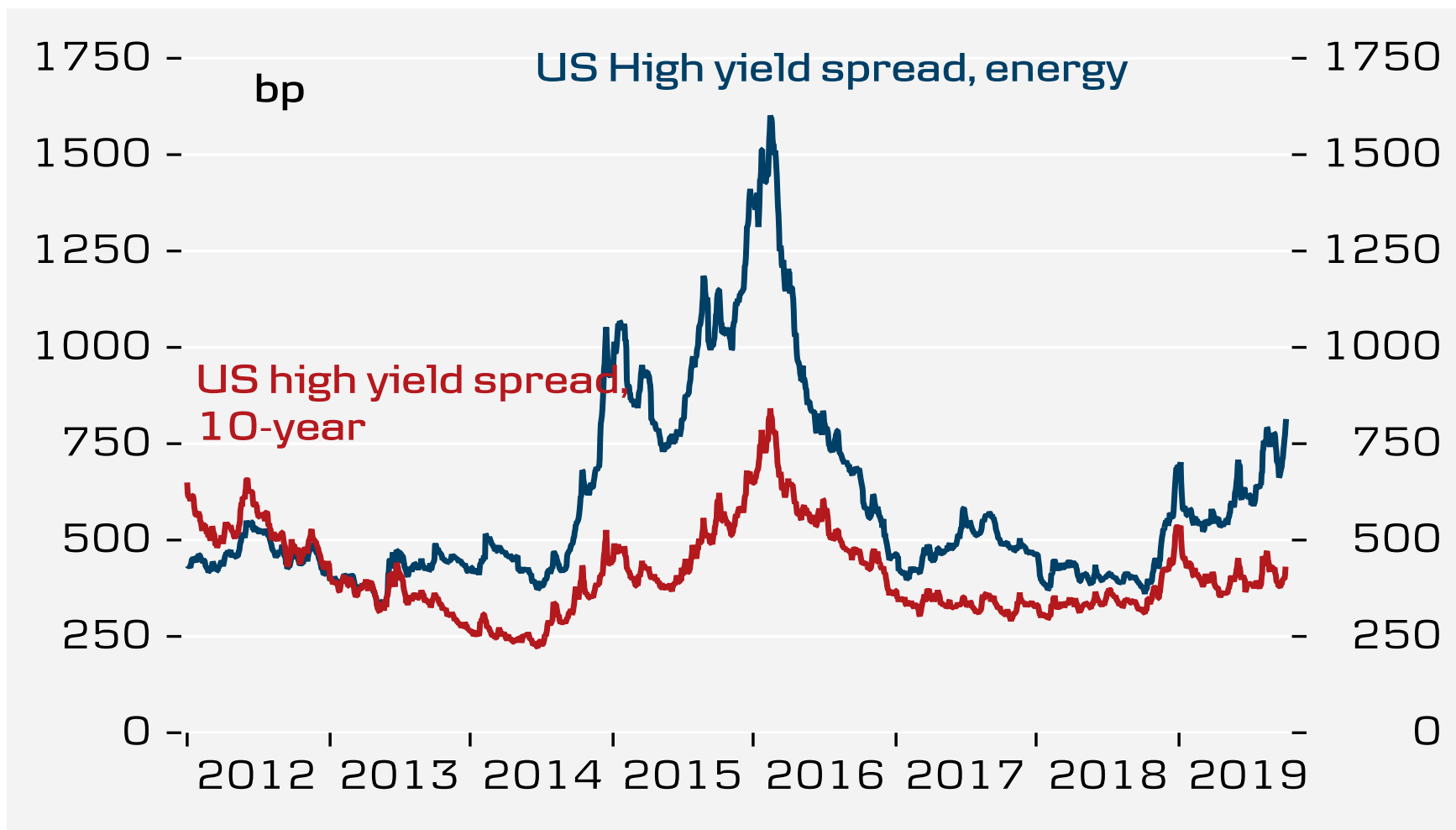
Source: Macrobond Financial

'Fragile five' currencies



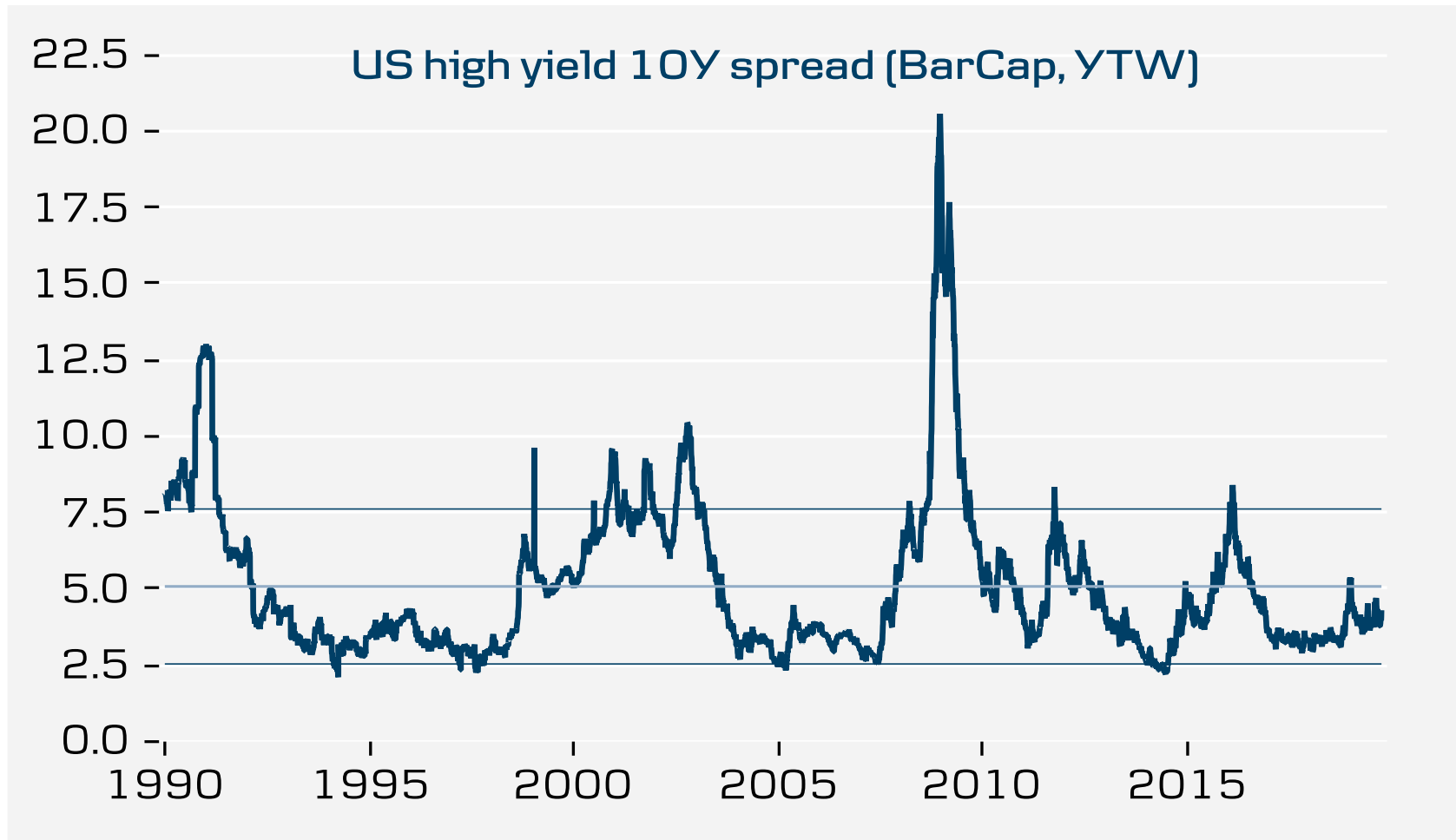
'Fragile five' are the emerging market countries with the biggest imbalances in terms of fiscal and current account deficits, external debt, etc.
Source: Macrobond Financial

US high yield



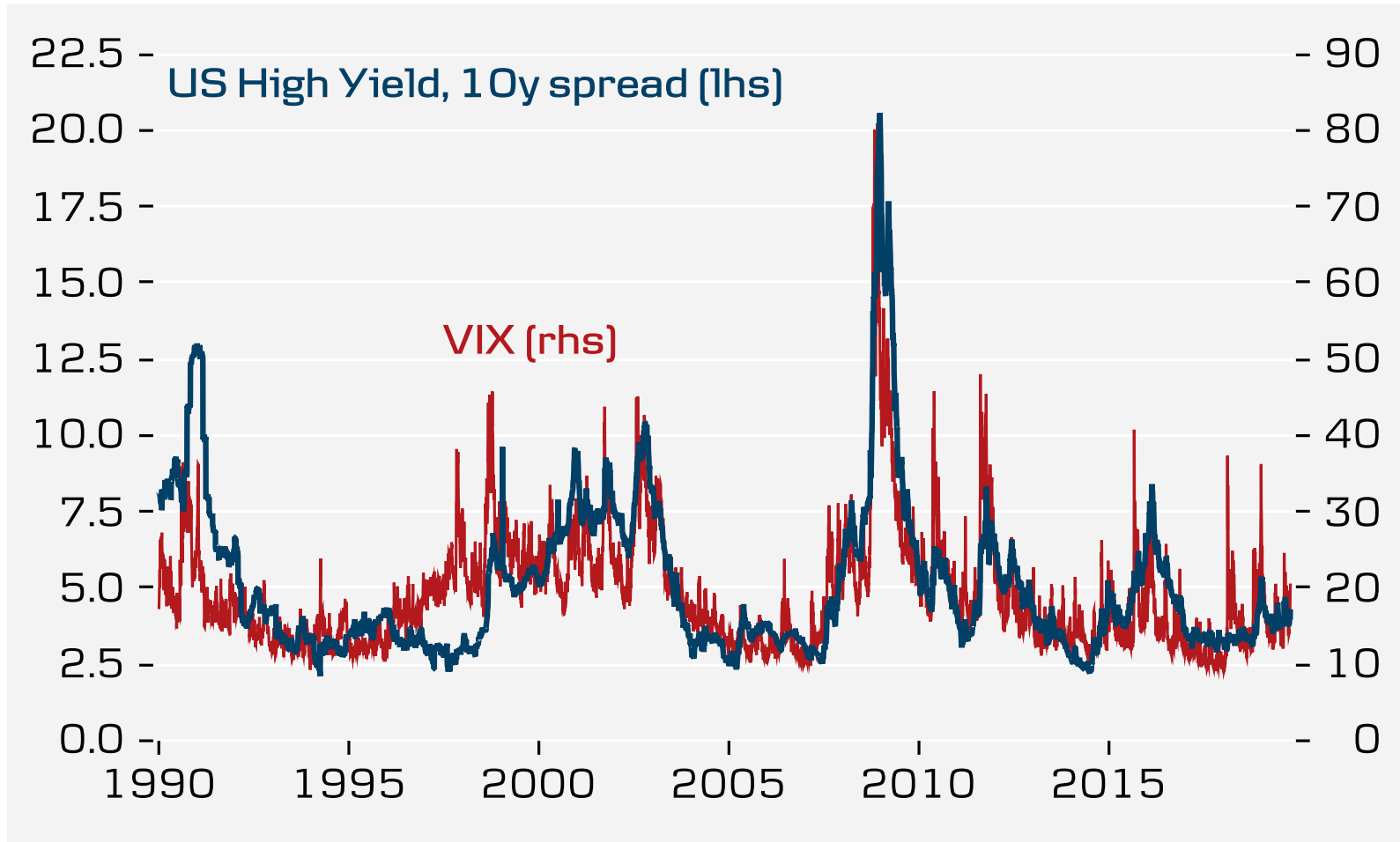
Source: Macrobond Financial, Bloomberg

US high yield



Source: Macrobond Financial, Bloomberg

US high yield vs VIX



Source: Macrobond Financial, Bloomberg

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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).

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