Macro Weekly

7/23

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Last week

- **The War/European Energy/Commodities**
  - Russia has started a new campaign, and Ukraine is begging the West for more weapons and ammunition
  - **Mixed commodities: The oil** price rose, while **European gas** prices fell further – as did **metal** prices
  - In China, mobility has returned to a very high level after the Chinese New Year
- **Global auto sales**
  - Sales flattened in January, following two month's decline. China and EMU contributed at the downside, the rest of the world on the upside
- **China**
  - **Inflation** accelerated 0.3 pp to 2.1% in January, and the core was up 0.2 pp to 0.9%. Producer prices are down y/y. Any better?
- **US**
  - **Fed Chairman Jay Powell** reiterated his message from the press conference in an interview on Tuesday: Disinflation has begun, it is very early stages, there will be further rate increases, and it may well be that we have to do more – but the market just listen to the disinflation word. However, during a data thin week rate expectations rose sharply, the terminal rate by 35 bps to 5.18%, a new cycle high. The rest of the curve rose, the 10 y to 3.75%, up 22 bps
  - **Atlanta Fed's median wage tracker** still reports 6%+ wage growth, more than 3 pp higher than over the 10 years prior the pandemic. Which over time will yield 3 pp higher CPI inflation than before the pandemic
- **EMU**
  - **Retail sales** were down 2.7% in Dec and the trend is straight down
- **Sweden**
  - **The Riksbank** lifted as widely expected the signal rate by 50 bps again, to 3,00% - and to above Norges Bank's policy rate. The bank also lifted the interest rate path by close to 50 bps – and FRA's rose by 50 bps as well. Riksbank signals a terminal rate at 3.33%, the market is 20 bps above. The QE programme expired at year end, and the bank is announcing that it will start QT beginning in April. The 10 y bond yield rose 50 bps too, much more than elsewhere
  - **Svensk Mäklarstatistik (the realtors)** reported a 1.9% decline in the prices of flats in Jan. Prices are now down 14% from the peak.. Real house prices are back to the early 2015 level. And the central bank is willing to continued hiking…
- **Japan**
  - **Wages** grew 2.5% in through '22, the fastest pace 1991. The Dec y/y rate was 4.9%, but heavily influenced by the fact that wages were lower than normal in Dec-21 – also real wages are in fact still falling
- **Norway**
  - **CPI inflation** surprised sharply to the upside in January. The headline CPI rose 1.1 pp to 7.0%, and the core was up 0.6 pp to 6.4%, both significantly above our, the market's and Norges Bank's f'casts (if not for the total CPI). The price increases are broad based, with autos (even if adjusting for higher taxes, in the core CPI), housing and newspapers/books contributing the most on the upside. Both domestically and imported prices were to blame. Electricity prices fell 10%. The Dec core inflation data was a 'rates up' print, the Jan print sealed the deal for a 2nd 2023 hike from NoBa, following the well announced hike to come in March. The market puts a 80% probability for a third hike, to 3.5%, following a 35 bps lift in the OIS cure last week. It does not seem unreasonable
  - **Manufacturing production** fell for the 2nd month and was down 0.6% in Dec, we expected it to remain unchanged. In fact, production in oil-related sectors was unchanged, but activity in the other sectors was down by 0.7% m/m. Only the production of chemicals, ships/platforms, and repairs were higher m/m
  - The **vacancy rate** was up 0.4 pp to 3.6% in Q4, far above our estimate at 3.0%. The unfilled job openings rate is the highest on record (data from 2010)

US CPI, manuf. prod, housing market, and NO GDP + Norw investment surv.

Time	Count.	Indicator	Period	Forecast	Prior
Monday Feb 13					
08:00	NO	Construction costs	Jan		6.3%
Tuesday Feb 14					
00:50	JN	GDP Annualized SA QoQ	4Q P	2.0%	-0.8%
06:00	SW	PES Unemployment Rate	Jan		3.1%
06:30	NO	Consumer Confidence	1Q	(-35)	-38
08:00	**UK**	**Weekly Earnings ex Bonus**	**Dec**	**6.5%**	**6.4%**
08:00	UK	Unemployment Rate SA		3.7%	3.7%
08:00	**NO**	**GDP Mainland QoQ**	**4Q**	**0.7%(1.1)**	**0.8%**
08:00	**NO**	**GDP Mainland MoM**	**Dec**	**(1.1%)**	**0.2%**
11:00	EMU	GDP SA QoQ	4Q P	0.1%	0.1%
11:00	EMU	Employment QoQ	4Q P		0.3%
12:00	US	NFIB Small Business Optimism	Jan	90.0	89.8
14:30	**US**	**CPI YoY**	**Jan**	**6.2%**	**6.5%**
14:30	**US**	**CPI Ex Food and Energy MoM**	**Jan**	**0.4%**	**0.4%**
Wednesday Feb 15					
08:00	UK	CPI YoY	Jan	10.2%	10.5%
08:00	UK	CPI Core YoY	Jan	6.2%	6.3%
08:00	NO	Trade Balance	Jan		148.8b
10:00	NO	New Home Sales, Home Builders	Jan		
11:00	EMU	Industrial Production MoM	Dec	-0.8%	1.0%
11:00	EMU	Trade Balance SA	Dec	-16.0b	-15.2b
14:30	US	Empire Manufacturing	Feb	-20.0	-32.9
14:30	US	Retail Sales Ex Auto MoM	Jan	0.8%	-1.1%
15:15	US	Manufacturing (SIC) Production	Jan	0.6%	-1.3%
16:00	US	Business Inventories	Dec	0.3%	0.4%
16:00	US	NAHB Housing Market Index	Feb	37	35
Thursday Feb 16					
02:30	CN	New Home Prices MoM	Jan		-0.25%
08:00	**NO**	**Oil investment survey**	**2023**	**(180bn)**	**150bn**
08:00	**NO**	**Manufacturing inv. survey**	**2023**		
14:30	US	Building Permits	Jan	1350k	1330k
14:30	US	Housing Starts	Jan	1361k	1382k
14:30	US	Initial Jobless Claims	Feb-11	190k	196k
14:30	US	Philadelphia Fed Business	Feb	-6.9	-8.9
14:30	US	PPI Ex Food and Energy YoY	Jan	4.9%	5.5%
Friday Feb 17					
08:00	UK	Retail Sales Ex Auto Fuel MoM	Jan	-0.3%	-1.1%
08:00	SW	LFS Unemployment Rate SA	Jan	7.4%	7.5%
	NO	**TBU Techical report on wage neg.**	**2023p**		
16:00	US	Leading Index	Jan	-0.3%	-0.8%
During the week					
	CN	Aggregate Financing CNY	Jan	5375.0b	1310.0b
	CN	New Yuan Loans CNY	Jan	4000.0b	1400.0b

Sources: Bloomberg. SB1M est. in brackets. Key foreign & all Norwegian data are highlighted, **the most important in bold**

- **China**
  - **New home prices** have fallen since Sept-21, along with existing home prices. Authorities have put in place numerous measures to support demand, but so far without any luck
  - **Credit growth** has slowed even if the authorities have tried to stimulate growth, as least vs construction and housing
- **US**
  - **Inflation** is easing and headline CPI fell 0.1% m/m in December and underlying inflation is some 3.1%,as energy prices have fallen which is of course still not the Fed's target. The core is also coming down and the annual rate is now at 5.7%, down from the peak at 6.6%, thanks to falling goods prices. Services inflation (x rents) is still at 6.2% and rents are still on the rise. However, we still expect both the headline and the core to moderate further in January, and the uncertainty may be at the downside
  - **Manufacturing production** has turned south and is now below the pre-pandemic trend and only 0.8 pp above the Feb-20 level. Production in all main sectors declined in December, and new orders are not promising either, according to surveys
  - Both **housing starts and permits** are down 21%-29% since March/April of last year, and permits fell further in December, suggesting a continued fall in starts. The **Home builders' Housing Market Index** plunged over the past year but rose a tad in Jan, and is expected further up in Feb
- **UK**
  - **Wage inflation** is still on the rise, and was up 6.7% y/y in November. It used to be below 3% before the pandemic, and now inflation is still at 10.5% and unions are striking for growth in real wages – the BoE has a tough job ahead. At the same time, unemployment is the lowest in decades but have probably bottomed
- **Norway**
  - **GDP** growth has been relatively strong and the level is above NoBa's estimate, yet again. Mainland business investments have remained strong and so has consumption. The weak links? Manufacturing production and oil investments. In Dec, the surge in auto sales will lift GDP by almost 2 pp, before the impact from higher imports and lower inventories are incorporated. (Import data has been surprisingly muted, but we assume a substantial drag). The headline number will anyway not be relevant for an assessment of the cycle (auto sales fell like never before in January which will take GDP down. We expect an 1% lift m/m in Dec, and a 1.1% q/q growth in Q4. Annual accounts will reveal more details on wages, profits etc.
  - **Investment surveys** are out on Thursday. The 2023 estimate for **oil & gas investments** will be revised up more than anytime before as a large no. applications for field developments was delivered late last year to benefit from the temporary tax incentive offered if the PDO will be included in the forecast. We expect a NOK 30 bn lift in 2023 investments, to 180 bn – if so 13% up from the equivalent 2022 f'cast. The first forecast for 2024 will also be lofty, we expect NOK 160 bn, with the uncertainty at the upside. **Manufacturing investments** have been very upbeat, and the last 2023 estimate was 44% higher than the 2022 equivalent. The problem is that other surveys are more downbeat. We expect not much further upward revisions, and not in power supply either
  - **The TBU (**the Technical Committee preparing the wage negotiations) will present it's preliminary report at Friday. An 'official' estimate last year's wage growth (may be north of 4%, given new data), and a forecast for 2023 inflation will be published (probably not higher than the 4.8% – 4.9% forecast NoBa/SSB has published as electricity prices has fallen sharply. However, the core CPI is moving in the wrong direction…

Highlights
The world around us
The Norwegian economy
Market charts & comments

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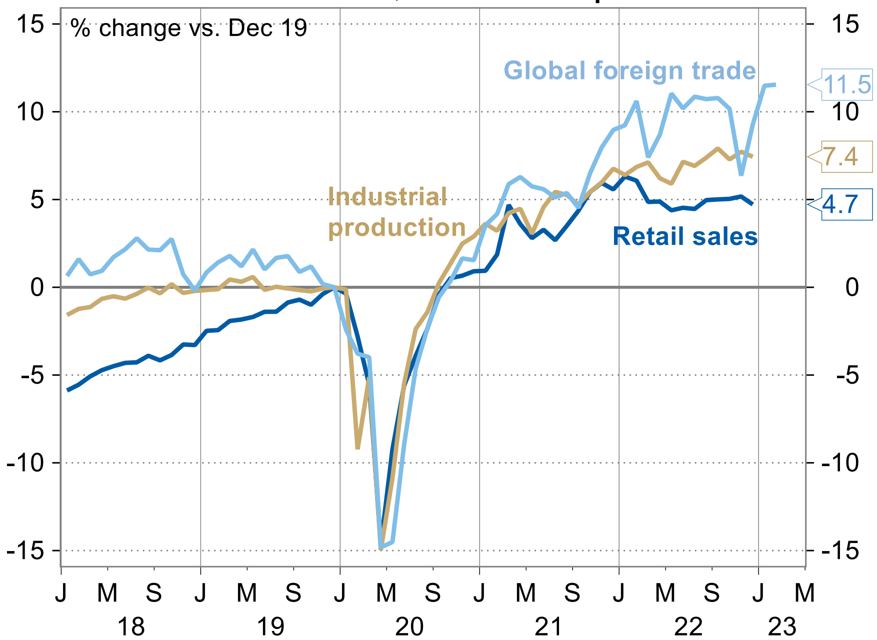
Industrial production & retail sales most likely ~~flattish~~ down in December

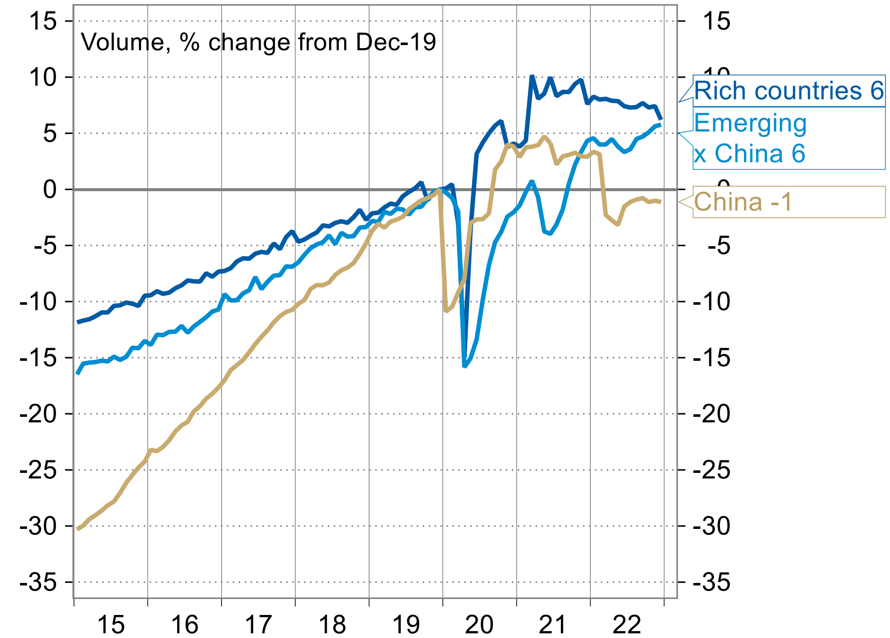
Global trade was weak in Nov & Dec but have probably recovered somewhat

Global Retail sales, industrial prod. & trade



SB1 Markets/Macrobond/CPB

Retail sales



SB1 Markets/Macrobond

- These December data (and even more Jan/Feb trade data) are preliminary, as most countries have not yet reported

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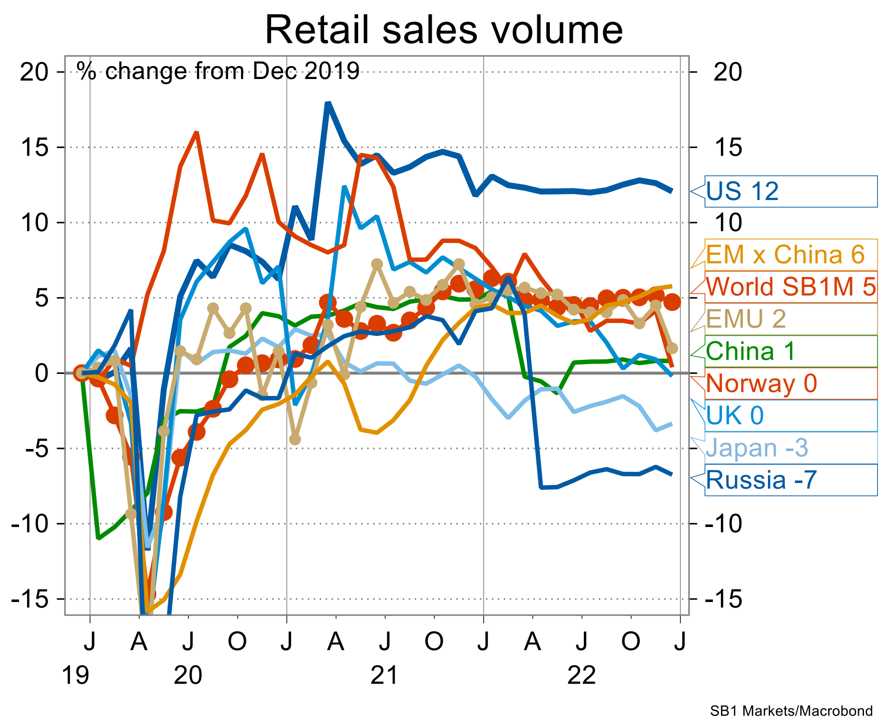
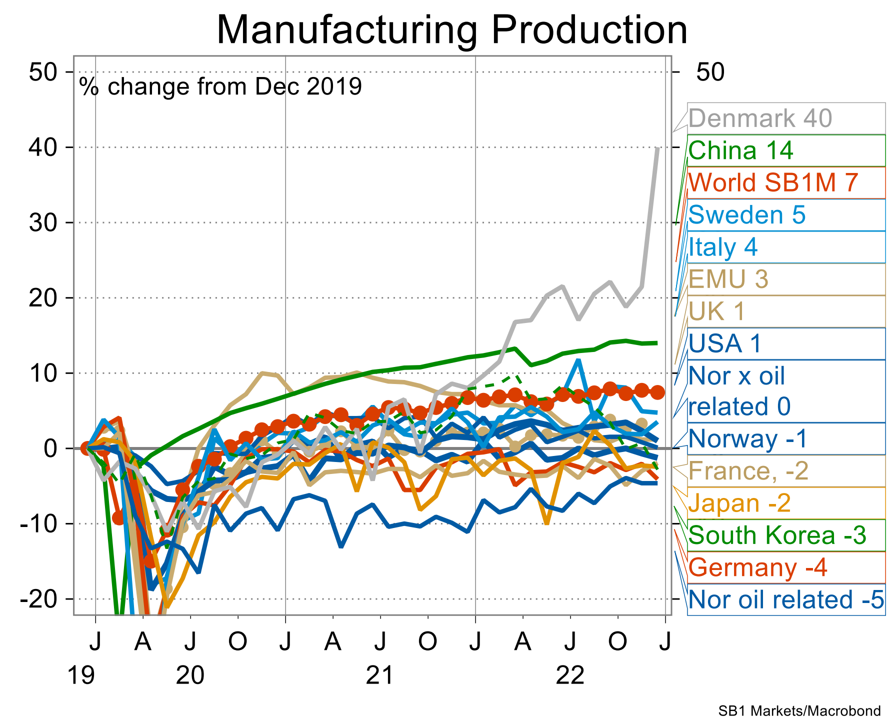
Global foreign trade: The last months, including forecasts, are estimates from the Kiel Institute.

Global retail trade supported by Emerging Markets x China, but that's all



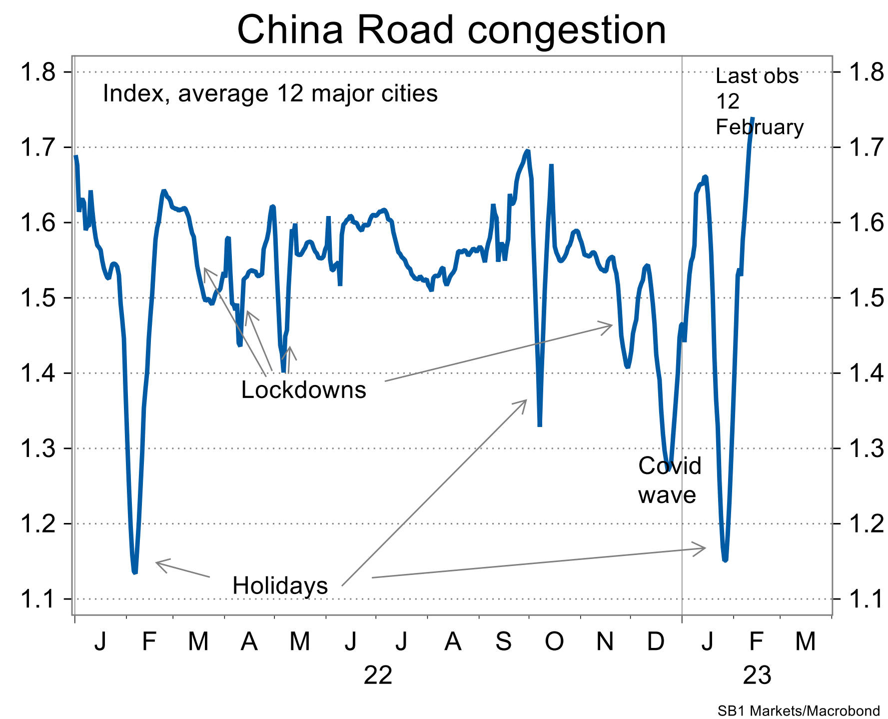


- We have not checked these Danish data

US retail sales: Personal consumption of goods, ex auto & energy

Road traffic was back to a normal level after the Chinese New Year ended

… or even to something better than that?



- The seasonal adjustment of February in the chart to the left is still very uncertain – and the real number will very likely turn out to be lower

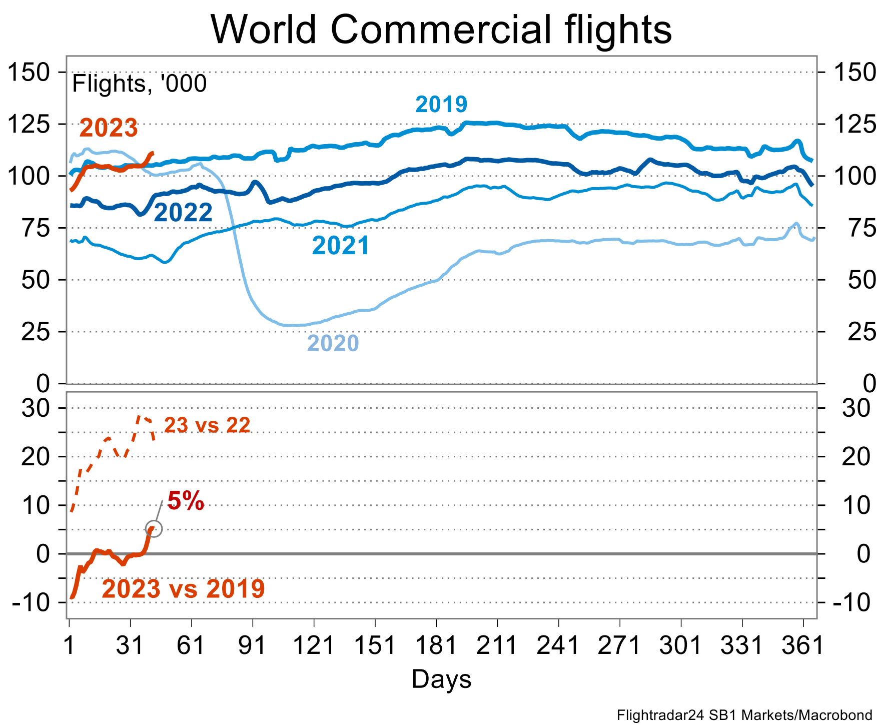
Metro traffic has recovered too

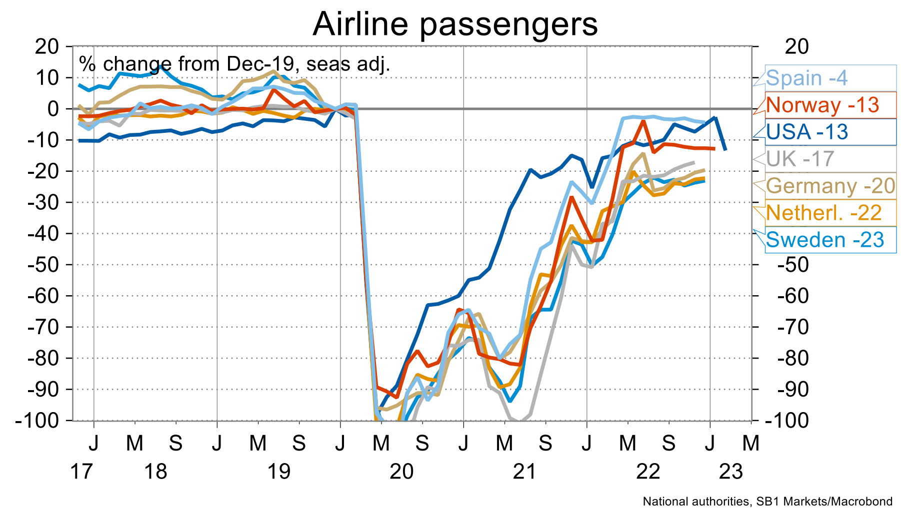
Air traffic is returning rapidly as well

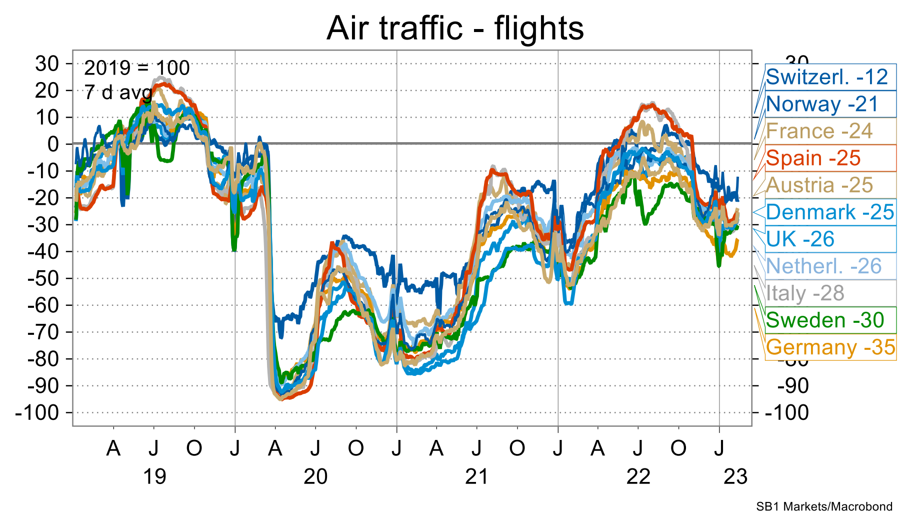
- Our February observation is a very uncertain estimate

Airline traffic almost back at ATH? At least measured vs. no. of flights

.. And adjusted for the season (early 2020 was probably better, especially seasonally adjusted).

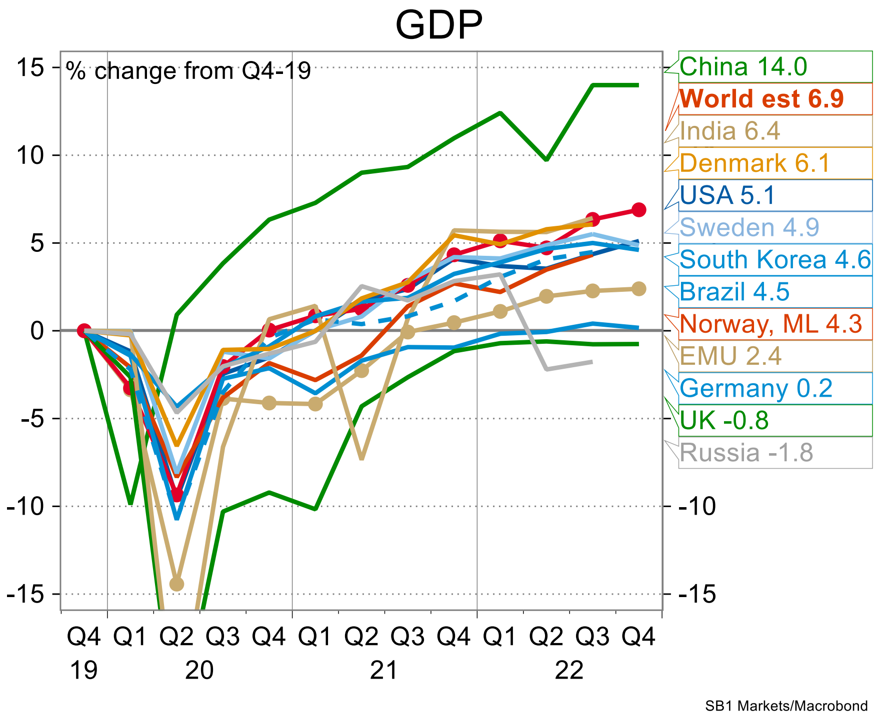


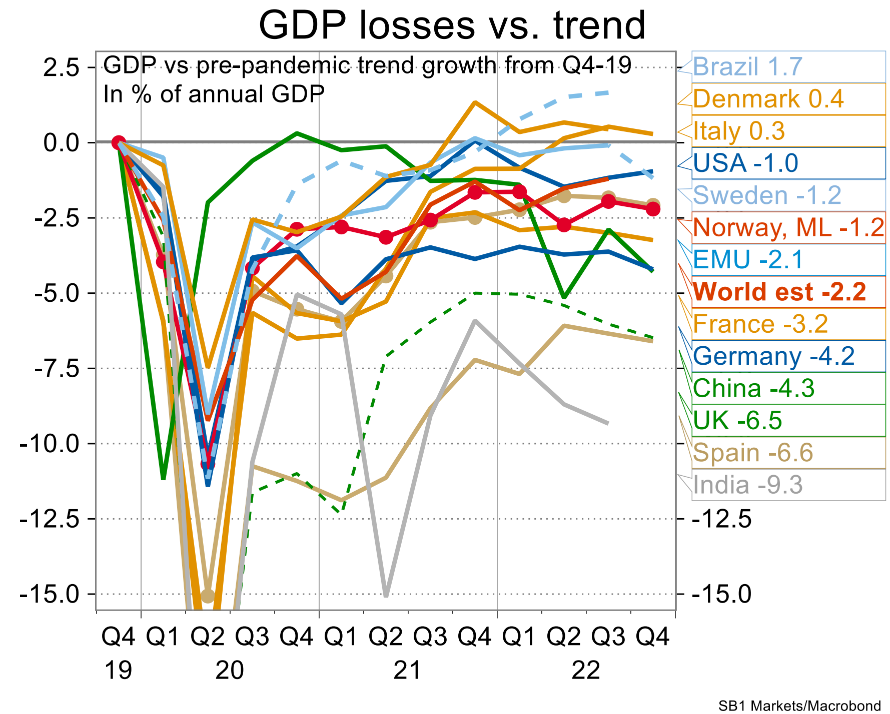




- Chinese traffic will is not doubt returning rapidly

Global GDP probably grew at a 2% pace in Q4, as China flattened

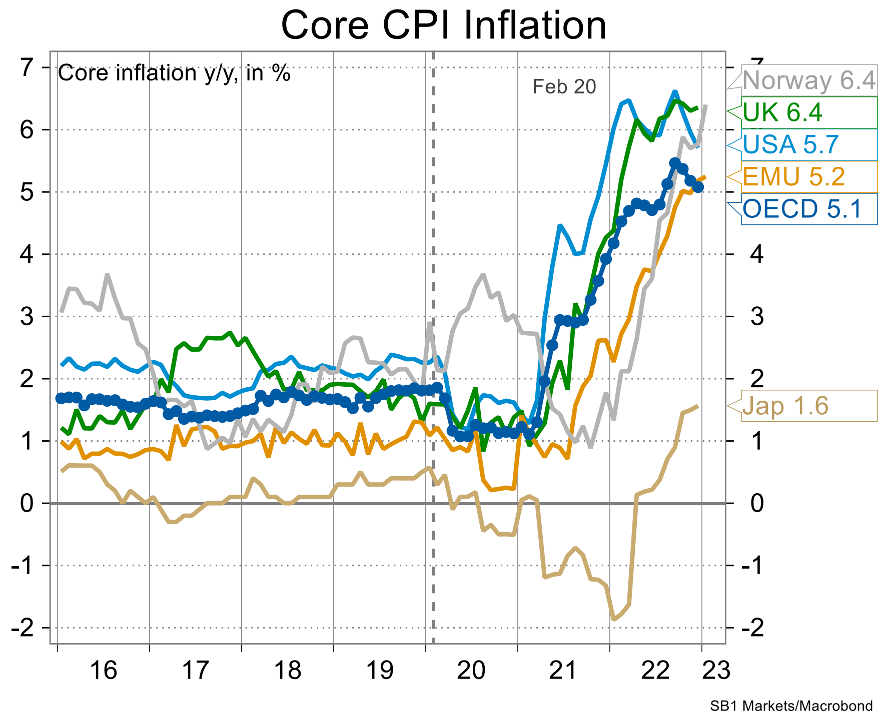


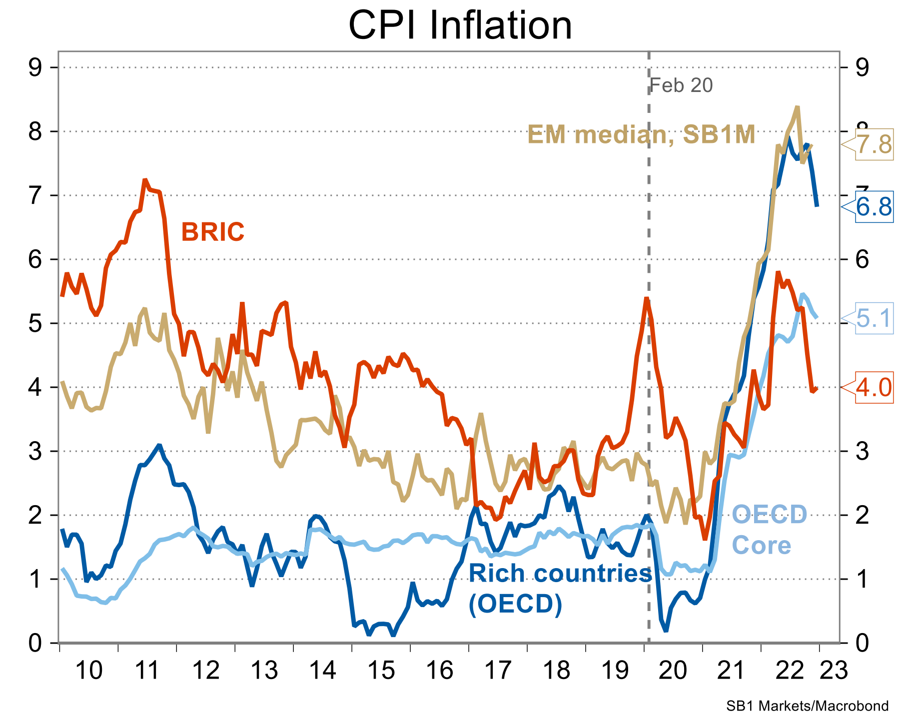


- Almost all countries are still reporting GDP levels that are far below the pre-pandemic trends – just Brazil, Italy (!) and Denmark are ahead

Peak inflation? Very likely, both in developed & emerging markets

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

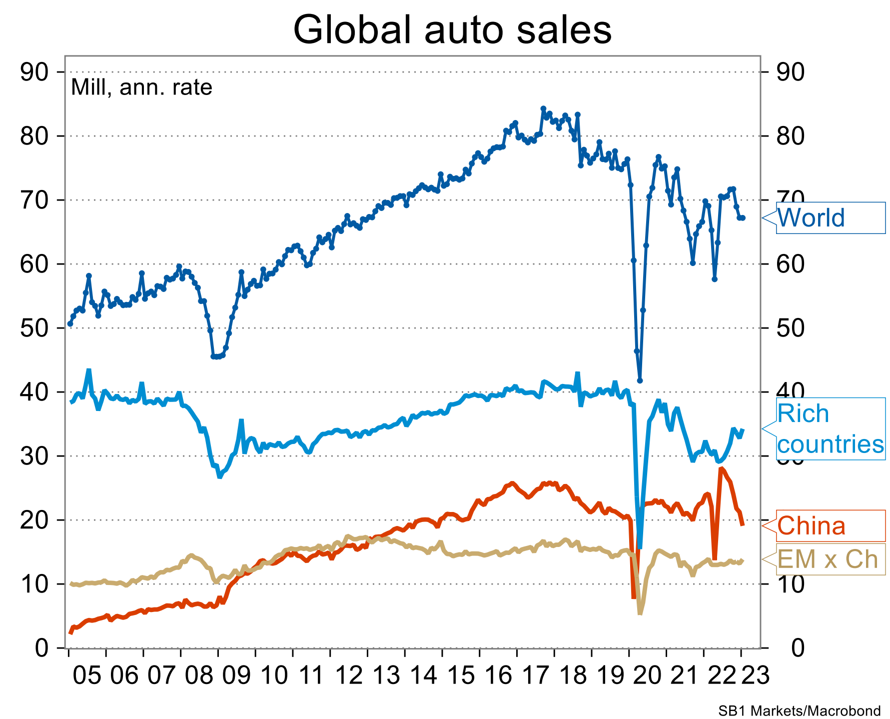


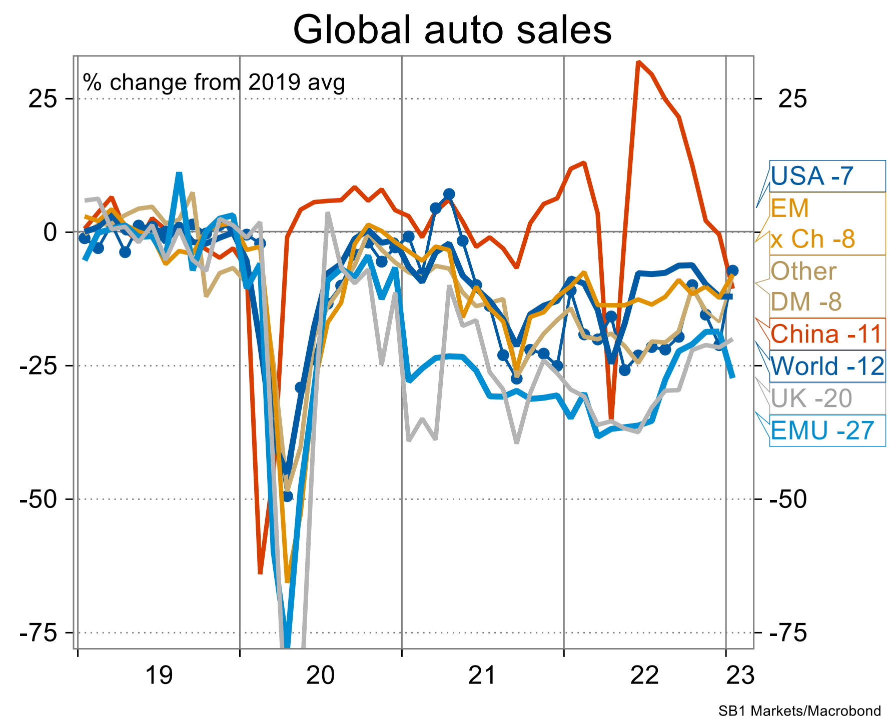


- We expect **inflation** to decline rapidly through 2023, as raw material prices and freight rates are declining, profit margins will come under pressure as demand, at least for goods, weakens in the rich part of the world. In the US, core goods prices are already declining
- In Europe, the big uncertainty is of course **energy prices**. We still think the potential on the downside is larger than the risk to the upside, even if 2023 prices have fallen sharply recent weeks. Both demand and supply are adjusting to high prices – and prices will come down
- US has a wage cost challenge, EMU most likely has not – at least not until now. The US wage inflation will slow in the coming quarters as demand for labour weakens (the Fed will take care of that). The risk in Europe: Compensation claims in wage negotiations

Global auto sales stabilised in January, China & EMU down, others up

Sales rose in US, India and Russia

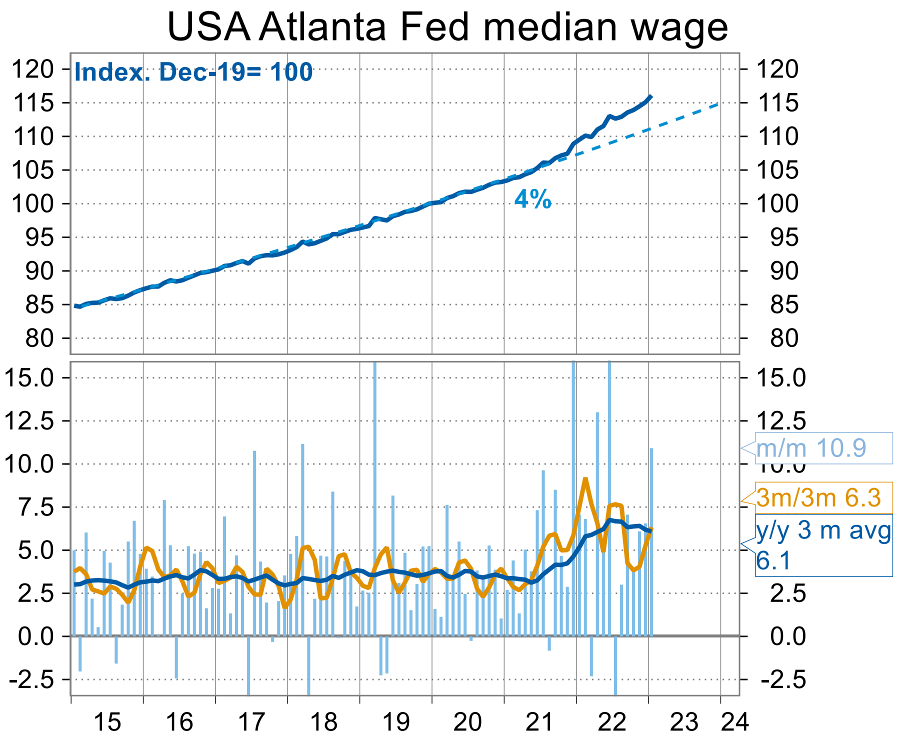


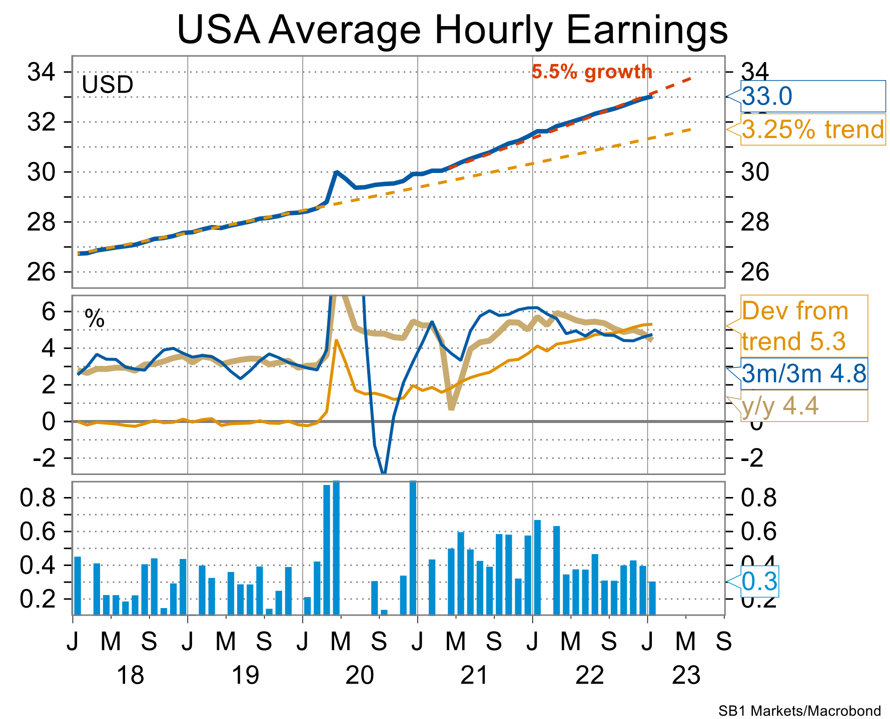


- **Global auto sales** were probably unchanged m/m in January, following the decline in Nov & Dec. The level is 12% below the 2019 average However, 2019 is an easy comparison: Sales are down almost 20% from the peak in 2018 and 35% below the pre-2018 trend growth path!
- Sales in **China** fell further, and are suddenly 11% below the 2019 level. We assume sales will recover – but the trend has been weak since 2016. Sales in the **US** rose more than expected and are down just 7% since 2019. **EMU** sales fell sharply as German sales returned to a low level – and sales are 27% below the 2019 level. **UK** sales are down 20%. We have removed Norwegian sales from the chart, as it has been all over the place (record high in Dec, very low in Jan)
- Sales in **EM x China** rose, mostly due to higher sales in India as well as in Russia – but the level is still rather low in the latter
- **Auto production** has been the limiting factor, at last since late 2020. Production has increased most places, and is higher than in 2019 some places. Now, the market balance is clearly better – and demand is probably a constraining factor some places

Atlanta Fed median wage inflation still at a 6% trajectory

Median wages rose more rapidly in January, and annual/underlying growth is still at 6%, way above a normal level

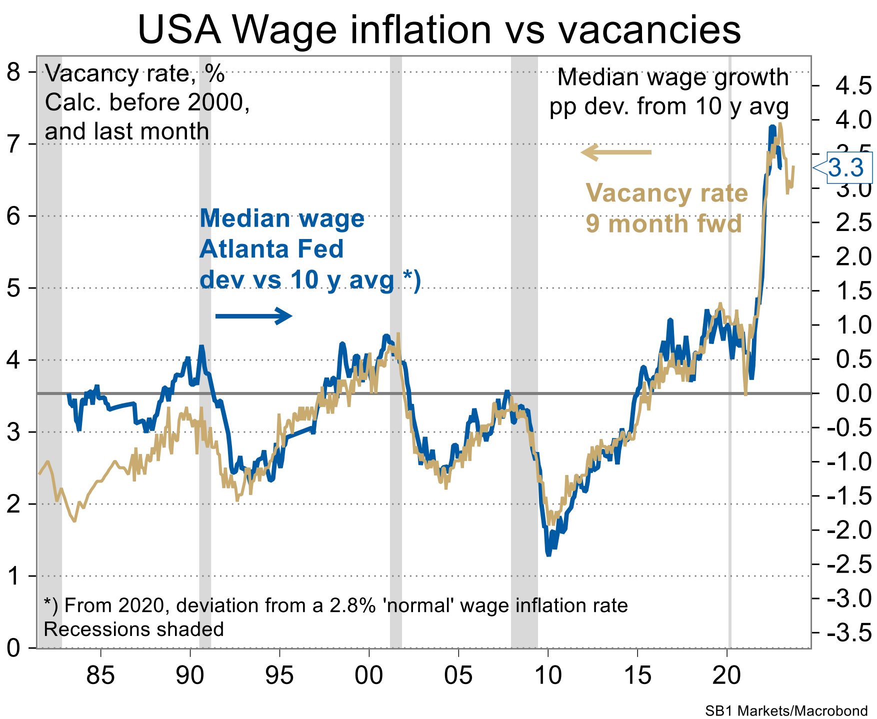


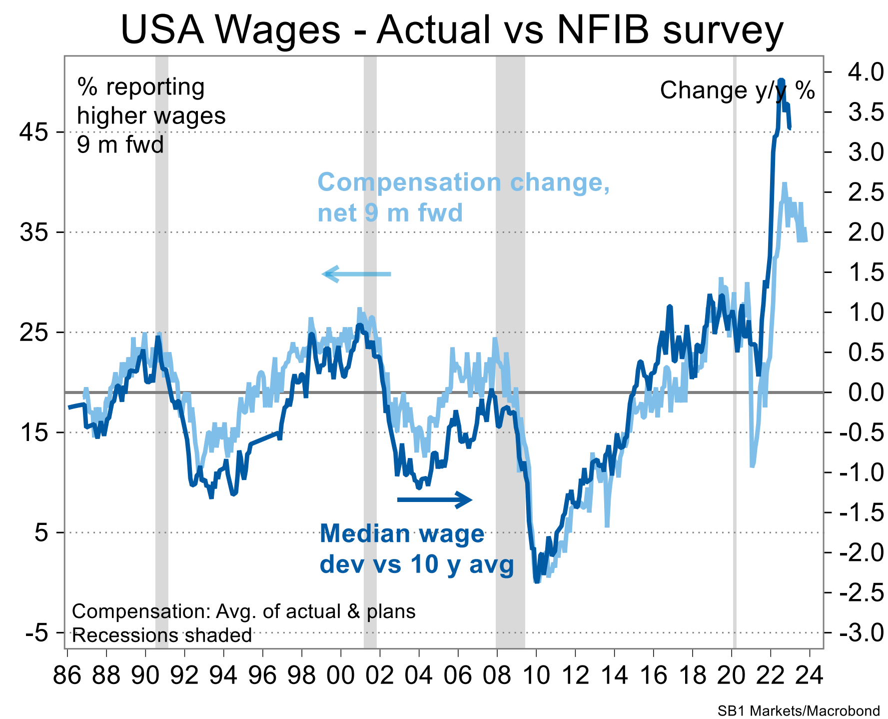


- Monthly changes in **Atlanta Fed's wage index** (calculated by us) are rather volatile, and we do not put that much emphasise on the 11% annualised increase in January. However, the trend is still strong and wage inflation for all categories of labour has accelerated sharply vs. the pre-pandemic normal rates
- The previous week, wage inflation **the monthly labour market report** was revised up slightly, and with an 0.3% growth in January, the 3m/3m rate was lifted, and rose further, to 4.8%

Vacancies up, harder to fill them – and wage plans are still very aggressive

Yes, wage inflation has come down, but it is not obvious that wages will return to '2% price inflation' level anytime soon

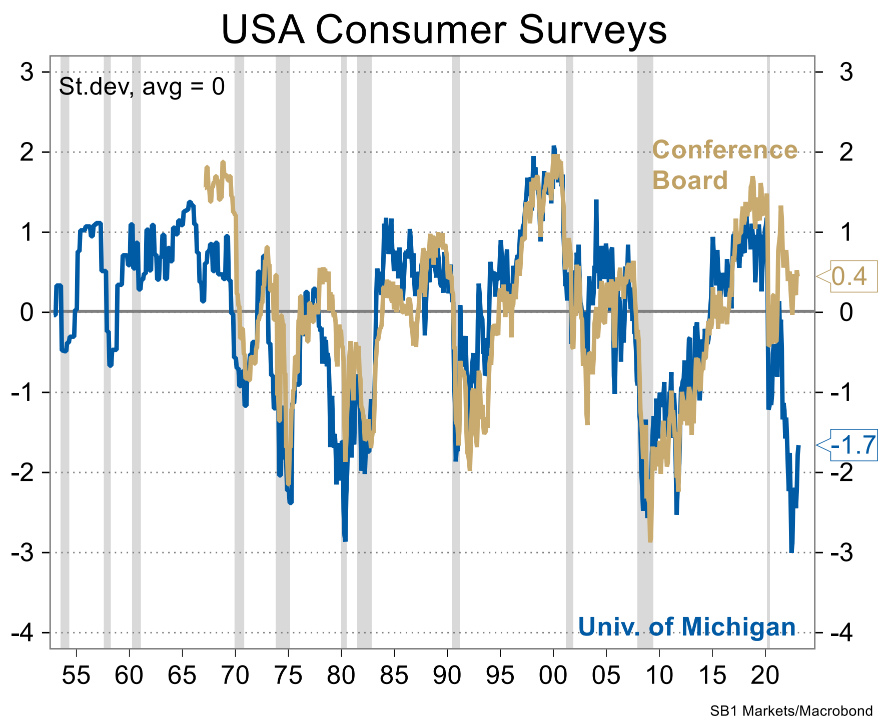




- **Our 'Phillips curve'** based on the vacancy rate signals continued wage inflation at some 2.6% above the normal level
- **Companies (SMEs) compensation plans** also signal continued high wage inflation but 'just' 2 pp higher than the past 10 y avg.
- **Demand for labour** probably has to be reduced in order to get wage inflation permanently back to a sustainable level
  - Check under which circumstances wage inflation slows on the charts above (hint: find the shaded areas, follow the blue wage line - as well as the vacancy rate or the wage hike plans ☺)
  - The alternative good news: Wage inflation has peaked, both the Atlanta Fed media wage (at the charts above) and the wage indices presented at the next pages

Univ. of Mich. sentiment further up in early February

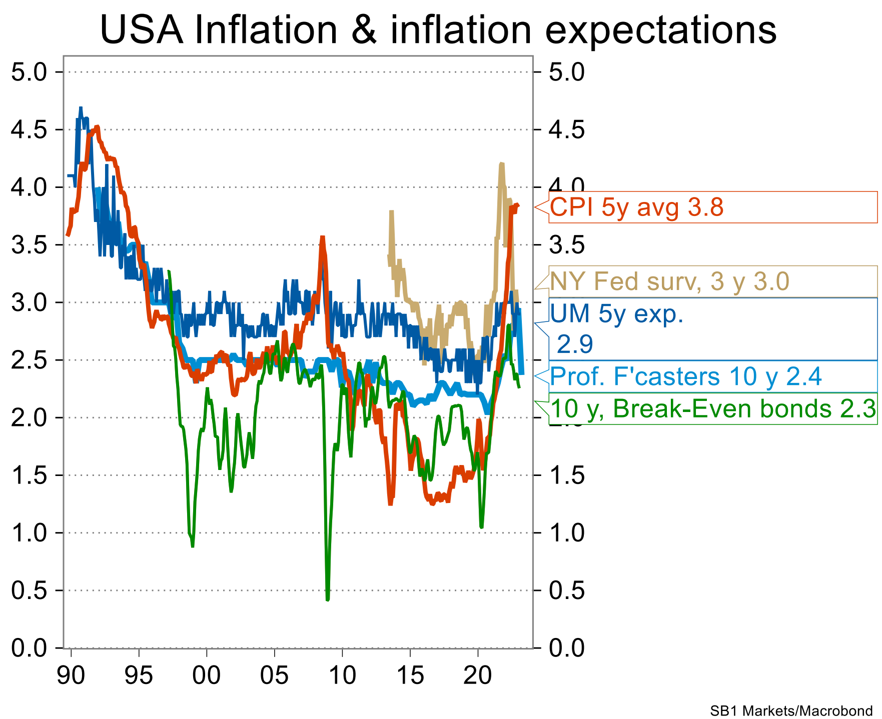
The sentiment index is still at a low level, 1.8 st.dev below average. All other surveys have turned up

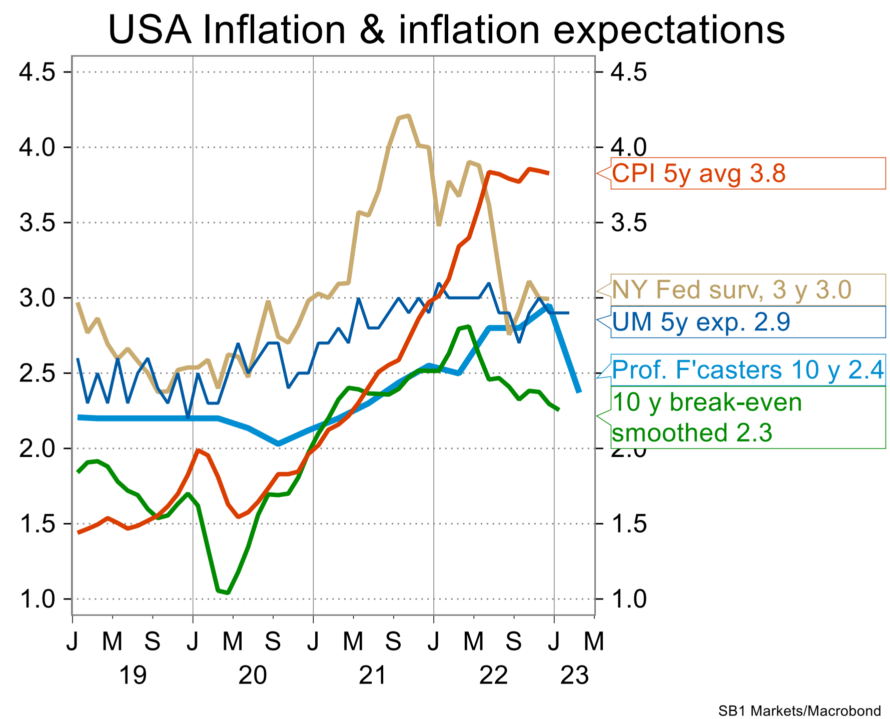


- **University of Michigan's consumer sentiment** climbed 1.5 p to 66.4 in February, according to the preliminary estimate. The level equals 1.7 st.dev below average. The bottom was in in last June, at -3.0 st.dev
  - Households' assessment of the current situation deteriorated somewhat, while expectations rose 4.2 p to 72.6
- **Other consumer surveys** have all turned up recent months but except for the Conference Board survey, they all remain well below an average level
- Quite often, the UM survey has been the canary in the mine vs. recessions, it yields earlier than Conference Board's survey. Now, however, the UM is turning upwards, before CB's survey really fell
- **Short-term inflation expectations** rose significantly, for the coming 12 months to 4.2% from 3.9% in January, but is down from 5.4% at the peak. The 5y expectation remained unch. at 2.9%
- **The risk:** The UM survey is still at a very low level, and is often an early bird in the cycle

Professional forecasters have lowered their 10y CPI est. to 2.4%, from 3.0%!

Ahead of the surge in actual inflation, the professionals expected 2.0% long term inflation. Guess they will return to that?

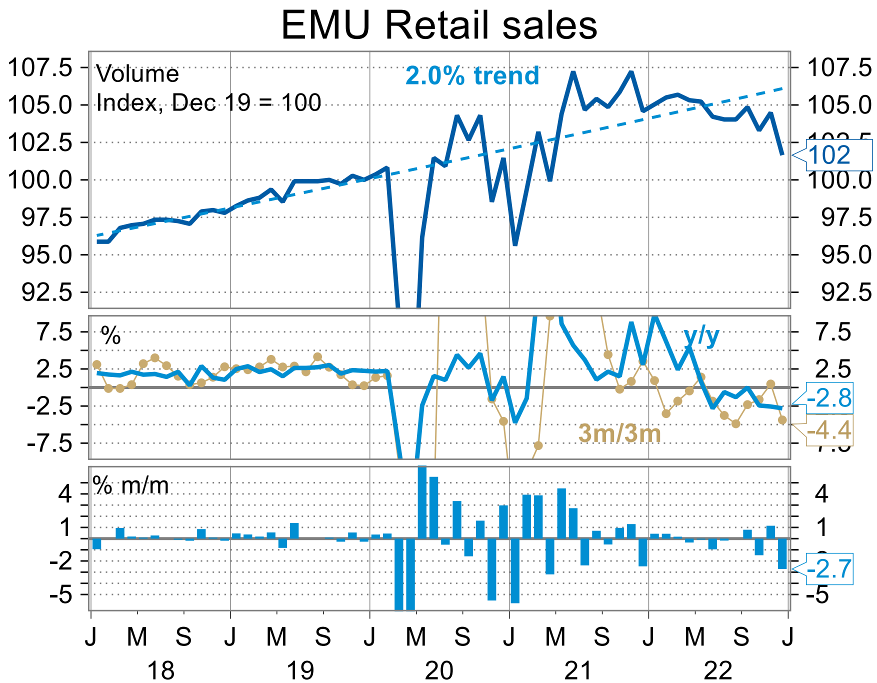


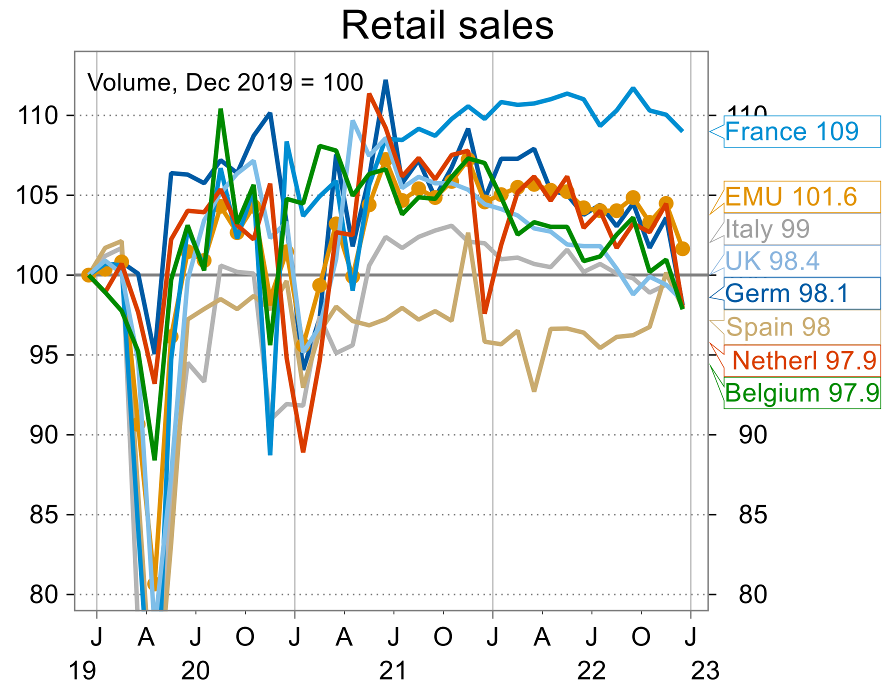


- In NY Fed's survey, households' 3y expectations have fallen to 3.0% from the peak at 4.2% in late 2021

Retail sales plummeted in December

Both food and non-food products contributed on the downside, while fuel sales were up

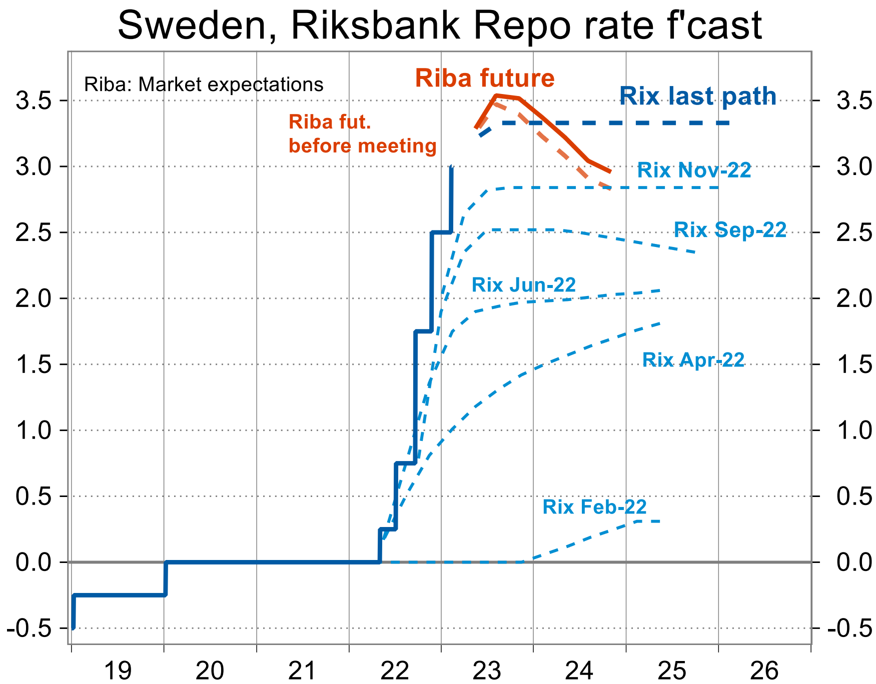




- **Sales** were down 2.7% in Dec (Nov print was revised up by 0.3 pp to +1.1%), expected down 2%. Sale volumes are down 2.8% y/y, the 3m/3m rate (=Q4 growth rate) is now at -4.4% and the trend is clearly down. Sales volumes are now just 2% above the pre-pandemic level, but 4% below the pre-pandemic growth path.
- As for the **regional** differences, sales were down in Germany (-5.3%), Spain (-2.2%), and France (-1.0%) in December (Italy has not yet reported), along with several other member countries
- Sales have been trending down since mid 2021 – and the outlook is dismal, given loss of buying power. However, sentiment have clearly turned the corner and the labour market is still remarkably strong, with the lowest unemployment rate in 4 decades, and an unprecedented high level of unfilled vacancies. And gas prices are trending rapidly down

The Riksbank lifted the signal rate by 50 bps to 3% – as expected

The bank sees further rate hikes during the spring and will sell bonds at a faster pace



Riksbank f'cast, annual percentage change

	2021	2022	2023	2024	2025
CPI	2,2 (2,2)	8,4 (8,3)	8,6 (9,3)	3,6 (3,0)	2,4 (2,4)
CPIF	2,4 (2,4)	7,7 (7,6)	5,5 (5,7)	1,9 (1,5)	1,9 (2,0)
GDP	5,1 (5,1)	2,5 (2,7)	-1,1 (-1,2)	0,9 (1,0)	1,9 (1,7)
Unemployment	8,8 (8,8)	7,5 (7,4)	8,0 (7,9)	8,4 (8,3)	8,4 (8,3)
Unit labour cost	1,6 (1,6)	3,4 (3,3)	4,5 (4,6)	2,7 (2,6)	2,0 (2,1)

	2022Q4	2023Q1	2023Q2	2024Q1	2025Q1	2026Q1
Policy rate	2,01 (2,00)	2,74 (2,64)	3,21 (2,82)	3,33 (2,84)	3,33 (2,84)	3.33

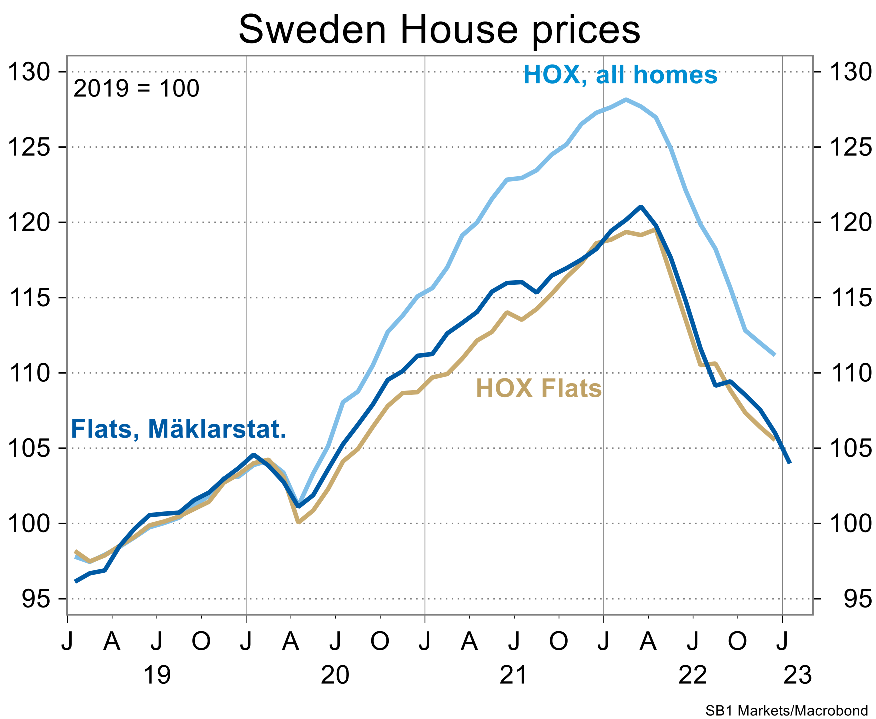
Source: Riksbank/ SCB/ SB1Markets

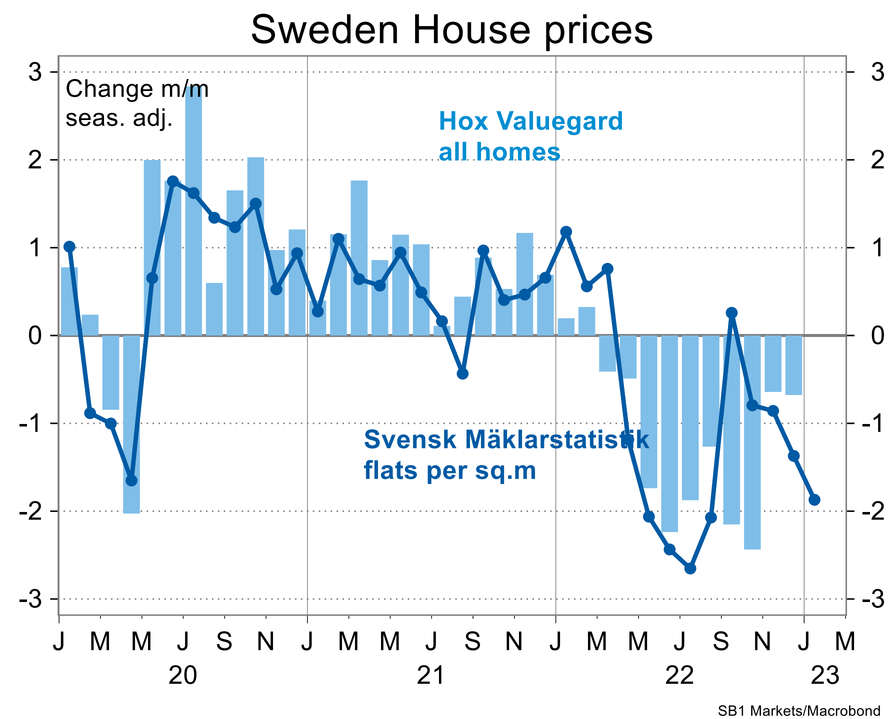
- **The Riksbank** raised the policy rate by 50 bps to 3.0%, as widely expected, both in the market and among economists. The bank states that the inflation is far too high, and the bank expects one more or two more hikes in 2023
- **Inflation** was revised down by 0.7 pp to 8.6% in ‘23 but then up in ’24, to 3.6. Next year the CPIF is expected down to 1.9%, while the CPIF x energy (the real core) is expected to return to 2% in 2025 from 5.8% in 2023
- **GDP growth** was revised up by 0.1 pp in ’23 (still expecting GDP to fall by 1.1%) and down by 0.1 pp in ‘24. The **unemployment rate** was revised only slightly upwards for the remainder of the prognosis period
- **The interest rate path** was lifted, by up to 49 bps (from the spring-23), to 3.33%. Thus, the bank expects to hike the rate once or twice this year, to 3.25% (2/3% probability) or 3.50% (1/3 prob, and no cut on the horizon. The market now assumes at peak at 3.50%, with a small probability for a hike to 3.75% - but then a reversal from early 2024
- The **QE program** expired at the end of the year, and the bank **will now move to QT**, selling SEK 3.5 bn of gov’t bonds each month, starting in April. At year-end, the total holding of gov’t bonds was SEK 338 bn, so the sell-off will not be that dramatic
- **Riba futures** rose 10 – 15 bps on the announcement on Thursday and then by the same amount on Friday – after climbing earlier in the week – in sum up 40 – 50 bps!
- **The 10 y government bond yield** rose by 50 bps as well, and it was ‘Swedish’, the spread vs. 10 y German gov. rose by 34 bps last week – but the Swedish yield is still slightly lower than the ‘Bund’ yield

SpareBank 1 MARKETS

No relief for Swedish home prices, according to the realtors, down 14%

Svensk Mäklarstatistik (the realtors) report of a 1.9% decline in the prices of flats in January

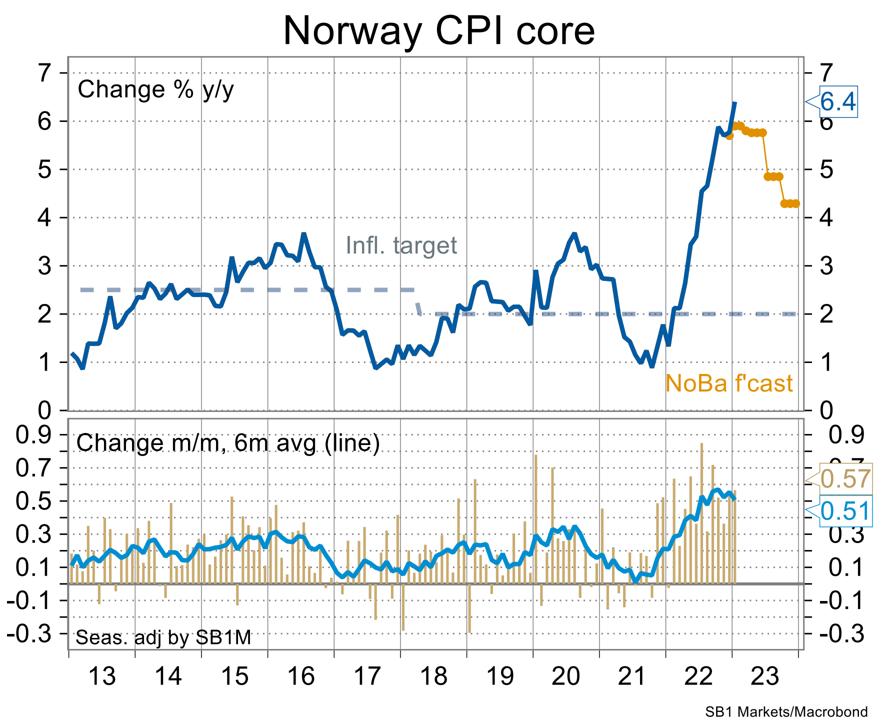




- The actual price decline was 1%, but that turned into a 1.9% setback after our seasonal adjustment
- The realtors' price index is down 14% from the peak in March-22, and <u>prices are back to the same level as in Feb-20</u>, before the pandemic hit
  - **In real terms**, prices are <u>back to level in Feb-15</u> – of course supported by the 12% inflation last year
- **The HOX/Valueguard index** reported a 0.7% m/m fall in house prices in <u>December</u>

January inflation data surprised sharply to the upside

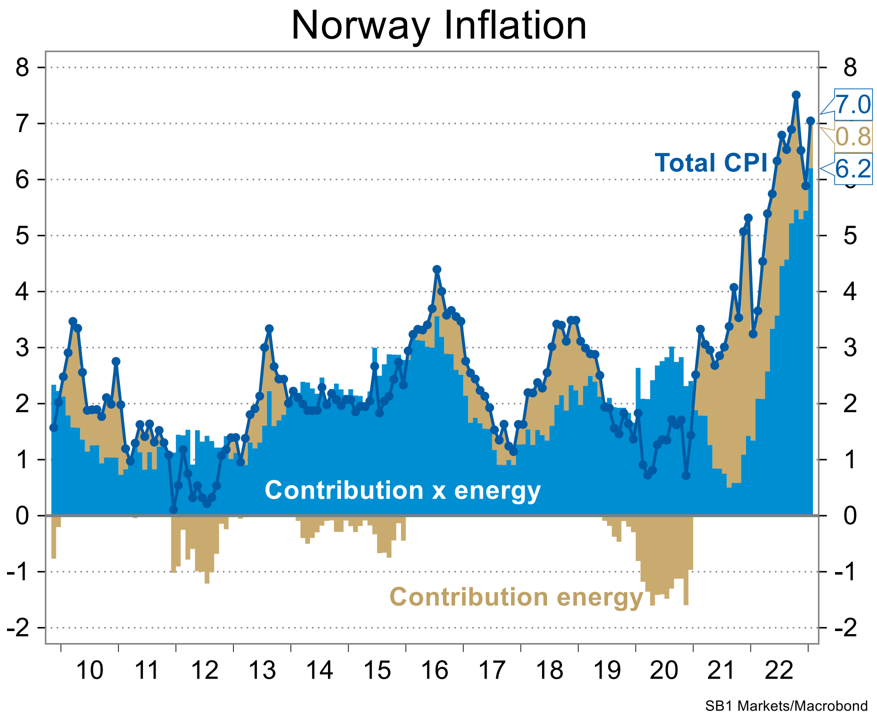
The core index 0.6 pp to 6.4%, consensus at 6.1%, NoBa at 5.9%. 60% of the CPI components are up more than 5%



- The **headline CPI** jumped to 7.0% from 5.9%, we expected 6.4%. Consensus was at 6.5%, and NoBa at 6.9%, as the bank assumed higher electricity prices
- **CPI-ATE** (ex. energy and taxes) rose 0.6% m/m (s.a) in Jan (we expected 0.2%), and the annual rate accelerated 0.6 pp to 6.4%. We expected 5.8%, consensus 6.1%, and NoBa expected 5.9%
  - **What lifted the core**: Rents, (probably) new autos, recreation (newspapers/books), clothing. Personal care & social protection contributed at the downside
  - The lions share of the 6.4% y/y rate of core inflation is due to domestically produced goods and services (influenced by imported goods prices and energy, no doubt), but imported prices are up 7.0%
  - **Food prices** were flat m/m but are still up 12.4% y/y, though just 4% above 'trend'. Prices were 'below trend' a year ago. In February, the annual rate will surge again, and now 'for real'
  - **The median/underlying inflation** rate is close to the annual core rate. The 6 m underlying core rate is at 6.3%
- The **electricity index** fell 10% (we expected -5%) even if spot prices nosedived 25% (blame the semi-fixed price contracts), while **gasoline** prices were up 3.3% (we expected +4%) in January
- **The outlook**
  - **Market electricity prices** have fallen further, and in February even the semi-fixed contracts will benefit from the decline. **Gasoline prices** have stabilised but that will soon imply a steep decline y/y, from the peak prices last year
  - **Core inflation** is of course the real problem. Food prices no doubt surged in February, and as demand all in all remain strong, we expect the core rate to accelerated marginally in February
  - The real challenge: **Implications for wages**, check discussion next page

Implications for wages, Norges Bank and the policy rate

Wage inflation has probably accelerated, and the January CPI increases the risk further. A 2nd 2023 hike quite likely



So what?

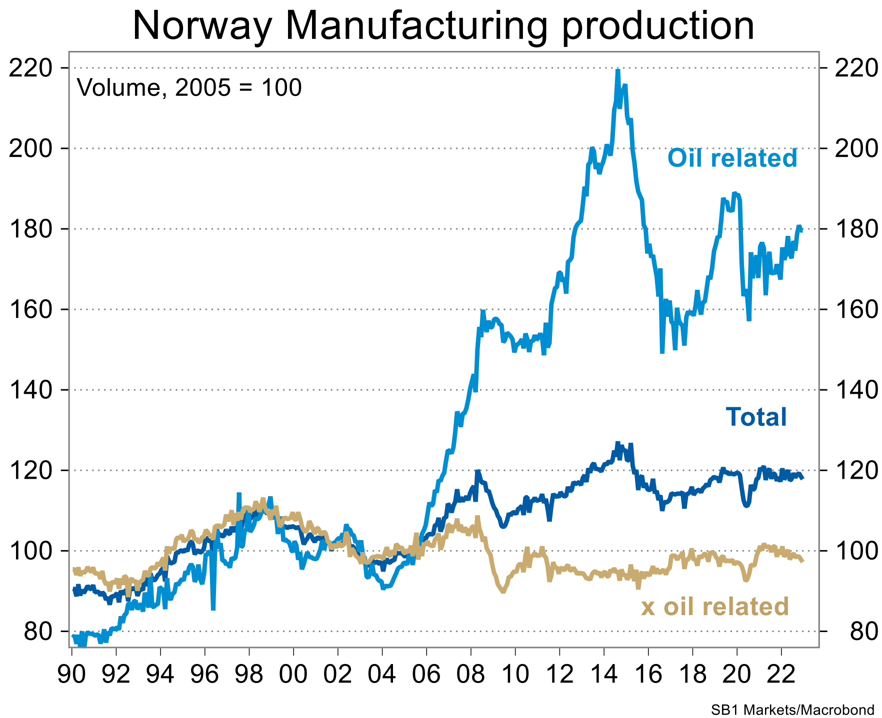
- In December – and confirmed in January - **Norges Bank** signalled another 25 bp hike in Q1 and possibly one more in Q2 .
- This inflation report was probably the nail in the coffin that lifts the interest rate path and <u>seals the 2nd hike</u>
  - The market is now discounting an 80% probability for a third hike in 2024, to 3.50%, following a 35 bps lift in OIS forwards last week (the lion's share on Friday)
- We think the market is fair priced, there is a risk that 3,25% will not be the terminal rate (up from 2,75% now)

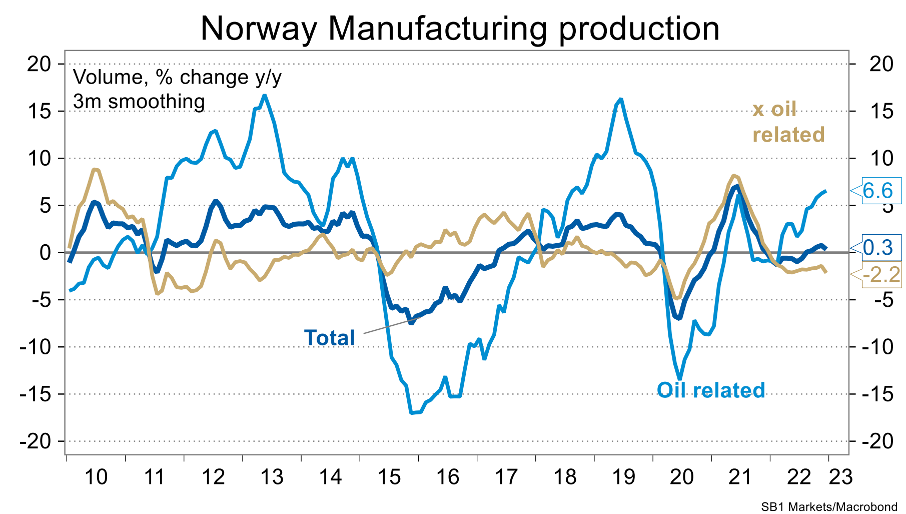
Inflation at 7.0%, core at 6.4%, so what?

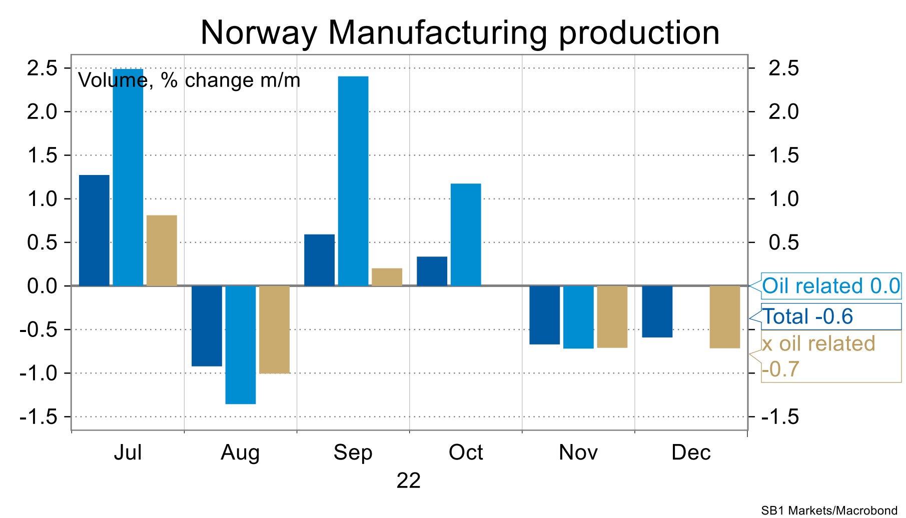
- **Headline inflation** came down in Nov and Dec, but increased again in Jan, and much more than expected and the rate is still too high for comfort
- **Core inflation** is also very high and higher than expected, and is <u>not</u> yielding – and it is still broadening
- For Norges Bank, as all other central banks, **wage inflation** is the dominant risk vs inflation over time.
  - The latest wages stats indicate that wage inflation was higher last year than we have – and Norges Bank – has assumed. Data are not final, but they imply a 4.4% – 4.6% wage inflation last year, vs. the 3.7% – 3.9% growth rate that so far seemed most likely (which was in line with the agreed wage increased in last spring's wage negotiations
  - On Friday, the TBU (Technical committee for the wage negotiations) with representatives from the parties will – under the leadership of the head of Statistics Norway – will present their estimate of wage inflation last year – and even more important, an estimate for CPI inflation in 2023, in their initial report
  - The higher starting point for the core CPI, given the January print, will lift the annual core estimate, as will a fair estimate of the lift in food prices per February. On the other hand, electricity prices have fallen since the SSB and Norges Bank have published their last 2023 estimates. SSB's estimated 4.9%, Norges Bank 4.8%
  - We assume the TBU will end up this range, possibly somewhat lower, due to the decline in electricity prices. The TBU may chose to postpone the CPI estimate to the final report, out mid March
  - The main trade union, the LO - and within LO, the manufacturing faction – will probably not claim compensation for loss of real wages in 2022, but the starting point is at least to preserve buying power in 2023 – implying wage increases not far below 5%
  - Even if LO will try to be 'moderate', there are no doubt groups that has higher ambitions
  - In addition, the labour market is still tight, conf. the surge in the vacancy rate in Q4 (<u>check here</u>), and a market driven wage acceleration, which seems to have take place last year, may lift wage even faster
  - The government may enter the scene, like increasing electricity subsidies, but we doubt there are measures at hand that will substantially ease the price pressure in 2023

Manufacturing production continues to slide

The short-term trend is flat, but surveys are bleak and the risk is to the downside



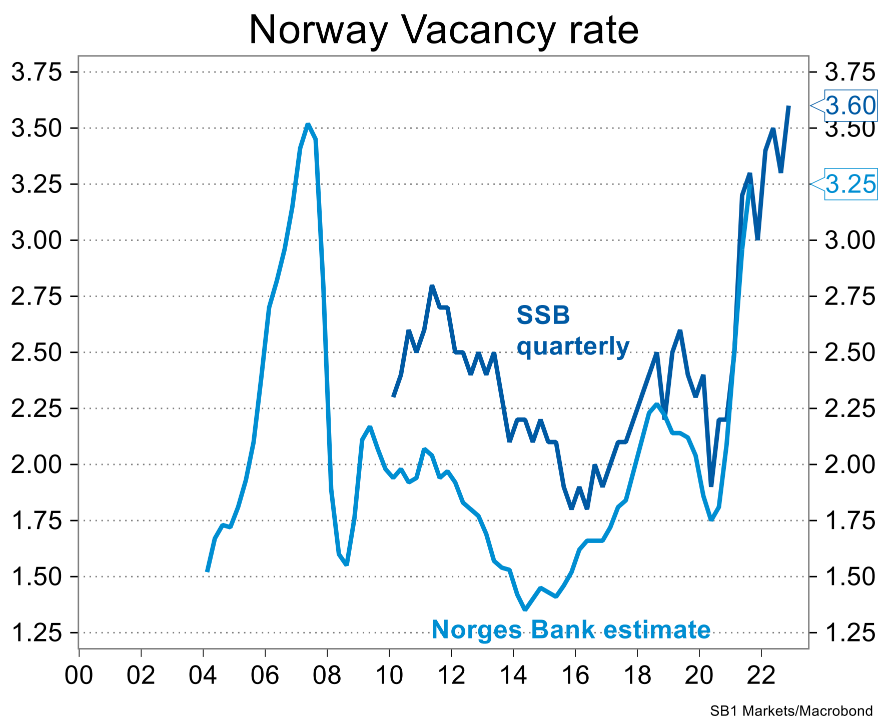


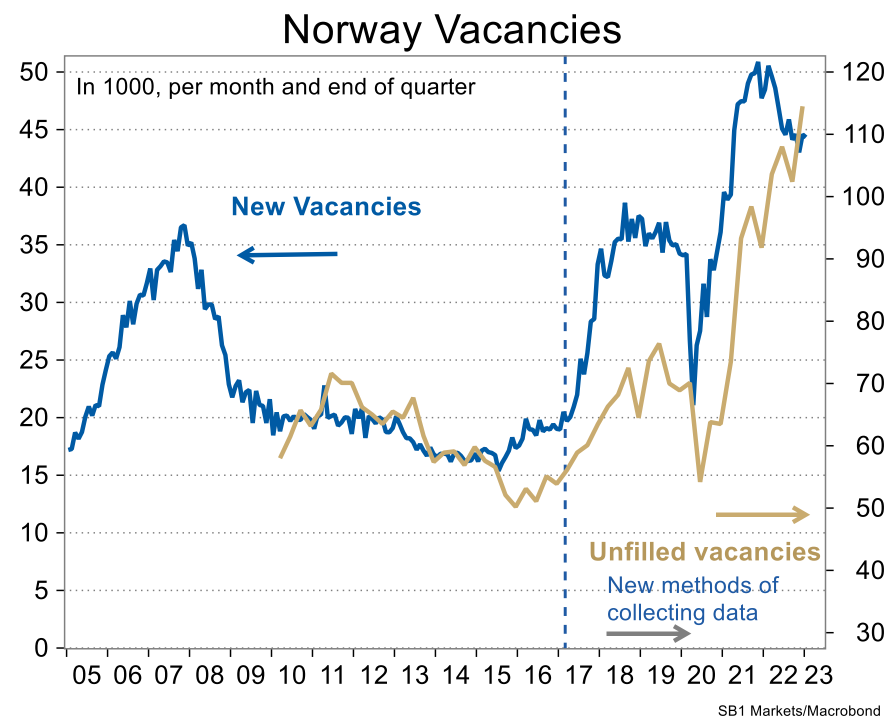


- **Total production** fell for the 2nd month and was down 0.6% in Dec, we expected unch.
- **Oil related manufacturing production** (yards etc) was down unch., but the trend is up, at a 5% – 6% pace
- **Other sectors** reported a 0.7% decrease in activity – and the trend is down, at a 1% rate
- **Manufacturing surveys have turned down since Q4 2021**

Labour market is skin-tight: The unfilled vacancy rate up 0.3 pp to 3.6% in Q4

The inflow of new vacancies has peaked – but the level increased both in December and January

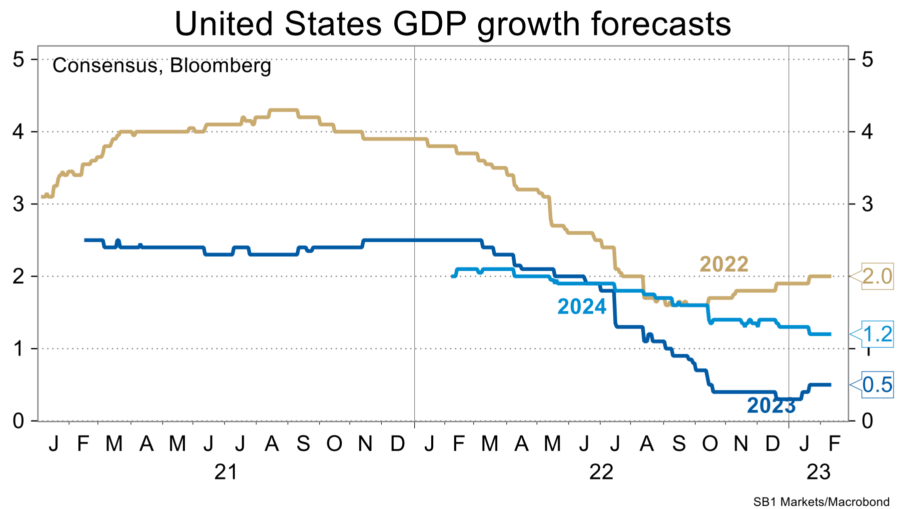


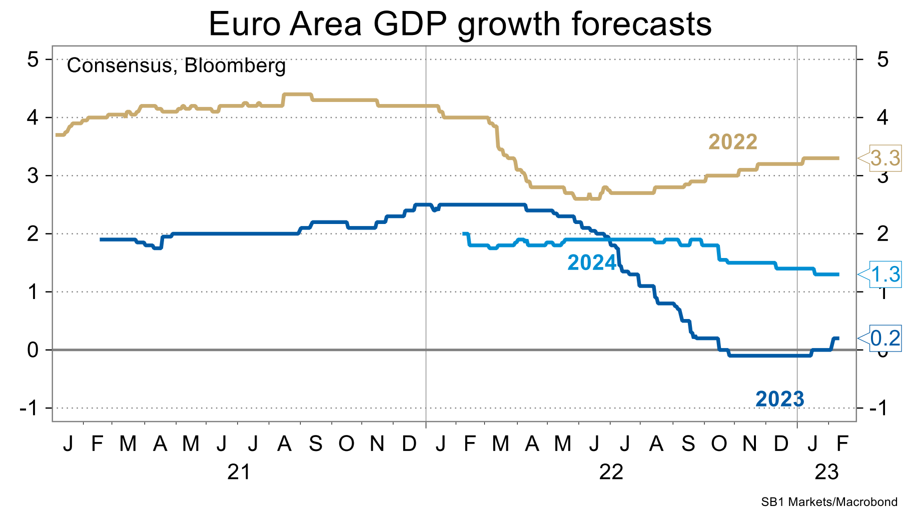


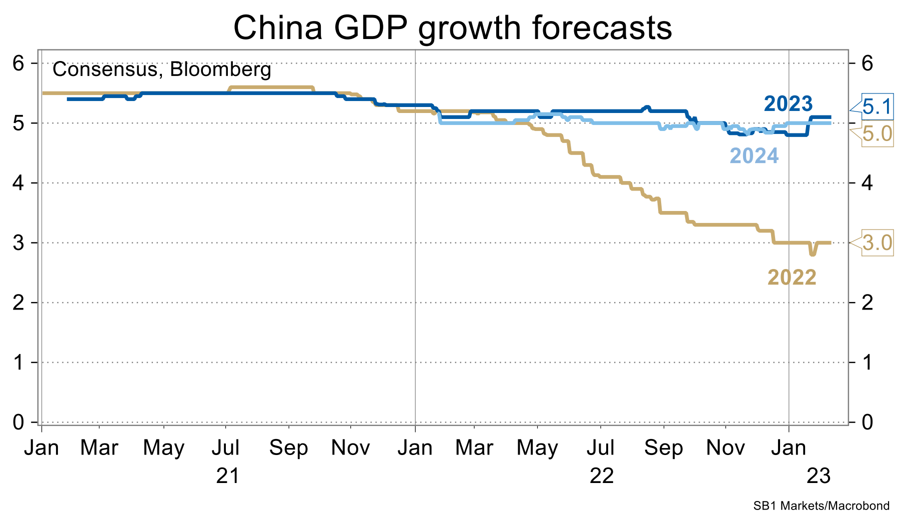
- We expected a decline from a previously reported 3.2% rate to 3.0% - while the Q3 was revised up 0.1 pp to 3.3% and further up to 3.6% in Q4
- The vacancy rate is the highest ever (SSBs stats date back to 2010). Norges Bank has published some data back to 2004, and they are not identical. Thus, it is uncertain whether the current vacancy rate is the hiker or lower than in 2007.
  - Surveys indicate that the rate is lower than at the peak 15 year ago

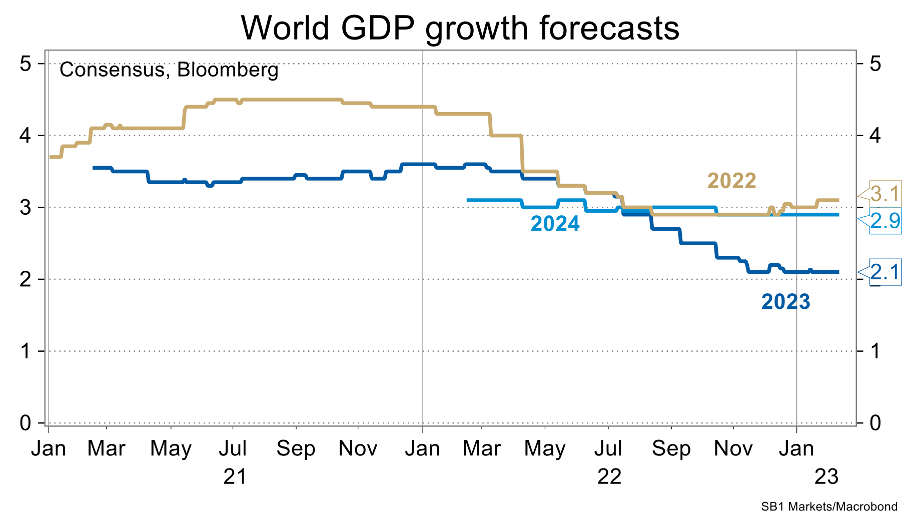
Eurozone 2023 GDP growth forecast revised upwards again

No changes in the US or China last week – but the last revisions are up





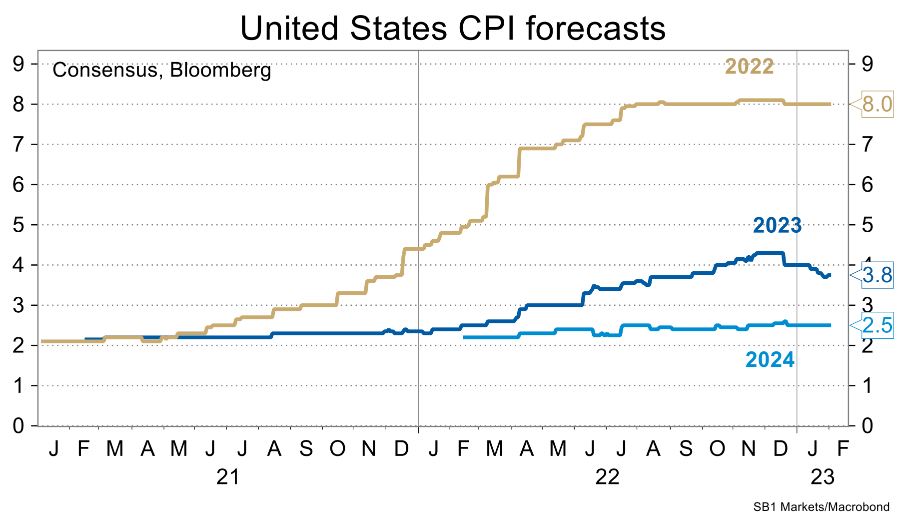


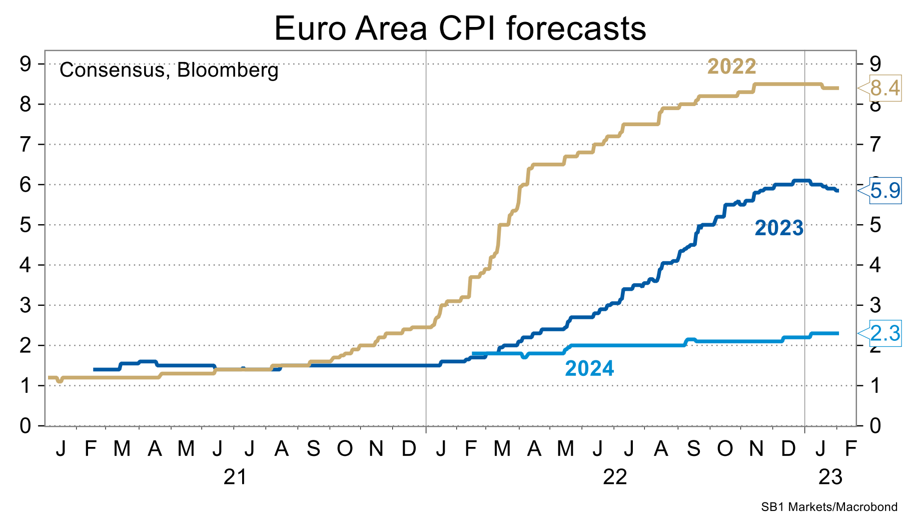


These charts (and the two at the next page, are based on forecasts collected by Bloomberg

2023 inflation expectations are falling both in the US & EMU

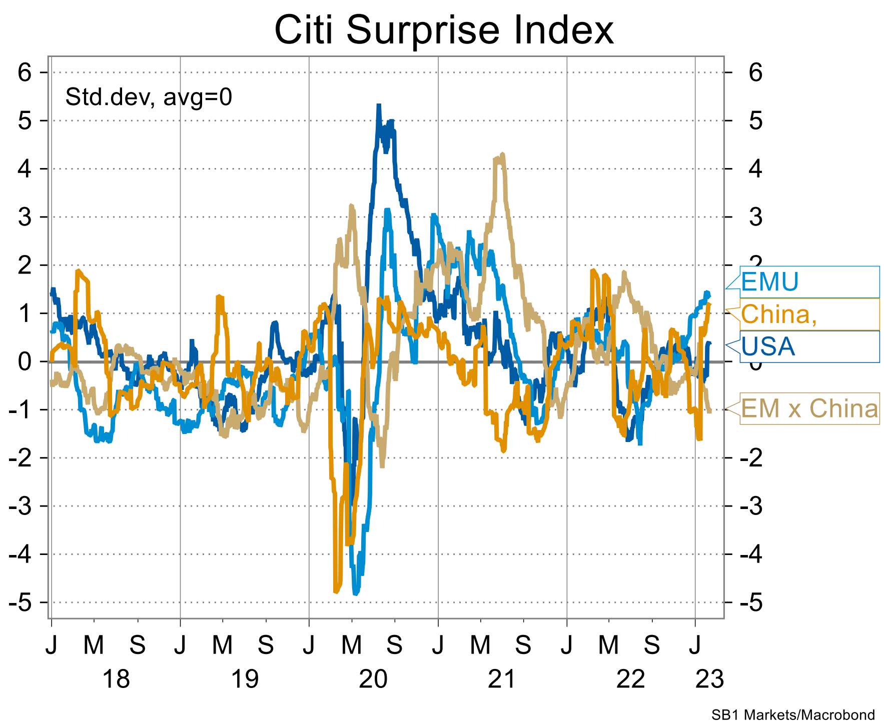
(barring a minor upward revision in the US). We expect more downward revisions the coming months

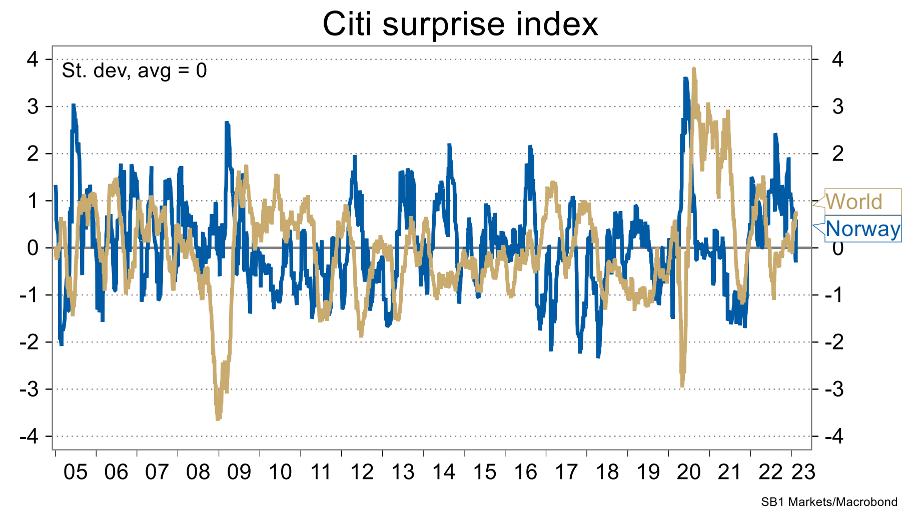


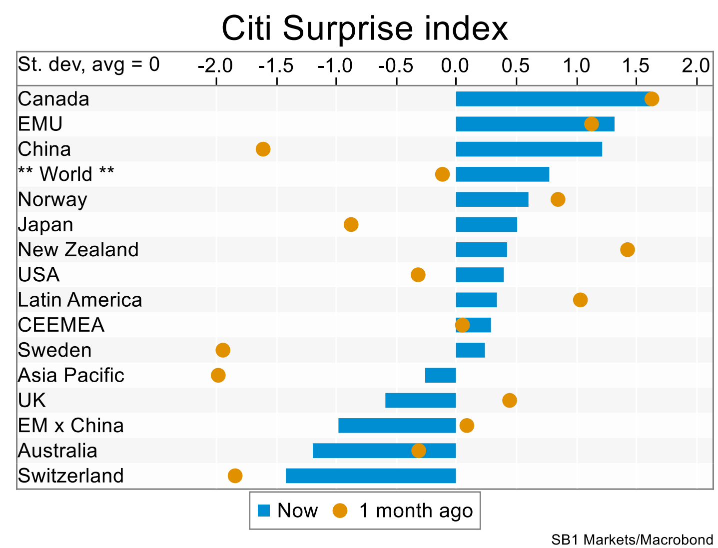


The world is surprising to the upside, now even the US

The EMU is (almost) at the top, and China has moved up towards the to of the list







- **Norway** moved up on the list this week (the CPI?), but is still marginally above average

Surprise-indices measure the difference between economists' expectations and the actual outcome over a 3-month rolling window, calculated by Citi

Highlights

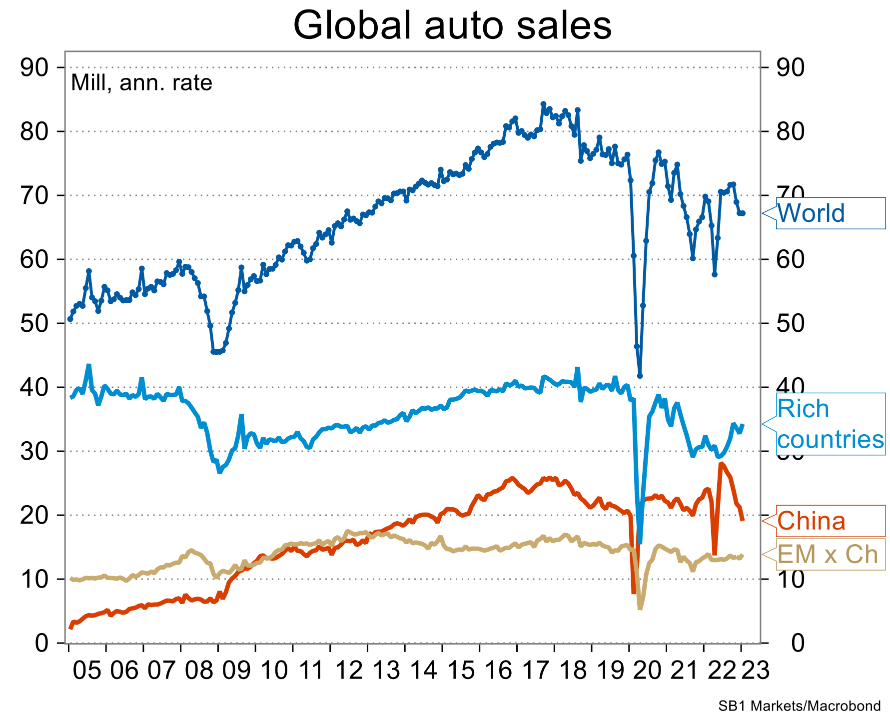
The world around us

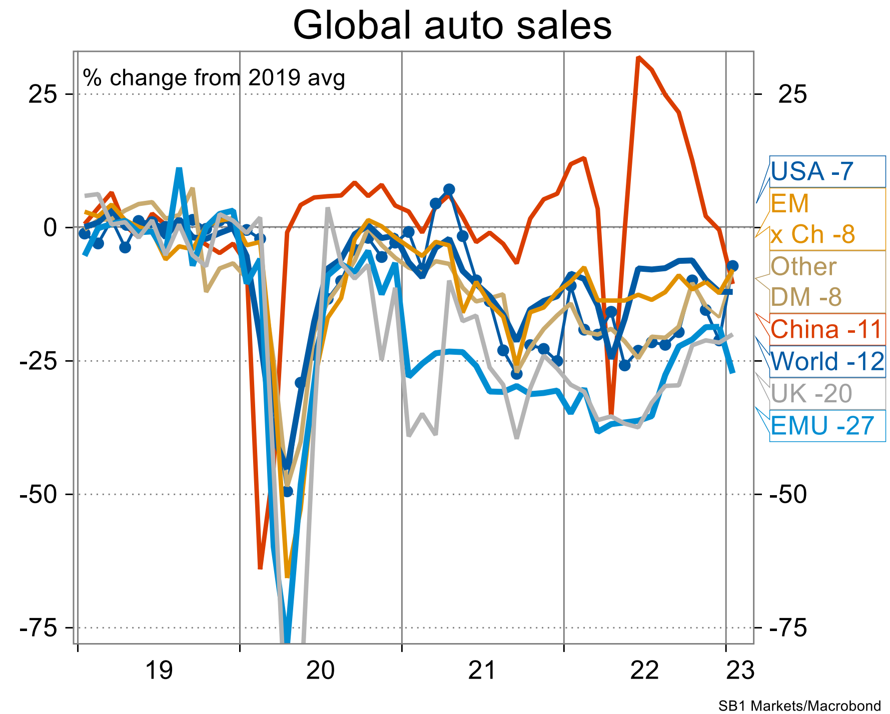
The Norwegian economy

Market charts & comments

Global auto sales stabilised in January, China & EMU down, others up

Sales rose in US, India and Russia

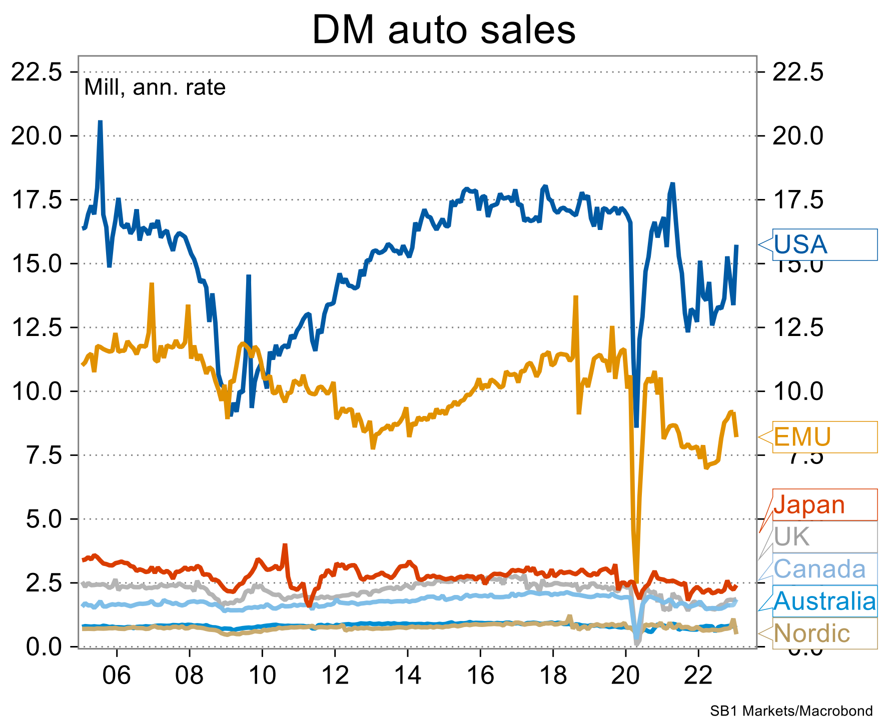


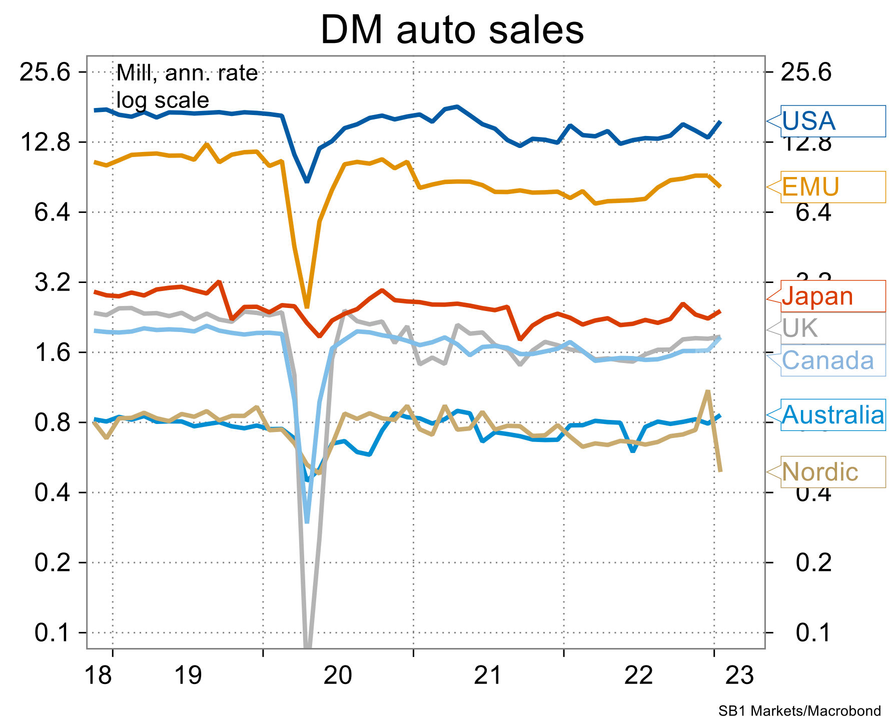


- **Global auto sales** were probably unchanged m/m in January, following the decline in Nov & Dec. The level is 12% below the 2019 average However, 2019 is an easy comparison: Sales are down almost 20% from the peak in 2018 and 35% below the pre-2018 trend growth path!
- Sales in **China** fell further, and are suddenly 11% below the 2019 level. We assume sales will recover – but the trend has been weak since 2016. Sales in the **US** rose more than expected and are down just 7% since 2019. **EMU** sales fell sharply as German sales returned to a low level – and sales are 27% below the 2019 level. **UK** sales are down 20%. We have removed Norwegian sales from the chart, as it has been all over the place (record high in Dec, very low in Jan)
- Sales in **EM x China** rose, mostly due to higher sales in India as well as in Russia – but the level is still rather low in the latter
- **Auto production** has been the limiting factor, at last since late 2020. Production has increased most places, and is higher than in 2019 some places. Now, the market balance is clearly better – and demand is probably a constraining factor some places

DM sales: Sales trend up, even if inflation is high, interest rates are soaring

… as supply of new cars strengthens

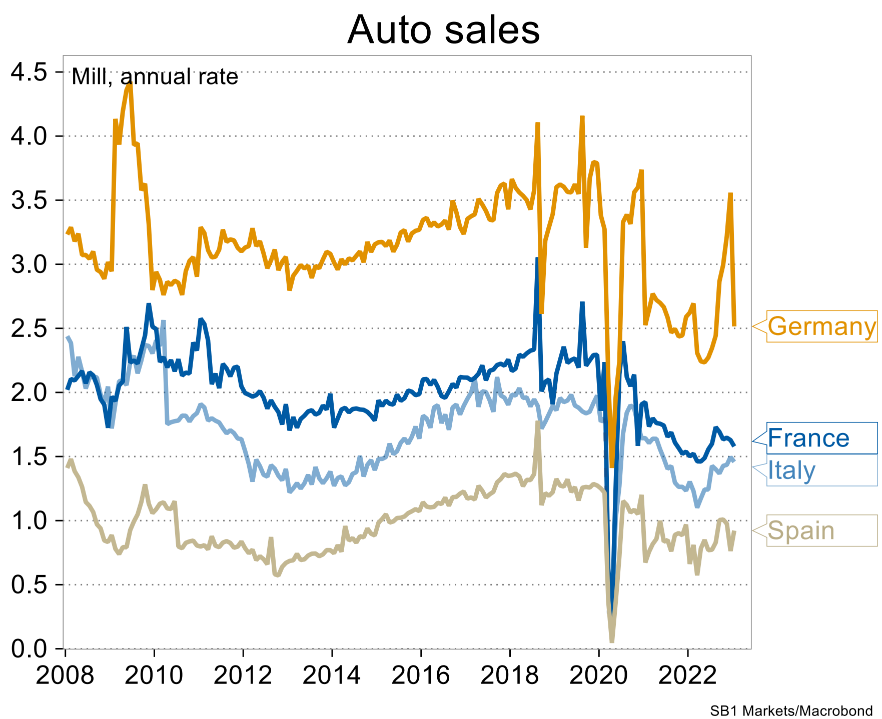


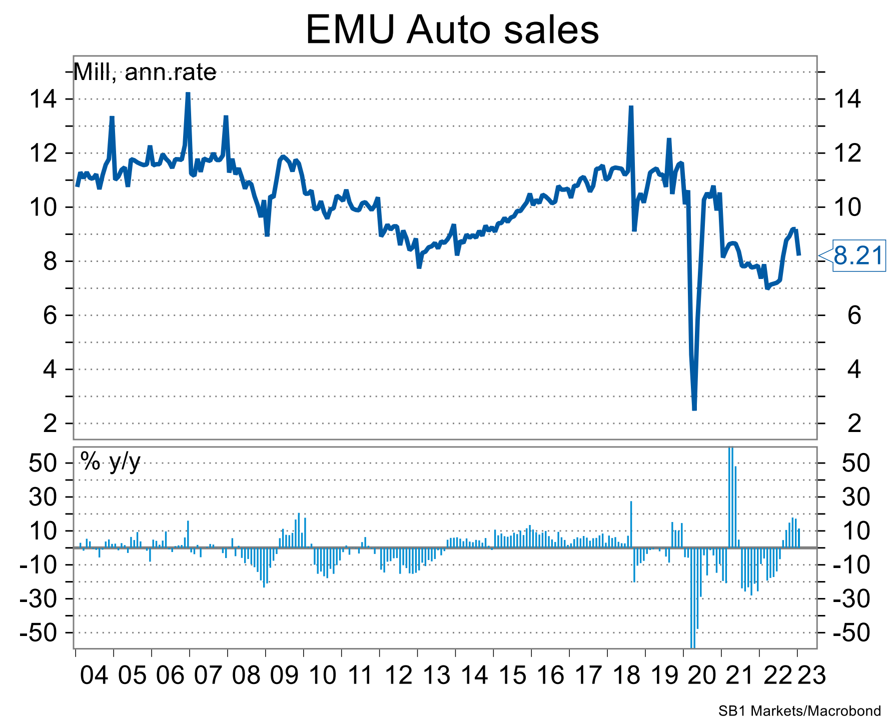


- Norway killed Nordic sales January

German auto sales back to the basement, but total EMU sales trend upwards

… probably

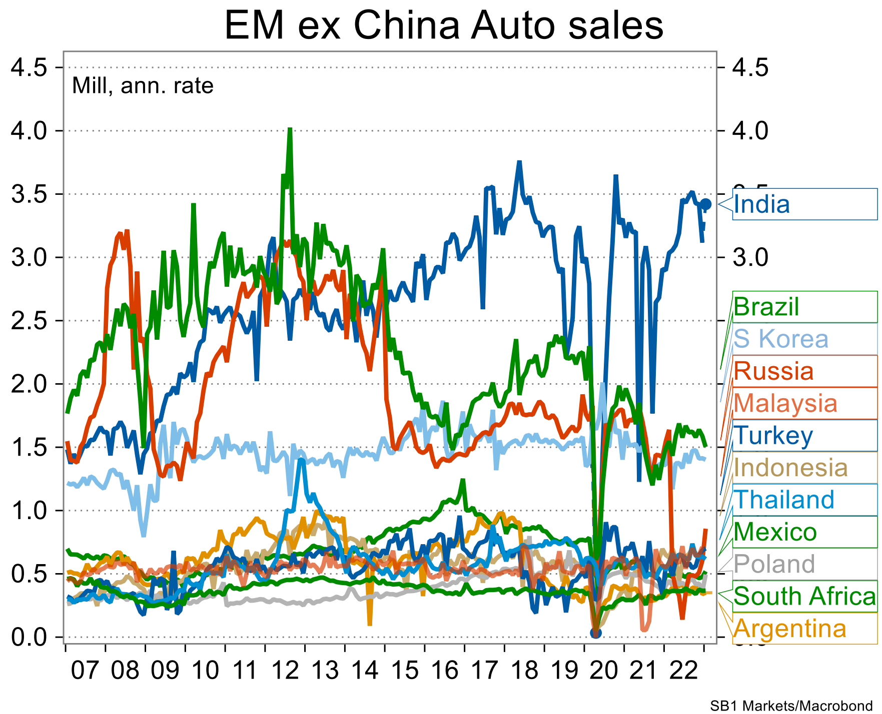


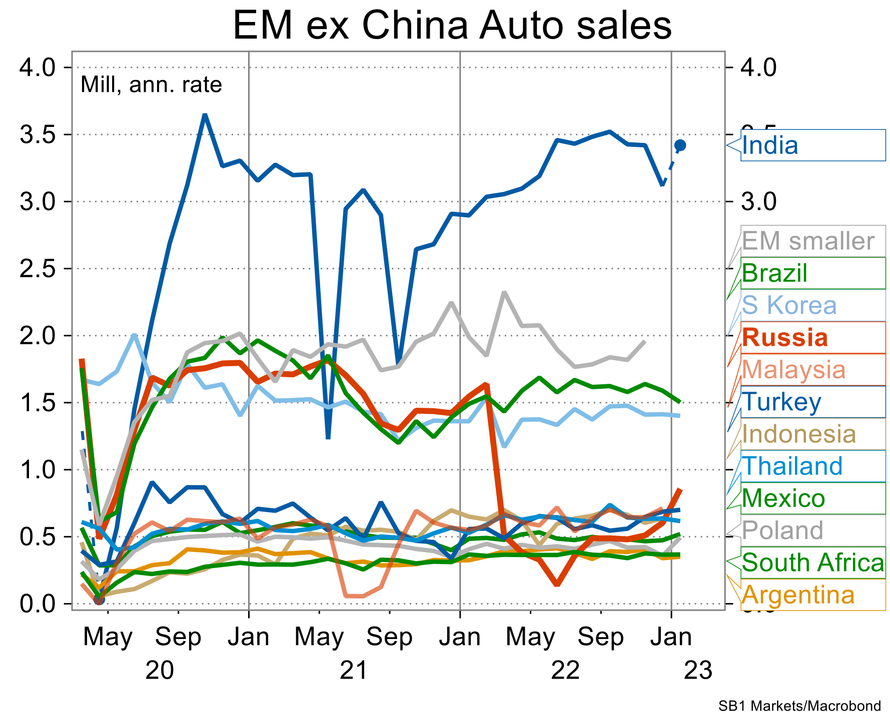


- Some tax changes may explain the strong sales in December og far lower in January
- Small changes in auto sales/new registrations among other EMU countries reported so far – and all are way below pre-pandemic levels

EM: Russian auto sales sharply up, probably Indian sales as well

Brazilian sales are slowing, as are Korean sales



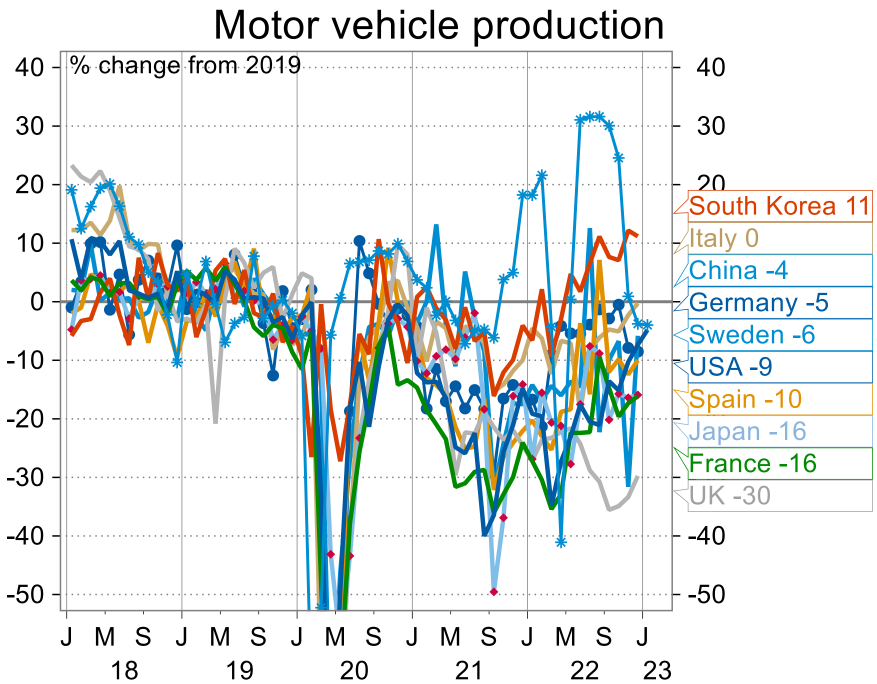


- Indian sales are close to ATH levels
- Sales in EM x China & Russia are just marginally down vs the 2019 level

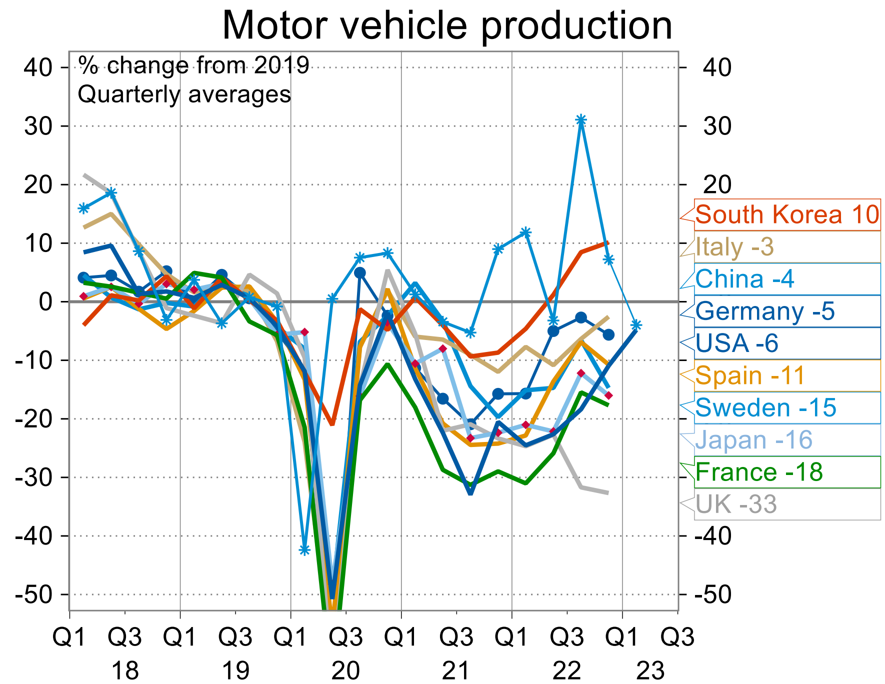
Not all countries have reported yet, and for some countries we have just plugged in figures from media reports that are not always correct

Auto production is gradually recovering

However, somebody hit the brake on Chinese production in Nov/Dec. We think we know why



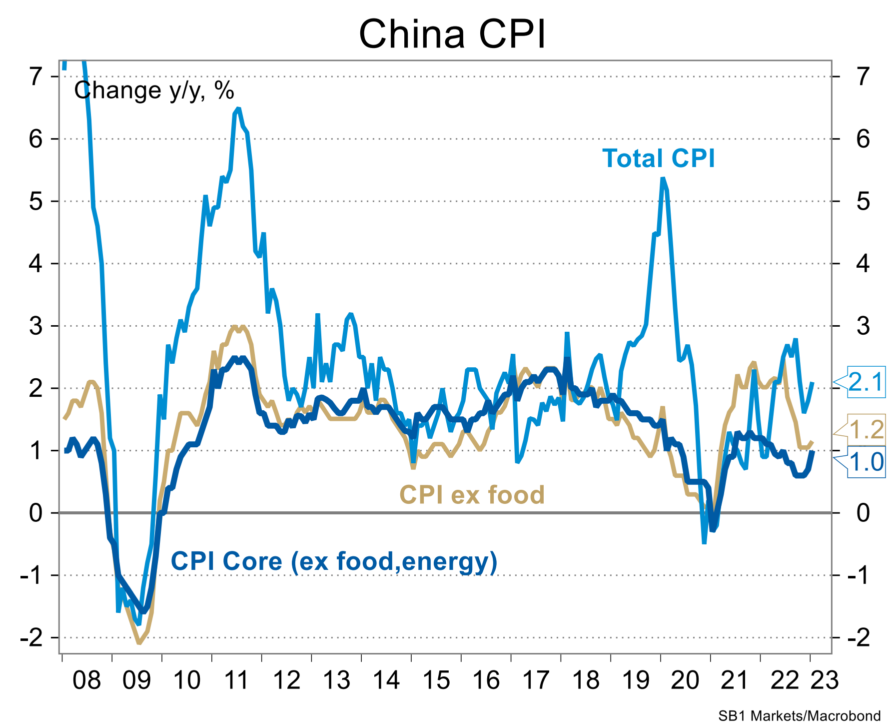
SB1 Markets/Macrobond

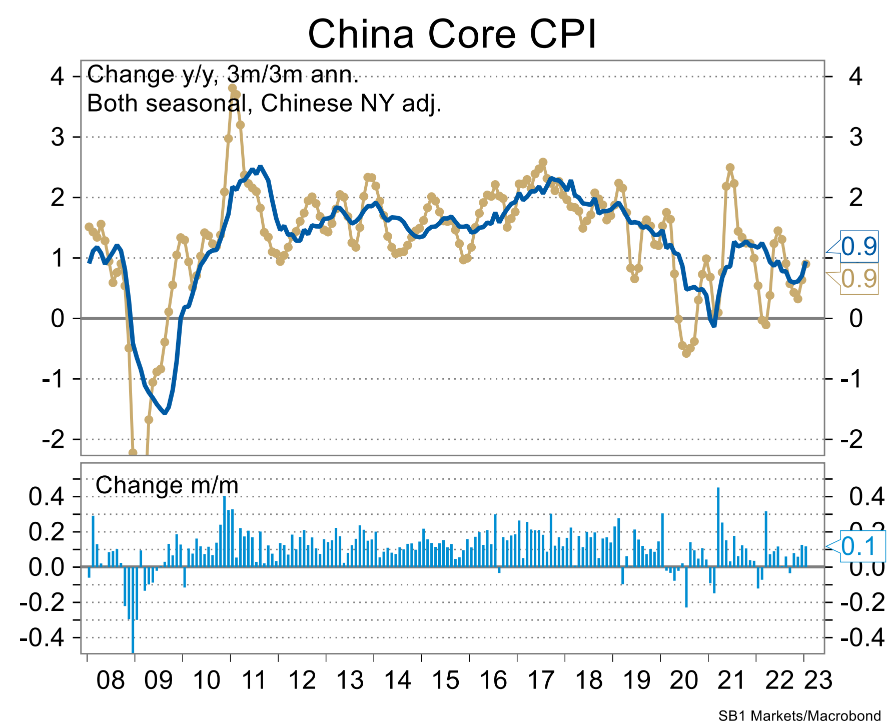


SB1 Markets/Macrobond

Chinese CPI up 2.1% y/y, but the core is still very low at 0.9%

Inflation close to expectations in January: Core up 0.8% m/m, expected 0.7%. Headline 0.1 pp below expectations

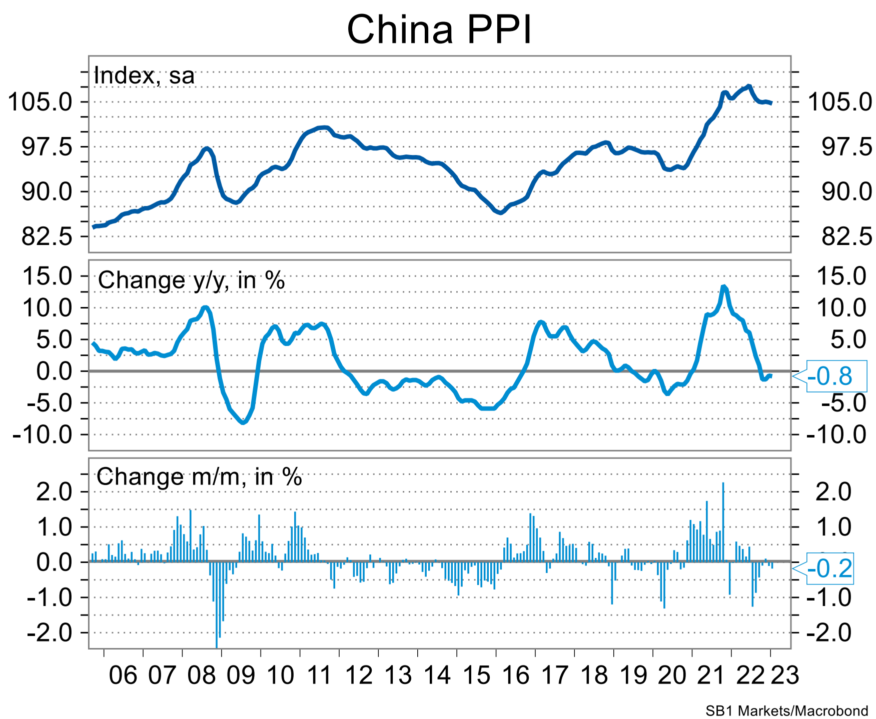


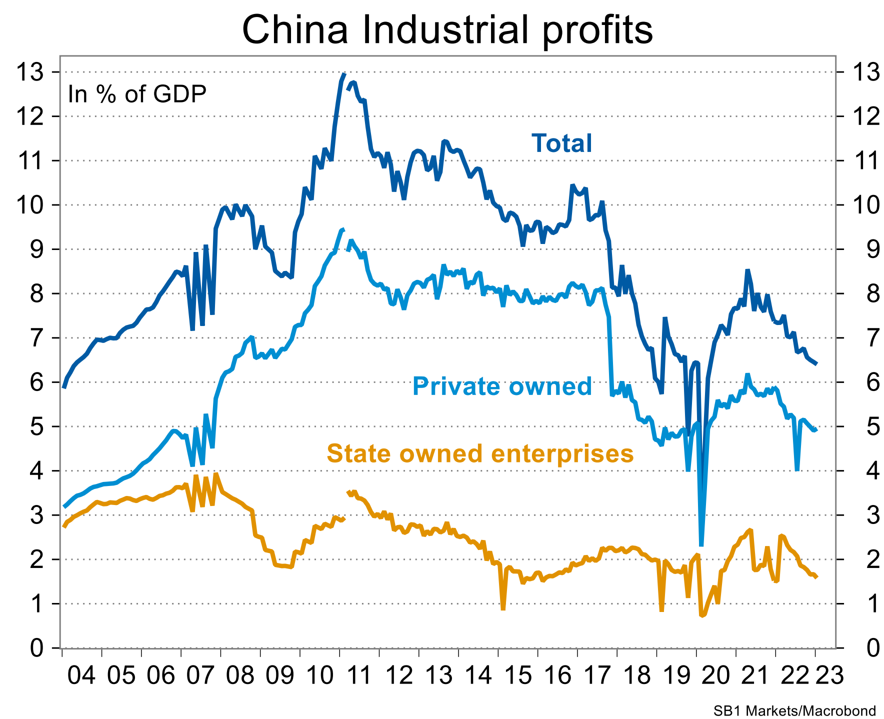


- **Total annual CPI** was up 0.3 pp to 2.1%. Prices were flat m/m
- **The core CPI** (x energy, food) were up 0.1% m/m, and the annual rate crept up 0.2 p to 0.9% y/y. The 3m/3m rate is at 0.9% as well – no sign of acceleration
- **Food prices** are up 6.2% y/y, with pork prices in the lead again, up 12% (but down from above 50% in Nov)
- **Gasoline/fuel prices** are up 5.5% (down from 12% y/y in Dec)
- **Both core & headline inflation** are still low. **Monetary policy** will not respond to actual inflation data if inflation is not really high or low, the real economy and the credit market are more important. Now authorities are trying to kickstart the economy again after the lockdowns and holidays

Producer prices keep falling and are down 0.8% y/y

A sign of slowdown in goods inflation globally? Corporate profits are trending down too

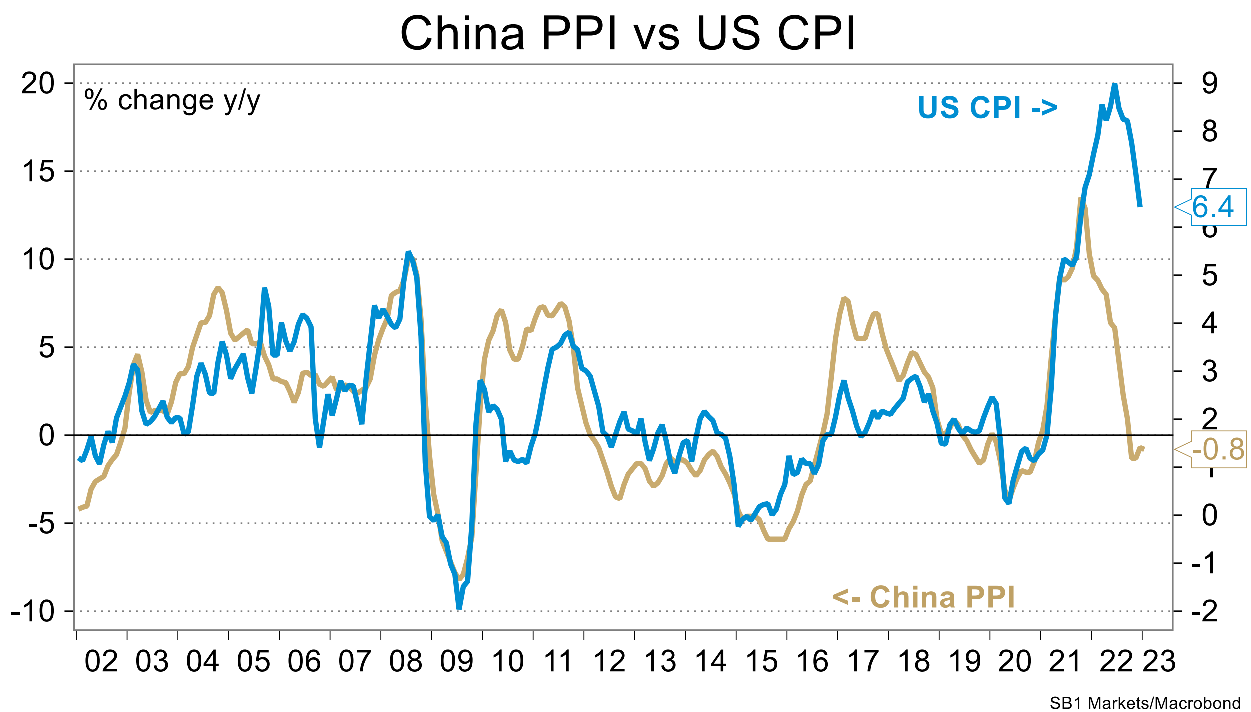




- **At the peak**, the PPI was up 13.5% (last October)
- **The PPI** fell by 0.2% m/m in January and producer prices have moderated since July. In fact, the only small uptick in prices since then was in November. Global demand is no doubt softening
- **Consumer goods** are up just 1.5% y/y, durable consumer goods are up 0.3%, while raw materials are <u>down</u> 0.1% - down from +26% a year ago
- The correlation between PPI and CPI in China is not impressive (but far better with the US CPI)
- **Profits in privately owned industrial enterprises** are declining in % of GDP, as are profits in state owned companies

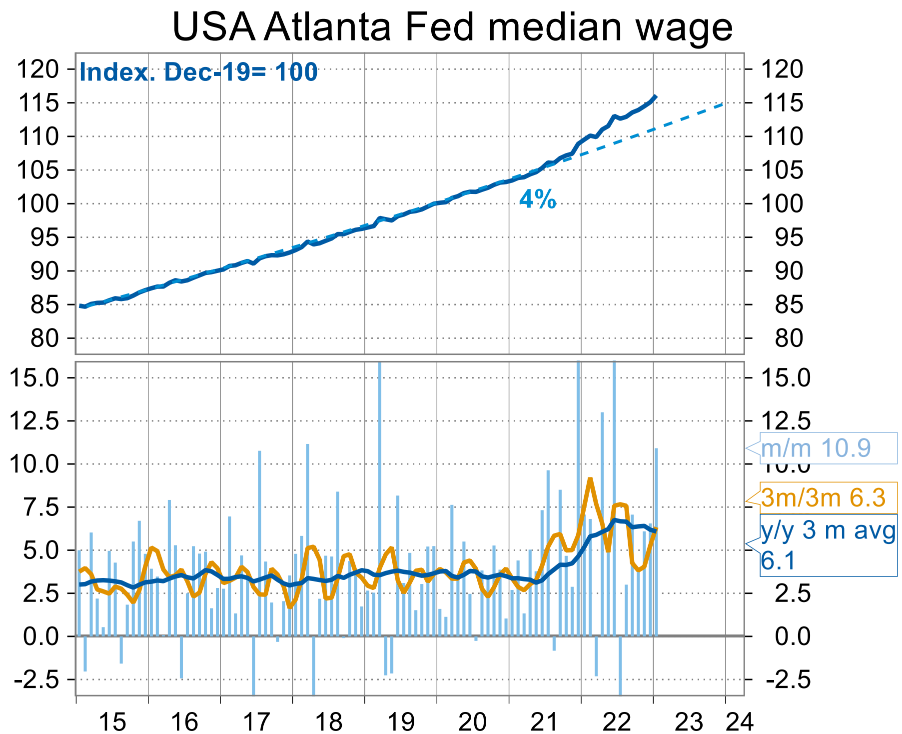
The Chinese PPI is not a good predictor of Chinese CPI, but…

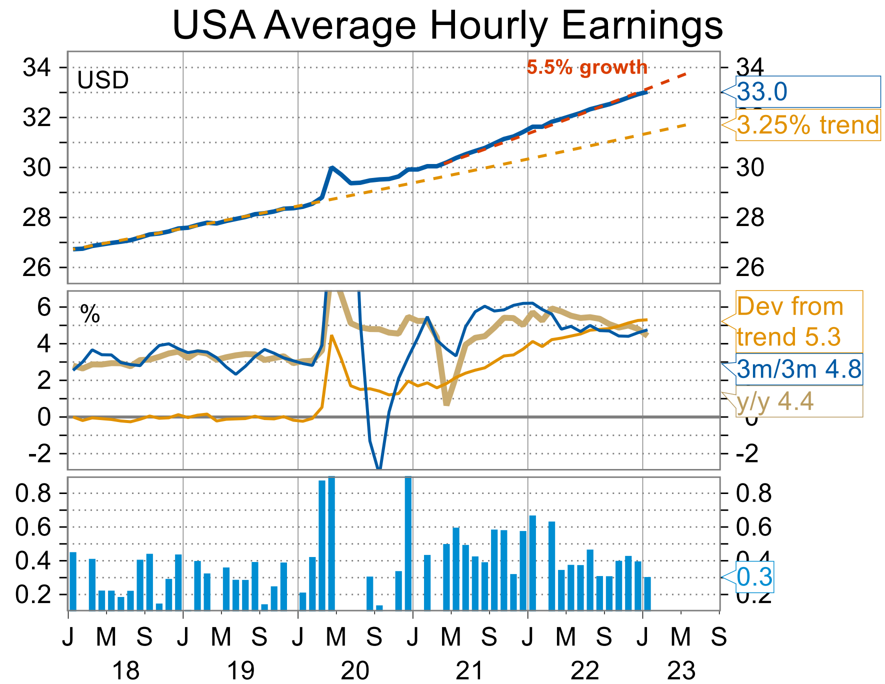
…it has been a decent predictor of the US CPI (data out this week)



Atlanta Fed median wage inflation still at a 6% trajectory

Median wages rose more rapidly in January, and annual/underlying growth is still at 6%, way above a normal level



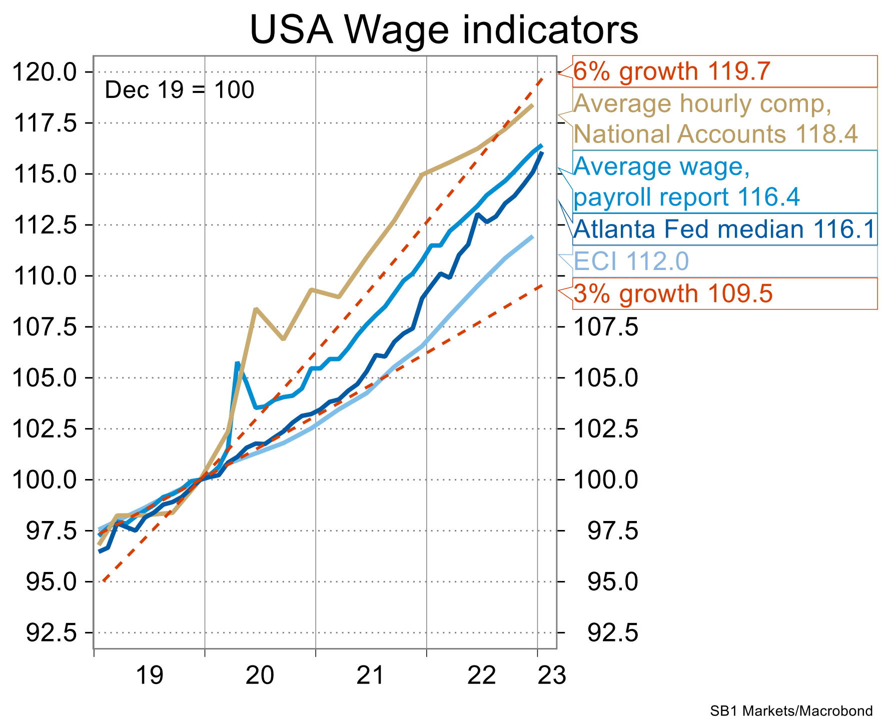


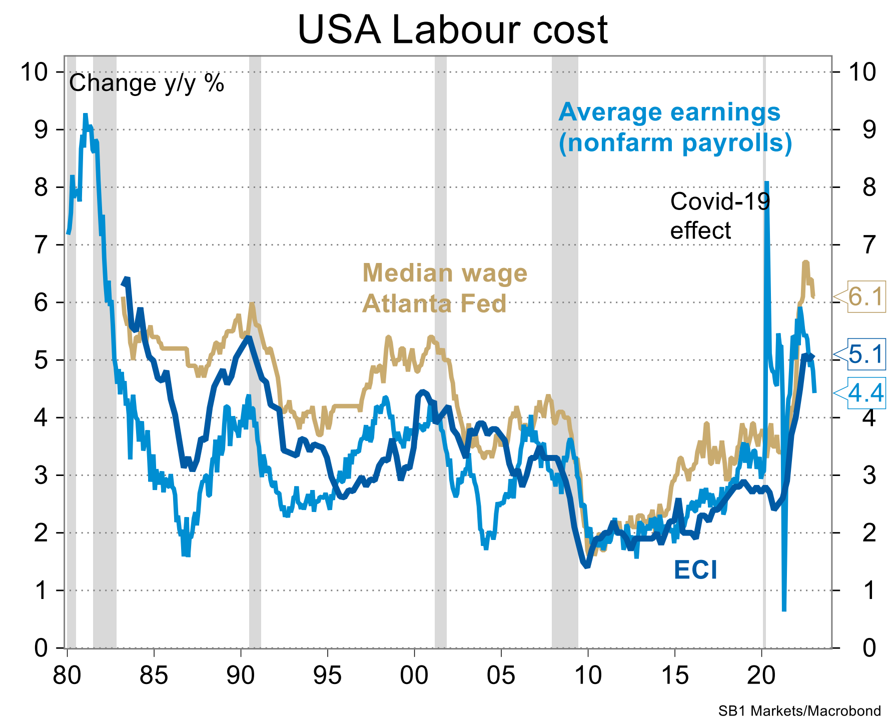
SB1 Markets/Macrobond

- Monthly changes in **Atlanta Fed's wage index** (calculated by us) are rather volatile, and we do not put that much emphasise on the 11% annualised increase in January. However, the trend is still strong and wage inflation for all categories of labour has accelerated sharply vs. the pre-pandemic normal rates
- The previous week, wage inflation **the monthly labour market report** was revised up slightly, and with an 0.3% growth in January, the 3m/3m rate was lifted, and rose further, to 4.8%

All indicators combined: some signs that wage inflation may have peaked

However, all are reporting much higher wage inflation than pre Covid: 2% price inflation is ‘impossible’

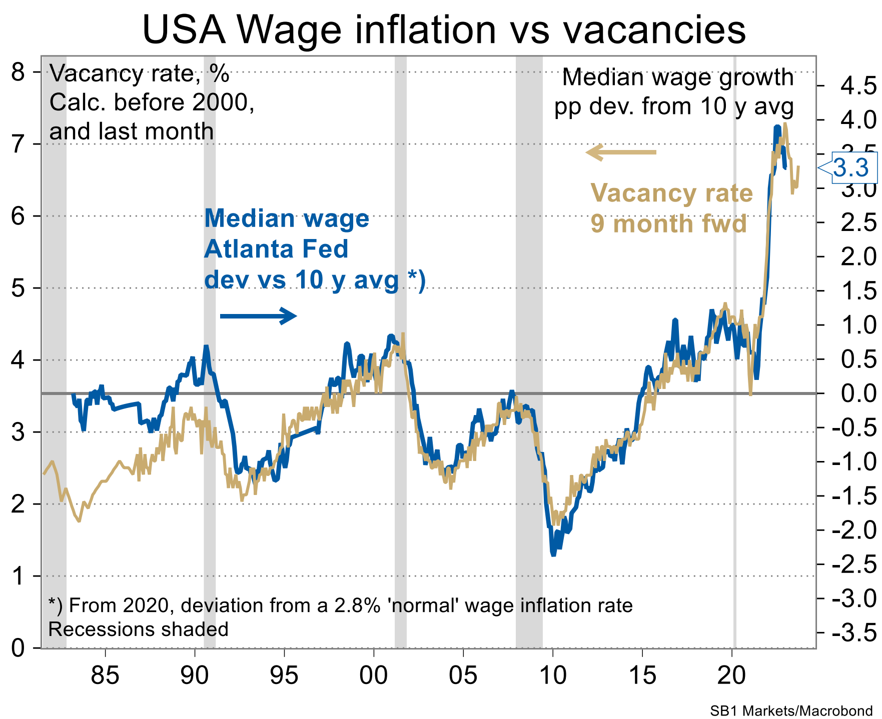


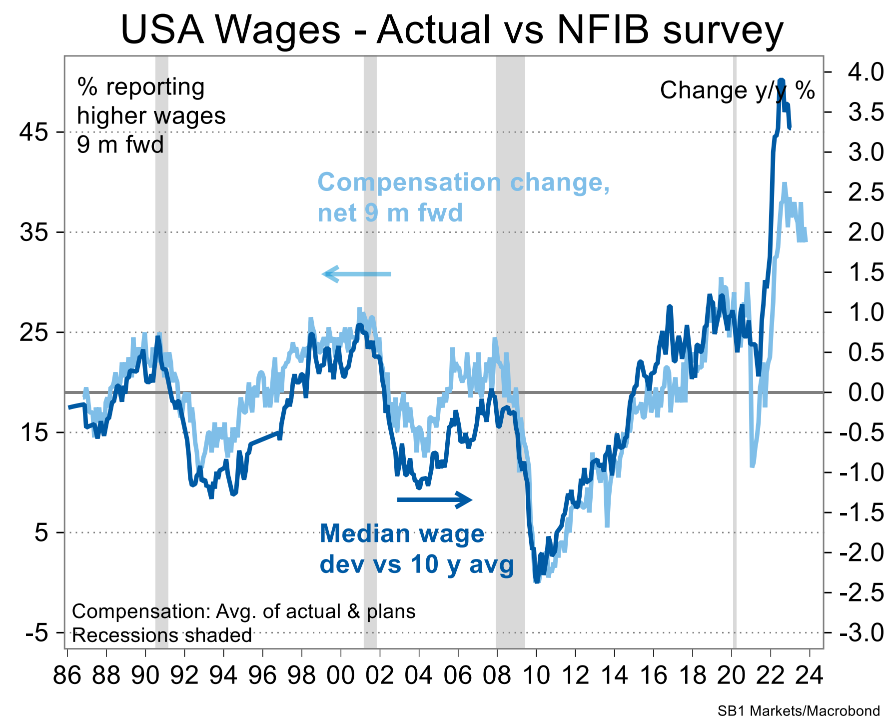


- **There are several wage indicators**, and no index describes the one and only real underlying wage growth
- Growth in wage/earnings/compensation indicators are up 2.5 – 3.5 pp vs their respective 10 y averages before the pandemic
- Over the past 10 years, inflation has been close to 2% (before the pandemic, that is)
- It will be impossible to keep inflation at 2% if wage inflation remains at current levels. Productivity growth has not accelerated. Profit margins may take a beating – and they no doubt will – but not sufficient to bring inflation down to acceptable levels on their own, at least not over time. Even if wage inflation has slowed somewhat without an increase in the unemployment rate, we still doubt it is possible to bring wage inflation down to a sustainable level with the current tightness of the labour market

Vacancies up, harder to fill them – and wage plans are still very aggressive

Yes, wage inflation has come down, but it is not obvious that wages will return to '2% price inflation' level anytime soon

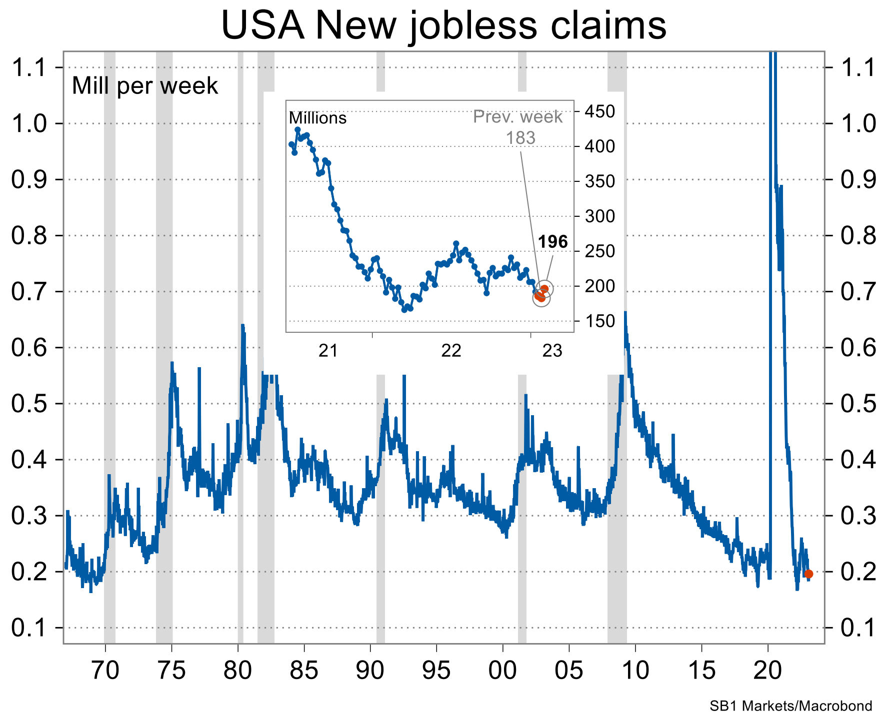


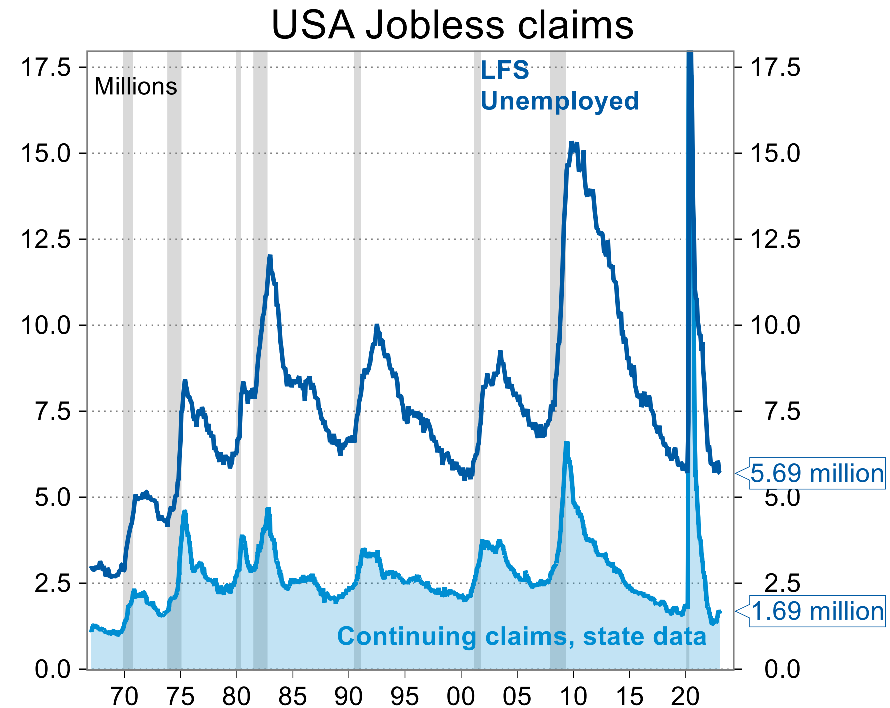


- **Our 'Phillips curve'** based on the vacancy rate signals continued wage inflation at some 2.6% above the normal level
- **Companies (SMEs) compensation plans** also signal continued high wage inflation but 'just' 2 pp higher than the past 10 y avg.
- **Demand for labour** probably has to be reduced in order to get wage inflation permanently back to a sustainable level
  - Check under which circumstances wage inflation slows on the charts above (hint: find the shaded areas, follow the blue wage line - as well as the vacancy rate or the wage hike plans ☺)
  - The alternative good news: Wage inflation has peaked, both the Atlanta Fed media wage (at the charts above) and the wage indices presented at the next pages

A 6.7% vacancy rate will do it – laid off workers do not end up unemployed

New jobless claims were up 13' last week, but claims still below 200'

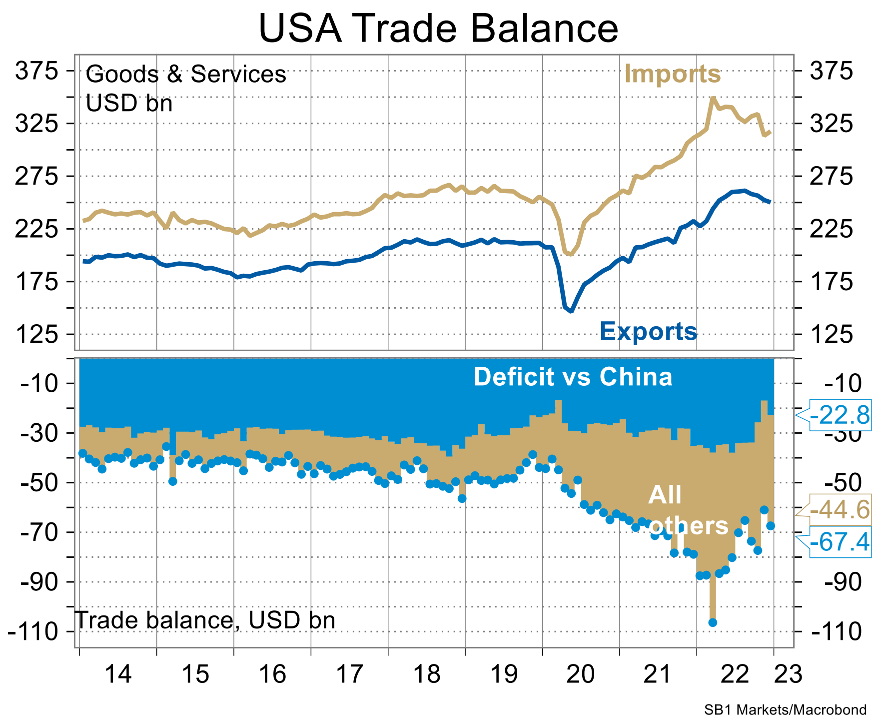


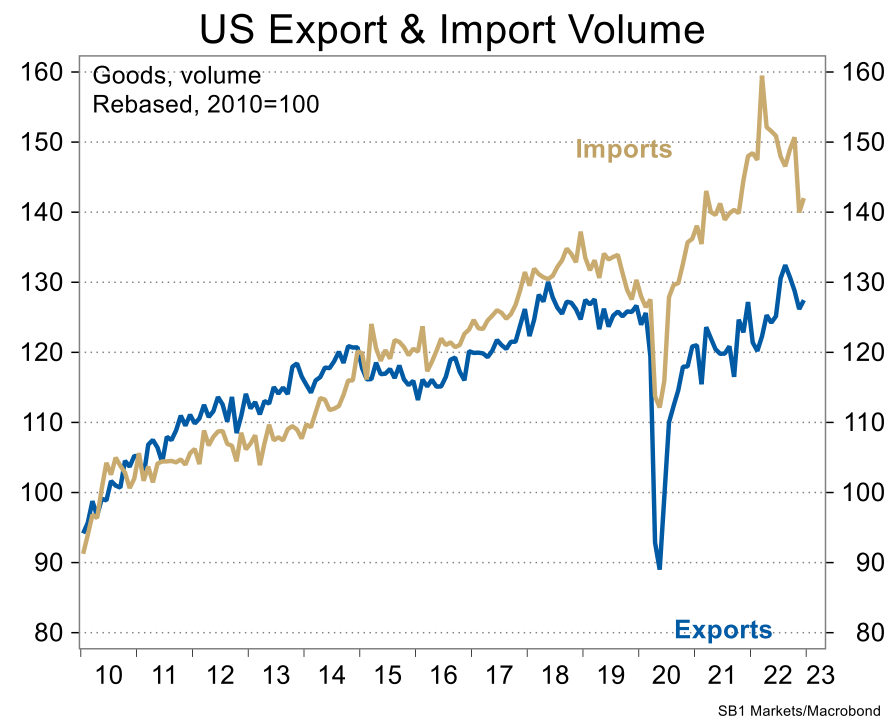


- **New jobless claims** rose by 13' to 196' last week, expected up to 190'. The inflow is still incredibly low considering all the layoffs being announced
- **Continuing claims** rose 3' to 1,69' in week 4. The trend is slightly upwards but the level remains very low still
- Both still indicate a **tight 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)

Trade deficit increased in December due to higher imports

And exports fell, but far less – and the trade deficit rose to USD 67 bn, from USD 62 bn in Nov

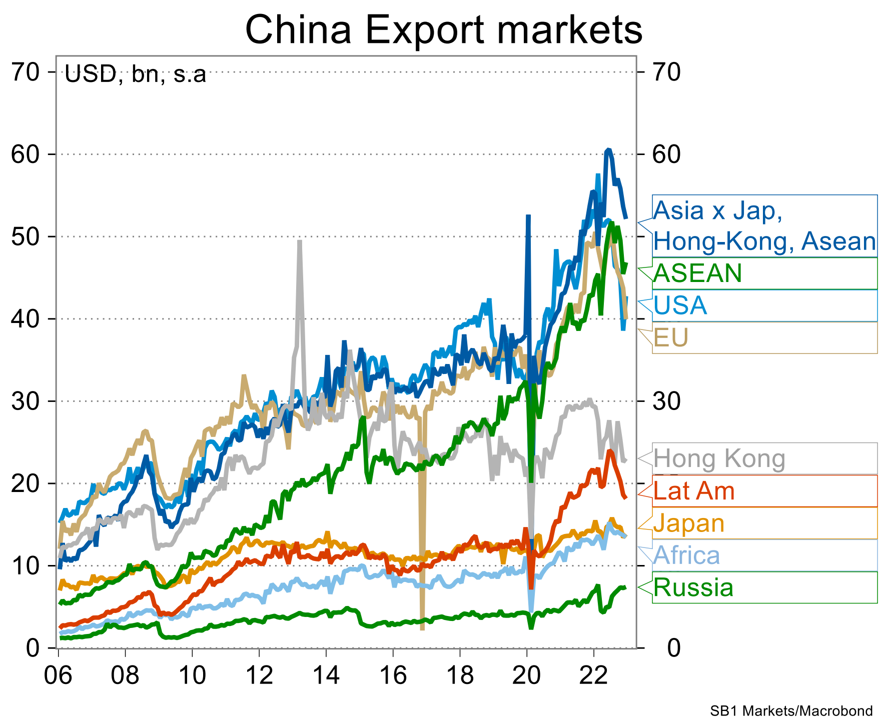


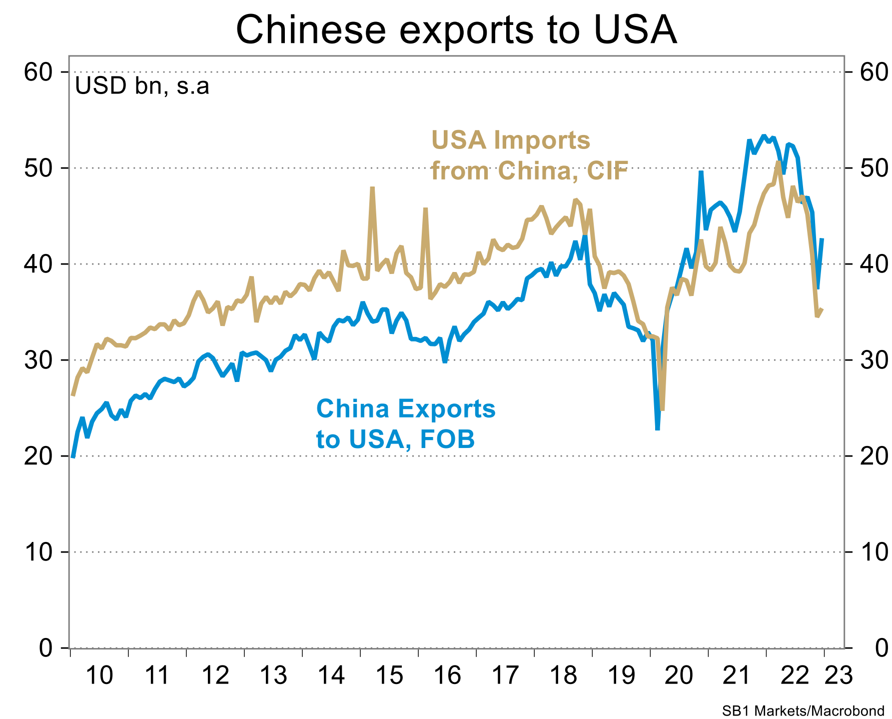


- **Imports** (goods and services) increased by 1.3% in December, after falling 6% in November. Imports have actually been trending down both in value and volume terms since the spring, no doubt mostly due to lower weaker domestic demand (witnessing lower delivery times, falling prices). The increase in imports in December was largely due to an increase in consumer goods and auto imports
- **Exports** fell by 0.9% m/m in December, and very short-term trend is now down here too. The export volume (for goods) increased by 1%. In volume terms, exports of goods are close to the pre-pandemic level (vs +11% for imports)
- **The trade increased again**, to USD 67 bn from USD 62 bn, which was the lowest since before the pandemic, from 79 bn in Oct. At 3.2% of GDP, the deficit in is, of course, sizeable

Chinese exports to the US made a sharp rebound in Dec, the Chinese say

…but not enough to make up for the fall the month before. US trade statistics have not recognised the lift yet

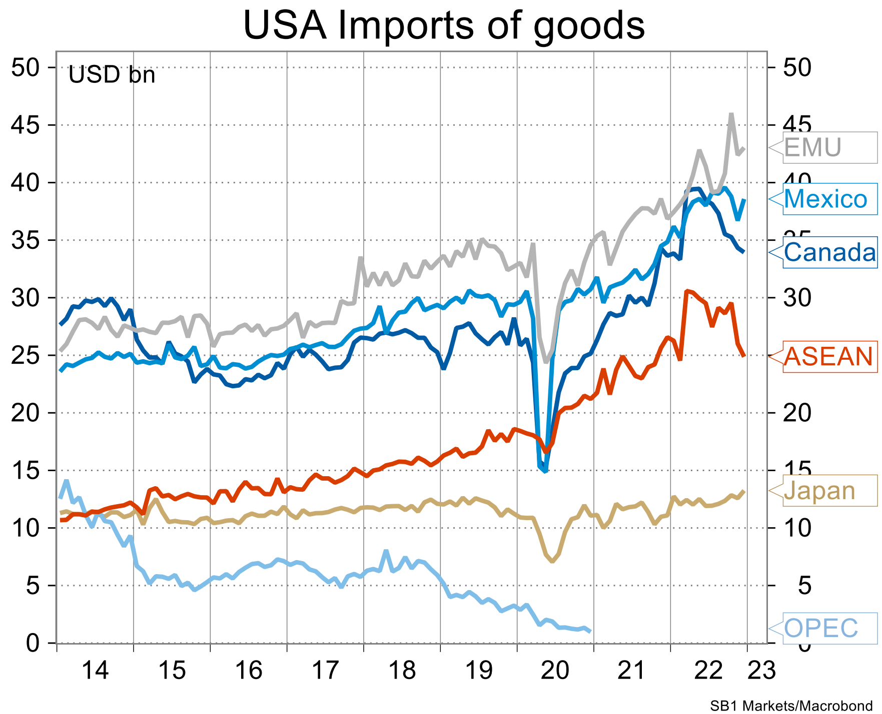


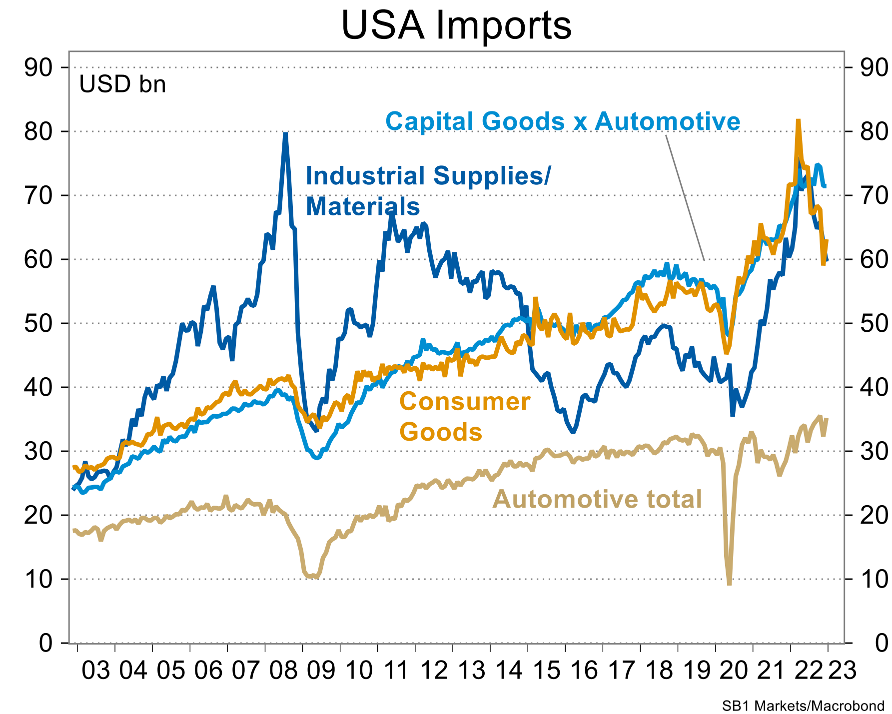


- The recent sharp decline in Ch xx

Imports of consumer goods down towards more normal levels

Imports are yielding/flattening from all corners, except the EMU

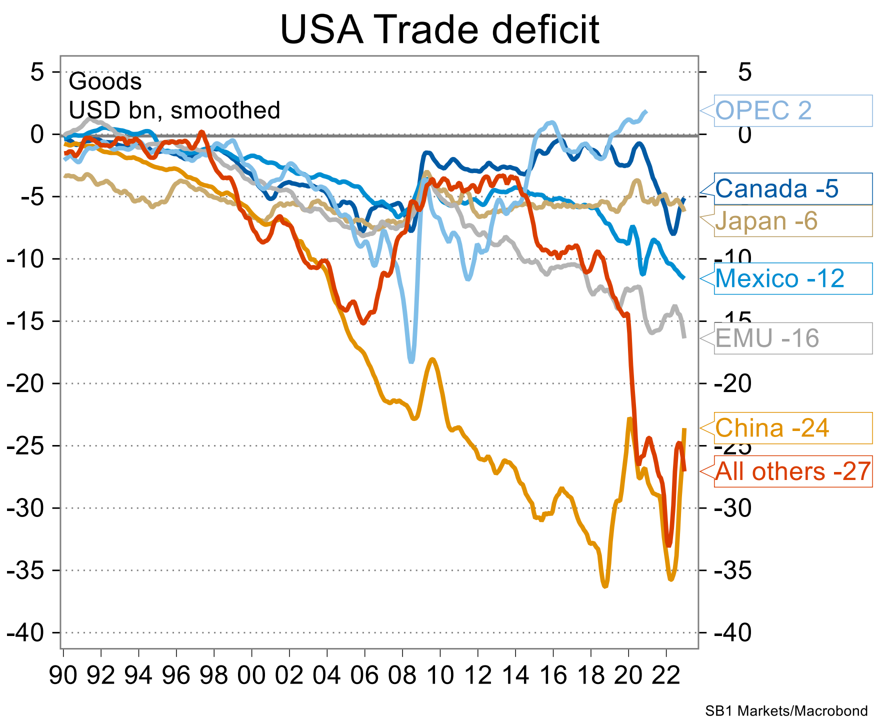




- **Imports from regions:**
  - A trend shift in imports from all countries recent months vs the surge the previous 2 years. Imports from China have fallen sharply
  - The exception: Imports from the EMU have increased significantly since the summer
- **Imports by type of goods:**
  - Import of all types of goods have surged during the pandemic, but the import of consumer goods has fallen sharply since March, as have industrial supplies. Imports of autos are on the way up (all data are nominal). Growth in demand is slowing, and inventories probably grew too large

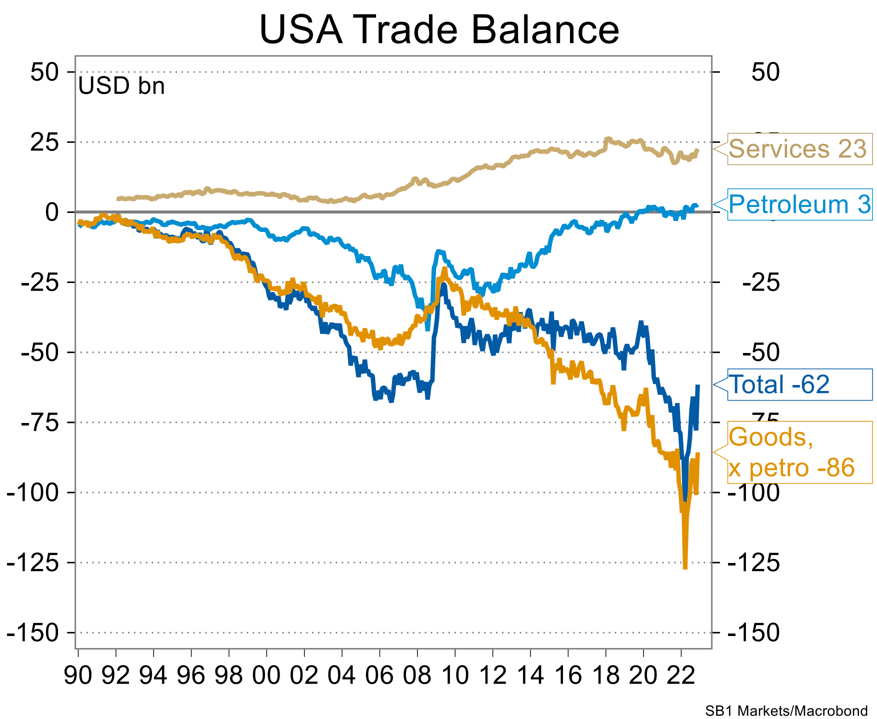
Mixed changes in the trade deficit vs. regions

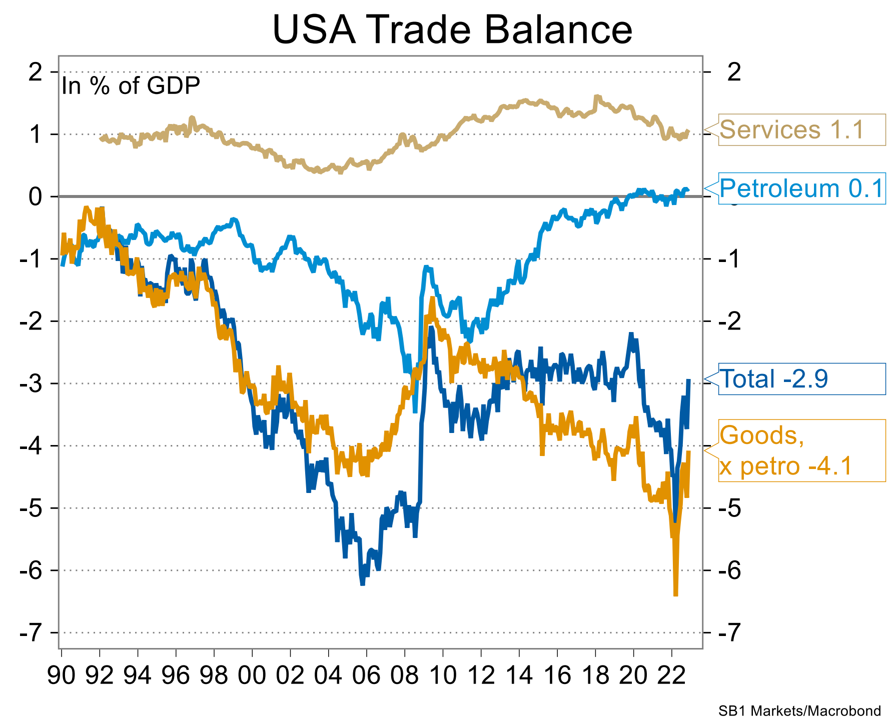
Deficit vs. China has been shrinking since June



Goods x petroleum deficit very high, even in % of GDP

Surplus in services has flattened at a lover level than before

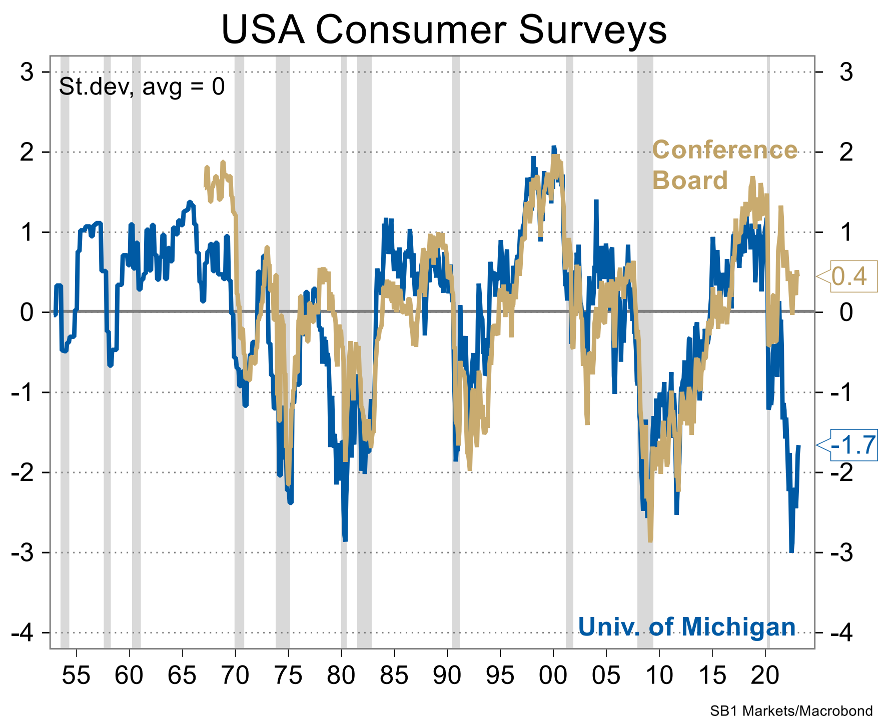




- The **total trade <u>deficit</u>** at USD 62 bn equals 2.9% of GDP. The deficit was 2.5% in early 2020 but fell to below 6% at the peak. Now, weaker domestic demand dampens demand for imports as well, and strengthens export and the deficit narrowed sharply in H2 last year
- **The US runs a <u>surplus</u> in services** at USD 23 bn, equalling 1.1% of GDP, but this surplus has fallen from some 1.5% of GDP at the peak, before covid

Univ. of Mich. sentiment further up in early February

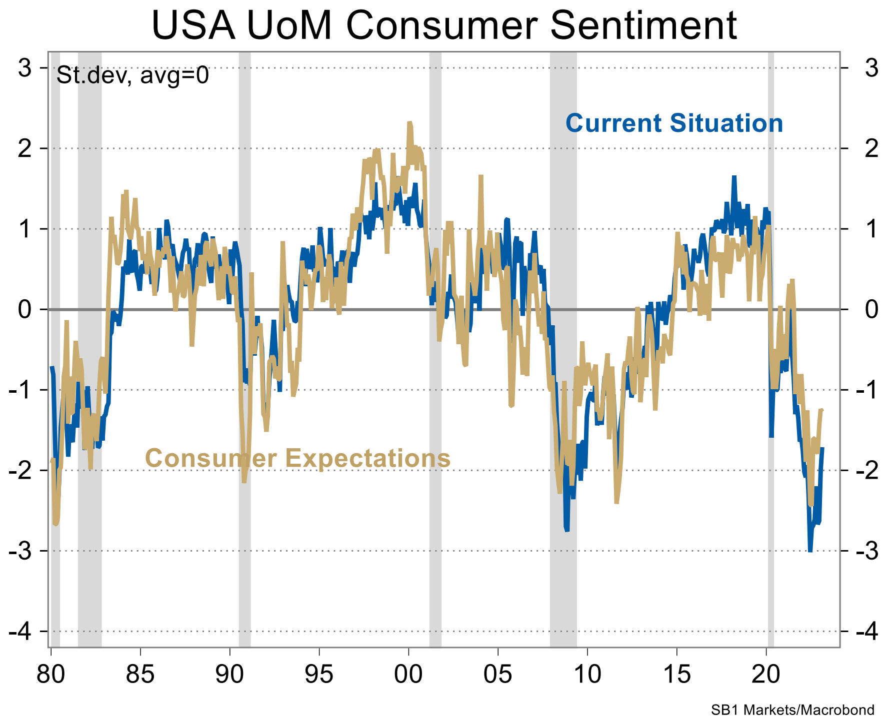
The sentiment index is still at a low level, 1.8 st.dev below average. All other surveys have turned up

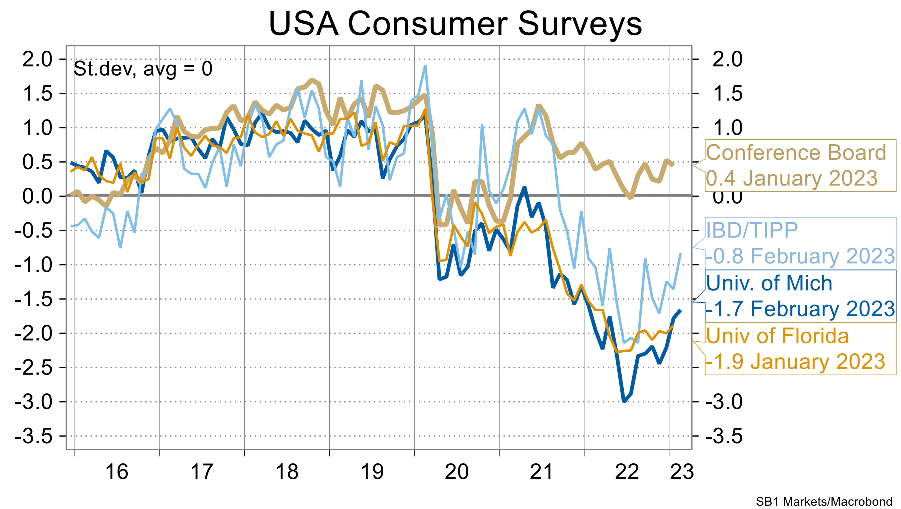


- **University of Michigan's consumer sentiment** climbed 1.5 p to 66.4 in February, according to the preliminary estimate. The level equals 1.7 st.dev below average. The bottom was in in last June, at -3.0 st.dev
  - Households' assessment of the current situation deteriorated somewhat, while expectations rose 4.2 p to 72.6
- **Other consumer surveys** have all turned up recent months but except for the Conference Board survey, they all remain well below an average level
- Quite often, the UM survey has been the canary in the mine vs. recessions, it yields earlier than Conference Board's survey. Now, however, the UM is turning upwards, before CB's survey really fell
- **Short-term inflation expectations** rose significantly, for the coming 12 months to 4.2% from 3.9% in January, but is down from 5.4% at the peak. The 5y expectation remained unch. at 2.9%
- **The risk:** The UM survey is still at a very low level, and is often an early bird in the cycle

Univ. of Michigan: current situation marginally worse, expectations higher

Other surveys are up or have flattened recent months

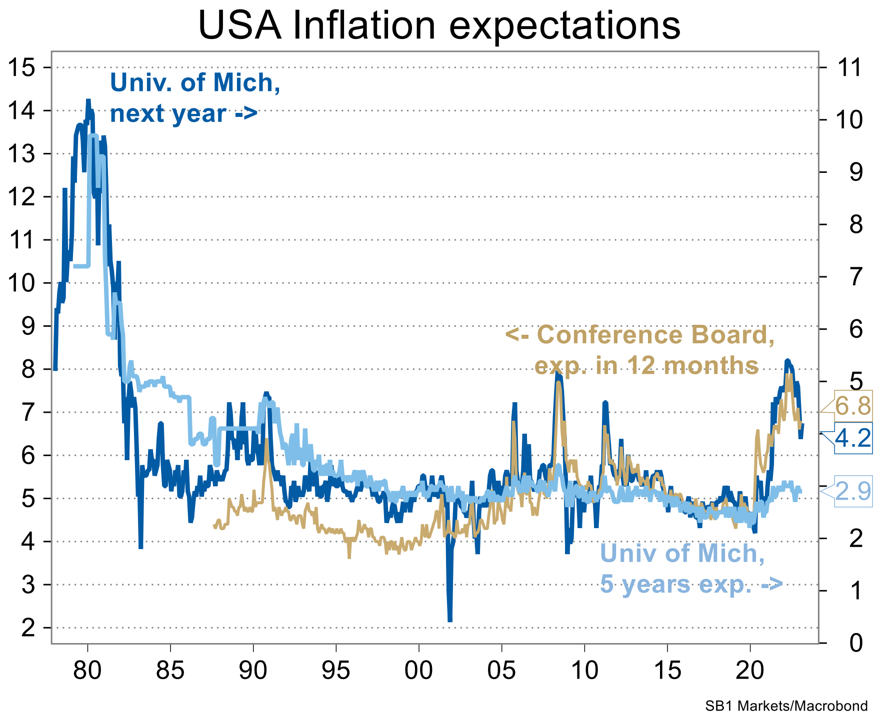




- Both IBD/TIPP consumer survey, Univ. of Florida's survey are 0.8 – 1.9 st.dev below par

Short-term inflation expectations have come down quite a bit from the peak

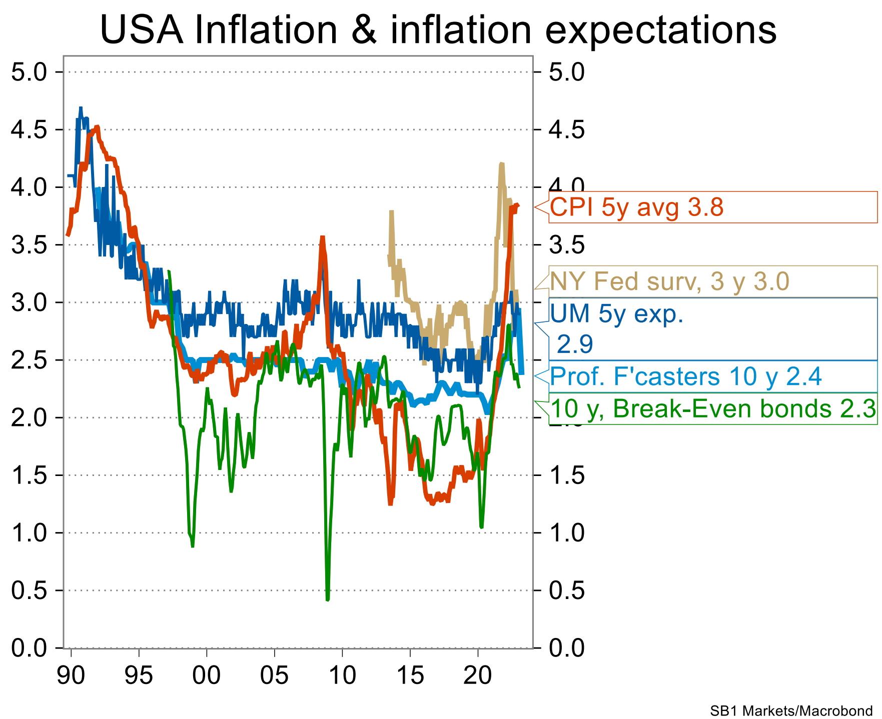
…and inflation expectations are in sum down

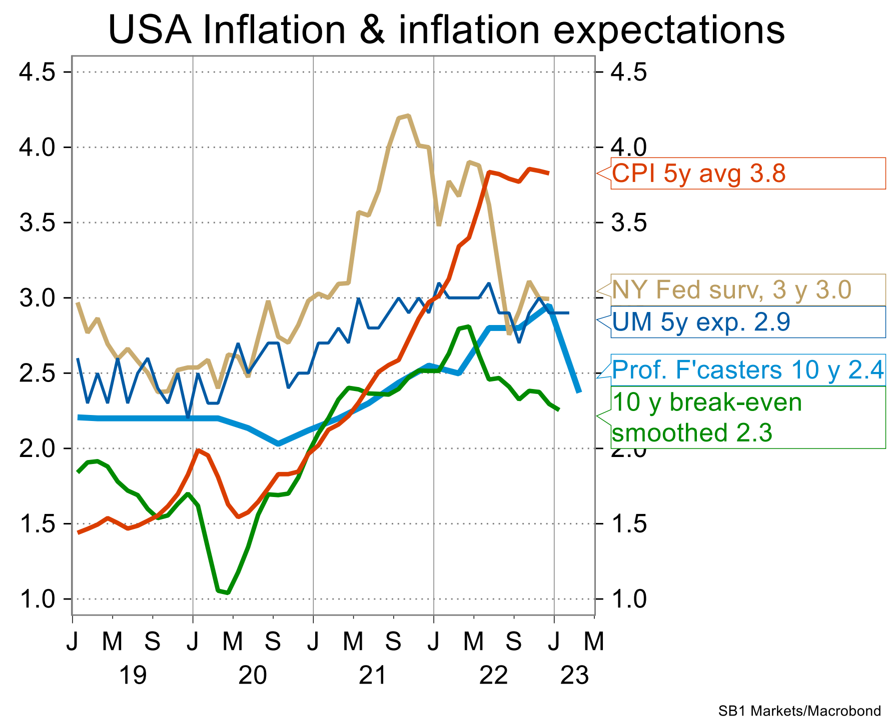


- **12 m inflation expectations** increased to 4.2% in Feb, from 3.9% in January, at bit strange. The peak was at 5.4%, last March
- **5 y inflation expectations** were flat at 2.9% - and they have been close to 3% through 2022 – which is some 0.5 pp higher than during 2016 – 2021 – but in line with expectations over the preceding years
  - The 2.9% is in line with the average over the past 10 years, not bad given the current rate of inflation

Professional forecasters have lowered their 10y CPI est. to 2.4%, from 3.0%!

Ahead of the surge in actual inflation, the professionals expected 2.0% long term inflation. Guess they will return to that?

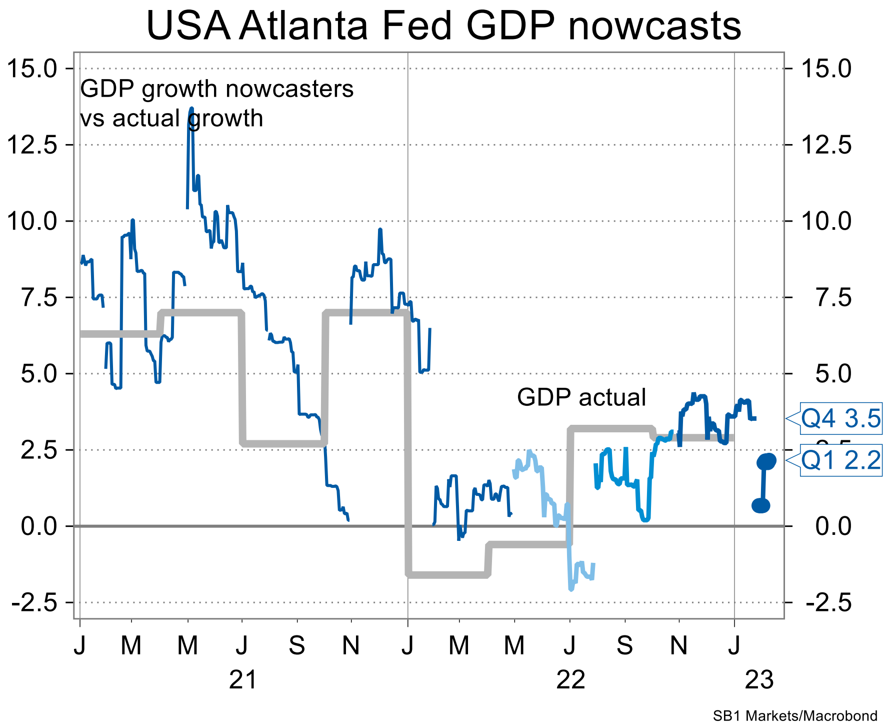


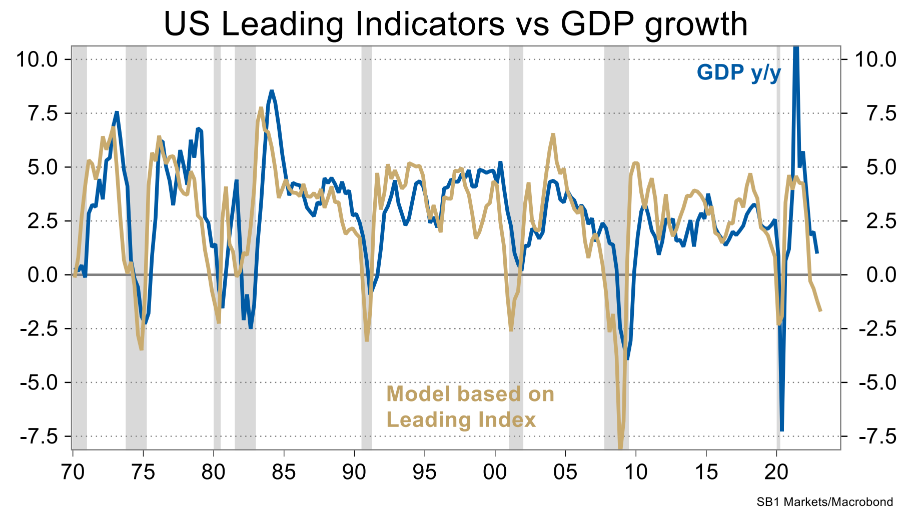


- In NY Fed's survey, households' 3y expectations have fallen to 3.0% from the peak at 4.2% in late 2021

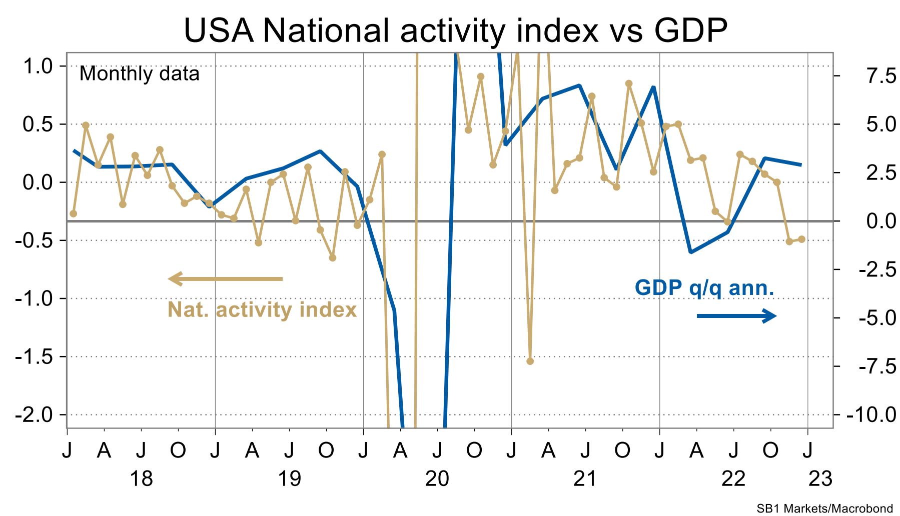
Atlanta Fed Q1 estimate shot up to 2.2% from 0.7%

Stronger auto sales, better manufacturing orders (and thus equipment investments) have lifted the forecast



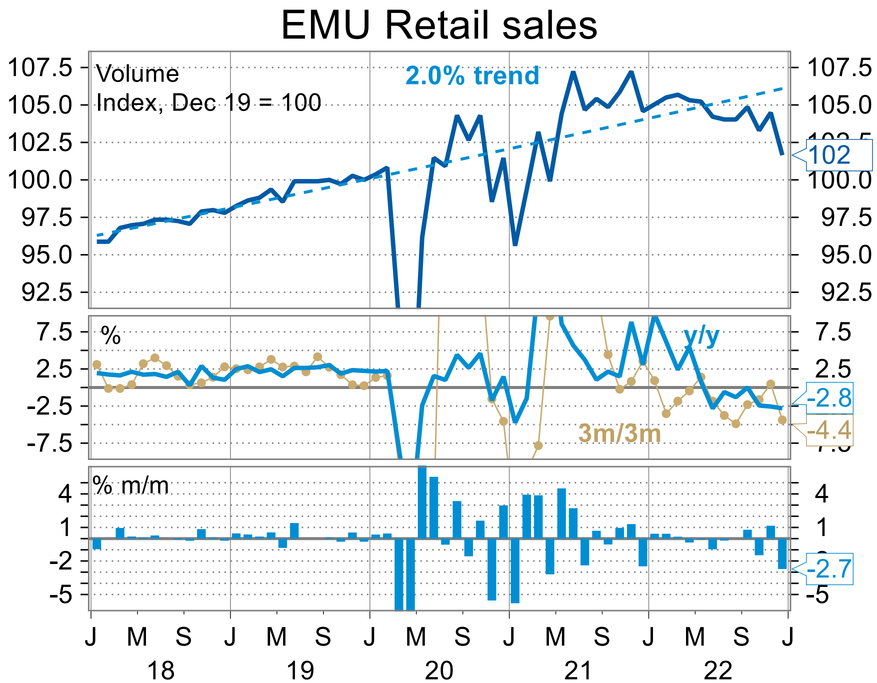


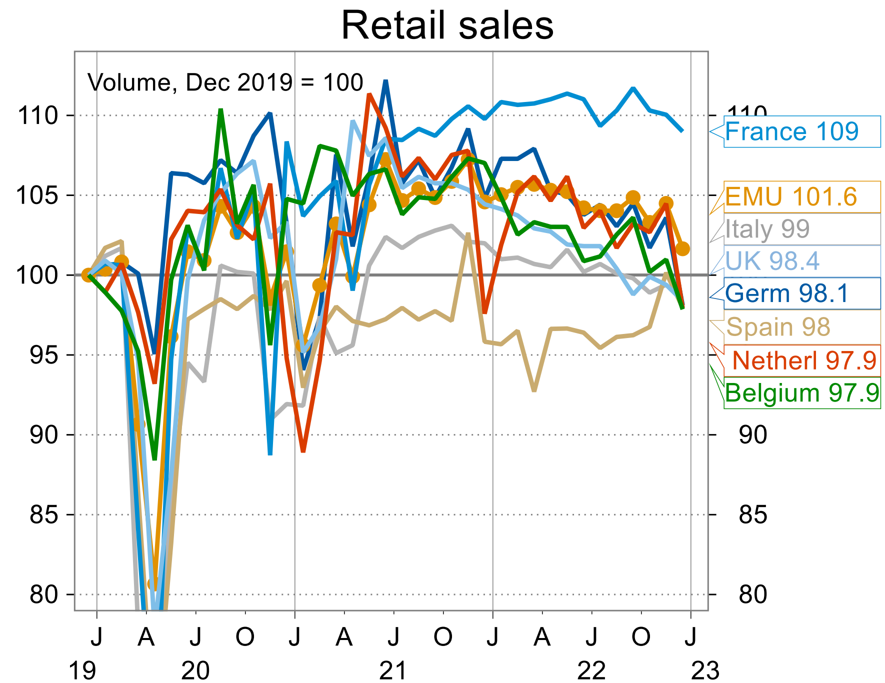
- The National Activity index and Leading Economic indicators both signal a decline in GDP
- Which also is the consensus forecast



Retail sales plummeted in December

Both food and non-food products contributed on the downside, while fuel sales were up

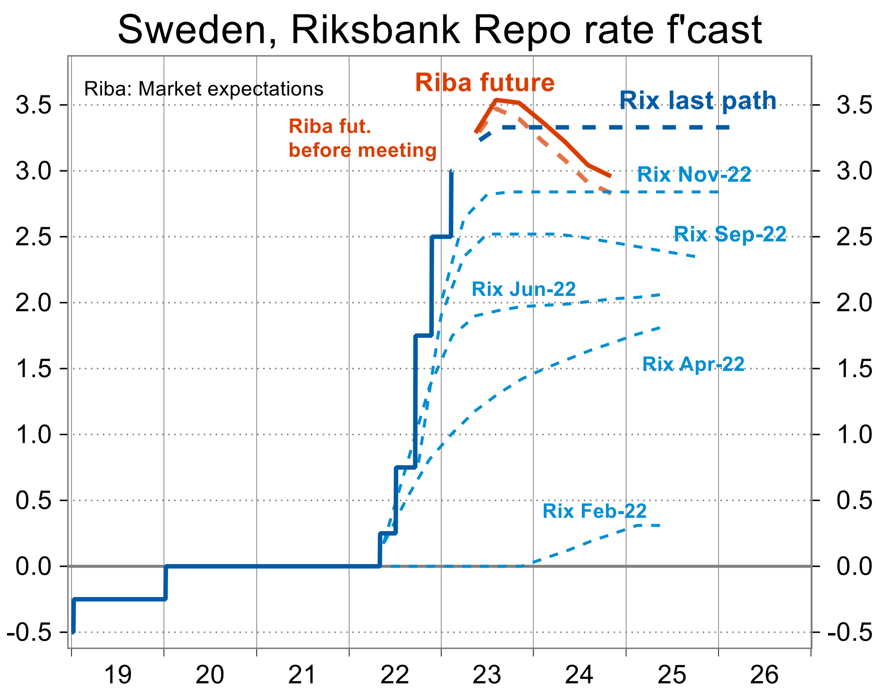




- **Sales** were down 2.7% in Dec (Nov print was revised up by 0.3 pp to +1.1%), expected down 2%. Sale volumes are down 2.8% y/y, the 3m/3m rate (=Q4 growth rate) is now at -4.4% and the trend is clearly down. Sales volumes are now just 2% above the pre-pandemic level, but 4% below the pre-pandemic growth path.
- As for the **regional** differences, sales were down in Germany (-5.3%), Spain (-2.2%), and France (-1.0%) in December (Italy has not yet reported), along with several other member countries
- Sales have been trending down since mid 2021 – and the outlook is dismal, given loss of buying power. However, sentiment have clearly turned the corner and the labour market is still remarkably strong, with the lowest unemployment rate in 4 decades, and an unprecedented high level of unfilled vacancies. And gas prices are trending rapidly down

The Riksbank lifted the signal rate by 50 bps to 3% – as expected

The bank sees further rate hikes during the spring and will sell bonds at a faster pace



Riksbank f'cast, annual percentage change

	2021	2022	2023	2024	2025
CPI	2,2 (2,2)	8,4 (8,3)	8,6 (9,3)	3,6 (3,0)	2,4 (2,4)
CPIF	2,4 (2,4)	7,7 (7,6)	5,5 (5,7)	1,9 (1,5)	1,9 (2,0)
GDP	5,1 (5,1)	2,5 (2,7)	-1,1 (-1,2)	0,9 (1,0)	1,9 (1,7)
Unemployment	8,8 (8,8)	7,5 (7,4)	8,0 (7,9)	8,4 (8,3)	8,4 (8,3)
Unit labour cost	1,6 (1,6)	3,4 (3,3)	4,5 (4,6)	2,7 (2,6)	2,0 (2,1)

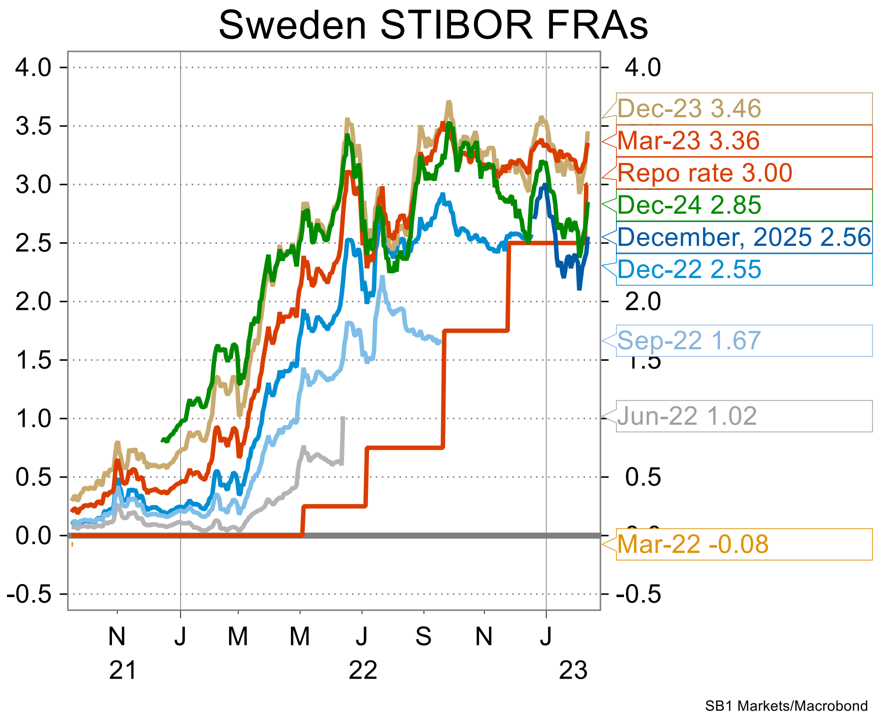
	2022Q4	2023Q1	2023Q2	2024Q1	2025Q1	2026Q1
Policy rate	2,01 (2,00)	2,74 (2,64)	3,21 (2,82)	3,33 (2,84)	3,33 (2,84)	3.33

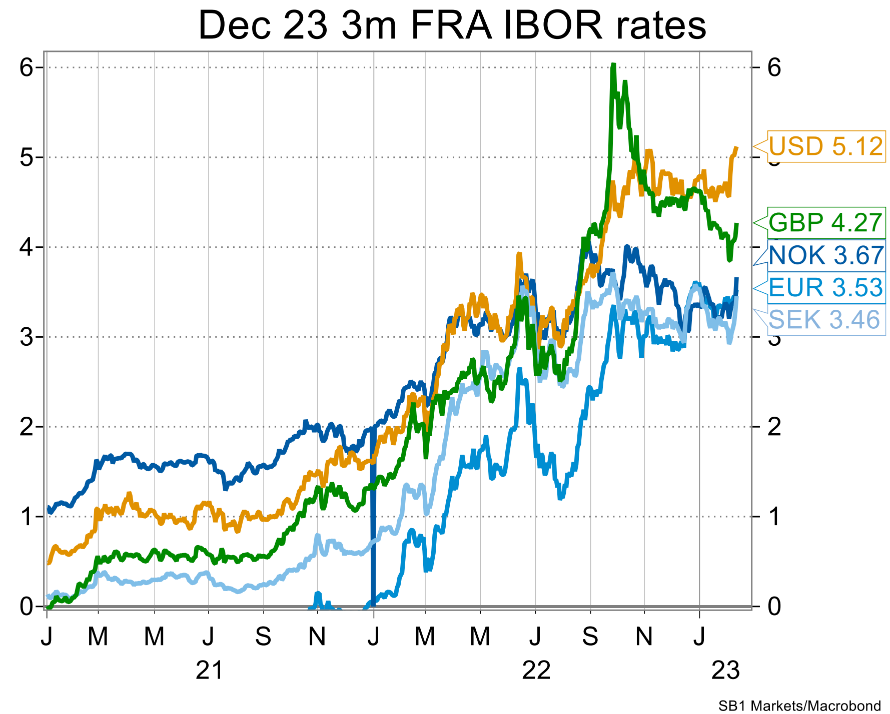
Source: Riksbank/ SCB/ SB1Markets

- **The Riksbank** raised the policy rate by 50 bps to 3.0%, as widely expected, both in the market and among economists. The bank states that the inflation is far too high, and the bank expects one more or two more hikes in 2023
- **Inflation** was revised down by 0.7 pp to 8.6% in ‘23 but then up in ’24, to 3.6. Next year the CPIF is expected down to 1.9%, while the CPIF x energy (the real core) is expected to return to 2% in 2025 from 5.8% in 2023
- **GDP growth** was revised up by 0.1 pp in ’23 (still expecting GDP to fall by 1.1%) and down by 0.1 pp in ‘24. The **unemployment rate** was revised only slightly upwards for the remainder of the prognosis period
- **The interest rate path** was lifted, by up to 49 bps (from the spring-23), to 3.33%. Thus, the bank expects to hike the rate once or twice this year, to 3.25% (2/3% probability) or 3.50% (1/3 prob, and no cut on the horizon. The market now assumes at peak at 3.50%, with a small probability for a hike to 3.75% - but then a reversal from early 2024
- The **QE program** expired at the end of the year, and the bank **will now move to QT**, selling SEK 3.5 bn of gov’t bonds each month, starting in April. At year-end, the total holding of gov’t bonds was SEK 338 bn, so the sell-off will not be that dramatic
- **Riba futures** rose 10 – 15 bps on the announcement on Thursday and then by the same amount on Friday – after climbing earlier in the week – in sum up 40 – 50 bps!
- **The 10 y government bond yield** rose by 50 bps as well, and it was ‘Swedish’, the spread vs. 10 y German gov. rose by 34 bps last week – but the Swedish yield is still slightly lower than the ‘Bund’ yield

Rate expectations up everywhere – but the most in Sweden

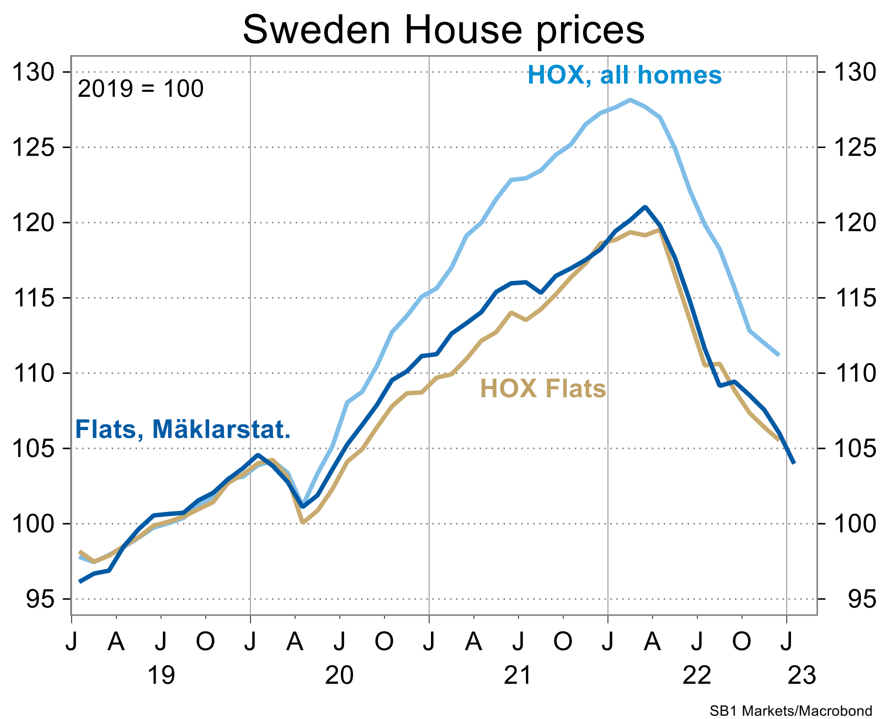
SEK Dec 23 up by 50 bps, UK +42 bps, NOK +38 bps, USD +31 & EUR +21

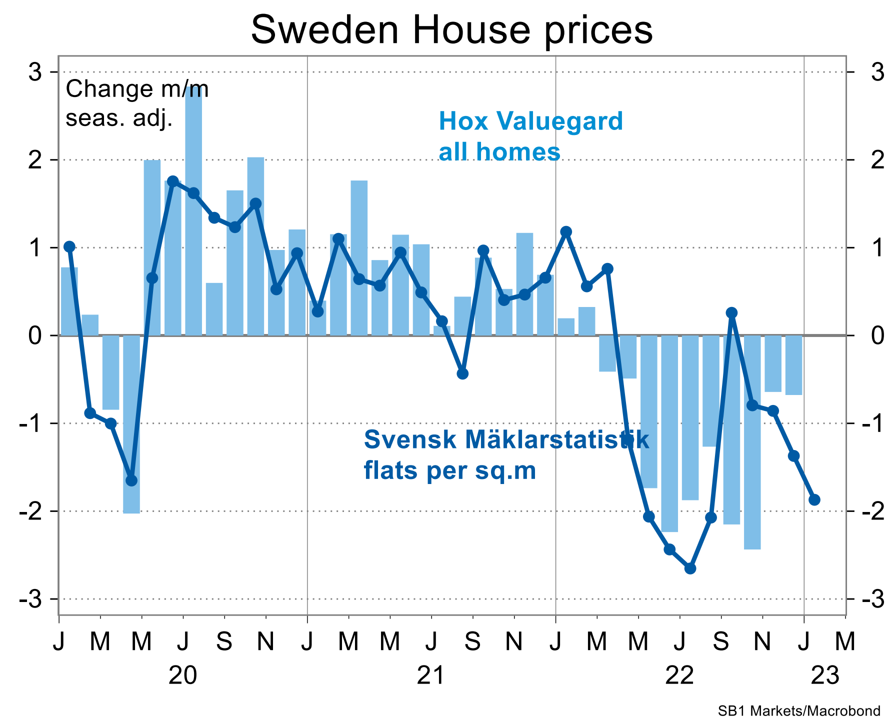




No relief for Swedish home prices, according to the realtors, down 14%

Svensk Mäklarstatistik (the realtors) report of a 1.9% decline in the prices of flats in January

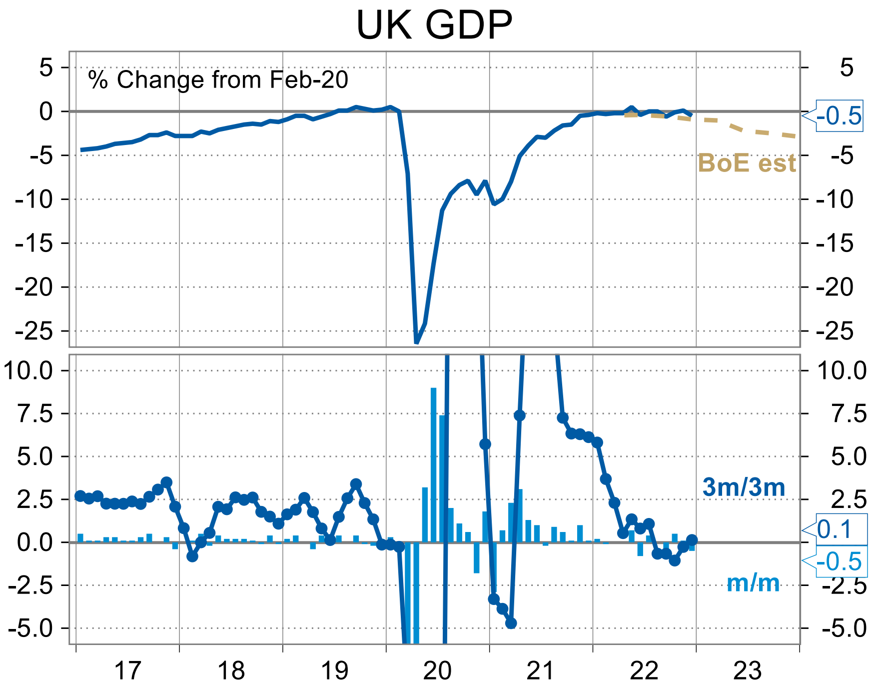




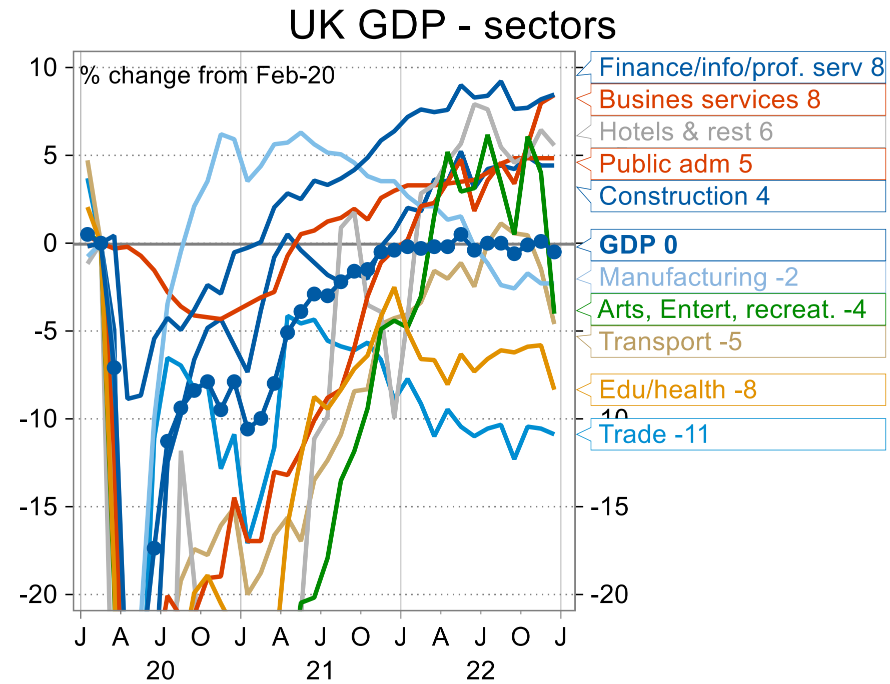
- The actual price decline was 1%, but that turned into a 1.9% setback after our seasonal adjustment
- The realtors' price index is down 14% from the peak in March-22, and prices are back to the same level as in Feb-20, before the pandemic hit
  - **In real terms**, prices are back to level in Feb-15 – of course supported by the 12% inflation last year
- **The HOX/Valueguard index** reported a 0.7% m/m fall in house prices in December

The UK escaped a recession with the narrowest of margins – GDP flat in Q4

…and GDP was down 0.5% m/m in December, below expectations of -0.3%



SB1 Markets/Macrobond



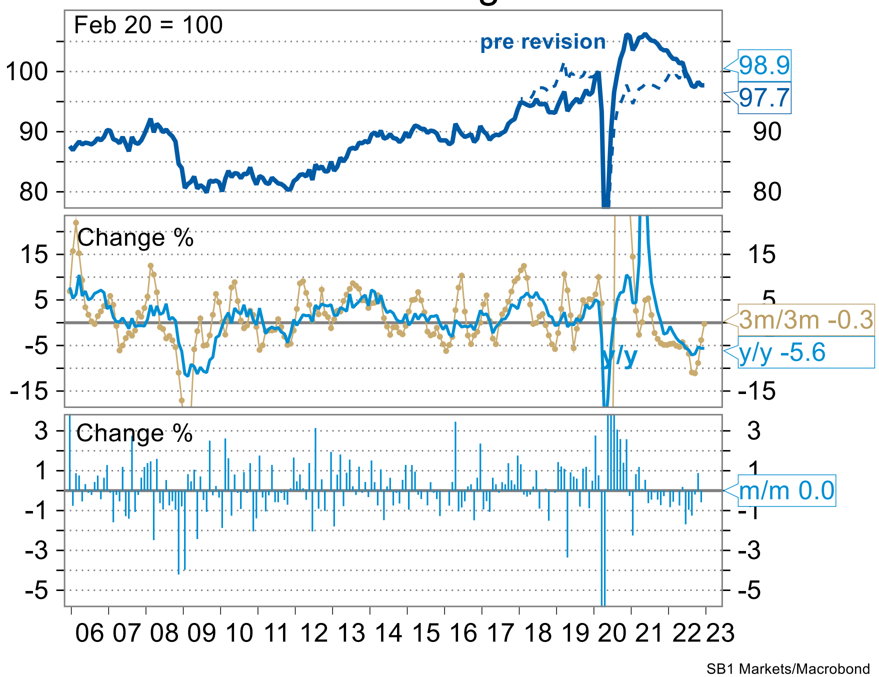
SB1 Markets/Macrobond

- **GDP** was expected to decline by 0.3%, following the 0.1% increase in November
  - **GDP** is 0.5% below the pre-pandemic level – that is 3 years without growth. Like in the US, the labour supply has contracted somewhat (while it has exploded most other places)
  - **Unemployment** it the lowest in decades, and wage inflation has climbed sharply. Inflation is above 10%, the highest since the early 80s
  - So: Not the best-balanced economy on earth
  - **Bank of England** expect GDP to contract by 1% pace for 5 quarters… They just might be on track for that should the fall continue
- **Mixed between sectors:** Trade the big loser through 2022, together with manufacturing and education & health
  Most other sectors are trending up

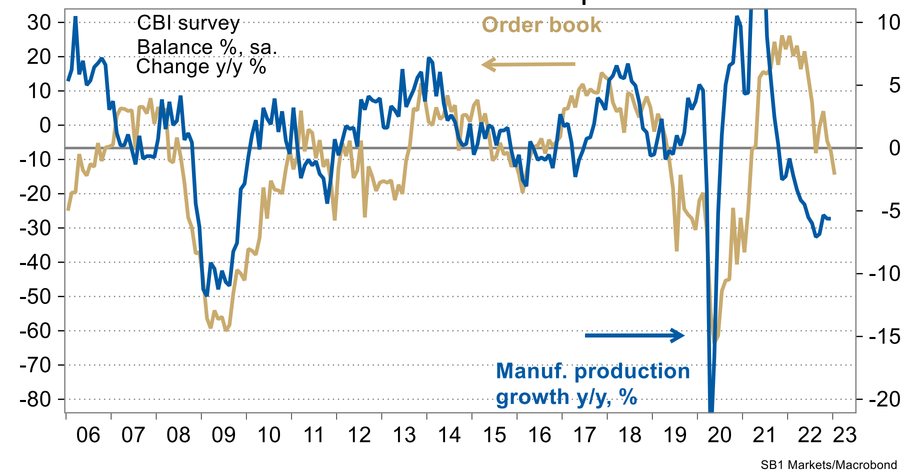
Manufacturing production unch. in December, down 5.6% y/y

Production has flattened past 4 months, but most surveys signal continued downturn

UK Manufacturing Production

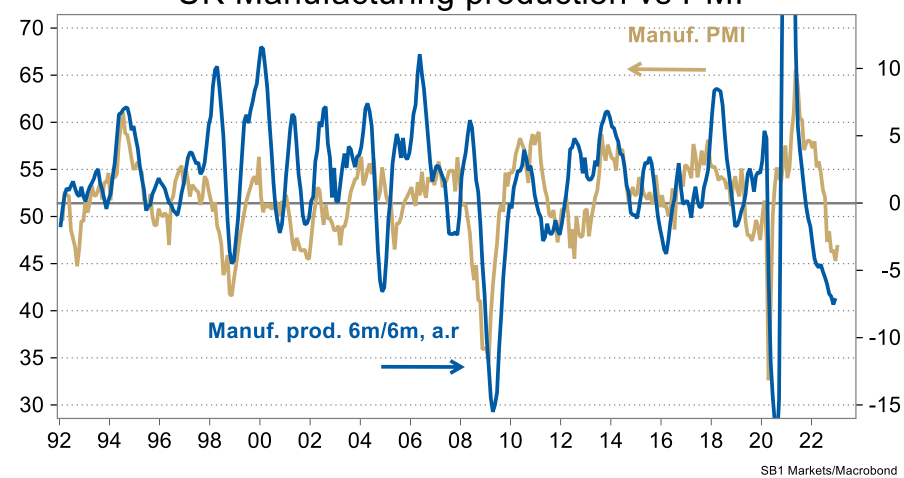


UK CBI Orders vs Manuf. production



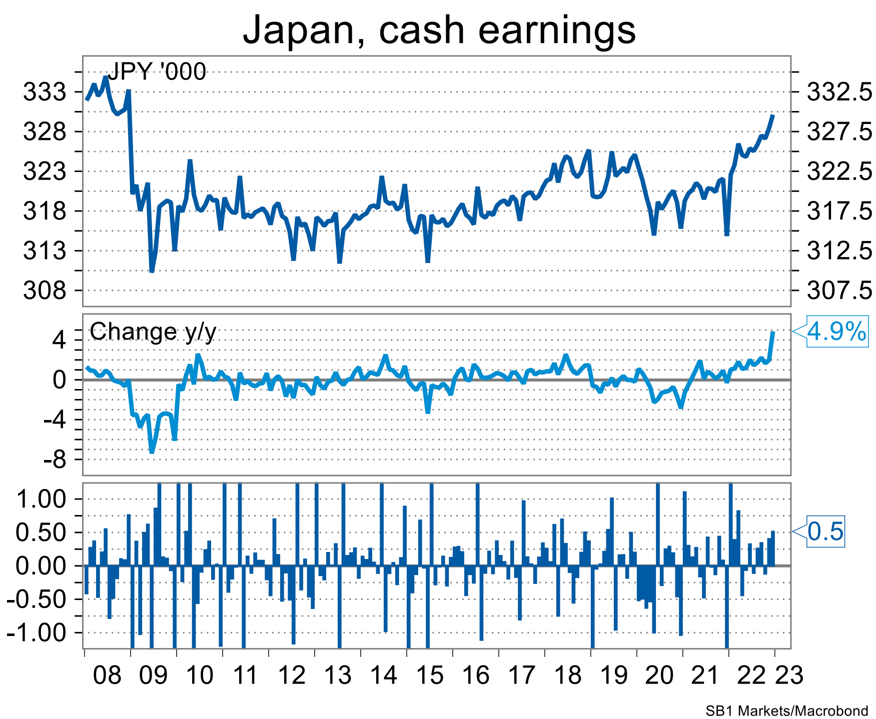
- Production is down 5.6% y/y – and by 0.3% 3m/3m
- Almost all sectors are reporting a downward trend in production
- The CBI survey signals a fall in manuf. orders, and the manufacturing PMI are still heading rapidly downwards too

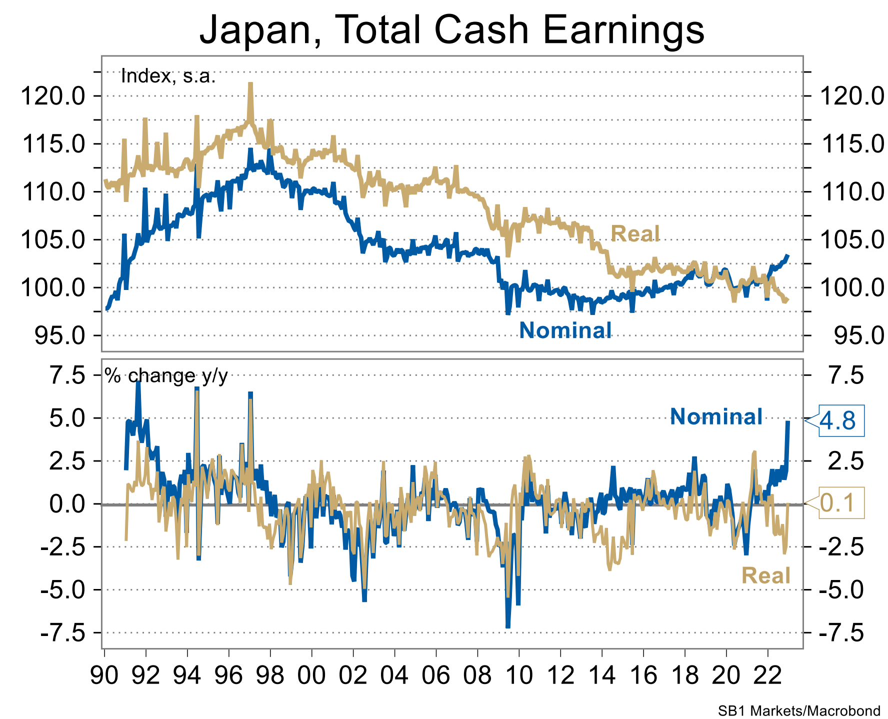
UK Manufacturing production vs PMI



Wage earnings rapidly up through 2022, finally. But real wages still falling

BoJ's argument for sticking with their expansionary policy and the rate corridor was that wages were <u>not accelerating</u>…



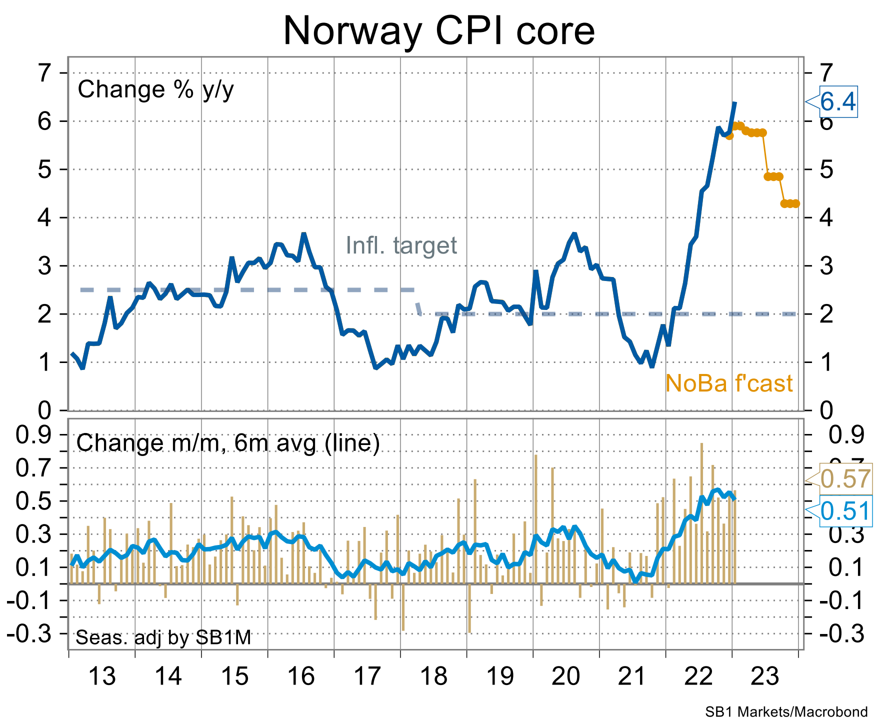


- Wages have grown by a 2.5% pace through 2022, the highest growth rate since 1991!!
  - The annual (y/y) rate in December at 4.9% was just because bonuses were low in Dec-21 (and seas adj. wages declined sharply), and the 4.9% rate is not 'for real'
- However, inflation has climbed to 4%, and real wages are still falling rapidly – by some 1.5% through last year, the weakest since 2014 (forget the positive 0.1% y/y print in Dec, it's 'fake' due to the base effect)
- However, if a 2.5% wage inflation is established, and given Japan's dismal productivity growth (zero since 2005), Bank of Japan might resonate that domestic inflation pressures are not at zero or below anymore…
- BTW, Japanese cash wages are not higher than in 1992, and in real terms even further back in time, in fact back to 1980!

Highlights
The world around us
The Norwegian economy
Market charts & comments

January inflation data surprised sharply to the upside

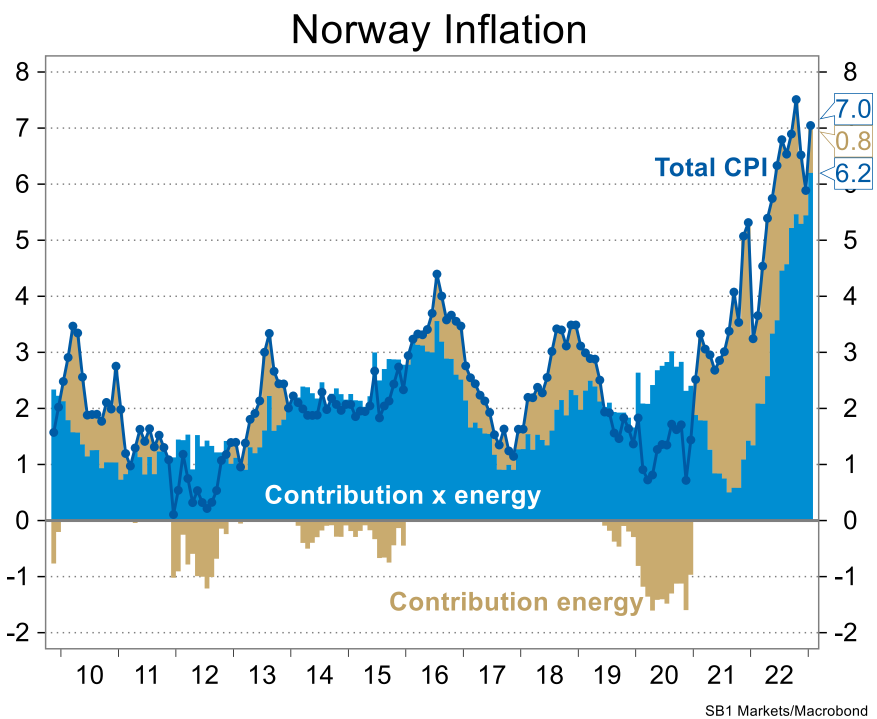
The core index 0.6 pp to 6.4%, consensus at 6.1%, NoBa at 5.9%. 60% of the CPI components are up more than 5%



- The **headline CPI** jumped to 7.0% from 5.9%, we expected 6.4%. Consensus was at 6.5%, and NoBa at 6.9%, as the bank assumed higher electricity prices
- **CPI-ATE** (ex. energy and taxes) rose 0.6% m/m (s.a) in Jan (we expected 0.2%), and the annual rate accelerated 0.6 pp to 6.4%. We expected 5.8%, consensus 6.1%, and NoBa expected 5.9%
  - **What lifted the core**: Rents, (probably) new autos, recreation (newspapers/books), clothing. Personal care & social protection contributed at the downside
  - The lions share of the 6.4% y/y rate of core inflation is due to domestically produced goods and services (influenced by imported goods prices and energy, no doubt), but imported prices are up 7.0%
  - **Food prices** were flat m/m but are still up 12.4% y/y, though just 4% above 'trend'. Prices were 'below trend' a year ago. In February, the annual rate will surge again, and now 'for real'
  - **The median/underlying inflation** rate is close to the annual core rate. The 6 m underlying core rate is at 6.3%
- The **electricity index** fell 10% (we expected -5%) even if spot prices nosedived 25% (blame the semi-fixed price contracts), while **gasoline** prices were up 3.3% (we expected +4%) in January
- **The outlook**
  - **Market electricity prices** have fallen further, and in February even the semi-fixed contracts will benefit from the decline. **Gasoline prices** have stabilised but that will soon imply a steep decline y/y, from the peak prices last year
  - **Core inflation** is of course the real problem. Food prices no doubt surged in February, and as demand all in all remain strong, we expect the core rate to accelerated marginally in February
  - The real challenge: **Implications for wages**, check discussion page next page

Implications for wages, Norges Bank and the policy rate

Wage inflation has probably accelerated, and the January CPI increases the risk further. A 2nd 2023 hike quite likely



So what?

- In December – and confirmed in January - **Norges Bank** signalled another 25 bp hike in Q1 and possibly one more in Q2 .
- This inflation report was probably the nail in the coffin that lifts the interest rate path and seals the 2nd hike
  - The market is now discounting an 80% probability for a third hike in 2024, to 3.50%, following a 35 bps lift in OIS forwards last week (the lion's share on Friday)
- We think the market is fair priced, there is a risk that 3,25% will not be the terminal rate (up from 2,75% now)

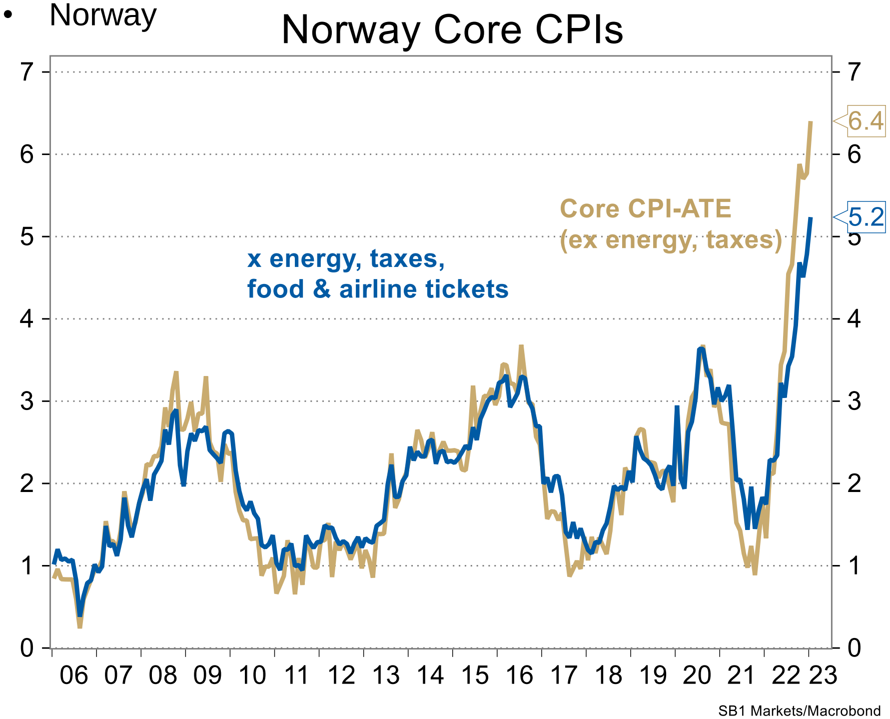
Inflation at 7.0%, core at 6.4%, so what?

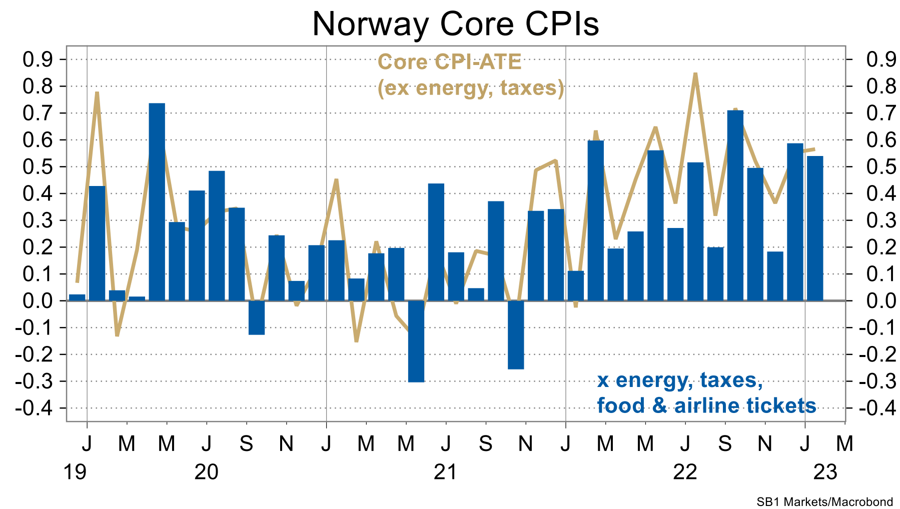
- **Headline inflation** came down in Nov and Dec, but increased again in Jan, and much more than expected and the rate is still too high for comfort
- **Core inflation** is also very high and higher than expected, and is not yielding – and it is still broadening
- For Norges Bank, as all other central banks, **wage inflation** is the dominant risk vs inflation over time.
  - The latest wages stats indicate that wage inflation was higher last year than we have – and Norges Bank – has assumed. Data are not final, but they imply a 4.4% – 4.6% wage inflation last year, vs. the 3.7% – 3.9% growth rate that so far seemed most likely (which was in line with the agreed wage increased in last spring's wage negotiations
  - On Friday, the TBU (Technical committee for the wage negotiations) with representatives from the parties will – under the leadership of the head of Statistics Norway – will present their estimate of wage inflation last year – and even more important, an estimate for CPI inflation in 2023, in their initial report
  - The higher starting point for the core CPI, given the January print, will lift the annual core estimate, as will a fair estimate of the lift in food prices per February. On the other hand, electricity prices have fallen since the SSB and Norges Bank have published their last 2023 estimates. SSB's estimated 4.9%, Norges Bank 4.8%
  - We assume the TBU will end up this range, possibly somewhat lower, due to the decline in electricity prices. The TBU may chose to postpone the CPI estimate to the final report, out mid March
  - The main trade union, the LO - and within LO, the manufacturing faction – will probably not claim compensation for loss of real wages in 2022, but the starting point is at least to preserve buying power in 2023 – implying wage increases not far below 5%
  - Even if LO will try to be 'moderate', there are no doubt groups that has higher ambitions
  - In addition, the labour market is still tight, conf. the surge in the vacancy rate in Q4 (check here), and a market driven wage acceleration, which seems to have take place last year, may lift wage even faster
  - The government may enter the scene, like increasing electricity subsidies, but we doubt there are measures at hand that will substantially ease the price pressure in 2023

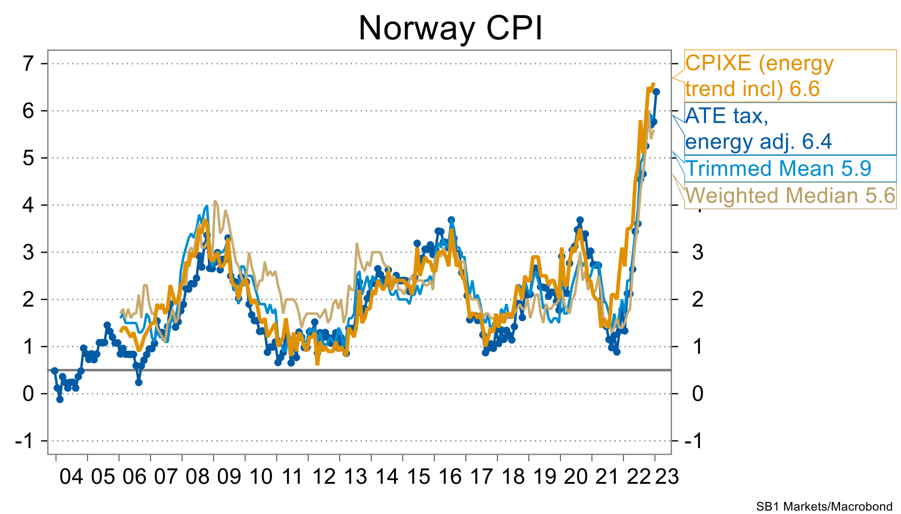
The ‘real’ core (core ex food and airline tickets) inflation up to 5.2%, ATH again

In addition, all measures of underlying inflation suggest <u>a 5.6% – 6.6+% level</u>

- Norway





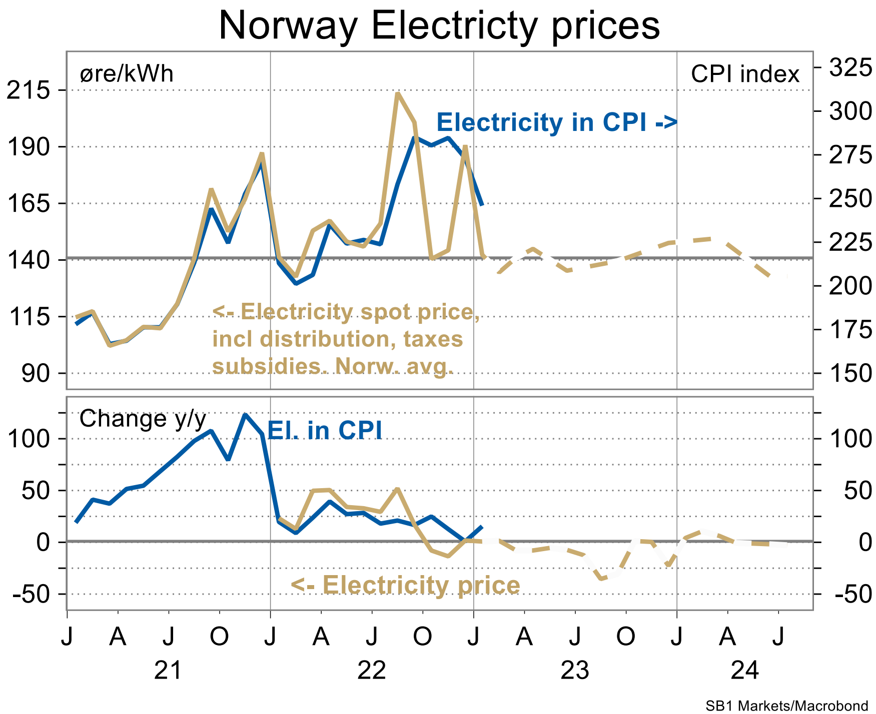


Of the sub-components in the CPI:

- 91% up > 2% (up from 87% last month)
- 60% up > 5% (up from 58%)
- <u>48% up > 7% (up from 38%)</u>

Still some more downside for electricity prices in the CPI

The semi-fixed price contracts have created problems recent months but the impact will probably be gone in February



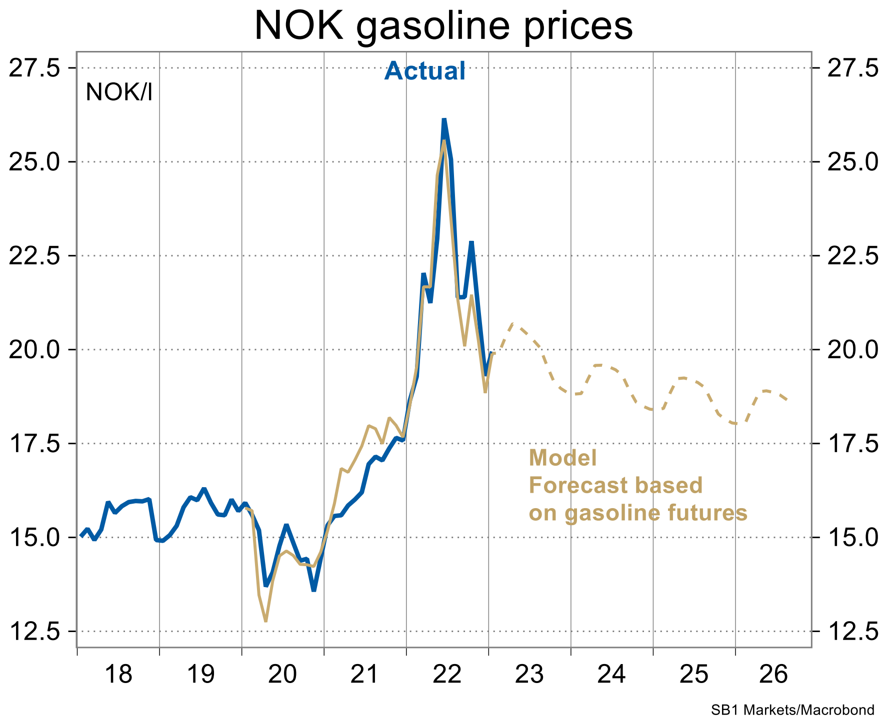
- **Spot prices** + transfer fees + taxes – subsidies fell by some 25%, in January. However, the semi-fixed (1 month fixed) contracts were based on high forward prices in mid December, and the decline in the total electricity component in the CPI at 10% was less than the decline in the spot++ price. We assumed a 5% decline
- **In February**, spot prices will probably decline further, and the semi-fixed contracts will be based on a far lower future price (set around mid January). Thus, we expect a further decline in the electricity price component in the CPI, by some 10 – 15%, contributing to a 0.4 pp decline in the headline CPI (but then food prices will contribute in the other direction…)

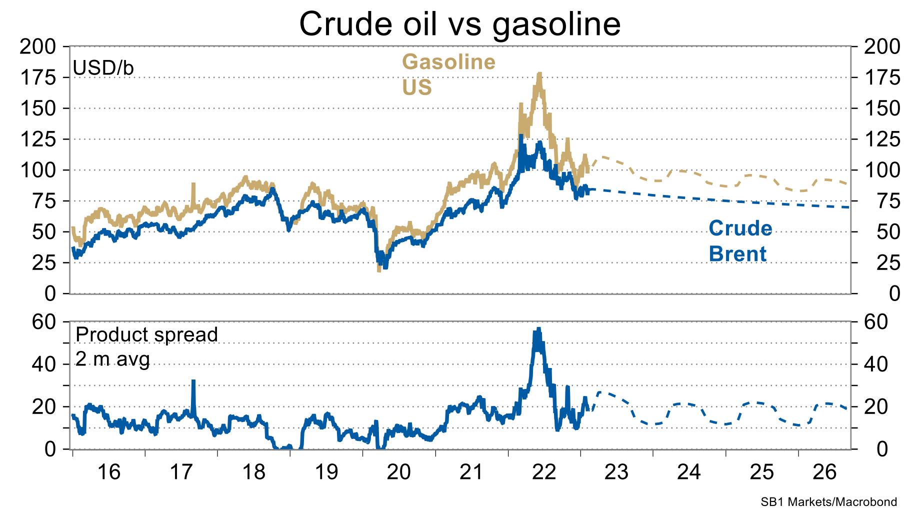
- For the rest of the year: From March onwards, current future prices indicate a zero, and negative growth rate, measured y/y

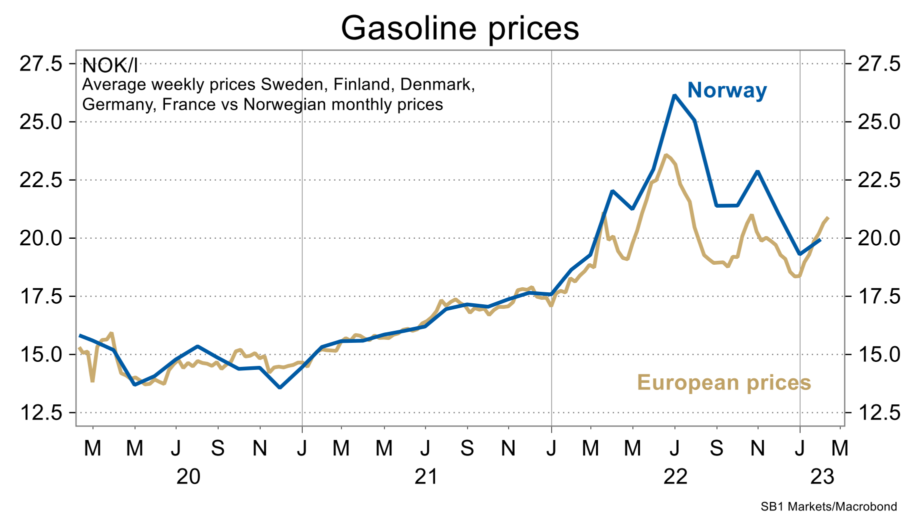
A 90% subusidy efficiency is assumed as more electricity is used when prices are high (due to low temperatures)

Gasoline prices were up in Jan, and markets signal further increases in Feb

Upside risk m/m the coming months but the annual rate will soon turn sharply negative ☺



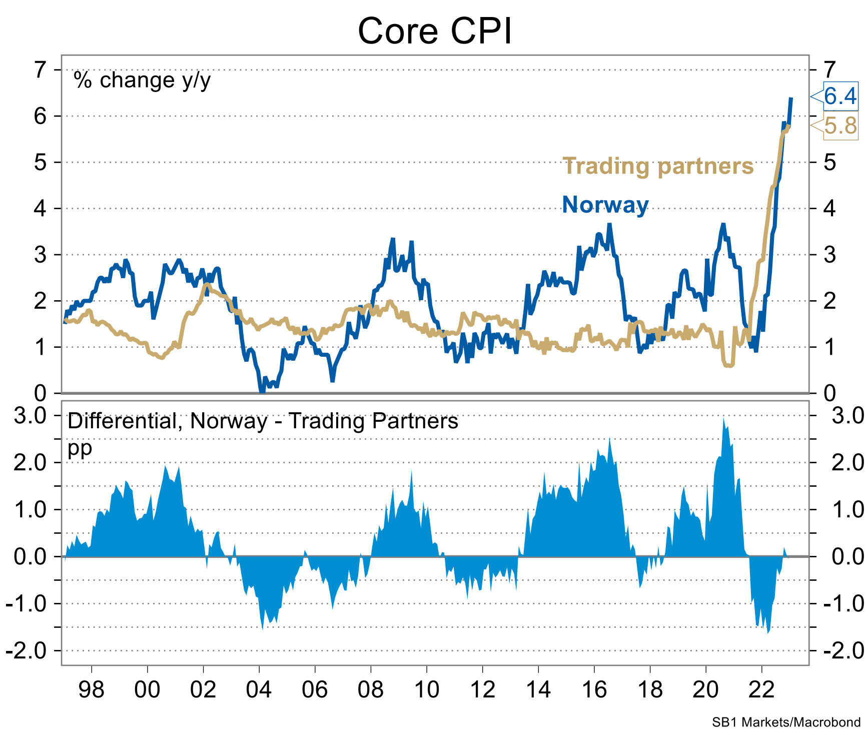


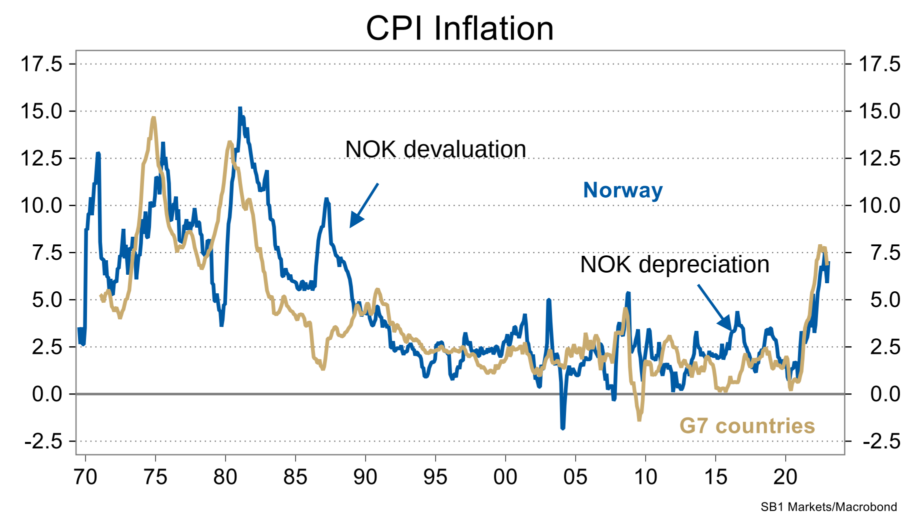


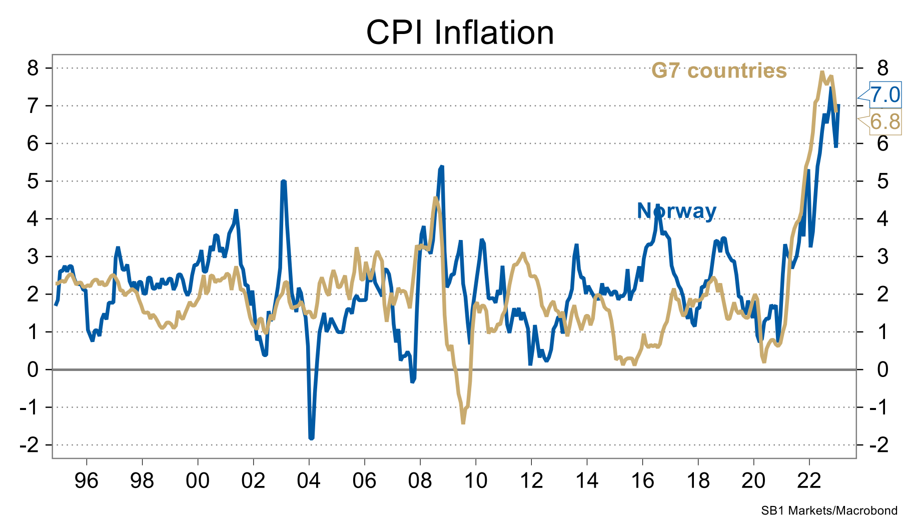
- **Refinery/product margins** widened in early 2022, but have fallen back to normal level. Gasoline prices fell until in the late fall and until the new year, but have since turned back up and futures prices suggest further increases in the coming weeks
- Risk: Will **diesel prices** be kept in check when the Russian diesel is removed from the European market from mid February, due to EU sanctions?

Norway vs ROW: The large, long-term CPI 'regimes' have been correlated

But limited short-term correlation, at least in the 'low-inflation regime'. *In which we are no more*







- Norwegian core CPI vs. trading partners' core has been close to uncorrelated past 20 years. The headline CPIs have been somewhat better correlated, due to co-movements in energy prices
- During the last large inflation cycle '70s and early '80s Norwegian headline inflation was quite closely correlated to the global (G7) CPI cycle (and mostly lagging)

Energy prices surprised to the downside, but that's close to it…

… most other components surprised to the upside and lifted the CPI much more than anybody expected

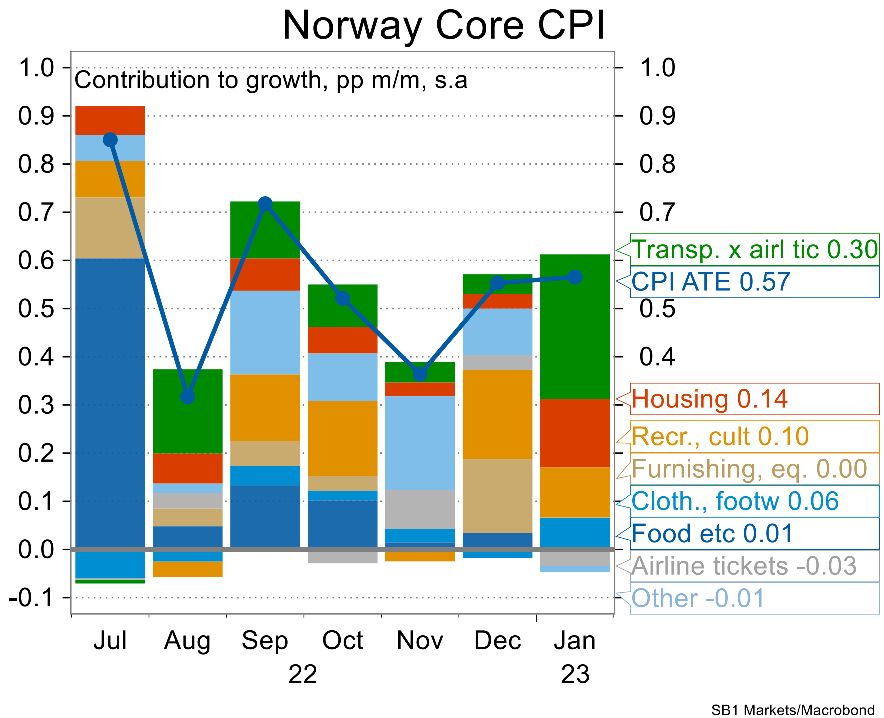
		Change m/m, seas. adj			Change y/y			Contribution, pp		
Jan-23	Weight	Out-	SB1M	Dev.	Prev.	Out-	SB1M			Dev. vs
CPI ATE, seas adj.	%	come	f'cast	pp	month	come	f'cast	m/m	y/y	f'cast
Food, non alc bev	12.9	0.0	0.2	-0.1	11.5	12.4	12.6	0.01	1.60	-0.01
Alcohol, tobacco	4.2	0.8	0.2	0.6	6.9	7.5	6.8	0.03	0.32	0.03
Clothing, footwear	5.1	1.1	0.2	0.9	1.4	2.6	0.9	0.06	0.13	0.05
Housing x. energy	20.2	0.7	0.2	0.5	2.4	2.9	2.4	0.14	0.58	0.10
Furnishing	6.9	0.0	0.0	0.0	9.5	8.3	8.3	0.00	0.57	0.00
Health	3.4	-0.0	0.2	-0.2	3.2	3.2	3.6	-0.00	0.11	-0.01
Transp. ex. gas, airl. tick	12.2	2.2	1.0	1.2	5.2	7.3	5.0	0.27	0.89	0.15
Airline tickets	0.8	-3.6	0.2	-3.8	19.3	40.3	46.8	-0.03	0.32	-0.03
Communication	2.4	-0.3	-1.0	0.7	5.2	4.5	4.1	-0.01	0.11	0.02
Recreation, culture	10.8	0.8	0.0	0.8	7.1	8.1	7.1	0.09	0.87	0.09
Education	0.5	-	-	-	2.3	2.0	2.0		0.01	0.00
Restaurants, hotels	5.6	0.6	0.3	0.3	7.4	7.7	7.4	0.03	0.44	0.02
Other	8.7	-1.3	0.3	-1.6	3.0	1.9	3.6	-0.12	0.17	-0.14
CPI-ATE, s.a	93.7	**0.6**	**0.2**	0.3	**5.8**	**6.4**	**5.8**			0.31
Norges Bank est.			*0.4*		*5.7*		*5.9*			
Imported	36	0.7	0.1	0.7	6.4	7.0	6.1	0.27	2.55	0.24
Domestic	57	0.5	0.3	0.1	5.8	6.4	5.7	0.26	3.67	0.07
Energy, housing (x s.a)	4.4	-10.0	-5.0	-5.0	0.8	15.4	21.8	-0.44	0.68	-0.22
Energy, transport (x s.a)	2.0	3.3	4.0	-0.7	15.8	17.8	18.6	0.07	0.35	-0.01
CPI Total	100	**0.2**	**-0.2**	0.4	**5.9**	**7.0**	**6.4**	0.16	7.05	0.39
Norges Bank est.		*0.2*		*0.0*	*6.0*	*6.9*				

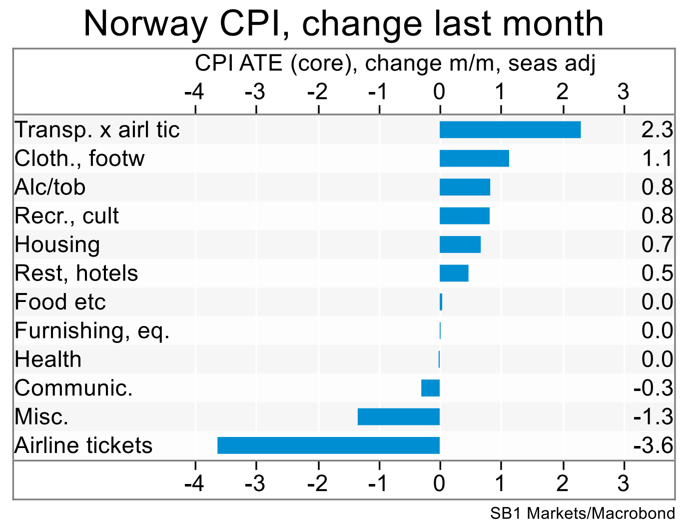
- **Food, non-alc bev.** prices were flat (core, s.a); we expected a 0.2% increase. The annual growth increased by 0.9 pp to 12.4%. The 'real' inflation is far lower, prices were low one year ago
- **Clothing** prices rose 1.1% m/m, and are up 2.9% y/y
- **Housing** (mostly rents) rose 0.7%, well above our forecast, and is up 2.9% y/y – and now clearly accelerating
- **Transport ex. gas & airfare tickets** was rose 2.2% m/m and is up 7.3% y/y, even if the impact of the lift in auto taxes is <u>not</u> included in the core. Auto prices rose 7.2% m/m before a tax adjustment
- **Airline tickets** prices were <u>down</u> by 3.6% m/m and are <u>up</u> 40% y/y, from a very low level last year (due to Covid)
- **Recreation** prices were up 0.8%, and are up 8.1 y/y, due to higher prices on books & newspapers
- **Restaurant/hotel prices** up 0.6% m/m, and 7.7% y/y
- **CPI-ATE** up 0.6% m/m, 6.4% y/y, 0.6 pp above our forecast, 0.3 above consensus and 0.5 pp above NoBa's f'casts
- Prices on **imported goods** rose 0.7%, and are up 7.0% y/y – a substantial contribution to the total (2.6 pp), not due a NOK impact but due to high inflation abroad
- Prices on **domestically produced** goods & services were up 0.5%. The annual rate at 6.4% is remarkably high
- **Electricity (and other heating)** prices <u>declined</u> 10%, we expected .-5% m/m. A further decline in February
- Gasoline/diesel prices were up 3.3% m/m, we expected +4.0%
- … **headline** inflation rose to 7.0%, above both our & consensus expectations, but close to NoBa's 6.9% forecast (which included much higher electricity prices)

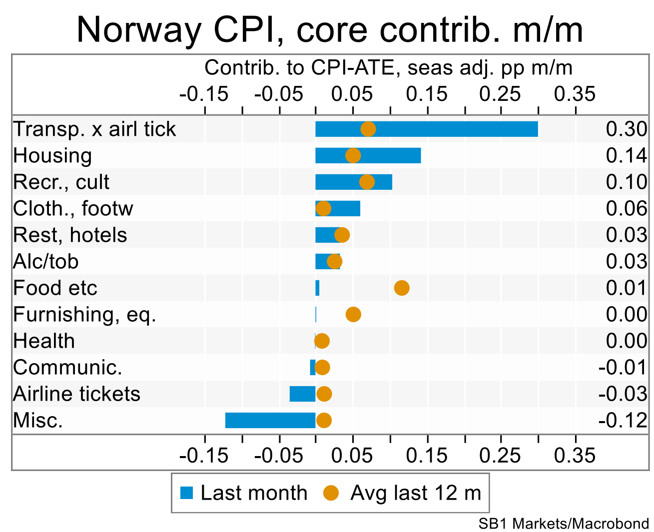
<u>Monthly changes are seasonally adjusted by SB1 Markets</u>. The weighted sum of the components does not necessarily sum exactly up to the total, and deviations m/m and y/y do not necessarily add up. Norges Bank m/m s.a. estimate is implied, calculated by us. Sources: SSB, Norges Bank, SB1 Markets calculations

The list is long, but transport, housing, and recreation contributed in January

Airline ticket prices were down 3.6% m/m

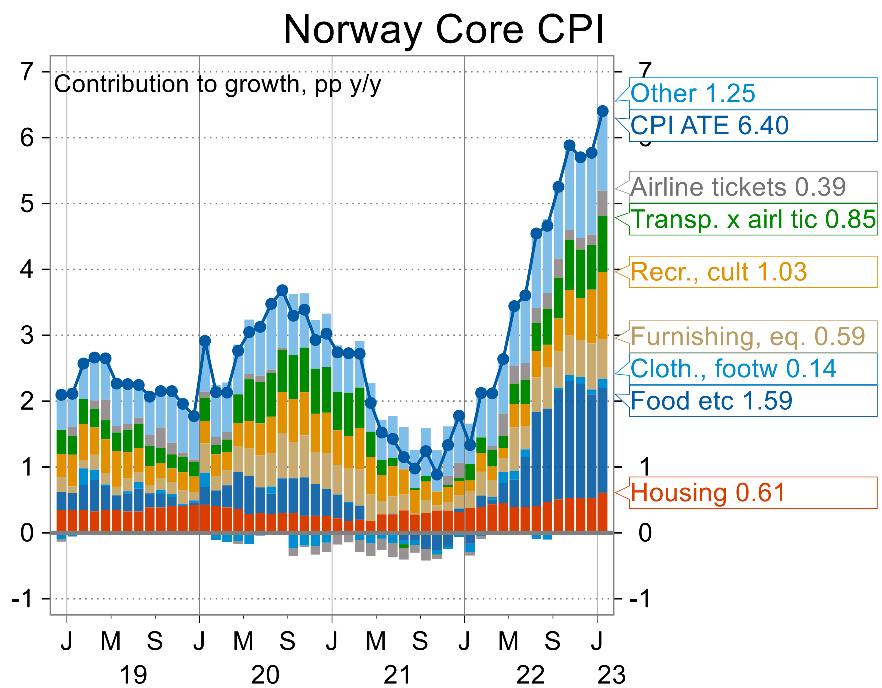




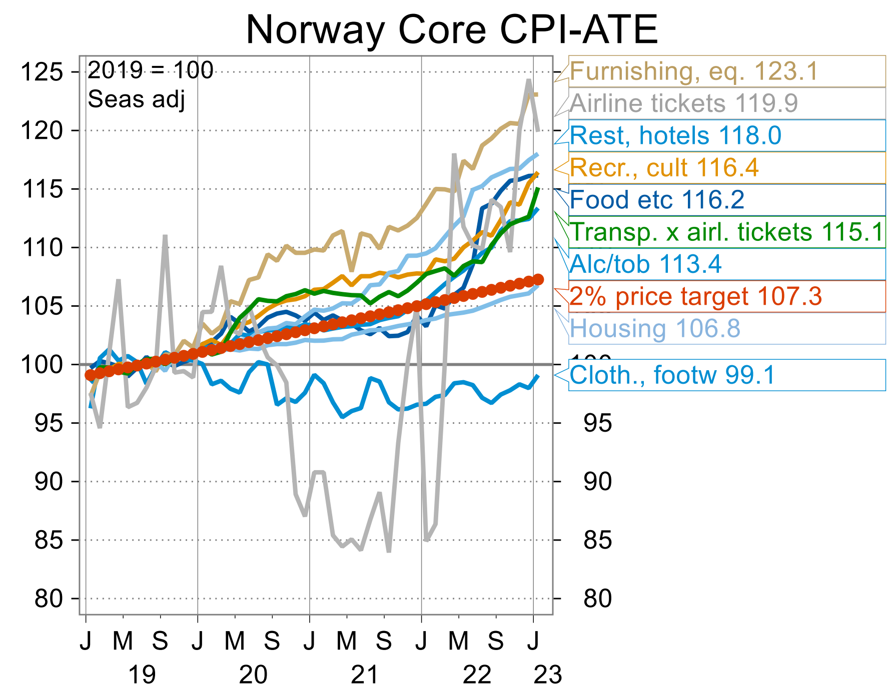


The core rate remains far too high – and it is broad based

And now even rents join the party



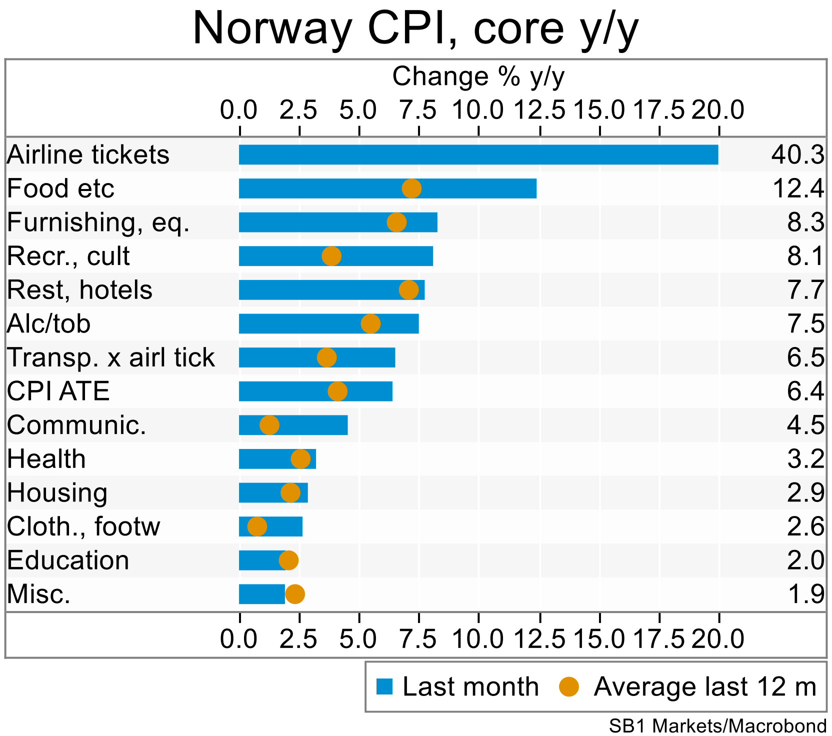
SB1 Markets/Macrobond

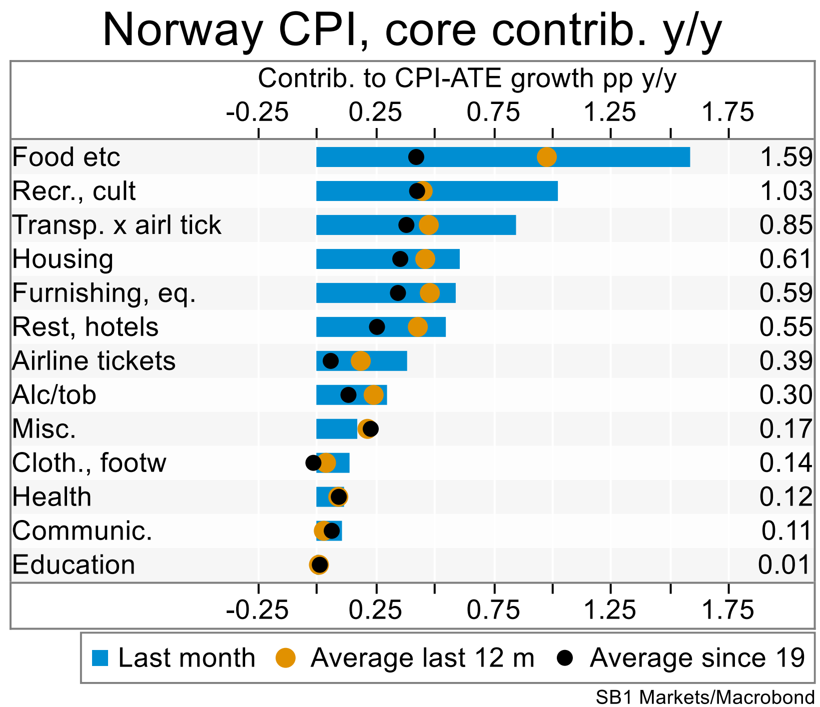


SB1 Markets/Macrobond

12 sectors report core inflation above 2.0%, just 1 is below

Food, transportation, recreation, housing, and furnishing have contributed the most y/y

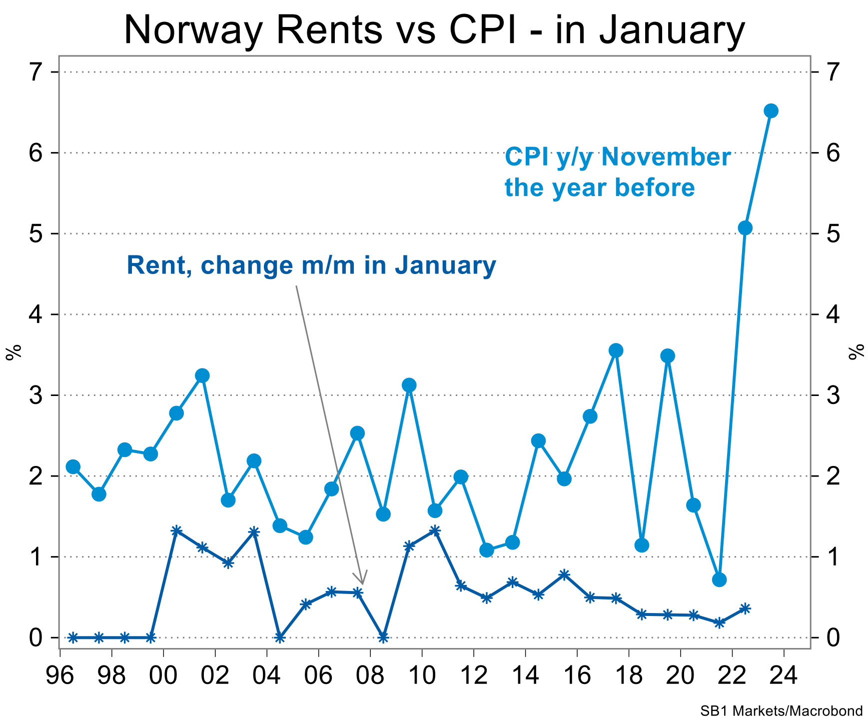


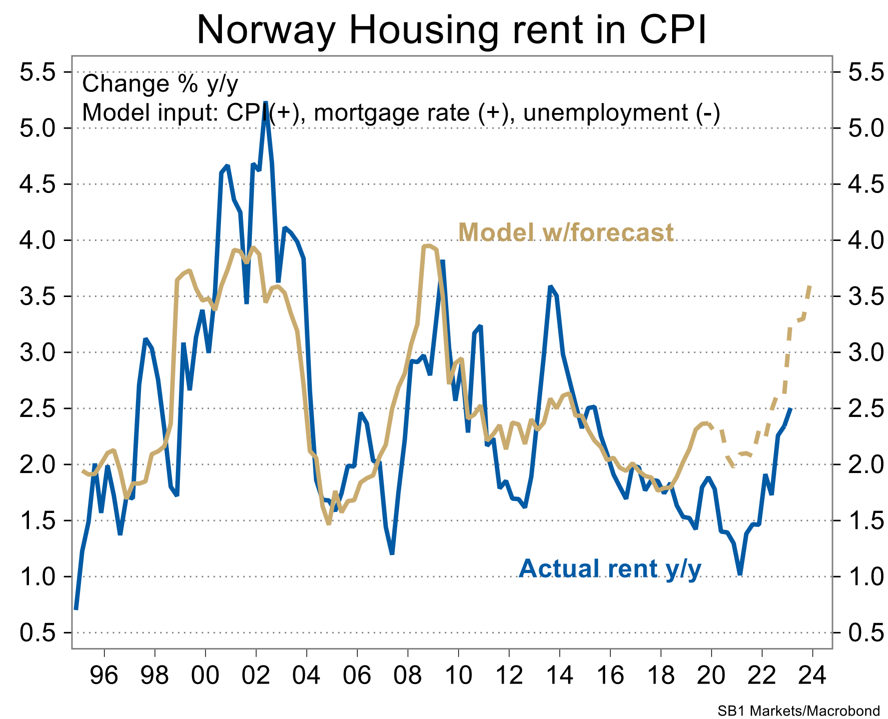


- 91% of sub-components of the CPI are up more than 2%
- **60% are up more than 5%**

Rents, the next shoe top ‘drop’ (or rather ‘take off’?)

Rente rose more than we expected in January, but no chock. But the outlook is not the best



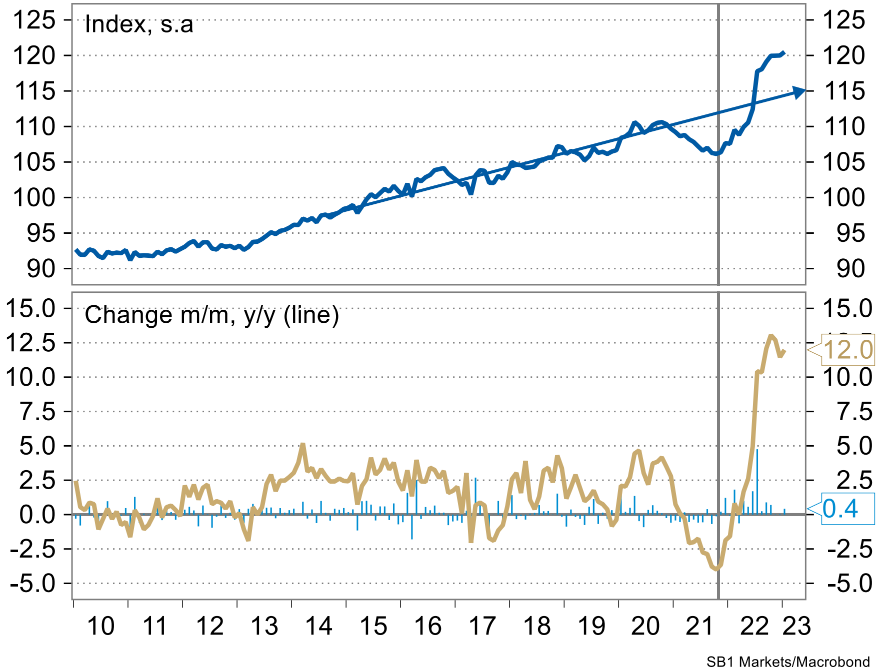


- **There is no correlation** between changes in rents in January, vs the CPI growth in November the year before (the last CPI print available before rents are set in January)
- However, changes in CPI inflation have an **clear impact** on rents, with a 3 – 6 quarters lag. In addition, the mortgage rate has a positive, while the cycle, here the unemployment, has a negative impact
- Given the surge in CPI inflation the recent quarters, it is likely that rent inflation as it is measured in the CPI will accelerate form the present 2.7% y/y growth rate – feeding back to the CPI etc. An increase to 4% rate of rent inflation from the present 2.9% (January, Q4 avg 2.3%) will lift the CPI by 0.2 pp
- In the Norwegian CPI, the rent component is an average of actual, observed rents, and a calculated owner’s equivalent rate. The two are very closely correlated

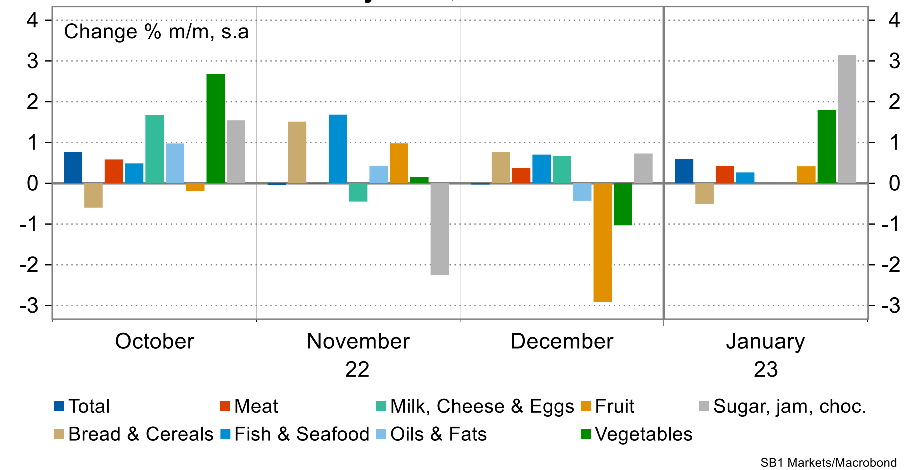
Food prices are up 12.5% y/y, but 'just' around 4% above trend-path

The high y/y food inflation rate is partly due to very low prices in January '22; underlying food inflation is actually falling

Norway CPI, Food & non-alc beverages

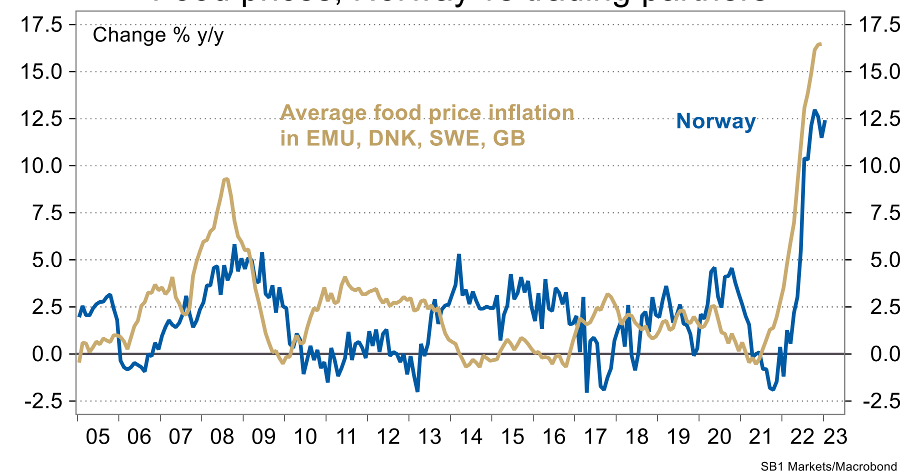


Norway CPI, Food details



- Prices were close to flat m/m in January, and up 12.5% y/y (slightly down from the peak at 13.1%). Bread and cereal prices fell m/m (-0.5%), whereas milk, cheese, eggs, oils & fats were unch.
- Food prices no doubt rose sharply in February, following the semi-annual price negotiations producers/wholesalers and retailers, numerous reports. We assume that the increase will be well above last year's February hikes – and the annual growth rate will climb further and more of the high y/y rate will be 'for real'
- Food prices have increased faster among our northern European neighbours

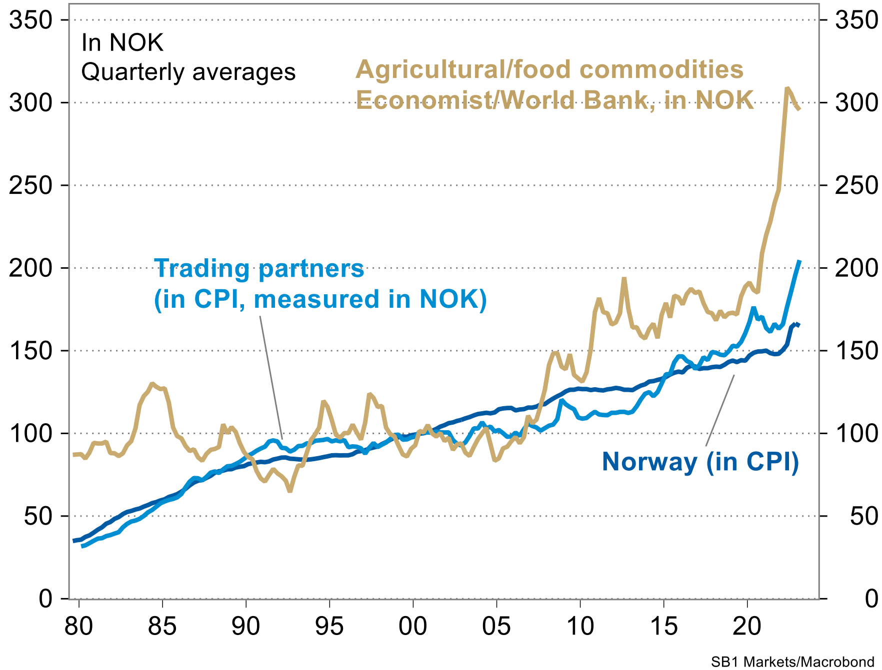
Food prices, Norway vs trading partners



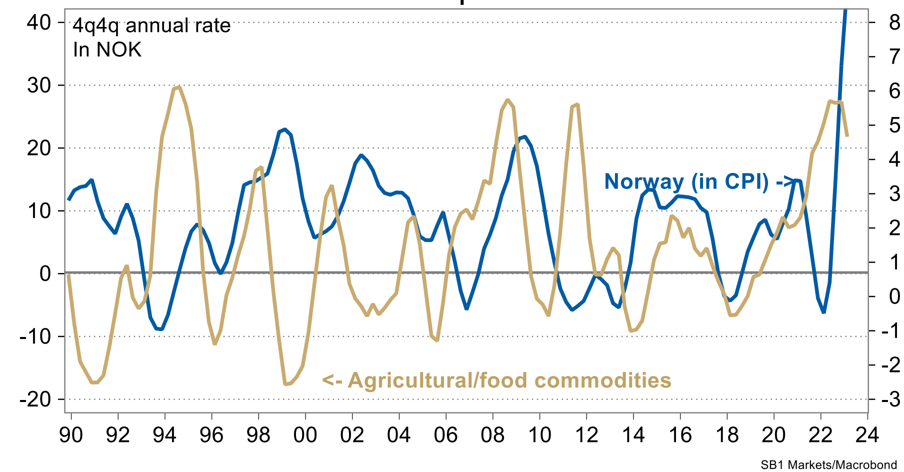
Food commodity prices: Limited correlation to trading partners' food prices

… And no stable correlation to Norwegian food prices (in the CPI). Now, food commodity prices have peaked

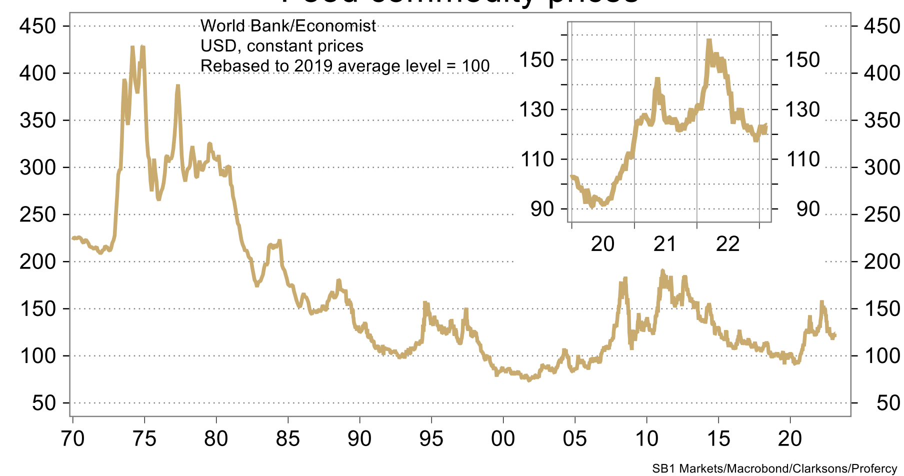
Food prices - commodities vs. in CPI



Food prices



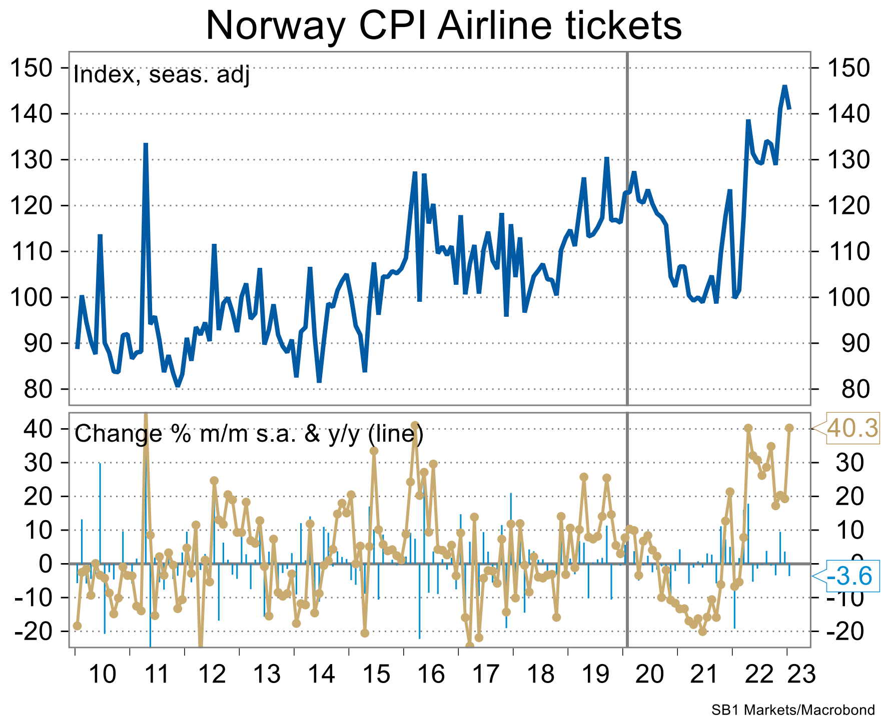
Food commodity prices



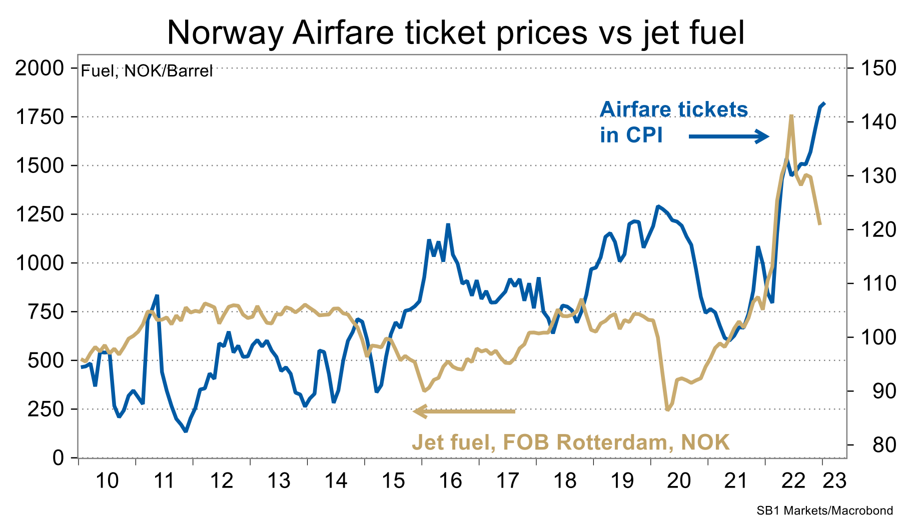
- Agricultural/food commodity prices are sharply up from mid 2020 but have fallen sharply since March in USD terms. In real USD terms, prices are below the past 10 y average. However, measured in NOK, prices are not that low…

Have airfare ticket price inflation peaked?

Prices are still clearly above a long term trend (2¼ % per year) - and should be, given the fuel cost



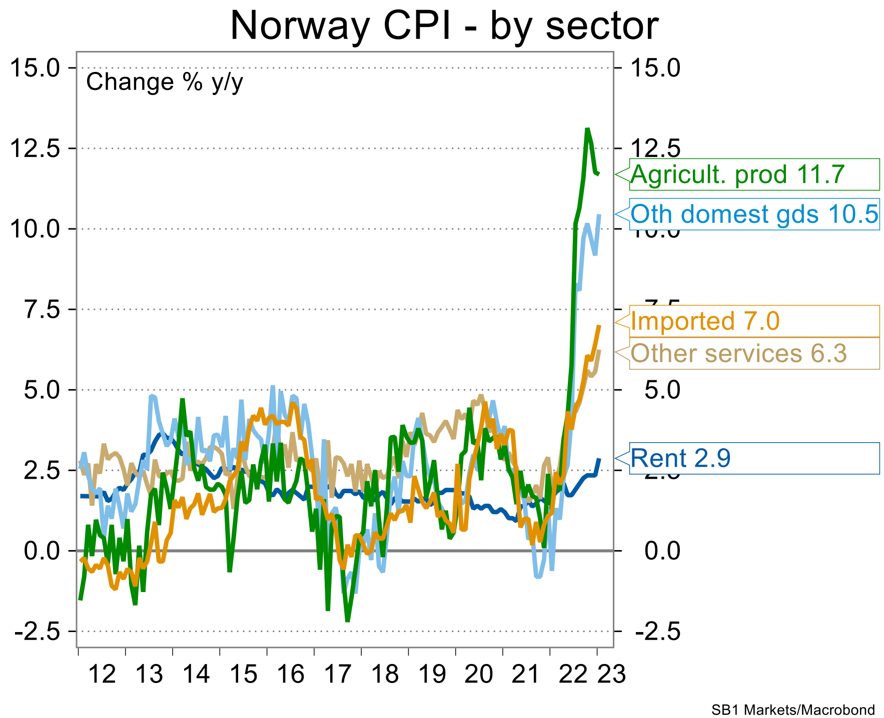
- **Airfare ticket prices** were down 3.6 m/m in January. Prices are up 40.3% y/y, contributing 0.3 pp to the annual core rate
  - Price rose sharply last spring, when corona restrictions were eased, and soon the annual growth rate will very likely decline substantially
- **Prices** are some 10 pp above the pre-corona trend path – which could at least partly be explained by the increase in the fuel cost
- However, there is no historical correlation between ticket prices and the **fuel cost**, check the chart below (and fuel prices have fallen 32% since June)

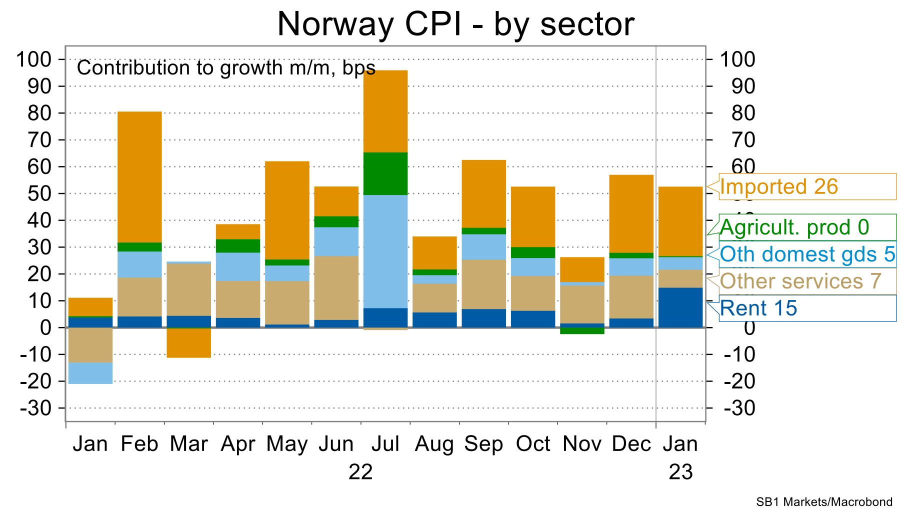


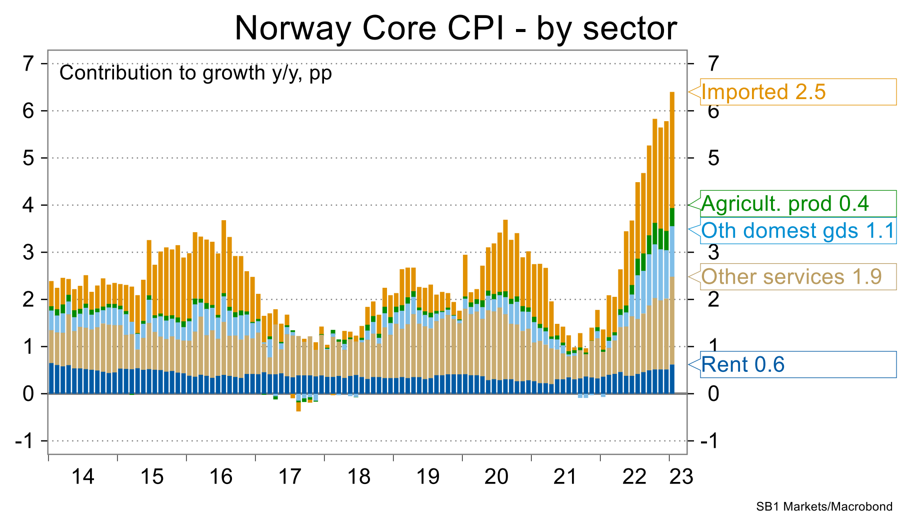
SpareBank 1 MARKETS

Imported goods contributed to half of the January lift in prices

… but domestic goods & services have contributed more recently. Domestic goods up 10.5% y/y, services (x rents) 6.3%



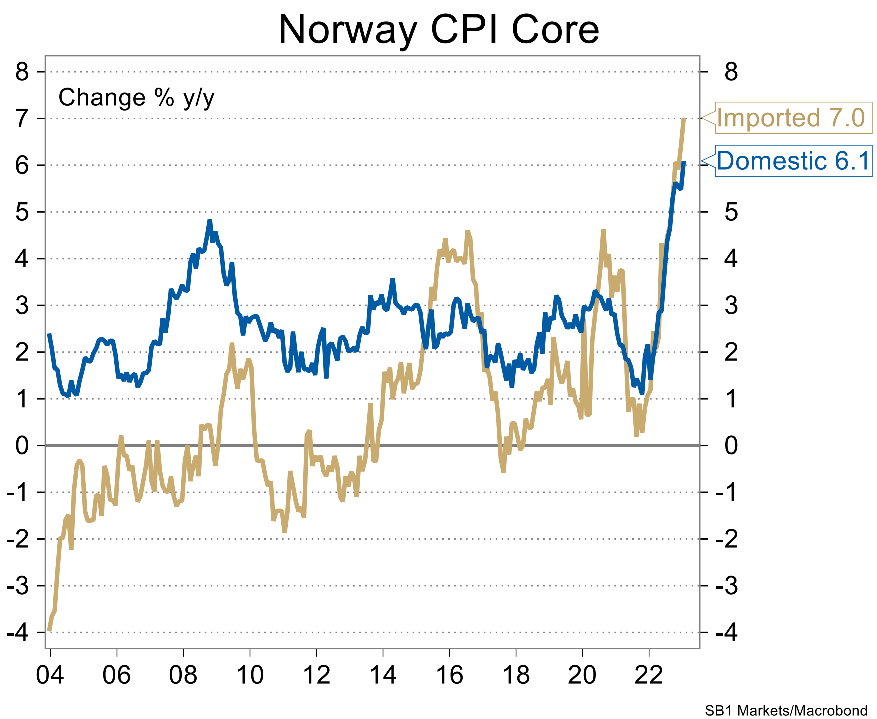


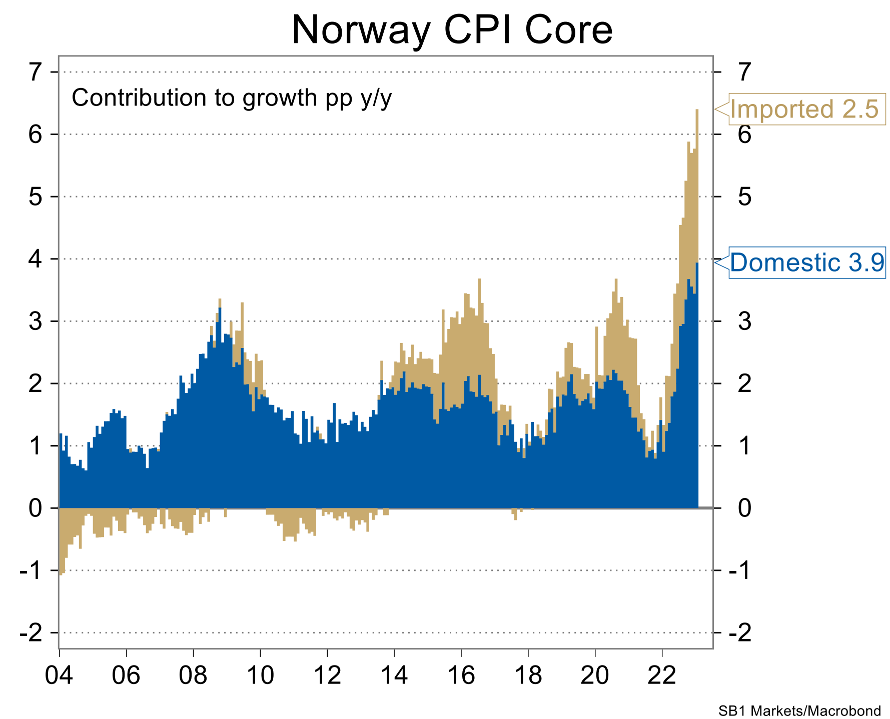


- **Domestic services inflation ex rents** slowed sharply during the corona crisis, and is now climbing faster, up 6.3% y/y, contributing 1.9% to core inflation, with hotels/restaurant and recreation/culture (partly services) contributes the most
- **Domestically produced agricultural products** are up 11.7% y/y, contributing 0.4 pp to the overall core rate
- **Other goods** than agricultural & imported products, that is goods produced in Norway are up 10.5% y/y, and contributed 1.1 pp to the core inflation rate
- **Rent** inflation is accelerating rapidly, now to 2.9%, yielding a 0.6 pp contribution

Both imported goods and domestically produced goods & services contribute

… and the domestic component is by far the largest contributor



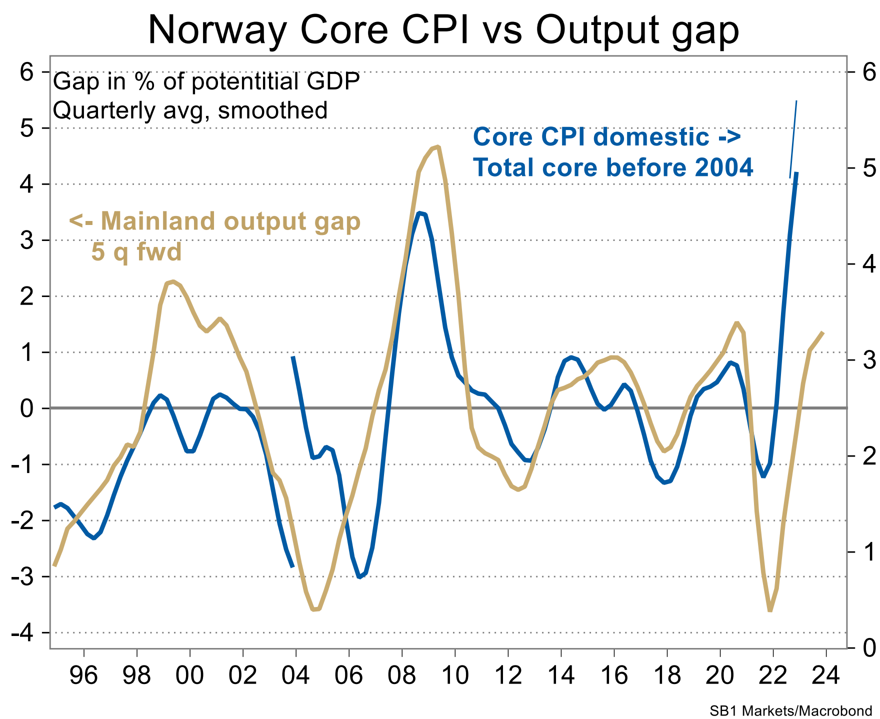


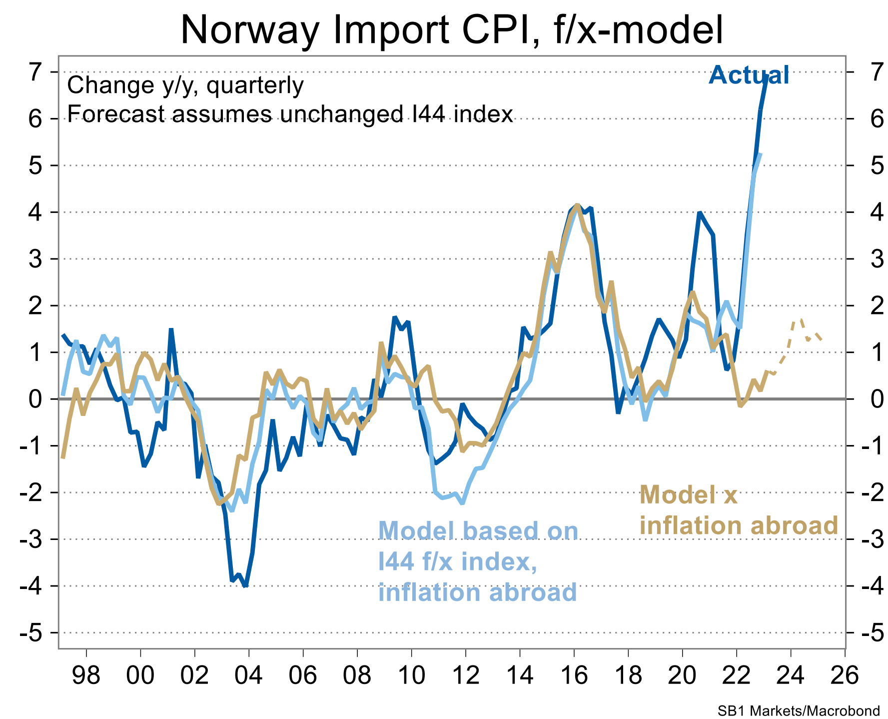
- Of course, most core domestic goods and services (that is ex. energy and taxes) have some imported cost components, as well as energy costs and some are 'regulated vs. the total CPI, like rents. Thus, the core domestic inflation is not entirely due to core domestic factors

SpareBank 1 MARKETS

Domestic inflation up due to a strong domestic economy? At least partly

... but the lift has arrived earlier than normal, and it is larger. 'Imported' inflation is close to the model estimate

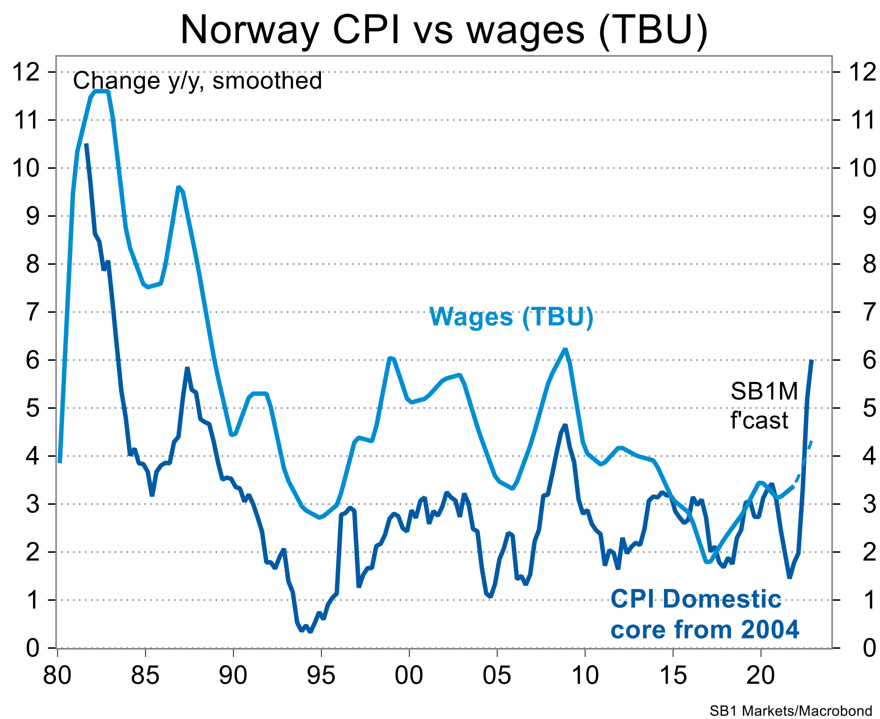


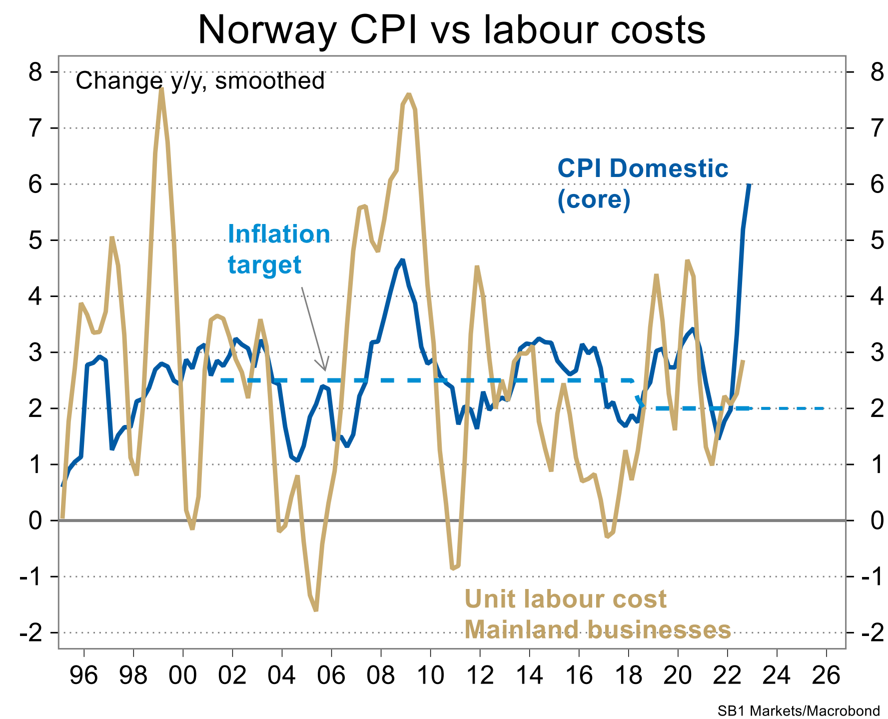


- **… if inflation abroad** is included in the model, together with the exchange rate. If inflation abroad is **not included**, imported inflation is underestimated by more than 6 pp. <u>Thus, the 'weak' NOK is not to blame for higher prices on imported goods, but rather high inflation abroad</u>
- **Labour market data and surveys as well as Norges Banks's estimate,** indicate that the output gap is higher than the mechanic calculation on the chart to the left (that is more of the domestic inflation is 'explained'

Domestic costs: Weak productivity growth is lifting unit labour costs

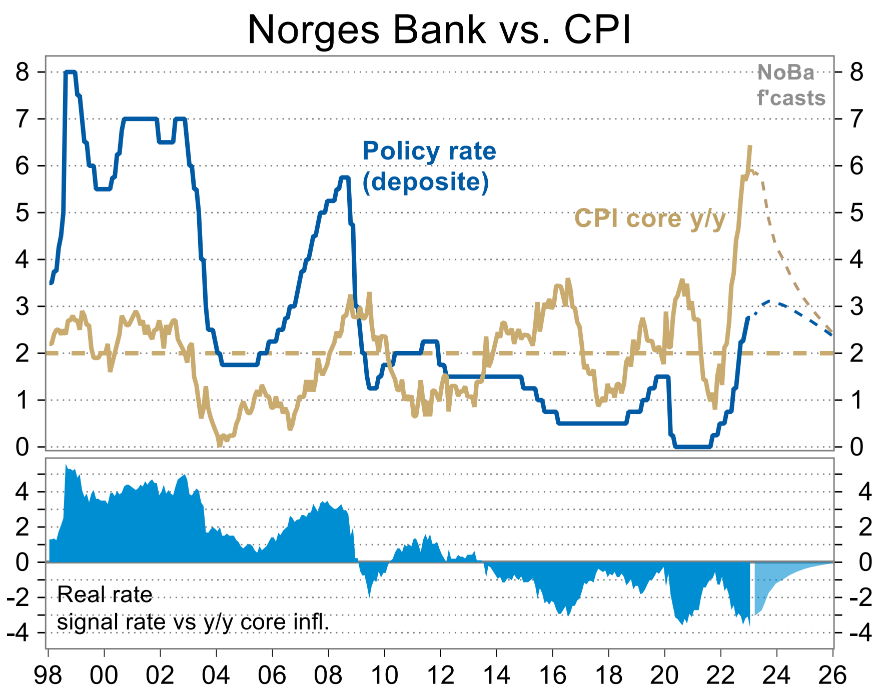
But wage inflation has not accelerated (we thought it would), and ULC is up less than 3% y/y (but that's still rather high)



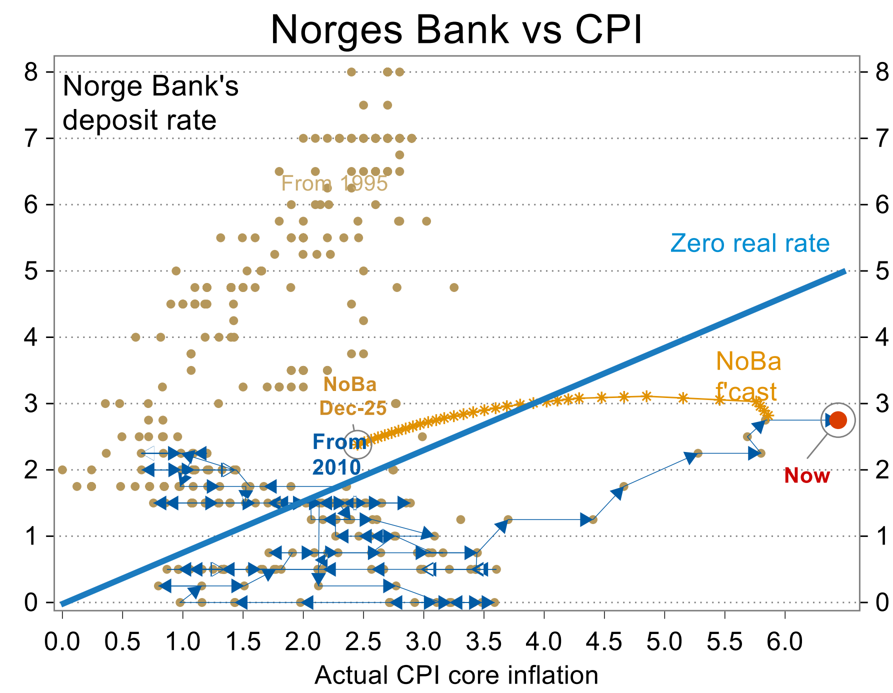


- Unit Labour Cost is us some 3% y/y (new data out this week)
- Wages (full year equivalent) probably grew north of 4% last year, according to SSB (4.4% and 4.6% have both been published)

The lift in the core rate is not good news and it was far above NoBa's estimate



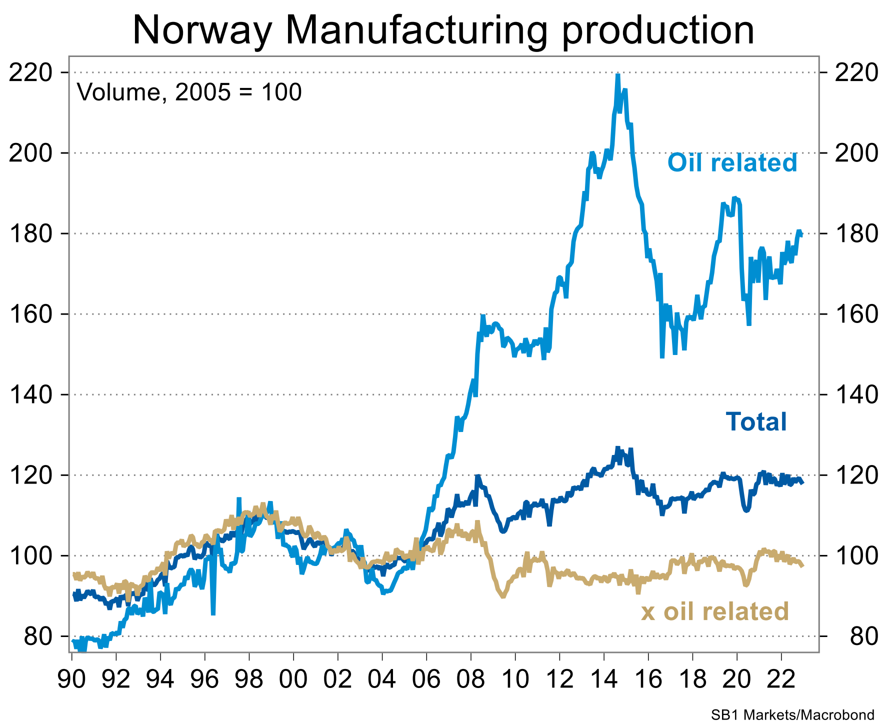
SB1 Markets/Macrobond

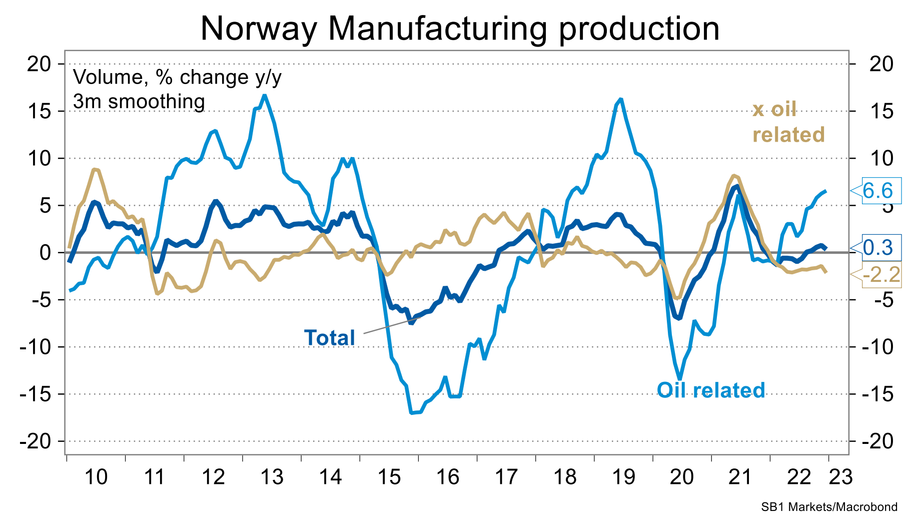


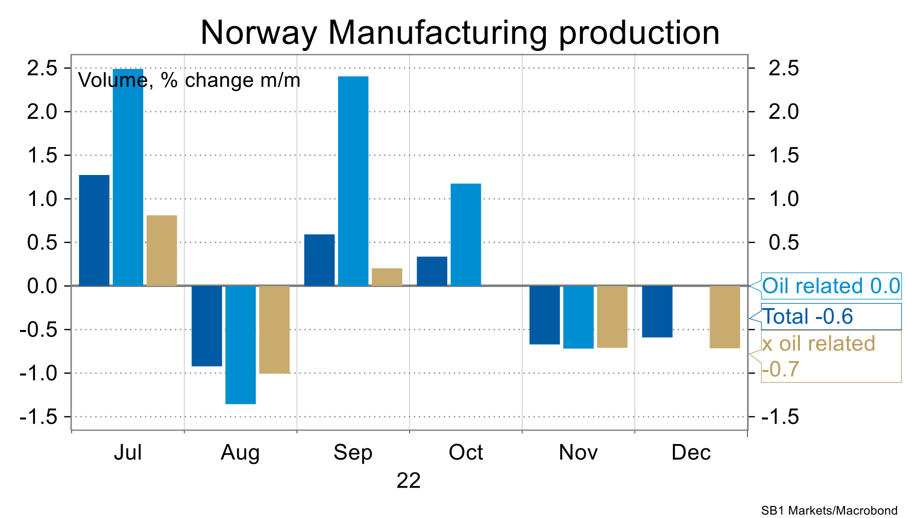
SB1 Markets/Macrobond

Manufacturing production continues to slide

The short-term trend is flat, but surveys are bleak and the risk is to the downside



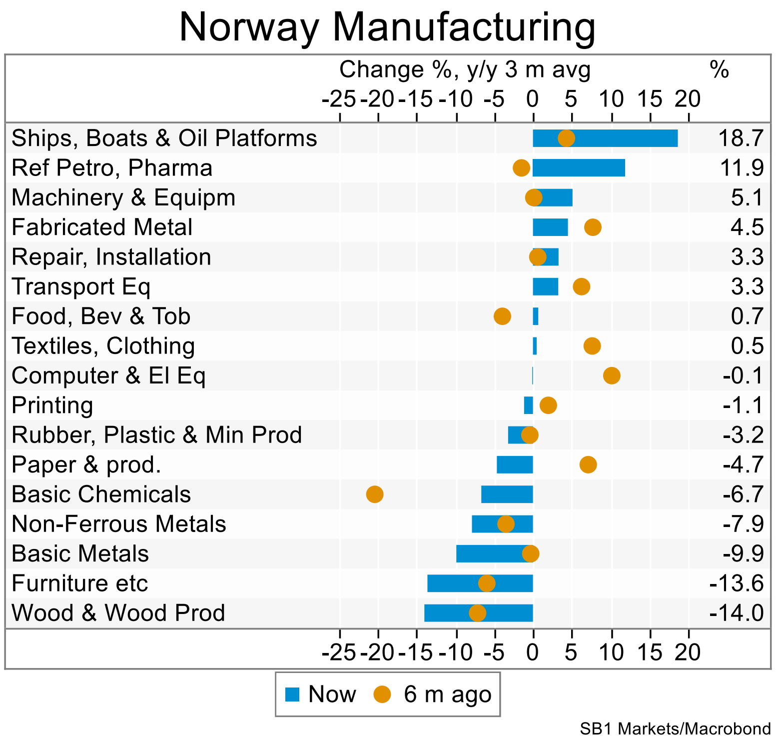


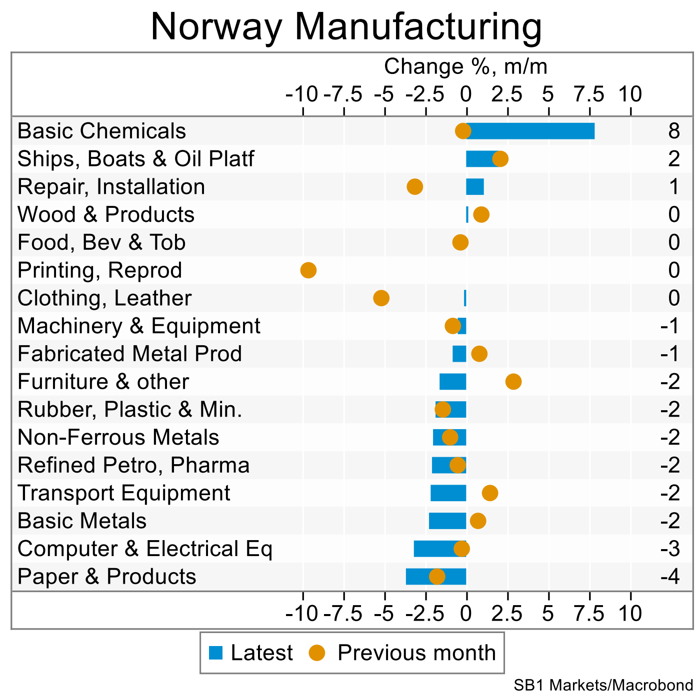


- **Total production** fell for the 2nd month and was down 0.6% in Dec, we expected unch.
- **Oil related manufacturing production** (yards etc) was down unch., but the trend is up, at a 5% – 6% pace
- **Other sectors** reported a 0.7% decrease in activity – and the trend is down, at a 1% rate
- **Manufacturing surveys have turned down since Q4 2021**

Production in most sectors was flat or down in December

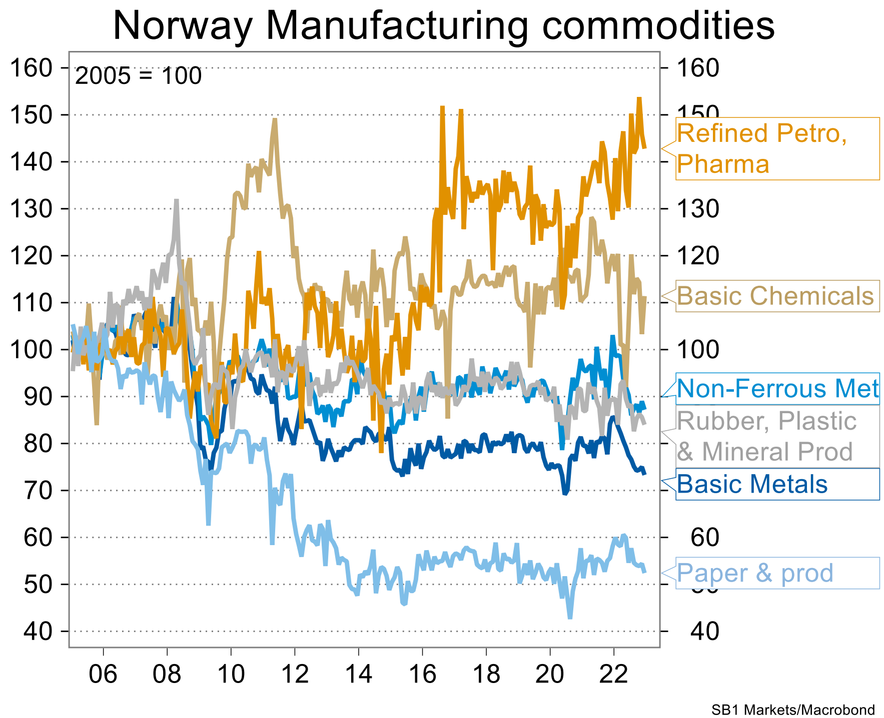
Chemicals, ships/platforms, and repairs were stronger m/m

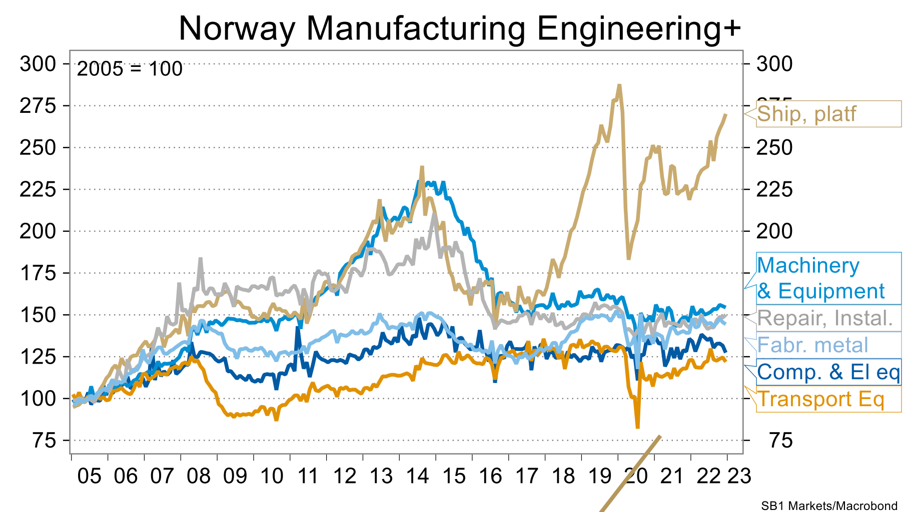


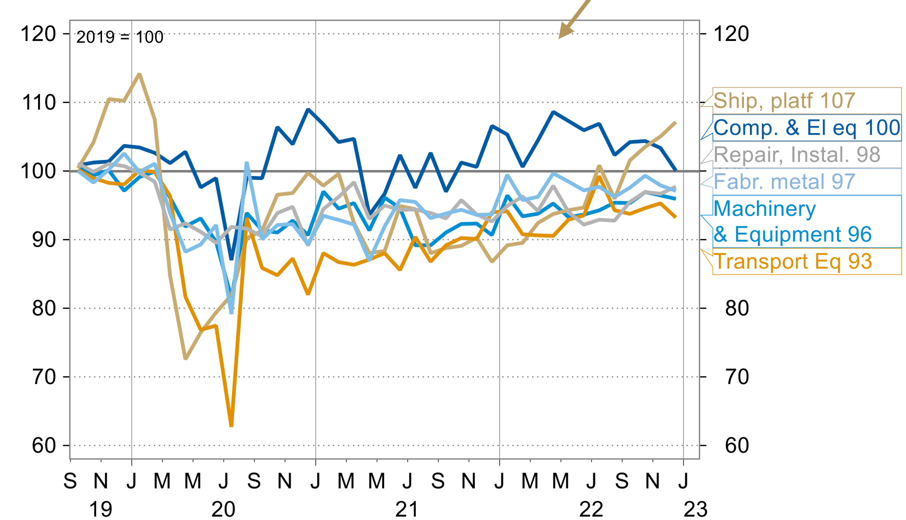


Commodities ex refined petro/pharma are trending down

Both commodities and engineering (with the exception of ships/platforms) were down in December





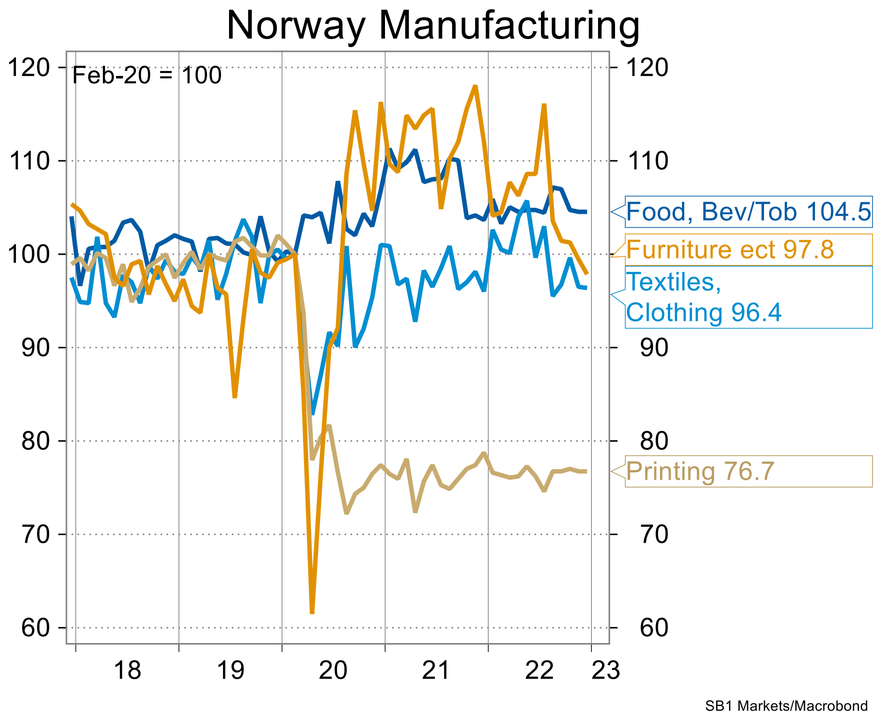


- Even though the longer term picture looks good for pharmaceuticals and refined petro, production was actually down in November and December

SpareBank 1 MARKETS

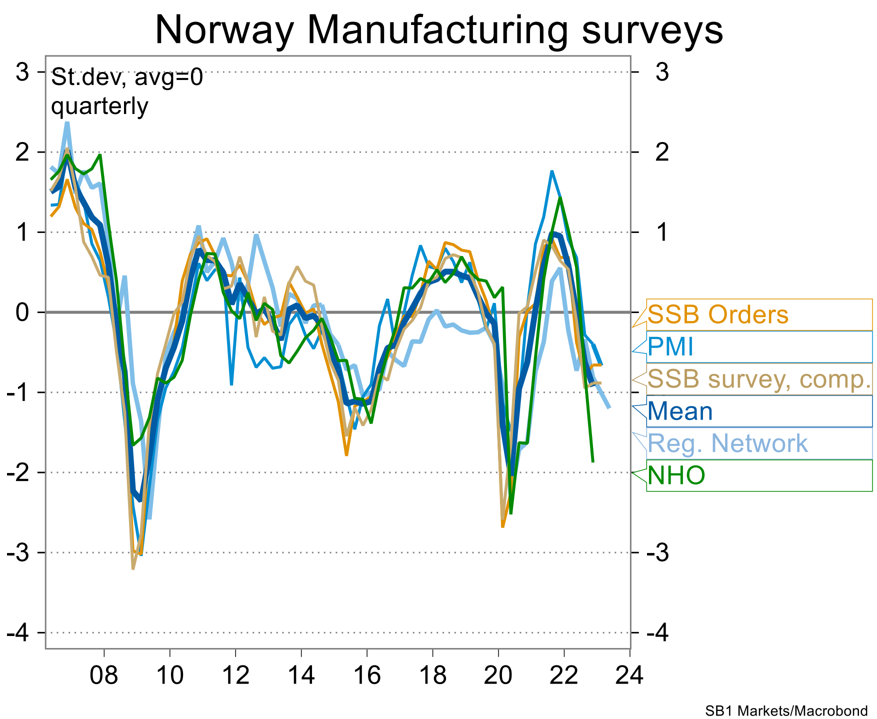
Food production is back to a normal level, and has flattened

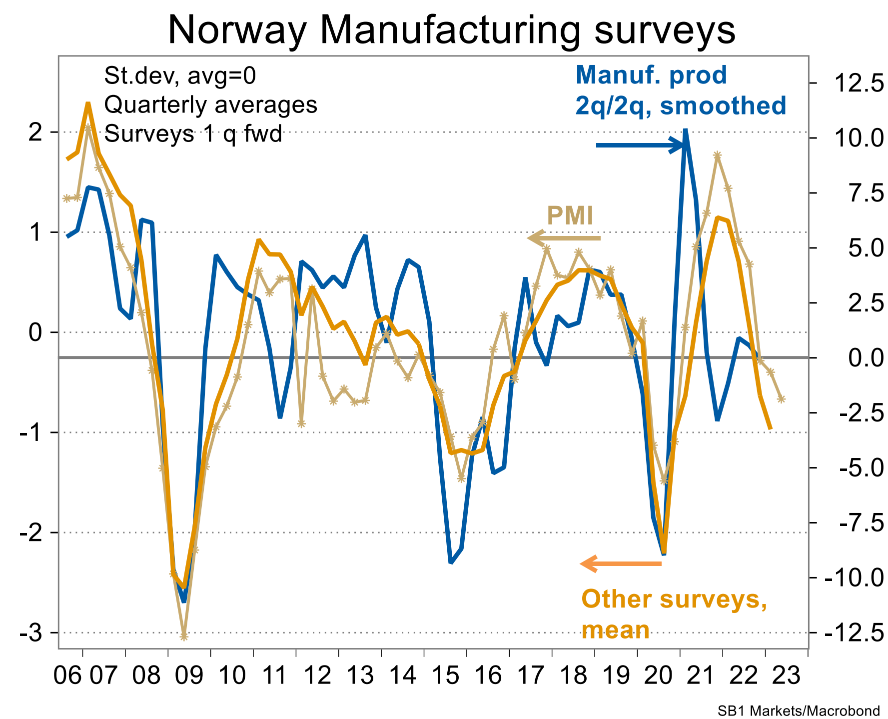
Textile/clothing is now below pre-pandemic level, and so is furniture, and it is trending down



Surveys are signalling a decline in manufacturing prod. (like most places)

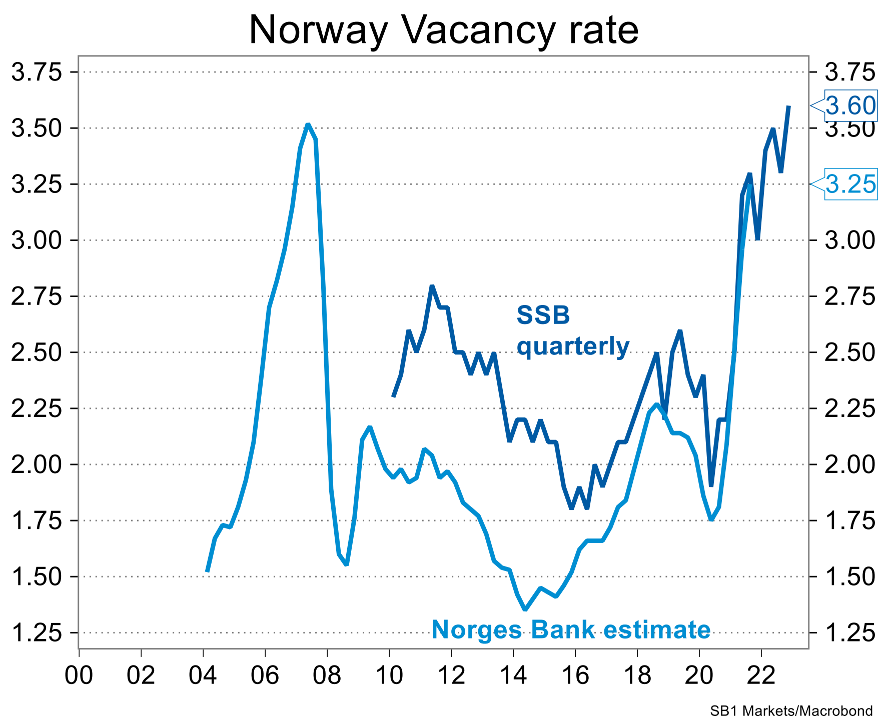
… production has not been that impressive (like most other places) even when surveys were strong

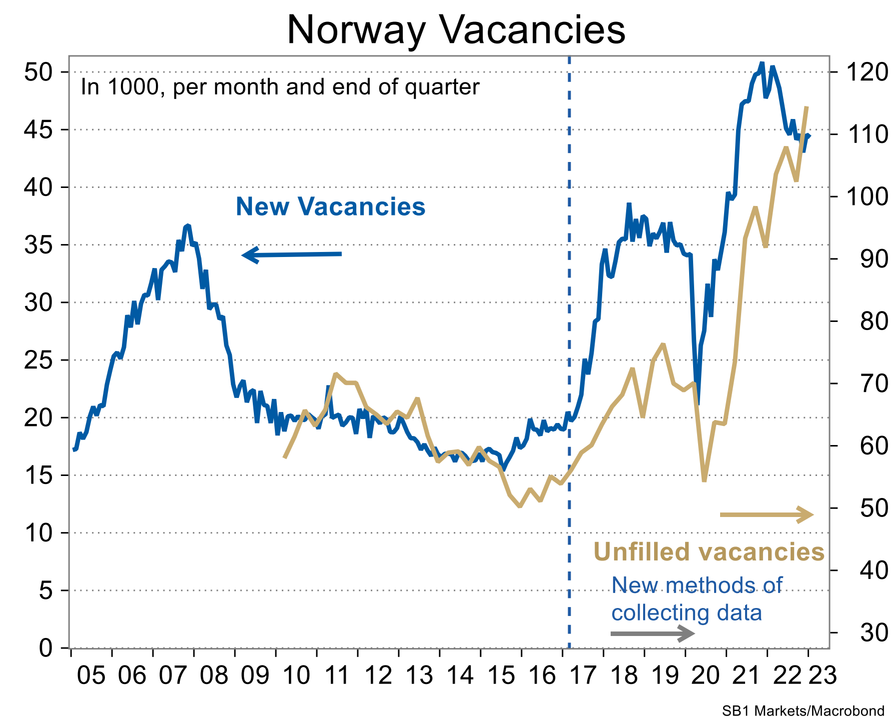




Labour market is skin-tight: The unfilled vacancy rate up 0.3 pp to 3.6% in Q4

The inflow of new vacancies has peaked – but the level increased both in December and January

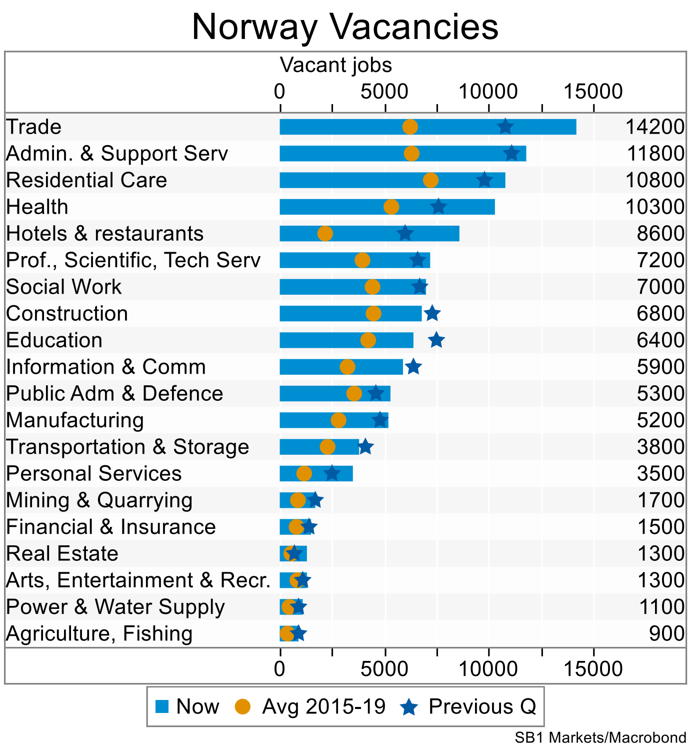


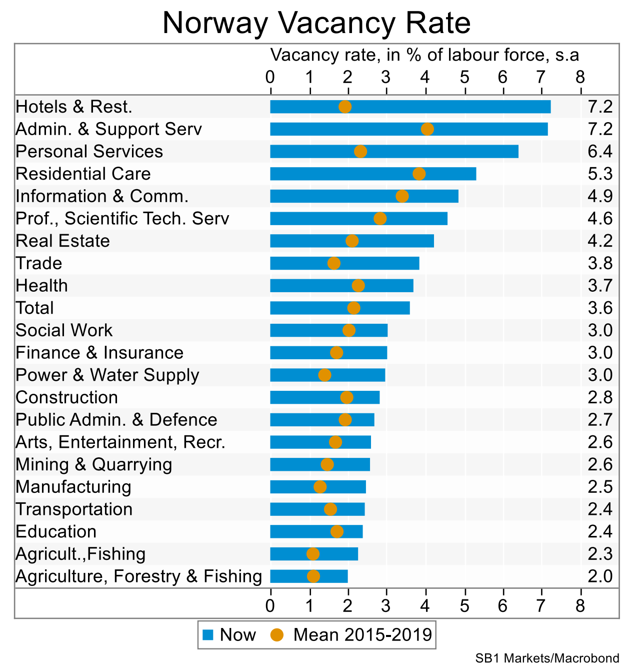


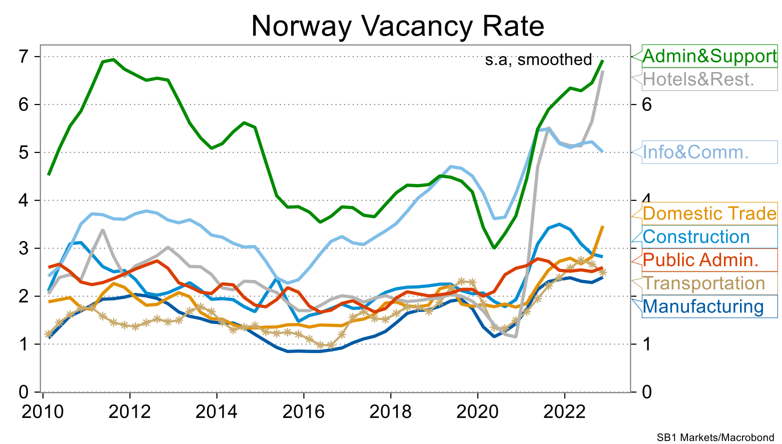
- We expected a decline from a previously reported 3.2% rate to 3.0% - while the Q3 was revised up 0.1 pp to 3.3% and further up to 3.6% in Q4
- The vacancy rate is the highest ever (SSBs stats date back to 2010). Norges Bank has published some data back to 2004, and they are not identical. Thus, it is uncertain whether the current vacancy rate is the hiker or lower than in 2007.
  - Surveys indicate that the rate is lower than at the peak 15 year ago

More vacancies than normal, but most sectors report an increase in Q4

9 sectors down in Q4, 7 sectors report more unfilled vacancies



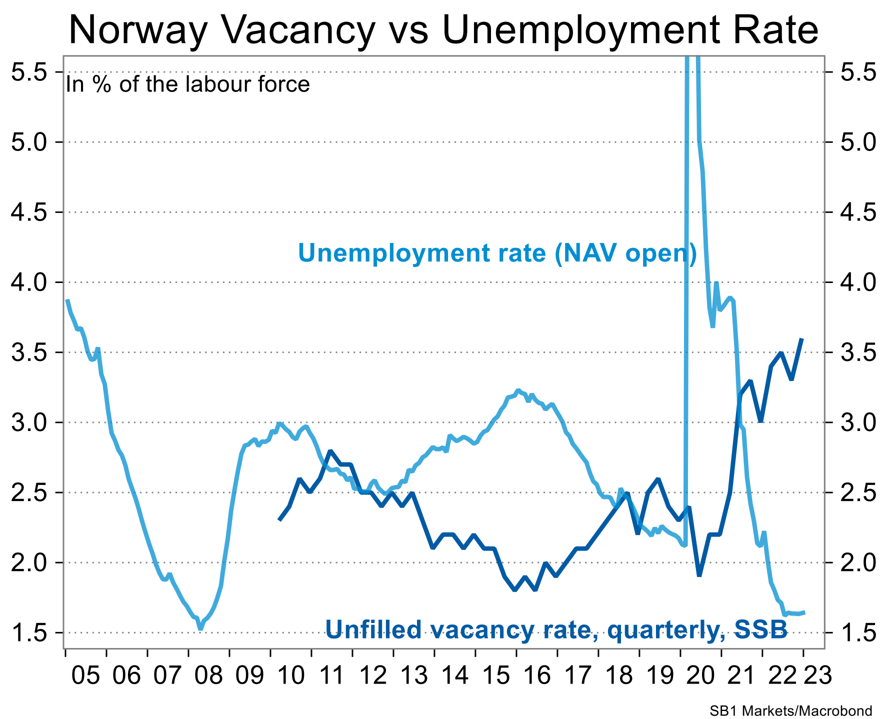


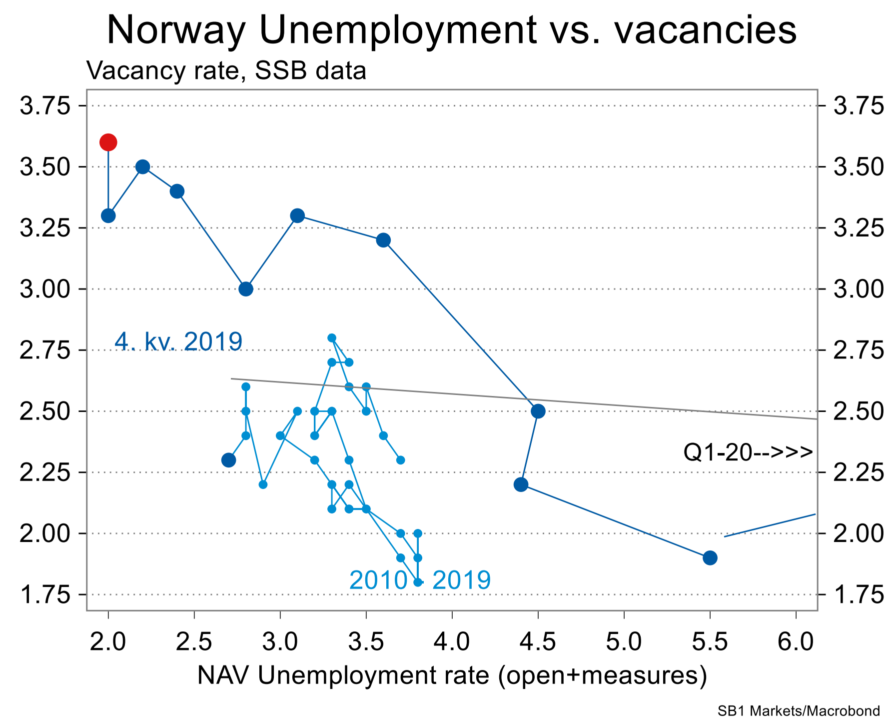


- The highest **no. of vacancies, and the highest vacancy rate** are found in admin. & supportive services, even if activity in the latter is still lower than before the pandemic

'Some' mismatch or just a very tight labour market?

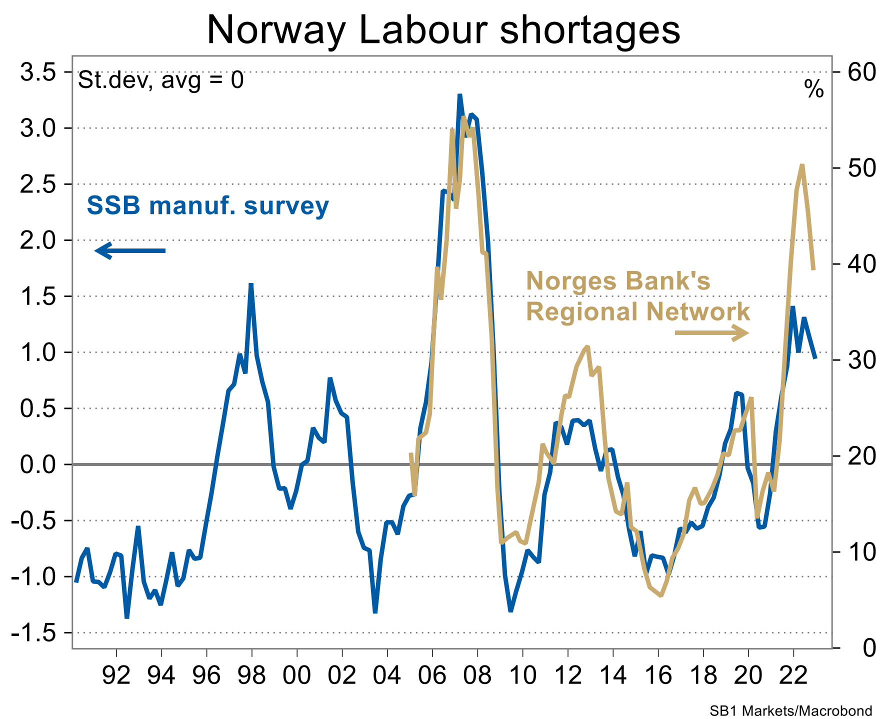
Probably the latter, as the unemployment rate is exceptionally low!

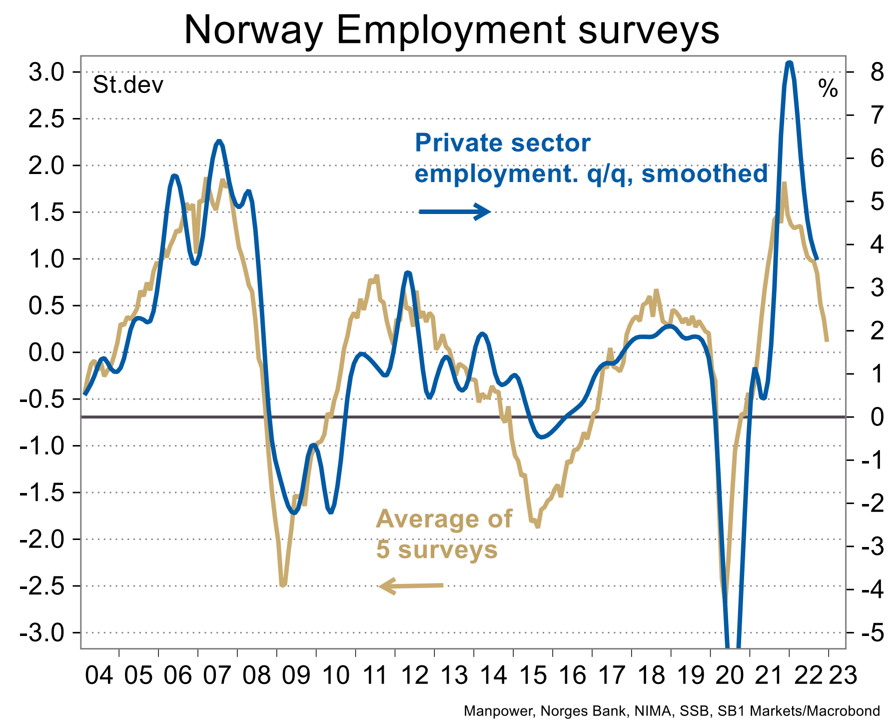




Surveys confirm that the labour market is tight, but easing

Labour shortages were widespread in November (Regional Network), and in Q4 (SSB manuf. survey)

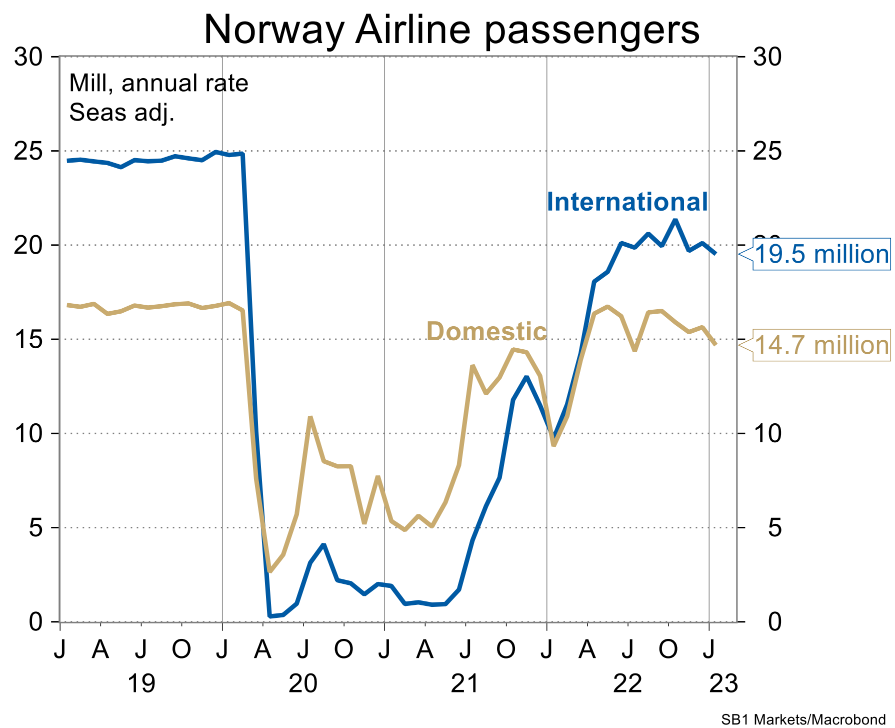


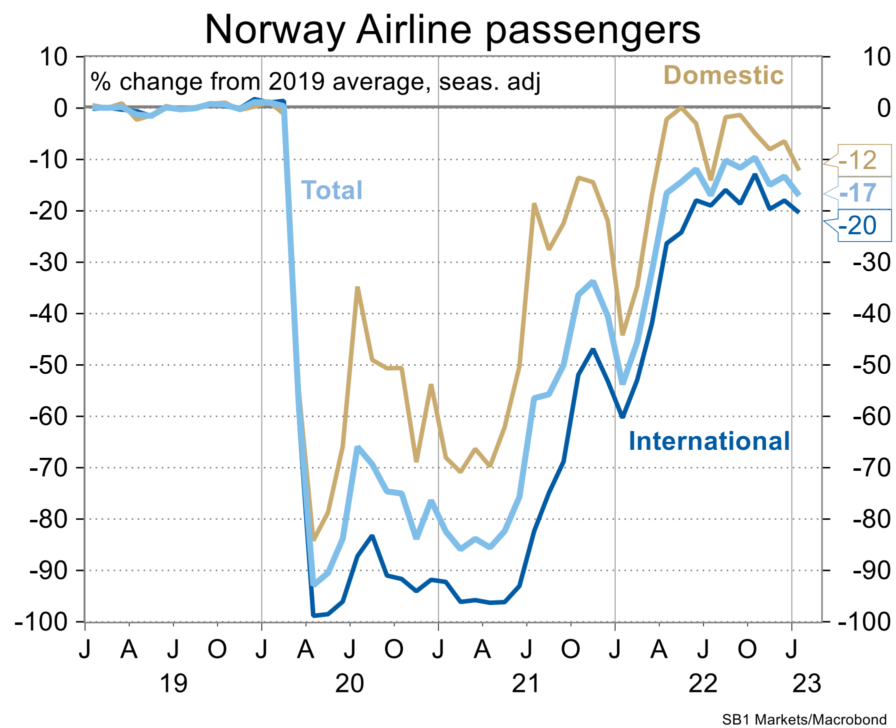


- In addition, employment surveys still report of employment plans equaling close to 2% employment growth

Airline traffic down in January, and the trend is down?

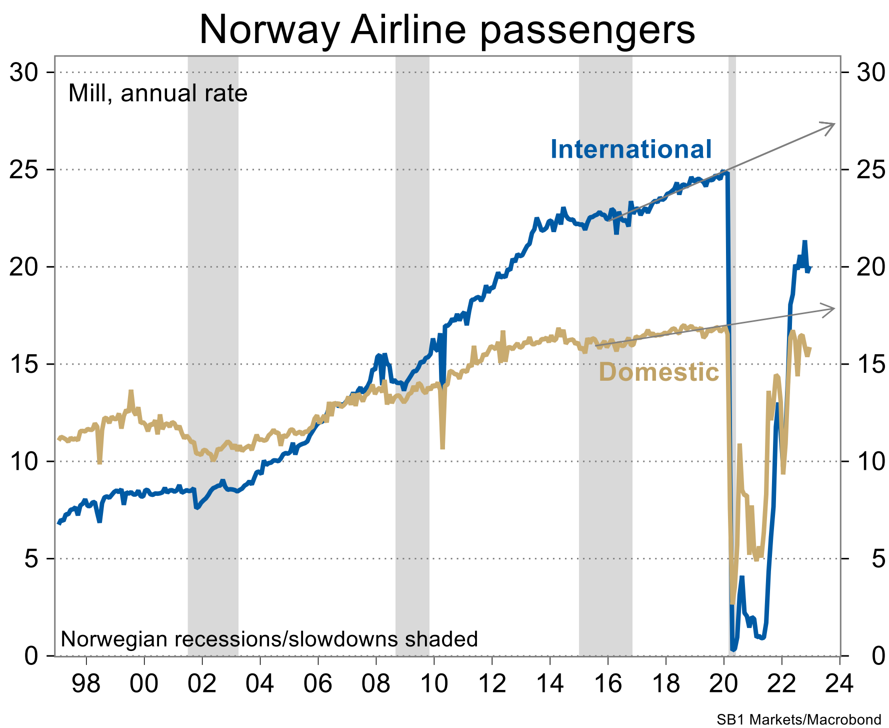
Total no. of passengers down some 17% from the 2019 level. And much lower vs the pre-pandemic trend paths





A Longer term view – this recovery is not complete yet

The uncertainty: How much will business travel behaviour change, permanently?

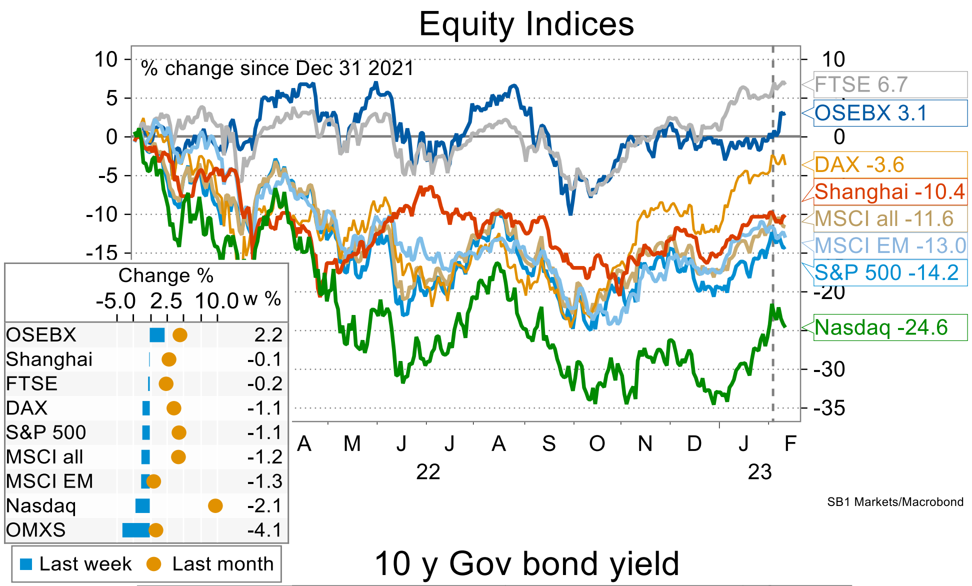


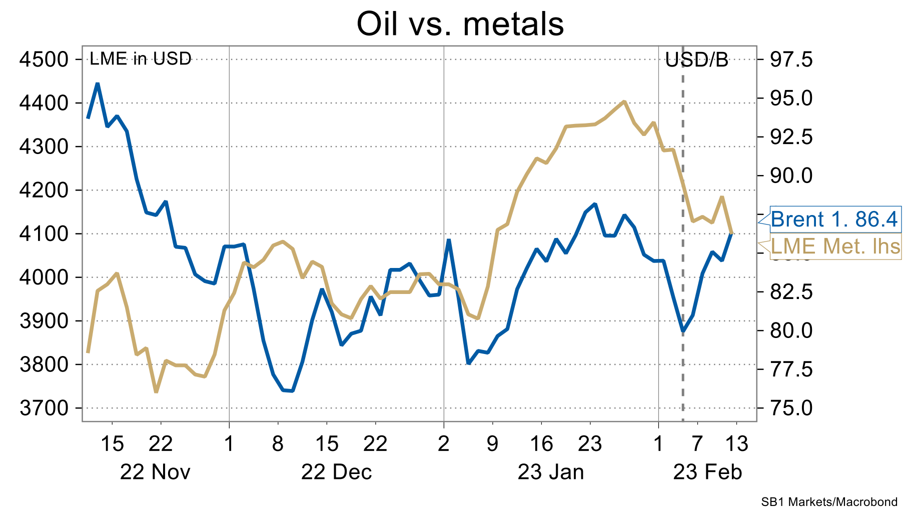
- International traffic is down 25%+ vs. the pre-pandemic trend path – which was much lower than the pre-2014 growth path
- Domestic traffic was not growing that fast during the 10 years before the pandemic – and the shortfall vs. this trend is less than 10%

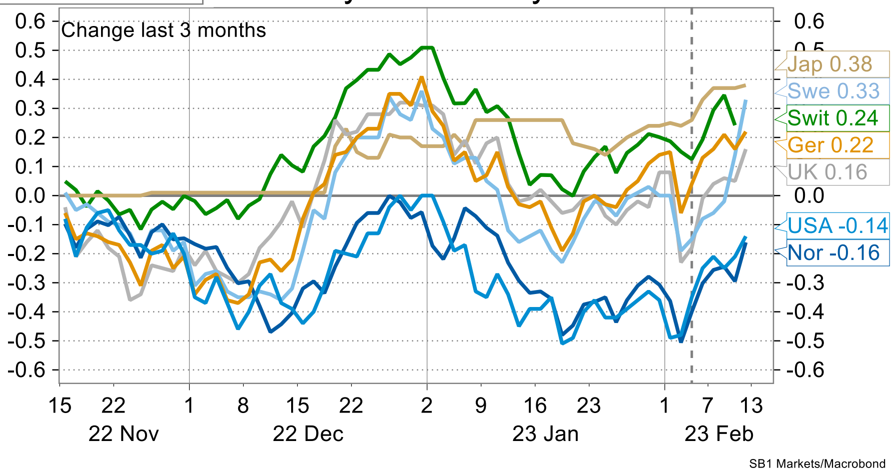
Highlights
The world around us
The Norwegian economy
Market charts & comments

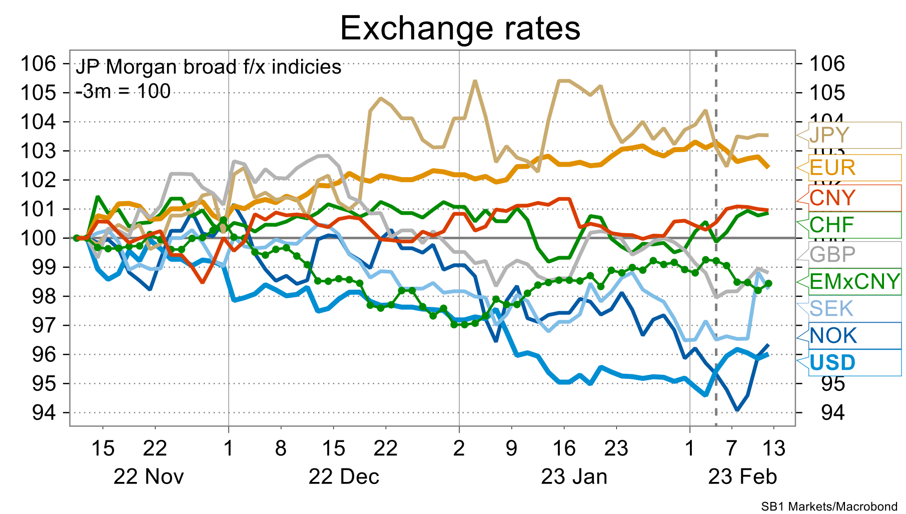
Risk off, equities down across the board (except for Oslo). Bond yields up

USD, NOK & SEK stronger. Oil up and metals down





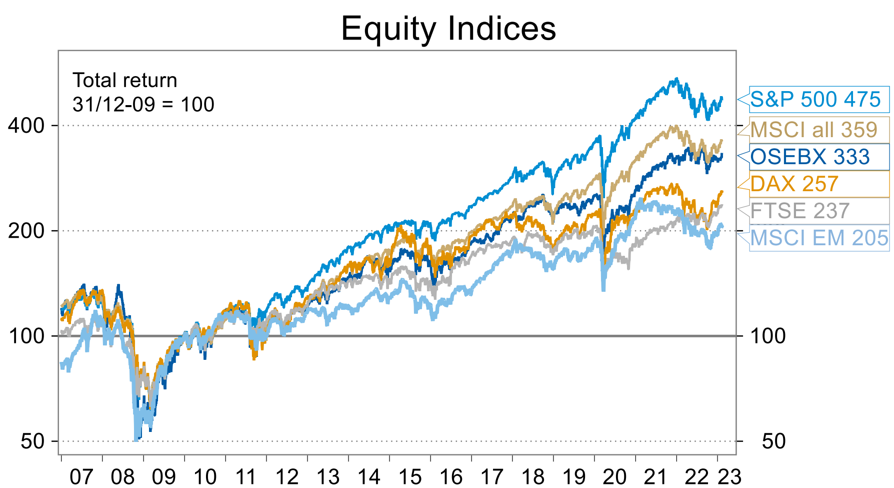


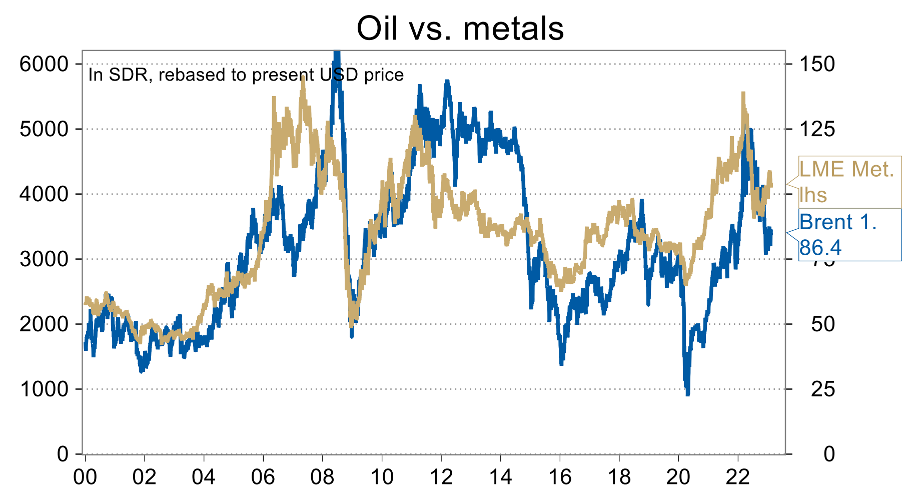


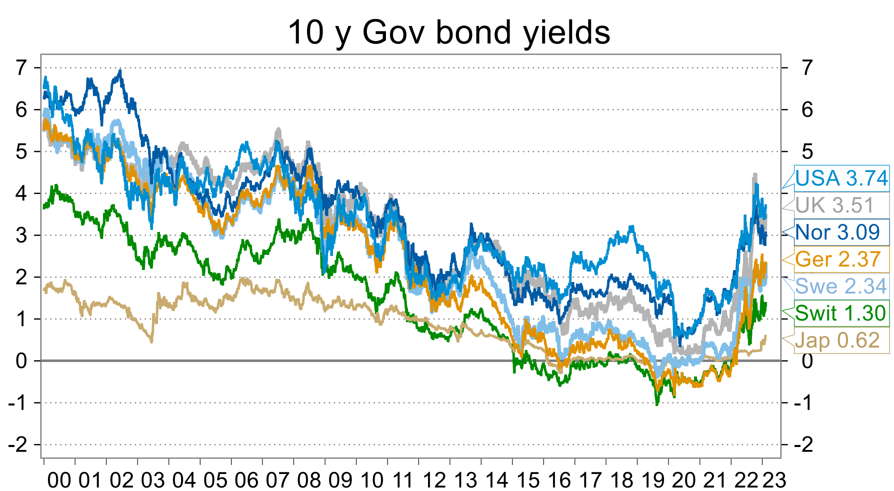
SpareBank 1 MARKETS

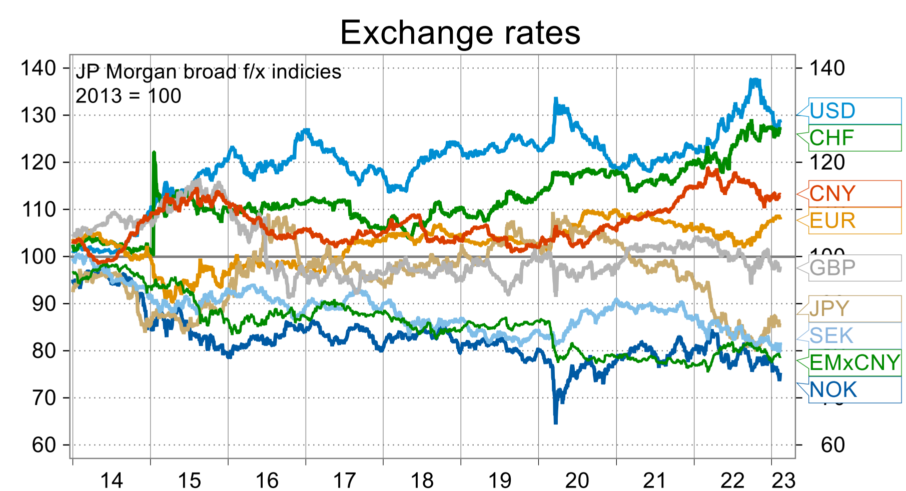
The long-term picture: Turning points? Equites on the way up again?

… together with commodity prices, and bond yields are well down from the peak, and the USD has turned south?



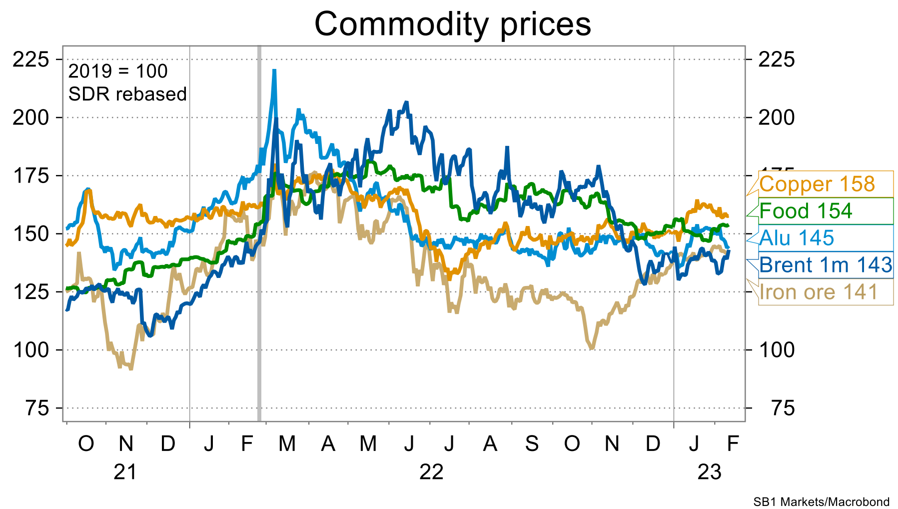


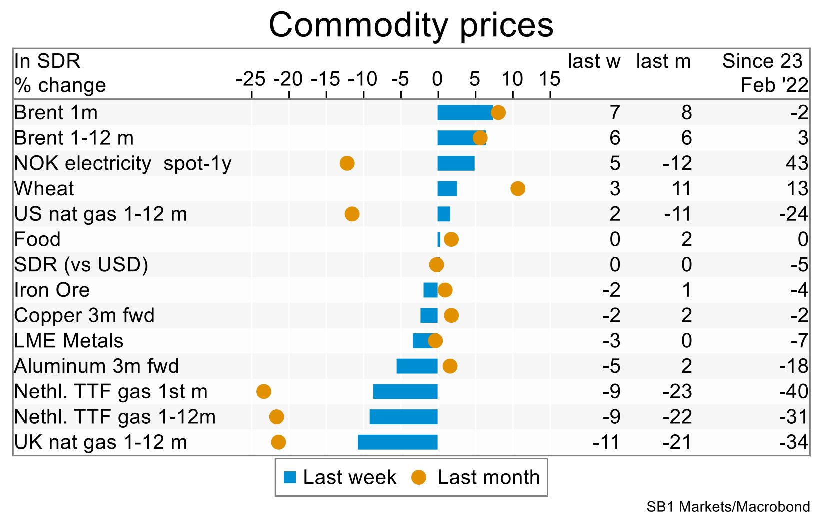




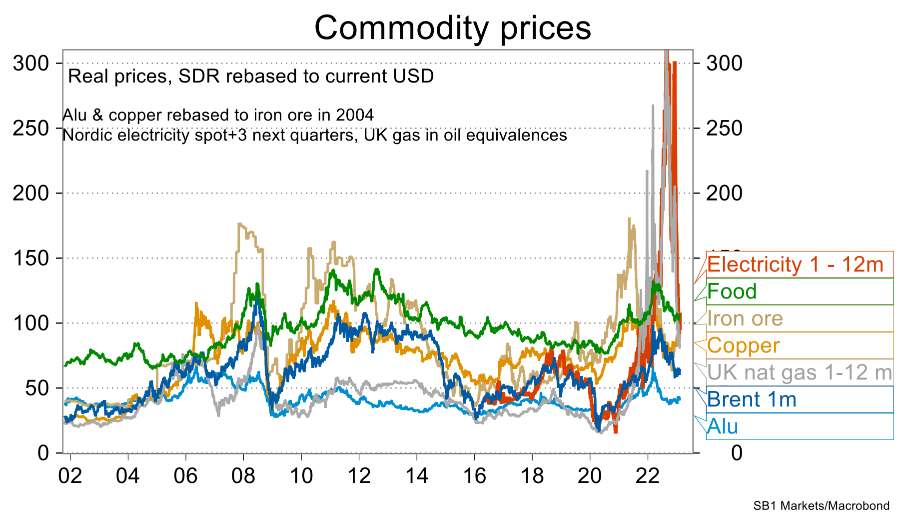
European energy prices lower. Brent and NOK electricity prices higher

Metals, iron ore were down on the week. Food prices have flattened





In SDR % change	last w	last m	Since 23 Feb '22
Brent 1m	7	8	-2
Brent 1-12 m	6	6	3
NOK electricity spot-1y	5	-12	43
Wheat	3	11	13
US nat gas 1-12 m	2	-11	-24
Food	0	2	0
SDR (vs USD)	0	0	-5
Iron Ore	-2	1	-4
Copper 3m fwd	-2	2	-2
LME Metals	-3	0	-7
Aluminum 3m fwd	-5	2	-18
Nethl. TTF gas 1st m	-9	-23	-40
Nethl. TTF gas 1-12m	-9	-22	-31
UK nat gas 1-12 m	-11	-21	-34

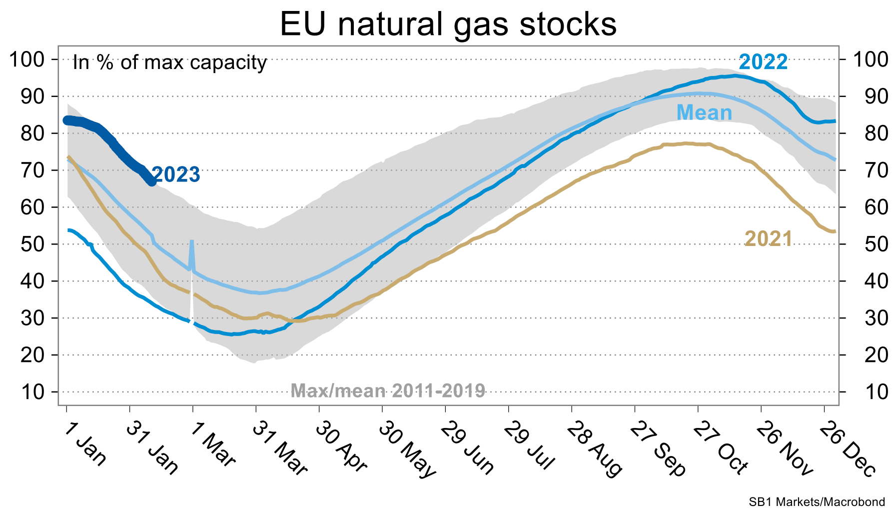


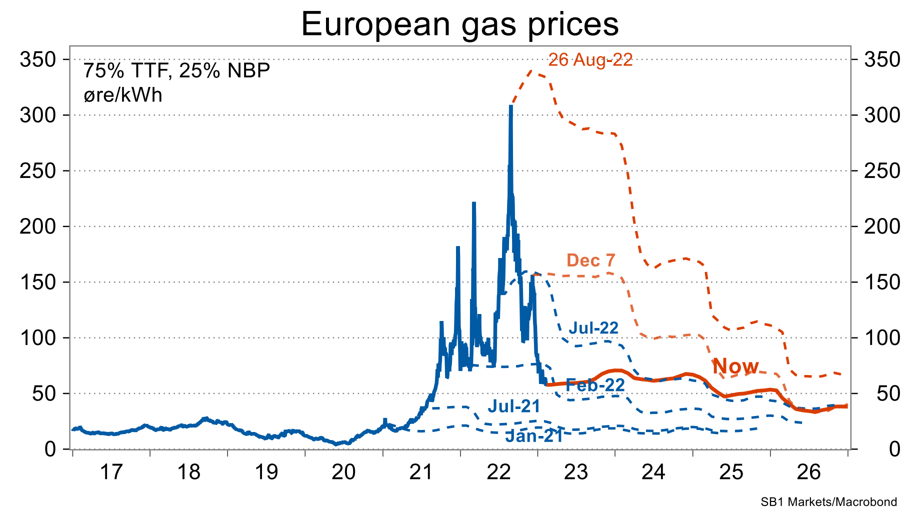
Last week – prices in SDR

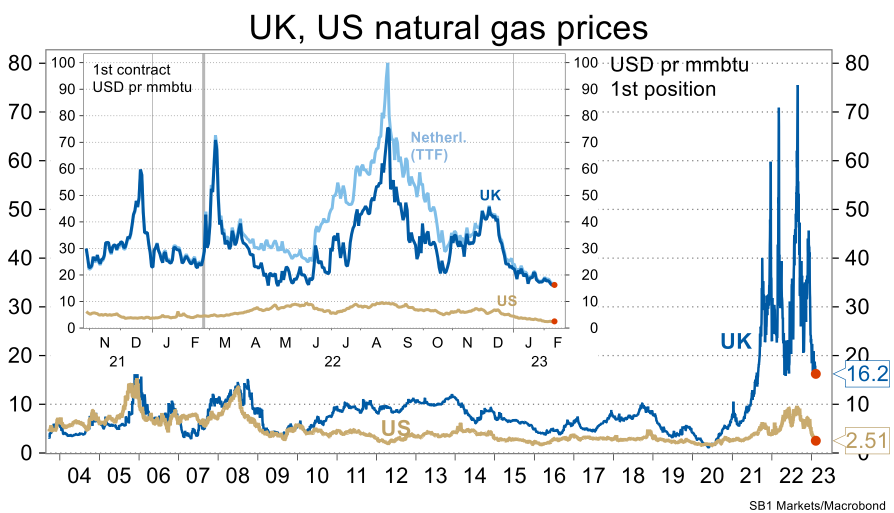
- **Oil prices** rose 6 – 7%
- **European natural gas** prices were down 9%-11% - and are on 'low' end
- **Iron ore** prices fell 2% last week after increasing in the weeks prior, and prices are still up 1% over the last month
- **Food prices** were flat, but are trending down

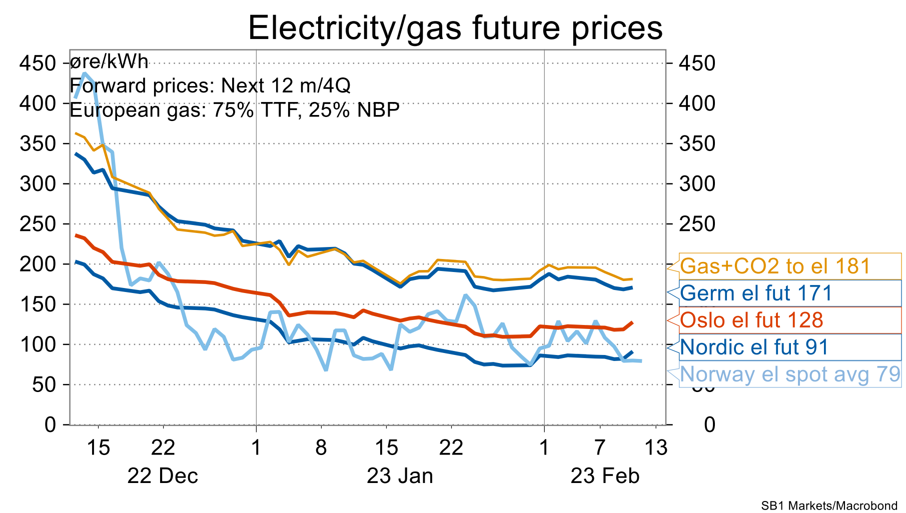
European gas stocks the highest ever, and gas prices were down 9%-11%

US gas prices have fallen to a low level (but were up last week) – and are far lower than in Europe, of course





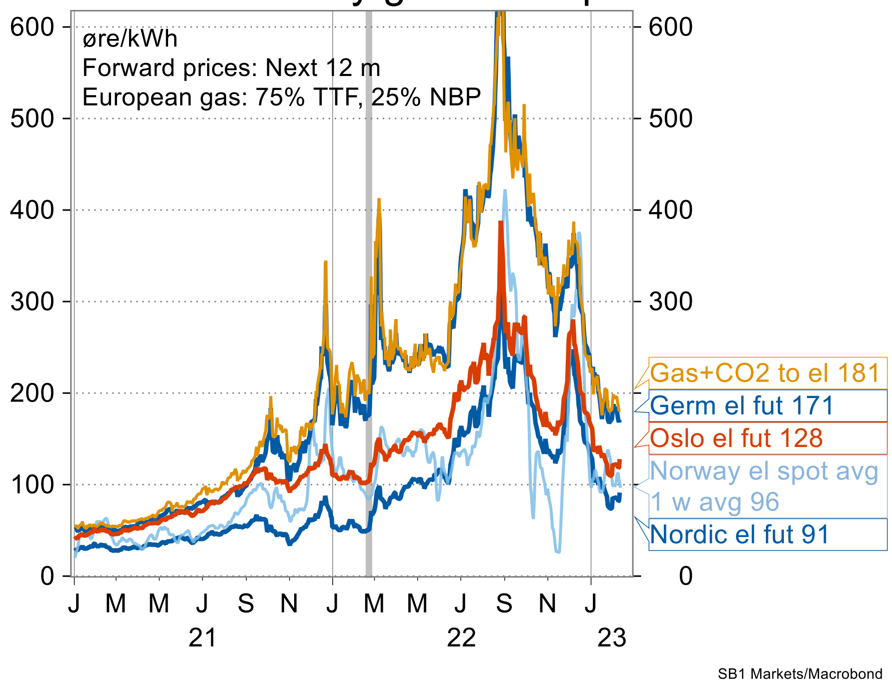




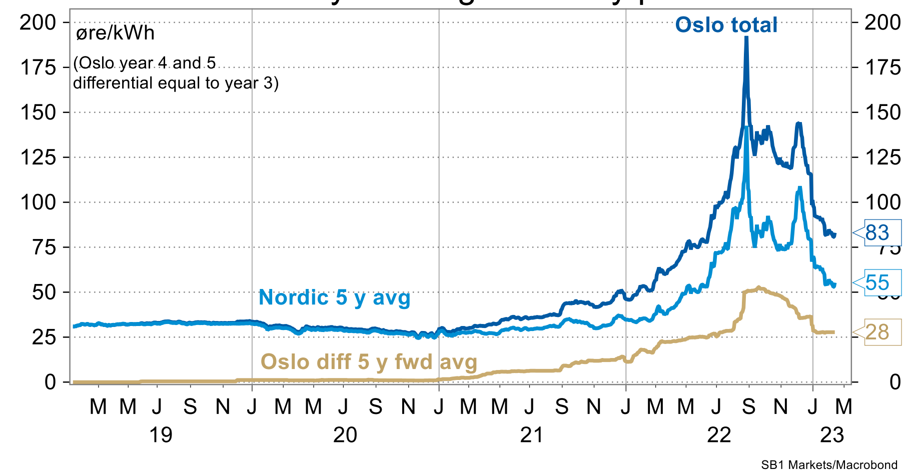
European gas/el. prices have fallen substantially

Spot prices are lower than before the war started, but future prices remain somewhat higher

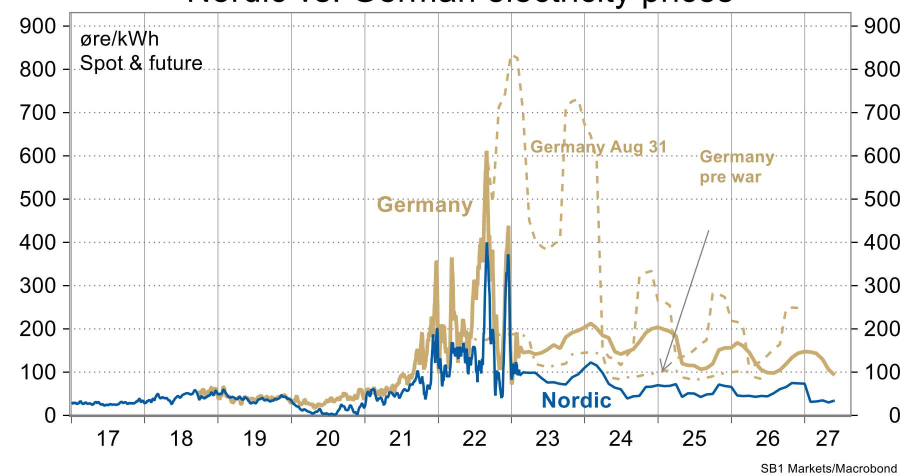
Electricity/gas future prices



Nordic 5 y fwd avg Electricty prices

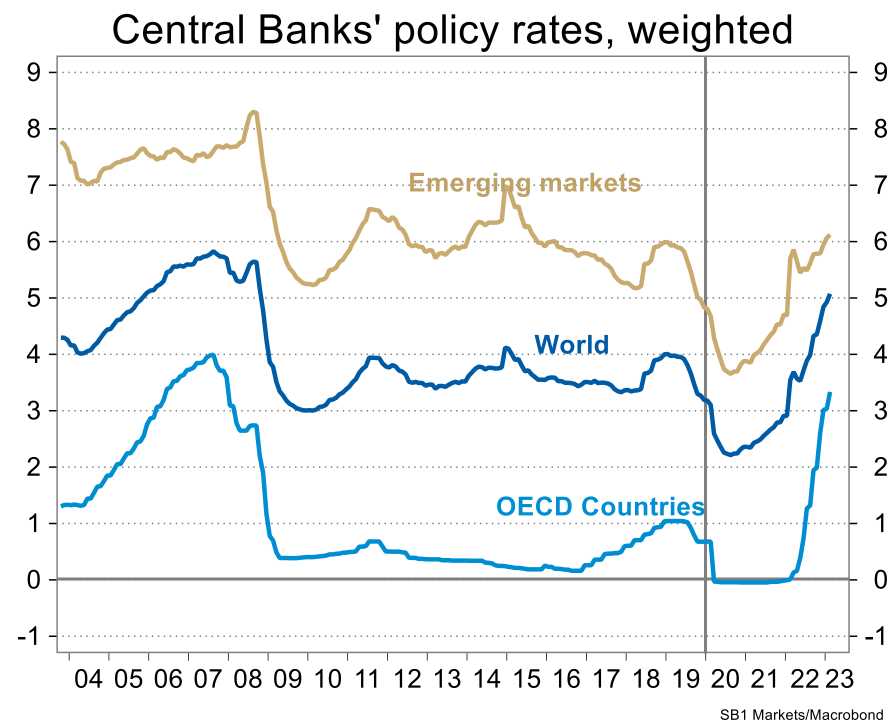


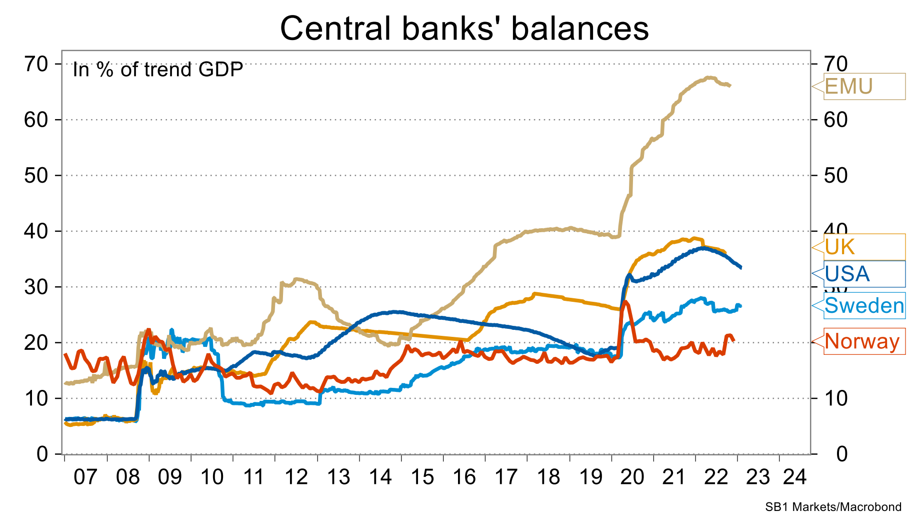
Nordic vs. German electricity prices

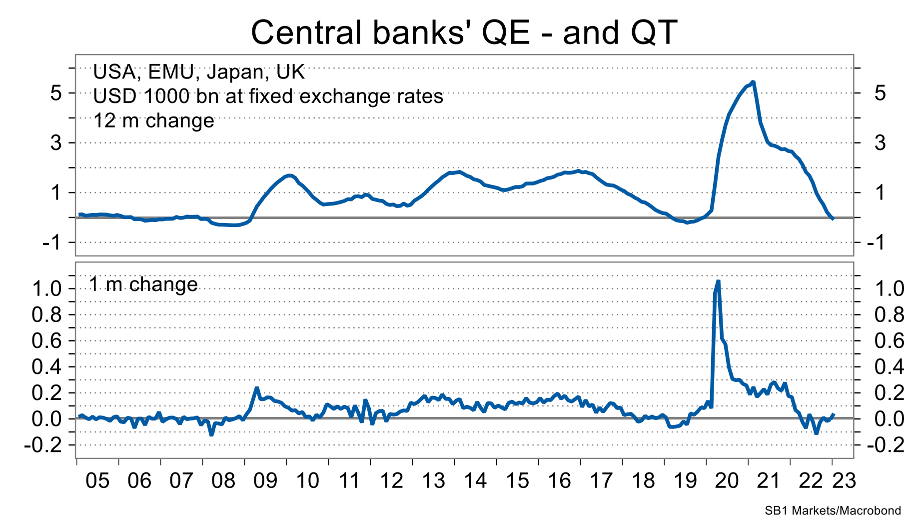


The global average signal rate is up to 5% from 2% at the bottom

… and 2.9% one year ago, +3.3 pp to 3.3% in rich countries. And now QE programs have turned into QT programs



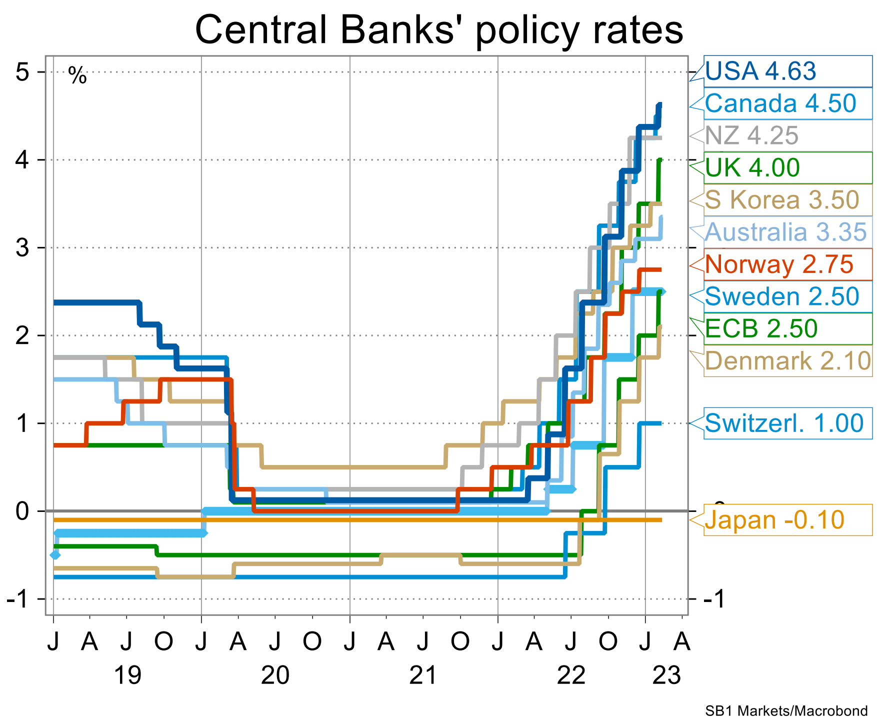


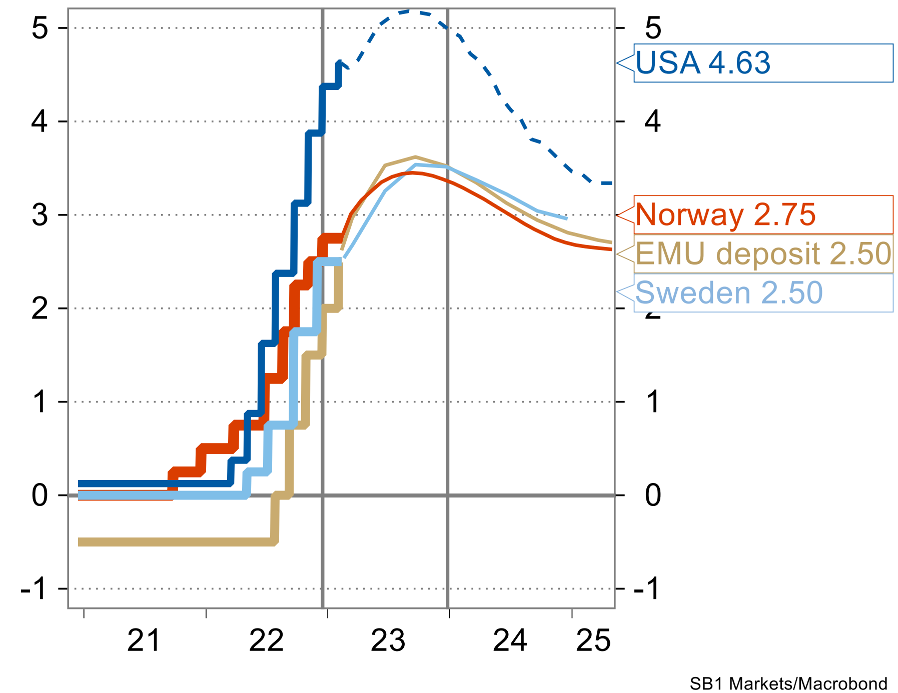


- The **EM average policy rate** is on the way up again, after a decline, due to the cut in the Russian and Turkish signal rates
- In addition to rate hikes, most central banks have ended their **QE buying programs**. Most banks have embarked on cutting back on their holdings, moving into the **QT zone**. In December, the ECB signalled a further tightening from Q2

Australia, Sweden hiked again last week

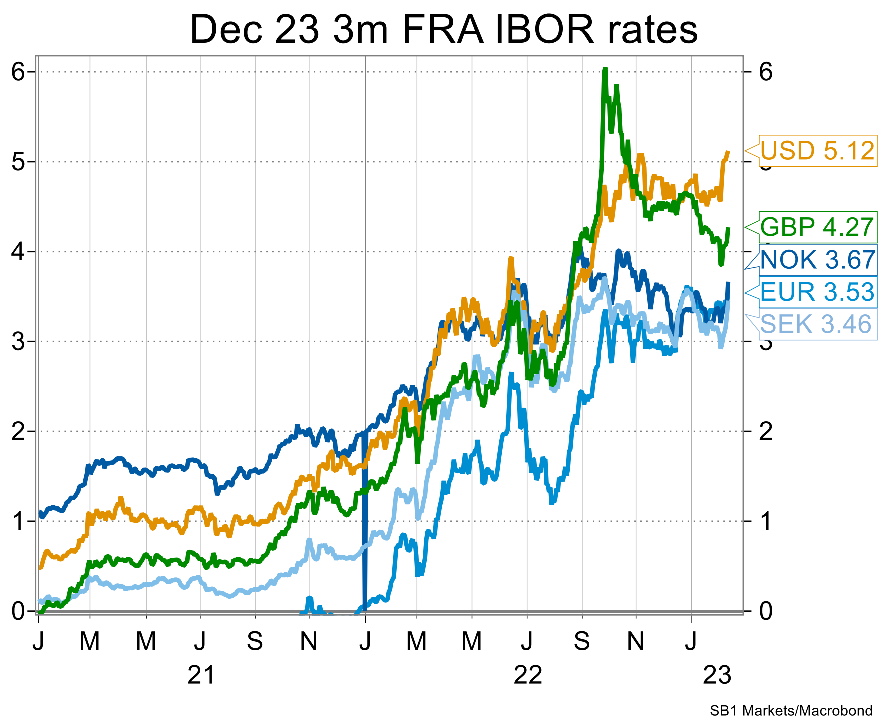
Following US, EMU & UK hikes the week before. The US is still in the lead

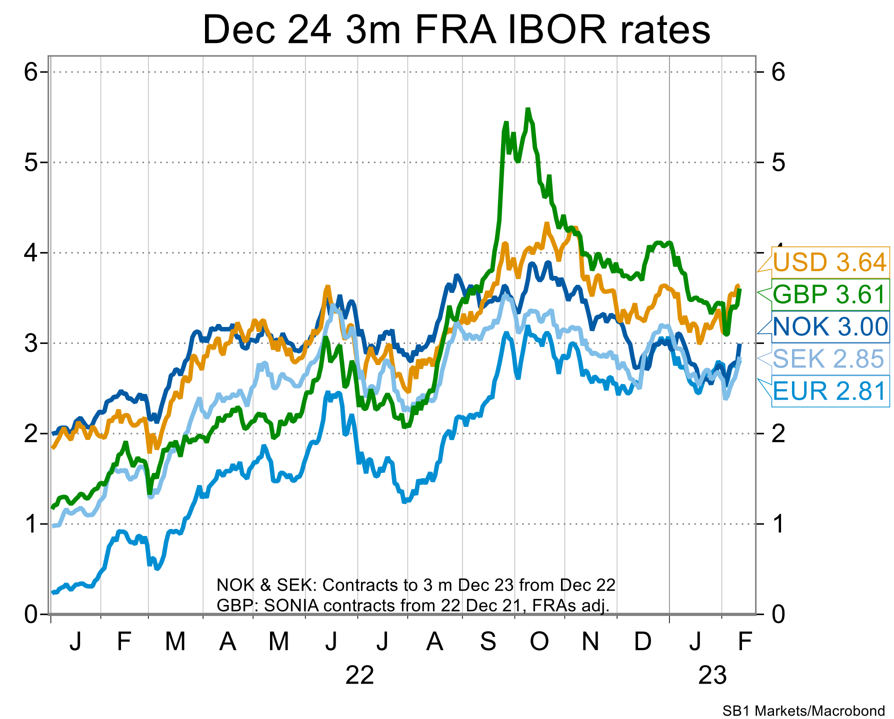


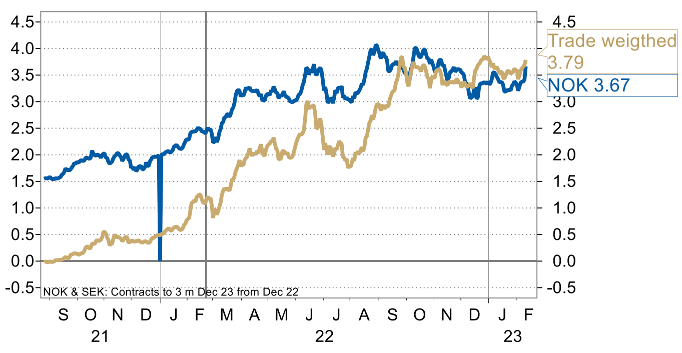


FRAs up all over, and by up to 50 bps in SEK (Dec 23) and in GBP (Dec 24)

Substantial rate cuts are expected from mid-23







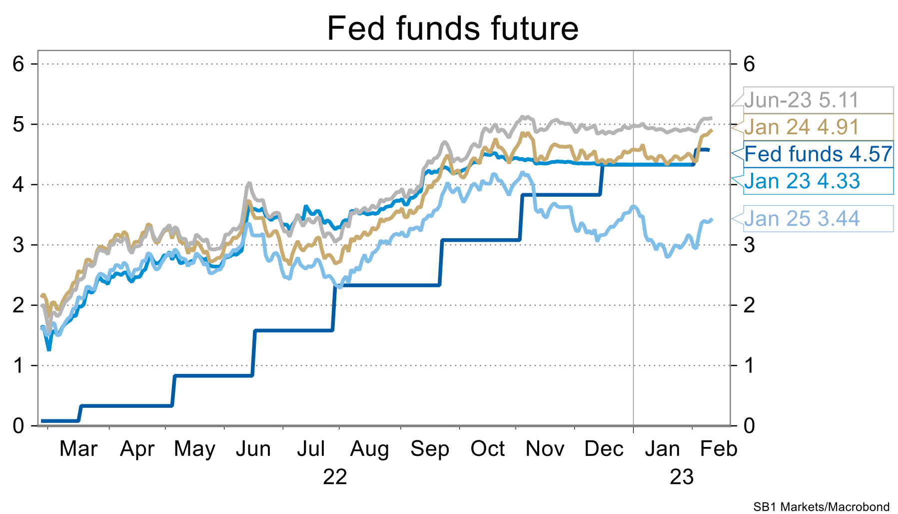
Dec 24 3m FRAs

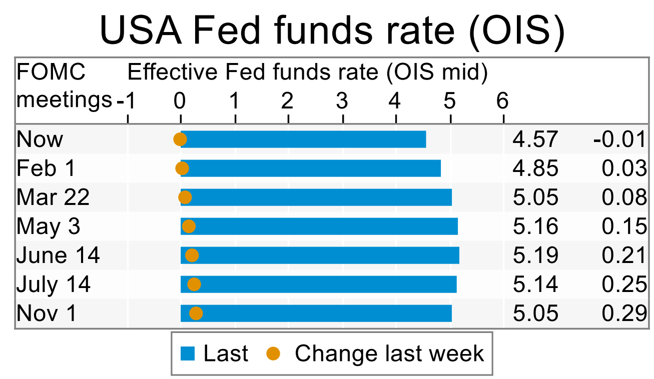
	Close	1w	1m	YDT
USD	3.64	0.31	0.34	0.04
GBP	3.61	0.51	-0.16	-0.50
NOK	3.00	0.37	0.03	-0.04
SEK	2.85	0.43	0.02	-0.35
EUR	2.81	0.21	0.06	-0.26

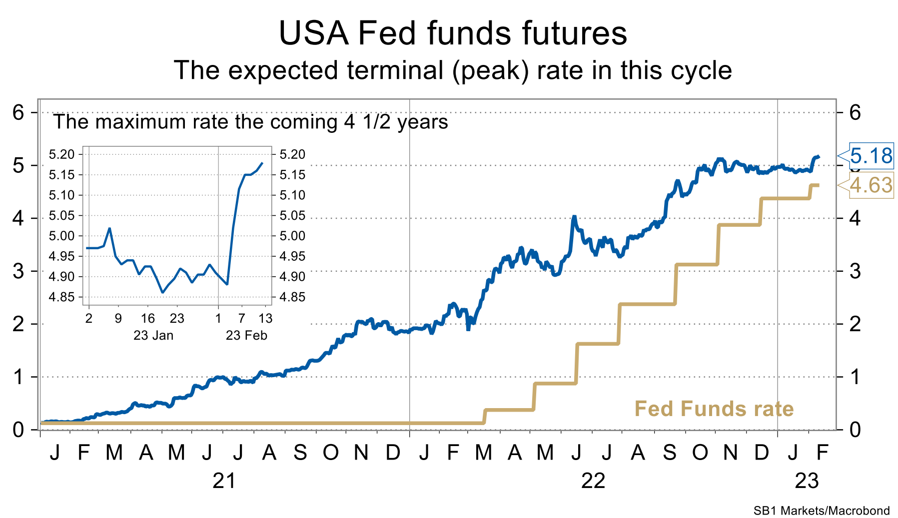
SB1 Markets/Macrobond

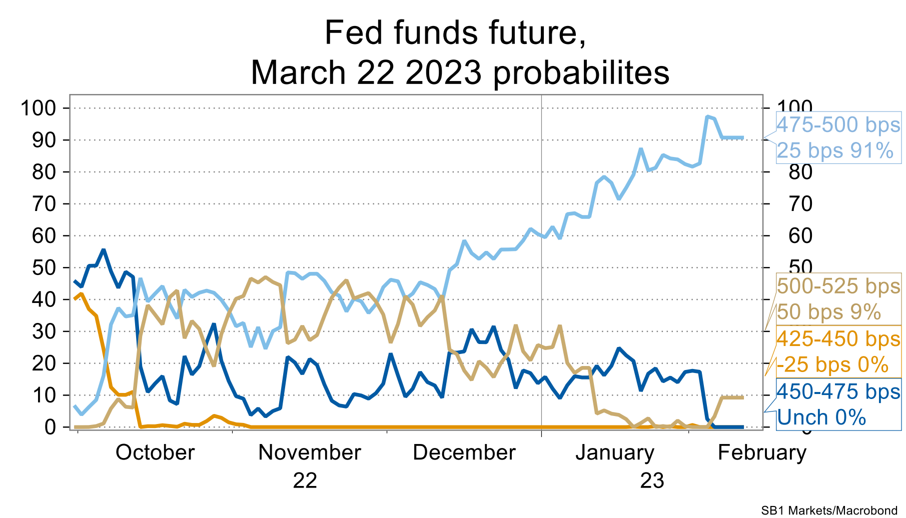
A 25 bps hike still the most likely in March. But 50 bps not impossible (9%)

The expected peak – terminal – rate rose 30 bps vs. last week, to 5.18%, new 'ATH' in this cycle



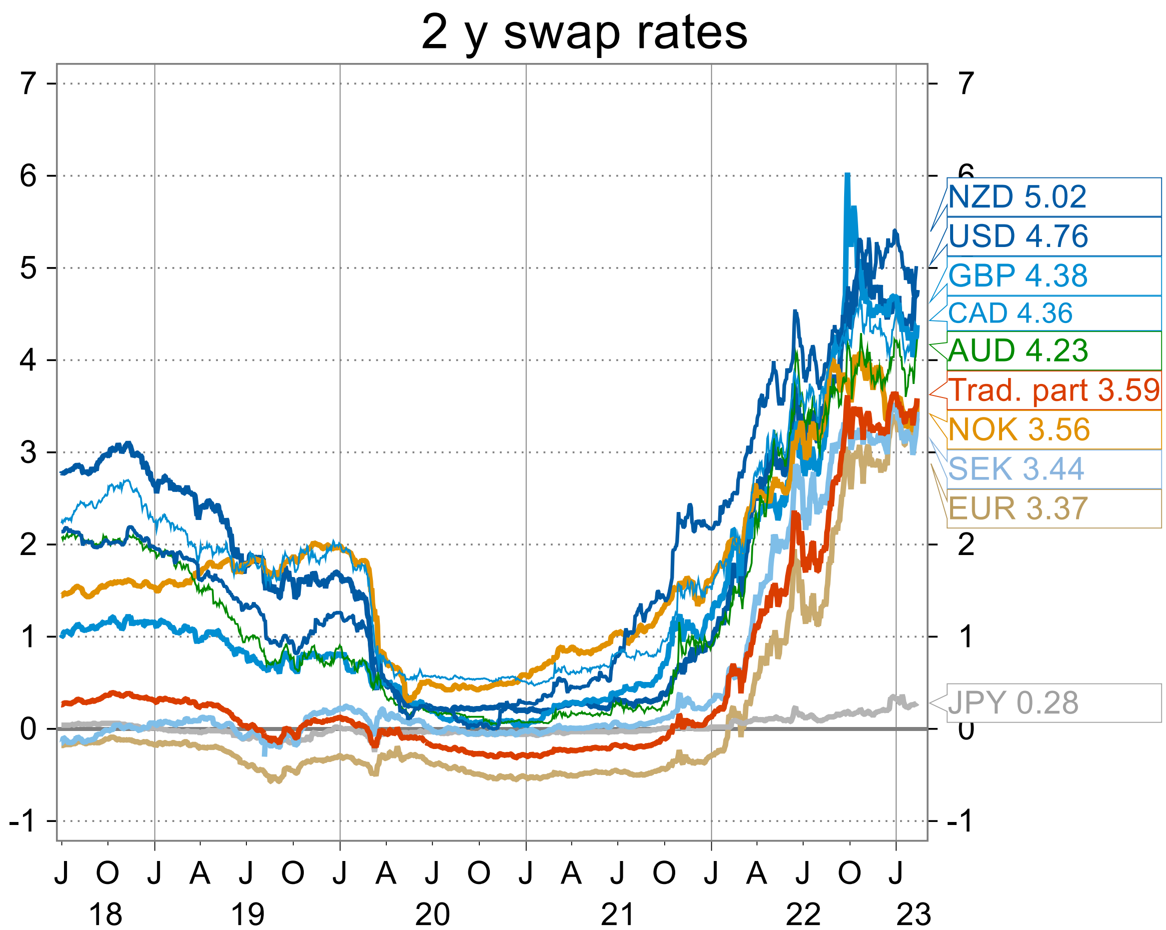






2 y swaps up all over last week – and the most in AUD and SEK

…and the least in JPY



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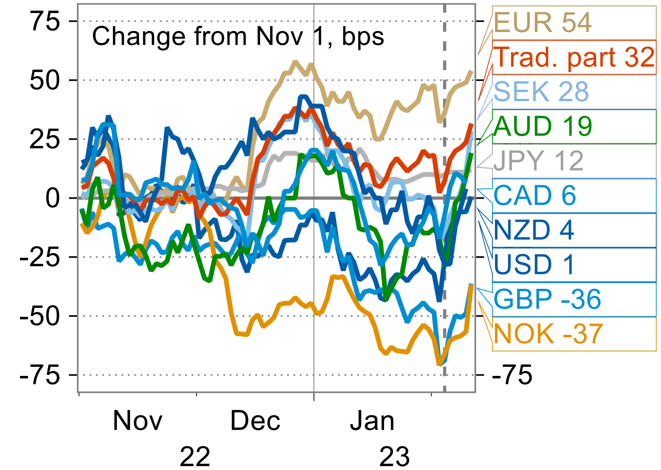
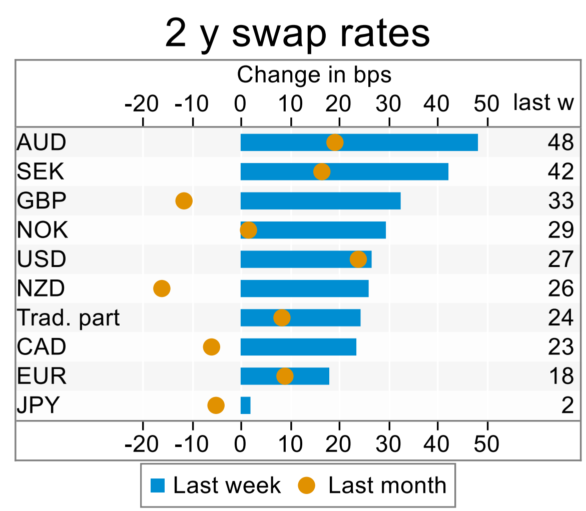
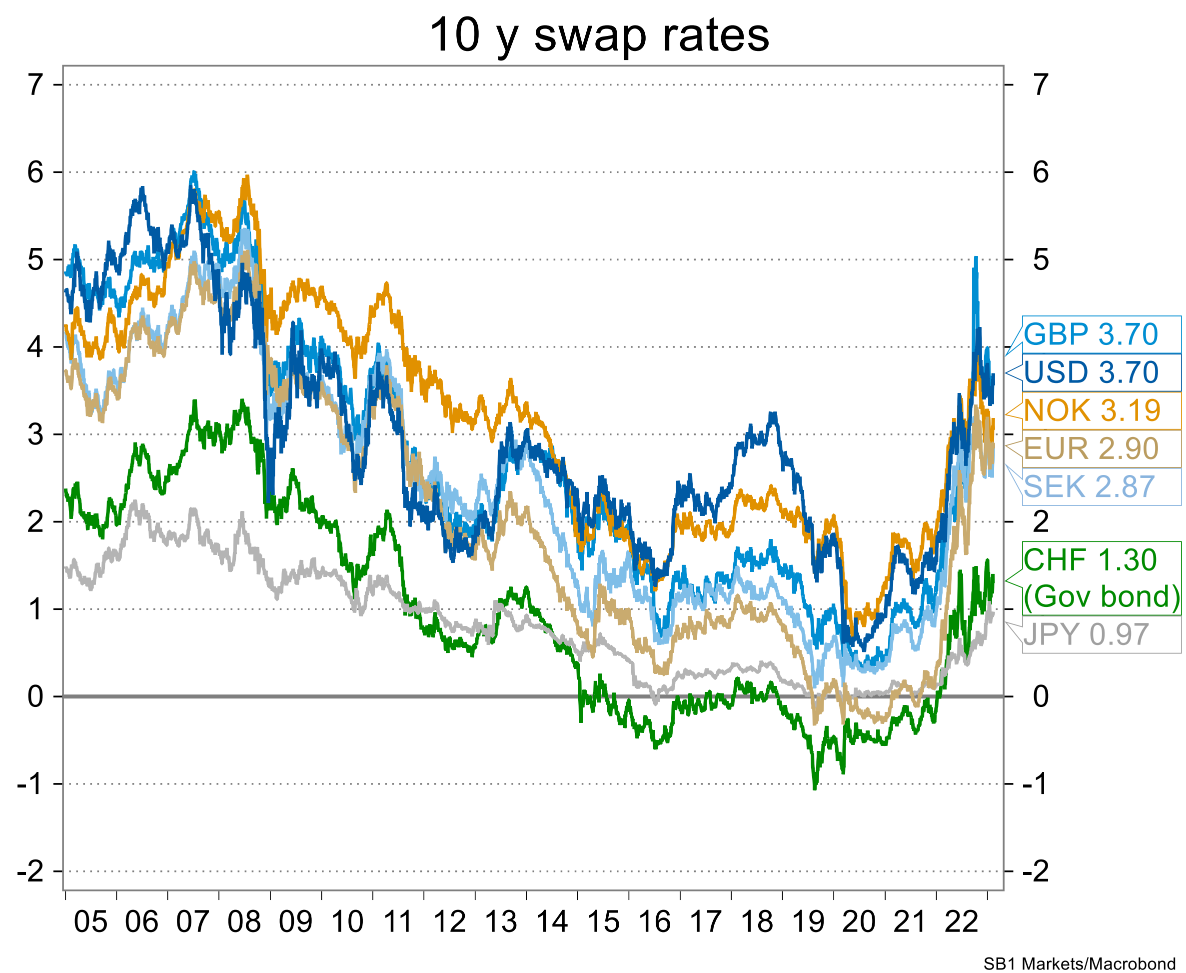


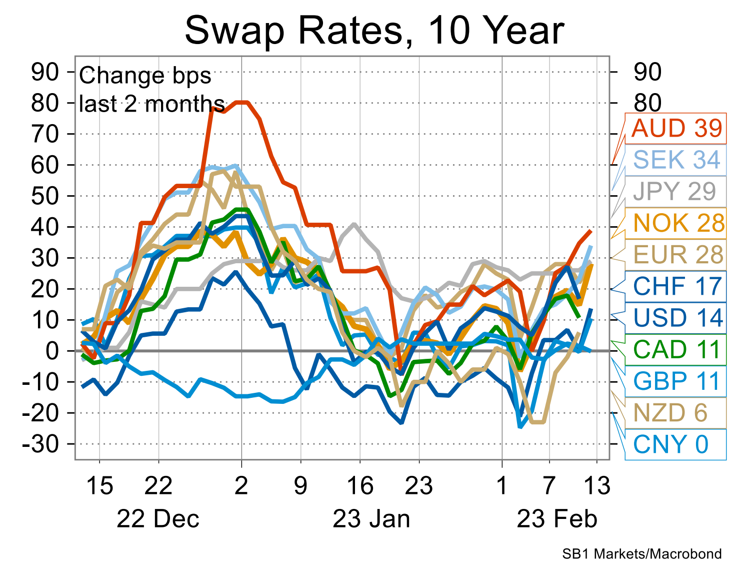


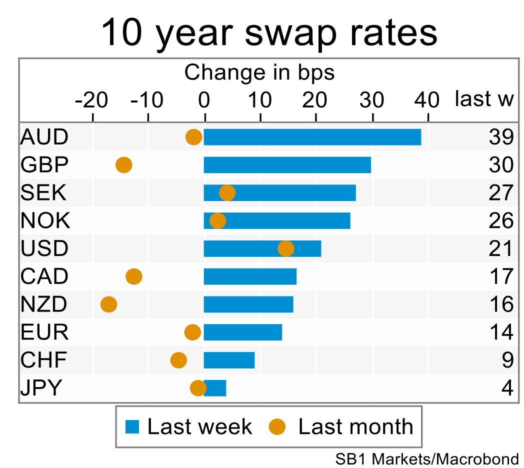
SB1 Markets/Macrobond

10 y swaps up across the board – and the most in AUD and GBP

The short-term trend is, however, down

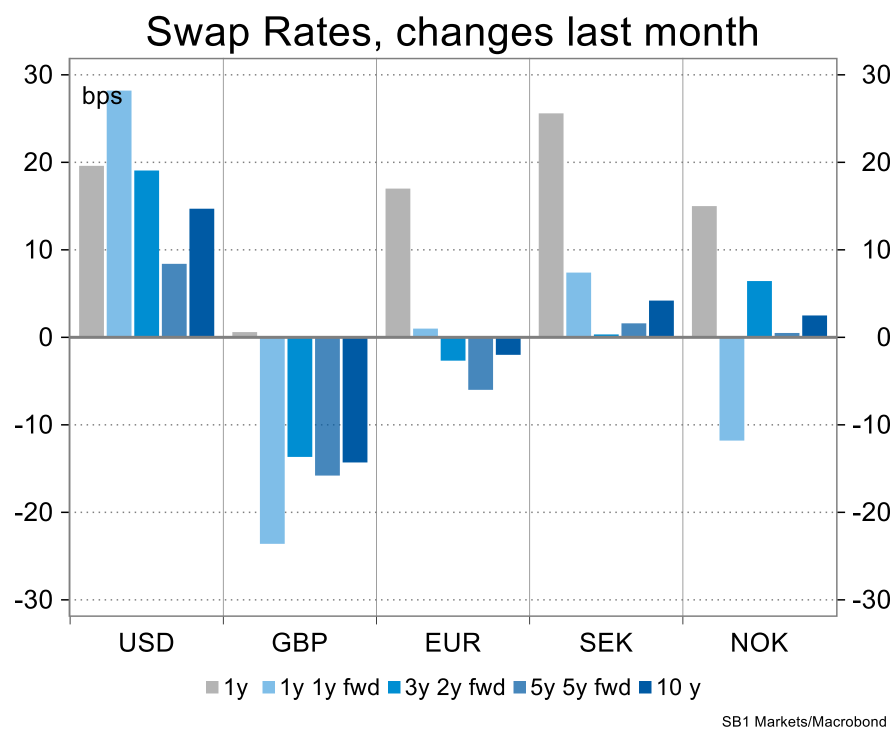


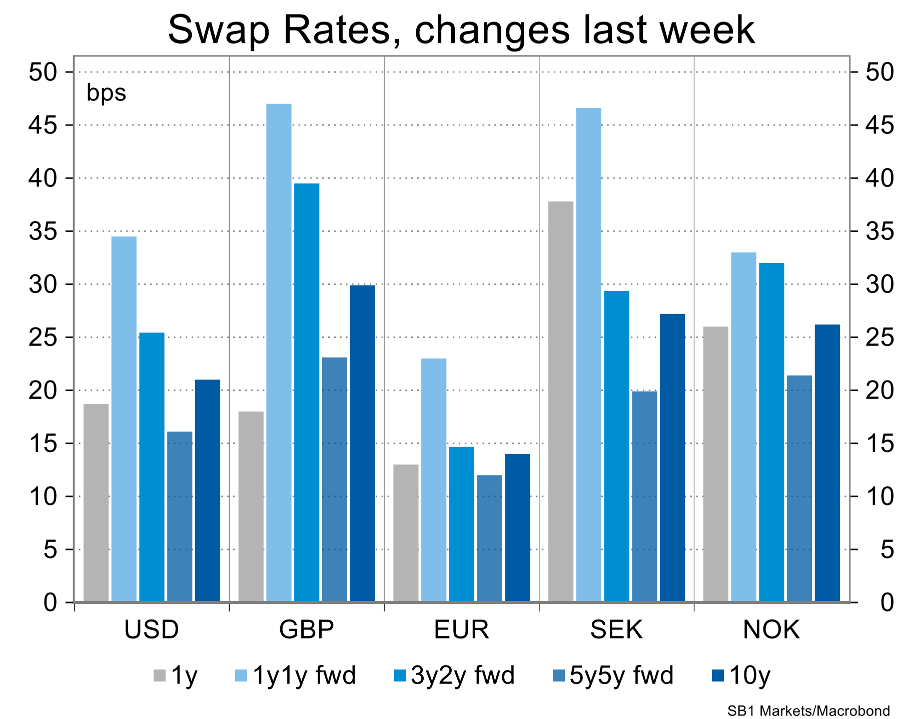




A massive increase in interest rates last week

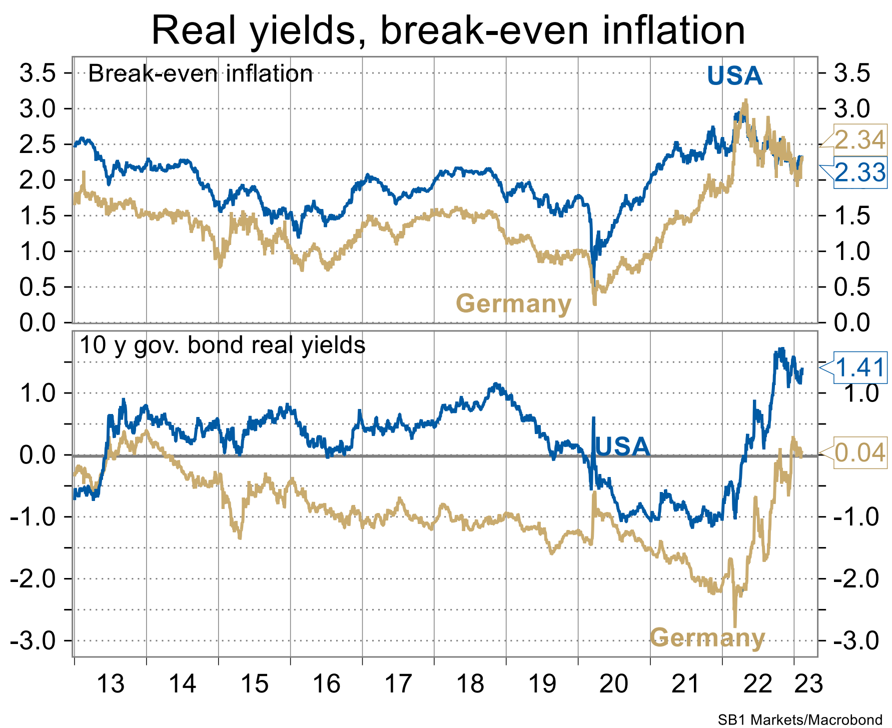
GBP rates are still down on the month, others are not

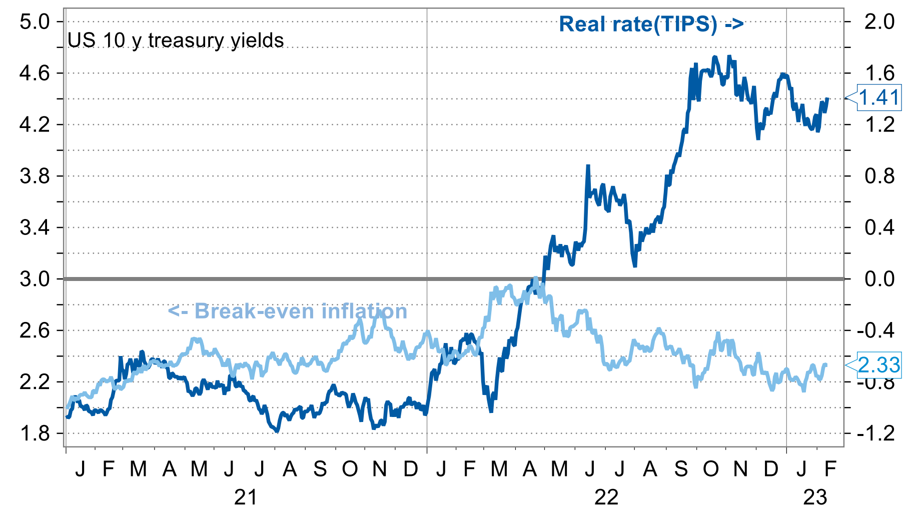




US real rates and inflation expectations were both up 10 bps last week

The same was true for Germany. Still, the trend is down for both real rates & inflation expectations





- In the US, a 10 y CPI expectation at 2.33% is quite close to Fed's 2% target for the PCE-deflator (which on average is some 0.3 pp below CPI inflation). Our model suggest that the break-even inflation component is somewhat too high
- The German 10 y real rate is close to zero – a low level. In the EUR swap market, real rates rose by 19 bps

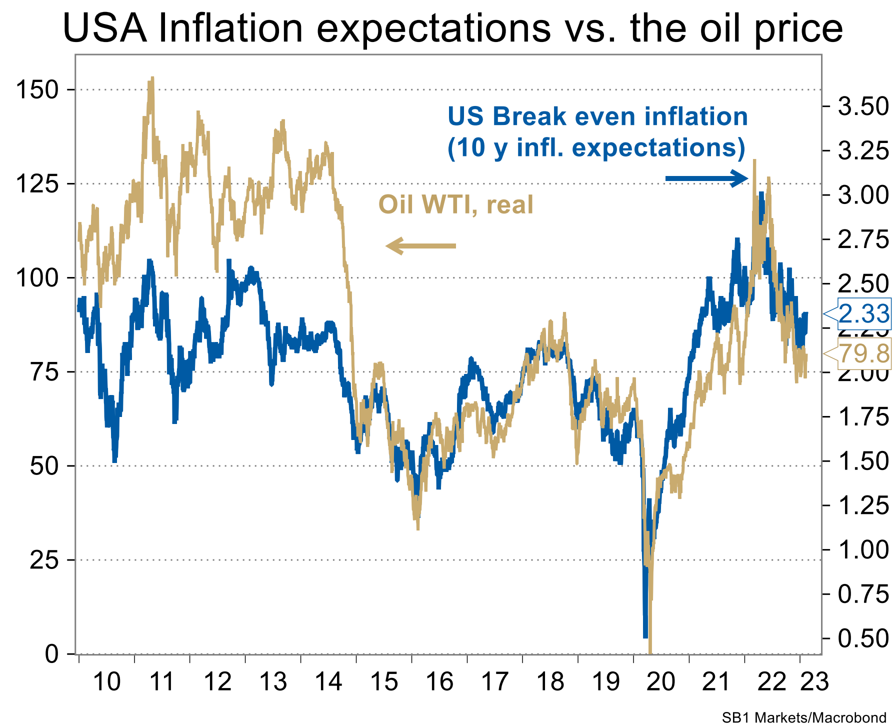
US & Germany 10 y Gov bond yield

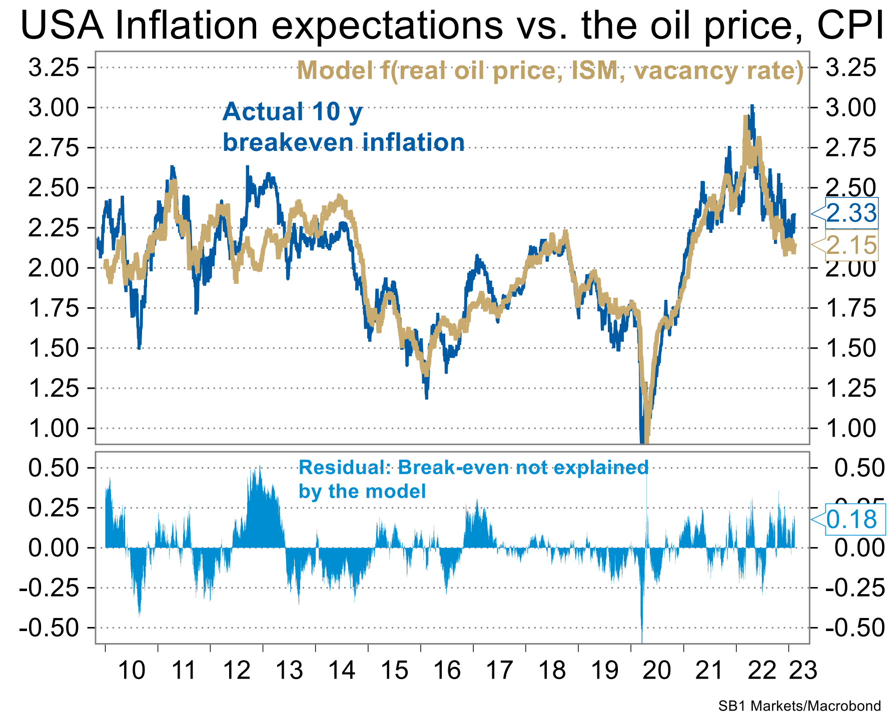
	Yield	Change 1w	Change 1m	YTD	Min since April-20
USA nominal treasury	3.74	0.21	0.13	-0.14	0.52
.. break-even inflation	2.33	0.11	0.09	0.03	1.06
.. TIPS real rate	1.41	0.10	0.04	-0.17	-1.19
Germany nominal bund	2.37	0.18	0.07	-0.19	-0.64
.. break-even inflation	2.34	0.09	0.26	0.05	0.42
.. real rate	0.04	0.09	-0.19	-0.24	-2.80

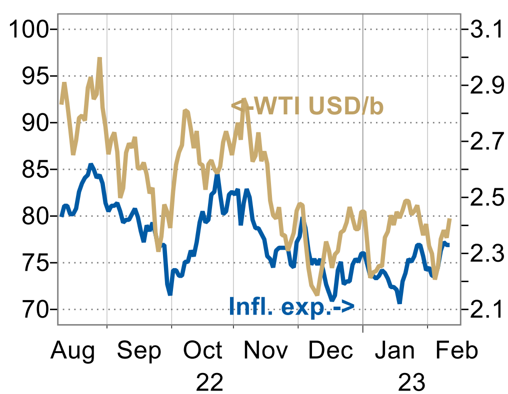
SB1 Markets/Macrobond

US inflation break-even inflation expectations are trending down

The current break-even is 18 bps above our model current f'cast (based on the oil price, ISM & the vacancy rate)

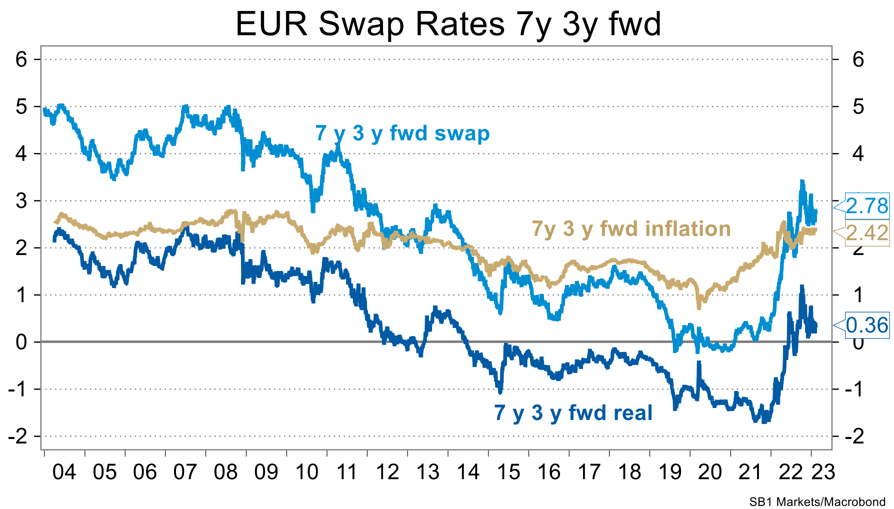


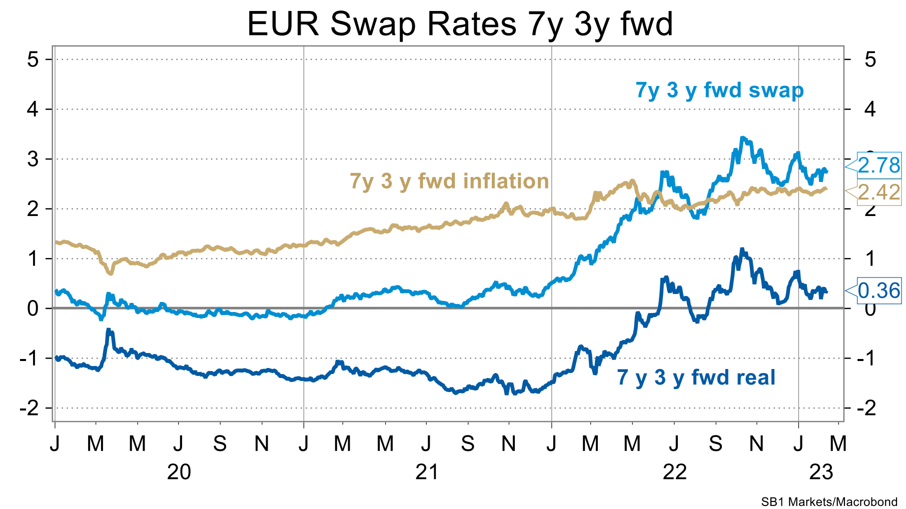


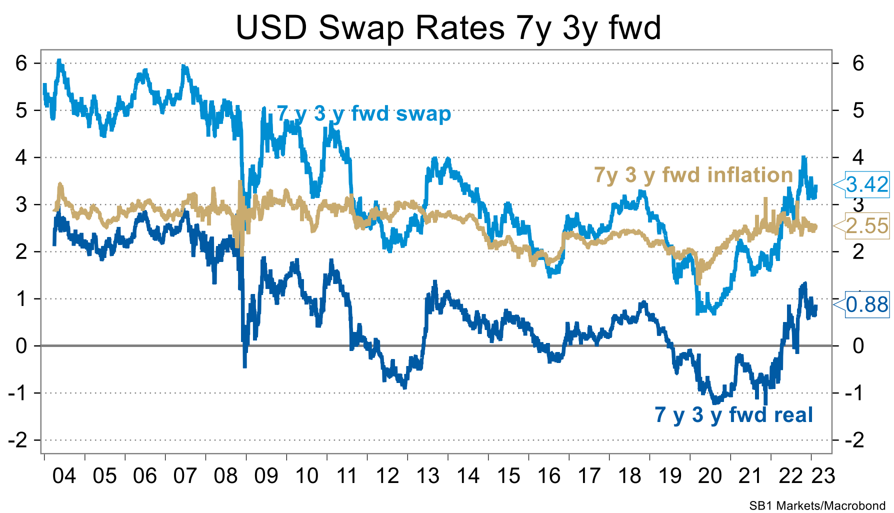


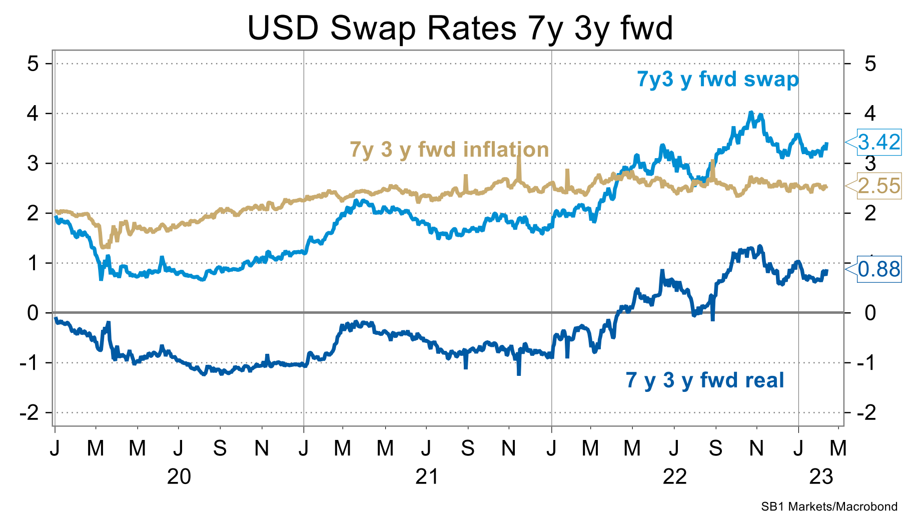
- A simple model including the spot oil price, the current ISM and the current vacancy rate pretty well explains the long-term breakeven inflation expectation in the bond yield curve
- What now? The actual break-even is in line with the model forecast. We are uncertain about the oil price, but rather 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 labour market vacancy pts, (to 3.2% from 6.5%): -36 bps
  - - 10 USD/b: -10 bps

Real (swap) rates up last week

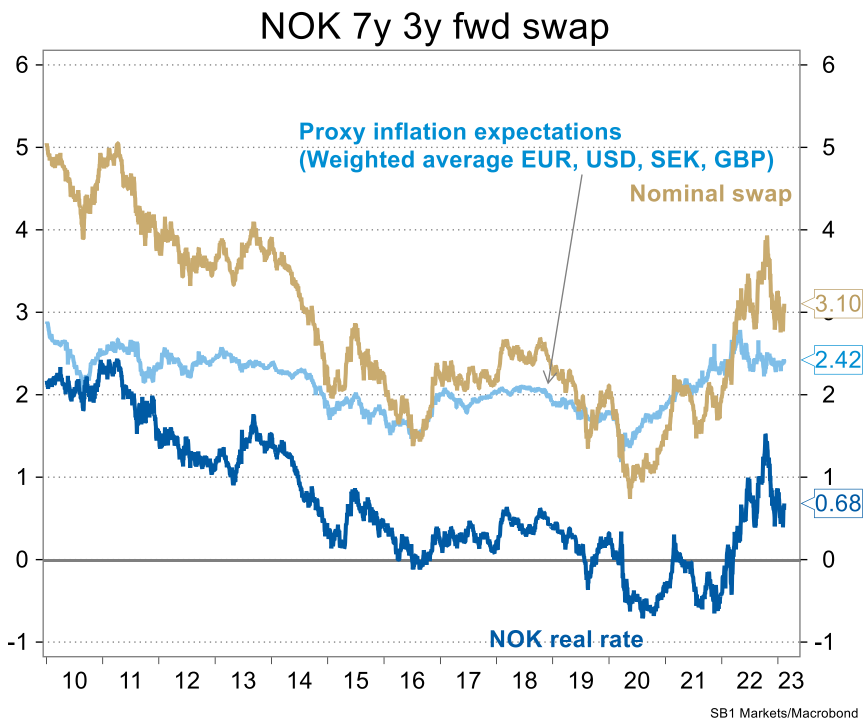


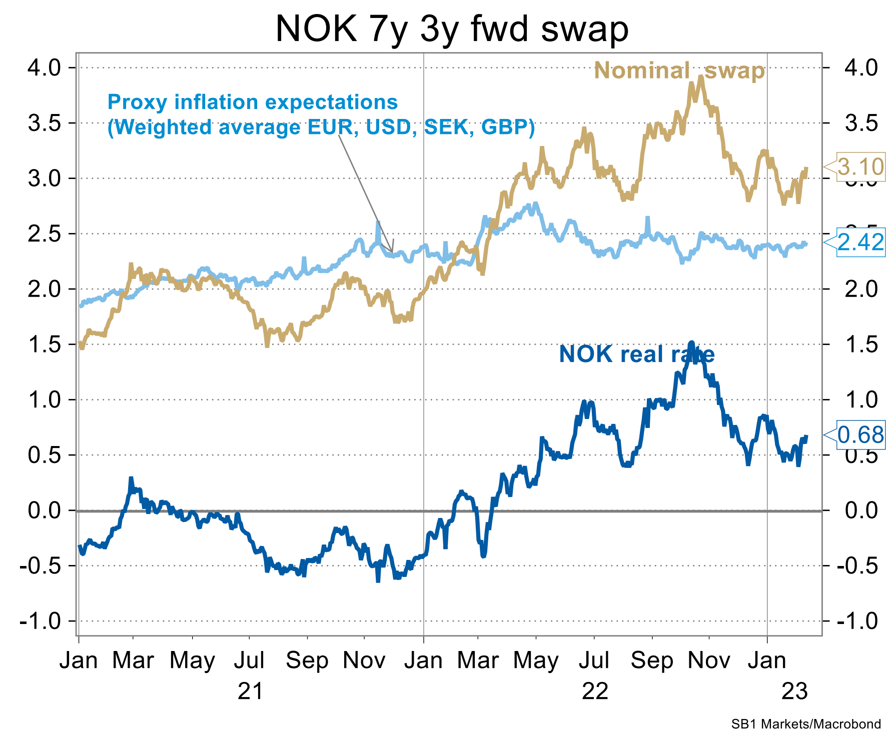


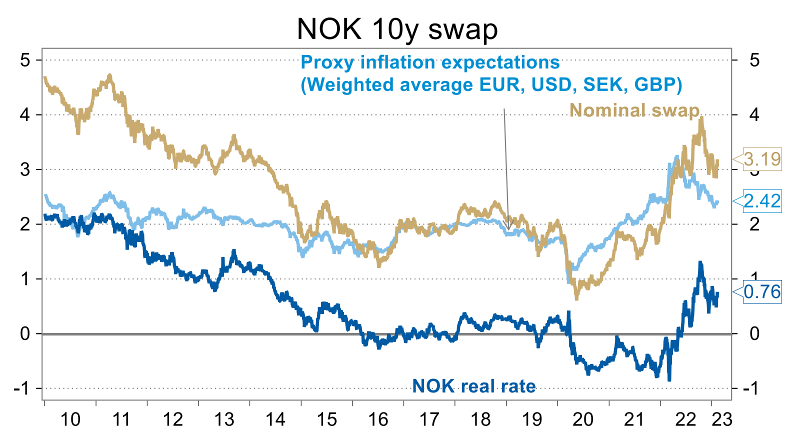




NOK real rates (very likely) also up last week





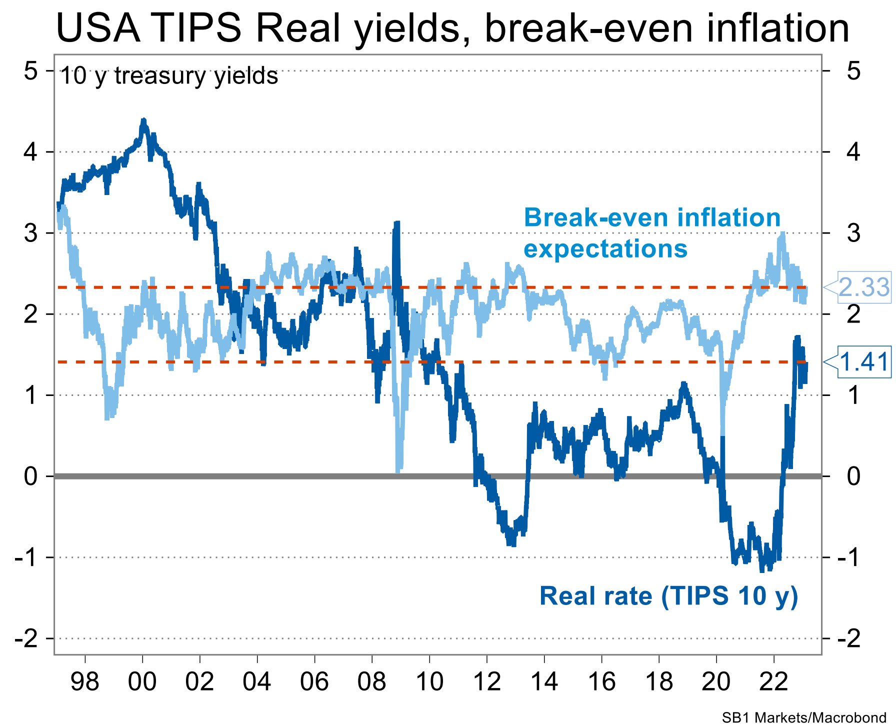


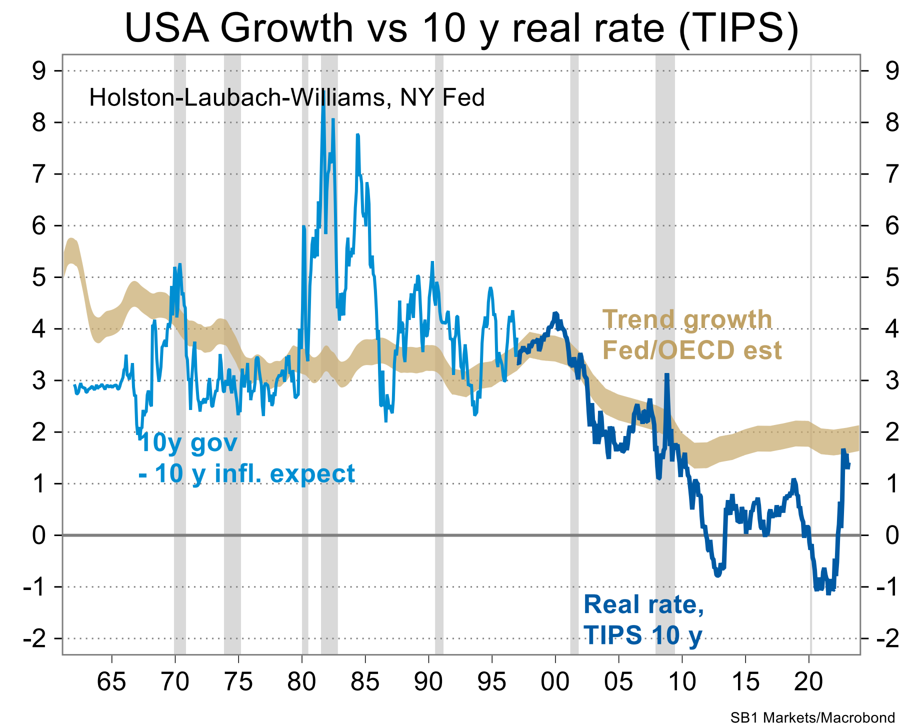
Memo: Our NOK inflation expectation proxy is a weighted average of EUR, SEK, GBP, and USD inflation swaps, cross-checked vs historical inflation differentials and inflation expectations from surveys

SpareBank 1 MARKETS

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

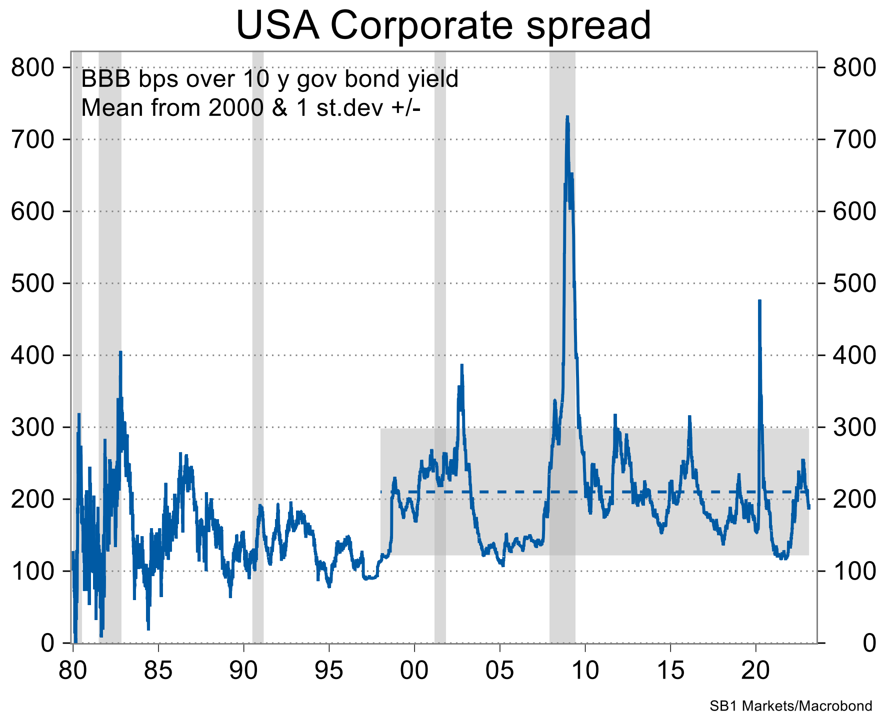
At least not compared to the differential during the pandemic

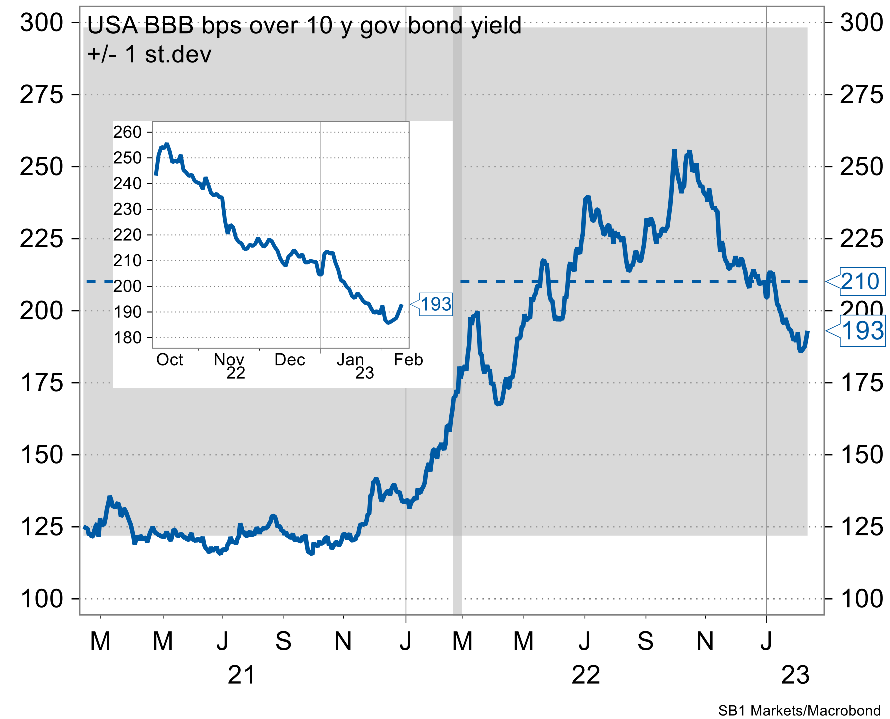




Risk off: Credit spreads widened marginally last week

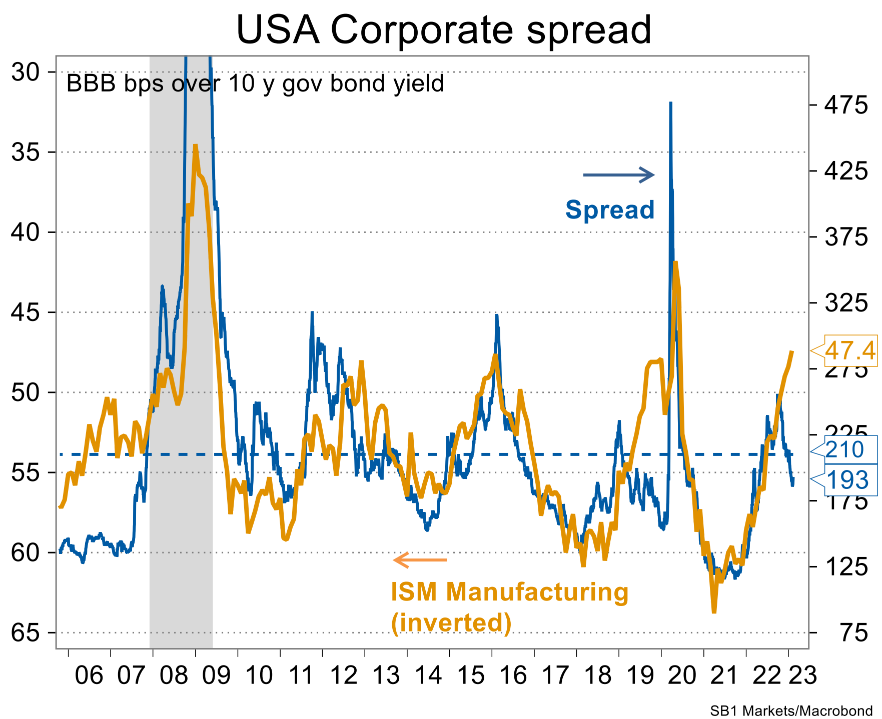
We think that makes perfect sense - the spreads are exposed to a weakening economy

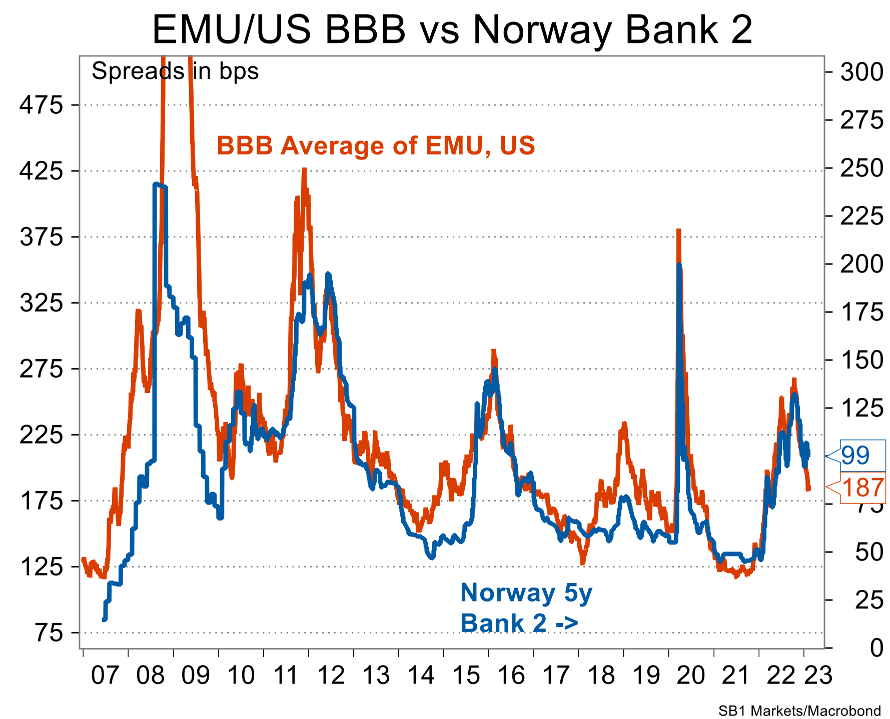




Mind a new gap: The economy is weakening (ISM), and spreads too narrow

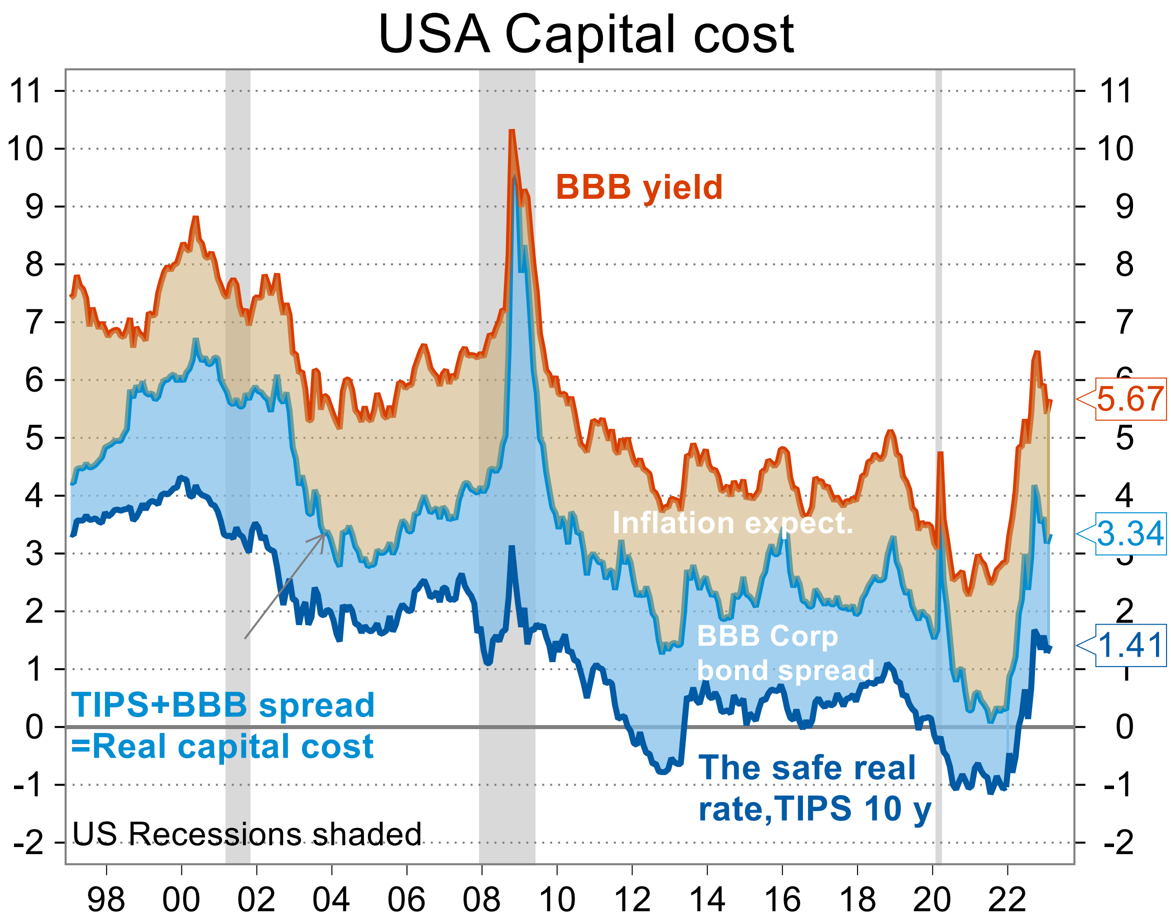
What do you think is more likely: An ISM at 45 or 55 before summer? We are quite sure, it's at 47 already





The cost of capital is higher than in more than a decade

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

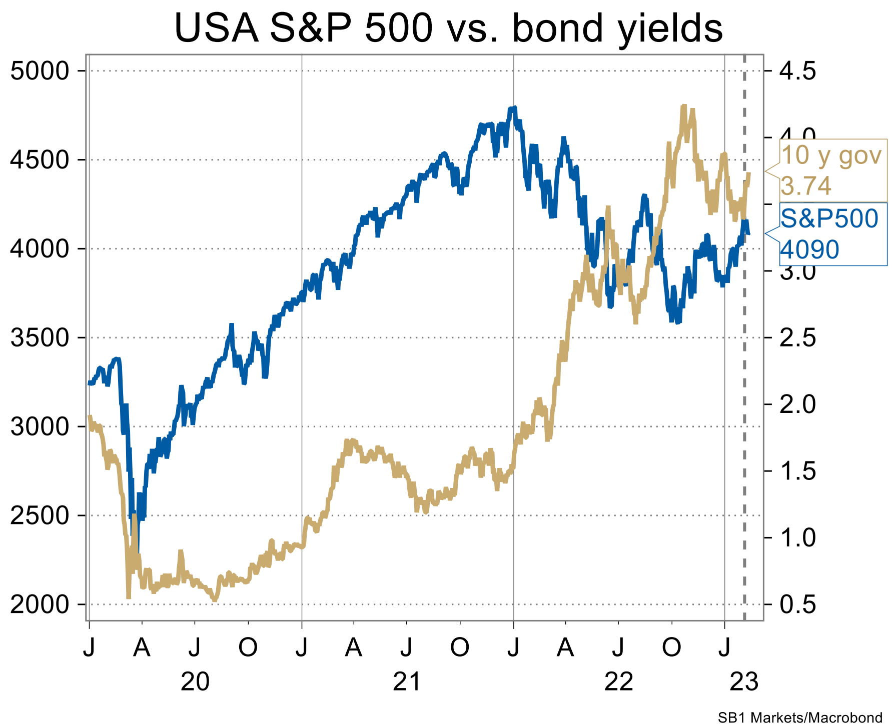


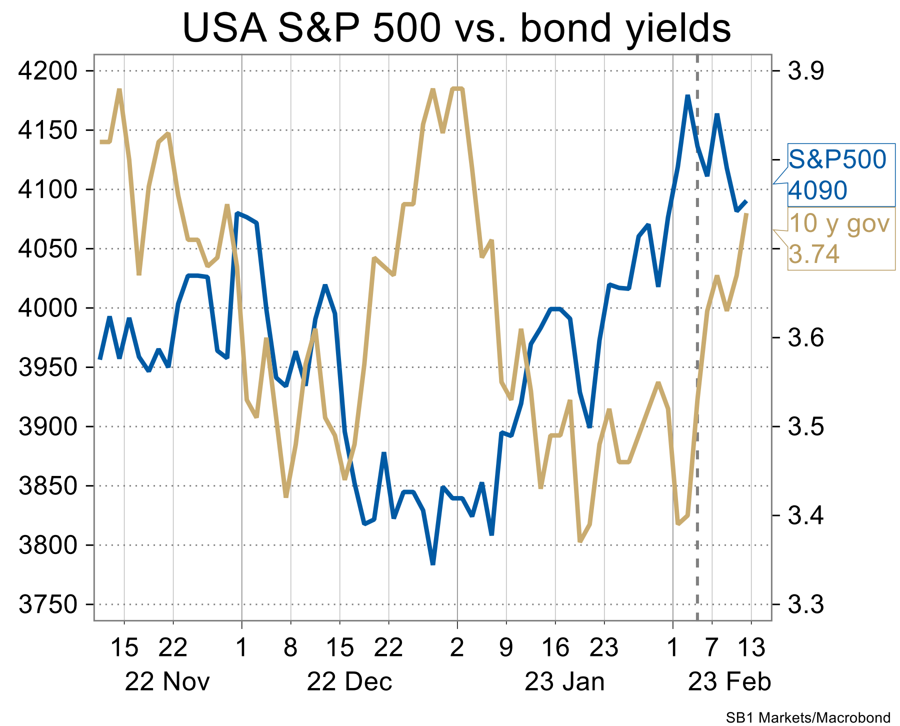
SB1 Markets/Macrobond

- **Spreads** flattened last week
- The total real borrowing cost for a BBB company has increased to 3.3% bps from zero by the end of 2021
  - The TIPS real rate is up from -100 to + 141 bps
  - The BBB corporate investment grade spread is up from 120 bps to 216 bps
- 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 last October)

S&P down 1.1%, the 10 y bond yield up 21 bps to 3.74%

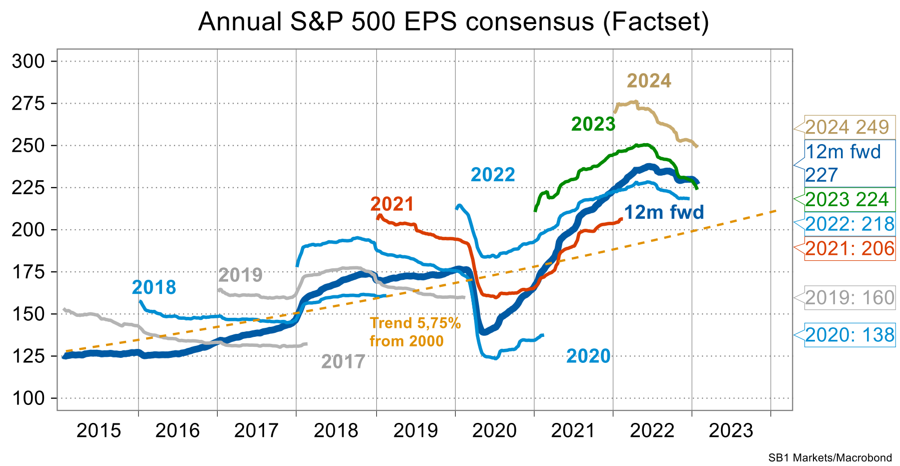
The trend is still down from the 4.25% peak level in late October

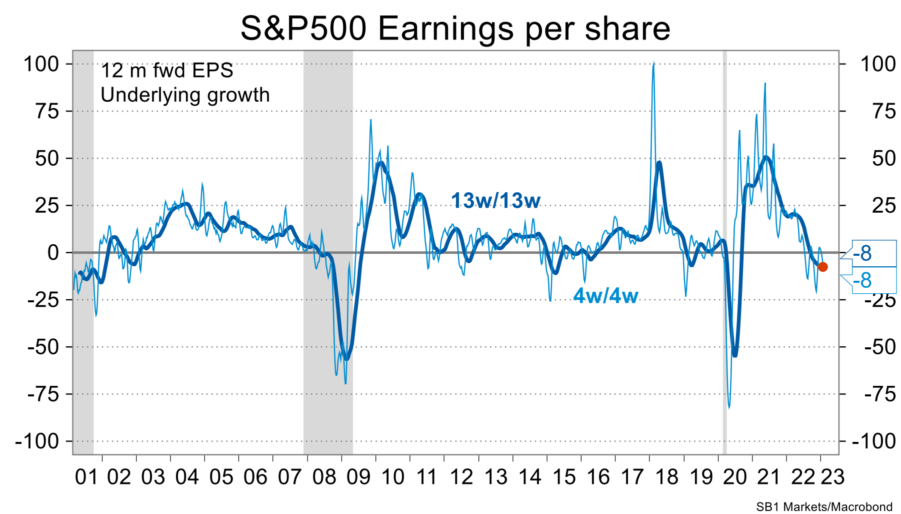


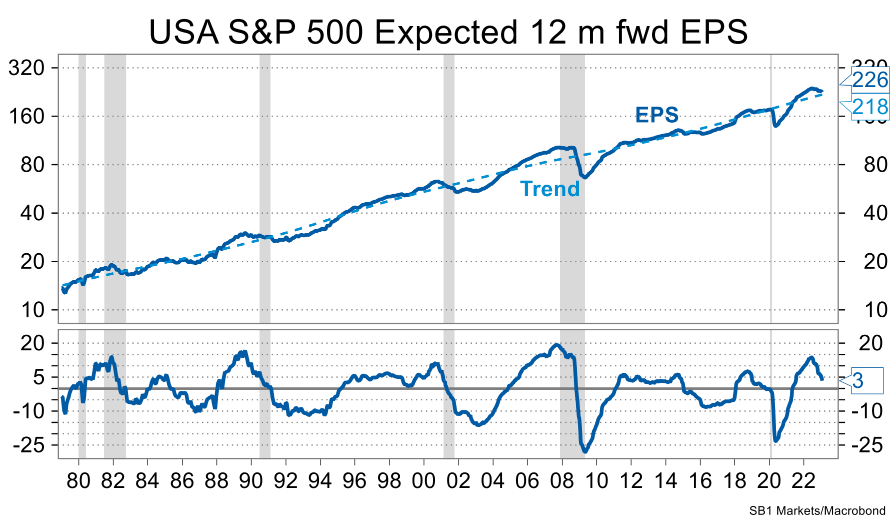


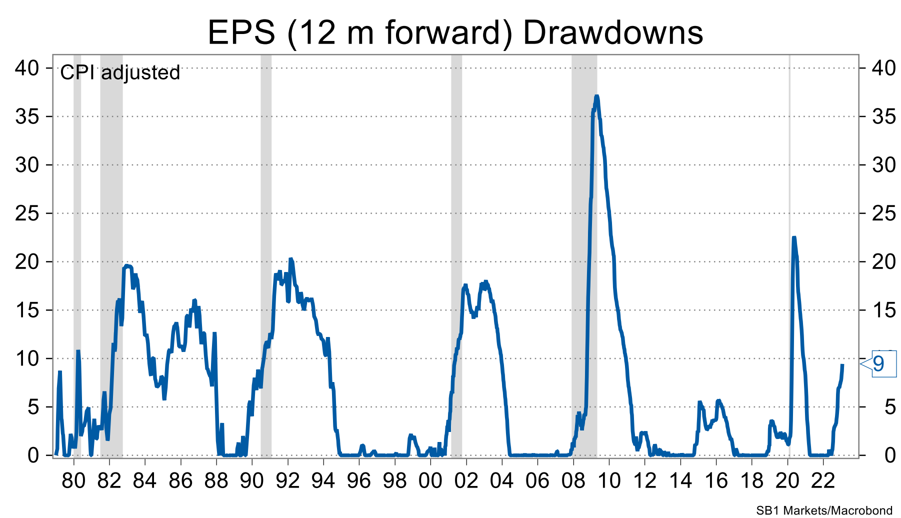
Earnings forecasts are trending down again and is approaching the trend path

S&P 500 expected 12 m fwd EPS was some 15% above trend in mid June. Now down to +3%





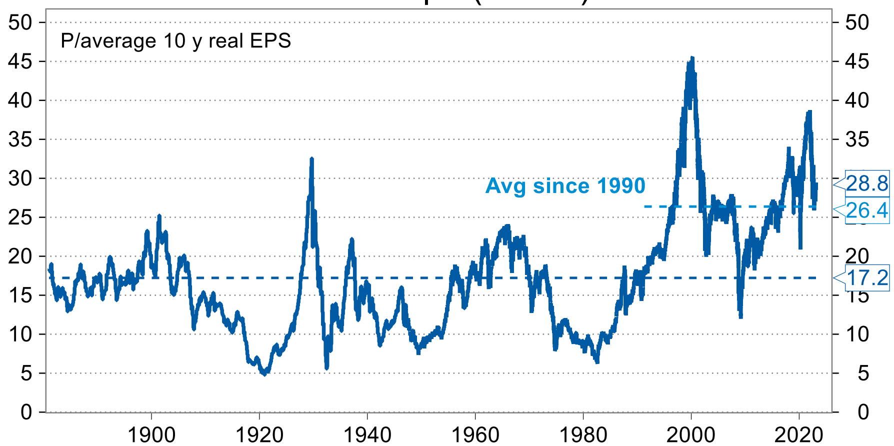




The P/E is drifting upwards, while the real rate is rather stable

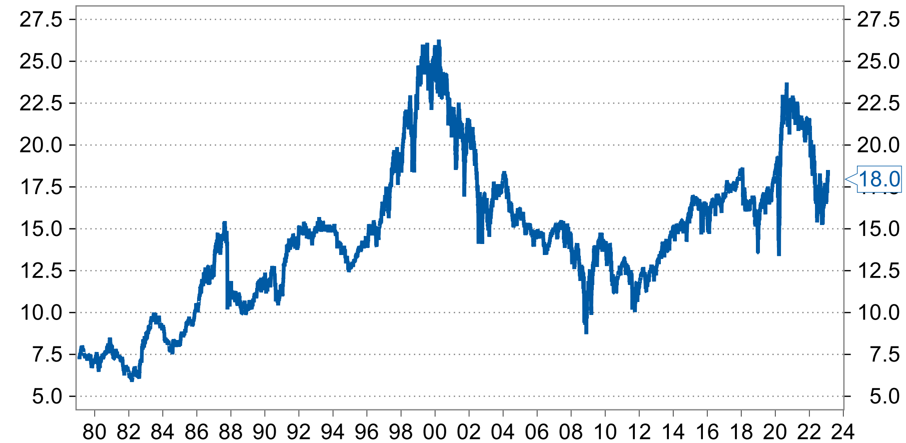
Is the negative correlation between the TIPS real rate and P/E broken? At one stage, it should

S&P500 Cape (Shiller) P/E



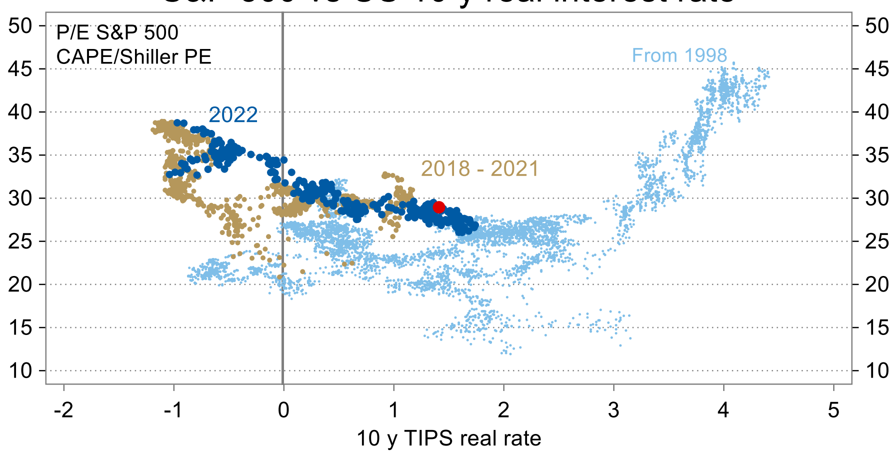
SB1 Markets/Macrobond

USA S&P 500 12 m fwd P/E



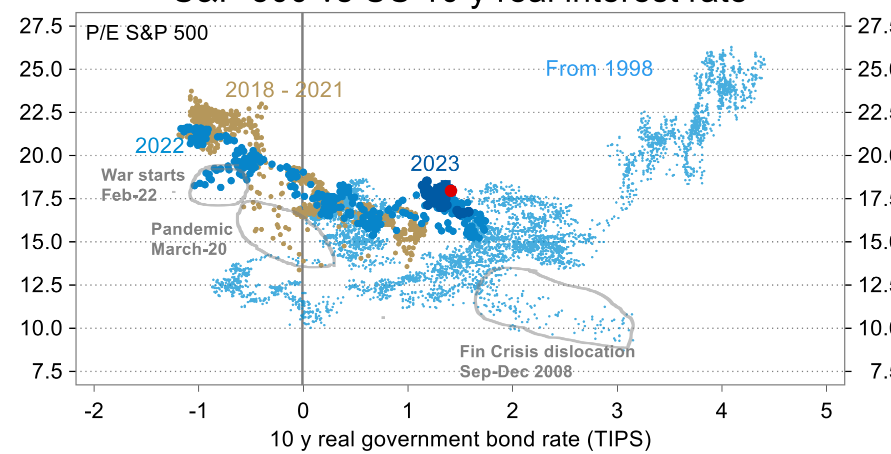
SB1 Markets/Macrobond

S&P 500 vs US 10 y real interest rate



SB1 Markets/Macrobond

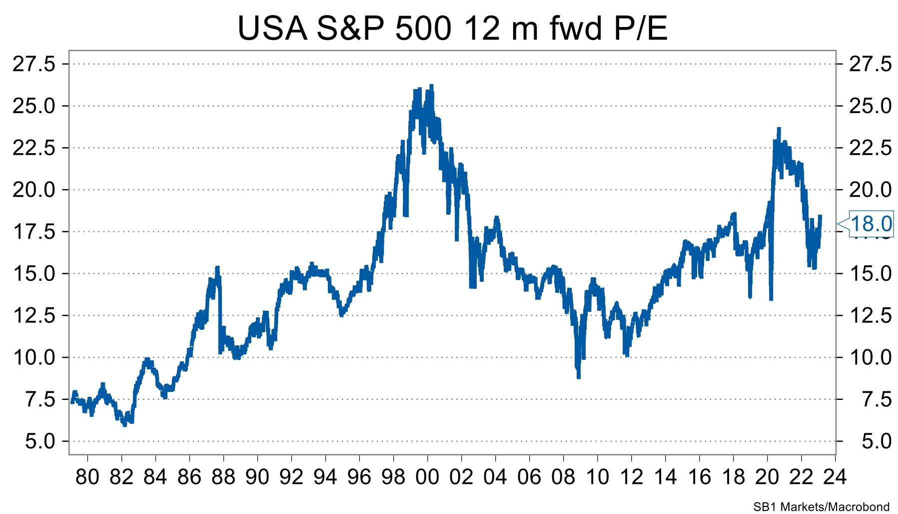
S&P 500 vs US 10 y real interest rate

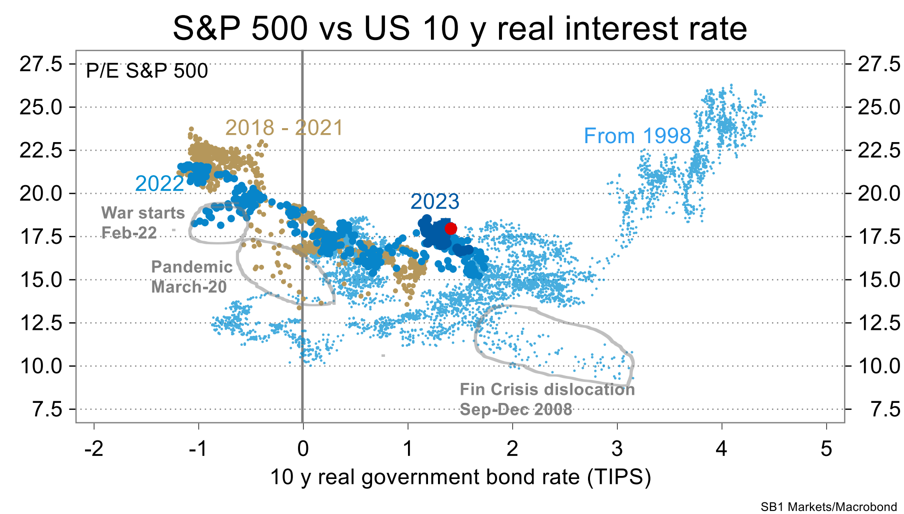


SB1 Markets/Macrobond

The P/E is drifting upwards, while the real rate has been rather stable

the negative correlation between the TIPS real rate and P/E broken? At one stage, it should





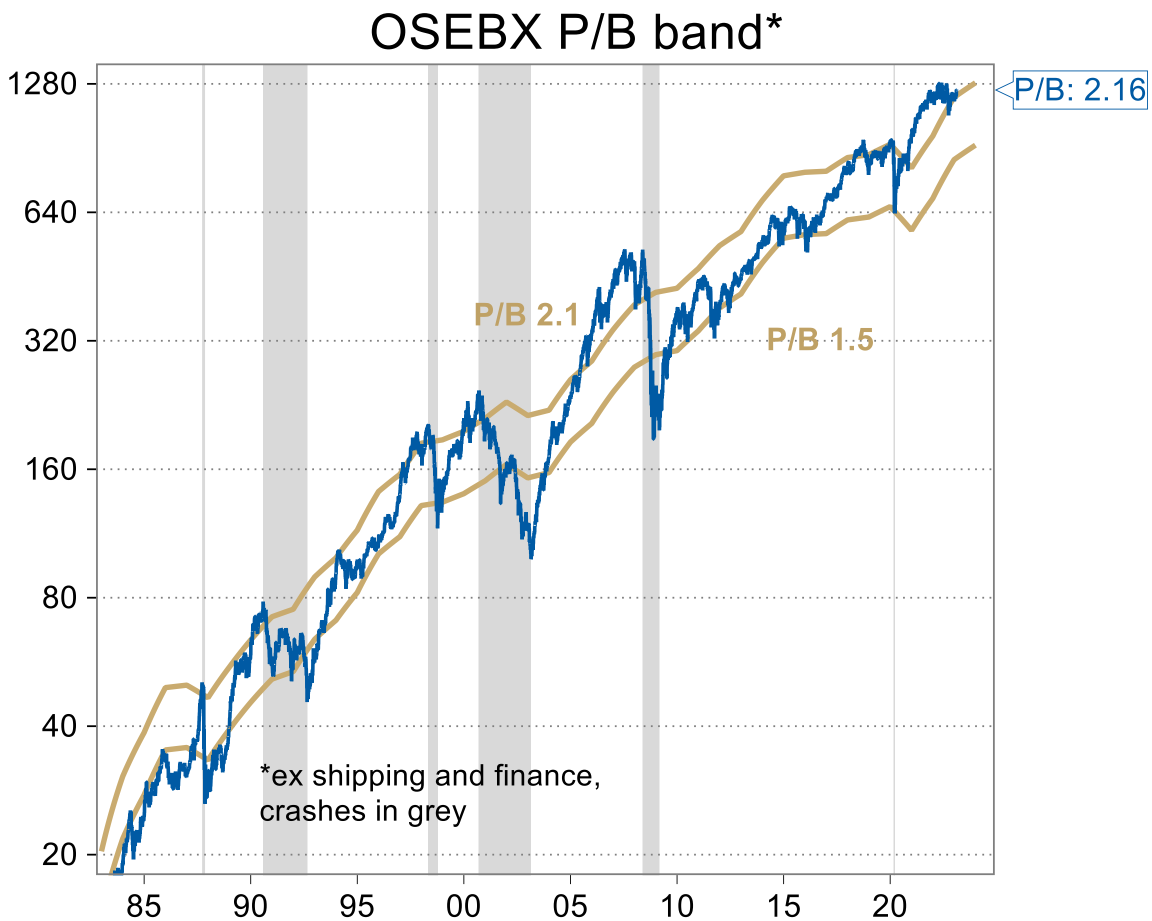
- Earnings expectations are falling slowly, and the equity market has recovered, at least until last week – and the forward P/E has increased, from 15 at the bottom last autumn to 18 now
- There is still a negative correlation between the P/E ratio and real rates but less so than during most of the 2018 – 2022 period
- If we are not heading back into a Goldilocks scenario, with decent growth and low inflation or not fall into a stagflationary trap (weak growth, high inflation), the correlation will probably shift sign: High growth with moderate inflation or a 'normal' recession, with low growth and low inflation will normally yield a positive correlation between equities and real rates

Our 'model'

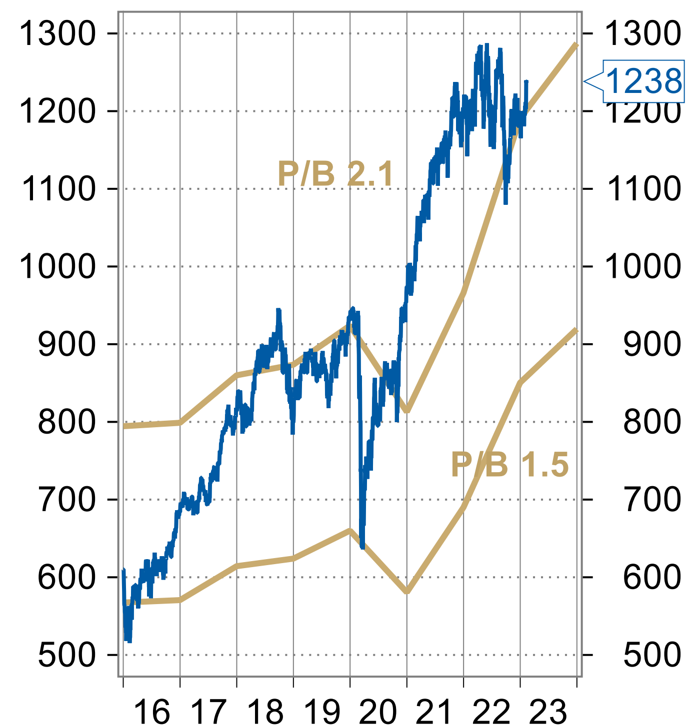
- Lower real rates are **negative** for equities if real rates are falling due to a weak economic outlook and inflation is not a worry (a normal recession)
- Lower real rates are **positive** for equities if real rates are falling without a weaker economic outlook, and at the same time low inflation (Goldilocks)
- Higher real rates are **positive** for equities if real rates are increasing because the growth is strengthening/strong (a recovery) and if inflation does not increase too much
- Higher real rate are **negative** for equites if real rates are increasing because inflation is too high and must be kept in check with high nominal rates (stagflation)

The OSEBX was up 2.2% last week – and up +0.06 to 2.16x the book value

The book value is growing rapidly, due to the extremely strong energy sector earnings. But for how long??



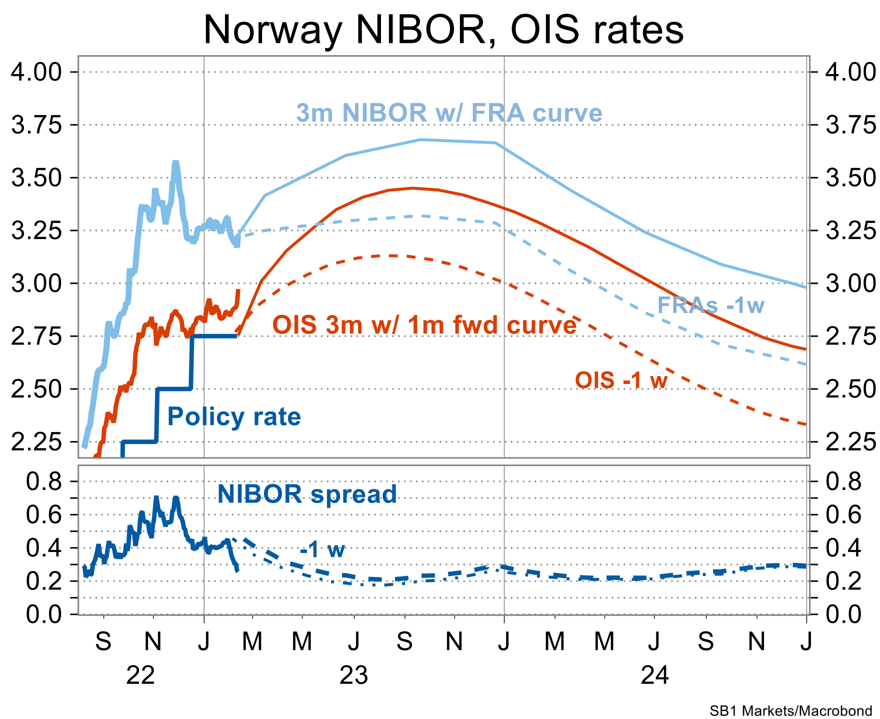
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

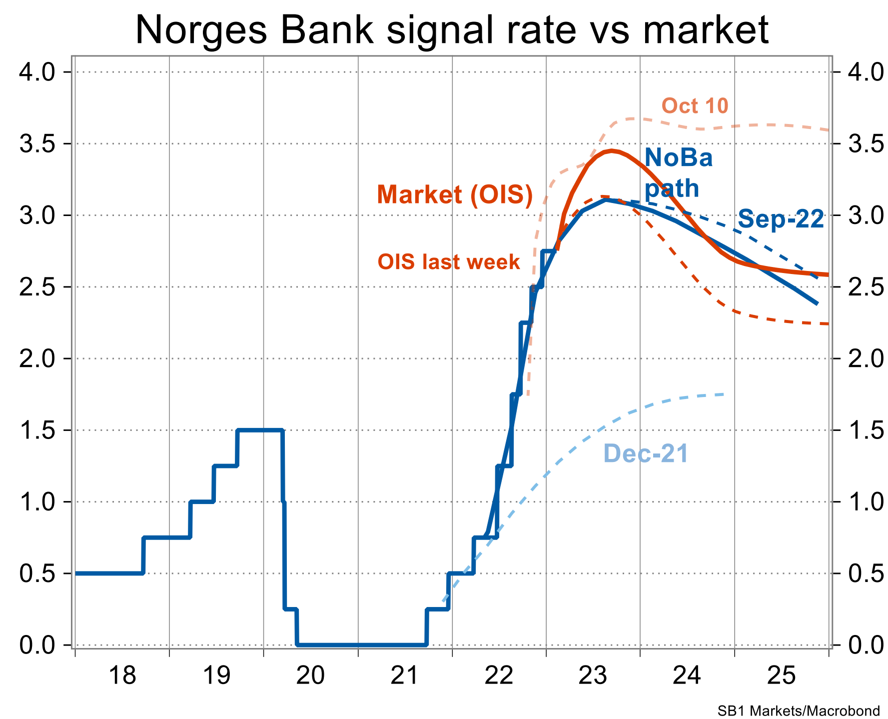


Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

A massive lift in the expected NoBa peak rate, up 35 bps to 3.45%

The market expect close to <u>three hikes in 2023,</u> vs NoBa's Dec path that signalled <u>one or two hikes</u> (almost 50/50) in H1

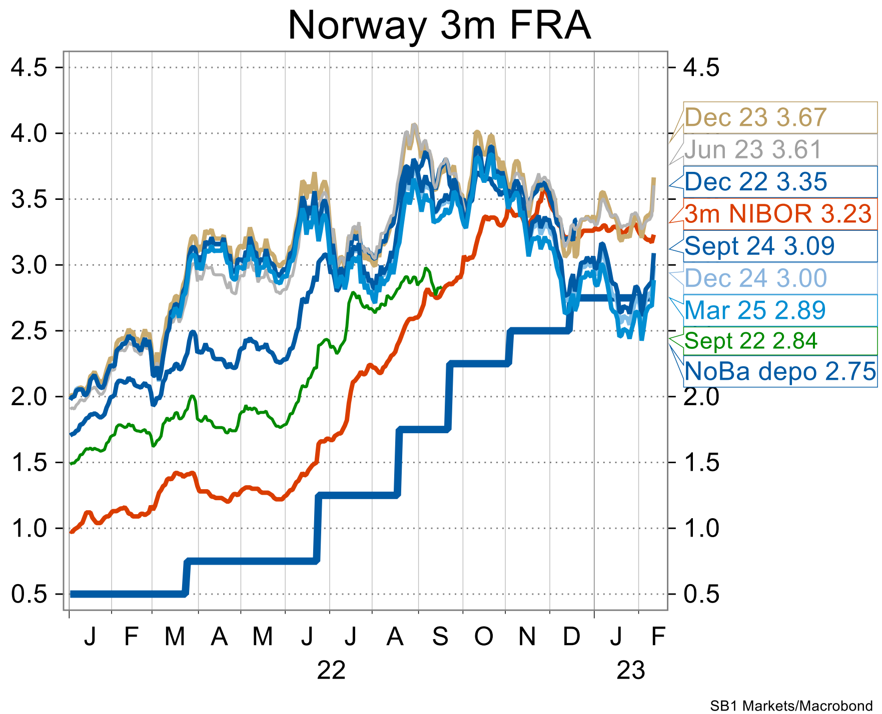


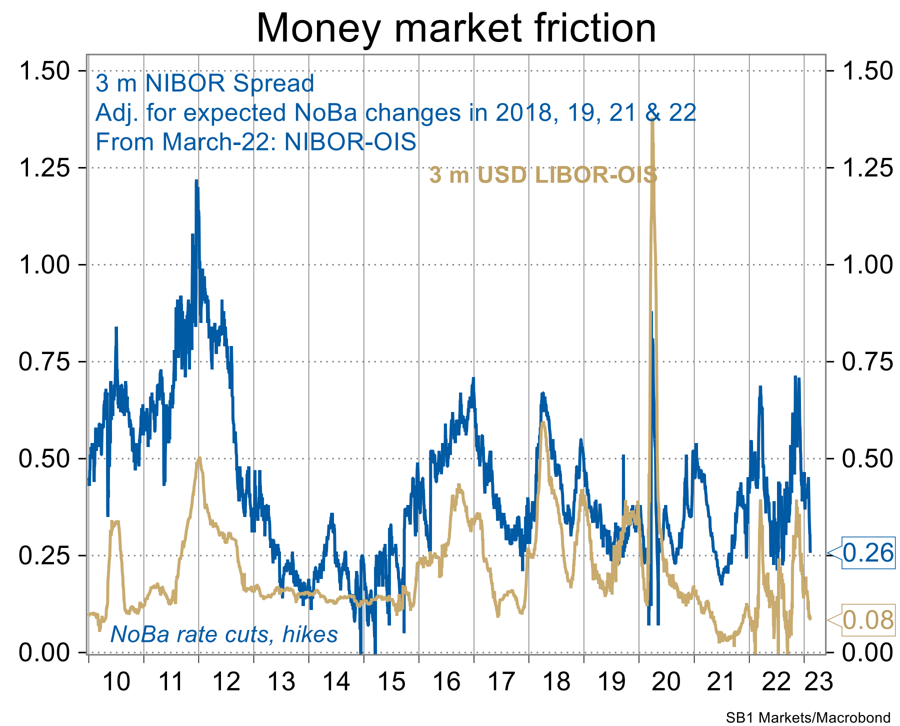


- The OIS curve is 35 bp above NoBa's Dec path

The NIBOR collapsed to 26 bps. 3 m NIBOR +1 bp, the 3 m OIS up 10 bps

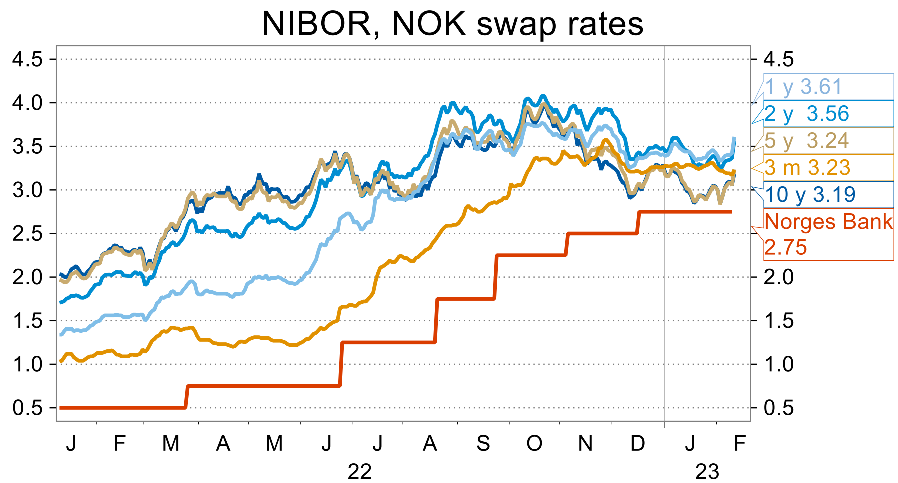
Dec-23 3 m FRA the highest since early November – with help from abroad. And the Norwegian CPI

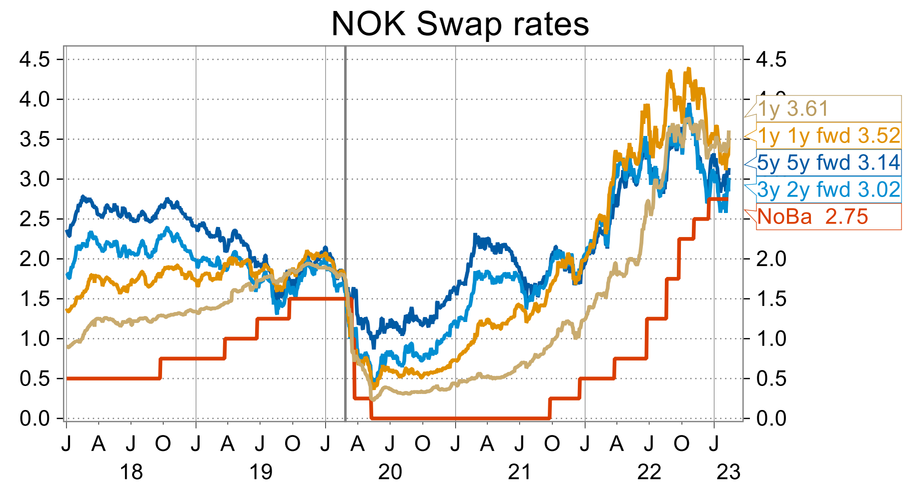


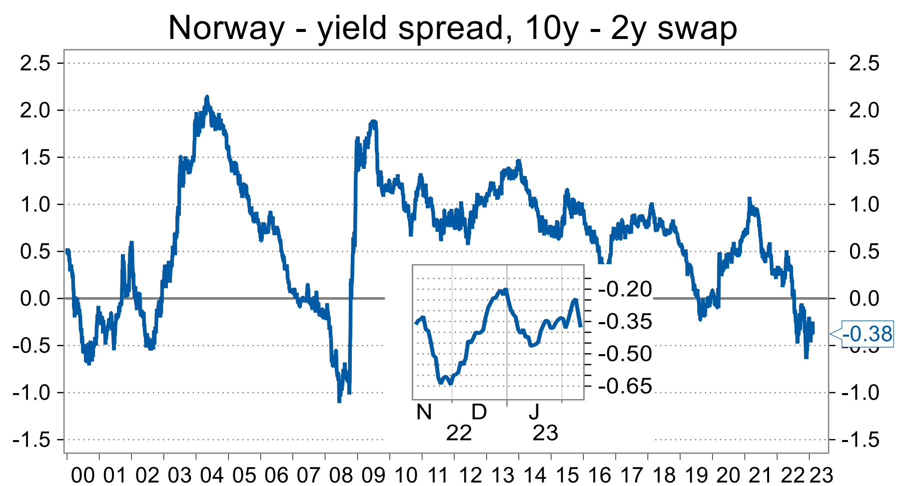


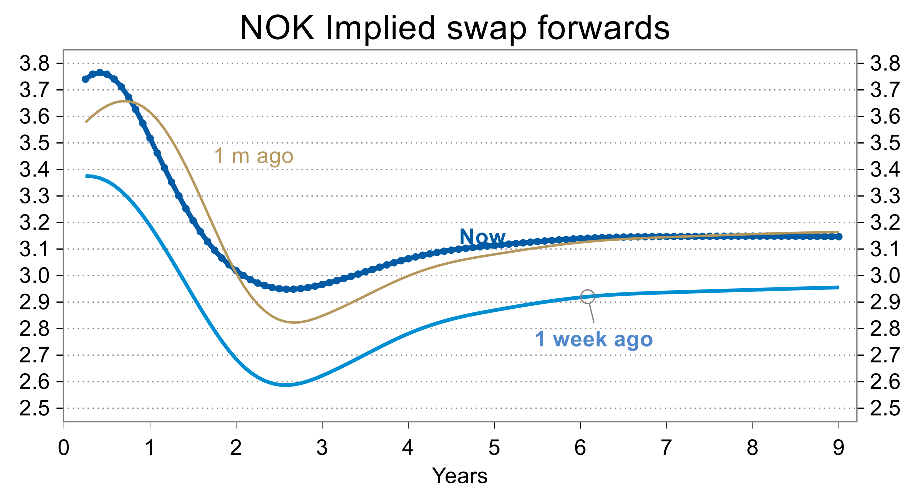
SpareBank 1 MARKETS

Implied swap rates up all over the curve, most in short end





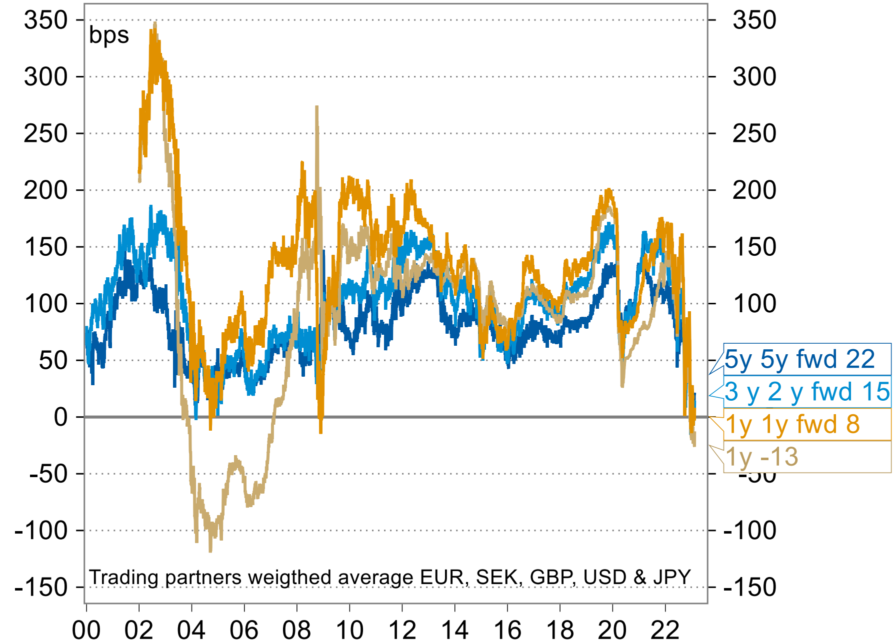




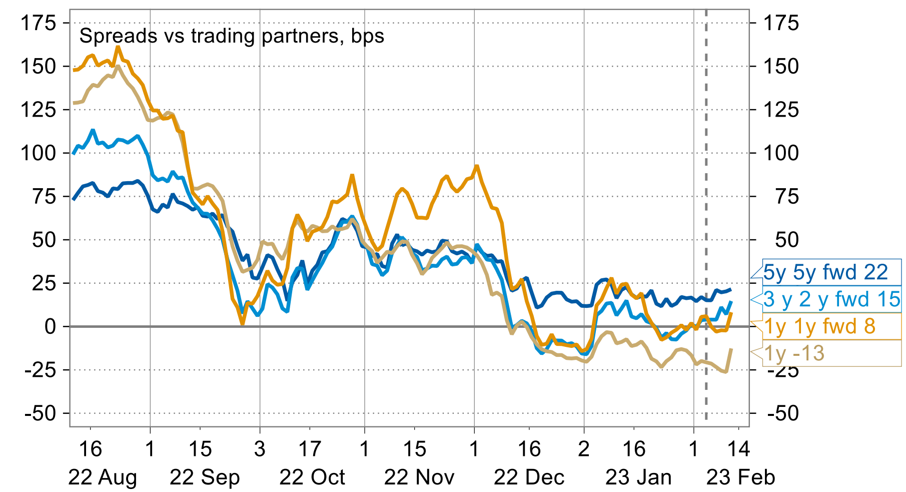
Spreads marginally up last week too, the level is still low

The 1 y rate below, the rest of the NOK curve higher than abroad – but not by much

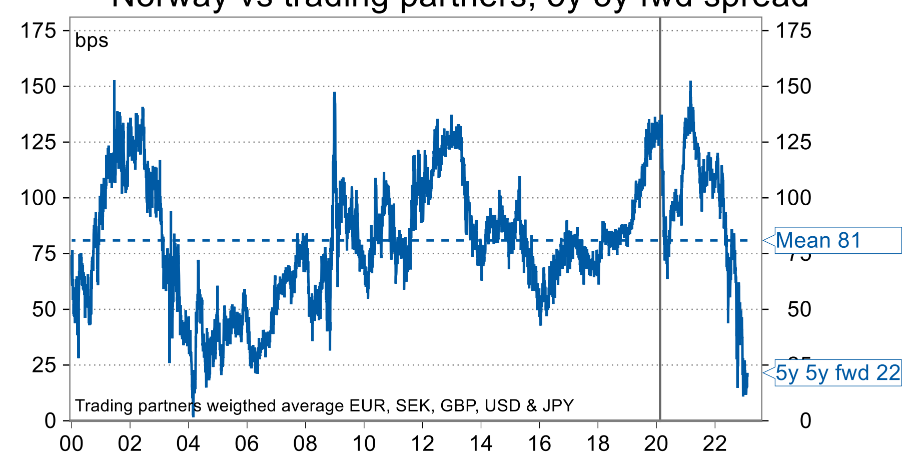
Norway vs trading partners, impl swap spreads



SB1 Markets/Macrobond



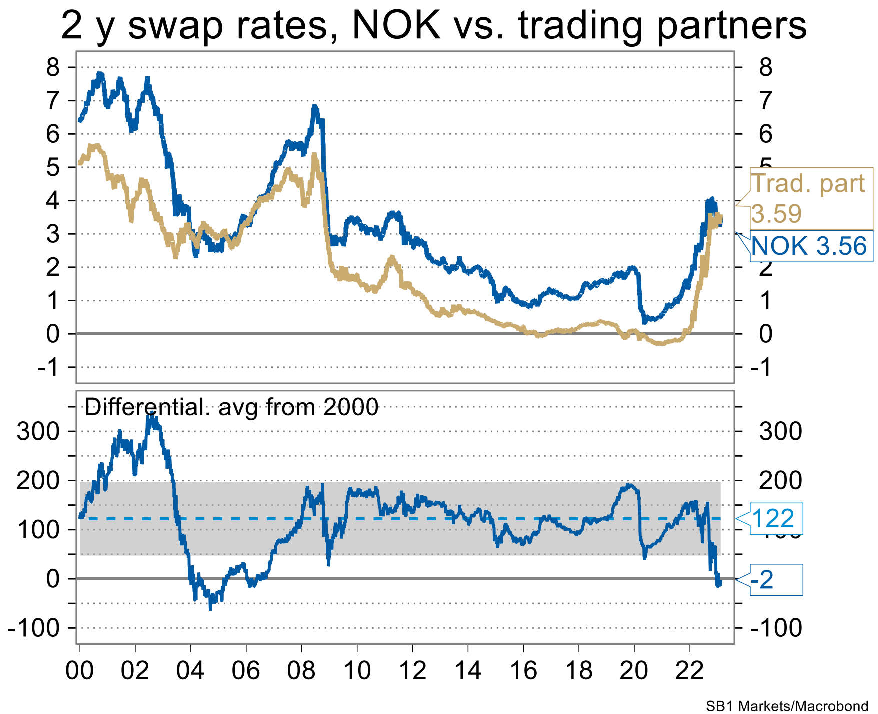
Norway vs trading partners, 5y 5y fwd spread

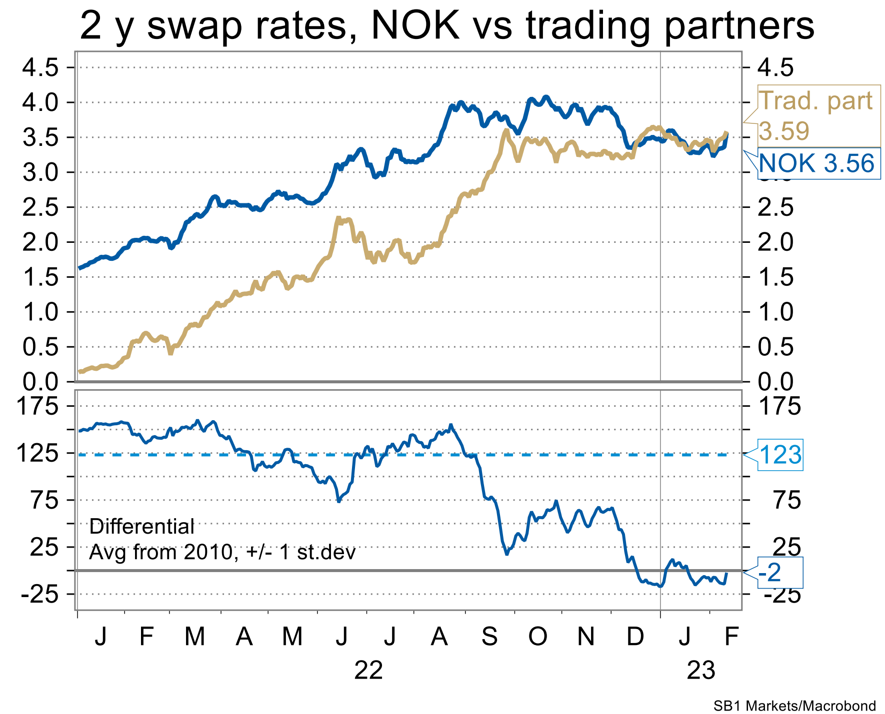


SB1 Markets/Macrobond

- Spreads were too wide, now they may be too narrow
  - **Norwegian inflation** has not historically been lower than abroad – and we doubt it will
  - **Higher oil investments** will give the Norwegian an idiosyncratic support the 2 – 3 coming years
  - The room for **fiscal expansion** is much larger than in any other country, if needed
- The ‘only’ risk: A collapse in the Norwegian housing market

The spread vs. trading partners has fallen to close to zero

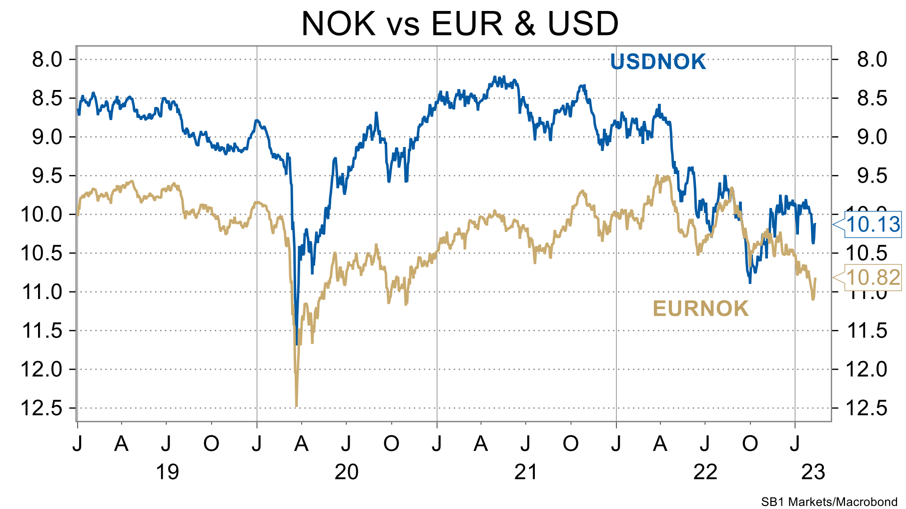


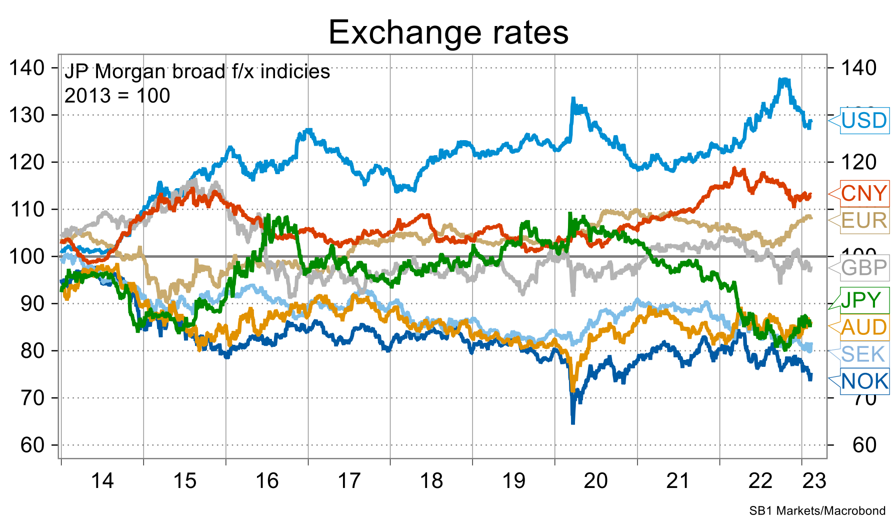


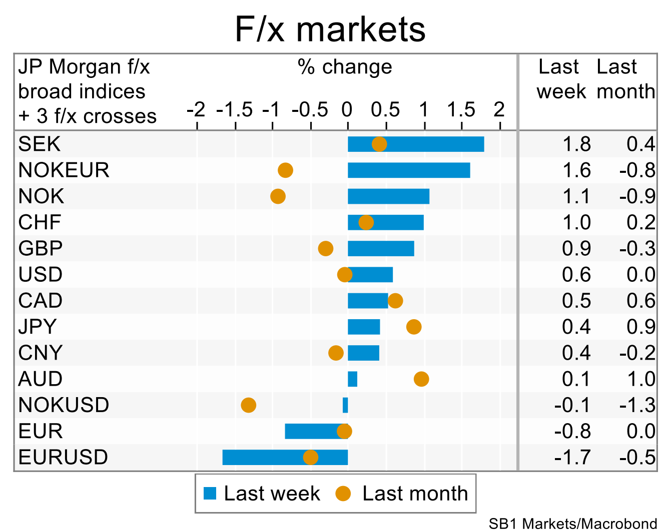
- See the comment on the previous page

NOK almost to the top of the list, from the bottom. SEK last week's winner

USD up too while EUR the big looser, as rates rose less here than elsewhere?



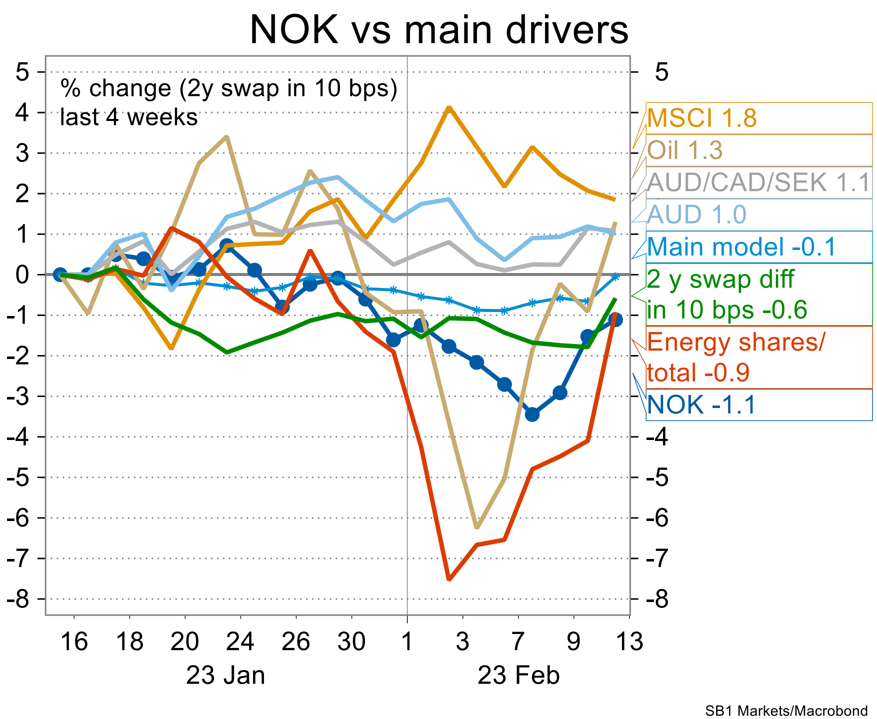


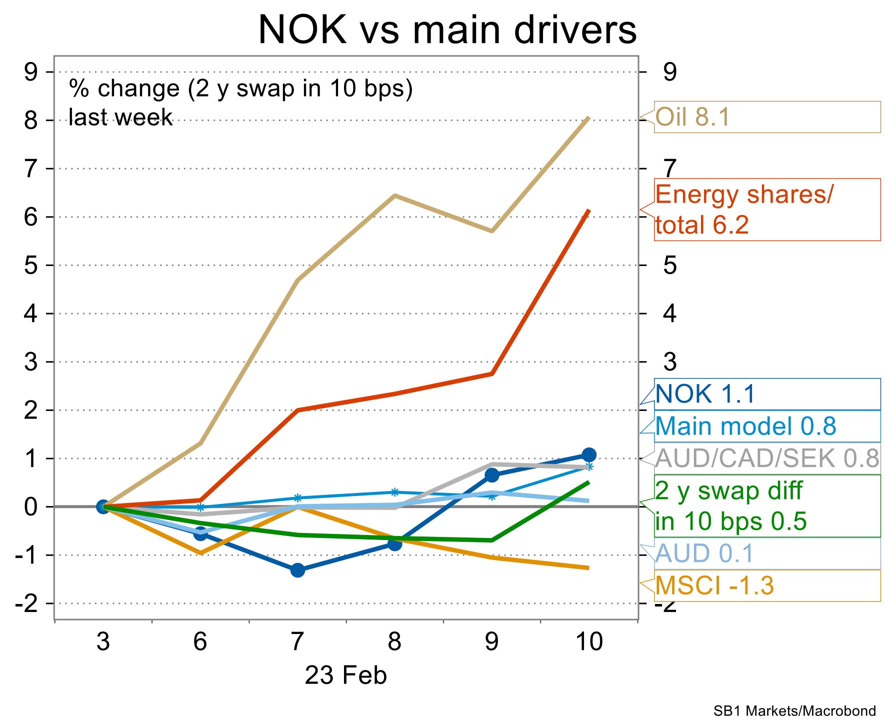


JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
SEK	1.8	0.4
NOKEUR	1.6	-0.8
NOK	1.1	-0.9
CHF	1.0	0.2
GBP	0.9	-0.3
USD	0.6	0.0
CAD	0.5	0.6
JPY	0.4	0.9
CNY	0.4	-0.2
AUD	0.1	1.0
NOKUSD	-0.1	-1.3
EUR	-0.8	0.0
EURUSD	-1.7	-0.5

NOK up 1.1%, our model indicated 0.8%

The oil prices rose. 'Risk off' was not sufficient to prevent the NOK from appreciate

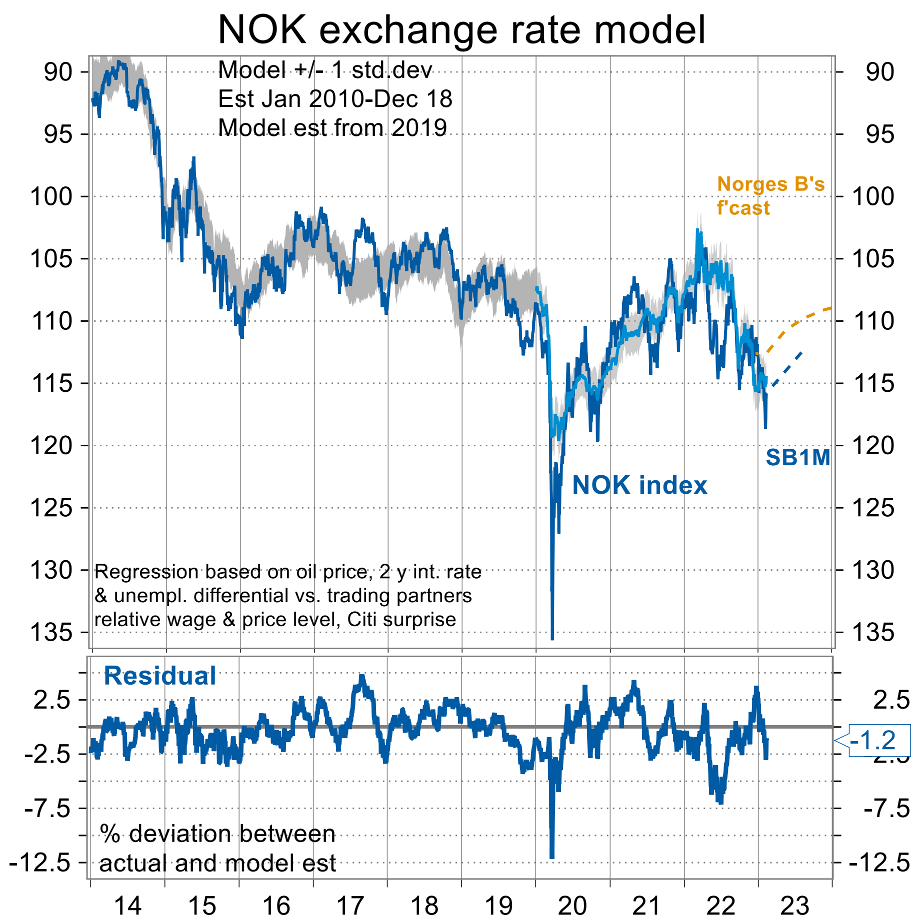


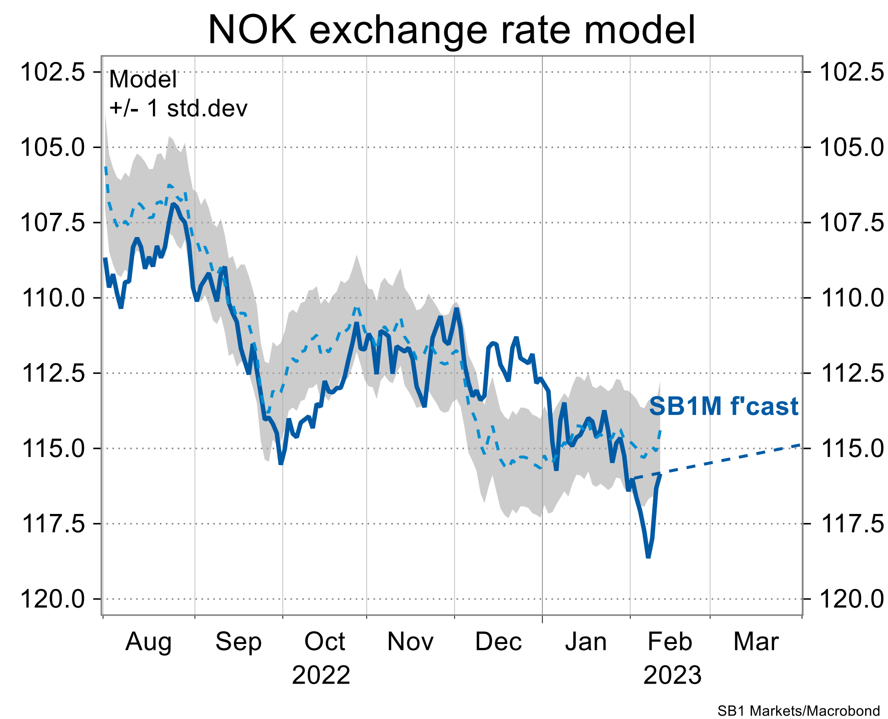


- NOK is 1.2% <u>below</u> our **main model estimate** (from -1.4%)
- The NOK is 10% <u>weaker</u> than our **AUD/CAD/SEK-model**, our 'super-cycle peers', predicts, a substantial weakening (from -9%.)
- NOK is 3% <u>weaker</u> than an estimate from a model that includes global **energy companies' equity prices** (vs the global stock market) (from -1%)

On this and the following pages we have swapped Norges Bank's I44 index for JP Morgan's broad NOK index and rebased it to the current index value for the I44. The I44 has an earlier closing time than the 'official' closing time for f/x crosses. There are no substantial difference between these two indices over time, The 2 y swap rate differential is measured in 10 bps - that is, 1 equals 10 bps

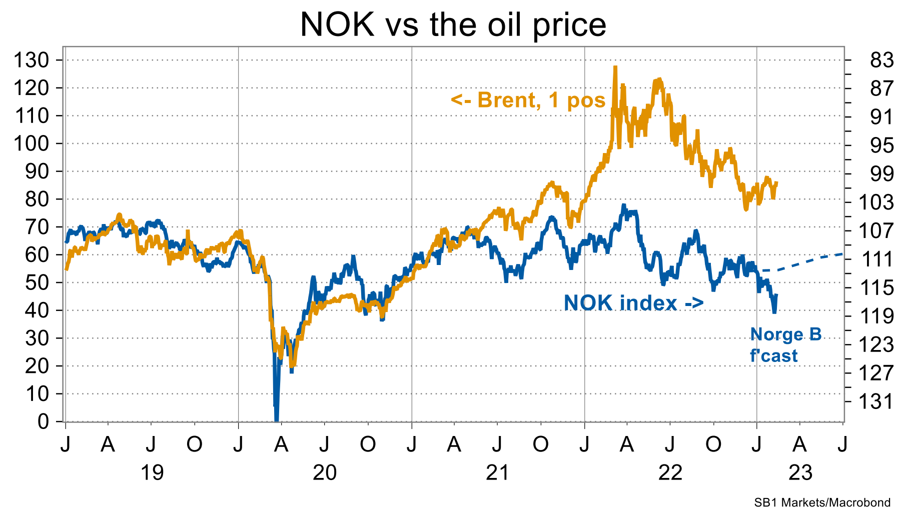
NOK up last week, still on the weak side

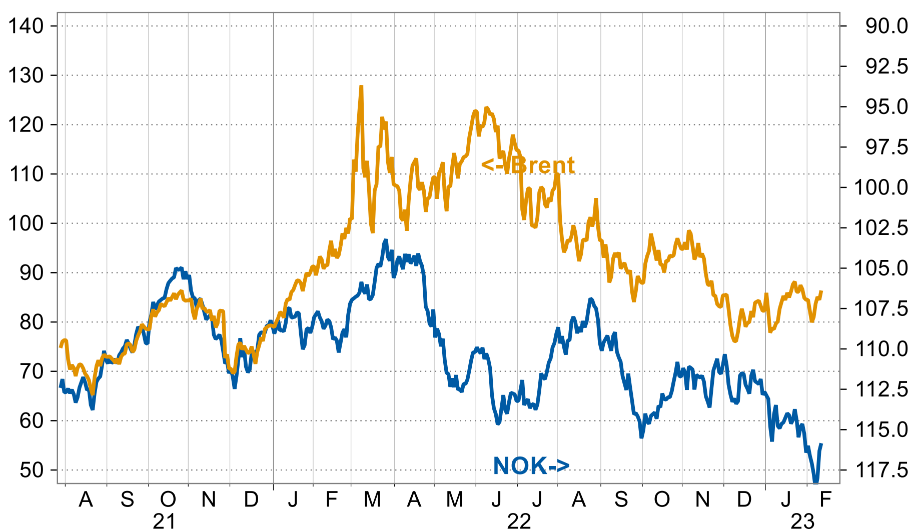


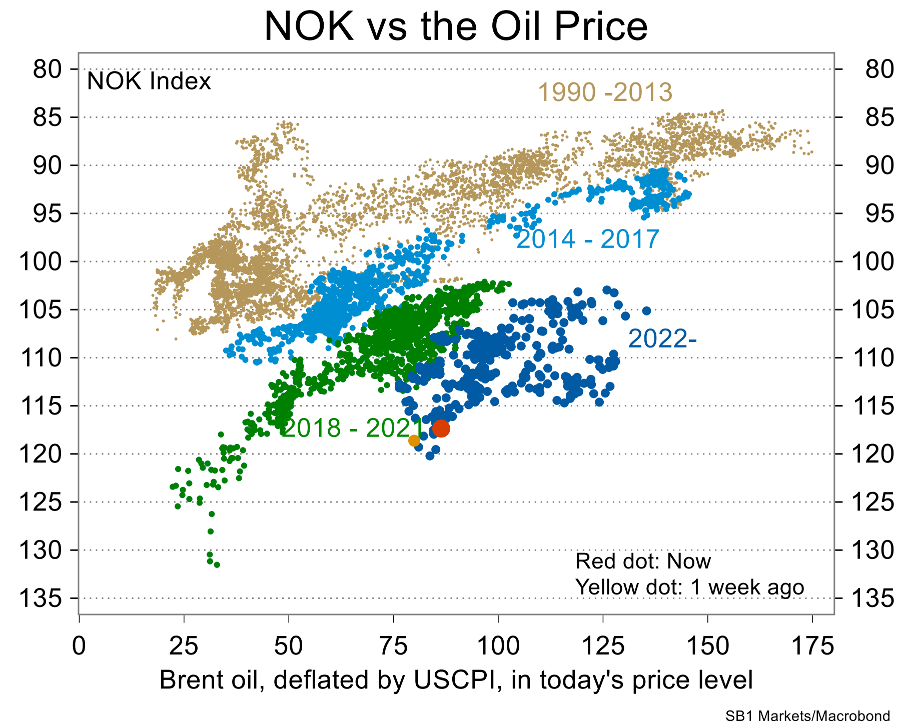


Oil and NOK up in tandem – by luck and accident?

The NOK has been close to uncorrelated with the oil (or natural gas) price last year

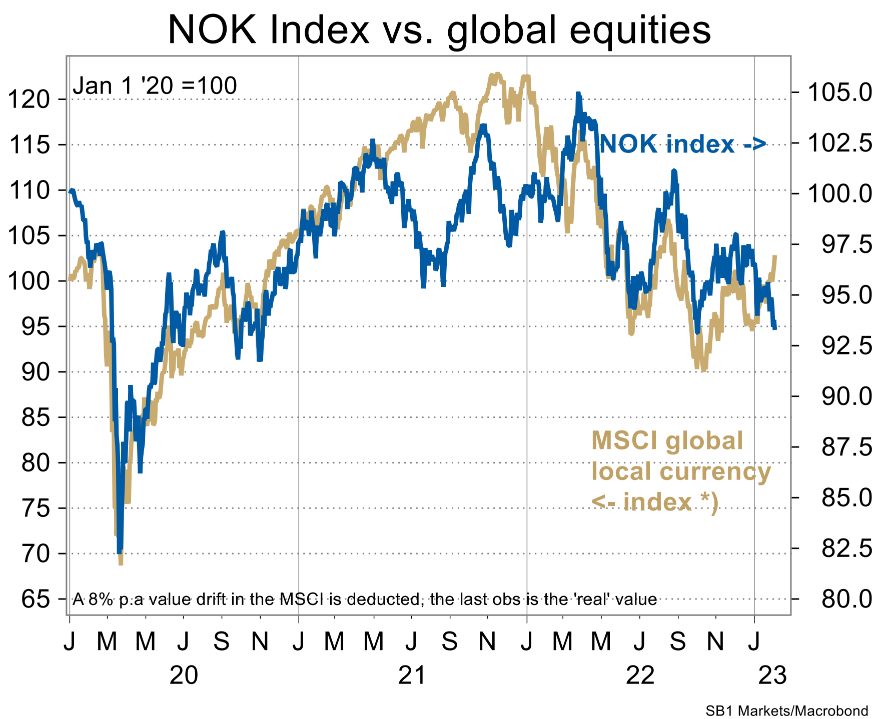


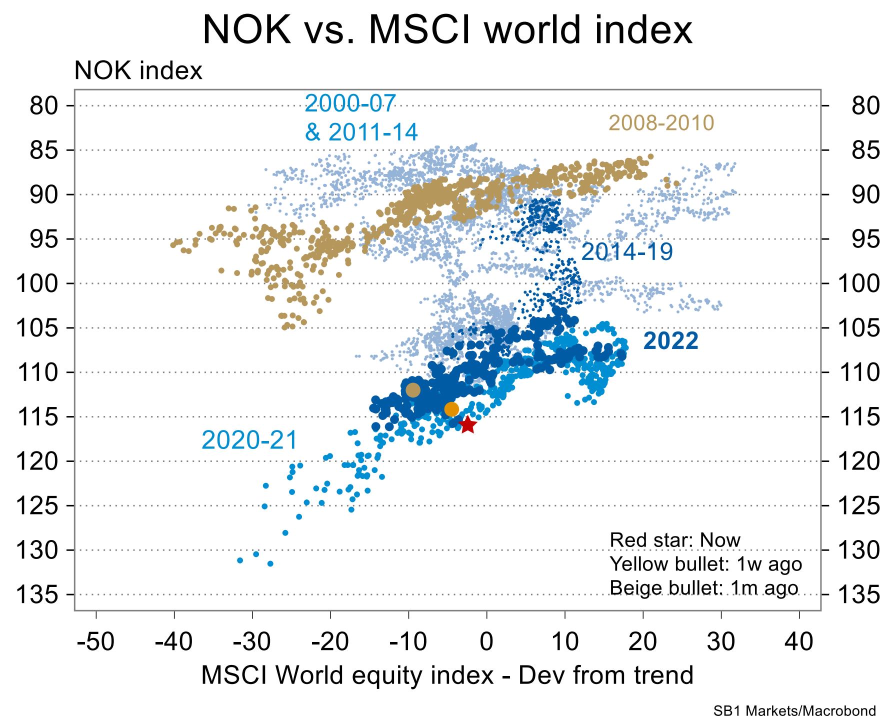




Global equities down, NOK up. Is the positive correlation broken, again?

The NOK has been closely in sync with the global stock market since April – <u>but not so the recent weeks</u>

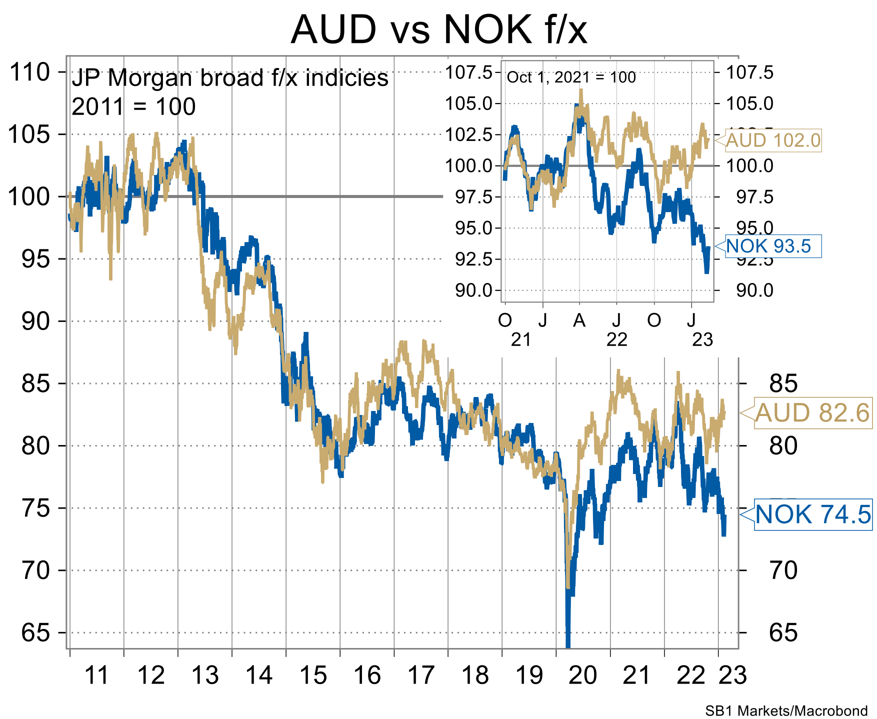


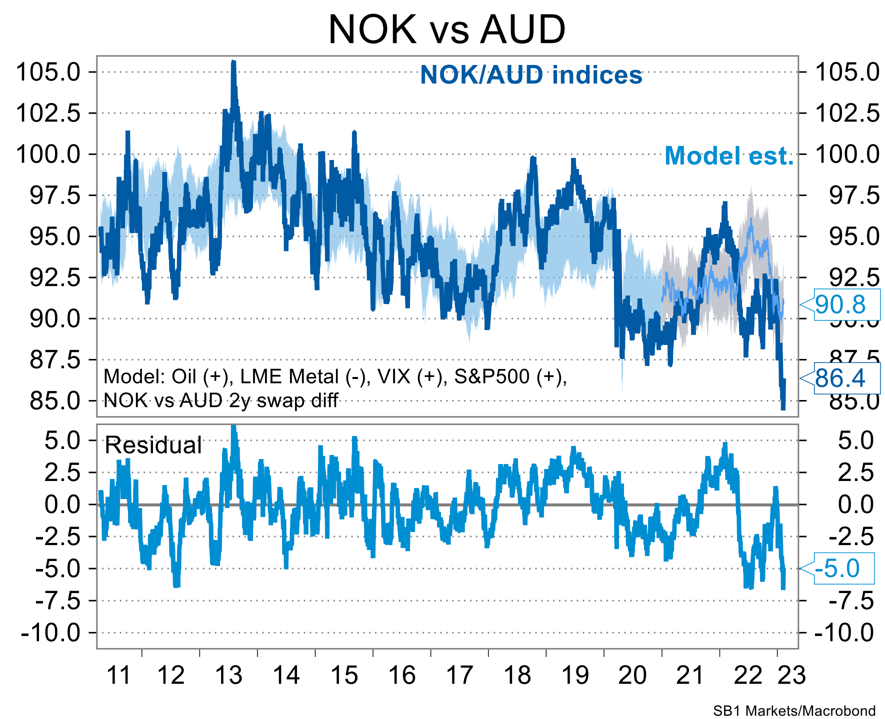


- There has not been any stable correlation over time, and when it is, the oil price is normally the real driver. *Not so much recent weeks*

The NOK/AUD gap marginally narrowed – but it is still wide

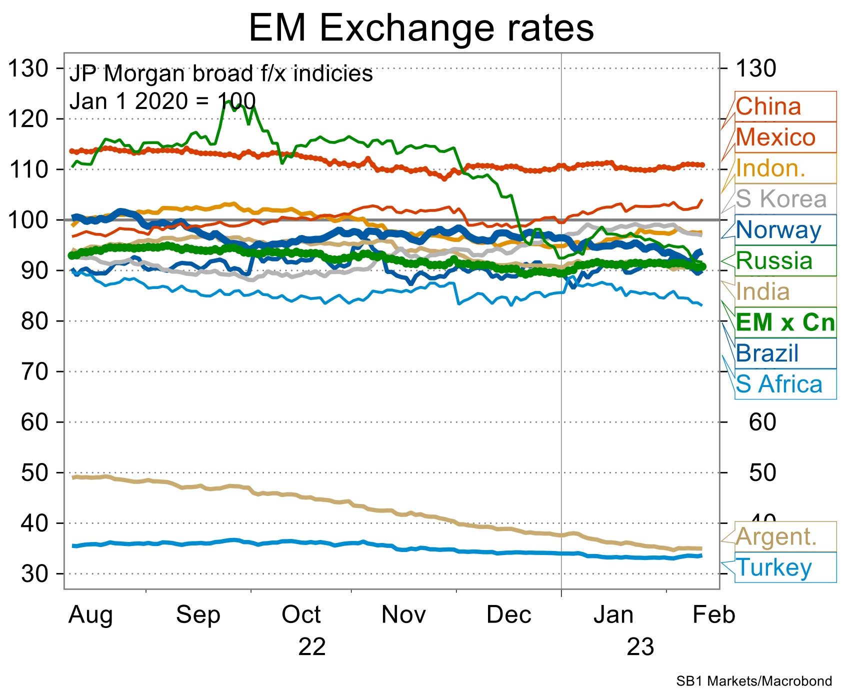
The NOK index is weaker vs the AUD index than we normally can explain by our model

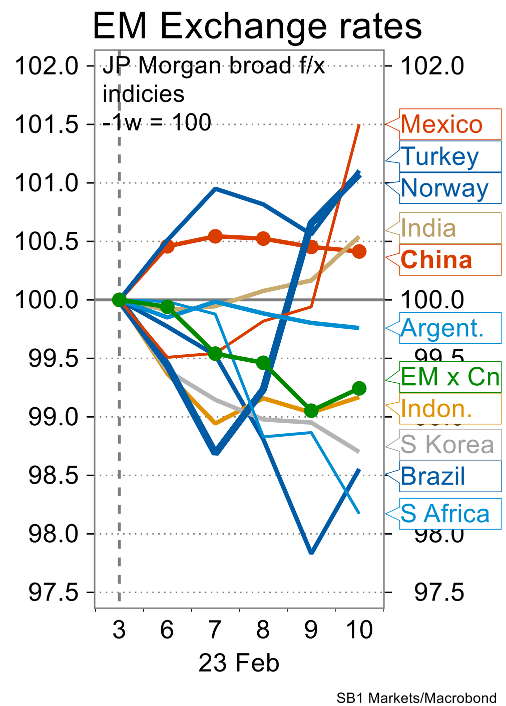


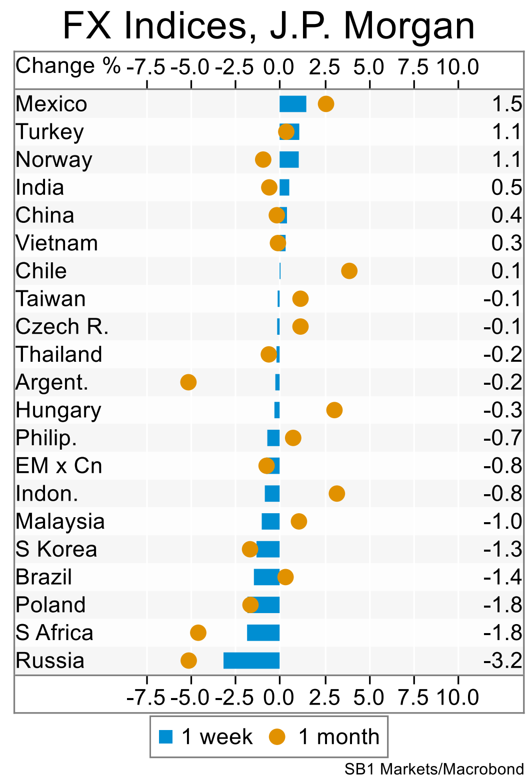


- Normally, NOK strengthens vs the AUD when the oil price rises vs. the LME metal index, when VIX, and the S&P500 index increases. The impact of interest rate differentials vs trading partners is added back to the model

Some volatility at EM f/x markets too, most commodity currencies down







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