

# Global Inflation Watch

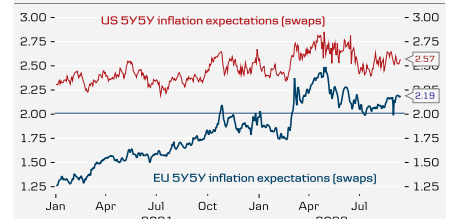
## US inflation surprise points to another 75bp Fed hike

- Overview:** Inflation pressures from oil, metals, food and freight rates have come down but labour markets remain tight in US and Europe keeping wage pressures high. Incoming inflation numbers also remain elevated as evident from the upward surprise in US CPI for August (see below). Gas and electricity prices have come off the highs in Europe but remain very high. Looking forward, we expect inflation to stay high in the short term (rise further in the euro area) but decline during 2023 as recession looms.
- Inflation expectations:** US household 3-year inflation expectations from NY Fed turned lower in August. Euro consumer price expectations are off the peak but still high. Market-based long-term inflation expectations are moving broadly sideways above 2%.
- US:** CPI inflation surprised to the upside in August, as core inflation remained brisk at +0.6% m/m. Declining gasoline prices will continue to ease energy and transportation related inflation, weighing on headline CPI towards year-end. Most leading indicators point towards moderating inflation expectations, as supply chain challenges ease and commodity prices have declined. In addition, while shelter prices contribute positively to the CPI for now, housing market conditions have continued to cool. That said, the strong economic momentum and persistent labour shortages continue to push wages higher, creating sticky and broad-based upward pressure on consumer prices as well.
- Euro:** In contrast to the US, an inflation peak remains not yet in sight, with headline inflation reaching an all-time high of 9.1% in August. Food prices remain on a steep uptrend and although energy price inflation moderated slightly, we think it is the ‘calm before the storm’, with significant increases for gas and electricity prices still looming in coming months. Weaker demand does not yet seem to be an issue for firms’ pricing decisions, as both goods and services inflation accelerated further. Inflation expectations ticked up with the latest energy price surge, leaving ECB to highlight the risk of de-anchoring. Despite the tight labour market, a sharp rise in wages is not yet in sight, with negotiated wage edging down to 2.4% in Q2 22 (from 3.0% in Q1).
- China:** CPI moved down to 2.5% y/y in August from 2.7% in July. PPI inflation fell yet again to 2.3% y/y from 4.2% y/y. It’s down from the peak in Oct ’21 at 13.5% y/y.

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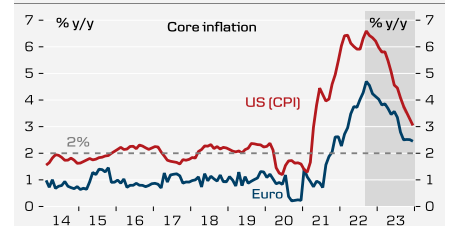
### Market-based inflation expectations sideways lately above 2%



Note: Past or current performance is no guarantee of future performance

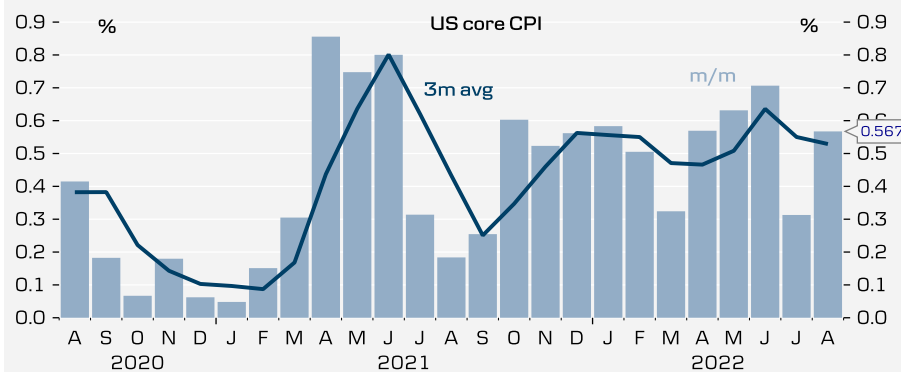
Source: Macrobond Financial, Bloomberg

### Core CPI inflation peaking soon and set to head lower in 2023



Source: Macrobond Financial, Bloomberg

### Continued strong run rate on US core CPI points to another 75bp Fed hike



Source: Bloomberg, Macrobond Financial.

Note: Past performance is no guarantee of future performance

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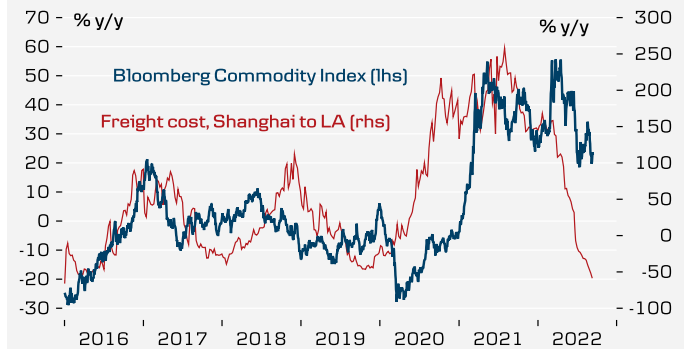
# Top down overview

## Trend in inflation pressure over recent months

Inflation Score Card		
Commodity prices	Oil	↓
	Metals	↓
	Food stuff	↓
	Gas	↑
Supply Chains	Freight rates	↓
	Delivery times	↓
Wage pressure		↑
Inflation expectations		→
Pricing power		↓

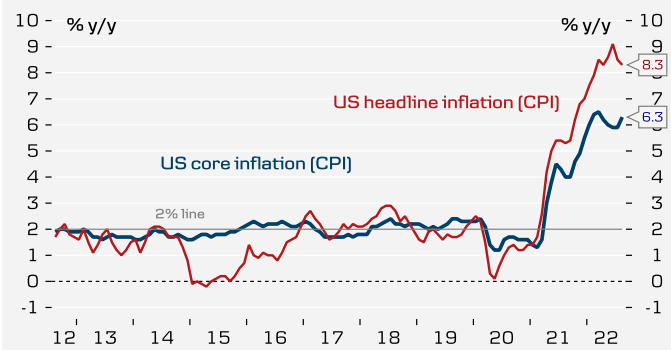
Source: Macrobond Financial, BLS

## Commodity price and freight inflation



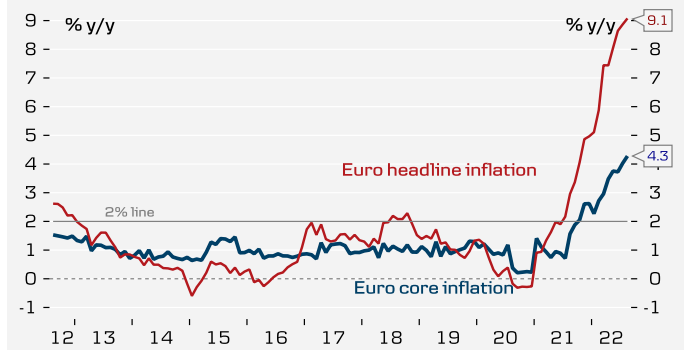
Source: Macrobond Financial, Eurostat

## US headline and core inflation (CPI)



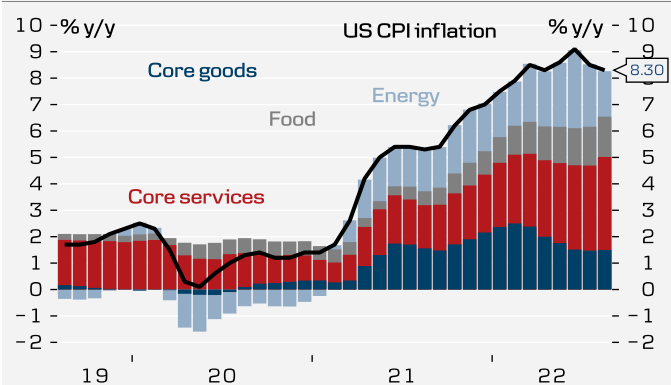
Source: Macrobond Financial, BLS

## Euro headline and core inflation



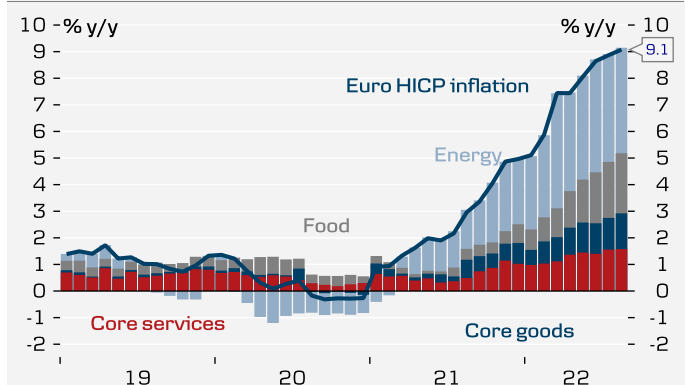
Source: Macrobond Financial, Eurostat

## Contributions to US inflation



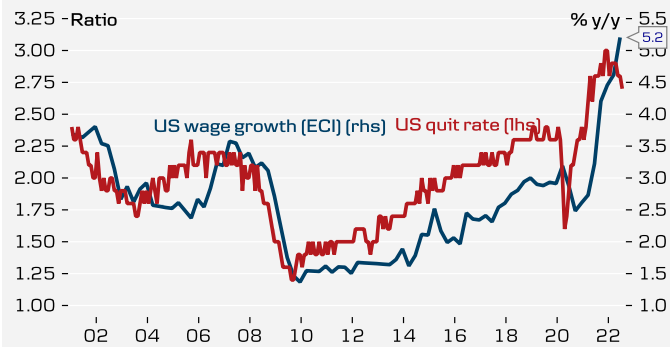
Source: Macrobond Financial, BLS

## Contributions to euro inflation



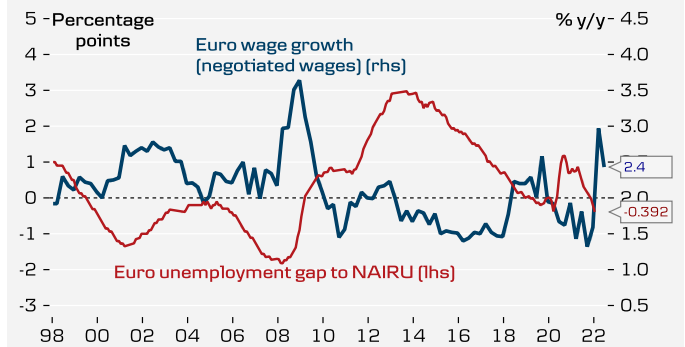
Source: Macrobond Financial, Eurostat

### US wage growth and labour market tightness



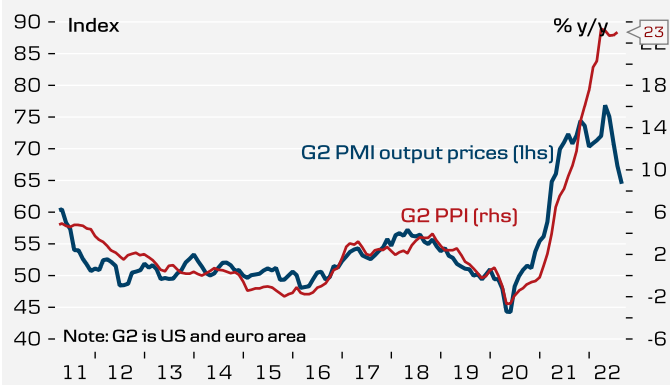
Source: Macrobond Financial, BLS

### Euro wage growth and labour market tightness



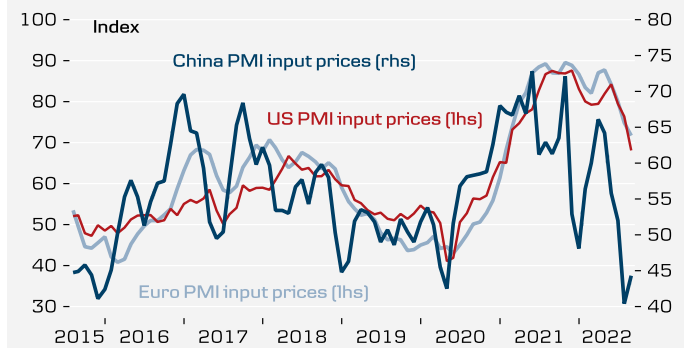
Source: Macrobond Financial, Eurostat, ECB

### G2 PPI inflation vs oil price inflation



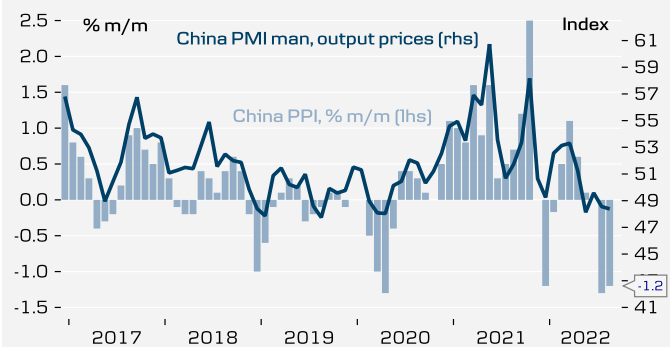
Source: Macrobond Financial, BLS, Eurostat

### PMI input price indices US, Euro and China



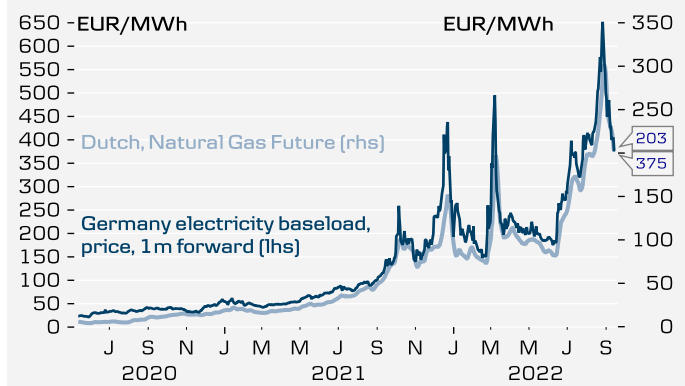
Source: Macrobond Financial, Markit

### China PPI inflation momentum



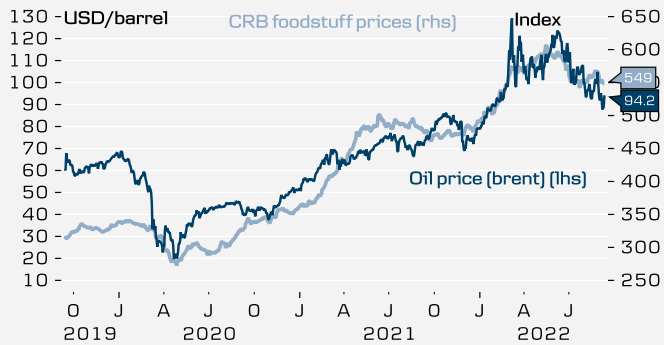
Source: Macrobond Financial, Markit

### European natural gas and electricity prices



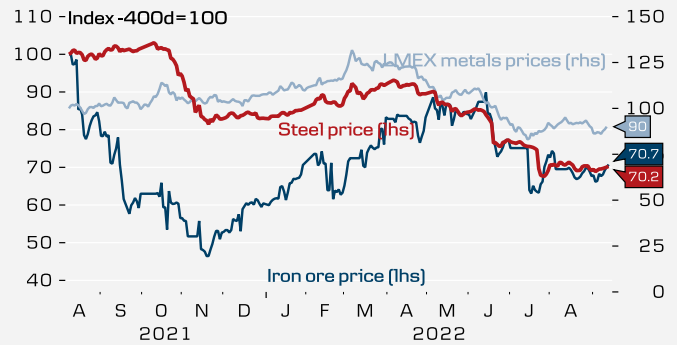
Note: Past or current performance is no guarantee of future performance  
Source: Macrobond Financial, PBoC, Danske Bank

Commodity price levels – oil, metals and food



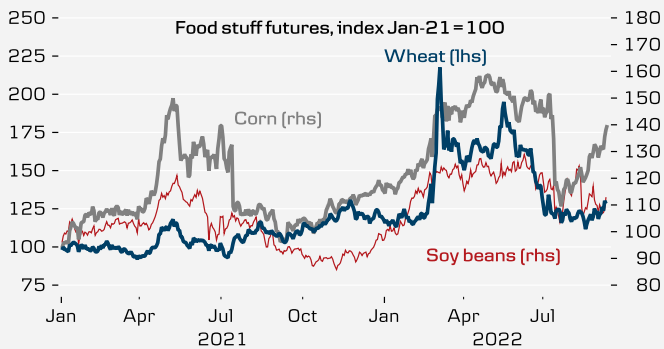
Source: Macrobond Financial, Bloomberg  
 Note: Past performance is not a reliable indicator of future performance.

Commodity price levels – steel, iron ore and lumber



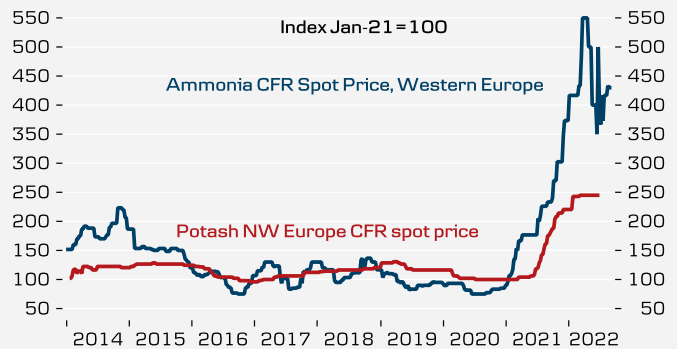
Source: Macrobond Financial, Bloomberg  
 Note: Past performance is not a reliable indicator of future performance.

Grain prices



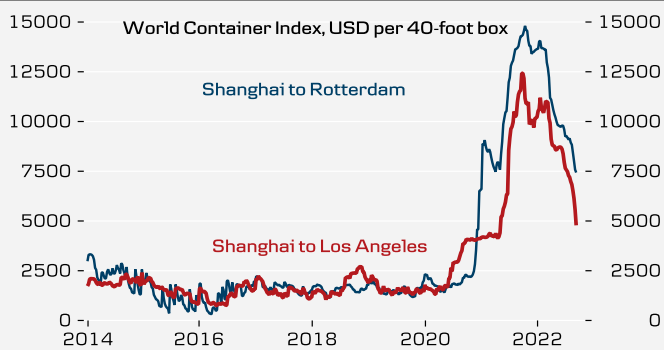
Source: Macrobond Financial, Bloomberg  
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Fertilizer input prices



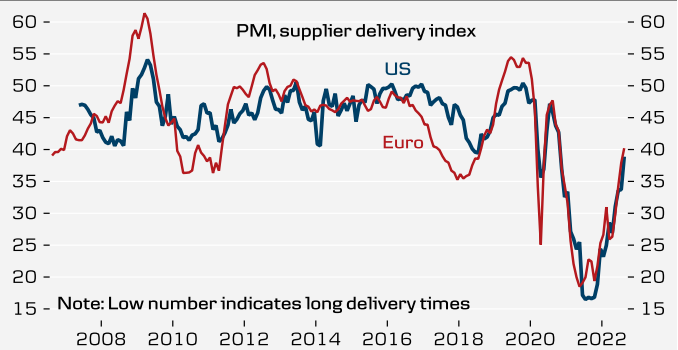
Source: Macrobond Financial, Bloomberg  
 Note: Past performance is not a reliable indicator of future performance.

Freight rates



Source: Macrobond Financial, Bloomberg, WCI

Bottle necks - supplier delivery indices

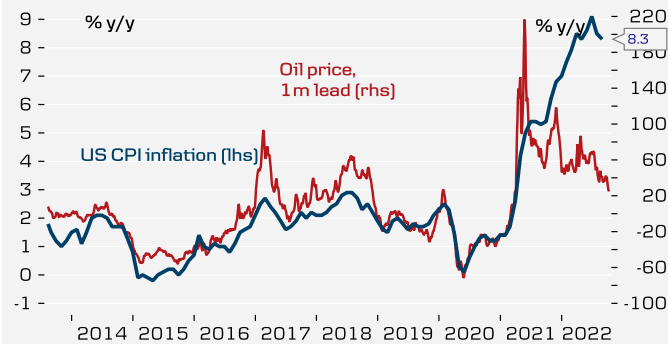


Source: Macrobond Financial, Markit

# Country details - US

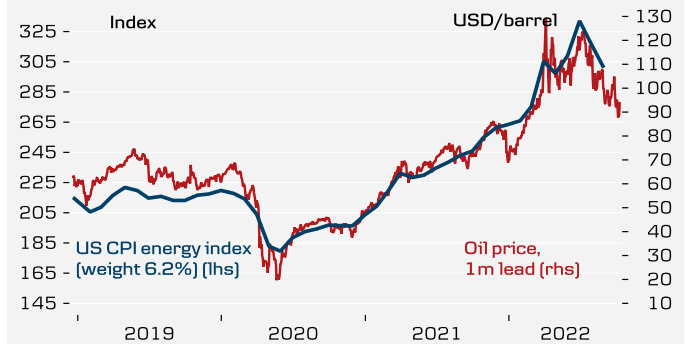
## Top down

Headline CPI inflation vs. oil prices



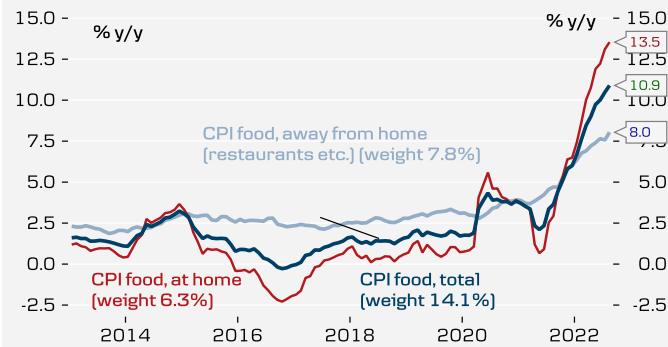
Source: Macrobond Financial, BLS.  
 Note: Past performance is not a reliable indicator of future performance.

CPI energy prices vs oil



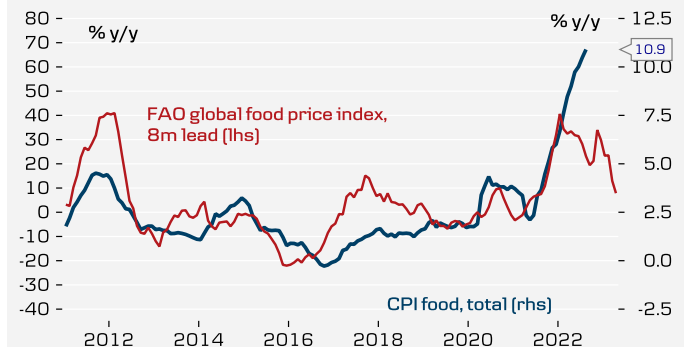
Source: Macrobond Financial, BLS.  
 Note: Past performance is not a reliable indicator of future performance.

Food prices



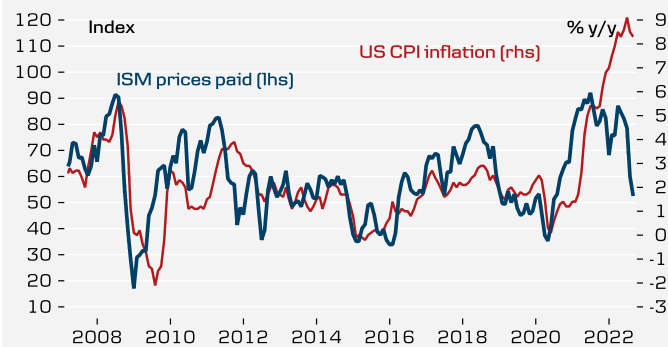
Source: Macrobond Financial, BLS

Food prices vs FAO food price index



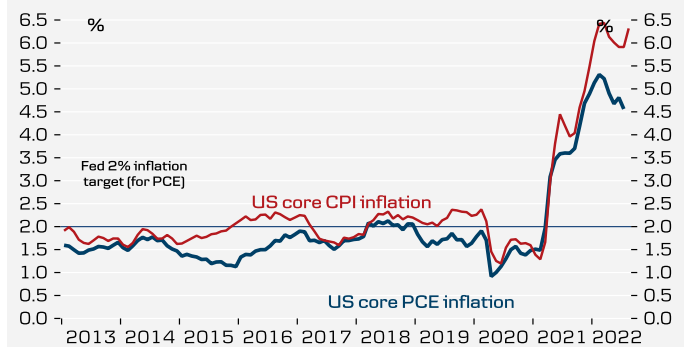
Source: Macrobond Financial, FAO, BLS  
 Note: Past performance is not a reliable indicator of future performance.

US PMI output prices vs CPI inflation



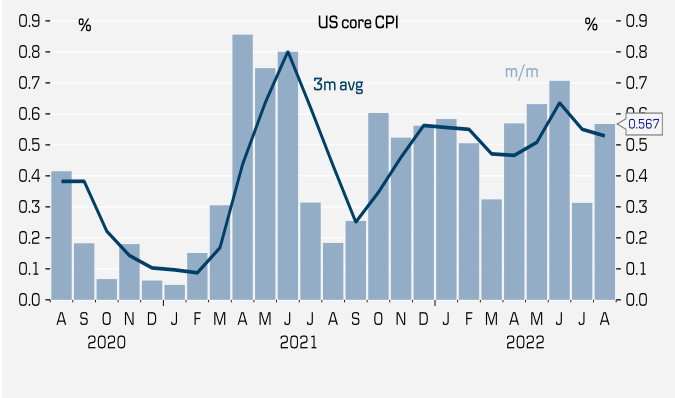
Source: Macrobond Financial, BLS, Markit

Core PCE inflation vs core CPI inflation



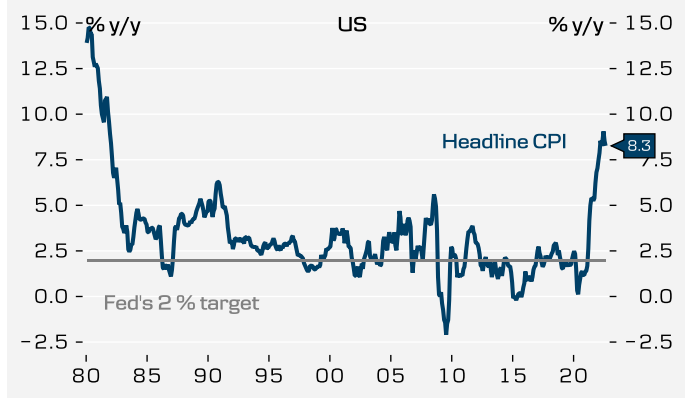
Source: Macrobond Financial, BLS, BEA

**Core CPI momentum**



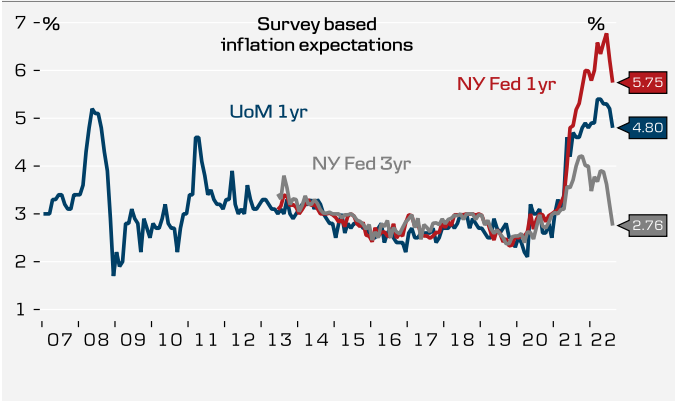
Source: Macrobond Financial, BLS

**Headline CPI since 1980**



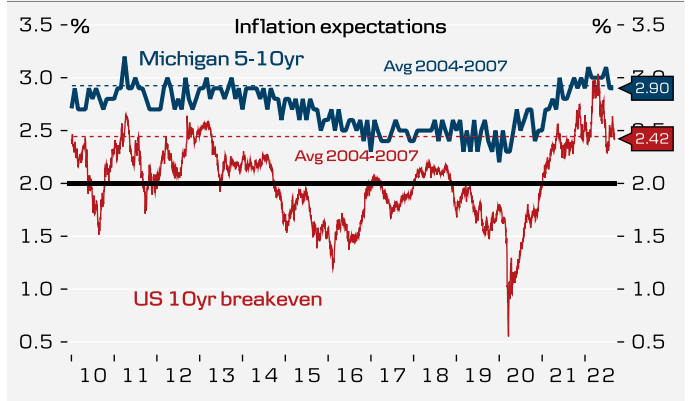
Sources: BEA, BLS, Macrobond Financial

**Survey-based inflation expectations**



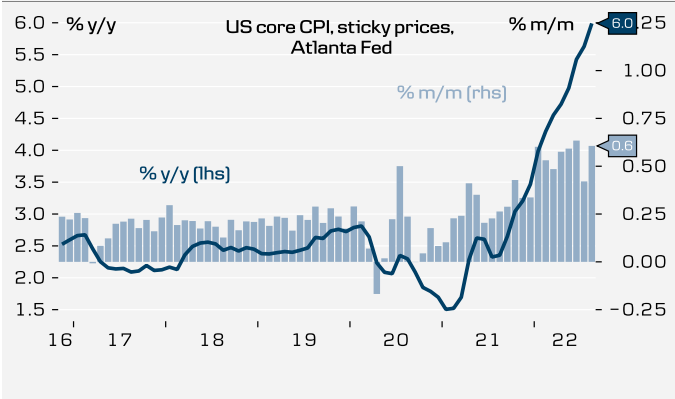
Source: NY Fed, University of Michigan, Macrobond Financial

**Long-term inflation expectations**



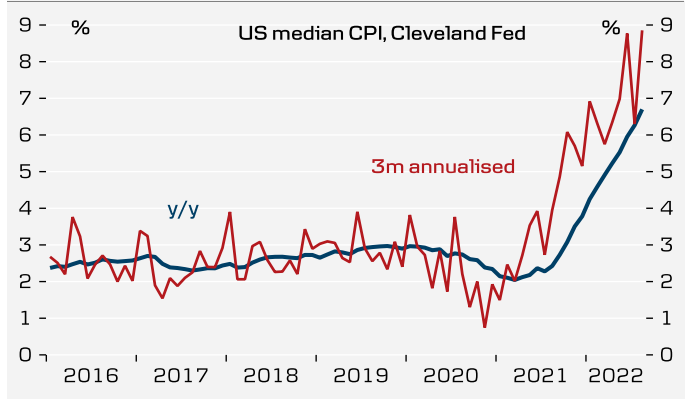
Source: Macrobond Financial, University of Michigan  
Note: Past performance is not a reliable indicator of future performance.

**Core sticky prices inflation (prices changed less frequently)**



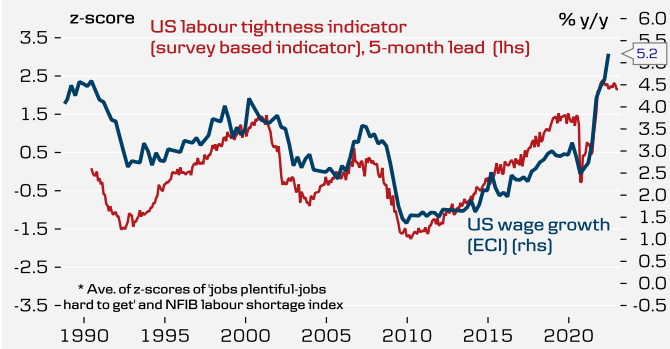
Source: Macrobond Financial, Atlanta Fed

**Median CPI inflation**



Source: Macrobond Financial, Cleveland Fed

### Labour market tightness: wage growth vs tightness



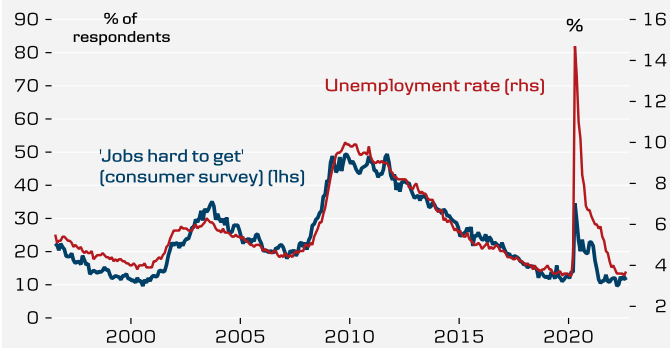
Source: Macrobond Financial, Conference Board, NFIB, BLS, Danske Bank

### Labour market tightness: job openings and shortage



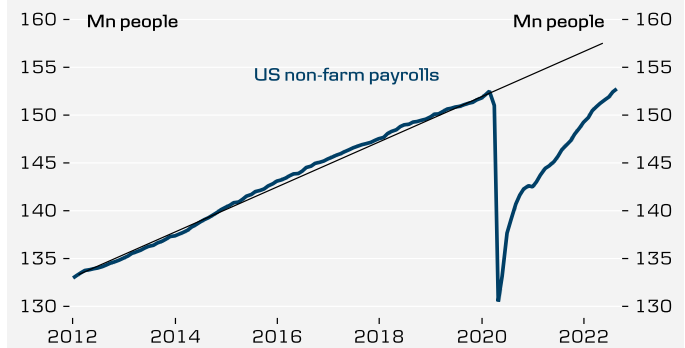
Source: Macrobond Financial, NFIB, BLS

### Labour market tightness: Jobs hard to get and unemployment



Source: Macrobond Financial, Conference Board, BLS

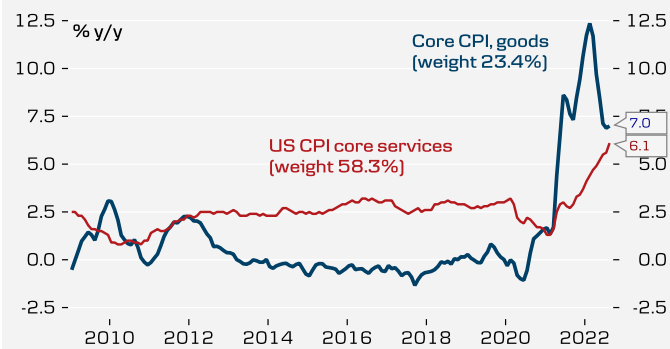
### Employment gap



Source: Macrobond Financial, BLS

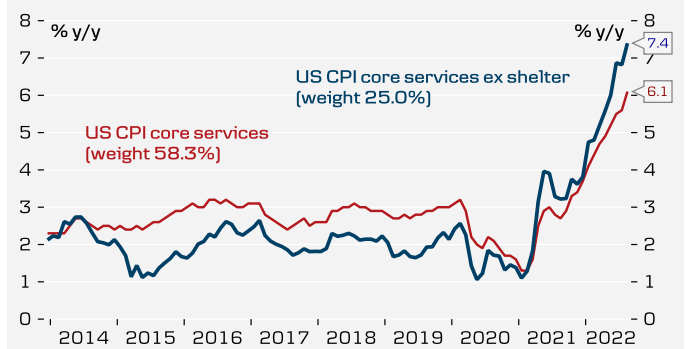
## Bottom up

### Core goods vs. services



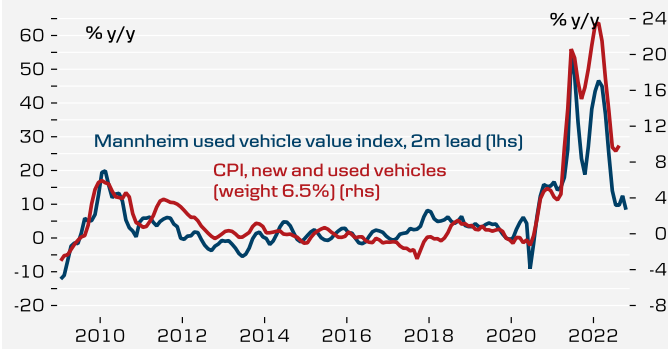
Source: Macrobond Financial, BLS

### Core services ex shelter



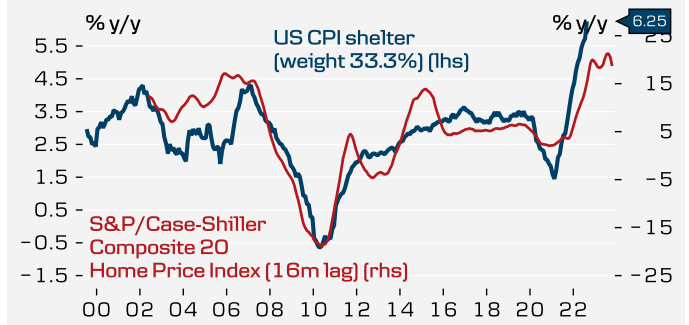
Source: Macrobond Financial, BLS

Used car prices



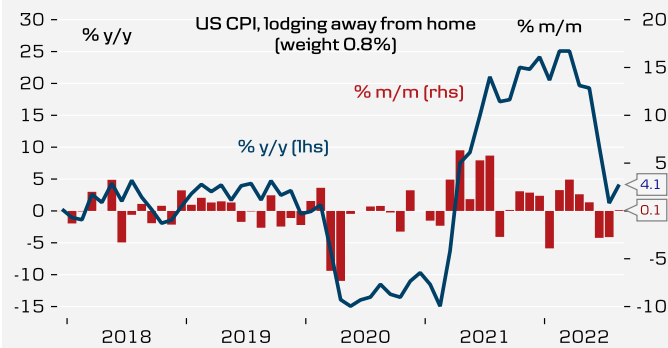
Source: Macrobond Financial, BLS, Manheim Consulting

Rent of shelter



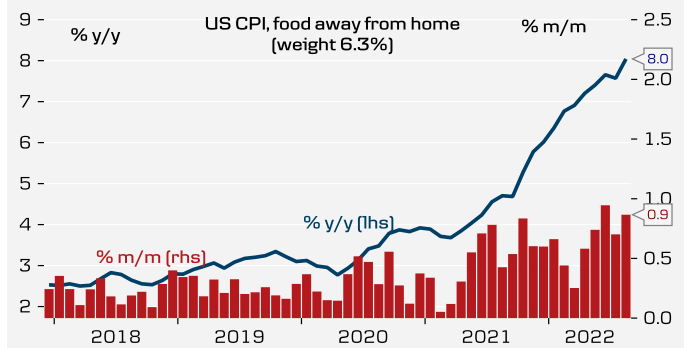
Source: Macrobond Financial, BLS, S&P Dow Jones

Lodging away from home (hotels etc.)



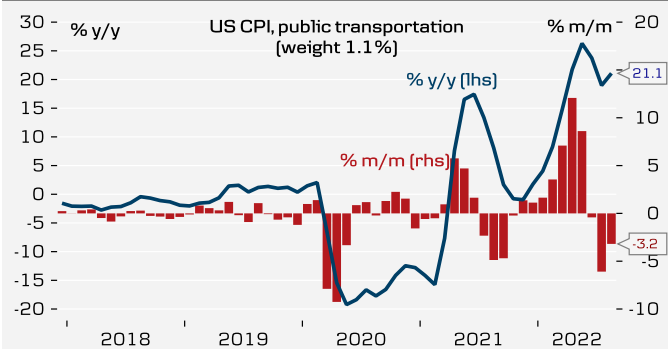
Source: Macrobond Financial, BLS

Food away from home (restaurants etc.)



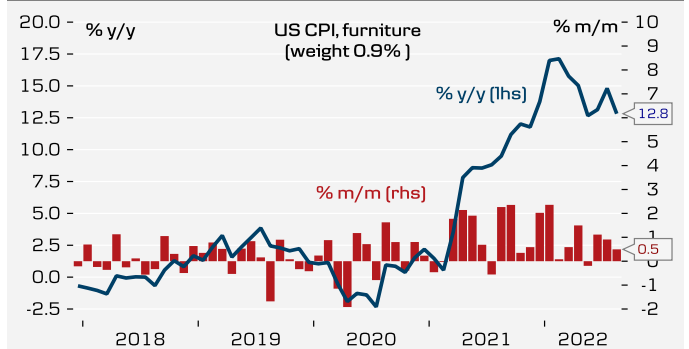
Source: Macrobond Financial, BLS

Public transportation (airfares etc.)



Source: Macrobond Financial, BLS

Furniture



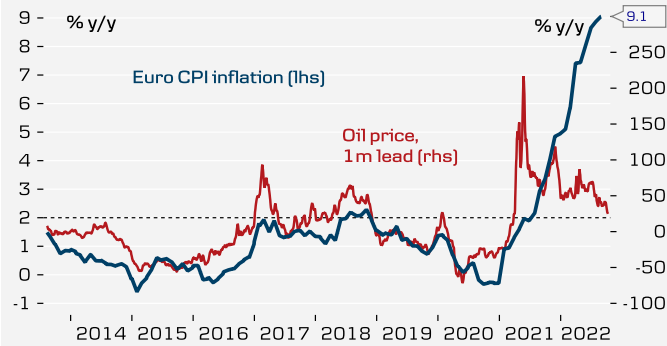
Source: Macrobond Financial, BLS



# Country details – Euro

## Top Down

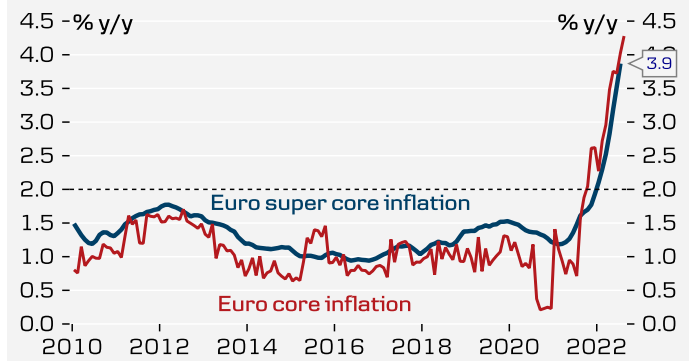
Headline vs. oil prices



Source: Macrobond Financial, Eurostat

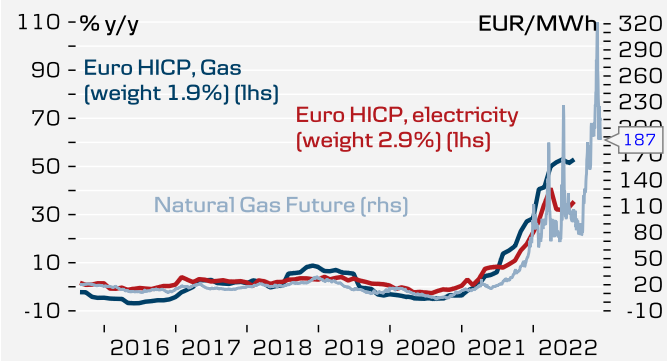
Note: Past performance is not a reliable indicator of future performance.

Core inflation



Source: Macrobond Financial, Eurostat, Danske Bank

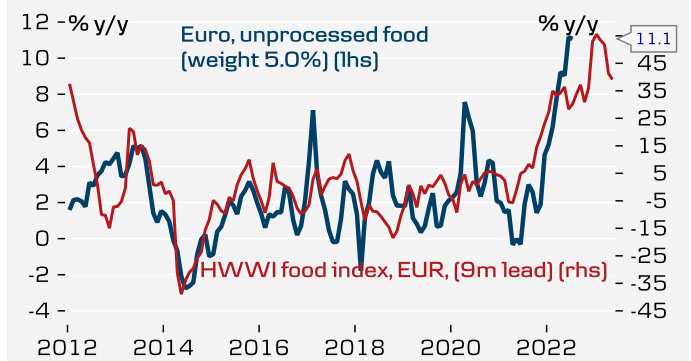
Natural gas & electricity



Source: Macrobond Financial, Eurostat

Note: Past performance is not a reliable indicator of future performance.

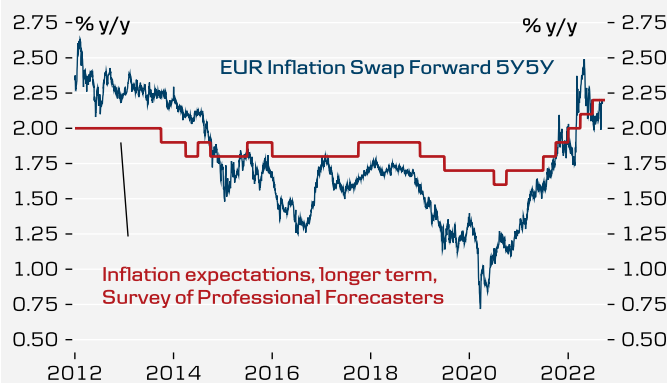
Food



Source: Macrobond Financial

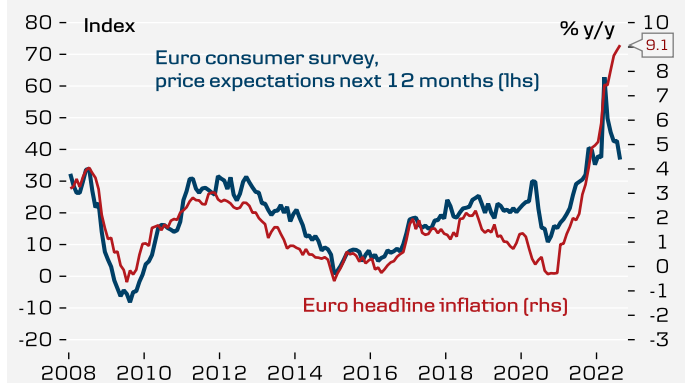
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Inflation expectations



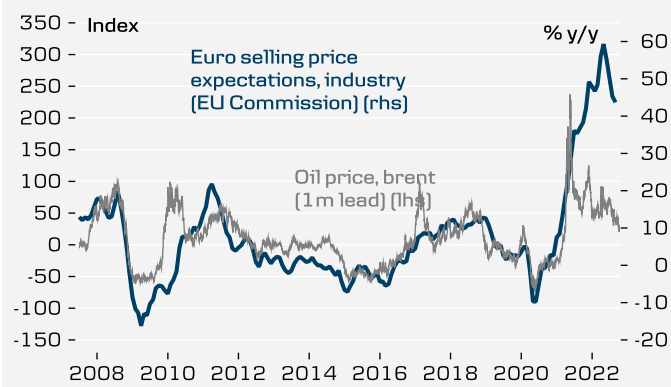
Source: Macrobond Financial, Bloomberg, ECB

Consumer confidence - price expectations



Source: Macrobond Financial, EU Commission, Eurostat

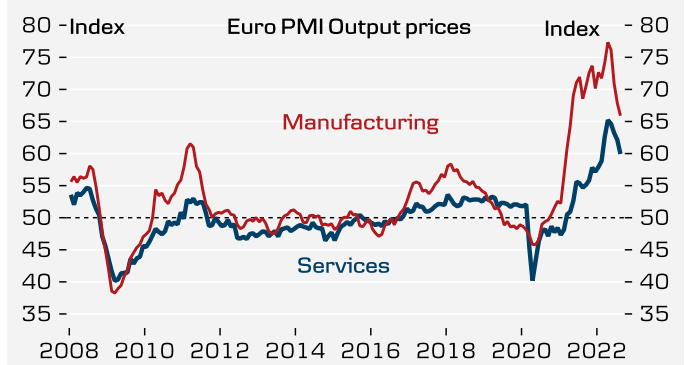
### Selling price expectations from companies



Source: Macrobond Financial, EU Commission

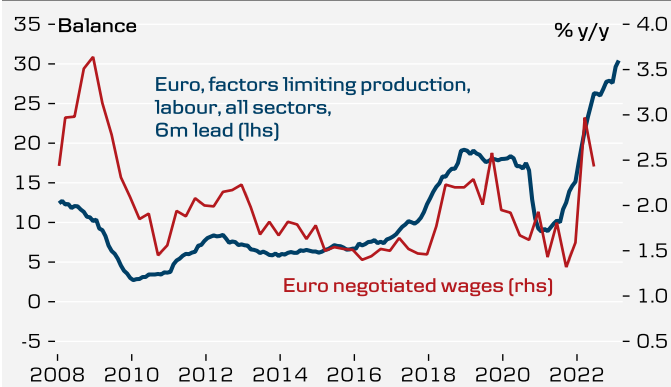
Note: Past performance is not a reliable indicator of future performance.

### PMI output prices



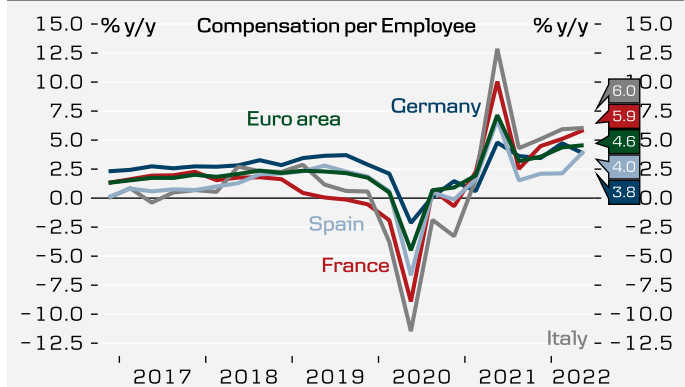
Source: Macrobond Financial, Markit

### Labour shortage and wage growth



Source: Macrobond Financial, EU Commission

### Wage compensation

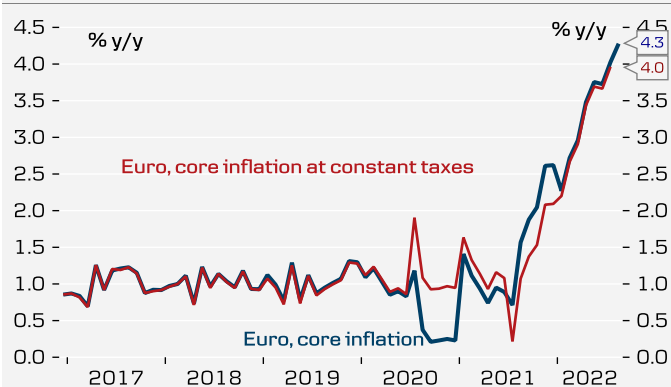


Source: Macrobond Financial, ECB.

Note: Compensation is affected by changes in working hours in contrast to negotiated wages, which is per hour worked.

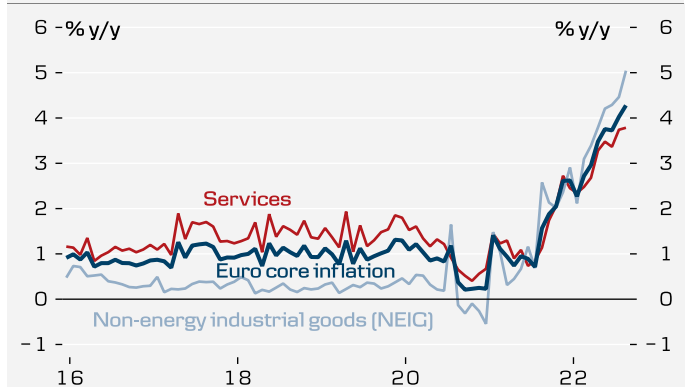
## Bottom up

### Core inflation, effect from taxes



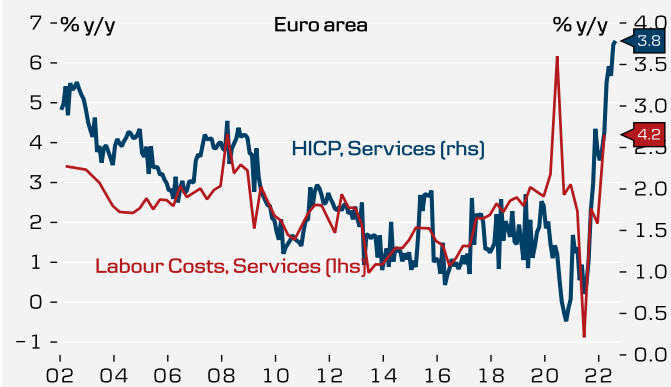
Source: Macrobond Financial, Eurostat

### Core inflation components



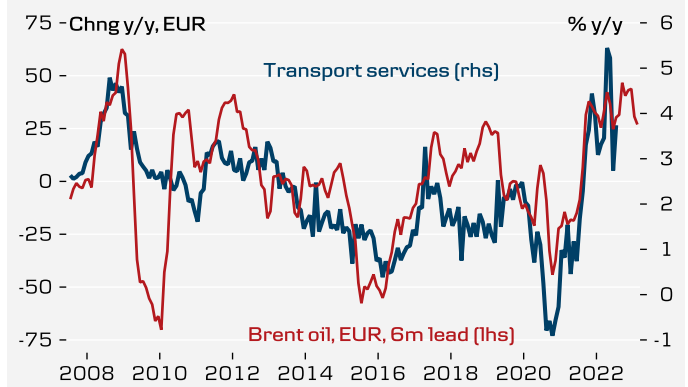
Source: Macrobond Financial, Eurostat, ECB

Service inflation vs. labour costs



Source: Macrobond Financial, Eurostat, Danske Bank

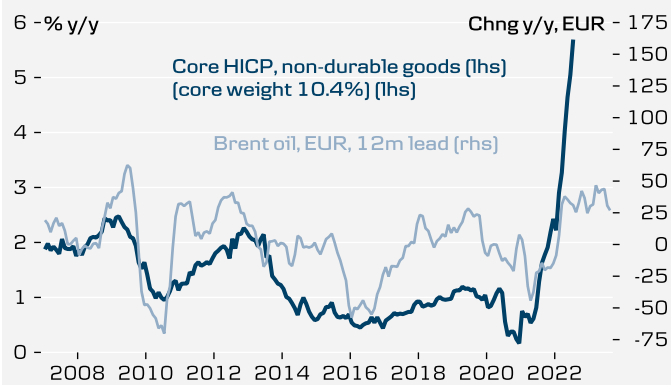
Transport services vs. oil



Source: Macrobond Financial, Eurostat, Danske Bank

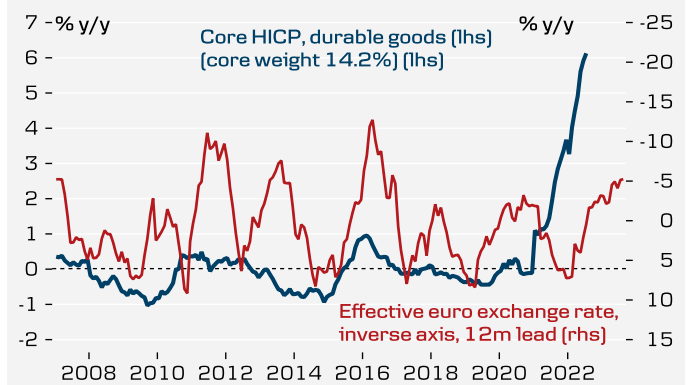
Note: Past performance is not a reliable indicator of future performance.

Core non-durable goods



Source: Macrobond Financial

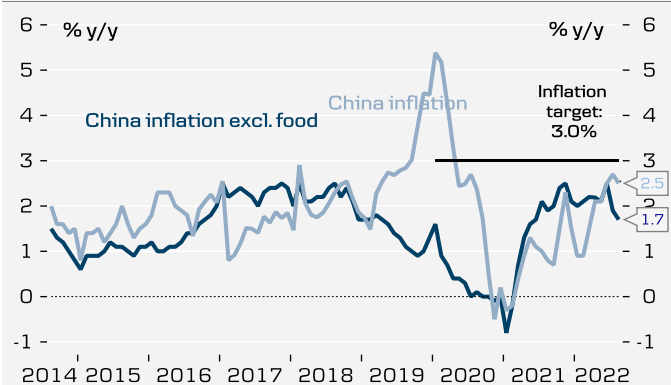
Core durable goods



Source: Macrobond Financial

# Country details – China

CPI and CPI ex food



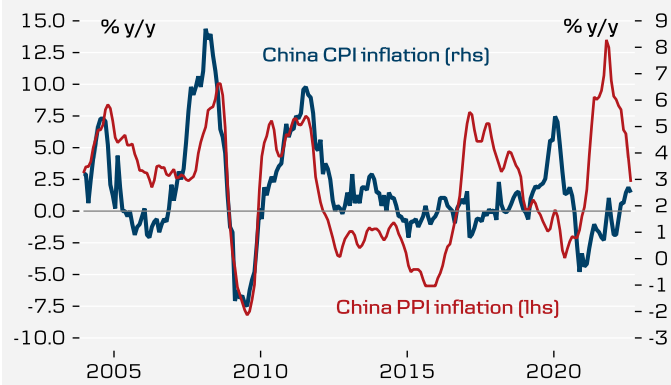
Source: Macrobond Financial, NBS

CPI and food prices



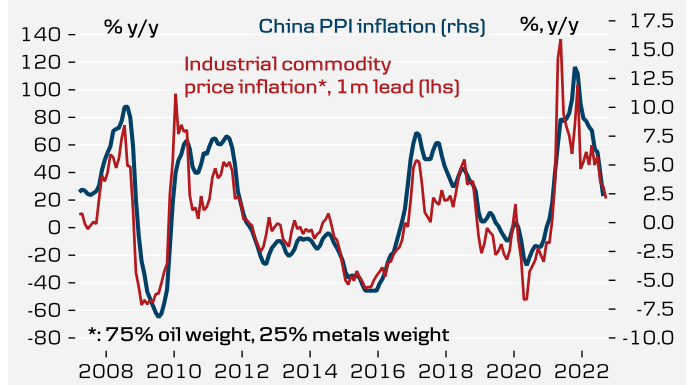
Source: Macrobond Financial, NBS

PPI vs. CPI



Source: Macrobond Financial, NBS

PPI vs. commodity prices



Source: Macrobond Financial, NBS, Danske Bank

Note: Past performance is not a reliable indicator of future performance.

## Disclosures

This research report has been prepared by Danske Bank A/S ('Danske Bank'). The authors of this research report is Allan von Mehren, Chief Analyst, Aila Mihr, Senior Analyst, and Antti Ilvonen, Analyst.

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