November 14, 2022

Macro Weekly

Week 46

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Last week

- **The War/European Energy/Commodities**
  - » **The Russian withdrawal from Kherson** may increase the likelihood for peace negotiations? So far, just a hope but still…
  - » **European gas and electricity prices** fell further last week, all over the curve. **Other commodities** were mixed, but all were lifted by the decline in the USD – but also supported by hopes for higher growth everywhere (supported by lower rates everywhere) and an extra boost in China, due to easing of some covid restrictions
- **Auto sales**
  - » **Global sales** probably rose further in October, by some 2% and – at the best level since early 2021 – sales were 4% below the 2019 level. However, sales are 10% below the ATH in 2018 – and more than 20% below the pre-2018 trend growth path. US contributed the most on the upside, and sales rose most places, but fell marginally in China and probably in the EMU as well
- **China**
  - » **Credit growth** was much slower than expected in October, and the CCP congress and some lockdowns are probably not the main reasons.
- **USA**
  - » **US inflation** came in at 7.7%, below expectations and probably sent a sigh of relief through the FOMC. The core is still up 6.3% y/y and the 3m/3m rate remains at 6.1%. However, both the headline and the core CPI seem to have peaked. So, what seems like a downward trend in inflation gives room for the Fed to slow their pace and see the effect of the hikes already implemented. Rate expectations fell sharply, but just real rates. The USD followed suit
  - » The **Democrats** most likely lost their majority in the **House** but the party kept it in the **Senate**. The outcome was much better for the Democrats than experts predicted (and the Republicans hoped for). The blame is largely being put on the 'former guy', almost all 'his' candidates lost in combative districts
- **EMU**
  - » **Retail sales** rose 0.4% in September, as expected after several countries reported better sales than expected the previous week. Sales have flattened lately, but the trend and the outlook is negative as a result of diminishing buying power and lower consumer confidence
- **UK**
  - » **GDP** growth surprised on the downside and was down 0.6% m/m, 0.2 pp below expectations. This is the second month of contracting GDP, and it is now down 0.2% since Feb-20. If the BoE is correct, these are just the first two out of many months of falling GDP
- **Sweden**
  - » Swedish **apartment prices** fell 0.4% in October, following a similar increase in September. Prices are now down close to 10% from the peak in March
- **Norway**
  - » **Inflation** surprised sharply on the upside, again. CPI-ATE rose 0.5% m/m (s.a) in October, and the annual rate climbed by 0.6 pp to 5.9% pp, far above our & consensus expectations at 5.5%, and NoBa's f'cast at 5.0% from the Sept MPR. A stunning 56% of CPI components up more than 5%. NoBa signalled another 25 bp hike in December. Even if inflation is far too high, we expect the bank to deliver just a 'single' hike, but rather that they will lift the rate path to 3.25% - 3.50%, given that other economic data don't keep surprising on the upside the coming weeks (if so, a 50-bps hike can not be ruled out). The market is now split 50/50, slightly higher than one week ago
  - » The **unfilled vacancy rate** fell 0.2 pp to 3.2%, as we expected. The level is still way above normal – and in Q3, the labour market was very tight

The Calendar: China news, US retail sales % housing. GDP and investment surveys here

Time	Count.	Indicator	Period	Forecast	Prior
Monday Nov 14					
08:00	NO	Building cost index	Oct		
11:00	EMU	Industrial Production SA MoM	Sep	0.4%	1.5%
Tuesday Nov 15					
00:50	JN	GDP Annualized SA QoQ	3Q P	1.2%	3.5%
03:00	**CN**	**Industrial Production YoY**	**Oct**	**5.2%**	**6.3%**
03:00	**CN**	**Retail Sales YoY**	**Oct**	**0.7%**	**2.5%**
03:00	**CN**	**Fixed Assets Ex Rural YTD YoY**	**Oct**	**5.9%**	**5.9%**
06:00	SW	PES Unemployment Rate	Oct		3.1%
06:30	NO	Consumer Confidence	4Q	(-40)	-26.8
08:00	SW	CPI YoY	Oct	11.0%	10.8%
08:00	SW	CPIF Excl. Energy YoY	Oct	7.5%	7.4%
08:00	NO	Trade Balance	Oct		122.4b
08:00	UK	Unemployment (ILO/LFS)	Sep	3.5%	3.5%
08:00	UK	Average Weekly Earnings	Sep	5.9%	6.0%
10:00	NO	New home sales, starts Homeb.	Oct		
11:00	GE	ZEW Survey Expectations	Nov	-50.0	-59.2
11:00	EMU	Employment QoQ	3Q P		0.4%
11:00	EMU	GDP SA QoQ	3Q P	0.2%	0.2%
14:30	**US**	**Empire Manufacturing**	**Nov**	**-5.3**	**-9.1**
14:30	US	PPI Final Demand YoY	Oct	8.3%	8.5%
Wednesday Nov 16					
02:30	CN	Home Prices	Oct		
08:00	UK	CPI YoY	Oct	10.7%	10.1%
08:00	UK	CPI Core YoY	Oct	6.4%	6.5%
14:30	US	Retail Sales Advance MoM	Oct	0.9%	0.0%
14:30	**US**	**Retail Sales Control Group**	**Oct**	**0.3%**	**0.4%**
15:15	US	Manufacturing (SIC) Production	Oct	0.2%	0.4%
16:00	US	Business Inventories	Sep	0.5%	0.8%
16:00	US	NAHB Housing Market Index	Nov	36	38
Thursday Nov 17					
08:00	NO	Population growth	Q3		
08:00	**NO**	**Investment survey, oil**	**2023**	**(145bn)**	**135bn**
08:00	NO	Investm. surv, manufact, power s	2023		
10:00	NO	Expectations survey	Q4		
11:00	EMU	CPI YoY	Oct F	10.7%	9.9%
14:30	US	Housing Starts	Oct	1415k	1439k
14:30	US	Building Permits	Oct	1517k	1564k
14:30	US	Philadelphia Fed Business	Nov	-6	-8.7
14:30	US	Initial Jobless Claims	Nov-12	220k	225k
Friday Nov 18					
08:00	NO	Housing starts	Oct		
08:00	**NO**	**GDP Mainland MoM**	**Sep**	**-0.3%(-0.3)**	**0.4%**
08:00	**NO**	**GDP Mainland QoQ**	**3Q**	**0.4%(0.4)**	**0.7%**
08:00	UK	Retail Sales Inc Auto Fuel MoM	Oct	0.6%	-1.4%
08:00	SW	Unemployment Rate SA	Oct	7.1%	7.0%
16:00	US	Existing Home Sales	Oct	4.38m	4.71m
16:00	US	Leading Index	Oct	-0.4%	-0.4%

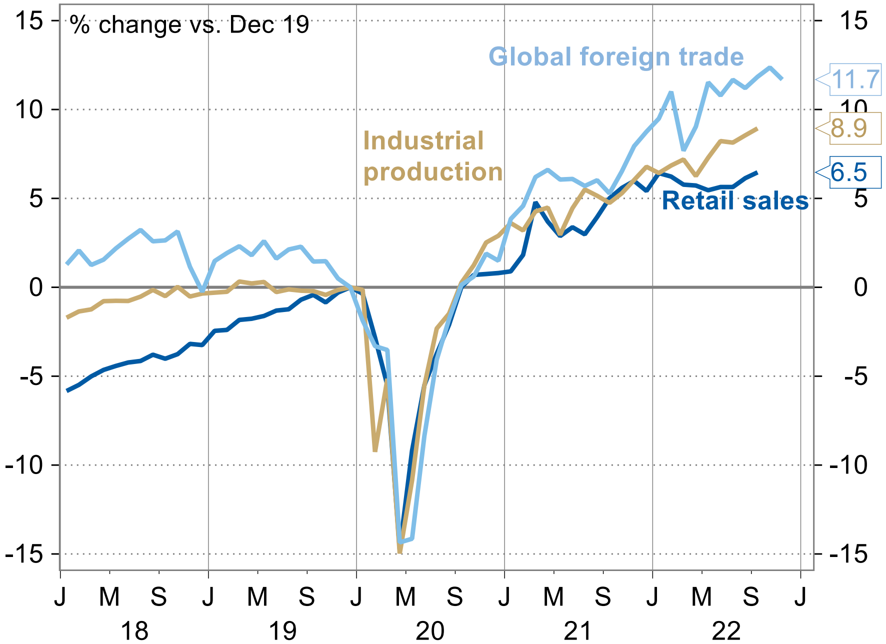
- **China**
  - » GDP recovered more than expected in Q3 but September was still mixed. **Industrial production** came out on the strong side, but **service sector production** was not impressive. **Retail sales** remained muted. Overall **investments** were OK, even in **construction starts** remain at a very low level, down more than 50% from the peak. In October, data may have been influenced by the party congress and lockdowns some places. Easing restrictions may lift parts of the Chinese economy, but industry (and exports) have been strong all the time, and the downturn in construction is probably not due to the pandemic
- **USA**
  - » **(Core) retail sales** are still growing, and the underlying pace is almost 3%, even if inflation has been very high – as households have dipped into their savings
  - » **Manufacturing surveys** have been weak recent months (and the first November surveys will be published this week) growth in **production** has kept up well, and a further increase is expected in October
  - » **Housing** is in dire straits. **Existing home sales** have fallen sharply, and now **prices** are following suit. **Home builders** report a very steep decline in activity, and actual **permits/starts** are rapidly on the way down
- **EMU**
  - » Several countries have already published **industrial production** data, and the first **GDP** estimate was out two weeks ago. Final CPI data will not rock markets either
- **UK**
  - » **CPI, unemployment and wages**: Wage inflation is the real challenge for Bank of England, it has accelerated visibly, and the current growth rate at 6% can not yield 2% CPI inflation. **Unemployment** is the lowest in almost five decades, and **inflation** the highest in four decades
- **Sweden**
  - » **CPI, unemployment:** The former is up 11% y/y, the highest since the 80s, the latter the lowest in 20 years (but turns up now?)
- **Norway**
  - » **Mainland GDP** very likely fell in September, due to a large decline in electricity production. Still GDP was probably up 0.4%. Consumption fell (goods), investments rose, except for housing. Mainland exports rose more than imports
  - » We expect **oil companies** to revise their 2023 **investment forecast** up, as Plans for Development and Operation (PDOs) have been submitted to the authorities. However, the coming weeks (before Dec 31) an unprecedented numbers of PDOs will be delivered, in order benefit from the temporary tax cut. These projects will be included in the February investment surveys. Manufacturing and power supply surveys will also be published
  - » **Housing data:** Sales/starts reported by Home builders, permits and building costs from SSB

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

Retail sales up in September, due to Emerging markets… and rich countries

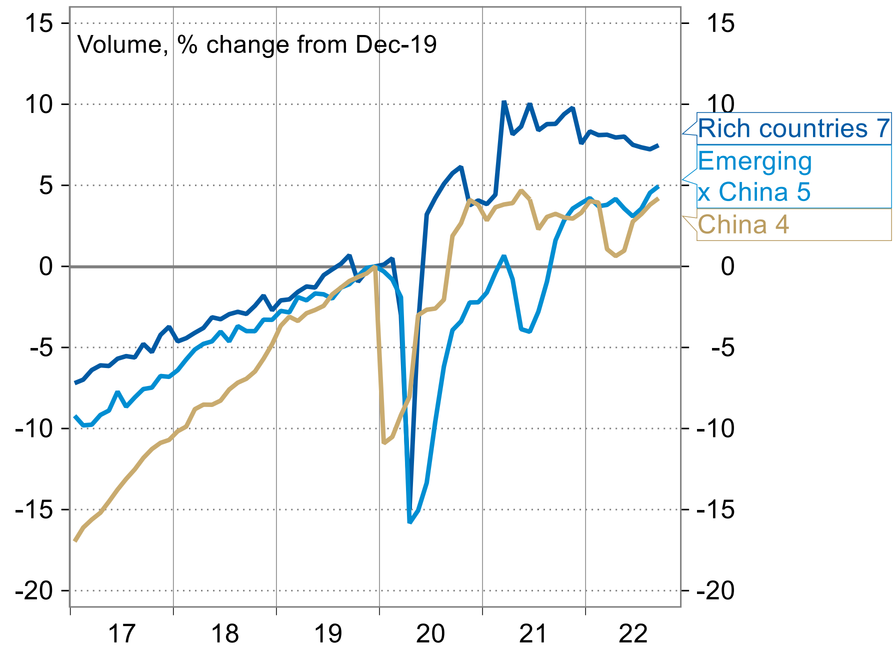
Industrial production rose as well. Recent global trade data ~~may be too upbeat~~ revised down, still OK

Global Retail sales, industrial prod. & trade



SB1 Markets/Macrobond/CPB

Retail sales



SB1 Markets/Macrobond

Global foreign trade: The last months are estimates from the Kiel Institute, they are also making a prognoses for the next month based on shipping activity etc.

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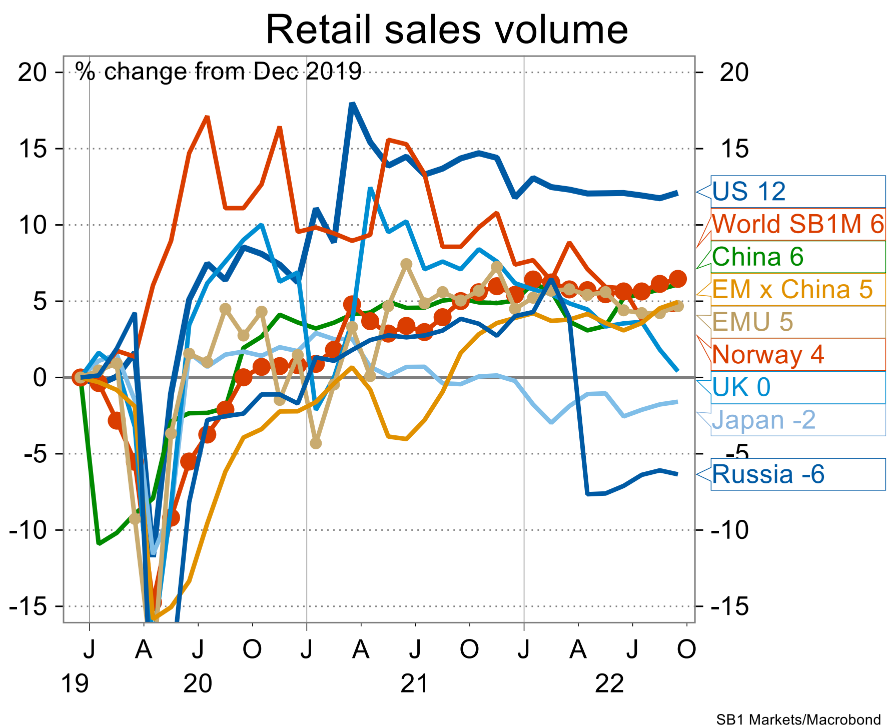
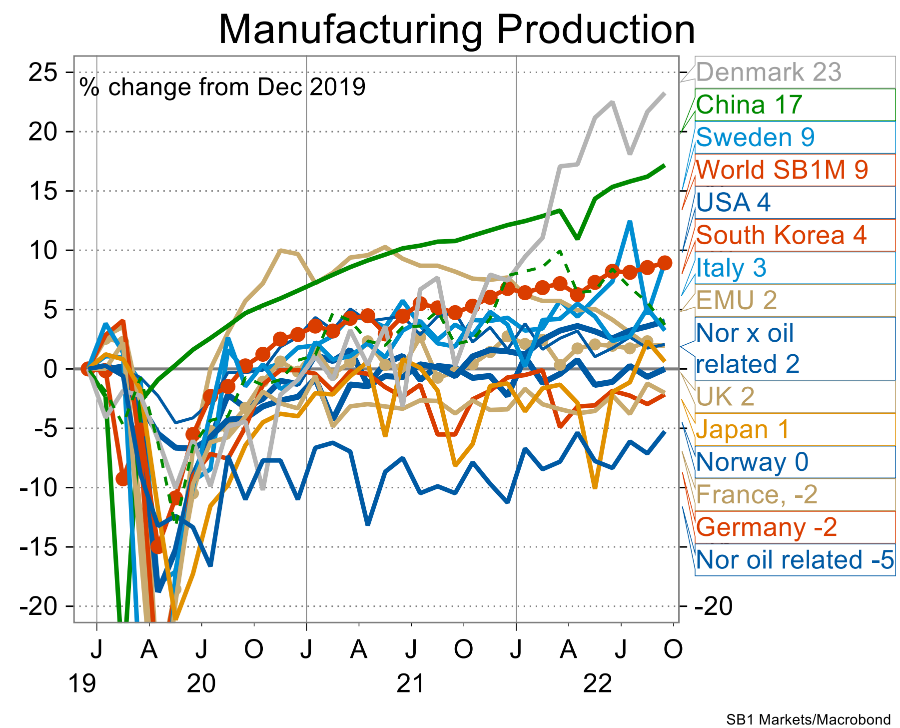
A broad slowdown of retail sales, at least in the rich part of the world

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





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

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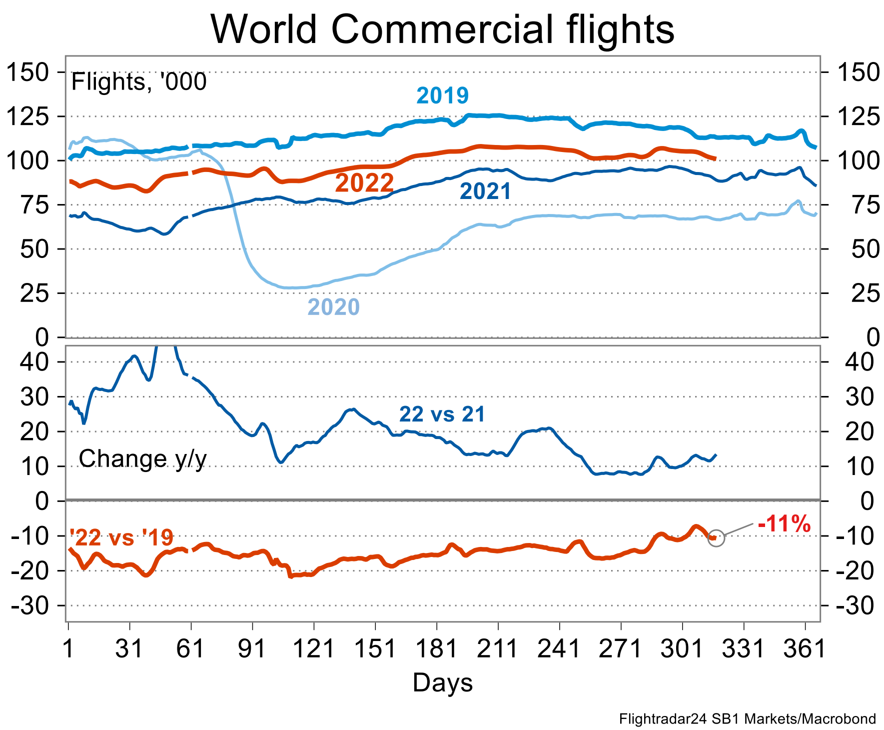
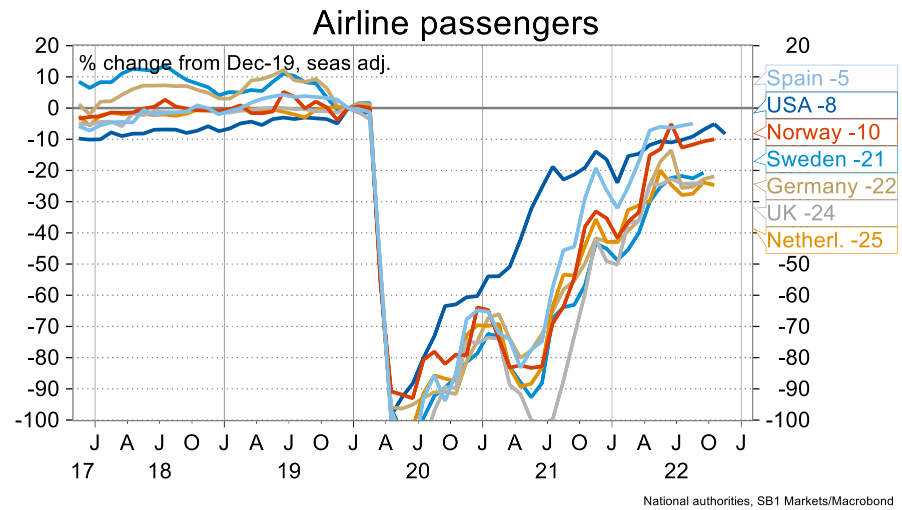
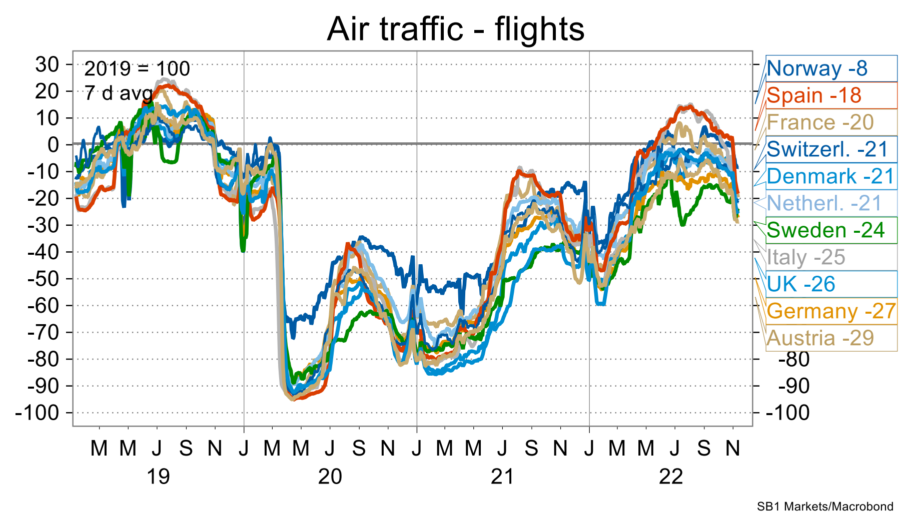
Global airline traffic slightly down, -11% vs 2019 (from -9%)

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

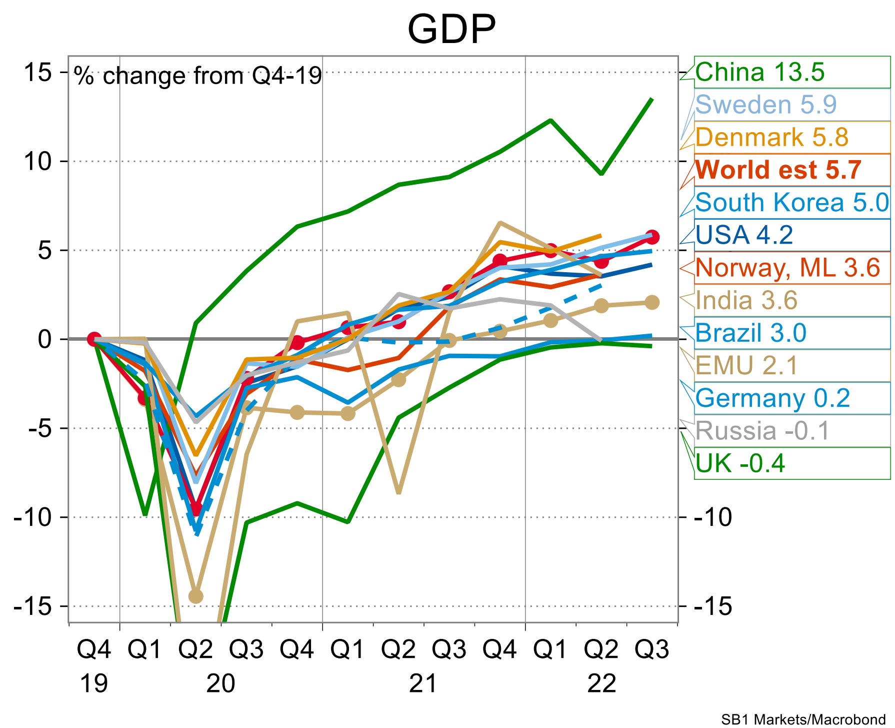


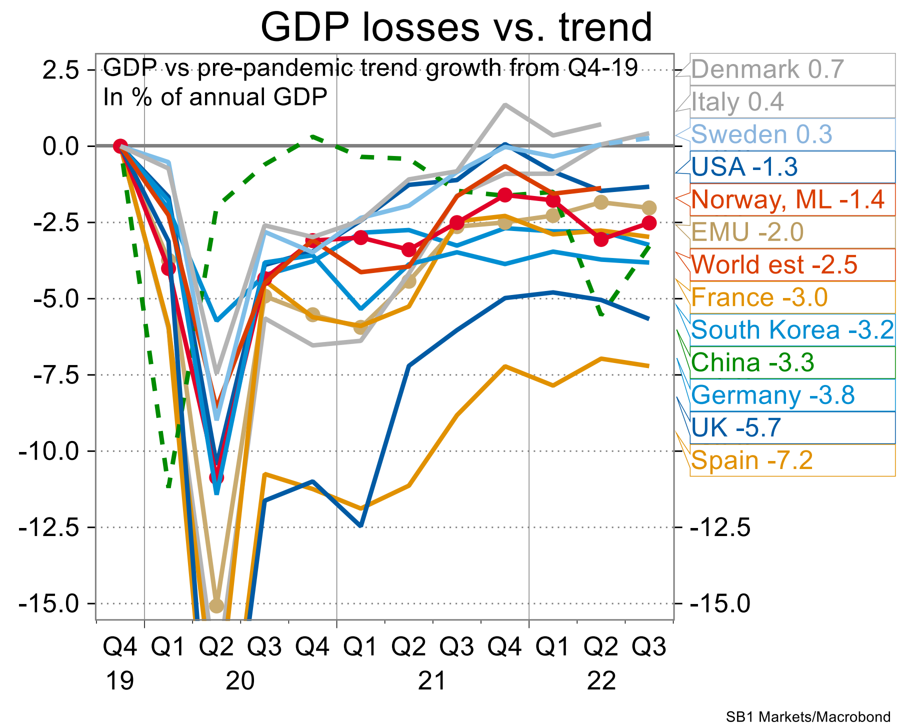




Global GDP recovered in Q3, mostly thanks to China, but with help from the US

… and the EMU! Up 1.3%, from -0.6% in Q1. Global GDP is still 2.5% below the pre-pandemic trend path

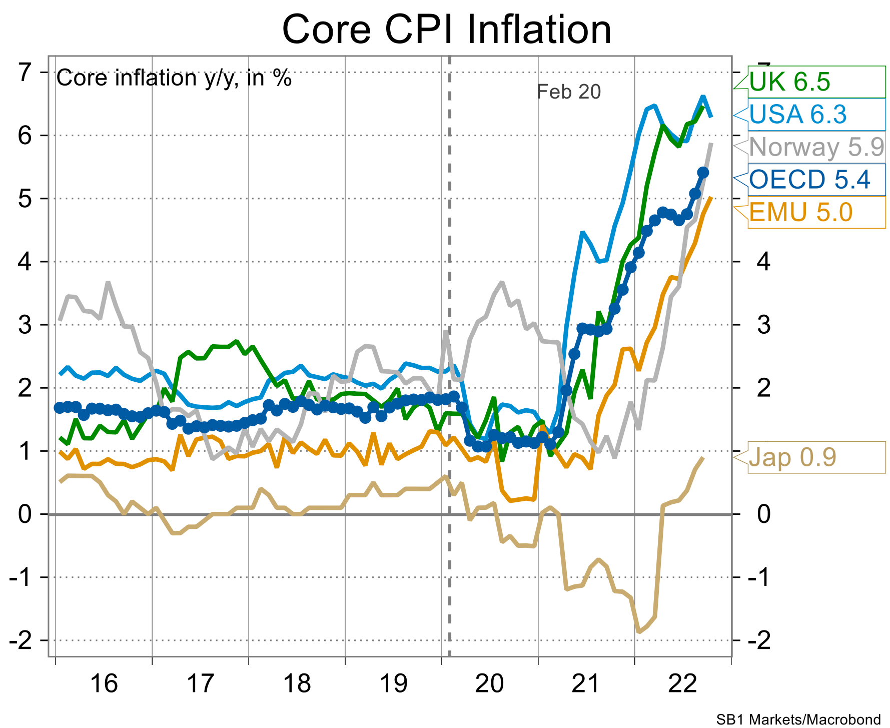


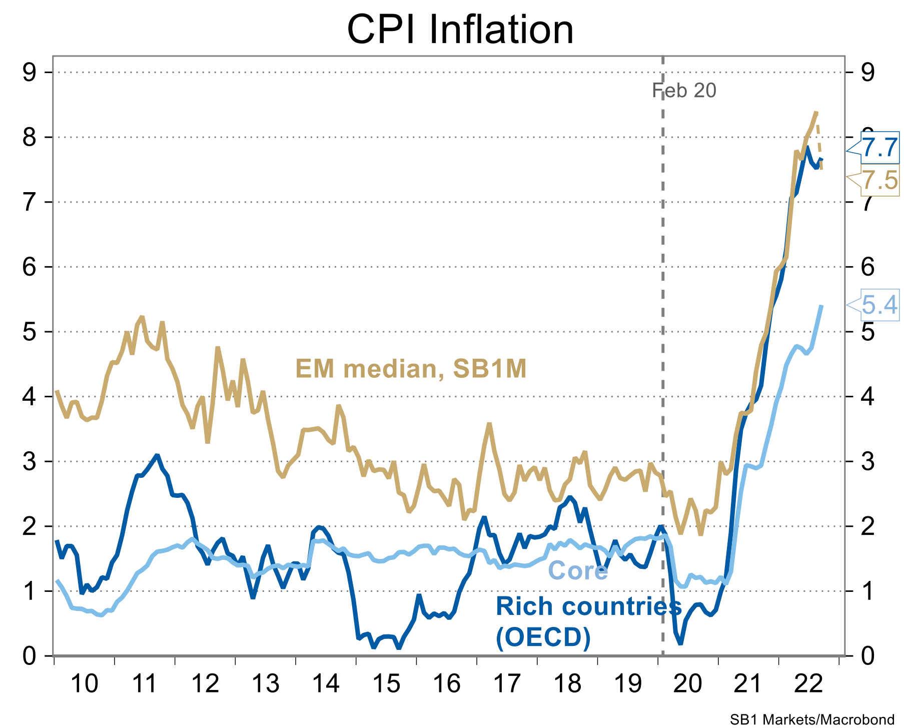


- … even if unemployment, at least in the rich part of the world is 'zero', and employment rates are record high almost everywhere
- Most countries have not yet reported Q3 data

Peak inflation? Data are not that obvious anymore

The going rate is 8% headline inflation, and 5% core inflation, and the latter is still on the way up





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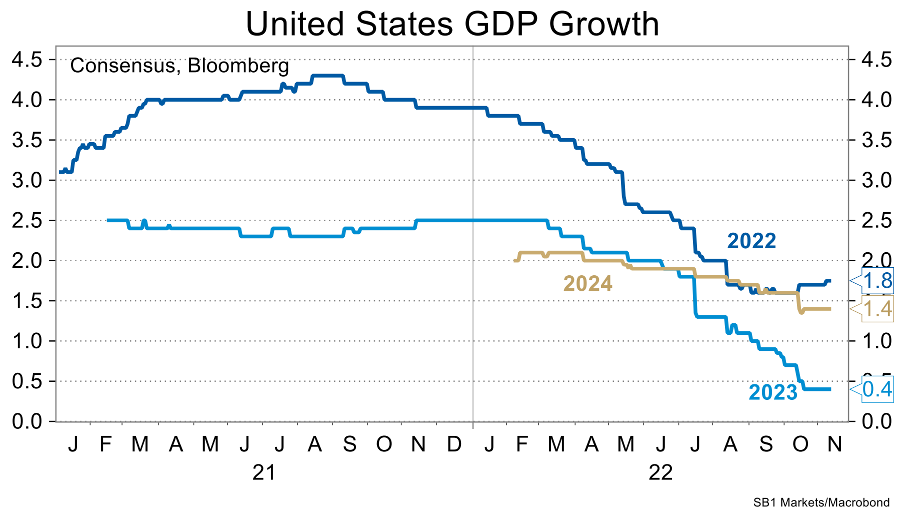
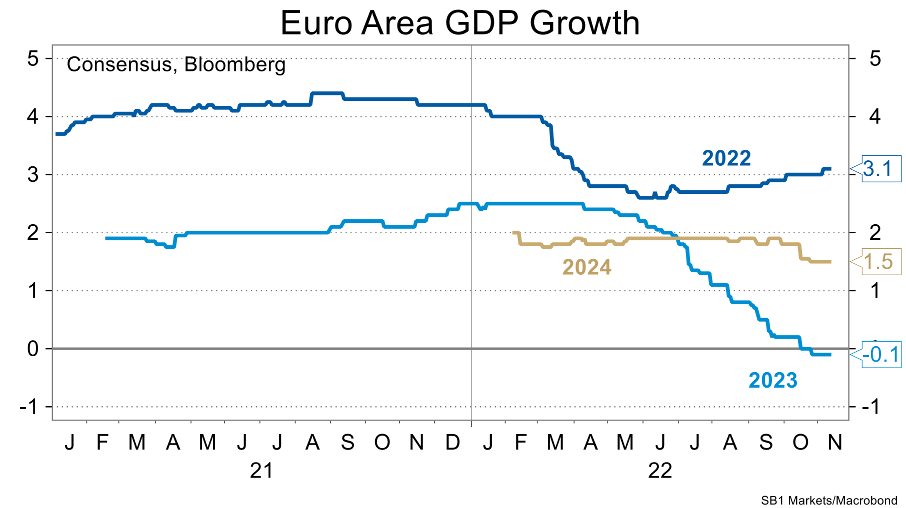
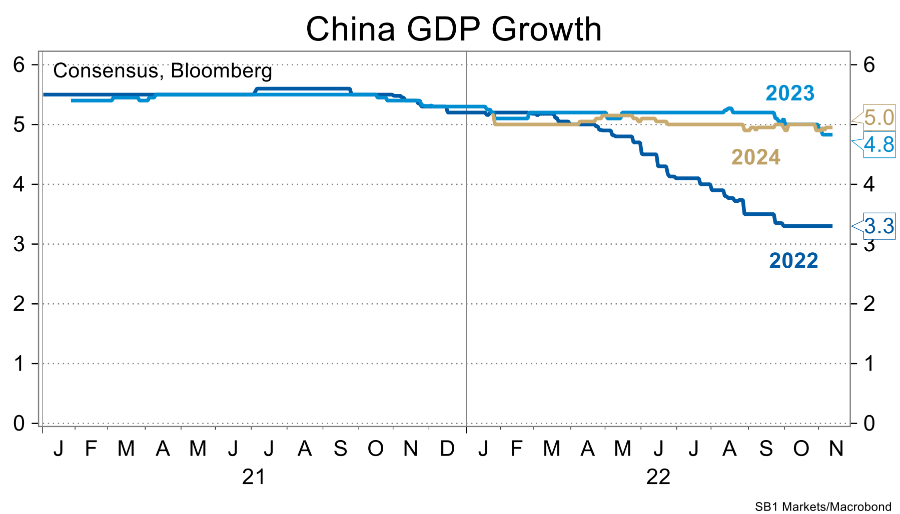
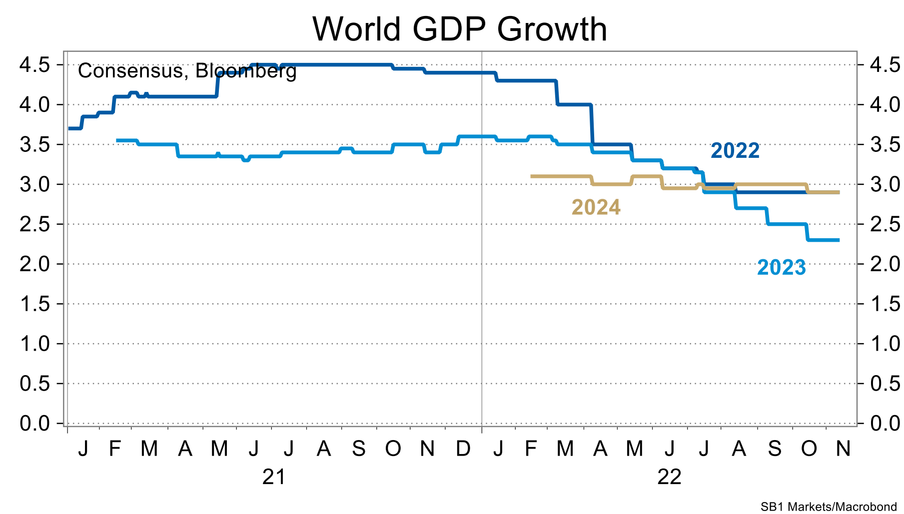
GDP growth expectations: 2023 forecasts are sliding down in US & EMU

In addition, 2022 will be a 'lost' year in China



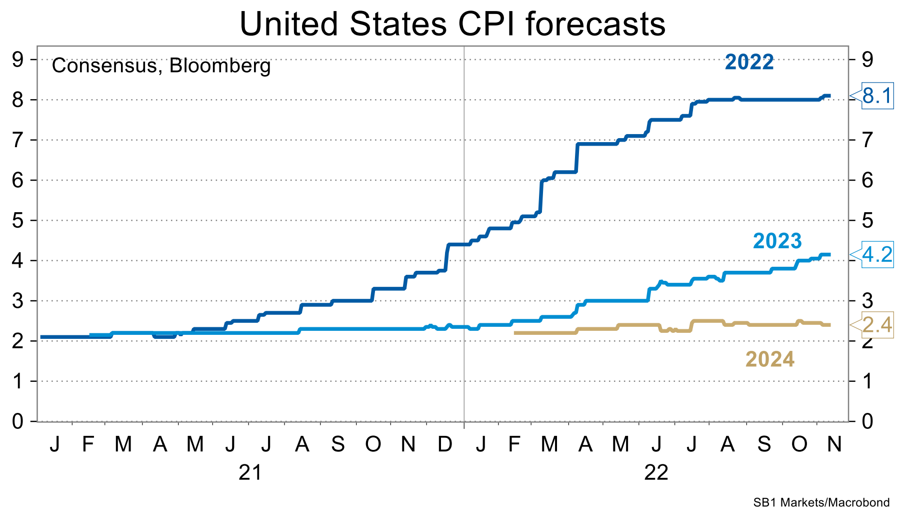


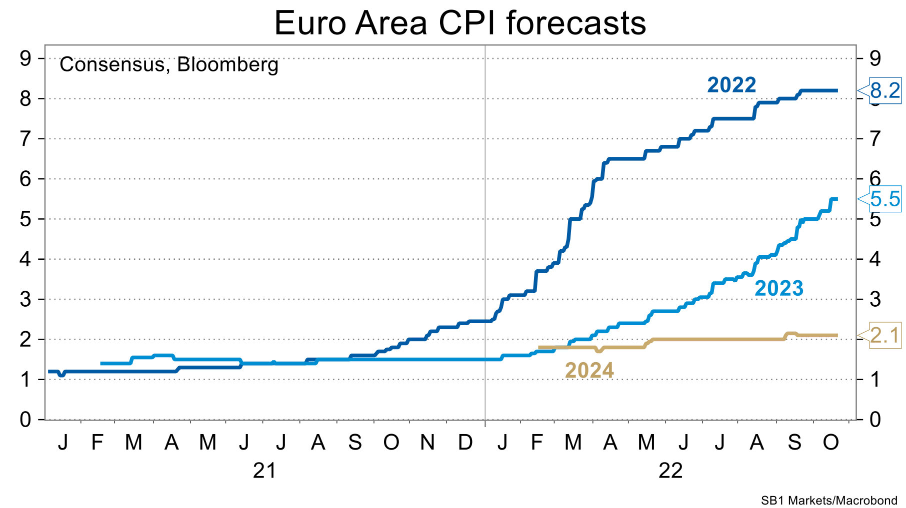




2023 inflation forecasts are still drifting upwards

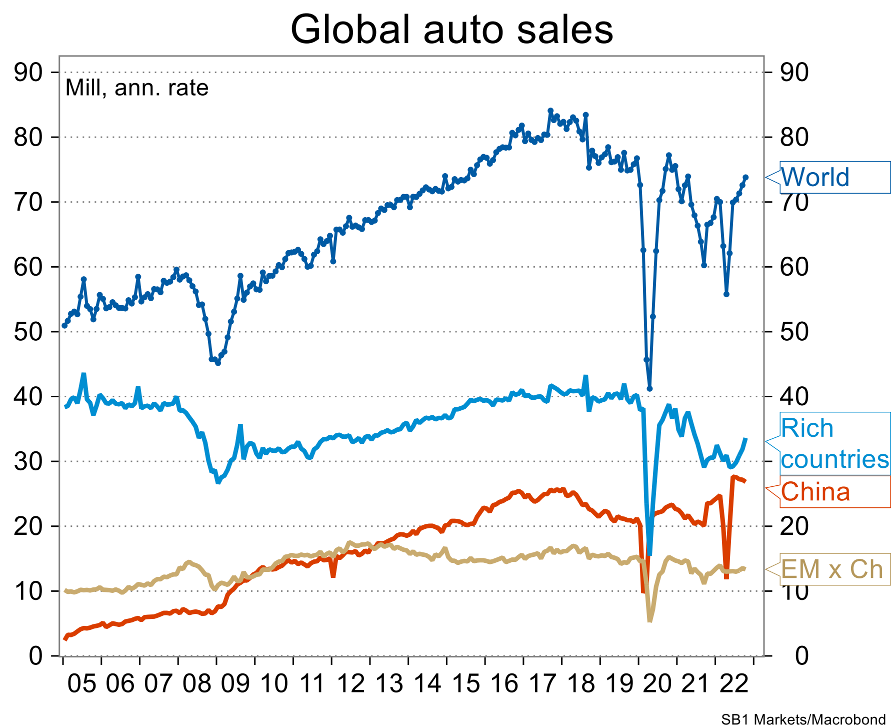
Especially the 2023 EMU inflation expectations

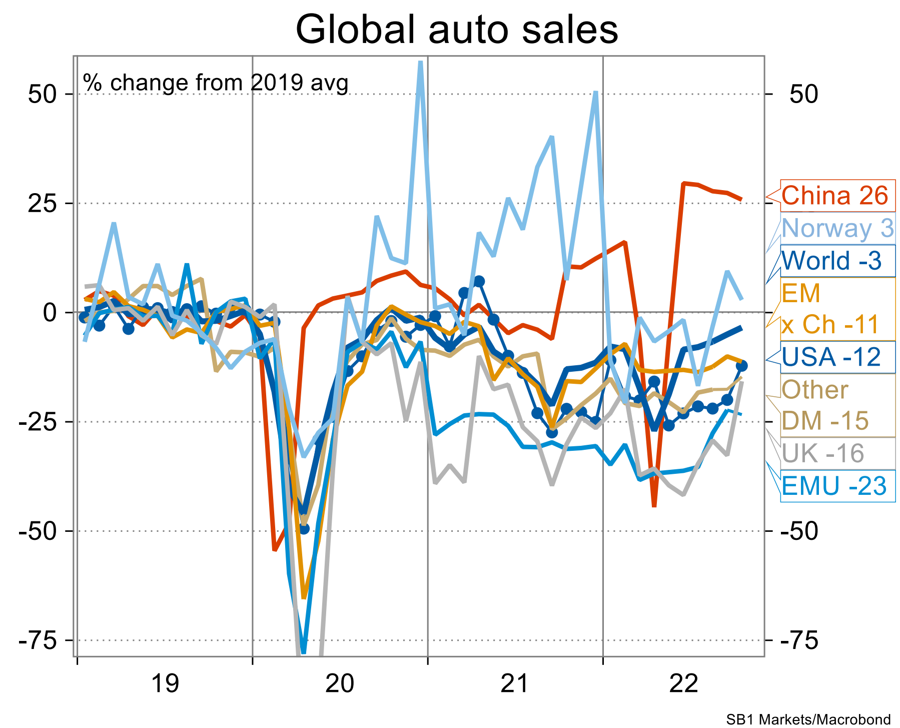




Auto sales further up in October, as sales rose most places

... and production is gradually recovering

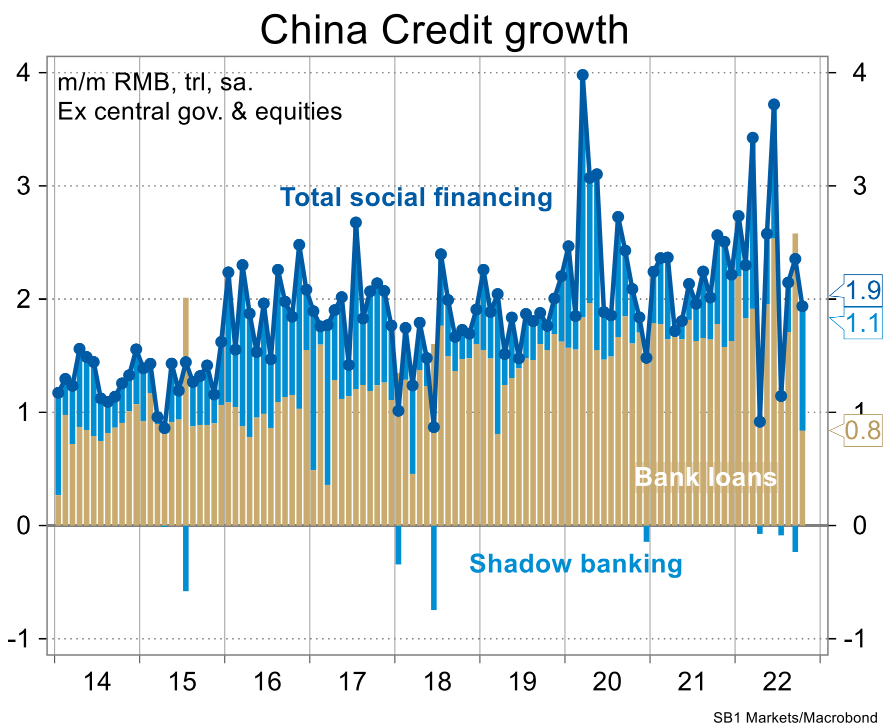


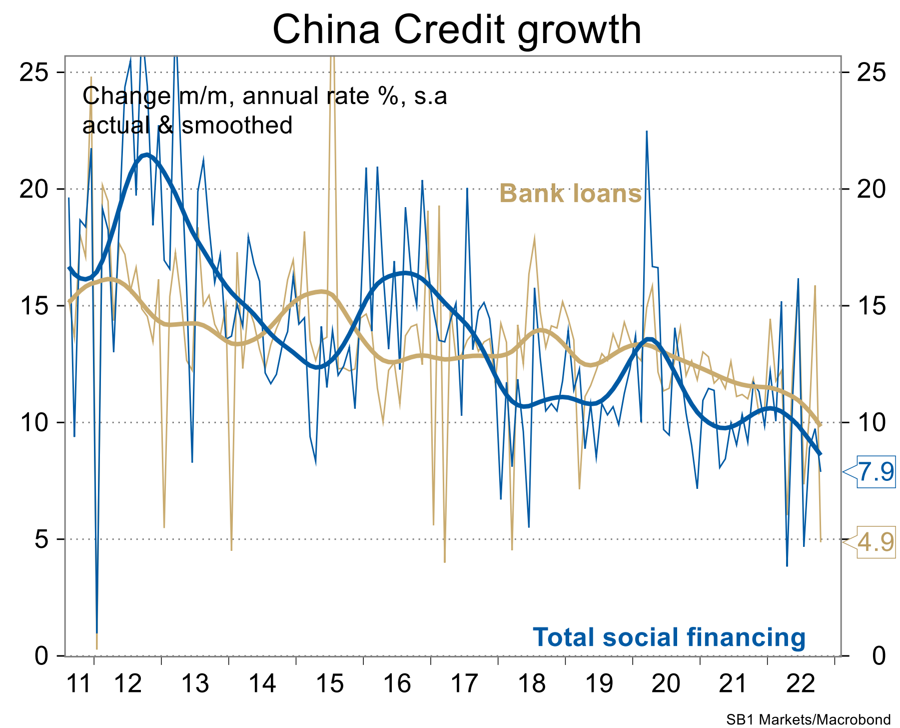


- **Global auto sales** rose 2% in October, at tad faster than during the previous months. Sales are the best since early 2021, and 'just' 4% below the 2019 level. However, 2019 is an easy comparison: Sale are down more than 10% from the peak in 2018 and more than 20% below the pre-2018 trend growth path!
- The regional differences are substantial: Sales in **China** have been revised down, and fell further in October, but the level is the highest ever, up 26% from 2019 – even if the housing market is struggling. Sales in the **US** rose 12% m/m and are down 12% since 2019. **EMU** sales probably fell marginally, and are 23% below the 2019 level. **UK** sales shot up, and are down 16% (from -33%!)! **Norwegian** sales fell slightly in Oct, but are 3% above the 2019 level
- Sales in **EM x China rose marginally. Indian** sales are close to ATH, while **Russian** sales are down almost 75% from before the war
- **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% below. Most of Europe and Japan is down 10% – 25%

What did the bankers do in October? At least, they did not lend much

Credit outside banks partly compensated, but total credit growth slowed – and the trend is down

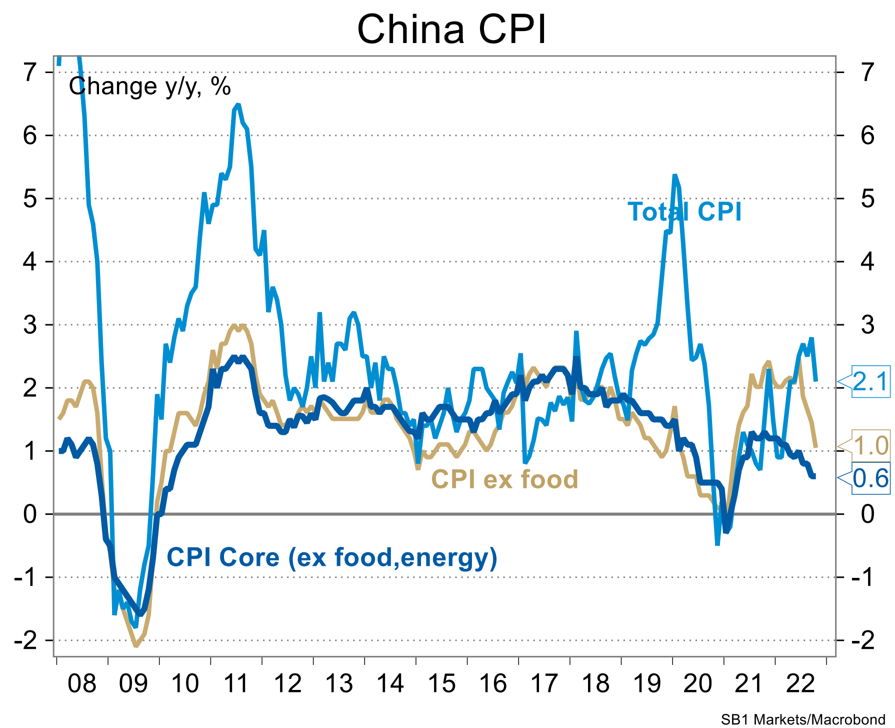


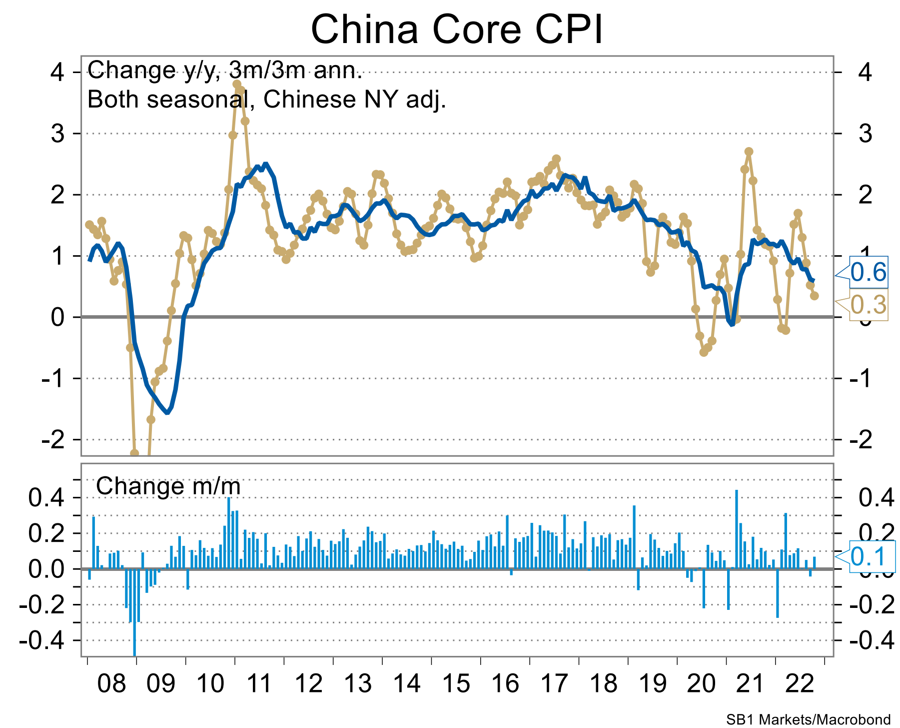


- **Core total credit** (social financing, ex central gov bonds, equites) grew at a 7.9% pace in Oct (m/m, seas. adj. annualised), down from 9.7% in Sept. The annual growth rate fell 0.3 pp to 10.0%
- **The official total social financing** rose RMB 910 bn, expected 1,600 bn. Our core credit supply grew RBM 1.9 bn (seas adj)
  - » **Bank loans** rose by RMB 0.8 trl (s.a) or at a 4.9% annualised pace, well below expectations, and the lowest growth rate in more than 4 years! Loans are up 11% y/y, down 0.5 pp
  - » **Shadow banking credit** rose by RMB 1.1 trl, and is up 7.9% y/y
  - » **Local governments have been** responsible for most of the increase in credit outside banks over the last year, at least until the past 4 months (including our Oct est, no data published yet). Less revenues from sale of land, and public financing of unfinished building projects requires funding, which is 'dictated' from the central government

While the west struggles with high inflation, China steers clear

Inflation data well below expectations in October, the core down to 0.6% y/y





- **Total annual CPI** was down 0.7 pp to 2.1% y/y in Oct, 0.3 pp below consensus expectations. Prices were down 0.1% m/m, down from +0.25% in Sept
- **The core CPI** (x energy, food) were up 0.1% m/m, and the annual rate was little changed at 0.6% y/y. The 3m/3m rate is down 0.2 pp to 0.3%
- **Food prices** are up 7% y/y, with pork prices in the lead again, up 51.8%
- **Gasoline/fuel prices** are up 12% (down from 19% y/y in Sept)
- **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

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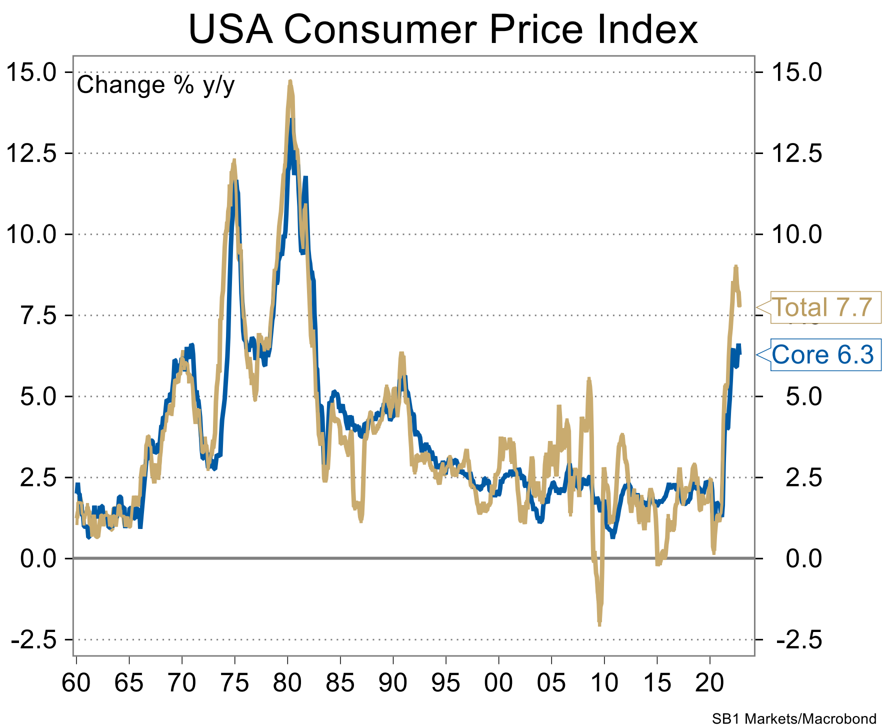
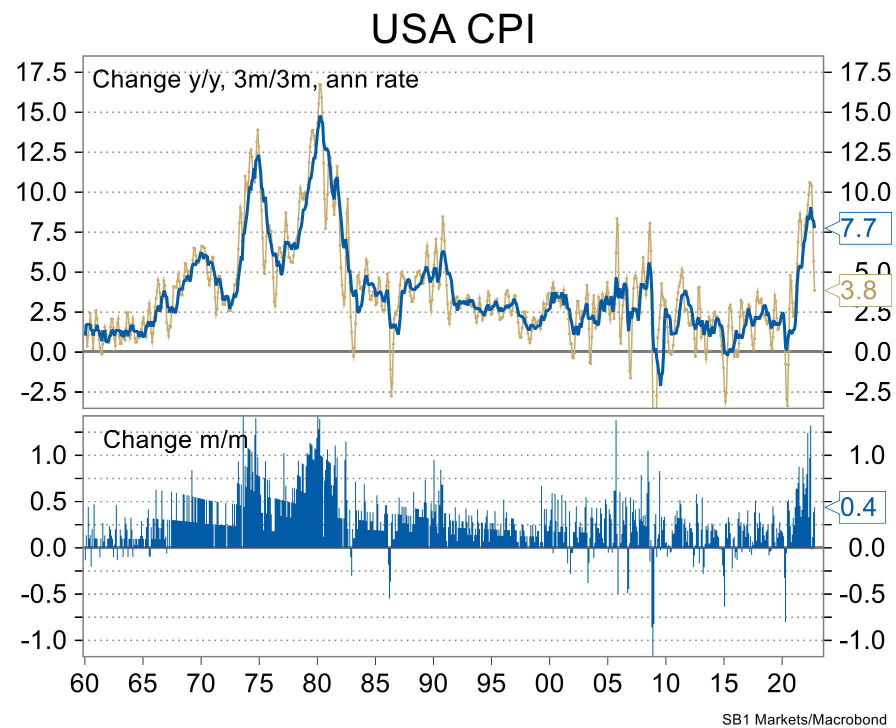
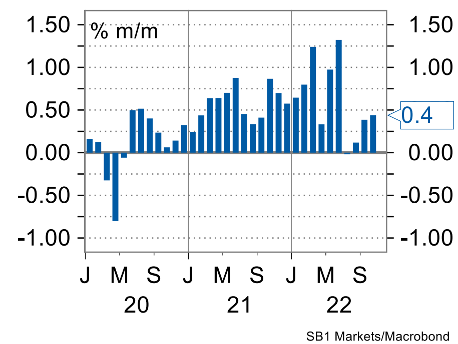
The Fed catches a break – inflation lower and below expectations

CPI inflation was 0.2 – 0.3 pp lower than expected. The core still up 6.3% y/y, but the tide has turned?





- **Headline CPI** slowed 0.5 pp to 7.7% in October, expected down to 8.0%. Prices rose 0.4% m/m, expected 0.6%
- **Energy prices** fell further, but energy is still contributing 1.6 pp to the headline rate
- **Food prices** rose 0.6% m/m and are up 10.6% y/y, lifting the CPI by 1.5 pp
- **Surveys** have also come down quite a bit recently
- This gives room for the Fed to slow their pace and see the effect of the hikes already implemented. However, inflation is still high and the Fed would appreciate another downward move in the CPI (and the PCE). October CPI data is out on Dec 13th, and the Fed press conference is on Dec 14th



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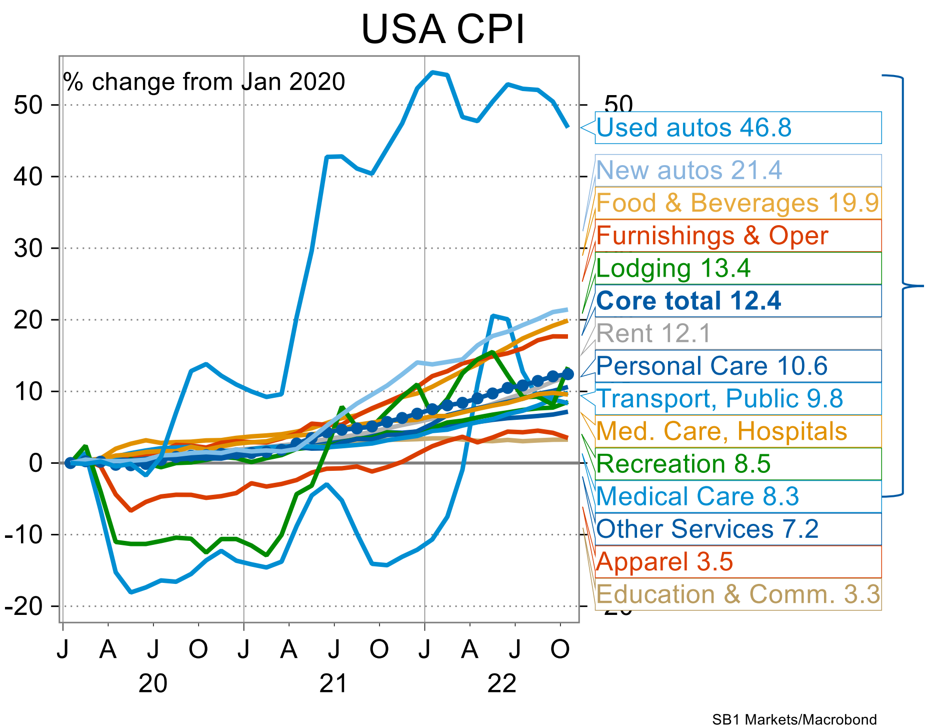
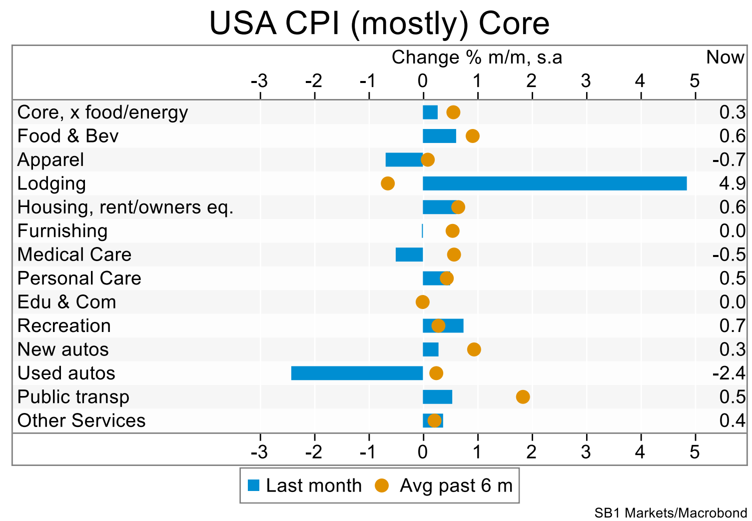
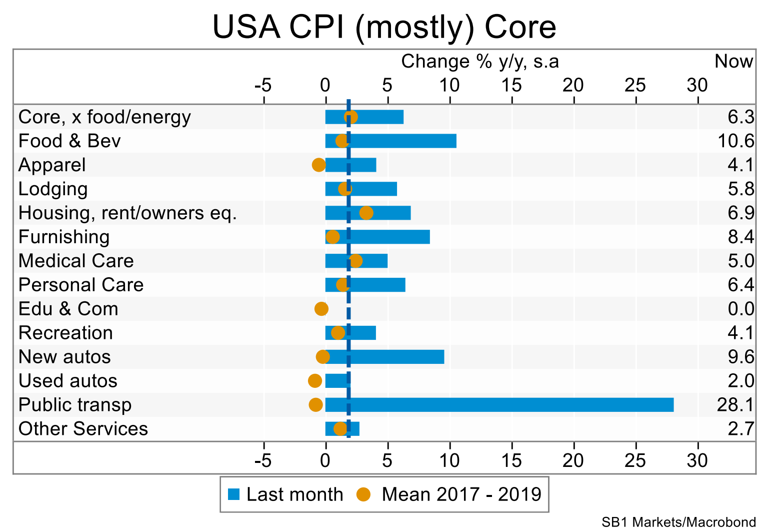
Used autos, apparel, and medical care cheaper in October

… but most prices were up







- All but education & communication and used autos, are up at more than a 2% pace
- Rents are up 6.9% y/y, lifting the CPI by 2.5%, alone!
- Like we predicted, auto prices are now coming down and has a negative contribution of 0.1 pp to the total CPI

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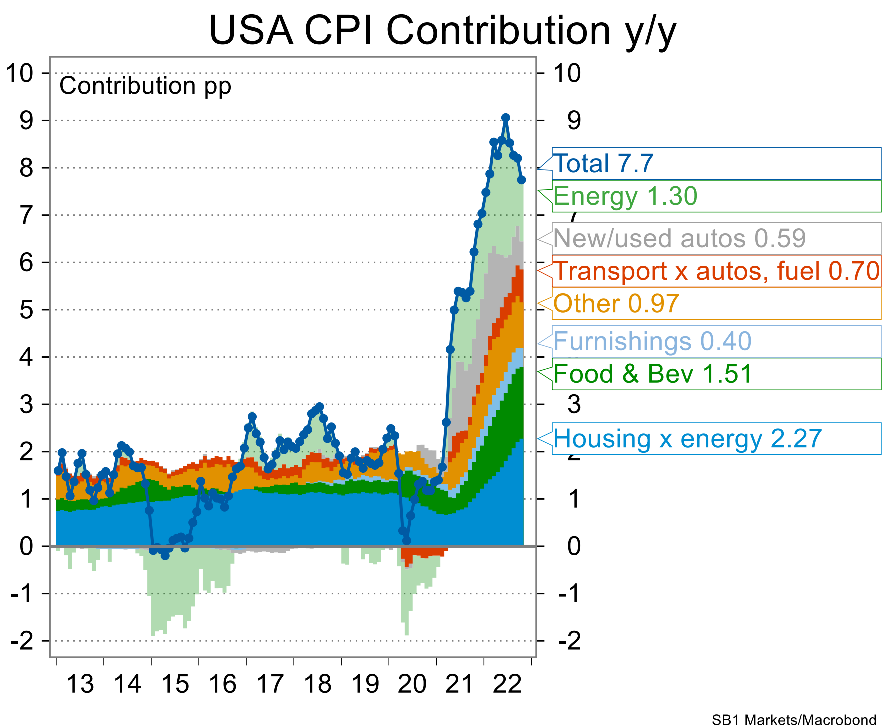
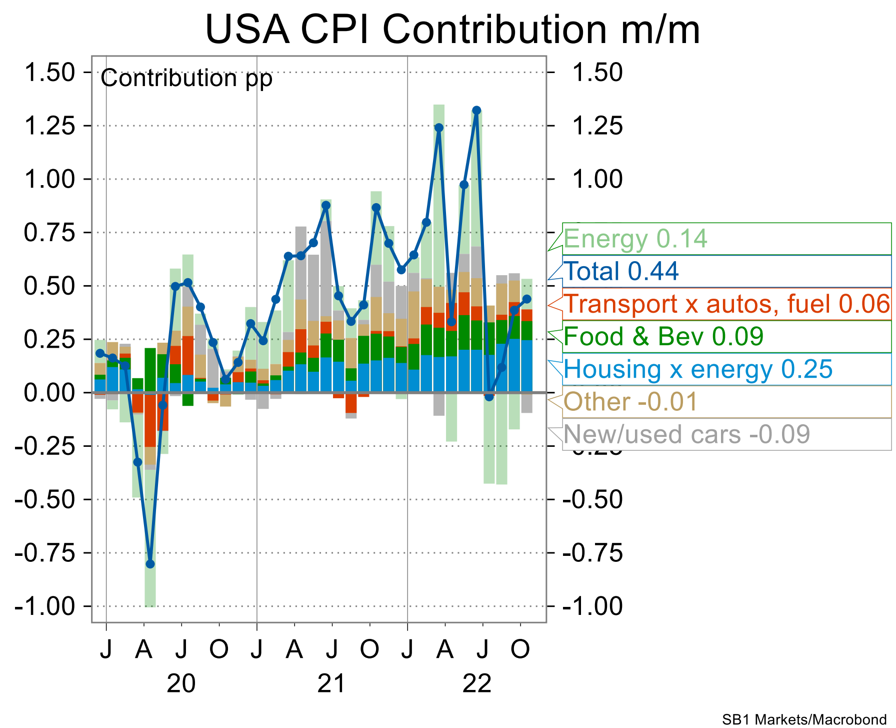
Energy & transport (incl autos) explain just 1.3 pp of the 7.7% lift in total CPI

The problem: The rest is up by more than 6.5% y/y. Housing alone contributes 2.3 pp; food 1.5 pp



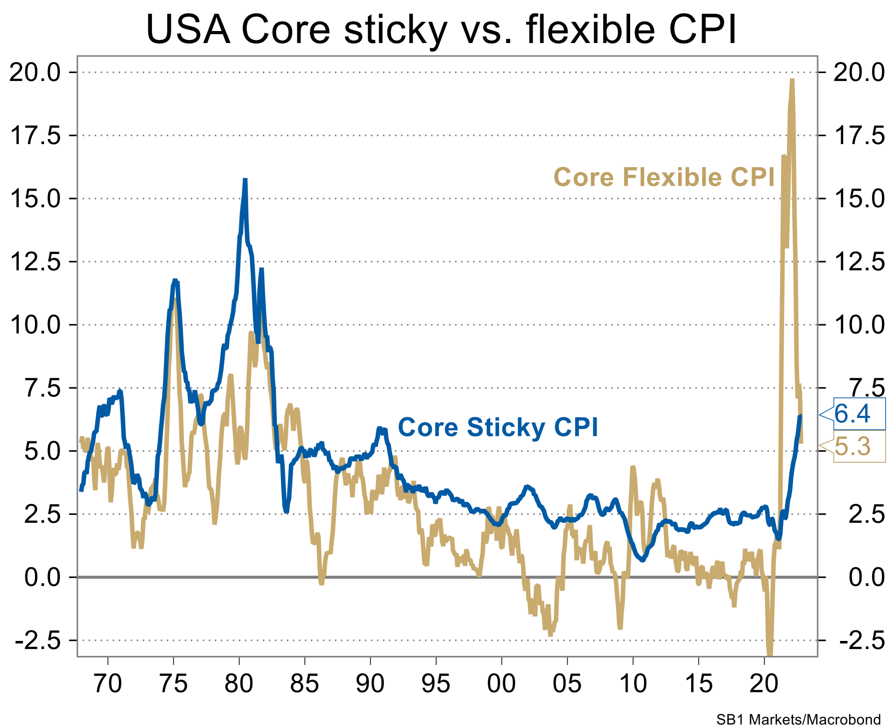


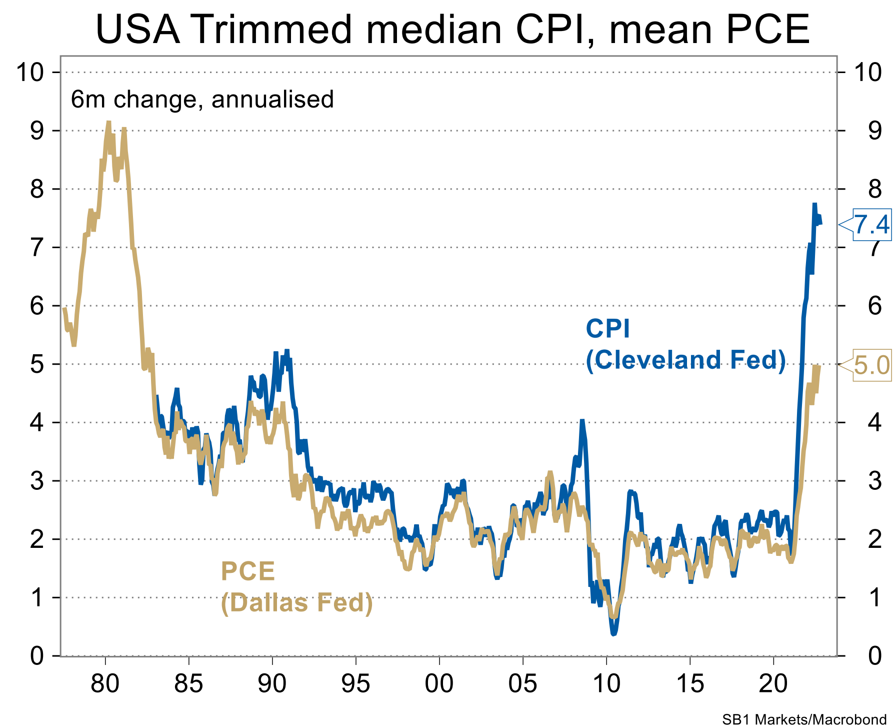
- **Energy** prices rose again in Oct, but the contribution to annual price growth has fallen past 4 months, explaining the decline in headline CPI
- **Excluding** the 2.6 pp contribution to the headline CPI from energy & transport , **"remaining"** inflation has not come down, and is at some 6%
- **Housing x energy** (and x lodging) is contributing by 2.3 pp, though partly due to a low base one year ago. Rents as measured in the CPI are up 6.9% y/y, but the upside is probably now limited
- In October, used car prices fell but all other main components contributed at the upside – and housing rents are not the only culprit!

Lodging away from home (incl hotels) is not included in housing at the charts above

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

Sticky prices are up 6.4% (90% of the CPI). The trimmed median CPI up 7.4%, and close to peak

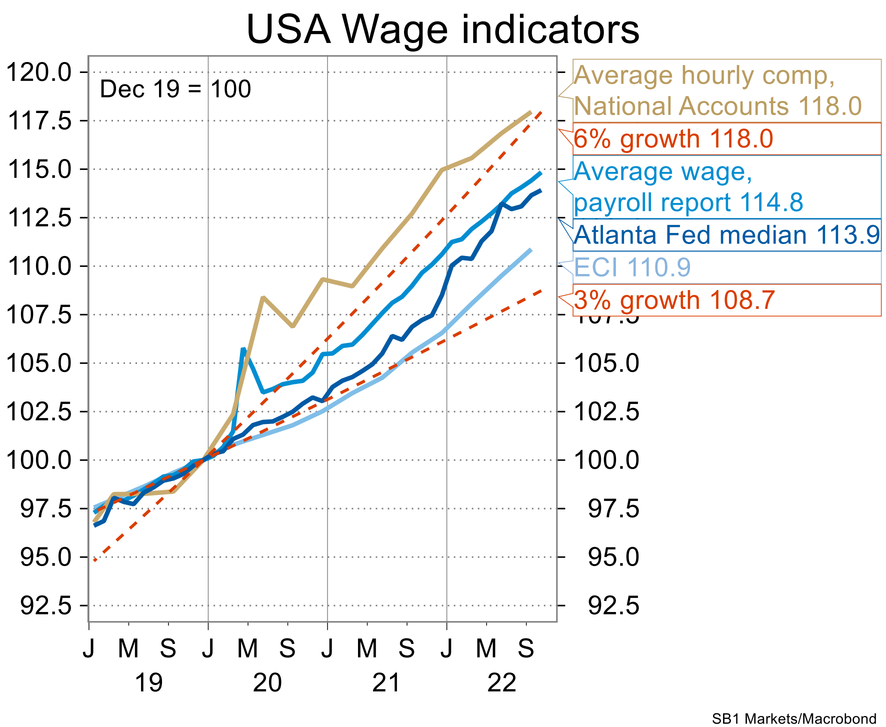


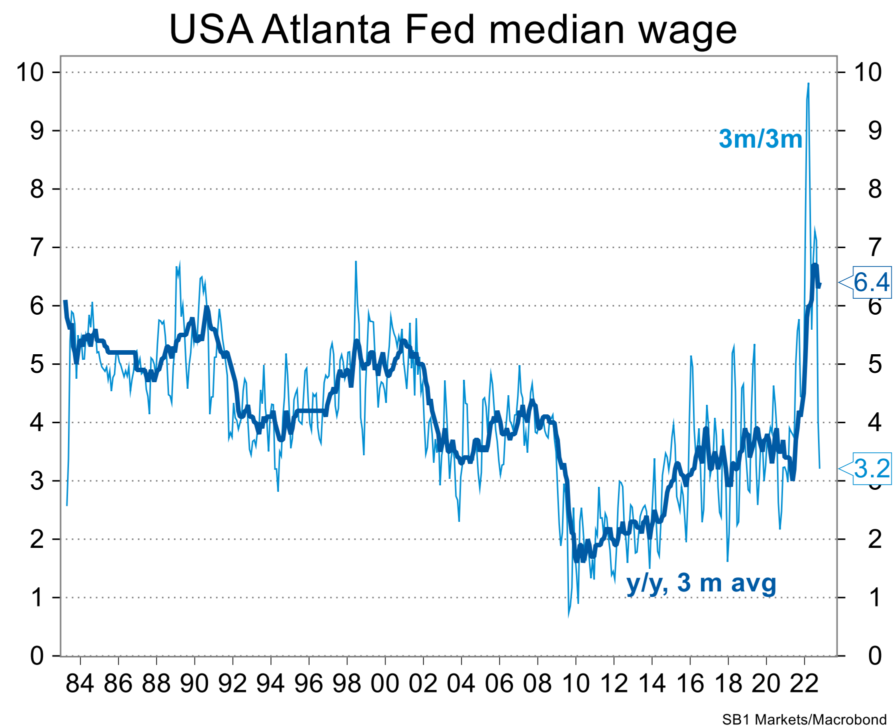


- Almost all of the initial lift in core CPI was due to prices of goods & services that often fluctuate, with rapid price increases followed by deep price cuts. These prices are '**flexible'** and represent some 10% of the core CPI. The core flexible CPI is up 5.3% y/y, down from almost 20% at the peak! But still higher than anytime since 1981
- The new challenge: The **sticky components,** 90 % of the core CPI are up 6.4% y/y, and it rose further in October. The surge in the sticky index is much more worrisome for the inflation outlook than the ups and downs in the 'flexible' CPI
- The Cleveland Fed **trimmed median CPI** is up at a 7.4% pace over the past six months, down from 7.6% last month – but miles above anything seen before (data from 1983). Dallas Fed's **trimmed mean PCE** was up 5% in September, at the peak level for this cycle

Atlanta Fed: Wage inflation is probably slowing somewhat

The median wage +6.3% y/y, 6.4% 3 m avg, up from 6.3% - still 3 pp higher than 'normal' growth



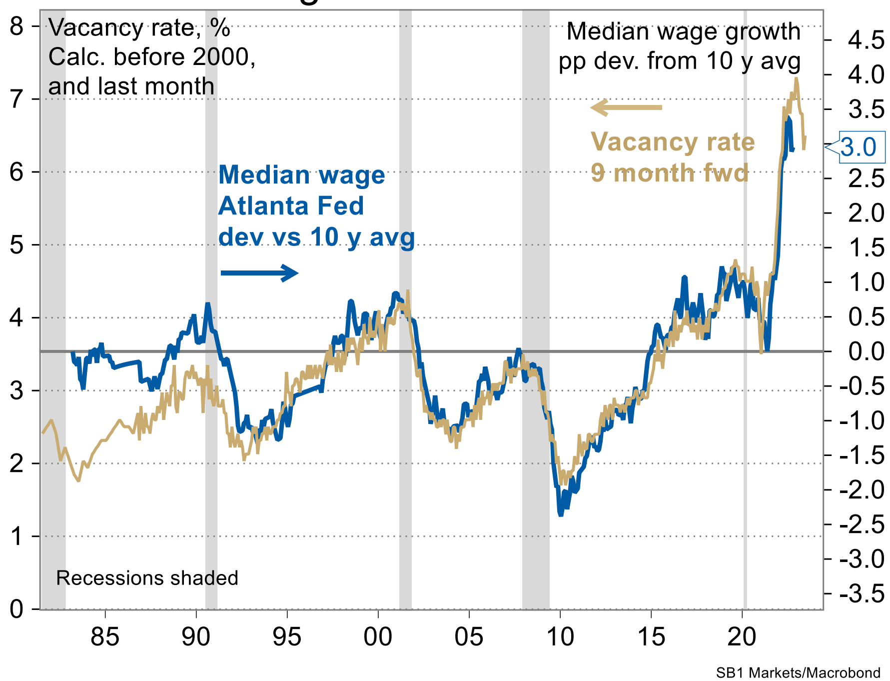


- **Atlanta Fed's median tracker reported** a 6.4% growth in October, down 0.1 pp from Sept. Our calculated m/m was up 0.2%, and growth has slowed past three months. The 3m/3m rate 'collapsed' to 3.2%, but the 'real' underlying growth rate is 5.5% - 6% (a strange June obs. has created some volatility). The **3 m average annual wage** growth gained 0.1 pp to 6.4%, from the highest print ever at 6.7% in August. The current wage inflation is 3.0 pp higher than the past 10 average, a wage acceleration we have never seen before
- **Wage inflation** among ages, occupations, industries, job switchers (or not), race, education, urban or rural regions have experienced a sharp acceleration in wage inflation. The only laggards: those who are paid the best, but even this group report higher wage growth recent months
- **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 2.5% – 4% faster than the past 10 years' average – which will make it impossible to reach the 2% price target over time

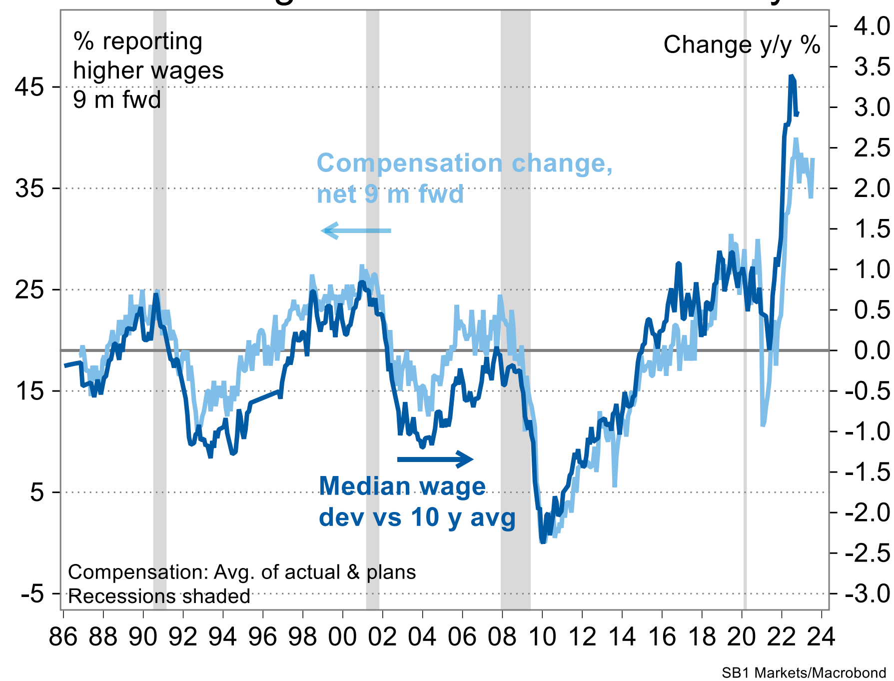
Peak wage inflation? Very likely, as demand for labour slows

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

USA Wage inflation vs vacancies



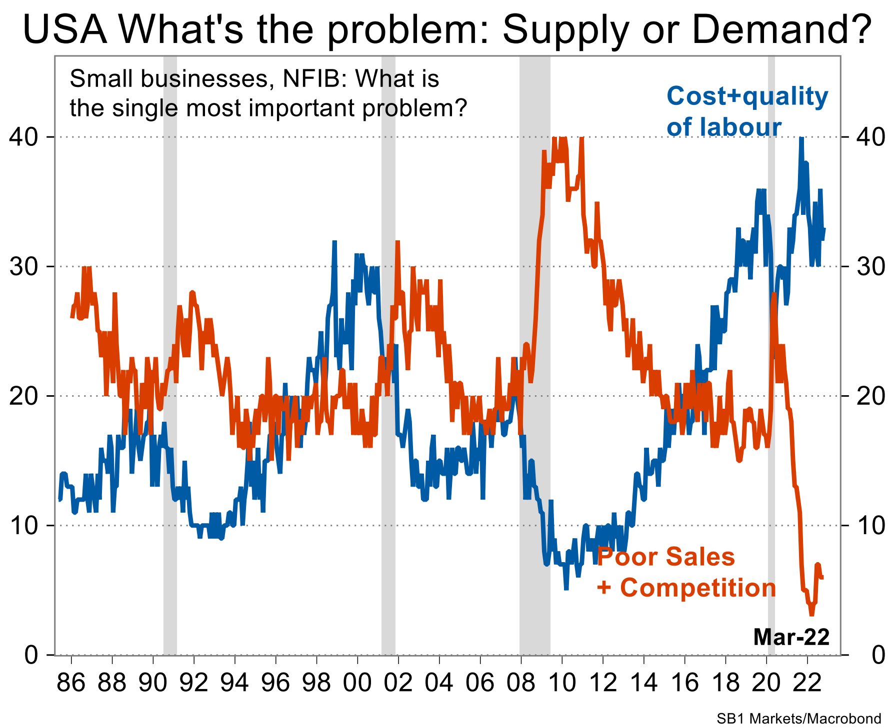
USA Wages - Actual vs NFIB survey

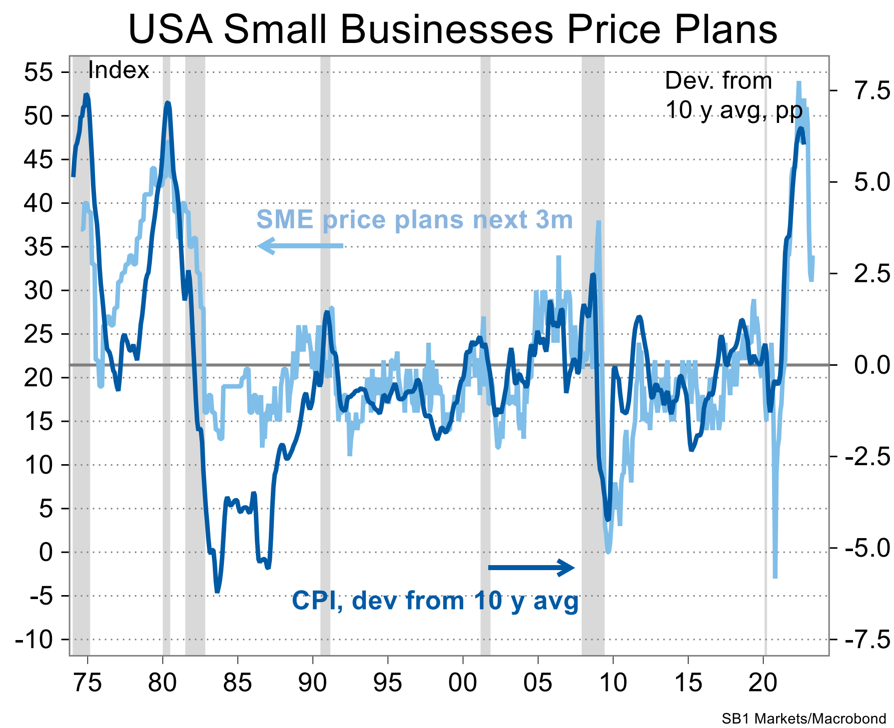


- **Our 'Phillips curve'** based on the vacancy rate signals a further increase in wage inflation the coming quarters, even if vacances have peaked. The vacancy rate leads changes in wage inflation quite consistently by 3 quarters. However, we would not be surprised if the current extraordinary high wage inflation turns out to be the peak
  - » Companies (SMEs) compensation plans signal continued high wage inflation but not faster than the present
- **Wage inflation** has already accelerated by almost 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

Sales are not the problem, lack of labour is. Price plans revised up in October!

We are quite surprised, we expected demand to slow (and the had Fed hoped for it)

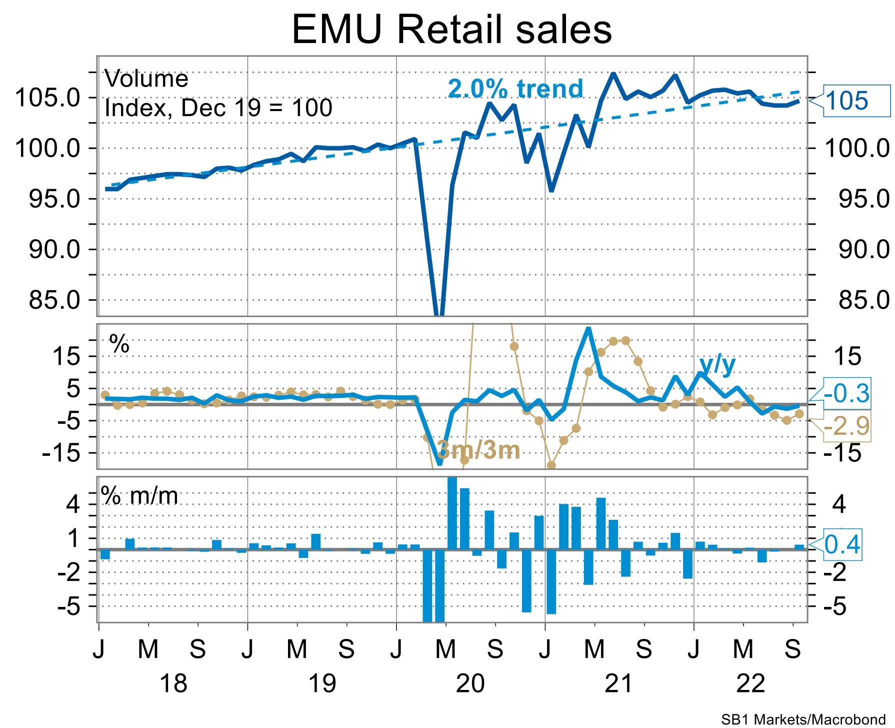


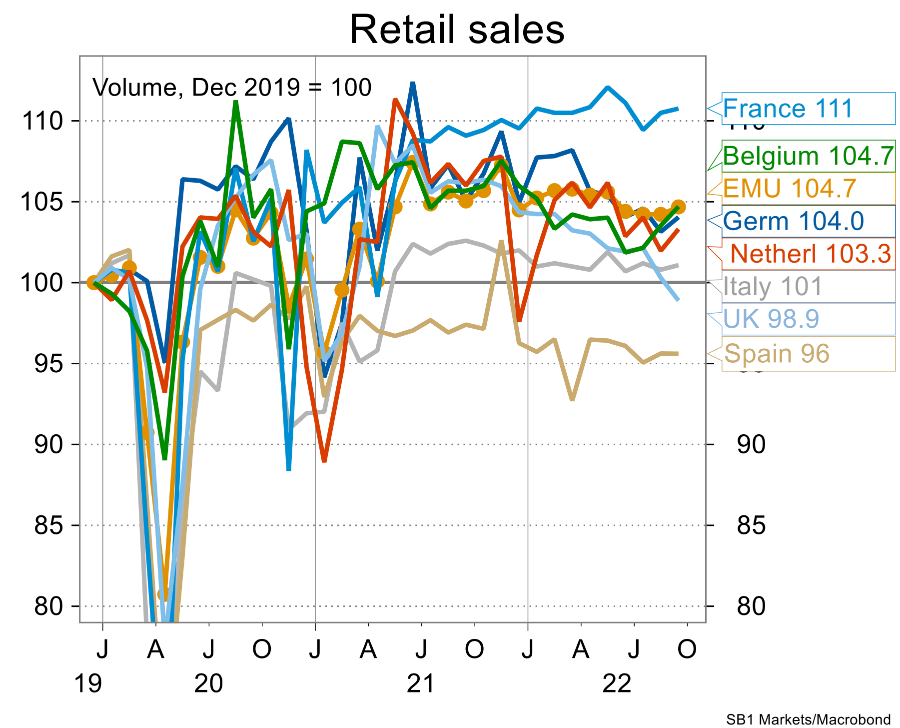


- **The 'gap' between supply and demand concerns** is still very large, but it is now heading down (if not in Sept and Oct!)
  - » Very few companies report **poor sales or competition** as a problem. The share is up from March, but has stabilised recent months
  - » **Cost & quality of labour** are stated as the most important problem for a much higher share of companies than normal. However, the share has fallen somewhat from the peak. Still, compensation plans were revised up in October
- The share of **companies that plan to lift prices** has fallen sharply from the peak but rose slightly in Oct, to 34%, way above the average at 21%, and inflation well above the past 10 y average is still signalled
- **We have no doubt:** Over the coming months and quarters, the poor sales/competition (the red line) will climb sharply – and the blue line will come back down to Mother Earth as financial conditions tightens, with or without more help from the Federal Reserve. It's normally labelled as a recession, as soon as the red line crosses the 20-line

Retail sales up most places in September

Sales rose 0.4%, as expected after several countries reported better sales than expected



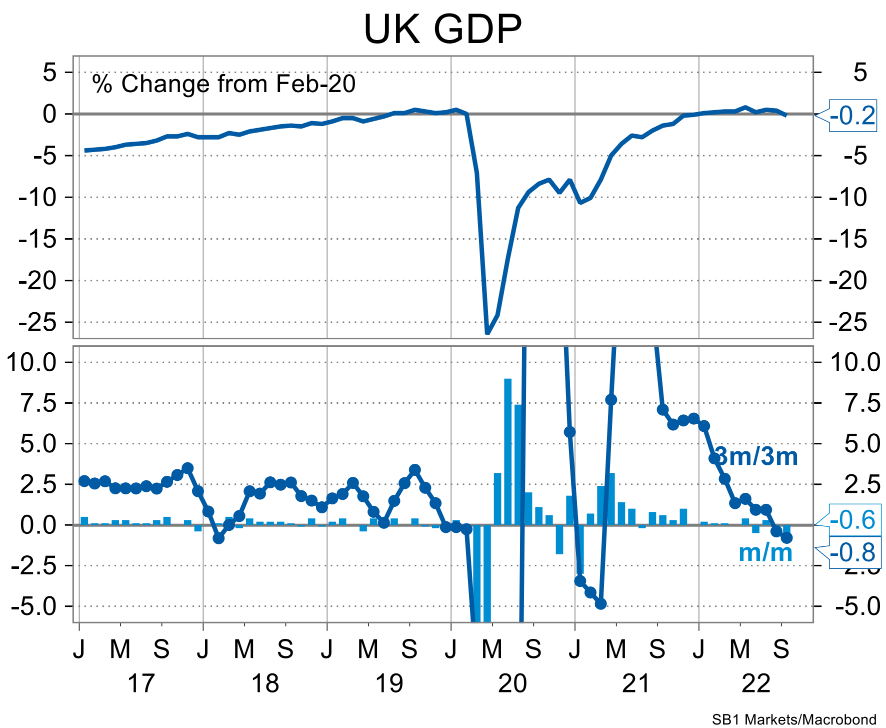


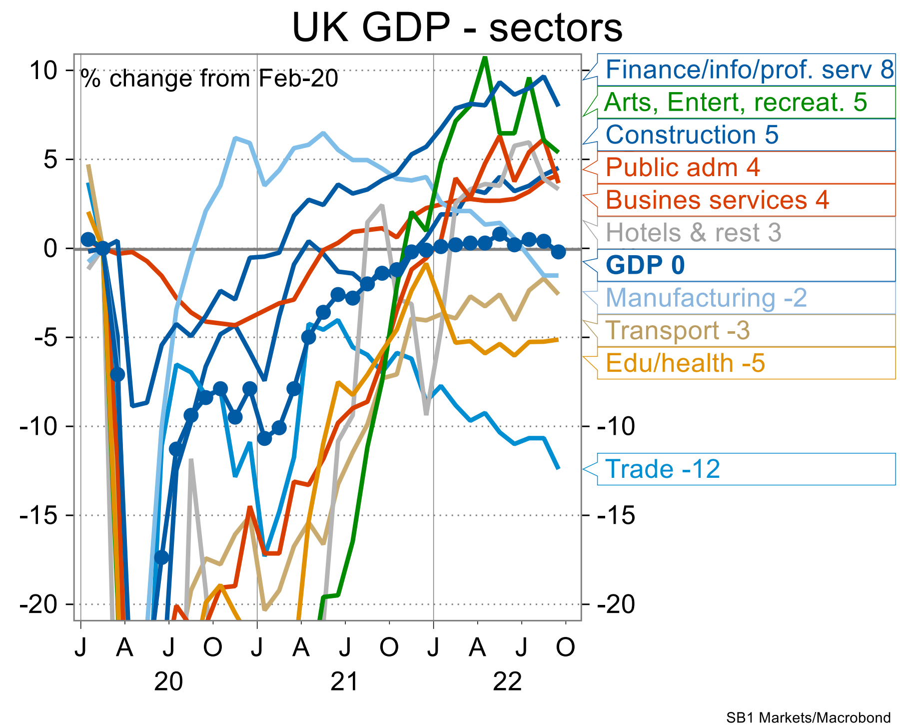
- Sales have flattened recent months – at 5% above the pre-pandemic level – which yields a normal growth rate in EMU
- However, the trend is down from the peak in mid 2021 – and the outlook is dismal, given loss of buying power and a dramatic decline in consumer confidence – even if the labour market is still very strong

SpareBank 1 MARKETS

GDP contracted for the 2nd month, in what the BoE thinks will be a long downturn

GDP was down 0.6% m/m, 0.2 pp below expectations. Q3 GDP fell by 0.8% (annualised, expected -2%)



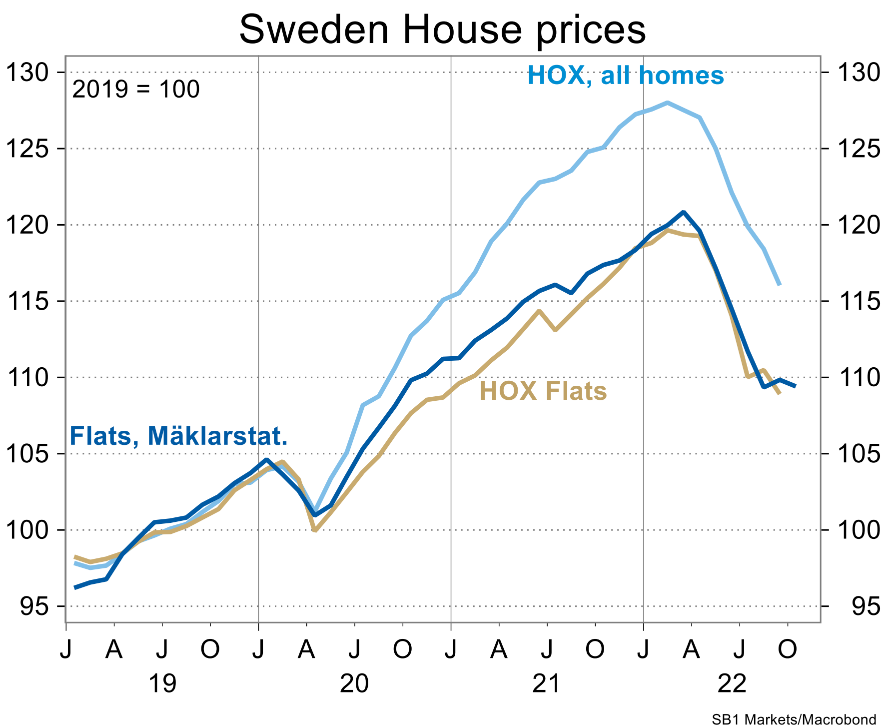


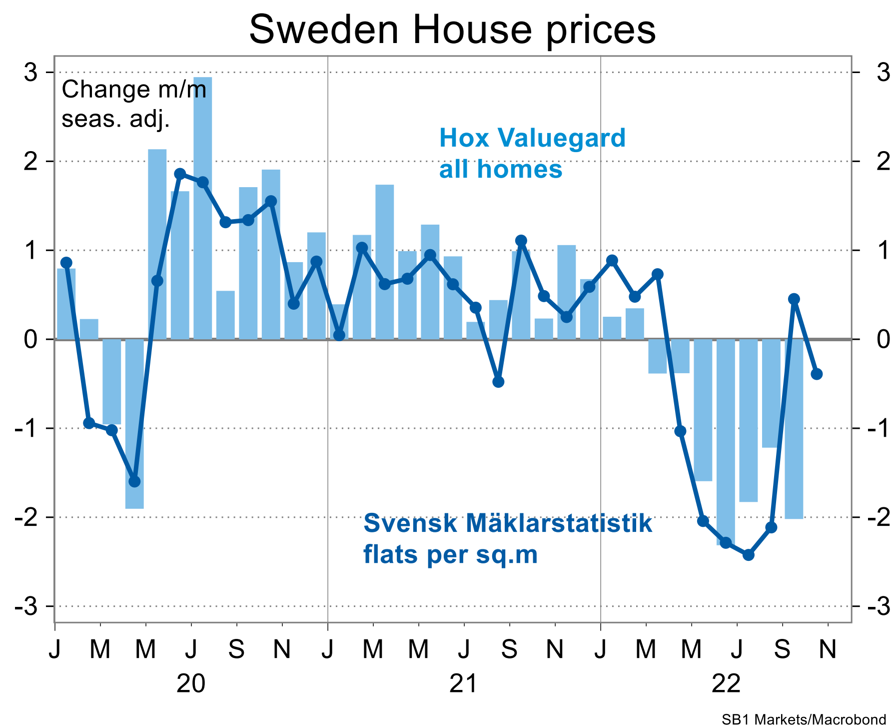
- **GDP** was revised up – and even if GDP fell more than expected in September, Q3 was better than assumed, GDP fell 0.2%, expected -0.5% (not annualised). GDP is still 0.2% below the pre-pandemic level
- **Mixed between sectors:** Professional services, transport, arts & entertain., education, and hotels & restaurants contributed on the downside
- **On the demand side**: Inventories fell sharply in Q3, while business investments, and exports rose. Household demand flattened
- **Bank of England** expects UK to have entered a recession in Q3, due to a steep decline in real incomes, and monetary tightening. And the Queen's death. So far, the BoE has been proven right

SpareBank 1 MARKETS

Swedish apartment prices have flattened, according to the realtors

Prices fell 0.4% in October, following a similar increase in September. Vi expected a larger decline

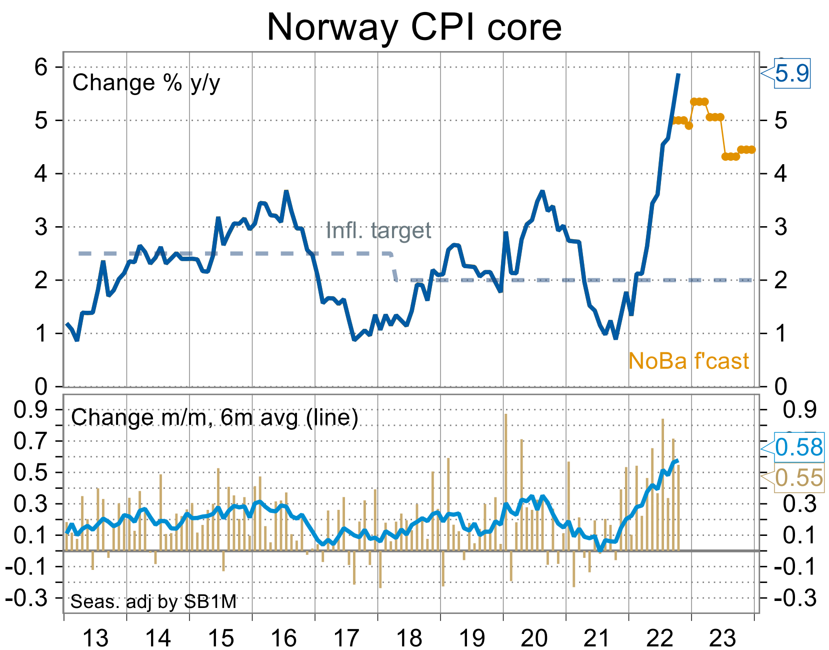


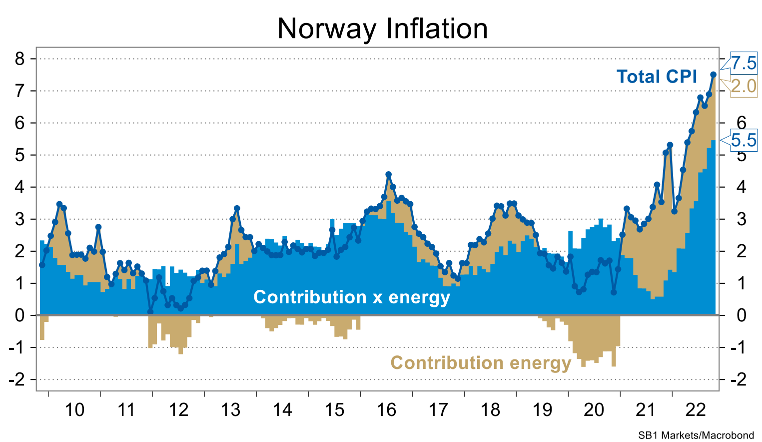


- Prices are down close to 10% from the peak in March – before the Riksbank started to hike rates
- The HOX index reported a small uptick in flat prices in August (while single-home prices fell further), but a larger decline in September. October data from HOX out next week

Inflation surprised sharply on the upside, once more

The ‘real’ core inflation up to 4.7%, 56% of CPI components up >5%. Challenging times for NoBa

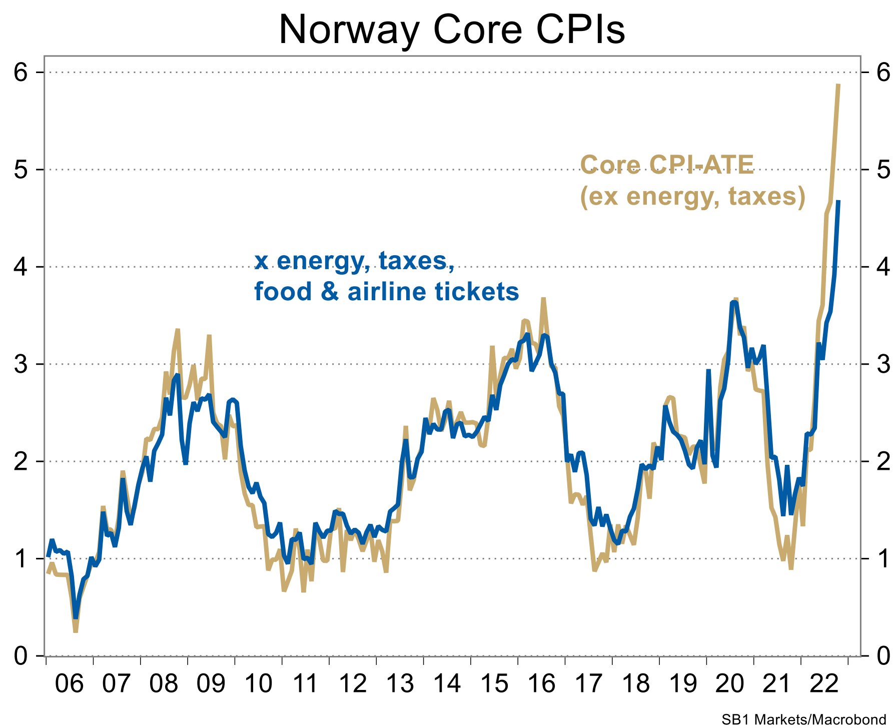


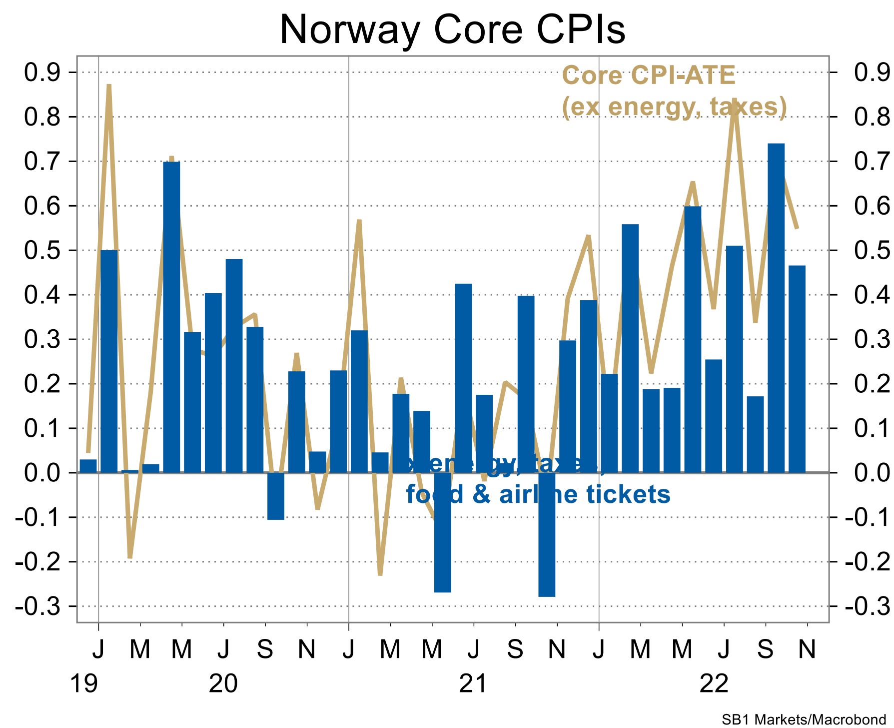


- **CPI-ATE** (ex. energy and taxes) rose 0.5% m/m (s.a) in October, and the annual rate climbed by 0.6 pp to 5.9% pp, we expected 5.5%, consensus was 4.9%, NoBa expected 5.0% in the Sept MPR!
- **Food prices** rose by 0.7% in Sept, we expected +0.5%. The annual rate is now at 13.0%. The annual rate will remain lofty the coming quarters. However, a<u>t one stage, prices will be cut, or at least flatten as the price pressure in the value change will reverse or abate</u>
  - » **Airline ticket prices** fell further, as the only main category where prices were significantly down
  - » Prices on **imported goods** climbed 0.6% m/m, and are up 6.1% y/y; **domestically produced** goods & services were 0.5% m/m and are up 5.9% y/y
  - » **10 sectors** reported growth above 2% y/y, and just 2 are below. All trimmed/median measures tell the same story: <u>Inflation has broadened, typically to 5% – 6%</u>
- **Total inflation accelerated by 0.6 pp**, to 7.5%, the highest since 1987. We expected 6.3%! Once more, we totally miscalculated electricity prices – but now these prices HAVE to fall sharply in the November CPI
- **The outlook**
  - » Most of the lift in **electricity prices** are behind us, due to the generous government subsidies
  - » **Gasoline prices** are on the way down and will contribute to a decline in headline CPI
  - » If so, **average 2022 inflation** will be some 5.8%, and above Norges Bank’s 5.4% f’cast. The core inflation may average 3.9%, just 0.2 pp above NoBa’s f’cast
  - » We expect inflation to slow faster than Norges Bank expects, as the economy slows, and raw material prices decline, including energy prices
- **So what?**
  - » **Inflation** is above NoBa’s f’casts, and while imported inflation is high, it explains 2.2 pp of overall inflation of 7.5%. Take away energy and food as well, and domestic inflation is still way above 2%
  - » 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, even if the economy has slowed somewhat before that. Still, we doubt NoBa’s 4.6% 2023 wage inflation forecast is too low, it is rather too high!
  - » NoBa signalled another 25 bp hike in December. Even if inflation is far too high, <u>we expect the bank to deliver just a ‘single’ hike</u> – barring surprisingly strong GDP (next week) or unemployment data (late Nov), or a strong Regional Network (early Dec). Still, <u>the bank will probably lift the ‘terminal’ rate in the rate path</u>, to 3.25% or more likely (as we see it today) to 3.5%, from 3.1%. A deep decline in home prices in November may become the best (and only?) counter argument

The ‘real’ core is a problem too: Core ex food, energy & airline tickets up 4.7% y/y

This real core gained 0.7% m/m

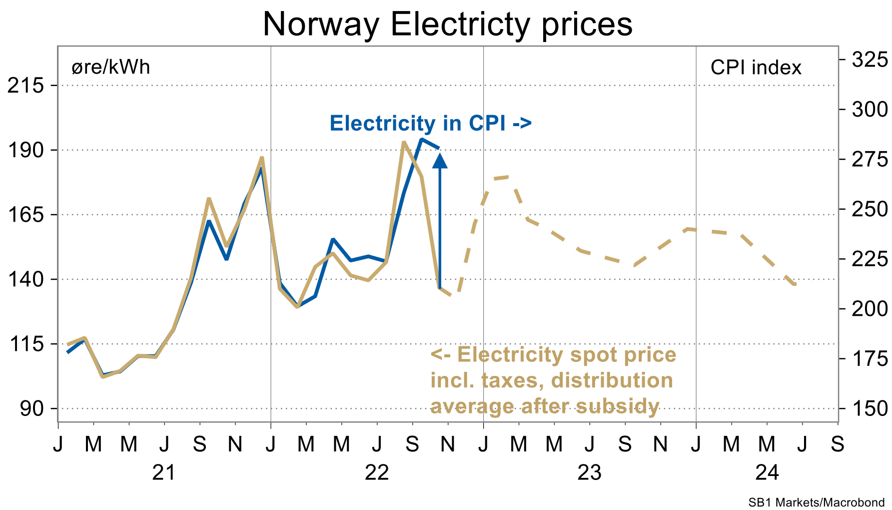


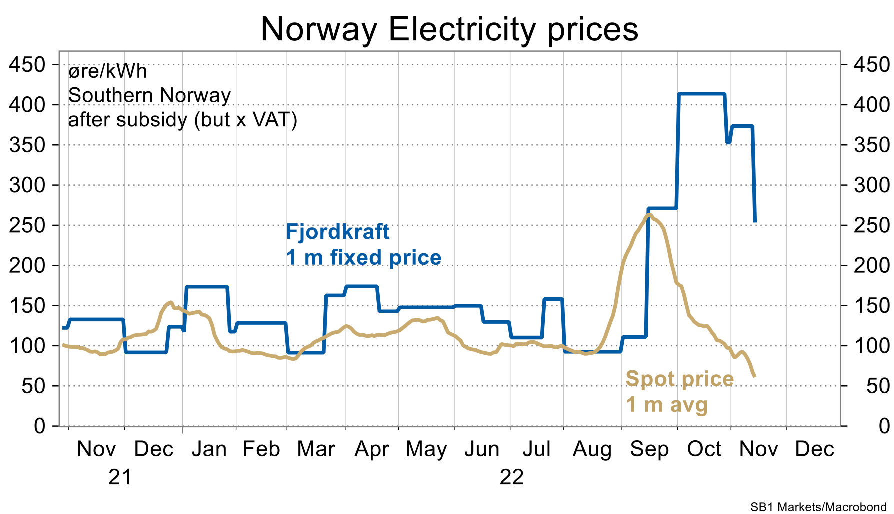


SpareBank 1 MARKETS

Our estimate miss of the year! Electricity spot prices collapsed in October

… but too many customers stayed on 'variable fixed price contracts', and paid a terrible prize for that

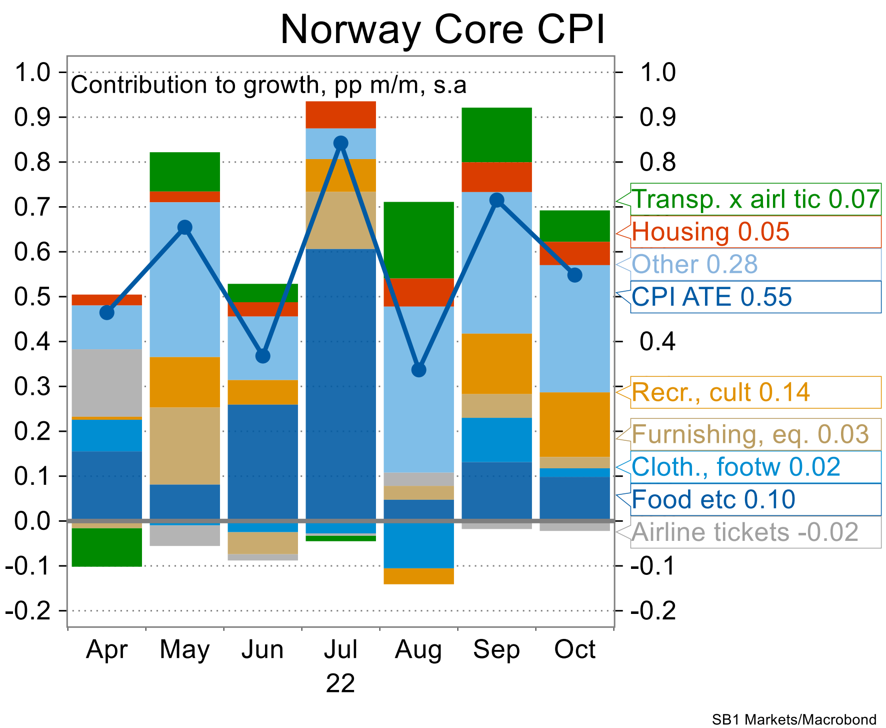


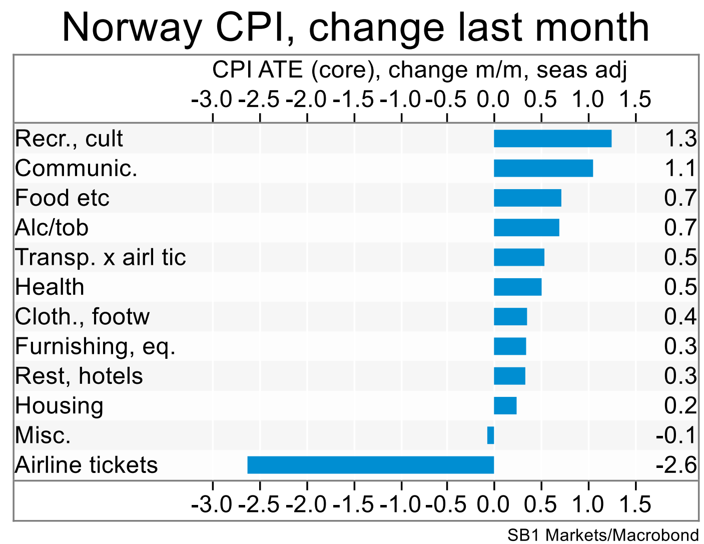


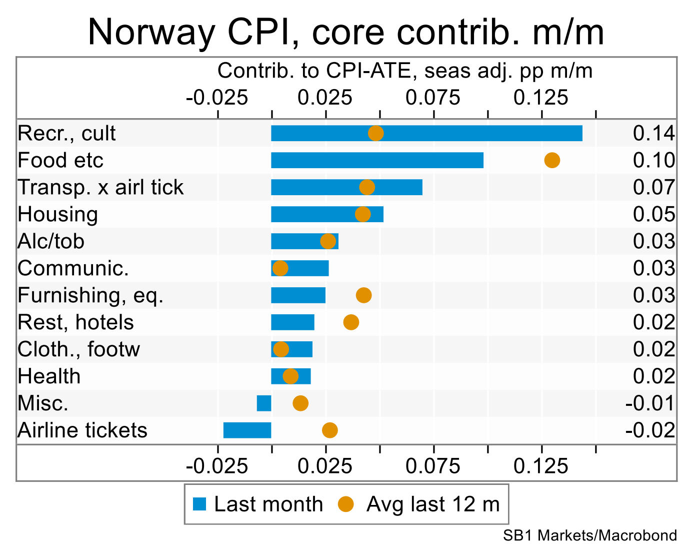
- Average household price at the upper chart: Spot prices, adjusted for government support, national weigthed average of the 5 price regions, adjusted for holiday & large homes, distribution costs (nettleie), taxes, VAT… everything available
- Our model worked pretty well until September, where SSB reported a higher average price than we assumed – and then a terrible miss in October (the blue arrow)
  - We expected a 22% decline, SSB reported a 1.6% decline
- The CPI level, including our miss in September, is 33% higher than indicated by the spot price (+our ton of adjustments). It seems like fixed price contracts or semi-variable contracts can explain the discrepancy.
  - There are numerous reports in media recent days regarding the 1 m fixed price contracts which was set at very high level in mid September for the month of October (based on high forward market prices and perhaps some 'extra' margins?). In October, these customers did not receive much electricity subsidy, which is based on the spot price, and their energy bill exploded! We have never seen such a discrepancy vs. the spot based contracts before!
    - 75% of households have contracts tied to the spot price, 17% have variable fixed price contracts (typically one month fixed price contracts), and just 6% have a fixed prices contracts. As those 'variable fixed 17%' of contracts yielded 2 – 3 x higher electricity bill than the spot price contracts, our miss of the year is at least explained…
  - Going forward, whether customers remain at these variable fixed contracts or not following the October price shock, the average electricity bill decline substantially, as the November fixed price bill will be cut by some 35% (in Southern Norway, impact on the total CPI el. index -6%), and the average spot prices probably will decline somewhat too
  - will close the gap to the spot price, at least in December (November is still exposed, as spot prices so far have fallen further, and the fixed price for November probably is down

October: Everything, barring airline ticket prices, contributed on the upside

Food, recreation, transportation x airline tickets contributed the most



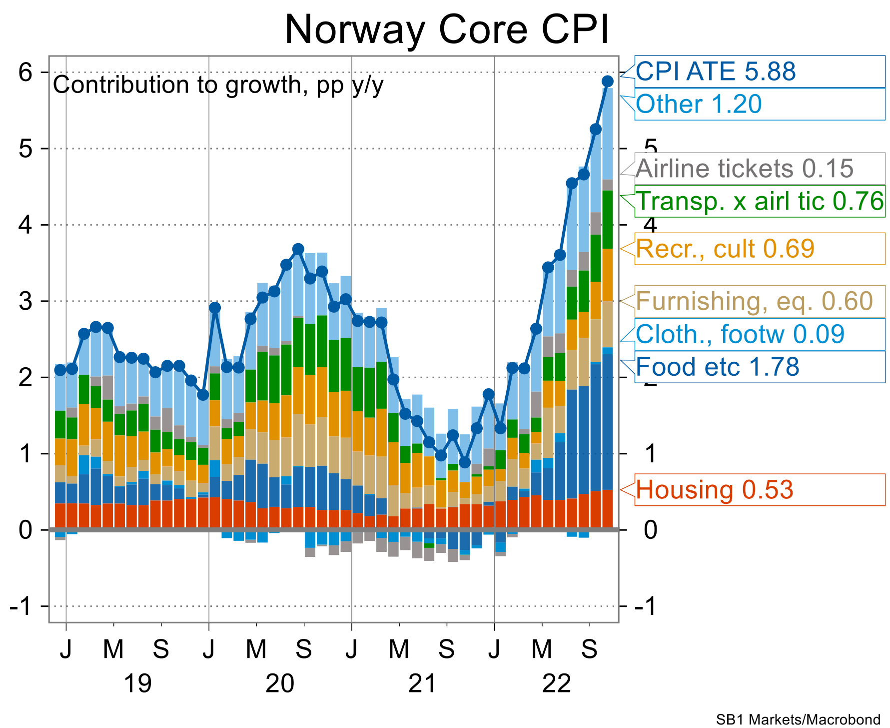


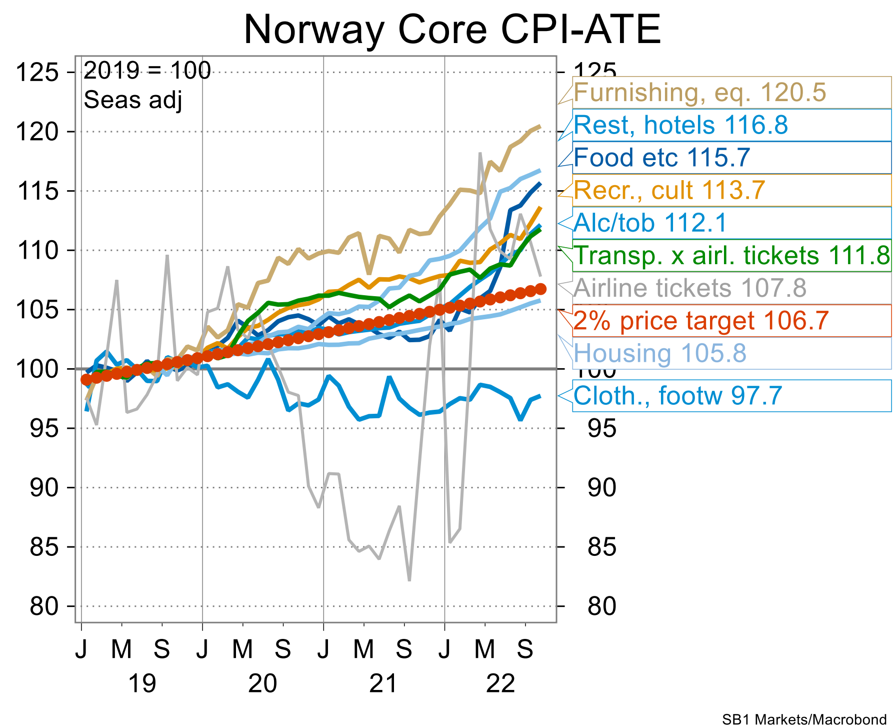


SpareBank 1 MARKETS

Faster/broader price growth recent months

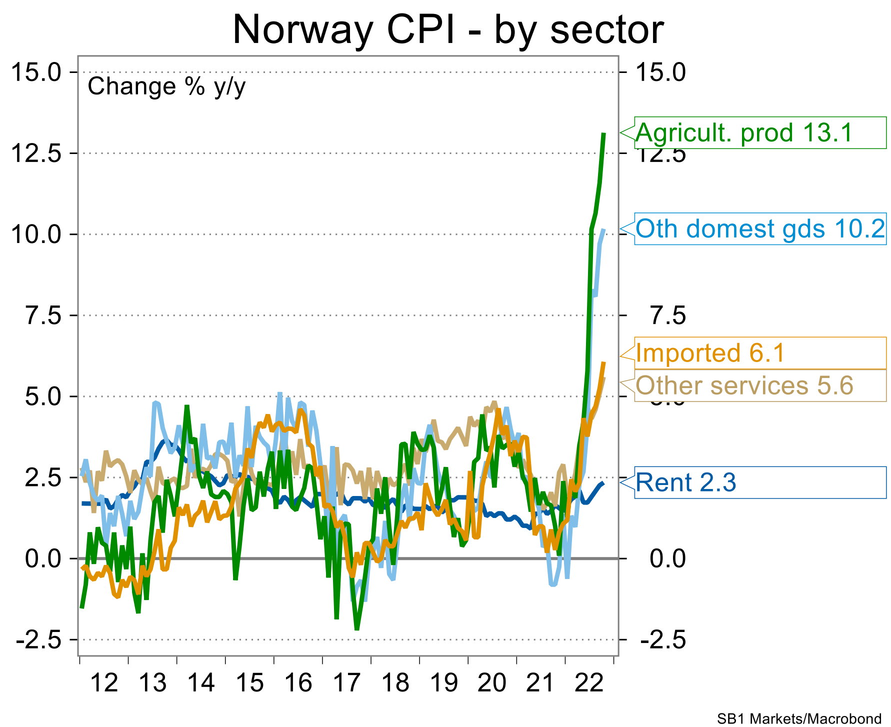
Just clothing/footwear, and housing ex energy below the 2% path since 2019

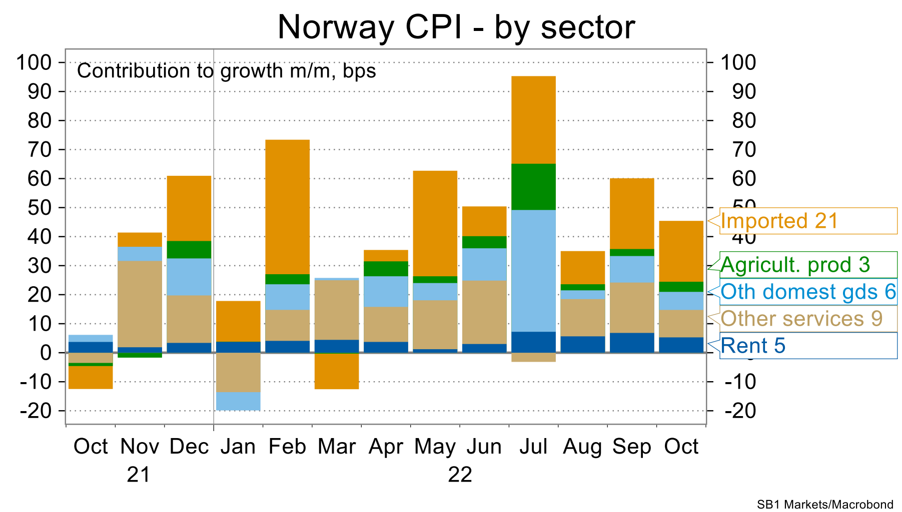


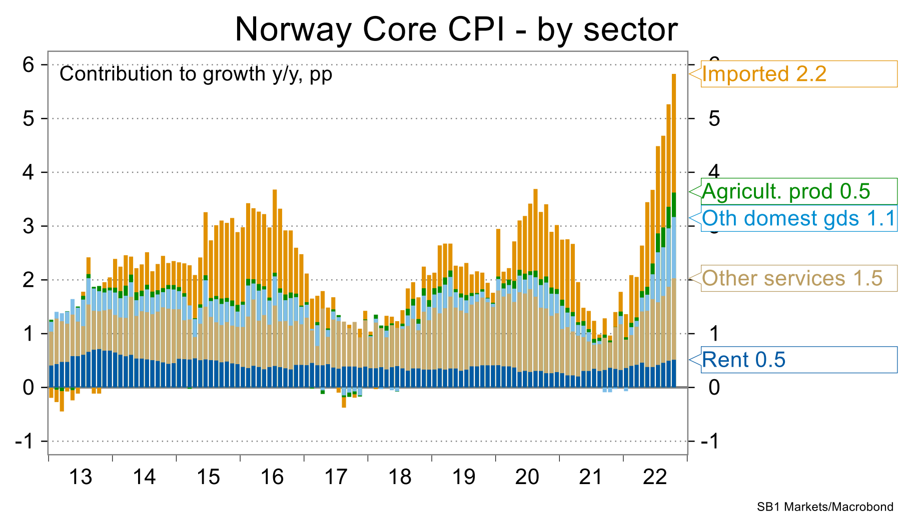


Services and imported goods contributed the most on the upside in October

Domestic goods up 10.2%, services 5.6%



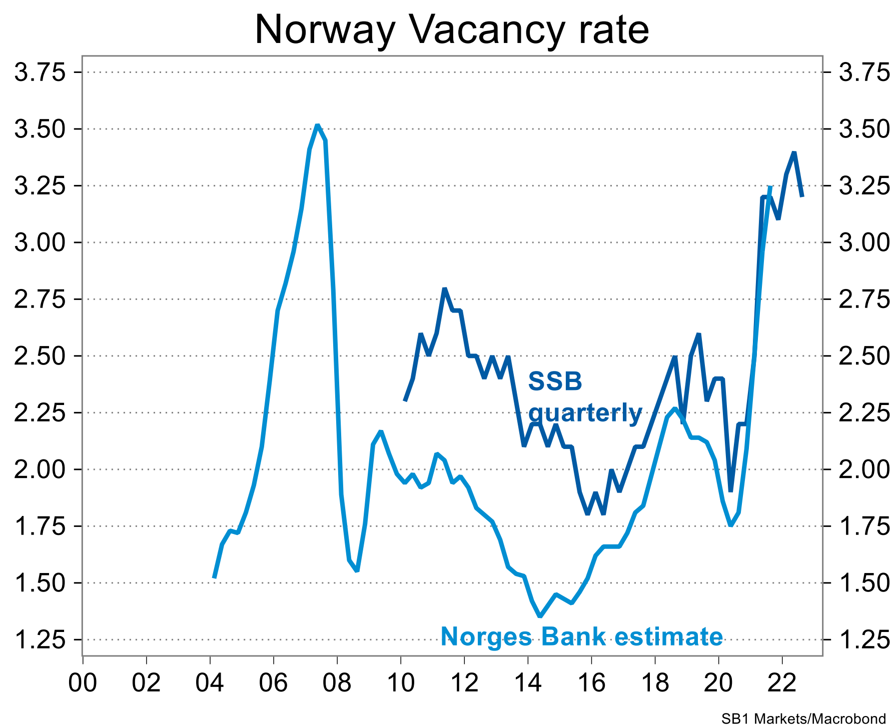


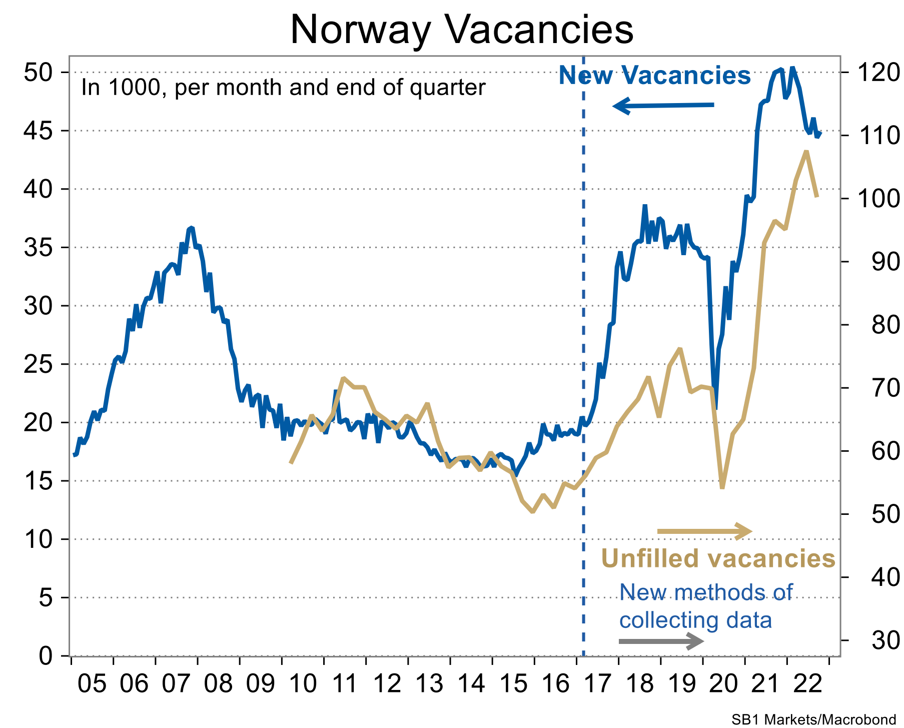


- **Domestic services inflation ex rents** slowed sharply during the corona crisis, and is now climbing faster, up 5.6% y/y, contributing 1.5% to core inflation, with hotels/restaurant and recreation/culture (partly services) contributes the most
- **Domestically produced agricultural products** are up 13.1% y/y, new ATH, contributing 0.5 pp to the overall core rate
- **Other goods** than agricultural & imported products (that are produced in Norway) are up 10.2% y/y, and contributed 1.1 pp to the core inflation rate, by far the highest ever
- Rent inflation is still modest, at 2.3%

The unfilled vacancy rate down 0.2 pp to 3.2% in Q3, still a very high level

The inflow of new vacancies has also peaked – but the level remains very high

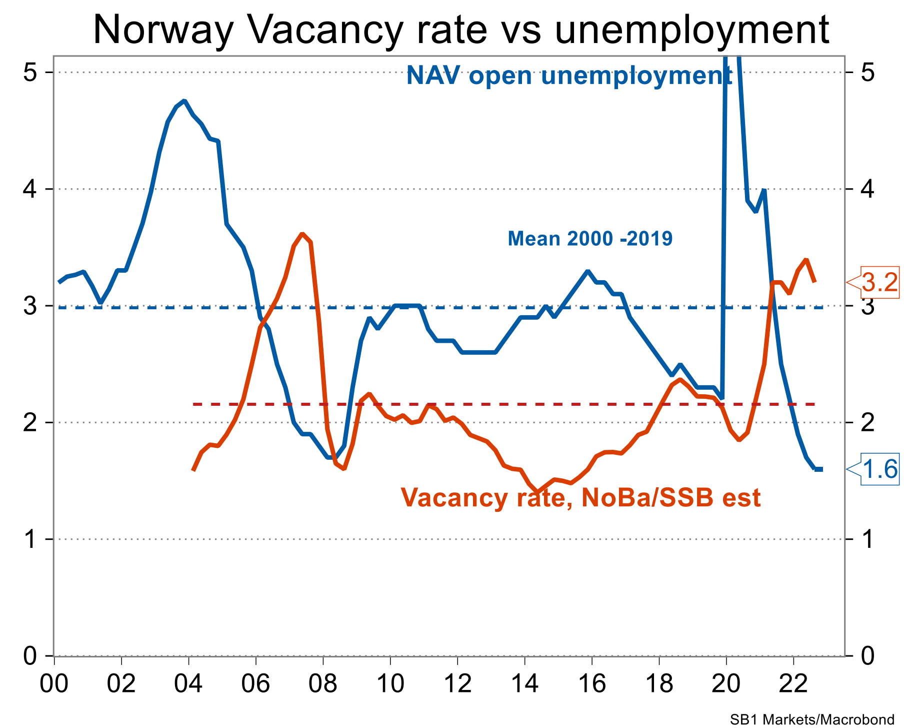


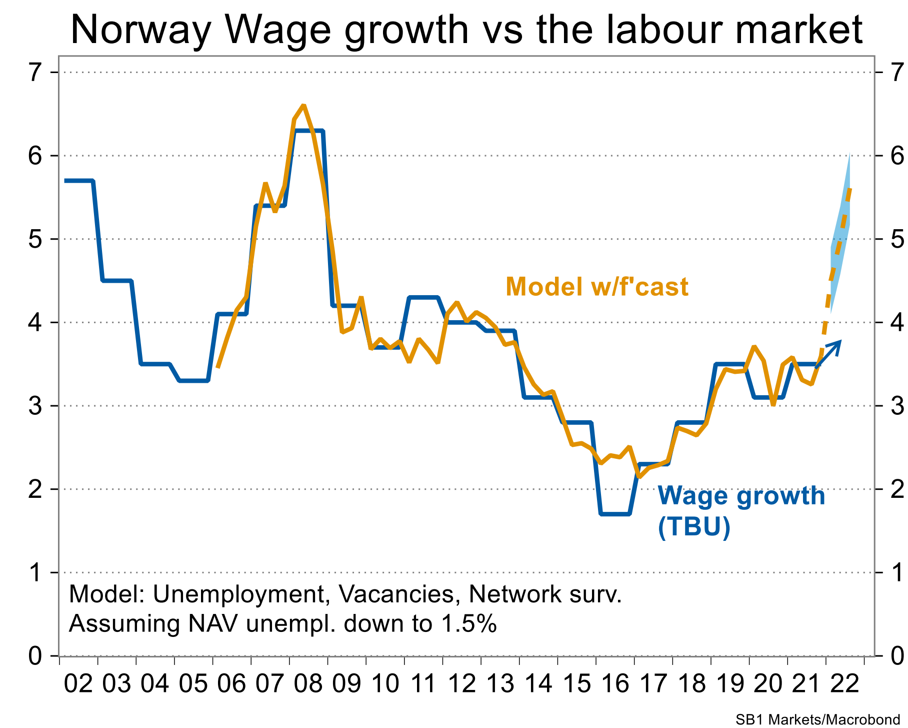


- Now more foreign workers have returned, and we cannot blame the lack of foreigners – and besides: Whatever reason, the lack of labour is the highest in more than a decade. (SSBs stats date back to 2010, Norges Bank has published some data back to 2004 – and they are not identical)

Can wage inflation climb further? Our simple model suggests it will

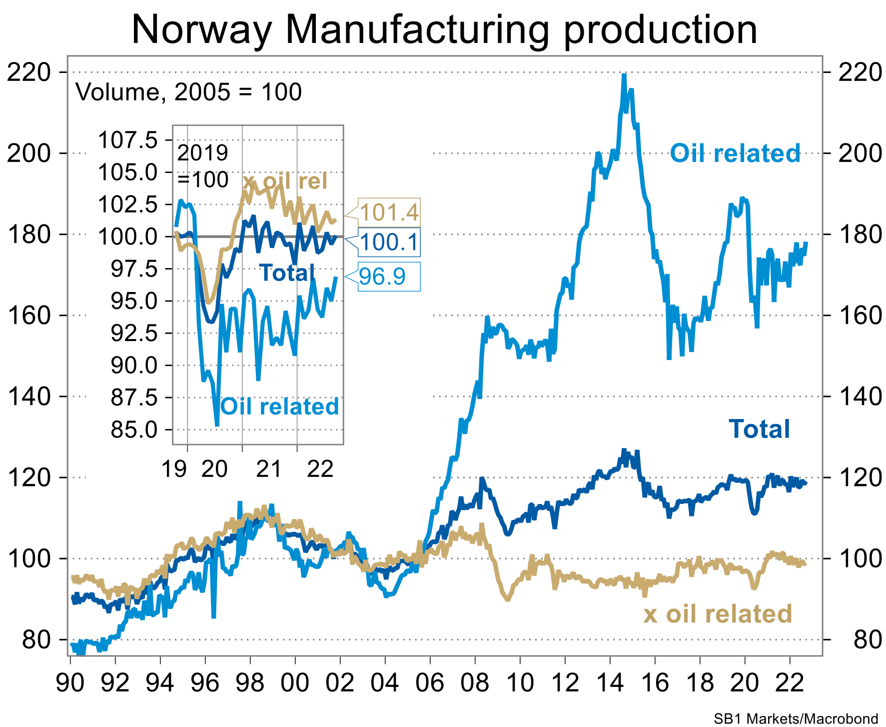
If no one does not do anything about it…

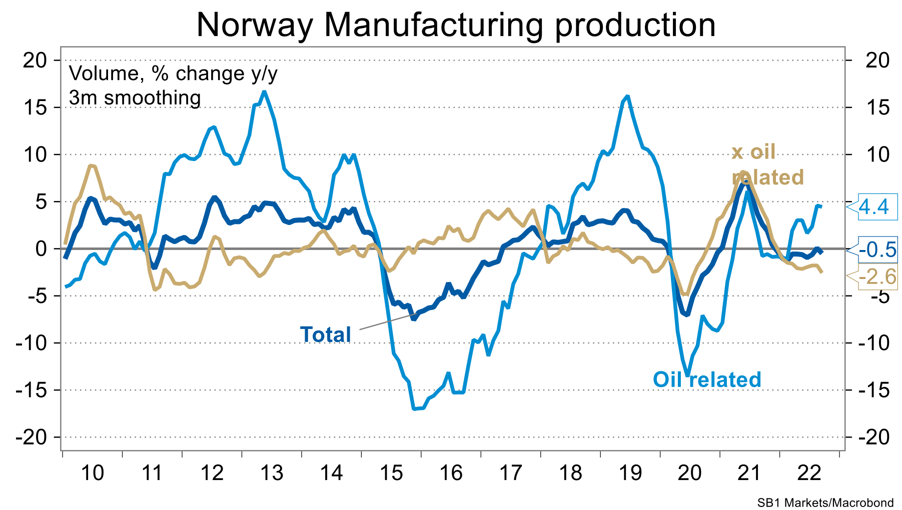


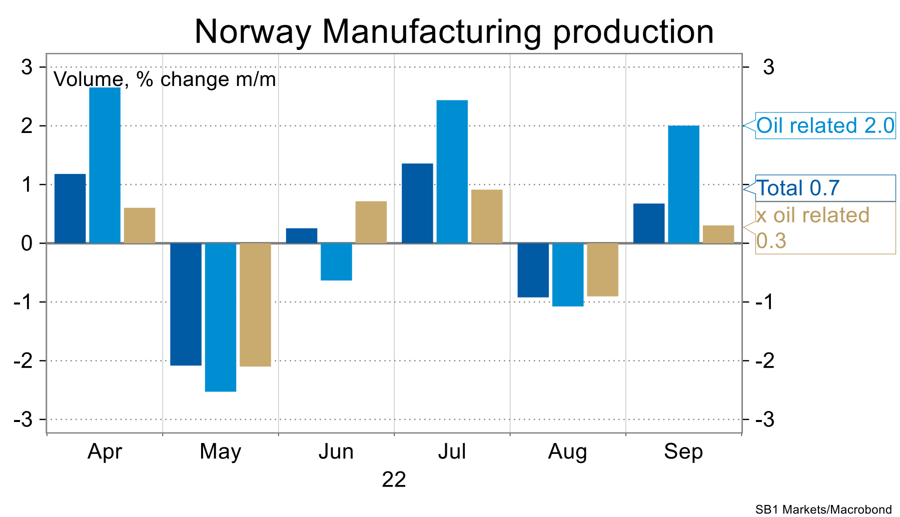


Oil related manufacturing on the way up again, the others are on the way down

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



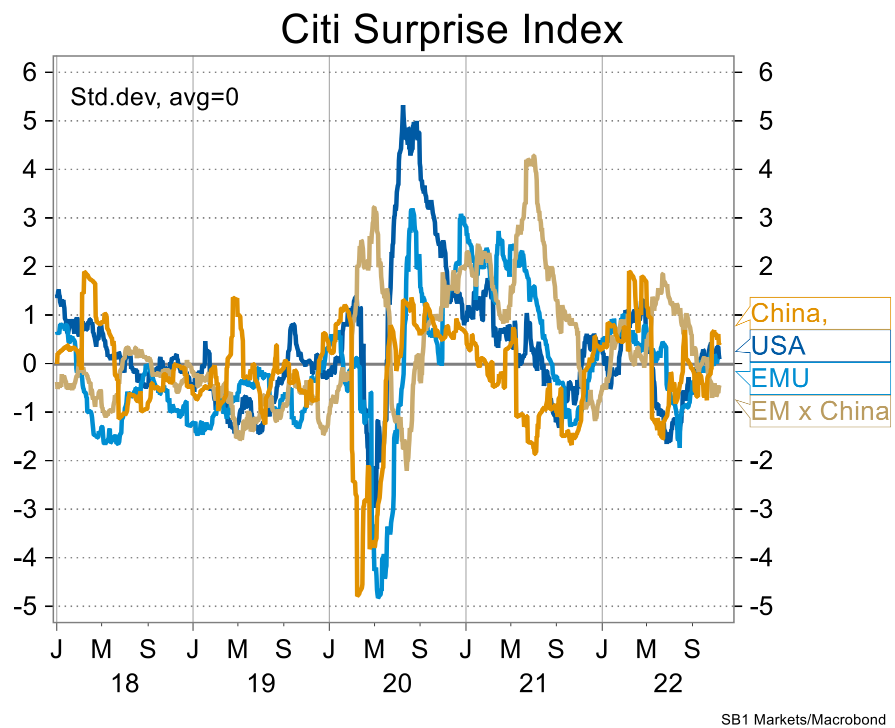




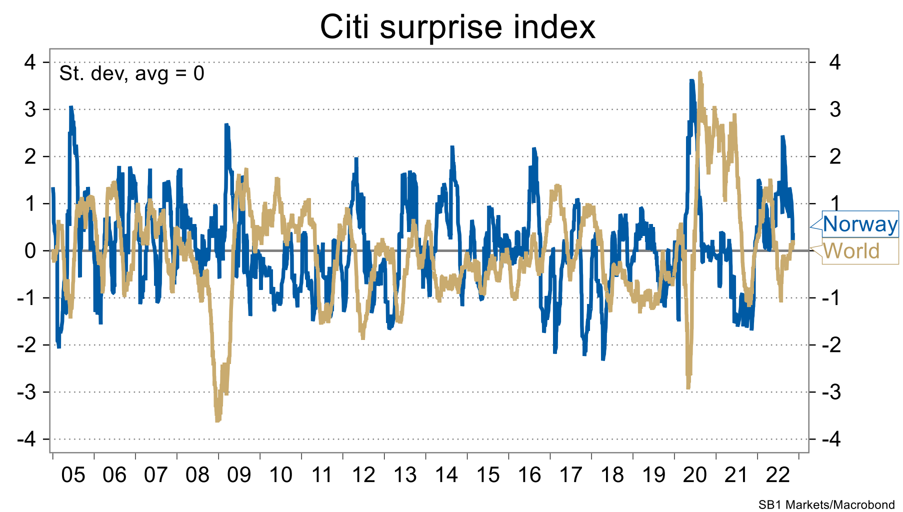
- **Total production** rose 0.7% in Sept, we expected unch.
- **Oil related manufacturing production** (yards etc) grew 2.0% and is drifting clearly upwards, at a 4 %– 5 % pace
- **Other sectors** reported a 0.3% increase – but the trend is down, at a 1% – 2% rate
- **Manufacturing surveys have turned down since Q4 2021**

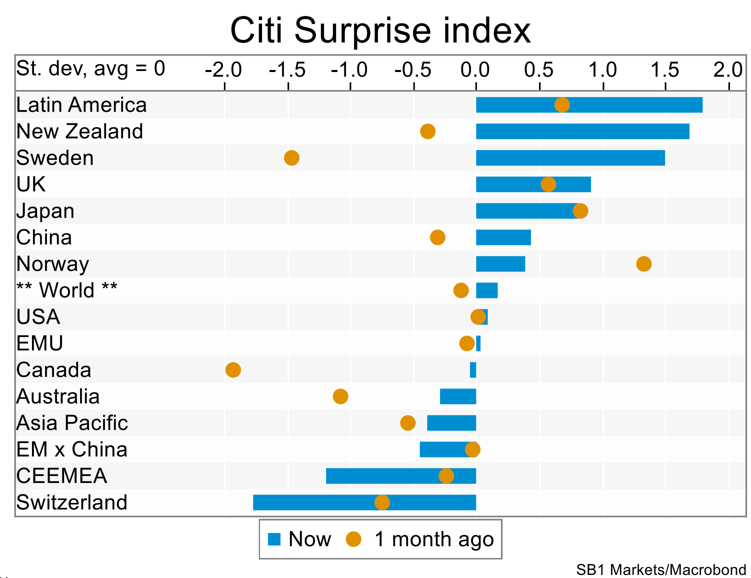
Data close to expectations, according to the Citi surprise index

Both US, EMU and China delivers close to expectations



- **Emerging markets x China** is somewhat below par
- **Norway** has fallen from the top of the list to close to the middle. Sweden closer to the top





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

Highlights

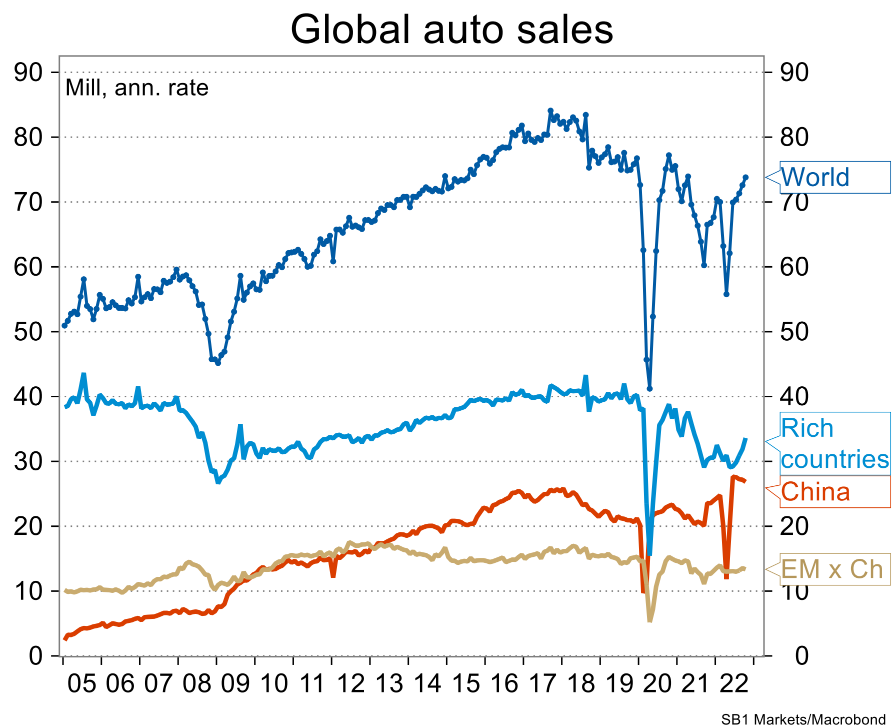
The world around us

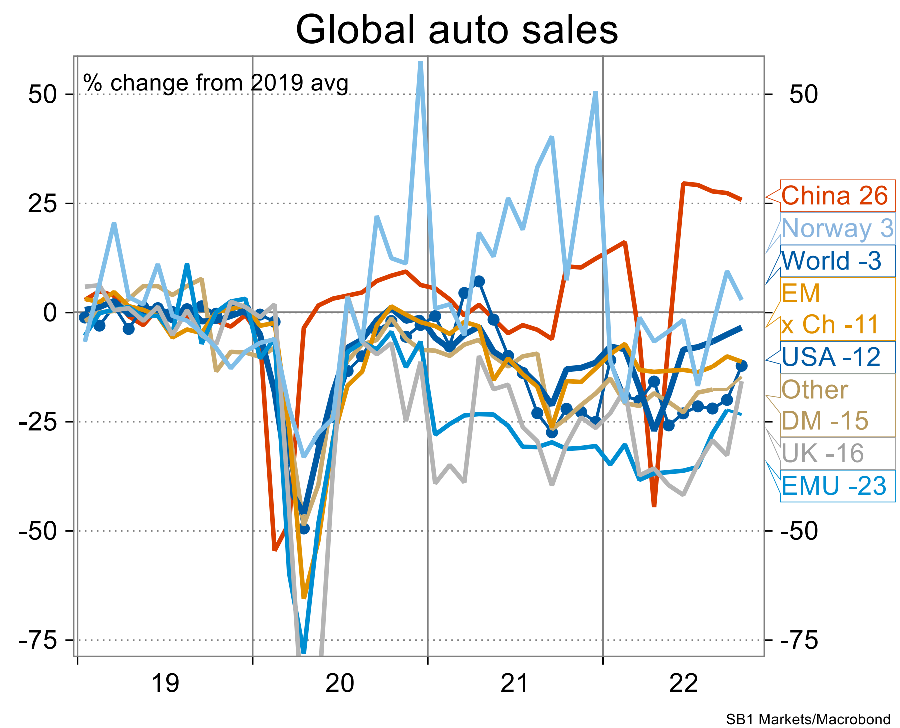
The Norwegian economy

Market charts & comments

Auto sales further up in October, as sales rose most places

... and production is gradually recovering

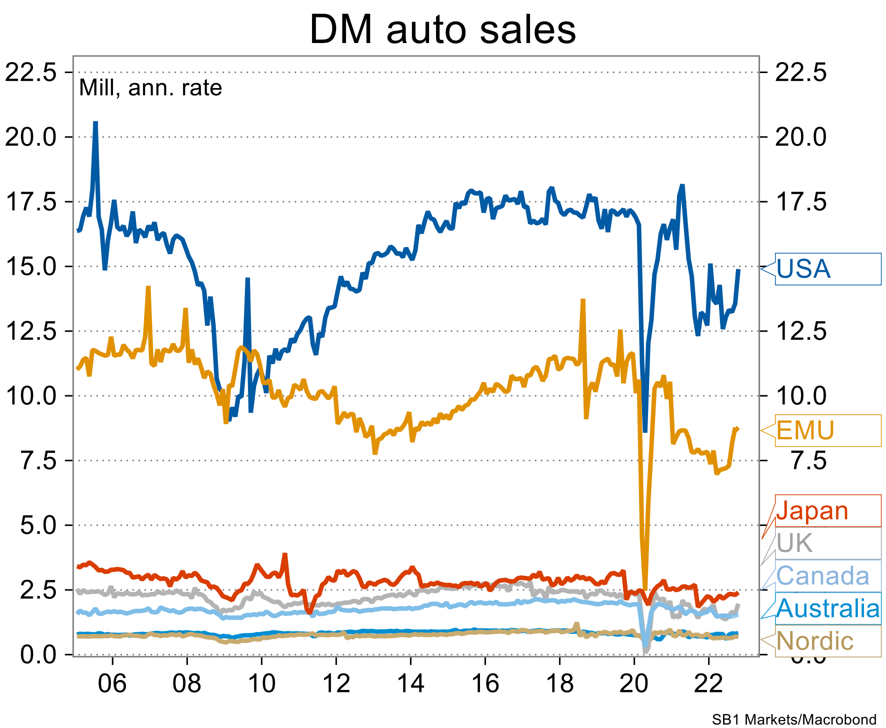


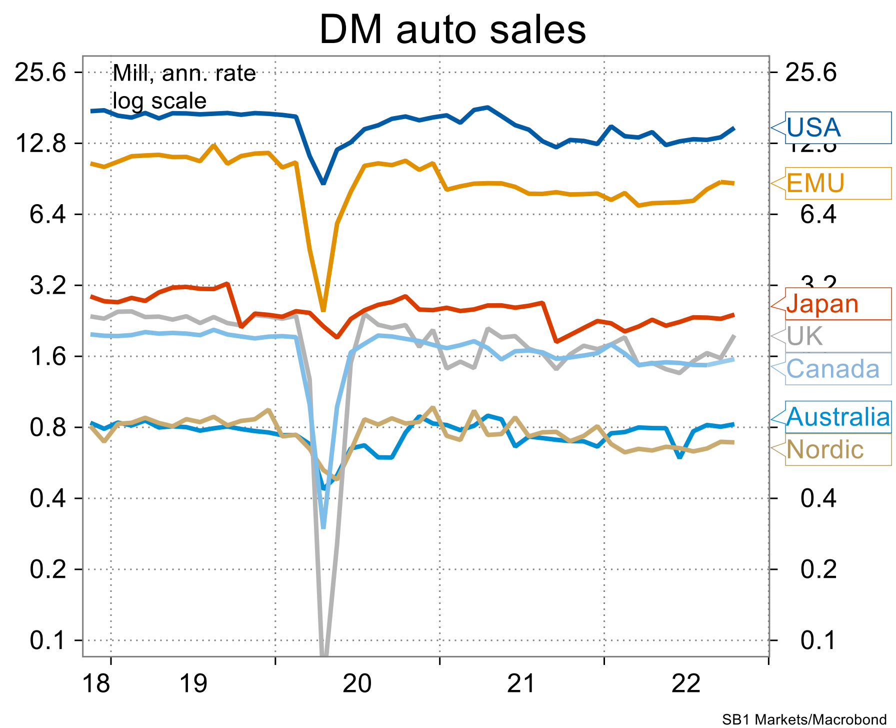


- **Global auto sales** rose 2% in October, at tad faster than during the previous months. Sales are the best since early 2021, and 'just' 4% below the 2019 level. However, 2019 is an easy comparison: Sale are down more than 10% from the peak in 2018 and more than 20% below the pre-2018 trend growth path!
- The regional differences are substantial: Sales in **China** have been revised down, and fell further in October, but the level is the highest ever, up 26% from 2019 – even if the housing market is struggling. Sales in the **US** rose 12% m/m and are down 12% since 2019. **EMU** sales probably fell marginally, and are 23% below the 2019 level. **UK** sales shot up, and are down 16% (from -33%!)! **Norwegian** sales fell slightly in Oct, but are 3% above the 2019 level
- Sales in **EM x China rose marginally. Indian** sales are close to ATH, while **Russian** sales are down almost 75% from before the war
- **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% below. Most of Europe and Japan is down 10% – 25%

DM sales: Most up, even if inflation is high, and interest rates are soaring

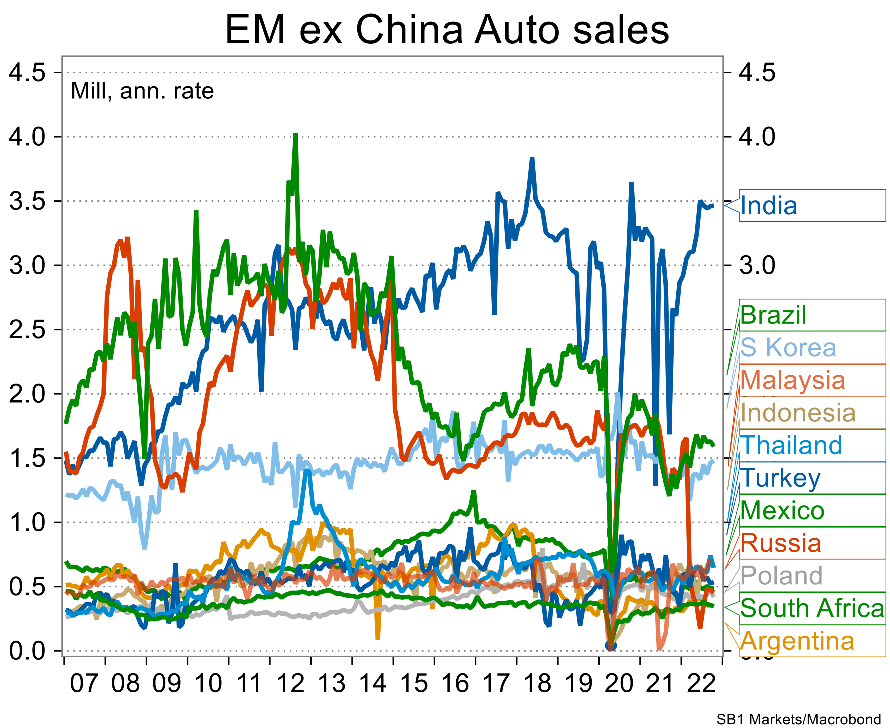
Pent up demand must be considerable as sales have been so low due to lack of supply (semi-cond.)

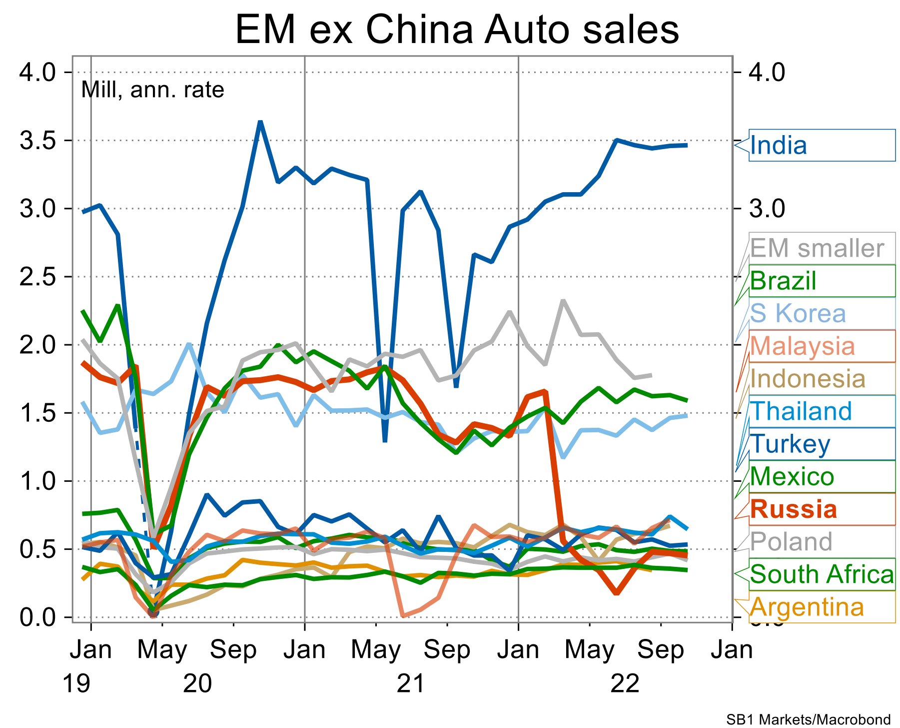




EM: India close to ATH. Russian sales remain extremely low

Sales in other EMs are in sum OK, but most are down from previous ATHs



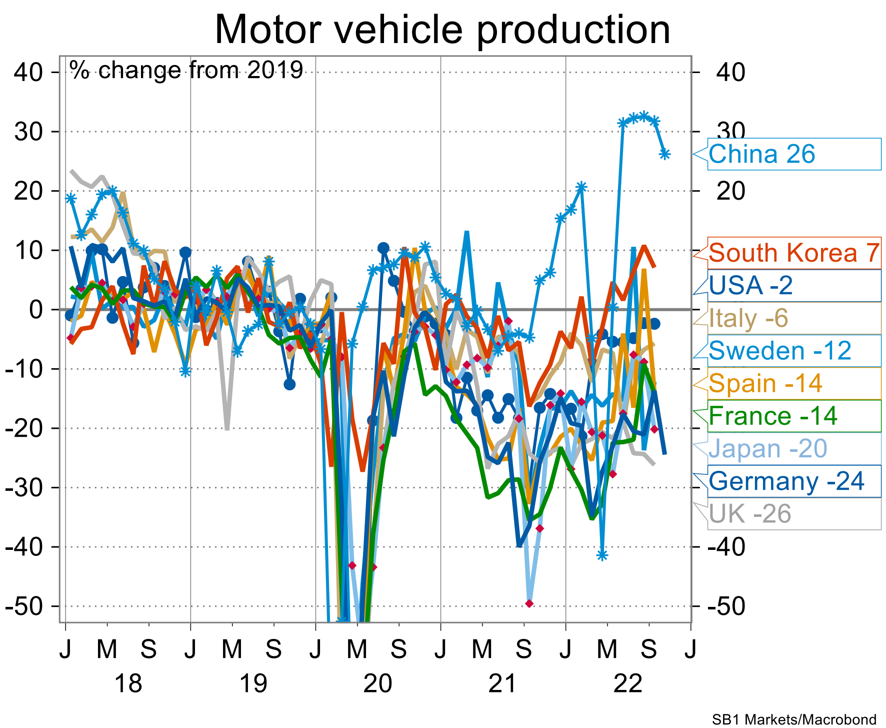


- Sales in EM x China & Russia are just marginally down vs the 2019 level

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

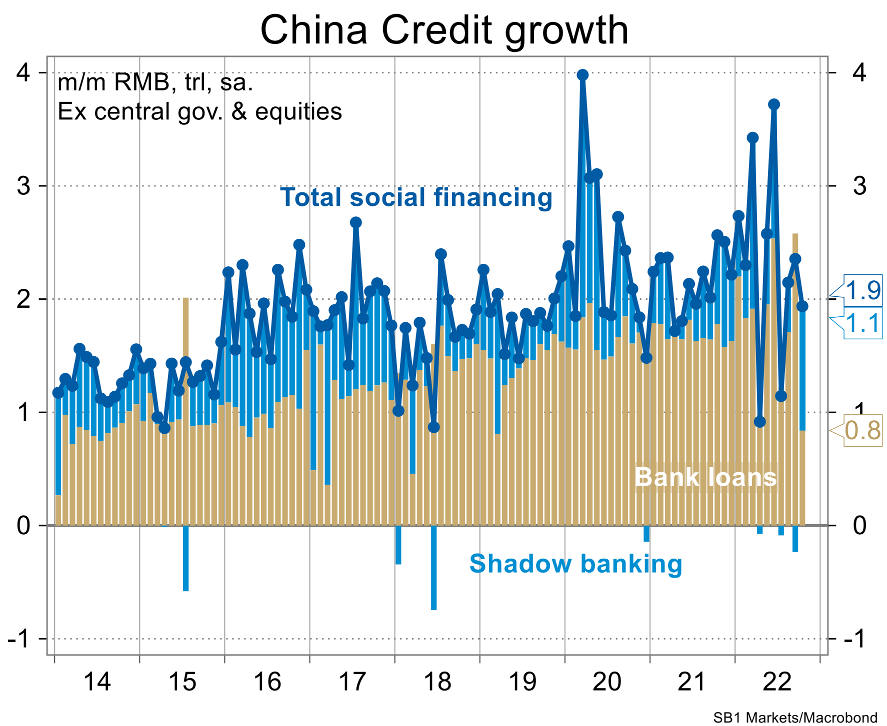
Full speed in auto production in China – while others are (mostly) on the way up

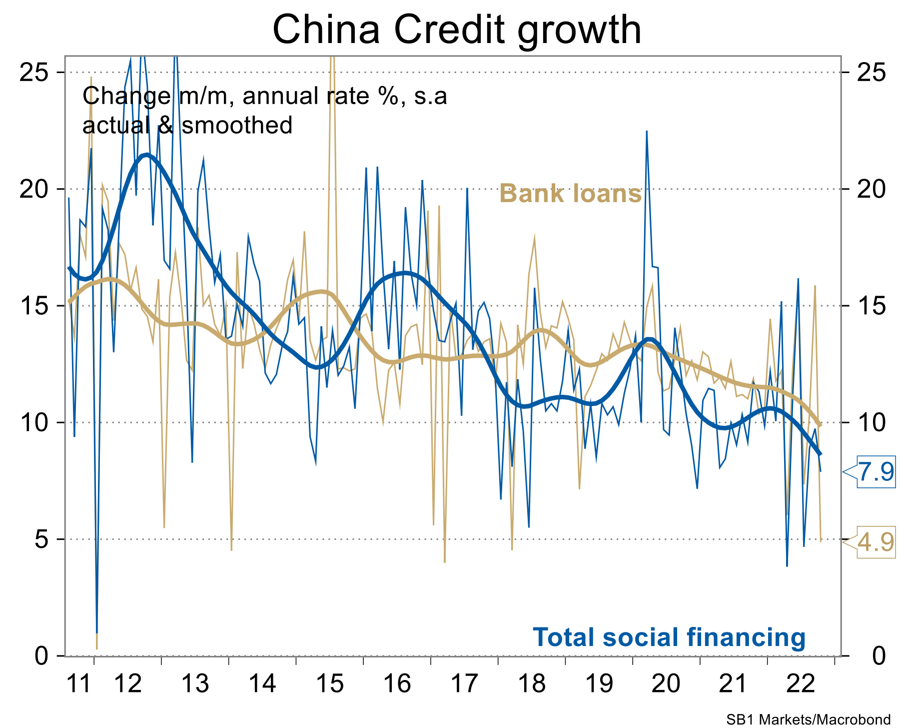
Will pent up demand keep demand and production up even if most economies slow?



What did the bankers do in October? At least, they did not lend much

Credit outside banks partly compensated, but total credit growth slowed – and the trend is down

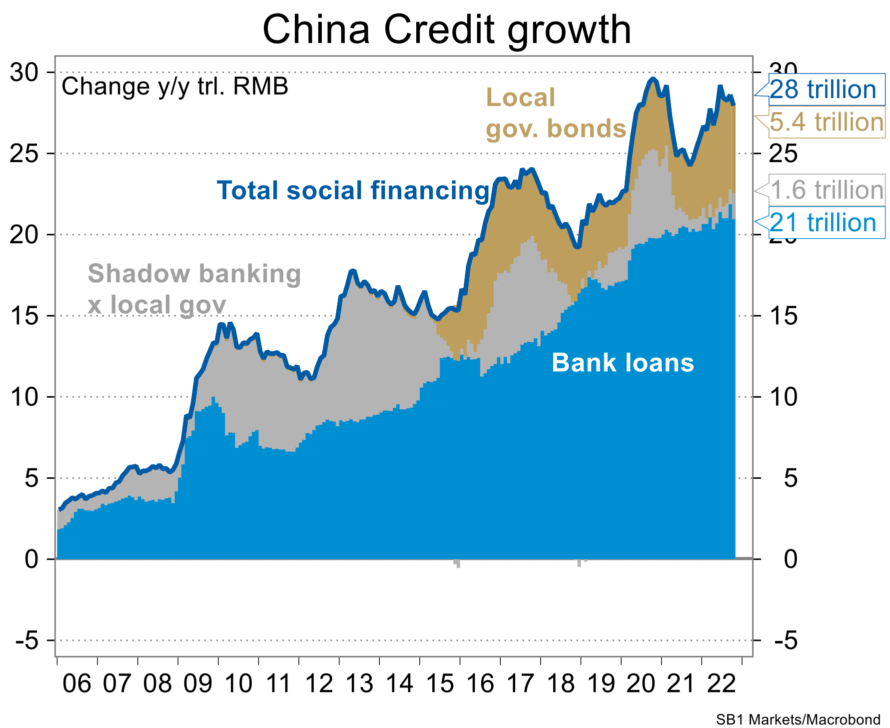


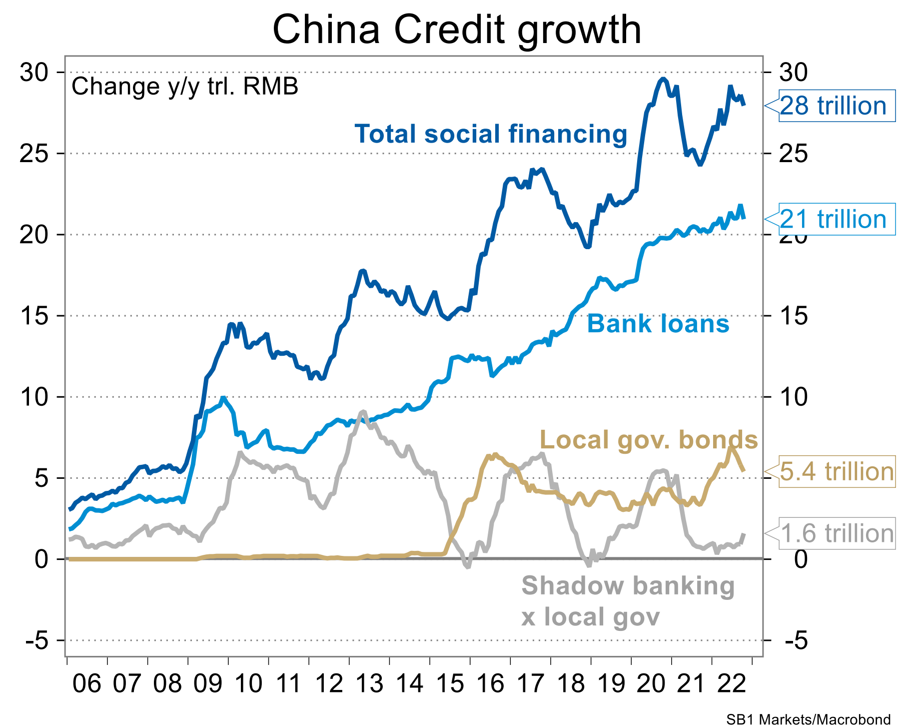


- **Core total credit** (social financing, ex central gov bonds, equites) grew at a 7.9% pace in Oct (m/m, seas. adj. annualised), down from 9.7% in Sept. The annual growth rate fell 0.3 pp to 10.0%
- **The official total social financing** rose RMB 910 bn, expected 1,600 bn. Our core credit supply grew RBM 1.9 bn (seas adj)
  - » **Bank loans** rose by RMB 0.8 trl (s.a) or at a 4.9% annualised pace, well below expectations, and the lowest growth rate in more than 4 years! Loans are up 11% y/y, down 0.5 pp
  - » **Shadow banking credit** rose by RMB 1.1 trl, and is up 7.9% y/y
  - » **Local governments have been** responsible for most of the increase in credit outside banks over the last year, at least until the past 4 months (including our Oct est, no data published yet). Less revenues from sale of land, and public financing of unfinished building projects requires funding, which is 'dictated' from the central government

Credit growth is accelerating but just due to more local gov't bond issuances

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

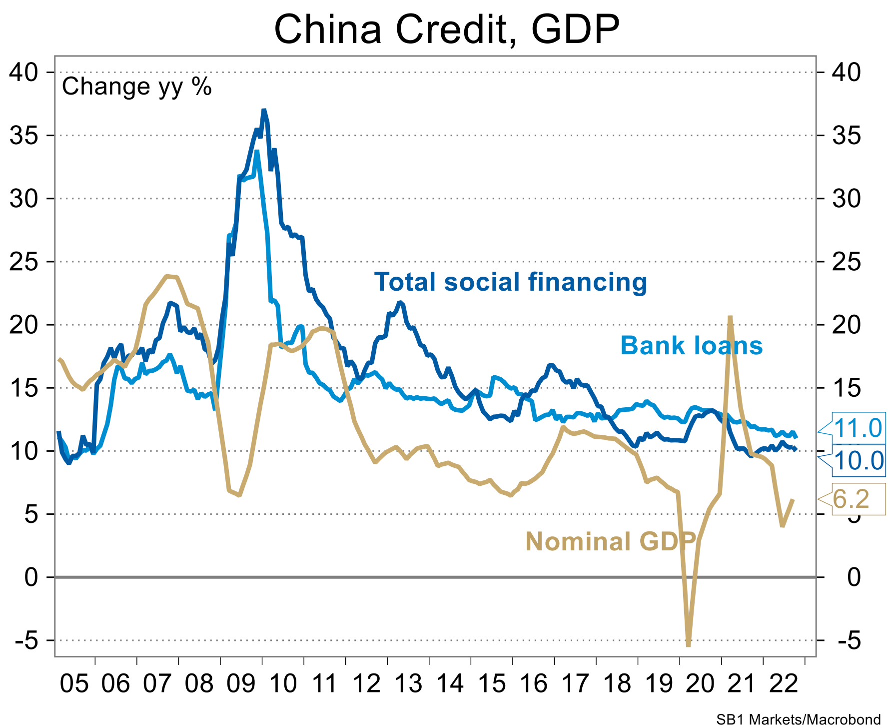


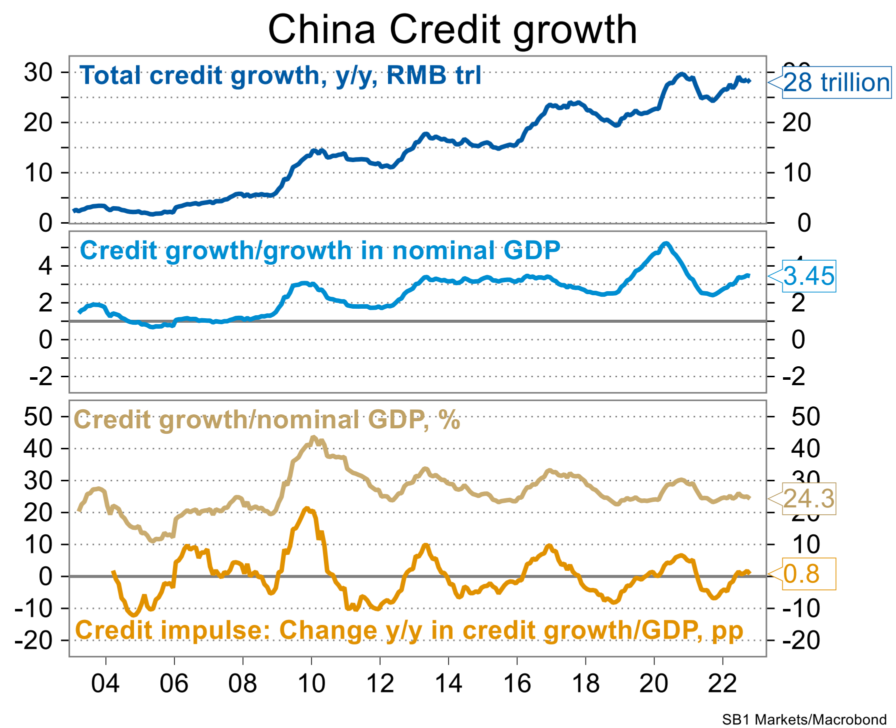


- Over the past year, **total credit** has expanded by RMB 29 trl, equalling more than 25% of annual GDP, up from the 24 trl at the bottom last Sept, (but still down from almost RMB 30 trl at the peak in 2020)
- **Banks** supplied RMB 21 trl of the y/y increase – which implied a gradual decline in the percentage growth rate
- **Local governments** have accelerated their credit growth to 6.3 trl – to above 20% y/y, up from 13% y/y last September!
- Growth in other credit – via the **shadow credit market x local gov bonds** – at 1.5 trl is well below the from 5 trl growth in 2020 (a dramatic slowdown, like many times before…). Growth has increased slightly the past 4 months

Big picture: Credit growth is not accelerating anymore

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

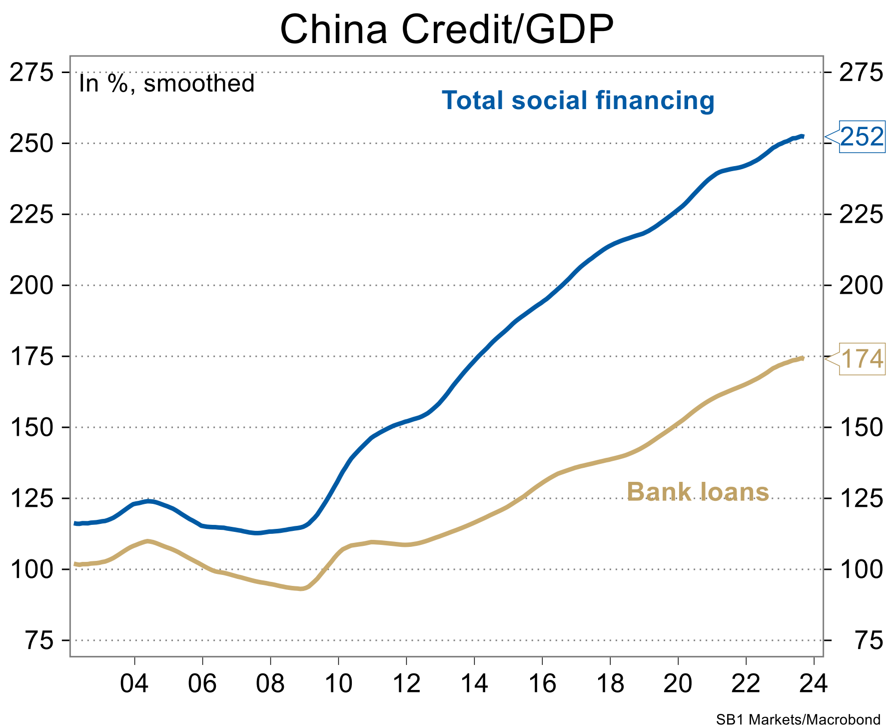


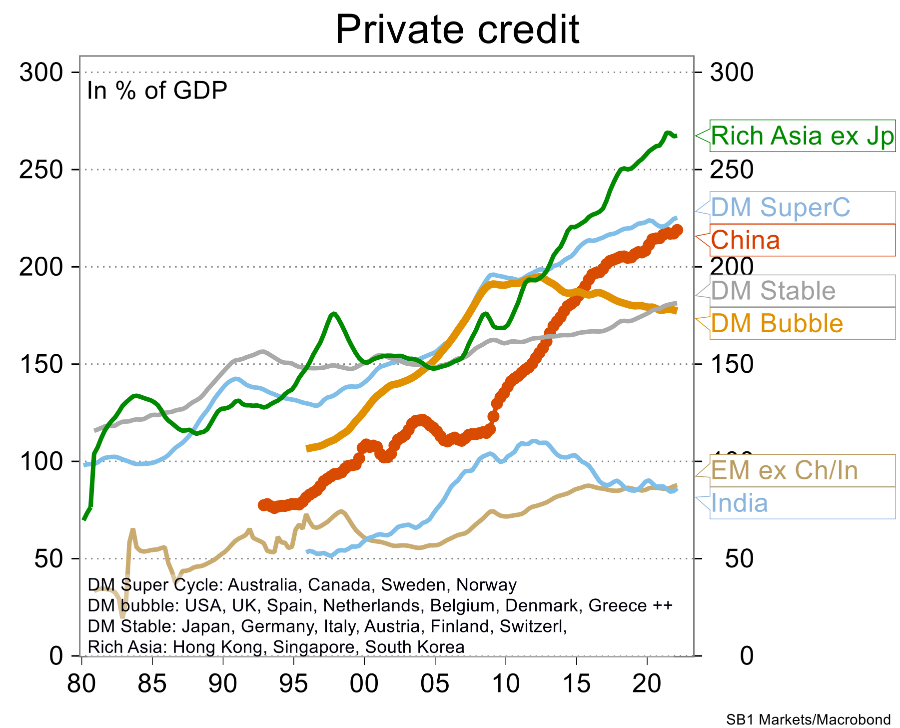


- **The credit impulse** (<u>change</u> in credit growth vs. nominal GDP) has turned positive but the impulse is now close to zero measured y/y – but negative measured over the recent months
- **Central authorities** have signalled that **local governments** will be allowed to borrow an additional 1.5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

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

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

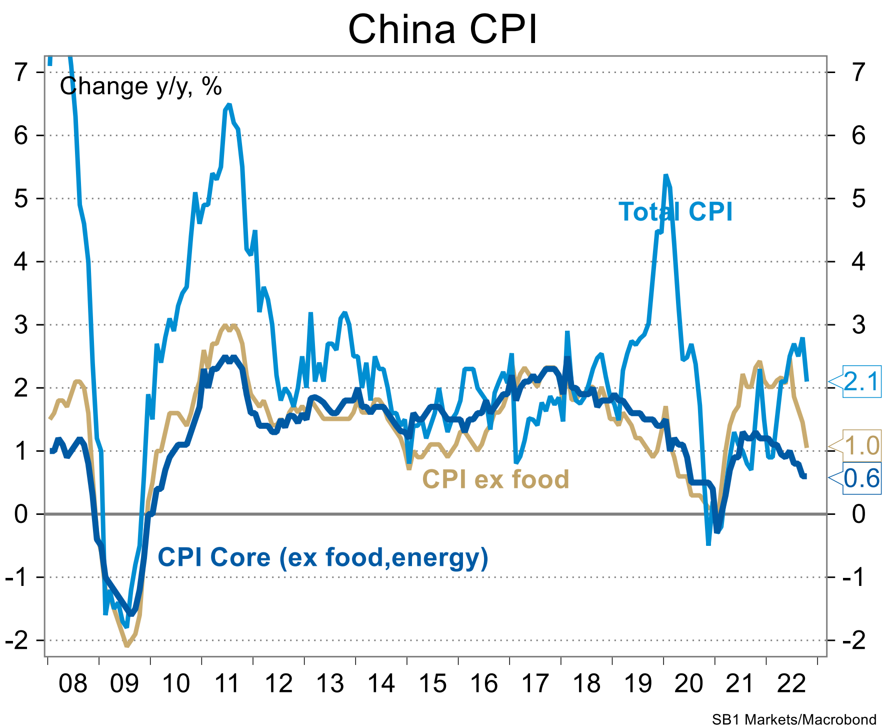


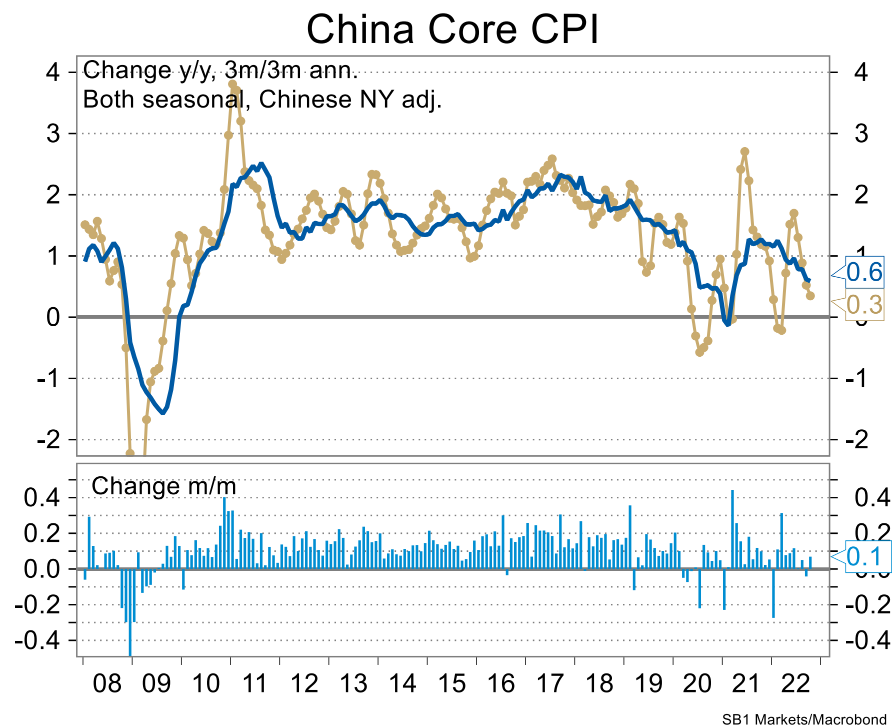


- And there some other outliers as well: DM Supercyclicals (Australia, Canada, Norway, Sweden)

While the west struggles with high inflation, China steers clear

Inflation data well below expectations in October, the core down to 0.6% y/y

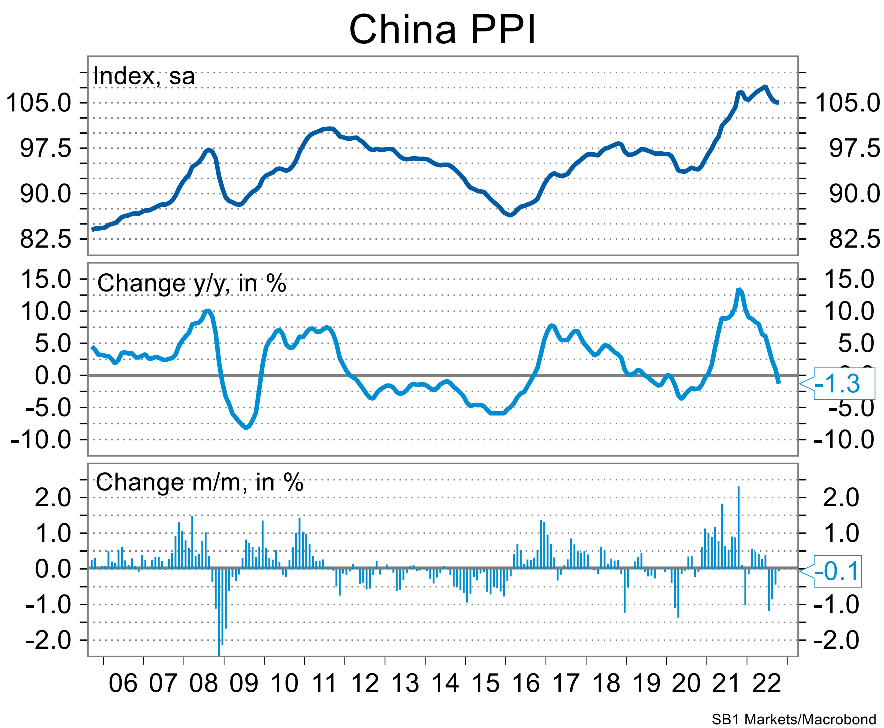


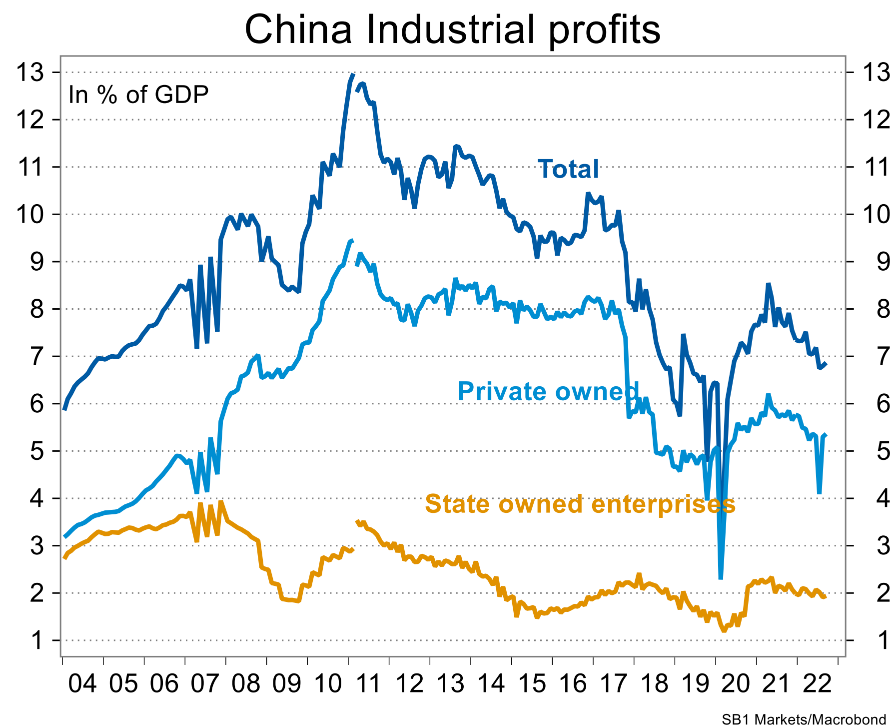


- **Total annual CPI** was down 0.7 pp to 2.1% y/y in Oct, 0.3 pp below consensus expectations. Prices were down 0.1% m/m, down from +0.25% in Sept
- **The core CPI** (x energy, food) were up 0.1% m/m, and the annual rate was little changed at 0.6% y/y. The 3m/3m rate is down 0.2 pp to 0.3%
- **Food prices** are up 7% y/y, with pork prices in the lead again, up 51.8%
- **Gasoline/fuel prices** are up 12% (down from 19% y/y in Sept)
- **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 keep falling and are down 1.3% y/y

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



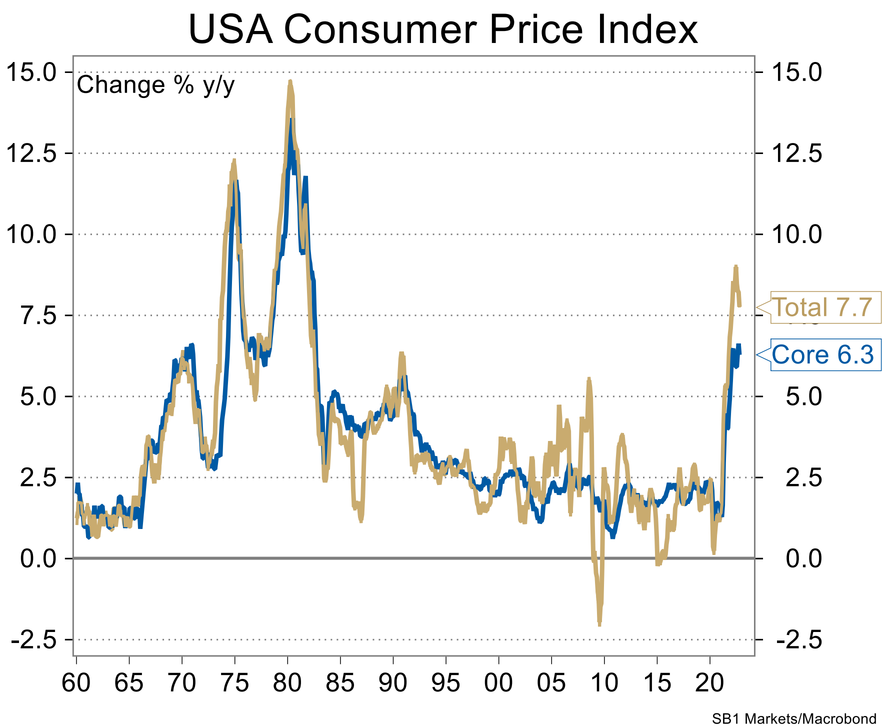


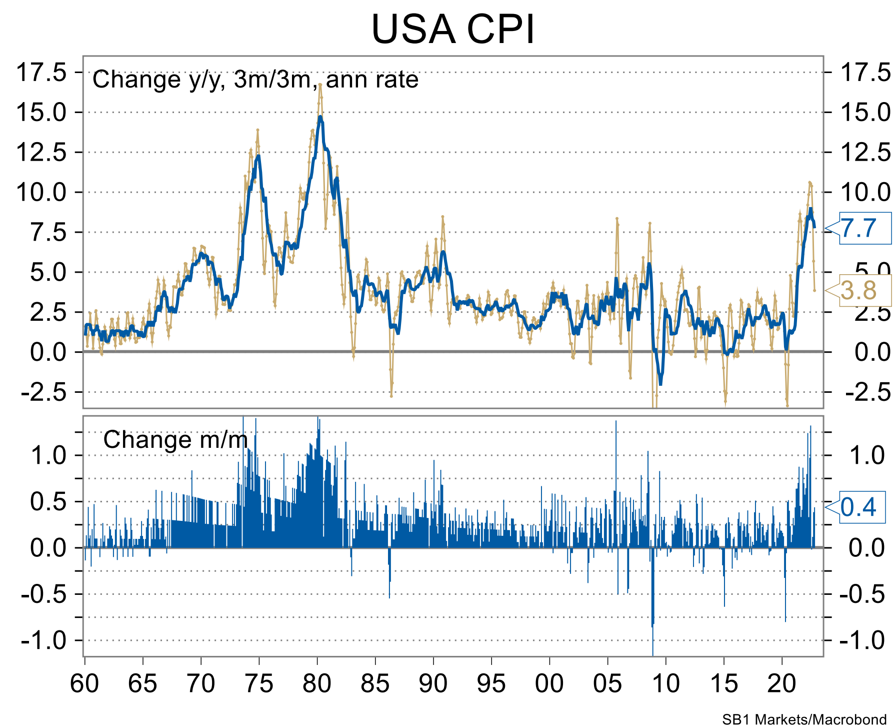
- **At the peak**, the PPI was up 13.5% last October
- **The PPI** fell by 0.1% m/m in Oct and has fallen over the past 4 months. World demand softening?
- **Consumer goods** are up just 2.2% y/y, durable consumer goods are up 0.2% y/y, while raw materials are up 1.2% - down from 5.8% in Sept
- The correlation 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.

SpareBank 1 MARKETS

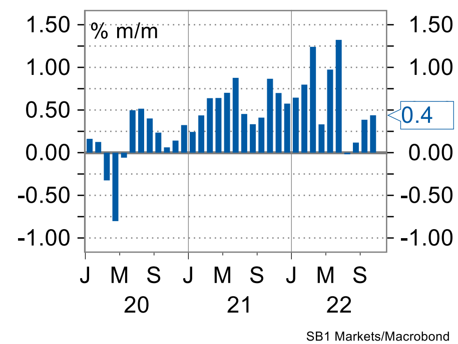
The Fed catches a break – inflation lower and below expectations

CPI inflation was 0.2 – 0.3 pp lower than expected. The core still up 6.3% y/y, but the tide has turned?



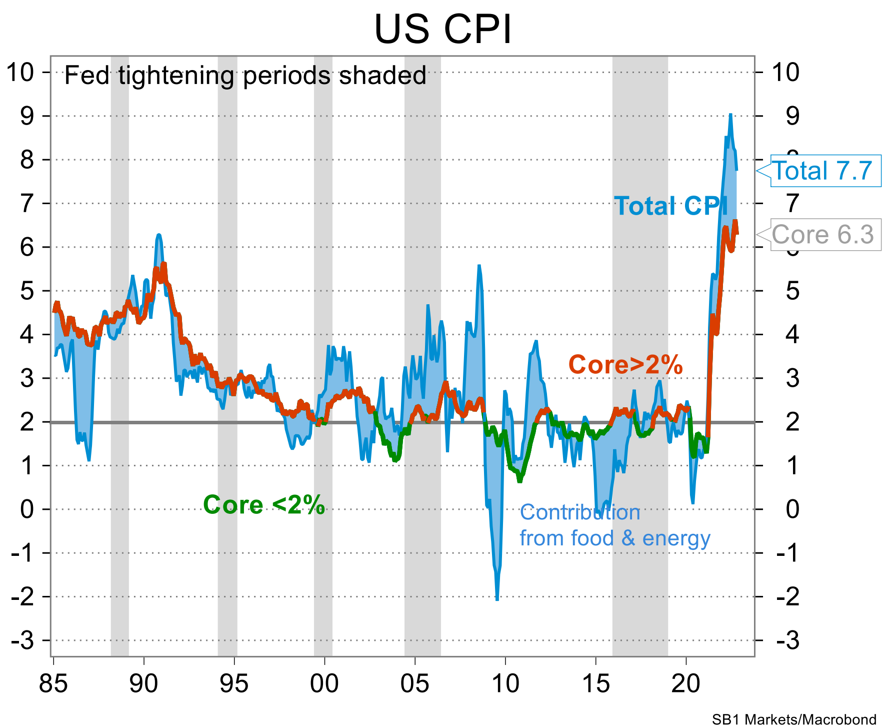


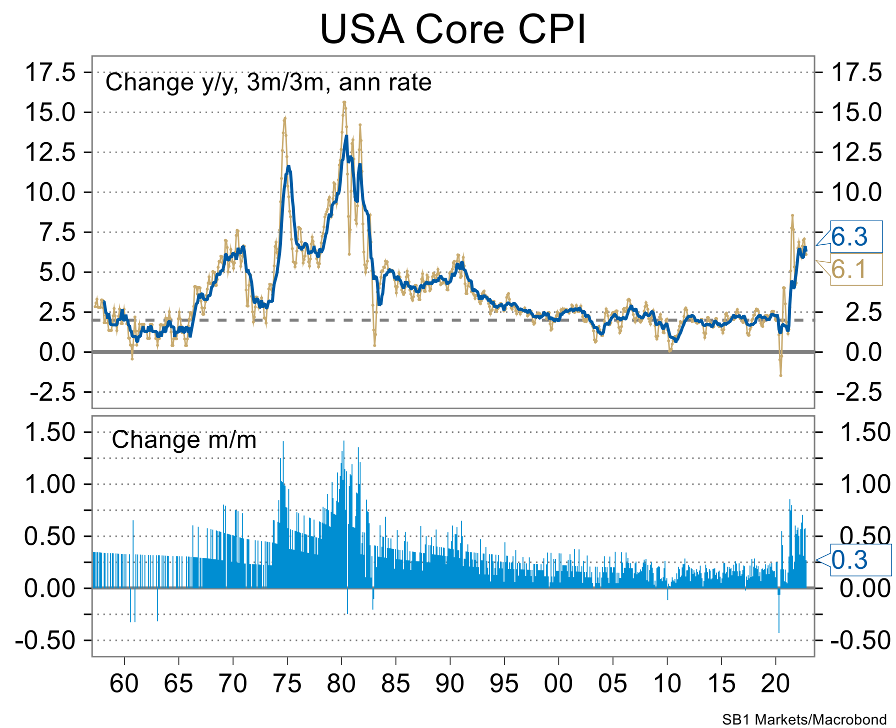
- **Headline CPI** slowed 0.5 pp to 7.7% in October, expected down to 8.0%. Prices rose 0.4% m/m, expected 0.6%
- **Energy prices** fell further, but energy is still contributing 1.6 pp to the headline rate
- **Food prices** rose 0.6% m/m and are up 10.6% y/y, lifting the CPI by 1.5 pp
- **Surveys** have also come down quite a bit recently
- This gives room for the Fed to slow their pace and see the effect of the hikes already implemented. However, inflation is still high and the Fed would appreciate another downward move in the CPI (and the PCE). October CPI data is out on Dec 13th, and the Fed press conference is on Dec 14th

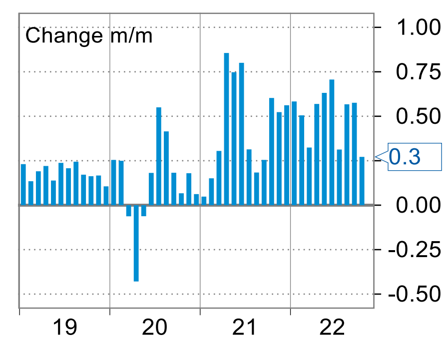


Core prices up 0.3% m/m, 0.2 pp less than expected; down 0.3 pp to 6.3% y/y

The 3m/3m rate at 6.1% confirms that underlying inflation is still very high

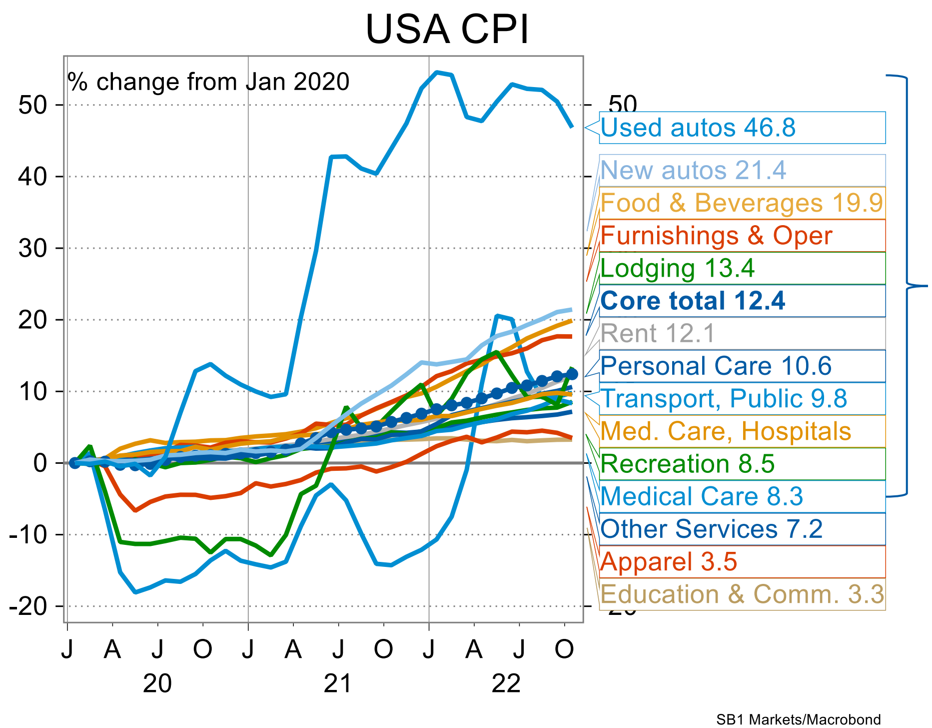


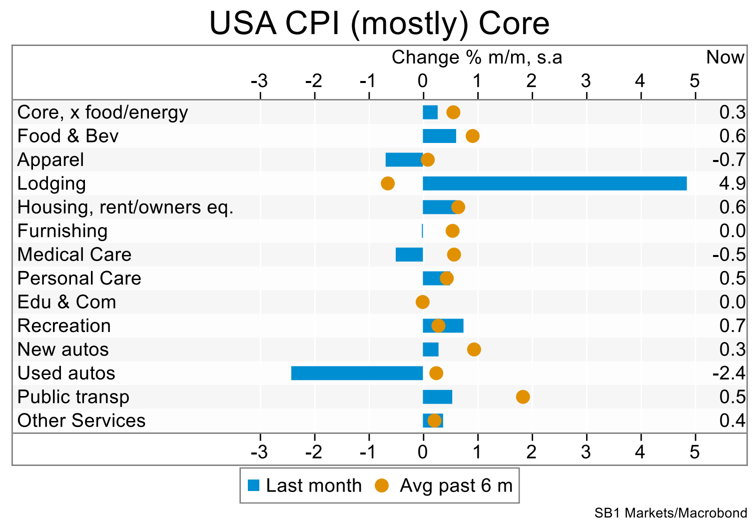


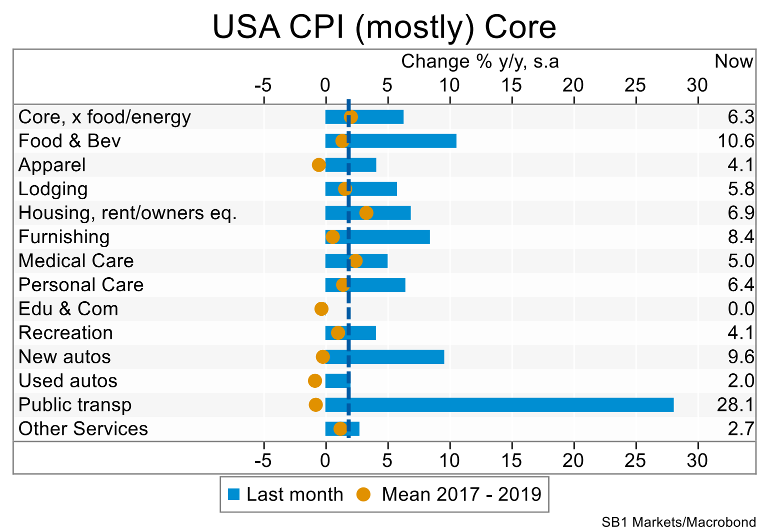


Used autos, apparel, and medical care cheaper in October

... but most prices were up



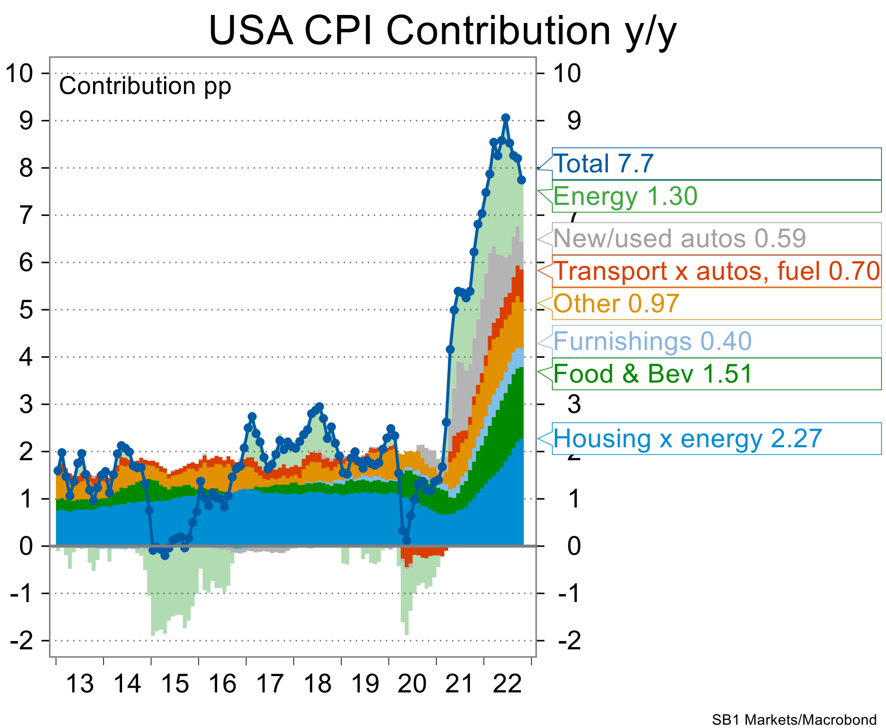


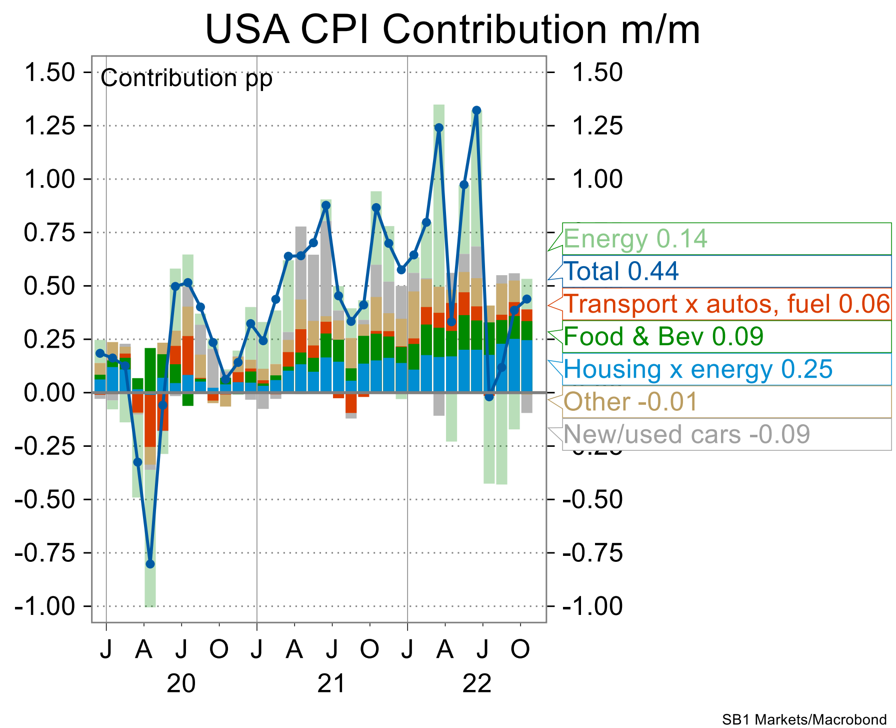


- All but education & communication and used autos, are up at more than a 2% pace
- Rents are up 6.9% y/y, lifting the CPI by 2.5%, alone!
- Like we predicted, auto prices are now coming down and has a negative contribution of 0.1 pp to the total CPI

Energy & transport (incl autos) explain just 1.3 pp of the 7.7% lift in total CPI

The problem: The rest is up by more than 6.5% y/y. Housing alone contributes 2.3 pp; food 1.5 pp





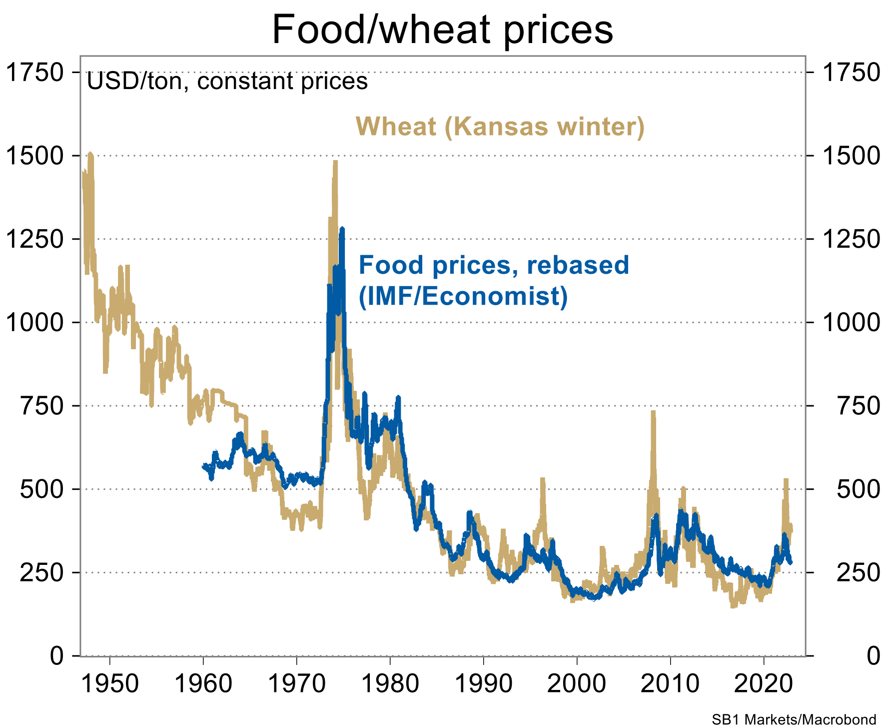
- **Energy** prices rose again in Oct, but the contribution to annual price growth has fallen past 4 months, explaining the decline in headline CPI
- **Excluding** the 2.6 pp contribution to the headline CPI from energy & transport , **"remaining"** inflation has not come down, and is at some 6%
- **Housing x energy** (and x lodging) is contributing by 2.3 pp, though partly due to a low base one year ago. Rents as measured in the CPI are up 6.9% y/y, but the upside is probably now limited
- In October, used car prices fell but all other main components contributed at the upside – and housing rents are not the only culprit!

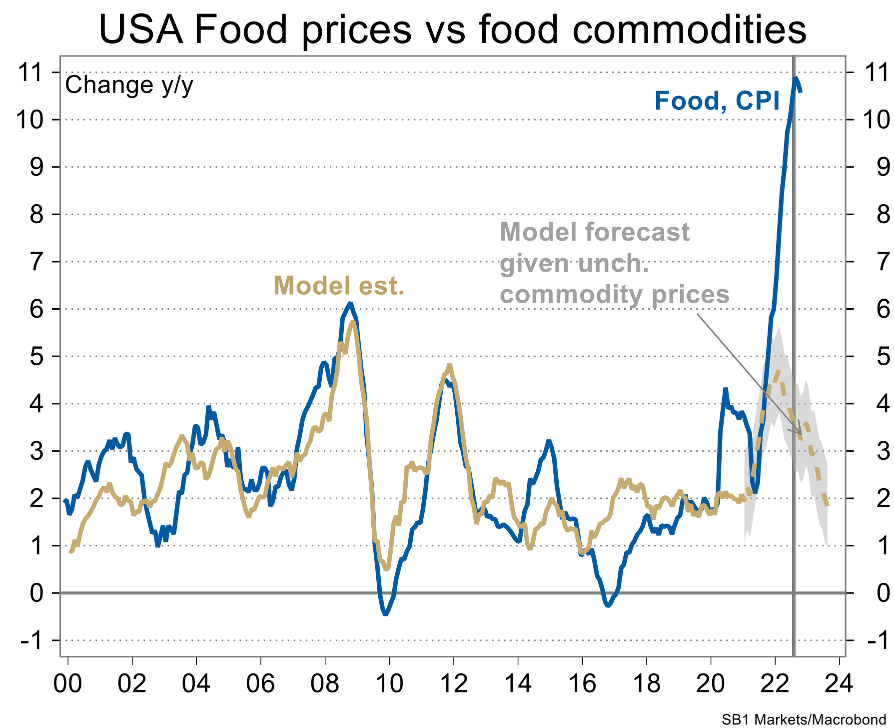
Lodging away from home (incl hotels) is not included in housing at the charts above

SpareBank 1 MARKETS

Food prices through the roof, and now we cannot blame food commodity prices

Food commodity prices did not increase that much, and <u>now they are heading down</u>



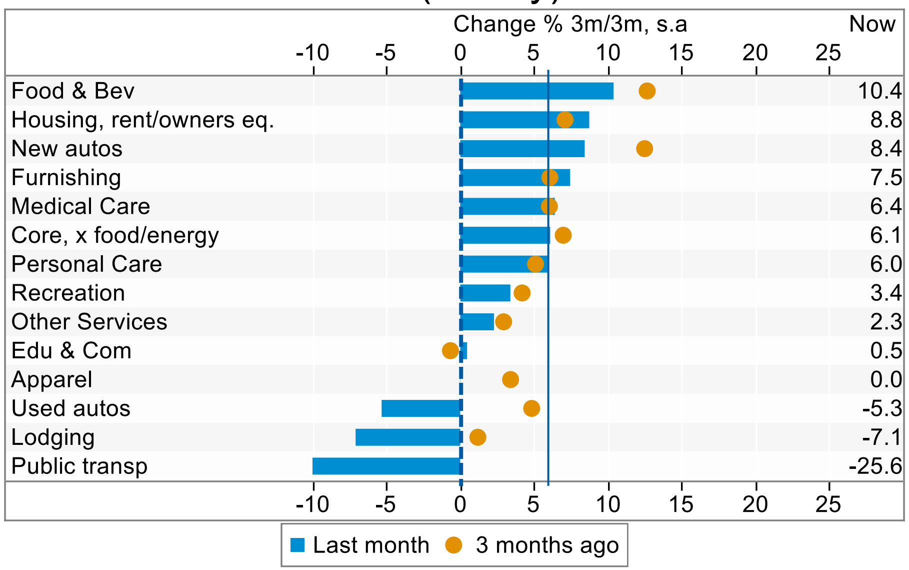


- Why have food prices at the retail level exploded vs. food commodities? The candidates: Freight costs, processing costs, distribution costs, (including energy and wages at each element in the value chain) – and the retail trade sector has increased its profit margins (according to national accounts)
- Very likely, food price inflation in the CPI will fall sharply the coming quarters

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

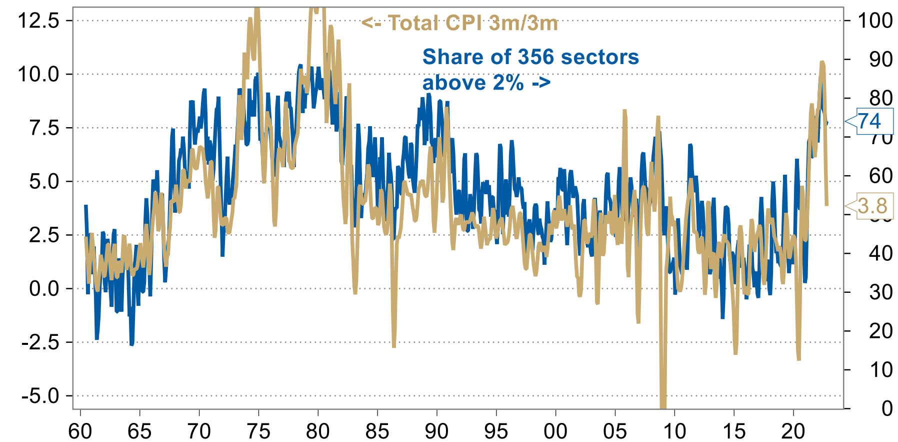
However, prices are up ‘just’ 3.8% 3 m/3 m, down from above 10% at the peak

USA CPI (mostly) Core



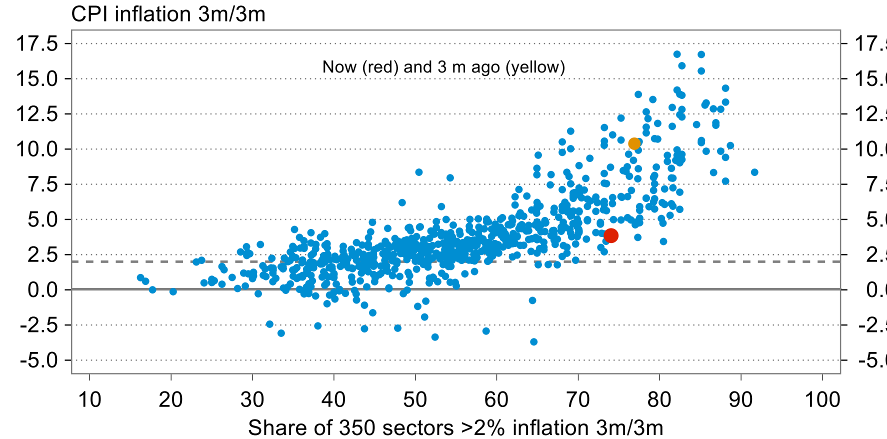
SB1 Markets/Macrobond

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



SB1 Markets/Macrobond

USA CPI inflation & share above 2%

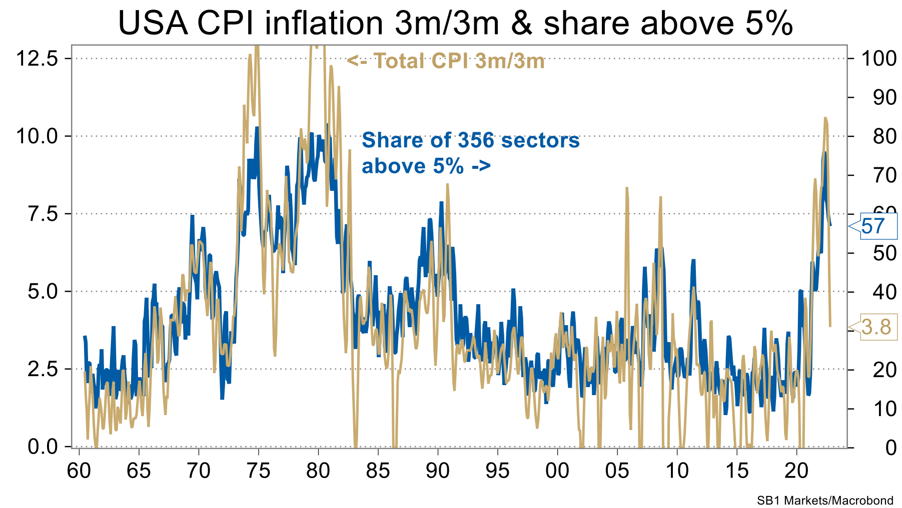


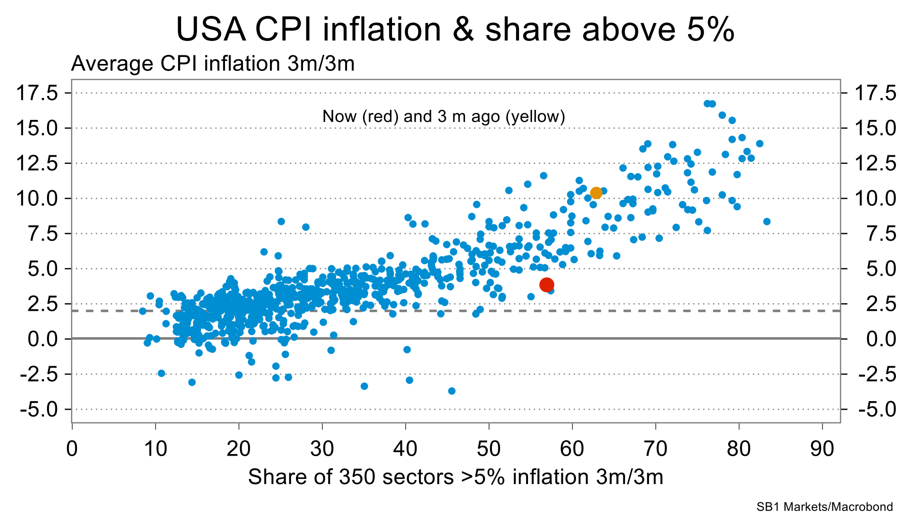
SB1 Markets/Macrobond

- 74% of the CPI items are up more than 2% y/y
- A substantial negative drag from lodging, public transport, and used cars recent months

‘Just’ 57% of sub-indices are up more than 5% measured 3m/3m

We say ‘just’ because the share has fallen from almost 80%

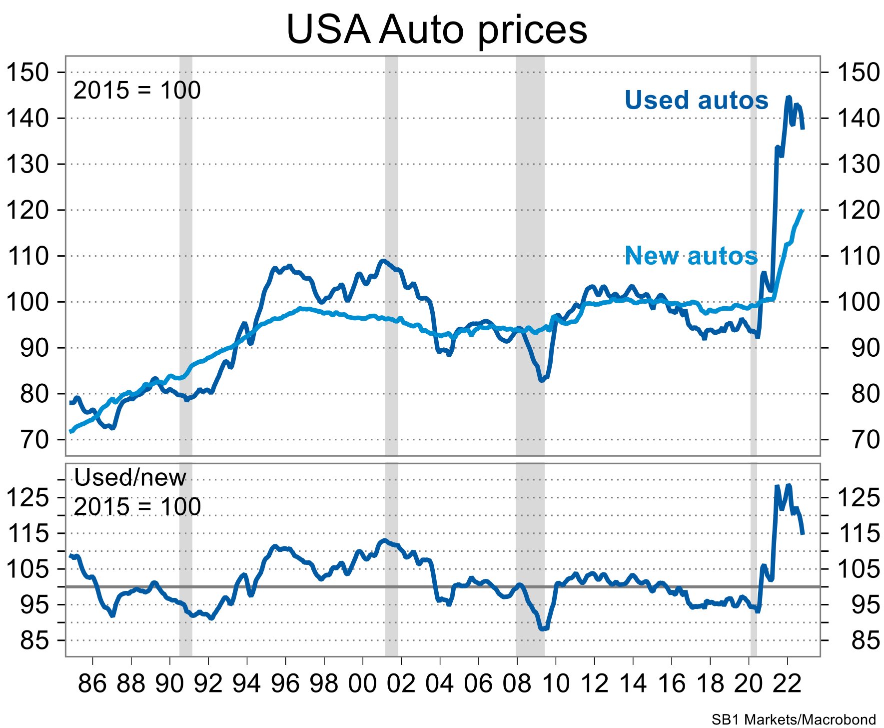




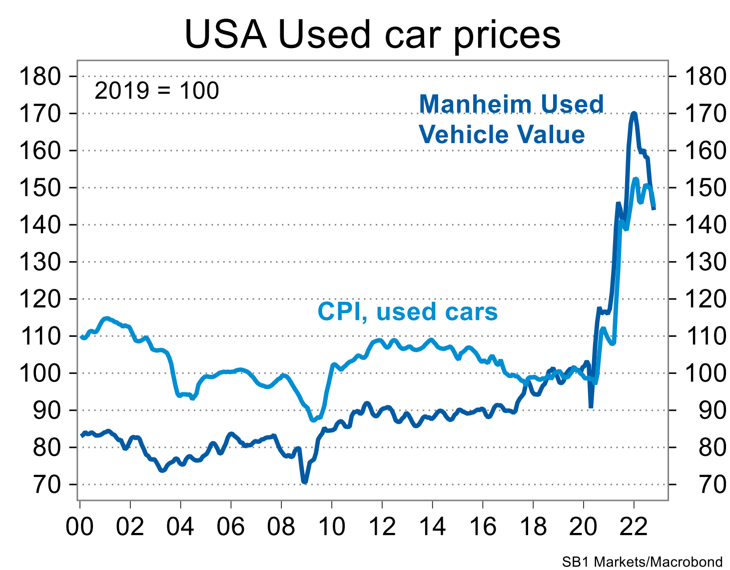
SpareBank 1 MARKETS

Used auto prices have peaked and are declining, but so far less than expected

Private surveys had indicated a substantial decline in second-hand autos



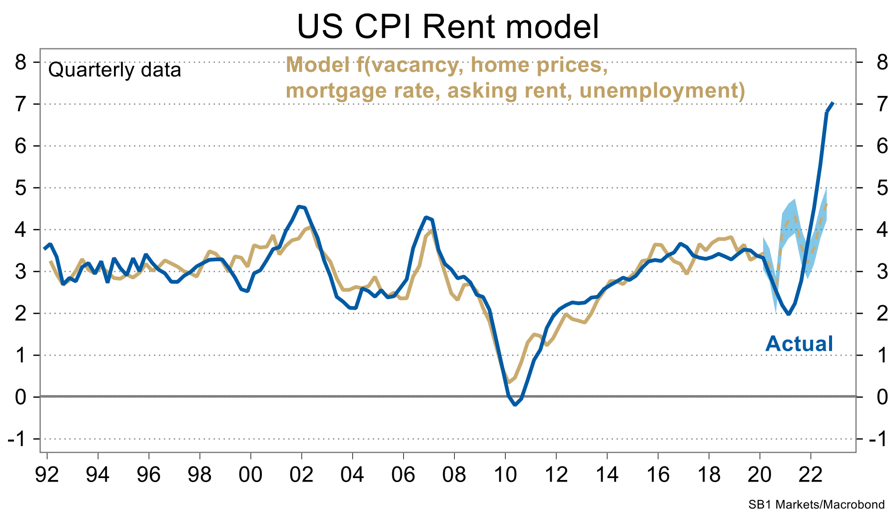
- At one stage, at least **used auto prices** will come down to a normal level vs. new car prices
- **New auto prices** have shot up sharply recent months – and these prices will very likely return to a more normal level – production costs are not up 26% through the pandemic!
  - We have so far assumed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



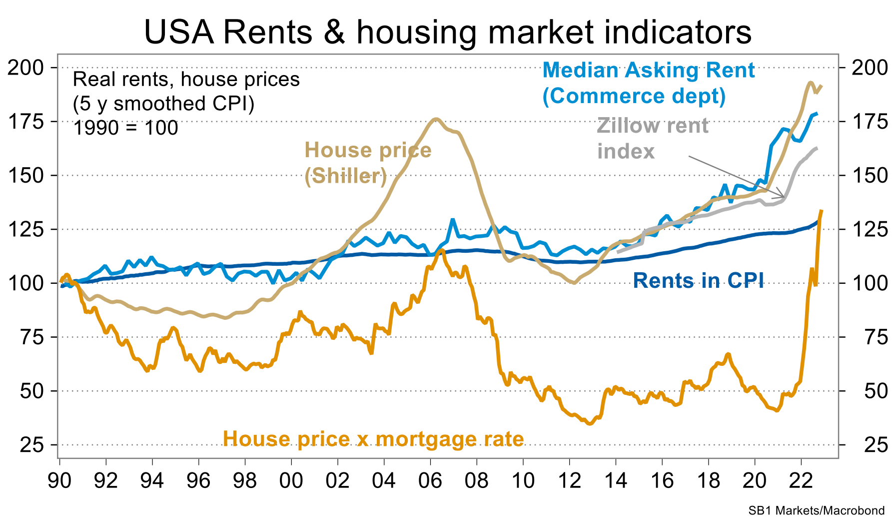
SpareBank 1 MARKETS

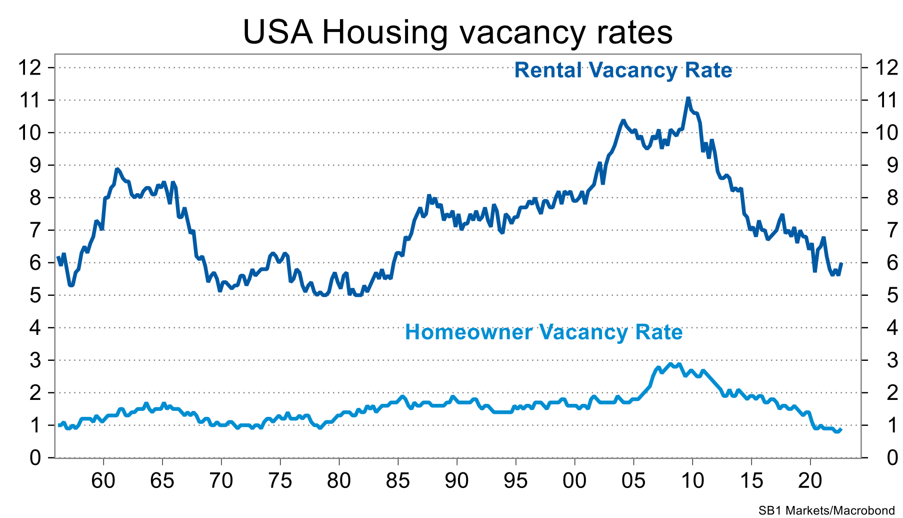
Rents are still accelerating. Will soon peak?

‘CPI’ rents are up 6.8% y/y, while signals from ‘actual’ rental market are mixed



- **The official (Commerce dept) median rental asking price** is on the way up again following a slowdown last autumn. Some other surveys signal slowing rent inflation
- **House prices** are still up double digit y/y, and the owner cost (price x mortgage rate) has almost doubled. House prices are now probably falling m/m
- **The rental vacancy rate** has fallen sharply recent quarters, to ATL. The **homeowner vacancy rate** is trending down, and is also at an ATL
- **Rent inflation measured in the CPI** has accelerated to 6.9%, though from a base below trend last year but past months rents have been climbing at an 8%-9% pace (m/m), and total housing costs (ex energy) contribute 2.3 pp to annual headline inflation!
- **Our model**, when assuming a substantial slowdown in rental asking price inflation and a rapid decline in existing house price inflation the coming quarters, and a flattening of the 30 y mortgage rate at 6%, signals a decline in rent inflation to below 4%. However, the outlook for the rental market is highly uncertain

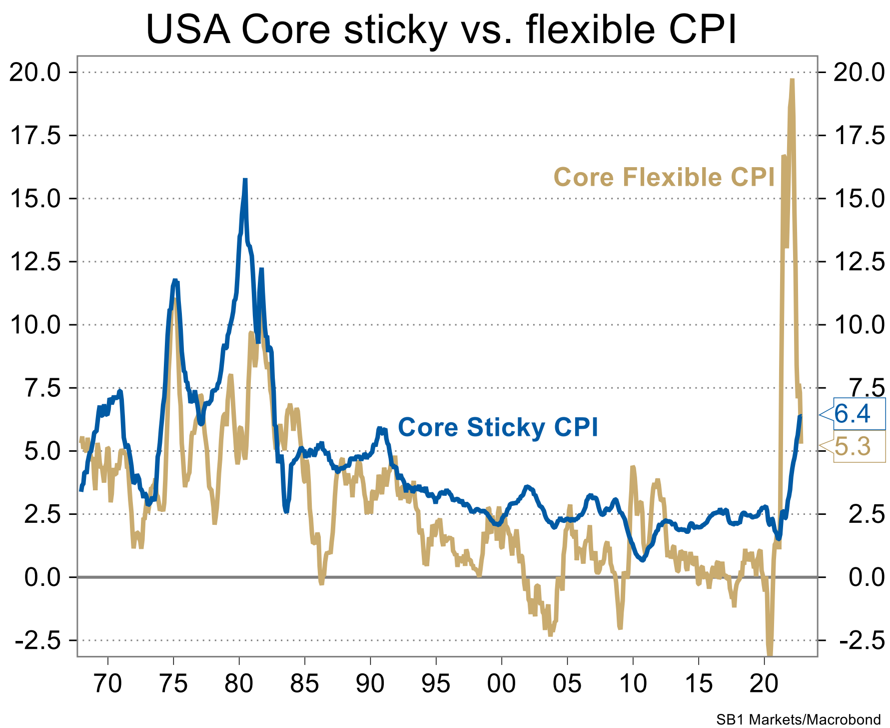


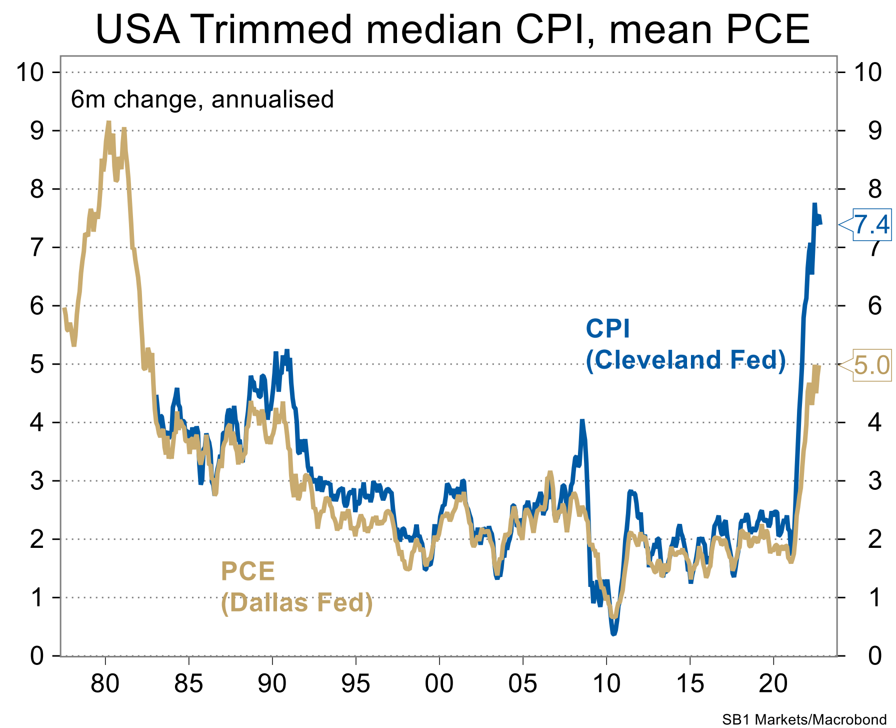


SpareBank 1 MARKETS

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

Sticky prices are up 6.4% (90% of the CPI). The trimmed median CPI up 7.4%, and close to peak

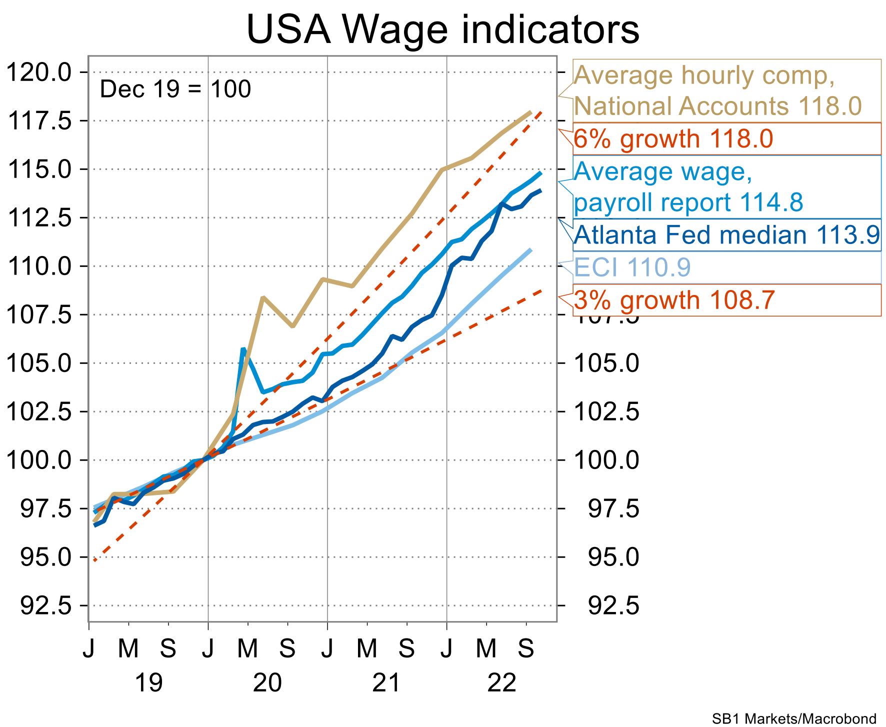


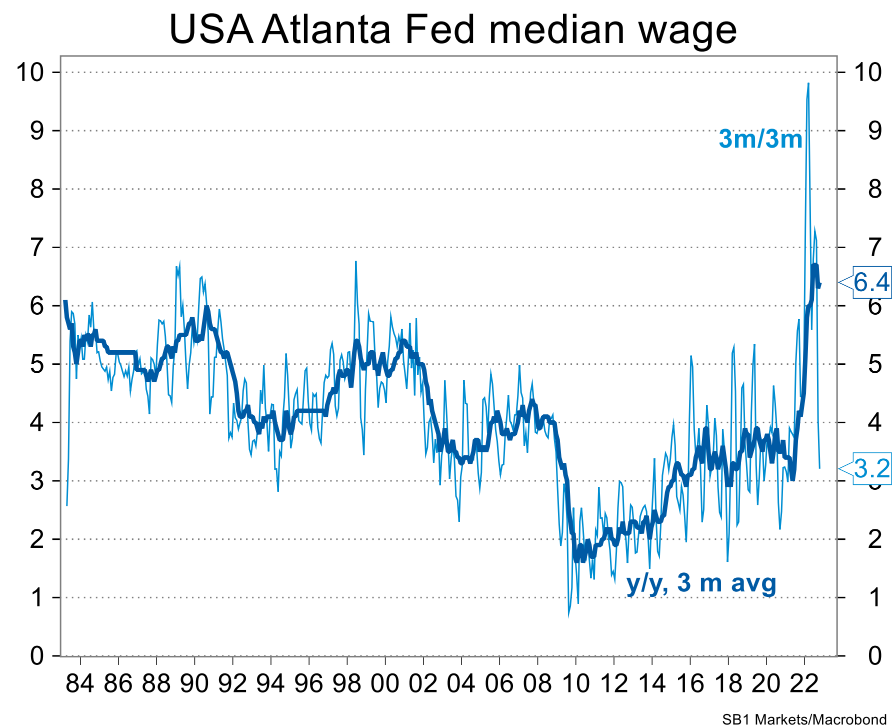


- Almost all of the initial lift in core CPI was due to prices of goods & services that often fluctuate, with rapid price increases followed by deep price cuts. These prices are '**flexible'** and represent some 10% of the core CPI. The core flexible CPI is up 5.3% y/y, down from almost 20% at the peak! But still higher than anytime since 1981
- The new challenge: The **sticky components,** 90 % of the core CPI are up 6.4% y/y, and it rose further in October. The surge in the sticky index is much more worrisome for the inflation outlook than the ups and downs in the 'flexible' CPI
- The Cleveland Fed **trimmed median CPI** is up at a 7.4% pace over the past six months, down from 7.6% last month – but miles above anything seen before (data from 1983). Dallas Fed's **trimmed mean PCE** was up 5% in September, at the peak level for this cycle

Atlanta Fed: Wage inflation is probably slowing somewhat

The median wage +6.3% y/y, 6.4% 3 m avg, up from 6.3% - <u>still 3 pp higher than 'normal' growth</u>

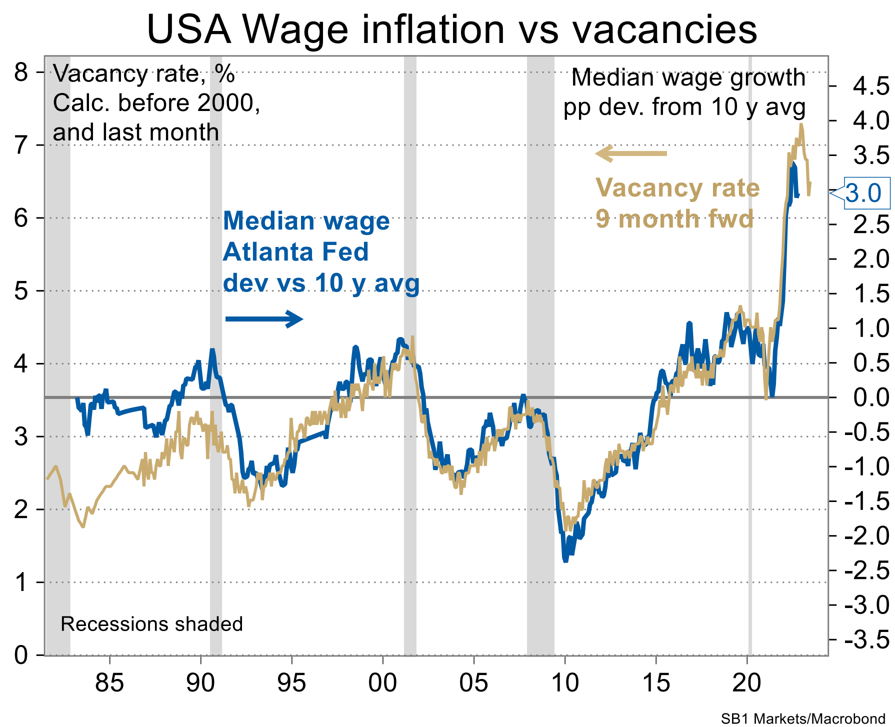


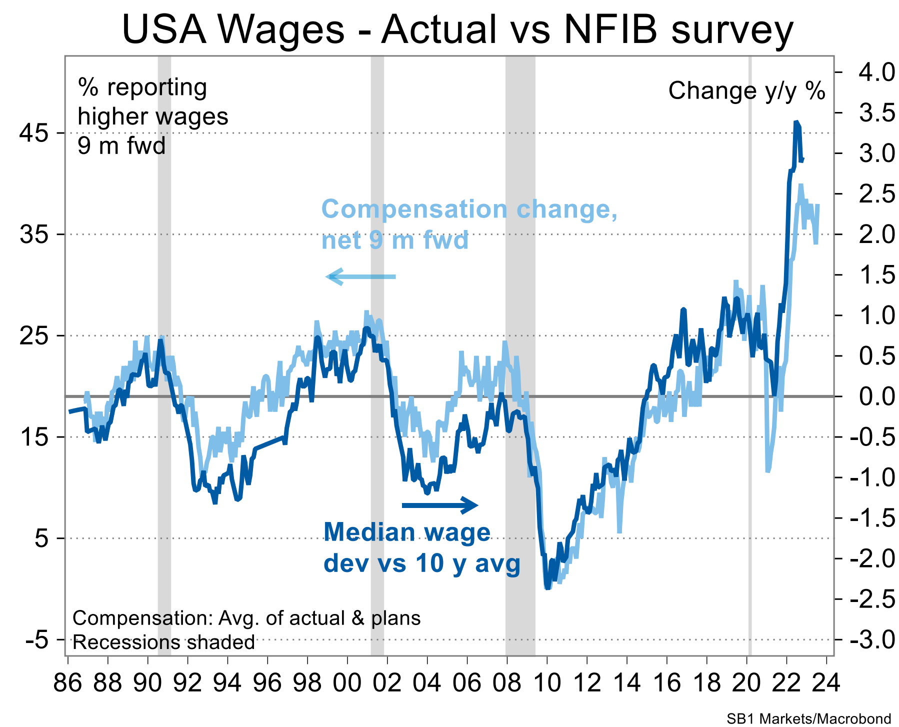


- **Atlanta Fed's median tracker reported** a 6.4% growth in October, down 0.1 pp from Sept. Our calculated m/m was up 0.2%, and growth has slowed past three months. The 3m/3m rate 'collapsed' to 3.2%, but the 'real' underlying growth rate is 5.5% - 6% (a strange June obs. has created some volatility). The **3 m average annual wage** growth gained 0.1 pp to 6.4%, from the highest print ever at 6.7% in August. The current wage inflation is 3.0 pp higher than the past 10 average, a wage acceleration we have never seen before
- **Wage inflation** among ages, occupations, industries, job switchers (or not), race, education, urban or rural regions have experienced a sharp acceleration in wage inflation. The only laggards: those who are paid the best, but even this group report higher wage growth recent months
- **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 2.5% – 4% faster than the past 10 years' average – 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

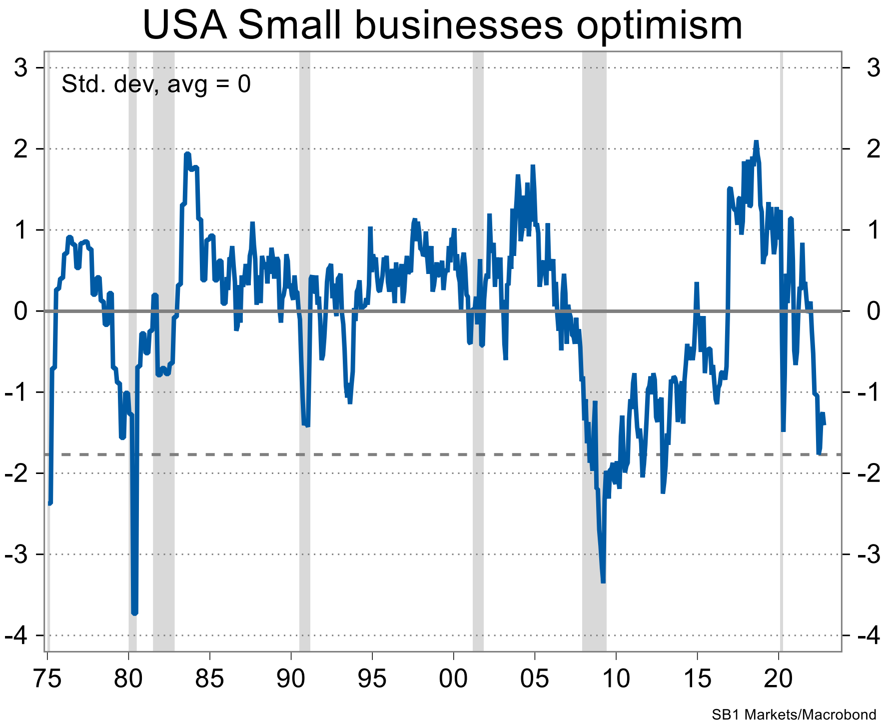


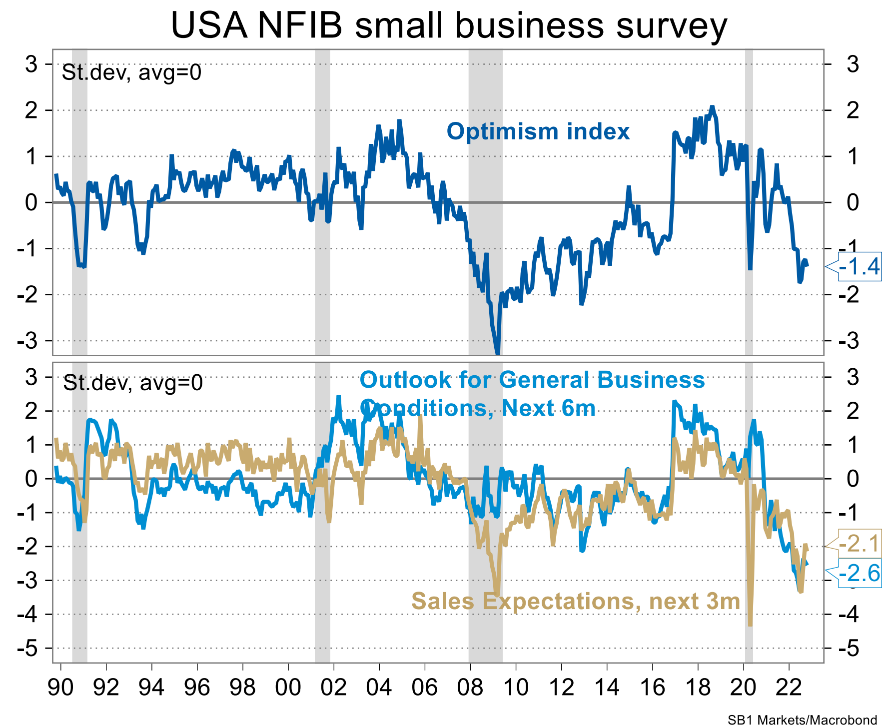


- **Our 'Phillips curve'** based on the vacancy rate signals a further increase in wage inflation the coming quarters, even if vacances have peaked. The vacancy rate leads changes in wage inflation quite consistently by 3 quarters. However, we would not be surprised if the current extraordinary high wage inflation turns out to be the peak
  - » Companies (SMEs) compensation plans signal continued high wage inflation but not faster than the present
- **Wage inflation** has already accelerated by almost 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

Weak but stable SMEs' business optimism in October

Sales expectations have recovered somewhat since the bottom in July, still -2.1 st.dev below par

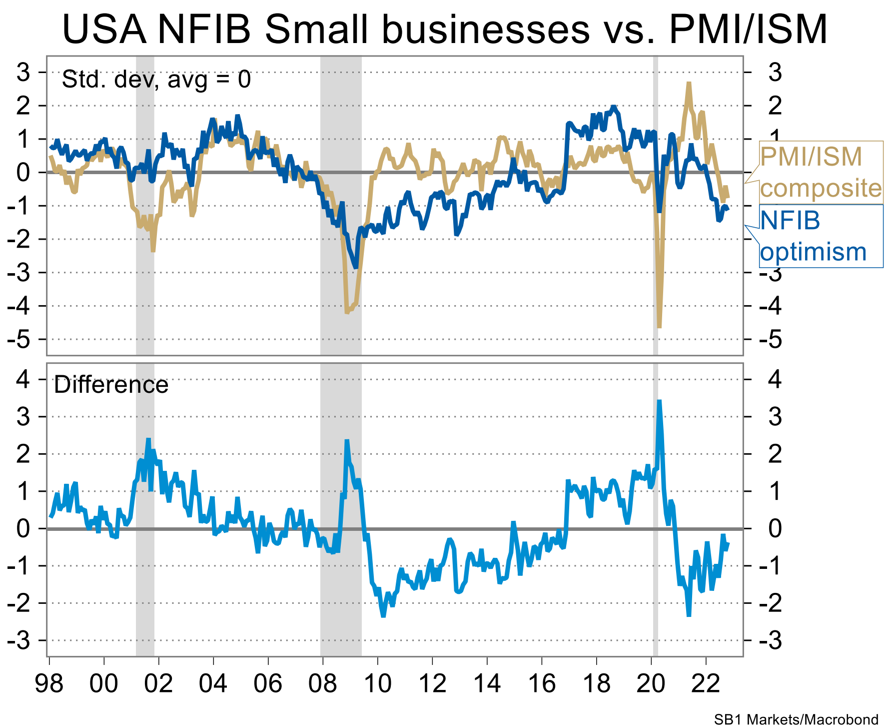




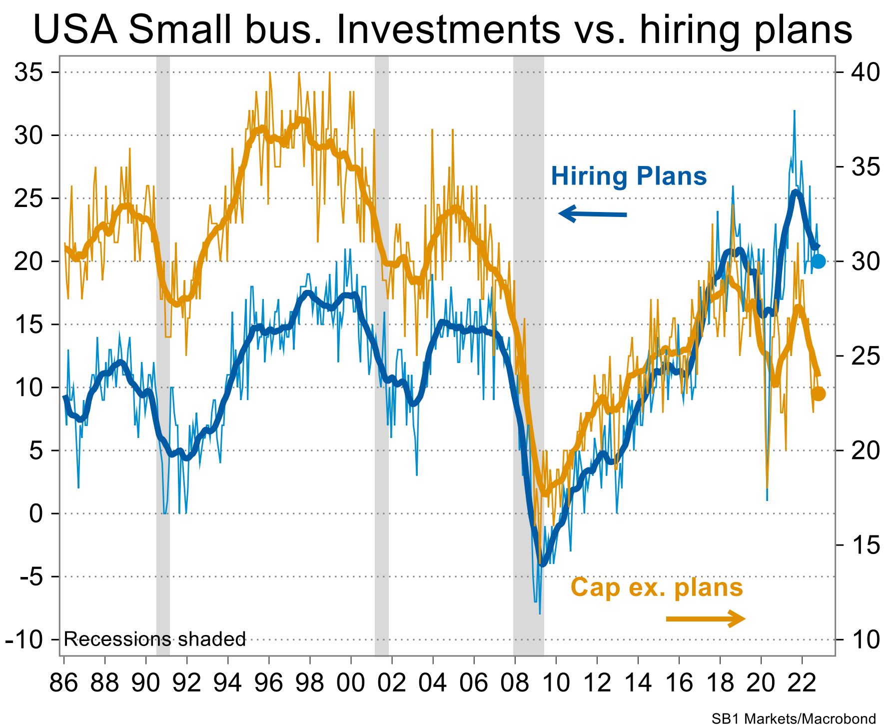
- The **NFIB optimism index** fell marginaly in October, expected slightly up. The level is 1.4 st.dev below average. **The outlook for the next 6 months** worsened marginally too, and is at a very low level, 2.6 st dev. **Sales expectations** also declined marginally, to -2.1 st.dev below par still 1.9 st.dev below avg. (up from 2.6 st.dev below avg. in Aug, and 3.4 st.dev below in July!)
- **Inflation, lack of qualified labour and labour costs** are still the main worries for the SMEs. However, some more companies report that **competition** is a worry, but the share is still very low. The share of companies that **plans to lift prices** rose again in October, but less than the decline in September. The share at 34% is well above the average at 21%
- **Investment plans** were revised down, like in most other surveys we follow. **Hiring plans** were revised down, but are still well above normal levels. Companies still report they are not able to **fill their vacancies**, and a close to a record share of SMEs report they plan to **lift compensation further**. So it ain't over yet

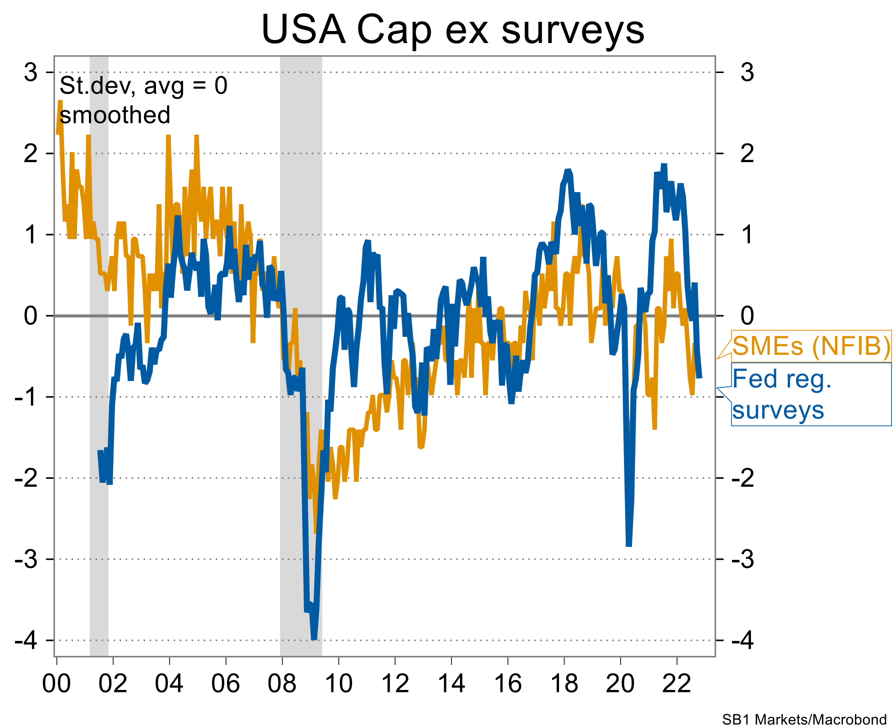
Large and small businesses are more in sync

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



The party is not yet over: But SMEs revised their hiring, investment plans down

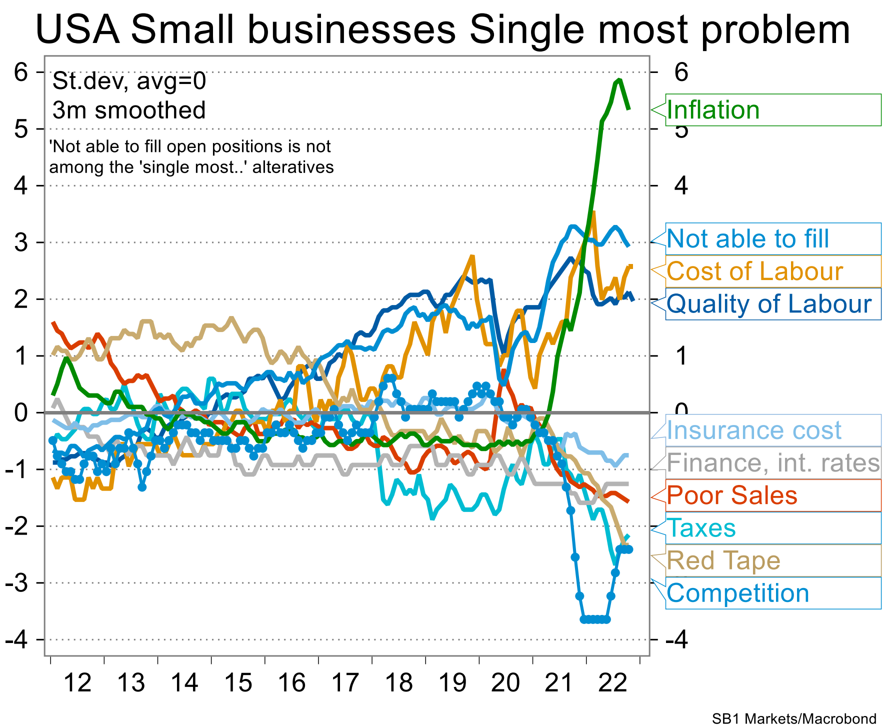


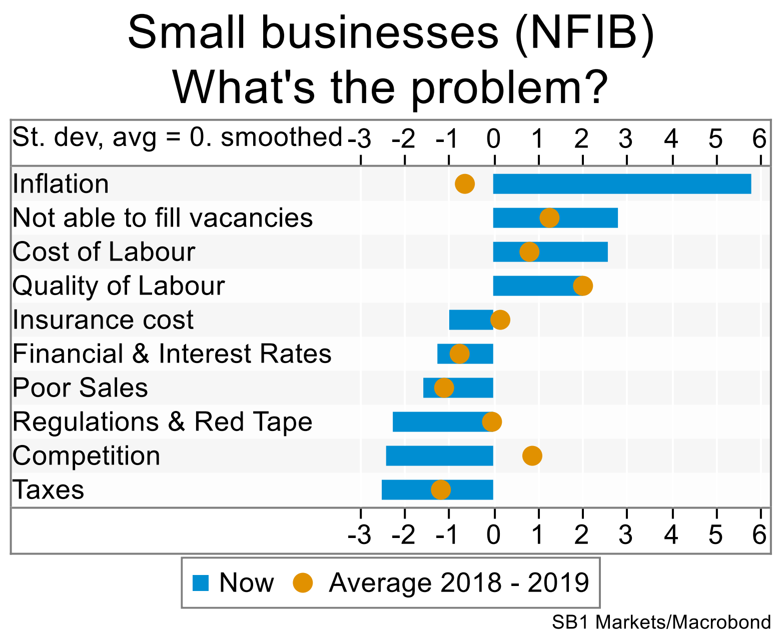


- The NFIB survey report of investment plans far below average
- Other (regional Fed) investment surveys have also come down from the top, to below an average level

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

Besides inflation, lack/quality/cost of labour are still the big challenges





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

In the charts above, we have included the 'Not able to fill open positions' data from the survey, but this is (rather strangely) not an alternative in the single-most-problem question in the survey. We still show it in the chart

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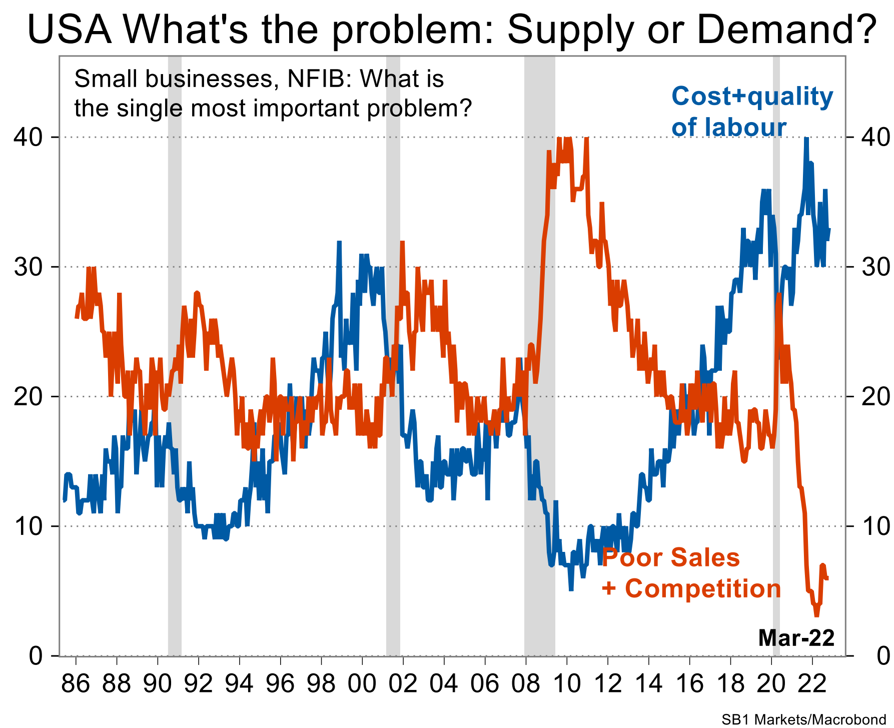
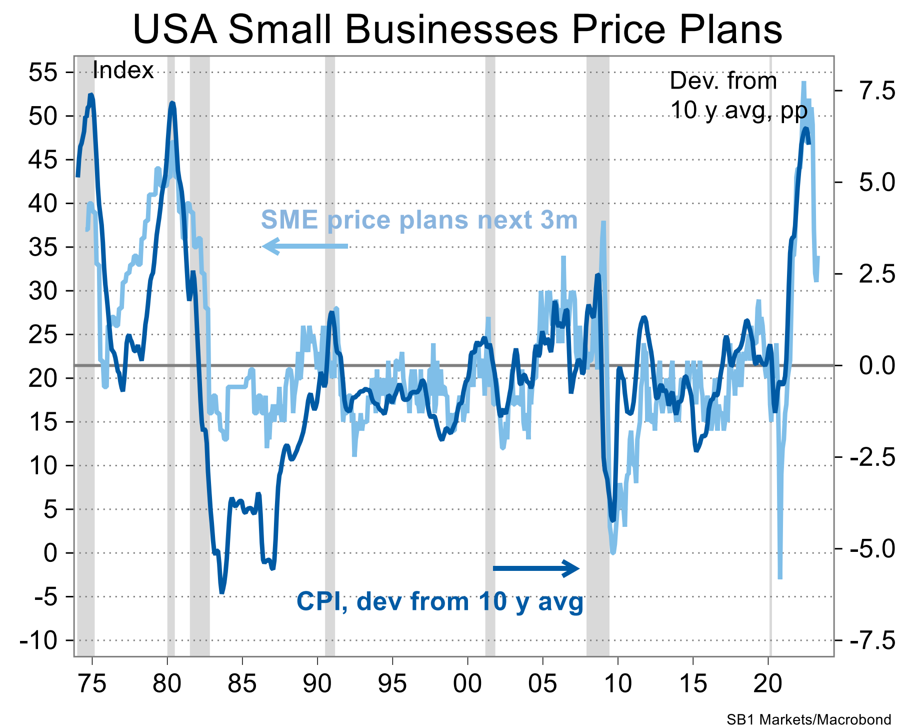
Sales are not the problem, lack of labour is. Price plans revised up in October!

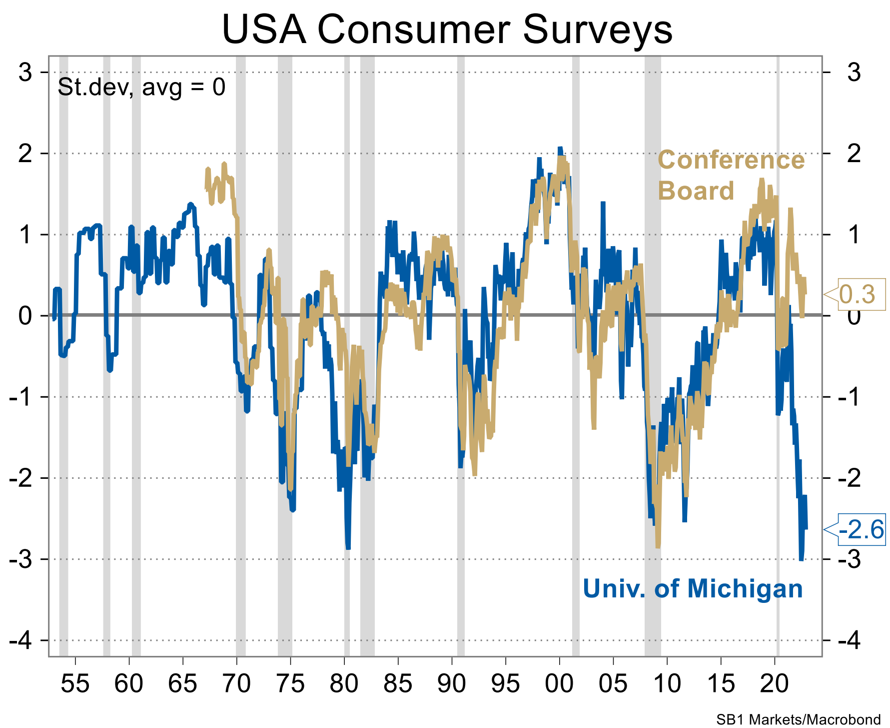
We are quite surprised, we expected demand to slow (and the had Fed hoped for it)





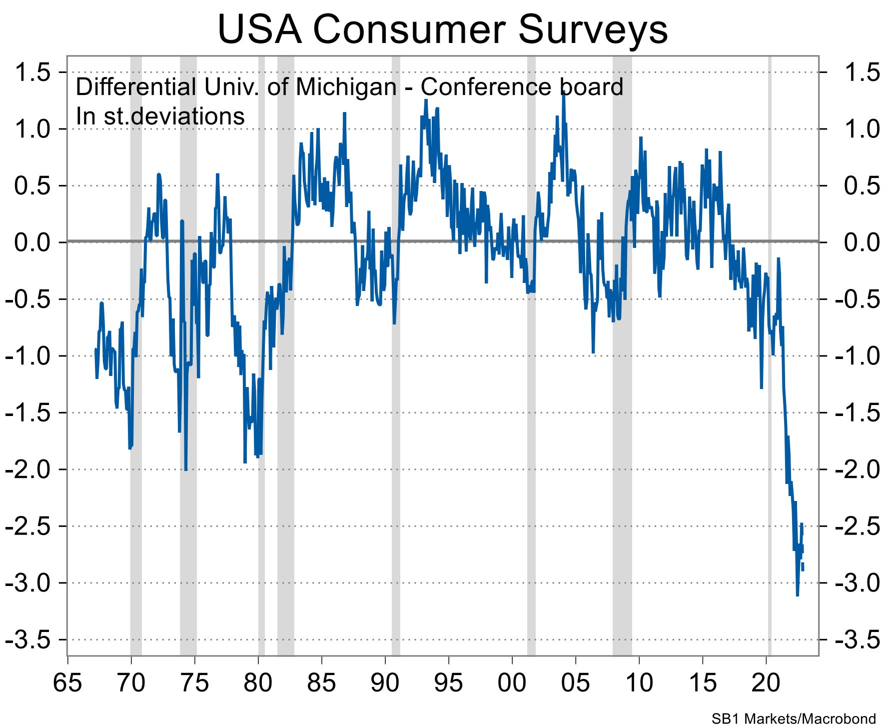
- **The 'gap' between supply and demand concerns** is still very large, but it is now heading down (if not in Sept and Oct!)
  - » Very few companies report **poor sales or competition** as a problem. The share is up from March, but has stabilised recent months
  - » **Cost & quality of labour** are stated as the most important problem for a much higher share of companies than normal. However, the share has fallen somewhat from the peak. Still, compensation plans were revised up in October
- The share of **companies that plan to lift prices** has fallen sharply from the peak but rose slightly in Oct, to 34%, way above the average at 21%, and inflation well above the past 10 y average is still signalled
- **We have no doubt:** Over the coming months and quarters, the poor sales/competition (the red line) will climb sharply – and the blue line will come back down to Mother Earth as financial conditions tightens, with or without more help from the Federal Reserve. It's normally labelled as a recession, as soon as the red line crosses the 20-line

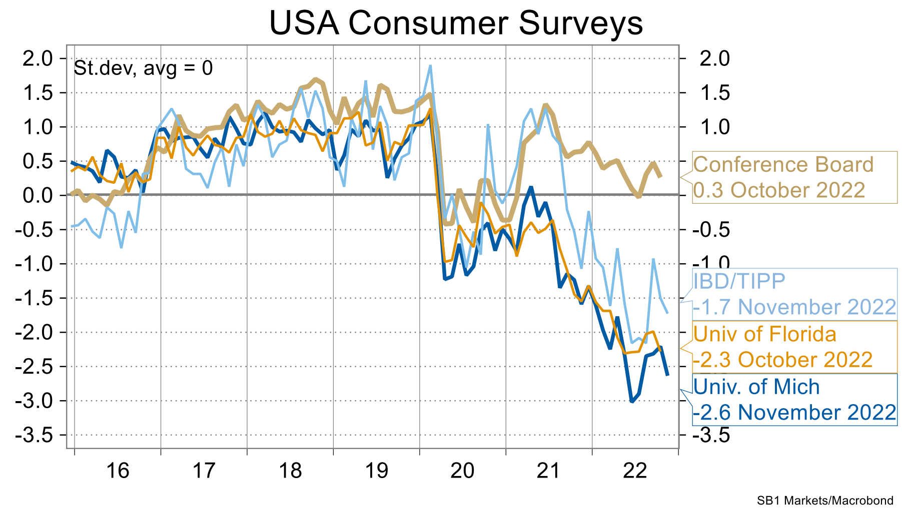
Univ. of Mich. sentiment down again in November



- **University of Michigan's consumer sentiment** fell 5.2 pp to 54.7 p, expected down 0.4 p. The level is 2.6 st.dev below average, down from -2.2 in Oct. 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 fallen in Oct/Nov – and 2 of them are far below an average level
- **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

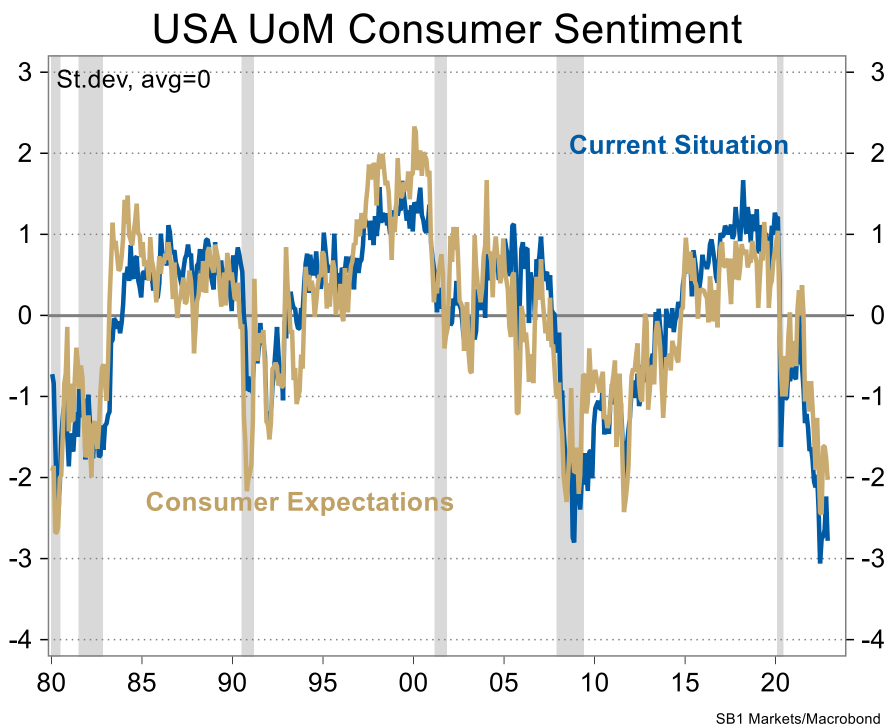


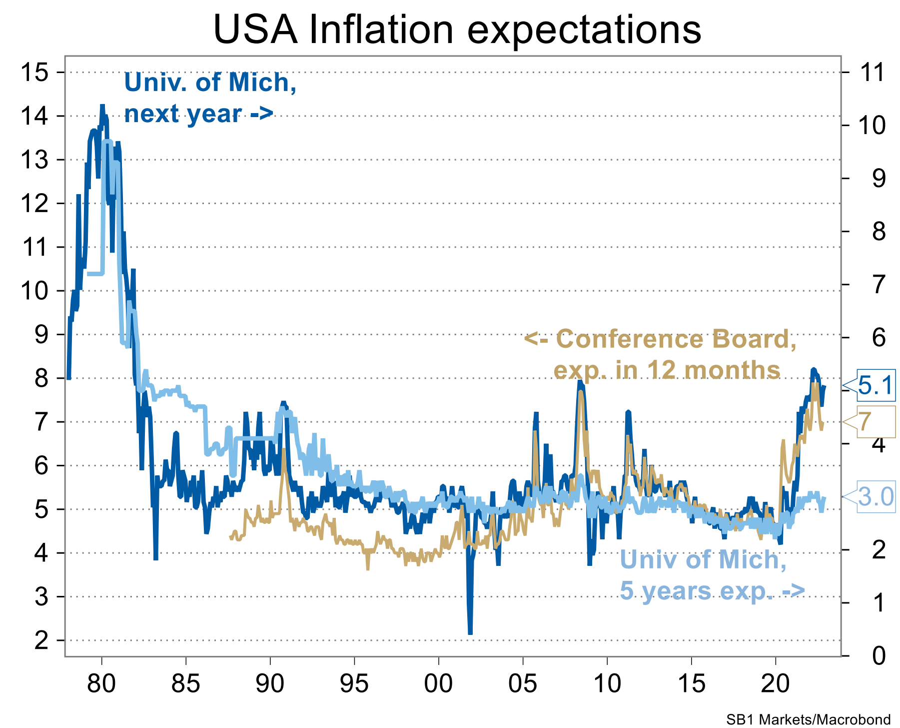


- Quite often, the UM survey has been the canary in the mine vs. recessions, it yields earlier than Conference Board's survey, and the current stance is a VERY bad sign – we have never seen anything like it!
- Both IBD/TIPP consumer survey, Univ. of Florida's survey are 1.7 – 2.3 st.dev below par

Univ. of Michigan: Both current situation & expectations down in November

Inflation expectations rose slightly but both 1 y and 5y expected inflation rates down from the peak

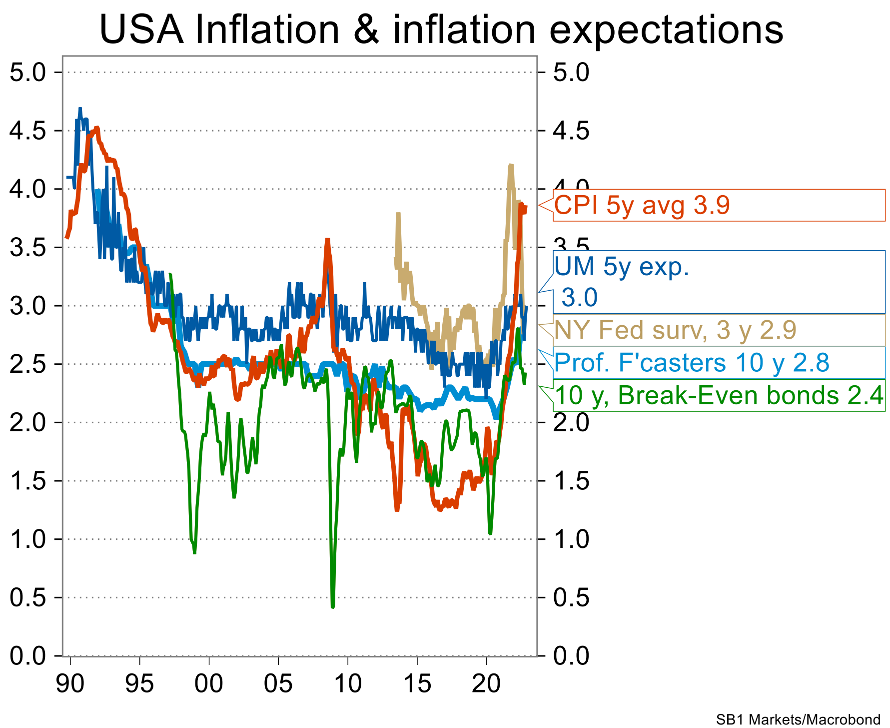


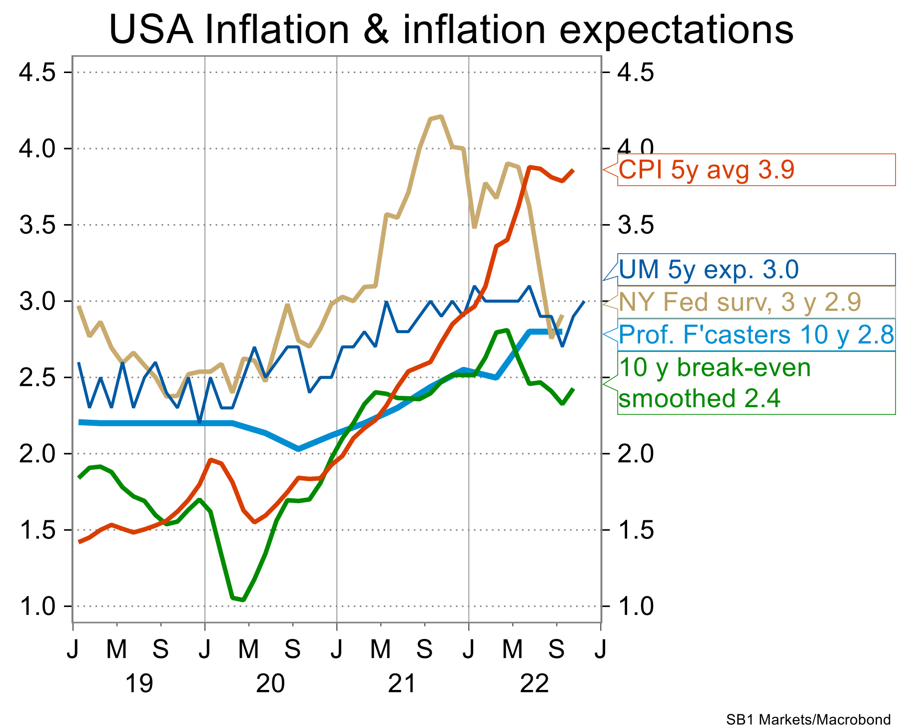


- **12 m inflation expectations** rose 0.1 p to 5.1% in October, very likely because the gasoline price turned up again
- The peak was at 5.4%, in March. Expectations are well below the current 7.7% y/y CPI print
- **5 y inflation expectations** added one tick, to 3.0%
  - » The 3.0% is just 0.1 pp above the average over the past 10 years, not that much given the current rate of inflation

Inflation expectations are heading down, even if actual inflation remains high

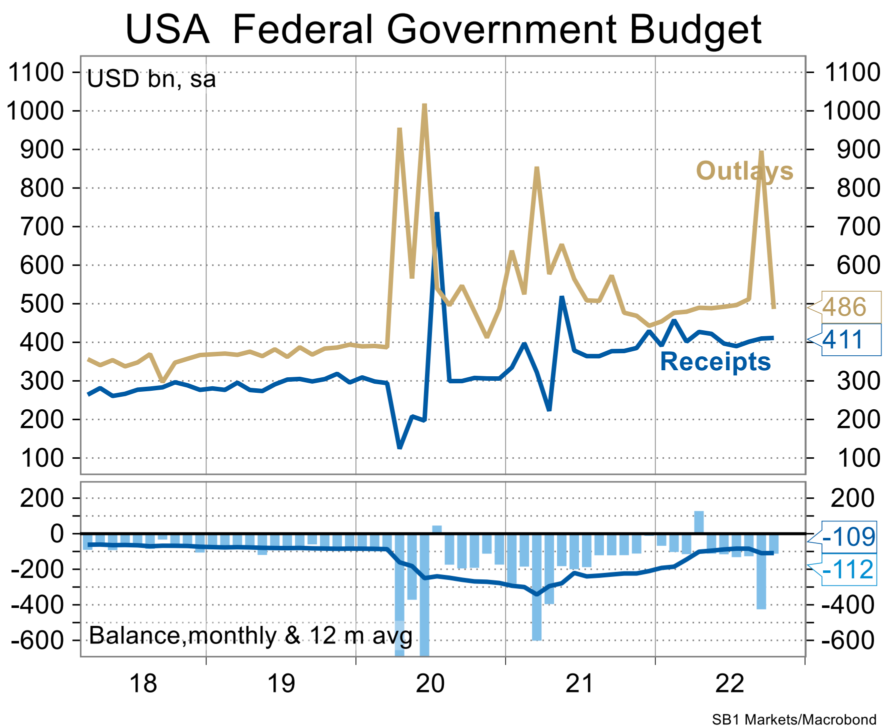
Professional forecasters still expect a 10 y 2.8% avg inflation, the market suggests just 2.4%

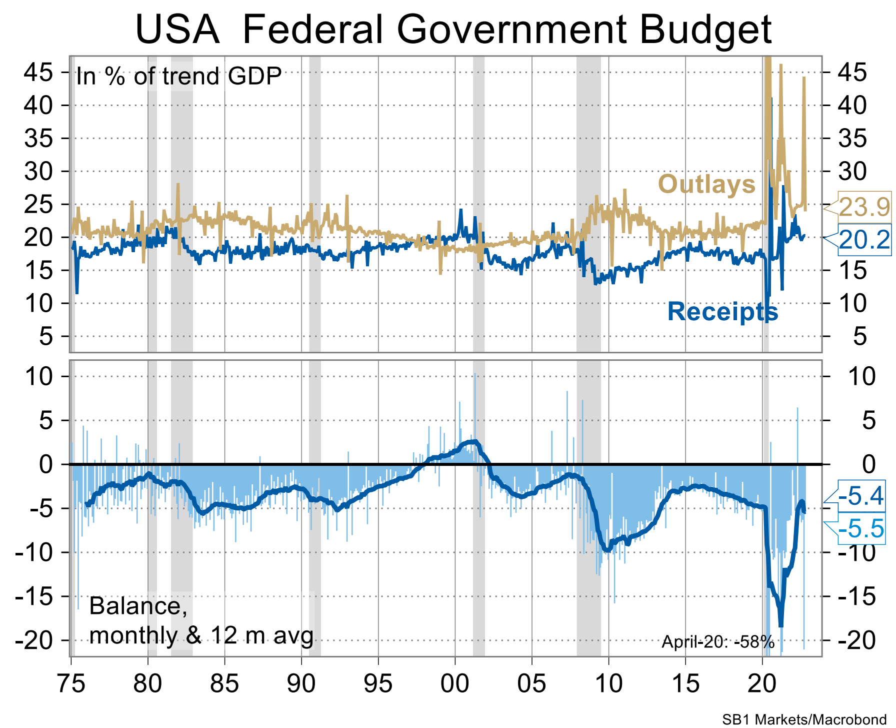




The budget did not reach balance – and now it is too late?

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

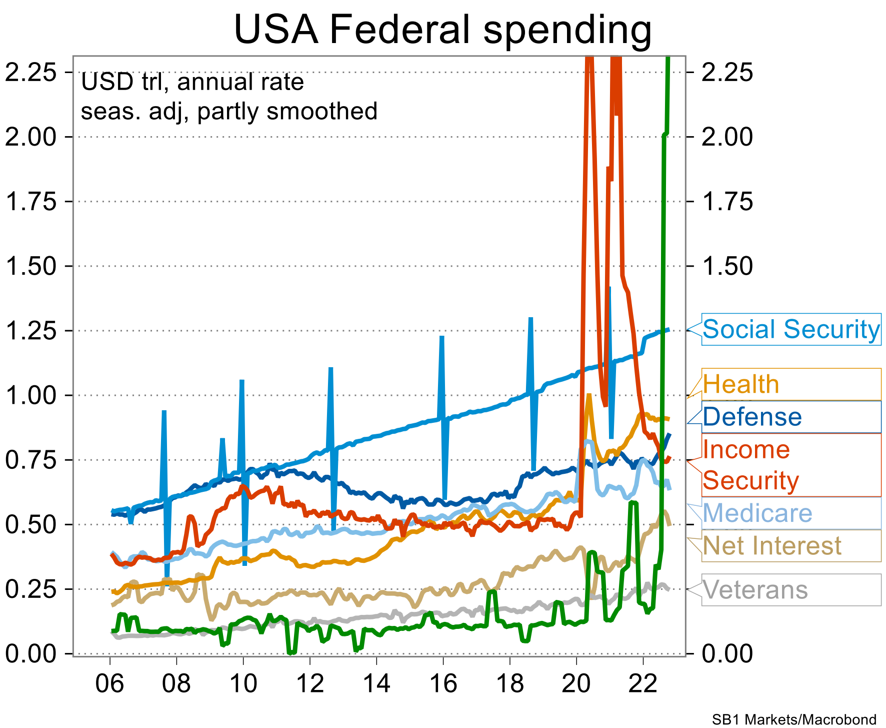


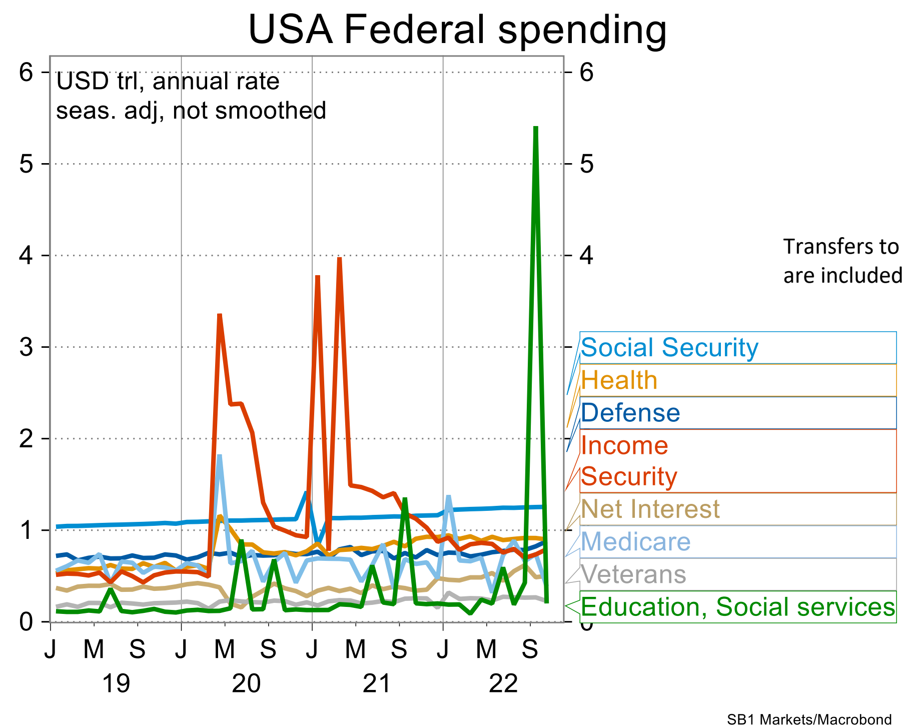


- **Federal expenses** fell in October, following the surge in September, when the USD 300 bn cost for cancelling student debt was booked (while the case is still disputed in the courts). The trend is clearly upwards. Spending equals 24% of GDP, up from 21% – 22% before the pandemic
- **Federal receipts** have flattened through 2022, even if growth in nominal GDP has been strong. Receipts equals 20% of GDP, above the 17% level ahead of the pandemic
- The actual **deficit** was USD 88 bn in Oct, or 112 bn seasonally adjusted, which is 5.5% of GDP. Over the past 12 months the Federal deficit has equalled 5.4% of GDP. Before corona, the federal deficit also was close to 5%. In a booming economy, the budget should of course have been in surplus, now even more than before the pandemic

Spending has normalised post student debt relief lifted spending in September

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



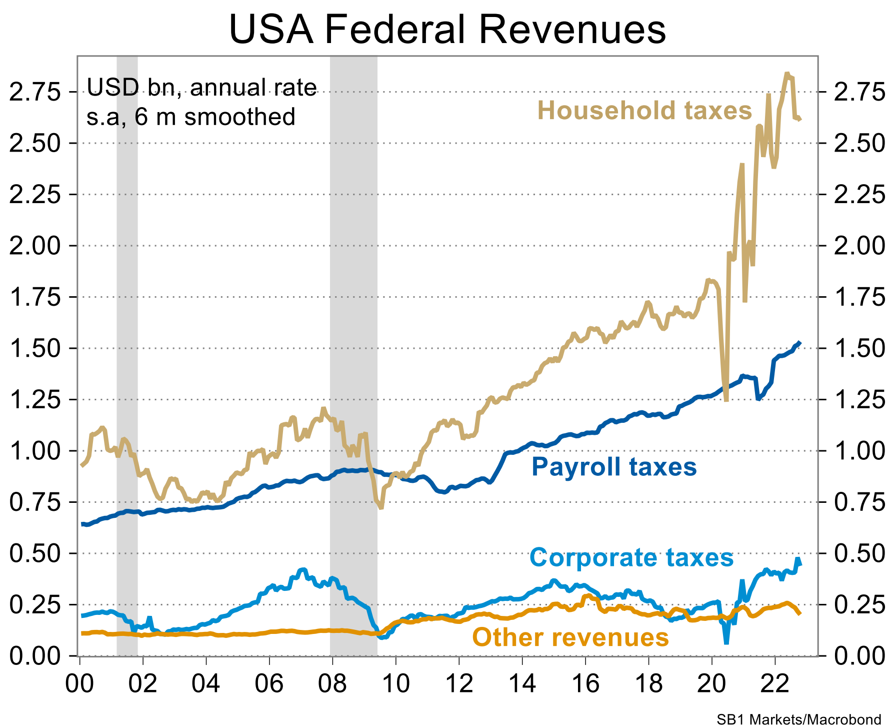


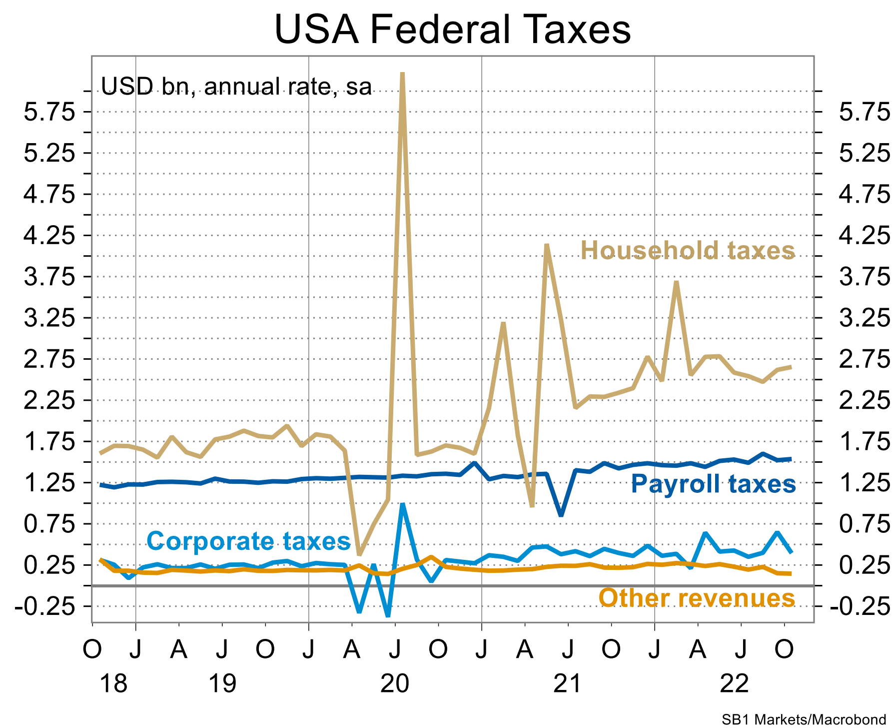
Transfers to local gov. are included in others

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

Tax revenues are remarkably higher than before the pandemic

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

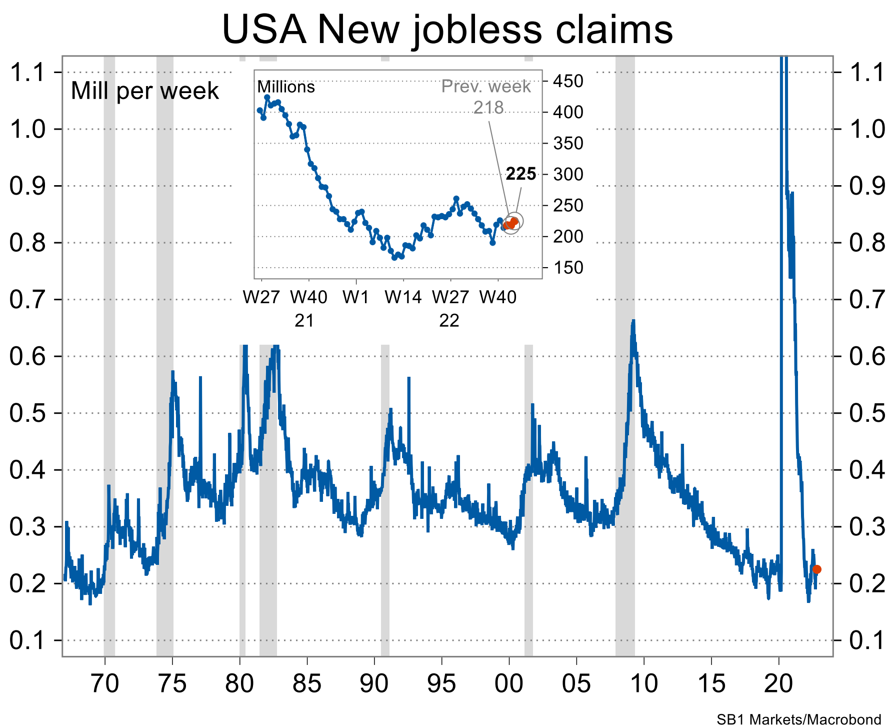


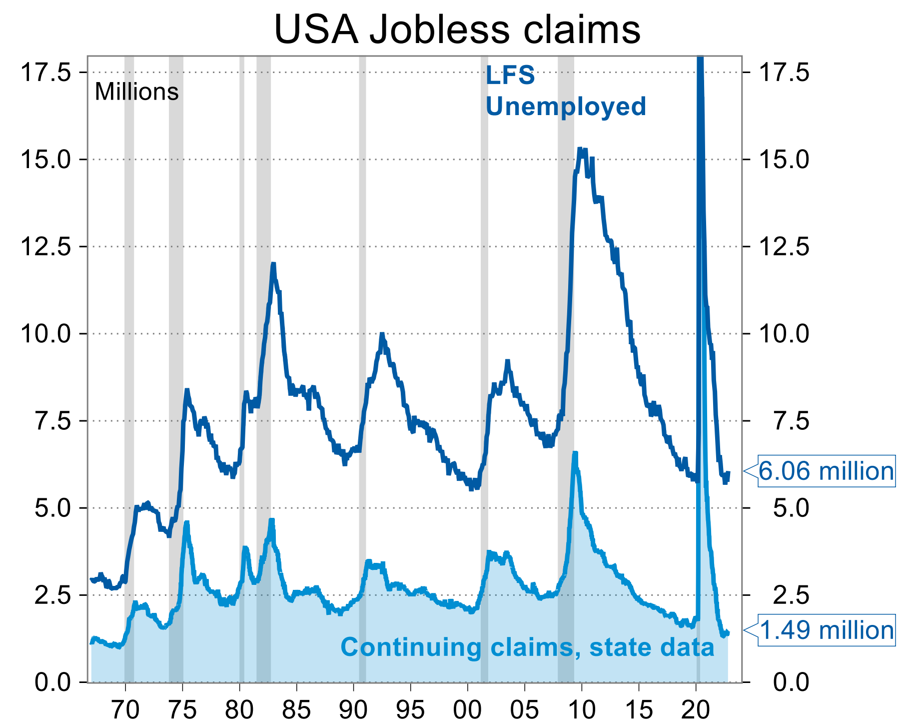


- And taxes have increased more than what could be explained by the surge in nominal GDP (due to the surge in inflation)

The inflow of new jobless claims remains at very low level

New jobless claims marginally up to 225', expected 220'

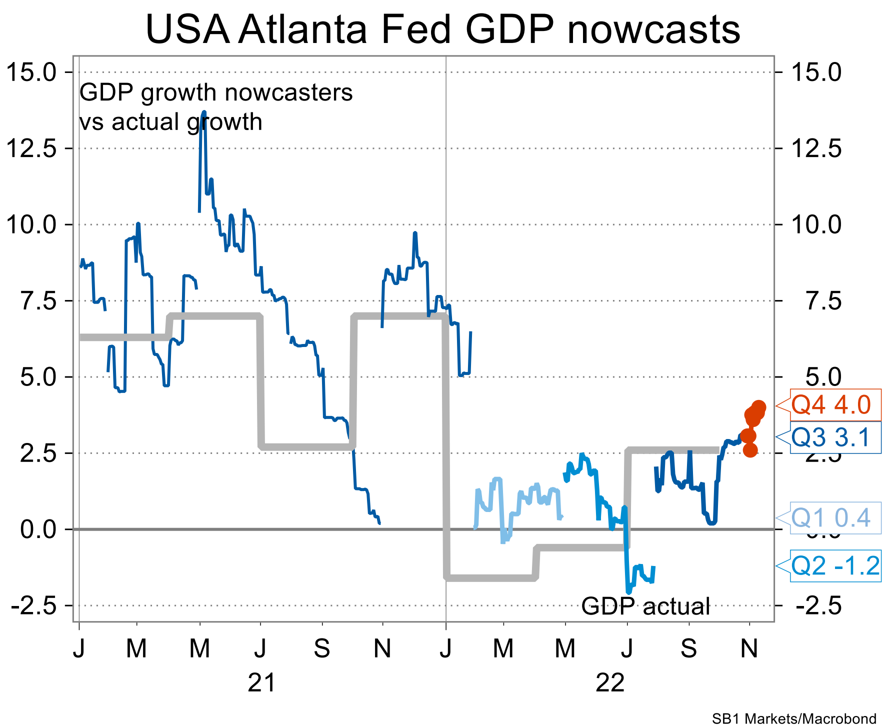


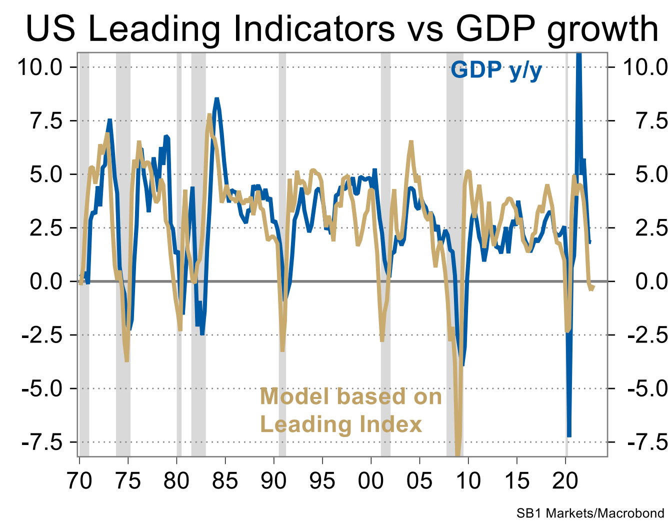


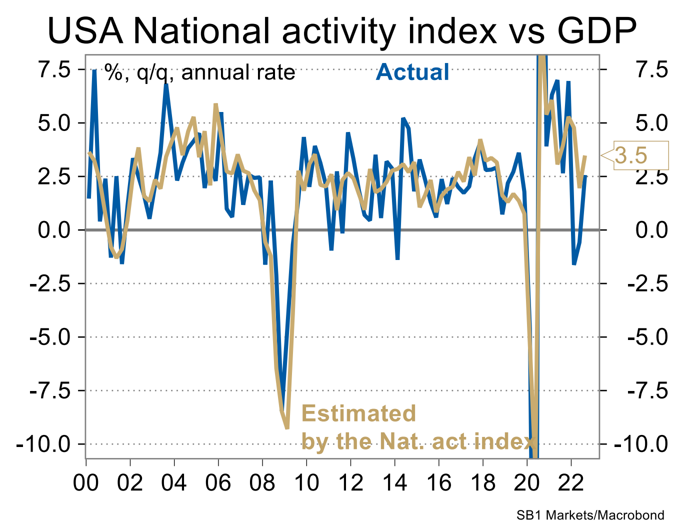
- **New jobless claims** increased by 7' to 225, from a 1' upward revised number the previous week
- **Continuing claims** rose by 5' to 1,493' in week 43, the previous week's print was revised up by 2'. The trend is slightly upwards but the level remains very low
- <u>Both still indicate a very tight labour market</u>

Atlanta Fed's Q4 forecast stable at 4.0%

Private consumption, investments are turning up, less support from foreign trad in Q4 vs Q3



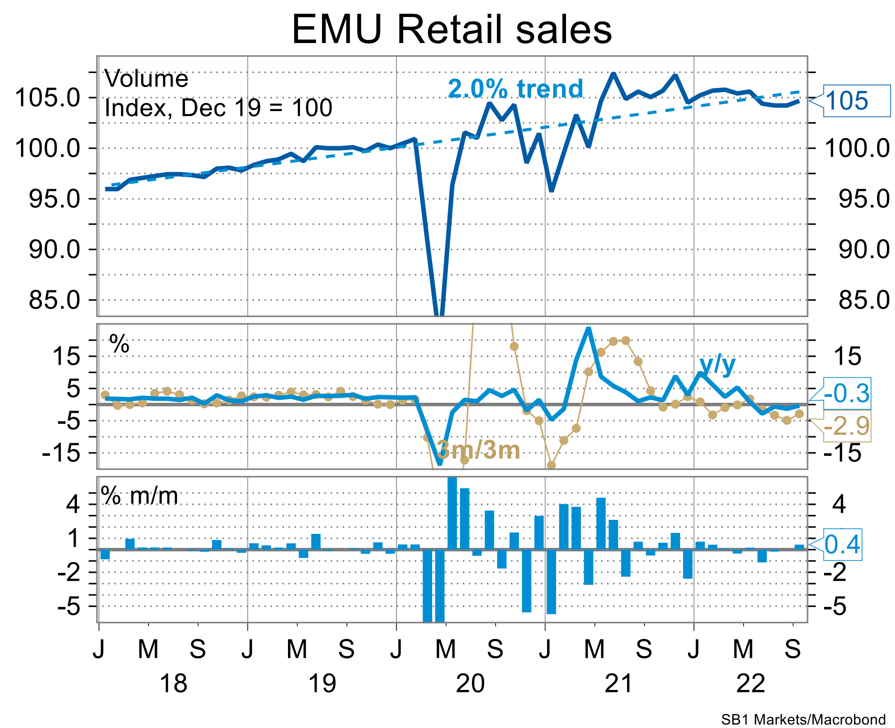


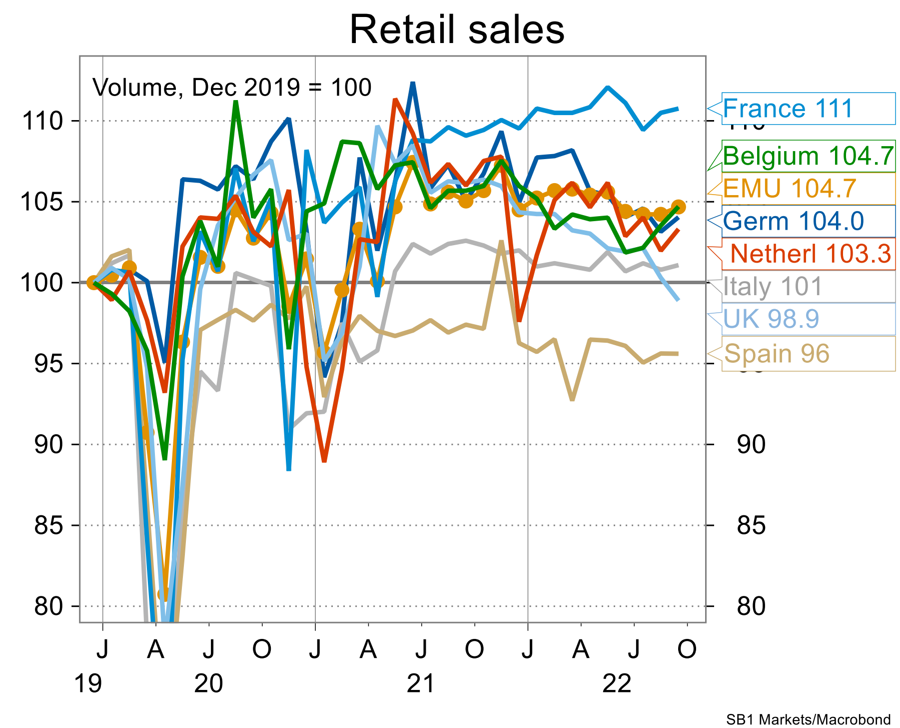


- National Activity index suggests a 3.5%% growth pace
- Leading indicators say zero!

Retail sales up most places in September

Sales rose 0.4%, as expected after several countries reported better sales than expected





- Sales have flattened recent months – at 5% above the pre-pandemic level – which yields a normal growth rate in EMU
- However, the trend is down from the peak in mid 2021 – and the outlook is dismal, given loss of buying power and a dramatic decline in consumer confidence – even if the labour market is still very strong

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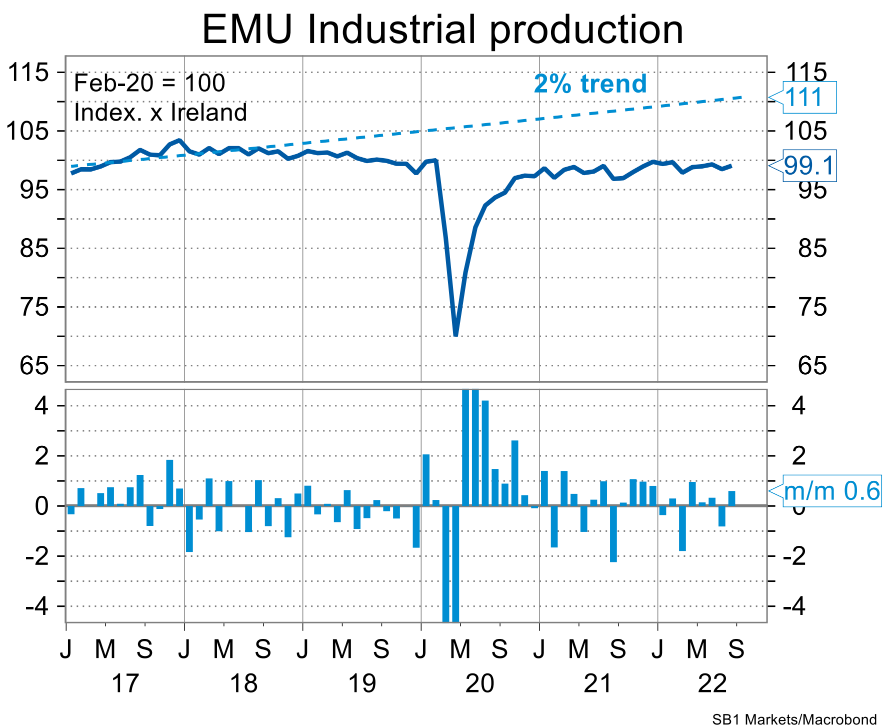
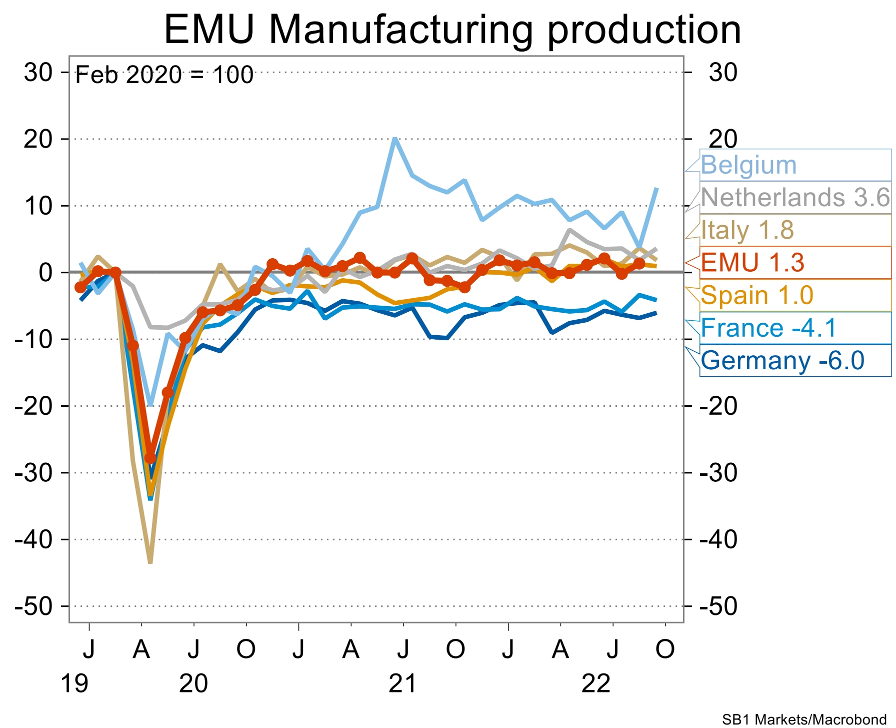
EMU industrial production probably up in September, the trend is still flat

Germany manf. surprised at the upside in September, +0.8%, France & Italy down, others mostly up





- Eurostat will publish EMU data this week, expected up 0.4% (we think 0.6% x Ireland)

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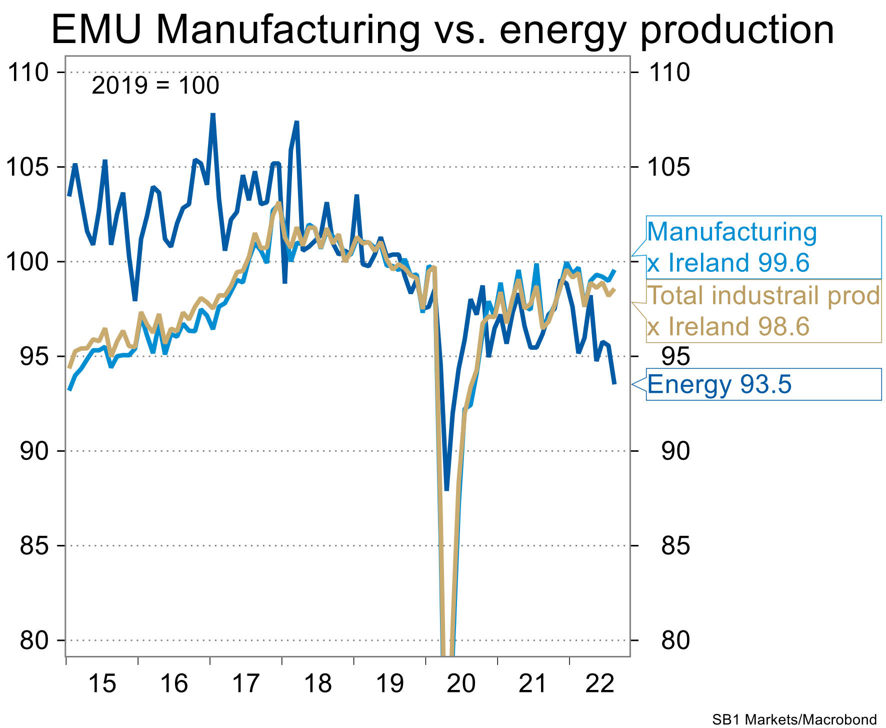
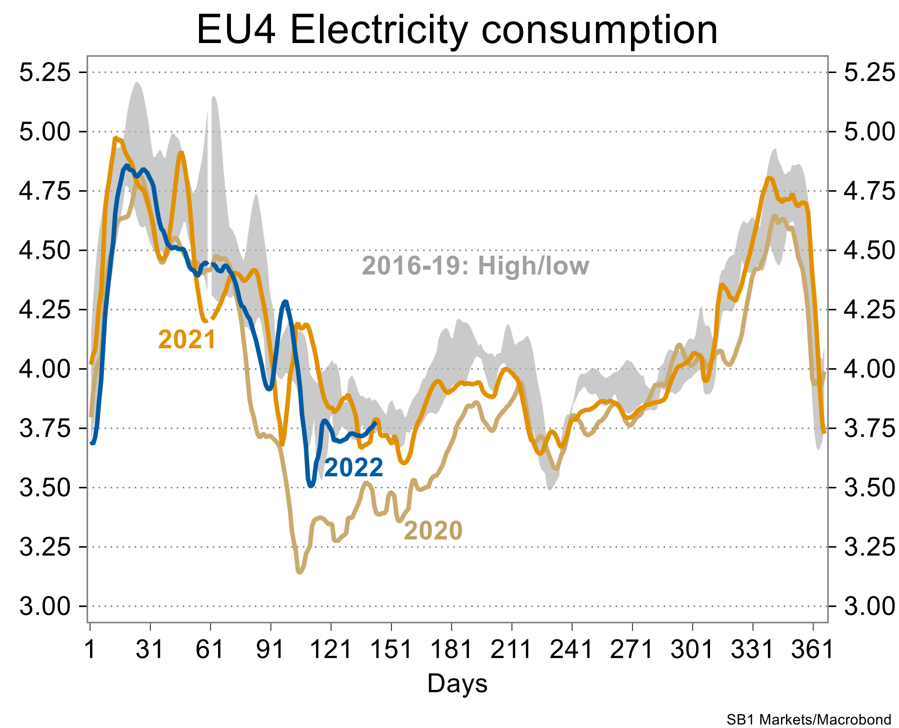
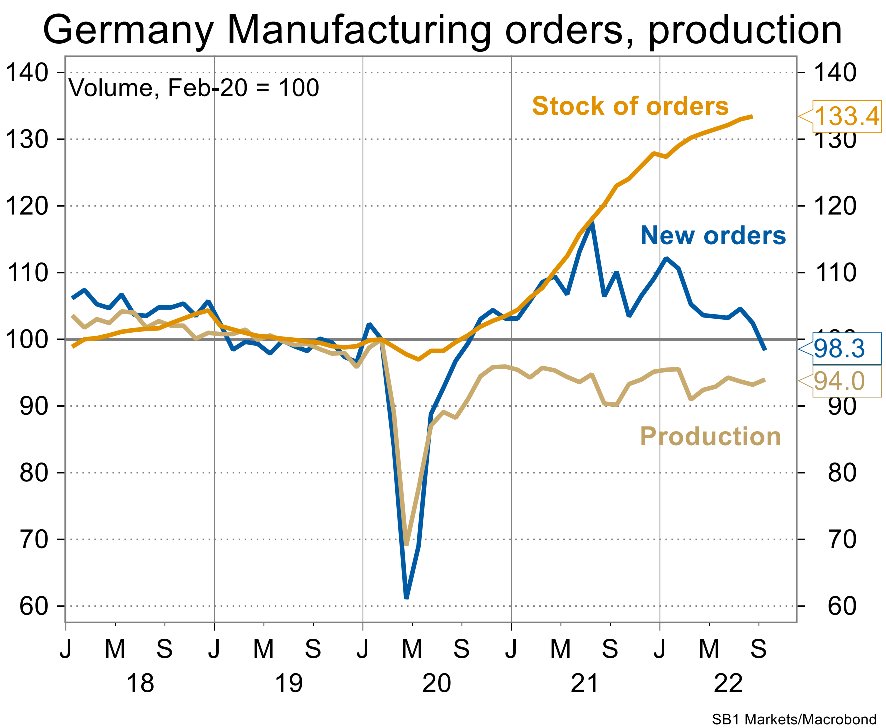
Energy production is down 5%, without hurting overall manufacturing prod.!

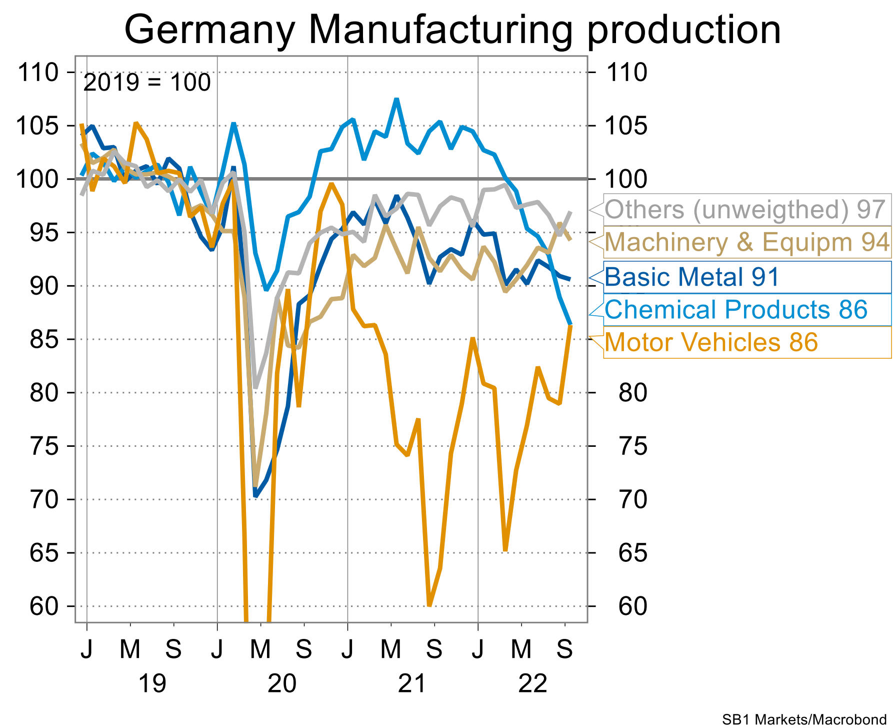




Chemicals sharply on the way down, very likely due to lack of energy (& prices)

German factory orders have also turned south





- Manufacturing production was up 0.6% m/m i September. August data revised down to -1.2% from -0.8%

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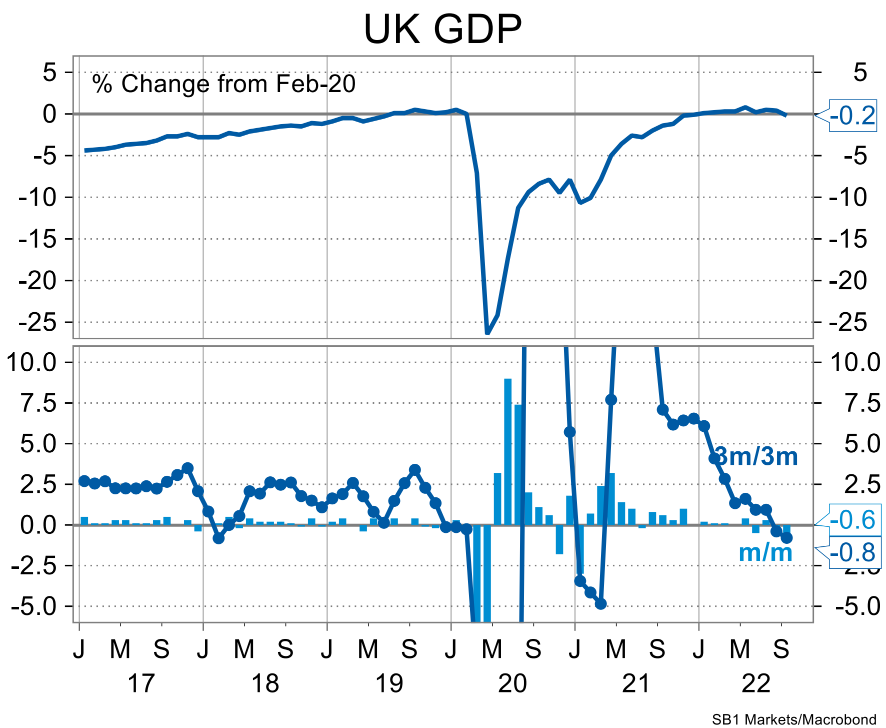
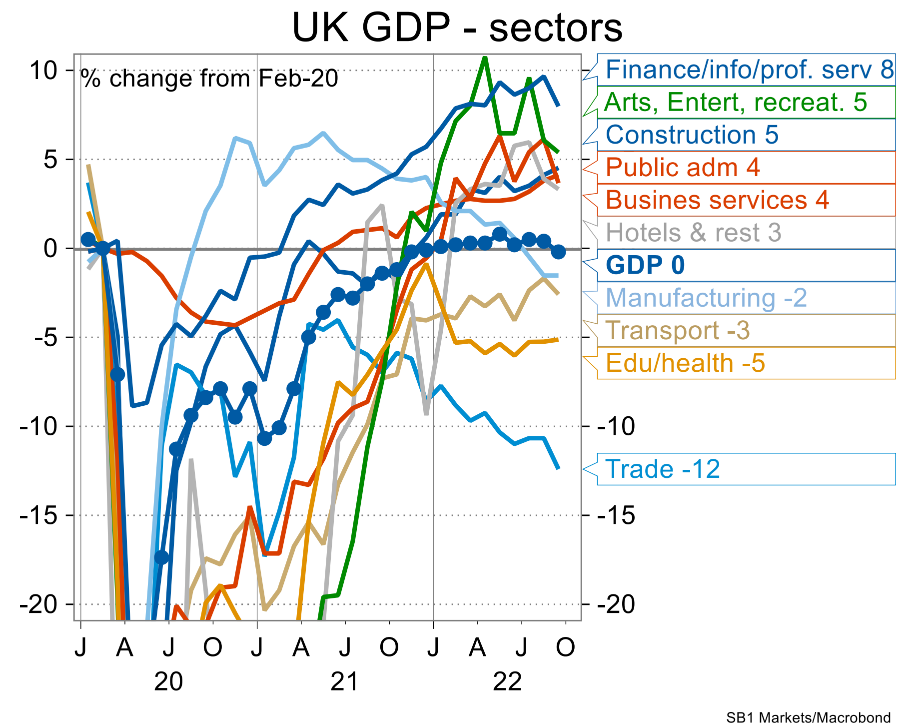
GDP contracted for the 2nd month, in what the BoE thinks will be a long downturn

GDP was down 0.6% m/m, 0.2 pp below expectations. Q3 GDP fell by 0.8% (annualised, expected -2%)

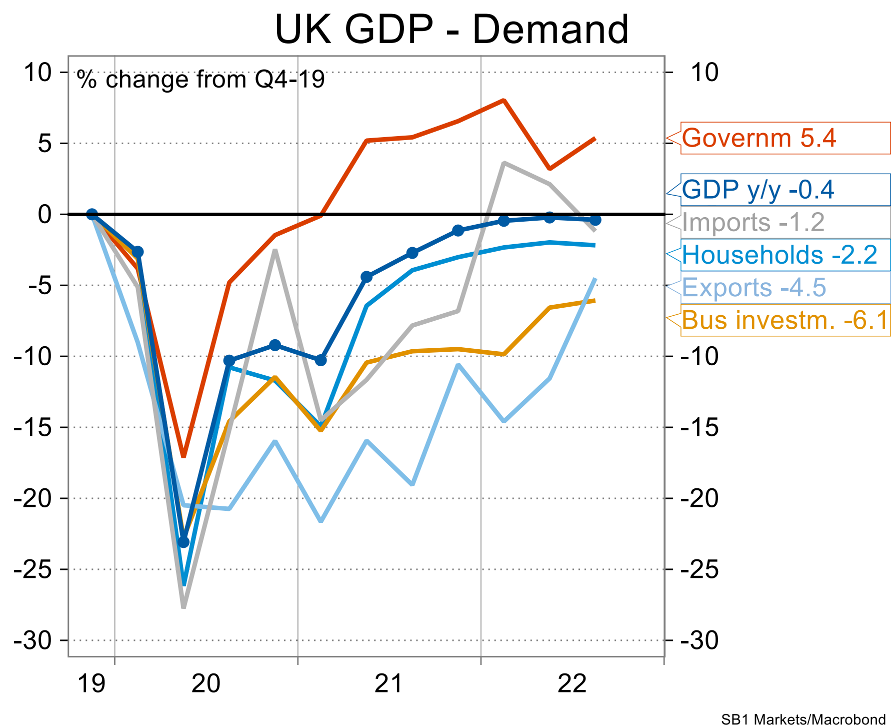


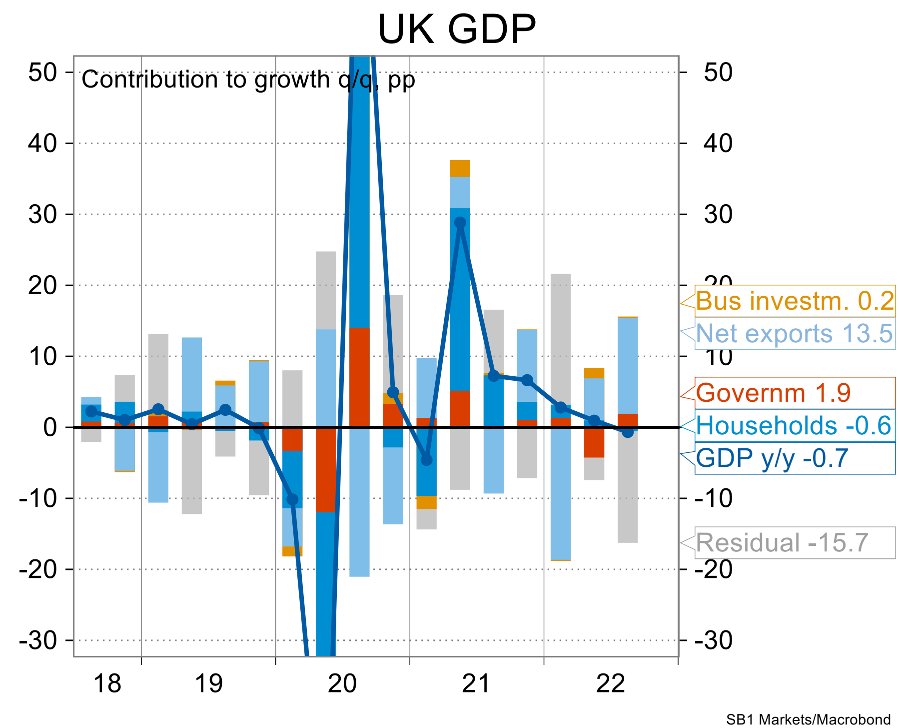


- **GDP** was revised up – and even if GDP fell more than expected in September, Q3 was better than assumed, GDP fell 0.2%, expected -0.5% (not annualised). GDP is still 0.2% below the pre-pandemic level
- **Mixed between sectors:** Professional services, transport, arts & entertain., education, and hotels & restaurants contributed on the downside
- **On the demand side**: Inventories fell sharply in Q3, while business investments, and exports rose. Household demand flattened
- **Bank of England** expects UK to have entered a recession in Q3, due to a steep decline in real incomes, and monetary tightening. And the Queen's death. So far, the BoE has been proven right

Public demand has supported growth, private demand is still recovering

However, household demand is flattening. Still strong growth in export volumes





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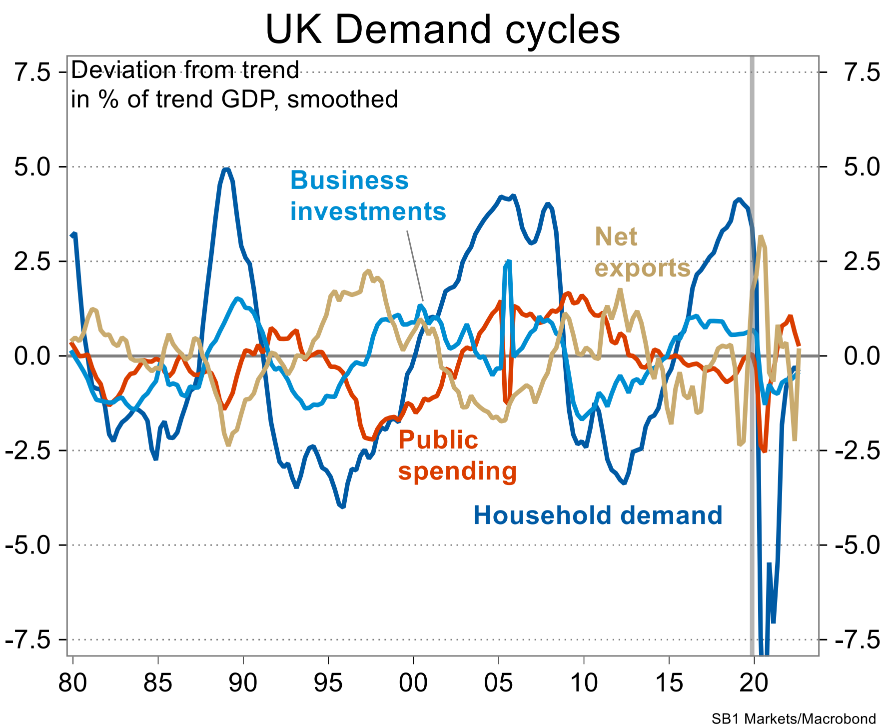
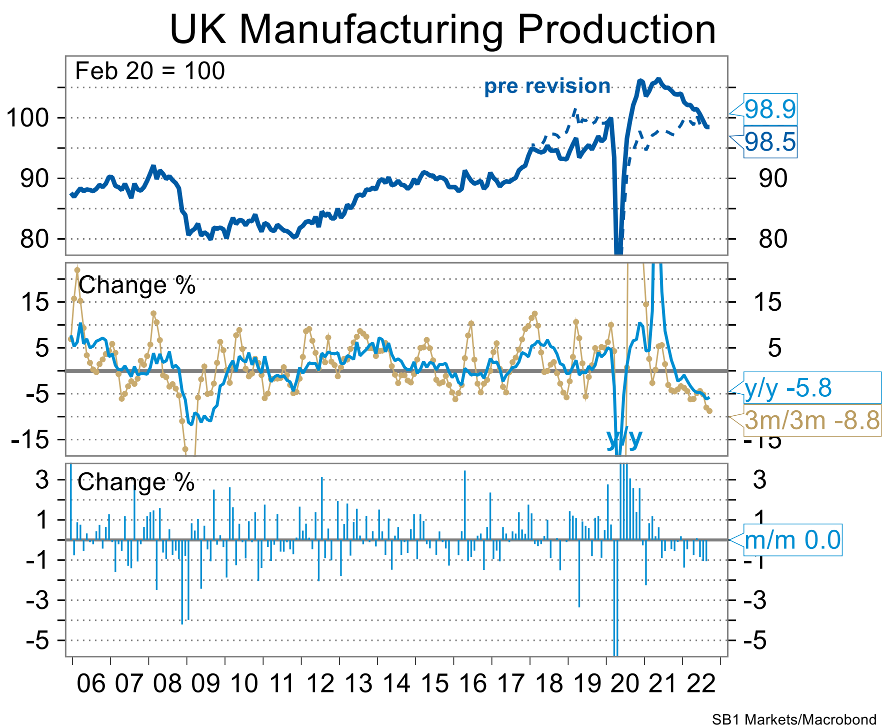
No big imbalances in the UK now? Private sector demand 'on trend'

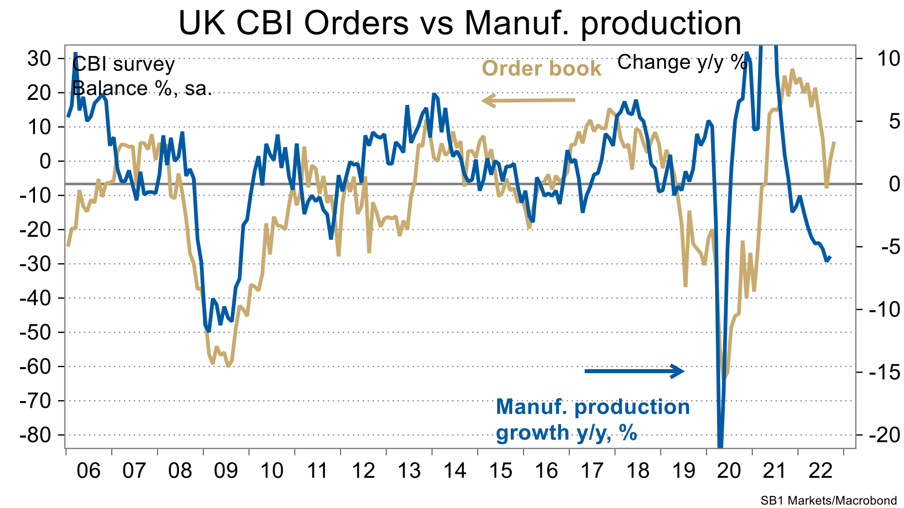
Business investments still in the doldrums. Net exports volatile, just marginally down during Covid

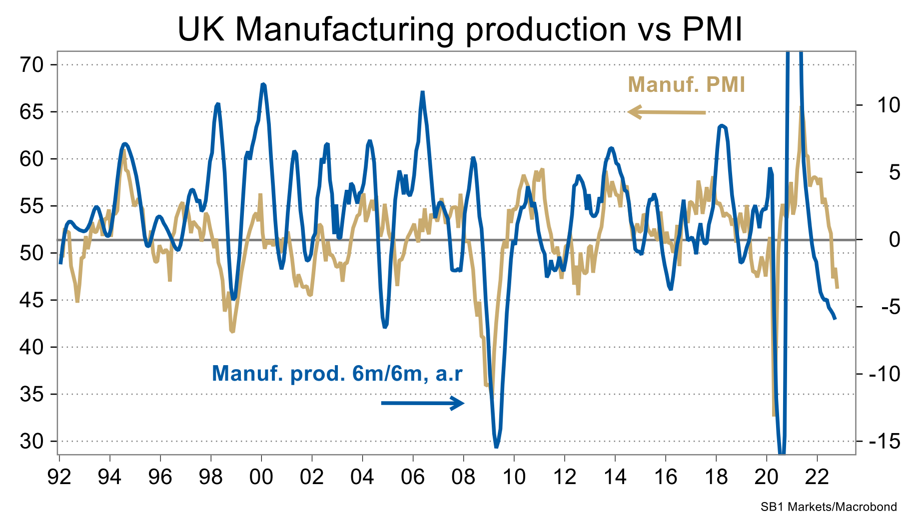


Manufacturing production better than expected in September…

…but still nothing to celebrate. Production was flat m/m and is down 2.5% since Feb-20



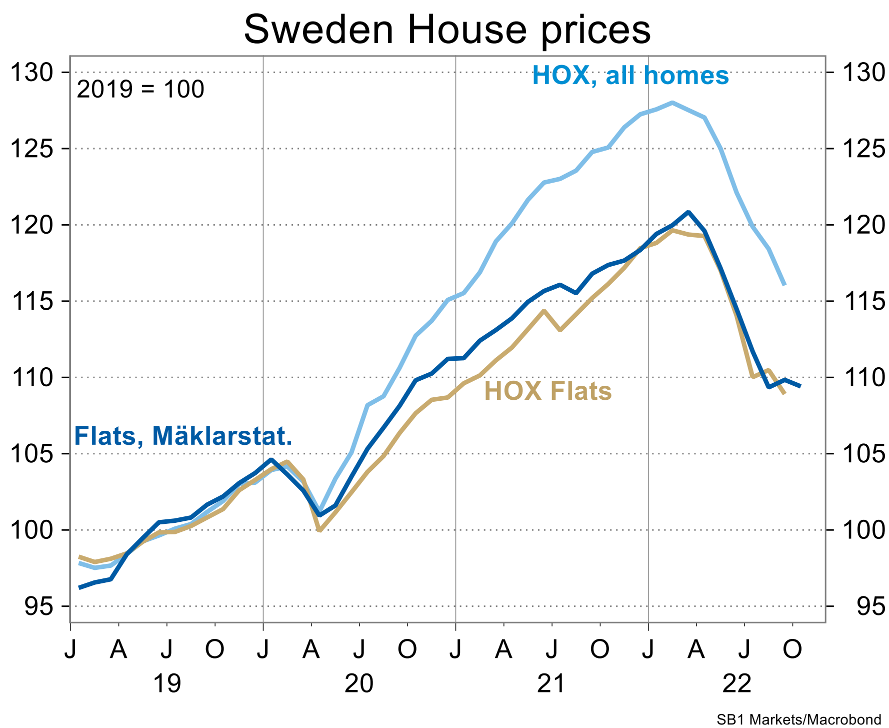


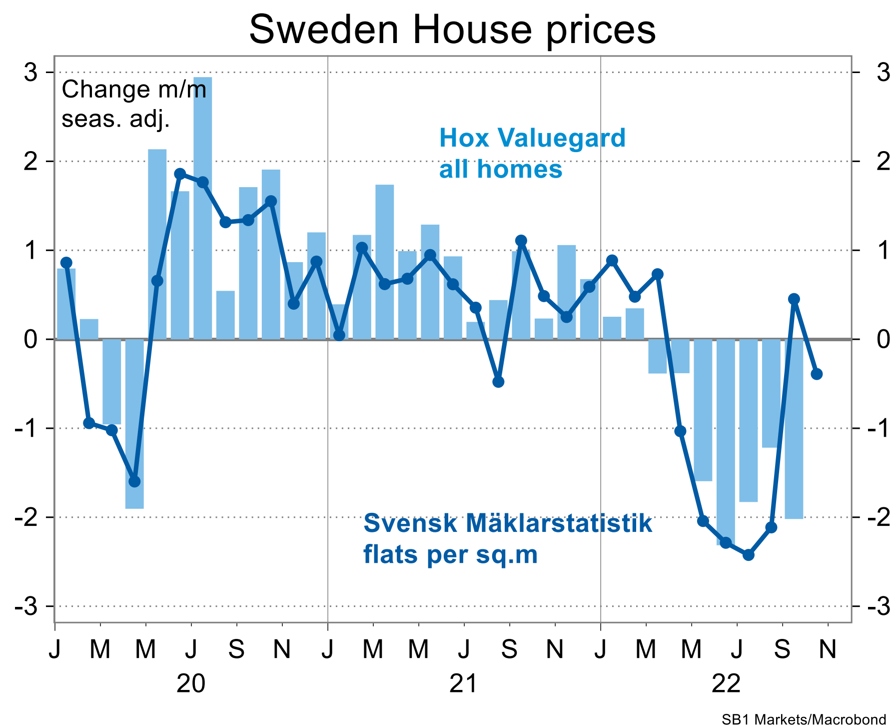


- Production was down 5.8% y/y, expected 6.6%, and August data was revised up by 0.5 pp to -6.2% (following an unprecedented revision of production data one month ago, the stapled line at the chart above)
- Almost all sectors are reporting a downward trend in production
- The CBI survey signals an increase in manuf. orders, while the manuf. PMI is still weak

Swedish apartment prices have flattened, according to the realtors

Prices fell 0.4% in October, following a similar increase in September. Vi expected a larger decline

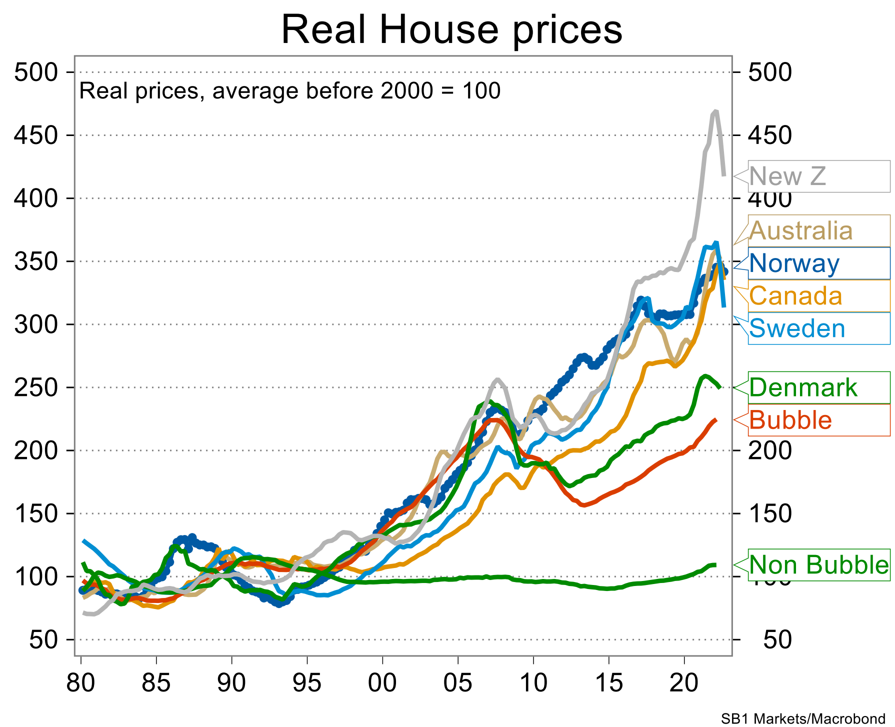


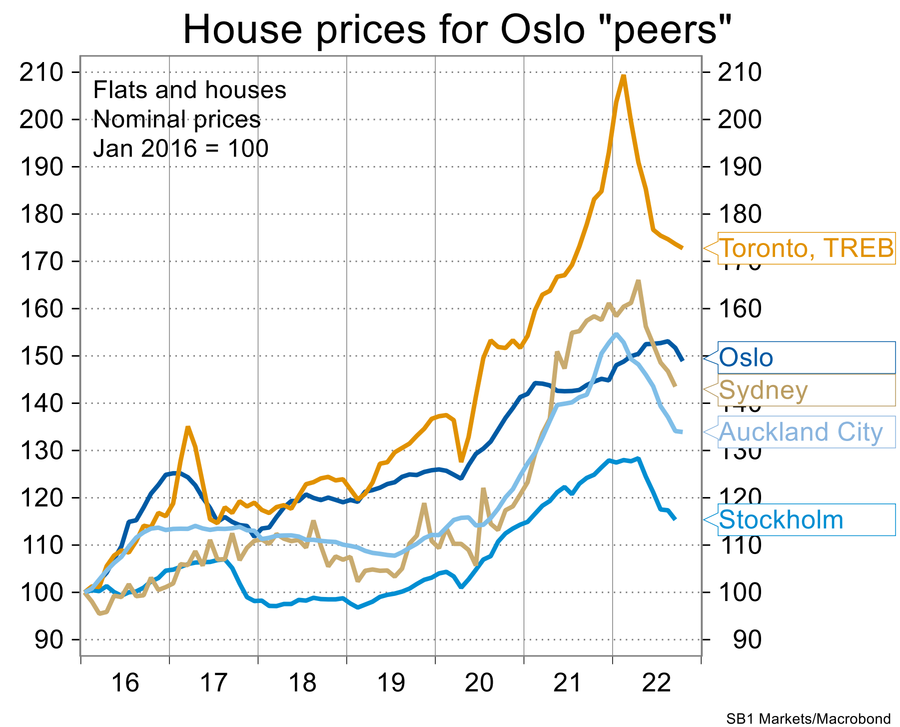


- Prices are down close to 10% from the peak in March – before the Riksbank started to hike rates
- The HOX index reported a small uptick in flat prices in August (while single-home prices fell further), but a larger decline in September. October data from HOX out next week

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 (were data are updated). Prices in the capitals have turned down in all these countries

Highlights

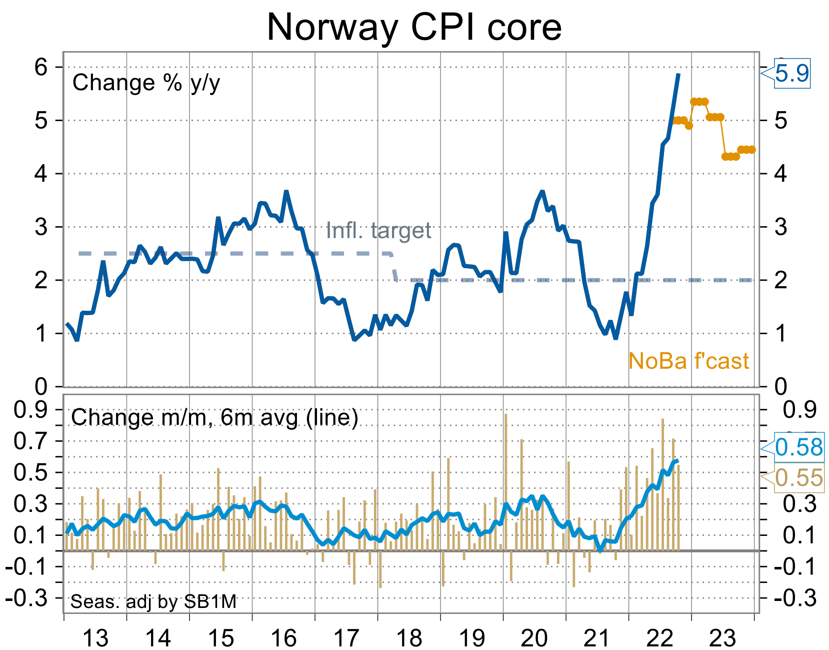
The world around us

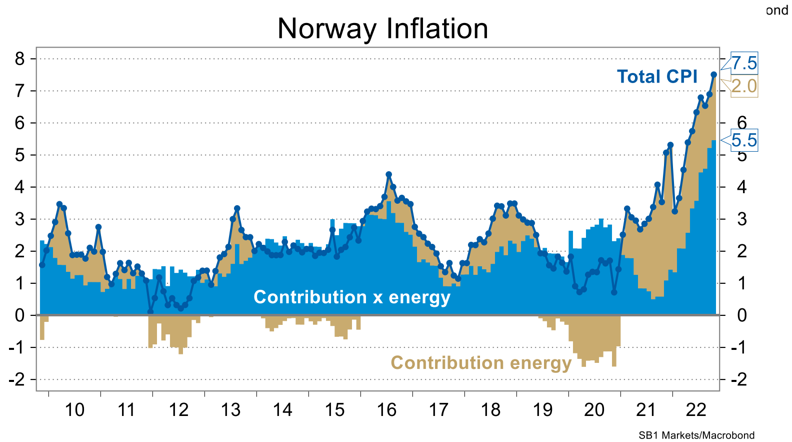
The Norwegian economy

Market charts & comments

Inflation surprised sharply on the upside, once more

The 'real' core inflation up to 4.7%, 56% of CPI components up >5%. Challenging times for NoBa

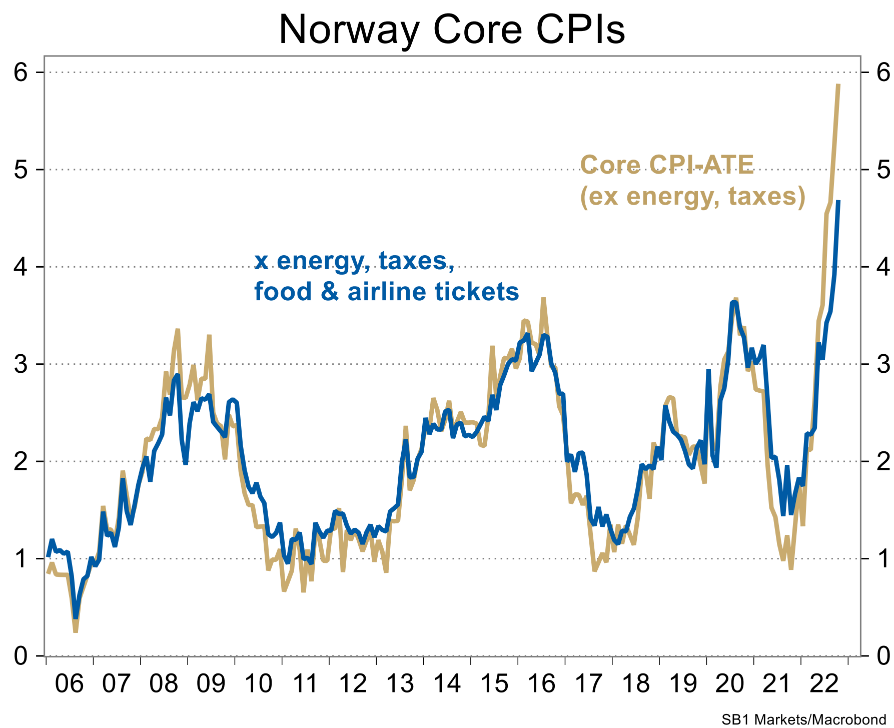


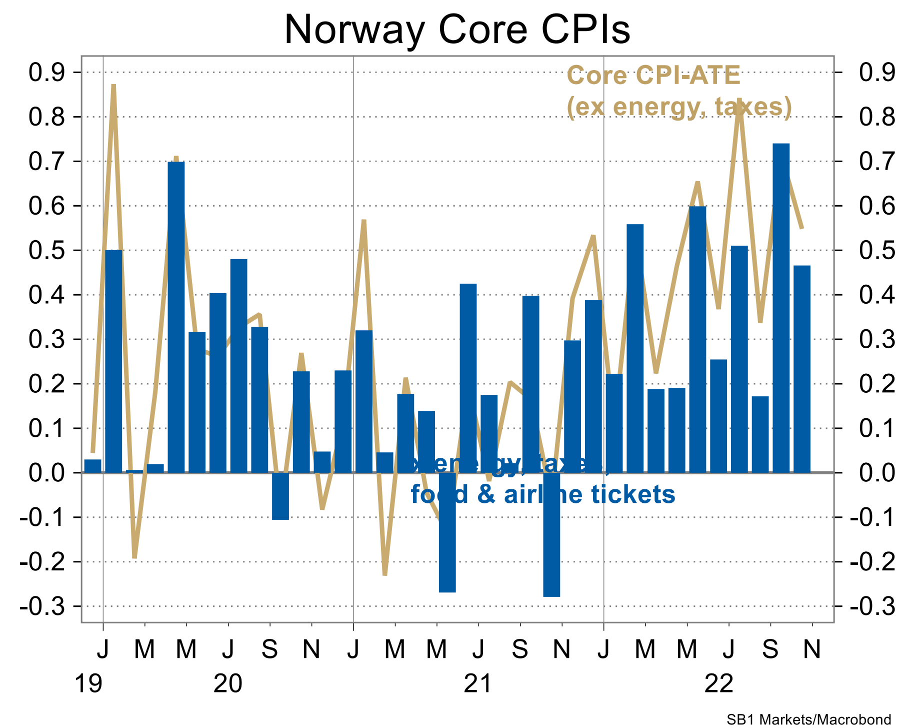


- **CPI-ATE** (ex. energy and taxes) rose 0.5% m/m (s.a) in October, and the annual rate climbed by 0.6 pp to 5.9% pp, we expected 5.5%, consensus was 4.9%, NoBa expected 5.0% in the Sept MPR!
- **Food prices** rose by 0.7% in Sept, we expected +0.5%. The annual rate is now at 13.0%. The annual rate will remain lofty the coming quarters. However, a<u>t one stage, prices will be cut, or at least flatten as the price pressure in the value change will reverse or abate</u>
  - » **Airline ticket prices** fell further, as the only main category where prices were significantly down
  - » Prices on **imported goods** climbed 0.6% m/m, and are up 6.1% y/y; **domestically produced** goods & services were 0.5% m/m and are up 5.9% y/y
  - » **10 sectors** reported growth above 2% y/y, and just 2 are below. All trimmed/median measures tell the same story: <u>Inflation has broadened, typically to 5% – 6%</u>
- **Total inflation accelerated by 0.6 pp**, to 7.5%, the highest since 1987. We expected 6.3%! Once more, we totally miscalculated electricity prices (probably due to the 1 m fixed price contracts) – but now these prices HAVE to fall sharply in the November CPI
- **The outlook**
  - » Most of the lift in **electricity prices** are behind us, due to the generous government subsidies
  - » **Gasoline prices** are on the way down and will contribute to a decline in headline CPI
  - » If so, **average 2022 inflation** will be some 5.8%, and above Norges Bank's 5.4% f'cast. The core inflation may average 3.9%, just 0.2 pp above NoBa's f'cast
  - » We expect inflation to slow faster than Norges Bank expects, as the economy slows, and raw material prices decline, including energy prices
- **So what?**
  - » **Inflation** is above NoBa's f'casts, and while imported inflation is high, it explains 2.2 pp of overall inflation of 7.5%. Take away energy and food as well, and domestic inflation is still way above 2%
  - » 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, even if the economy has slowed somewhat before that. Still, we doubt NoBa's 4.6% 2023 wage inflation forecast is too low, it is rather too high!
  - » NoBa signalled another 25 bp hike in December. Even if inflation is far too high, <u>we expect the bank to deliver just a 'single' hike</u> – barring surprisingly strong GDP (next week) or unemployment data (late Nov), or a strong Regional Network (early Dec). Still, <u>the bank will probably lift the 'terminal' rate in the rate path</u>, to 3.25% or more likely (as we see it today) to 3.5%, from 3.1%. A deep decline in home prices in November may become the best (and only?) counter argument

The 'real' core is a problem too: Core ex food, energy & airline tickets up 4.7% y/y

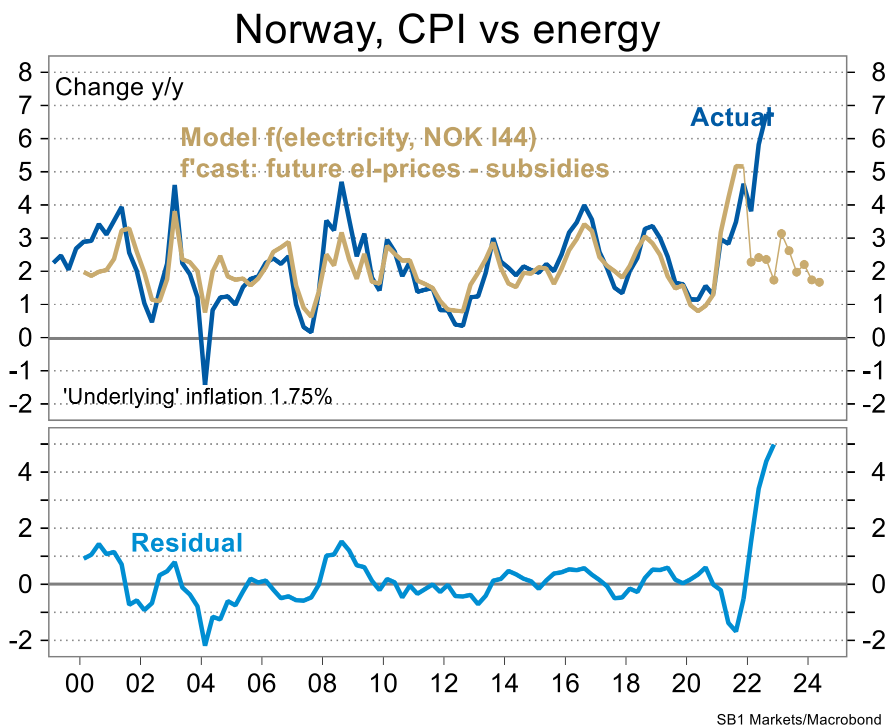
This real core gained 0.7% m/m

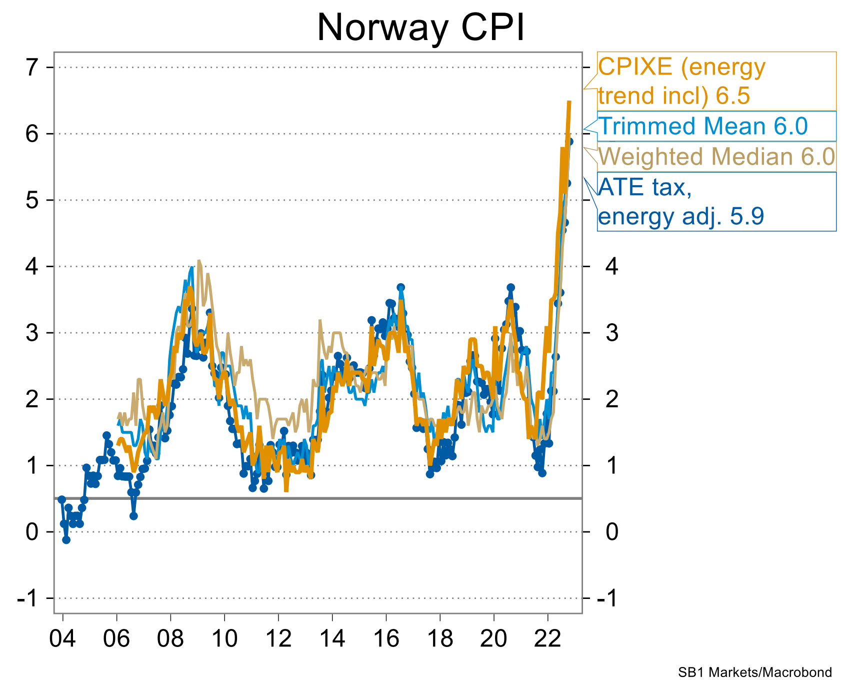




All measures of underlying inflation suggest a broadening, to a 5% – 6% level

… and inflation is far higher than suggested by electricity prices & NOK



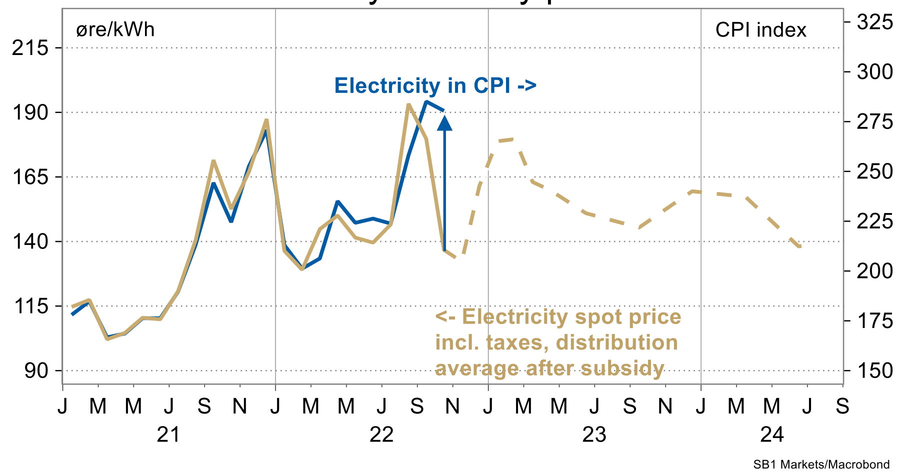


- 84% of sub-components of the CPI are up more than 2%
- <u>56% are up more than 5%</u>

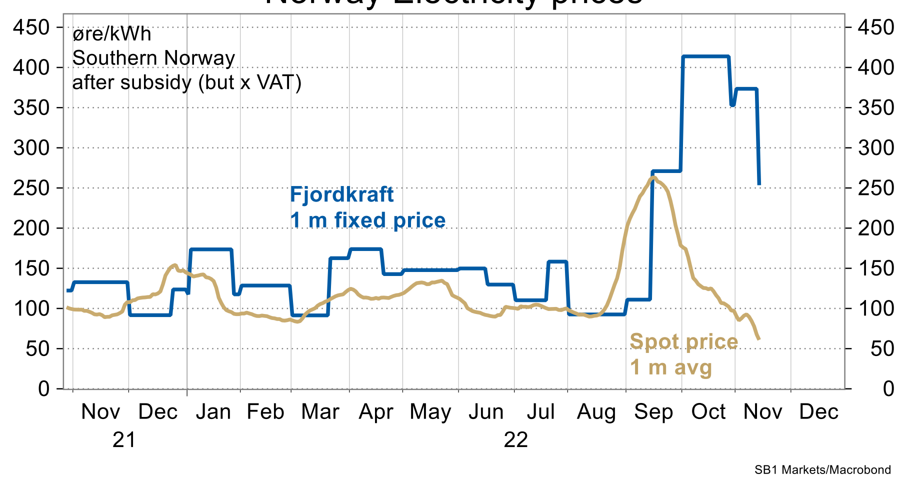
Our estimate miss of the year! Electricity spot prices collapsed in October

… but too many customers stayed on 'variable fixed price contracts', and paid a terrible prize for that

Norway Electricty prices



Norway Electricity prices



- Average household price at the upper chart: Spot prices, adjusted for government support, national weigthed average of the 5 price regions, adjusted for holiday & large homes, distribution costs (nettleie), taxes, VAT… everything available
- Our model worked pretty well until September, where SSB reported a higher average price than we assumed – and <u>then a terrible miss in October</u> (the blue arrow)
  - » We expected a 22% decline, SSB reported a 1.6% decline
- The CPI level, including our miss in September, is 33% higher than indicated by the spot price (+our ton of adjustments). It seems like fixed price contracts or semi-variable contracts can explain the discrepancy.
  - » There are numerous reports in media recent days regarding the 1 m fixed price contracts which was set at very high level in mid September for the month of October (based on high forward market prices and perhaps some 'extra' margins?). In October, these customers did not receive much electricity subsidy, which is based on the spot price, and their energy bill exploded! We have never seen such a discrepancy vs. the spot based contracts before!
    - ▪ 75% of households have contracts tied to the spot price, 17% have variable fixed price contracts (typically one month fixed price contracts), and just 6% have a fixed prices contracts. <u>As those 'variable fixed 17%' of contracts yielded 2 – 3 x higher electricity bill than the spot price contracts, our miss of the year is at least explained…</u>
  - » Going forward, whether customers remain at these variable fixed contracts or not following the October price shock, the average electricity bill decline substantially, as the November fixed price bill will be cut by some 35% (in Southern Norway, impact on the total CPI el. index -6%), and the average spot prices probably will decline somewhat too
  - » will close the gap to the spot price, at least in December (November is still exposed, as spot prices so far have fallen further, and the fixed price for November probably is down

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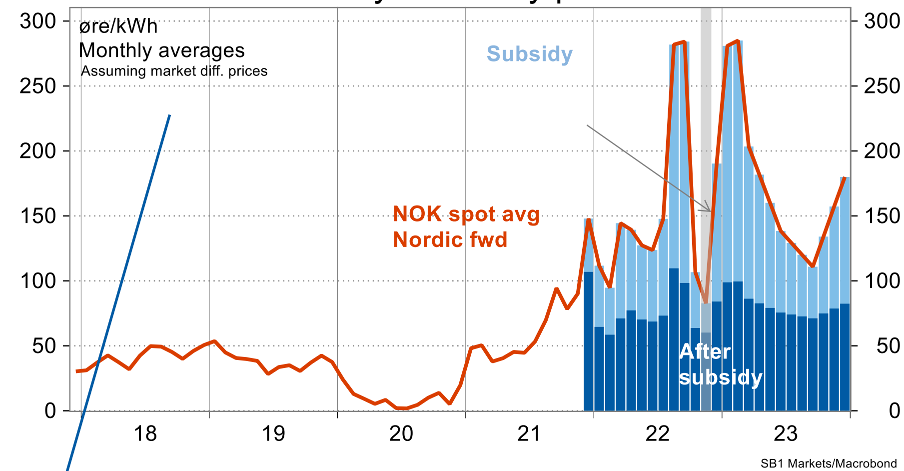
Electricity future prices sharply down but still very high!

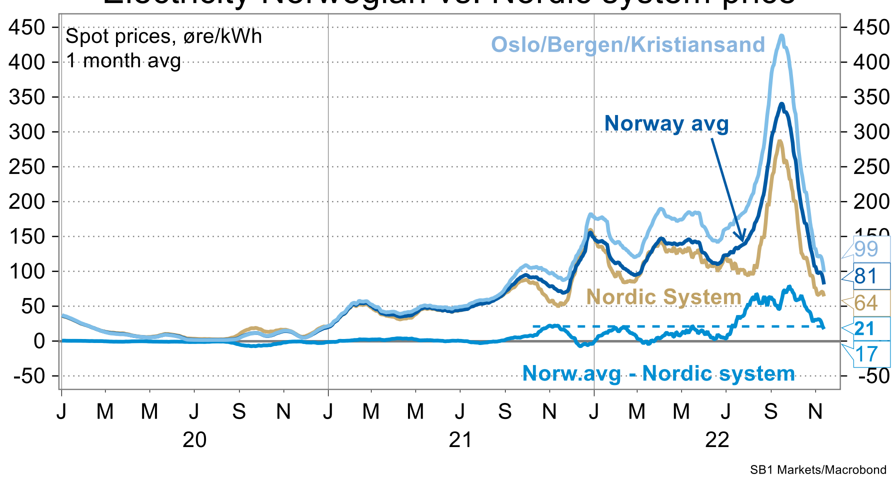
The Q4-22 future price still up 5x since before the war started!

Norway Electricity prices

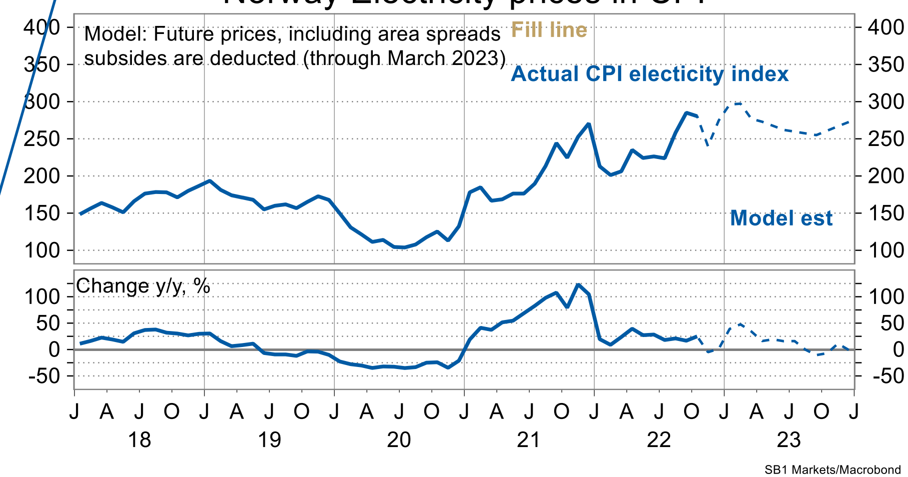
Norway electricity prices



Electricity Norwegian vs. Nordic system price



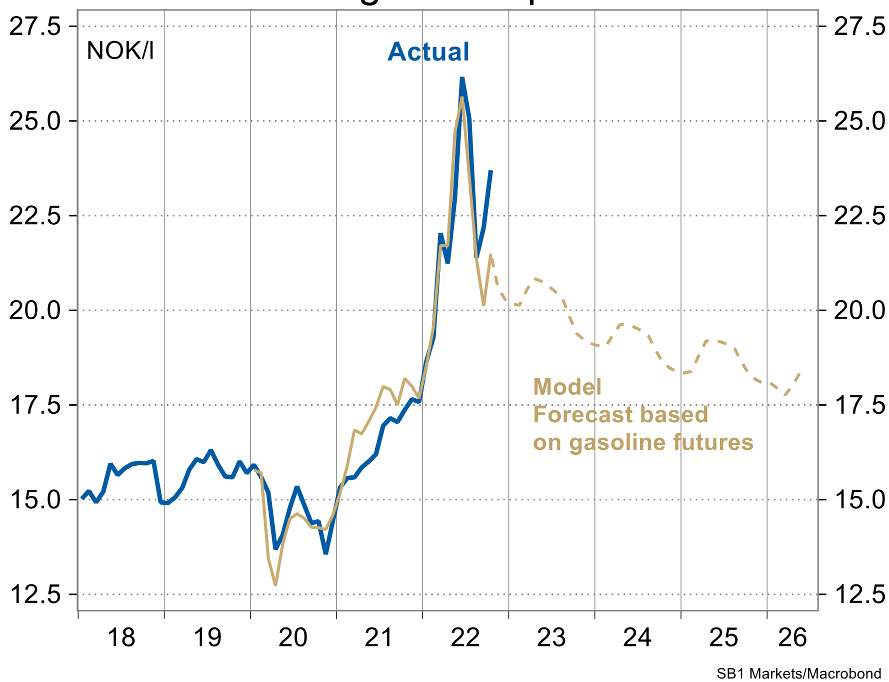
Norway Electricity prices in CPI



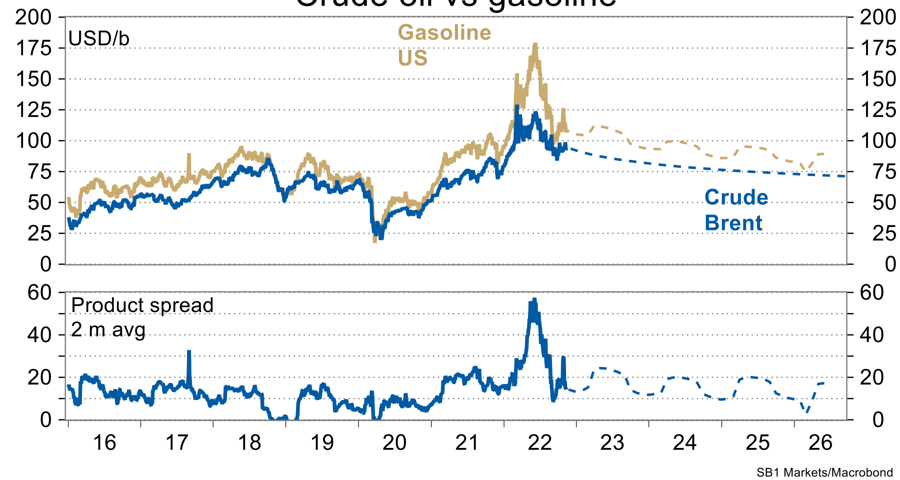
Gasoline prices further up in October

However, some downside potential coming months?

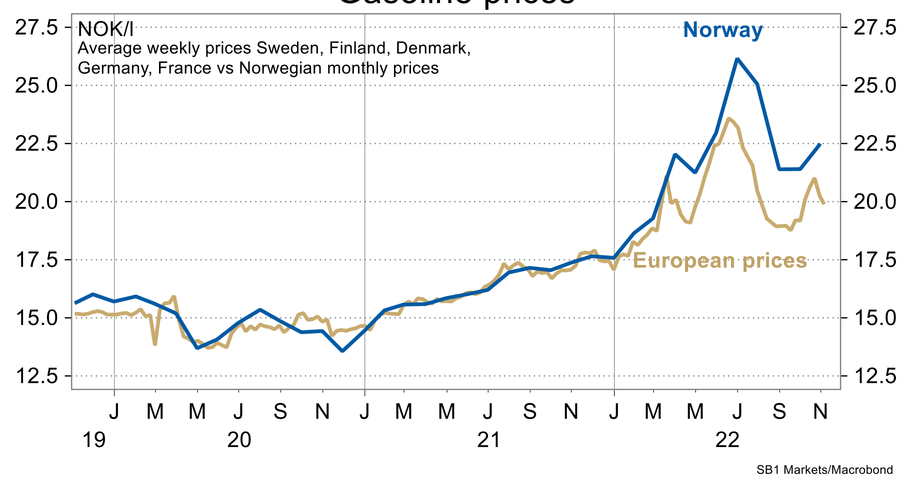
NOK gasoline prices



Crude oil vs gasoline



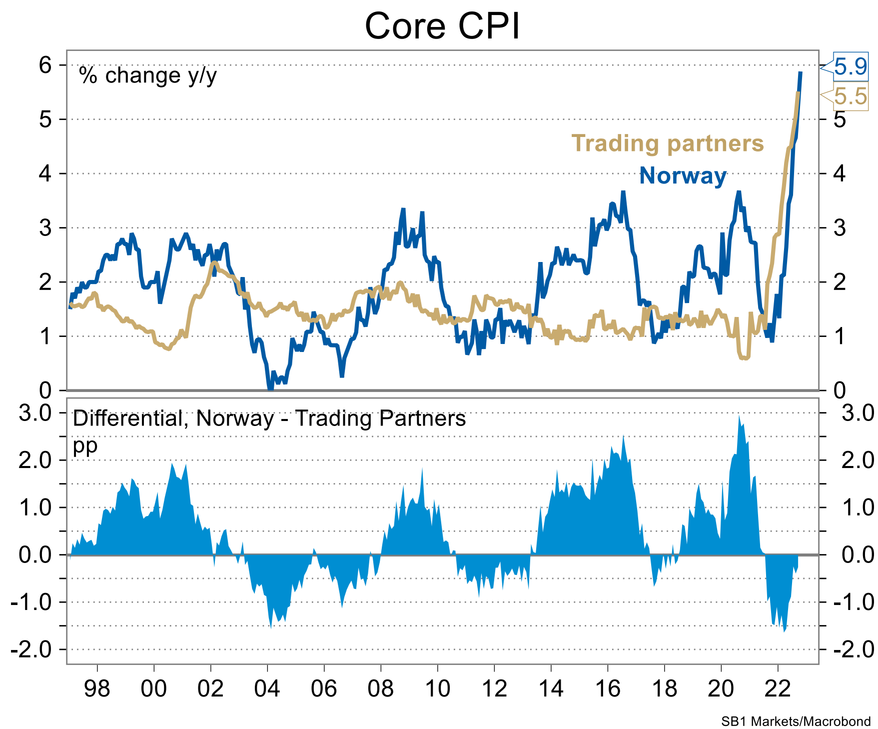
Gasoline prices

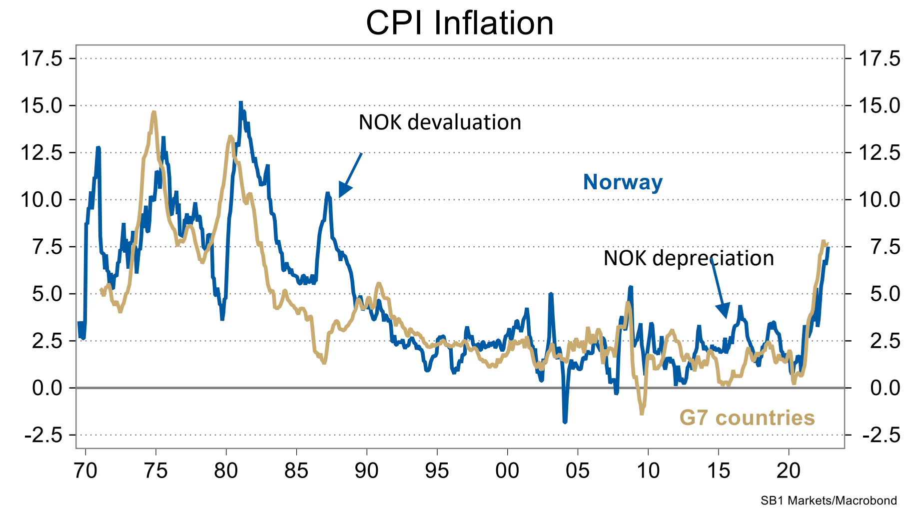


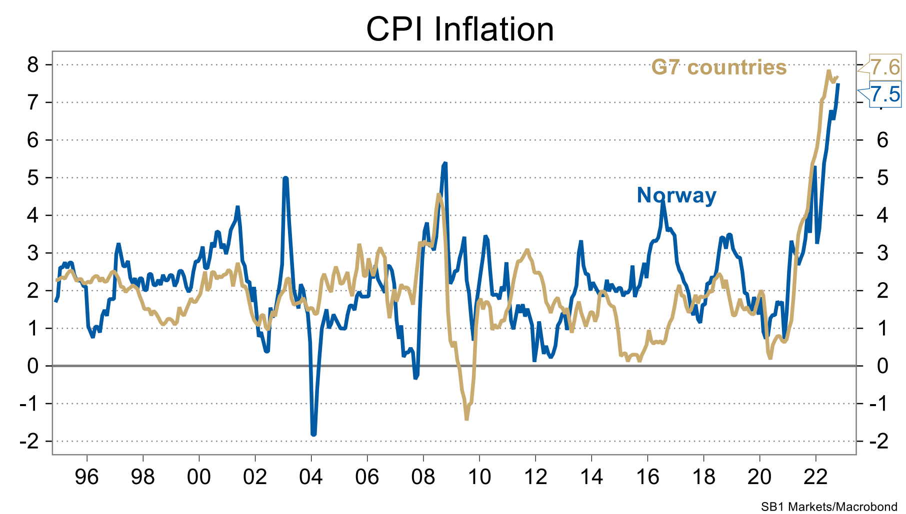
- Refinery/product margins widened in early 2022, but have fallen back to normal level. In the US as well as in Europe, gasoline prices fell until mid September, but turned up again until mid October. Now, prices are falling again

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

Domestic inflation still very high, and rather broad

Electricity prices rose far more than we expected

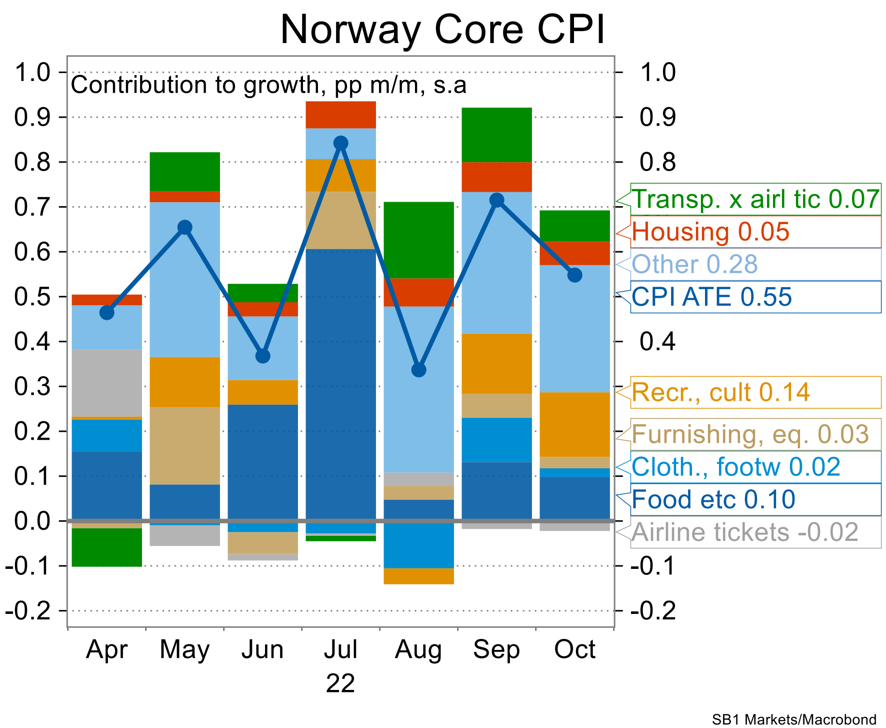
		Change m/m, seas. adj			Change y/y			Contribution, pp		
Oct-22	Weight	Out-	SB1M	Dev.	Prev.	Out-	SB1M			Dev. vs
CPI ATE, seas adj.	%	come	f'cast	pp	month	come	f'cast	m/m	y/y	f'cast
Food, non alc bev	12.9	0.7	0.5	0.2	12.1	13.0	12.3	0.09	1.67	0.03
Alcohol, tobacco	4.2	0.7	0.5	0.2	7.2	7.8	7.6	0.03	0.33	0.01
Clothing, footwear	5.1	0.4	0.2	0.2	0.6	1.6	1.4	0.02	0.08	0.01
Housing x. energy	20.2	0.2	0.3	-0.1	2.4	2.4	2.5	0.05	0.49	-0.01
Furnishing	6.9	0.3	0.2	0.1	7.6	8.2	8.1	0.02	0.57	0.01
Health	3.4	0.5	0.3	0.3	2.8	3.3	2.9	0.02	0.11	0.01
Transp. ex. gas, airl. tick	12.2	0.5	0.3	0.2	4.7	5.8	5.1	0.07	0.70	0.03
Airline tickets	0.8	-2.6	0.2	-2.8	34.8	17.2	22.8	-0.02	0.14	-0.02
Communication	2.4	1.1	0.2	0.9	1.1	2.5	1.2	0.02	0.06	0.02
Recreation, culture	10.8	1.3	0.3	1.0	4.3	6.0	4.6	0.14	0.64	0.10
Education	0.5	-	-	-	2.3	2.3	2.3		0.01	0.00
Restaurants, hotels	5.6	0.3	0.3	-0.0	8.0	8.1	8.2	0.02	0.45	-0.00
Other	8.7	-0.1	0.2	-0.3	2.0	1.9	2.2	-0.01	0.17	-0.02
CPI-ATE, s.a	93.7	**0.5**	**0.3**	0.2	**5.3**	**5.9**	**5.5**			0.23
Norges Bank est.			***0.0***		***5.0***		***5.0***			
Imported	36	0.6	0.2	0.4	5.2	6.1	5.5	0.21	2.20	0.14
Domestic	57	0.5	0.4	0.2	5.3	5.9	5.5	0.30	3.37	0.09
Energy, housing	4.4	-1.6	-22.0	20.4	16.7	24.9	-0.9	-0.07	1.09	0.90
Energy, transport	2.0	5.1	5.0	0.1	32.9	35.1	35.0	0.10	0.68	0.00
CPI Total	100	**0.6**	**-0.6**	1.1	**6.9**	**7.5**	**6.3**	0.56	7.51	1.14
Norges Bank est.			***-0.2***		***6.0***		***5.8***			
Change m/m, seasonally adjusted (calc by SB1M)										
Sum of parts does not necessarily add up to totals										

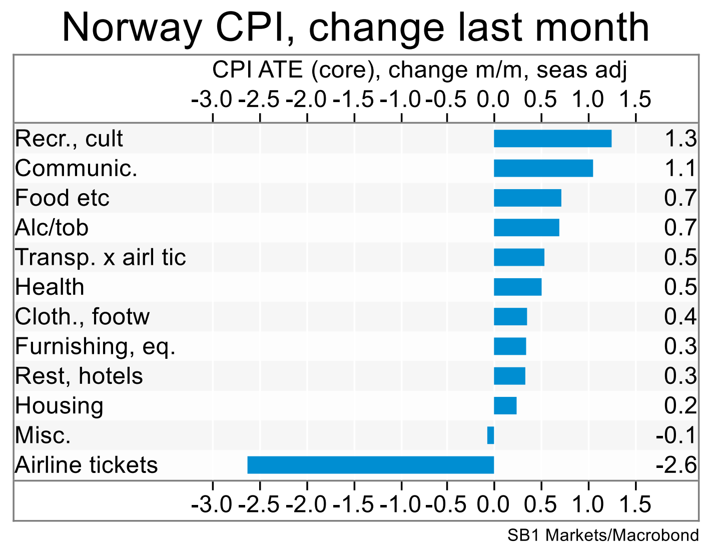
- **Food, non-alc bev.** prices rose 0.7% (ex taxes, seas. adj), we expected a 0.5% increase. The annual growth increased 0.9 pp to 13.0%. The 'real' inflation is far lower
- **Clothing** prices rose 0.4% m/m. Clothing prices are up 1.6% y/y, 0.2 pp above our expectations
- **Furniture/hardware/equip.** prices up 0.3%/8.2%
- **Transport ex. gas & airfare tickets** rose 0.5%, up 5.8% y/y, surprisingly low given global auto prices
- **Airline tickets** prices were down by 2.6% m/m but are up 17% y/y, from a low level last year
- **Recreation** prices were up 1.3%, and 6.0 y/y. TVs contributed the most to the m/m lift
- **Restaurant/hotel prices** up 0.3% m/m, 8.1% y/y
- **CPI-ATE** up 0.5% m/m, 5.9% y/y, 0.2 pp above our forecast and the consensus f'cast, and 0.9 pp above NoBa's 'cast
- Prices on **imported goods** rose 0.6%, and are up 6.1% 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 5.9% is remarkably high
- **Electricity (and other heating)** prices fell just 1.6%, we expected a HUGE decline!
- Gasoline/diesel prices rose 5% m/m, as we expected
- … **headline inflation rose to 7.7%, 1.2 pp above our f'cast due to our miss on electricity prices, and 1.7 pp above Norges Bank's estimate**

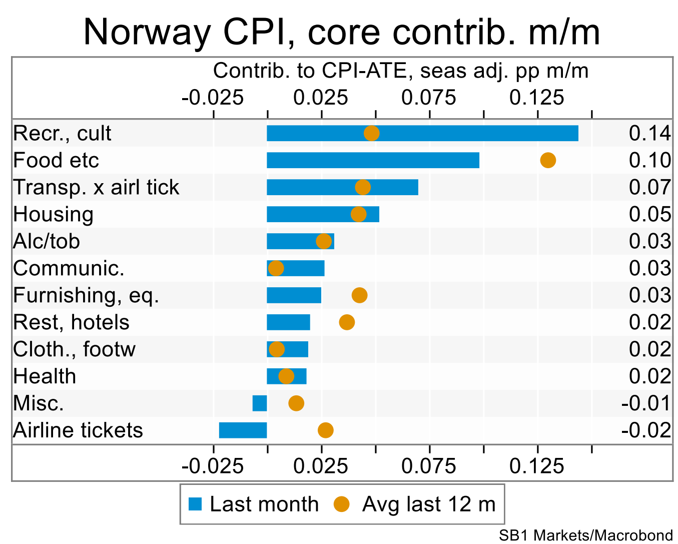
Monthly changes are seasonally adjusted by SB1 Markets. The weighted sum of the components does not necessarily sum exactly up to the total, and deviations m/m and y/y do not necessarily add up. Norges Bank m/m s.a. estimate is implied, calculated by us. Sources: SSB, Norges Bank, SB1 Markets calculations

October: Everything, barring airline ticket prices, contributed on the upside

Food, recreation, transportation x airline tickets contributed the most

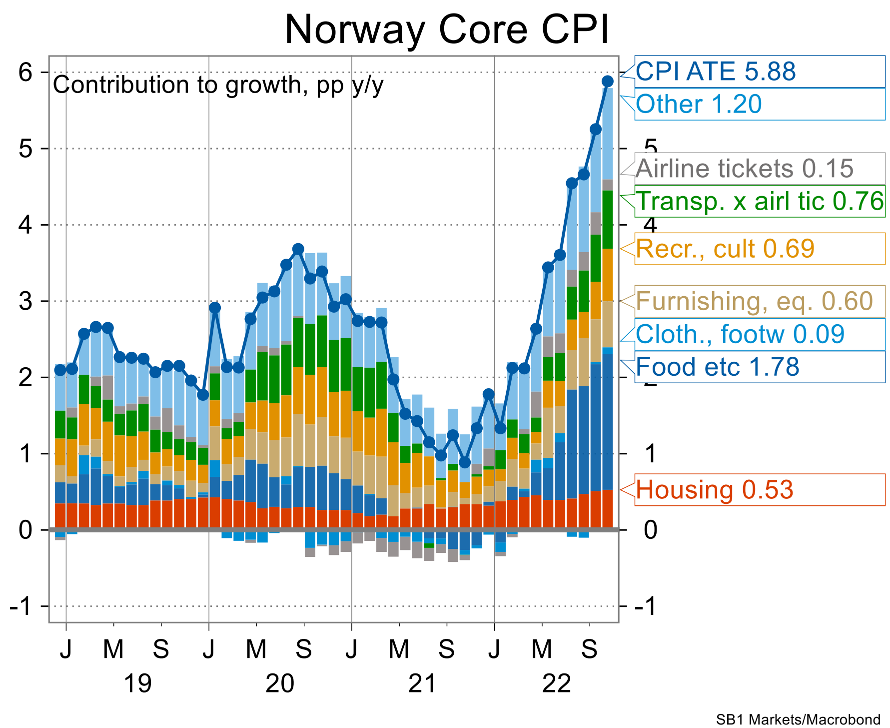


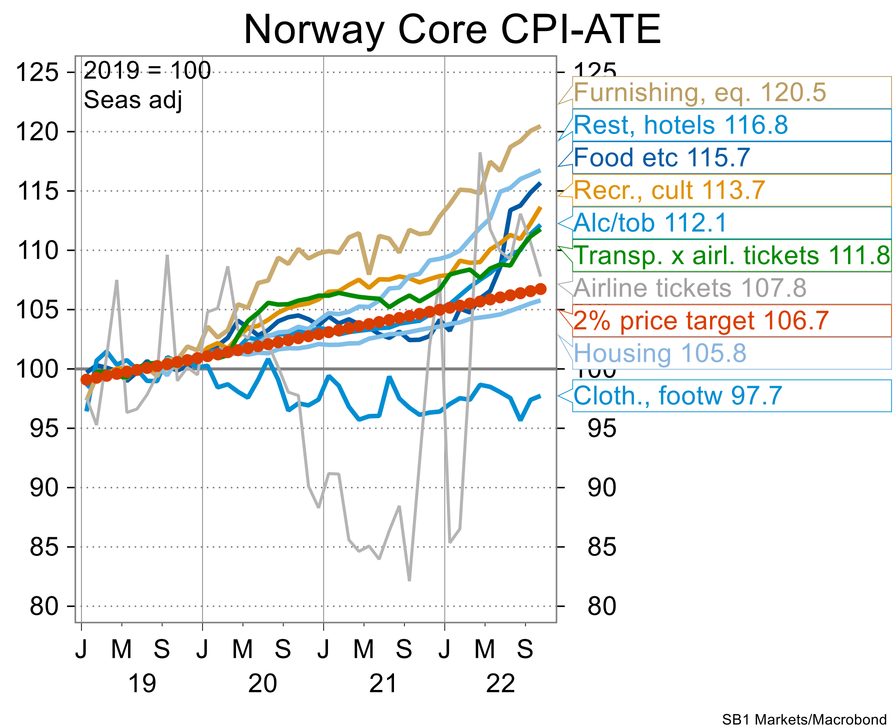




Faster/broader price growth recent months

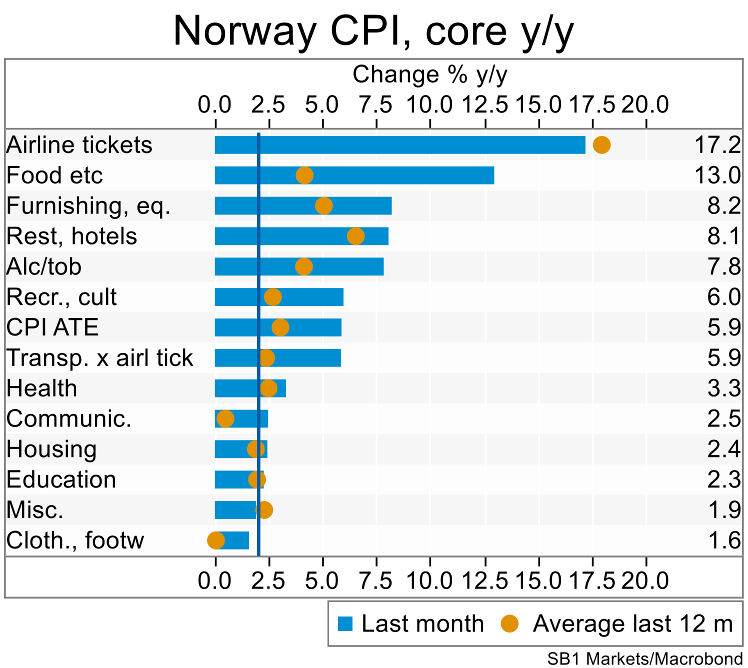
Just clothing/footwear, and housing ex energy below the 2% path since 2019

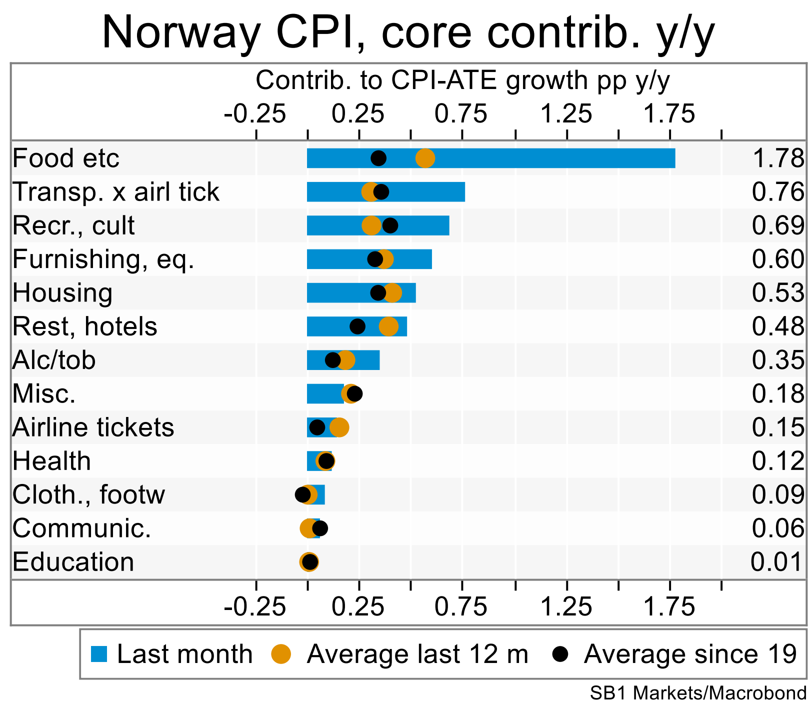




10 sectors report core inflation above 2.0%, just 2 are below. 56% sub-comp.>5%

Food, furnishings, housing, and transportation have contributed the most y/y

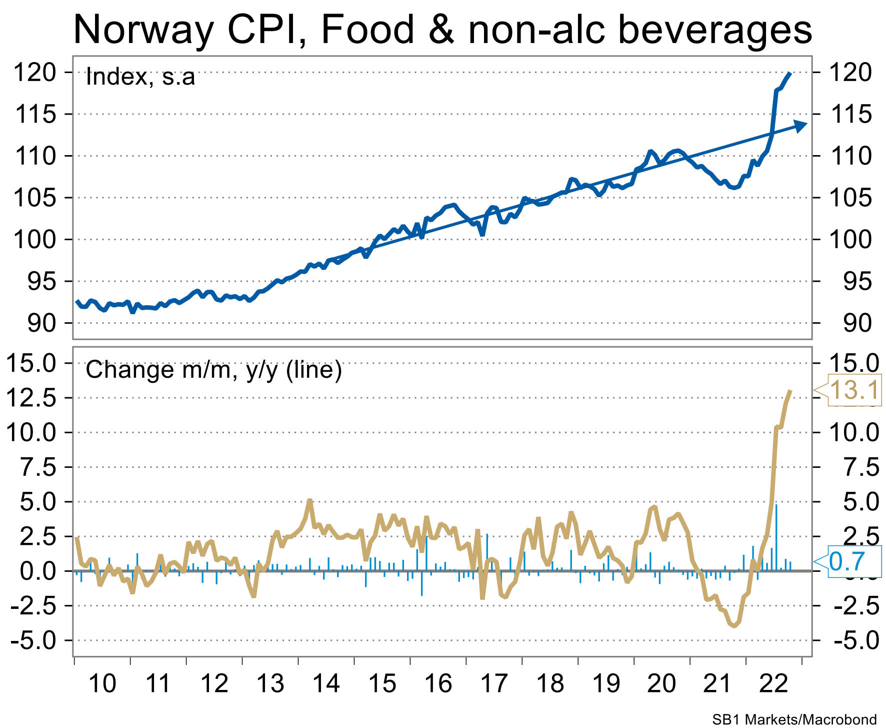




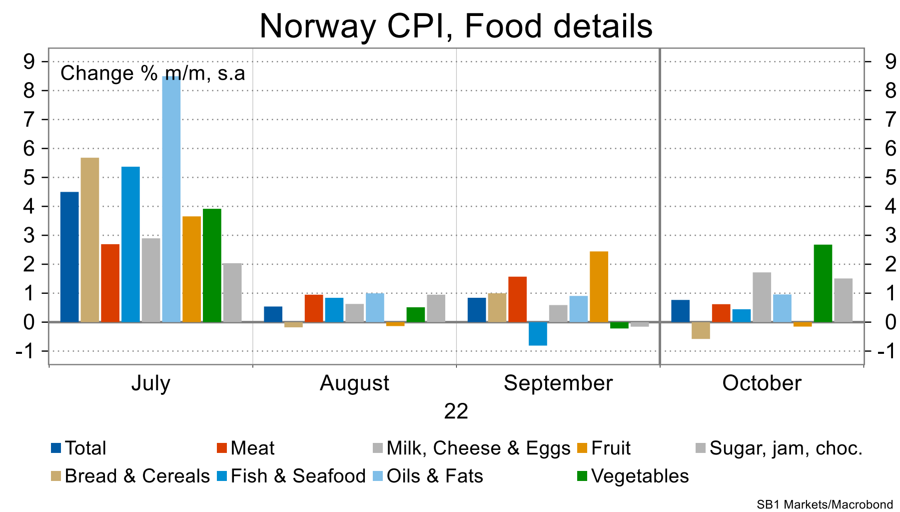
- 84% of sub-components of the CPI are up more than 2%
- 56% are up more than 5%

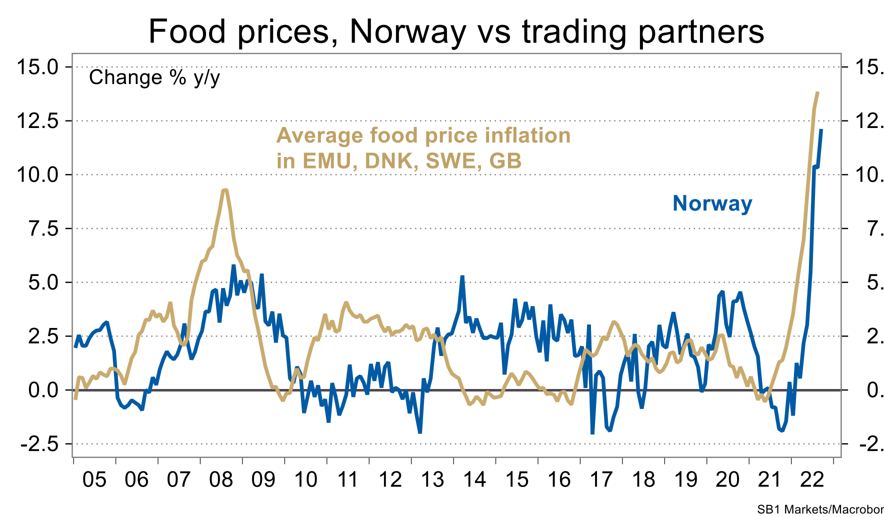
Food prices are up 13% y/y but 'just' some 5% above 'trend'

The 'real' food inflation, from a 'normal' price level last year would have been 'just' 8%



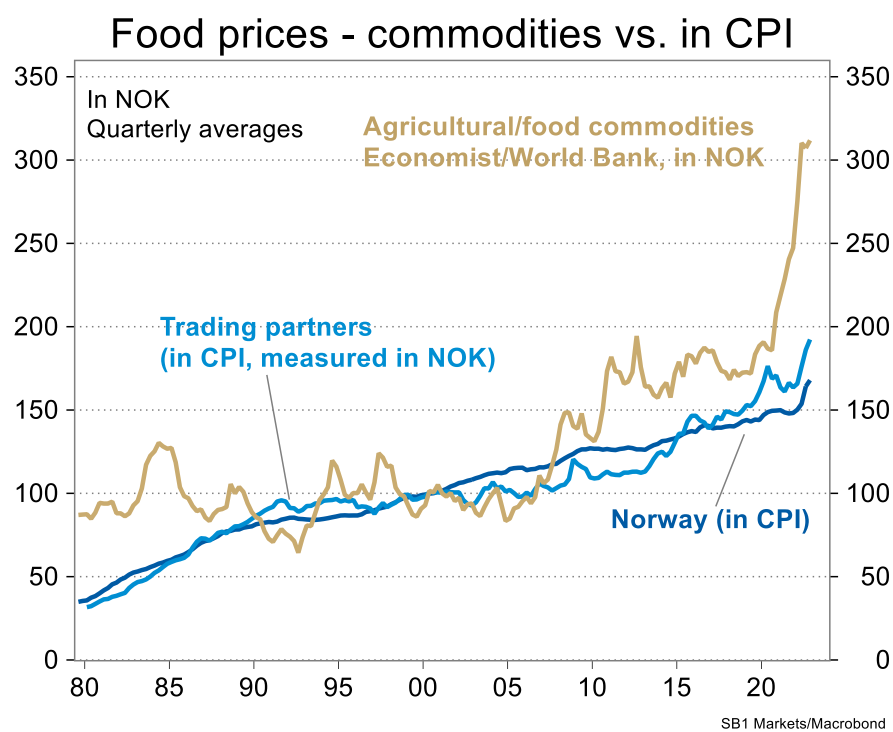
- Prices up 0.7% m/m and 13.1% y/y. Vegetables up almost 3% in October, but milk and sugar (including honey, we assume) also rose sharply. Bread/cereal prices fell
- Norwegian food prices are now up in line with prices abroad – which is not the norm at all in the highly regulated Norwegian agricultural/food market. The good news now: Food prices (commodities) are trending down globally (at least measured in the strong USD)

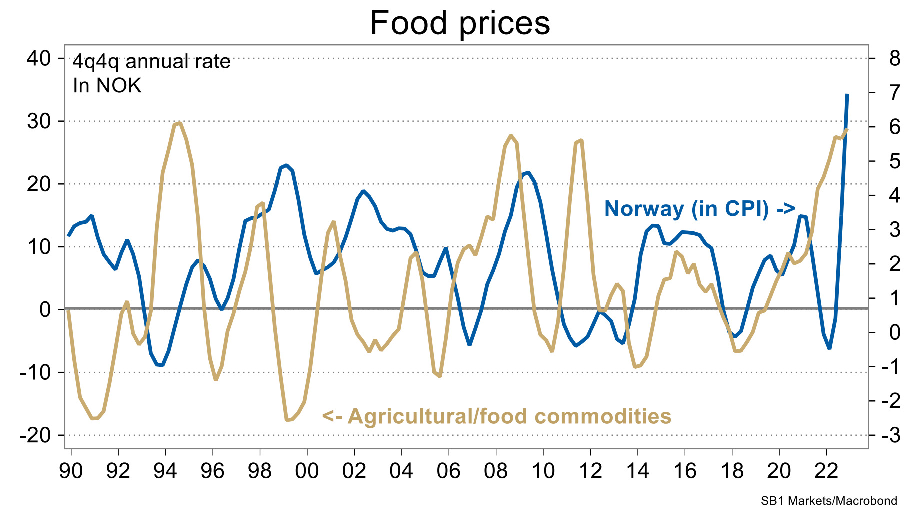


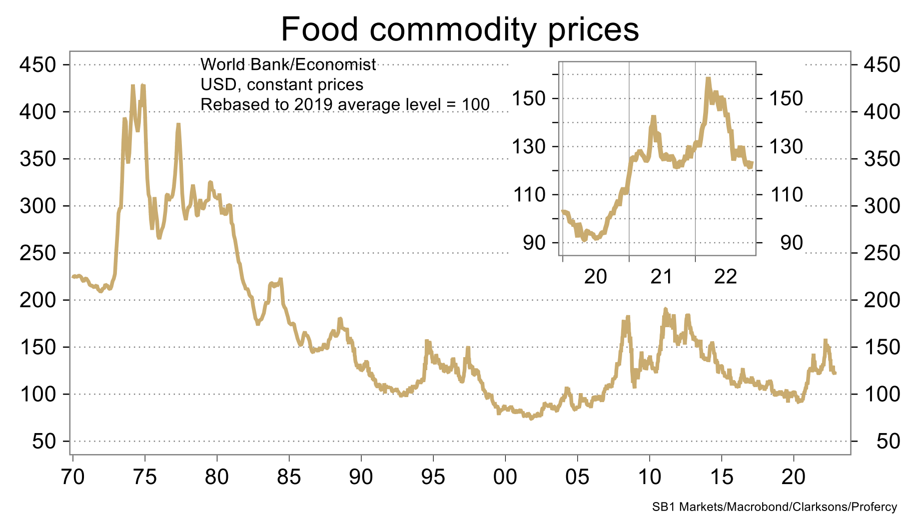


Food commodity prices: Limited correlation to trading partners' food prices

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



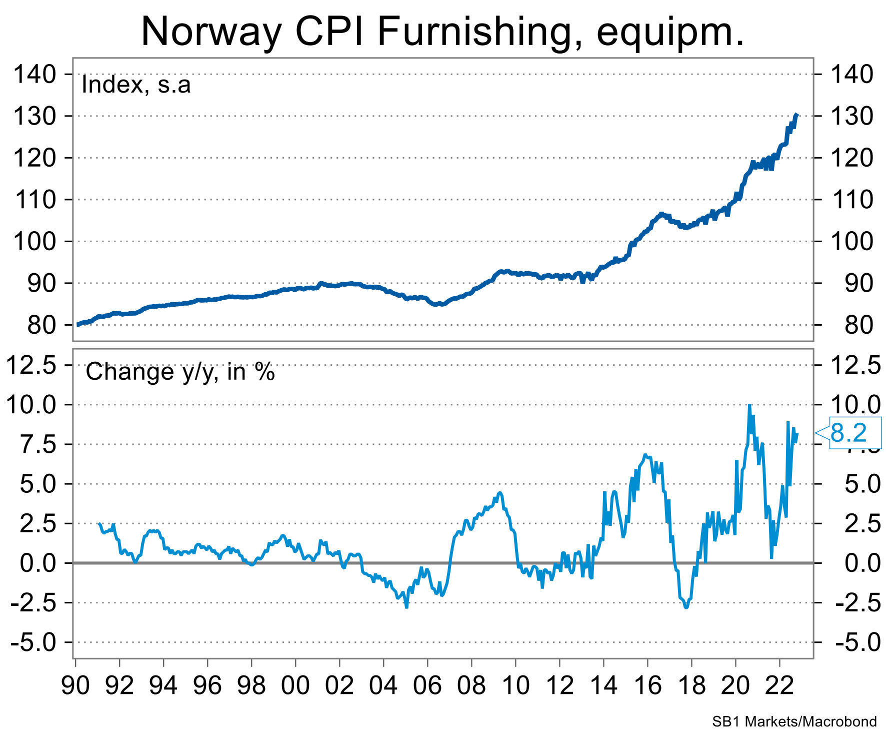


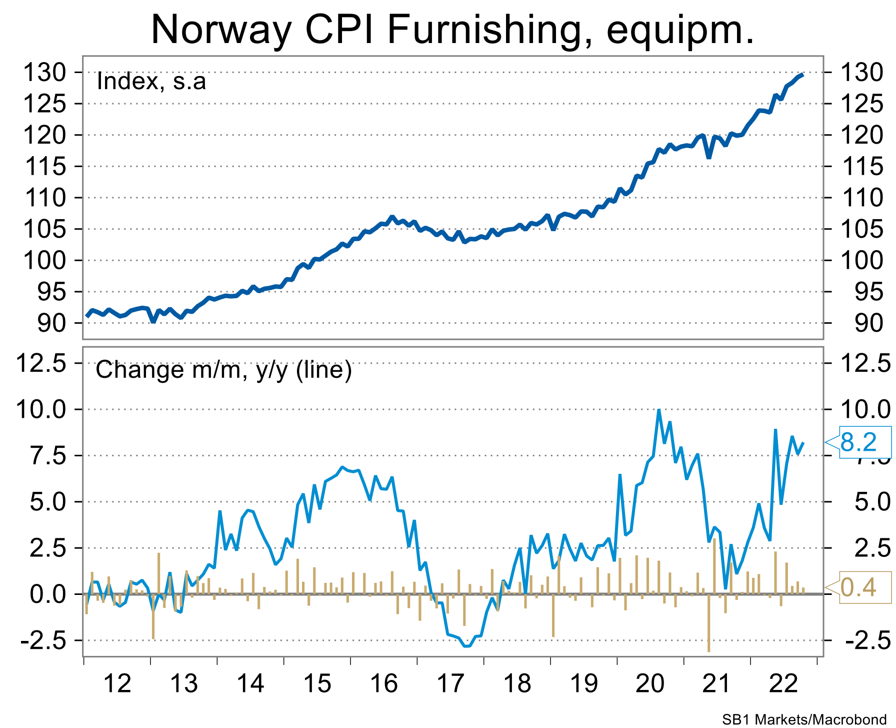


- Agricultural/food commodity prices are sharply up from mid 2020 but have fallen sharply since March in USD terms. In real USD terms, prices are below the past 10 y average. However, measured in NOK, prices are not that low…

Furnishing etc. prices up 0.4% in October – and by 8.2% y/y

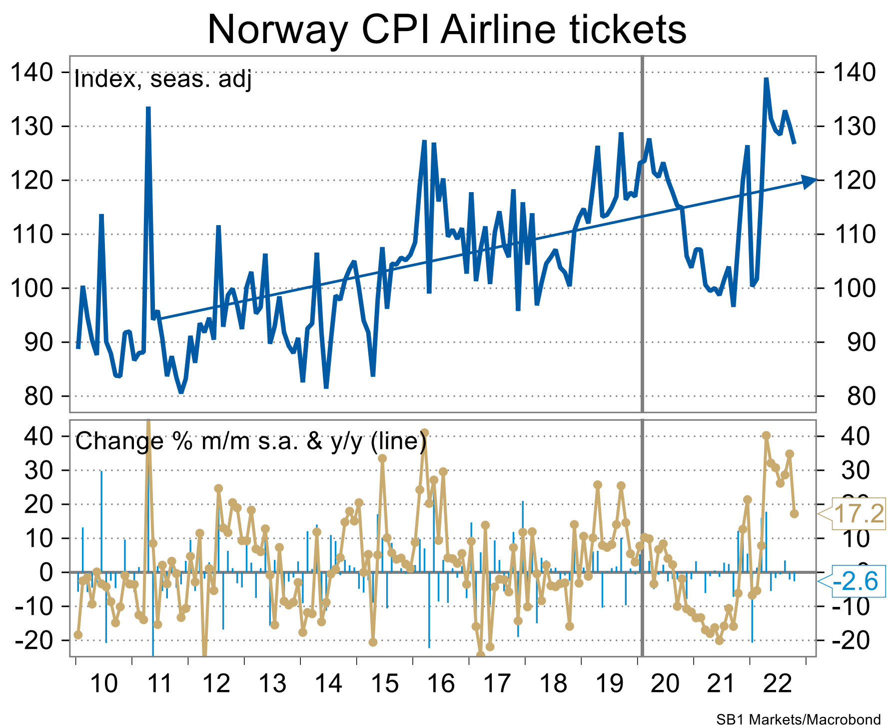
Furniture up 10% (and on the way down)



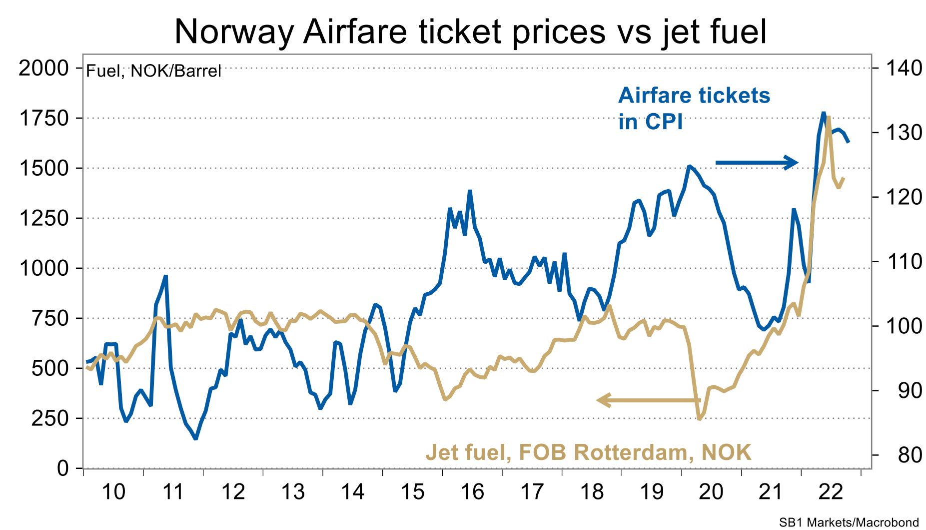


Airfare ticket prices marginally down in October too

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

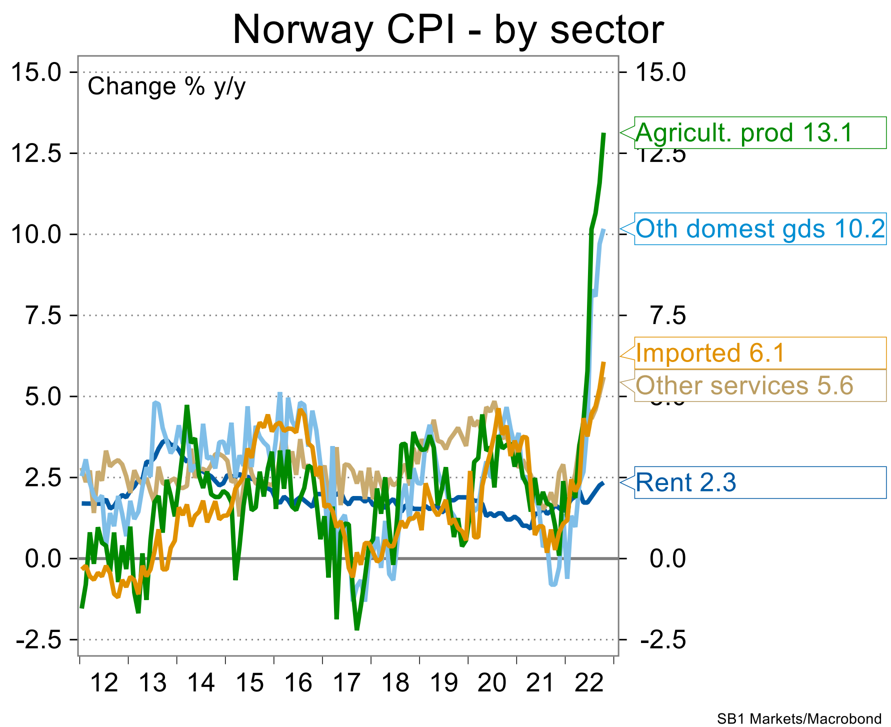


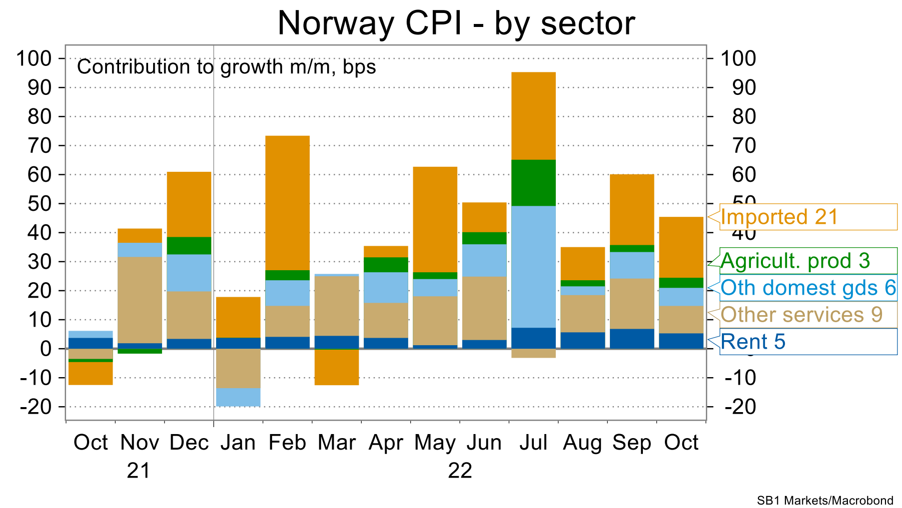
- **Airfare ticket prices** were down 2.6 m/m in October. Prices are up 17.2% y/y, contributing 0.14 pp to the annual core rate
- **Prices** are less than 10% above the pre-corona trend path – which could at least partly be explained by the increase in the fuel cost
- However, there is no historical correlation between ticket prices and the **fuel cost**, check the chart below (and fuel prices have fallen 20% since June but may now turn up again)

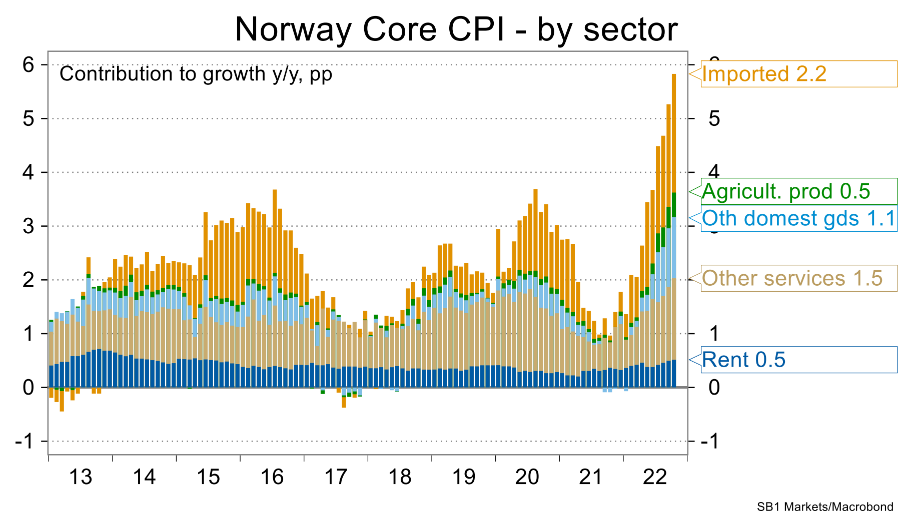


Services and imported goods contributed the most on the upside in October

Domestic goods up 10.2%, services 5.6%



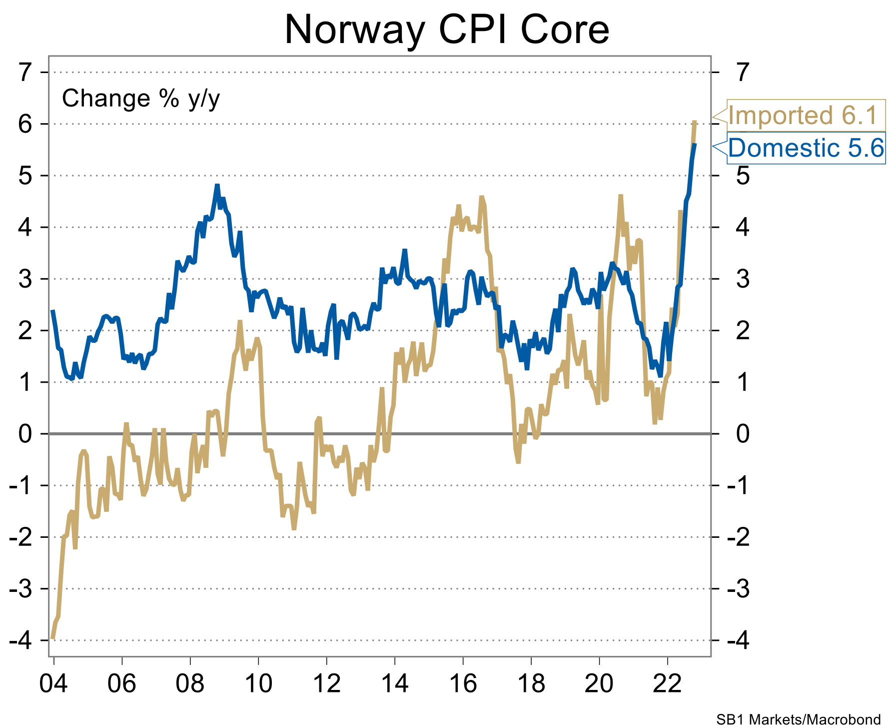


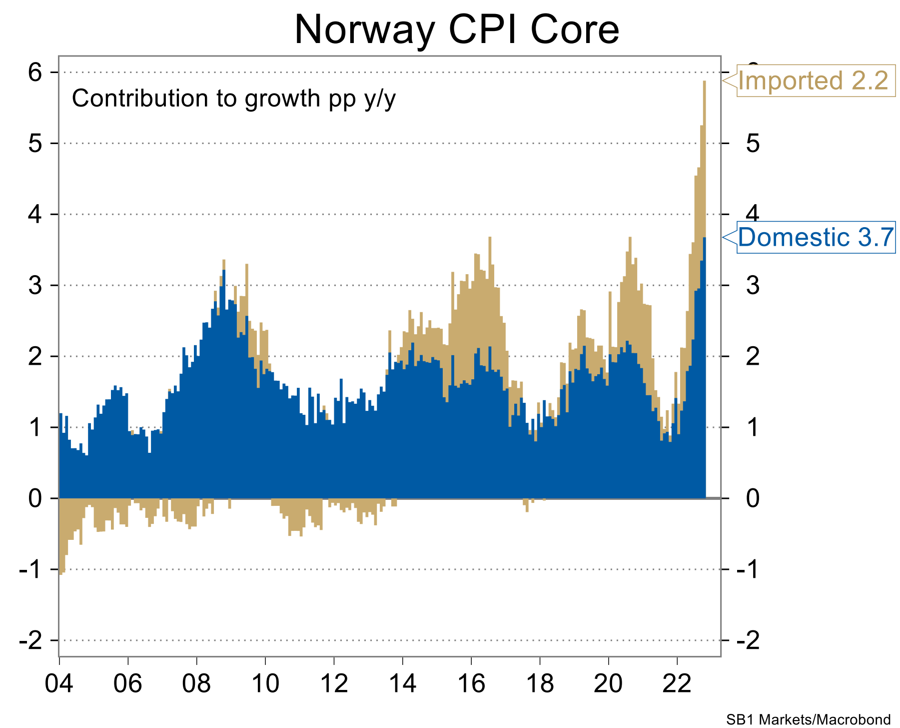


- **Domestic services inflation ex rents** slowed sharply during the corona crisis, and is now climbing faster, up 5.6% y/y, contributing 1.5% to core inflation, with hotels/restaurant and recreation/culture (partly services) contributes the most
- **Domestically produced agricultural products** are up 13.1% y/y, new ATH, contributing 0.5 pp to the overall core rate
- **Other goods** than agricultural & imported products (that are produced in Norway) are up 10.2% y/y, and contributed 1.1 pp to the core inflation rate, by far the highest ever
- Rent inflation is still modest, at 2.3%

Both imported goods and domestically produced goods & services contribute

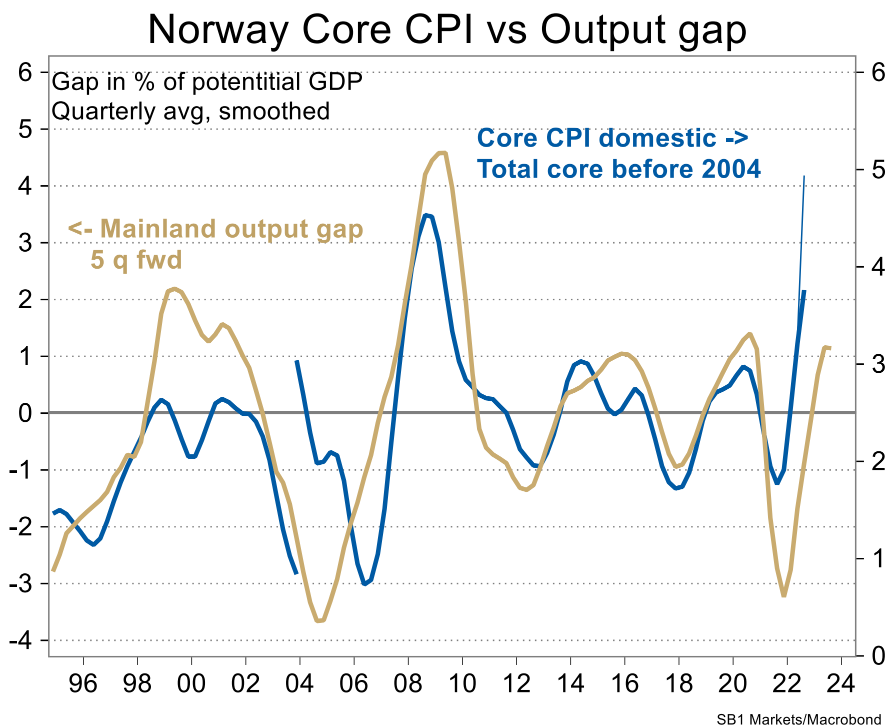
... and the domestical component is by far the largest contributor

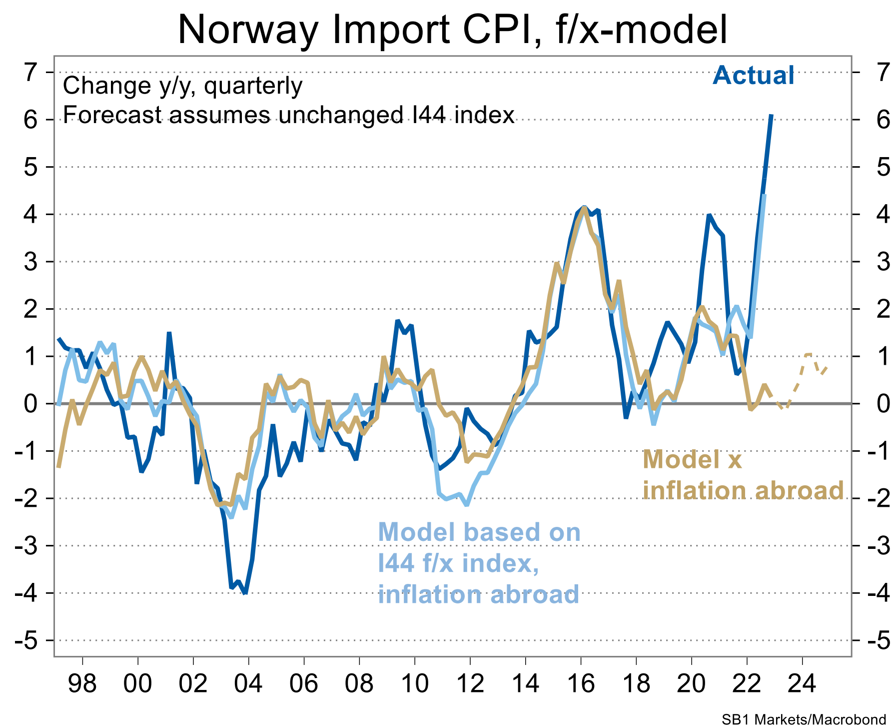




Domestic inflation up due to a strong domestic economy? At least partly

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

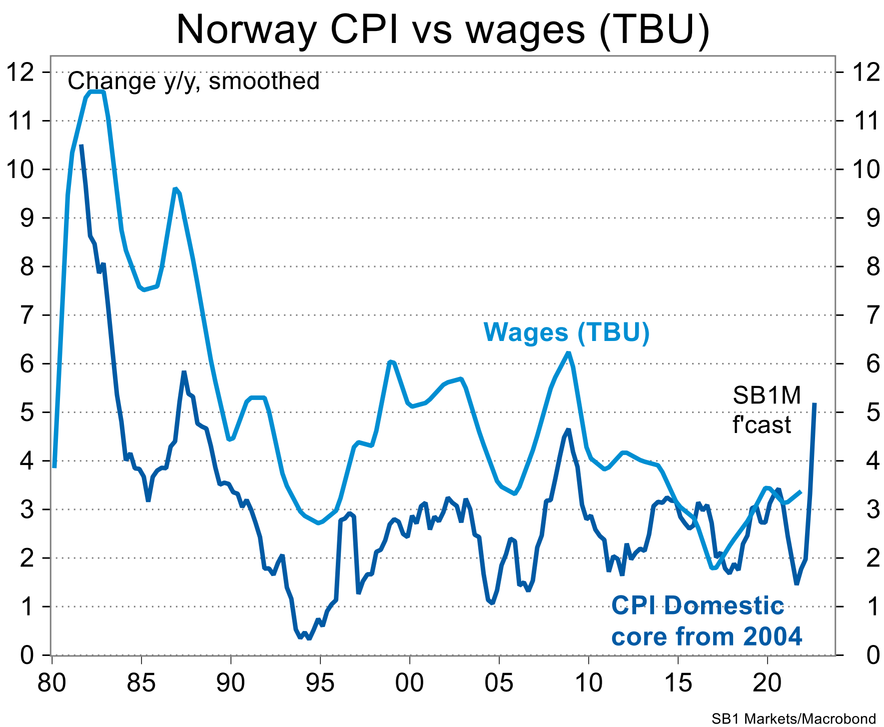


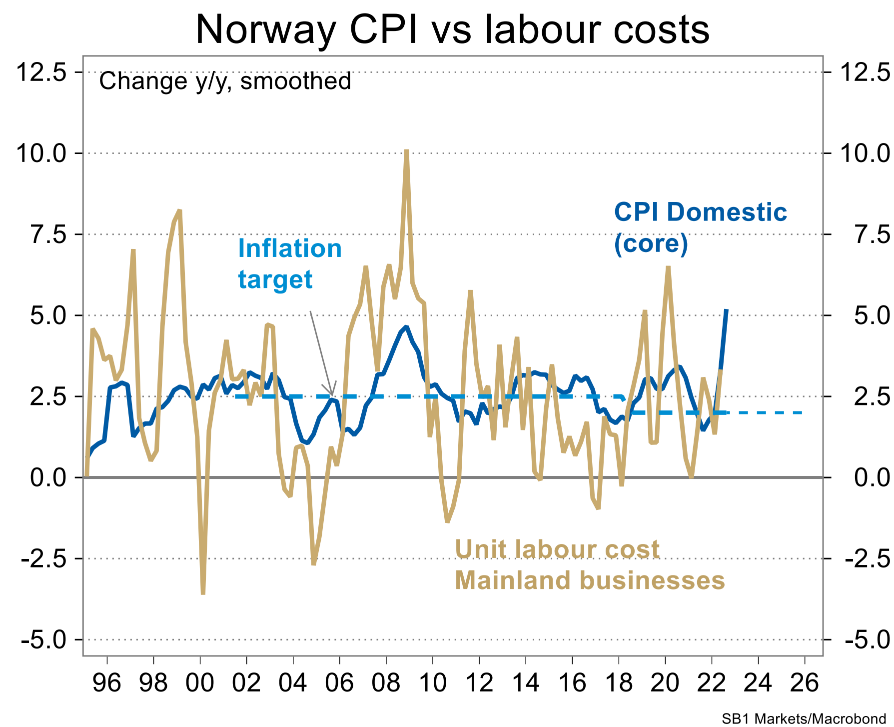


- **... if inflation abroad** is included in the model, together with the exchange rate. If inflation is **not included**, imported inflation is underestimated by close to 6%. Thus, the 'weak' NOK is not to blame for higher prices on imported goods, but rather high inflation abroad
- **Labour market 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 not far above 2%

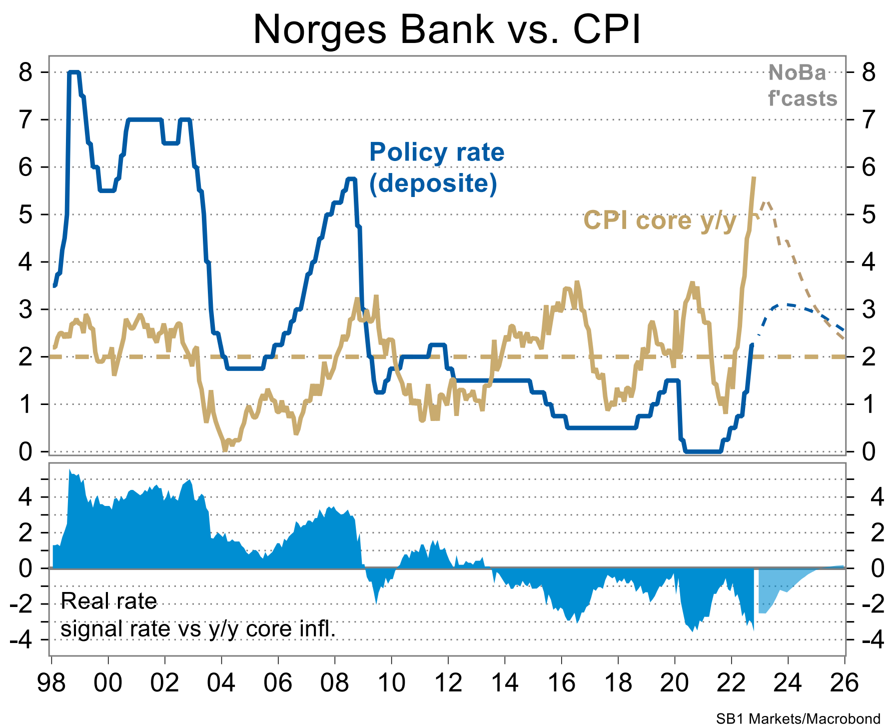


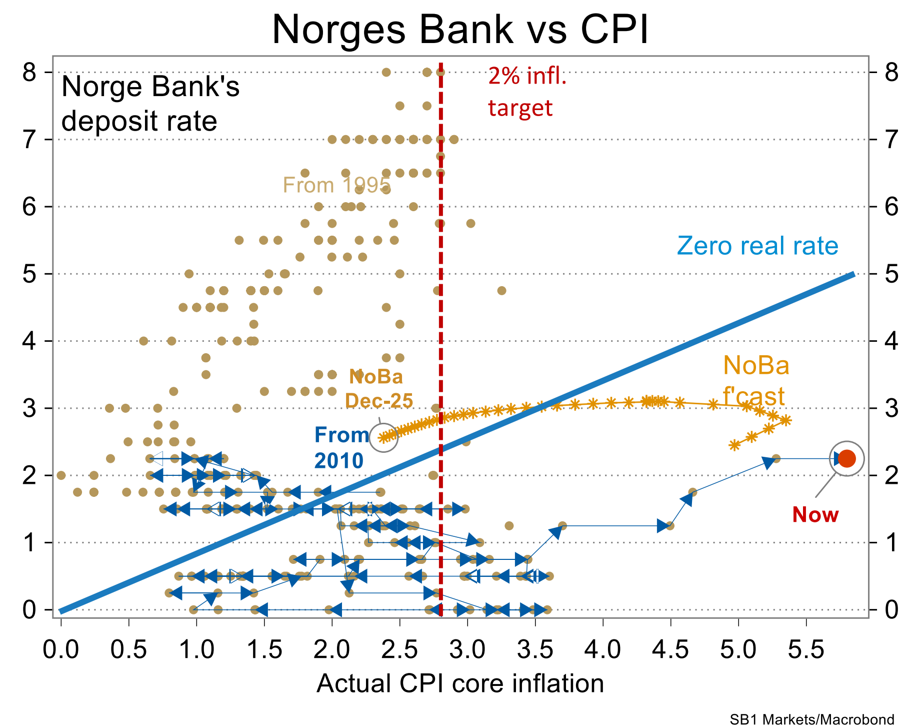


- Unit Labour Cost is us some 3% y/y

Higher inflation is increasing the pressure on Norges Bank

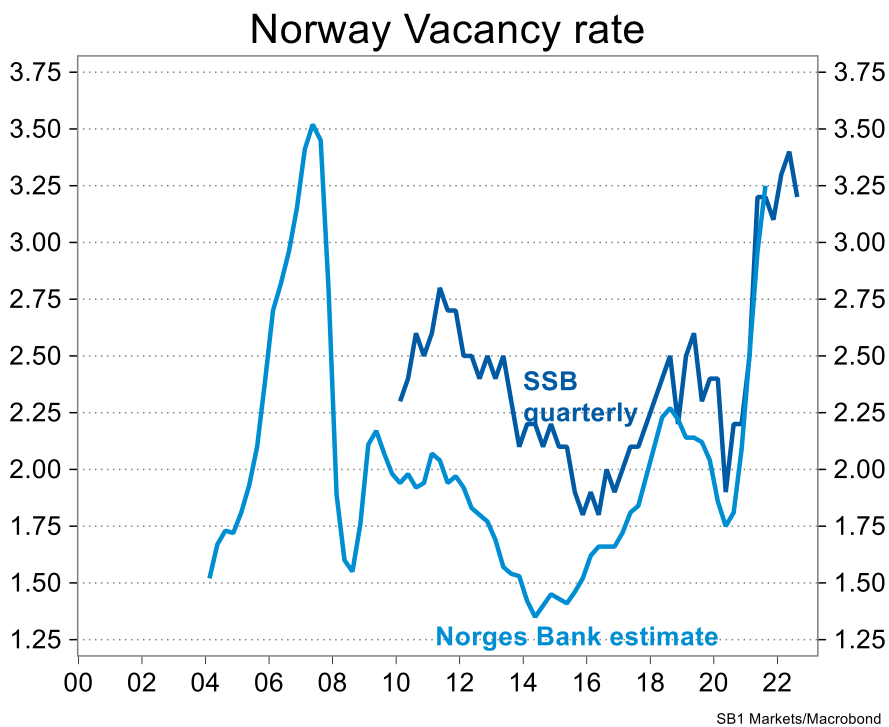
The recent data, combined with higher that assumed growth, adds fuel to the +50 bps hike crowd

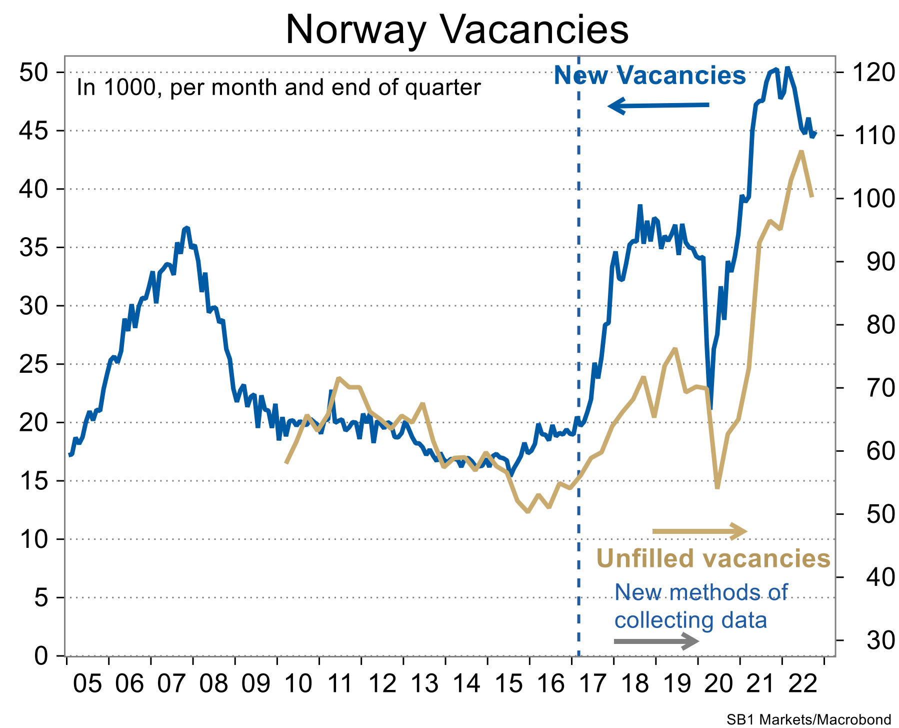




The unfilled vacancy rate down 0.2 pp to 3.2% in Q3, still a very high level

The inflow of new vacancies has also peaked – but the level remains very high





- Now more foreign workers have returned, and we cannot blame the lack of foreigners – and besides: Whatever reason, the lack of labour is the highest in more than a decade. (SSBs stats date back to 2010, Norges Bank has published some data back to 2004 – and they are not identical)

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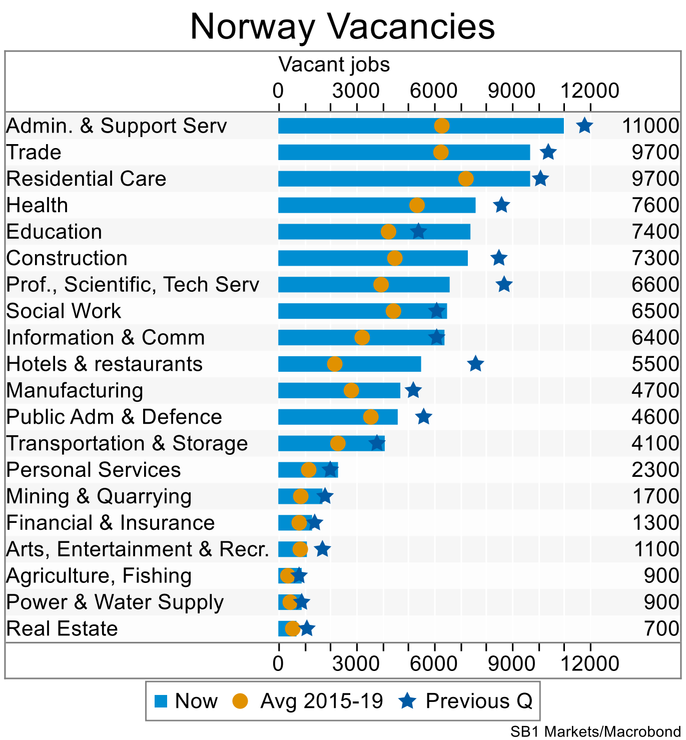
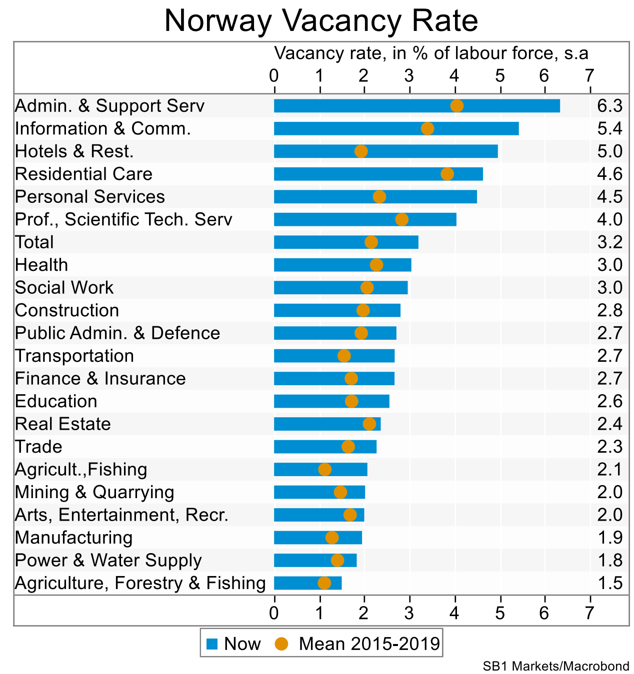
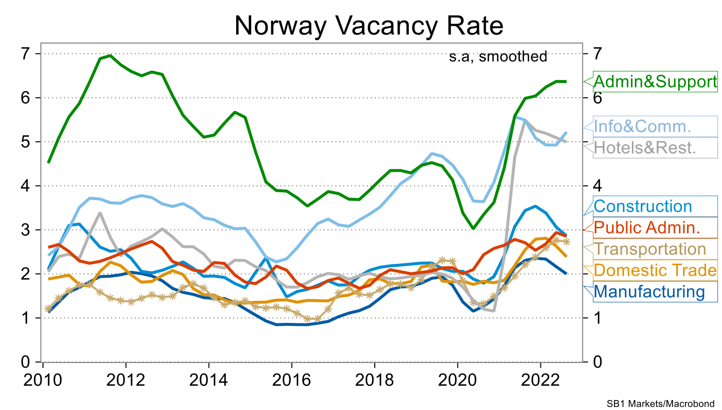
More vacancies than normal everywhere, but most sectors report a decline in Q3

11 sectors down in Q3, 5 sectors report more unfilled vacancies



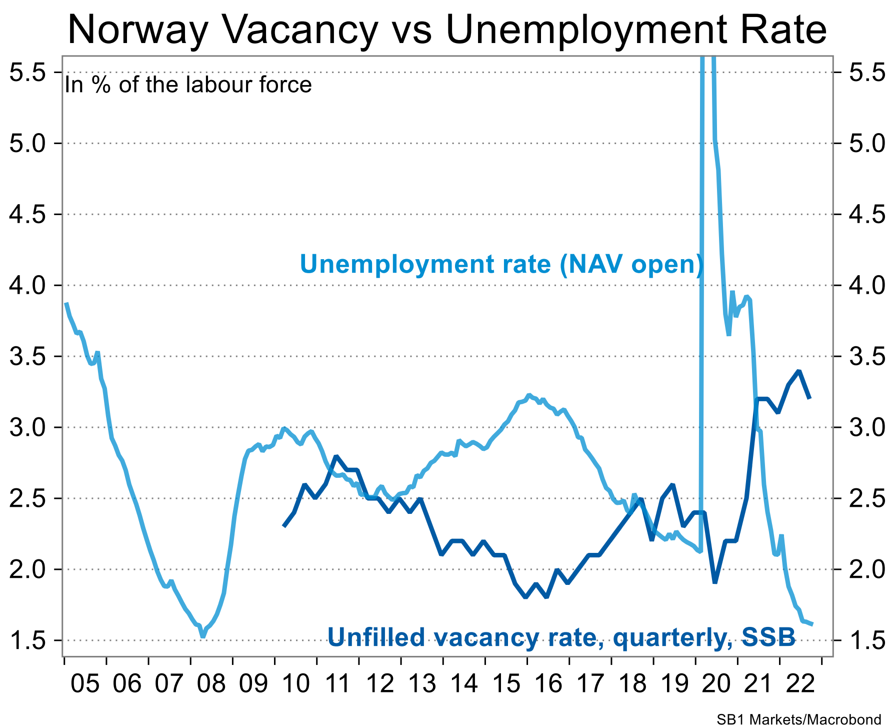


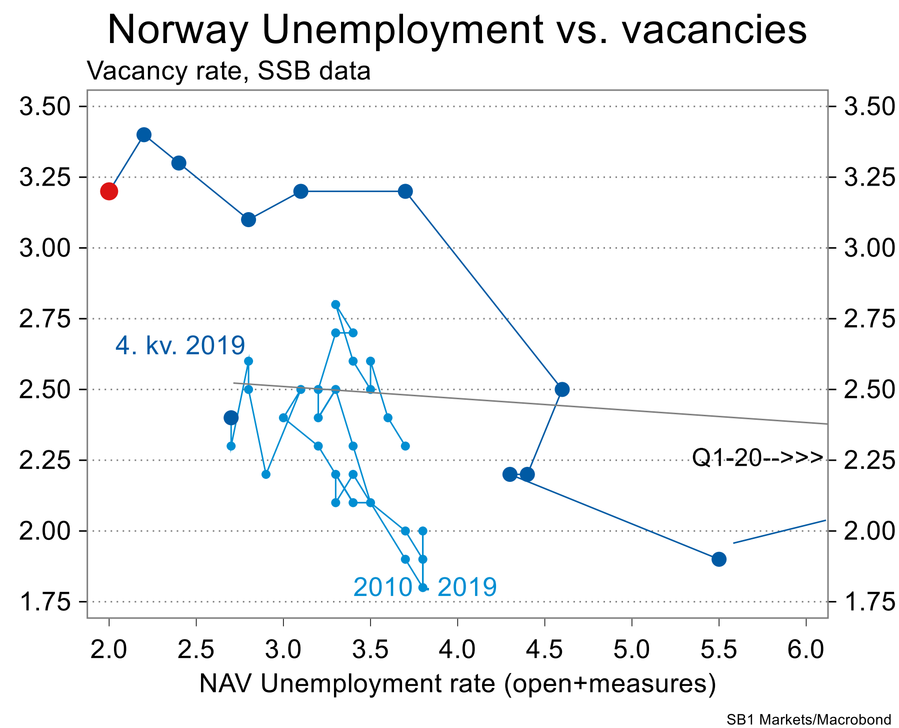


- The highest **no. of vacancies, and the highest vacancy rate** are found in admin. & supportive services, even if activity in the latter is still lower than before the pandemic

‘Some’ mismatch or just a very tight labour market?

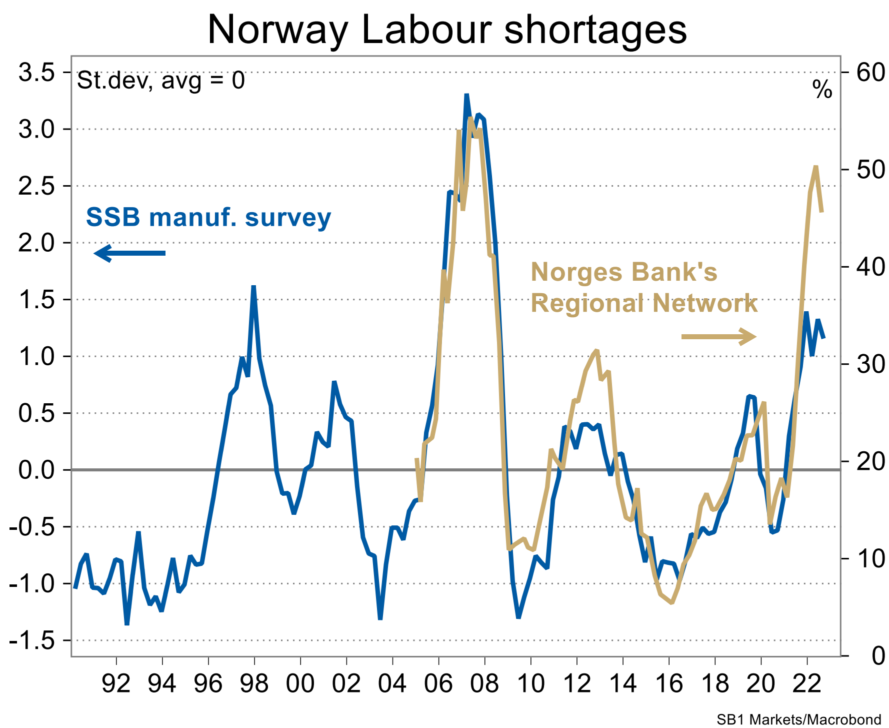
Probably the latter, as the unemployment rate now is very low!

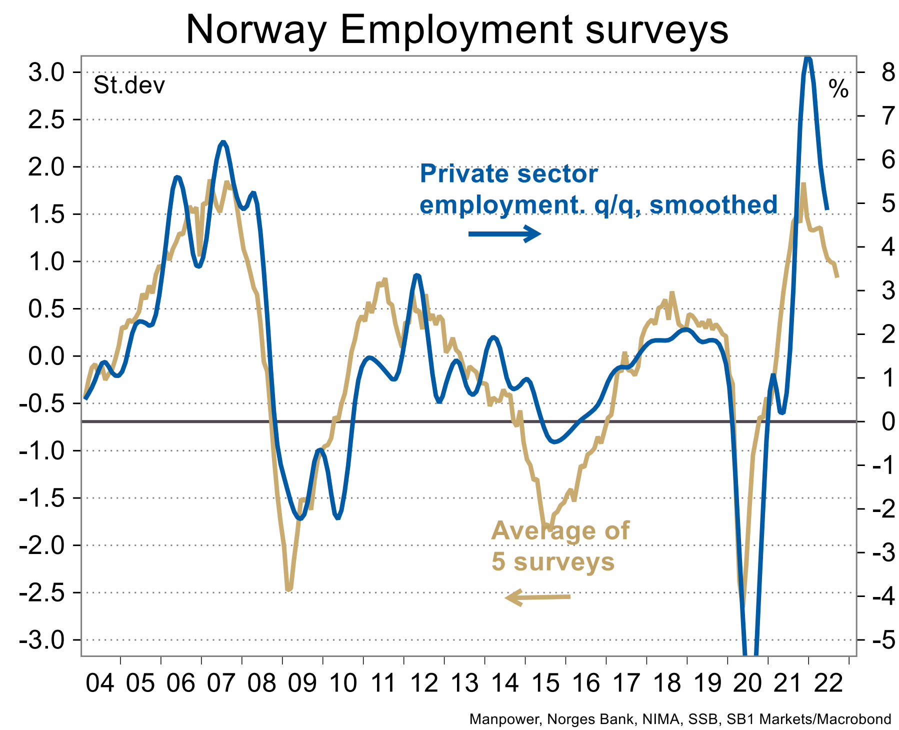




Surveys confirm a still tight labour market

Labour shortages were widespread in August (Regional Network), and in Q3 (SSB manuf. survey)

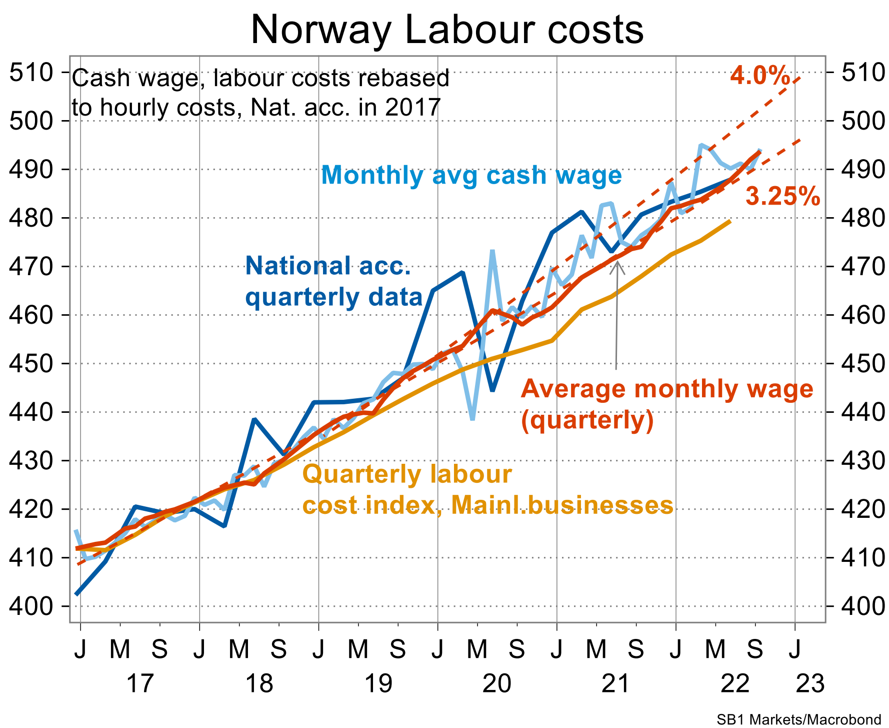


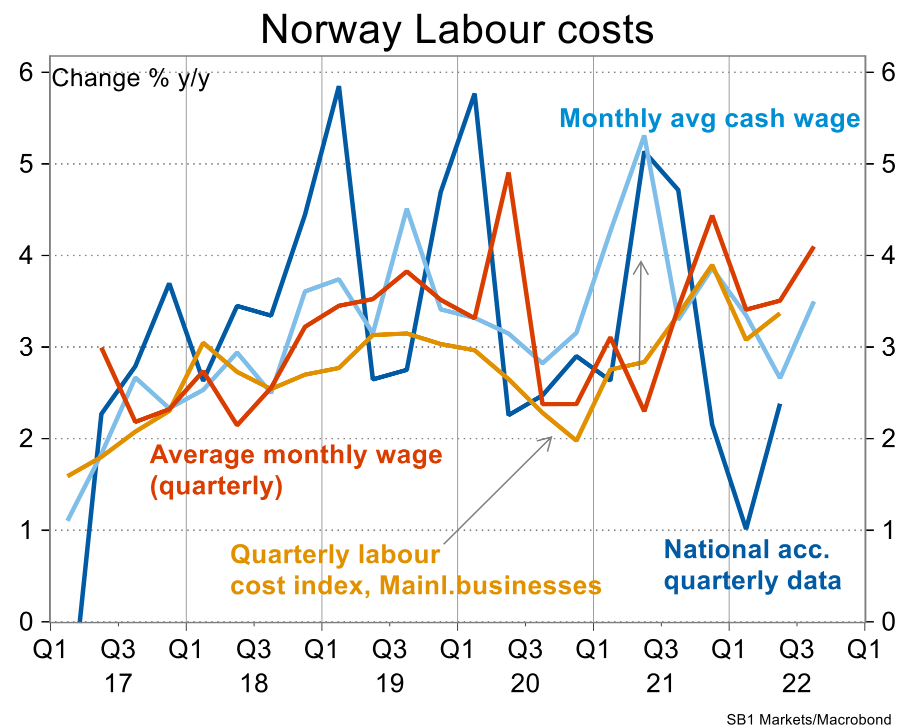


- In addition, employment surveys reveal employment plans equalling more than 3% growth in employment!

Wage inflation still in check

The average montly wage is growing just marginally fastger than the 3 ¼% trend growth line!

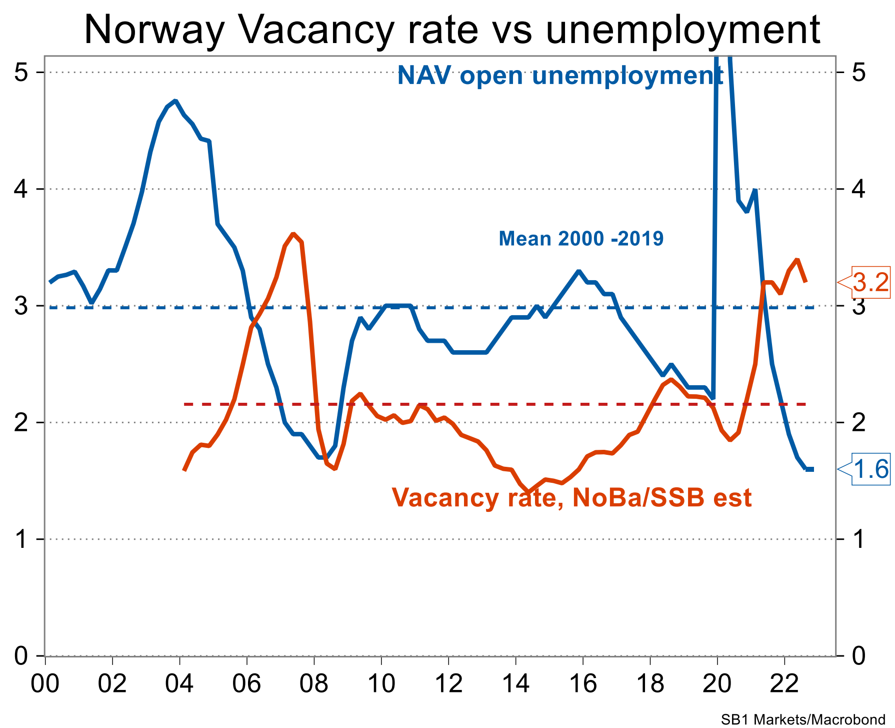


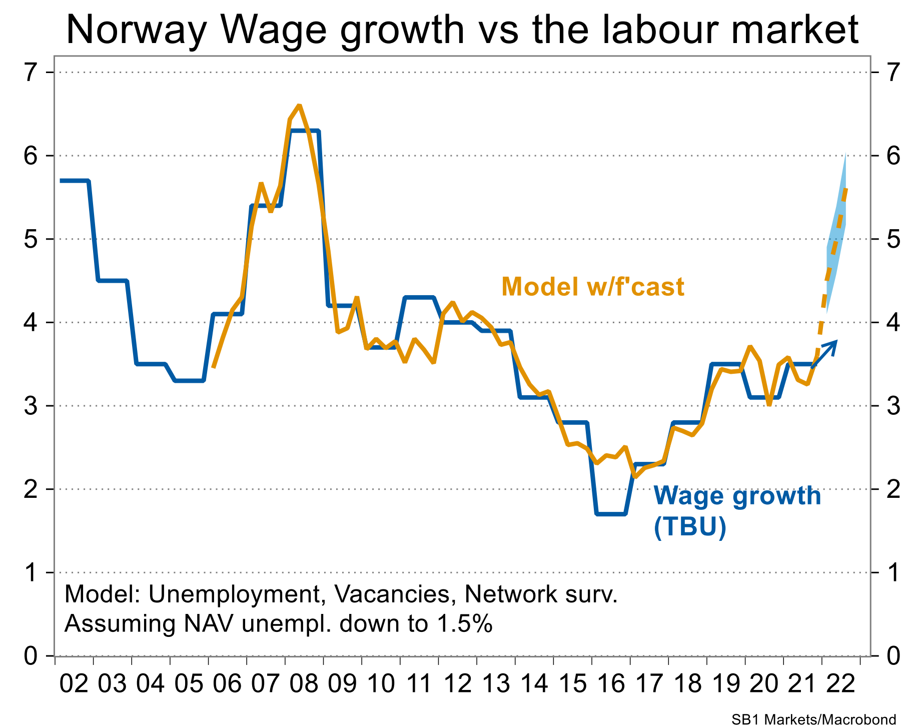


- The quarterly wage statistics report a 4.1% growth y/y in Q3, up from 3.5% in Q2
  - » However, like with all other Norwegian data annual growth rates are difficult to interpret, at least short term. Data are too volatile to make sense of, and more so during the pandemic of course
  - » The chart to the left is far ‘better’ – there are no signs of take off over several months/quarters. In fact, wage inflation is stable at 3.5%, at the most

Can wage inflation climb further? Our simple model suggests it will

If no one does not do anything about it…

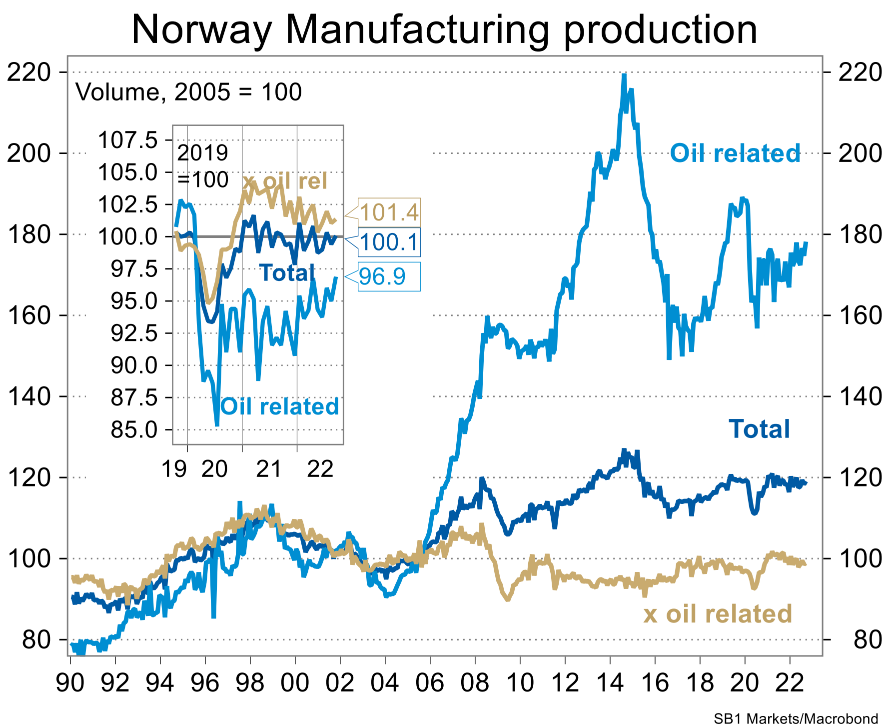


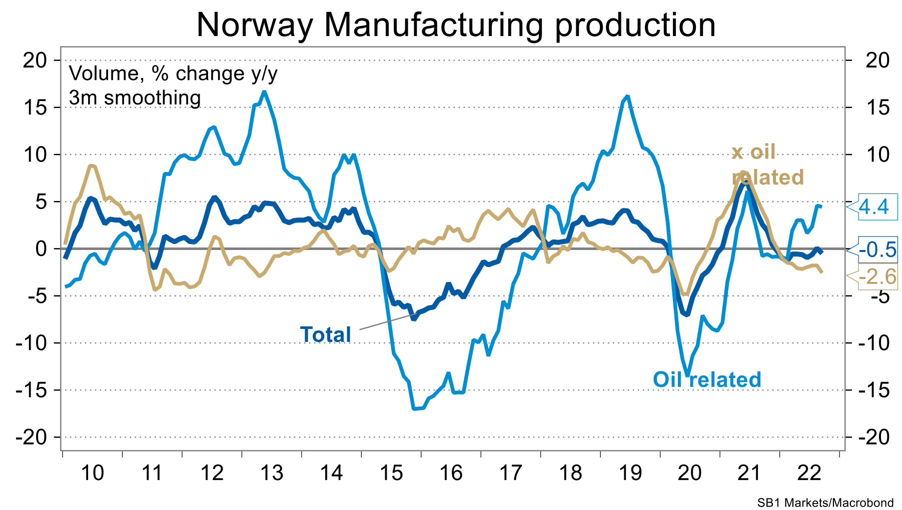


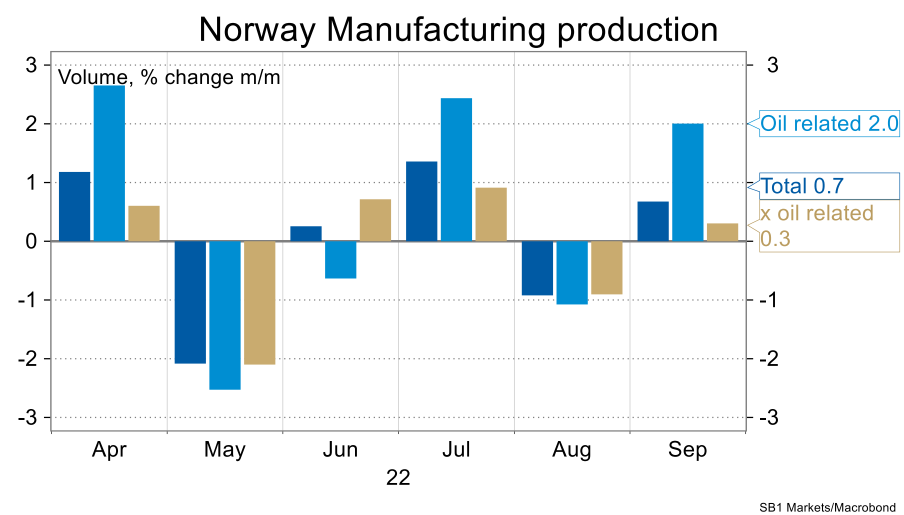
SpareBank 1 MARKETS

Oil related manufacturing 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



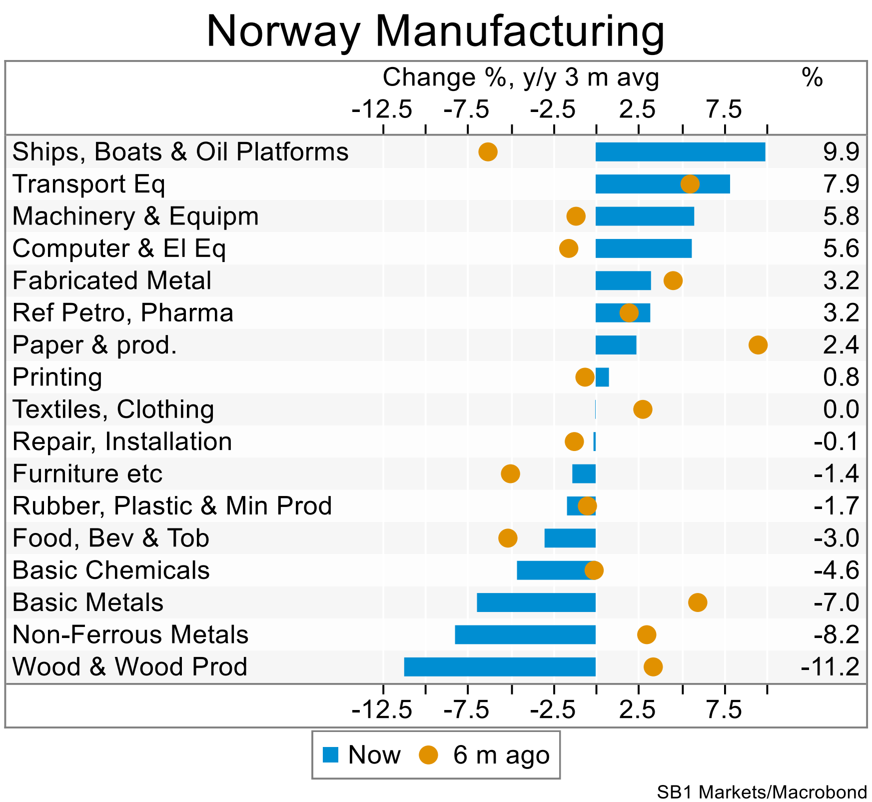


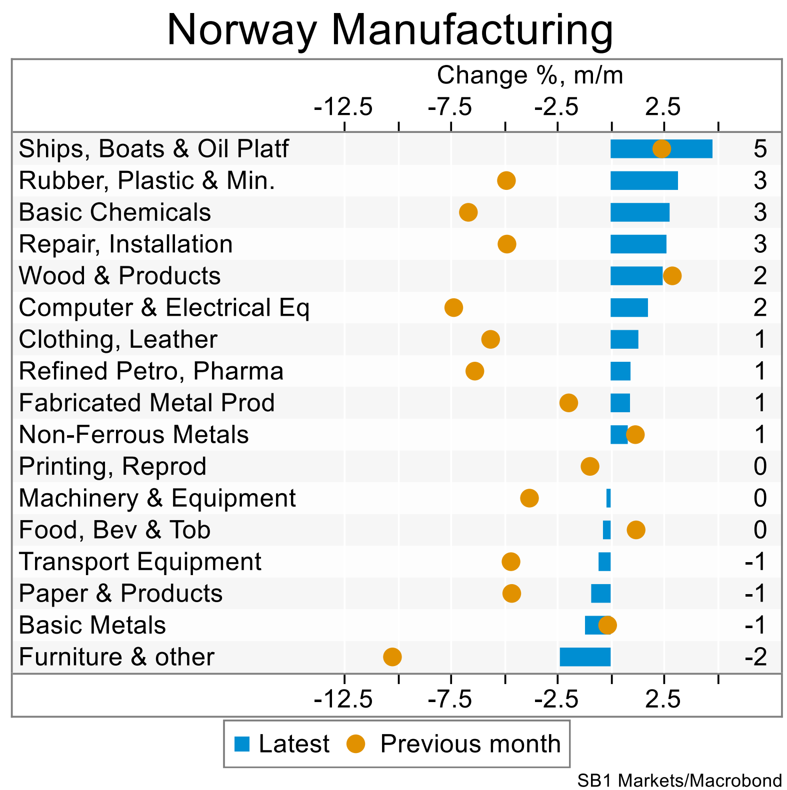


- **Total production** rose 0.7% in Sept, we expected unch.
- **Oil related manufacturing production** (yards etc) grew 2.0% and is drifting clearly upwards, at a 4 %– 5 % pace
- **Other sectors** reported a 0.3% increase – but the trend is down, at a 1% – 2% rate
- **Manufacturing surveys have turned down since Q4 2021**

Unusually mixed between sectors in September: Basic metals & Chemicals down

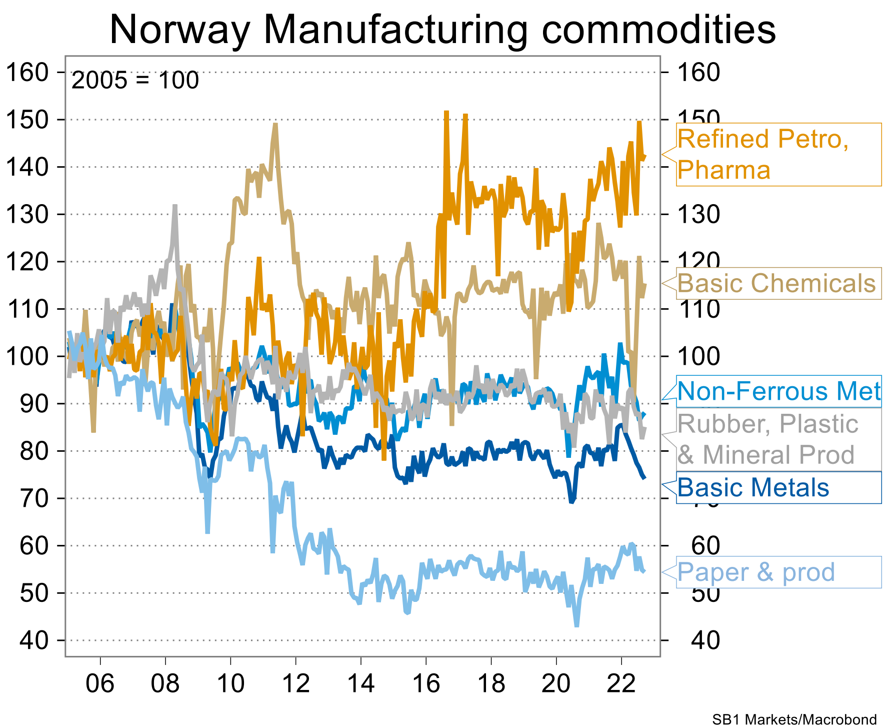
Ships/platforms, machinery, fabricated metals up

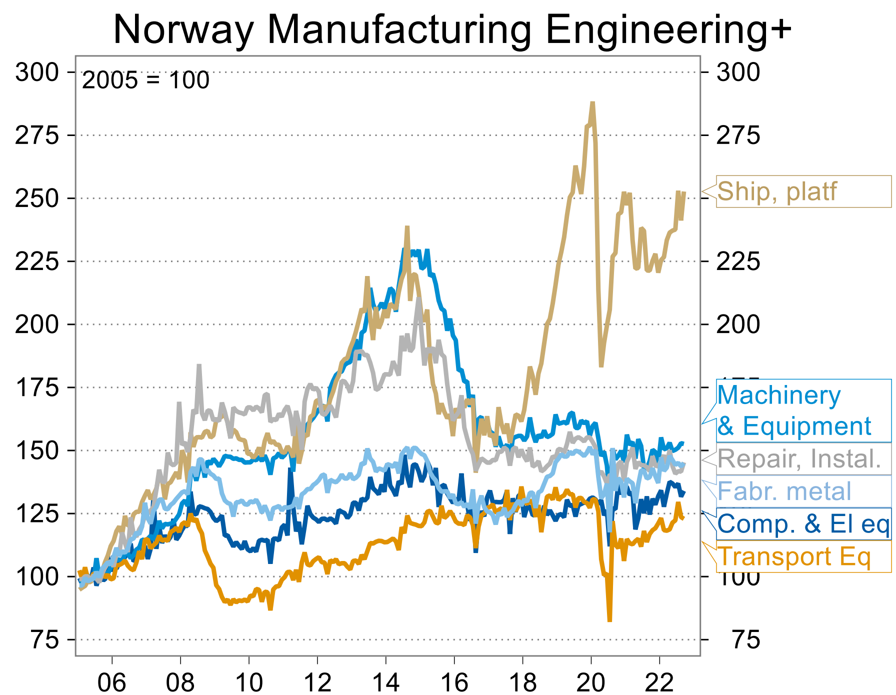


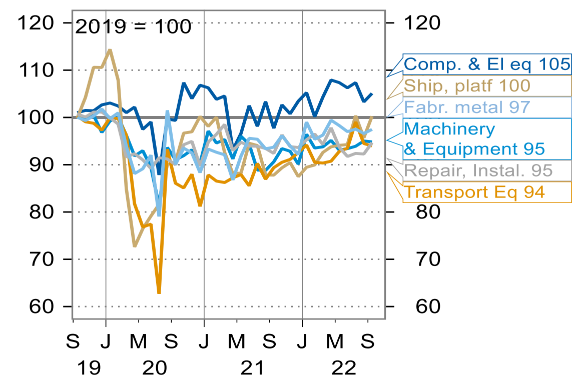


Engineering on the way up; now even ships and platforms too

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

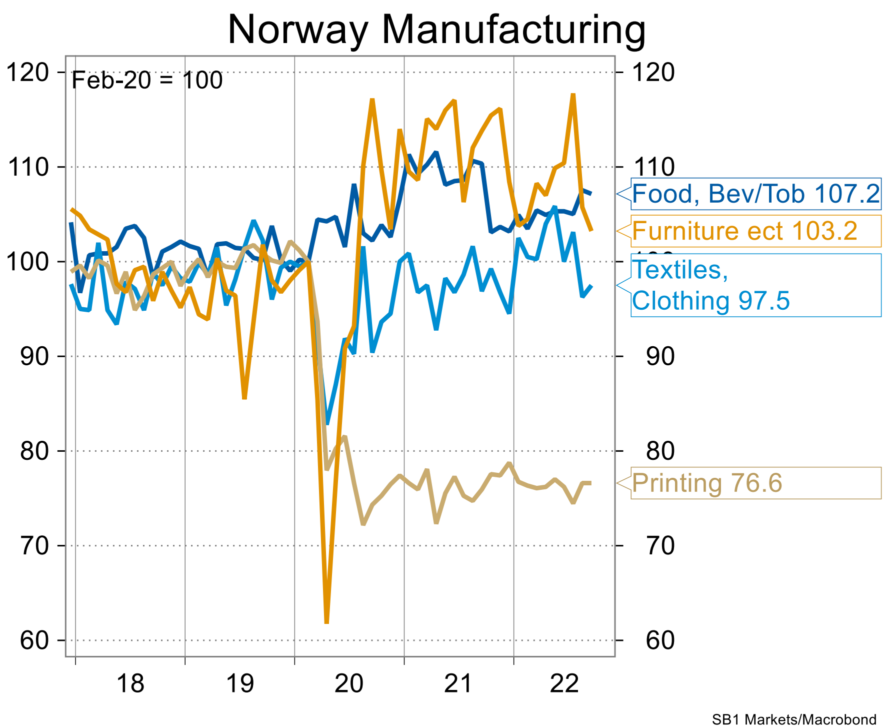






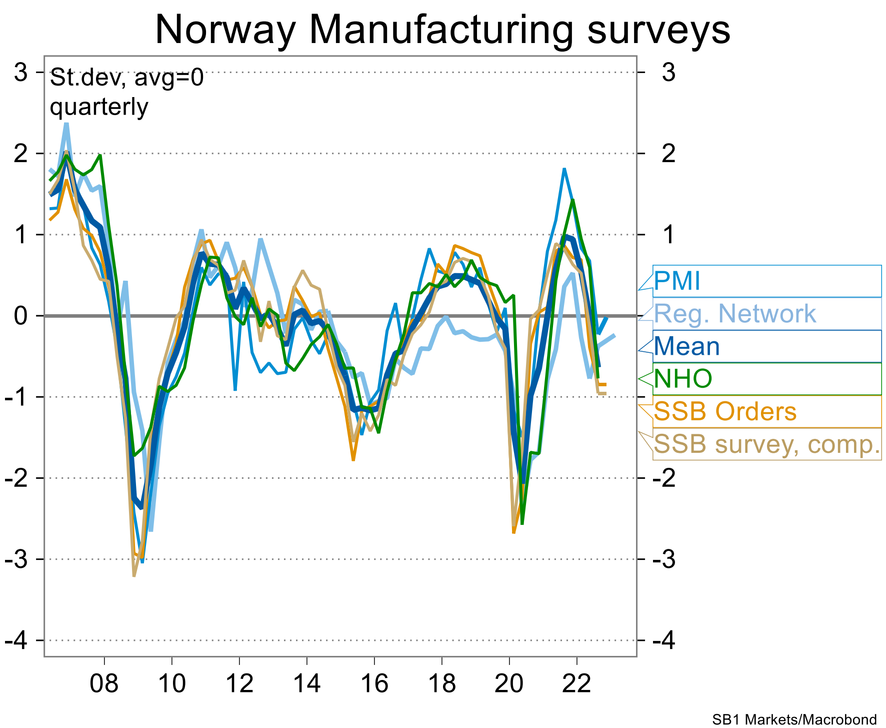
Food production is back to a normal level, and has flattened

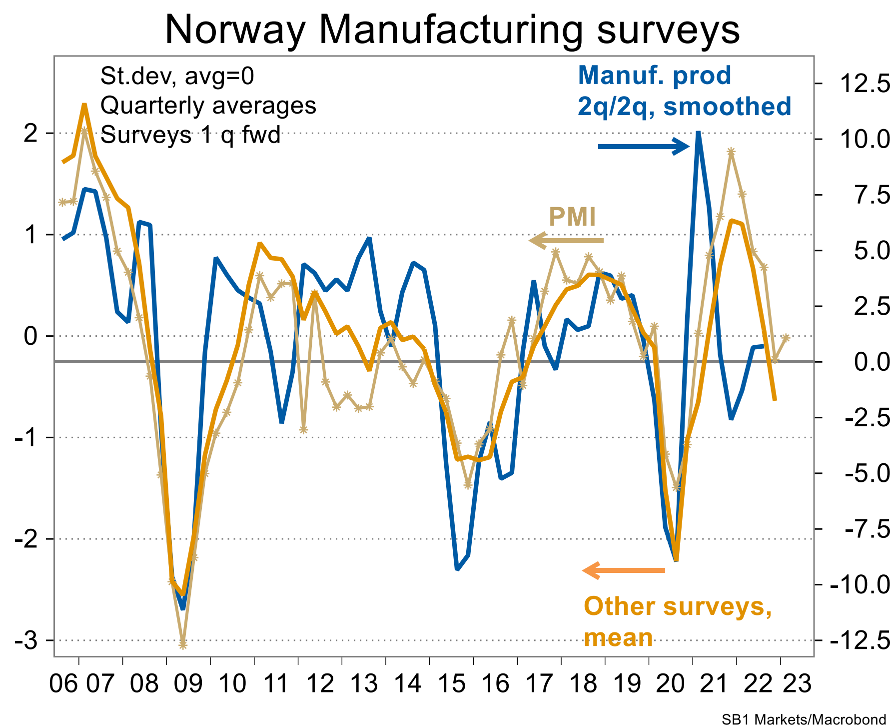
Furniture and textile/clothing are back down to the pre-pandemic level



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

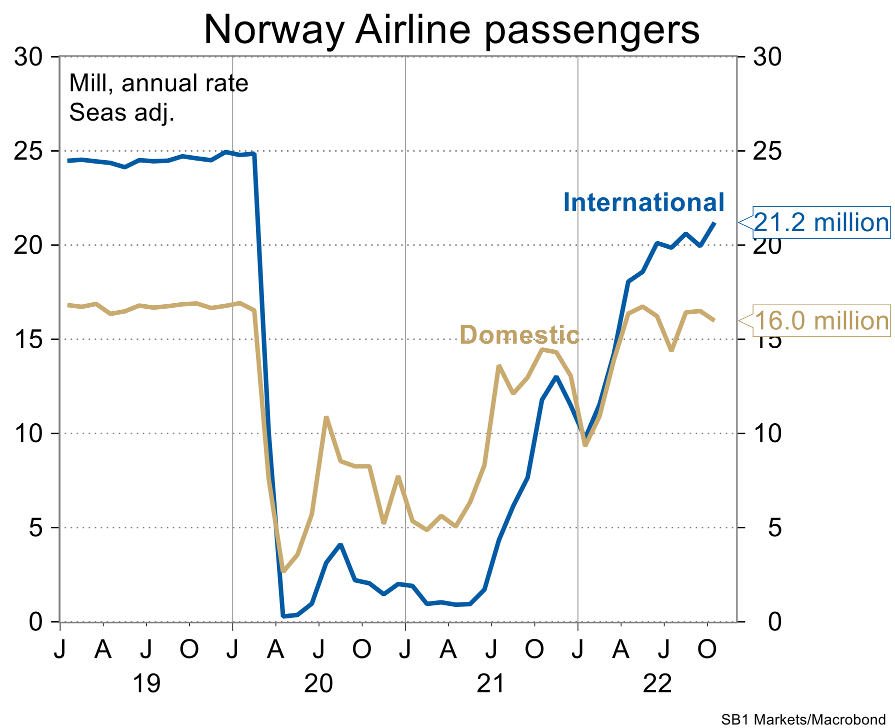
… production has not been that impressive (like most other places) even when surveys were strong

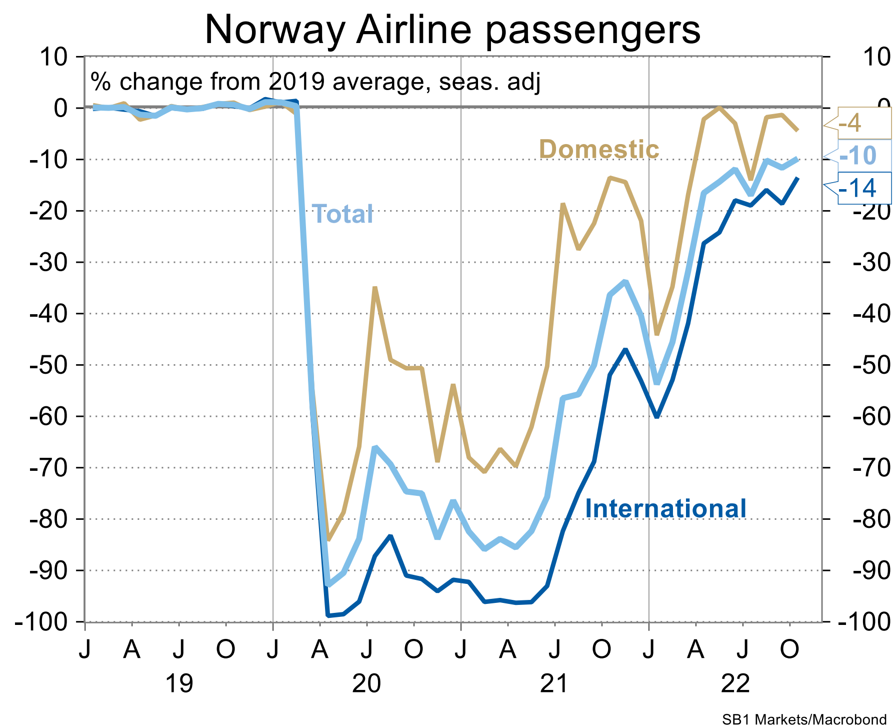




Domestic airline traffic back to the pre-pandemic level, international still -14%

… But the latter is still trending up

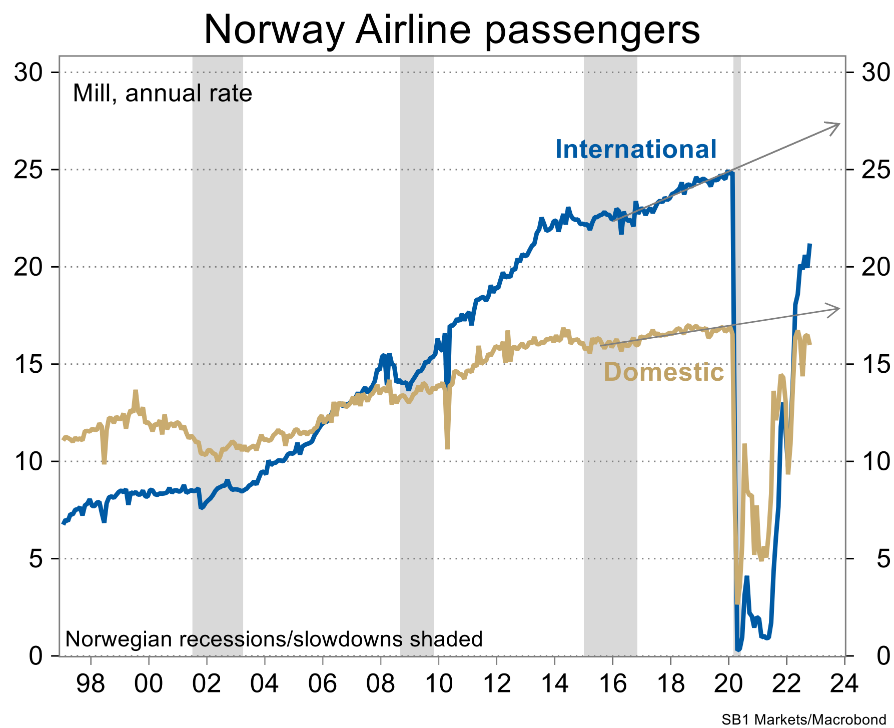




- Domestic flights are down 10% vs the pre-pandemic trend growth path, international flights -20%
- International traffic rose in October, domestic traffic fell marginally – and has flattened since the spring

A Longer term view – this recovery is not complete yet

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



- Domestic traffic is down 10% vs the pre-pandemic trend growth path
- International traffic is down 20% vs the p-p trend

SpareBank 1 MARKETS

Highlights

The world around us

The Norwegian economy

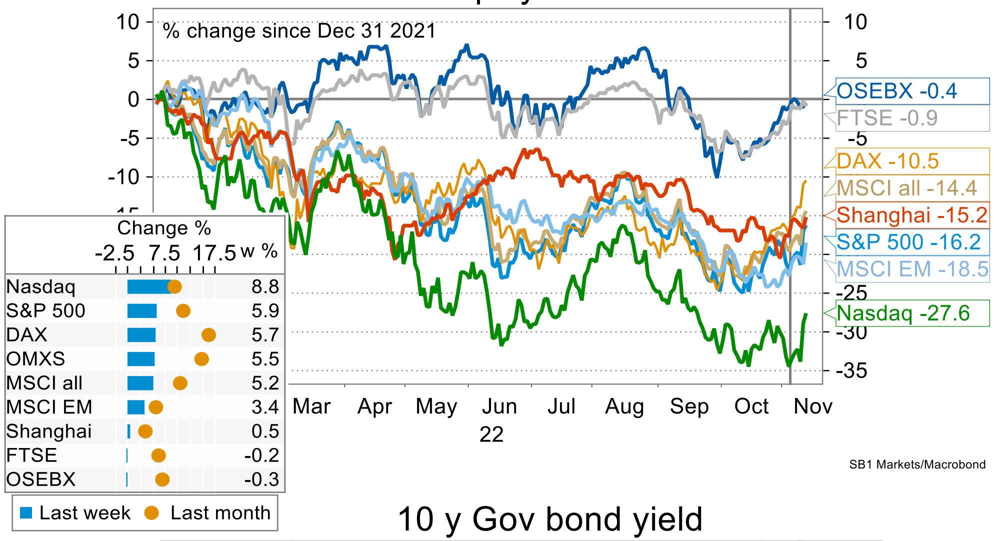
Market charts & comments

Markets

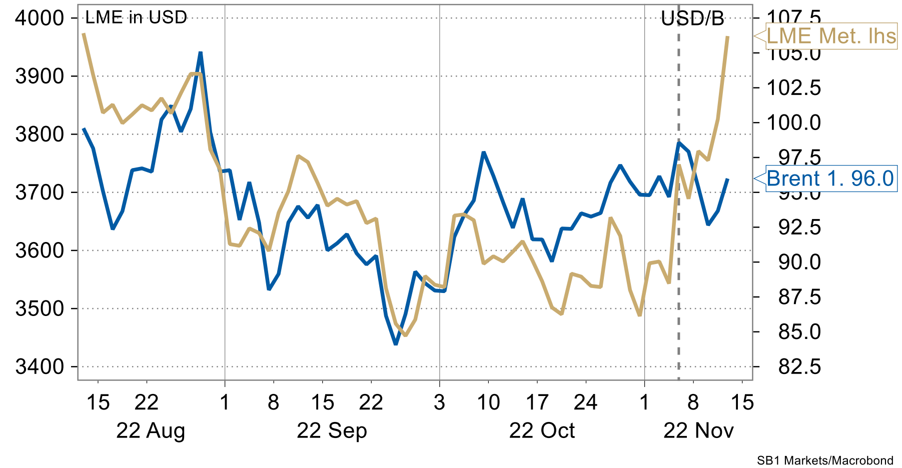
A huge US inflation relief lifted most boats

A sharp stock market recovery, - the oil heavy OSE. Bond yields down everywhere. USD down, NOK up

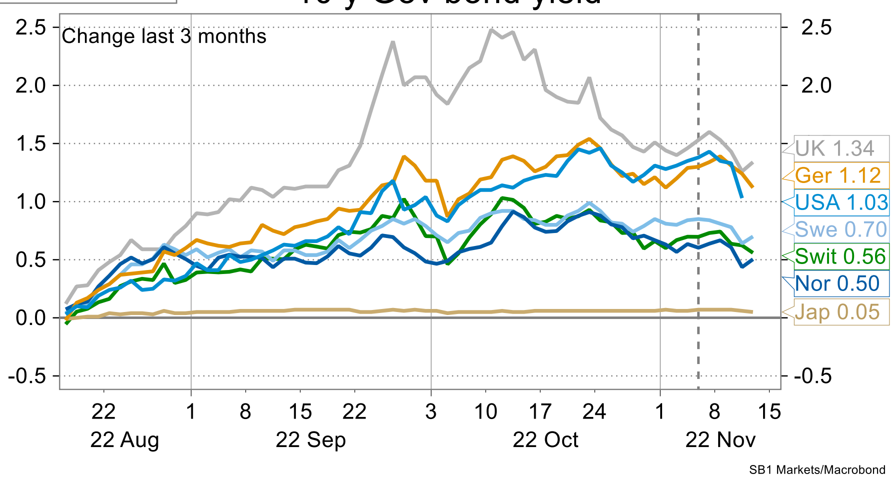
Equity Indices



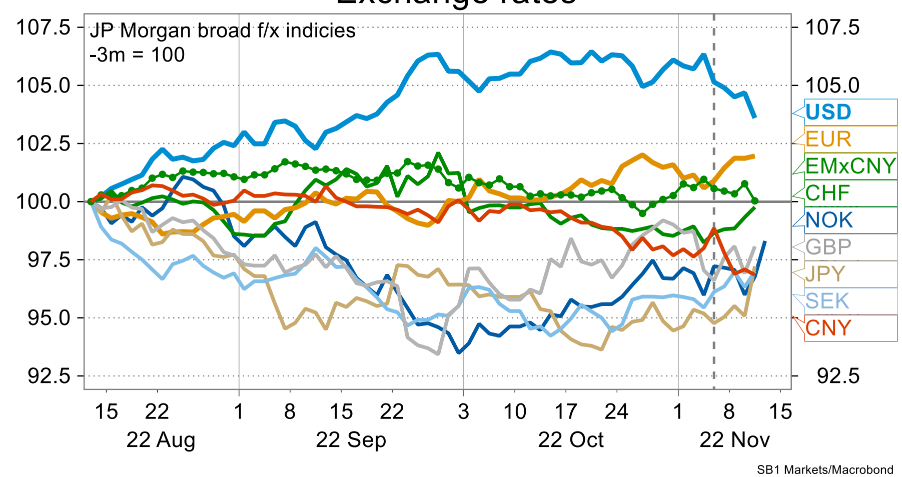
Oil vs. metals



10 y Gov bond yield

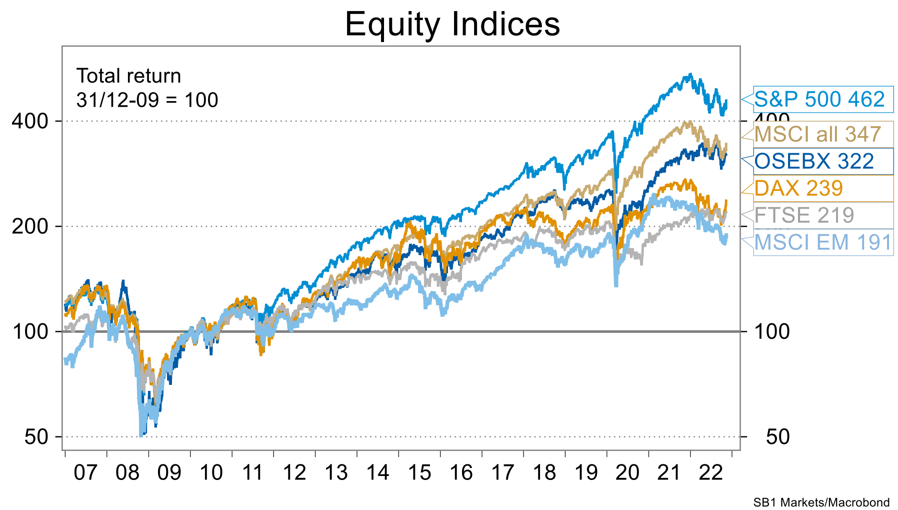


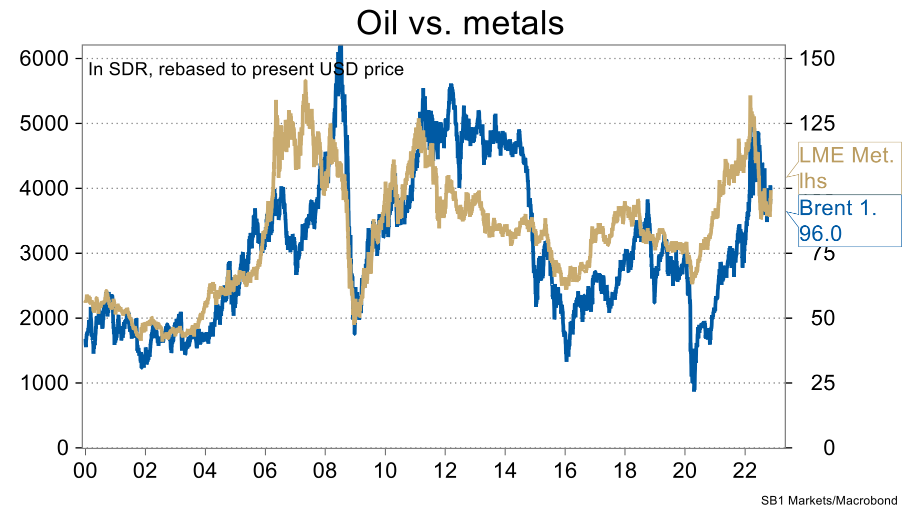
Exchange rates

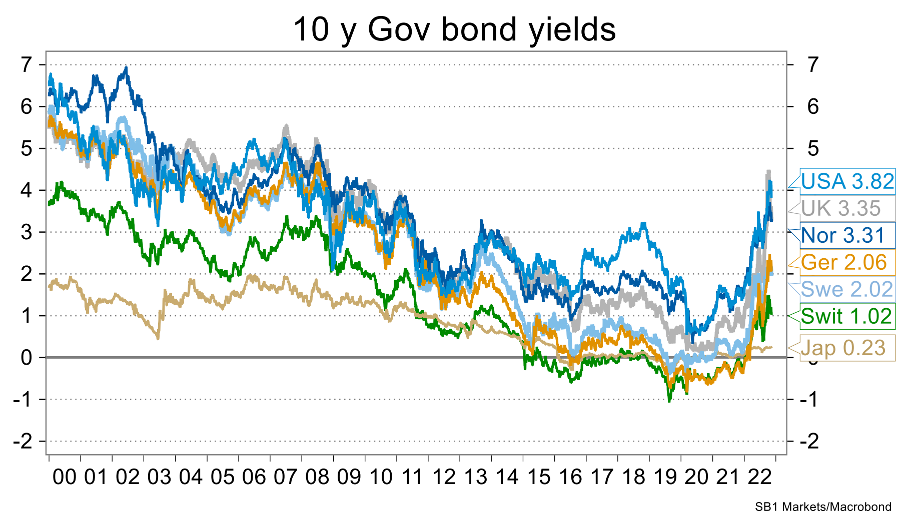


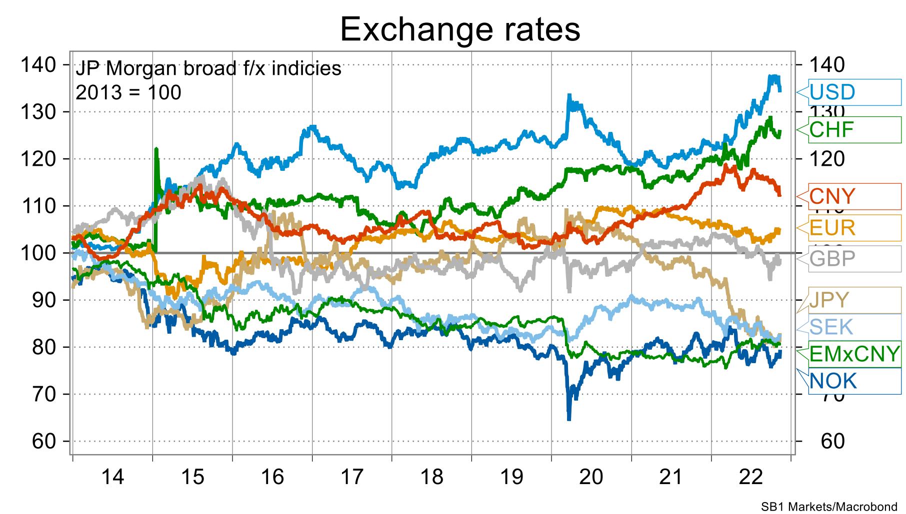
The long-term picture: Stock markets down, commodities down, bond yields up

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





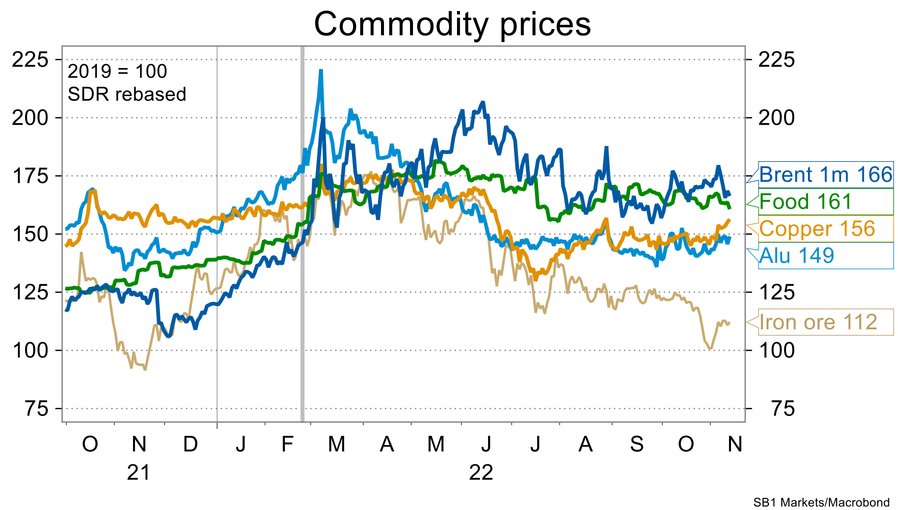


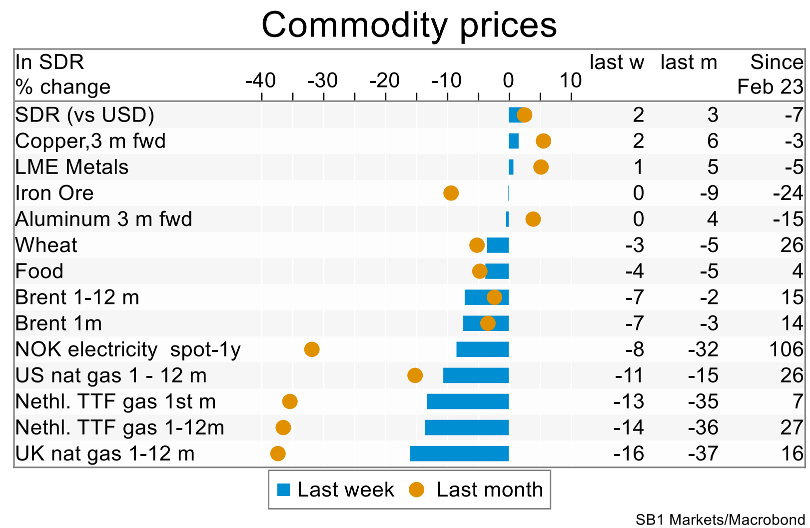


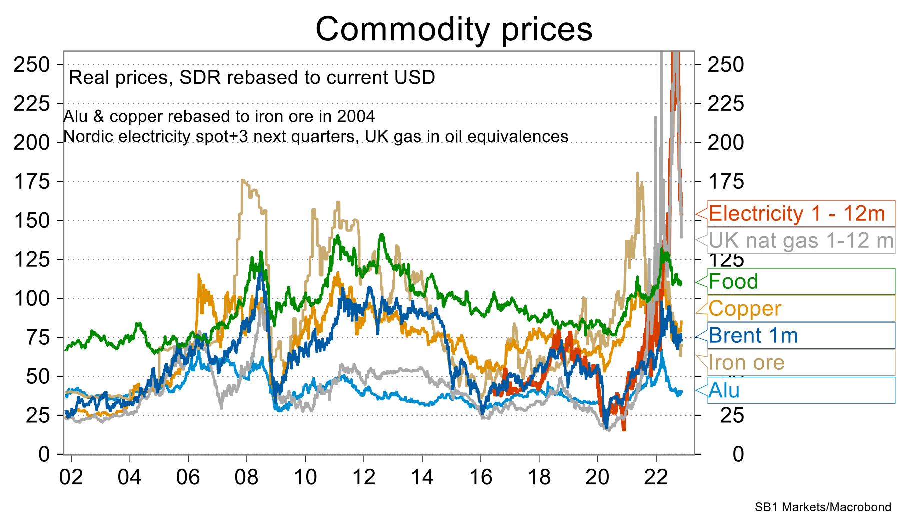
SpareBank 1 MARKETS

Commodity prices down, especially measured in common currency (like SDR)

European gas, electricity prices further down last week, down 30% – 40% last 4 weeks







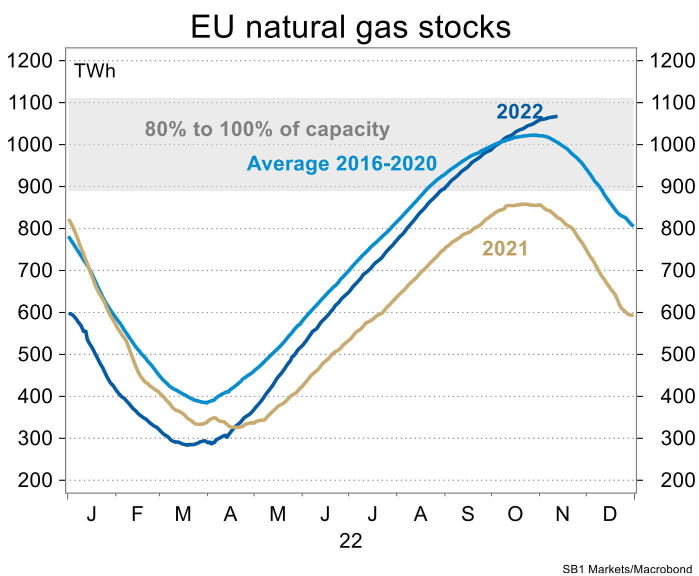
Last week – prices in SDR

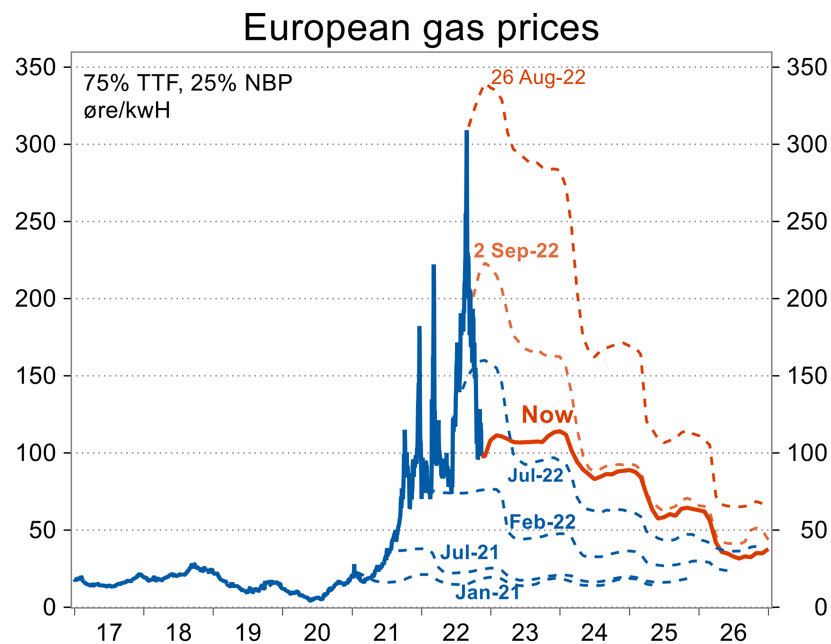
- **European natural gas** fell further last week, as did **Norwegian electricity prices**, down 8% - 16% (the coming 12 months fwds)
- **The oil price** also fell slightly
- The Economist's **food commodity index** turned south again
- **Metal prices** rose further, but just marginally measured in the 'world' currency (they were more up in USD). Late Friday the LME decided against a ban on Russian metals, which may reverse some of the increase in some prices recent weeks

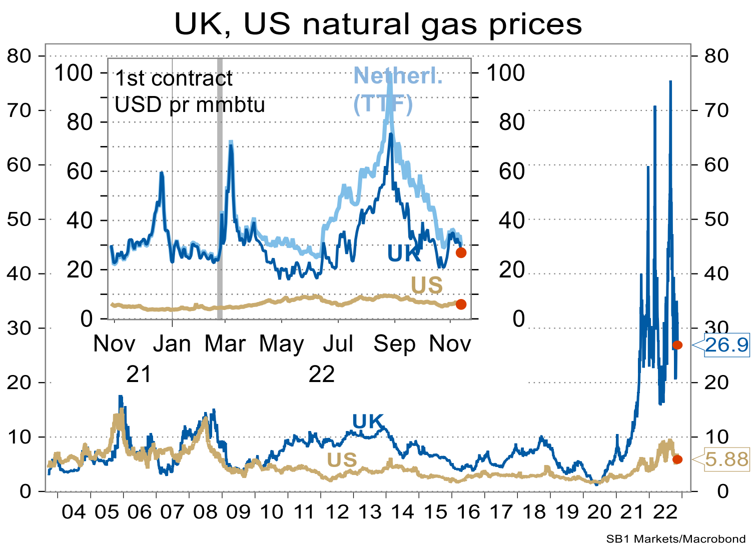
SDR: IMF's Special Drawing Rights – a 'global currency'

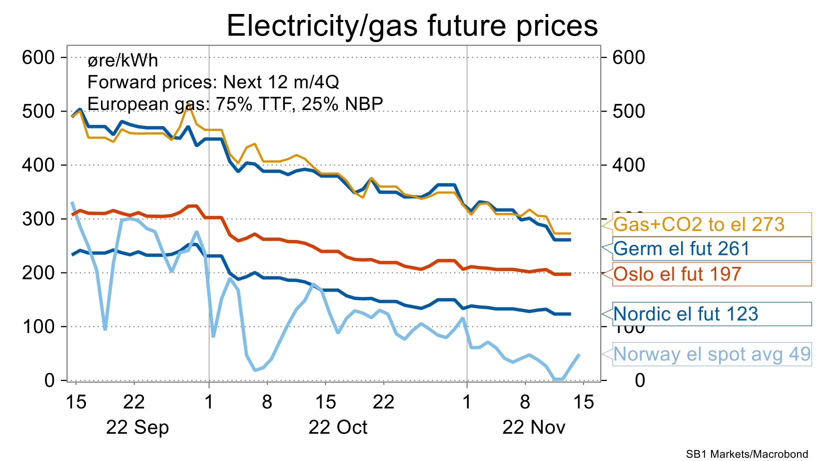
European gas prices further down, inventories are filled up, it's windy & warm

Electricity prices are trending rapidly down as well



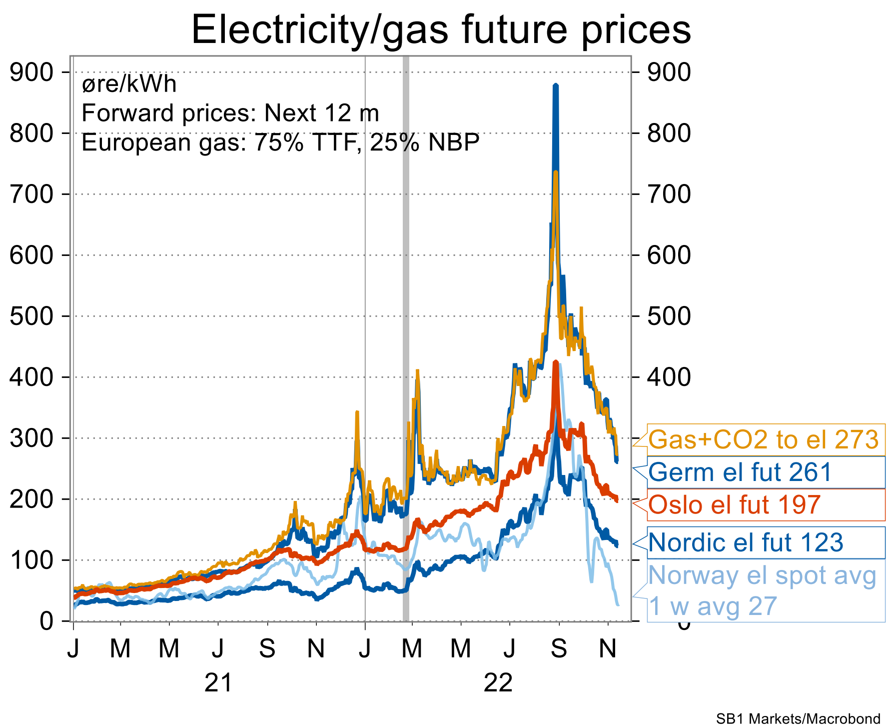


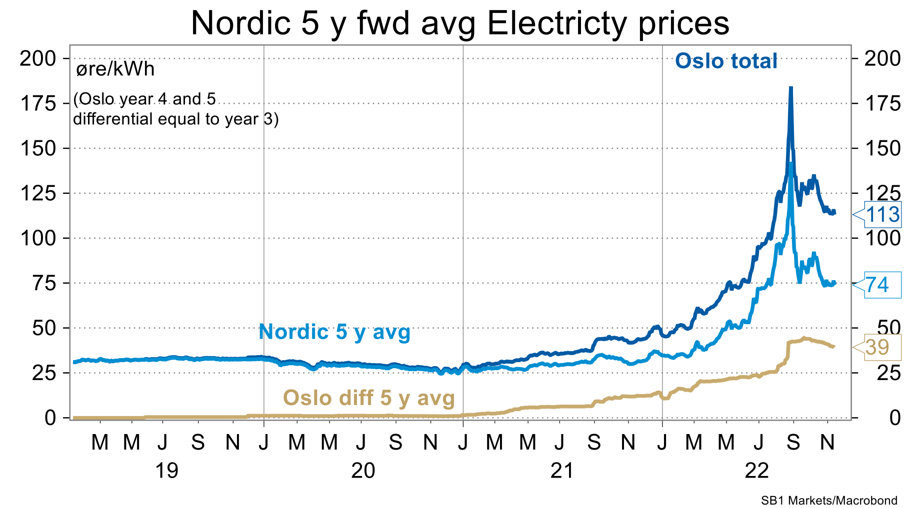


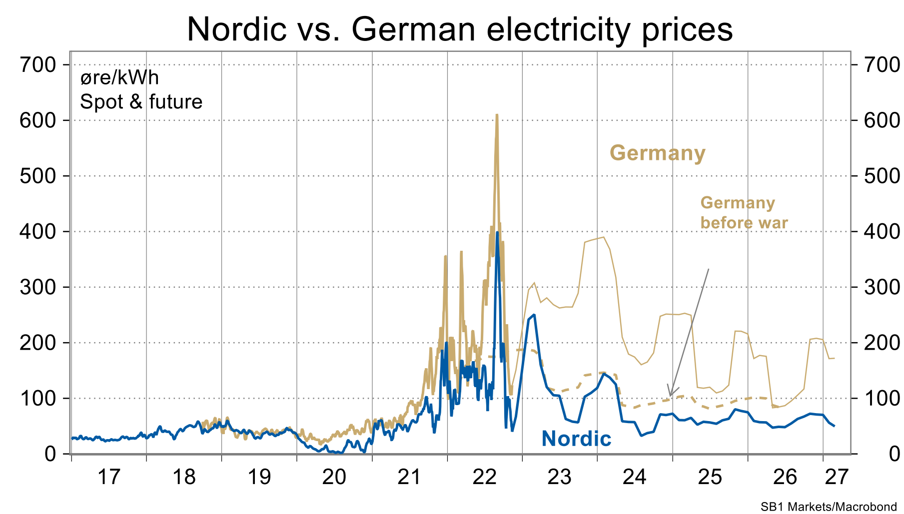


European gas & electricity sharply down last week

… but the price level is still high, at least the 12 m fwd prices



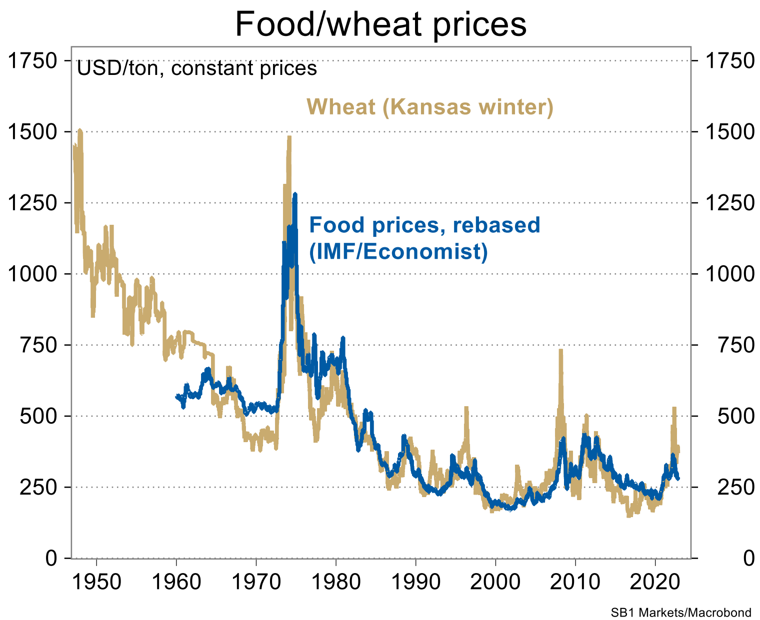


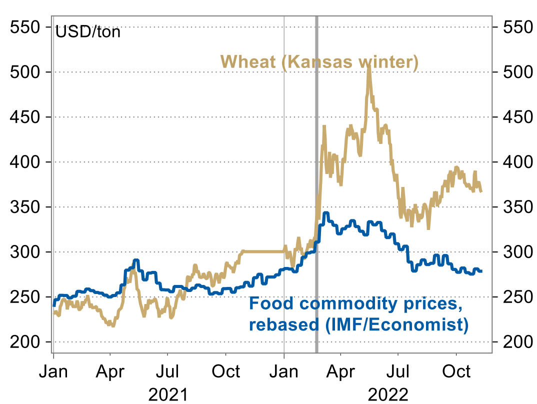


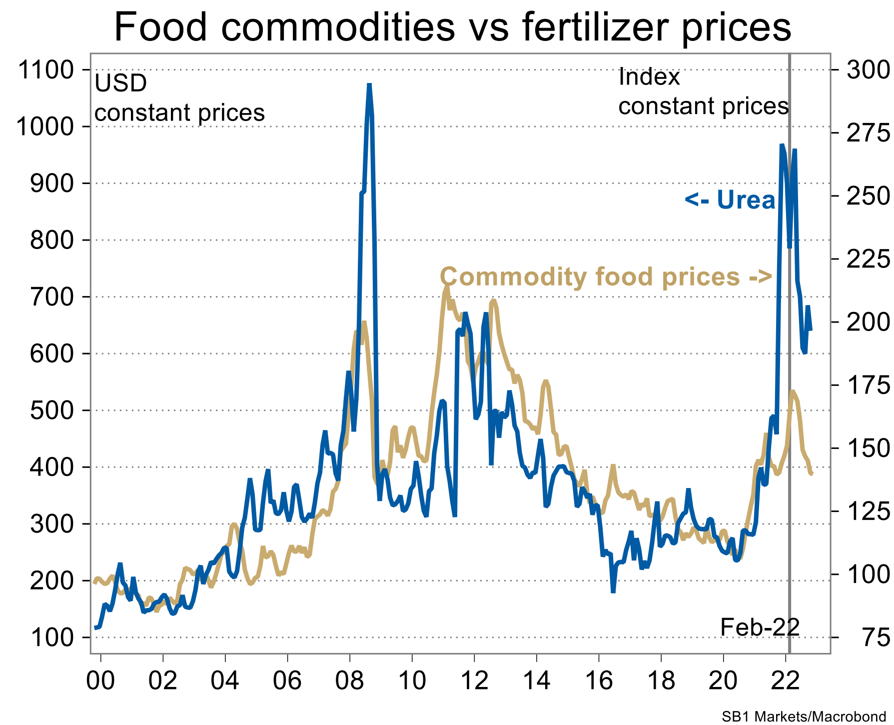
European gas: 75% Dutch TTF, 25% UK NBP, excl. CO2 cost

Food prices are trending down

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





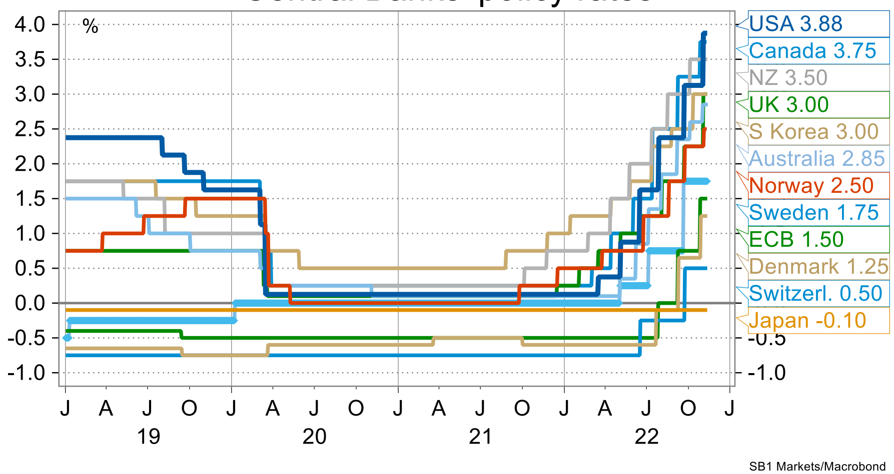


Urea prices have been falling too

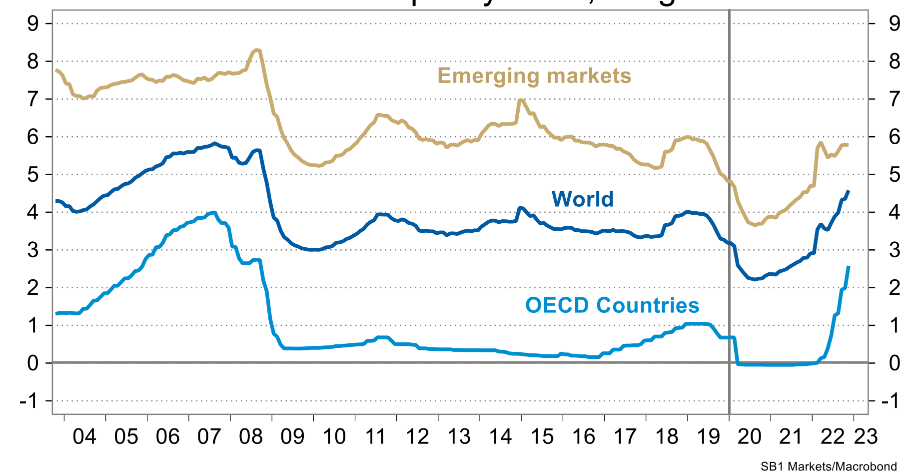
Last week: No more hikes last week

But it ain't over yet

Central Banks' policy rates

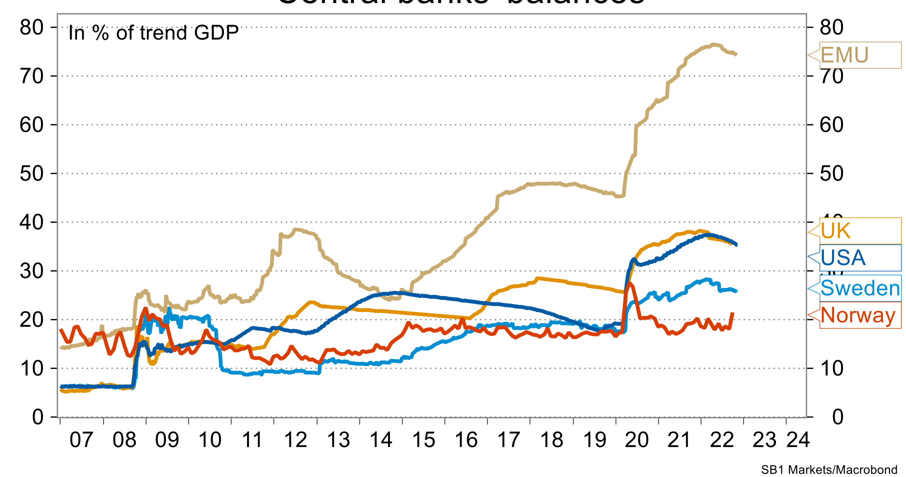


Central Banks' policy rates, weighted



- **Central banks** are hiking rates even if they expect growth to slow (US, EMU) or the economy to contract (Sweden, UK, Norway) because inflation is way above target (including all measures of underlying inflation, partly also costs) and is expected to remain above target for several years
- The **EM average policy rate** fell due to the Russian cuts – but the average is on the way up again
- In addition to rate hikes, most central banks have ended their **QE buying programs**. Some banks have started reducing their holdings, moving into the **QT zone**. US ramped up its QT program (doubled the pace) from the beginning of September

Central banks' balances



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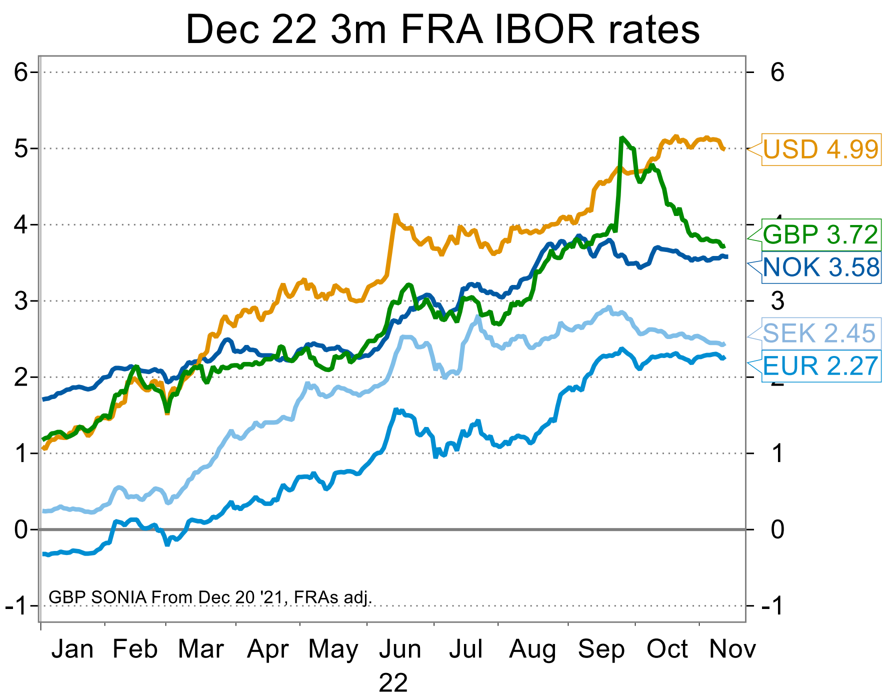
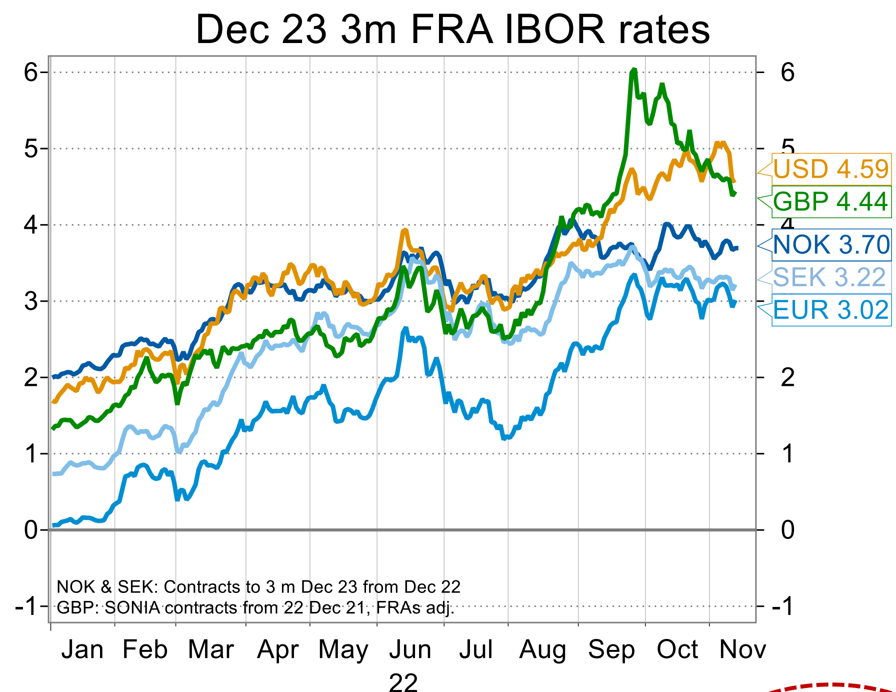
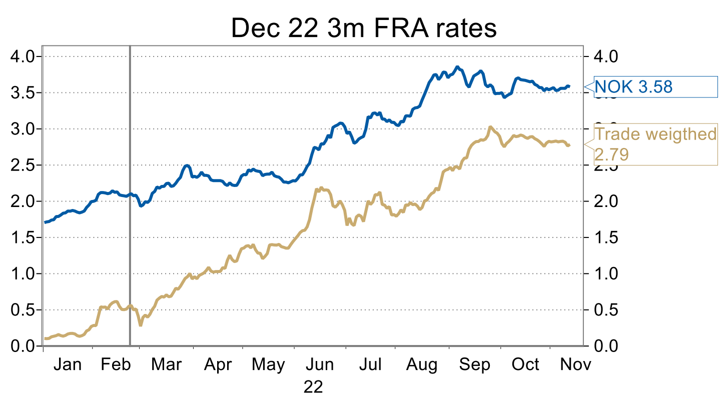
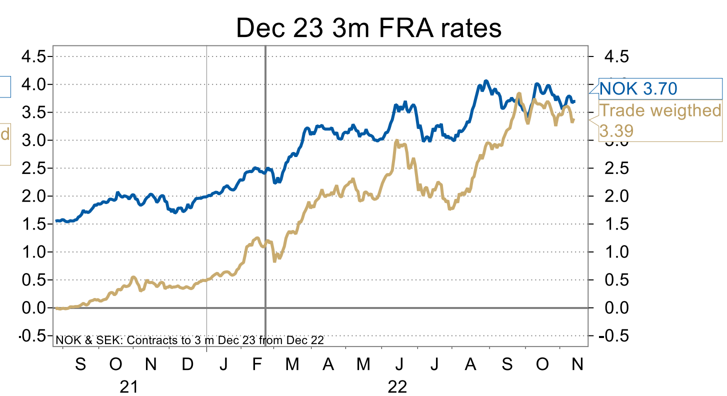
FRAs on the way down most places, last week everywhere but in Norway

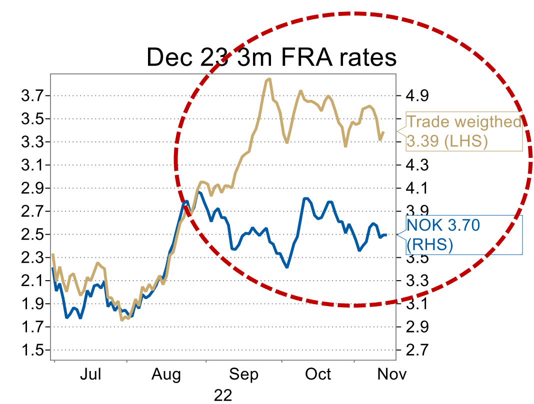
US rates fell sharply due to the CPI surprise







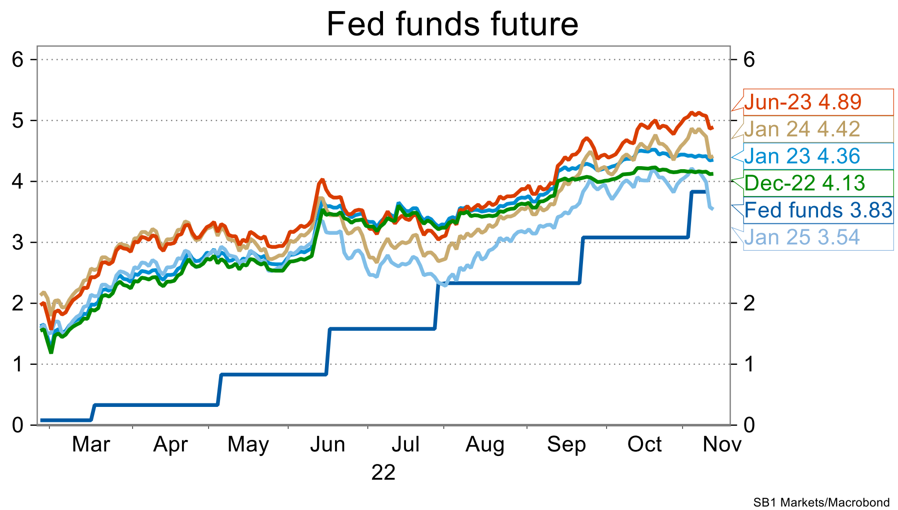


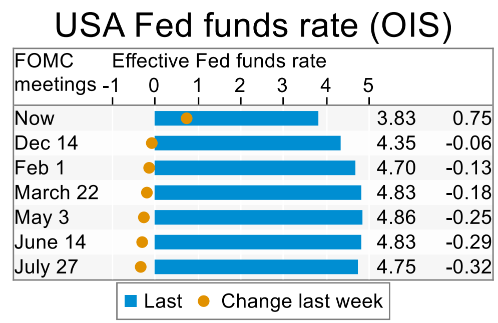


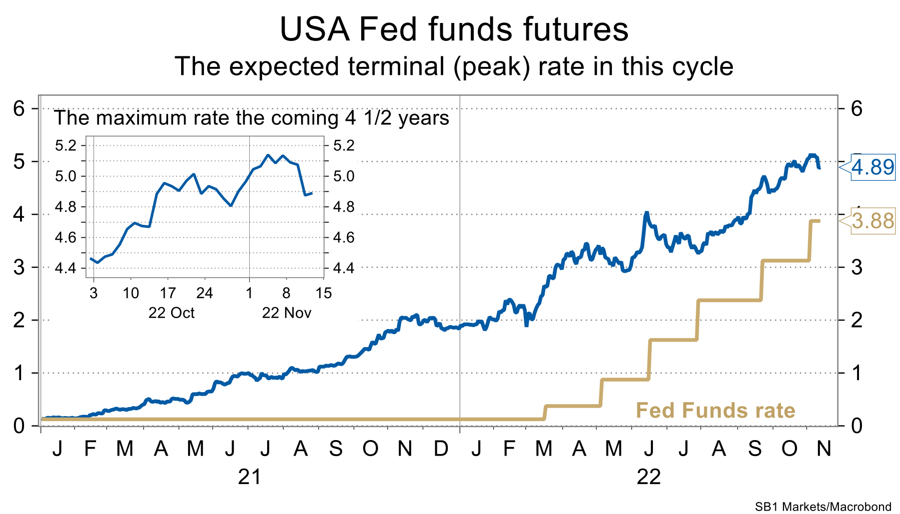
SB1 Markets/Macrobond

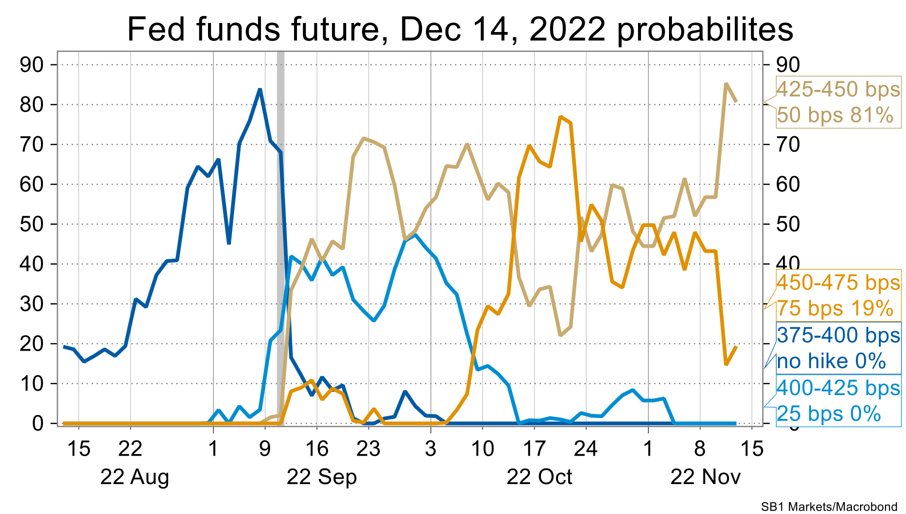
The surprisingly tame CPI lowered US rate expectations by up to 65 bps!

Now, just a 50-bps hike in Dec is almost a done deal (and not a 75 bps lift)



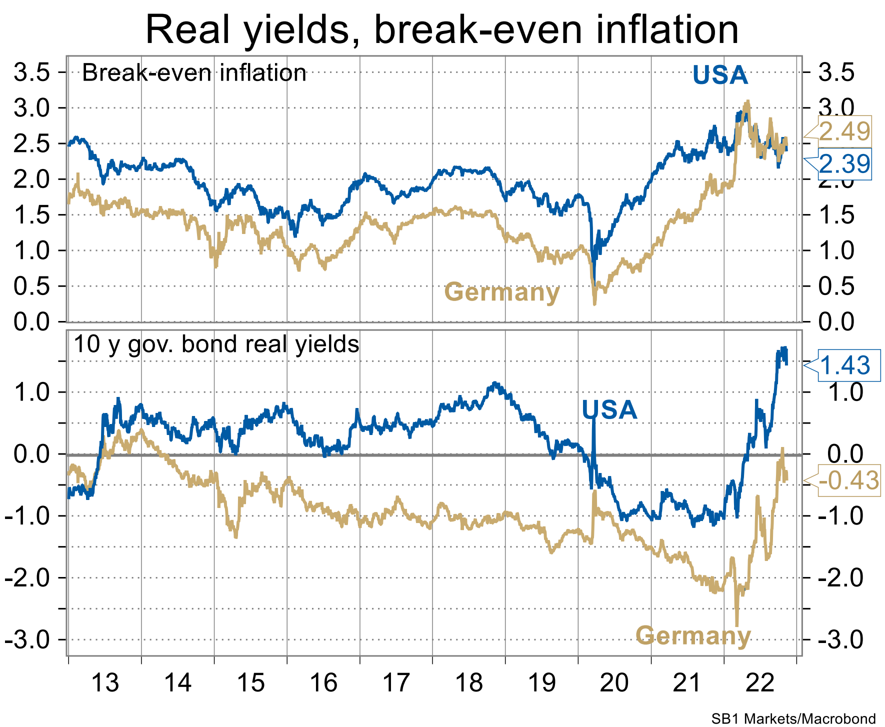






US 10 y real rates down 31 bps, German rates -15 bps. But infl. expectations stable

Inflation expectations marginally down



US & Germany 10 y Gov bond yield

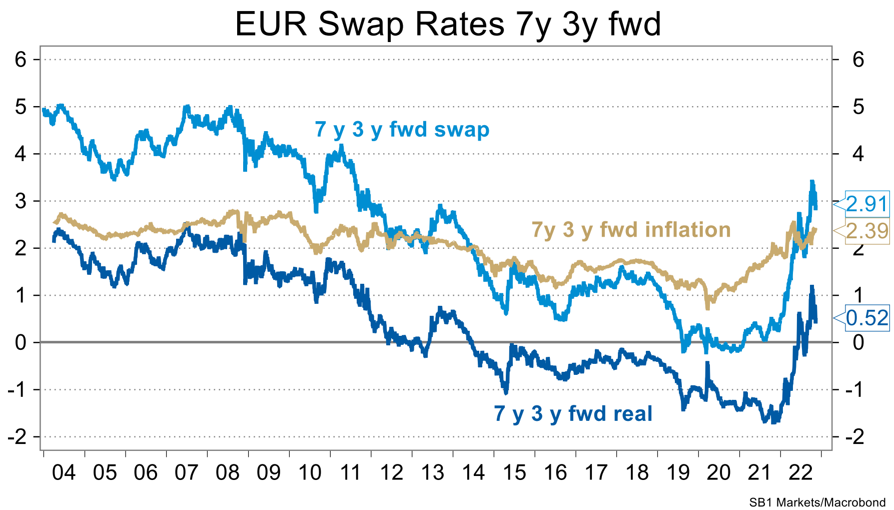
	Yield	Change 1w	Change 1m	YTD	Min since April-20
USA nominal treasury	3.82	-0.32	-0.07	2.30	0.52
.. break-even inflation	2.39	-0.01	0.12	-0.17	1.06
.. TIPS real rate	1.43	-0.31	-0.19	2.47	-1.19
Germany nominal bund	2.06	-0.18	-0.24	2.27	-0.65
.. break-even inflation	2.49	-0.03	0.11	0.60	0.40
.. real rate	-0.43	-0.15	-0.35	1.68	-2.80

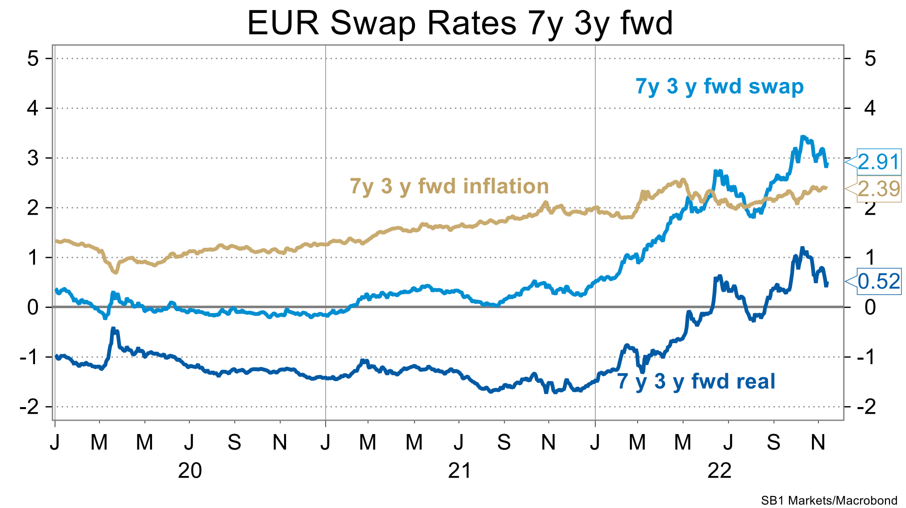
SB1 Markets/Macrobond

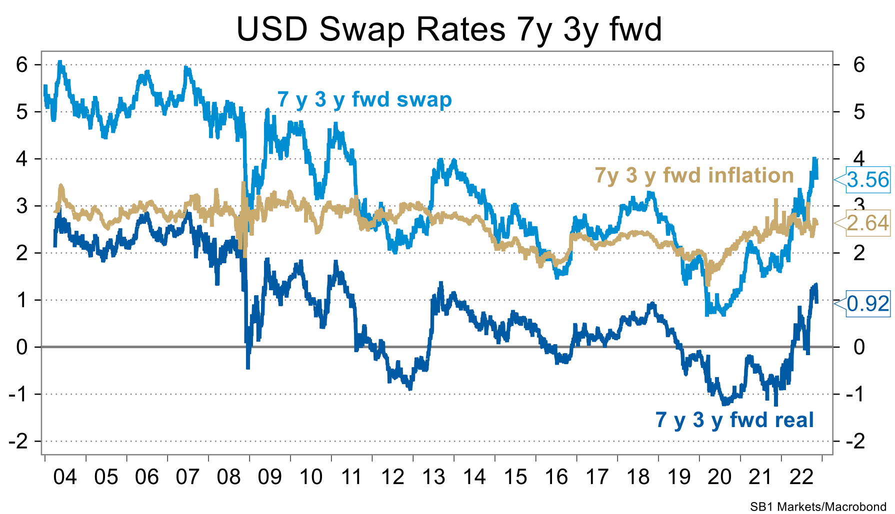
- The lift in real rates is still one for the history books!
- No signs of war angst or flight to safety
- In the US, a 10 y CPI expectation at 2.39 is somewhat above Fed's 2% target for the PCE-deflator (which on average is some 0.3 pp below CPI inflation)

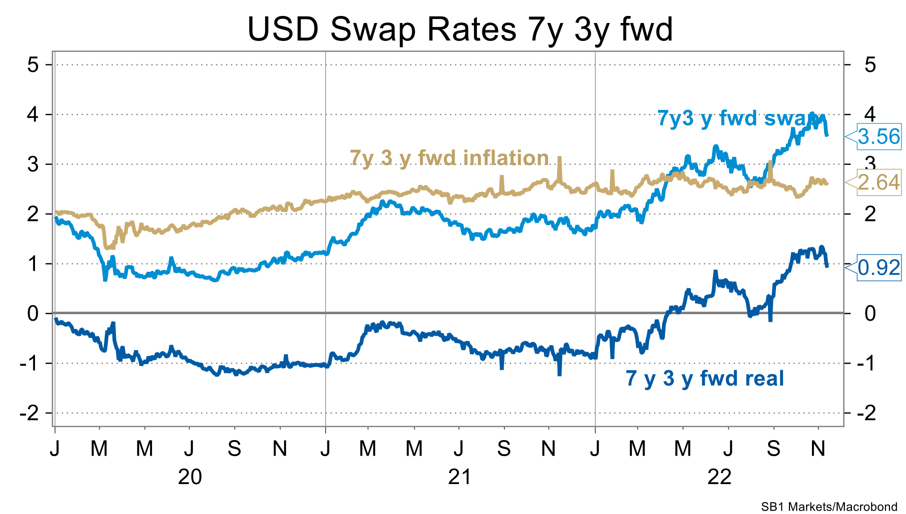
SpareBank 1 MARKETS

Real rates sharply down, however measured

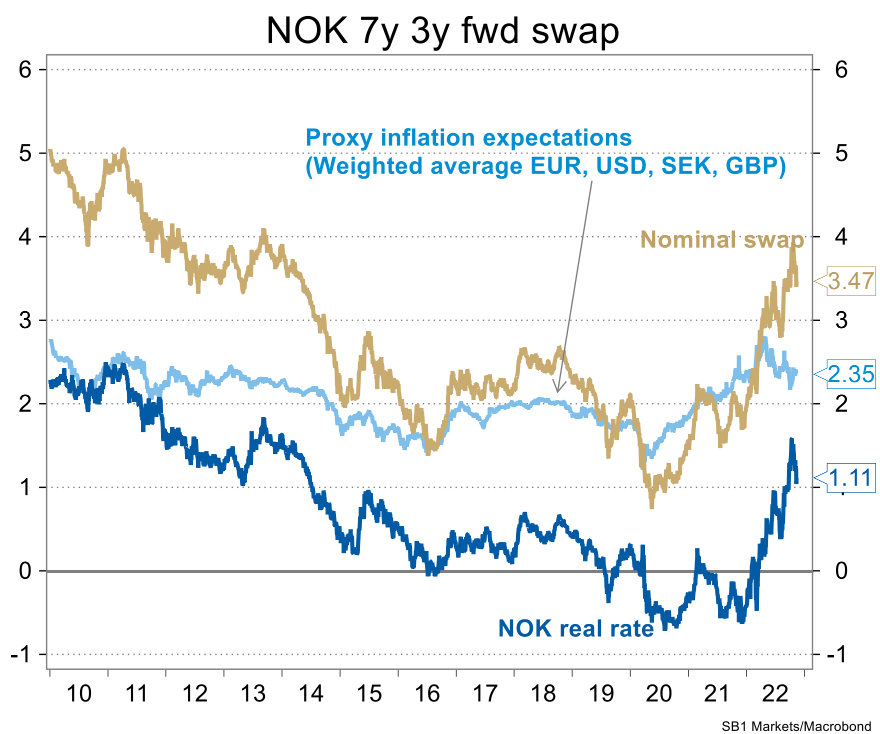


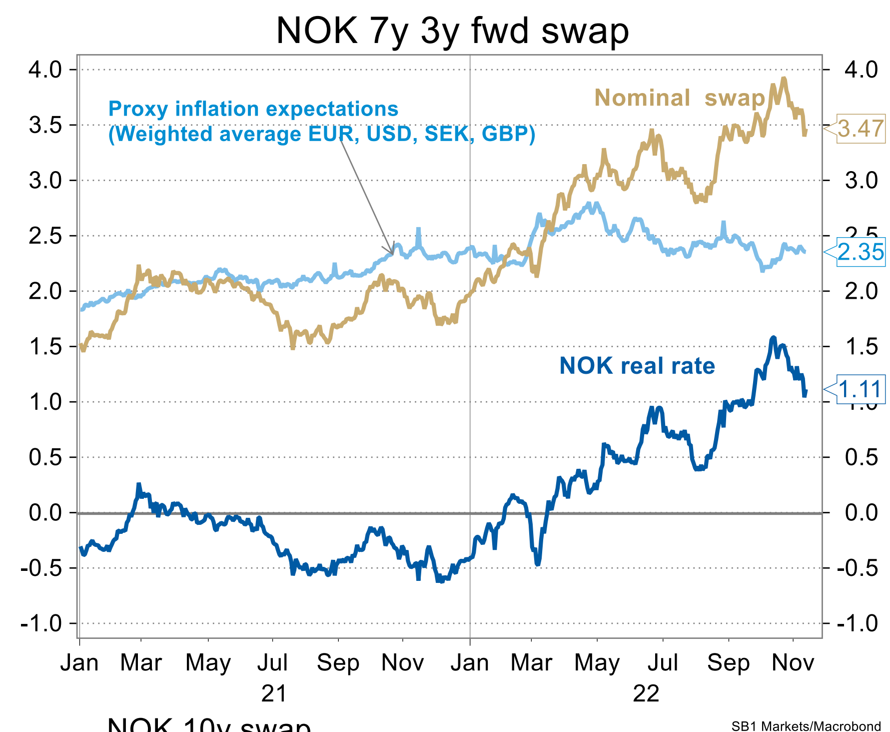


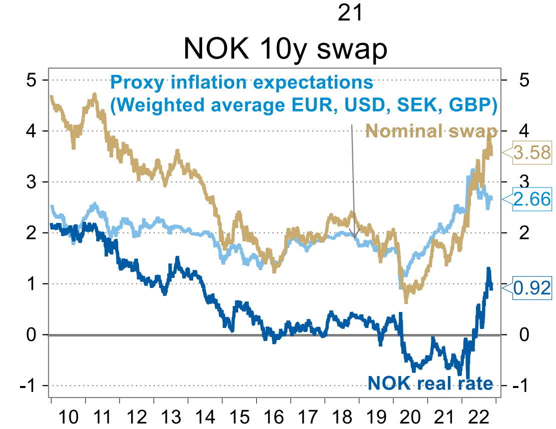




NOK real rates very likely down too – and by 50 bps from the peak in October





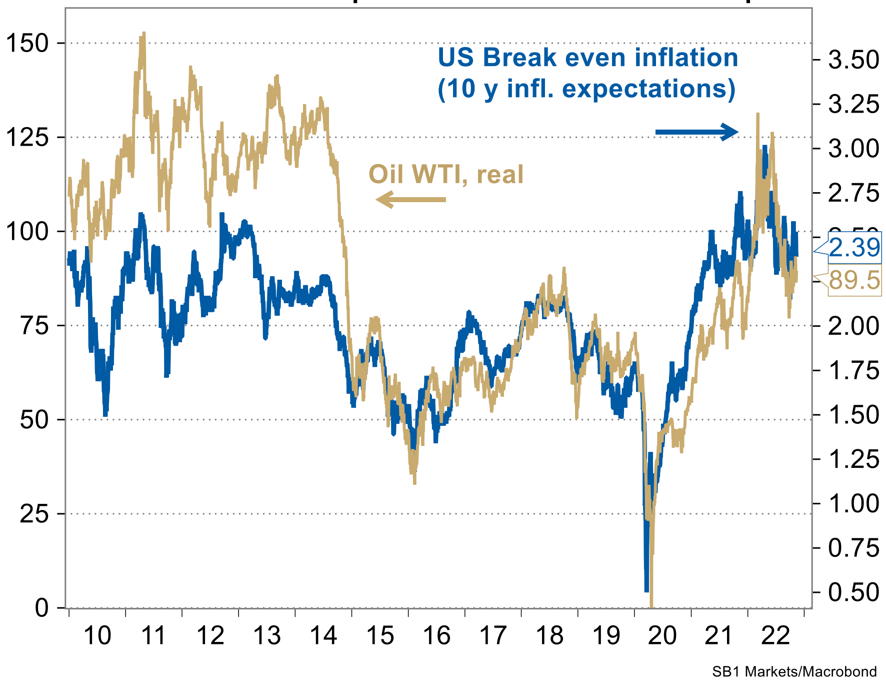


Memo: Our NOK inflation expectation proxy is a weighted average of EUR, SEK, GBP, and USD inflation swaps, cross-checked vs historical inflation differentials and inflation expectations from surveys

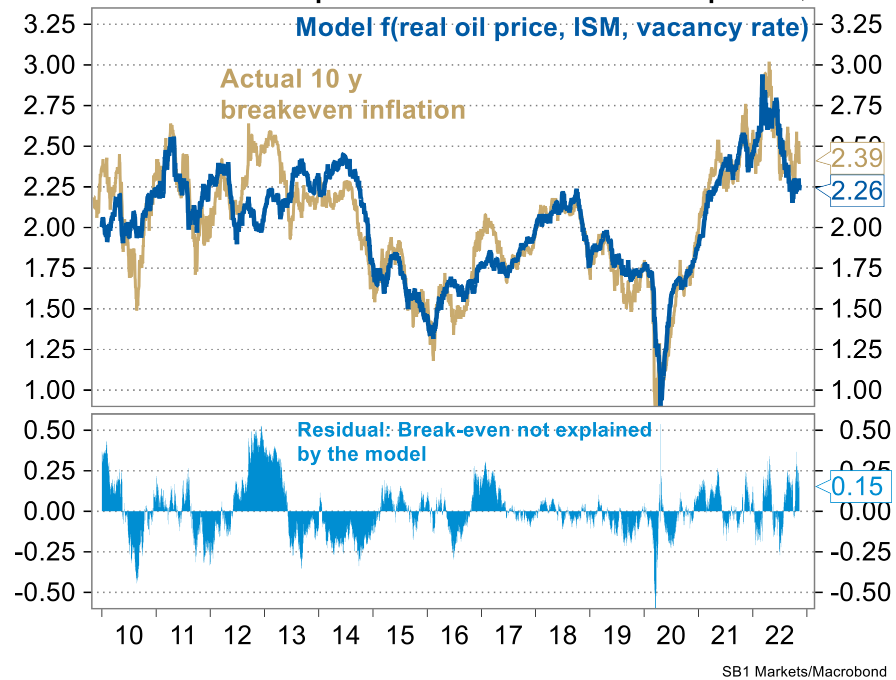
US inflation expectations still somewhat too high?

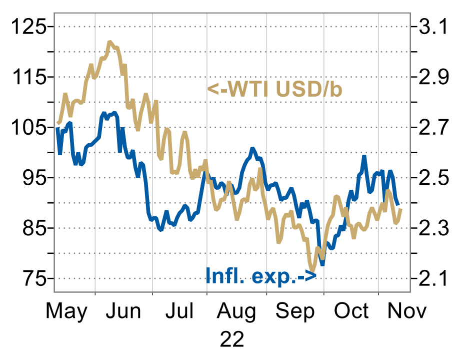
At least they are, vs our model estimate

USA Inflation expectations vs. the oil price



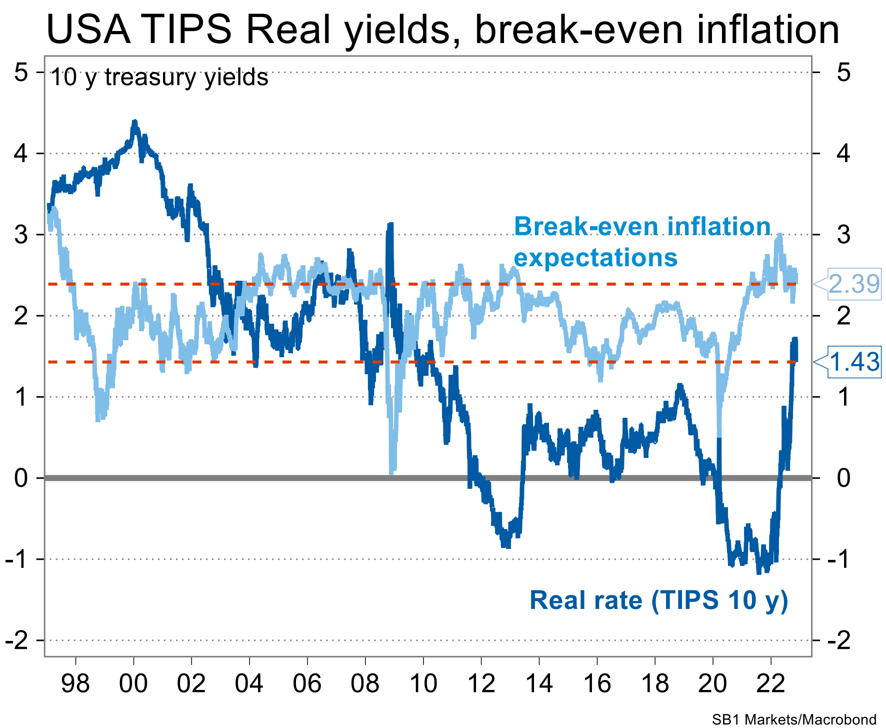
USA Inflation expectations vs. the oil price, CPI

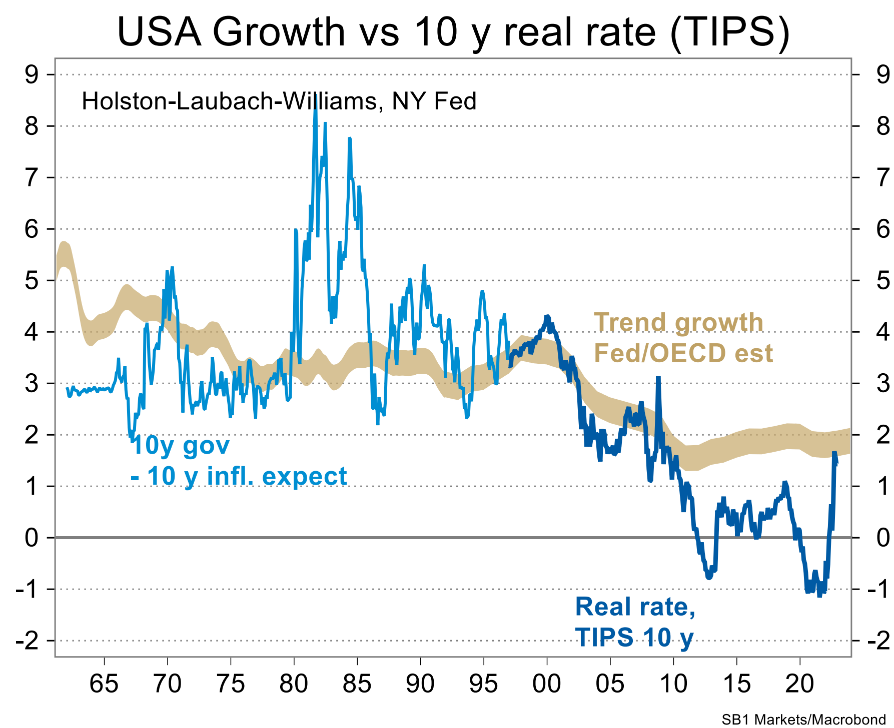




- A simple model including the spot oil price, the current ISM and the current vacancy rate pretty well explains the long-term breakeven inflation expectation in the bond yield curve
- What now? We are uncertain about the oil price, but rather confident that both the ISM, and the vacancy rate will decline. 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: Even if rates fell last week – the gap is more or less closed

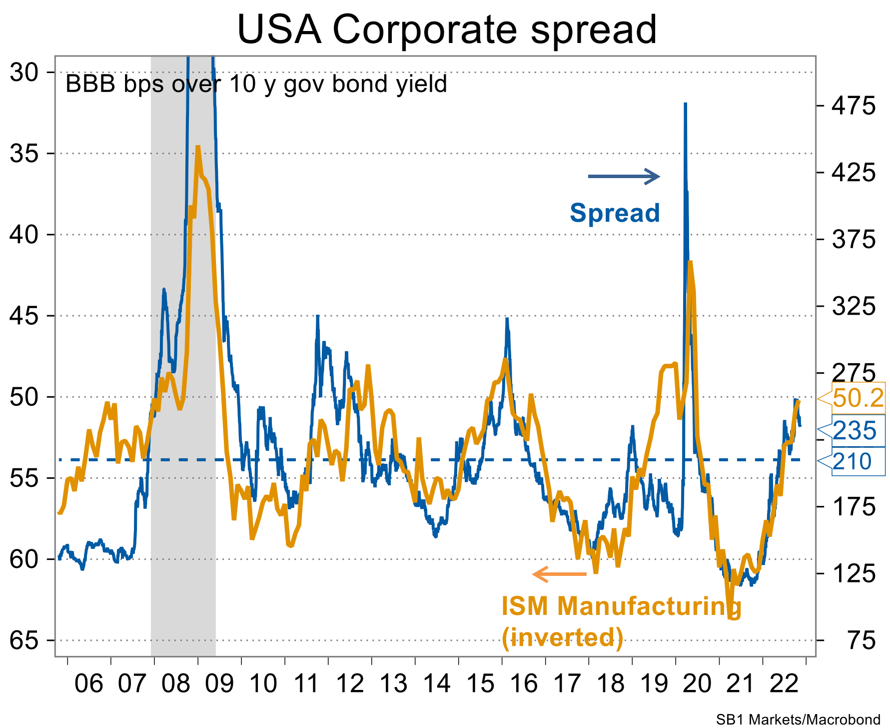


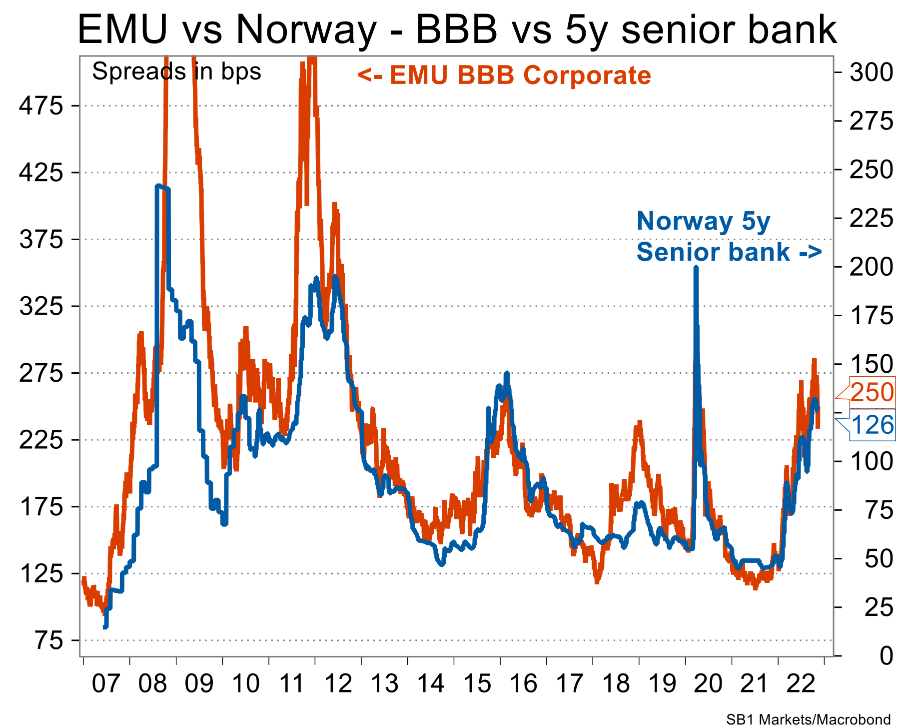


SpareBank 1 MARKETS

Why have credit spreads widened in 2022? Could it be the slowing economy?

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



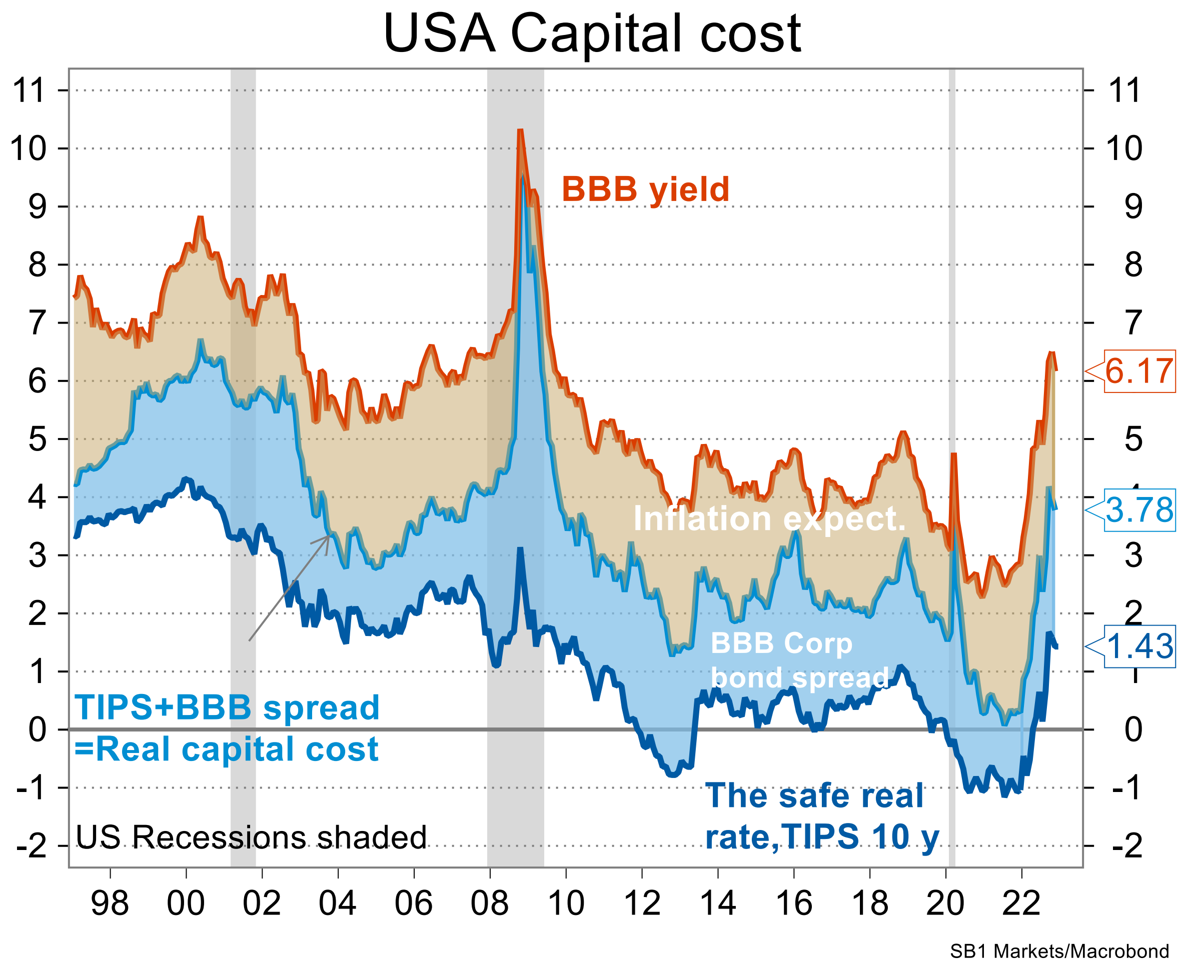


- The answer is not irrelevant for your view on the outlook for spreads, we think
- And do you think Norwegian spreads will be influenced by changes in the global credit market?
- Last week: Norwegian credit spreads rose in sympathy with higher spreads abroad the previous week
- The good news: The recent hike in spreads have made these credit instruments far more attractive, at least from a hold to maturity perspective

SpareBank 1 MARKETS

The cost of capital is not what it was some few months ago

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

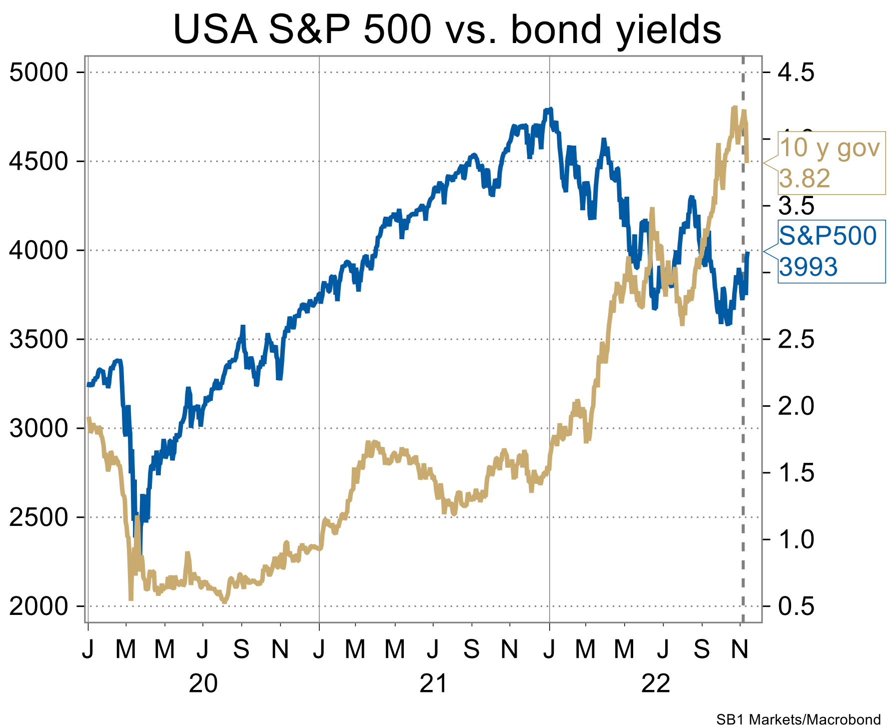


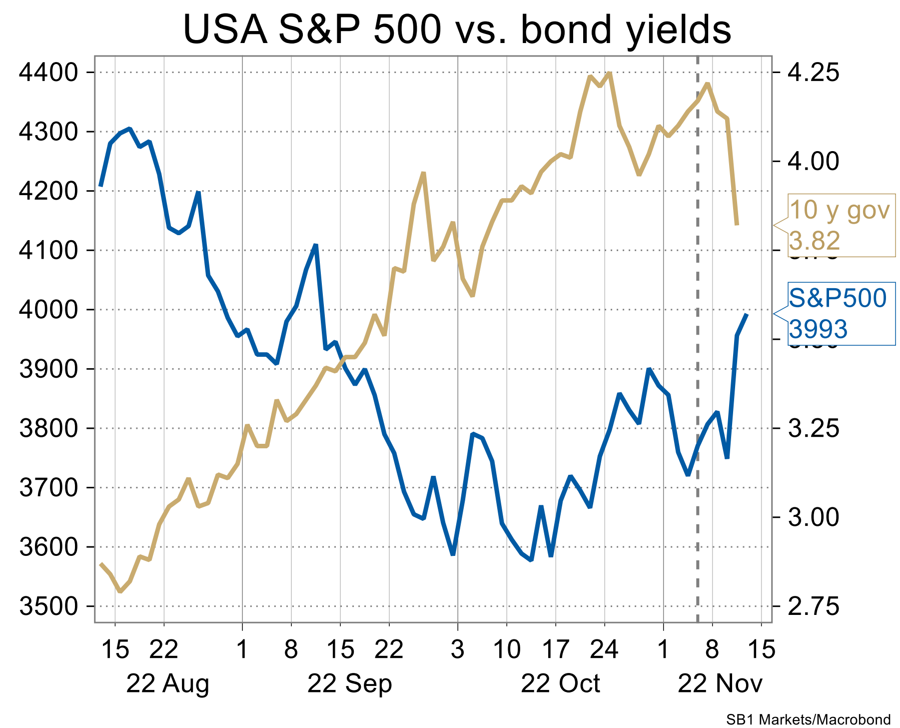
- Spreads and real rates fell last week but the story remains intact
- The total real borrowing cost for a BBB company has increased to 3.8% bps from zero by the end of last year:
  - » The TIPS real rate is up from -100 to + 140 bps
  - » The BBB corporate investment grade spread is up from 120 bps to 240!
- Add on modest inflation expectations, the nominal borrowing cost has increased from well below 3% to above 6% (though down from 6.7% at the local peak in October)

SpareBank 1 MARKETS

The CPI did it! S&P up 5.9%, the 10 y bond yield down 32 bps, to 3.82%

A bear market rally, or something more??



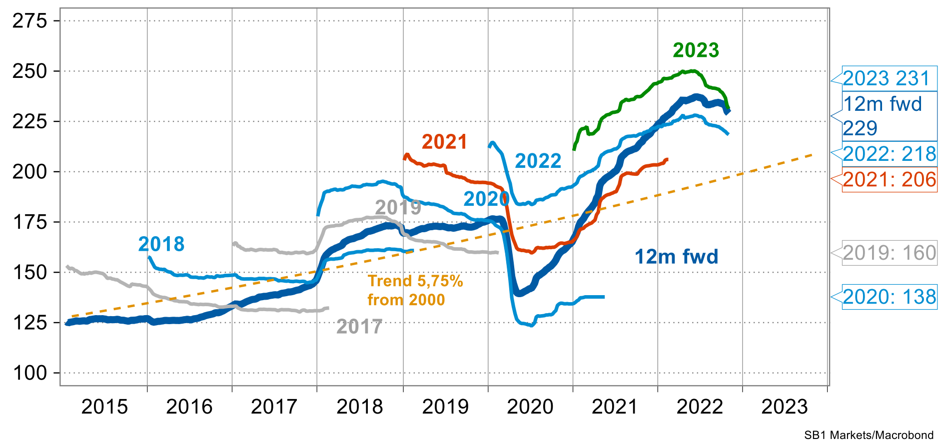


SpareBank 1 MARKETS

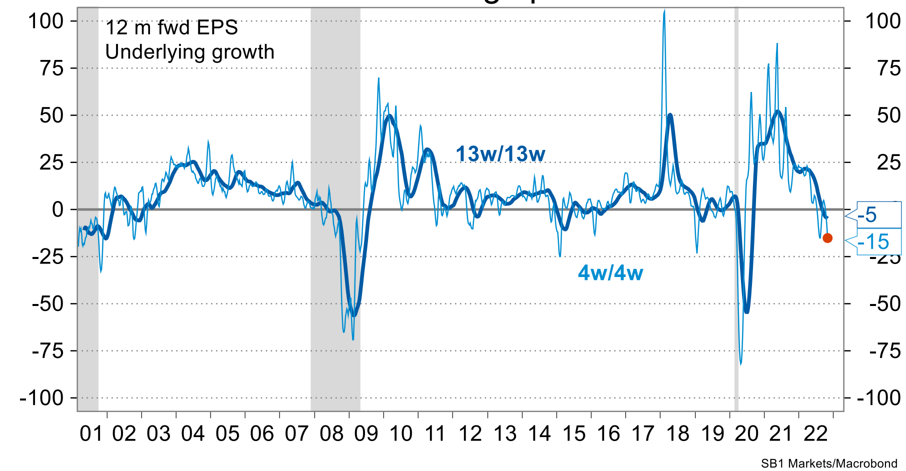
Earnings forecasts downward revisions are accelerating

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

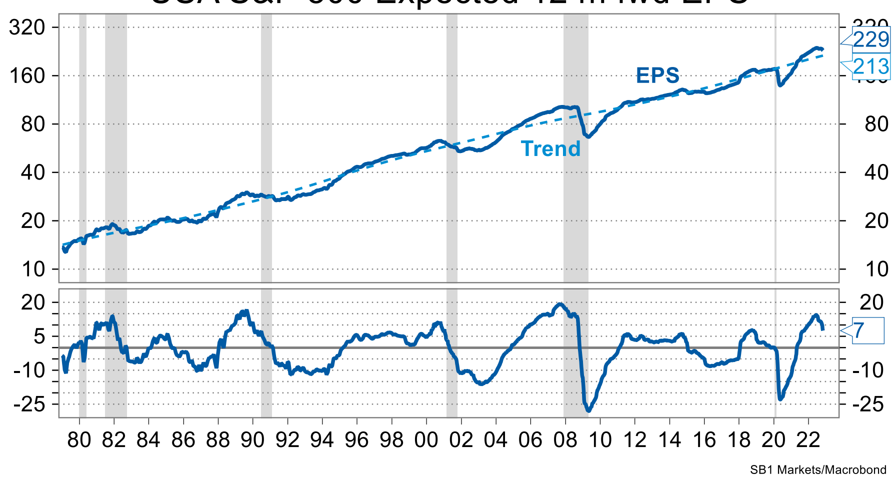
Annual S&P 500 EPS consensus (Factset)



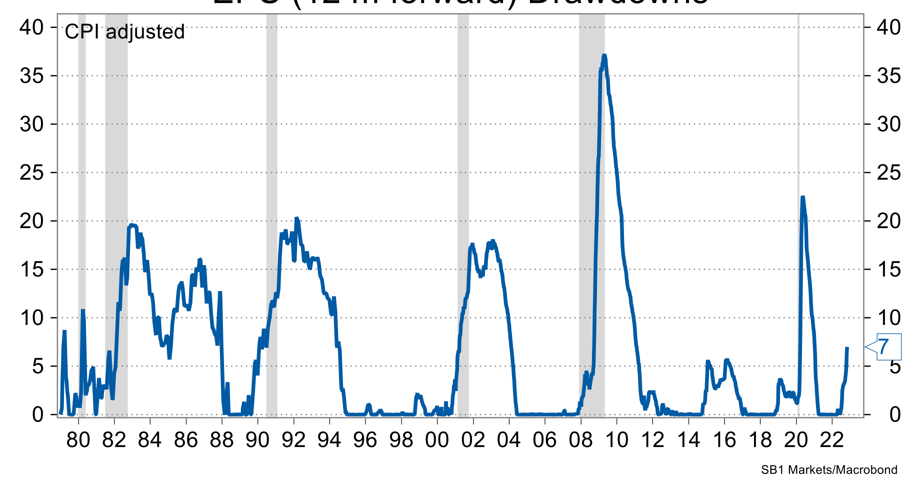
S&P500 Earnings per share



USA S&P 500 Expected 12 m fwd EPS



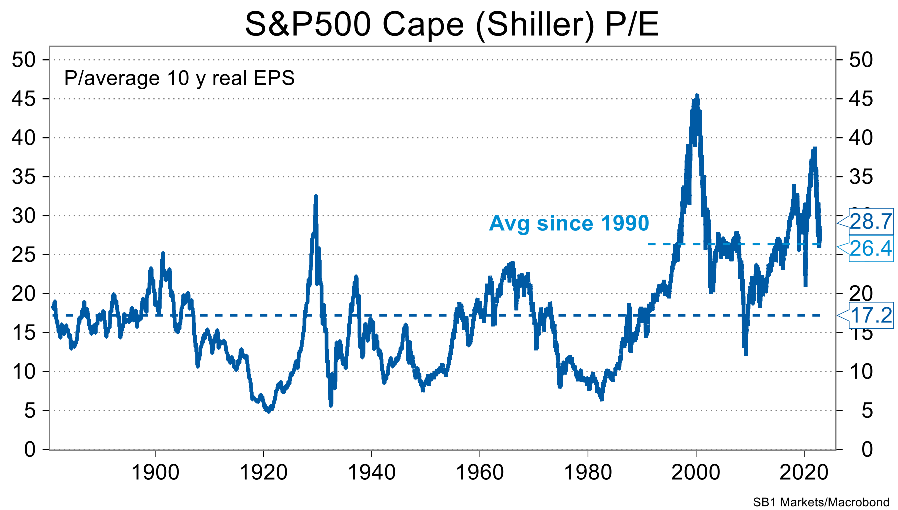
EPS (12 m forward) Drawdowns

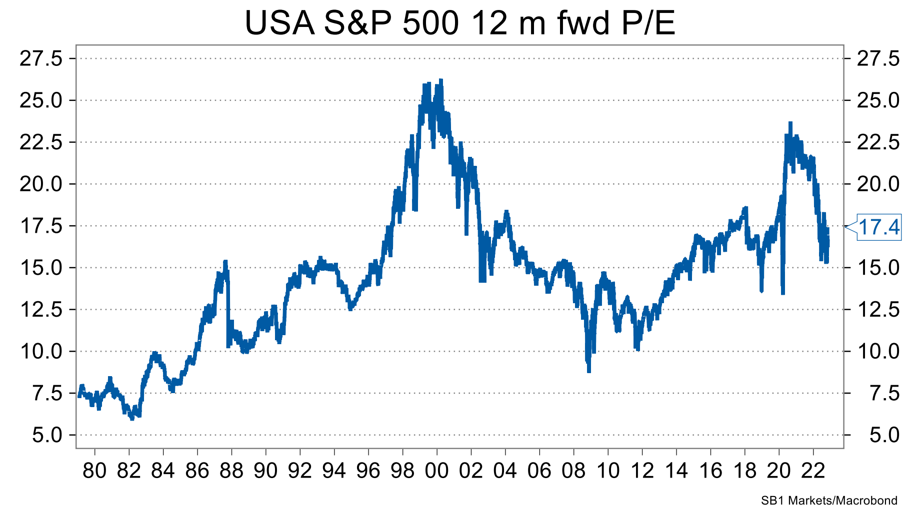


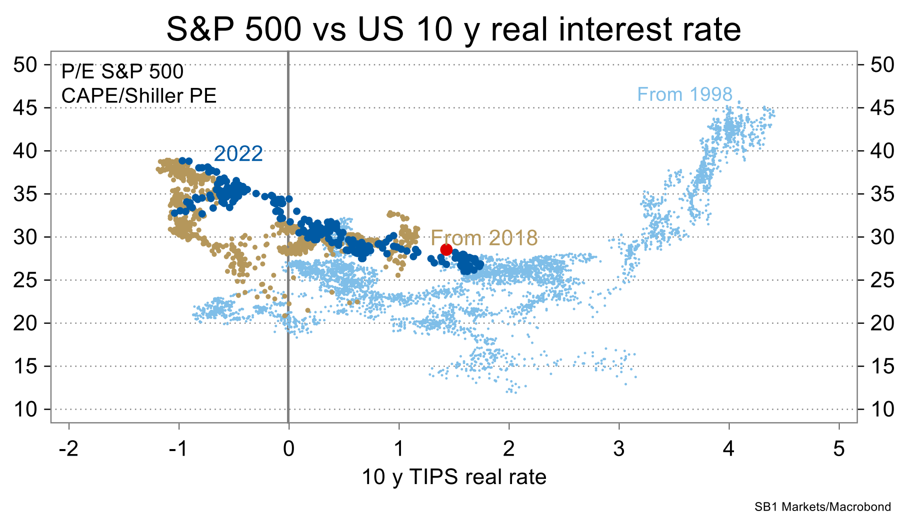
SpareBank 1 MARKETS

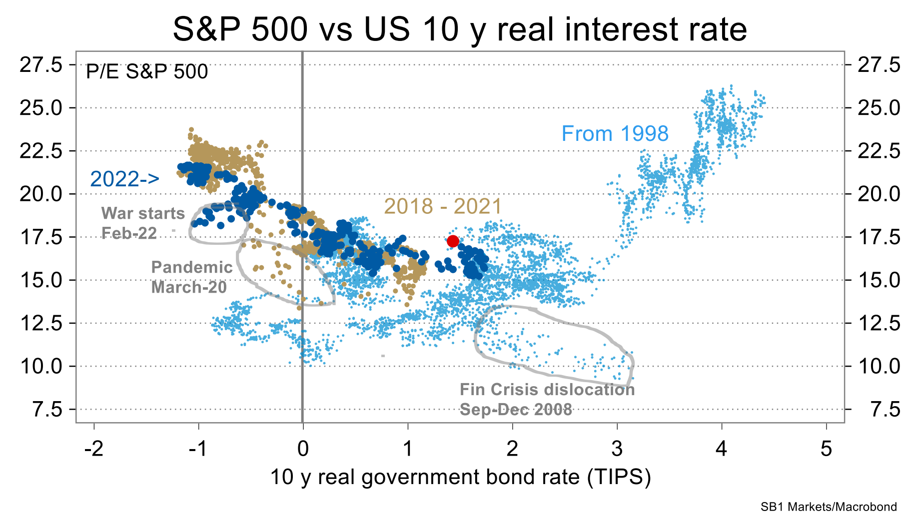
4 valuation charts: Check the extreme tight correlation between real rates, P/E

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





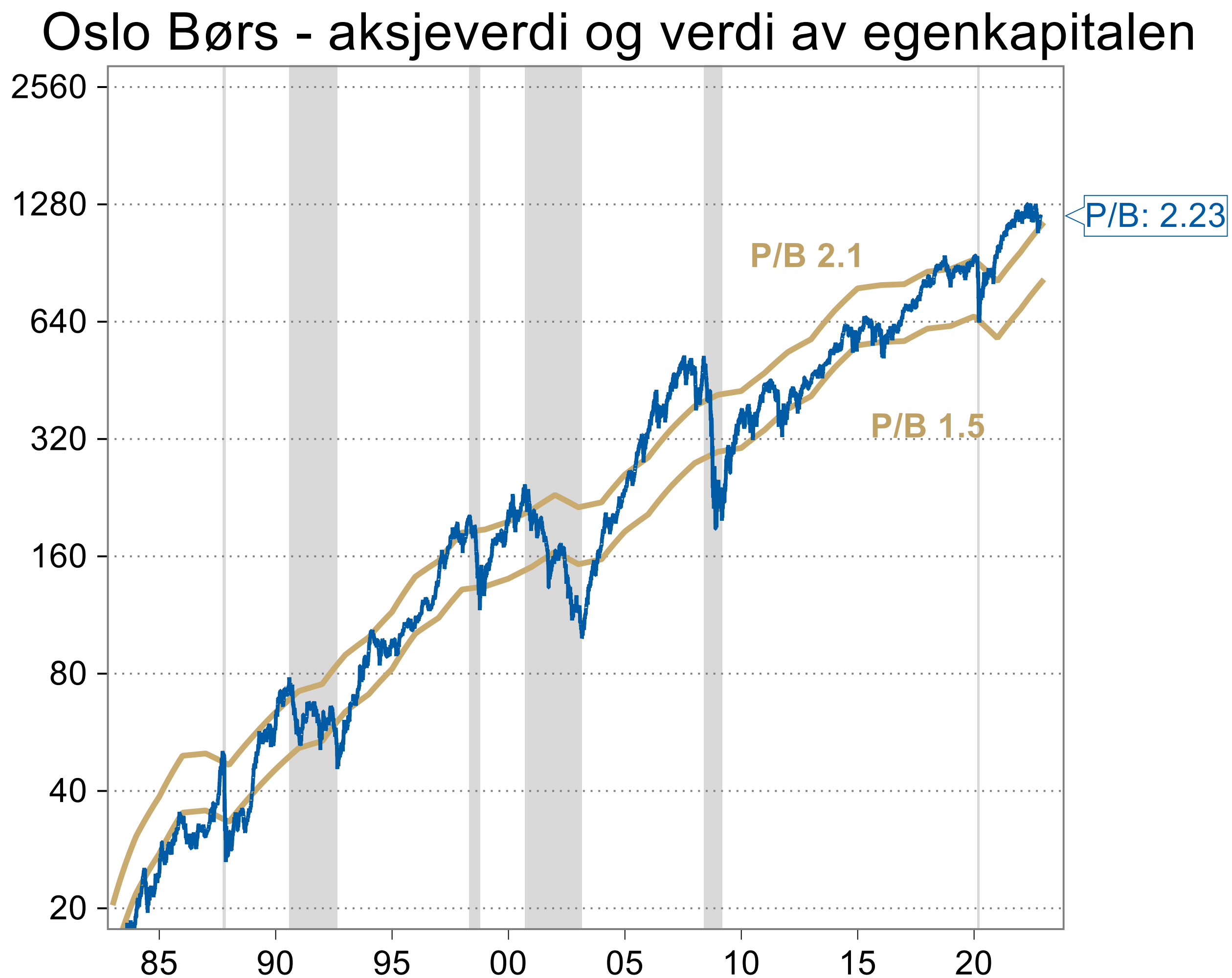


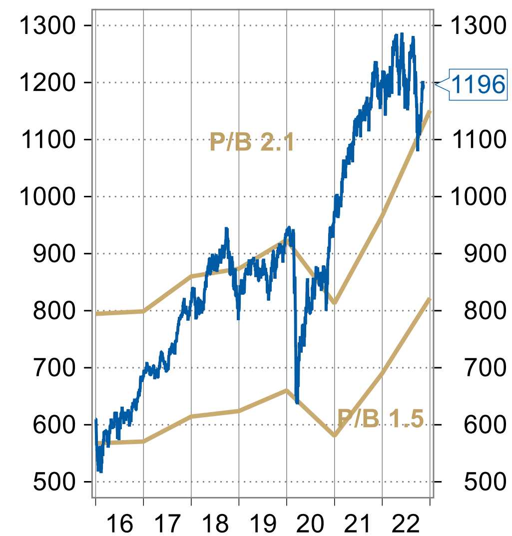


SpareBank 1 MARKETS

The OSEBX up to a Price/Book at 2.24

Thus, it is just 29% down the lower (1.5) band, index level 800! A very safe bottom at 500 (P/B=1)





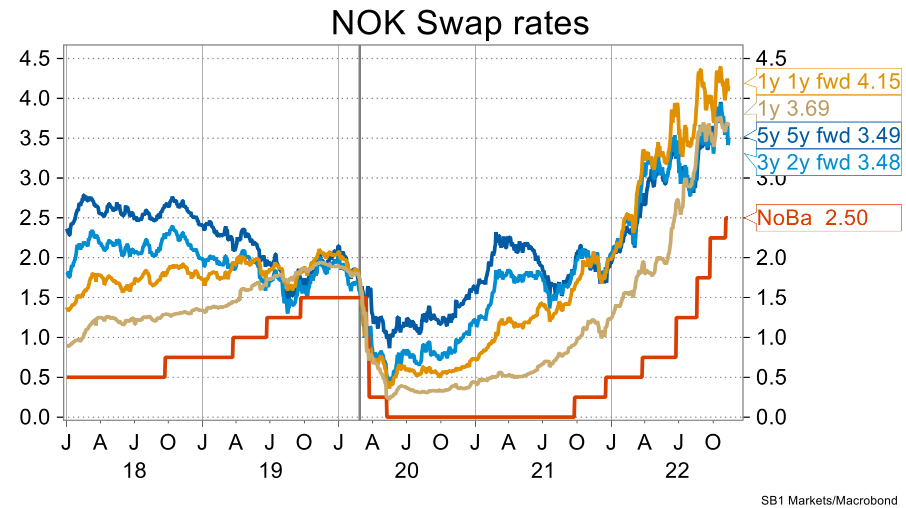
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

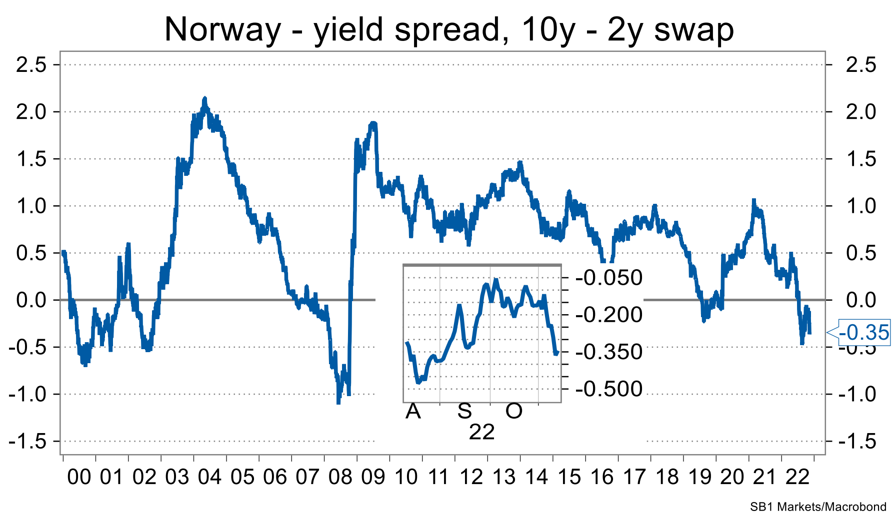
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

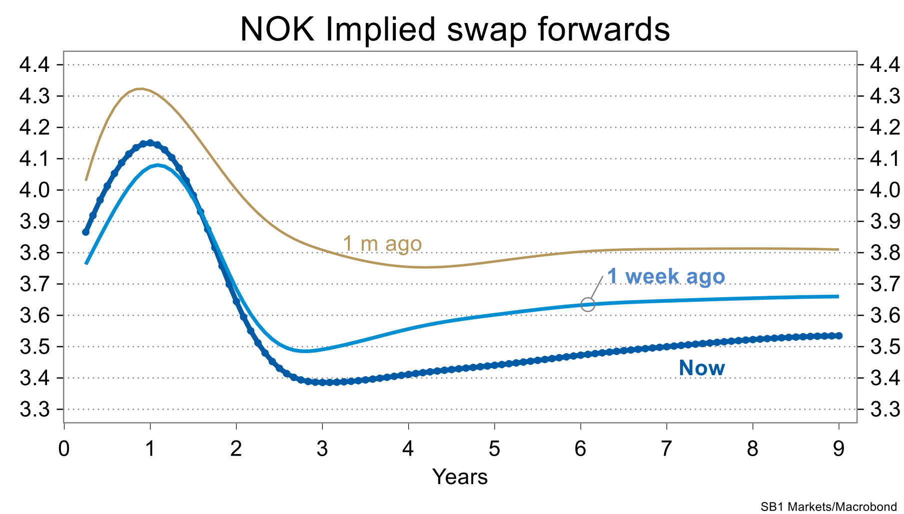
SpareBank 1 MARKETS

Norwegian swaps up in the very short end, down in the long end

The 3m NIBOR down 6 bp to 3.36, but the short end of the curve still up on the CPI print



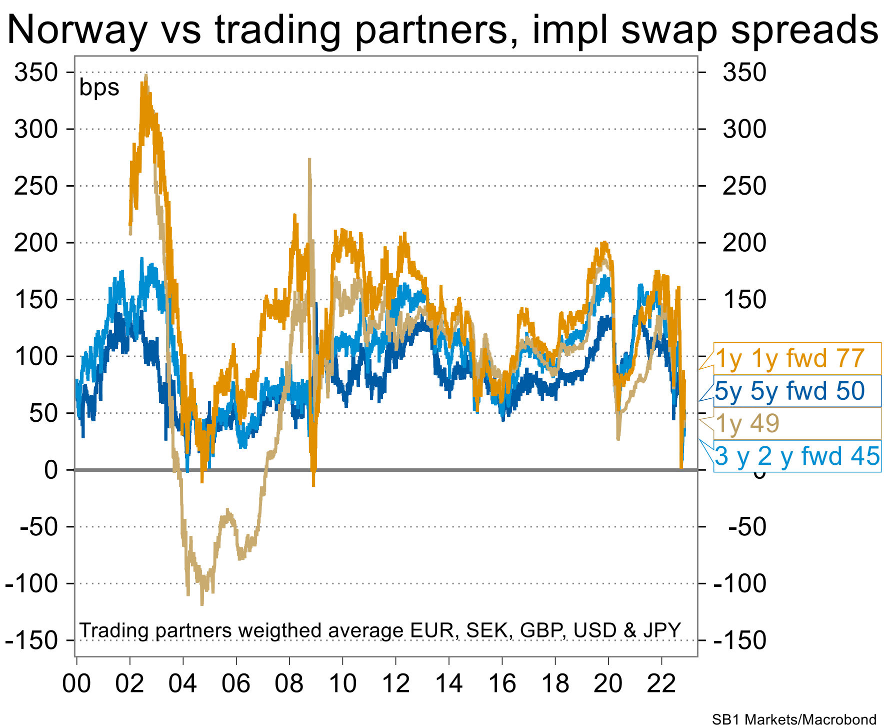


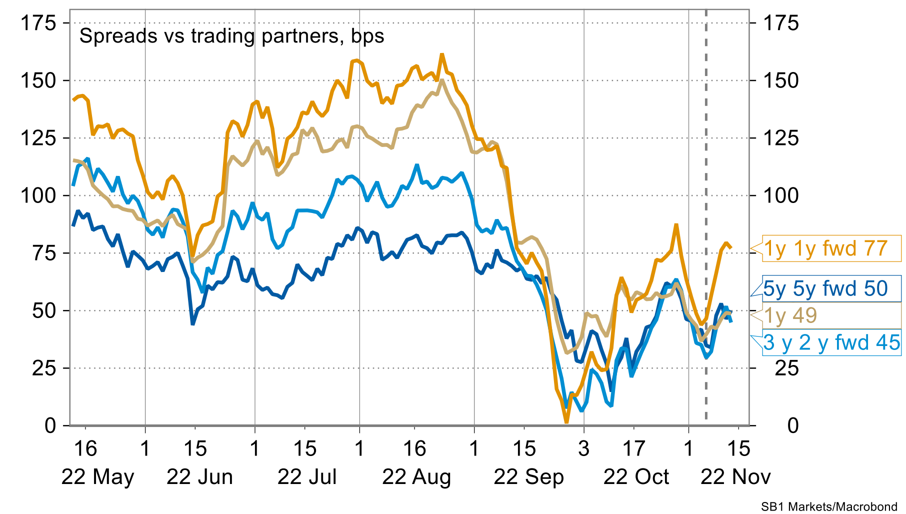


SpareBank 1 MARKETS

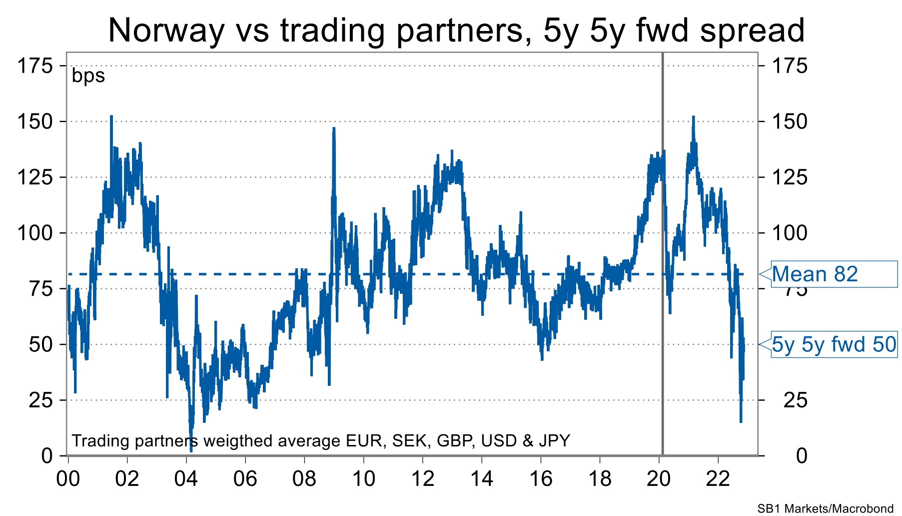
Rate spreads widened last week, probably at a low to fair level

At least not much potential at the downside (barring a housing collapse)



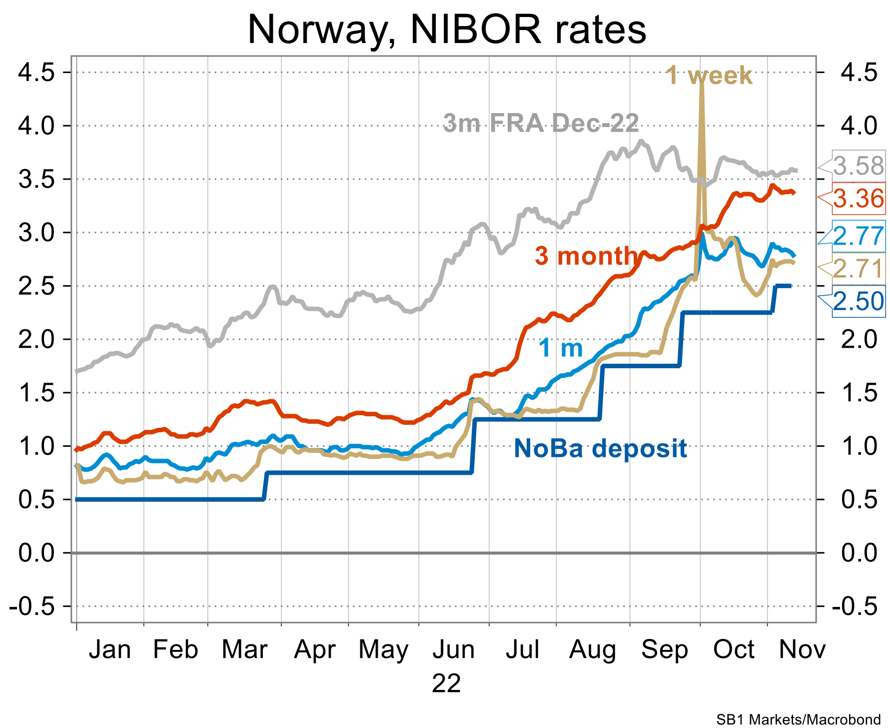


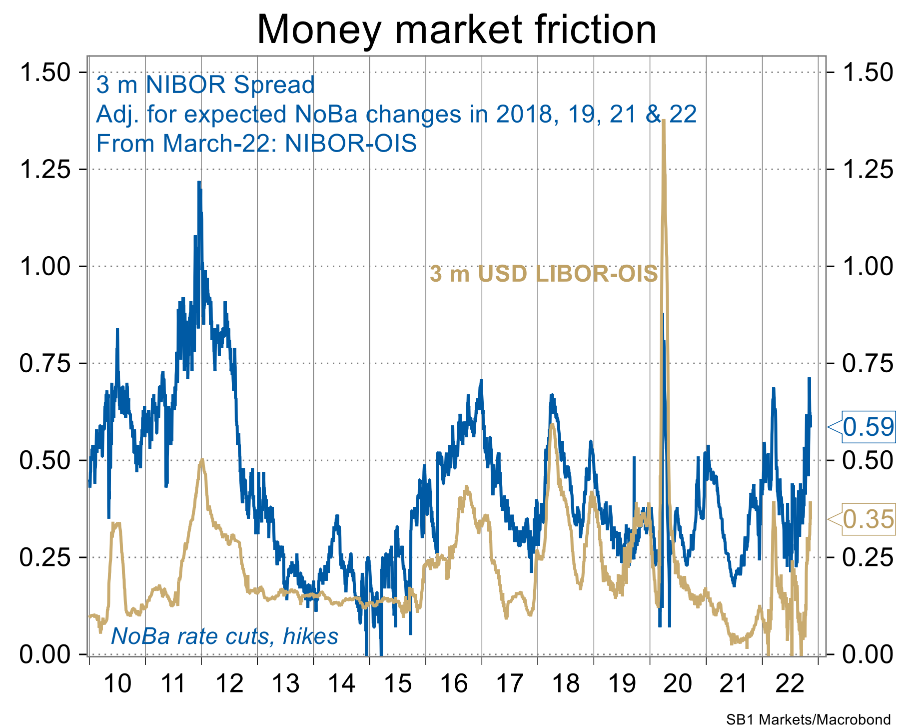
- NOK rates are far below the average level among our trading partners
- We assume spreads now should be far lower than the historical average but still higher than the trading partners' average, due to low EMU rates
  - » The main downside risk vs spreads: A much weaker Norwegian housing market



The 3 NIBOR down 6 bp to 3.36% as the NIBOR spread narrowed

The spread is still well above a normal level, likely at some 60 bps (vs a 35 bs average level)

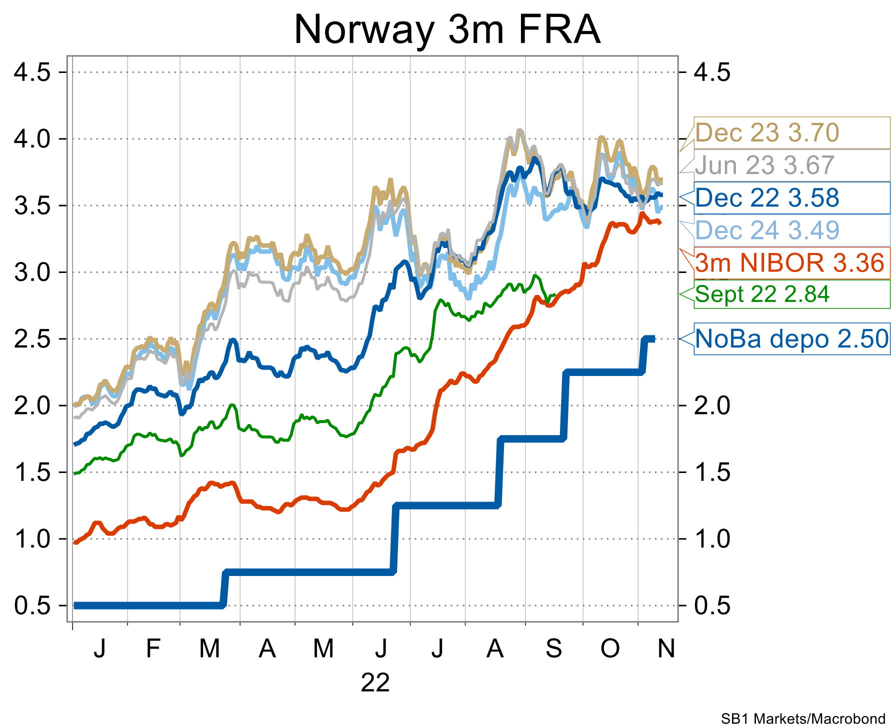


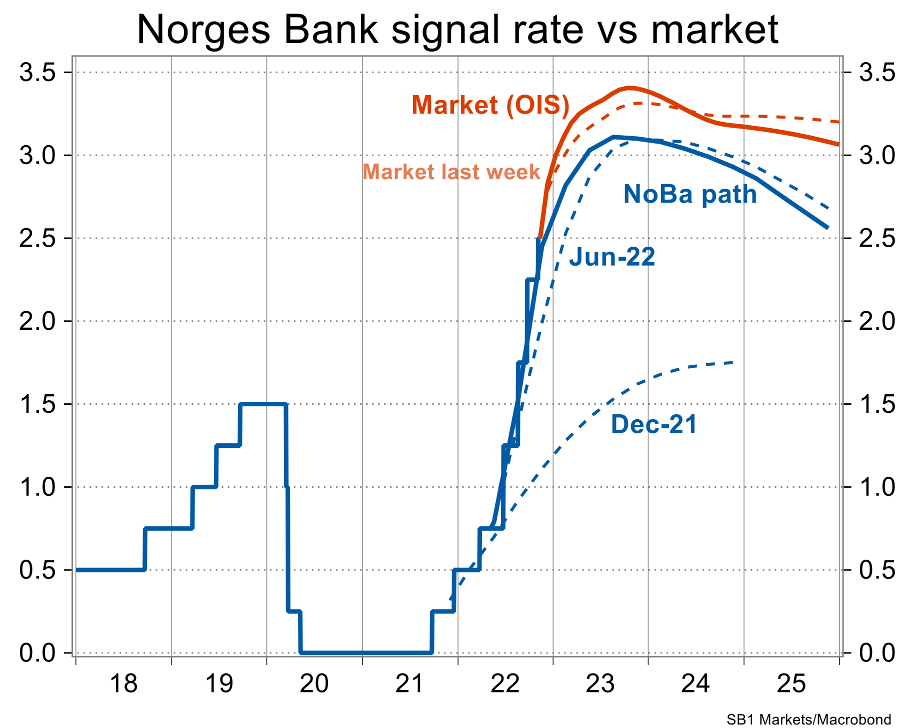


- We are now (finally) utilising the NOK OIS (Overnight Index Swaps, which are bets on the NoBa signal rate (or formally the NOWA rate)

Rate expectations up the short end of the curve, down from mid-24

The CPI surprise lifted the short end of the curve – but lower rates abroad lowered the long end



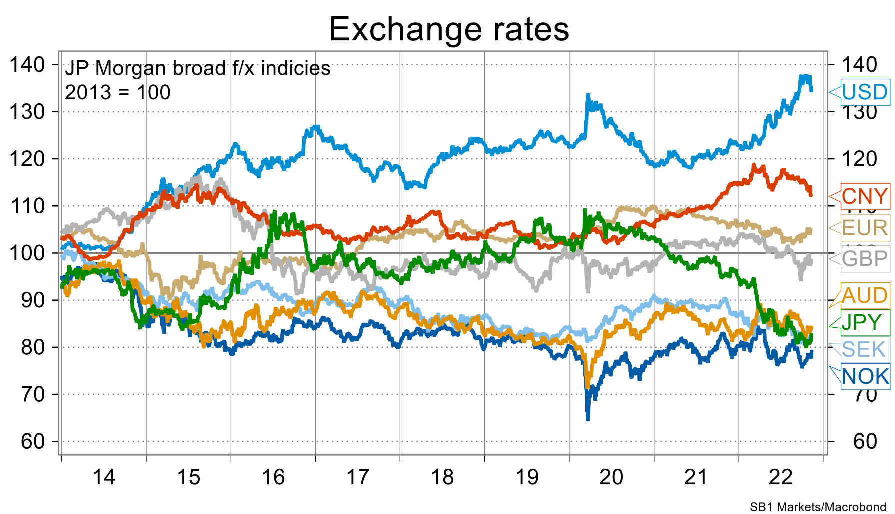


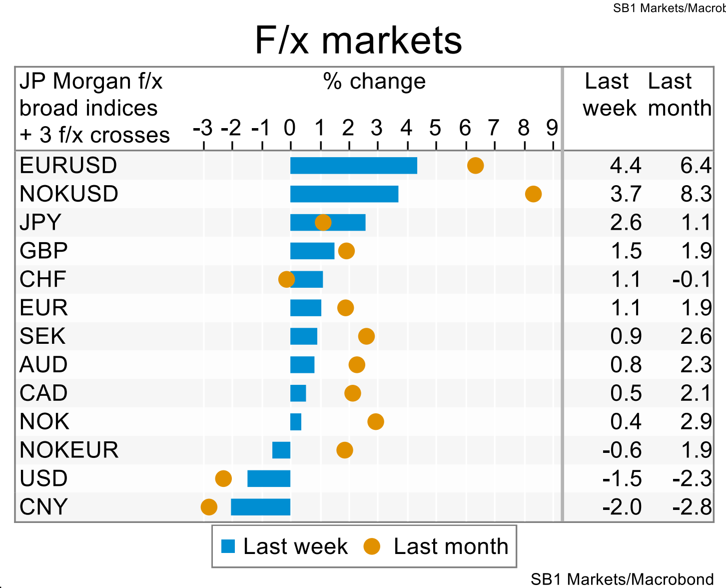
- The short end of the NOK OIS curve signals a 50% probability for a 25 bps hike in December, and 50% for a 50 bps hike, slightly up from one week ago
- Thereafter, 2 or 3 x 25 bps hikes are discounted in 2023, up to 3.4% in Q4-23, 30 bps above NoBa's September interest rate path

SpareBank 1 MARKETS

US sharply down alongside US rates last week – (even if rates fell elsewhere too…

The EUR appreciated, as did the NOK. The USD is still very strong – too strong?



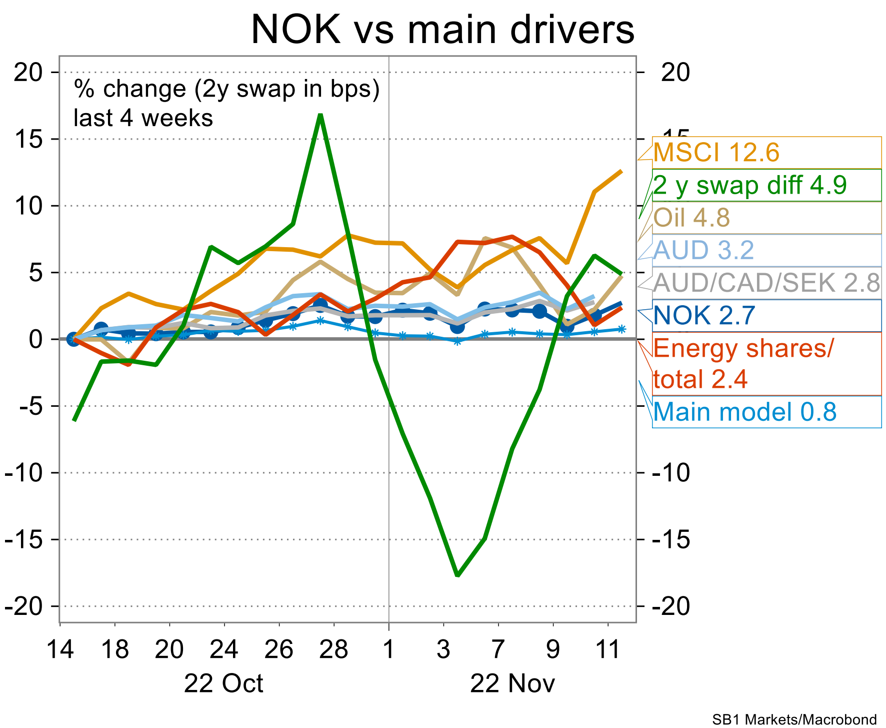


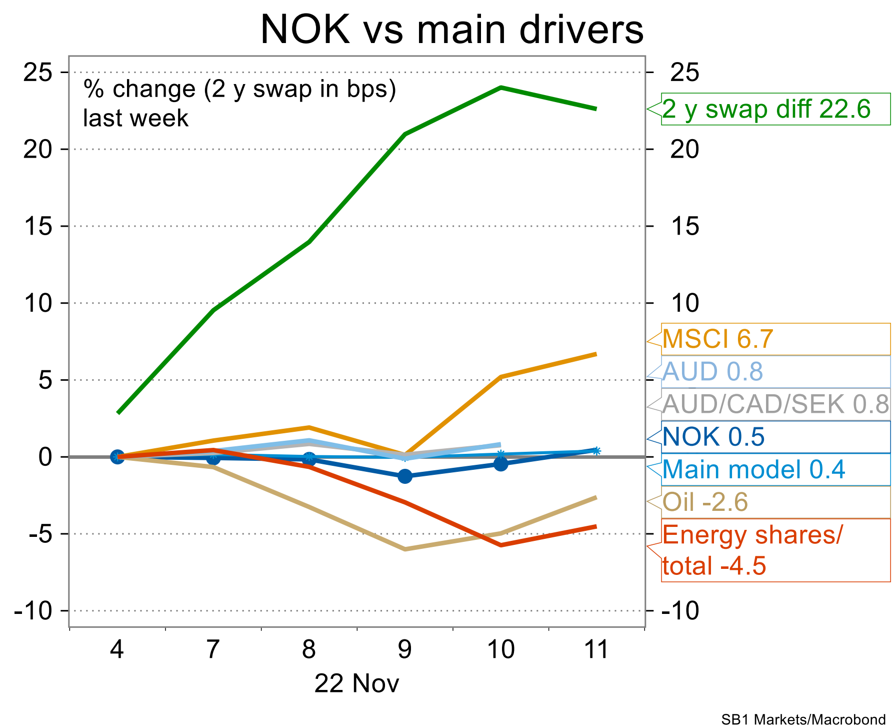
JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
EURUSD	4.4	6.4
NOKUSD	3.7	8.3
JPY	2.6	1.1
GBP	1.5	1.9
CHF	1.1	-0.1
EUR	1.1	1.9
SEK	0.9	2.6
AUD	0.8	2.3
CAD	0.5	2.1
NOK	0.4	2.9
NOKEUR	-0.6	1.9
USD	-1.5	-2.3
CNY	-2.0	-2.8

Friday's prints are partially missing, due to the US bank holiday!

NOK up 0.5%, supported by… A low CPI print in the US, a high in Norway

The NOK is in line with the model estimate



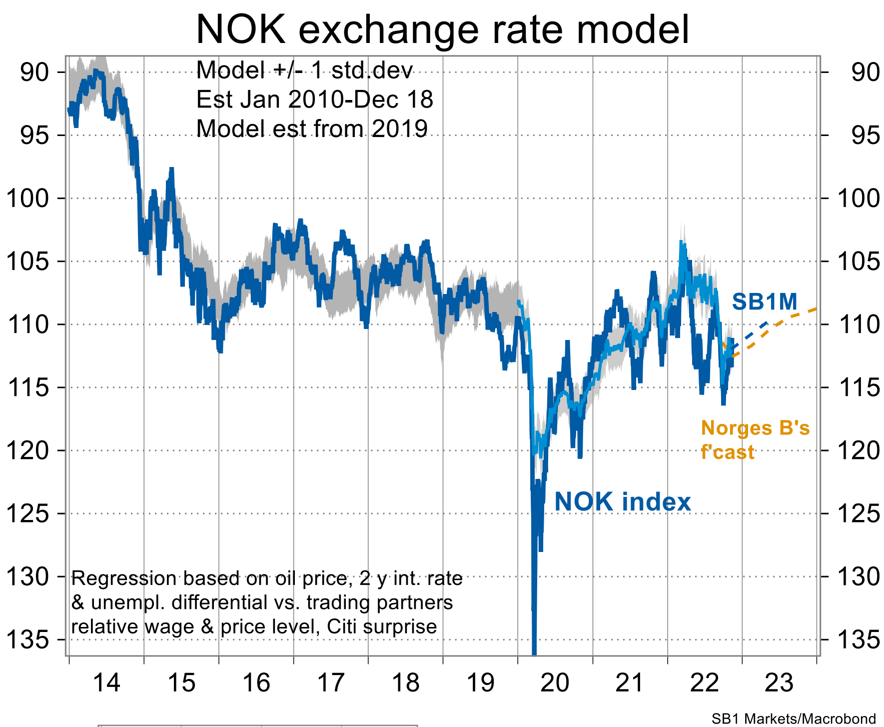


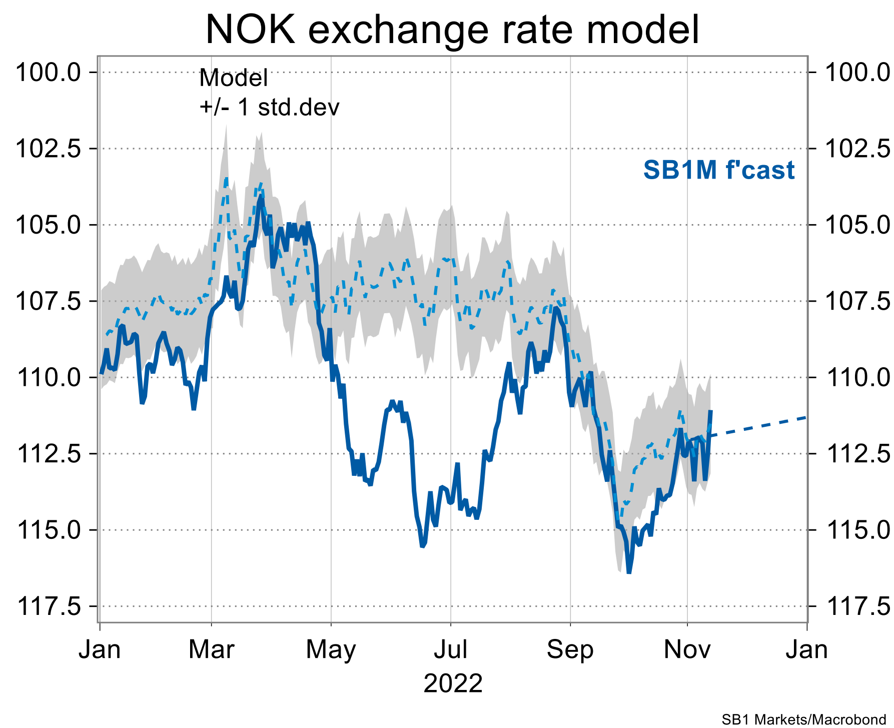
Gaps vs. our model estimates narrowed further last week

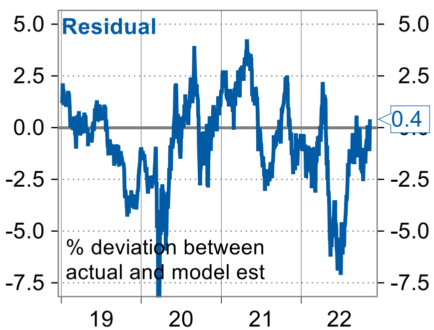
- ***NOK is 0.4% above our main model estimate (from -0.3%)***
- The NOK is 6% weaker than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts, a substantial weakening (unch)
- NOK is 4% weaker than an estimate from a model that includes global energy companies equity prices (vs the global stock market) (unch)

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. Friday's print is an estimate, due to the US bank holiday

The NOK 0.4% above our model forecast!



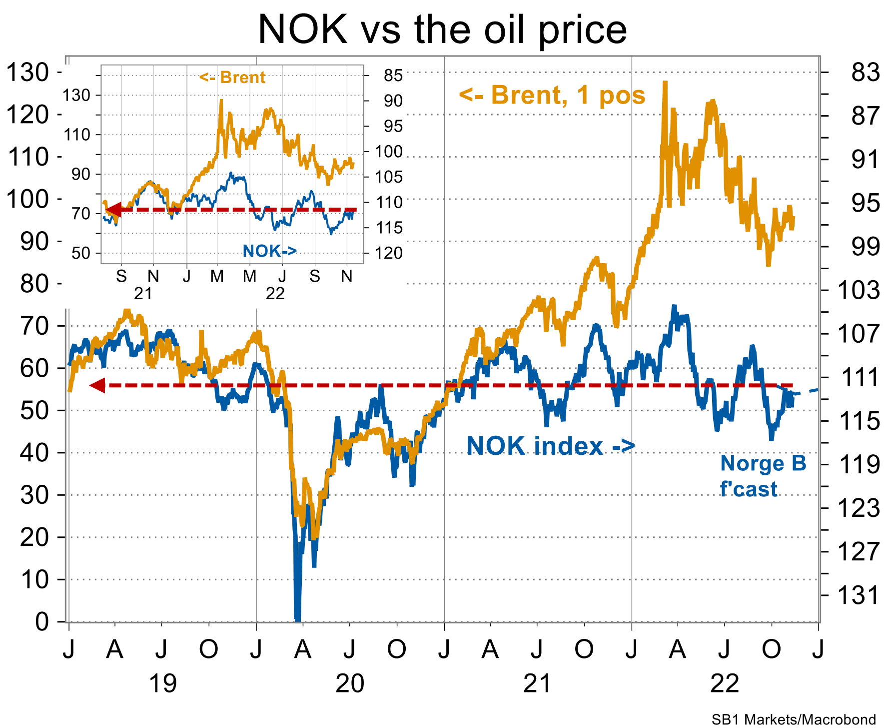


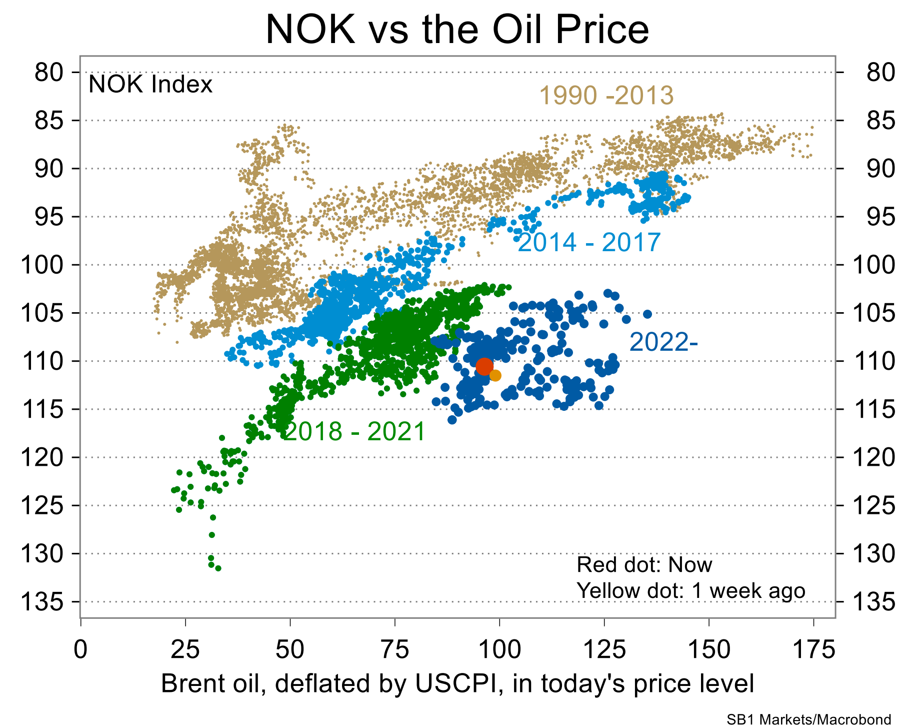


SpareBank 1 MARKETS

NOK slightly up, oil slightly down

The ‘gap’ vs the oil price has narrowed somewhat recently

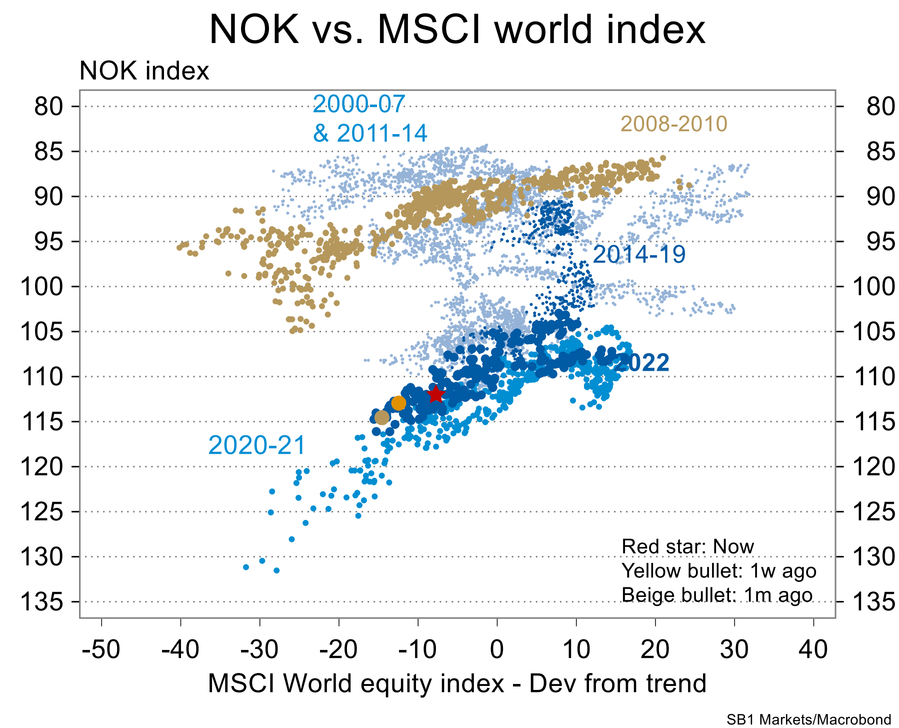




- The correlation between the NOK and the oil price has been close to non-existent since the start of 2022, rather unusual

The NOK up even if the global stock market declined

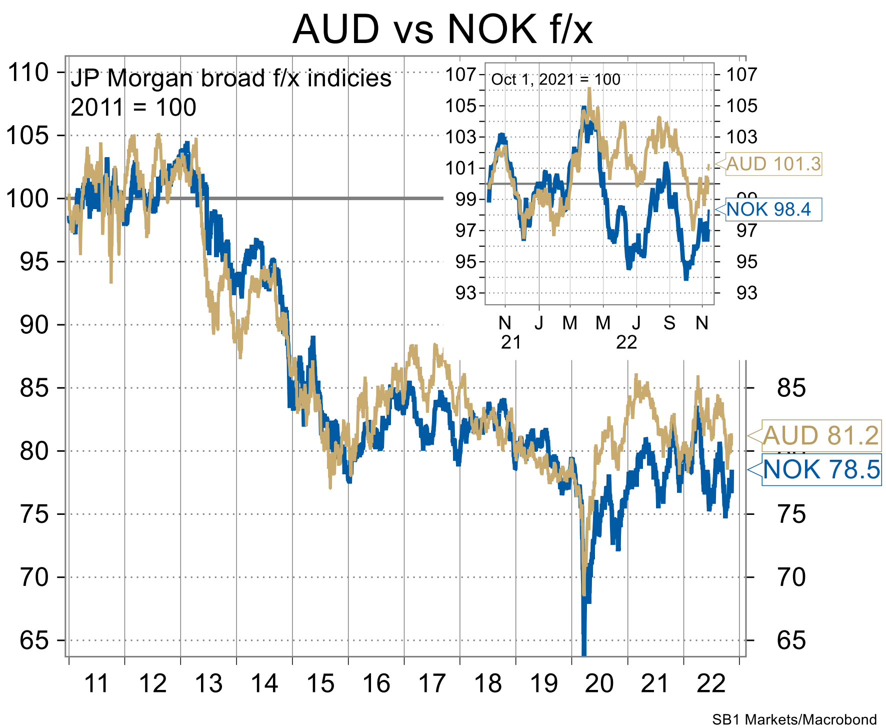
The NOK has been closely in sync with the global stock market since April

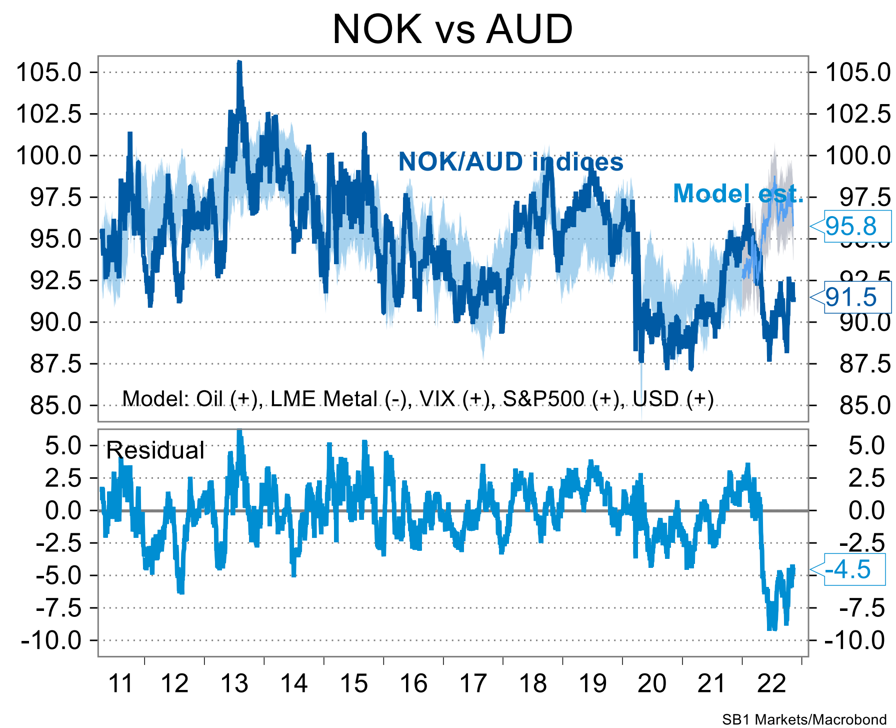


- However, has not been any stable correlation over time, and when it is, the oil price is normally the real driver. Not so much now

Both the AUD and NOK up last week – NOK is still lagging

NOK is 4.5 % below our model f'cast vs AUD

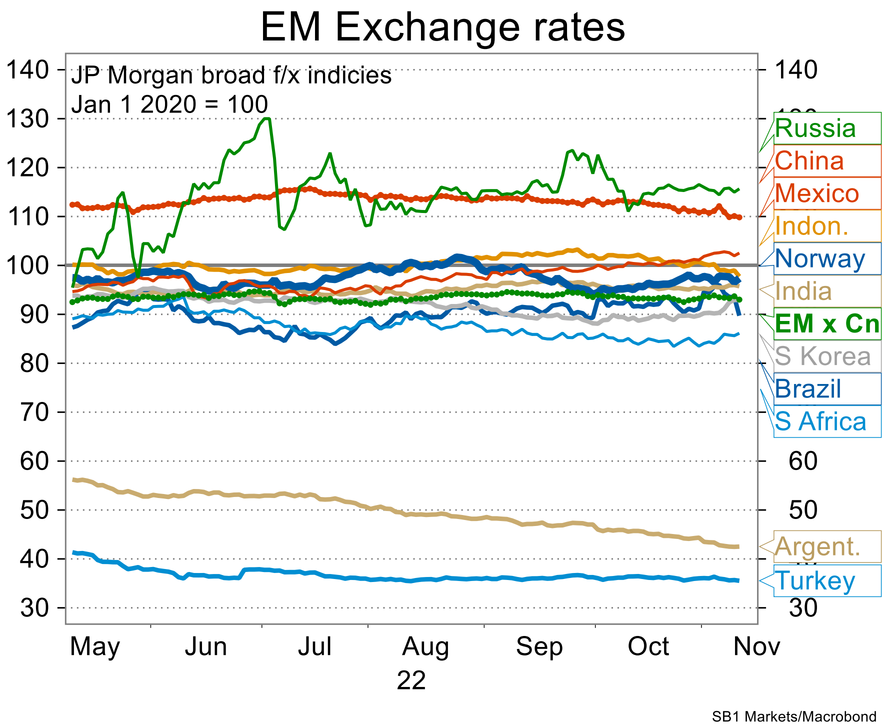


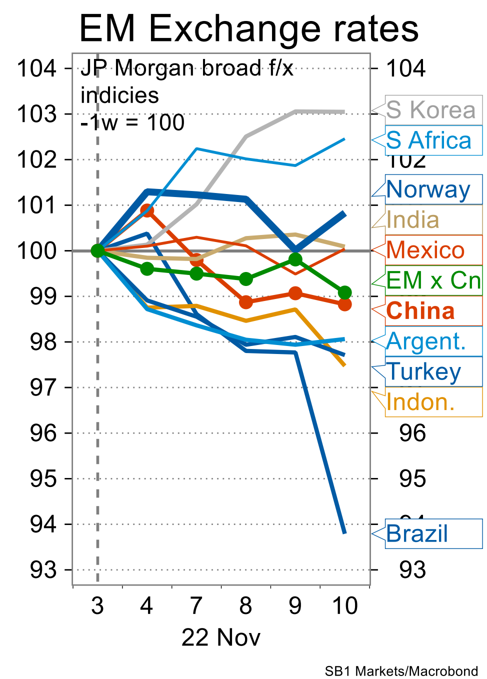


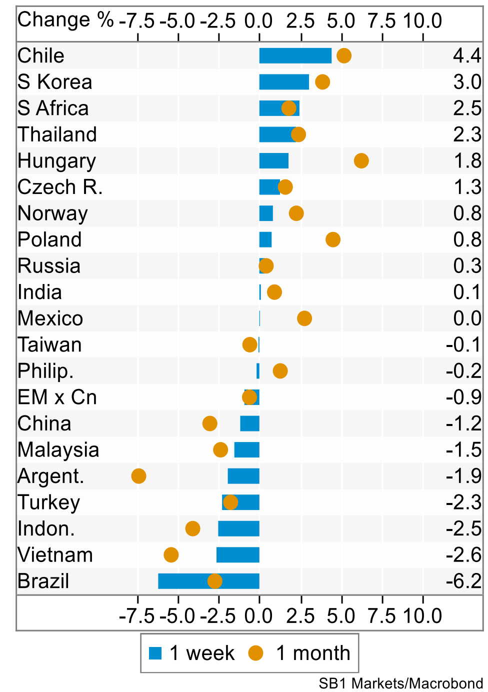
- The discrepancy between the NOK and AUD is unusual, given the normal factors that normally has explained the limited gap between the two
- Normally, NOK strengthens vs the AUD when the oil price rises vs. the LME metal index, when VIX, and the S&P500 index increases, and the USD index appreciates.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

EM f/x down last week, even if US rates fell sharply (data through Thursday)

Brazil turned down due to uncertainty on president Lula's fiscal policies – then supported by easing of some few Covid restrictions in China







- The CNY has been slightly on the weak side recent weeks, and fell by 0.7% last week

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