

# SpareBank MARKETS



## Macro Weekly

51/22

19/12/2022

**Harald Magnus Andreassen**

Phone: +47 24 13 36 21

Mobile: +47 91 14 88 31

E-mail: [hma@sb1markets.no](mailto:hma@sb1markets.no)

**Tina Norden**

Phone: +47 24 13 37 48

Mobile: +47 93 22 62 24

E-mail: [tina.norden@sb1markets.no](mailto:tina.norden@sb1markets.no)

**SpareBank 1 Markets**

Phone: (+47) 24 14 74 18

Visit address: Olav Vs gate 5, 0161 Oslo

Post address: PostBox 1398 Vika, 0114 Oslo

**SpareBank**  
MARKETS

## Last week

- **The War/European Energy/Commodities**

- Russian missiles are still hitting **Ukraine's civilian infrastructure**, and nobody seem able to move the **frontline in the East**
- **European gas prices** fell sharply last week, as did **Norwegian electricity** prices (spot – 12 m). One half to 2/3 of the increase in European energy prices from mid-November was suddenly reversed
- **Oil prices** fell Thursday and Friday but ended the week up, following the decline the previous week
- **Most other commodity prices** fell last week and most are down past 4 weeks, except iron ore (on hope for a post Covid recovery in China)
- It is still uncertain if **China's new Covid strategy** will work – in a population with still a low immunity rate

- **Central banks**

- **In the US, the FOMC** lifted the Fed funds by 50 bp to 4.25% – 4.75%, which was the most likely outcome. The bank lifted the interest rate path to above 5% by the end of 2023 (17 members signalled 5.1% or above, 3 months ago just 2 of 19 members thought that would be appropriate). The bank revised GDP further down, unemployment and inflation further up. Market's rate expectations are well below Fed's new plan, but that did not bother the bond market that much, and the curve moved down last week. Other markets too notice, however
- **The ECB** lifted its signal rate by 50 bps, the repo rate to 2.00%, and 'promises' to hike at a 50-bp pace for a period of time – which will soon bring the signal rate to above 3% - while the market thought, until the meeting last week, that 3.0% would be the terminal rate. The hawkish signal lifted market expectations to almost 3.5%. In addition, the ECB signals a further quantitative tightening, and the long end of the curve rose in Germany (real rates up 55 bps, inflation expectations fell 31 bps, the price for credibility?), and even more in the periphery. ECB cut its GDP growth forecast, and a short and shallow recession next year is now assumed
- **Bank of England** lifted the bank rate by 50 bps to 3.50%, as expected. The bank expects (or rather, wants) GDP to contract, unemployment to increase (from the lowest level in decades, though). A full MPR was not published, but the bank sees further rate hikes. The market agrees, and market expectations rates rose further last week, but less than in the Eurozone
- **Norges Bank** lifted its policy rate by 25 bps to 2.75%, as expected. The interest rate path peak was kept unch. at 3.1%, signalling a 40% probability for two more hikes next year (and 60% for just one 25 bps hike). The path was lowered by up to 17 bps in '24/'25. Market rates rose by more than 20 bps, to 3.17% (Q3 next year), but are still well below NoBa's path in 24/25. NoBa revises the GDP level up but expects a decline in GDP each quarter next years. Unemployment was revised just marginally up
- **The Swiss National Bank** also hiked its signal rate by 50 bps to just 1,00%

- **Preliminary December PMIs**

- **Mixed news:** The EMU PMIs was much better than expected, thanks to a recovery in the German indices. The EMU composite climbed 1 p to 48.8, and is thus below the 50-line. The US PMIs were much weaker than expected, the composite fell 1.8 p to 44.6 (!) – and the surprise differential was 2.9 p (one of the larger, we think). We estimate an unchanged global composite PMI at 48.0, signalling zero growth in the global economy – but China has not yet reported. New orders are falling rapidly, delivery times have normalised, and prices increase are slowing substantially



## Last week, II

- **China December data – all on the downside**

- **Industrial production** fell 0.3% m/m, rather unusual – and the annual rate fell to 2.2% from 5.0%, expected 3.6%. Both Covid restrictions as well as weaker global demand is probably to blame
- **Retail sales** gained 0.2% m/m in November, following a 0.7% drop in October. In addition, the history was once more revised sharply down, and these data seem to be totally unreliable. Measured y/y, sales are down 5.9% (!) in value terms, down from -0.5% in October, expected -3.5%. Very likely, measures against Covid are to blame. Restrictions are now eased but then the virus spreads rapidly again
- **Investments** also fell m/m, which is very seldom, and history is revised down, which has not happened often either. New home sales and all sorts of construction starts fell further in November, as did home prices, everywhere
- **Credit growth** was rather slow in November too, total credit up a 7.7% pace, and the annual growth rate is heading down too

- **US**

- **CPI inflation** fell 0.1 – 0.2 pp more than expected in November, the headline to 7.1%, the core to 6.0% - and peak inflation is very likely behind us. Underlying growth is slowing but remains high. Good prices fell m/m but rent inflation is still brisk, and services have not yielded by much
- **Retail sales** fell by 0.1% in volume terms (our est.) in November, some 0.3 pp weaker than expected. The trend is still surprisingly strong
- **Manufacturing** production fell 0.6% in November, 0.5 pp more than expected. Production has been flat since April

- **EMU**

- **HICP (CPI) inflation** was marginally revised upwards in November, to 10.1%, the core was unch. at 5.0%. Energy inflation may have peaked but food prices – and all other prices – are still on the way upwards. **PPI inflation** fell sharply, due to lower energy prices
- **Manufacturing production** fell by 1.3% but has kept up well recent months even if energy production has fallen by 5% past few months

- **UK**

- **Headline inflation** may have peaked but is still at 10.7%. Core inflation is at 6.3%
- **GDP** gained 0.5% in October, but the trend is flat, while **retail sales** are heading down
- **Unemployment** has turned marginally up but the **no. of employed** is still on the way up. **Wage inflation** accelerated further, a is at 6%, way to high to reach a 2% CPI target

- **Sweden**

- **CPI** inflation is still on the way up, the total at 11.5%, core at 8%
- **Unemployment** has probably bottomed, and the no. of new claims is heading slightly up but vacancies remain at a very high level

- **Norway**

- **Mainland GDP** was unchanged in October; We expected a small increase. Consumption rose further but investments fell both on- and offshore, as did exports. Inventories grew, probably due to less deliveries of investments goods. Ex. electricity production, GDP fell by 0.2%, as fisheries contributed on the downside
- The **trade surplus** fell in November as gas prices fell sharply. However, the surplus still equals 32% of Mainland GDP. Mainland exports fell, in volume terms, while imports continued upwards
- **Home builders** report a further decline in new home sales in November

# This week: US housing, PCE deflator; EMU labour cost; Norw. unempl, wages

| Time                    | Count. | Indicator                      | Period | Forecast  | Prior     |
|-------------------------|--------|--------------------------------|--------|-----------|-----------|
| <b>Monday Dec 19</b>    |        |                                |        |           |           |
| 08:00                   | NO     | Housing starts                 | Nov    |           |           |
| 10:00                   | GE     | IFO Expectations               | Dec    | 82        | 80        |
| 11:00                   | EMU    | Labour Costs YoY               | 3Q     |           | 4.0%      |
| 16:00                   | US     | NAHB Housing Market Index      | Dec    | 34        | 33        |
| <b>Tuesday Dec 20</b>   |        |                                |        |           |           |
| 14:30                   | US     | Housing Starts                 | Nov    | 1400k     | 1425k     |
| 14:30                   | US     | Building Permits               | Nov    | 1485k     | 1526k     |
| 16:00                   | EMU    | Consumer Confidence            | Dec P  | -22       | -23.9     |
| <b>Wednesday Dec 21</b> |        |                                |        |           |           |
| 06:00                   | SW     | Home prices, HOX/Valueguard    | Nov    |           |           |
| 09:00                   | SW     | Economic Tendency Survey       | Dec    |           | 84.5      |
| 09:00                   | SW     | Consumer Confidence            | Dec    |           | 55.8      |
| 14:30                   | US     | Current Account Balance        | 3Q     | -\$224.0b | -\$251.1b |
| 16:00                   | US     | Existing Home Sales            | Nov    | 4.20m     | 4.43m     |
| 16:00                   | US     | Conf. Board Consumer           | Dec    | 101       | 100.2     |
| <b>Thursday Dec 22</b>  |        |                                |        |           |           |
| 08:00                   | SW     | Wages Non-Manual Workers YoY   | Oct    |           | 3.1%      |
| 08:00                   | NO     | Unemployment Rate AKU          | Oct    | (3.4)     | 3.4%      |
| 08:00                   | NO     | Employees, wages               | Nov    |           |           |
| 08:00                   | NO     | Hotel guest nights             | Nov    |           |           |
| 08:00                   | UK     | GDP QoQ                        | 3Q F   | -0.2%     | -0.2%     |
| 08:00                   | SW     | Retail Sales MoM               | Nov    |           | -1.30%    |
| 10:00                   | NO     | Unemployment Rate, NAV         | Dec    | 1.7%(1.6) | 1.6%      |
| 14:30                   | US     | Chicago Fed Nat Activity Index | Nov    |           | -0.05     |
| 14:30                   | US     | GDP Annualized QoQ             | 3Q T   | 2.9%      | 2.9%      |
| 14:30                   | US     | Initial Jobless Claims         | Dec-17 | 225k      | 211k      |
| 16:00                   | US     | Leading Index                  | Nov    | -0.4%     | -0.8%     |
| <b>Friday Dec 23</b>    |        |                                |        |           |           |
| 08:00                   | NO     | Credit Indicator Growth YoY    | Nov    |           | 5.2%      |
| 14:30                   | US     | Personal Income                | Nov    | 0.3%      | 0.7%      |
| 14:30                   | US     | Personal Spending              | Nov    | 0.2%      | 0.8%      |
| 14:30                   | US     | PCE Deflator YoY               | Nov    | 5.5%      | 6.0%      |
| 14:30                   | US     | PCE Core Deflator MoM          | Nov    | 0.2%      | 0.2%      |
| 14:30                   | US     | PCE Core Deflator YoY          | Nov    | 4.6%      | 5.0%      |
| 14:30                   | US     | Durable Goods Orders           | Nov P  | -0.9%     | 1.1%      |
| 14:30                   | US     | Cap Goods Orders Nondef Ex Air | Nov P  | 0.1%      | 0.6%      |
| 16:00                   | US     | U. of Mich. Sentiment          | Dec F  | 59.1      | 59.1      |
| 16:00                   | US     | New Home Sales                 | Nov    | 600k      | 632k      |

## • USA

- **The housing market** is struggling as mortgage rates have surged, following the 40% house price appreciation from before the pandemic. **New home sales** have been stronger than expected recently but are well down from the local peak – and **starts** are down even more, as inventories have grown much larger than normal. **Existing home sales** have fallen sharply. **Home builders** have so far been reporting a steep decline in activity. Now, mortgage rates have come down, material costs are coming down and some optimism has returned. Still, we think the downturn in housing, especially in home prices, still has a way to go
- Surveys report collapsing **new orders**, but official new order stats are still going strong
- The **PCE price deflator** will very likely confirm the decline in CPI inflation, while household spending slowed in November
- The **3<sup>rd</sup> Q3 GDP** release is unlikely to reveal important revisions

## • EMU

- **Labour cost inflation** has been modest, as the 4% growth rate in Q2 does not reflect the underlying growth. However, these data, which are based on preliminary National accounts, are volatile, and often substantially revised. The data quality is therefore questioned, and some x-checks may indicate that wage inflation has accelerated – and not remained as stable as these data so far has reported. Which is rather important for the ECB, without high wage inflation, CPI inflation will come down rapidly

## • Sweden

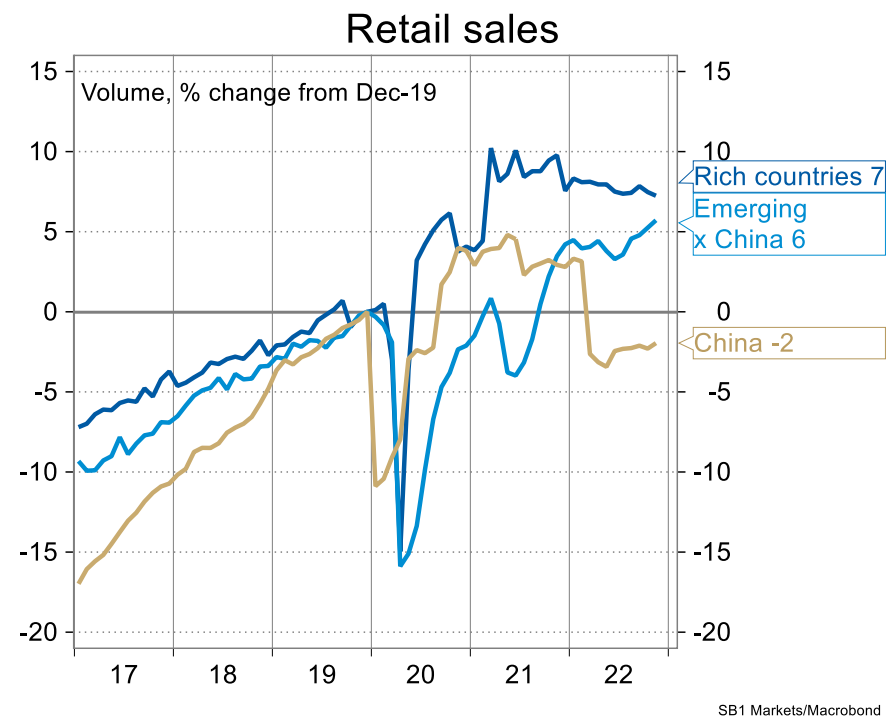
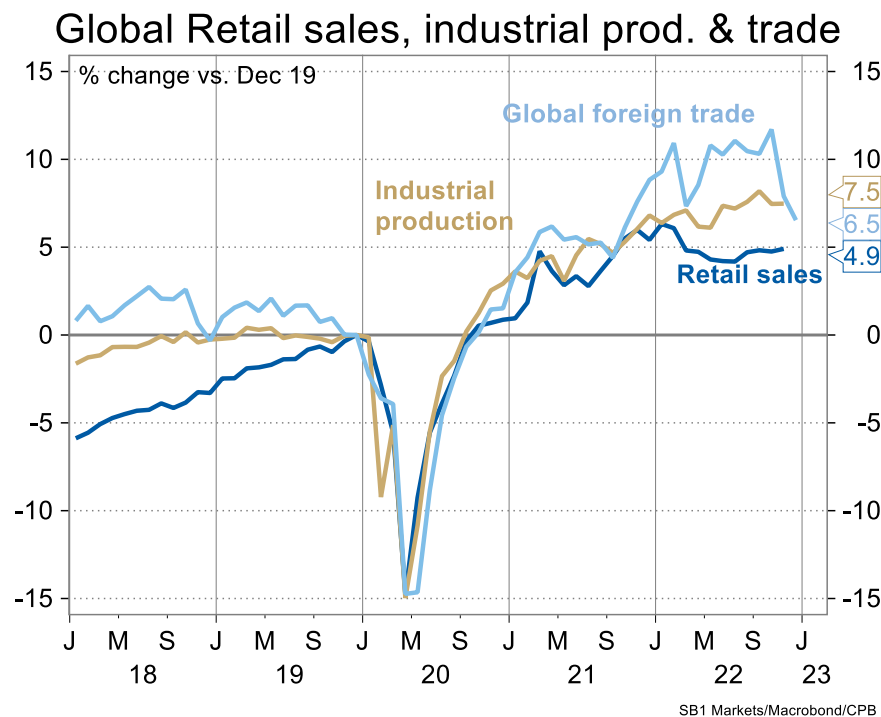
- The first **house price** statistics reported higher prices in November, we doubt the more robust Valueguard stats will confirm a flattening. **Wage inflation** remains modest

## • Norway

- **NAV unemployment** fell further in November but we expect a small increase in December, however not sufficient to lift the (seas. adj.) rate from 1.6%. We assume the inflow of **new vacancies** slowed further. The **LFS (AKU) unemployment rate** rose by 0.2 pp to 3.4% in October, but these data are rather volatile. The **register-based employee stats** has so far reported growth, albeit somewhat slower. **Wage inflation** has remained moderate

# Kiel institute reports a steep decline in shipping activity

Still preliminary figure, but worth taking notice. Retail sales are flattish, industrial production is still trending up

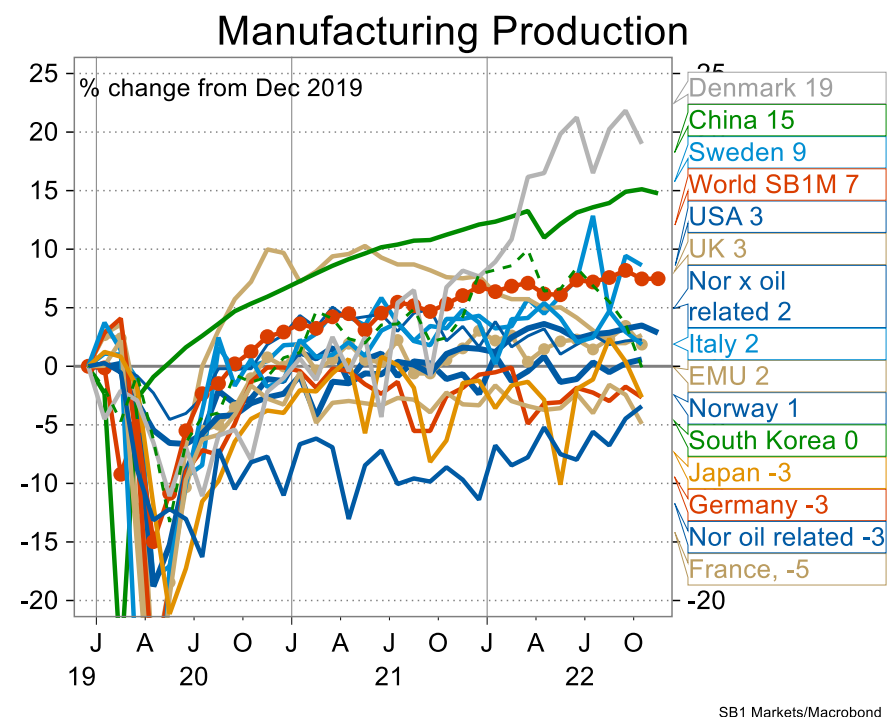
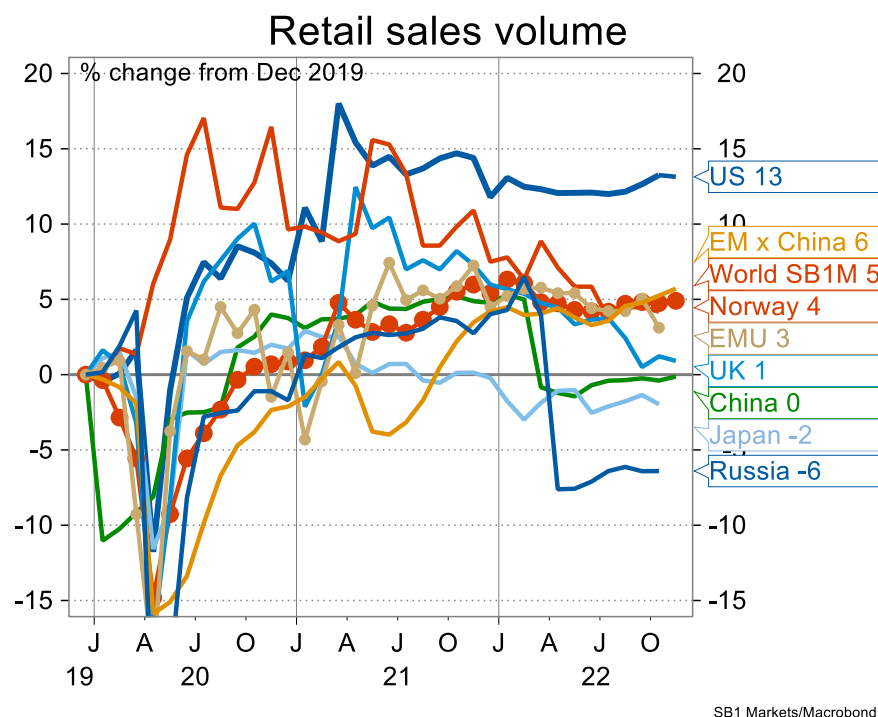


Global foreign trade: The last months, including forecasts, are estimates from the Kiel Institute.



# A broad slowdown of retail sales, at least in the rich part of the world (+China)

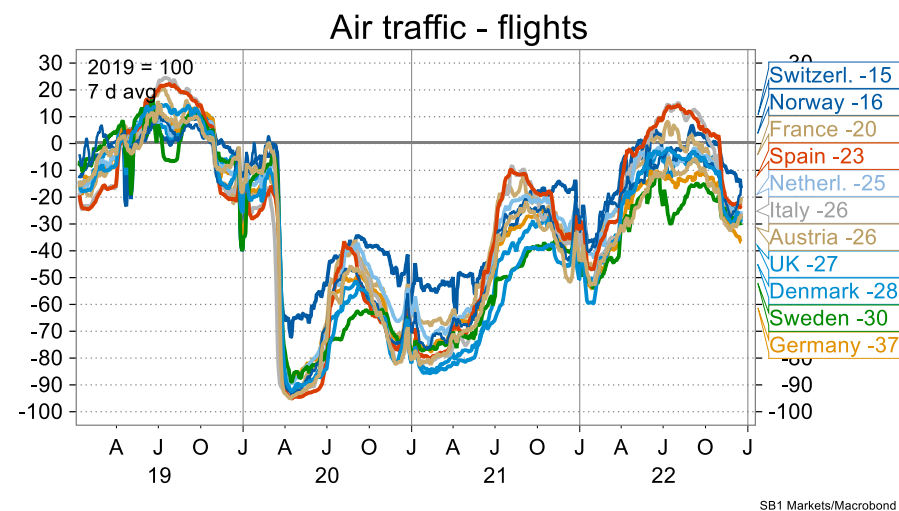
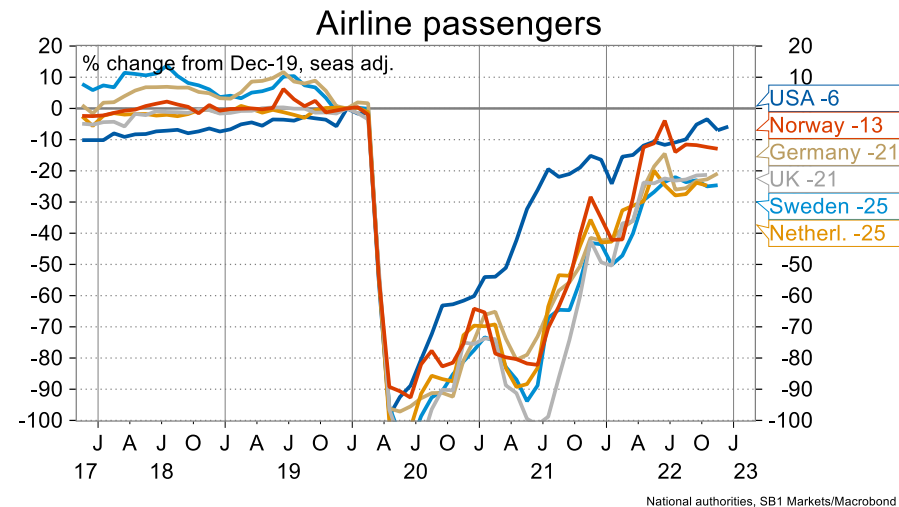
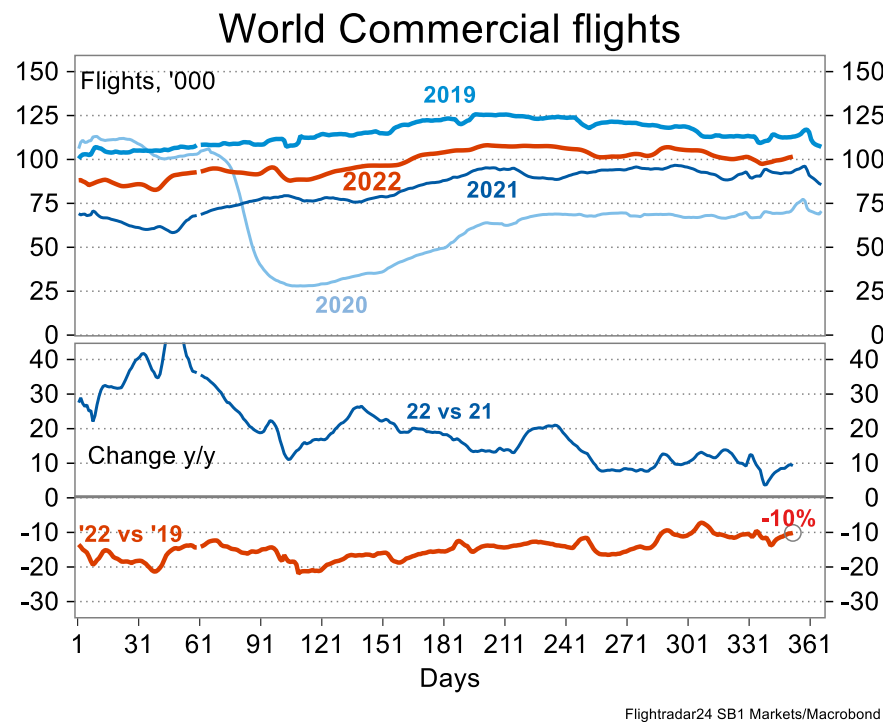
Is manufacturing exposed? Surveys, like the PMIs send a warning sign too



- Retail sales in China rose marginally in November but the history was once more revised down

# Global airline traffic is slightly up, but down 10% vs 2019

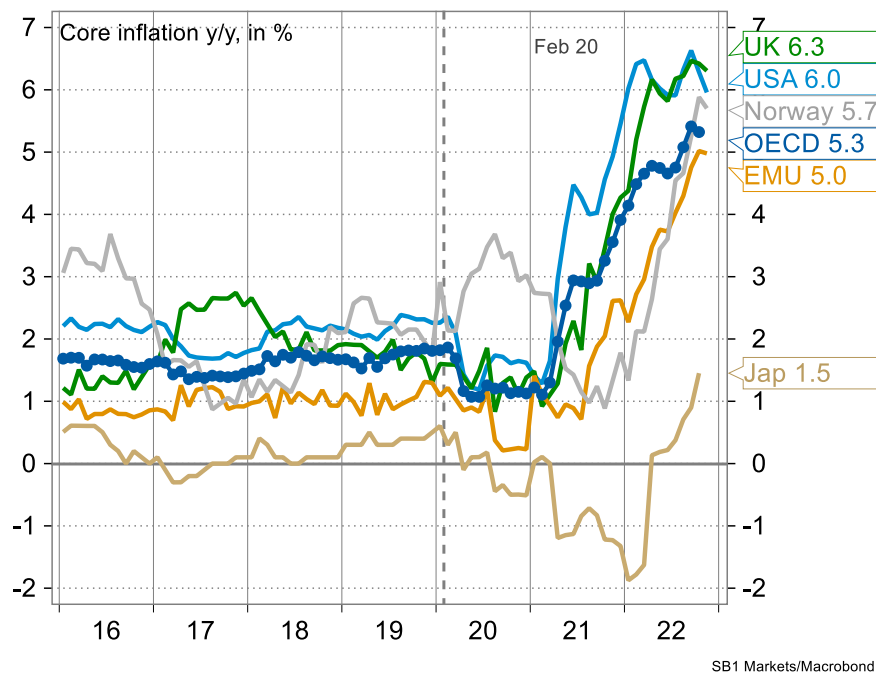
If growth rates had been normal the past 3 years, it should have been at least 10% above



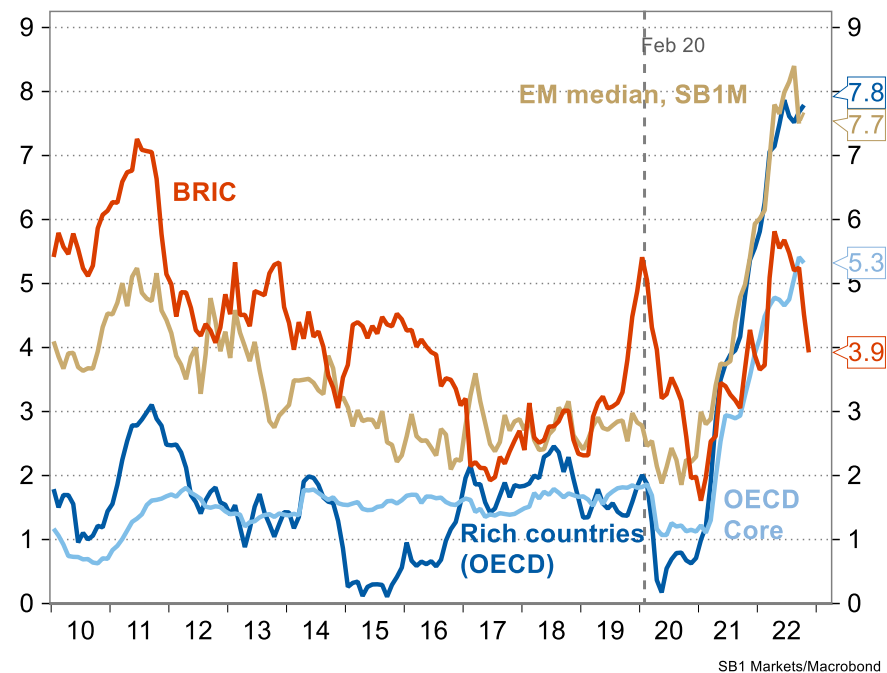
## Peak inflation? Probably

The going rate in DM is still 7% - 11% headline inflation, and 5% - 6% core inflation

### Core CPI Inflation



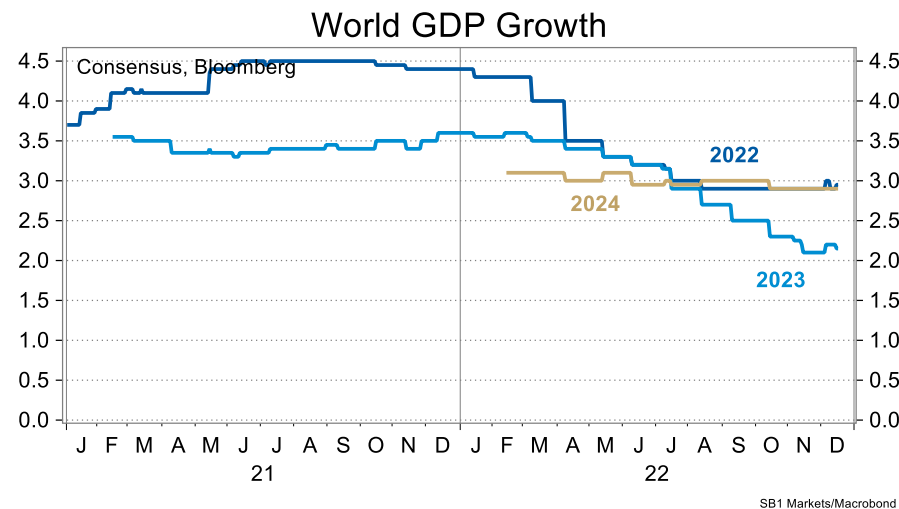
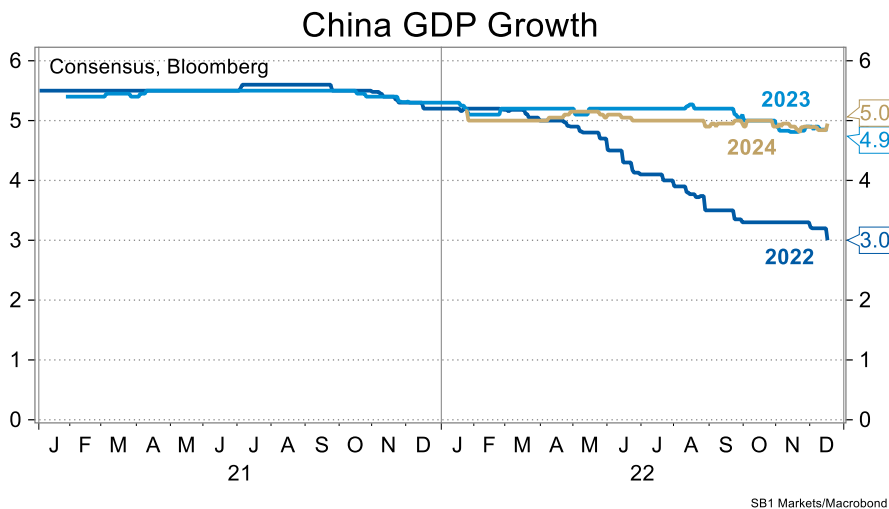
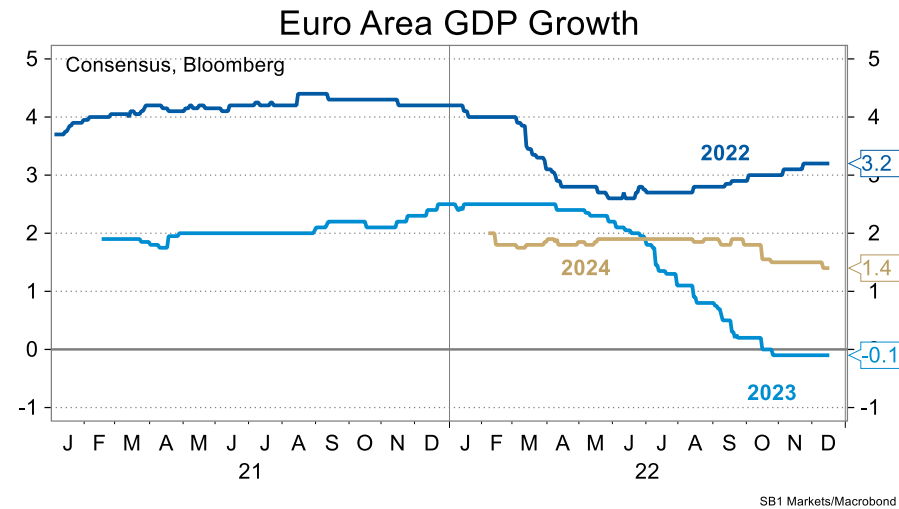
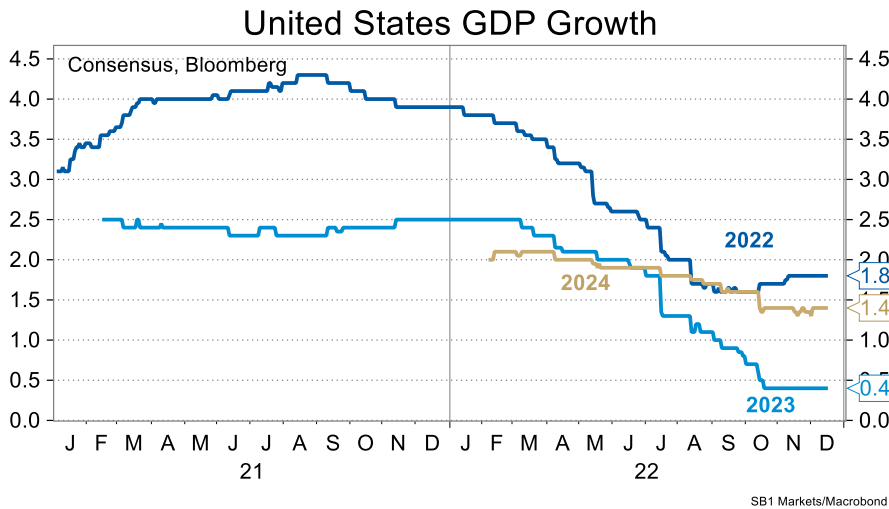
### CPI Inflation





# GDP growth expectations: 2023 forecasts have flattened

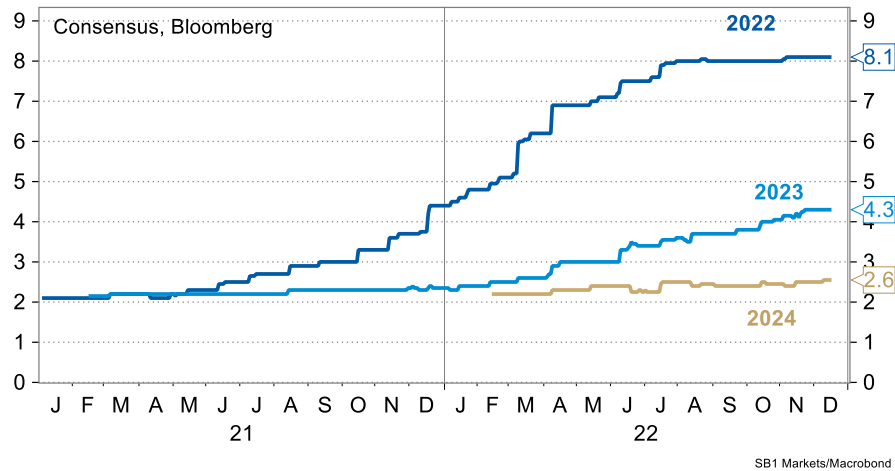
But the 2023 f'casts imply a recession in the US next year, and deeper one in Europe



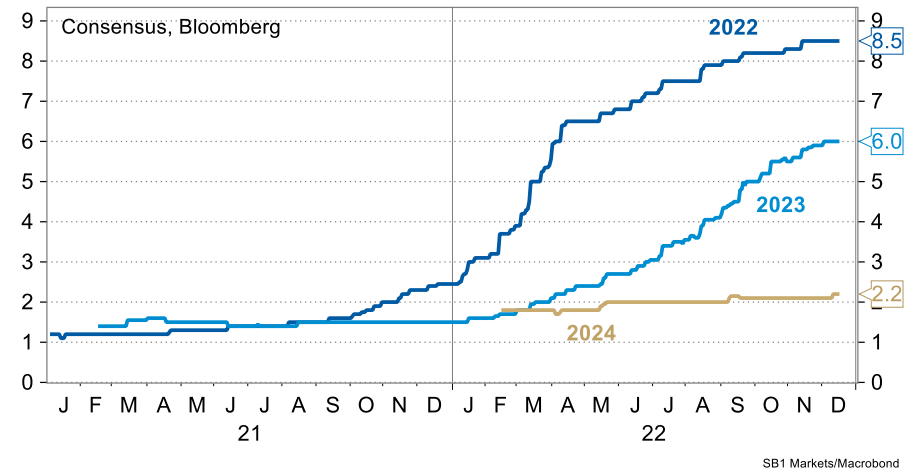
# 2023 inflation forecasts are still drifting upwards

Especially the 2023 EMU inflation expectations

## United States CPI forecasts

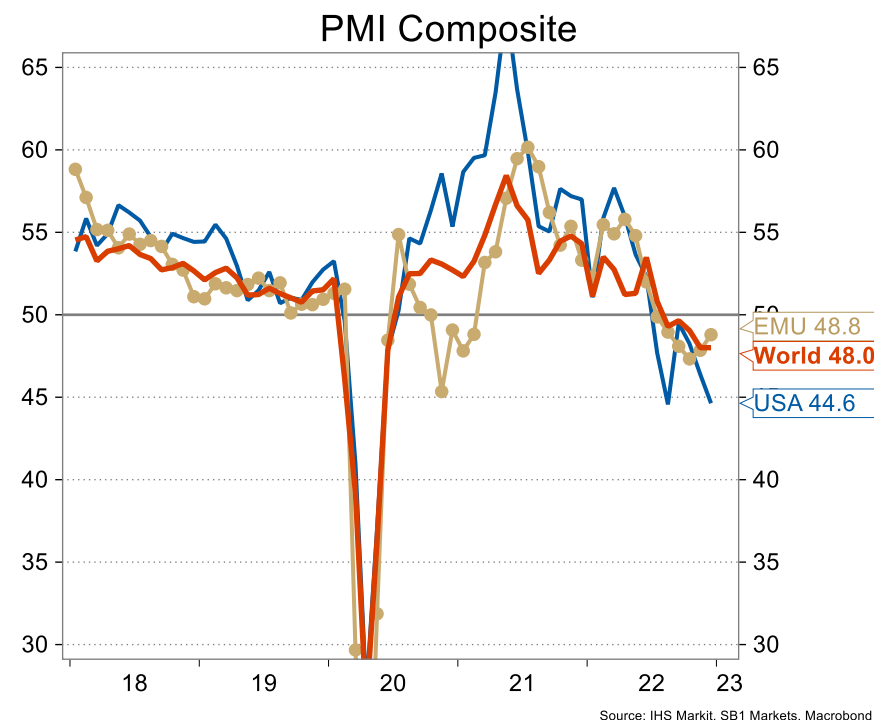
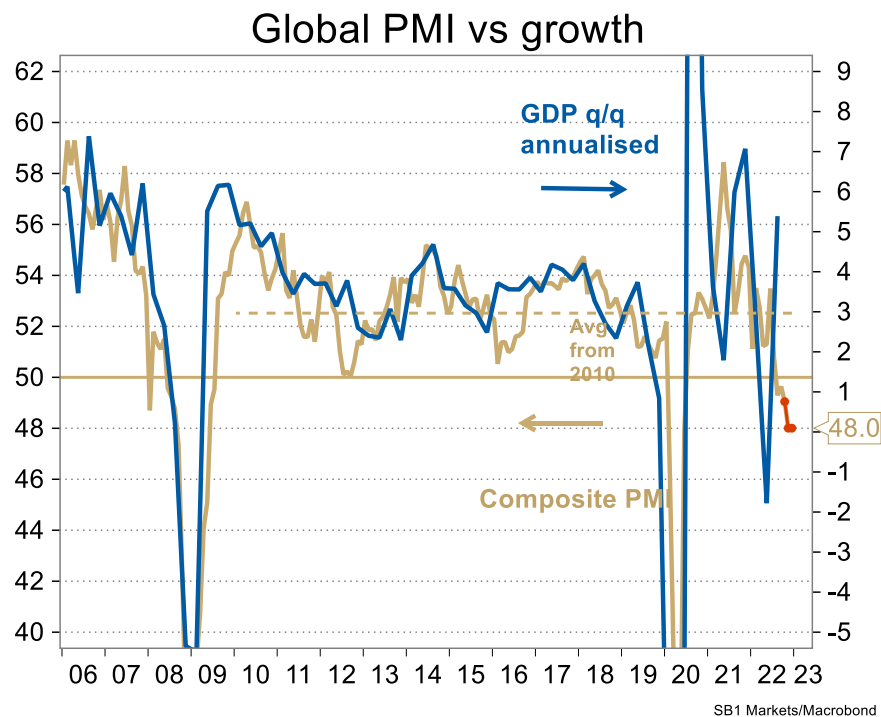


## Euro Area CPI forecasts



# The global composite PMI probably close to unchanged in December

... at a low level, signalling a zero growth in GDP. USA surprised at the downside, EMU at the upside



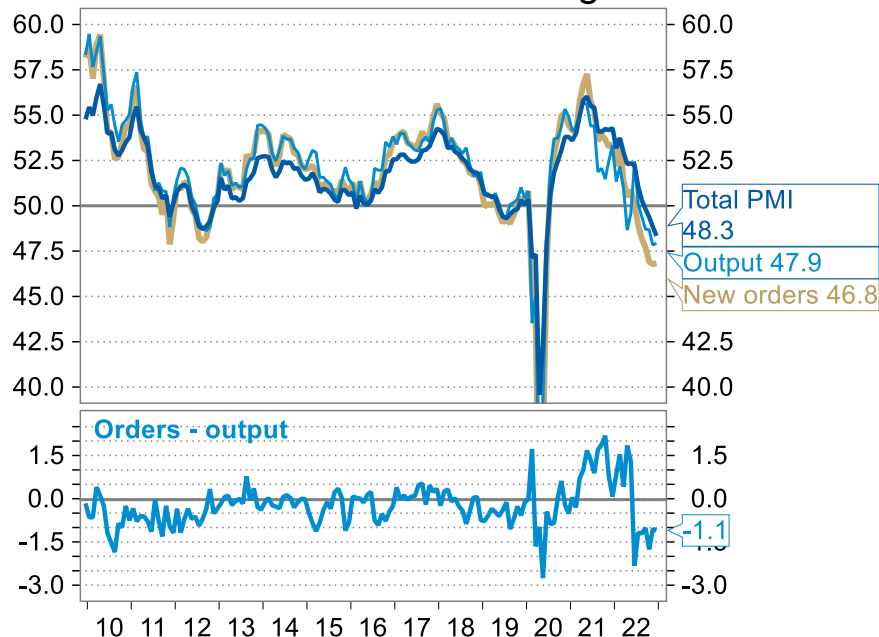
- According to the preliminary PMIs from the rich part of the world, the global PMI probably remained close to 48 in December, for a labelling a global recession, a 2.5% growth rate. The index is by far the weakest level since the financial crisis – except for the first pandemic months
- EMU once again surprised on the upside, US on the downside (is sum a 2.9 p surprise differential, we think one of the larger)
- China (or other EMs) has not yet reported



# Manufacturing orders are contracting very fast, both in Europe and the US

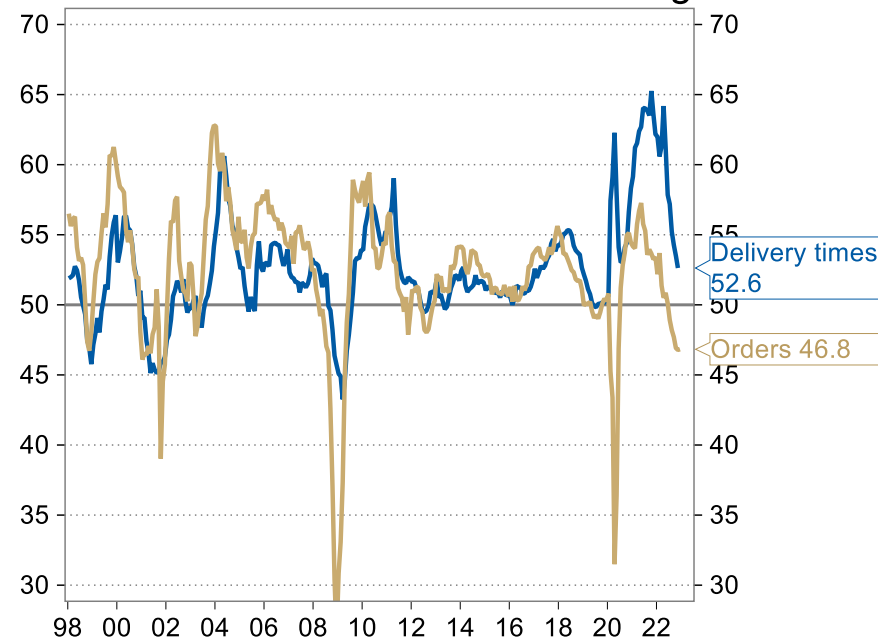
The delivery times was unch. in December, thanks to the uptick in the EMU index

## Global Manufacturing PMI



SB1 Markets/Macrobond

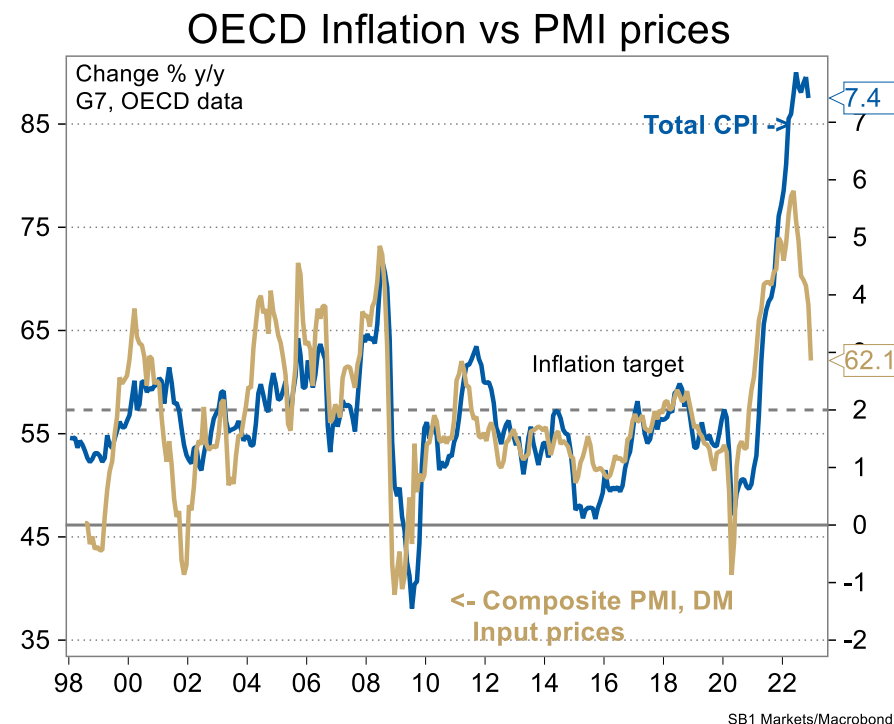
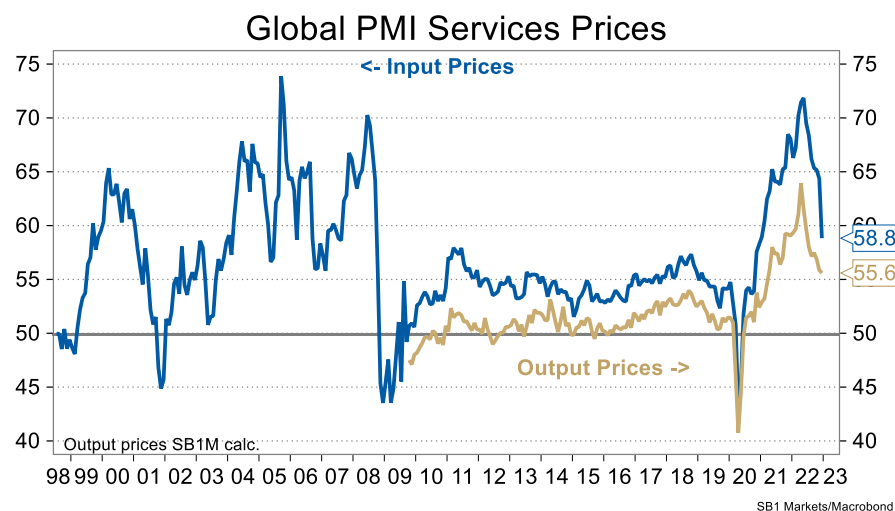
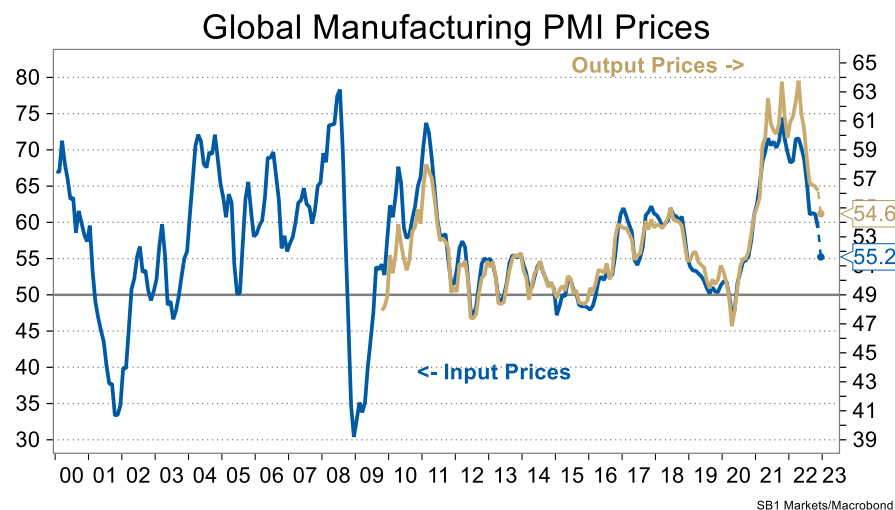
## Global PMI Manufacturing



SB1 Markets/Macrobond

# Price indices are heading down, and input prices are back to a normal level

... at least in manufacturing sector in the rich part of the world



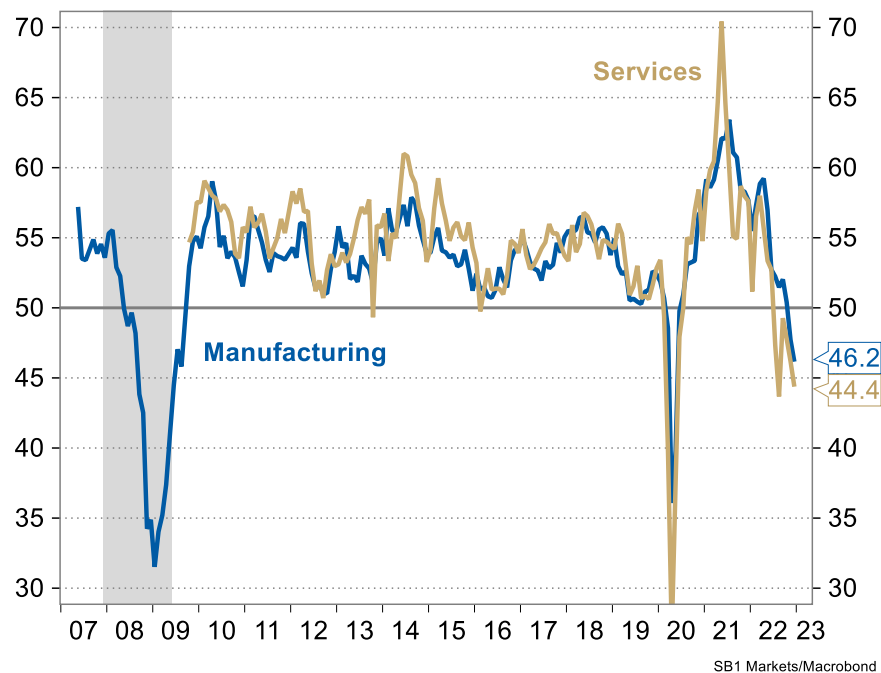
- These PMIs signal a substantial easing of price pressure the coming months – but are still indicating inflation well above a normal level
- We are still more concerned about wage inflation than the actual price inflation due to factors that are most likely transitory, like hikes in raw material prices, freight costs or short-lived margins expansion when demand is surprisingly strong

Last obs. based on preliminary PMIs from EMU, Japan, UK, and the US

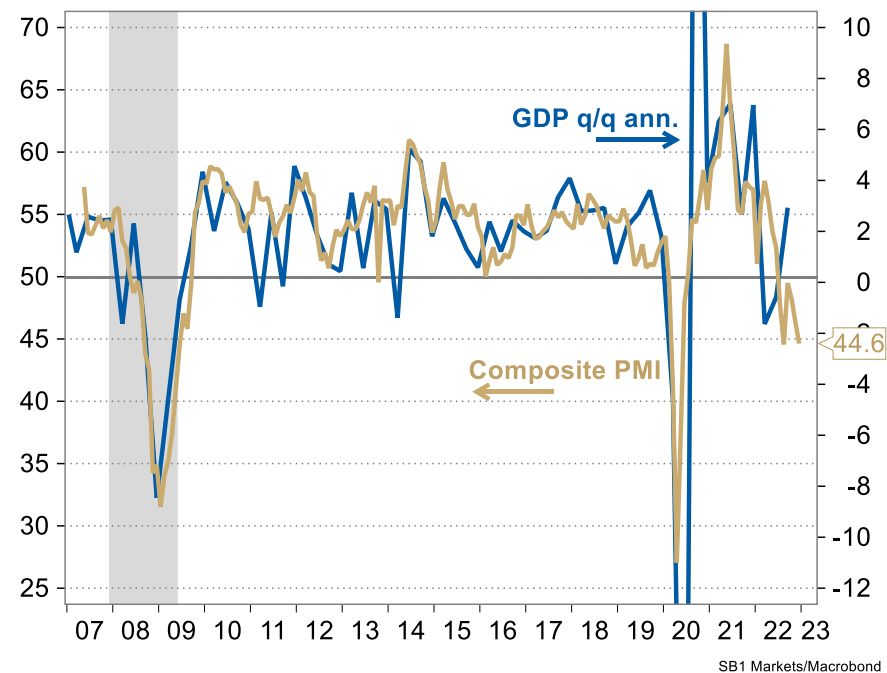
# US PMIs much weaker than expected in December too, the composite at 44.6

... which signals a significant GDP contraction, AKA a recession

## USA S&P PMI



## USA S&P PMI vs GDP

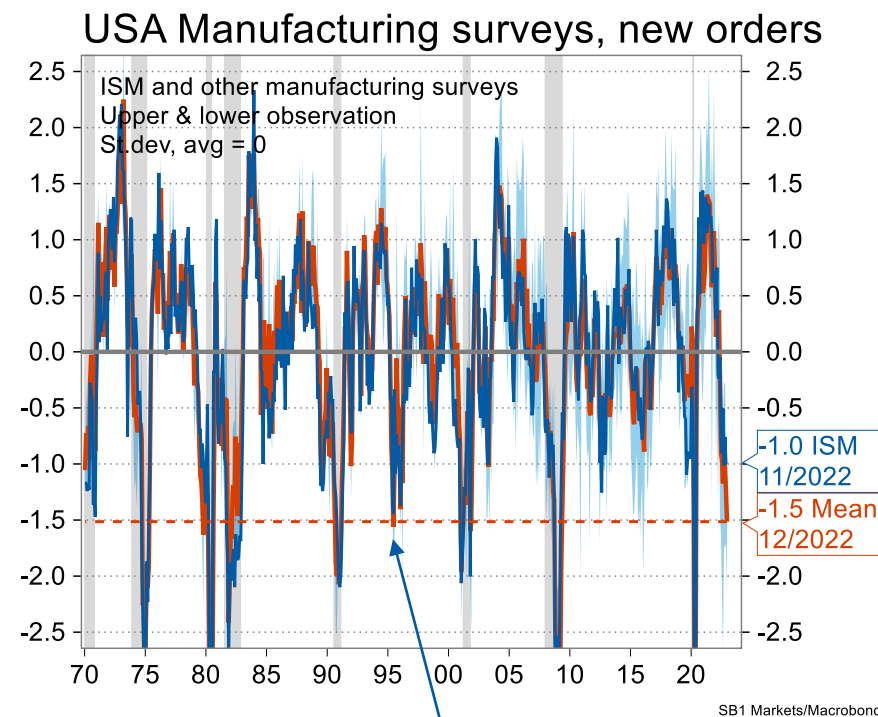
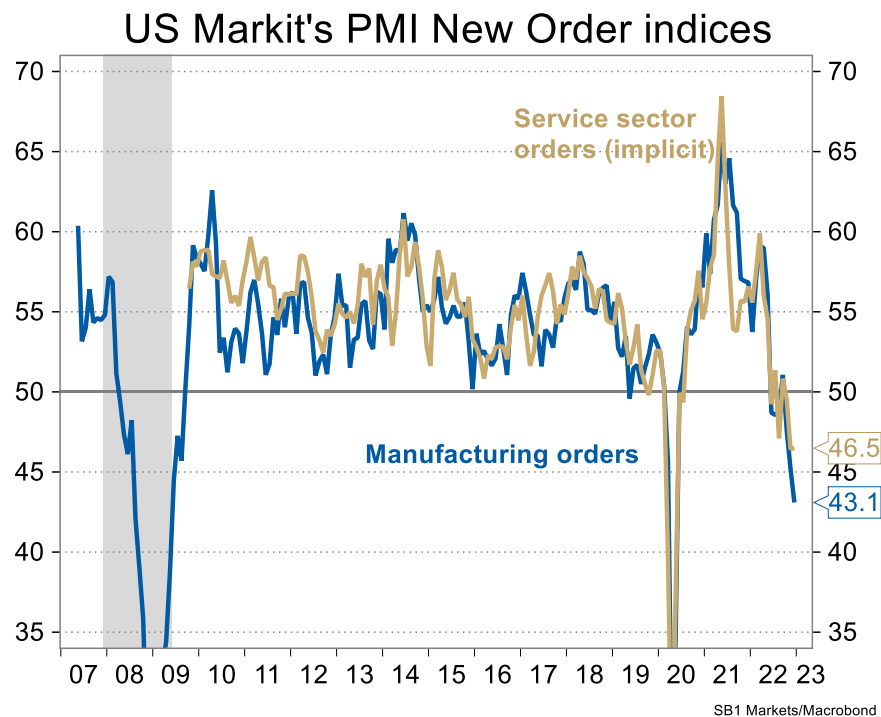


- **The S&P composite PMI** fell 1.8 p to 44.6 in December, expected up 0.5 p! The index signals a 2%+ pace of contraction in GDP. The index has been below the 50-line for 6 consecutive months.
- Services fell by 1.8 p to 44.1. The total manufacturing PMI 1.5 p to 46.2, both expected marginally up. Two months ago, the manufacturing PMI was above 50!
- **The manufacturing new orders index** dropped 2.1 p to 43.1 indicating a sharp decline in order inflow
- **The price indices** fell further but they are still above average levels, but below prior peaks



# The PMI and all other manufacturing surveys insist a serious order shortfall

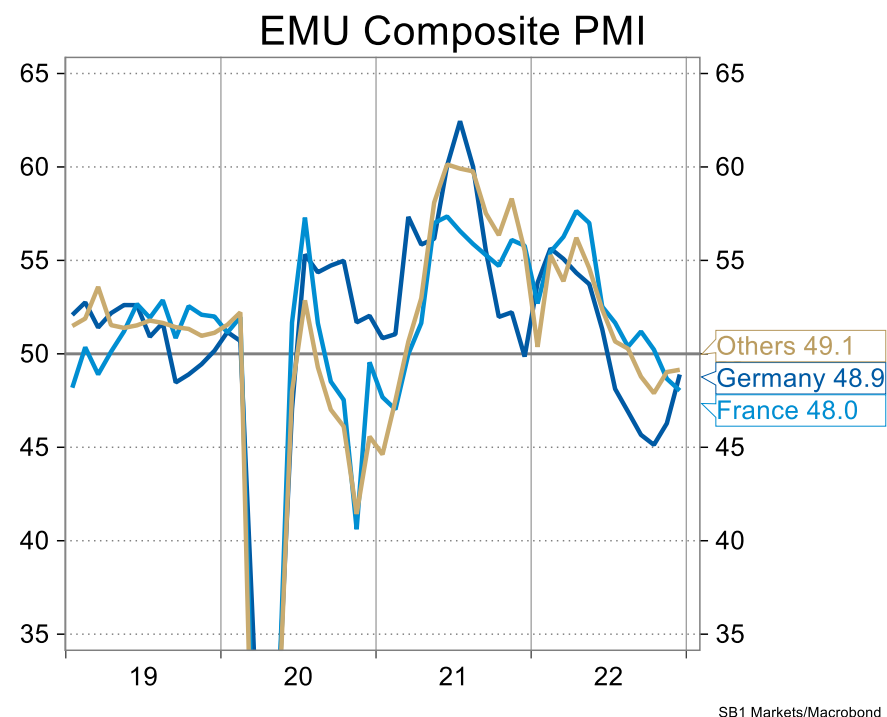
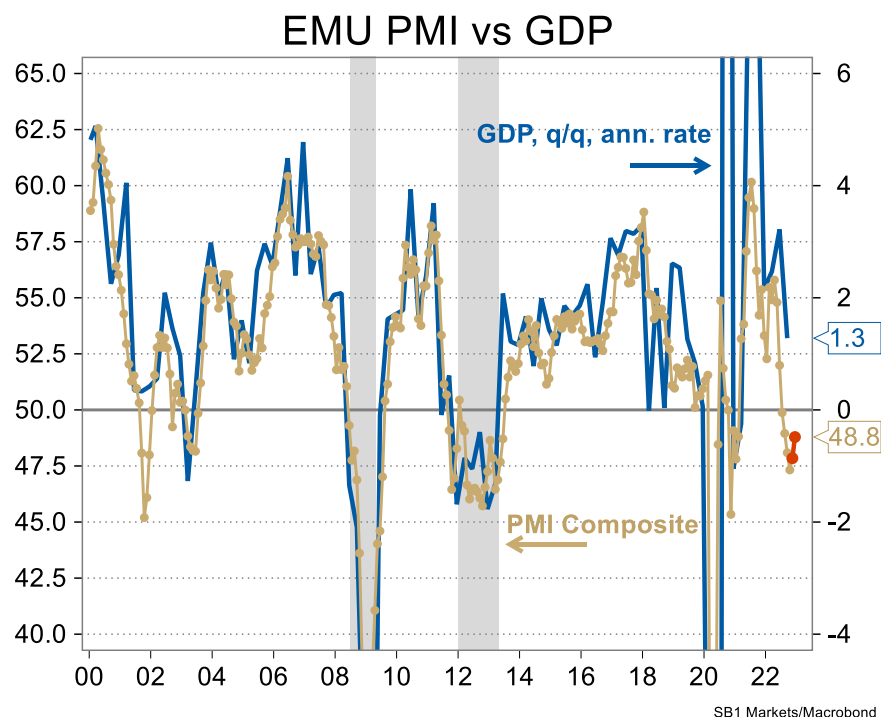
The manuf. PMI reports of steep decline in new orders, just the Financial Crisis, start of the pandemic were worse



- Just once, in 1995, the order inflow was reported weaker than now, without the US entering or being in a recession (and if other surveys are as weak as the 3 Dec surveys reported so far, the margin vs. 1995 has become very slim, check the chart above)

# Germany lifted the EMU PMI, the composite up 1 p to 48.8

France down, EMU x Fr/Ger marginally up. The PMIs are still in contractionary territory though

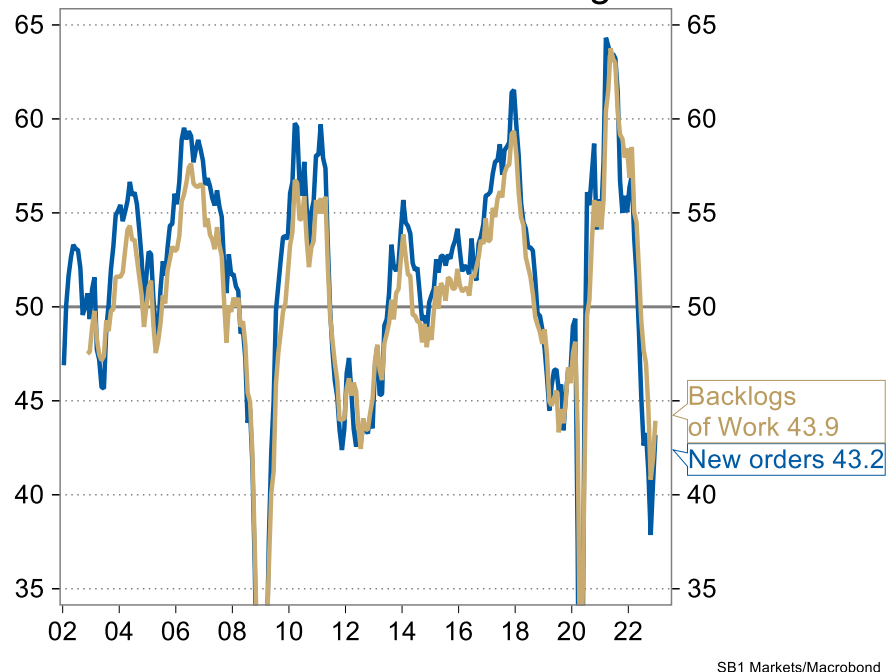


- **The composite PMI** increased by 1.0 p in Nov, to 48.8, 0.9 p better than expected – still signalling a small contraction in GDP. The German comp. PMI gained 2.6 p to 48.9 (from 45 in October!), 2.4 p better than expected as both manufacturing (+1.2) and services (+2.9) surprised on the upside. The French PMI was weaker than expected, down to 48 from 48.7 (expected up to 48.9). Other EMU countries slightly up, to 49.1
- **In the EMU, services** gained 0.6 p, as expected, while the **output component in the manufacturing** survey added 1.9 p but remained at a modest level at 47.9. Orders are still declining, but at a slower pace
- **The delivery times** and price indices both fell, and while the price indices still remain higher than normal, the delivery times have now normalised.
- The ECB has so far been vindicated, the Euro zone economy has not fallen apart. The PMI signals a GDP contraction, but now at just a modest pace

# New orders index further up, delivery times normalised, price increases slow

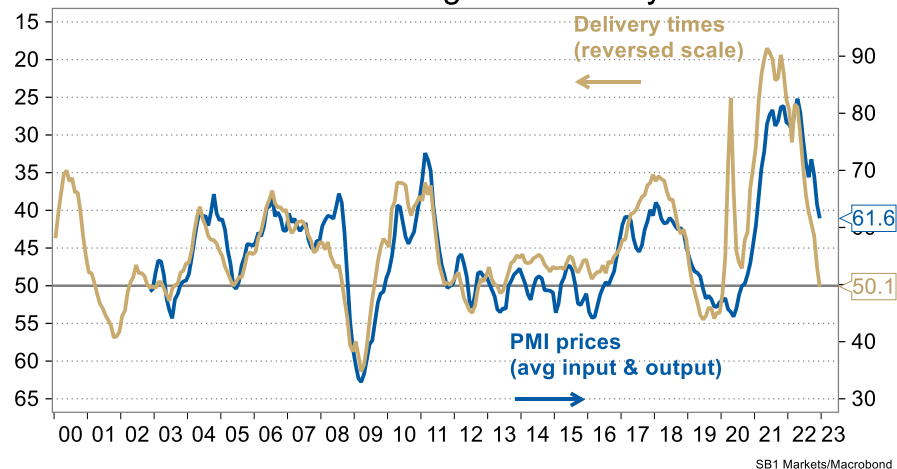
However, new orders are still falling rapidly, and the backlog is shrinking too

EMU PMI Manufacturing orders

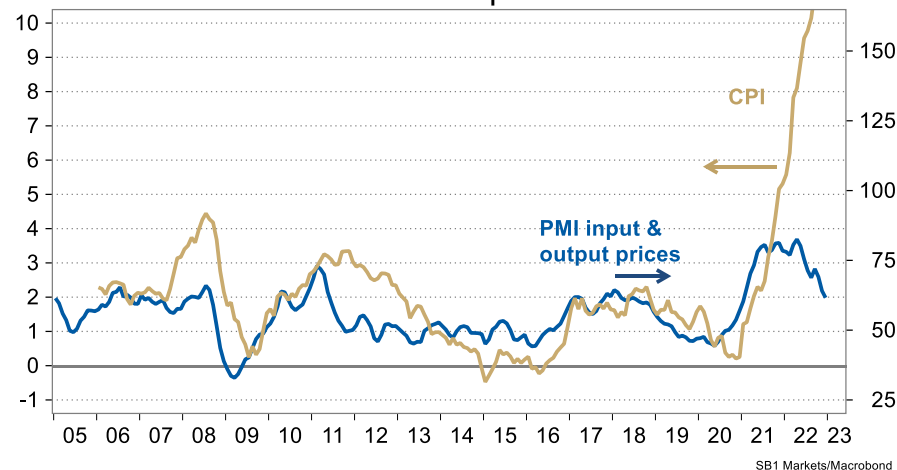


- The price indices signal a steep decline in CPI inflation the coming months – in principle
  - However, no model can capture the increase in inflation vs. these surveys – what has happened is totally outside what we have seen before (and the PMI cannot climb above 100)

EMU Manufacturing PMI delivery times

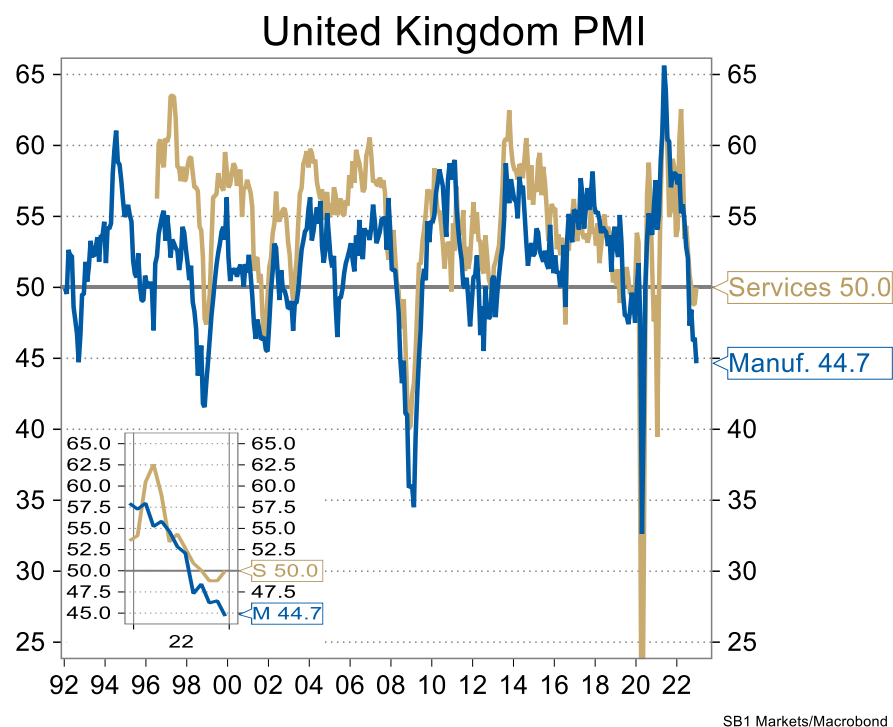


EMU CPI vs PMI price indices

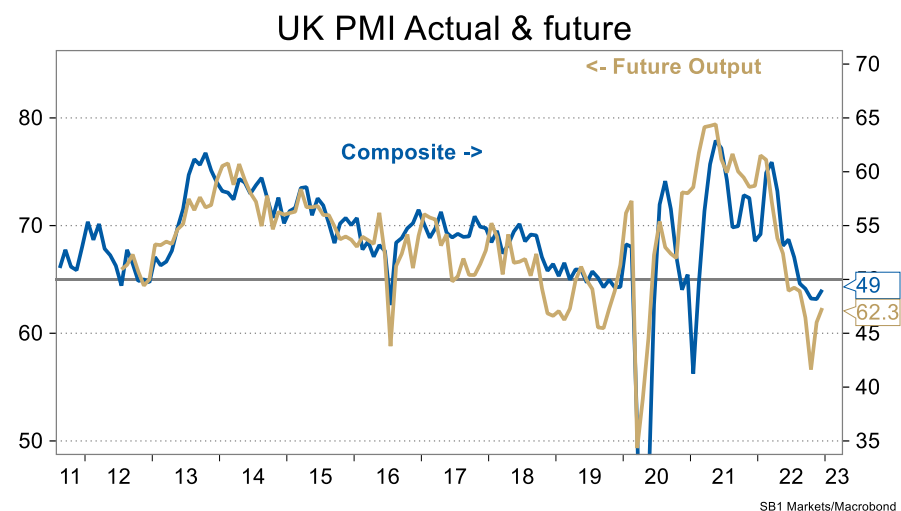
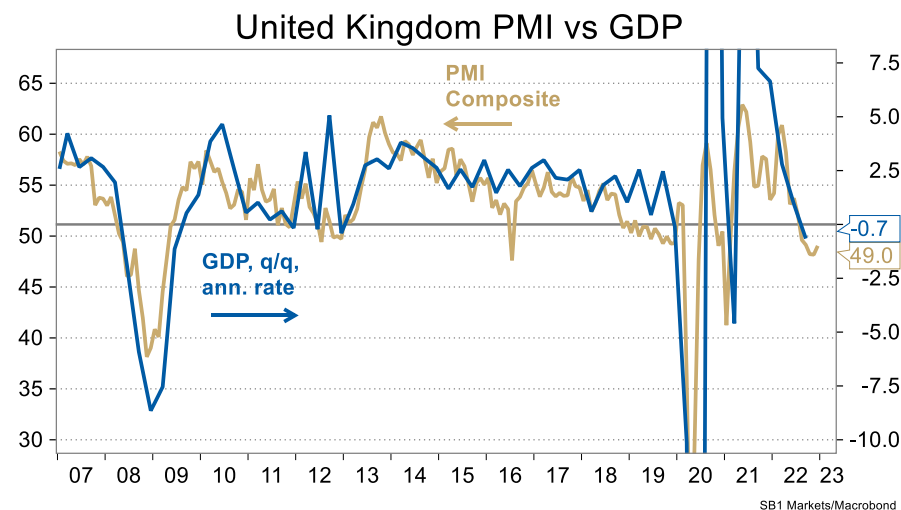


# Services up to the 50-line in December, manufacturing further down, to 44.7

The composite index rose 0.8 p to 49.0, signalling a continued decline in GDP



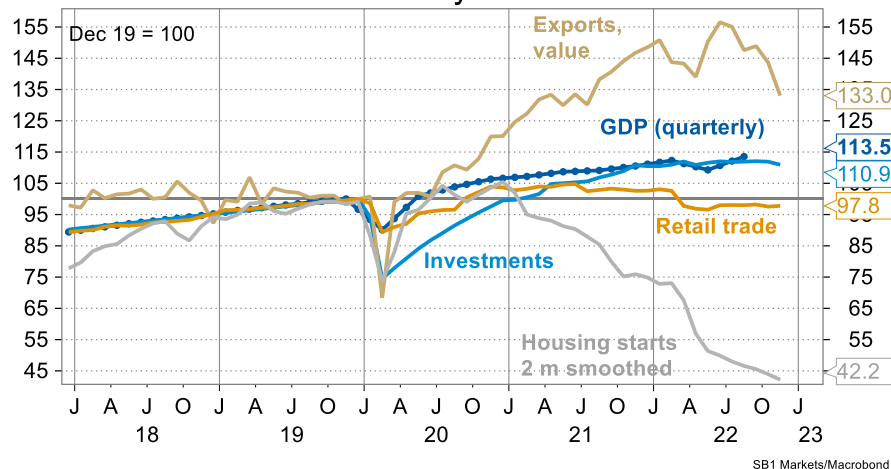
- The UK **composite index** rose 0.8 p to 49.0 in Dec, expected down 0.2 p to 48. The **manufacturing index** fell 1.8 p to 44.7, a very weak print, expected unch. The **service sector PMI** climbed 1.2 p to 50.0, 1.5 p above expectations
- Although the PMIs in sum were above expectations, no growth is signalled - and a decline in GDP is widely expected
- **Expectations** are still modest, well below normal levels



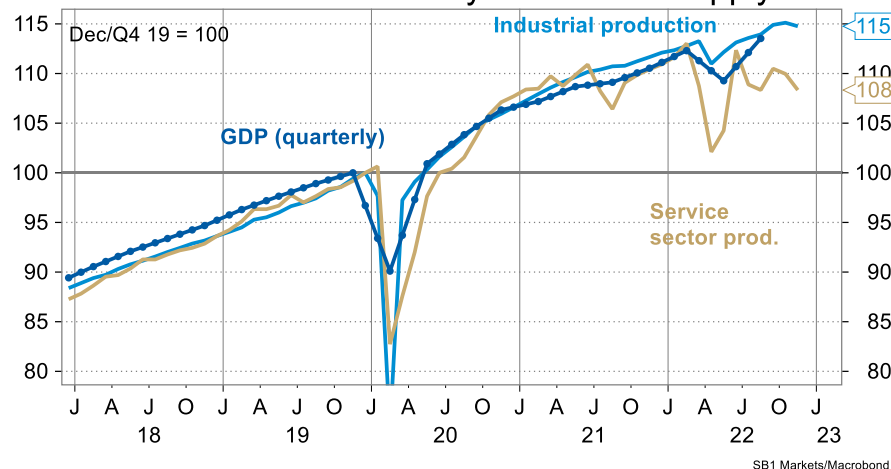
# November data all on the downside

... and construction activity is still declining, starts down 60% since the late 2020 peak!

China GDP vs monthly indicators - demand



China GDP vs monthly indicators - supply



In sum: October was below expectations. Covid measure are a part of the story but the continued decline in construction starts is probably not and may reveal a huge structural challenge

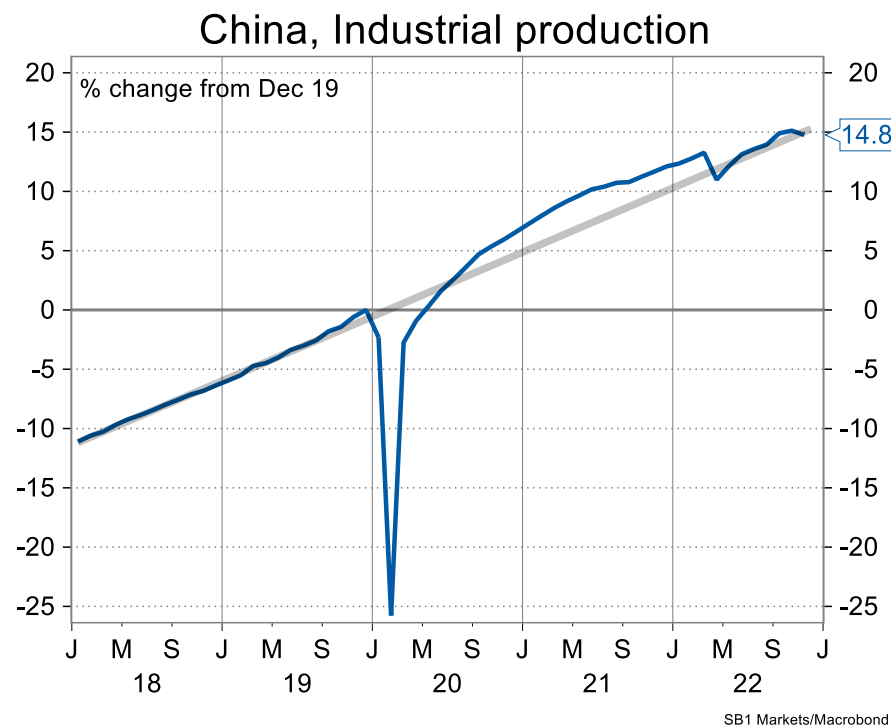
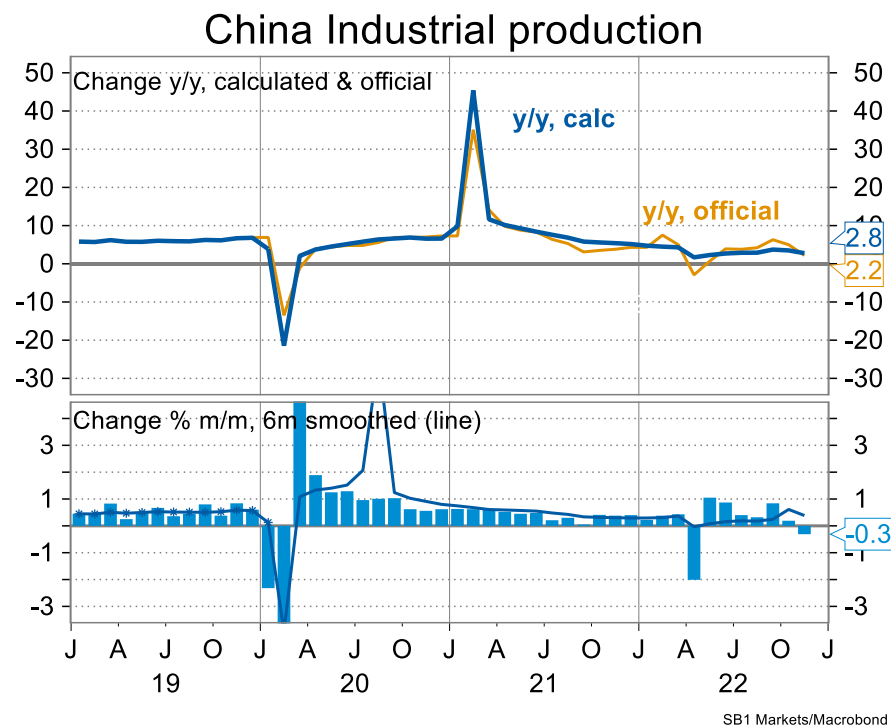
- **Industrial production** fell 0.3% in November, and production is up just 2.2% y/y, expected 3.6%, down from 5.0% in Oct. History was revised down. Metals, chemicals up, cement not
- **Service sector** production fell 1.5% in Nov (our est.), following the 0.5% setback in Oct. Activity fell 1.9% y/y
- **Retail sales** volumes gained 0.2% in Nov, following the 0.7% drop in Oct. Once more, history was revised down, now by 2%, after the 4% revision chock last month. Sales are down 5.9% y/y in value terms, down from -0.5% in Oct, expected -3.7%. A huge miss. Hard to make anything sensible out of these data – but the current release signals a huge upside potential if a more efficient Covid policy could be implemented
- **Investments** fell 0.9% in Nov, and history was revised down. Investments slowed substantially YTD, and are flat y/y, also probably in volume terms. The decline in **construction starts**, which continued in November, may explain this weakness. Starts, both residential and commercial, are down 50% from the peak early last year, the largest contraction ever). **New home sales** also fell further in Nov, and is down almost 40%. **Home prices** are continuing downwards too. The authorities have announced a long list of measures to prop up the real estate market – and some recovery seems likely. But not a return to where it came from – and cannot be the aim either
- **Credit growth** was slow in November. No signs yet that several measures that has been implemented has lifted credit flow

## Headlines from the previous week:

- **Exports** fell sharply in November, especially to the US. Imports also fell. Both very likely also fell in volume terms. Both covid measures and weaker demand in the rich part of the world are probably to blame
- **CPI inflation** fell to 1.6% in November, and the core remained at 0.6%. So, inflation is not a global challenge

# Industrial production fell in November, back to the pre-pandemic path

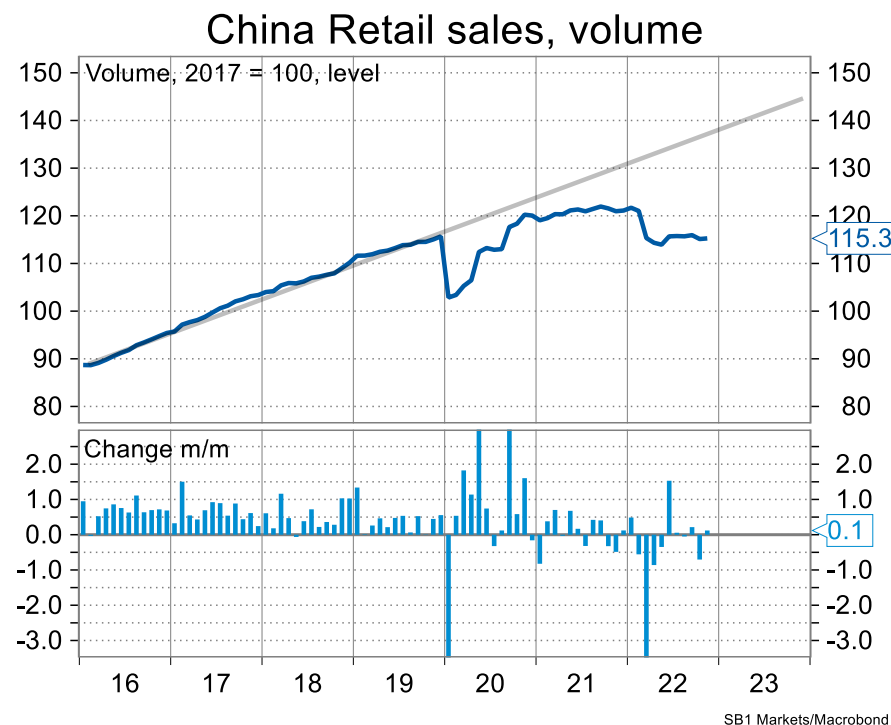
Production fell by an unusual 0.3% m/m, and is up just 2.2% y/y, expected 3.6%, and down from 5.0% in Oct. Covid??



- The level is not that bad by itself, but the decline in November, following just marginal growth in October (0.2%, though after a strong lift in September, 0.8%) is not a positive signal. In addition, history has been revised somewhat down. Very likely covid restrictions have hampered production, if not in the same way as in May, when production fell 2%. Since then, production has stayed well below the trend before the lockdowns during the spring
- In addition, recent months taken together, may also signal that the Chinese economy is slowing 'for real': construction is down, house prices are down, investments are down, and retail sales have stalled and in November, exports fell sharply

# Retail sales flattened m/m in November but history once more revised down

Official sales down 5.9% y/y (!), from -0.5%, expected -3.7%. Incredibly weak. Covid measures 'must' be to blame



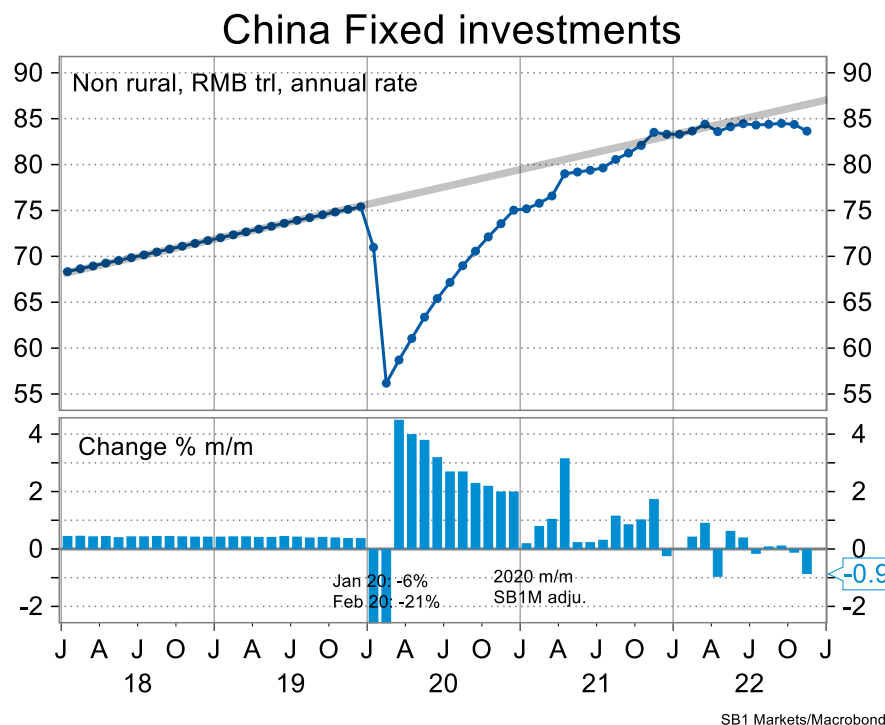
- **Sales** rose 0.2% m/m nominally, we assume a 0.1% in volume terms, following the 0.7% decline (on both volume and value terms) in October
  - Sales in volume terms are down 4.7% from Nov last year (aggregated monthly changes, the official y/y growth in value terms implies larger decline)
- Last month these monthly m/m data were revised down sharply (in sum by up to 4%), and the downward revision continued in November, by a couple of pp more, mostly due to another downward revision of growth in March. Anyway, these data has become almost usable – but they are the best we have...

Memo: Monthly sales data are still somewhat difficult to decipher, and they are not consistent with annual growth rates - so do not take our interpretations of them too literally. Several revisions, the last one this month downwards, have made the analysis even more complicated



# Is the slump in real estate and construction catching up with investments?

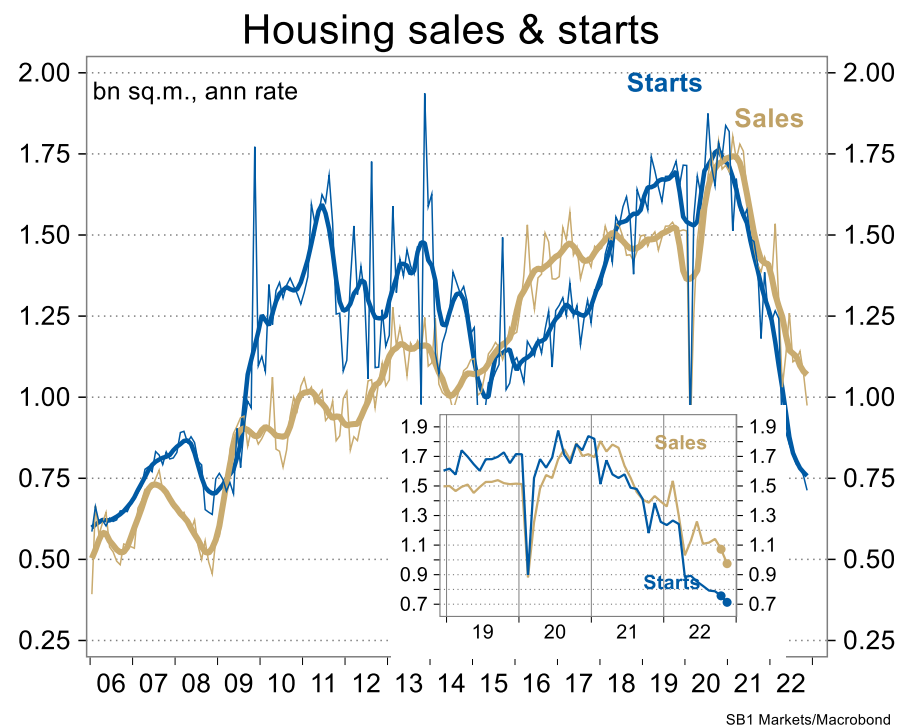
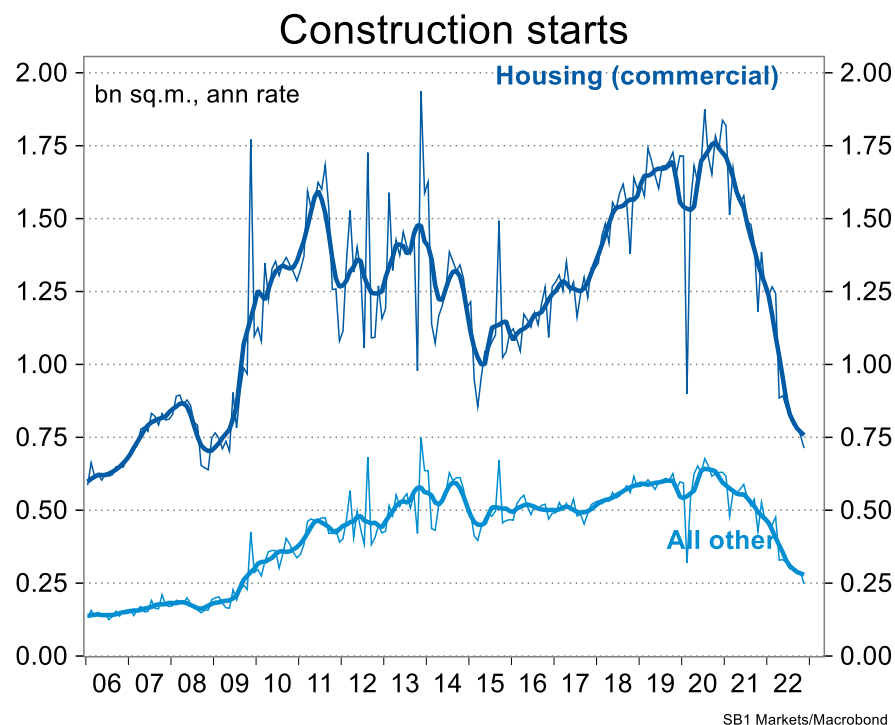
Overall investments fell 0.9% in November, after a flattening recent months, following a visible downward revision



- In addition to the unusual decline in investments in November, the **history was revised sharply down**, as measured by the seasonally adjusted m/m growth data. Since late spring, investments have been revised down by some 4%! Now, total investments are heading down!
- **Measured YTD**, official data showed nominal urban investments rose 5.3% in November, expected up 5.6%. Growth y/y in October was 0%. We estimate a 0% growth in real terms too
- The **investment level** is now 3.4% below the pre-pandemic growth path
- The decline in **construction starts** is likely one of the culprits to falling investments, and we believe investments will keep falling the coming quarters. In fact, the overall investment level has so far kept up far better than we assumed

# Both housing starts and sales further down in November

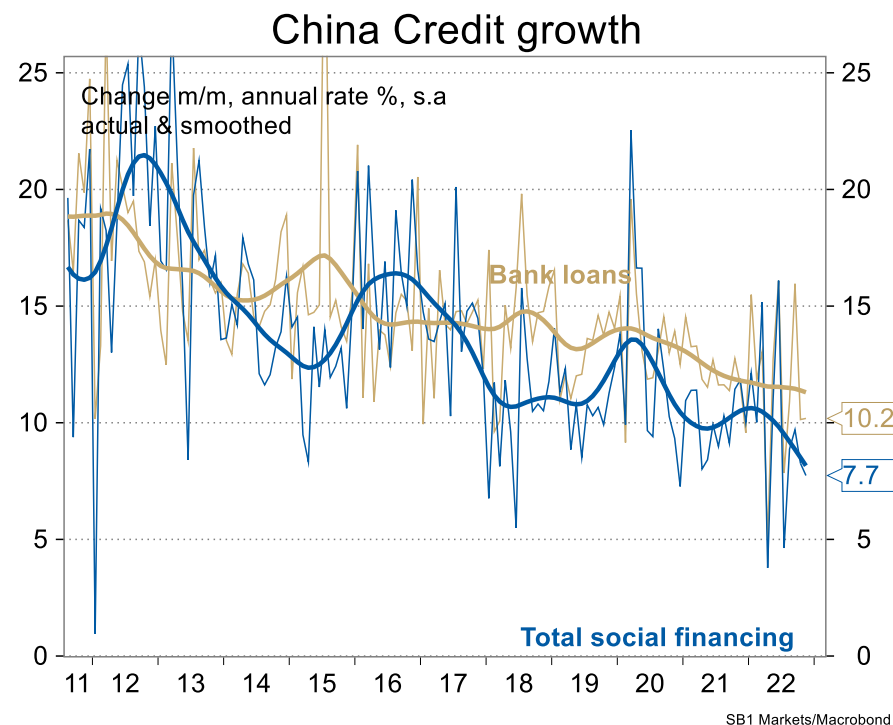
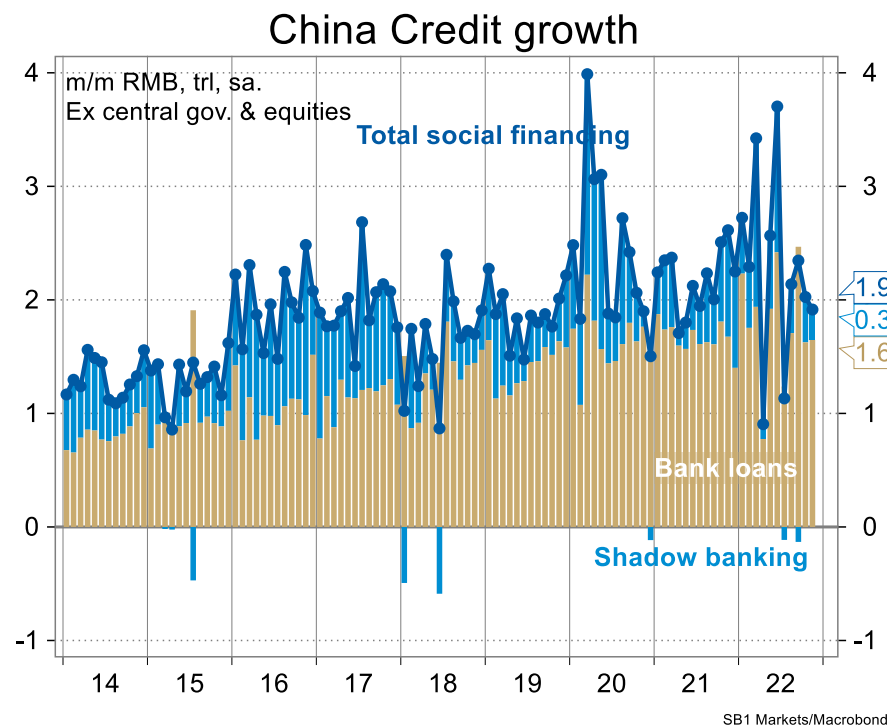
Starts down 60% from the peak two years ago; Sales are down more than 40%



- **Non-residential construction starts** are also more than cut in half, and the level is the lowest since 2009, as for housing starts
- We doubt the fight against the virus can explain much of the deep, and continuous downturn, from late 2020
- This unprecedented decline in construction starts will lower growth in the Chinese economy substantially – spread over time, as it takes some 3 years from a home is started until it is completed...
- ...unless the government's new rescue plan works. **The authorities pumped an additional CNY 150 bn into the financial system (on top of the CNY 500 bn already decided) this month** to ward off a sell-off in the bond market after easing covid restrictions, and to loosen financial conditions. This is of course in addition to the policy measures already taken a month ago, which were designed to loosen conditions for lenders and borrowers, both in terms of funds available, possible repayment postponements, and red tape

# Slow credit growth in November too, and the trend is down

Banks are not aggressive, and little new credit to be found in the shadows. No signs yet of new stimulus measures

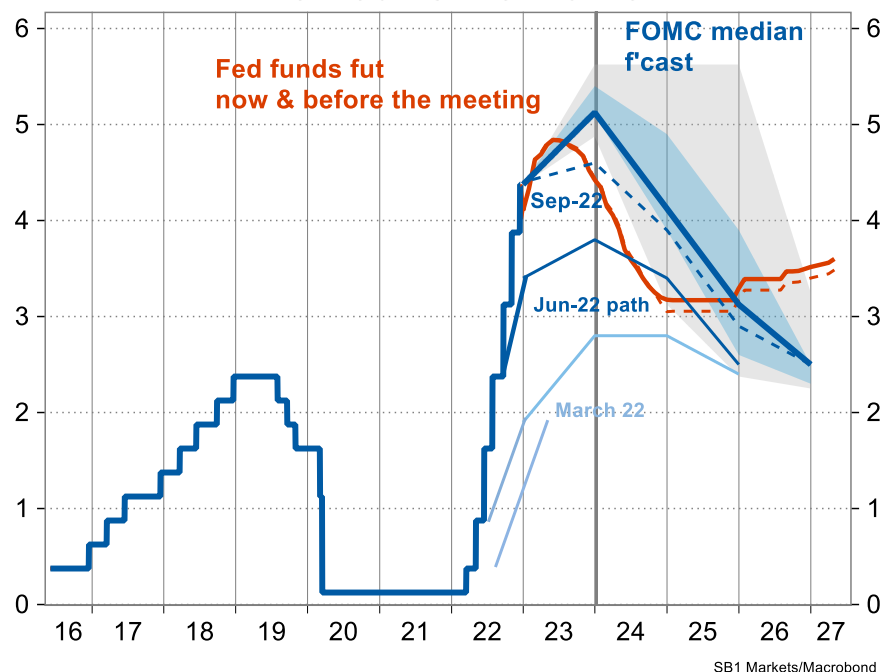


- **Core total credit** (social financing, ex central gov bonds, equities) grew at a 7.7% pace in Nov (m/m, seas. adj. annualised), down from 8,% in Oct and almost 10% in September. The annual growth rate fell 0.3 pp to 9.8%
- **The official total social financing** rose RMB 2.0 trl, expected 2.1 trl. Our core credit supply grew RBM 1.9 bn (s.a.)
  - **Bank loans** rose by RMB 1.5 trl (s.a) or at a 10.2% annualised pace, below expectations. Loans are up 11.6% y/y
  - **Shadow banking credit** rose by just RMB 0.3 trl, and is up 6.5% y/y
  - **Local governments have been** responsible for most of the increase in credit outside banks over the last year, at least until the past 5 months (including our Nov est., no data published yet). Less revenues from sale of land, and public financing of unfinished building projects requires funding, which is 'dictated' from the central government

# The FOMC more hawkish than the market expected, will hike to above 5%

Powell is still in aggressive fighting mode vs. inflation. He is not alone. 17 of 19 FOMC member signalled 5% or above. In Sept, NO ONE did!

The Fed vs the market



- **Market reactions:** interest rate expectations rose marginally when Powell talked but then fell back and ended the week down – while the ECB really set its mark on the market – rates rose sharply in the Euro zone (the OIS rates are slightly above the level before the meeting though, they well on Tuesday, due to the lower-than-expected CPI print). The stock market disliked Fed's signals though, even if they should have not been surprising, and the bond market hardly took notice

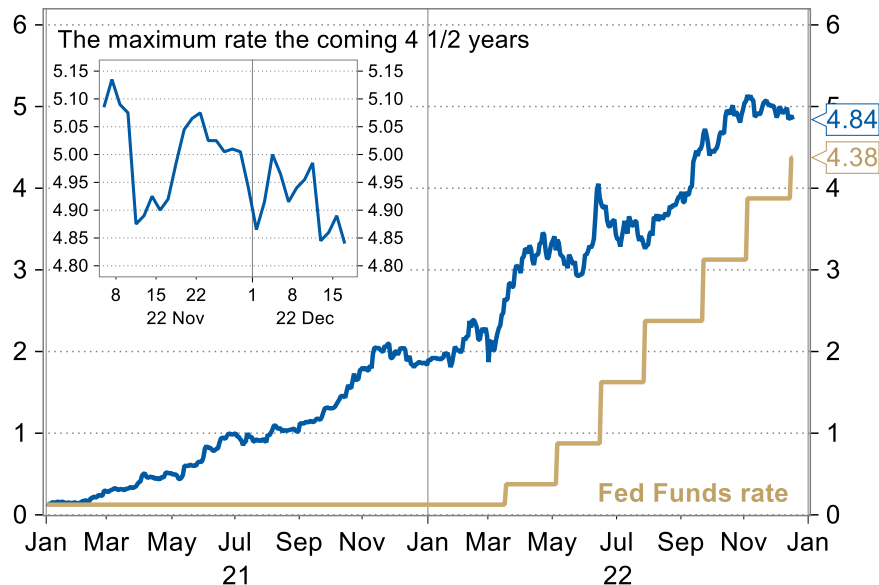
- As widely FOMC hiked the **Fed funds rate** by 50 bps to 4.25% – 4.5%
- **The interest rate path**, the 'dot plot', was lifted by up to 60 bps, to 5.1% by the end of 2023. 17 of 19 members pencilled 5.1% or higher. 3 months ago, NO FOMC member considered likely to raise the Fed funds rate to 5% or above! The 'peak' rate is up 75 bps from today's level, very likely delivered in 25 bps pieces next year. The market assumed a peak at 4.85% before the meeting, and a decline to 4.5% by the end of 2023, and steeper cuts in rates in '24, to 3.1%. The FOMC median voter says 4.1%
- FOMC lifted the interest rate path even if **GDP growth** was revised down, and **unemployment** up, once more, the latter up to 4.6% in Q4-23, revised up by 0.2 pp and 1.1% from the through in this cycle. The reason: **Higher inflation**, of course, and steady more precise comments vs the treat to inflation caused by wage inflation ways above a sustainable level
- The long-term '**neutral**' **Fed funds rate** is still assumed to be 2.5%, signalling a real rate at 0.5%, well below the market (OIS) curve
- In the **press release** the bank describes growth as modest but job gains have been robust, and the unemployment has remained low. Inflation remain elevated, for many reasons, including 'broad price pressures'
- **At the press conference, Powell** seemed just as determined to win the war on inflation as he has been in recent months. We think the bank underestimates the costs (unemployment will climb more) but we think Powell & Co will stay on course. Goods inflation has already turned down, rent inflation will in due time. The problem is wage inflation, that will keep service sector inflation up.
  - The bank has not yet started thinking about the need for cutting rates – the view is upwards, ongoing rate hikes needed to rebalance the economy in order to get inflation down. The market still think the peak will be below 5%, in the late spring

# The Fed will keep at it, until the Fed funds rate reaches at least 5%

Powell's comments did not shock the interest rate market, the terminal (expected peak) rate fell – to 4.84%

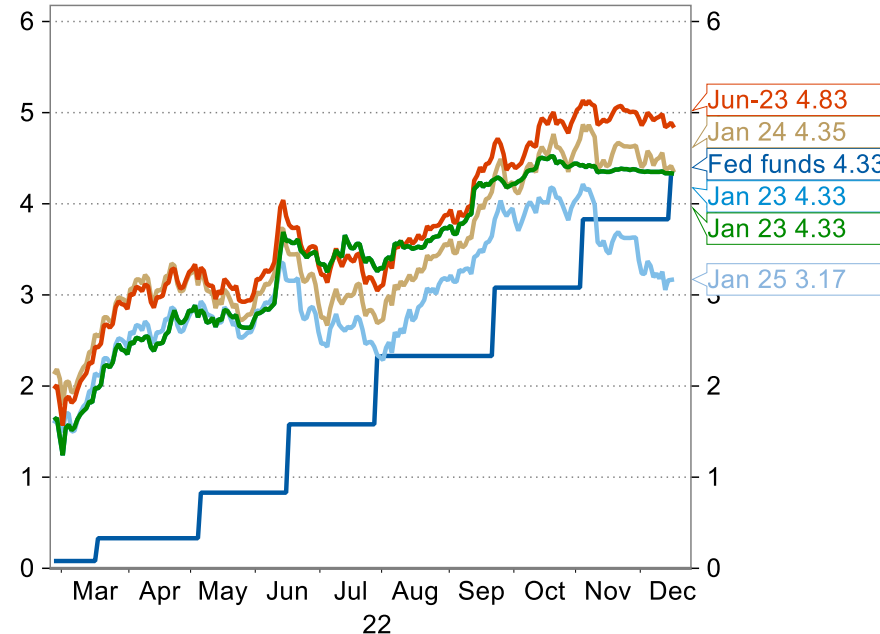
## USA Fed funds futures

The expected terminal (peak) rate in this cycle



SB1 Markets/Macrobond

## Fed funds future

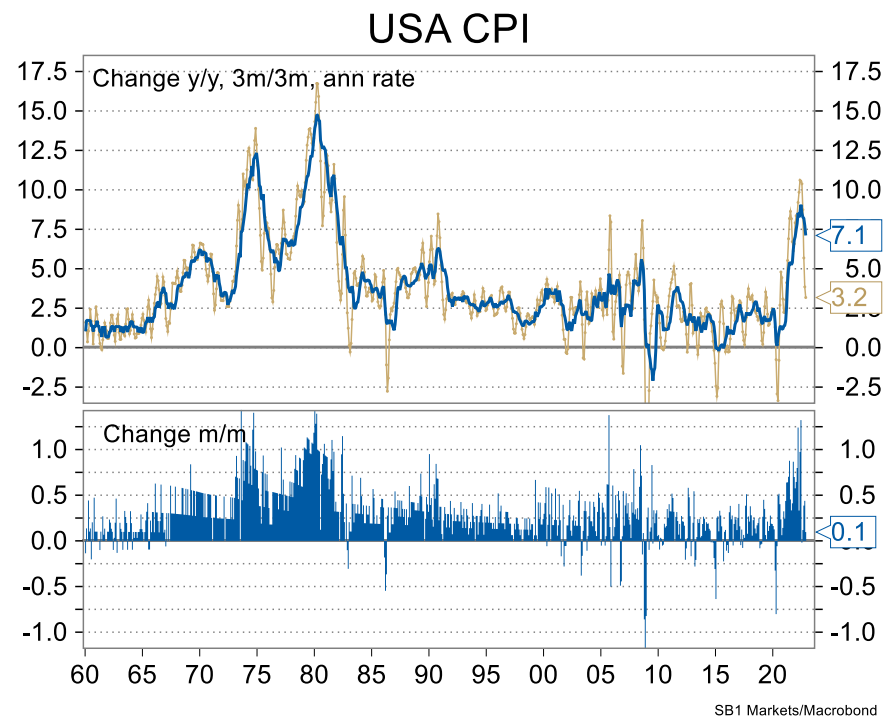
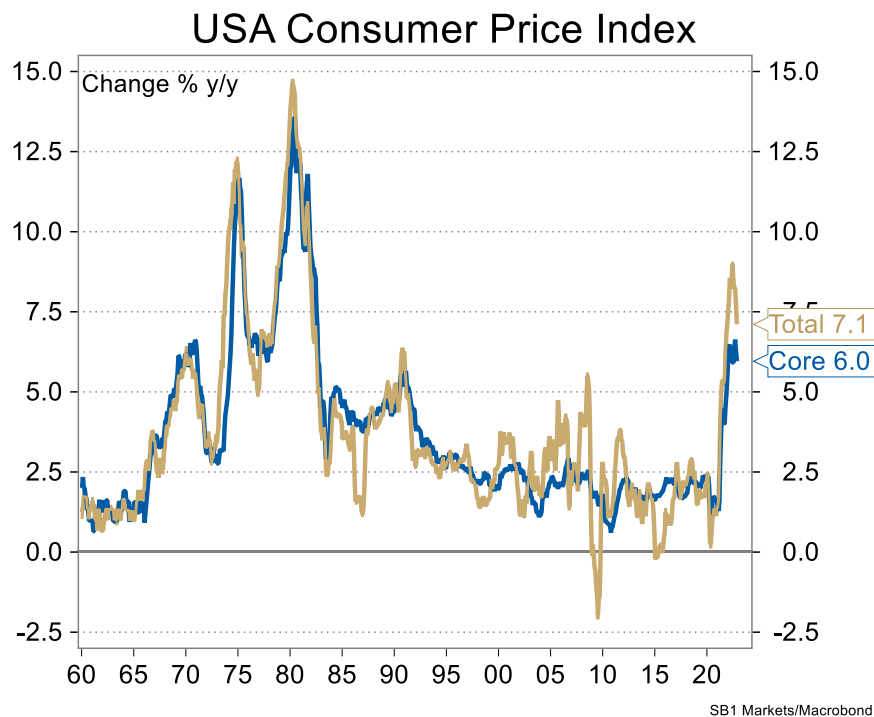


SB1 Markets/Macrobond

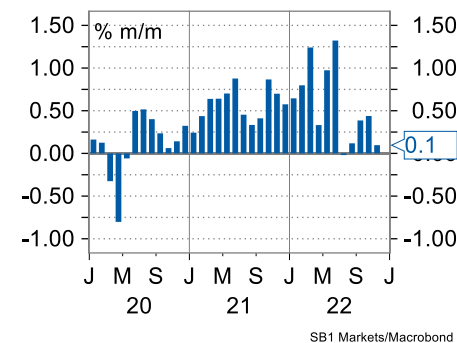
- The whole Fed funds future curve fell last week due to the decline on Tuesday, due to CPI surprise – even if European rates rose sharply, as ECB was much more hawkish than expected

# CPI has peaked. More to come – without the ‘real’ inflation challenge solved

CPI rose 0.1 – 0.2 pp less than expected – and even the core is slowing m/m, now down to 0.2% m/m



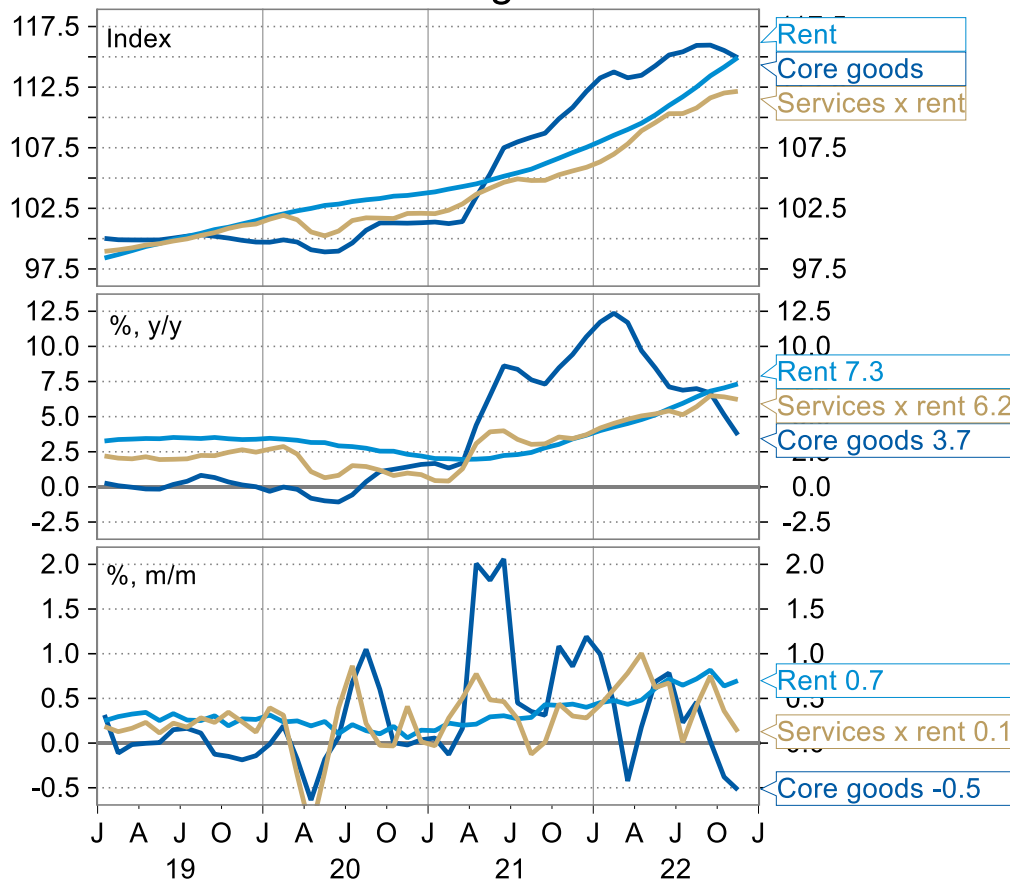
- **Headline CPI** slowed 0.6 pp to 7.1% in November, expected down to 7.3%. Prices rose 0.1% m/m, expected 0.3%
- **Energy prices** fell further, by 1.6% m/m, but energy is still contributing 1.0 pp to the headline rate
- **Food prices** rose 0.5% m/m and are up 10.6% y/y, lifting the CPI by 1.5 pp
- **Producer prices** are on the way down from crude/intermediate goods – and will take goods CPI inflation down
- **Surveys** report further price increases the coming months, but at much slower pace than over the prev. months
- We still think **markets** focus too much on actual inflation, especially driven by commodity prices, and too little on wage cost inflation. However, a contraction in margins will also be detected in the CPI report – and they are important for the Fed



# Goods are down, rents will probably come down – will other services too?

Core goods prices fell 0.5% m/m in November, and are up 'just' 3.7% y/y, from 12.5% at the peak in early 2022

## USA CPI Core goods & services

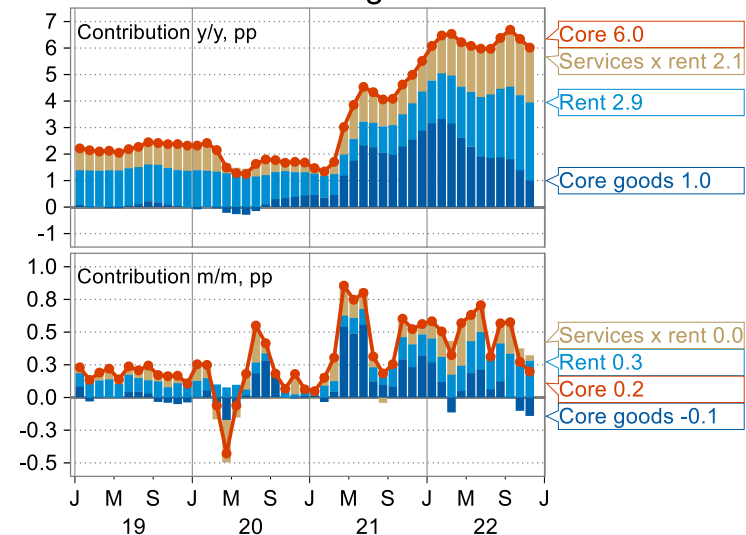


SB1 Markets/Macrobond

In the core CPI: Rent 40%,

- A further normalisation of **goods prices** is likely, as demand slows, raw material prices are coming down, alongside transportation cost – and as signalled by the PPI
- **Rent inflation** is still on the way up, but as prices on new leases are moderating, the rent index in the CPI should follow suit after some months
- However, as Powell has stressed several times, also at last week's press conference, inflation will not come down to a sustainable level before **service sector inflation** (ex residential rents) also yields. Monthly changes have slowed somewhat, and the annual rate has probably peaked, but remains at 6.2%

## USA CPI Core goods & services

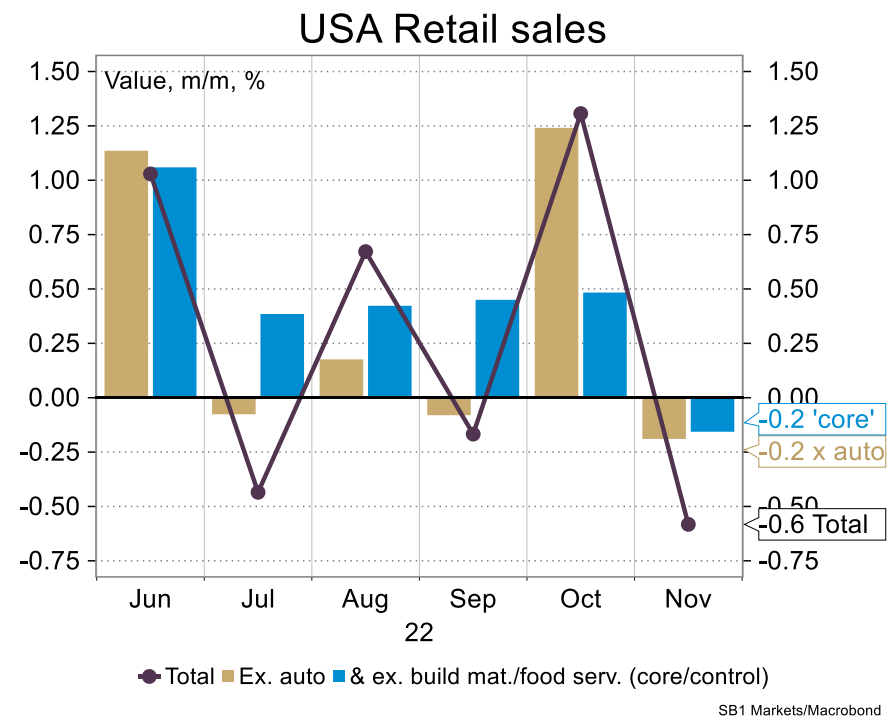
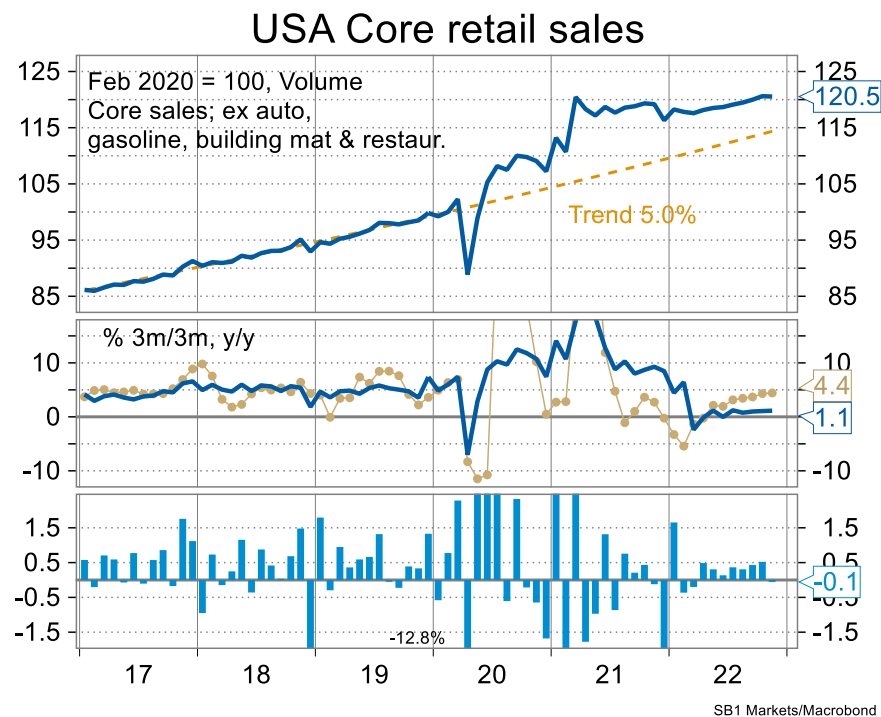


SB1 Markets/Macrobond



# Retail sales were weaker in November, and below expectations

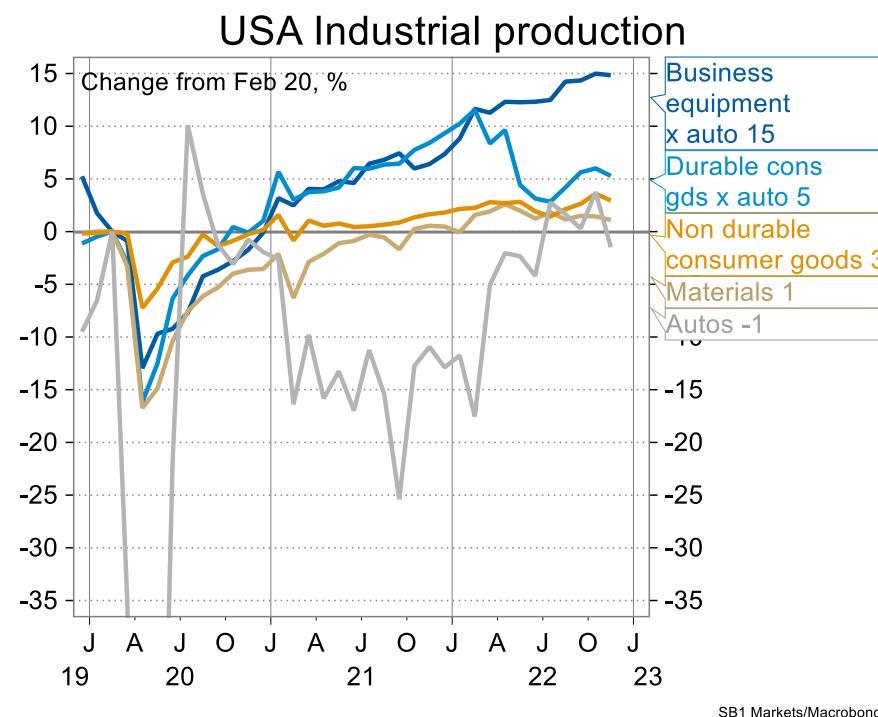
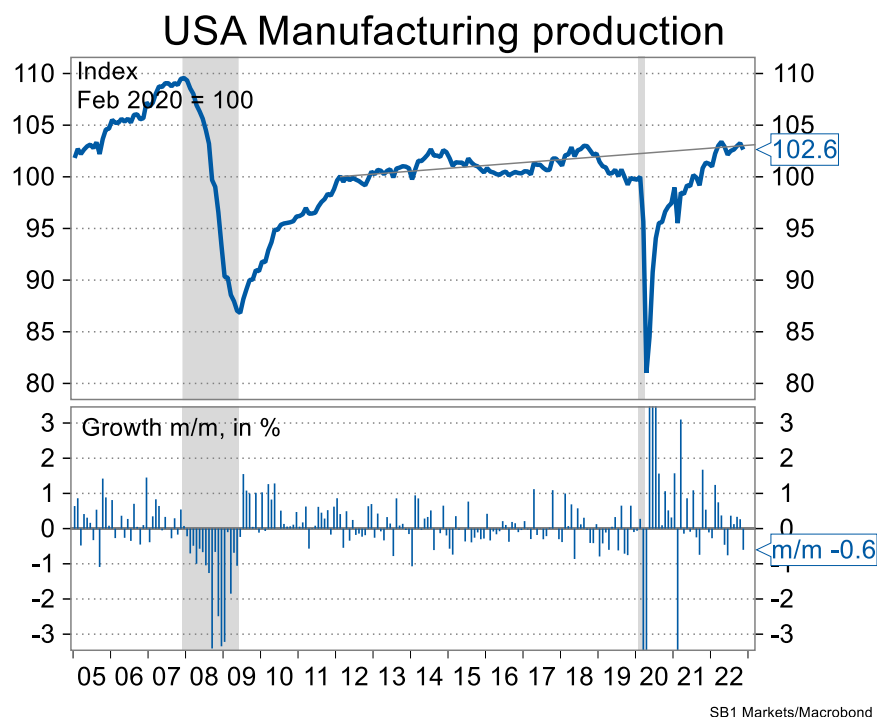
Core sales volumes down 0.2% in November; the total down 0.6%



- **Total nominal sales** were down 0.6% in November, expected -0.1%. Food, food services, and healthcare sales were up, all other sectors were down. Total nominal sales are still up 31% vs. the Feb 2020 level!
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) were down 0.2% in value terms, 0.3 pp weaker than expected. October was revised down to 0.5% from 0.7%
- **In volume terms**, we assume that core sales fell by 0.1%, down from 0.5% in Oct (unch vs. or first estimate). 'Real' sales are trending upwards at a rather solid pace (+4.4% 3m/3m), far better than we expected some months ago!

# Manufacturing production down 0.6% in November

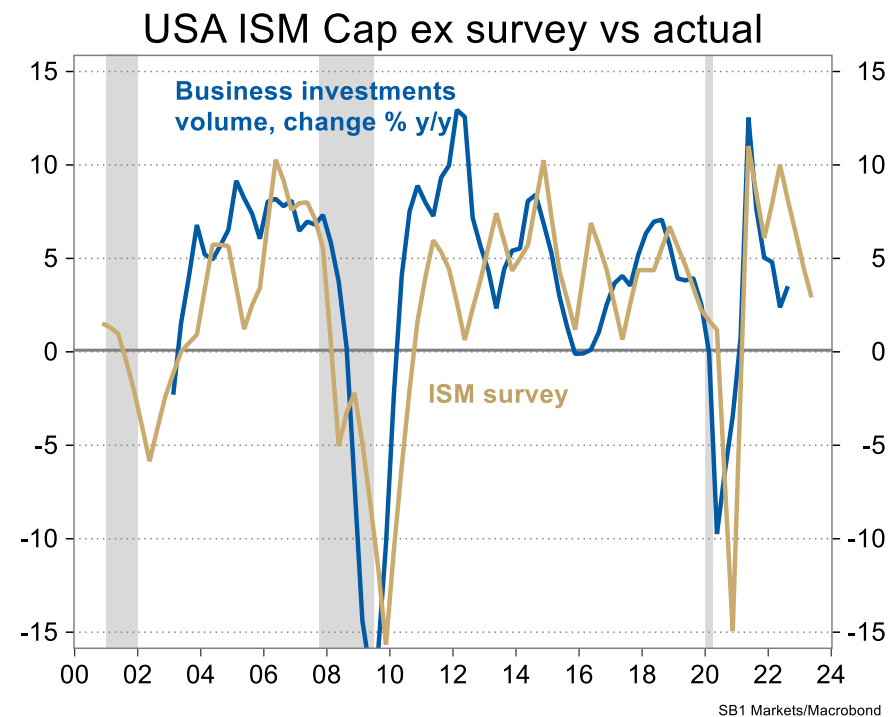
Auto production down in Nov, but is close to the 2019 average. Other durable goods the weak chain last year



- **Manufacturing production** fell 0.6% in November, 0.5 pp below expectations. The Oct print was revised up by 0.2 pp to 0.3%. Production remains below the April level. Still production is up 2.1% measured 3m/3m, and goods production will probably contribute positively to GDP growth in Q4. Production is up 2.6% vs. the pre-pandemic level
  - Production in all main sectors were up in Sept, and all are now above the pre-pandemic level, even including auto production!
- **Total industrial production**, including utilities, mines/oil production, declined 0.2% m/m, expected +0.1%
- **Capacity utilisation** was down 0.2 pp to 79.7%, but the level is still close to the highest in 20 years (the peak was in April)
- **Surveys** have weakened substantially since May. The first December surveys are further down

## ISM semi-annual investment survey: Further down but not out

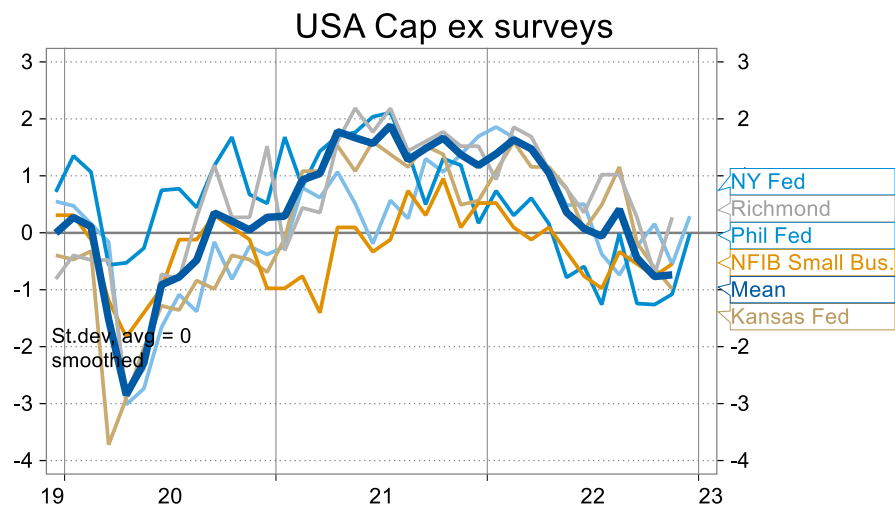
Growth in investments is slowing but companies are still expecting a normal growth rate – far better than we assumed!



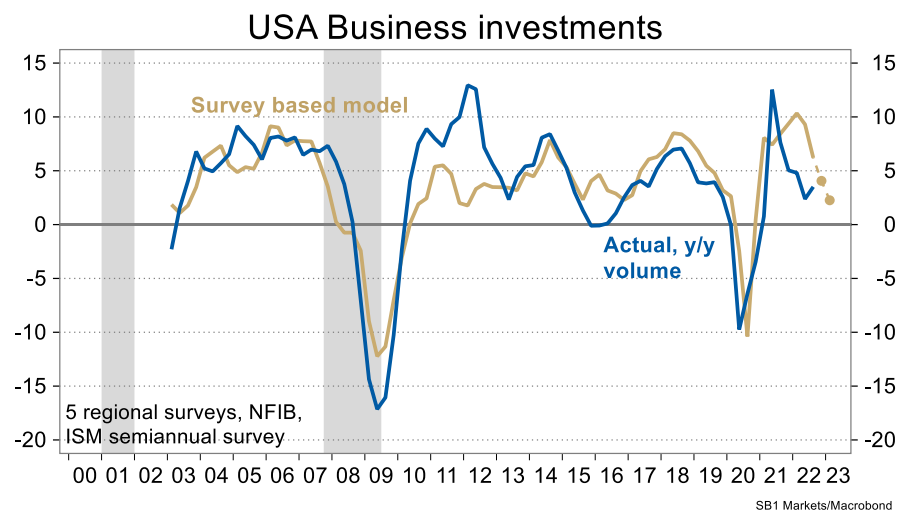
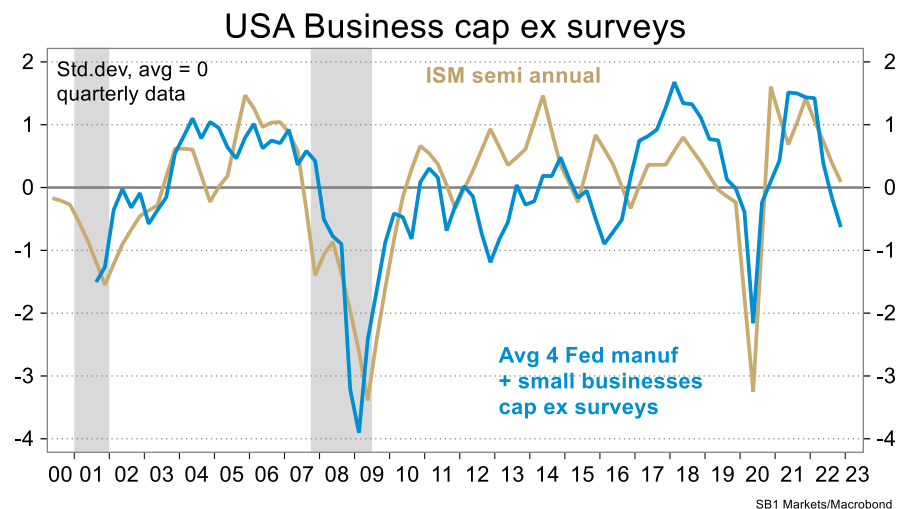
- However, business are not that forward looking in their estimates – they were very optimistic (and much more than now) until the recession hit in December 2007

# Other investment surveys mixed but in sum up recently – though not strong

Taken together with the ISM survey, a 2% actual growth rate is indicated (down from a 7% signal 6 months ago)



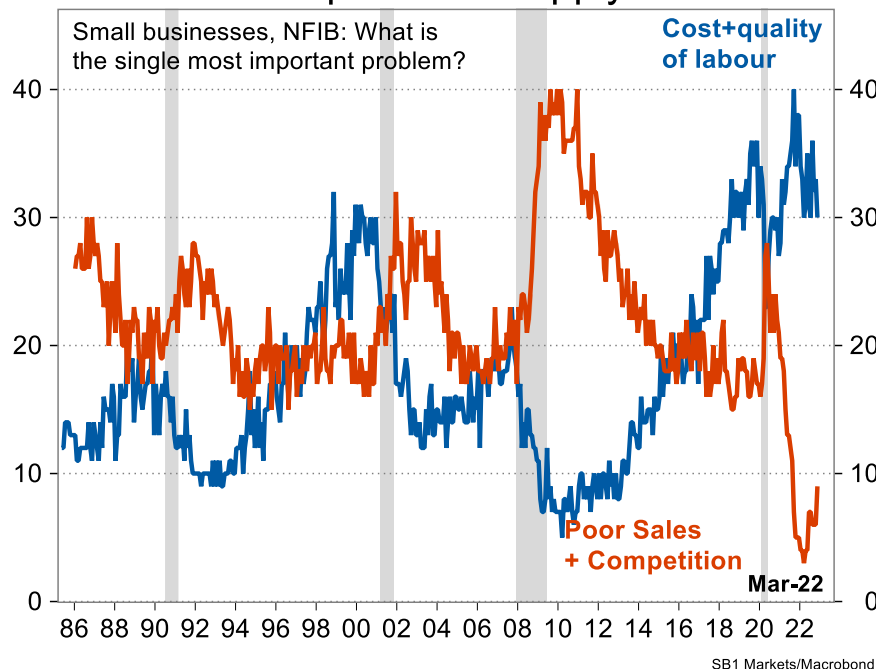
- Both **NY and Phil Fed surveys** reported stronger investments plans in December – a very positive signal



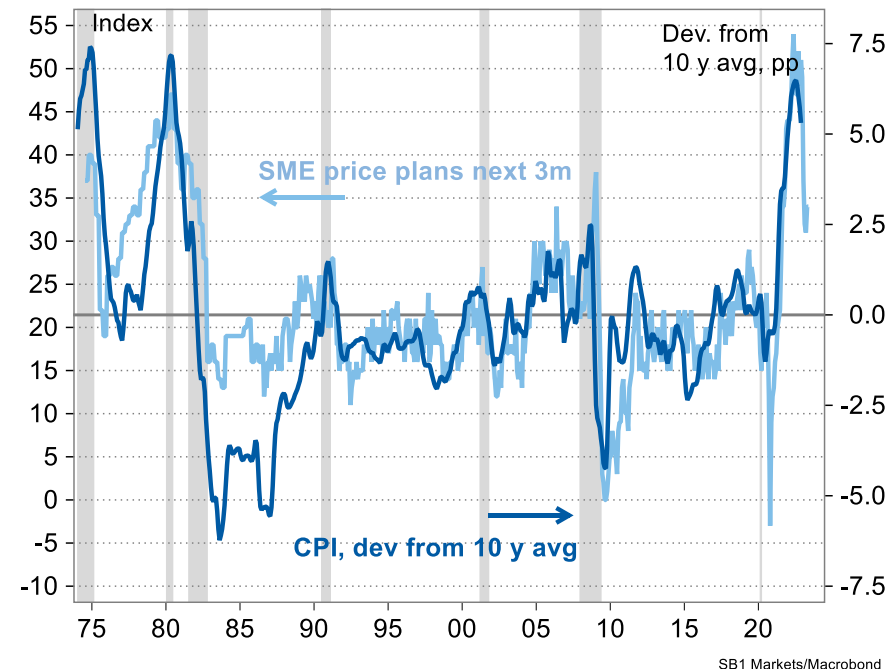
# Sales/compensations are not the problem, lack of labour still is

Still rather aggressive price increase plans were unchanged in November, signalling still higher inflation than normal

## USA What's the problem: Supply or Demand?



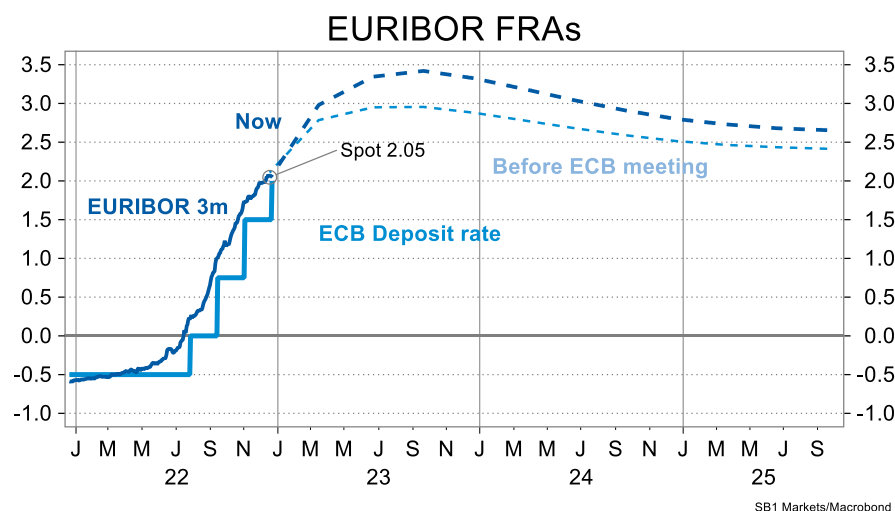
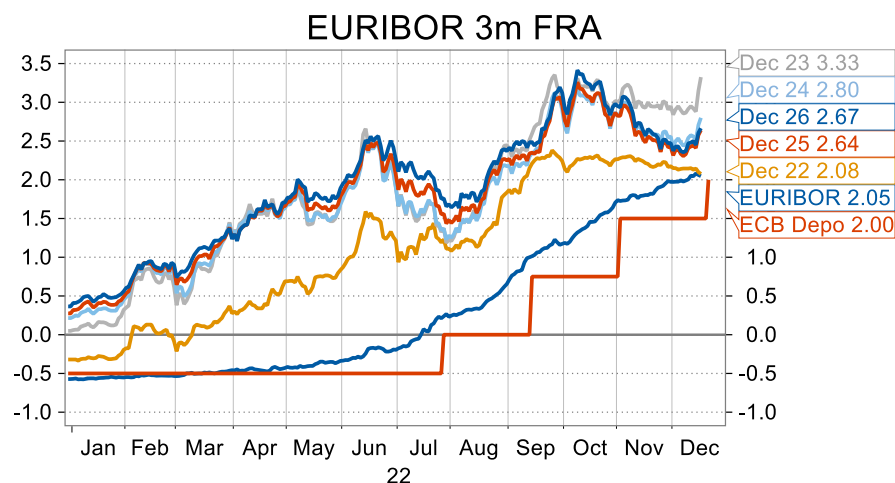
## USA Small Businesses Price Plans



- The 'gap' between supply and demand concerns is still very large, but it is now heading down
- Very few companies report **poor sales** as a problem, somewhat more complain about **competition**. The total share is up from March, but has stabilised recent months
  - **Cost & quality of labour** are stated as the most important problem for a much higher share of companies than normal. However, the share has fallen somewhat from the peak. Still, compensation plans were revised up in October
- The share of **companies that plan to lift prices** has fallen sharply from the peak was unch at 35% in Nov%, way above the average at 21%, and inflation at 2 – 2.5% above the past 10 y average is still signalled
- **We have no doubt:** Over the coming months and quarters, the poor sales/competition (the red line, chart to the left) will climb sharply – and the blue line will come back down to Mother Earth as financial conditions tightens, with or without more help from the Federal Reserve. It's normally labelled as a recession, as soon as the red line crosses the 20-line

# ECB hiked by 50 bps, and will raise rates at a 50-bp pace for a period of time

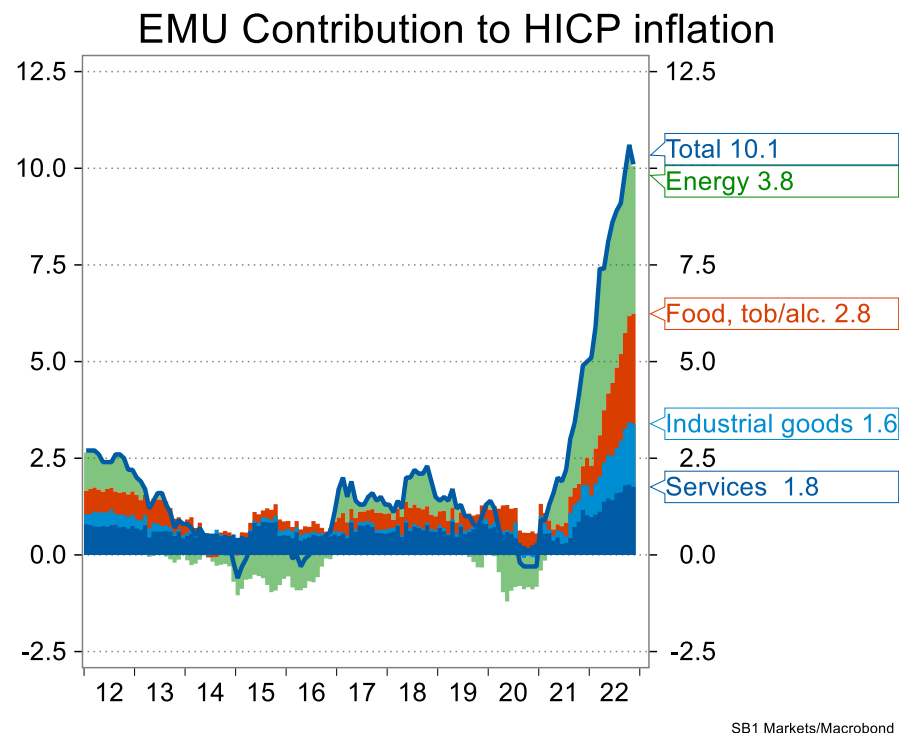
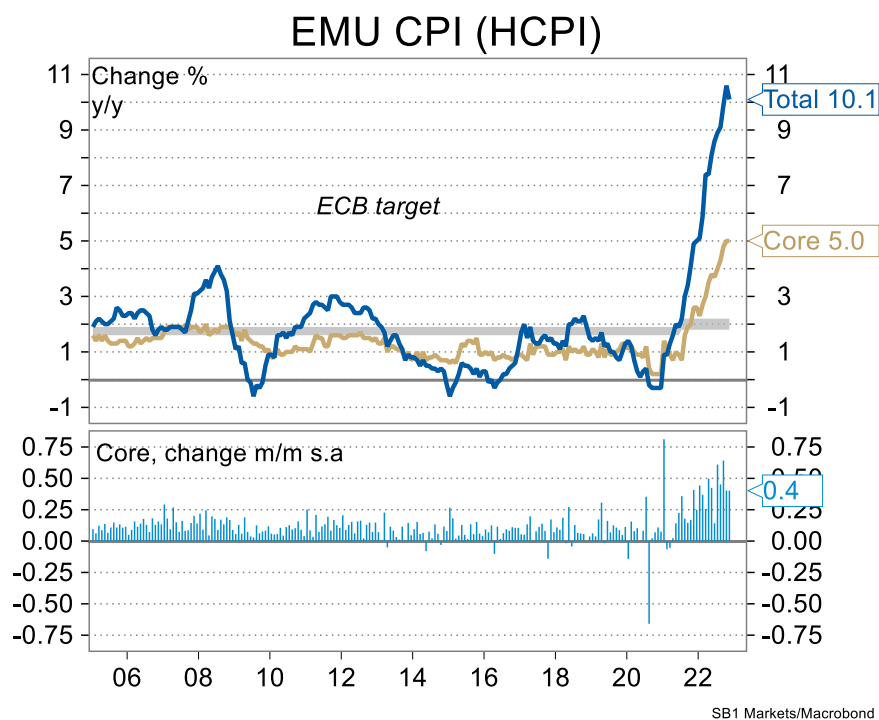
The Bank will also start QT in March, reducing the balance sheet by EUR 15 bn per month. Market rates straight up



- **The 50 bps hike** was expected, and almost fully priced into the market, the 3 m EURIBOR rate was virtually unch., but longer dated FRA rose more on the more hawkish message. The repo rate (which is close to the money market rate) was then lifted to 2.50%, while the deposit rate was lifted to 2.00%
- The bank stated that interest rates will have to rise significantly at a steady pace to reach levels that are sufficiently restrictive to bring inflation back to 2%. President Lagarde later clarified that this means raising rates in 50 bp increments “for some time”. Rates will be higher, and stay higher for longer...
- **The inflation f'cast was revised further up:** by 0.3 pp to 8.4% in 2022, by 0.8 pp to 6.3 in 2024, before inflation is expected to decline to 3.4% in 2024 (previous f'cast was 2.3%) and 2.3% in 2025
- The bank revised down its **GDP growth projections** for next year significantly to 0.5% from 0.9% in the September report (still well above consensus at -0.1%). GDP growth for 2022 was revised up by 0.3 pp to 3.4%. 2024 projections remained unch. at 1.9%. The bank projects a recession next year but expects it to be “short and shallow”
- Asked about whether the ECB is at all following the Fed, Lagarde's answer was clear: “Anybody who thinks that this is a pivot for the ECB is wrong. We're not pivoting, we're not wavering. We are showing determination and resilience in continuing a journey where we have, if you compare – comparisons are odious, but if you were to compare with the Fed – we have more ground to cover. We have longer to go ... This is not a pivot. We're not slowing down. We're in for the long game.”
- The **FRA curve** is now up 45 bps vs the pre-meeting level, and is approaching 3.5% (and well above the NOK curve), while the German 2y and 5y gov't yields rose by 22-24 bps and the Italian 2y yield was up by 30 bps after the meeting

# Final data shows headline inflation slightly higher than preliminary estimate

Headline inflation revised up 0.1 p to 10.1% y/y, core unch. at 5.0%



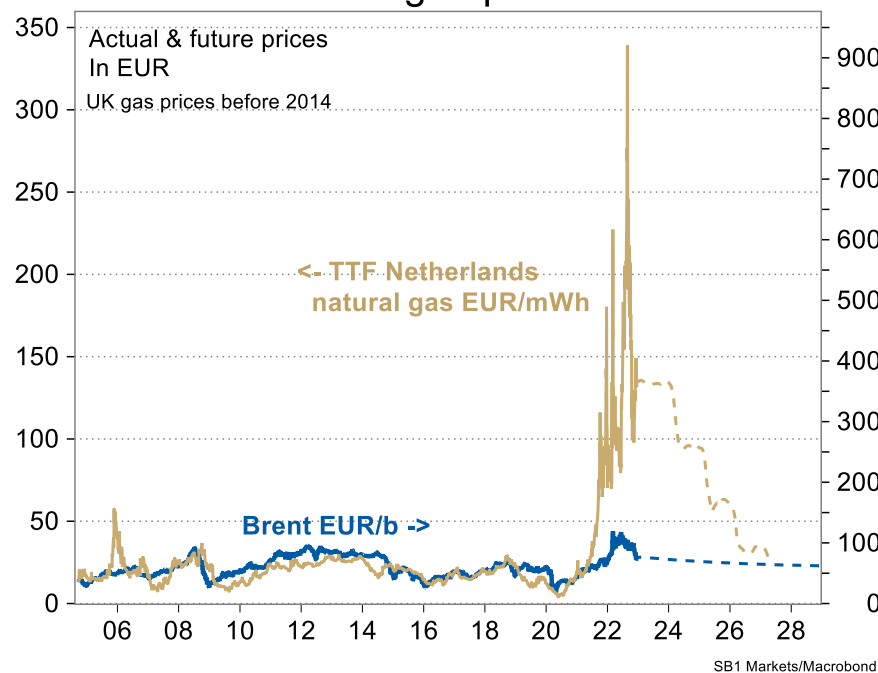
- The **total HICP** fell 0.1% m/m in Nov (seas adj), and is up 10.1% y/y, which is down 0.5 pp from October and 0.1 pp above the preliminary print
  - Energy prices were down 1.6% m/m, and they are up 35% y/y (down from 41% a month ago), but still contribute 3.8 pp to the headline rate. Food prices rose 1% m/m - and are up 14% y/y, contributing 2.8 pp to overall CPI growth
- The **core** rose 0.4% m/m. Both goods and services contributed. The annual rate was unchanged from October and from the initial estimate at 5%, still the highest ever...
- The **ECB** hiked rates by 50 bps to 2.0% at their last meeting and reiterated that their job is to control inflation. In addition, the bank's statement with regards to further hikes was more hawkish, indicating several 50-bp hikes to come. A lower inflation print is certainly welcome by the ECB, but the bank clearly stated that a pivot is even close. It is adamant to get inflation under control and will tighten conditions until the target is in range



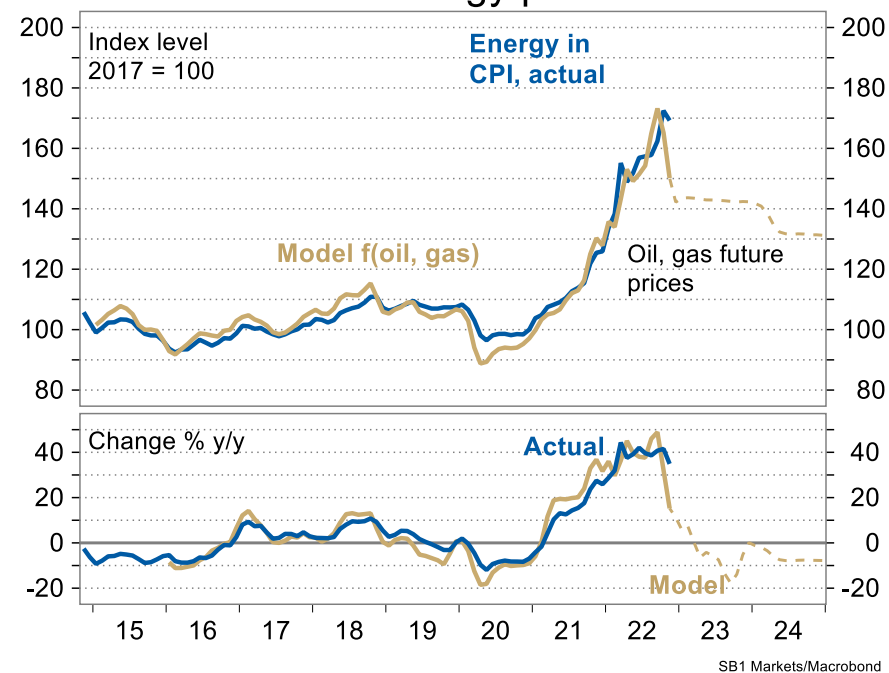
# Gas, oil prices have lifted 'energy CPI inflation' up 35% but....

... the peak is very likely behind us, given the retreat in oil and even more gas prices recent months

## Oil & gas prices



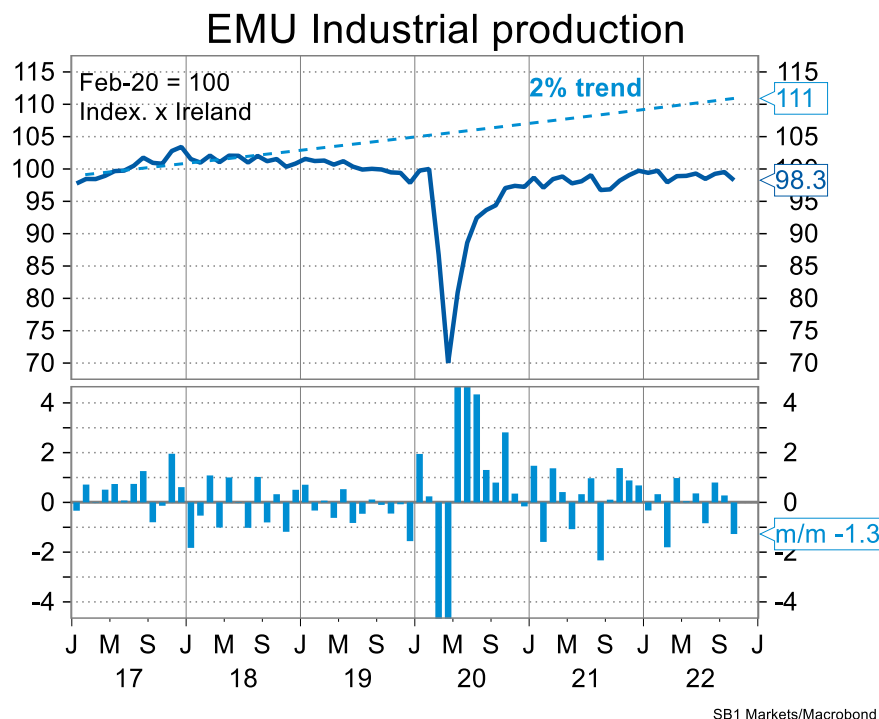
## EMU Energy prices



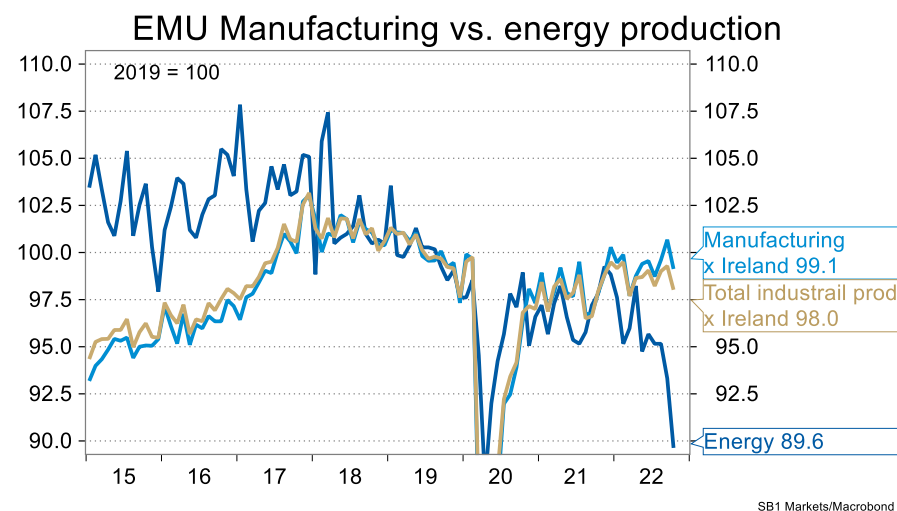
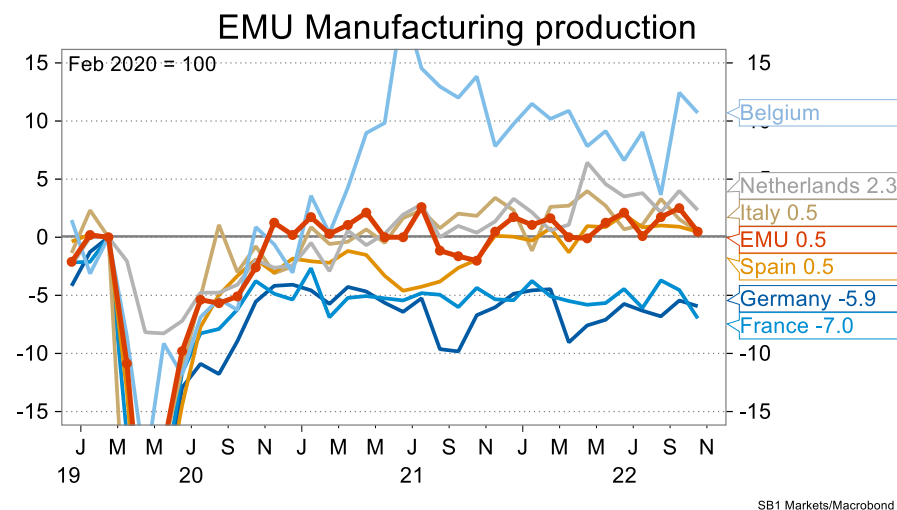
- Gas prices are well down from the peak – even if prices have increased again last weeks (before falling again recent days)
- Early next year, energy prices will probably be down, measured y/y – even after the current surge.  
If the market got it right this time ...

# EMU industrial production down 1.3% in October, as el. production nosedived

A broad decline in manufacturing production as well - but the trend is still upwards



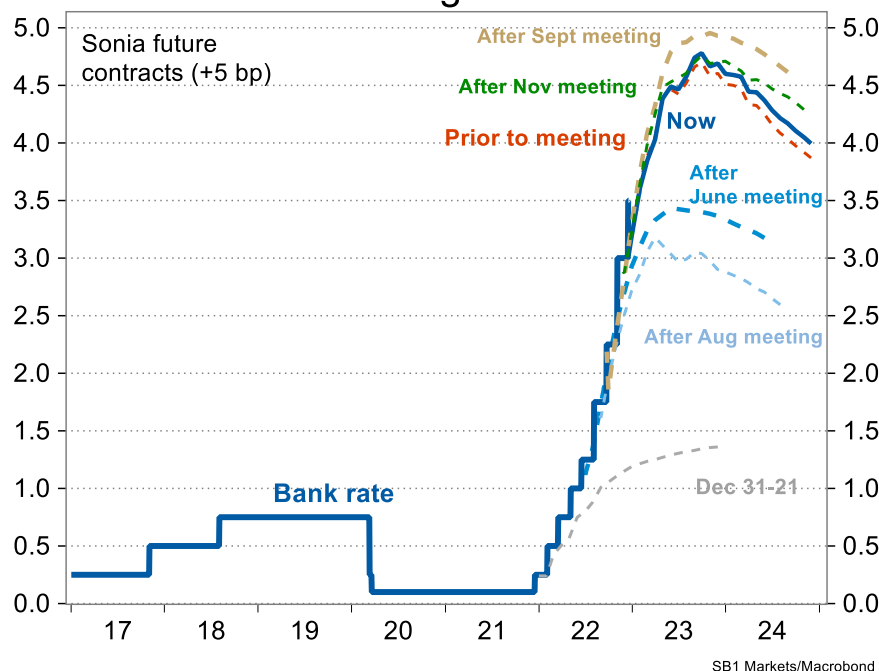
- On the bright side: the fall in production was less than what the market expected (-1.5%). Energy production fell by 4% and has fallen by 10% since April – and from the 2019 average level
- Manufacturing production** is heading slightly upwards even if energy production is declining – but production fell 1.5% in October (ex volatile Irish production)
- The outlook** is not that bright: In Nov and Dec, the manufacturing PMIs stabilised but are far into negative territory in all of the big 4 countries, and although the new order index increased, orders are still falling



# Bank of England raises rates by 50 bps – sees further rate hikes

In line with market expectations – but market rates are up some 10 bps since before the meeting

UK Bank of England bank rate



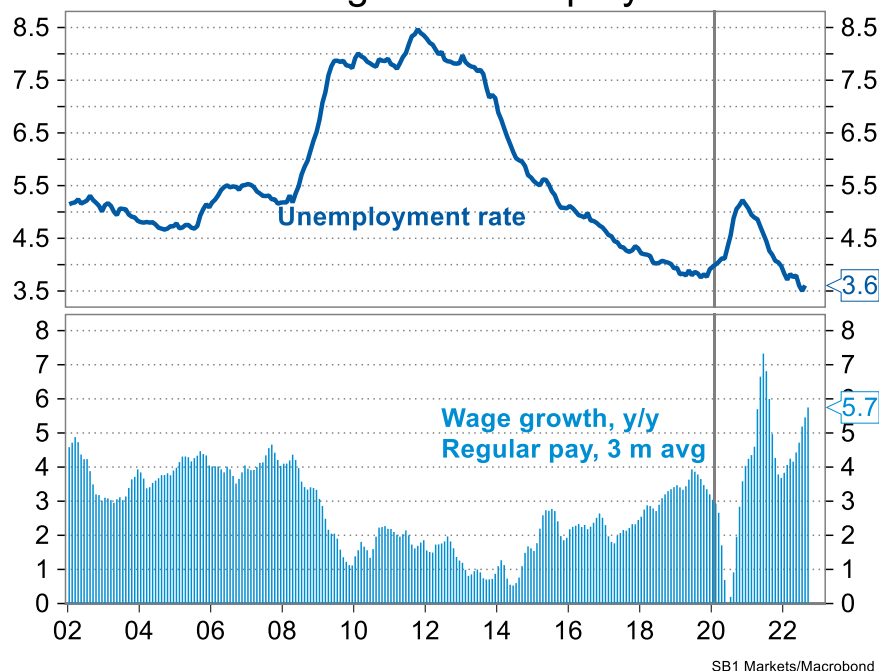
- The **Market** had largely discounted the hikes and the continued hawkishness of the BoE - **short end of the UK curve was left virtually unchanged post the meeting**

- **The policy rate** was lifted by 50 bps to 3.5%, as widely expected, the 9<sup>th</sup> increase in row – the BoE started in December
  - The MPC was more split than usual: 6 of 9 members voted for a 50 bp hike, 1 member voted for 75 bps, while 2 members voted to keep the rate unchanged
  - The Bank was clearly front-loading rate hikes in order to prevent it from risking an extended tightening later
    - “The labour market remains tight and there has been evidence of inflationary pressures in domestic prices and wages that could indicate greater persistence and thus justifies a further forceful monetary policy response”
  - No MPR at this meeting. In its statement, the bank comments on the impact of the government’s fiscal policy measures (and especially the Energy Price Guarantee), stating that they will lower the Bank’s CPI f’cast in Q2 2022 by ¾ pp, and increase the level of GDP by 0.4% in year 1, leave GDP unch. in year 2, and reduce GDP by 0.5% in year 3

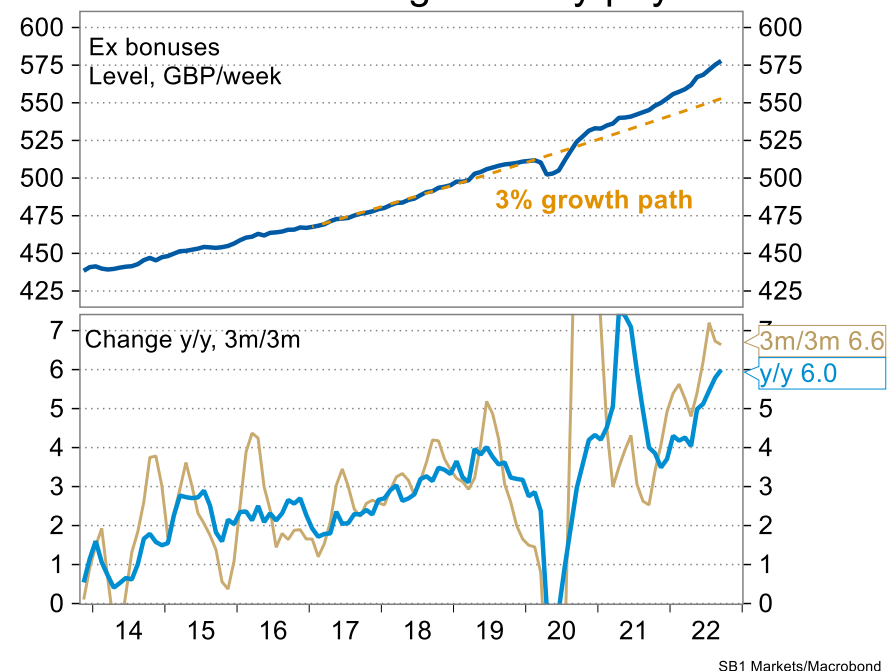
# Lowest unemployment rate since 1974 – and wage inflation is on the way up

... wages ex. bonuses are up 6%, up from the pre-pandemic level at 2% – 3½%

## UK Earnings vs Unemployment



## UK Average weekly pay

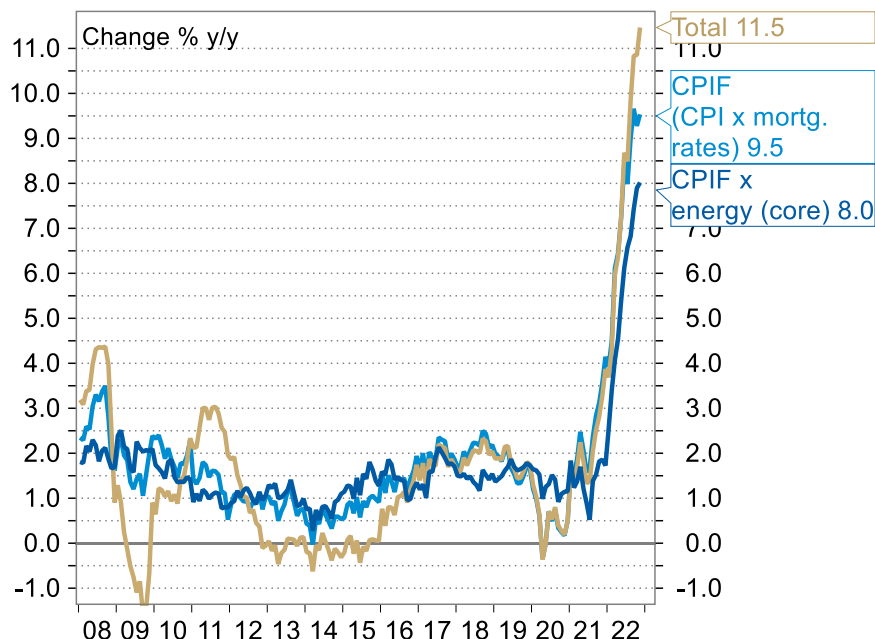


- **Annual wage growth** (regular pay, 3 m avg) accelerated 0.3 pp to 5.7% in September, expected up to 5.5%. Not smoothed, wages were up 6% y/y, and the underlying 3m/3m rate is at 6.6%
- **Including bonuses**, total wages are up 6.0% y/y (3 m avg), also 0.1 pp higher than expected (*chart next page*)
- Just before the pandemic, wage inflation was approx. 3% (total pay) to 4% (regular pay) – but just between 2% and 3% the preceding years. Thus, the current wage inflation rates are well above the British 'norm', that have yielded 2% CPI inflation
- Some unions in the UK have lifted their ambitions substantially recent months – as inflation is close to 10% - and BoE expect more to come. Wage claims in the same territory have now been aired, not surprisingly, in a very tight labour market. There are several ongoing 'rolling, part time' strikes in the public sector

# No peak yet for Swedish inflation – core in line with Riksbank f'cast

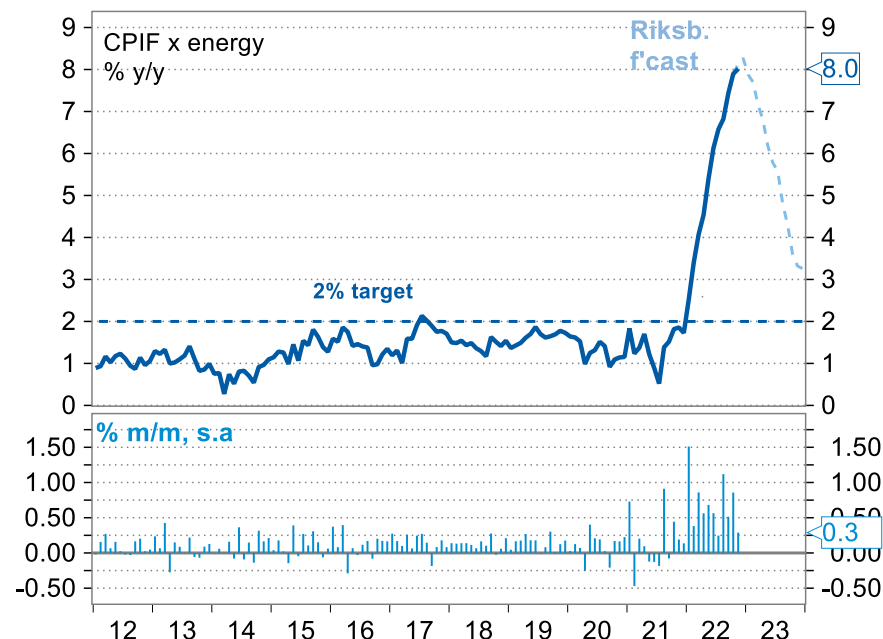
The headline was up 0.6 pp to 11.5%, in line with market expectations. Core CPI up 0.3% m/m, up 0.1 pp to 8.0%

## Sweden CPI



SB1 Markets/Macrobond

## Sweden CPI core

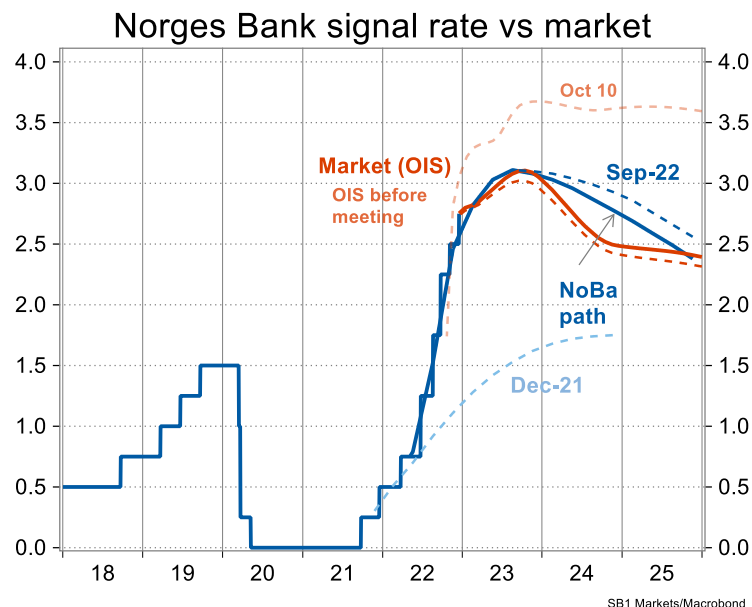


SB1 Markets/Macrobond

- **CPI-F x energy, the 'real core'**, rose 0.5% in November (seas. adj). The core rate has accelerated sharply recent months, to 8.0%, the latest print though in line with the Riksbank f'cast from Sept. (Food prices are included in the core)
- Why is inflation so high? Housing incl. energy prices are up 18% y/y, food prices are up 18%, furnishings 15%, hotels & restaurants 10%!
  - All other measures of underlying inflation are sharply up – and at the highest level in some 30 years
  - Until Q4 last year, inflation was pretty well explained by higher energy prices, now many more elements are on the move upwards
- **The increase in inflation is broad**, but the biggest contributors on the upside are energy, housing (larger mortgage pmts), food, and furnishings
- **The Riksbank surprised markets** and hiked by 75 bps at their last meeting in Nov, and signalled a 25 bps as the most likely outcome in at the next meeting. The market, however prices in +50 bps

# NoBa hiked 25 bp tp 2.75%, signals one or two more hikes next year

The interest rate path was unch. in 2023 – but lowered marginally in '24/25. In sum, more hawkish than expected



## Interest rate paths

|       | SB1 NoB/SB1 | NoBA Change | Fair FRA *) | FRA**    | FRA** | FRA** |
|-------|-------------|-------------|-------------|----------|-------|-------|
|       | Path 3-22   | Path 4-22   | @IMM, NB    | pre-meet | now   | NoBa  |
| Q3 22 | 1.53        | 1.53        | 0.00        | 2.67     |       |       |
| Q4 22 | 2.45        | 2.46        | 0.01        | 3.11     | 3.15  | 3.17  |
| Q1 23 | 2.82        | 2.82        | 0.00        | 3.35     | 3.27  | 3.33  |
| Q2 23 | 3.03        | 3.03        | 0.00        | 3.45     | 3.20  | 3.30  |
| Q3 23 | 3.11        | 3.11        | 0.00        | 3.43     | 3.13  | 3.26  |
| Q4 23 | 3.10        | 3.08        | -0.02       | 3.39     | 3.06  | 3.19  |
| Q1 24 | 3.08        | 3.03        | -0.05       | 3.32     | 2.96  | 3.08  |
| Q2 24 | 3.04        | 2.96        | -0.08       | 3.23     | 2.87  | 2.98  |
| Q3 24 | 2.99        | 2.87        | -0.12       | 3.14     | 2.78  | 2.89  |
| Q4 24 | 2.93        | 2.78        | -0.15       | 3.05     | 2.70  | 2.80  |
| Q1 25 | 2.86        | 2.69        | -0.17       | 2.96     | 2.65  | 2.75  |
| Q2 25 | 2.76        | 2.59        | -0.17       | 2.86     | 2.60  | 2.69  |
| Q3 25 | 2.66        | 2.49        | -0.17       | 2.40     | 2.60  | 2.69  |
| Q4 25 | 2.56        | 2.38        | -0.18       |          |       |       |

\*) Assuming the NIBOR spread at 35 bps

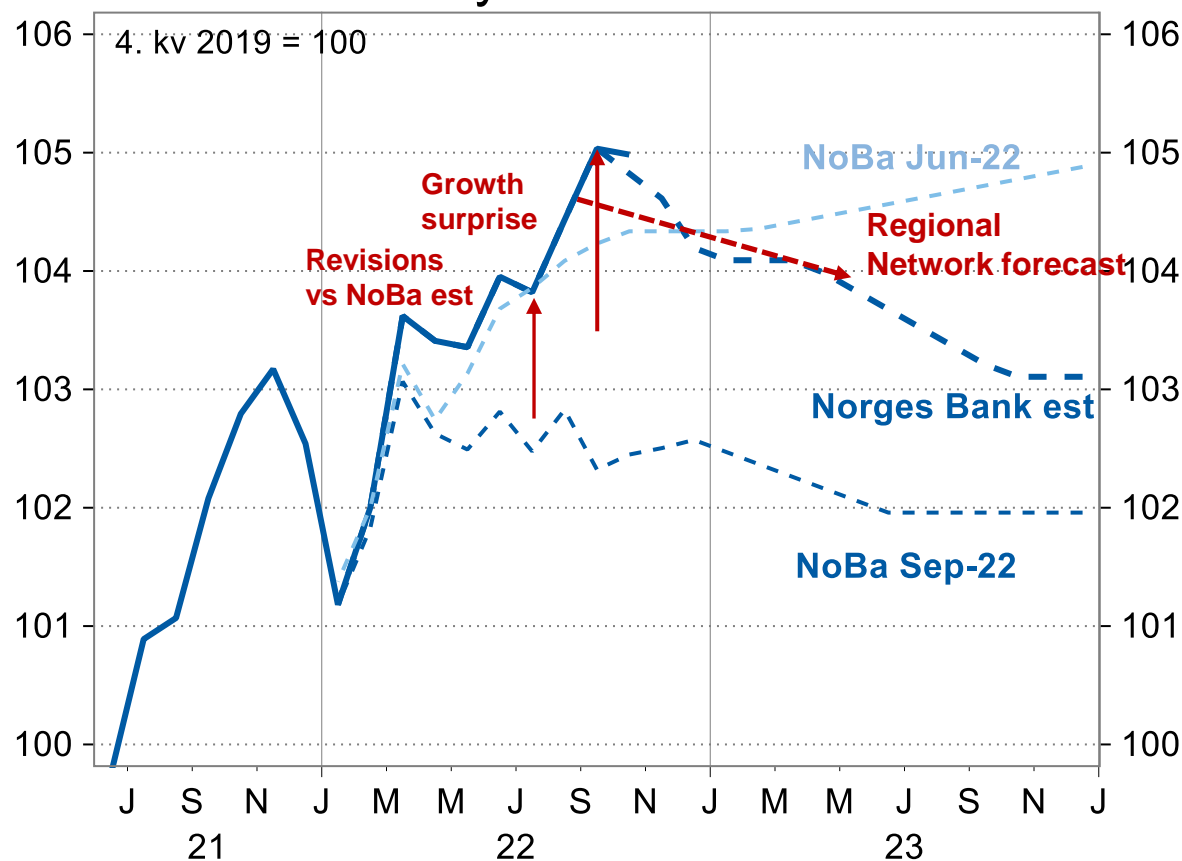
\*\*) Q4 FRAs adjusted for liquidity prem

- **The raise in the policy rate** was as everybody expected
- **The peak of the rate path** remained unchanged at 3.1%, and higher than expected
  - 2023: One or two 25 bp hikes, March (and possibly, 40%) June
  - 2024: Policy rate will be cut, and to slightly below 2.5% by the end of 2025
  - The interest rate path was lowered by up to 18 bps
- **Economic projections**
  - NoBa once more lifted its **inflation expectations**, and inflation is expected to remain far above the target for the whole forecast period
  - **Mainland GDP** was revised sharply up, due to a higher starting point. From here, GDP is expected to decline at the same pace as in September. GDP is expected to decline in all 4 quarters next year, in sum by 1.4%, from a 0.5% decline in the Sept report. For 2023, GDP will still just be down 0.1% y/y, vs. the -0.3% Sept f'cast
  - **Wage inflation** was revised up by 0.1 pp to 4.7% for '23 but down 0.2 pp in both '24 and '25, to 4.2% and 4.0%. Given slow productivity growth, cost inflation will remain well above 2%
  - **The bank is flexible**, inflation is allowed to stay above target the coming 3 years, while the unemployment rate is just slightly up from the present level
  - **House prices** are now expected to fall by 6% from the Aug peak by next summer, up from a 4% decline. **Oslo Office prices** are expected down 25%, from 15%
- **Market reaction**
  - Following the steep decline in OIS/FRA recently, the market had expected a pretty dovish NoBa – and rate expectations rose some 10 bps when the Bank kept its 3.0% – 3.25% peak rate estimate. Still, market rates are below NoBa's path from early '24 and until late '25 - by up to 30 bps
  - The NOK was slightly stronger after the NoBa announcement
- **The countercyclical capital buffer** was kept unchanged at 2.5%

# GDP revised sharply down in Sept, partly reversed in December

GDP growth has surprised sharply on the upside since the Sept MPR, and the GDP f'cast lifted by 1.5 – 2 pp

## Norway Mainland GDP



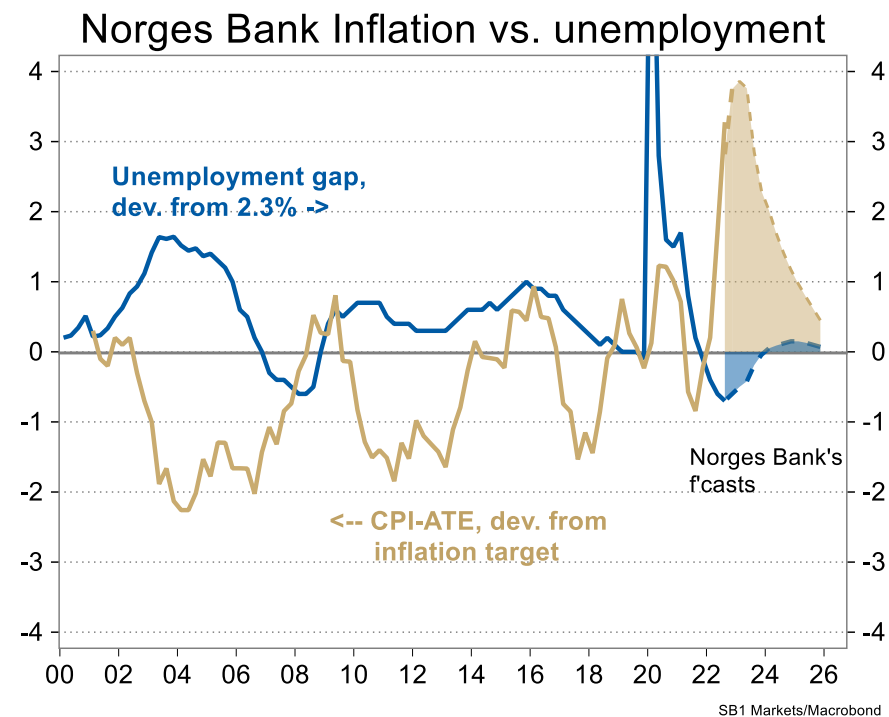
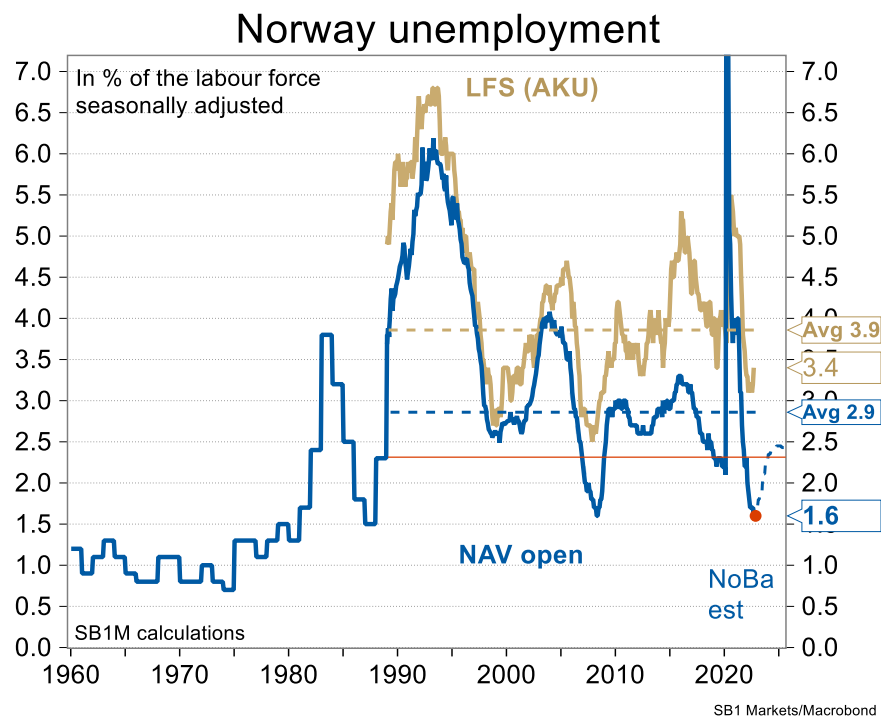
SB1 Markets/Macrobond

- The GDP forecast was as we expected close to the Regional Network growth estimate, as we illustrated the last Weekly report
- SSB reported an unchanged October Mainland GDP last week, we expected a small uptick, NoBa a small decline



## Yes, Norges Bank assumes higher unemployment but still a very low level

NoBa expect an increase in the unemployment rate peak to 2.5% in H2-2024, up from 1.6% now

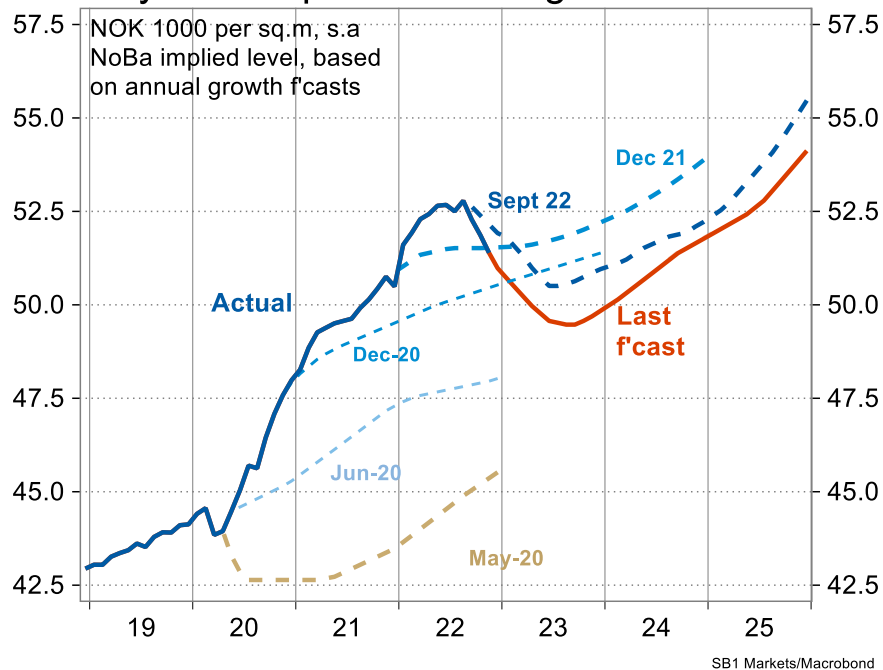


- The average **NAV unemployment** rate has been 2.9% since 1990, and below 2.3% (the red line on the chart) just in 18% of the months since 1990 (in 2007/8, 2019 and in 2022)
- If we assume that the 'NAIRU' is 2.3%, the unemployment gap will turn positive (become too high), in Q1 2024 – but will remain extremely small (the small blue area above the zero line in 2024/25. By comparison, the inflation gap (the beige area) is huge, some 30 x larger, implying that NoBa is a far cry from being an inflation nutter. A stable unemployment/production gap is given priority over the inflation gap
- However, as we said three months ago: *Another question is if **Norges Bank's forecasts** will turn out to be correct. Unemployment may increase by more, and inflation may come down faster. If that's the case, we are pretty sure what the bank's response would be 😊*

# NoBa revises down house prices again, exp. a 6.3% drop, Commercial -25%

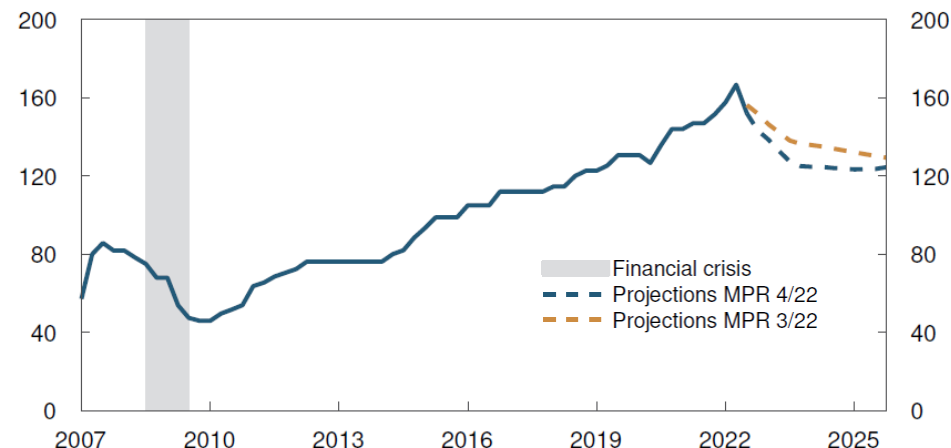
In Sept, -4.3%. So far, prices are down 2.6% from the peak in August

## Norway House prices vs Norges Bank's f'casts



## Chart 5.6 Commercial property prices are expected to decline

Estimated selling prices. In thousands of NOK per square metre

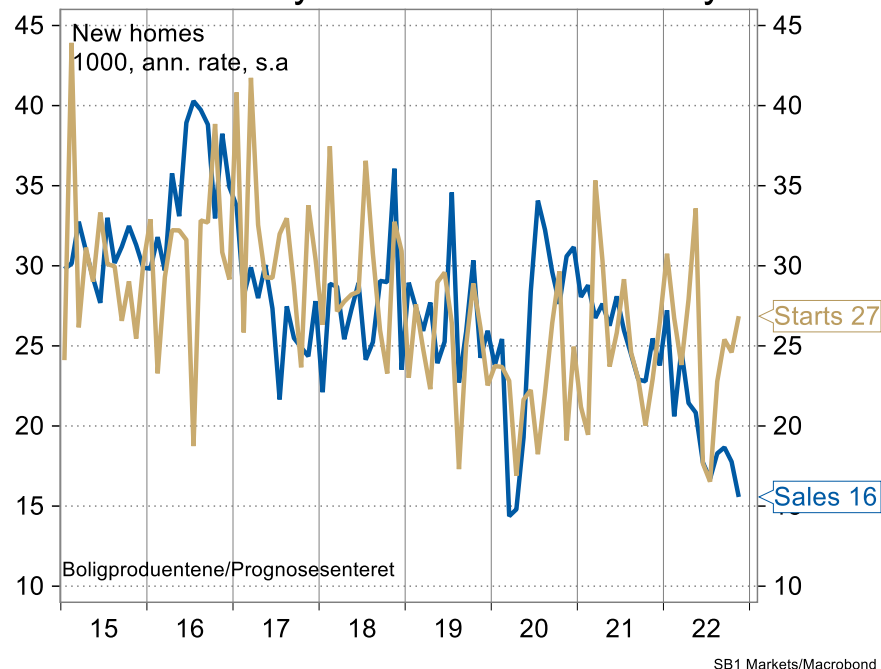


- Three months ago, the bank also trimmed the house price f'cast by 2%
- House prices will bottom in Q3, and thereafter turn up, after a while supported by lower interest rates
- NoBa forecast a 15% 25% decline in prime office selling prices in Oslo the next few years – coming year (chart inspection, do data published). Three months ago we wrote: *We think it will happen much faster – and that prices will decline more than by 15%. The bank now came to the same conclusion, is has in reality happened already*

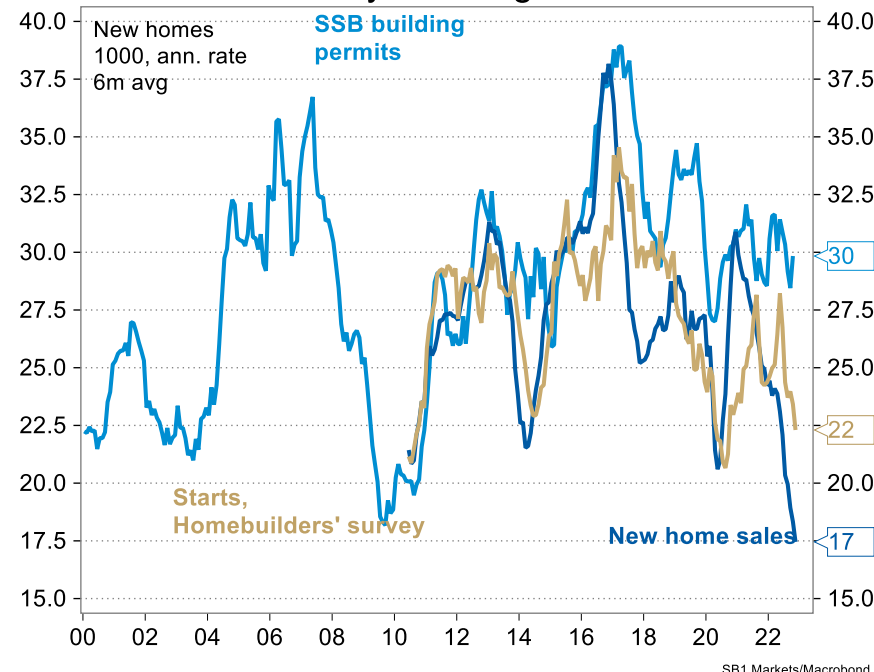
# New home sales further down in November

To the lowest level ever (data from 2010), barring the start of the pandemic

## Norway Homebuilders' survey



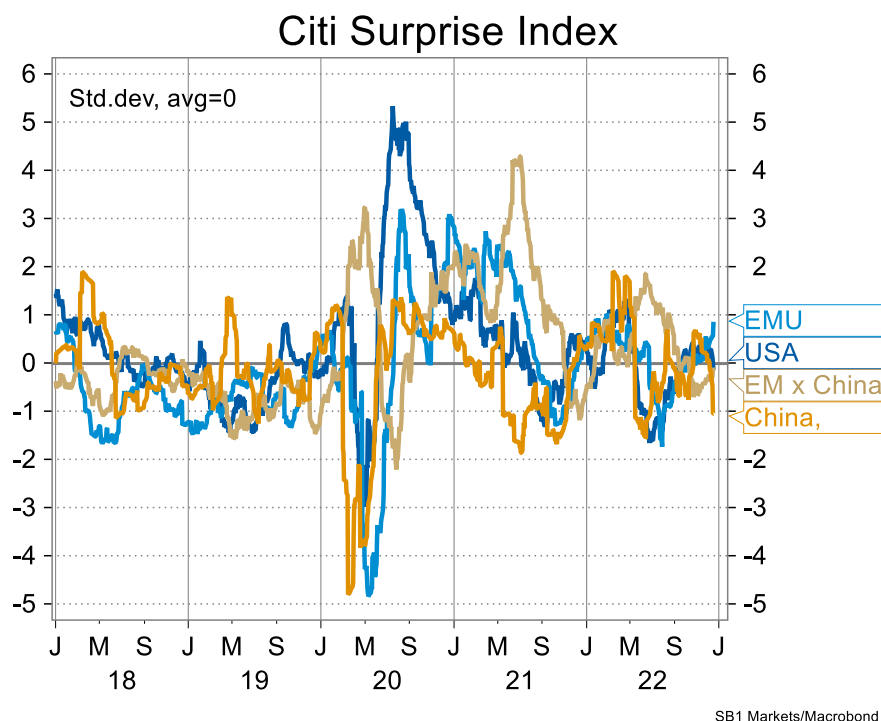
## Norway Housing starts



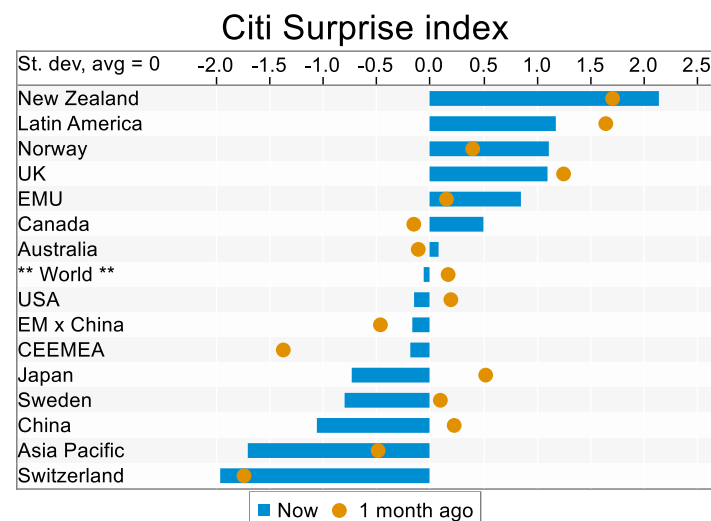
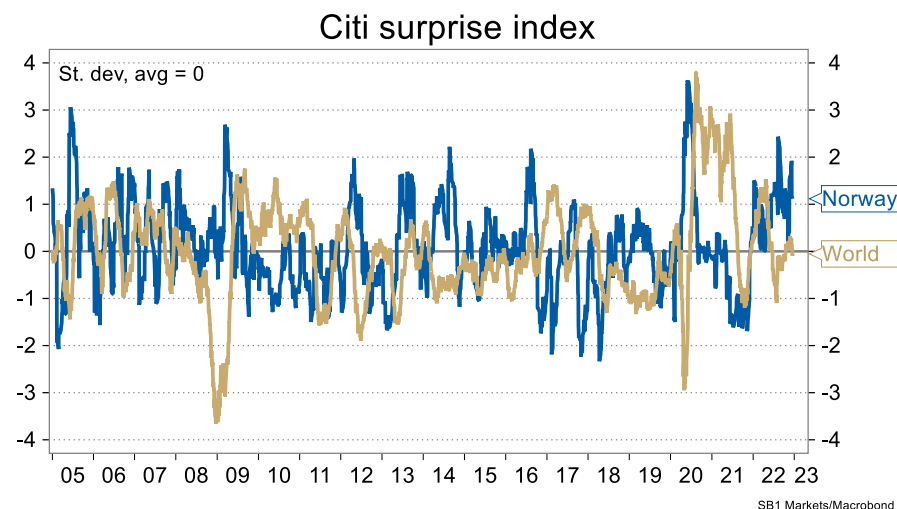
- Boligprodusentene (Home builders) reported a further decrease in new home sales in November, to 16' from 18' (annualised). The average over the past 6 months is 17', the lowest on record from the Home builders
- Starts increased by 3' to 27' in November. The average over the past 6 months is at 22', while SSBs reported building permits at 30' on average the past 6 months
- The rather steady decline in new home sales signals a very likely downturn in new starts/permits the coming months. Higher mortgage rates, higher construction costs as well as falling house prices are reasonable explanations

# US, Chinese data weaker than expected; EMU data surprise to the upside

All Chinese November data were weaker than expected. US retail sales, surveys also on below expectations



- **Emerging markets x China** is marginally below par, but less so recent weeks
- Norwegian data still much better than expected, according to Citi



Highlights

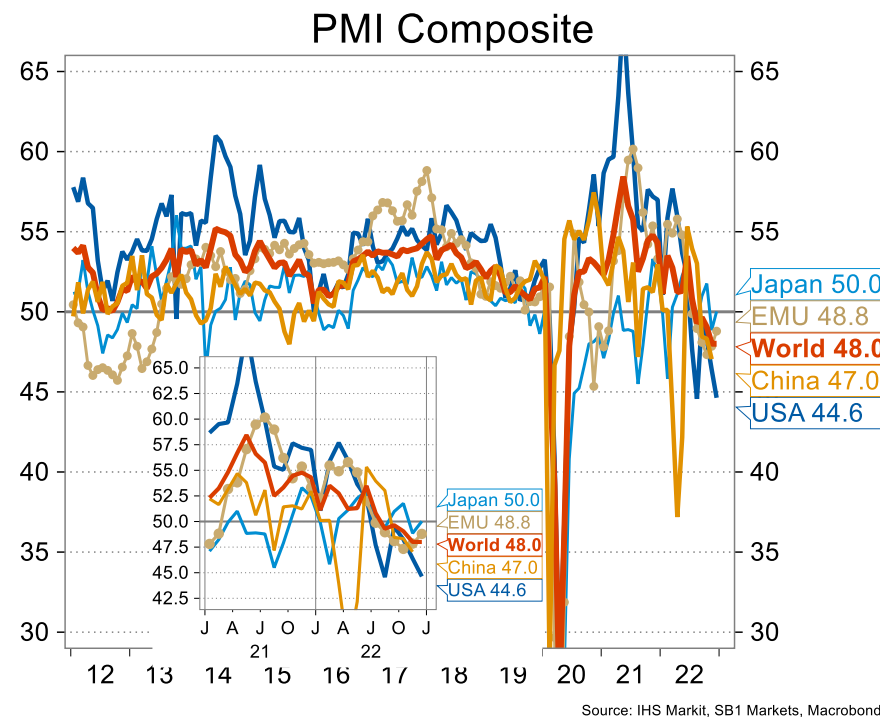
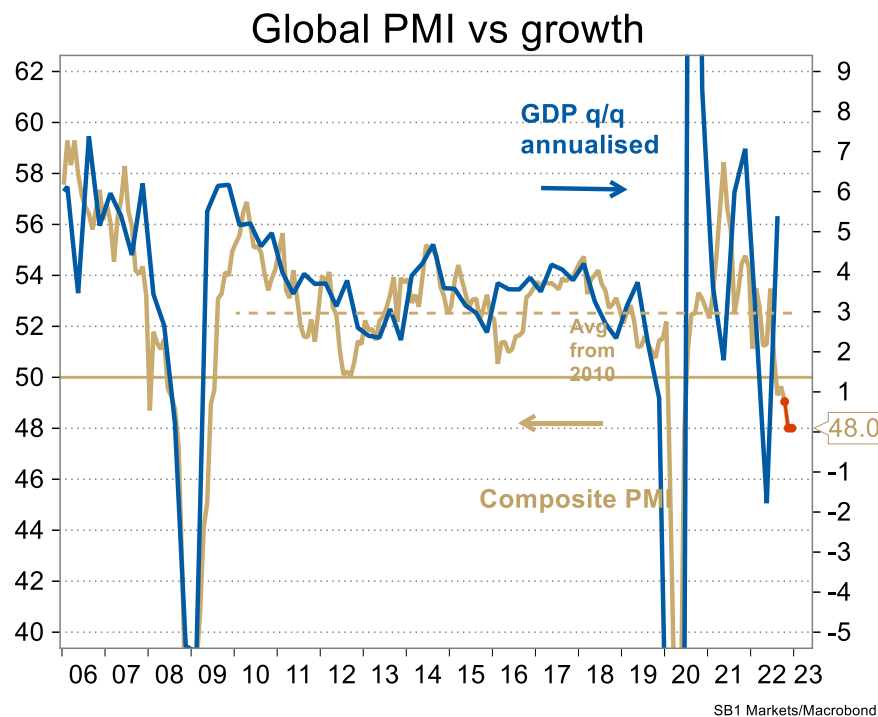
The world around us

The Norwegian economy

Market charts & comments

# The global composite PMI probably close to unchanged in December

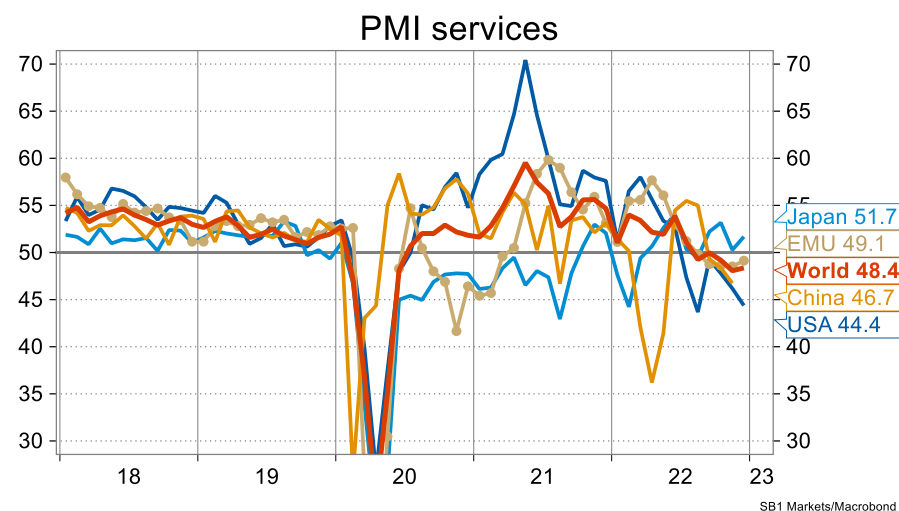
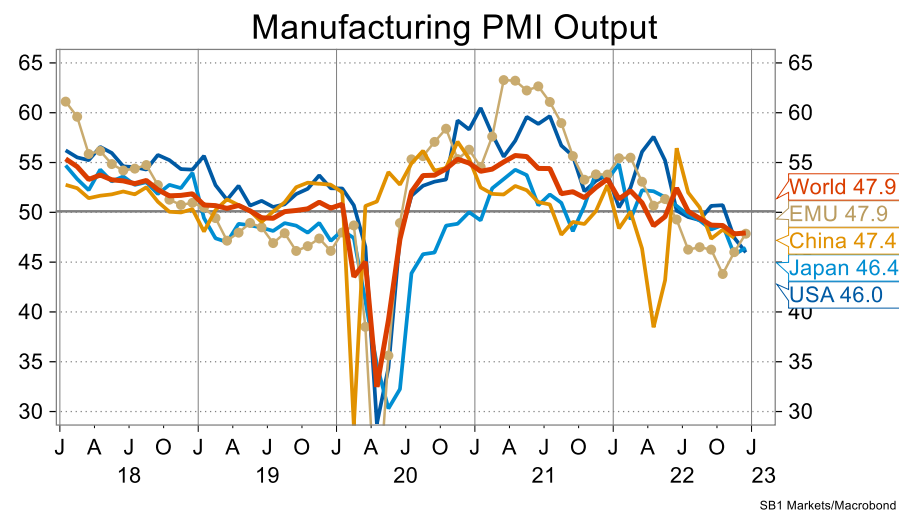
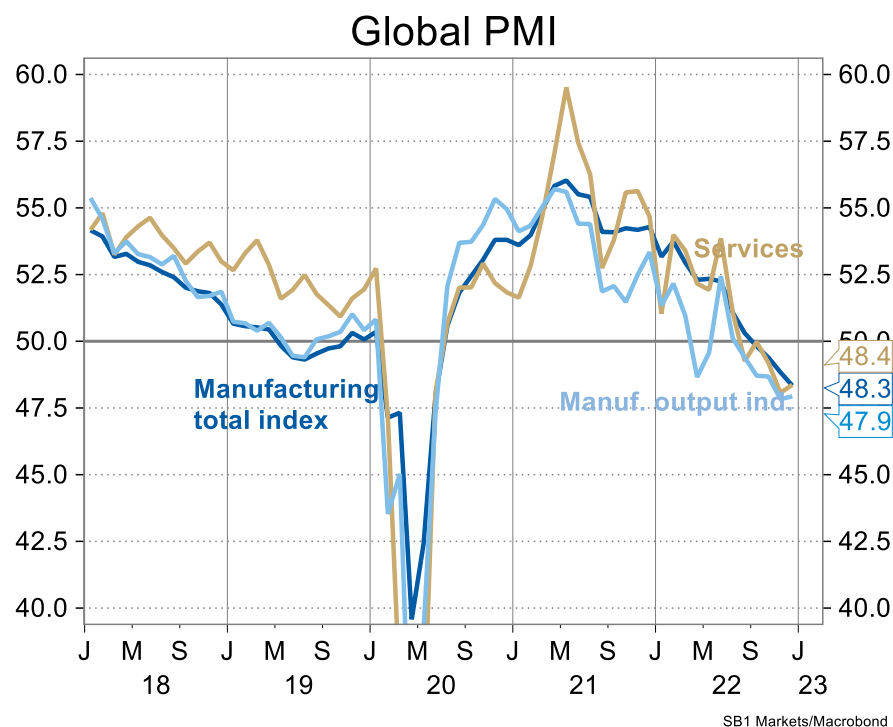
... at a low level, signalling a zero growth in GDP. USA surprised at the downside, EMU at the upside



- According to the preliminary PMIs from the rich part of the world, the global PMI probably remained close to 48 in December, for a labelling a global recession, a 2.5% growth rate. The index is by far the weakest level since the financial crisis – except for the first pandemic months
- EMU once again surprised on the upside, US on the downside (is sum a 2.9 p surprise differential)
- China (or other EMs) has not yet reported

# US further down, to the bottom and way weaker than expected

EMU surprised sharply on the upside but remains well below the 50-line

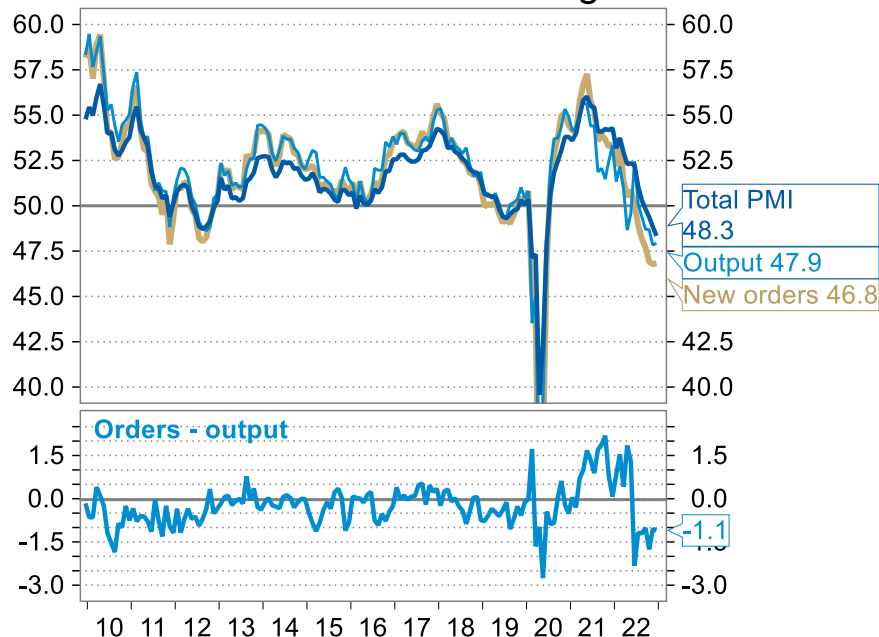




# Manufacturing orders are contracting very fast, both in Europe and the US

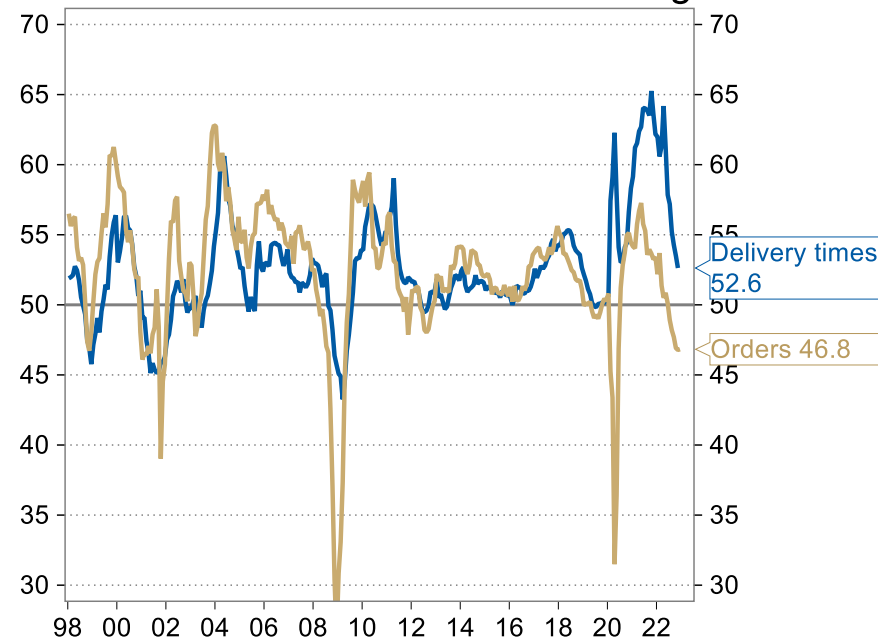
The delivery times was unch. in December, thanks to the uptick in the EMU index

## Global Manufacturing PMI



SB1 Markets/Macrobond

## Global PMI Manufacturing

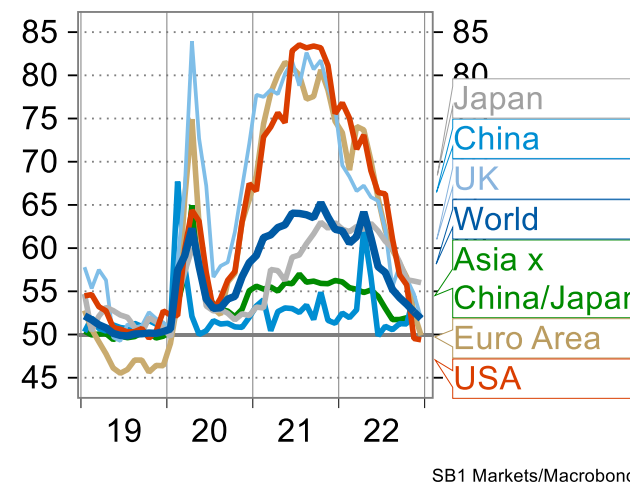
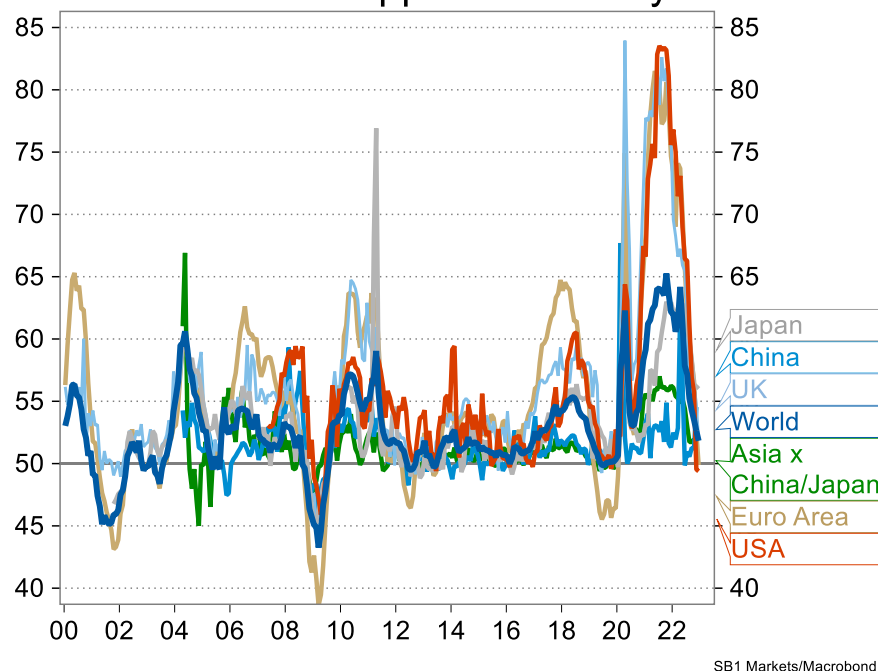


SB1 Markets/Macrobond

## Delivery times have normalised

In the US, they are lower than normal – at least the index is below average

PMI Manuf. Suppliers' Delivery Times

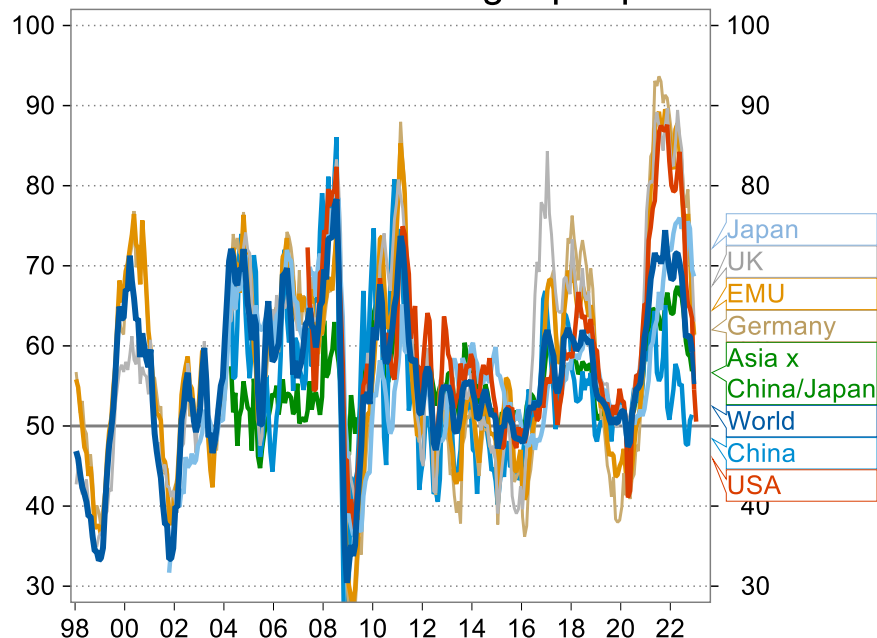


- **The global delivery times** PMI sub-index (changes in delivery times vs the previous month) has been inching down since the peak last October. The decline is broad among the Western rich countries – and now the level is back to the 50-line, very likely signalling normal delivery times
- **The interpretation of this index is unclear** – are companies really reporting changes in delivery times – which they are asked to do?
  - This index has been above 50 most of the time (the past 20+ years), formally implying a continuous increase in delivery times. However, delivery times have surely not increased almost all the time – they have rather fallen! Companies may be reporting the level of delivery times. If so, delivery times are now contracting – while the index formally reports that delivery times are increasing at a marginally slower pace

# Manufacturing price inflation is heading downwards, output prices still >avg

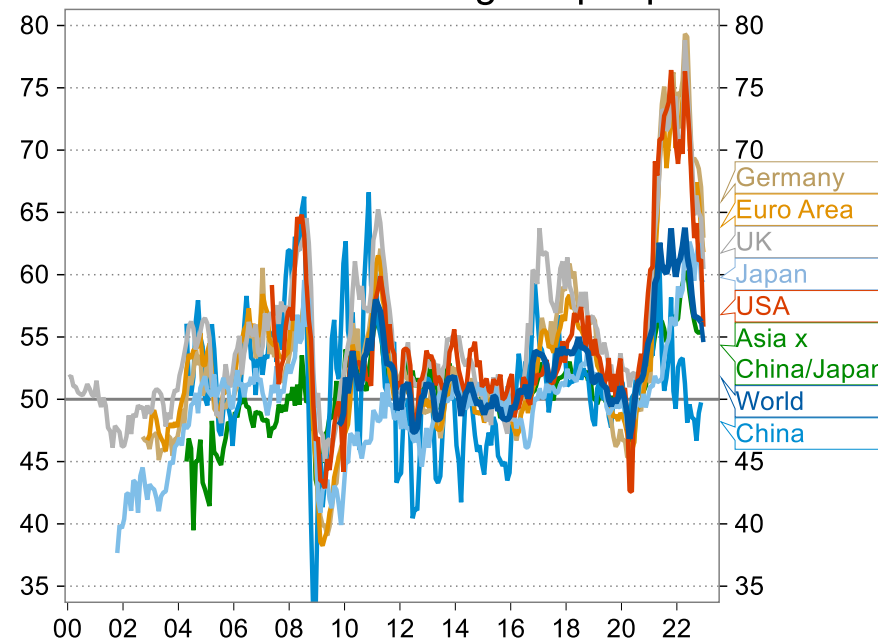
The decline in the input price index was probably steep in December, and it is back to a normal level

## PMI Manufacturing Input prices



SB1 Markets/Macrobond

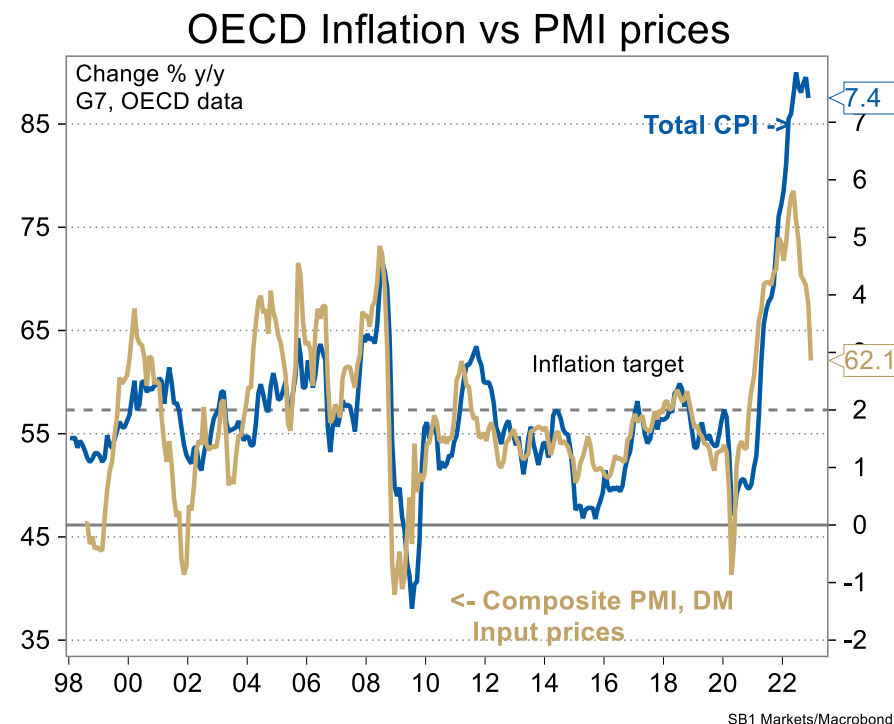
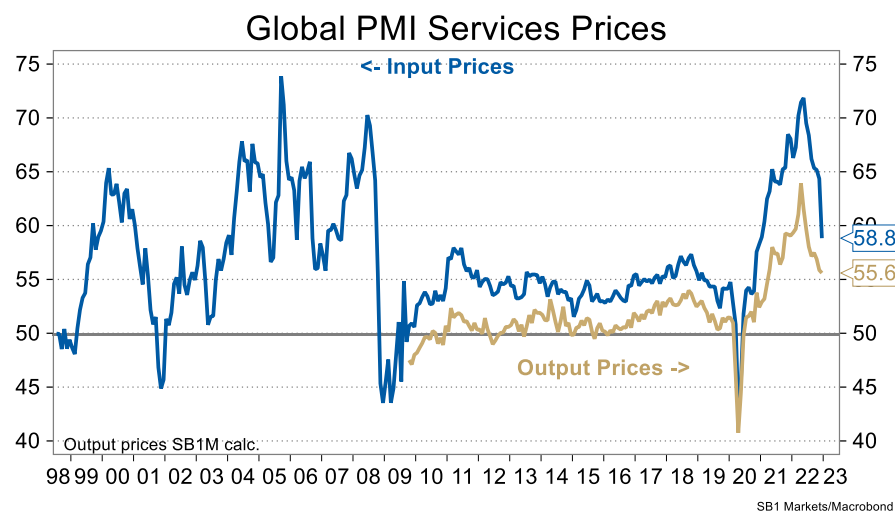
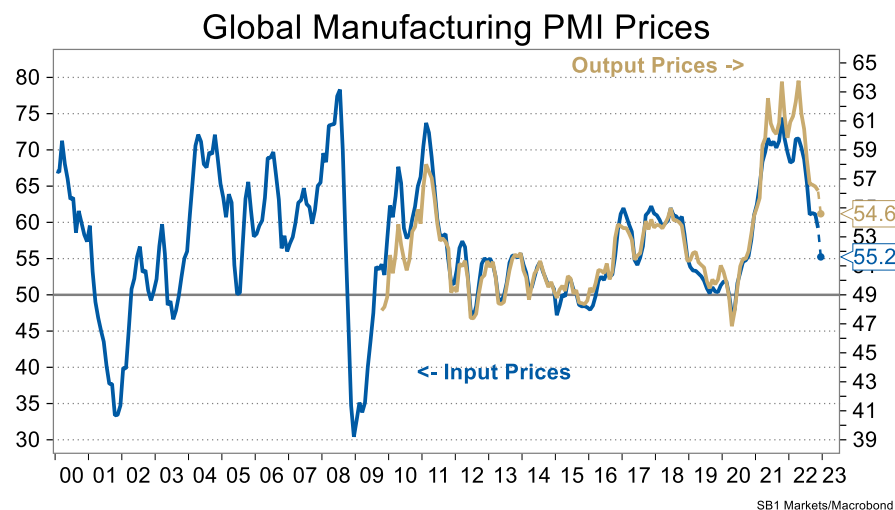
## PMI Manufacturing Output prices



SB1 Markets/Macrobond

# Price indices are heading down, and input prices are back to a normal level

... at least in manufacturing sector in the rich part of the world



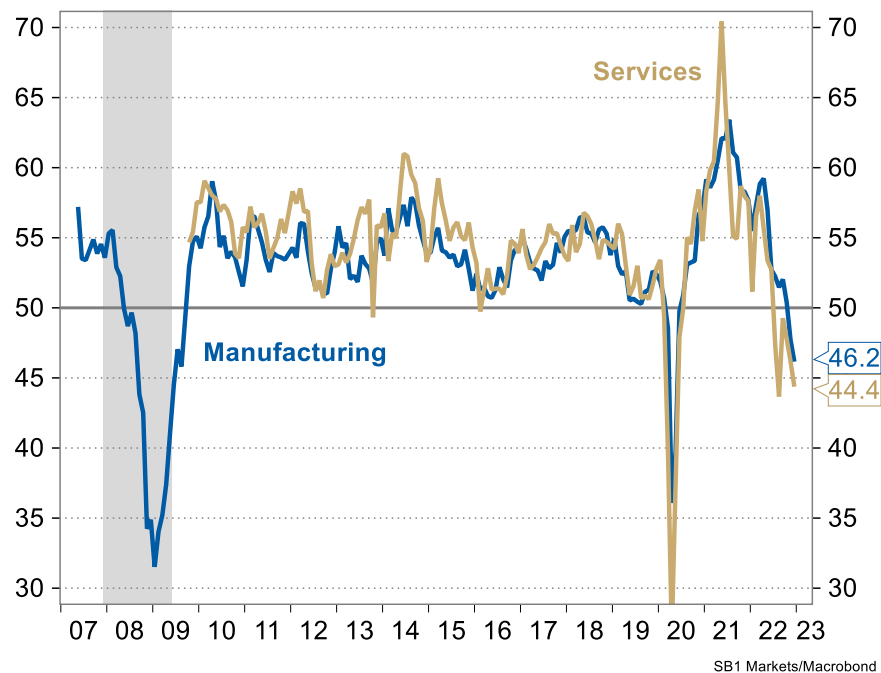
- These PMIs signal a substantial easing of price pressure the coming months – but are still indicating inflation well above a normal level
- We are still more concerned about wage inflation than the actual price inflation due to factors that are most likely transitory, like hikes in raw material prices, freight costs or short-lived margins expansion when demand is surprisingly strong

Last obs. based on preliminary PMIs from EMU, Japan, UK, and the US

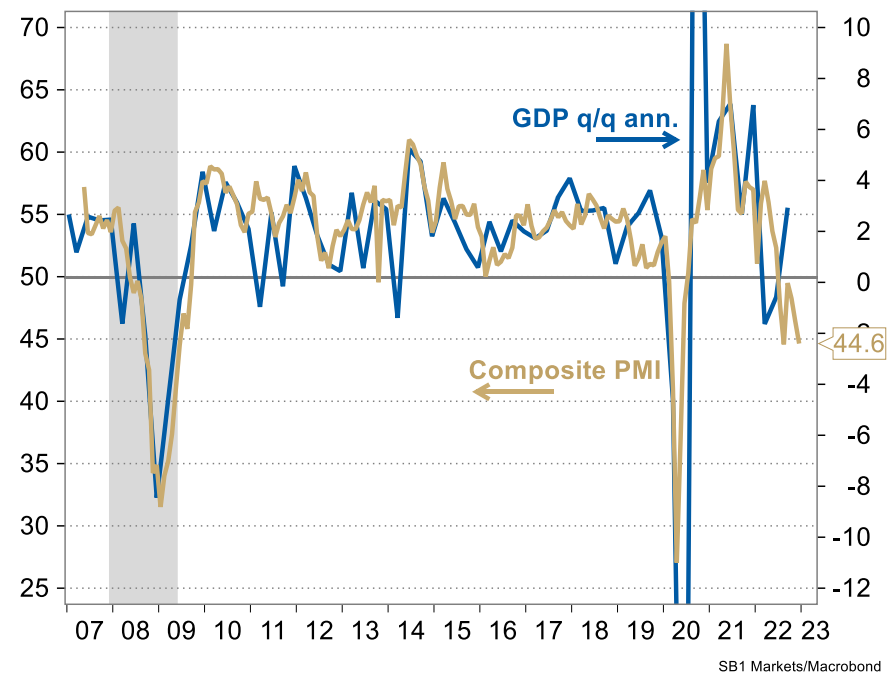
# US PMIs much weaker than expected in December too, the composite at 44.6

... which signals a significant GDP contraction, AKA a recession

## USA S&P PMI



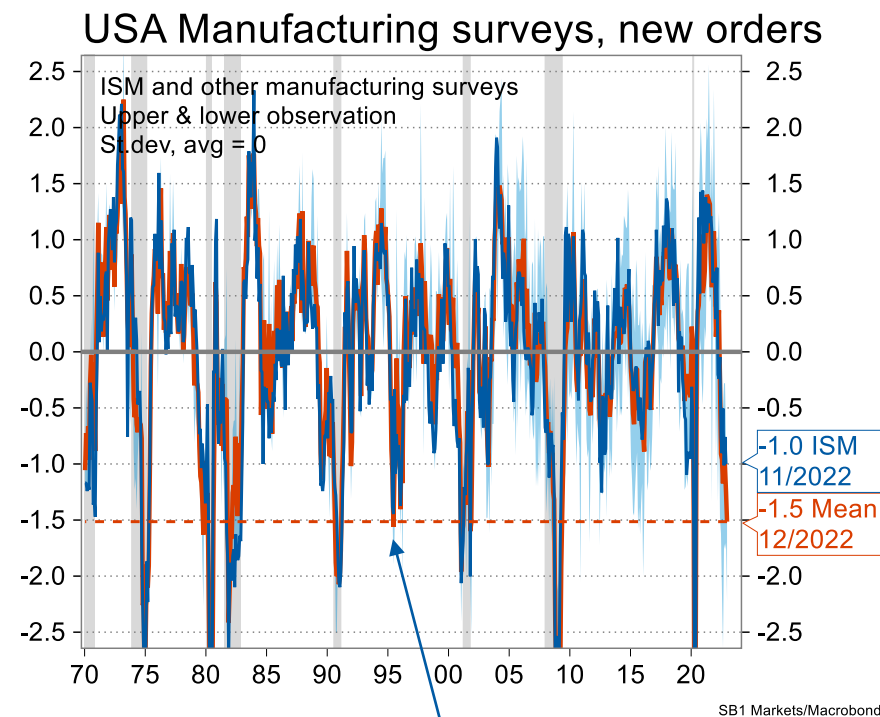
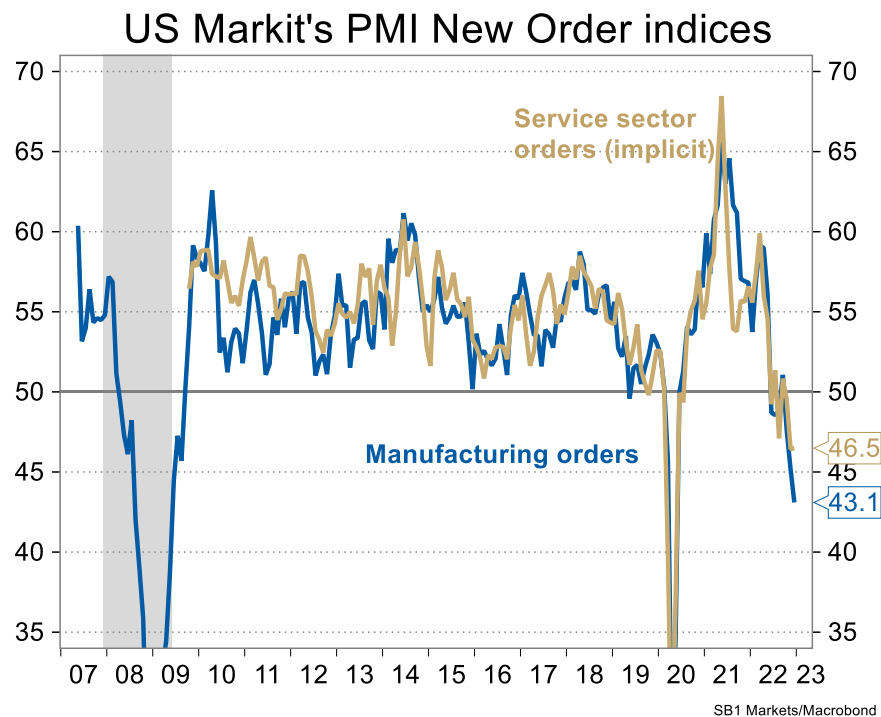
## USA S&P PMI vs GDP



- **The S&P composite PMI** fell 1.8 p to 44.6 in December, expected up 0.5 p! The index signals a 2%+ pace of contraction in GDP. The index has been below the 50-line for 6 consecutive months.
- Services fell by 1.8 p to 44.1. The total manufacturing PMI 1.5 p to 46.2, both expected marginally up. Two months ago, the manufacturing PMI was above 50!
- **The manufacturing new orders index** dropped 2.1 p to 43.1 indicating a sharp decline in order inflow
- **The price indices** fell further but they are still above average levels, but below prior peaks

# The PMI and all other manufacturing surveys insist a serious order shortfall

The manuf. PMI reports of steep decline in new orders, just the Financial Crisis, start of the pandemic were worse

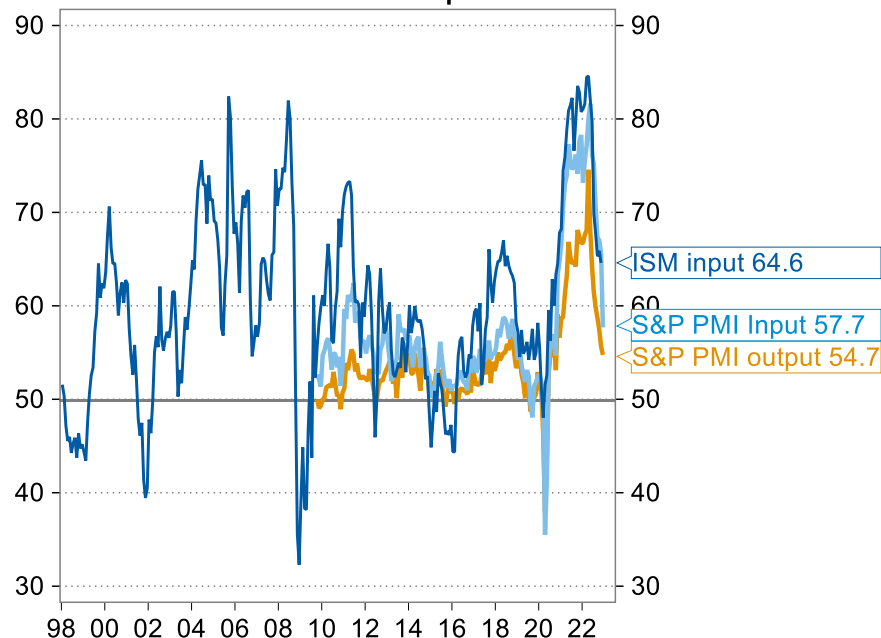


- Just once, in 1995, the order inflow was reported weaker than now, without the US entering or being in a recession (and if other surveys are as weak as the 3 Dec surveys reported so far, the margin vs. 1995 has become very slim, check the chart above)

# Peak price inflation? Companies are reporting slower price increases in Nov

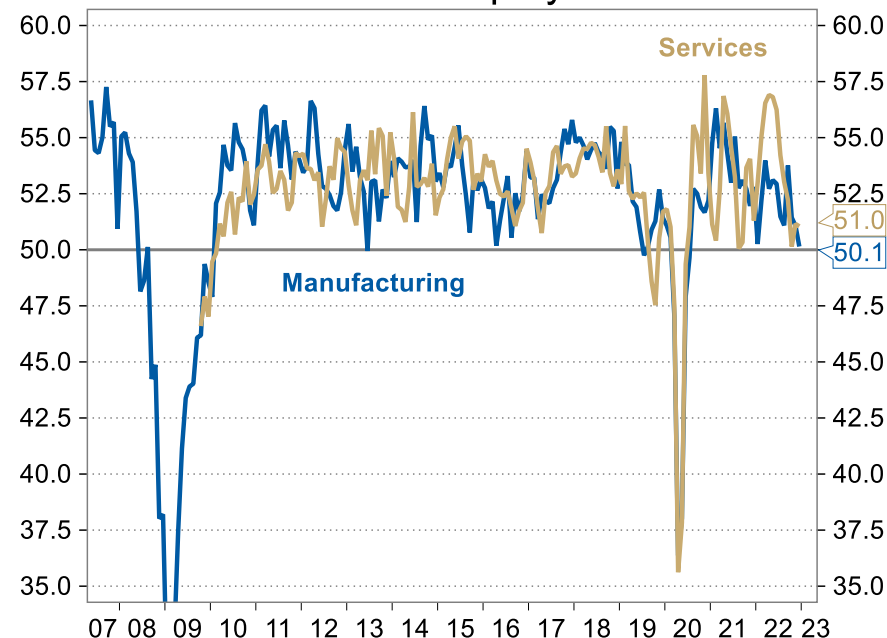
Companies have also been reporting slower growth in employment recent months

## USA PMI/ISM Composite Price Indices



SB1 Markets/Macrobond

## USA PMI Employment



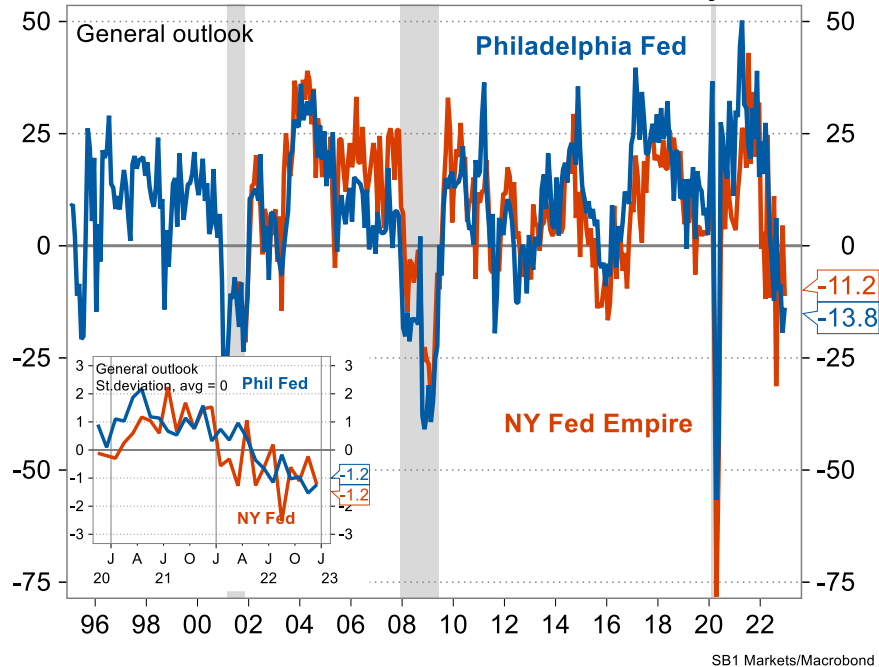
SB1 Markets/Macrobond



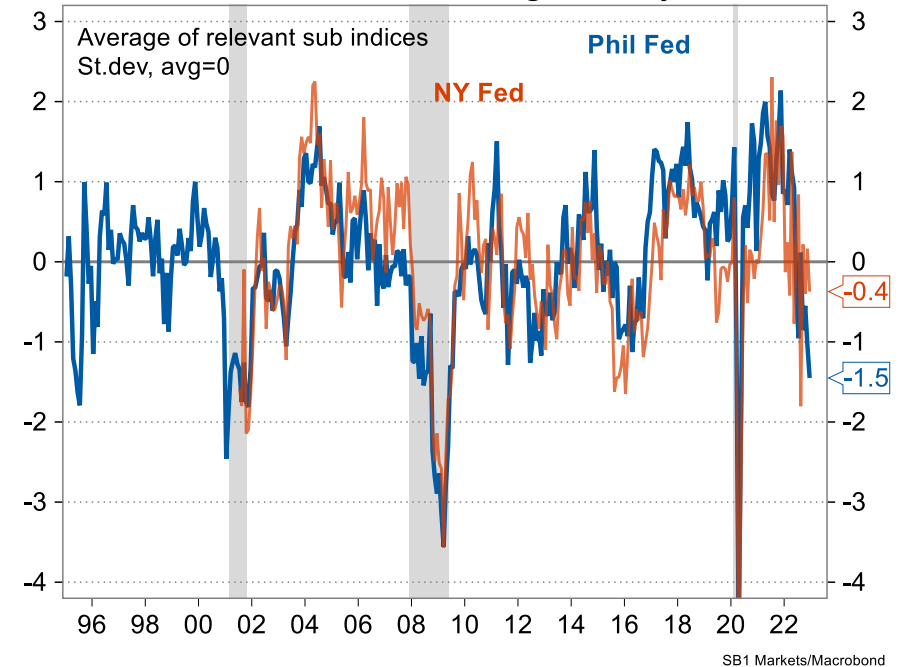
# Both NY & Phil Fed weaker than expected in November, both well below par

The headline Phil Fed Index rose slightly but less than expected – and the sum of details were on the downside

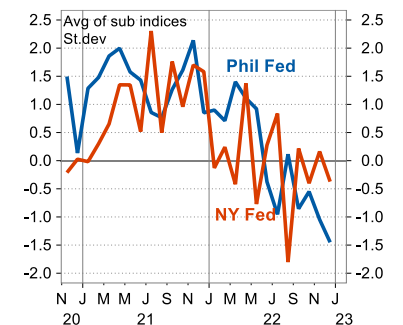
## USA NY, Phil Fed manuf surveys



## US Manufacturing surveys



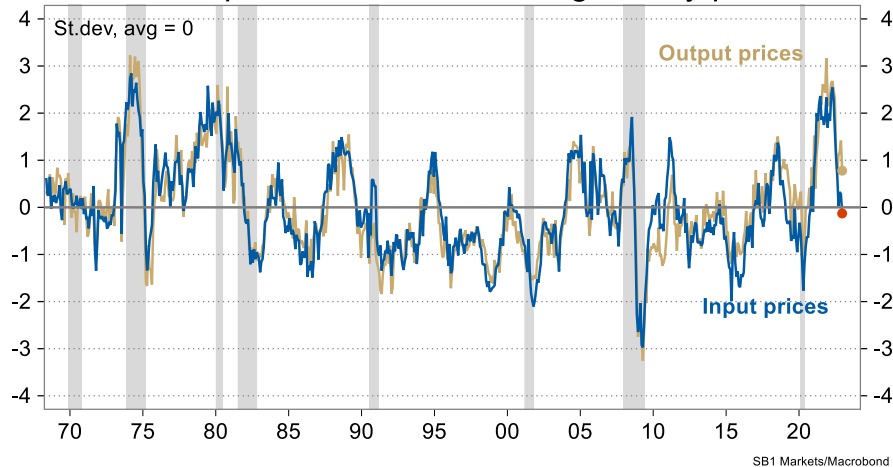
- **The average of the subindices** in the two surveys both fell, and both are below average
- **Taken together:** In sum better than expected, and a positive signal for the ISM, according to our model



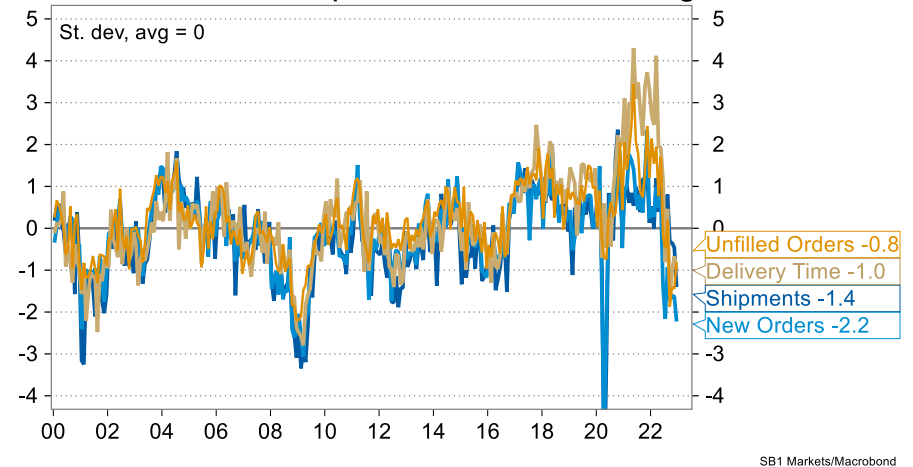
# Philly Fed: Further weakening now, but the outlook a tad less bad

Delivery times and prices are normalising

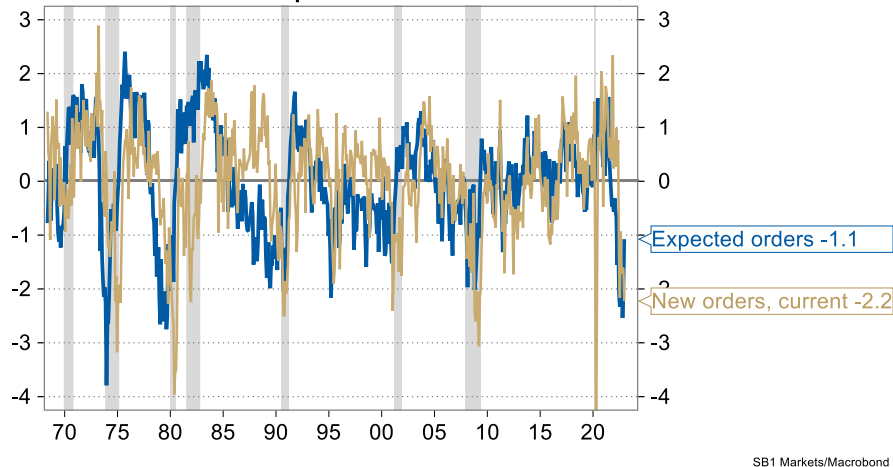
Philadelphia Fed Manufacturing survey prices



USA Philadelphia Fed Manufacturing index



USA Philadelphia Fed New orders, 6 m Future

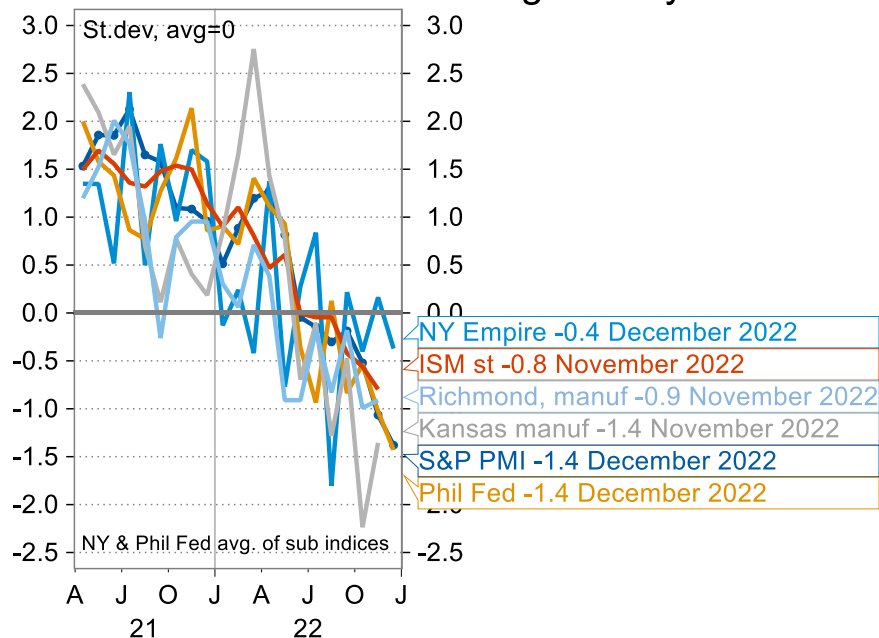


- **Out prices indices** are still signalling price increases, but not more than normal for input prices (st.dev just below 0)
- **The new orders** index is zigzagging downwards, and fell again in December, to 2.2 st.dev below average. The **expected orders** index fell recovered sharply, but is still 1.1 st.dev below par
- **The shipment index** fell sharply

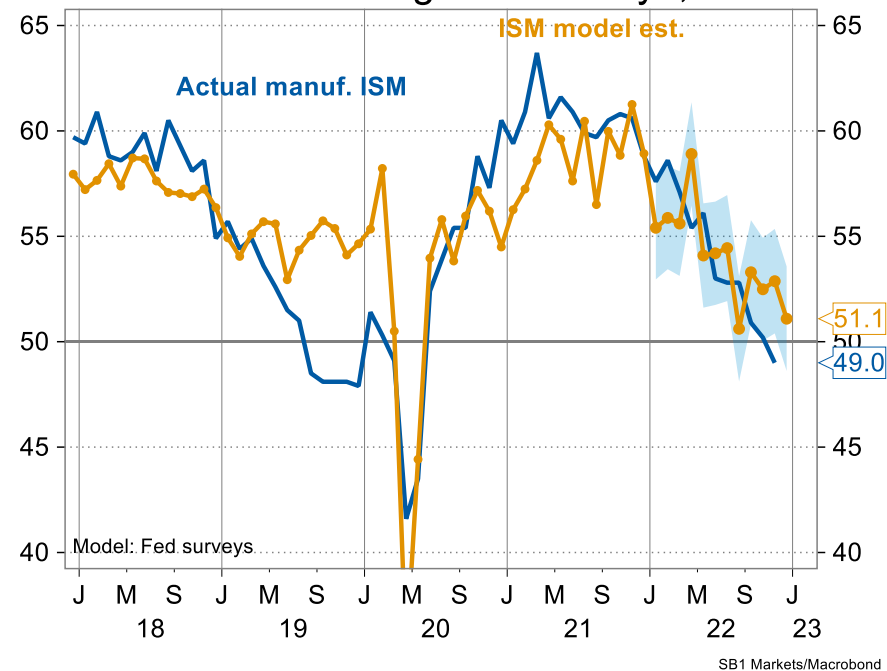
## NY, Philadelphia Fed & the PMI all down

But these surveys do not necessarily signal an even weaker ISM, according to our regression model

### USA Manufacturing Surveys

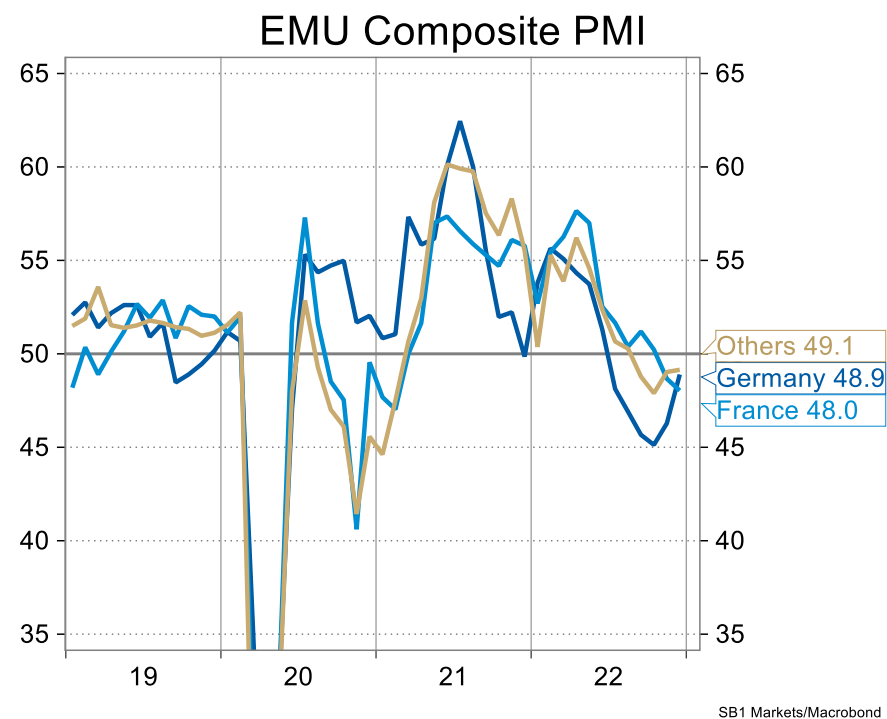
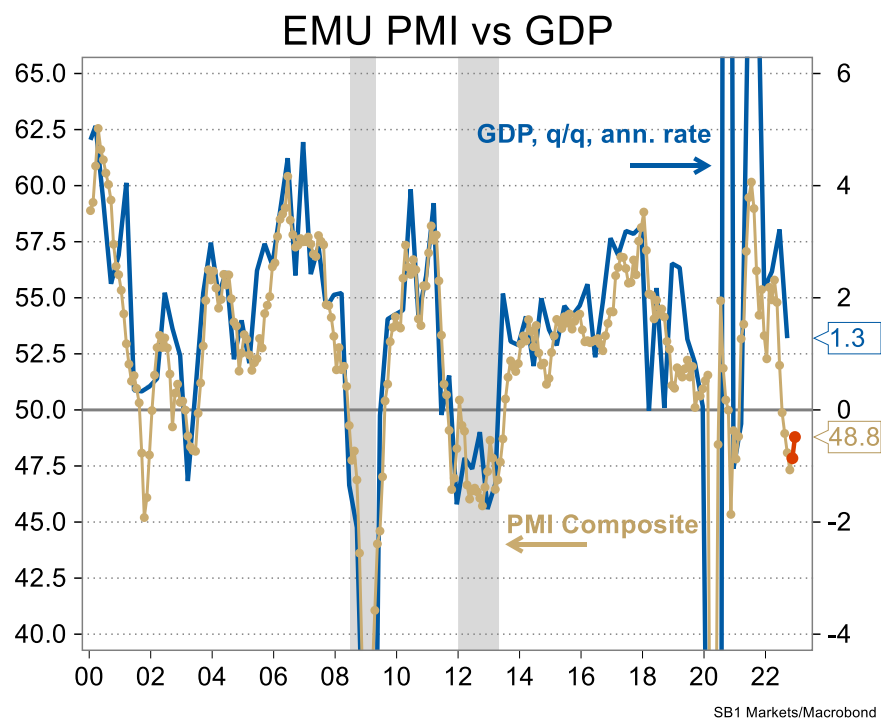


### USA ISM vs. regional surveys, PMI



# Germany lifted the EMU PMI, the composite up 1 p to 48.8

France down, EMU x Fr/Ger marginally up. The PMIs are still in contractionary territory though

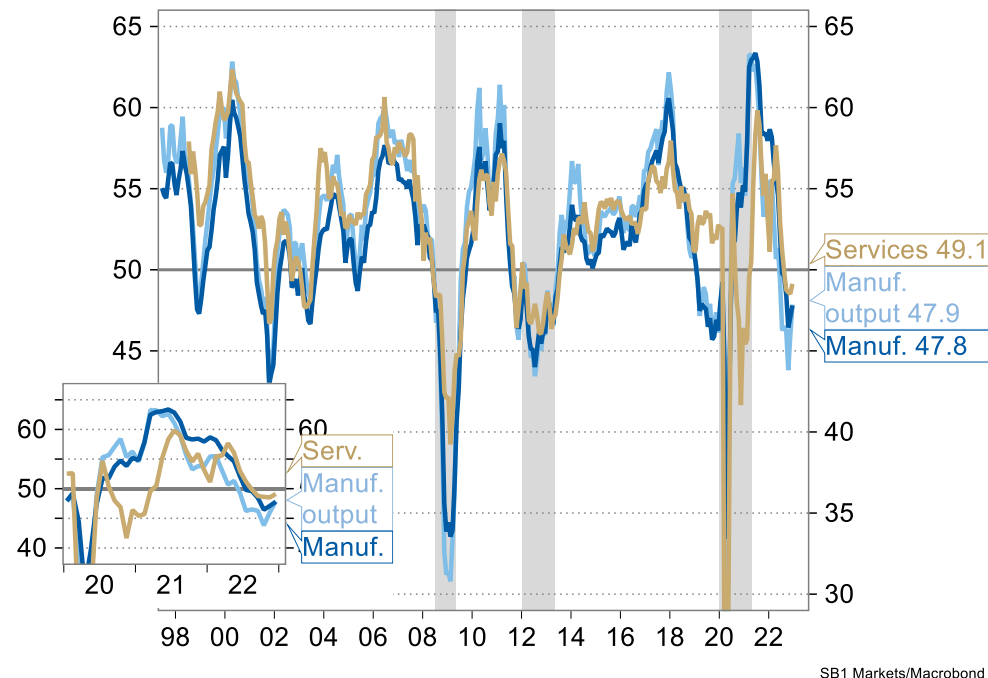


- **The composite PMI** increased by 1.0 p in Nov, to 48.8, 0.9 p better than expected – still signalling a small contraction in GDP. The German comp. PMI gained 2.6 p to 48.9 (from 45 in October!), 2.4 p better than expected as both manufacturing (+1.2) and services (+2.9) surprised on the upside. The French PMI was weaker than expected, down to 48 from 48.7 (expected up to 48.9). Other EMU countries slightly up, to 49.1
- **In the EMU, services** gained 0.6 p, as expected, while the **output component in the manufacturing** survey added 1.9 p but remained at a modest level at 47.9. Orders are still declining, but at a slower pace
- **The delivery times** and price indices both fell, and while the price indices still remain higher than normal, the delivery times have now normalised.
- The ECB has so far been vindicated, the Euro zone economy has not fallen apart. The PMI signals a GDP contraction, but now at just a modest pace

# Germany in the lead upwards, both in services & manuf. – but still below 50

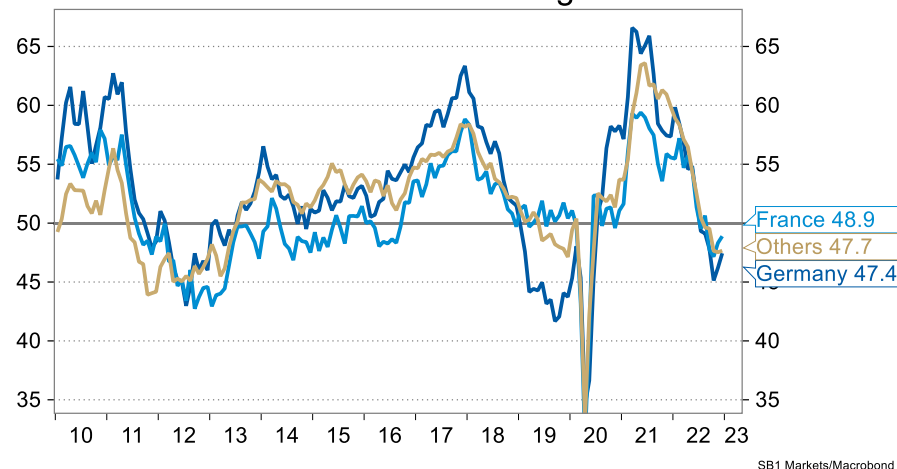
The EMU manufacturing output index rose the most, by 1.9 p to 47.9, services up by 0.6 p to 49.1

EMU PMI

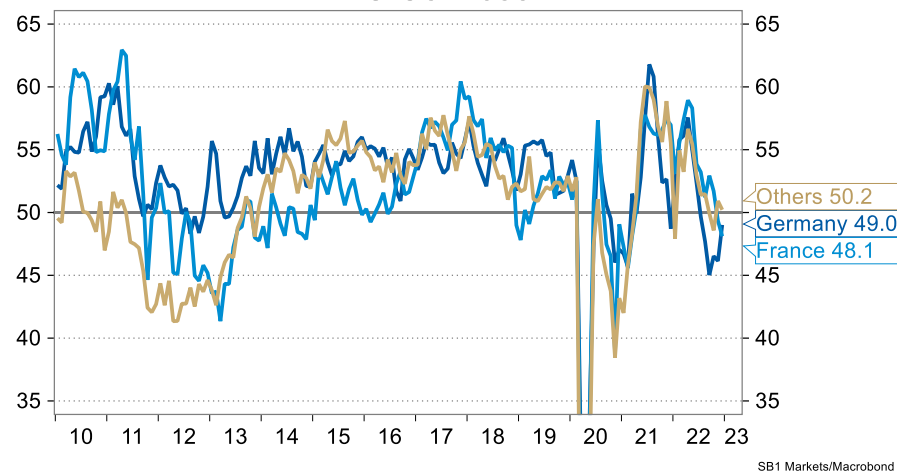


- German manuf. PMI was up 1.2 p to 47.4, and the French manuf. PMI was up 0.6 p to 48.9
- The EMU service sector was supported by a lift in Germany, while both France and 'others' (the implicit average of Italy and Spain) reported a decline (but the latter remained above the 50-line)

EMU Manufacturing PMI



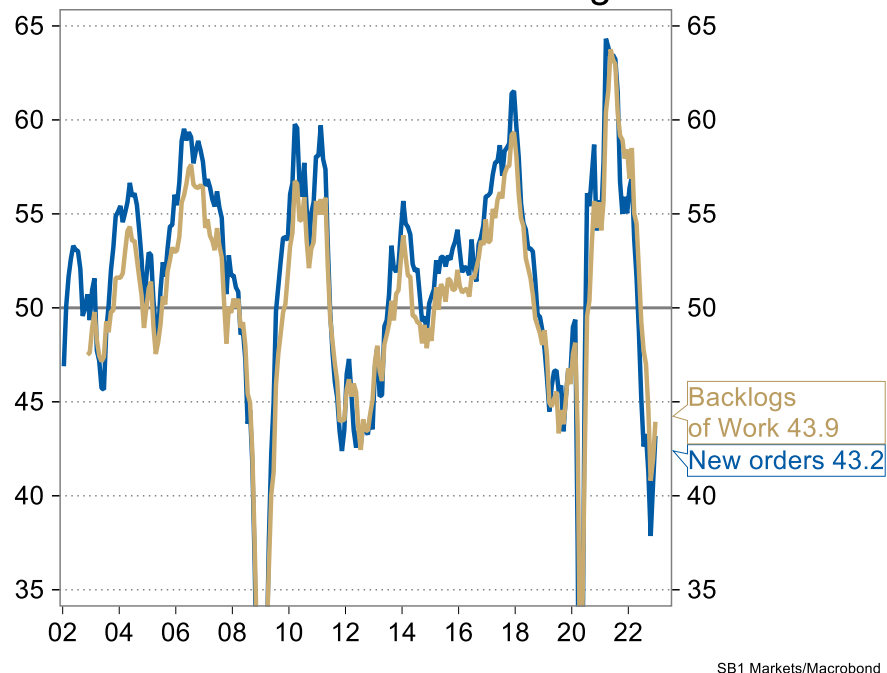
EMU Services PMI



# New orders index further up, delivery times normalised, price increases slow

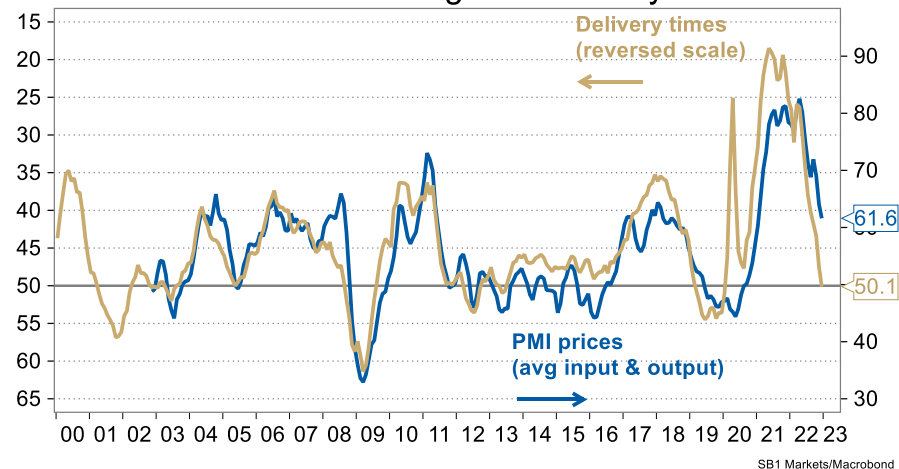
However, new orders are still falling rapidly, and the backlog is shrinking too

EMU PMI Manufacturing orders

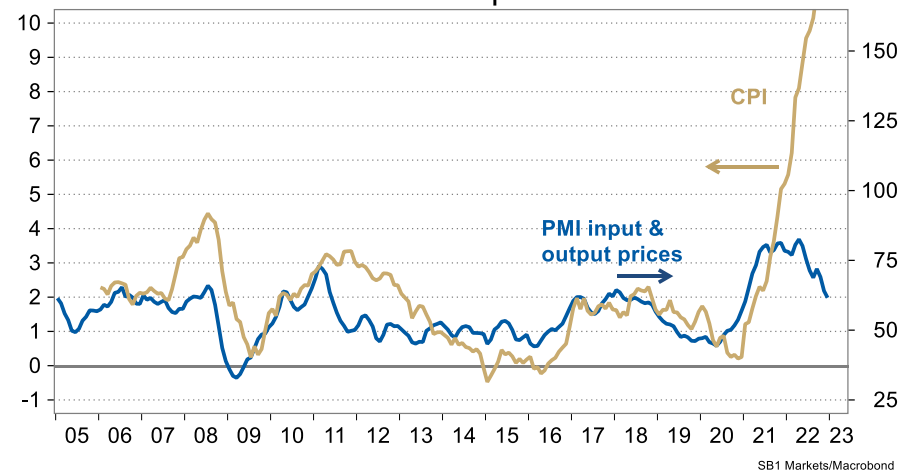


- The price indices signal a steep decline in CPI inflation the coming months – in principle
  - However, no model can capture the increase in inflation vs. these surveys – what has happened is totally outside what we have seen before (and the PMI cannot climb above 100)

EMU Manufacturing PMI delivery times

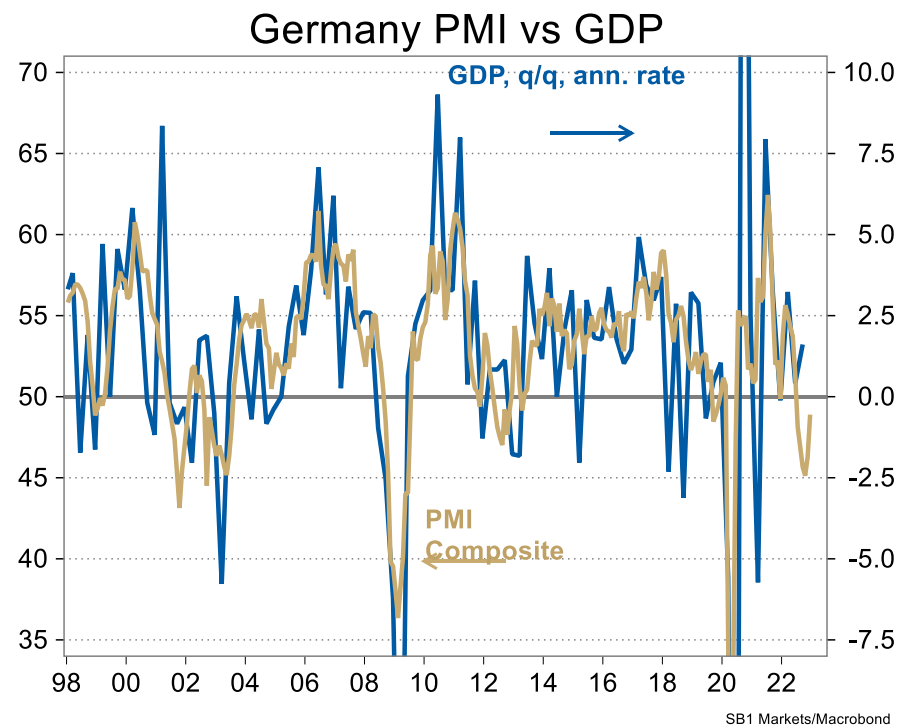
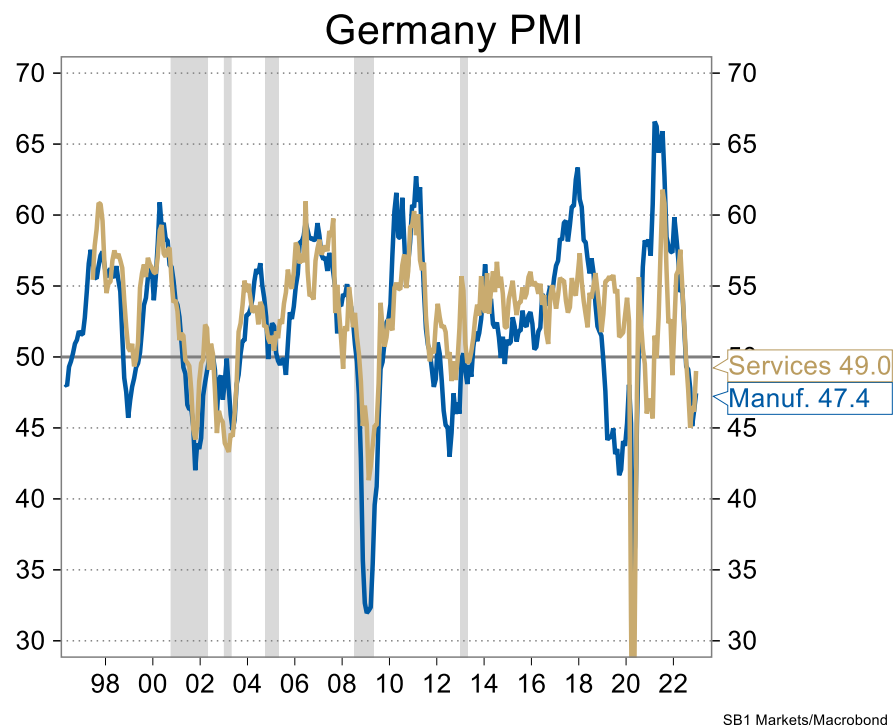


EMU CPI vs PMI price indices



## Germany: The PMIs further up in December, still below par

The composite up 2.6 p to 48.9, expected up just 0.2 p. Services up 2.9 p, manufacturing up 1.2 p



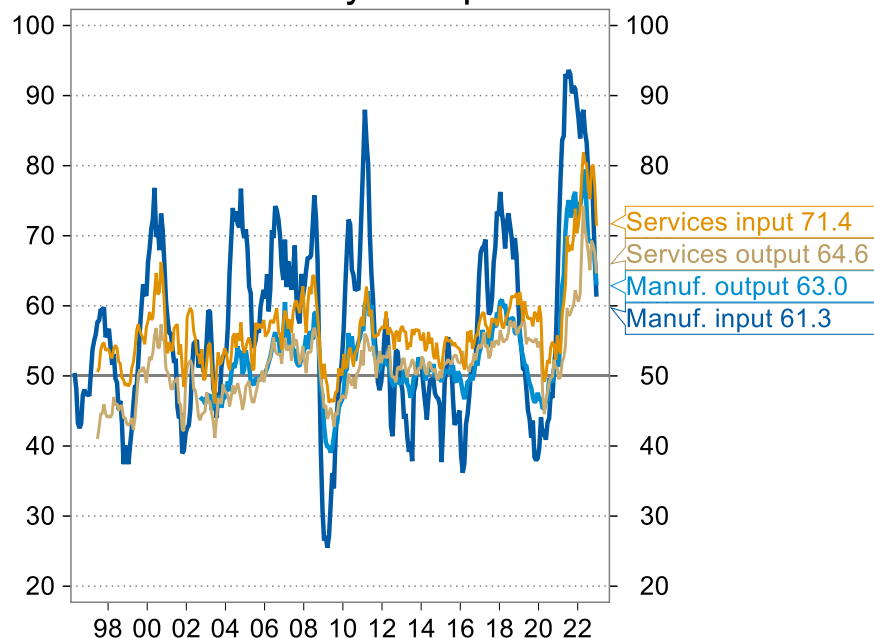
- Thus, the German PMIs surprised on the upside for the 2<sup>nd</sup> month in row. The level is still low but the PMI now signals just a moderate GDP contraction – even if inflation is above 11% and interest rates are on the way up
- All price indices are falling, finally now also input prices in the service sector. However, all price indices are still above normal levels – and all but the manufacturing input price index are higher than any time before, signalling continued inflation above normal. However, at the current pace of decline in these indices, they are soon back at to neutral
- Input cost inflation fell for the 3<sup>rd</sup> month and output prices are also falling now, according to S&P



# Prices are increasing at a slower pace, delivery times are collapsing

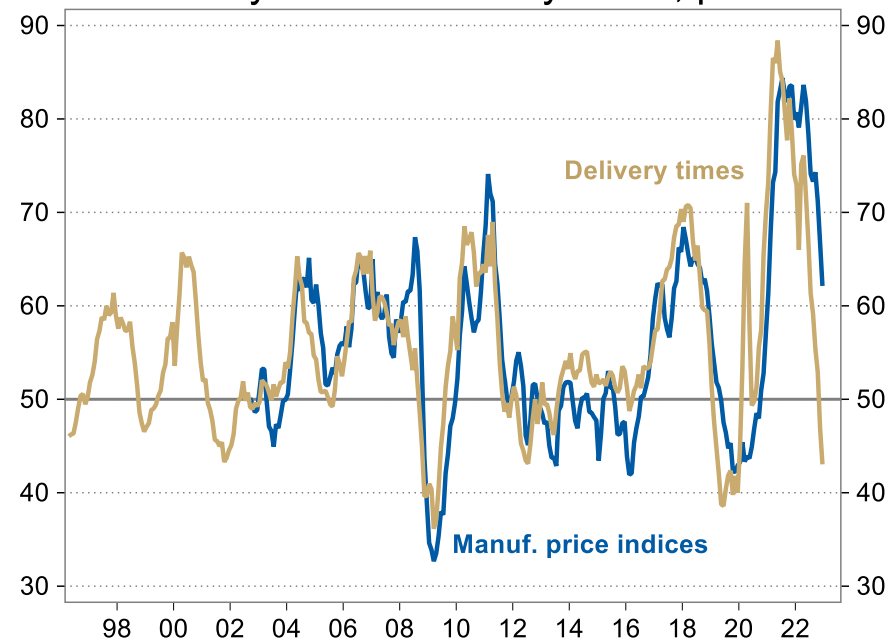
Indicate that something will turn up in the CPI not before too long

## Germany PMI price indices



SB1 Markets/Macrobond

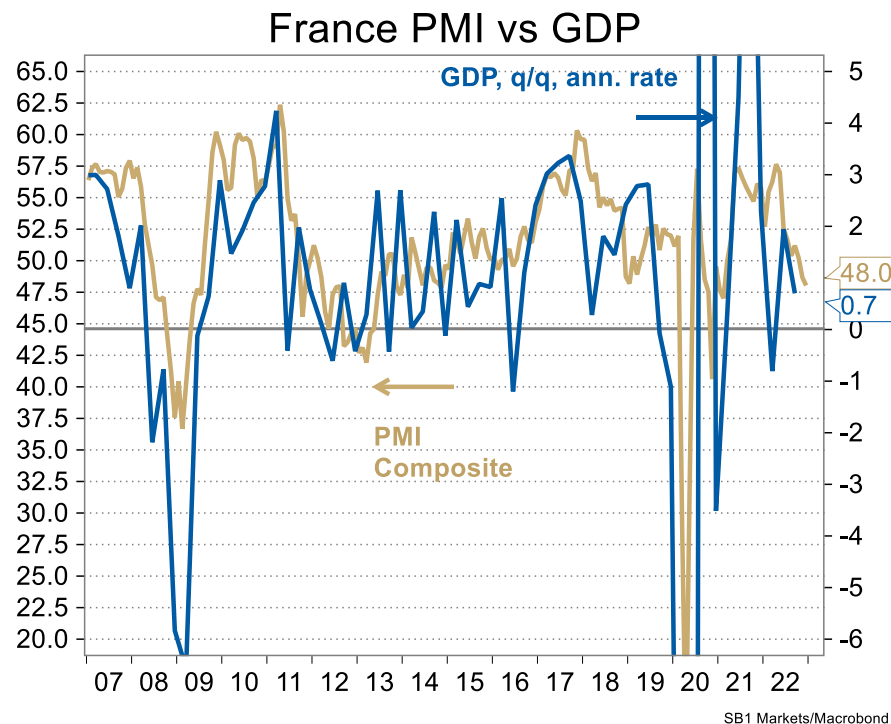
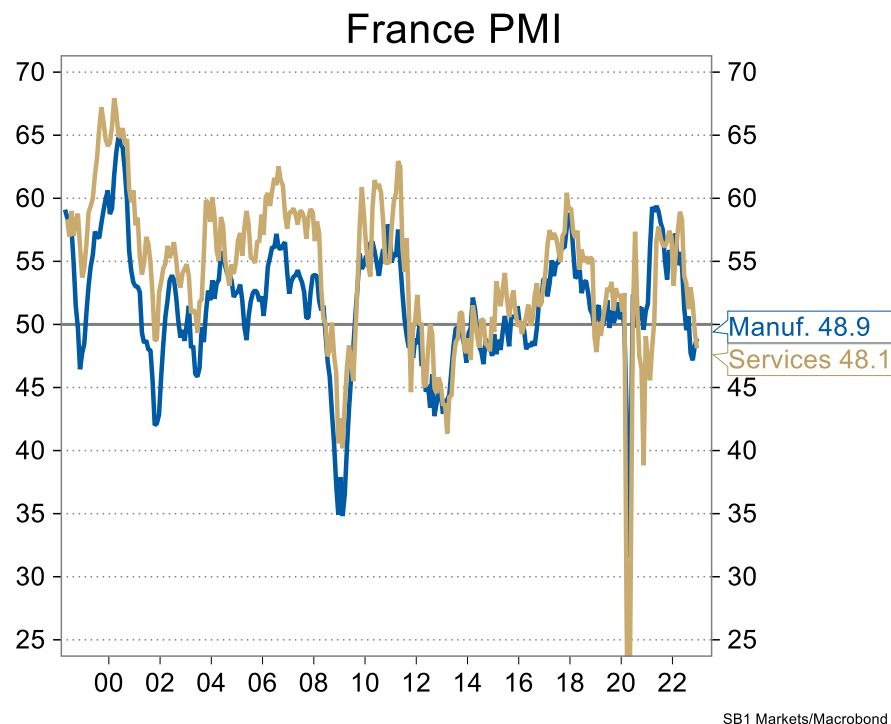
## Germany Manuf. delivery times, prices



SB1 Markets/Macrobond

# France: Composite PMI down below the 50-mark, still indicating 1% growth

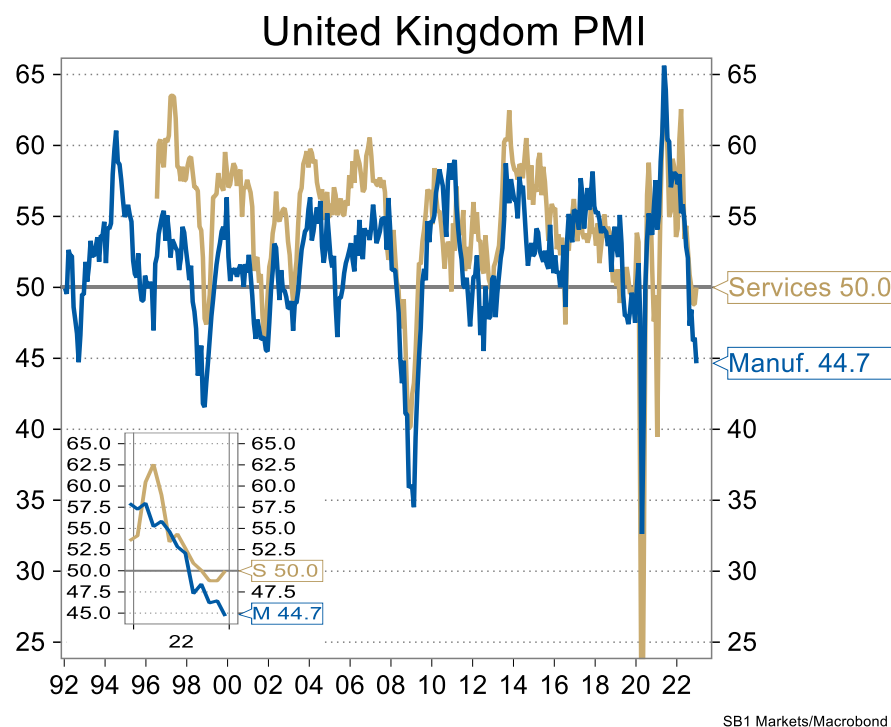
The composite PMI fell 0.7 p to 48.0 due to a 1.2 p decline in the services PMI, which fell to 48.1. Manuf. +0.6 to 48.9



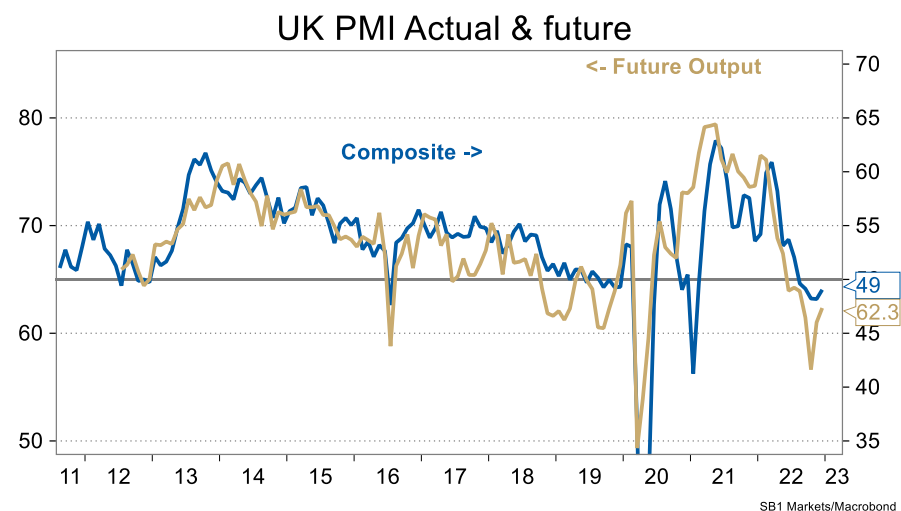
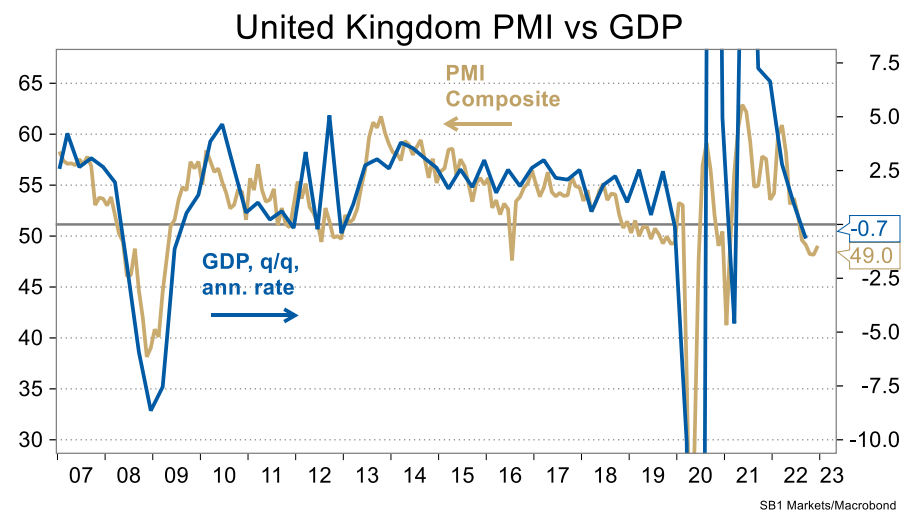
- The difference between France and Germany? Energy prices, at least in the CPI. The headline CPI is up 7.1% in France vs 11.3% in Germany

# Services up to the 50-line in December, manufacturing further down, to 44.7

The composite index rose 0.8 p to 49.0, signalling a continued decline in GDP

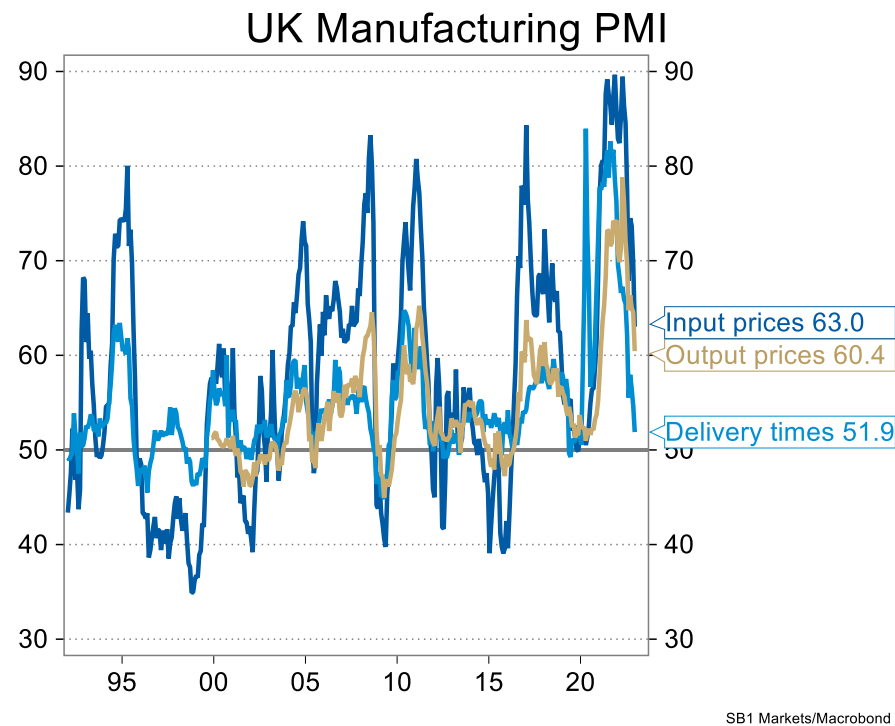
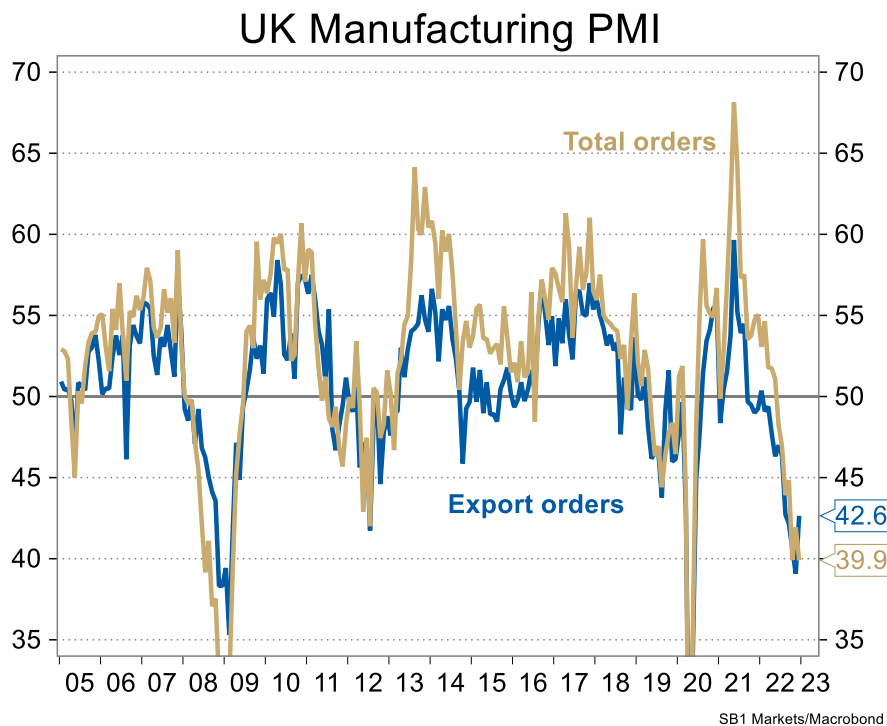


- The UK **composite index** rose 0.8 p to 49.0 in Dec, expected down 0.2 p to 48. The **manufacturing index** fell 1.8 p to 44.7, a very weak print, expected unch. The **service sector PMI** climbed 1.2 p to 50.0, 1.5 p above expectations
- Although the PMIs in sum were above expectations, no growth is signalled - and a decline in GDP is widely expected
- Expectations** are still modest, well below normal levels



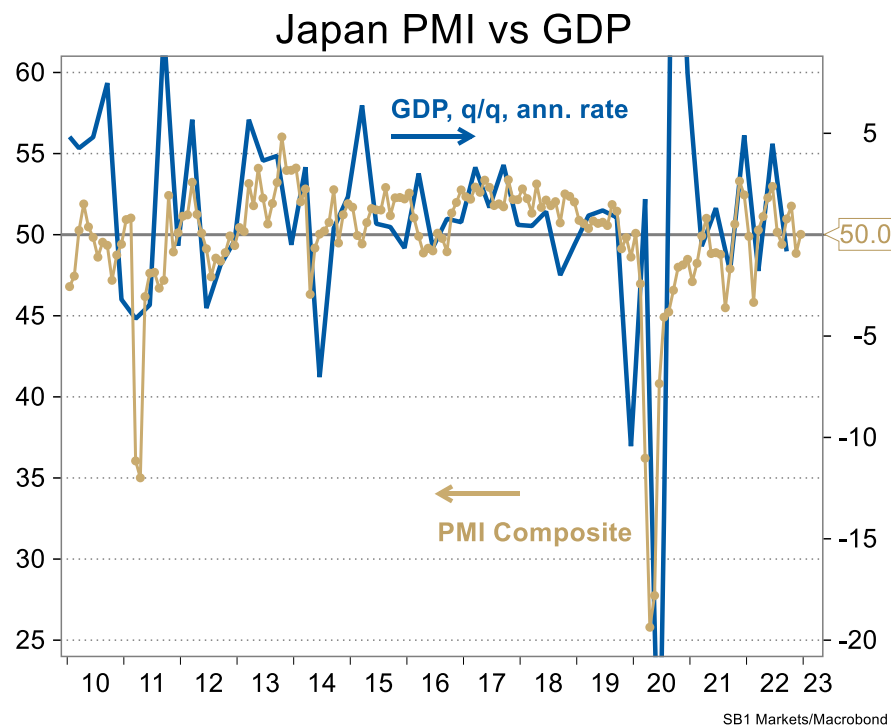
# Delivery times have normalised, prices are increasing at a slower pace

Order indices are still very low, even if the export order index rose significantly, to 42.6...

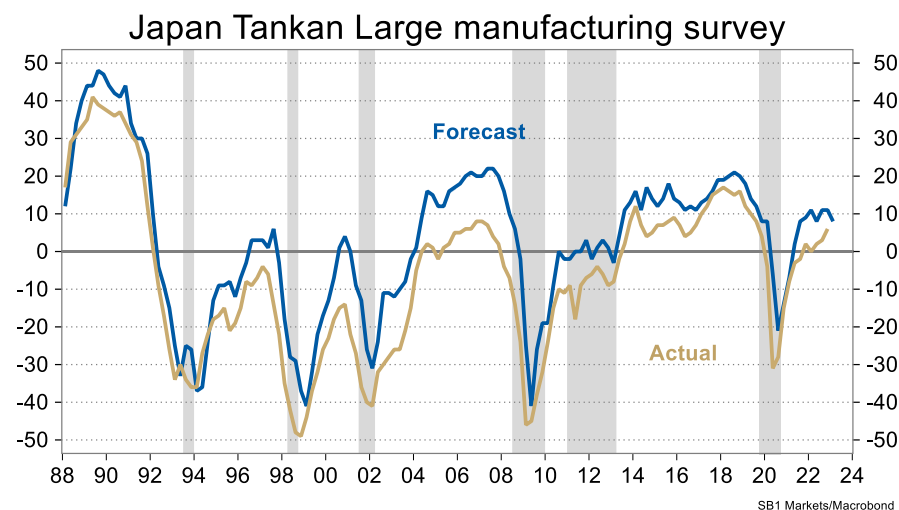
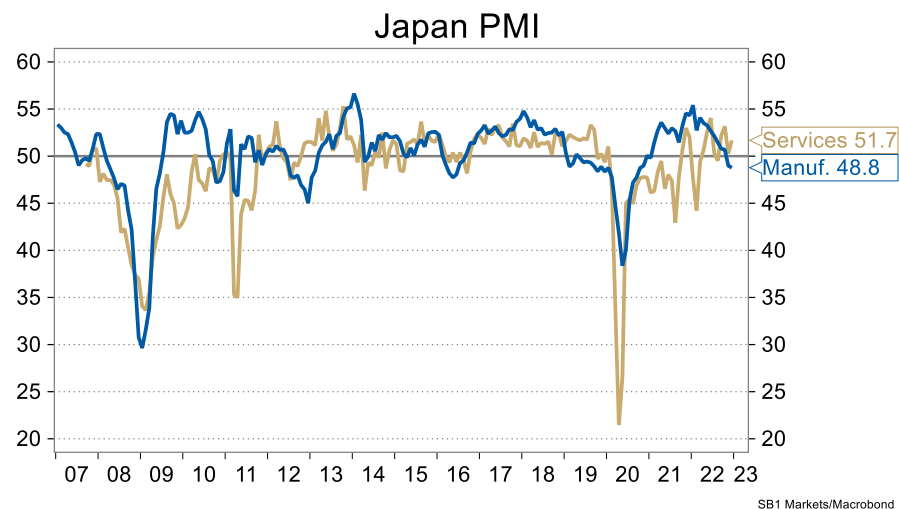


# Service sector reports growth, the PMI up to 51.7

The manufacturing PMI marginally down to 48.8. The composite +1.1 p to 50.0, signalling zero GDP growth

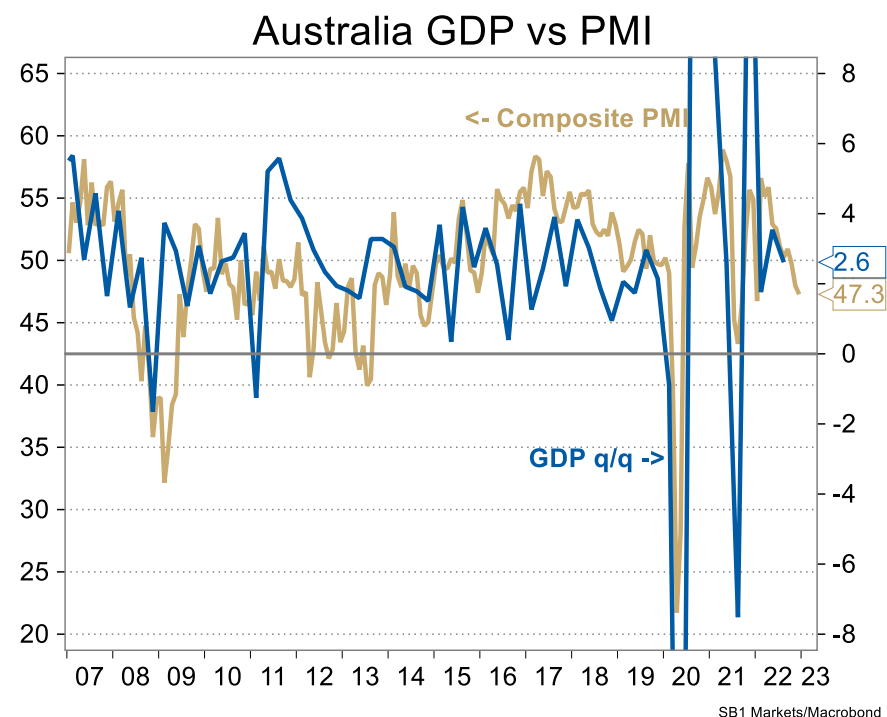
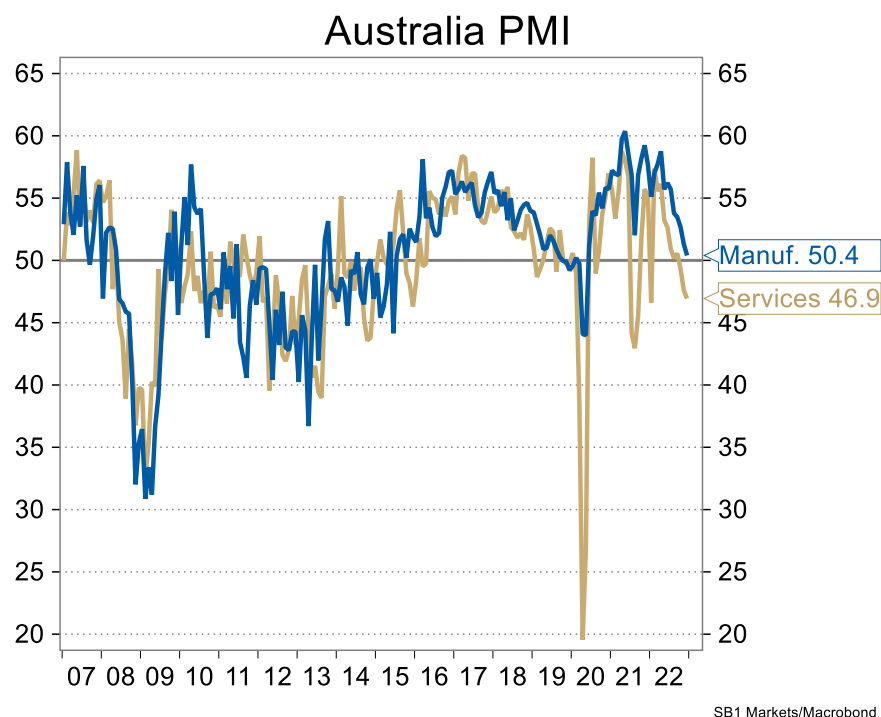


- Bank of Japan's tankan survey was mixed, but in sum OK
  - Actual activity strengthened, and the index is above average
  - Expectations fell slightly but remain well above average



# Australia is slowing, both in manufacturing and services

The composite index at 47.3 (down 0.7%) does not signal a recession, but growth below 2%. No China stimulus seen?

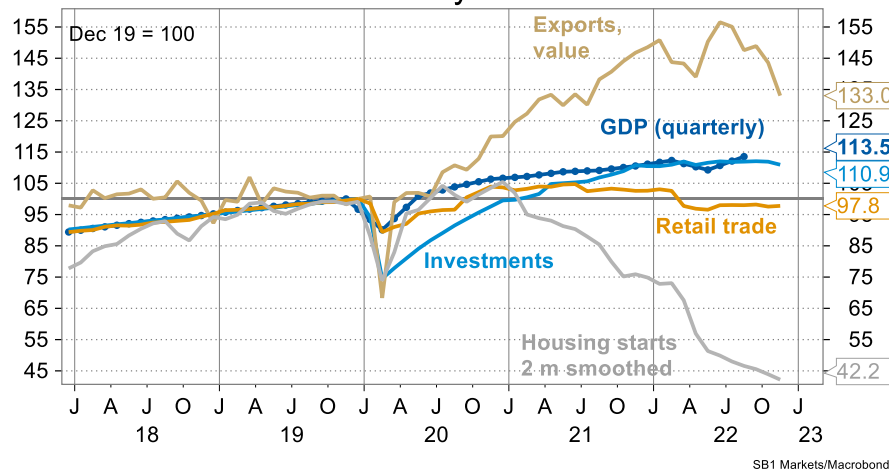


- The service sector reports slow growth but the manufacturing PMI is heading south too – and almost reached the 50-line in December

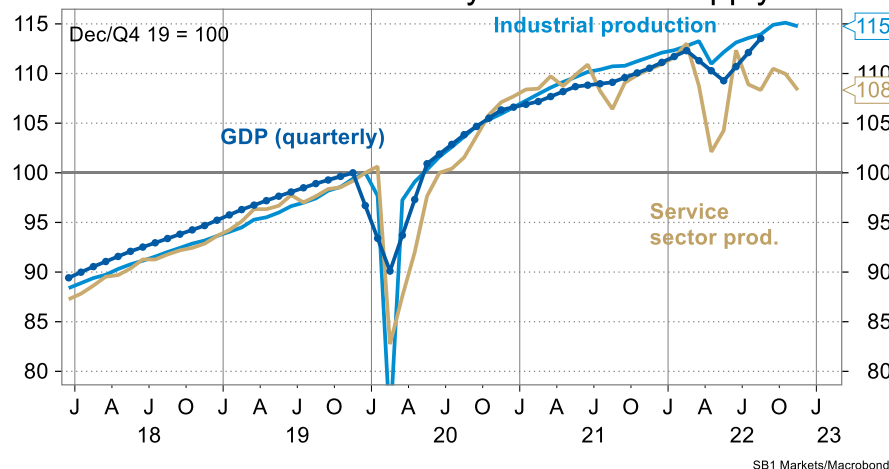
# November data all on the downside

... and construction activity is still declining, starts down 60% since the late 2020 peak!

## China GDP vs monthly indicators - demand



## China GDP vs monthly indicators - supply



In sum: October was below expectations. Covid measure are a part of the story but the continued decline in construction starts is probably not and may reveal a huge structural challenge

- **Industrial production** fell 0.3% in November, and production is up just 2.2% y/y, expected 3.6%, down from 5.0% in Oct. Metals, chemicals up, cement not
- **Service sector** production fell 1.5% in Nov (our est.), following the 0.5% setback in Oct. Activity fell 1.9% y/y
- **Retail sales** volumes gained 0.2% in Nov, following the 0.7% drop in Oct. Once more, history was revised down, now by 2%, after the 4% revision chock last month. Sales are down 5.9% y/y in value terms, down from -0.5% in Oct, expected -3.7%. A huge miss. Hard to make anything sensible out of these data – but the current release signals a huge upside potential if a more efficient Covid policy could be implemented
- **Investments** fell 0.9% in Nov, and history was revised down. Investments slowed substantially YTD, and are flat y/y, also probably in volume terms. The decline in **construction starts**, which continued in November, may explain this weakness. Starts, both residential and commercial, are down 50% from the peak early last year, the largest contraction ever). **New home sales** also fell further in Nov, and is down almost 40%. **Home prices** are continuing downwards too. The authorities have announced a long list of measures to prop up the real estate market – and some recovery seems likely. But not a return to where it came from – and cannot be the aim either
- **Credit growth** was slow in November. No signs yet that several measures that has been implemented has lifted credit flow

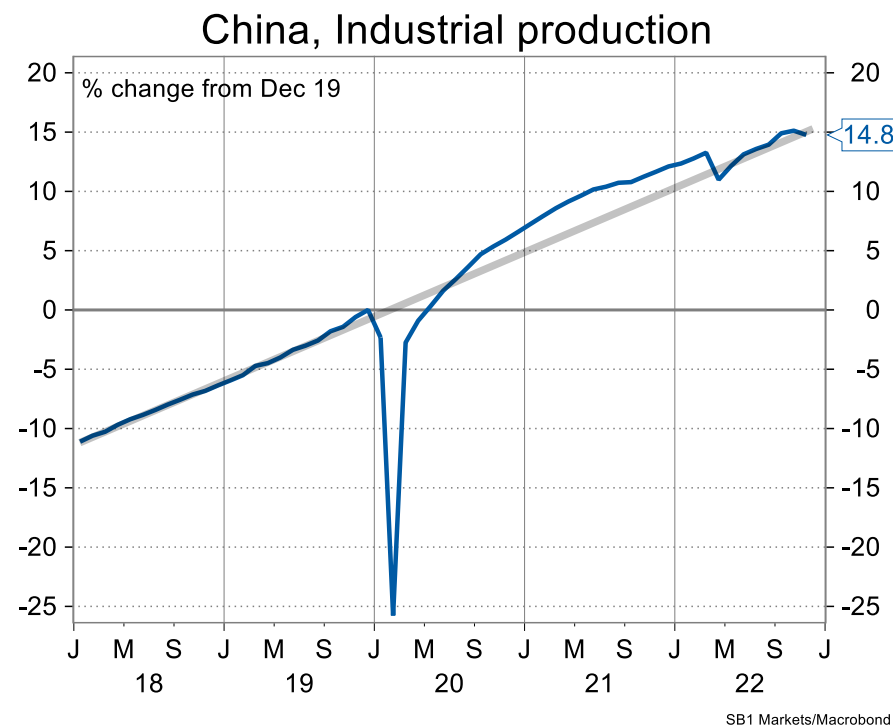
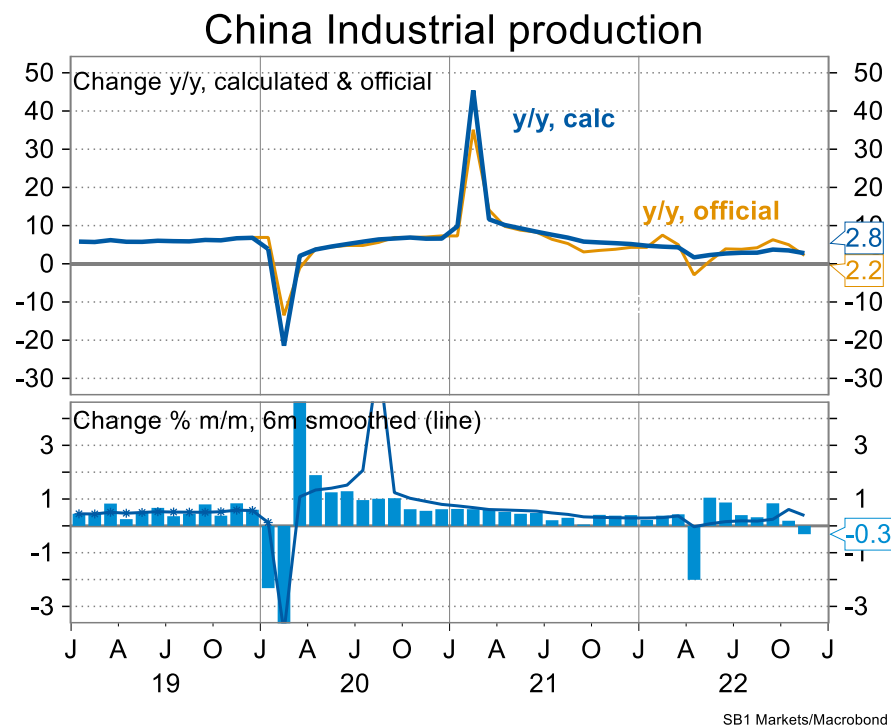
### Headlines from the previous week:

- **Exports** fell sharply in November, especially to the US. Imports also fell. Both very likely also fell in volume terms. Both covid measures and weaker demand in the rich part of the world are probably to blame
- **CPI inflation** fell to 1.6% in November, and the core remained at 0.6%. So, inflation is not a global challenge



# Industrial production fell in November, back to the pre-pandemic path

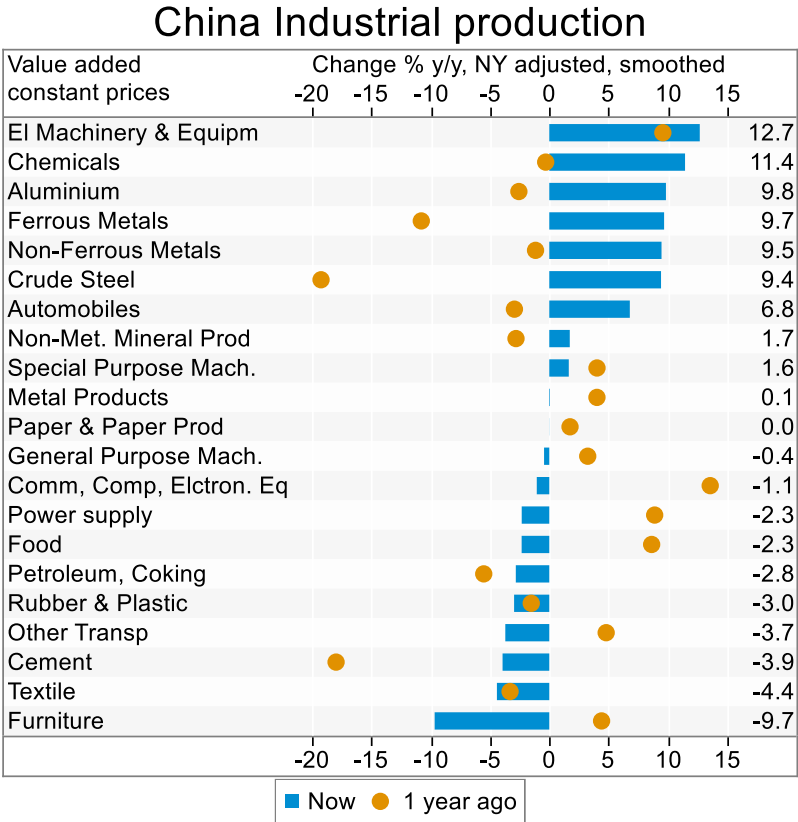
Production fell by an unusual 0.3% m/m, and is up just 2.2% y/y, expected 3.6%, and down from 5.0% in Oct. Covid??



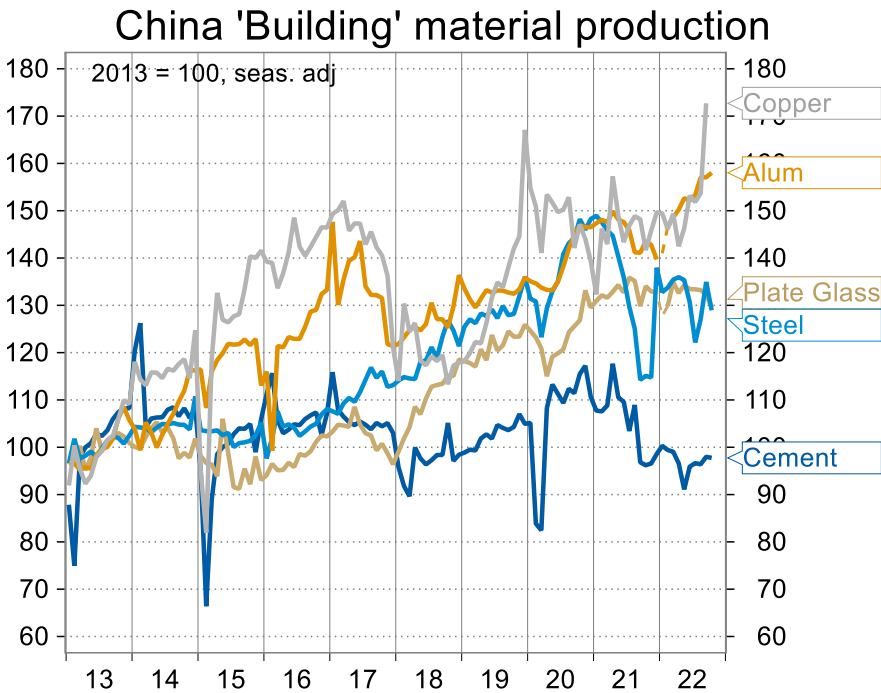
- The level is not that bad by itself, but the decline in November, following just marginal growth in October (0.2%, though after a strong lift in September, 0.8%) is not a positive signal. Very likely covid restrictions have hampered production, if not in the same way as in May, when production fell 2%. Since then, production has stayed well below the trend before the lockdowns during the spring
- In addition, recent months taken together, may also signal that the Chinese economy is slowing 'for real': construction is down, house prices are down, investments are down, and retail sales have stalled and in November, exports fell sharply

# Mixed among industrial sectors. Furniture, textiles, and cement at the bottom

Machinery & equipment, chemicals, aluminium and metals (copper) at the top



SB1 Markets/Macrobond

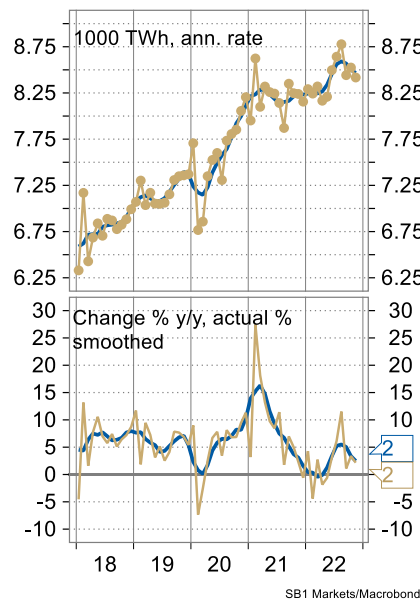
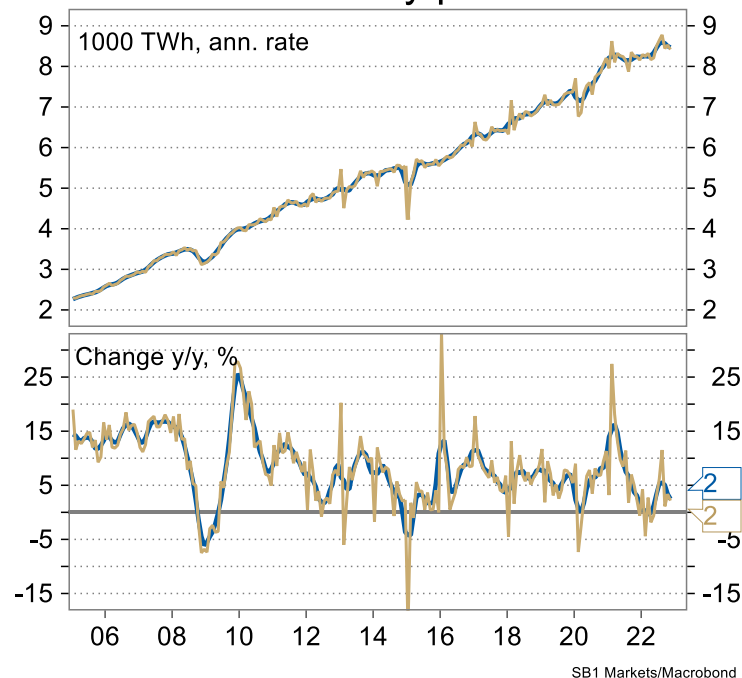


SB1 Markets/Macrobond

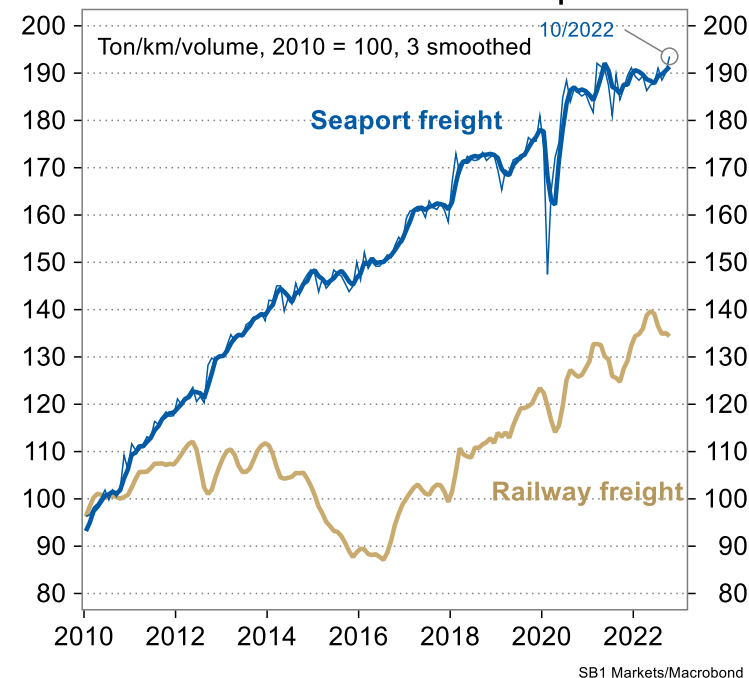
# Electricity production down in November, and seaport freight increased

... even if both exports and imports fell. Trend growth in electricity production is some 5%. Still on the long-term trend

## China Electricity production



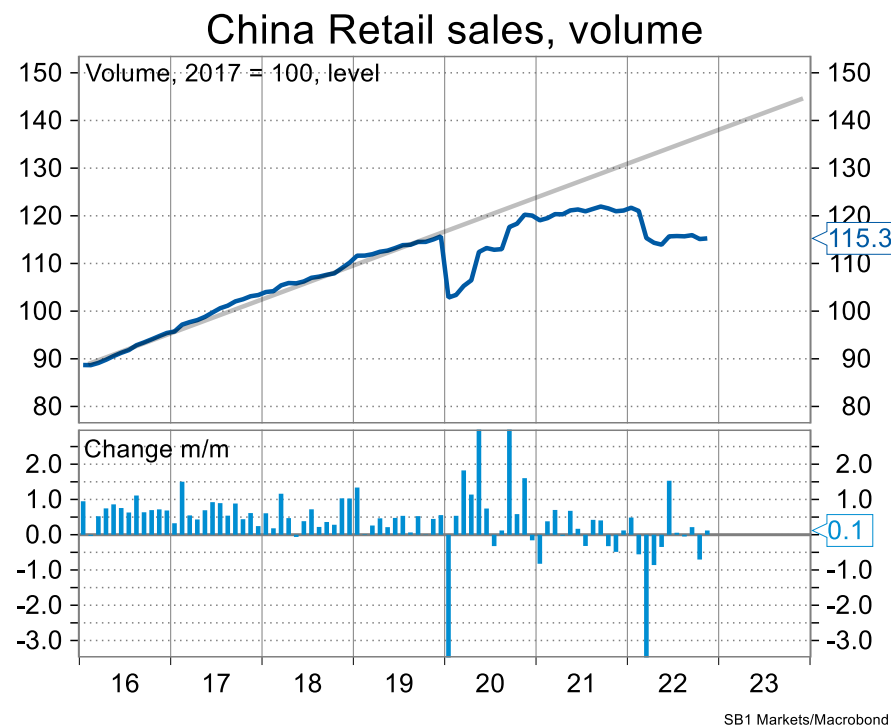
## China Trade and transport



- Railway freight was marginally lower, as domestic demand has softened

# Retail sales flattened m/m in November but history once more revised down

Official sales down 5.9% y/y (!), from -0.5%, expected -3.7%. Incredibly weak. Covid measures 'must' be to blame

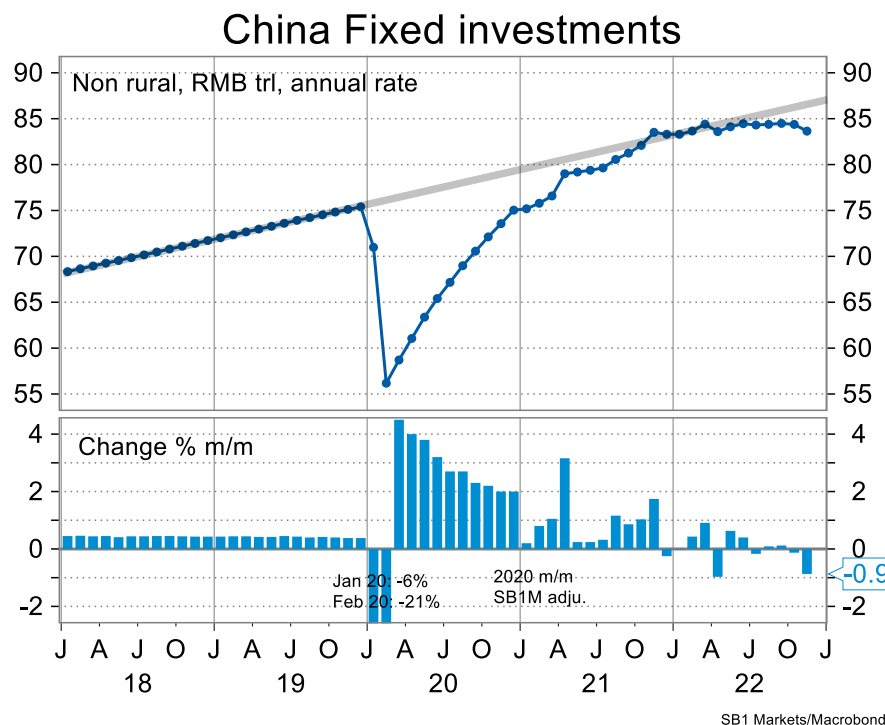


- **Sales** rose 0.2% m/m nominally, we assume a 0.1% in volume terms, following the 0.7% decline (on both volume and value terms) in October
  - Sales in volume terms are down 4.7% from Nov last year (aggregated monthly changes, the official y/y growth in value terms implies larger decline)
- Last month these monthly m/m data were revised down sharply (in sum by up to 4%), and the downward revision continued in November, by a couple of pp more, mostly due to another downward revision of growth in March. Anyway, these data has become almost usable – but they are the best we have...

Memo: Monthly sales data are still somewhat difficult to decipher, and they are not consistent with annual growth rates - so do not take our interpretations of them too literally. Several revisions, the last one this month downwards, have made the analysis even more complicated

# Is the slump in real estate and construction catching up with investments?

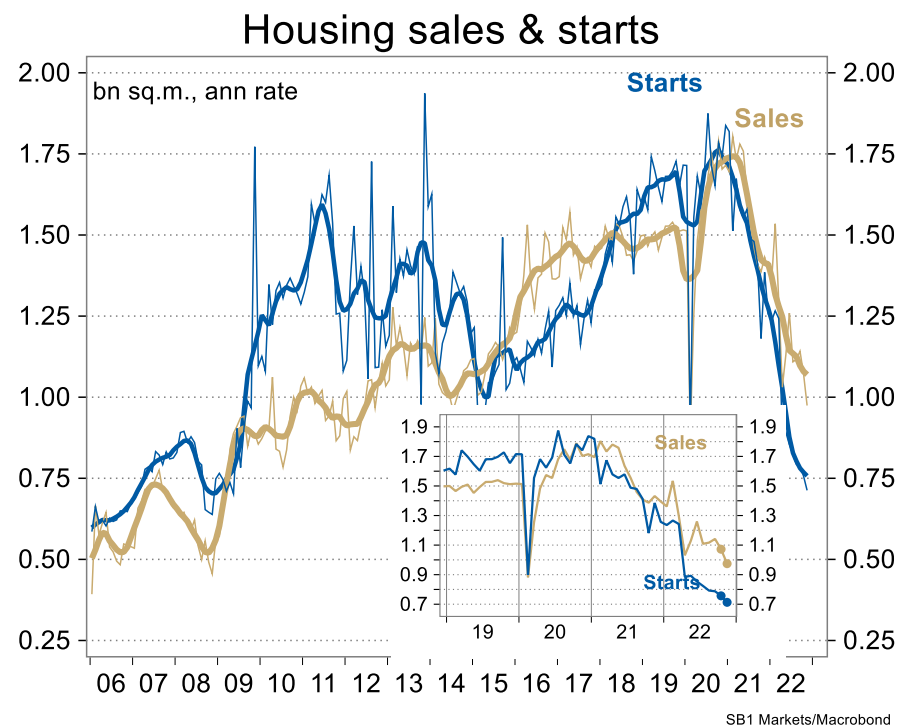
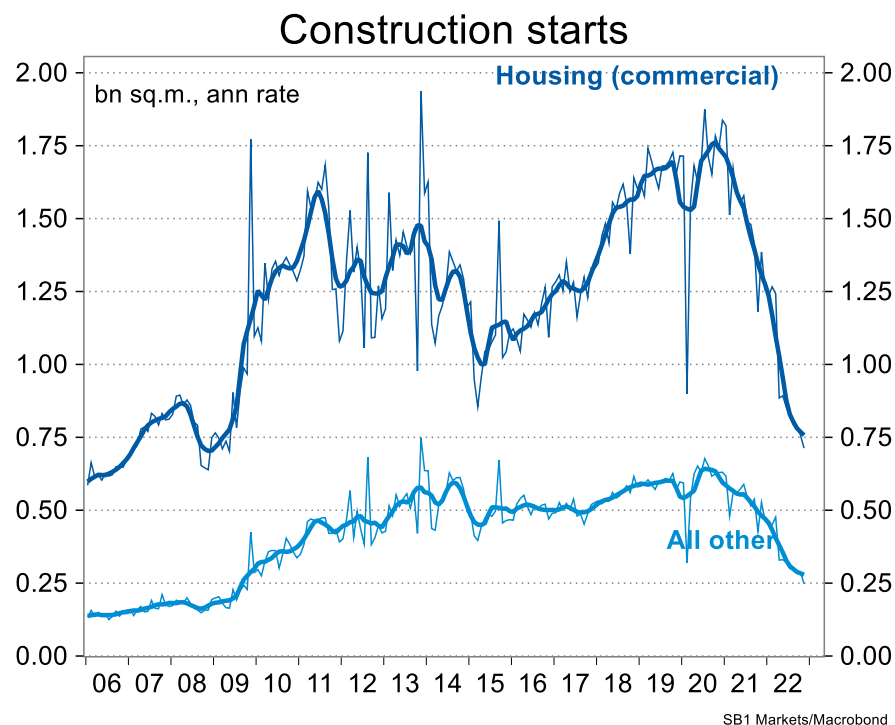
Overall investments fell 0.9% in November, after a flattening recent months, following a visible downward revision



- In addition to the unusual decline in investments in November, the **history was revised sharply down**, as measured by the seasonally adjusted m/m growth data. Since late spring, investments have been revised down by some 4%! Now, total investments are heading down!
- **Measured YTD**, official data showed nominal urban investments rose 5.3% in November, expected up 5.6%. Growth y/y in October was 0%. We estimate a 0% growth in real terms too
- The **investment level** is now 3.4% below the pre-pandemic growth path
- The decline in **construction starts** is likely one of the culprits to falling investments, and we believe investments will keep falling the coming quarters. In fact, the overall investment level has so far kept up far better than we assumed

# Both housing starts and sales further down in November

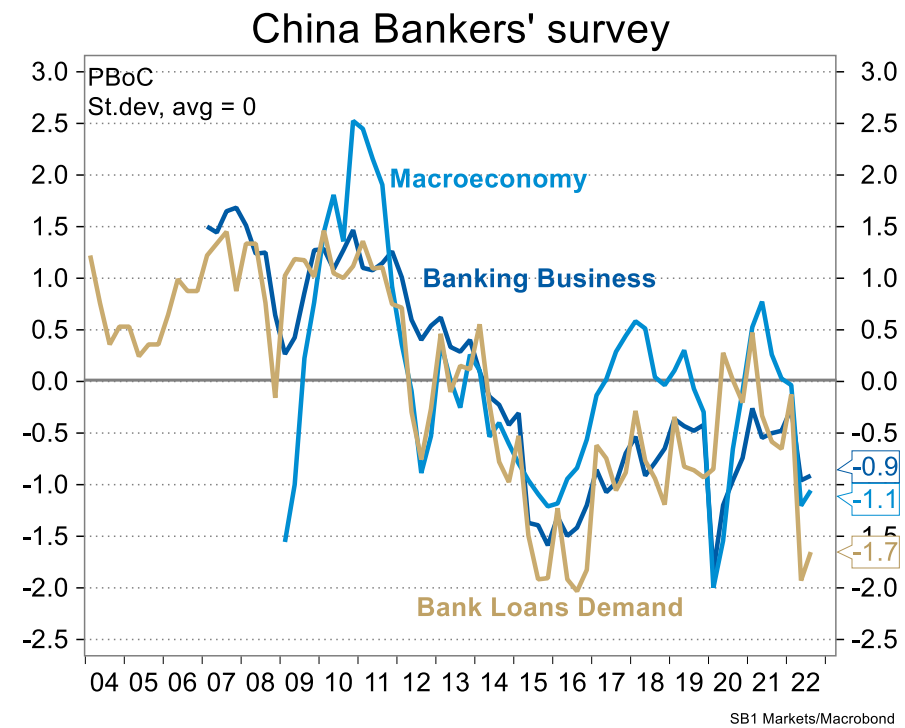
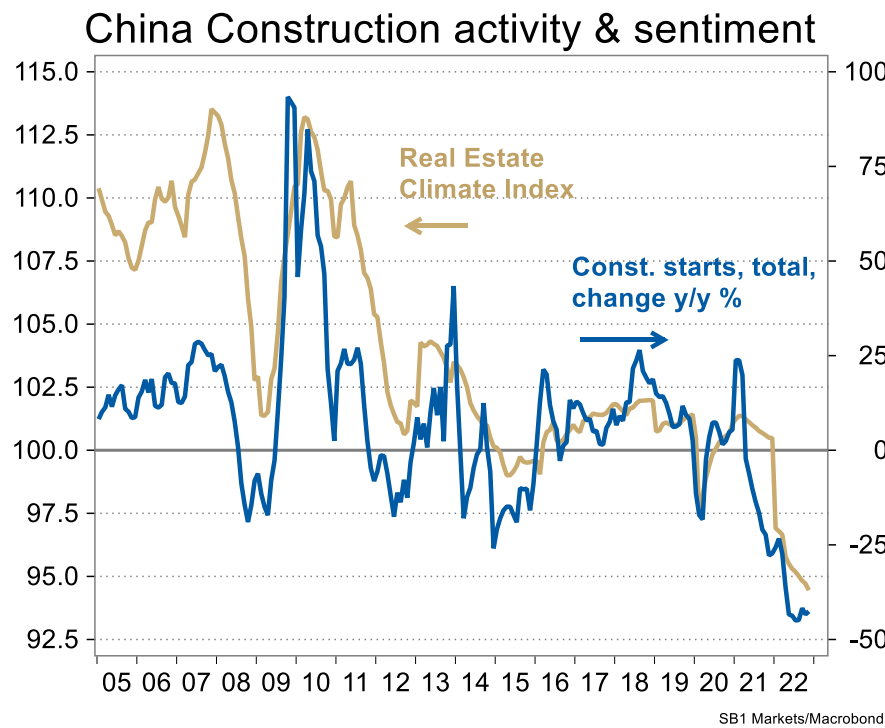
Starts down 60% from the peak two years ago; Sales are down more than 40%



- **Non-residential construction starts** are also more than cut in half, and the level is the lowest since 2009, as for housing starts
- We doubt the fight against the virus can explain much of the deep, and continuous downturn, from late 2020
- This unprecedented decline in construction starts will lower growth in the Chinese economy substantially – spread over time, as it takes some 3 years from a home is started until it is completed...
- ...unless the government's new rescue plan works. **The authorities pumped an additional CNY 150 bn into the financial system (on top of the CNY 500 bn already decided) this month** to ward off a sell-off in the bond market after easing covid restrictions, and to loosen financial conditions. This is of course in addition to the policy measures already taken a month ago, which were designed to loosen conditions for lenders and borrowers, both in terms of funds available, possible repayment postponements, and red tape

# Sentiment in the real estate sector is the worst ever

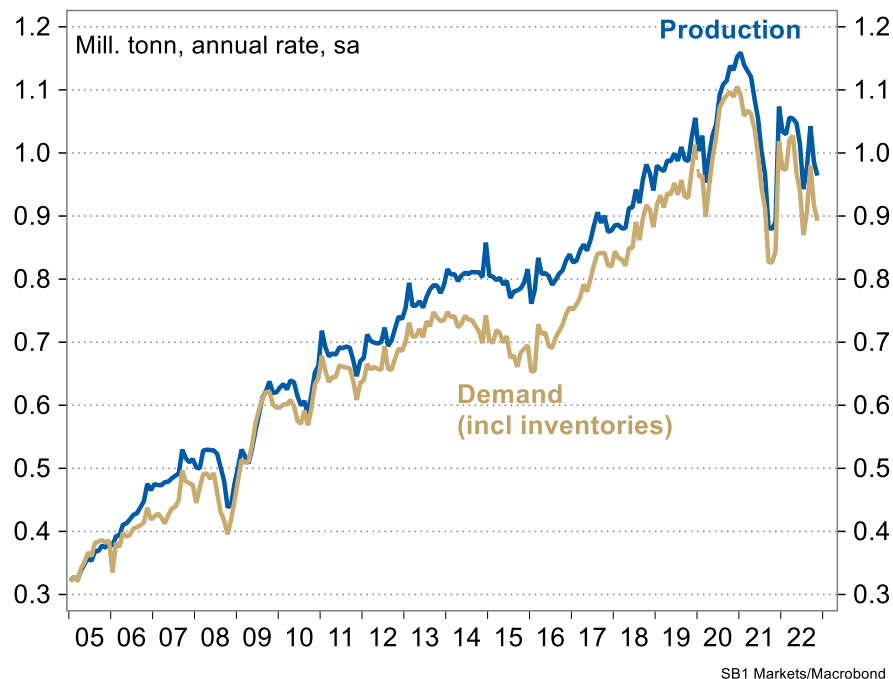
However, this survey is hardly leading. Bankers are not that optimistic either, loan demand was weak in Q3 too



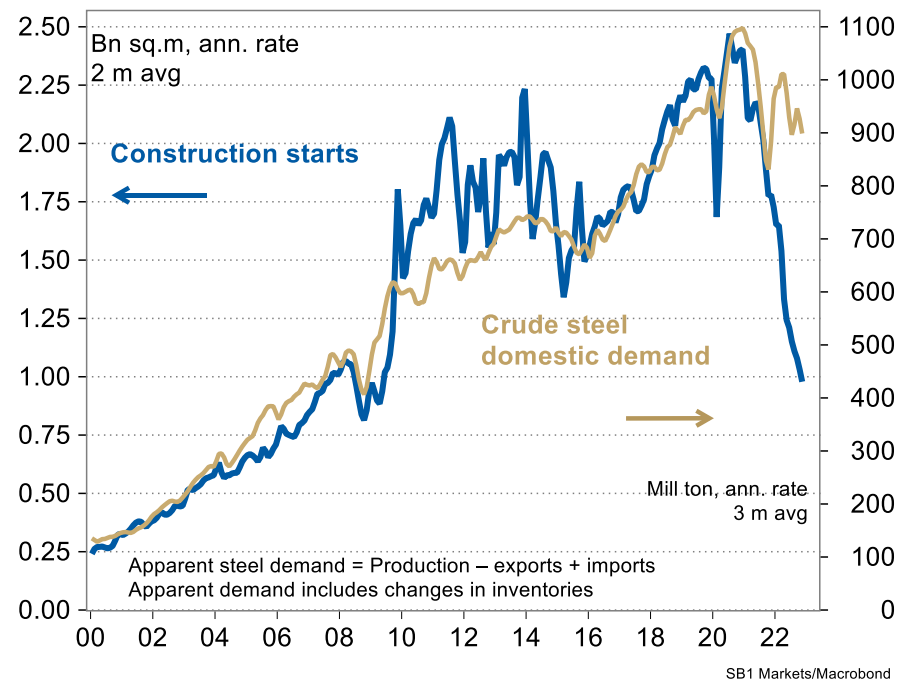
# Steel demand/production fell further in November, but the level is still high

Where is steel demand increasing? In auto production perhaps, but construction is far more important

## China Steel



## China Construction vs steel



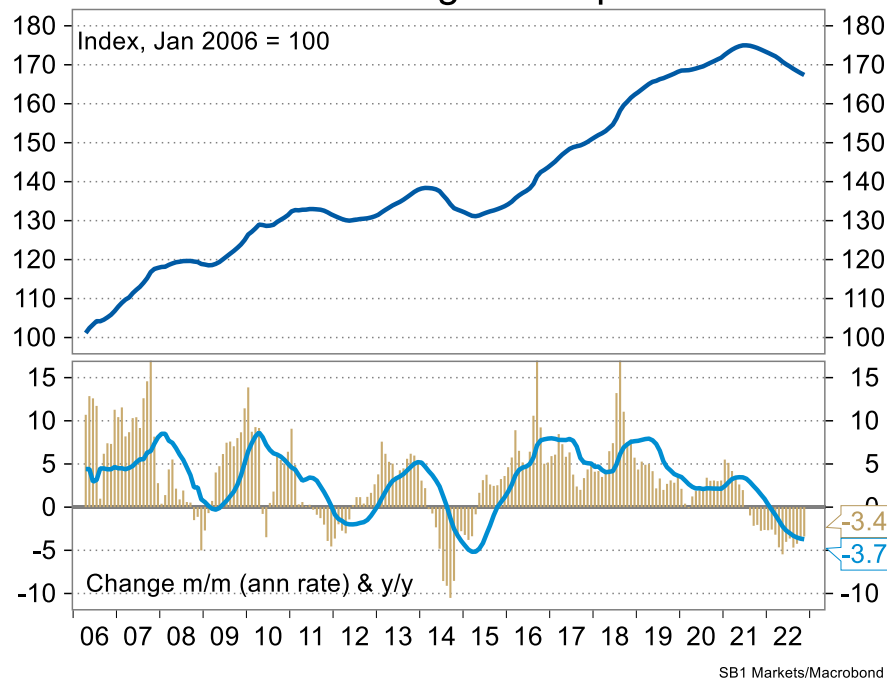
- Construction activity will be under pressure as new starts have fallen sharply



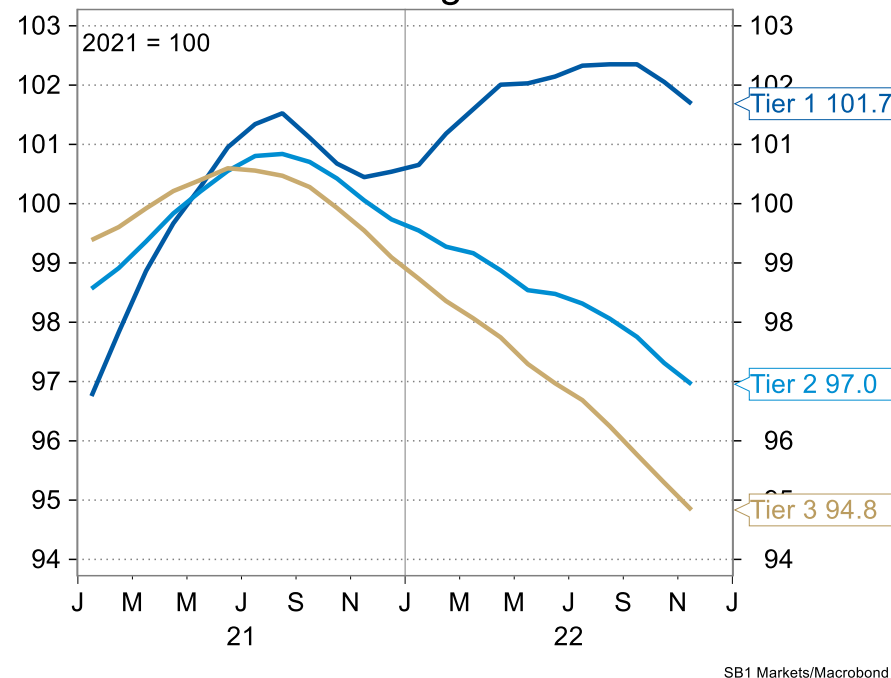
# Existing home prices fell further in November – for the 16<sup>th</sup> month in a row

- the longest stretch with falling prices ever – and they are falling everywhere. New home prices on the way down too

## China Existing Home prices



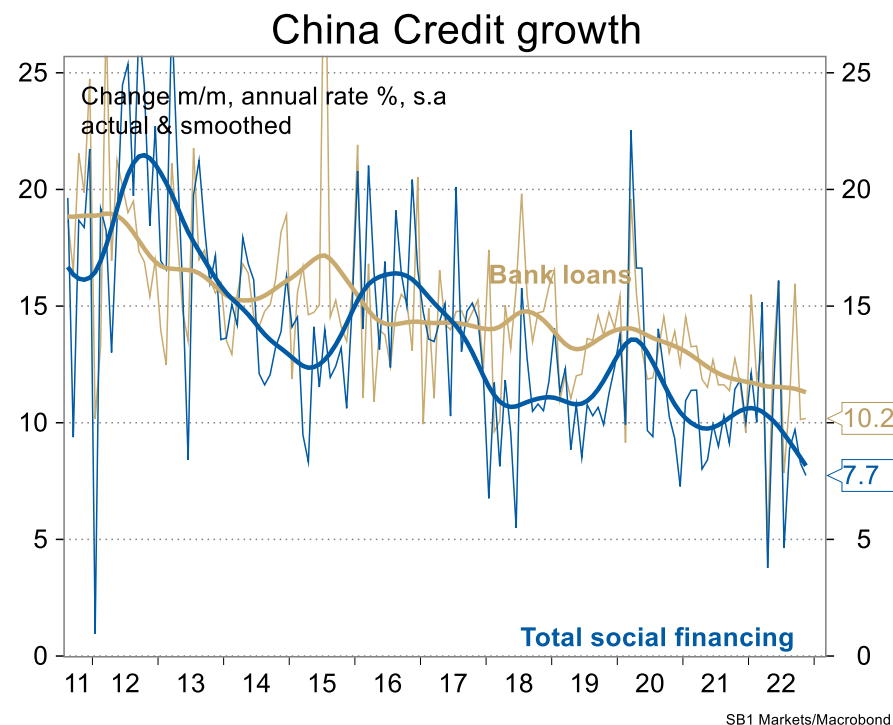
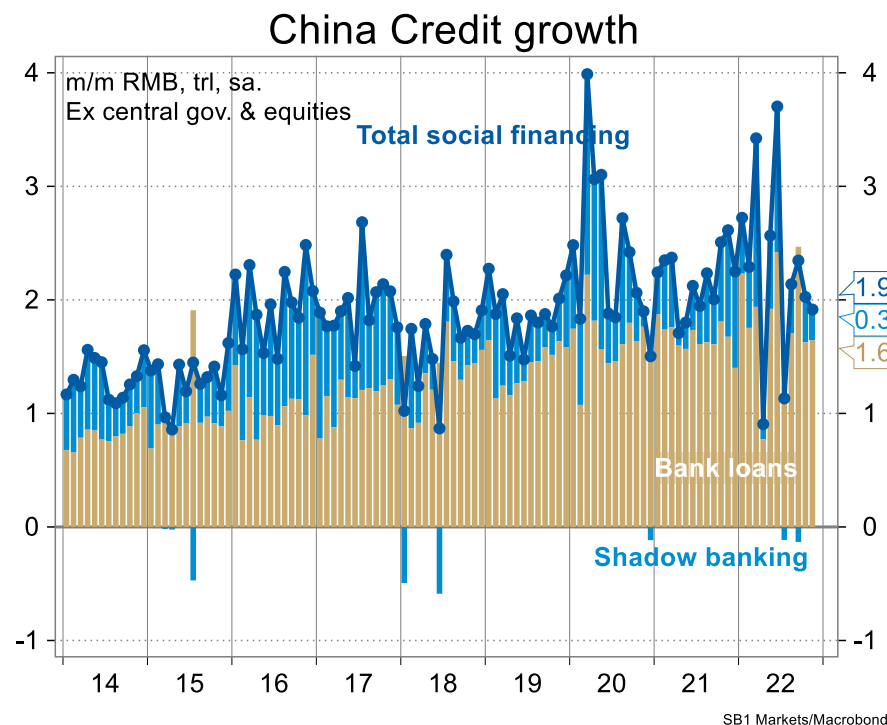
## China Existing Home Prices



- **Existing home prices** peaked last July, and have been falling at a gradually faster pace, until May. In October, prices fell at 3.4% pace. Prices are down 3.7% y/y, less than the price setback in 2014/15. However, the current setback has now lasted longer than the previous
- **New home prices** also fell last autumn but at a slower pace than existing home prices, and in Nov new home prices fell at just a 0.1% pace m/m, and are down 2.3% y/y
- Prices are now falling in the four largest Tier 1 cities for the 2<sup>nd</sup> month in a row, but prices are falling at the fastest pace in the 'smaller' Tier 3 cities
- **Central authorities** have signalled willingness to expand credit supply again, both to finance infrastructure projects and the construction sector, as well as providing support to home buyers. So far without any impact

# Slow credit growth in November too, and the trend is down

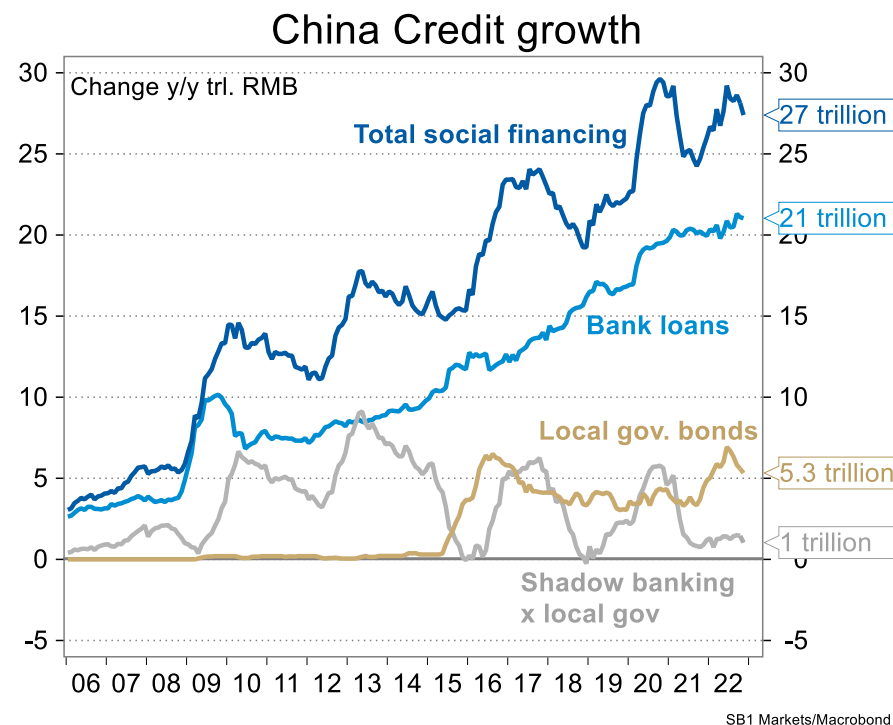
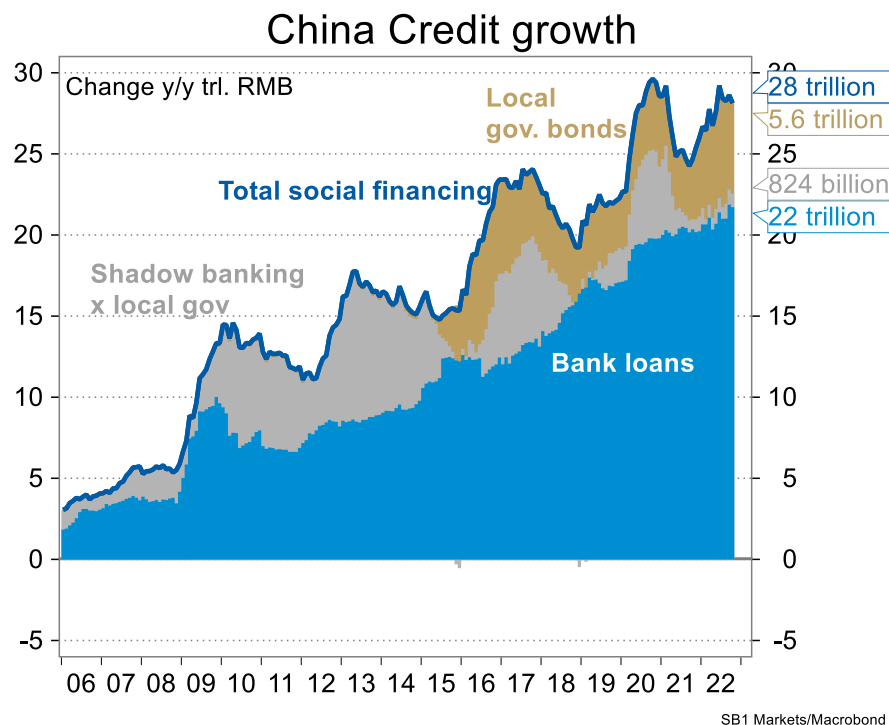
Banks are not aggressive, and little new credit to be found in the shadows. No signs yet of new stimulus measures



- **Core total credit** (social financing, ex central gov bonds, equities) grew at a 7.7% pace in Nov (m/m, seas. adj. annualised), down from 8,% in Oct and almost 10% in September. The annual growth rate fell 0.3 pp to 9.8%
- **The official total social financing** rose RMB 2.0 trl, expected 2.1 trl. Our core credit supply grew RBM 1.9 bn (s.a.)
  - **Bank loans** rose by RMB 1.5 trl (s.a) or at a 10.2% annualised pace, below expectations. Loans are up 11.6% y/y
  - **Shadow banking credit** rose by just RMB 0.3 trl, and is up 6.5% y/y
  - **Local governments have been** responsible for most of the increase in credit outside banks over the last year, at least until the past 5 months (including our Nov est., no data published yet). Less revenues from sale of land, and public financing of unfinished building projects requires funding, which is 'dictated' from the central government

# Credit growth has peaked, hard to push more money through the system?

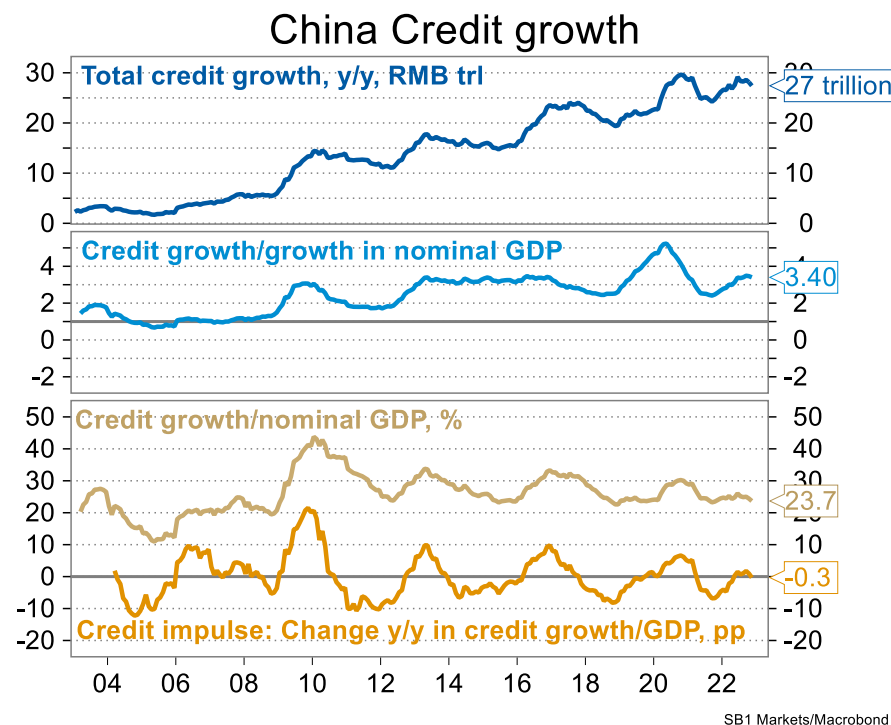
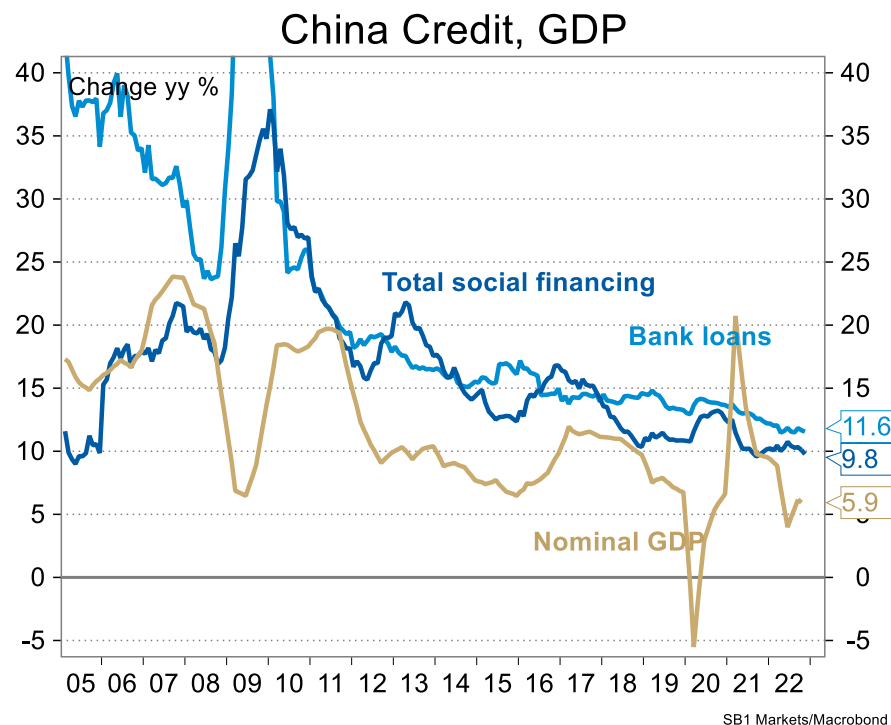
Bank loans are flattening, and there is limited growth in credit outside banks (other than local gov't)



- Over the past year, **total credit** has expanded by RMB 27 trl, equalling 24% of annual GDP, up from the 24 trl at the bottom last Sept, (but still down from almost RMB 30 trl at the peak in 2020, and 29 trl some few months ago)
- Banks** supplied RMB 22 trl of the y/y increase – which implied a gradual decline in the percentage growth rate
- Local governments** have not accelerated their credit uptake as expected (or rather assumed by the authorities) – and growth is now slowing again
- Growth in other credit – via the **shadow credit market x local gov bonds** – at 1.5 trl is well below the from 5 trl growth in 2020 (a dramatic slowdown, like many times before...). Growth has increased slightly the past 4 months

# Big picture: Credit growth is not accelerating anymore

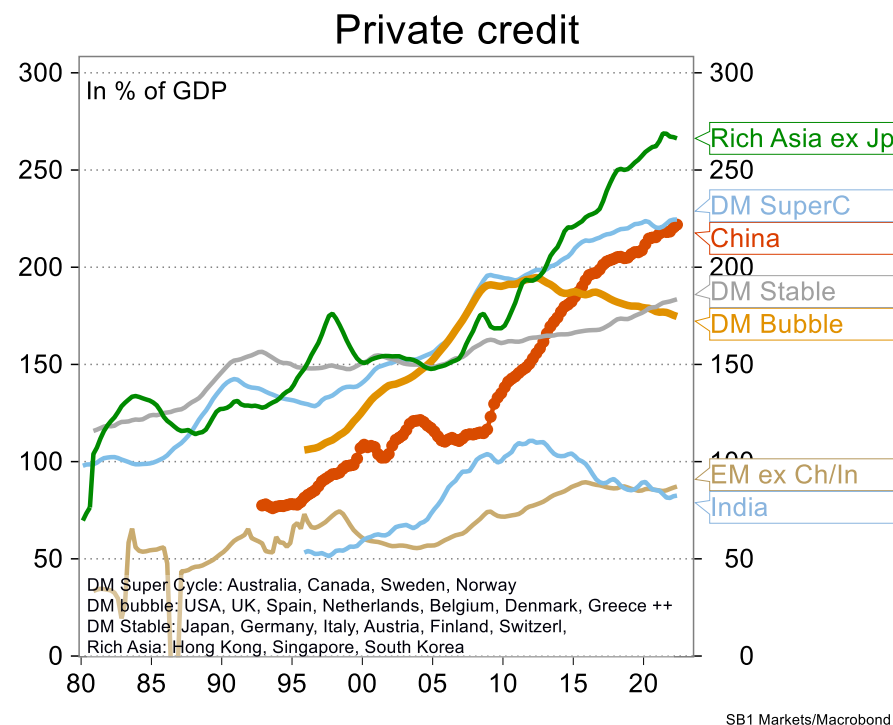
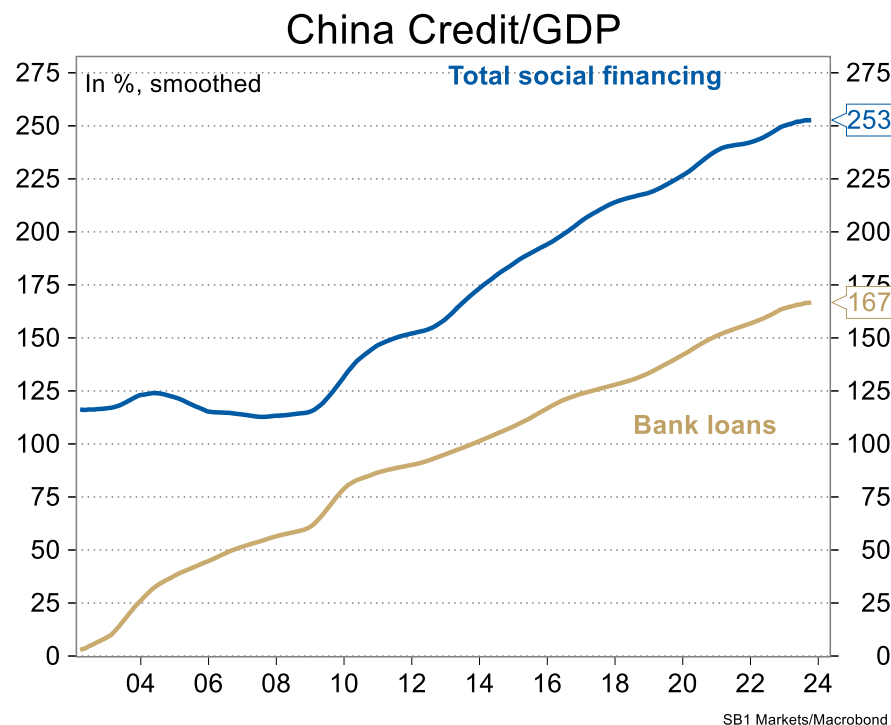
... even if central authorities have ordered local governments to borrow more



- **The credit impulse** (change in credit growth vs. nominal GDP) has turned positive but the impulse is now close to zero measured y/y – but negative measured over the recent months
- **Central authorities** have signalled that **local governments** will be allowed to borrow an additional 1.5 trl by issuing special bonds in H2 in order to fund **infrastructure investments**, lifting overall credit growth by some 0.6 pp (from the present 10.5%). So far, their borrowing has slowed
- Growth in bank lending is slowly slowing (and more abrupt in Oct). The PBoC is likely to take further action, and it has room to do so as China does not have an inflation problem. The question is rather: Who will borrow more?

# Private sector credit: China is an outlier, along with other rich Asian countries

The 'global' private sector debt bubble is really a Chinese bubble (with support South K, Singap., HK)

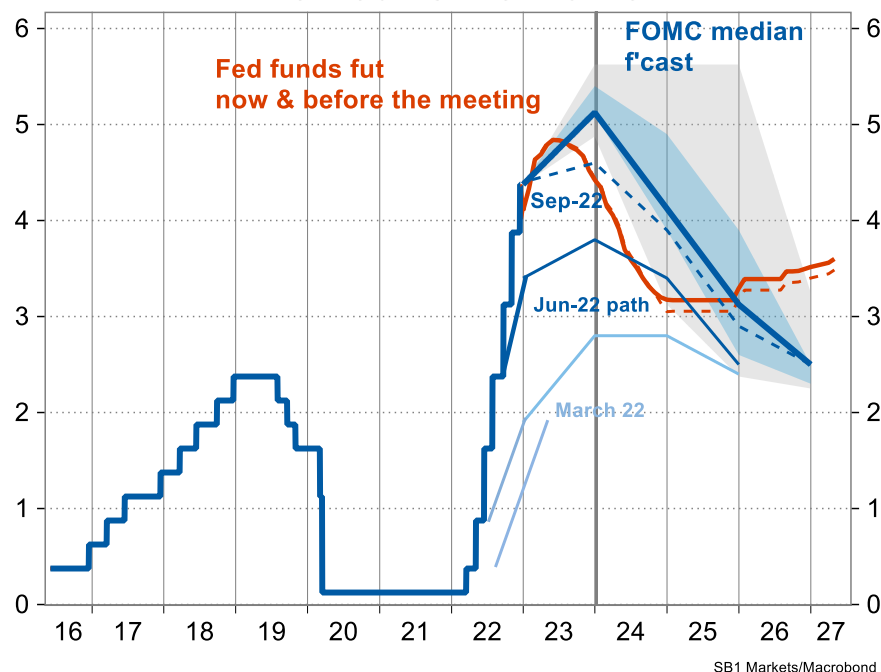


- And there some other outliers as well: DM Supercyclicals (Australia, Canada, Norway, Sweden)

# The FOMC more hawkish than the market expected, will hike to above 5%

Powell is still in aggressive fighting mode vs. inflation. He is not alone. 17 of 19 FOMC member signalled 5% or above. In Sept, NO ONE did!

The Fed vs the market



- **Market reactions:** interest rate expectations rose marginally when Powell talked but then fell back and ended the week down – while the ECB really set its mark on the market – rates rose sharply in the Euro zone (the OIS rates are slightly above the level before the meeting though, they well on Tuesday, due to the lower-than-expected CPI print). The stock market disliked Fed's signals though, even if they should have not been surprising, and the bond market hardly took notice

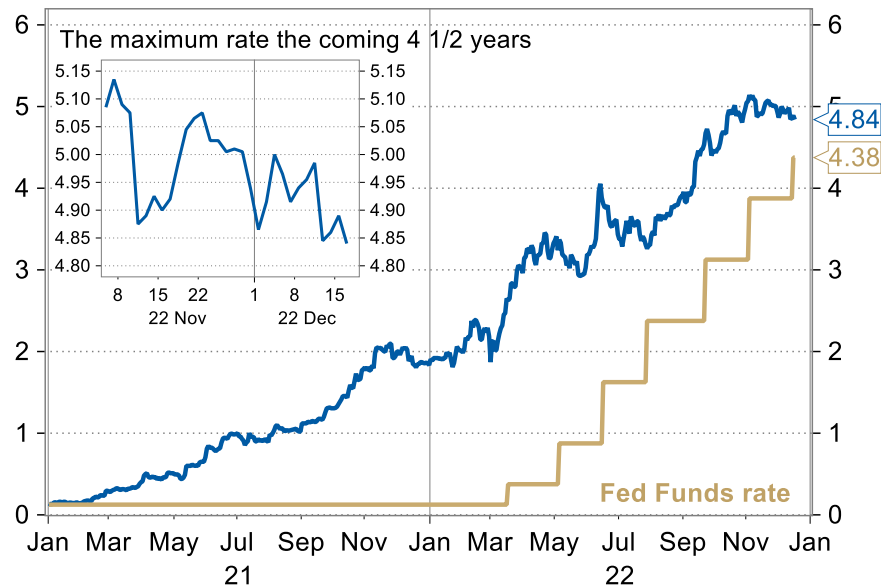
- As widely FOMC hiked the **Fed funds rate** by 50 bps to 4.25% – 4.5%
- **The interest rate path**, the 'dot plot', was lifted by up to 60 bps, to 5.1% by the end of 2023. 17 of 19 members pencilled 5.1% or higher. 3 months ago, NO FOMC member considered likely to raise the Fed funds rate to 5% or above! The 'peak' rate is up 75 bps from today's level, very likely delivered in 25 bps pieces next year. The market assumed a peak at 4.85% before the meeting, and a decline to 4.5% by the end of 2023, and steeper cuts in rates in '24, to 3.1%. The FOMC median voter says 4.1%
- FOMC lifted the interest rate path even if **GDP growth** was revised down, and **unemployment** up, once more, the latter up to 4.6% in Q4-23, revised up by 0.2 pp and 1.1% from the through in this cycle. The reason: **Higher inflation**, of course, and steady more precise comments vs the treat to inflation caused by wage inflation ways above a sustainable level
- The long-term '**neutral**' **Fed funds rate** is still assumed to be 2.5%, signalling a real rate at 0.5%, well below the market (OIS) curve
- In the **press release** the bank describes growth as modest but job gains have been robust, and the unemployment has remained low. Inflation remain elevated, for many reasons, including 'broad price pressures'
- **At the press conference, Powell** seemed just as determined to win the war on inflation as he has been in recent months. We think the bank underestimates the costs (unemployment will climb more) but we think Powell & Co will stay on course. Goods inflation has already turned down, rent inflation will in due time. The problem is wage inflation, that will keep service sector inflation up.
  - The bank has not yet started thinking about the need for cutting rates – the view is upwards, ongoing rate hikes needed to rebalance the economy in order to get inflation down. The market still think the peak will be below 5%, in the late spring

# The Fed will keep at it, until the Fed funds rate reaches at least 5%

Powell's comments did not shock the interest rate market, the terminal (expected peak) rate fell – to 4.84%

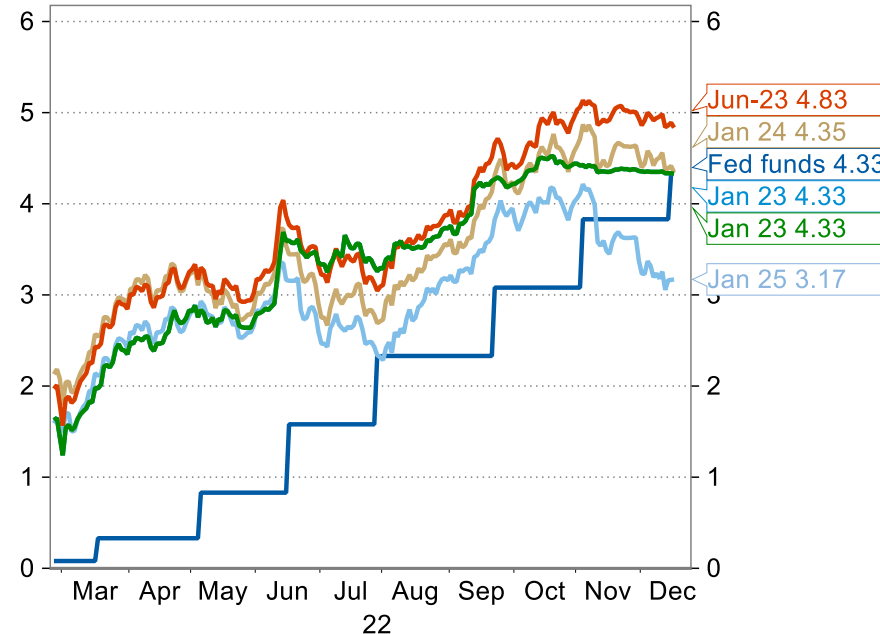
## USA Fed funds futures

The expected terminal (peak) rate in this cycle



SB1 Markets/Macrobond

## Fed funds future



SB1 Markets/Macrobond

- The whole Fed funds future curve fell last week due to the decline on Tuesday, due to CPI surprise – even if European rates rose sharply, as ECB was much more hawkish than expected



# Growth once more revised down, unemployment and inflation up once more

... and no surprise, the FOMC members revised their forecast for the Fed funds rate further up, by up to 50 bps, to 5.1%

| Percent                                 | Median <sup>1</sup> |      |      |      |            |
|---|---------------------|------|------|------|------------|
| Variable                                | 2022                | 2023 | 2024 | 2025 | Longer run |
| Change in real GDP                      | 0.5                 | 0.5  | 1.6  | 1.8  | 1.8        |
| September projection                    | 0.2                 | 1.2  | 1.7  | 1.8  | 1.8        |
| Unemployment rate                       | 3.7                 | 4.6  | 4.6  | 4.5  | 4.0        |
| September projection                    | 3.8                 | 4.4  | 4.4  | 4.3  | 4.0        |
| PCE inflation                           | 5.6                 | 3.1  | 2.5  | 2.1  | 2.0        |
| September projection                    | 5.4                 | 2.8  | 2.3  | 2.0  | 2.0        |
| Core PCE inflation <sup>4</sup>         | 4.8                 | 3.5  | 2.5  | 2.1  |            |
| September projection                    | 4.5                 | 3.1  | 2.3  | 2.1  |            |
| Memo: Projected appropriate policy path |                     |      |      |      |            |
| Federal funds rate                      | 4.4                 | 5.1  | 4.1  | 3.1  | 2.5        |
| September projection                    | 4.4                 | 4.6  | 3.9  | 2.9  | 2.5        |

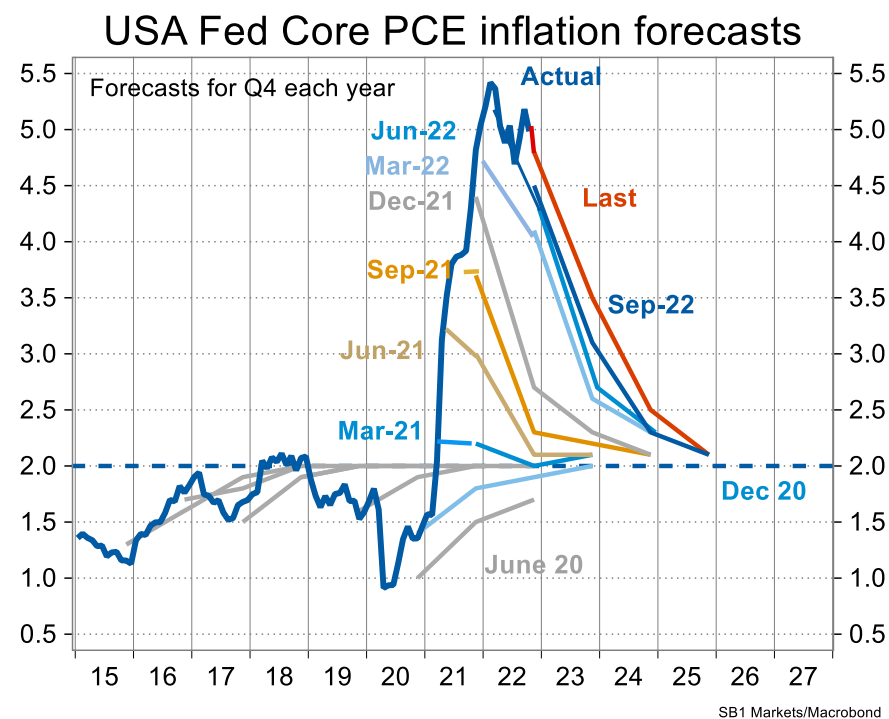
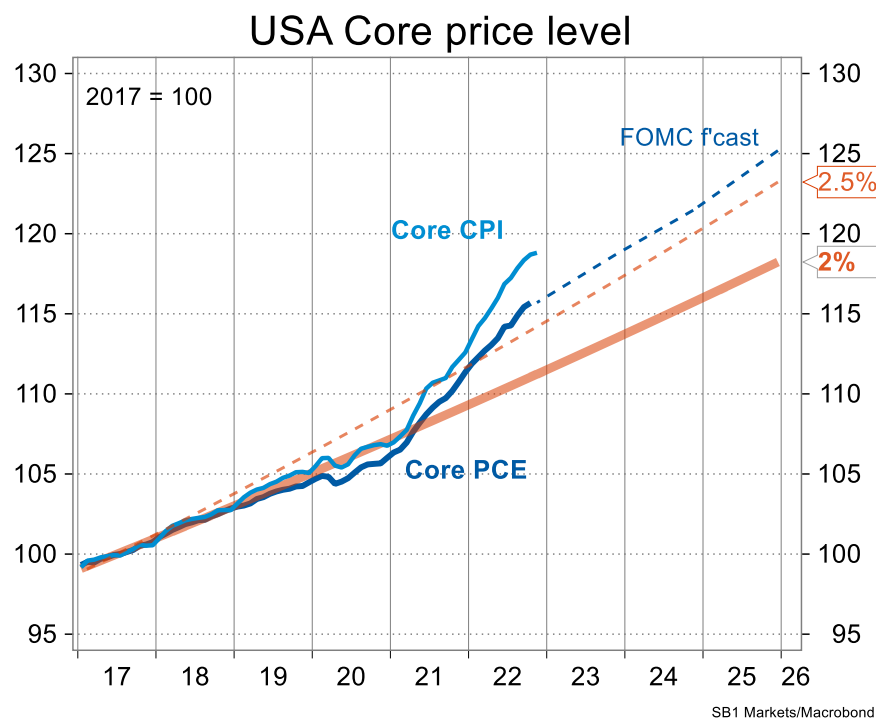
| Percent                                 | June forecasts      |      |      |            |
|---|---------------------|------|------|------------|
| Variable                                | Median <sup>1</sup> |      |      |            |
|   | 2022                | 2023 | 2024 | Longer run |
| Change in real GDP                      | 1.7                 | 1.7  | 1.9  | 1.8        |
| March projection                        | 2.8                 | 2.2  | 2.0  | 1.8        |
| Unemployment rate                       | 3.7                 | 3.9  | 4.1  | 4.0        |
| March projection                        | 3.5                 | 3.5  | 3.6  | 4.0        |
| PCE inflation                           | 5.2                 | 2.6  | 2.2  | 2.0        |
| March projection                        | 4.3                 | 2.7  | 2.3  | 2.0        |
| Core PCE inflation <sup>4</sup>         | 4.3                 | 2.7  | 2.3  |            |
| March projection                        | 4.1                 | 2.6  | 2.3  |            |
| Memo: Projected appropriate policy path |                     |      |      |            |
| Federal funds rate                      | 3.4                 | 3.8  | 3.4  | 2.5        |
| March projection                        | 1.9                 | 2.8  | 2.8  | 2.4        |

- The Q4 '22 y/y GDP f'cast was revised up by 0.3 pp to 0.5% (still too pessimistic). Growth in 2023 was revised down by 0.7 pp to 0.5%. In June (RHS table), the '23 estimate was 1.7%
- Unemployment** by the end of 2023 was revised up by 0.2 pp to 4.6%, from the current 3.7%, the bottom so far is 3.5%. We have never before seen a 1.1 pp y/y lift in unemployment without labelling it a recession – and in a recession unemployment has never increased as little as 1.1% even if it has not been planned
- Core PCE inflation** was also revised up again, by 0.3 pp for Q4 22, and up by 0.4% next year. Core PCE inflation will remain above 2% until 2025
- The median dot plot**, the individual FOMC members interest rate forecasts, was revised up by up to 50 bps, and the end of 2023 f'cast was lifted to 5.1% (implying a 5 – 5.25% fed funds corridor, up 75 bps from the current 4.25% – 4.5%. Just 2 of 19 members expected an end of 2023 rete below 5.0%, 17 were above. Three months ago, NO FOMC member expected a rate at 5% or above! Incredible. No cut is on the table for 2023, according to Powell.
- The long-term neutral Fed funds rate** is assumed to be 2.5% (median, unch.), implying a (long-term) 0.5% positive real rate. The neutral rate is assumed to be reached after 2025. The quantitative tightening (QT, QE in reverse) by selling bonds, which started in early June, will add to the monetary policy tightening



# The anchor is lifted? The 2025 price level will be 5.9% higher than 'promised'

Remember Aug 2020 (Jackson Hole), when Powell promised to keep the price level in check, at a 2% path, over time

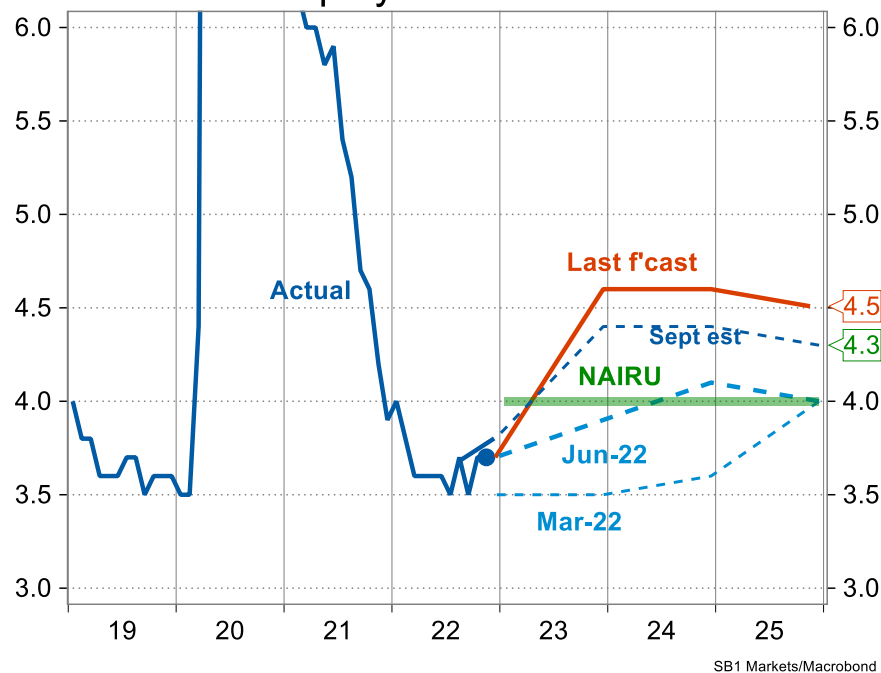


- ... And at that time inflation had been a tad to low – and was below a 2% path. That's not the problem anymore. Should the Fed try to bring the price level back down to the promised 2% path? Strange, Powell is not talking about it anymore...

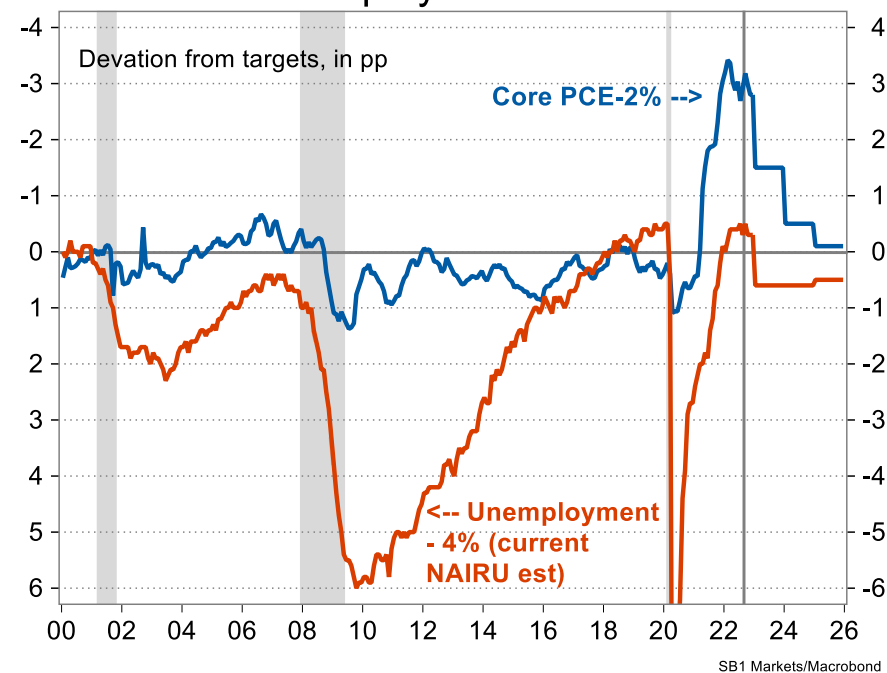
# Unemployment revised up again, needs to get higher to get wage infl. down

The long-term NAIRU \*) rate is still assumed to be 4%. Unemployment will climb to 4.6% in '23, a 0.2 pp upw. revision

## USA Unemployment vs Fed forecast



## USA Unemployment vs. inflation



- The **unemployment rate** is assumed to increase by 0.9 pp through 2023, to 4.6%, up from the 4.4% estimate in Sept (and 3.8% in June)
- The assumed unemployment gap (actual rate – NAIRU) is not large, vs. levels seen before
- The current FOMC forecast seems much more likely than the previous forecasts – but we are pretty sure the risk is on the upside – and that the next upward revision arrives in March

\*) NAIRU: The Non-Accelerating Inflation Rate of Unemployment – an unemployment rate that balances wage and price inflation. It varies hugely between countries, it is not stable in each country, and it can best case be quantified only 'after the fact'. Still it may be a useful analytical concept.

# What do Fed's models say? A steeper downturn in 2023, then slower growth

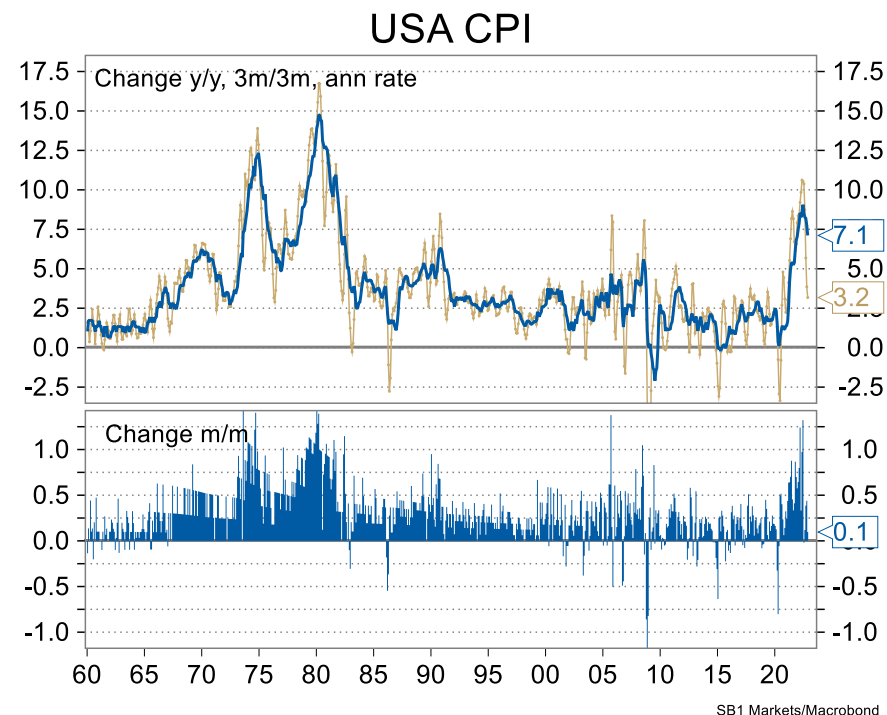
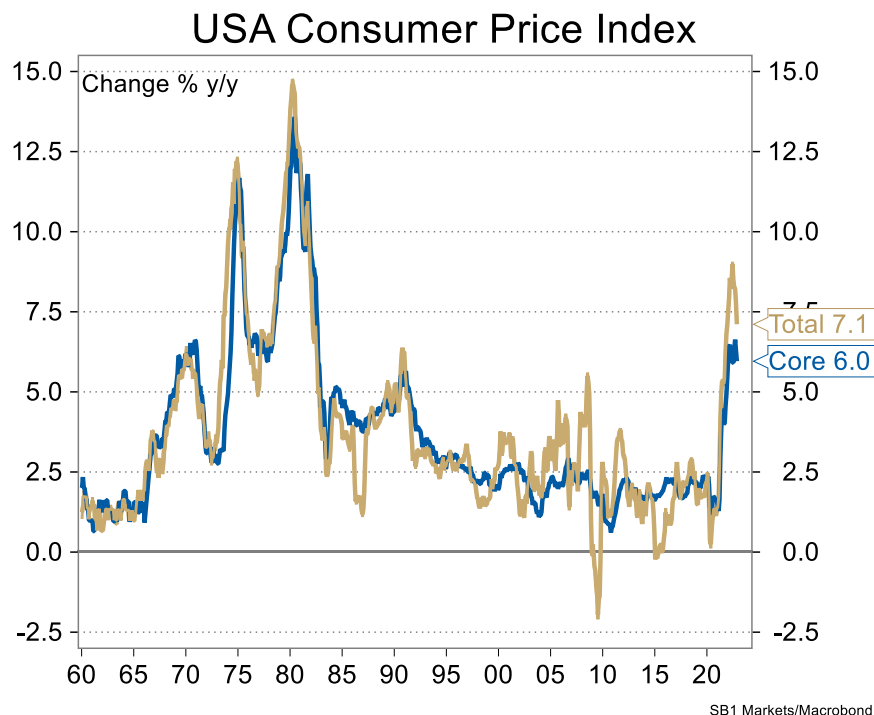
... compared to the FOMC median forecast. Small changes in NY Fed's DSGE model-based forecast since September

|                                       |             | 2022        |             | 2023        |             | 2024        |             | 2025        |             |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                       |             | Dec         | Sep         | Dec         | Sep         | Dec         | Sep         | Dec         | Sep         |
| GDP growth<br>(Q4/Q4)                 | <b>FOMC</b> | <b>0.5</b>  | <b>0.2</b>  | <b>0.5</b>  | <b>1.2</b>  | <b>1.6</b>  | <b>1.5</b>  | <b>1.8</b>  | <b>1.8</b>  |
|                                       |             | 0.2         | -0.7        | -0.3        | -0.4        | 0.0         | 0.1         | 0.4         | 0.7         |
|                                       |             | (-0.2, 0.6) | (-2.3, 0.8) | (-5.0, 4.5) | (-5.2, 4.4) | (-5.0, 4.8) | (-4.7, 4.9) | (-4.9, 5.6) | (-4.5, 5.9) |
| Core PCE inflation<br>(Q4/Q4)         |             | 4.8         | 4.1         | 3.4         | 3.1         | 2.8         | 2.6         | 2.6         | 2.4         |
|                                       |             | (4.7, 4.9)  | (3.8, 4.4)  | (2.7, 4.2)  | (2.3, 3.8)  | (1.9, 3.7)  | (1.7, 3.5)  | (1.6, 3.6)  | (1.4, 3.4)  |
| Real natural rate of interest<br>(Q4) |             | 2.6         | 1.4         | 2.0         | 1.2         | 1.6         | 1.0         | 1.3         | 0.9         |
|                                       |             | (1.5, 3.7)  | (0.2, 2.6)  | (0.6, 3.4)  | (-0.3, 2.6) | (0.0, 3.1)  | (-0.6, 2.6) | (-0.3, 2.9) | (-0.7, 2.6) |

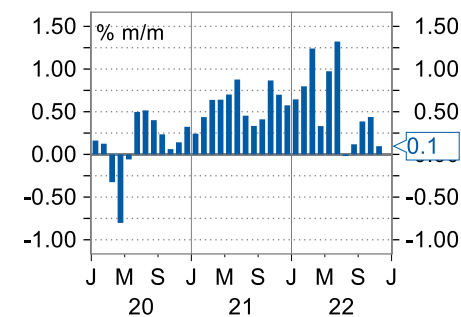
- **New York Fed's model-based** forecast implies a mild recession in 22/23 (GDP down by 0.3% from Q4-22 to Q4-23)
  - The recovery will be weak in 24/25, in sum up 0.4% over these two years
- If so, a marginal growth **in GDP** from 2021 to 2025, by just 0.3%, the weakest 4-year run, ever – except for Q2-20, but then something very unusual happened
  - The FOMC members' median forecast is for 4.4% growth from Q4 2021 to Q4 2025 (down from 4.7% in the Sep f'cast). So, they do not trust their own (or their economists' models) at all!
- The model's **core inflation forecasts** are revised further up, by on average 0.2 pp the coming years, to 2.9%, 0.2 pp above the FOMC f'cast
- The **real natural rate** of interest is once more revised significantly upwards, on average to 1.9% from 1.1% in September!! The FOMC believes in a 0.5% long-term real Fed funds interest rate. The DSGE model is right, the current 1.30% 10 y TIPS rate is rather low
- Well, models are models and we do not trust them too much.  
But these growth and real rate forecasts are worth contemplating

# CPI has peaked. More to come – without the ‘real’ inflation challenge solved

CPI rose 0.1 – 0.2 pp less than expected – and even the core is slowing m/m, now down to 0.2% m/m

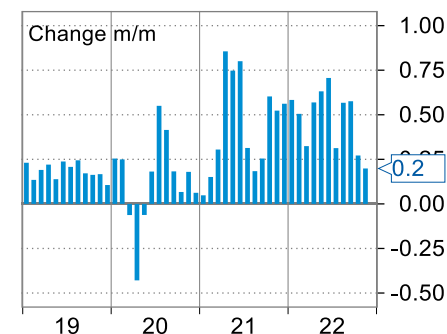
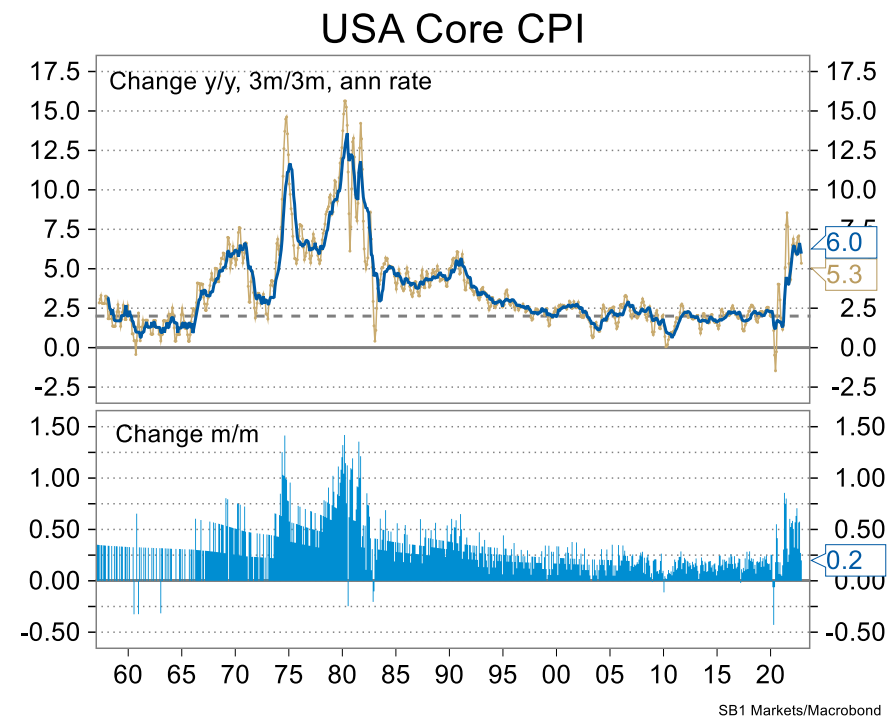
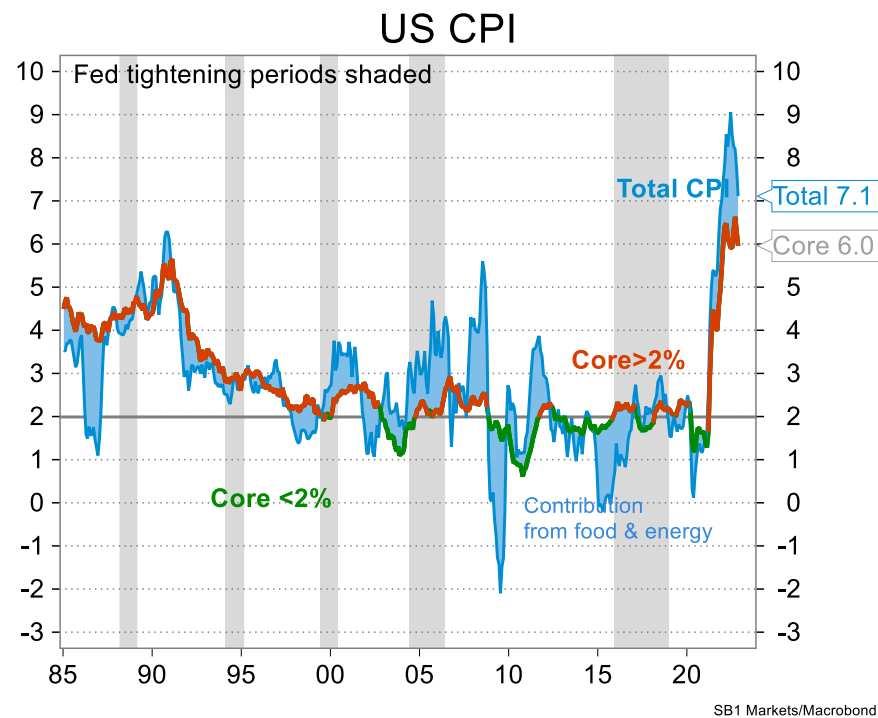


- **Headline CPI** slowed 0.6 pp to 7.1% in November, expected down to 7.3%. Prices rose 0.1% m/m, expected 0.3%
- **Energy prices** fell further, by 1.6% m/m, but energy is still contributing 1.0 pp to the headline rate
- **Food prices** rose 0.5% m/m and are up 10.6% y/y, lifting the CPI by 1.5 pp
- **Producer prices** are on the way down from crude/intermediate goods – and will take goods CPI inflation down
- **Surveys** report further price increases the coming months, but at much slower pace than over the prev. months
- We still think **markets** focus too much on actual inflation, especially driven by commodity prices, and too little on wage cost inflation. However, a contraction in margins will also be detected in the CPI report – and they are important for the Fed



# Core prices up 0.2%, 0.1 pp less than expected, and down 0.3 pp to 6.0% y/y

The 3m/3m rate at 5.3% confirms that underlying inflation has peaked but remains far too high

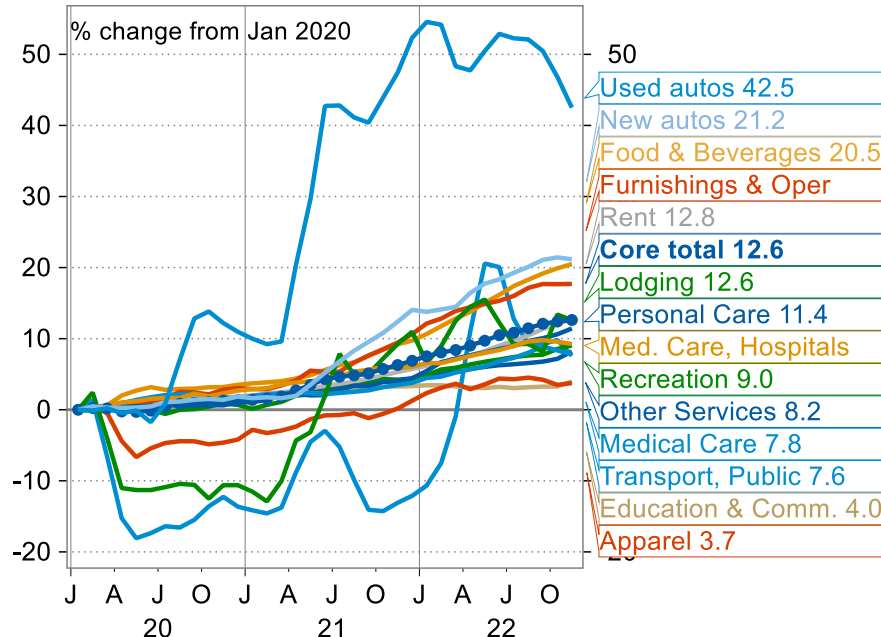




# Lodging, used autos & airfares cheaper in November

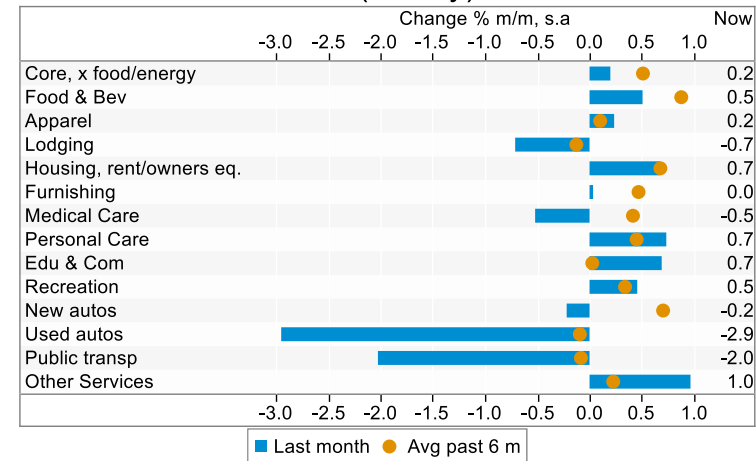
The downside for several sectors must be substantial, like for used cars

## USA CPI

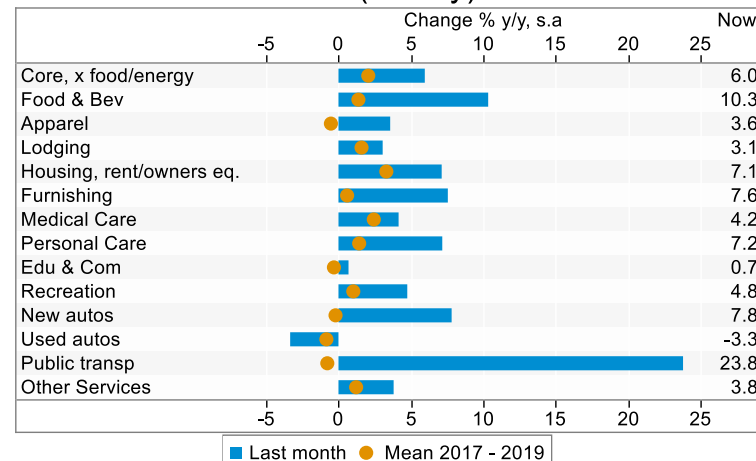


- All but two sectors, education & communication and apparel, are up at more than a 2% pace from before the pandemic
- Rents are up 7.1% y/y, lifting the CPI by 2.4%, alone!
- One day: A huge downside to used auto prices – and hopefully for some others as well, like food and furnishing prices. And rents

## USA CPI (mostly) Core



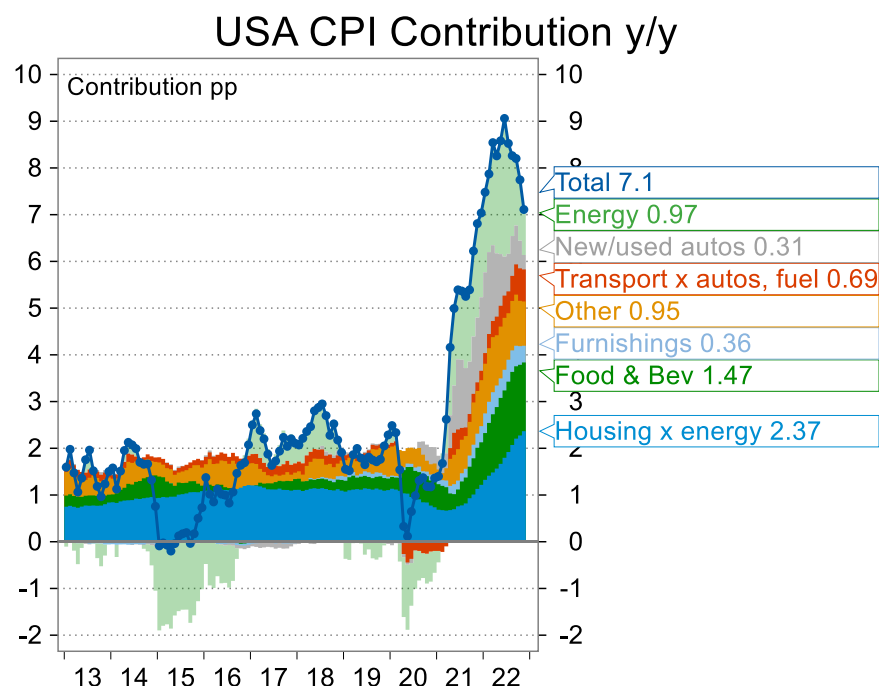
## USA CPI (mostly) Core



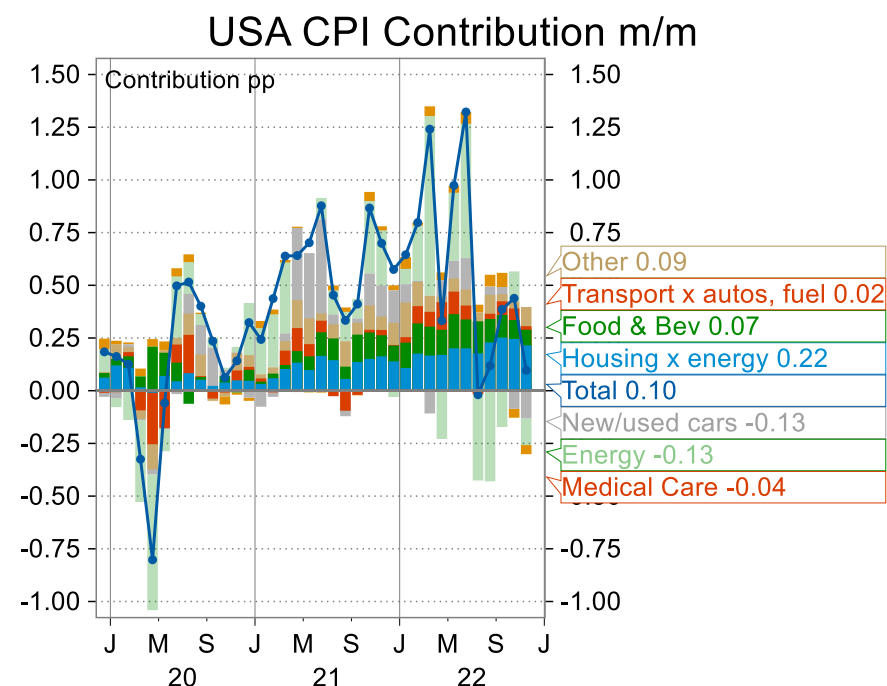
SB1 Markets/Macrobond

# Energy & transport (incl autos) explain 2 pp of the 7.1% lift in total CPI

The problem: The rest is up well above 5% y/y. Housing alone contributes 2.4 pp; food 1.5 pp



SB1 Markets/Macrobond



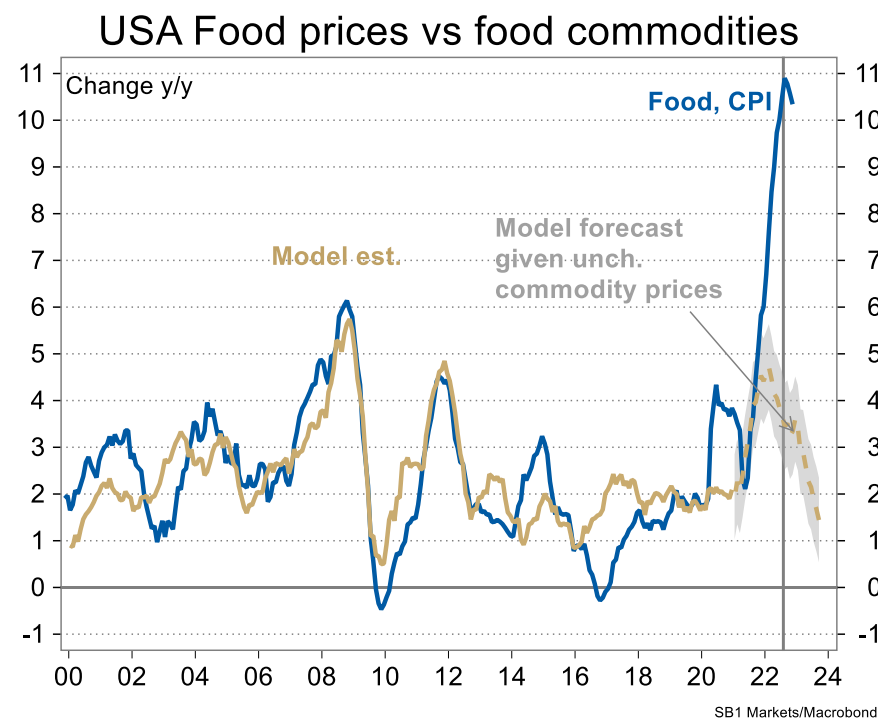
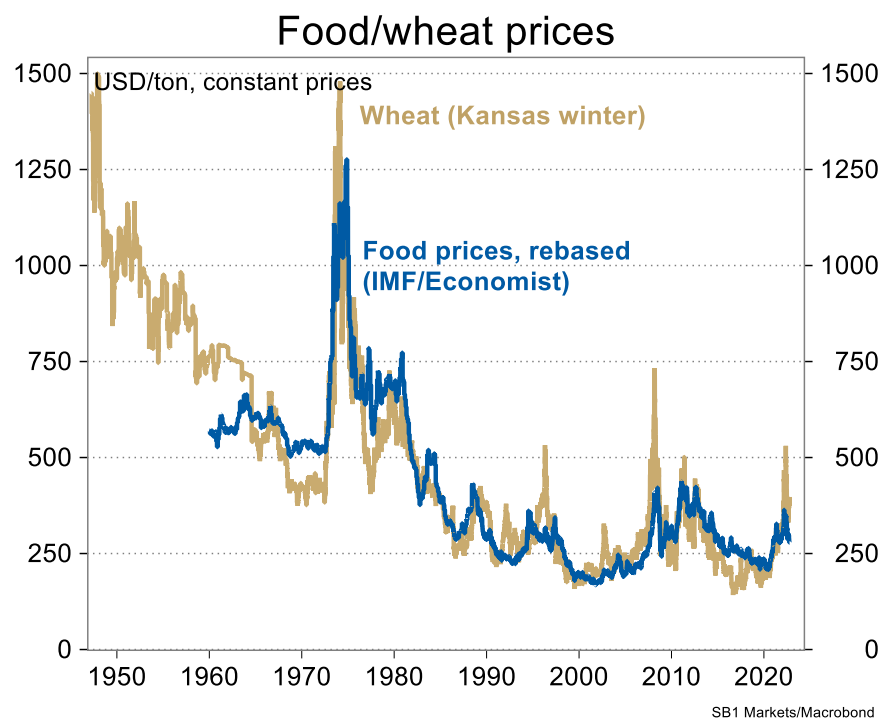
SB1 Markets/Macrobond

- **Energy** prices fell further in September but are still sharply up y/y
- **However, excluding** the 2 pp contribution to the headline CPI from energy & transport, “**remaining**” inflation has flattened
- **Housing x energy** (and x lodging) is contributing by 2.4 pp. Rents as measured in the CPI are up 7.1% y/y, but the upside is probably now limited



# Food prices will have to come down??

Food commodity prices did not increase that much, and now they are heading down

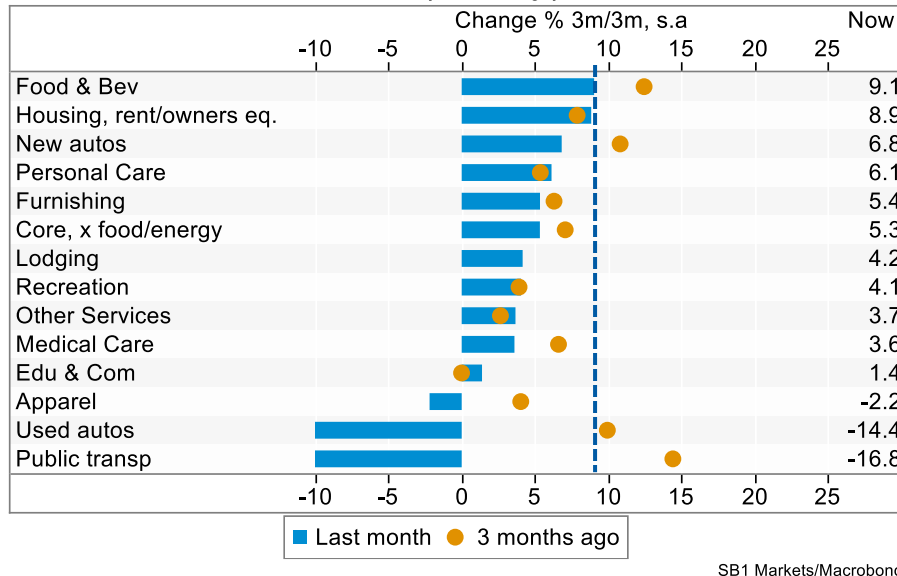


- Why have food prices at the retail level exploded vs. food commodities? The candidates: Freight costs, processing costs, distribution costs, (including energy and wages at each element in the value chain) – and the retail trade sector has increased its profit margins (according to national accounts). Are these factors permanent? We very much doubt
- If we are right, food inflation will come down sharply

# Inflation measured 3m/3m: More sub-indices are slowing than accelerating

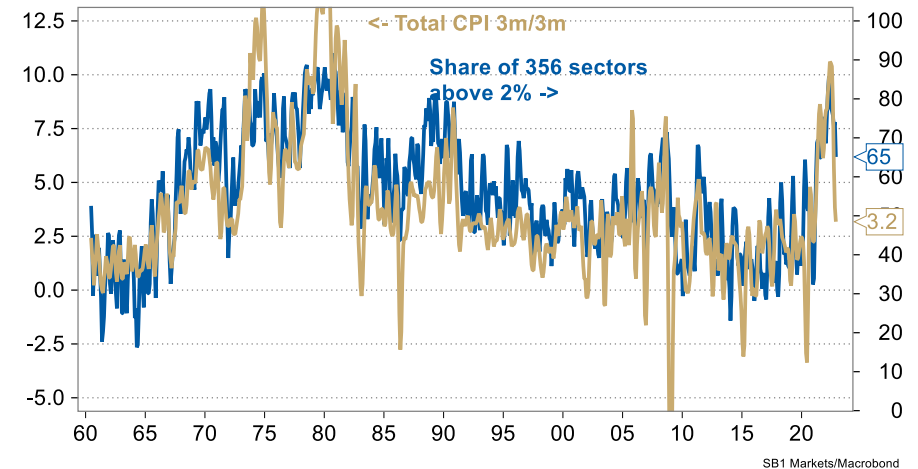
In addition, prices are up 'just' 3.2% 3m/3m, down from above 10% at the peak

## USA CPI (mostly) Core

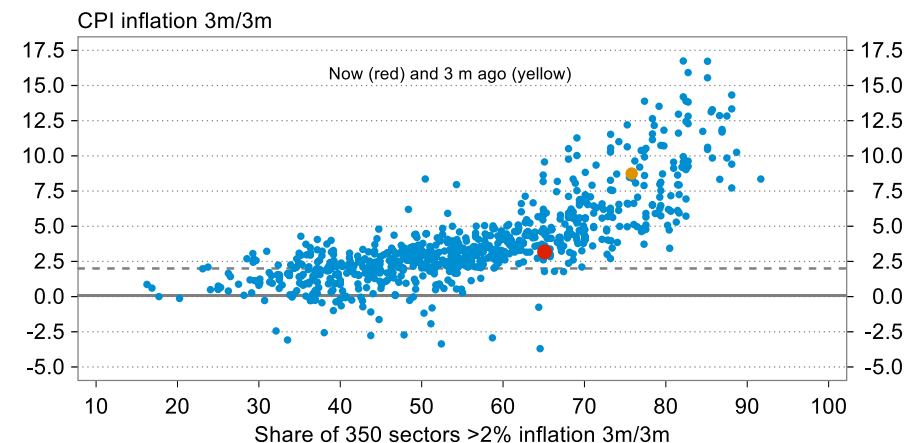


- 65% of the CPI items are up more than 2% y/y, down from 90% at the peak
- A substantial negative drag from lodging and public transport recent months

## USA CPI inflation 3m/3m & share above 2%

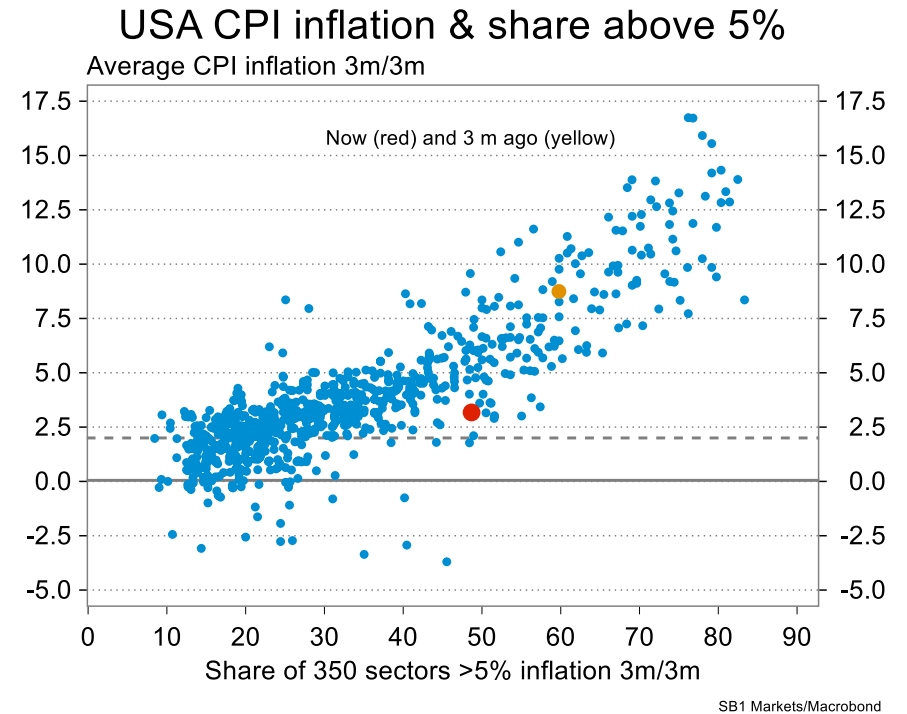
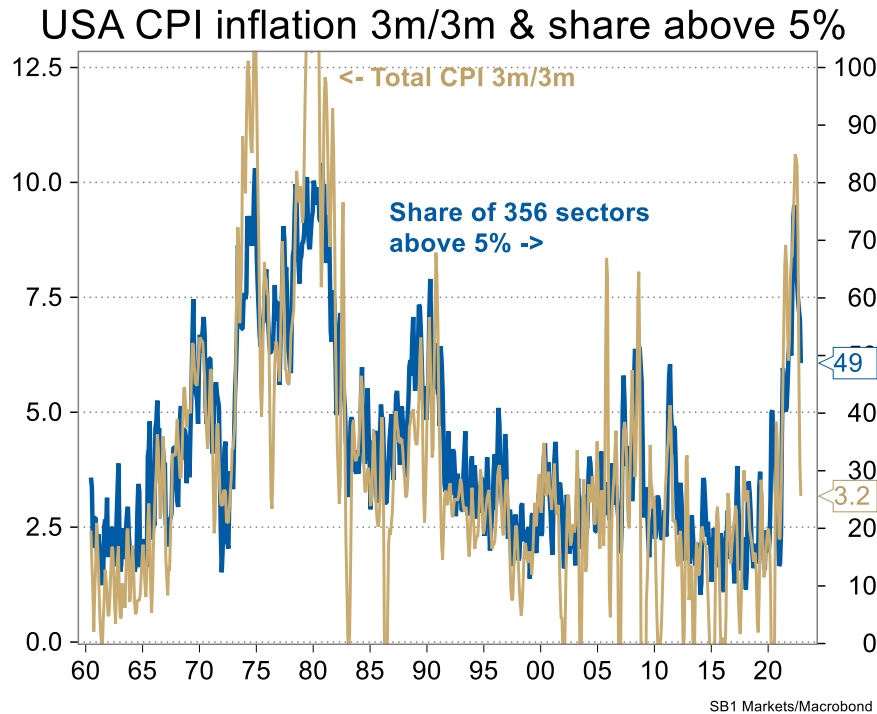


## USA CPI inflation & share above 2%



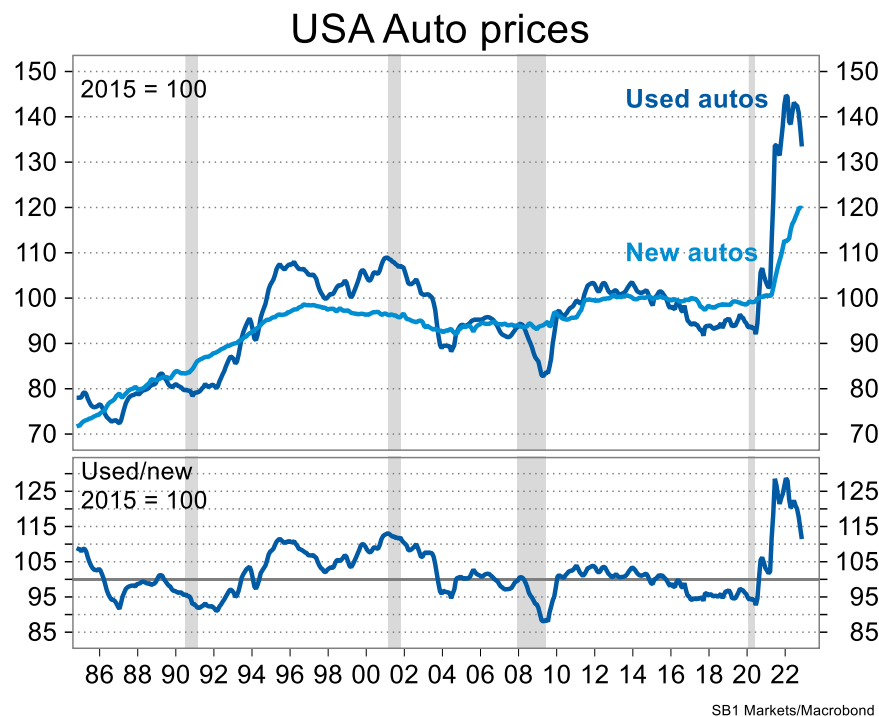
# 'Just' 49% of sub-indices are up more than 5% 3m/3m

'Just' because the share has fallen from almost 80%



# Used auto prices are finally yielding but are still too high

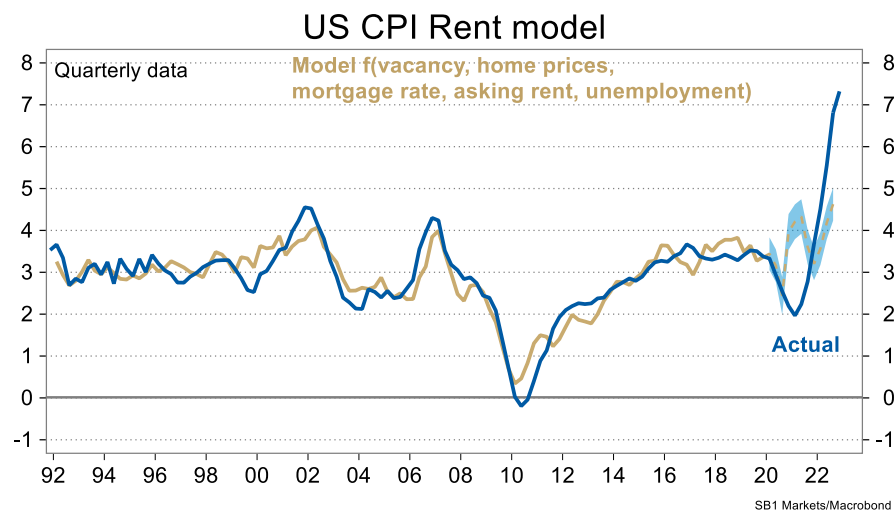
New auto prices are still soaring – but for how long?



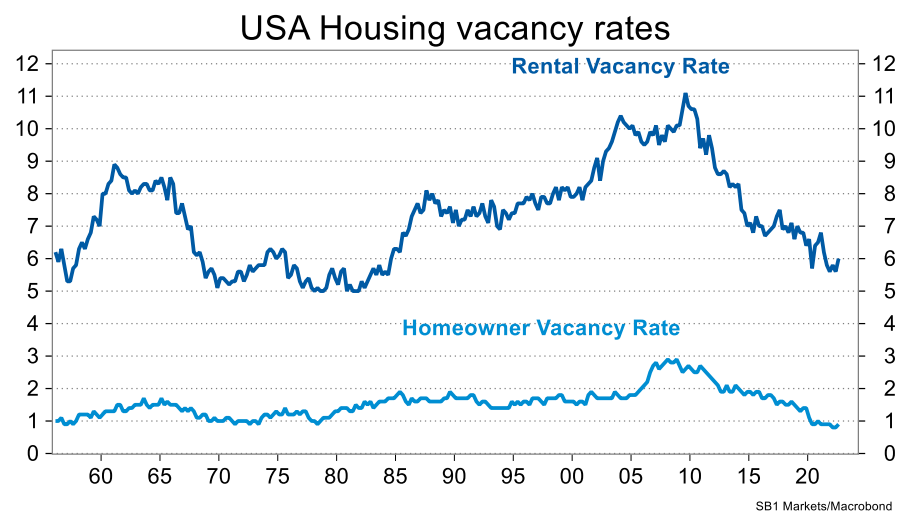
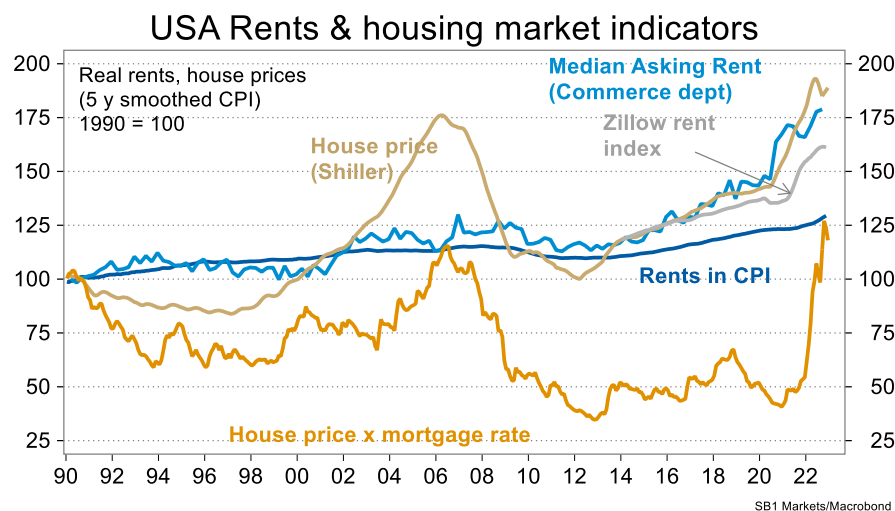
- At one stage, at least **used auto prices** will come down to a normal level vs. new car prices
- **New auto prices** have shot up sharply recent months – and these prices will also very likely return to a more normal level – production costs are not up 26% through the pandemic!
  - We have so far assumed that demand for autos was higher than production capacity but there are reports of higher inventories of new cars

# Rent inflation will soon peak, as the rental market is probably cooling down

Rents are up 7.1% y/y, while signals from the rental market are mixed



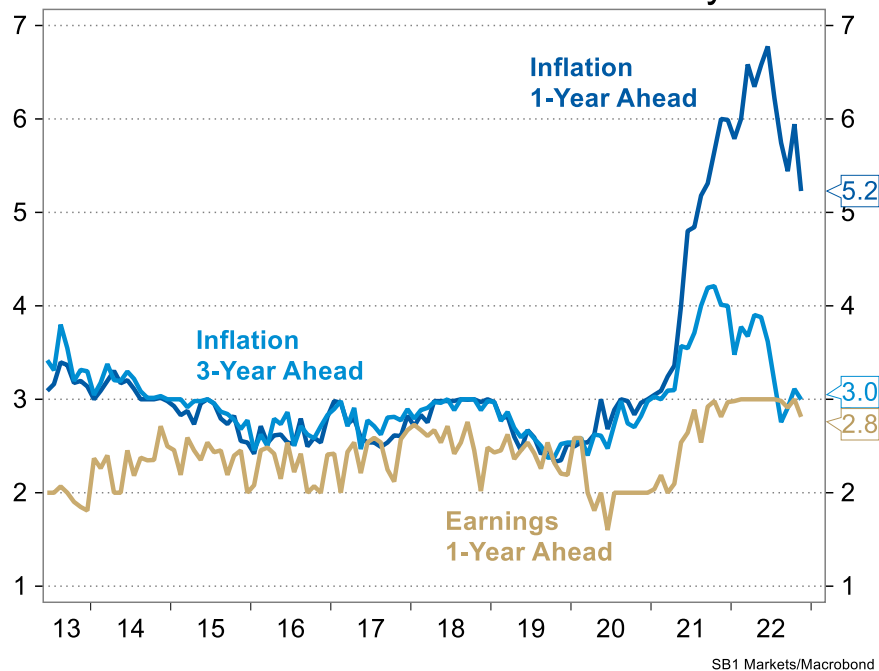
- **The official (Commerce dept) median rental asking price** is on the way up again following a slowdown last autumn. Some other surveys signal slowing rents, as do the slowdown in house prices – but it typically takes time before rents in the CPI follow suit
- **The rental vacancy rate** has fallen sharply recent quarters, but may now be turning up. The **homeowner vacancy rate** is still trending down, and is also at an ATL
- **Rent inflation measured in the CPI** has accelerated to 6.8%, though from a base below trend last year but past months rents have been climbing at an 8%-9% pace (m/m), and total housing costs (ex energy) contribute 2.2 pp to annual headline inflation!
- **Our model**, when assuming a substantial slowdown in rental asking price inflation and a rapid decline in existing house price inflation the coming quarters, and a flattening of the 30 y mortgage rate at 6%, signals a decline in rent inflation to below 4%. However, the outlook for the rental market is highly uncertain



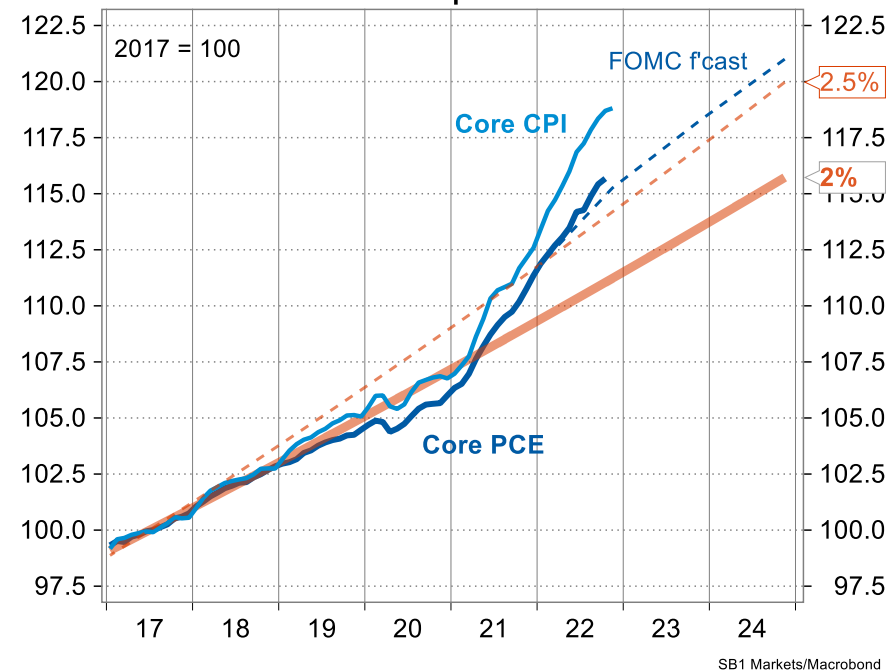
# NY Fed's survey: Consumers' inflation expectations are yielding

Longer term expectations are almost back to a normal level. Wage increase expectations are muted as well

USA NY Fed Consumer survey



USA Core price level

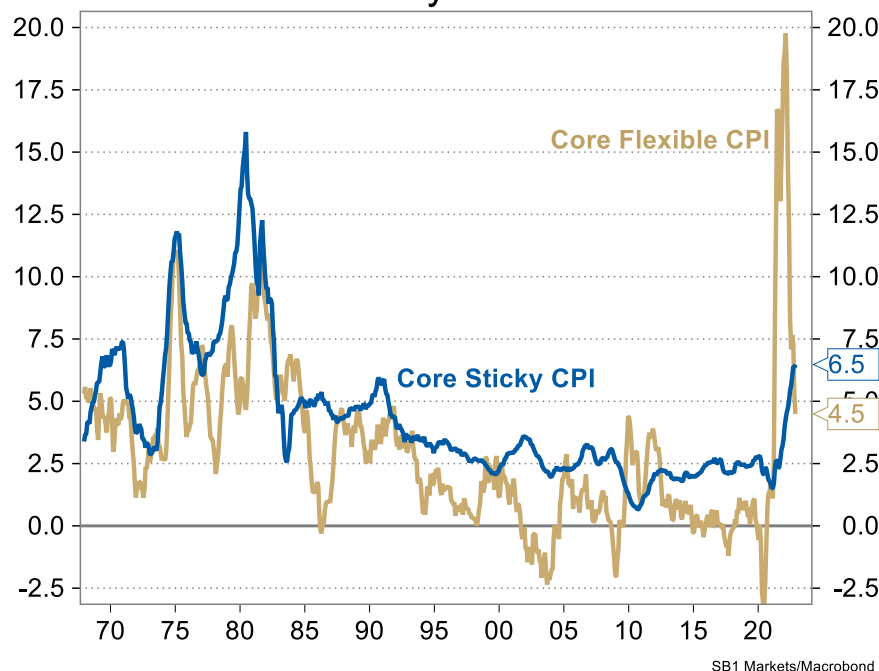


- All surveys tell the same story: **Longer term inflation expectations** have come down and are not high
- The public has not lost confidence in the Federal Reserve – even if actual inflation is very high, and the price level has departed from the 2% path
  - BTW, do you remember Powell's arguments for an expansionary monetary policy back in 2020, in order to bring the price level up to the 'promised 2% path' by letting inflation run above 2% for a while? *How should he formulate this strategy now??*

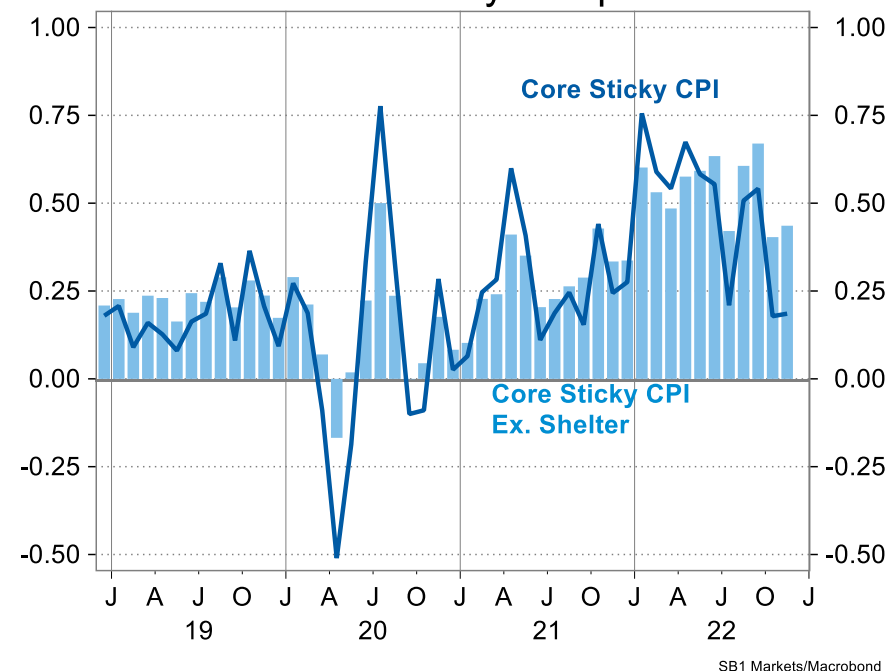
# Flexible prices are coming down rapidly, *but sticky prices still on the way up*

Sticky prices (90% of the CPI) are up 6.5% y/y, and excluding shelter up 0.4% m/m. The trimmed median up 7.4%

USA Core sticky vs. flexible CPI



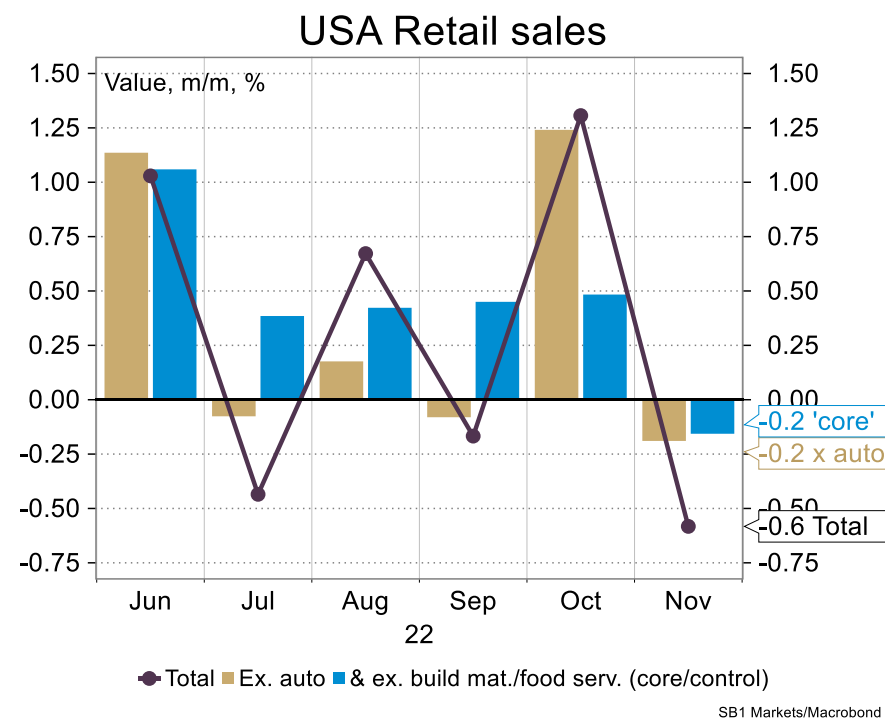
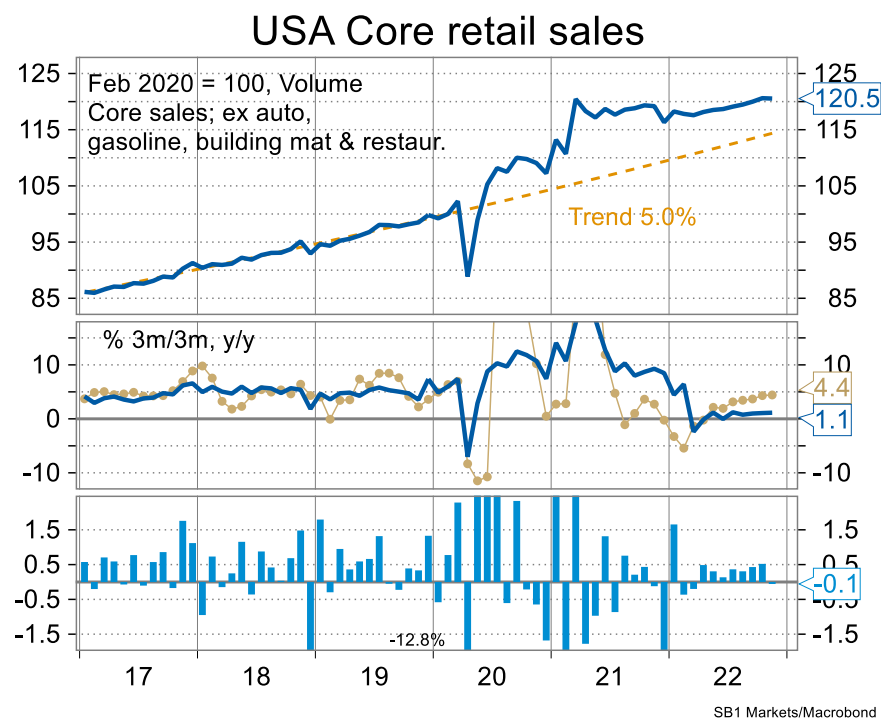
USA Core Sticky CPI prices



- Almost all of the initial lift in core CPI was due to prices of goods & services that often fluctuate, with rapid price increases now followed by deep price cuts. These prices are '**flexible**' and represent some 10% of the core CPI. The core flexible CPI is up 4.5% y/y, down from almost 20% at the peak! But still higher than anytime since 1985!
- The new challenge: The **sticky components** (90 % of the core CPI) are up 6.5% y/y. The surge in the sticky index is much more worrisome for the inflation outlook than the ups and downs in the 'flexible' CPI, even if monthly changes have slowed marginally recent months
- The Cleveland Fed **trimmed median CPI** is up at a 7.5% pace over the past six months, unch. from Oct. – and miles above anything seen before (data from 1983). Dallas Fed's **trimmed mean PCE** was up 5.1% in Oct, a cycle peak

# Retail sales were weaker in November, and below expectations

Core sales volumes down 0.2% in November; the total down 0.6%

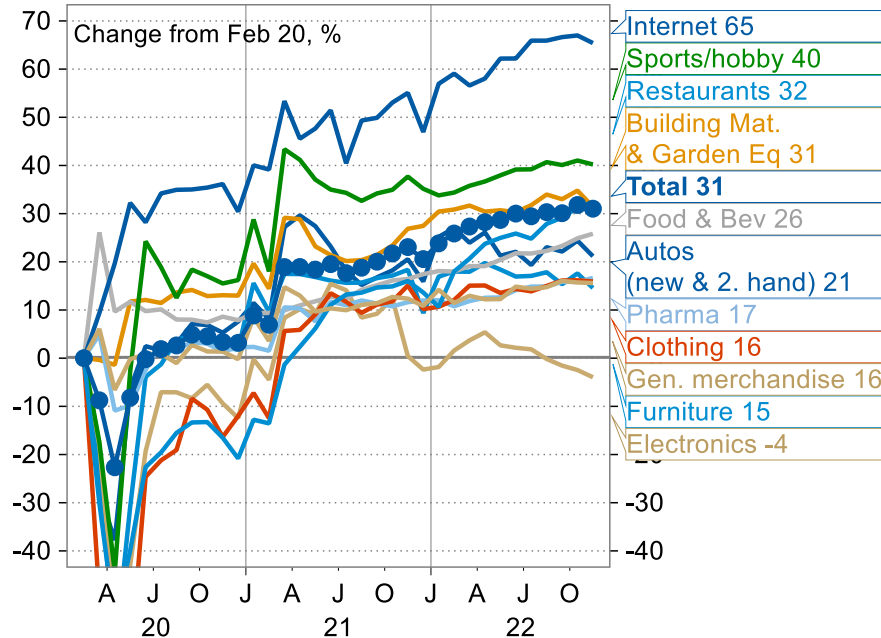


- **Total nominal sales** were down 0.6% in November, expected -0.1%. Food, food services, and healthcare sales were up, all other sectors were down. Total nominal sales are still up 31% vs. the Feb 2020 level!
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) were down 0.2% in value terms, 0.3 pp weaker than expected. October was revised down to 0.5% from 0.7%
- **In volume terms**, we assume that core sales fell by 0.1%, down from 0.5% in Oct (unch vs. or first estimate). 'Real' sales are trending upwards at a rather solid pace (+4.4% 3m/3m), far better than we expected some months ago!



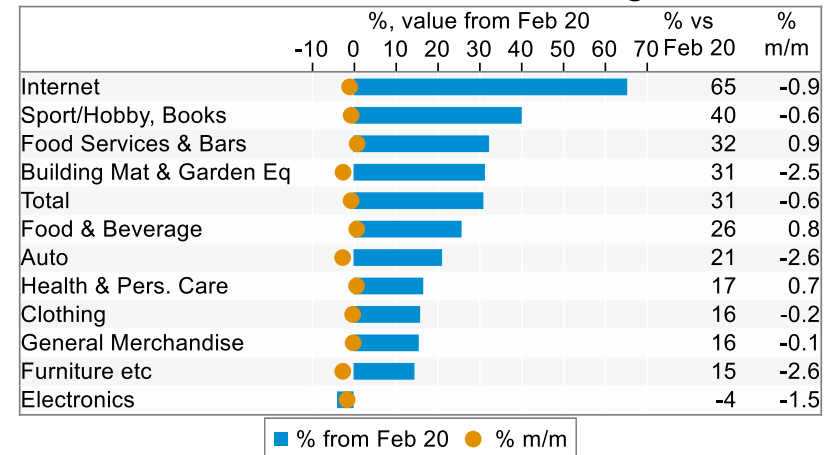
# Only 3 sectors reported lower sales in October

## USA Retail sales

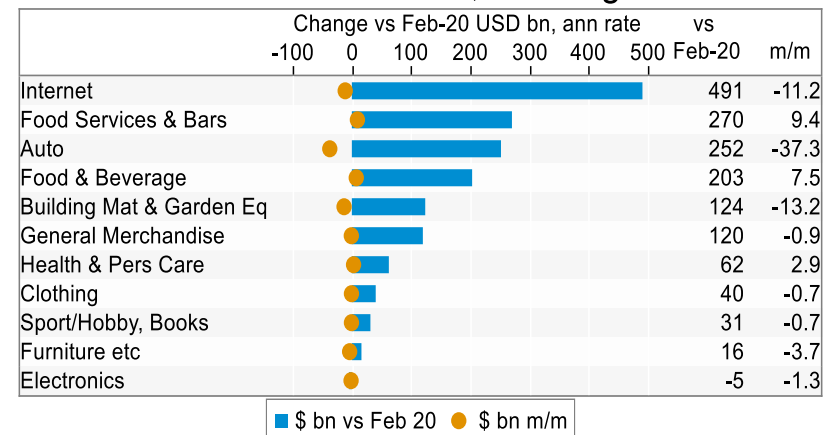


- 8 out of 11 main sectors reported lower sales in November, 3 reported higher sales
- Total sales are up 31% in value terms vs Feb. 20
- Restaurants are up 32% vs Feb-20!
- **Internet sales are up 60%**, but were down 0.9% in Nov
- Clothing is up 'just' 16%
- Electronics are down 4% - in value terms

## USA Retail trade, % change



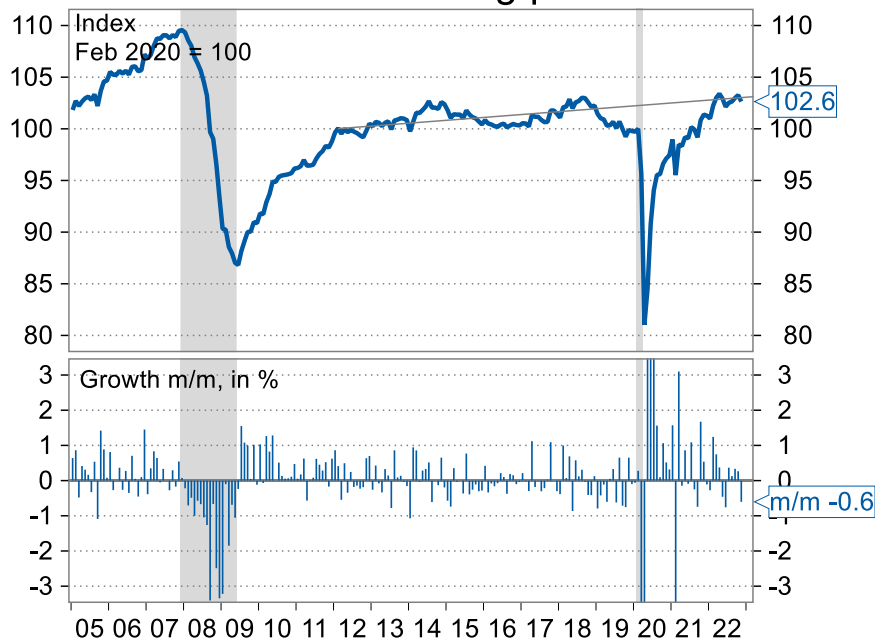
## USA Retail trade, \$ change



# Manufacturing production down 0.6% in November

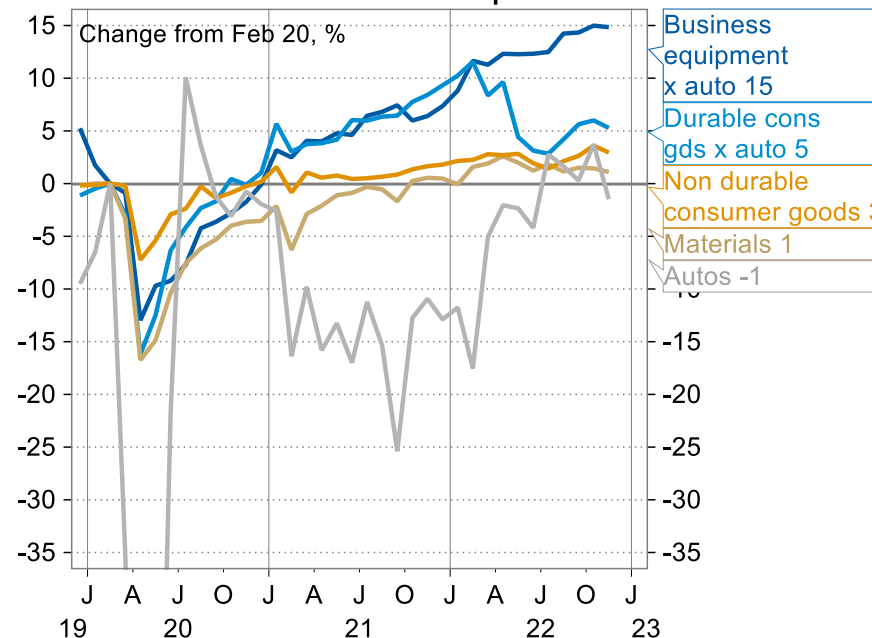
Auto production down in Nov, but is close to the 2019 average. Other durable goods the weak chain last year

## USA Manufacturing production



SB1 Markets/Macrobond

## USA Industrial production

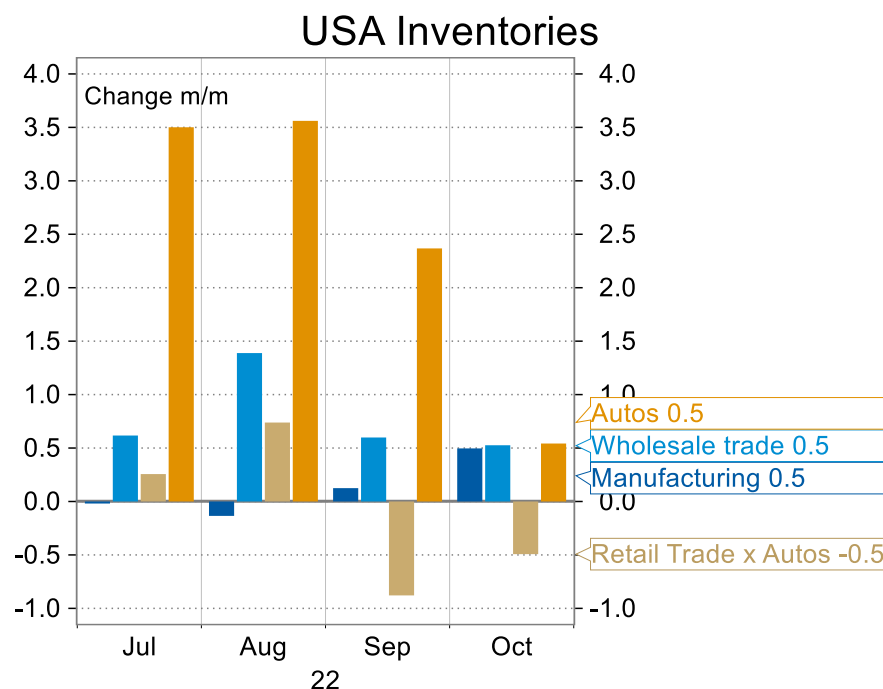


SB1 Markets/Macrobond

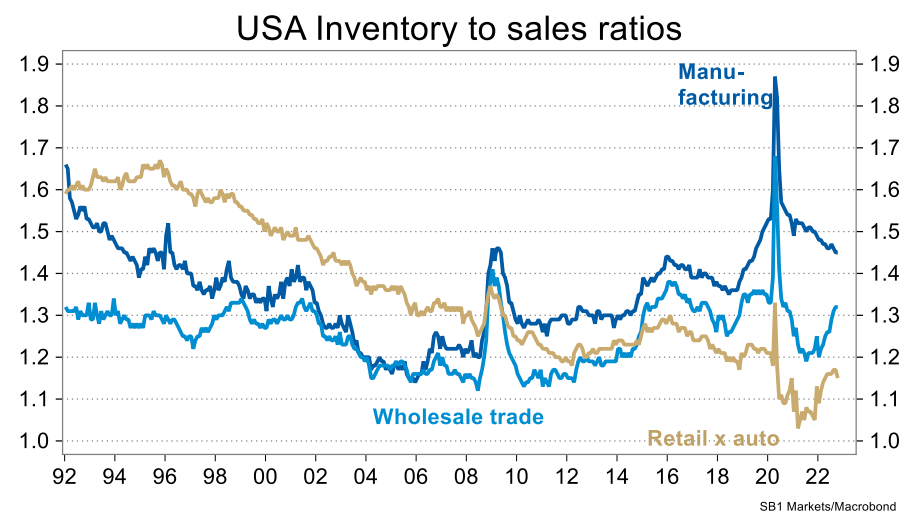
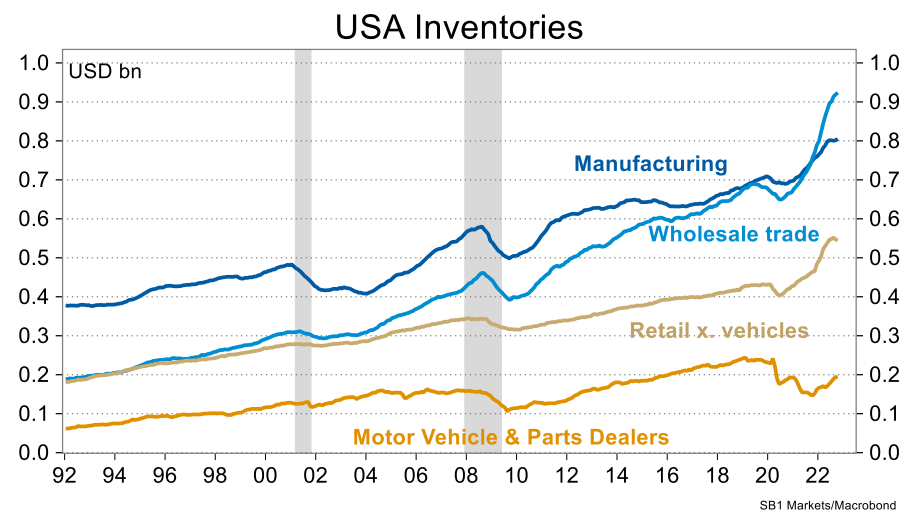
- **Manufacturing production** fell 0.6% in November, 0.5 pp below expectations. The Oct print was revised up by 0.2 pp to 0.3%. Production remains below the April level. Still production is up 2.1% measured 3m/3m, and goods production will probably contribute positively to GDP growth in Q4. Production is up 2.6% vs. the pre-pandemic level
  - Production in all main sectors were up in Sept, and all are now above the pre-pandemic level, even including auto production!
- **Total industrial production**, including utilities, mines/oil production, declined 0.2% m/m, expected +0.1%
- **Capacity utilisation** was down 0.2 pp to 79.7%, but the level is still close to the highest in 20 years (the peak was in April)
- **Surveys** have weakened substantially since May. The first December surveys are further down

# Inventories still up vs. sales in wholesale, but is declining in the manuf. sector

Inventories in retail trade (ex. autos) are not very high vs sales, and they fell in October

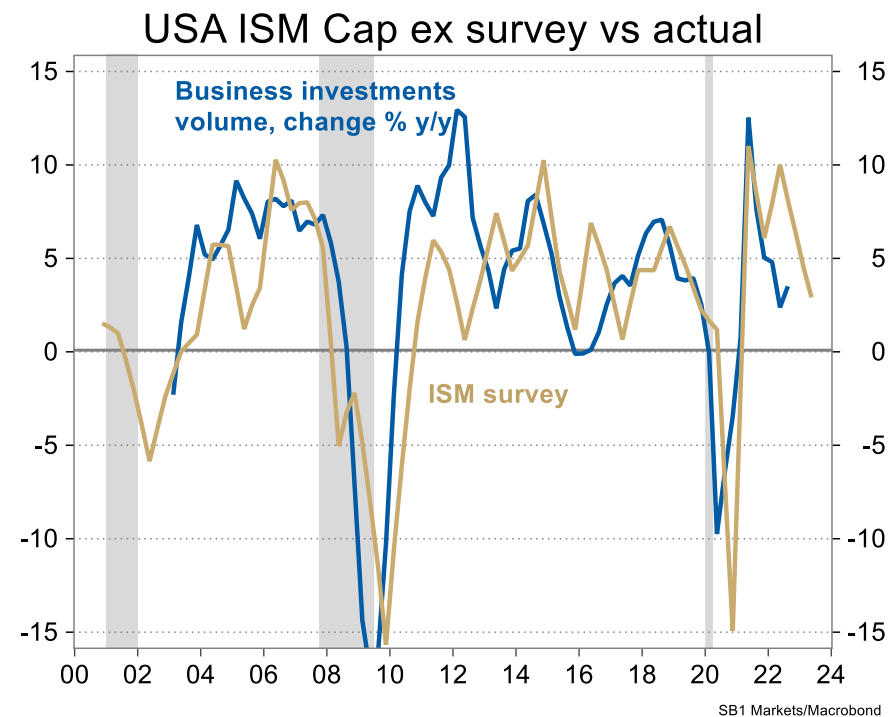


- These **official inventory data** are less alarming than some private/company reports have indicated
- Inventories in the **manufacturing sector** have stabilised, but the I/S ratio as come down somewhat from the peak. However, it is still high
- **Auto inventories** are on the way back to a normal level



## ISM semi-annual investment survey: Further down but not out

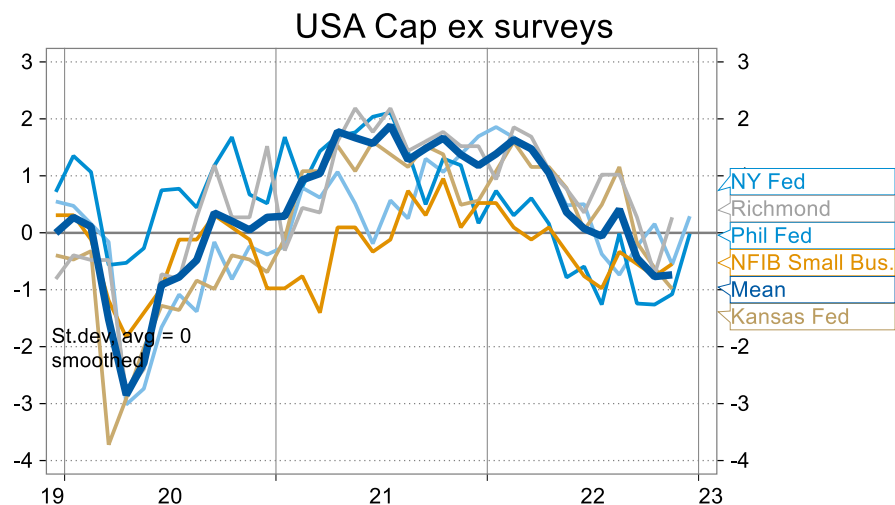
Growth in investments is slowing but companies are still expecting a normal growth rate – far better than we assumed!



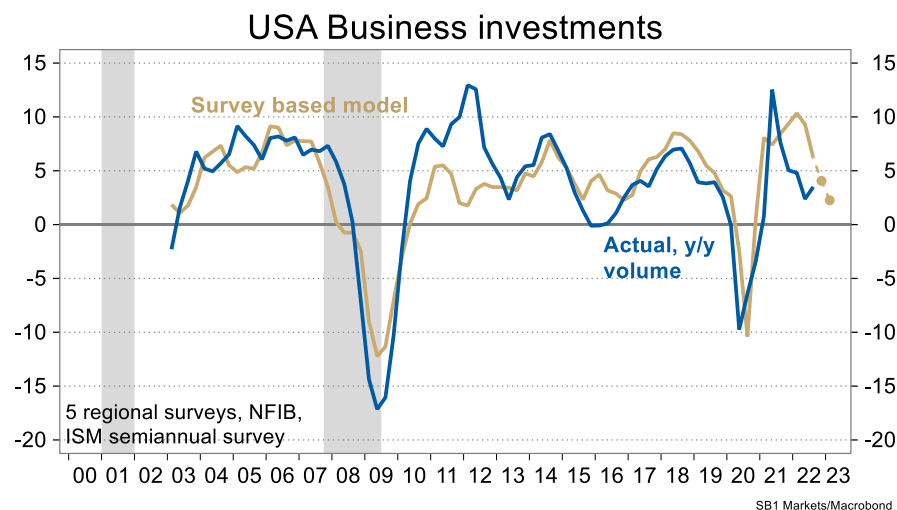
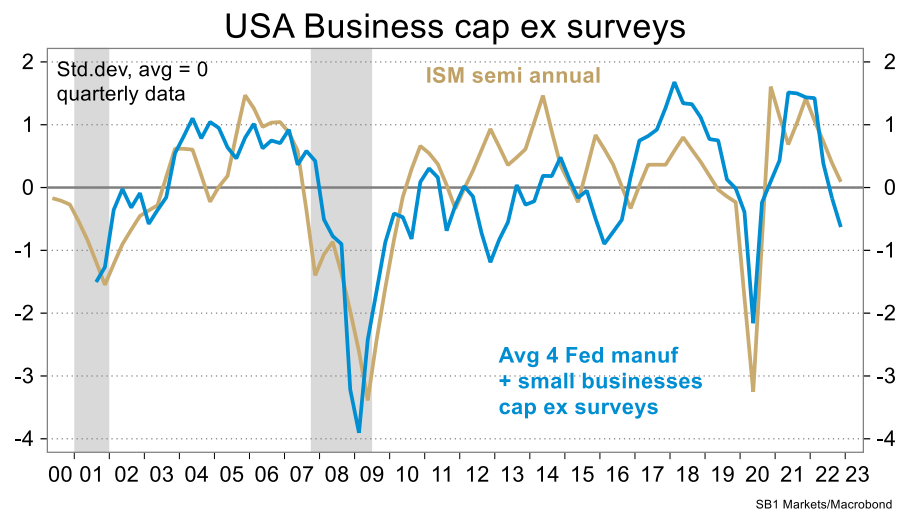
- However, business are not that forward looking in their estimates – they were very optimistic (and much more than now) until the recession hit in December 2007

# Other investment surveys mixed but in sum up recently – though not strong

Taken together with the ISM survey, a 2% actual growth rate is indicated (down from a 7% signal 6 months ago)



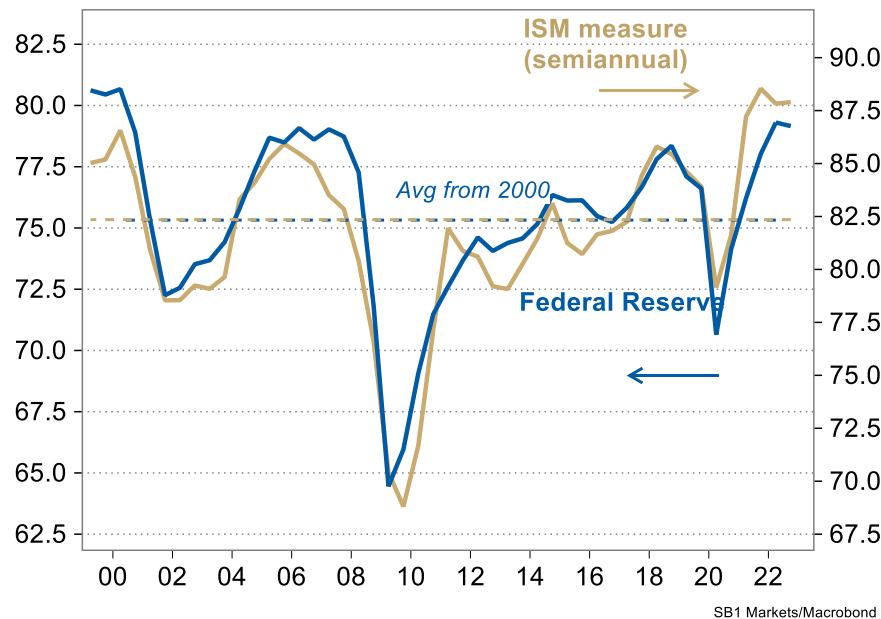
- Both **NY and Phil Fed surveys** reported stronger investments plans in December – a very positive signal



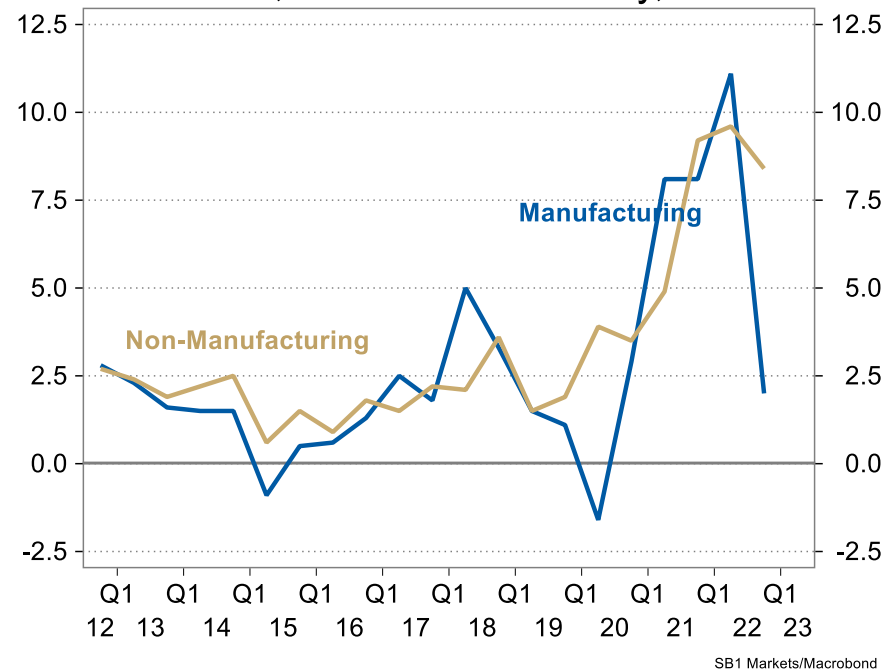
# ISM semi-annual survey: Capacity utilisation in manufacturing flat in H2

The manufacturing sector expects price inflation to slow to a normal level. But services expect still very high inflation!

USA Capacity utilisation  
Manufacturing - two measures



USA ISM, Semiannual Survey, Prices

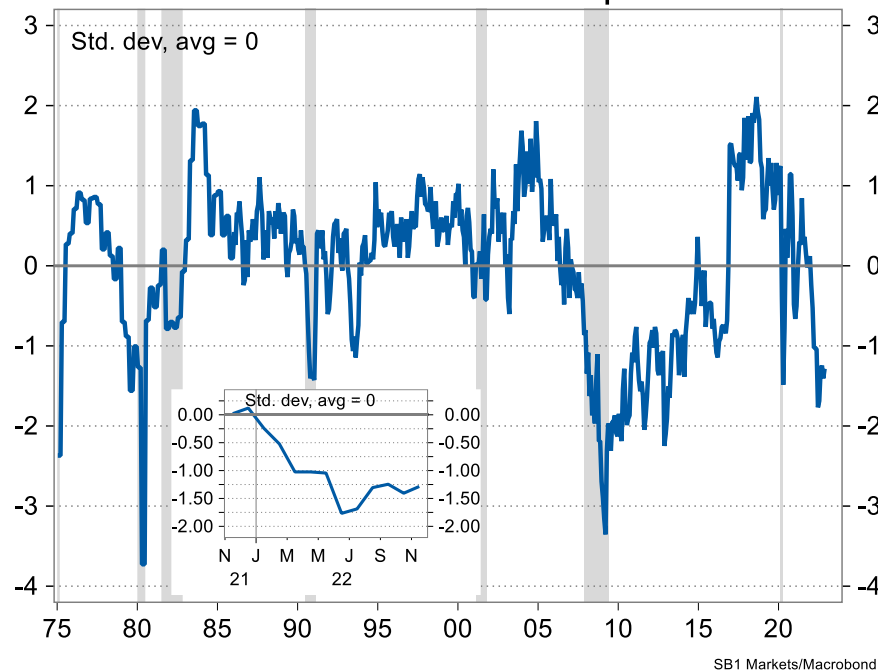


- In the **ISM's semi-annual survey**, manufacturing companies reported a utilisation at 88% – 6 pp above average
- The **Federal Reserve's** estimates a 79% utilisation (so far in H2), 3 pp above average. The gap between the two measures narrowed in H1
- In the ISM semi-annual survey, companies in both manufacturing and non-manufacturing are reporting the highest expected prices increases ever – however with data just back to 2012. But it surely illustrates the price risk on the upside

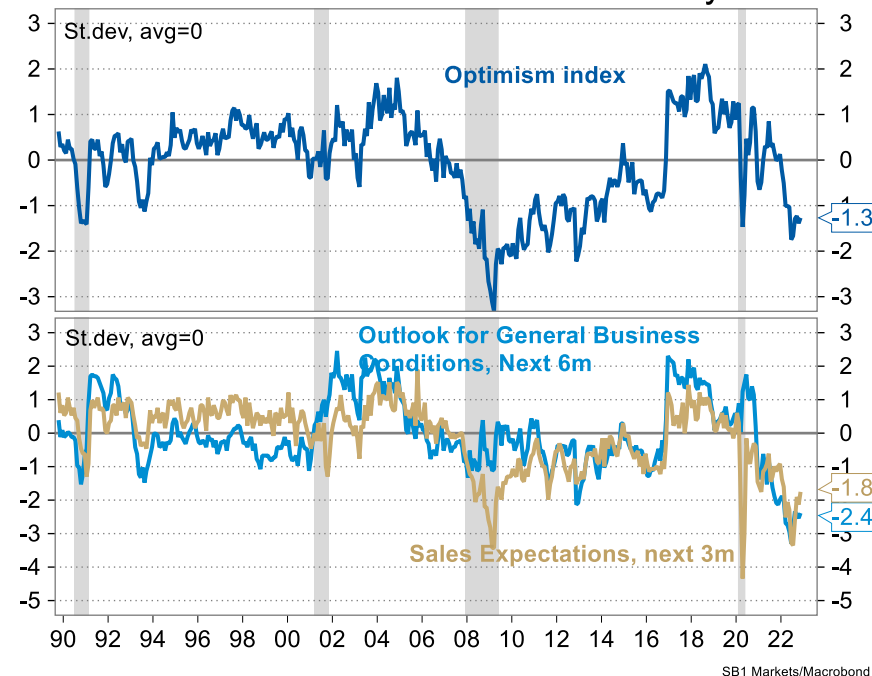
# SME optimism marginally up in November, level still weak

... But now more in line with other business surveys

## USA Small businesses optimism



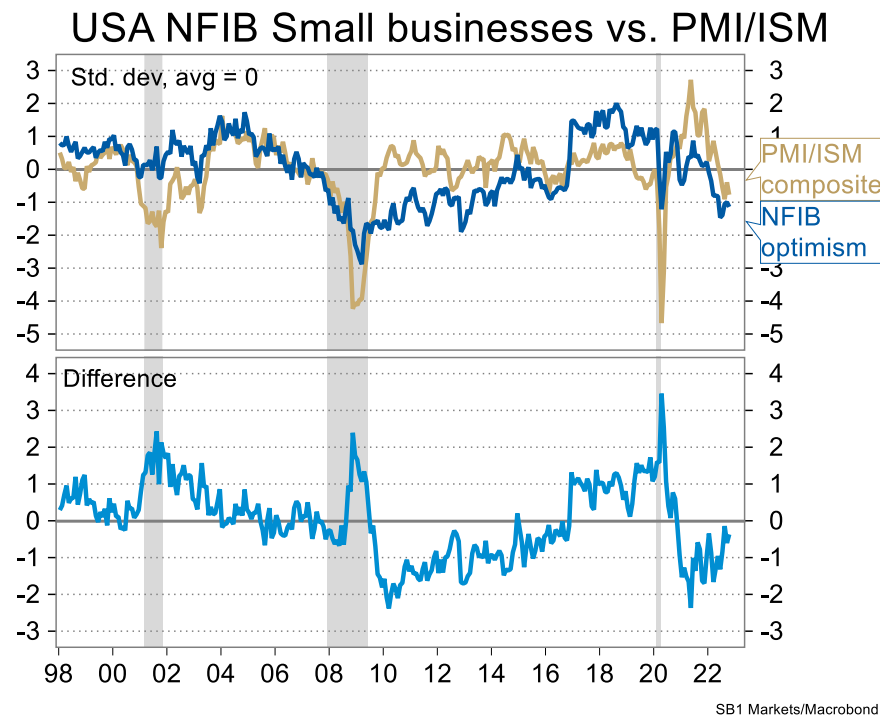
## USA NFIB small business survey



- The **NFIB optimism index** has been rather stable at a low level recent months. The level is 1.4 st.dev below average. **The outlook for the next 6 months** also climbed marginally, and is at a very low level, 2.4 st dev. **Sales expectations** also climbed marginally, to -1.8 st.dev below par
- **Inflation, lack of qualified labour and labour costs** are still the main worries for the SMEs. However, some more companies report that **competition** is a worry, but the share is still very low. The share of companies that **plans to lift prices** rose again in October, but less than the decline in September. The share at 34% is well above the average at 21%
- **Investment plans** were revised down, like in most other surveys we follow. **Hiring plans** were revised down but are still well above normal levels. Companies still report they are not able to **fill their vacancies**, and a close to a record share of SMEs report they plan to **lift compensation further**. So, it ain't over yet

# Large and small businesses are now better in sync

... As it turns out that the SME's were closer to the ball

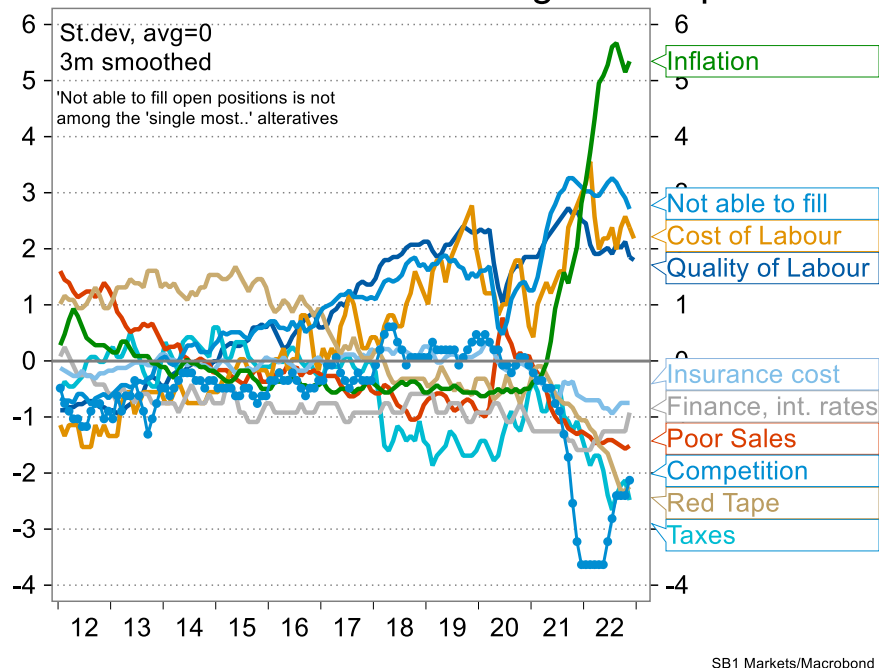




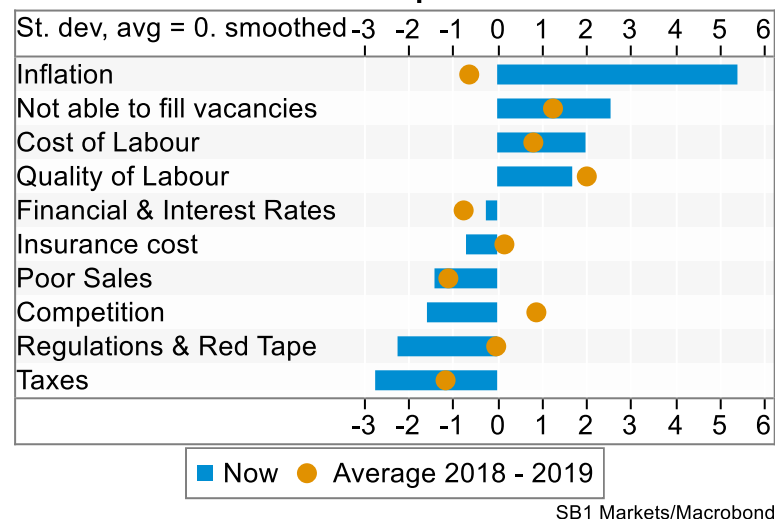
# Inflation is the biggest problem (even if companies are 'selling' inflation)

Besides inflation, lack/quality/cost of labour are still the big challenges – but a tad down from the peak

USA Small businesses Single most problem



Small businesses (NFIB)  
What's the problem?

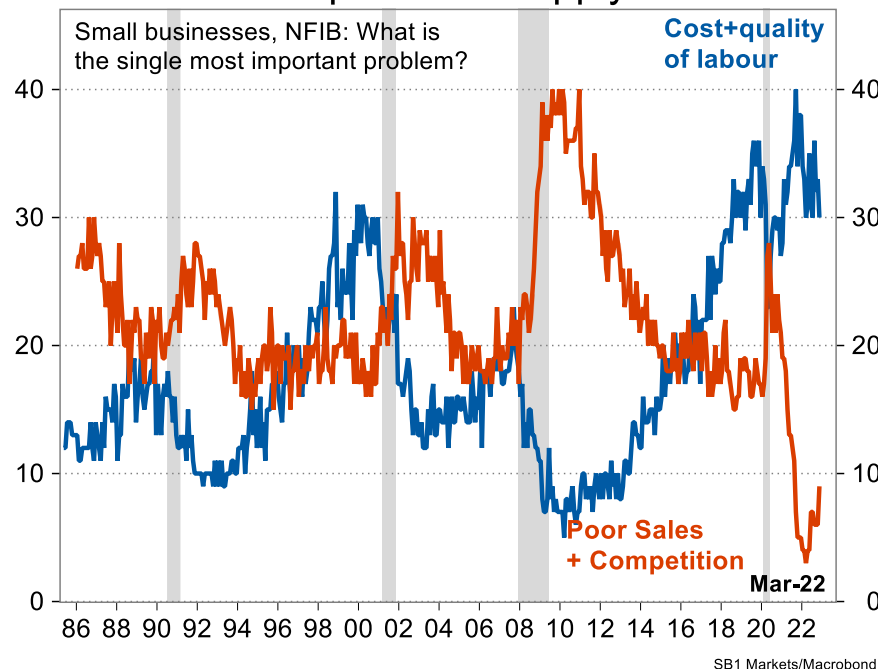


- Companies still report they are constrained from the **supply side**, not from the **demand side**

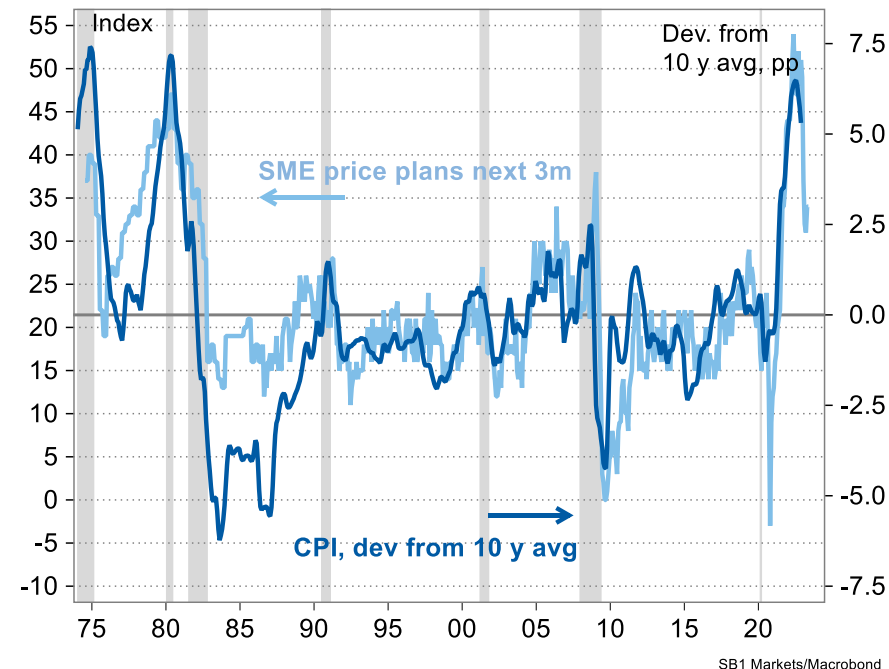
# Sales/compensations are not the problem, lack of labour still is

Still rather aggressive price increase plans were unchanged in November, signalling still higher inflation than normal

## USA What's the problem: Supply or Demand?



## USA Small Businesses Price Plans



- The 'gap' between supply and demand concerns is still very large, but it is now heading down
- Very few companies report **poor sales** as a problem, somewhat more complain about **competition**. The total share is up from March, but has stabilised recent months
  - **Cost & quality of labour** are stated as the most important problem for a much higher share of companies than normal. However, the share has fallen somewhat from the peak. Still, compensation plans were revised up in October
- The share of **companies that plan to lift prices** has fallen sharply from the peak was unch at 35% in Nov%, way above the average at 21%, and inflation at 2 – 2.5% above the past 10 y average is still signalled
- **We have no doubt:** Over the coming months and quarters, the poor sales/competition (the red line, chart to the left) will climb sharply – and the blue line will come back down to Mother Earth as financial conditions tightens, with or without more help from the Federal Reserve. It's normally labelled as a recession, as soon as the red line crosses the 20-line

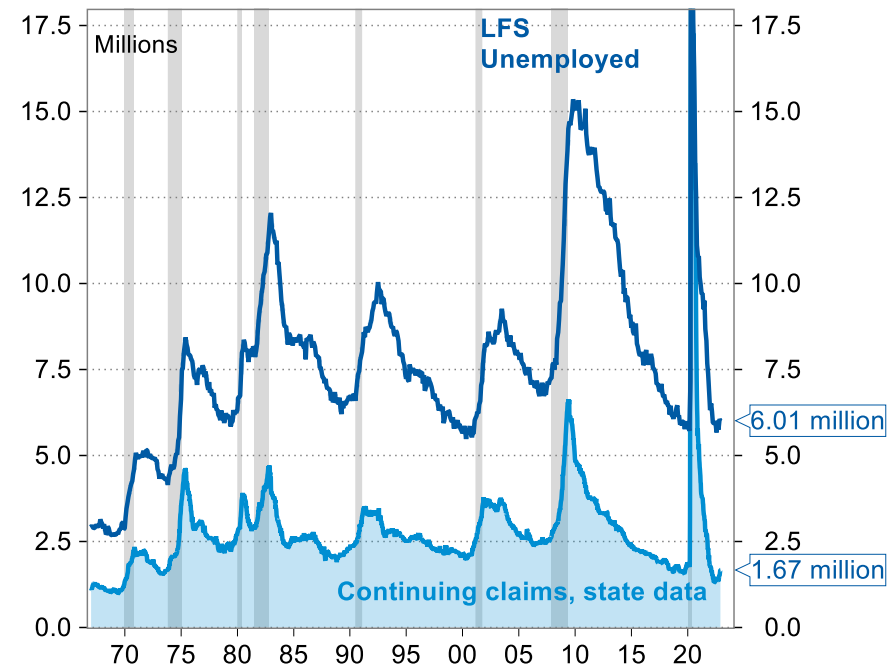
# The labour market is still very tight!

New jobless claims down to 211', 29' below market expectations

## USA New jobless claims



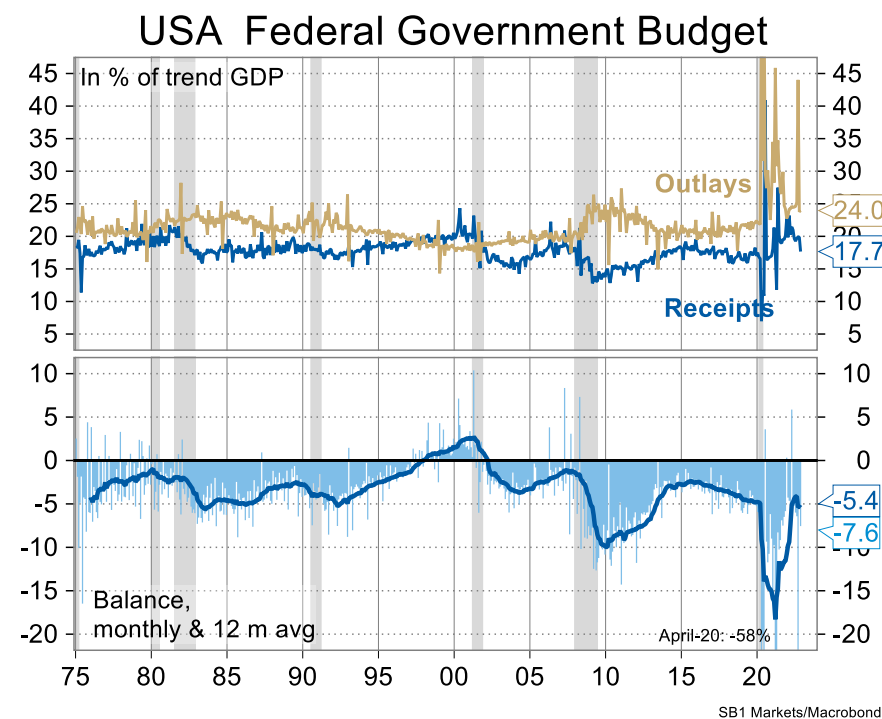
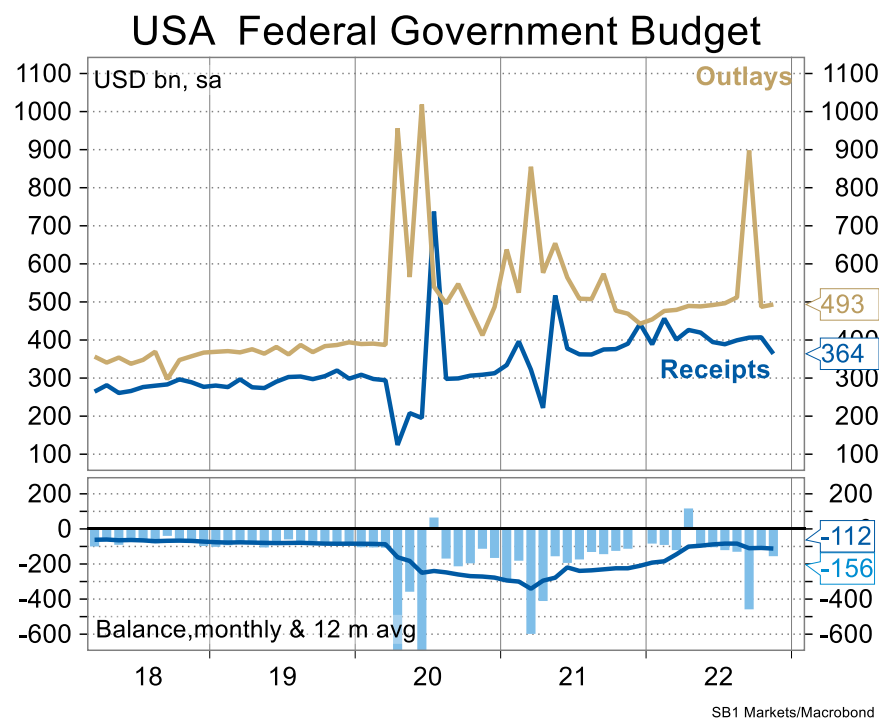
## USA Jobless claims



- **New jobless claims** decreased by 20' to 211 last week
- **Continuing claims** rose by 1' to 1,671' (prev. week revised down by 1') in week 47. The trend is slightly upwards but the level remains very low
- Both still indicate a **tight labour market** – a labour market that is far more resilient than we and probably also the Fed had envisioned, given higher interest rates, record-low consumer sentiment, and falling orders (according to surveys)

# The budget did not reach balance – and now it is too late?

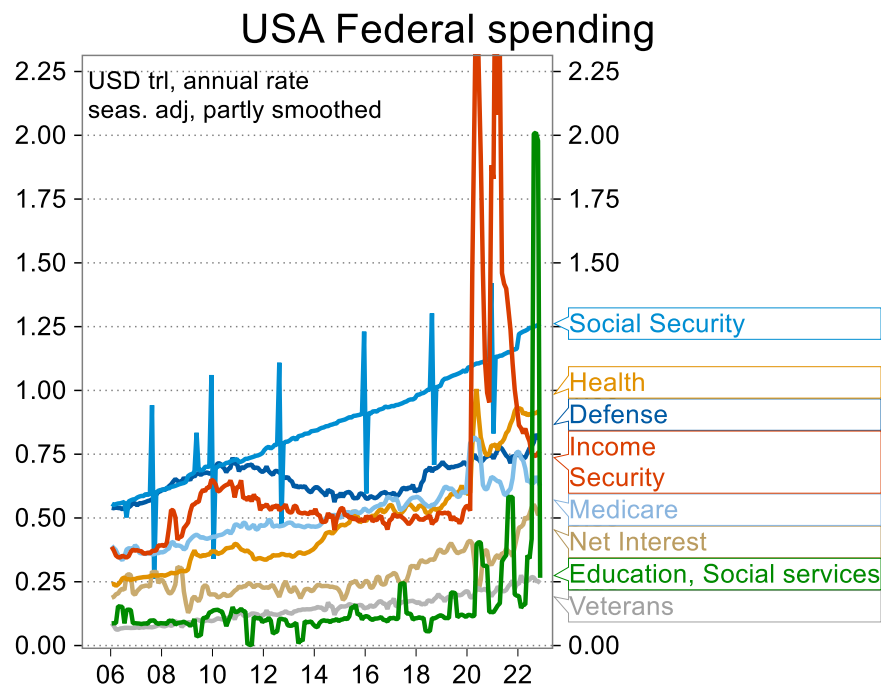
A slowing economy will not strengthen the budget – and the deficit is set to widen again



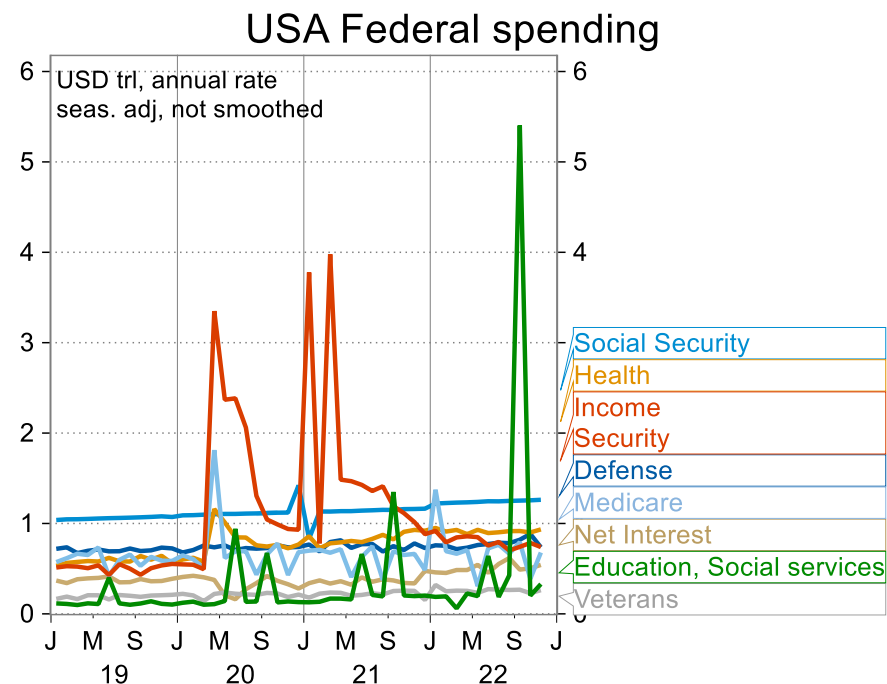
- **Federal expenses** were close to unch. in November. The trend is clearly upwards. Spending equals 24% of GDP, up from 21% – 22% before the pandemic. (The spike in spending in September was the student debt relief, which is still disputed in courts)
- **Federal receipts** have trended weaker through 2022, even if growth in nominal GDP has been strong. Receipts equals 17.7% of GDP, above the 17% level ahead of the pandemic – but below the level during the pandemic
- The actual **deficit** was USD 249 bn in Nov, as expected but just USD 156 bn, seasonally adjusted, equalling 7.6% of GDP. Over the past 12 months the Federal deficit has equalled 5.4% of GDP. Before corona, the federal deficit also was close to 5%. In a booming economy, the budget should of course have been in surplus, now even more than before the pandemic

# Spending has normalised, post student debt relief lifted spending in Sept

Net interest rate payment have increased by almost 50%, equalling 1.5% of GDP. And more to come!



SB1 Markets/Macrobond



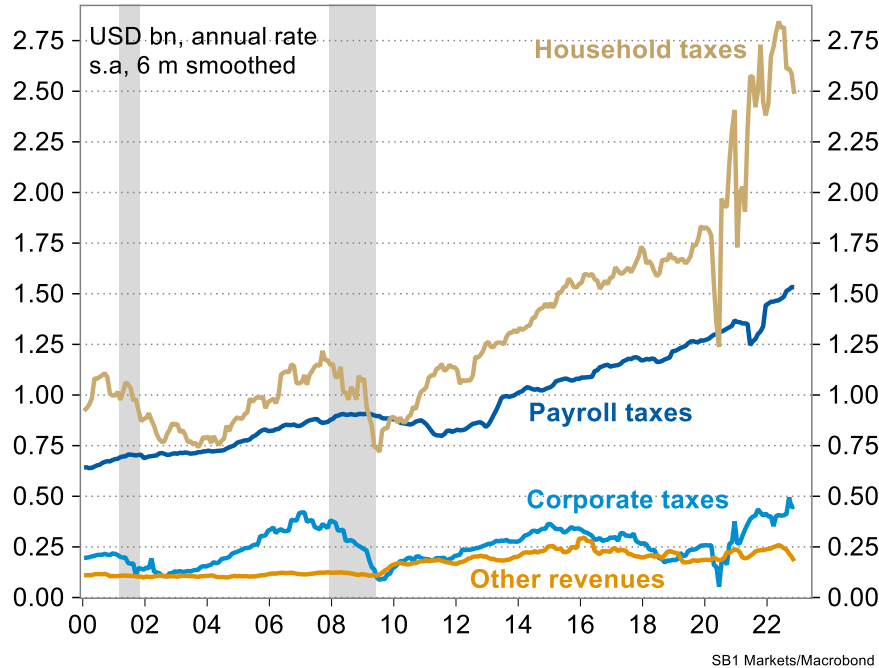
SB1 Markets/Macrobond

- Most components are trending up
- Interest rate payments will increase substantially from the present level, even if bond yields do not climb further from here – since new (and refinanced) debt have to pay current yields, which are higher than average yield on maturing bonds
- Both income security and 'other spending' are well above the pre-pandemic level. Health spending is sharply up too

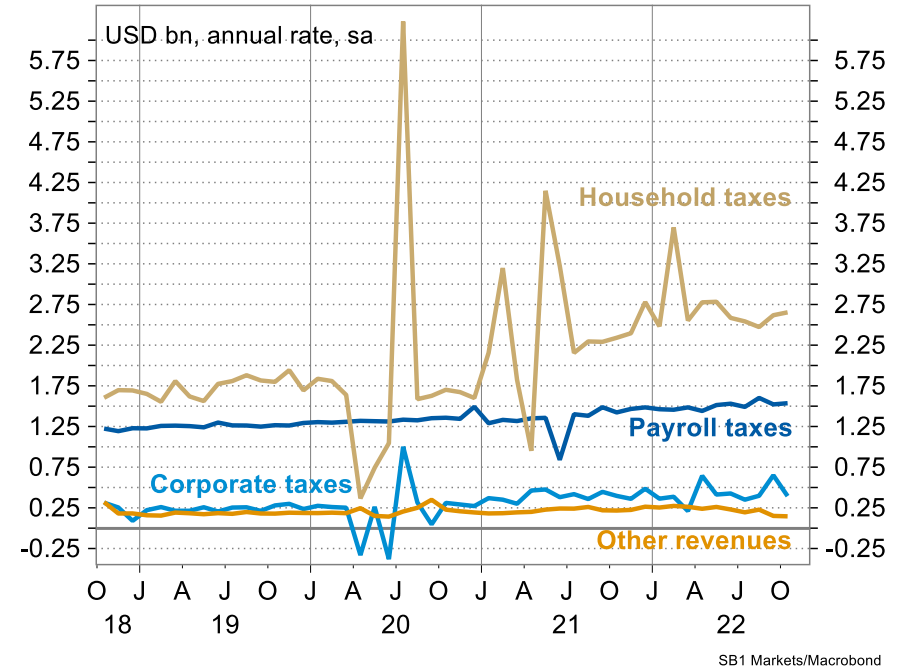
# Tax revenues are remarkably higher than before the pandemic

Especially taxes paid by households (+60%) and corporates (50%+)!

## USA Federal Revenues



## USA Federal Taxes

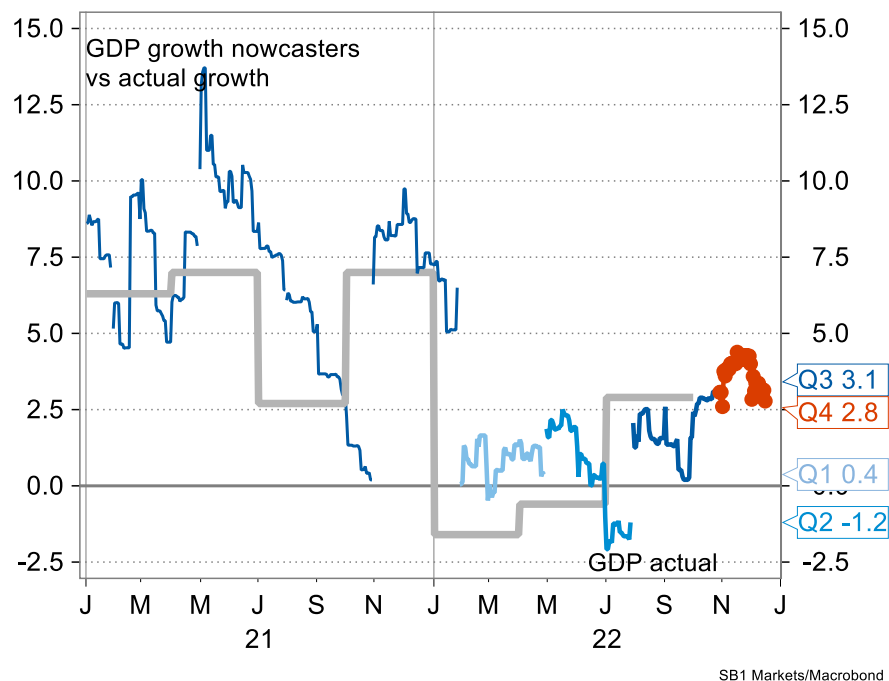


- And taxes have increased more than what could be explained by the surge in nominal GDP (due to the surge in inflation)

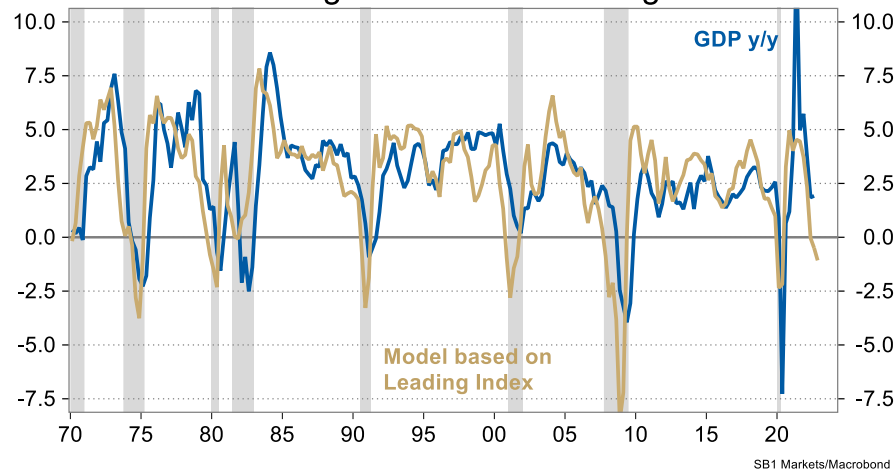
# Atlanta Fed revised it's Q4 GDP forecast down by 0.4 pp to 2.8%

However, it is still the most upbeat nowcast available

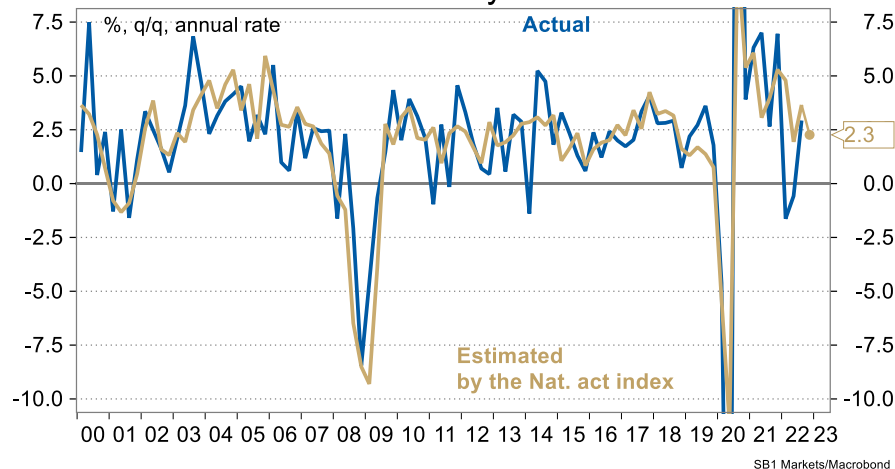
## USA Atlanta Fed GDP nowcasts



## US Leading Indicators vs GDP growth

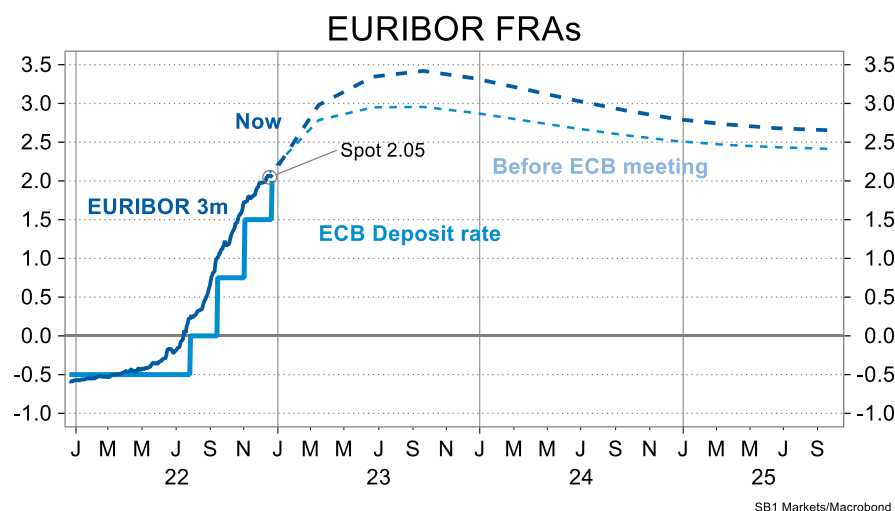
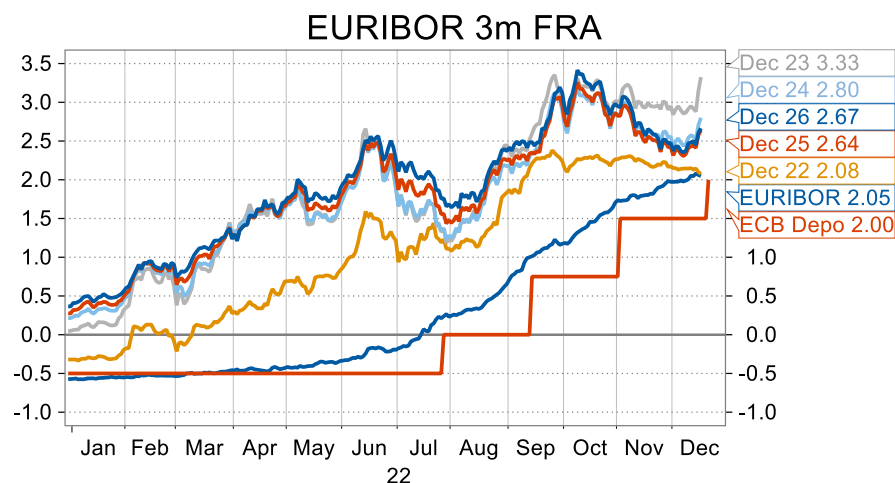


## USA National activity index vs GDP



# ECB hiked by 50 bps, and will raise rates at a 50-bp pace for a period of time

The Bank will also start QT in March, reducing the balance sheet by EUR 15 bn per month. Market rates straight up



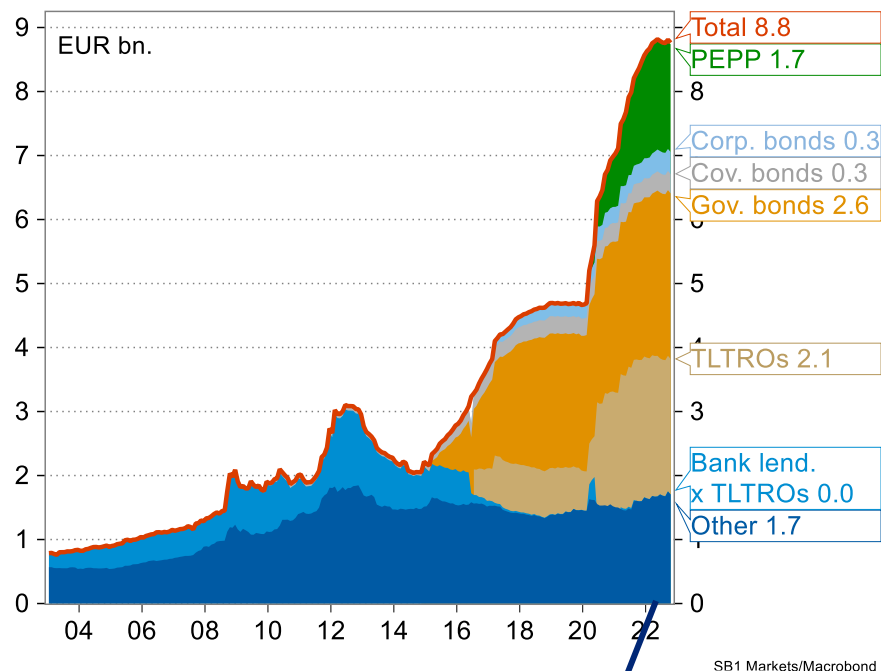
- **The 50 bps hike** was expected, and almost fully priced into the market, the 3 m EURIBOR rate was virtually unch., but longer dated FRA rose more on the more hawkish message. The repo rate (which is close to the money market rate) was then lifted to 2.50%, while the deposit rate was lifted to 2.00%
- The bank stated that interest rates will have to rise significantly at a steady pace to reach levels that are sufficiently restrictive to bring inflation back to 2%. President Lagarde later clarified that this means raising rates in 50 bp increments “for some time”. Rates will be higher, and stay higher for longer...
- **The inflation f'cast was revised further up:** by 0.3 pp to 8.4% in 2022, by 0.8 pp to 6.3 in 2024, before inflation is expected to decline to 3.4% in 2024 (previous f'cast was 2.3%) and 2.3% in 2025
- The bank revised down its **GDP growth projections** for next year significantly to 0.5% from 0.9% in the September report (still well above consensus at -0.1%). GDP growth for 2022 was revised up by 0.3 pp to 3.4%. 2024 projections remained unch. at 1.9%. The bank projects a recession next year but expects it to be “short and shallow”
- Asked about whether the ECB is at all following the Fed, Lagarde's answer was clear: “Anybody who thinks that this is a pivot for the ECB is wrong. We're not pivoting, we're not wavering. We are showing determination and resilience in continuing a journey where we have, if you compare – comparisons are odious, but if you were to compare with the Fed – we have more ground to cover. We have longer to go ... This is not a pivot. We're not slowing down. We're in for the long game.”
- The **FRA curve** is now up 45 bps vs the pre-meeting level, and is approaching 3.5% (and well above the NOK curve), while the German 2y and 5y gov't yields rose by 22-24 bps and the Italian 2y yield was up by 30 bps after the meeting



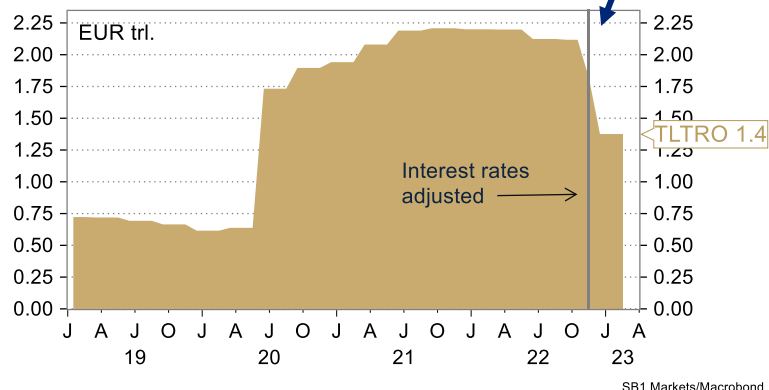
# QT is here: The ground has already been laid for tighter financial conditions

...and the Bank will reduce the balance of the Asset Purchase Programme assets starting in March

## ECB Balance



## ECB Balance

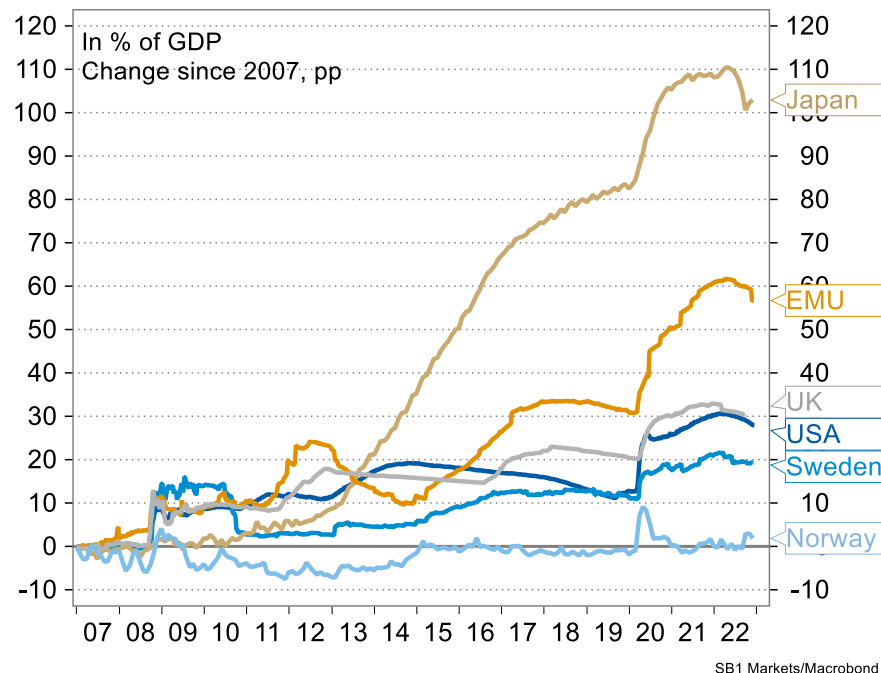


- According to the ECB's statement from the December meeting, the APP portfolio will decline at a measured and predictable pace, starting in March next year
  - Not all proceeds from principal payments will be reinvested, so that the APP portfolio will decline by EUR 15 bn per month until the end of Q2 – but the Bank also stated that the Governing council will regularly assess the pace of the reduction to ensure that it is consistent with the overall monetary policy. More details will be revealed at the Feb meeting
  - The bank has already taken steps to tighten financial conditions, as it revised its **TLTRO programme** in the October meeting, with effect from November. Prior to that, banks were able to pledge collateral and borrow through the TLTRO programme at the deposit facility rate - 50 bps (but not higher than -1%). However, starting November 23<sup>rd</sup>, the new interest rate will be the average deposit facility rate for the remainder of the period, effectively making banks pay instead of paying them
- The ECB also introduced 3 new early repayment options in November 2022, January and February 2023
- These policy changes has reduced the balance of the TLTROs to EUR 1.4 trl from EUR 2.1 trl at the announcement. The reduction of the APP is a much bigger operation though – the balance as of November was 3.4 trillion

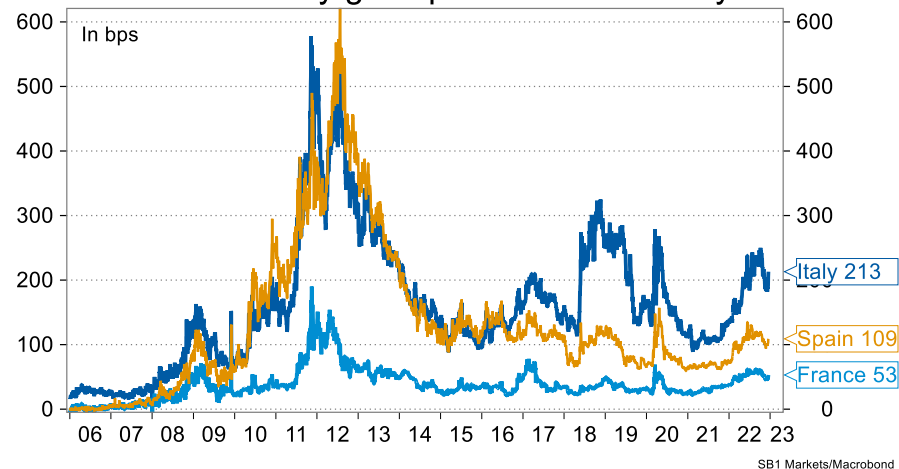
# The Italian bond spread widened but not in a dramatic way

The ECBs QT announcement was more precise/hawkish than expected, and intra EMU spreads widened somewhat

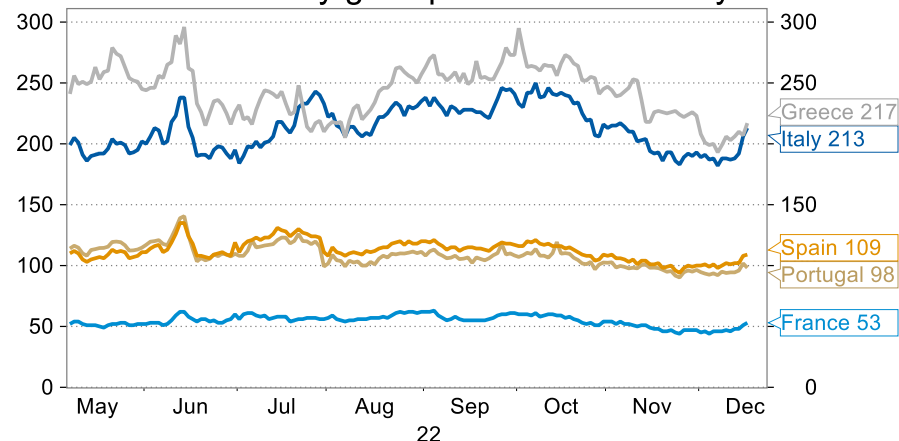
## Central banks' balances



## EMU 10 y gov spreads vs Germany

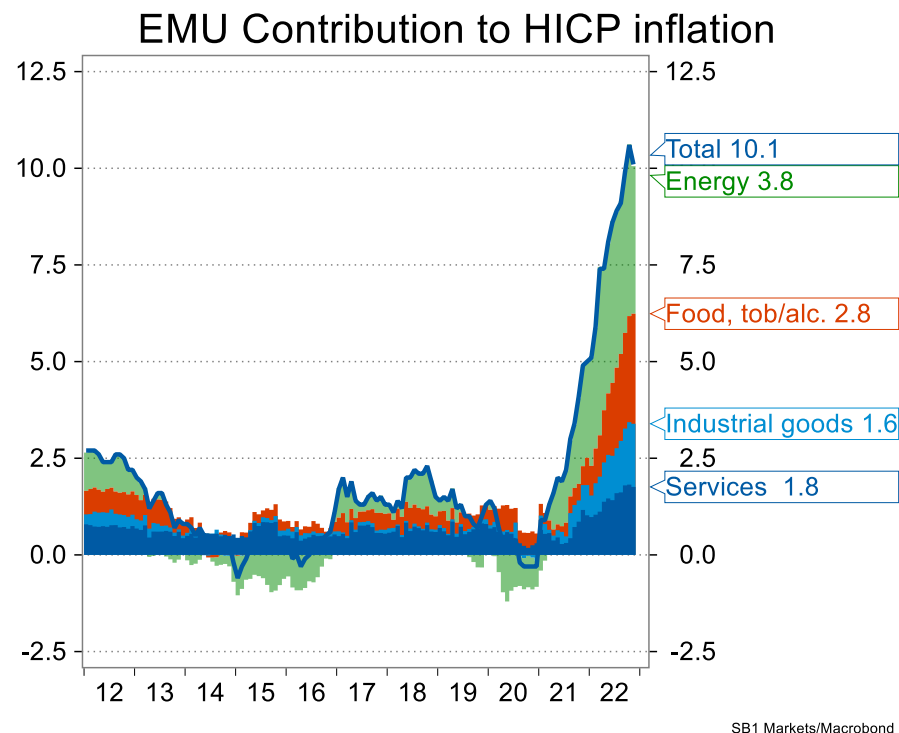
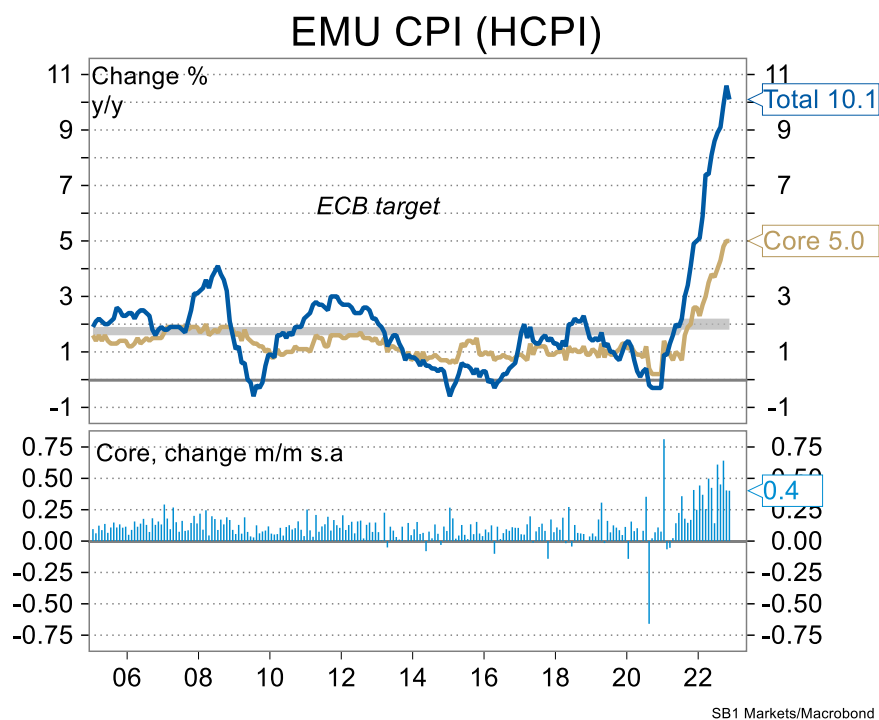


## EMU 10 y gov spreads vs Germany



# Final data shows headline inflation slightly higher than preliminary estimate

Headline inflation revised up 0.1 p to 10.1% y/y, core unch. at 5.0%

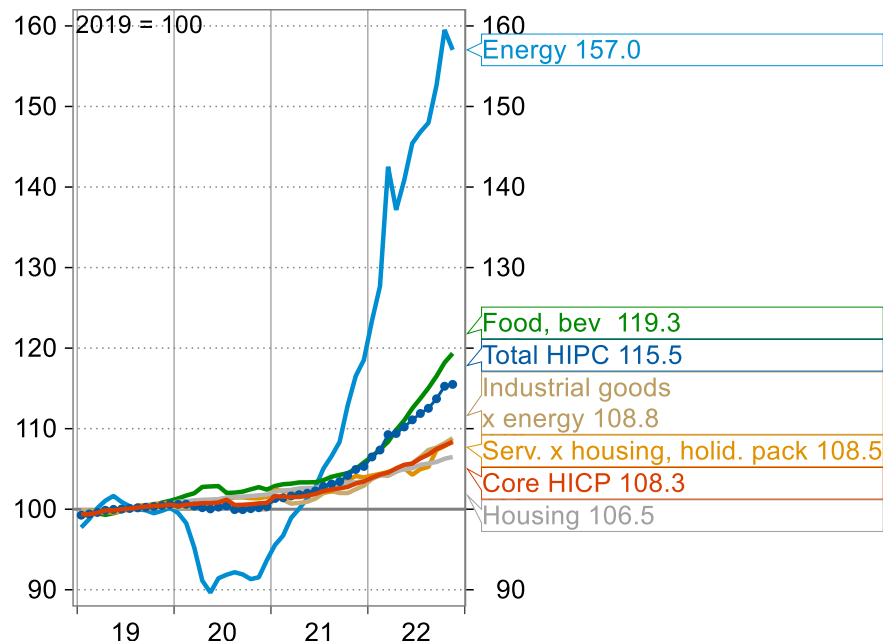


- The **total HICP** fell 0.1% m/m in Nov (seas adj), and is up 10.1% y/y, which is down 0.5 pp from October and 0.1 pp above the preliminary print
  - Energy prices were down 1.6% m/m, and they are up 35% y/y (down from 41% a month ago), but still contribute 3.8 pp to the headline rate. Food prices rose 1% m/m - and are up 14% y/y, contributing 2.8 pp to overall CPI growth
- The **core** rose 0.4% m/m. Both goods and services contributed. The annual rate was unchanged from October and from the initial estimate at 5%, still the highest ever...
- The **ECB** hiked rates by 50 bps to 2.0% at their last meeting and reiterated that their job is to control inflation. In addition, the bank's statement with regards to further hikes was more hawkish, indicating several 50-bp hikes to come. A lower inflation print is certainly welcome by the ECB, but the bank clearly stated that a pivot is even close. It is adamant to get inflation under control and will tighten conditions until the target is in range

# Food prices are climbing 1% m/m, up 14% y/y

But energy prices fell 1.6% in November

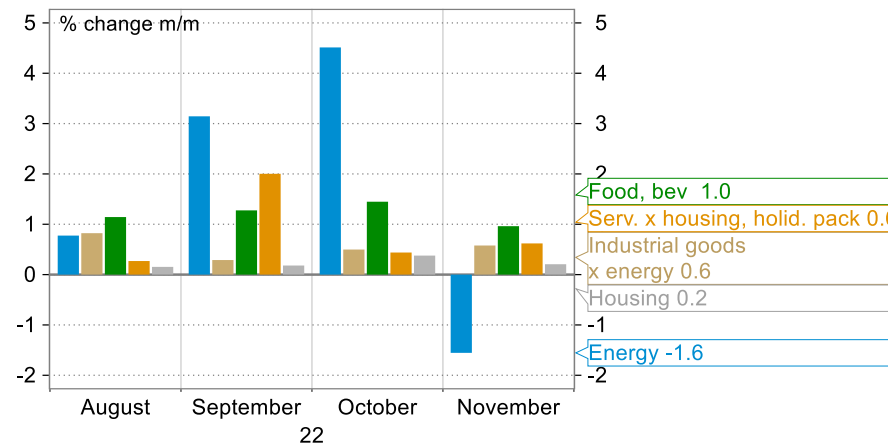
EMU HICP Goods & services



SB1 Markets/Macrobond

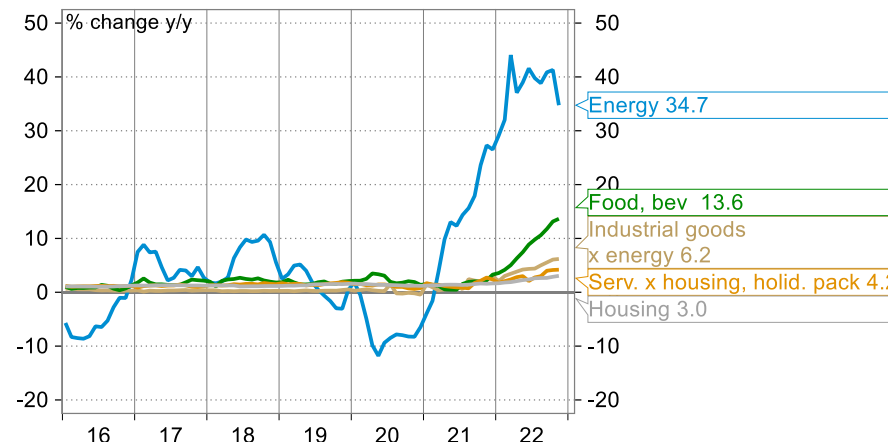
- But the peak is behind us, check two pages forward

EMU HICP Goods & services



SB1 Markets/Macrobond

EMU HICP Goods & services

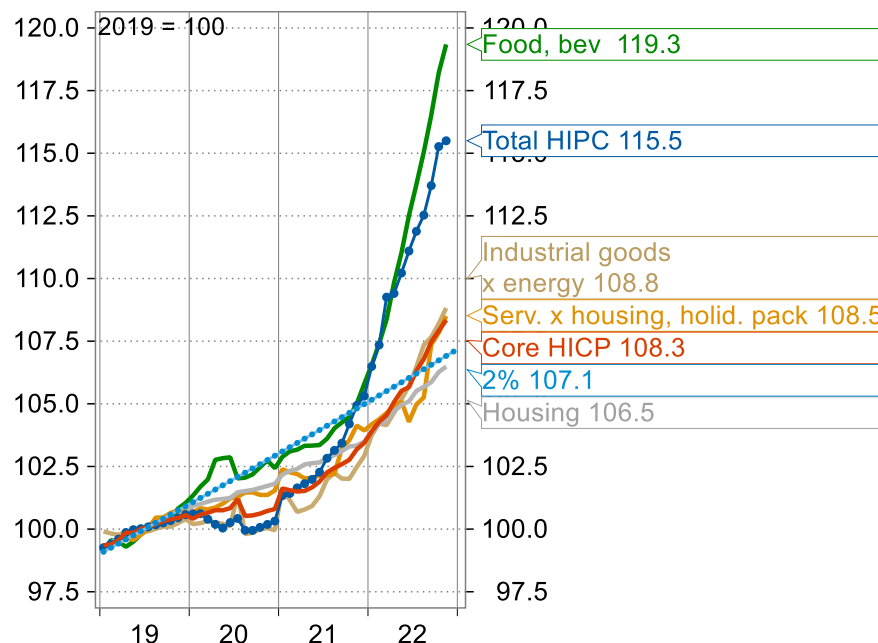


SB1 Markets/Macrobond

# And prices ex energy and food are increasing fast too

Industrial goods x energy at 6.2% y/y, and services ex housing 4.2%

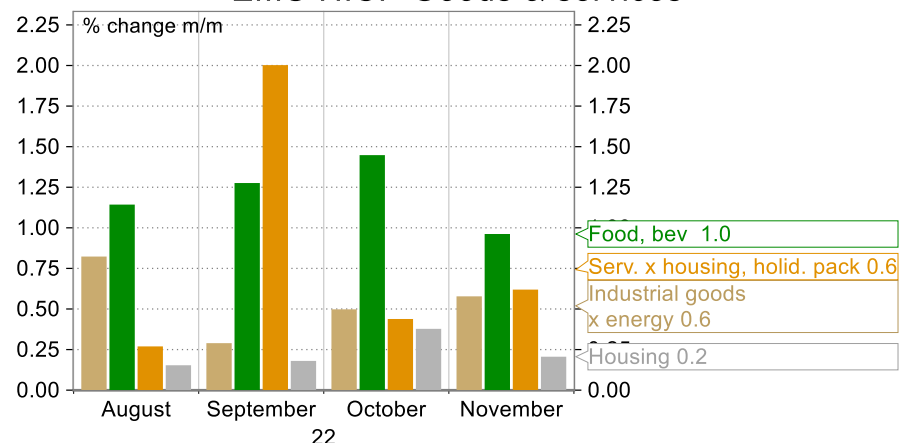
## EMU HICP Goods & services



SB1 Markets/Macrobond

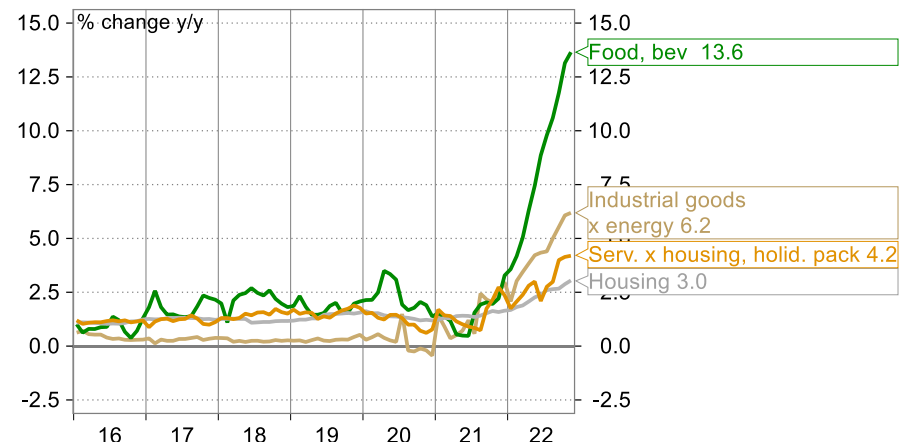
- **Industrial goods** prices increased by 0.6% in Nov, and are up 6.2% y/y. Still, these prices are up 'just' at a 2.9% path since 2019
- **Service prices** (ex housing, holiday travel) rose 0.6% in Nov, and these prices are now up at a 2.8% path vs the 2019 level too. Transport services, hotels/restaurants, education, and several other sectors contribute to the high service sector inflation

## EMU HICP Goods & services



SB1 Markets/Macrobond

## EMU HICP Goods & services

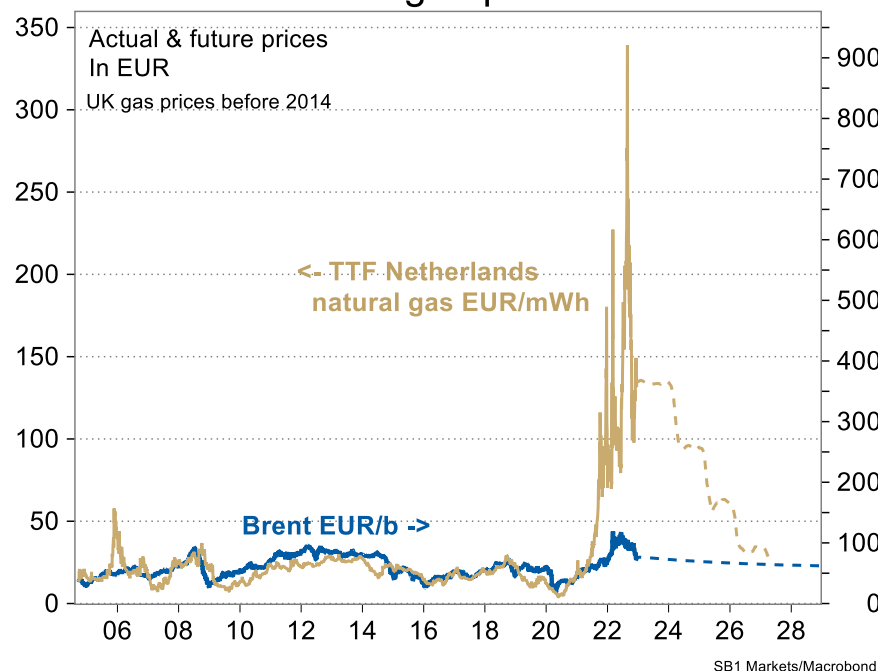


SB1 Markets/Macrobond

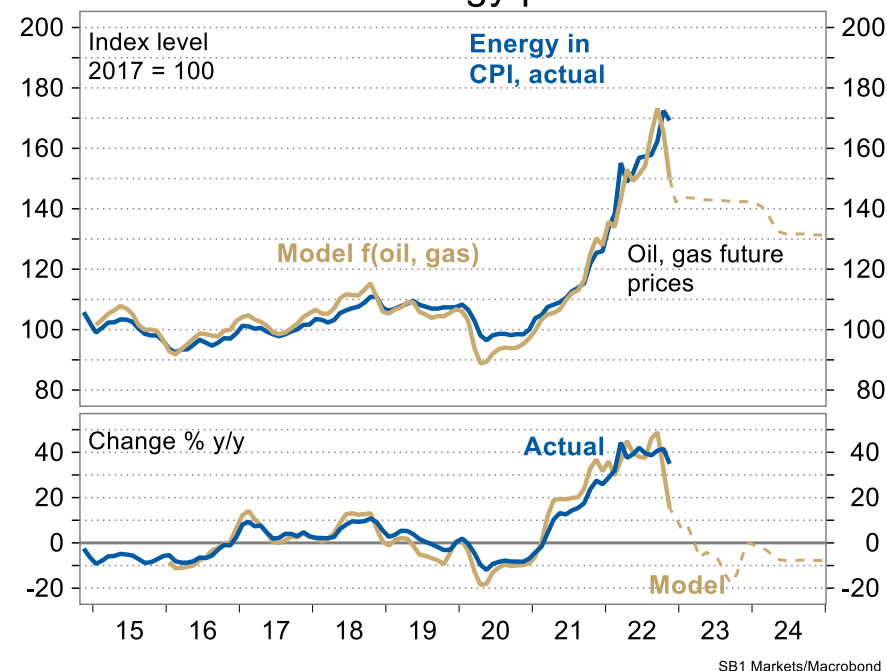
# Gas, oil prices have lifted 'energy CPI inflation' up 35% but....

... the peak is very likely behind us, given the retreat in oil and even more gas prices recent months

## Oil & gas prices



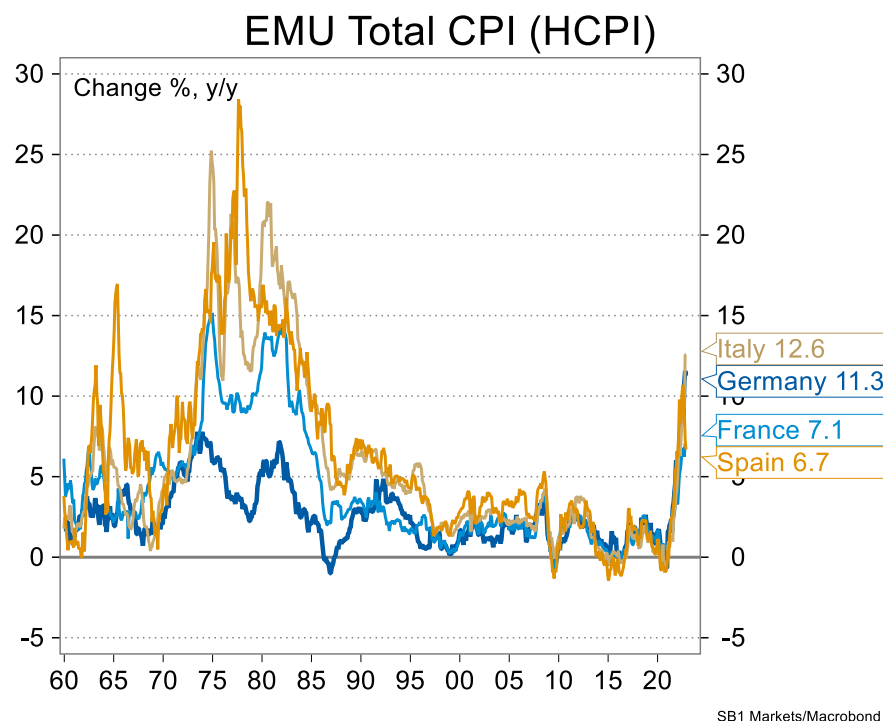
## EMU Energy prices



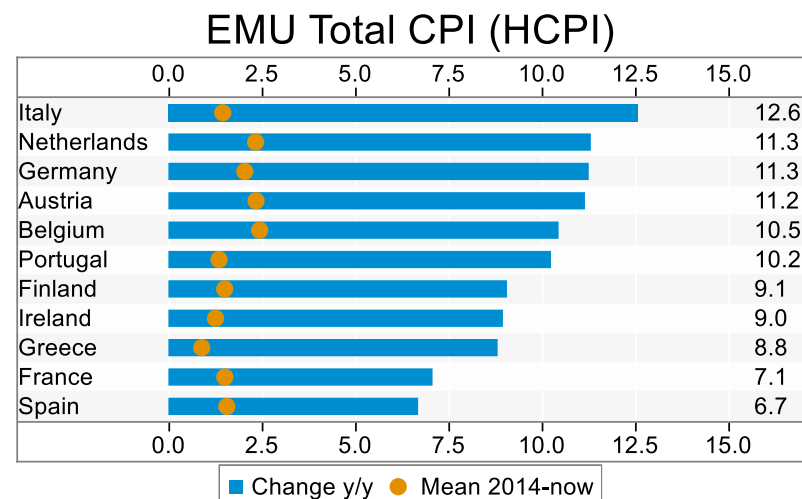
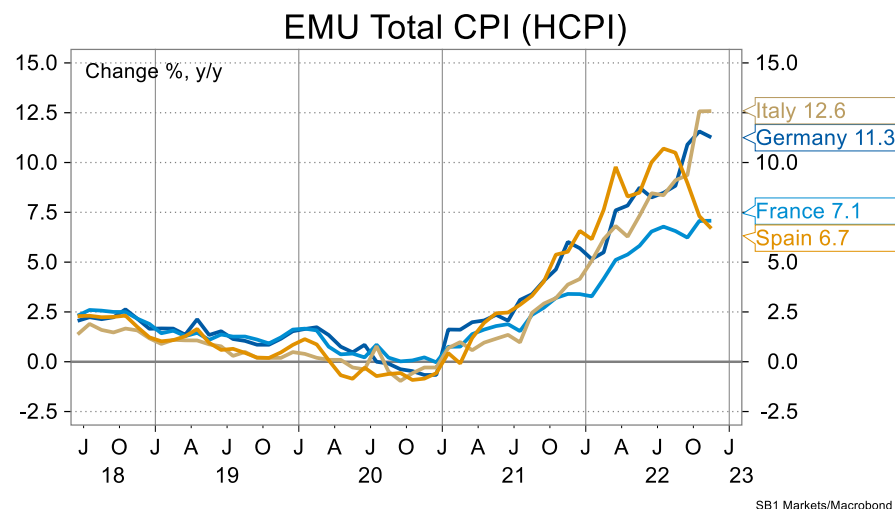
- Gas prices are well down from the peak – even if prices have increased again last weeks (before falling again recent days)
- Early next year, energy prices will probably be down, measured y/y – even after the current surge.  
If the market got it right this time ...

# Inflation is high across the union (and higher than in Norway everywhere)

But the inflation in France and Spain are down from the peak



- In fact, the Spanish CPI (HICP) fell m/m, as it did in October as well
  - In Spain and France lower energy prices have lower/stabilised CPI inflation
- In Germany, Total CPI was flat m/m,, bringing the y/y rate to 11.3%

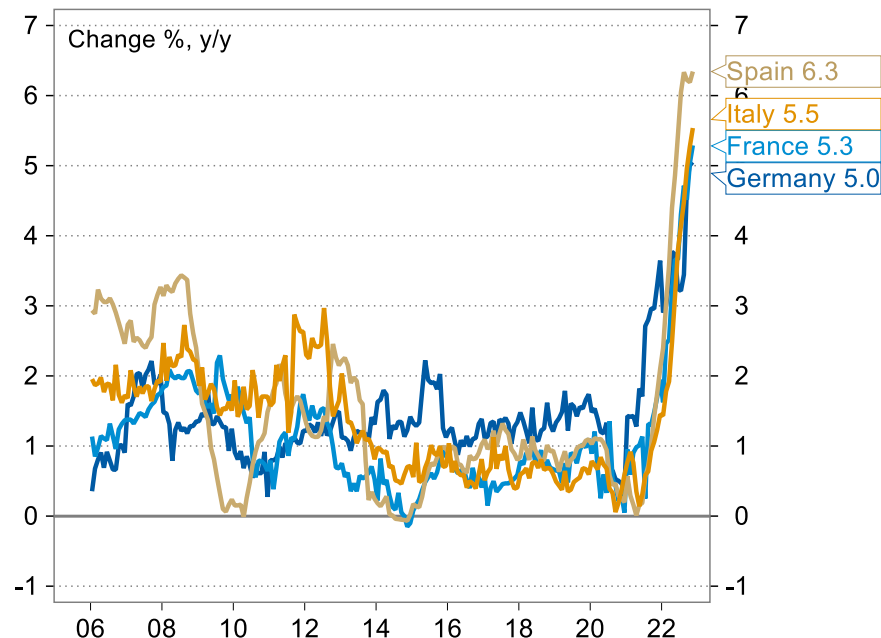


SB1 Markets/Macrobond

# Core inflation is, of course, above the 2% target everywhere as well

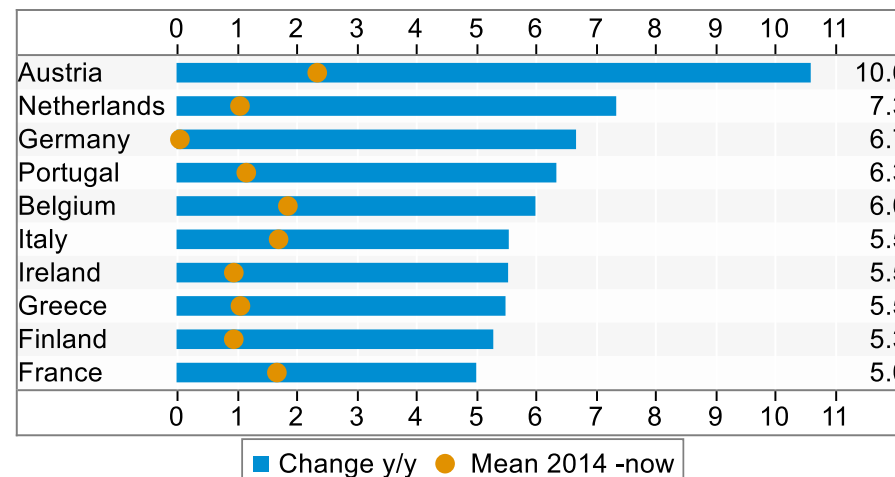
...and the ECB is raising rates and rolling out QT in response

EMU Core CPI



SB1 Markets/Macrobond

EMU Core CPI



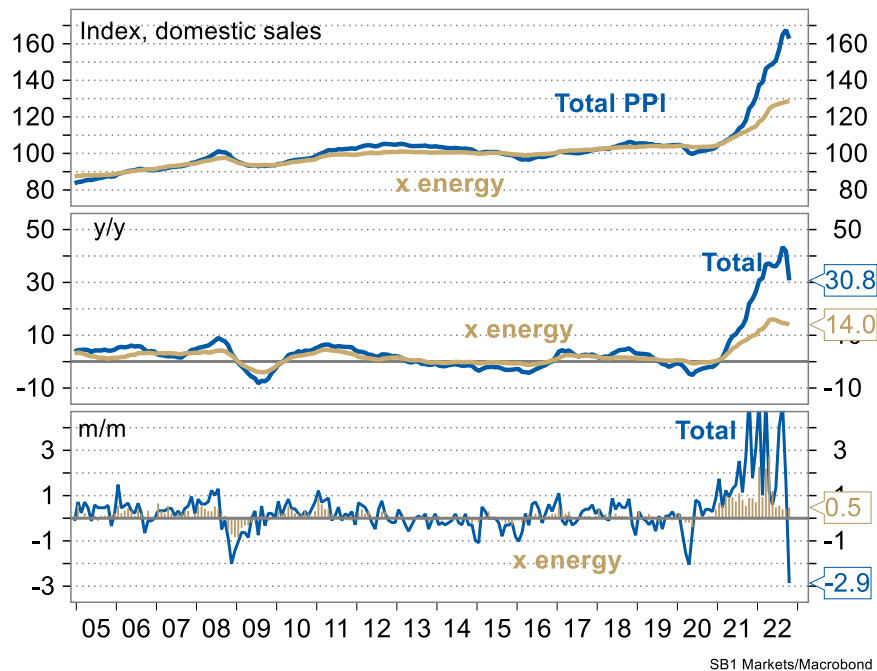
SB1 Markets/Macrobond



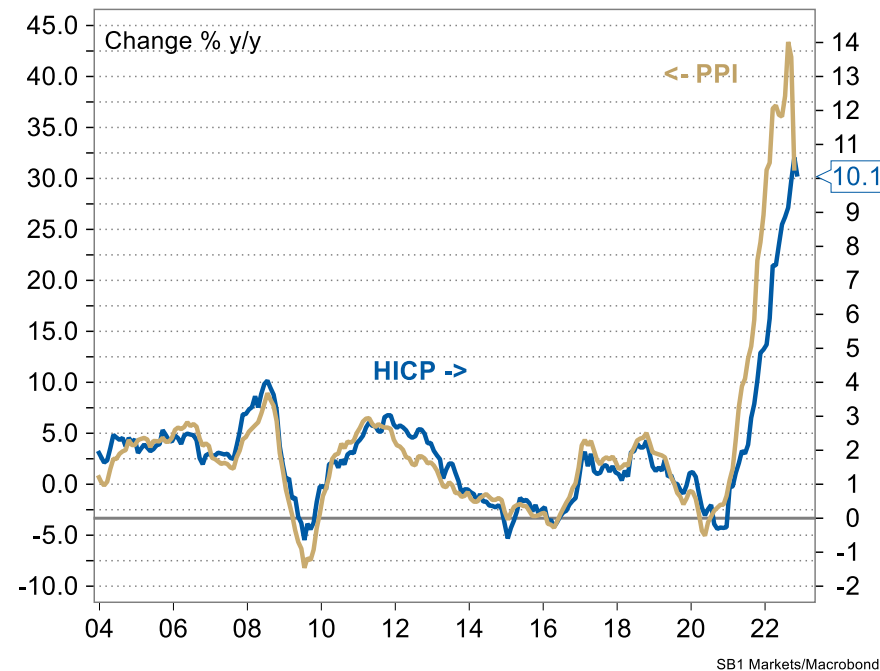
# The PPI 'collapsed' in October

The total PPI fell 2.9% due to lower energy prices. Still, prices are up 31% y/y. Core up 0.5% m/m, 14% y/y

EMU PPI



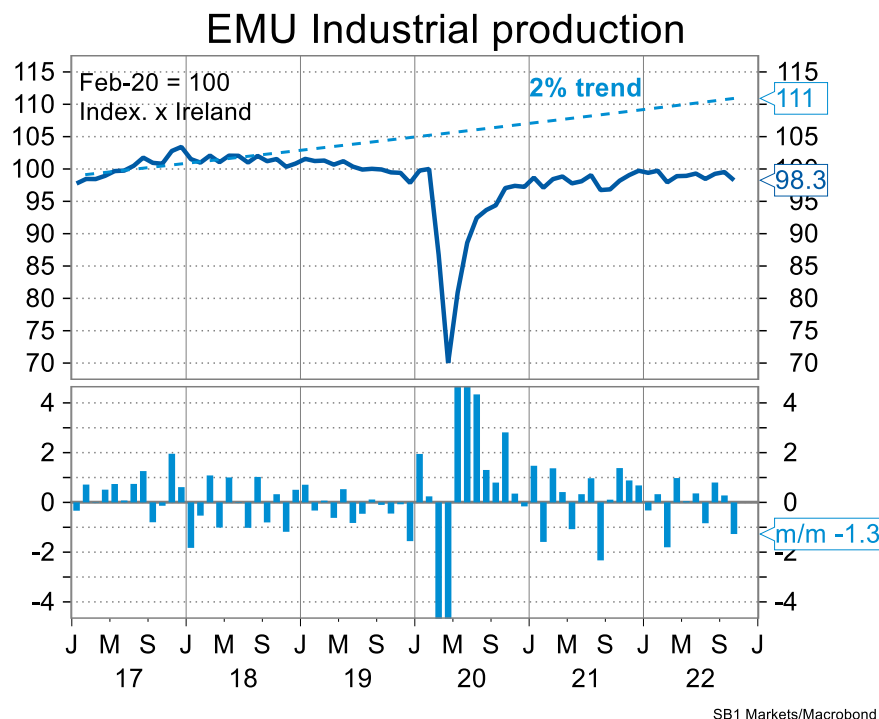
EMU PPI vs CPI



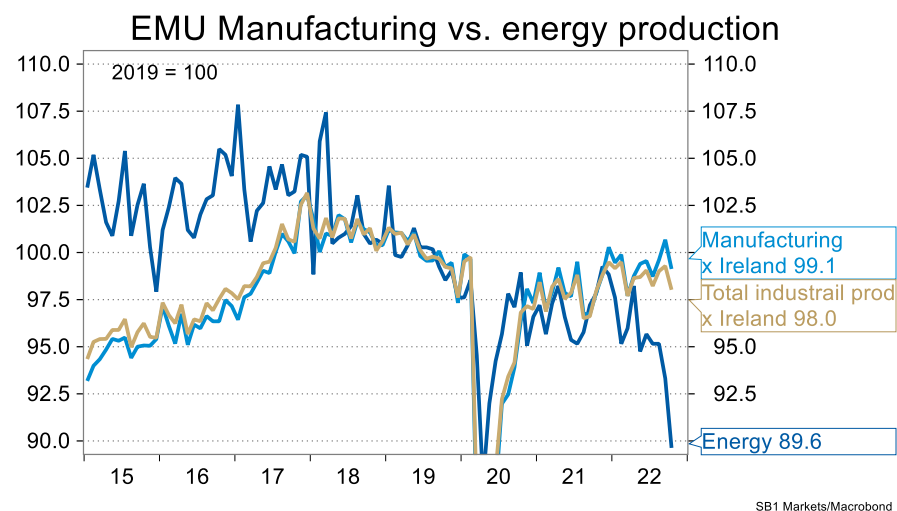
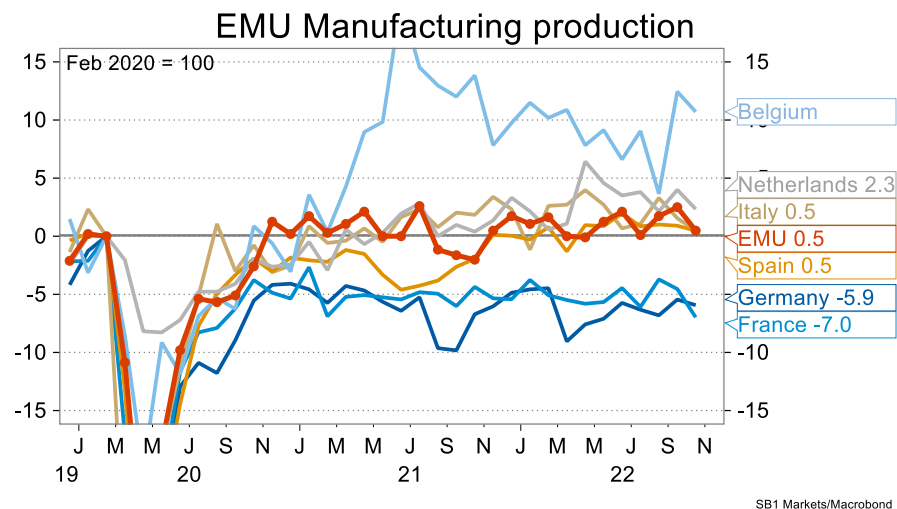
- Good news – but the way back to a normal level is very long

# EMU industrial production down 1.3% in October, as el. production nosedived

A broad decline in manufacturing production as well - but the trend is still upwards



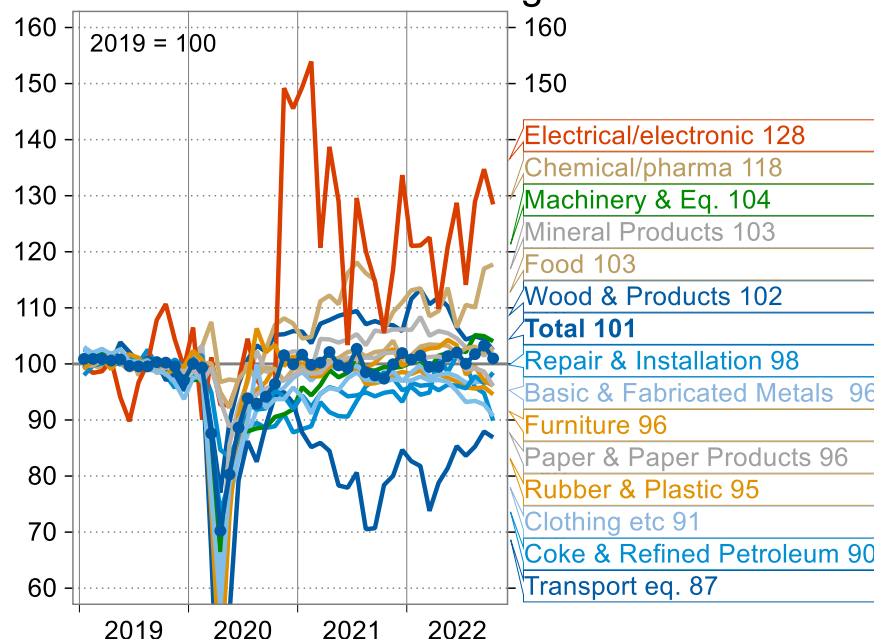
- On the bright side: the fall in production was less than what the market expected (-1.5%). Energy production fell by 4% and has fallen by 10% since April – and from the 2019 average level
- Manufacturing production** is heading slightly upwards even if energy production is declining – but production fell 1.5% in October (ex volatile Irish production)
- The outlook** is not that bright: In Nov and Dec, the manufacturing PMIs stabilised but are far into negative territory in all of the big 4 countries, and although the new order index increased, orders are still falling



# Several manufacturing sectors still report growth

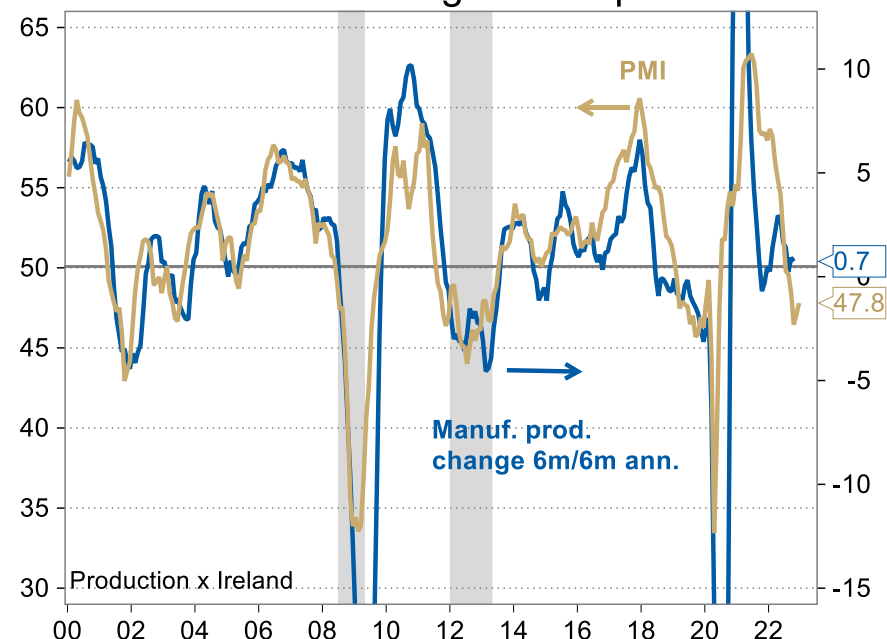
The surveys are not that bright – a decline in manufacturing is rather likely

## EMU Manufacturing - sectors



SB1 Markets/Macrobond

## EMU Manufacturing PMI vs production



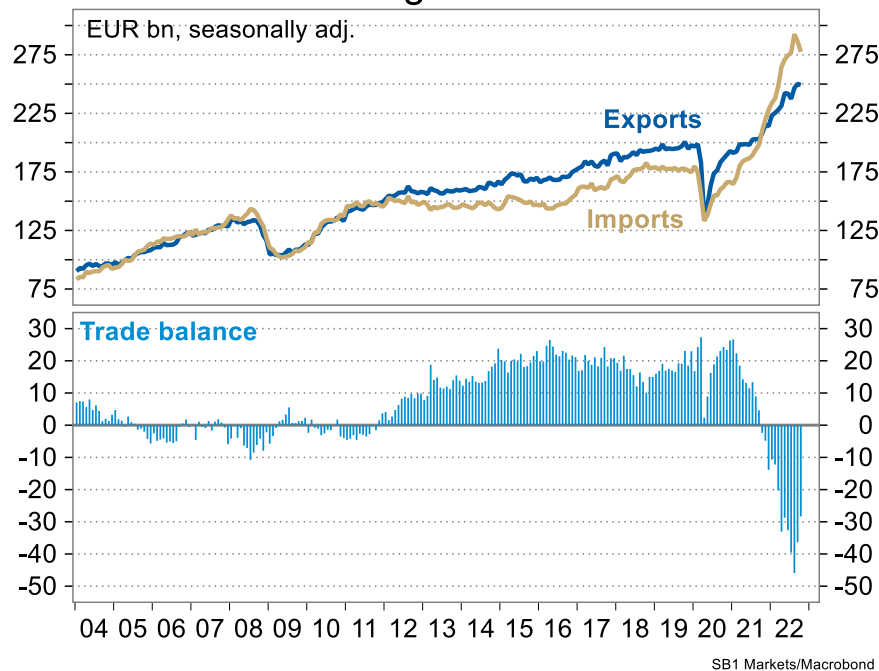
SB1 Markets/Macrobond

- Transport equipment is still a drag on production – but gradually less so (-30% a year ago, 13% now)
- Basic Metals are below par but not by much – even if energy costs have soared. Chemicals are still strong

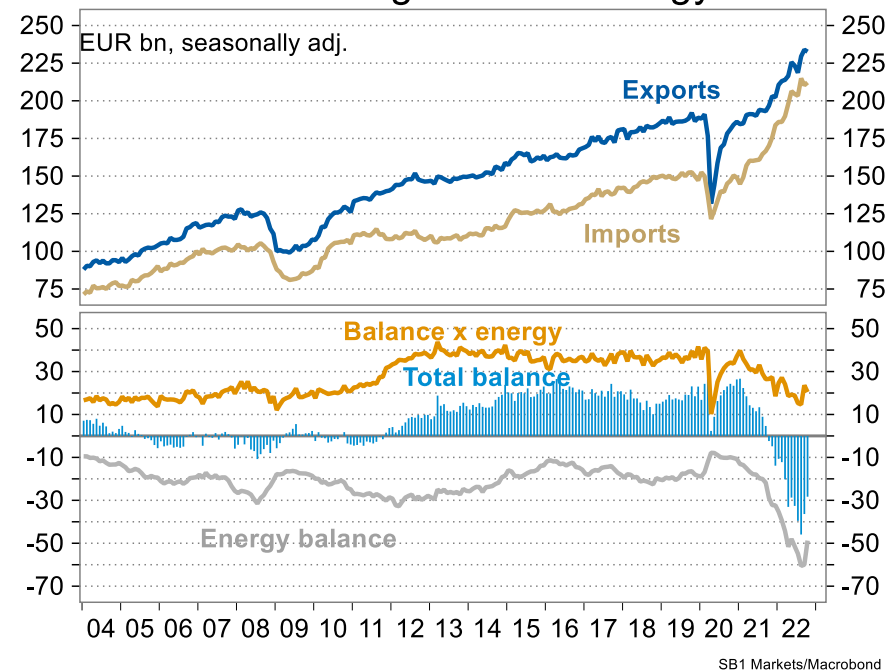
# Trade narrowed further in Oct due to lower energy imports, still at 2.5% of GDP

The ex. energy surplus at 1.8% of GDP is smaller than normal (4%) as ex. energy imports are up too, even in volume t.

## EMU Foreign trade values



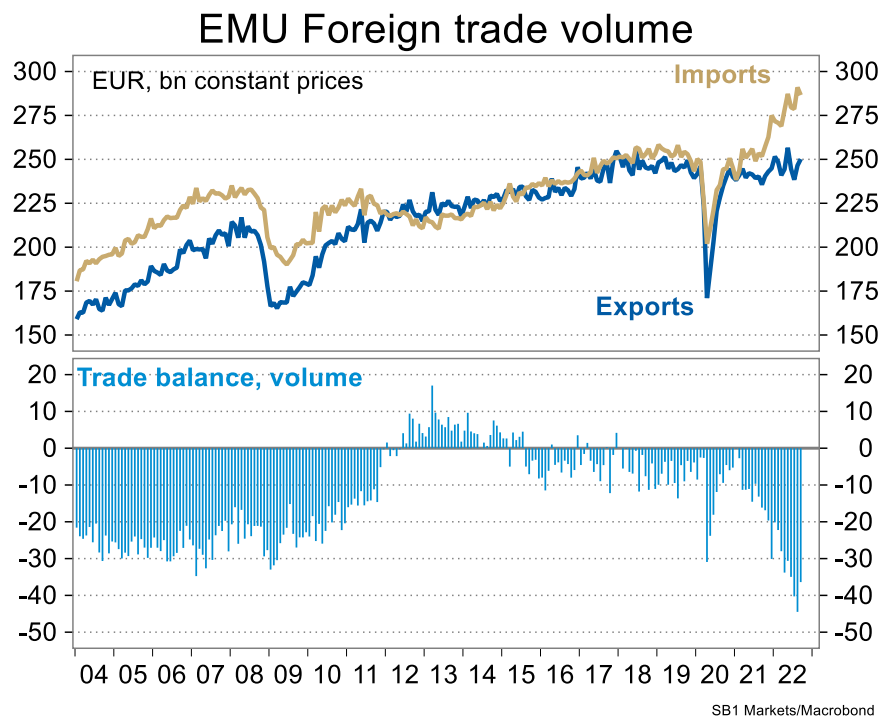
## EMU Foreign trade x energy



- The **trade deficit** narrowed in October as energy prices fell, to EUR 28 bn (s.a.) from EUR 36 bn in September, equaling 2.5% of GDP
- Energy imports are up 137% over the first 10 months in '22 compared to the first 10 months in '21, and imports from Norway are up 145% over the same time period... Makes sense. The net energy balance in October was EUR -49 bn, or 4.4% of GDP. It used to be some 2%
- Imports are up 32% y/y, while exports are up 'just' 20%. In volume terms, quite another story: exports are close to flat, while imports have soared, check next page

# Import volumes up 15% from Feb-20, while export volumes are only up 1.7%

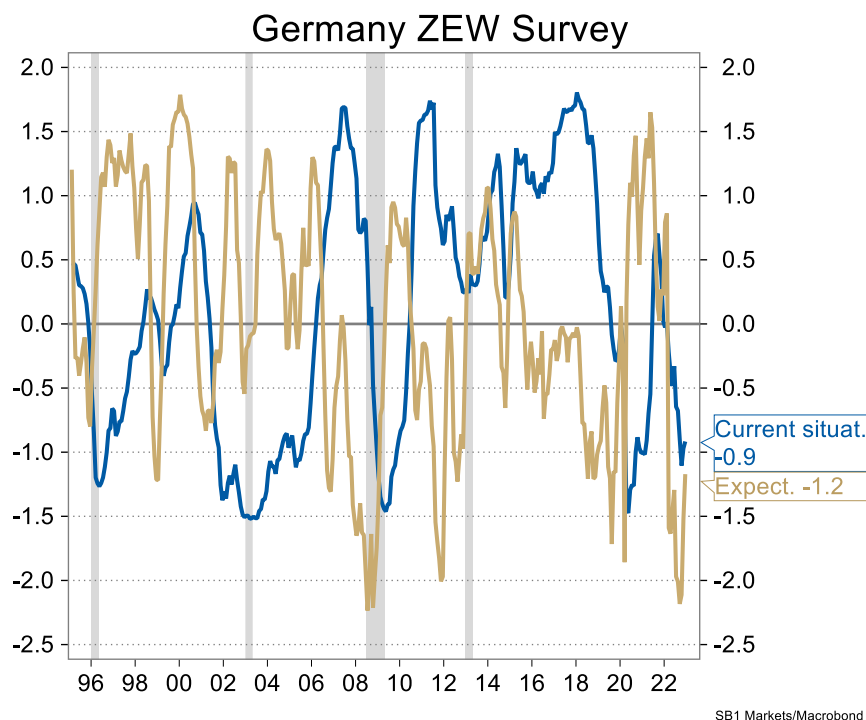
Domestic demand has been strong – and still seems to be



- **Import volumes** are up 16% from before the pandemic, as domestic demand has been strong
- **Export volumes** are close to flat, even if volumes are up some 6% y/y, from a low level last year

# ZEW expectations higher in December too, but the sentiment is still dire

German investors/analysts are still extremely negative vs. the outlook, but less so than in November

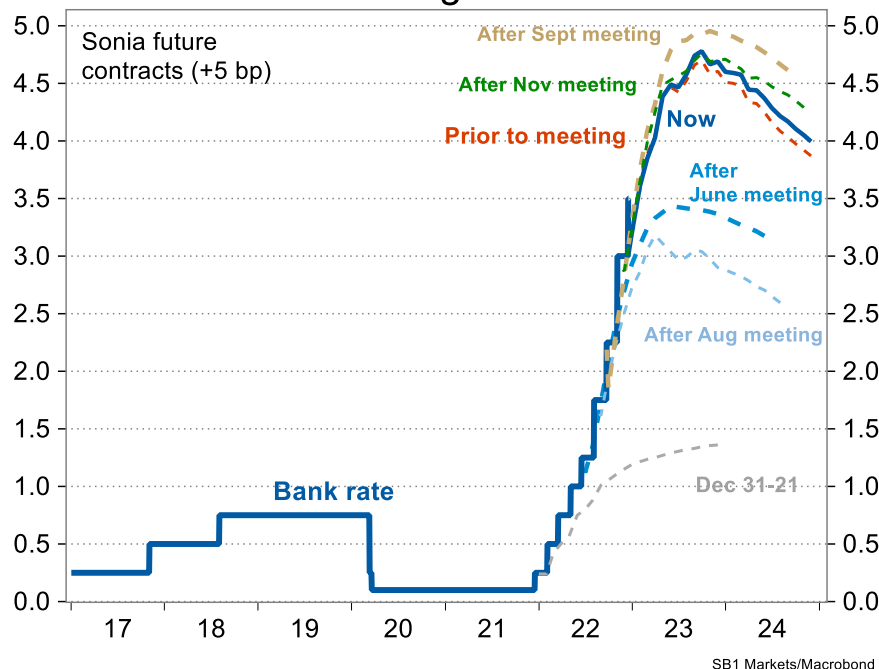


- The **ZEW expectation** rose 13.4 p to -23.3, expected just up to -26.4. The level is now 1.2 st.dev below average, 0.9 st.dev up from the bottom
- The **current situation** index was also higher, by 3.1 p to -61.4, to 0.9 st.dev below par (from -1.0)
- ZEW of course signals a deep recession in Germany, but less so than a couple of months ago
- Business surveys are not that negative, at least not yet

# Bank of England raises rates by 50 bps – sees further rate hikes

In line with market expectations – but market rates are up some 10 bps since before the meeting

UK Bank of England bank rate



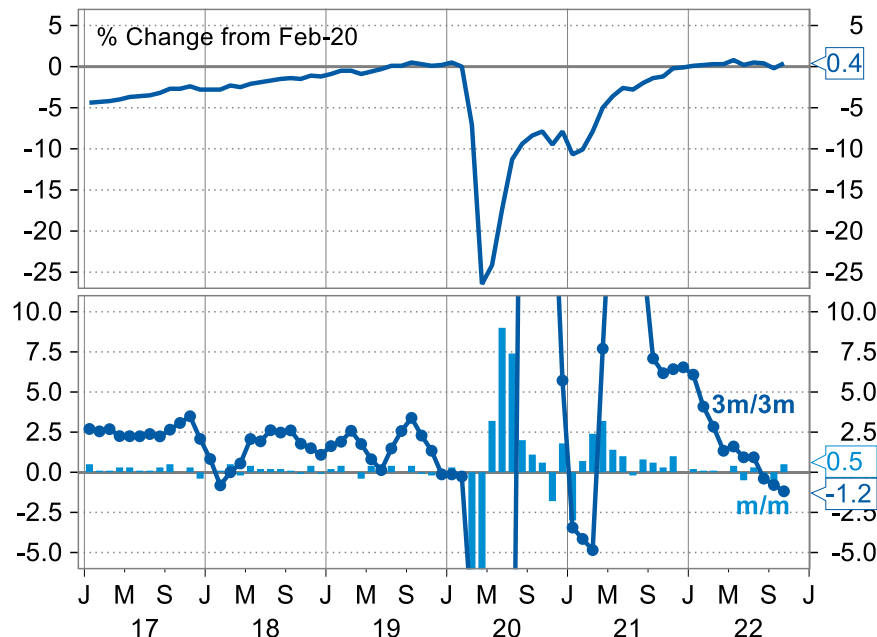
- The **Market** had largely discounted the hikes and the continued hawkishness of the BoE - **short end of the UK curve was left virtually unchanged post the meeting**

- **The policy rate** was lifted by 50 bps to 3.5%, as widely expected, the 9<sup>th</sup> increase in row – the BoE started in December
  - The MPC was more split than usual: 6 of 9 members voted for a 50 bp hike, 1 member voted for 75 bps, while 2 members voted to keep the rate unchanged
  - The Bank was clearly front-loading rate hikes in order to prevent it from risking an extended tightening later
    - “The labour market remains tight and there has been evidence of inflationary pressures in domestic prices and wages that could indicate greater persistence and thus justifies a further forceful monetary policy response”
  - No MPR at this meeting. In its statement, the bank comments on the impact of the government’s fiscal policy measures (and especially the Energy Price Guarantee), stating that they will lower the Bank’s CPI f’cast in Q2 2022 by ¾ pp, and increase the level of GDP by 0.4% in year 1, leave GDP unch. in year 2, and reduce GDP by 0.5% in year 3

# A little bright spot, GDP up 0.5% in October. But the direction is set

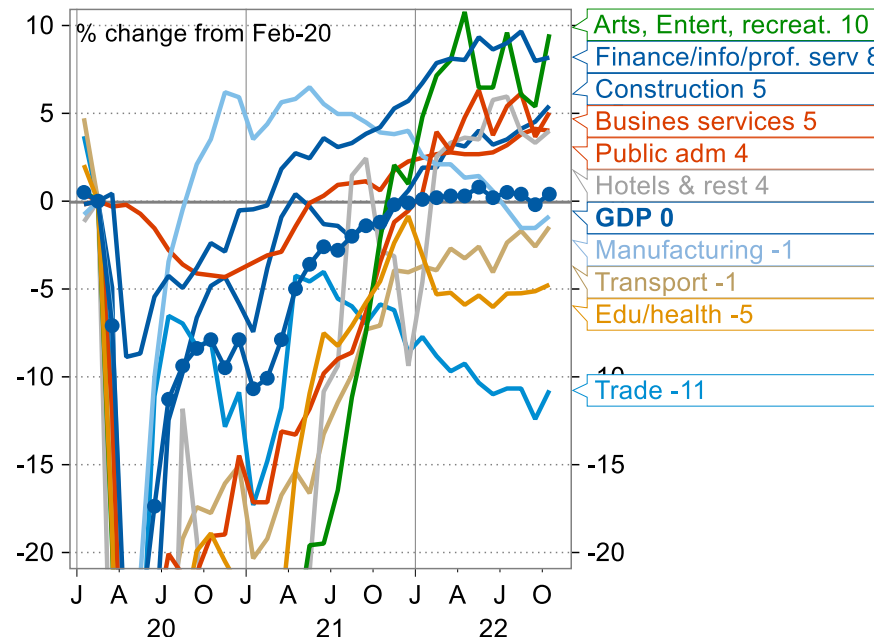
GDP has been trending slightly downwards from the spring, and is down 1.2% 3m/3m

## UK GDP



SB1 Markets/Macrobond

## UK GDP - sectors



SB1 Markets/Macrobond

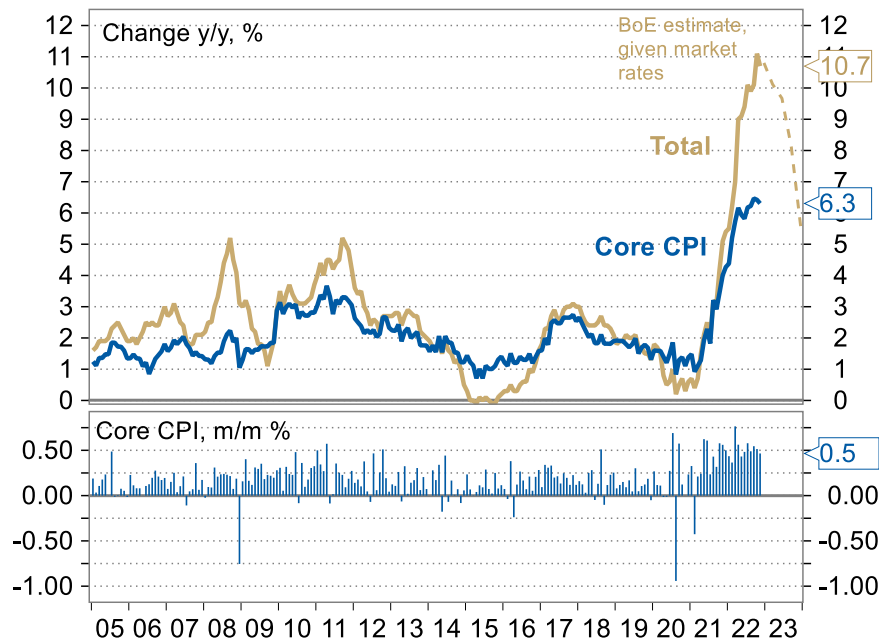
- **GDP** was expected up 0.4%, following the 0.6% decline in September, so the outcome was close to expectation
  - GDP is at the same level as before the pandemic – that is 3 years without growth. Like in the US the labour supply has contracted somewhat (while it has exploded most other places)
  - Unemployment is the lowest in decades, and wage inflation has climbed sharply. Inflation is at above 10%, the highest since the early 80s
  - So: Not the best-balanced economy on earth
- **Mixed between sectors:** Trade the big loser through 2022, together with manufacturing, following an unprecedented downward revision. Most other sectors are trending up



# UK headline inflation down from the peak

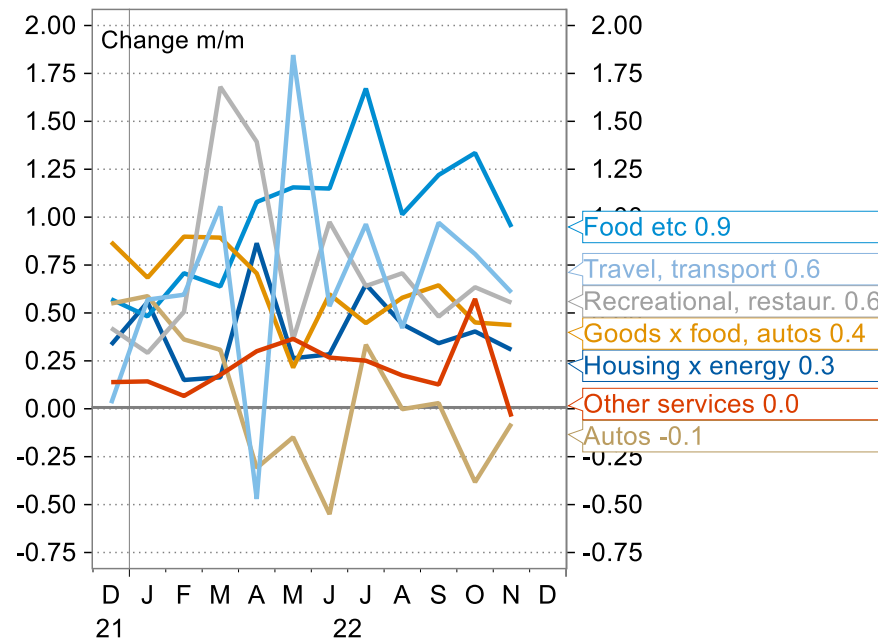
The BoE expects inflation to peak at 11% in Q4. Are they spot on? Headline down to 10.7% y/y in Nov, from 11.1%

UK CPI



SB1 Markets/Macrobond

UK CPI

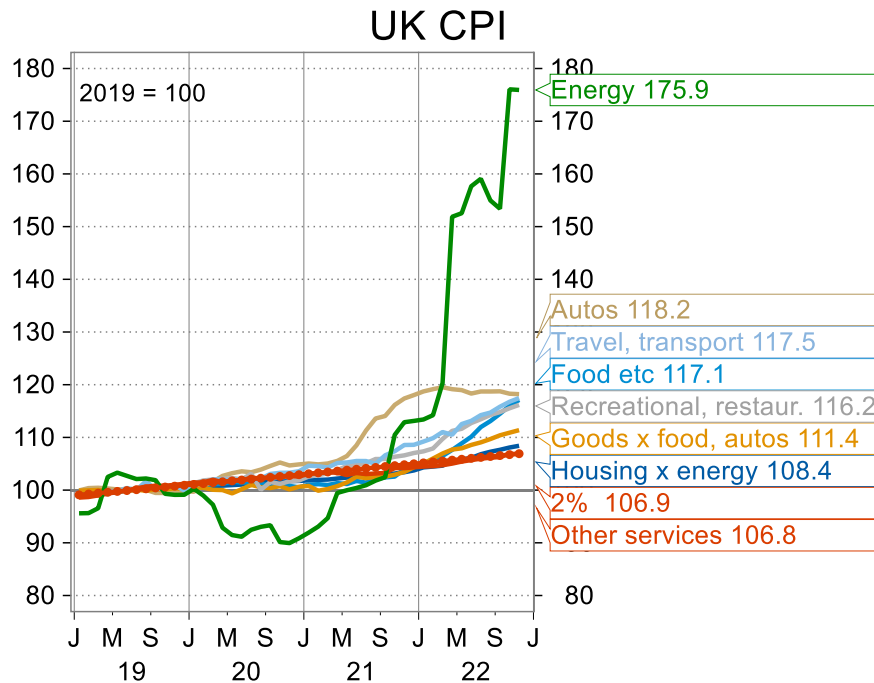


SB1 Markets/Macrobond

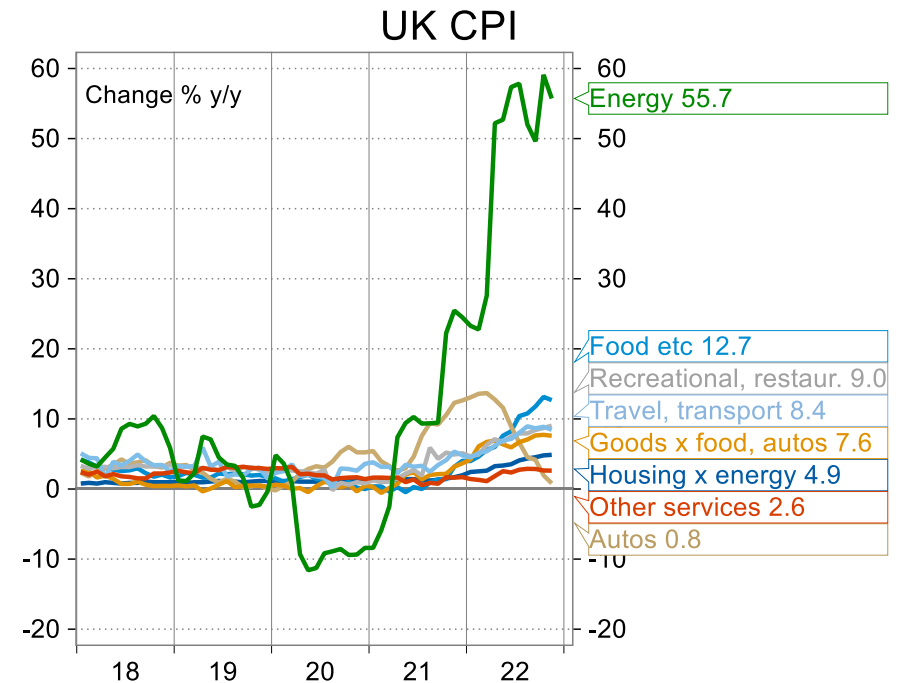
- **The total CPI** rose 0.4% m/m in November. The annual rate decelerated 0.4 pp to 10.7%, expected down 0.2 pp to 10.9%
- **Energy prices** fell 0.1% in Nov, the 15 lift in October as the regulated price cap for energy was lifted
- **Food prices** rose 0.9% m/m, and they are up 13% y/y (like in Norway), lifting the headline by 2.1 pp!
- The **core CPI** (ex food and energy) rose 0.5% m/m, and is up 6.3% y/y, down 0.1 pp from October
- **Auto prices** are down 0.1% m/m and up 0.8% y/y
- **Almost all major sectors** are reporting growth at or above 2%, and all up by more than a 2% pace since before the pandemic. This is BoE's problem, inflation is broad, and are also driven by home-made factors. The gap problem cannot be slowed by the bank, of course

# Energy is the main culprit, but far from the only problem

... almost all main components are above the 2% growth path



SB1 Markets/Macrobond



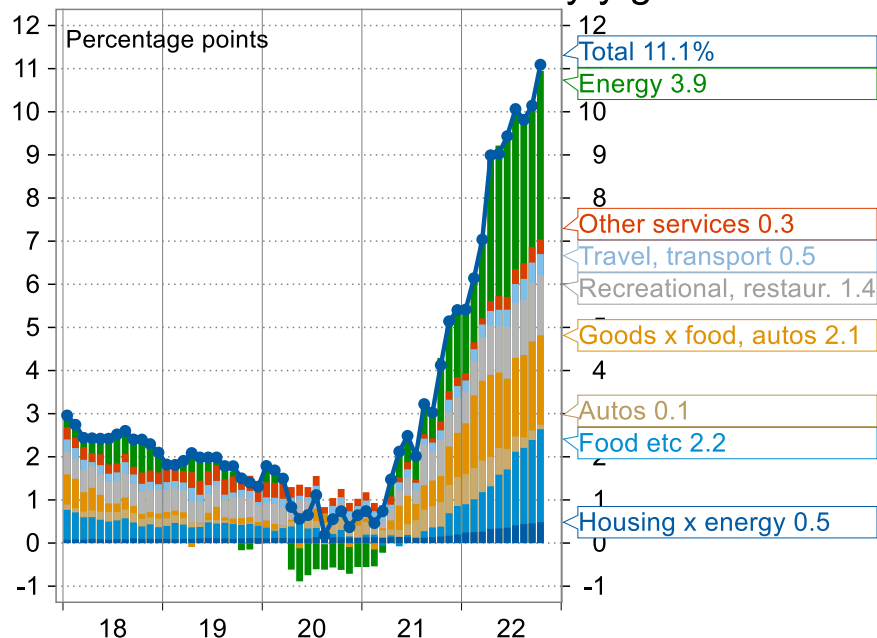
SB1 Markets/Macrobond

- **Energy prices** are up 56% y/y, much of it due to the 26% m/m surge in April, and then the second semi-annual price cap adjustments by 14% in October, *check the chart to the left*
- Some positive signs: Auto prices have peaked, and services x housing is up 'just' 2.6%

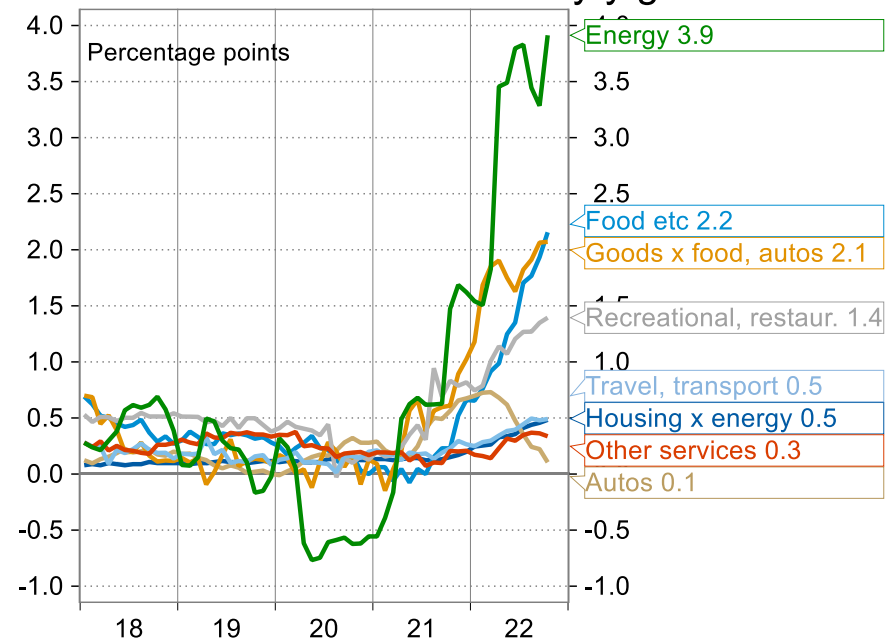
# Energy is important, but the inflation problem is broad based

Food and goods are contributing 4 pp to the headline

## UK CPI Contribution to y/y growth

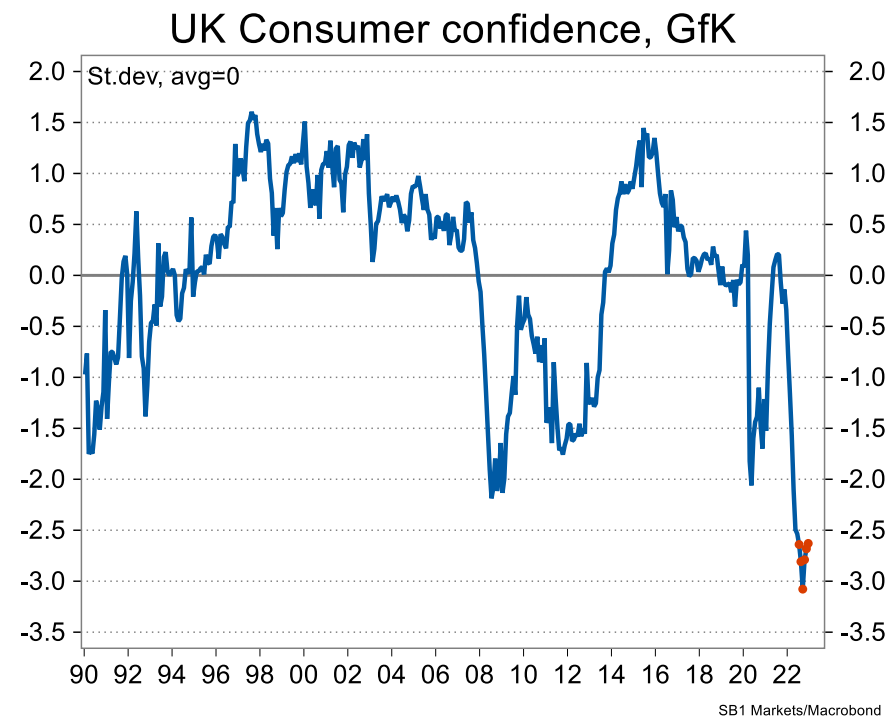
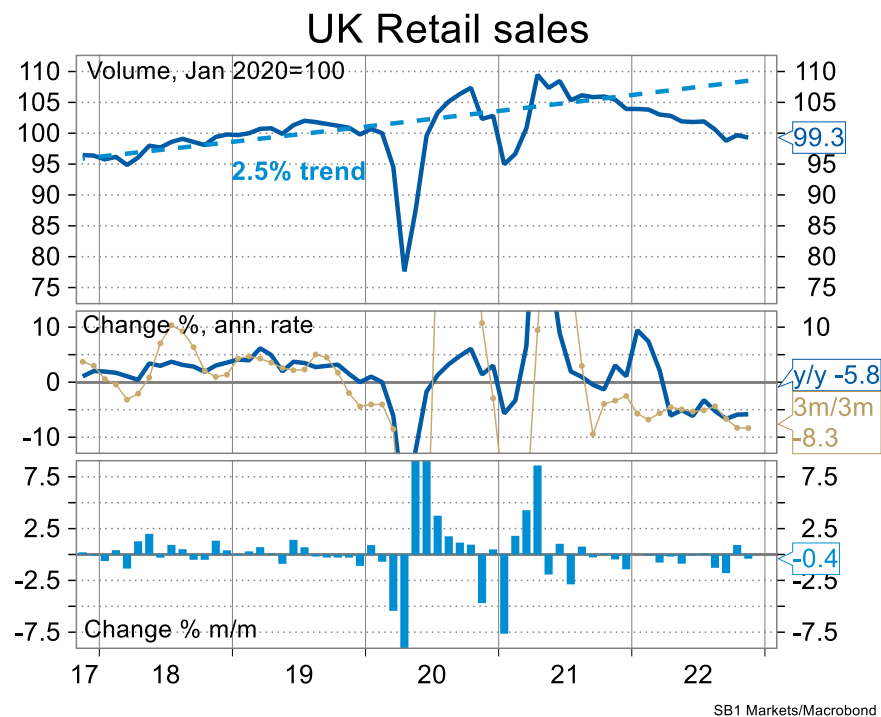


## UK CPI Contribution to y/y growth



# Retail sales down 0.4% in November, and the trend is rapidly down

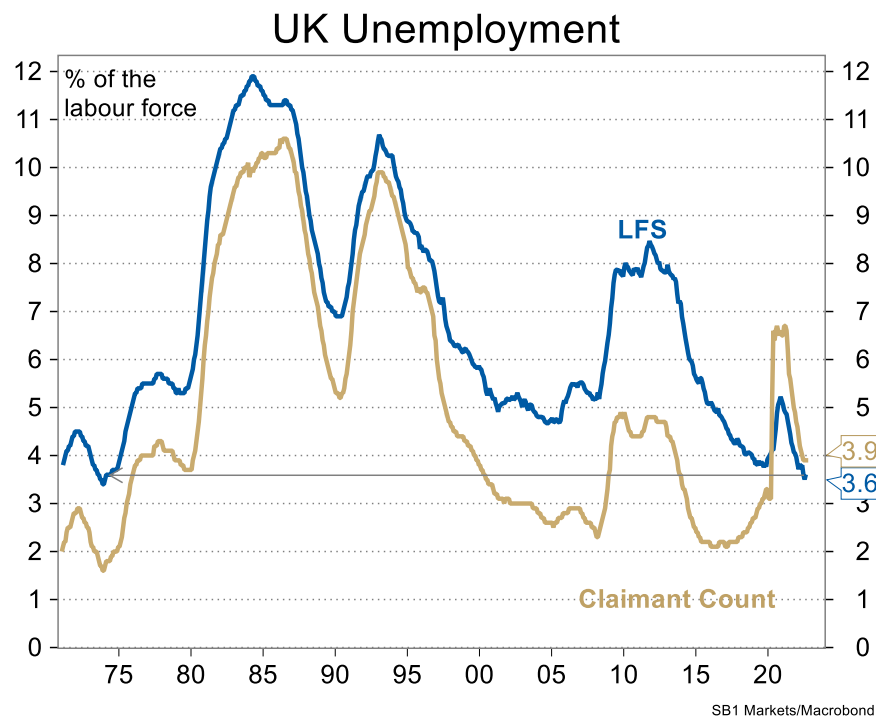
Sales are down 5.9% y/y and 8.3% 3m/3m. Consumer confidence is still very low – but it has bottomed, here too!



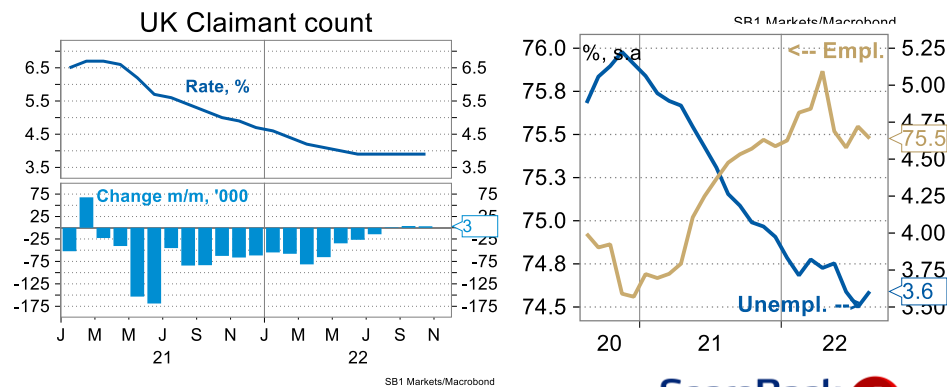
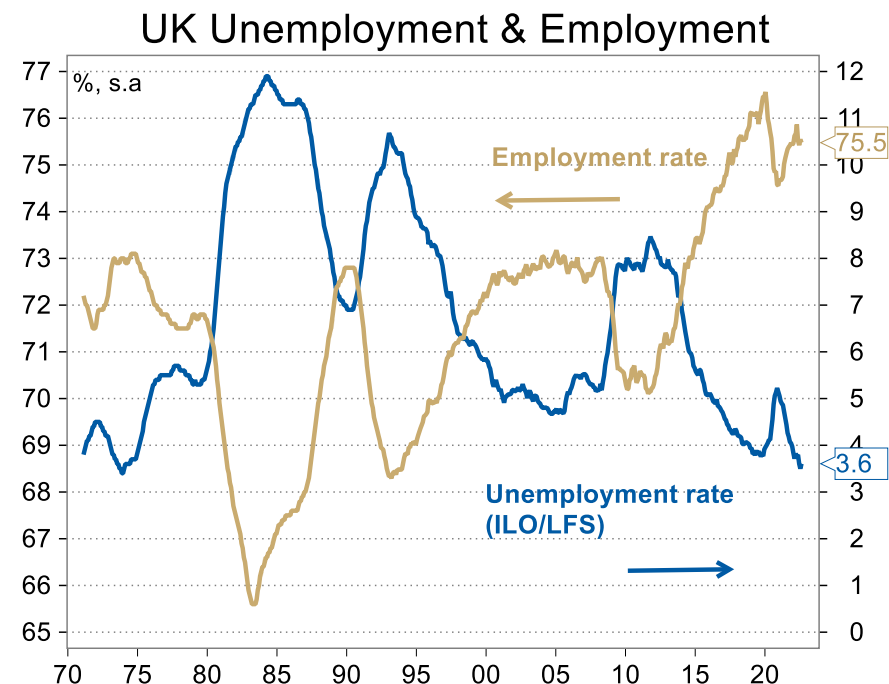
- **Retail sales** peaked Apr-21, and the gradual decline brought sales down to well below the pre-pandemic 2.5% growth path – and now even 0.6% below the pre-pandemic level! Sales are down at a 8.3% pace measured 3m/3m, a substantial drag on GDP growth
- **Consumer confidence** increased slightly again in Dec, to 2.6 st.dev below average, from -2.7 st.dev in Nov
  - High inflation, and an unprecedented decline in real wages and higher interest rates are likely reasons for the historically low consumer confidence. Political turmoil is probably not helping. Besides that, the labour market is strong, the unemployment rate the lowest in 4 decades

# The unemployment rate marginally up, but claimant count below expectations

Payrolls are up, and wage growth is still accelerating – from a far too high level

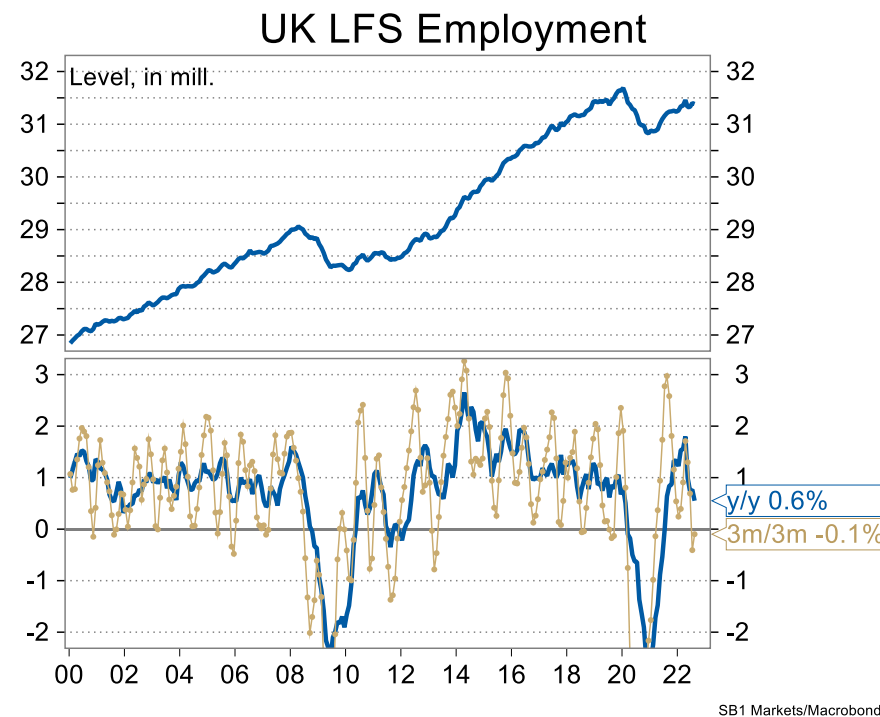
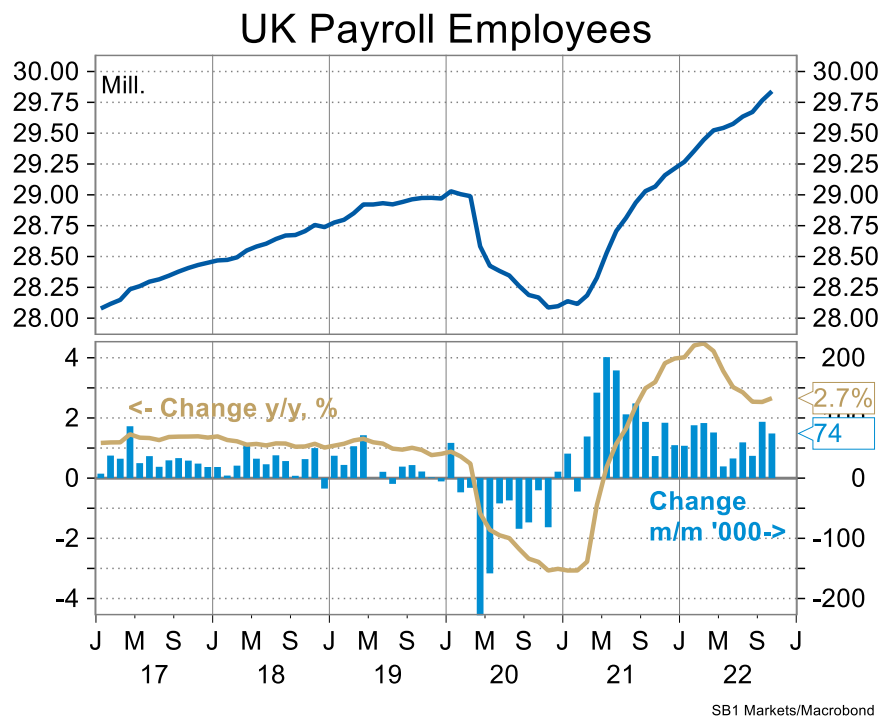


- **ILO/LFS ('AKU') unemployment** rose 0.1 pp to 3.6% in Sept, up from the lowest level since 1974 in Aug, expected unchanged
- **Claimant counts** ('open unemployment') have flattened at 3.9%, which is not that low, and in October the number of claimants rose marginally, by 3', expected up 17'
- The no. of **unfilled vacancies** is now falling slowly – but remains at a very high level



# What a crisis: Number of employees is still growing at rapid pace

Payrolls grew by 74' in October and Sept was revised up by 25' to 94'



- Total employment measured by the LFS ('ILO/AKU') still trending upwards but monthly survey data are rather volatile
- LFS employment is still below the level before the pandemic, while the new payroll stats reports a 2.7% growth. The number of self-employed have fallen sharply, according to these two data sets

# Lowest unemployment rate since 1974 – and wage inflation is on the way up

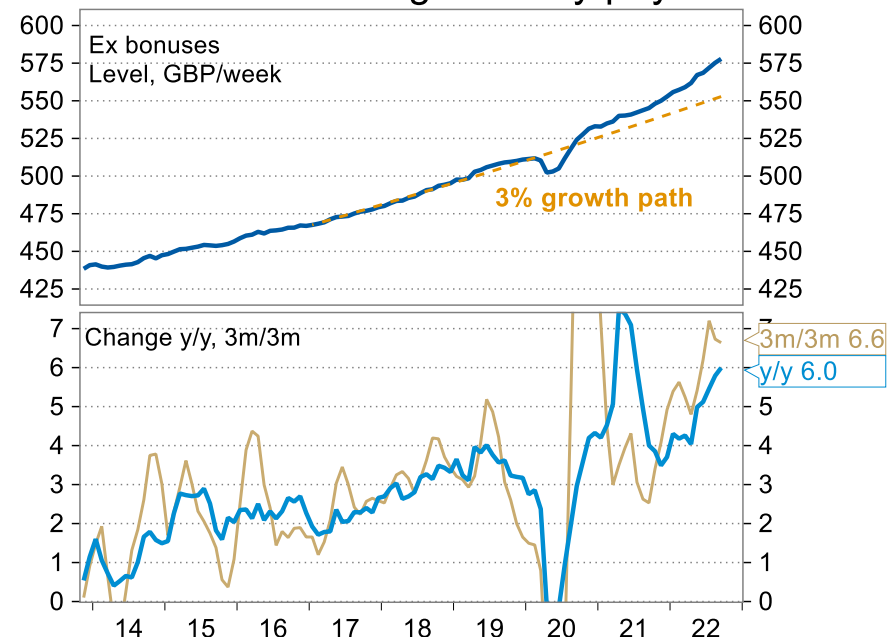
... wages ex. bonuses are up 6%, up from the pre-pandemic level at 2% – 3½%

## UK Earnings vs Unemployment



SB1 Markets/Macrobond

## UK Average weekly pay



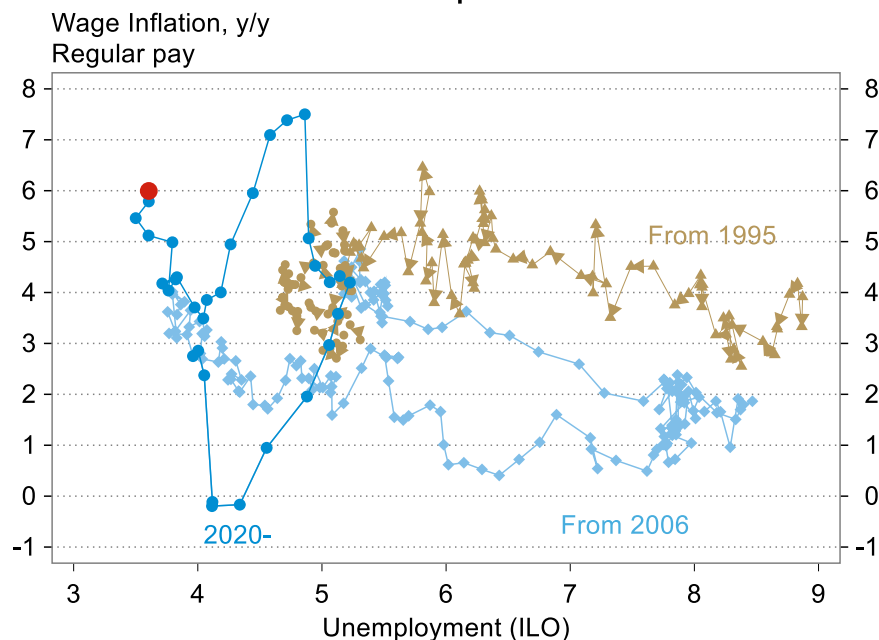
SB1 Markets/Macrobond

- **Annual wage growth** (regular pay, 3 m avg) accelerated 0.3 pp to 5.7% in September, expected up to 5.5%. Not smoothed, wages were up 6% y/y, and the underlying 3m/3m rate is at 6.6%
- **Including bonuses**, total wages are up 6.0% y/y (3 m avg), also 0.1 pp higher than expected (*chart next page*)
- Just before the pandemic, wage inflation was approx. 3% (total pay) to 4% (regular pay) – but just between 2% and 3% the preceding years. Thus, the current wage inflation rates are well above the British 'norm', that have yielded 2% CPI inflation
- Some unions in the UK have lifted their ambitions substantially recent months – as inflation is close to 10% - and BoE expect more to come. Wage claims in the same territory have now been aired, not surprisingly, in a very tight labour market. There are several ongoing 'rolling, part time' strikes in the public sector

# Total pay, including bonuses, is accelerating rapidly

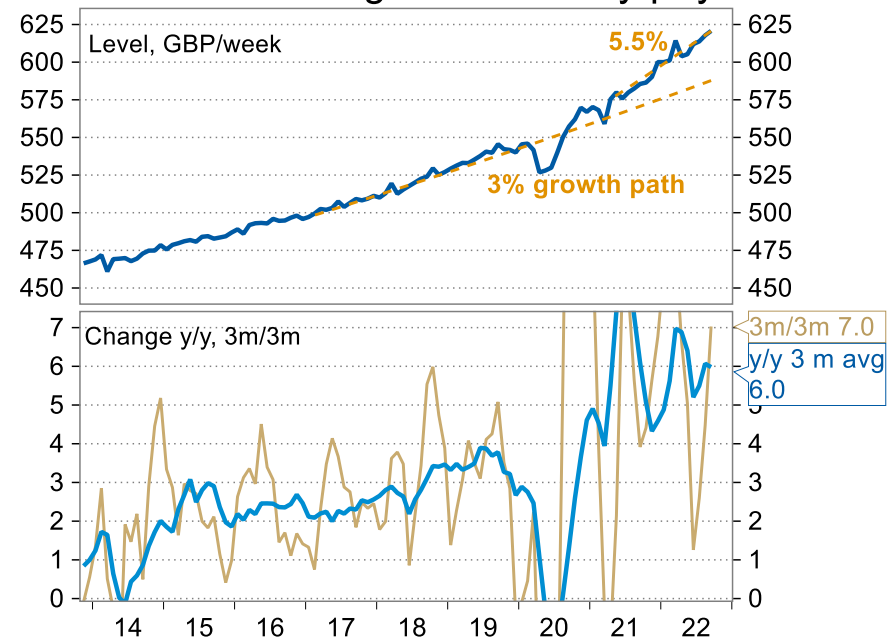
The sum up 6.0% y/y, the trend is at the same level – 3 pp above the pre-pandemic normal

## UK Phillips 'curl'



SB1 Markets/Macrobond

## UK Average total weekly pay



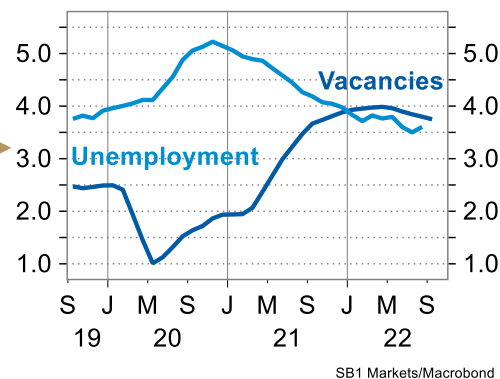
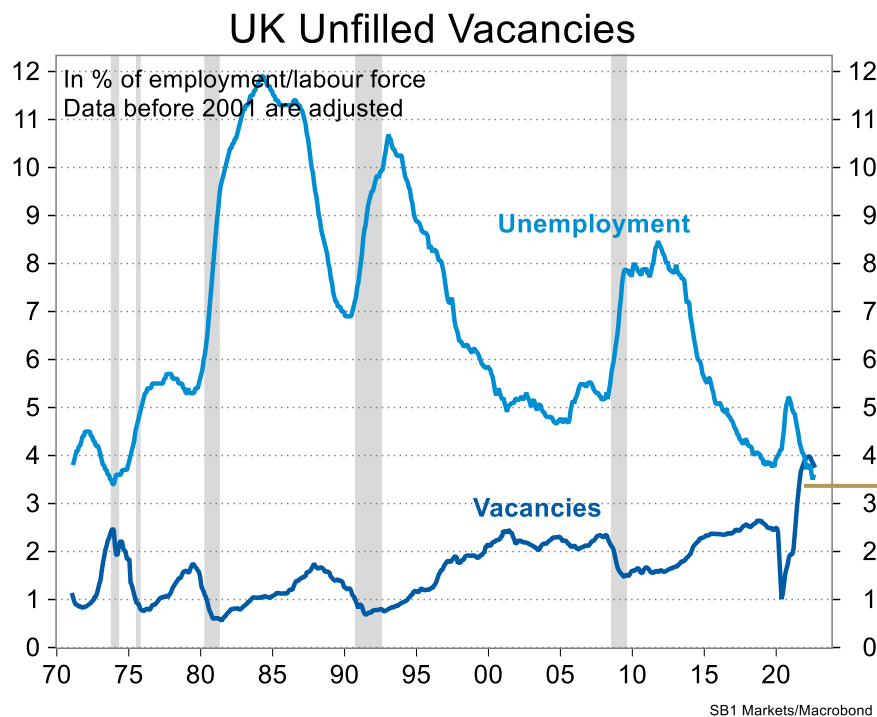
SB1 Markets/Macrobond

- Wages are on the way up alongside something that looks like a Phillips curve
- It is completely impossible to bring inflation back to 2% over time if wage inflation remains at 6%, probably even above 4%. With a 3% wage inflation rate, inflation was just marginally below the 2% target – and productivity has slowed here too



# A tight labour market – but the peak tightness is behind us?

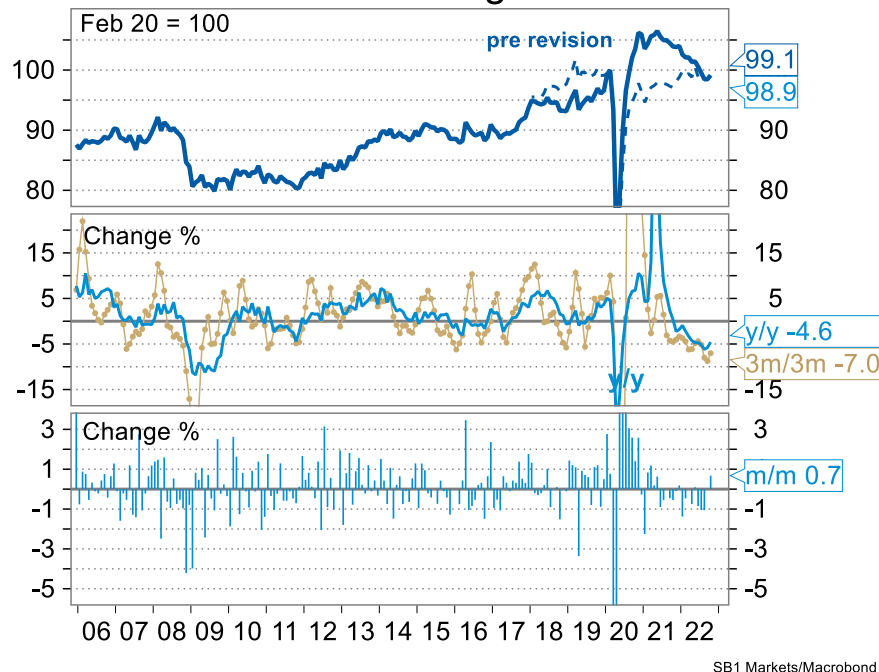
The vacancy rate has fallen marginally the past 4 months but remains extremely high



# Manufacturing production up 0.7% October, expected flat

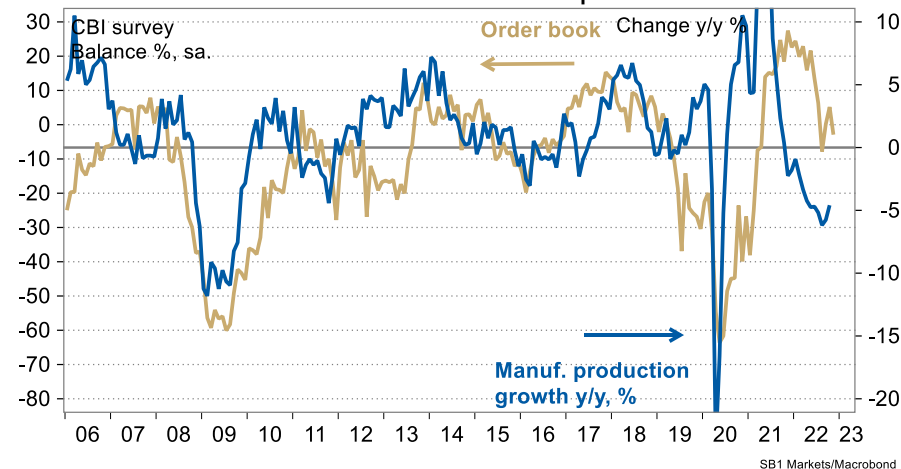
...but still nothing to celebrate. Production was flat m/m and is down 1% since Feb-20

## UK Manufacturing Production

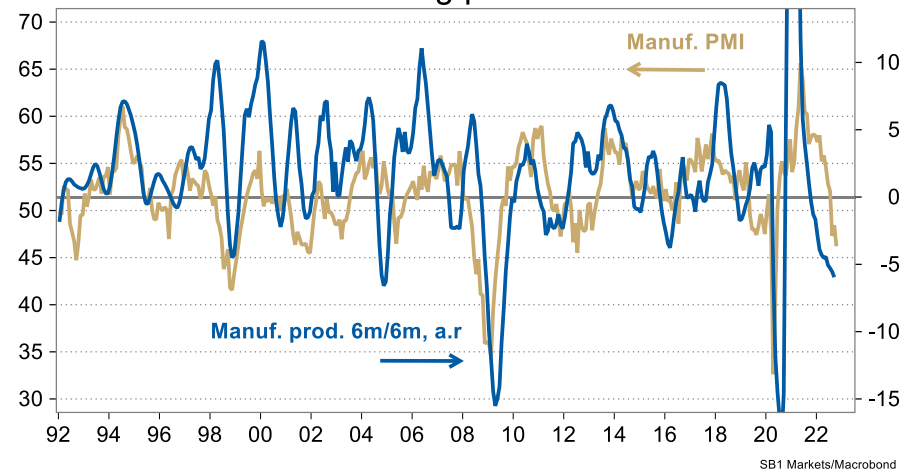


- Production was down 4.6% y/y, expected -5.4%
- Almost all sectors are reporting a downward trend in production
- The CBI survey signals an increase in manuf. orders, while the manuf. PMI is not

## UK CBI Orders vs Manuf. production



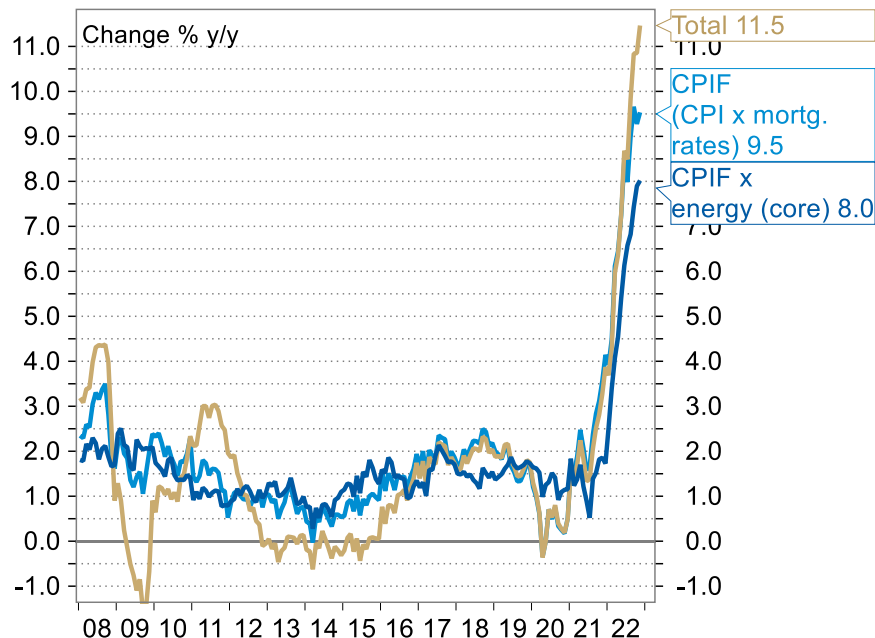
## UK Manufacturing production vs PMI



# No peak yet for Swedish inflation – core in line with Riksbank f'cast

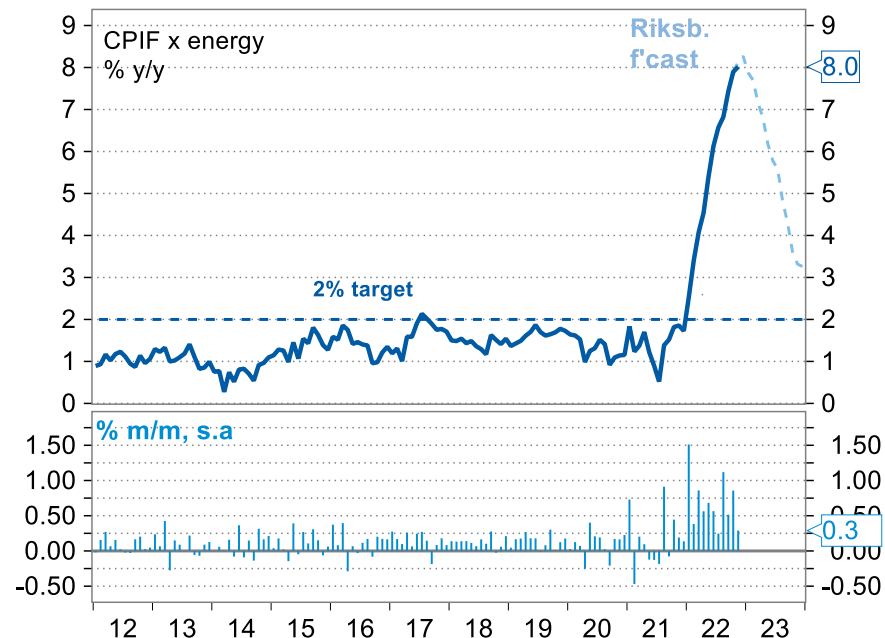
The headline was up 0.6 pp to 11.5%, in line with market expectations. Core CPI up 0.3% m/m, up 0.1 pp to 8.0%

## Sweden CPI



SB1 Markets/Macrobond

## Sweden CPI core

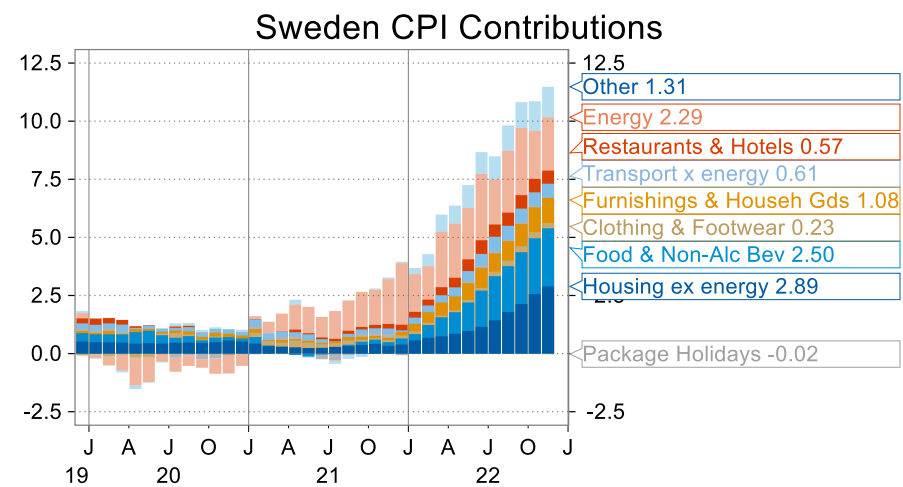
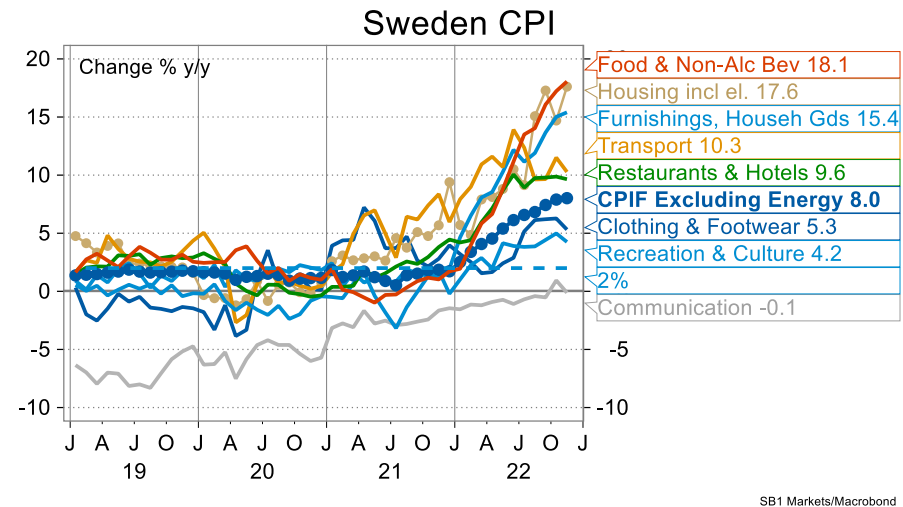
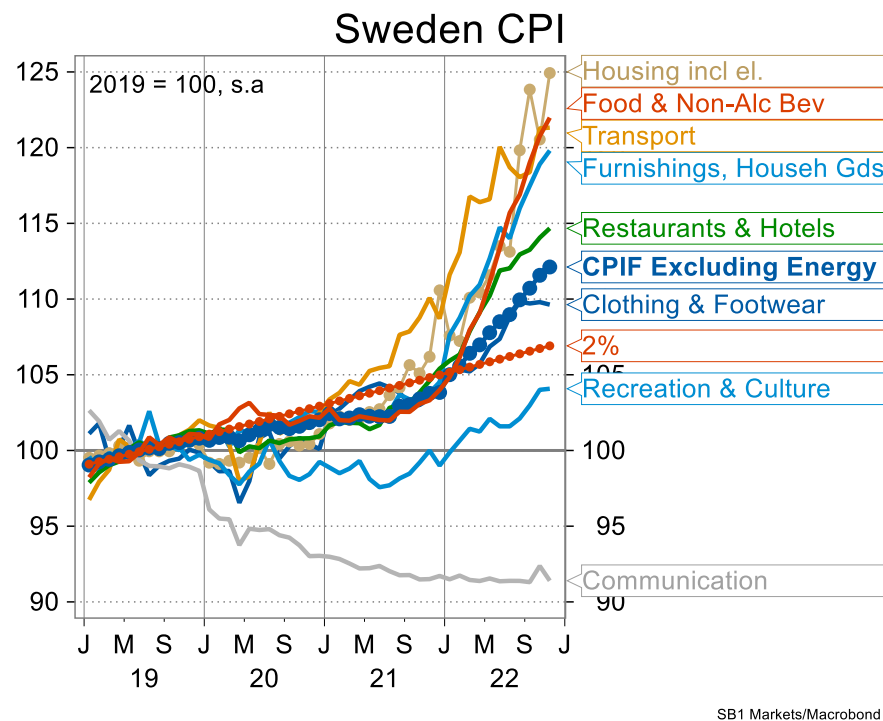


SB1 Markets/Macrobond

- **CPI-F x energy, the 'real core'**, rose 0.5% in November (seas. adj). The core rate has accelerated sharply recent months, to 8.0%, the latest print though in line with the Riksbank f'cast from Sept. (Food prices are included in the core)
- Why is inflation so high? Housing incl. energy prices are up 18% y/y, food prices are up 18%, furnishings 15%, hotels & restaurants 10%!
  - All other measures of underlying inflation are sharply up – and at the highest level in some 30 years
  - Until Q4 last year, inflation was pretty well explained by higher energy prices, now many more elements are on the move upwards
- **The increase in inflation is broad**, but the biggest contributors on the upside are energy, housing (larger mortgage pmts), food, and furnishings
- **The Riksbank surprised markets** and hiked by 75 bps at their last meeting in Nov, and signalled a 25 bps as the most likely outcome in at the next meeting. The market, however prices in +50 bps

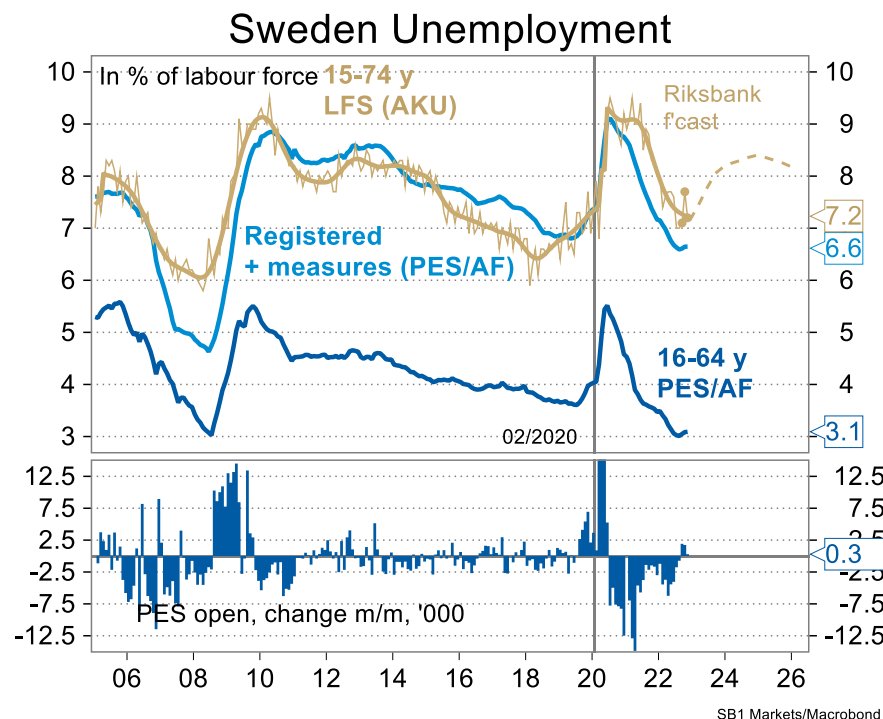
# Inflation in Sweden: a broad acceleration

Just communication is below 2% y/y (like in Norway), and is together with recr/culture, below a 2% path since 2019

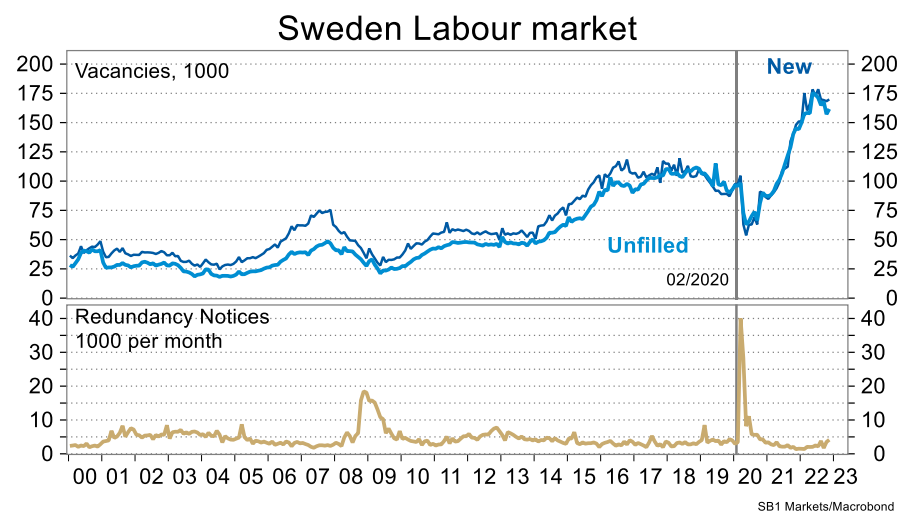
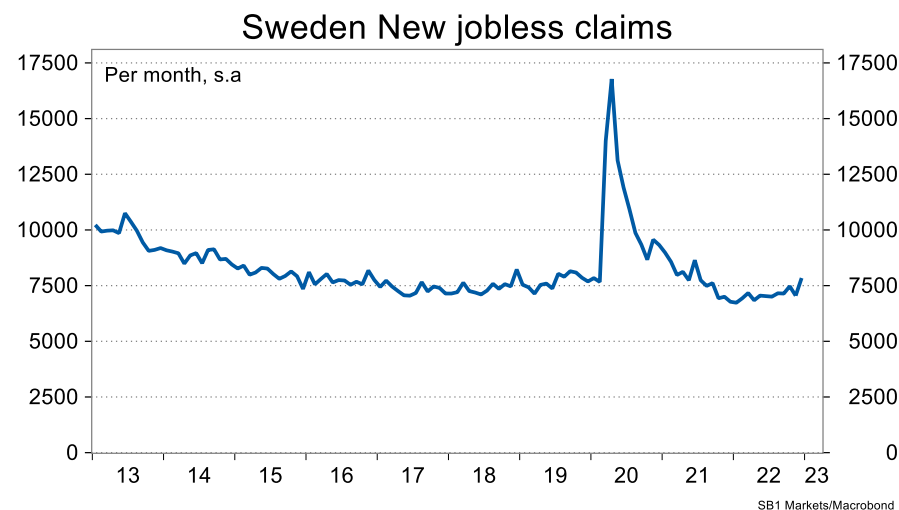


# The cycle has turned? PES Unemployment up for the 3<sup>rd</sup> month in November

LFS unemployment may have bottomed too. Vacancies are coming down, but remain at a high level

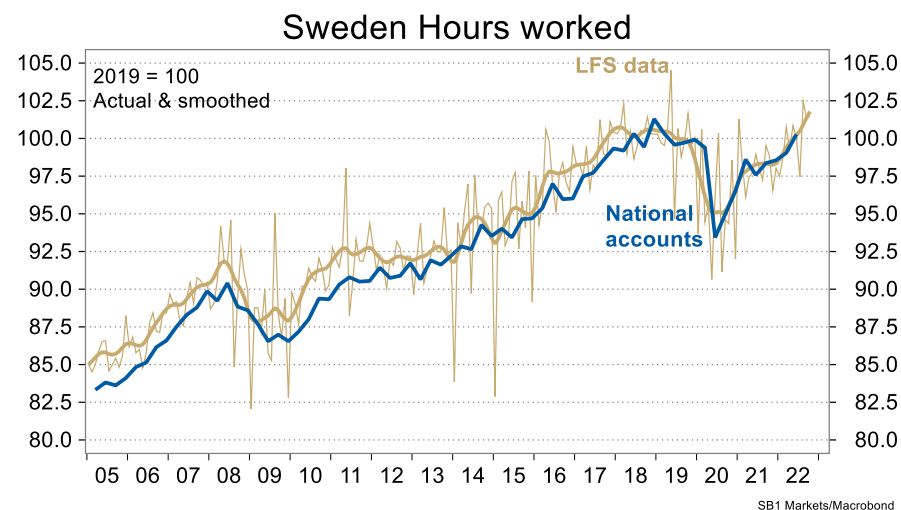
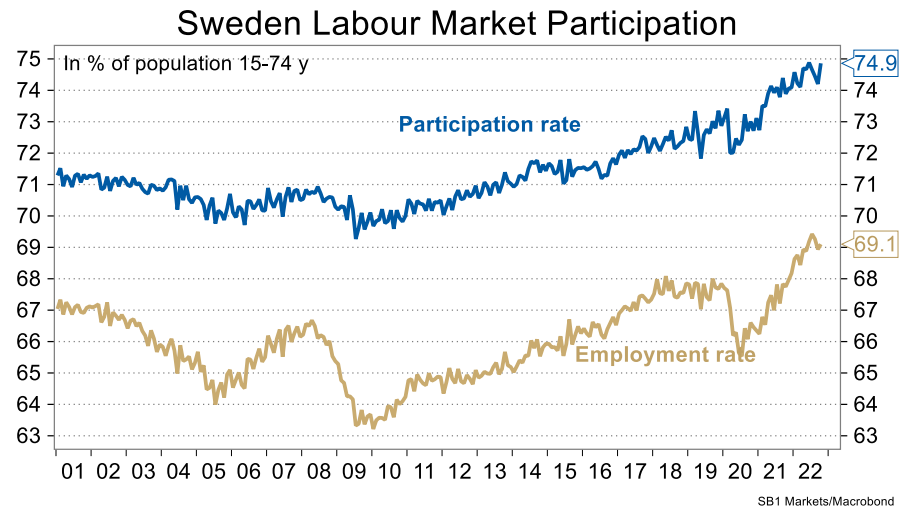
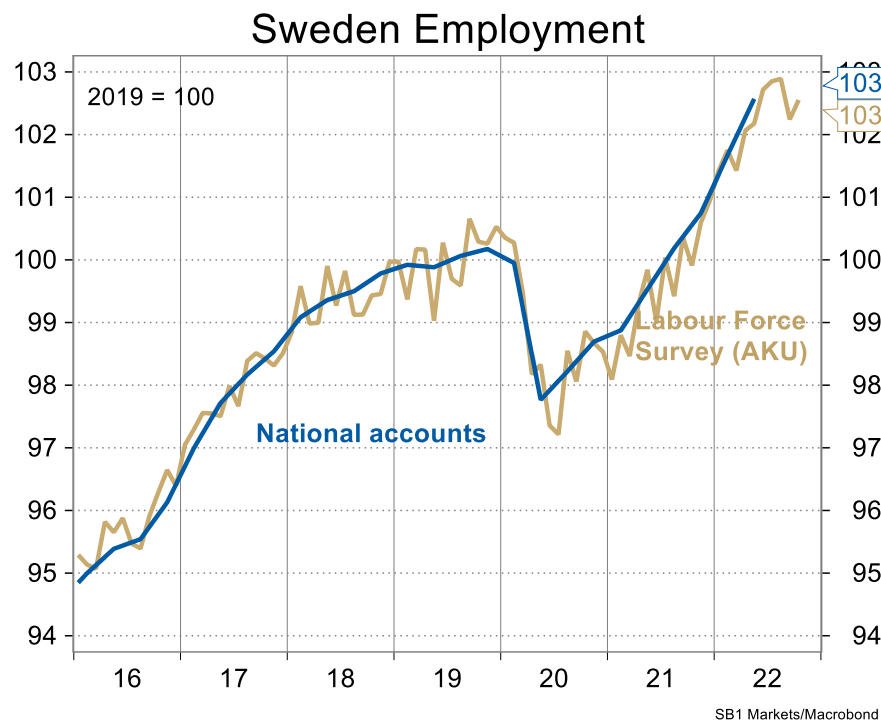


- The **'open' registered unemployment rate** at 3.1% is far below the pre-pandemic level – close to the lowest level since 1990, before the housing/banking crisis. The no. of unemployed has increased marginally past 3 months (and the least in Nov). In addition, the inflow of **new jobless registrations** has increased slowly since the start of the year
  - Unemployment including labour market** measures has turned marginally up, while the smoothed LFS unemployment rate also has bottomed
- The number of **new vacancies** and of **unfilled vacancies** rose marginally in November both are down from the peak



# Employment, participation and hours worked were all up in October

However, the LFS data are far too volatile short term (but LFS employment has yielded recent months



Highlights

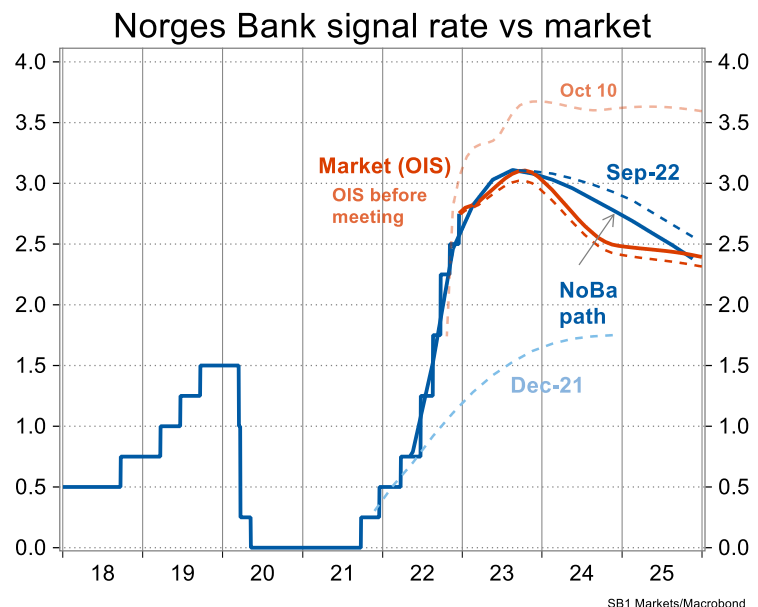
The world around us

**The Norwegian economy**

Market charts & comments

# NoBa hiked 25 bp tp 2.75%, signals one or two more hikes next year

The interest rate path was unch. in 2023 – but lowered marginally in '24/25. In sum, more hawkish than expected



## Interest rate paths

|       | SB1 NoB/SB1 | NoBA Change | Fair FRA *) | FRA**    | FRA** | FRA** |
|-------|-------------|-------------|-------------|----------|-------|-------|
|       | Path 3-22   | Path 4-22   | @IMM, NB    | pre-meet | now   | NoBa  |
| Q3 22 | 1.53        | 1.53        | 0.00        | 2.67     |       |       |
| Q4 22 | 2.45        | 2.46        | 0.01        | 3.11     | 3.15  | 3.17  |
| Q1 23 | 2.82        | 2.82        | 0.00        | 3.35     | 3.27  | 3.33  |
| Q2 23 | 3.03        | 3.03        | 0.00        | 3.45     | 3.20  | 3.30  |
| Q3 23 | 3.11        | 3.11        | 0.00        | 3.43     | 3.13  | 3.26  |
| Q4 23 | 3.10        | 3.08        | -0.02       | 3.39     | 3.06  | 3.19  |
| Q1 24 | 3.08        | 3.03        | -0.05       | 3.32     | 2.96  | 3.08  |
| Q2 24 | 3.04        | 2.96        | -0.08       | 3.23     | 2.87  | 2.98  |
| Q3 24 | 2.99        | 2.87        | -0.12       | 3.14     | 2.78  | 2.89  |
| Q4 24 | 2.93        | 2.78        | -0.15       | 3.05     | 2.70  | 2.80  |
| Q1 25 | 2.86        | 2.69        | -0.17       | 2.96     | 2.65  | 2.75  |
| Q2 25 | 2.76        | 2.59        | -0.17       | 2.86     | 2.60  | 2.69  |
| Q3 25 | 2.66        | 2.49        | -0.17       | 2.40     | 2.60  | 2.69  |
| Q4 25 | 2.56        | 2.38        | -0.18       |          |       |       |

\*) Assuming the NIBOR spread at 35 bps

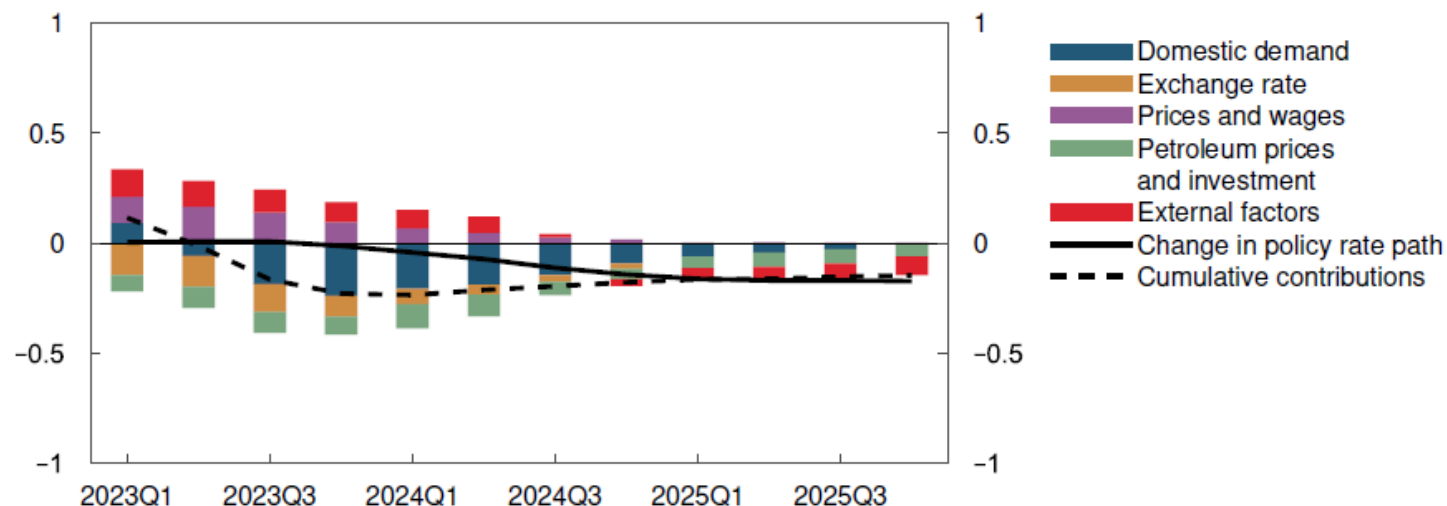
\*\*) Q4 FRAs adjusted for liquidity prem

- **The raise in the policy rate** was as everybody expected
- **The peak of the rate path** remained unchanged at 3.1%, and higher than expected
  - 2023: One or two 25 bp hikes, March (and possibly, 40%) June
  - 2024: Policy rate will be cut, and to slightly below 2.5% by the end of 2025
  - The interest rate path was lowered by up to 18 bps
- **Economic projections**
  - NoBa once more lifted its **inflation expectations**, and inflation is expected to remain far above the target for the whole forecast period
  - **Mainland GDP** was revised sharply up, due to a higher starting point. From here, GDP is expected to decline at the same pace as in September. GDP is expected to decline in all 4 quarters next year, in sum by 1.4%, from a 0.5% decline in the Sept report. For 2023, GDP will still just be down 0.1% y/y, vs. the -0.3% Sept f'cast
  - **Wage inflation** was revised up by 0.1 pp to 4.7% for '23 but down 0.2 pp in both '24 and '25, to 4.2% and 4.0%. Given slow productivity growth, cost inflation will remain well above 2%
  - **The bank is flexible**, inflation is allowed to stay above target the coming 3 years, while the unemployment rate is just slightly up from the present level
  - **House prices** are now expected to fall by 6% from the Aug peak by next summer, up from a 4% decline. **Oslo Office prices** are expected down 25%, from 15%
- **Market reaction**
  - Following the steep decline in OIS/FRA recently, the market had expected a pretty dovish NoBa – and rate expectations rose some 10 bps when the Bank kept its 3.0% – 3.25% peak rate estimate. Still, market rates are below NoBa's path from early '24 and until late '25 - by up to 30 bps
  - The NOK was slightly stronger after the NoBa announcement
- **The countercyclical capital buffer** was kept unchanged at 2.5%



# Changes in the interest rate path: Mixed contributions – and none were large

**Chart 4.7 The decomposition indicates small changes in the policy rate path**  
Cumulative contributions. Percentage points



Source: Norges Bank

## Upside contributions:

- Price and wage inflation (more than we assumed, as wage inflation was revised upwards)
- Higher interest rate abroad (in the short end of the curve, lower in the long end)
- Domestic demand (in the very short end of the curve, thereafter weaker)

## Downside contributions:

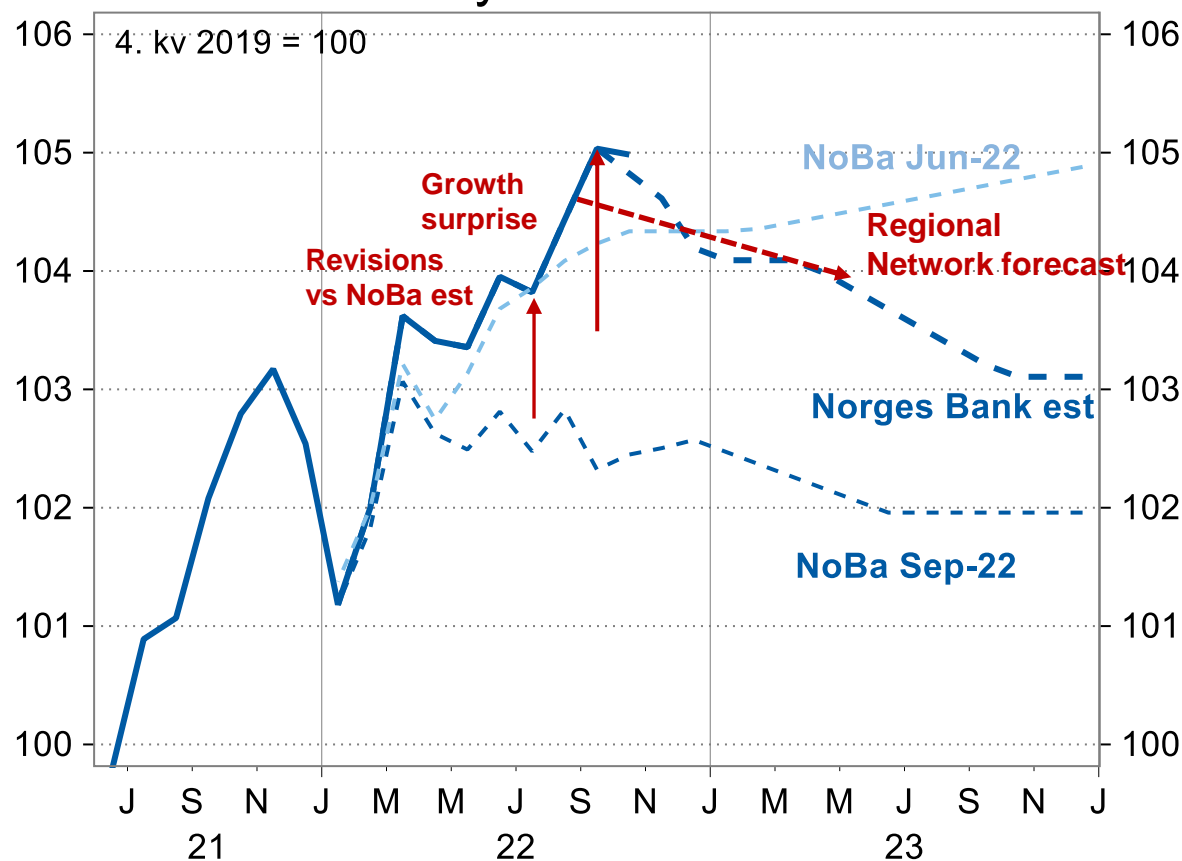
- From early next year, weaker domestic demand partly due to lower household real income, lower house prices)
- NOK (just a marginal contribution)
- Oil (and gas) prices and investments (as we assumed)

Our pre-meeting forecast was pretty close to the outcome, at least until late 2023, we did not expect the bank to lower the curve

# GDP revised sharply down in Sept, partly reversed in December

GDP growth has surprised sharply on the upside since the Sept MPR, and the GDP f'cast lifted by 1.5 – 2 pp

## Norway Mainland GDP



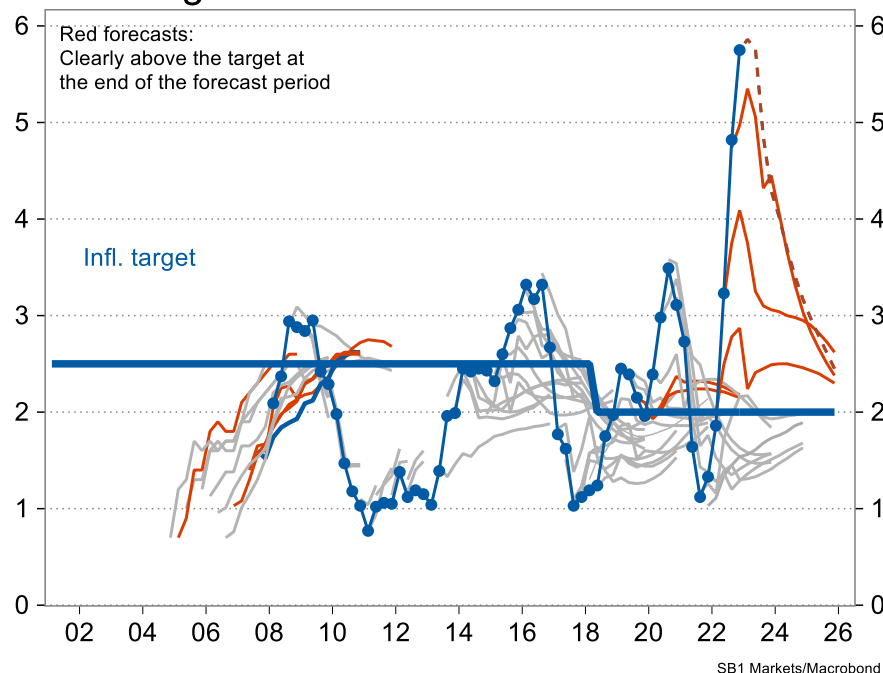
- The GDP forecast was as we expected close to the Regional Network growth estimate, as we illustrated the last Weekly report

SB1 Markets/Macrobond

# Inflation is assumed to stay FAR above target

A total deviation from the price target is substantial

Norges Bank core inflation forecasts

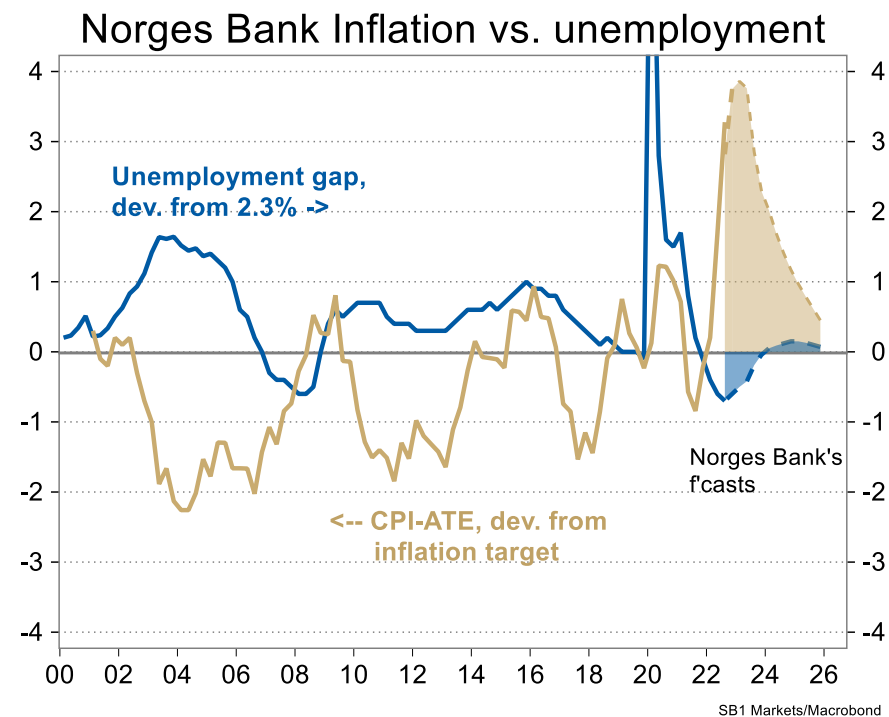
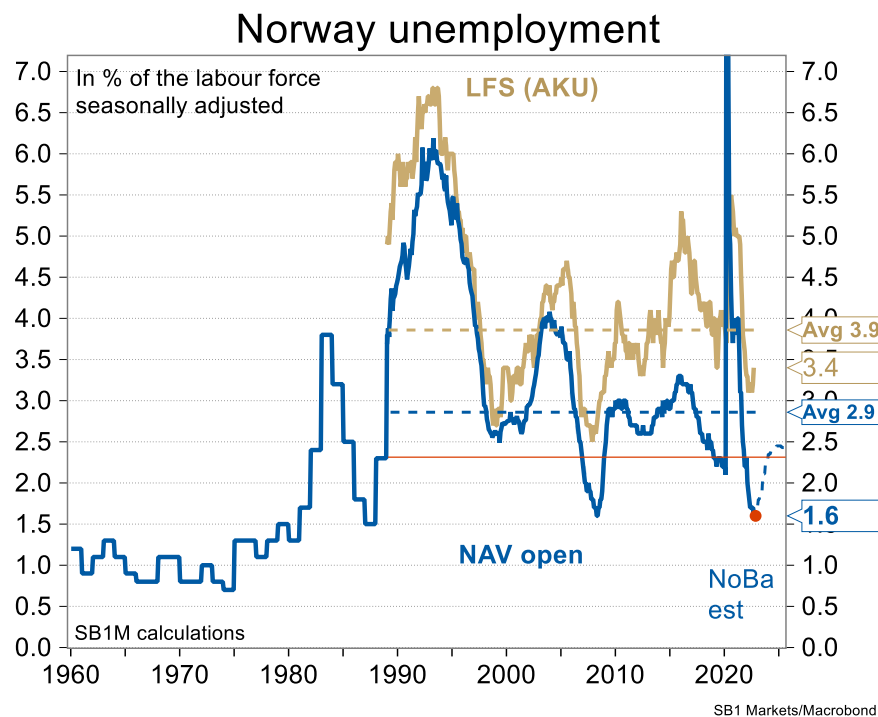


- Until 2022, just 5 of the more than 60 inflation forecasts NoBa has published since 2005 has had an end point above the inflation target at the time, and then by just 0.1 or 0.2 pp
- Now, the inflation forecast at the end of the forecast period is 0.4 pp above the target. The average miss 2022 - 2025 is 1.9 pp (in sum 7.4 pp) – a substantial deviation
- Thus, the Bank will orchestrate a mild economic downturn in order to bring inflation down but accepts an unprecedented deviation from target the coming years (check next page too)
- We think the risk is on the downside both for the output gap and inflation

- Norway

# Yes, Norges Bank assumes higher unemployment but still a very low level

NoBa expect an increase in the unemployment rate peak to 2.5% in H2-2024, up from 1.6% now

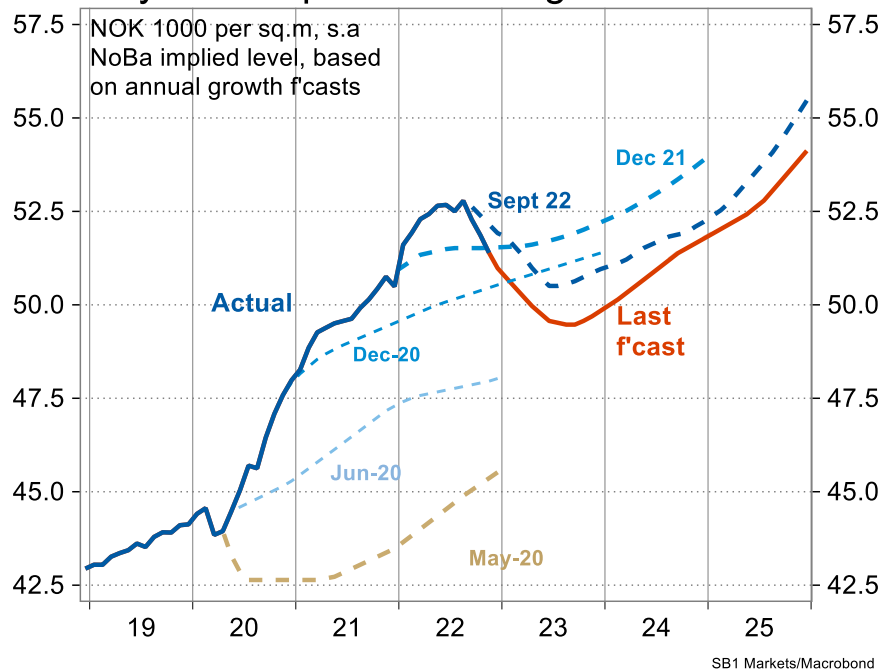


- The average **NAV unemployment** rate has been 2.9% since 1990, and below 2.3% (the red line on the chart) just in 18% of the months since 1990 (in 2007/8, 2019 and in 2022)
- If we assume that the 'NAIRU' is 2.3%, the unemployment gap will turn positive (become too high), in Q1 2024 – but will remain extremely small (the small blue area above the zero line in 2024/25. By comparison, the inflation gap (the beige area) is huge, some 30 x larger, implying that NoBa is a far cry from being an inflation nutter. A stable unemployment/production gap is given priority over the inflation gap
- However, as we said three months ago: *Another question is if **Norges Bank's forecasts** will turn out to be correct. Unemployment may increase by more, and inflation may come down faster. If that's the case, we are pretty sure what the bank's response would be ☺*

# NoBa revises down house prices again, exp. a 6.3% drop, Commercial -25%

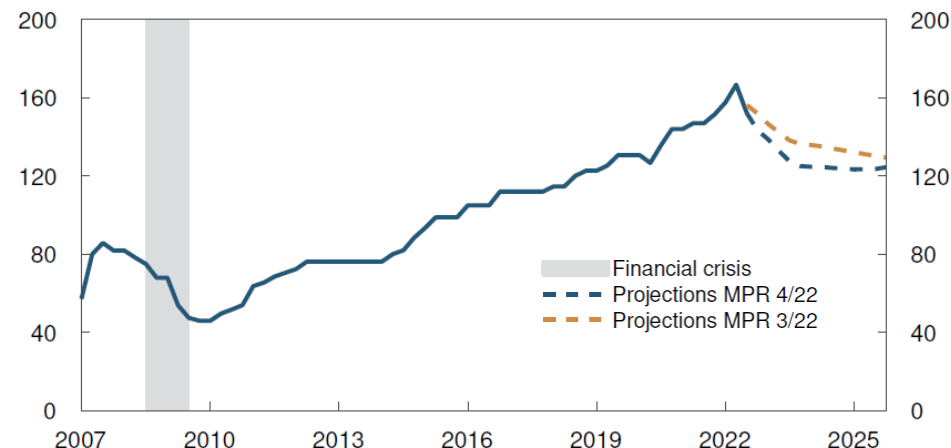
In Sept, -4.3%. So far, prices are down 2.6% from the peak in August

## Norway House prices vs Norges Bank's f'casts



## Chart 5.6 Commercial property prices are expected to decline

Estimated selling prices. In thousands of NOK per square metre

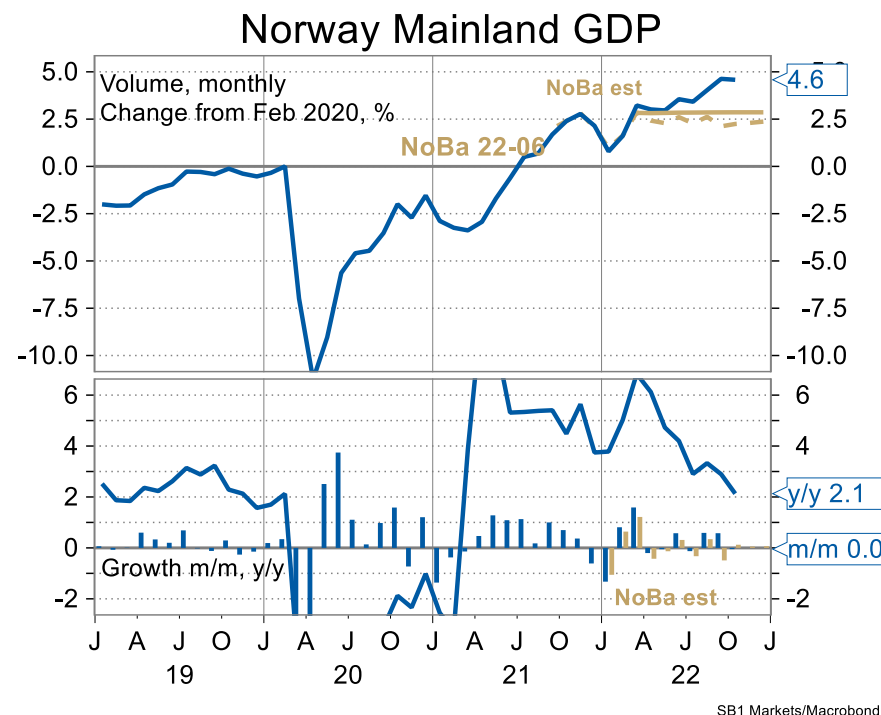
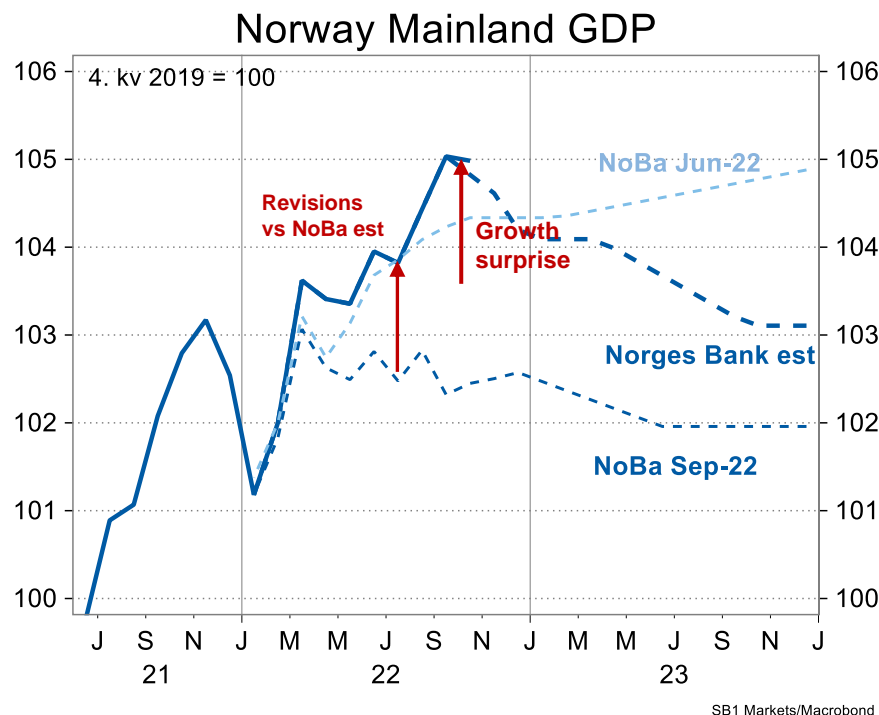


Sources: JLL and Norges Bank

- Three months ago, the bank also trimmed the house price f'cast by 2%
- House prices will bottom in Q3, and thereafter turn up, after a while supported by lower interest rates
- NoBa forecast a 15% 25% decline in prime office selling prices in Oslo the next few years – coming year (chart inspection, do data published). Three months ago we wrote: *We think it will happen much faster – and that prices will decline more than by 15%. The bank now came to the same conclusion, is has in reality happened already*

# GDP unchanged in October, below expectations, but still far above NoBa path

October GDP 2.3% higher than NoBa assumed in September

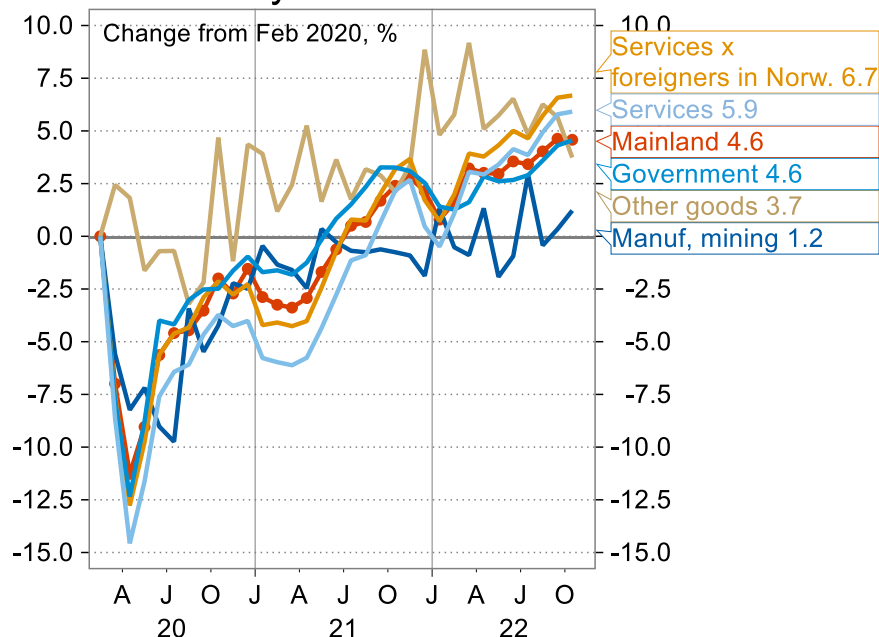


- **Mainland GDP** was unchanged in October, expected up 0.2% – 0.4% (our f'cast as the highest). Growth m/m in September was revised up by 0.1 pp to 0.6%.
- **Production:** Fisheries on the downside, electricity and manufacturing production on the upside
- **Demand:** Household demand rose while Mainland business and oil investments fell sharply. Higher inventories may be a warning sign – they contributed to a huge lift in demand (all other elements were in sum down) but these data are notoriously volatile
- **What to make out of this?** Growth 'has to' slow soon, but the current pace is strong

# Production: Fish farming and fishery weakest sector in October

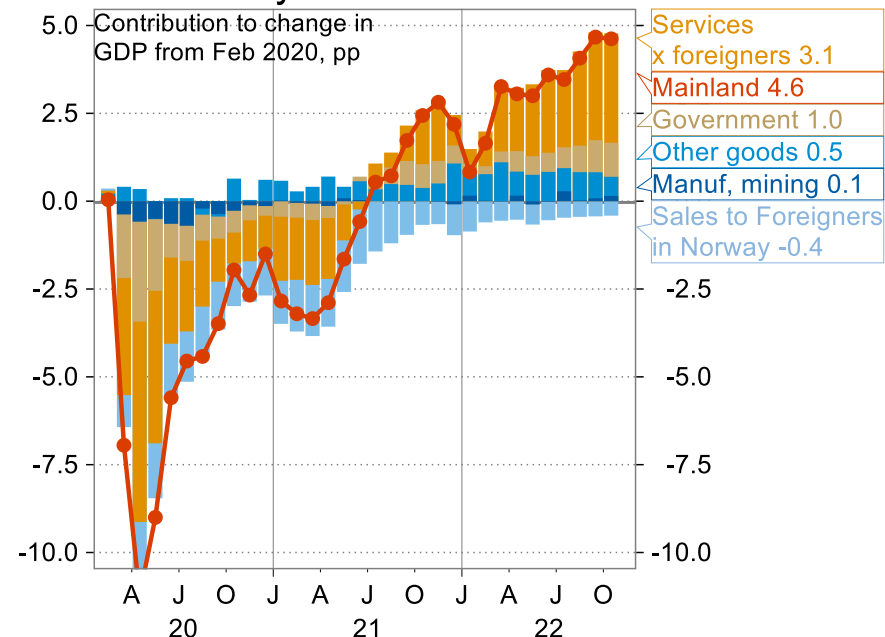
Manufacturing is still the weakest sector since before the pandemic, but grew 0.9% m/m in October

Norway Mainland GDP - sectors



SB1 Markets/Macrobond

Norway Mainland GDP - sectors

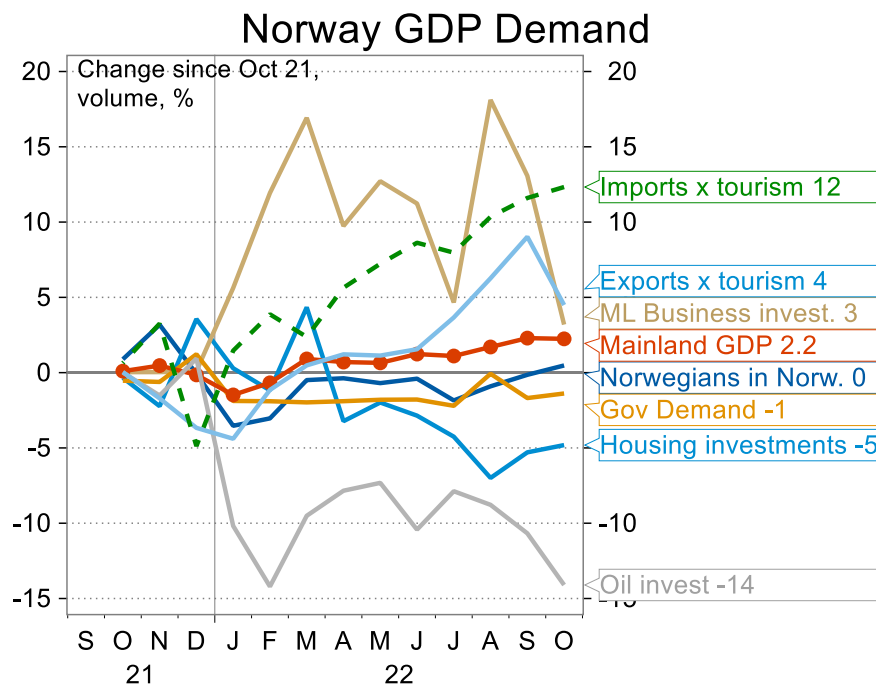


SB1 Markets/Macrobond

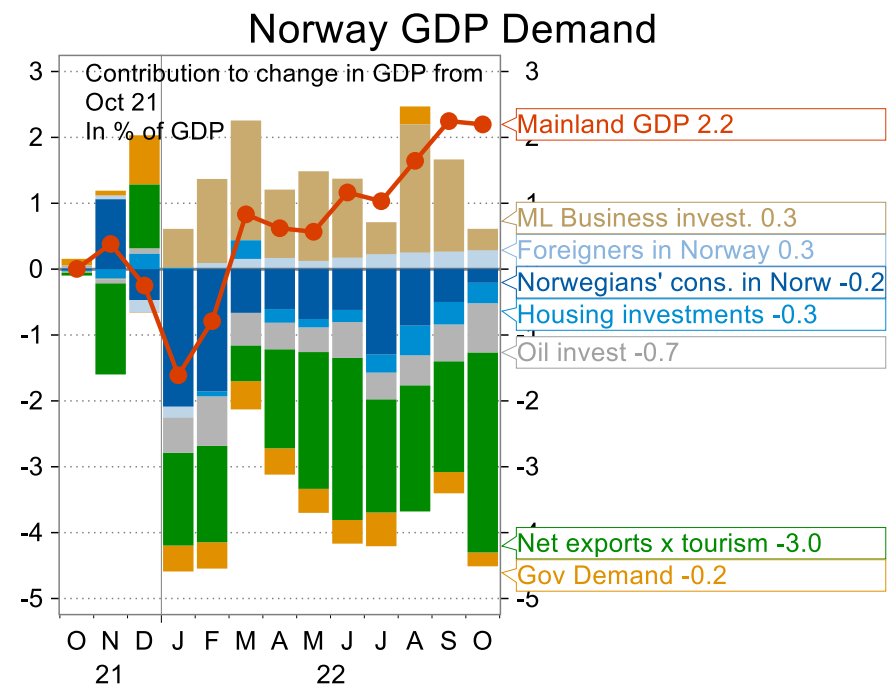
- The 'other goods' sector includes among other sectors fish-farming, fisheries and construction

# Demand: Mainland business, oil investments fell sharply in October

...while housing investments were marginally up in October... despite starts trending down (and rates up)



SB1 Markets/Macrobond



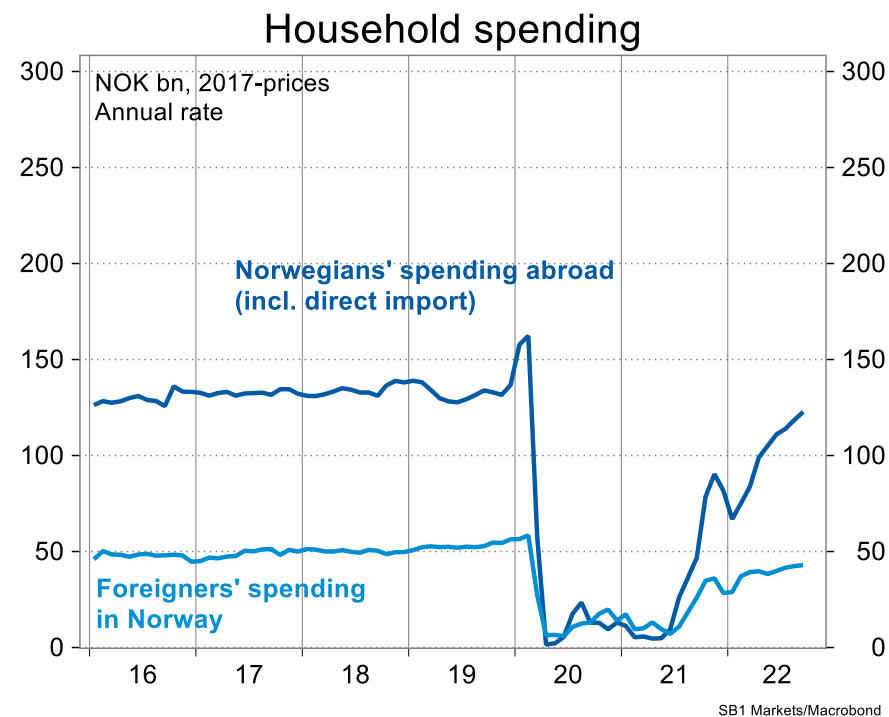
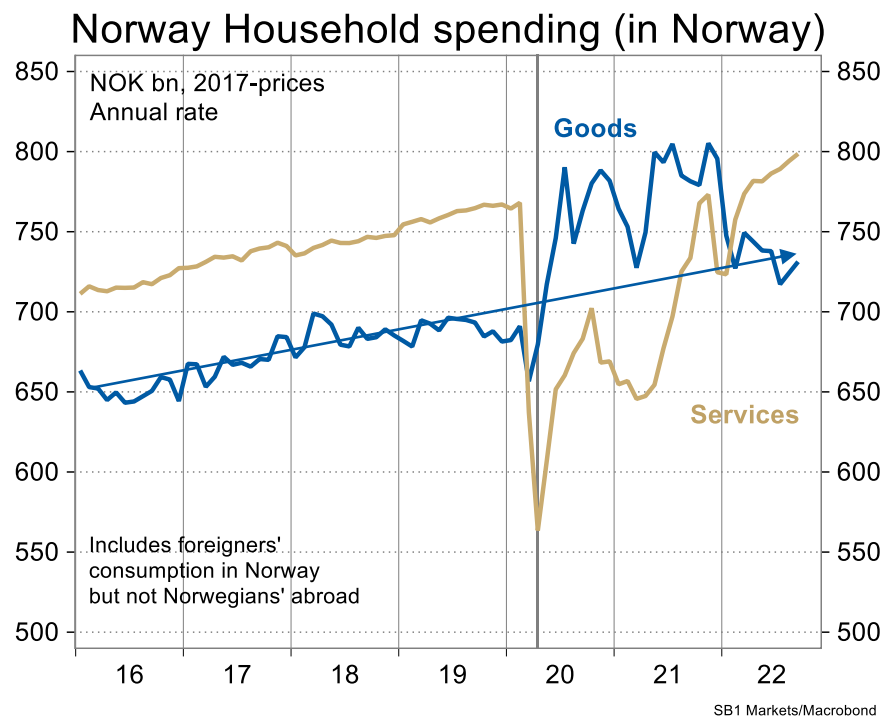
SB1 Markets/Macrobond

- Mainland business investments fell by 8.3%
- Exports also fell, after a strong run
- In addition, a faster growth in inventories contributed sharply on the upside



# Services consumption in Norway have fully recovered

Goods consumption close to the pre-pandemic trend. Spending abroad still 8% below par

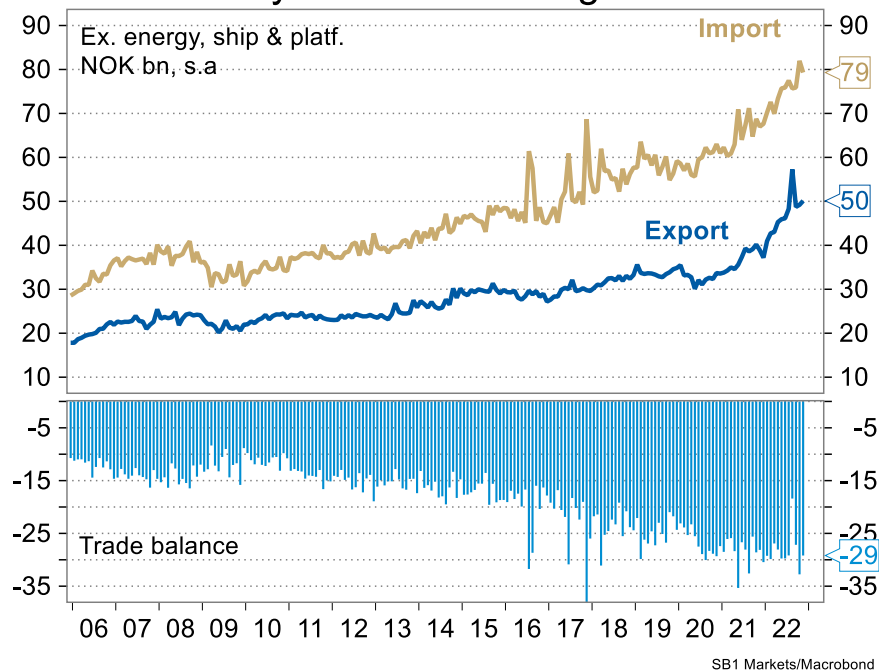


- Foreigners' spending in Norway is recovering but remains almost 20% below the pre-pandemic level
- Even so, spending on services in Norway is back on track. Somebody else must be spending more...

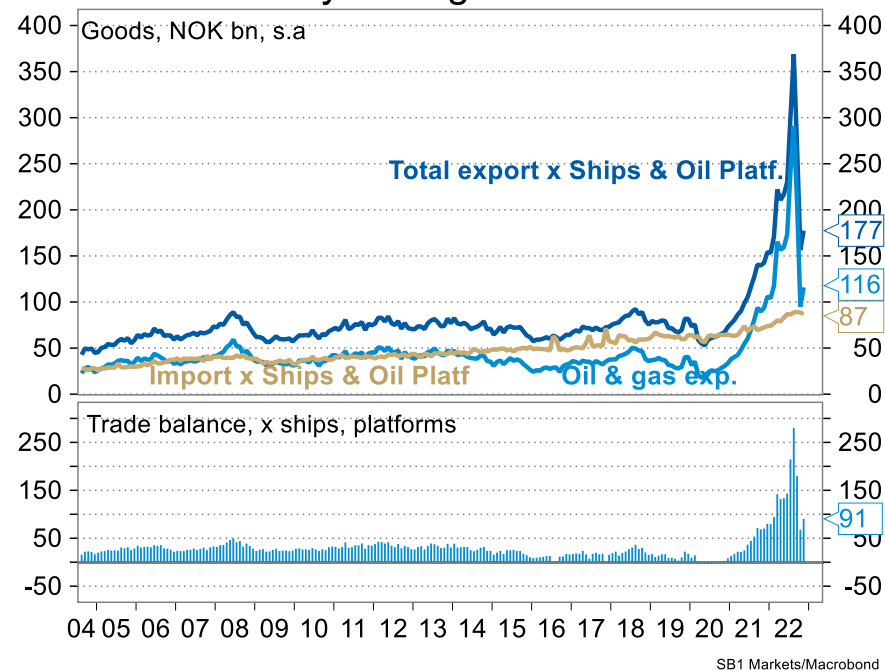
# Trade surplus lower due to falling gas prices and higher imports

The Mainland x energy balance has strengthened over the summer

## Norway Mainland Foreign trade



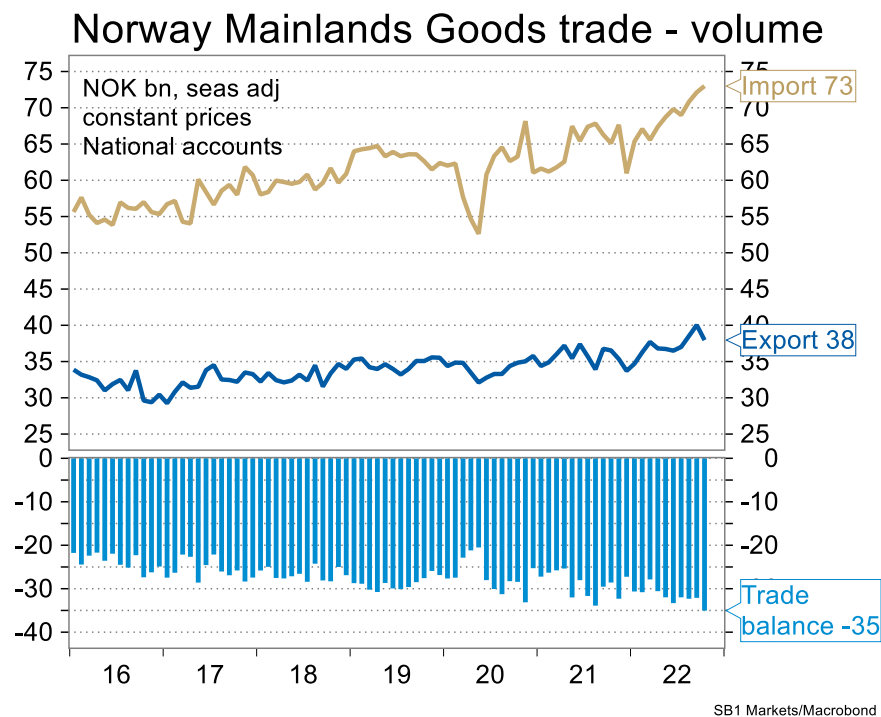
## Norway Foreign Trade total



- The November **overall trade surplus** in goods was NOK 91 bn, up from 68 bn in October (but down from ATH at 280 bn in Aug). The surplus in November equals 32% of Mainland GDP
- Oil & natural gas exports** were up 42% m/m, after a 34% decline in Oct – in volume terms, gas exports were down 5%. So far in December, gas prices have rebounded somewhat after easing in November - reason to believe that the value of gas exports will be up in Dec
- The **Mainland (and non-energy) trade deficit in goods** decreased by 3 bn to NOK 29 bn, equalling 10% of Mainland GDP (however, deliveries from the Mainland to the oil sector (cap. ex and op.ex) are not counted as exports from the Mainland but imported intermediate goods for producing 'exports' to the oil sector are counted as imports – and the 'real' Mainland trade balance is far, far stronger)
- Non-energy exports** were virtually unch at NOK 50 bn. Mainland exports have been very strong in value terms during and after the pandemic, and the underlying growth rate over the past year is some 30%. Exports are up 49% since the end of 2020, almost entirely due to higher prices. Fish, metals, and chemicals exports were lower in November, but fish exports are still up 18% y/y and 51% since Dec-20 in value terms
- Imports** declined by 3 bn to 79 bn in November

## In volume terms, Mainland trade data are not that impressive

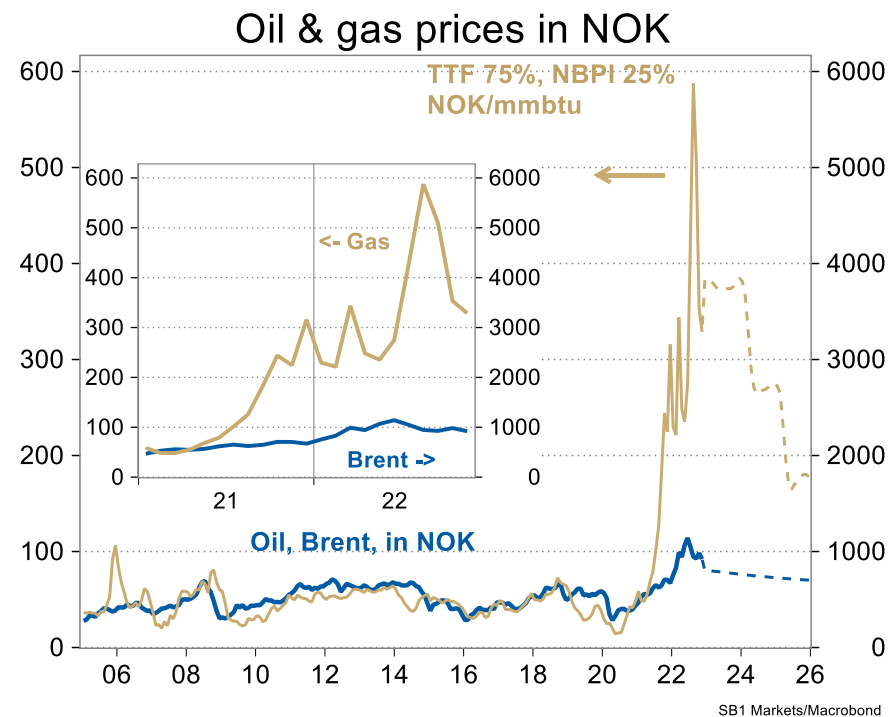
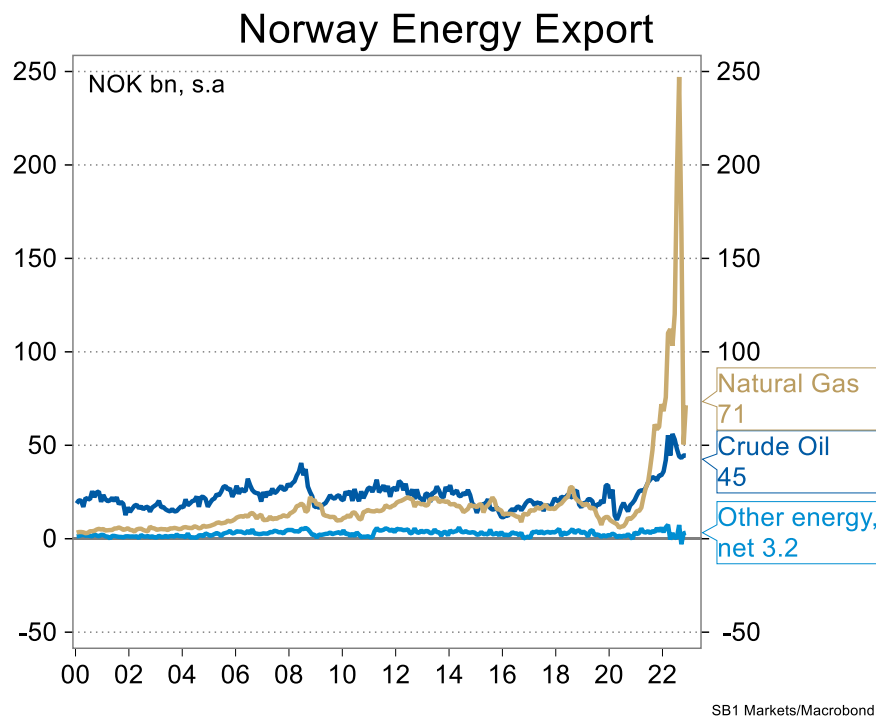
However, export volumes have climbed since the summer! And imports are at ATH



- The trade deficit in volume terms has been close to stable since before the pandemic

# Gas exports down 71% from peak, still 4x - 5x a normal level

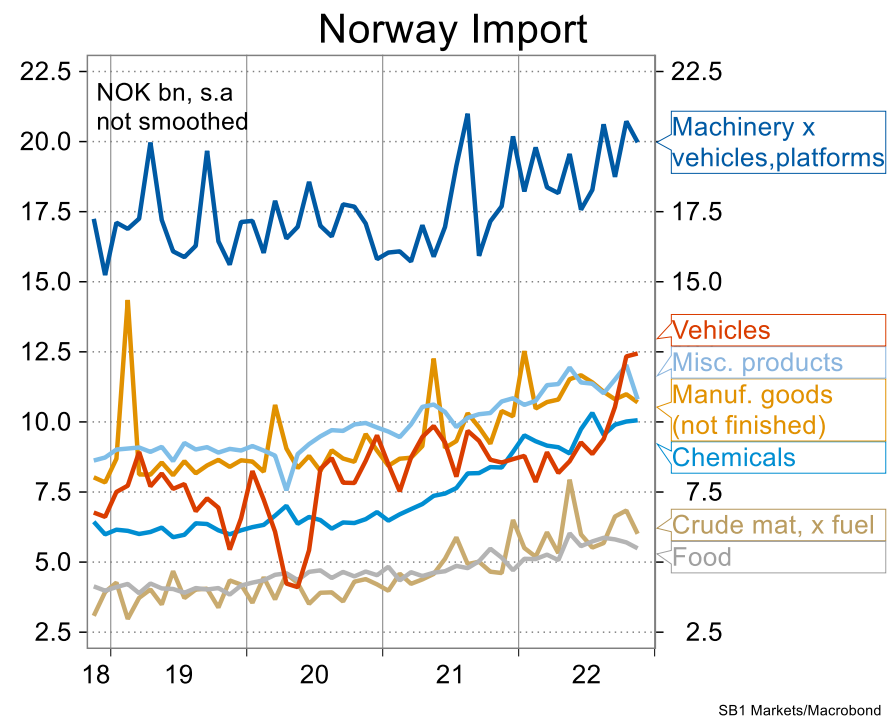
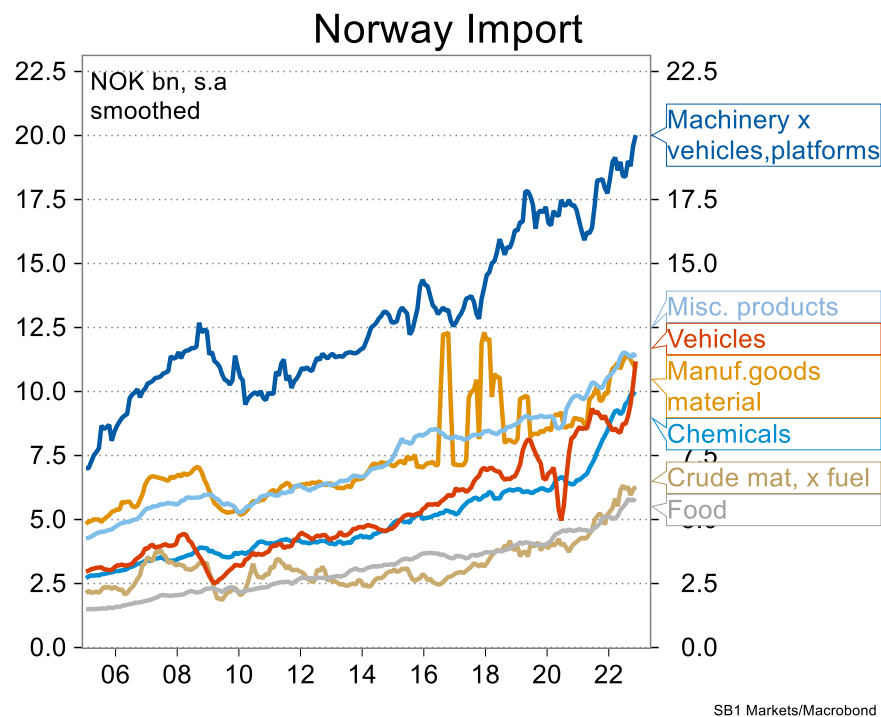
The gas price is up somewhat in December compared the November average, due to a very dry and cold weather



- **Gas prices** (75% TTF Netherland gas prices, 25% NBP UK prices) climbed 10x above a normal level to August, from early 2021, of course because Russian exports to Europe have been almost completely cut off. Actual gas exports rose to NOK 71 bn in November, up from NOK 50 bn in October but down from NOK 200 bn at the peak in Aug. Volume wise, gas exports were down 5% m/m in November
- **Crude oil exports** increased by 0.1 bn to NOK 44.6 bn (+0.2%, seas.adj.)
- In sum, **petro exports** have been sky high, and although gas exports at NOK 71 bn is down 71% from ATH, it is still some 4x - 5x a normal level. Some of it is due to higher volumes, as more capacity was utilised to supply Europe with gas post the Russian cut off. However, the majority of the increase is due to higher gas prices. Most of the new earned fortunes will end up in the Government's coffers and thereafter transferred directly to the Oil fund – before being returned to the budget via the long term 3% (of the Fund's capital) spending rule
- **Other energy exports** were up in November

# Most imports are trending rapidly upwards – as domestic demand is strong

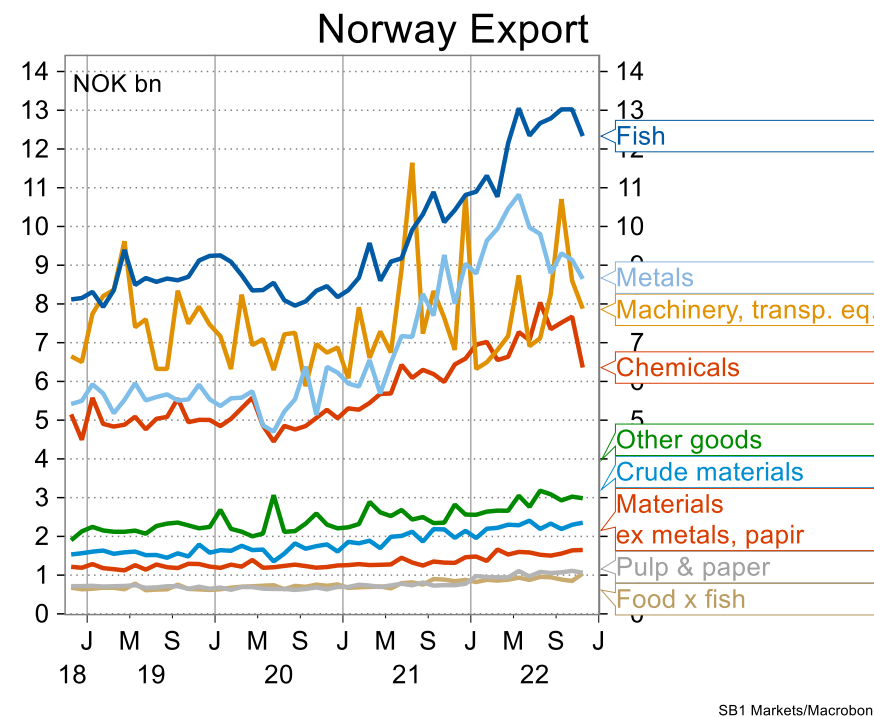
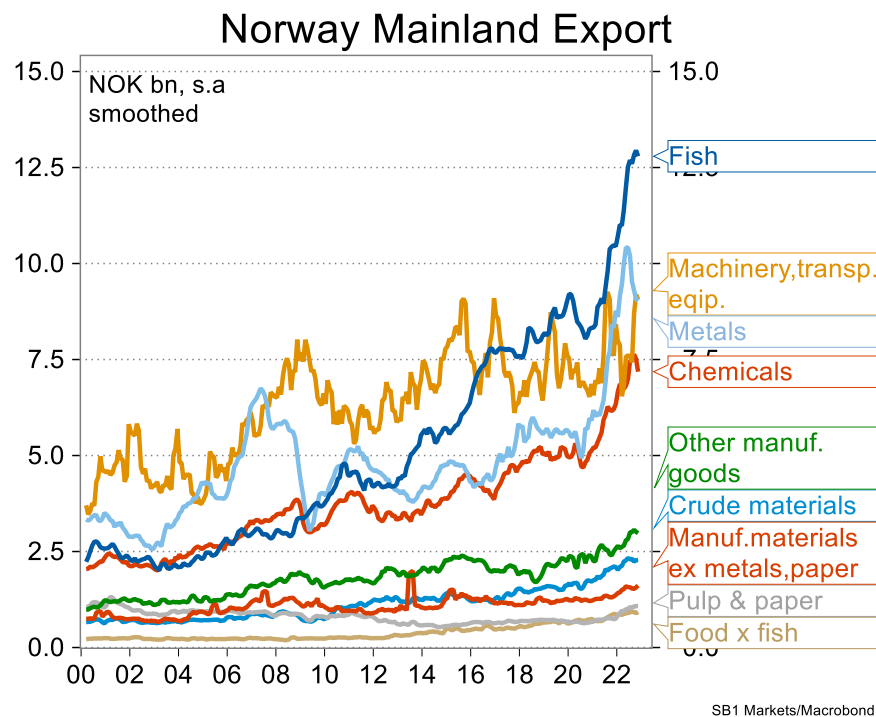
... And prices are soaring. Vehicle imports have also turned back up, as tax increased will take effect from Jan-23



- ...but all major categories, with the exception of automobile imports, were down in November
- The spikes in imports of manufactured goods are due to unfinished platforms or ships

# Mainland exports: Fish, metals, machinery, chemicals down in November

Food, materials, and crude metals exports were higher in Nov. Machinery exports still not that impressive

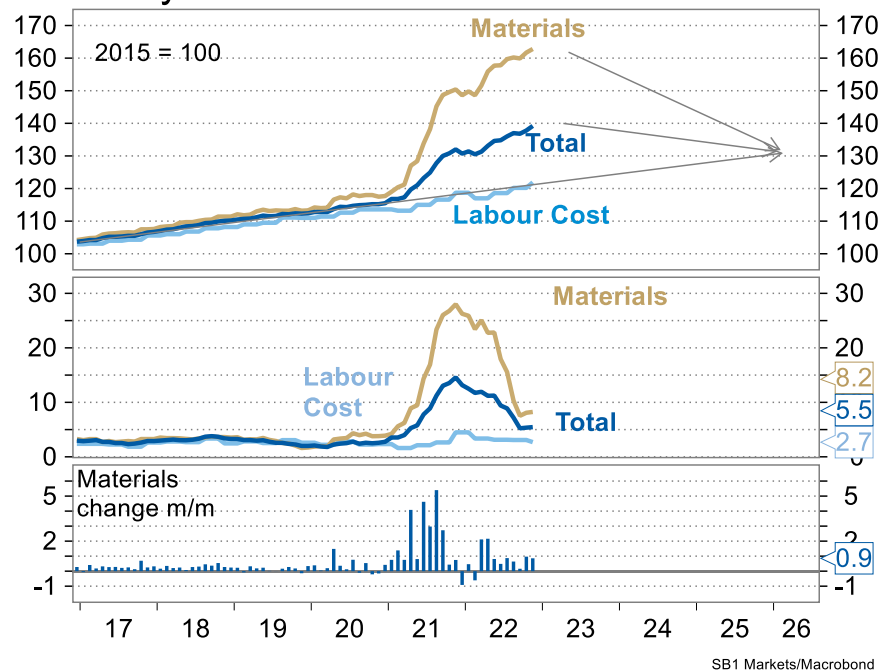


- Raw material prices have turned south, and exports of metals are down from the peak

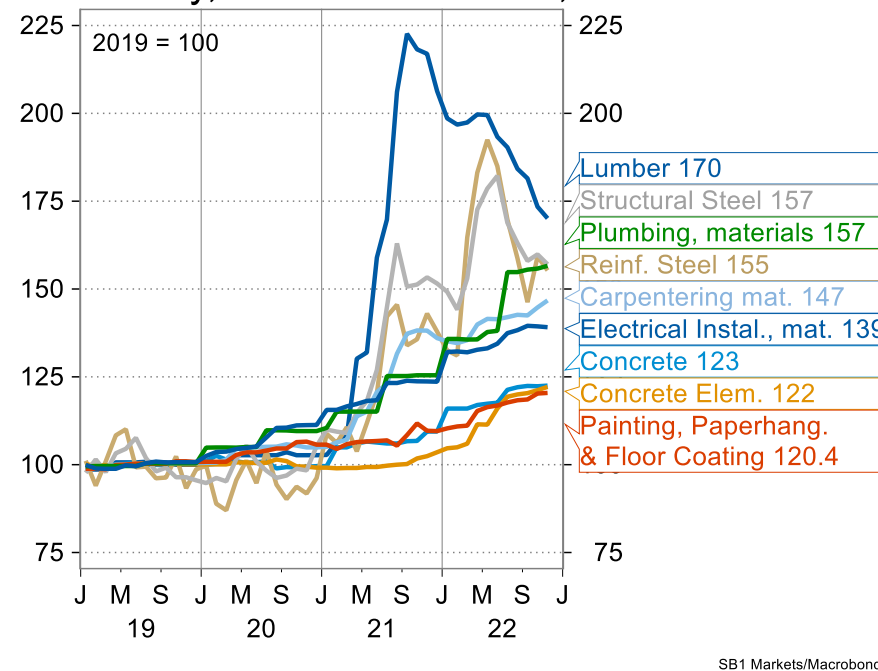
# Building materials are still on the way up, even if lumber is falling further

Steel prices are well down from the peak, but is not falling anymore

## Norway Residential Construction Cost Index



## Norway, Residential constr, material costs

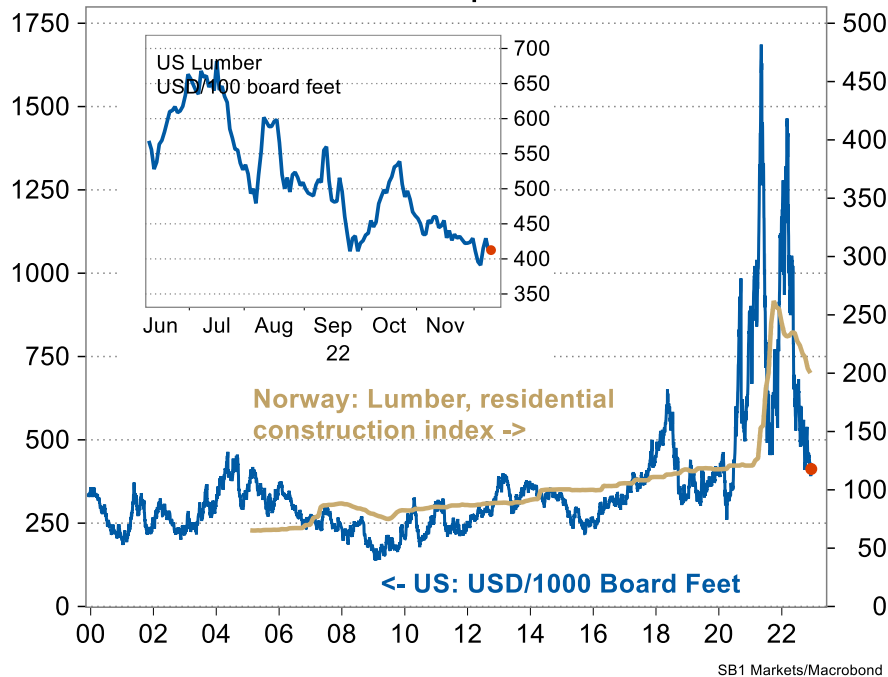


- **Material prices** (houses and apartments) added 0.9% November. Prices are up 8.2%, down from 28% at the peak. We expected a decline m/m
  - Lumber prices are trending down, and reports signal further declines the coming months. Steel prices also fell in November but these prices have flattened recent months (in line with global steel prices)
  - Other material prices are still trending up; but slower. Plumbing materials, electrical equipment and concrete rose just slightly
- **Labour costs** were just up 2.5% y/y in Q4, down from 3.1% in Q3 – no sign of acceleration
- Including labour costs, the **total building** cost index is up by 5.5%, down from the ATH at 14.6% at the peak last Oct. The price level is up 13% vs. the pre-pandemic 2.5% growth path. Going forward, we still think lower material costs will bring total construction costs down to more normal levels, check 2 pages fwd.

## US lumber prices (2"x4) almost back to a normal level

Steel prices have come down from the peak, but are more or less flat from a month ago

### Lumber prices



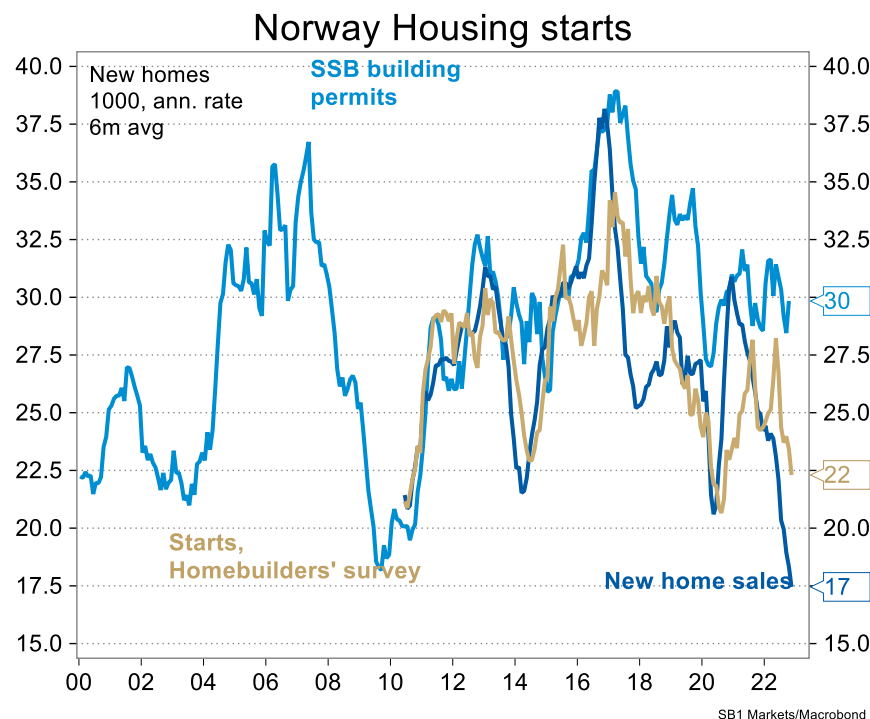
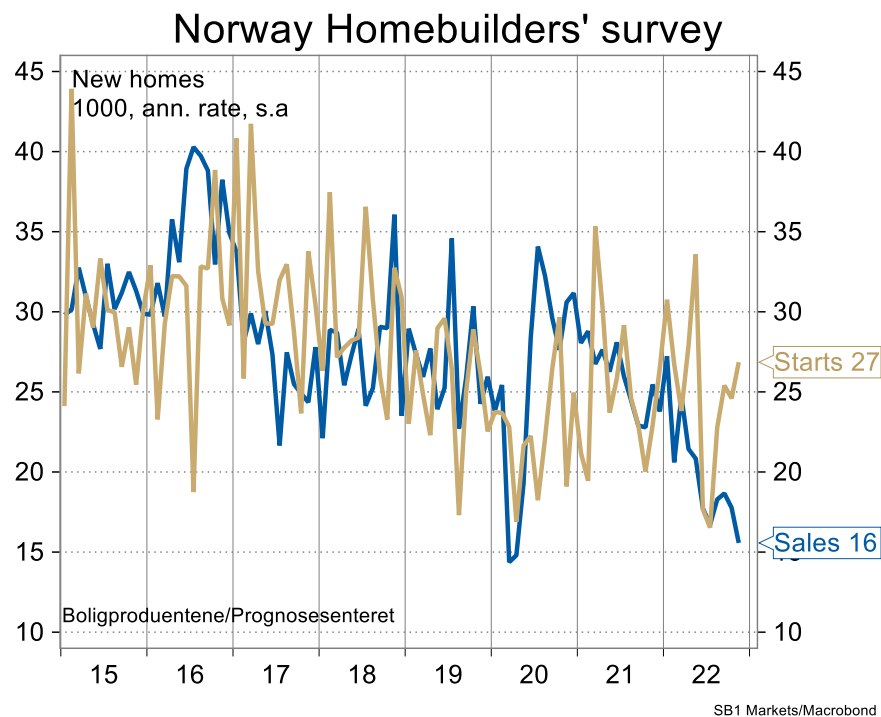
### Steel prices





# New home sales further down in November

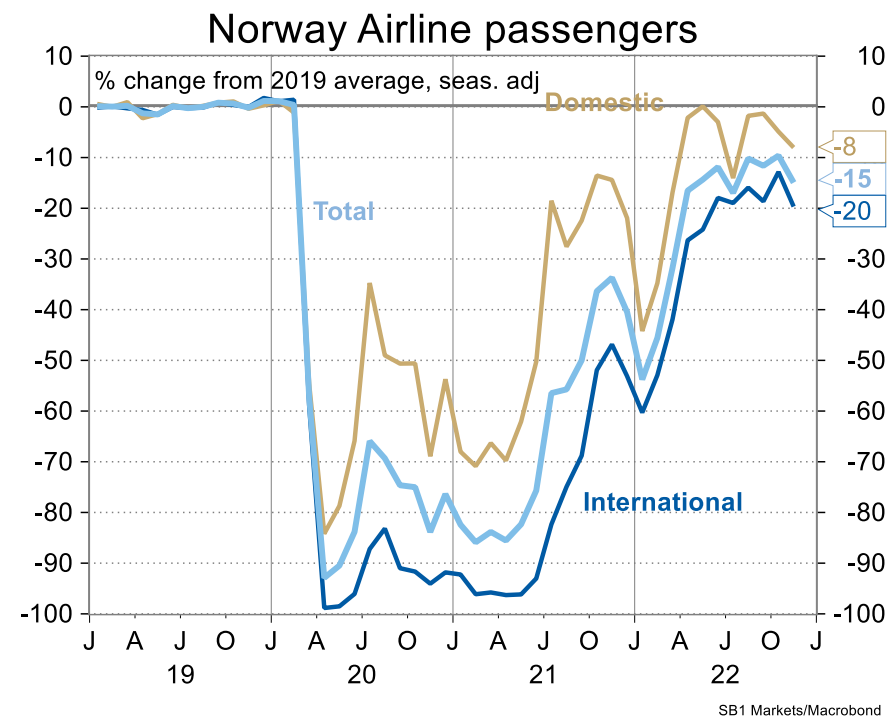
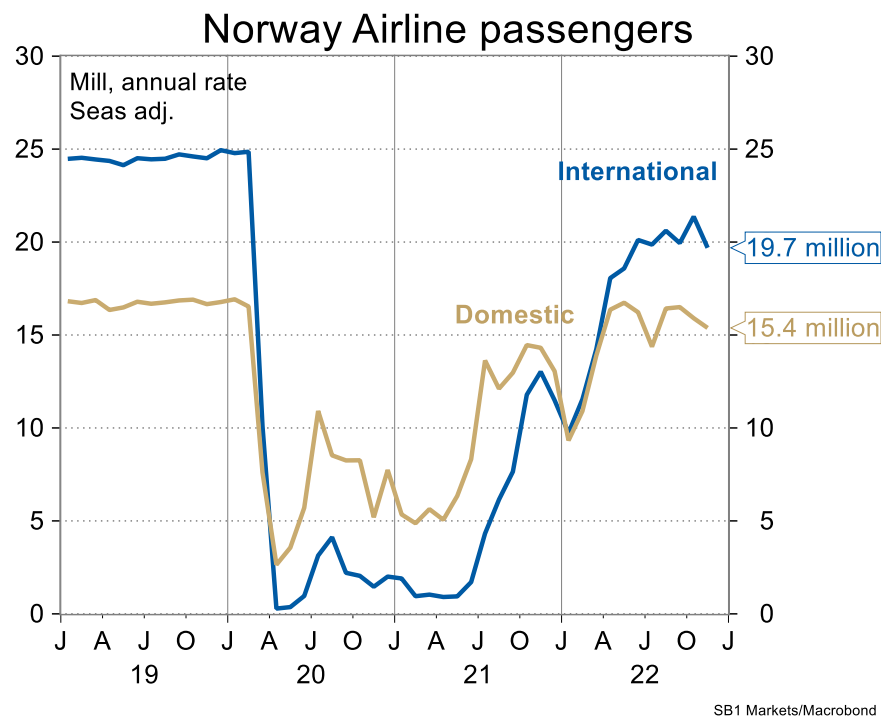
To the lowest level ever (data from 2010), barring the start of the pandemic



- Boligprodusentene (Home builders) reported a further decrease in new home sales in November, to 16' from 18' (annualised). The average over the past 6 months is 17', the lowest on record from the Home builders
- Starts increased by 3' to 27' in November. The average over the past 6 months is at 22', while SSBs reported building permits at 30' on average the past 6 months
- The rather steady decline in new home sales signals a very likely downturn in new starts/permits the coming months. Higher mortgage rates, higher construction costs as well as falling house prices are reasonable explanations

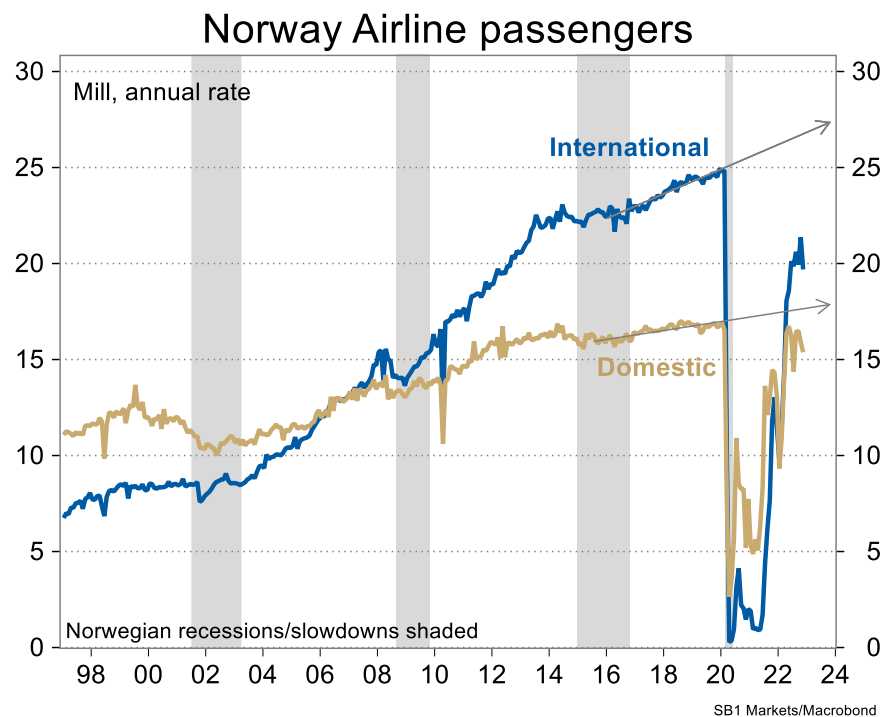
# Airline traffic flattens; Domestic down -5% vs 2019, international down 15-20%

No. of passengers slightly down in November



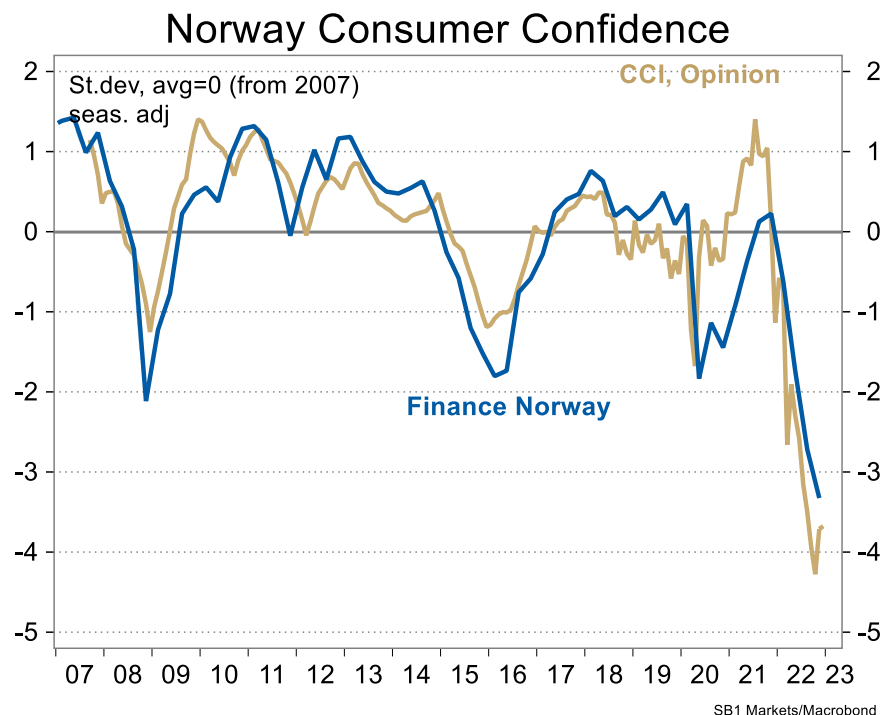
## A Longer-term view: Long Covid in the air

Both domestic and international travelling are 15 & 25% below their respective pre-pandemic trends



# Consumer confidence marginally up in December, still -3.7 st.dev below avg.

We are collectively depressed: consumer confidence is extremely low – but have bottomed most placed



- The **CCI print** from Opinion was slightly up in Christmas, but at -3.7 st.dev it is hardly a positive story. ATL was at -4.2 st.dev in October, while the bottom during the pandemic was 2.0 st. dev. below average
- The **net share of optimists** is -27%. Given inflation and the hikes in interest rates + some geopolitical uncertainty, this share could easily have been larger
- **Will households stop spending or retreating from the housing market?** The housing market has no doubt turned the corner, while sales are trending down but far from at a scale comparable to the record low consumer confidence
- Even if a large share of the population recognises that their own economy will be hurt, it does not imply that they all plan to cut spending sharply – but there is of course some downside risk. So far, lower savings have paid much of the bill for higher interest rates and higher prices

Highlights

The world around us

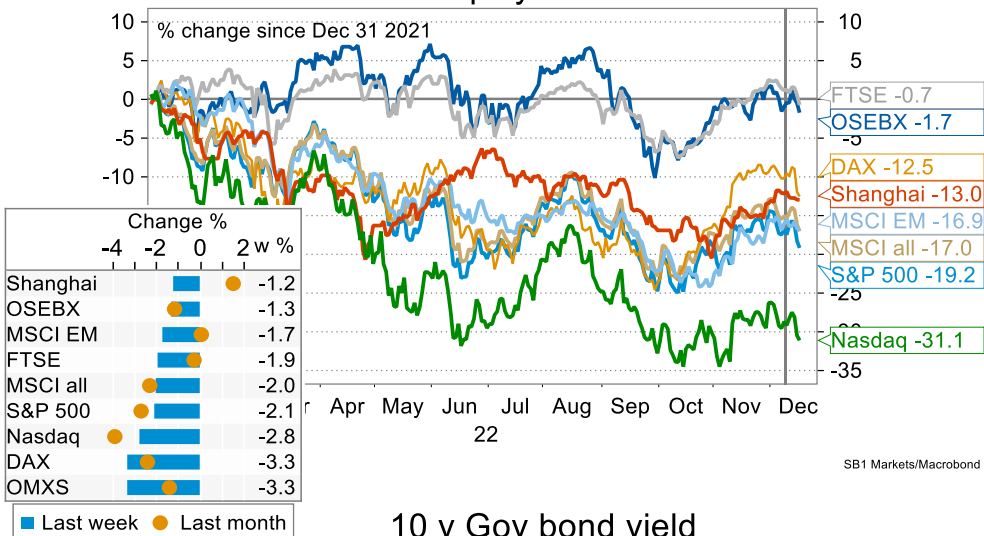
The Norwegian economy

Market charts & comments

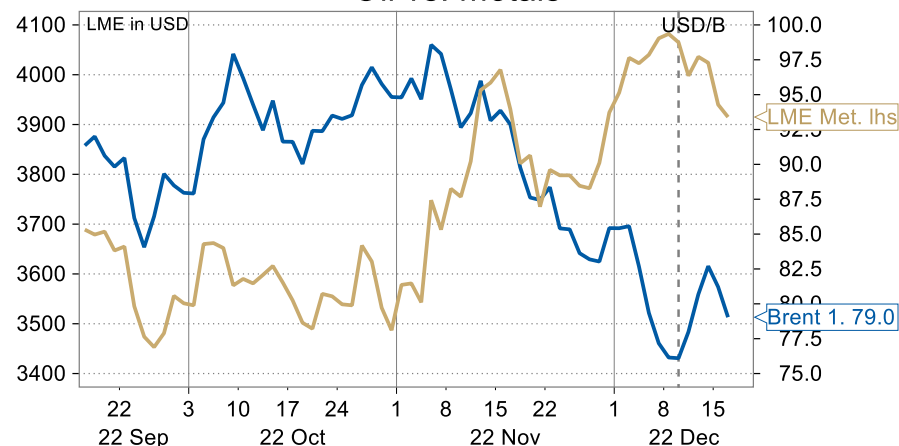
# Equity markets down, bond yields mostly up on hawkish central banks

Oil slightly up, but is trending down, the opposite for metals. The EUR is recovering, and the NOK appreciated last week

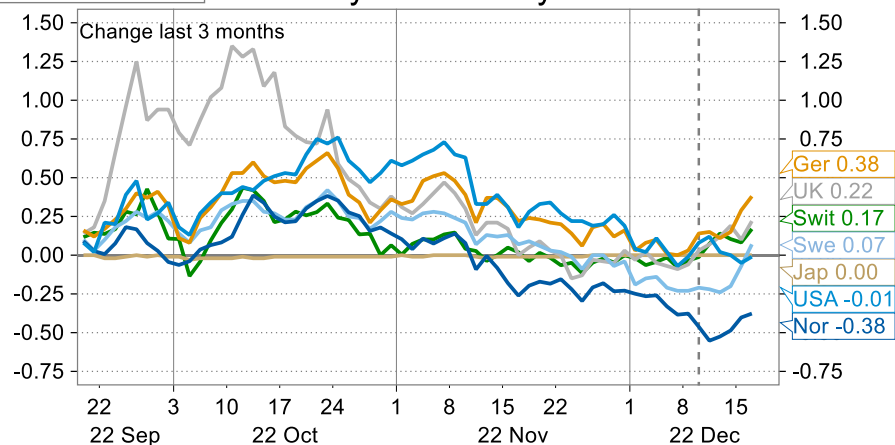
## Equity Indices



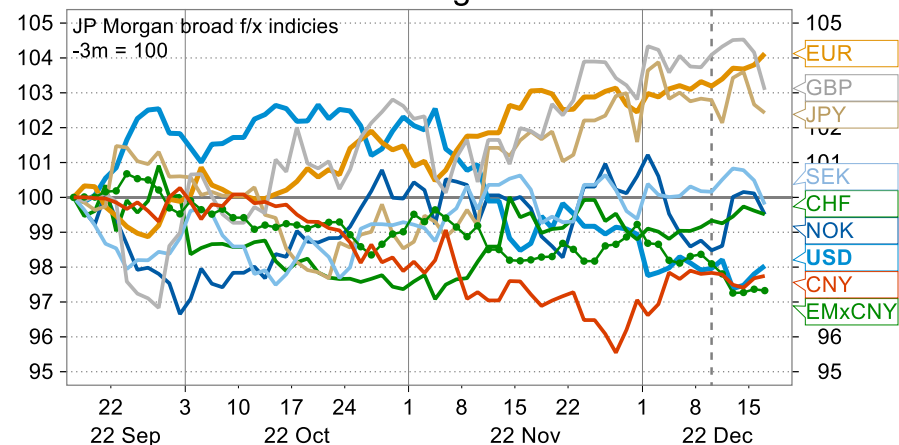
## Oil vs. metals



## 10 y Gov bond yield



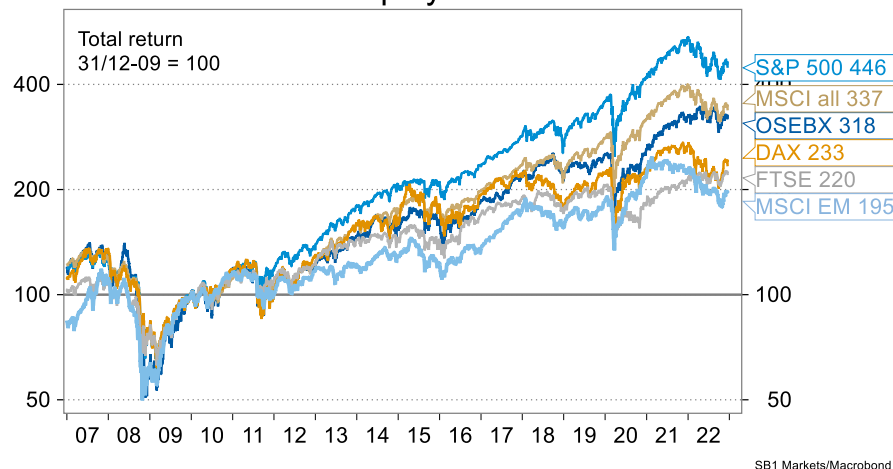
## Exchange rates



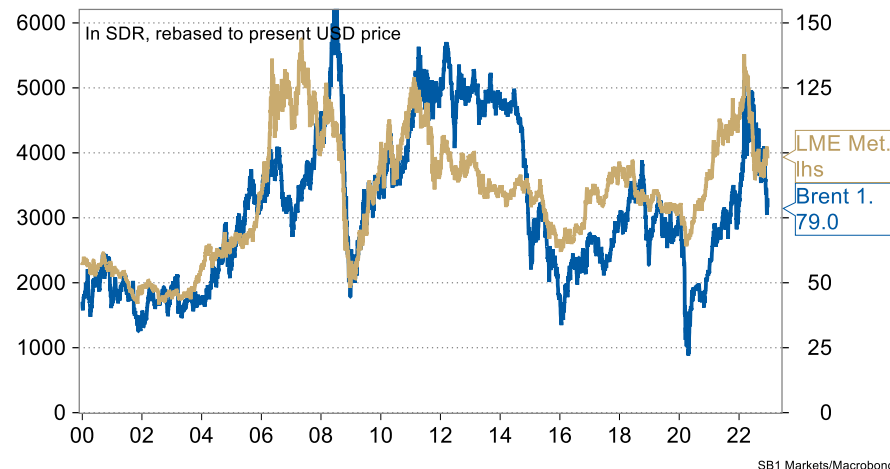
# The long-term picture: Stock markets down, commodities down, yields up

The USD is still very strong, most other DMs are slipping, NOK including

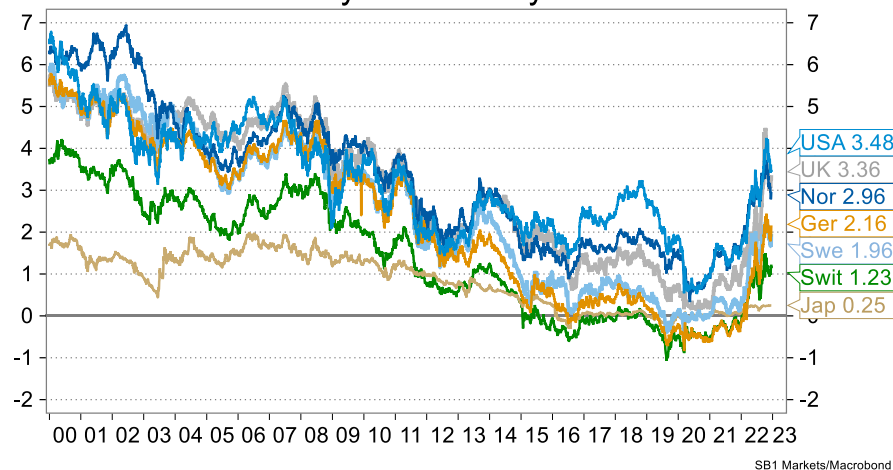
## Equity Indices



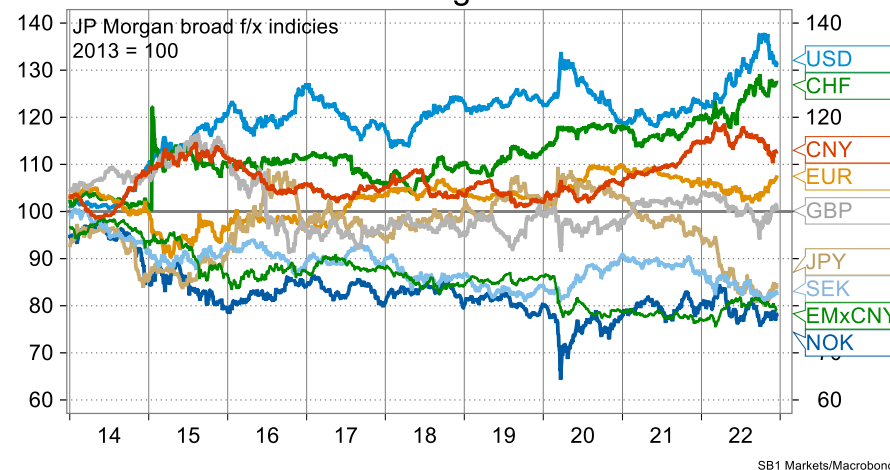
## Oil vs. metals



## 10 y Gov bond yields

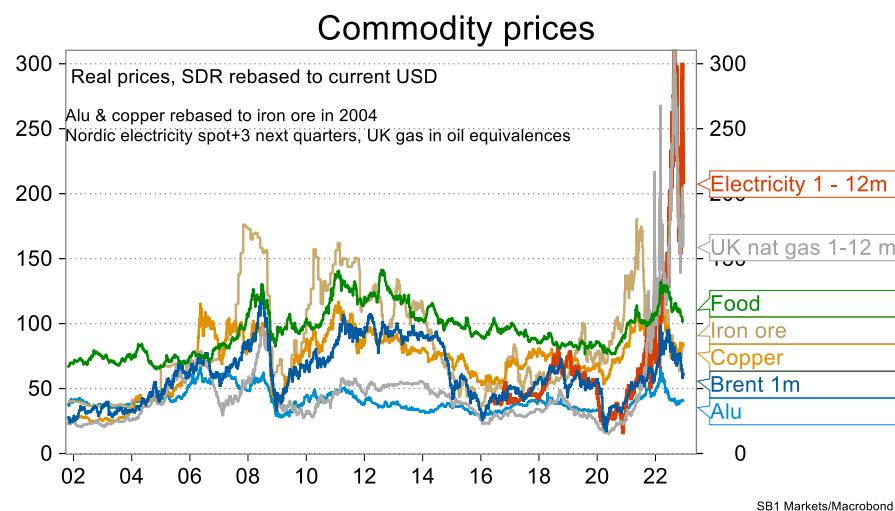
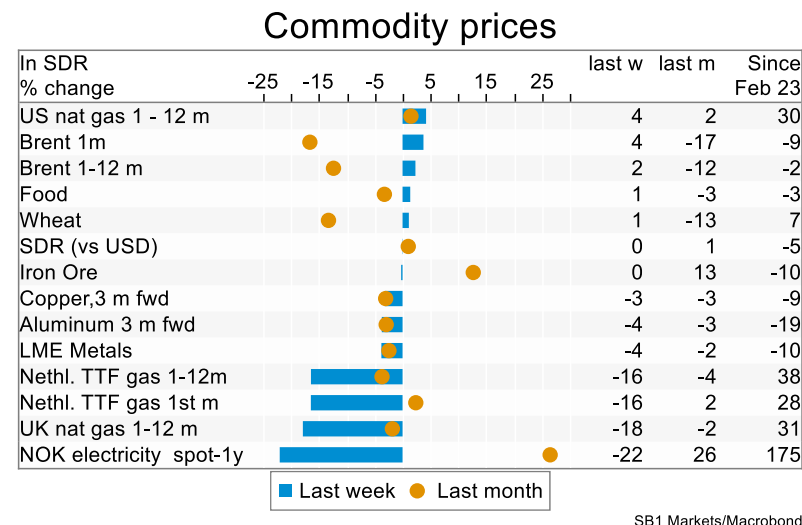
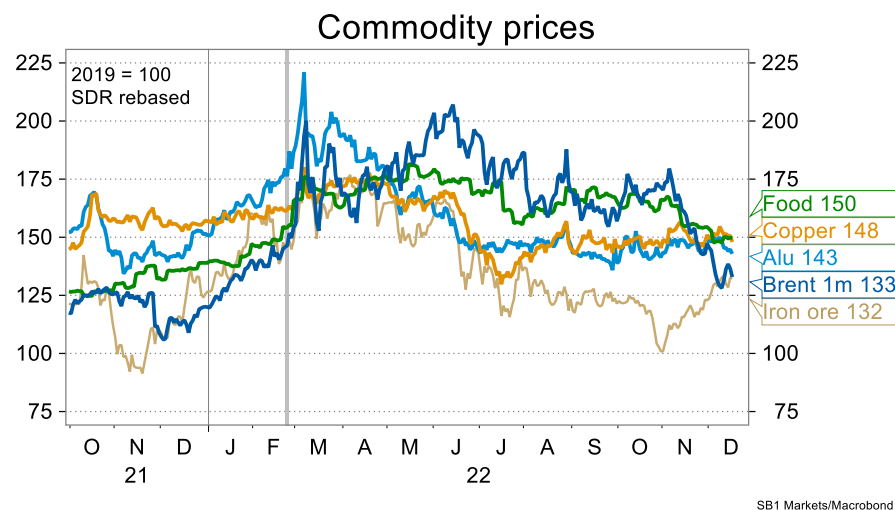


## Exchange rates



# The oil price recovered some the recent losses, European gas/el. down

Metal prices mostly down but iron ore prices continued upwards



## Last week – prices in SDR

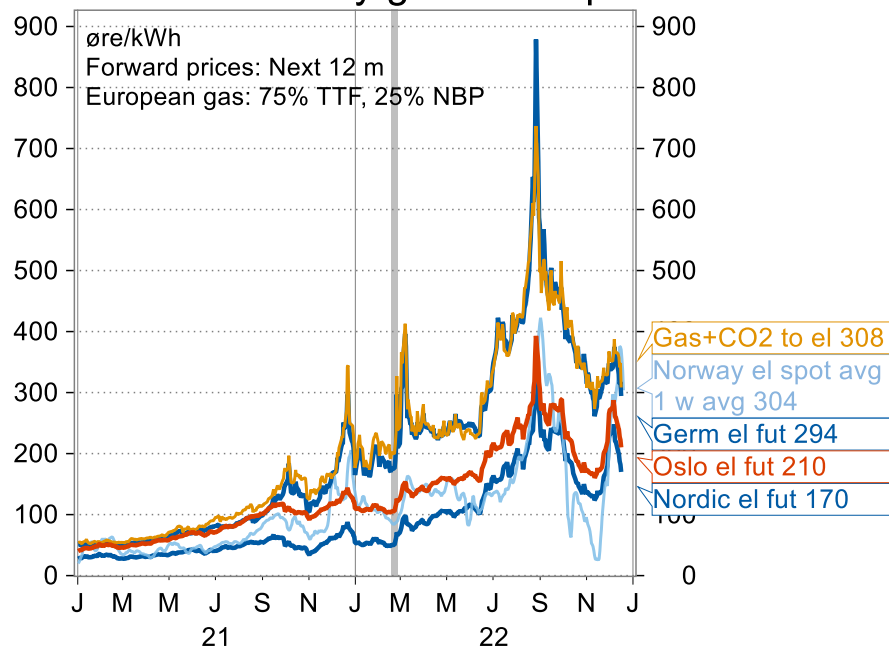
- **Oil** prices recovered some of the recent losses. The price level is close to a 5 or 10 y average (in real USD terms)
- **European natural gas** turned south, following steep increases recent weeks. Norwegian electricity prices fell further but is still up last 4 weeks
- **Iron ore** prices have recovered sharply since early November on hopes for a recovery in the Chinese construction sectors following a string of policy stimulus measures – that might work
- **Other metal** prices took a break last week and are flat last month





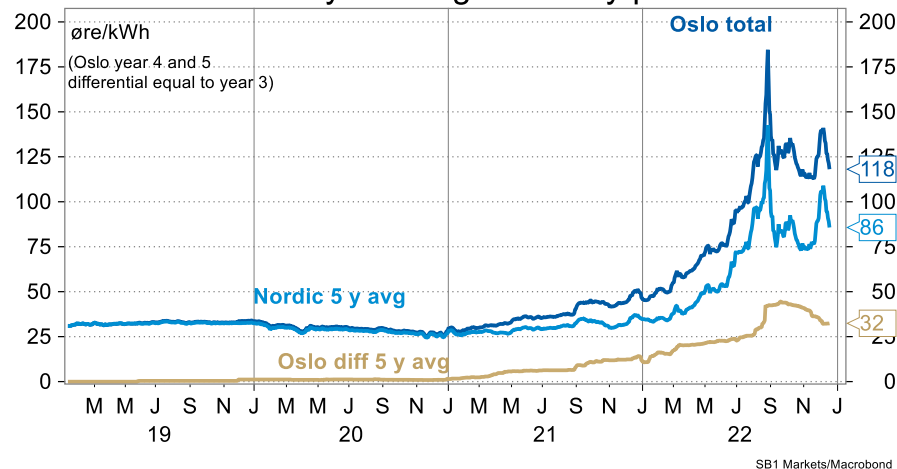
# European gas & electricity prices have reversed >1/2 of the November surge

## Electricity/gas future prices



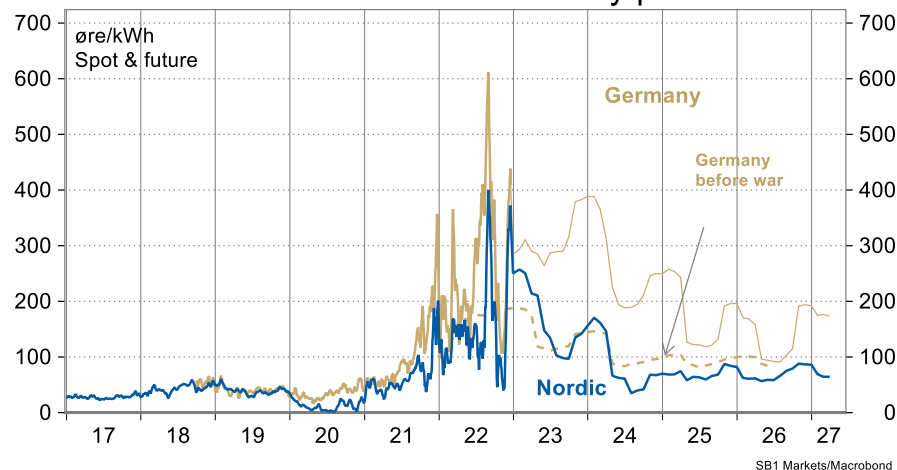
SB1 Markets/Macrobond

## Nordic 5 y fwd avg Electricity prices



SB1 Markets/Macrobond

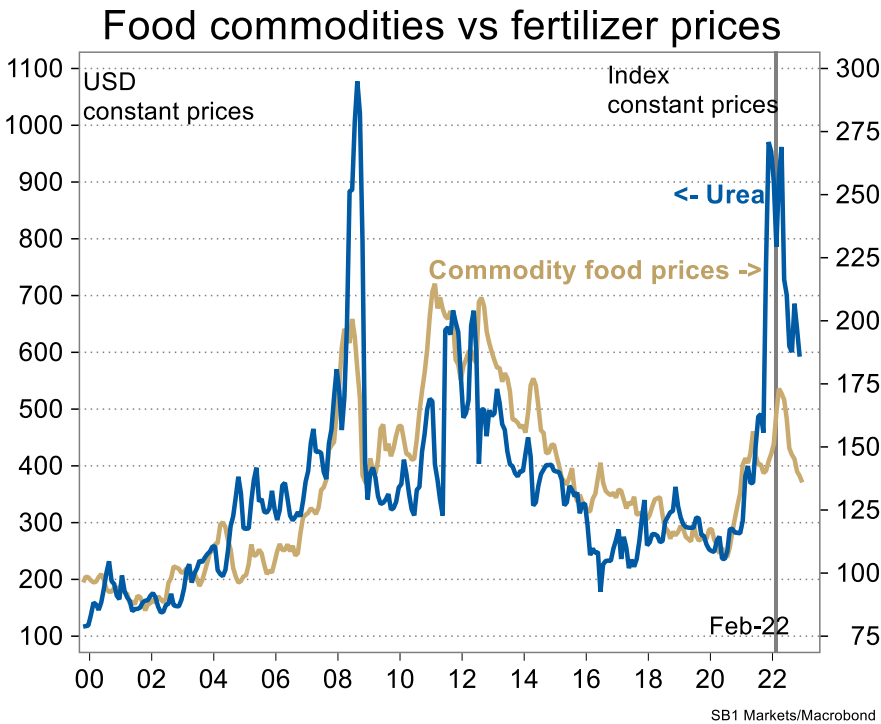
## Nordic vs. German electricity prices



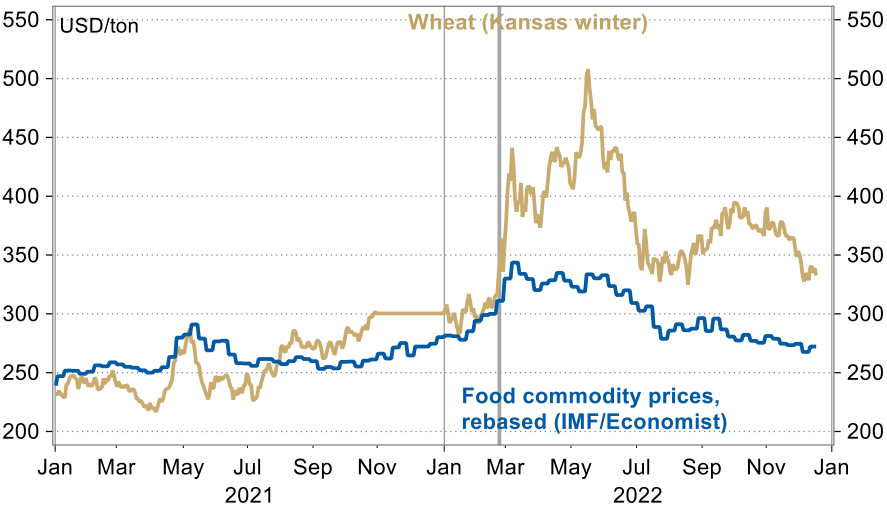
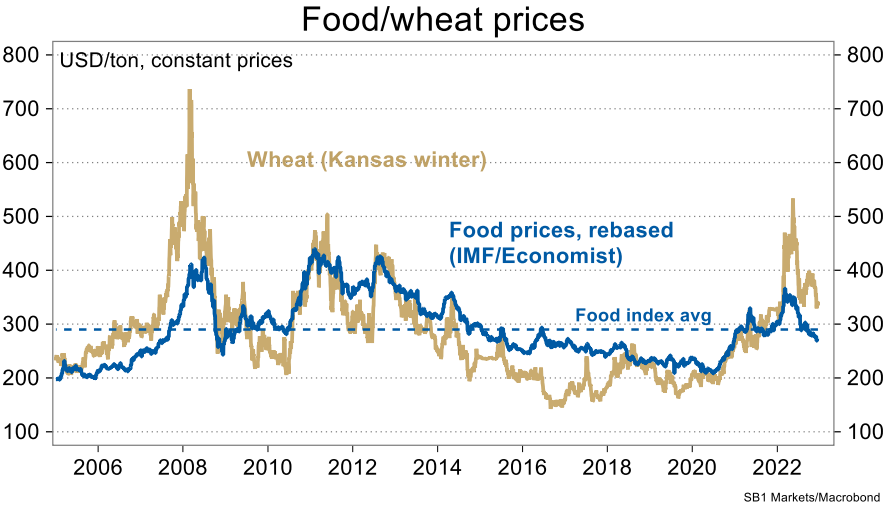
SB1 Markets/Macrobond

# Food prices are trending down

The real price level is not that high, and below the 10 y average. A global food crisis??

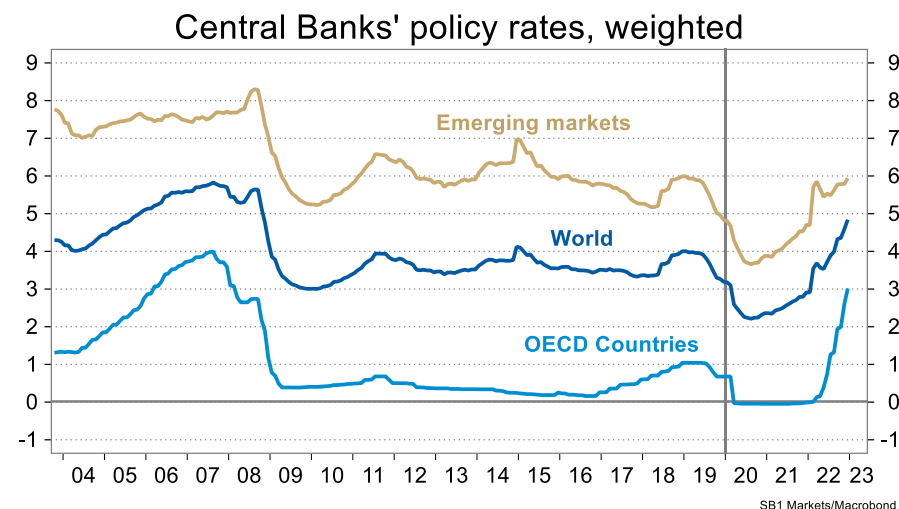
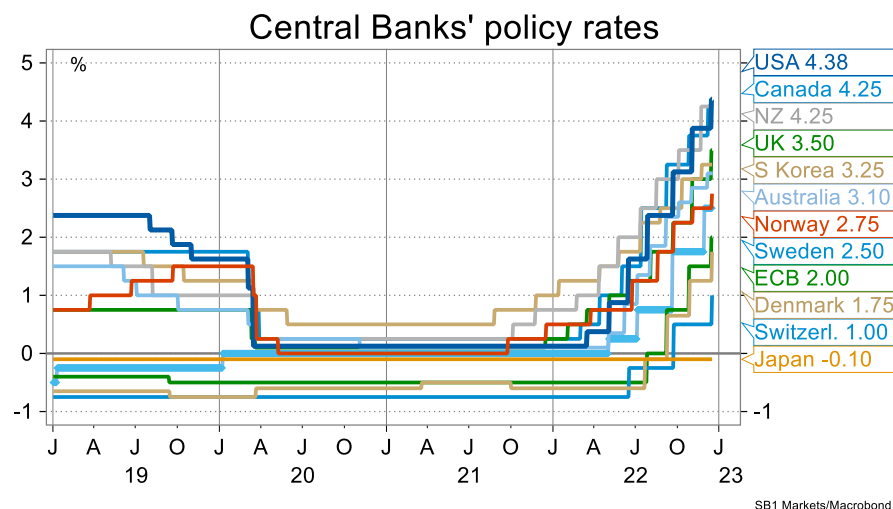


- Urea prices have come sharply down to, since early 2022 – but prices remain higher than normal

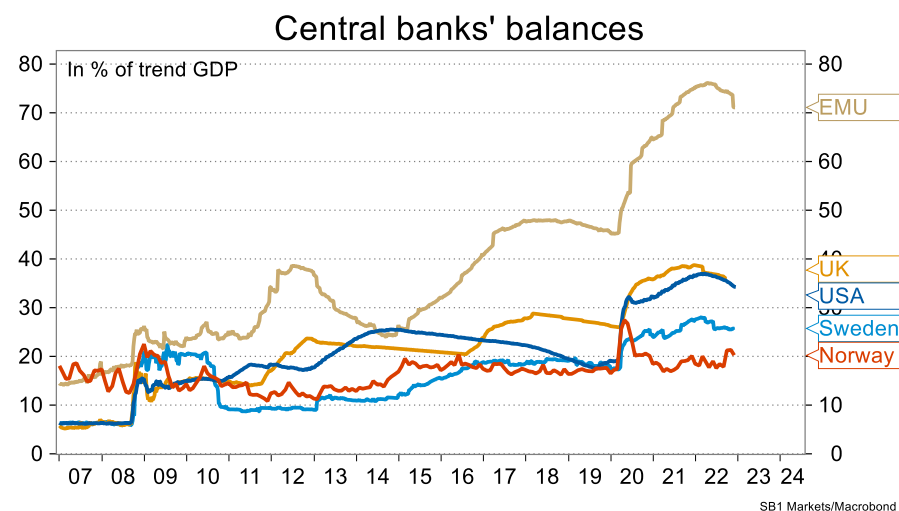


# Last week: Fed, ECB, BoE, SNB +50 bps. NoBa +25 bps

All as expected. All were more hawkish than expected, especially the ECB



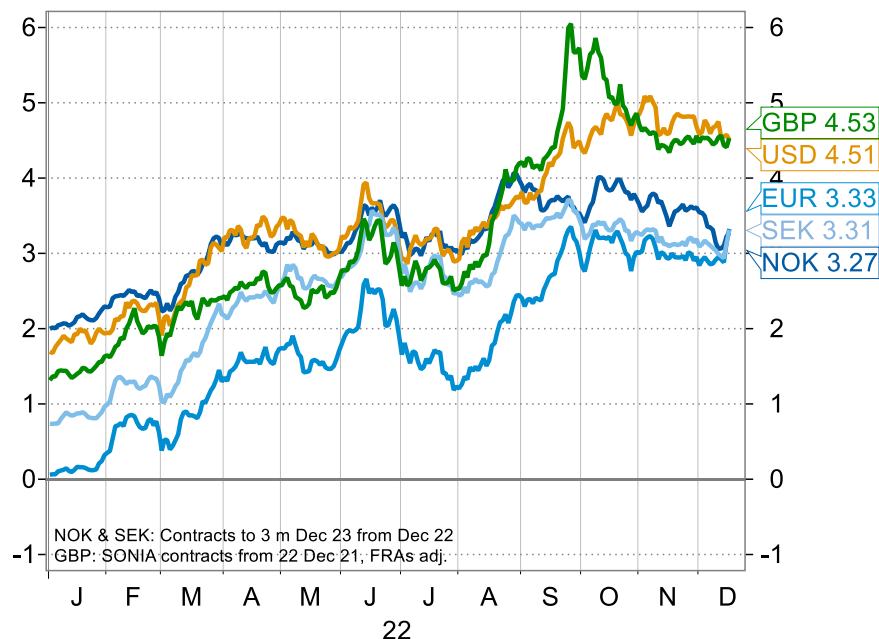
- **Central banks** are hiking rates even if they expect growth to slow (US) or the economy to contract (EMU, Sweden, UK, Norway) because inflation is way above target (including all measures of underlying inflation, partly also costs) and is expected to remain above target for several years
- The **EM average policy rate** is on the way up again, after a decline, due to the cut in the Russian and Turkish signal rates
- In addition to rate hikes, most central banks have ended their **QE buying programs**. Most banks have embarked on cutting back on their holdings, moving into the **QT zone**. The ECB signalled a further tightening last week



# Just US FRA rates down last week

The EUR rates rose the most (up to 40 bps) in response to the ECB hawkish signals – more 50 bps hikes to come

## Dec 23 3m FRA IBOR rates



SB1 Markets/Macrobond

## Dec 24 3m FRA IBOR rates



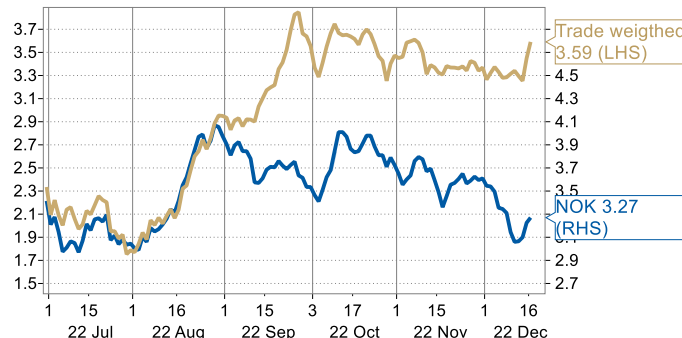
SB1 Markets/Macrobond

## Dec 23 3m FRA rates



SB1 Markets/Macrobond

## Dec 23 3m FRA rates



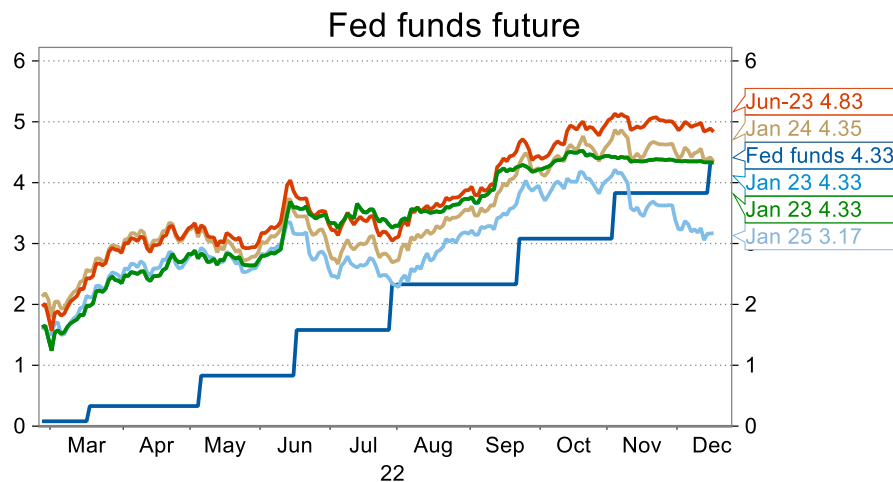
SB1 Markets/Macrobond

- The market still doubts ECB will be able to conduct more than 2 x 50 and 1 x 25 bps – but that's still 40 bps more than before the ECB press conference. A 40-bps response to one single policy signal is highly unusual

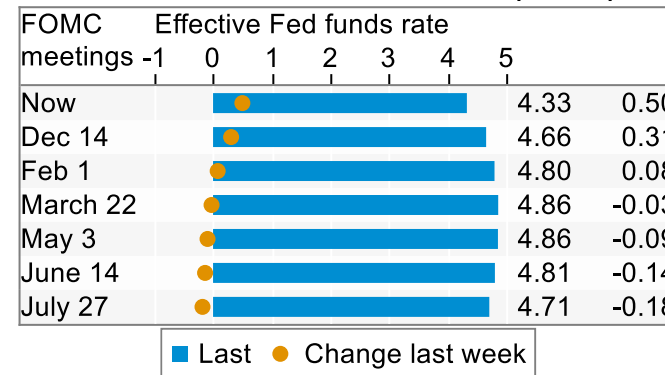
# Fed's Powell tried to sound hawkish but market's rate expectations fell last w.

The Fed signalled a terminal rate at 5.1%, the market thinks 4.86% is sufficient. A 25 bps hike is expected in 1 Feb

*Then 2 x 25 bps cuts in H2-23*

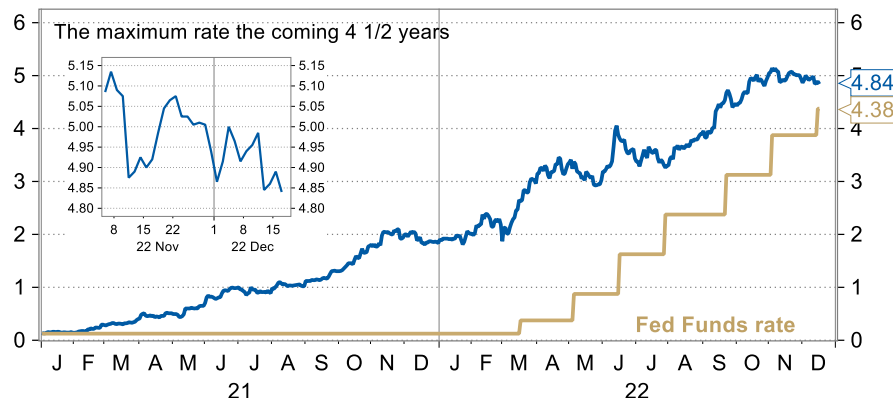


## USA Fed funds rate (OIS)

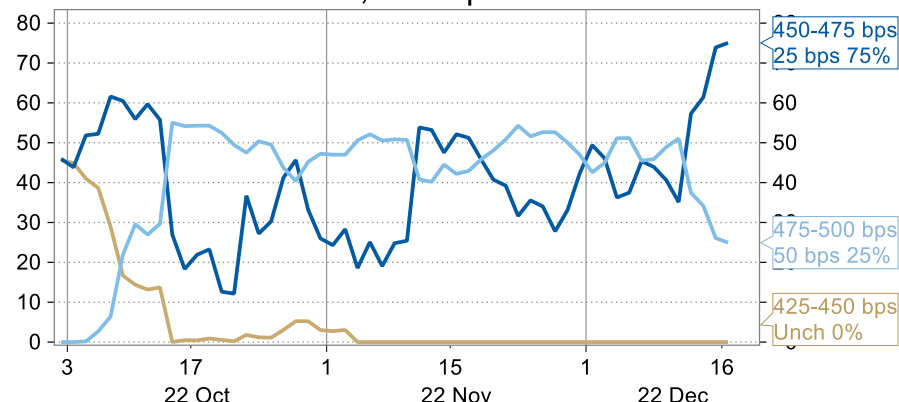


## USA Fed funds futures

The expected terminal (peak) rate in this cycle



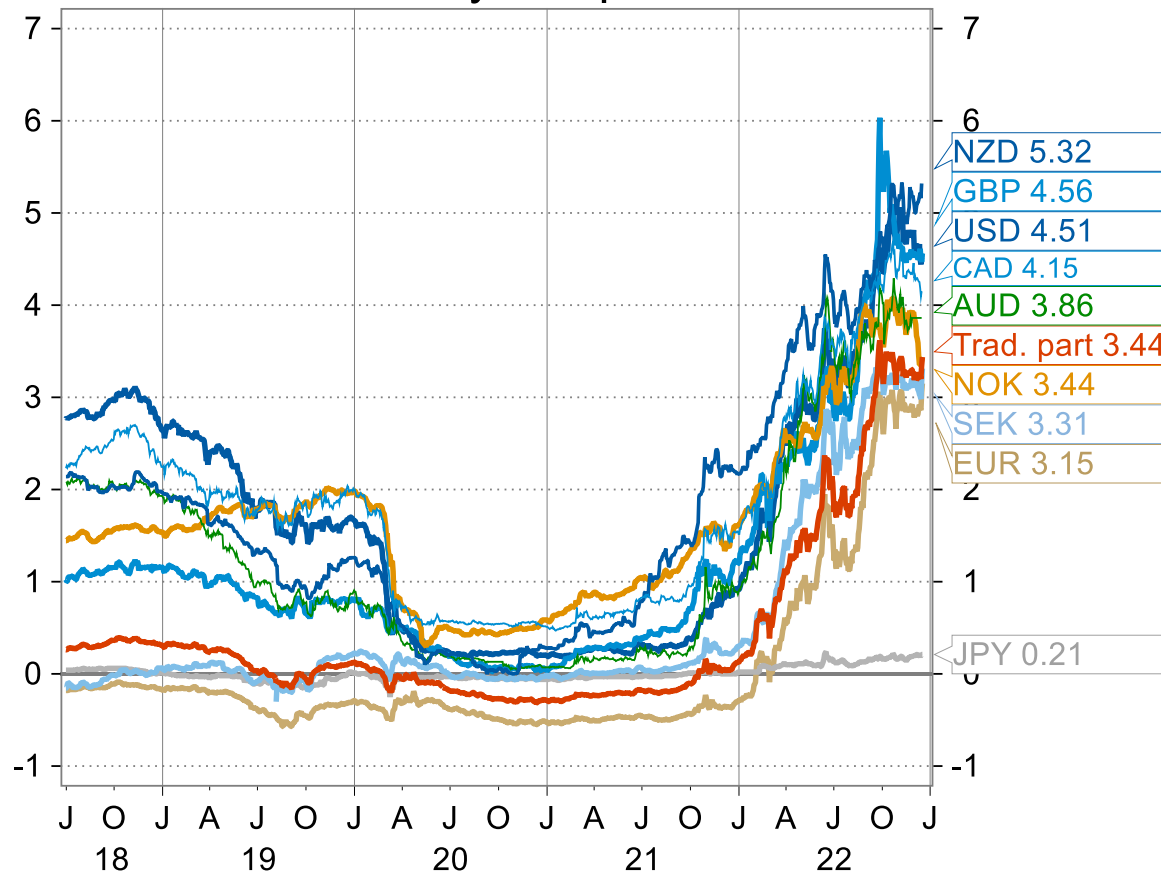
## Fed funds future, Feb 1, 2023 probabilities



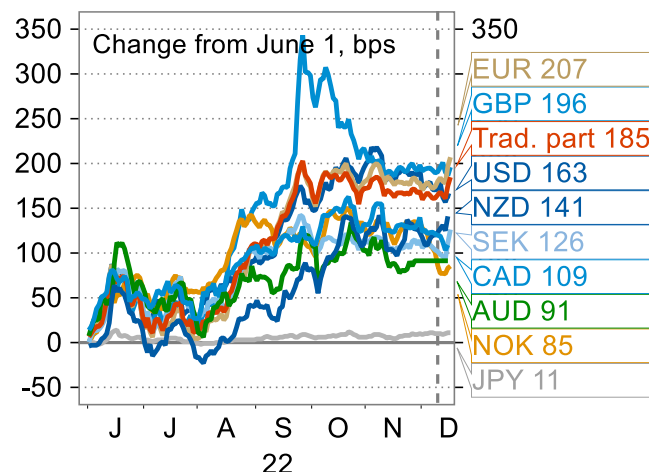
# EUR rates straight up on a hawkish ECB. NOK rates flat. US rates down

The trend in the short end is close to flat – except for NOK and the USD rates

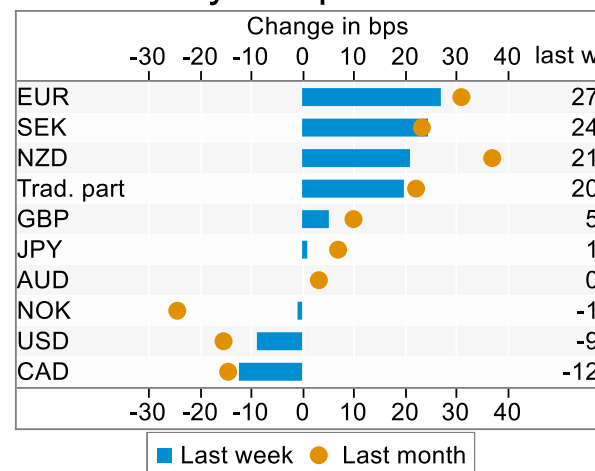
## 2 y swap rates



SB1 Markets/Macrobond



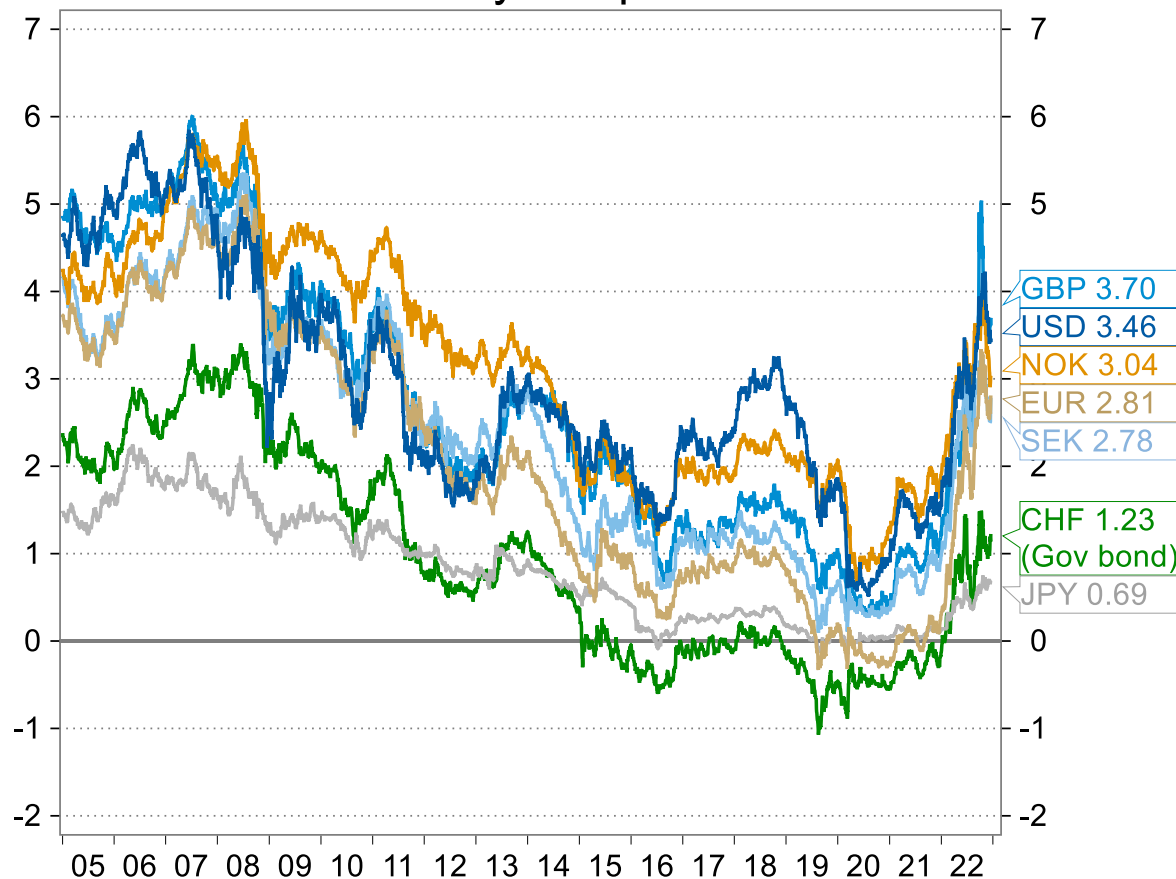
## 2 y swap rates



SB1 Markets/Macrobond

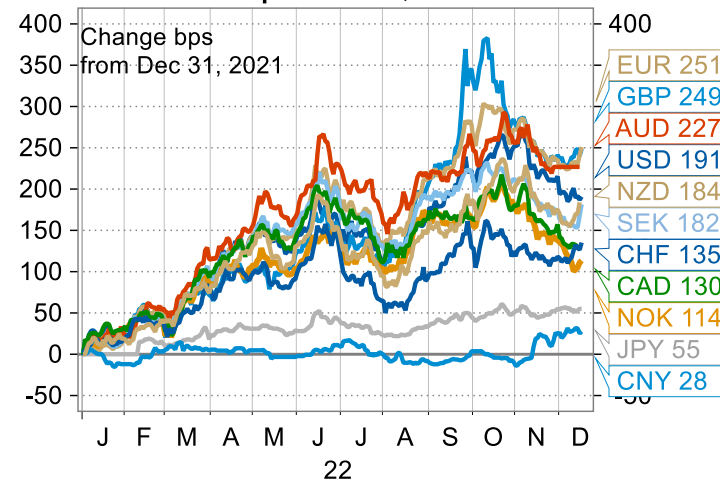
# Most long dated swap rates up, but not USD rates

10 y swap rates



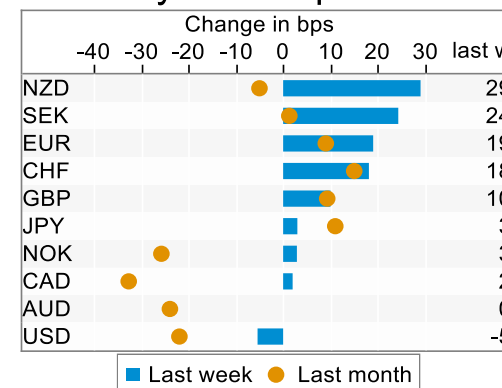
SB1 Markets/Macrobond

Swap Rates, 10 Year



SB1 Markets/Macrobond

10 year swap rates

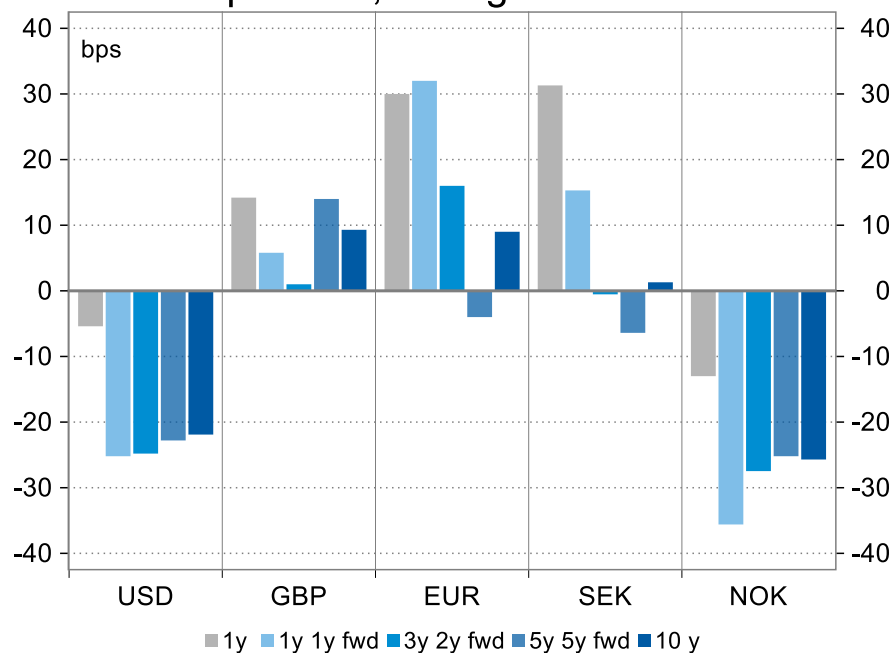


SB1 Markets/Macrobond



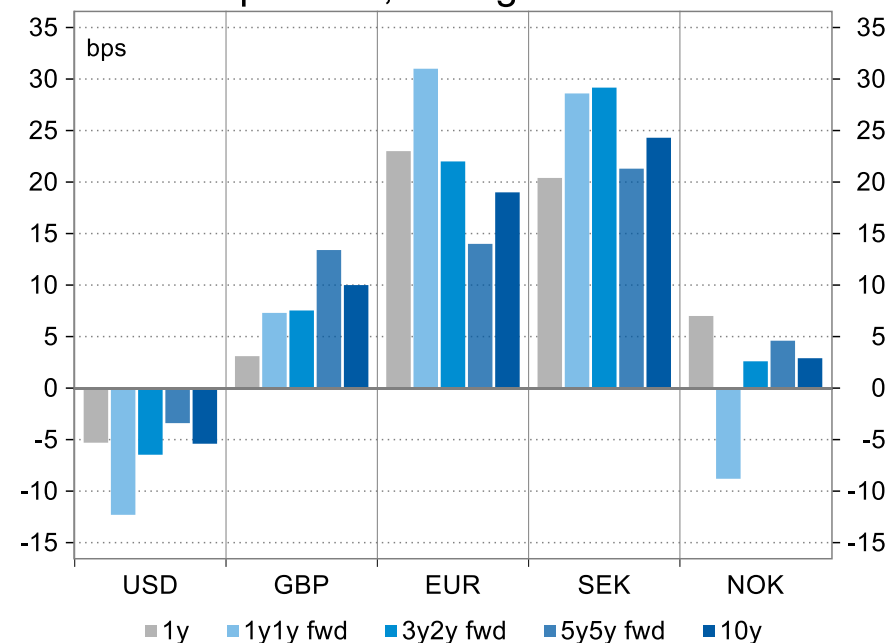
**EUR, SEK rates up 15 – 30 bps. US rates down, NOK rates close to unch.**

Swap Rates, changes last month



SB1 Markets/Macrobond

Swap Rates, changes last week

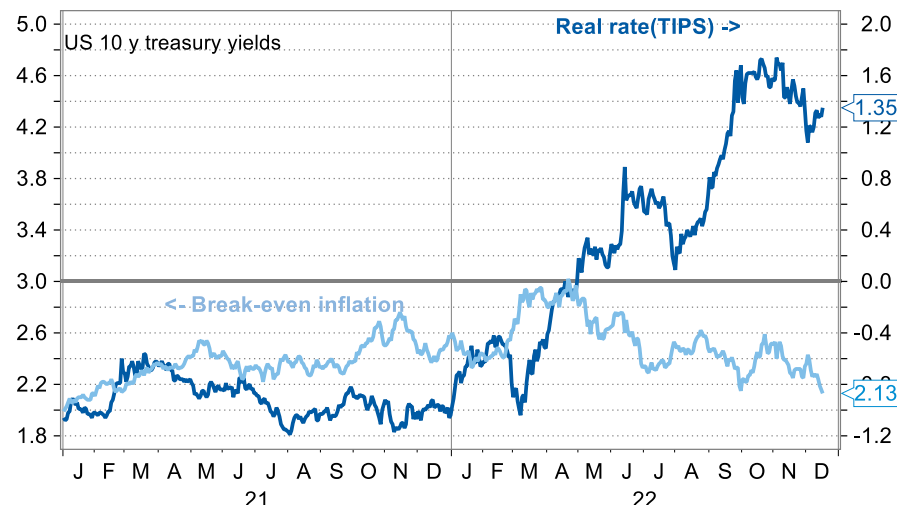
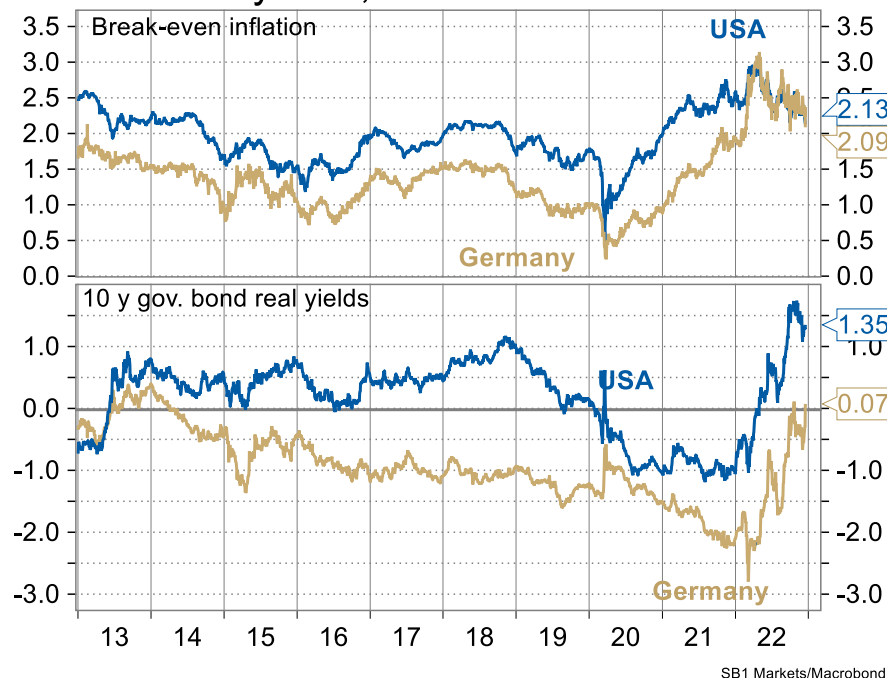


SB1 Markets/Macrobond

# German real rates up 55 bps in one go to +7 bps! Inflation expect. -31 bps

US real rates rose just 4 bps to 1.35%. Thus – a ‘real’ response to the tougher ECB stance, also vs. QT

## Real yields, break-even inflation



- In the US, a 10 y CPI expectation at 2.13% is in line – or below (!) Fed’s 2% target for the PCE-deflator (which on average is some 0.3 pp below CPI inflation). Our model have for some weeks suggested that the break-even inflation component was to high. Now, the gap is almost closed
- German break-even fell 31 bps to 2.09

## US & Germany 10 y Gov bond yield

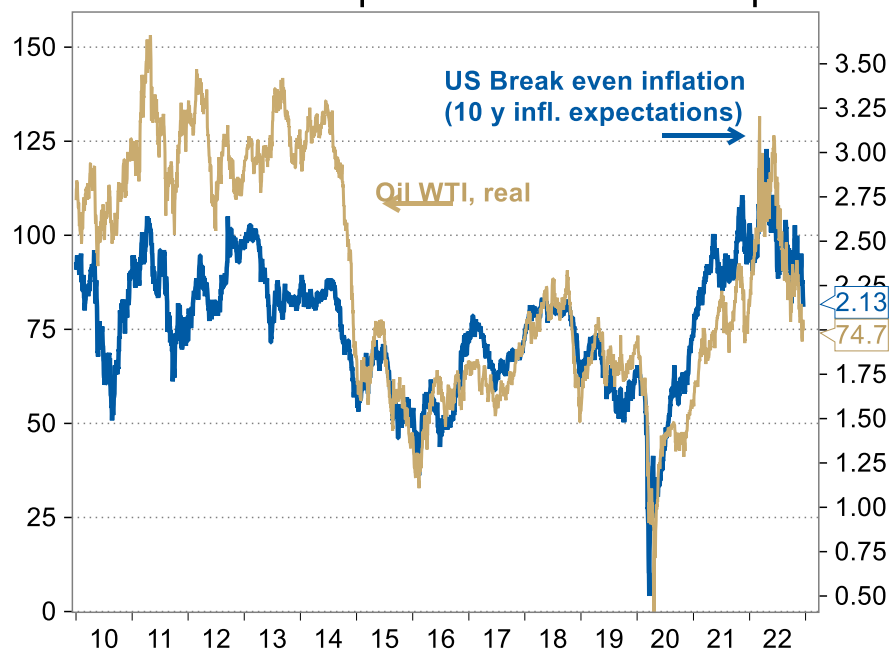
|                             | Yield | Change<br>1w | Change<br>1m | YTD   | Min since<br>April-20 |
|-----------------------------|-------|--------------|--------------|-------|-----------------------|
| <b>USA nominal treasury</b> | 3.48  | -0.09        | -0.19        | 1.96  | 0.52                  |
| .. break-even inflation     | 2.13  | -0.13        | -0.16        | -0.43 | 1.06                  |
| .. TIPS real rate           | 1.35  | 0.04         | -0.03        | 2.39  | -1.19                 |
| <b>Germany nominal bund</b> | 2.16  | 0.24         | 0.16         | 2.34  | -0.64                 |
| .. break-even inflation     | 2.09  | -0.31        | -0.24        | 0.16  | 0.42                  |
| .. real rate                | 0.07  | 0.55         | 0.40         | 2.18  | -2.80                 |

SB1 Markets/Macrobond

# US inflation expectations sharply down, just as our model signalled

The current break-even is close to our model current f'cast (based on the oil price, ISM & the vacancy rate)

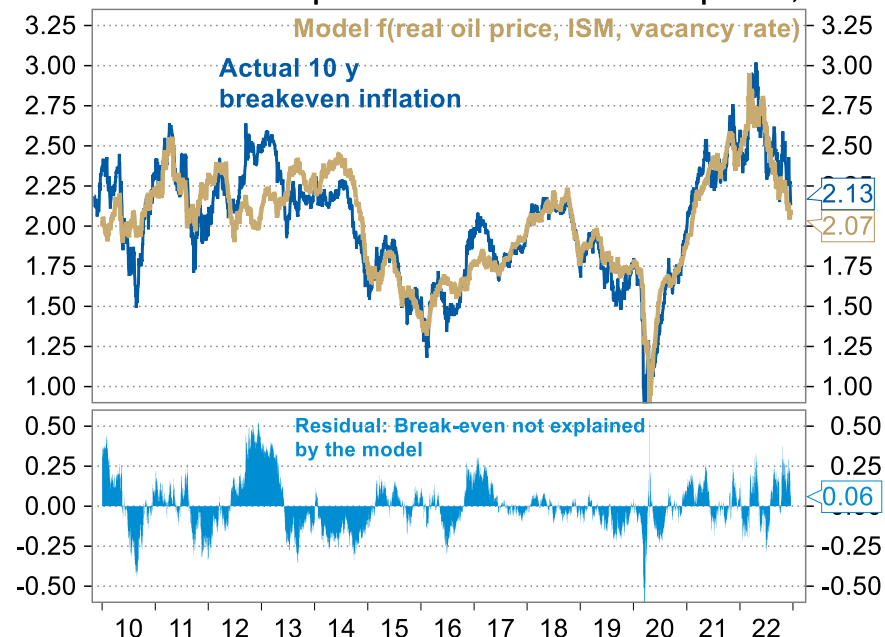
## USA Inflation expectations vs. the oil price



SB1 Markets/Macrobond



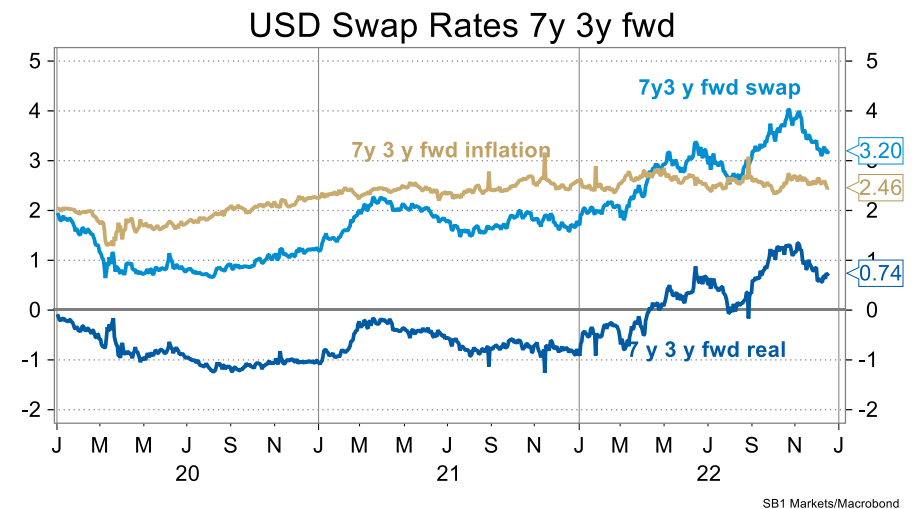
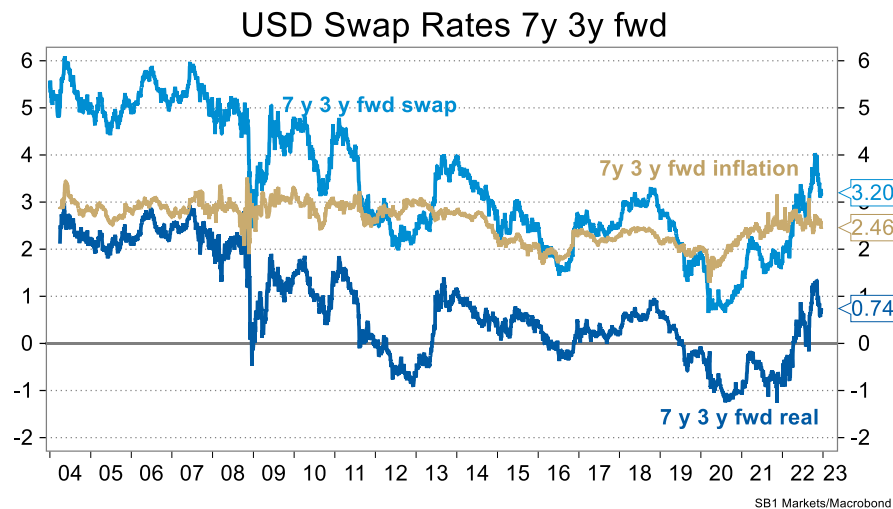
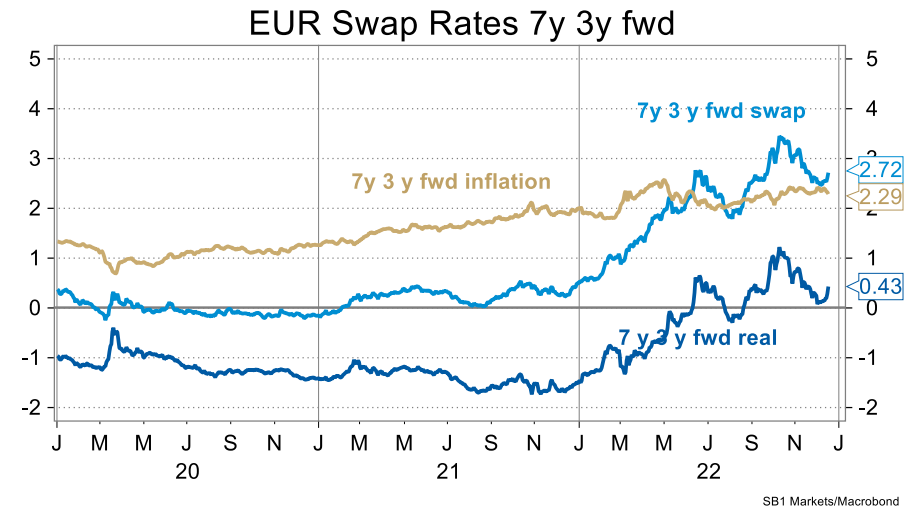
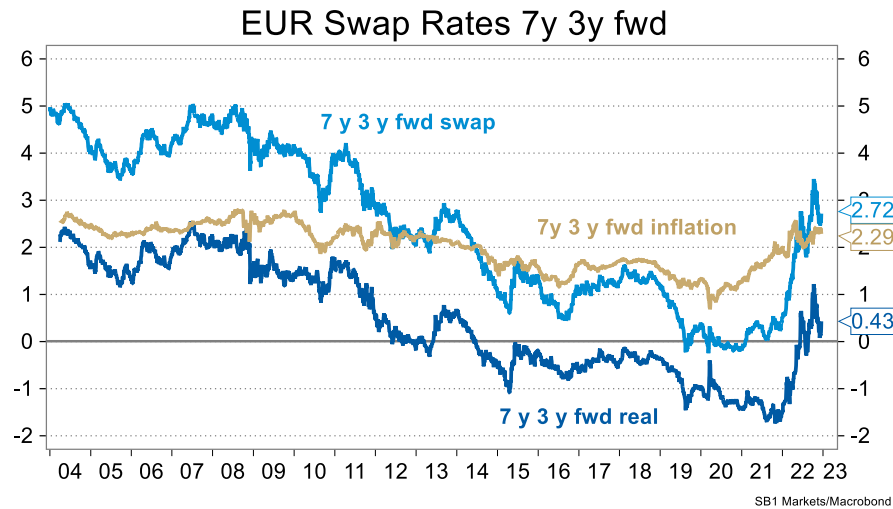
## USA Inflation expectations vs. the oil price, CPI



SB1 Markets/Macrobond

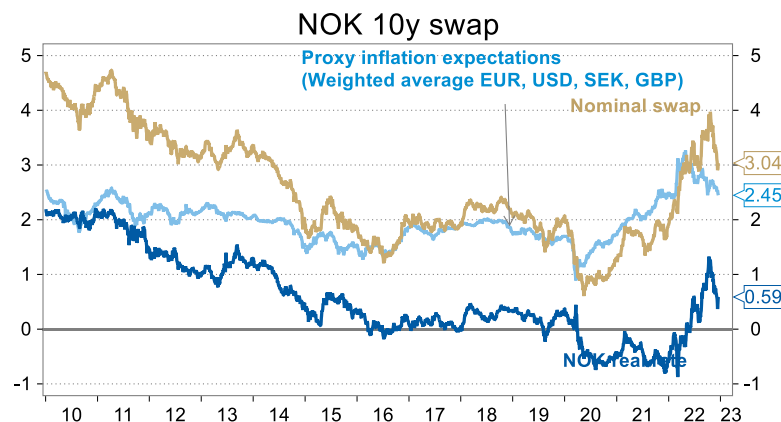
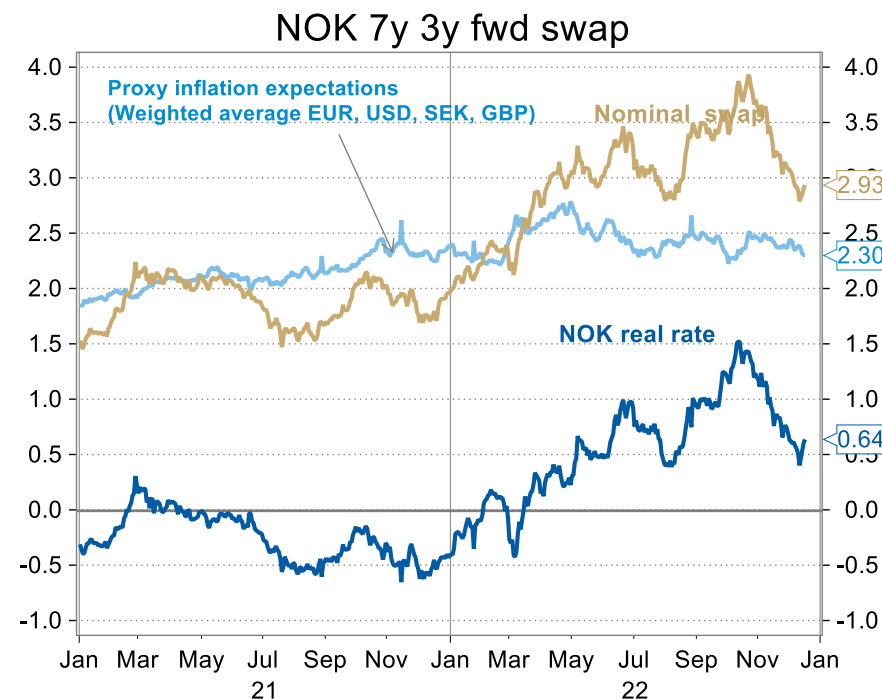
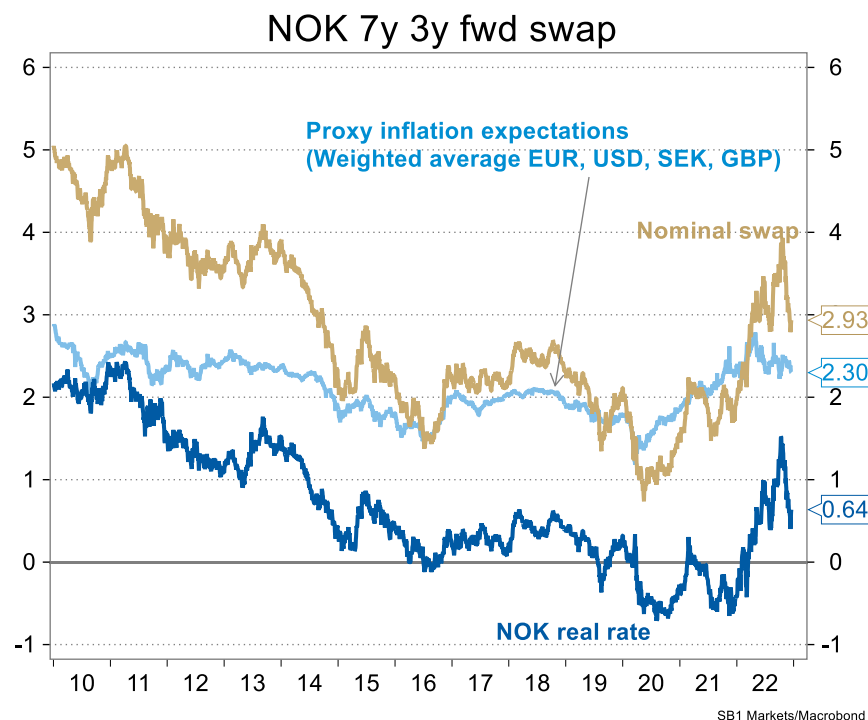
- A simple model including the spot oil price, the current ISM and the current vacancy rate pretty well explains the long-term breakeven inflation expectation in the bond yield curve
- What now? The actual break-even is in line with the model forecast. We are uncertain about the oil price, but rather confident that both the ISM, and the vacancy rate will decline. Impact vs the 10 y break-even expected inflation rate:
  - 5 ISM points: -12 bps
  - 3 vacancy pts, (to 3.2% from 6.2%): -36 bps
  - 10 USD/b: -10 bps

# European real (swap) rates up last week – following a substantial decline



# NOK real rates very likely rose last week but less than in rest of Europe

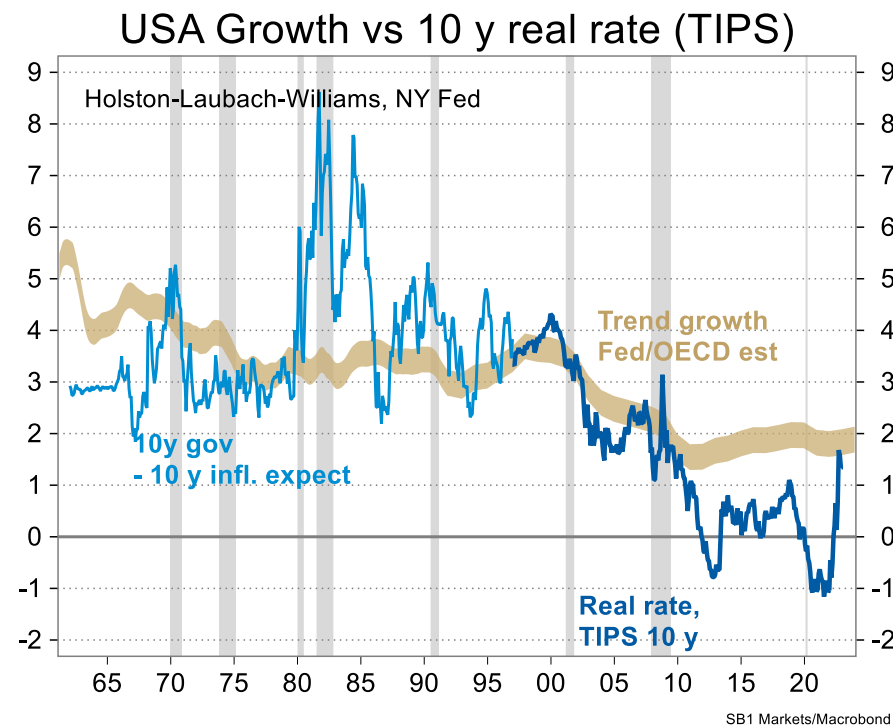
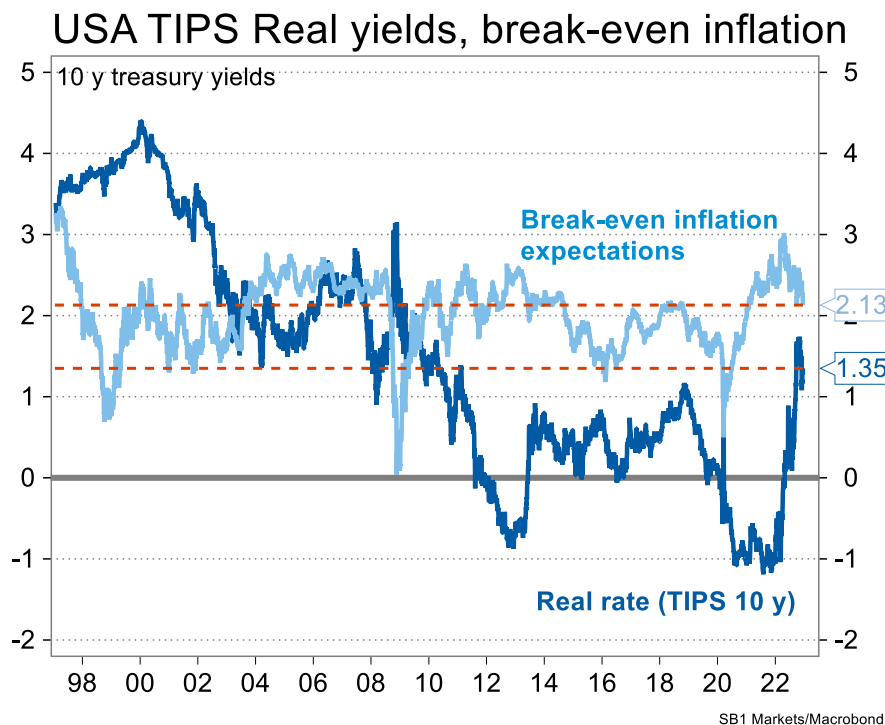
... as the increase in the nominal swap rate was much smaller than abroad



Memo: Our NOK inflation expectation proxy is a weighted average of EUR, SEK, GBP, and USD inflation swaps, cross-checked vs historical inflation differentials and inflation expectations from surveys

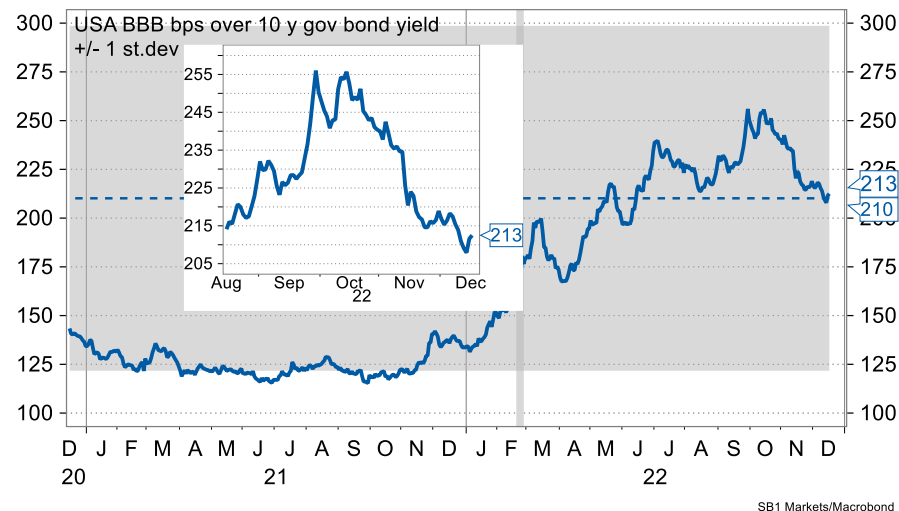
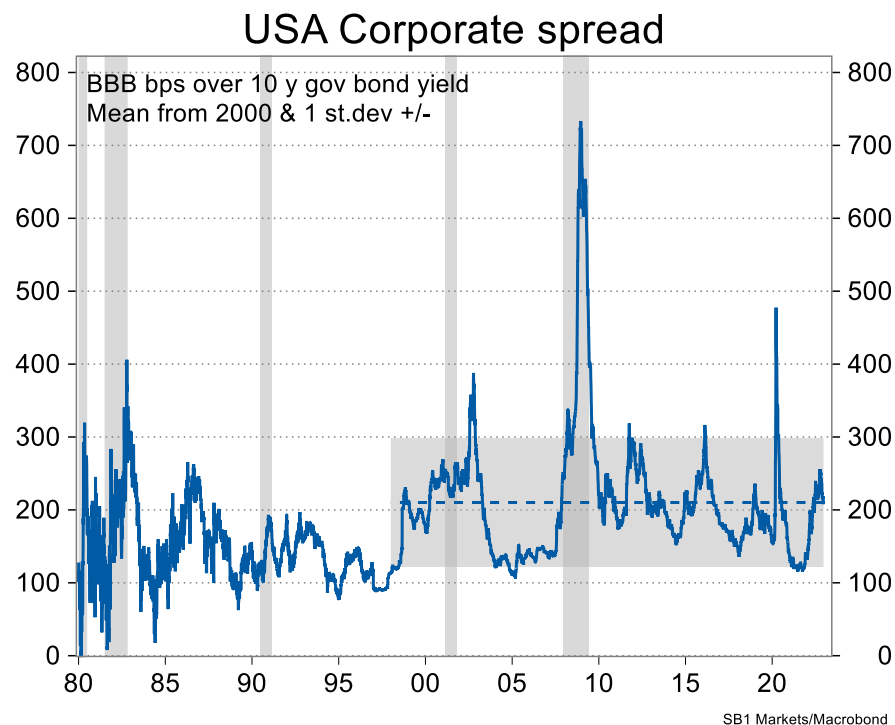
# Growth vs real rates: Real rates on the low side but not by much

At least not compared to the differential during the pandemic



# Risk on: Credit spreads flattened last week, but have come down noticeably

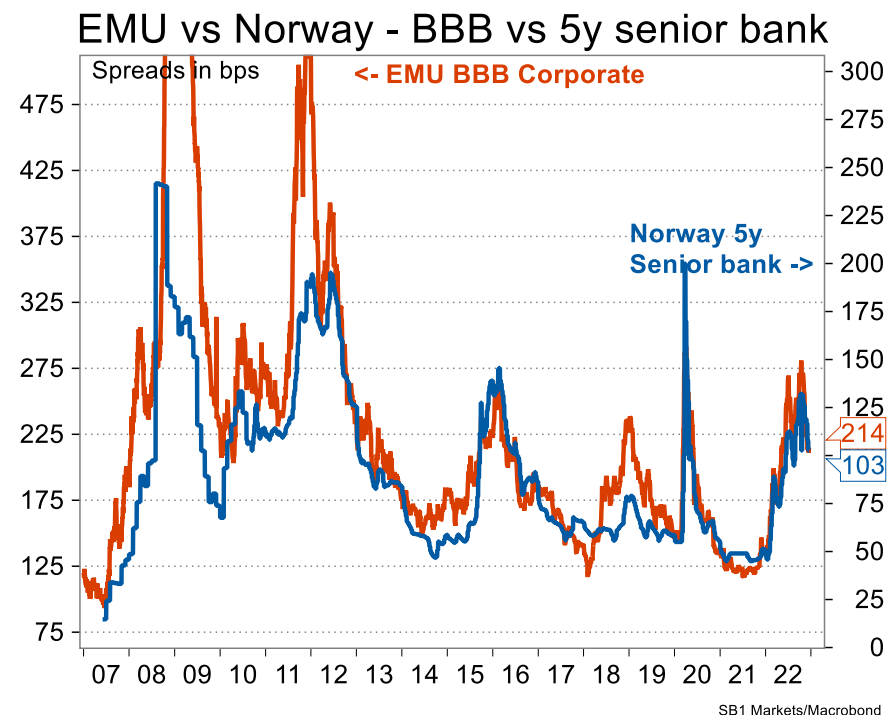
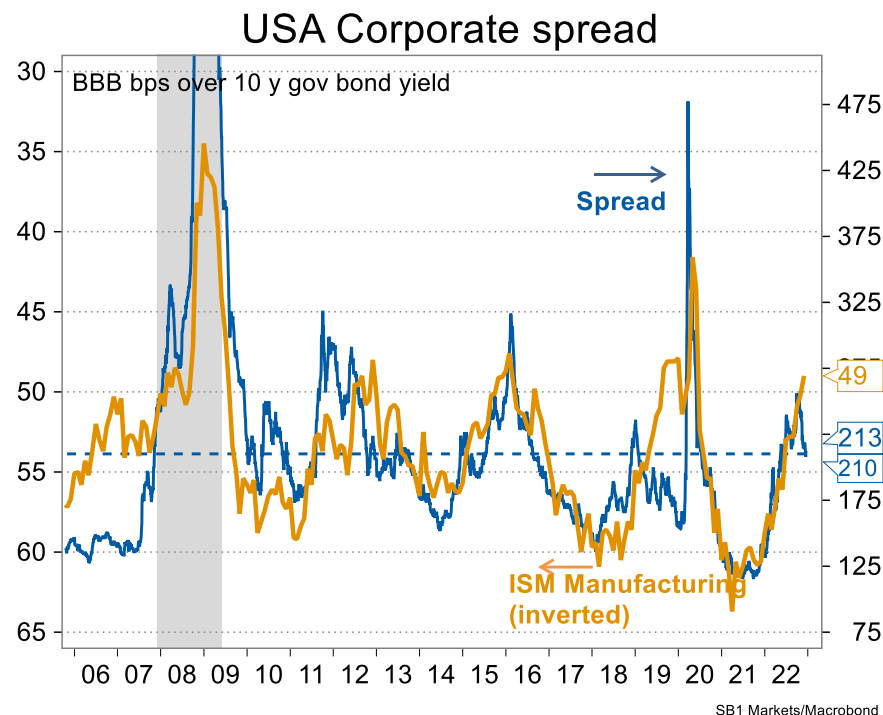
Even so, we think the trend is still up because the economy will weaken



- The US BBB spread is up 100 bps from the bottom last autumn, a doubling
- In addition, real rates have increased by 210 bps from the bottom late last year
- Thus, the basis for all valuation metrics has changed dramatically, check the chart two pages forward!

# Mind a new gap: The economy is weakening (ISM), and spreads are narrowing

What do you think is more likely: An ISM at 45 or 55 before summer? We are quite sure, the PMI is at 47 already



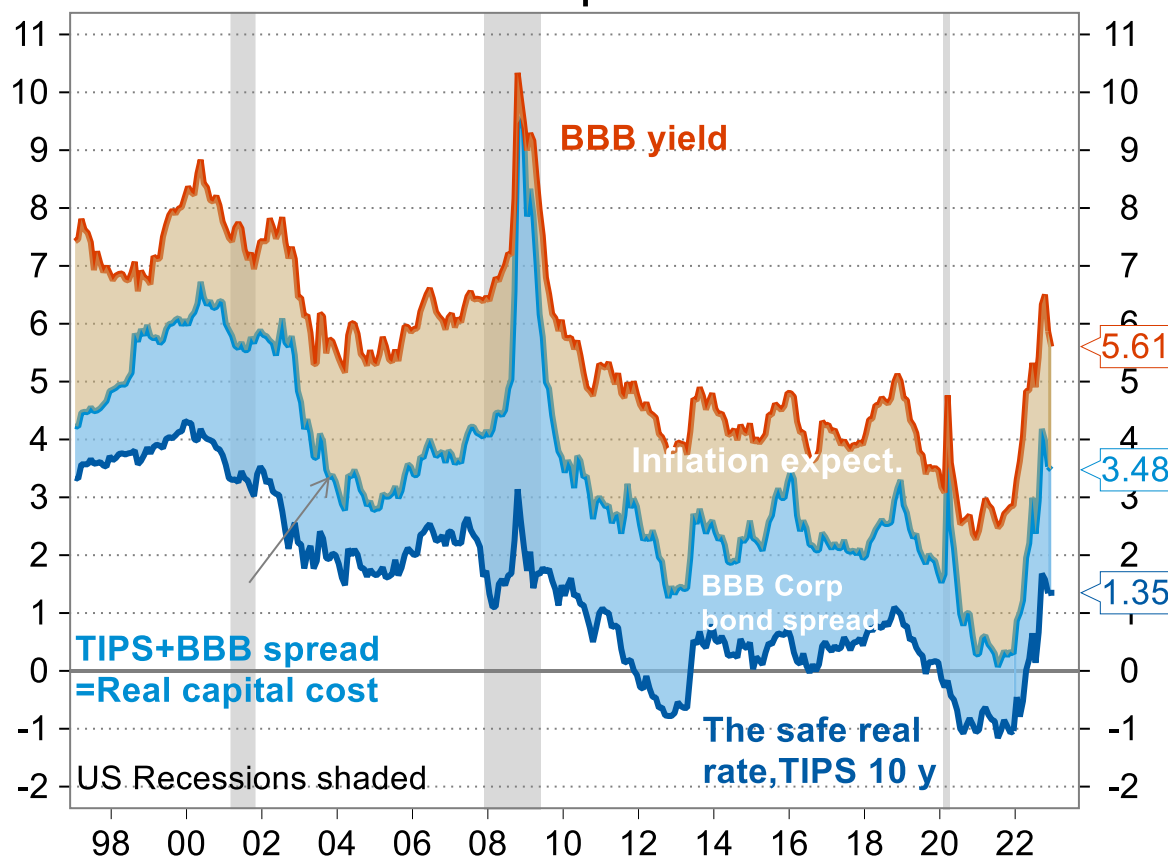
- Last week: Norwegian credit spreads continued downwards (the bank 2, 5y benchmark swap fell 5 bps to 103 bps)



# The cost of capital is declining but still remains high (vs past 13 y history)

All valuation metrics have changed dramatically. As have all calculations of return on capital

## USA Capital cost



SB1 Markets/Macrobond

- Spreads and real rates fell last week but the story remains intact
- The total real borrowing cost for a BBB company has increased to 3.2% bps from zero by the end of last year:
  - The TIPS real rate is up from -100 to + 108 bps
  - The BBB corporate investment grade spread is up from 120 bps to 115!
- Add on modest inflation expectations, the nominal borrowing cost has increased from well below 3% to 5.7% (though down from 6.7% at the local peak in October)

# S&P down 2.1%, almost ½ of the autumn rally reversed. The 10 y bond -9 bps

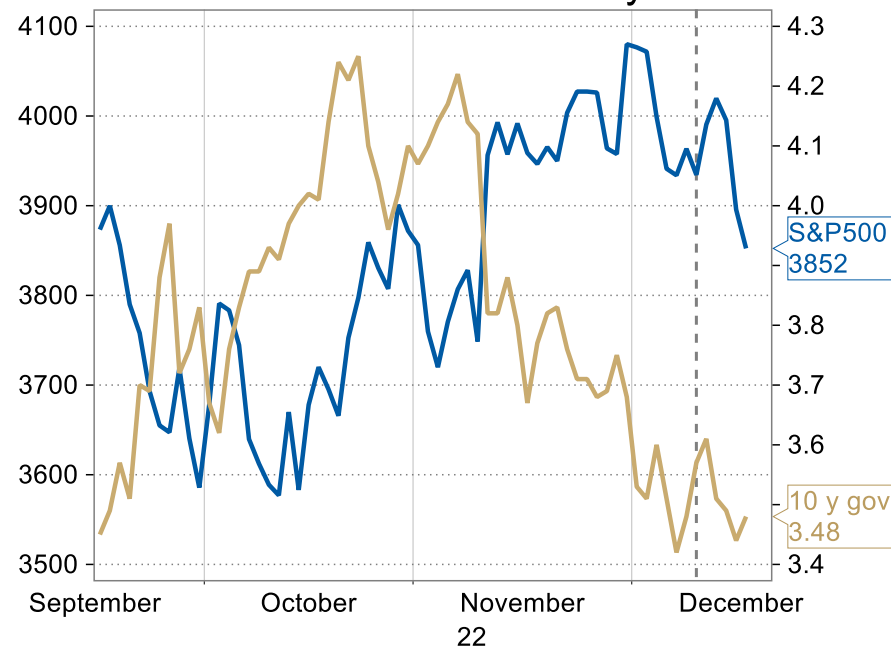
Growth and earnings worries to the fore, again

USA S&P 500 vs. bond yields



SB1 Markets/Macrobond

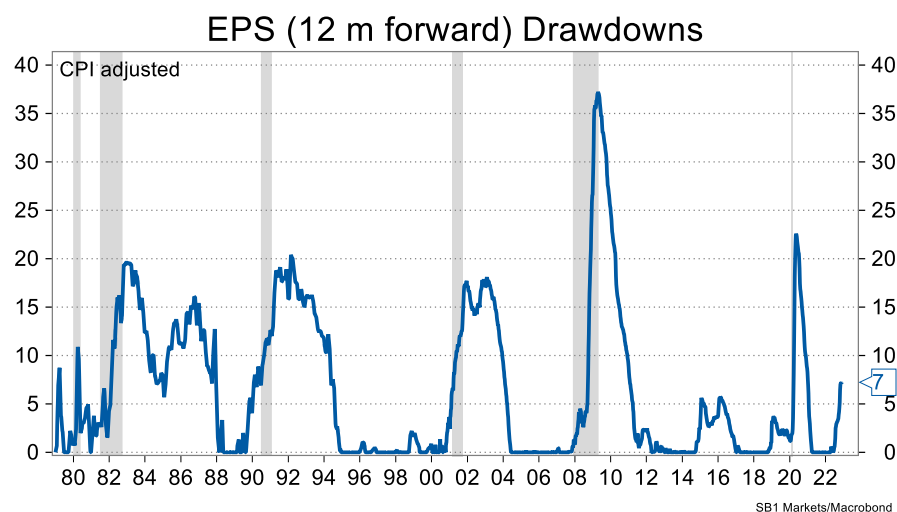
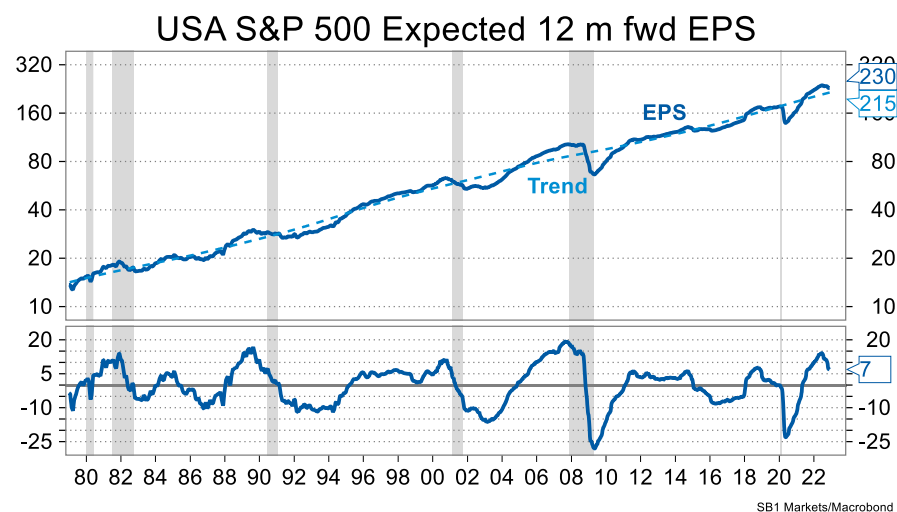
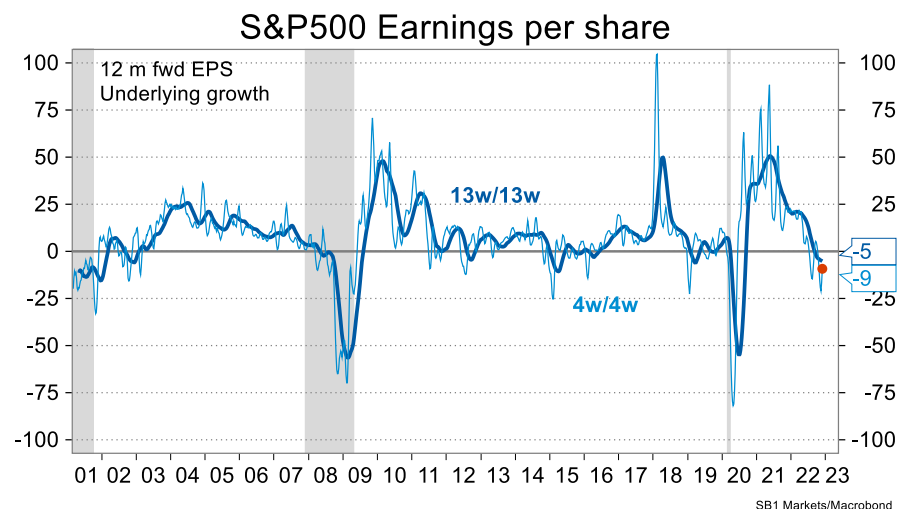
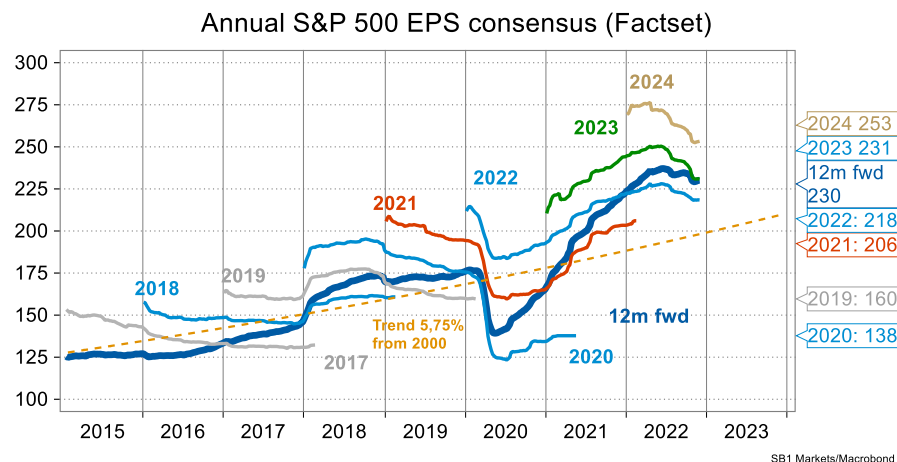
USA S&P 500 vs. bond yields



SB1 Markets/Macrobond

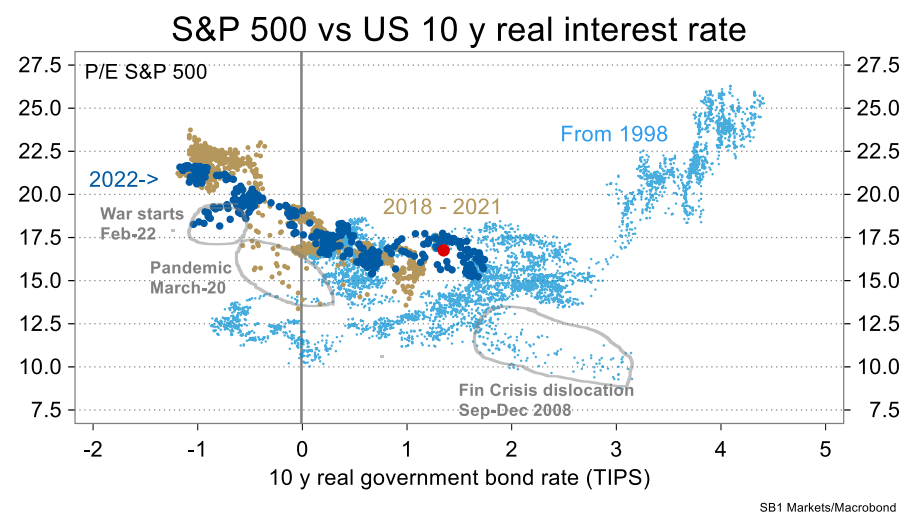
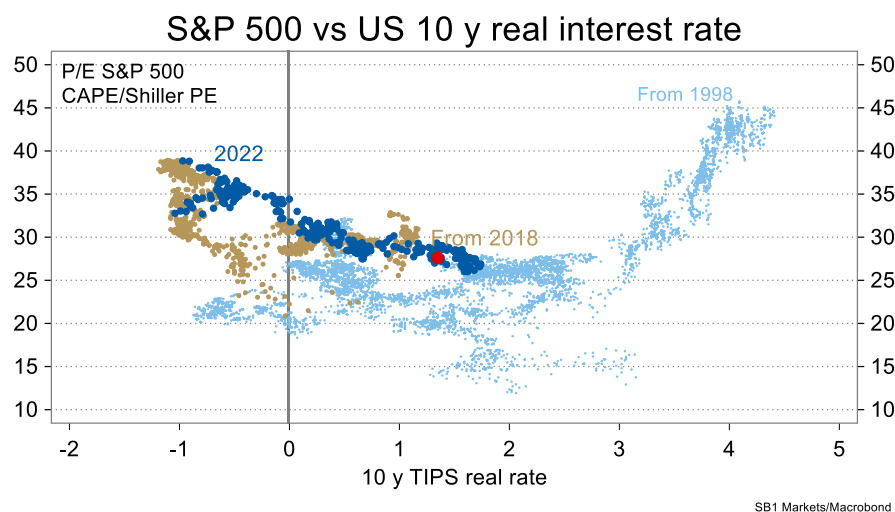
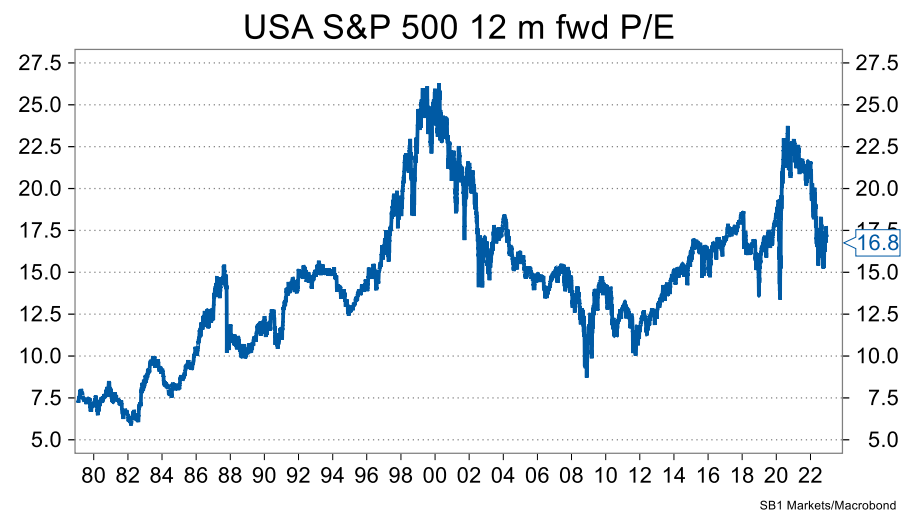
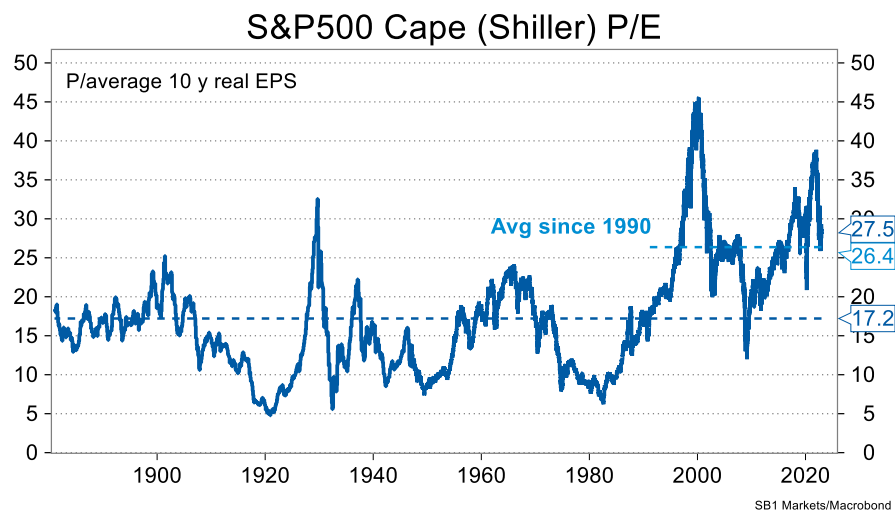
# Earnings forecasts has stabilised – but the risk still on the downside

S&P 500 expected 12 m fwd EPS was some 15% above trend in mid June. Now down to +7%



# 4 valuation charts: Check the extreme tight correlation between real rates, P/E, P/E

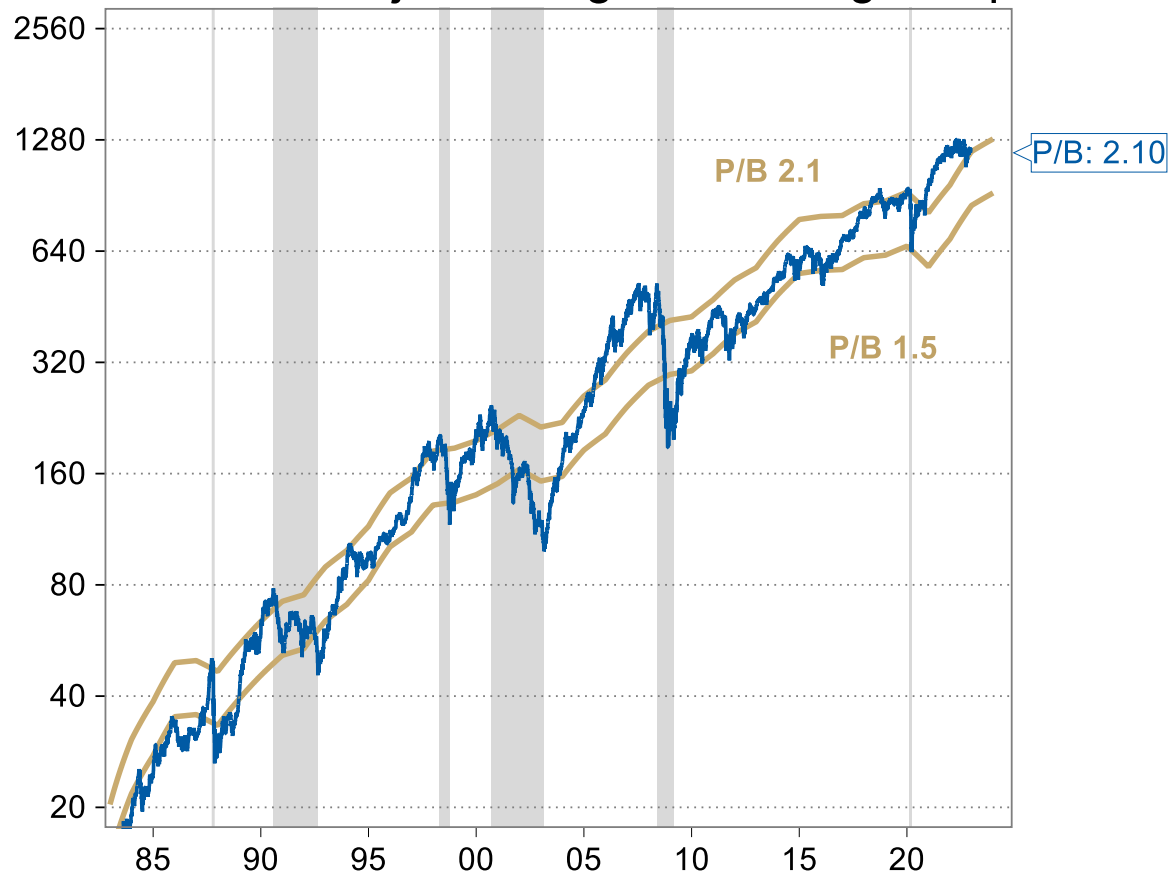
The TIPS real rate has been the main driver for the P/E since 2018. And it still probably is. But should it, now?



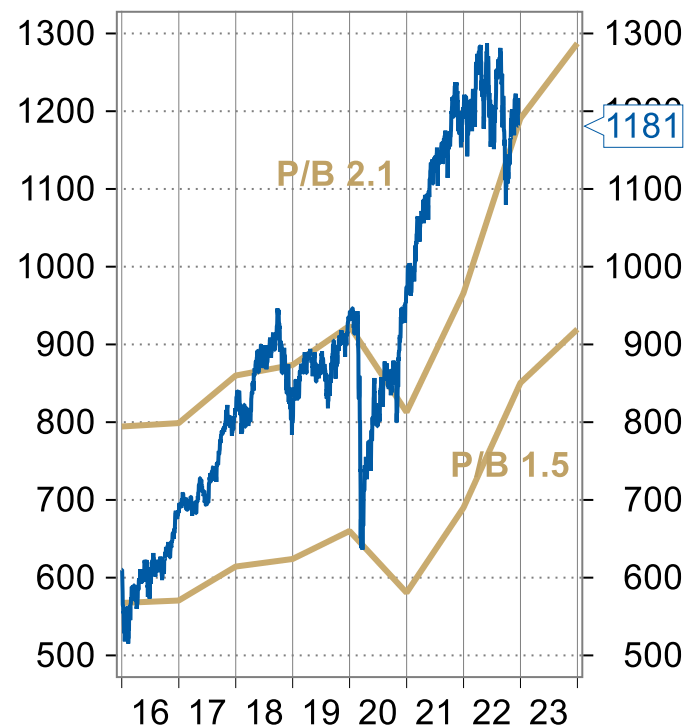
## The OSEBX down 1.3% - to a Price/Book ratio at 2.10

The book value is growing rapidly, due to the extremely strong energy sector earnings

### Oslo Børs - aksjeverdi og verdi av egenkapitalen



Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

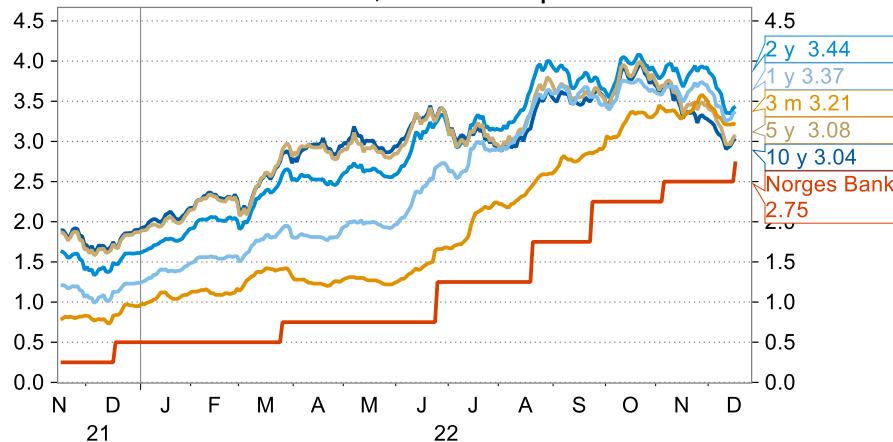


Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

# Rates marginally up, barring a decline in the 1 – 2 y segment

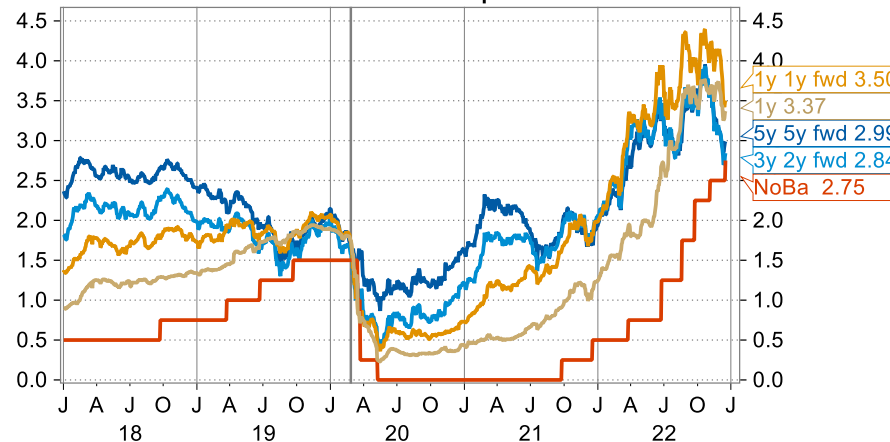
The 3m NIBOR has stabilised where it should be, at 3.21%

NIBOR, NOK swap rates



SB1 Markets/Macrobond

NOK Swap rates



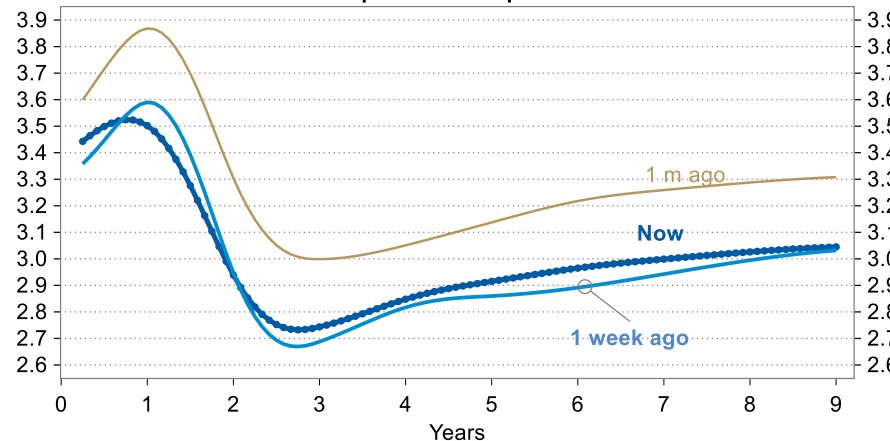
SB1 Markets/Macrobond

Norway - yield spread, 10y - 2y swap



SB1 Markets/Macrobond

NOK Implied swap forwards

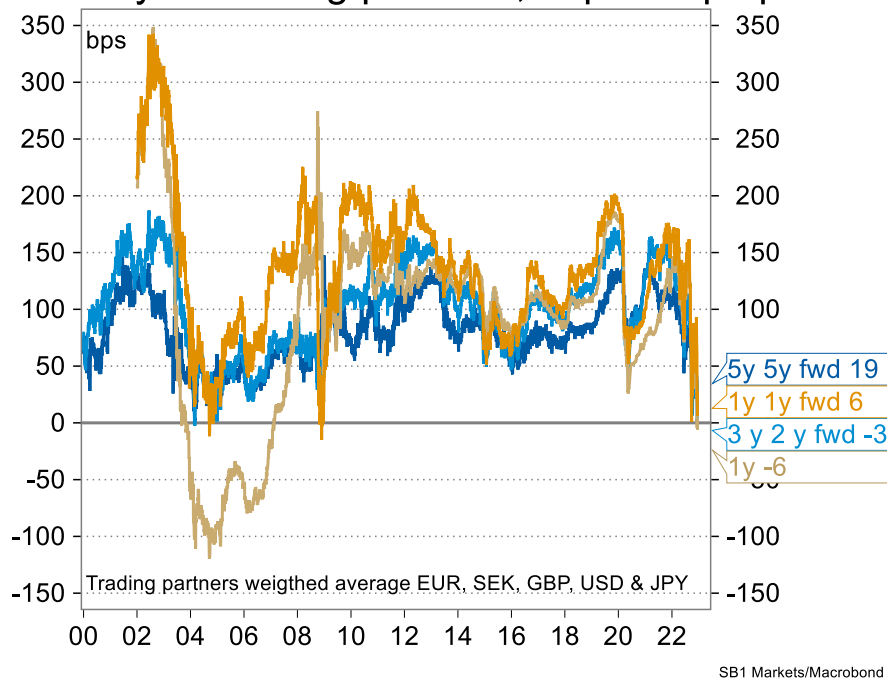


SB1 Markets/Macrobond

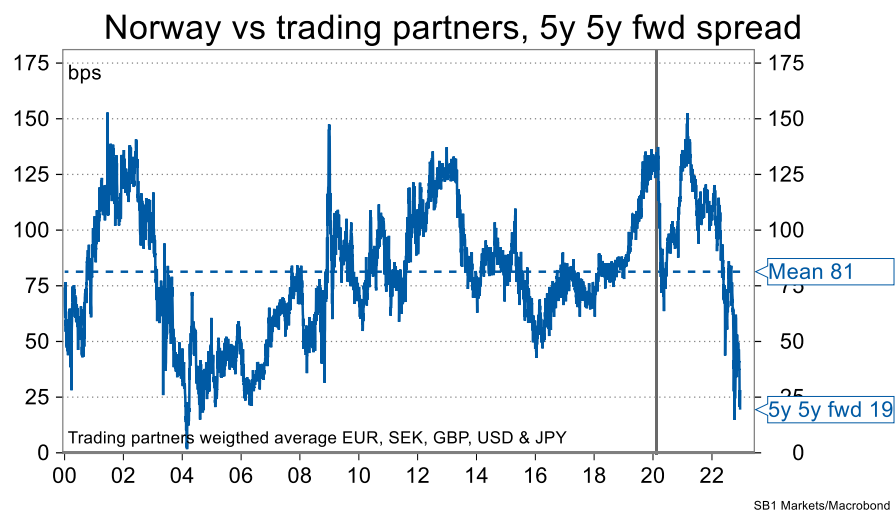
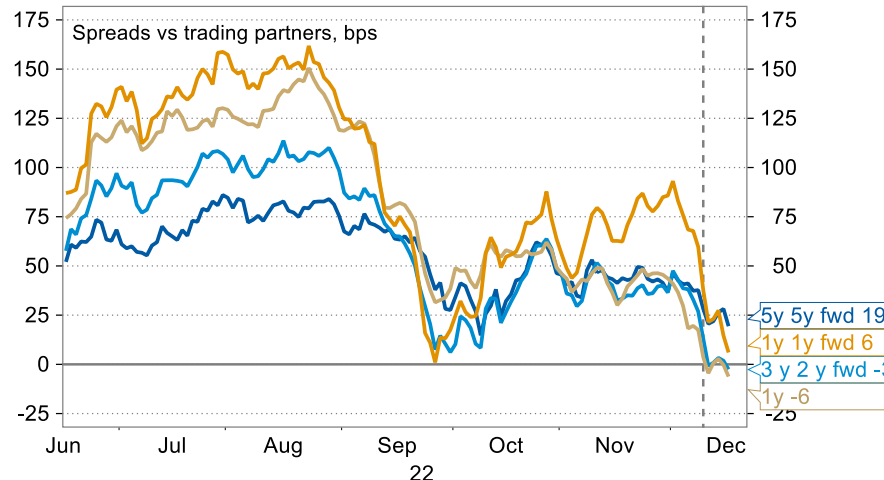
# Rate spreads vs trading partners further down!!

The Regional Network signalled a decline in GDP, lower inflation than expected – but is the decline warranted?

## Norway vs trading partners, impl swap spreads



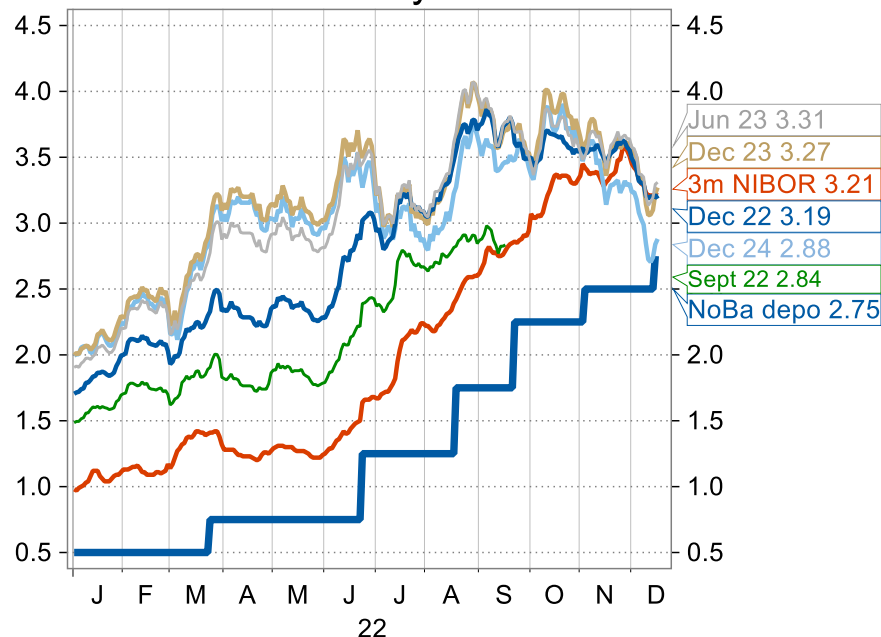
- Norges Bank surprised the market on the upside on Thursday, but ECB surprised much more!
- Now, NOK rates are below or equal to the short end of the curve among our trading partners. If the Norwegian housing market yields, that OK. If not, rates are too low



# The NIBOR spread fell 5 bps to 0.42%, just some few bps too high

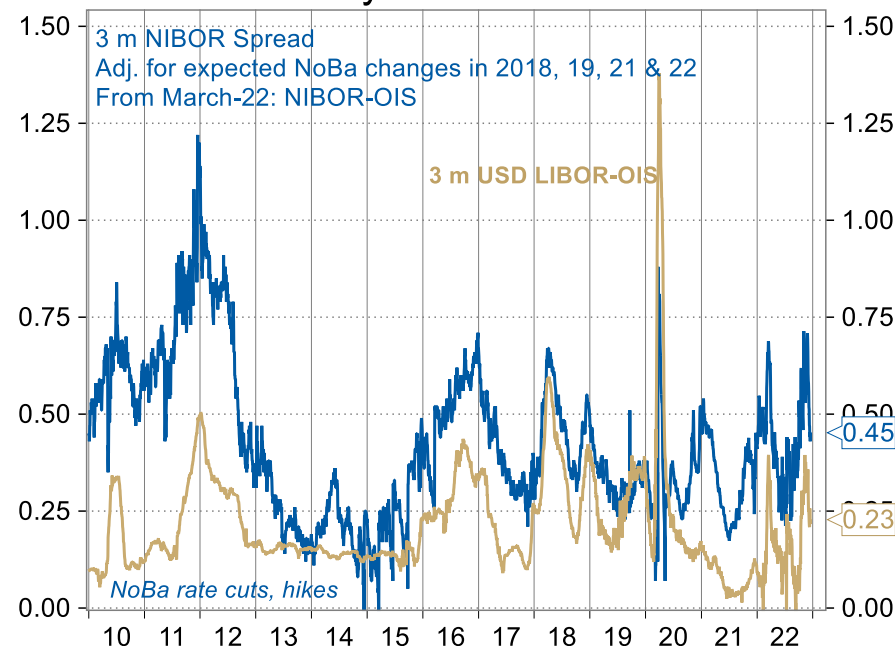
However, adjust for the normal 5 bps NIBOR year-end premium, the 'real' spread is at 35 bps – our long-term estimate

## Norway 3m FRA



SB1 Markets/Macrobond

## Money market friction



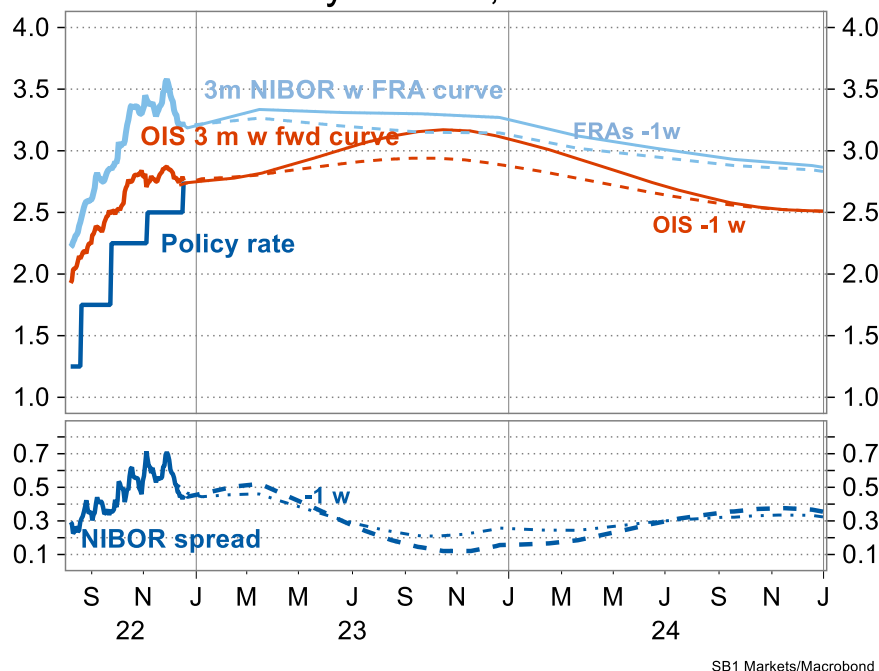
SB1 Markets/Macrobond



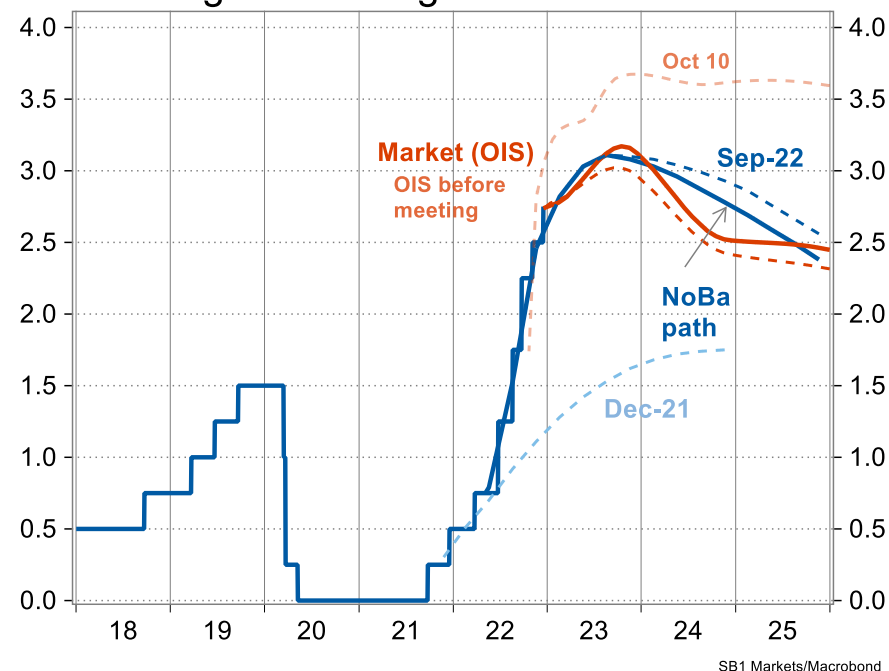
# Norges Bank lifted the 2023 OIS curve, the ECB contributed more thereafter

The FRA/OIS market was surprised by somewhat hawkish signal from NoBa, moved to above 3% again

Norway NIBOR, OIS rates



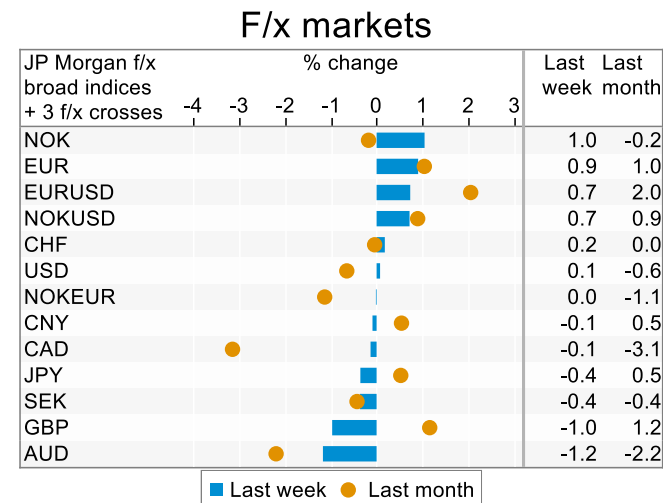
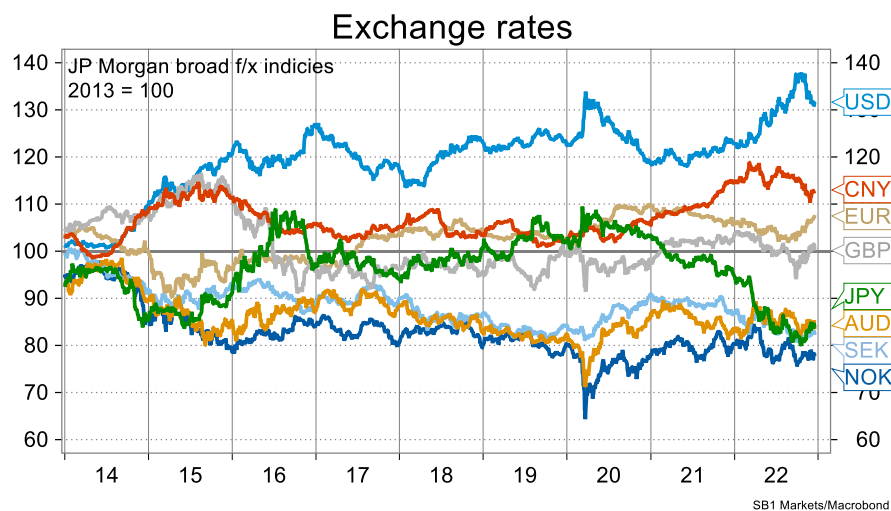
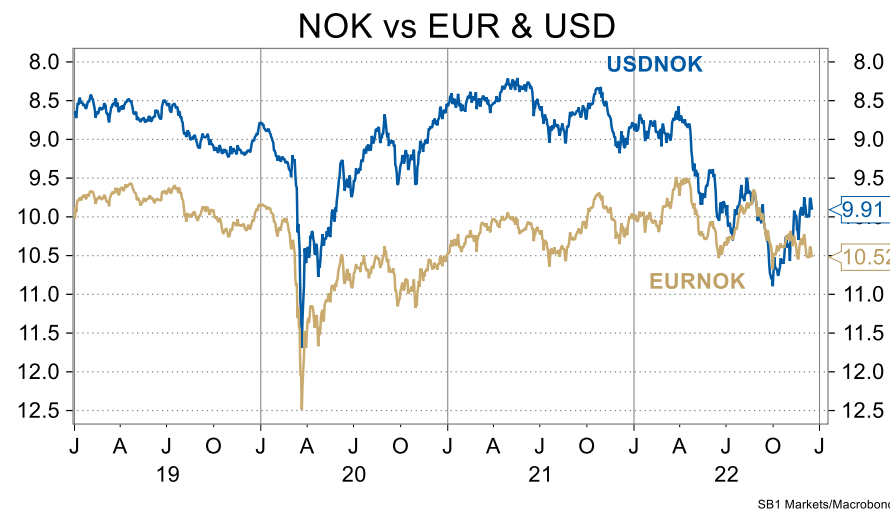
Norges Bank signal rate vs market



- One week ago, we thought NOK interest rate expectations had fallen far too much, and we were partly vindicated – the OIS path rose by up to 23 bps, reversing more than half of the decline the previous week
- Now we think the market may be too aggressive vs rate cuts expectations in 2024 – but if the housing market runs into trouble, not impossible

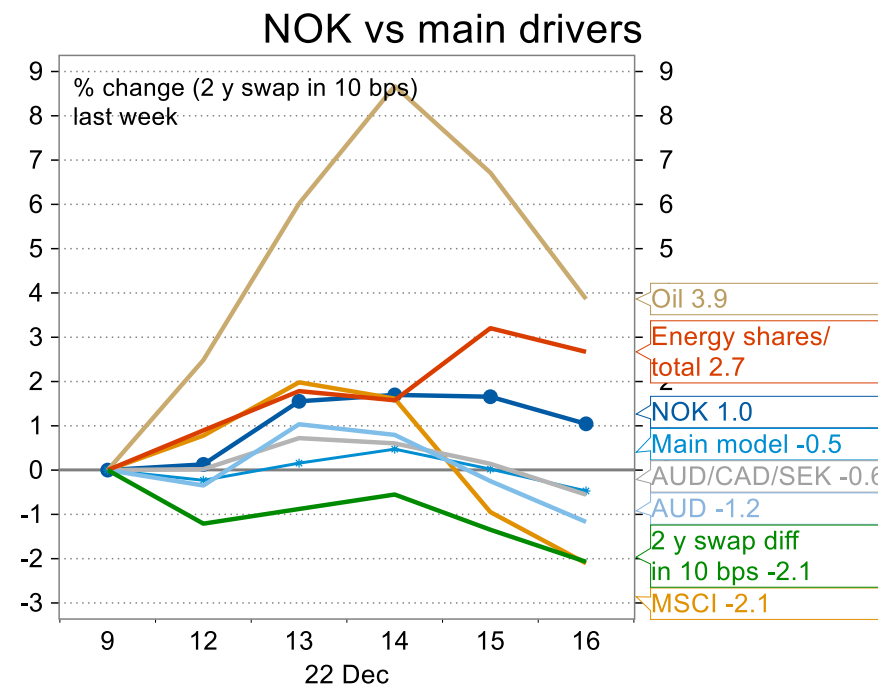
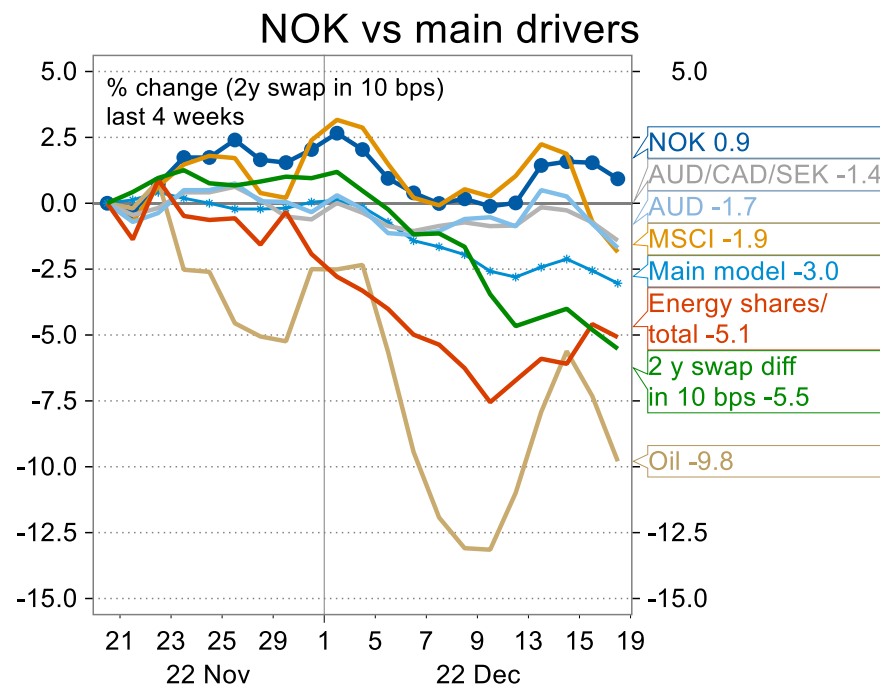
# The NOK to the top, from the bottom of the list. The EUR also gained

AUD on the bottom of the list, and 'the gap' was partially closed



# The oil price rose, as did energy shares. Other factors were on the downside

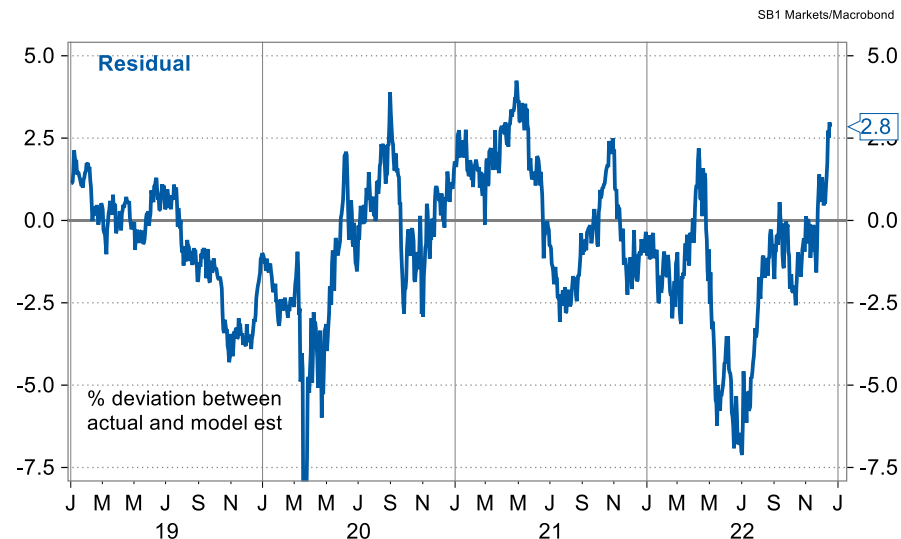
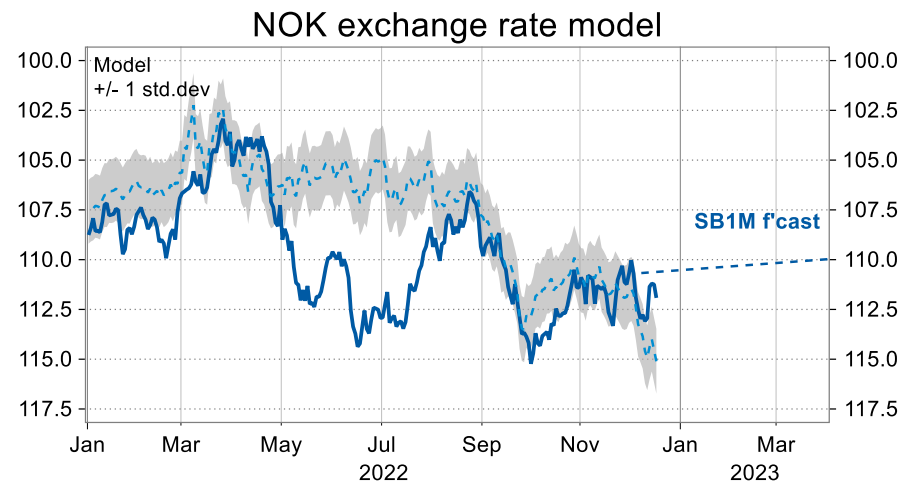
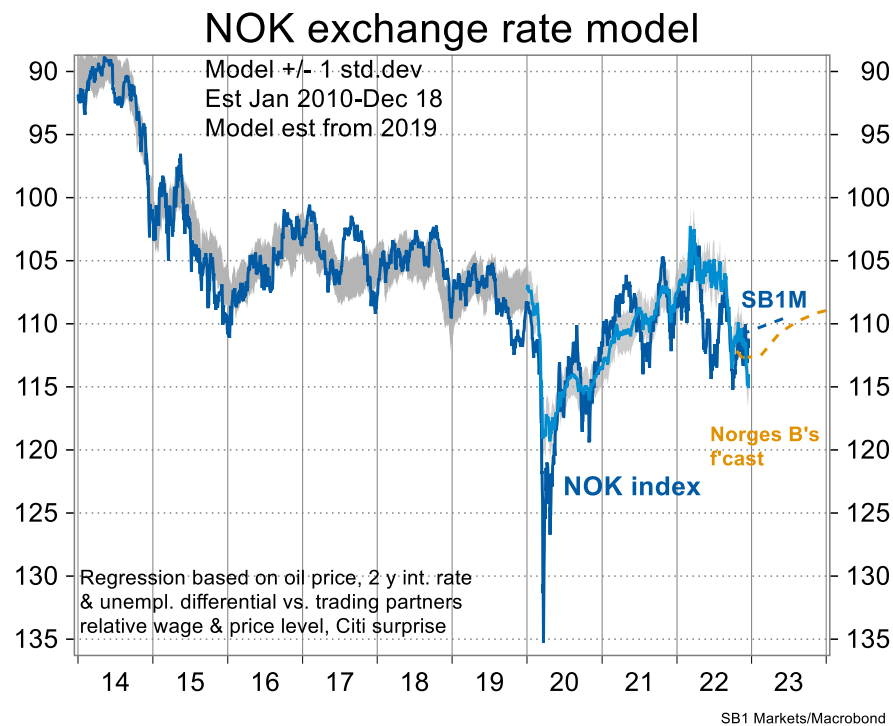
NOK rose 1%, out model said down 0.5%, and suddenly the NOK is too strong, 2.8% above our model f'cast



Gaps vs. our model estimates narrowed further last week

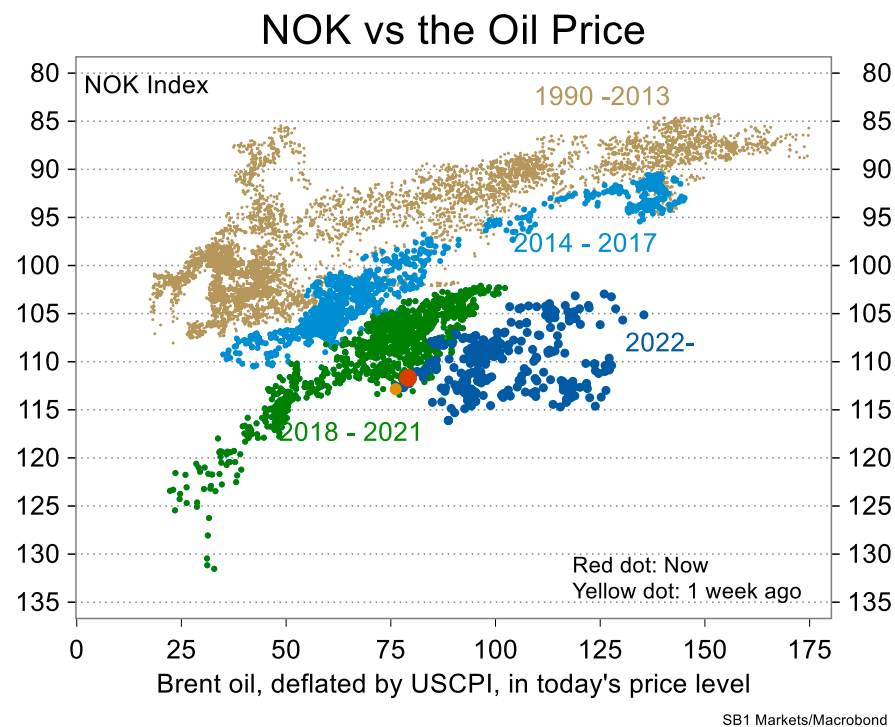
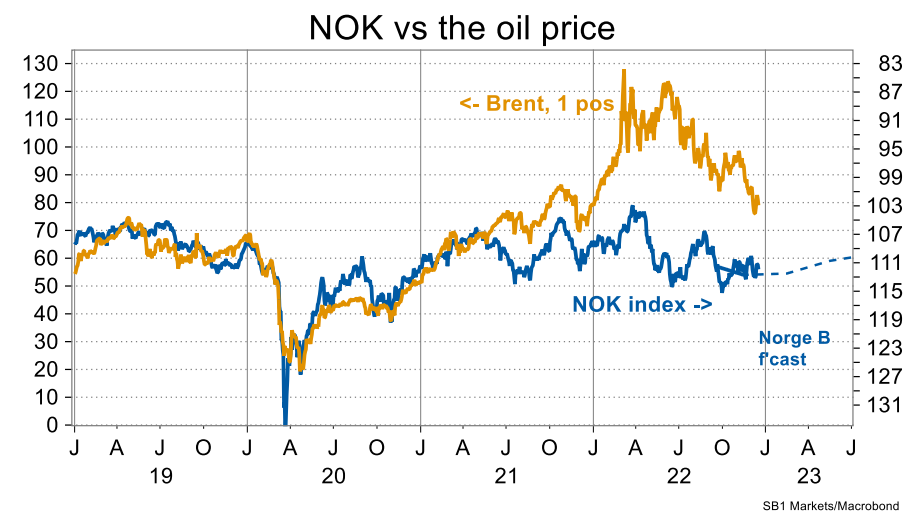
- **NOK is 2.8% above our main model estimate (from 1.3%), the largest, positive since H1 2021**
- The NOK is 5% weaker than our **AUD/CAD/SEK-model**, our 'super-cycle peers', predicts, a substantial weakening (from -6%)
- NOK is 1% weaker than an estimate from a model that includes global **energy companies' equity prices** (vs the global stock market) (unch.)

The NOK remained above our model estimate, now 2.8% ‘too’ strong



# Oil up, NOK up

However, the NOK has been close to uncorrelated with the oil (or natural gas) price in 2022



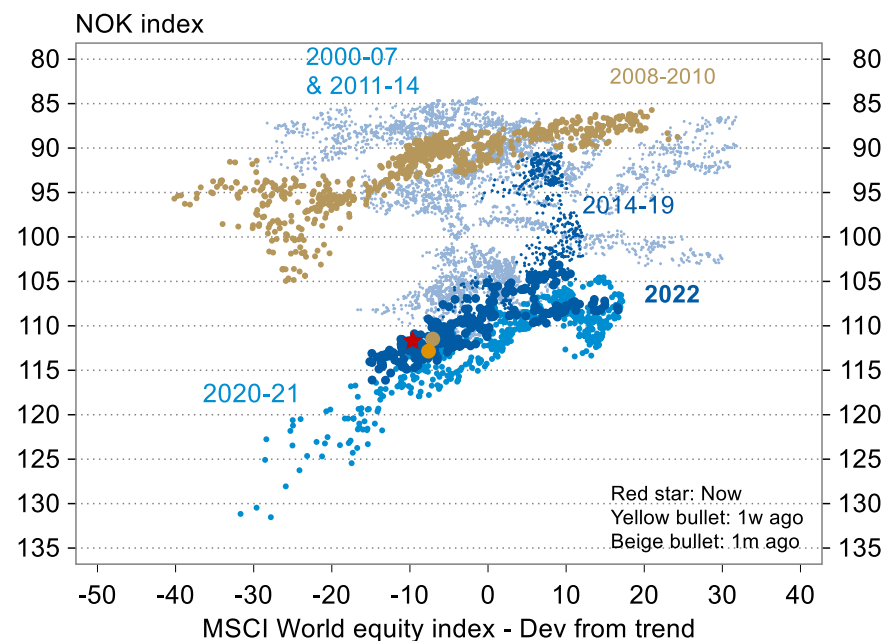
# Global equities down, NOK up

The NOK has been closely in sync with the global stock market since April – but not so last week

## NOK Index vs. global equities



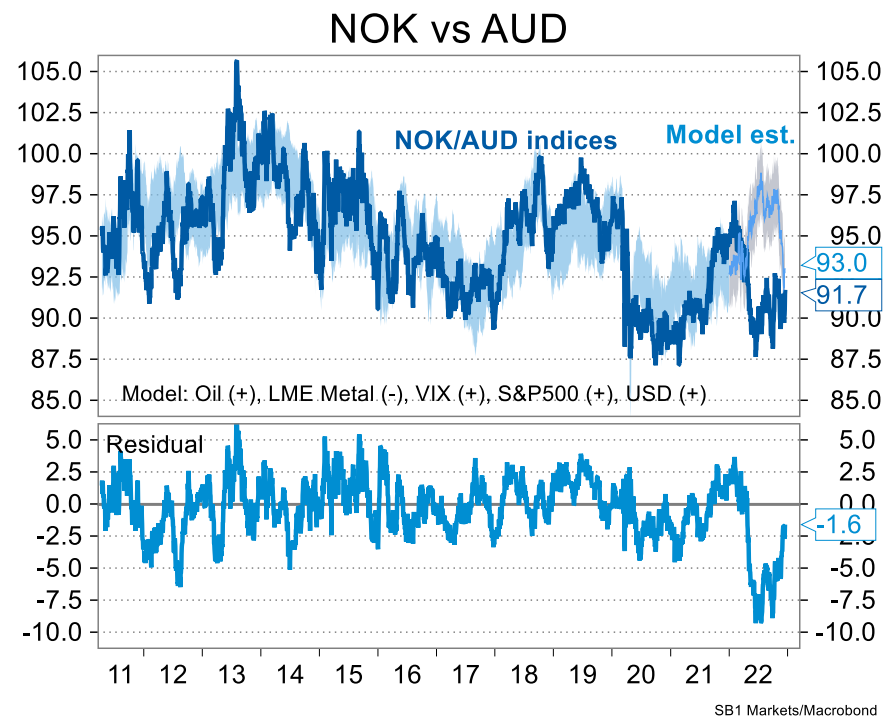
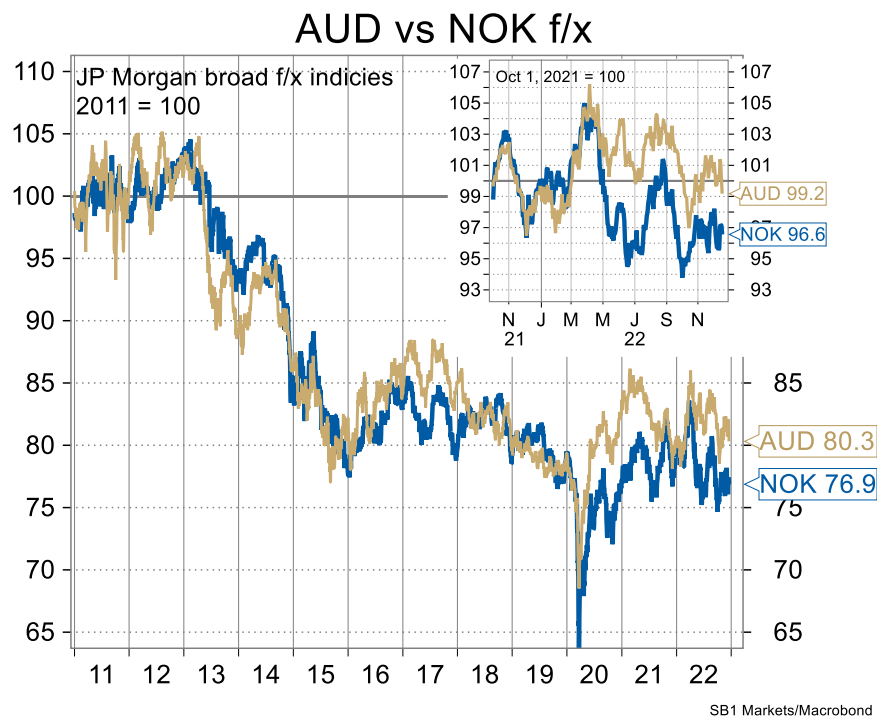
## NOK vs. MSCI world index



- There has not been any stable correlation over time, and when it is, the oil price is normally the real driver. *Not so much now*

# The NOK up vs. AUD – but for a good reason: Oil up, metals down

NOK is just 1.6% below our model f'cast vs AUD (from -1.8%), the lowest residual since the spring!

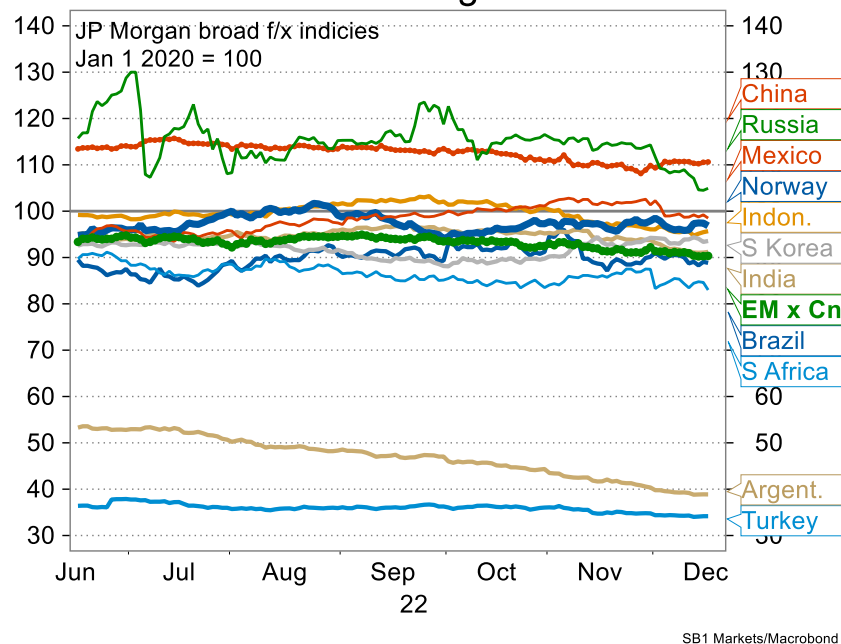


- The discrepancy between the NOK and AUD is unusual, given the normal factors that normally has explained the limited gap between the two
- Normally, NOK strengthens vs the AUD when the oil price rises vs. the LME metal index, when VIX, and the S&P500 index increases, and the USD index appreciates. Seem like we need a new model. Until we find it, buy the NOK index (and short the AUD index)

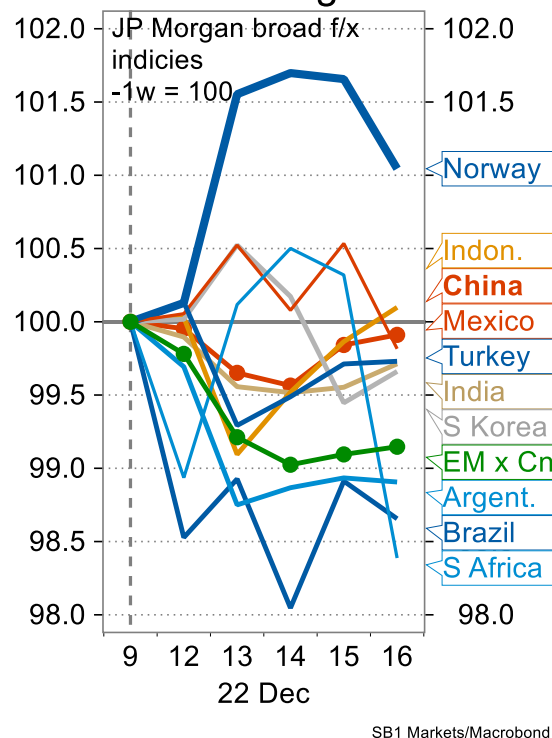
# EM x China currencies are drifting slowly downwards

'Risk off' may not be what these currencies long for. CNY has stabilised, hope for a better Covid handling (one day)?

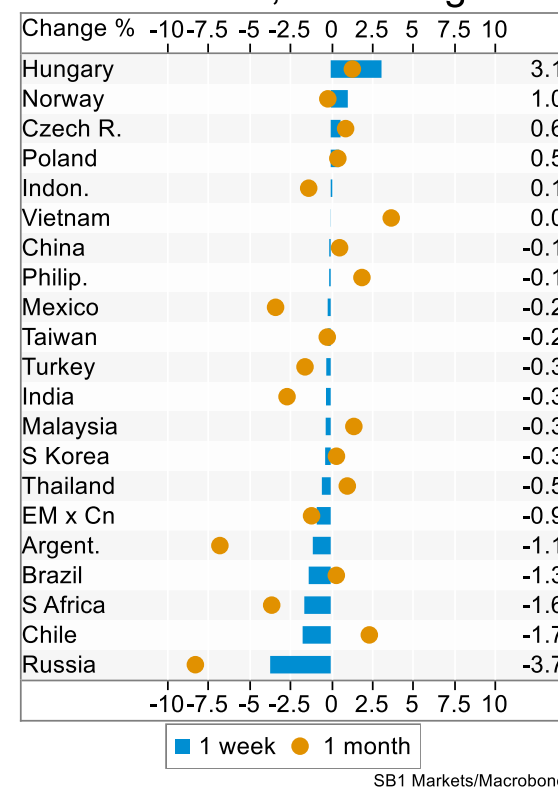
## EM Exchange rates



## EM Exchange rates



## FX Indices, J.P. Morgan





# Disclaimer

## **SpareBank 1 Markets AS (“SB1 Markets”)**

This report originates from SB1 Markets’ research department. SB1 Markets is a limited liability company subject to the supervision of The Financial Supervisory Authority of Norway (Finanstilsynet). SB1 Markets complies with the standards issued by the Norwegian Securities Dealers Association (VPFF) and the Norwegian Society of Financial Analysts.

## **No investment recommendation**

Any views and opinions relating to securities mentioned in this report should be interpreted as general market commentary, and not as investment recommendations within the meaning of section 3-10 of the Norwegian Securities Trading Act.

## **No personal recommendation**

The information contained in this publication is general and should not be construed as a personal recommendation within the meaning of the Norwegian Securities Trading Act, section 2-4. It does not provide individually tailored investment advice regarding a particular financial situation, investment experience, risk profile or preferences of the persons who may receive this report. For tailored investment advice regarding stocks mentioned in this publication, please consult our brokerage desk or your individual investment advisor.

## **Research for the purposes of unbundling**

This report is deemed to constitute a minor non-monetary benefit for the purposes of the inducement rules under MiFID II. The report is publicly available on our website (no log-in required).

## **Conflicts of interest**

SB1 Markets, affiliates and staff may perform services for, solicit business from, hold long or short positions in, or otherwise be interested in the investments (including derivatives) in any stock mentioned in this publication. To mitigate possible conflicts of interest and counter the abuse of confidential information and insider knowledge, SB1 Markets has set up effective information barriers between divisions in possession of material, non-public information and other divisions of the firm. Our research team is well versed in the handling of confidential information and unpublished research material, contact with other divisions, and restrictions on personal account dealing. The views expressed in this report accurately reflect the analyst’s personal views about the companies and the securities that are subject of the report, and no part of the research analyst’s compensation is related to the specific recommendations or views expressed in this report.

## **Accuracy of sources**

All opinions and statements in this publication are, regardless of source, given in good faith, and may only be valid as of the stated date of this publication and may be subject to change without notice. SB1 Markets has taken all reasonable steps to ensure that the information contained in this report is true and not misleading. Notwithstanding such efforts, we make no guarantee as to its accuracy or completeness.

## **Risk information**

Return on investments is inherently exposed to risks. The value of an investment position may both rise and fall during the investment period. If the return on investments is positive at one time, there is no guarantee that it will remain such in future. In certain cases, losses may exceed the sum of the original investment.

## **Limitation of liability**

Any use of information contained in this report is at your own individual risk. SB1 Markets assumes no liability for any losses caused by relaying on the information contained in this report, including investment decision taken on the basis of this report.

## **Limitation on distribution**

This publication is not intended for, and must not be distributed to, individuals or entities in jurisdictions where such distribution is unlawful.