Macro Weekly

49/22

12/12/2022

Harald Magnus Andreassen
Phone: +47 24 13 36 21
Mobile: +47 91 14 88 31
E-mail: hma@sb1markets.no

Tina Norden
Phone: +47 24 13 37 48
Mobile: +47 93 22 62 24
E-mail: tina.norden@sb1markets.no

SpareBank 1 Markets
Phone: (+47) 24 14 74 18
Visit address: Olav Vs gate 5, 0161 Oslo
Post address: PostBox 1398 Vika, 0114 Oslo

Last week, I

- **The War/European Energy/Commodities**
  - **No good news** from the East front
  - **European gas prices** rose slightly last week as the weather cooled but **Norwegian electricity prices** (spot – 12 m avg) still declined, after a steep rise the previous weeks
  - **Other commodity prices** mostly rose, but the oil price fell sharply, is spite of Russian treats about cutting production as a response to G7's price cap
  - **China** lifted most of its Covid restrictions, and markets celebrated, at least in China. The problem is the low level of immunity, especially among the elderly. (Germans living in China will be allowed to use BioNTech's mRNA vaccine, but not the Chinese. What a regime…)
- **November services & composite PMIs, services ISM**
  - The global PMI fell further in November, and both the manufacturing and the service sectors contributed on the downside. The November reading of 48 signals zero global GDP growth, with the rich world and China as the weakest links. Emerging markets x China are faring better and remain above the 50-line, but that alone does not look promising when all of the big growth engines are struggling. Delivery times are normalising and price increases are slowing but the latter still remain well above normal levels most places
- **Auto sales**
  - **Global sales** fell by some 3% m/m in November, and are down 7% vs the 2019 level. Sales fell in the **US** (down 17% vs '19 avg.) and further in **China** (but sales are still strong, up 19% vs '19), while **EMU** sales climbed further, due to the strong, ongoing recovery in German. EMU total is still down almost 20% vs. 2019. Norwegian 1st time registrations are up 32%, before taxes are hiked from Jan 1
- **China**
  - **Exports** fell sharply in November, and much more than expected, possibly both due to Covid restriction and lockdowns but also weaker demand overseas. The decline in exports to the US was particularly large. Exports from rest of Asia is also declining (and the Kiel Institute's global trade tracker report a substantial decline in shipping activity, and freight rates are now almost back to the pre-pandemic level). Chinese **imports** were also weaker – and the level is low (while Chinese exports have been incredible strong during the pandemic)

Last week, II

- **USA**
  - **Productivity** growth was higher, hourly **labour cost inflation** lower – but the underlying trend for **Unit Labour Costs** is still the main challenge for the Federal Reserve
  - Both companies and households reduced **borrowing** somewhat in Q3 but no credit strike to be seen
- **EMU**
  - **Retail sales** were down 1.8% in October but are still up 3% vs the pre-pandemic level. The fall in October was broad across the EMU countries, and it is clear that the outlook is all but optimistic as the cost-of-living crisis takes its toll on consumer demand. Auto sales are however recovering, especially in Germany
- **Norway**
  - Norges Bank's Regional **Network** expect a broad decline in activity the coming 6 months, but not at a faster pace than NoBa assumed in September. In addition, the starting point for the Network's forecast was much better than assumed back in September, as the GDP level now turns out to have been 2.5% higher than the bank assumed at that time! The Network signals lower capacity utilisation but not low – and still much more widespread lack of labour than normal, confirming the continued downward drift in unemployment. We think comments & market reactions (FRAs fell 15 bps) were misplaced, the network report was not that weak!
  - **CPI inflation** moderated substantially, as we expected (if not for all the right reasons...). Electricity inflation slowed, even if prices once more were higher than we assumed. The headline rate fell to 6.5% from 7.5%, we expected 6.7%, consensus at 7.0%. The core rate also slowed by 0.2 pp to 5,7%, we expected 5,8%, consensus 6.0%. However, NoBa expected just 5% back in September. The second steep decline in rate expectations last week was also too aggressive
  - **House prices** fell 0.9% in November, very broad based, probably in line with consensus (we expected -1.5%). The number of transactions is close to normal, but the inventory of unsold homes rose further (but not faster).
  - On Friday, the Government eased mortgage regulation by lowering the **rate hike in the stress test of borrowers**, to 3 pp from 5 pp (though minimum with a 7% mortgage rate), which will increase borrowing 'capacity' among many potential home buyers. If so – everything else equal – house prices will decline less and more tightening from NoBa will be needed

This week: FOMC, ECB, BoE & NoBa! China; US CPI, PMIs again; Norw. GDP

Time	Count.	Indicator	Period	Forecast	Prior
Monday Dec 12					
08:00	NO	Building cost index	Nov		
08:00	UK	Monthly GDP (MoM)	Oct	0.4%	-0.6%
08:00	UK	Manufacturing Production MoM	Oct	0.0%	0.0%
20:00	US	Monthly Budget Statement	Nov		-$191.3b
Tuesday Dec 13					
08:00	**NO**	**GDP Mainland MoM**	**Oct**	**0.2%(0.4)**	**0.4%**
08:00	UK	Weekly Earnings ex Bonus	Oct	5.9%	5.7%
08:00	UK	Unemployment (ILO, LFS)	Oct		
11:00	GE	ZEW Survey Expectations	Dec	-26.4	-36.7
12:00	US	NFIB Small Business Optimism	Nov	90.7	91.3
14:30	**US**	**CPI YoY**	**Nov**	**7.3%**	**7.7%**
14:30	**US**	**CPI Ex Food and Energy YoY**	**Nov**	**6.1%**	**6.3%**
Wednesday Dec 14					
08:00	UK	CPI YoY	Nov	10.9%	11.1%
08:00	SW	CPI YoY	Nov	11.5%	10.9%
11:00	EU	Industrial Production MoM	Oct	-1.5%	0.9%
20:00	**US**	**FOMC Rate Decision, MPR, press**	**Dec-14**	**4.5%**	**4.0%**
Thursday Dec 15					
03:00	**CN**	**Industrial Production YoY**	**Nov**	**3.7%**	**5.0%**
03:00	**CN**	**Retail Sales YoY**	**Nov**	**-3.9%**	**-0.5%**
03:00	CN	Fixed Assets Investments YoY	Nov	5.6%	5.8%
06:00	SW	PES Unemployment Rate	Nov		3.1%
08:00	NO	Trade Balance	Nov		82.0b
10:00	**NO**	**Norges Bank signal rate, MPR**	**Dec-15**	**2.75%**	**2.50%**
10:00	NO	Housing starts	Nov		
13:00	**UK**	**Bank of England Bank Rate**	**Dec-15**	**3.5%**	**3.0%**
14:15	**EU**	**ECB Main Refinancing Rate**	**Dec-15**	**2.5%**	**2.0%**
14:30	US	Empire Manufacturing	Dec	-1	4.5
14:30	**US**	**Retail Sales Ex Auto MoM**	**Nov**	**0.2%**	**1.3%**
14:30	US	Initial Jobless Claims	Dec-10	234k	230k
14:30	US	Philadelphia Fed Business	Dec	-10	-19.4
15:15	US	Manufacturing Production	Nov	-0.1%	0.1%
Friday Dec 16					
08:00	UK	Retail Sales MoM	Nov	0.3%	0.3%
08:00	SW	Unemployment Rate SA	Nov	7.3%	7.7%
09:30	GE	Manufacturing PMI	Dec P	46.5	46.2
09:30	GE	Services PMI	Dec P	46.4	46.1
10:00	**EU**	**Manufacturing PMI**	**Dec P**	**47.2**	**47.1**
10:00	**EU**	**Services PMI**	**Dec P**	**48.5**	**48.5**
10:30	UK	Manufacturing PMI	Dec P	46.5	46.5
10:30	UK	Services PMI	Dec P	48.5	48.8
11:00	EU	Trade Balance SA	Oct		-37.7b
11:00	EU	CPI YoY	Nov F	10.0%	10.0%
11:00	EU	CPI Core YoY	Nov F	5.0%	5.0%
15:45	**US**	**Manufacturing PMI**	**Dec P**	**47.8**	**47.7**
15:45	**US**	**Services PMI**	**Dec P**	**46.5**	**46.2**

- **Preliminary December PMIs**
  - The Nov PMIs were weaker than expected, especially in the US. The first Dec estimates are expected close to unchanged – at a level that implies a global recession. Delivery times have normalised, at prices are climbing slower, but still too fast
- **China**
  - **Industrial production** has been growing steadily following the pandemic, but covid restrictions and weaker global demand pose a risk vs. Nov. production. **Retail sales** were down 0.5% y/y in nominal terms in Oct, and the history was revised sharply downward to a low level, no doubt hurt by the virus & measures against the virus. **Investments** have been ok, strange, considering the 60% downturn in **construction starts**. Maybe the government's measures are working? **Credit data** may give a hint. Either way, we think investments are bound to slow sooner or later given the economic trends in China and the world
- **USA**
  - **The FOMC** will likely hike by 50 bps to 4.25 – 4.75%, even if 75 is not taken of the table. The bank will lift the interest rate path (the dot plot) by at least 40 bps, to 5%, and smaller hikes from here goes without saying. Wage inflation is still the big, underlying problem for the Fed
  - **Inflation** has peaked, and is expected further down in November. The signal from raw materials, PMIs are positive. The problem? Inflation is still far too high, of course
  - **Retail sales** are expected to slow in November, and **manufacturing production** to decline
  - The first Dec **business surveys**: Mixed results expected, in sum on the weak side
- **EMU**
  - **The ECB** will likely hike by 50 bps, to 2,00%. The economy has been stronger than expected, the unemployment rate lower, and inflation higher – but may have peaked. Business surveys are mixed, credit growth is slowing. In sum, the bank can afford to slow the pace of rate hikes, as communicated at their last press conference
- **UK**
  - **The BoE** will likely hike by 50 bps, to 3,50%. Wage inflation is far too high (new data this week), as is inflation (new data out this week), and BoE is willing to push the economy into a recession to break the wage/price spiral, now
- **Norway**
  - **Norges Bank will** likely hike by 25 bps to 2.75%, as the market discounts. We doubt the bank will lower its interest rate path as much as the market suddenly came to realise last week (after being to aggressive just days before). *More 3 next pages*
  - We expect **Mainland GDP** to rise further in October (and more than consensus, electricity production rose sharply), and the discrepancy to NoBa's Sept path will widen further. How NoBa will handle that, we will find out on Thursday

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

Norges Bank: A ‘dovish’ 25 bps hike, and no lowering of the interest rate path

The market response to the Regional Network and the CPI reports were far too aggressive.
A path lift is more likely than a lowering of the path

On the upside since the Sept MPR

- **GDP growth** has been far higher than assumed/expected. Estimated capacity in the economy will be revised upwards, but less than the upward revision of GDP (= increased output gap)
- **The Regional Network** reported the same slowdown as Norges Bank expected in September, but from a far higher GDP level than Norges Bank assumed
- **Inflation** (CPI-ATE) is 0.7 pp higher than Norges Bank expected in September
- **Unemployment** (NAV open) is unchanged at 1.6% (and the number of unemployed is still falling), Norges Bank expected an increase to 1.7%
- The government on Friday eased mortgage lending regulations by lowering the rate hike in the **stress test of borrowers** to 3 from 5 pp (though not to below 7%), increasing borrowing capacity for many potential house buyers substantially

Neutral vs the Sept MPR

- **Wage growth** has been kept in check
- **NOK** has been slightly stronger, is now slightly lower than projected
- **Surveys** are at large no weaker than Norges Bank's growth path implied
- **Interest rate expectations abroad** are unchanged from September (first up, then down)
- **Fiscal policy** is probably close to NoBa's projections (even if the Bank’s figures in the MPR were … strange)

On the downside since the Sept MPR

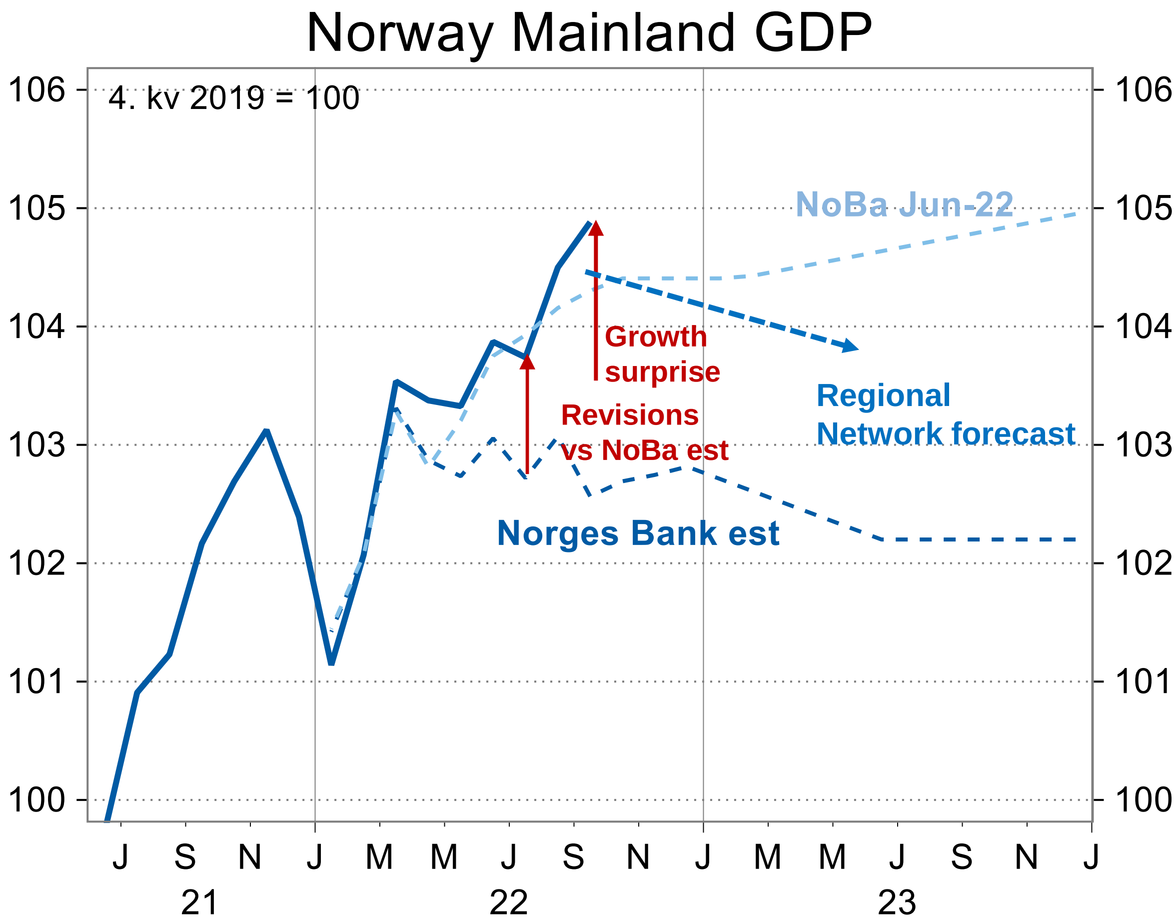
- **House prices** have fallen more than twice as fast as expected
- **Household debt** growth is slowing faster than expected
- **Global growth** is adjusted downwards (but just marginally)
- **Global CPI** inflation may have peaked, raw material prices, fright rates are falling rapidly
- **Oil prices** are some USD 5/barrel lower than projected (NoBa expected a steep decline next year)

In sum: a dovish 25 bps hike, and rather a higher, than a lower interest rate path

- A 25 bps hike is in fact rather dovish, given these 3 lists. Just the high debt burden and the possible strong impact of higher floating rates ‘for all’ and the need for ‘wait and see’ – and no signs yet of accelerating wage inflation – are arguments for lifting the signal rate by 25 bps and not by 50 bps, and for not lifting the interest rate path
- Market’s rate expectations collapsed last week, first on the Regional Report, then on the CPI. The think this response was misplaced, the Network was not that weak at all (vs. NoBa’s GDP expectations or whatever), and CPI inflation is still rather high
- We doubt the Bank now will follow the market and lower the interest rate path. A small upward revision (signalling 3.25%, instead of 3.10% at the peak) would be less surprising to us

The Regional Network expects the same decline from here as Norge Bank

… but the starting point is far above Norges Bank assumption in September

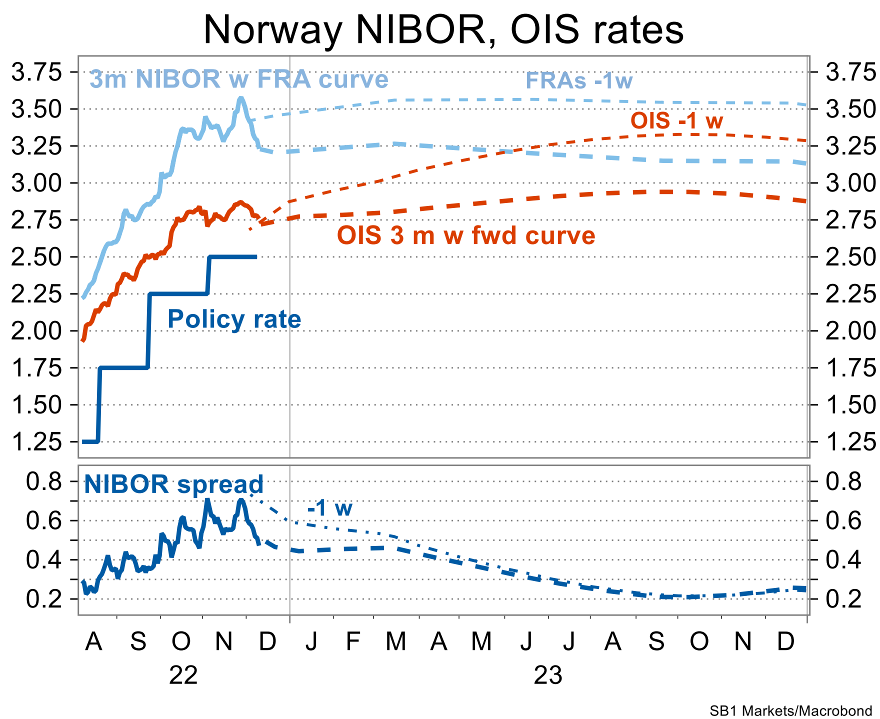


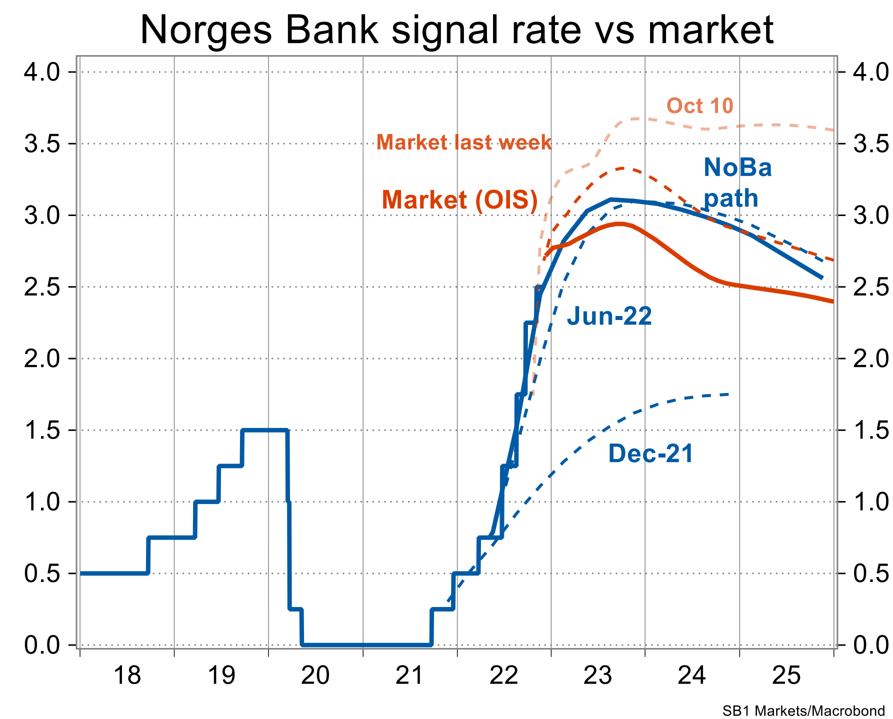
SB1 Markets/Macrobond

- The activity level at the end of Q3 was well above Norges Banks estimate
  - The Mainland GDP history has been revised up
  - Growth in August and September was much higher than Norges Bank expected (and the gap is expected to widen in October, data out tomorrow)
- NoBa will very likely revise its estimate of potential GDP up, but less than the discrepancy between the current GDP and the September forecast, and the output gap will be revised upwards, supported by lower unemployment than expected too
- If so, the Network's expected slowdown, which growth-wise was in line with NoBa's growth forecast, will not imply a downward revision of NoBa's forecasts – in fact rather the opposite!

The End is Near: A brutal decline in rate expectations last week

A 25 bps hike is still discounted this week. After that, just 20 bps left until the assumed peak in Q3 next year



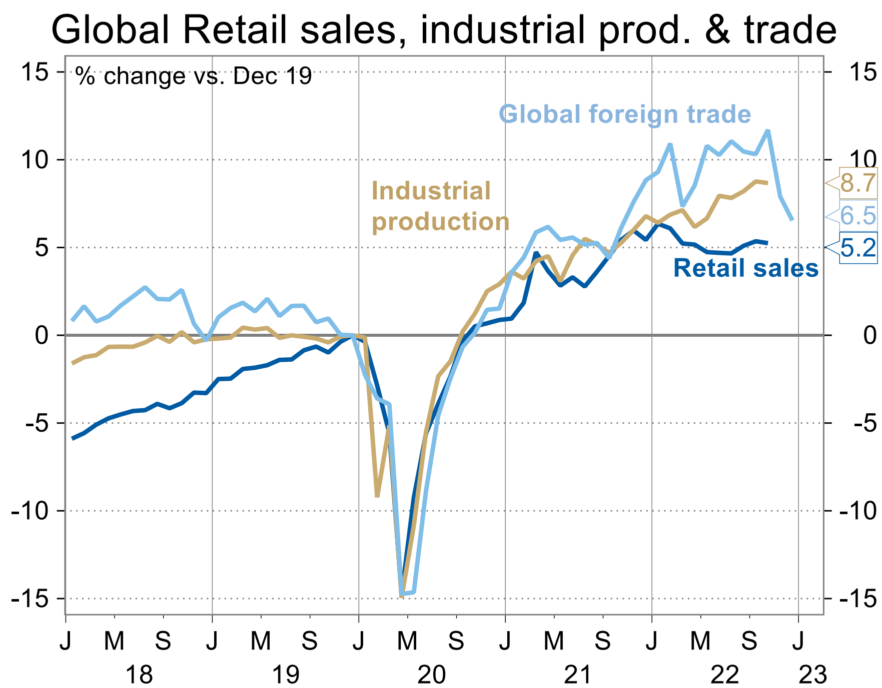


- The **OIS curve** fell by up to 42 bps last week, the most on Tuesday (the Regional Network), and even more on Friday (the CPI)
- We think the market overreacted:
  - The **Regional Network** was not that weak, as the starting point is far above NoBa'a Sept f'cast, and the decline from there was in line with NoBa's expected growth rates (that is, from a much lower starting point)
  - The **CPI was lower than expected** but is still far too high, and far above NoBa's Sept f'cast
  - In addition, on Friday, the Government decided to ease a couple of elements in the mortgage lending regulation. The most importantly, lowering the rate hike in the **stress test on borrowers debt serving capacity** by 2 pp to 3 pp from 5 pp (though at least up to a 7% mortgage rate) will increase borrowing capacity substantially for many home buyers. Thus, a higher mortgage rate would be warranted have the same overall tightening impact

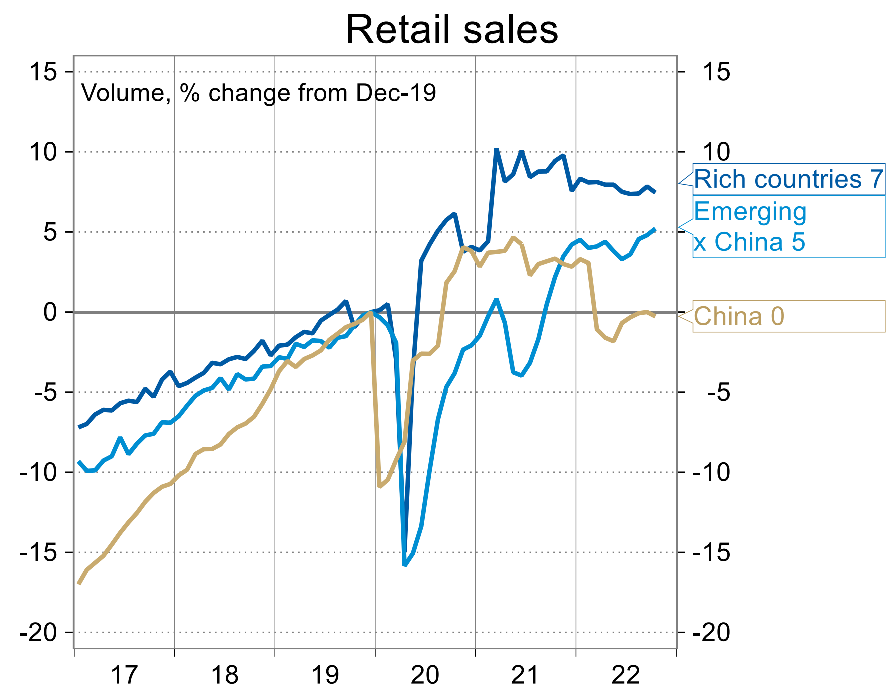
SpareBank 1 MARKETS

Kiel institute report a steep decline in shipping activity

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



SB1 Markets/Macrobond/CPB

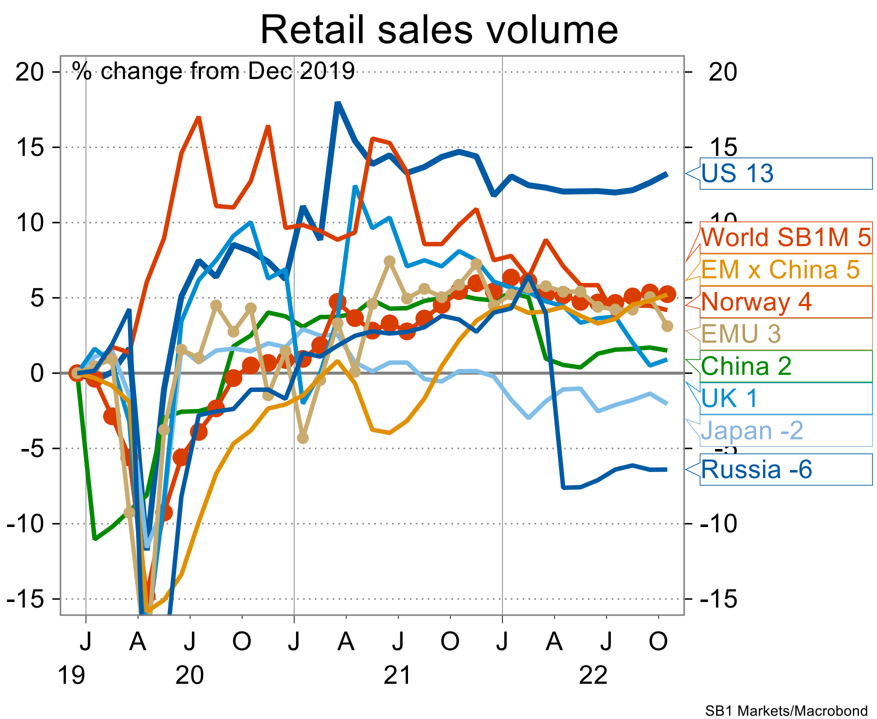


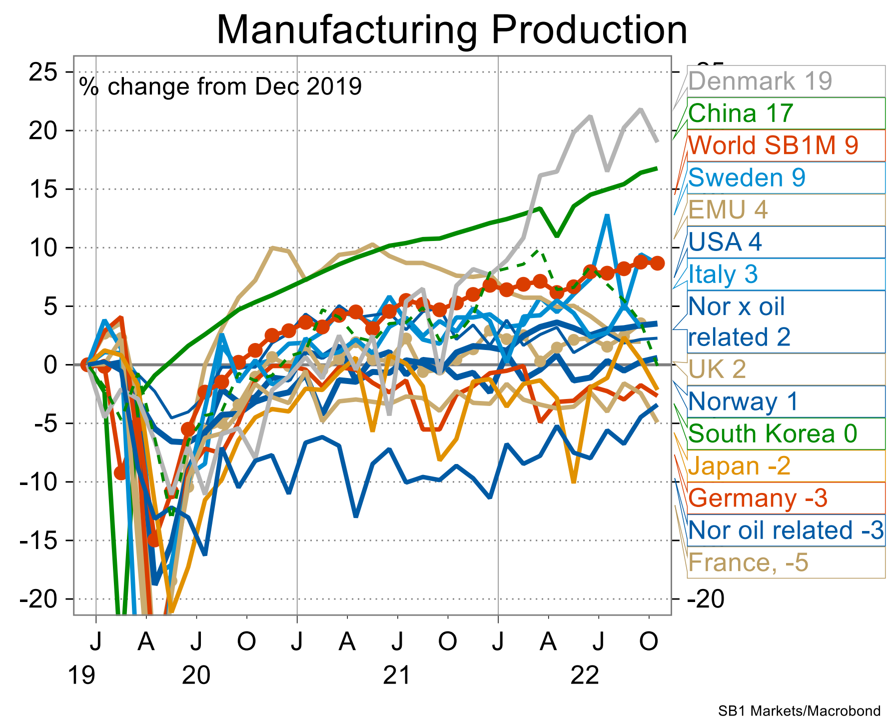
SB1 Markets/Macrobond

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

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

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



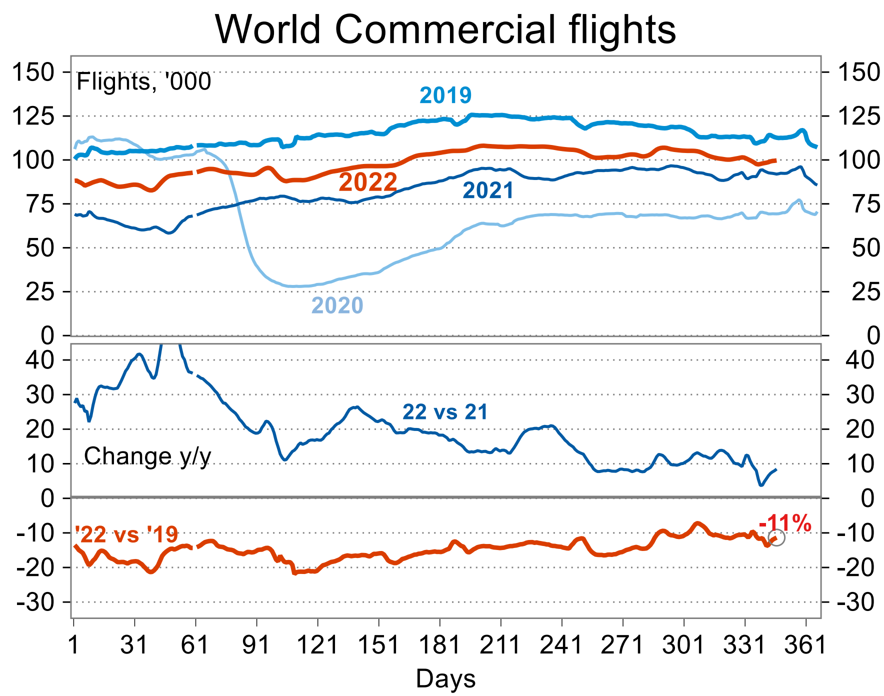


•

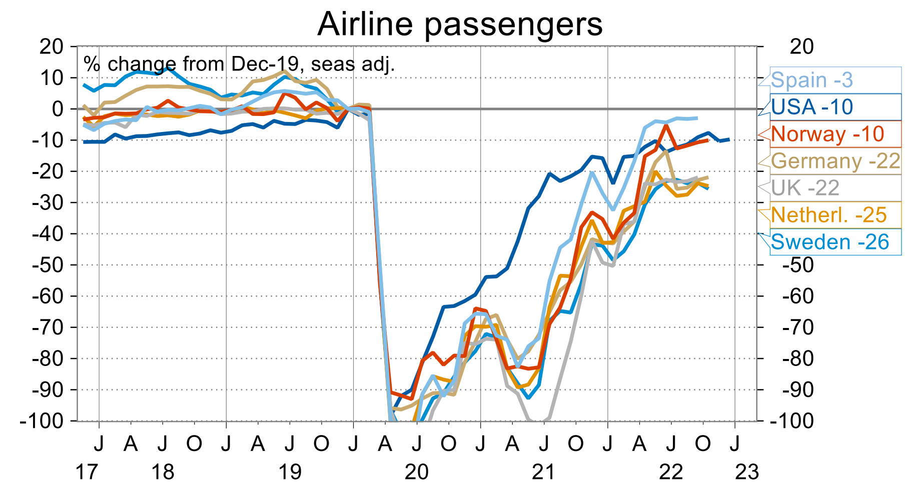
US retail sales: Personal consumption of goods, ex auto & energy

Global airline traffic slightly down, -11% vs 2019

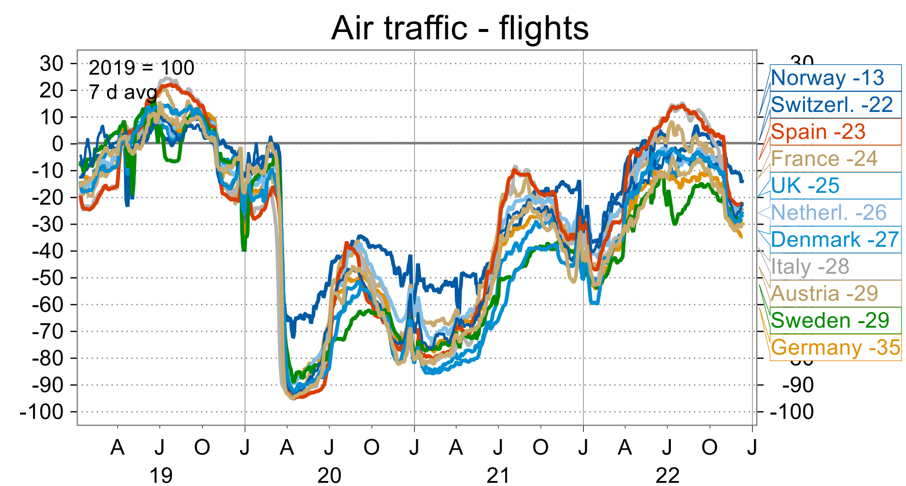
If growth rates had been normal the past 3 years, it should have been at least 10% above



Flightradar24 SB1 Markets/Macrobond



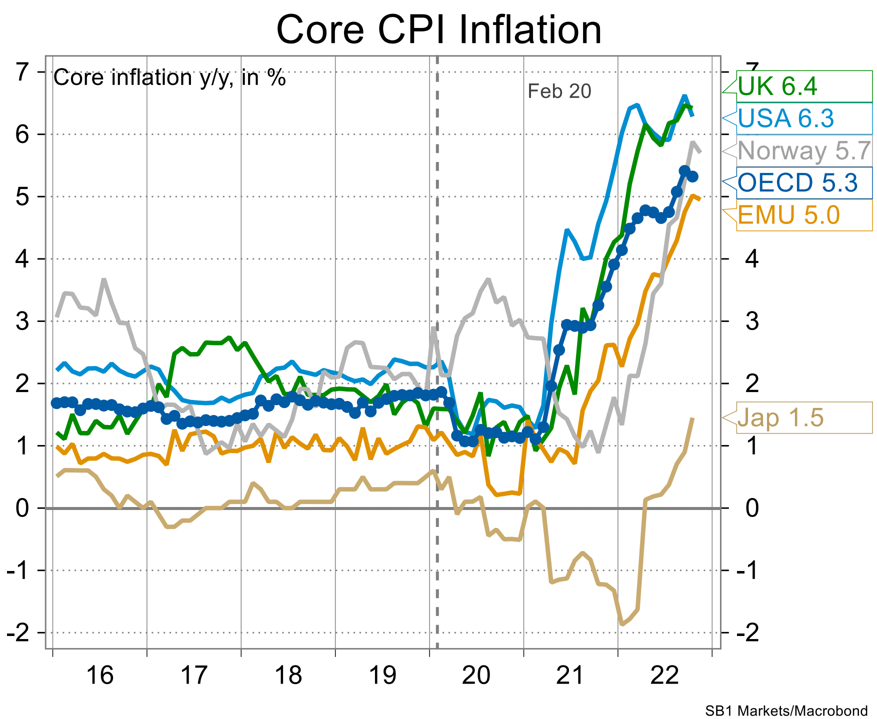
National authorities, SB1 Markets/Macrobond

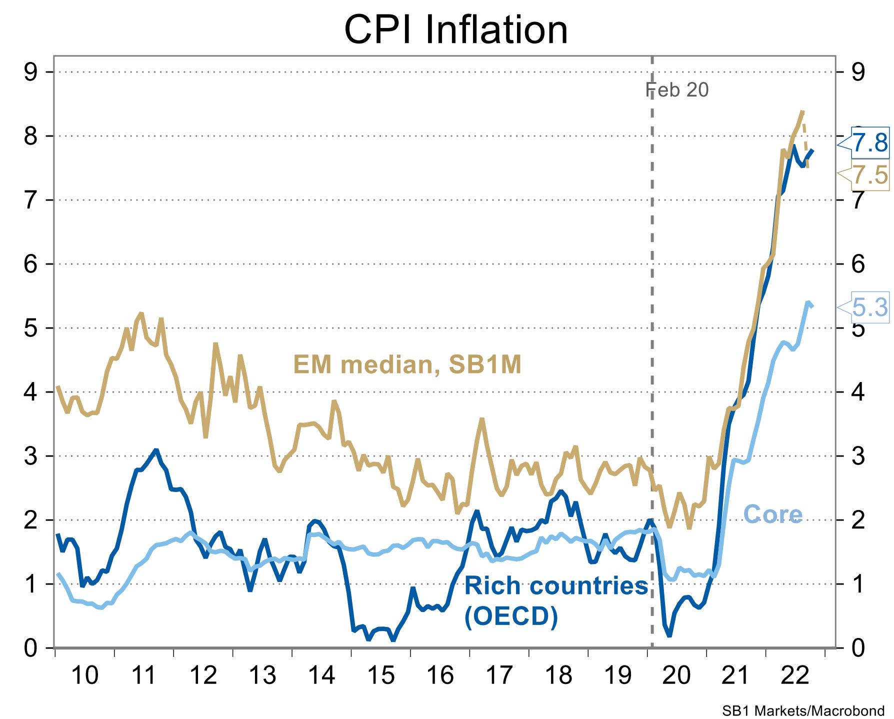


SB1 Markets/Macrobond

Peak inflation? Probably

The going rate is 8% headline inflation, and 5% core inflation

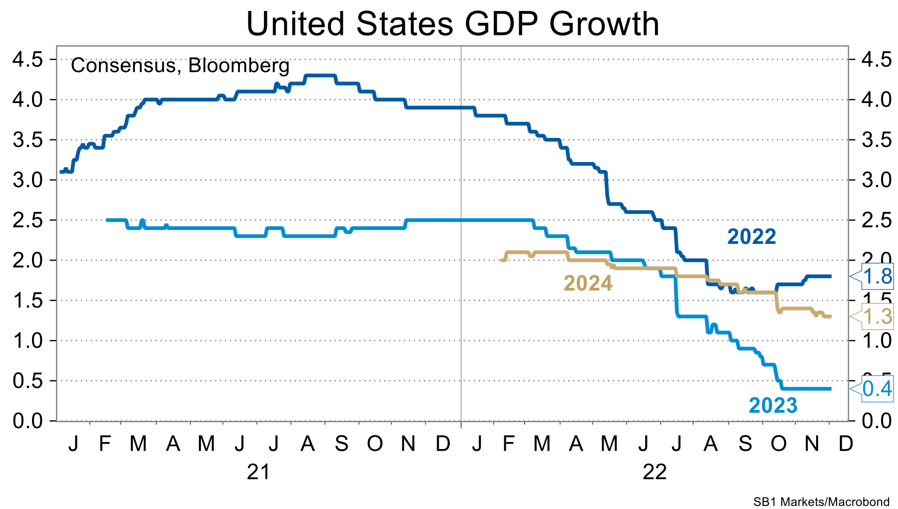


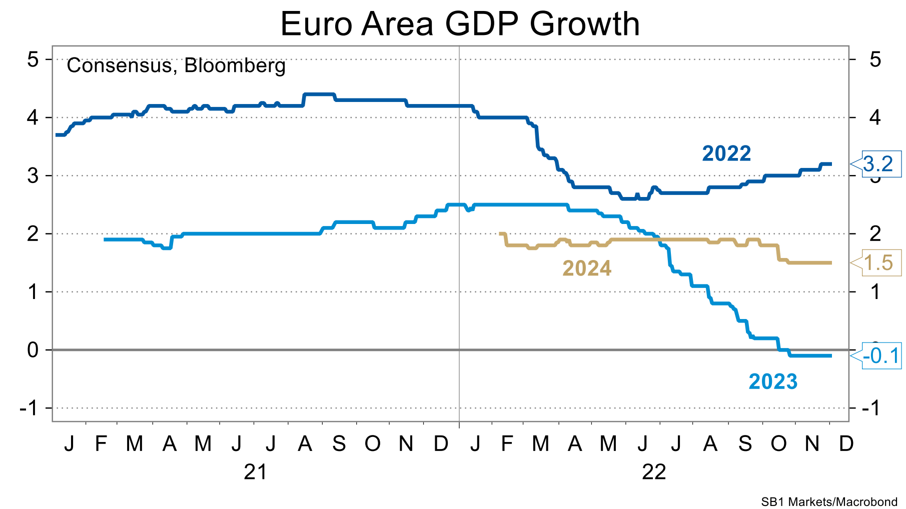


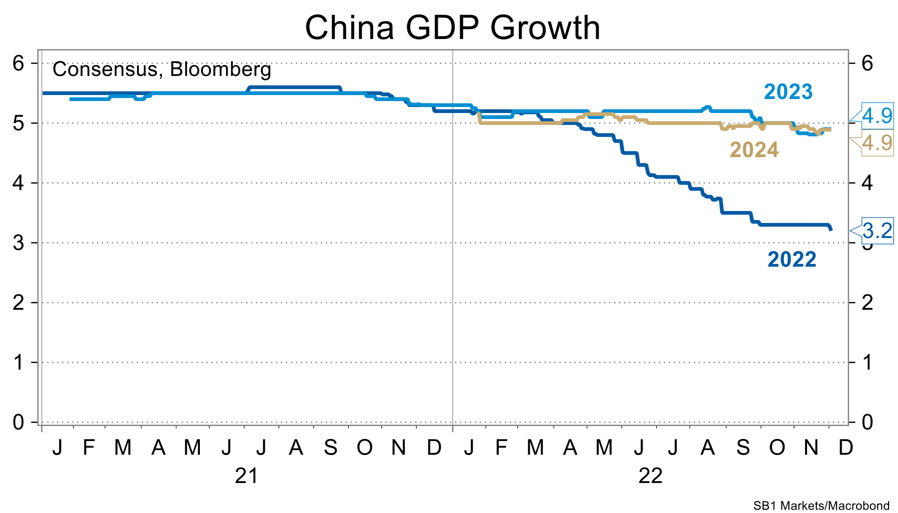
•

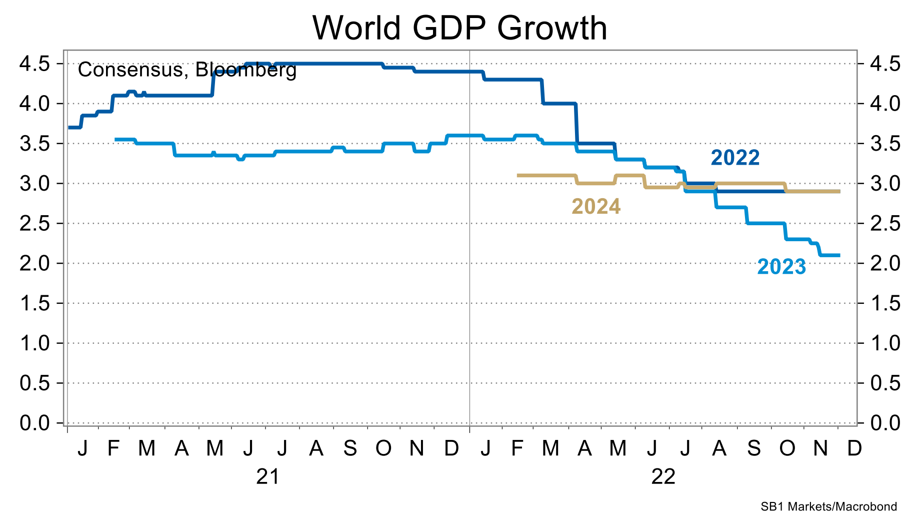
GDP growth expectations: 2023 forecasts have flattened

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



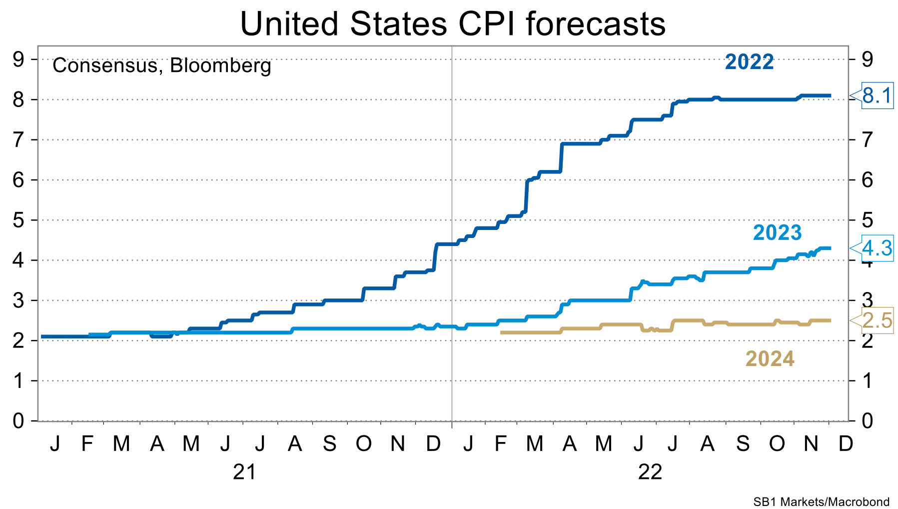


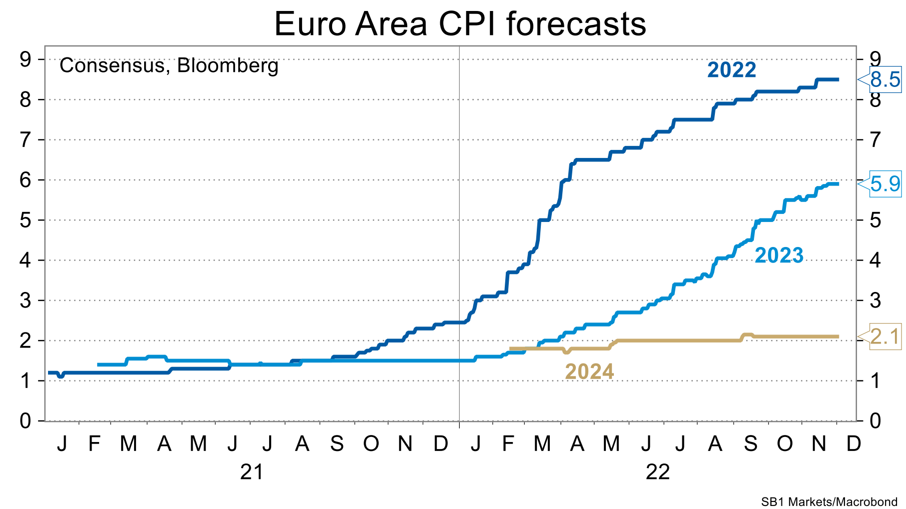




2023 inflation forecasts are still drifting upwards

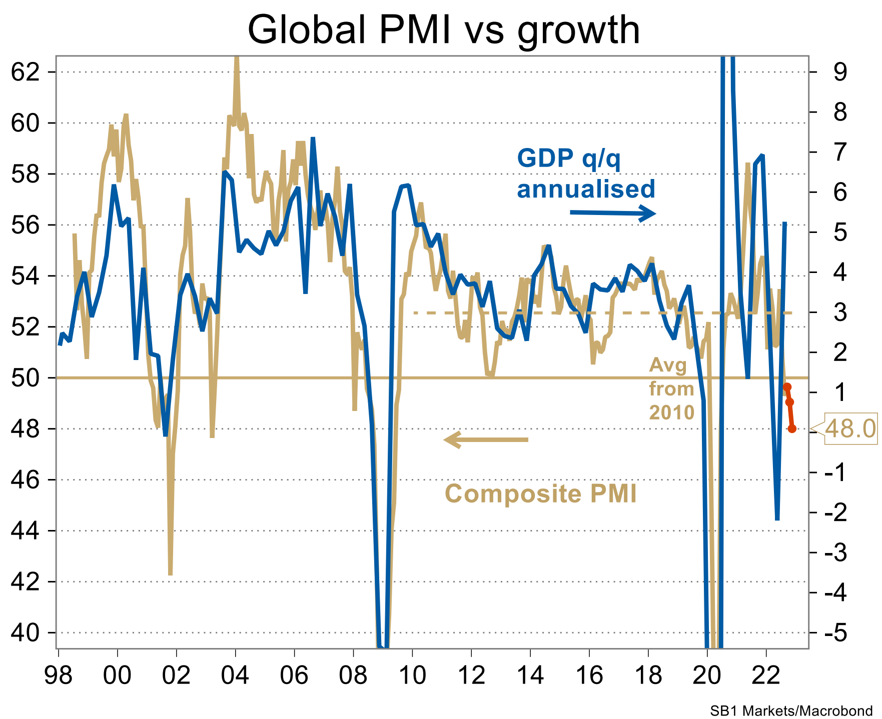
Especially the 2023 EMU inflation expectations

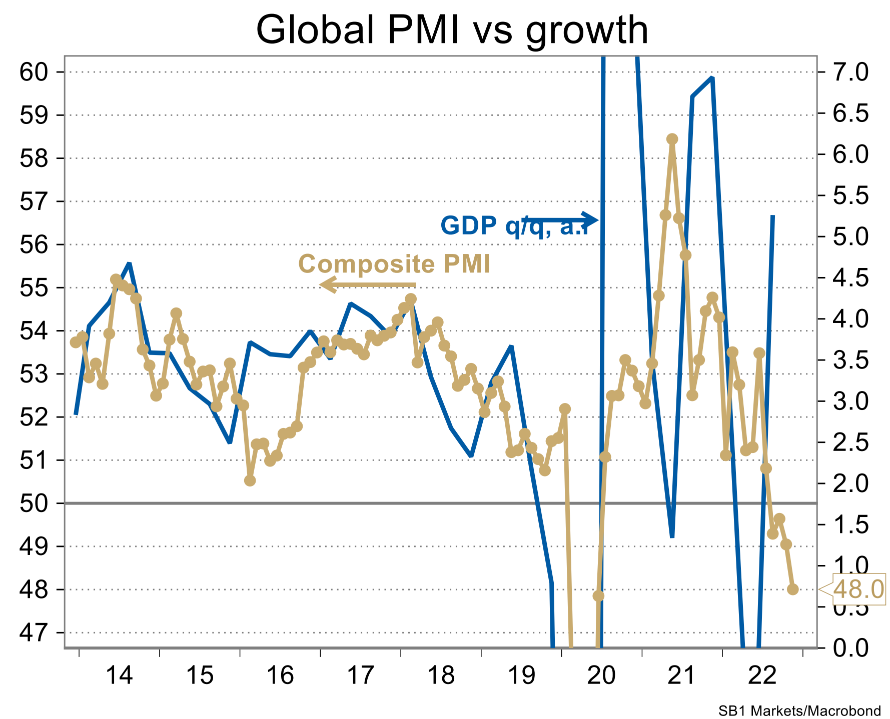




The global PMI further down in November, signals zero global GDP growth

The global index fell by 1 p to 48.0, we expected -1.2p. Both manufacturing & services slowed further

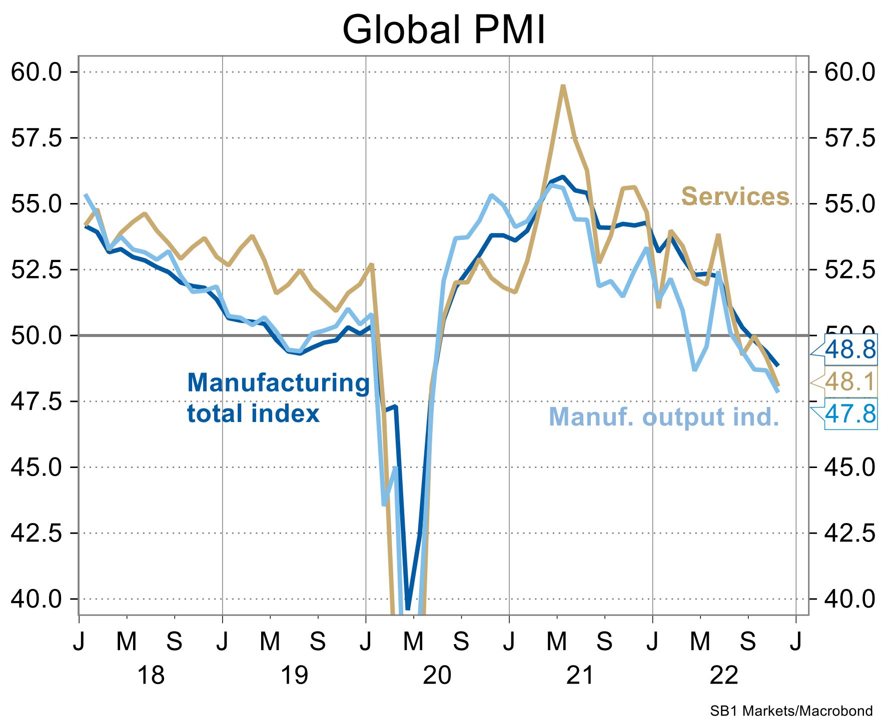


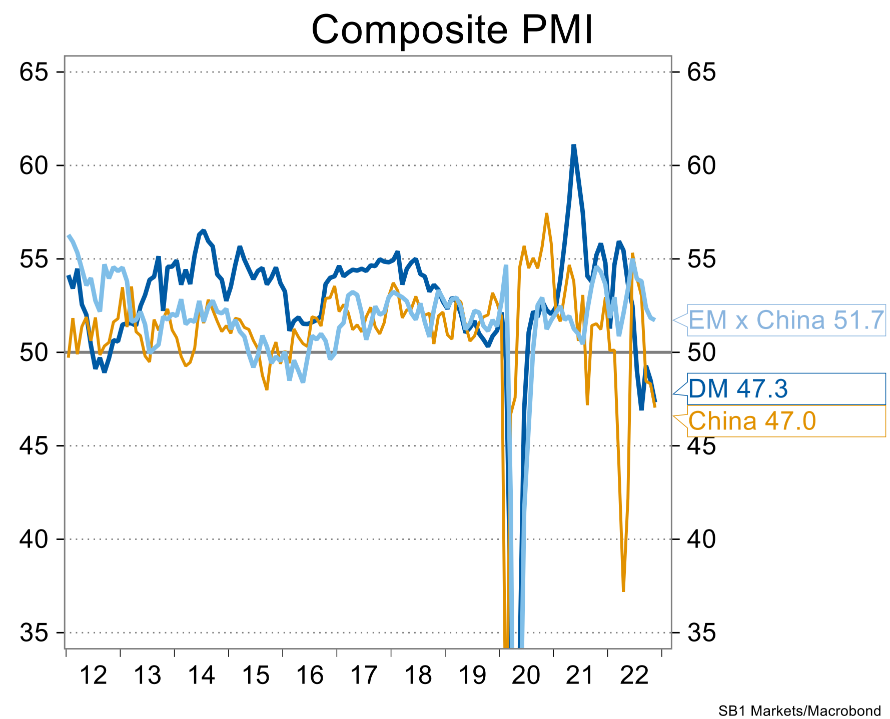


- The composite PMIs are weak in the US (S&P/Markit), the UK, the EMU as well, and in China as well
- The German index is close to the bottom of the league, as both the manufacturing and the service sector PMIs are very weak
- The US S&P PMIs are below par too; the ISMs is in sum far better, due to the service sector ISM
- New orders are weak across the EMU, and are declining the US as well

Emerging Markets x China down but still at 51.7. China & rich world below 50

Both manufacturing and services down in November, and below 50

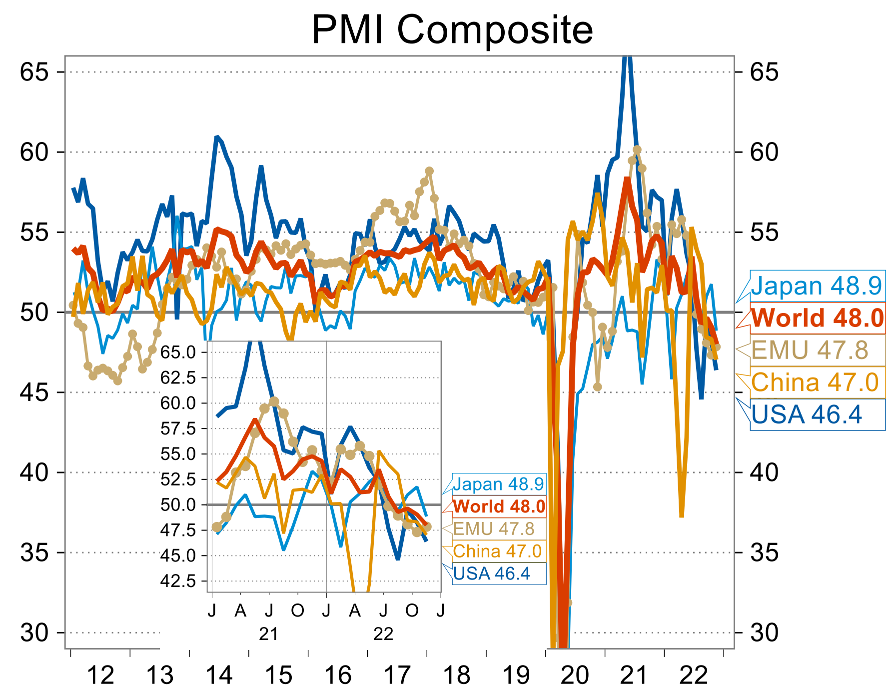


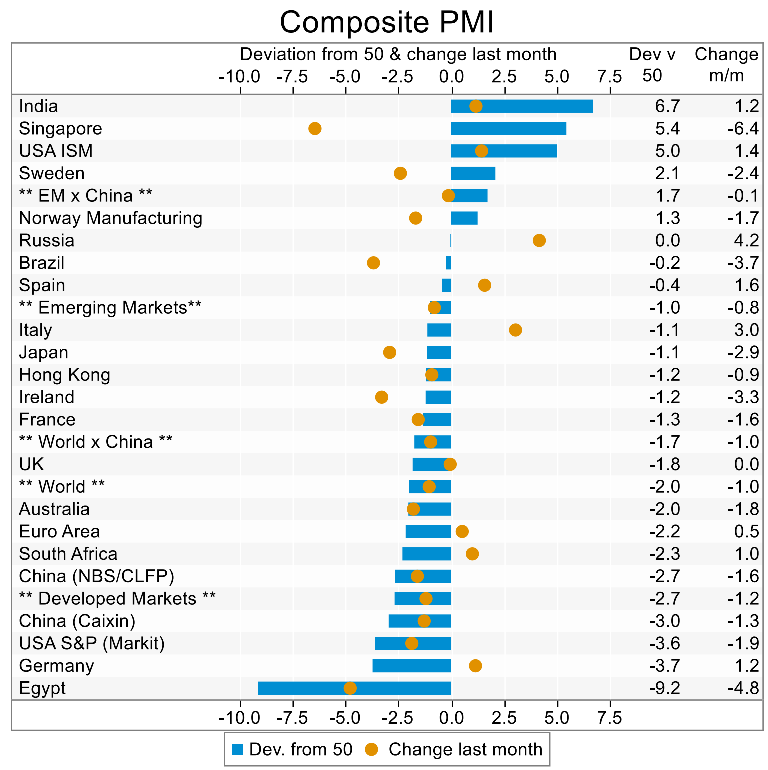


- The output index in manufacturing fell 0.8 p, to 47.8

18 countries/regions down, 8 up, 1 unch. in November

20 countries/regions below the 50 line (including China, EMU, UK, US); 6 are above

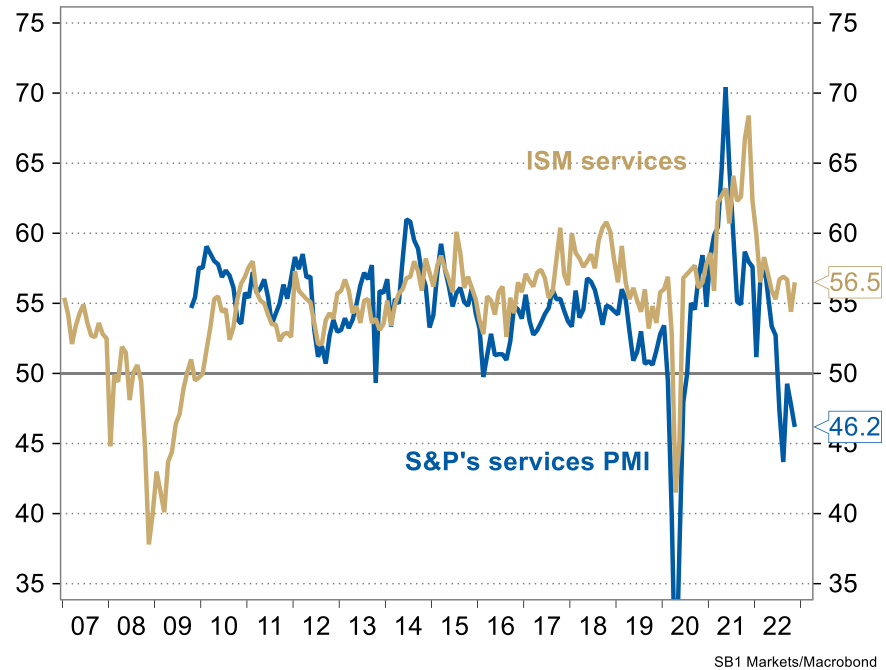


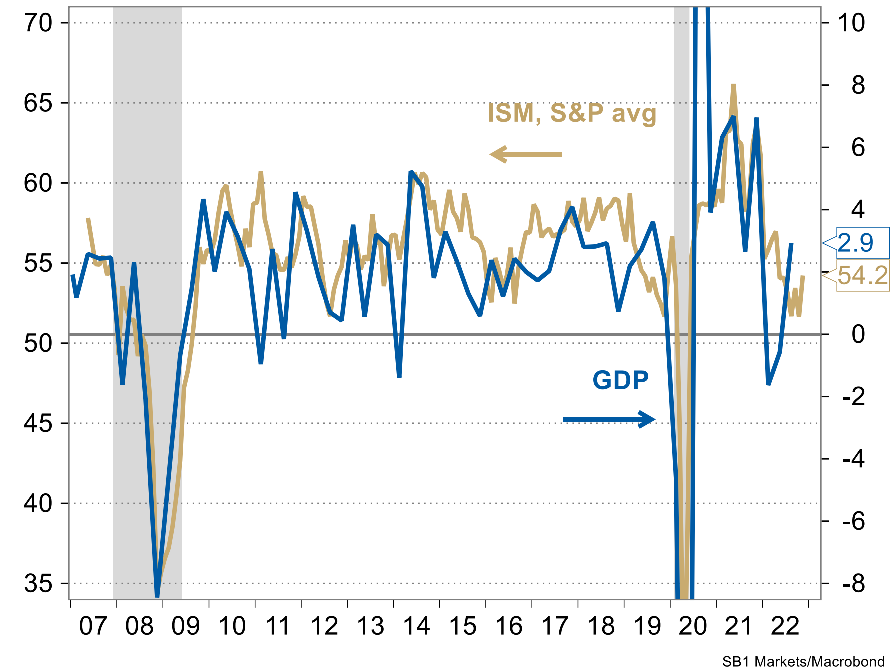


- **The rich countries'** (Developed Markets, DM) PMIs remain well below the global average
  - A couple of exceptions: Swedish composite PMI is still above 50 due to strength in the service sector – and the ISM 'composite' is even stronger, for the same reason
- The **ISM survey** is far better than **S&P's (Markit) US survey** – the ISM 'composite' increased by 1.4 p to 55, while S&P's PMI fell 1.9 p, and is far weaker, at 46.4. This discrepancy is more than strange – and is entirely due to the diverging service sector indices (ISM covers mostly larger companies)
- (**Norway** does not compete in this league, we just have a manufacturing PMI. The Nov index would have yielded a 6th place in the composite race)

Mind the gap: S&P says services are contracting; the ISM reports OK growth

On average, slow growth is signalled – also if manufacturing surveys are included

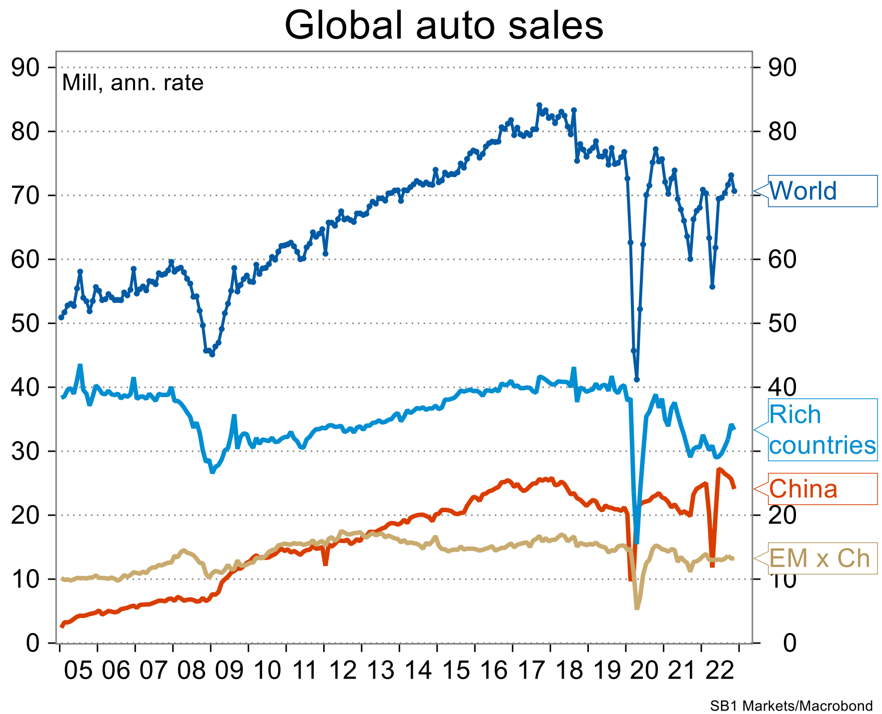


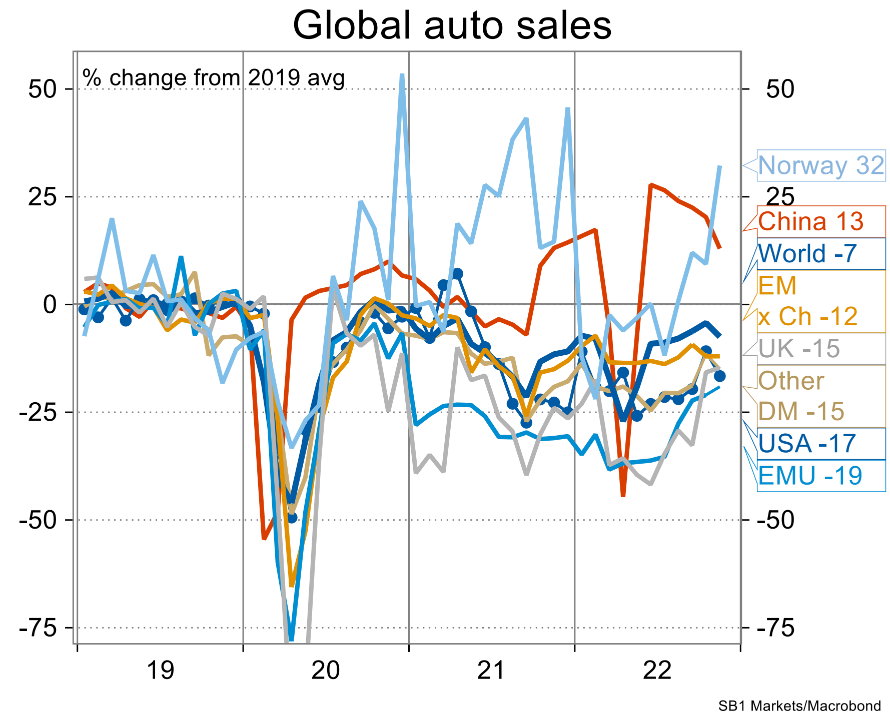


- The history of the two surveys are too similar and too short to judge which one is better, but so far, the ISM seems to be more correct, the service sector has not been contracting the recent months
- The **ISM services** index was up 2.1 p to 56.5, expected down to 53.3. This survey is tilted towards the larger companies compared to the S&P survey. Even if the new order index was down 0.5 p, the 56.0 level signals decent growth. Input prices are increasing a little slower according to the ISM, and the S&P service sector respondents concur
  - Comments were in general much weaker than signalled by the actual index numbers
  - 13 sectors reported growth (down from 16), and just 3 a decline (up from 2): Management & support services, Wholesale trade, and Information
- **S&P's services PMI** (aka Markit's) was 0.1 p higher than the preliminary PMI, but remained well below 50, at 46.2! So far, the ISM index seems to have been closest to the ball
- The **average** of the composite ISM and PMI rose 2.6 p to 54.2 – which implies some 1.8% GDP growth

Global auto sales down in November, due to lower sales in the US and China

European (German) sales up. Norway at top of the list

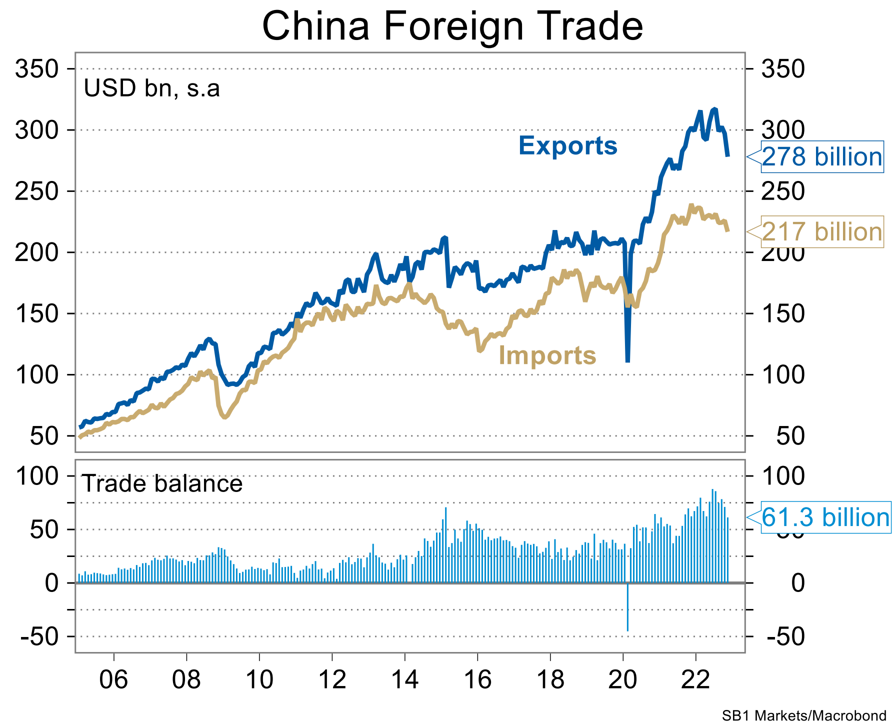




- **Global auto sales** fell 3% in November. Sales are back to the same level as in early 2021, and 'just' 7% below the 2019 level. However, 2019 is an easy comparison: Sales are down more than 13% from the peak in 2018 and more than 20% below the pre-2018 trend growth path!
- The regional differences are substantial: Sales in **China** have been revised down, and fell further in November, but are still up 13% from 2019 – even if the housing market is struggling. Sales in the **US** fell m/m and are down 17% since 2019. **EMU** sales continued upwards, primarily due to a surge in German sales, and EMU sales are 19% below the 2019 level. **UK** sales rose further, and are down 15% from 2019! **Norwegian** sales rose again in November, to 32% above the 2019 level, an outlier. Actual contracts written are probably far weaker, now cars a pouring in before the hike in taxes from Jan 1st
- Sales in **EM x China** were flat, and are down 12% vs 2019. India is close to ATH, Russia is not…
- **Auto production** is very much still a limiting factor most places, but production is now recovering. Chinese production was 26% above the 2019 level in September. South Korea is also above the 2019 level, and US is just 2% above. Most of Europe and Japan are down 10% – 25%

Exports sharply down in November, imports weak too

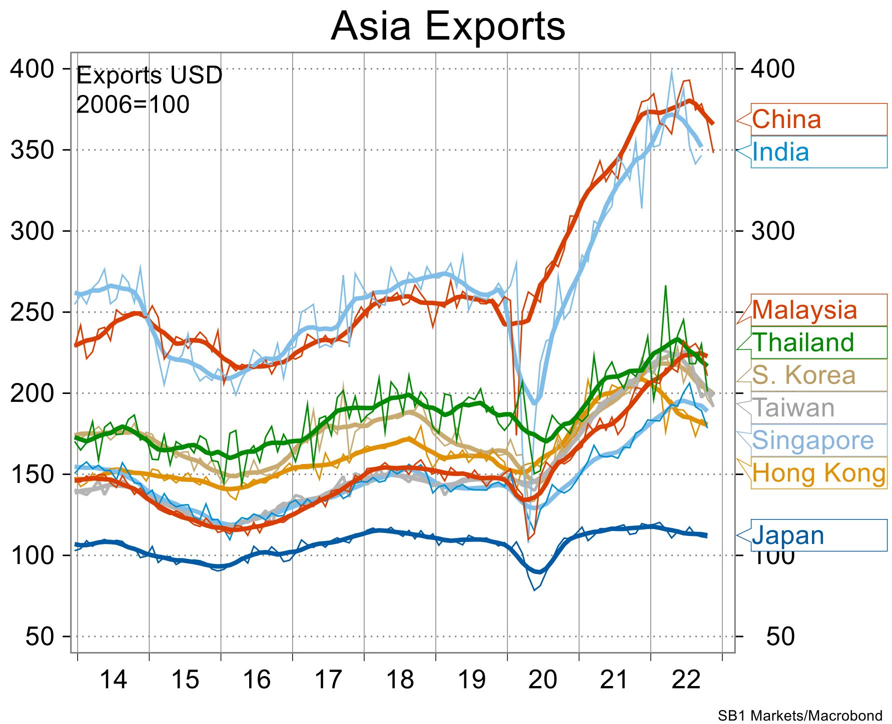
Some covid restrictions, weaker global demand – or changing trade patterns?

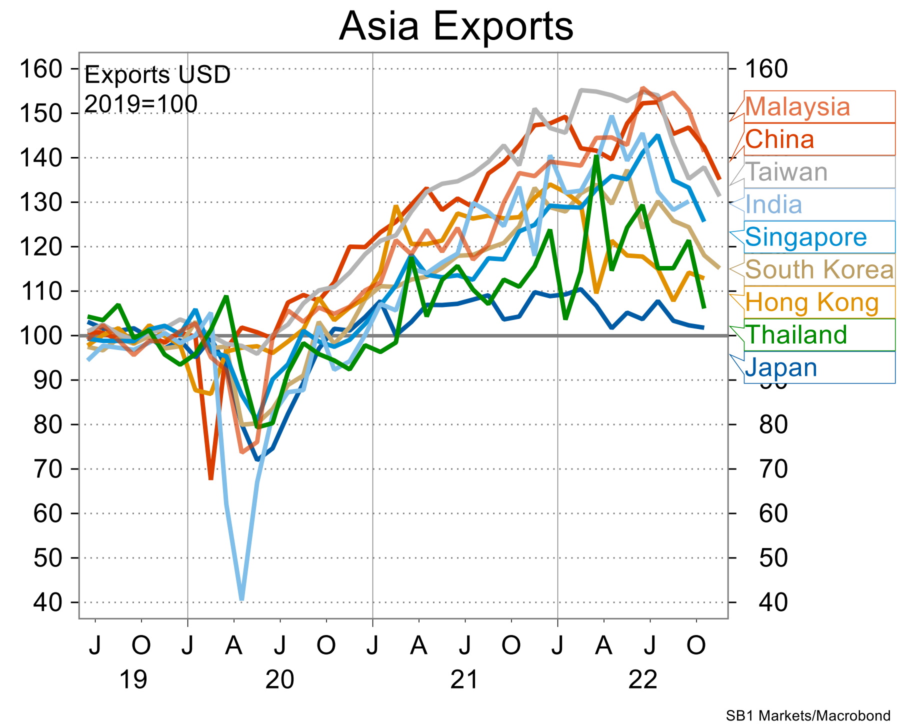


- **Export values** fell 6% (in USD terms) in November, to the lowest level since August 2021. Exports are down 8.7% y/y, 5 pp below expectations! Export values are still up 35% from before the pandemic, and **export volumes** are up 11%, and still not below the pre-pandemic trend. There may be some impact from covid restrictions (like during the spring) but we think lower demand from abroad is the main reason. Trade patterns may turn away from China but the impact will just be very gradually
  - Export to the US fell sharply, explaining 1/3 of the overall decline
- **Imports** fell 4% m/m, and are down 10.6% y/y, also 5 pp below expectations. In **volume terms** imports are down by 12% from the peak level last spring – and some 6% below the pre-pandemic trend path
- The **trade surplus** at USD 70 bn was 9 bn smaller than expected, but the surplus is still among the highest ever. In seasonally adjusted terms, the surplus equalled USD 61 bn, or some 4% of GDP.

Exports from other Asian countries on the weak side recent months

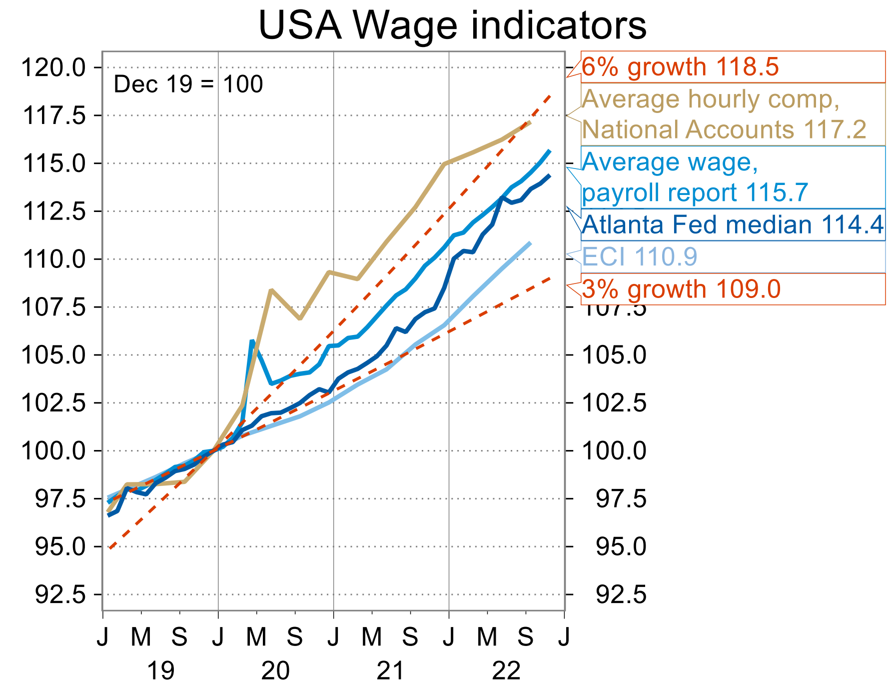
… which confirms the lack of global demand story – not a sudden production problem in Asia

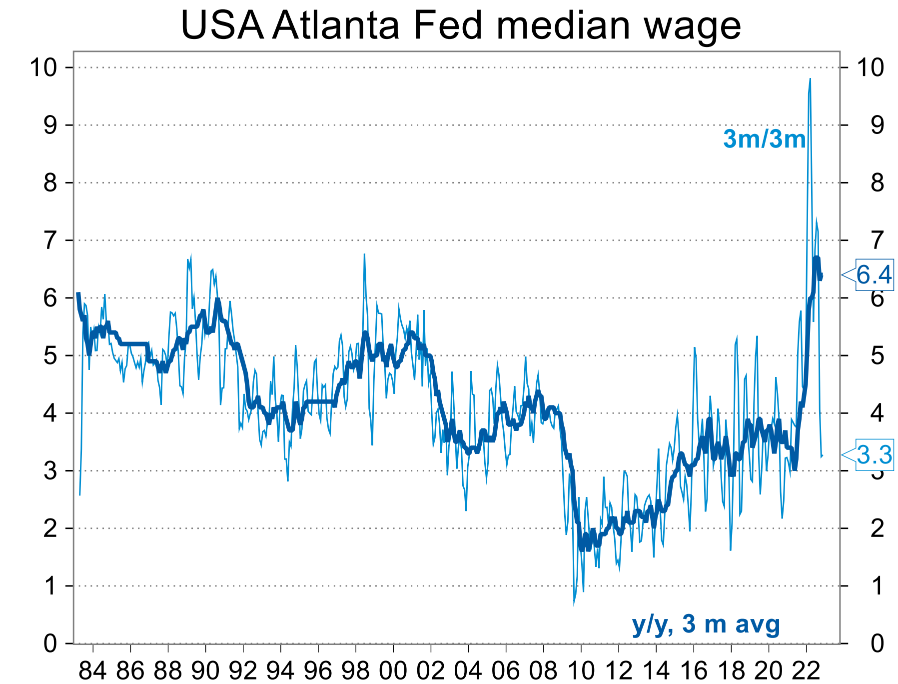




Atlanta Fed: Wage inflation remains high

The median wage +6.5% y/y, 3 m avg at 6.4%, down from 6.7% at the peak - <u>still 3 pp higher than 'normal' growth</u>



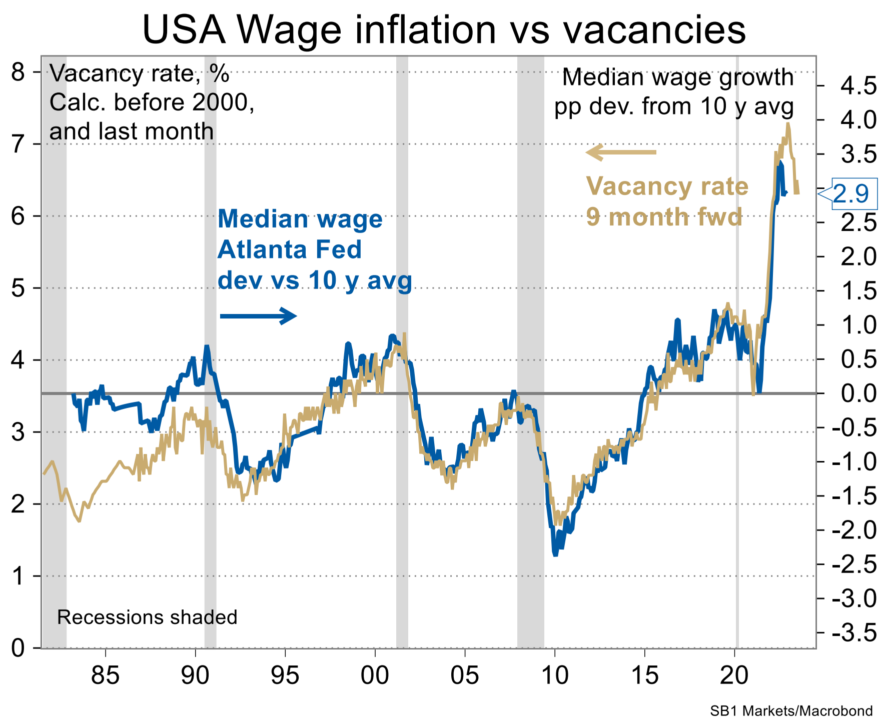


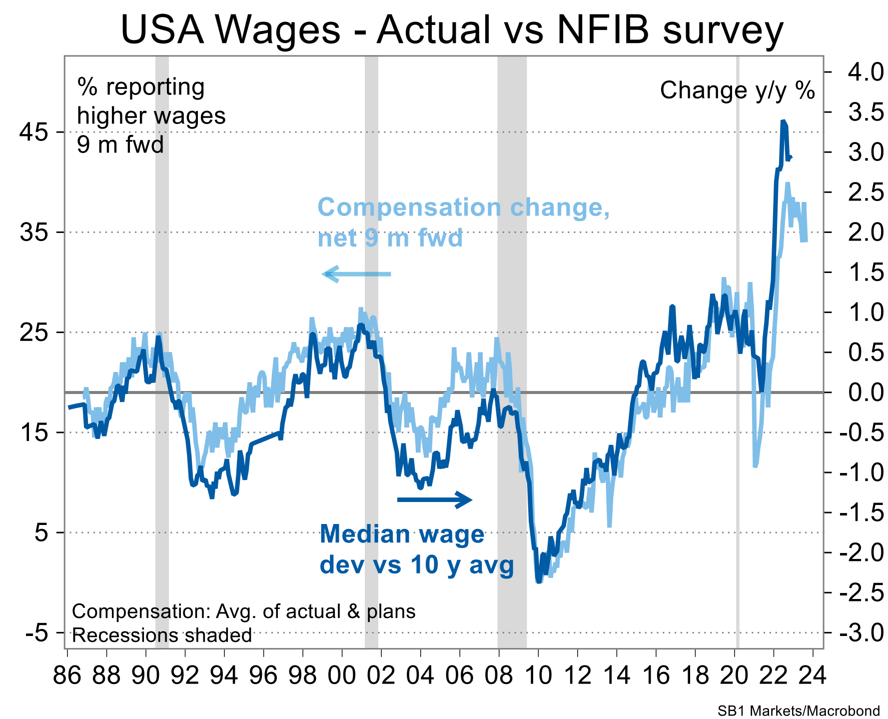
- **Atlanta Fed's median tracker reported** a 6.5% growth in November, up 0.2 pp from Oct. Our calculated m/m growth was 0.4%. The 3m/3m rate 'collapsed to 3.1%, but the 'real' underlying growth rate is closer to 6% (a strange June obs. has created some volatility). The **3 m average annual wage** was unch. at 6.4%, down from the highest print ever at 6.7% in August. The current wage inflation is 2.9 pp higher than the past 10 average, a wage acceleration we have never seen before (data from early 80s)
- **All** ages, occupations, industries, job switchers (or not), race, education, urban or rural regions report a sharp acceleration in wage inflation. The only laggards: those who are paid the best, but even this group report higher wage growth that 'normal'
- **All other wage indicators** are reporting fast wage growth, and all are reporting wage growth well above the recent years' average, some are still accelerating, other are slowing marginally but all are growing 2 – 3.5% faster than the 10 years' average before the pandemic – which will make it impossible to reach the 2% price target over time

SpareBank 1 MARKETS

Peak wage inflation? Very likely, as demand for labour slows

Still, demand for labour is still strong, and wage inflation is far above a sustainable level

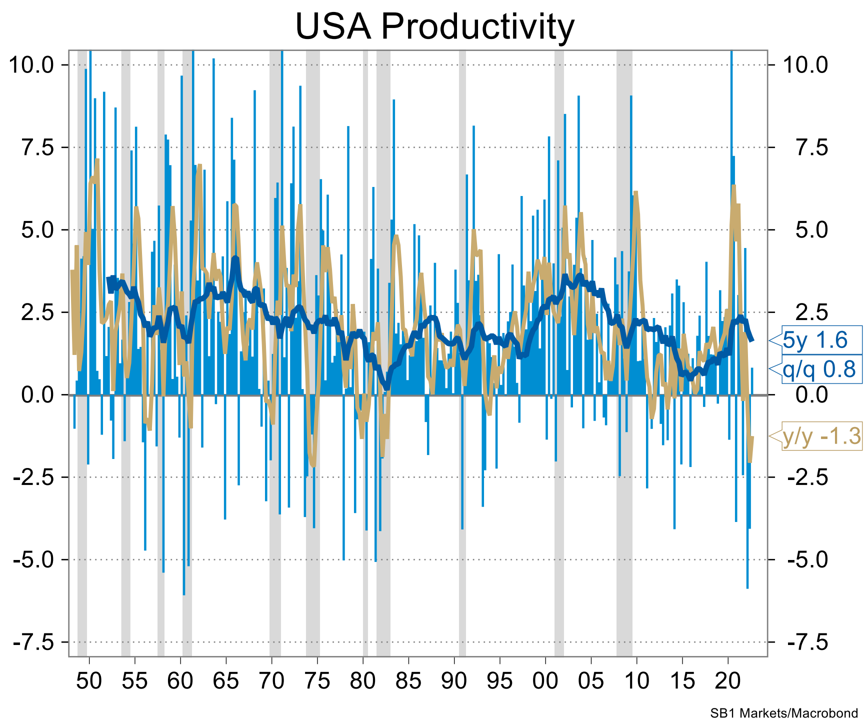


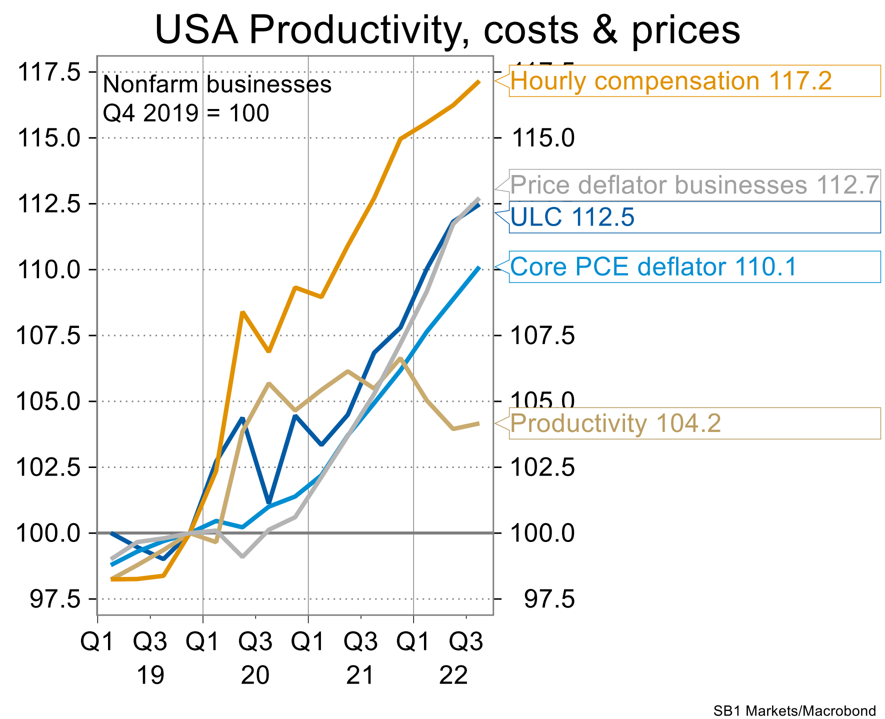


- **Our 'Phillips curve'** based on the vacancy rate signals a further increase in wage inflation the coming quarters even if vacances have peaked. The vacancy rate leads changes in wage inflation quite consistently by 3 quarters. However, we would not be surprised if the current extraordinary high wage inflation recorded in August was the peak, even if it came in some months 'too early'
  - Companies (SMEs) compensation plans signal continued high wage inflation but not faster than the present
- **Wage inflation** has already accelerated by almost 3.3 pp vs the 10 y average (Atlanta Fed median) and cannot possibly generate a 2% price inflation rate over time. <u>This is Fed's main headache, not the current high CPI inflation print. And it will become the stock owners' headache too, of course</u>
- **Demand for labour has to be reduced sharply in order to get wage inflation back to a sustainable level! That's the recipe for an unavoidable RECESSION**
  - <u>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 ☺). Fed will not be able to control inflation if demand for labour is not cut sharply</u>

Productivity slightly revised up, hourly compensation down

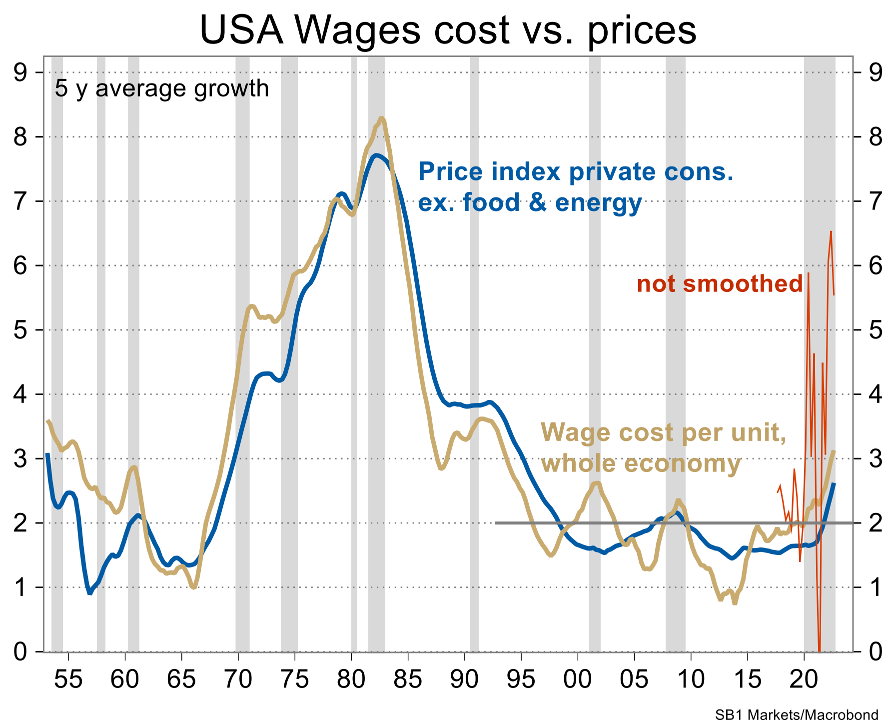
… and Unit Labour Cost grew slower than first reported – the trend is still far from comforting

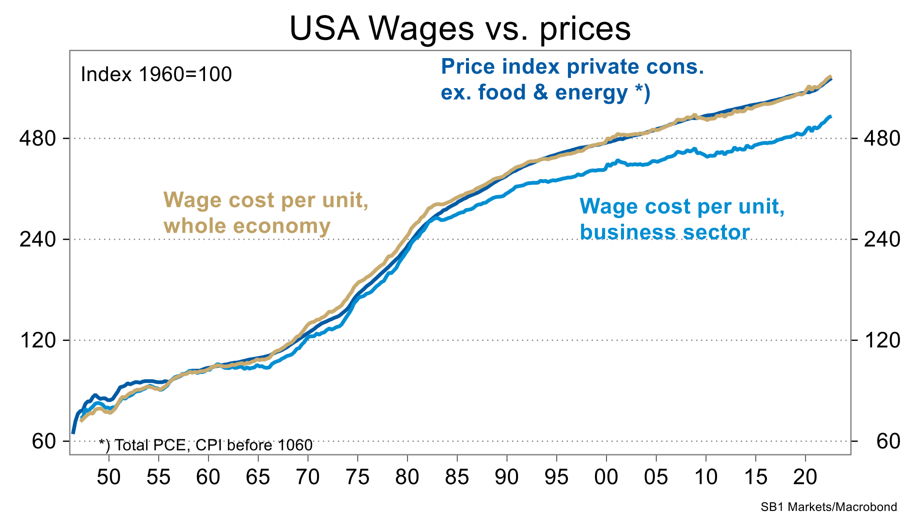


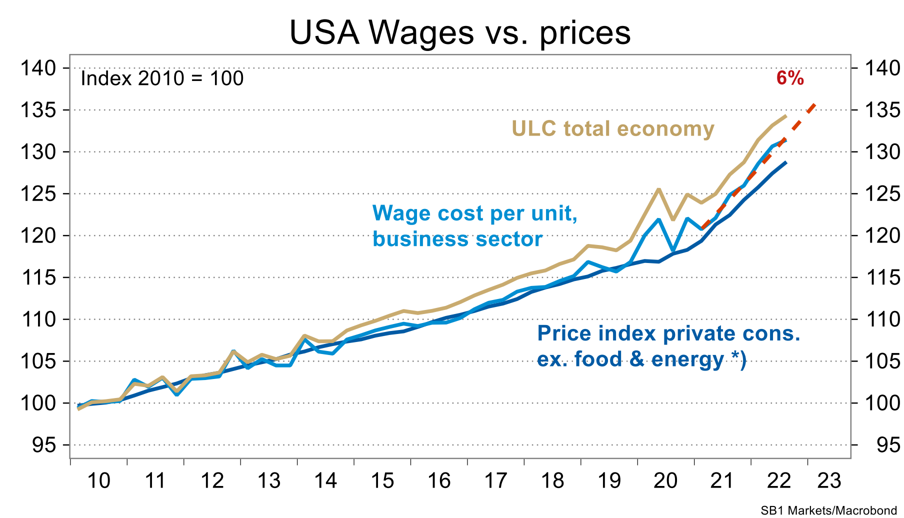


- **Productivity** increased by 0.8% in Q3 (annualised), up from the initial estimate of 0.3%, following the unusual steep decline during H1. Over the past four quarters, productivity has decreased by 1.3% due to the return of less productive (and lower-paid) service sector workers after the pandemic. Since late 2019 productivity has been increasing at 1.5% pace, in line with recent history (please see the two following pages)
- **Hourly compensation (wages ++)** grew at a 3.2% pace in Q3, and the annual rate is 4.0%. Average growth since Q4-19 is 6.2%. Growth is slowing somewhat, but not convincing as lower paid service sector workers have returned to work, taking the average wage down
- **Unit labour costs** (hourly compensation – productivity) grew by 3.5% in Q2, up 6.1% y/y. Since Q4-19, <u>ULC has grown at a 4.7% pace, revised down from 6.4% but still far above a normal level – which of course is incompatible vs the 2% inflation target</u>

Wage inflation is still the main risk, not raw materials/energy/corp. margins





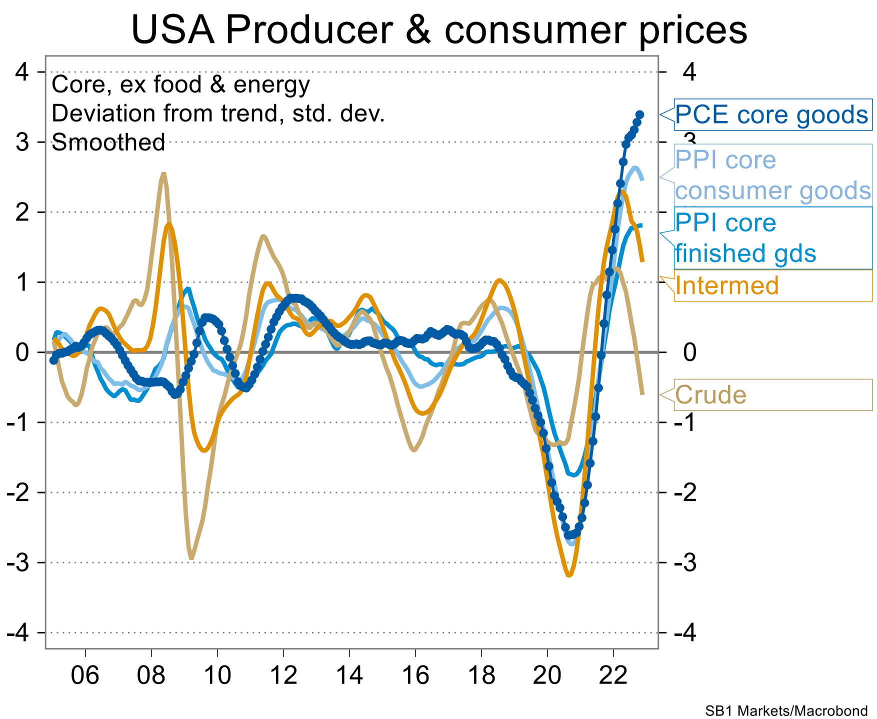


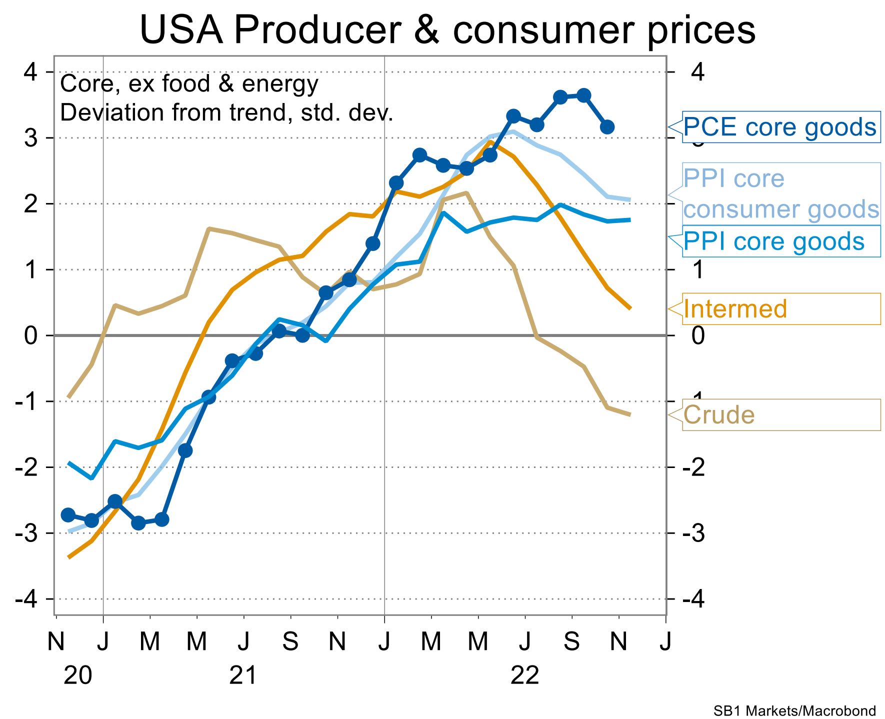
- Costs have climbed faster than core prices since before the pandemic

SpareBank 1 MARKETS

Crude core material prices are yielding, as are intermediate prices

The core consumer goods PPI has also turned south – and so will probably goods prices in the CPI/PCE

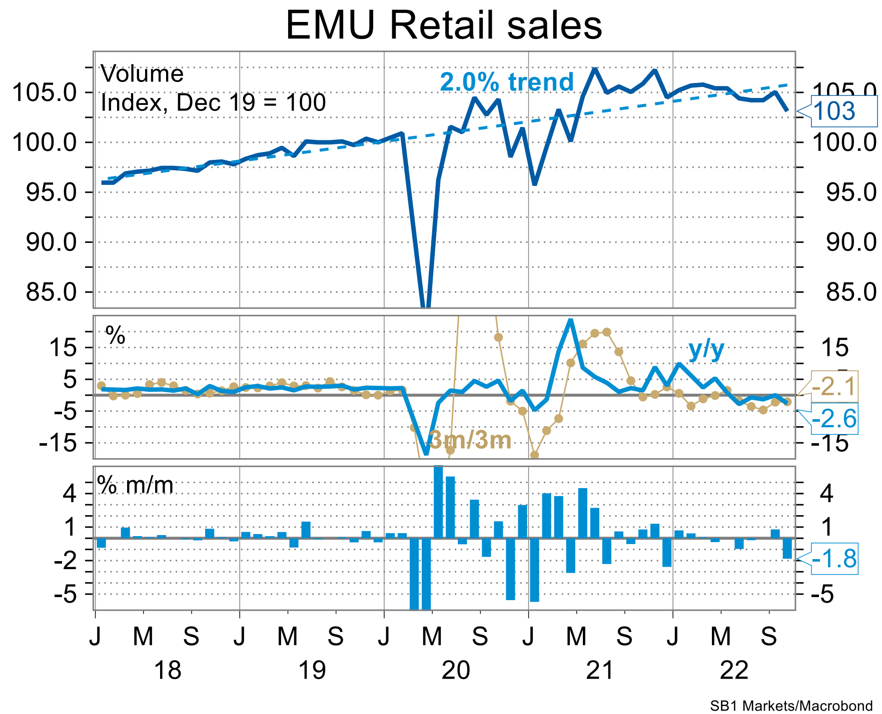


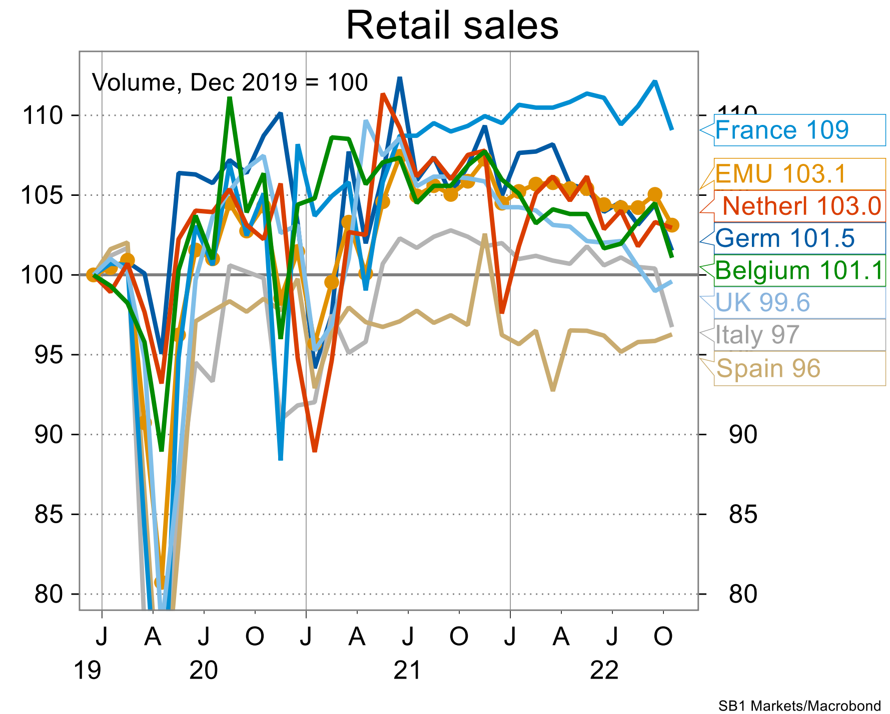


- **Crude goods prices** are leading intermediate goods prices by 4 months, and consumer prices by 12 months. Following several months with slow growth in these prices to February from last summer, they rose in March and remained at a high level in April – but they are now heading down rapidly (and prices are down y/y, *check next page*). **Intermediate prices** are now also well on the way down. We can see the impact of the broad decline in raw material prices globally – as growth in demand is slowing
- **Core consumer goods** prices are also yielding at the producer level, rather early vs the normal cycle pattern
- The next shoe to start dropping will be goods prices at the consumer level, in the CPI/PPI.
  This is the best 'peak inflation' indicator available!

Retail sales sharply down in October - declined by 1.8%

Why a sudden retreat in October? Sentiment is heading up, auto sales (not incl in retail sales) are strong

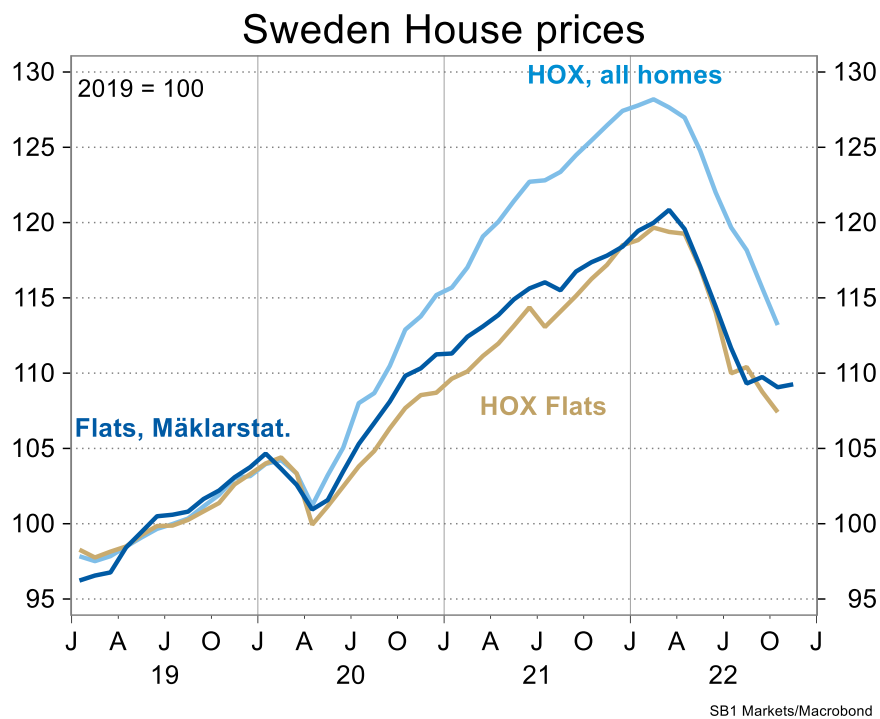


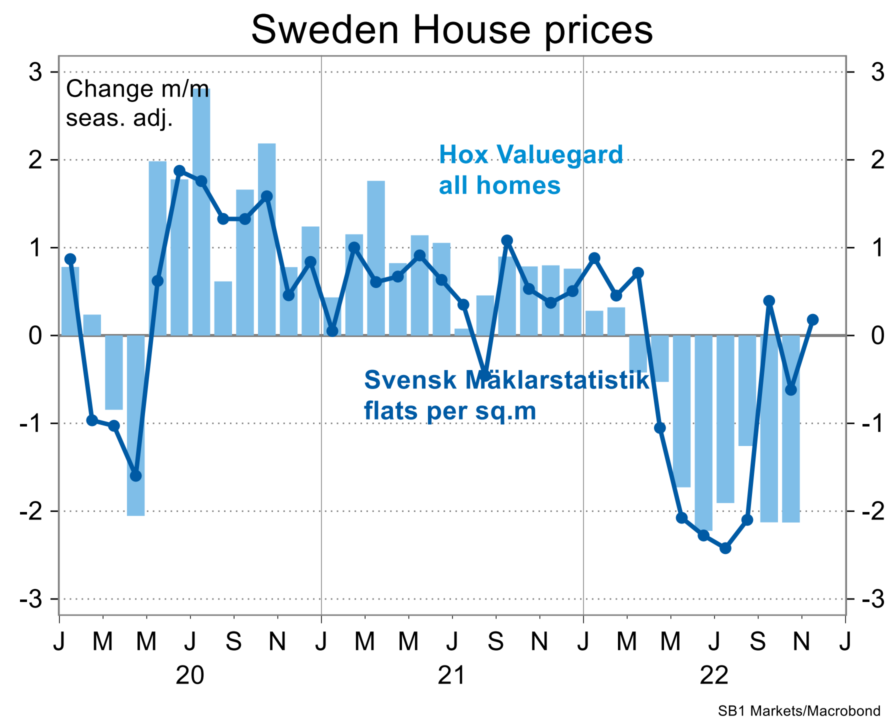


- Sales are now still 3% above the pre-pandemic level, but far below the pre-pandemic growth path
- Sales have been trending down since mid 2021 – and the outlook is dismal, given loss of buying power. However, sentiment may have turned the corner and the labour market is still remarkably very strong

Swedish apartment prices were up in November, according to the realtors

Prices rose 0.2%, and they have almost flattened since August! The HOX index is still heading straight down

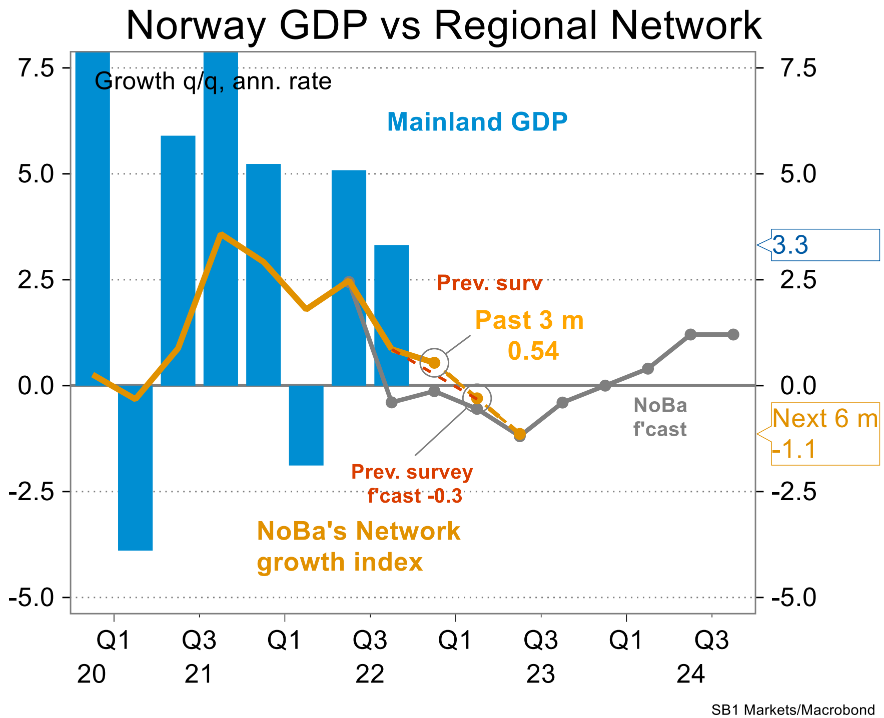




- Prices are down close to 10% from the peak in March – before the Riksbank started to hike rates
- The HOX index reported a 1.6% fall in apartment prices in October, while single-homes were down 3.8%

Norges Bank's Regional Network signals a deeper downturn

… exactly like Norges Bank expected – <u>but from a much stronger starting point than Norges Bank assumed!</u>



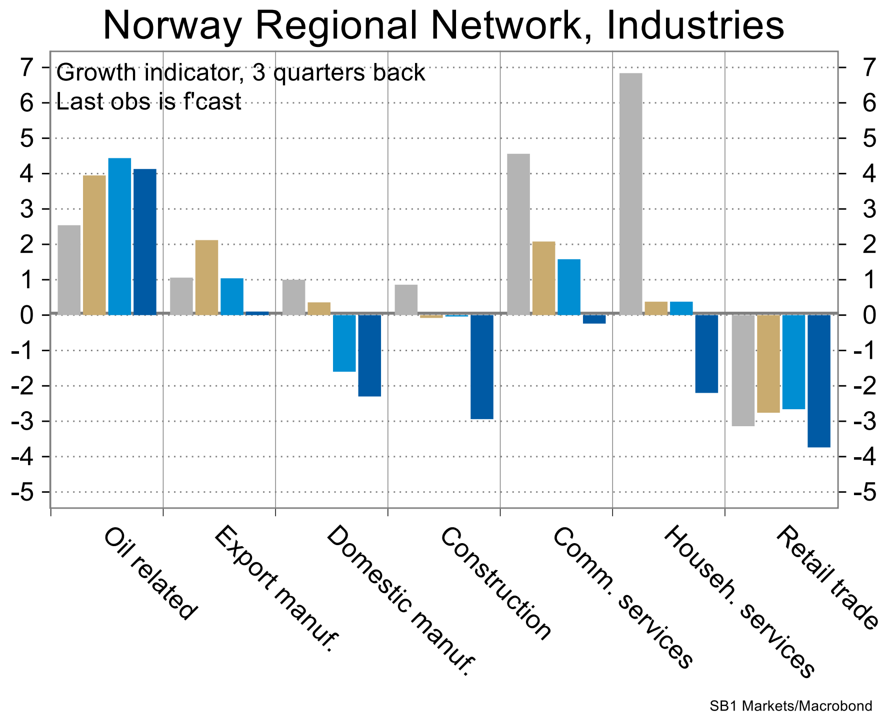
Implications

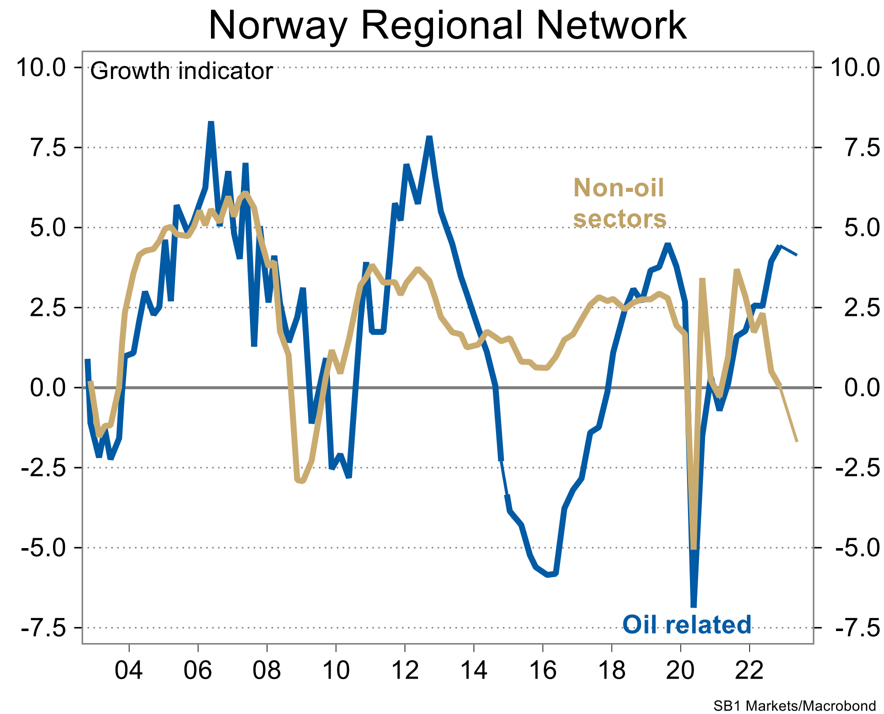
- The Network confirms a broad slowdown, but the activity level is signalled to remain well above Norges Bank's September forecast (which was not at all recognised in media reports or comments last week)
- Since the September MPR, just house prices, household credit growth and the oil price have been on the weak side vs. the Bank's forecast. The most important variables; GDP, inflation, unemployment have all been 'stronger' than the Bank assumed in September
- A 25-bps hike next week is still a done deal, as the bank is rapidly approaching the assumed 'terminal' rate, but we do not think the Bank will lower its interest rate path

A weak report

- The Network expects a -1.1% pace of decline in activity the next 6 months (index value at -0.57, we expected -0.2, a rather bad forecast…), down from -0.3% three months ago. The slowdown is the sharpest since the financial crisis (barring the start of the pandemic, check the charts on the next page)
- Still, the Network's <u>growth</u> forecast is in line with Norges Bank's Mainland GDP <u>growth</u> forecast from September. In addition, the starting level for NoBa's GDP forecast now turns out to have been 2.5% higher that the bank assumed in <u>September</u> (check the much higher actual GDP prints for Q2 and Q3 compared to NoBa's assumptions/forecasts on the chart to the right!). Thus, the Network signal <u>a far higher GDP level in 6 months time than NoBa assumed in September!</u>
- That said, the assumed slowdown is broad, and most sectors report that growth has slowed already, and retailers and well as domestic oriented manufacturers report a decline in activity and just oil related mainland industries expect an increase in activity the coming 6 months, the others are all down
- **Regionally**, actual growth and growth expectations fell everywhere Q4. The South, South West, and Trøndelag still expect growth the coming months, but Trøndelag just marginally. North turned negative. Central East (Oslo +) reported the weakest outlook 3 months ago, and was still at the bottom, with an almost 3% decline
- **Capacity utilisation and labour shortages** fell but both remained above average, especially lack of labour. **Employment** plans were revised down but are still signalling growth, whereas NoBa expects a decline in 2023
- 2022 **wage inflation** forecast flattened at 4%, and the first 2023 forecast came in at 4.1%, 0.5 pp below NoBa's f'cast, and 0.8 pp below expectations among trade union economists. Also, even fewer companies expect to increase their **prices** than in Q3, and the share is lower than ever vs. households
- **Investment** plans were revised further down, but not by much. Profits are expected sharply down (oil companies are not included)

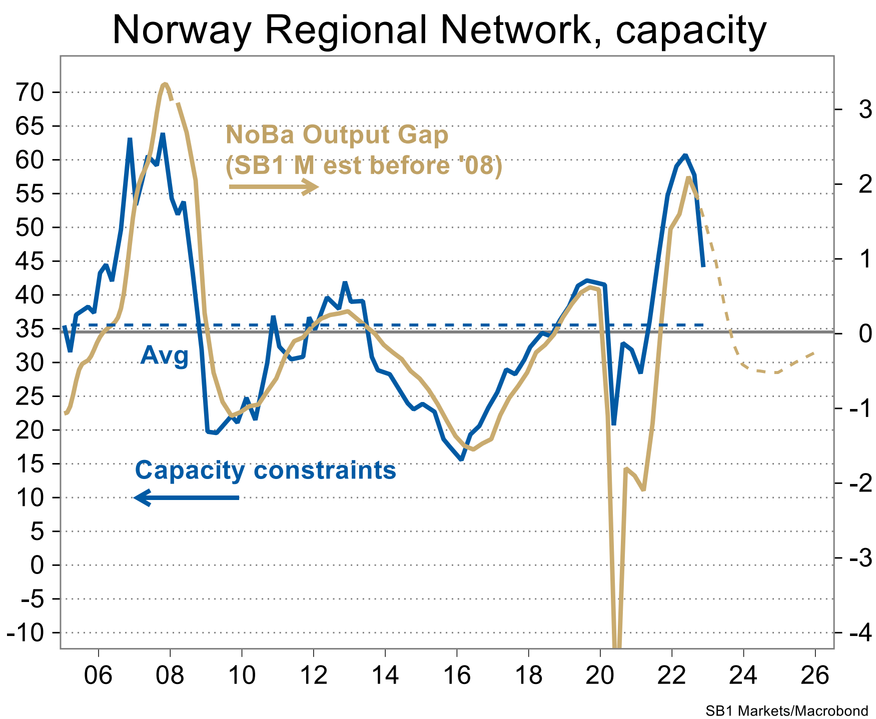
Not that many bright points, sector wise

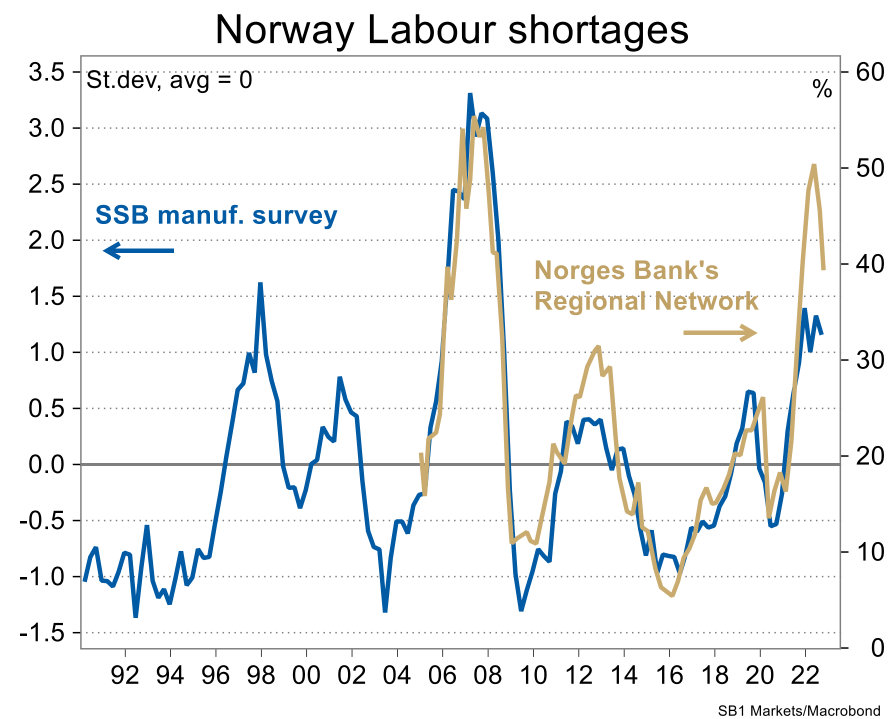




Capacity constraints & labour shortages are coming down…

… but both are well above normal levels – especially labour shortages

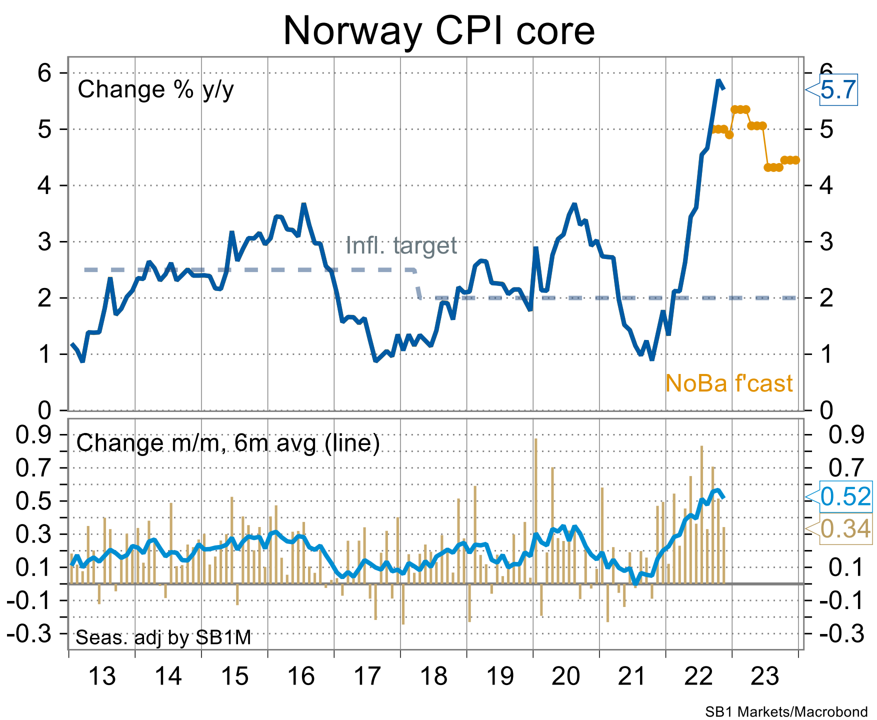




- Fewer companies are reporting **capacity constraints** following the steepest surge ever, but the level is still far above avg. as 45% of companies report that they are operating at full capacity (the average level is 35%). The correlation to NoBa's assessment of the **output gap** is not 1:1 and the Network report does not suggest than the Bank's estimate will be revised in the upcoming MPR
- **Labour supply** shortages also fell further in Q4, but the level still far above normal, and broad based. Still, should growth expectations turn out be fulfilled, the labour market should weaken... eventually
- **Wage expectations** are drifting slowly upwards, check two pages forward – but is just marginally above 4% for 2023, well below NoBa's 4.6% forecast

Inflation lower and below consensus in Nov, still far above NoBa's f'cast

The 'real' core inflation down to 4.5%, 52% of CPI components up >5%. Challenging times for NoBa

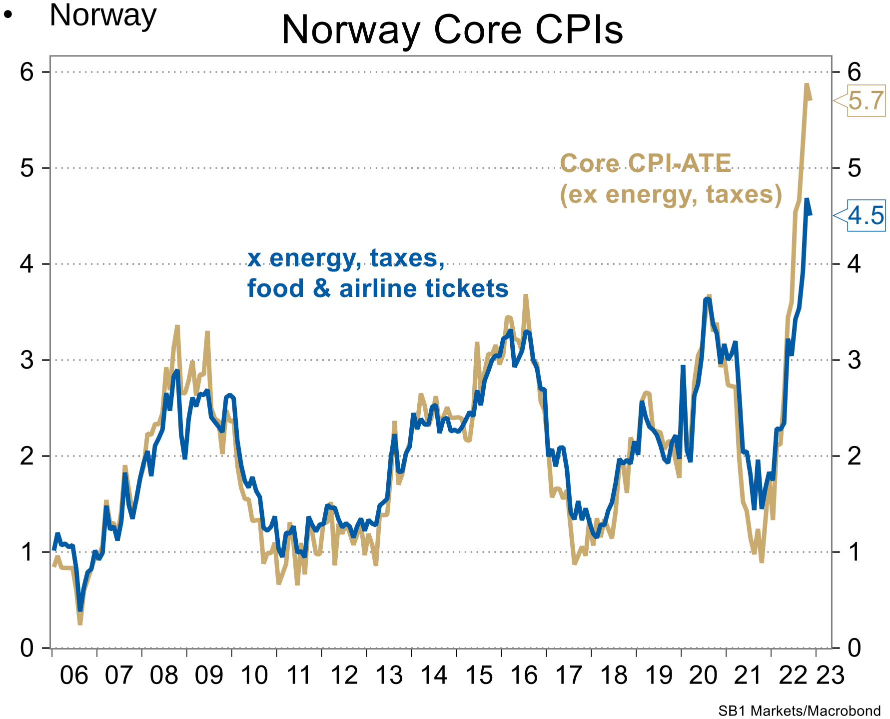


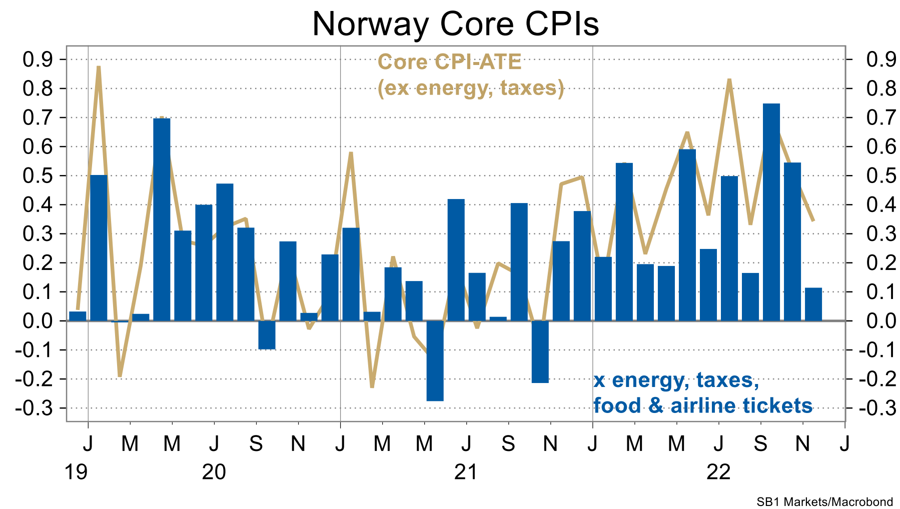
- **CPI-ATE** (ex. energy and taxes) rose 0.3% m/m (s.a) in November, and the annual rate fell 0.2 pp to 5.7% pp, we expected 5.8%, consensus was 6.0%, NoBa expected 5.0% in the Sept MPR!
- **Food prices** rose by 0.1 in Nov, we expected +0.3%. The annual rate is now at 12.6%. The annual rate will remain lofty the coming quarters. However, at one stage, prices will be cut, or at least flatten as the price pressure in the value change will reverse or abate
  - **Airline ticket prices** rose again, but most sectors reported slower growth than we expected
  - Prices on **imported goods** climbed 0.1% m/m, and are up 6.0% y/y; **domestically produced** goods & services were up 0.5% m/m and are up 5.7% y/y
  - **12 sectors** reported growth above 2% y/y, and just 1 is below. All trimmed/median measures tell the same story: Inflation has broadened, typically to 5% – 6%
- **Total inflation was down by 1 pp**, to 6.5% (last month's print was the highest since 1987). We expected 6.7%, while consensus was 7.0%
- **The outlook**
  - The lift in **electricity prices** are behind us, not least due to the generous government subsidies
  - **Gasoline prices** are on the way down and will contribute to a decline in headline CPI
  - We still expect inflation to slow faster than Norges Bank and most others expect, as the economy slows, and raw material prices decline, including energy prices

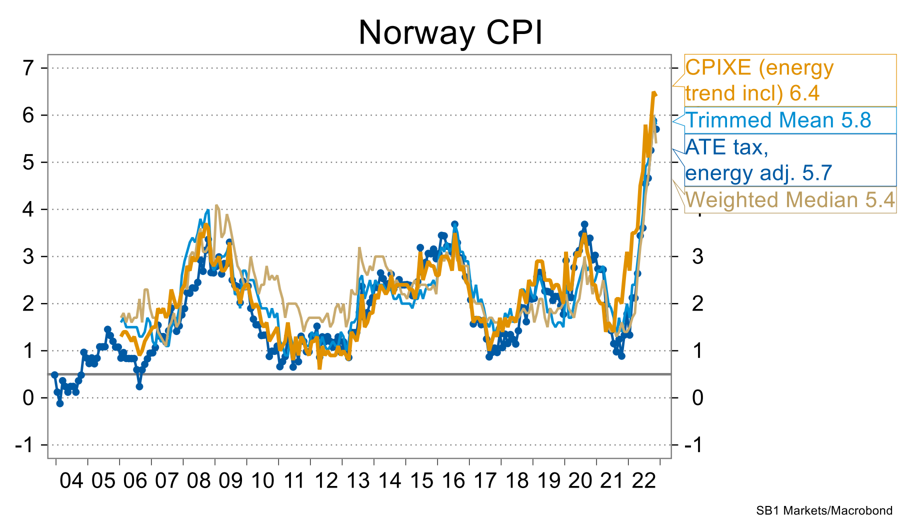
The ‘real’ core inflation is slowing too, but still high at 4.5% y/y

In addition, all measures of underlying inflation suggest a broadening, to a 5% – 6% level

- Norway



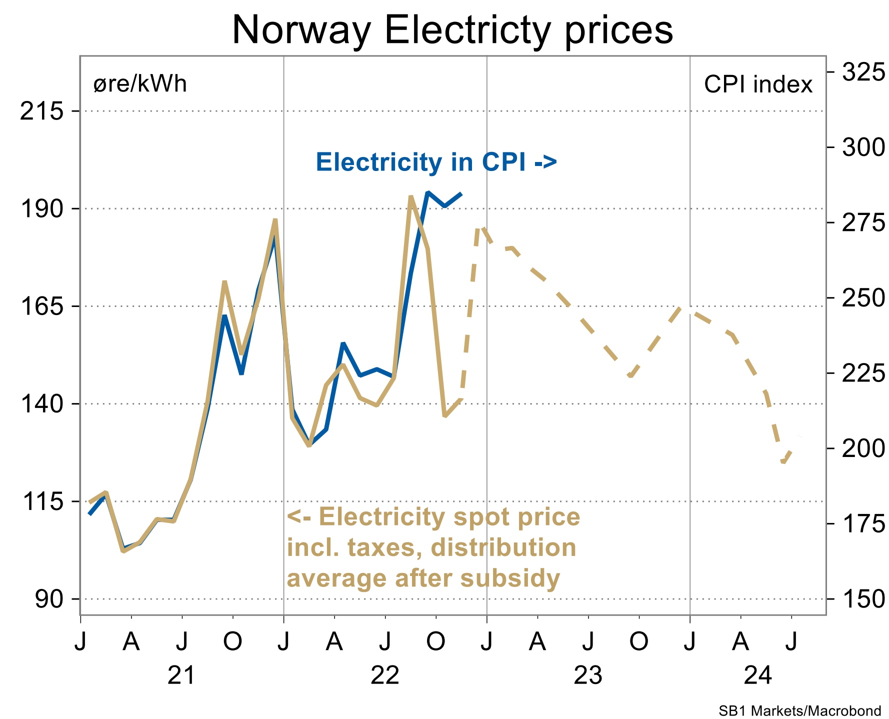


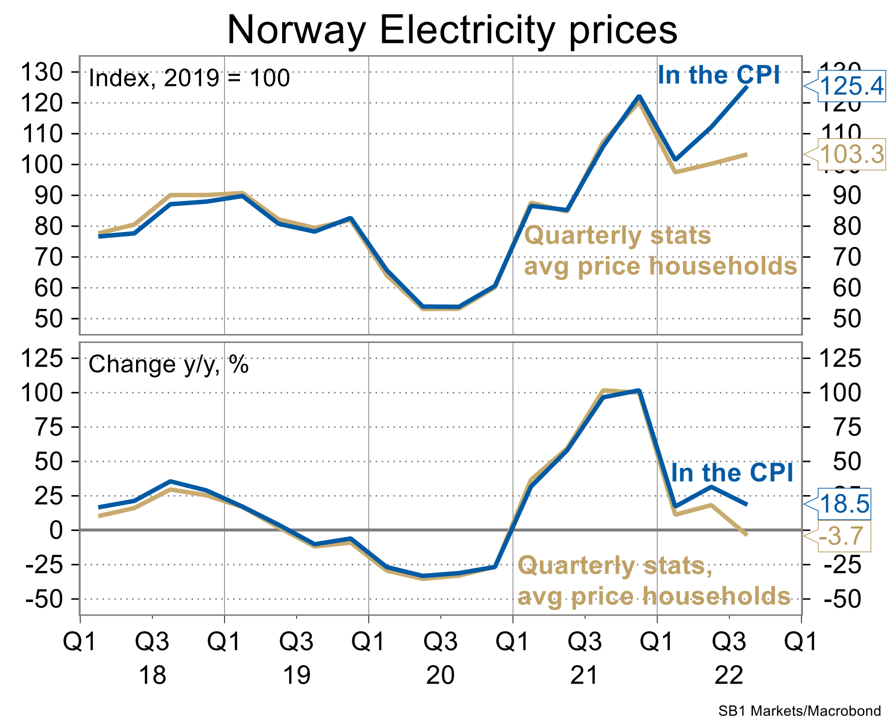


- 81% of sub-components of the CPI are up more than 2%
- 52% are up more than 5%

Electricity prices are still far higher than signalled by spot market prices

We are still puzzled, but CPI prices cannot impossible rise by much in December, even if spot prices are climbing rapidly

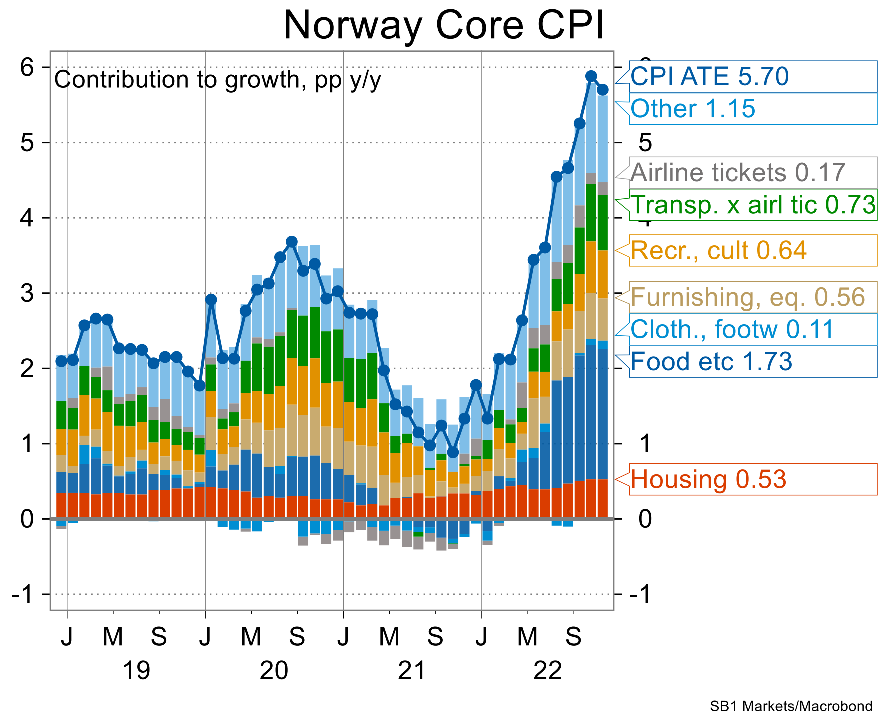


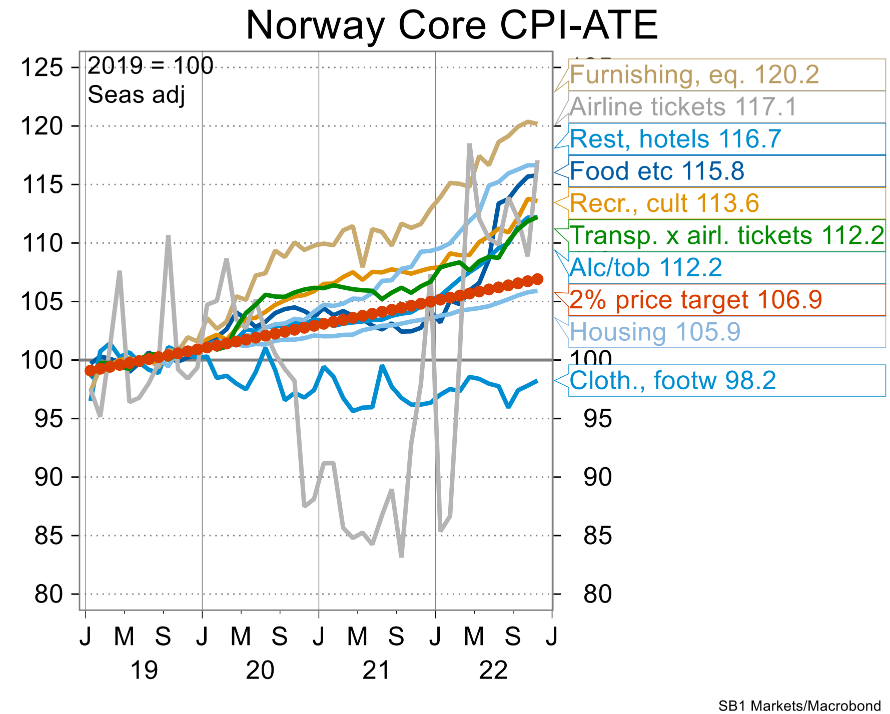


- We have for several months complained about or ability to predict monthly electricity prices in the CPI. Also in November, the CPI index was much higher than we assumed, based on a detailed model of regions, subsides & taxes, transfer fees, electricity holiday homes etc.
  - In November, the CPI index once more was much higher than spot market prices (plus all sorts of adjustments). 'Variable' (1 months fixed price) contracts may explain some of the gap, but it once more surprised us
- We have neither been able to calibrate the monthly CPI to the quarterly electricity statistics for Q2, and Q3, which are usually well in sync
  - Finansavisen today reports on this discrepancy. SSB has some explanations, but we are not convinced that these differences really can explain the more the 20% y/y price gap in Q3
  - However, our estimate of monthly consumer prices have been in line with SSBs CPI until the summer, and far smaller than the discrepancy vs quarterly stats
  - We expect a huge price gap also in Q4, check the chart to the left!
-

Slower pace of price growth across many sectors in November

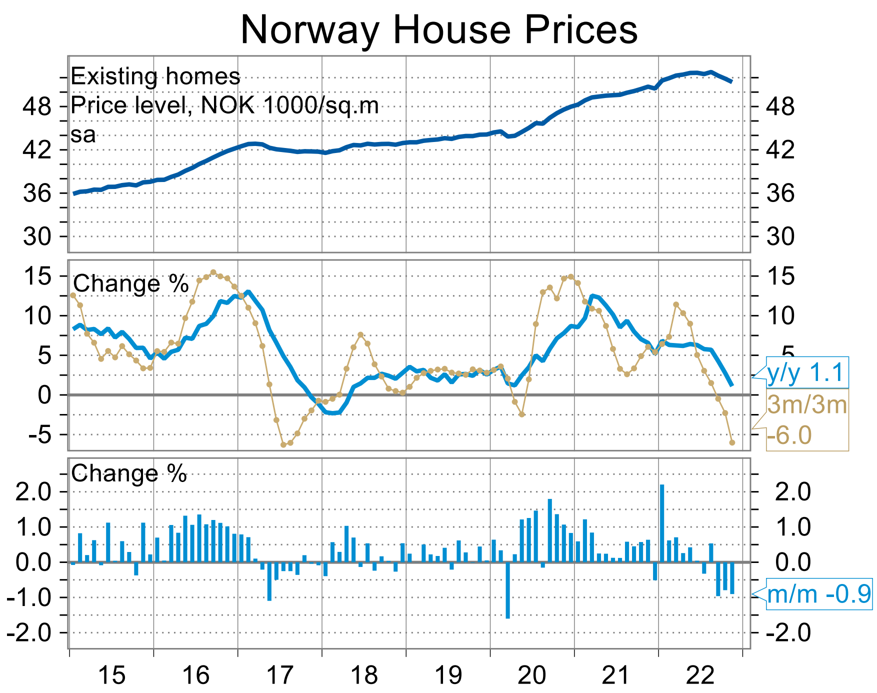
…but just clothing/footwear, and housing ex energy below the 2% path since 2019

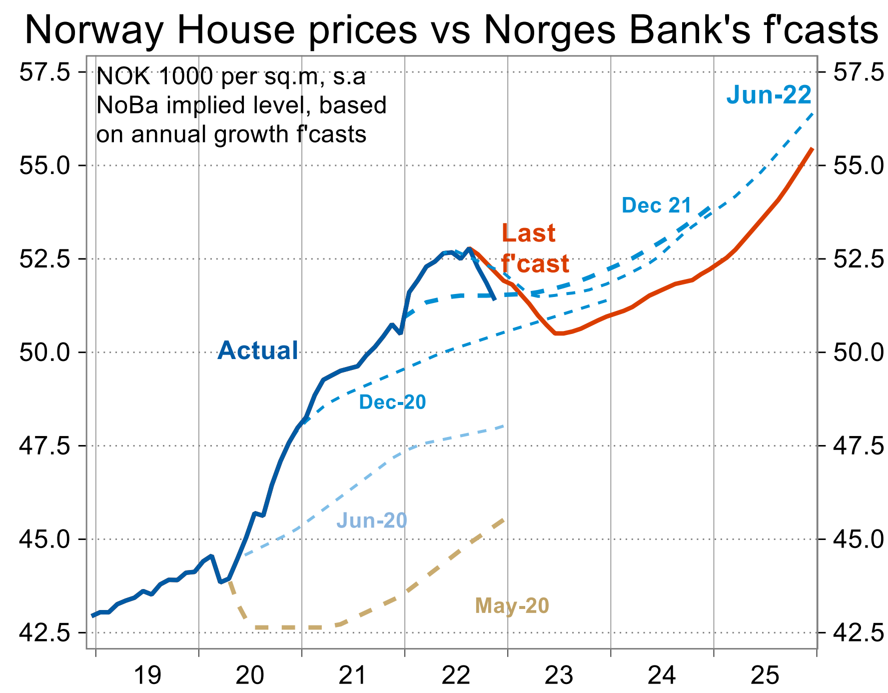




House prices further down in November but not at a faster pace

Prices are falling faster than NoBa assumed, more than ½ of the assumed decline already executed

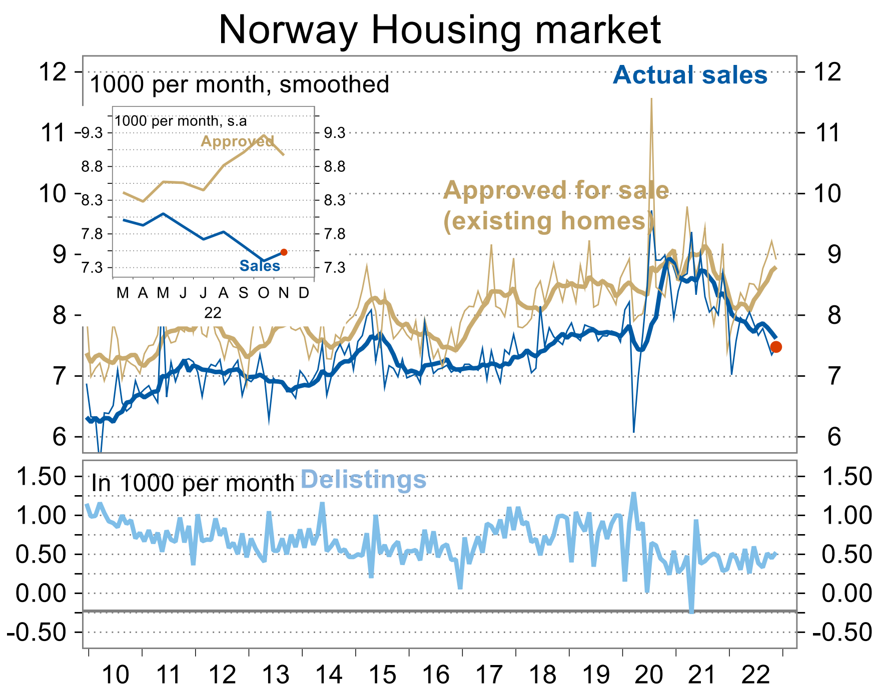




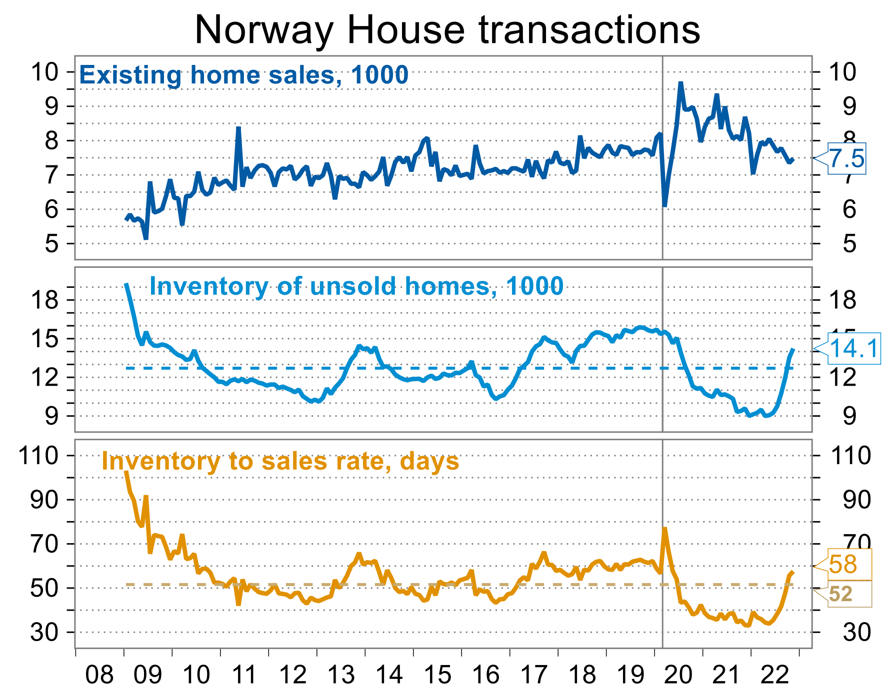
- **House prices** declined 0.9% in November, less than our -1,5% f'cast. Over the past 3 months, prices have fallen 2.6%, the steepest 3-month decline since late 2008. In Sept, NoBa assumed a 4% decline from the peak to a trough in late Q2 next year. Prices are still up 1.1% y/y. Prices fell m/m in 14 of 16 cities, just Kristiansand and Stavanger was up
- **Existing home transactions** rose marginally, to 7.5' which is 15% below the peak during the pandemic but still just back to the average 2019 level. However, no. of **homes approved for sale** has climbed to a level far above normal
- **The inventory of unsold homes** rose by 0.7' units in November, a smallest increase since July – but the inventory has climbed faster than ever the past 5 months. Still, the time on market for those homes actually sold remains low
- On Friday, the Government eased mortgage regulation by lowering the **rate hike in the stress test of borrowers**, to 3 pp from 5 pp (though minimum with a 7% rate), which will increase borrowing 'capacity' among many potential home buyers substantially, reducing the downside risk for house prices. If so, and everything else equal - more tightening from NoBa will be needed

A record rapid pace of inventory accumulation as sales slow rapidly as well

The inventory is increasing twice as fast as ever before, and the inventory is above average



SB1 Markets/Macrobond



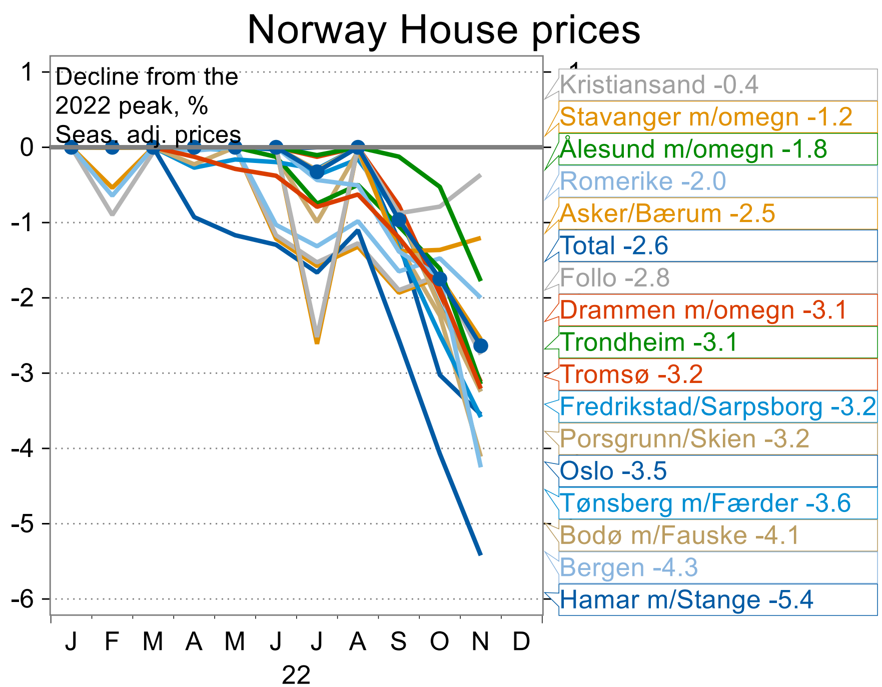
SB1 Markets/Eiendom Norge/Finn/Eiendomsverdi AS

- The **number of transactions** fell in further in October and is now slightly below a normal (2019) level (7.3')
- The **supply of new existing homes for sale (approvals)** rose further and to way above a normal level in October (9.2')
- The **inventory of unsold homes** rose by 700 homes, a smallest increase since July. The increase in the inventory over the 5 past moths, is the largest ever, by far. The level at 14.1' is above average but still far from record high
- The **inventory/sales ratio** added 2 days to 58 days, vs an average at 52 days – and the ratio is still not high
- The **time on market** for those homes actually sold added 2 days to 35 days, which is a very low level (average 42 days) – so there is not yet any buyer's strike for homes which are 'correctly' priced. However, if all those homes not sold should have been sold, substantial price cuts would very likely have been needed

SpareBank 1 MARKETS

The 2022 setback: Some regional differences

Just a marginal decline in house prices in Kristiansand and Stavanger – both supported by the oil sector recovery

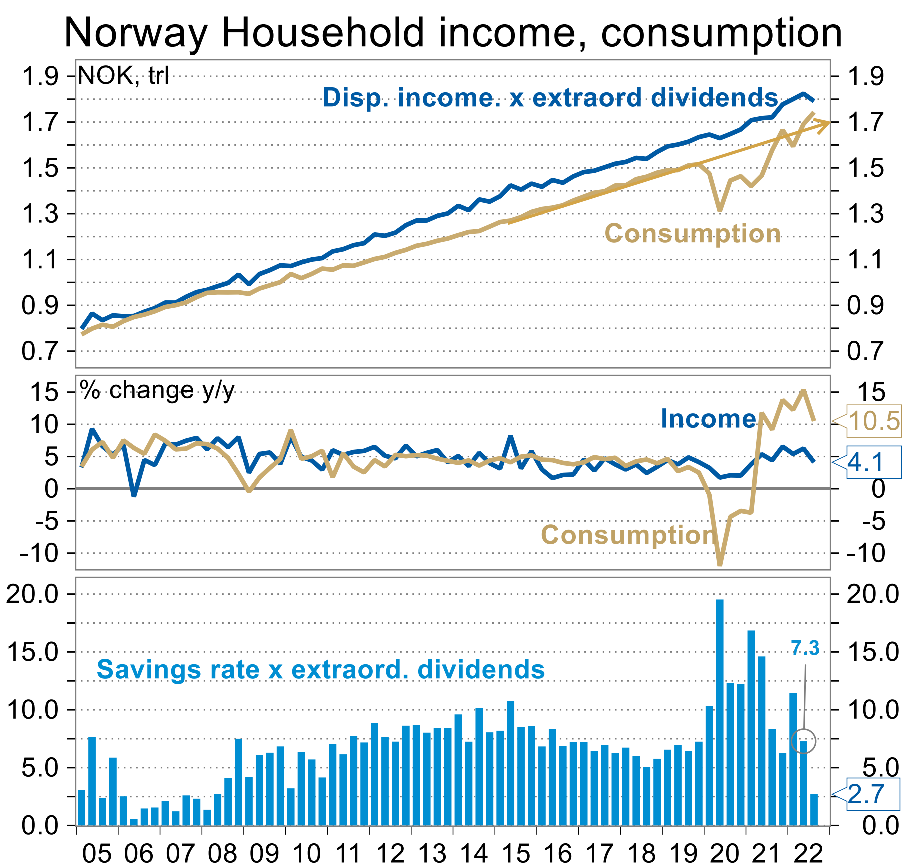


SB1 Markets/Macrobond

- Both cities reported an uptick in prices in November
- Bodø, Bergen and Hamar have reported the steepest declines so far

Households reduced 'real' savings back to the lowest level since 2008

The core savings rate fell to 2.7% from 7.3%, as nominal income fell, and (expensive) spending expenditure rose sharply

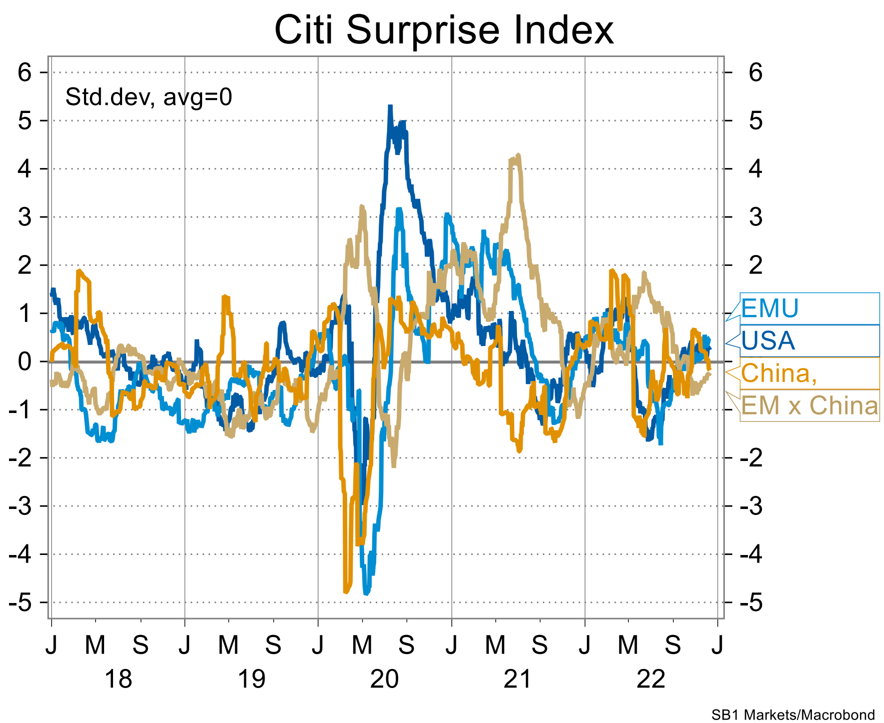


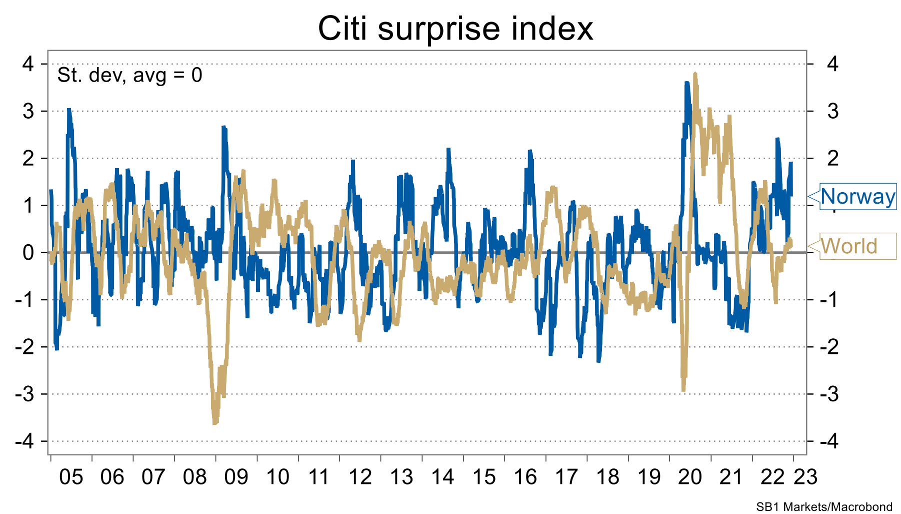
SB1 Markets/Macrobond

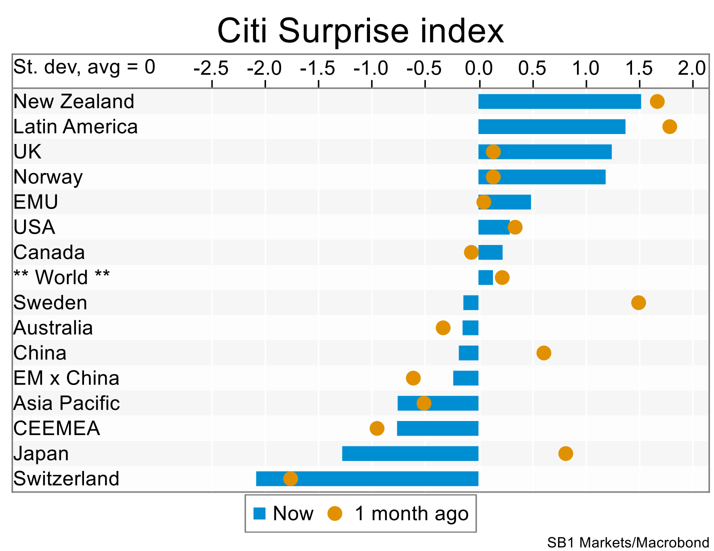
- **Total household disposable** income fell 1.7% in q/q in Q3, in nominal terms, as interest rates rose sharply. Adjusted for extraordinary dividends & pension rights, income declined by 1.8%. Still, total disposable income is up 4.1% y/y. Wage revenues are up 7.4% y/y!
- However, in real terms disposable income is down 1.1% as prices are soaring
- **Nominal growth in consumption** climbed 3.1% in Q3 - and by 10.5% y/y! In Q3, the price deflator rose by 2.6% - and real consumption rose just 0.5%
- **The savings rate** was far higher than normal during the pandemic, and the accumulated extra saving during the pandemic equalled approx. 12% of one year's disposable income
  - In Q3, the savings rate was far below a normal level, implying the some of the extra savings were spent – in order to keep consumption up even if prices rose sharply, and interest rates rose
    - Higher inflation than normal knocked out 3.8% from real disposable income last year, while higher interest rates deducted 2.3%
  - How these money are invested (or disinvested), check some few pages forward

Global data harvest slightly above expectations

Norway down from the pole position, but data in sum still on the positive side







- **Emerging markets x China** is somewhat below par, but less so recent weeks
- **China** has fallen slightly below

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

Highlights

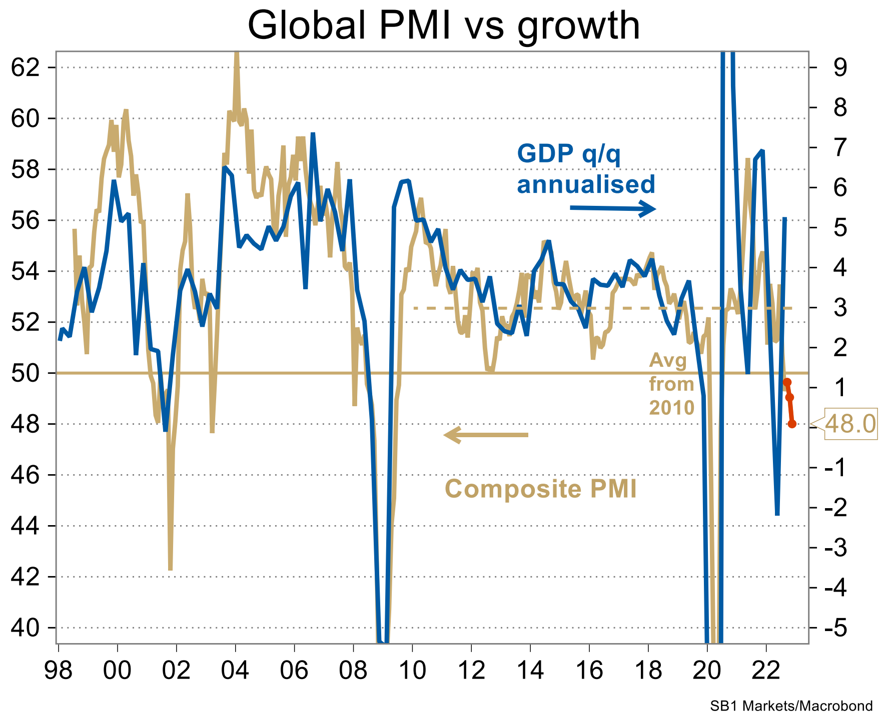
The world around us

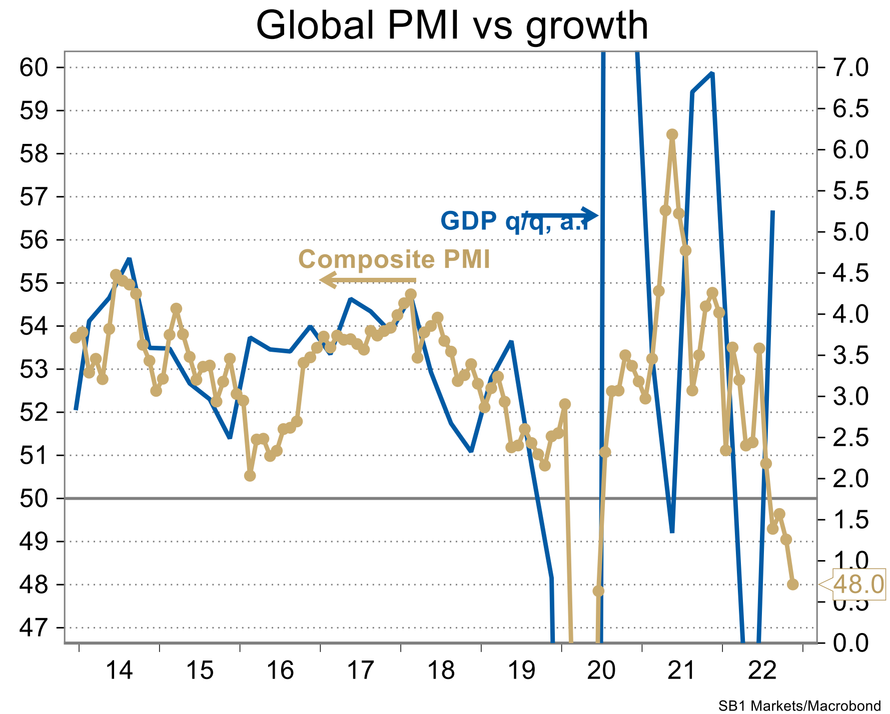
The Norwegian economy

Market charts & comments

The global PMI further down in November, signals zero global GDP growth

The global index fell by 1 p to 48.0, we expected -1.2p. Both manufacturing & services slowed further

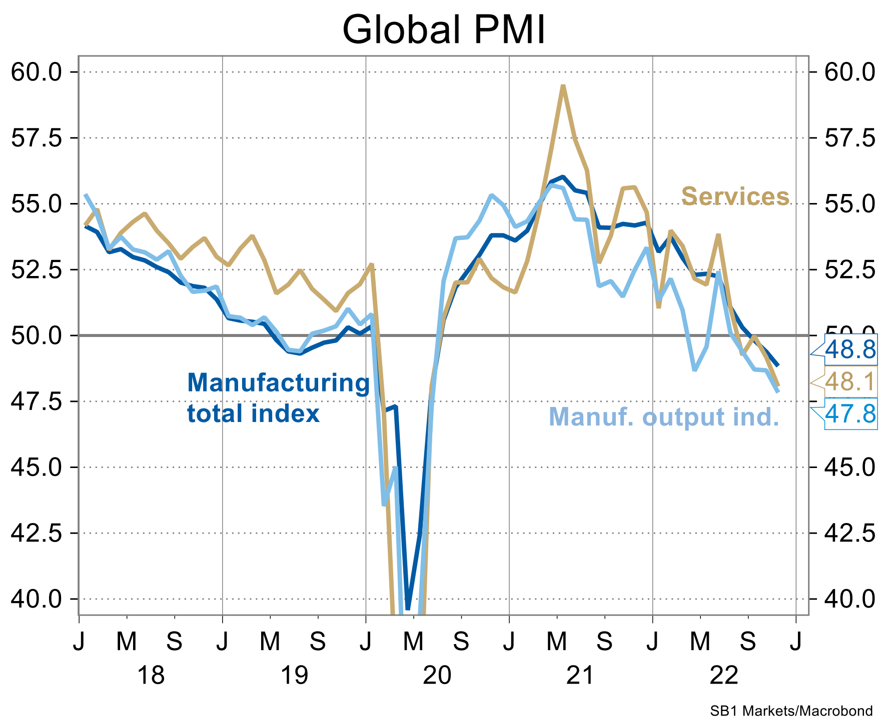


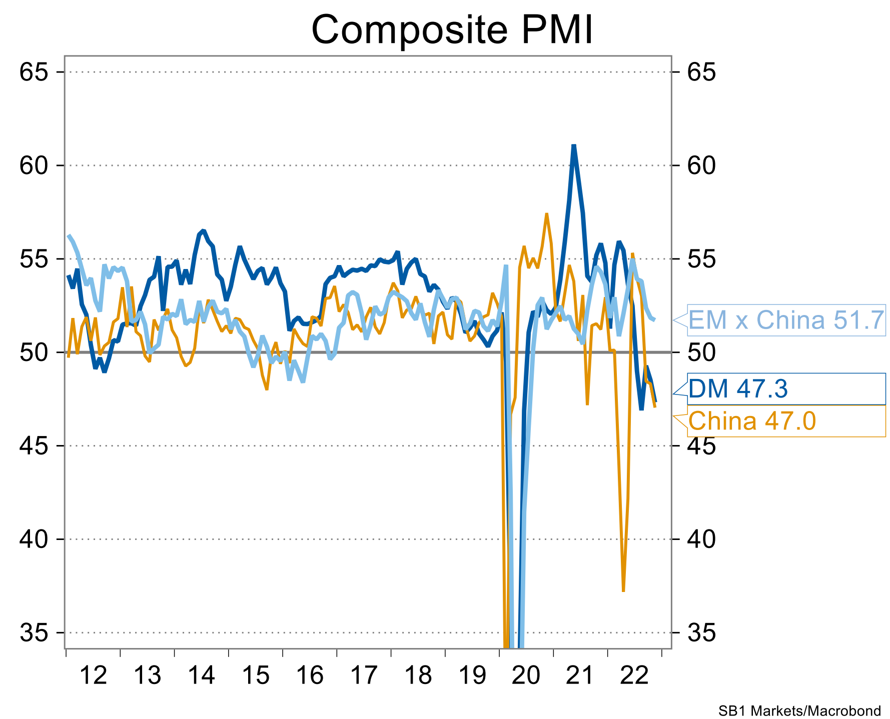


- The composite PMIs are weak in the US (S&P/Markit), the UK, the EMU as well, and in China as well
- The German index is close to the bottom of the league, as both the manufacturing and the service sector PMIs are very weak
- The US S&P PMIs are below par too; the ISMs is in sum far better, due to the service sector ISM
- New orders are weak across the EMU, and are declining the US as well

Emerging Markets x China down but still at 51.7. China & rich world below 50

Both manufacturing and services down in November, and below 50

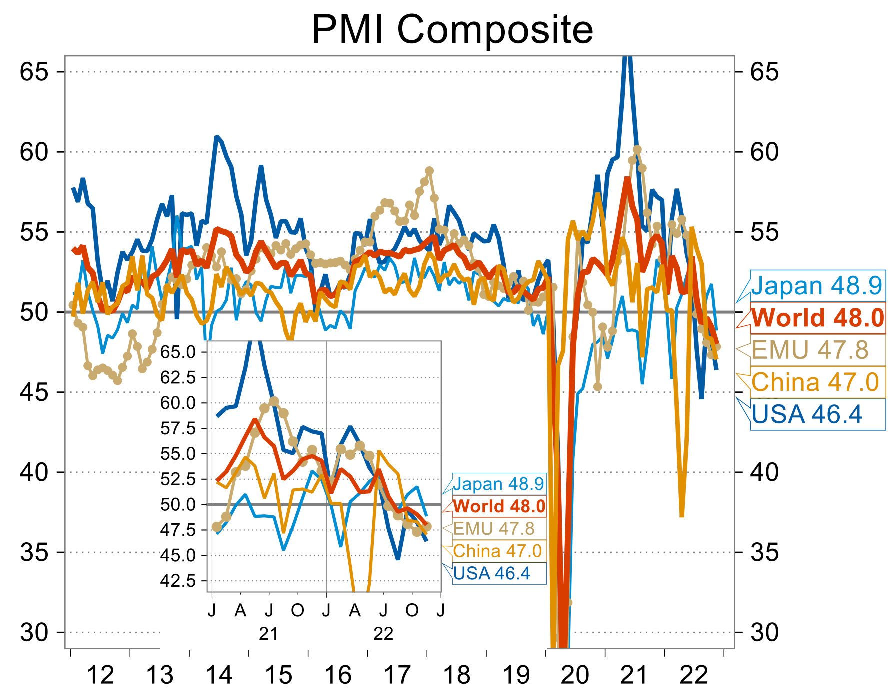




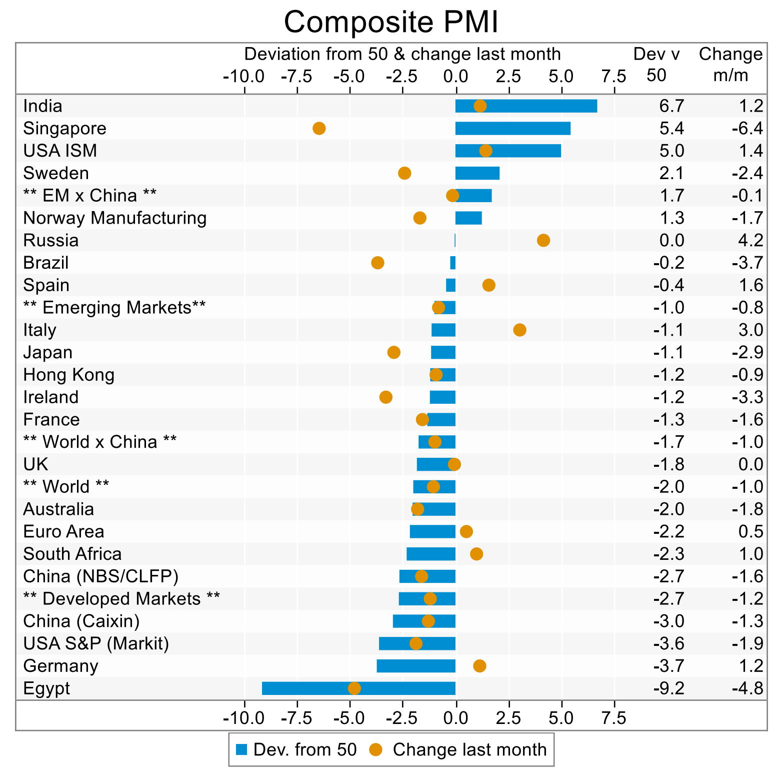
- The output index in manufacturing fell 0.8 p, to 47.8

18 countries/regions down, 8 up, 1 unch. in November

20 countries/regions below the 50 line (including China, EMU, UK, US); 6 are above



Source: IHS Markit, SB1 Markets, Macrobond

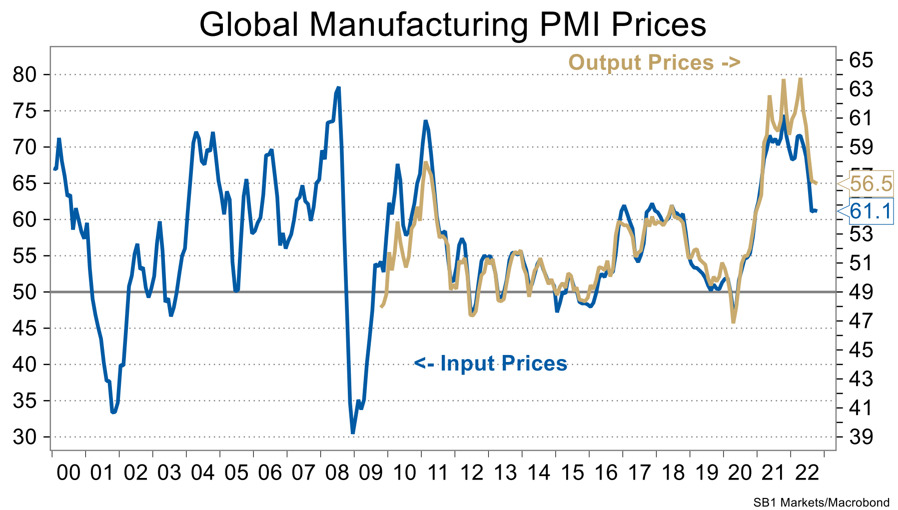


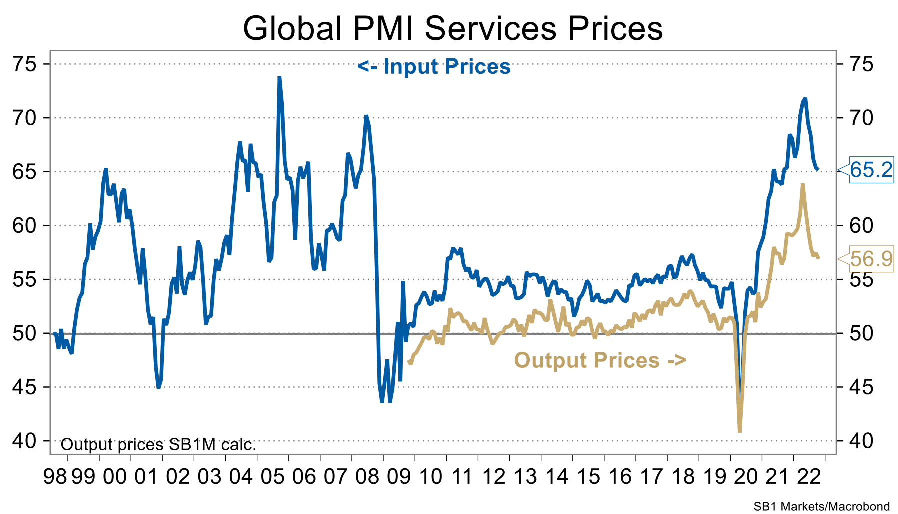
SB1 Markets/Macrobond

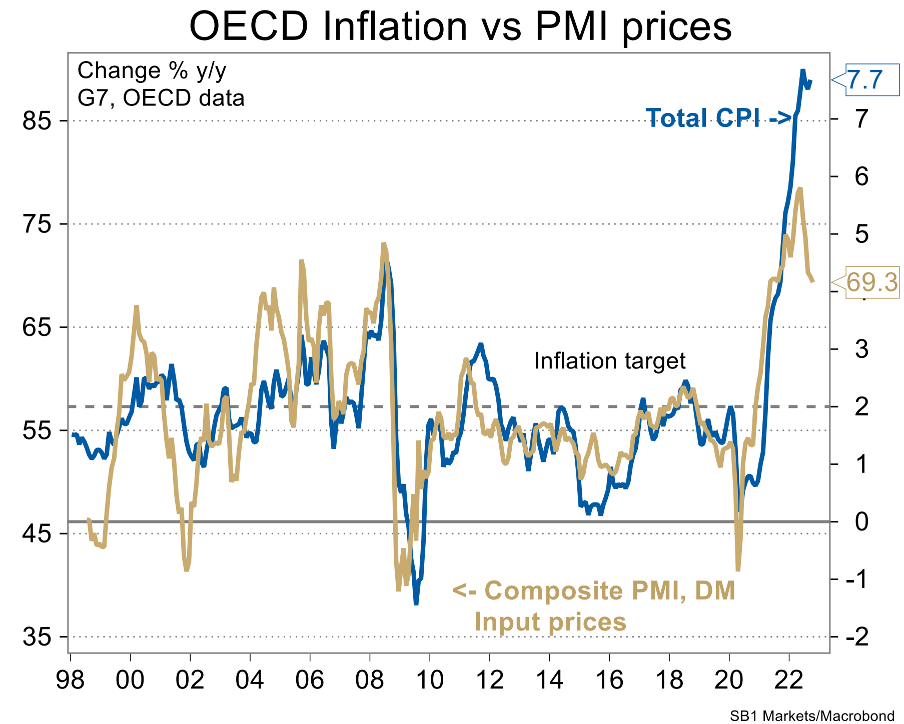
- **The rich countries'** (Developed Markets, DM) PMIs remain well below the global average
  - A couple of exceptions: Swedish composite PMI is still above 50 due to strength in the service sector – and the ISM 'composite' is even stronger, for the same reason
- The **ISM survey** is far better than **S&P's (Markit) US survey** – the ISM 'composite' increased by 1.4 p to 55, while S&P's PMI fell 1.9 p, and is far weaker, at 46.4. This discrepancy is more than strange – and is entirely due to the diverging service sector indices (ISM covers mostly larger companies)
- (**Norway** does not compete in this league, we just have a manufacturing PMI. The Nov index would have yielded a 6th place in the composite race)

Price increases are slowing, according to the PMIs

All price indices remain at high or very high levels though (like service sector input prices)

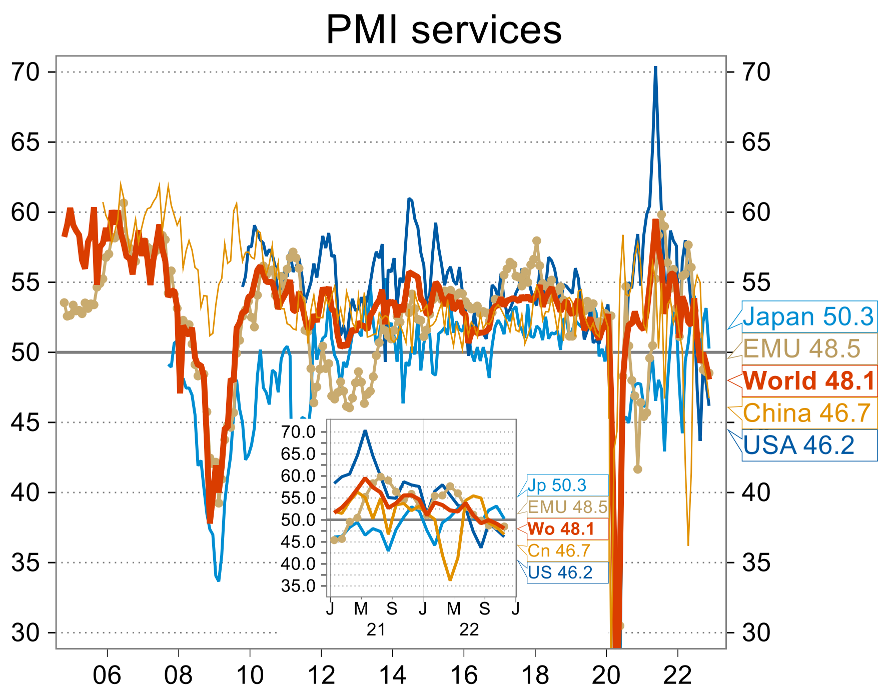




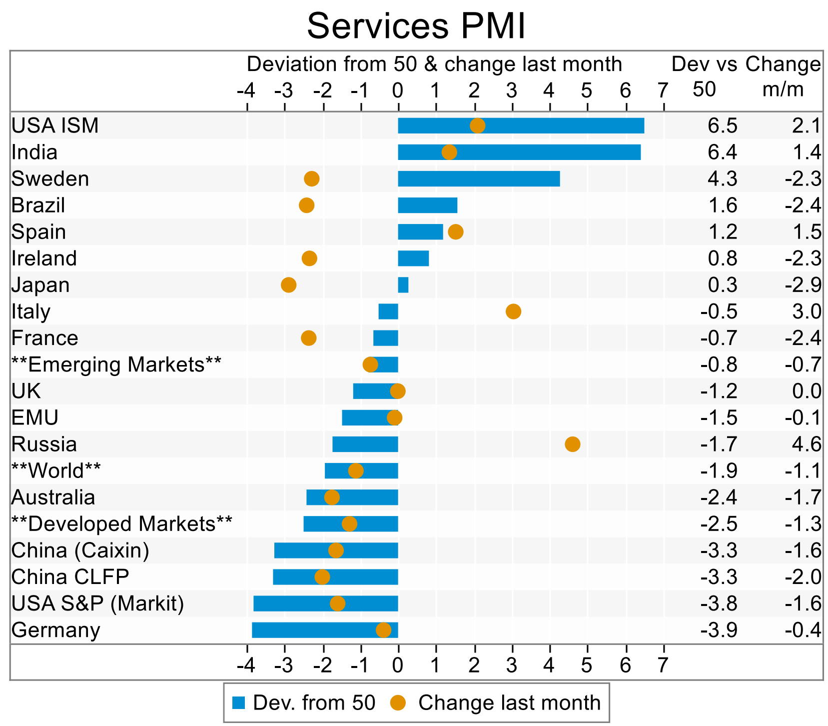


Services PMI down 1.1 p to 48.1, all main regions below the 50-line

Both China, EMU and US below the 50-line



SB1 Markets/Macrobond

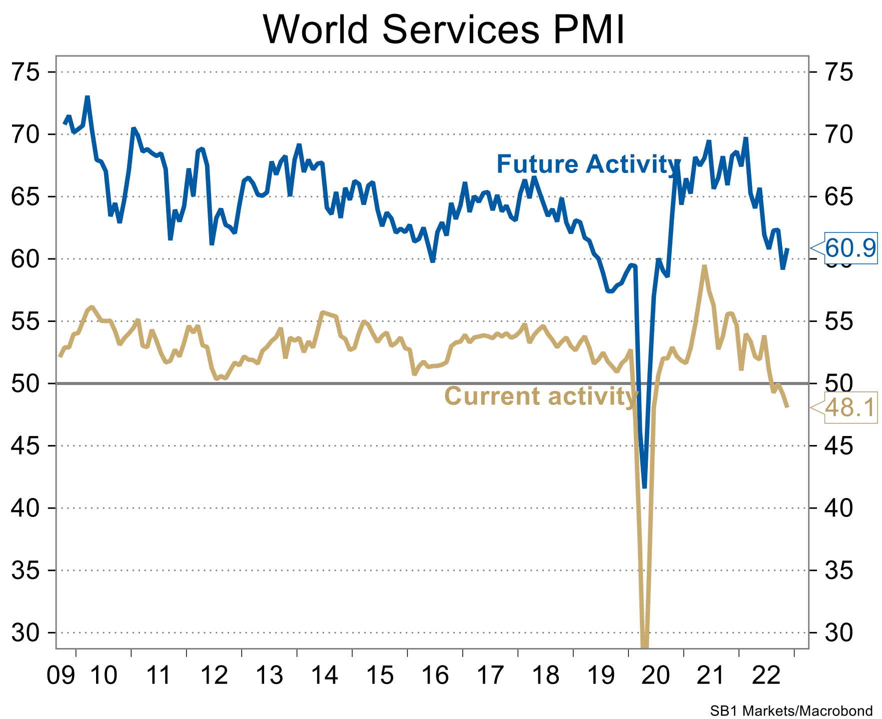


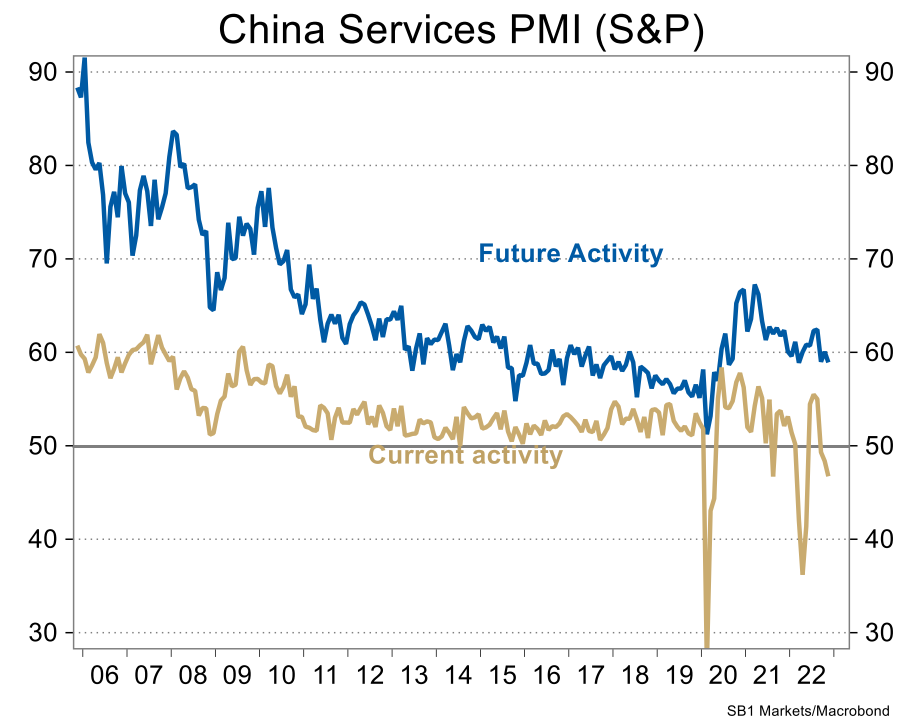
SB1 Markets/Macrobond

- The German index fell sharply in November, so did the US (S&P's/Markit's) and the Chinese service sector PMIs. Activity is falling in all the biggest economies, in other words…

Current activity aspects in the service sector further down

The lowest level, barring the pandemic trough

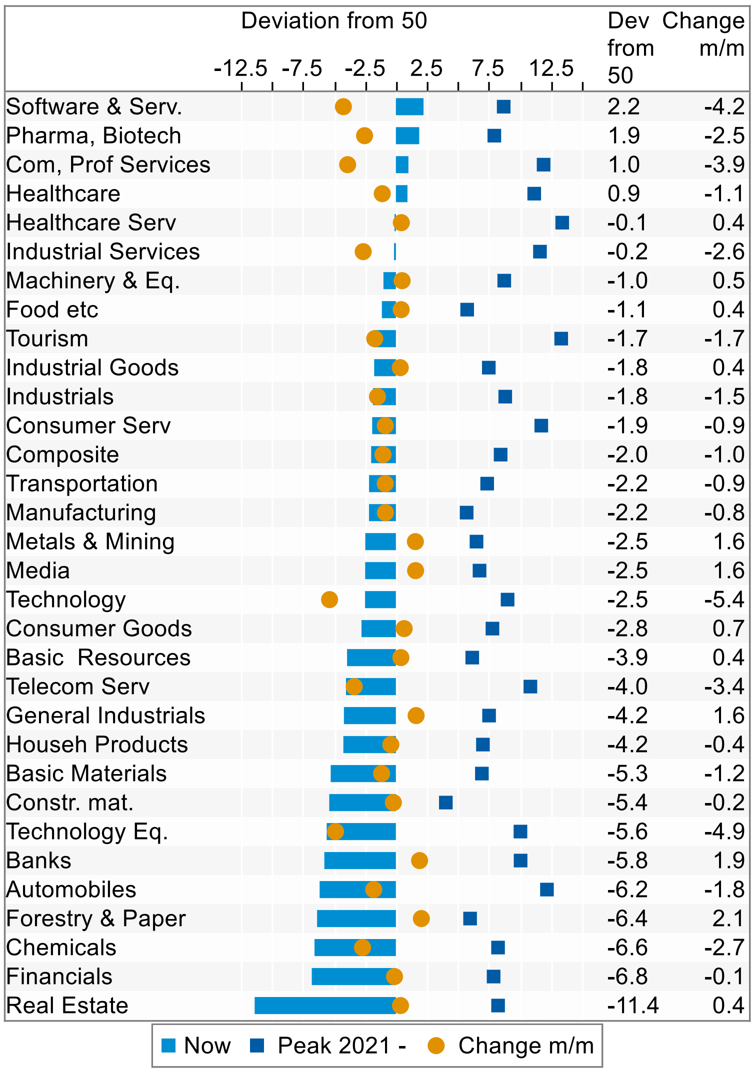




Globally: A broad setback sector wise in November

Real estate still at the bottom, due to the lift in the capital cost

World PMI sectors

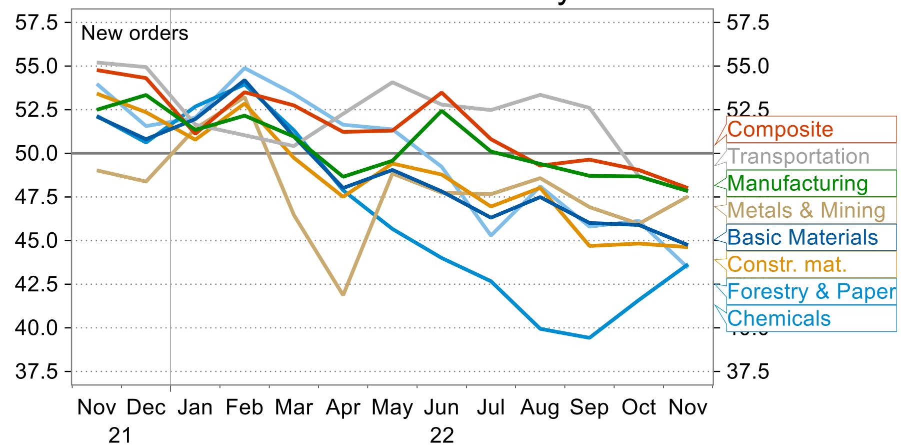


Sector	Dev from 50	Change m/m
Software & Serv.	2.2	-4.2
Pharma, Biotech	1.9	-2.5
Com, Prof Services	1.0	-3.9
Healthcare	0.9	-1.1
Healthcare Serv	-0.1	0.4
Industrial Services	-0.2	-2.6
Machinery & Eq.	-1.0	0.5
Food etc	-1.1	0.4
Tourism	-1.7	-1.7
Industrial Goods	-1.8	0.4
Industrials	-1.8	-1.5
Consumer Serv	-1.9	-0.9
Composite	-2.0	-1.0
Transportation	-2.2	-0.9
Manufacturing	-2.2	-0.8
Metals & Mining	-2.5	1.6
Media	-2.5	1.6
Technology	-2.5	-5.4
Consumer Goods	-2.8	0.7
Basic Resources	-3.9	0.4
Telecom Serv	-4.0	-3.4
General Industrials	-4.2	1.6
Househ Products	-4.2	-0.4
Basic Materials	-5.3	-1.2
Constr. mat.	-5.4	-0.2
Technology Eq.	-5.6	-4.9
Banks	-5.8	1.9
Automobiles	-6.2	-1.8
Forestry & Paper	-6.4	2.1
Chemicals	-6.6	-2.7
Financials	-6.8	-0.1
Real Estate	-11.4	0.4

SB1 Markets/Macrobond

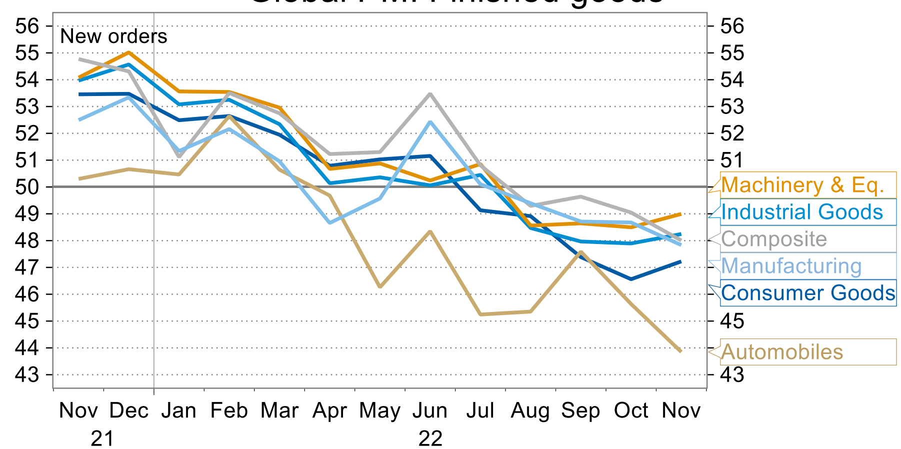
- Most sectors are reporting a decline in activity
- Financials, real estate at the bottom

Global PMI Commodity sectors



SB1 Markets/Macrobond

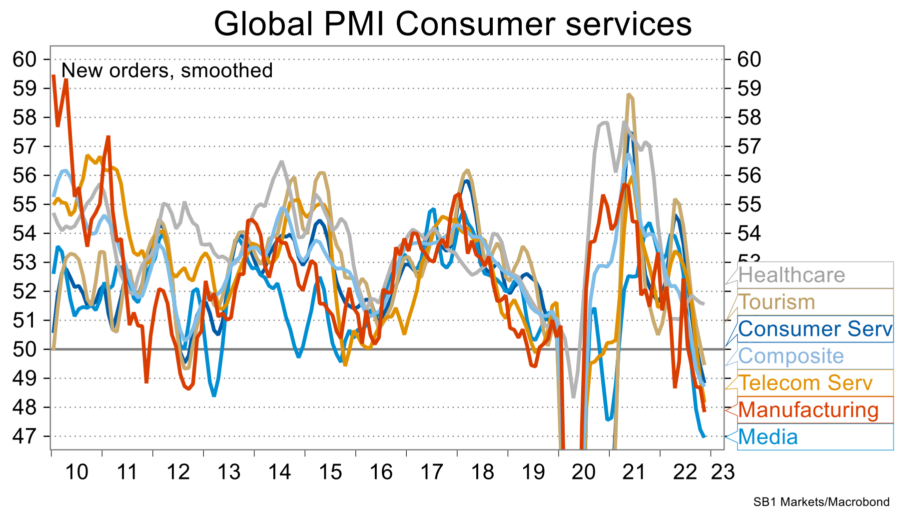
Global PMI Finished goods

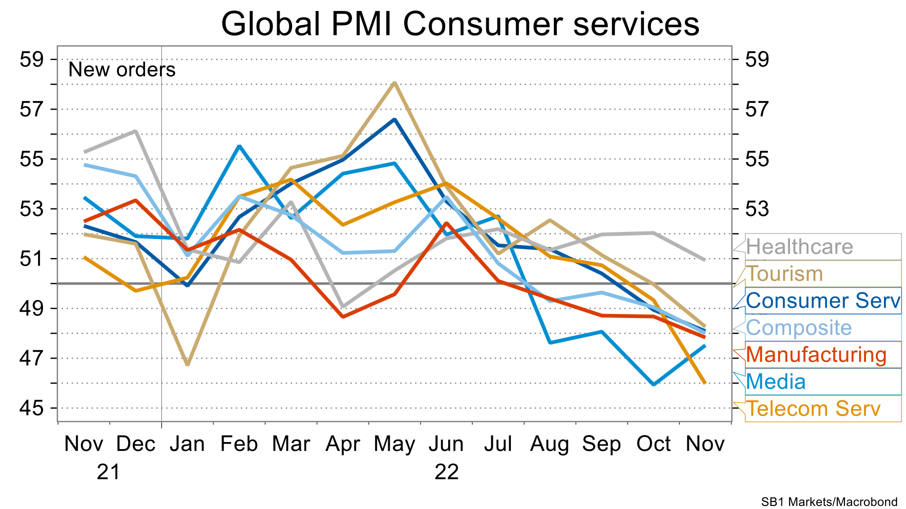


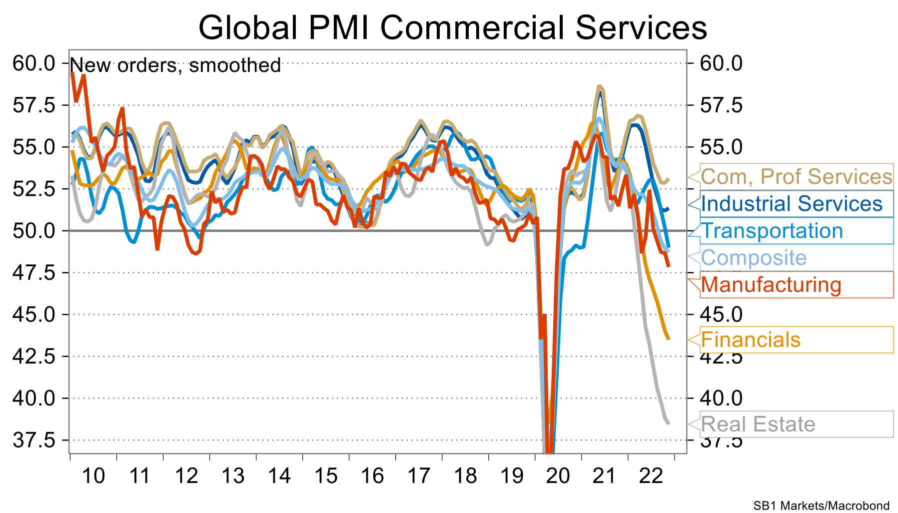
SB1 Markets/Macrobond

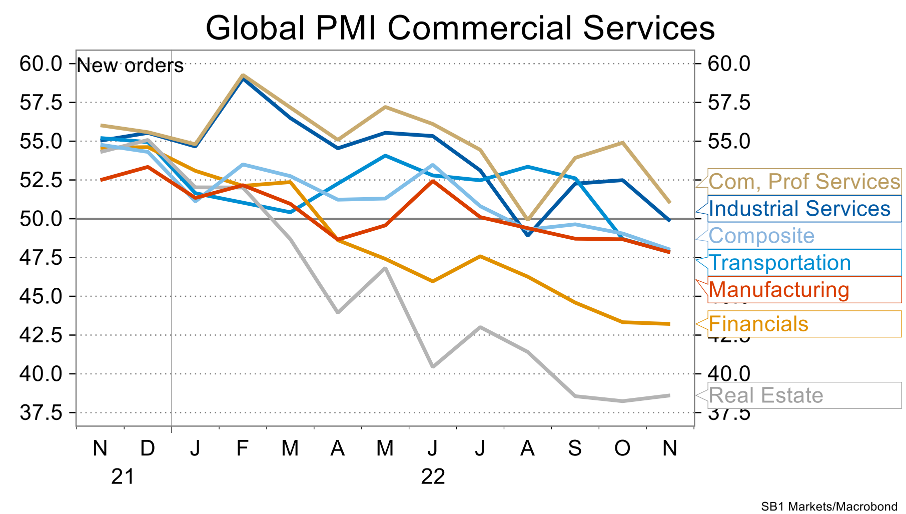
Services are contracting… fast

Beware real estate: has fallen sharply recent months. We think we know why



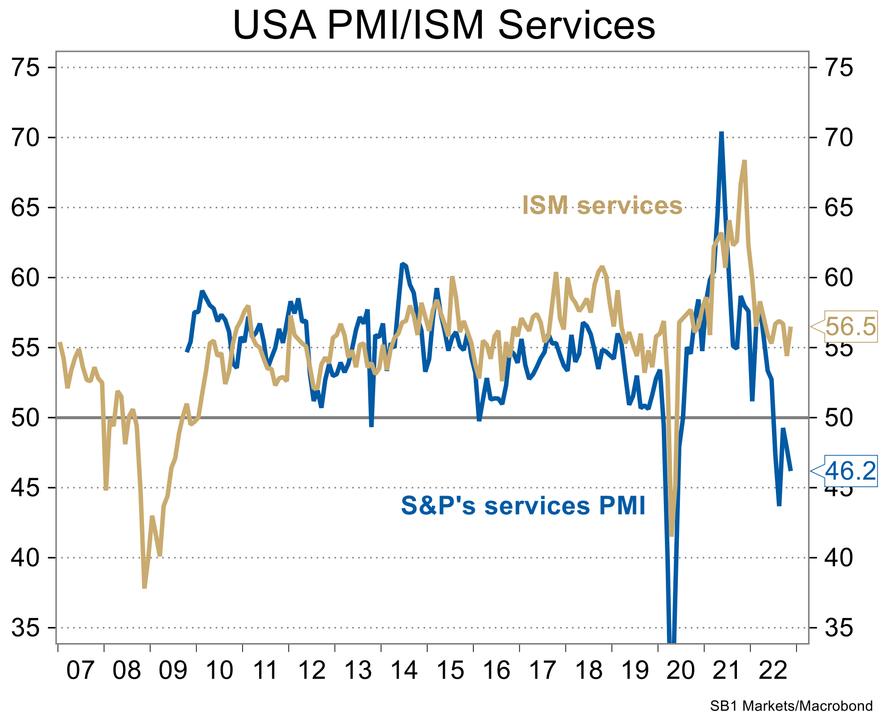


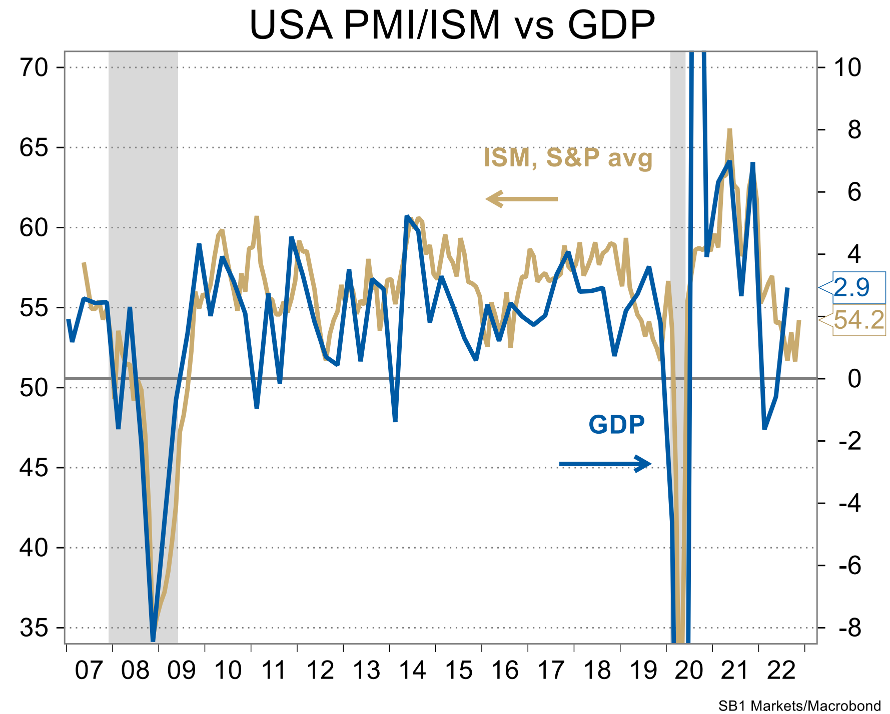




Mind the gap: S&P says services are contracting; the ISM reports OK growth

On average, slow growth is signalled – also if manufacturing surveys are included

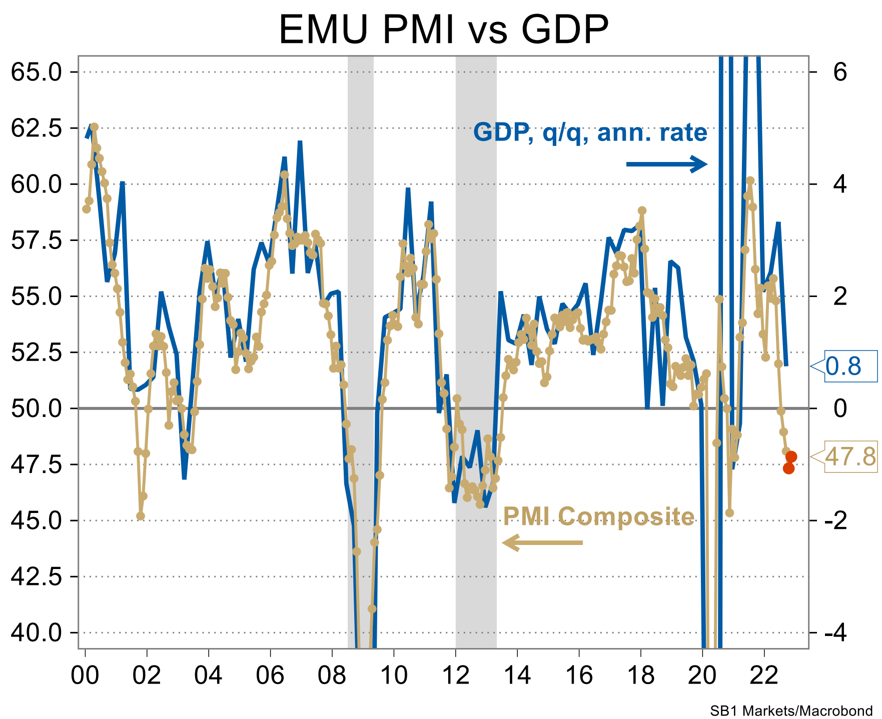


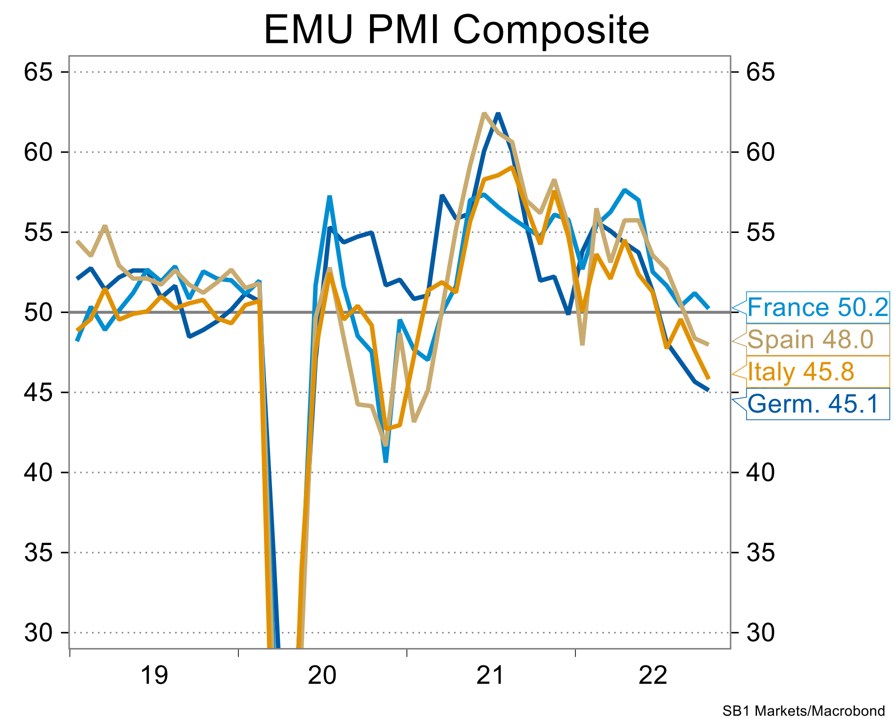


- The history of the two surveys are too similar and too short to judge which one is better, but so far, the ISM seems to be more correct, the service sector has not been contracting the recent months
- The **ISM services** index was up 2.1 p to 56.5, expected down to 53.3. This survey is tilted towards the larger companies compared to the S&P survey. Even if the new order index was down 0.5 p, the 56.0 level signals decent growth. Input prices are increasing a little slower according to the ISM, and the S&P service sector respondents concur
  - Comments were in general much weaker than signalled by the actual index numbers
  - 13 sectors reported growth (down from 16), and just 3 a decline (up from 2): Management & support services, Wholesale trade, and Information
- **S&P's services PMI** (aka Markit's) was 0.1 p higher than the preliminary PMI, but remained well below 50, at 46.2! So far, the ISM index seems to have been closest to the ball
- The **average** of the composite ISM and PMI rose 2.6 p to 54.2 – which implies some 1.8% GDP growth

Eurozone PMIs confirmed up; still in contractionary territory for the 5th month

The composite up 0.5 p to 47.8; data stronger everywhere but the German & French service sectors

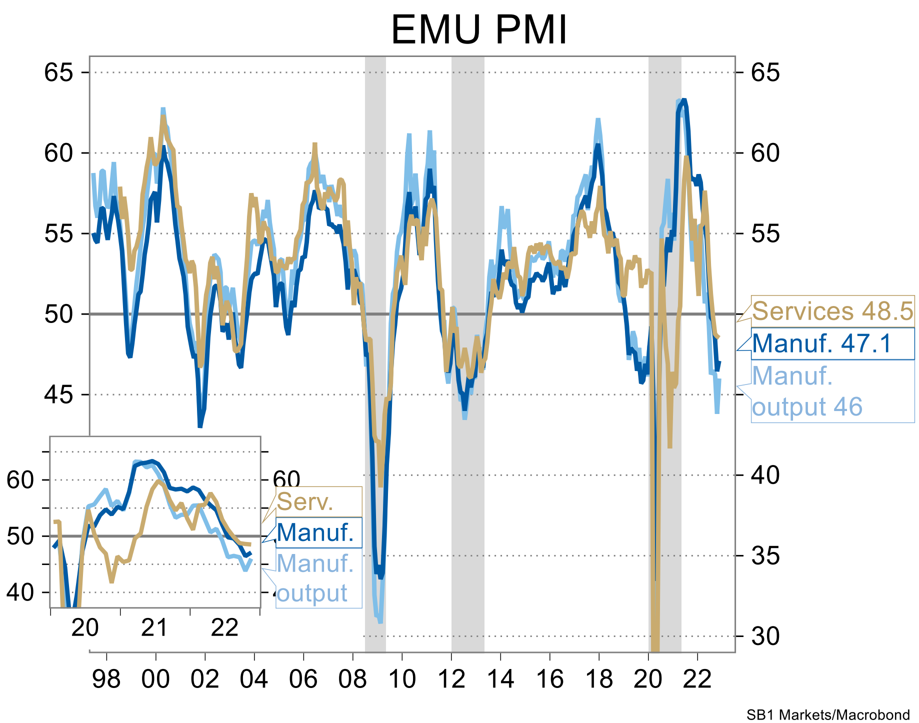


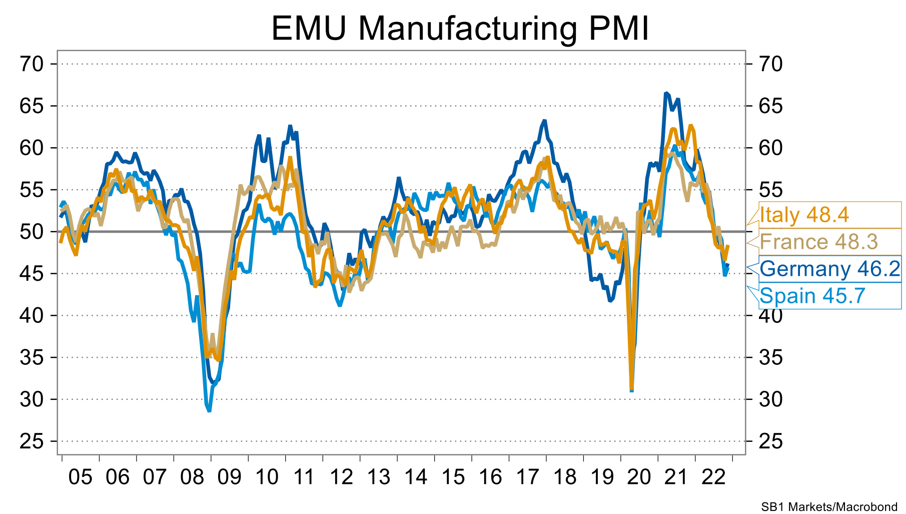


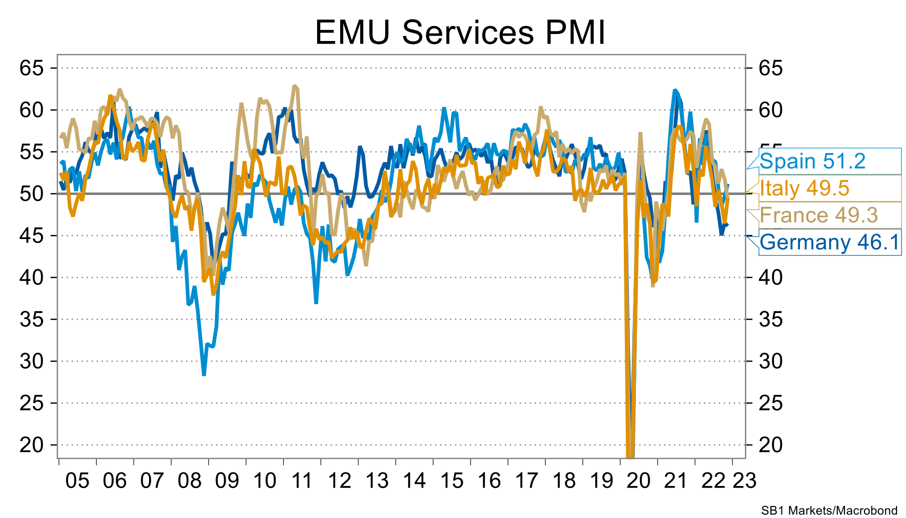
- The EMU composite PMI was spot on the flash estimate, and up 0.5 p from October. Most of the countries contributed on the upside, apart from the German and the French service sectors – the French service sector PMI fell by 4.6 p and below the 50-line
- The **manufacturing PMI** and the **manufacturing output** index were up, while the **service PMI** fell in November
- The sum of the parts for the Eurozone points to around a 1% contraction in GDP. In Q3, GDP grew 0.8%
- The November PMIs, like the previous months, bear sign of higher energy costs and higher interest rates, as well as lower global demand, as demonstrated by the low new order indices. The PMI data are clearly signalling a recession – how shallow or deep it will be could be determined by the weather and the energy prices…

Manufacturing stronger, but services PMIs further down in the Eurozone

Manufacturing is below 50 in all of the big 4 – Services above 50 only in Spain



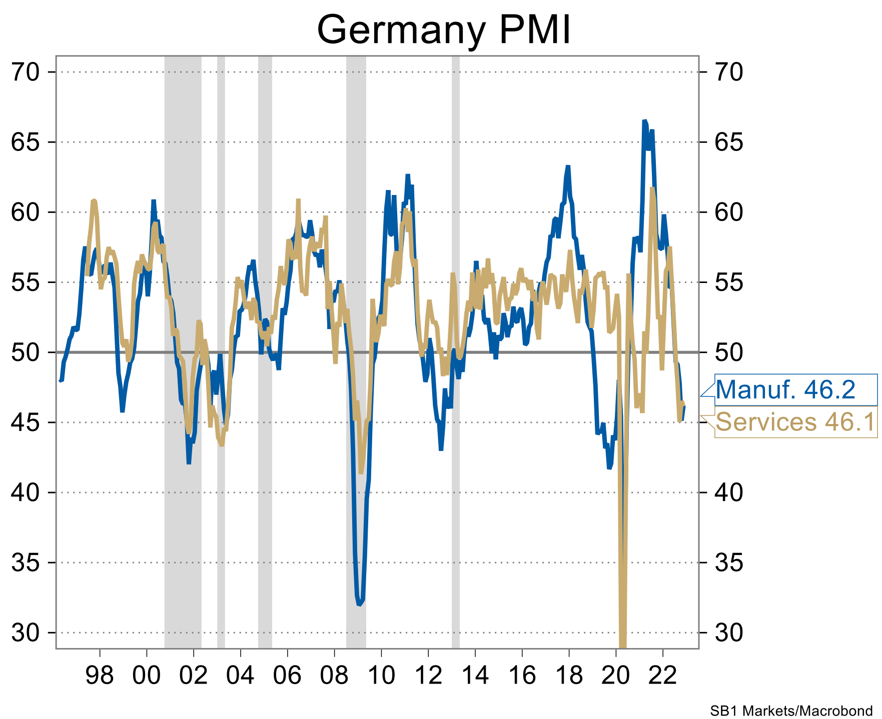


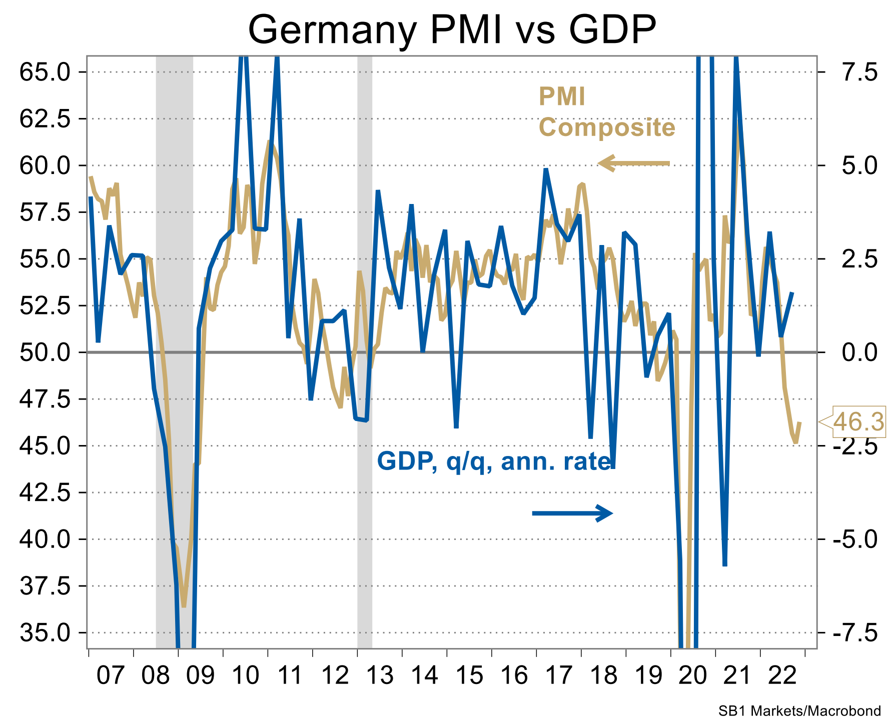


- The manufacturing output component is a warning sign. And even more the order index (which was slightly up in November, but from the lowest level since April-09, barring the prints during the pandemic). The new order index is now at 40.7!!!

Germany: The composite PMI now signals some 1.9% fall in GDP

Both the services and the manufacturing PMIs came in lower than the flash estimate

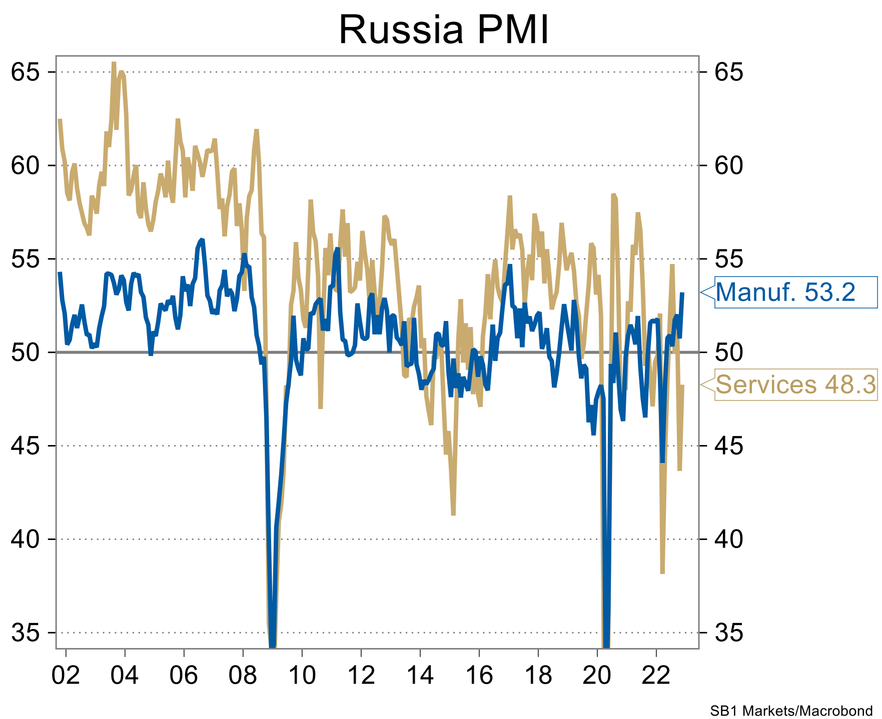


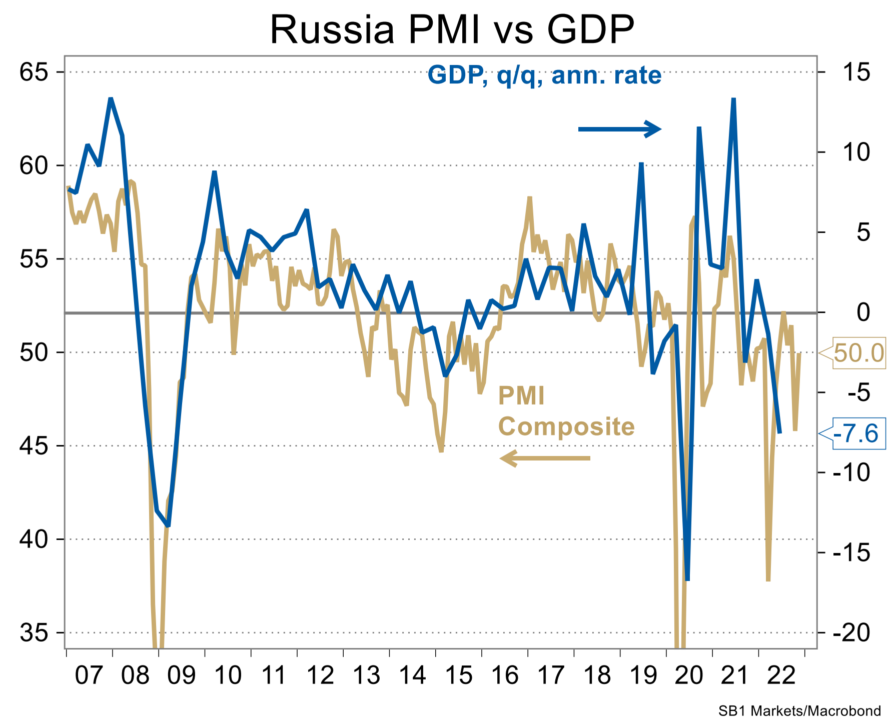


- The composite PMI is up 1.2 p to 46.3 in November, which is 0.1 p lower than the preliminary print
  - The service sector PMI fell by 0.4 p to 46.1, which is 0.3 p lower than the flash estimate. High inflation, higher interest rates, and an uncertain outlook (war & energy prices) is dampening demand. In addition, input cost inflation does not seem to ease, but rather continue at a record-fast pace, according to businesses
  - The manufacturing sector PMI rose 1.1 p to 46.2, up from the lowest level since June-20. The uptick was in part driven by a more optimistic outlook, less material shortages, lower input cost inflation in the manufacturing sector

Russian PMI stronger in November, despite sanctions and the war

The service sector PMI rose 4.6 p to 48.3, but the sector is still contracting; manufacturing PMI was up 2.5 p to 53.2

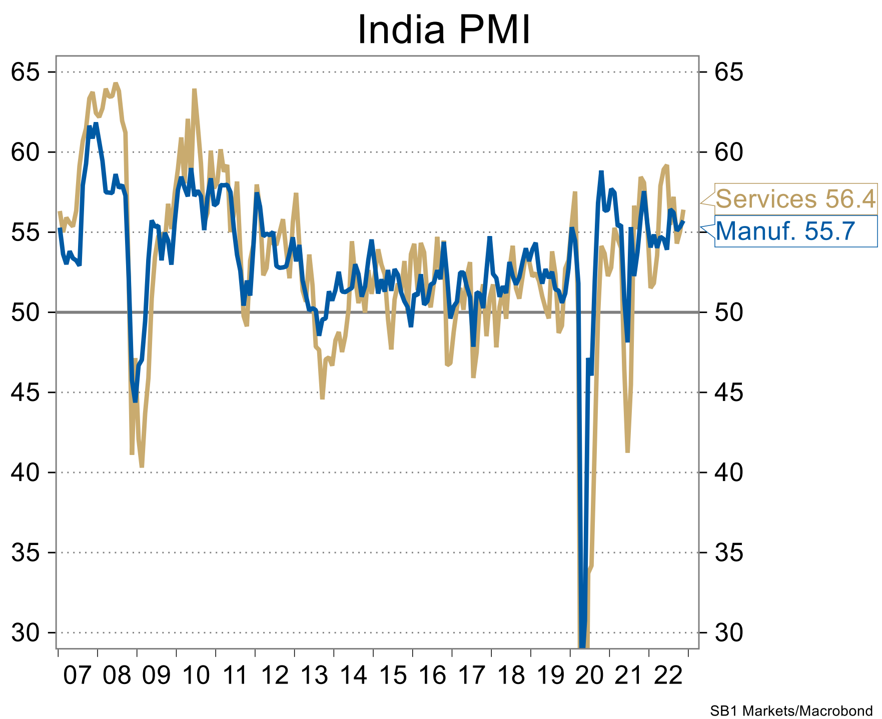


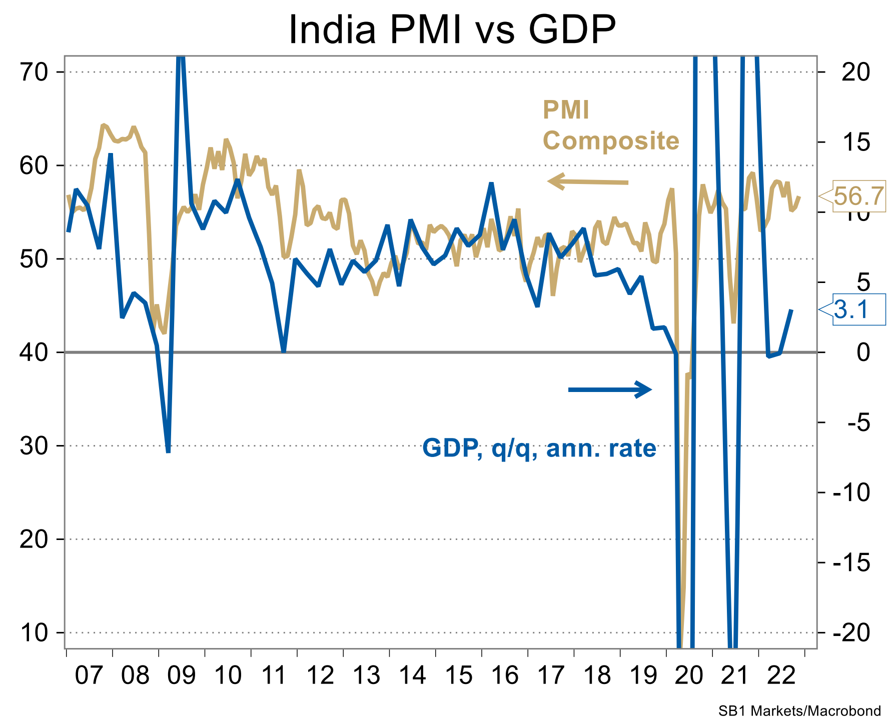


- **The composite PMI** was up 4.2 p to 50, which still signals a contraction in GDP at a 2.5% pace in Q4
- **Reliable data from Russia** are in short supply these days. What we have? Retail sales are down 12%, auto sales are down 70%, imports have fallen sharply (based on export data from other countries). Still, industrial production is down just 4% since February even if oil and gas production is included. GDP fell by 7.6% (-2% not annualised) in Q2, far less than assumed when the war started. No Q3 data yet
- **A reminder:** The PMIs are not sentiment surveys – respondents are asked about in changes in actual activity (new orders, output, employment, inventories) from the previous month

The composite PMI up 1.2 p to 56.7, as both services and manufacturing rose

…and both sector PMIs are very strong. <u>10-11% GDP growth??</u>

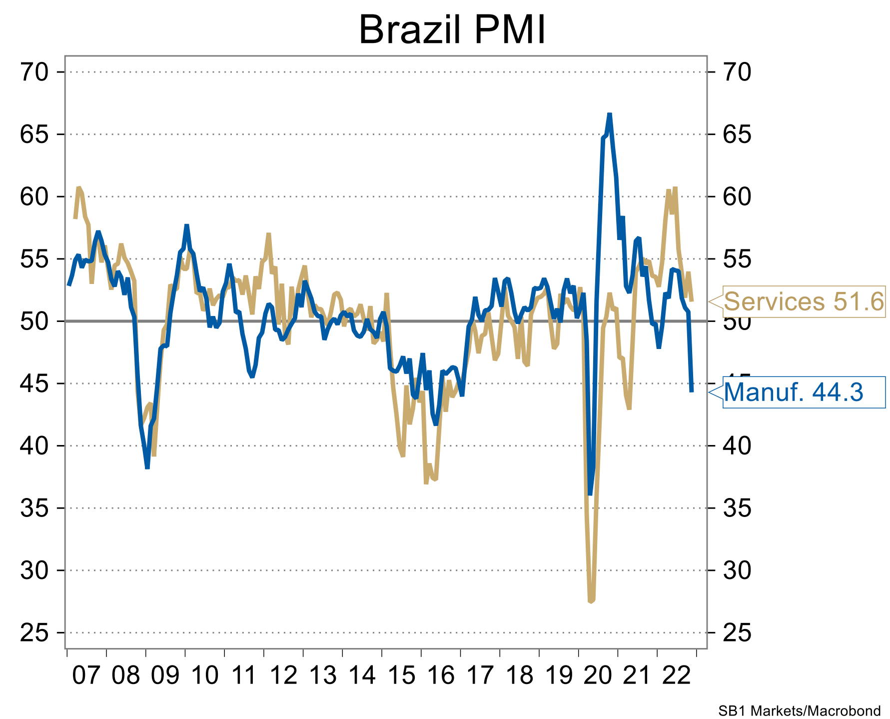


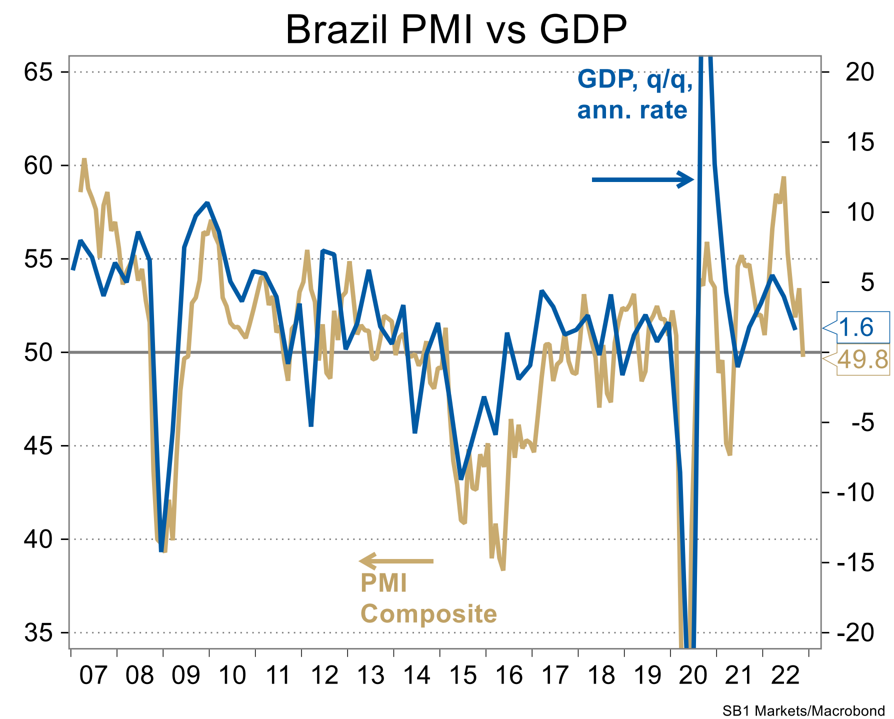


- GDP data have been heavily revised – and are not well in sync with the PMIs – which regrettably often is the case

Both manufacturing and services down; composite index signals 0% growth!

The composite PMI fell 3.6 p to 49.8

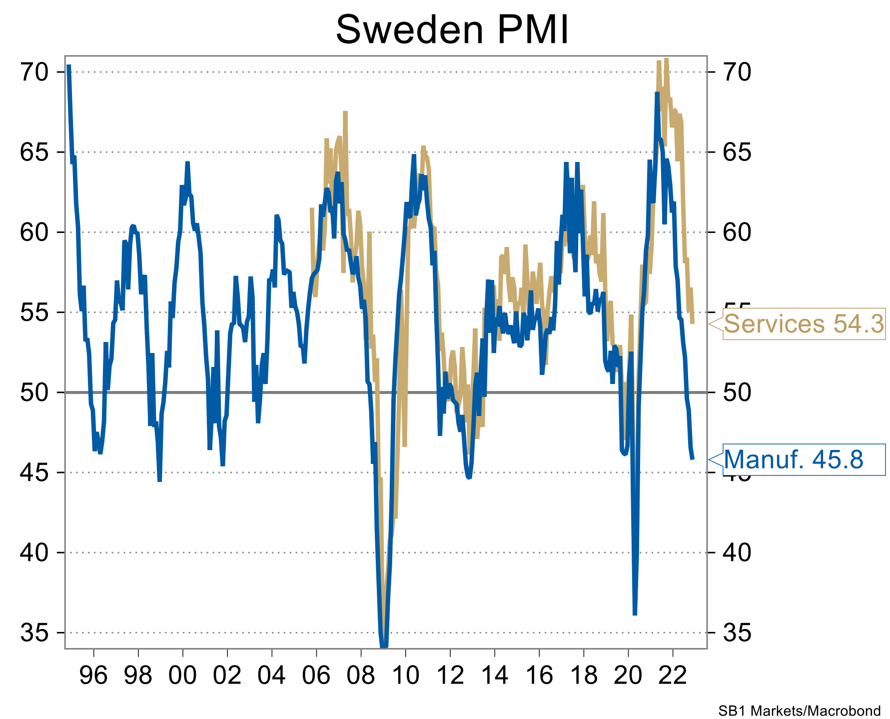


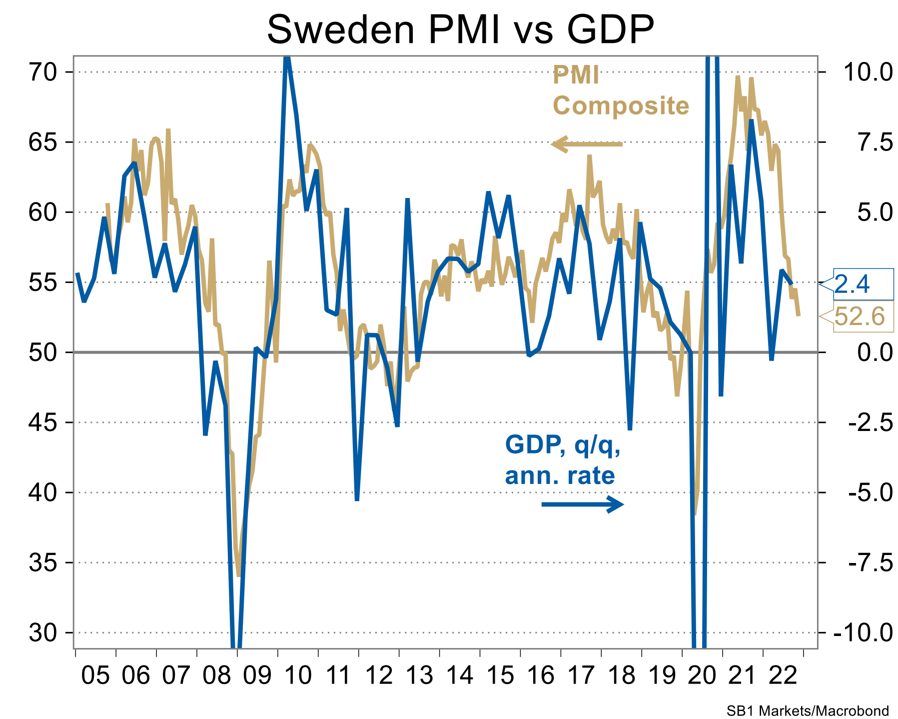


- The correlation to actual GDP growth is not impressive
- Actual GDP growth has picked up some steam the past 3 quarters

Manuf. sector contracting at a faster pace – but services remain strong

Even though the service sector PMI fell 2.6 p to 54.3 in November, the sector is still expanding at an average pace

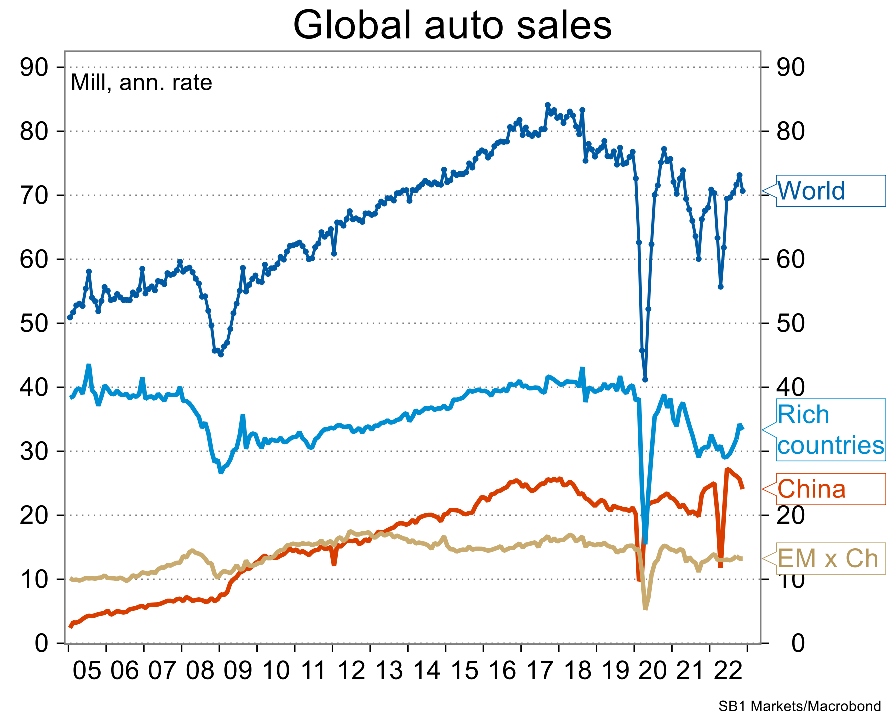


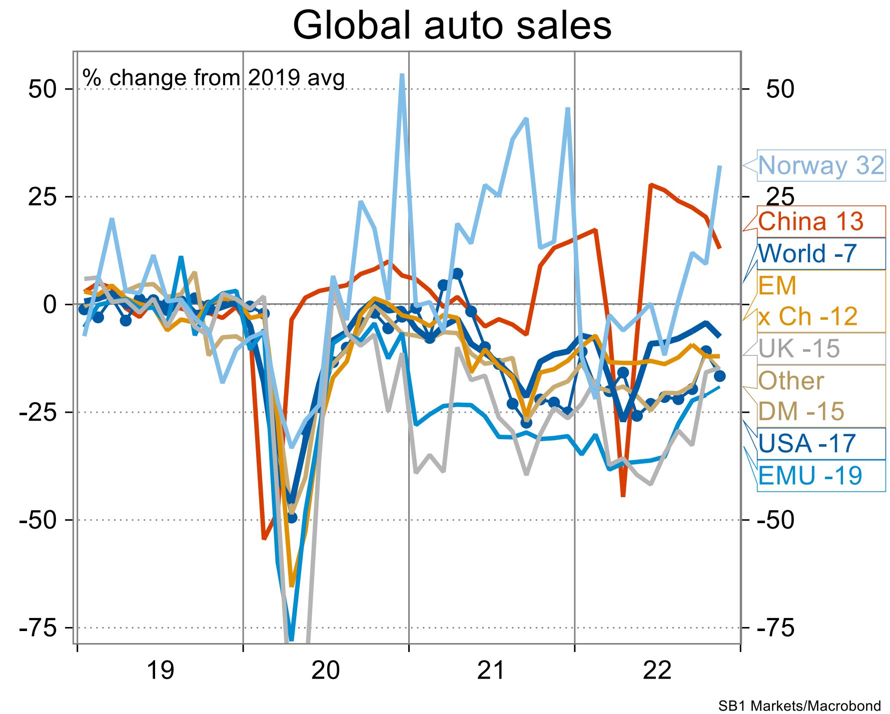


- **The composite** index fell 2 p to 52.6. The service sector still looks very strong. The manufacturing PMI kept falling, down 1.2 p to 45.8
- In Q3, **GDP** grew at 2.4% pace (0.6% not annualised). At current levels, the composite PMI is signalling a GDP growth at around 1.3%. KI's survey, which is tracking GDP closer, indicate around zero GDP growth

Global auto sales down in November, due to lower sales in the US and China

European (German) sales up. Norway at top of the list



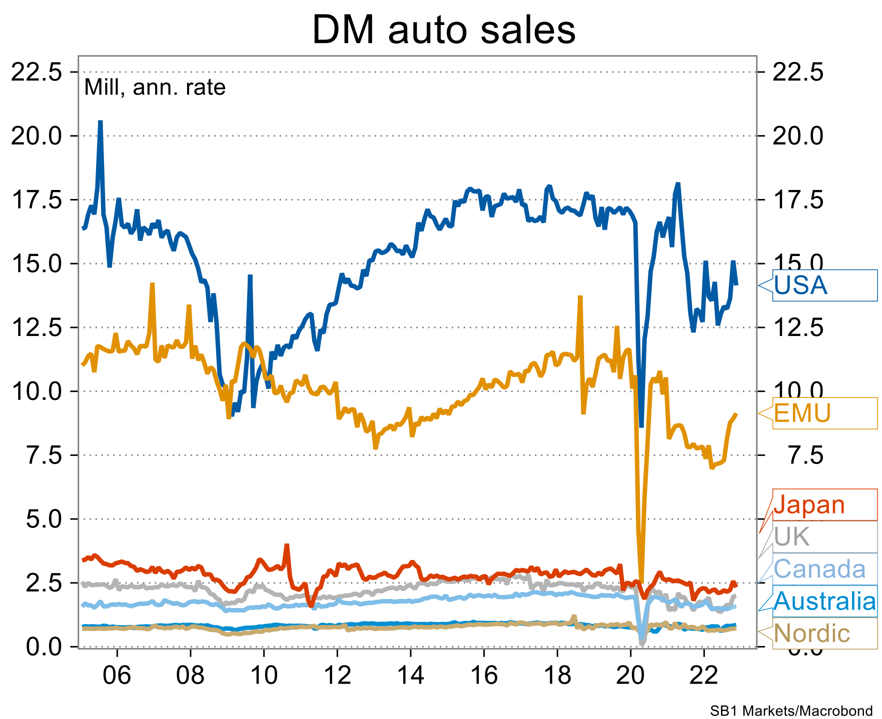


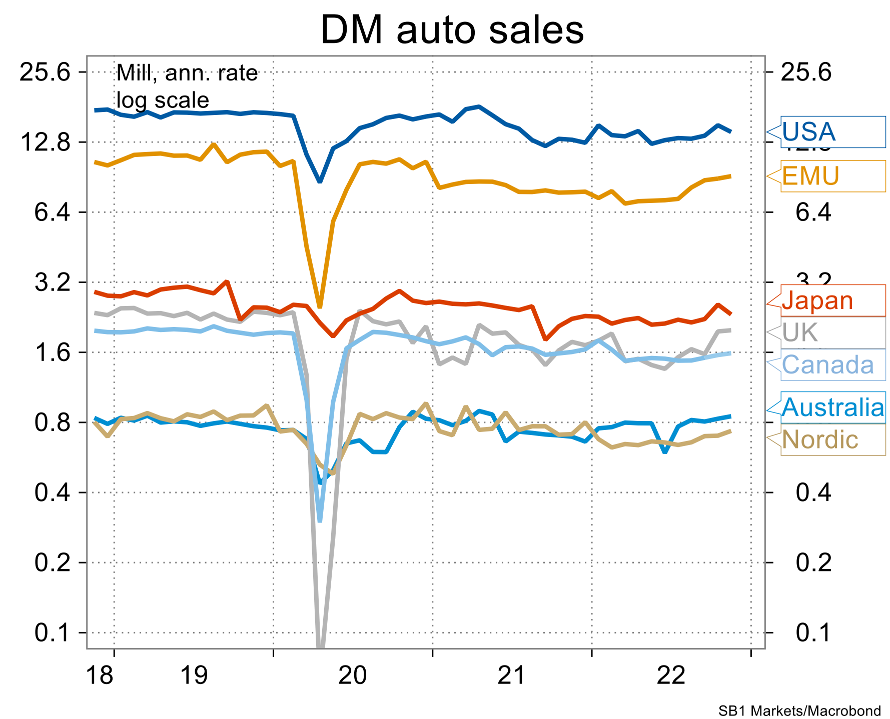
- **Global auto sales** fell 3% in November. Sales are back to the same level as in early 2021, and 'just' 7% below the 2019 level. However, 2019 is an easy comparison: Sales are down more than 13% from the peak in 2018 and more than 20% below the pre-2018 trend growth path!
- The regional differences are substantial: Sales in **China** have been revised down, and fell further in November, but are still up 13% from 2019 – even if the housing market is struggling. Sales in the **US** fell m/m and are down 17% since 2019. **EMU** sales continued upwards, primarily due to a surge in German sales, and EMU sales are 19% below the 2019 level. **UK** sales rose further, and are down 15% from 2019! **Norwegian** sales rose again in November, to 32% above the 2019 level, an outlier. Actual contracts written are probably far weaker, now cars a pouring in before the hike in taxes from Jan 1st
- Sales in **EM x China** were flat, and are down 12% vs 2019. India is close to ATH, Russia is not…
- **Auto production** is very much still a limiting factor most places, but production is now recovering. Chinese production was 26% above the 2019 level in September. South Korea is also above the 2019 level, and US is just 2% above. Most of Europe and Japan are down 10% – 25%

SpareBank 1 MARKETS

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

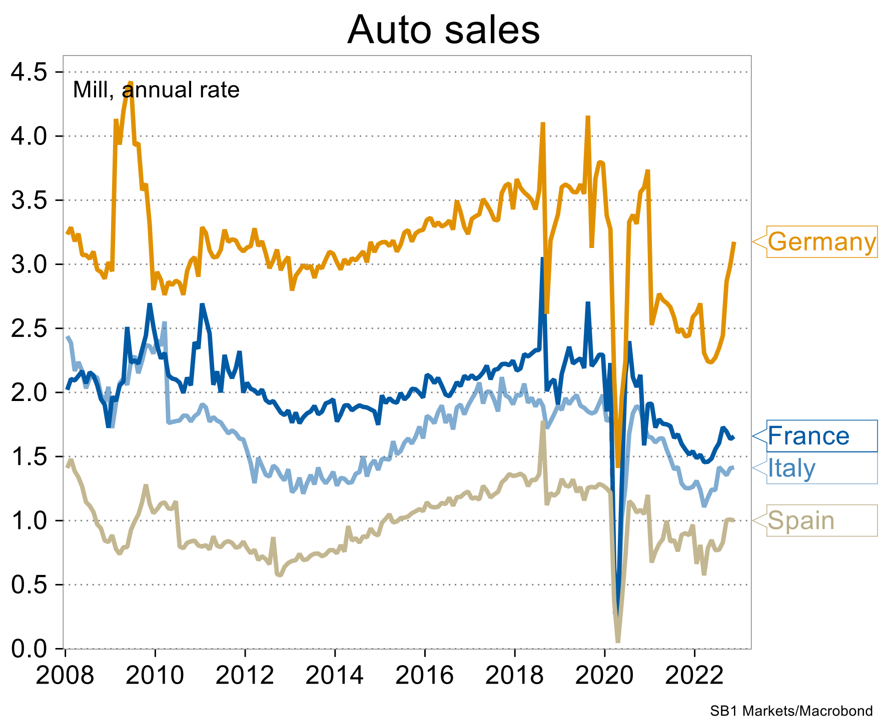
… as supply of new cars strengthens

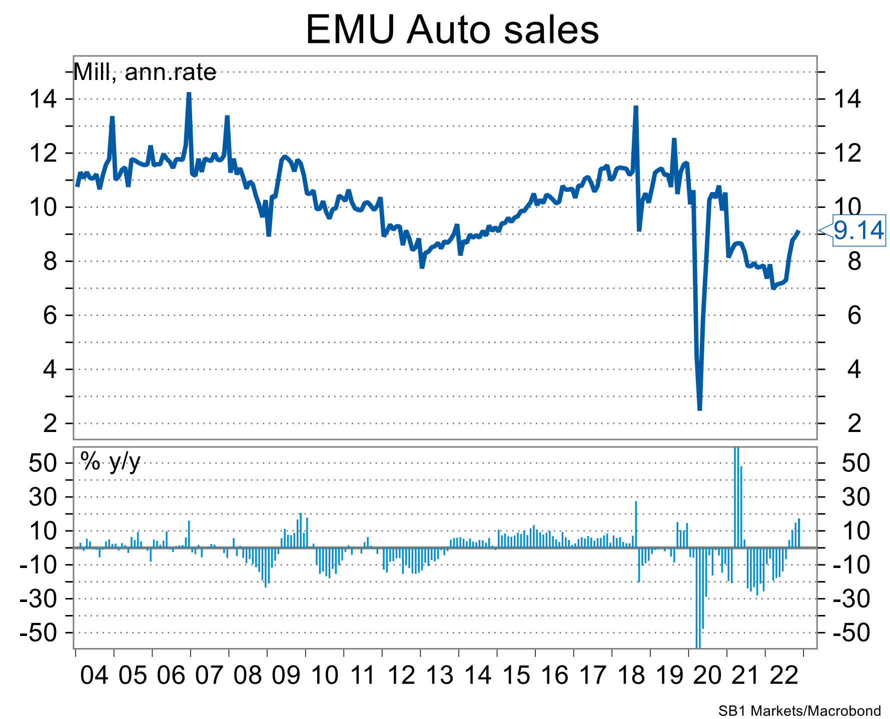




EMU: German auto sales are surging, up 40% since the summer! (EMU +30%)

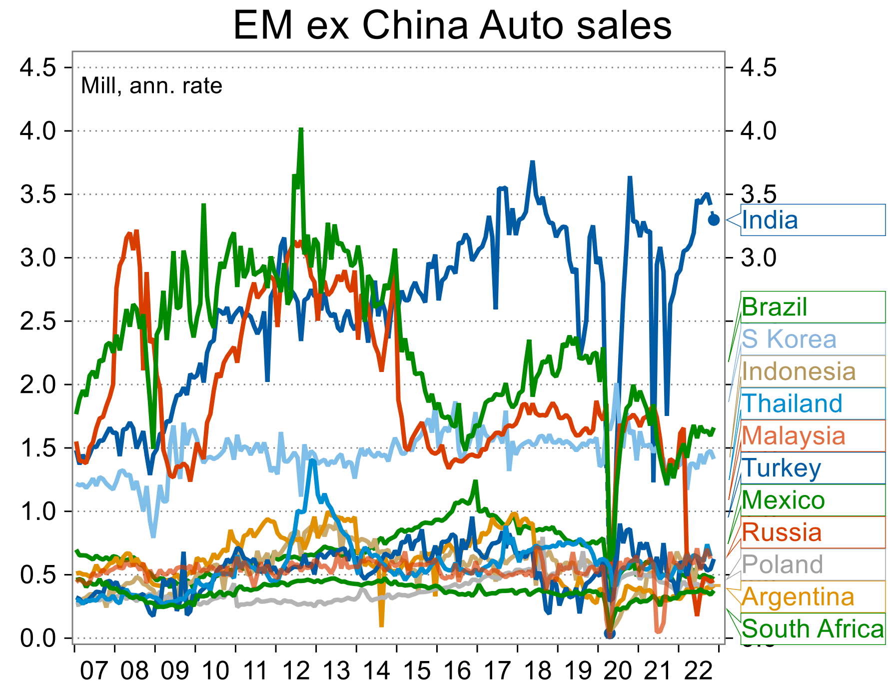
Total EMU sales will very likely climb further in November, small increases in France & Italy

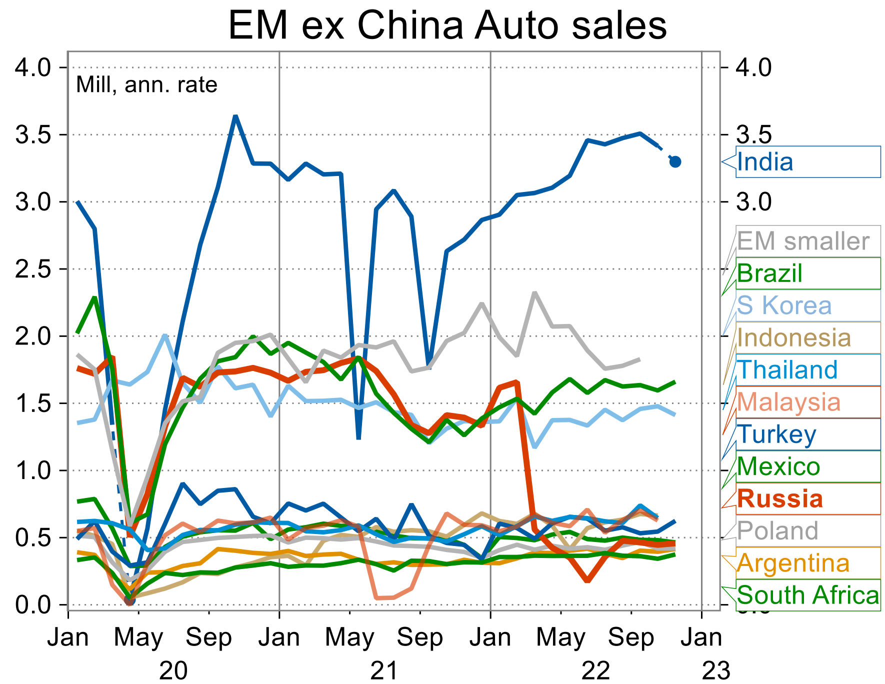




EM: most countries on the way up, but several are well below previous highs

Brazilian sales are cut in half – and Russian sales were once upon a time 8 times higher than today



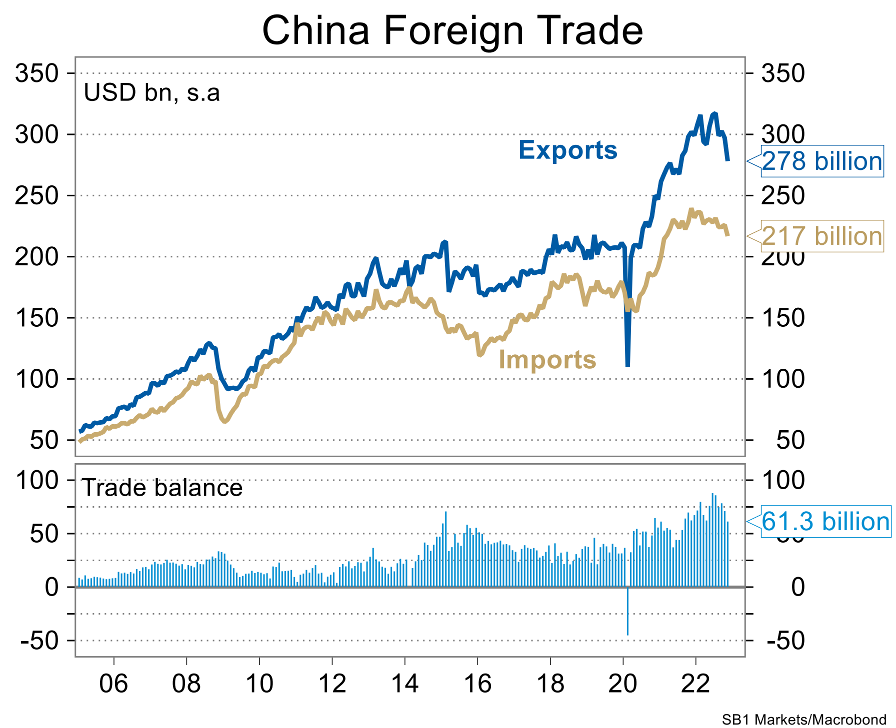


- Indian sales are still close to ATH levels (the Nov. data point is based on media reports, and is uncertain)
- Sales in EM x China & Russia are just marginally down vs the 2019 level

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

Exports sharply down in November, imports weak too

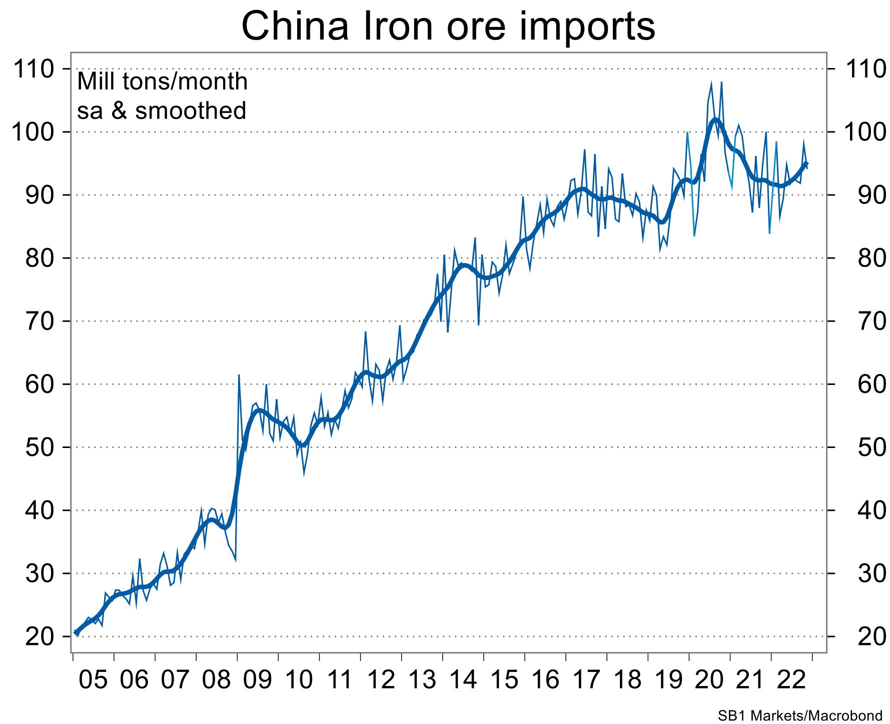
Some covid restrictions, weaker global demand – or changing trade patterns?

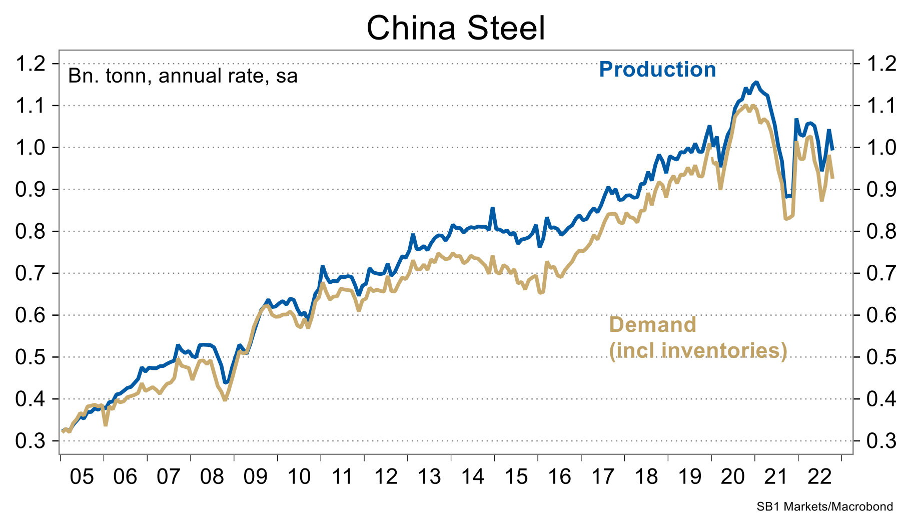


- **Export values** fell 6% (in USD terms) in November, to the lowest level since August 2021. Exports are down 8.7% y/y, 5 pp below expectations! Export values are still up 35% from before the pandemic, and **export volumes** are up 11%, and still not below the pre-pandemic trend. There may be some impact from covid restrictions (like during the spring) but we think lower demand from abroad is the main reason. Trade patterns may turn away from China but the impact will just be very gradually
  - Export to the US fell sharply, explaining 1/3 of the overall decline
- **Imports** fell 4% m/m, and are down 10.6% y/y, also 5 pp below expectations. In **volume terms** imports are down by 12% from the peak level last spring – and some 6% below the pre-pandemic trend path
- The **trade surplus** at USD 70 bn was 9 bn smaller than expected, but the surplus is still among the highest ever. In seasonally adjusted terms, the surplus equalled USD 61 bn, or some 4% of GDP.

Iron ore imports turns up – and domestic steel demand keeps up well

… at least including inventories

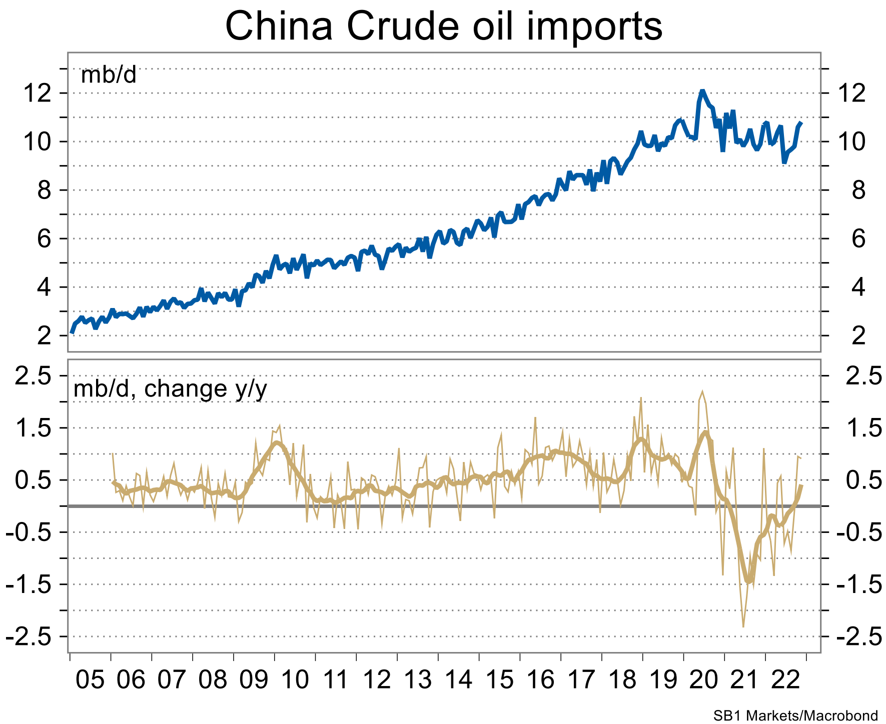


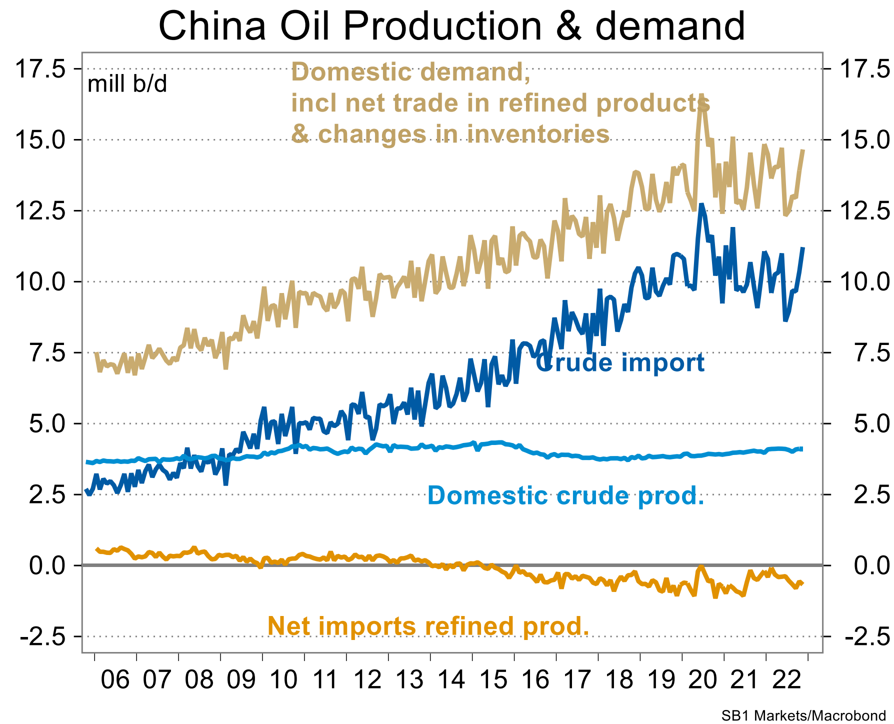


- **Steel production and domestic demand** (incl. inventories) fell sharply in Q2-Q3 last year – by 25% – due to public regulations and probably the setback in the construction sector
- Production recovered last December and has remained fairly stable in 2022, though with a dip in June. Now production is almost back on track, while demand is still somewhat below the 2022 average – and more than 10% down from the peak in 2021. That's remarkable strong, given the huge decline in construction starts in China, at least according public statistics

Crude oil imports slightly up recent months, still at a flattish trend since ’18/19

4 years without growth in **crude oil** import or domestic demand is rather surprising?

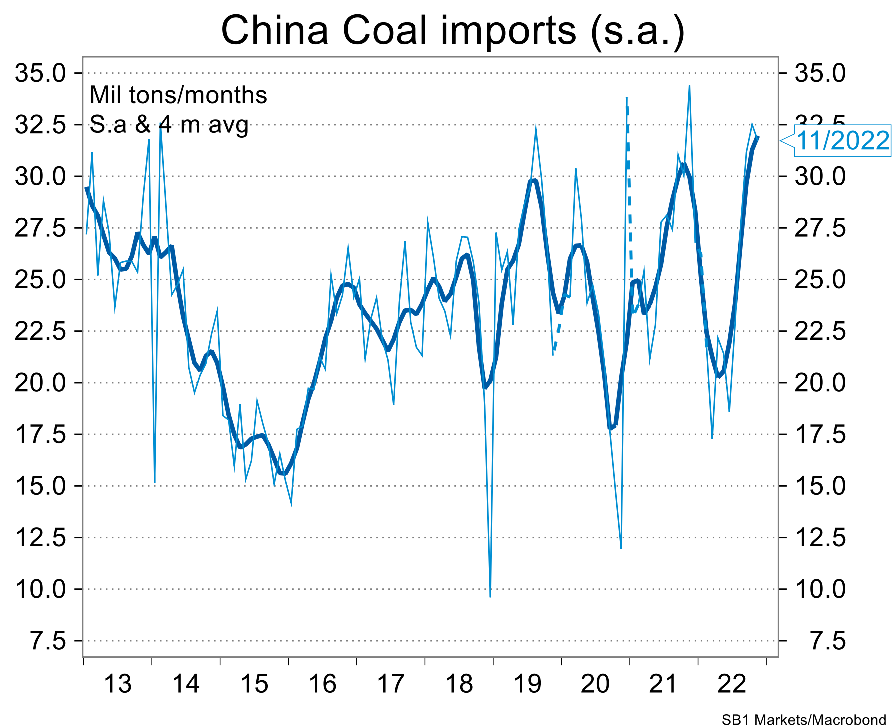


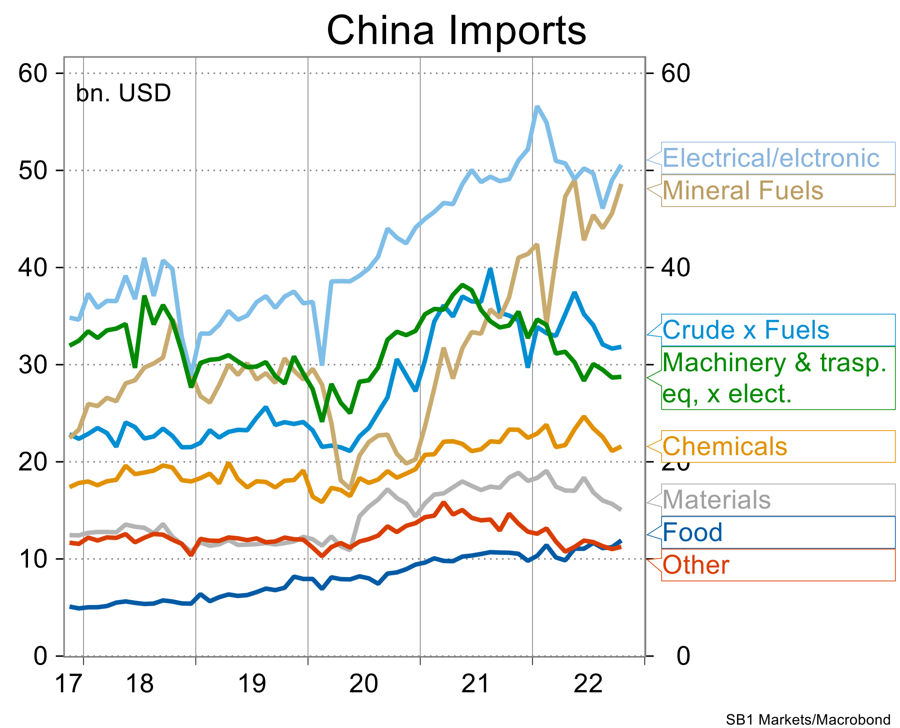


- 4 years without growth in **crude oil** import or domestic demand is rather surprising?
- However, higher net imports of **refined products** since early 2020 (almost 1 mb/d) and a small increase in domestic crude production have partly compensated for the flattening in crude imports - implying that domestic demand for oil/oil products is still increasing – but still at a slower pace
- Some **inventory/reserve building/drawdowns** may explain short term deviations but probably not the whole slowdown in apparent domestic demand

Coal imports further up in November

Imports of most goods are heading down

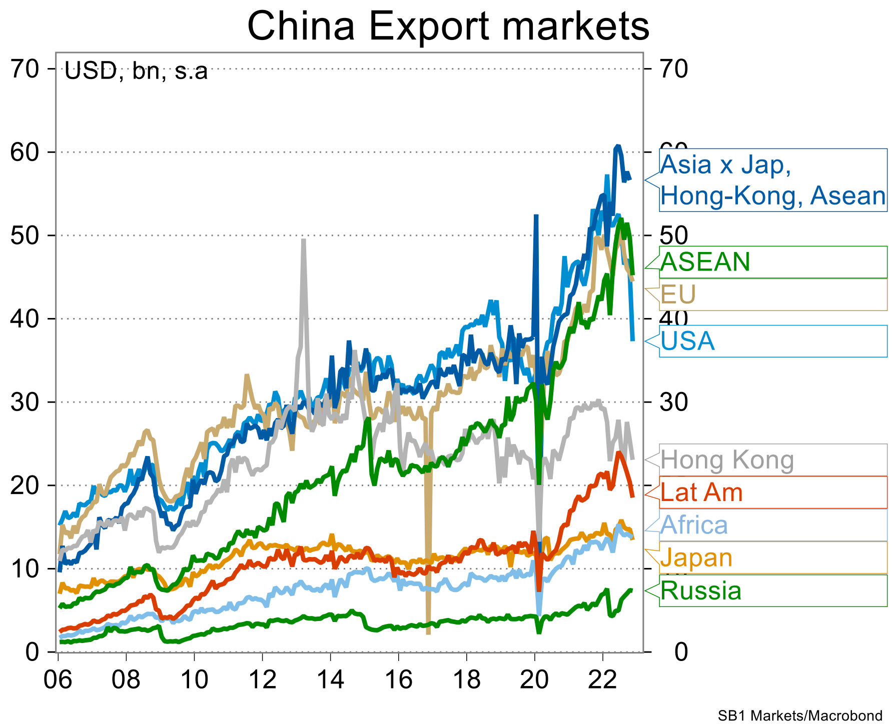


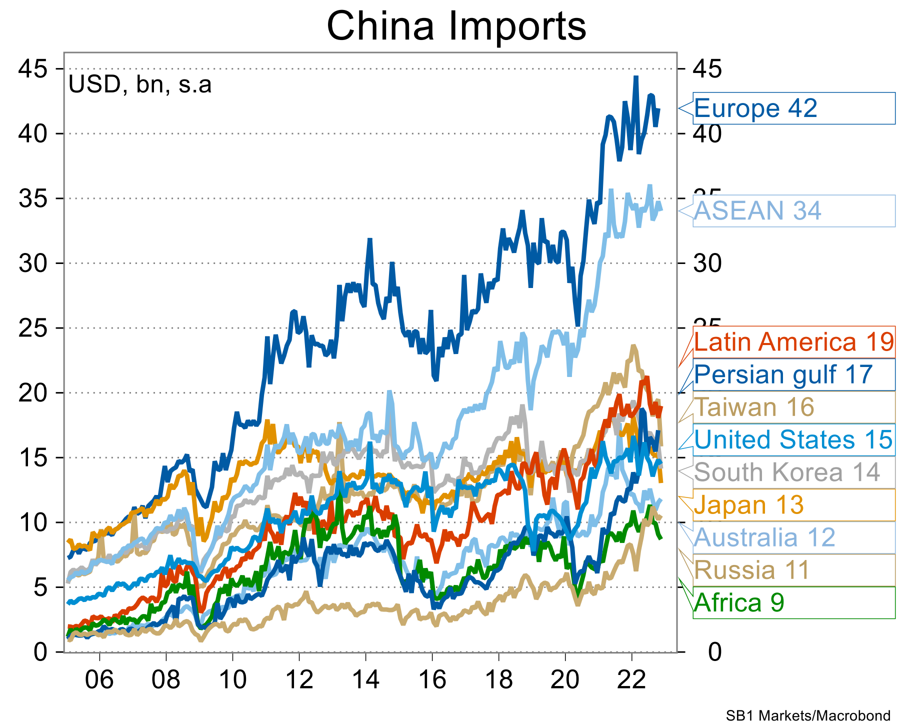


Data for most import sectors are not available for the last month

Exports to the US fell sharply, possibly an outlier

Trade patterns do not change that abrupt, and domestic demand in the US has not fallen completely off the cliff

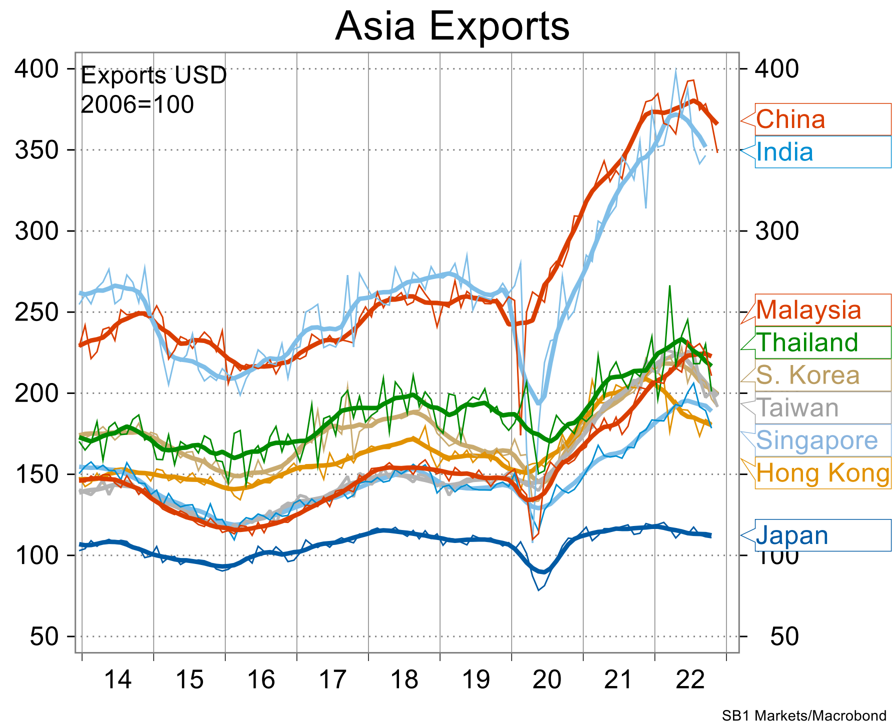


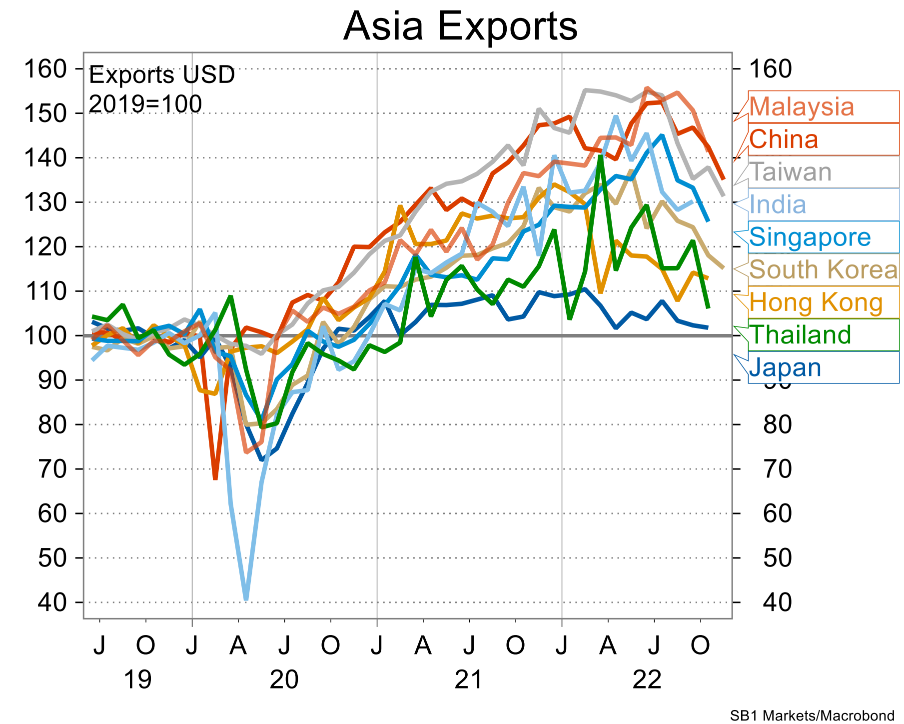


- However, Russia is not an important market for China

Exports from other Asian countries on the weak side recent months

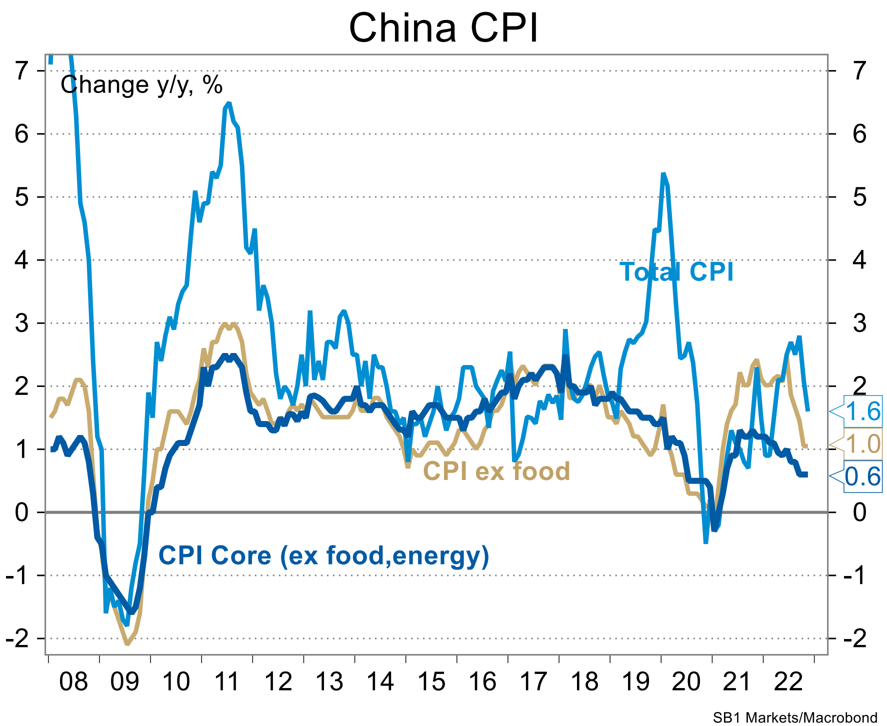
… which confirms the lack of global demand story – not a sudden production problem in Asia

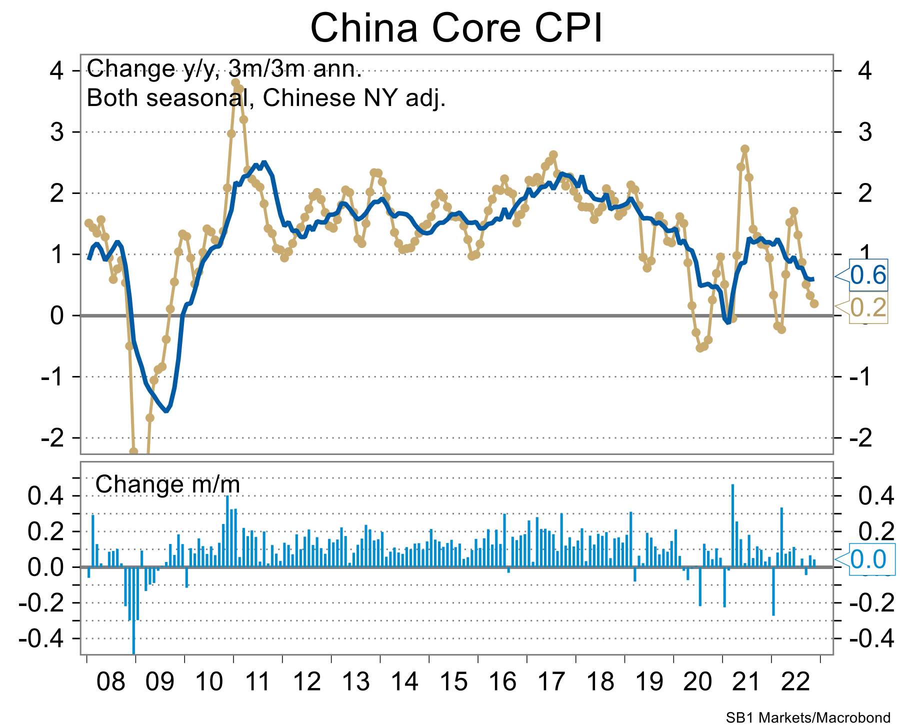




Chinese inflation lower in November – up 1.6% y/y, core at 0.6%

Inflation data spot on expectations. Deflation next??

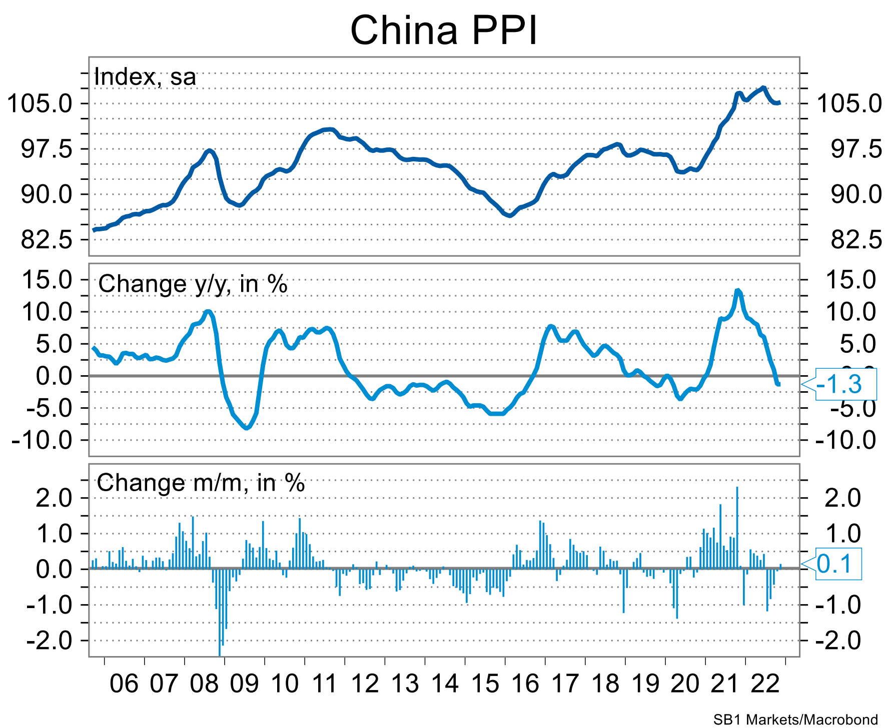


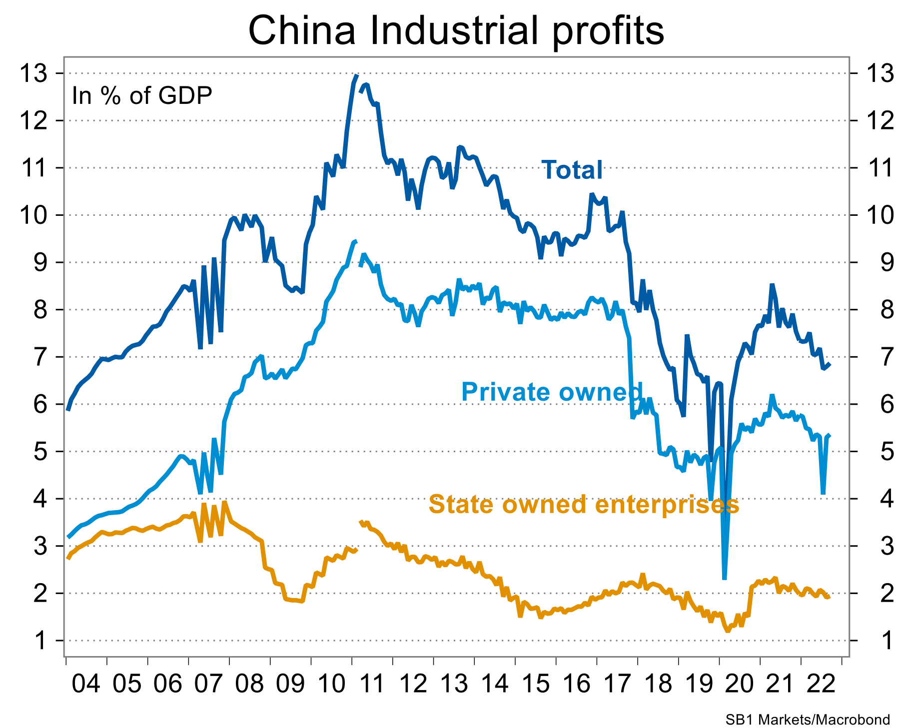


- **Total annual CPI** was down 0.5 pp to 1.6% y/y in Nov, in line with expectations. Prices actually fell 0.2% m/m
- **The core CPI** (x energy, food) were unch. m/m, and the annual rate was little changed at 0.6% y/y. The 3m/3m rate is down 0.1 pp to 0.2%
- **Food prices** are up 3.7% y/y, with pork prices in the lead again, up 34%
- **Gasoline/fuel prices** are up 11% (down from 12% y/y in Oct)
- **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 is more important. Now authorities are trying to kickstart the economy again after the lockdowns

Producer prices slightly up m/m but are still down 1.3% y/y

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

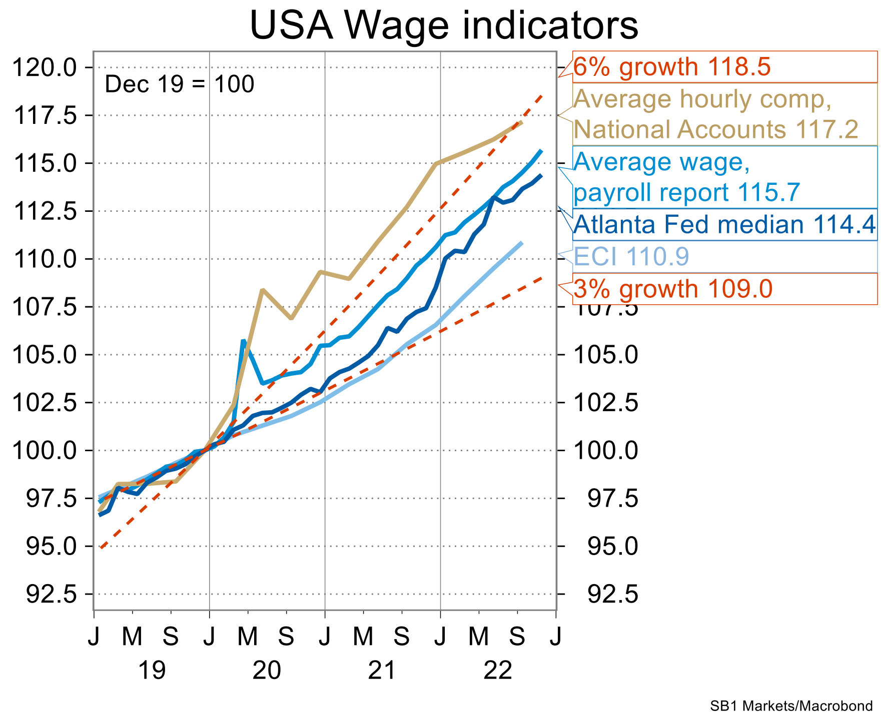


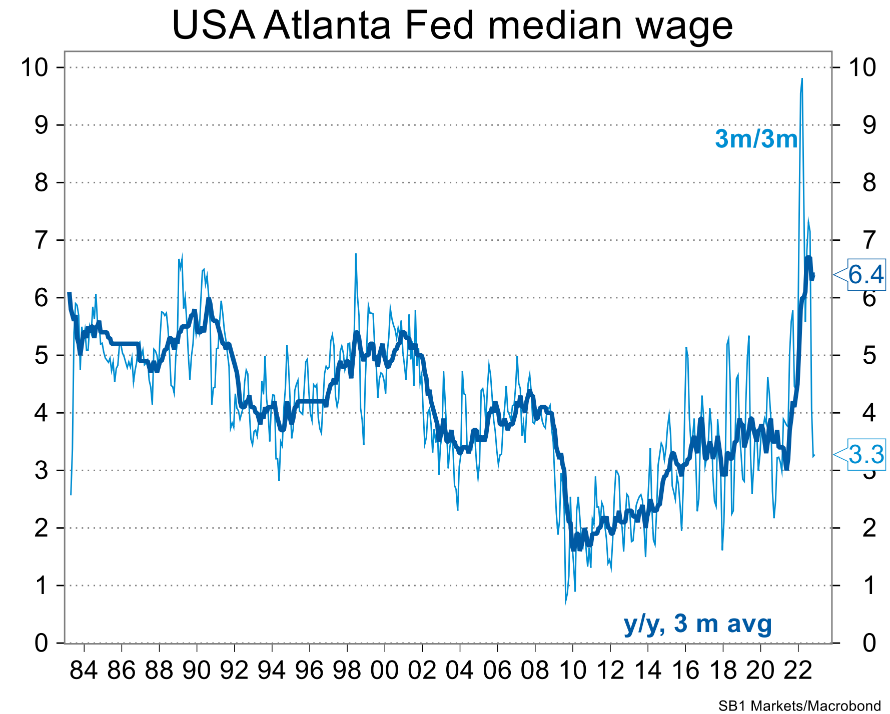


- **At the peak**, the PPI was up 13.5% in October '21
- **The PPI** was up 0.1% m/m in Nov and after falling in the 4 months prior. World demand softening?
- **Consumer goods** are up just 2.0% y/y, durable consumer goods are up 0.24% y/y, while raw materials are up 0.3% - down from 1.2% in Oct
- The 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

Atlanta Fed: Wage inflation remains high

The median wage +6.5% y/y, 3 m avg at 6.4%, down from 6.7% at the peak - <u>still 3 pp higher than 'normal' growth</u>

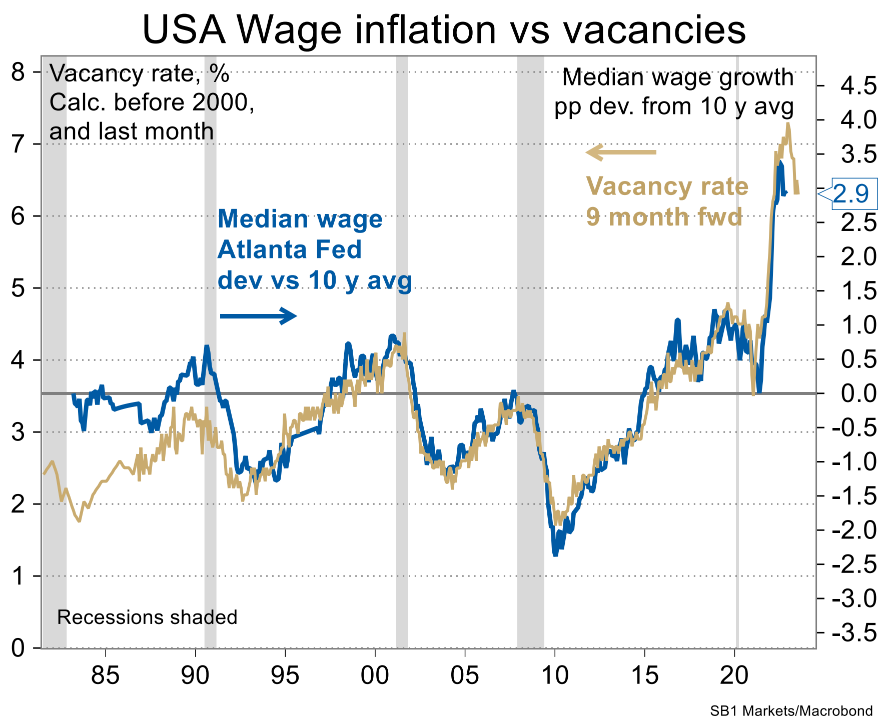


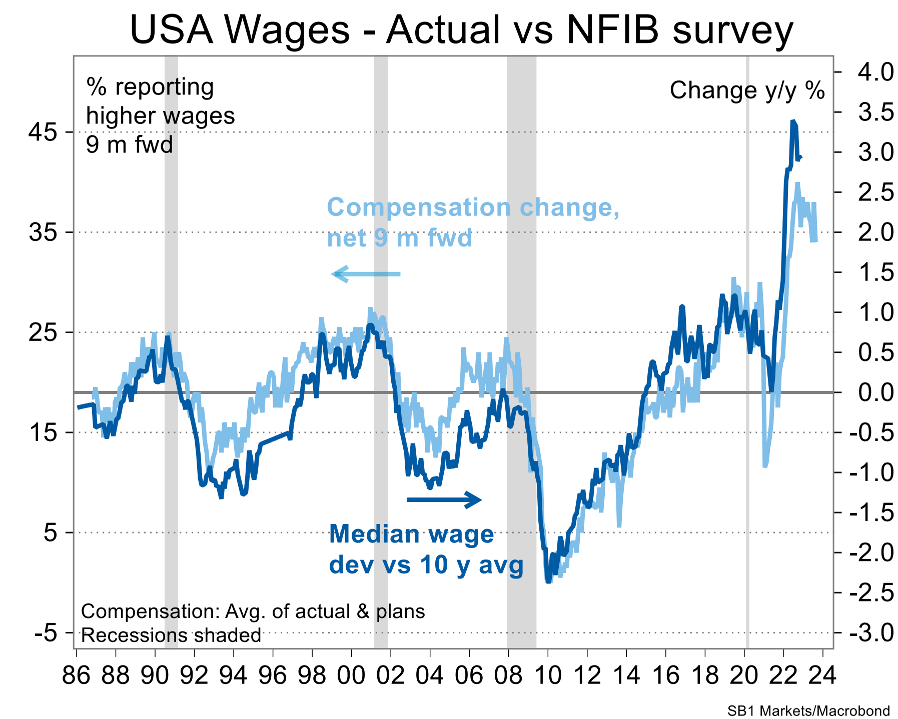


- **Atlanta Fed's median tracker reported** a 6.5% growth in November, up 0.2 pp from Oct. Our calculated m/m growth was 0.4%. The 3m/3m rate 'collapsed to 3.1%, but the 'real' underlying growth rate is closer to 6% (a strange June obs. has created some volatility). The **3 m average annual wage** was unch. at 6.4%, down from the highest print ever at 6.7% in August. The current wage inflation is 2.9 pp higher than the past 10 average, a wage acceleration we have never seen before (data from early 80s)
- **All** ages, occupations, industries, job switchers (or not), race, education, urban or rural regions report a sharp acceleration in wage inflation. The only laggards: those who are paid the best, but even this group report higher wage growth that 'normal'
- **All other wage indicators** are reporting fast wage growth, and all are reporting wage growth well above the recent years' average, some are still accelerating, other are slowing marginally but all are growing 2 – 3.5% faster than the 10 years' average before the pandemic – which will make it impossible to reach the 2% price target over time

Peak wage inflation? Very likely, as demand for labour slows

Still, demand for labour is still strong, and wage inflation is far above a sustainable level

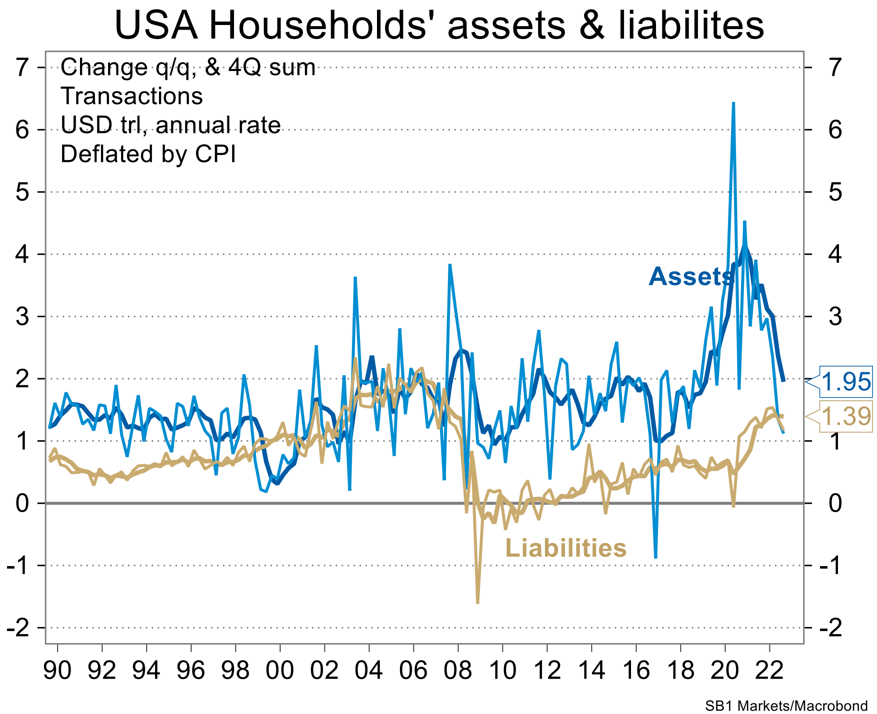


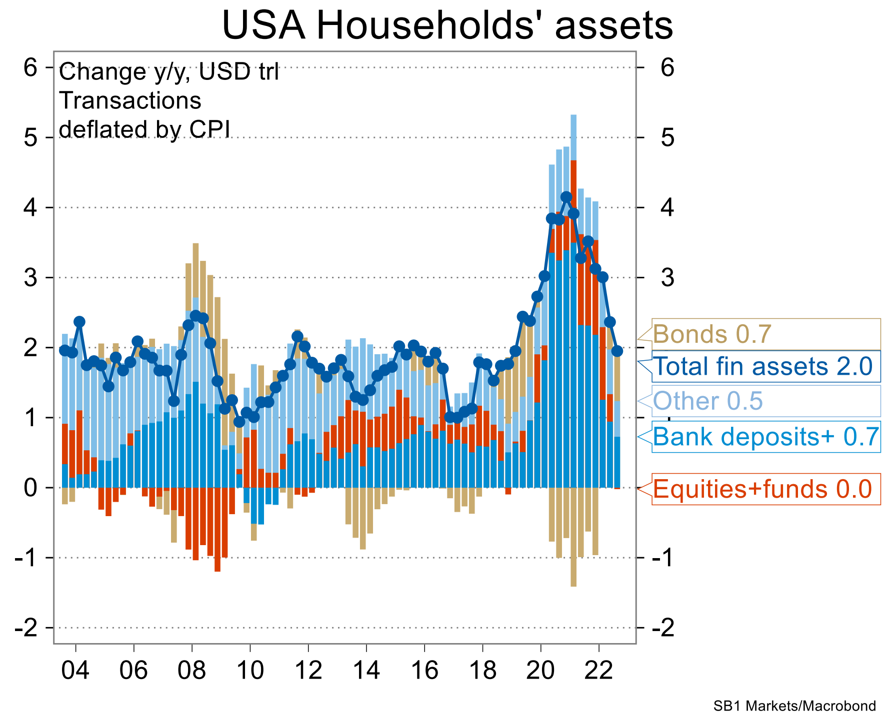


- **Our 'Phillips curve'** based on the vacancy rate signals a further increase in wage inflation the coming quarters even if vacances have peaked. The vacancy rate leads changes in wage inflation quite consistently by 3 quarters. However, we would not be surprised if the current extraordinary high wage inflation recorded in August was the peak, even if it came in some months 'too early'
  - Companies (SMEs) compensation plans signal continued high wage inflation but not faster than the present
- **Wage inflation** has already accelerated by almost 3.3 pp vs the 10 y average (Atlanta Fed median) and cannot possibly generate a 2% price inflation rate over time. This is Fed's main headache, not the current high CPI inflation print. And it will become the stock owners' headache too, of course
- **Demand for labour has to be reduced sharply in order to get wage inflation back to a sustainable level! That's the recipe for an unavoidable RECESSION**
  - 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 ☺). Fed will not be able to control inflation if demand for labour is not cut sharply

Flow of funds: Growth in financial assets down to a normal level

Growth in debt has flattened – at much higher level than normal (but from a low debt level)

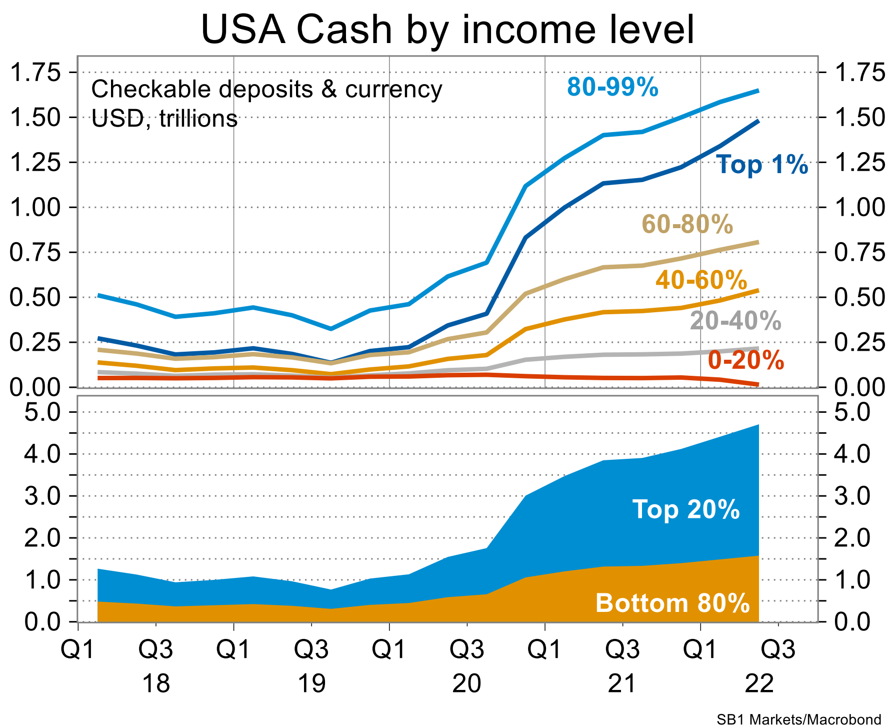




- **Households have increased their financial assets <u>through transactions</u>** by USD 2.0 trl over the past year through Q3, back to the pre-pandemic growth level. Debt is up USD 1.4 trl. In Q3 alone, debt rose just as fast as assets, for the first time since before the financial crisis
  - In October, the savings rate [(income-consumption)/income, and not change in saving assets] was the second lowest ever
- **Growth in assets** are concentrated in bank accounts, and suddenly in bonds! Over the past 4 quarters, no net buying of equities – following much higher net buying during the pandemic

Most of the accumulated savings reside with the top 20%

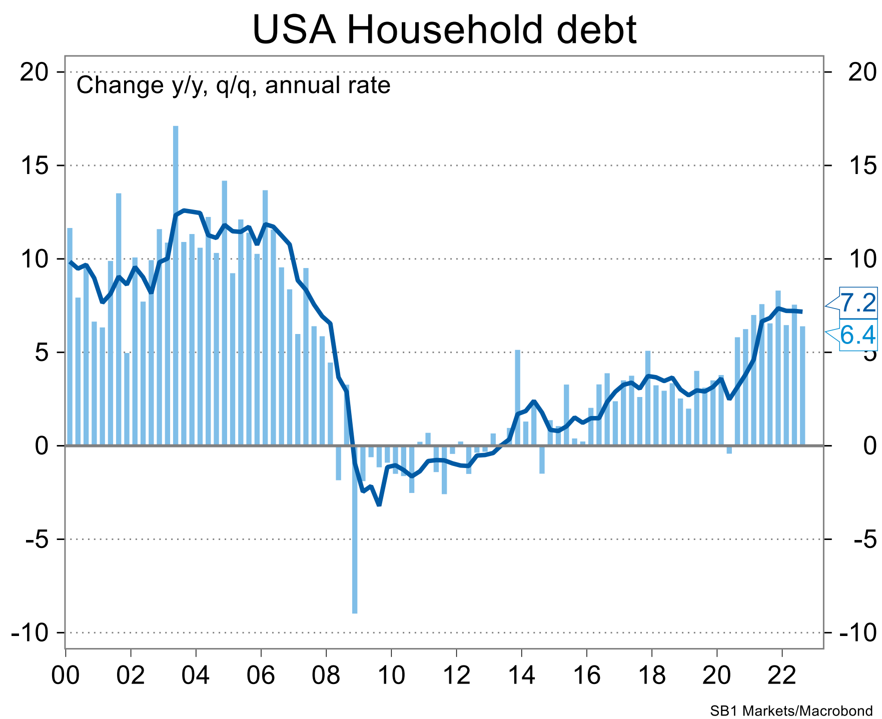
Those at the bottom of the income ladder did not save much more during the pandemic

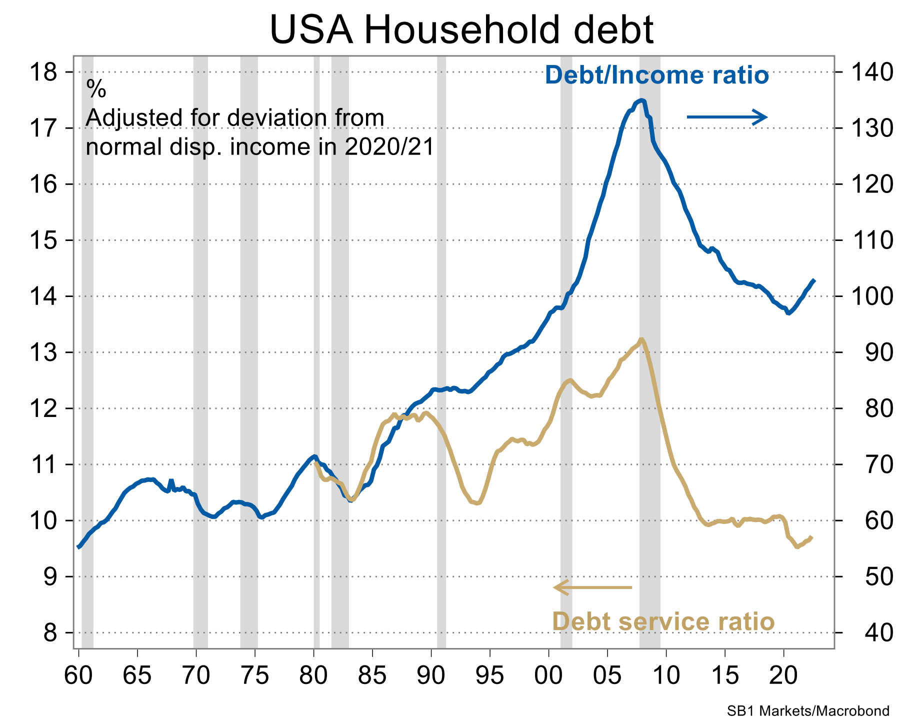


- This will of course determine where the money will be spent and if at all, due to the wealth effect and because these groups do not necessarily have to spend these savings to keep up consumption

Debt growth has stabilised – at 6% – 7%

The debt/income ratio is growing again, though from far below the pre-financial crisis level

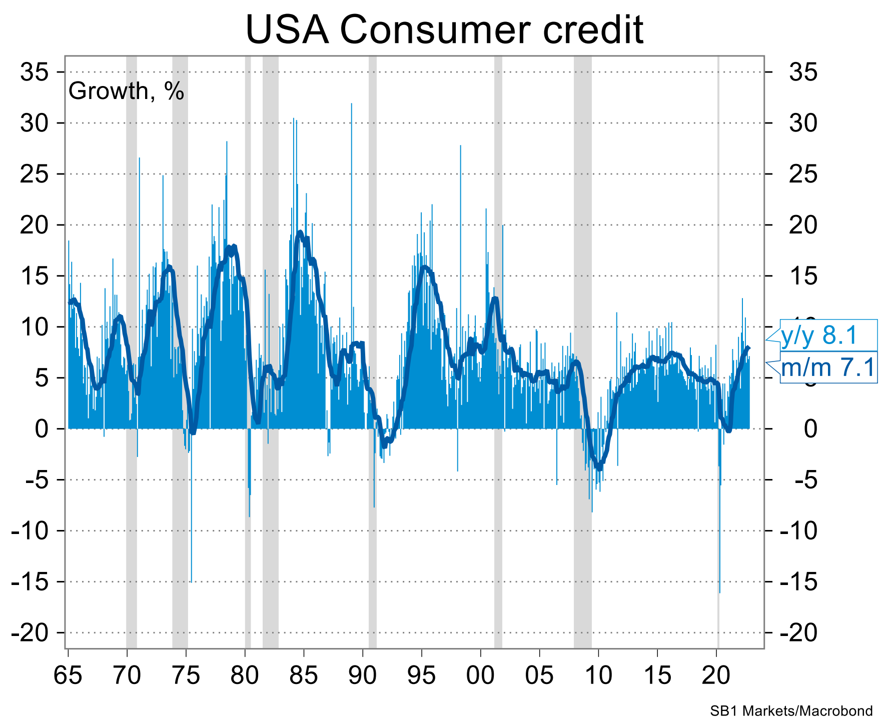


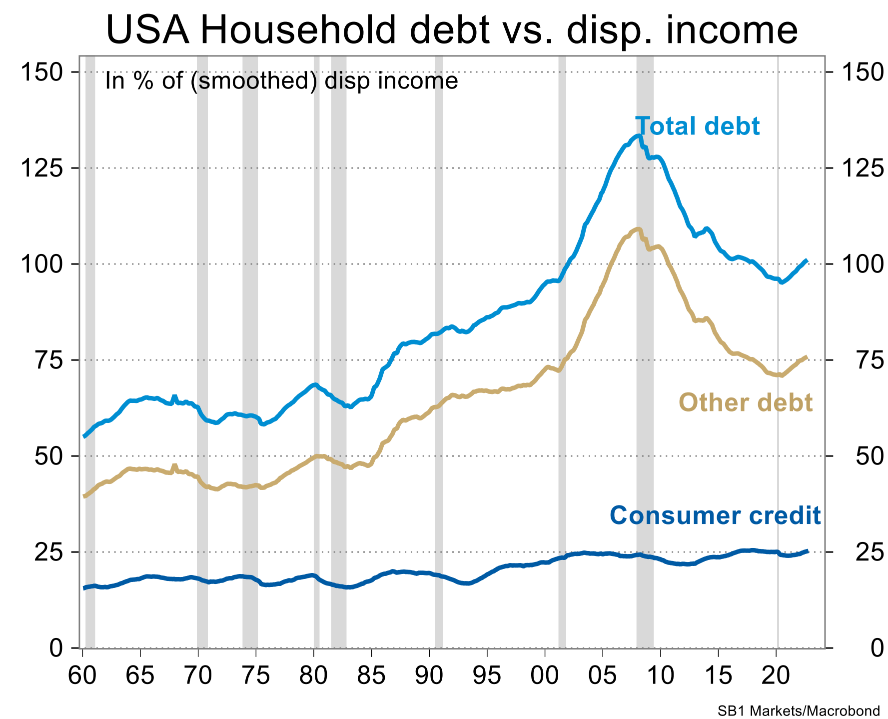


- Households have reduced their debt burden in an unprecedented way to 2020 from 2008. From Q2-20, growth in household debt has outpaced income growth (adjusted for the income impact of the pandemic/pandemic measures)
- In Q3-22, debt grew at a 6.4% pace, and growth has slowed marginally recent quarters – as mortgage rates are soaring and now house prices are falling
- The debt/income debt service ratio is record low, as interest rates have been low for a long time. The average interest rate will increase the coming quarters – and the debt service ratio to increase. But the difference between now and 2007 is incredible, check the chart!

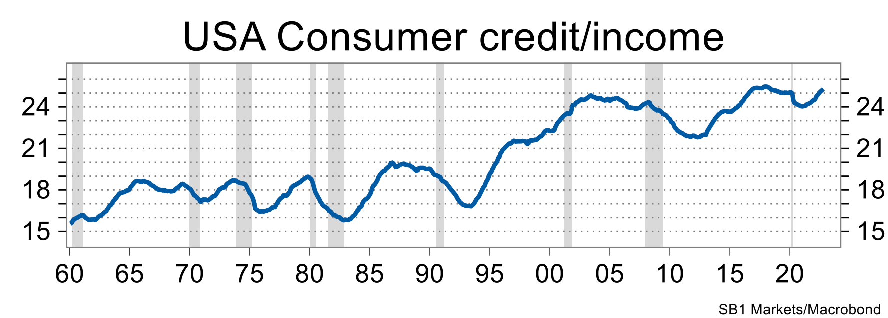
Consumer credit has accelerated, but not that much vs disposable income

Mortgage debt has been adding much more to the debt level (which anyway is rater low)



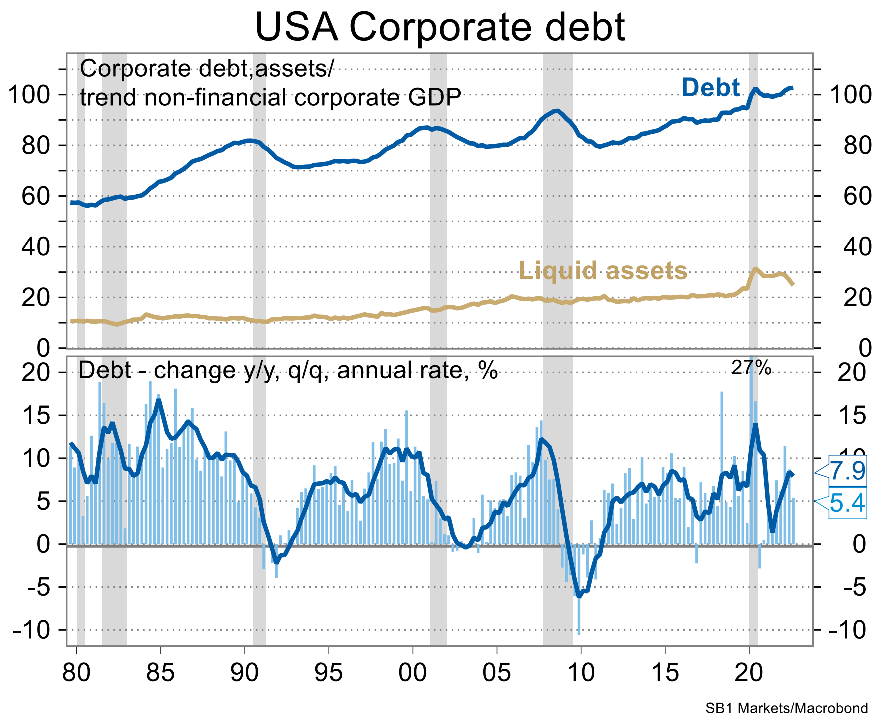


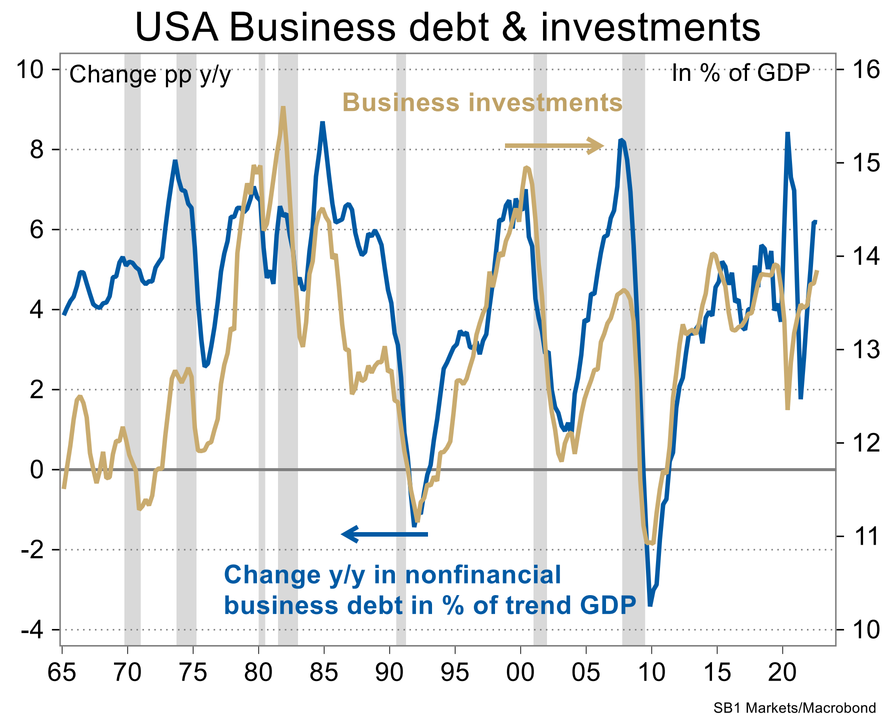
- However, some spurts in consumer credit has taken place ahead of recessions (but no strong recession model at all)



Corporate debt growth not that worrisome?

However, the debt level is high – but so is the level of liquid assets too ☺

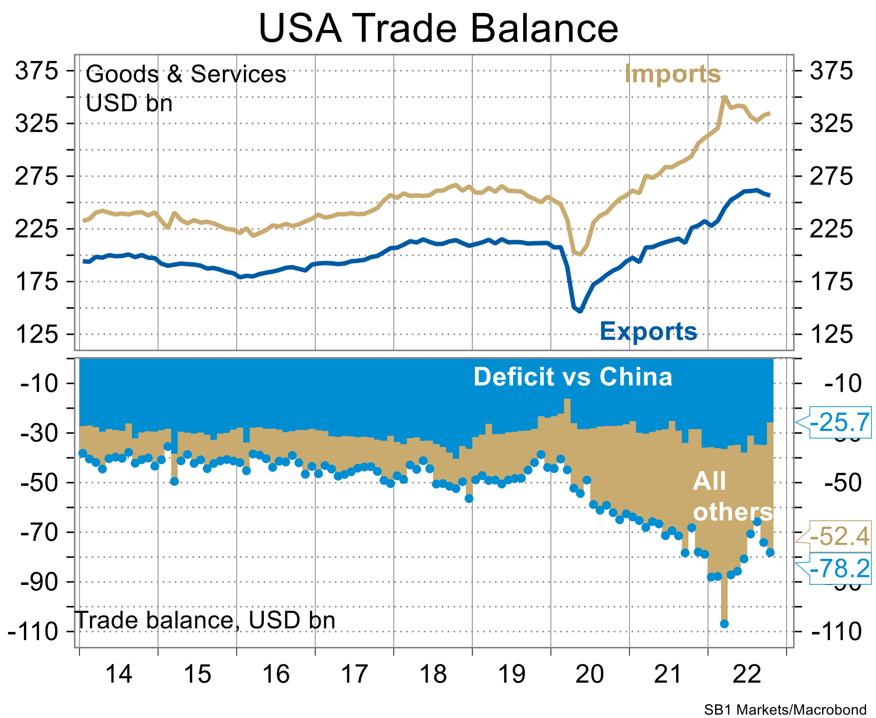


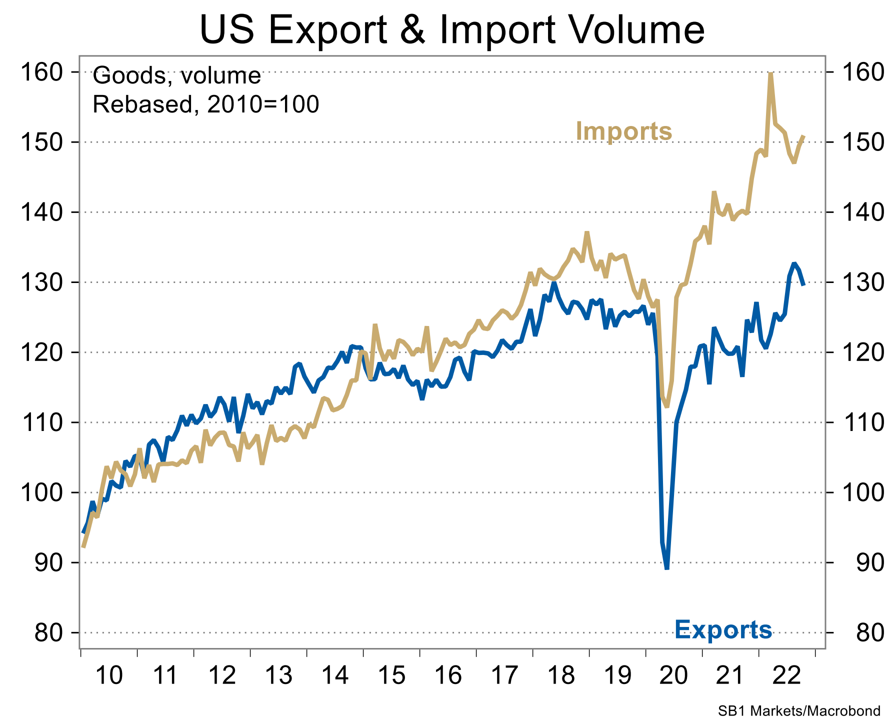


- **Corporate debt** rose 5.4% (annualised) in Q3. Measured y/y, debt is up by 7.9%, which is above a 'normal' level. The corp debt/GDP ratio is close to the long-term trend. Barring the super-high borrowing in 2020, this ratio is at a record high level
- On the other hand, during the pandemic companies increased their **liquid assets** sharply, to the highest level ever. Now the 'surplus' cash position is built somewhat down
- In sum: Companies still have some capacity to further lift their investments – even if the profit cycle turns south

US trade deficit widened in October as imports increased, exports declined

Deficit increased to USD 78 bn up from USD 74 bn in September

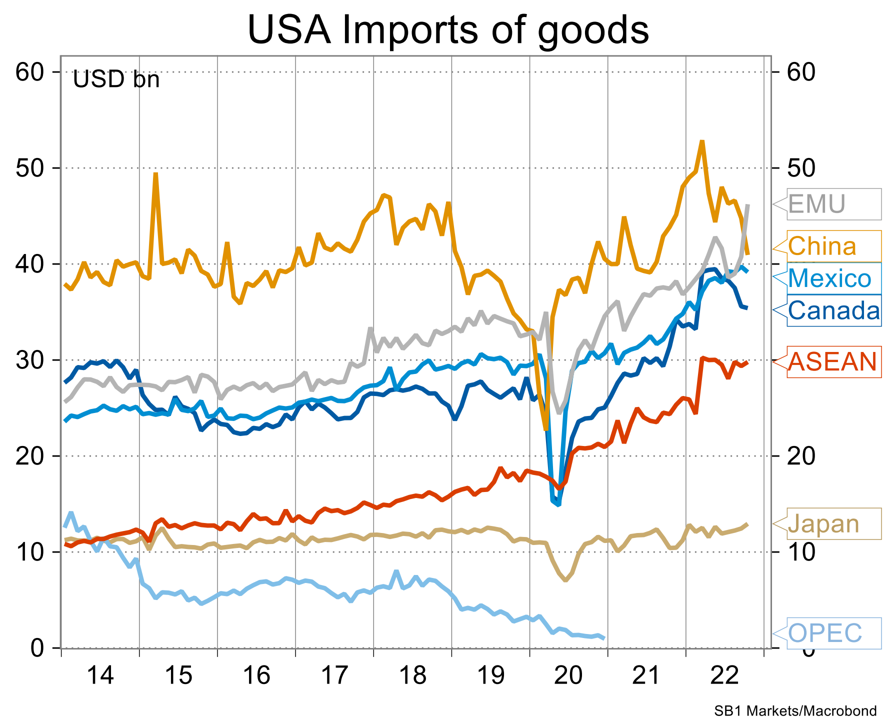


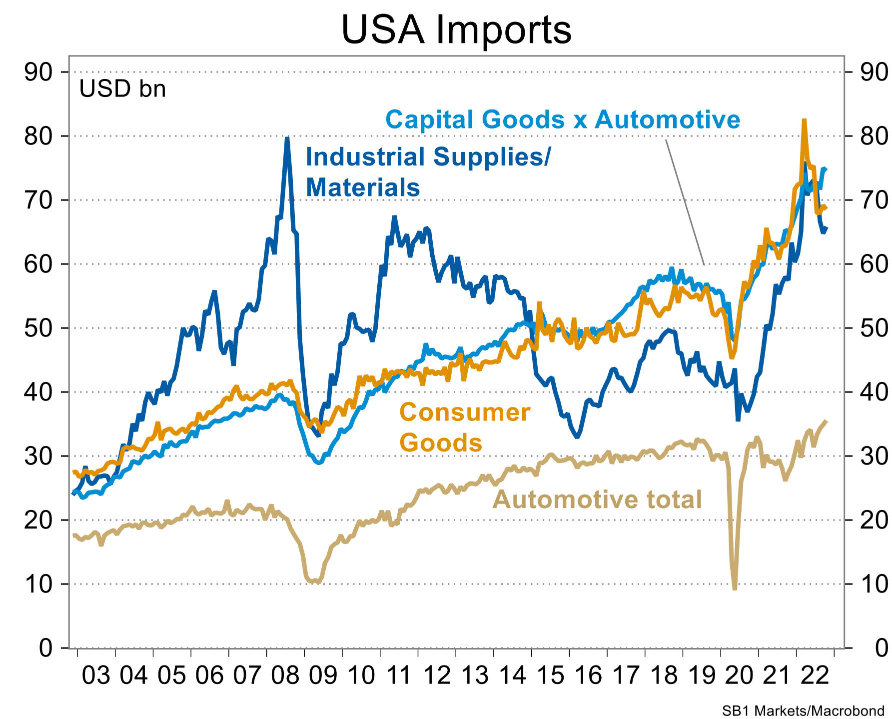


- **Imports** (goods and services) rose by 0.6% in October and are down 4,4% from the peak in March - but are still 29% above the pre-pandemic level, in nominal terms! In volume terms (and just for goods), the increase in October was 1%, and down 5.6% from March, and the volume is up 19% vs Feb-20, still a very high number! Demand for goods has been strong during the pandemic, driving imports – even if auto imports have been low. The sharp decline in import volumes recent months prior to Sept is probably due to a slowdown in domestic final demand as well as an inventory drawdown
- **Exports** fell by 0.7% m/m in October, and the level is up 21% vs Feb-20. The export volume (for goods) declined by 1.7%, and growth has been unusally strong recent months. However, in volume terms exports for goods are just 3% above the pre-pandemic level (vs 19% for imports)
- **The trade deficit** widened to USD 78 bn, from 74 bn in September. At 3.8% of GDP, the deficit is, of course, sizeable
  - The deficit vs. China has been remarkable stable in 2022, now at USD 26 bn, 1/3 of the total

Imports of consumer goods are coming down but level is still very high

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

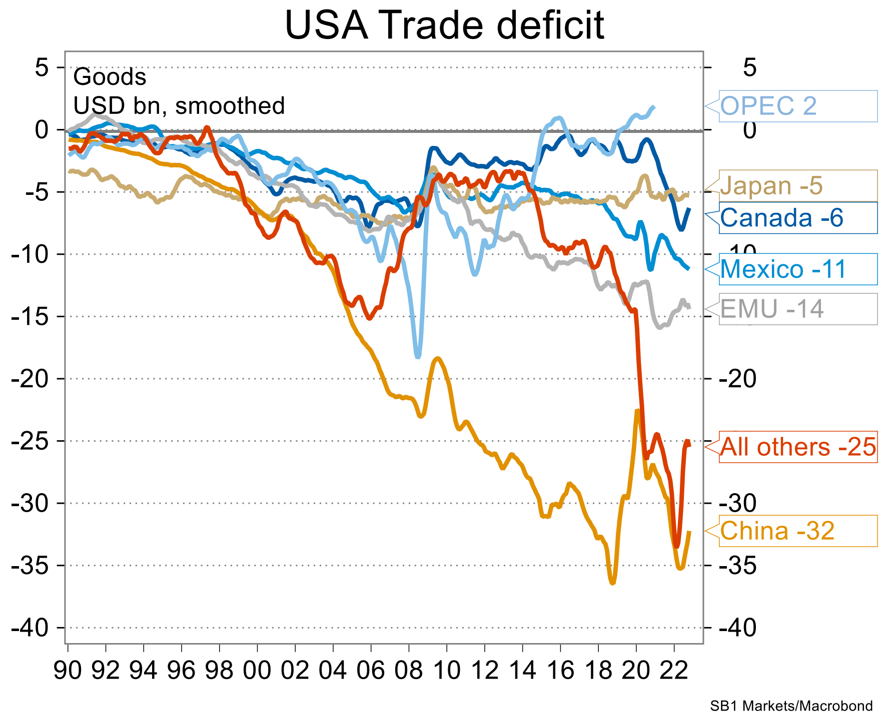




- **Imports from regions:**
  - A trend shift in imports from all countries recent months vs the surge the previous 2 years. Imports from China and Canada have fallen sharply
  - The exception: Imports from the EMU have increased significantly since the summer
- **Imports by type of goods:**
  - Import of all types of goods has been 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 to large

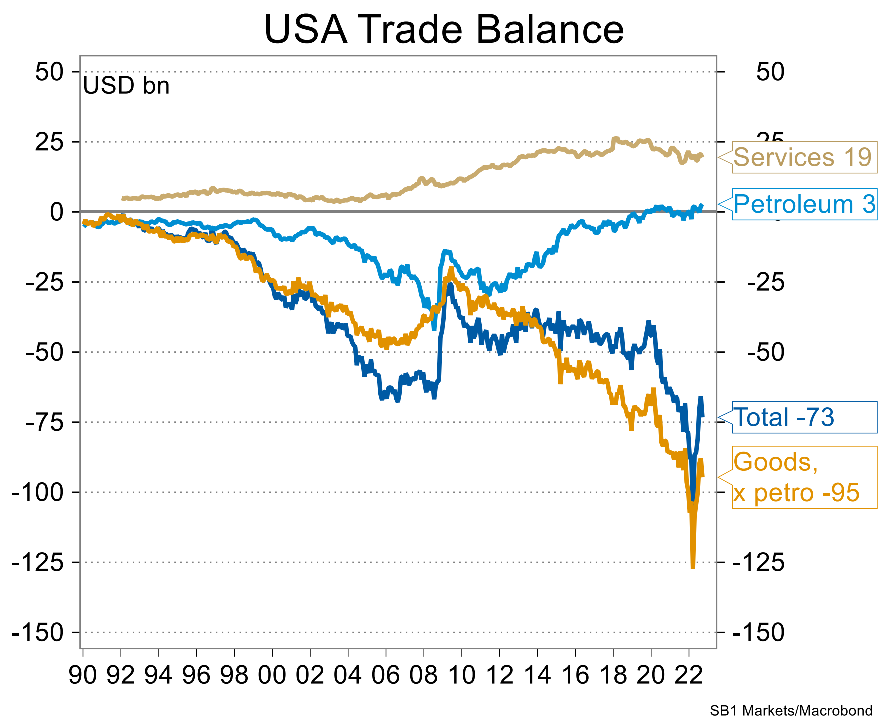
Mixed changes in the trade deficit vs. regions

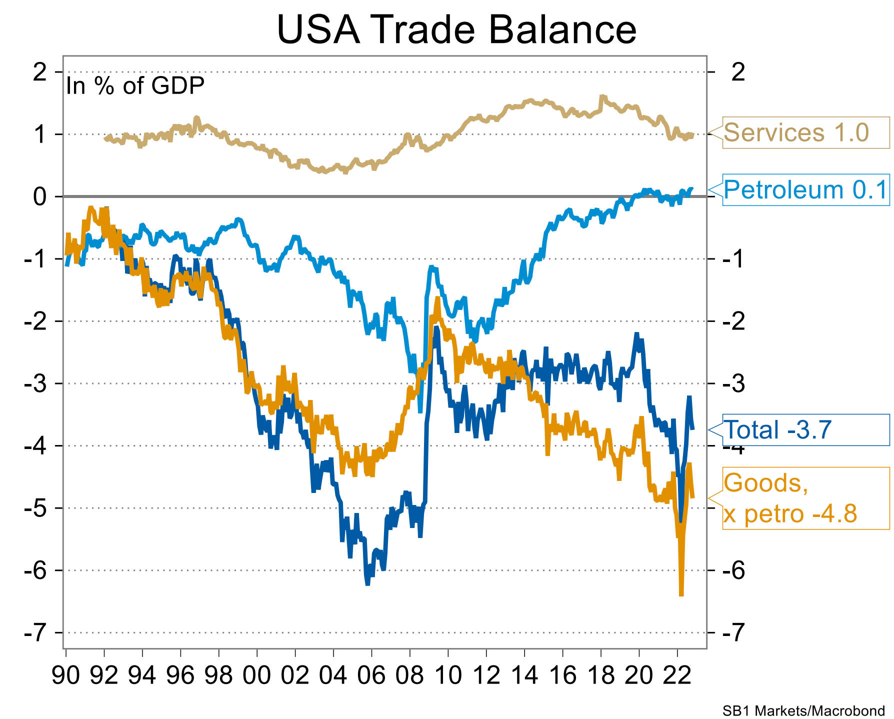
Deficit vs. China shrank in October



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

Surplus in services keeps narrowing

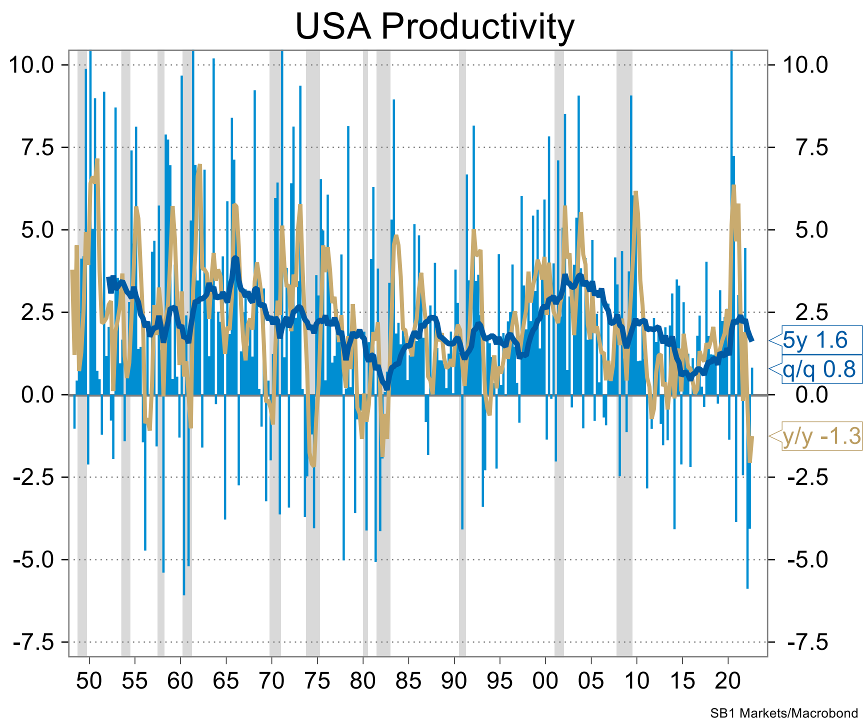


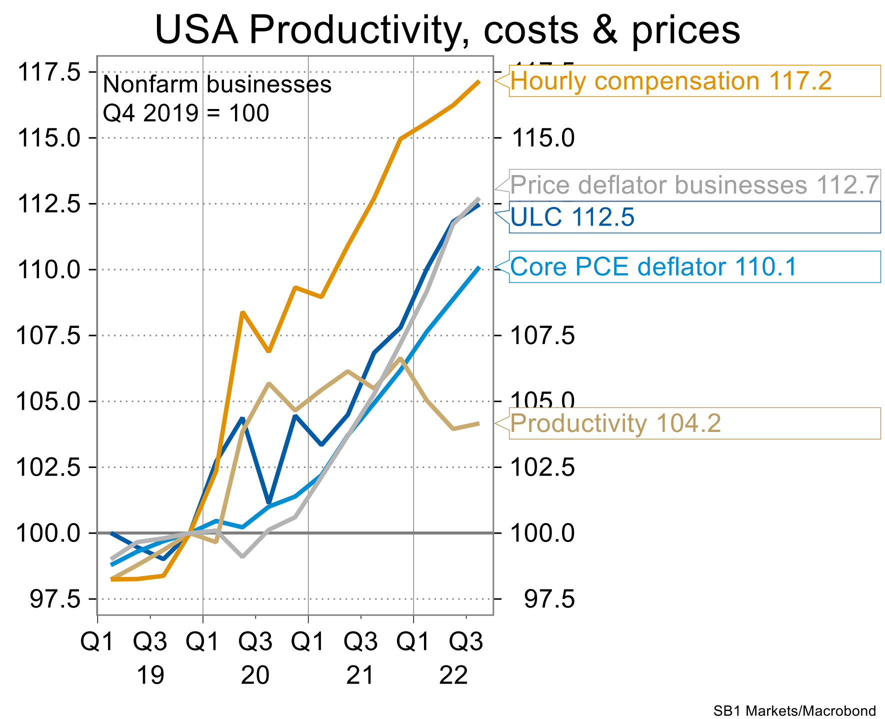


- The **total trade <u>deficit</u>** at USD 73 bn equals 3.6% of GDP. The deficit has widened from 2.5% in early 2020 – as domestic demand has been stronger in the US than abroad
- **The US runs a <u>surplus</u> in services** at USD 19 bn, equalling 1.0% of GDP, but this surplus is trending down (and the downturn started <u>well before Covid</u>)

Productivity slightly revised up, hourly compensation down

… and Unit Labour Cost grew slower than first reported – the trend is still far from comforting

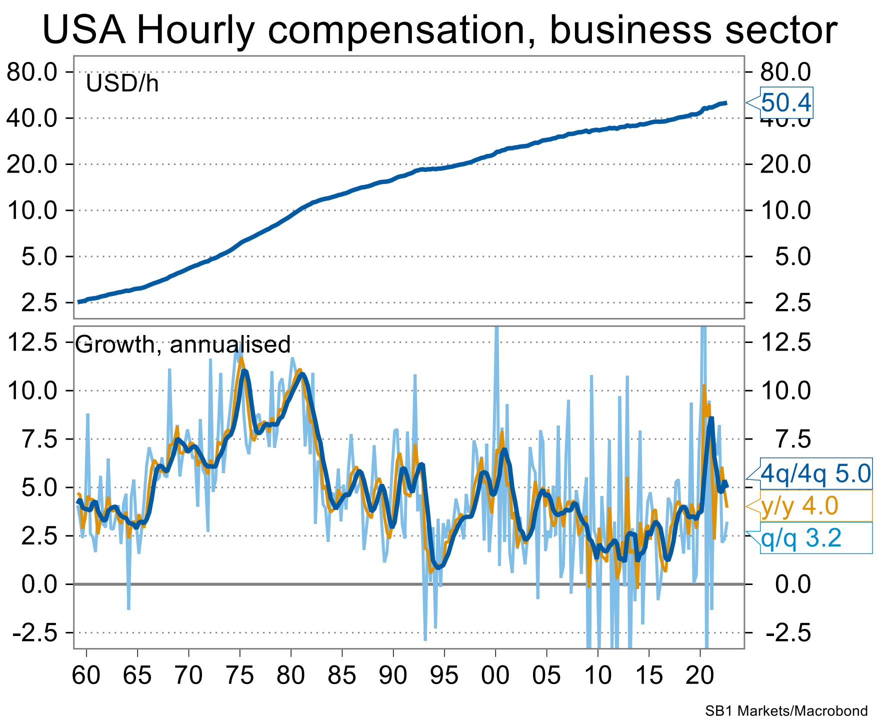


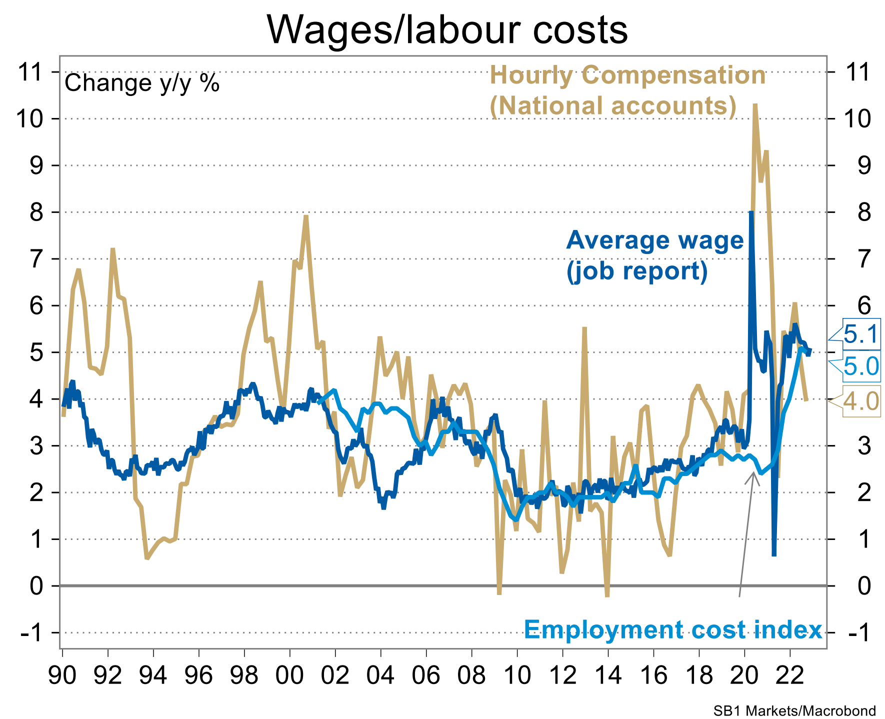


- **Productivity** increased by 0.8% in Q3 (annualised), up from the initial estimate of 0.3%, following the unusual steep decline during H1. Over the past four quarters, productivity has decreased by 1.3% due to the return of less productive (and lower-paid) service sector workers after the pandemic. Since late 2019 productivity has been increasing at 1.5% pace, in line with recent history (please see the two following pages)
- **Hourly compensation (wages ++)** grew at a 3.2% pace in Q3, and the annual rate is 4.0%. Average growth since Q4-19 is 6.2%. Growth is slowing somewhat, but not convincing as lower paid service sector workers have returned to work, taking the average wage down
- **Unit labour costs** (hourly compensation – productivity) grew by 3.5% in Q2, up 6.1% y/y. Since Q4-19, ULC has grown at a 4.7% pace, revised down from 6.4% but still far above a normal level – which of course is incompatible vs the 2% inflation target

Hourly wage cost inflation has peaked, but remains too high

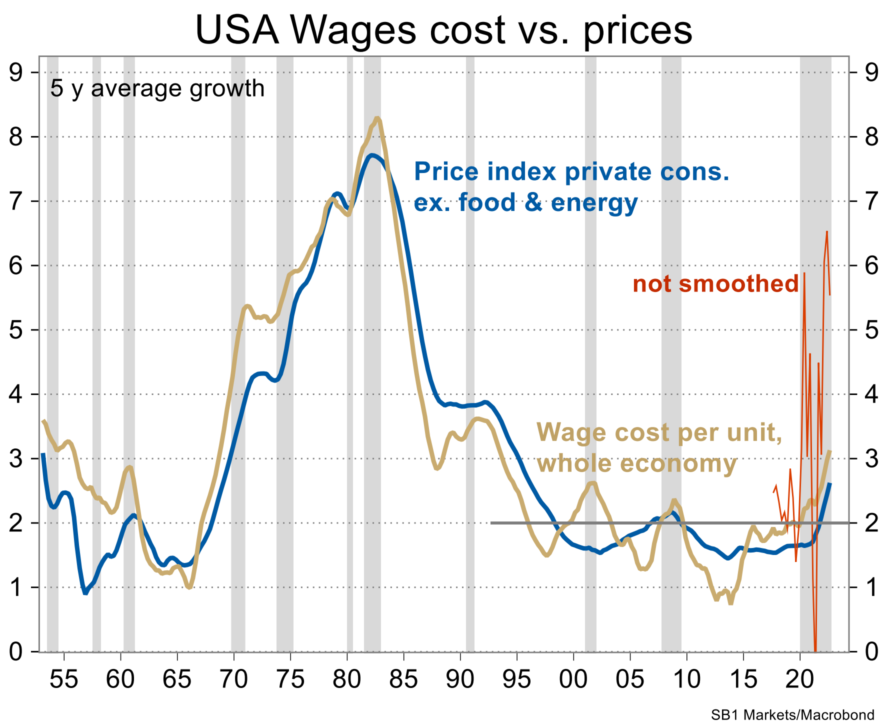
Wage inflation has slowed, as the least productive and less paid service sector workers have returned

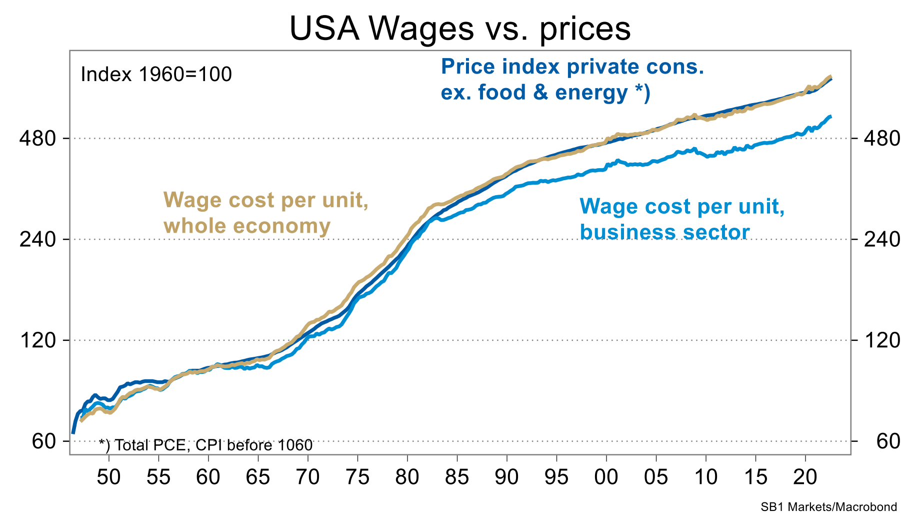


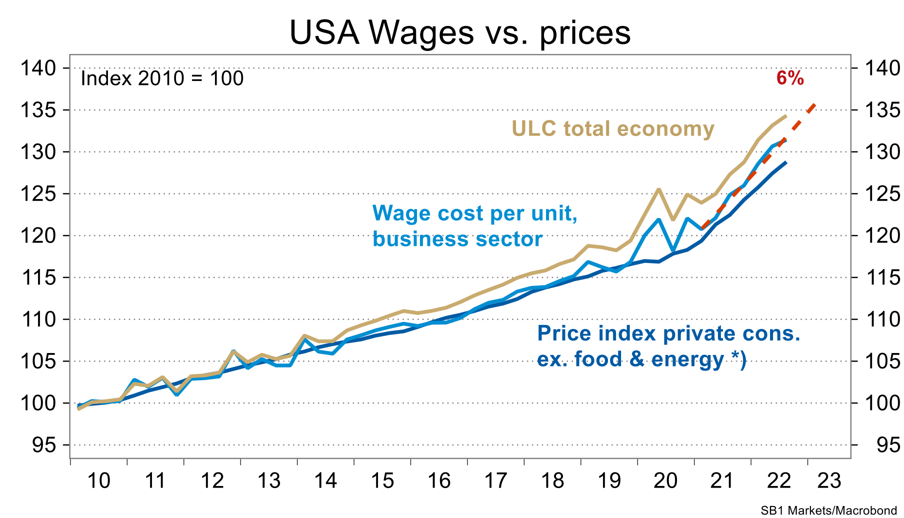


- Hourly labour cost is up 4% y/y, and smoothed 4q/4q at 5.0%
- The average over the 10 years before the pandemic was 2.5% (and until 2018 even lower)
- National hourly labour costs are very volatile short term, but is over time close to other wage indicators

Wage inflation is still the main risk, not raw materials/energy/corp. margins



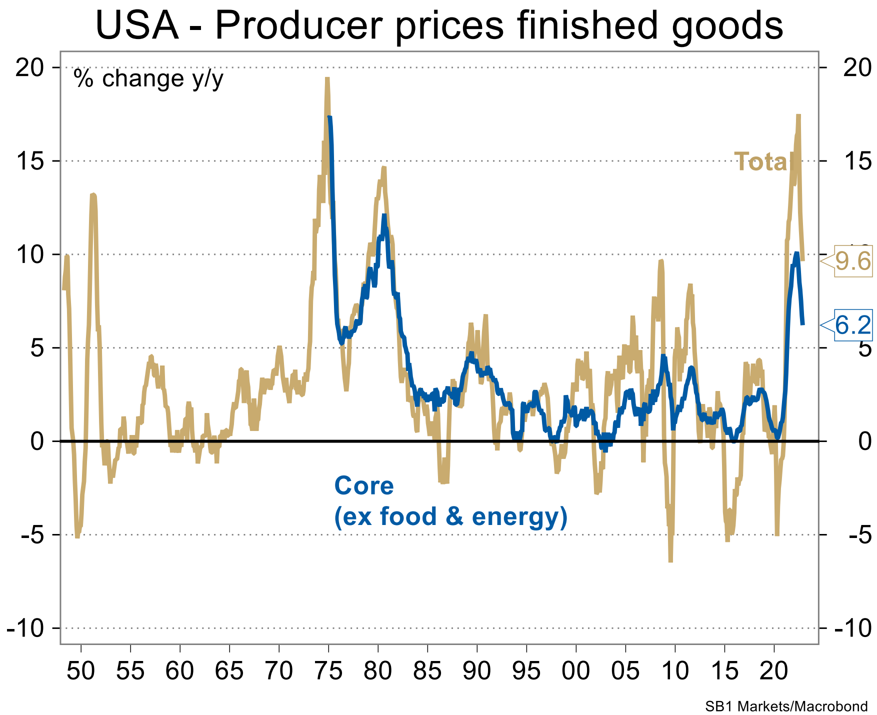


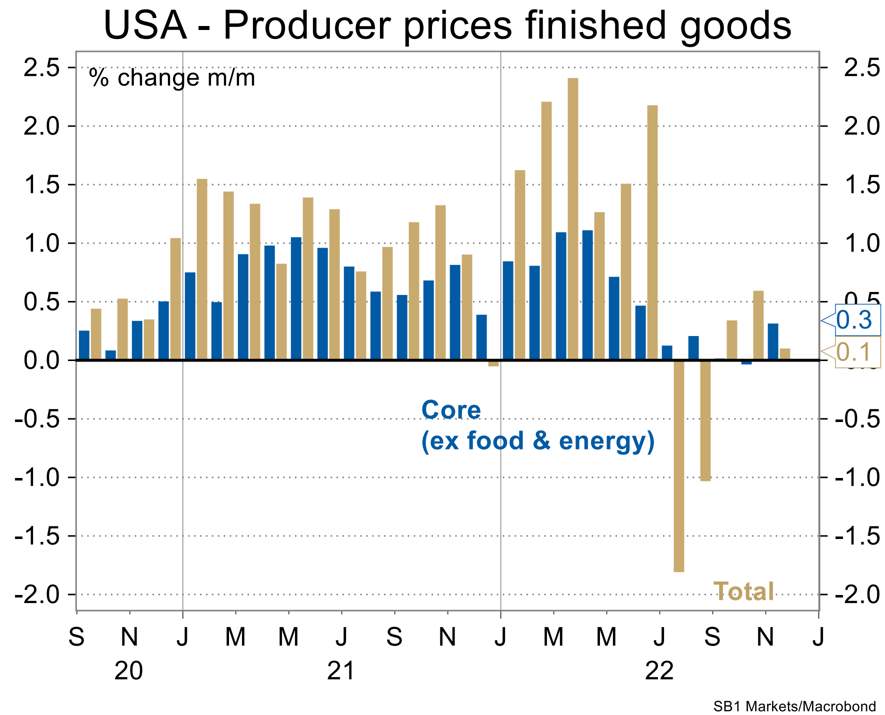


- Costs have climbed faster than core prices since before the pandemic

The goods PPI slightly higher in October; But the annual rate fell to 10.5%

PPI is now coming down – and core prices have flattened since the summer! And crude prices are on the way down!

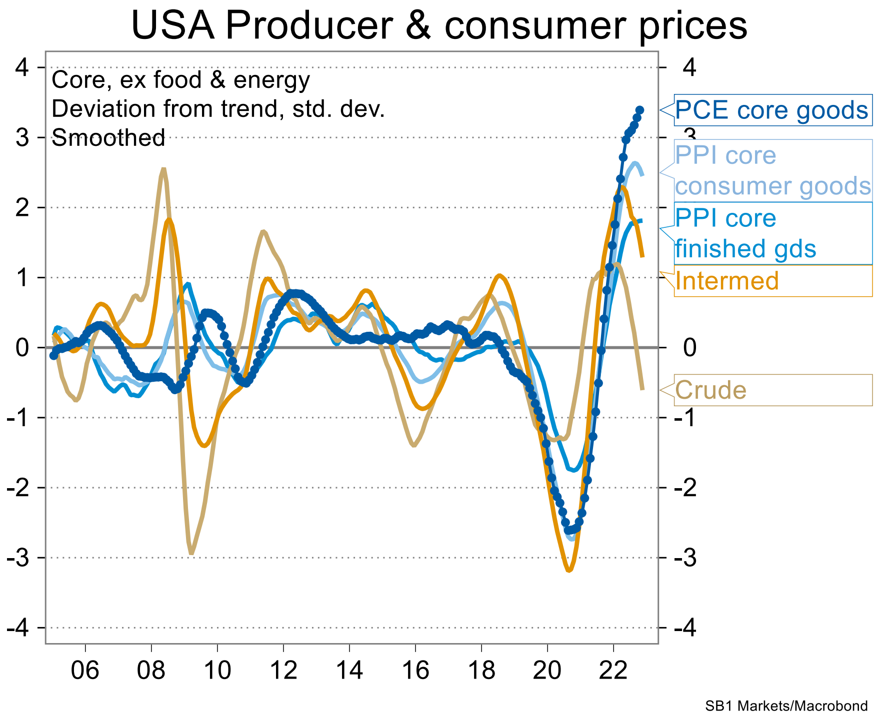


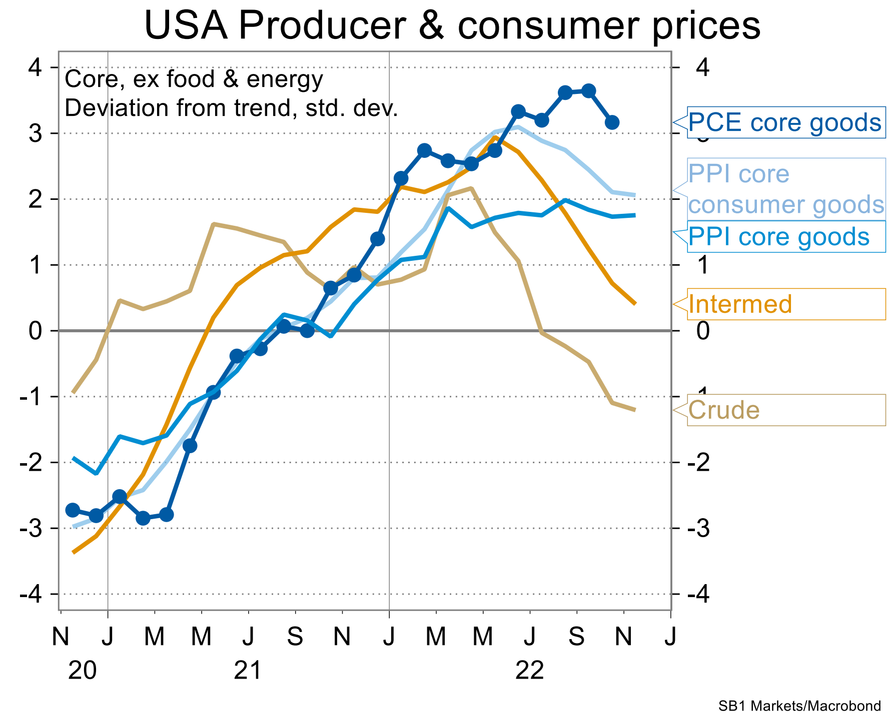


- **The headline finished <u>goods</u> PPI** rose by 0.1% in November, following the 0.6% increase in October. The annual rate was down 0.9 pp to 9.6%. Energy prices were down 3.3%, and food prices were up 3.3% (surprisingly much)
- **Core finished <u>goods</u> x food & energy** PPI was down 0.3% in November. The annual growth rate fell by 0.4 pp to 6.2%. The peak was at 10%
- **Crude material prices** have been on the retreat since early summer – normally the first sign of easing price pressures in the supply chain, and now intermediate material prices are now following suit, as normal
- **Core consumer goods prices** (PCE, like in the CPI) have already climbed more than usual vs. PPI prices (partly due to second-hand auto prices, not included in the PPI) and have likely peaked, limiting the upside risk
- **The 'official' total final demand PPI**, including **<u>services</u>**, was up 0.3% m/m in Nov. <u>The annual rate declined 0.6 pp to 7.4%, expected down to 7.2%</u>

Crude core material prices are yielding, as are intermediate prices

The core consumer goods PPI has also turned south – and so will probably goods prices in the CPI/PCE

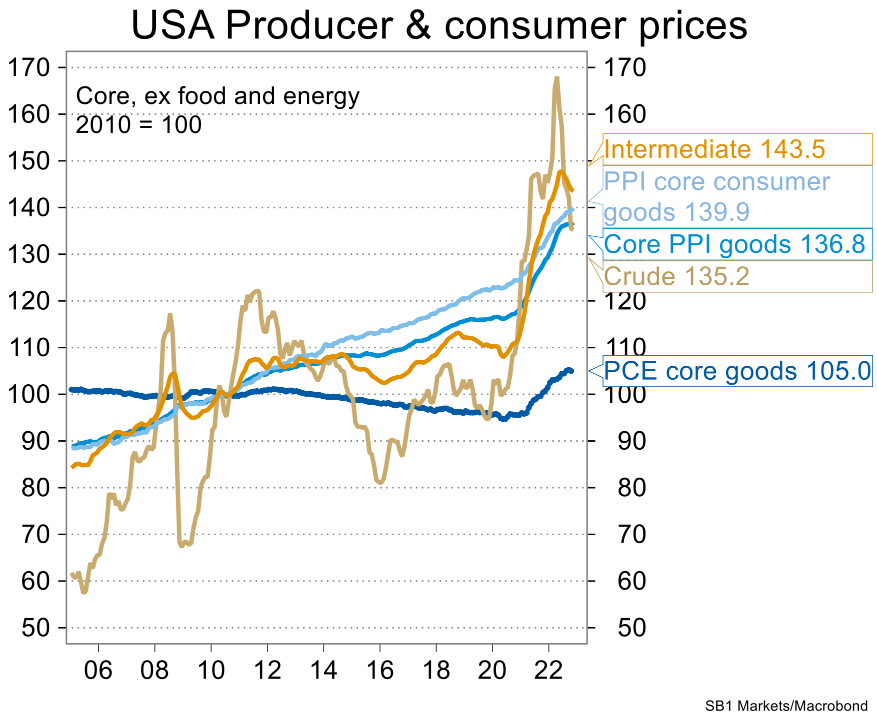


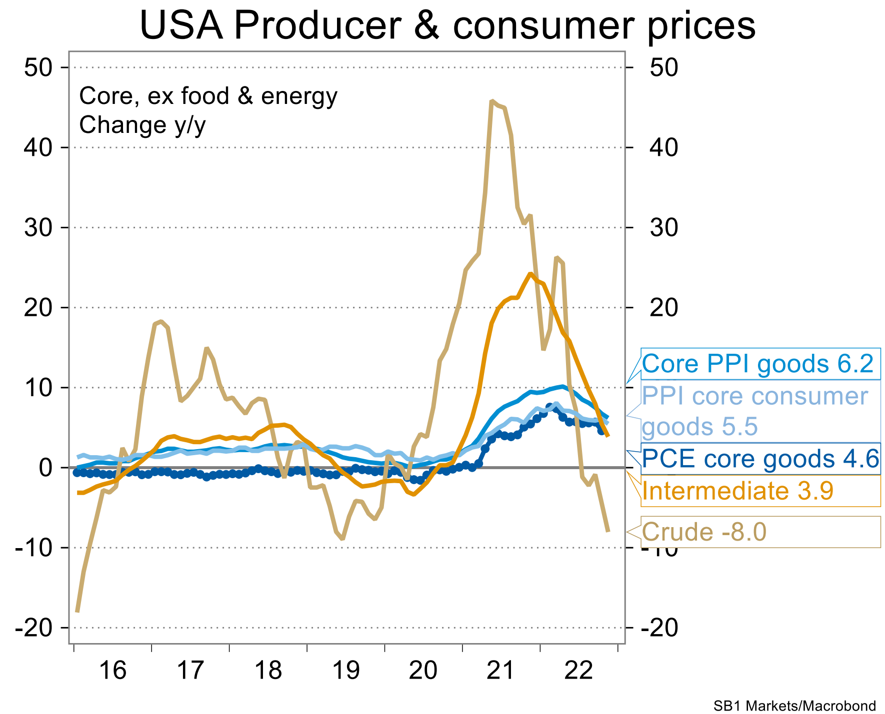


- **Crude goods prices** are leading intermediate goods prices by 4 months, and consumer prices by 12 months. Following several months with slow growth in these prices to February from last summer, they rose in March and remained at a high level in April – but they are now heading down rapidly (and prices are down y/y, *check next page*). **Intermediate prices** are now also well on the way down. We can see the impact of the broad decline in raw material prices globally – as growth in demand is slowing
- **Core consumer goods** prices are also yielding at the producer level, rather early vs the normal cycle pattern
- The next shoe to start dropping will be goods prices at the consumer level, in the CPI/PPI.
  This is the best 'peak inflation' indicator available!

Crude core material prices are yielding – and are down y/y

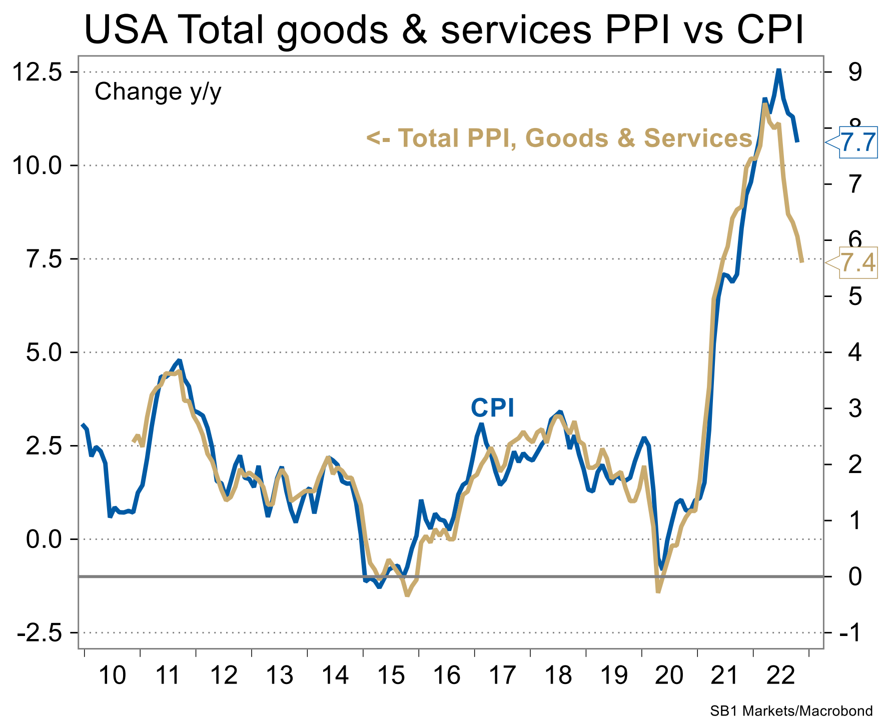
(level & growth rates, same series as per the prev. page)

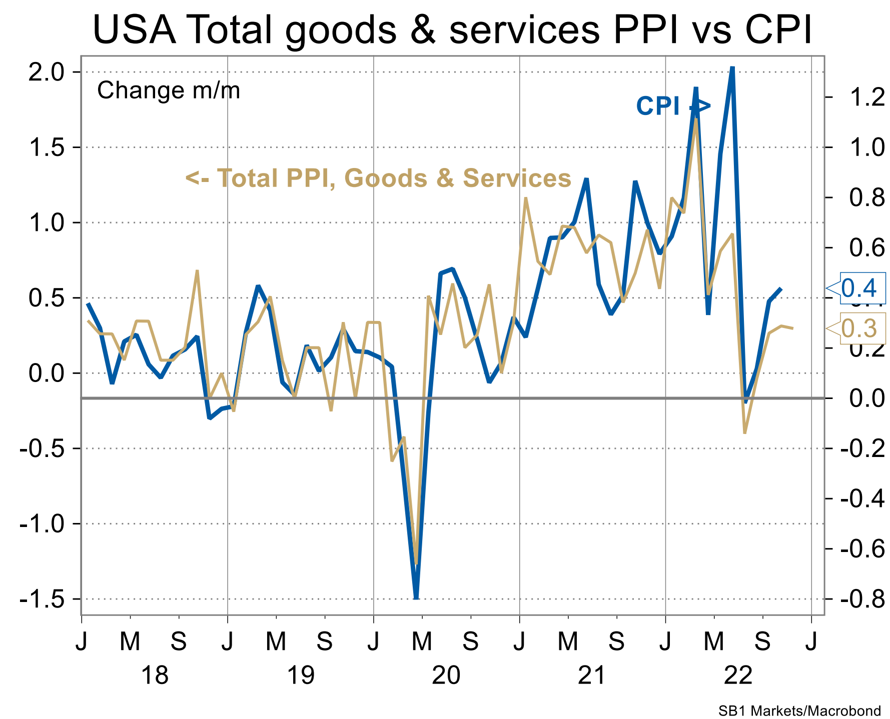




Total PPI (services incl.) +0.3 m/m, and the annual rate down 0.6 pp to 7.4%

... But still surprised 0.2 pp on the upside

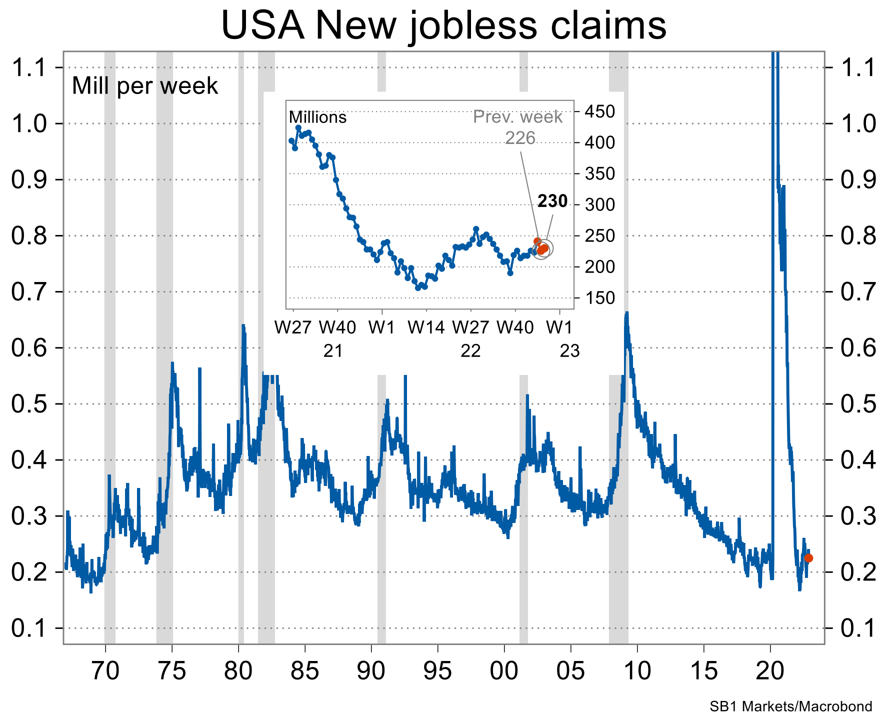


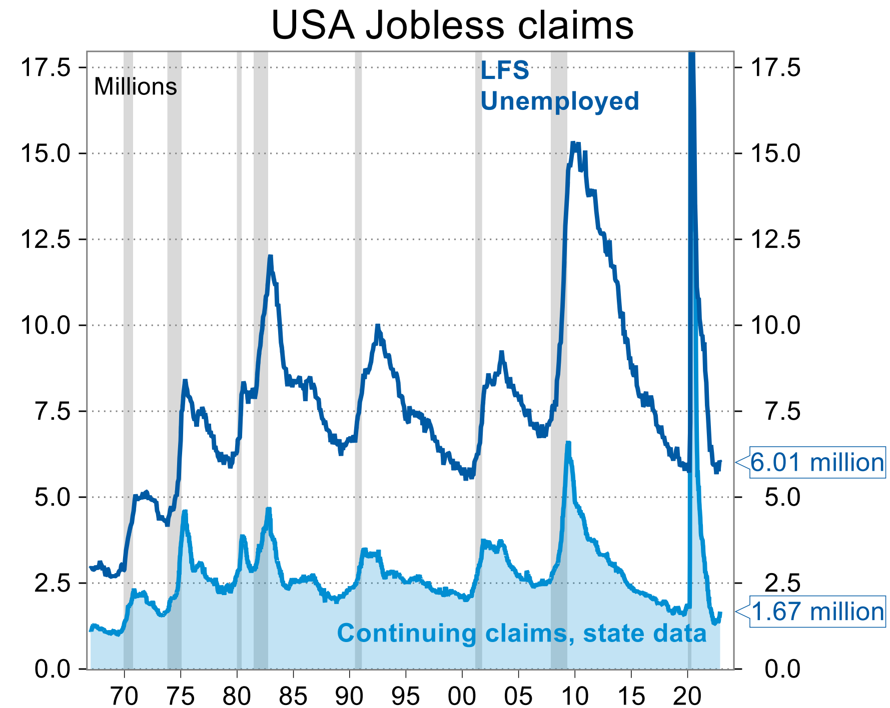


- The correlation between the total PPI, which includes all sorts of services in addition to goods, and the CPI is very close. The current 8.0% annual growth rate, signals a further, and substantial decline in CPI inflation the coming months

New jobless claims marginally up, but continuing claims are ticking upwards

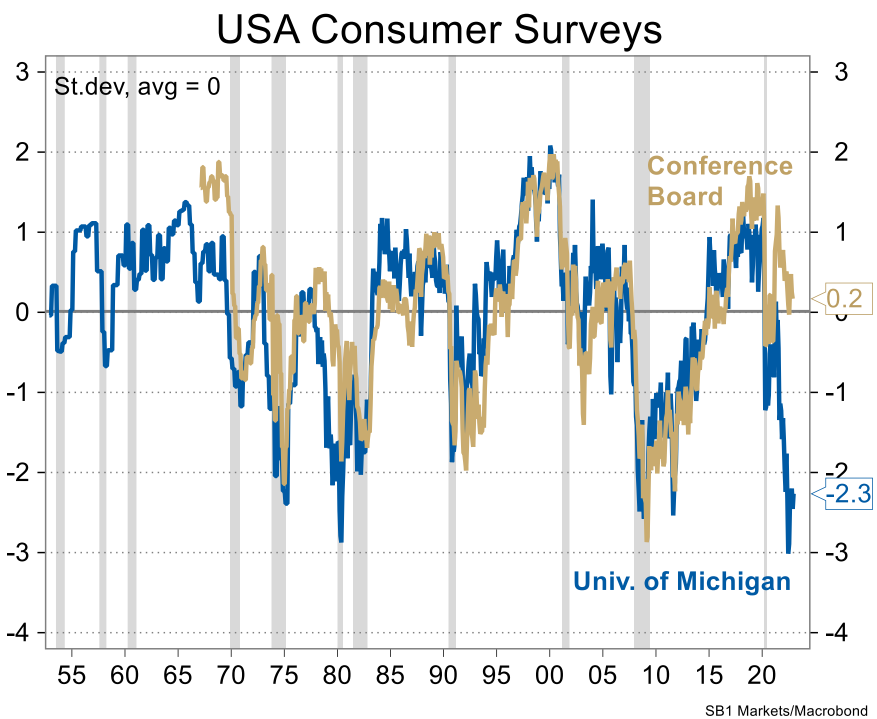
New jobless claims up to 230', in line with consensus f'cast





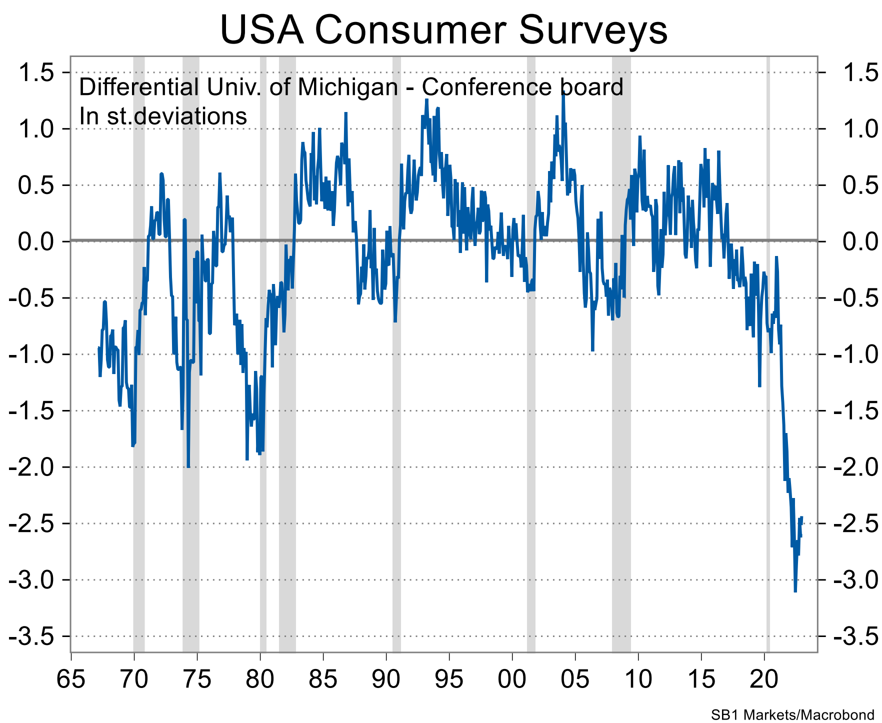
- **New jobless claims** increased by 4' to 230 last week, from a 1' upward revised print the week before
- **Continuing claims** rose by 62' to 1,671' (prev. week revised up by 1') in week 46. The trend is slightly upwards but the level remains very low
- Both still indicate a **tight labour market –** a labour market that is far more resilient than we and probably also the Fed had envisioned, given higher interest rates, record-low consumer sentiment, and falling orders (according to surveys)

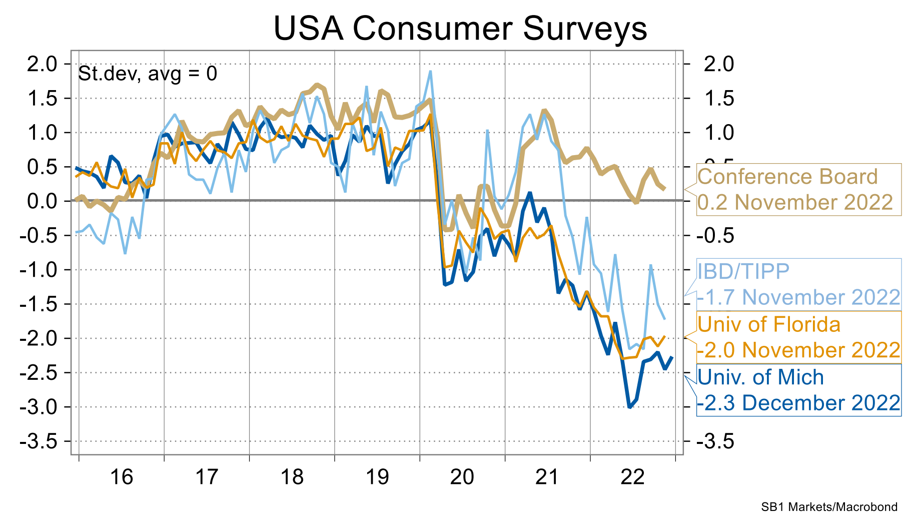
Univ. of Mich. sentiment up in early December



- **University of Michigan's consumer sentiment** 2.3 p o 59.1, expected up 0.1 p. The level is 2.3 st.dev below average. The bottom (so far) was in June, at -3
  - Both households' assessment of the current situation and expectations fell in November, expectations the most
- **The 3 other consumer surveys** have in sum stabilised recent months
- **Inflation expectations** rose marginally – but are down from the peak
- **The risk:** The UM survey is still at a very low level, and is often an early bird in the cycle

All surveys down in Oct/Nov – UM still at the bottom of the league

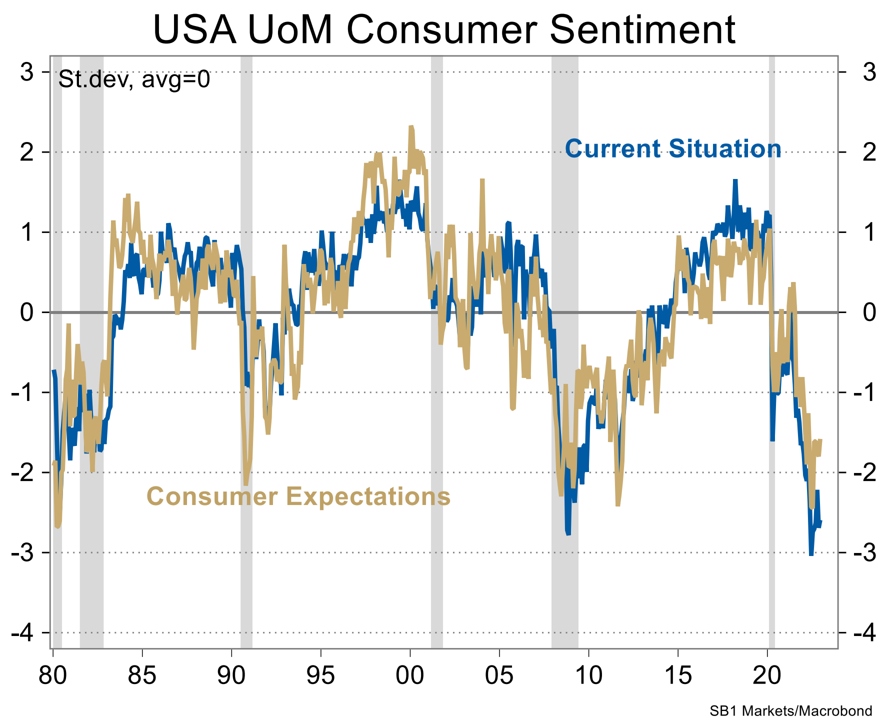


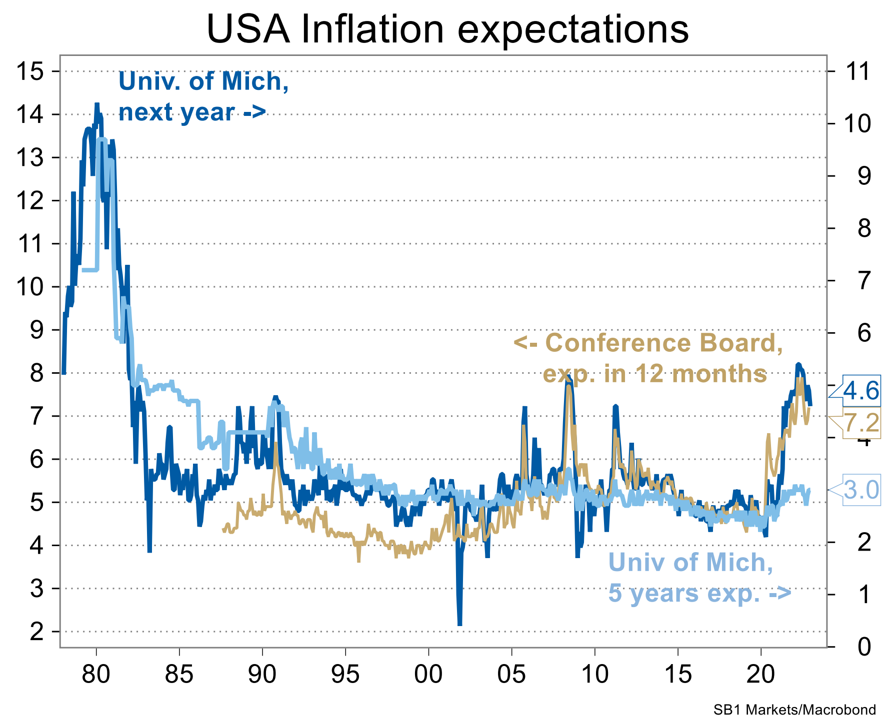


- Quite often, the UM survey has been the canary in the mine vs. recessions, it yields earlier than Conference Board's survey, and the current stance is a VERY bad sign – we have never seen anything like it!
- Both IBD/TIPP consumer survey, Univ. of Florida's survey are 1.7 – 2.3 st.dev below par

Univ. of Michigan: Both current situation & expectations up in December

Inflation expectations in sum slightly down. The 5y expected rate at 3.0% is not unusual – but not very low either

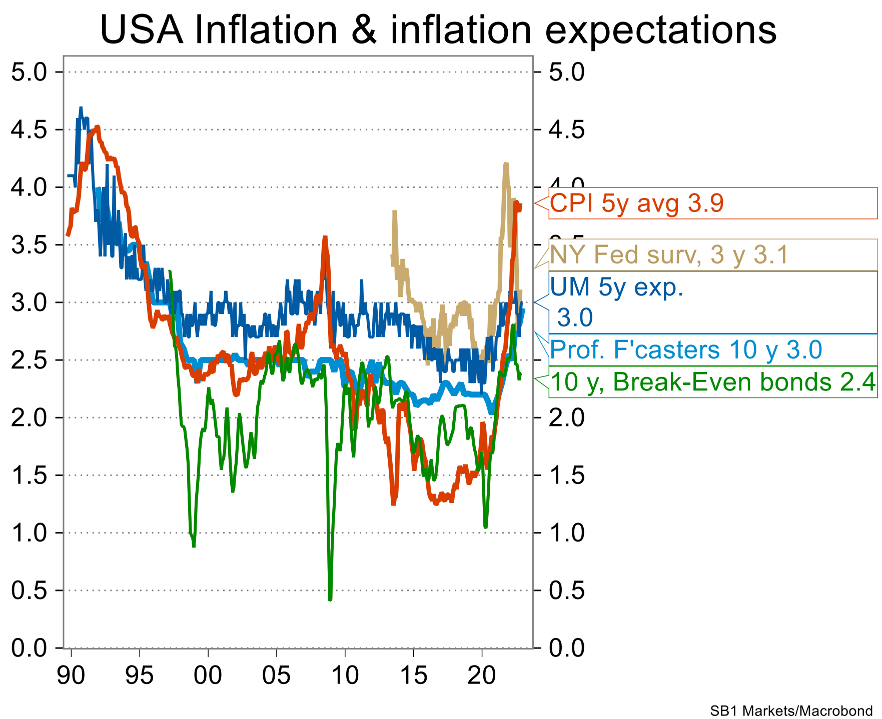


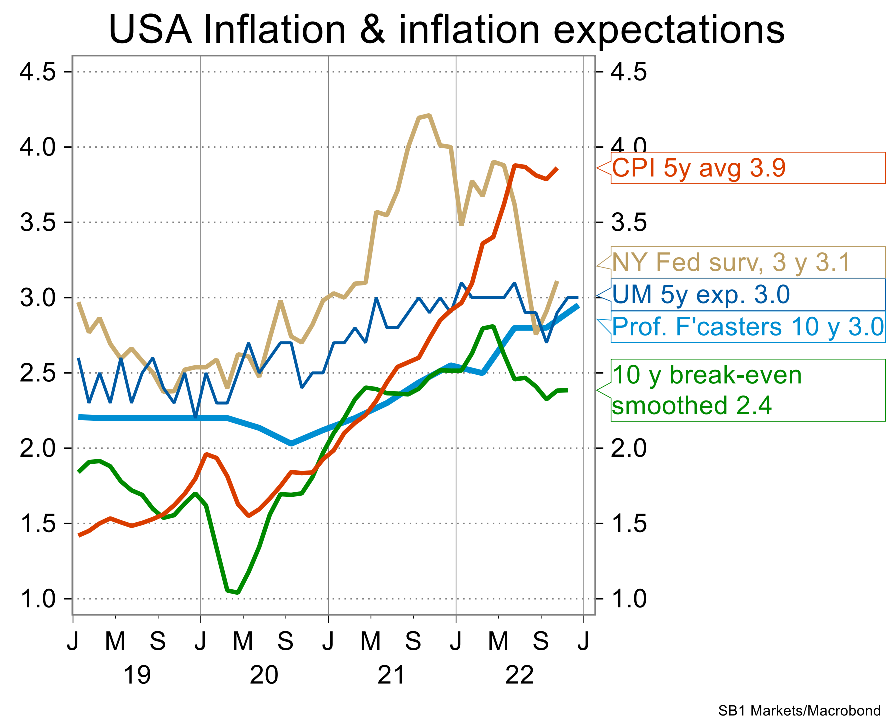


- **12 m inflation expectations** declined to 4.6% in December
- The peak was at 5.4%, in March. Expectations are well below the current 7.7% y/y CPI print
- **5 y inflation expectations** were unch. at 3.0%
  - The 3.0% is just 0.1 pp above the average over the past 10 years, not that much given the current rate of inflation

Professional forecasters have revised their 10y CPI est to 3%, from 2.2% p-p

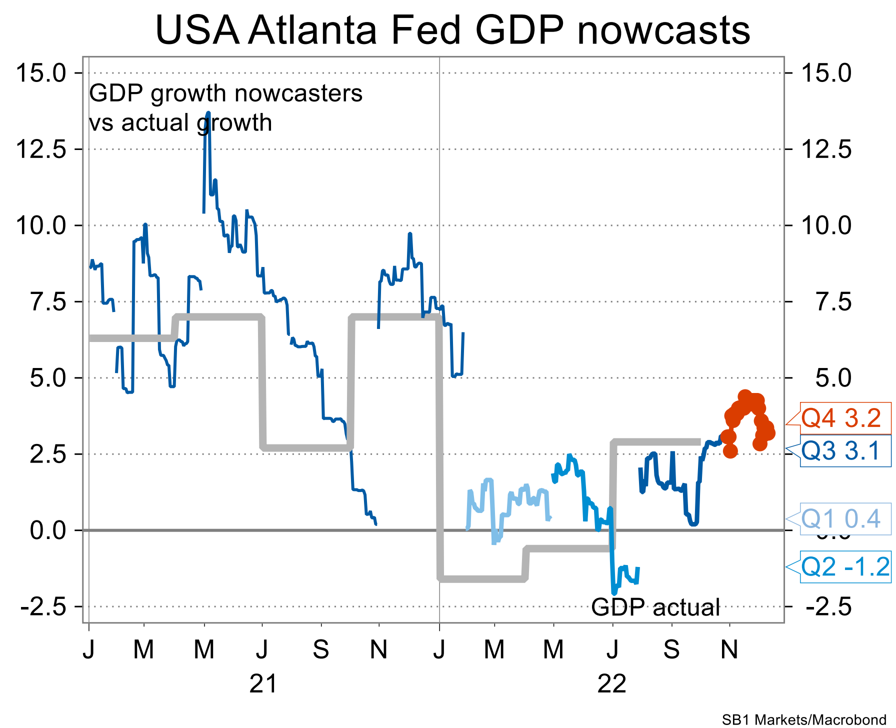
Professional forecasters upped their quarterly forecast by 0.2xx pp to 3% avg inflation, the market suggests just 2.4%

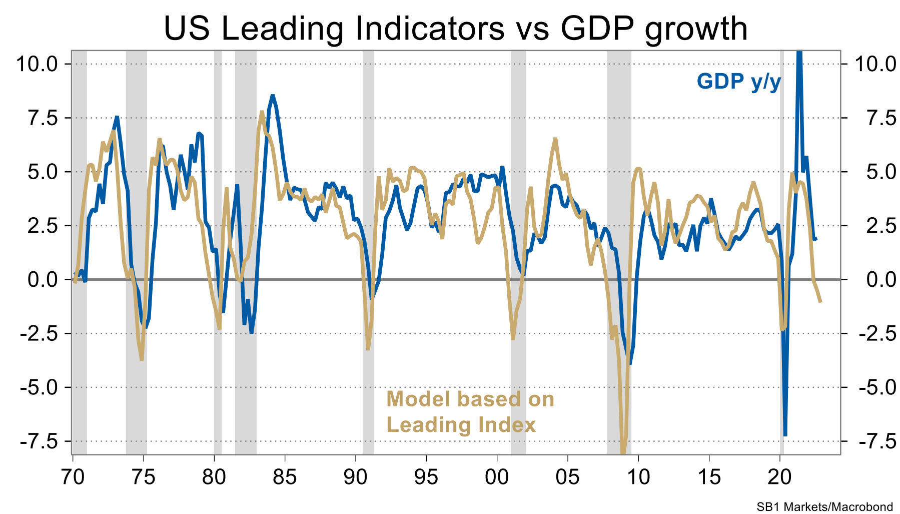


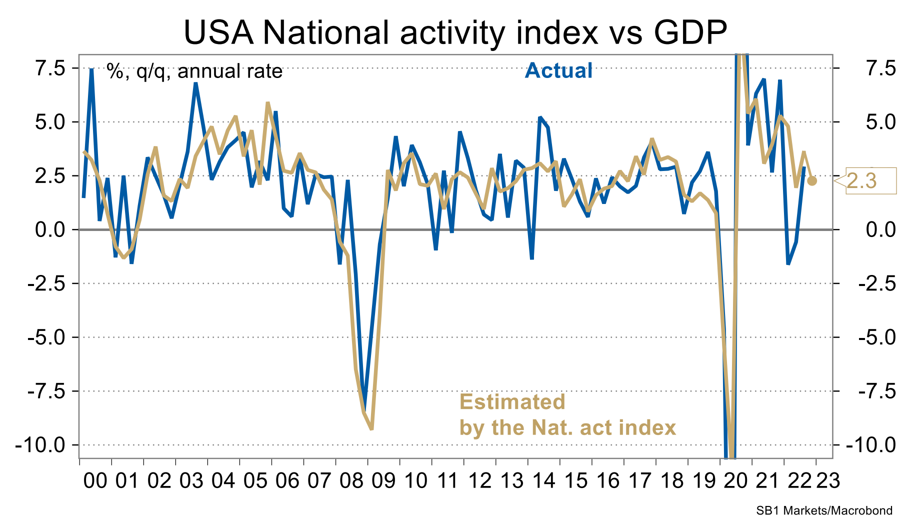


Atlanta Fed revised it’s Q4 GDP forecast up by 0.4 pp to 3.2%

However, it is the most upbeat nowcast available

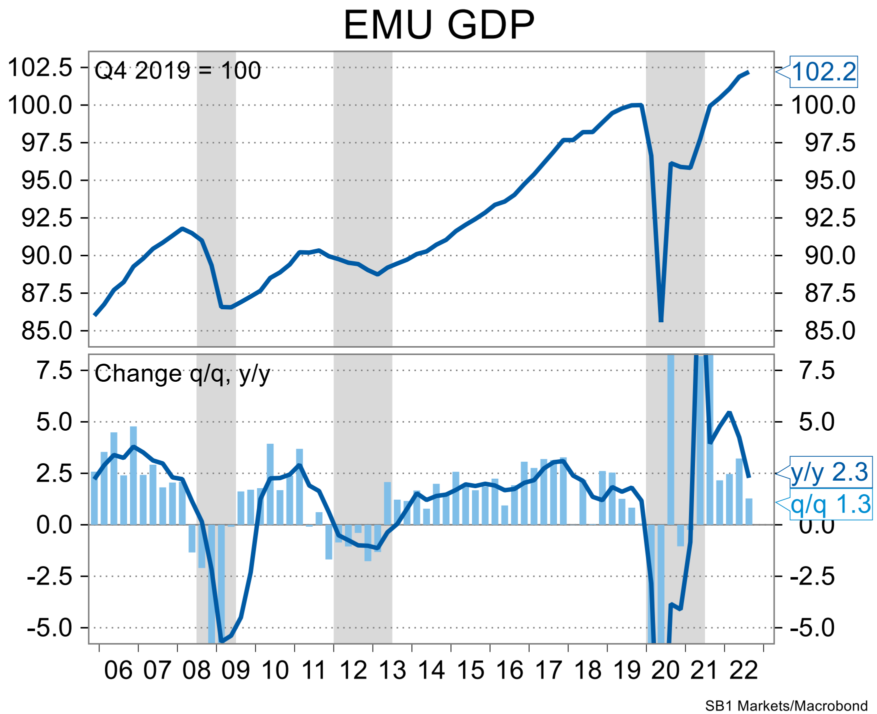


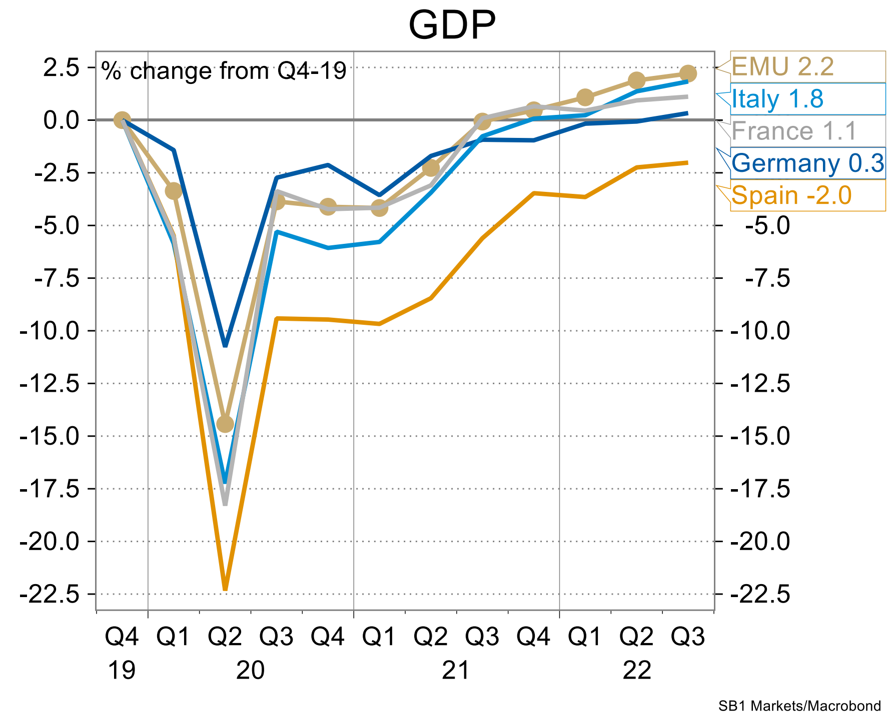




Eurozone GDP confirmed up 1.3% (ann.) in Q3

Big four countries up 0.2% - 0.5%, not annualised

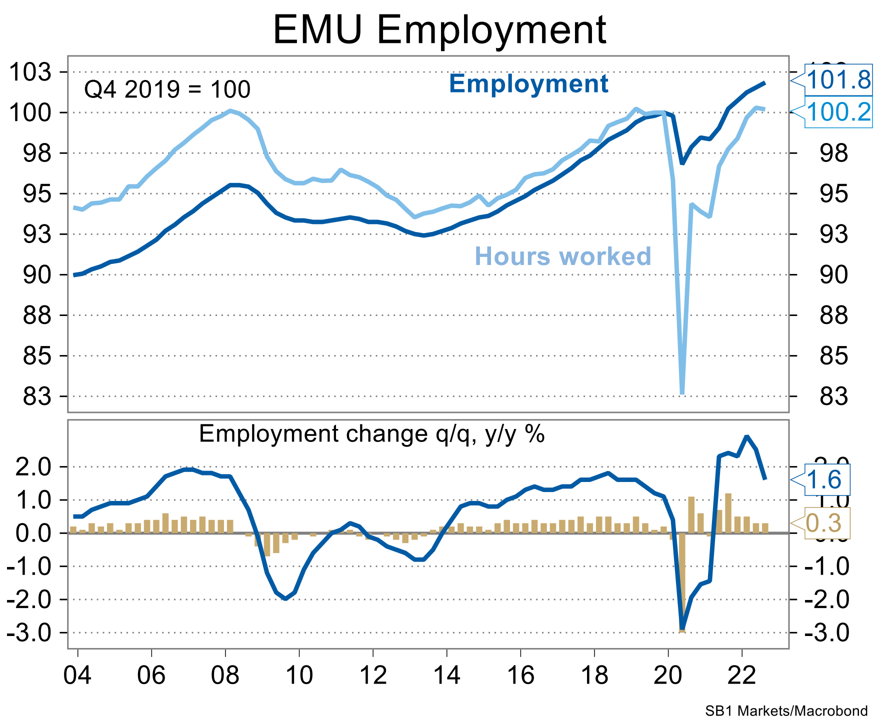


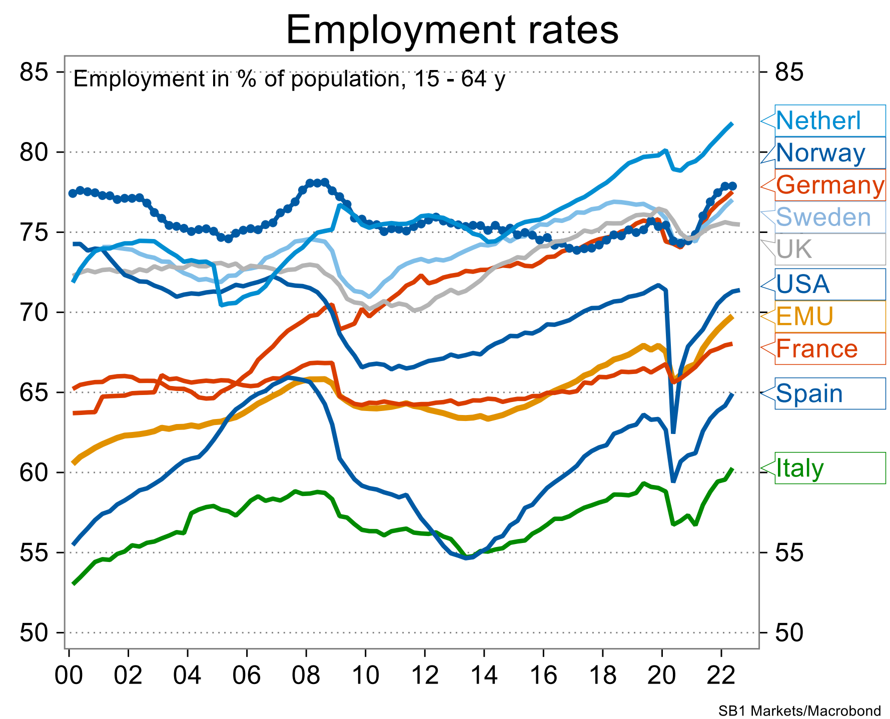


- GDP grew 0.3% in Q3 (not ann.), up from 0.2% in Q2. GDP is now 2.2% above the Q4-19 level
- Italy grew rapidly in Q3, and was up 0.5% (not ann.). Spain is still the laggard, even if GDP was up 0.2% q/q, it is still 2% below the pre-pandemic level
- The German GDP was up 0.4% in Q3 - and up 0.3% vs. Q4-19

Employment growth at the same pace in Q3 as the previous quarter

…impressive. Hours worked are marginally down from Q2, but remains slightly above the pre-pandemic level

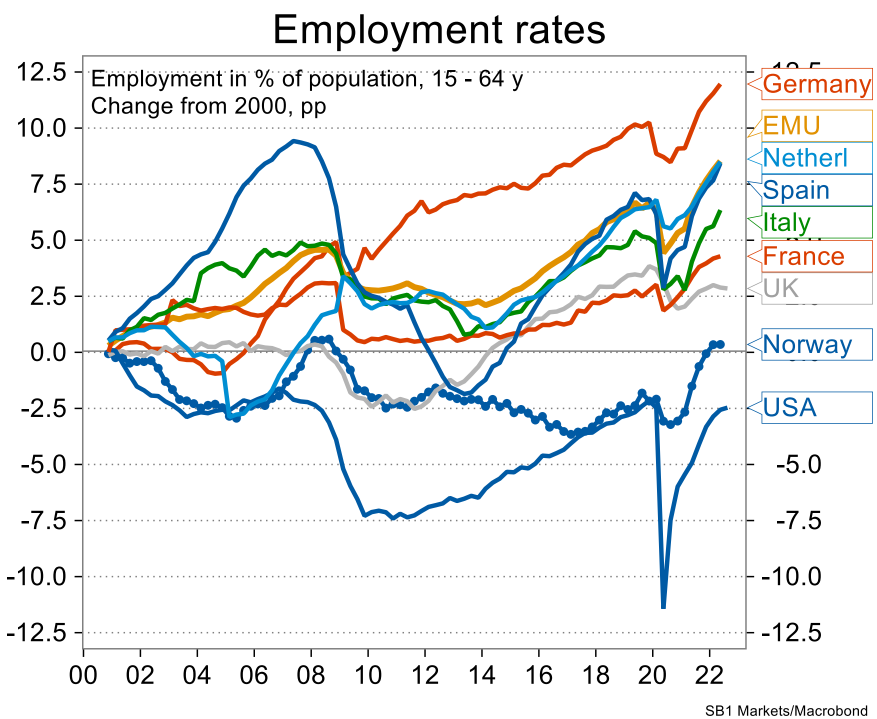




- Employment rates are up all over the region, vs the pre-pandemic level
- BTW, just UK and US are reporting lower employment rates than before the pandemic
- Over the past 20 years: US the big loser. Germany the winner. Check the chart next page ☺

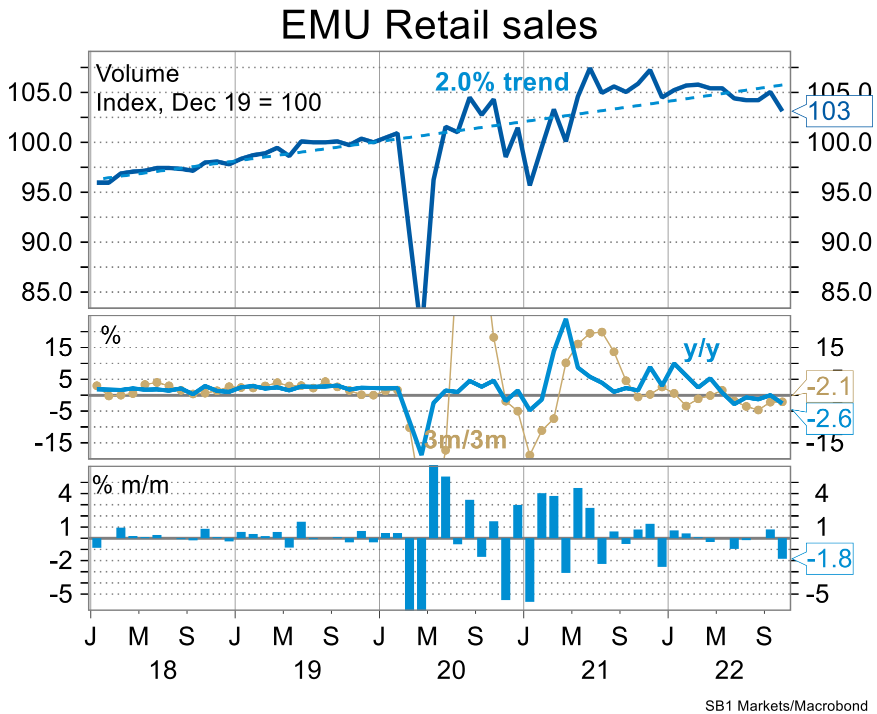
Some interesting changes in the labour markets over the past two decades

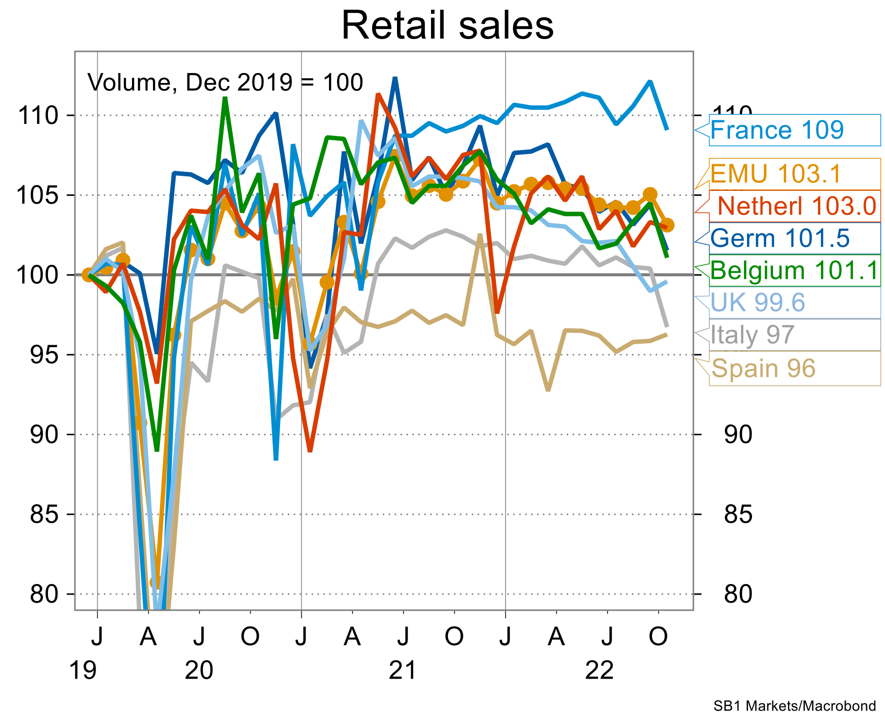
Who are the winners, who are the losers?



Retail sales sharply down in October - declined by 1.8%

Why a sudden retreat in October? Sentiment is heading up, auto sales (not incl in retail sales) are strong

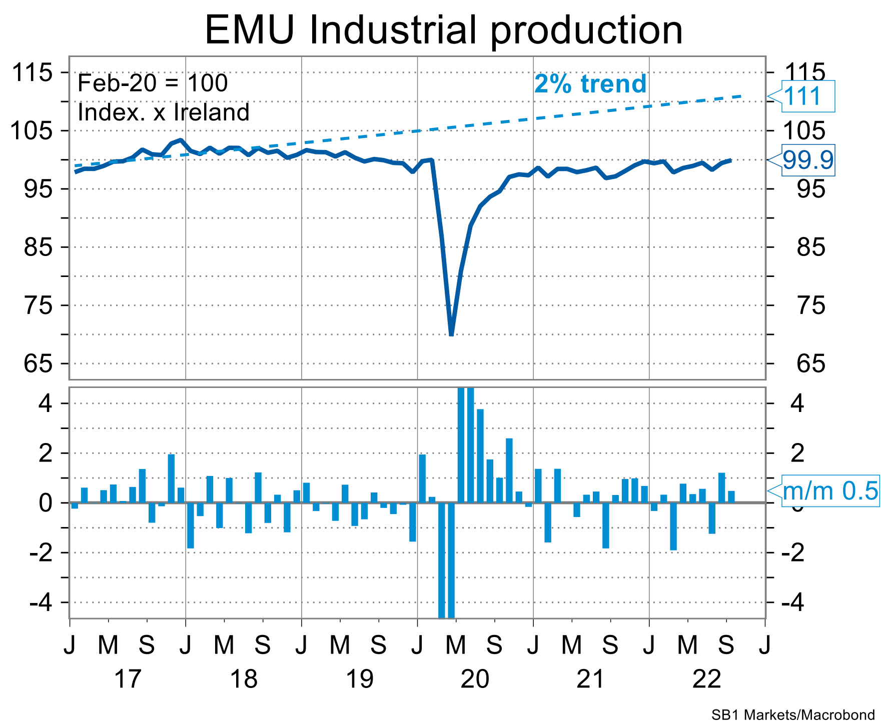


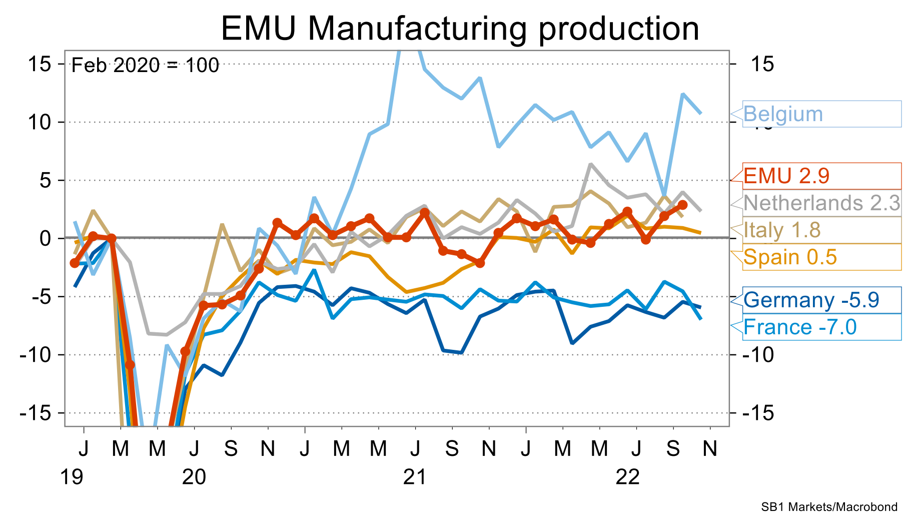


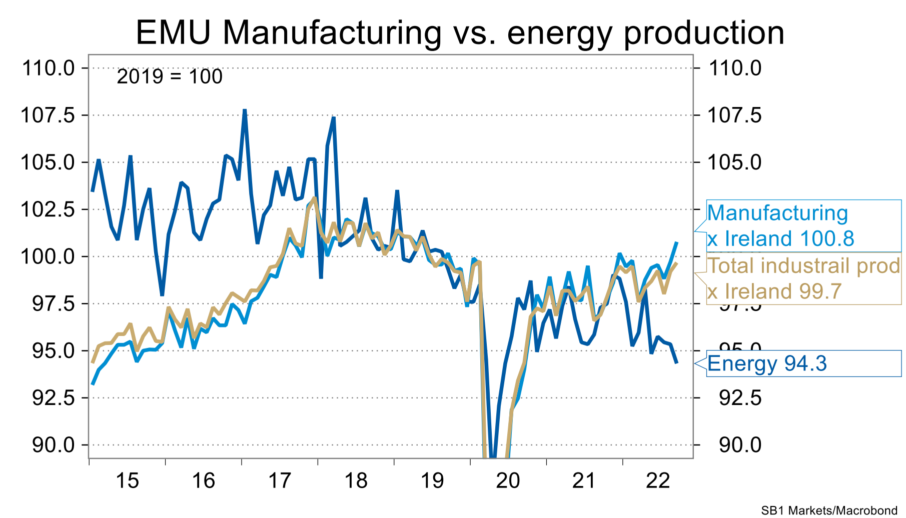
- Sales are now still 3% above the pre-pandemic level, but far below the pre-pandemic growth path
- Sales have been trending down since mid 2021 – and the outlook is dismal, given loss of buying power. However, sentiment may have turned the corner and the labour market is still remarkably very strong

EMU industrial production very likely down in October

Both France, Germany, Spain, Belgium and Netherlands have reported a decline





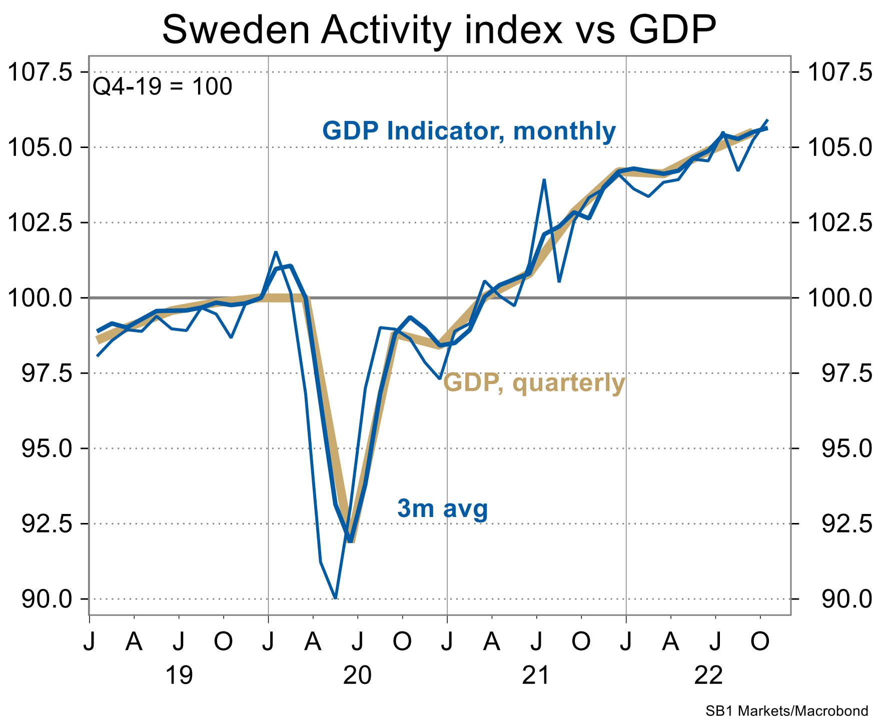


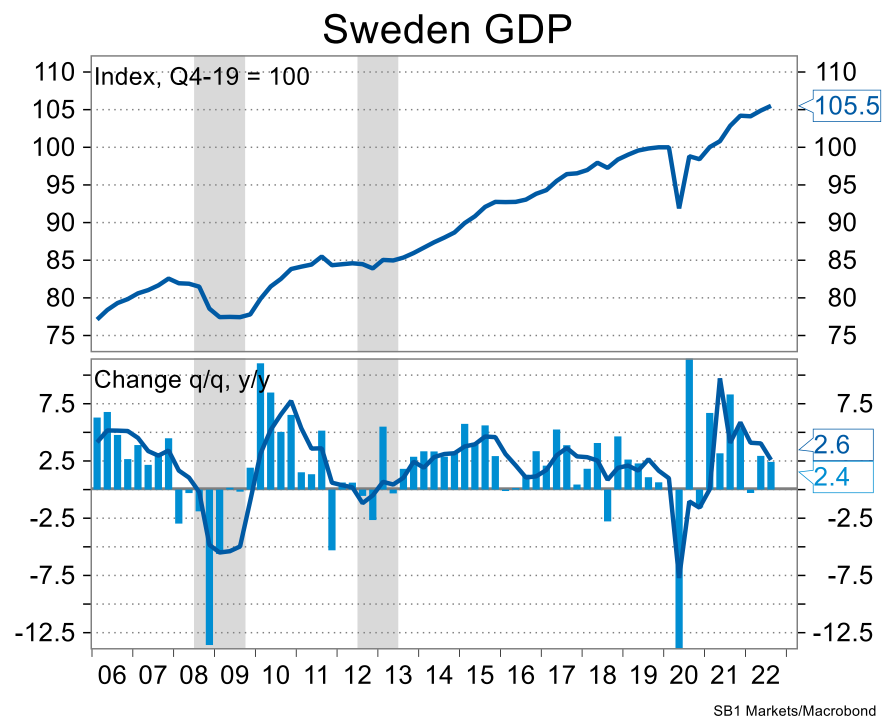
- A 1.5% decline is expected, we think with the risk skewed to the downside.
- Total industrial production is heading slightly upwards even if energy production is declining, and manufacturing production is still clearly on the way up
- **The outlook** is not that bright: In November, the manufacturing PMIs stabilised but are far into negative territory in all of the big 4 countries, as an unusual steep decline in new orders (and in the backlog) was reported

SpareBank 1 MARKETS

Swedish GDP grew 0.7% in Oct, beating expect., following a 1% lift in October

Swedish GDP is still on the way up. October was expected down 0.6%

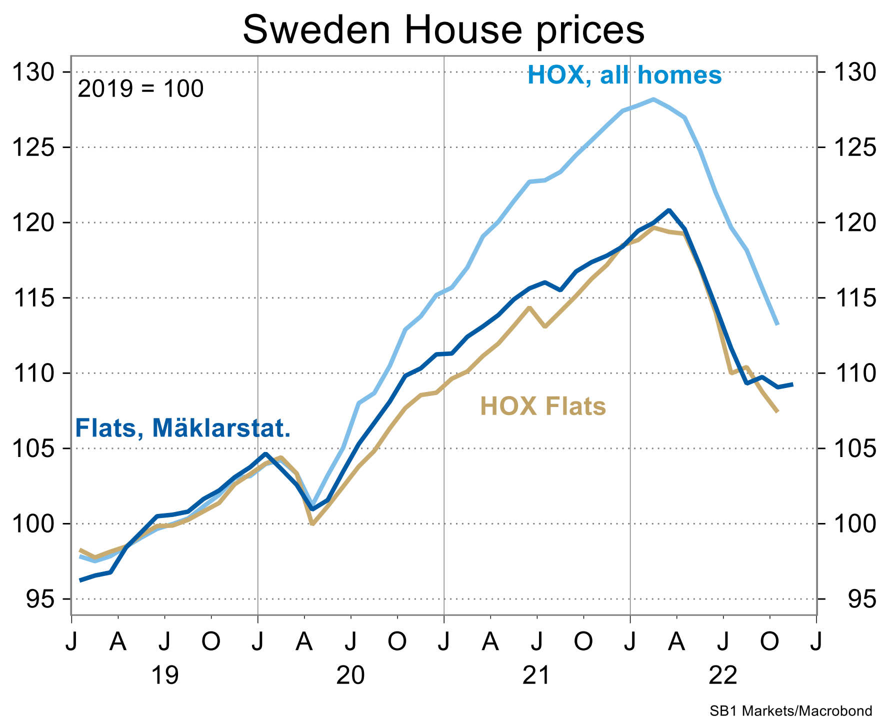


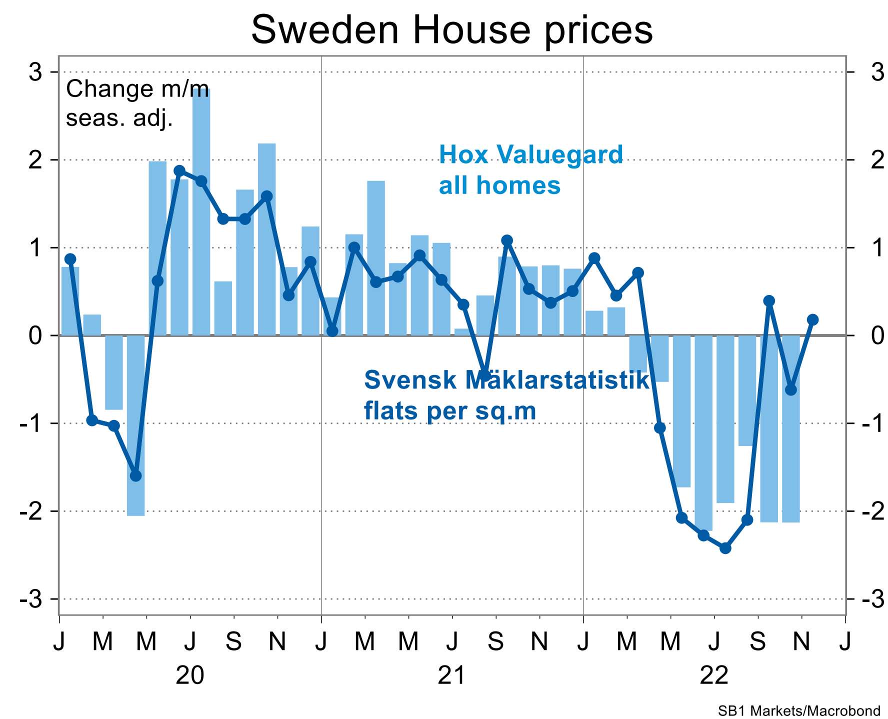


- **The next Riksbank meeting** is in February, so the bank has time to observe the development in the economy. After the last monetary policy meeting, the bank indicated that it would hike by 25 bps in Q1-23. The October data clearly puts the risk on the upside for +50 bps – the Riksbank's f'cast is for GDP to fall by 1.2% in 2023, an estimate that no doubt will be revised upwards
- **However, the outlook** is weakening, according to Swedish companies. The KI (NIER) business survey (consumer confidence not included) has fallen to below an average level but is still signalling a slight growth in GDP

Swedish apartment prices were up in November, according to the realtors

Prices rose 0.2%, and they have almost flattened since August! The HOX index is still heading straight down

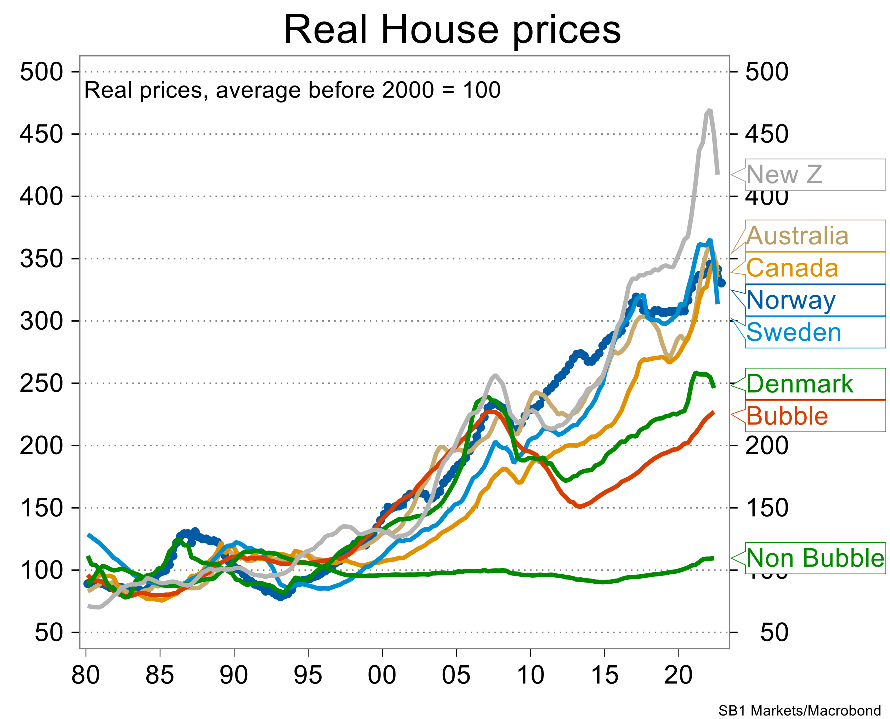


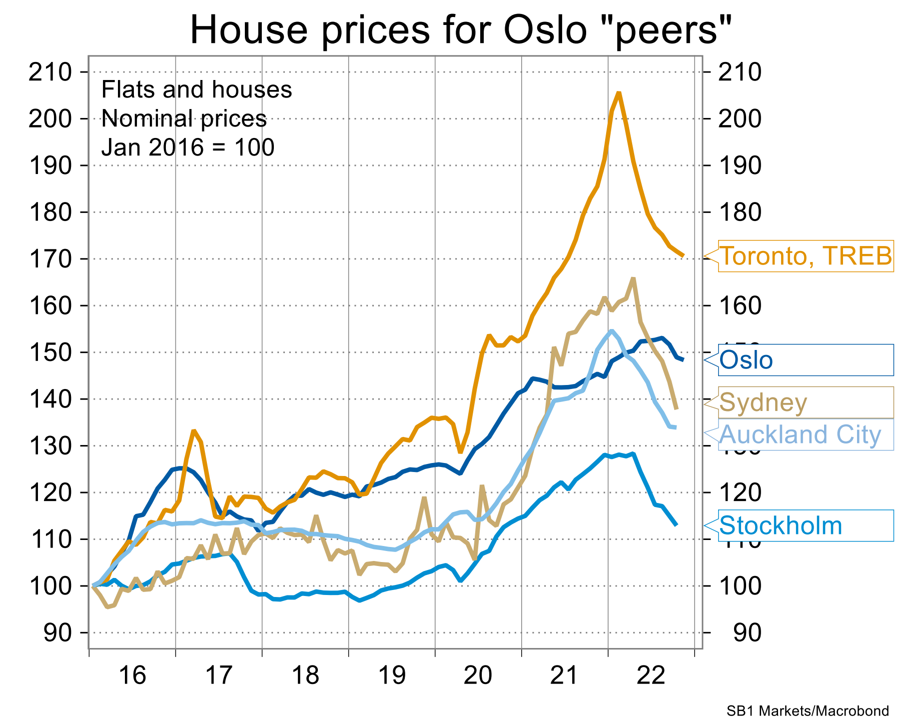


- Prices are down close to 10% from the peak in March – before the Riksbank started to hike rates
- The HOX index reported a 1.6% fall in apartment prices in October, while single-homes were down 3.8%

Prices are falling in the ‘supercyclical’ capitals, now even in Oslo

Prices have peaked in cities comparable to Oslo - and we believe we have passed the peak here too

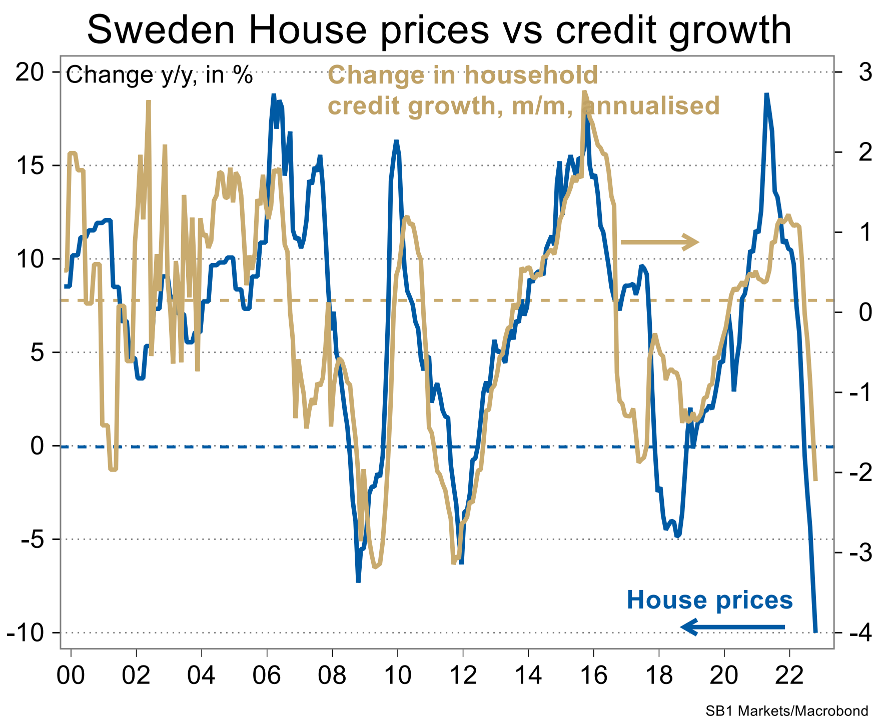


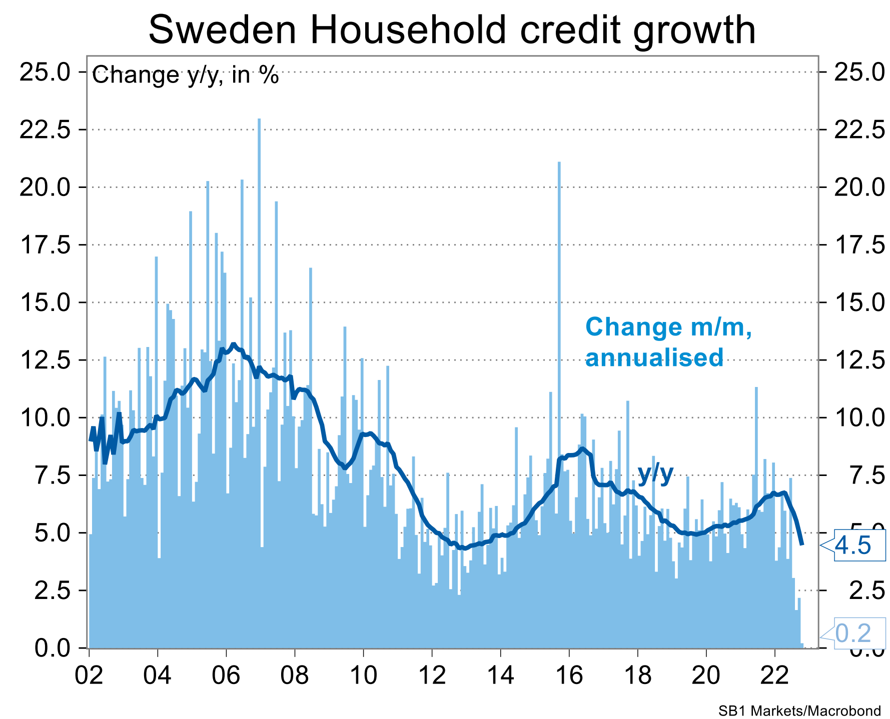


- Real house prices are at high levels in both Australia, Canada, Norway, and Sweden – and even more in New Zealand
- Now, prices are falling sharply (where data are updated). Prices in the capitals have turned down in all these countries

Household debt growth is contracting at a 2 pp pace (and more to come?)

Changes in credit growth (the 2nd derivative) is strongly correlated to change in house prices (the 1st derivative)

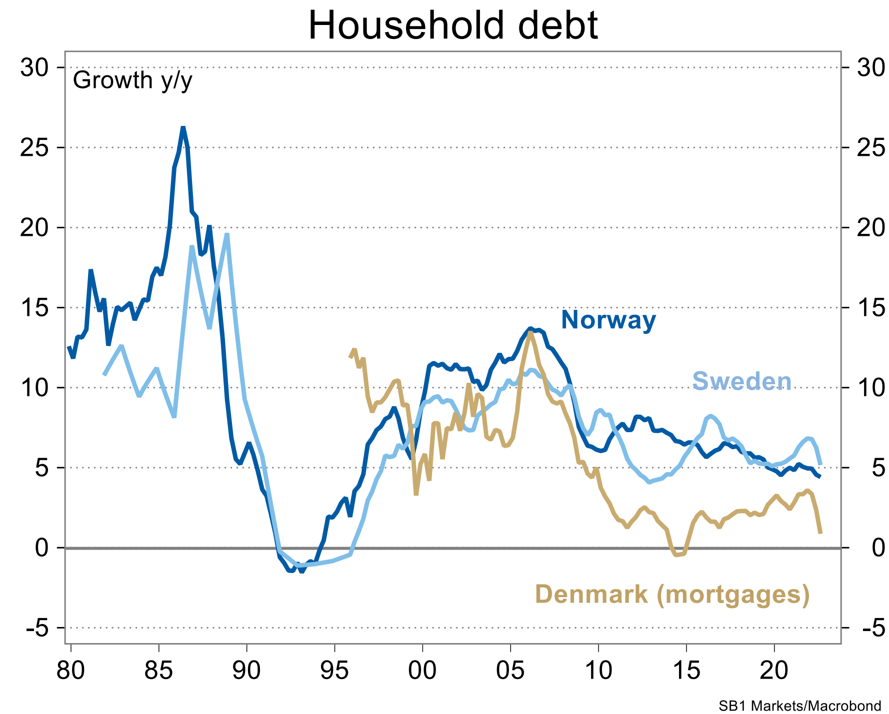




- Household credit growth is still positive measured y/y, but the growth rates is falling rapidly, from month to month, in fact at a pace equalling 2% per year, while our 'model' suggests even more, perhaps twice the pace
- In October, household debt barely grew at all

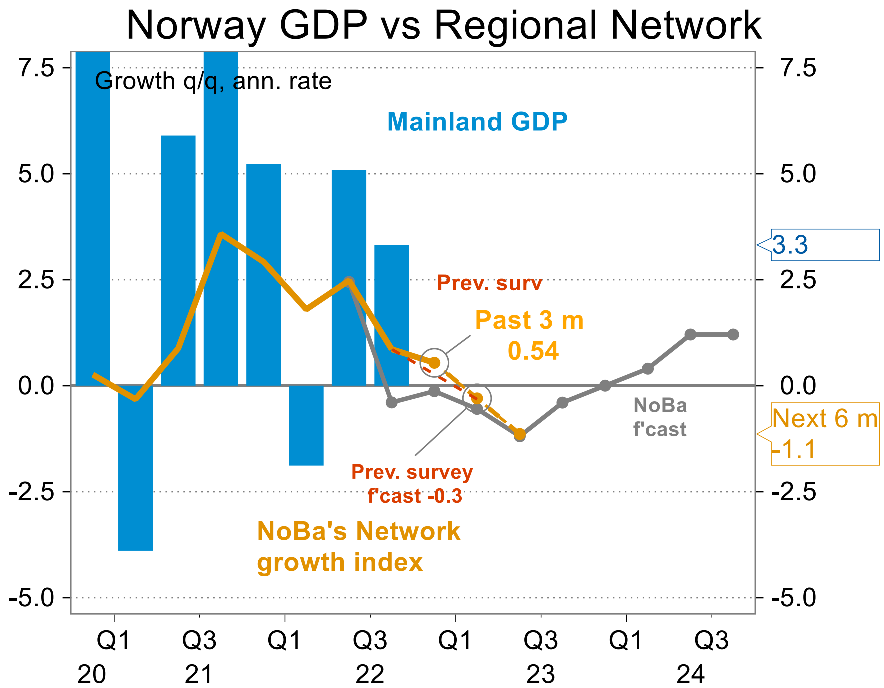
Bankers beware, strong credit demand is not given…

Look to Denmark!



Norges Bank's Regional Network signals a deeper downturn

… exactly like Norges Bank expected – but from a much stronger starting point than Norges Bank assumed!



SB1 Markets/Macrobond

Implications

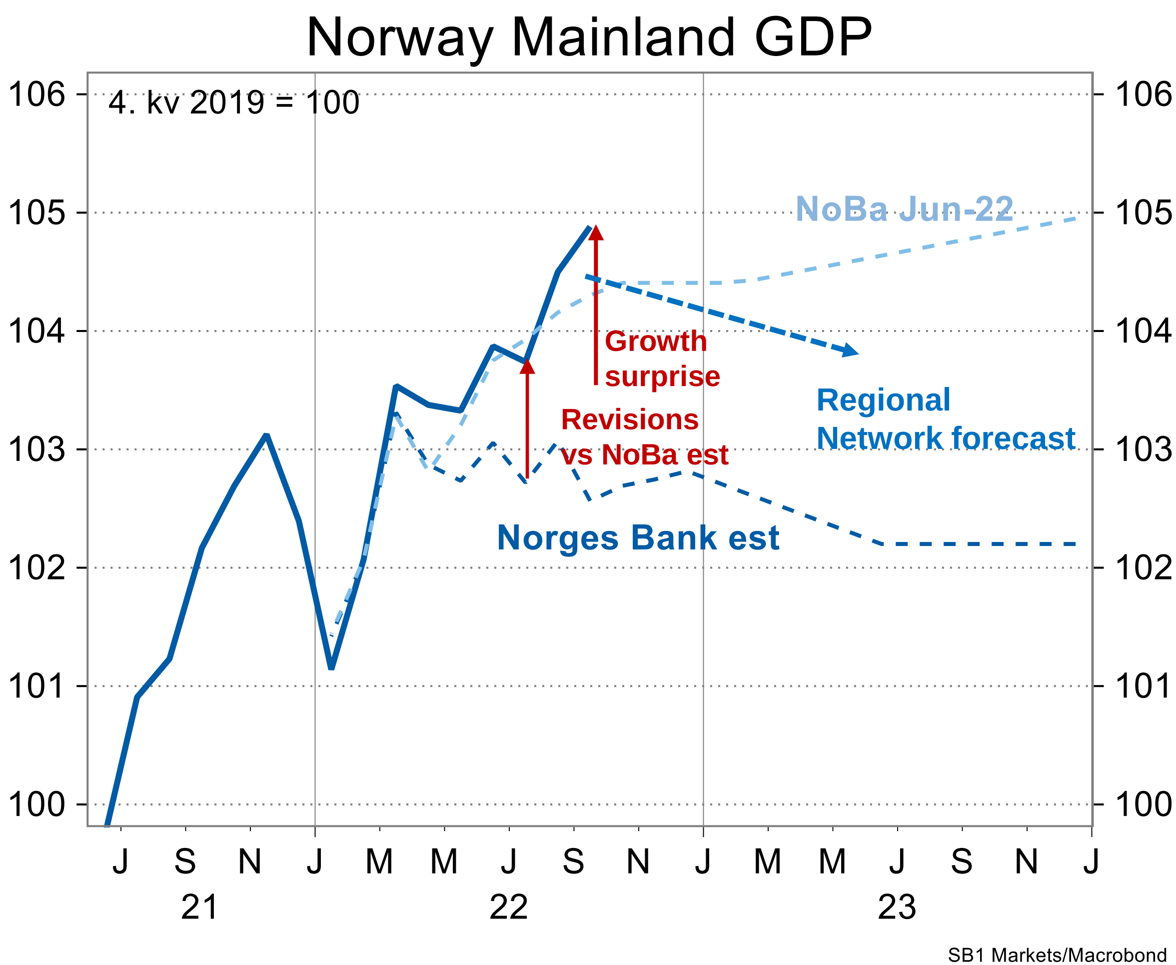
- The Network confirms a broad slowdown, but the activity level is signalled to remain well above Norges Bank's September forecast (which was not at all recognised in media reports or comments last week)
- Since the September MPR, just house prices, household credit growth and the oil price have been on the weak side vs. the Bank's forecast. The most important variables; GDP, inflation, unemployment have all been 'stronger' than the Bank assumed in September
- A 25-bps hike next week is still a done deal, as the bank is rapidly approaching the assumed 'terminal' rate, but we do not think the Bank will lower its interest rate path

A weak report

- The Network expects a -1.1% pace of decline in activity the next 6 months (index value at -0.57, we expected -0.2, a rather bad forecast…), down from -0.3% three months ago. The slowdown is the sharpest since the financial crisis (barring the start of the pandemic, check the charts on the next page)
- Still, the Network's growth forecast is in line with Norges Bank's Mainland GDP growth forecast from September. In addition, the starting level for NoBa's GDP forecast now turns out to have been 2.5% higher that the bank assumed in September (check the much higher actual GDP prints for Q2 and Q3 compared to NoBa's assumptions/forecasts on the chart to the right!). Thus, the Network signal a far higher GDP level in 6 months time than NoBa assumed in September!
- That said, the assumed slowdown is broad, and most sectors report that growth has slowed already, and retailers and well as domestic oriented manufacturers report a decline in activity and just oil related mainland industries expect an increase in activity the coming 6 months, the others are all down
- **Regionally**, actual growth and growth expectations fell everywhere Q4. The South, South West, and Trøndelag still expect growth the coming months, but Trøndelag just marginally. North turned negative. Central East (Oslo +) reported the weakest outlook 3 months ago, and was still at the bottom, with an almost 3% decline
- **Capacity utilisation and labour shortages** fell but both remained above average, especially lack of labour. **Employment** plans were revised down but are still signalling growth, whereas NoBa expects a decline in 2023
- 2022 **wage inflation** forecast flattened at 4%, and the first 2023 forecast came in at 4.1%, 0.5 pp below NoBa's f'cast, and 0.8 pp below expectations among trade union economists. Also, even fewer companies expect to increase their **prices** than in Q3, and the share is lower than ever vs. households
- **Investment** plans were revised further down, but not by much. Profits are expected sharply down (oil companies are not included)

The Regional Network expects the same decline from here as Norge Bank

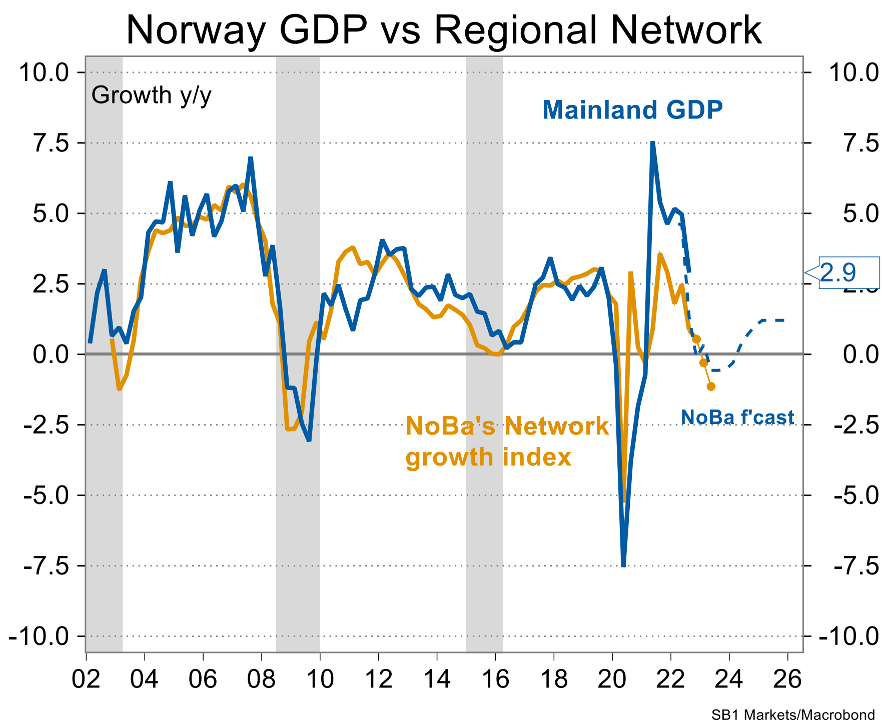
… but the starting point is far above Norges Bank assumption in September

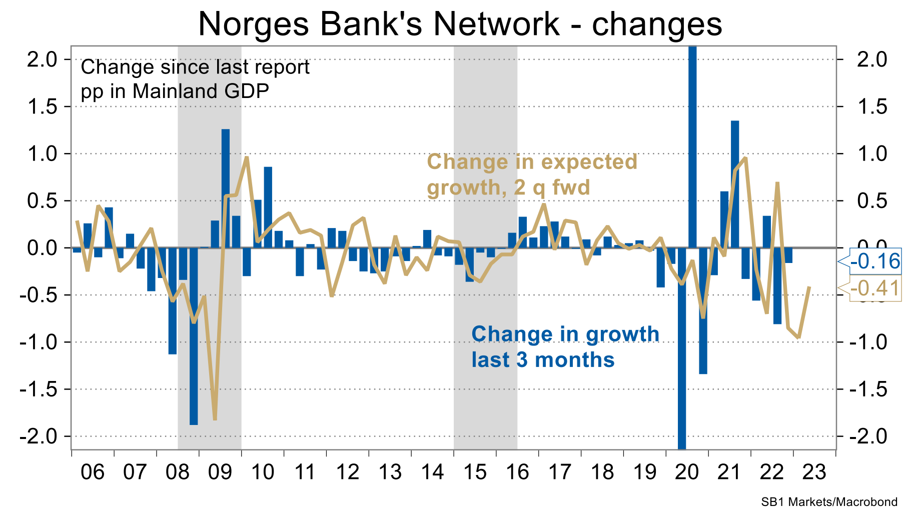


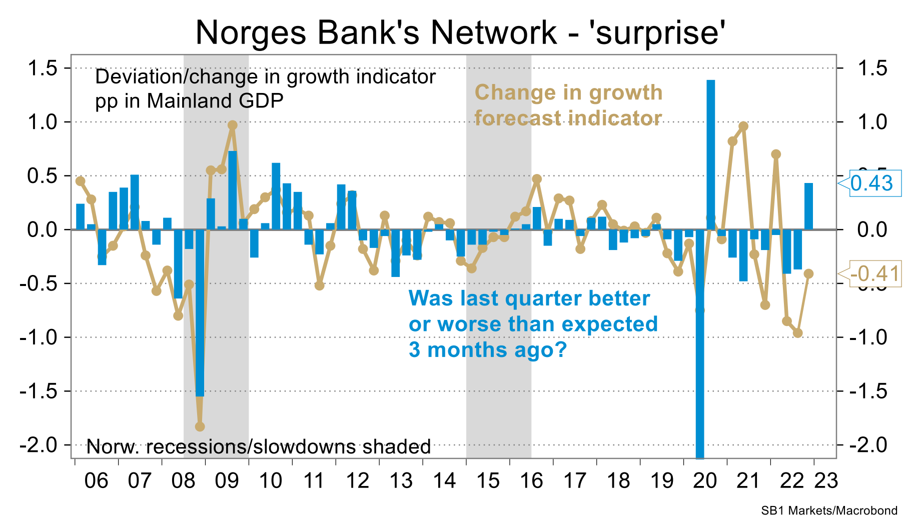
- The activity level by late Q3, and very likely in mid Q4, was well above Norges Bank's estimate
  - GDP history has been revised up
  - Growth in August and September var much higher than Norges Bank expected
- NoBa will very likely revise potential GDP up, but less than the discrepancy between the current GDP and the September forecast
- If so, the Network's expected slowdown, which growth wise was in line with NoBa's growth forecast, will not imply a downward revision of NoBa's forecasts – in fact rather the opposite!

The weakest Network report since the financial crisis (x the pandemic)

Growth is slowing further, but the downgrade is not as fast as reported 3 and 6 months ago



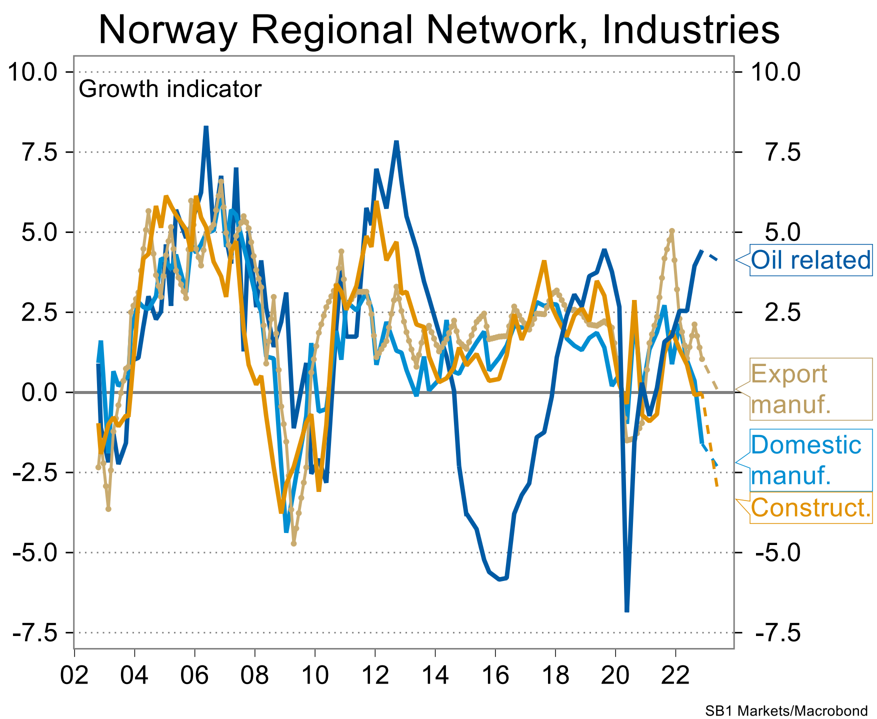


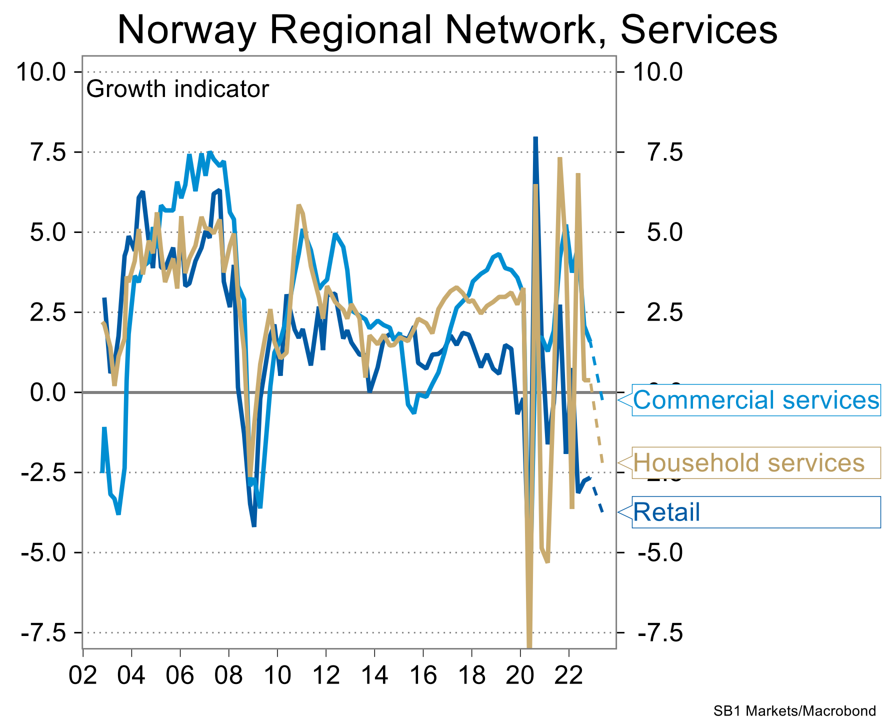


- In addition, the past 3 months were much better than the Network expected 3 months ago, for the first time in 9 quarters (lower right chart)
- The decline in the expected growth rate was smaller than in the two past Network reports (upper right chart)

Oil services still going strong. Others expect no growth or a decline

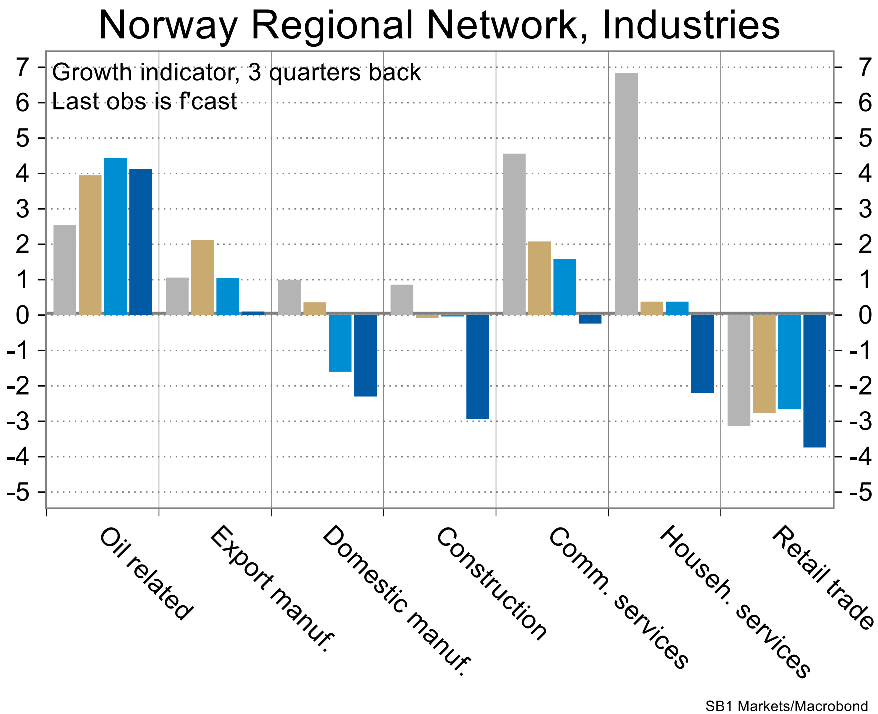
Retail trade, household services, construction and domestic oriented manufacturers all expect a substantial setback

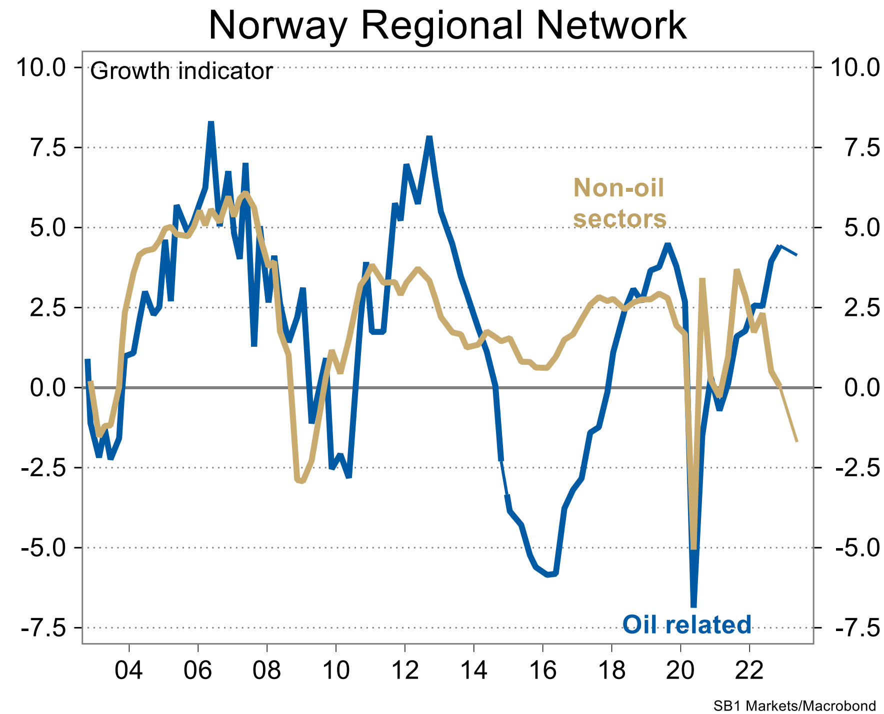




- Oil related industries report stronger growth, not surprising of course: The gas crisis and the tax regime are, needless to say, the reason the oil and gas industry – and its related Mainland related industries that are included in this survey (and not the oil companies) – are doing well
- We expected export industries to come back to earth, but the other sectors were weaker than we assumed

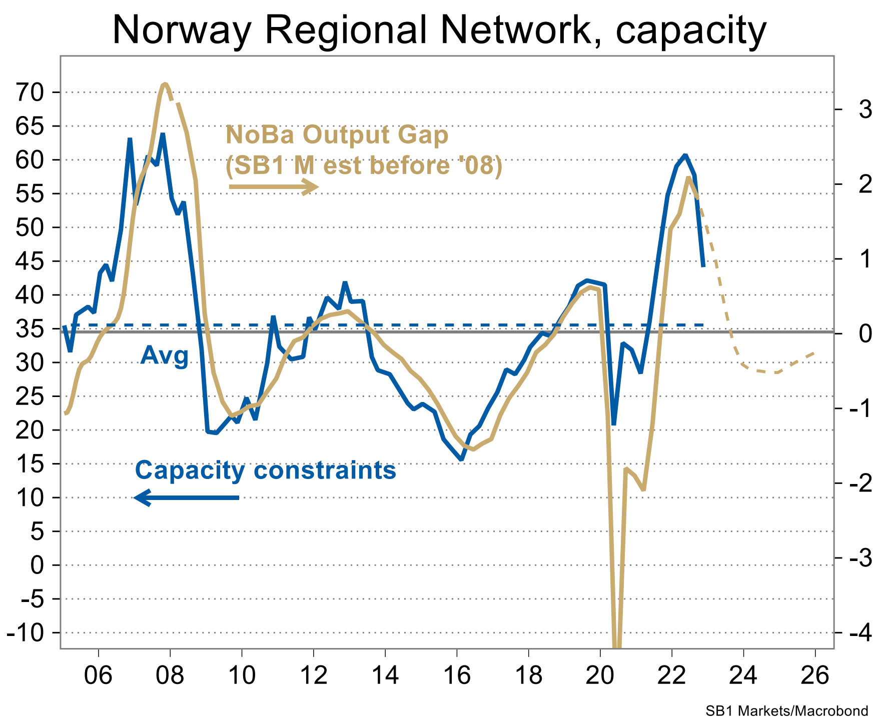
Not that many bright points, sector wise

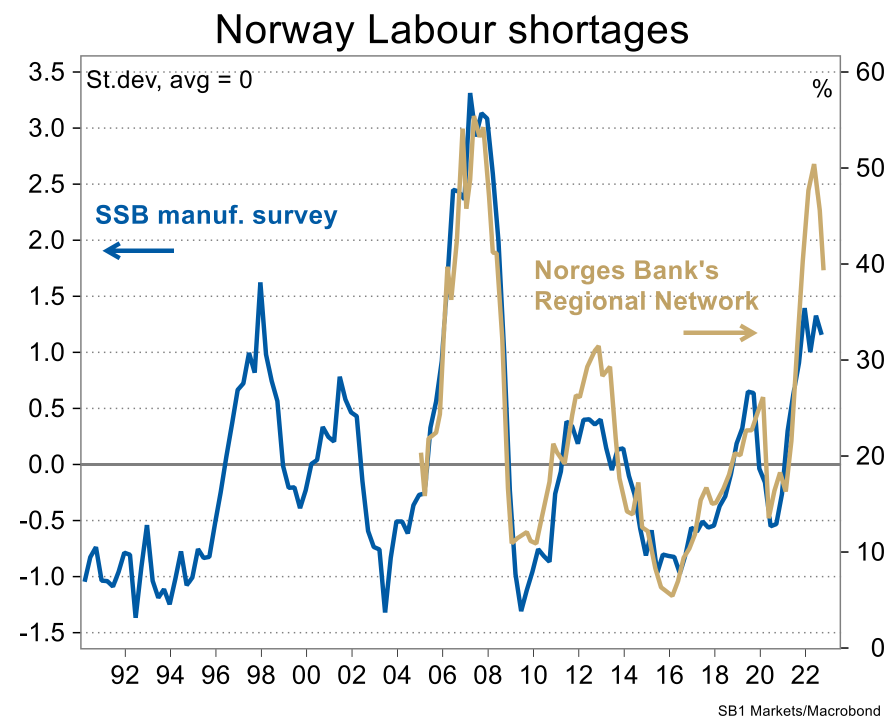




Capacity constraints & labour shortages are coming down…

… but both are well above normal levels – especially labour shortages

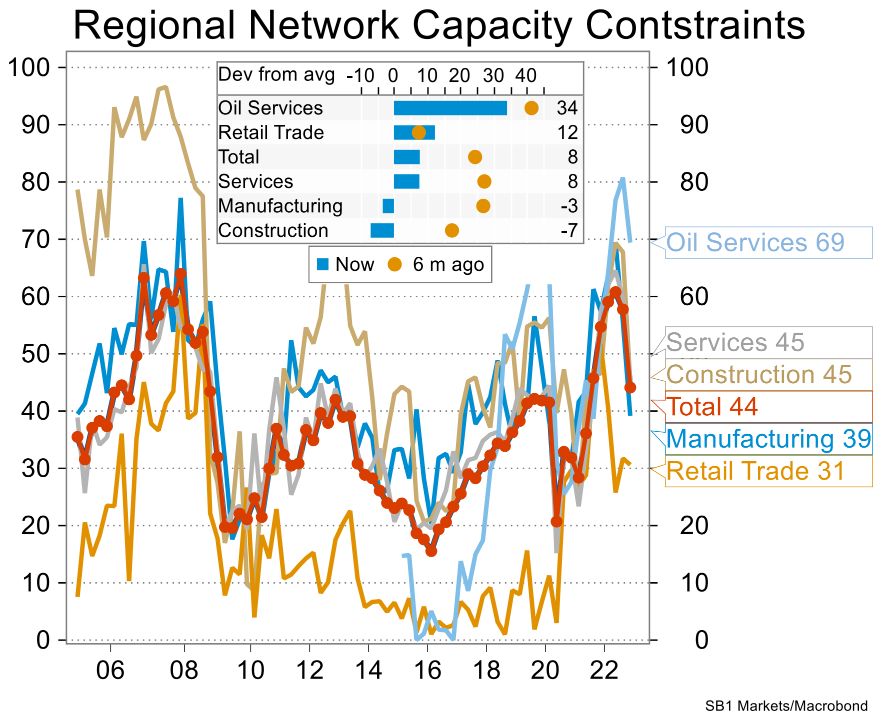


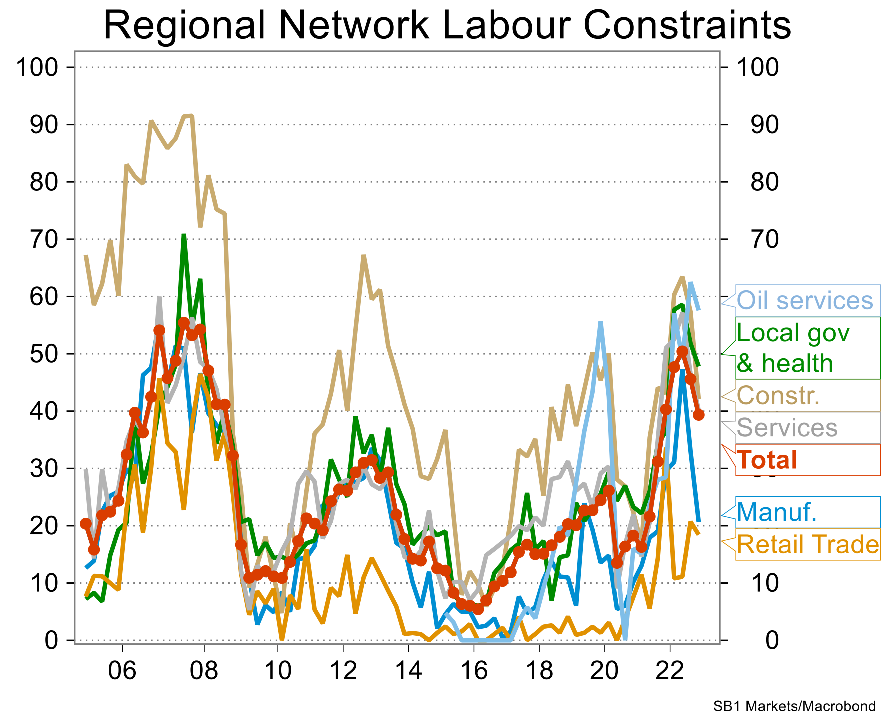


- Fewer companies are reporting **capacity constraints** following the steepest surge ever, but the level is still far above avg. as 45% of companies report that they are operating at full capacity (the average level is 35%). The correlation to NoBa's assessment of the **output gap** is not 1:1 and the Network report does not suggest than the Bank's estimate will be revised in the upcoming MPR
- **Labour supply** shortages also fell further in Q4, but the level still far above normal, and broad based. Still, should growth expectations turn out be fulfilled, the labour market should weaken... eventually
- **Wage expectations** are drifting slowly upwards, check two pages forward – but is just marginally above 4% for 2023, well below NoBa's 4.6% forecast

Fewer companies troubled by capacity constraints but most sectors > avg.

Even retail trade still reports more capacity constraints than normal!

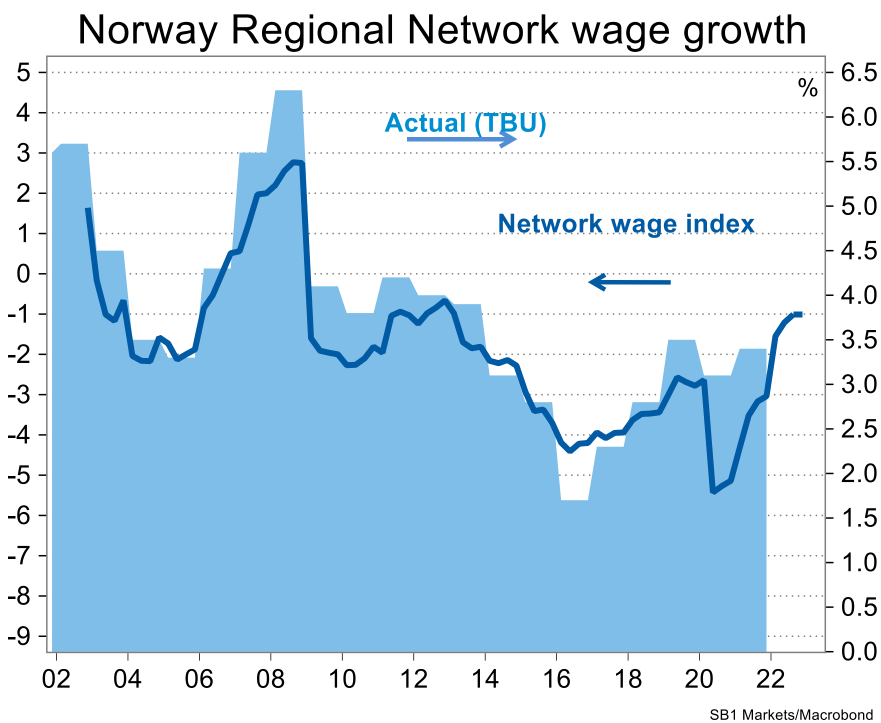


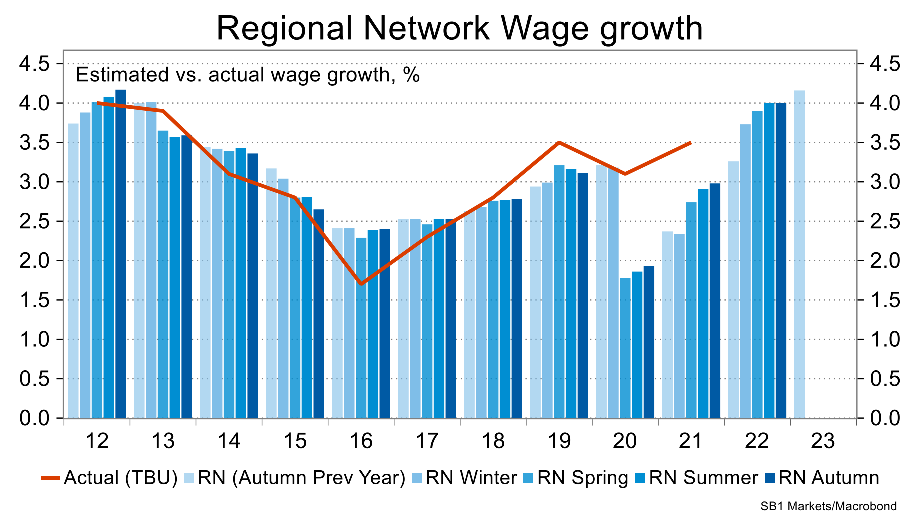


- Most sectors are reporting a decrease in labour shortages
- Lack of raw materials is still a challenge, while other capacity problems have eased somewhat

The Network still assumes 4% wage growth in 2022, and 'just' 4.1% in 2023!

Wage expectations have been trending up, but not further in Q4. The first 2023 forecast is well below most forecasts

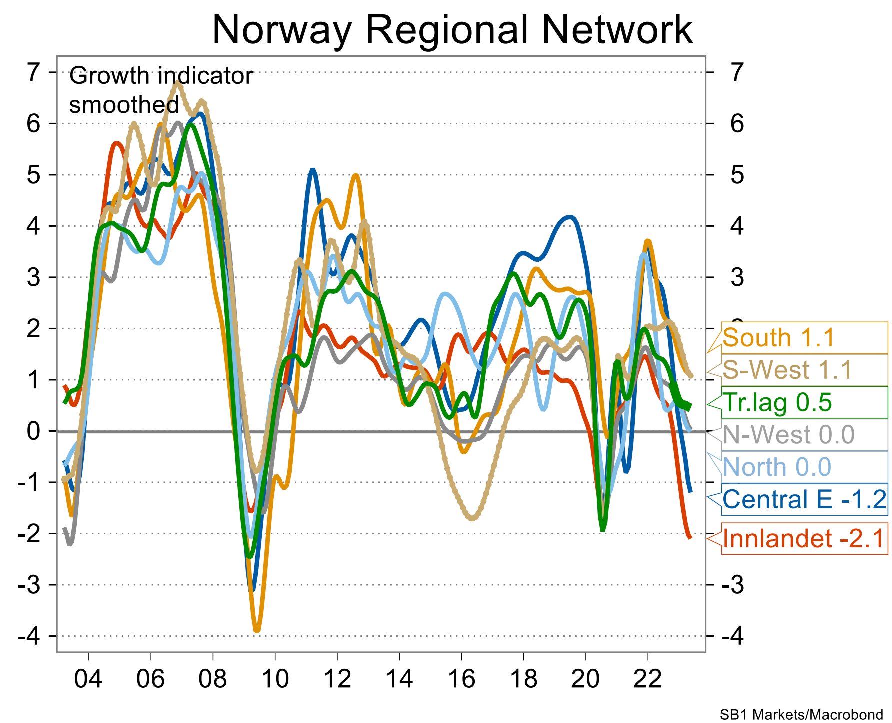


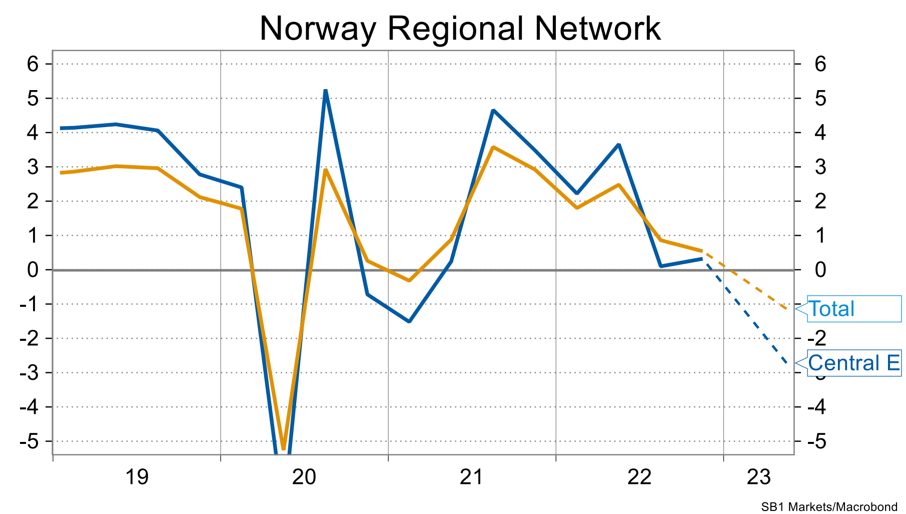


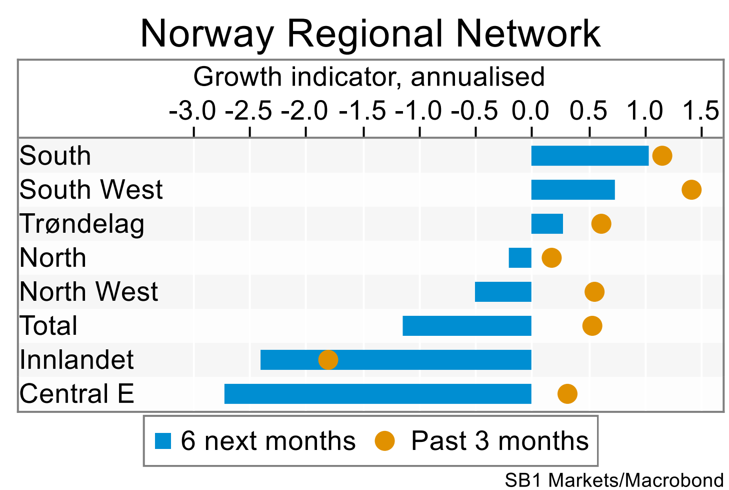
- **Wage growth in 2022** is expected at 4%, in line with the Q3 forecast and up from 3.5% in 2021 – and in line with Norges Banks September forecast. SSB's wage measures indicate a wage growth somewhat below 4%
- **Wage inflation** has so far been kept better in check than we feared
- The 4.1% 2023 forecast is interesting, as it signals that companies do not expect (and probably can not afford) wage increases anything close to what many expect (economists in trade unions expect 4.9%)

Regions: All report slower growth and lower expectations

Central East at the bottom, together with Innlandet. South/South West still in the lead but down. North down into neg.



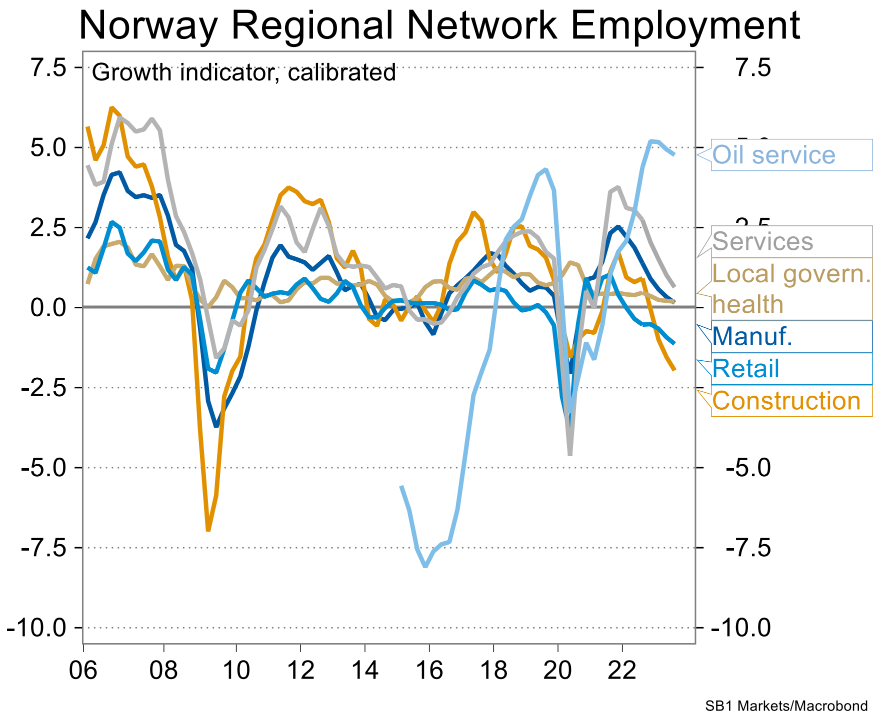


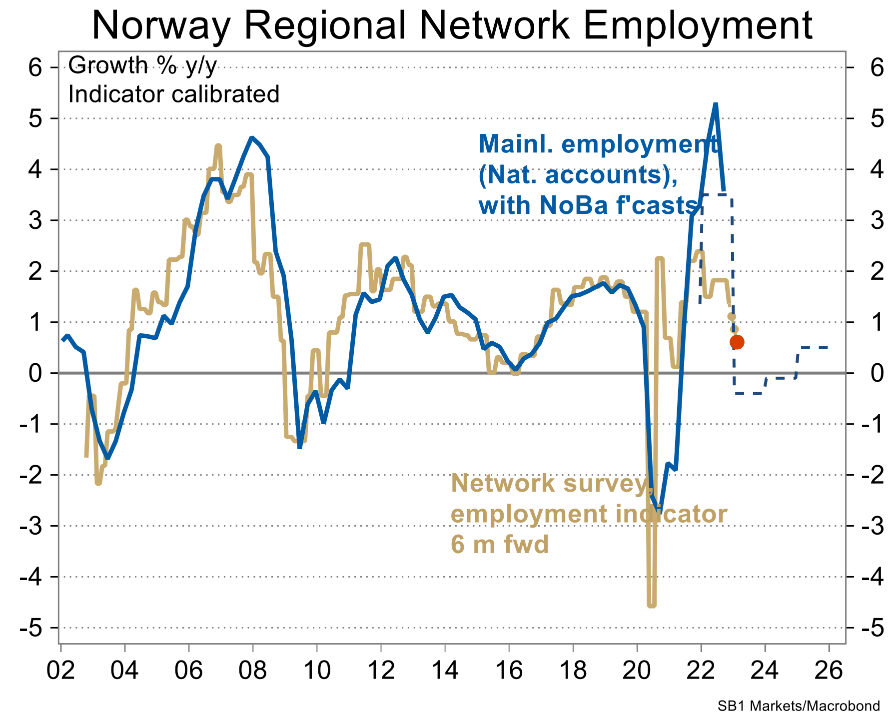


- **Respondents in Central East** expect a 2.7% pace of decline
- **Oil related industries** in South & South West support these regions but both slowed down substantially from Q3
- The Northern region fell down to earth in Q4, and expect no growth the coming 6 months

The network expects lower, but still 0.5%, employment growth

Construction, retail trade on the downside. Norges Bank expects a decline in employment next year, by 0.4%

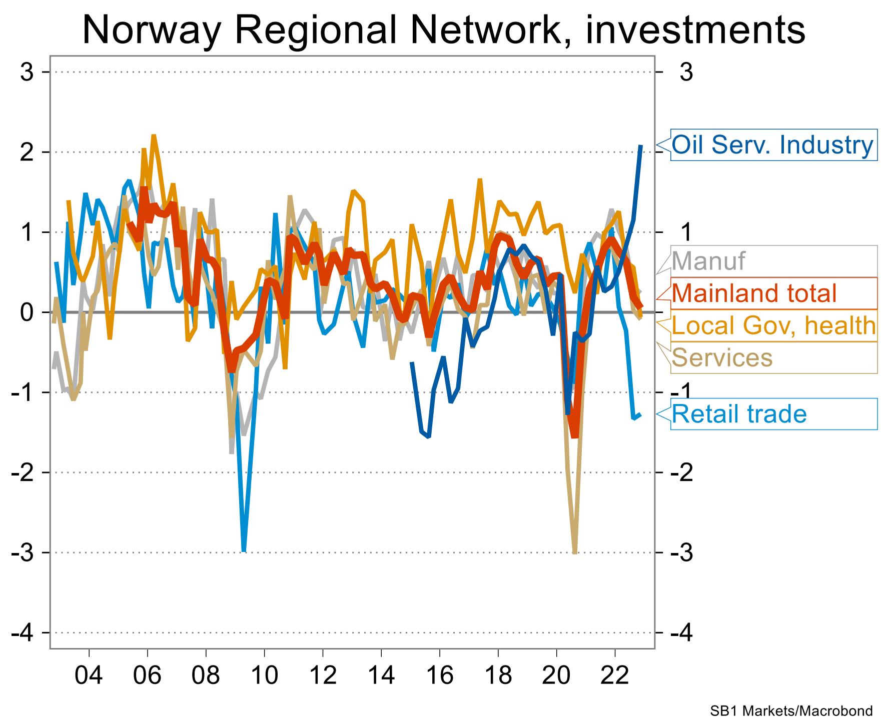


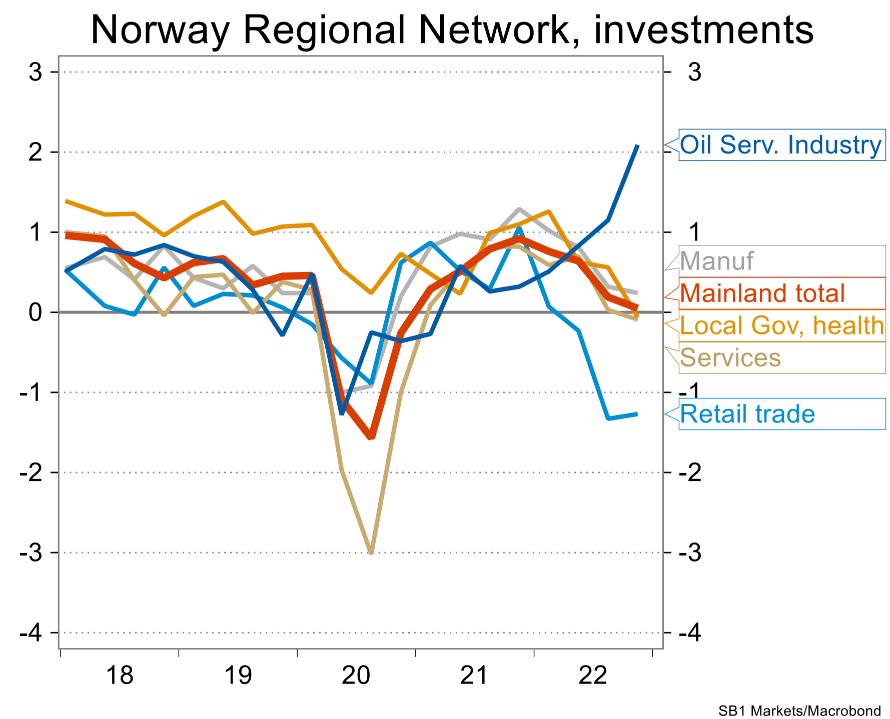


- Oil services are in the lead
- The NoBa forecast on the chart to the right represents the bank's annual averages

The Network revised investments just marginally down

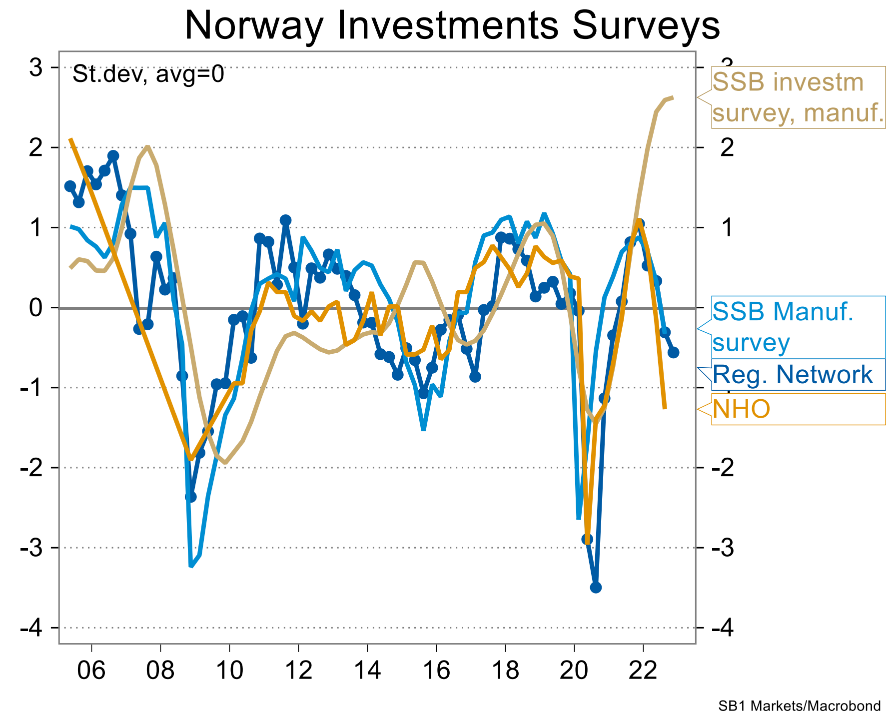
Retail trade will take a break, others not – even if growth ambitions are rather muted now

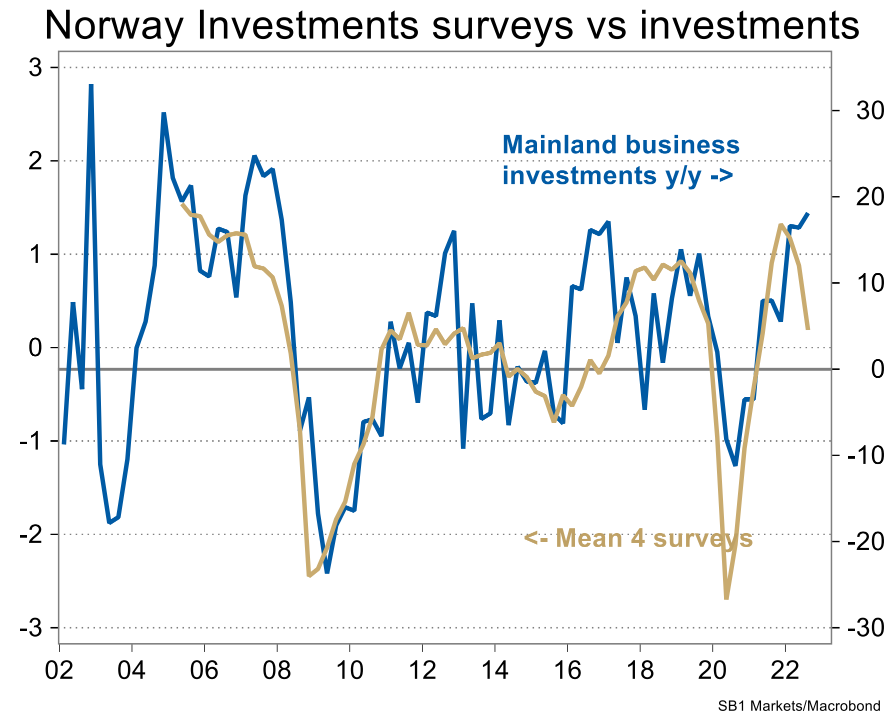




Other (and less updated) investment surveys mixed, in sum on the weak side

In sum, these surveys signal some growth in Mainland business investments, we expect a decline

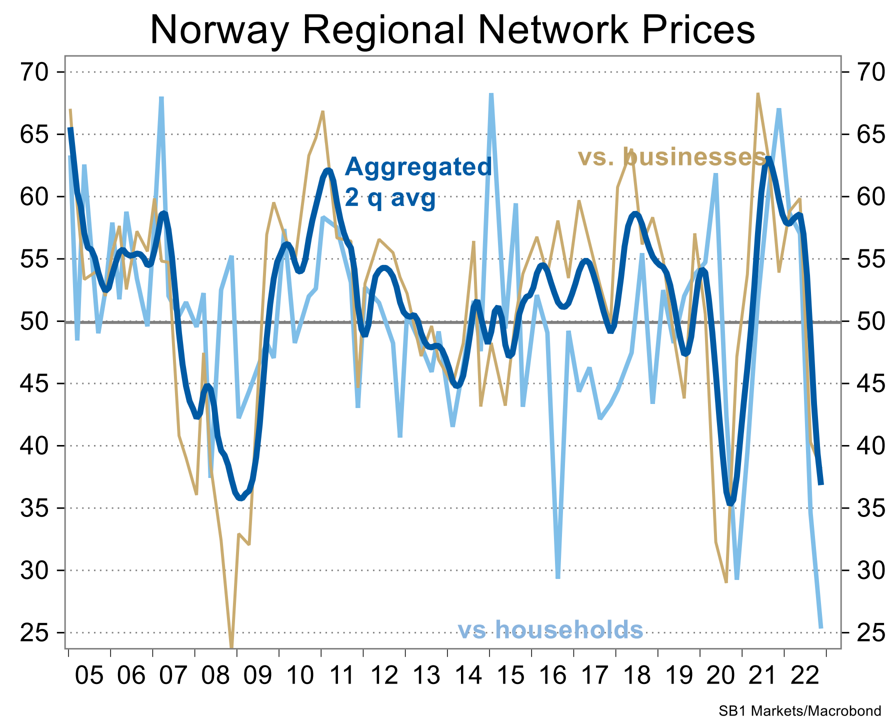


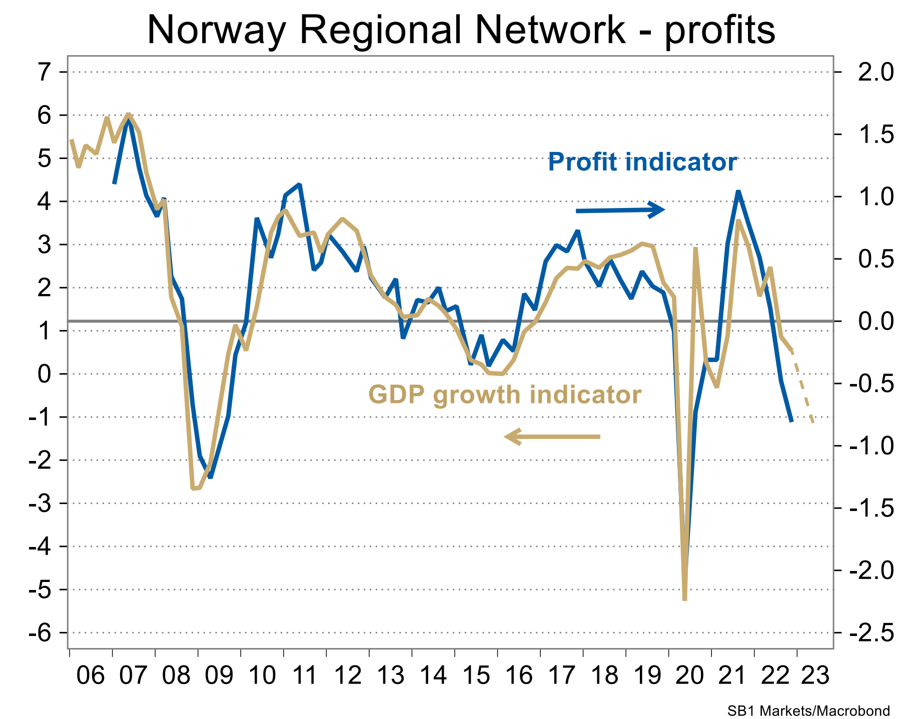


- SSB's manufacturing investment survey is still very upbeat, and normally worth listening to

The Network: Yes, inflation was transitory – good news for Norges Bank

Pricing power is evaporating, we guess. And as growth turns negative: A crystal clear profit warning

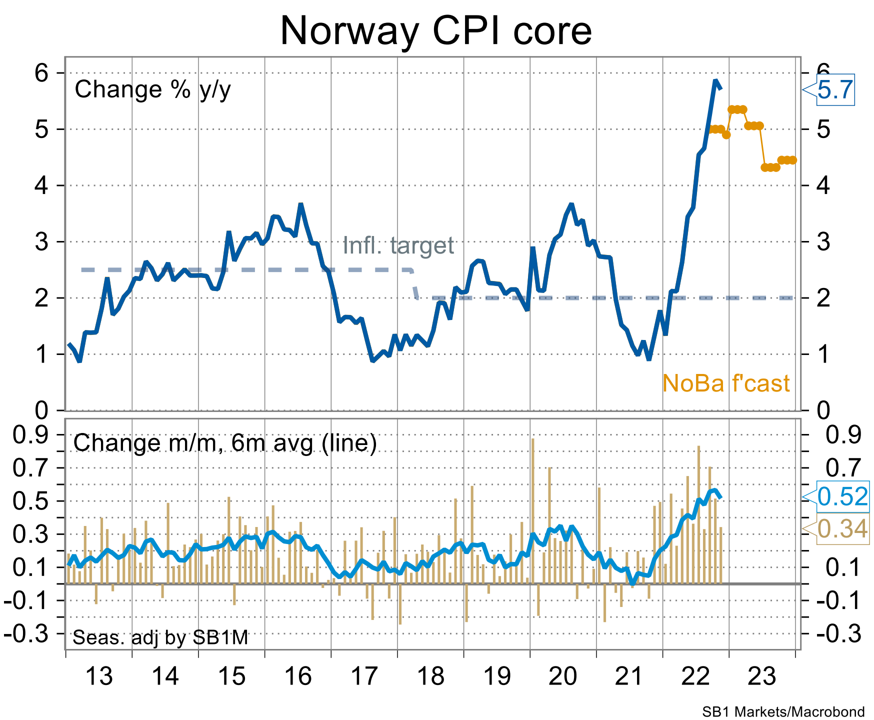




- However, the correlation vs. actual CPI (headline or core) not close to non-existing… Still, probably a positive signal vs. the inflation outlook, that the price index (vs households) in the Network is at the lowest level ever
- Respondents expect profits to decline sharply the coming months, in tandem with lower growth (and now a decline in activity), as usual

Inflation lower and below consensus in Nov, still far above NoBa's f'cast

The 'real' core inflation down to 4.5%, 52% of CPI components up >5%. Challenging times for NoBa

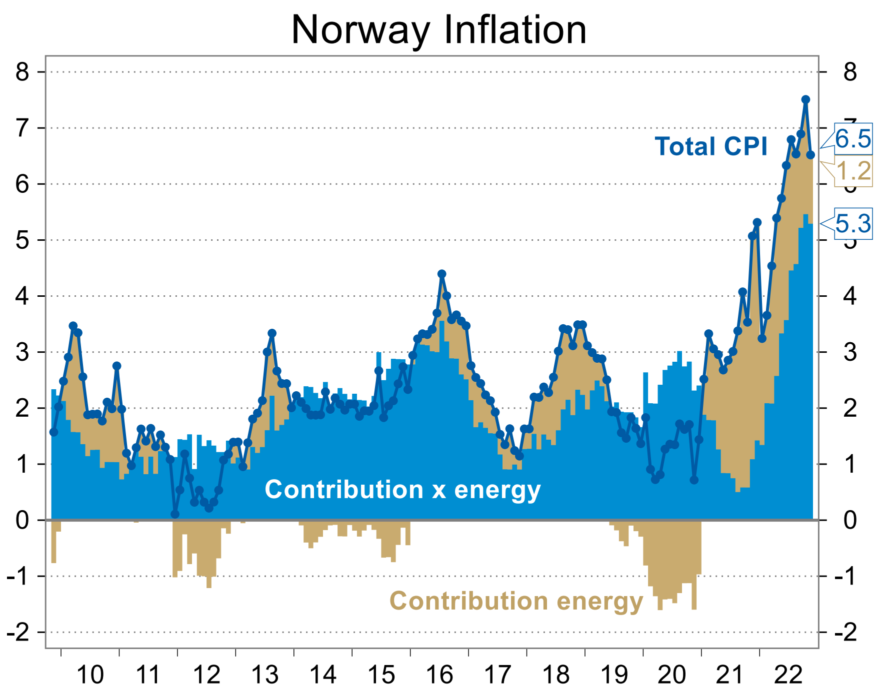


- **CPI-ATE** (ex. energy and taxes) rose 0.3% m/m (s.a) in November, and the annual rate fell 0.2 pp to 5.7% pp, we expected 5.8%, consensus was 6.0%, NoBa expected 5.0% in the Sept MPR!
- **Food prices** rose by 0.1 in Nov, we expected +0.3%. The annual rate is now at 12.6%. The annual rate will remain lofty the coming quarters. However, at one stage, prices will be cut, or at least flatten as the price pressure in the value change will reverse or abate
  - **Airline ticket prices** rose again, but most sectors reported slower growth than we expected
  - Prices on **imported goods** climbed 0.1% m/m, and are up 6.0% y/y; **domestically produced** goods & services were up 0.5% m/m and are up 5.7% y/y
  - **12 sectors** reported growth above 2% y/y, and just 1 is below. All trimmed/median measures tell the same story: Inflation has broadened, typically to 5% – 6%
- **Total inflation was down by 1 pp**, to 6.5% (last month's print was the highest since 1987). We expected 6.7%, while consensus was 7.0%

- **The outlook**
  - The lift in **electricity prices** are behind us, not least due to the generous government subsidies
  - **Gasoline prices** are on the way down and will contribute to a decline in headline CPI
  - We still expect inflation to slow faster than Norges Bank and most others expect, as the economy slows, and raw material prices decline, including energy prices

Implications for Norges Bank and the policy rate

The bank will stick to its plan



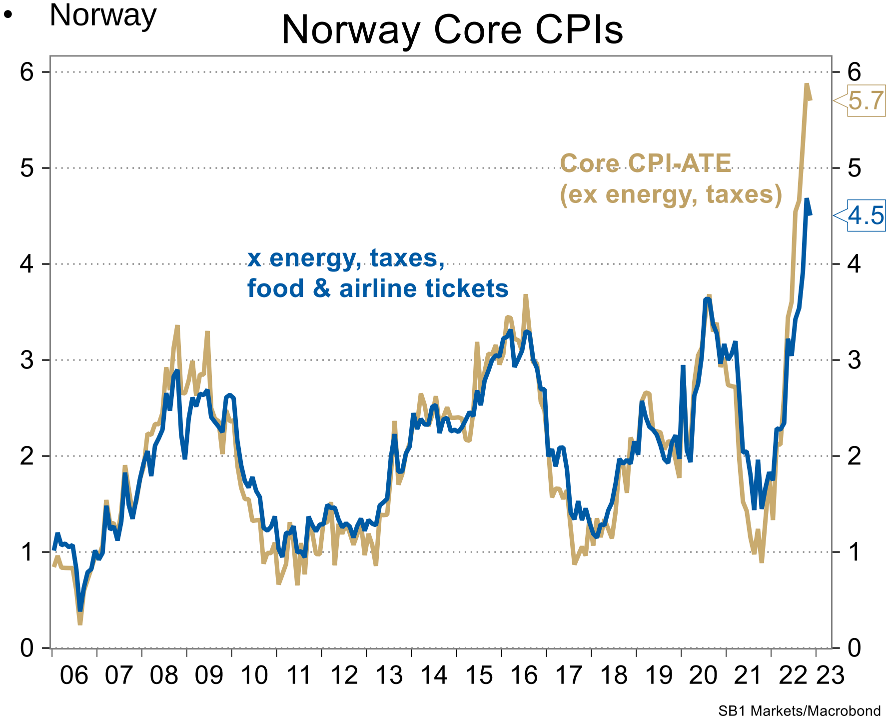
SB1 Markets/Macrobond

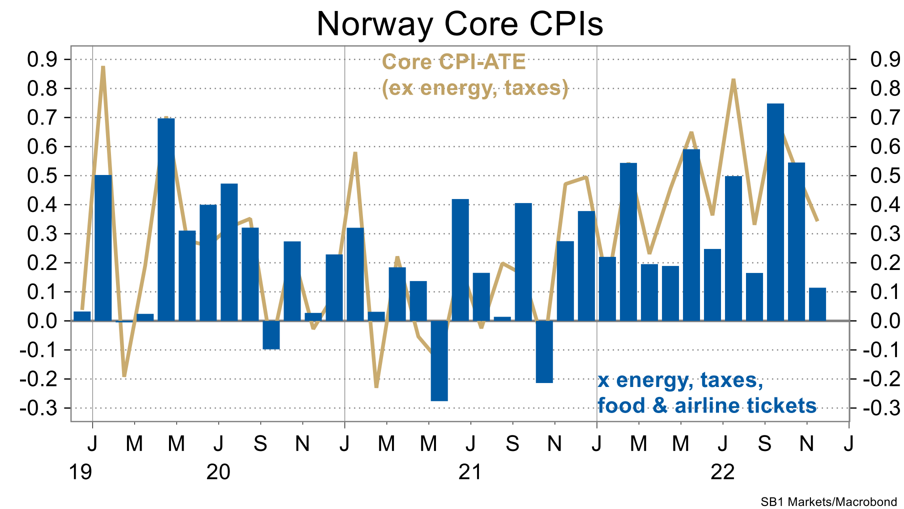
- **Inflation at 6.5%, core at 5.7%, so what?**
  - **Inflation** is 0.9 pp above NoBa's f'cast. Inflation on imported goods is high, it explains 2.1 pp of overall inflation of 6.5%. Take away energy and food as well, and even agricultural goods, domestic inflation is still way above 2.0%
  - For **Norges Bank**, as all other central banks, wage inflation is the dominant risk vs inflation over time. So far, wage inflation has not accelerated, as we expected it would. However, as inflation will be high into 2023, there still is a risk that wage inflation will accelerate following the wage negotiations the coming spring, even if the economy is slowing. We doubt Norges Bank will revise its 4.6% 2023 wage growth forecast upwards this week
  - The bank's inflation forecasts may be revised up, at least due to the higher starting point
  - In November, NoBa signalled another 25 bp hike in December. Even if inflation is far too high, we expect the bank to deliver just that – even given an inflation far above target, stronger-than-expected GDP growth, and low unemployment. Global growth expectations are now lower, the oil price has come down, and house prices (and credit growth) are falling. We believe the game plan from September still holds true: +25 bps hike and no change to the rate path

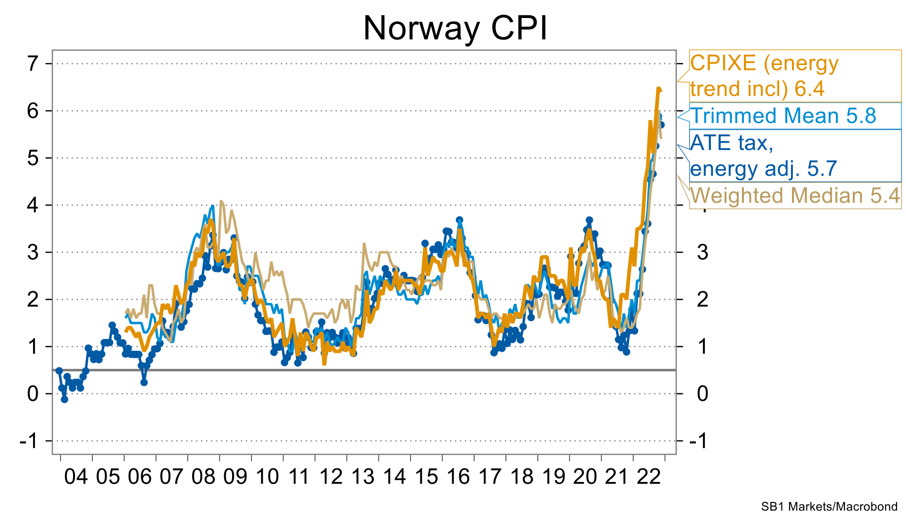
The 'real' core inflation is slowing too, but still high at 4.5% y/y

In addition, all measures of underlying inflation suggest a broadening, to a 5% – 6% level

- Norway



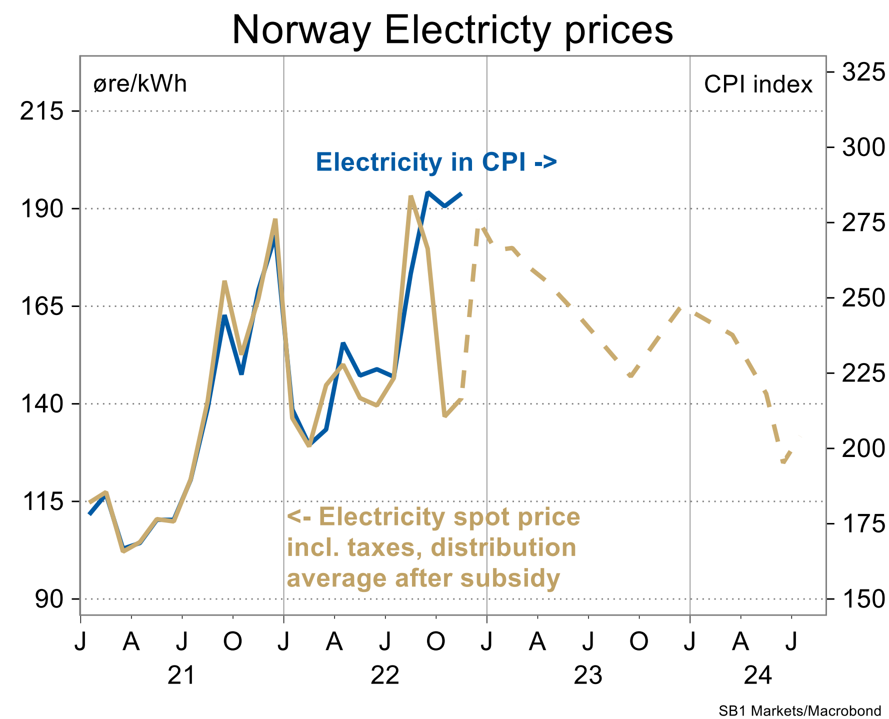


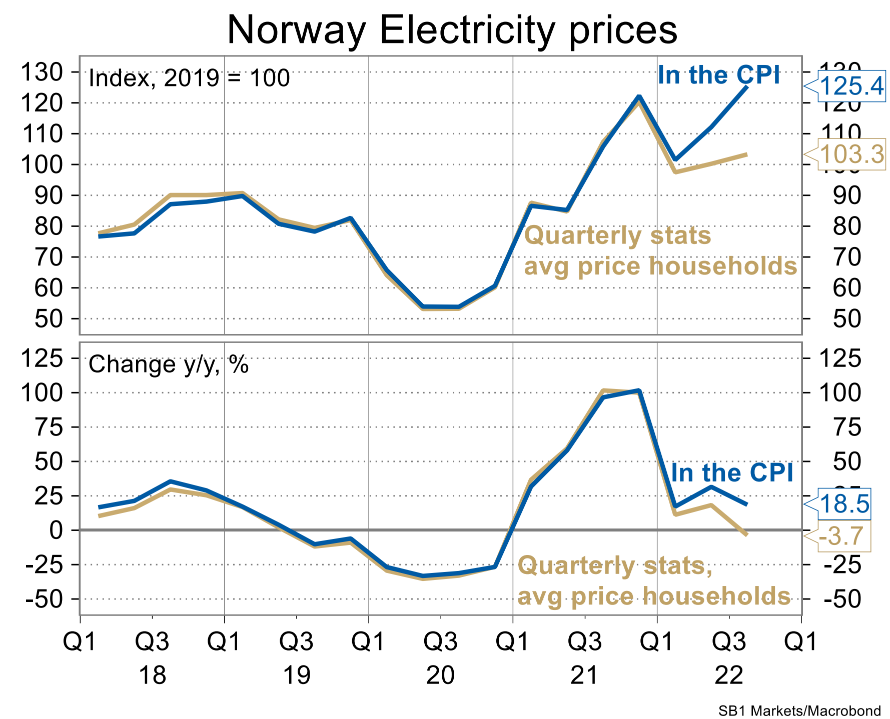


- 81% of sub-components of the CPI are up more than 2%
- 52% are up more than 5%

Electricity prices are still far higher than signalled by spot market prices

We are still puzzled, but CPI prices cannot impossible rise by much in December, even if spot prices are climbing rapidly

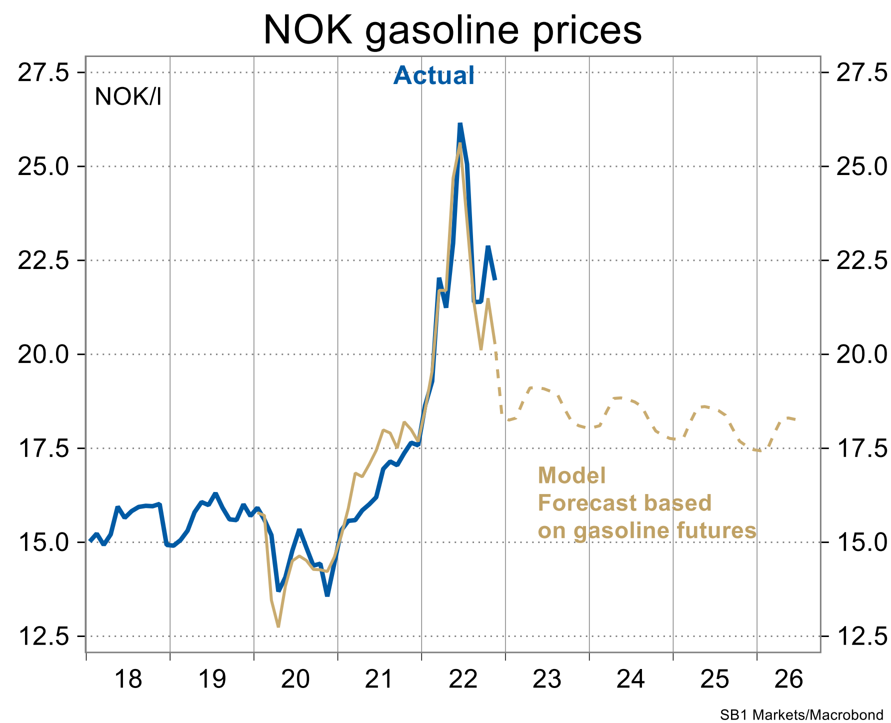


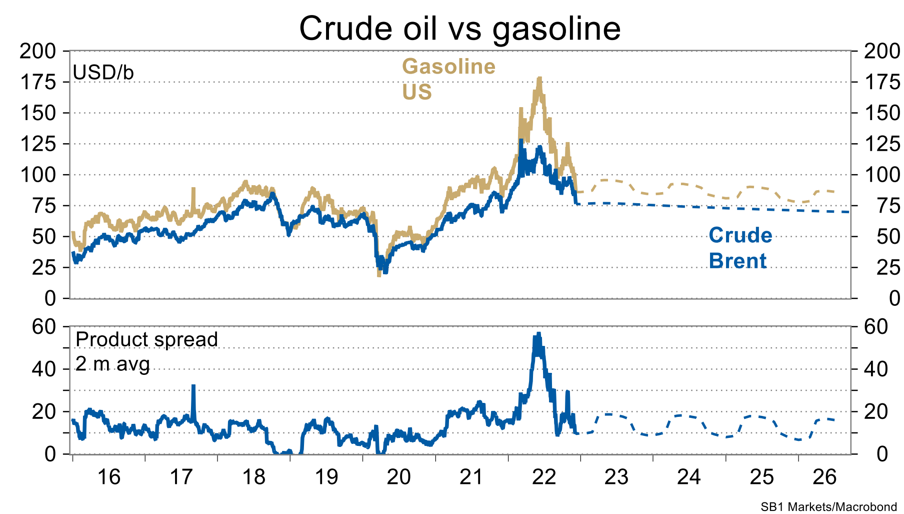


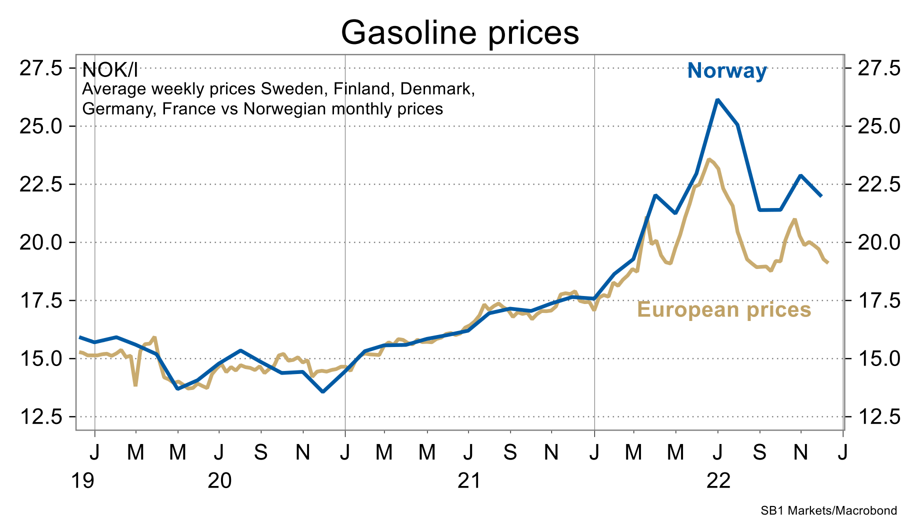
- We have for several months complained about or ability to predict monthly electricity prices in the CPI. Also in November, the CPI index was much higher than we assumed, based on a detailed model of regions, subsides & taxes, transfer fees, electricity holiday homes etc.
  - In November, the CPI index once more was much higher than spot market prices (plus all sorts of adjustments). 'Variable' (1 months fixed price) contracts may explain some of the gap, but it once more surprised us
- We have neither been able to calibrate the monthly CPI to the quarterly electricity statistics for Q2, and Q3, which are usually well in sync
  - Finansavisen today reports on this discrepancy. SSB has some explanations, but we are not convinced that these differences really can explain the more the 20% y/y price gap in Q3
  - However, our estimate of monthly consumer prices have been in line with SSBs CPI until the summer, and far smaller than the discrepancy vs quarterly stats
  - We expect a huge price gap also in Q4, check the chart to the left!
-

Gasoline prices came down in November

Further downside potential coming months as the oil price (and the USD) has fallen



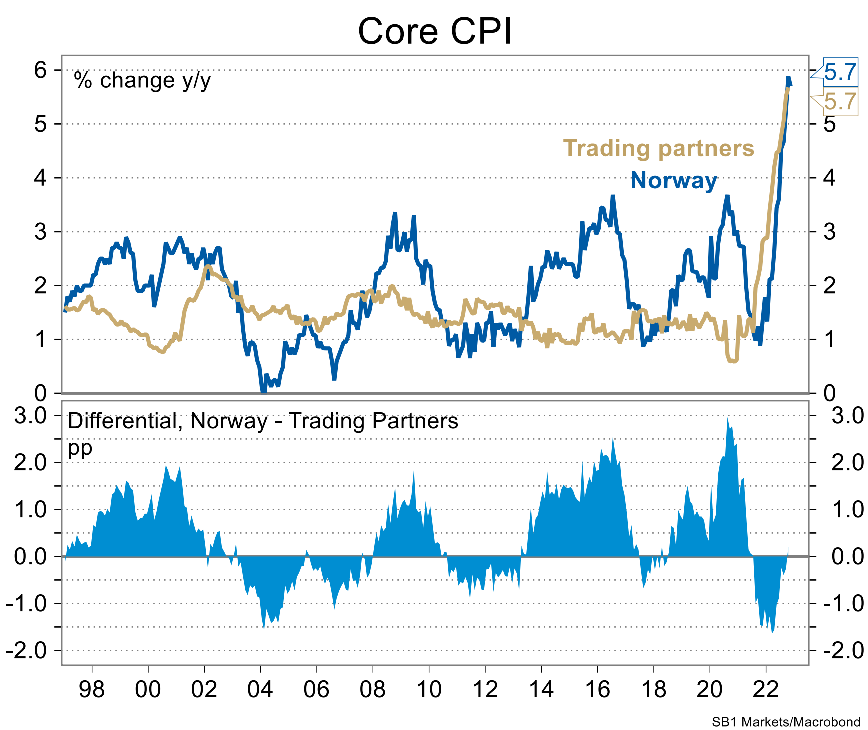


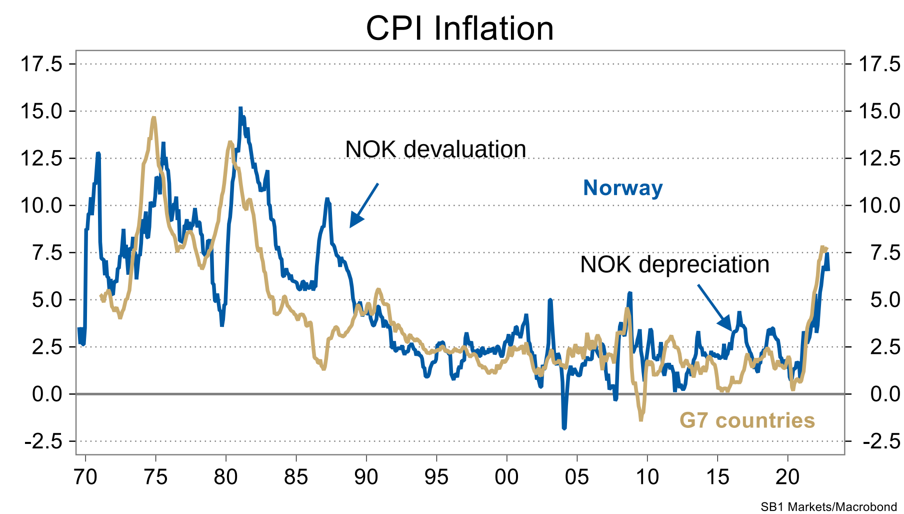


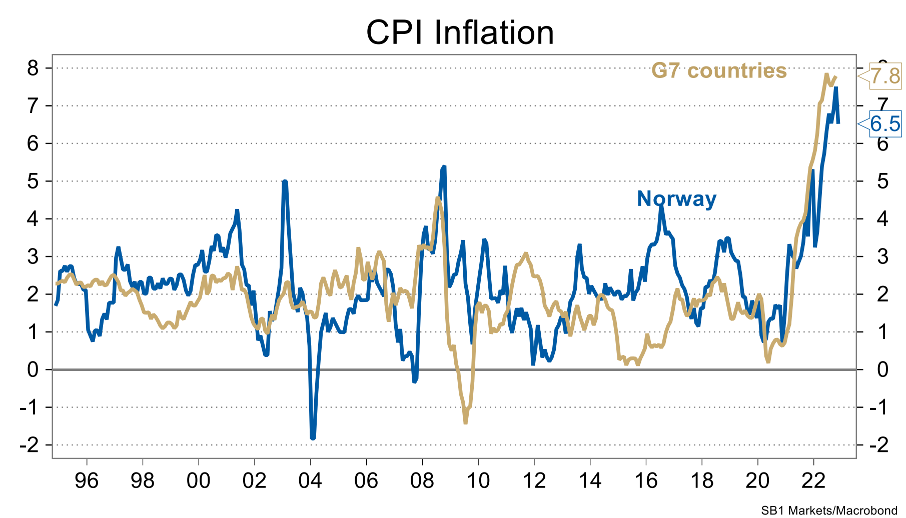
- Refinery/product margins widened in early 2022, but have fallen back to normal level. In the US as well as in Europe, gasoline prices fell until mid September, but turned up again until mid October. Now, prices are falling again

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 <u>close to uncorrelated</u> 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)

Pace of inflation is slowed in November

But electricity and airline ticket prices rose far more than we expected

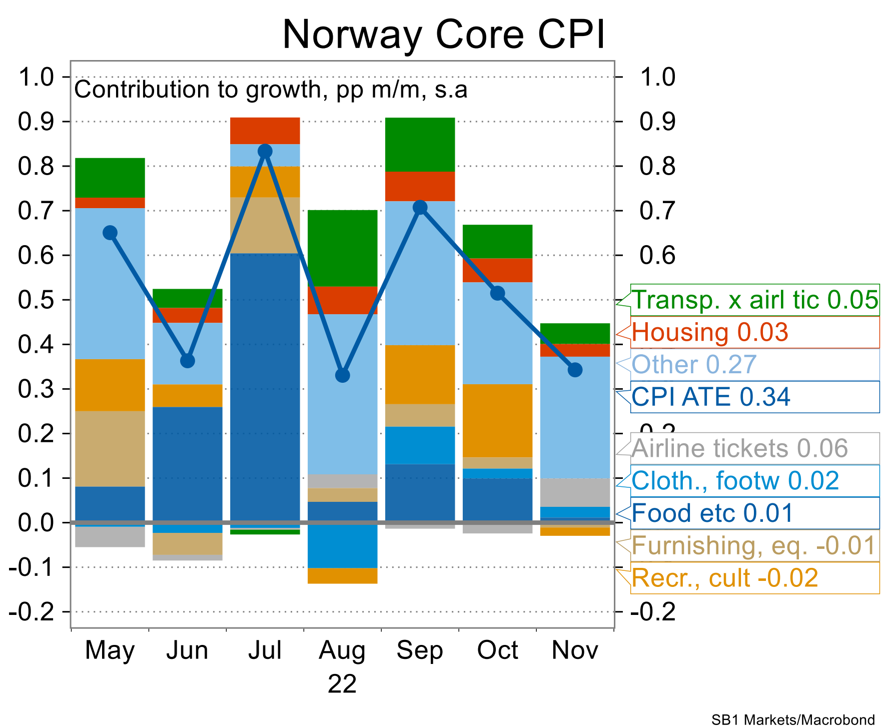
		Change m/m, seas. adj			Change y/y			Contribution, pp		
Nov-22 CPI ATE, seas adj.	Weight %	Out-come	SB1M f'cast	Dev. pp	Prev. month	Out-come	SB1M f'cast	m/m	y/y	Dev. vs f'cast
Food, non alc bev	12.9	0.1	0.3	-0.2	13.0	12.6	13.0	0.01	1.62	-0.03
Alcohol, tobacco	4.2	0.0	0.4	-0.4	7.8	7.3	7.7	0.00	0.31	-0.02
Clothing, footwear	5.1	0.4	0.2	0.3	1.6	2.1	1.5	0.02	0.11	0.01
Housing x. energy	20.2	0.1	0.3	-0.1	2.4	2.4	2.5	0.03	0.49	-0.02
Furnishing	6.9	-0.1	0.2	-0.3	8.2	7.6	8.3	-0.01	0.52	-0.02
Health	3.4	0.3	0.2	0.1	3.3	3.4	3.3	0.01	0.11	0.00
Transp. ex. gas, airl. tick	12.2	0.3	0.5	-0.2	5.8	5.5	5.8	0.04	0.68	-0.02
Airline tickets	0.8	7.5	0.2	7.3	17.2	20.3	6.1	0.06	0.16	0.06
Communication	2.4	-0.7	0.1	-0.8	2.5	1.8	2.7	-0.02	0.04	-0.02
Recreation, culture	10.8	-0.2	0.5	-0.7	6.0	5.5	6.2	-0.02	0.60	-0.07
Education	0.5	-	-	-	2.3	2.3	2.3		0.01	0.00
Restaurants, hotels	5.6	0.2	0.3	-0.1	8.1	6.8	7.1	0.01	0.38	-0.00
Other	8.7	0.9	0.2	0.7	1.9	2.7	2.0	0.08	0.24	0.06
CPI-ATE, s.a	93.7	**0.3**	**0.3**	0.0	**5.9**	**5.7**	**5.8**			0.04
Norges Bank est.			**0.4**		**5.0**		***5.0***			
Imported	36	0.1	0.2	-0.1	6.1	6.0	6.1	0.05	2.17	-0.03
Domestic	57	0.5	0.4	0.1	5.9	5.7	5.6	0.27	3.27	0.07
Energy, housing (x s.a)	4.4	1.3	-10.0	11.3	24.9	12.7	-0.1	0.06	0.56	0.50
Energy, transport (x s.a)	2.0	-4.0	-2.5	-1.5	35.1	26.8	28.8	-0.08	0.52	-0.03
CPI Total	100	**-0.1**	**-0.2**	0.1	**7.5**	**6.5**	**6.7**	-0.08	6.52	0.13
Norges Bank est.			**0.2**		**5.8**		***5.4***			

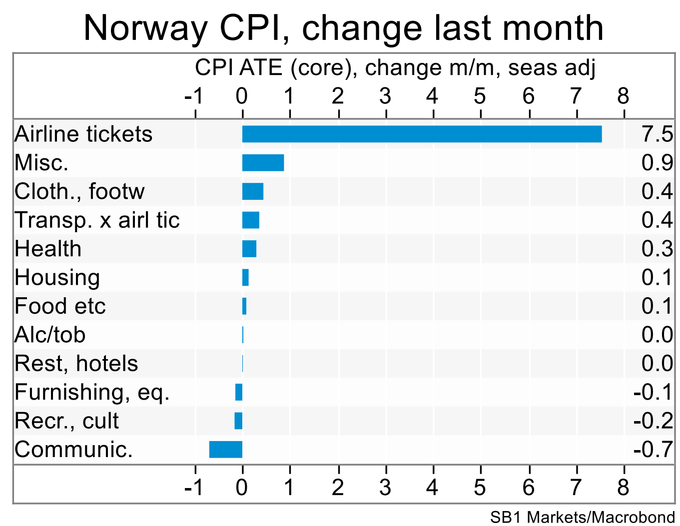
- **Food, non-alc bev.** prices rose 0.1% (ex taxes, seas. adj), we expected a 0.3% increase. The annual growth decreased 0.4 pp to 12.6%. The 'real' inflation is far lower
- **Clothing** prices rose 0.4% m/m. Clothing prices are up 2.1% y/y, 0.6 pp above our expectations
- **Furniture/hardware/equip.** prices fell 0.1% m/m and the annual rate fell by 0.6 pp to 7.6%
- **Transport ex. gas & airfare tickets** rose 0.3%, up 5.5% y/y, surprisingly low given global auto prices
- **Airline tickets** prices were up by 7.5% m/m and are up 20% y/y, from a low level last year
- **Recreation** prices were down 0.2%, and are up 6.5 y/y.
- **Restaurant/hotel prices** up 0.2% m/m, 6.8% y/y
- **CPI-ATE** up 0.3% m/m, 5.7% y/y, 0.1 pp below our forecast, 0.3 below the consensus f'cast, and 0.7 pp above NoBa's f'cast
- Prices on **imported goods** rose 0.1%, and are up 6.0% y/y – a substantial contribution to the total (2.2 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 5.7% is remarkably high
- **Electricity (and other heating)** prices rose 1.3%, we expected a HUGE decline!
- Gasoline/diesel prices fell 4% m/m, we expected -2.5%
- … **headline inflation rose to 6.5%, and 1.1 pp above Norges Bank's estimate**

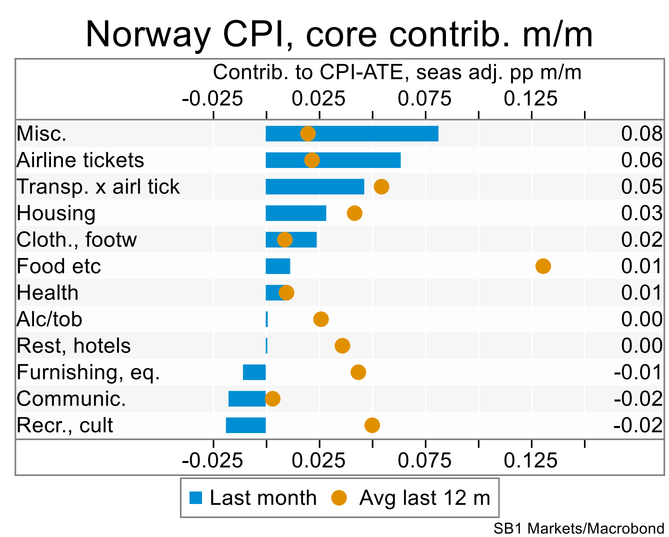
Monthly changes are seasonally adjusted by SB1 Markets. The weighted sum of the components does not necessarily sum exactly up to the total, and deviations m/m and y/y do not necessarily add up. Norges Bank m/m s.a. estimate is implied, calculated by us. Sources: SSB, Norges Bank, SB1 Markets calculations

Airline tickets, personal care, and insurance contributed most on the upside

Recreation/culture, communication, and furnishings contributed on the downside

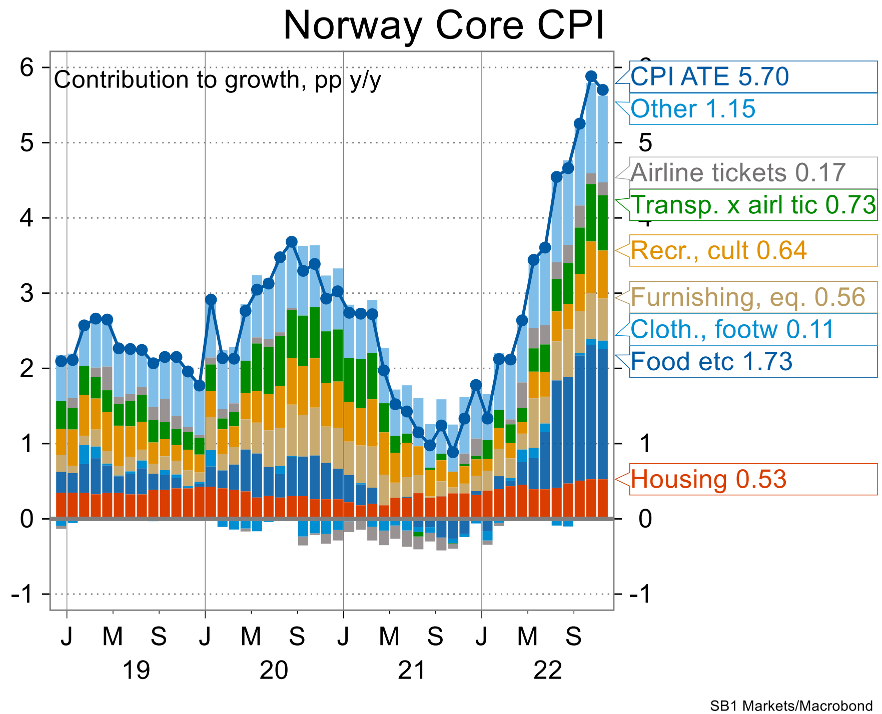


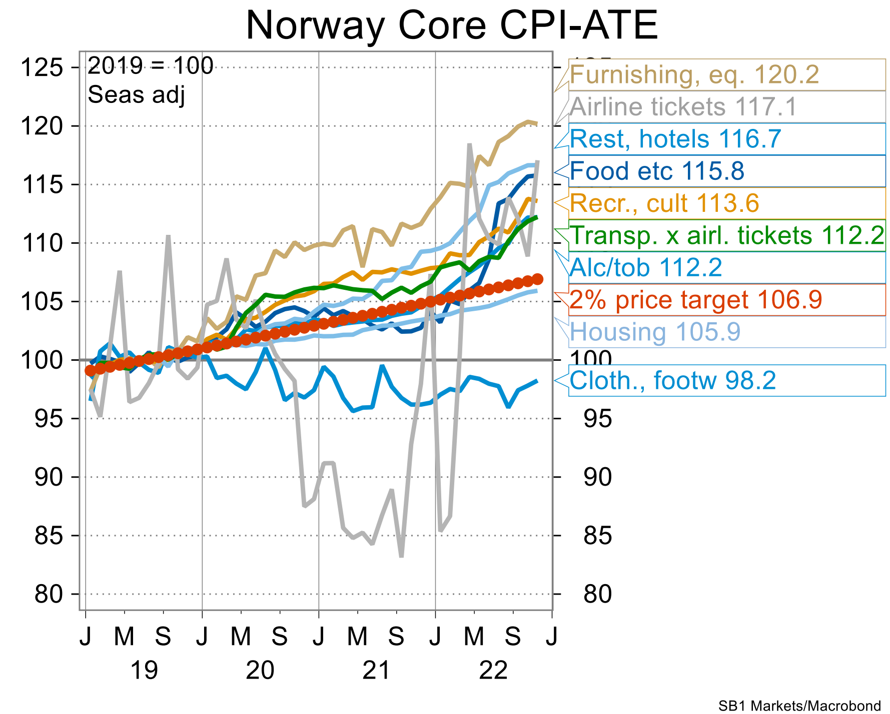




Slower pace of price growth across many sectors in November

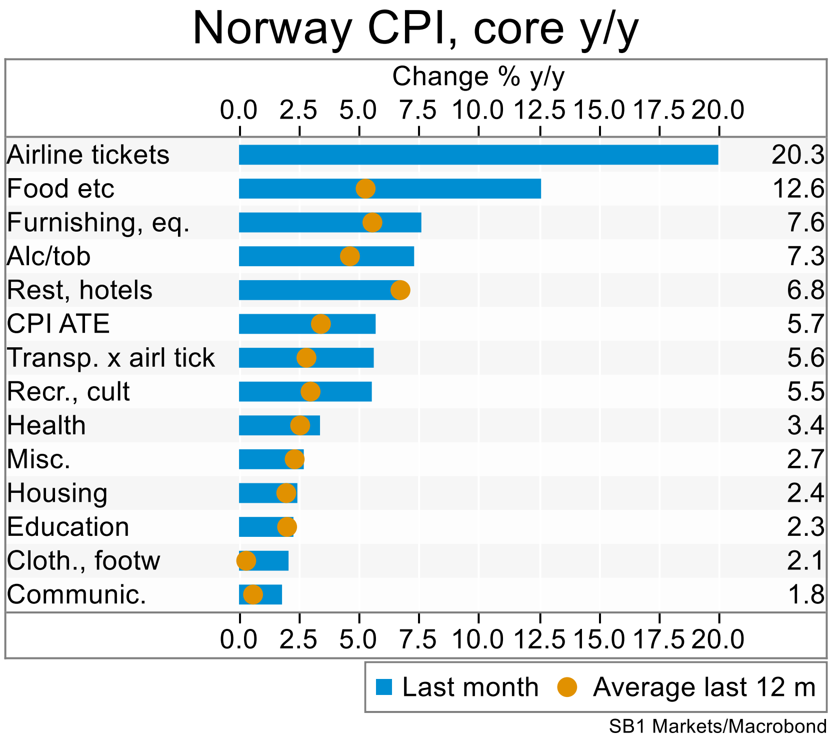
…but just clothing/footwear, and housing ex energy below the 2% path since 2019

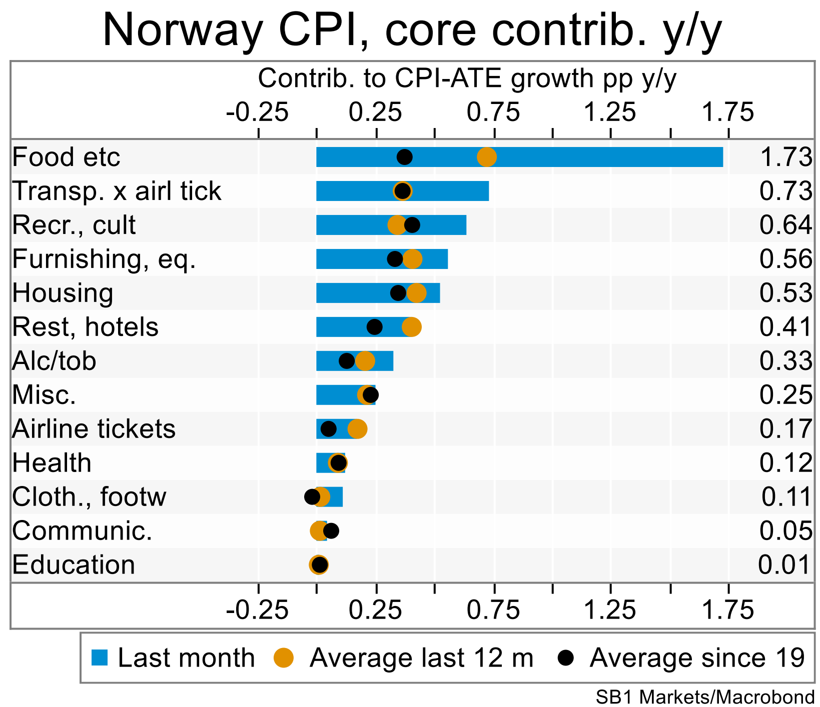




12 sectors report core inflation above 2.0%, just 1 is below

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

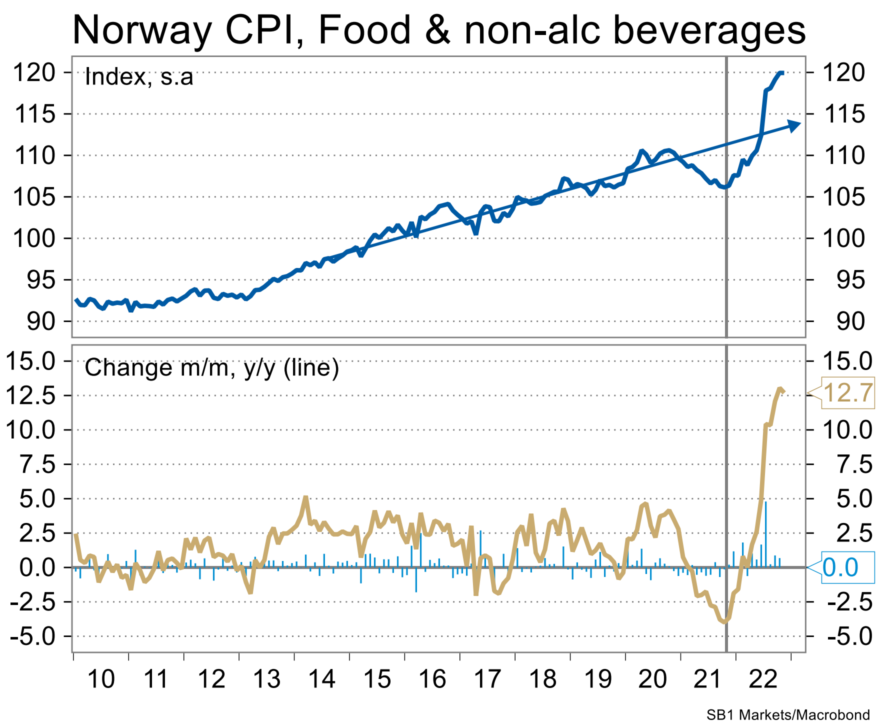


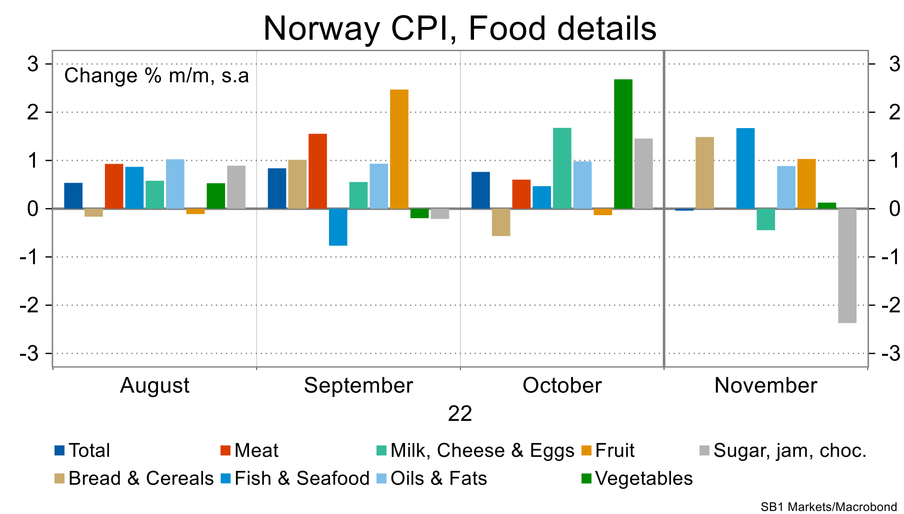


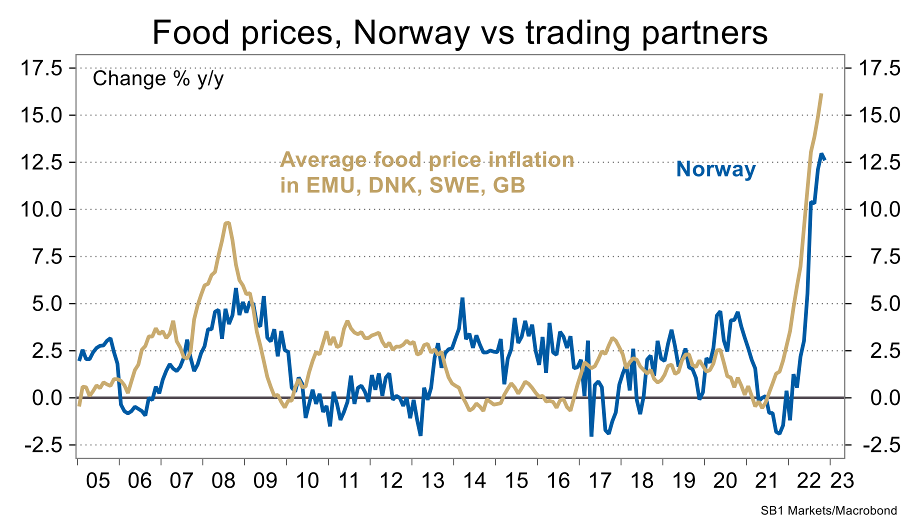
- 81% of sub-components of the CPI are up more than 2%
- **52% are up more than 5%**

Food prices are up 12.7% y/y (but from a low starting point)

The ‘real’ food inflation, from a ‘normal’ price level last year would have been ‘just’ 7.6%



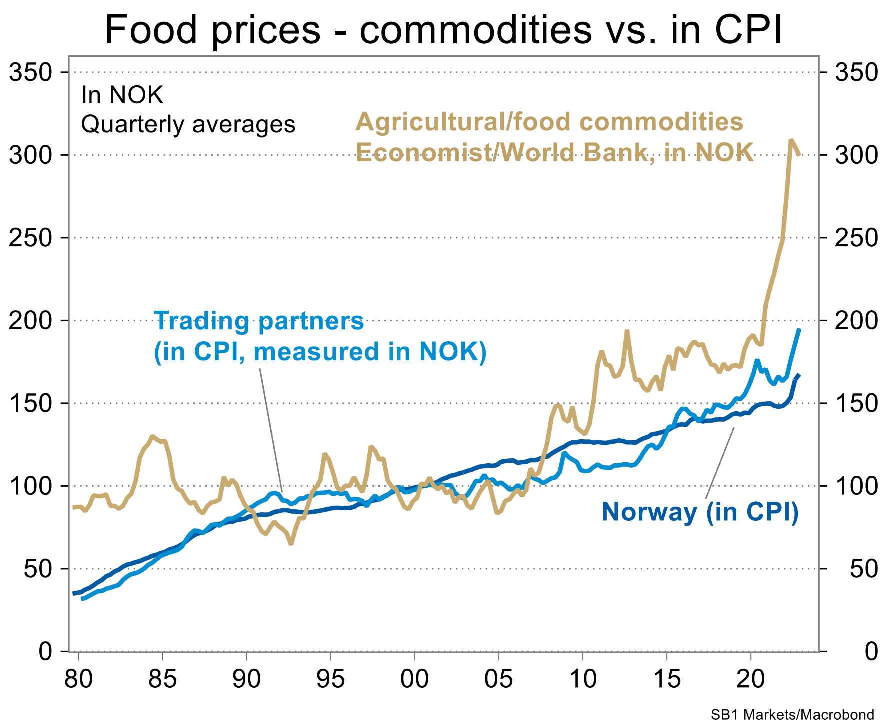


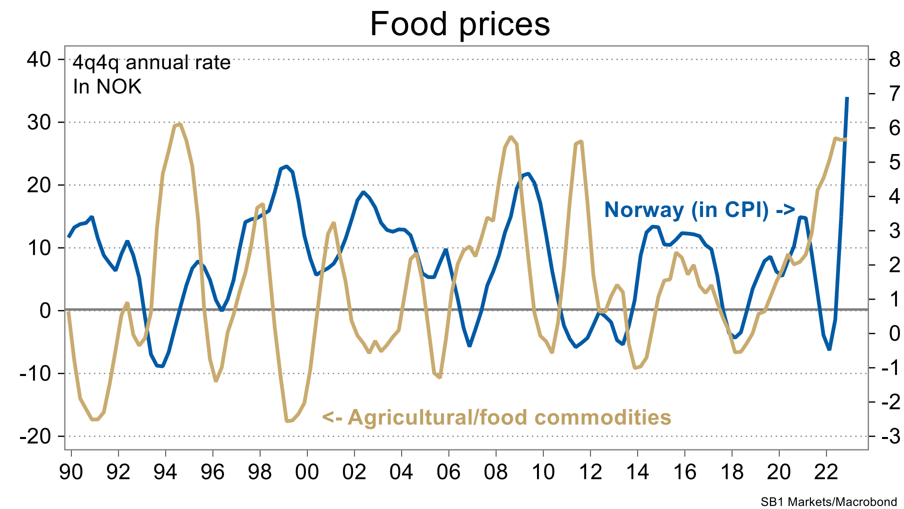


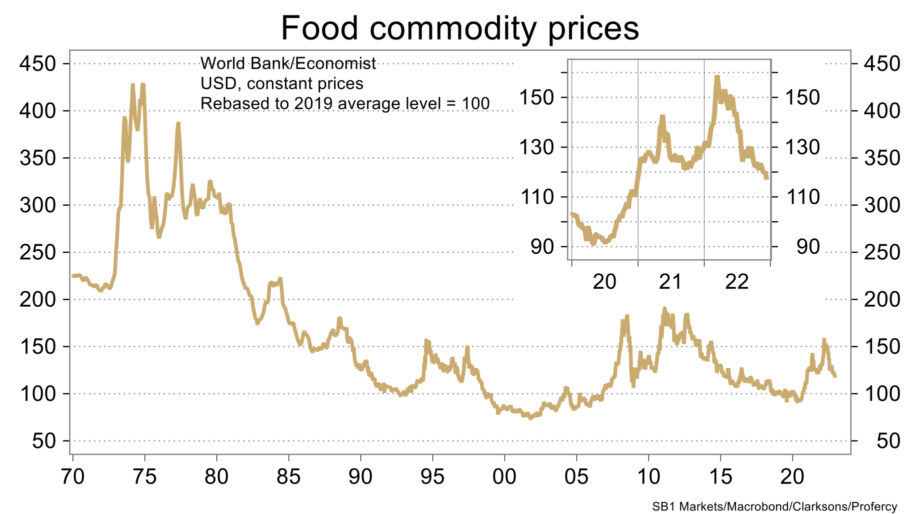
- Prices were close to flat m/m, and up 12.7% y/y. Fish and seafood prices increased by 1.7% in Nov, while milk and sugar (including honey, we assume) prices fell after a sharp rise last month. Bread/cereal prices fell
- Norwegian food price inflation are now up in line with inflation abroad – which is not the norm at all in the highly regulated Norwegian agricultural/food market. The good news now: Food prices (commodities) are trending down globally (at least measured in the strong USD)
- The coming months, the annual rate will come down – if prices do not shoot up from here

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

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





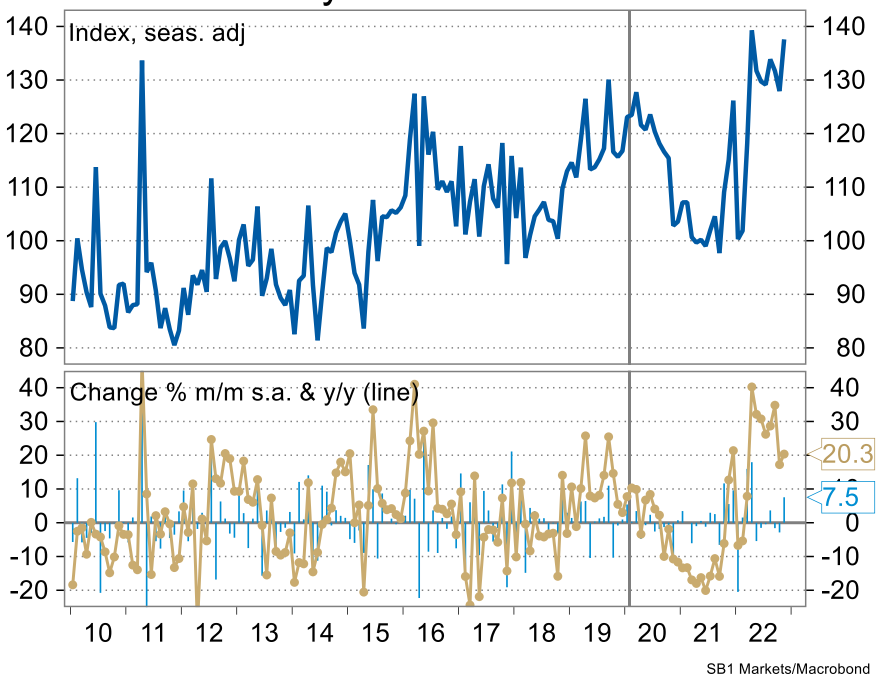


- Agricultural/food commodity prices are sharply up from mid 2020 but have fallen sharply since March in USD terms. In real USD terms, prices are below the past 10 y average. However, measured in NOK, prices are not that low…

Airfare ticket prices were sharply up in November

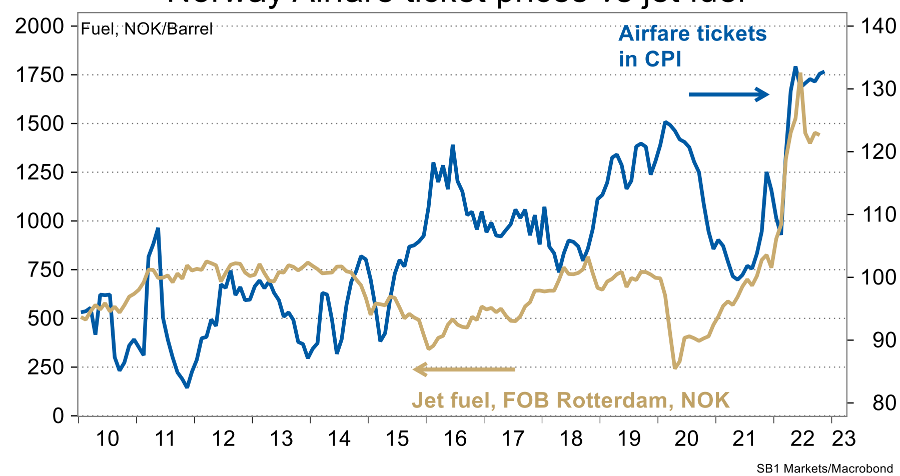
Prices are clearly above a long term trend (2 ¼ % per year) - and should be, given the fuel cost

Norway CPI Airline tickets



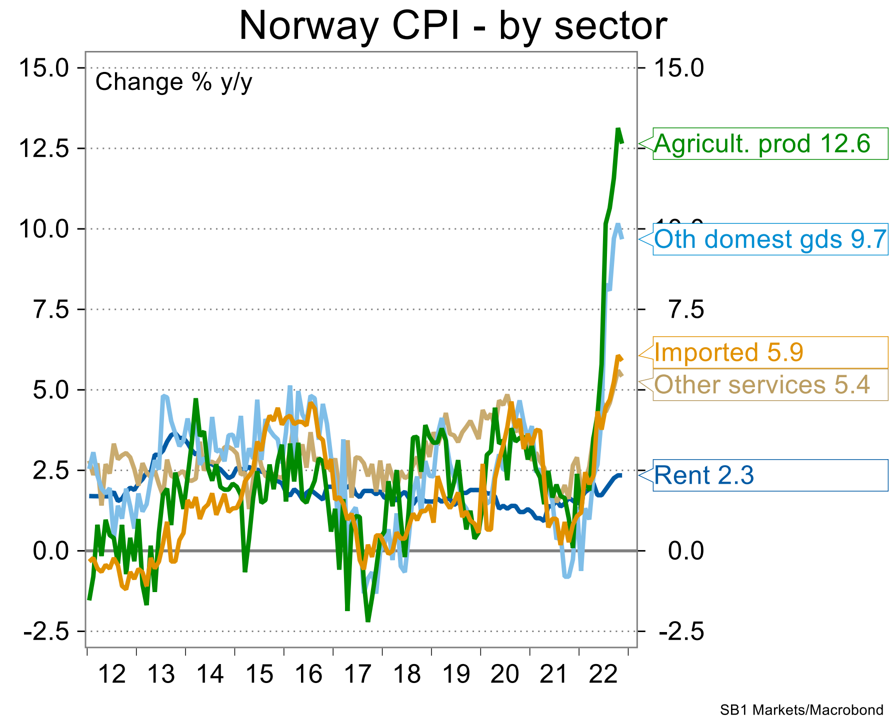
- **Airfare ticket prices** were up 7.5 m/m in November. Prices are up 20% y/y, contributing 0.17 pp to the annual core rate
- **Prices** are less than 10% above the pre-corona trend path – which could at least partly be explained by the increase in the fuel cost
- However, there is no historical correlation between ticket prices and the **fuel cost**, check the chart below (and fuel prices have fallen 18% since June, but may now turn up again)

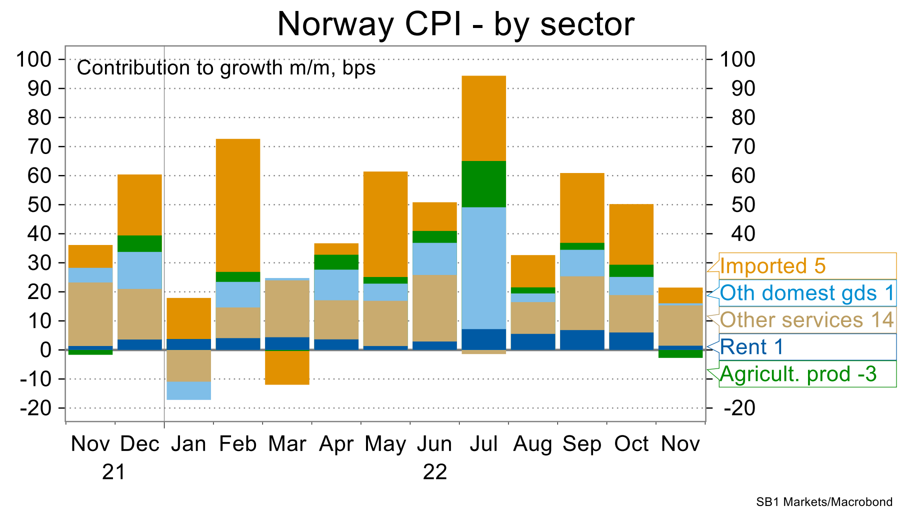
Norway Airfare ticket prices vs jet fuel

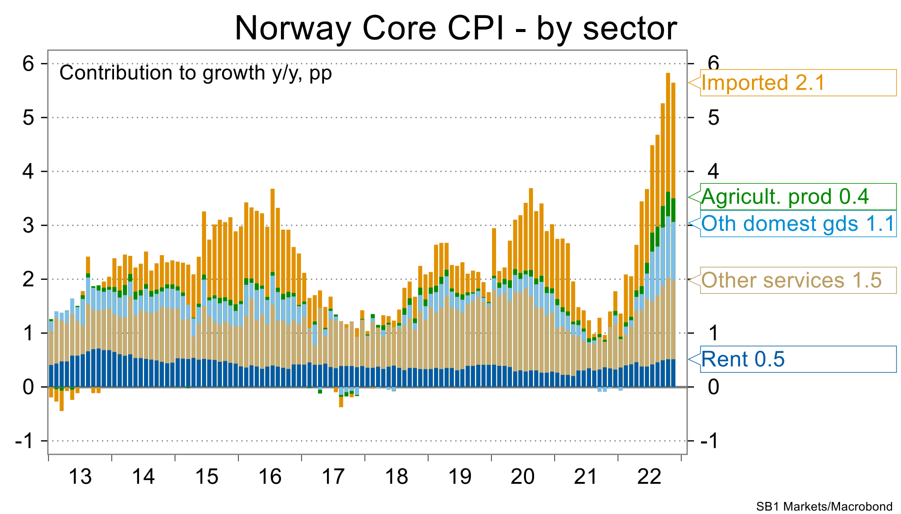


Services + imported goods contributed the most on the upside in November

Domestic goods up 9.7%, services 5.4%



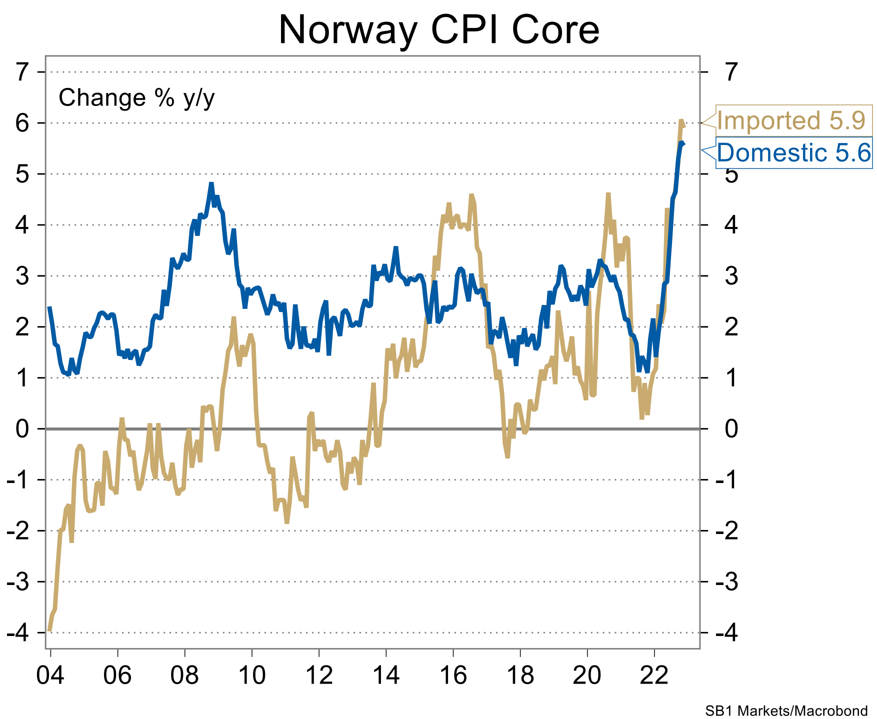


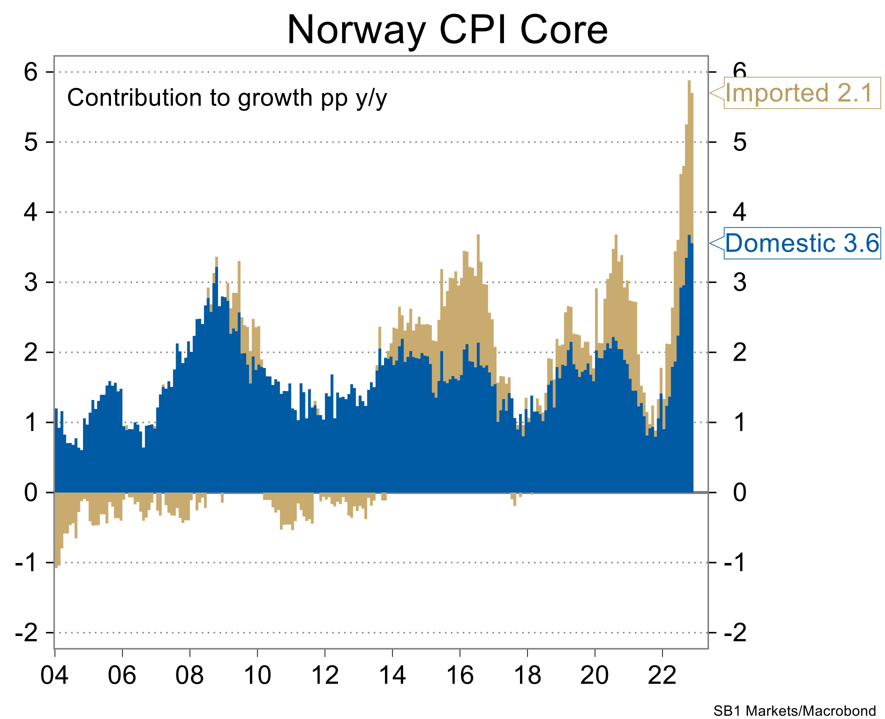


- **Domestic services inflation ex rents** slowed sharply during the corona crisis, and is now climbing faster, up 5.4% y/y, contributing 1.5% to core inflation, with hotels/restaurant and recreation/culture (partly services) contributes the most
- **Domestically produced agricultural products** are up 13% 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 9.7% y/y, and contributed 1.1 pp to the core inflation rate
- **Rent** inflation is still modest, at 2.3%

Both imported goods and domestically produced goods & services contribute

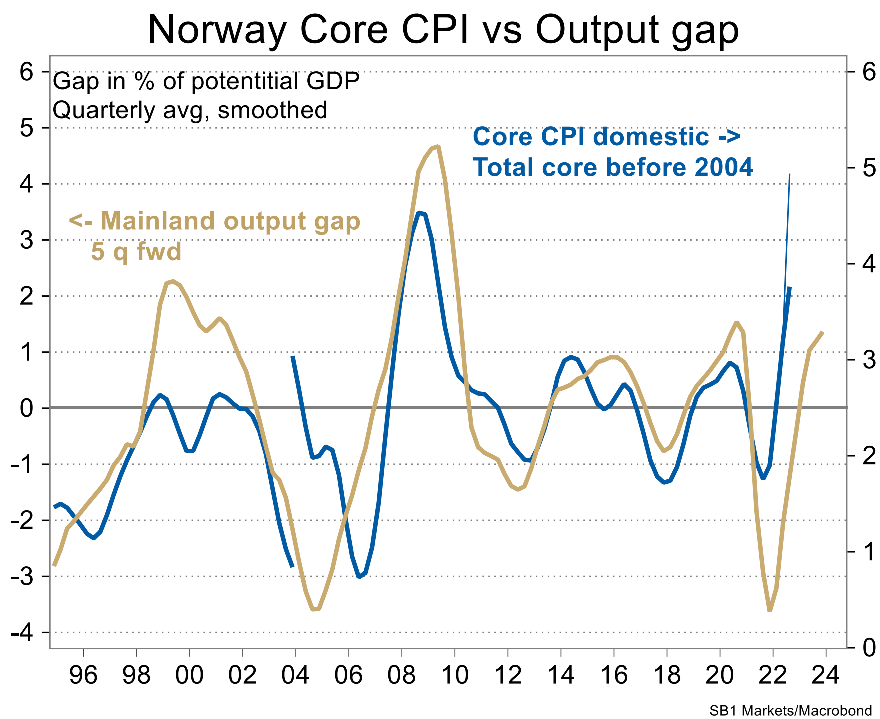
… and the domestic component is by far the largest contributor

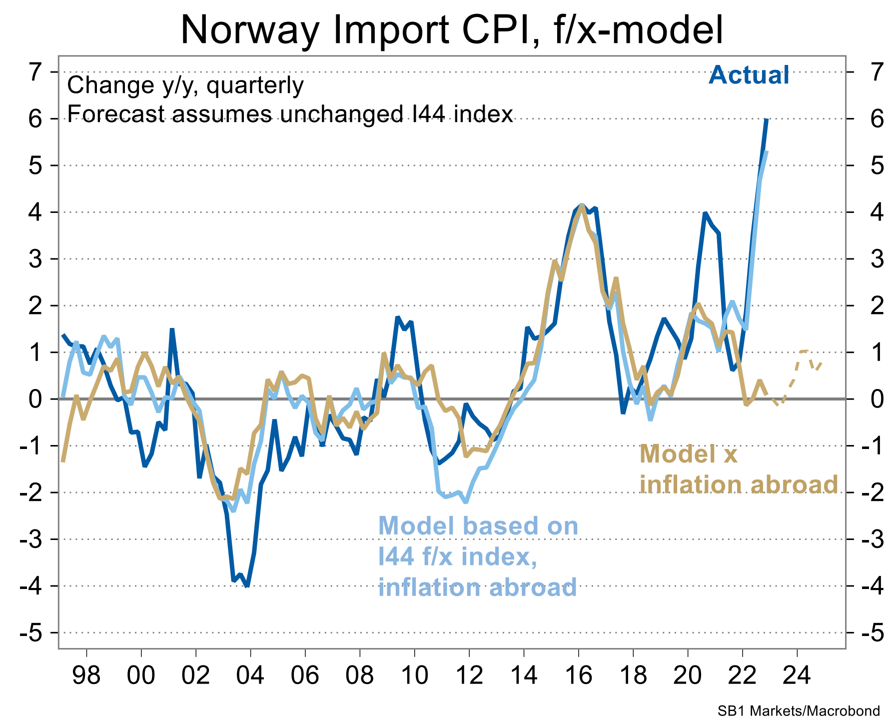




Domestic inflation up due to a strong domestic economy? At least partly

... but the lift has arrived earlier than normal. ‘Imported’ inflation close to the model estimate

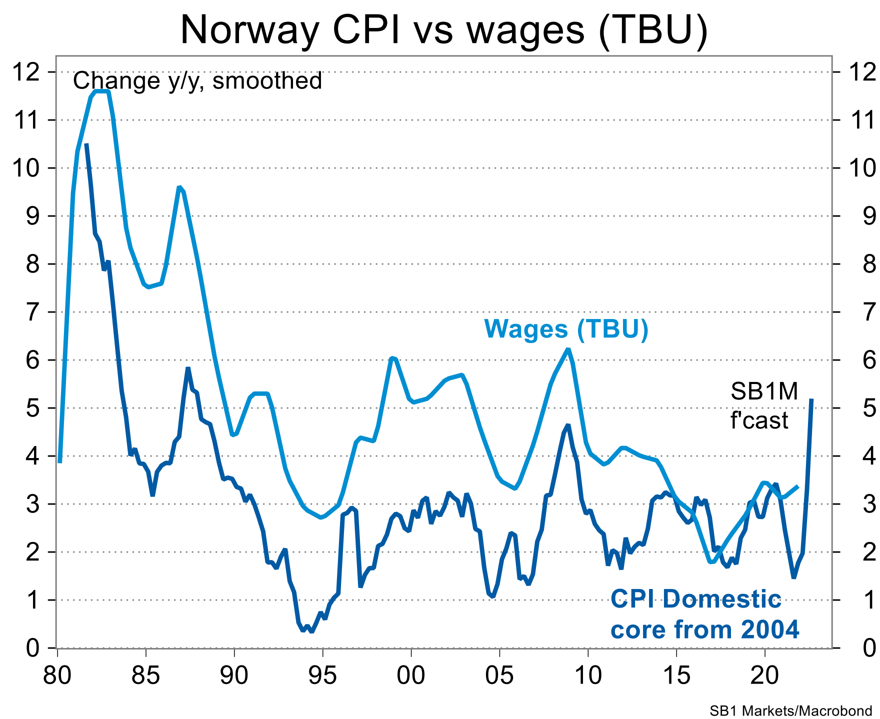


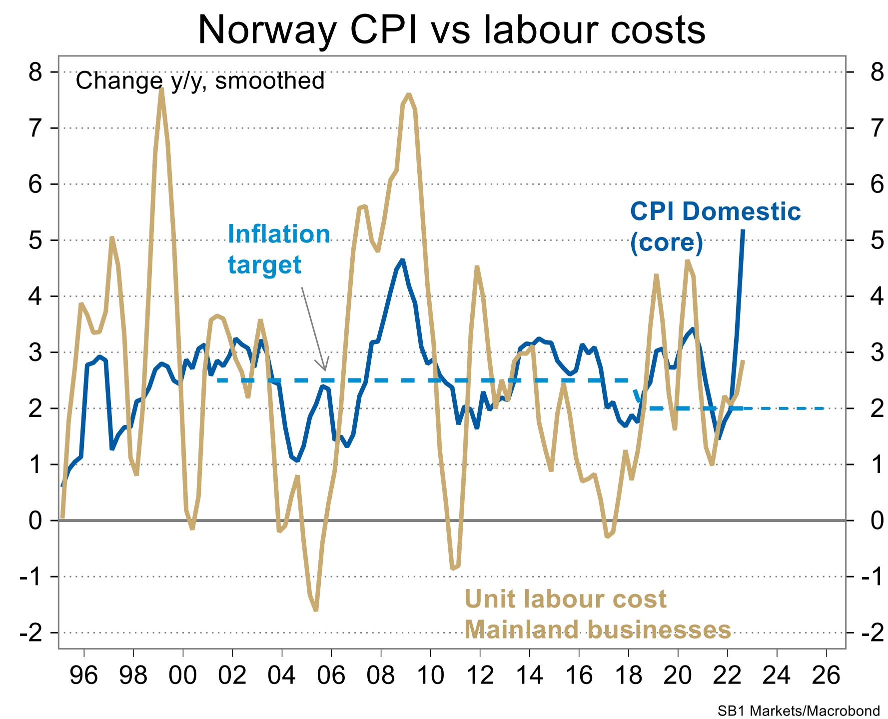


- **… if inflation abroad** is included in the model, together with the exchange rate. If inflation is **not included**, imported inflation is underestimated by close to 6%. <u>Thus, the ‘weak’ NOK is not to blame for higher prices on imported goods, but rather high inflation abroad</u>
- **Labour market data and surveys** indicate that the output gap is higher than the mechanic calculation on the chart to the left

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)

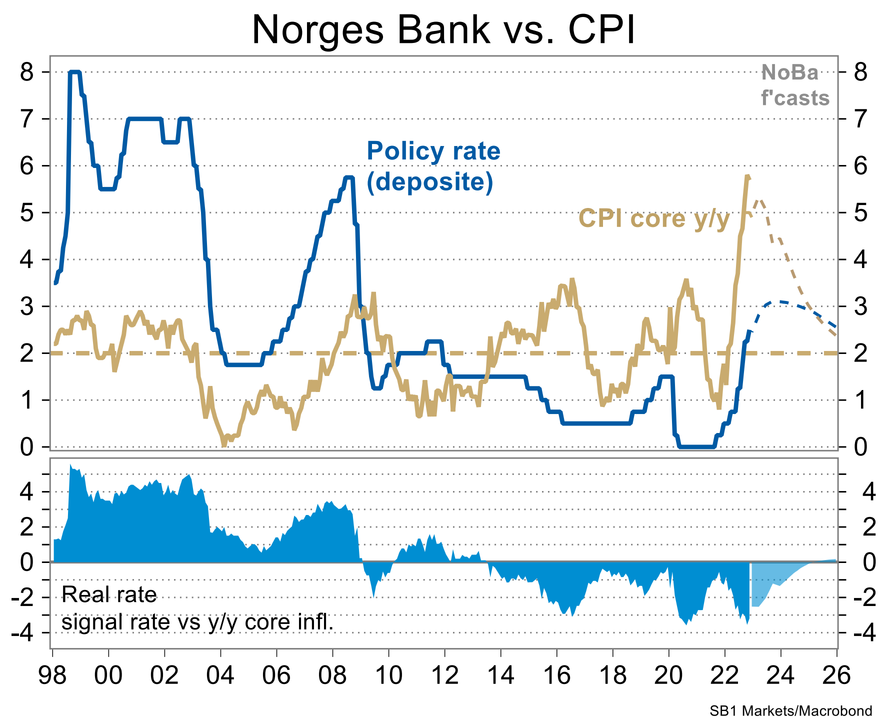


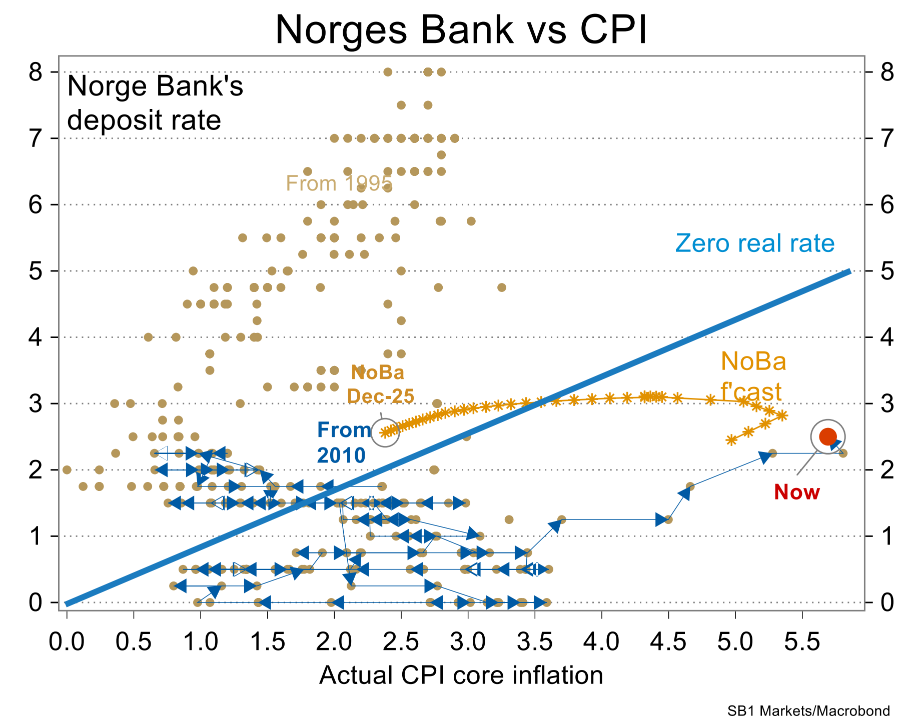


- Unit Labour Cost is us some 3% y/y

Inflation is still high, but the slower pace is certainly welcomed at NoBa

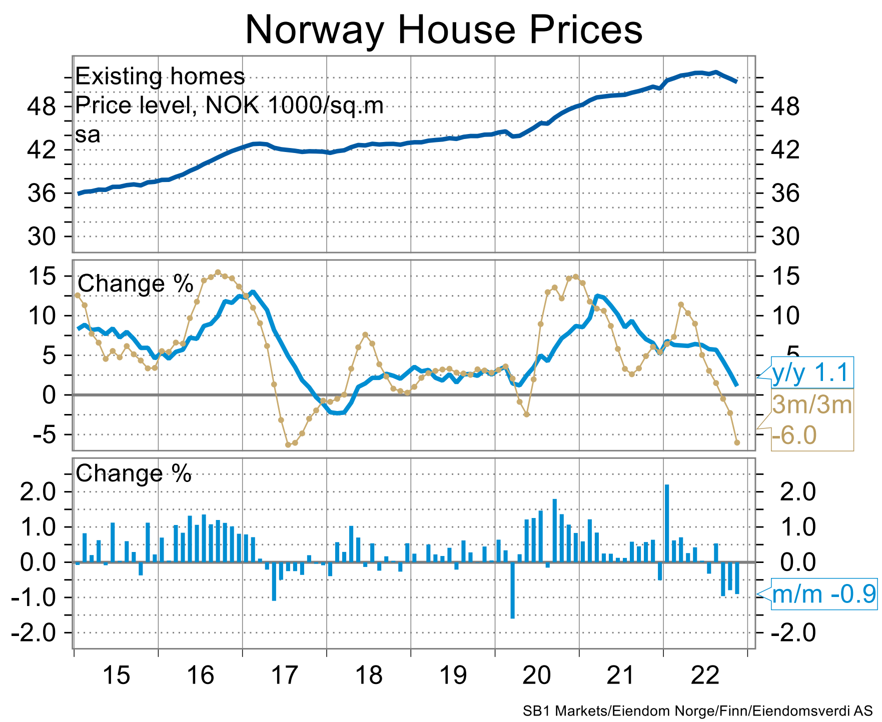
Add falling house prices in the mix, and the bank can, with good conscience, slow the pace to +25 bps next week

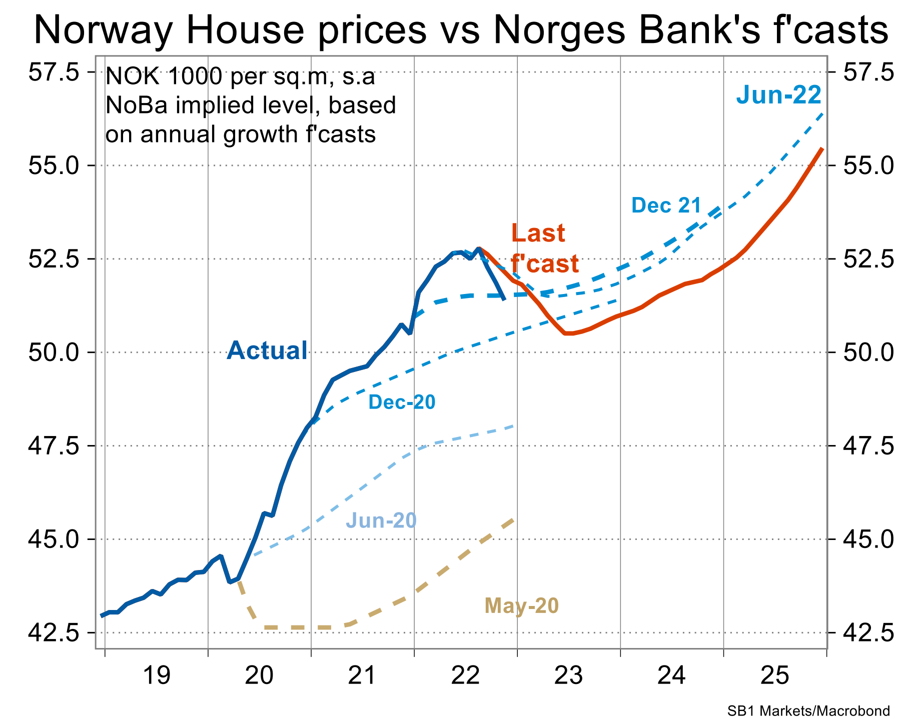




House prices further down in November but not at a faster pace

Prices are falling faster than NoBa assumed, more than ½ of the assumed decline already executed





- **House prices** declined 0.9% in November, less than our -1,5% f'cast. Over the past 3 months, prices have fallen 2.6%, the steepest 3-month decline since late 2008. In Sept, NoBa assumed a 4% decline from the peak to a trough in late Q2 next year. Prices are still up 1.1% y/y. Prices fell m/m in 14 of 16 cities, just Kristiansand and Stavanger was up

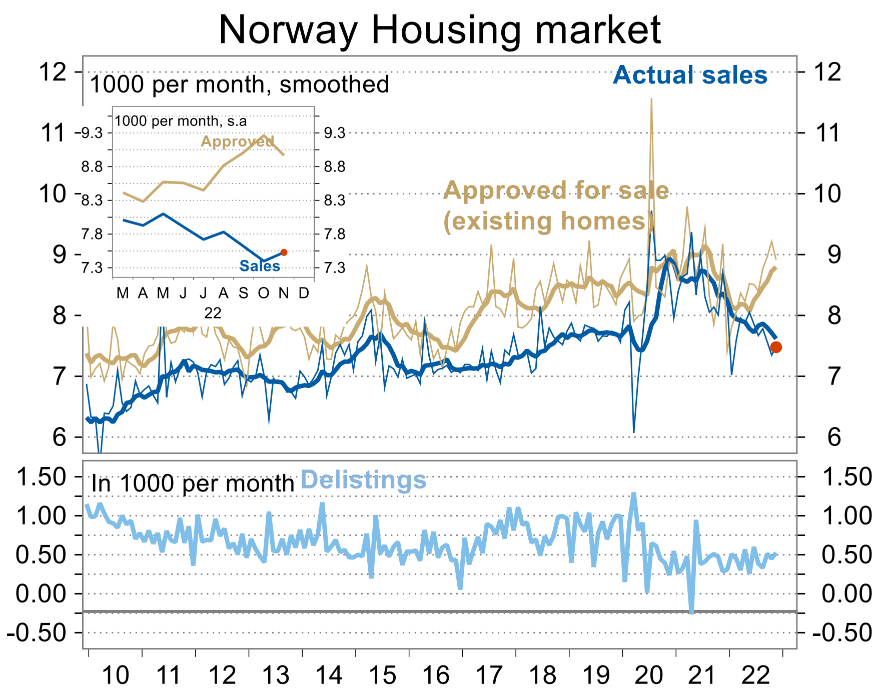
- **Existing home transactions** rose marginally, to 7.5' which is 15% below the peak during the pandemic but still just back to the average 2019 level. However, no. of **homes approved for sale** has climbed to a level far above normal

- **The inventory of unsold homes** rose by 0.7' units in November, a smallest increase since July – but the inventory has climbed faster than ever the past 5 months. Still, the time on market for those homes actually sold remains low

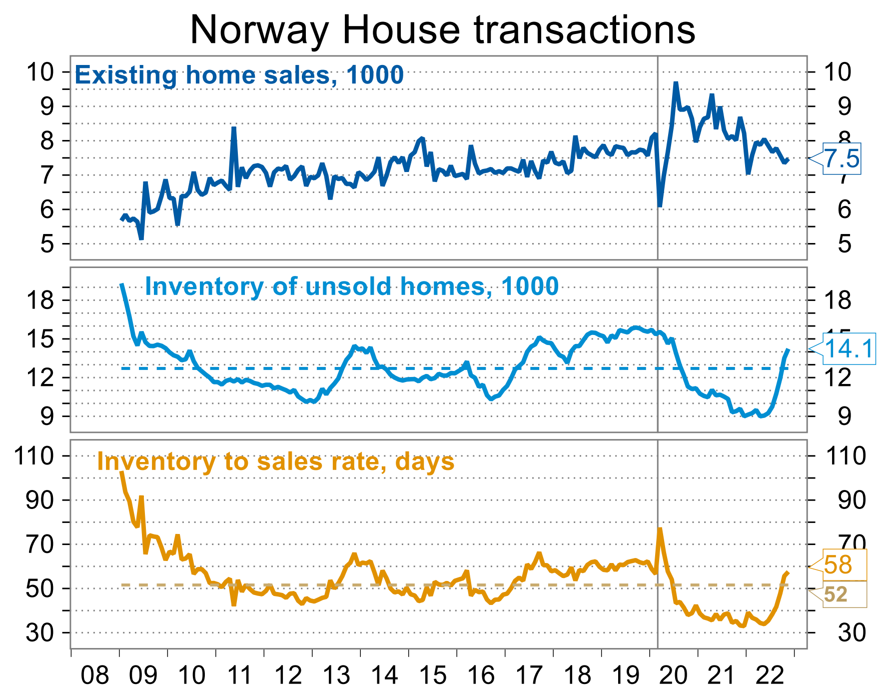
- On Friday, the Government eased mortgage regulation by lowering the **rate hike in the stress test of borrowers**, to 3 pp from 5 pp (though minimum with a 7% rate), which will increase borrowing 'capacity' among many potential home buyers substantially, reducing the downside risk for house prices. If so, and everything else equal - more tightening from NoBa will be needed

A record rapid pace of inventory accumulation as sales slow rapidly as well

The inventory is increasing twice as fast as ever before, and the inventory is above average



SB1 Markets/Macrobond

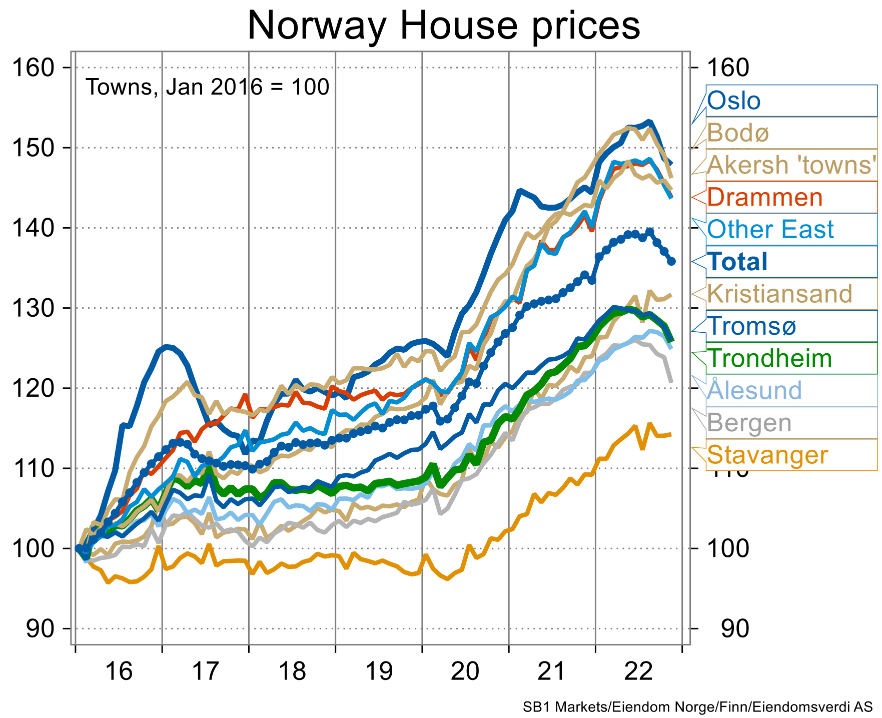


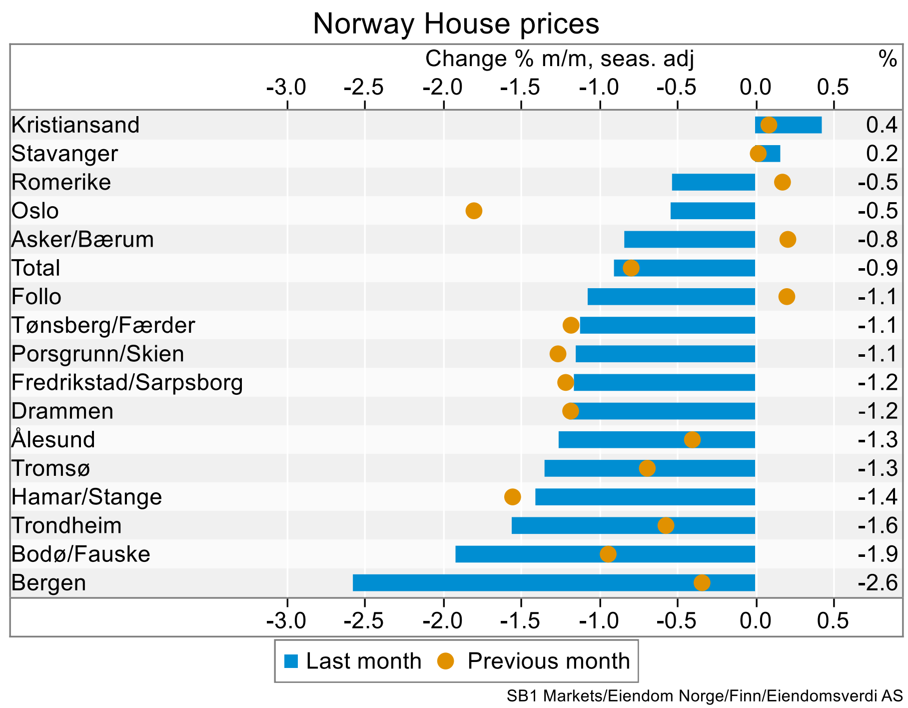
SB1 Markets/Eiendom Norge/Finn/Eiendomsverdi AS

- The **number of transactions** fell in further in October and is now slightly below a normal (2019) level (7.3')
- The **supply of new existing homes for sale (approvals)** rose further and to way above a normal level in October (9.2')
- The **inventory of unsold homes** rose by 700 homes, a smallest increase since July. The increase in the inventory over the 5 past moths, is the largest ever, by far. The level at 14.1' is above average but still far from record high
- The **inventory/sales ratio** added 2 days to 58 days, vs an average at 52 days – and the ratio is still not high
- The **time on market** for those homes actually sold added 2 days to 35 days, which is a very low level (average 42 days) – <u>so there is not yet any buyer's strike for homes which are 'correctly' priced.</u> However, if all those homes not sold should have been sold, <u>substantial price cuts would very likely have been needed</u>

Just Kristiansand and Stavanger reported higher prices in November

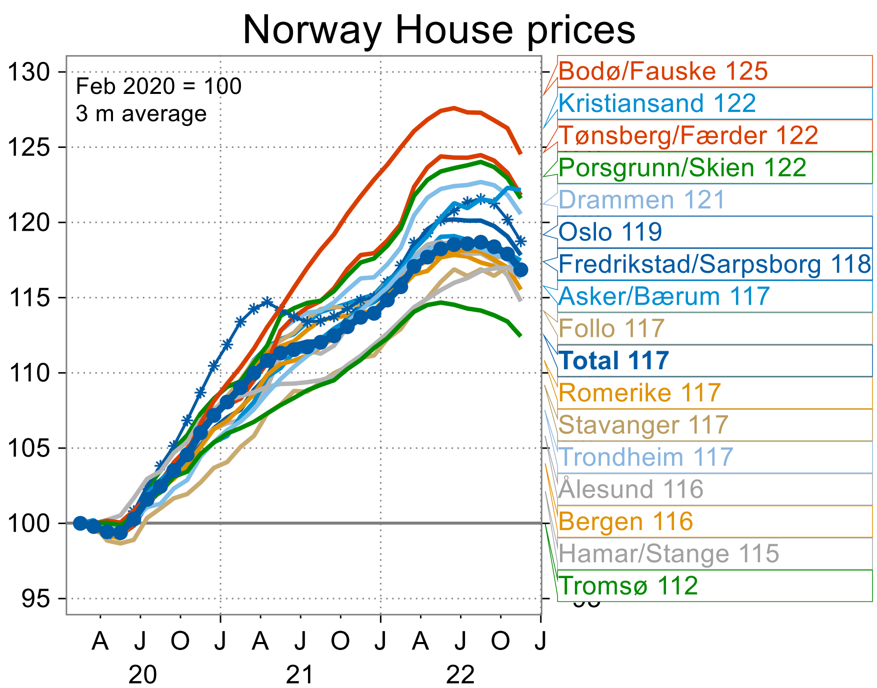
Oslo prices fell just 0.5% - while prices in Trondheim fell by 1.6% and by 2.6% in Bergen

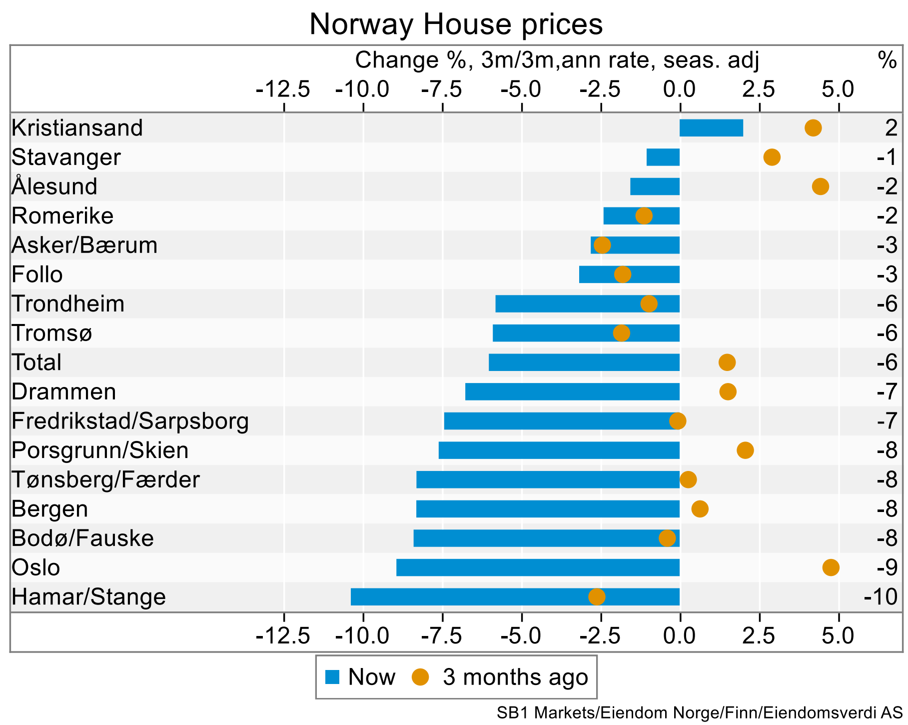




The big picture: Prices have turned down almost everywhere

Prices measured 3m/3m are up just in Kristiansand. Bergen, Bodø, Oslo and Hamar are at the bottom

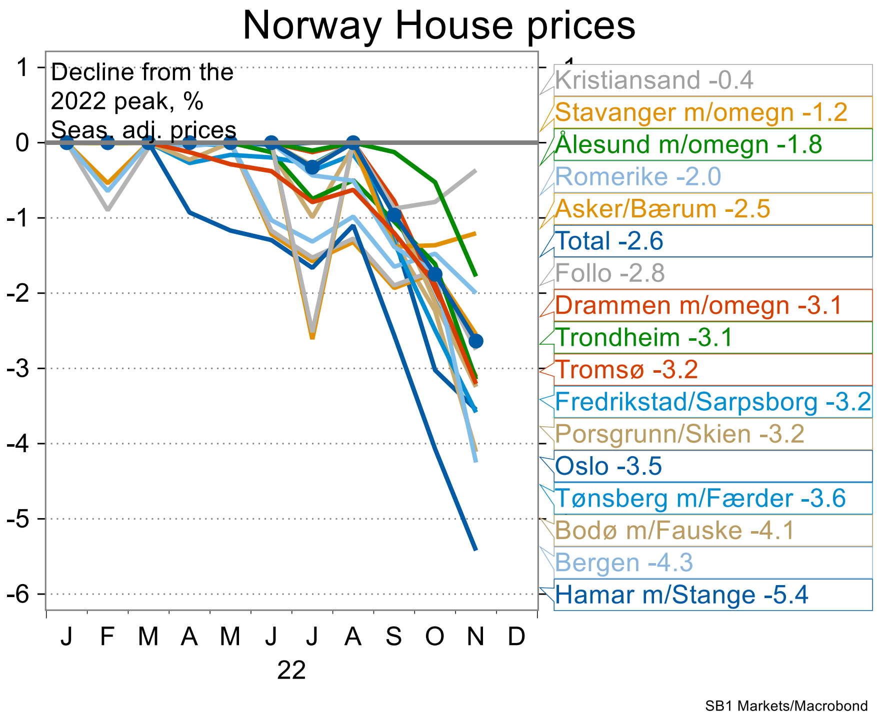




- Bodø was the winner through the pandemic (and since 2016). Now, prices are falling rapidly here

The 2022 setback: Some regional differences

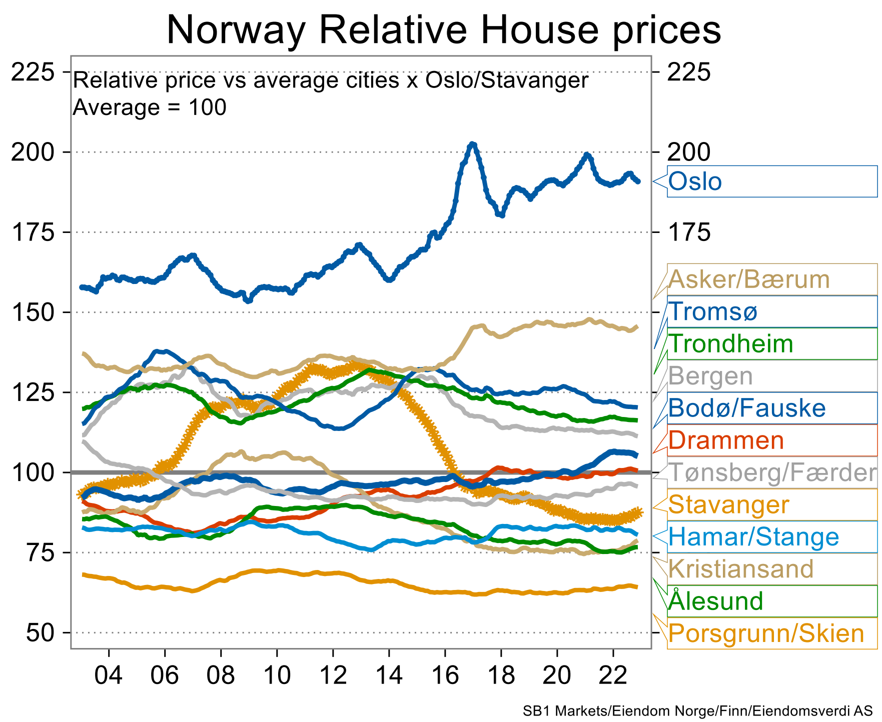
Just a marginal decline in house prices in Kristiansand and Stavanger – both supported by the oil sector recovery

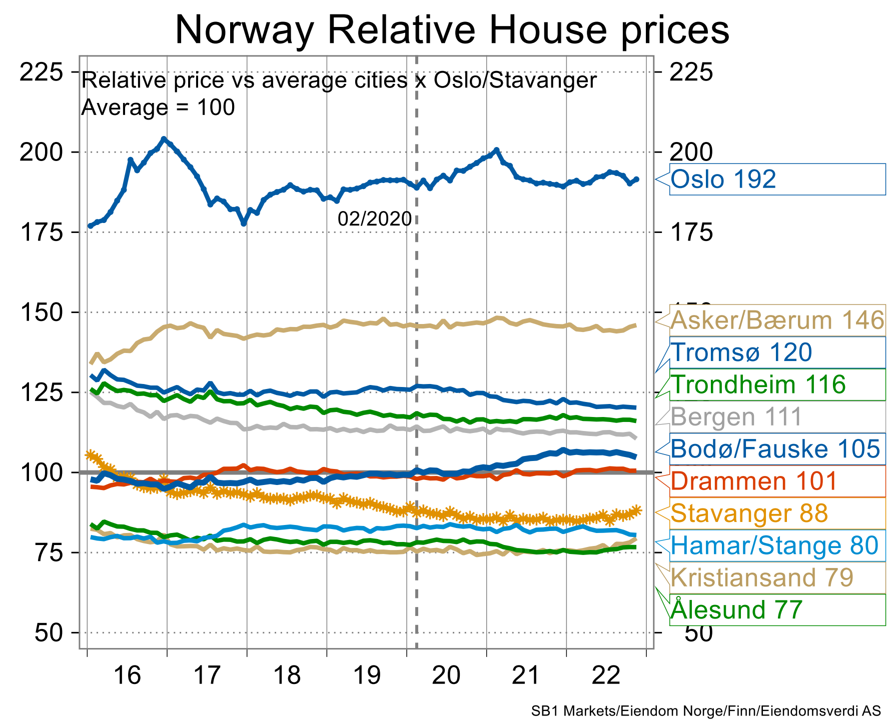


- Both cities reported an uptick in prices in November
- Bodø, Bergen and Hamar have reported the steepest declines so far

Oslo relative prices back to the pre-pandemic level

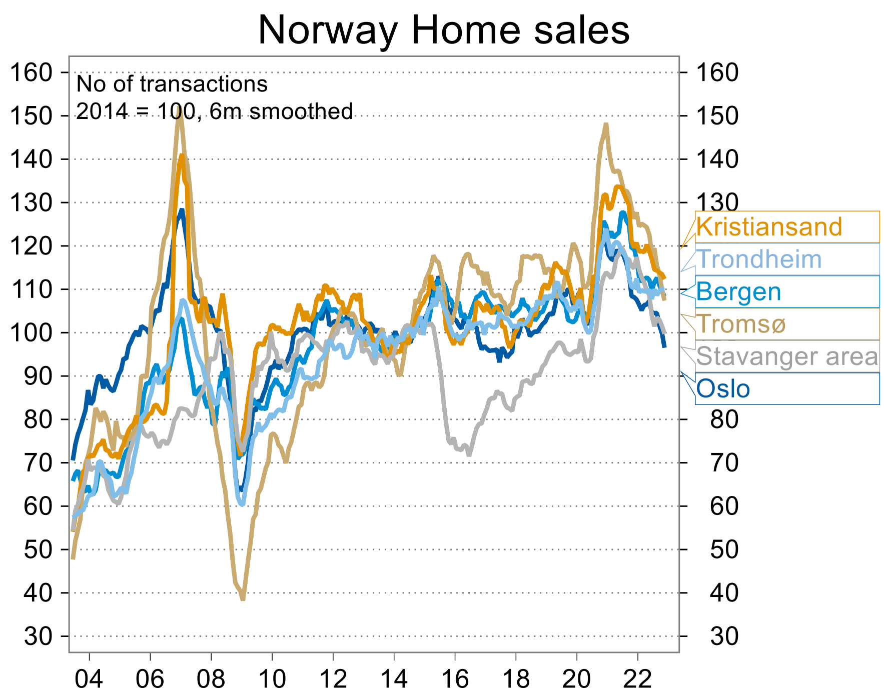
Stavanger has been slowly recovering, as have Kristiansand and Ålesund, vs the rest of the pack



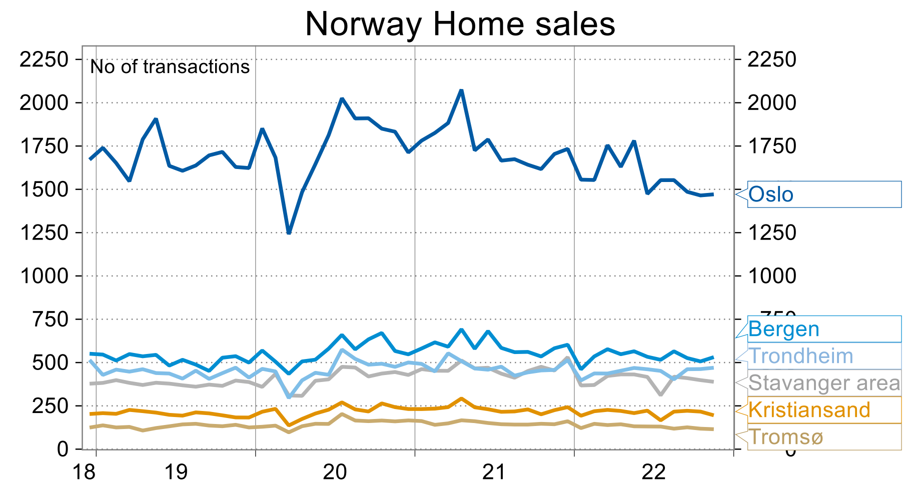


Sales are declining everywhere, all are well down from the recent peak

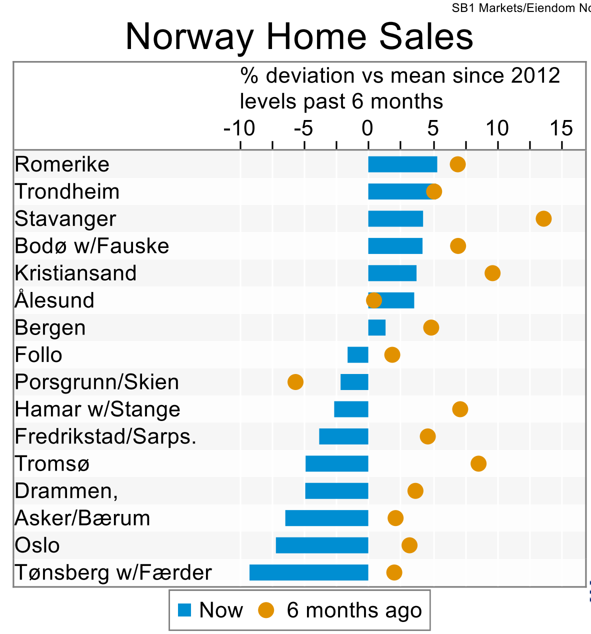
… and sales in almost half of the cities have fallen below the 10 y average



SB1 Markets/Eiendom Norge/Finn/Eiendomsverdi AS



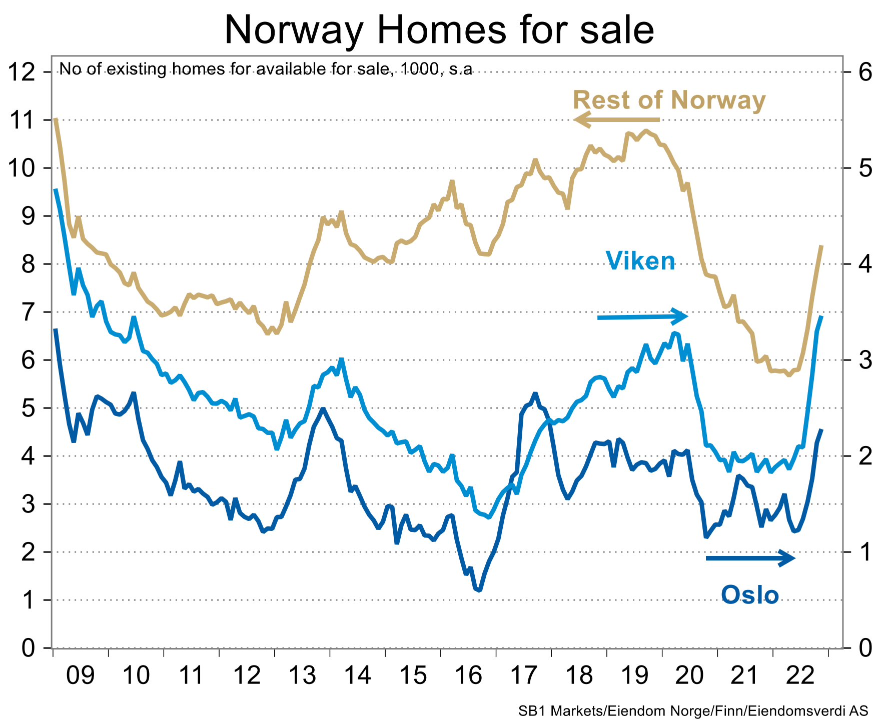
SB1 Markets/Eiendom Norge/Finn/Eiendomsverdi AS

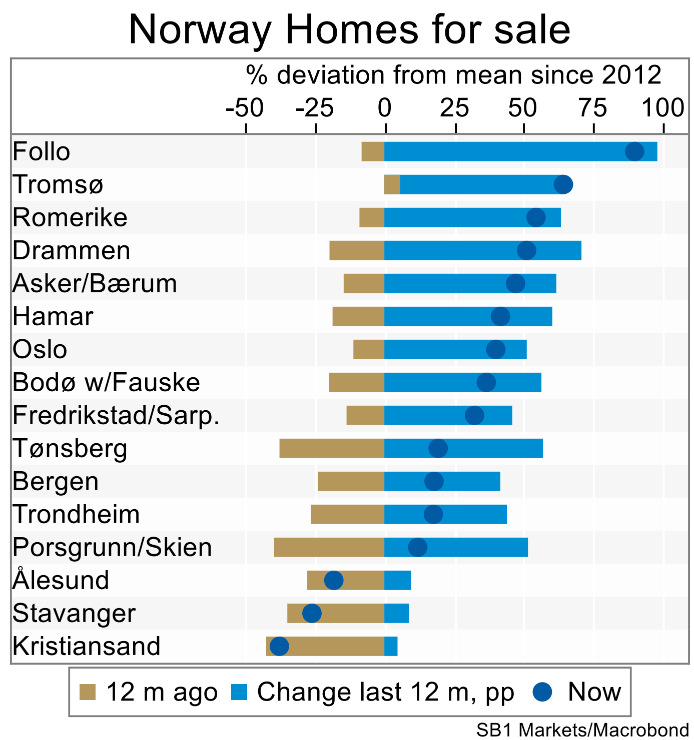


SB1 Markets/Macrobond

The inventory on the way up everywhere, and the fastest ever most places

All cities report higher inventories than one year ago, 14 cities above the 10 y average, 3 below

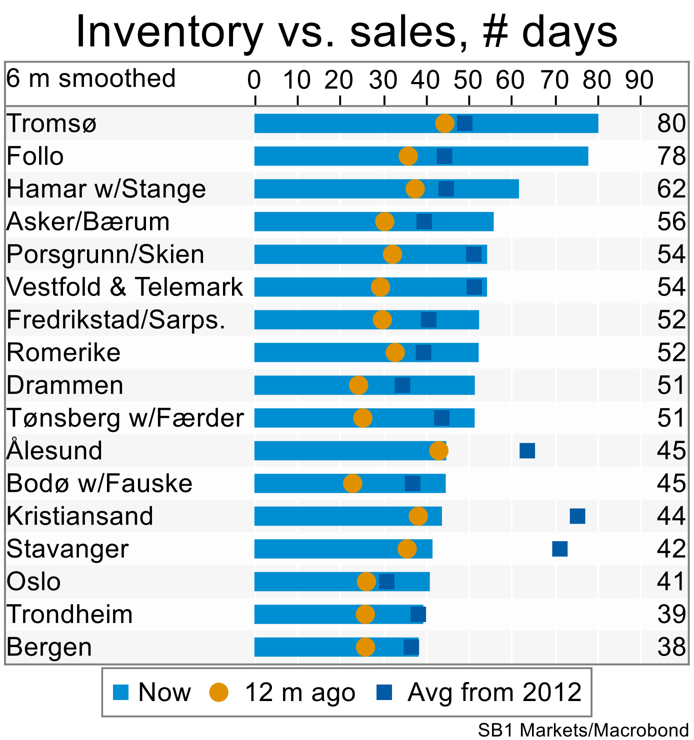




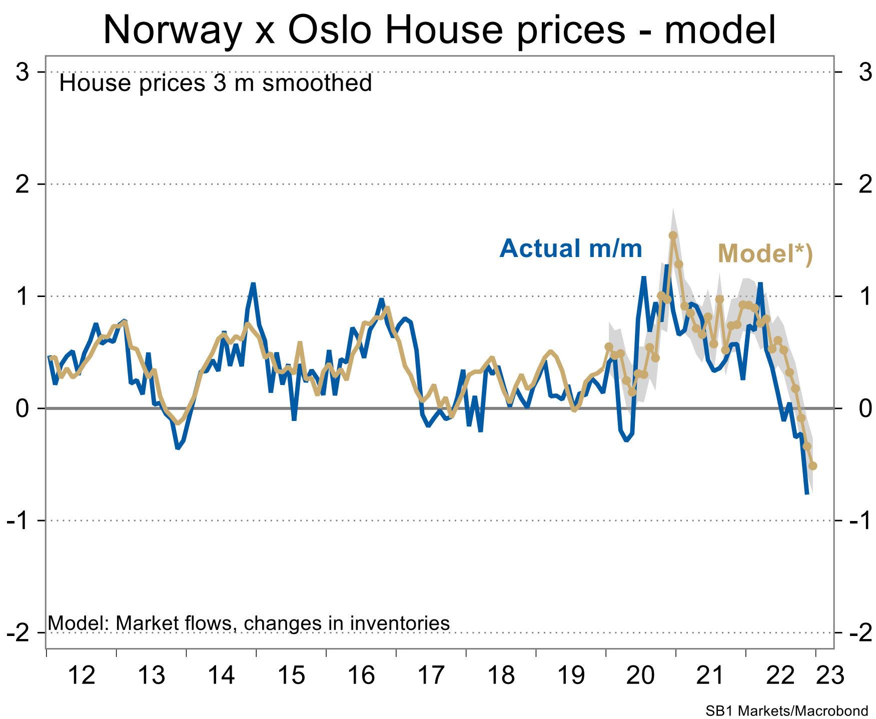
- Follo is reporting the largest increase over the past year, and the inventory is 90% above the average since 2012! Tromsø no 2 on the list. Viken in total is at the highest level since 2010!
- The inventory in Oslo is also well above a normal level – but far from record high

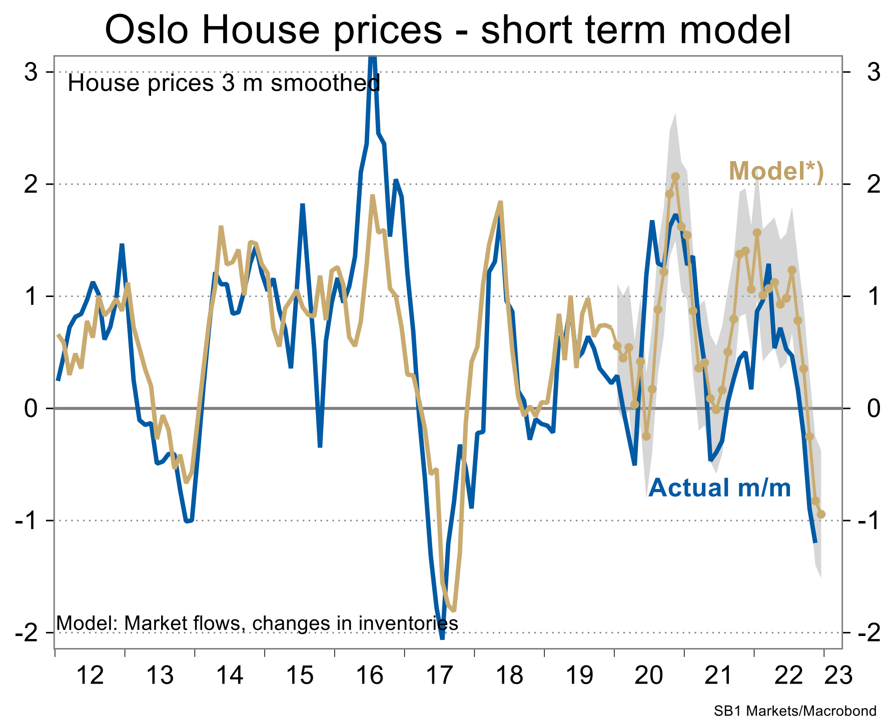
The inventory is turned around slower than normal almost everywhere

Just 3 cities are reporting lower i/s-ratios than the average since 2012; Ålesund, Kristiansand & Stavanger



Short term market flows suggest a continued price fall

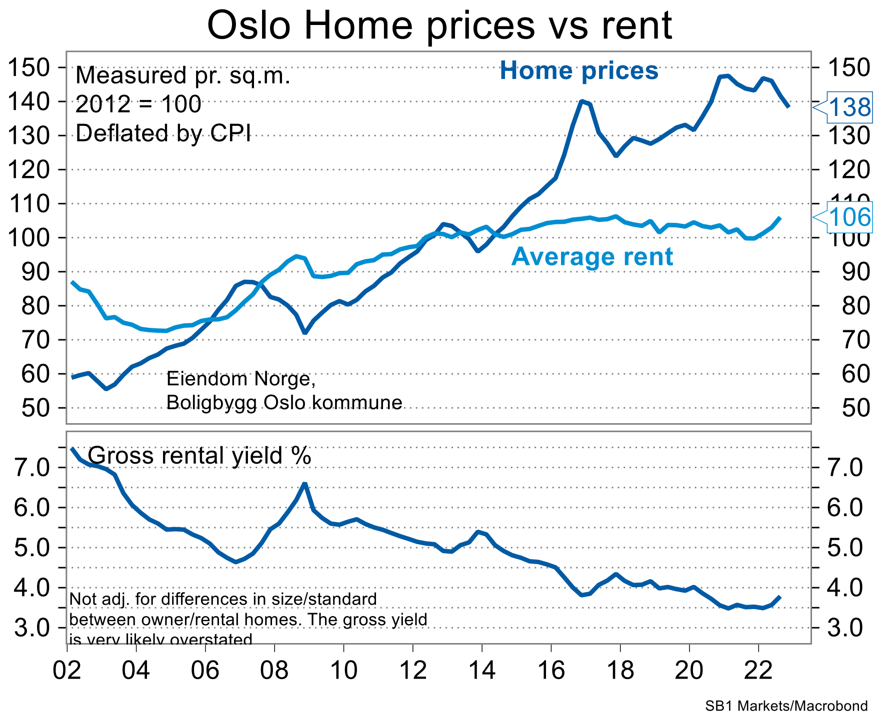


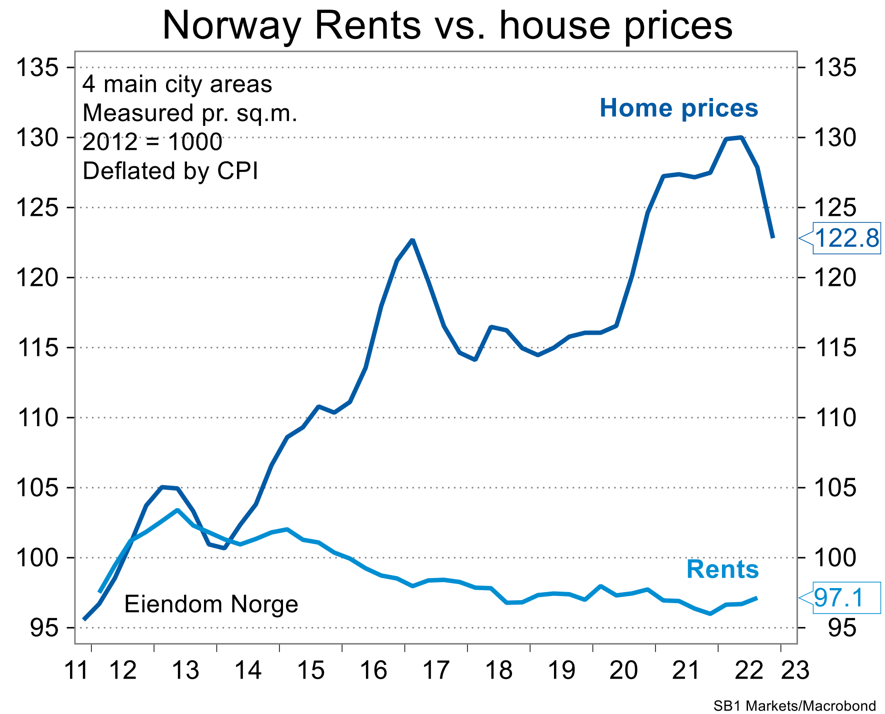


- Our **national x Oslo model** based on flows and the inventory signals a 0.5 decline in house prices (in comparison, prices in Norway x Oslo fell by 1% in November)
- Our **Oslo model** signals a further fall in prices and more than in the rest of the country, by 1% per month
- **Mortgage rates** are not included in these short-term market models, because they have not consistently added to the models' performance. Still, over time, mortgage rates and credit growth are important driver for the flows at the housing market, and now rates are rapidly on the way up
- *These models are not long-term price models, just short-term models based on flows of (existing) houses approved for sale, actual sales and changes in inventories – which are normally correlated to prices*

Why have house prices been so strong recent years? Lack of housing?

If so, strange that rents have been so weak? May is just be 'search for yield' (as mortgage rates fell)

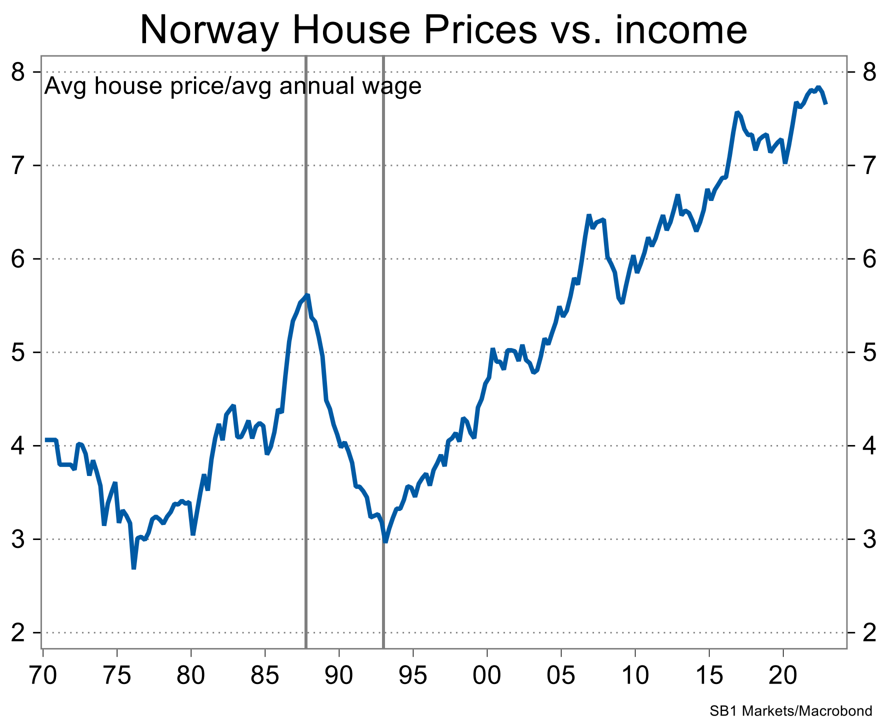


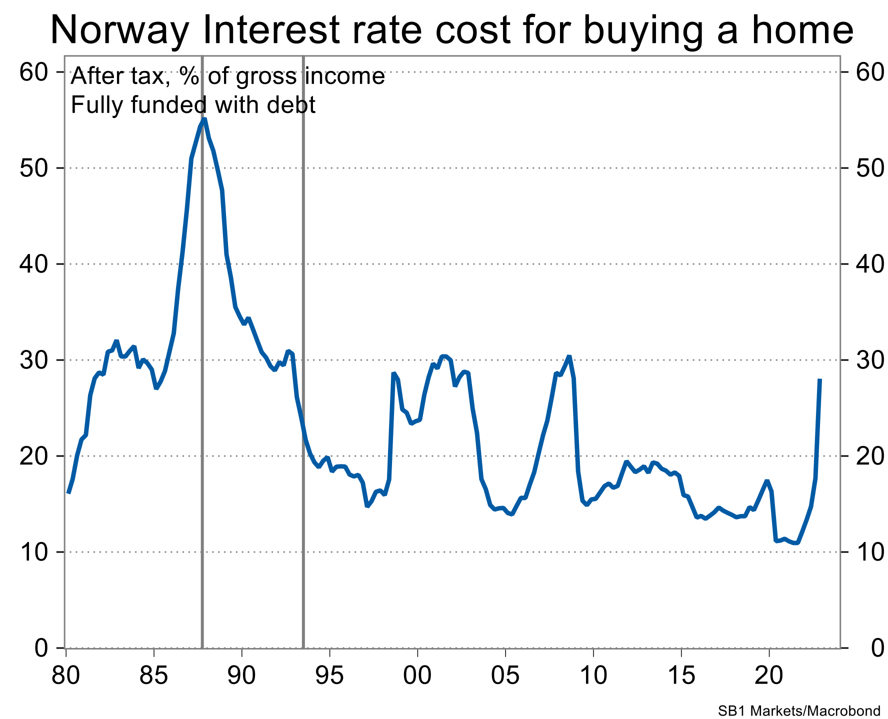


- Rents have been close to flat in real terms the past 10 years in Oslo, while prices were up are up 42% in real terms at the peak (almost 4% per year)
- Rents have fallen by 3% in real terms in the average of Oslo/Bergen/Trondheim and Stavanger areas, according to Eiendom Norge, while real prices were are 30% at the peak
- BTW, mortgage rates are not falling anymore…

The cost of buying an average home vs the average yearly wage income

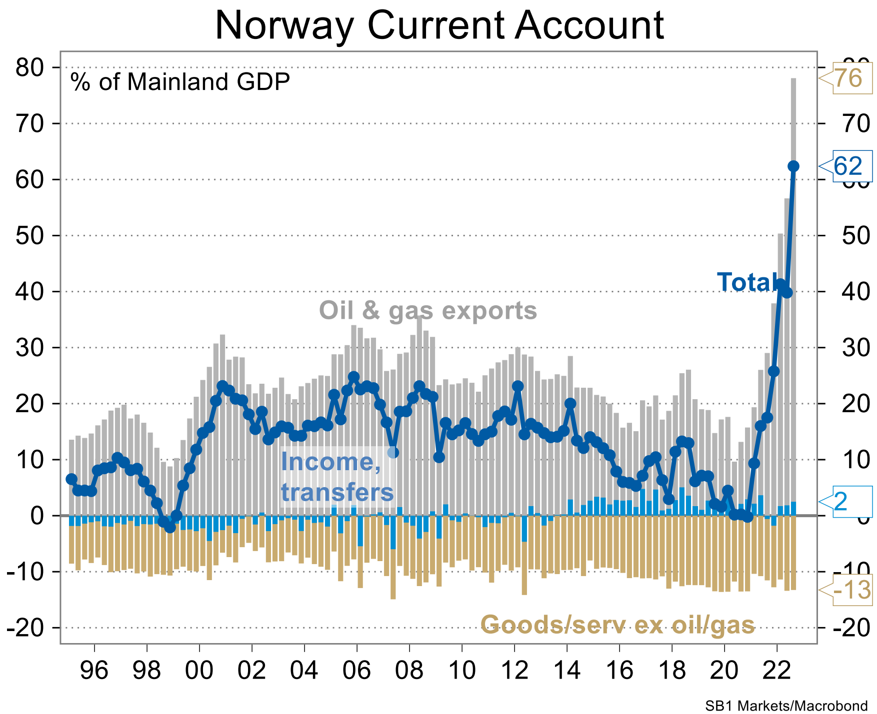
The Price/Income ratio is falling but still very high. The interest rate burden is now climbing rapidly





An incredible 62% of GDP surplus at the current account in Q4

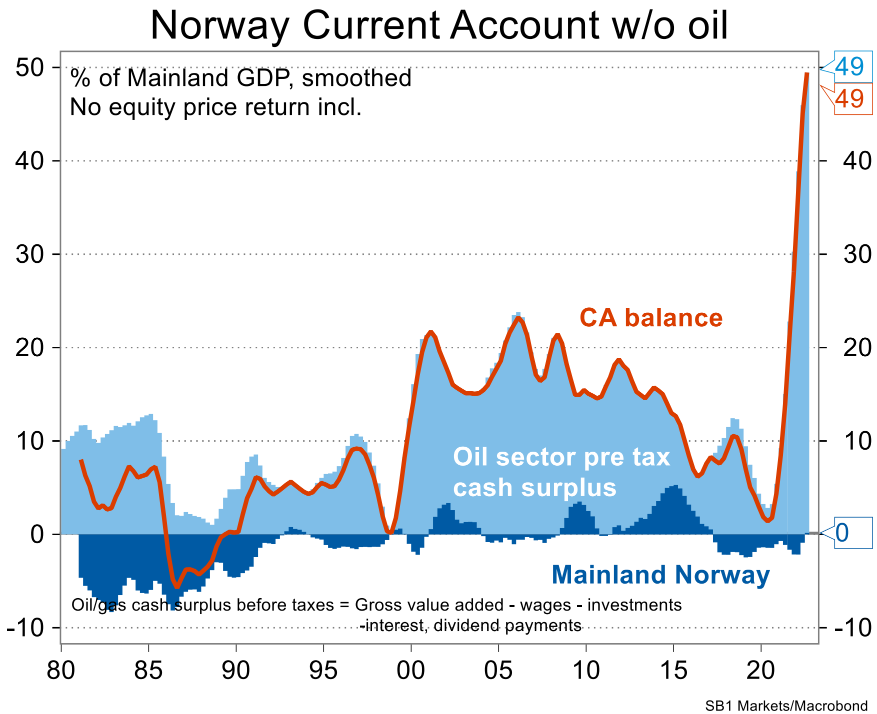
However, that was most likely the peak

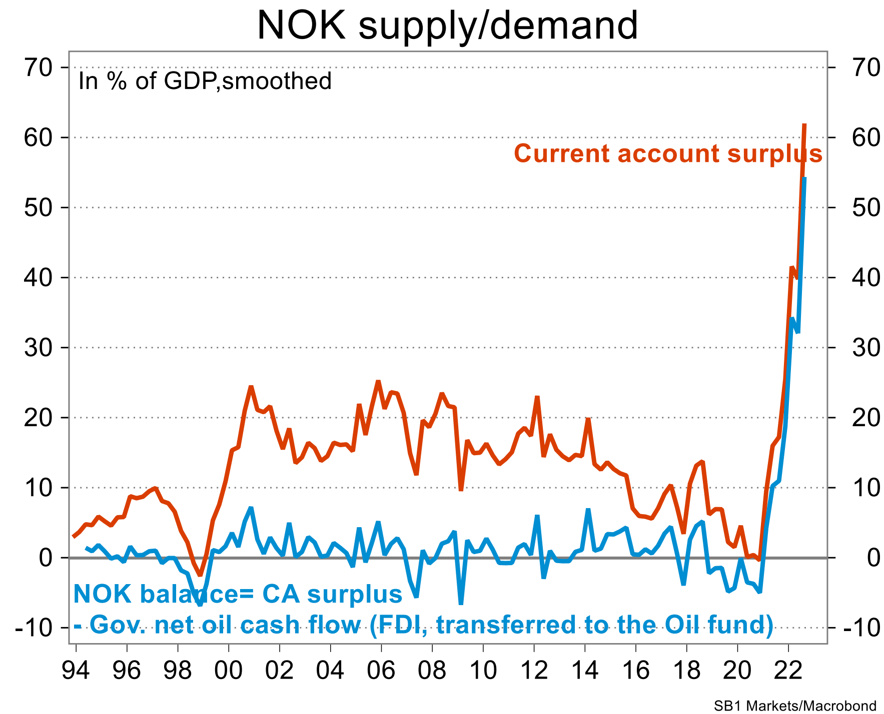


- The deficit in trade in goods & services ex. oil and gas has been stable at 10% – 13% of Mainland GDP recent quarters – and by and large the past 25 years

Norway ex the oil sector is in balance?

Yes – if we calculate the real ‘oil sector balance’, after deducting for op.ex, cap.ex etc.

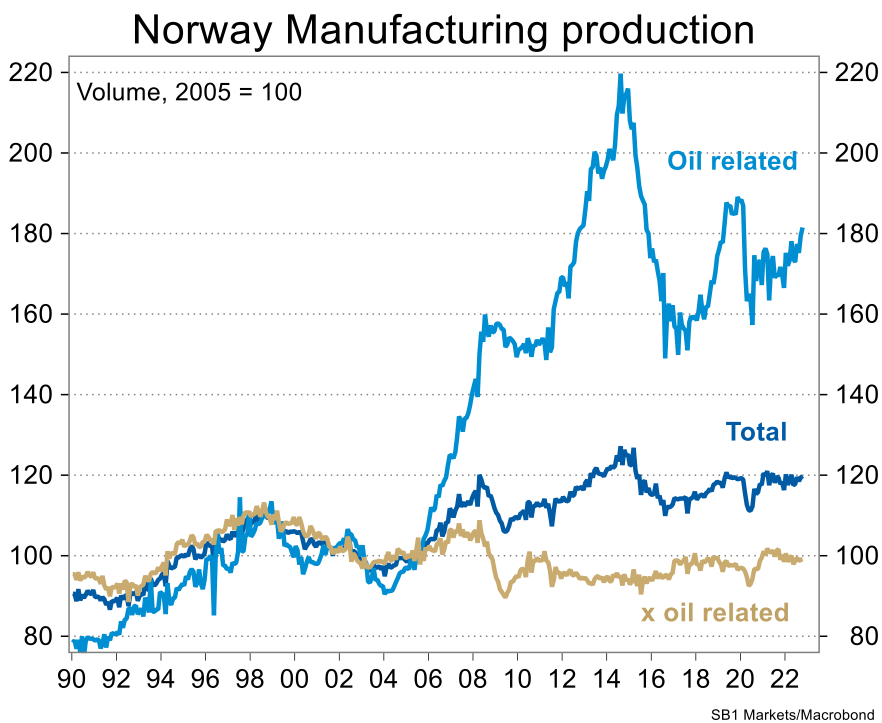


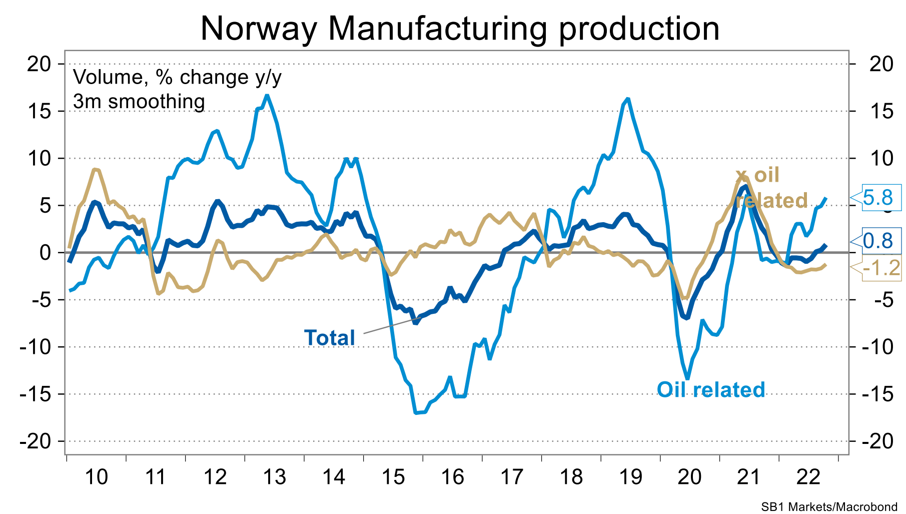


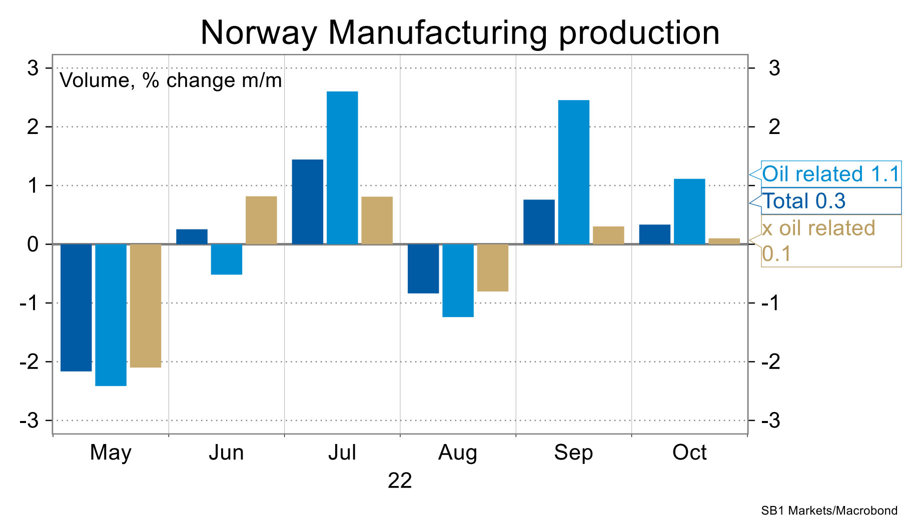
- The pre-tax cash surplus in the oil sector is far smaller than the value of oil and gas exports
  - The sector has to pay op.ex (including wages), finance its cap.ex (investments) and pay interest rates and pay dividends, to Norway and abroad, in sum almost 10% of Mainland GDP. Investments alone equals some 5% of Mainland GDP. Some of these inputs are imported directly, while the most is ‘imports’ from the Mainland. However, these sales from the Mainland is not counted as ‘Mainland exports’ in trade statistics
- On the chart to the left above, the ‘real’ ex. oil balance is calculated – and is not that bad
  - A MAIN CAVIAT: WE ASSUME THAT ‘EXPORTS’ TO THE OIL SECTOR CAN BE REPLACED 1:1 BY OTHER EXPORTS OR REDUCED IMPORT, if demand from the oil sector is cut down. That is very likely not the case, as companies will not have the same advantage when competing at other markets. In addition, we have not adjusted for reduced exports of oil related equipment to other countries, if the rest of the world also decides to ‘go green’. Still, this calculus explains the ‘real’ ex oil balance pretty well

Oil-related manuf. on the way up again, the others are on the way down

Surveys confirm: The overall outlook bleak but demand from the oil sectors is strengthening



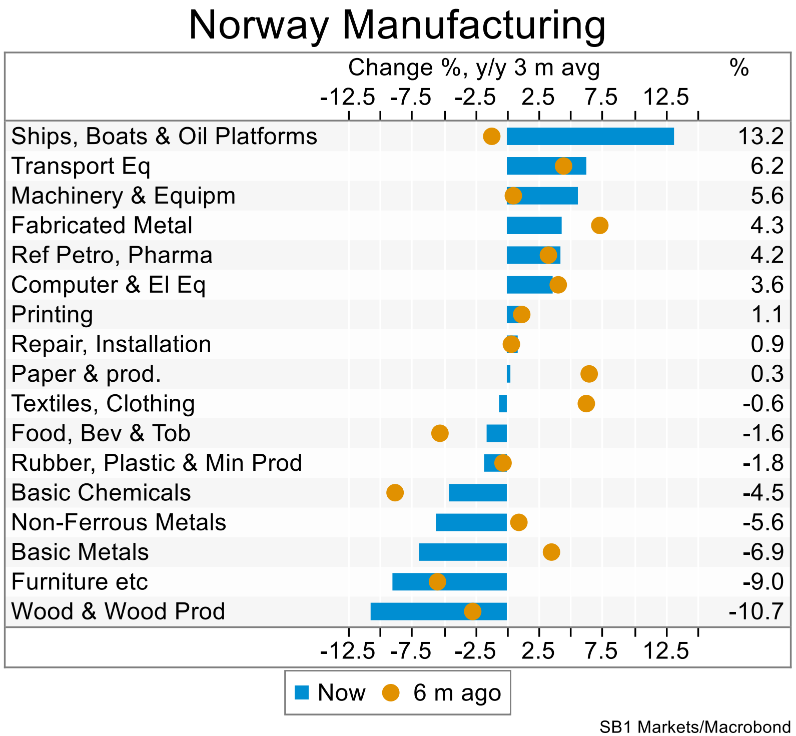


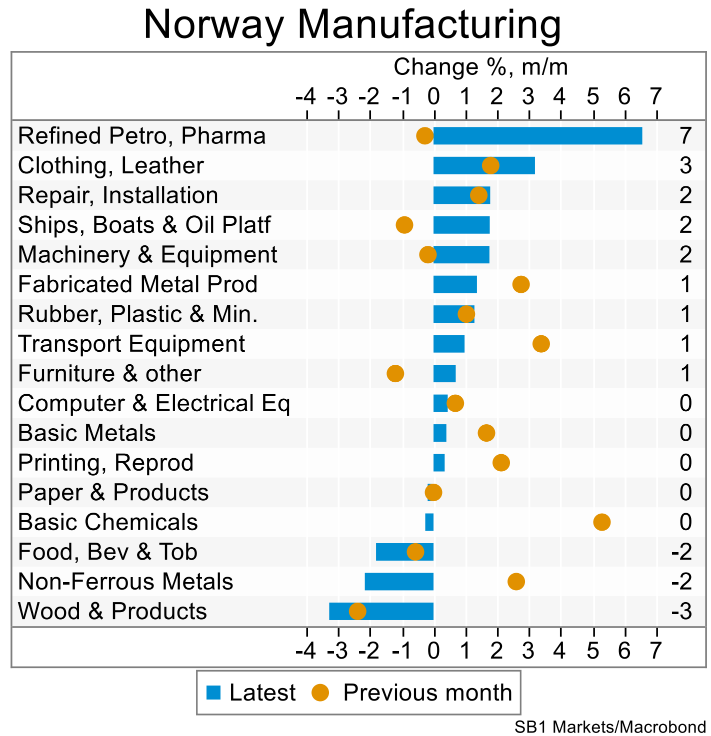


- **Total production** rose 0.3% in Oct, we expected unch.
- **Oil related manufacturing production** (yards etc) grew 1.1% and is drifting clearly upwards, at a 5 – 6% pace
- **Other sectors** reported a 0.1% increase – but the trend is down, at a 1% rate
- **Manufacturing surveys have turned down since Q4 2021**

Unusually mixed between sectors: Basic metals, chemicals, wood down

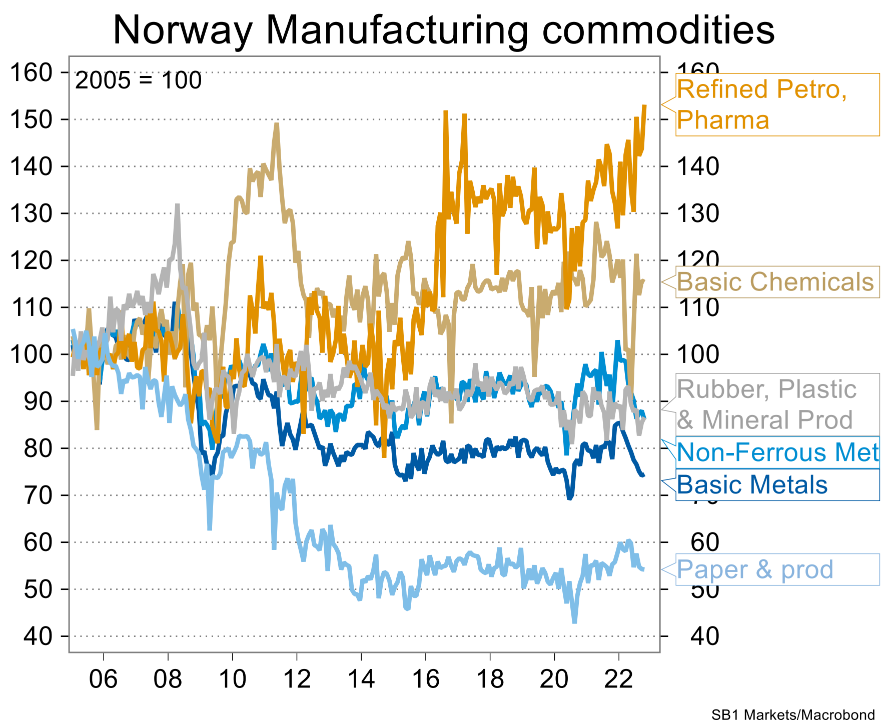
Ships/platforms, machinery, fabricated metals up

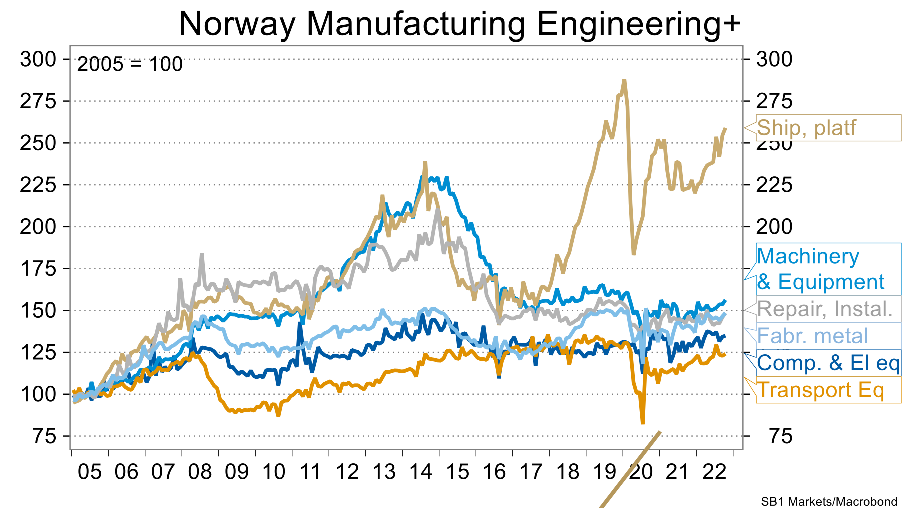


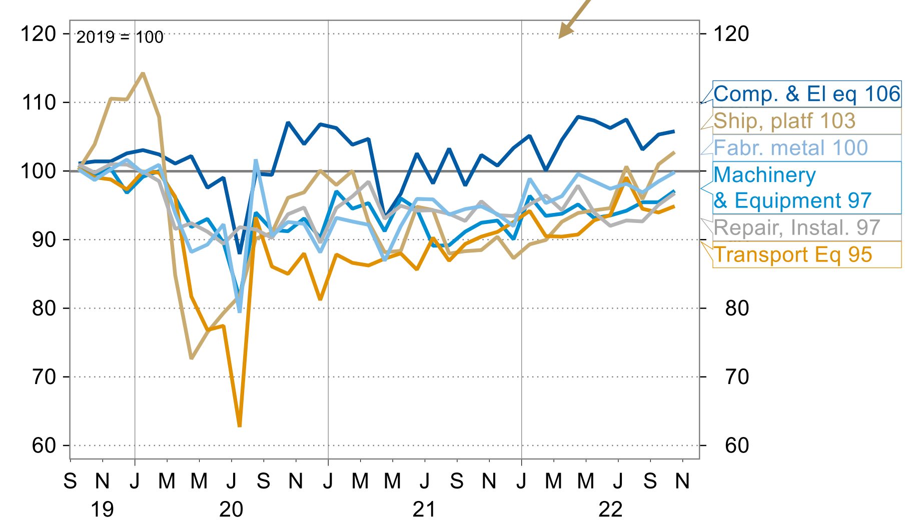


Engineering on the way up; now even ships and platforms too

Mixed within commodities: refined petro, pharmaceuticals, chemicals up – metals and paper down

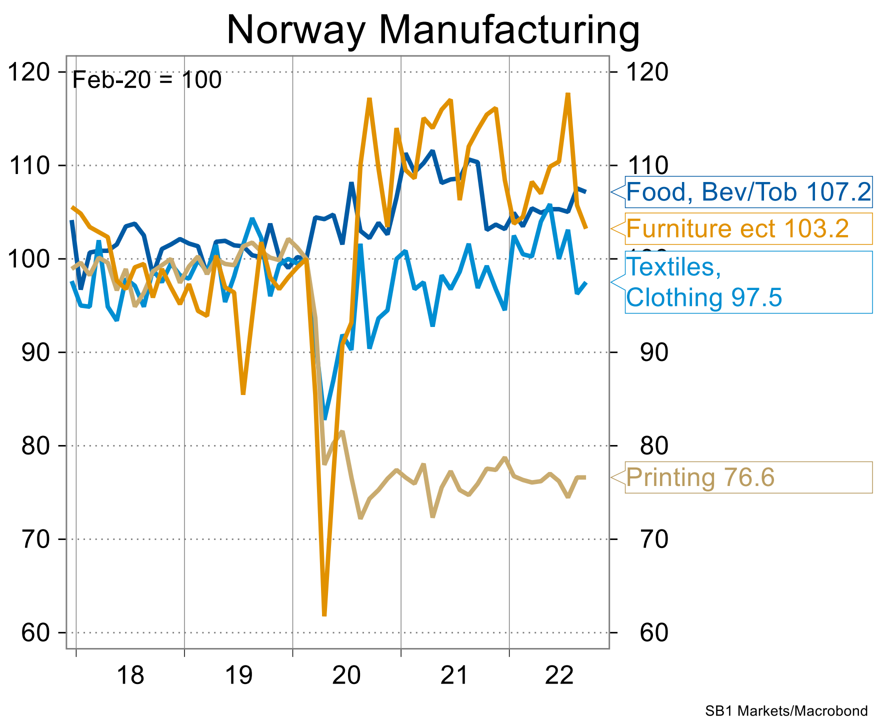






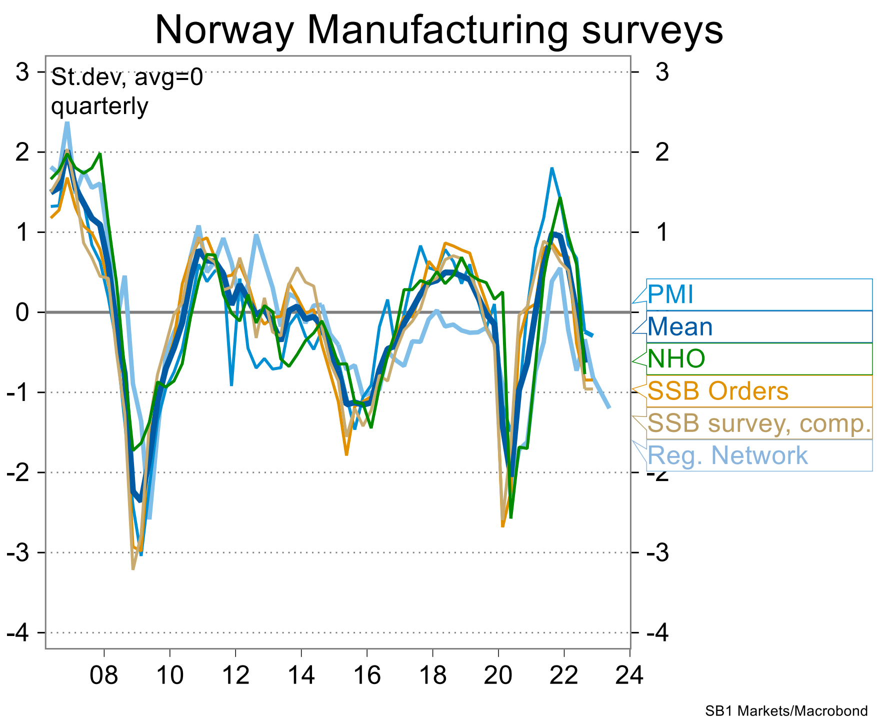
Food production is back to a normal level, and has flattened

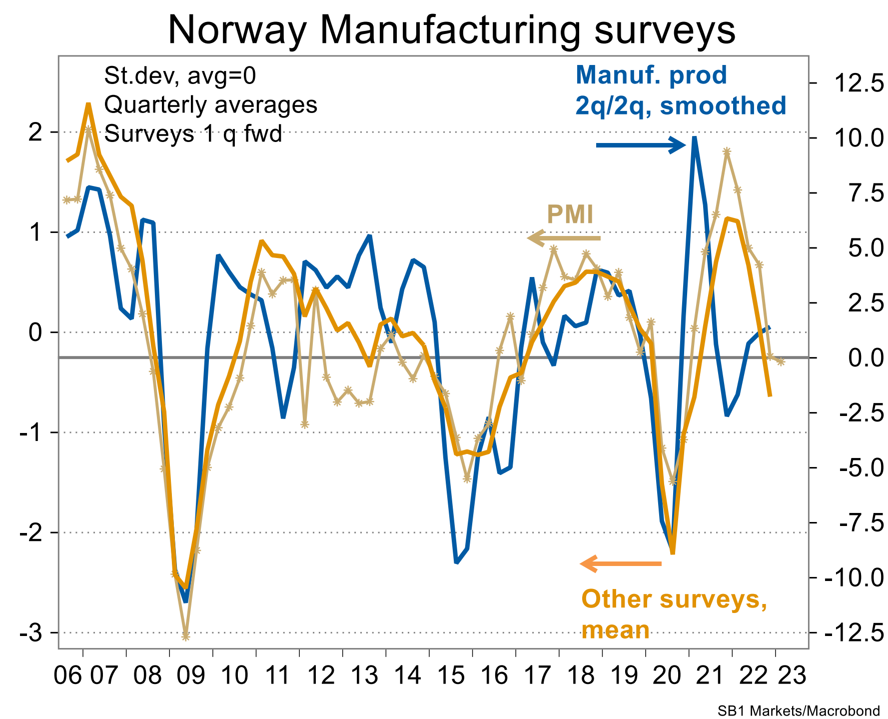
Furniture and textile/clothing are back down to the pre-pandemic level



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

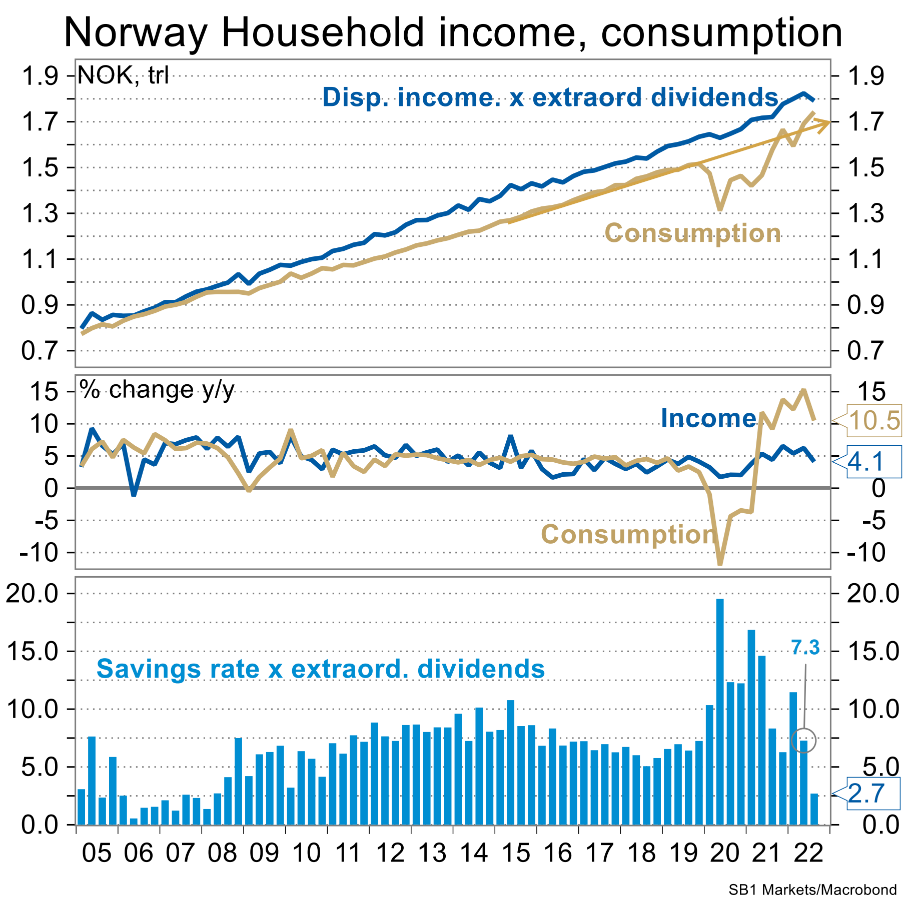
… production has not been that impressive (like most other places) even when surveys were strong





Households reduced 'real' savings back to the lowest level since 2008

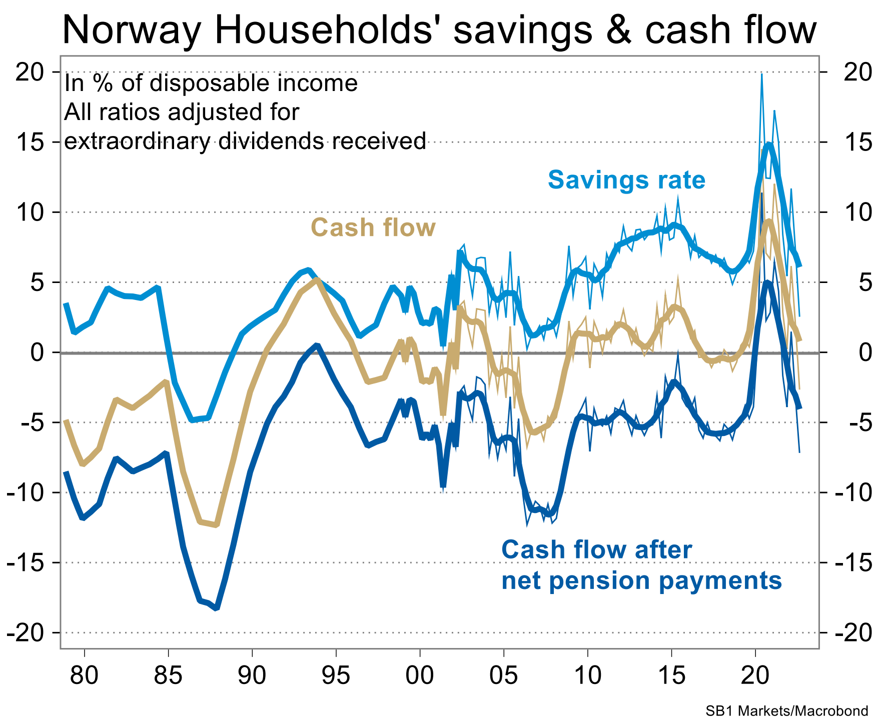
The core savings rate fell to 2.7% from 7.3%, as nominal income fell, and (expensive) spending expenditure rose sharply

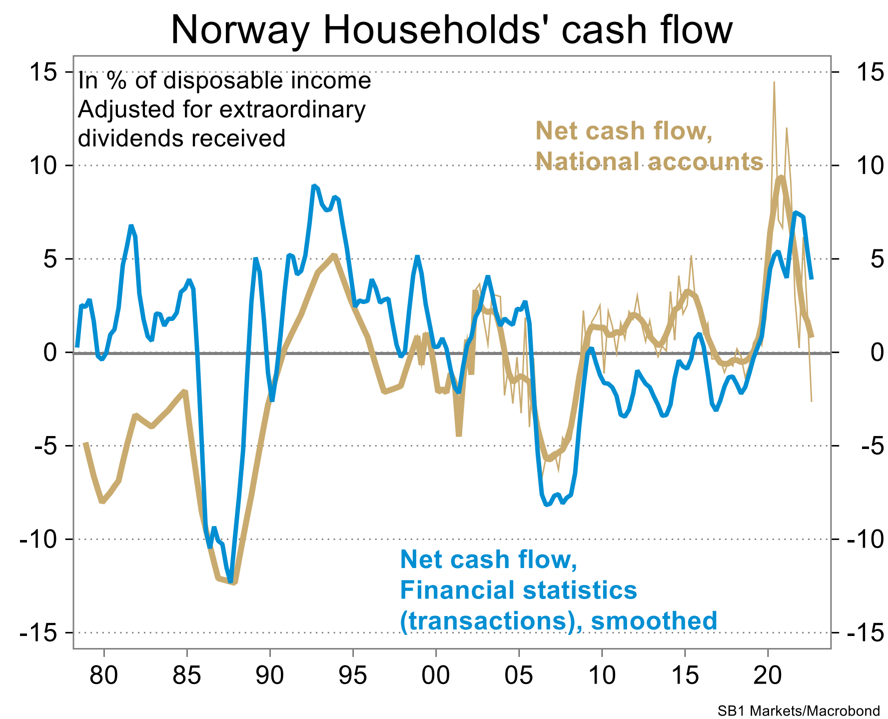


- **Total household disposable** income fell 1.7% in q/q in Q3, in nominal terms, as interest rates rose sharply. Adjusted for extraordinary dividends & pension rights, income declined by 1.8%. Still, total disposable income is up 4.1% y/y. Wage revenues are up 7.4% y/y!
- However, in real terms disposable income is down 1.1% as prices are soaring
- **Nominal growth in consumption** climbed 3.1% in Q3 - and by 10.5% y/y! In Q3, the price deflator rose by 2.6% - and real consumption rose just 0.5%
- **The savings rate** was far higher than normal during the pandemic, and the accumulated extra saving during the pandemic equalled approx. 12% of one year's disposable income
  - In Q3, the savings rate was far below a normal level, implying the some of the extra savings were spent – in order to keep consumption up even if prices rose sharply, and interest rates rose
    - Higher inflation than normal knocked out 3.8% from real disposable income last year, while higher interest rates deducted 2.3%
  - How these money are invested (or disinvested), check some few pages forward

Cash flow turned sharply negative in Q3, at least according to Nat. Accounts

Financial accounts yields a better picture, net savings still positive (even if some rich people has left the stage…)

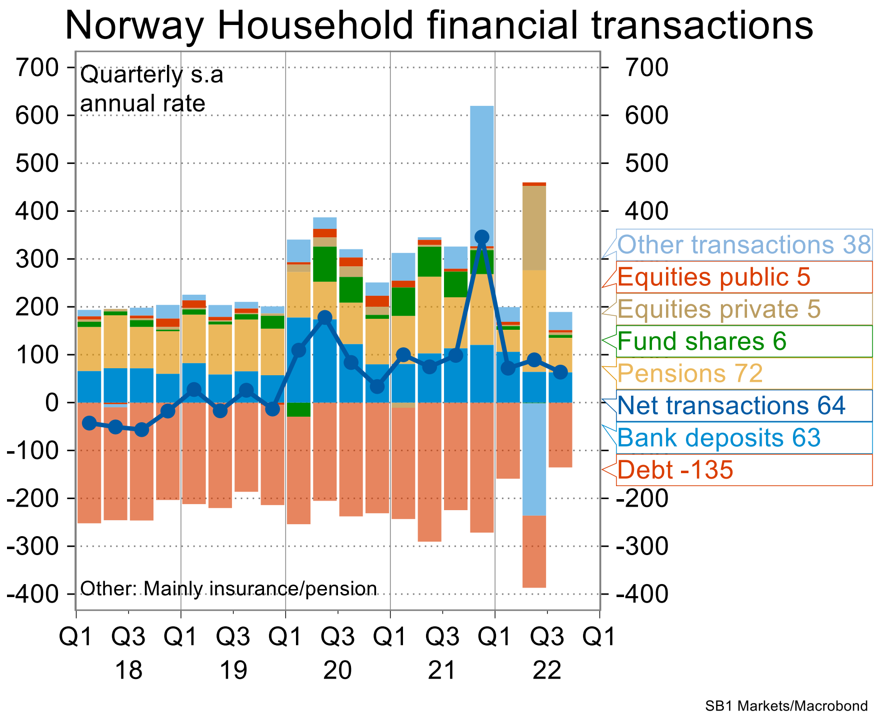


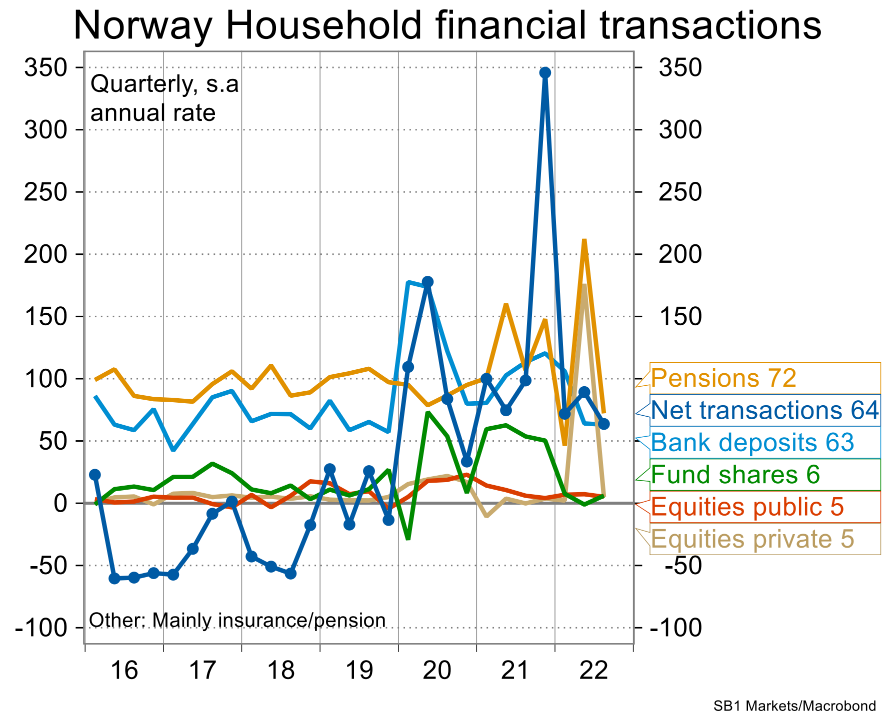


- As households normally invest more in new homes than depreciation on their old ones (which is included in total consumption), their **net cash flow** is lower than their savings (savings = income – consumption). In Q3. the cash flow fell to the lowest level since before the financial crisis, to -3% disposable income, according to National accounts
- Households also have to fill up their pension contracts, and the **'free' cash flow** is even lower, at some -7% of disposable income
- **Financial accounts** report that households have kept their saving powder dryer ??xx, net increase in financial assets are still in positive territory over the past year, +4%. There are often some discrepancies between these to stats

Some big ups and downs recent quarters, due to changes in the dividend tax

Large dividend payments in Q4-21, a large capital increase in privately owned companies in Q2-22

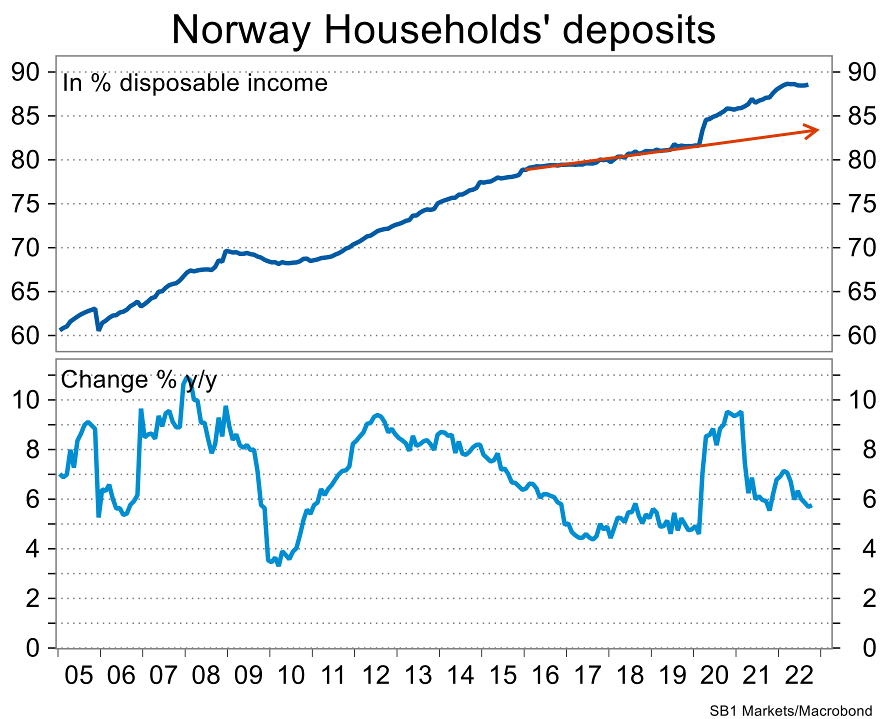


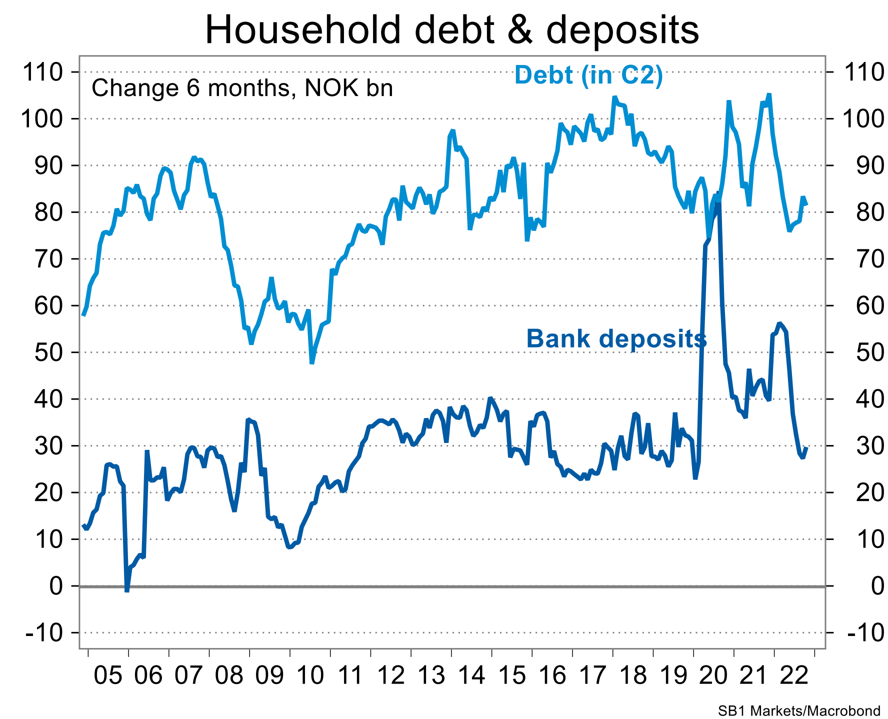


- Debt growth slowed substantially in Q3
- Growth in assets (via transactions) were modest, and almost everything were allocated to pensions (mostly paid by their employers), and in bank deposits

Bank accounts still well filled up – some 5% of disp. income, just in case?

Households increased savings sharply during the early phase of the pandemic, and bank deposits are still 'above trend'





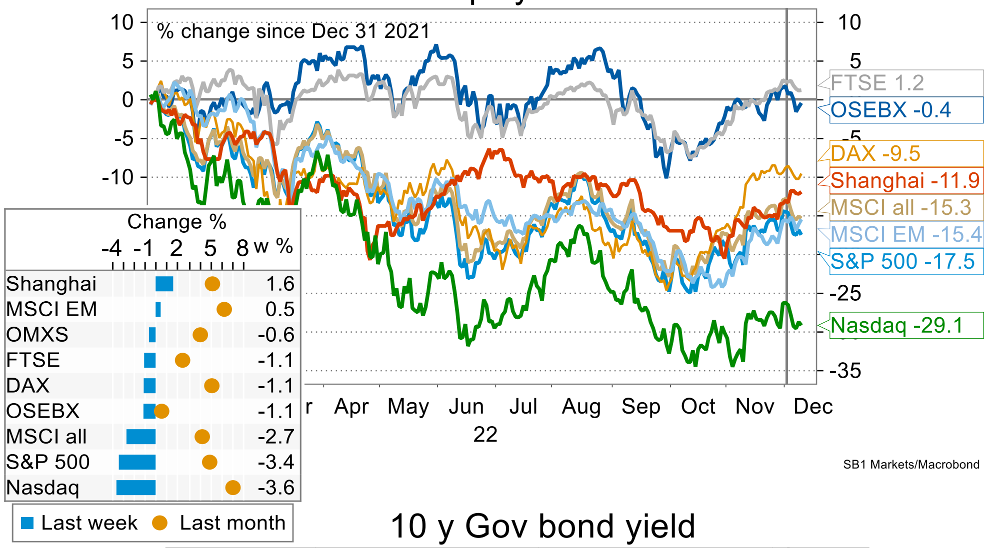
- However, growth in bank deposits has fully normalised – and is perhaps somewhat lower than normal now

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

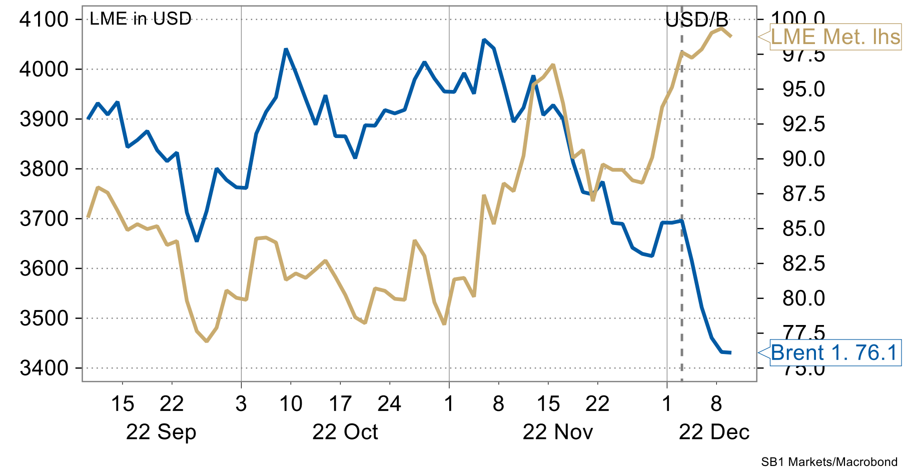
Shanghai up on scrapped Covid restrictions, equity markets elsewhere down

Bonds mixed, oil sharply down, metals up. NOK rate expectations sharply down, and the NOK the week's f/x loser

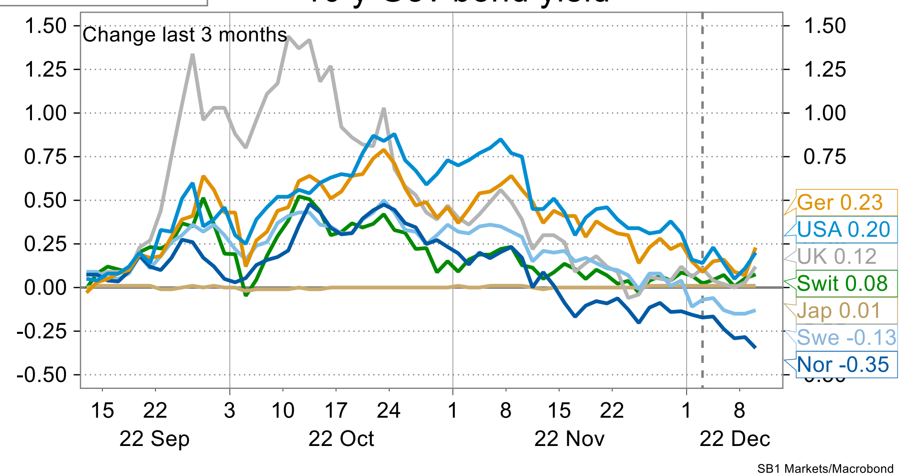
Equity Indices



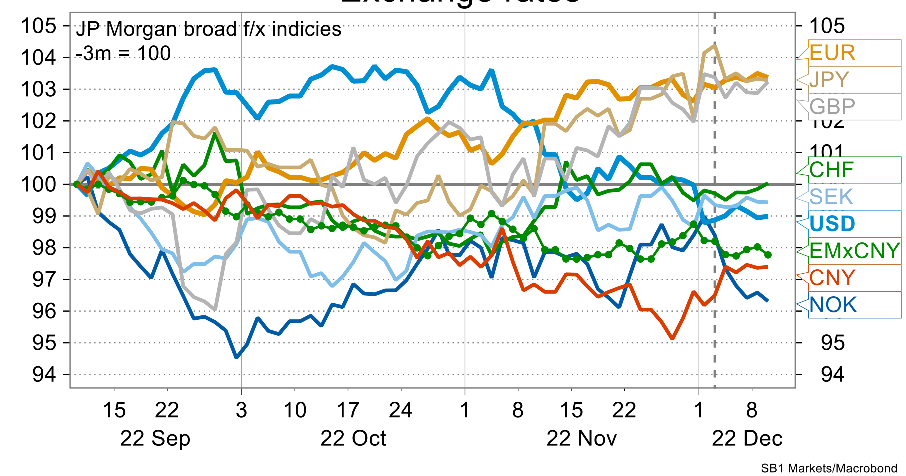
Oil vs. metals



10 y Gov bond yield

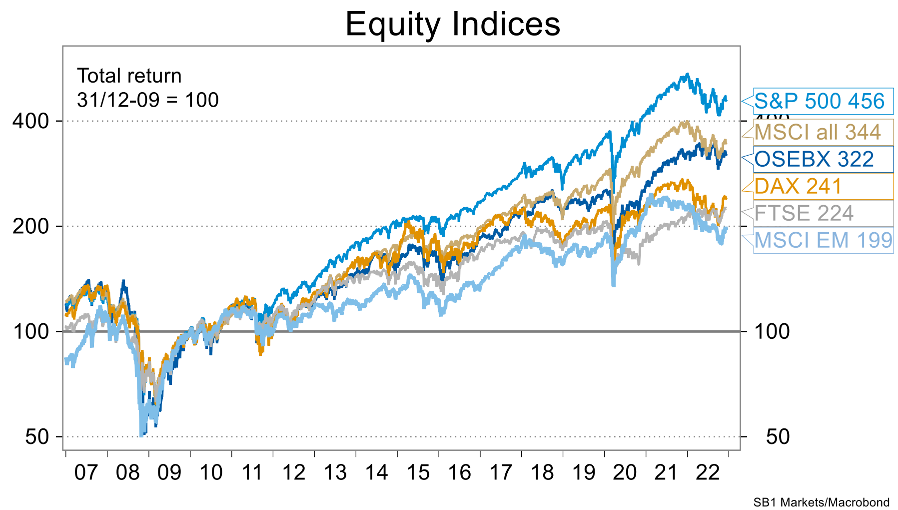


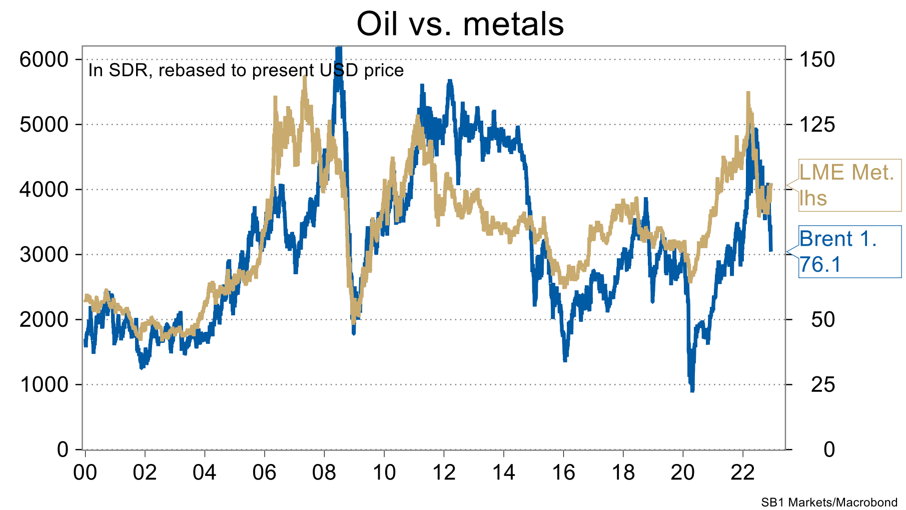
Exchange rates

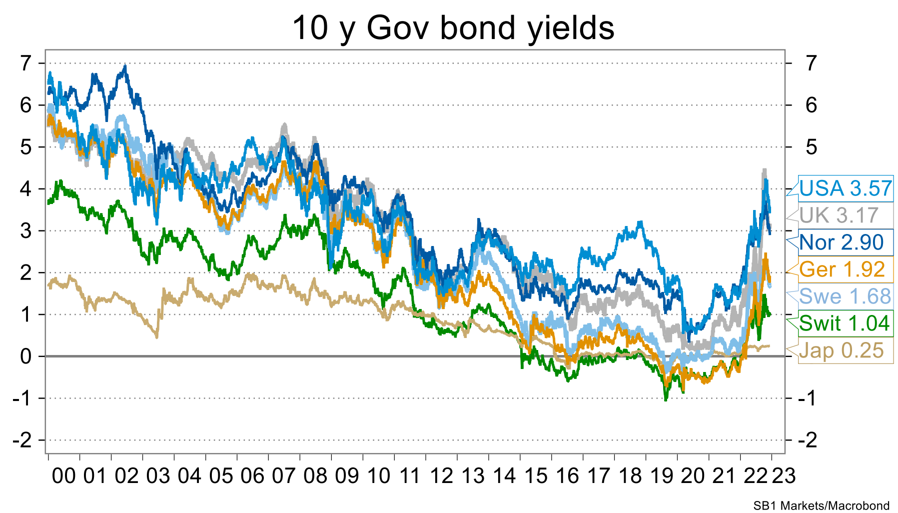


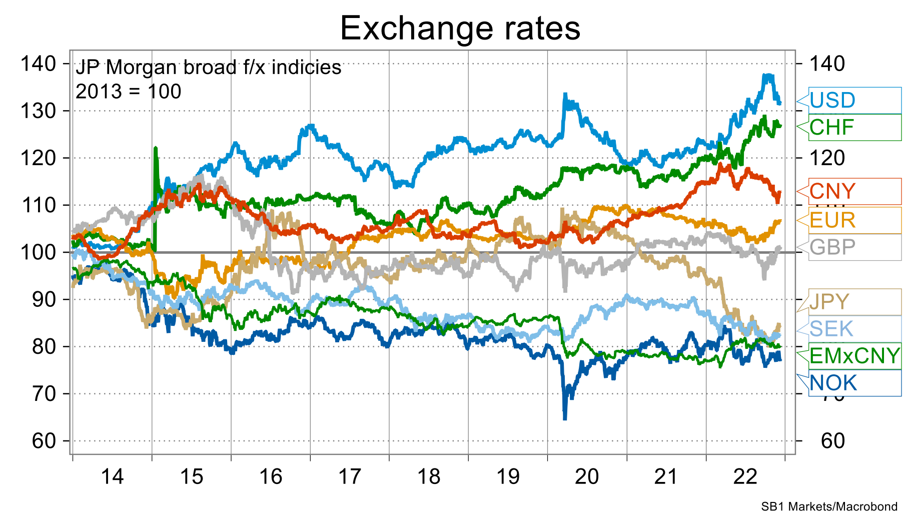
The long-term picture: Stock markets down, commodities down, yields up

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



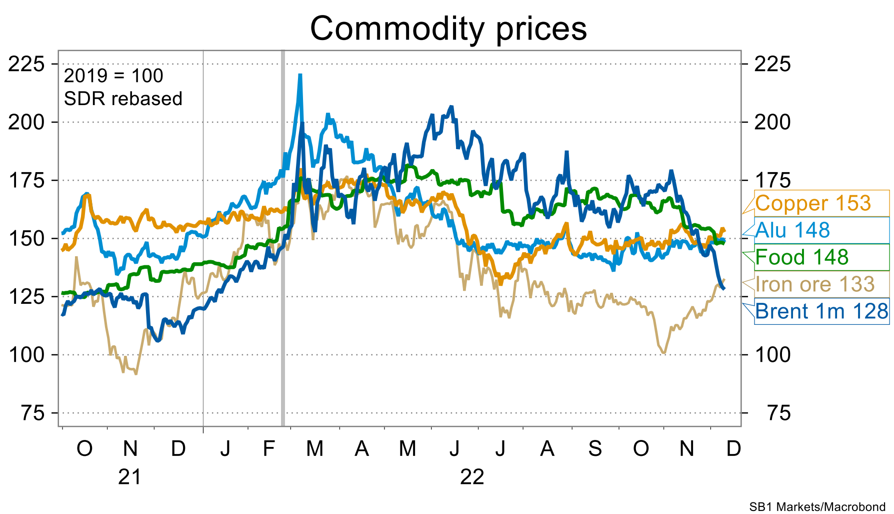






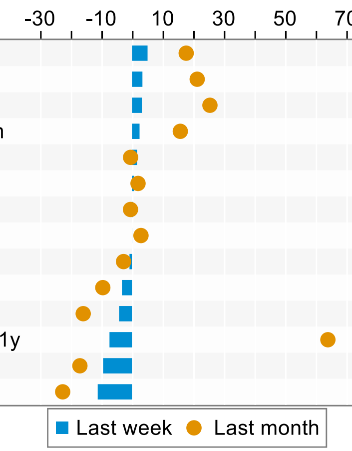
The oil price further down but European gas, most metals slightly up

Most other commodities also rose too

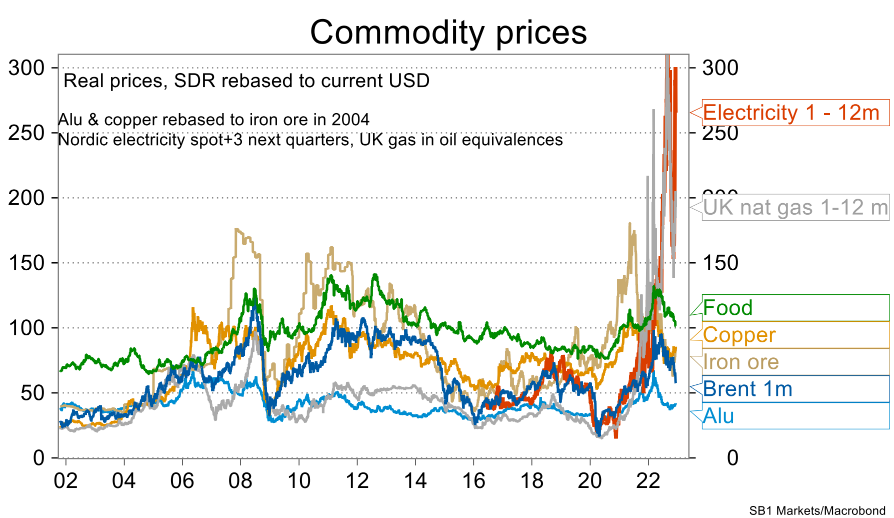


Commodity prices

In SDR % change	last w	last m	Since Feb 23
Iron Ore	5	18	-10
UK nat gas 1-12 m	3	21	59
Nethl. TTF gas 1st m	3	25	54
Nethl. TTF gas 1-12m	2	16	65
Copper,3 m fwd	2	0	-6
LME Metals	1	2	-6
Aluminum 3 m fwd	0	0	-16
SDR (vs USD)	0	3	-6
US nat gas 1 - 12 m	-1	-3	25
Food	-3	-10	-4
Wheat	-4	-16	6
NOK electricity spot-1y	-7	64	253
Brent 1-12 m	-9	-17	-5
Brent 1m	-11	-23	-13



SB1 Markets/Macrobond



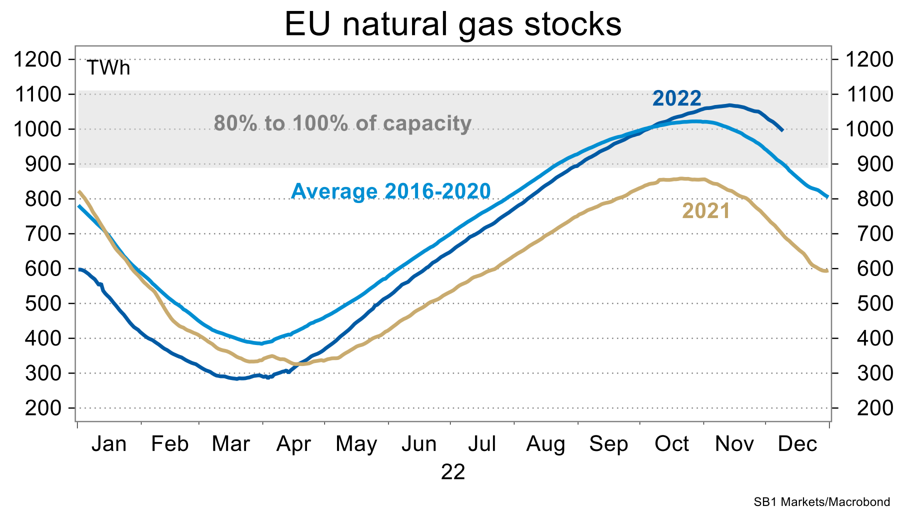
Last week – prices in SDR

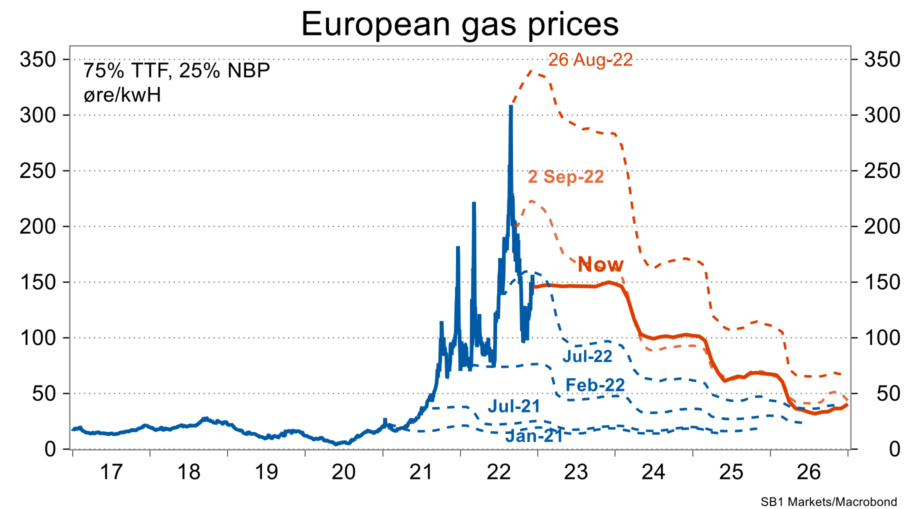
- **Oil prices** are falling further, the price cap on Russian gas - or Russian threats about cutting down oil production
- **European natural gas** continued upwards, all over the curve. Even so, **Norwegian electricity** prices fell – following a steep increase the previous weeks
- **Iron ore** prices have recovered sharply since early November on hopes for a recovery in the Chinese construction sectors following a string of policy stimulus measures – that might work
- **Other metal** prices also rose

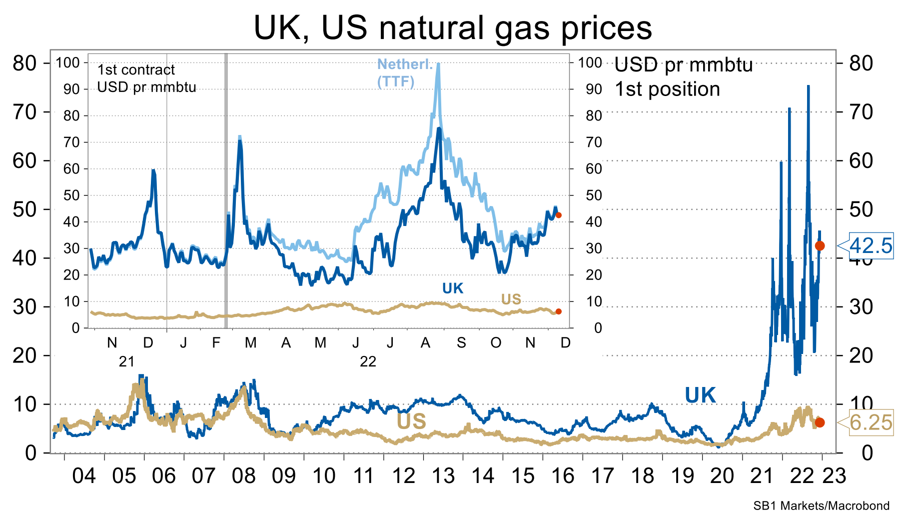
SpareBank 1 MARKETS

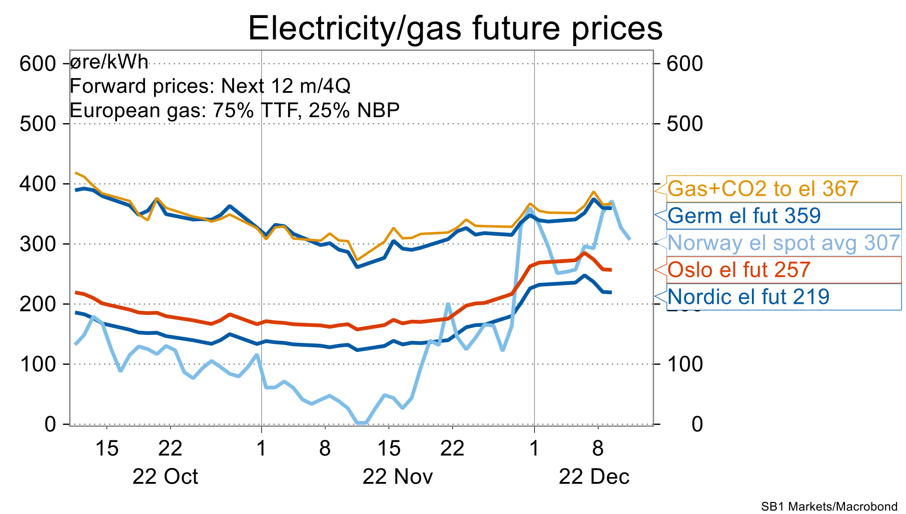
European gas prices marginally up, Norwegian el. prices slightly down

Gas stocks are now declining as weather has turned colder but levels are still rich



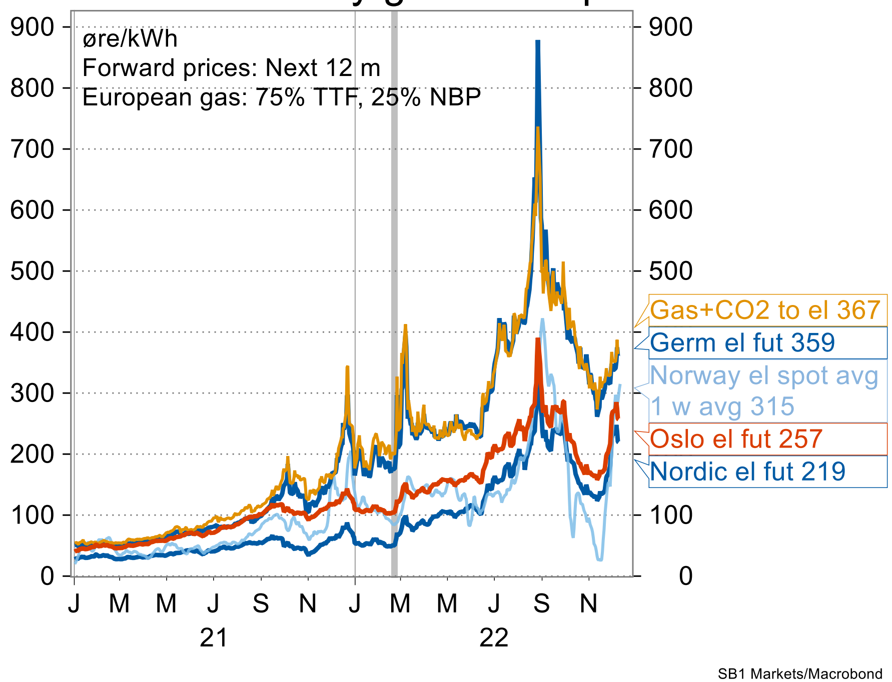




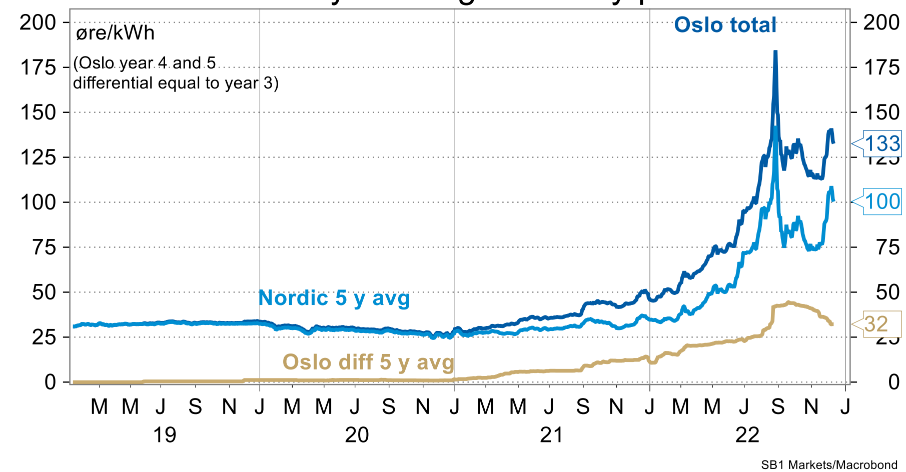


European gas & electricity sharply up recent weeks

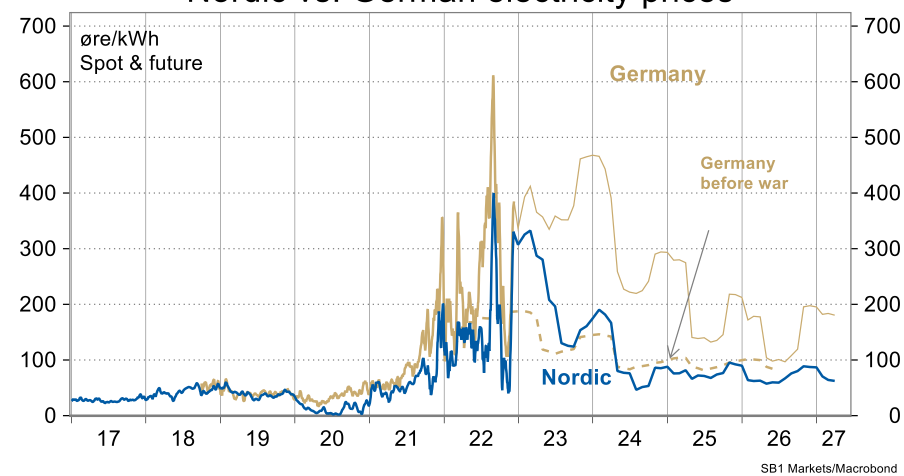
Electricity/gas future prices



Nordic 5 y fwd avg Electricty prices



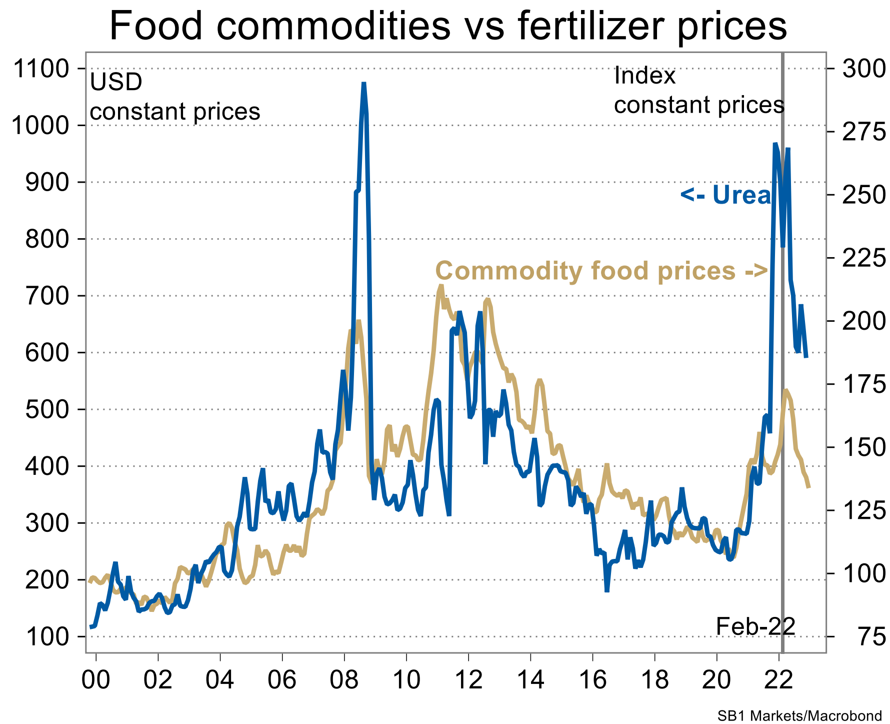
Nordic vs. German electricity prices



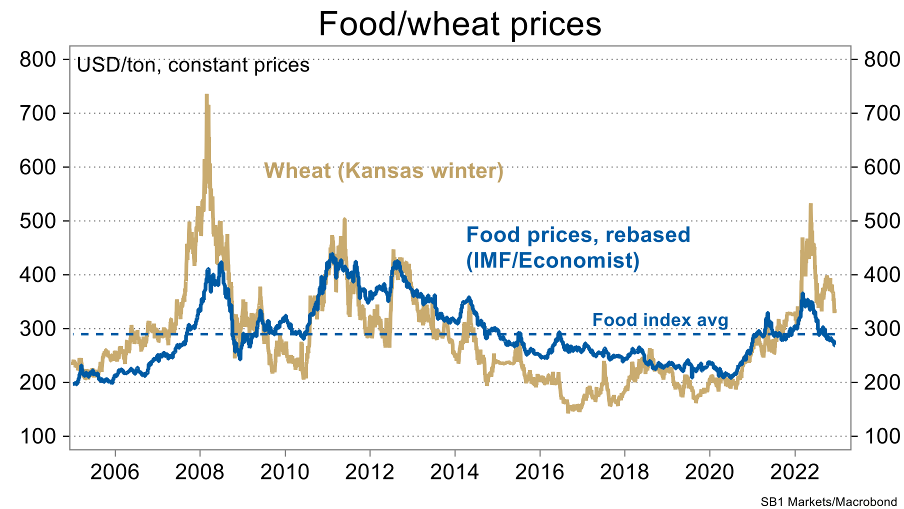
SpareBank 1 MARKETS

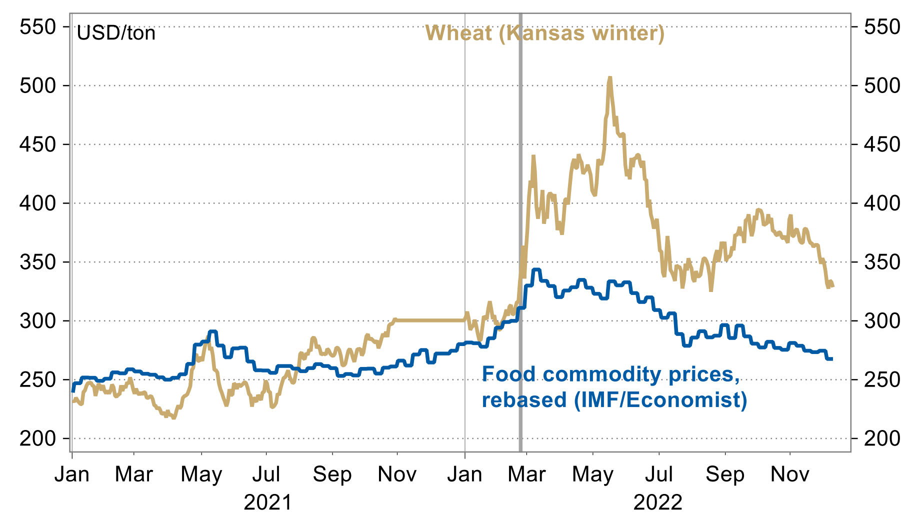
Food prices are trending down

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



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

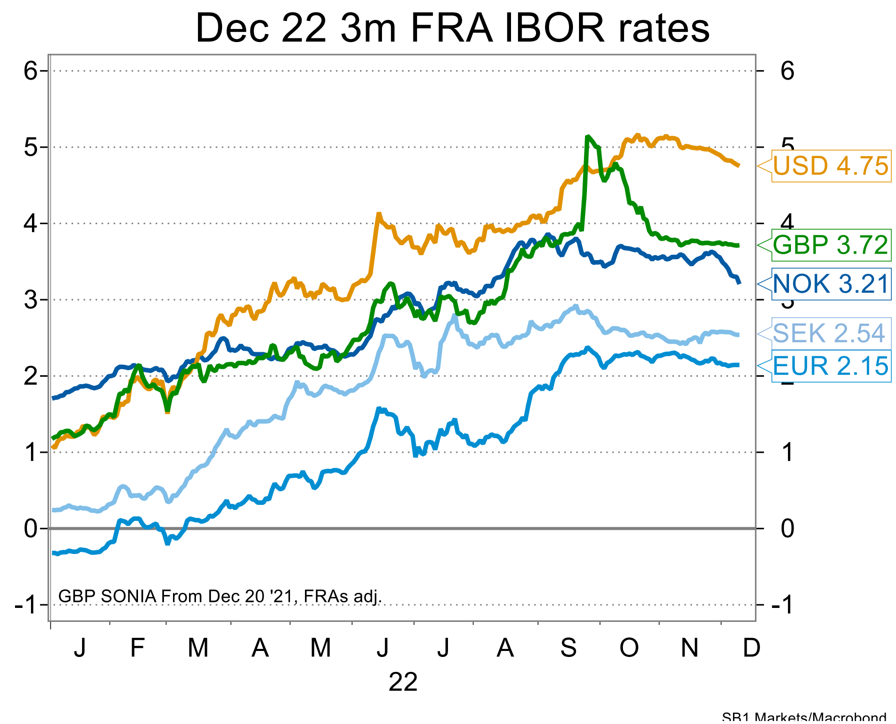


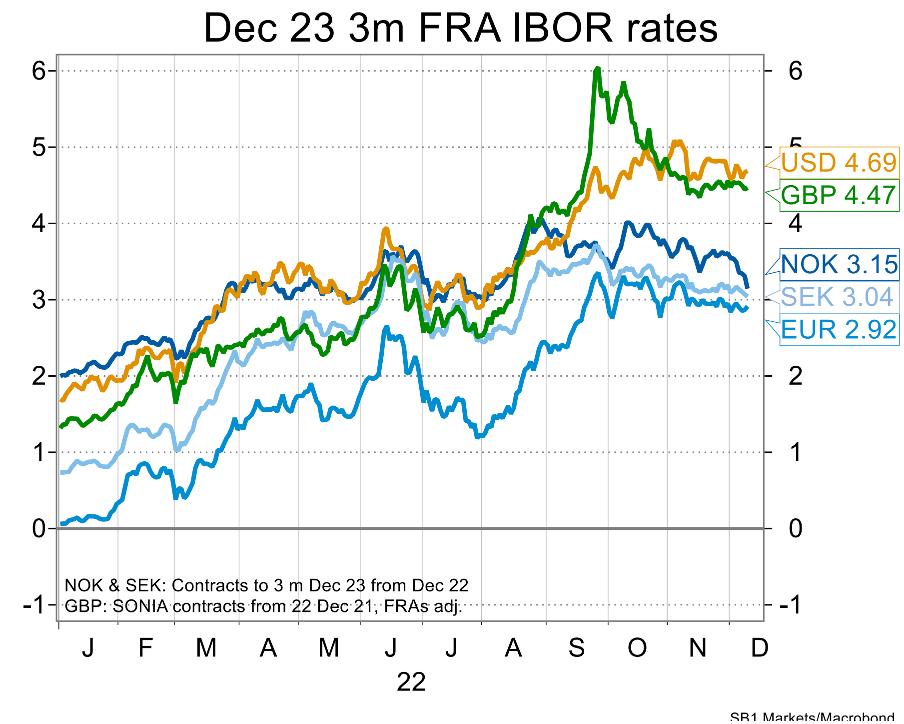


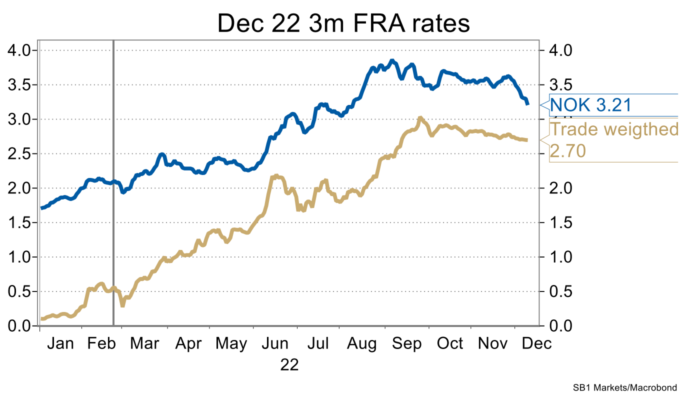
SpareBank 1 MARKETS

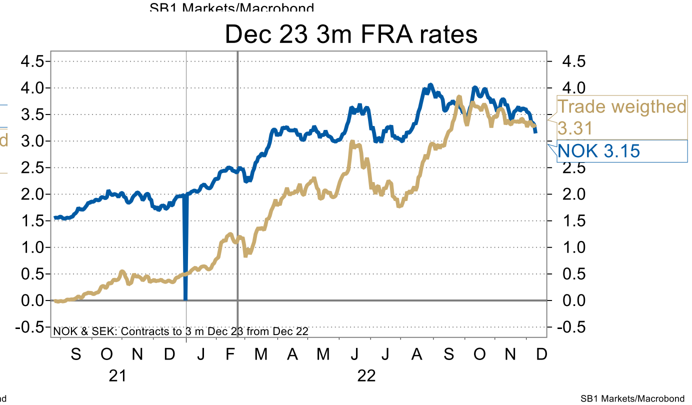
FRAs are trending down, but not much further last week. Except for NOK rates

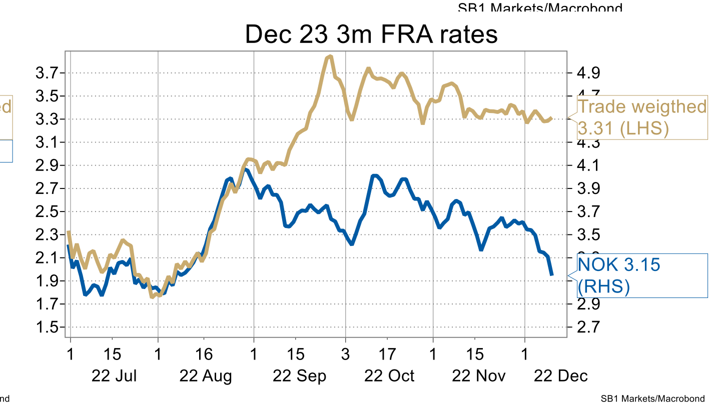
NOK rate expectations and (and NIBOR spreads) sharply down last week. Rate expectations down too much?







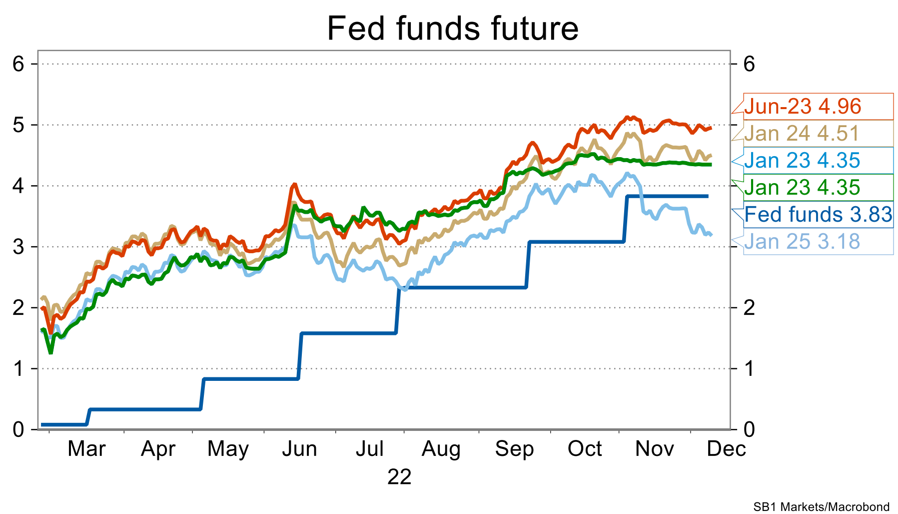


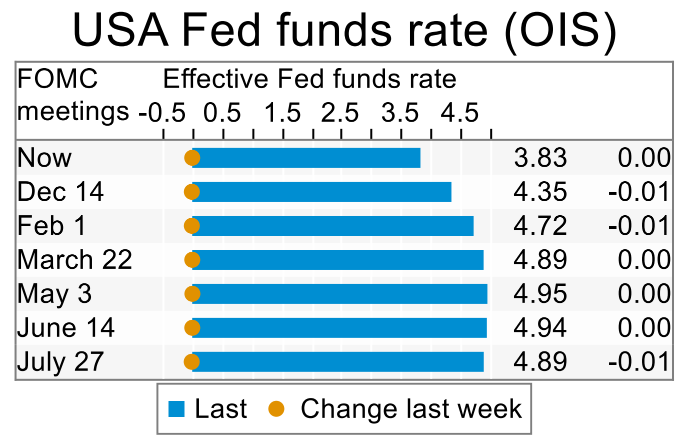


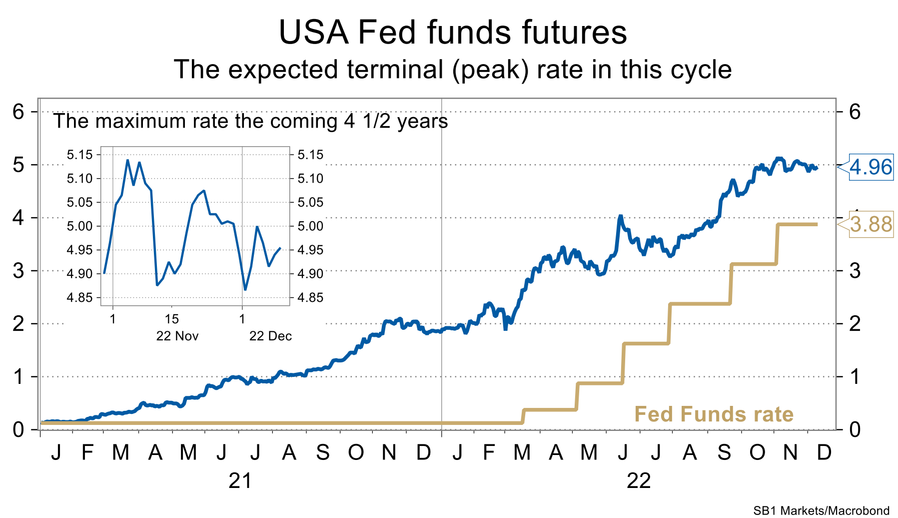
US rate expectations stable last week, a 50 bps hike to be delivered on Wed.

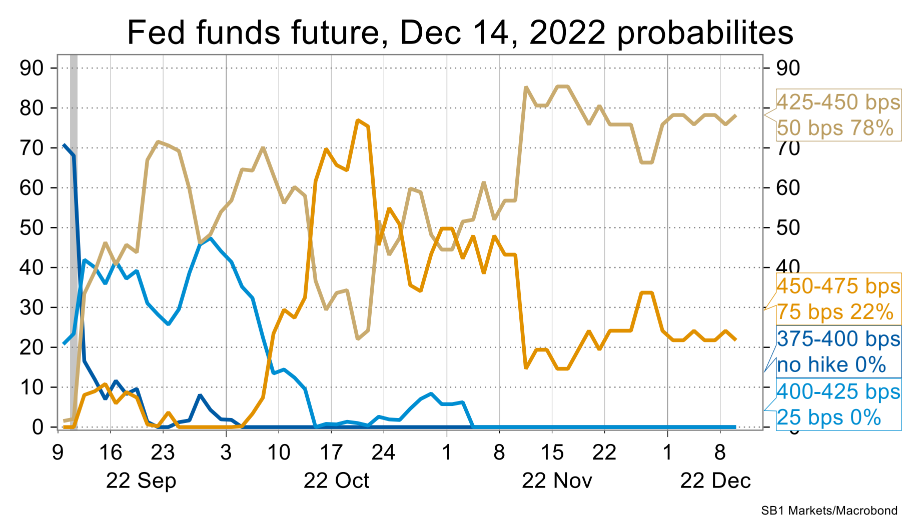
… to 4.25 – 4.50%. The FOMC will lift its dot plot by some 40 bps, to a peak at close to 5%. If so, just 2 x 25 bps left?

Then 2 x 25 bps cuts in H2-23



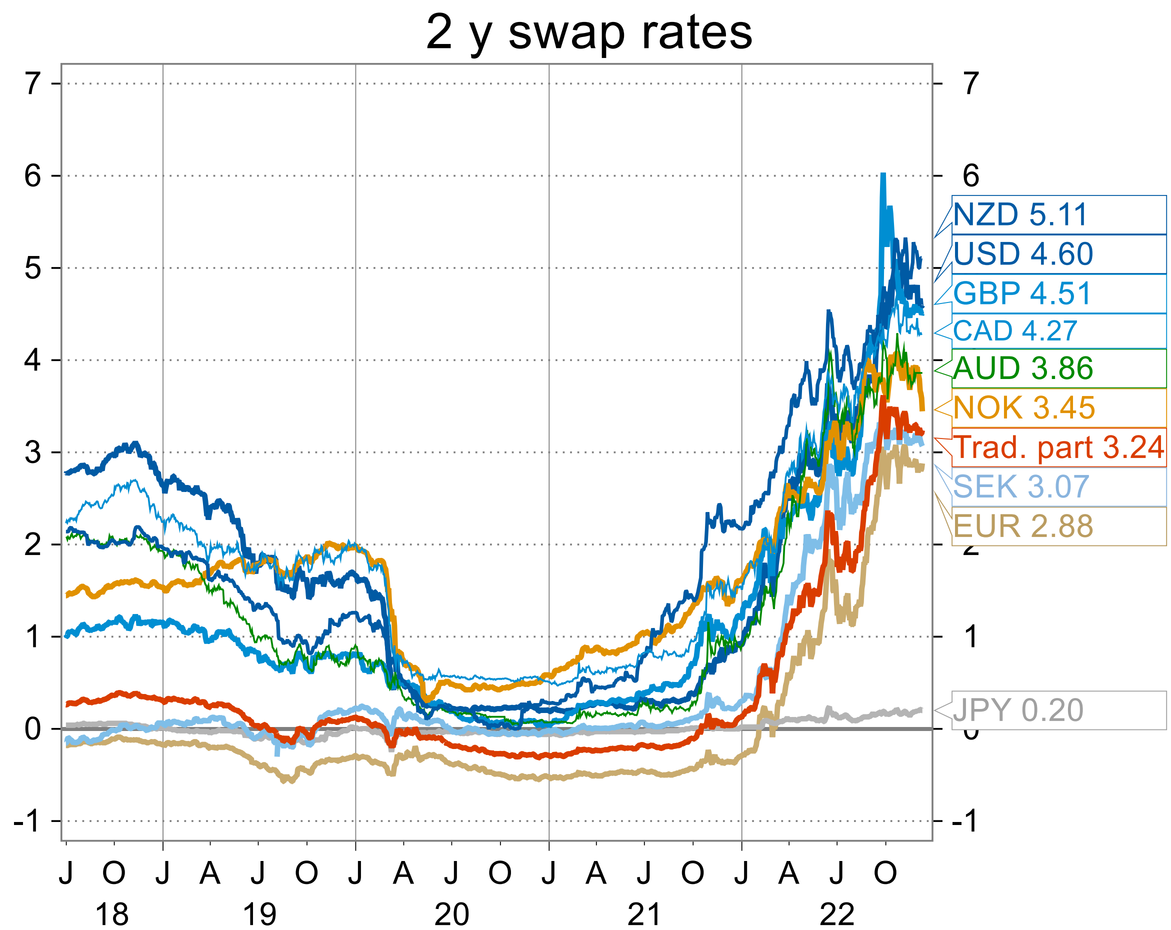




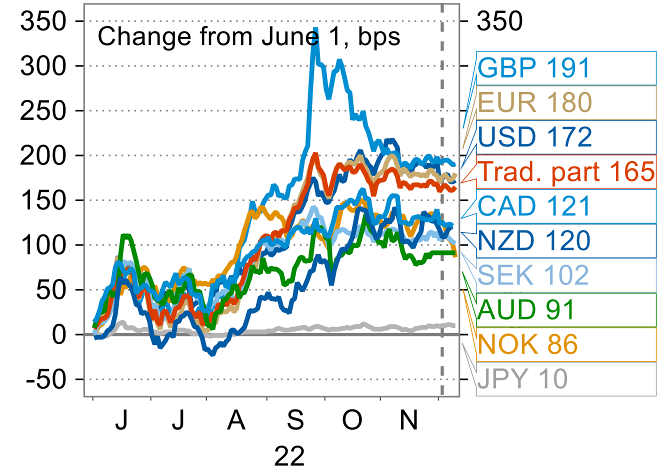


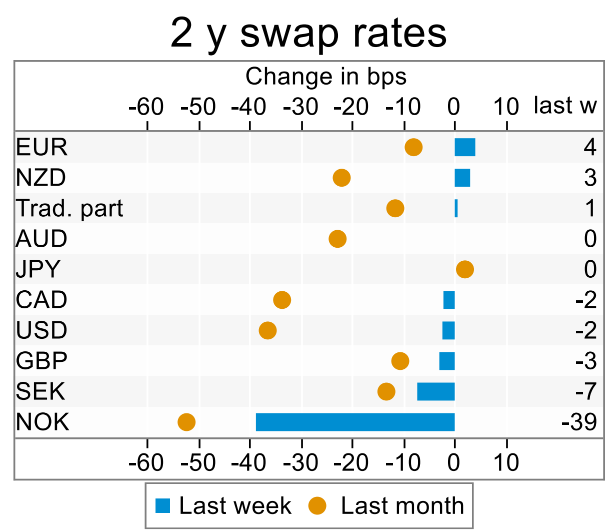
A collapse in the short end of the NOK curve, the 2y swap down 39 bps

Were NOK data really that soft last week? We doubt it



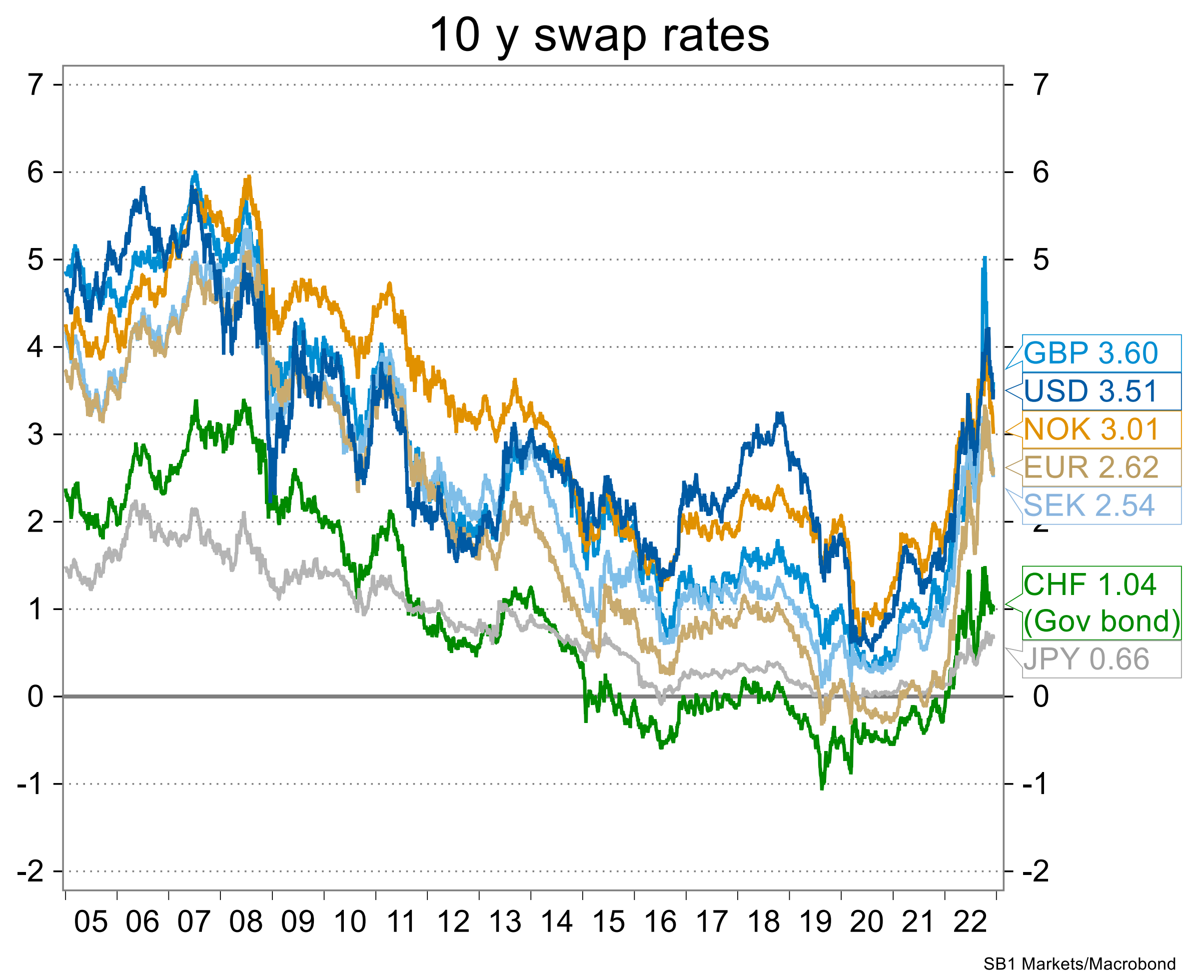
SB1 Markets/Macrobond

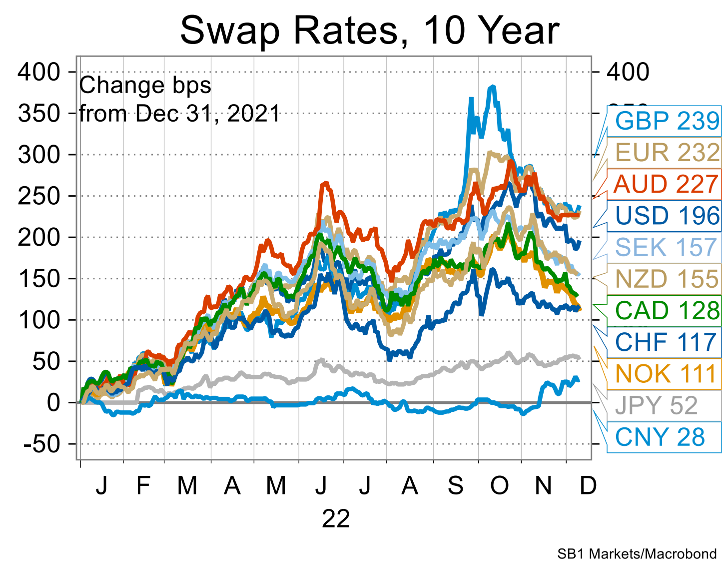


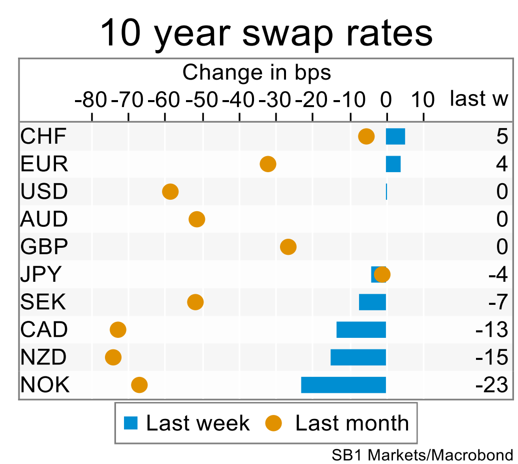


SB1 Markets/Macrobond

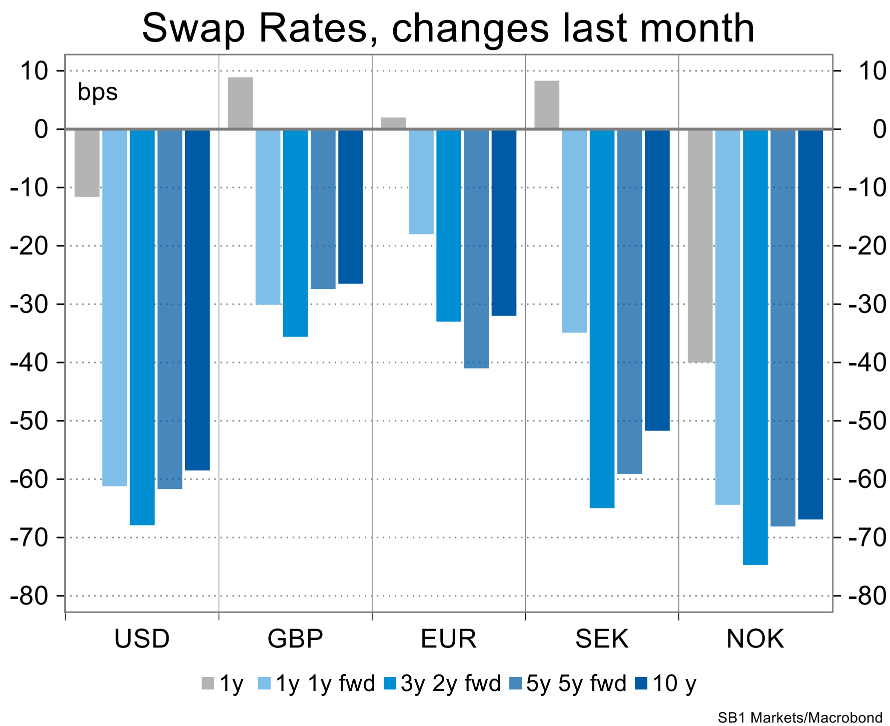
Most long dated swap rates down – with NOK rates in the lead

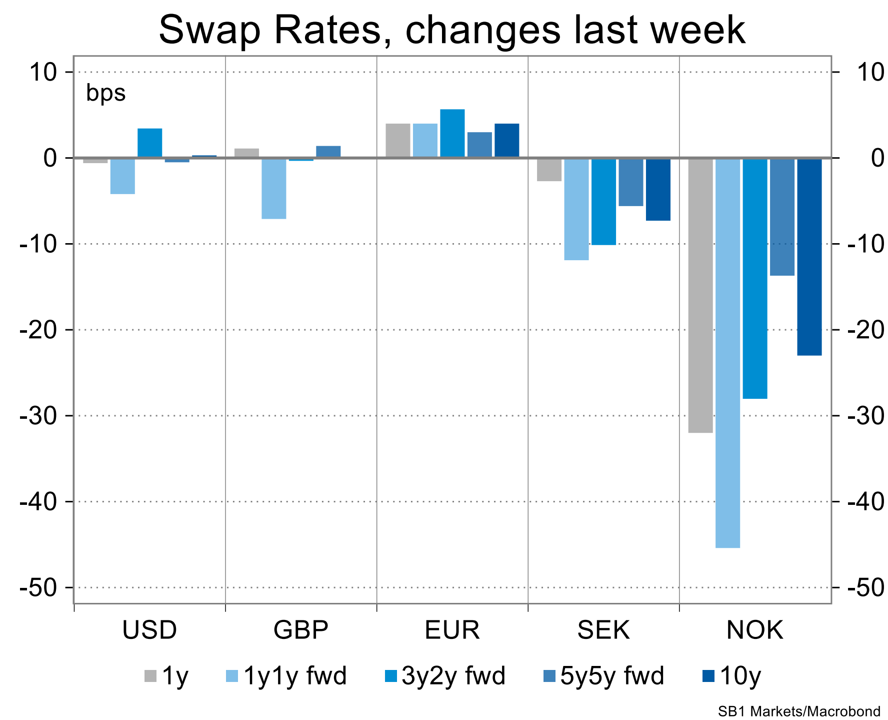






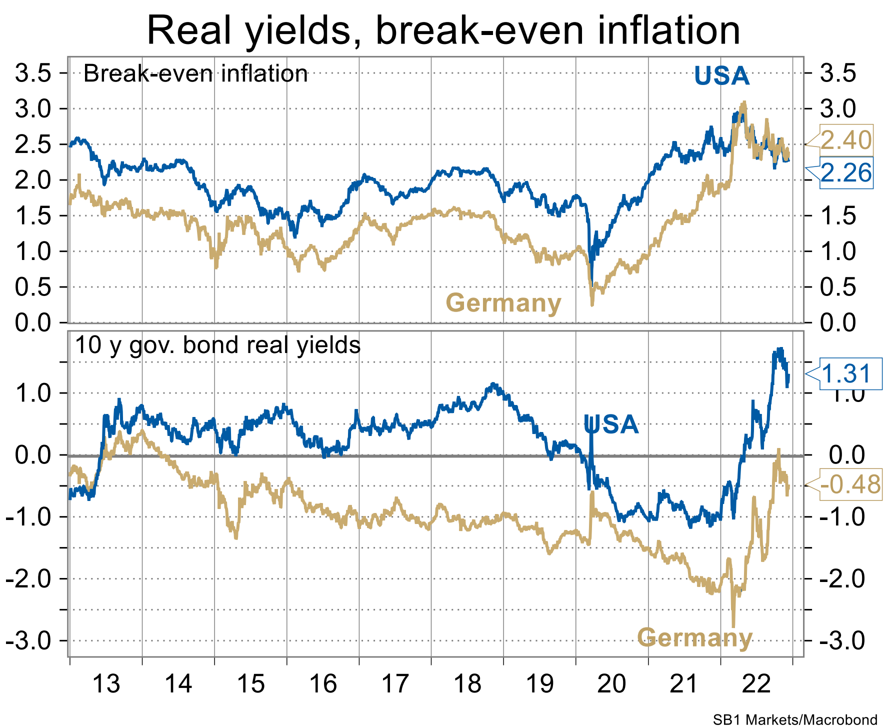
A Norwegian rate collapse last week – small changes abroad

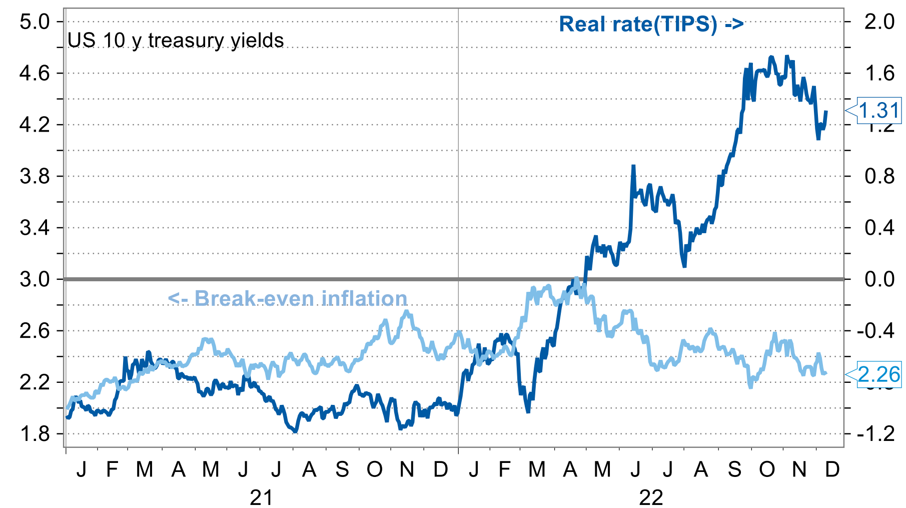




US 10 y real rates suddenly up again, while inflation expectations trend down

Inflation expectations rose further last week – but are trending down





- In the US, a 10 y CPI expectation at 2.26% is in line with Fed's 2% target for the PCE-deflator (which on average is some 0.3 pp below CPI inflation)
- 10 y real rates in Germany at -0.48%, while 10 y inflation expectations are slightly higher than US break-evens

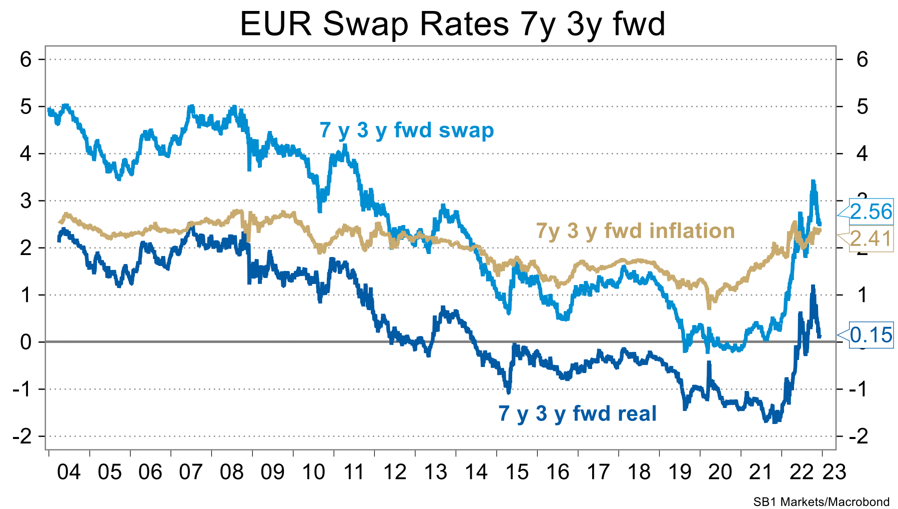
US & Germany 10 y Gov bond yield

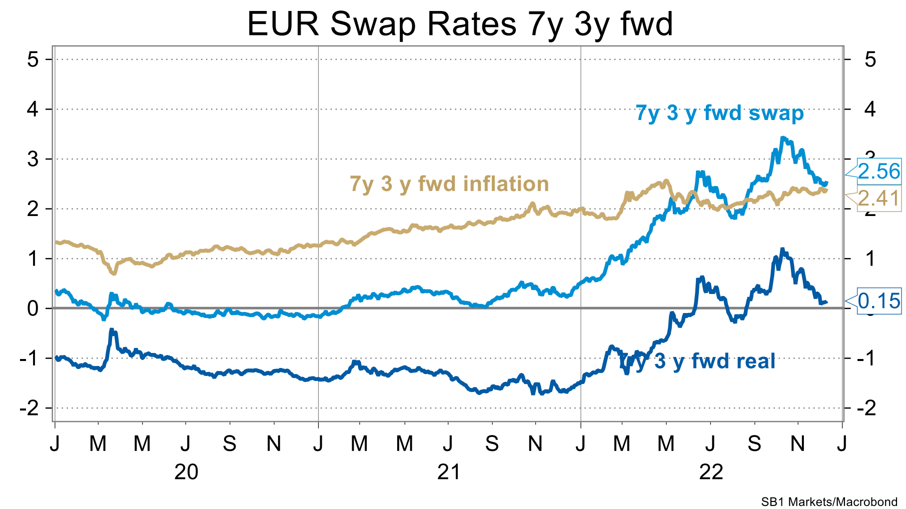
	Yield	Change 1w	Change 1m	YTD	Min since April-20
USA nominal treasury	3.57	0.06	-0.55	2.05	0.52
.. break-even inflation	2.26	-0.17	-0.16	-0.30	1.06
.. TIPS real rate	1.31	0.23	-0.39	2.35	-1.19
Germany nominal bund	1.92	0.14	-0.33	2.13	-0.65
.. break-even inflation	2.40	-0.05	-0.14	0.50	0.40
.. real rate	-0.48	0.19	-0.19	1.63	-2.80

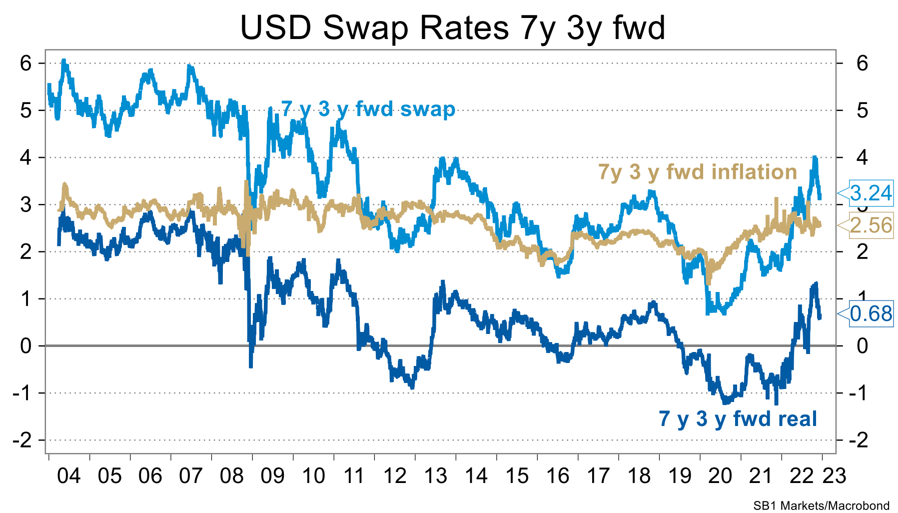
SB1 Markets/Macrobond

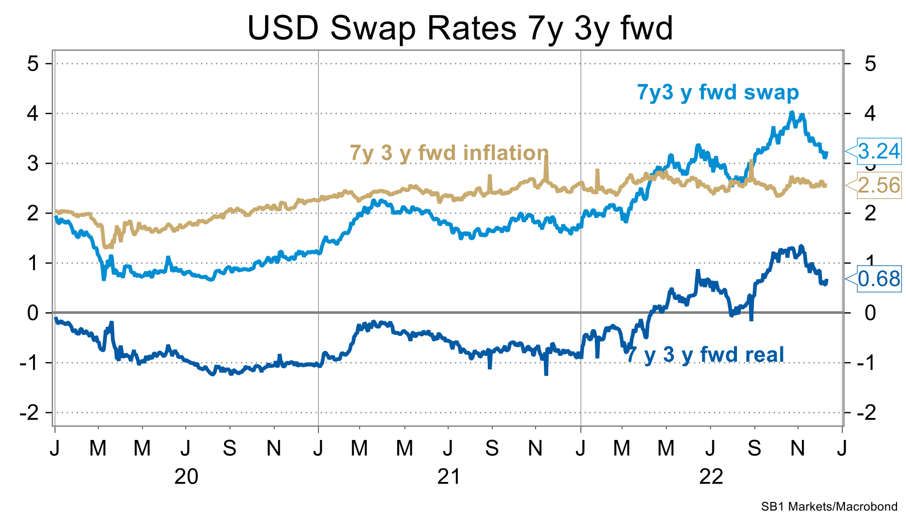
European real (swap) rates flattened last week – have fallen substantially

… and more than in the US



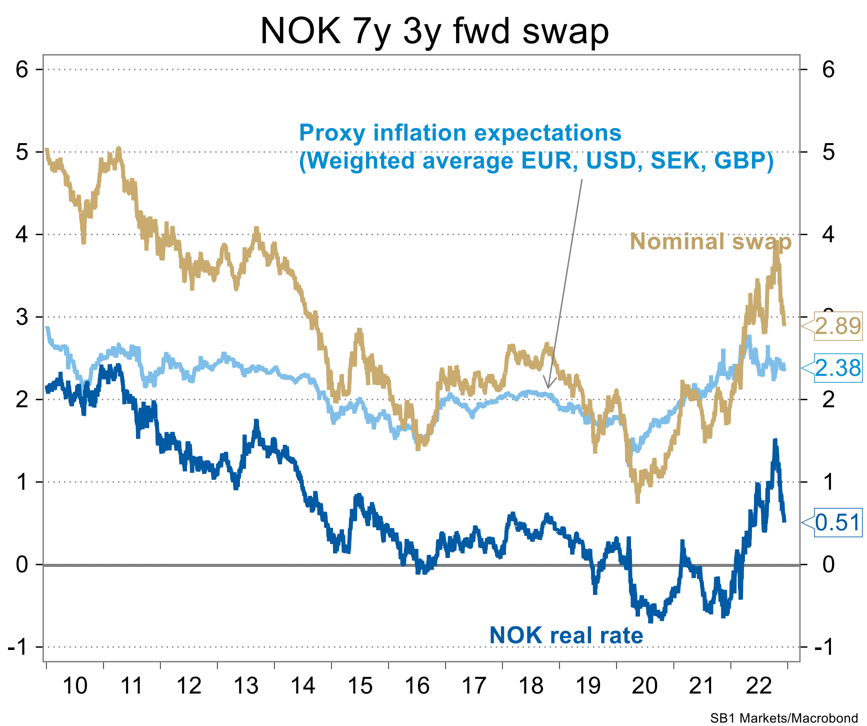


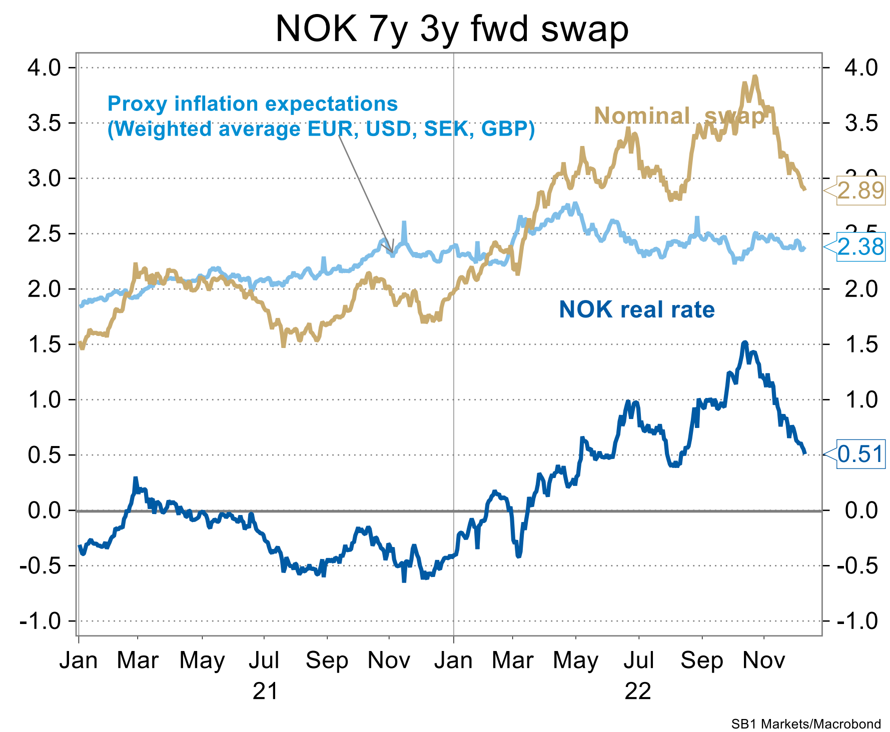


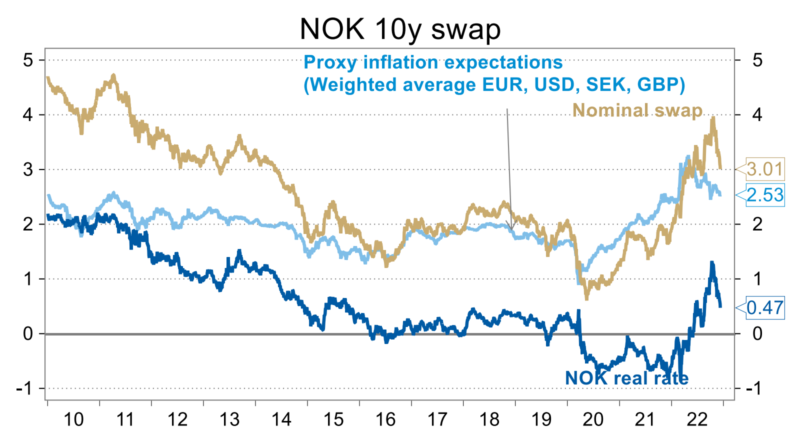


NOK real rates very likely fell last week too

– and by 100 bps from the peak (measured 7 y 3 y fwd)





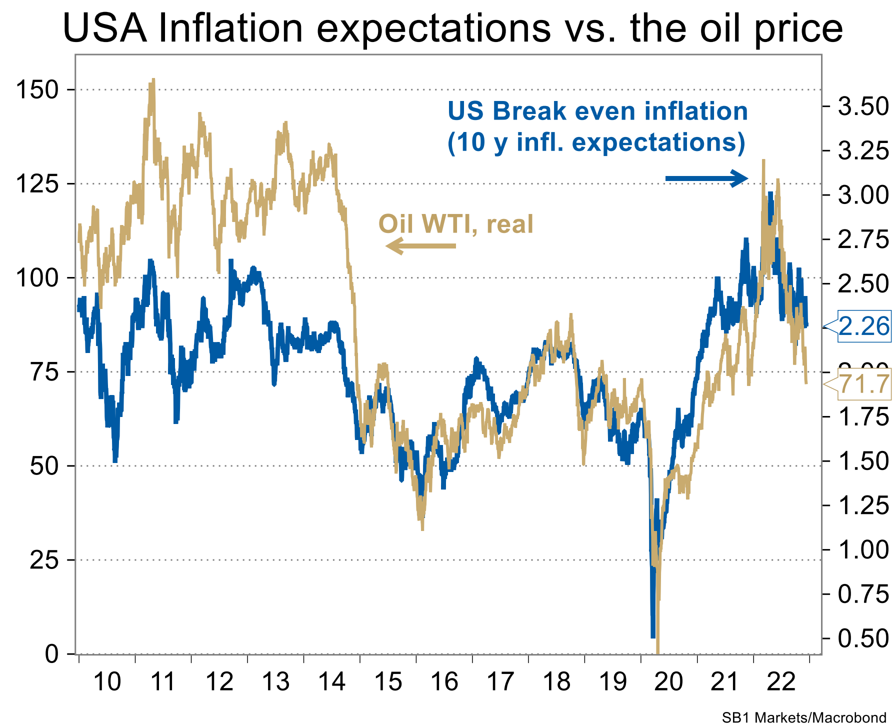


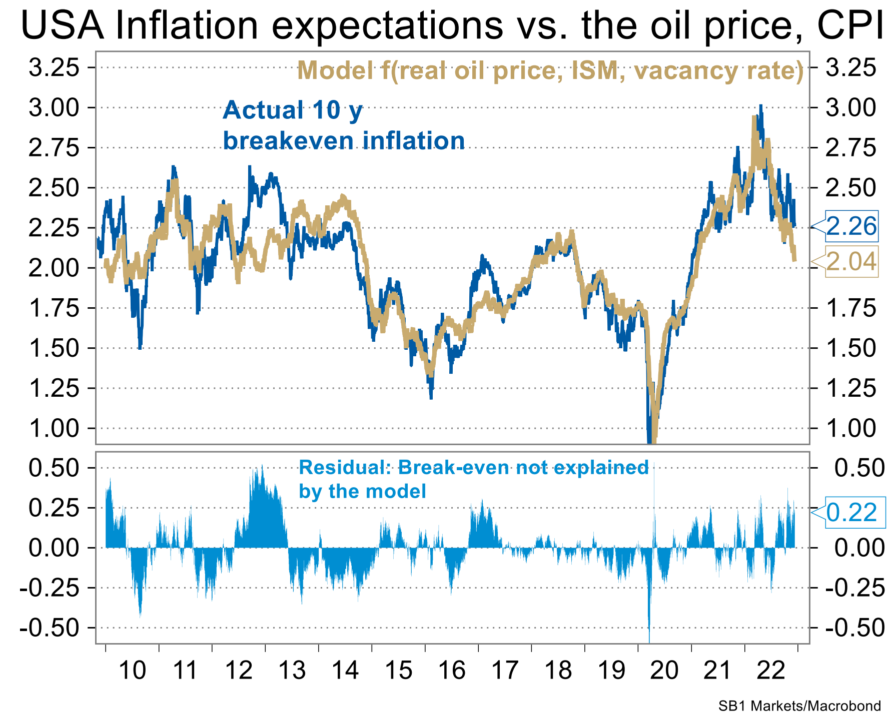
Memo: Our NOK inflation expectation proxy is a weighted average of EUR, SEK, GBP, and USD inflation swaps, cross-checked vs historical inflation differentials and inflation expectations from surveys

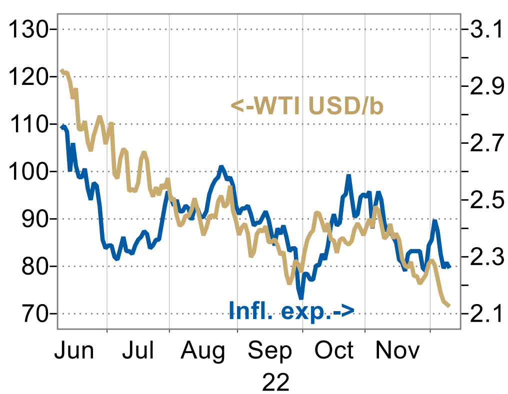
SpareBank 1 MARKETS

US inflation expectations still to high?

Our model, based on the oil price, ISM & the vacancy rate suggests a 22 bps decline in 10 y inflation expectations



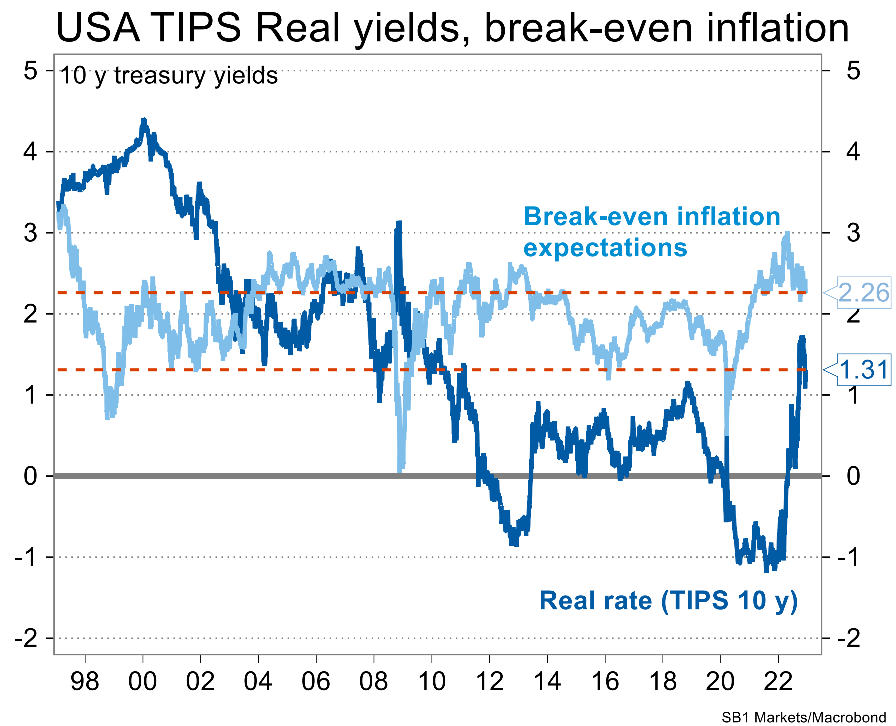


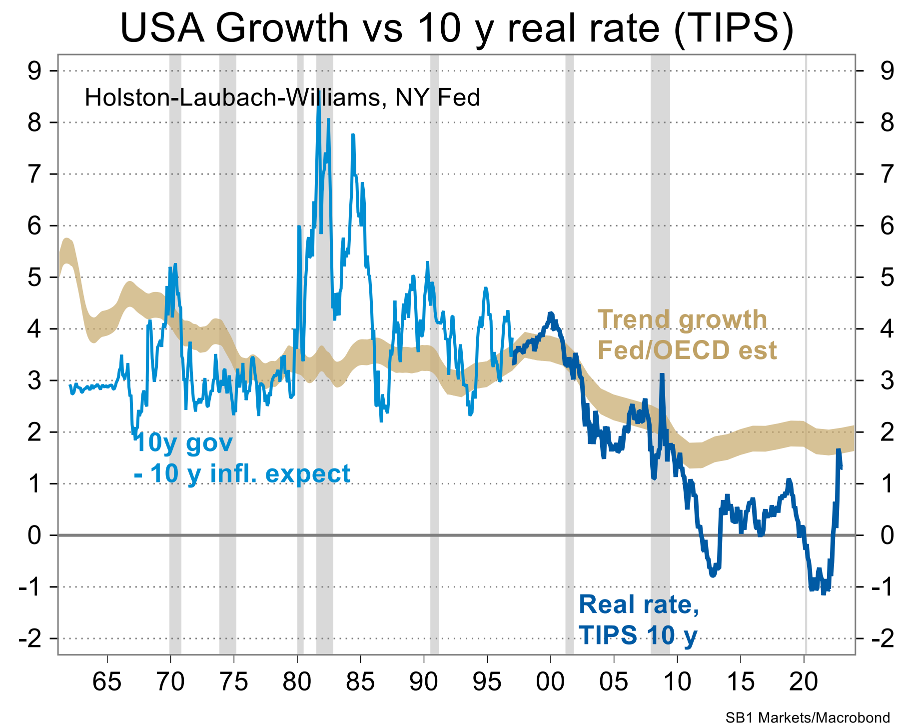


- A simple model including the spot oil price, the current ISM and the current vacancy rate pretty well explains the long-term breakeven inflation expectation in the bond yield curve
- What now? We are uncertain about the oil price, but rather confident that both the ISM, and the vacancy rate will decline.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

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

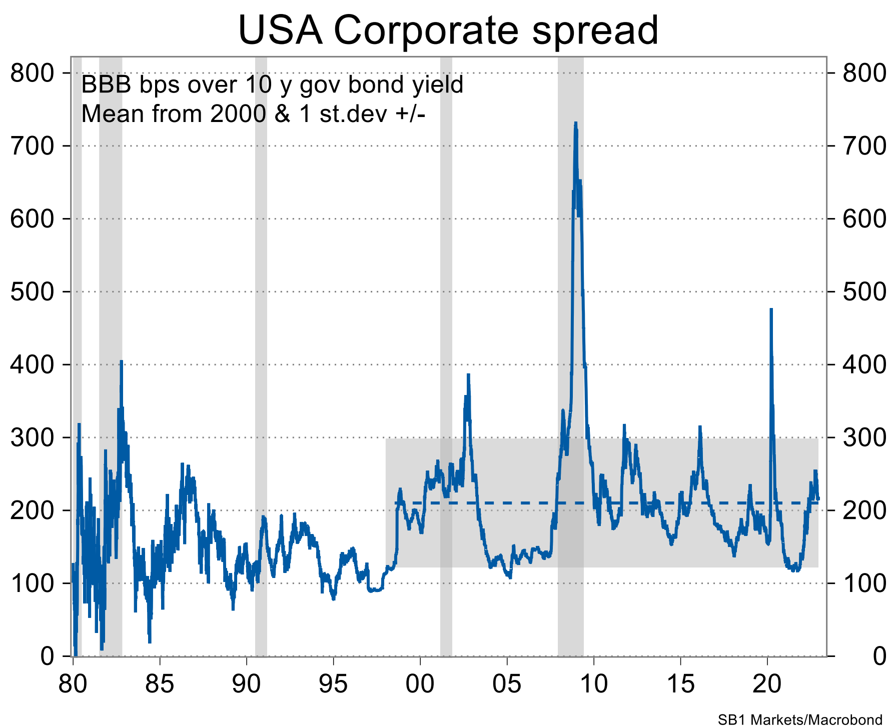
At least not compared to the differential during the pandemic





Risk on: Credit spreads trend down again, are close to an average level

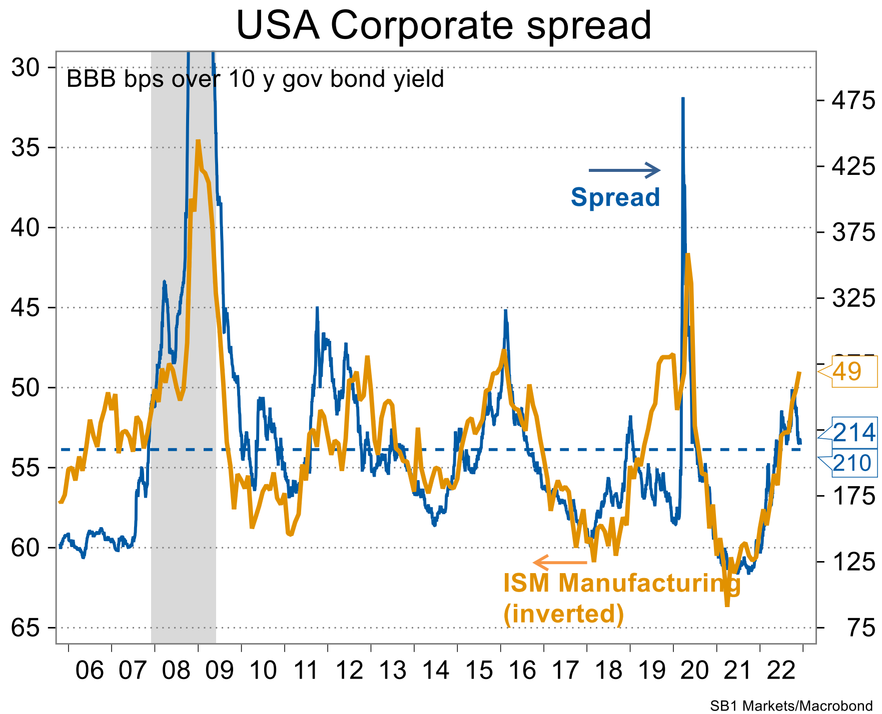
We think the trend is still up – and we expect more to come (because the economy will weaken)

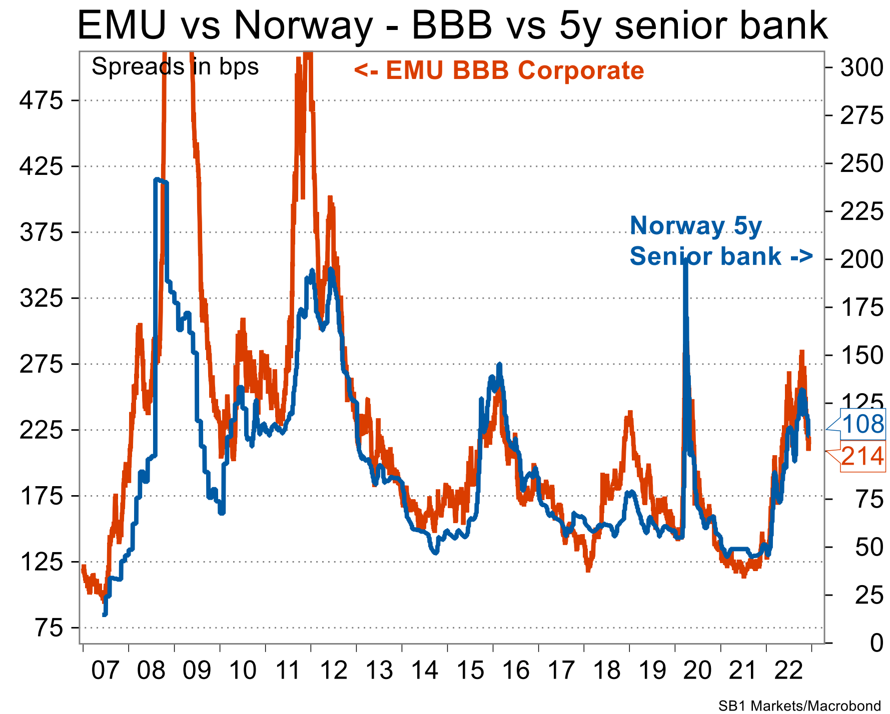


- The US BBB spread is up 100 bps from the bottom last autumn, a doubling
- In addition, real rates have increased by 210 bps from the bottom late last year
- Thus, the basis for all valuation metrics has changed dramatically, check the chart two pages forward!

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

What do you think is more likely: An ISM at 45 or 55 in some few months time? We are quite sure…

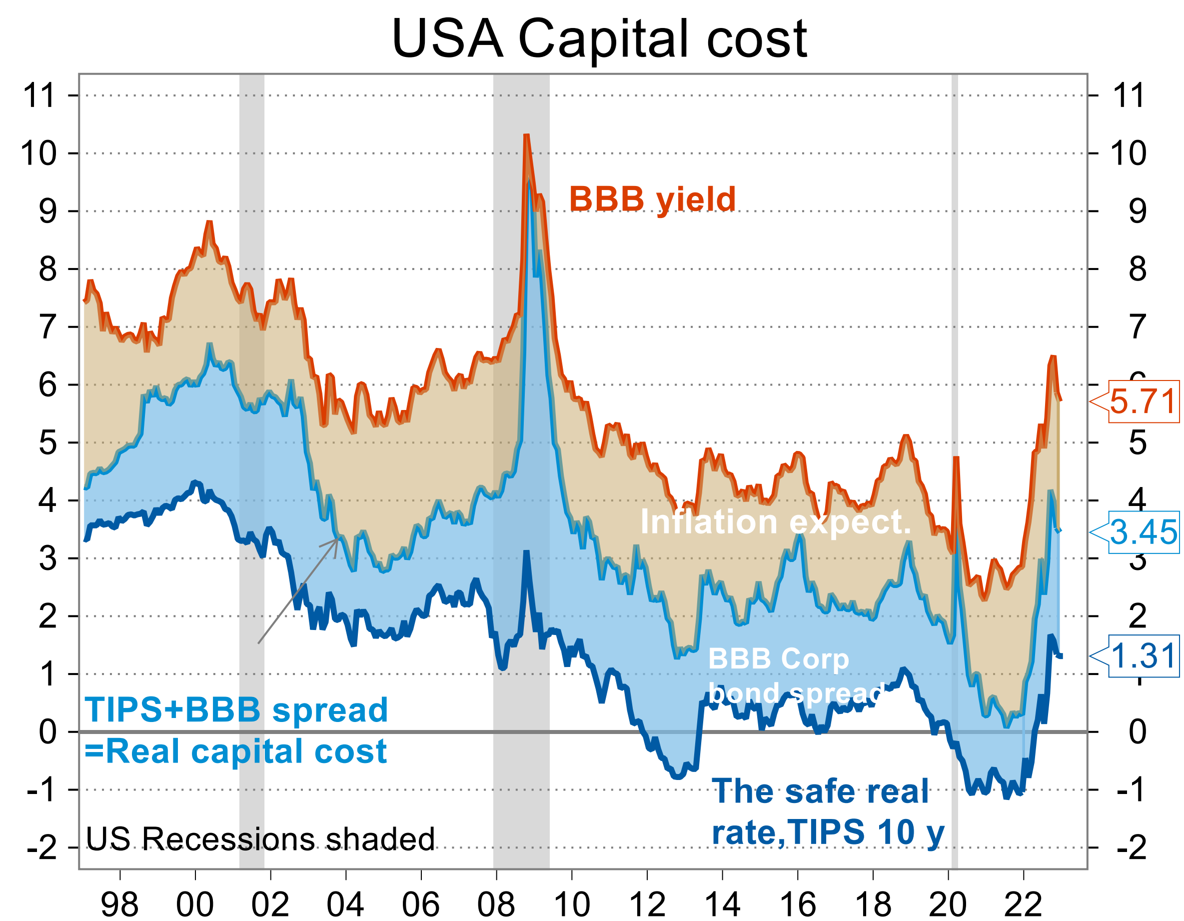




- Last week: Norwegian credit spreads continued downwards but less than the decline in 'global' spreads indicates, down 9 bps to 108 (the bank 2, 5y benchmark)

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

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

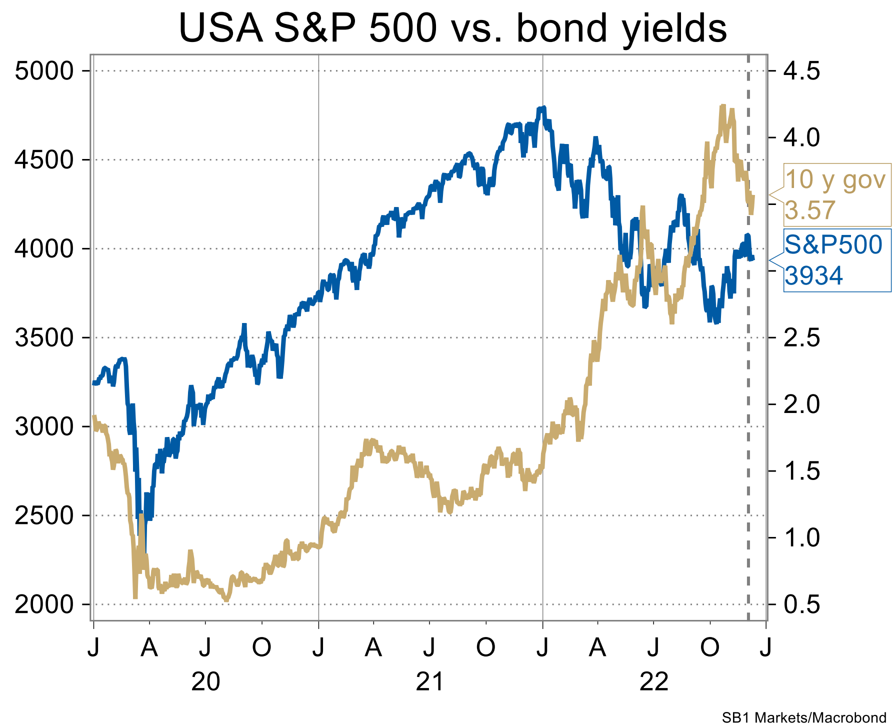


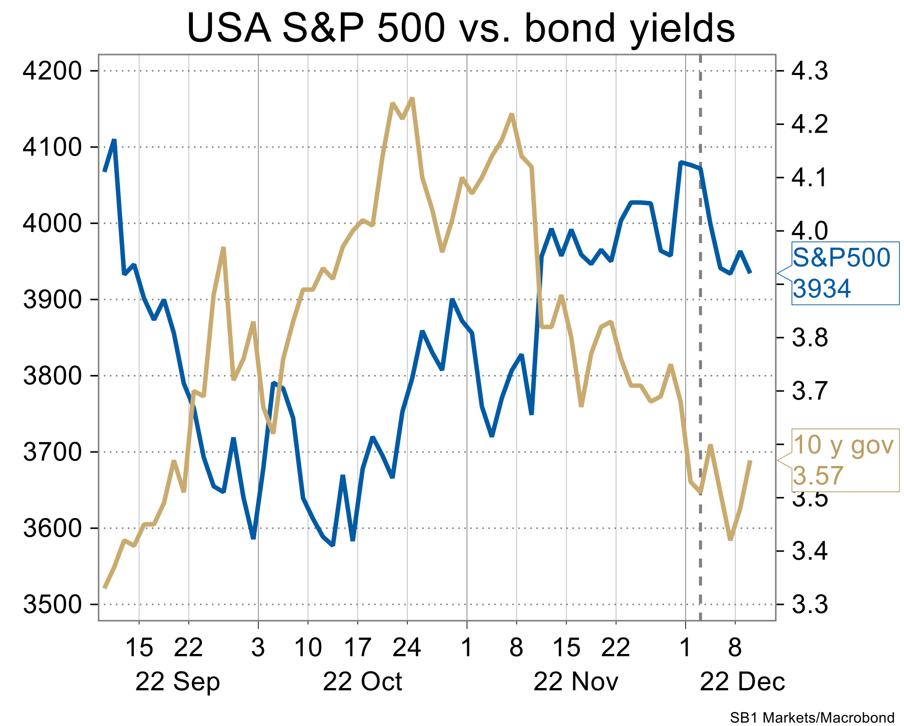
SB1 Markets/Macrobond

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

S&P down 3.4%, the bond yield up 6 bps to 3.57%

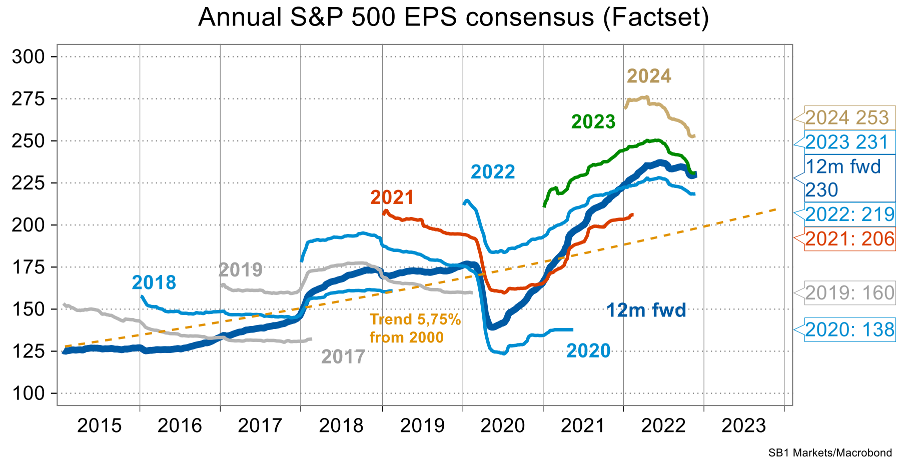
Some angst for Fed tightening – but interest rates/bond yields were not that impressed. But real yields rose

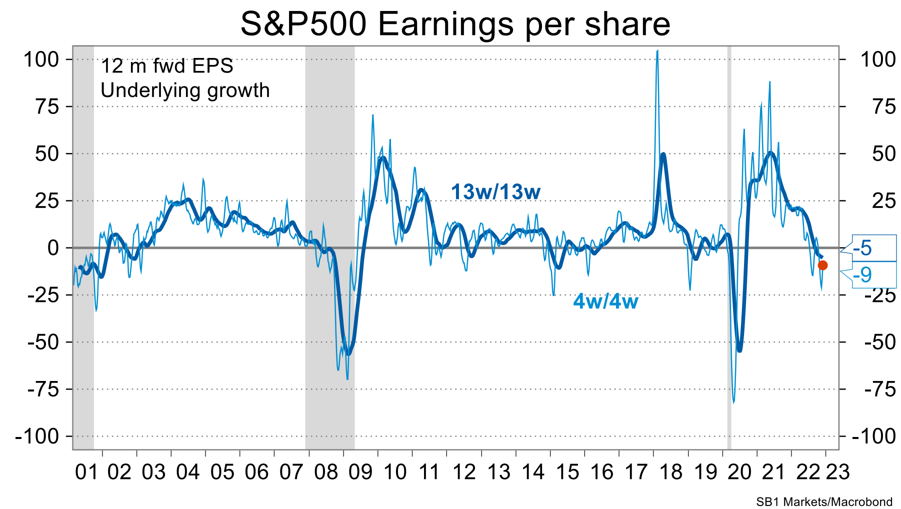


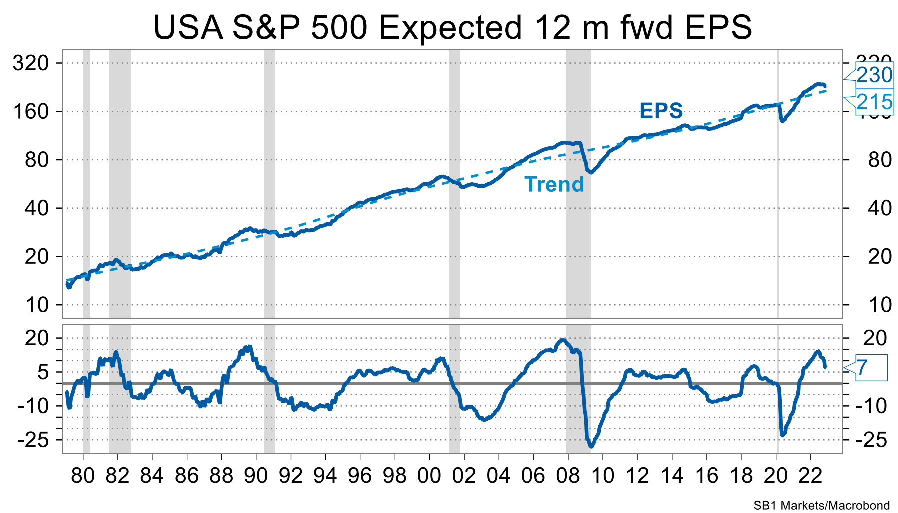


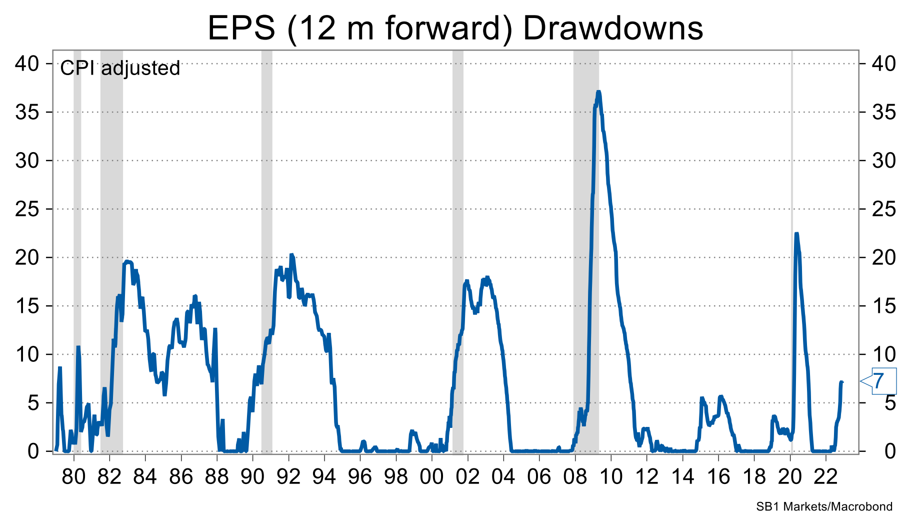
Earnings forecasts has stabilised – but the risk still on the downside

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





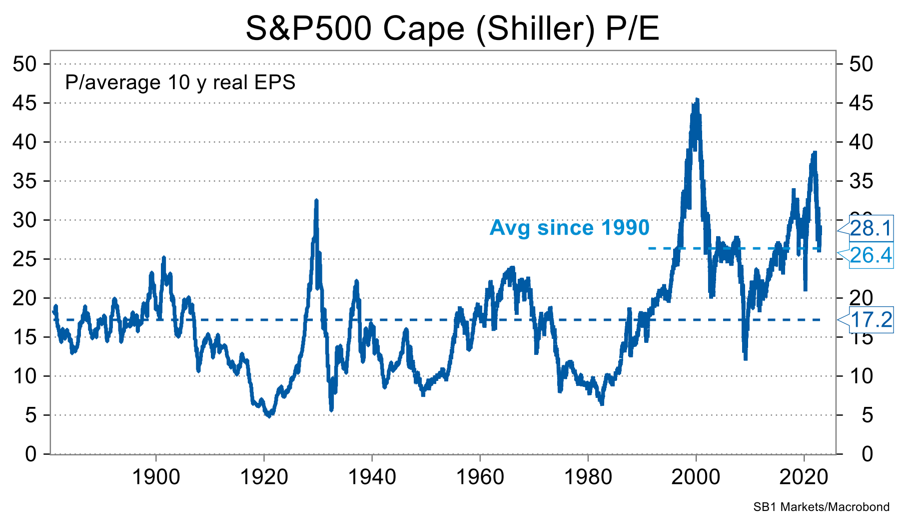


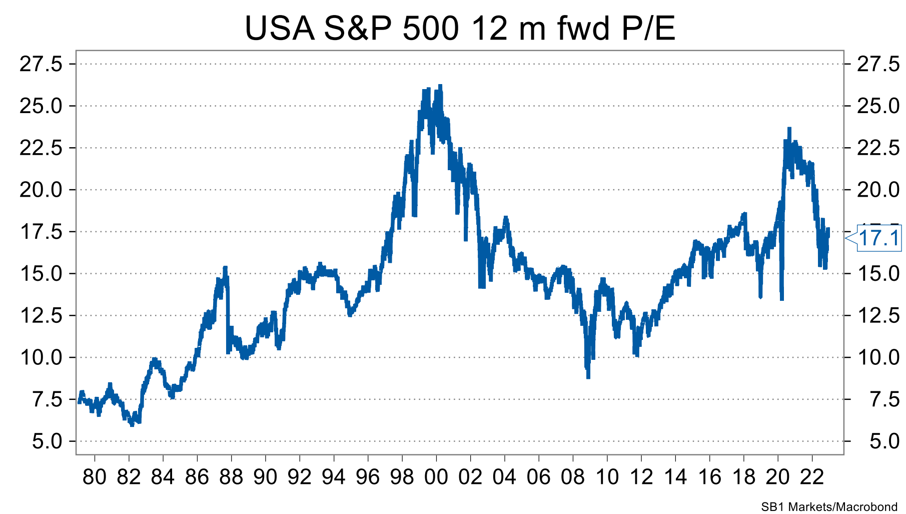


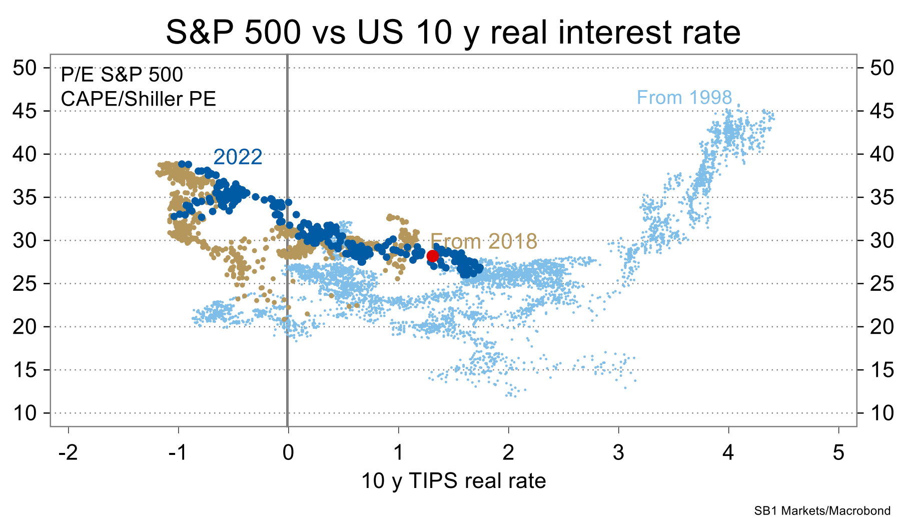
SpareBank 1 MARKETS

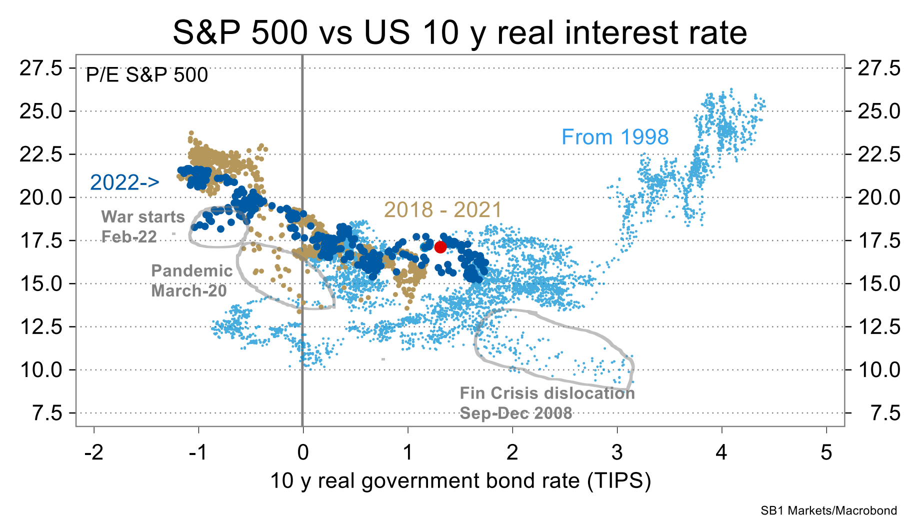
4 valuation charts: Check the extreme tight correlation between real rates, P/E

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



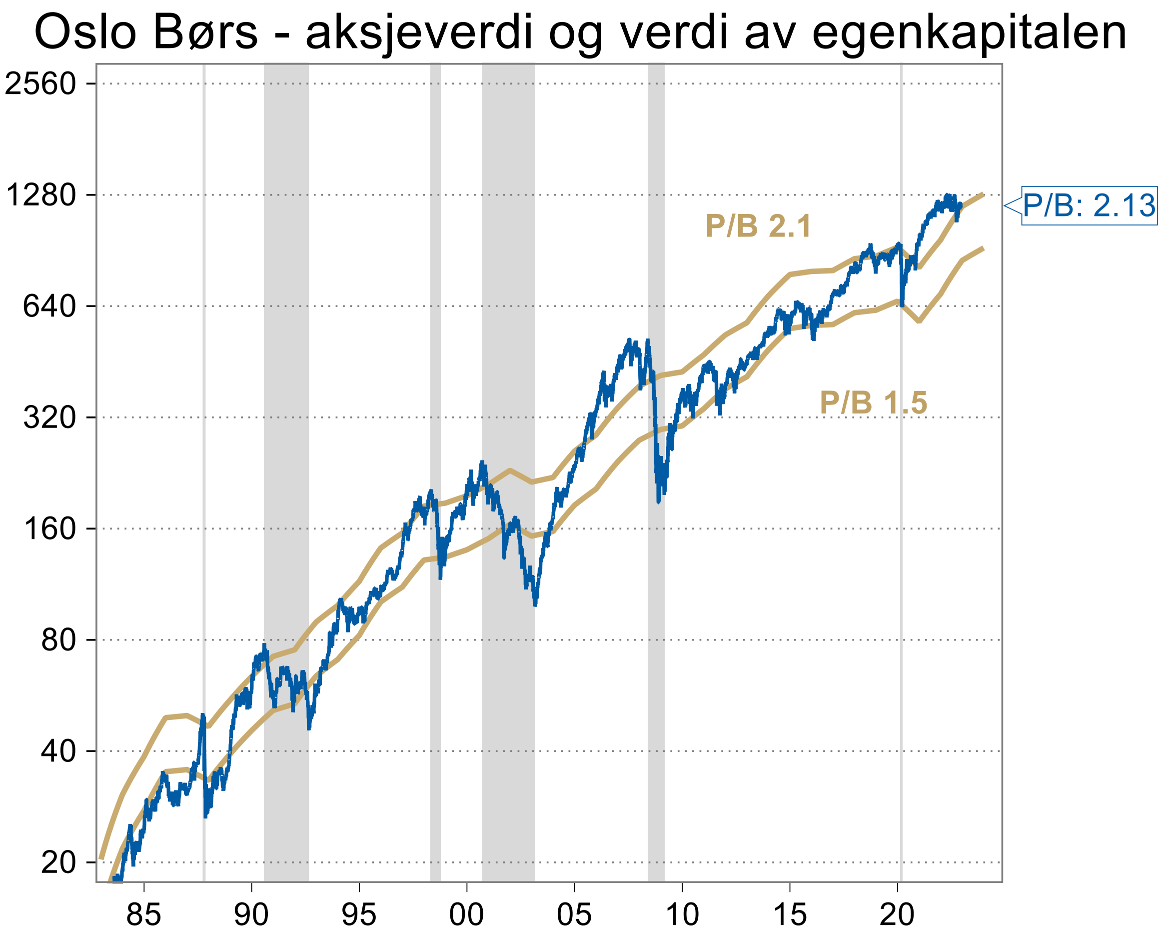




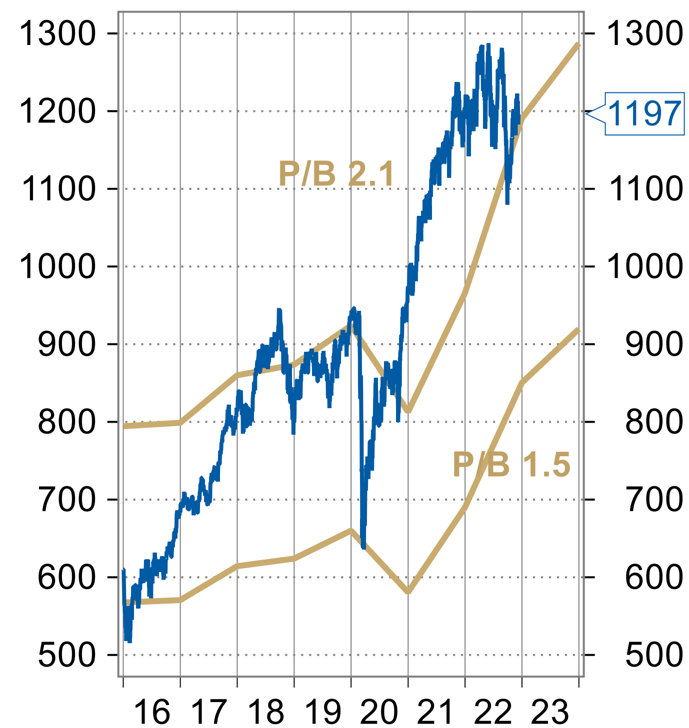


The OSEBX down 1.1% - to a Price/Book at 2.13

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



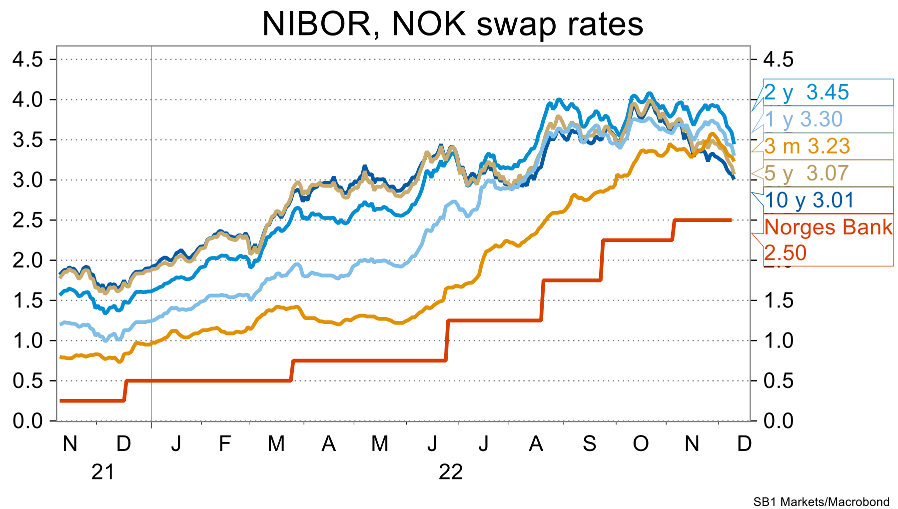
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

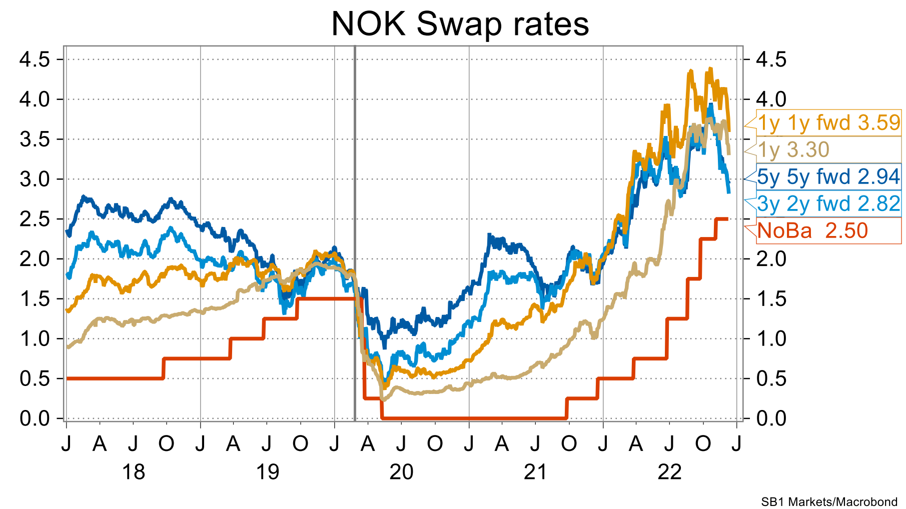


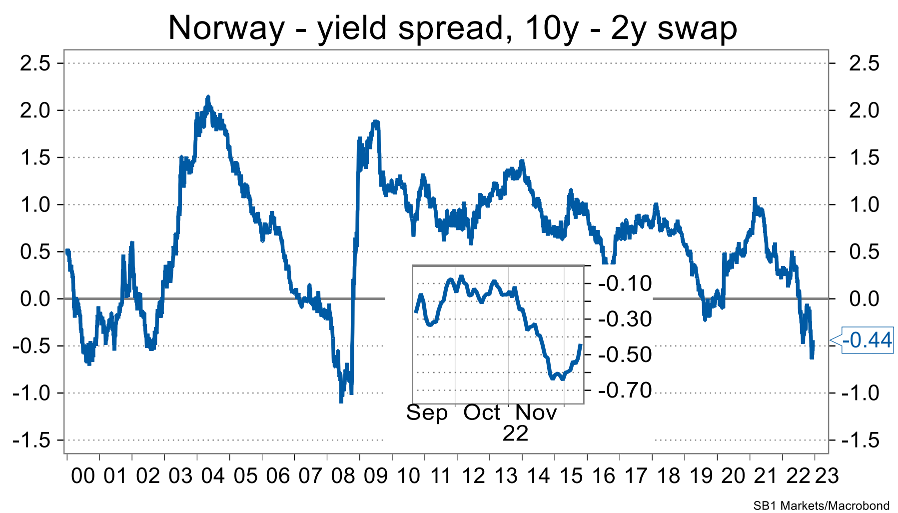
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

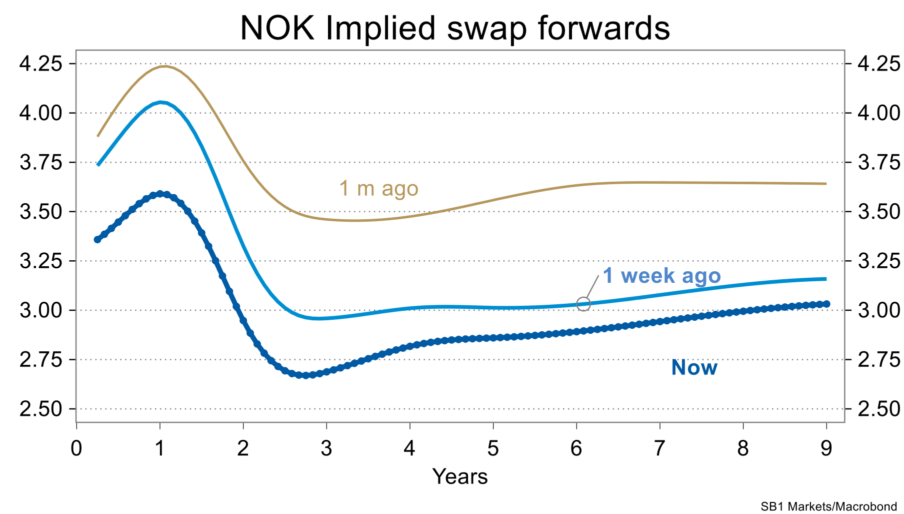
Rates down 25 – 50 bps all over the curve, the 10 y swap down to 3.01%

The 3m NIBOR nosedived 19 bps to 3.23% - both due to lower rate expectations, and a decline in the NIBOR spread







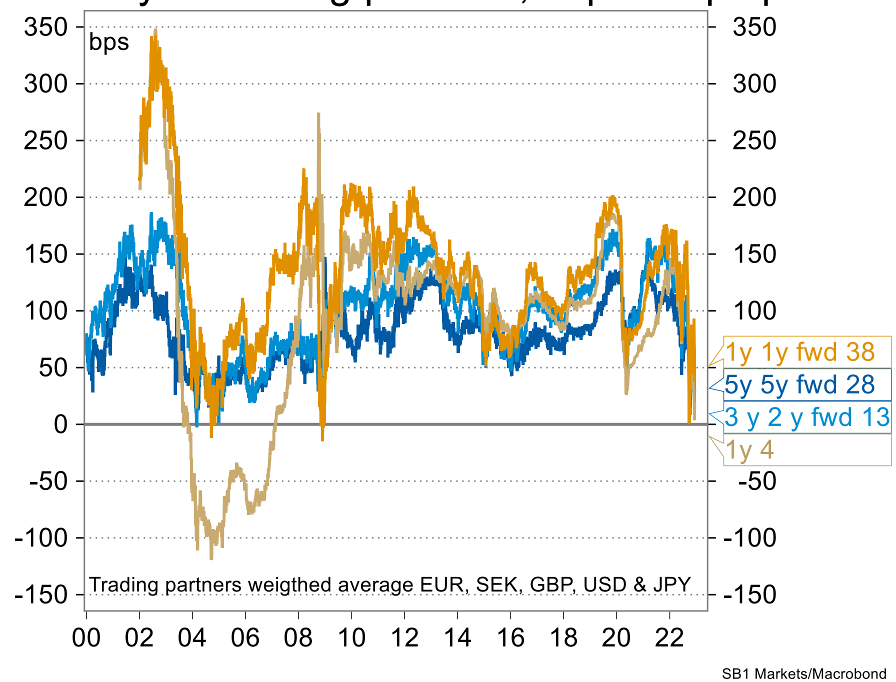


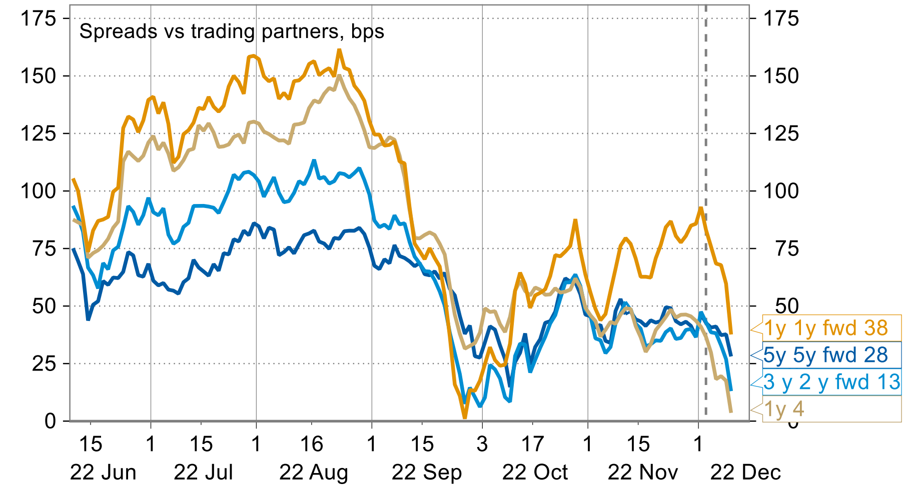
SpareBank 1 MARKETS

Rate spreads vs trading partners sharply down

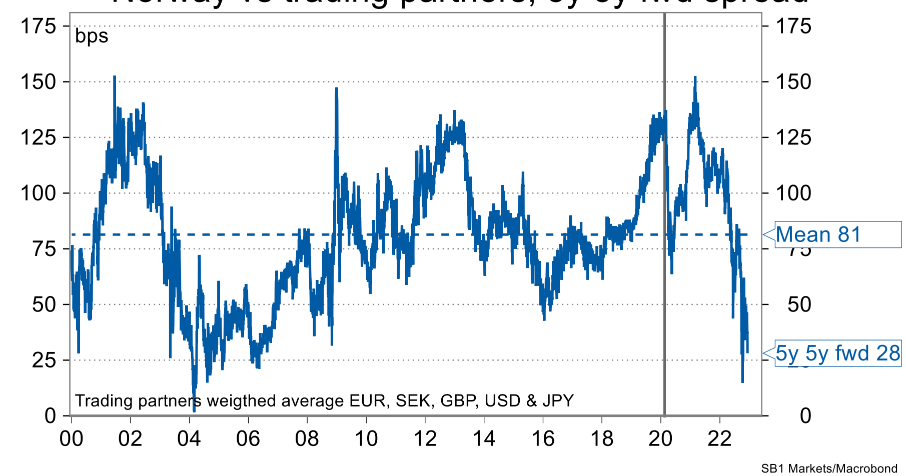
The Regional Network signalled a decline in GDP, lower inflation than expected – but is the decline warranted?

Norway vs trading partners, impl swap spreads





Norway vs trading partners, 5y 5y fwd spread

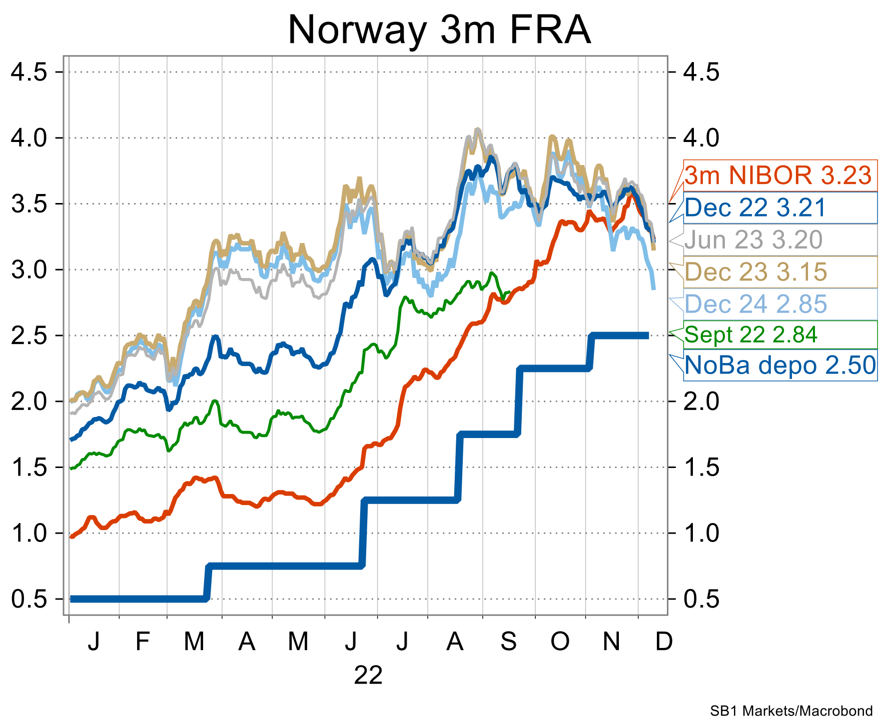


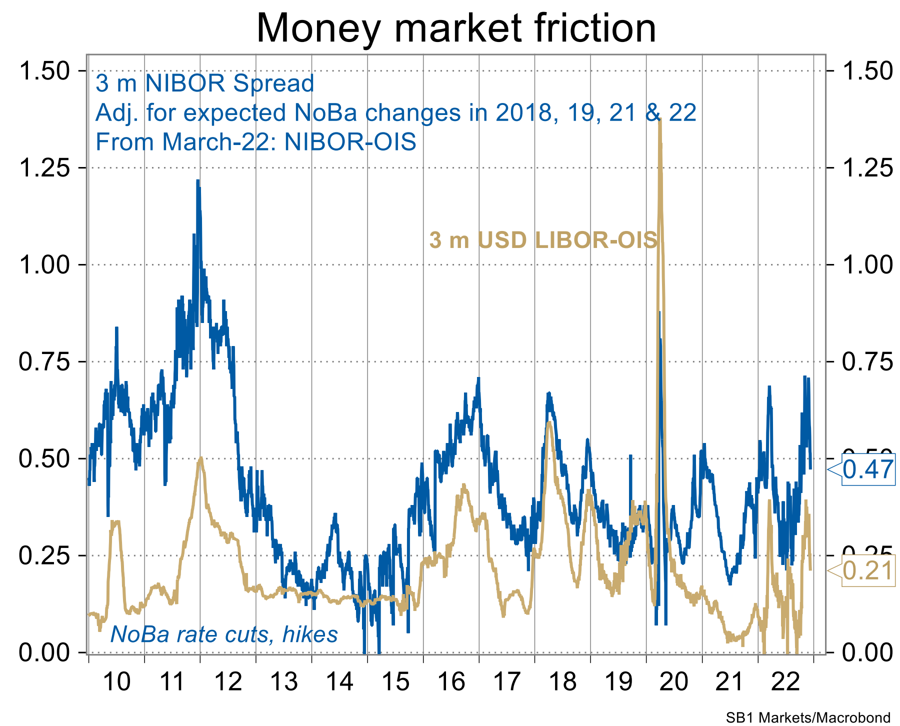
- The **Regional Network** does not signal a weaker economy than Norges Bank assumed – in fact a significantly stronger!
- **Inflation** was lower than expected but still far above Norges Bank's estimate
- … and **unemployment** is still drifting downwards, not upwards, as NoBa assumed in September
- Norges Bank may easily surprise on the upside on Thursday, check more here

SpareBank 1 MARKETS

The NIBOR spread fell 10 bps to 0.47%, liquidity concerns are easing

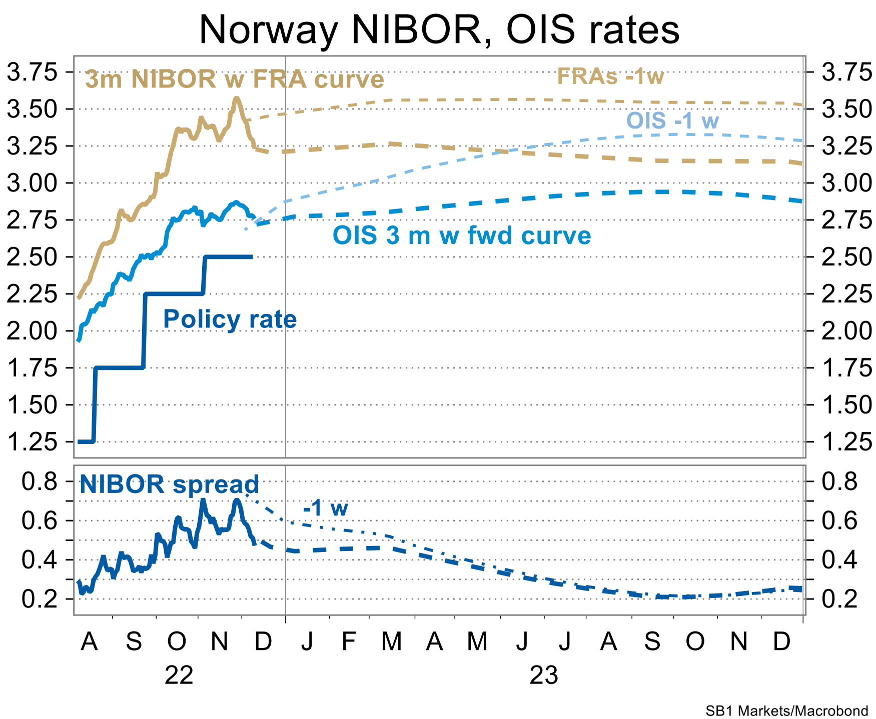
The NIBOR spread is still above a normal level (some 35 bps)

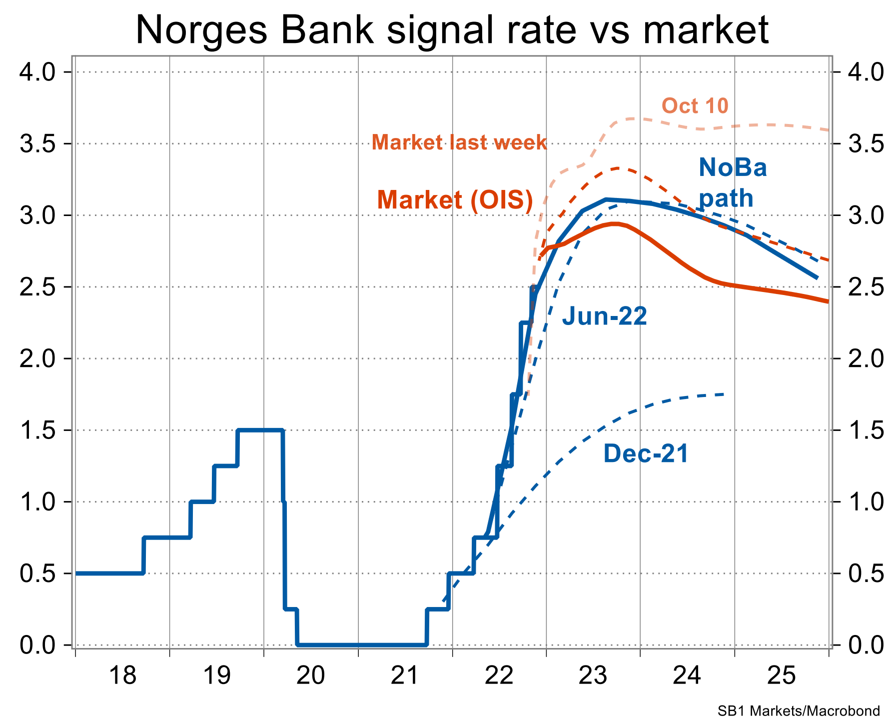




The End is Near: A brutal decline in rate expectations last week

A 25 bps hike is still discounted this week. After that, just 20 bps left until the assumed peak in Q3 next year

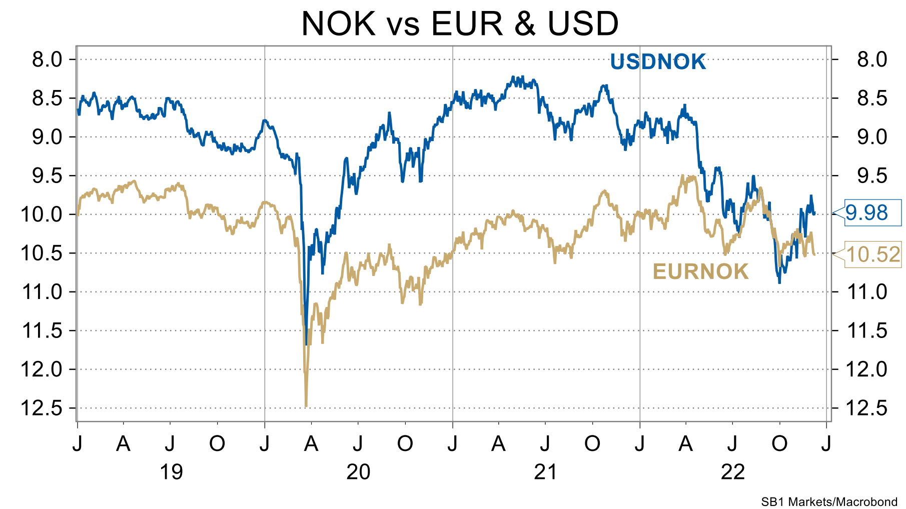


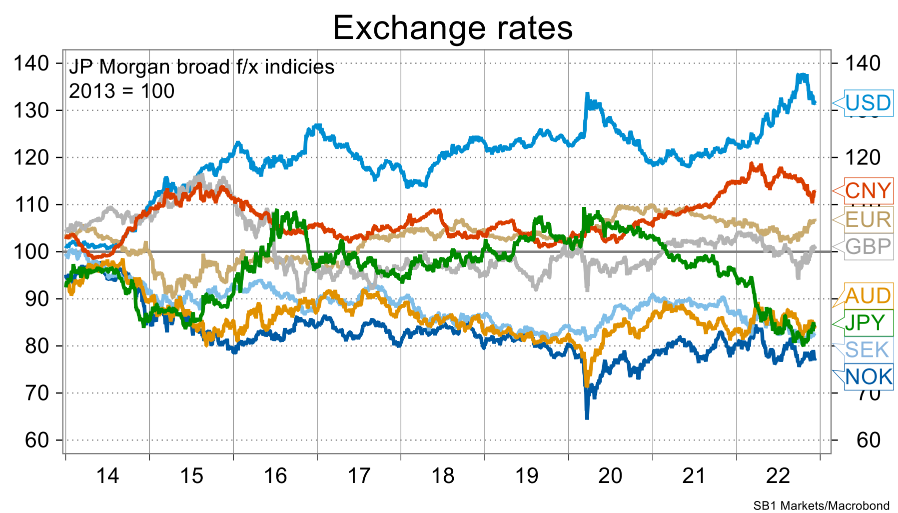


- The **OIS curve** fell by up to 42 bps last week, the most on Tuesday (the Regional Network), and even more on Friday (the CPI)
- <u>We think the market overreacted</u>:
  - The **Regional Network** was not that weak, as the starting point is far above NoBa'a Sept f'cast, and the decline from there was in line with NoBa's expected growth rates (that is, from a much lower starting point)
  - The **CPI was lower than expected** but is still far too high, and far above NoBa's Sept f'cast
  - In addition, on Friday, the Government decided to ease a couple of elements in the mortgage lending regulation. The most importantly, lowering the rate hike in the **stress test on borrowers debt serving capacity** by 2 pp to 3 pp from 5 pp (though at least up to a 7% mortgage rate) will increase borrowing capacity substantially for many home buyers. Thus, a higher mortgage rate would be warranted have the same overall tightening impact

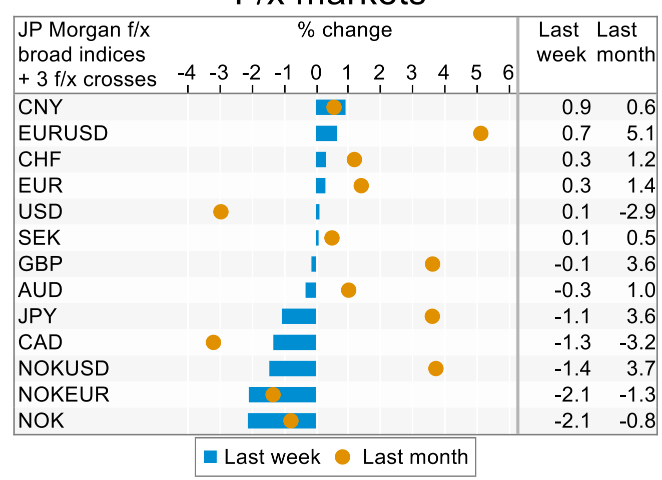
NOK down to the bottom of the list again. CNY at the top. The USD stabilised

A lot of negative factors for the NOK. The CNY up on a substantial easing of Covid restrictions (with still low immunity…)





F/x markets

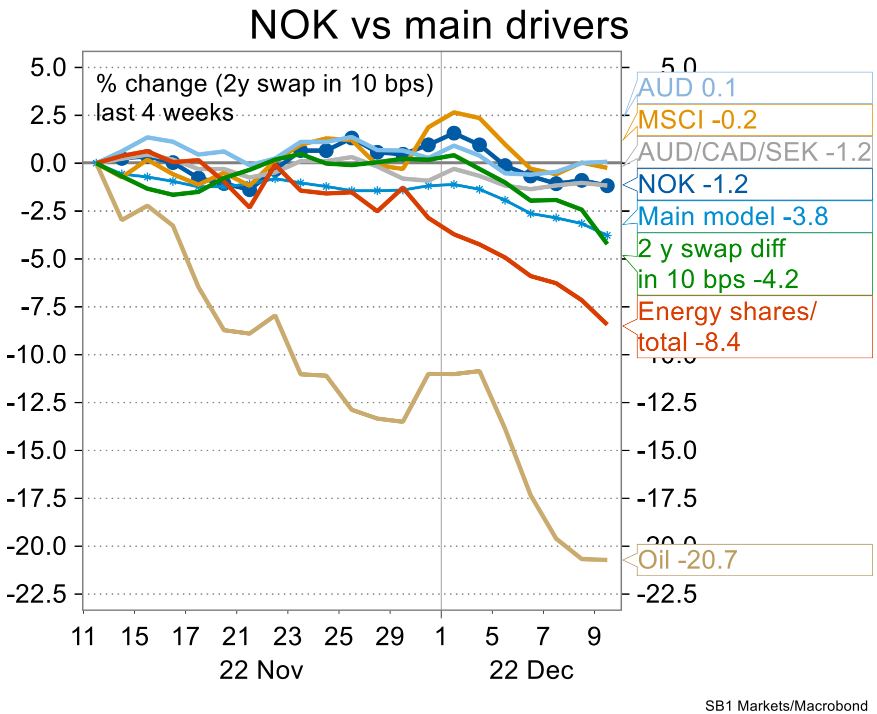


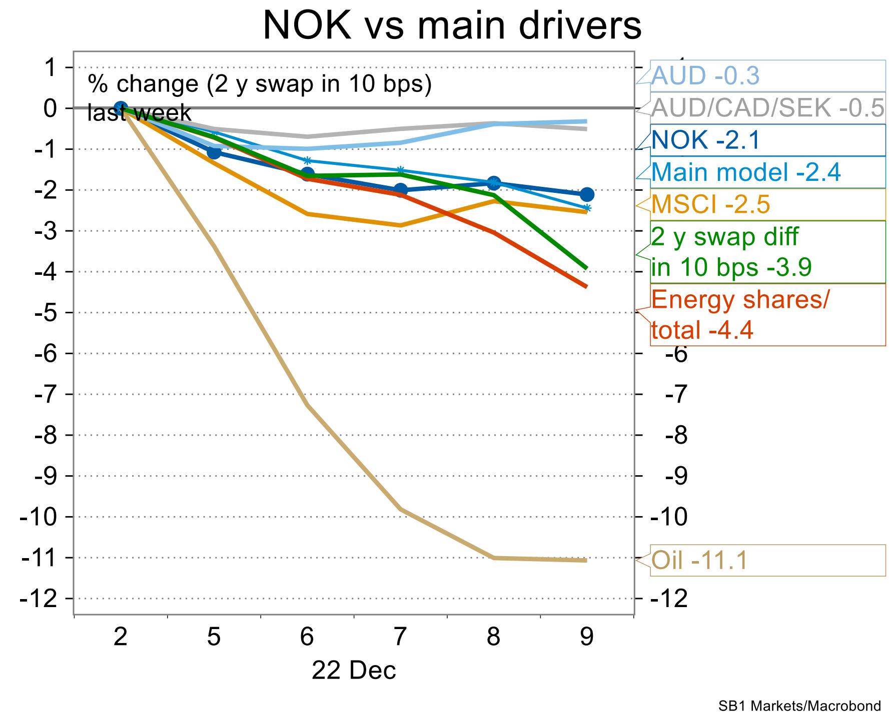
JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
CNY	0.9	0.6
EURUSD	0.7	5.1
CHF	0.3	1.2
EUR	0.3	1.4
USD	0.1	-2.9
SEK	0.1	0.5
GBP	-0.1	3.6
AUD	-0.3	1.0
JPY	-1.1	3.6
CAD	-1.3	-3.2
NOKUSD	-1.4	3.7
NOKEUR	-2.1	-1.3
NOK	-2.1	-0.8

SB1 Markets/Macrobond

The oil price ‘collapse’ took the NOK down. Or was is the MSCI? Or ‘NoBa’?

All 3 contributed sharply on the downside. The NOK is anyway still 1.3 % above our model est.



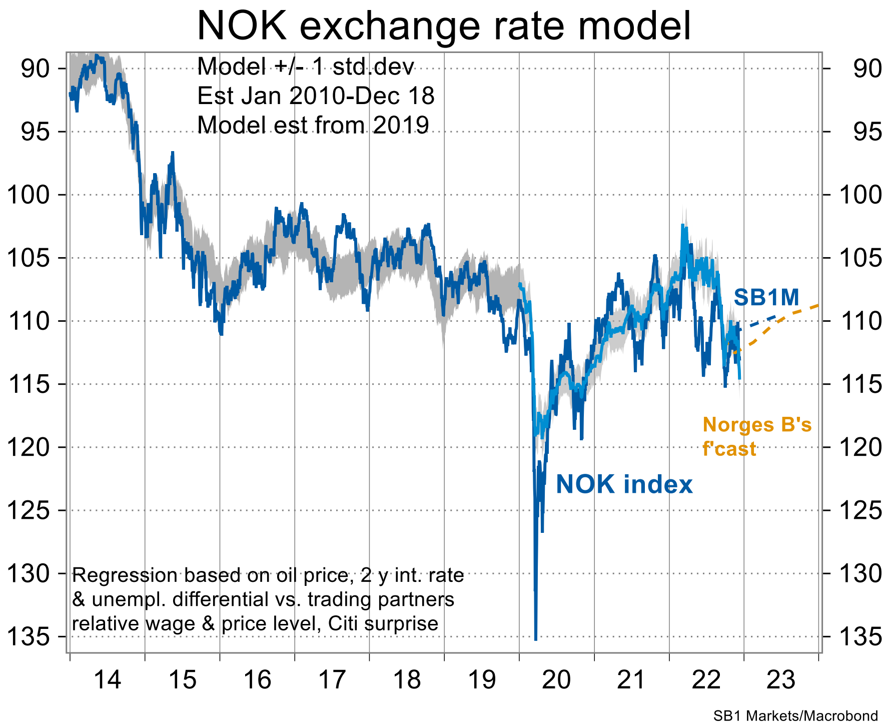


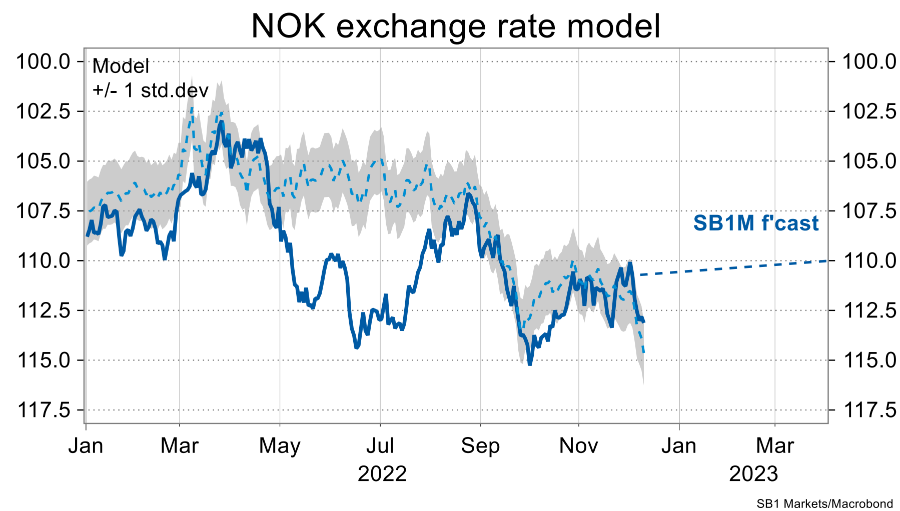
Gaps vs. our model estimates narrowed further last week

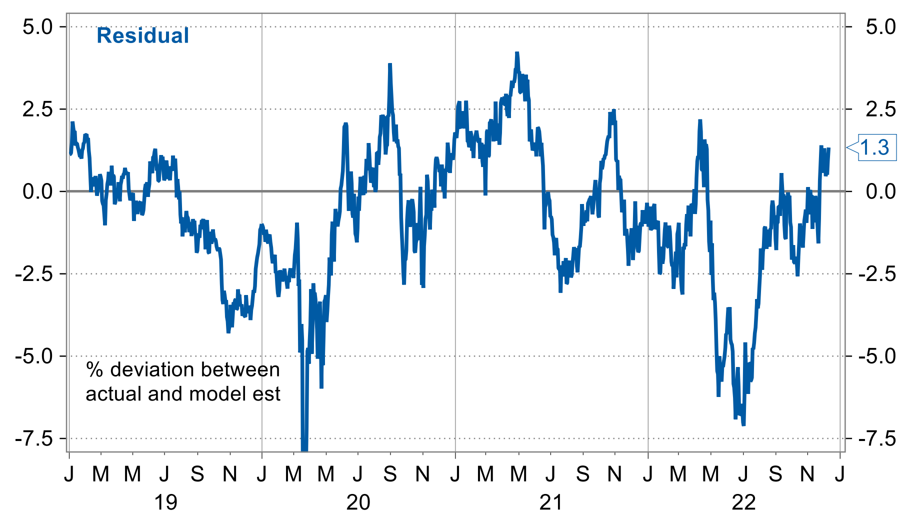
- ***NOK is 1.3% above our main model estimate (from 0.9%)***
- The NOK is 6% weaker than our **AUD/CAD/SEK-model**, our ‘super-cycle peers’, predicts, a substantial weakening (from -4%)
- NOK is 1% weaker than an estimate from a model that includes global **energy companies’ equity prices** (vs the global stock market) (from -2%)

At 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

The NOK remained above our model estimate, by 1.3%

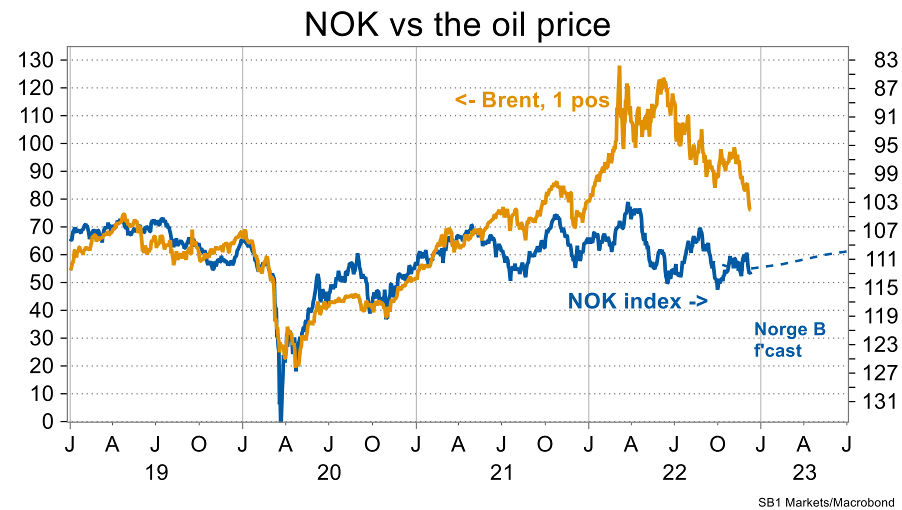


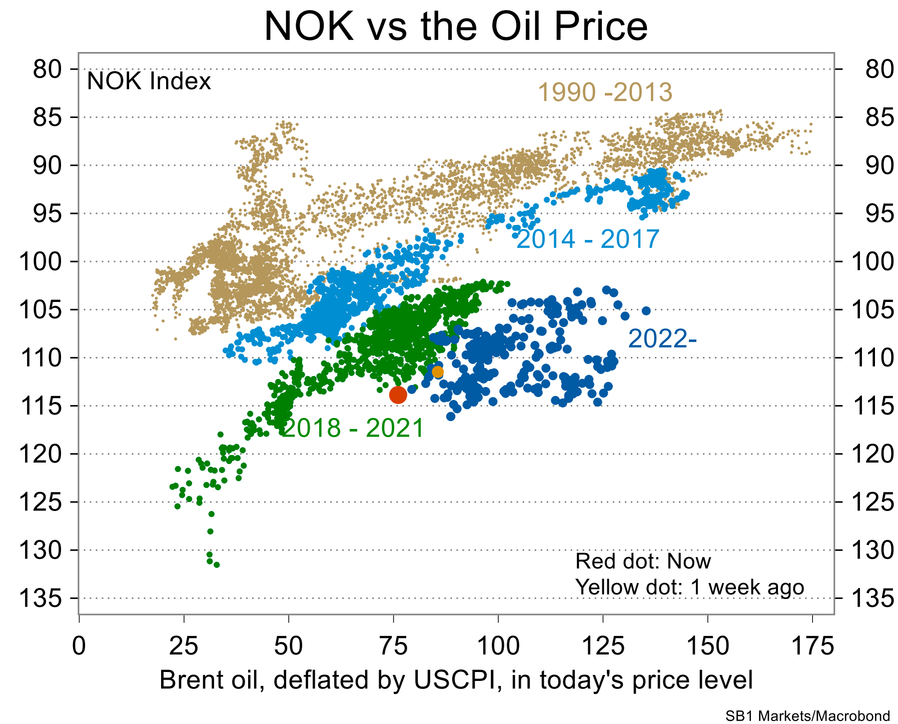


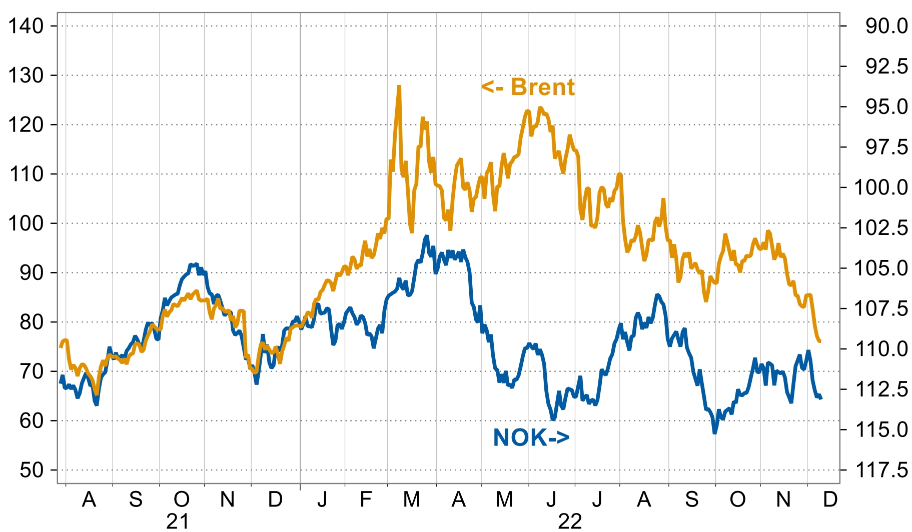


Oil down, NOK down

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

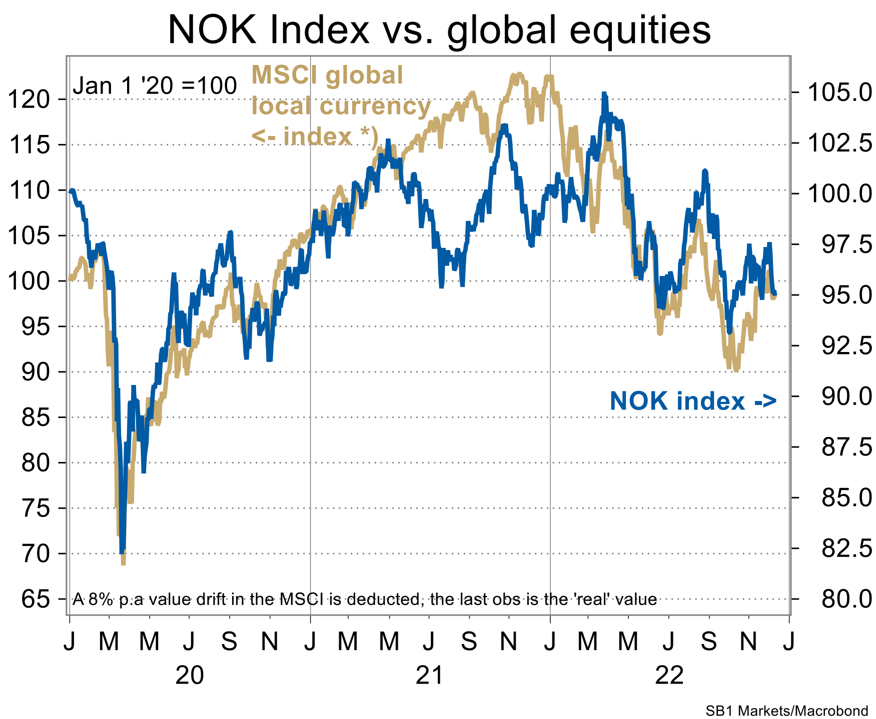


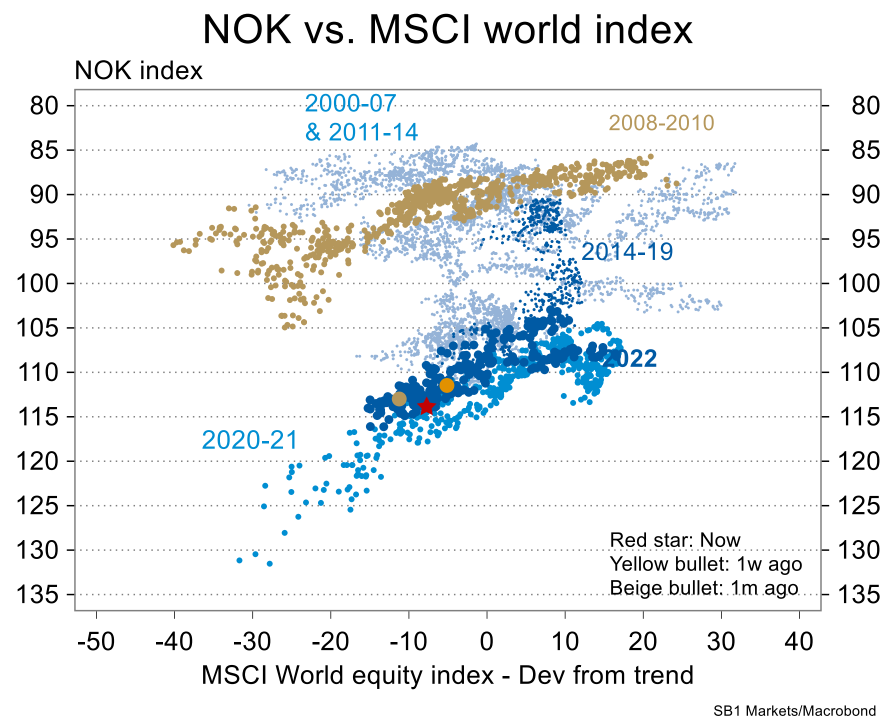




Global equities down, NOK down

The NOK has been closely in sync with the global stock market since April

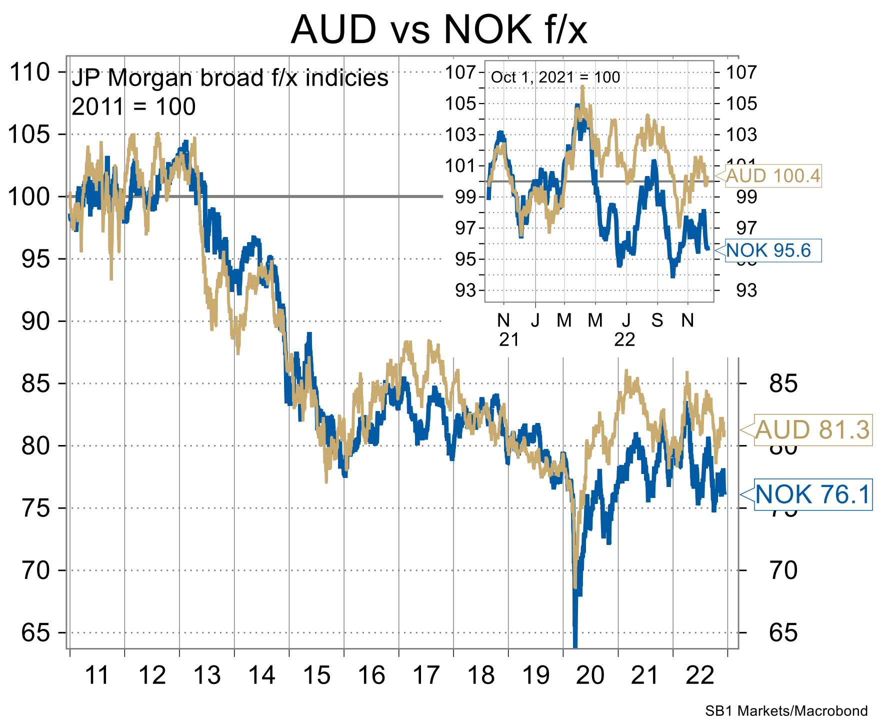


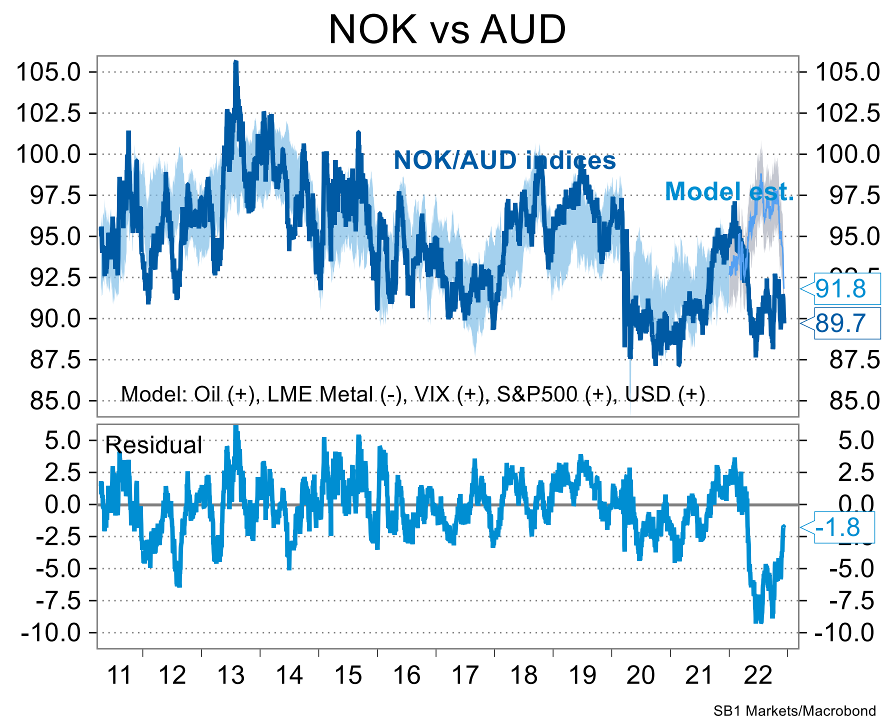


- There has not been any stable correlation over time, and when it is, the oil price is normally the real driver. *Not so much now*

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

NOK is just 1.8% below our model f'cast vs AUD (from -2.6%), the lowest residual since the spring!

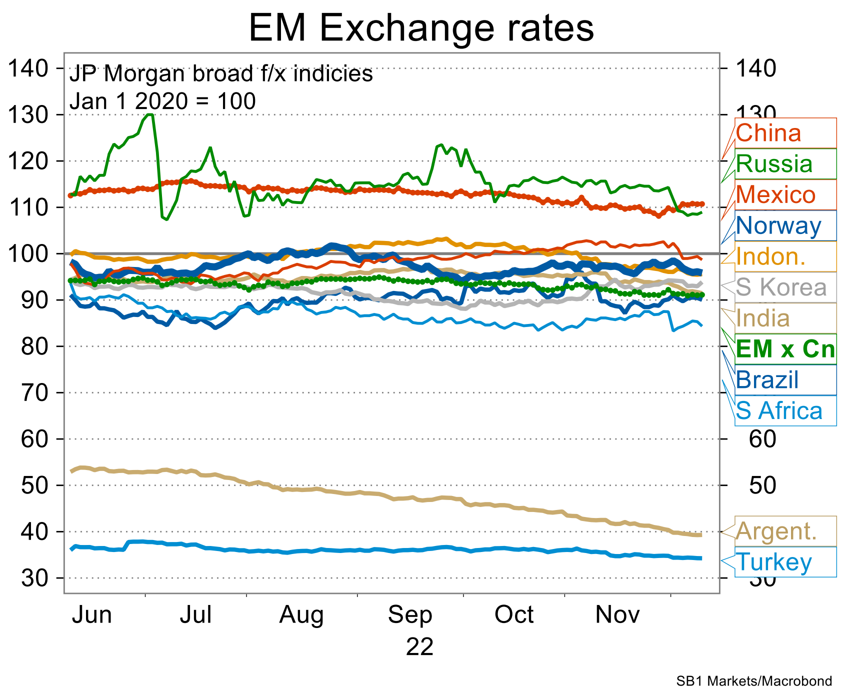


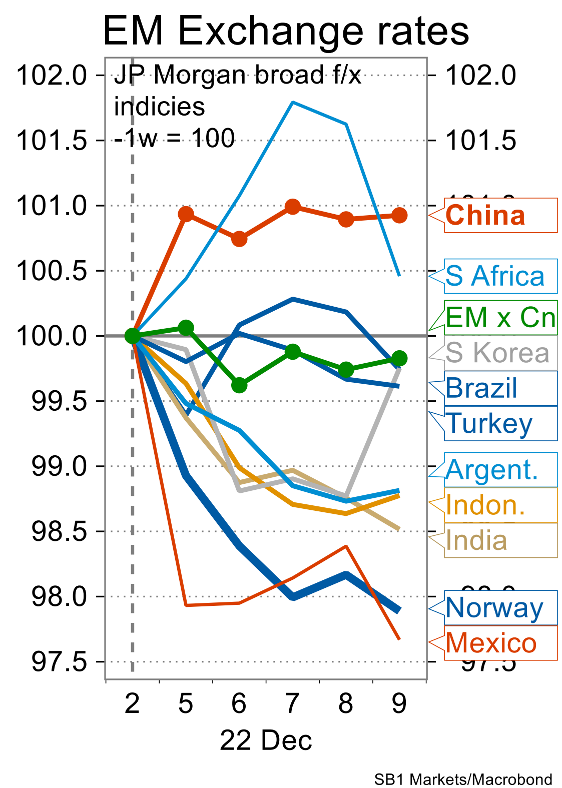


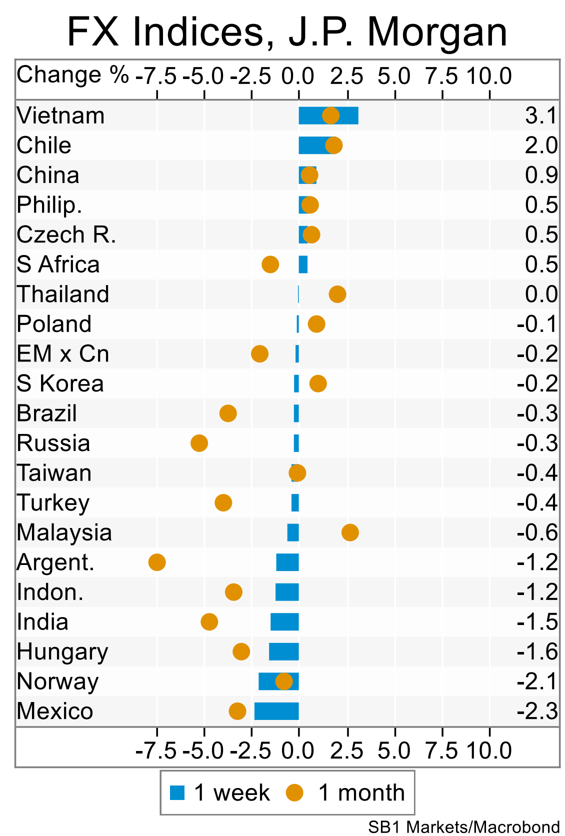
- The discrepancy between the NOK and AUD is unusual, given the normal factors that normally has explained the limited gap between the two
- Normally, NOK strengthens vs the AUD when the oil price rises vs. the LME metal index, when VIX, and the S&P500 index increases, and the USD index appreciates.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

The CNY further up on easing of covid restrictions

Other EMs mostly down, 'risk off' and lower oil prices were more important than higher (other) raw material prices







Disclaimer

SpareBank 1 Markets AS ("SB1 Markets")

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

No investment recommendation

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

No personal recommendation

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

Research for the purposes of unbundling

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

Conflicts of interest

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

Accuracy of sources

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

Risk information

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

Limitation of liability

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

Limitation on distribution

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