November 21, 2022

Macro Weekly

Week 47

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

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

SpareBank 1 Markets
Phone : (+47) 24 14 74 00
Visit address : Olav Vs gate 5, 0161 Oslo
Post address : PO Box 1398 Vika, 0114 Oslo

Last week

- **The War/European Energy/Commodities**
  - **No movements** on the ground in Ukraine last week – but the sky is filled with Russian missiles, harming the Ukrainian civil infrastructure (and Poland was hit by a Ukrainian air defence missile)
  - **European gas and electricity prices** rose last week – even for the longer-term contracts, as the winter arrived
  - Most **other commodity prices** fell further, especially the oil price
  - The **Chinese and US** presidents finally met – and they spent hours together at Bali. Not too friendly, but at least they are talking. BTW, the **corona virus** is once more spreading faster in China
- **China**
  - **Industrial production** rose just 0.3% in October, and the annual rate slowed by 1.3 pp to 5.0% y/y in October, below expectations
  - **Retail sales** were down 0.8 m/m in volume terms (our calc), and 2022 sales were revised down significantly. The current volume is only 1.4% above the pre-pandemic level, no doubt harmed by covid restrictions
  - In addition, **investments** are slowing and were up only 0.1% in October – we expect investments slow further due to a slowdown in the construction sector
  - **New housing sales and starts** fell further and starts are down almost 60% from the peak in late 2020. The **authorities** have announced long lists with measures to get the construction sector back on track (one lists has 16 points), to strengthen 'sound' developers and restore buyers' confidence. **House prices** fell further in October, for the 15th month in row but the price decline in not accelerating – but it is broadening to even the tier one cities
- **USA**
  - **Retail sales** increased by 1.3% in October and core sales were up 0.7%, above expectations, and the previous month's data were revised up too. In volume terms we assume a 0.5 lift in core sales in October and sales are trending upwards at a rather solid pace, almost 3% 3m/3m, far better than we estimated a couple of months ago!
  - **Producer prices** are slowing, and in early stages, crude and intermediate (ex. food & energy) have turned south
  - **Manufacturing production** rose less than expected in October, and history was revised slightly down and production . However, manufacturing **surveys** have been weak recent months, and even if the average of the first three is up, the trend is clearly down
  - **Housing starts, building permits, home builders' index and existing home sales** fell further in October. Existing home **prices** rose marginally, and the inventory of unsold existing homes has not increased by much. Still, we still prices will come sharply down as mortgage rates are high, and affordability the worst since 1985, also due to the 40% prices surge since before the pandemic
  - **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**
  - As previously reported **GDP** grew 0.2% in Q3 (0.8% annualised) down from 0.4% in Q2. GDP is now 2.1% above the Q4-19 level. German GDP was up 0.3% in Q3 – and is up 0.2% vs. Q4-19. **Employment** grew further in Q3, and the employment rates are record high in a majority of EMU countries (Just UK and US is below the pre-pandemic levels among large countries)
  - EMU **industrial production** up 0.9% in September, expected 0.3%, but production ex. Ireland was up just 0.1%. Manufacturing production was up 1.5%, and 0.7% ex Ireland. However, the outlook is more worrisome as the manufacturing PMIs continued to fall further into contractionary territory in all of the big 4 countries in October

Last week II

- **UK**
  - » UK headline **inflation** came in above expectations again in October and is now at 11.1% - the highest since 1981. The Bank of England expects inflation to top out at this level in Q4. Interesting times, as inflation is rather broad, and all major sectors are reporting inflation at or above the target
  - » **Unemployment** rose 0.1 pp to 3.6% in September, up from the lowest level since 1974 in August, expected unchanged. The number of **payrolls** is still increasing at a rapid pace and so are wages. **Annual wage growth** accelerated 0.3 pp to 5.7% in September, expected up to 5.5%. Not smoothed, wages were up 6% y/y, and the underlying 3m/3m rate is at 6.6%. Wage inflation is far above a level that yielded 2% inflation, before the pandemic. The outlook? Well, some unions are now demanding pay increased between 10%-18%!
- **Sweden**
  - » Core **CPI** (CPI ex. int. rates, energy) rose 0.8% m/m in October. The annual rate has accelerated sharply recent months, to 7.9%, and the latest print was slightly higher than the Riksbank f'cast from September. The increase in inflation is broad here too, and the biggest contributor on the upside is energy
  - » Both measures of **unemployment** rose in October: The PES unemployment rate rose for the 2nd month, to 3.1% (6.7% incl. measures) from 3.0% two months ago, while the volatile AKU unemployment rose to 7.7% form 7.1%. **Vacancies** were marginally down too, while **employment, participation** and **hours worked** all gained marginally, but the employment rate is down vs. the August level
  - » House prices keep falling at 2% per month pace, according to HOX/Valueguard. Prices are down 12% since February, and 9.8% y/y. This week the Riksbank will hike the signal rate again, probably by 75 bps to 2.5%
- **Norway**
  - » **Mainland GDP** surprised on the upside and including higher (and revised upwards) growth in July and August, September GDP was 2.5% above NoBa's forecast, published in September! GDP grew 0.5% in Sept, even if electricity production fell sharply, expected down 0.3%. GDP rose 0.8% (3.3% annualised, we & consensus expected 0.4%, NoBa a 0.1% decline!). Most sectors are still on the way up, and even if a faster (Mainland) inventory buildup explained 0.3 pp of the 0.8% Q3 growth, demand was stronger than expected too, just housing and consumption of goods on the downside. Wage growth remains stable, well below 4% but productivity is sagging and labour cost pr unit produced (UCL) is up at least 3%. Excluding electricity, the profit rate is yielding
  - » **Oil companies revised their 2023 investments plans** upwards but much more will be added in the Q1-23 survey when a huge number of projects will be included, as companies will deliver their Plans for Development and Operation (PDOs) before Dec 31, in order benefit from the temporary tax cut.
  - » **Manufacturing investments** will probably continue rapidly upwards in 2023, following the 2022 surge. Several sectors contribute. Investment in power supply will probably turn up next year, following the huge decline since 2018 (of the likely change in the tax regime will not curb investments)
  - » **Housing: Home builders** report continued low sales, while **SSB** report much better **permits data**. **Building material costs** rose further in Oct, and more than we expected
- … and the **COP27 in Egypt** hopefully brought the international climate policy cooperation some small steps forward

The Calendar: November PMIs, FOMC minutes, a Riksbank hike, Norw. unempl./empl/wages

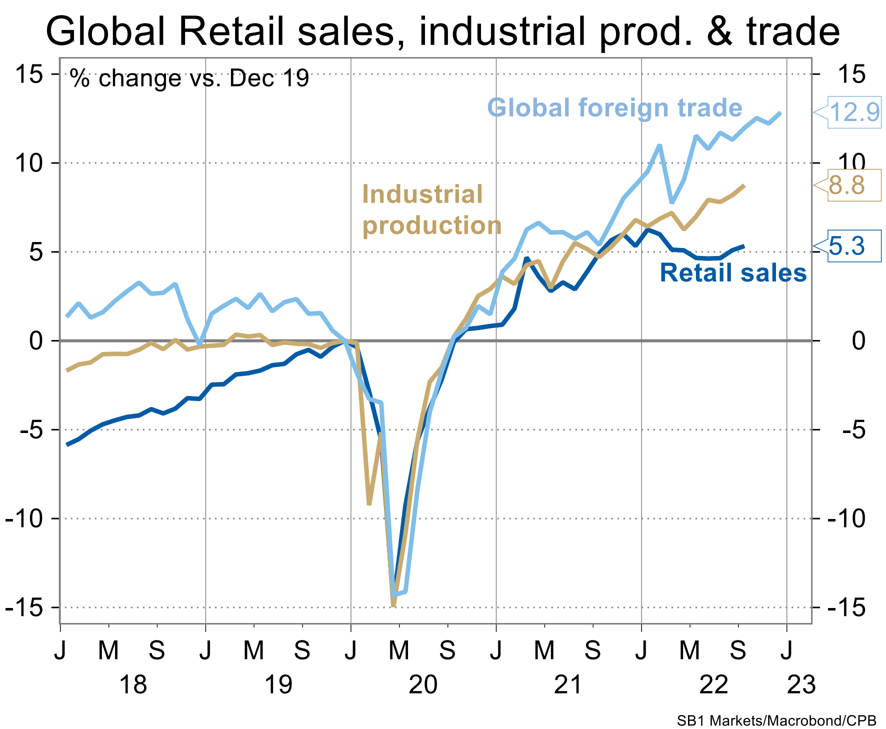
Time	Count.	Indicator	Period	Forecast	Prior
Monday Nov 21					
14:30	US	Chicago Fed Nat Activity Index	Oct		0.1
Tuesday Nov 22					
11:00	EU	OECD Economic Outlook			
16:00	EU	Consumer Confidence	Nov P	-26.9	-27.6
Wednesday Nov 23					
08:00	NO	Credit Indicator, C2, YoY	Oct		5.1%
09:15	FR	Manufacturing PMI	Nov P	47.0	47.2
09:15	FR	Services PMI	Nov P	50.6	51.7
09:30	GE	Manufacturing PMI	Nov P	45.0	45.1
09:30	GE	Services PMI	Nov P	46.2	46.5
10:00	**EU**	**Manufacturing PMI**	**Nov P**	**46.0**	**46.4**
10:00	**EU**	**Services PMI**	**Nov P**	**48.0**	**48.6**
10:00	**EU**	**Composite PMI**	**Nov P**	**47.0**	**47.3**
10:30	UK	Manufacturing PMI	Nov P	45.8	46.2
10:30	UK	Services PMI	Nov P	48.0	48.8
14:30	**US**	**Durable Goods Orders**	**Oct P**	**0.5%**	**0.4%**
14:30	US	Cap Goods Orders Nondef Ex Air	Oct P	-0.2%	-0.4%
14:30	US	Initial Jobless Claims	Nov-19	225k	222k
15:45	**US**	**Manufacturing PMI**	**Nov P**	**50.0**	**50.4**
15:45	US	Services PMI	Nov P	48.0	47.8
16:00	US	U. of Mich. Sentiment	Nov F	55.5	54.7
16:00	US	New Home Sales	Oct	575k	603k
20:00	US	FOMC Meeting Minutes	Nov-02		
Thursday Nov 24					
01:30	JN	Manufacturing PMI	Nov P		50.7
08:00	**NO**	**Unemployment Rate AKU**	**Sep**	**3.2%**	3.2%
08:00	NO	Payrolls, monthly wages	Oct		
08:00	NO	Labour cost index	Q3		
09:30	**SW**	**Riksbank Policy Rate**	**Nov-24**	**2.50%**	**1.75%**
10:00	GE	IFO Expectations	Nov	77.0	75.6
Friday Nov 25					
	NO	Consumer Confidence, Opinion	Nov		
08:00	GE	GDP SA QoQ	3Q F	0.3%	0.3%
08:00	NO	Hotel guest nights	Sep		

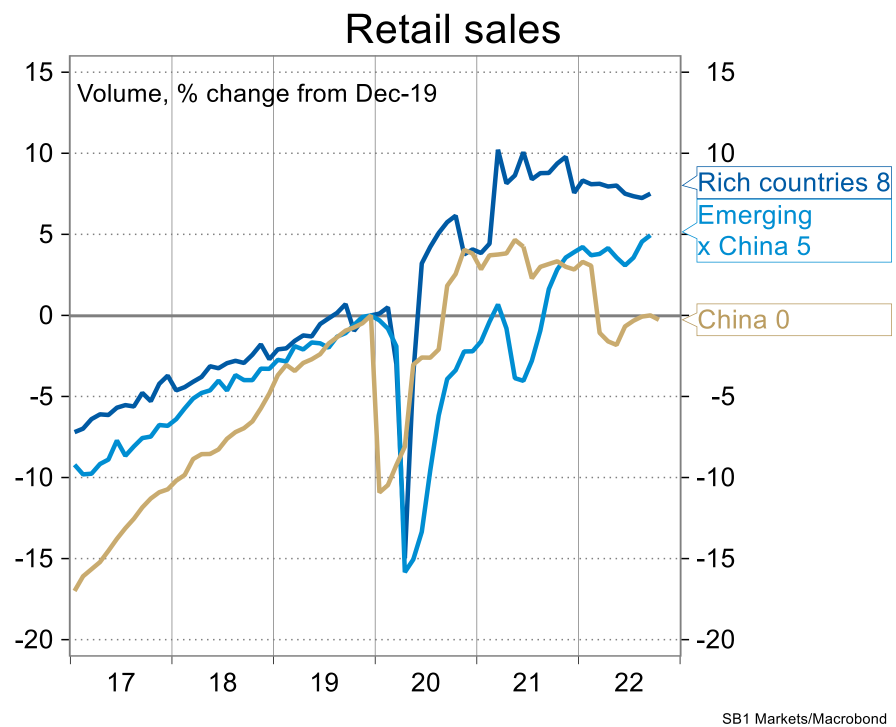
- **Preliminary November (DM) PMIs**
  - » The PMIs in rich countries (DM) are heading straight down with UK and EMU in the lead, and US not far behind. The European PMIs are expected marginally down, while the US surveys in sum are expected marginally up. Delivery times are easing, but prices are still increasing. The weakest link in the chain is new orders in the manufacturing sector, both in Europe and the US
- **USA**
  - » **The minutes from the FOMC** meeting two weeks ago will probably not reveal anything new on the next move, the bank will soon slow down, most likely at the December meeting (a 50 bps hike) – but that's not the question. Even if hikes slow down to 50 or 25 bps, the 'terminal' (peak) rate may be far away, and the Fed may keep the rate at 'high' level longer than the market now assumes – but no signals on that will be given in the minutes
- **EMU**
  - » **Consumer confidence** has fallen to a record low level but recovered slightly in October. Household spending has so far kept up, even in real terms
- **Sweden**
  - » **75 bps?** The Riksbank hiked by 100 bps in September, and a 'triple' is expected now. Inflation has accelerated and broadened. At the same time, the economy is slowing, and unemployment may have turned upwards. In addition, wage inflation remains reasonable in check, and the house market has hit the wall, as have the commercial real estate market. If the bank hikes by 75 bps, the signal rate will reach 2.50%, up from zero during the pandemic
- **Norway**
  - » We expect the **LFS (AKU) unemployment** rate to remain unchanged at 3.2%, with the risk on the upside. The LFS has reported a small decline in employment, while the monthly employee statistics still report decent growth, as did the Q3 National Accounts. Wage inflation has not turned up – October data out this week
  - » What else? **Credit growth, consumer confidence (CCI)**

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

Retail sales are sagging vs industrial production, China mostly to blame

Industrial production still on impressive path, far better than surveys signal



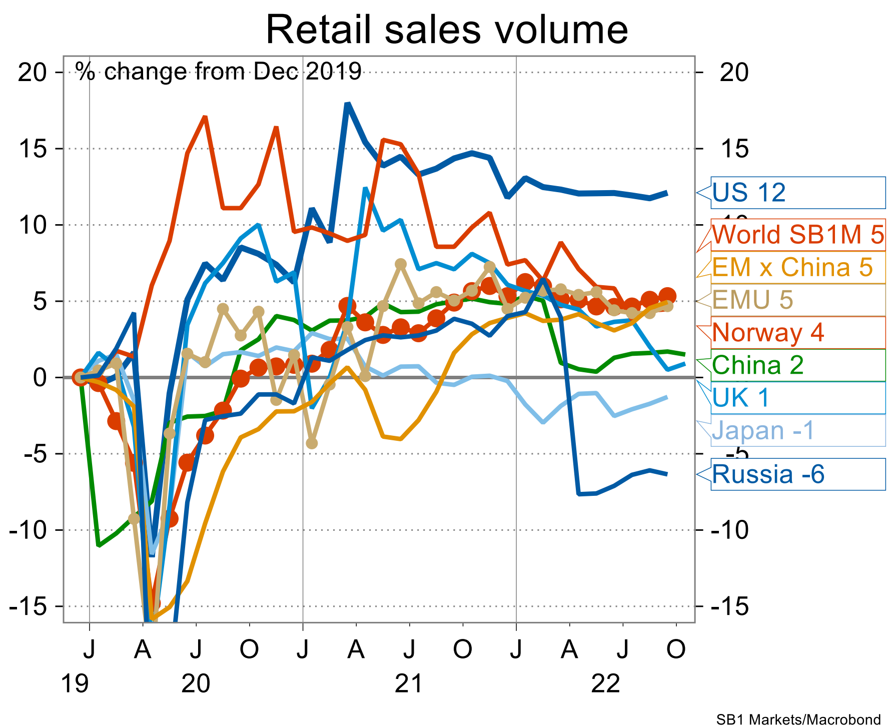


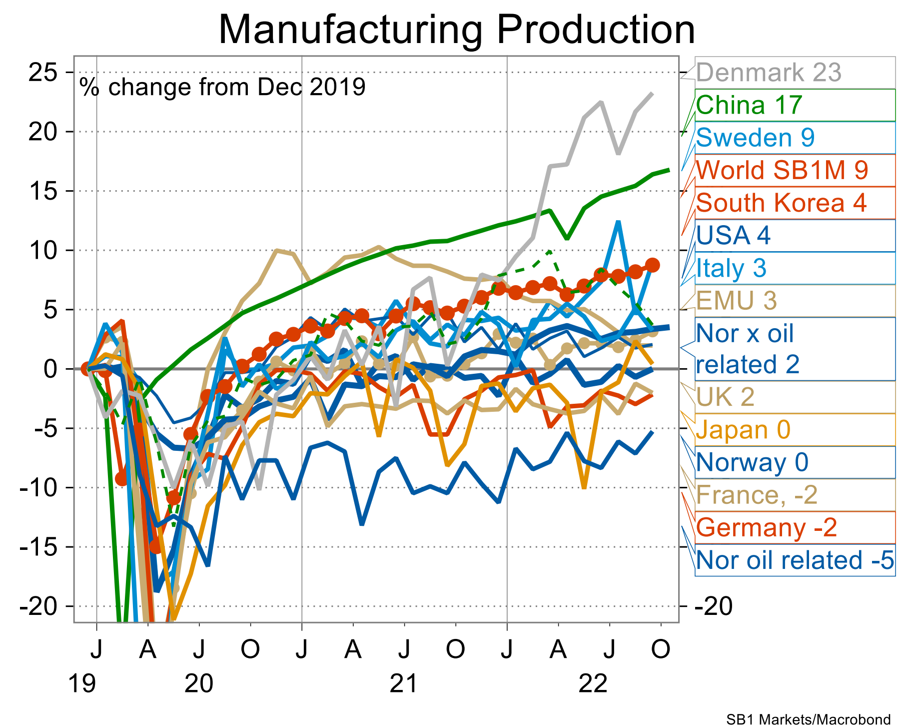
- Chinese sales have been revised substantially down, following several (confusing) revisions up and down in 2022

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.

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

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



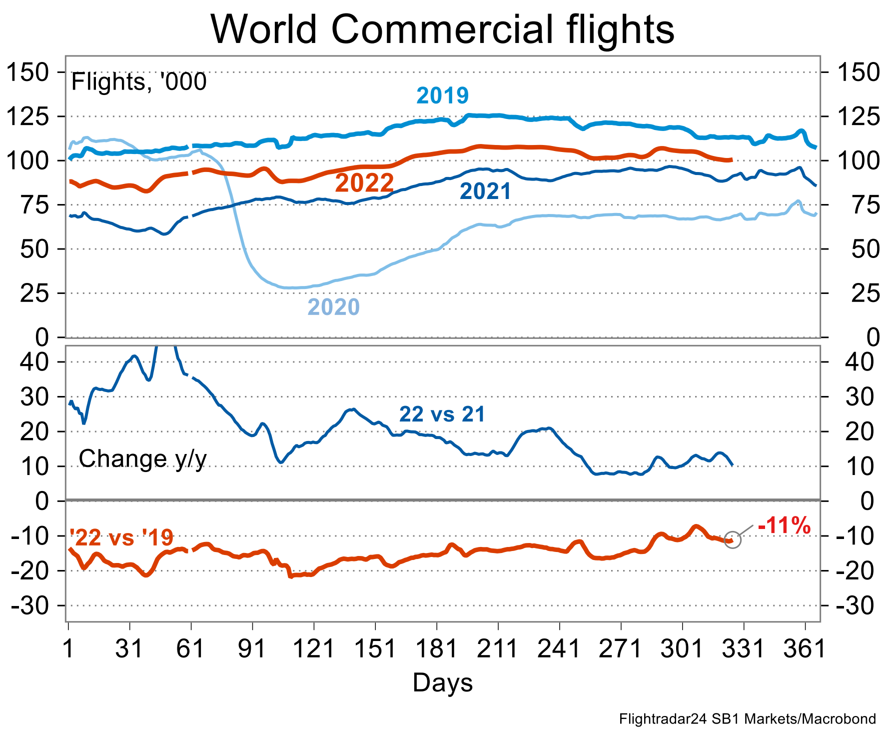


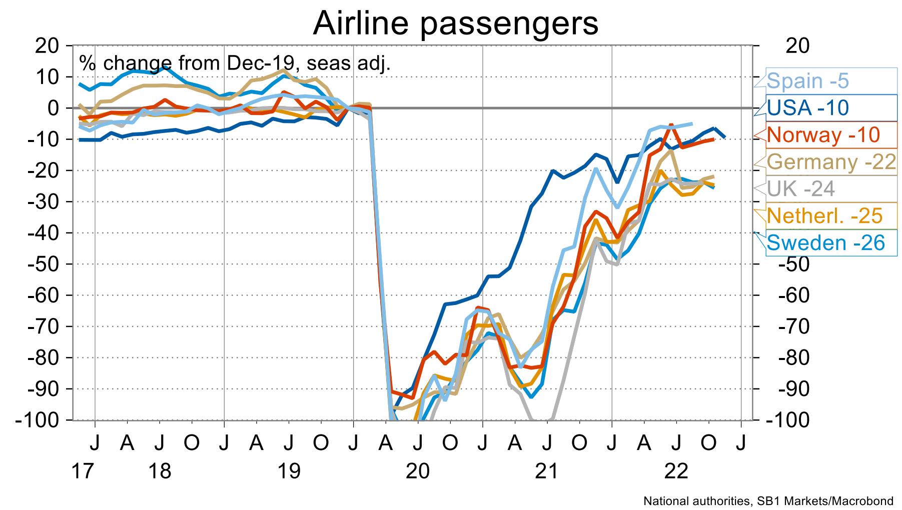
US retail sales: Personal consumption of goods, ex auto & energy

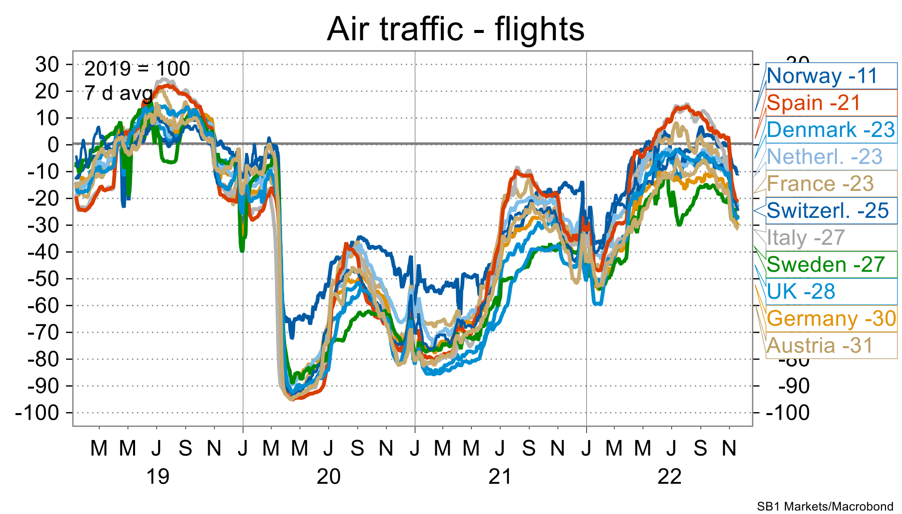
SpareBank 1 MARKETS

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

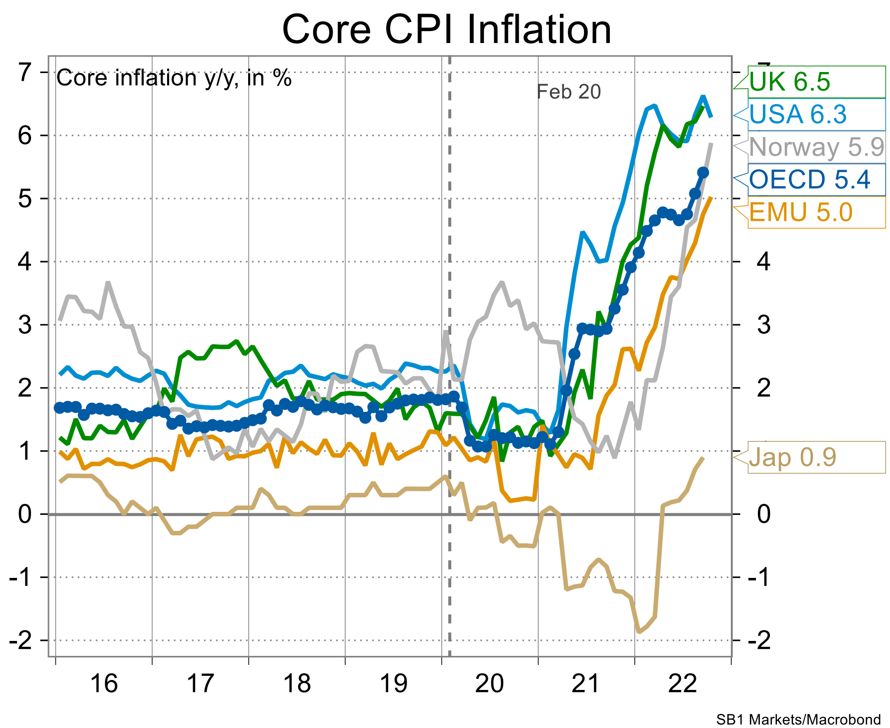


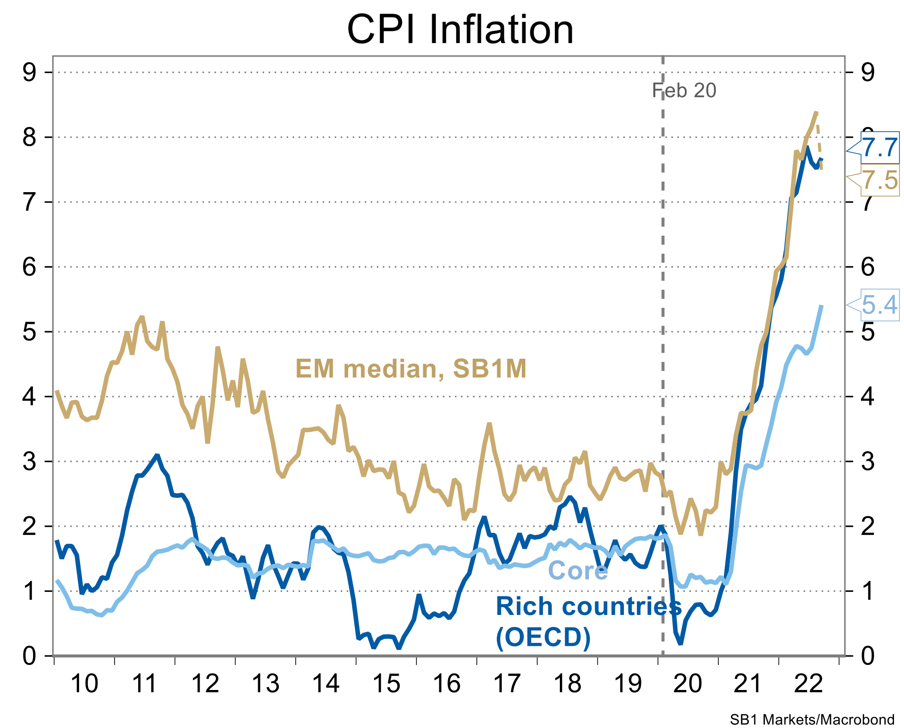




Peak inflation? Data are not that obvious anymore

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

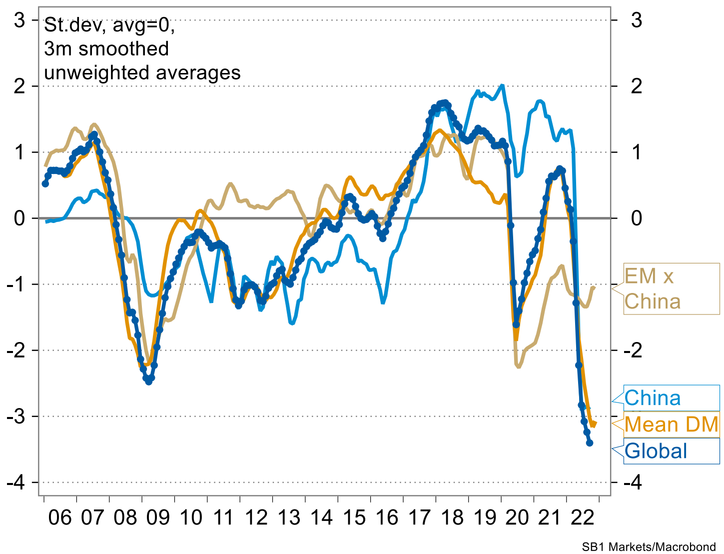




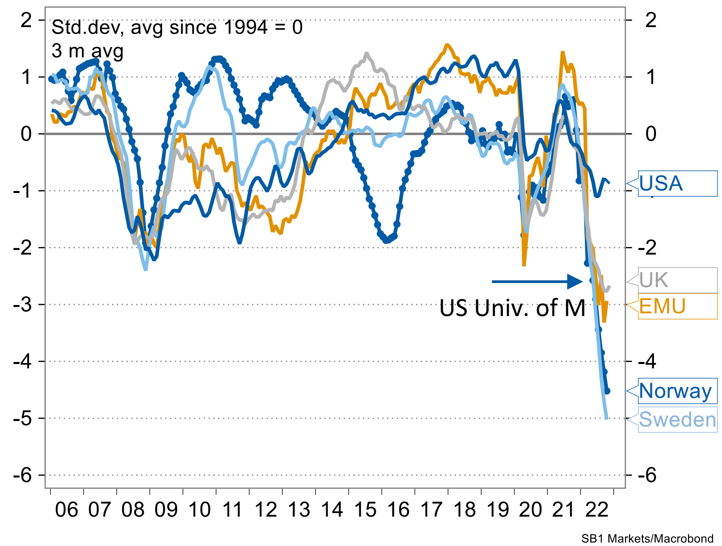
Consumer confidence further down almost everywhere

The Nordics at the bottom, rest of Europe close to. US has flattened

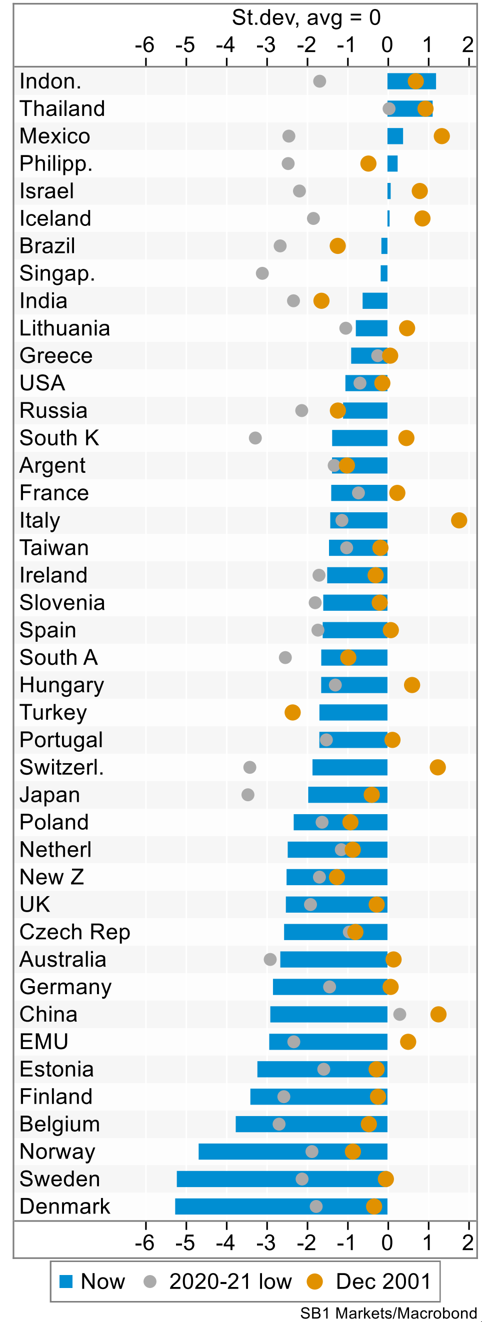
Global consumer confidence



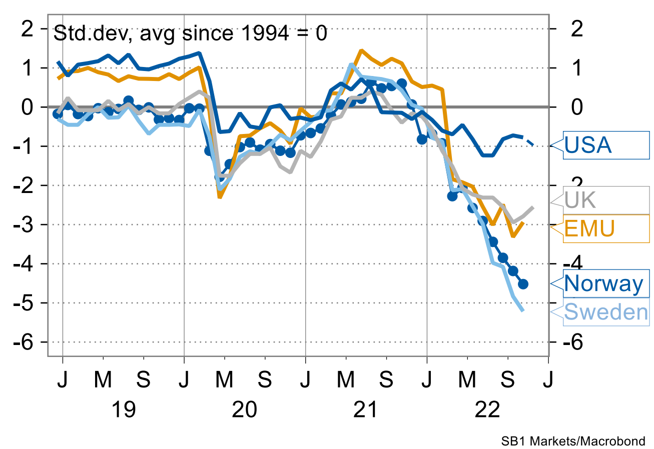
Consumer confidence



Consumer confidence



- Most countries are reporting a significant lower confidence level than late last year. Just 5 countries are above average, 36 are below, many at ATL. However, some signs of stabilisation in several countries lately
- In most **rich countries** inflation and higher interest rates may be to blame, while the collapse in the sentiment in **China** is very likely due the Covid measures (or also the souring housing market?)
- **Emerging markets ex China** has not fallen that much recently, but the level is low

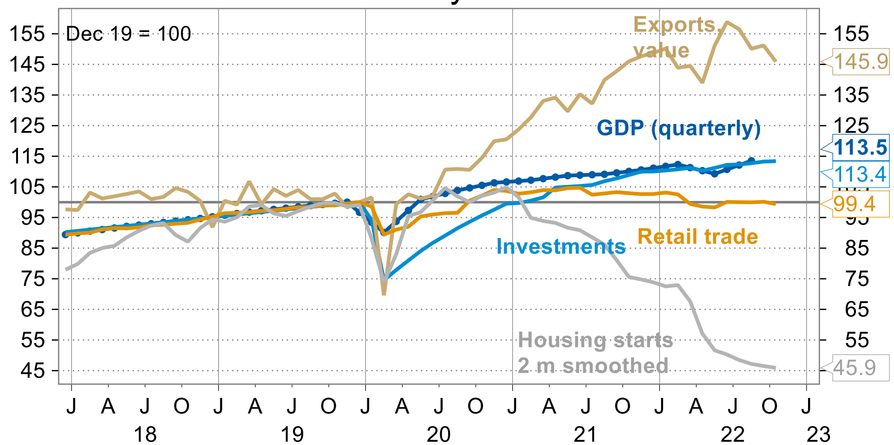


Norway is the average of Finans Norge & Opinion

October data at the downside – retail sales revised sharply down

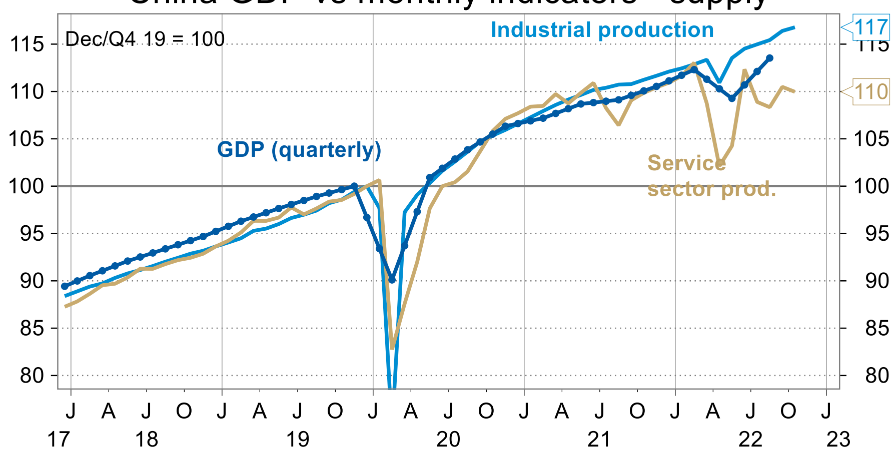
… and construction activity is still declining, starts down 60% since the late 2020 peak!

China GDP vs monthly indicators - demand



SB1 Markets/Macrobond

China GDP vs monthly indicators - supply



SB1 Markets/Macrobond

- **Industrial production** rose 0.3% in Oct., and production is up 5.0% y/y, 0.2 pp below expectations – but still at a decent trend! Autos still in the lead, due to record high domestic sales
- **Service sector** production fell marginally following the uptick in Sept – and activity is flat y/y as covid measures are no doubt still hampering activity
- **Retail sales** volumes fell 0.8% (our est), and sales fell 0.5% y/y, expected +1.0%, down from 2.5% in Sept. The main news as still a another revision, now sharply downwards, by an unprecedented 4% (the accumulated seas adj. m/m data). Hard to make anything sensible out of these data –but the current release signals a huge upside potential if a more efficient Covid policy could be implemented
- **Investments** rose 0.1% in Oct, but has recovered to pre pandemic/ lockdown trends, even if both **residential and commercial construction starts** have fallen 60% from the peak early last year (the largest contraction ever). New home sales also fell in October. Homes prices are continuing downwards too. The authorities have announced a long list of measures to prop up the real estate market – and some recovery seems likely. But not a return to where is came from – and can not be not the aim either

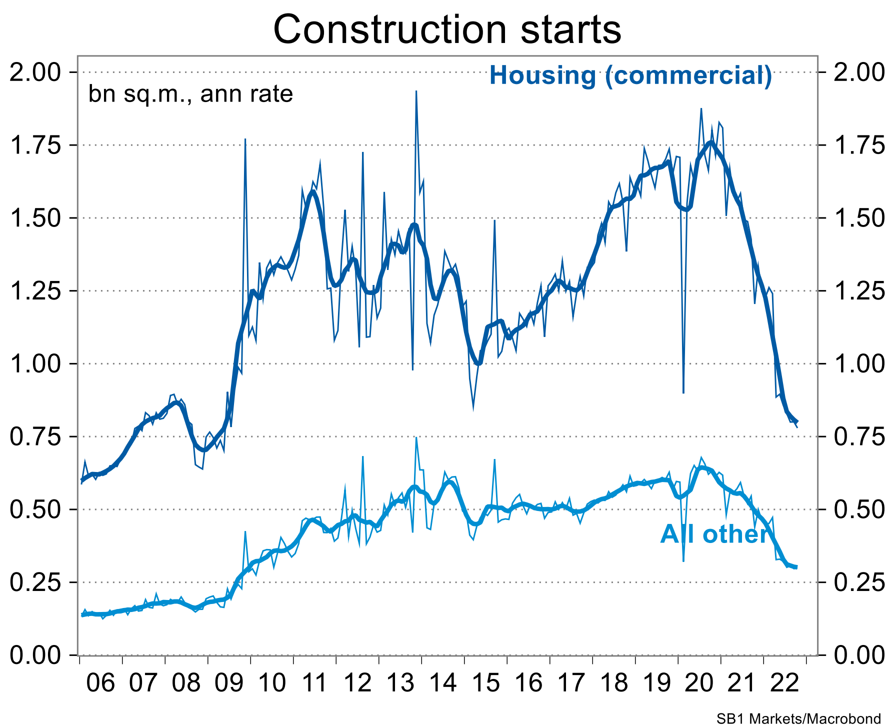
Headlines from the previous week:

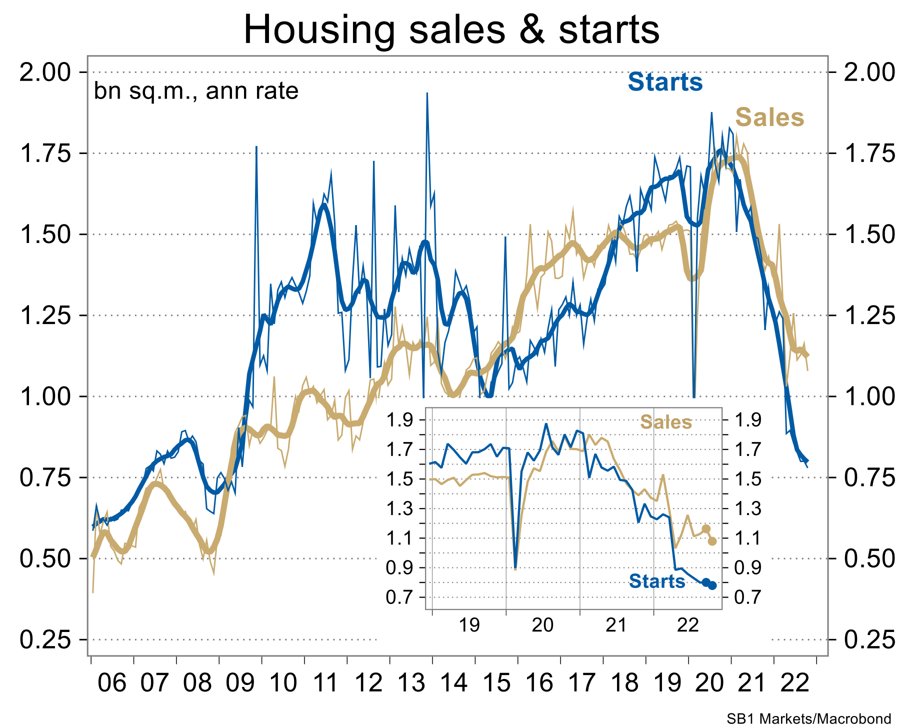
- **Exports** has flattened over the recent months both in nominal and real terms – both at very high levels though. **Imports** are still subdued, and the trade surplus was very high in October. Domestic demand is lagging
- **CPI inflation** fell to 2.1% in October, and the core to 0.6%. So, inflation is not a global challenge
- **Credit growth** was slow in October, but bank cut back less than we assumed last week – credit outside banks slowed shaply

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

Starts slightly down in October, while new home sales slumped

Starts down 57% from the peak two years ago; Sales are down 40%

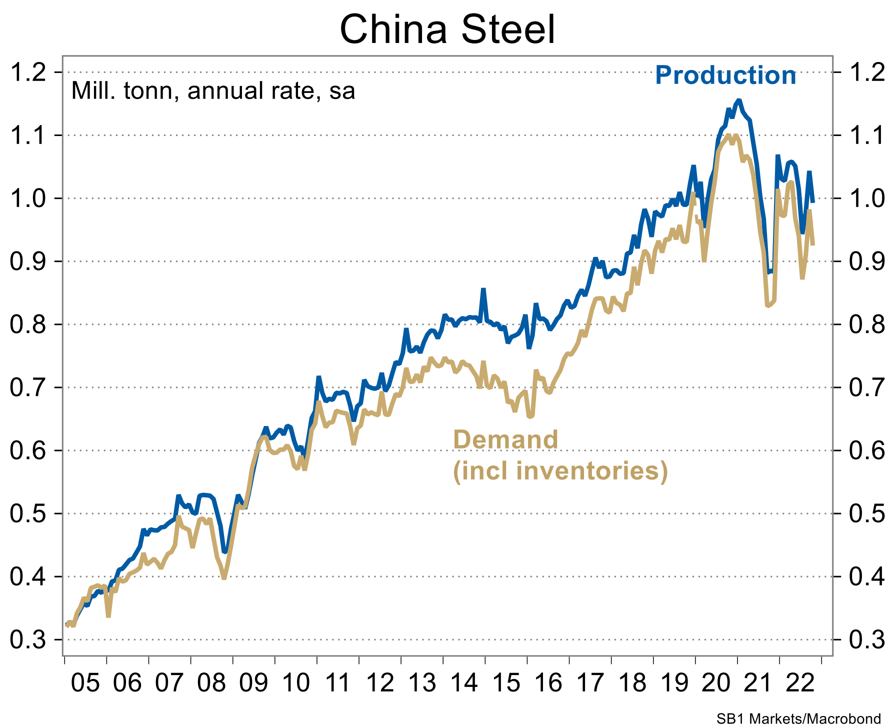




- **Non-residential construction starts** are also more than cut in half, and the level is the lowest since 2009, as for housing starts
- This unprecedented decline in construction starts will lower growth in the Chinese economy substantially – spread over time, as it takes some 3 years from a home is started until it is completed…
- …unless the government's new rescue plan works. **The authorities have told the banks to lend an additional USD 56 bn to the property sector** over the remaining two months of the year, adding to the USD 85 bn banks were told to lend in September, according to Bloomberg. The government also laid out a **16-point plan** to save the property sector from blowing up, which includes extending 'sound' developers' loans, supporting bond issuance, encouraging banks and asset managers to acquire real estate projects, extending mortgage repayments, and freezing credit scores, to mention a few. Let's hope buyers return – and they may, as the risk for building projects running into the wall should be reduced

Steel demand/production fell in October, but the level is high

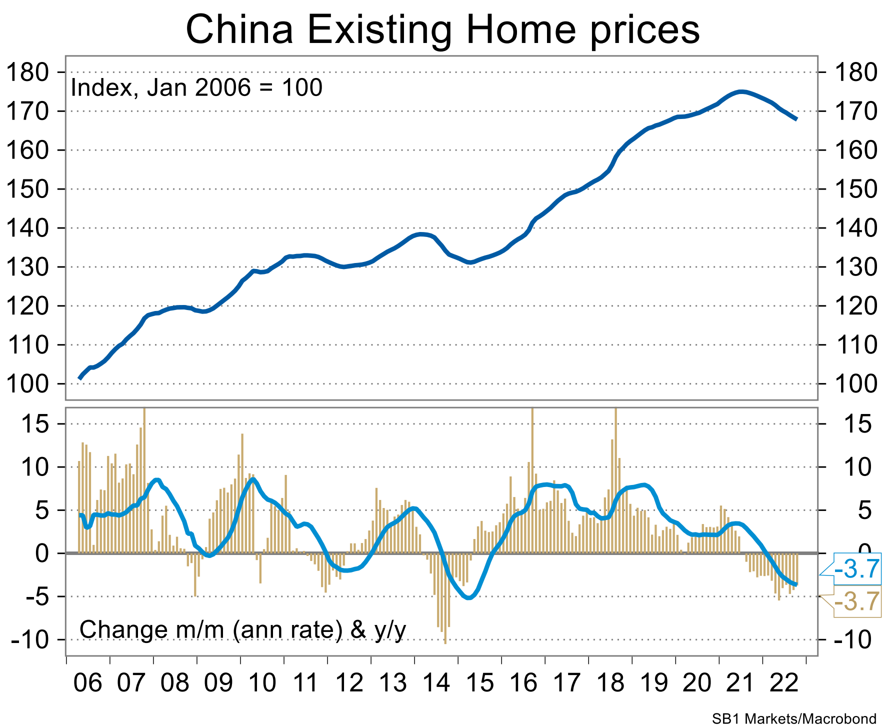
Where is steel demand increasing? In auto production perhaps, but construction is far more important

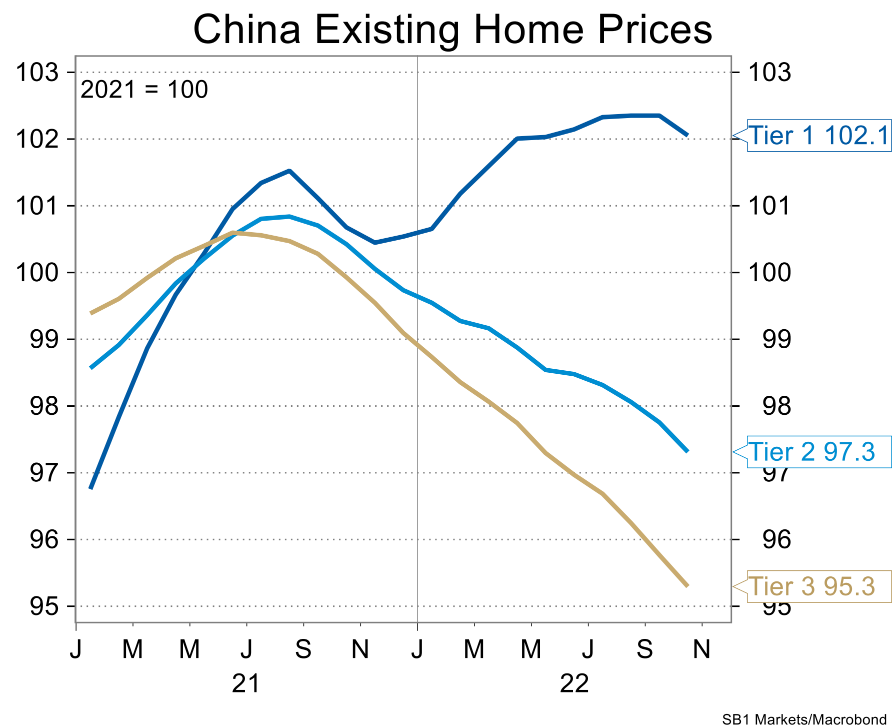


- Construction activity will be under pressure as new starts have fallen sharply. Demand for steel comes early in the building process as well

Existing home prices fell further in October – for the 15th month in row

- the longest stretch with falling prices ever. New home prices on the way down too

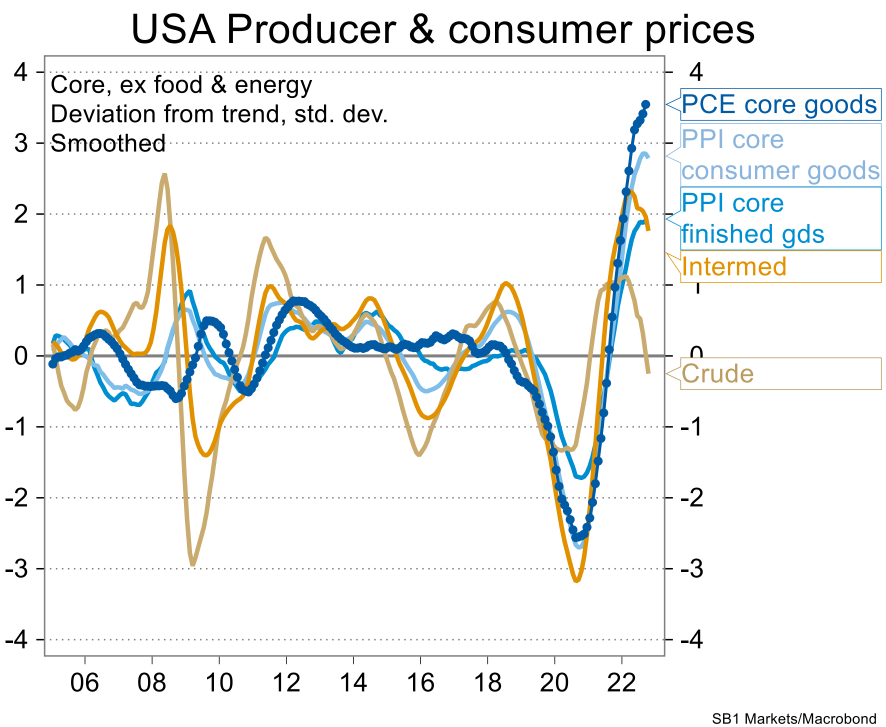


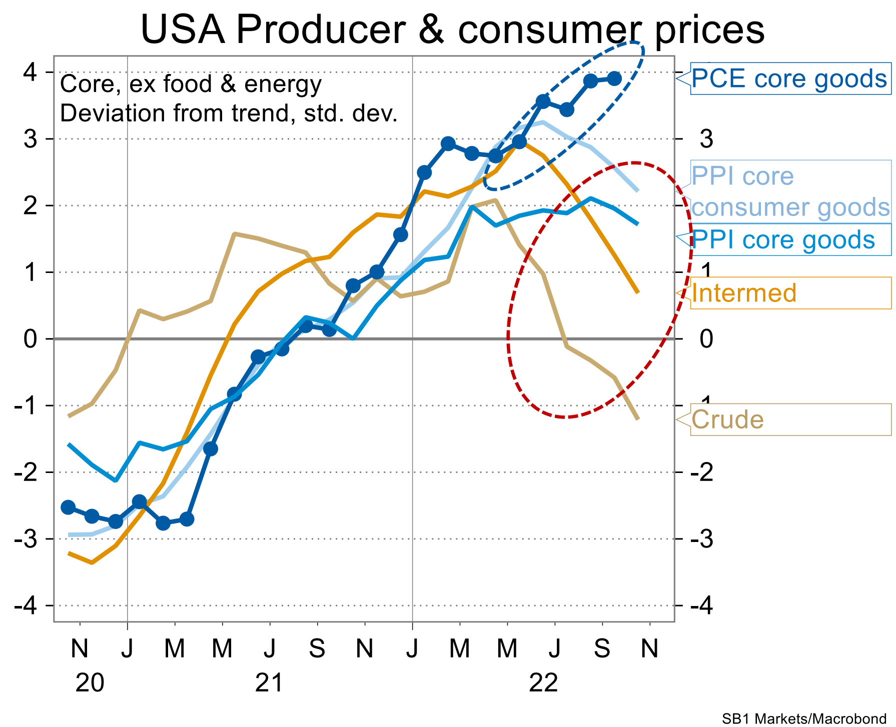


- **Existing home prices** peaked last July, and have been falling at a gradually faster pace, until May. In October, prices fell at 3.7% pace. Prices are down 3.7% y/y, less than the price setback in 2014/15. However, the current setback has now lasted longer than the previous
- **New home prices** also fell last autumn but at a slower pace than existing home prices, and in Oct new home prices fell at a 2.3% pace m/m, and are down 2.2% y/y. Some builders have reported deep price cuts to reduce the inventory and secure financing. The gradual decline in prices since last summer is probably due both some fire sales from construction companies that have run out of other sources of financing, and some hesitance from home buyers
- Prices have now started to fall in the four largest Tier 1 cities as well, but prices are falling at the fastest pace in the 'smaller' Tier 3 cities
- **Central authorities** have signalled willingness to expand credit supply again, both to finance infrastructure projects and the construction sector, as well as providing support to home buyers

Crude core material prices are yielding, as are intermediate prices

Core consumer goods PPI have also turned south – and so will probably goods prices in the CPI/PCE

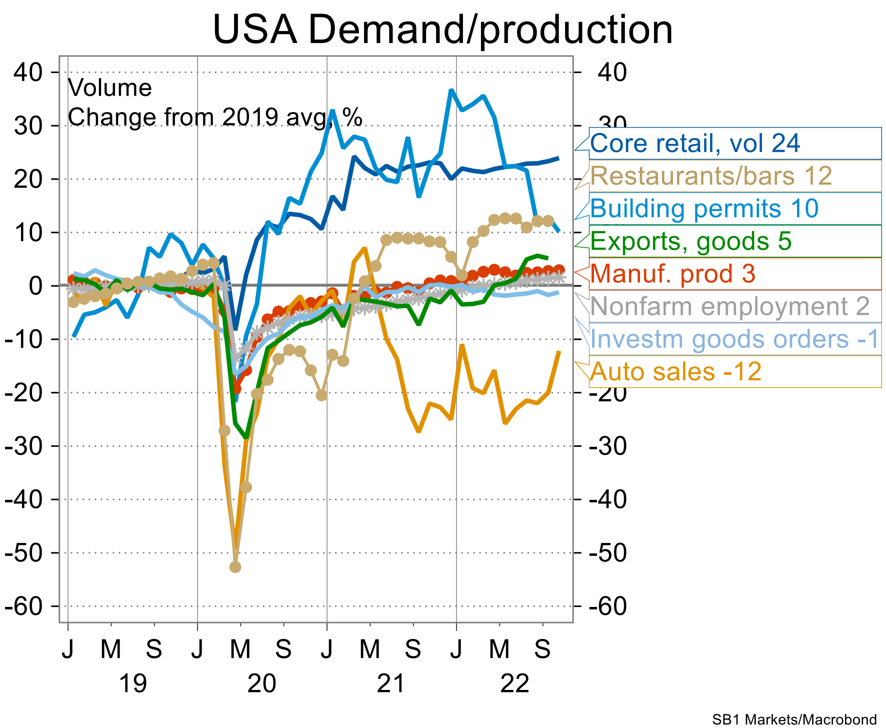




- **Crude goods prices** are leading intermediate goods prices by 4 months, and consumer prices by 12 months. Following several months with slow growth in these prices to February from last summer, they rose in March and remained at a high level in April – but they are now heading down rapidly (and prices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

Mixed activity data – Housing a drag but consumption of goods still stong

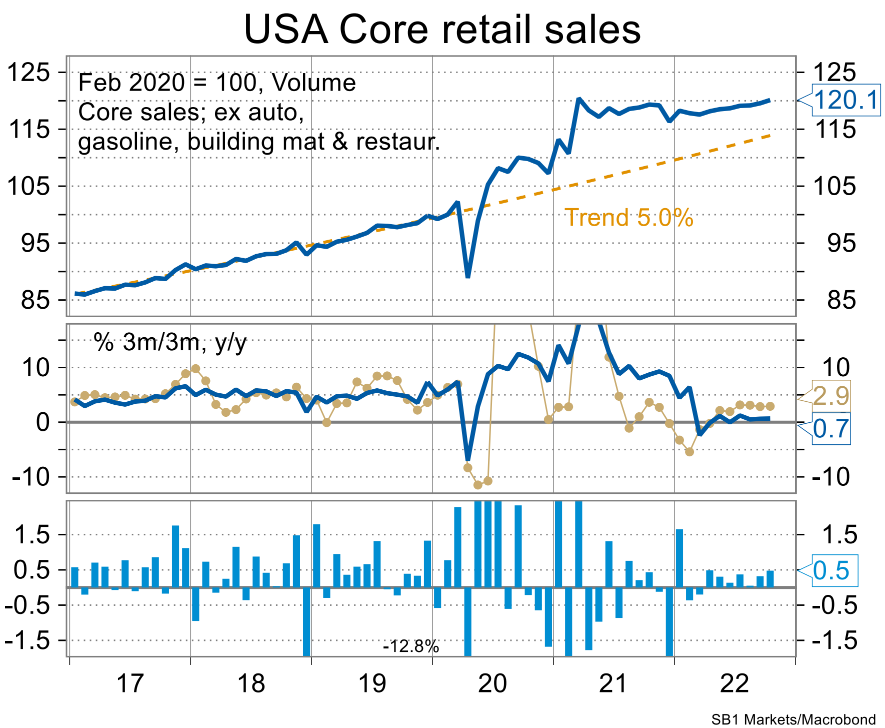
Core retail sales are up 24%, in volume terms – and is still growing at 3% pace!

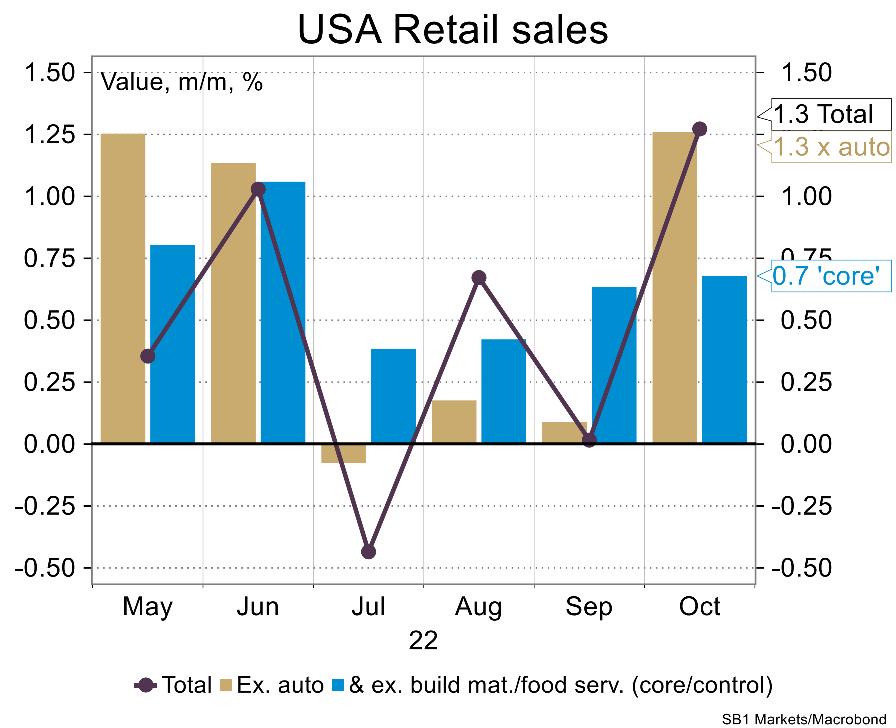


- Building permits are heading sharply down
- Export are finally above the pre-pandemic level
- Manufacturing production has flattened since the spring – but no downturn yet
- Investment goods orders have flattende close to the 2019 level
- Auto sales are on the way back but are still 12% below the 2019 average

Inflation, higher rates has not shot down consumers: Retail sales are rebounding!

Core sales volumes up 0.4% in October; Sept revised up to 0.4% from 0.2% → Growth almost at 3%!

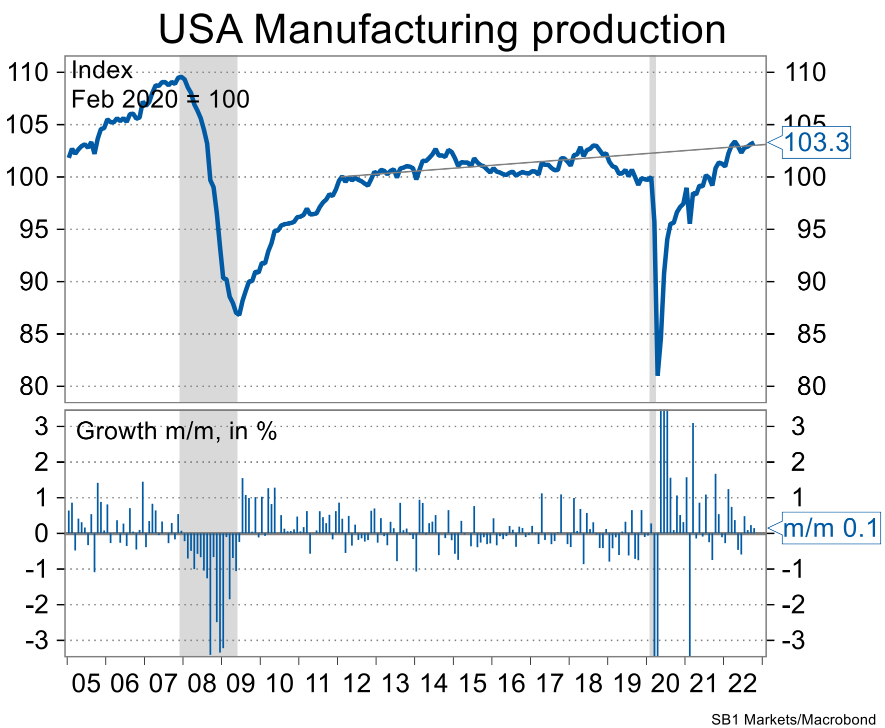


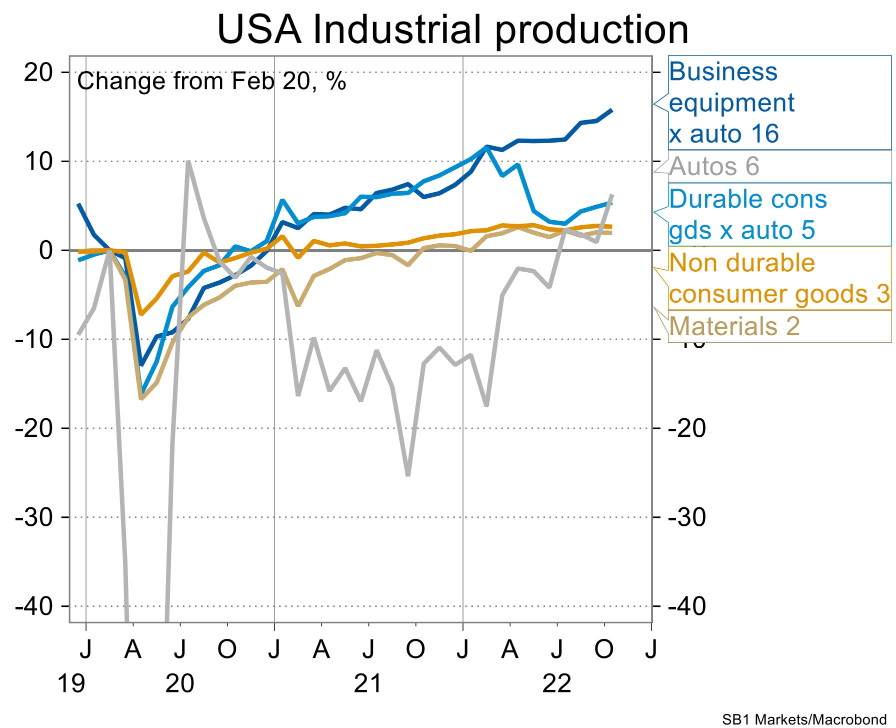


- **Total nominal sales** were up 1.3% in Oct, expected 1.0%. Sales in electronics, sport & hobby, and general merchandise fell, all other sectors were up. Total nominal sales are up 19% vs. the Feb 2020 level!
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) were up 0.7% in value terms, 0.4 pp above expectations (and Sept data were revised up by 0.2 pp to 0.6%)
- **In volume terms**, we assume that the core gained 0.5%, and Sept revised up to 0.3%. ‘Real’ sales are trending upwards at a rather solid pace (+2.9% 3m/3m), far better than we estimated a couple of months ago!

Manufacturing production below expectations, history revised down

Production has flattened since the spring

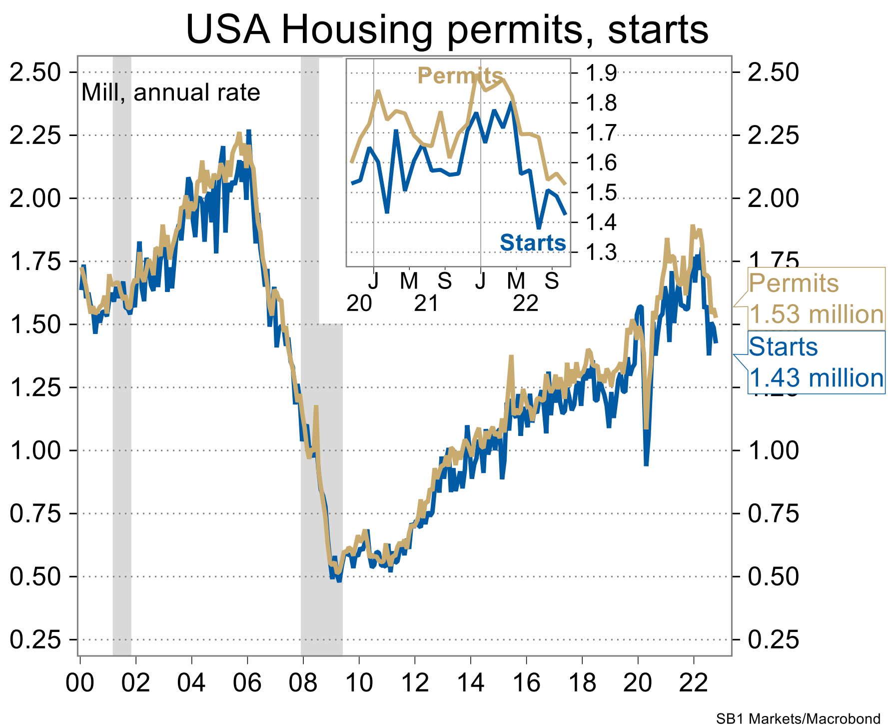


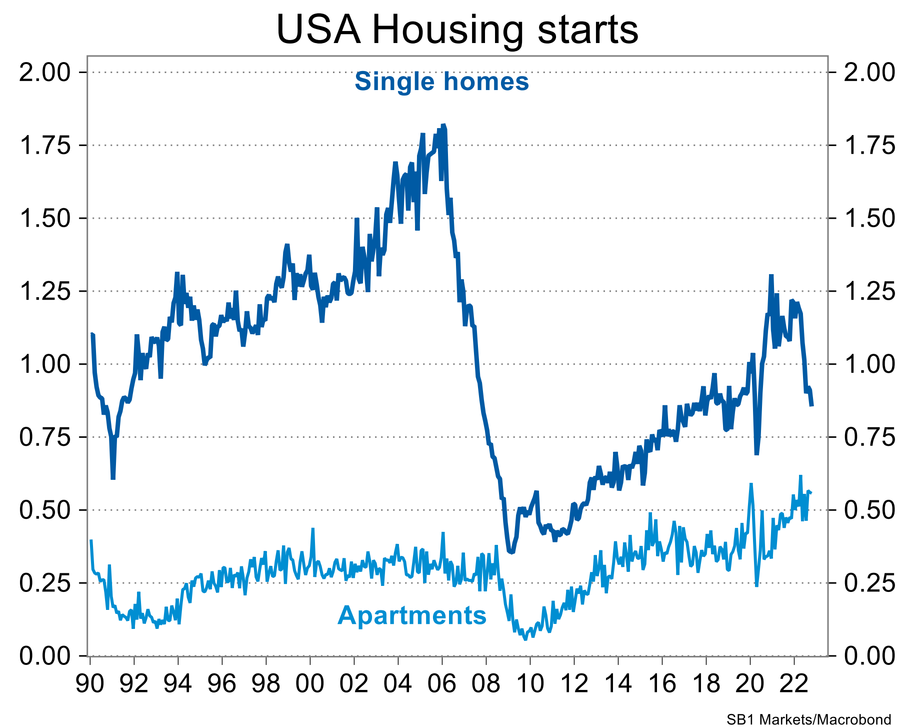


- **Manufacturing production** was up 0.1% in Oct, 0.1 pp below expectations. In addition, the Sept print was revised down by 0.2 pp to 0.2%. Post revisions, production remains below the April level, and the 3m/3m rate is now at +1.7%
  - » Production in all main sectors were up in Sept, and all are now above the pre-pandemic level, <u>even including auto production</u>!
- **Total industrial production**, including utilities, mines/oil production, declined 0.1% m/m, expected +0.2% (Sept data revised down by 0.2 pp to 0.2%)
- **Capacity utilisation** was unch., and the level is close to the highest in 20 years (the peak was in April)
- **Surveys** have weakened substantially since May. The two first October surveys are mixed but the downward trend is confirmed

Both permits and starts lower in October, and the trend is clearly down

Both are down 17% – 20% since before the steep decline that started in the spring

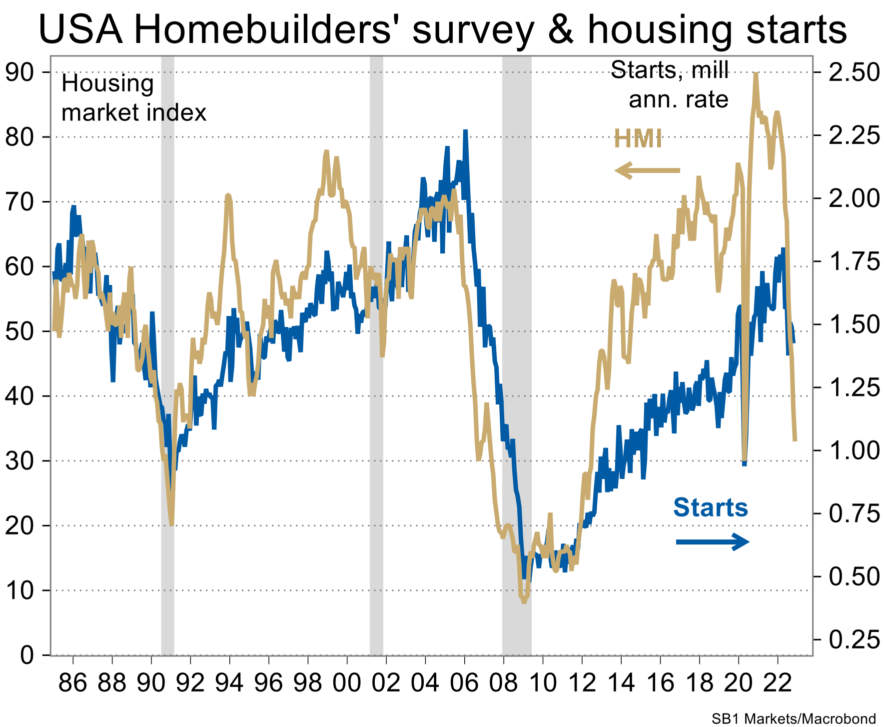


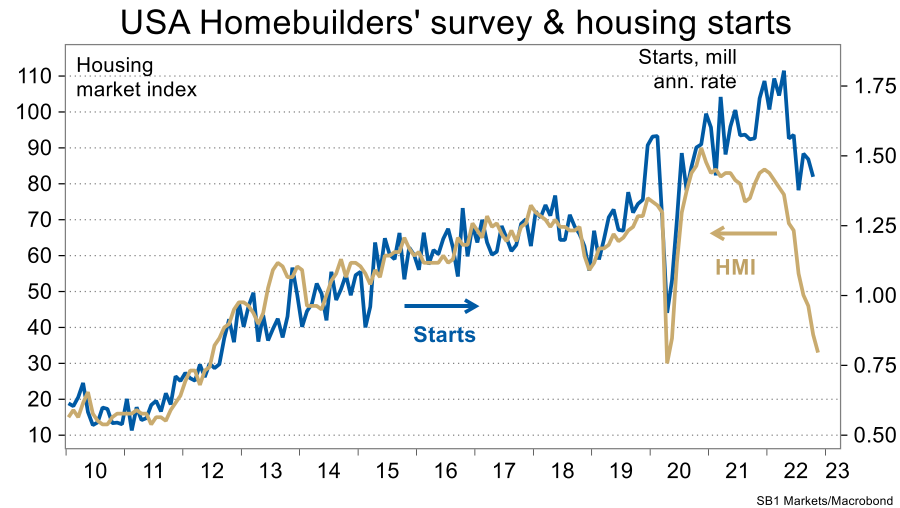


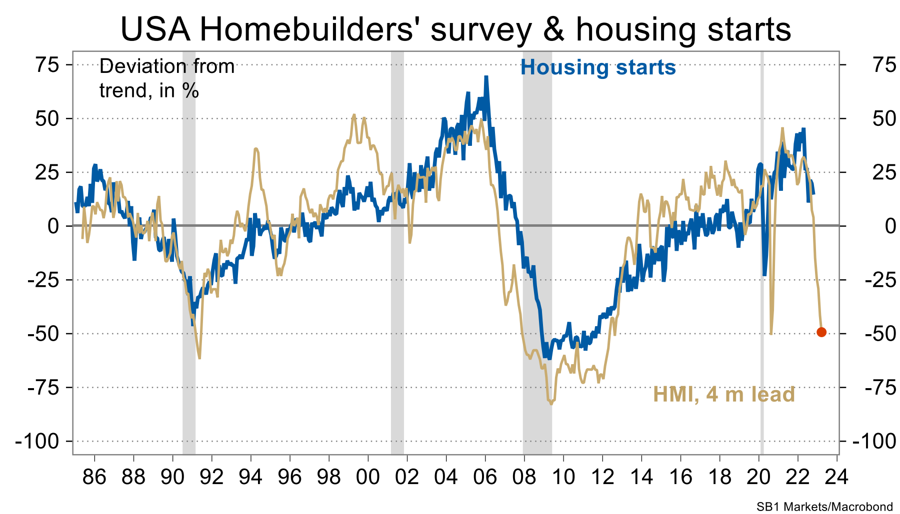
- **Housing starts** fell to 1.43 mill in Oct from 1.49 mill (revised up from 1.44 mill), expected 1.41 mil, and are still above the July level. **Building permits** declined to 1.53 mill, above expectations at 1.51 mill, from 1.56 mill in Sept. Permits fell in the 5 months prior to Sept, before an uptick that month, but are now falling again, suggesting fewer starts in the coming months. If Home builders are right (next page), the US will very likely soon be close to a recession – the housing market is in a recession
  - » Starts of **single homes** fell to the lowest level since after the start of the pandemic, down 30% since February. Starts of **apartments** also declined in October but have so far not come significantly down from the peak, these starts are just trending flat – with substantial downside ahead, we assume
- Building **material cost inflation** has come to a sudden halt. **Lumber prices** are back to a normal level (or even below), steel prices have fallen substantially recent months too

Home builders' index further down in November, signals a housebuilding crash

The HMI down 6 p to 32, expected down 2 p to 36. A further 50%+ drop in starts, in total 60%+?



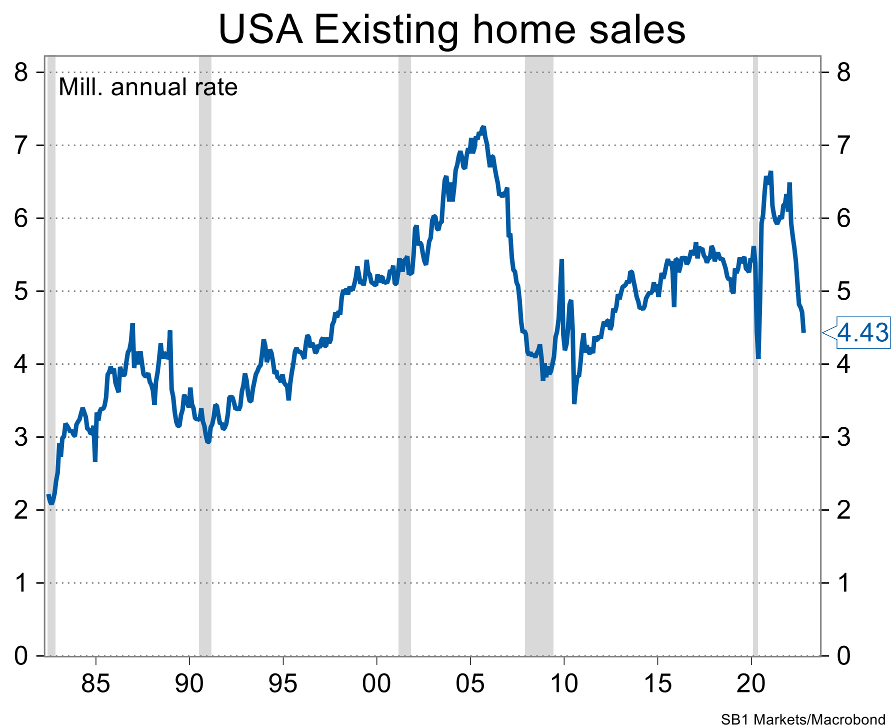


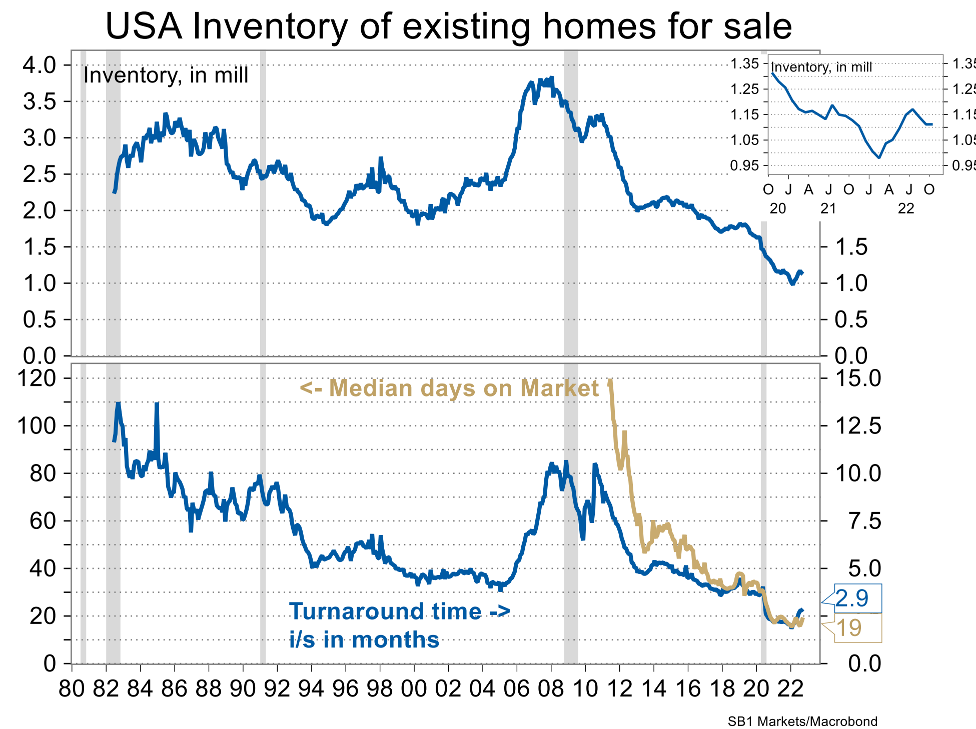


- **The Homebuilders' Housing Market Index (HMI)** once more fell more than expected! The decline recent months – and since Dec last year – is the steepest ever, and the second largest ever, after then one that took place from June 2005 to Jan 2009 (the decline started 3 years before the financial crisis)
  - » Affordability is still the challenge, due to higher mortgage rates, and soaring new home prices (at least until now)
- The decline in the index recent months signal at 50% decline in housing starts following the 20% drop so far - in sum a 60% setback, which we have never seen except for before or during the deepest recessions

Existing home sales have fallen for 9 consecutive months

Sales are down 27% from January, but prices were up m/m – as the inventory is shrinking again!

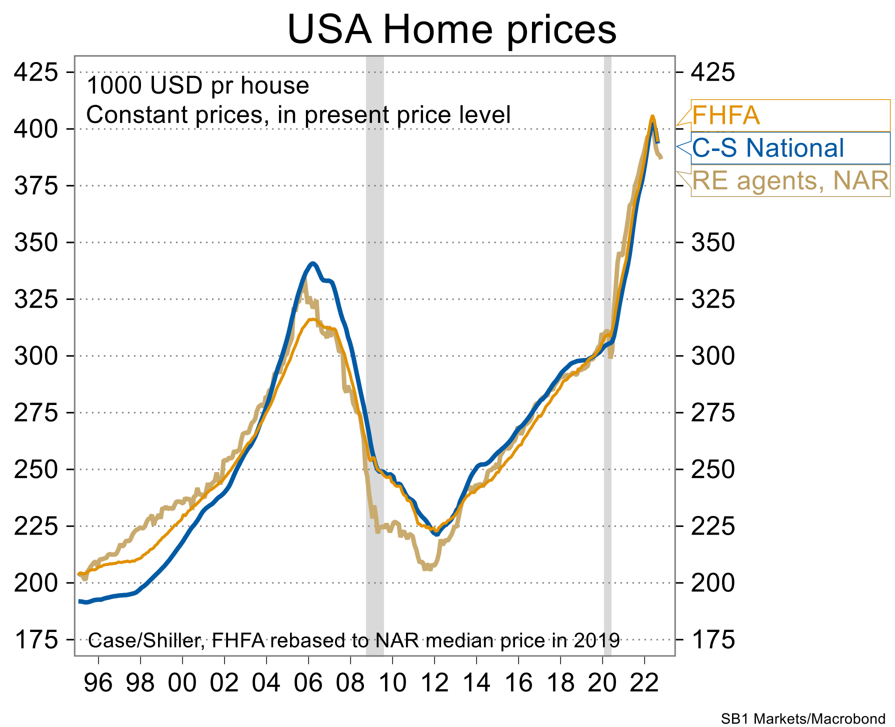


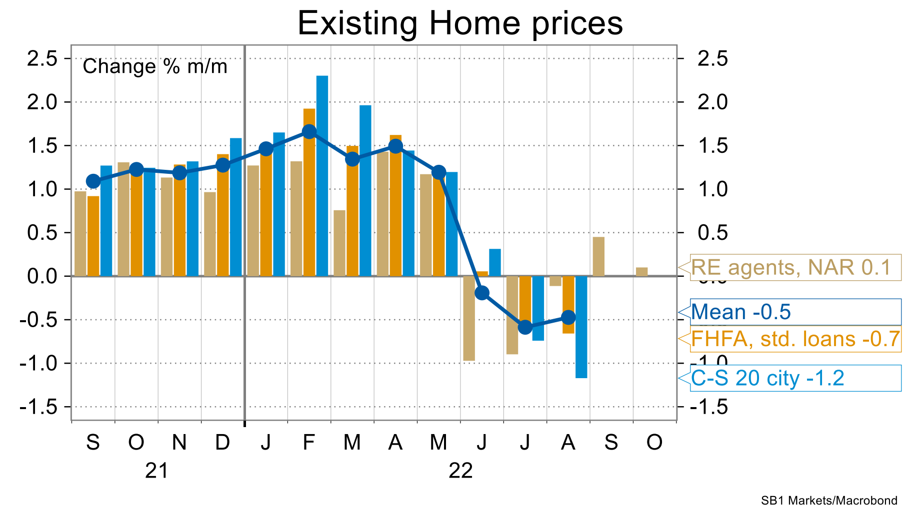


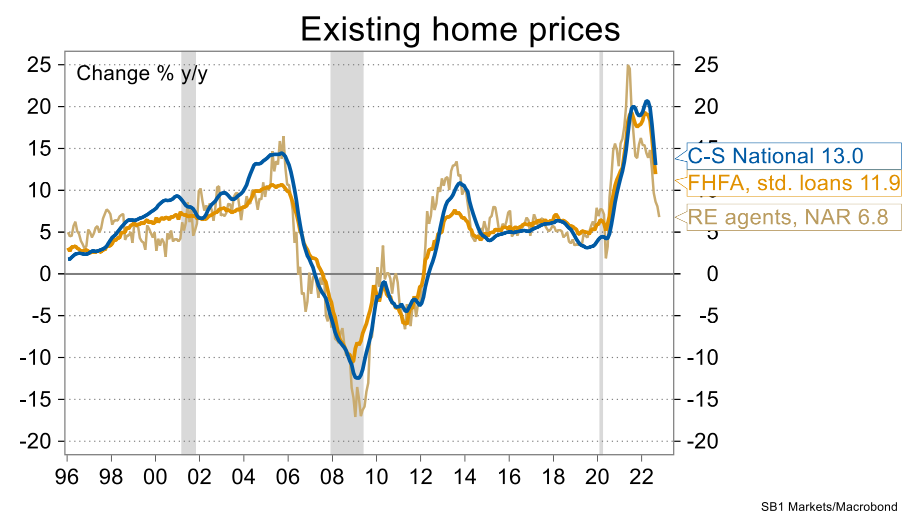
- Sales of **existing homes** fell to 4.43 mill in October (annualised rate), from 4.71 mill in Sept, expected down to 4.38 mill. Sales have fallen by 32% from local peak in January. Sales are down close to 20% vs. the pre-pandemic level. **Pending sales** signal a further decline in actual transactions
- **The inventory of unsold homes** rose marginally in October but is still lower than during the summer – and it is up less than 15% from the ATL in March. The inventory equals 2.9 months of sales (up from 2.8 last month, and 1.8 in January). During the 2005 boom, the i/s ratio was 4 months, in bad times it has been as high as 10 months
  - Very likely, the steep rise in mortgage rates are now locking prospective home movers in, if they sell, they have to pay a <u>much</u> higher mortgage rate for the next home. Thus, fewer sellers, at least for now (but also few buyers, of course!)
  - A signal of a still hot market: The median time on the market for those homes actually sold is just 19 days, and still close to ATL. Before the pandemic the time on market was at 30 days (and 120 days in 2011!)
- **Prices** surprised (us at least) on the upside, big time: Prices <u>rose</u> 1.1%, and the decline the previous 3 months were smaller than so far reported. Still, the trend is down. We are very likely witnessing a housing market recession

House prices up in October too but the direction is very likely down

Prices are up 8.5% y/y – but the negative sign is coming closer



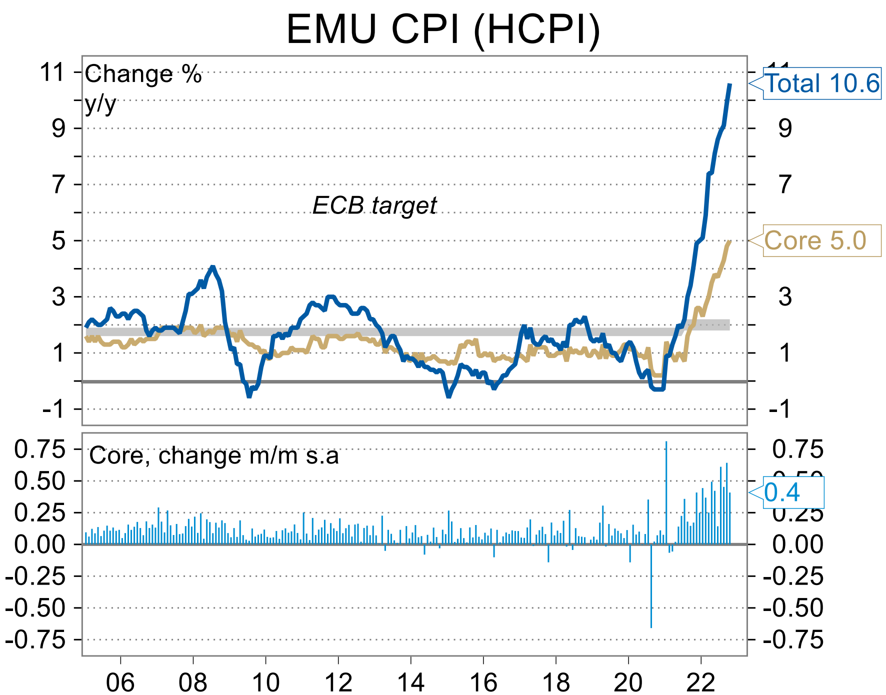




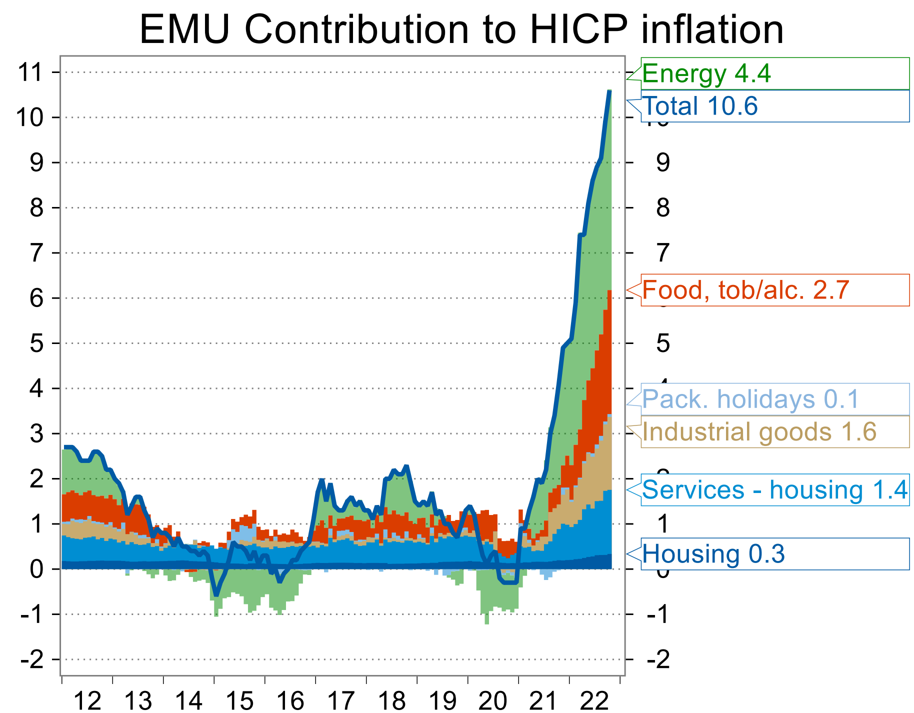
- **Prices** rose 0.1% in Oct, following a 0.5% increase in Sept (revised down from 1.1%), we expected a larger decline. The seasonal adjustment of these data is not perfect, so some caution on our m/m data. The annual rate fell 1.3 pp to 6.8% (from a 0.4 pp downward revised level in Sept)
- Other indices still are up 12% - 13% y/y, but prices fell all across the board in Aug (Jul-Sep, the last obs). Prices are normally lagging sales by almost 1 year. This time, prices followed sales down much earlier, we think it's due the rapid deterioration of affordability
- Home prices are up 40% from before the pandemic, and are way above the 2006 level, even in constant prices. The downside risk is HUGE! 2020 prices were sufficient to keep housing starts at a decent level

Headline inflation at 10.6% in October – 0.1 pp lower than the preliminary print

The headline index up 1.4% m/m, the core 0.4%



SB1 Markets/Macrobond



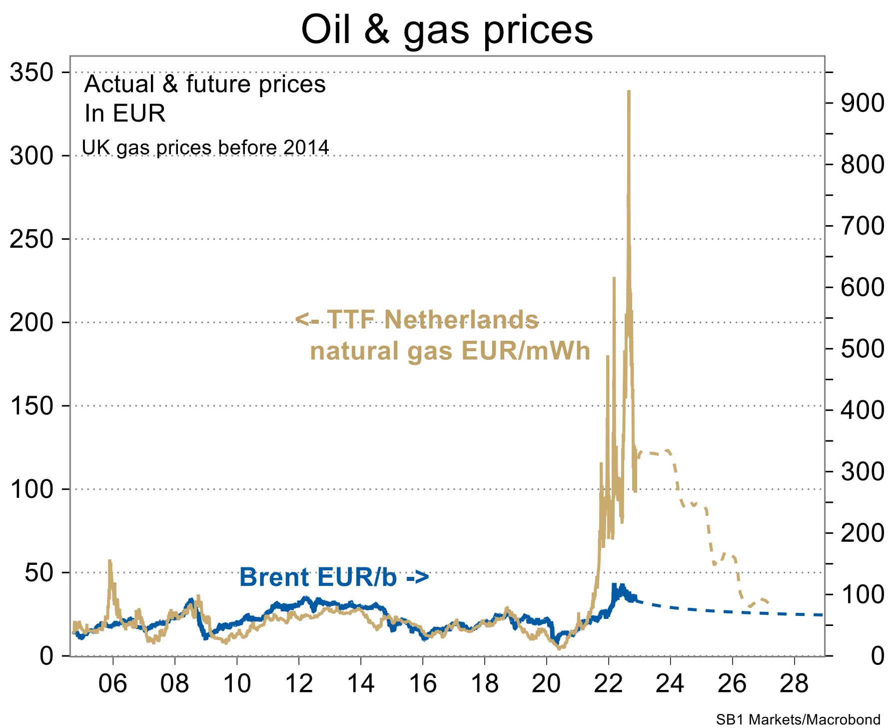
SB1 Markets/Macrobond

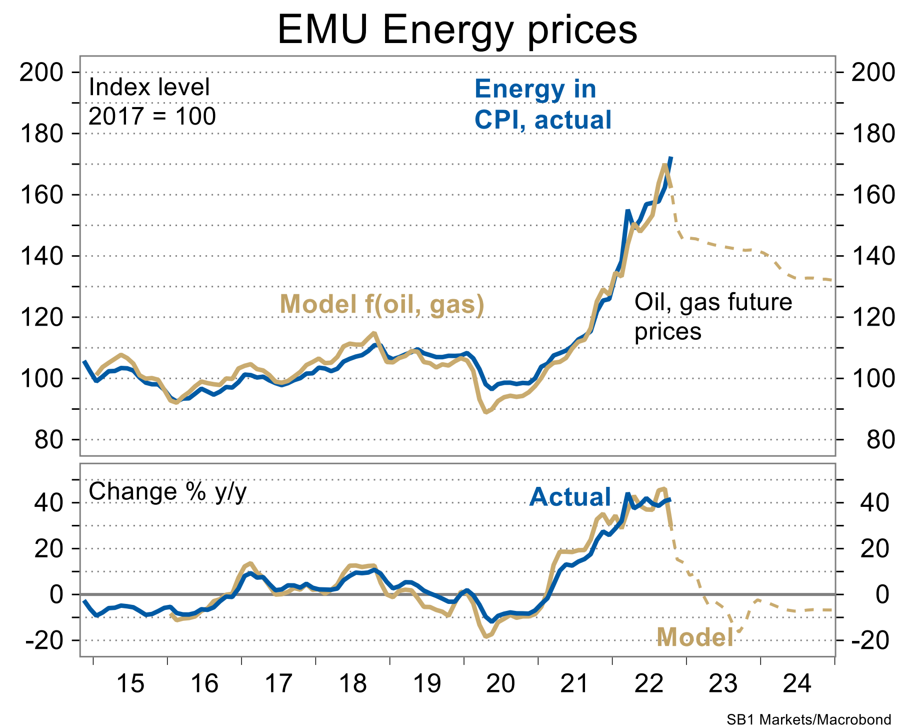
- **Energy prices** directly explains 4.4 pp of the headline of 10.6%. In October, energy prices were up 3.5%, while industrial goods prices were up 0.5%. We have said it for a couple of months now, energy prices will likely decline as spot and futures prices have come down substantially from the peak, check 3 pages forward

SpareBank 1 MARKETS

Gas, oil prices have lifted 'energy CPI inflation' up 41% but….

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



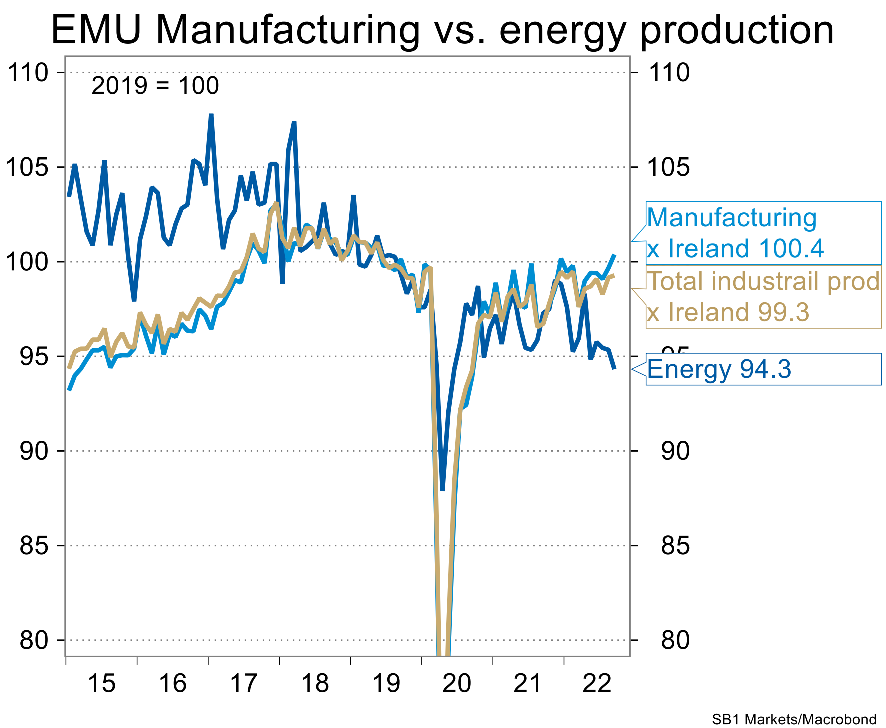


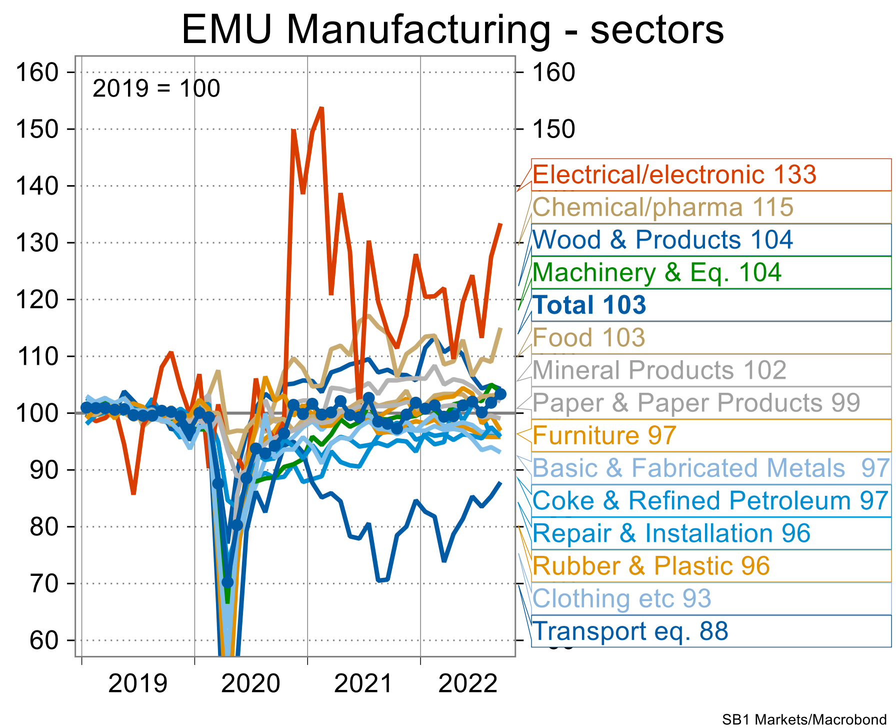
- The short end of the gas price curve has collapsed since the late August peak, and future prices fell substantially as well

In these models we incorporate all direct impacts from changes in the oil price – as well as the impact from other factors that influence inflation which correlates to the oil price

Energy production is down 5.7%, without hurting overall manufacturing prod.!

Manufacturing production is still trending upwards – even if surveys now have turned south



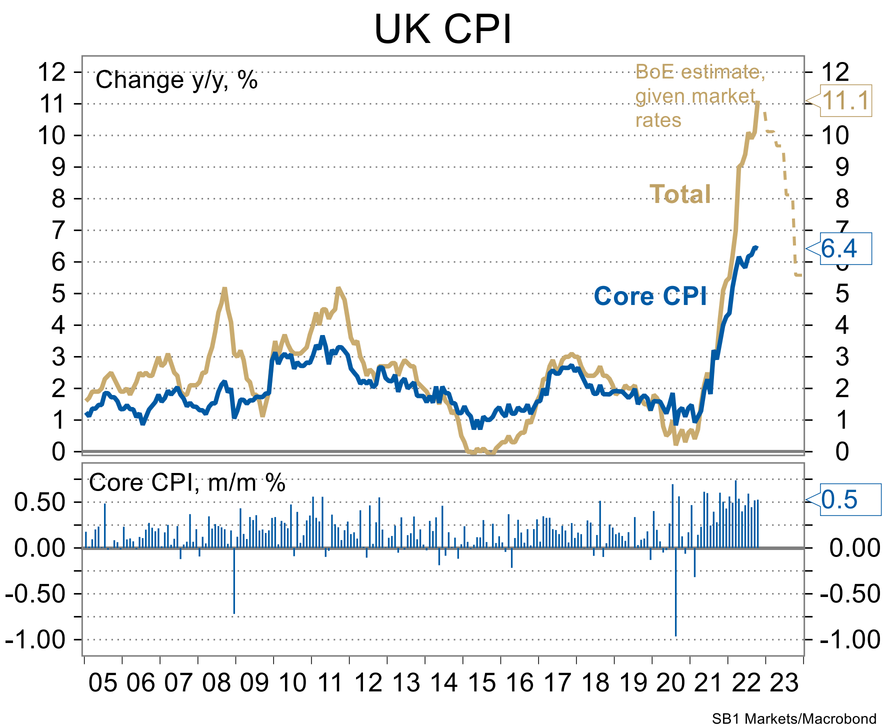


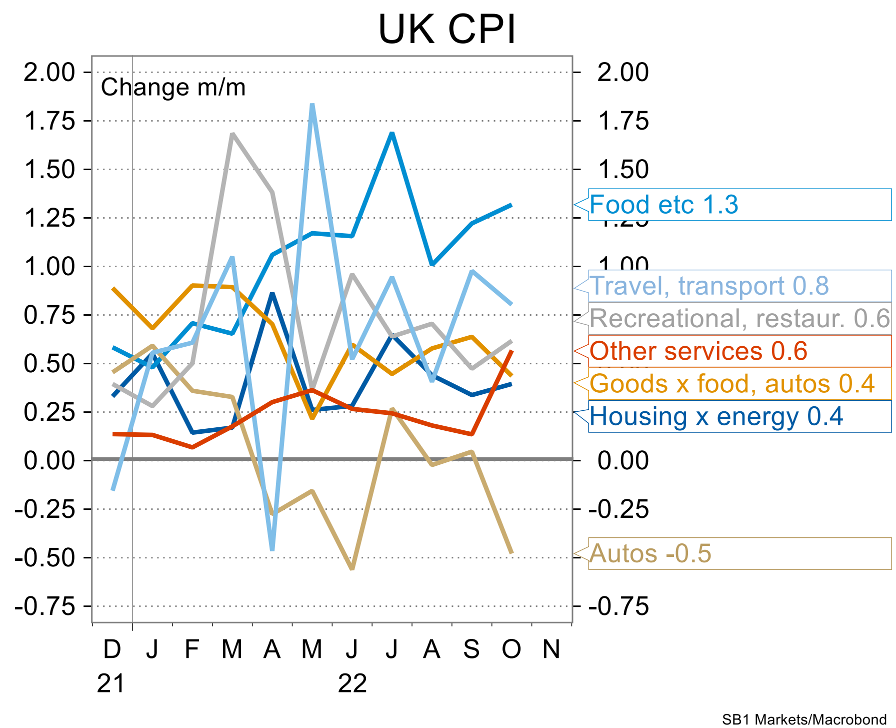
- Transport equipment is still a drag on production – but gradually less so (-30% a year ago, 12% now)
- Basic Metals are below par but not by much – even if energy costs have soared. Chemicals are still strong

SpareBank 1 MARKETS

UK headline inflation above expectations again in October, highest since 1981

Headline at 11.1% - the BoE expects inflation to peak at 11% in Q4…

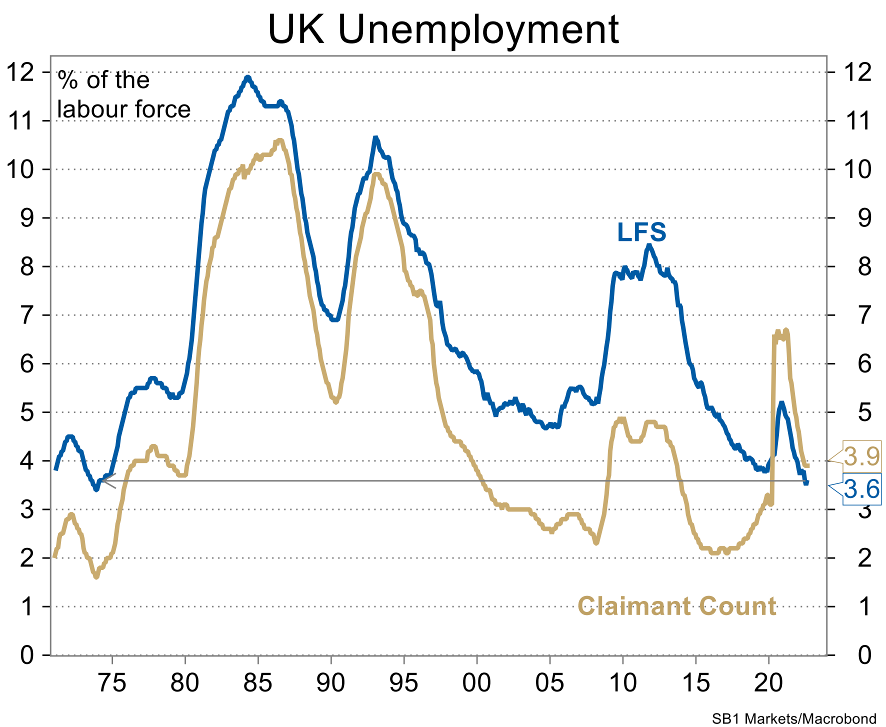


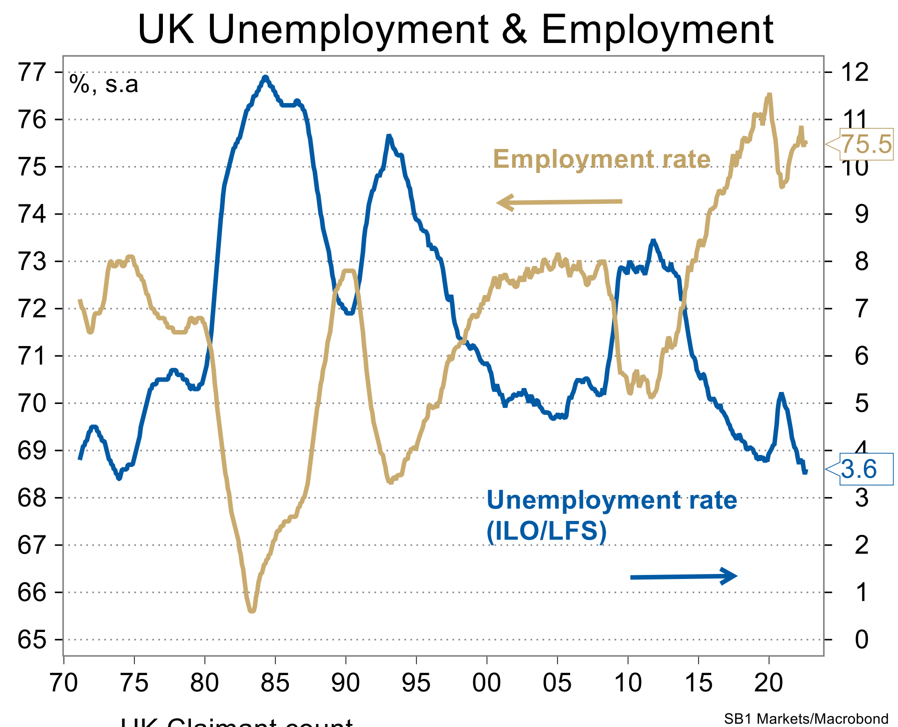


- **The total CPI** rose 2% m/m in October. The annual rate accelerated 1 pp to 11.1%, expected up 0.6 pp to 10.7%
- **Energy prices** were rose 14.8% in Oct, after falling 1% in Sept, but are up by 59% y/y and has lifted the headline y/y rate by 3.9 pp. The regulated price cap for energy is expected to stay in place until April 2023. Further energy subsides may lower inflation – if decided
- **Food prices** rose 1.3% m/m, and they are up 13% y/y (like in Norway), lifting the headline by 2.2 pp!
- The **core CPI** (ex food and energy) rose 0.5% m/m, and is up 6.4% y/y, unch. from Sept
- **Auto prices** are down 0.5% m/m and up 2% y/y
- **All major sectors** are reporting growth at or above 2%, and all up by more than a 2% pace since before the pandemic. This is BoE's problem, inflation is broad, and are also driven by home-made factors. The gas problem cannot be slowed by the bank, of course

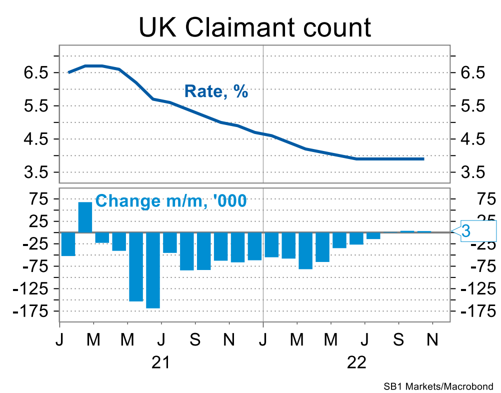
The unemployment rate marginally up, but claimant count below expectations

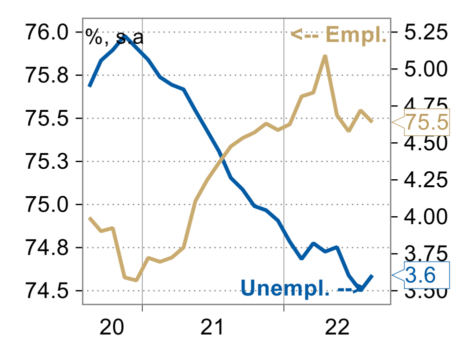
Payrolls are up, and wage growth is still accelerating – from a far too high level





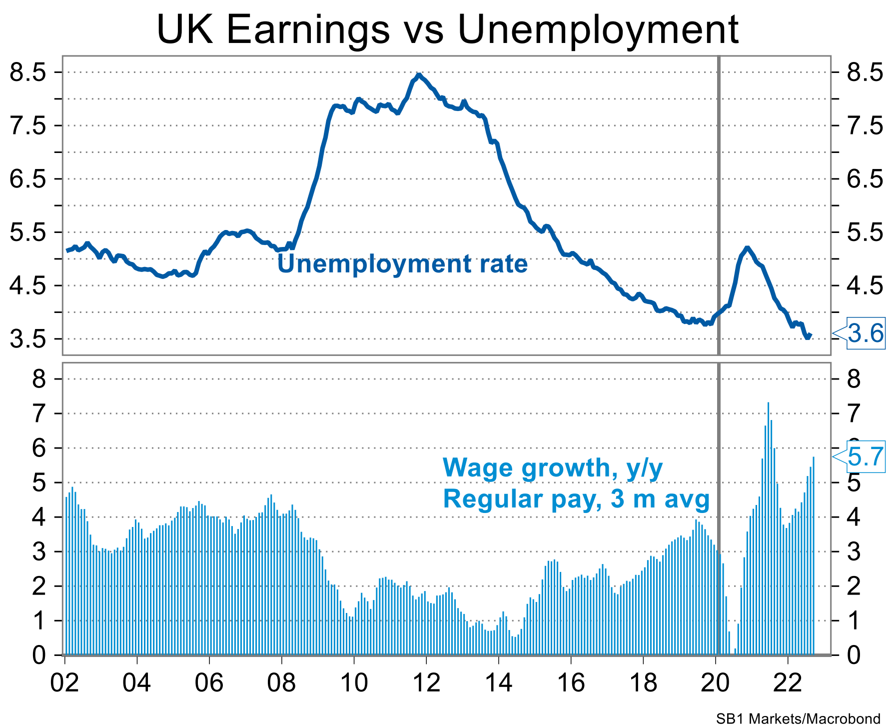
- **ILO/LFS ('AKU') unemployment** rose 0.1 pp to 3.6% in Sept, up from the lowest level since 1974 in Aug, expected unchanged
- **Claimant counts** ('open unemployment') have flattened at 3.9%, which is not that low, and in October the number of claimants rose marginally, by 3', expected up 17'
- The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

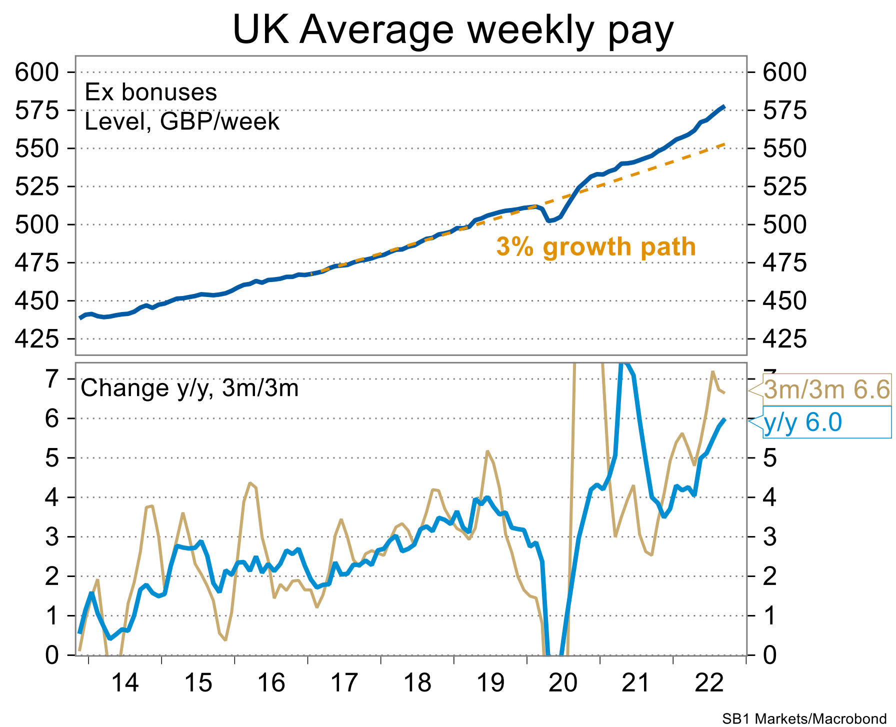




Lowest unemployment rate since 1974 – and wage inflation is on the way up

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

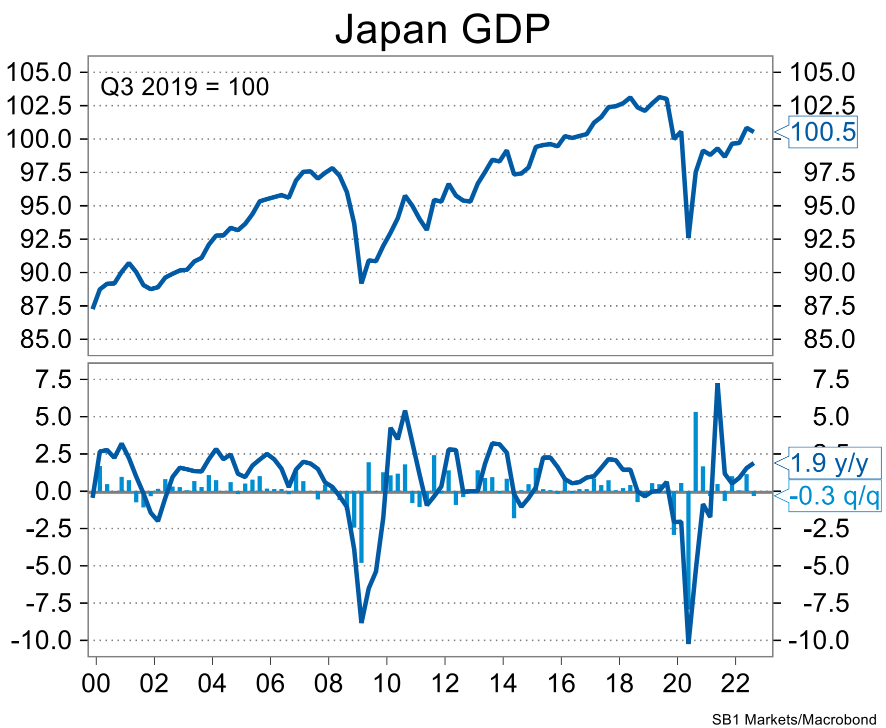


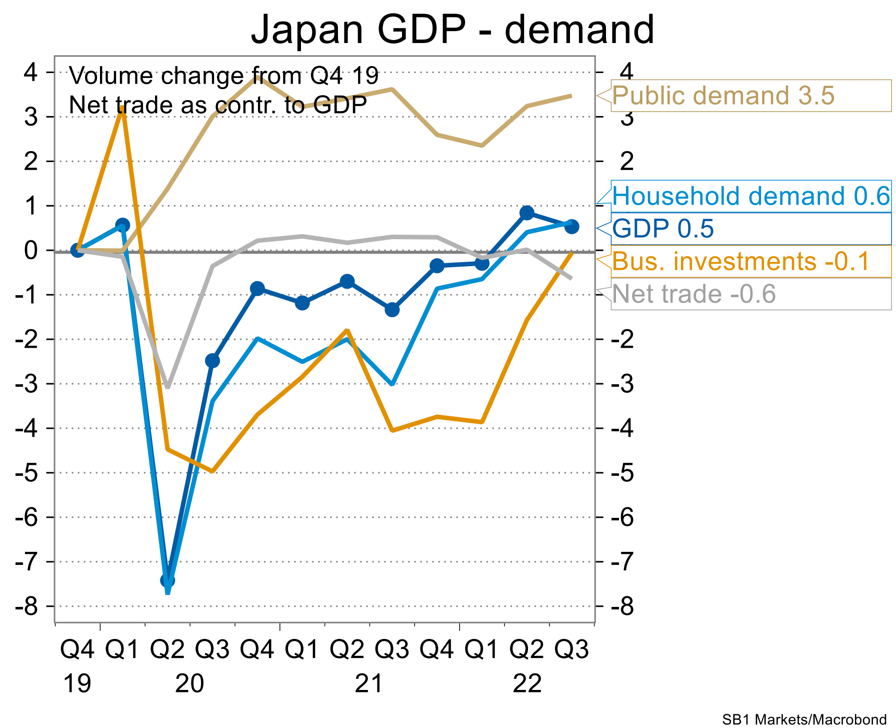


- **Annual wage growth** (regular pay, 3 m avg) accelerated 0.3 pp to 5.7% in September, expected up to 5.5%. Not smoothed, wages were up 6% y/y, and the underlying 3m/3m rate is at 6.6%
- **Including bonuses**, total wages are up 6.0% y/y (3 m avg), also 0.1 pp higher than expected (*chart next page*)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

GDP down at a 1.2% (ann.) pace in Q3, but is trending up

Household & public demand, business investments contributed on the upside in Q3



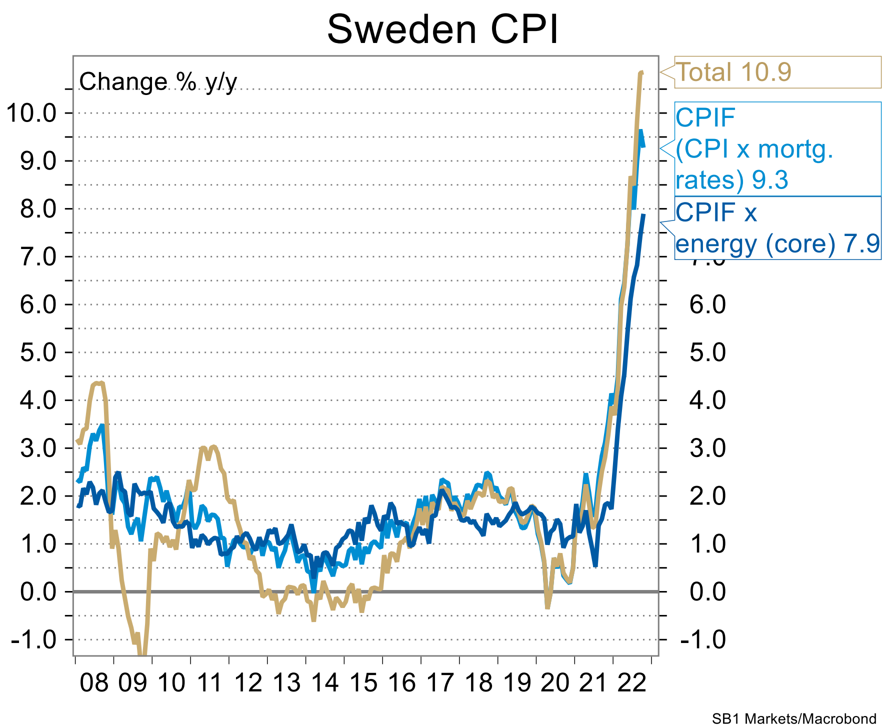


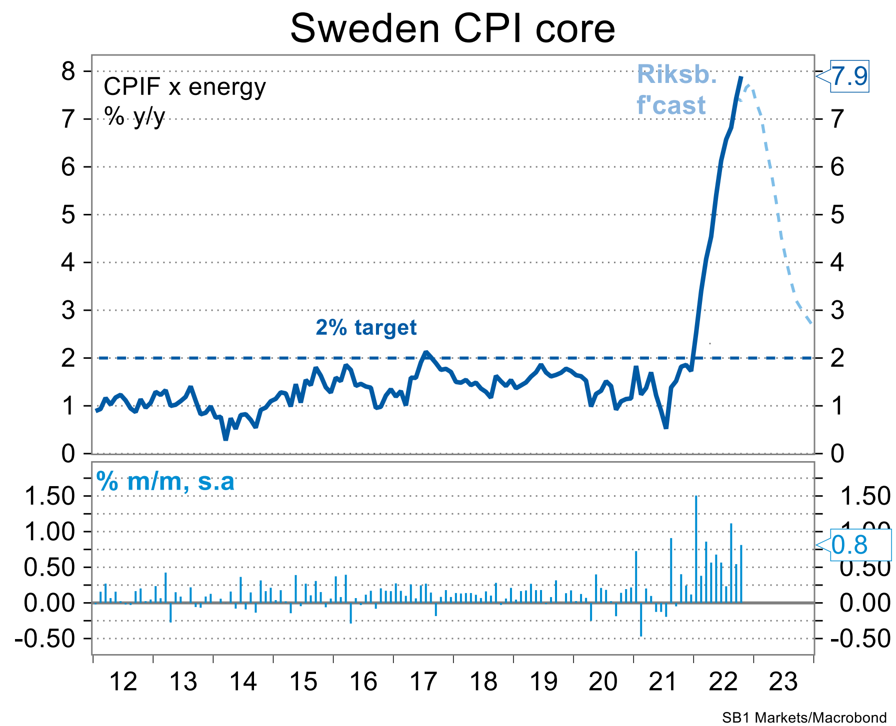
- Q3 GDP growth at -0.3% was weaker than expected (+0.3%), but the growth in Q2 was revised up by 0.3 pp to 1.1%
- GDP is just 0.5% above the Q4-19 level, and Q4-19 was not an impressive starting point (partly due to the VAT hike in Oct-19). <u>GDP is 2.5% below the mid 2019 level!</u>

SpareBank 1 MARKETS

No peak in yet for Swedish inflation – core slightly above Riksbank f'cast

The headline was up 0.1 pp to 10.9%, expected 11.1%. Core CPI up 0.8% m/m, up 0.5 pp to 7.9%



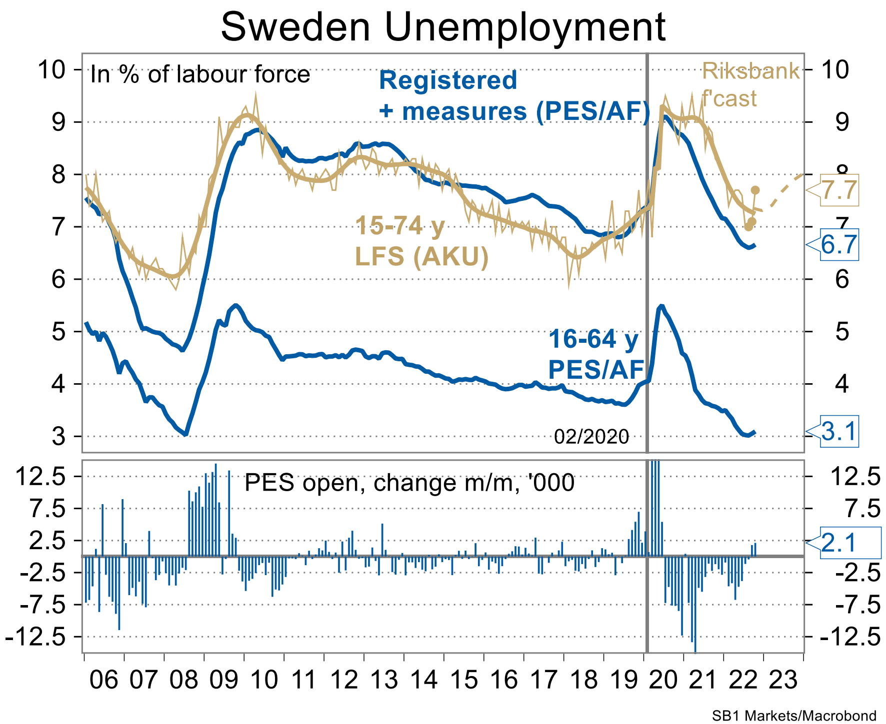


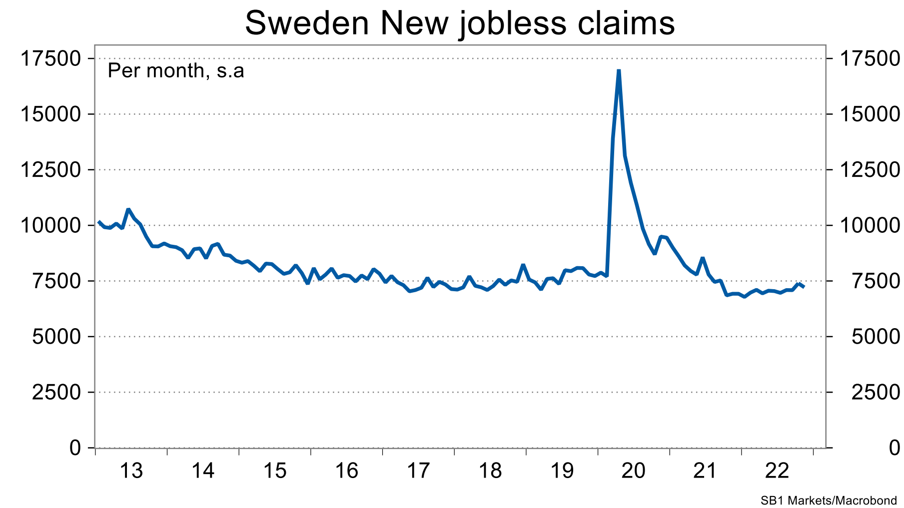
- **CPI-F x energy, the 'real core'**, rose 0.8% in October (seas. adj). The core rate has accelerated sharply recent months, to 7.9%, and the latest print was slightly higher than the Riksbank f'cast from Sept. (Food prices are included in the core)
- Why is inflation so high? Housing incl. energy prices are up 15% y/y, food prices are up 17%, furnishings 15%, hotels & restaurants 9.9%!
  - » All other measures of underlying inflation are sharply up – and at the highest level in some 30 years
  - » Until Q4 last year, inflation was pretty well explained by higher energy prices, now many more elements are on the move upwards
- **The increase in inflation is broad**, but the biggest contributors on the upside are energy (although electricity prices were down in October), housing (larger mortgage pmts), and furnishings
- **The Riskbank surprised markets** and hiked by 100 bps at their last meeting, and signalled a 50 bps as the most likely outcome in November. The market, however prices in another 75 – 100 bps

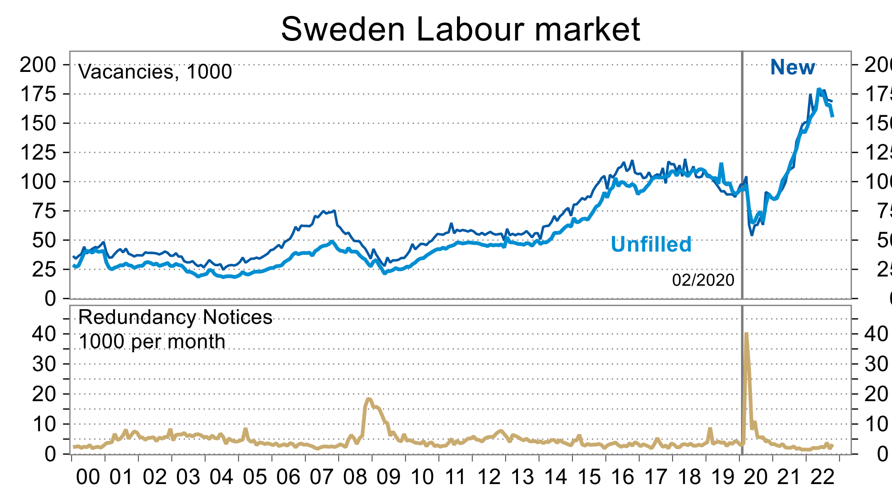
SpareBank 1 MARKETS

The cycle has turned? PES Unemployment up for the second month in October

AKU unemployment up too; vacancies are coming down, but remain at a high level



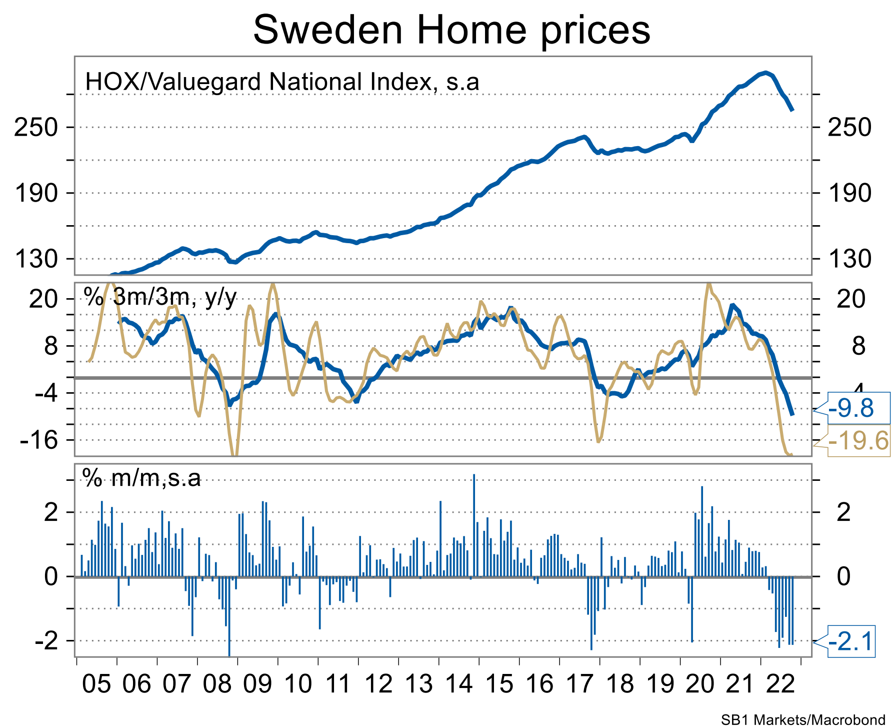


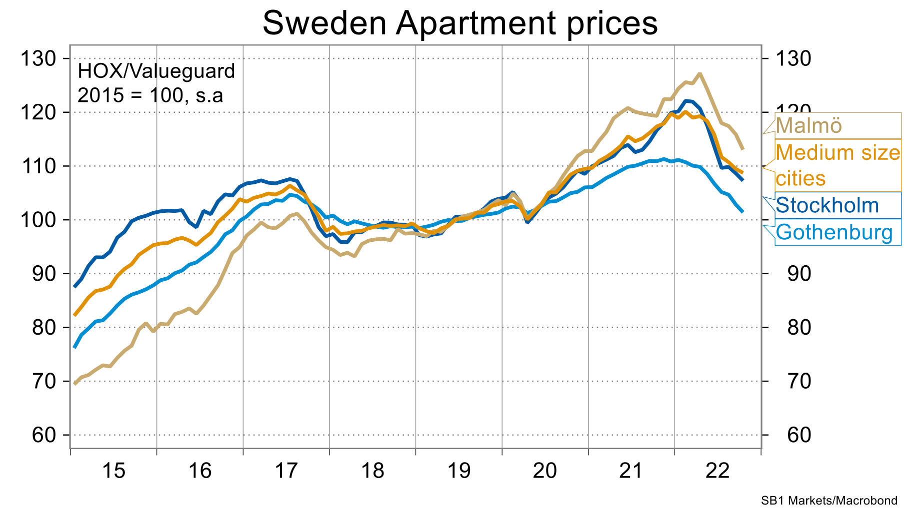


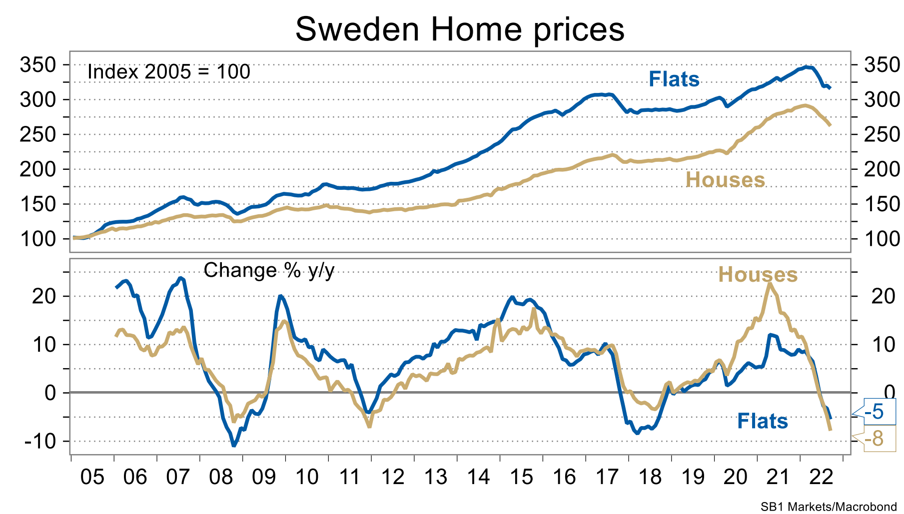
- The **'open' registered unemployment rate** at 3.1% is far below the pre-pandemic level – close to the lowest level since 1990, before the housing/banking crisis. The no. of unemployed has increased marginally in both September and October. In addition, the inflow of **new jobless registrations** has increased slowly since the start of the year
  - » **Unemployment including labour market** measures has fallen to 6.7%, while AKU unemployment increased to 7.7% in Oct, from 7.1 in Sept
- The number of **new vacancies** fell marginally in October, while the no. of **unfilled vacancies** also declined, and somewhat more

Swedish house prices kept falling in October, down 12% from February

Prices fell 2.1% in Oct, the 8th decline in a row, and this week the Riksbank will hike again



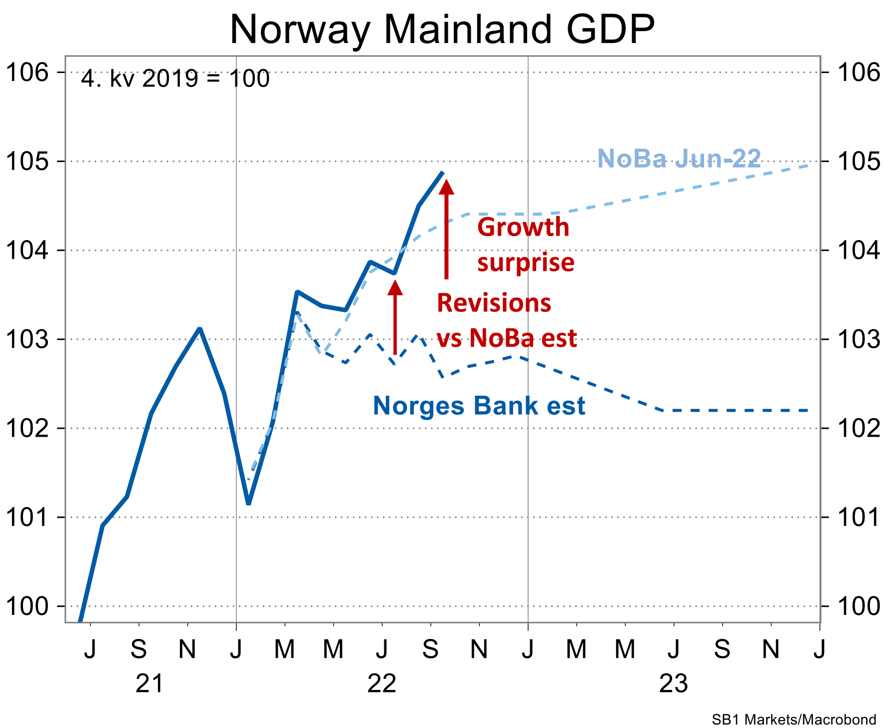




- **Prices are down 11.7**% from the peak in February, according to the HOX/Valueguard index. Apartment prices in Stockholm are down by the same amount
  - » In Oct, apartment prices in Stockholm fell just 1.3%%, Malmø was down 2.5%. House prices fell faster than flats
- **The annual rate** declined to -9.8% from -7.0% in Sept
  - » The underlying price growth (3m/3m) is now <u>-20%!</u>
- The **Riksbank's** abrupt change of tack in late April has no doubt hit the housing market hard. The rest of the real estate sector is hit by higher long term rates, and the sharp widening of credit spreads

The Times They Are A-Changin'. And the history too! Once more

September GDP 2.5% higher than NoBa assumed in September

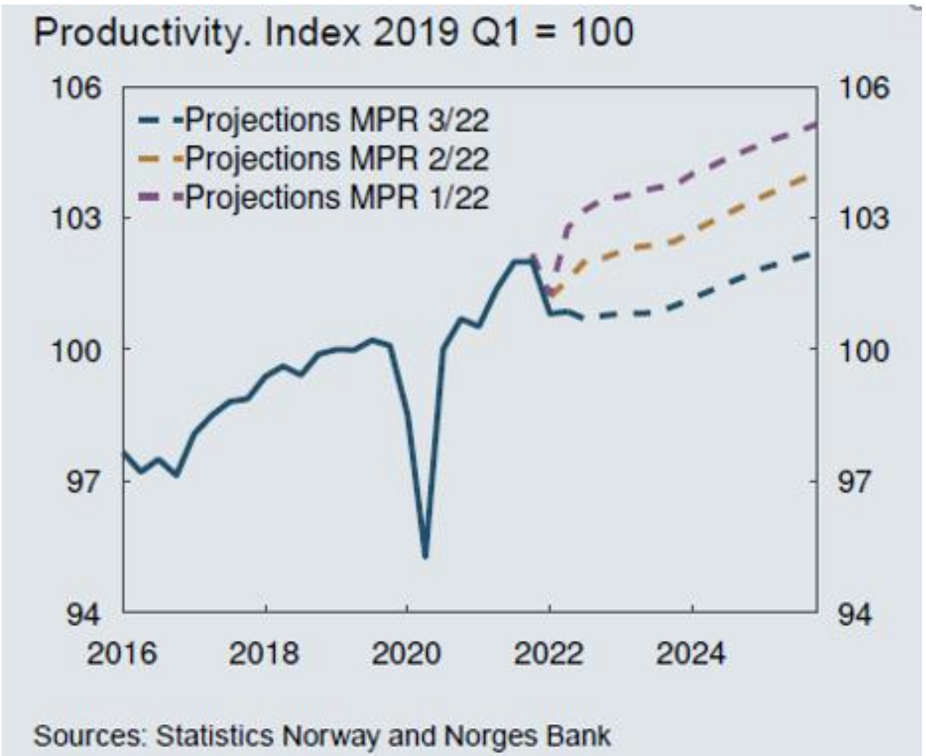


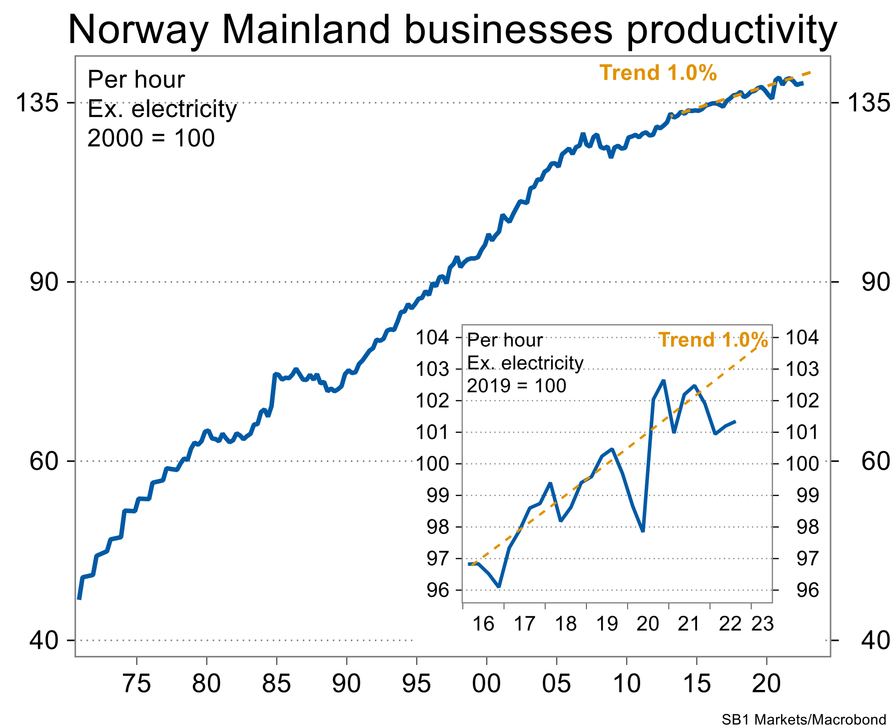
- The likelihood for a 50 bps hike in December has increased. Growth is stronger, inflation is higher and the labour market is tighter than expected. However, until further notice, we expect the bank to 'wait and see'.
- Labour and house price data, as well as NoBa's regional network are the most important data point ahead of the Dec 15 NoBa meeting

- **Mainland GDP** was once more revised upwards and grew much faster than expected in September, by 0.5% - even if electricity production fell sharply (0.8% ex. el), vs an expected 0.3% decline. In addition, August was revised up – and GDP in September was one year's normal growth higher (2.5%) than Norges Bank assumed in the MPR, in published September. Just above 1 pp is due to revisions of GDP since NoBa published its f'cast in September (the lower arrow), and more than 1 pp is due to stronger growth than assumed in Aug and Sept (the upper arrow)
- **In Q3,** GDP grew at a 3.3% pace (annualised) or 0.8% annualised, expected 0.4%. Norges Bank's f'cast -0.1%. Production rose in most sectors – and most demand elements contributed on the upside in Q3, barring consumption of goods and housing investments. 'Mainland' inventories contributed by 0.3 pp of the 0.8% growth rate
- **What to make out of this?**
  - » First, the **interest rate hikes** have not beaten the economy down. However, data a so far just through September, and the average signal rate in Q3 was 1.5%. Households' actual interest rate payment were still subdued. The 'long and variable' lags between changes in signal rate and the final impact in the economy are (always) an explanation if higher rates do not work – and for 'wait and see'. Still, the momentum in the economy is no doubt far stronger than anybody, NoBa included, expected some few weeks/months ago
  - » **Unemployment** in Sept (& Oct) was just 0.1 pp below NoBa's 1.7% f'cast. Thus, the production potential must be significantly higher than modest NoBa assumption, following the Bank's sharp downward revision of productivity both in the June and September MPRs (check next page). Productivity is still not impressive, but better than NoBa assumed – which is good news
  - » **The tight labour market** has not yet had any impact on wage inflation – which we expected would happen through 2022. Wage inflation runs at 3.5% – 4%. Even so, as productivity is flat (at best), unit labour cost inflation is running at a level that is too high to reach the 2% inflation target, even if import price inflation should return to a normal low level, inflation will not over time return to 2%

Productivity growth is dismal but slightly better than NoBa feared

Productivty in Mainland businesses have fallen well below the 1% trend path (from 2013)

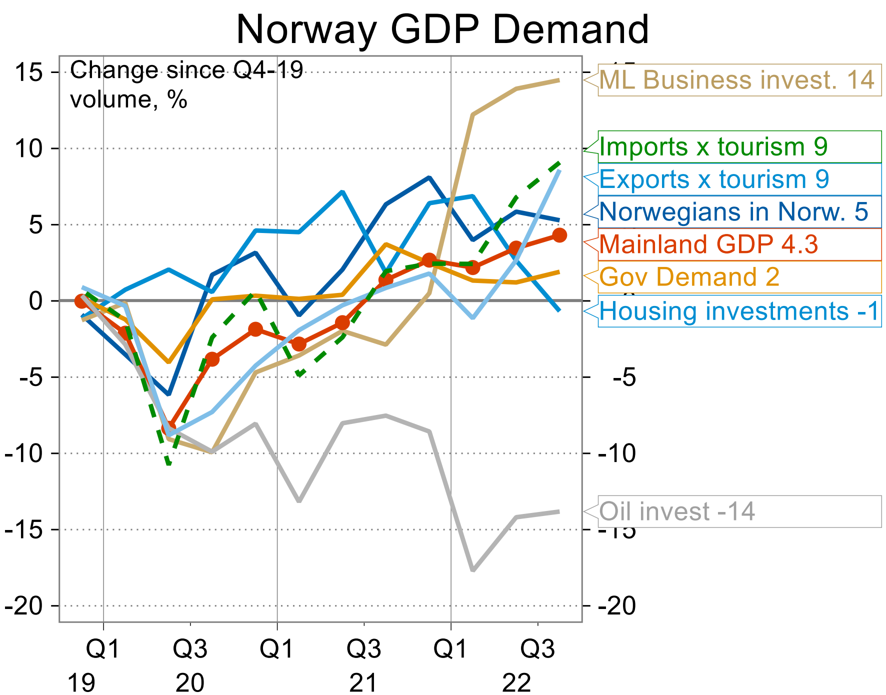


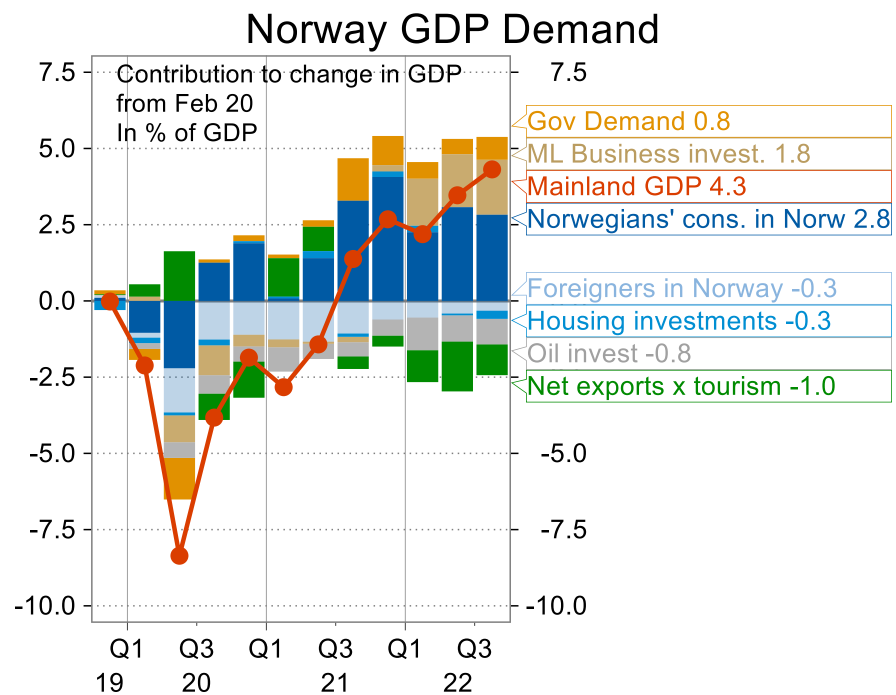


- ... And have fallen slightly recent quarters, at least for Mainland businesses in aggregate

Housing investments are declining, Norwegians' spending in Norway is flattening

But the rest is up: Oil investm. has turned up, and Mainland business investments are booming





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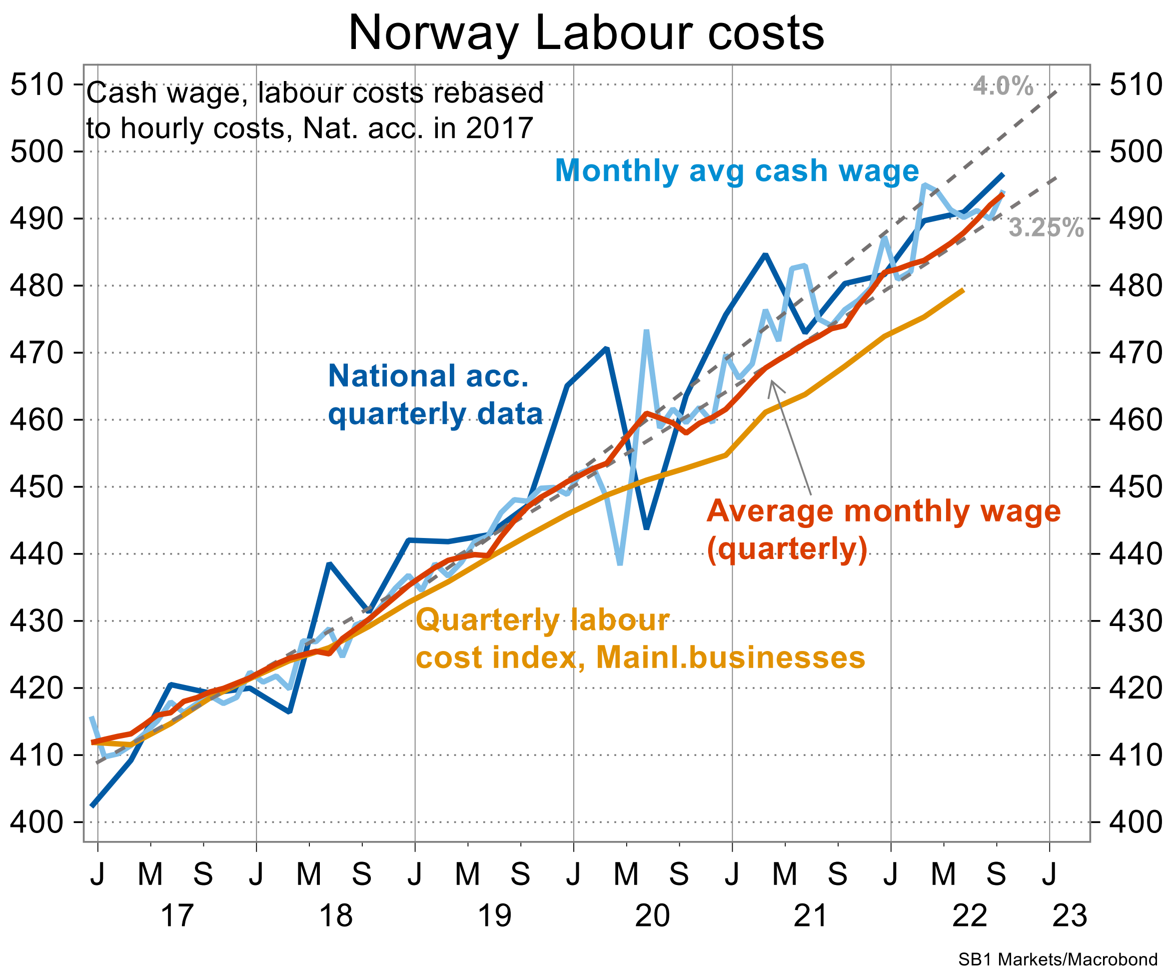
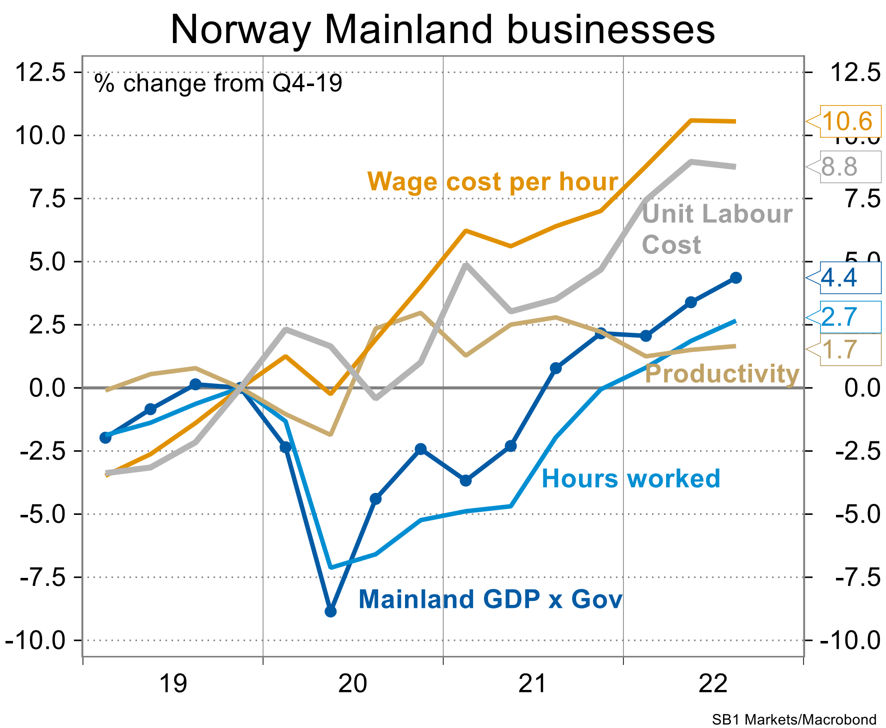
NO indications yet of accelerating wage growth

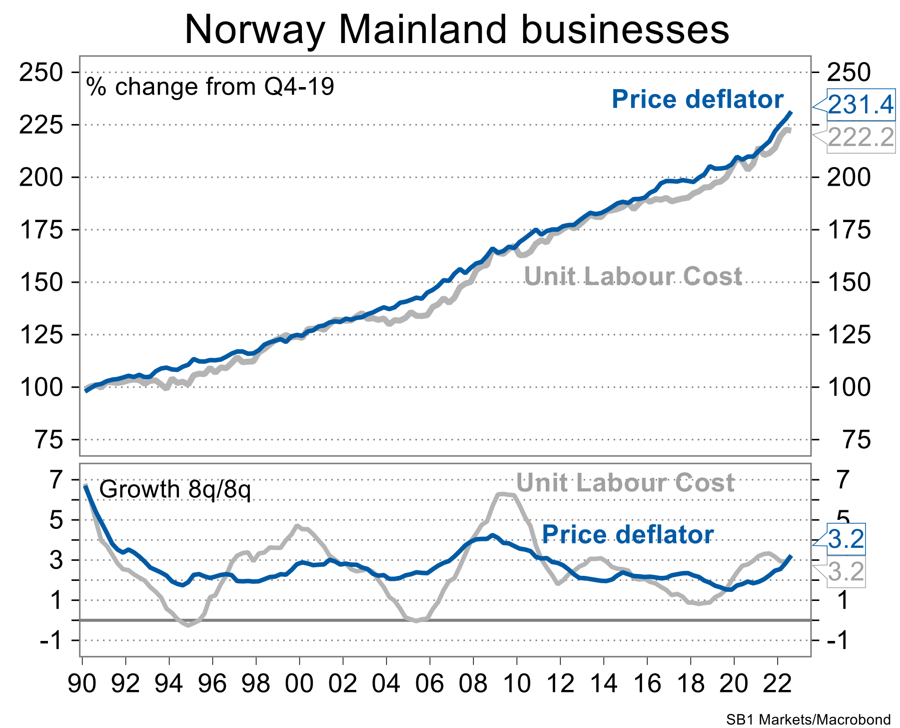
All indicators are below 4%. The spring 2023 wage agreement at 3.7% – 3.8% will probably hold



Unit labour cost inflation up at a 2.7% pace since Q4-19

Wages are up a 3.7% pace, productivity just 0.6%. Not assuring vs the 2% inflation target

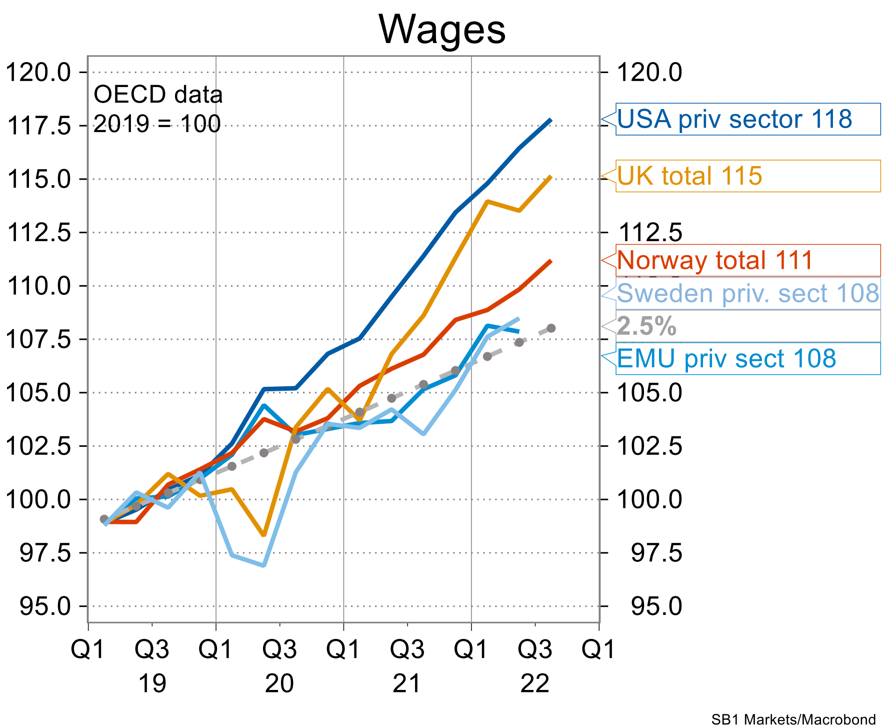


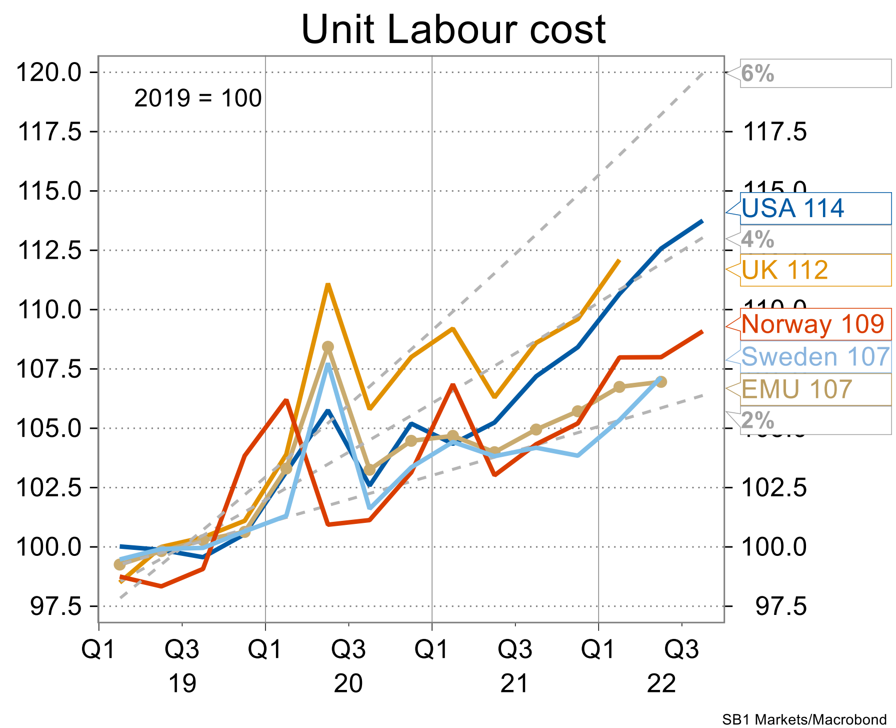


- **Wage cost pr hour** has been revised up – and has been growing at a 3.7% pace since Q4-19, and growth is <u>not accelerating</u>
- **Productivity** <u>has flattened</u> since Q4-20 – and just up 1.7% since Q4-19 (a 0.6% pace!) – even after an upward revision of the past quarters
- **Unit labour cost** has climbed at a 3.1% pace since Q4-19, and the underlying growth seems to be stable – even if UCL fell marginally in Q3. This is somewhat higher than before the pandemic, and somewhat too high to reach a 2% inflation target over time (even if import prices normally are contributing at the downside)
- Over time, the Mainland GDP (businesses x electricty) price deflator equals unit labour cost. Now, both are up 3.5% measured 8q/8q

Norway does not yet have a (serious) cost problem

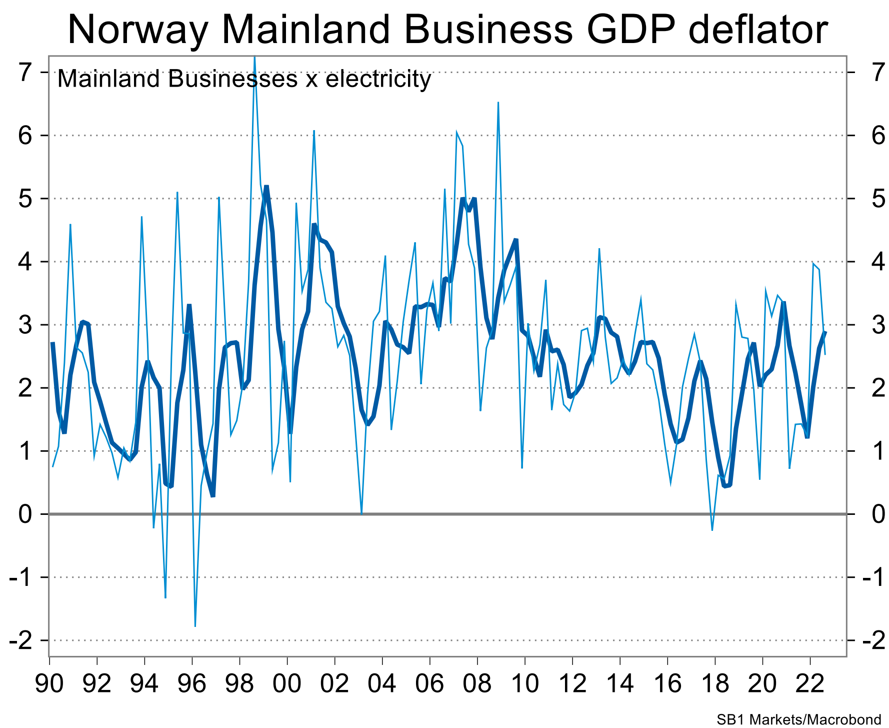
However, low productivity growth yields a ULC growth that is somewhat too high

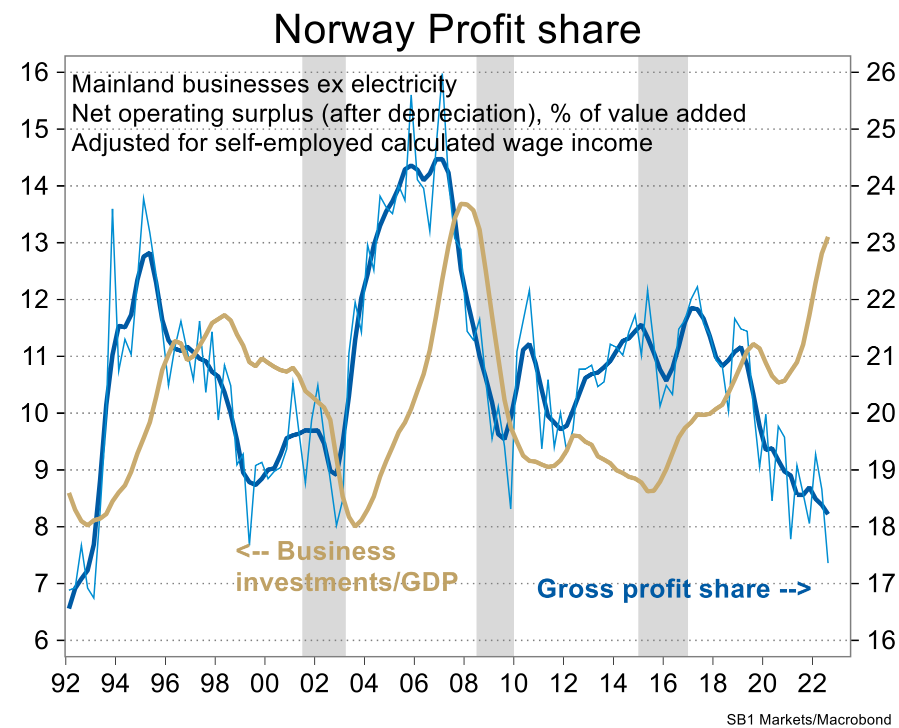




The profit share was under pressure, before corona – and still is

Operating margins have stabilised at a rather low level. Investments are exposed?

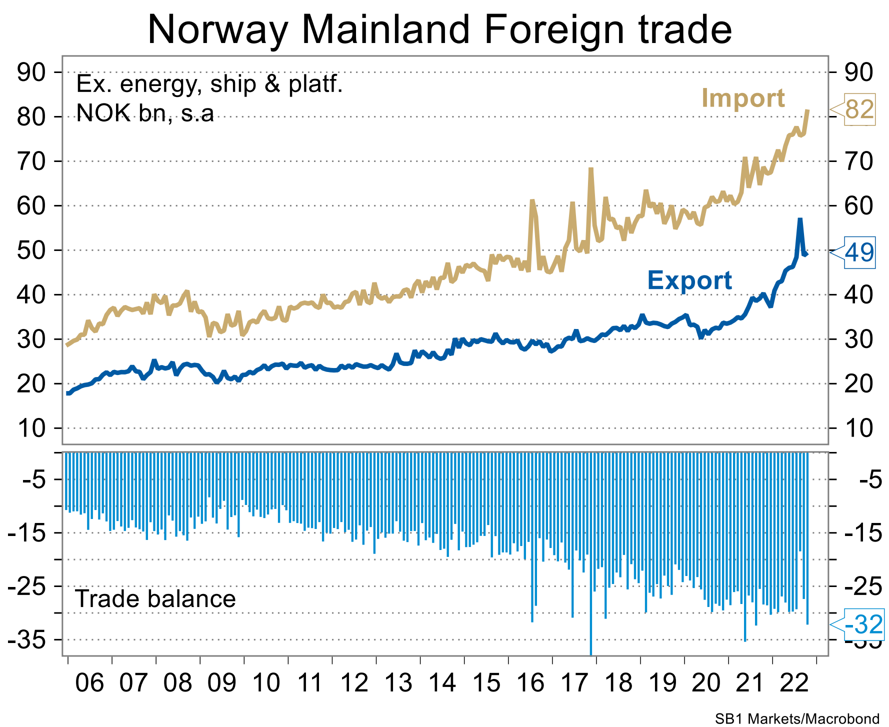


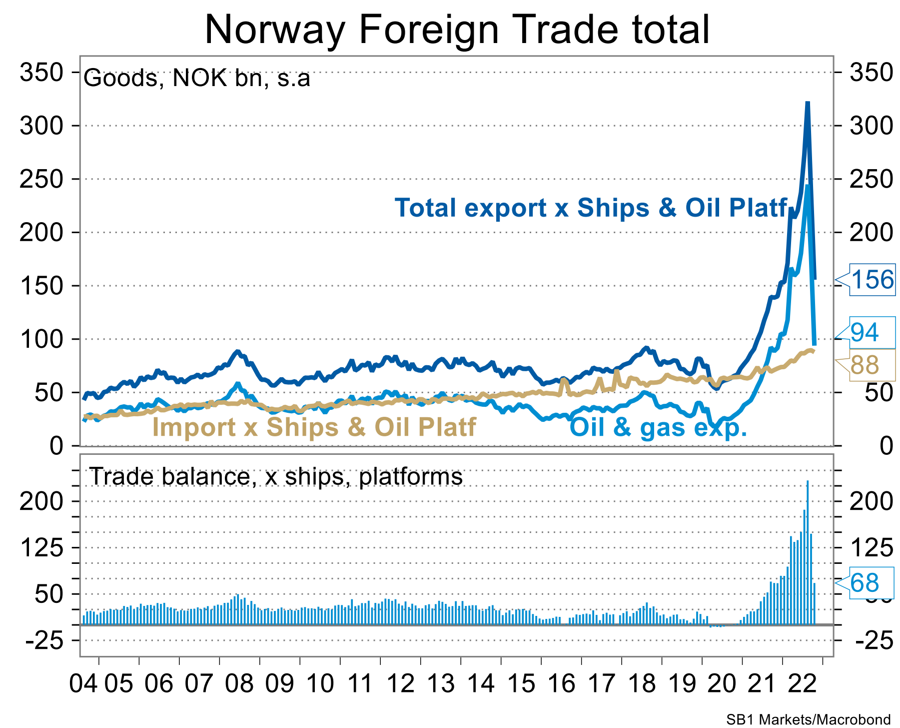


- The **Mainland business GDP price deflator** (ex the extra volatile electricity sector) is up 2.5% - 3%, and is not accelerating
- **Unit labour cost** (wage growth – productivity growth) is higher, at 3%, and the gross margin is still deteriorating
- The **Mainland business (ex electricity) gross margin** level is low – which signals an obvious risk vs the above average investment ration

Trade surplus lower due to falling gas prices and higher imports

The Mainland x energy balance has strengthened over the summer





- The October **overall trade surplus** in goods was NOK 68 bn, down from the ATH of 147 bn in September. The surplus in October equals 24% of Mainland GDP
- **Oil & natural gas exports** were down 34% m/m, after a 33% decline in Sept, due the sharp decline in gas prices. So far in November, gas prices have slid further, but higher-than-average future prices towards early 2023 signal high trade surpluses the coming months too
- **The Mainland (and non-energy) trade deficit in goods** decreased by 5 bn to NOK 32 bn, equalling 11% of Mainland GDP (however, deliveries from the Mainland to the oil sector (cap. ex and op.ex) are not counted as exports from the Mainland but imported intermediate goods for producing 'exports' to the oil sector are counted as imports – and the 'real' Mainland trade balance is far, far stronger)
- **Non-energy exports** were virtually unch. at NOK 49 bn. Mainland exports have been very strong in value terms during and after the pandemic, and the underlying growth rate over the past year is some 30%. Exports are up 48% since the end of 2020, almost entirely due to higher prices. Fish, metals & chemicals are reporting strong growth. Measured in volume terms, non-energy exports are up 10% since July (Check next page)
- **Imports** also rose by 6 bn to 82 bn in Oct, and at an 7% growth pace, in value terms, that is

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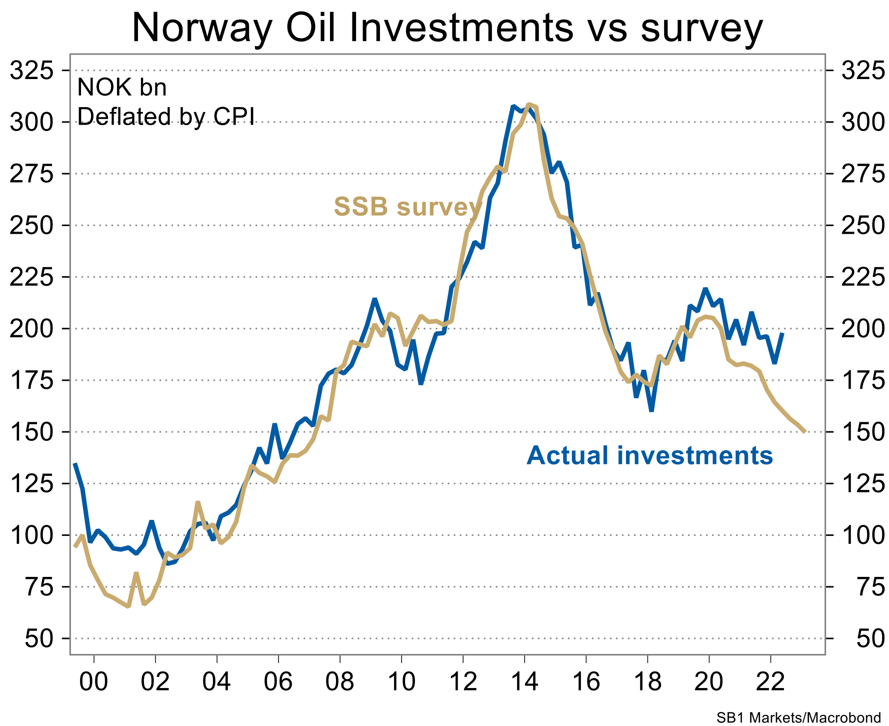
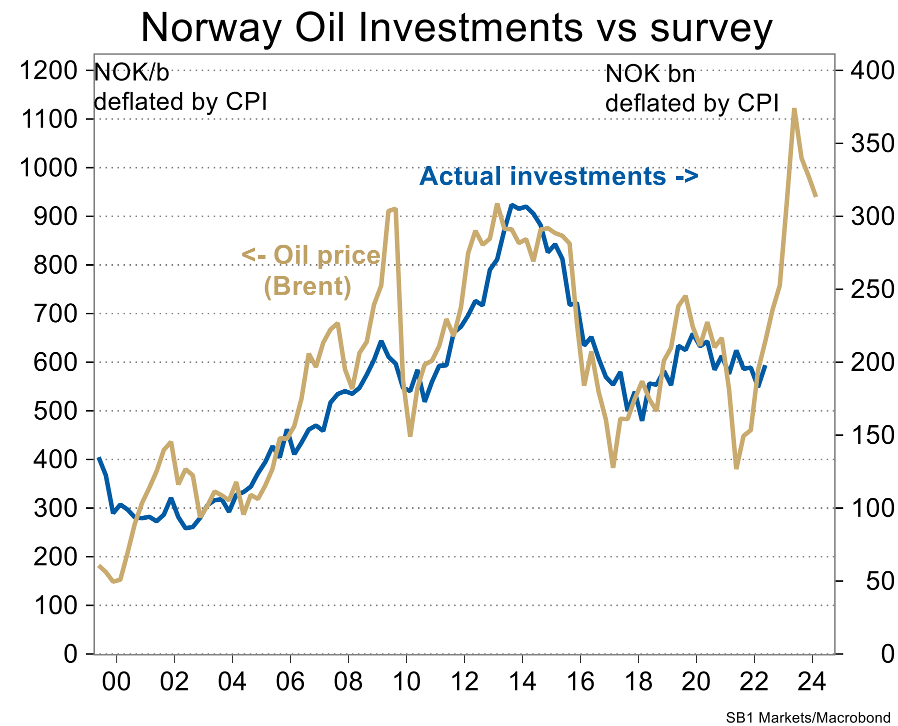
Oil investments: 2022 will (probably) be the local bottom

... even if the 2023 oil investment survey still suggest a further decline





- **Oil companies lifted their 2022 investment estimate** by 1% to 175 bn. The estimate is still 5% below the equivalent 2021 estimate. Some projects may be added to the list (a PDO delivered) before end of 2022 in order to benefit– and a higher oil price is also supportive – and there is some upside vs. the current estimate
- **The 2023 outlook** is far better, even if the November estimate at NOK 150 bn is still down 5% vs the equivalent 2022 estimate (as we expected). Many more projects will be added before end of 2022 in order to benefit from the temporary tax cuts decided in 2020, and we expect the February survey to signal far higher investments in 2023 than the current survey signals and a further lift in 2024

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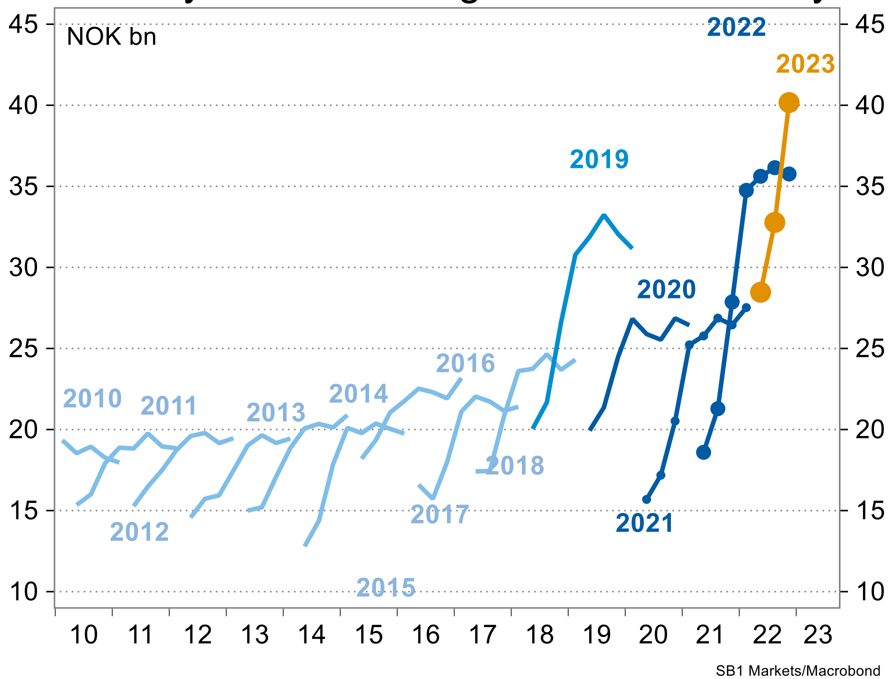
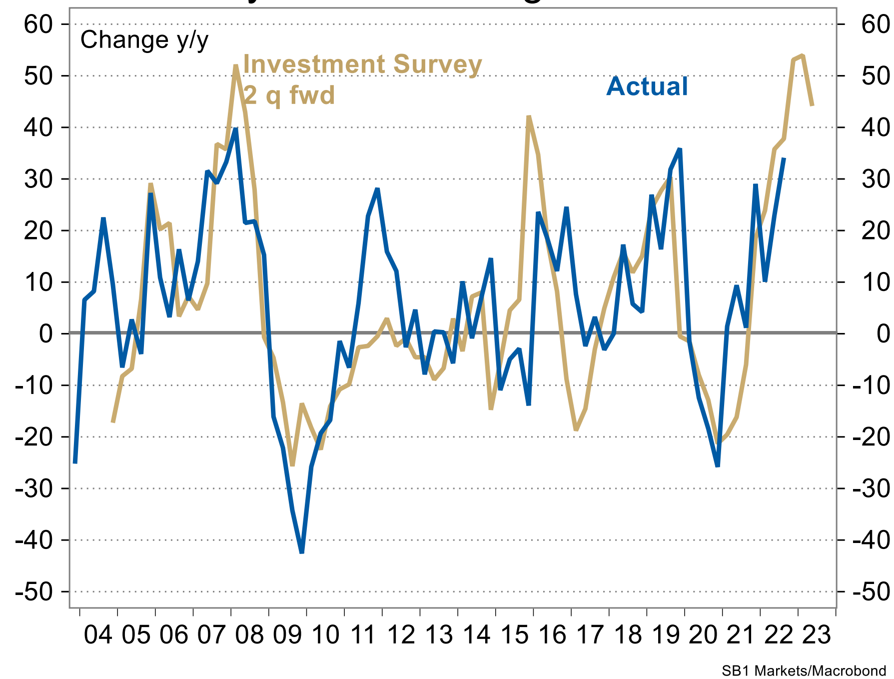
WOW, manufacturing investments ~~probably~~ further up in 2023

At least 20% volume growth in 2022, and a further, lift in 2023~~?~~!

Norway Manufacturing investment survey



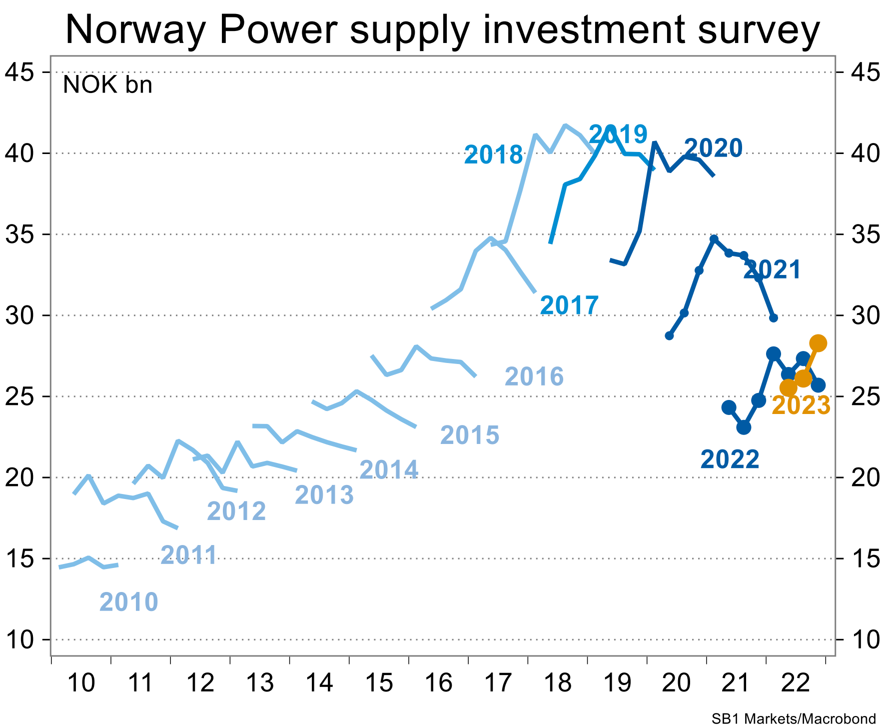
Norway Manufacturing investments

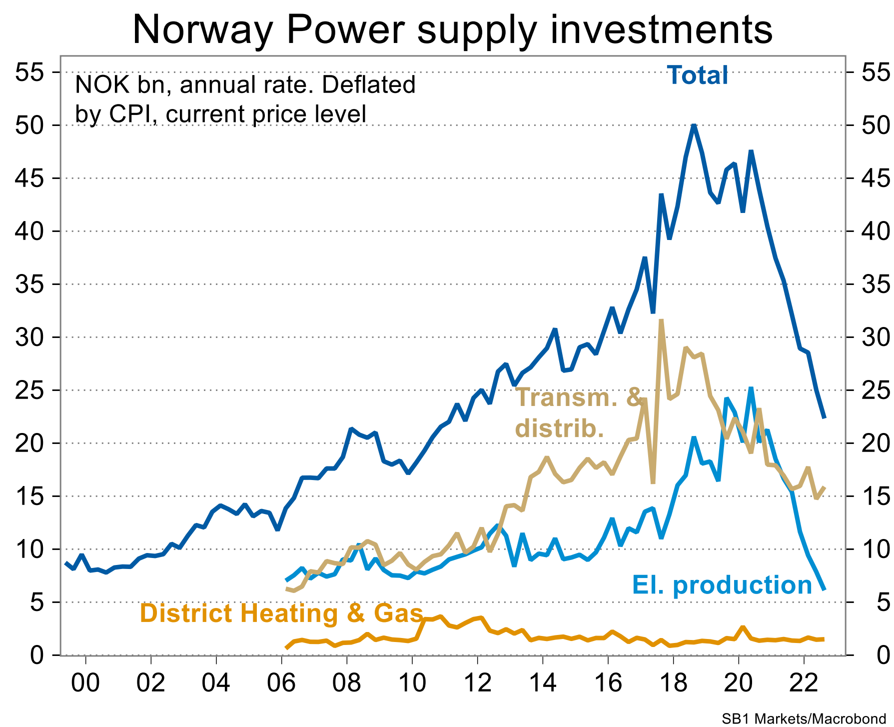


- Manufacturing companies report a 35% growth in **investments in 2022** – to the highest level ever, at least in nominal terms – NOK 36 bn. We assume at 15% growth in volume terms (based on National accounts, prices are rising rapidly)
- The **2023 estimate** was lifted by 23%, and it is 44% higher than the 2022 forecast, given one year ago. The estimate for 2022 has been revised upwards much more than normal, and we do not expect the 2023 estimate to follow the same path. Still a substantial further growth in investments in 2023 seems very likely, we assume 20% in nominal terms and 10% in volume terms. According the current forecasts from the companies, nominal investments are up 150% to 2021 to 2023!
- Computers/Electronic equipment are up 6x to '23 from 21, to 5 bn, mineral products 3x, ship/platform yards 2,5x, metals 2x

Power supply: After 2 years of decline, an uptick in 2023?

Investments have been cut in half since 2020 (CPI deflated)

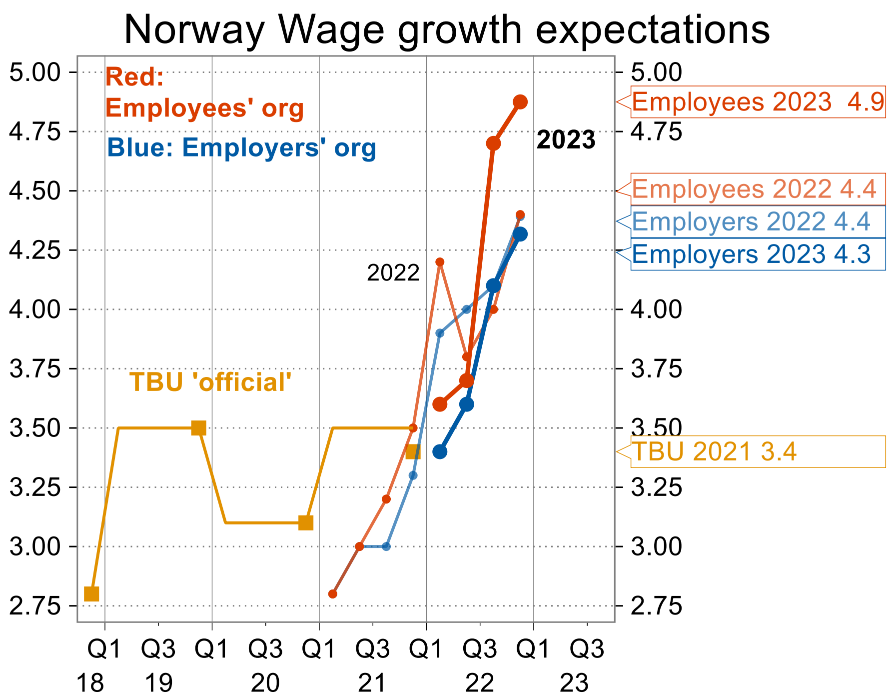




- **Power supply** (production & distribution) companies assume investments will decline by some 20% to NOK 26 bn in 2022
- The **2023 forecast** rose more than normal and is 14% above the similar estimate for 2022. We expect the final outcome to be well above (even if the current tax debacle may dampen investments for a while, even if electricity prices are high, and are expected to stay higher than normal the coming years)
- The decline in investments past years are rather spectacular, following the spectacular growth since year 2000

NoBa Expectation survey: Trade unions expect 4.7% wage inflation in 2023

The employers think 4.1% should be sufficient. Inflation expect. are on the way up too, even long term



SB1 Markets/Macrobond

2022

- Both employers organisations and unions expect a 4.4% wage lift this year, above the agreed 3.7% – 3.8% agreed upon this spring, and well above actual wage data published so far
- **Norges Bank** assumed a 4.0 % growth rate in the September MPR

2023

- **Employers** aim for 4.3%, up from 4.1% forecast in Q3, a substantial lift
- **The unions** expect 4.9% wage inflation, up from 4.7% in Q3, and the gap to employer's organisations remains the largest ever!
- **Norges Bank pencilled** 4.6% in September – equalling the average of the forecast for employers and the unions

In sum

- Wage inflation expectations are accelerating sharply, which is partly reflected in NoBa's forecast. Still, the huge lift in the expectations among the leaders in employees' organisations illustrates that challenging times are ahead

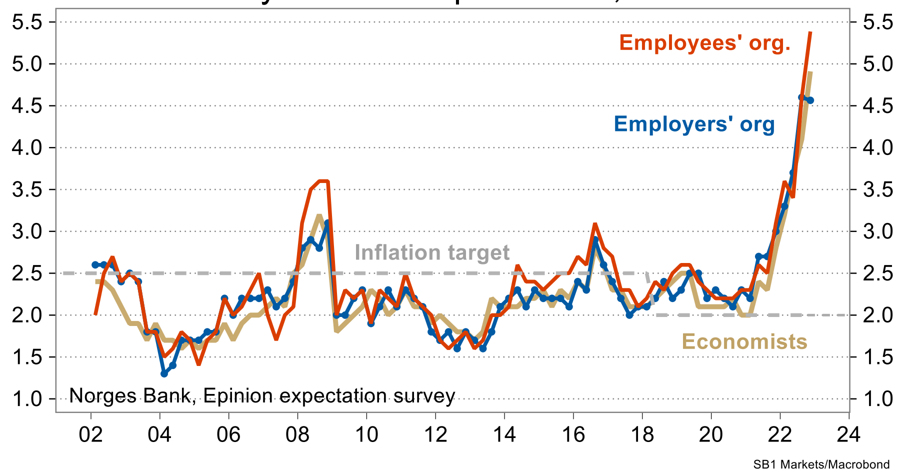
Inflation expectations are drifting upwards

- In addition – and not surprising - inflation expectations for the coming years, and even for the long run is way above the 2% inflation target
- This is surely a huge challenge for Norges Bank: How 'forcefully' should the bank be in order to 'correct' these expectations, or even more important, prevent this outcome?

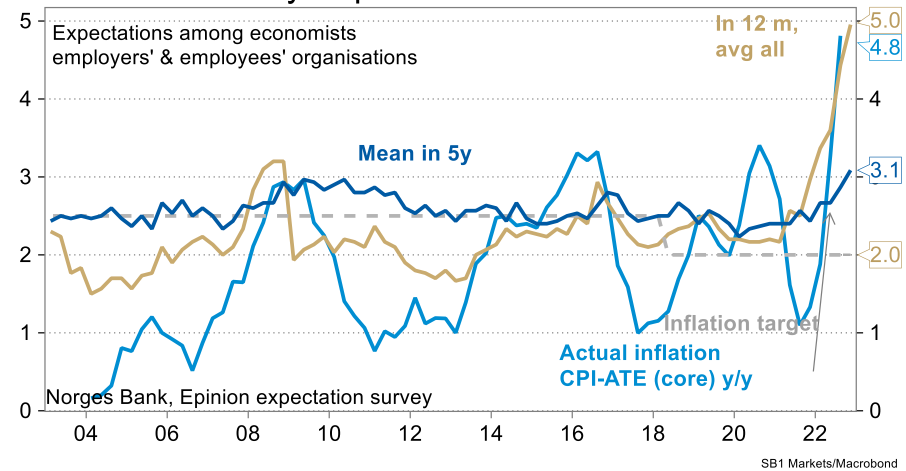
Inflation expectations still on the way up, also long term expectations

Nobody believes in the 2% inflation target anymore! <u>Unions expect 4.4% in 2 years' time, and 3.5% in 5 years'</u>

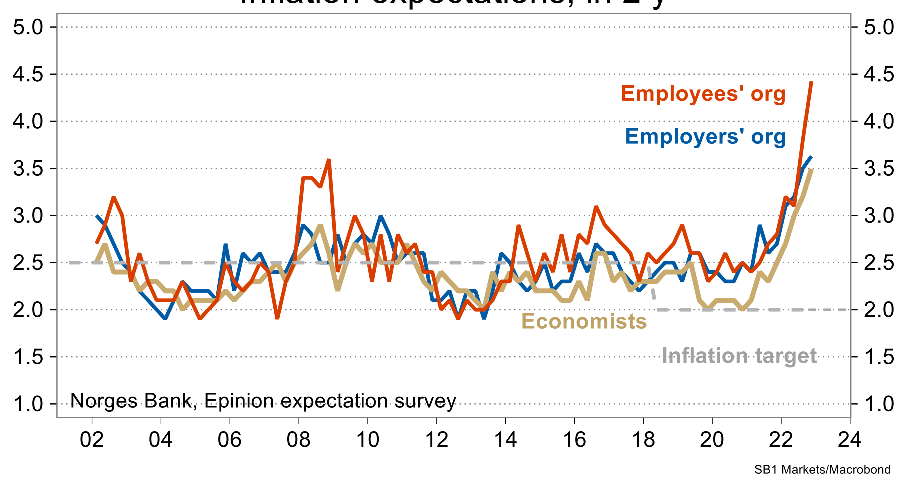
Norway inflation expectations, in 12m



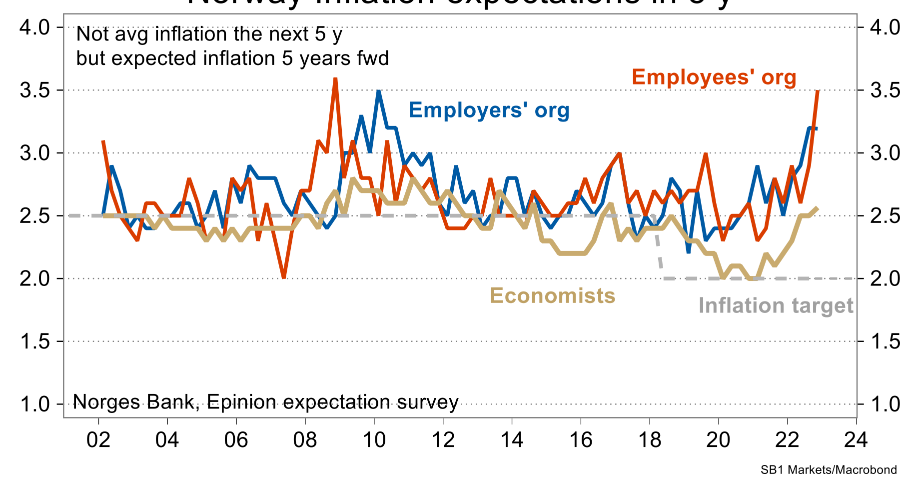
Norway Expected vs actual inflation



Inflation expectations, in 2 y



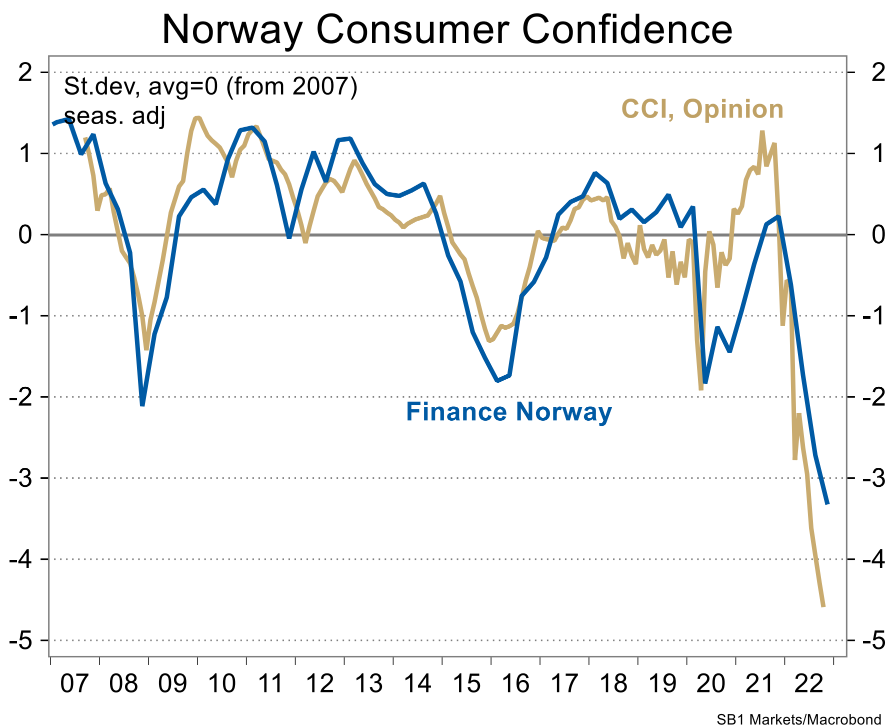
Norway Inflation expectations in 5 y

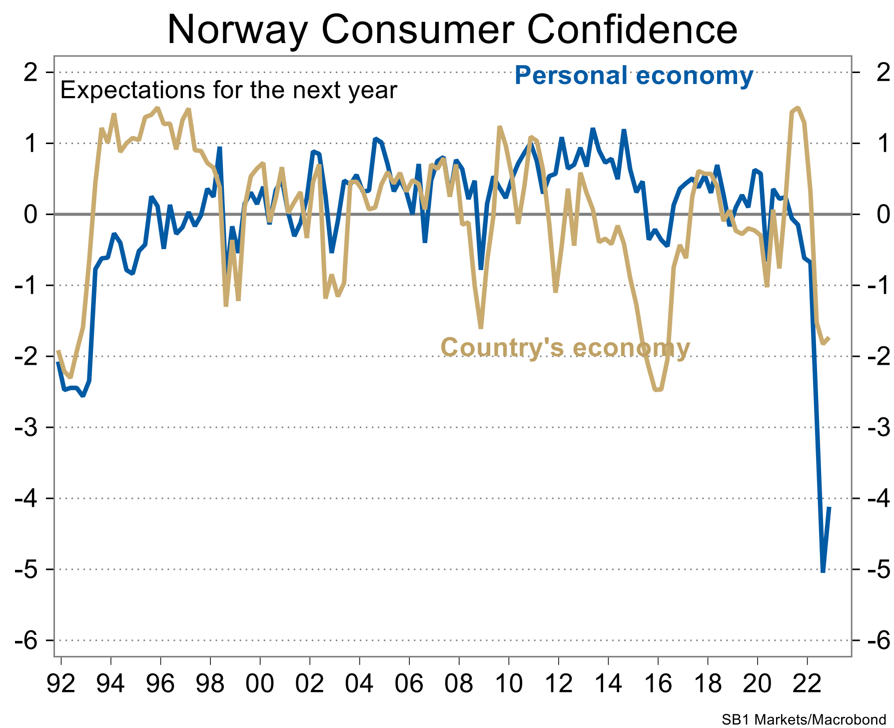


In these charts, results from economists (academia, market), leaders in trade unions and in employers' associations are presented, not businesses or households

Finans Norges' Q4 consumer confidence down to -3.3 st.dev

However, a small uptick in expectations for the next year – but levels are extremely low

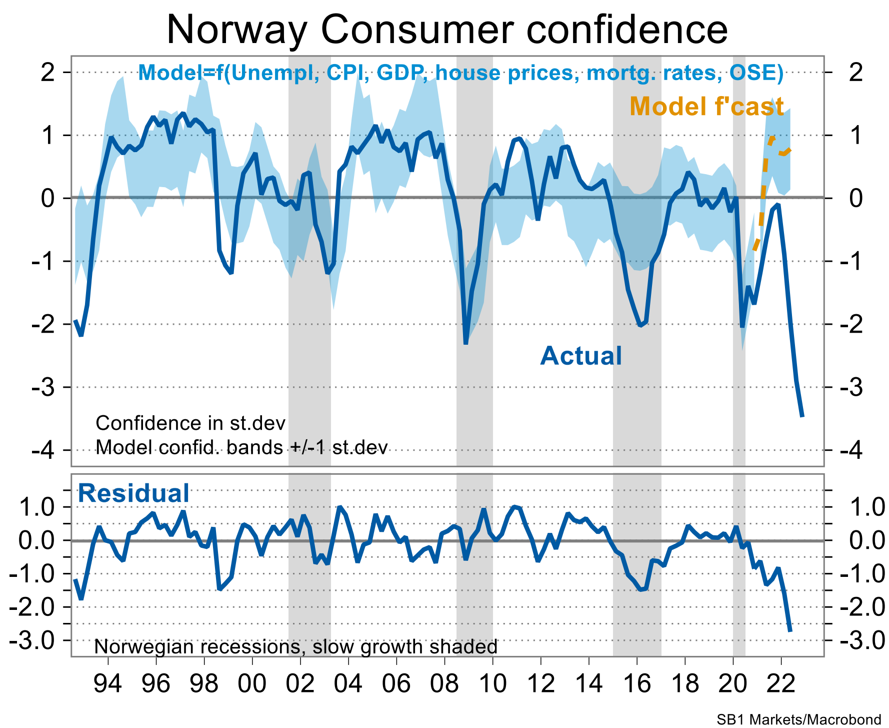


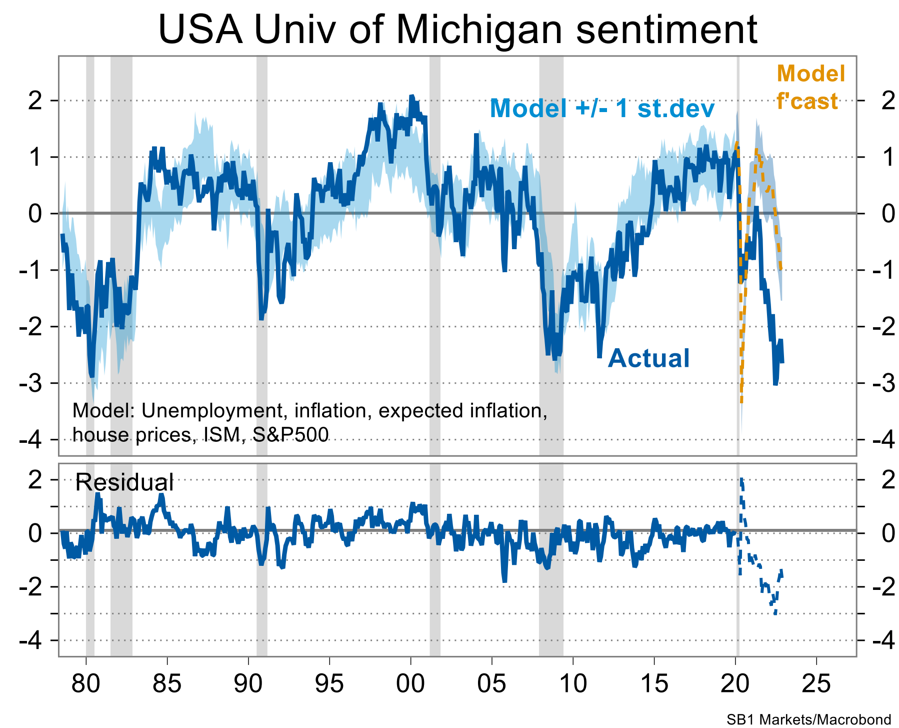


- **Finance Norway's quarterly consumer confidence index** fell to -38 in Q4 from -30 in Q3 (revised from -27), we expected -40. The index fell by 0.6 st.dev to -3.3 below average, another ATL
- **Households' expectations** of their own economy recovered marginally, from -5 to -4.1 st.dev. The actual index number fell rose 6 p to -14: So the balance is not that weak per se, the overweight of respondents that are negative is not that large and the impact on demand may not be that disastrous (but of course, normally most respondents have a positive outlook)
- **Opinion's monthly consumer confidence index (CCI)** is even weaker than Finans Norge's survey

Why are we (and others) in such a bad mood? Our models can not explain it

OK, our models are not perfect, especially the Norwegain version, but still…

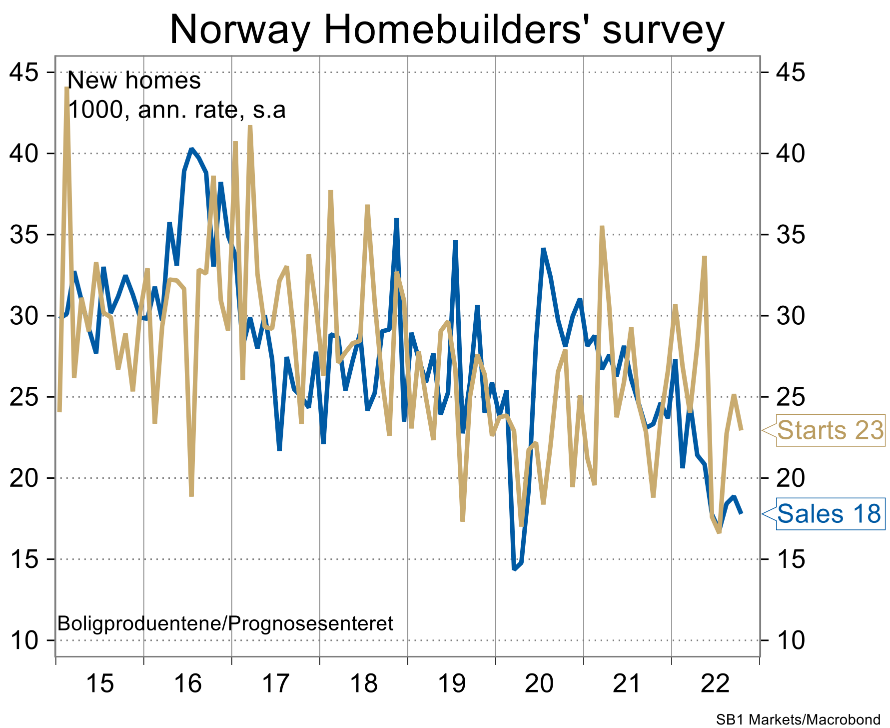


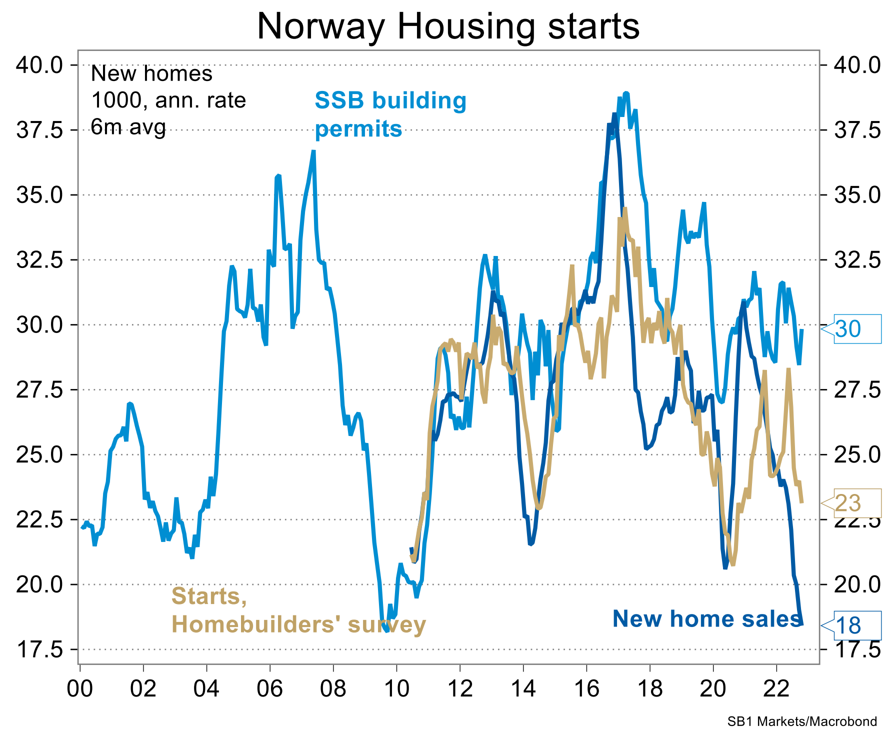


- The gap has closed somewhat in the US, as the stock market has tanked

New home sales remained at a low level in October

... according to the home builders. SSB reports declining building permits

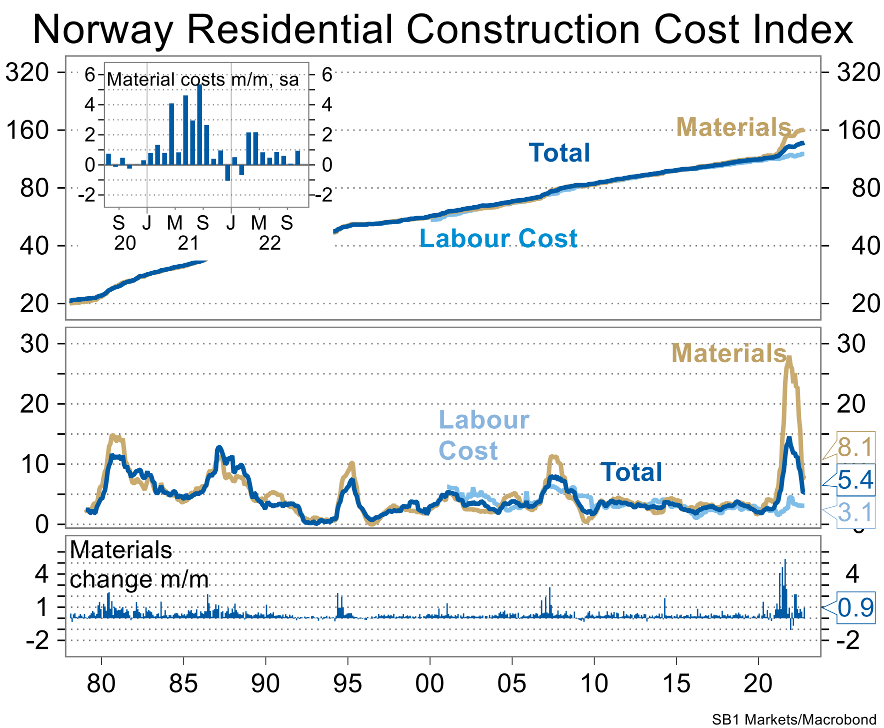


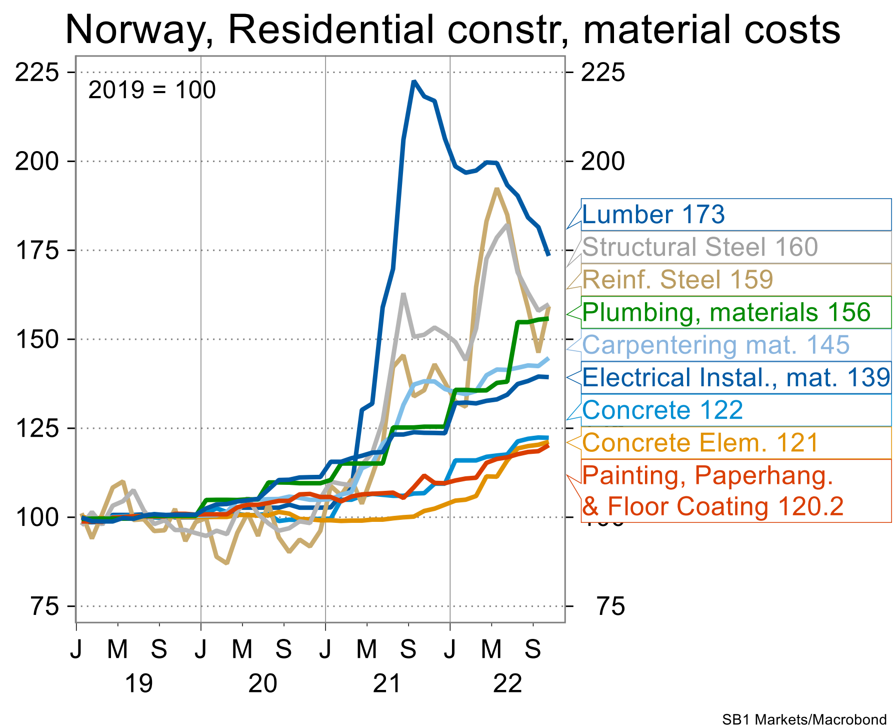


- Boligprodusentene (Home builders) reported a small decrease in new home sales in October, but the level is rather low at 18' and the trend has been down since early 2021. The average over the past 6 months is 18', the lowest on record from the Home builders
- Starts decreased by 2' to 23' in October. The average over the past 6 months is at 23', while SSBs building permits gained 5' to 30' in Oct, though with a 6 m average at 28 – which is trending down
- The rather steady decline in new home sales signals a downturn in new starts/permits the coming months. The sharp lift in construction costs and now much higher mortgage rates are reasonable explanations

Building costs rose faster in October – but the end of cost inflation in sight?

Lumber and steel is down, but other materials are still drifting upwards

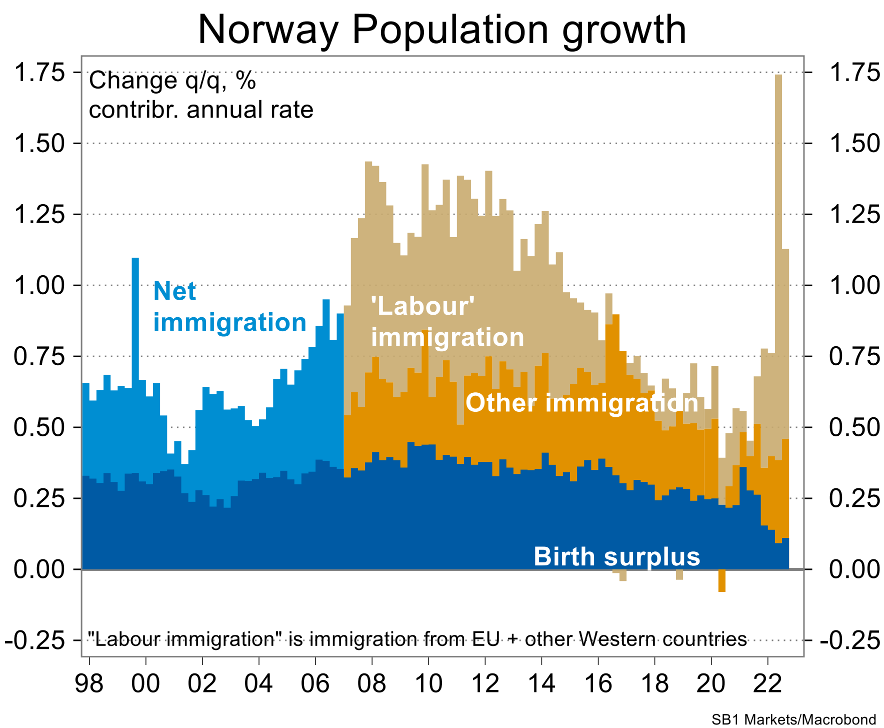


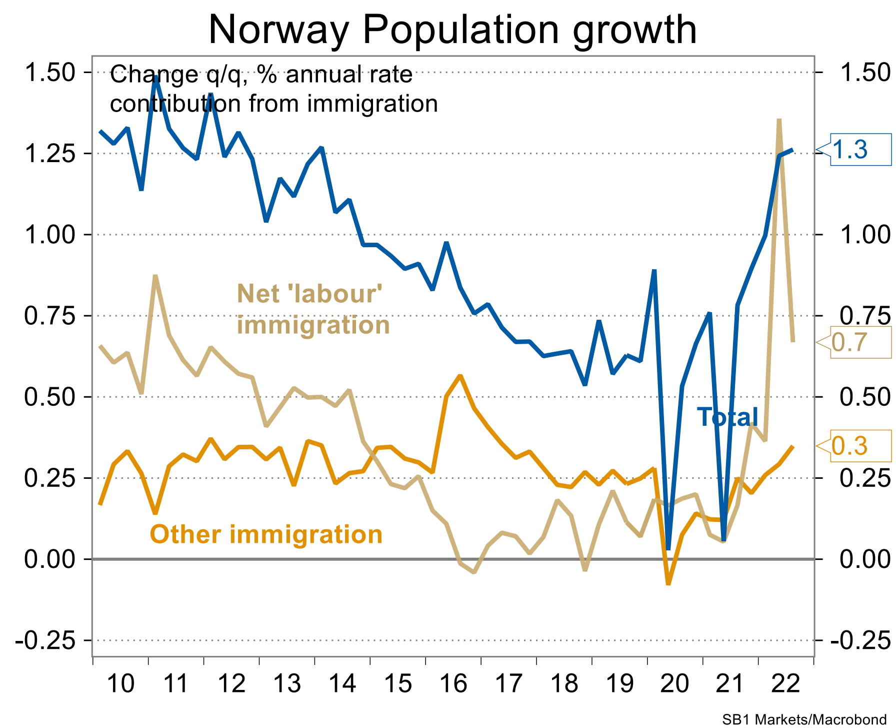


- **Material prices** (houses and apartments) added 1% October. Prices are up 8.1%, down from 28% at the peak. We expected a decline m/m.
  - » Lumber prices are trending down, and reports signal further declines the coming months. Steel prices rose in Oct but the trend is down, here too, as on the global steel market
  - » Other material prices are still trending up; but slower Both plumbing materials, electrical equipment and concreate rose slightly in both August and September
- **Labour costs** were just up 3.1% y/y in Q3, unch. from Q2, below the 4.5% gain in Q4 last year (which was the highest growth rate since 2009)
- Including labour costs, the **total building** cost index is up by 5.4%, down from the ATH at 14.6% at the peak last Oct. The price level is up 13% vs. the pre-pandemic 2.5% growth path. Going forward, we still think lower material costs will bring total construction costs down to more normal levels.

Ukrainian immigration boosts population growth sharply in Q3 too

Other 'western' immigration and the birth surplus were lower than normal

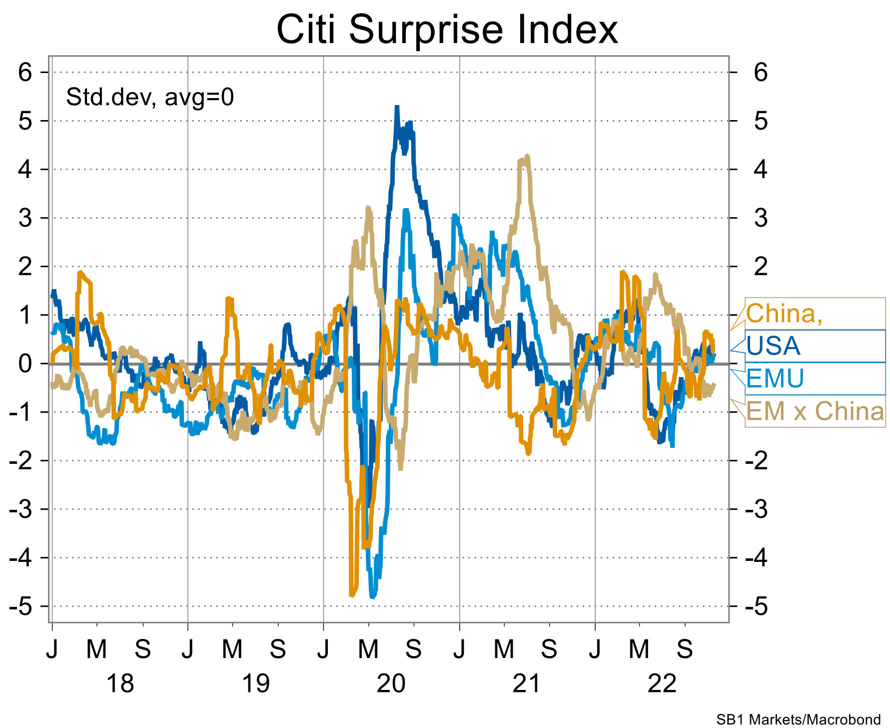


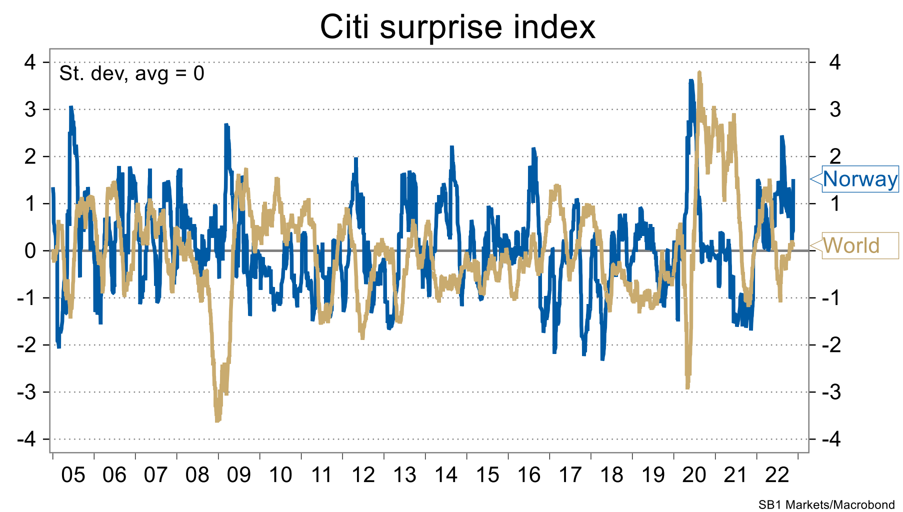


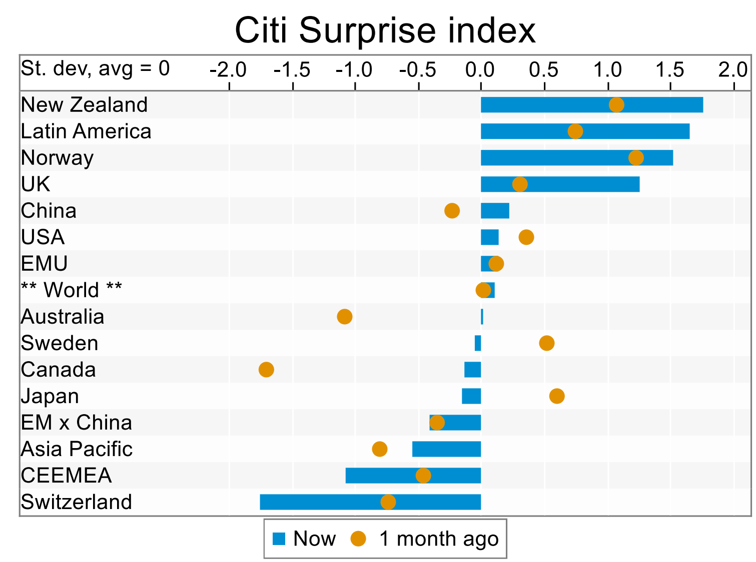
- Total population grew by 19,700 in Q3, equalling a 1.3% annualised rate close to the highest and record (and the highest ever, in seasonal adjusted terms). The steep increase was due to 11' immigrants from Ukraine. Excluding this inflow, population growth would have been lower than normal
  - » Immigration from the Baltics and other rich countries well below a normal level in Q3
- The net birth surplus fell to the lowest level ever in Q1. Births are slowing from the Covid spike in Q1-21 and are now back on the downward trend since before the pandemic. The number of deaths is some 5' (12%) above a normal level, both due to Covid deaths, '3 years of accumulated flu'-deaths, and an ageing population

Data close to expectations, according to the Citi surprise index

China less positive last week, EMU & US unchanged. Norwegian news were on the upside (like GDP)







- **Emerging markets x China** is somewhat below par
- **Norway** advanced on the list last week, close to the top in fact

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

Highlights

The world around us

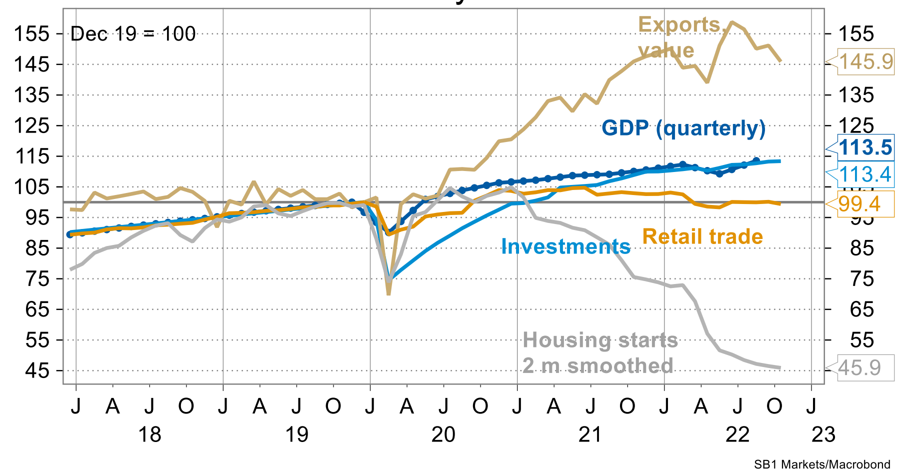
The Norwegian economy

Market charts & comments

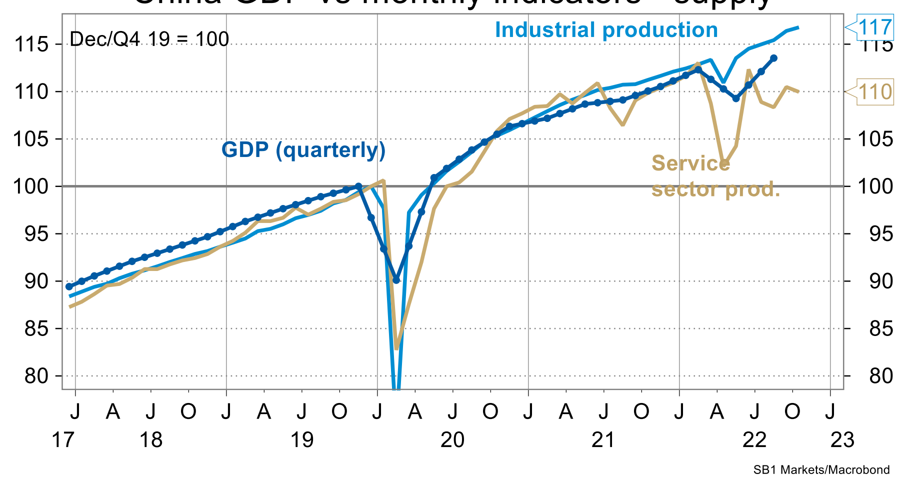
October data at the downside – retail sales revised sharply down

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

China GDP vs monthly indicators - demand



China GDP vs monthly indicators - supply



- **Industrial production** rose 0.3% in Oct., and production is up 5.0% y/y, 0.2 pp below expectations – but still at a decent trend! Autos still in the lead, due to record high domestic sales
- **Service sector** production fell marginally following the uptick in Sept – and activity is flat y/y as covid measures are no doubt still hampering activity
- **Retail sales** volumes fell 0.8% (our est), and sales fell 0.5% y/y, expected +1.0%, down from 2.5% in Sept. The main news as still a another revision, now sharply downwards, by an unprecedented 4% (the accumulated seas adj. m/m data). Hard to make anything sensible out of these data –but the current release signals a huge upside potential if a more efficient Covid policy could be implemented
- **Investments** rose 0.1% in Oct, but has recovered to pre pandemic/ lockdown trends, even if both **residential and commercial construction starts** have fallen 60% from the peak early last year (the largest contraction ever). New home sales also fell in October. Homes prices are continuing downwards too. The authorities have announced a long list of measures to prop up the real estate market – and some recovery seems likely. But not a return to where is came from – and can not be not the aim either

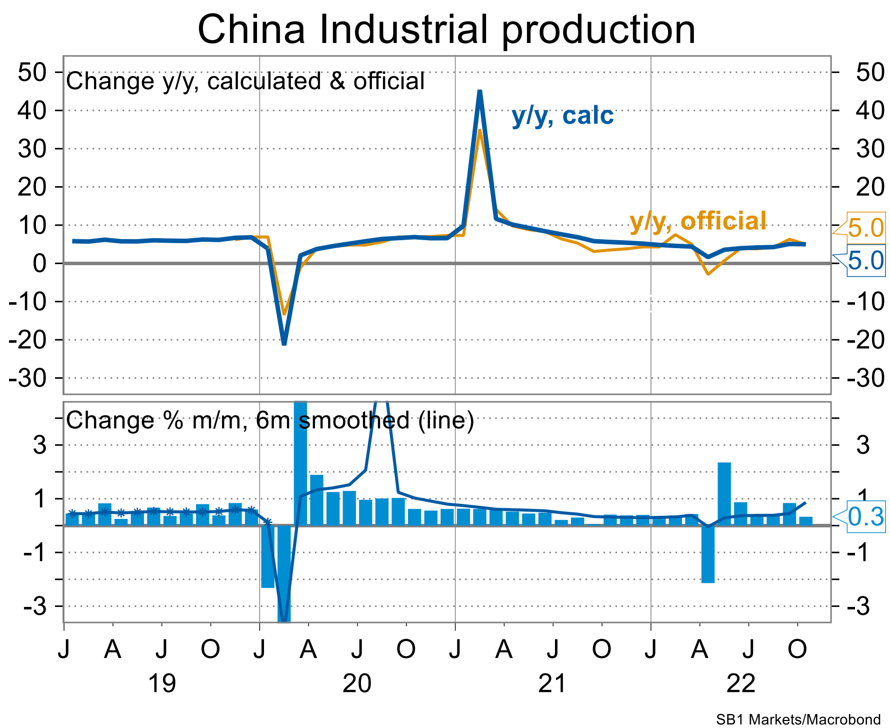
Headlines from the previous week:

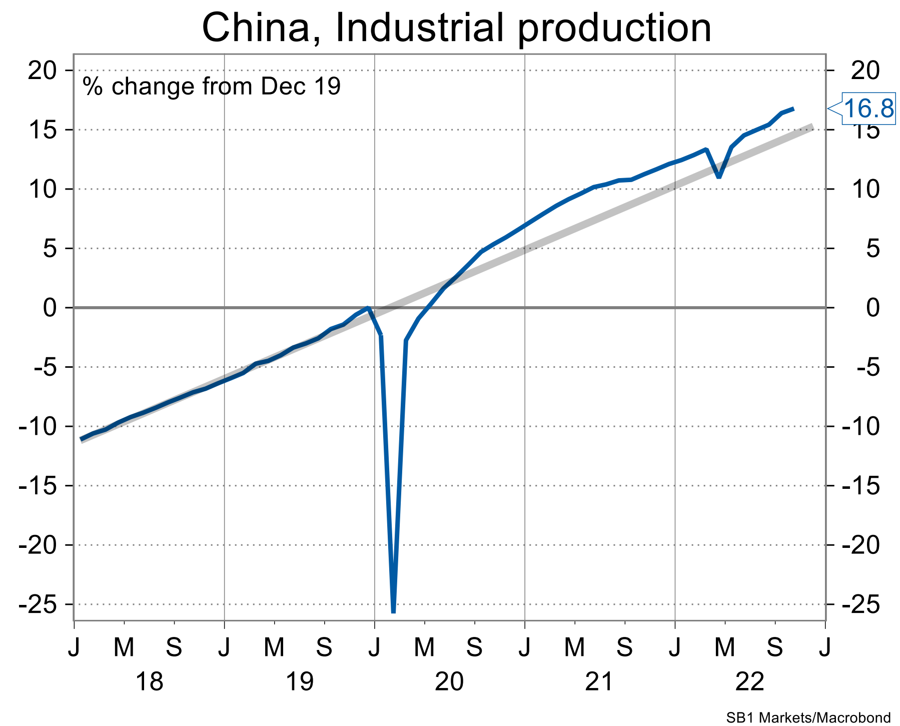
- **Exports** has flattened over the recent months both in nominal and real terms – both at very high levels though. **Imports** are still subdued, and the trade surplus was very high in October. Domestic demand is lagging
- **CPI inflation** fell to 2.1% in October, and the core to 0.6%. So, inflation is not a global challenge
- **Credit growth** was slow in October, but bank cut back less than we assumed last week – credit outside banks slowed shaply

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

Industrial production slowed, and below expectations in October. Level still OK

Production rose by 0.3% m/m, and by 5.0% y/y, expected 5.2%, and down from 6.3% in September

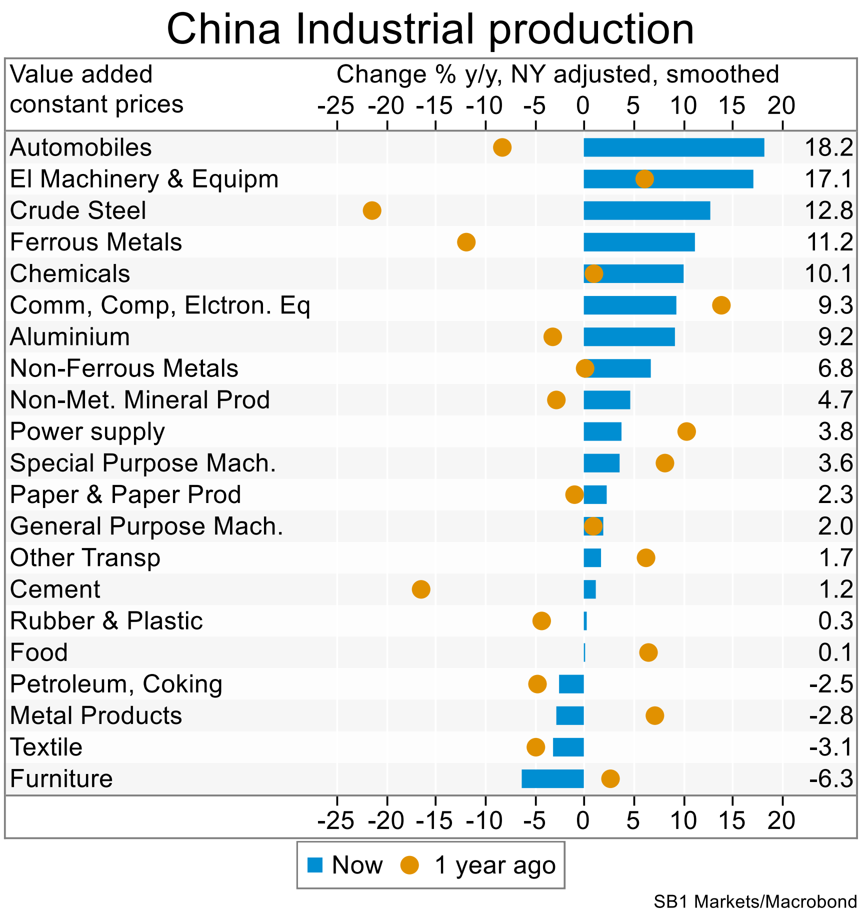


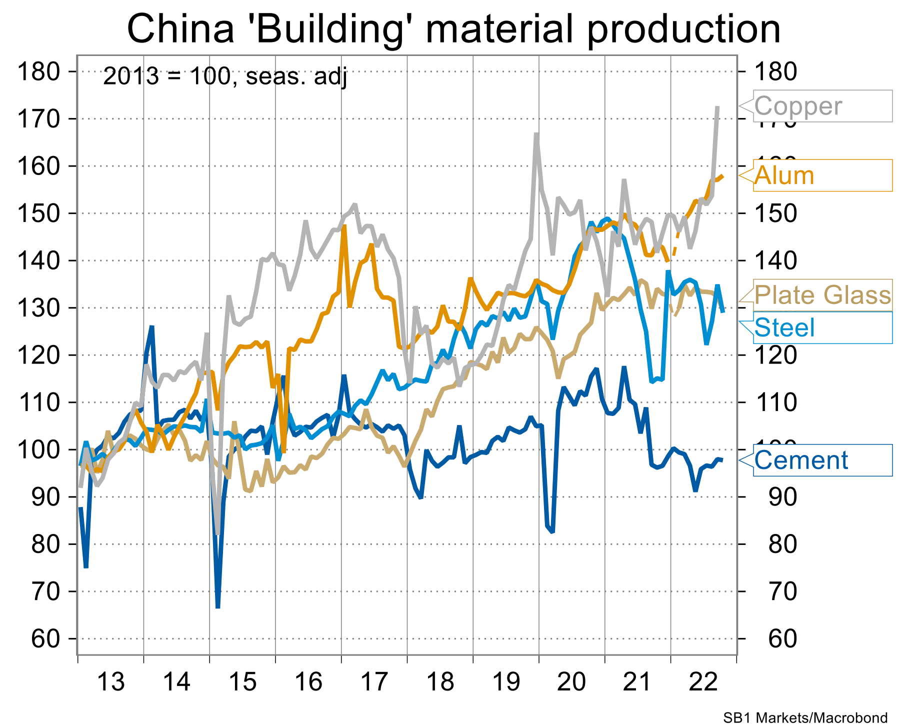


- The growth rate in September was above a normal growth rate, and the October rate is more 'down to earth' and in and of itself does not indicate a slowdown in the Chinese economy. However, taken together with mediocre investments and lower retail sales are signs of tougher times ahead
- **Growth in production** over the past year has been revised up by some 0.9 pp, and the production level is now well above the pre-pandemic trend (so much for blaming Chinese lockdowns for high inflation in the West…)

Growth in most industrial sectors. Steel and glass down m/m, aluminum up

Autos on the top, as domestic sales are booming



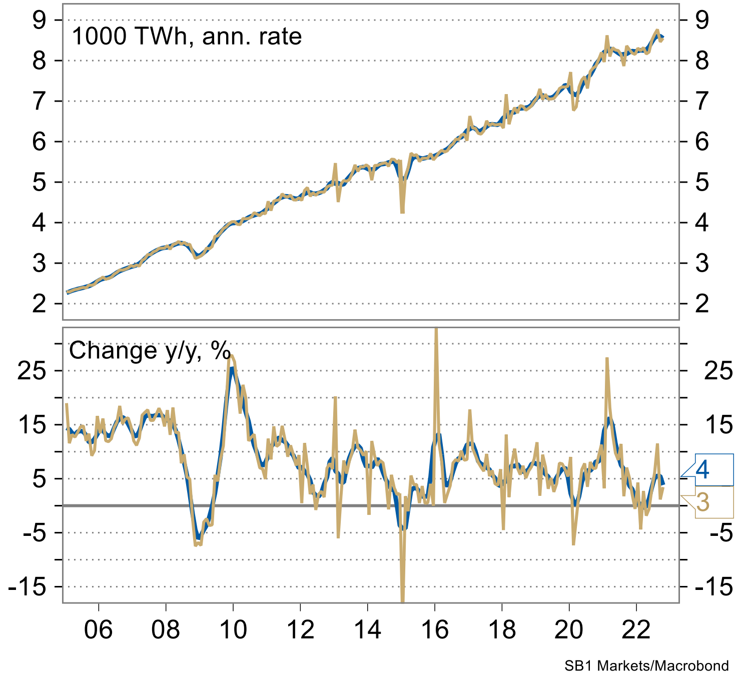


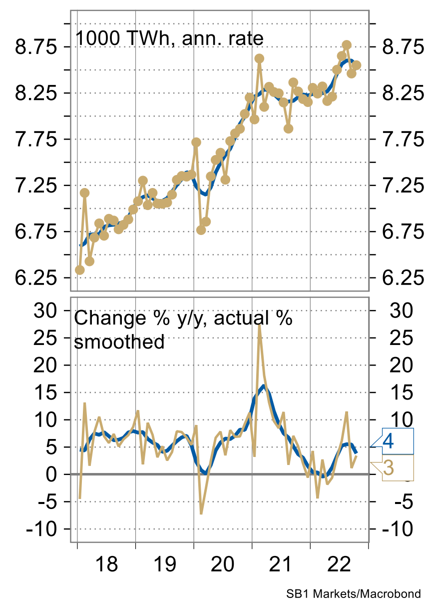
SpareBank 1 MARKETS

Electricity production up in October, and seaport freight increased

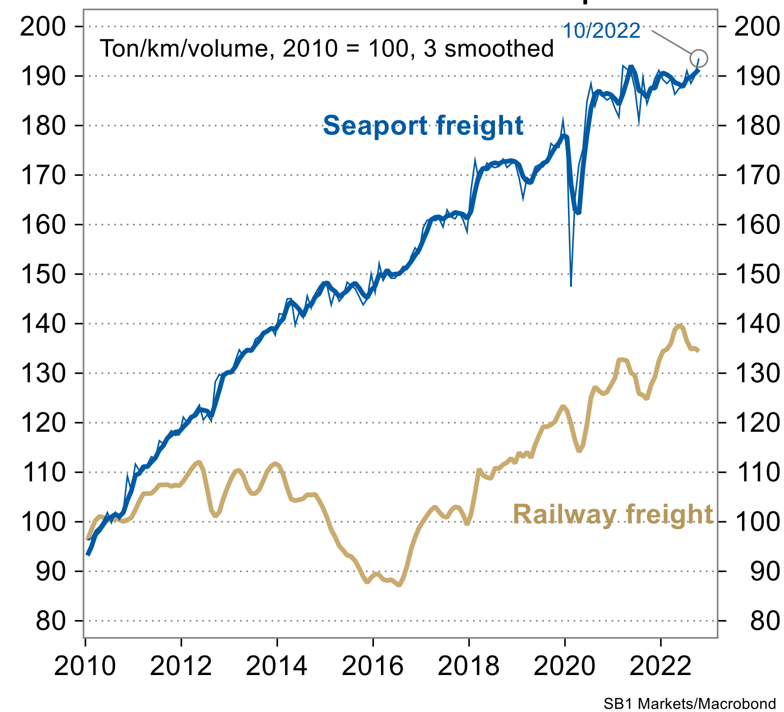
Electricity generation is up 4% y/y, smoothed

China Electricity production





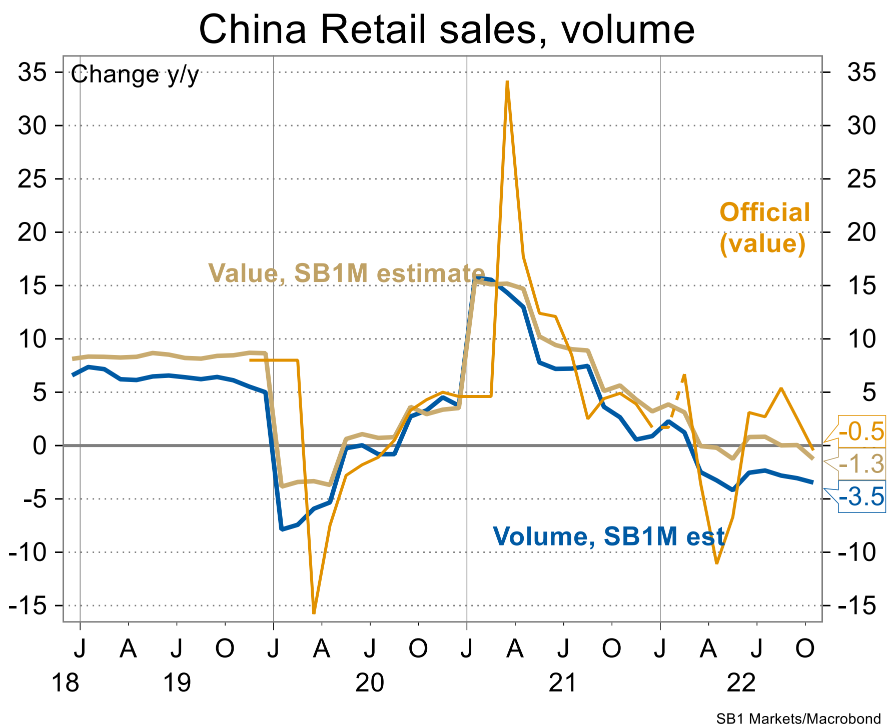
China Trade and transport

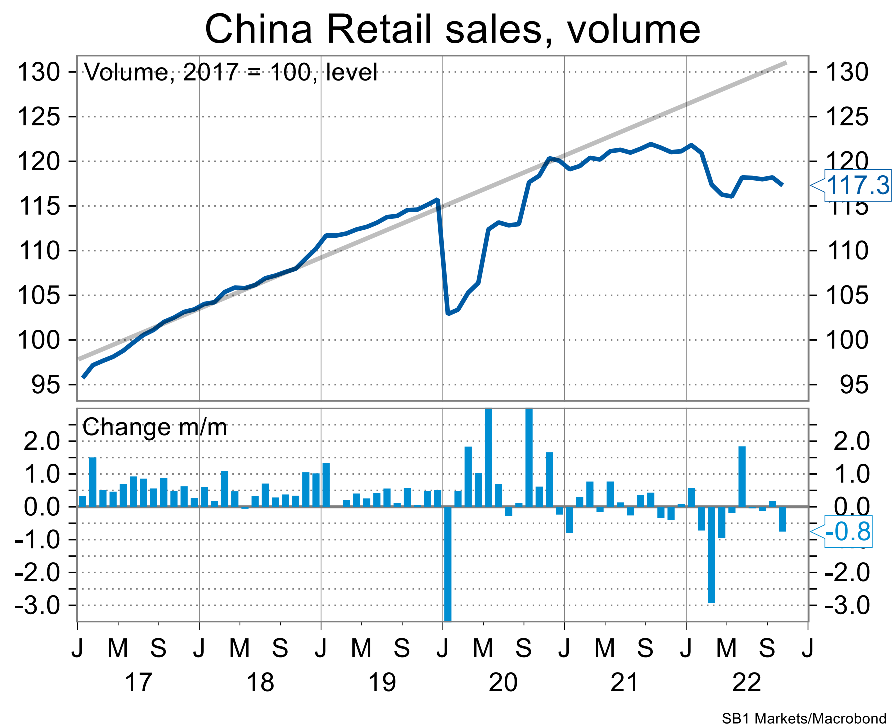


- Railway freight was marginally lower, as domestic demand has softened

Retail sales down 0.8 m/m, and 2022 sales are significantly downward revised!

Nominal sales down 0.5% y/y, below expectations at +1.0%



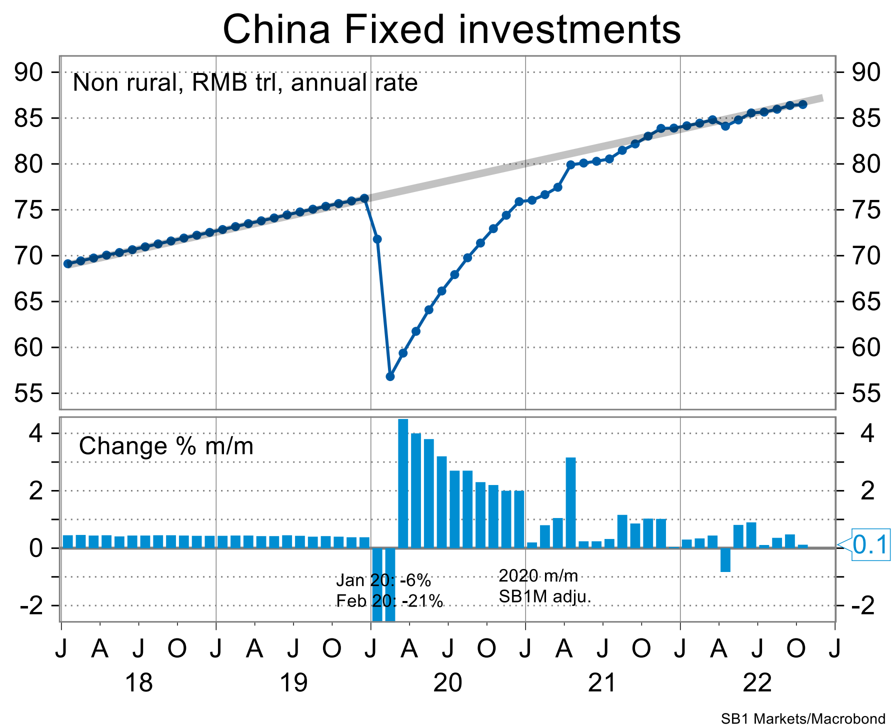


- Sales fell 0.7% m/m in **nominal terms,** and according to our estimate, **volume** was down 0.8%
  - Sales in volume terms are down 3.5% from October last year (aggregated monthly changes, the official y/y growth in value terms implies a smaller increase in volume terms)
- Major revisions to the seasonally adjusted data, equalling a total of 4% (!!), accumulated through the entire year, giving us somewhat less faith in the data (once more…). Nevertheless, the current volume is only 1.4 % above the pre-pandemic level and more than 10% below the pre-pandemic trend path! Lockdowns may explain substantial parts of this shortfall

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

Investments up 0.1% in October – at the lower end of the scale

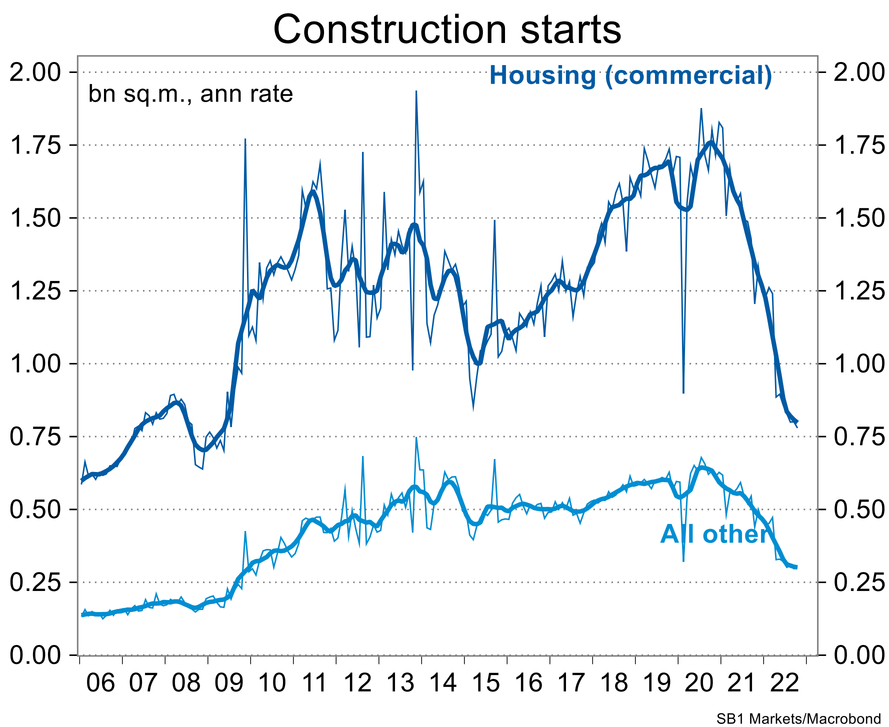
Overall investments are still (strangely) robust, given the downturn in construction starts

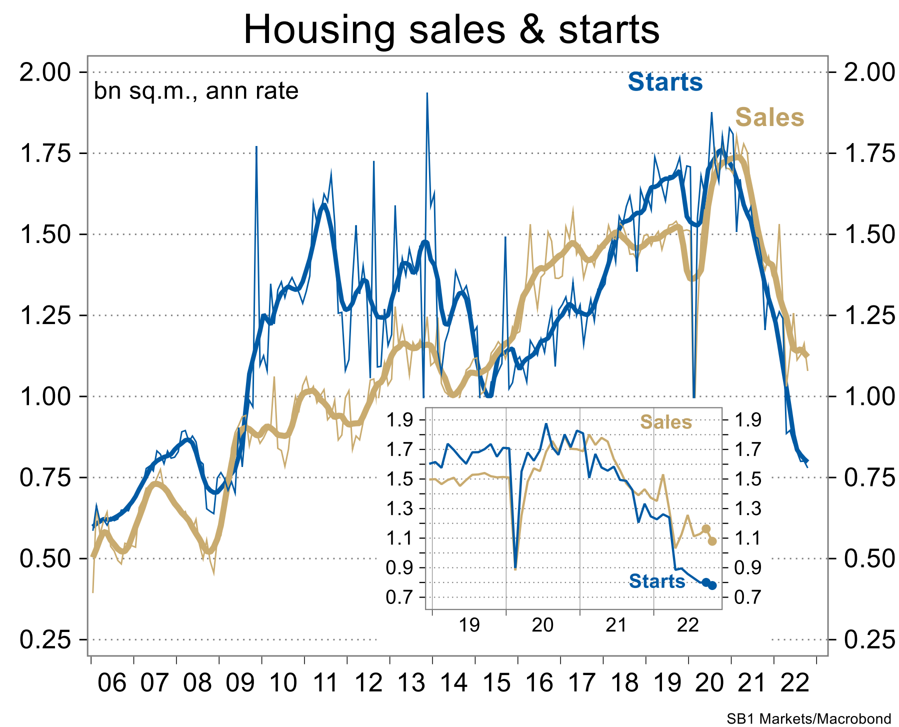


- **Measured YTD,** nominal urban investments rose 5.8% in October, expected up 5.9%. Growth y/y in September was 4%. We estimate a 4% growth in real terms too
- The **investment level** is still close to the pre-pandemic growth path
- The decline in construction starts should dampen overall investments the coming quarters (but the correlation has never been impressive)

Starts slightly down in October, while new home sales slumped

Starts down 57% from the peak two years ago; Sales are down 40%

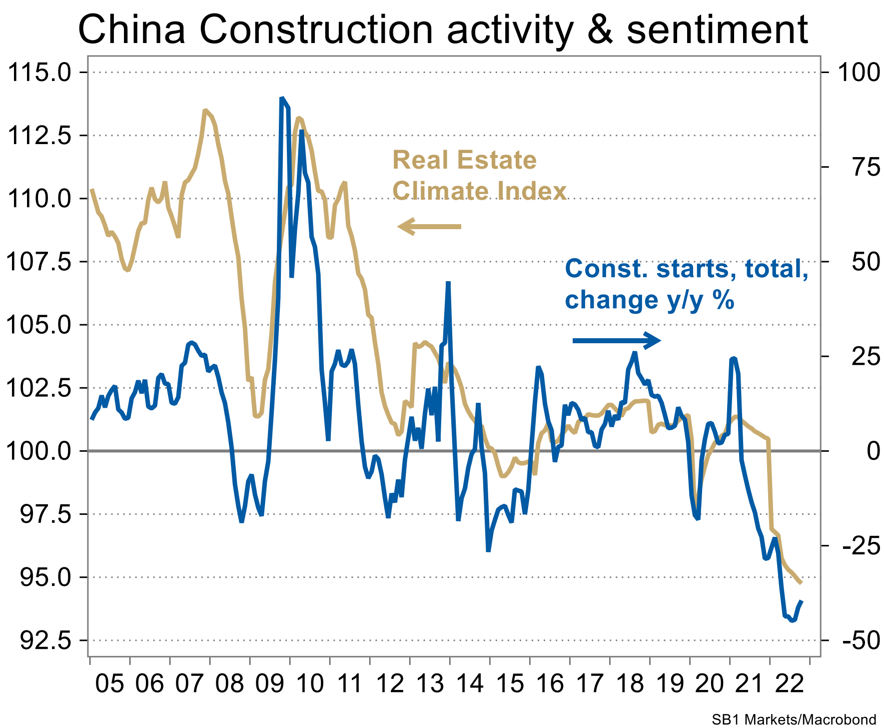




- **Non-residential construction starts** are also more than cut in half, and the level is the lowest since 2009, as for housing starts
- This unprecedented decline in construction starts will lower growth in the Chinese economy substantially – spread over time, as it takes some 3 years from a home is started until it is completed…
- …unless the government's new rescue plan works. **The authorities have told the banks to lend an additional USD 56 bn to the property sector** over the remaining two months of the year, adding to the USD 85 bn banks were told to lend in September, according to Bloomberg. The government also laid out a **16-point plan** to save the property sector from blowing up, which includes extending 'sound' developers' loans, supporting bond issuance, encouraging banks and asset managers to acquire real estate projects, extending mortgage repayments, and freezing credit scores, to mention a few. Let's hope buyers return – and they may, as the risk for building projects running into the wall should be reduced

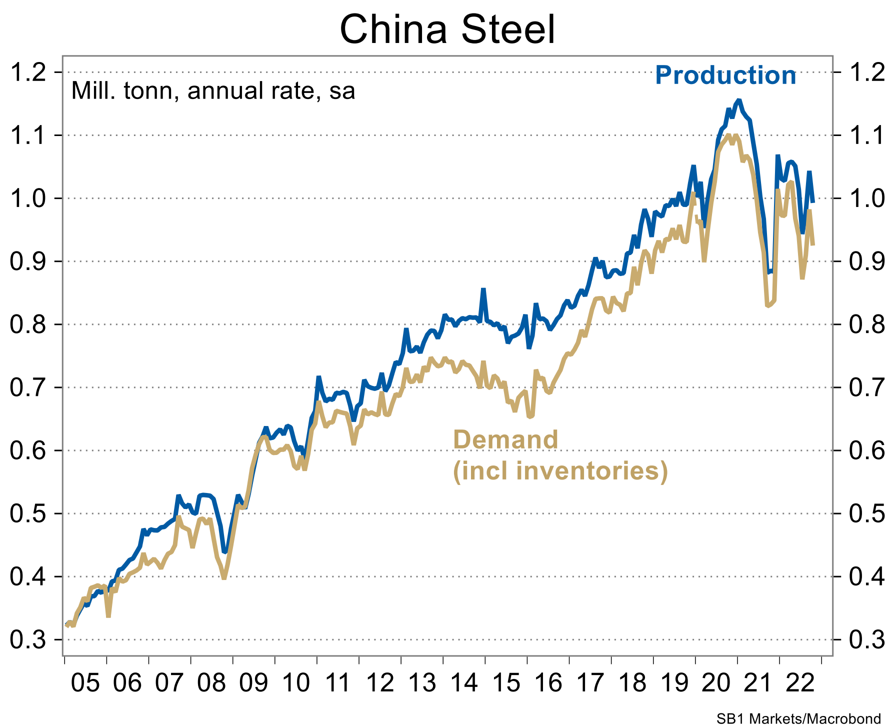
Sentiment in the real estate sector is the worst ever

However, this survey is hardly leading



Steel demand/production fell in October, but the level is high

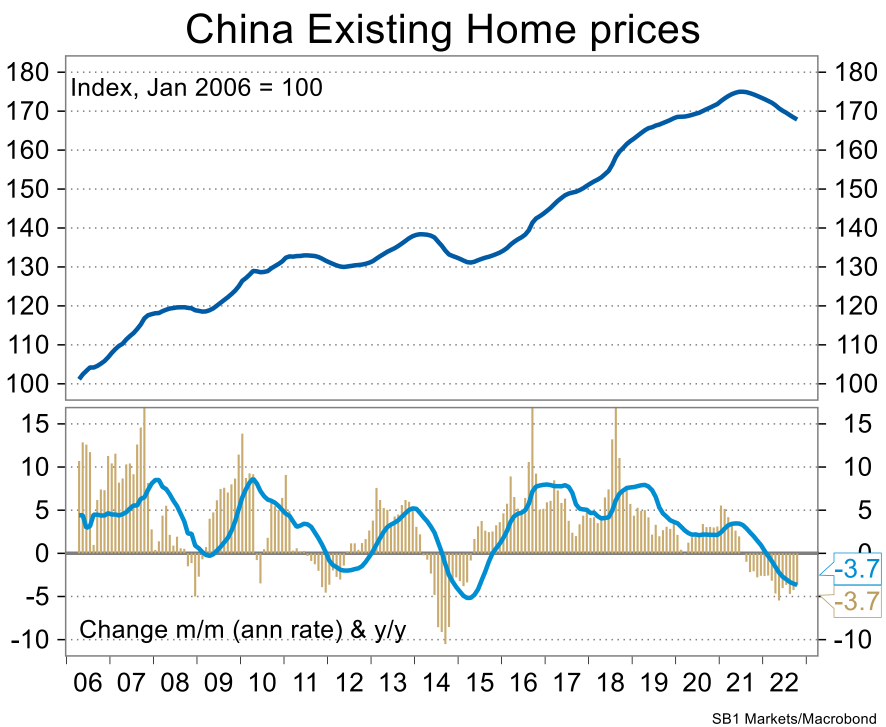
Where is steel demand increasing? In auto production perhaps, but construction is far more important

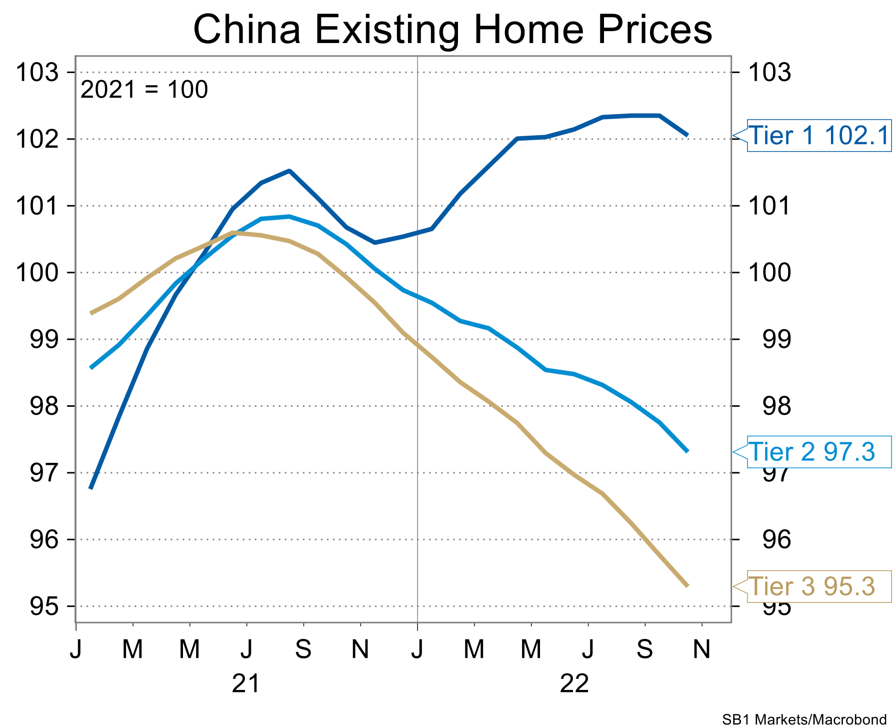


- Construction activity will be under pressure as new starts have fallen sharply. Demand for steel comes early in the building process as well

Existing home prices fell further in October – for the 15th month in row

- the longest stretch with falling prices ever. New home prices on the way down too

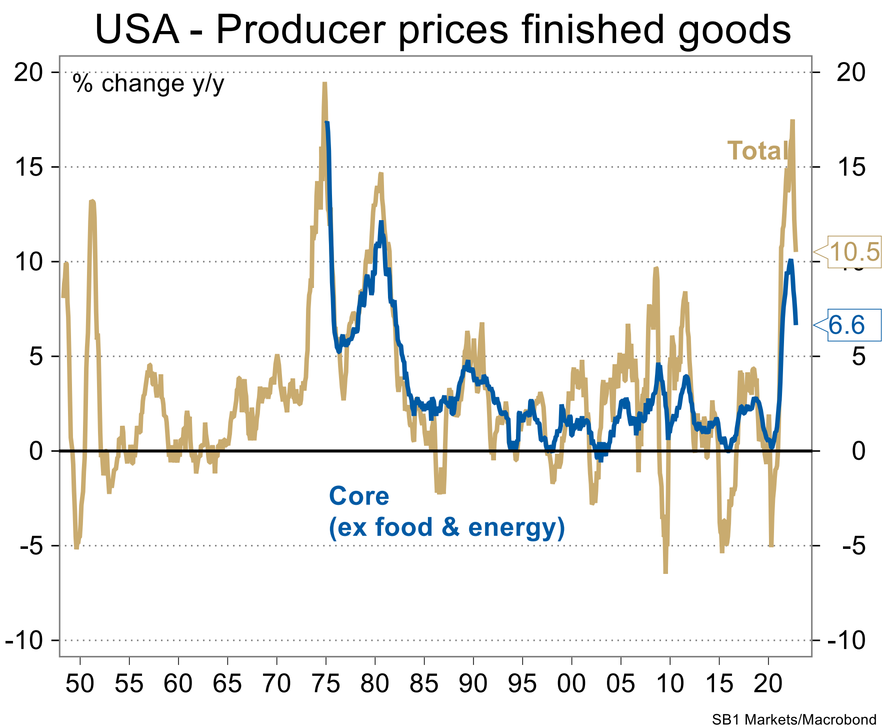


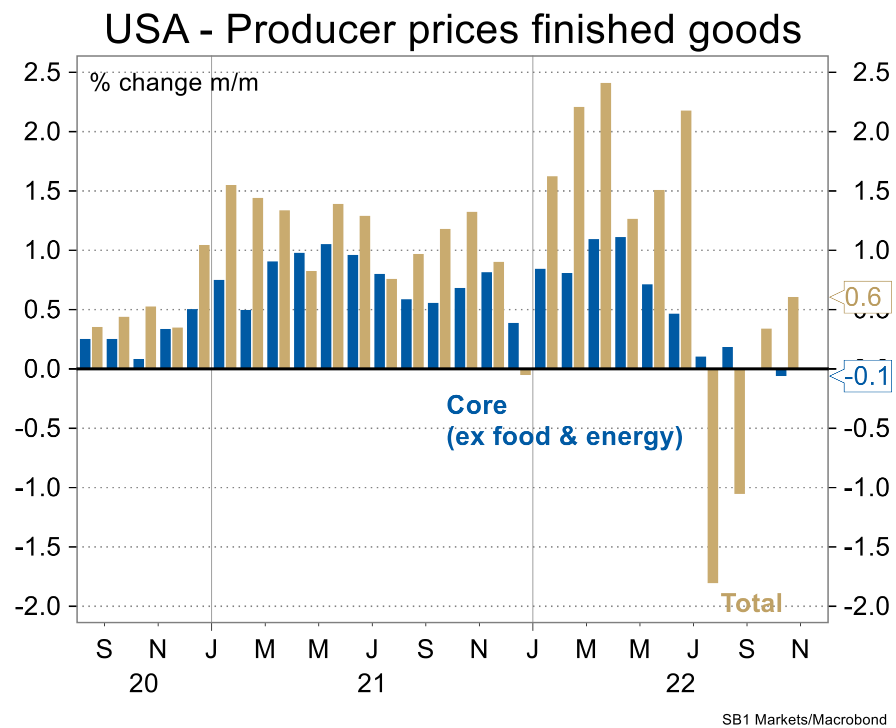


- **Existing home prices** peaked last July, and have been falling at a gradually faster pace, until May. In October, prices fell at 3.7% pace. Prices are down 3.7% y/y, less than the price setback in 2014/15. However, the current setback has now lasted longer than the previous
- **New home prices** also fell last autumn but at a slower pace than existing home prices, and in Oct new home prices fell at a 2.3% pace m/m, and are down 2.2% y/y. Some builders have reported deep price cuts to reduce the inventory and secure financing. The gradual decline in prices since last summer is probably due both some fire sales from construction companies that have run out of other sources of financing, and some hesitance from home buyers
- Prices have now started to fall in the four largest Tier 1 cities as well, but prices are falling at the fastest pace in the ‘smaller’ Tier 3 cities
- **Central authorities** have signalled willingness to expand credit supply again, both to finance infrastructure projects and the construction sector, as well as providing support to home buyers

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

PPI has peaked and is now coming down – and core prices have flattened since the summer!



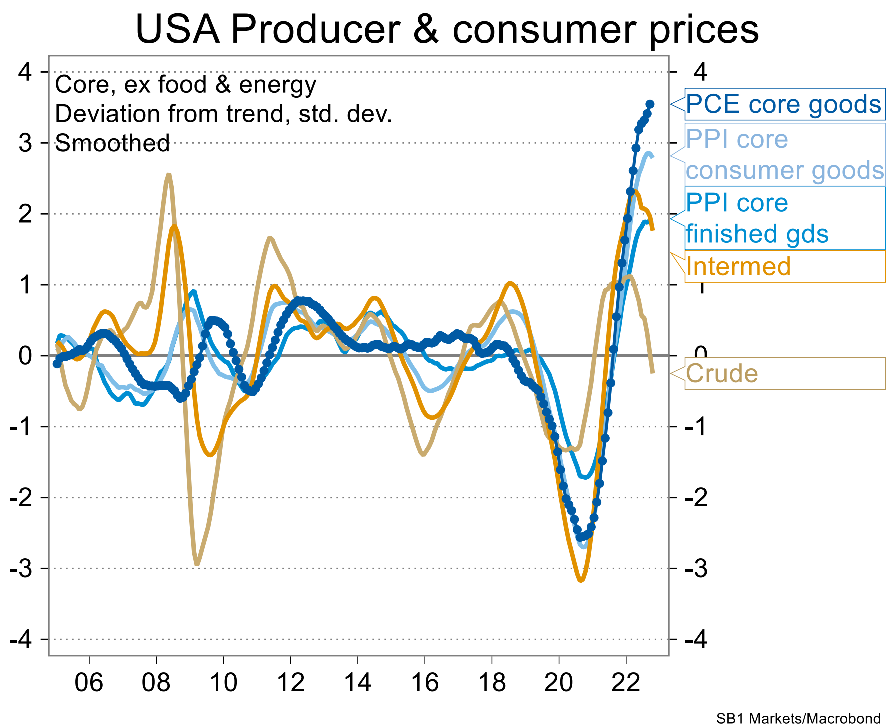


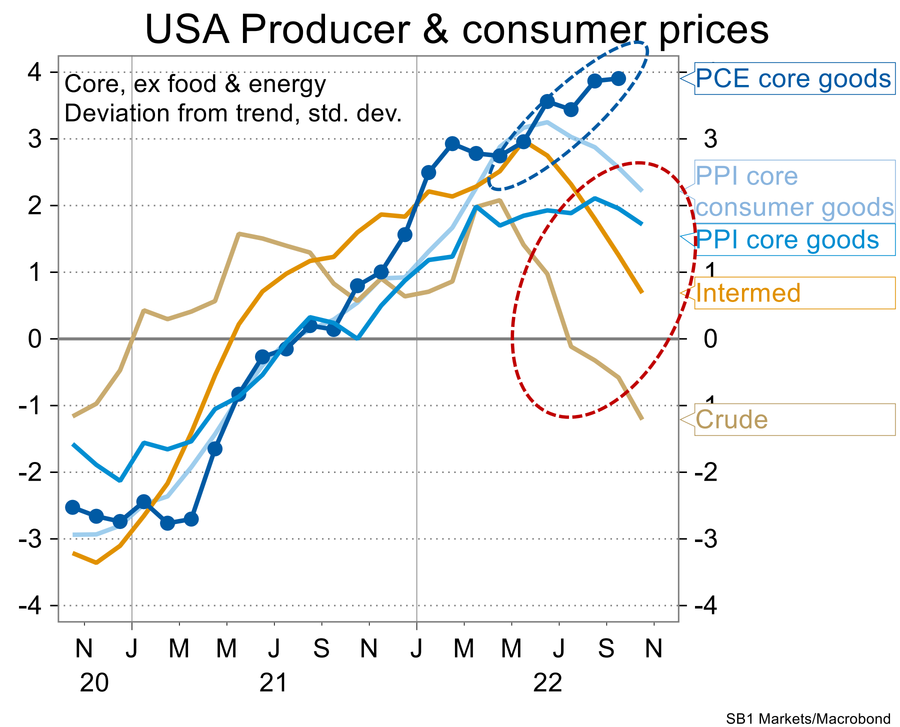
- **The headline finished <u>goods</u> PPI** rose by 0.6% in October, following the 0.4% increase in September. The annual rate was down 0.6 pp to 10.5%. Energy prices were up 2.7%, and food prices were up 0.5%
- **Core finished <u>goods</u> x food & energy** PPI was down 0.1% in October. The annual growth rate fell by 0.9 pp to 6.6%. The peak was at 10%
- **Crude material prices** are on the retreat – normally the first sign of easing price pressures in the supply chain, and now intermediate material prices are now following suit, as normal
- **Core consumer goods prices** (PCE, like in the CPI) have already climbed more than usual vs. PPI prices (partly due to second-hand auto prices, not included in the PPI) and have likely peaked, limiting the upside risk
- **The 'official' total final demand PPI**, including **<u>services</u>**, was up 0.2% m/m in Oct. <u>The annual rate at 8.0% was 0.3 pp lower than expected</u>

SpareBank 1 MARKETS

Crude core material prices are yielding, as are intermediate prices

Core consumer goods PPI have also turned south – and so will probably goods prices in the CPI/PCE

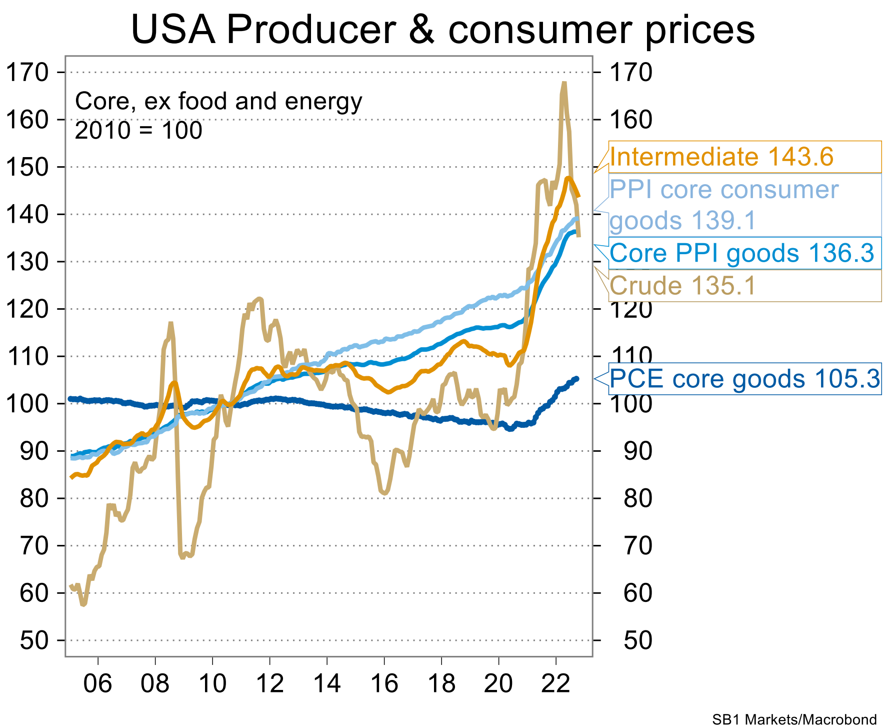


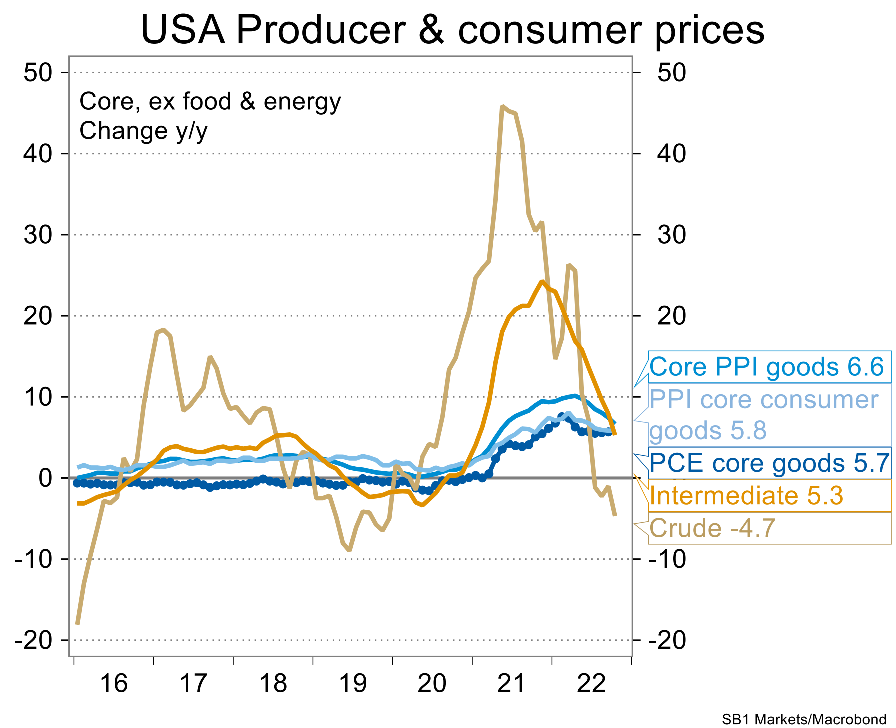


- **Crude goods prices** are leading intermediate goods prices by 4 months, and consumer prices by 12 months. Following several months with slow growth in these prices to February from last summer, they rose in March and remained at a high level in April – but they are now heading down rapidly (and prices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

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

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

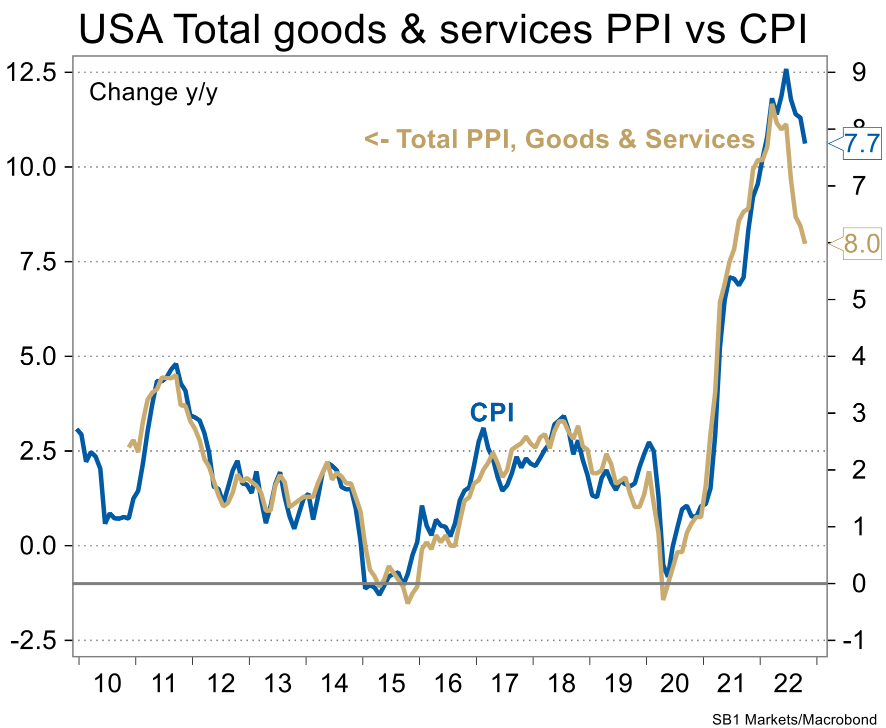


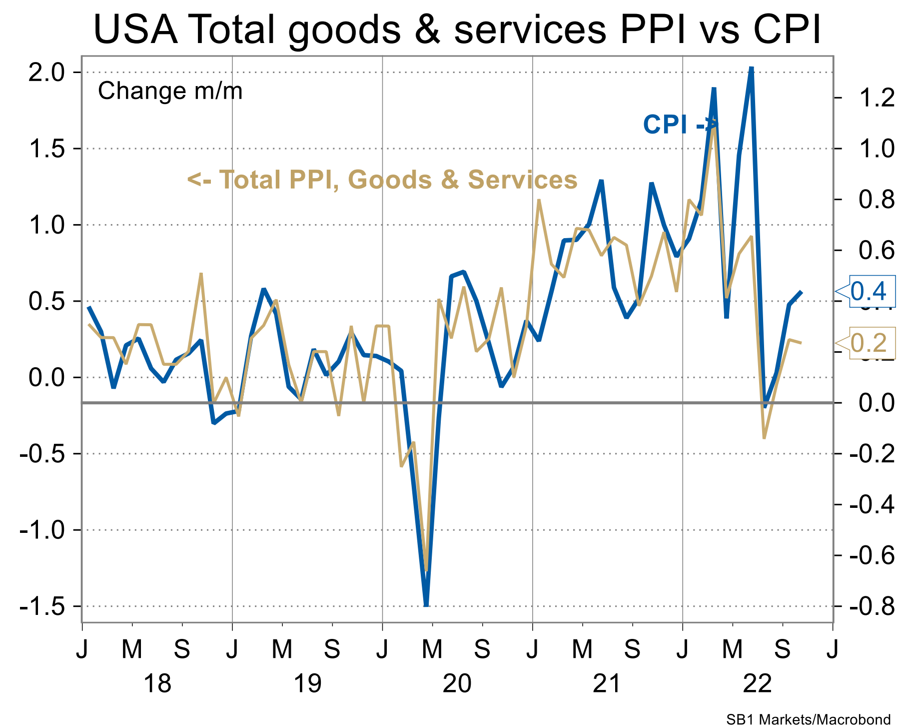


SpareBank 1 MARKETS

Total PPI (services incl.) +0.2 m/m, and the annual rate down 0.5 pp to 8.0%

... And also surprised on the downside, by 0.3 pp, like the CPI

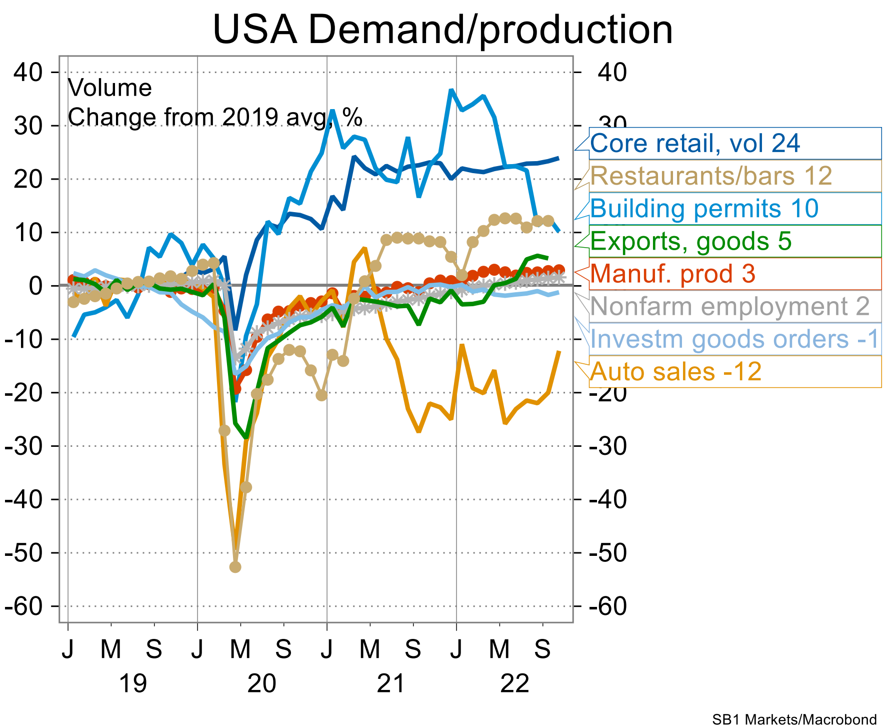




- The correlation between the total PPI, which includes all sorts of services in addition to goods, and the CPI is very close. The current 8.0% annual growth rate, signals a further, and substantial decline in CPI inflation the coming months

Mixed activity data – Housing a drag but consumption of goods still stong

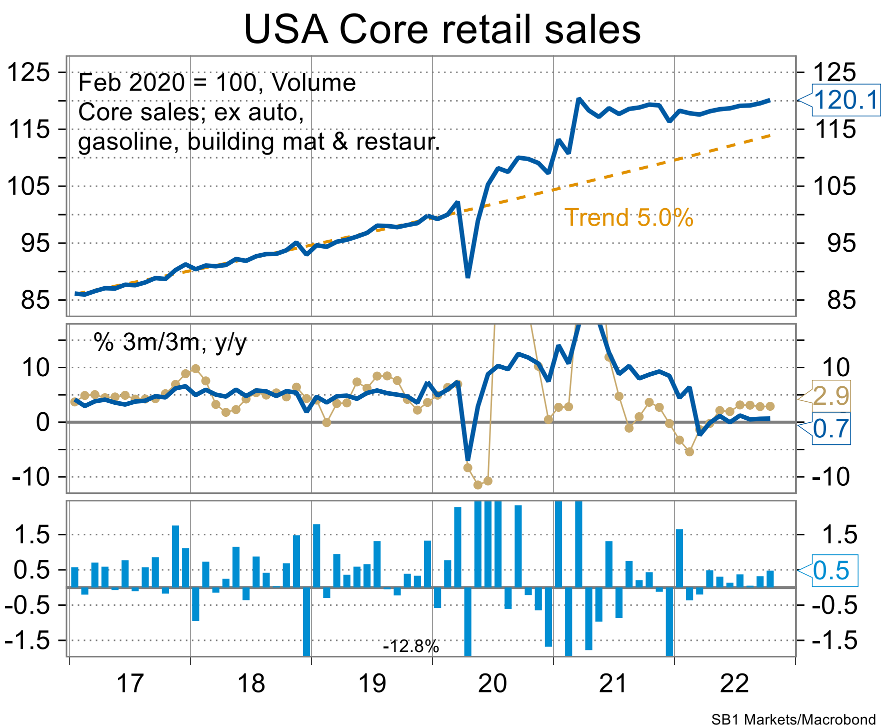
Core retail sales are up 24%, in volume terms – and is still growing at 3% pace!

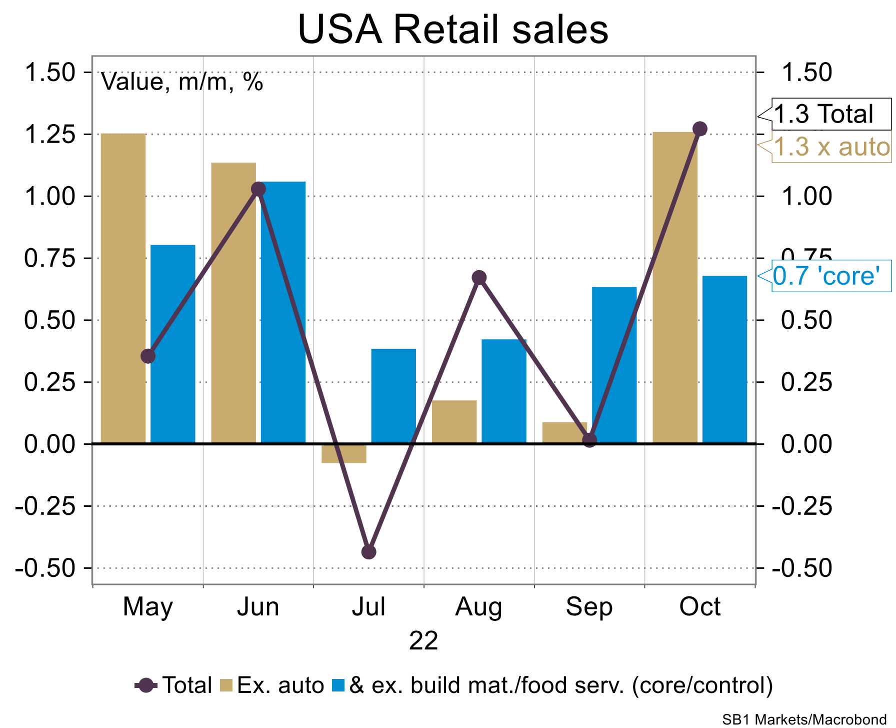


- Building permits are heading sharply down
- Export are finally above the pre-pandemic level
- Manufacturing production has flattened since the spring – but no downturn yet
- Investment goods orders have flattende close to the 2019 level
- Auto sales are on the way back but are still 12% below the 2019 average

Inflation, higher rates has not shot down consumers: Retail sales are rebounding!

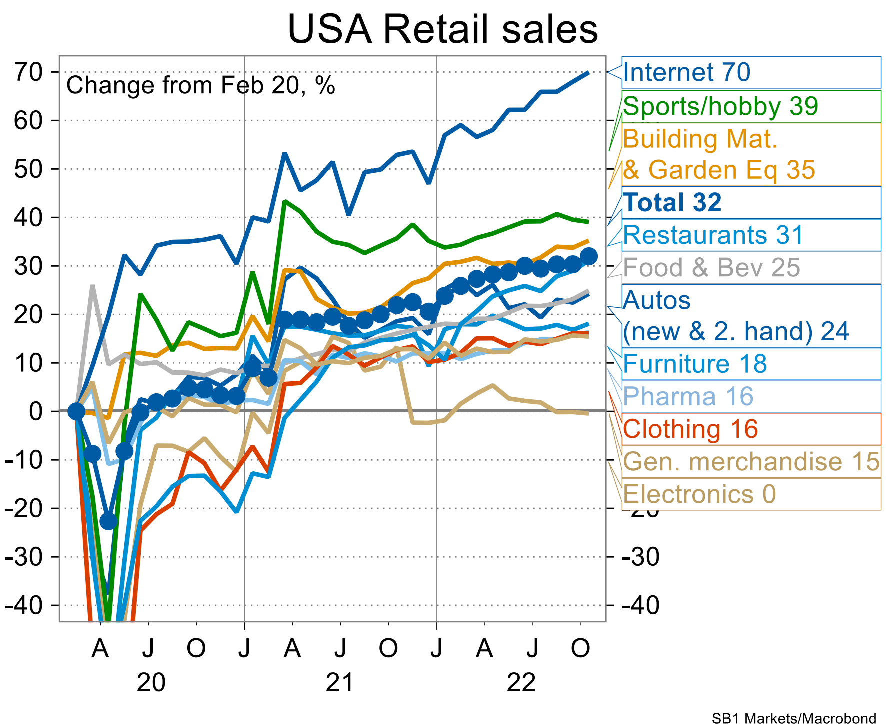
Core sales volumes up 0.4% in October; Sept revised up to 0.4% from 0.2% → Growth almost at 3%!



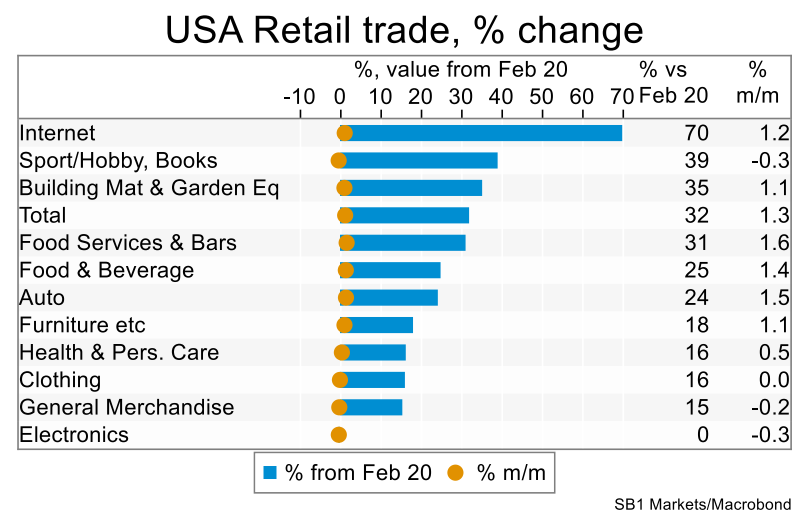


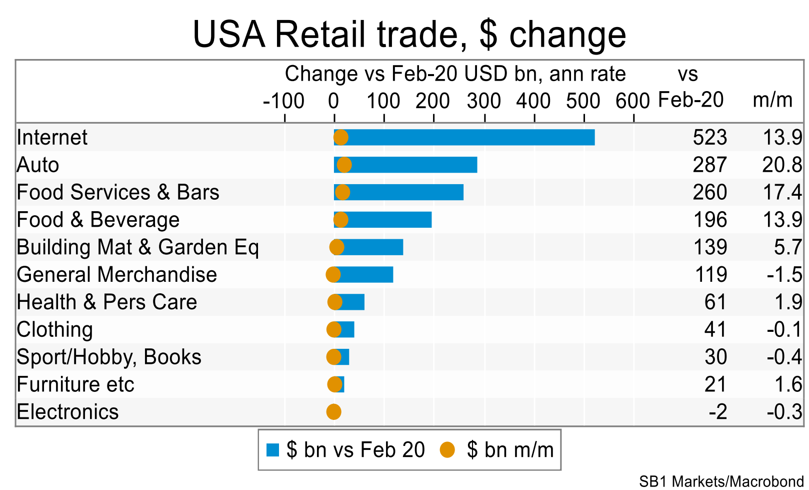
- **Total nominal sales** were up 1.3% in Oct, expected 1.0%. Sales in electronics, sport & hobby, and general merchandise fell, all other sectors were up. Total nominal sales are up 19% vs. the Feb 2020 level!
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) were up 0.7% in value terms, 0.4 pp above expectations (and Sept data were revised up by 0.2 pp to 0.6%)
- **In volume terms**, we assume that the core gained 0.5%, and Sept revised up to 0.3%. ‘Real’ sales are trending upwards at a rather solid pace (+2.9% 3m/3m), far better than we estimated a couple of months ago!

Only 3 sector reported lower sales in October



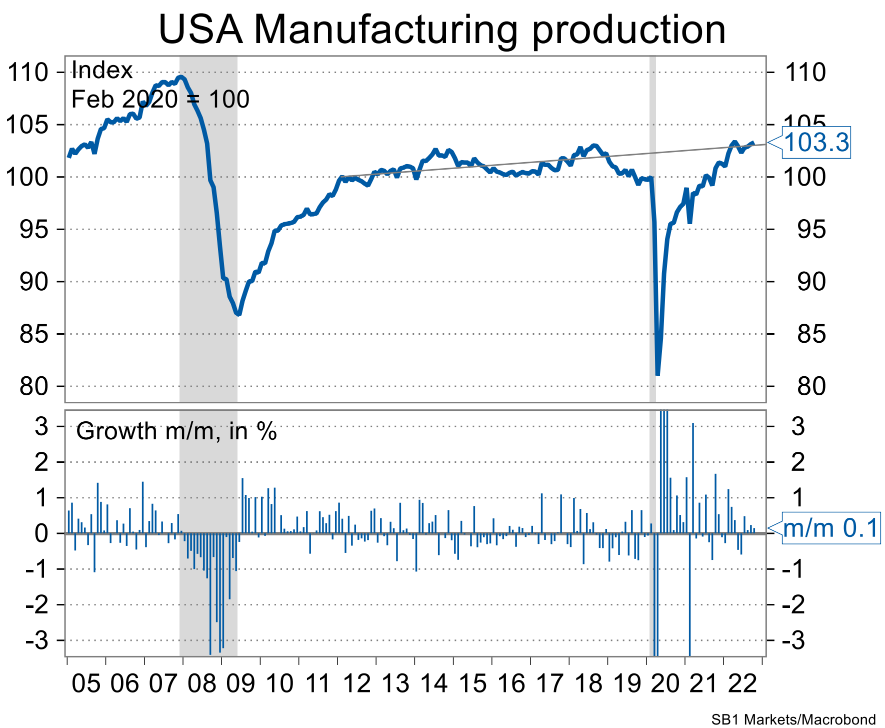
- 3 out of 11 main sectors reported lower sales in Octorber, 7 reported higher sales
- Total sales are up 32% in value terms vs Feb. 20
- Restaurants are up 31% vs Feb-20!
- **Internet sales are up 70%**
- Clothing is up 'just' 16%
- Electronics are flat - in value terms

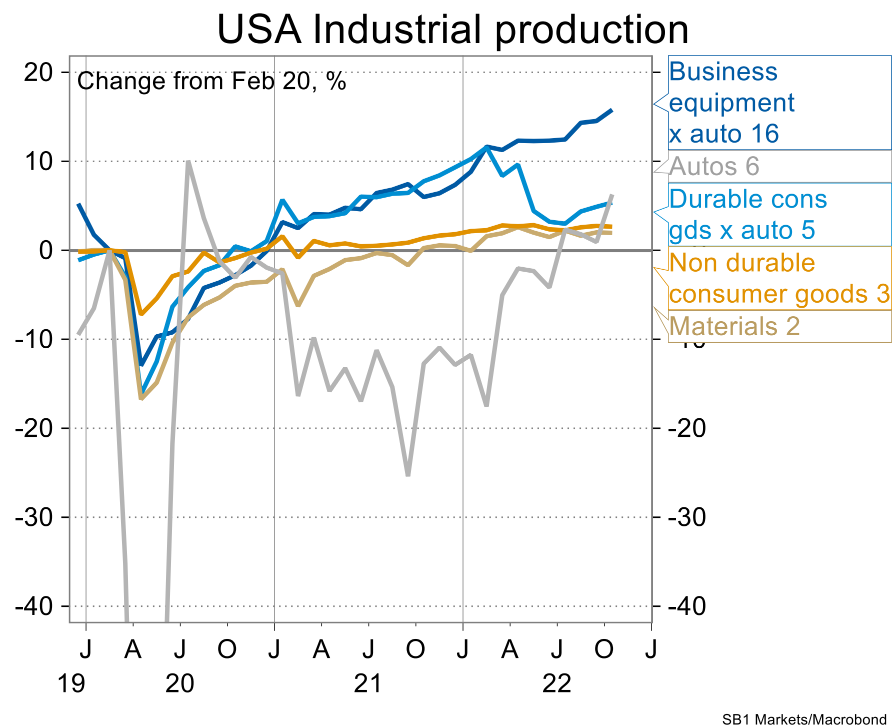




Manufacturing production below expectations, history revised down

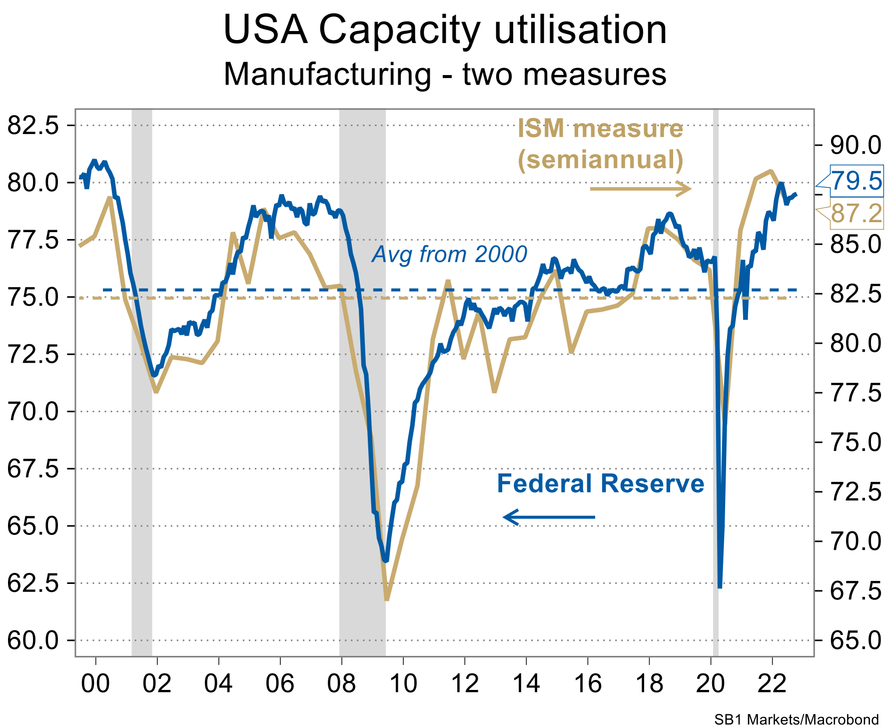
Production has flattened since the spring





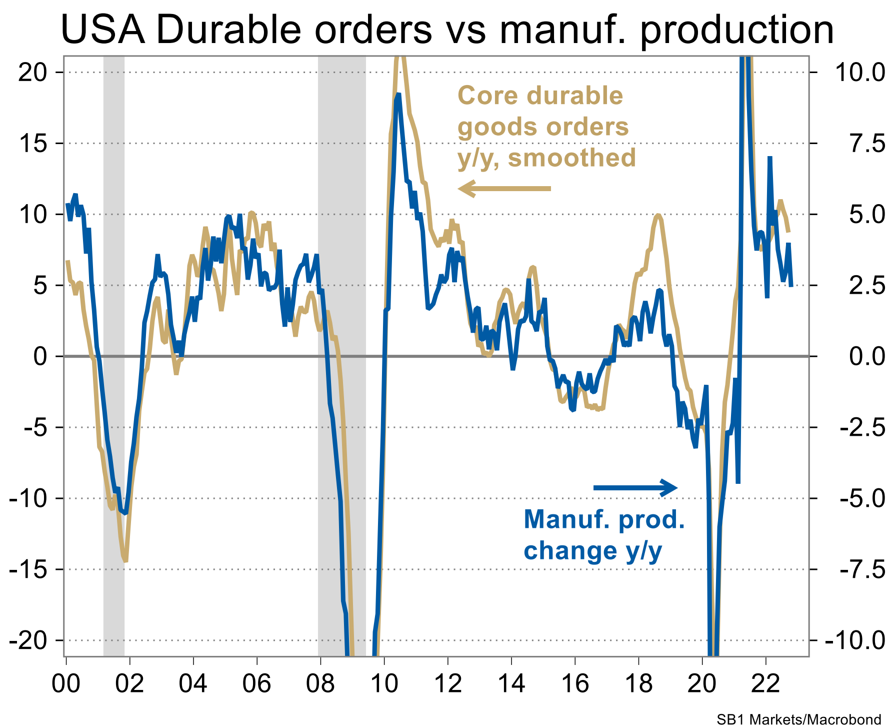
- **Manufacturing production** was up 0.1% in Oct, 0.1 pp below expectations. In addition, the Sept print was revised down by 0.2 pp to 0.2%. Post revisions, production remains below the April level, and the 3m/3m rate is now at +1.7%
  - » Production in all main sectors were up in Sept, and all are now above the pre-pandemic level, even including auto production!
- **Total industrial production**, including utilities, mines/oil production, declined 0.1% m/m, expected +0.2% (Sept data revised down by 0.2 pp to 0.2%)
- **Capacity utilisation** was unch., and the level is close to the highest in 20 years (the peak was in April)
- **Surveys** have weakened substantially since May. The two first October surveys are mixed but the downward trend is confirmed

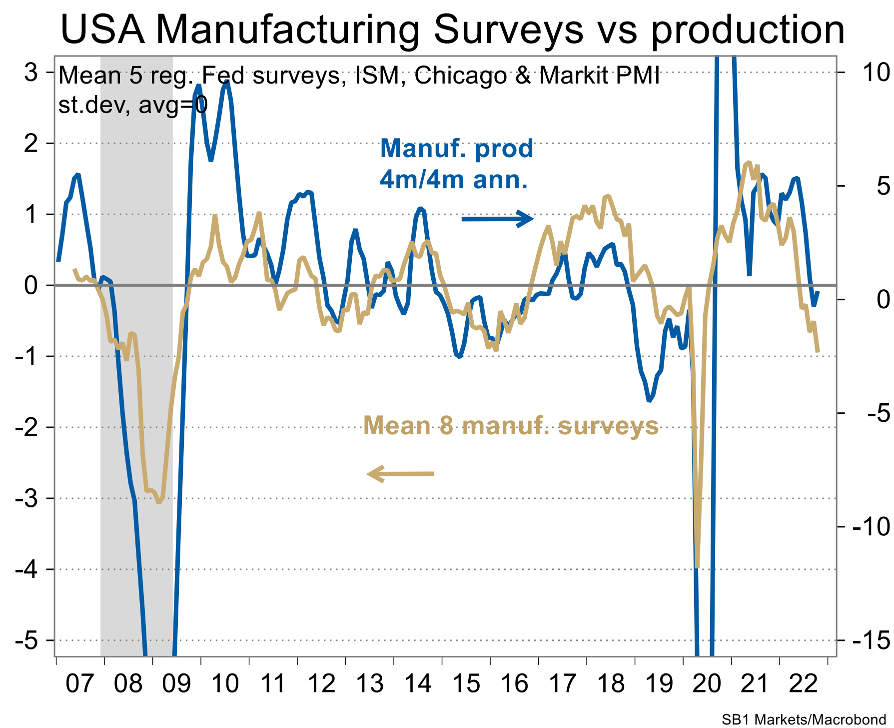
Capacity utilisation slightly lower, but remains very high



- **The Federal Reserve** reported a small increase in manufacturing capacity utilisation in October, and the level remains far above average
- **ISM's semi-annual** survey reported a decline in the cap. utilisation to 87.2% in H1/May
  - » These two measures have not been 100% correlated but they now agree that assessing the growth outlook
- The Fed's estimate is model based, while the ISM survey is based on companies assessment of their own capacity utilisation

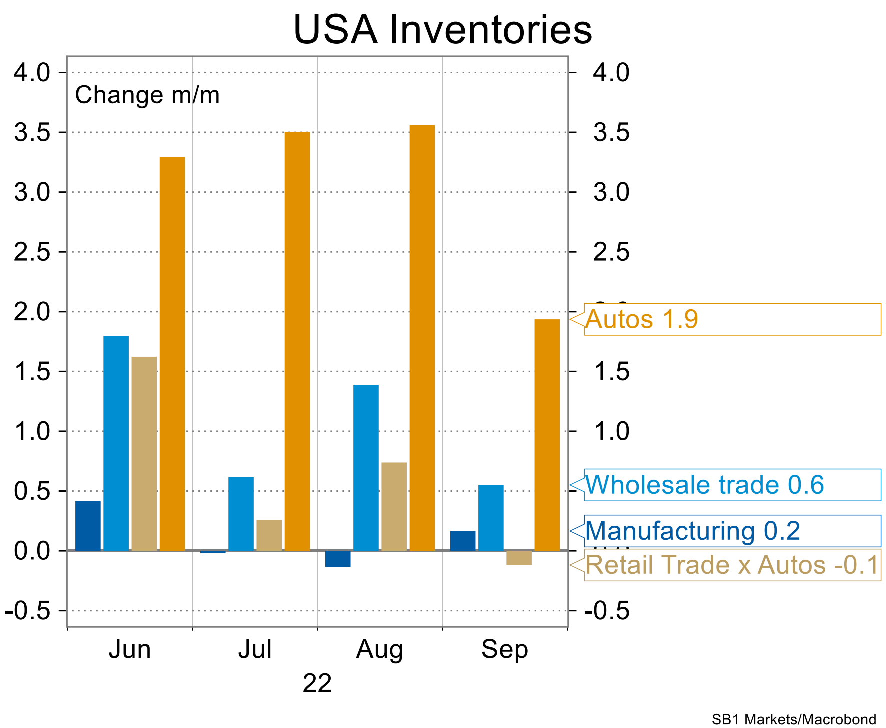
Surveys are signalling a fall in production, and growth in orders is coming down

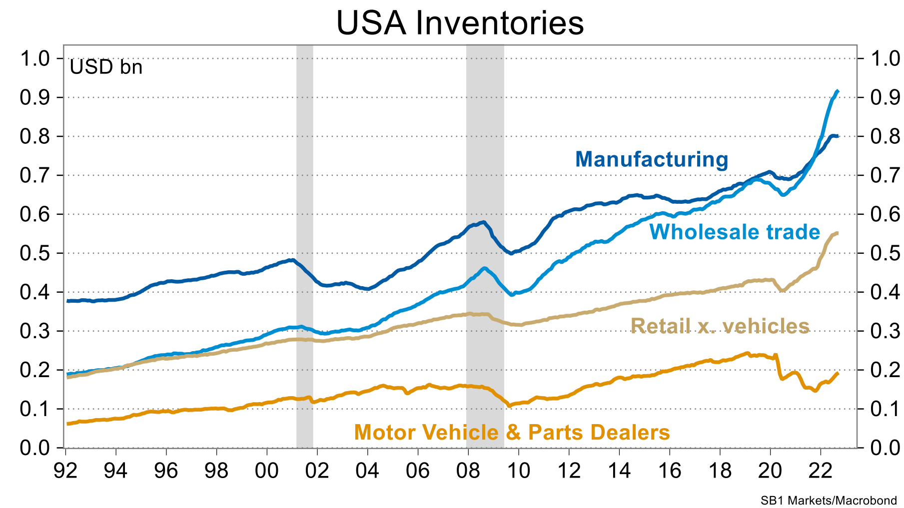


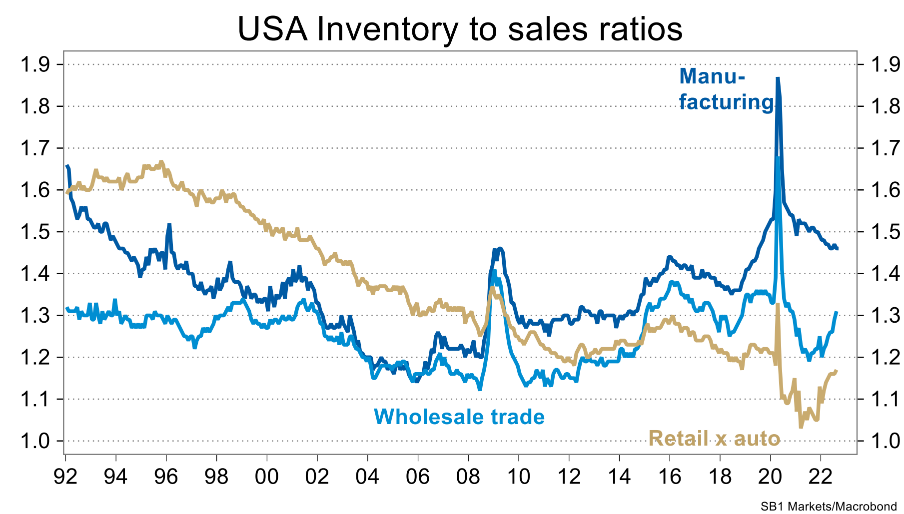


Inventories on the way up, and faster than sales in retail, wholesale trade

Manufacturing inventories-to-sales ratio is falling



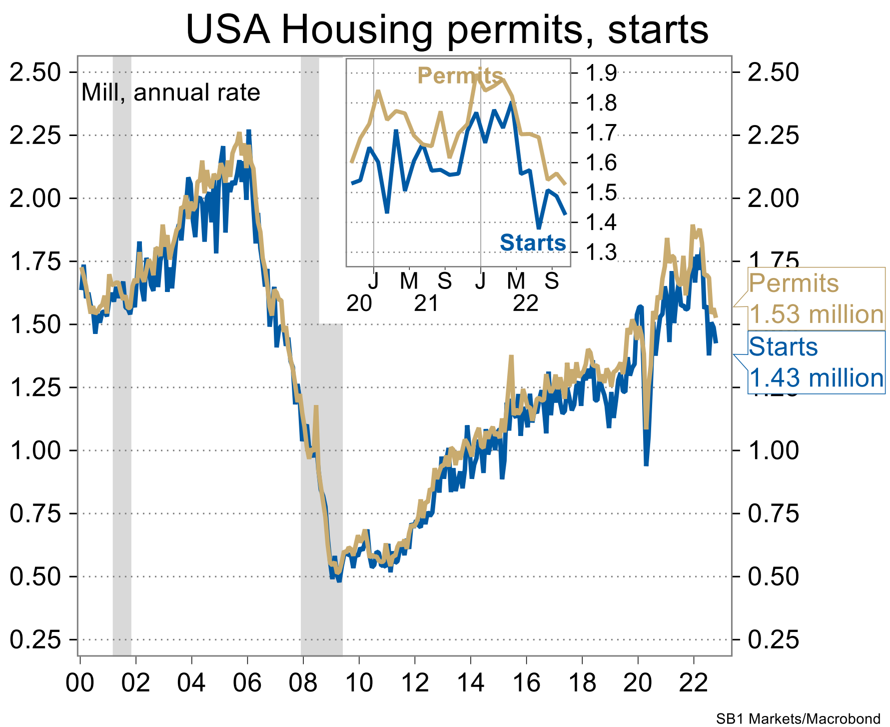


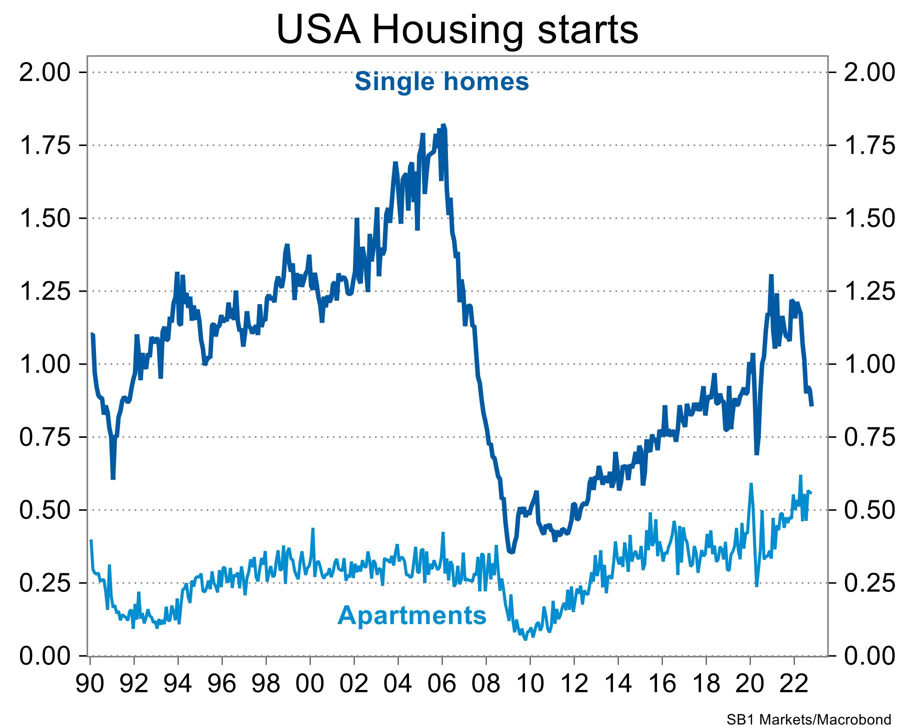


- Total inventories rose 0.4% in Sept, 0.1 pp less than expected
- Auto inventories are increasing again, signalling some softness in demand (as sales are still far lower than normal)
- Inventories in the **manufacturing sector** are falling vs. sales, from a high level – and there is probably a substantial potential for lowering inventories from here

Both permits and starts lower in October, and the trend is clearly down

Both are down 17% – 20% since before the steep decline that started in the spring

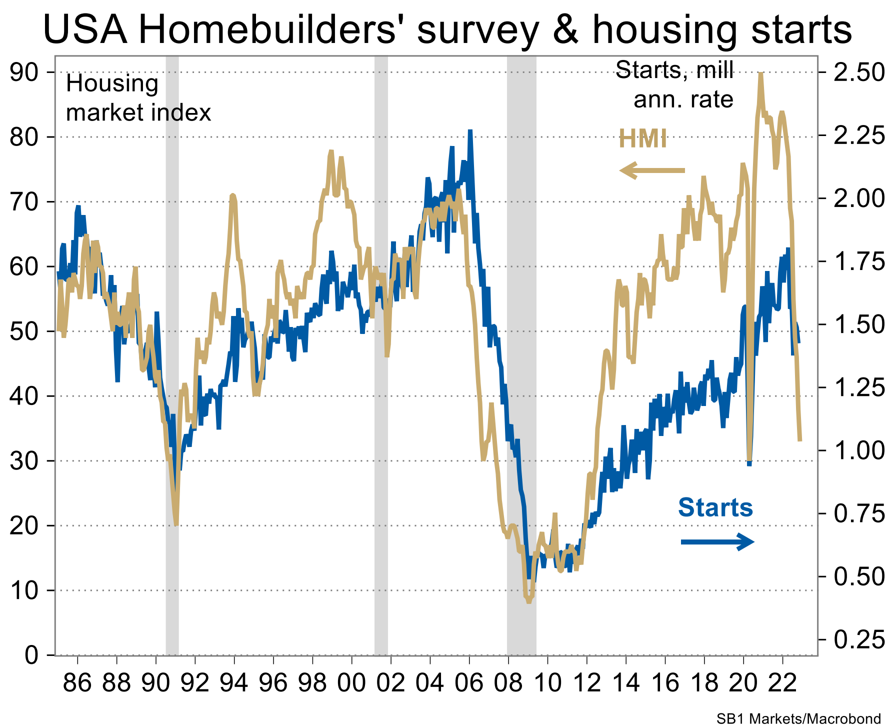


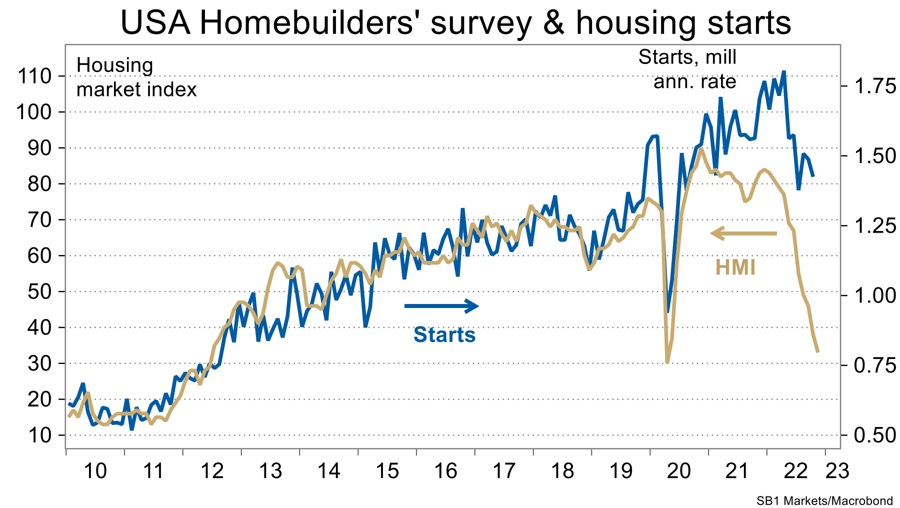


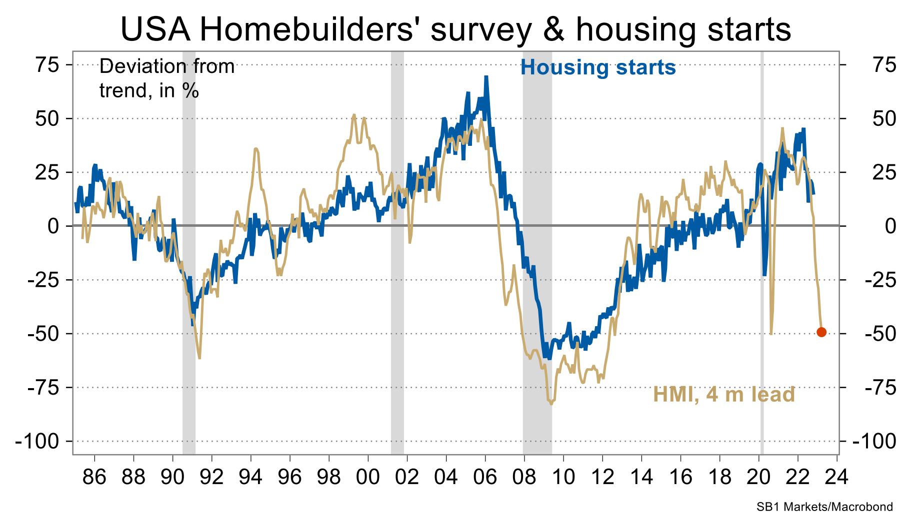
- **Housing starts** fell to 1.43 mill in Oct from 1.49 mill (revised up from 1.44 mill), expected 1.41 mil, and are still above the July level. **Building permits** declined to 1.53 mill, above expectations at 1.51 mill, from 1.56 mill in Sept. Permits fell in the 5 months prior to Sept, before an uptick that month, but are now falling again, suggesting fewer starts in the coming months. If Home builders are right (next page), the US will very likely soon be close to a recession – the housing market is in a recession
  - » Starts of **single homes** fell to the lowest level since after the start of the pandemic, down 30% since February. Starts of **apartments** also declined in October but have so far not come significantly down from the peak, these starts are just trending flat – with substantial downside ahead, we assume
- Building **material cost inflation** has come to a sudden halt. **Lumber prices** are back to a normal level (or even below), steel prices have fallen substantially recent months too

Home builders' index further down in November, signals a housebuilding crash

The HMI down 6 p to 32, expected down 2 p to 36. A further 50%+ drop in starts, in total 60%+?





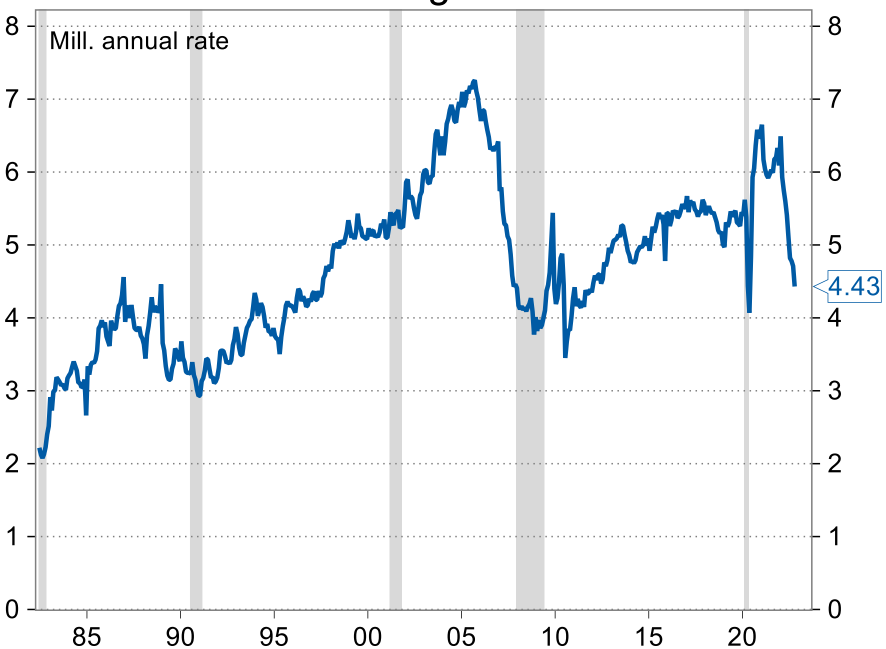


- **The Homebuilders' Housing Market Index (HMI)** once more fell more than expected! The decline recent months – and since Dec last year – is the steepest ever, and the second largest ever, after then one that took place from June 2005 to Jan 2009 (the decline started 3 years before the financial crisis)
  - » Affordability is still the challenge, due to higher mortgage rates, and soaring new home prices (at least until now)
- The decline in the index recent months signal at 50% decline in housing starts following the 20% drop so far - in sum a 60% setback, which we have never seen except for before or during the deepest recessions

Existing home sales have fallen for 9 consecutive months

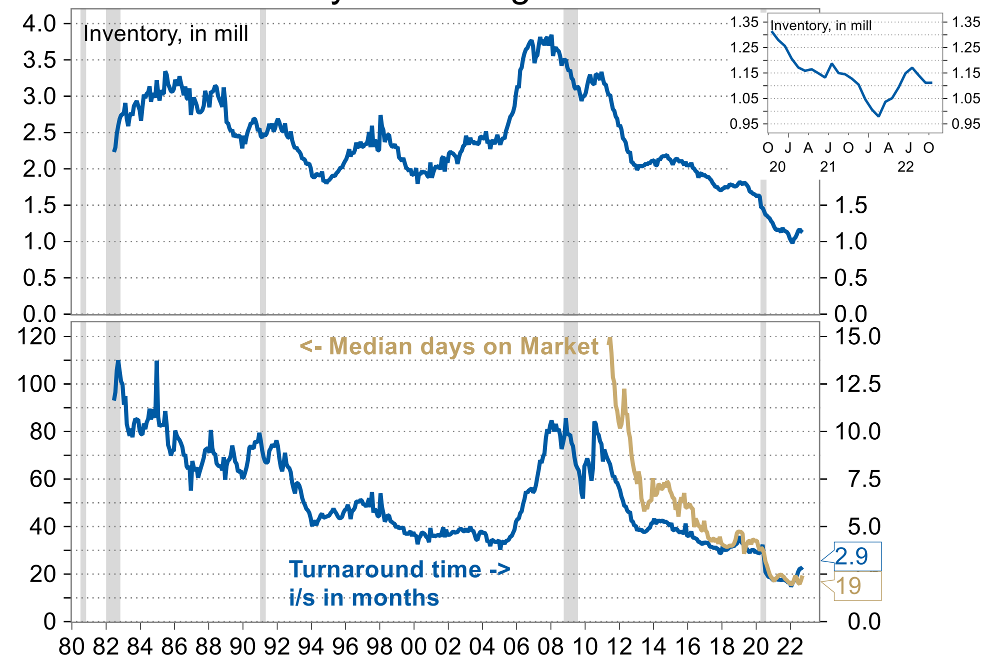
Sales are down 27% from January, but prices were up m/m – as the inventory is shrinking again!

USA Existing home sales



SB1 Markets/Macrobond

USA Inventory of existing homes for sale

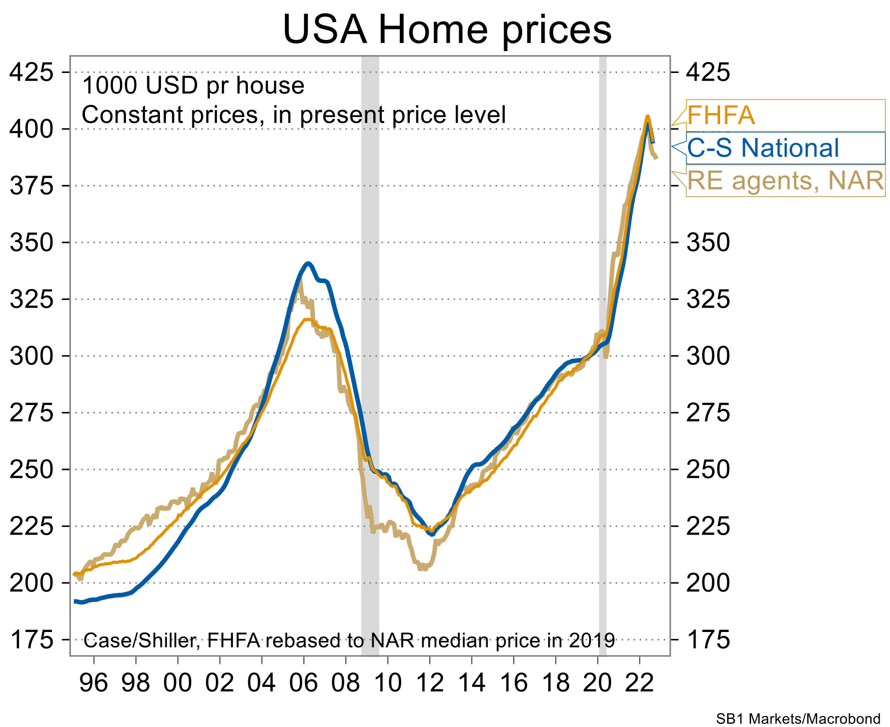


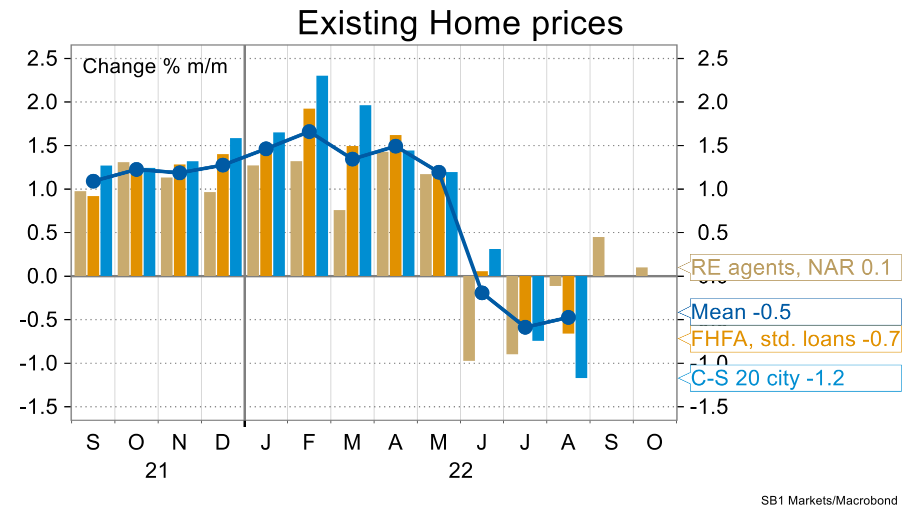
SB1 Markets/Macrobond

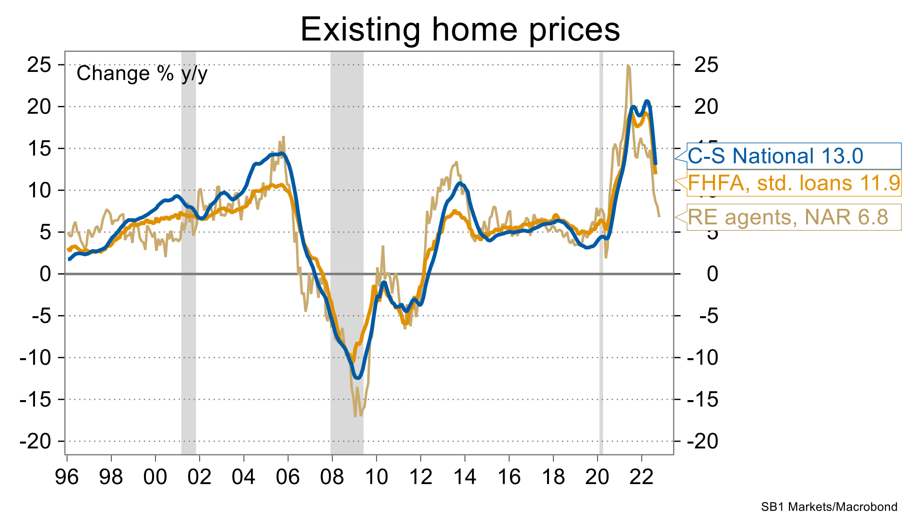
- Sales of **existing homes** fell to 4.43 mill in October (annualised rate), from 4.71 mill in Sept, expected down to 4.38 mill. Sales have fallen by 32% from local peak in January. Sales are down close to 20% vs. the pre-pandemic level. **Pending sales** signal a further decline in actual transactions
- **The inventory of unsold homes** rose marginally in October but is still lower than during the summer – and it is up less than 15% from the ATL in March. The inventory equals 2.9 months of sales (up from 2.8 last month, and 1.8 in January). During the 2005 boom, the i/s ratio was 4 months, in bad times it has been as high as 10 months
  - » Very likely, the steep rise in mortgage rates are now locking prospective home movers in, if they sell, they have to pay a <u>much</u> higher mortgage rate for the next home. Thus, fewer sellers, at least for now (but also few buyers, of course!)
  - » A signal of a still hot market: The median time on the market for those homes actually sold is just 19 days, and still close to ATL. Before the pandemic the time on market was at 30 days (and 120 days in 2011!)
- **Prices** surprised (us at least) on the upside, big time: Prices <u>rose</u> 1.1%, and the decline the previous 3 months were smaller than so far reported. Still, the trend is down. We are very likely witnessing a housing market recession

House prices up in October too but the direction is very likely down

Prices are up 8.5% y/y – but the negative sign is coming closer



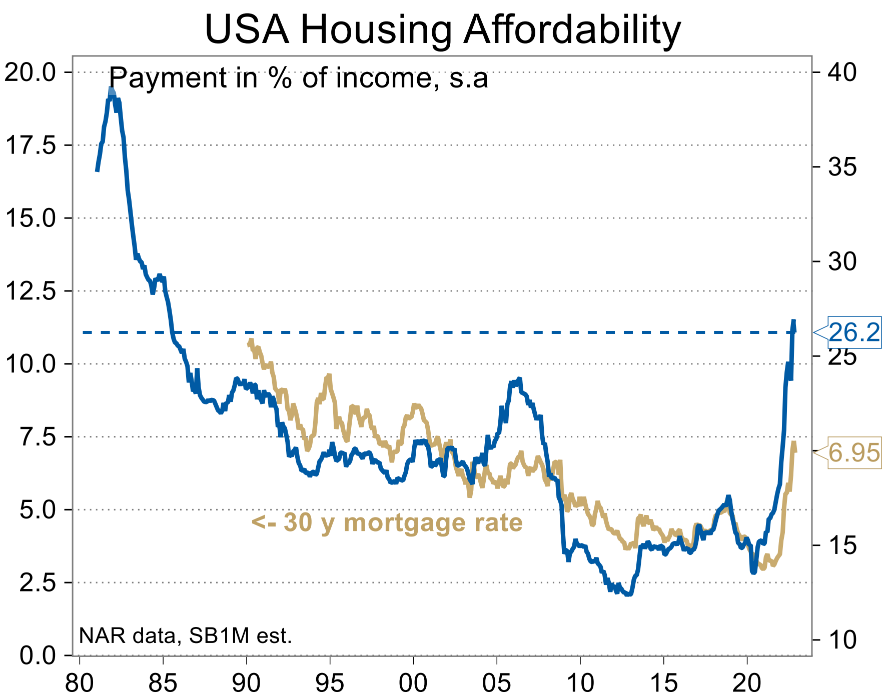


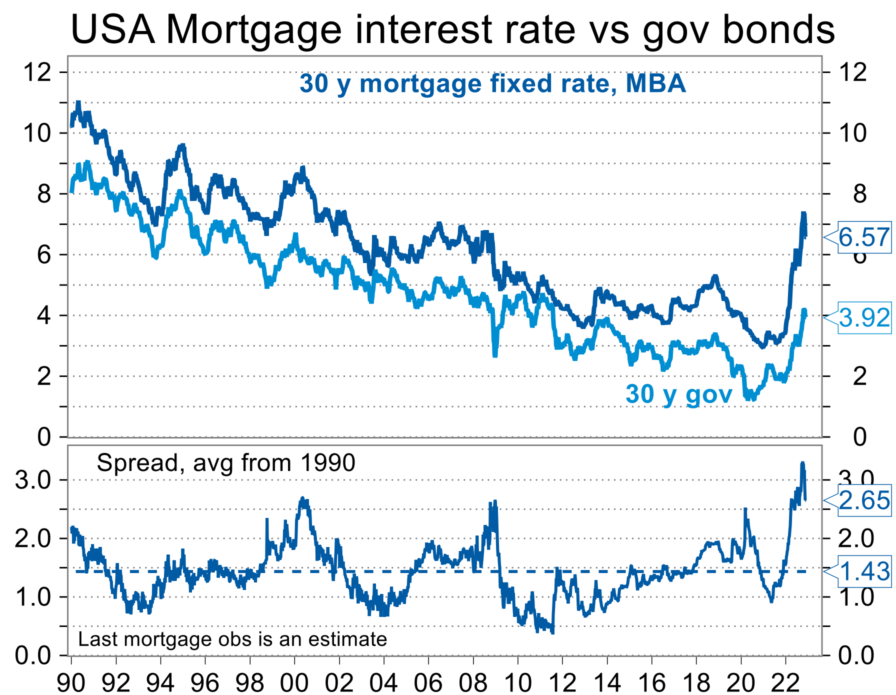


- **Prices** rose 0.1% in Oct, following a 0.5% increase in Sept (revised down from 1.1%), we expected a larger decline. The seasonal adjustment of these data is not perfect, so some caution on our m/m data. The annual rate fell 1.3 pp to 6.8% (from a 0.4 pp downward revised level in Sept)
- Other indices still are up 12% - 13% y/y, but prices fell all across the board in Aug (Jul-Sep, the last obs). Prices are normally lagging sales by almost 1 year. This time, prices followed sales down much earlier, we think it's due the rapid deterioration of affordability
- Home prices are up 40% from before the pandemic, and are way above the 2006 level, even in constant prices. The downside risk is HUGE! 2020 prices were sufficient to keep housing starts at a decent level

Mortgage rates down, as the spread (to Gov bond) finally yielded

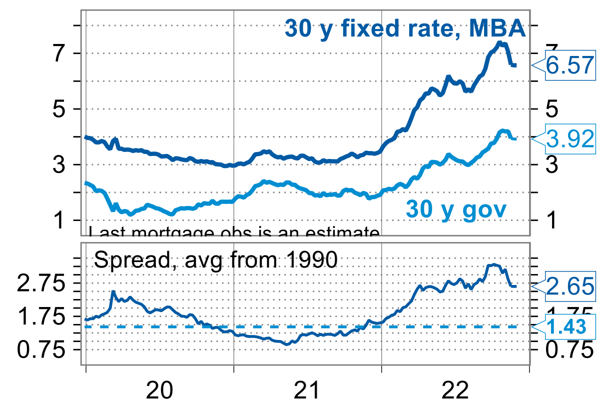
The effective mortgage 30 y rate at 6.6%, down almost 1 pp from the local peak. Still a very high level



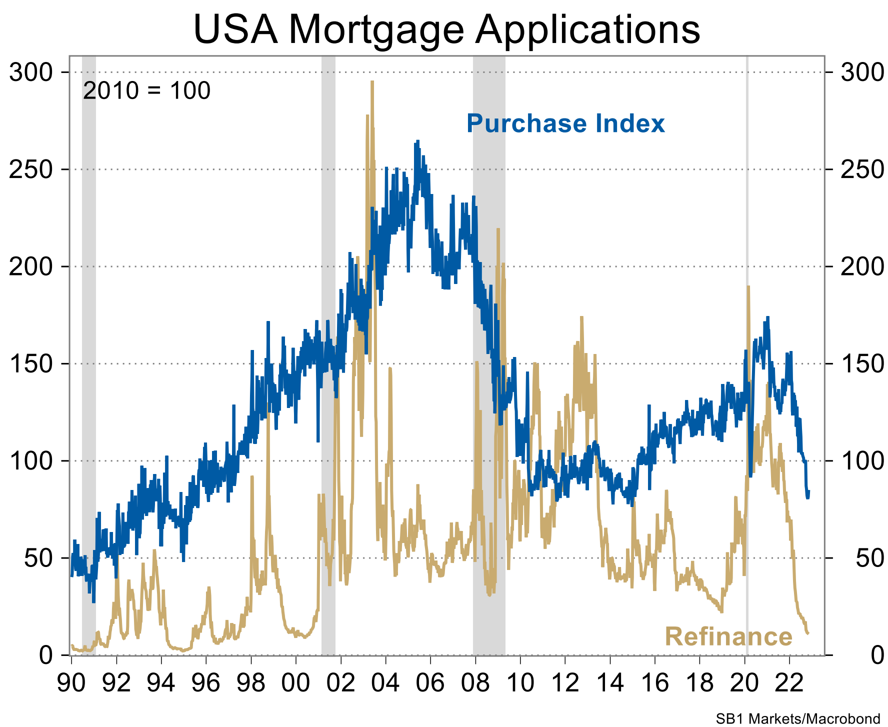


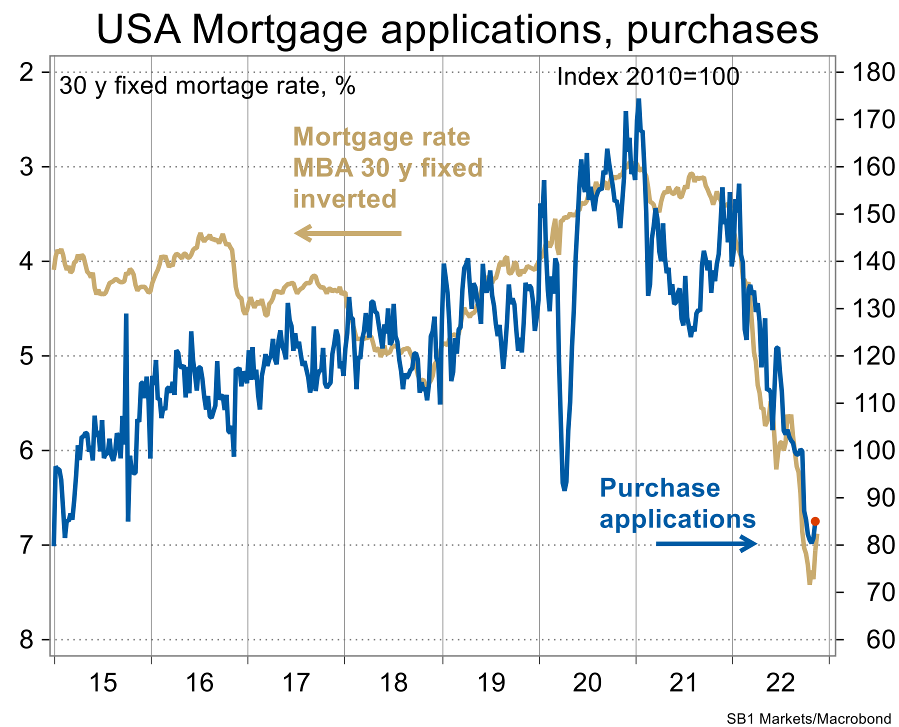
SB1 Markets/Macrobond

- The 30 y fixed mortgage rate has shot up recent months, both due to higher 30 y gov. bond rate and a dramatic widening of the spread up to the mortgage rate. Now, the spread has narrowed significantly, from a level we deemed to be much higher than warranted, long term
- If the spread had moved in the opposite direction, we had come closer to a point where the Federal Reserve would have been forced to start buying mortgage backed bonds
- <u>'Housing affordability (house price x mortgage rate/income) is still the worst since 1986</u>



Mortgage applications up last week, but has fallen almost 50% in 2022

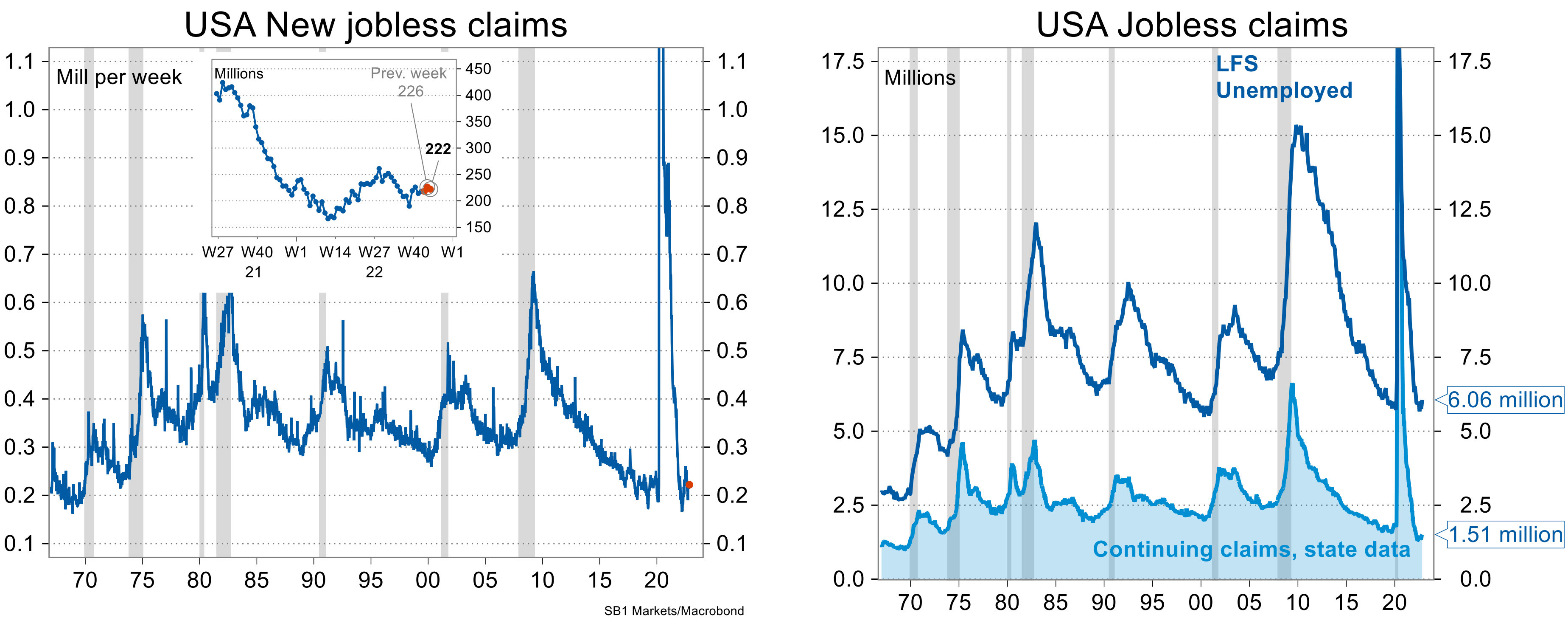




- Demand is now at the low end – 40% below the pre-pandemic level, not far above the bottom during the financial crisis
- Recently, mortgage rates have risen, alongside the increase in the 30-year treasury bond rate
- 'Nobody' is refinancing, for good reasons, given the current mortgage rate

The inflow of new jobless claims remains at very low level

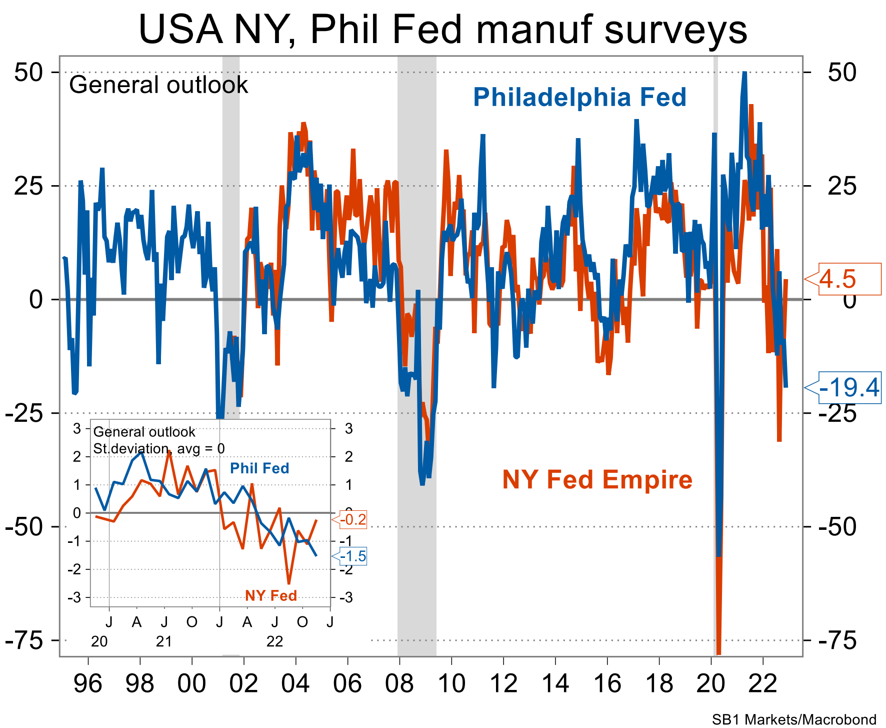
New jobless claims marginally up to 222', expected 225'

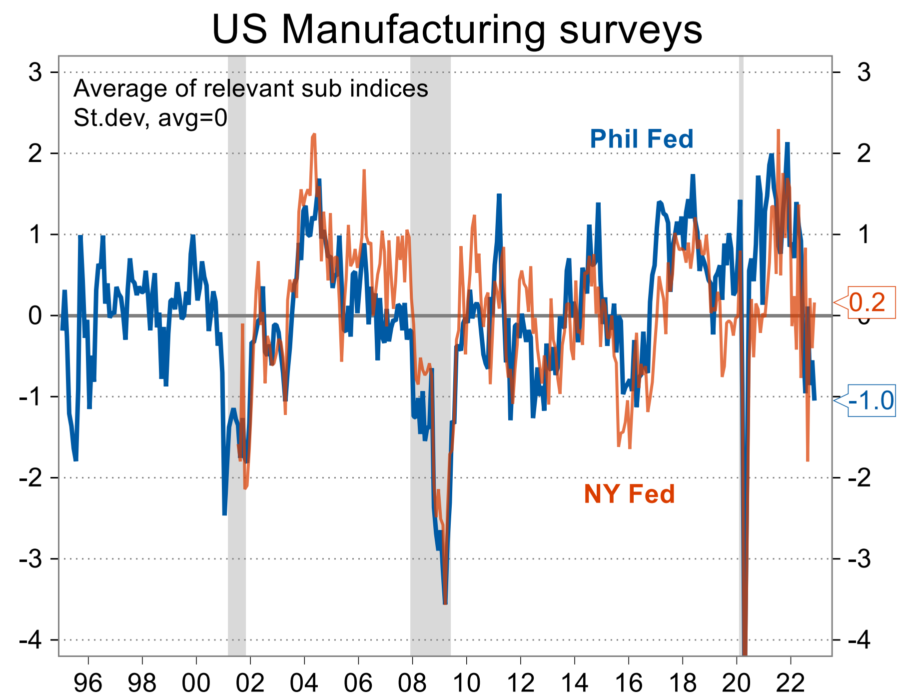


- **New jobless claims** decreased by 4' to 222, from a 1' upward revised number the previous week
- **Continuing claims** rose by 13' to 1,507' in week 44, the previous week's print was revised up by 1'. The trend is slightly upwards but the level remains very low
- <u>Both still indicate a very tight labour market</u>

Flip flop: NY Fed's index up, Phil Fed down in November. In sum slightly up

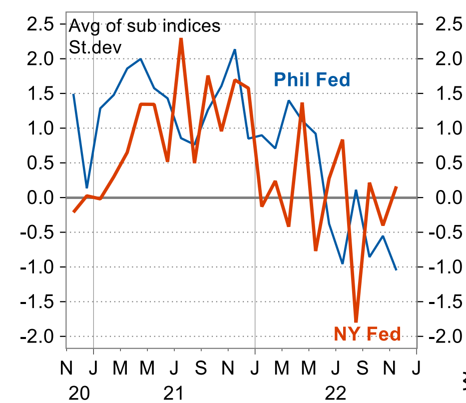
Once again the two surveys differ from month to month. <u>The trend is down for the both of them</u>





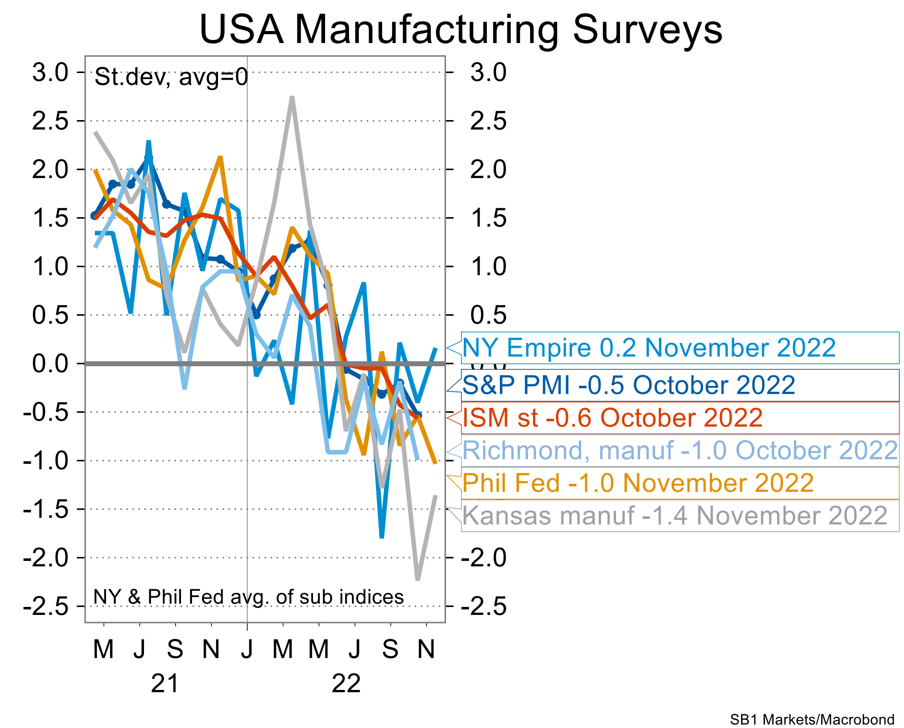
SB1 Markets/Macrobond

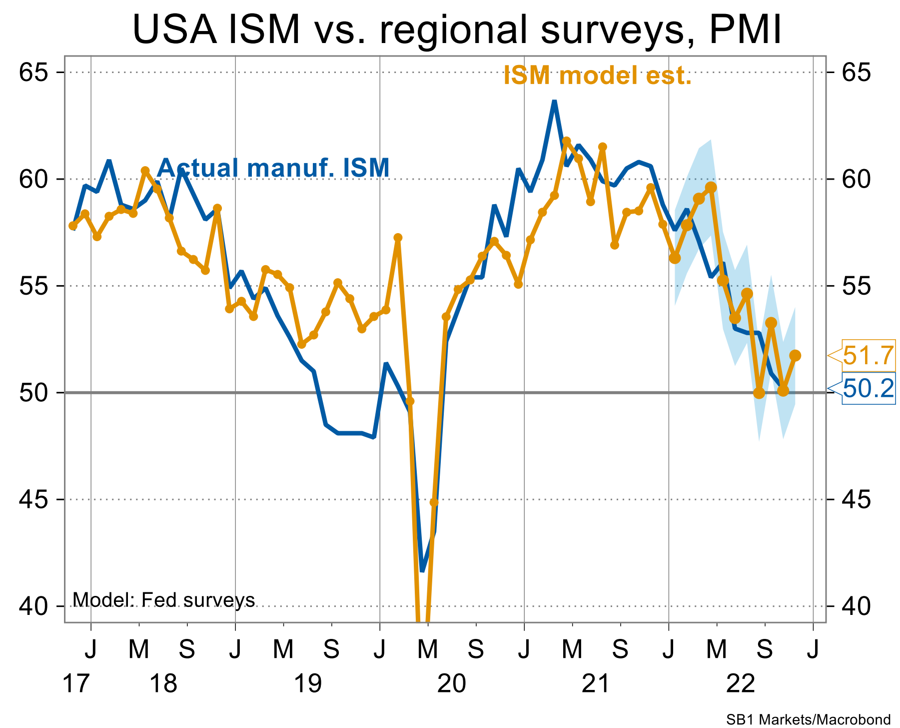
- **NY Fed Empire State manufacturing index** rose to -0.2 st.dev below avg. in November from -1.1 st.dev (up to +4.5 from -9.1 in absolute terms, expected -5)
- **Philadelphia Fed's manufacturing index** was down 0.5 st.dev to 1.5 below par in Nov (down to -19,4 from -8.7, expected up to -6)
- Both indices report an increase in input prices, lower shipments and a bleaker outlook
  - » <u>Expected order inflow is very weak, clearly at a recession level</u>
- **The average of the subindices** in the two surveys followed their respective headline indices, but the details in NY Fed's index is above an average level
- **Taken together:** In sum better than expected, and a positive signal for the ISM, according to our model



NY, Philadelphia & Kansas Fed in sum up in November

Still, the trend is down

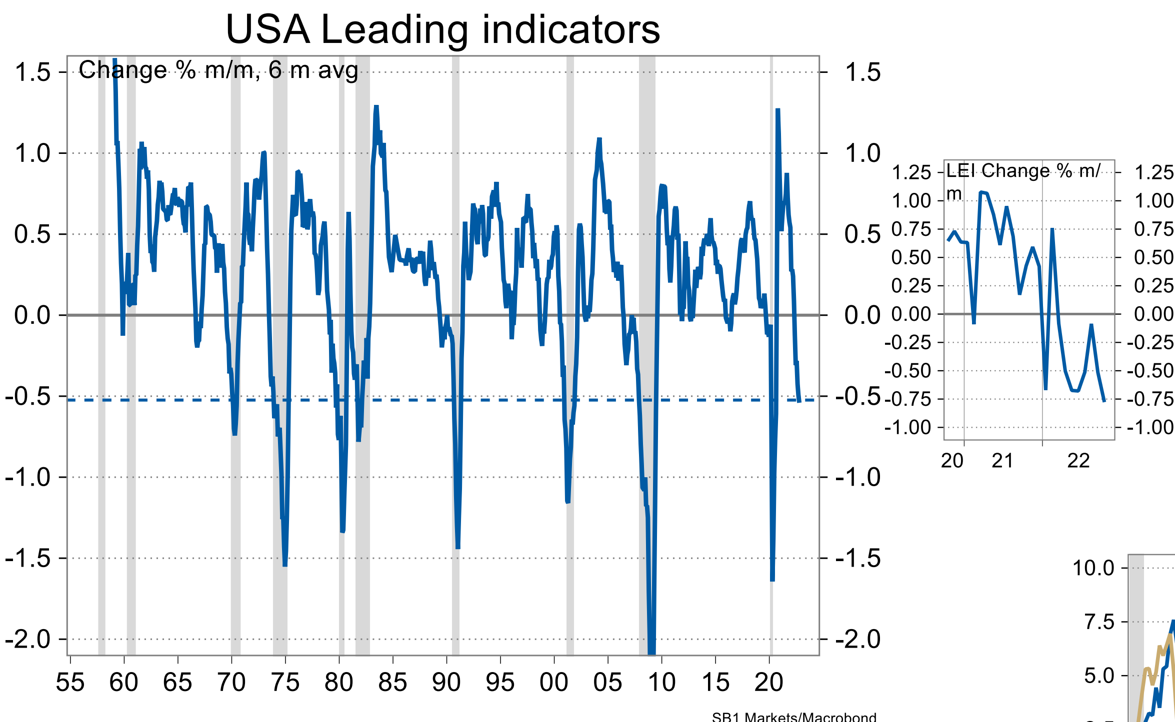


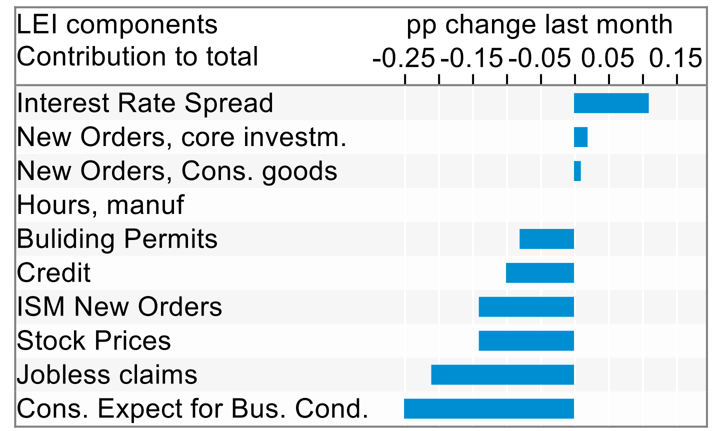


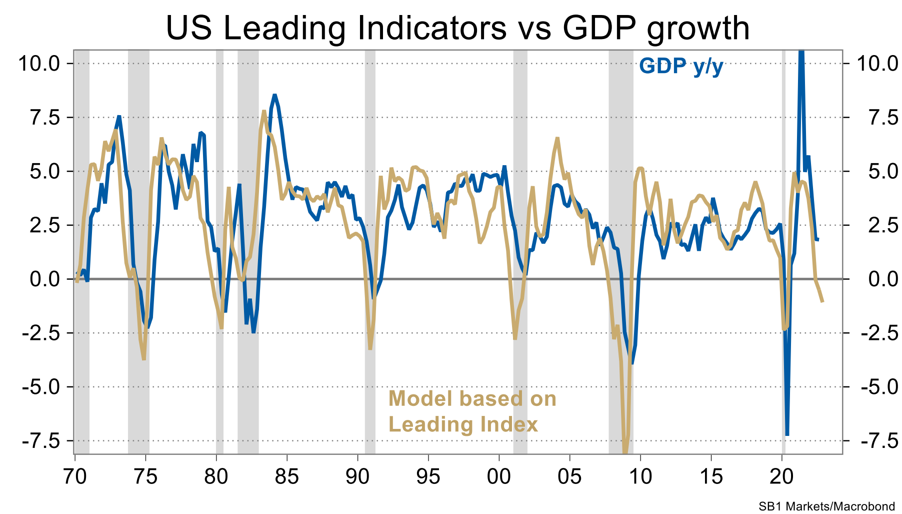
- Big picture: Growth is slowing but manufacturing indices do not signal that the economy has entered a recession (even if order indices are really worrisome, and even more expected order inflow)

The Leading Economic Indicators fell more than expected in September

A 6-month avg of -0.5% level detected 8 of the 8 past recessions. And there were no false warnings!



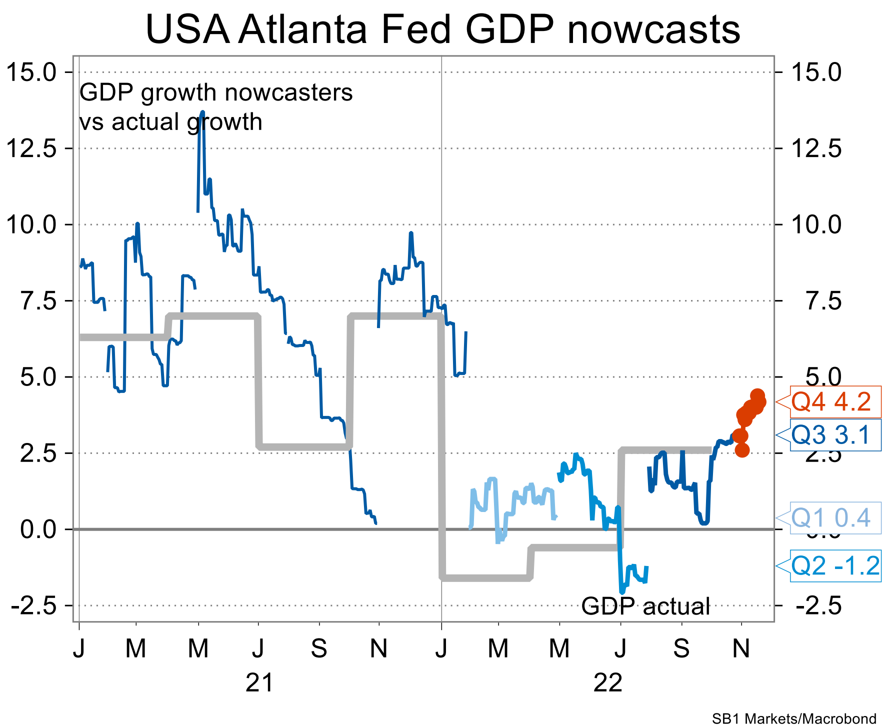


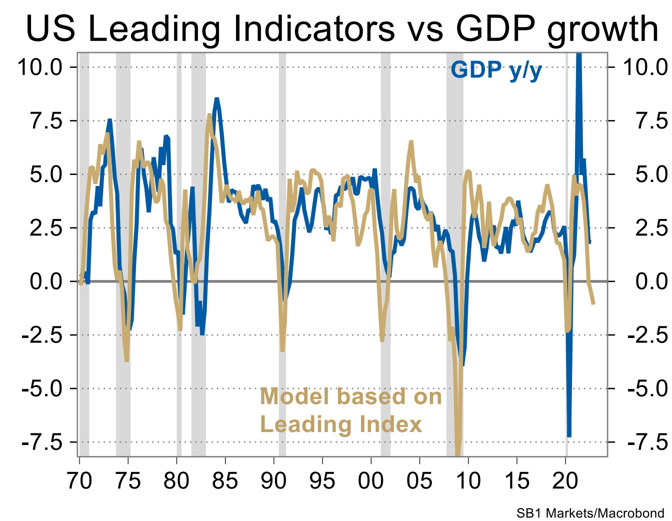


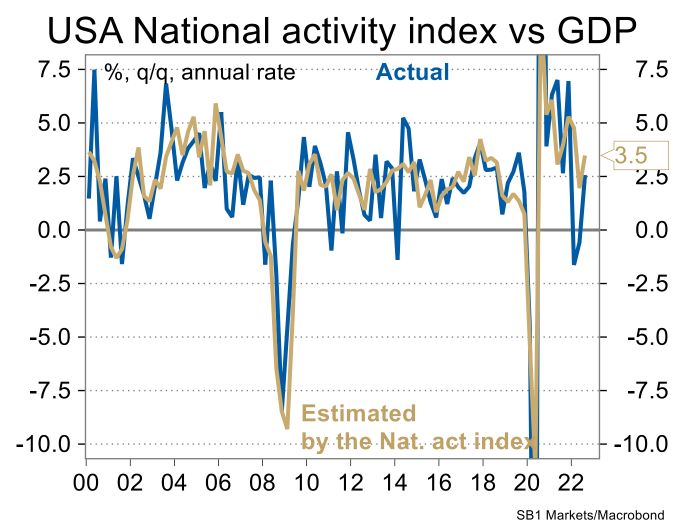
- The LEI fell 0.8% in Oct, expected down just 0.4 pp, and the direction is down. The 6 m average at is at -0.5%. The LEI has fallen to this level 8 times since 1965
  - » On these 8 occasions the US economy was very close to entering or had entered a recession
  - » Thus, the LEI 6 m avg at -0.5 'detected' all 8 recessions since 1965; no false positives, and no false negatives. In 1960, US entered a recession without any clear warning sign from the LEI

Atlanta Fed's Q4 forecast up to 4.2%

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! Or even less

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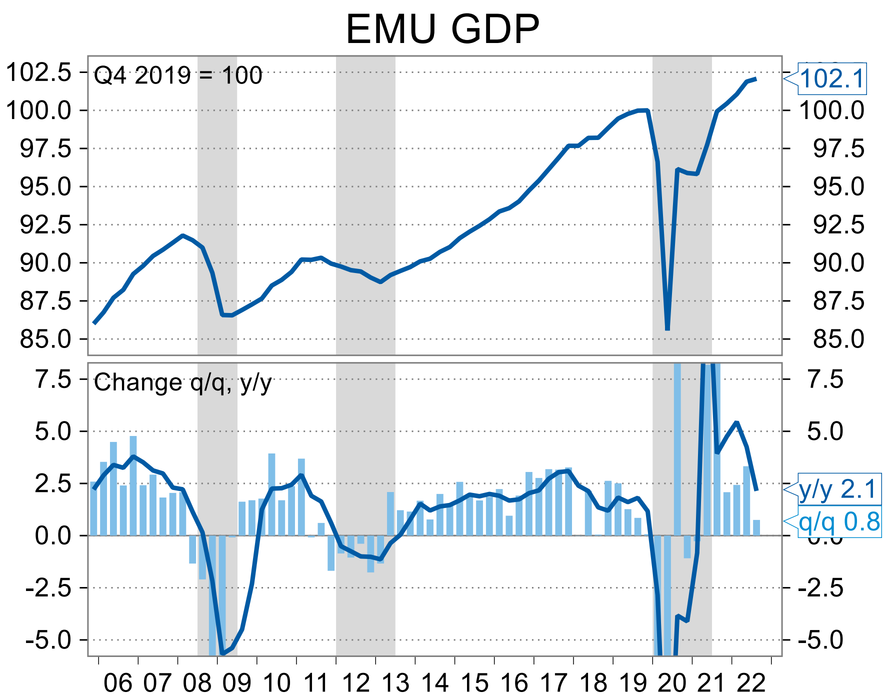
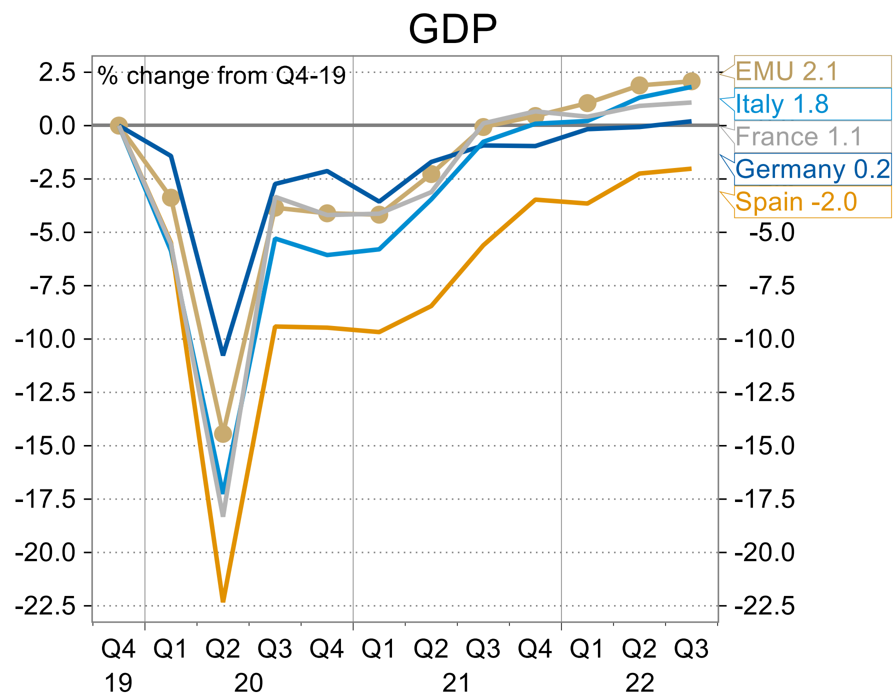
Eurozone GDP confirmed up 0.8% (annualised) in Q3, the big 4 up 0.8% – 2.0%



SB1 Markets/Macrobond

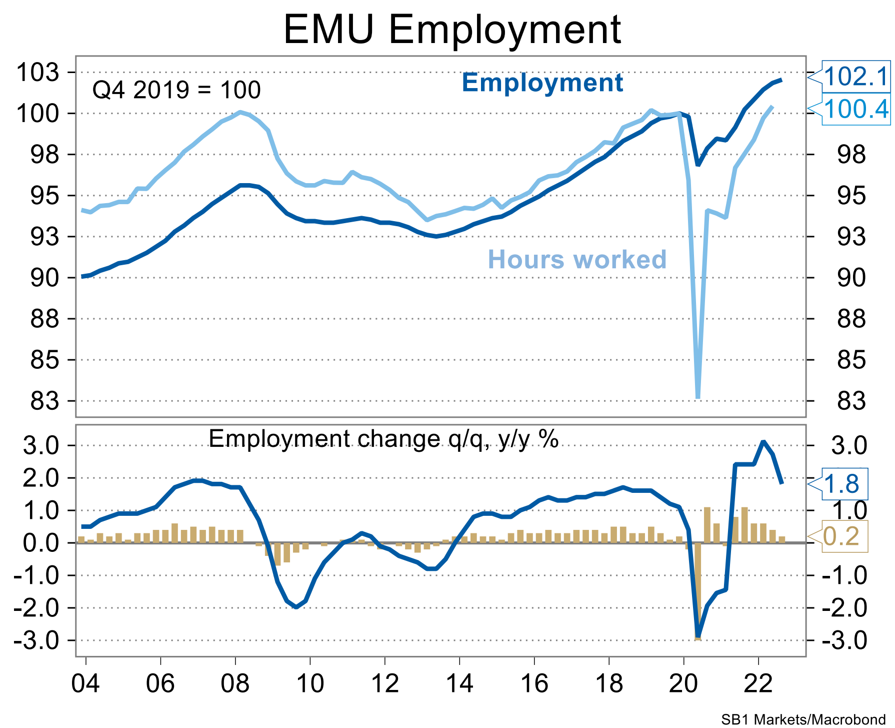


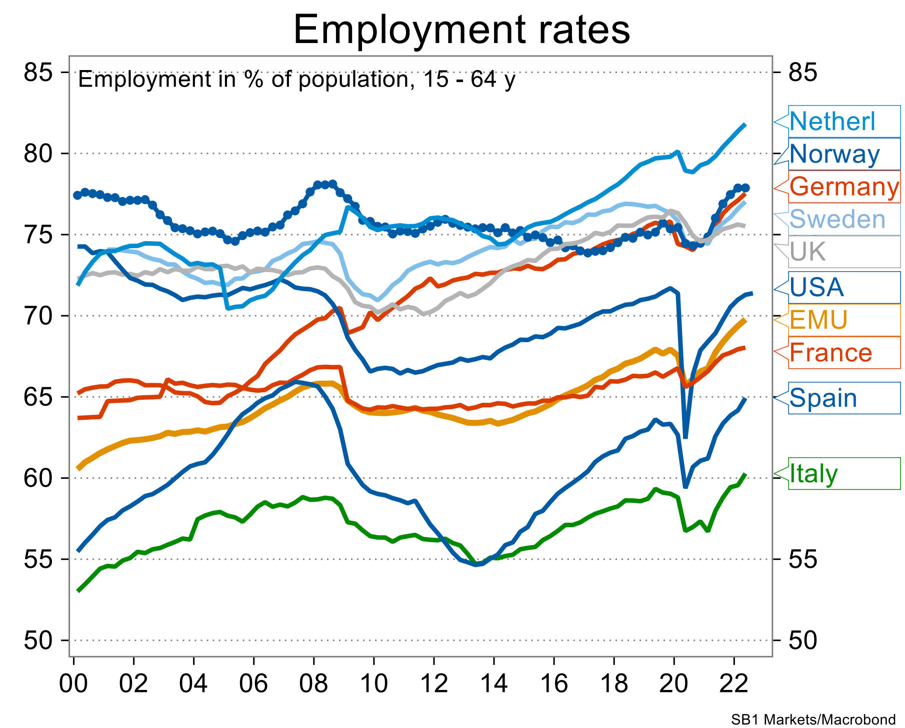
SB1 Markets/Macrobond

- GDP grew 0.2% in Q3 (not ann.), down from 0.4% in Q2. GDP is now 2.1% above the Q4-19 level
- Spain grew rapidly in Q2, and was up 0.2% (not ann.) in Q3, but is still the laggard, GDP is still 2% below the pre-pandemic level
- German GDP was up 0.3% in Q3 - and up 0.2% vs. Q4-19

Employment slowed further in Q3 but remains impressive

The employment rate is well above the pre-pandemic level. Hours worked are slightly above as of Q2



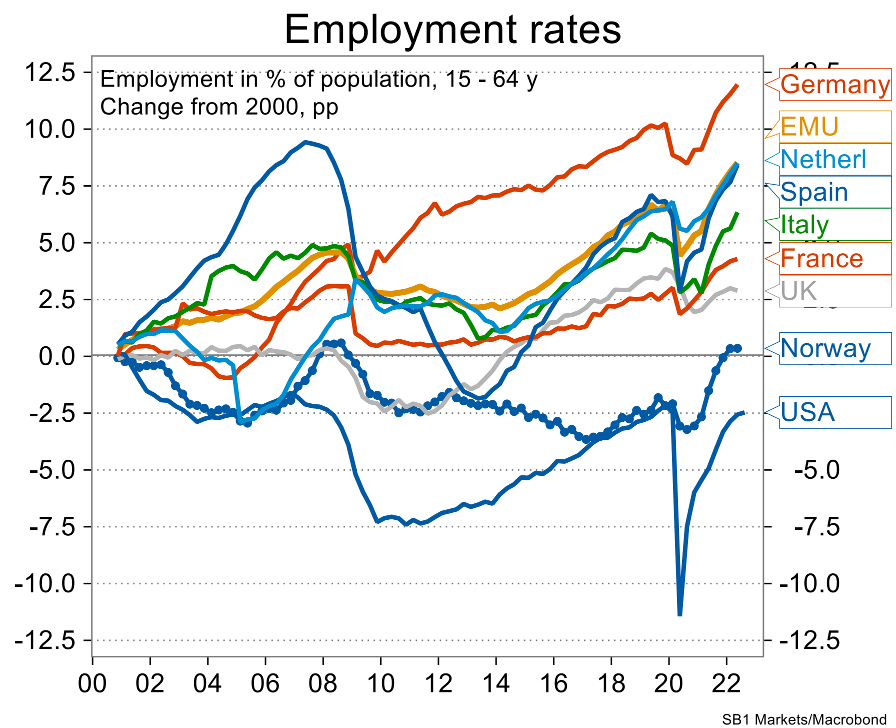


- Employment rates are up all over the region, vs the pre-pandemic level
- BTW, just UK and US are reporting lower employment rates than before the pandemic
- Over the past 20 years: US the big loser. Germany the winner. Check the chart next page ☺

SpareBank 1 MARKETS

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

Who are the winners, who are the losers?



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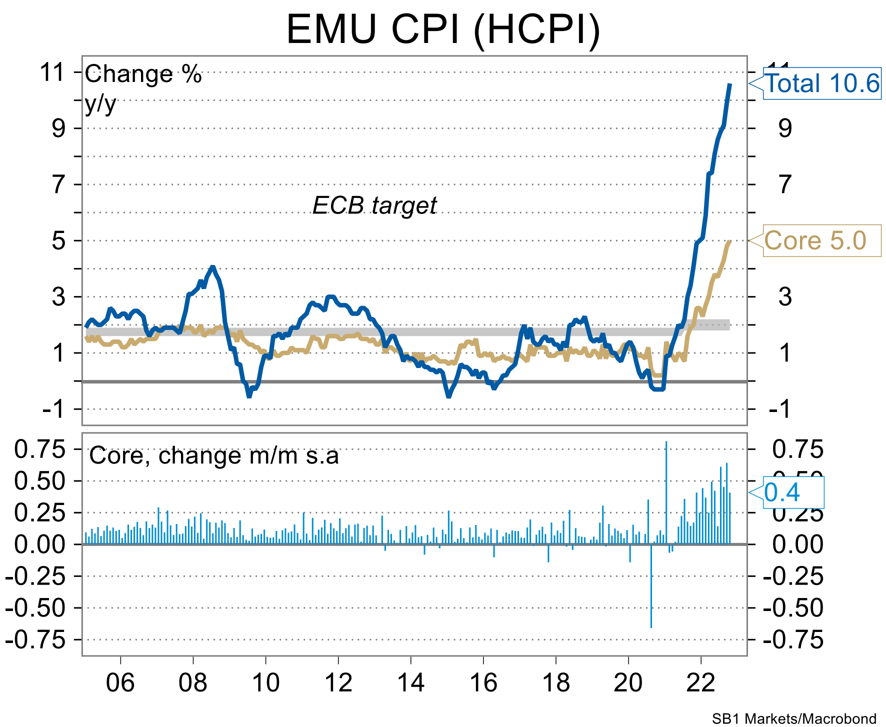
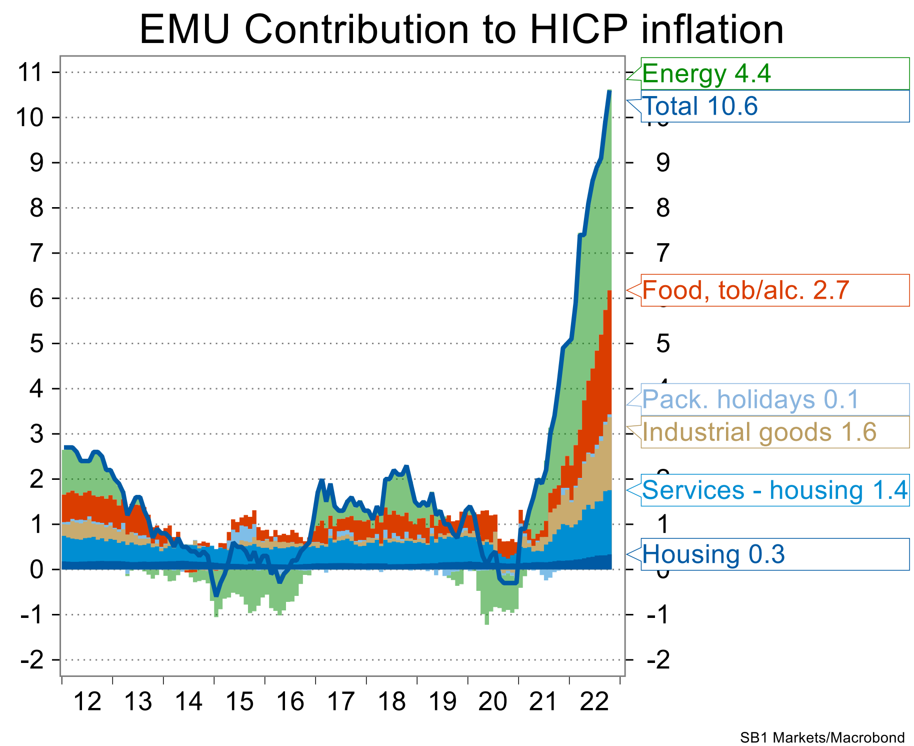
Headline inflation at 10.6% in October – 0.1 pp lower than the preliminary print

The headline index up 1.4% m/m, the core 0.4%

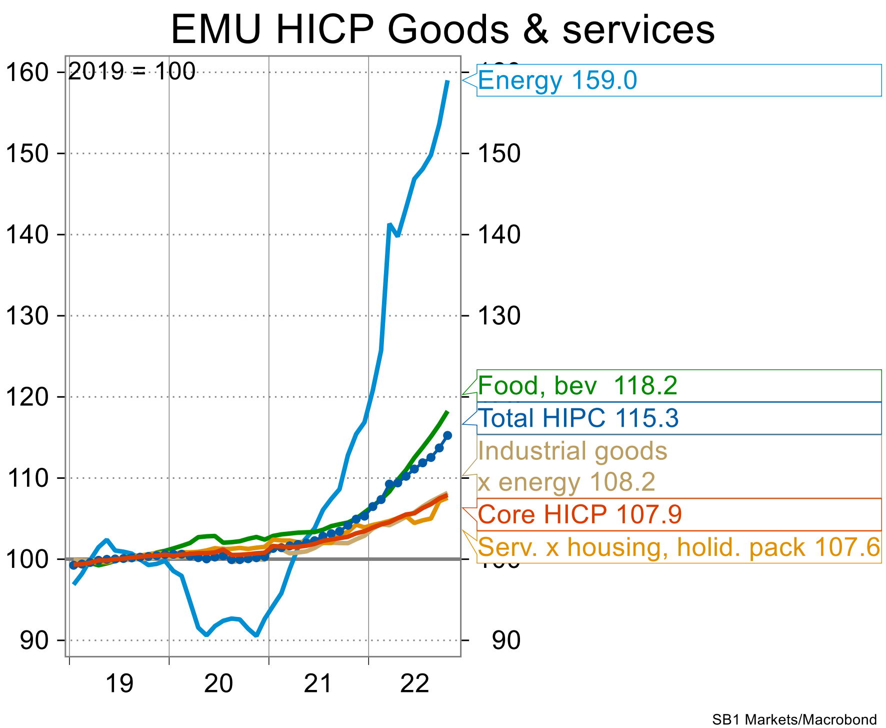


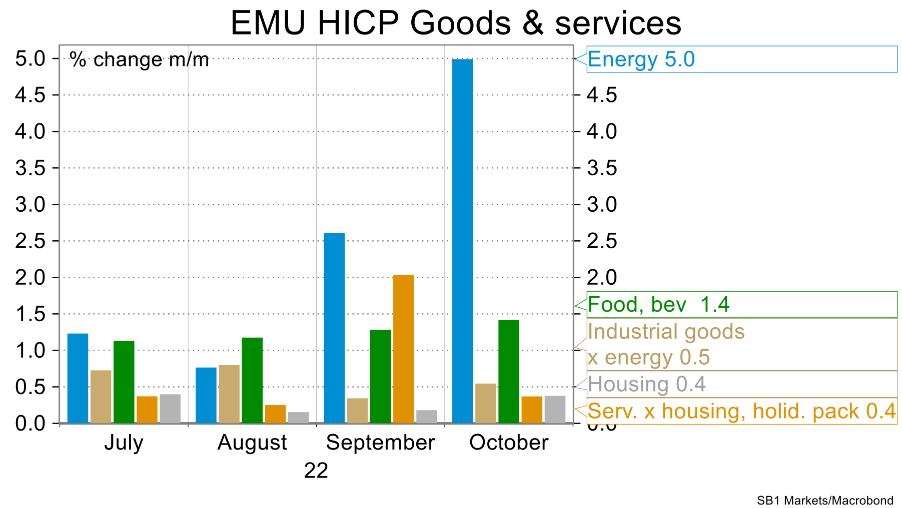


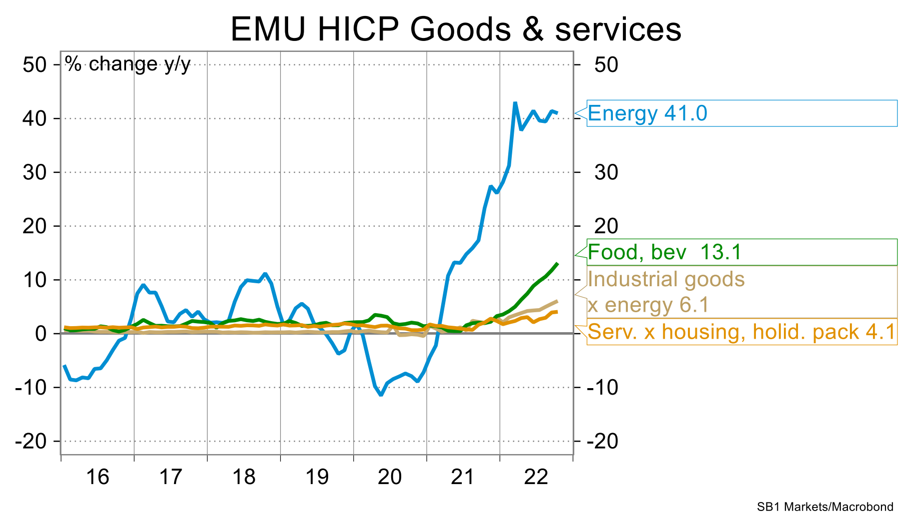
- **Energy prices** directly explains 4.4 pp of the headline of 10.6%. In October, energy prices were up 3.5%, while industrial goods prices were up 0.5%. We have said it for a couple of months now, energy prices will likely decline as spot and futures prices have come down substantially from the peak, check 3 pages forward

SpareBank 1 MARKETS

Energy prices have exploded. Food prices are climbing >1% m/m, up 13% y/y



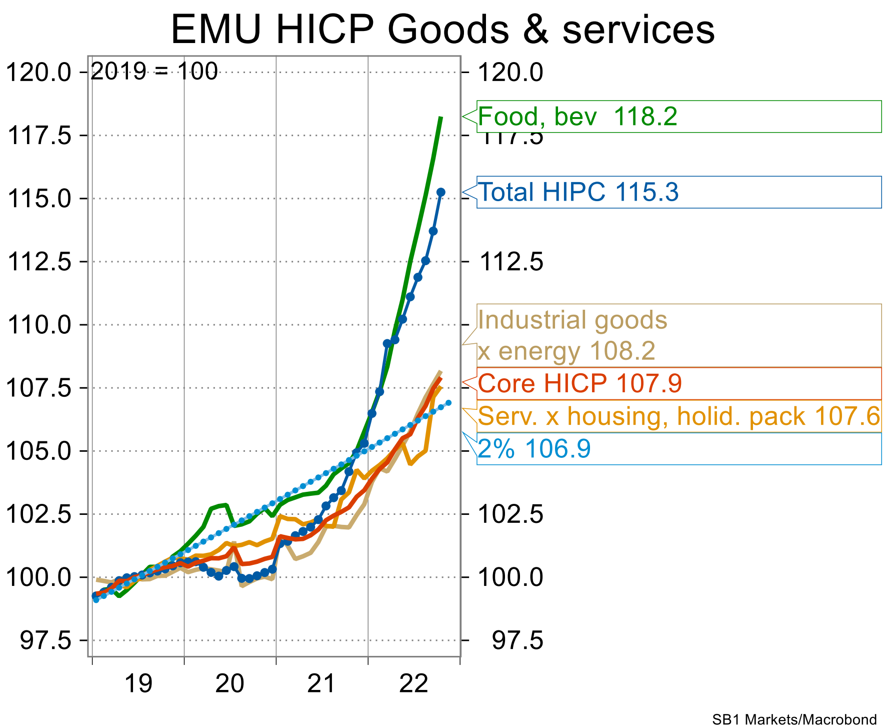


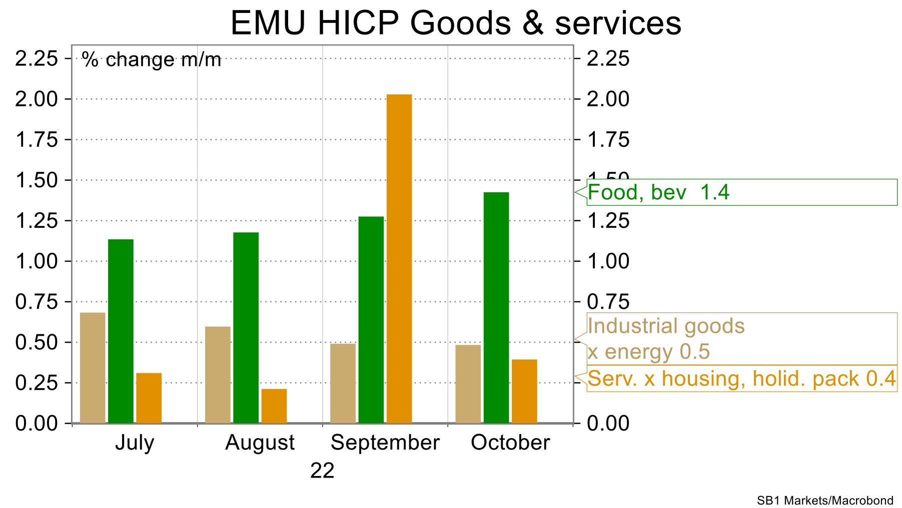


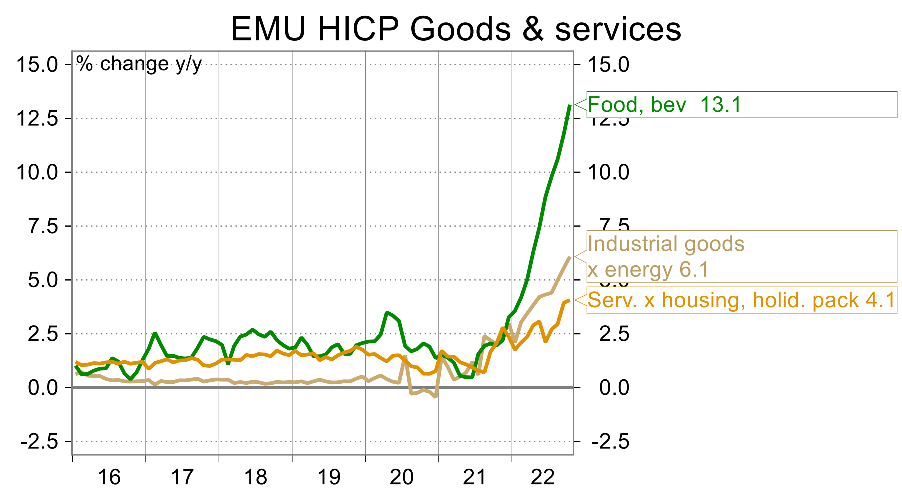
- But the peak is behind us, check two pages forward

And prices ex energy and food are accelerating too

Industrial goods x energy at 6.1% y/y, and services ex housing 4.1%



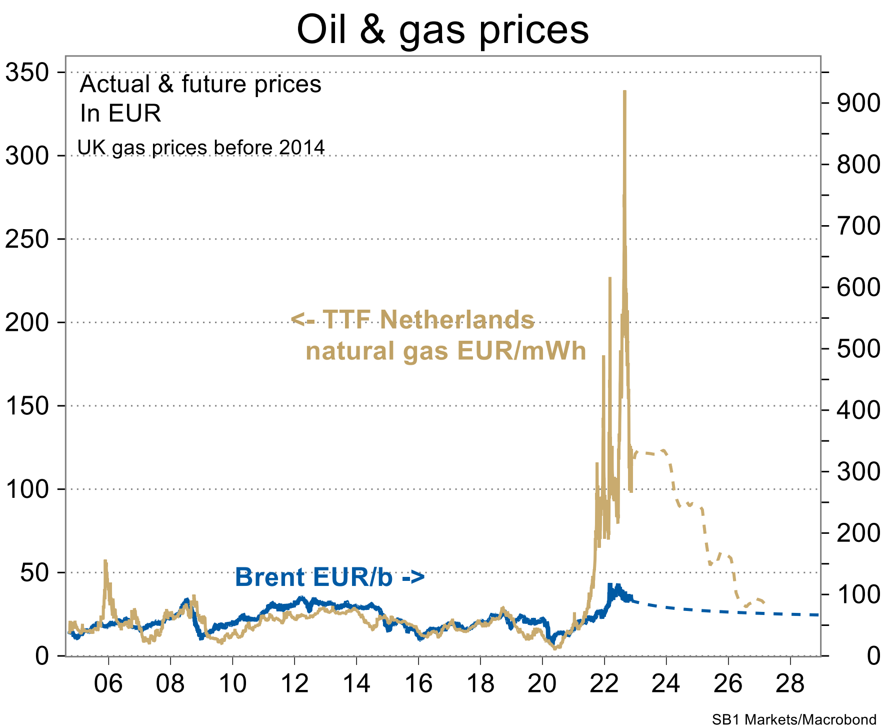


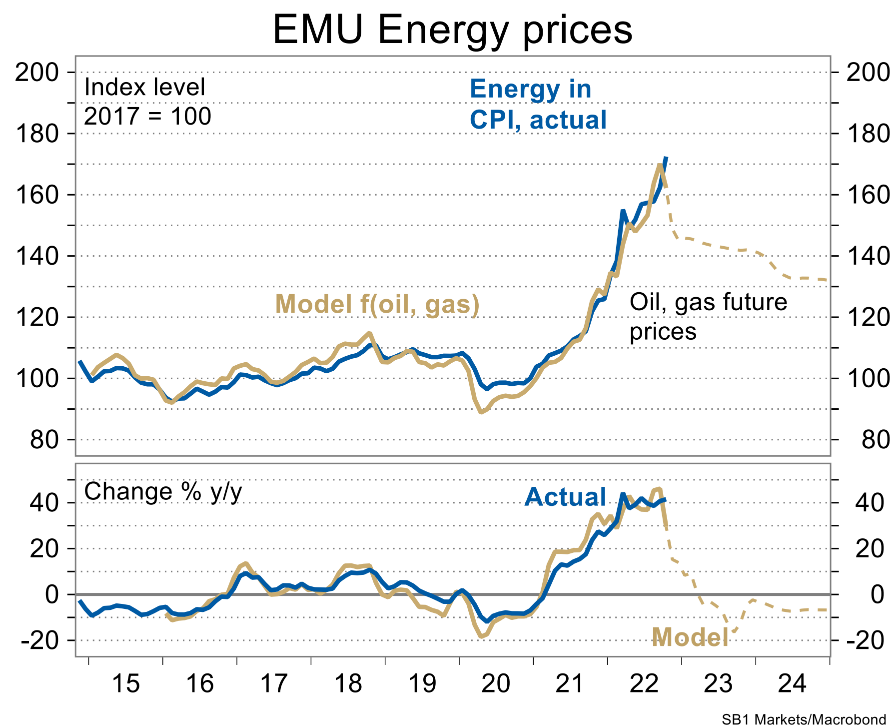


- **Industrial goods** prices increased by 0.5% in Oct, and are up 6.1% y/y. Still, these prices are up 'just' at a 2.4% path since 2019
- **Service prices** (ex housing, holiday travel) rose 0.4% in Oct, and these prices are now close to a 2% path vs the 2019 level too. Transport services, hotels/restaurants, education, and several other sectors contribute to the high service sector inflation

Gas, oil prices have lifted 'energy CPI inflation' up 41% but….

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



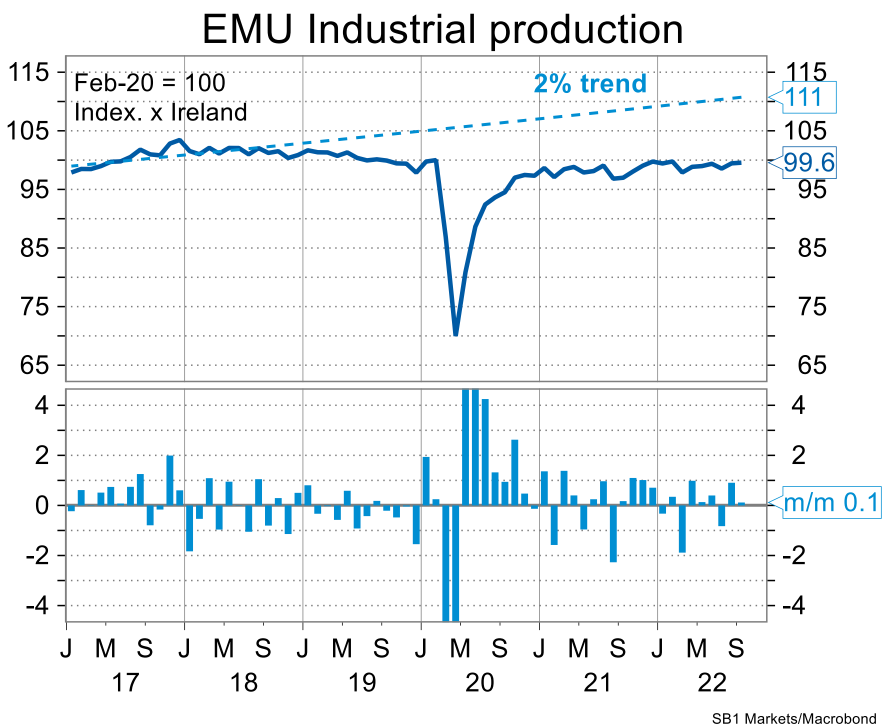


- The short end of the gas price curve has collapsed since the late August peak, and future prices fell substantially as well

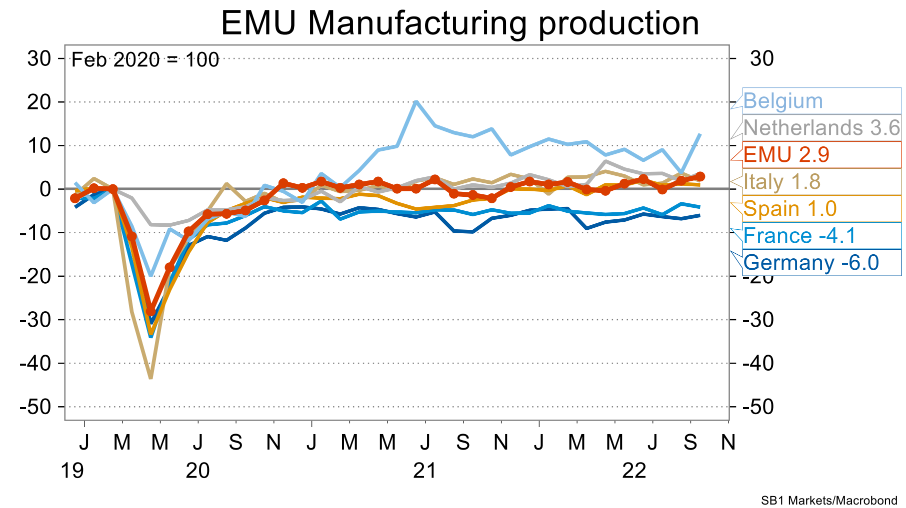
In these models we incorporate all direct impacts from changes in the oil price – as well as the impact from other factors that influence inflation which correlates to the oil price

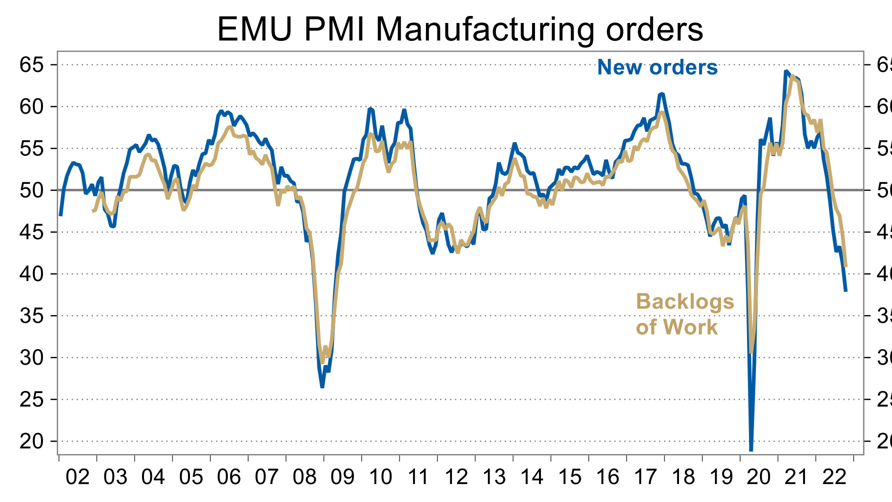
EMU industrial production above expectations in September, manuf. still strong

Total production up 0.9%, expected 0.3% - production ex. Ireland was up just 0.1%



- **Total industrial production** rose 0.9% in September, mostly due to a large increase in production in Ireland, but production also rose in Belgium, Germany, and the Netherlands. Production is still below the pre-pandemic level in France (-4%) and in Germany (-6%). Ex. Ireland +0.1%, weaker than we expected. **Manufacturing production** rose by 1.5%, and 0.7% ex. Ireland
- **The outlook** is not that bright though: In October, the manufacturing PMIs continued to fall further into contractionary territory in all of the big 4 countries – The new order sub-index is at the lowest level since 2009!





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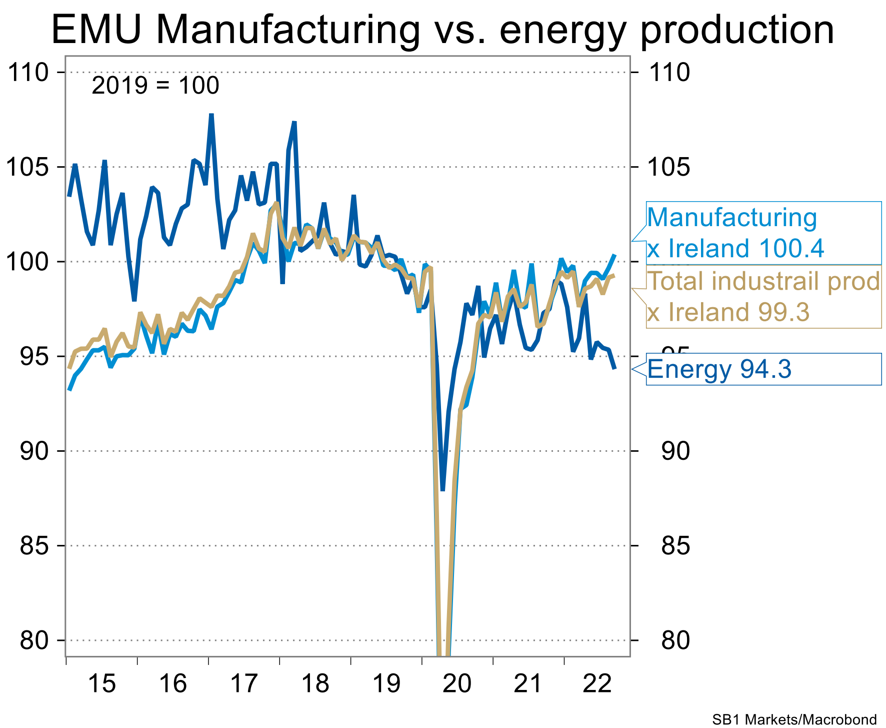
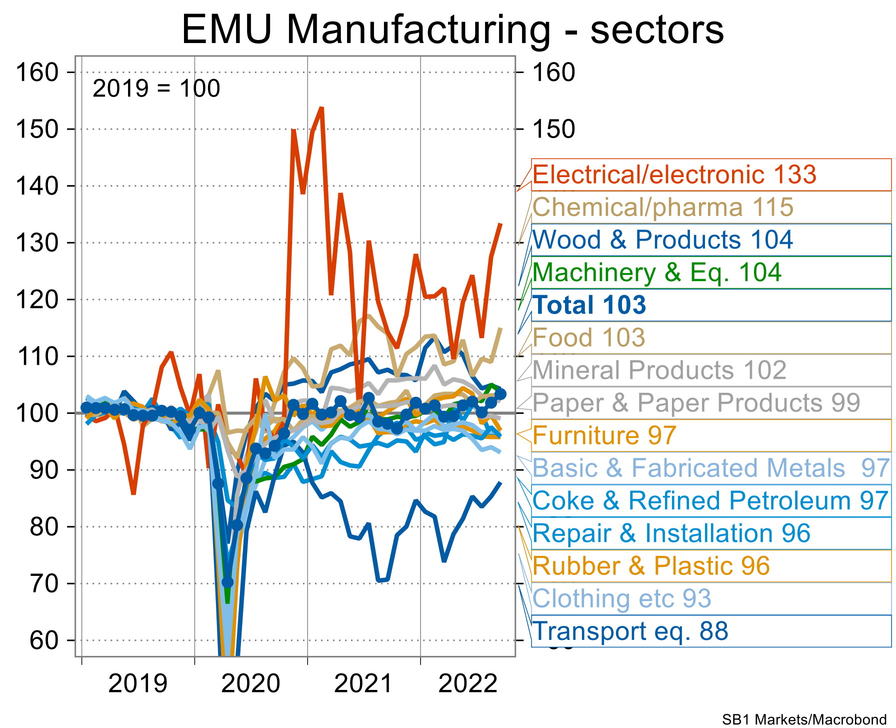
Energy production is down 5.7%, without hurting overall manufacturing prod.!

Manufacturing production is still trending upwards – even if surveys now have turned south

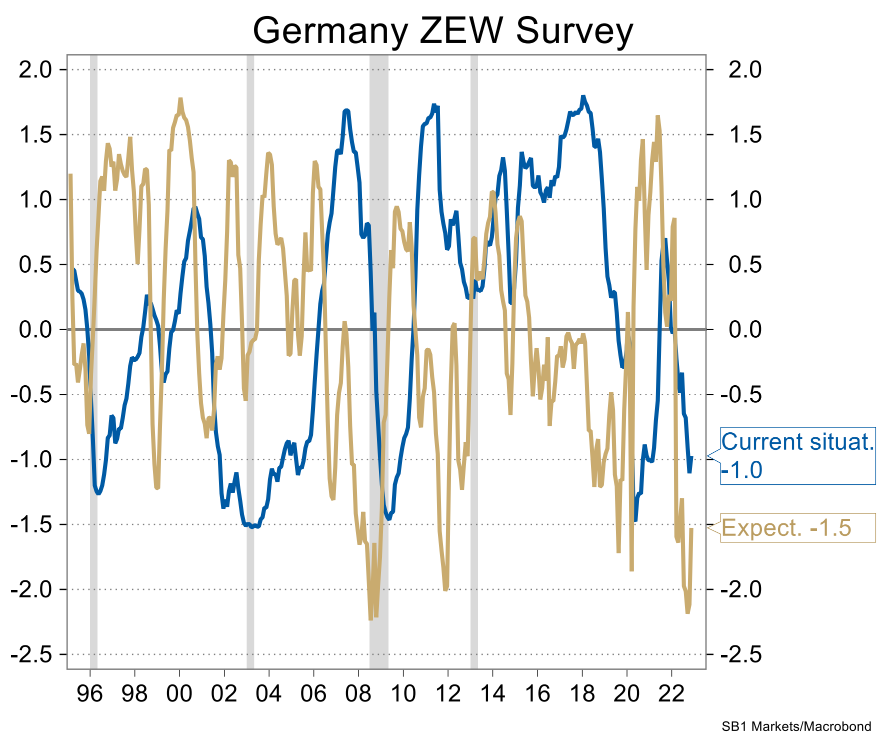




- Transport equipment is still a drag on production – but gradually less so (-30% a year ago, 12% now)
- Basic Metals are below par but not by much – even if energy costs have soared. Chemicals are still strong

ZEW expectations higher in November, but the sentiment is still dire

German investors/analysts are still extremely negative vs. the outlook

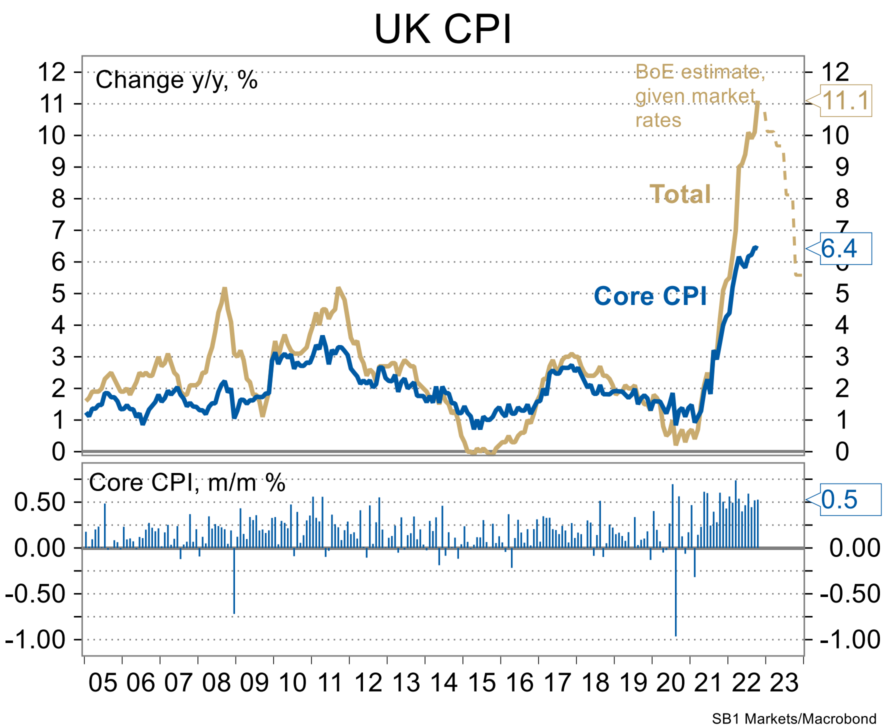


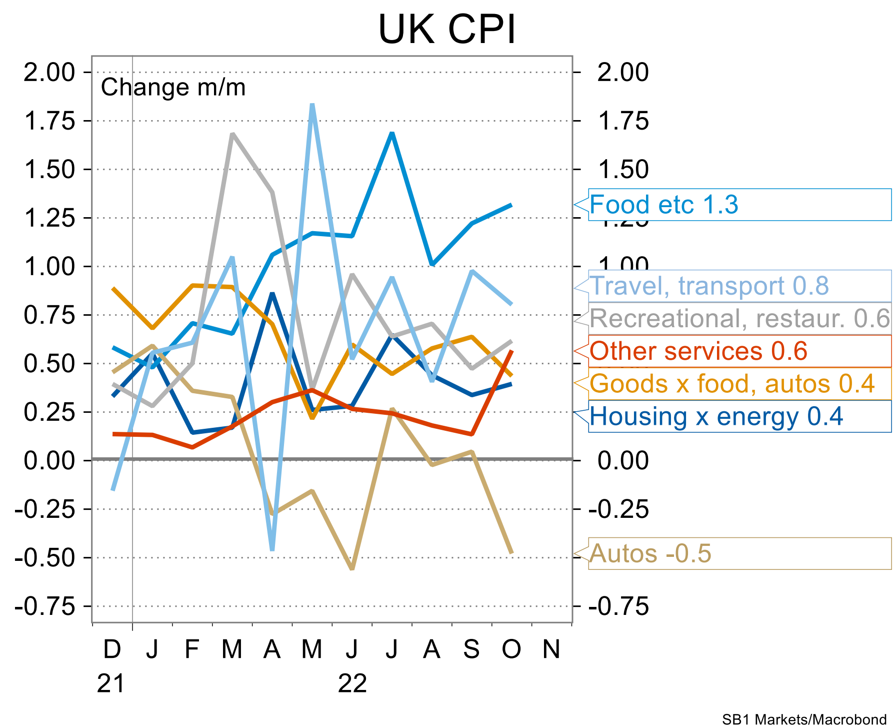
- The **ZEW expectation** rose 22.5 p to -36.7, expected up to -50. The level is 1.5 st.dev below average
- The **current situation** index was also higher, by 7.7 p to -64.5, to 1.0 st.dev below par (from -1.1)
- ZEW of course signals a deep recession in Germany
- Business surveys are not that negative, at least not yet

SpareBank 1 MARKETS

UK headline inflation above expectations again in October, highest since 1981

Headline at 11.1% - the BoE expects inflation to peak at 11% in Q4…

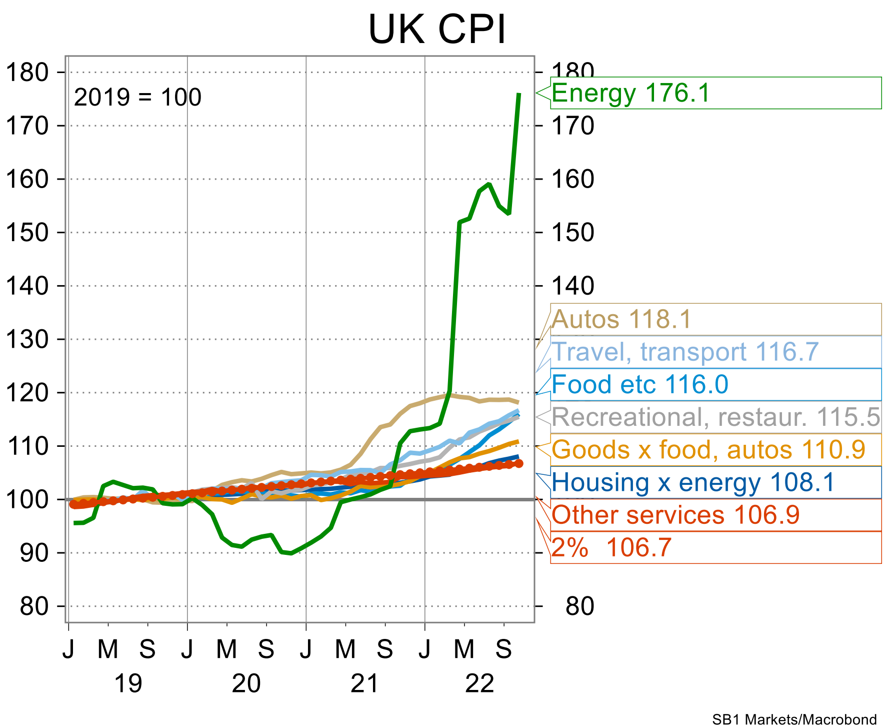


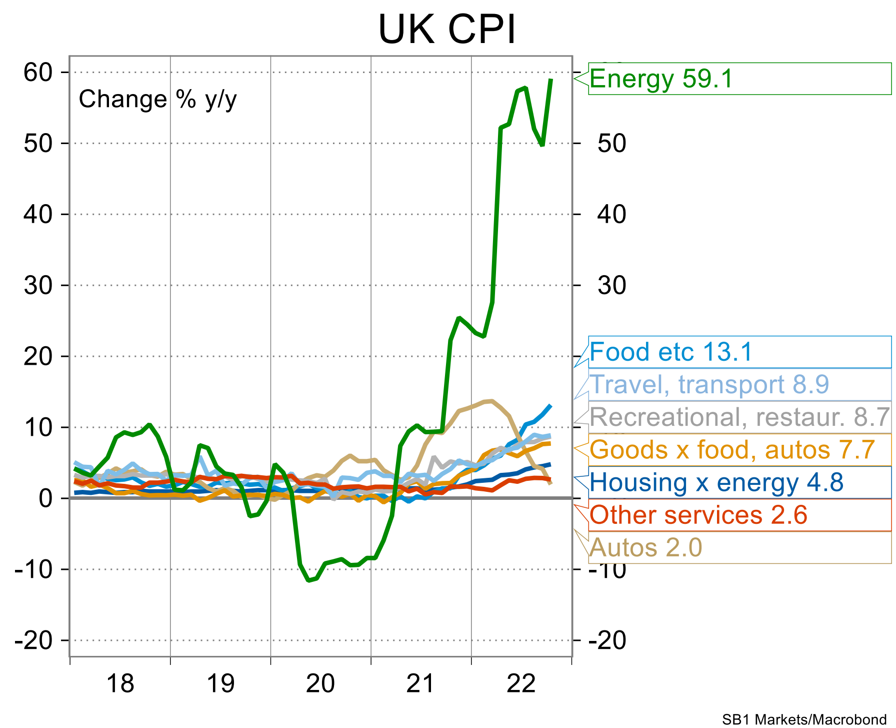


- **The total CPI** rose 2% m/m in October. The annual rate accelerated 1 pp to 11.1%, expected up 0.6 pp to 10.7%
- **Energy prices** were rose 14.8% in Oct, after falling 1% in Sept, but are up by 59% y/y and has lifted the headline y/y rate by 3.9 pp. The regulated price cap for energy is expected to stay in place until April 2023. Further energy subsides may lower inflation – if decided
- **Food prices** rose 1.3% m/m, and they are up 13% y/y (like in Norway), lifting the headline by 2.2 pp!
- The **core CPI** (ex food and energy) rose 0.5% m/m, and is up 6.4% y/y, unch. from Sept
- **Auto prices** are down 0.5% m/m and up 2% y/y
- **All major sectors** are reporting growth at or above 2%, and all up by more than a 2% pace since before the pandemic. This is BoE's problem, inflation is broad, and are also driven by home-made factors. The gas problem cannot be slowed by the bank, of course

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

… all main components are above the 2% growth path

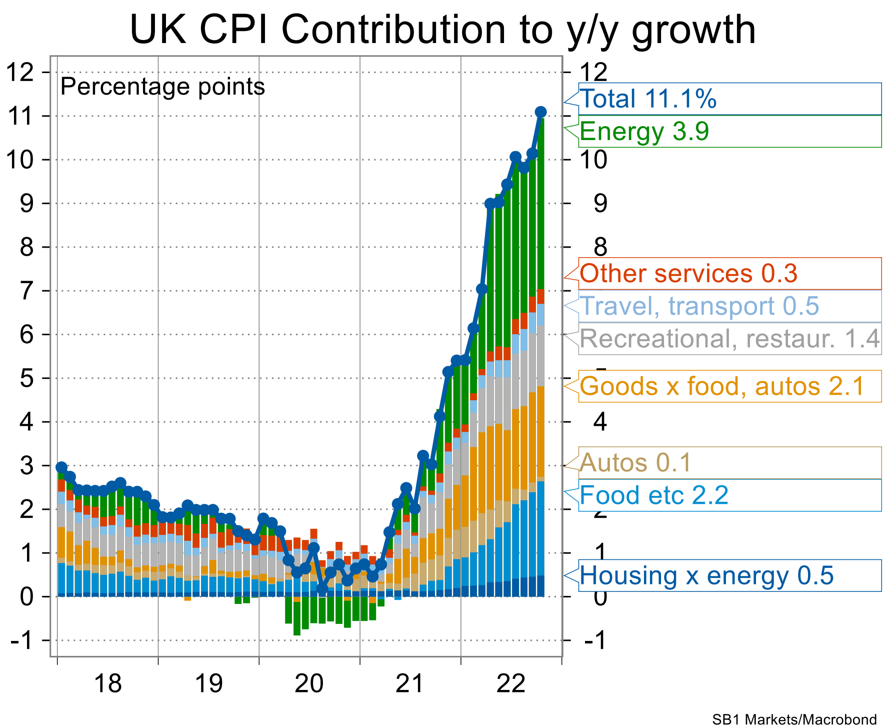


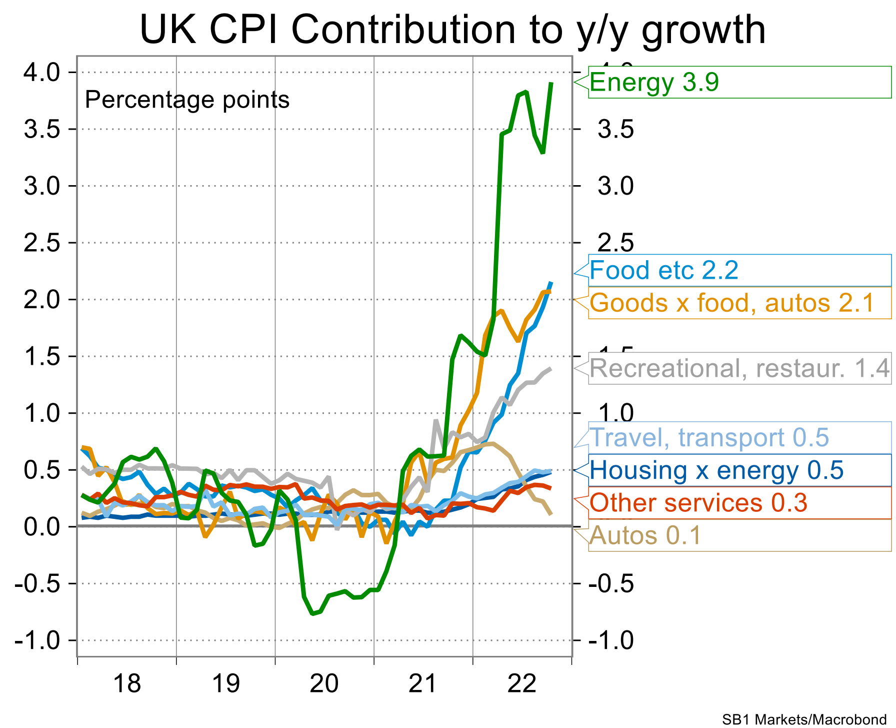


- **Energy prices** are up 59% y/y, much of it due to the 26% m/m surge in April, when semi-annual price cap adjustments were undertaken (the next adjustment is scheduled for next month)
- Some positive signs: Auto prices have peaked, and services x housing is up ‘just’ 2.6%

Energy is important, but the inflation problem is broad based

Food and goods are contributing 4 pp to the headline





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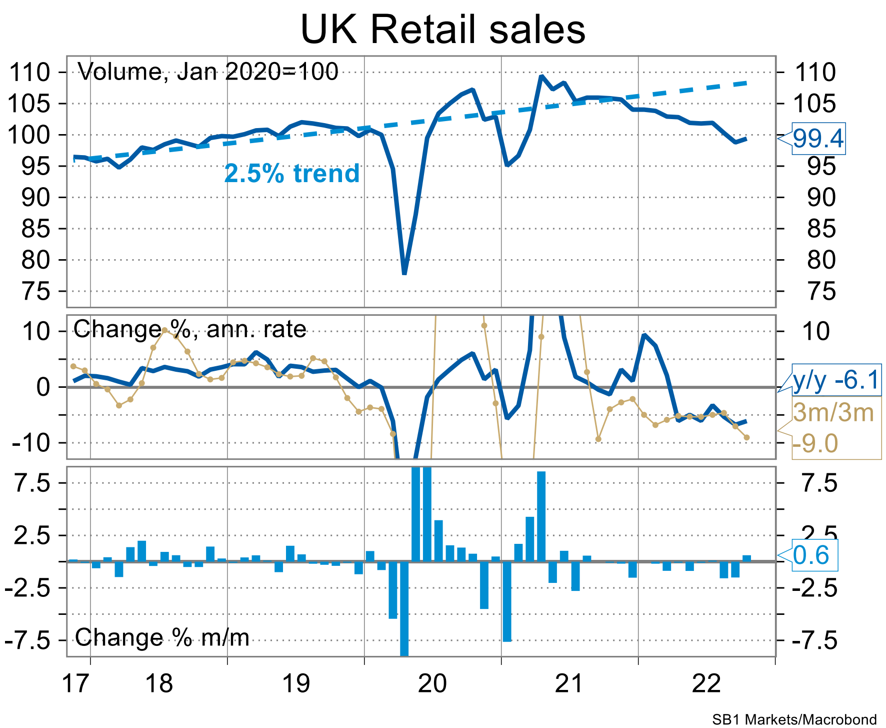
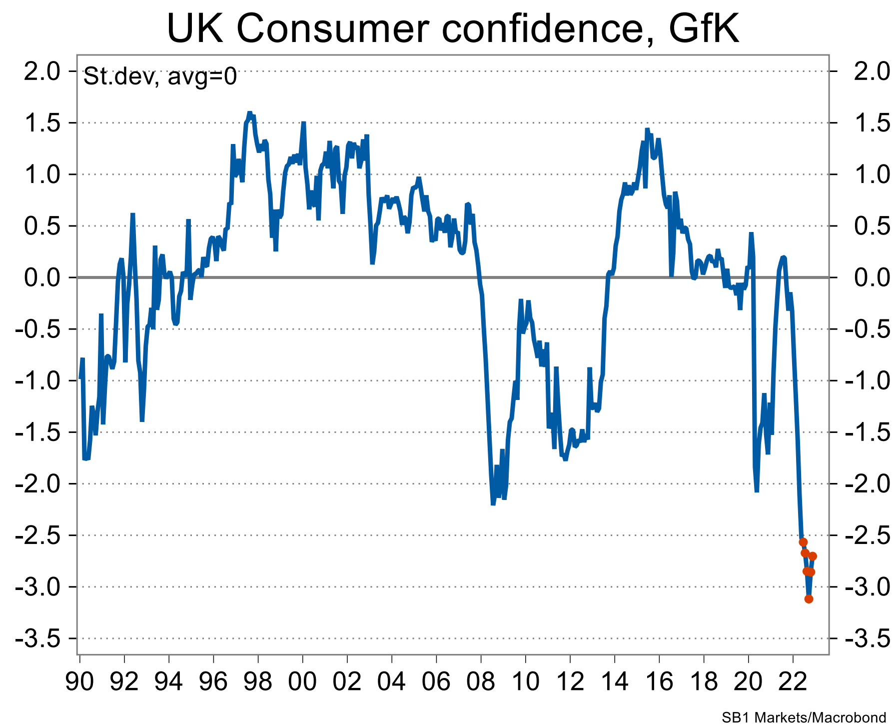
Retail sales up 0.6% in October, above expectations, but the trend is down

Sale fell more than 3% over the previous two months – and sales are down 6% y/y, -9% 3m/3m

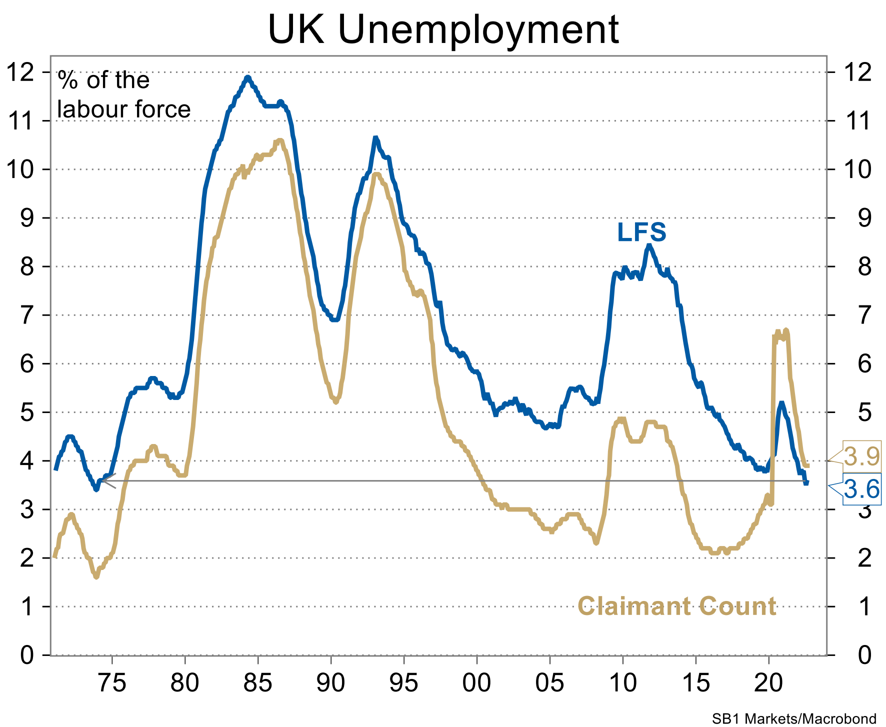


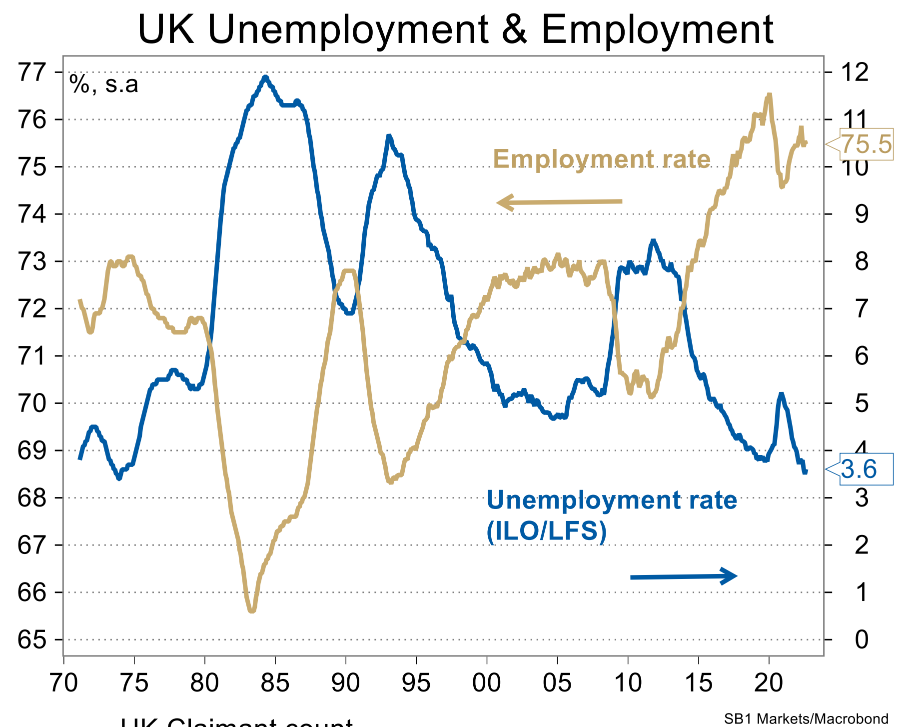


- **Retail sales** peaked Apr-21, and the gradual decline brought sales down to well below the pre-pandemic 2.5% growth path – and now even 0.6% below the pre-pandemic level! Sales are down at a 9% pace measured 3m/3m, a substantial drag on GDP growth
- **Consumer confidence** increased slightly again in Nov, to 2.7 st.dev below average, from -2.9 st.dev in Oct
  - » High inflation, and an unprecedented decline in real wages and higher interest rates are likely reasons for the historically low consumer confidence. Political turmoil is probably not helping. Besides that, the labour market is strong, the unemployment rate the lowest in 4 decades

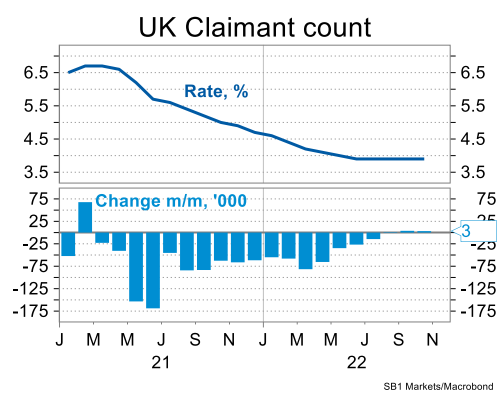
The unemployment rate marginally up, but claimant count below expectations

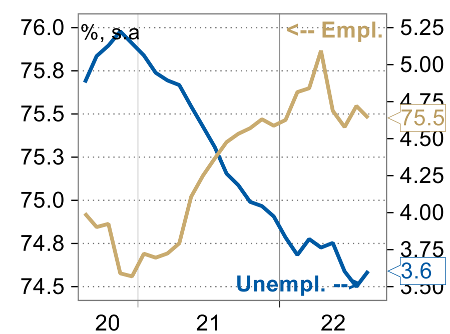
Payrolls are up, and wage growth is still accelerating – from a far too high level





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

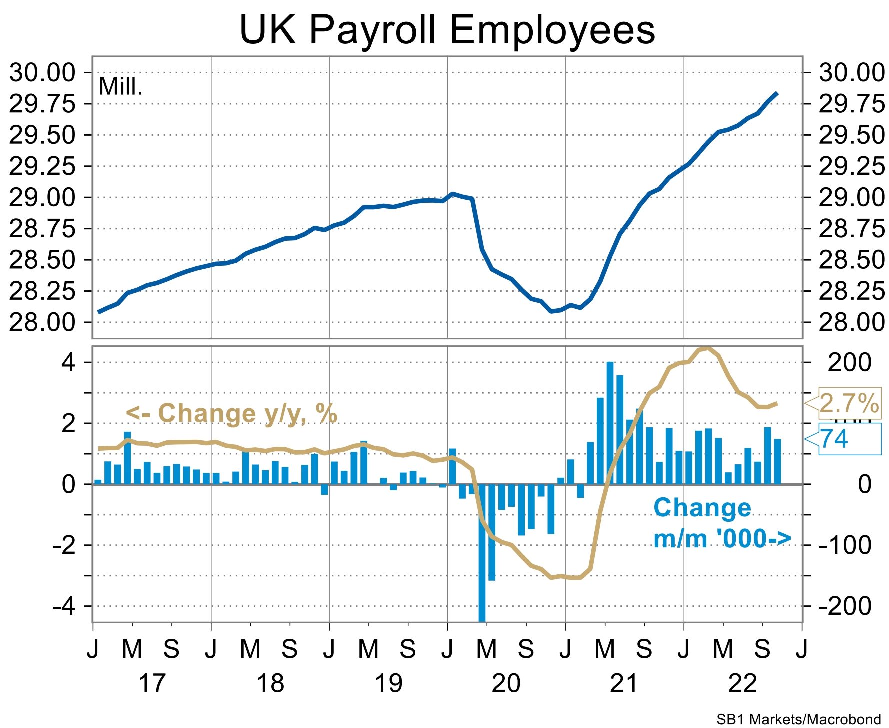


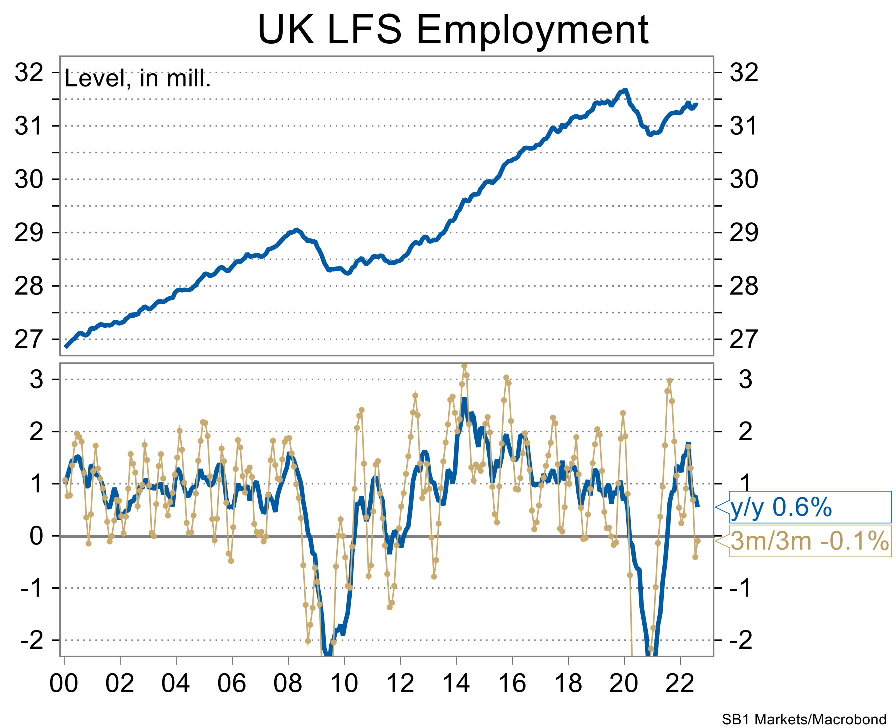


SpareBank 1 MARKETS

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

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

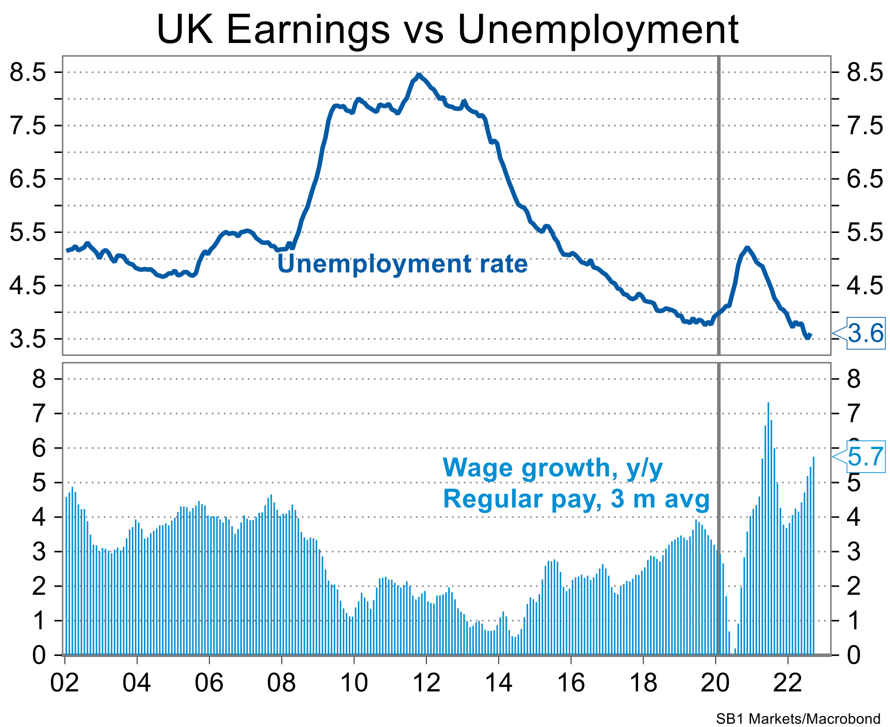


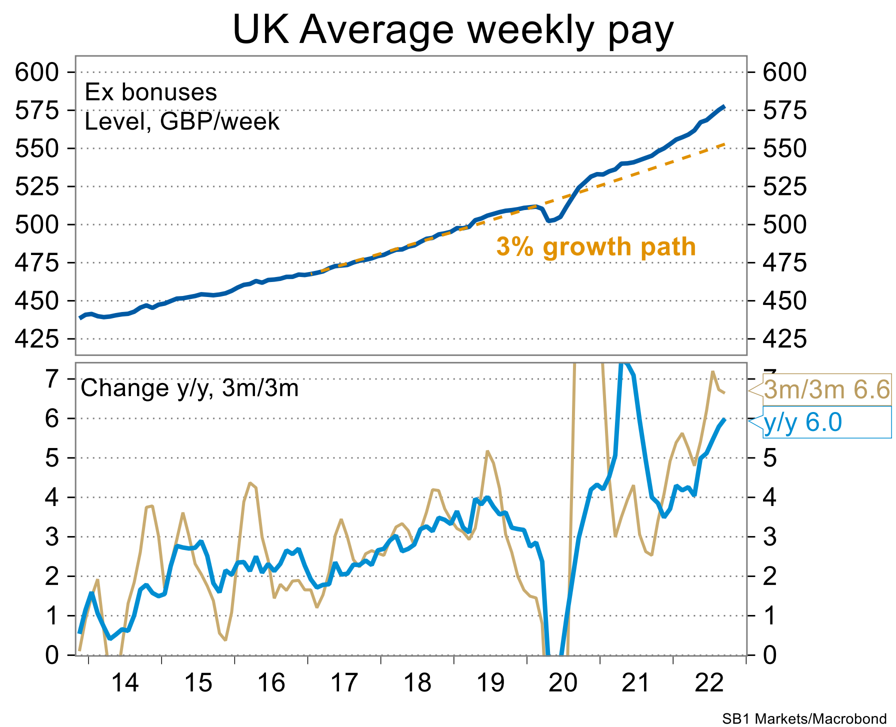


- Total employment measured by the LFS (‘ILO/AKU’) still trending upwards but monthly survey data are rather volatile
- LFS employment is still below the level before the pandemic, while the new payroll stats reports a 2.7% growth. The number of self-employed have fallen sharply, according to these two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

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

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

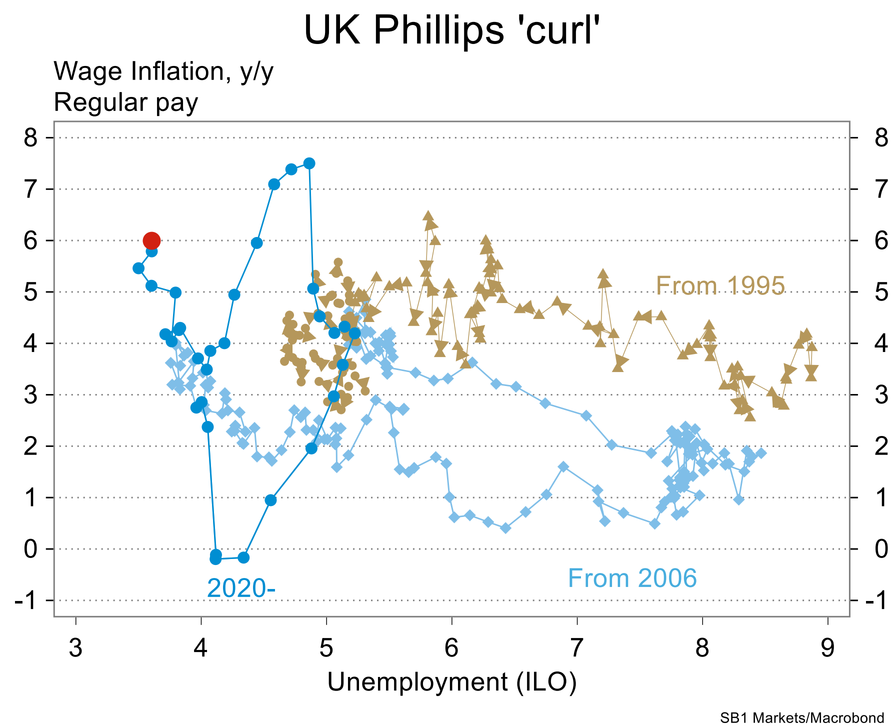


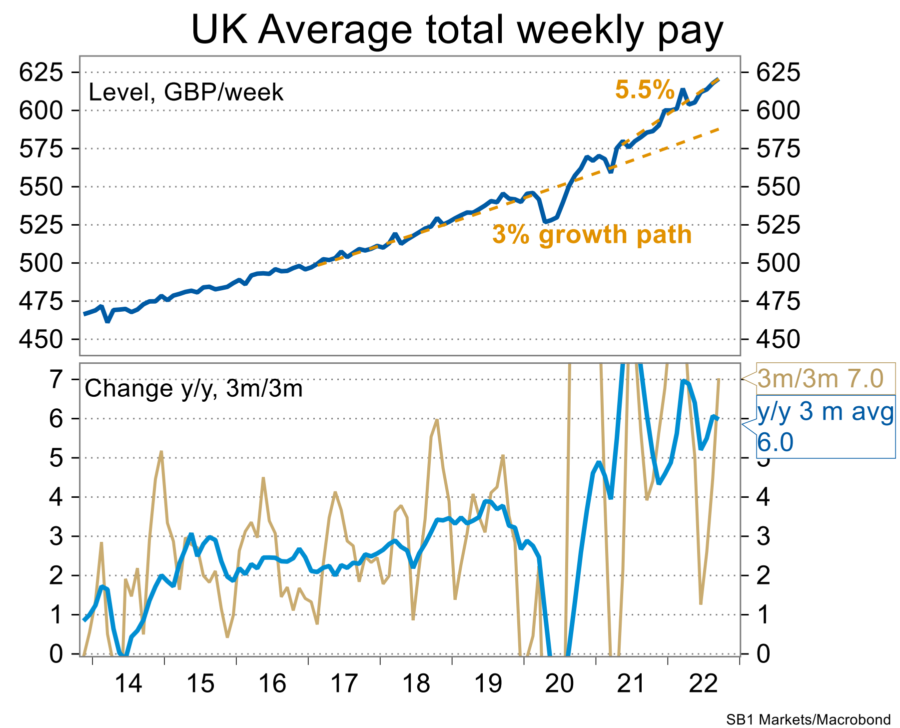


- **Annual wage growth** (regular pay, 3 m avg) accelerated 0.3 pp to 5.7% in September, expected up to 5.5%. Not smoothed, wages were up 6% y/y, and the underlying 3m/3m rate is at 6.6%
- **Including bonuses**, total wages are up 6.0% y/y (3 m avg), also 0.1 pp higher than expected (*chart next page*)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

Total pay, including bonuses, is accelerating rapidly

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

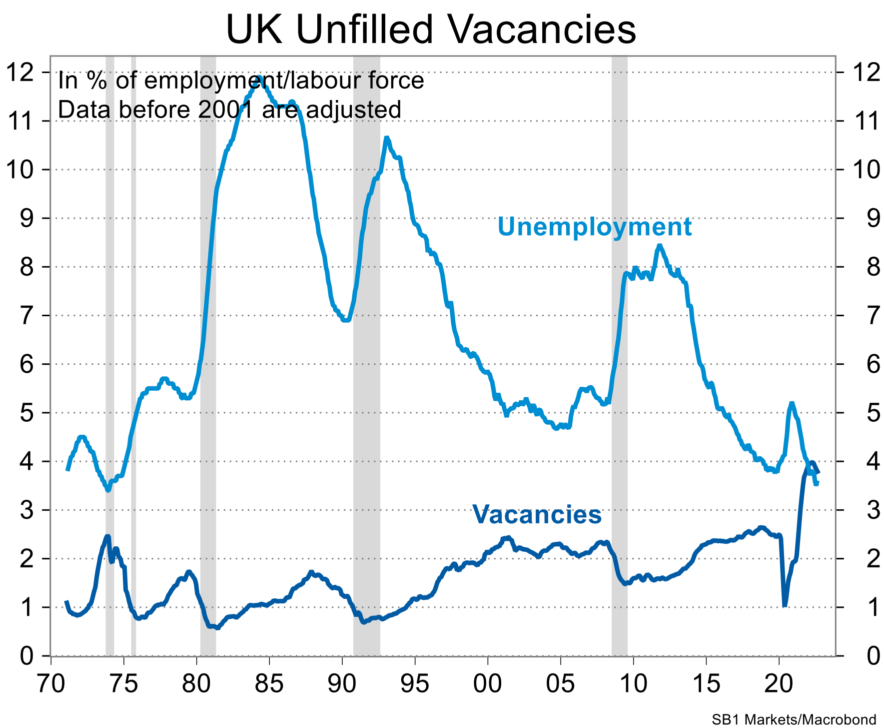


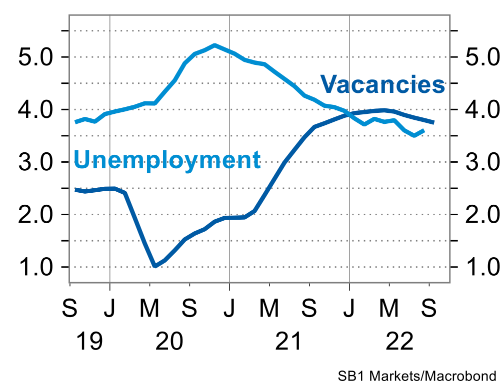


- Wages are on the way up alongside something that looks like a Phillips curve
- It is completely impossible to bring inflation back to 2% over time if wage inflation remains at 6%, probably even above 4%. With a 3% wage inflation rate, inflation was just marginally below the 2% target – and productivity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

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

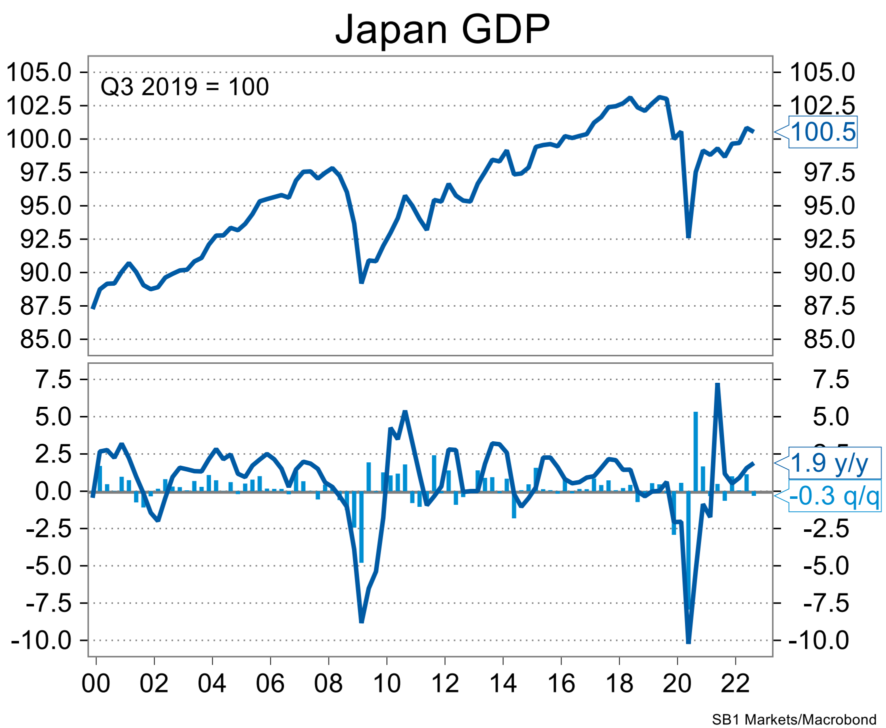
The vacancy rate has fallen marginally the past 4 months but remains extremely high

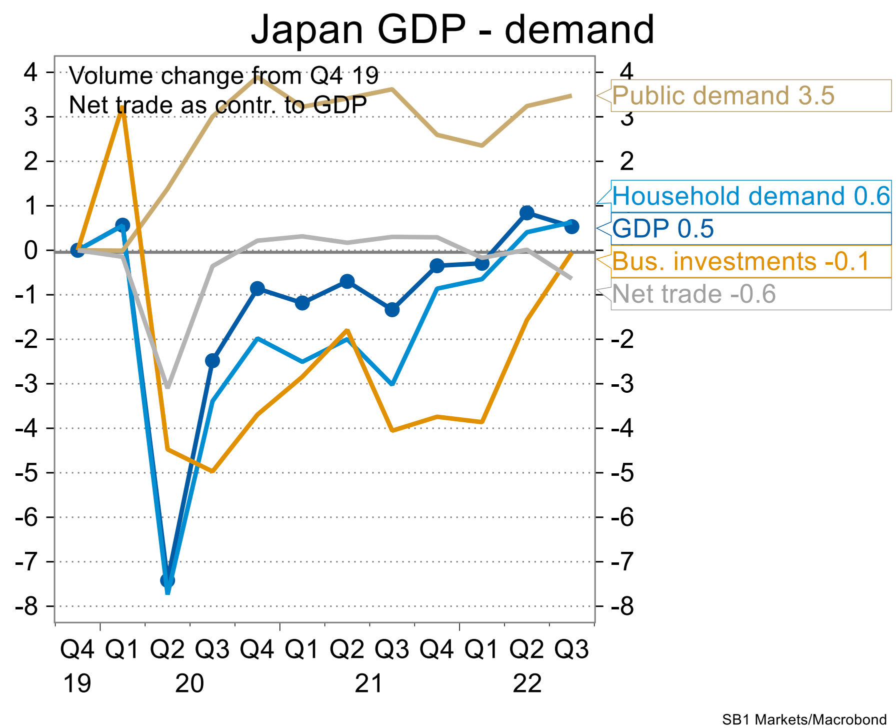




GDP down at a 1.2% (ann.) pace in Q3, but is trending up

Household & public demand, business investments contributed on the upside in Q3





- Q3 GDP growth at -0.3% was weaker than expected (+0.3%), but the growth in Q2 was revised up by 0.3 pp to 1.1%
- GDP is just 0.5% above the Q4-19 level, and Q4-19 was not an impressive starting point (partly due to the VAT hike in Oct-19). <u>GDP is 2.5% below the mid 2019 level!</u>

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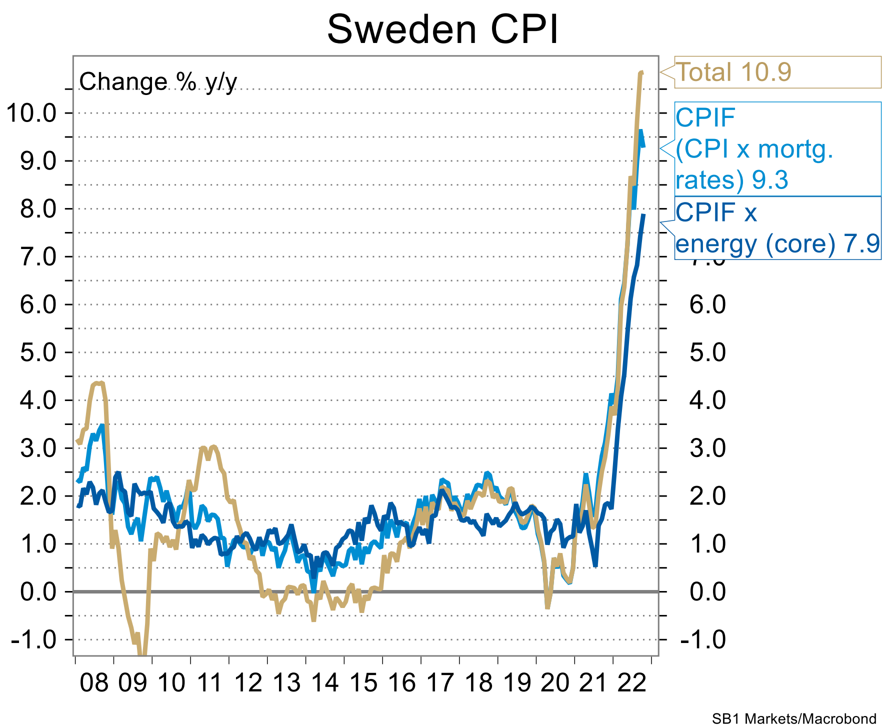
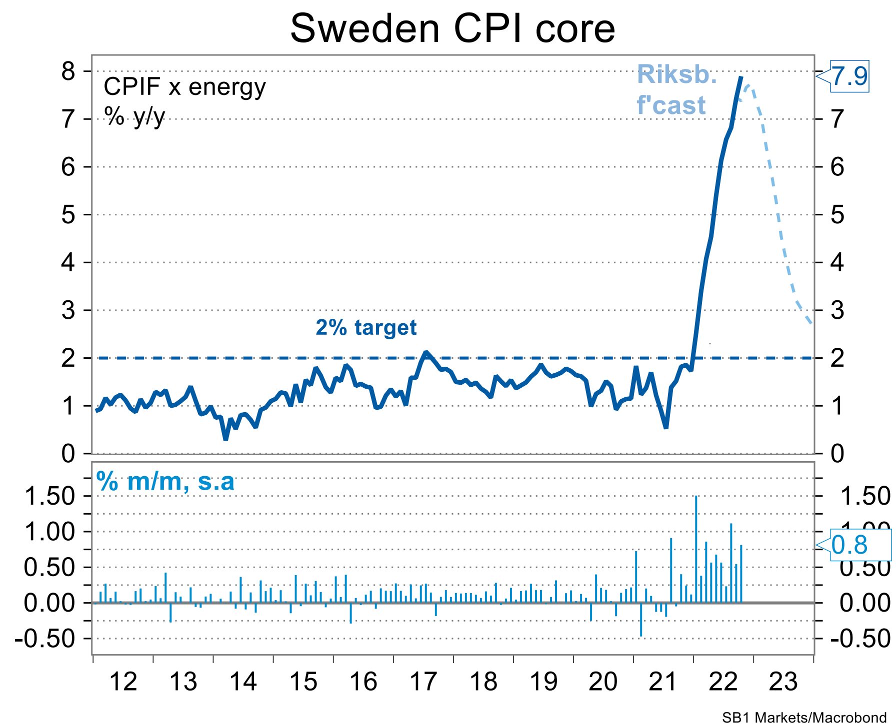
No peak in yet for Swedish inflation – core slightly above Riksbank f'cast

The headline was up 0.1 pp to 10.9%, expected 11.1%. Core CPI up 0.8% m/m, up 0.5 pp to 7.9%

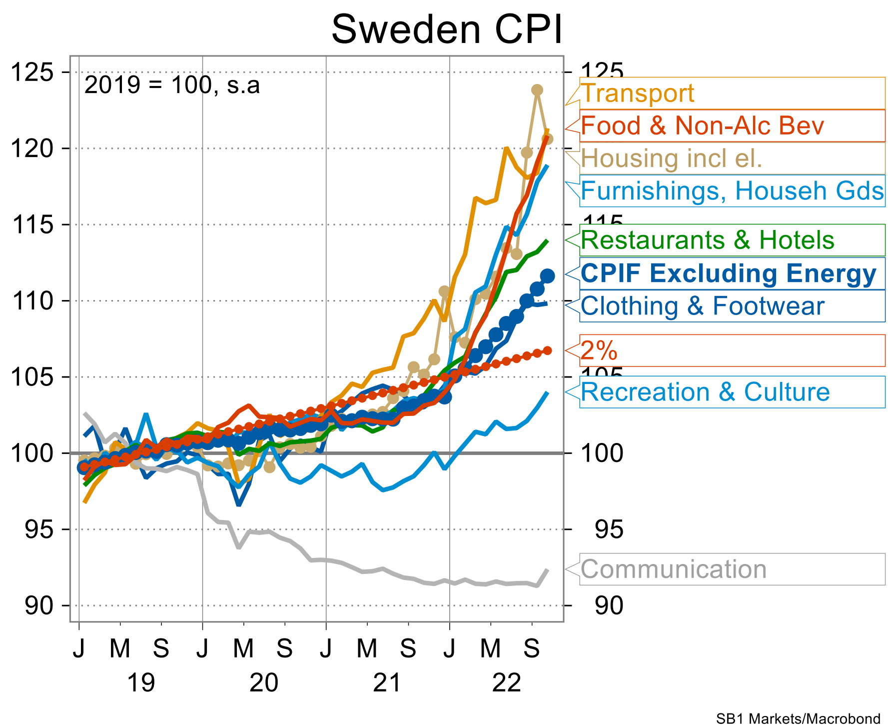


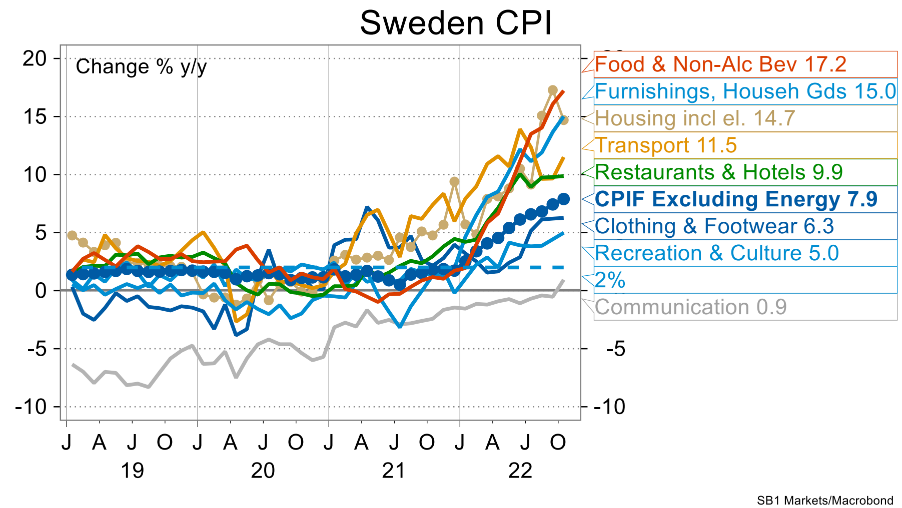


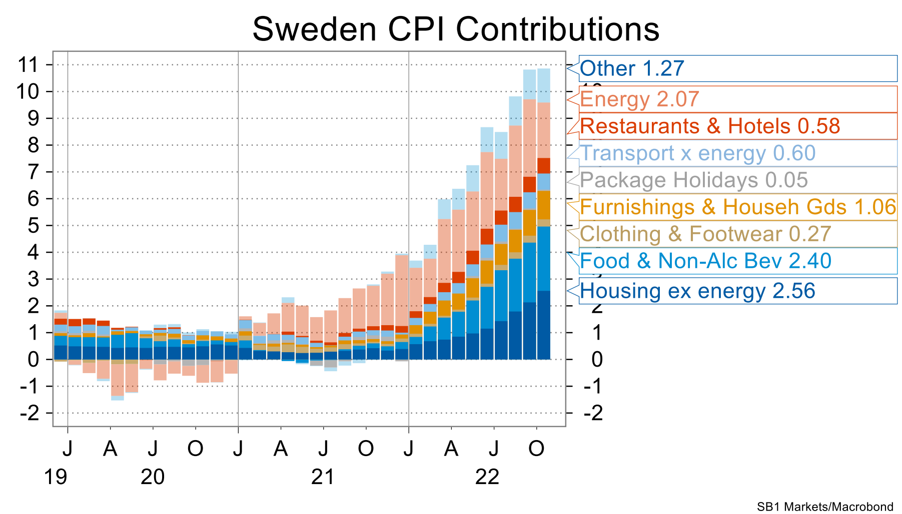
- **CPI-F x energy, the 'real core'**, rose 0.8% in October (seas. adj). The core rate has accelerated sharply recent months, to 7.9%, and the latest print was slightly higher than the Riksbank f'cast from Sept. (Food prices are included in the core)
- Why is inflation so high? Housing incl. energy prices are up 15% y/y, food prices are up 17%, furnishings 15%, hotels & restaurants 9.9%!
  - All other measures of underlying inflation are sharply up – and at the highest level in some 30 years
  - Until Q4 last year, inflation was pretty well explained by higher energy prices, now many more elements are on the move upwards
- **The increase in inflation is broad**, but the biggest contributors on the upside are energy (although electricity prices were down in October), housing (larger mortgage pmts), and furnishings
- **The Riskbank surprised markets** and hiked by 100 bps at their last meeting, and signalled a 50 bps as the most likely outcome in November. The market, however prices in another 75 – 100 bps

Inflation in Sweden: a broad acceleration

Just communication is below 2% y/y, and is together with recr/culture, below a 2% path since 2019

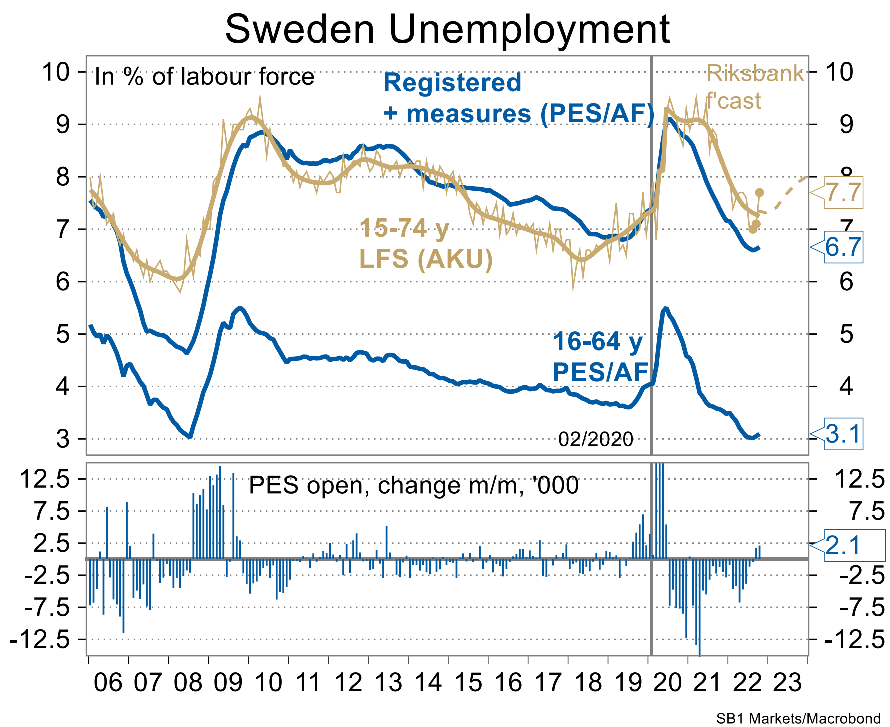


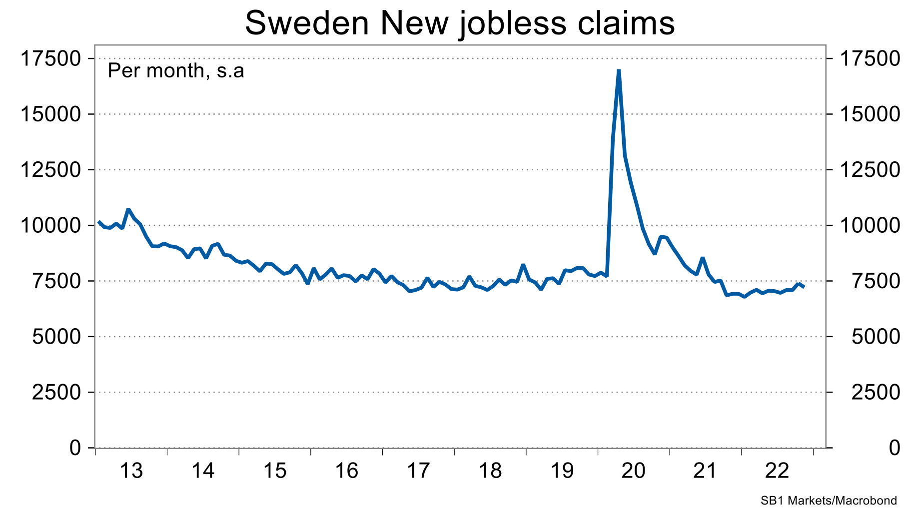


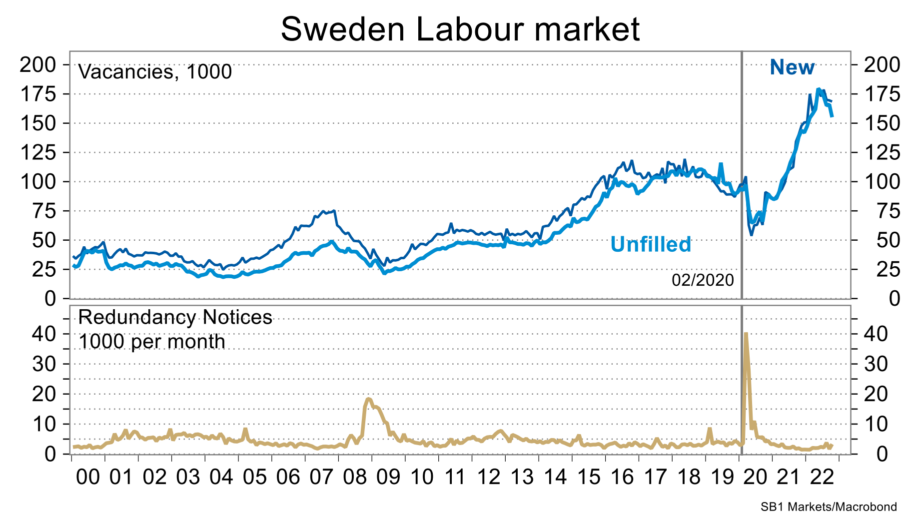


The cycle has turned? PES Unemployment up for the second month in October

AKU unemployment up too; vacancies are coming down, but remain at a high level



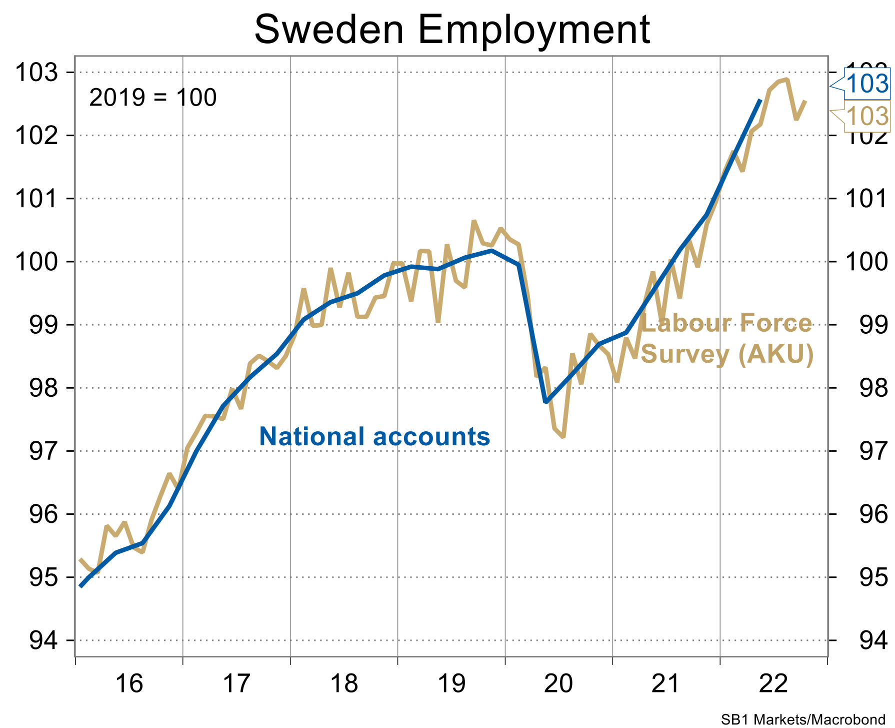


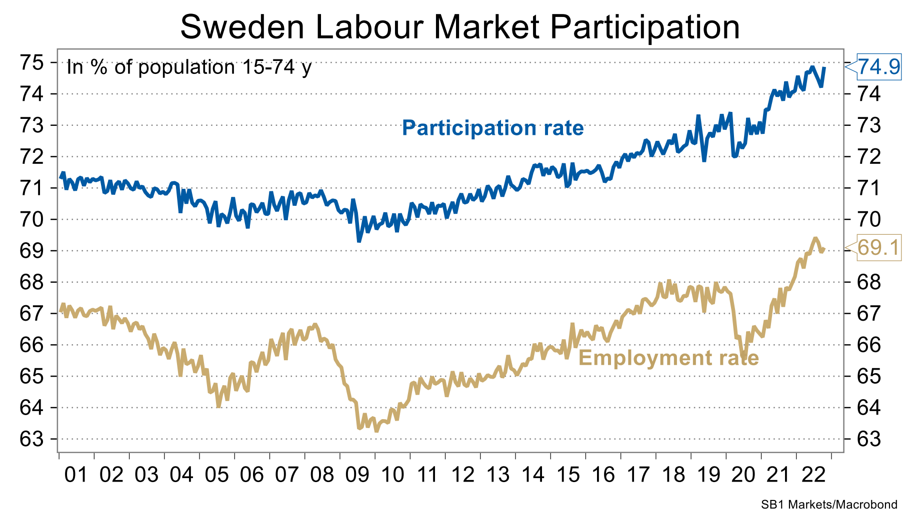


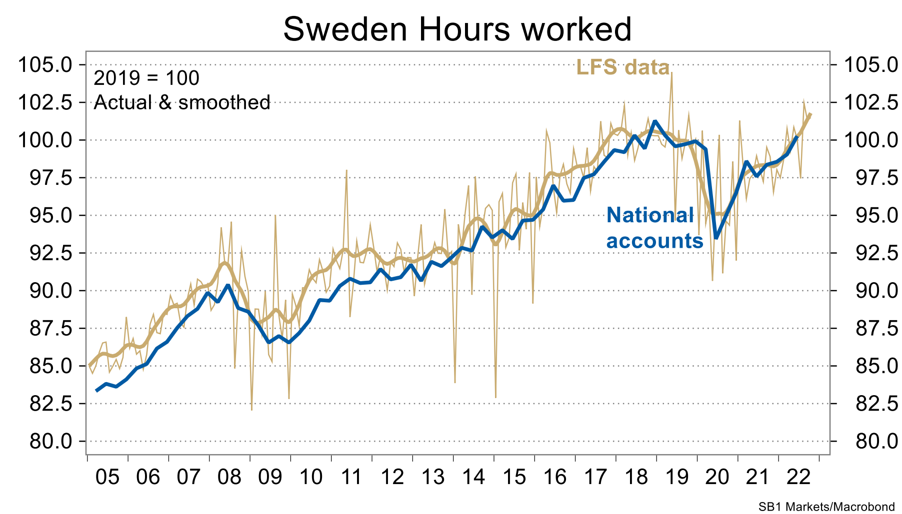
- The **'open' registered unemployment rate** at 3.1% is far below the pre-pandemic level – close to the lowest level since 1990, before the housing/banking crisis. The no. of unemployed has increased marginally in both September and October. In addition, the inflow of **new jobless registrations** has increased slowly since the start of the year
  - » **Unemployment including labour market** measures has fallen to 6.7%, while AKU unemployment increased to 7.7% in Oct, from 7.1 in Sept
- The number of **new vacancies** fell marginally in October, while the no. of **unfilled vacancies** also declined, and somewhat more

Employment, participation and hours worked were all up in October

However, the LFS data are far too volatile short term

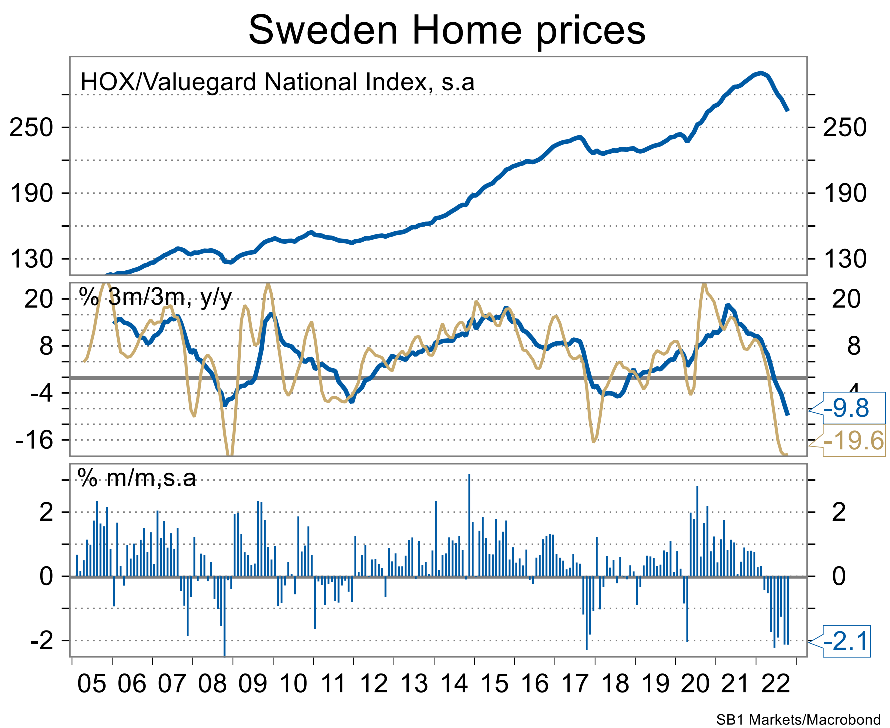




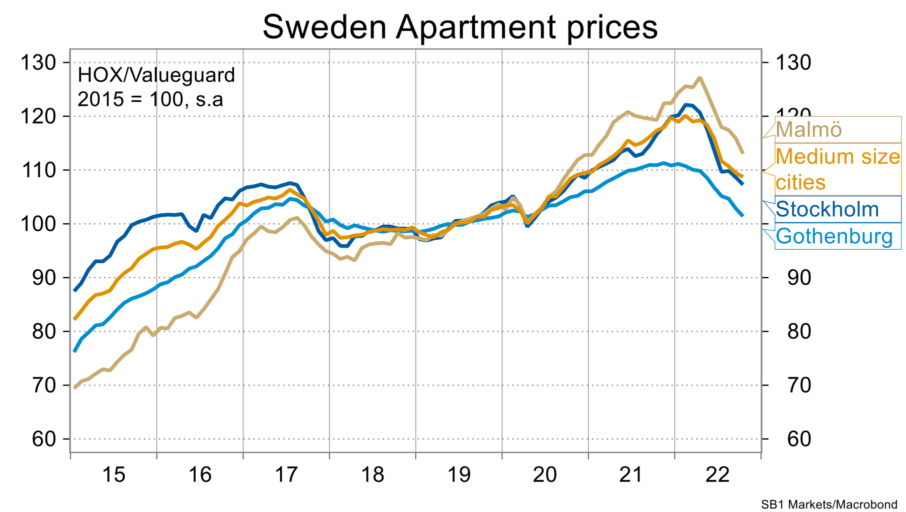


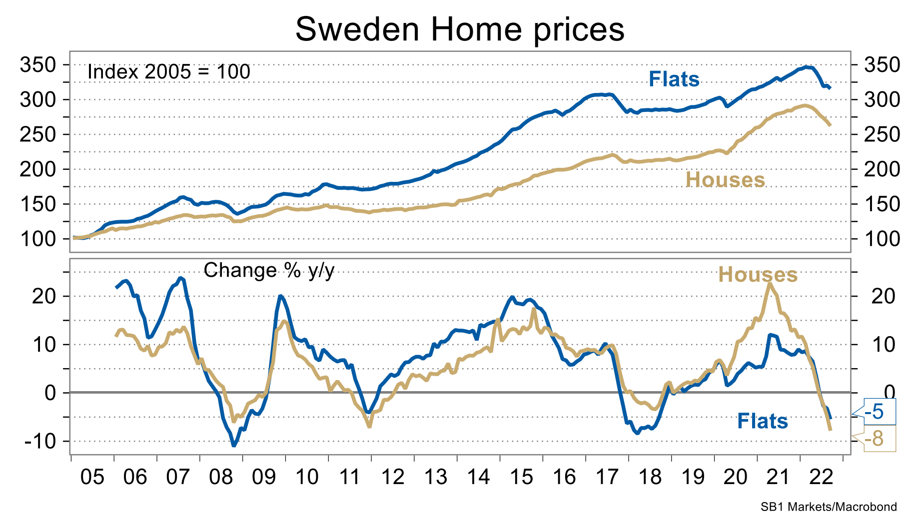
Swedish house prices kept falling in October, down 12% from February

Prices fell 2.1% in Oct, the 8th decline in a row, and this week the Riksbank will hike again



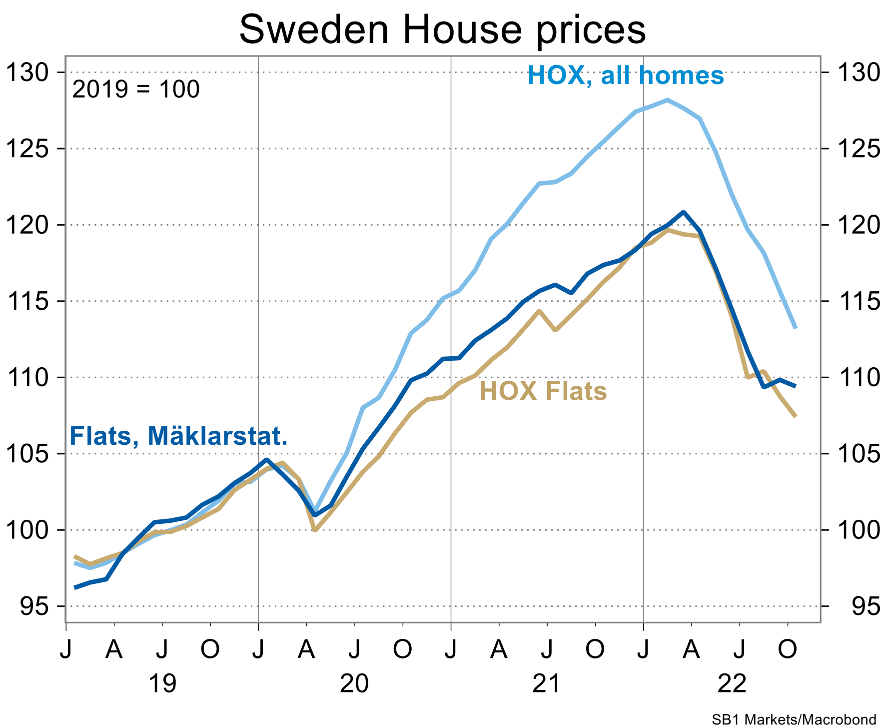
- **Prices are down 11.7**% from the peak in February, according to the HOX/Valueguard index. Apartment prices in Stockholm are down by the same amount
  - » In Oct, apartment prices in Stockholm fell just 1.3%%, Malmø was down 2.5%. House prices fell faster than flats
- **The annual rate** declined to -9.8% from -7.0% in Sept
  - » The underlying price growth (3m/3m) is now <u>-20%!</u>
- The **Riksbank's** abrupt change of tack in late April has no doubt hit the housing market hard. The rest of the real estate sector is hit by higher long term rates, and the sharp widening of credit spreads

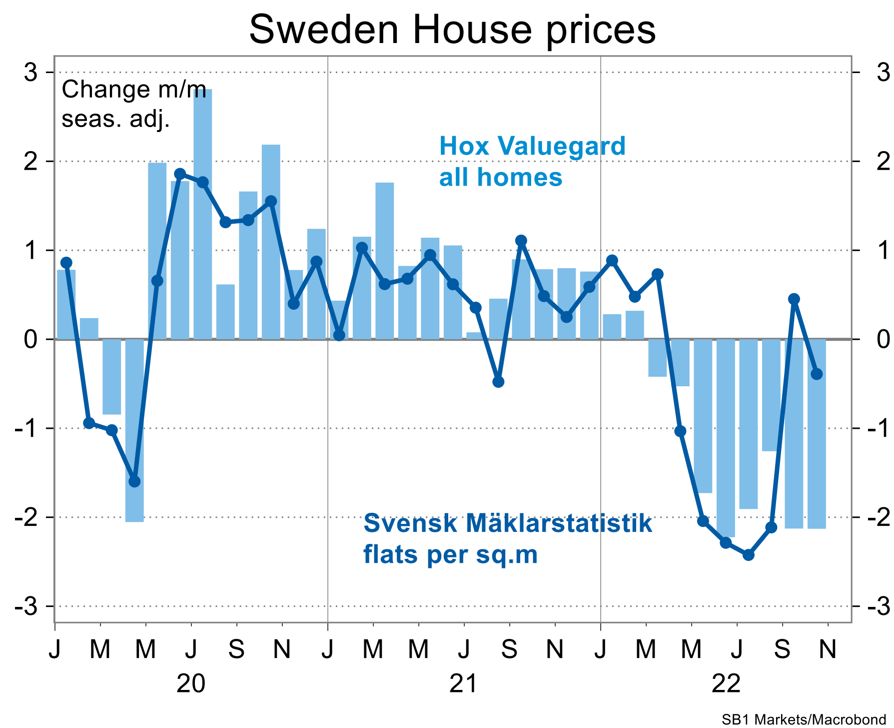




A x-check with (lagging?) Svensk Mäklarstatistik (realtors stats)

The realtors reported a 0.4% decrease in apartment prices in October (after +0.4% in Sept)





- If anything, the realtor index is lagging the HOX Valuegard index, not leading

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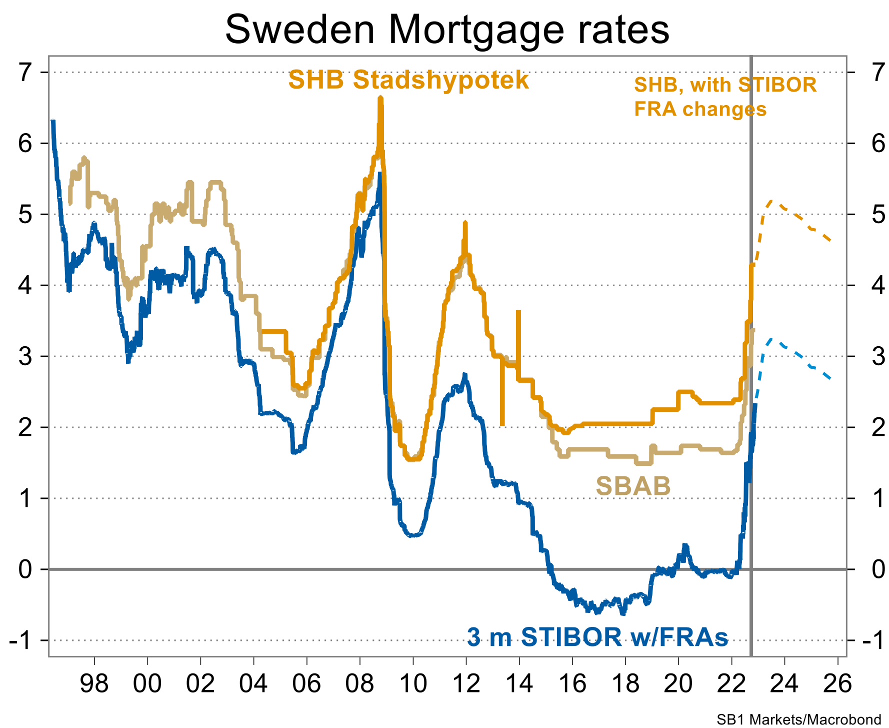
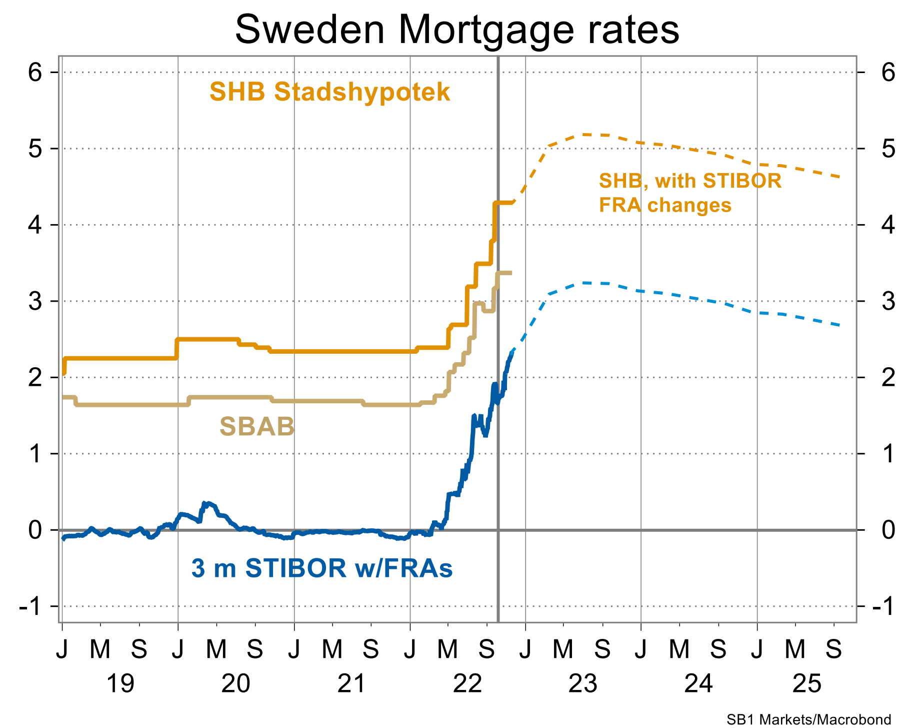
Mortgage rates are climbing at a murderous pace – and more to come

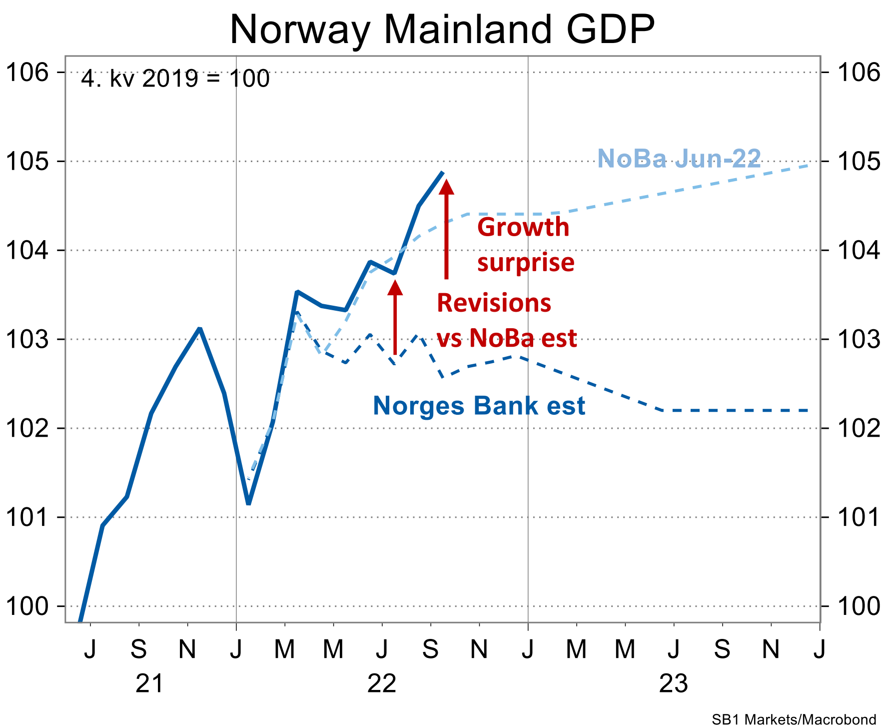
At least according to the FRA market. Mortgage rates have increased more or less in line whith STIBOR





The Times They Are A-Changin'. And the history too! Once more

September GDP 2.5% higher than NoBa assumed in September

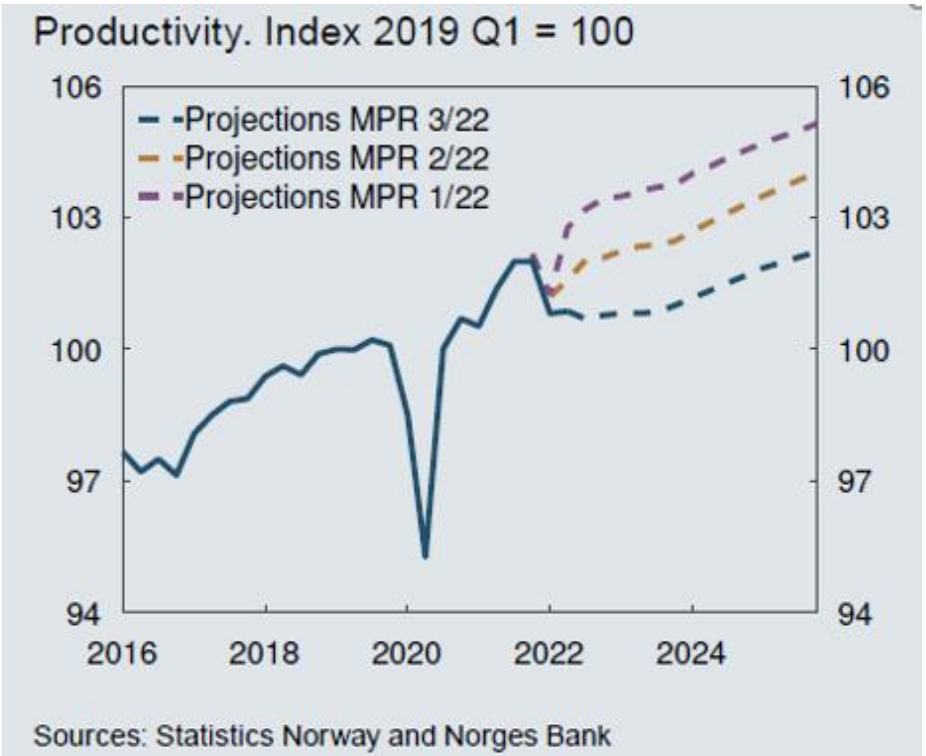


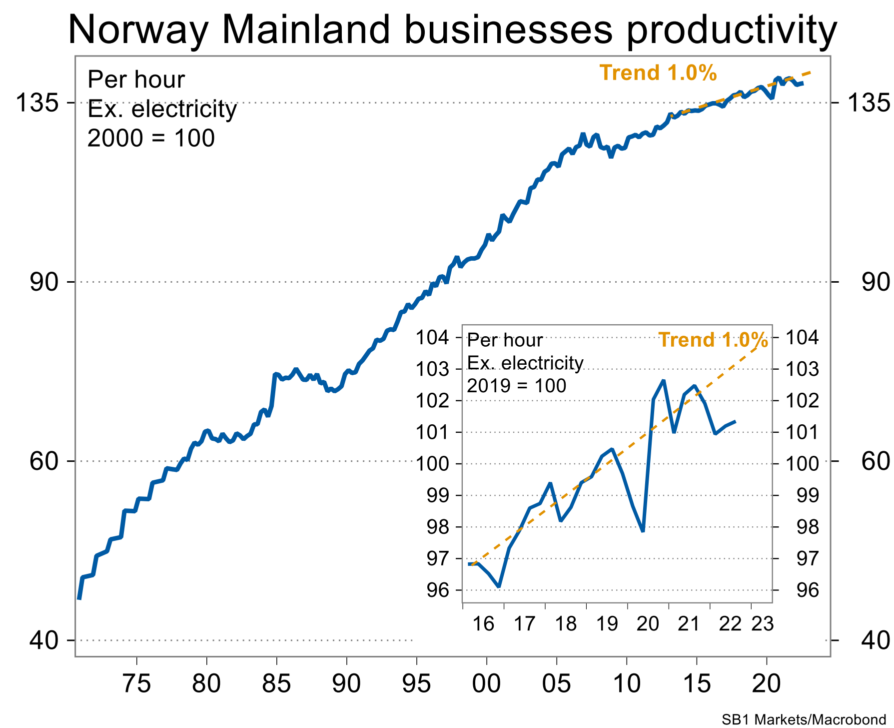
- The likelihood for a 50 bps hike in December has increased. Growth is stronger, inflation is higher and the labour market is tighter than expected. However, until further notice, we expect the bank to 'wait and see'.
- Labour and house price data, as well as NoBa's regional network are the most important data point ahead of the Dec 15 NoBa meeting

- **Mainland GDP** was once more revised upwards and grew much faster than expected in September, by 0.5% - even if electricity production fell sharply (0.8% ex. el), vs an expected 0.3% decline. In addition, August was revised up – and GDP in September was one year's normal growth higher (2.5%) than Norges Bank assumed in the MPR, in published September. Just above 1 pp is due to revisions of GDP since NoBa published its f'cast in September (the lower arrow), and more than 1 pp is due to stronger growth than assumed in Aug and Sept (the upper arrow)
- **In Q3,** GDP grew at a 3.3% pace (annualised) or 0.8% annualised, expected 0.4%. Norges Bank's f'cast -0.1%. Production rose in most sectors – and most demand elements contributed on the upside in Q3, barring consumption of goods and housing investments. 'Mainland' inventories contributed by 0.3 pp of the 0.8% growth rate
- **What to make out of this?**
  - » First, the **interest rate hikes** have not beaten the economy down. However, data a so far just through September, and the average signal rate in Q3 was 1.5%. Households' actual interest rate payment were still subdued. The 'long and variable' lags between changes in signal rate and the final impact in the economy are (always) an explanation if higher rates do not work – and for 'wait and see'. Still, the momentum in the economy is no doubt far stronger than anybody, NoBa included, expected some few weeks/months ago
  - » **Unemployment** in Sept (& Oct) was just 0.1 pp below NoBa's 1.7% f'cast. Thus, the production potential must be significantly higher than modest NoBa assumption, following the Bank's sharp downward revision of productivity both in the June and September MPRs (check next page). Productivity is still not impressive, but better than NoBa assumed – which is good news
  - » **The tight labour market** has not yet had any impact on wage inflation – which we expected would happen through 2022. Wage inflation runs at 3.5% – 4%. Even so, as productivity is flat (at best), unit labour cost inflation is running at a level that is too high to reach the 2% inflation target, even if import price inflation should return to a normal low level, inflation will not over time return to 2%

Productivity growth is dismal but slightly better than NoBa feared

Productivty in Mainland businesses have fallen well below the 1% trend path (from 2013)





- ... And have fallen slightly recent quarters, at least for Mainland businesses in aggregate

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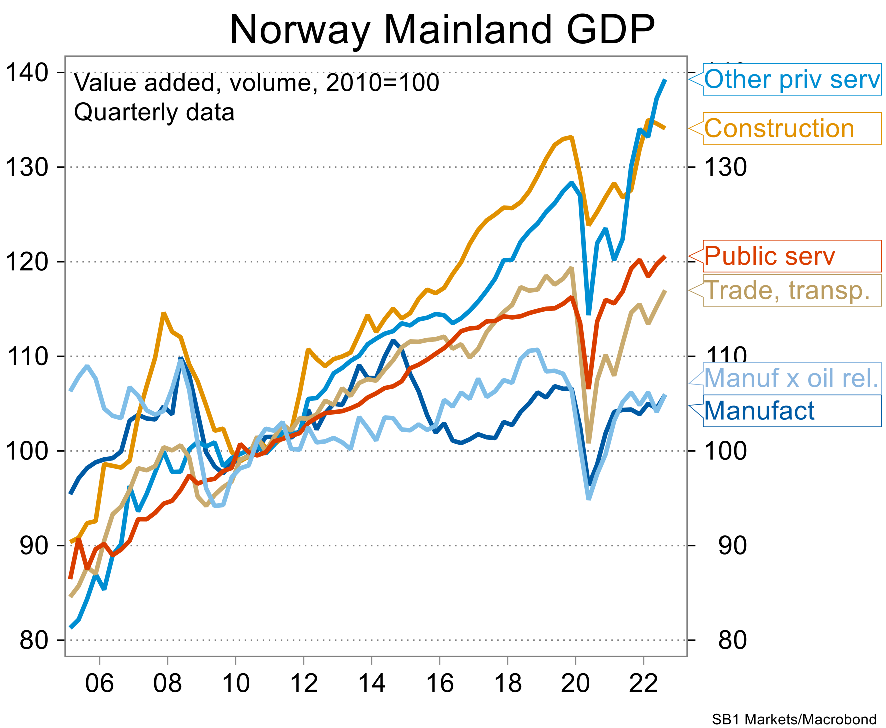
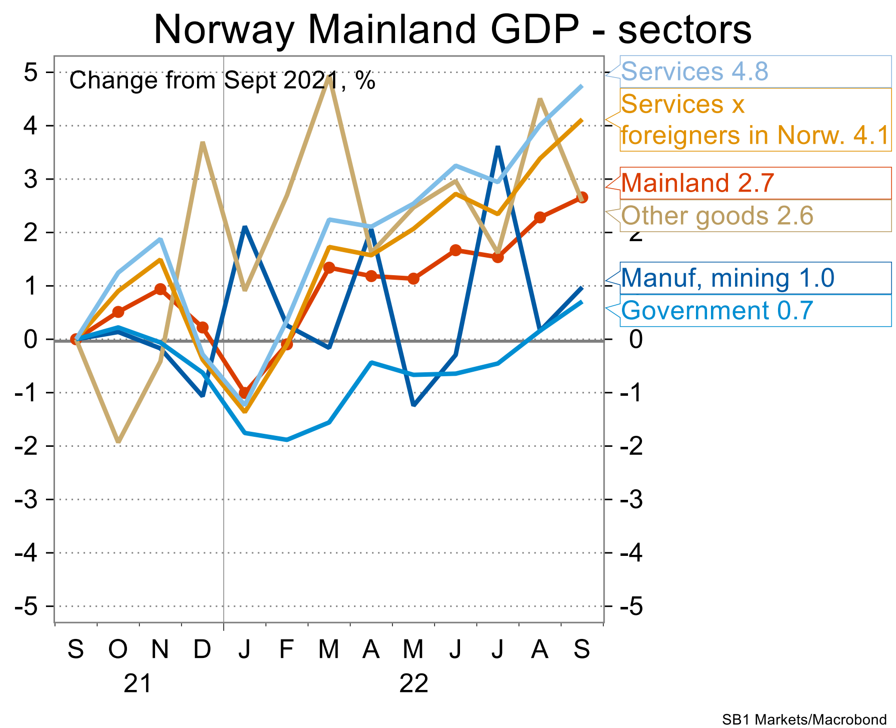
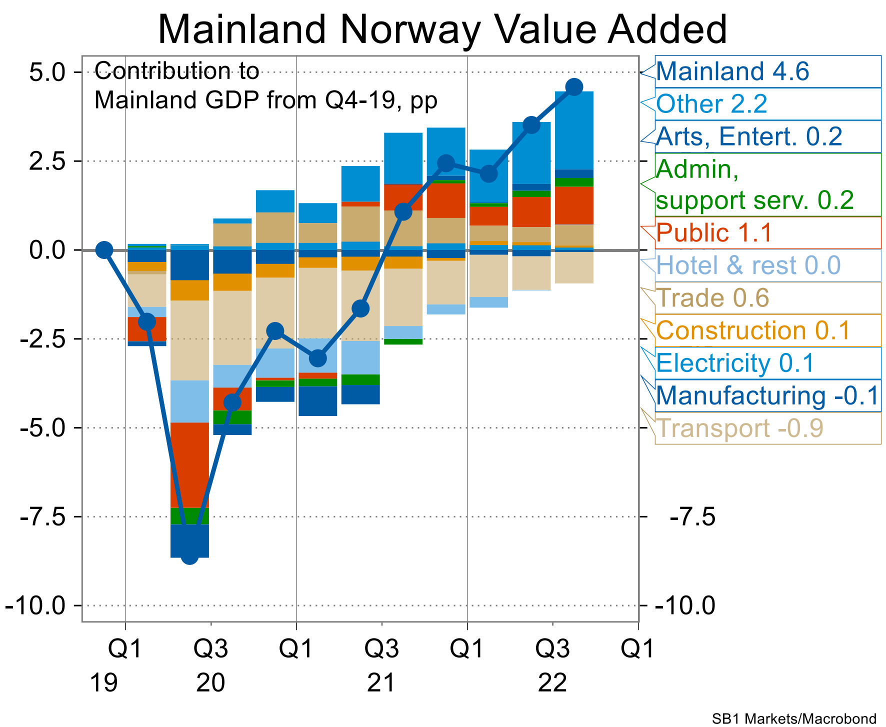
Growth in all sectors in Q3, barring construction

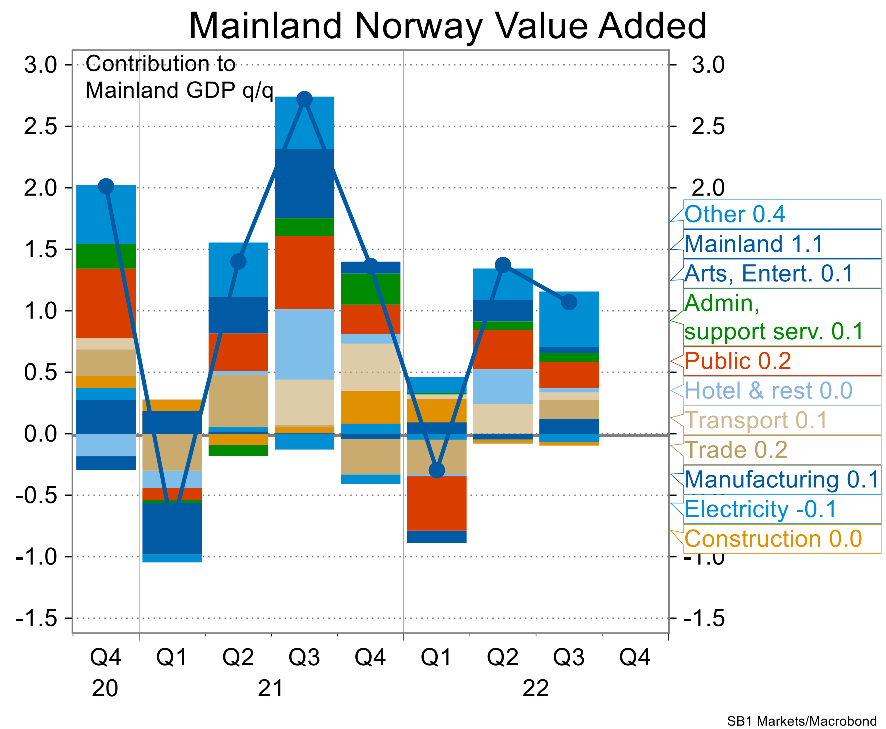




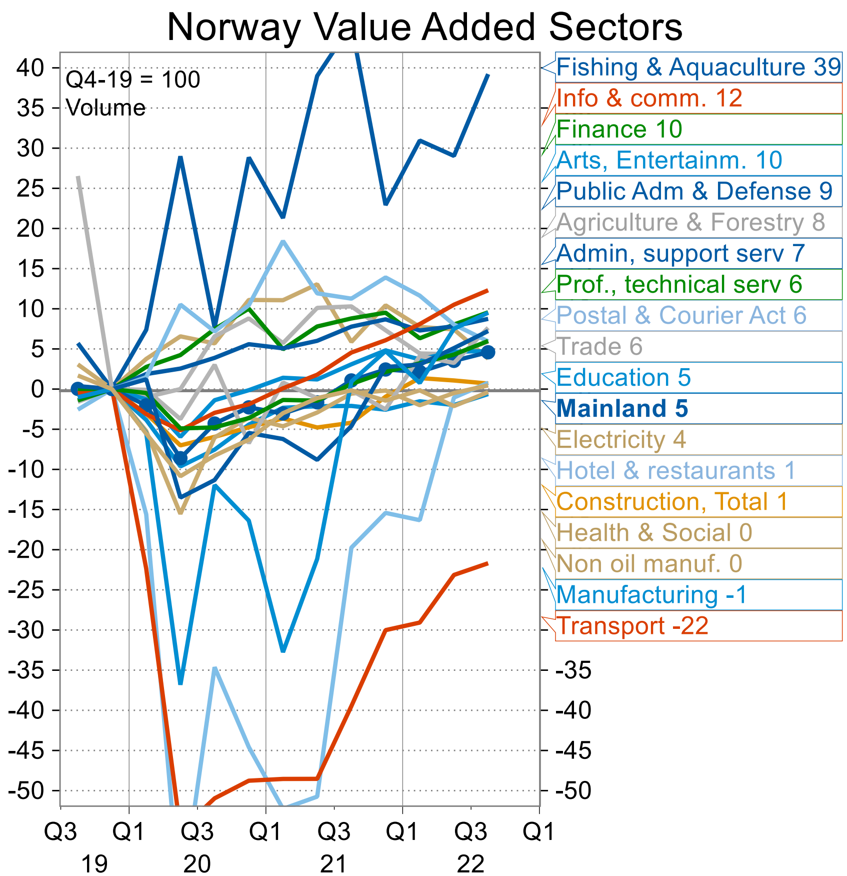
Trade is slowing, manufacturing has been lagging for a while

Services the main growth engine, together with the public sector

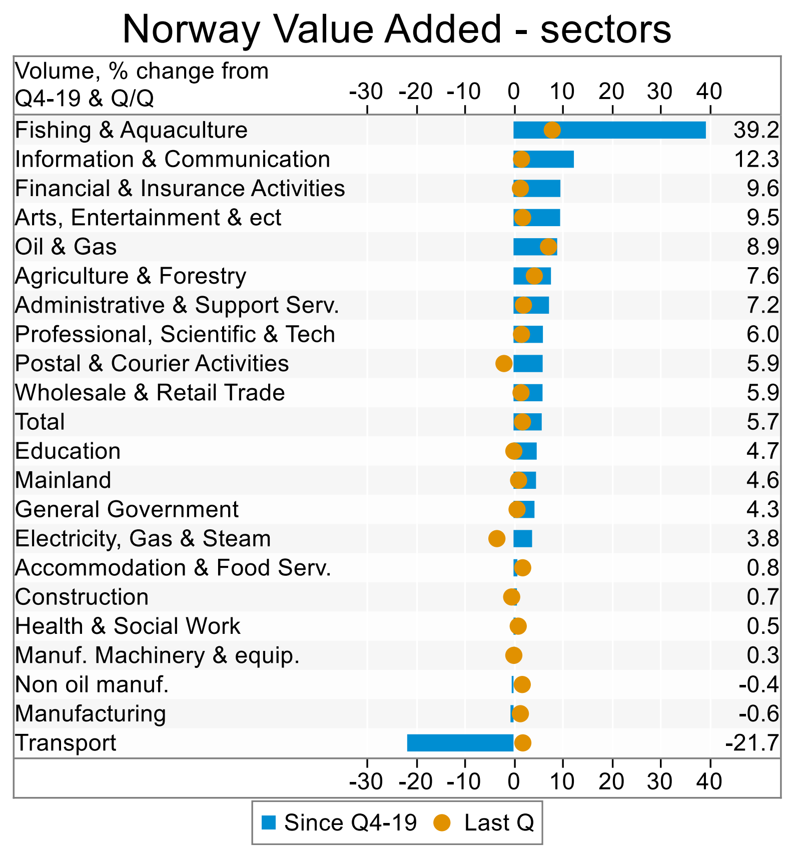




Details since 2019: Most sectors have recovered



SB1 Markets/Macrobond

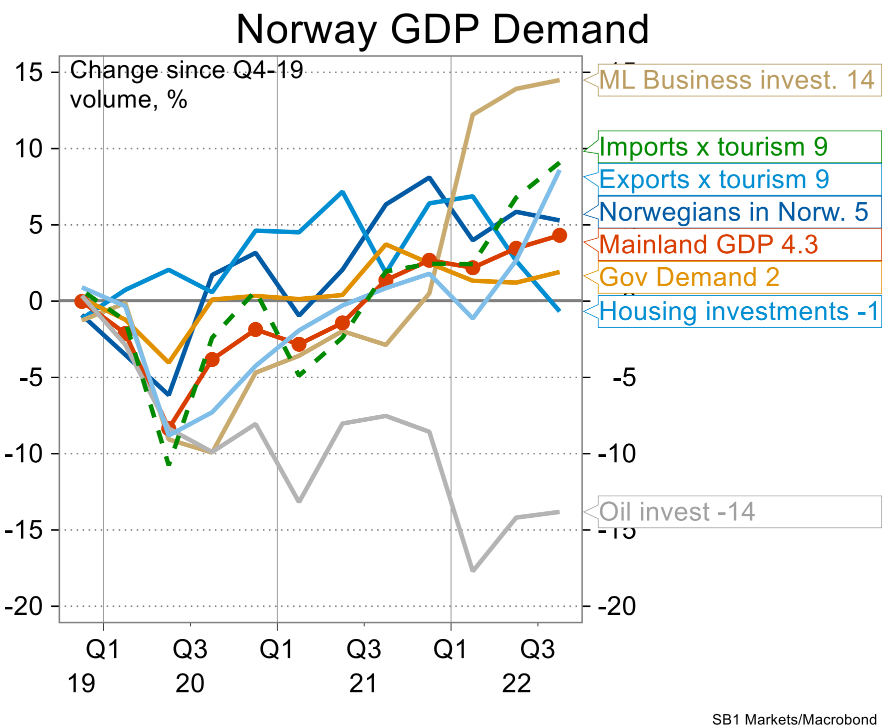


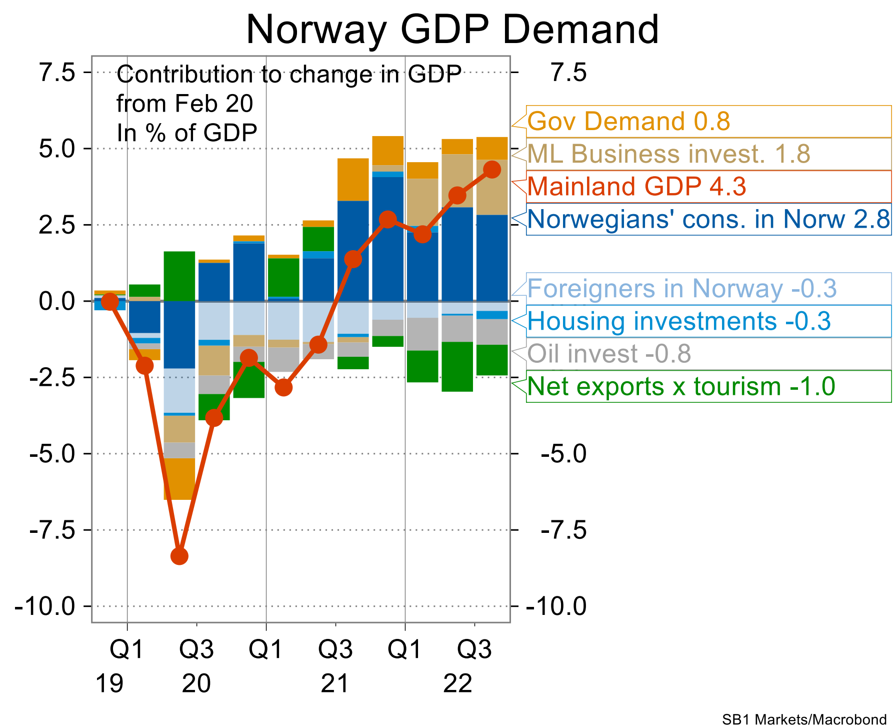
SB1 Markets/Macrobond

- Transport ex ocean shipping seems to be too weak (after at remarkable downward revision)

Housing investments are declining, Norwegians' spending in Norway is flattening

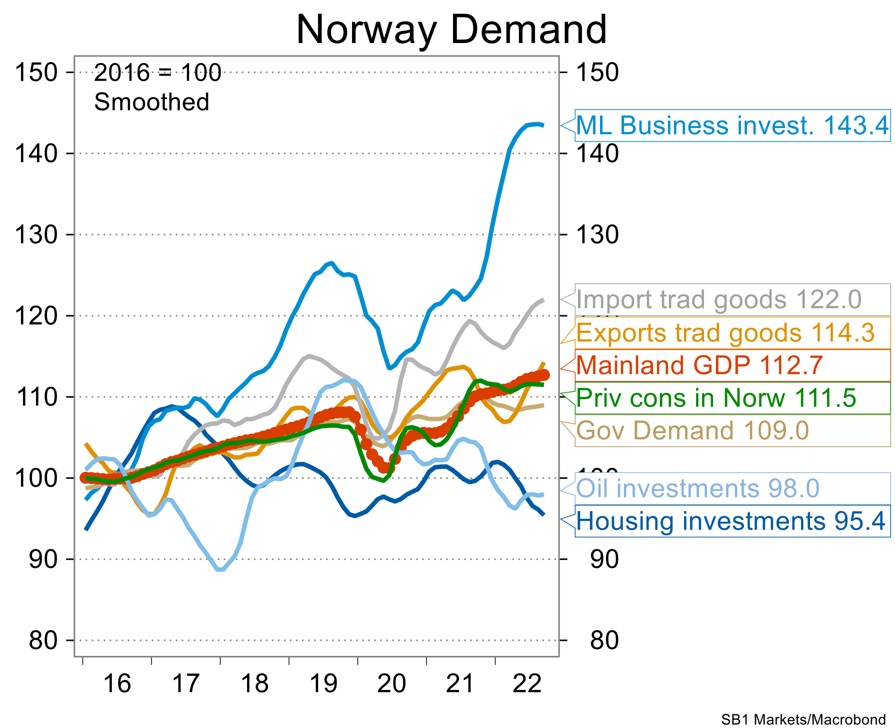
But the rest is up: Oil investm. has turned up, and Mainland business investments are booming

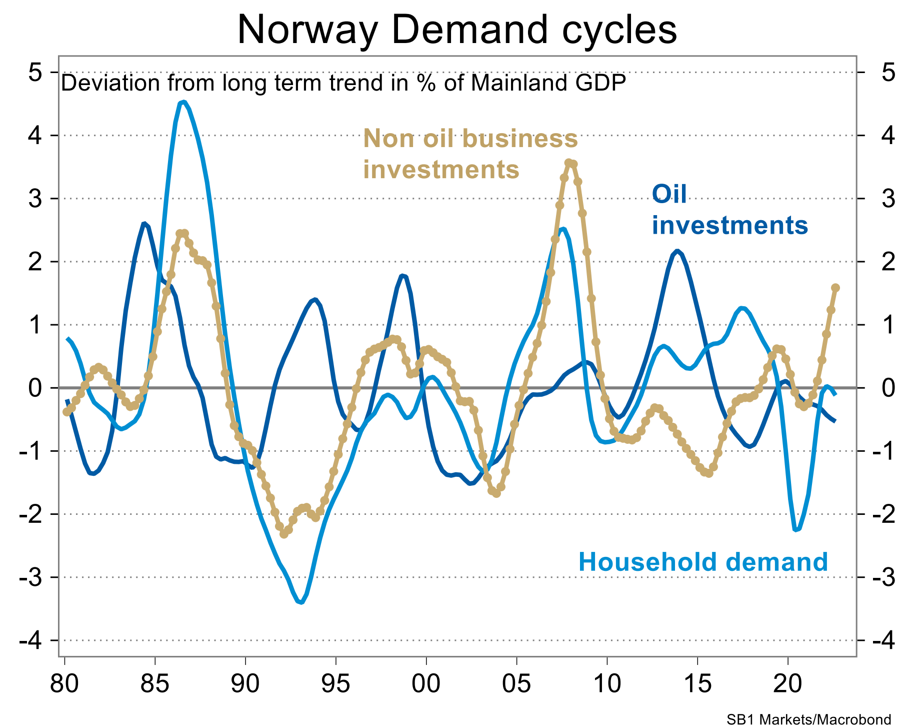




A longer and smoothed demand view

Mainland business investment are very likely above trend – and exposed. Oil will turn up, but less?





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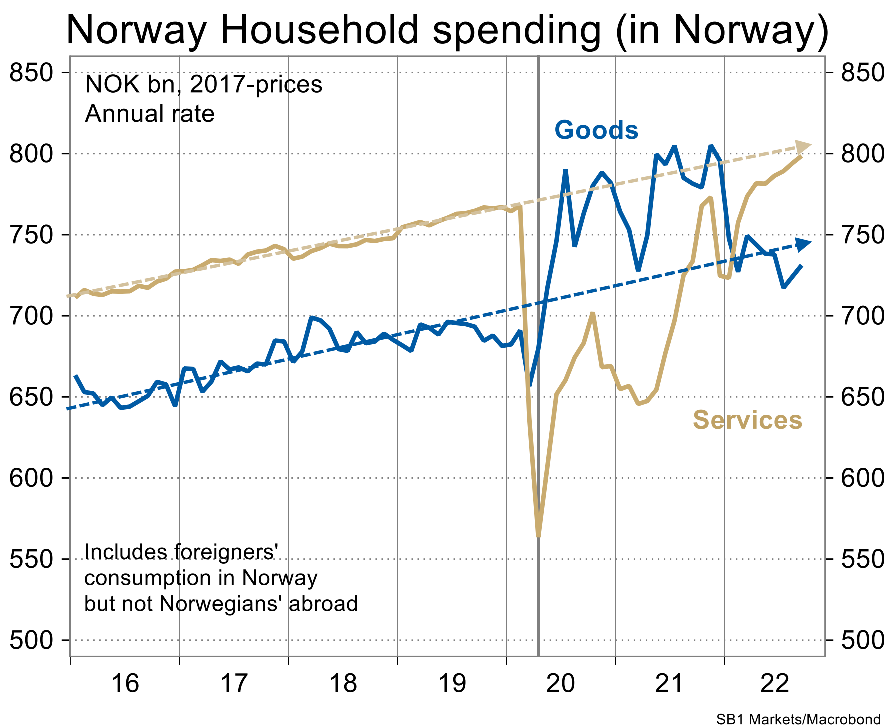
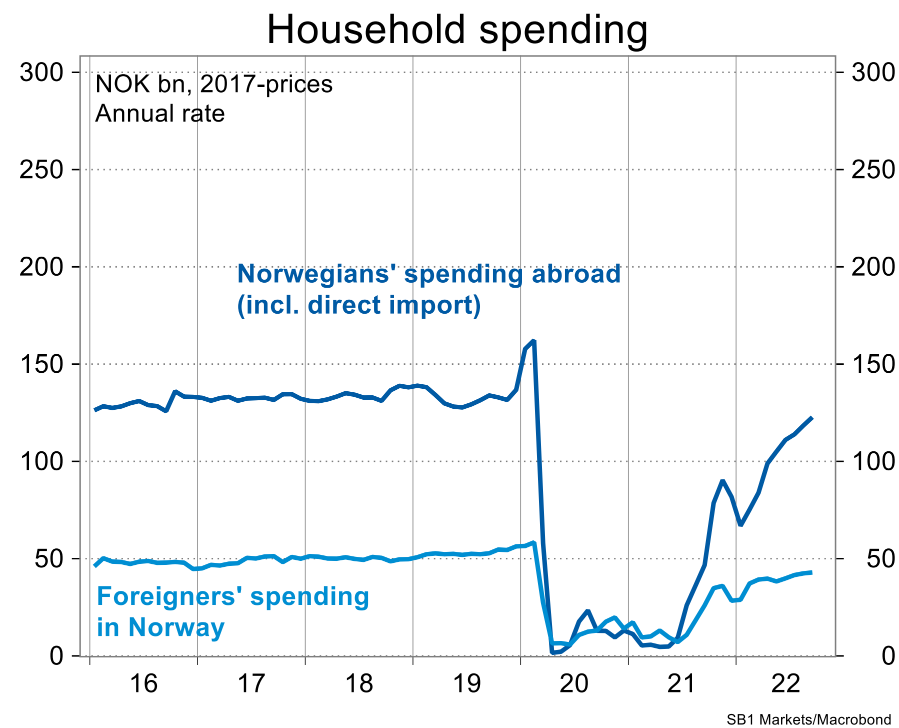
Services consumption in Norway have fully recovered

Goods consumption slightly below pre-pandemic trend. Spending abroad still 8% below par

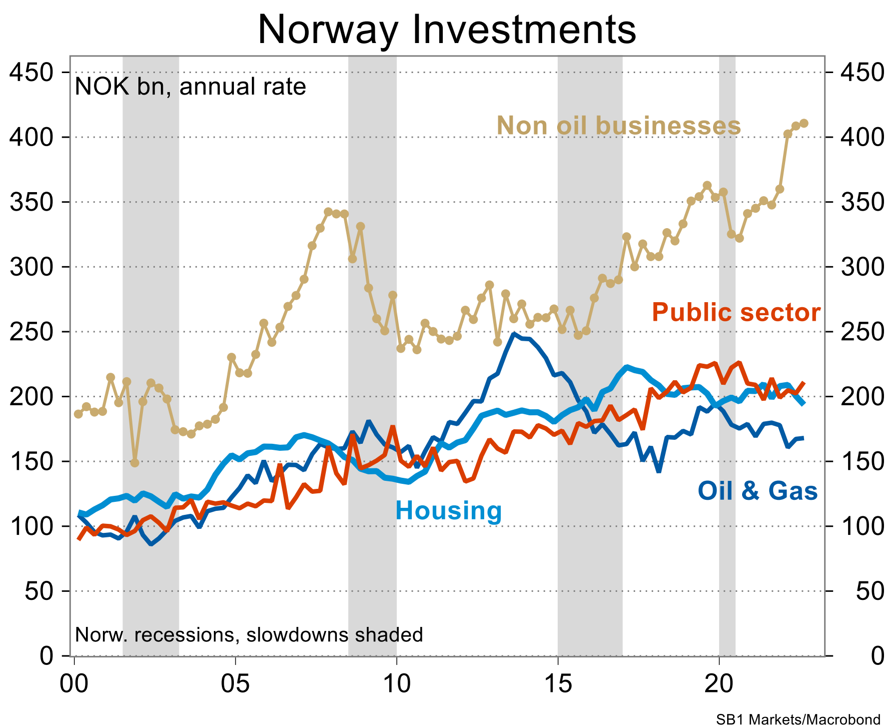


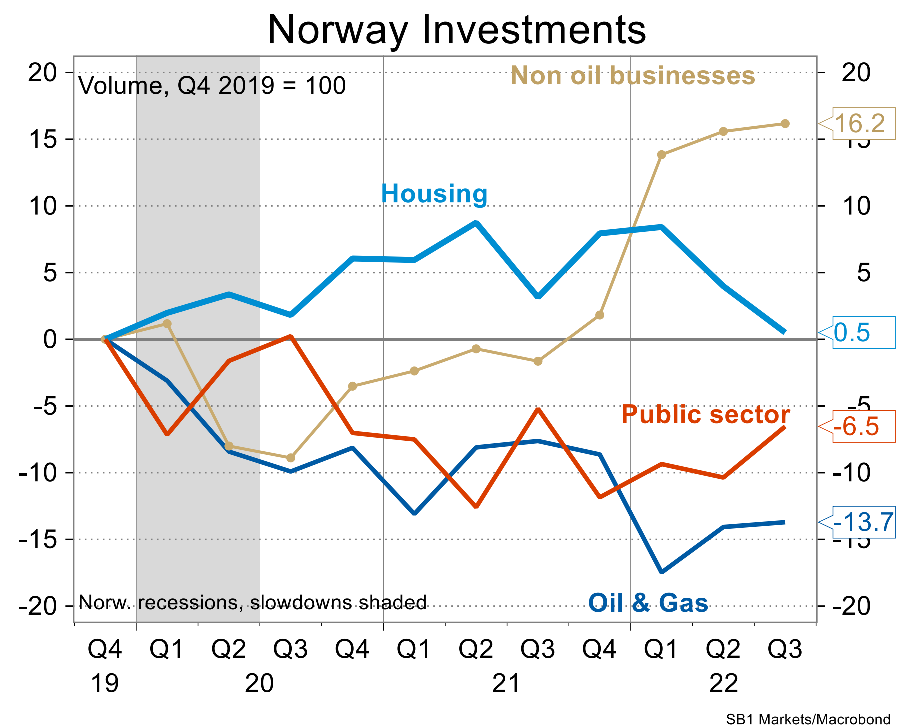


- Foreigners' spending in Norway is recovering but remains almost 20% below the pre-pandemic level
- Even so, spending on services in Norway is back on track. Somebody else must be spending more…

Investments: Mainland business investment sharply revised up, downside risk

Housing on the way down, while oil investments have bottomed – more to come in 2023

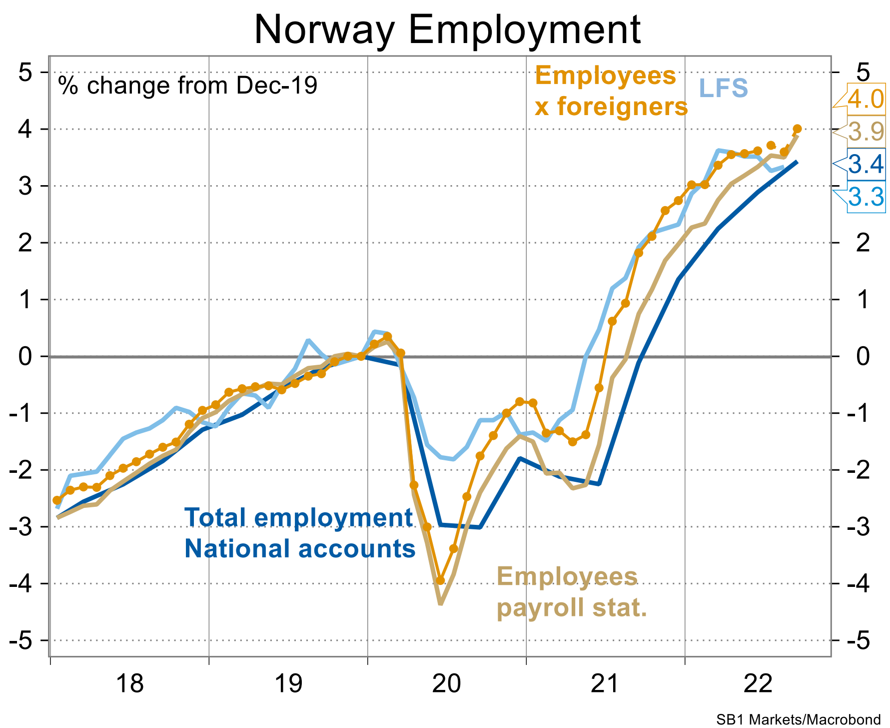


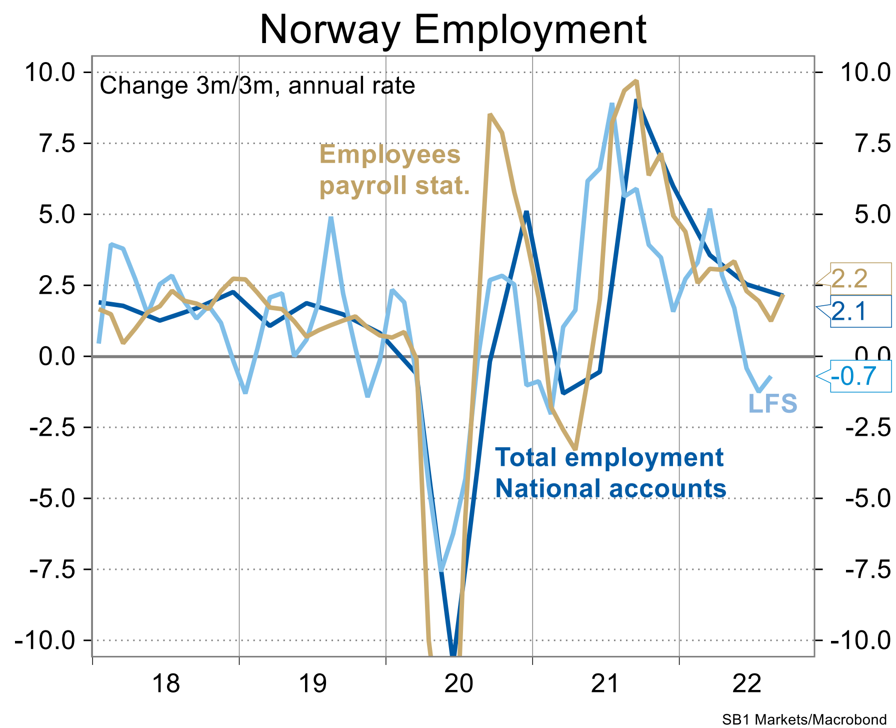


- Mainland business investments have been on the way up since Q4-20
- Following an uptick early in the pandemic, housing investments are on the way down
- Oil investments have been steadily declining since 2019 but has bottomed. The outlook for 2023 is bright, given tax cuts, high prices.
- Public sector investments fell in 2020 but has flattened from mid 2021

Employment growth is calming down, but the trend is still upwards

The final answer: Up at 2.1% pace in Q3





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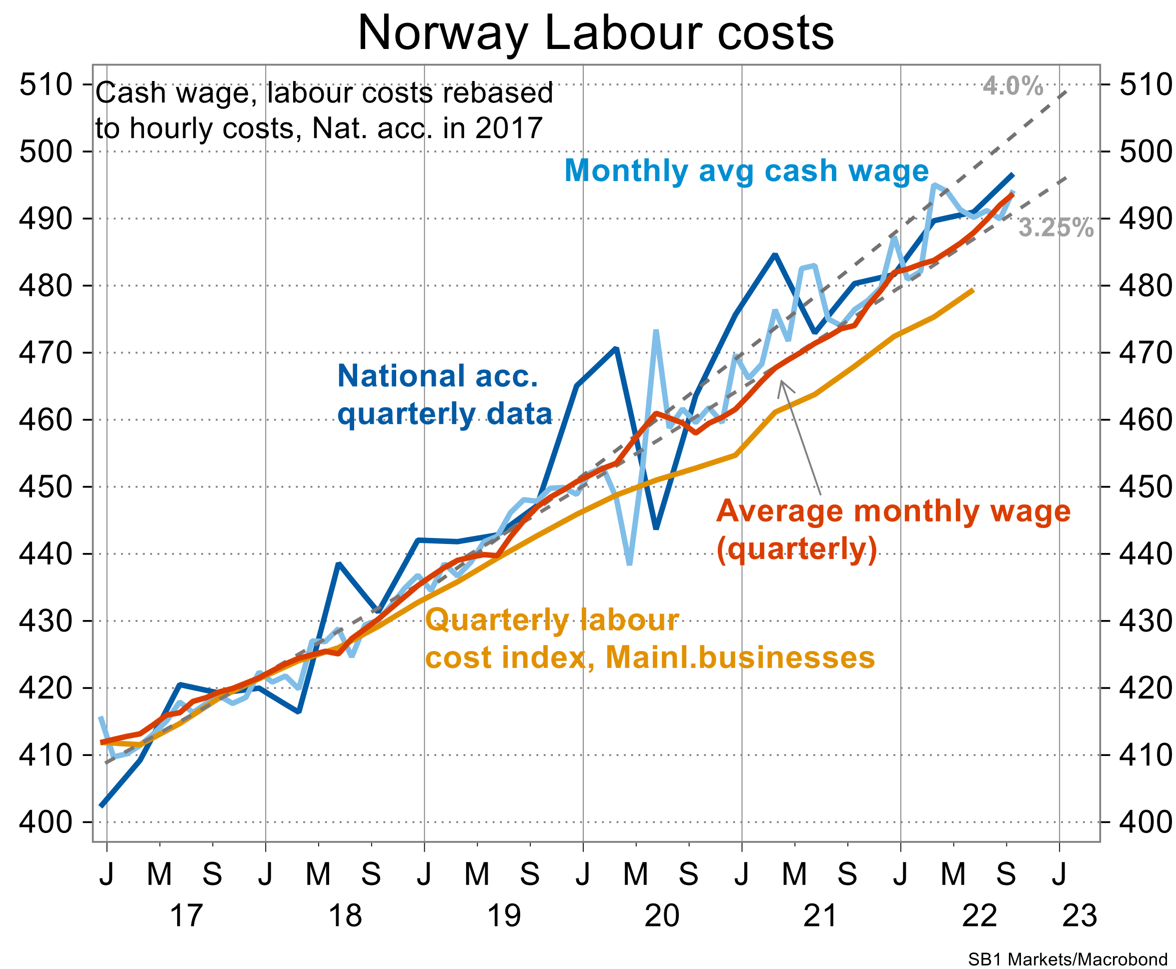
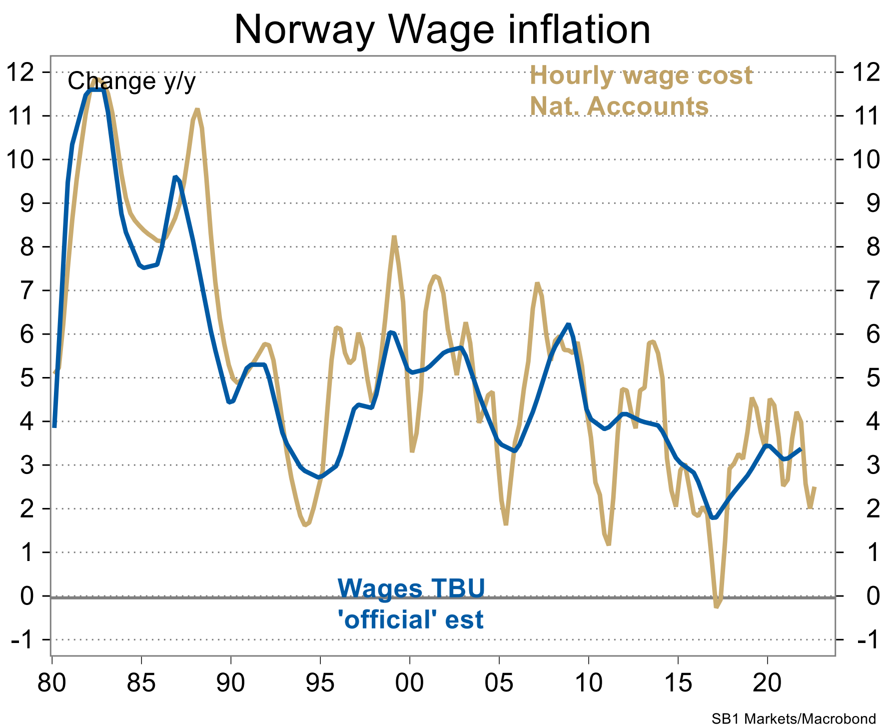
NO indications yet of accelerating wage growth

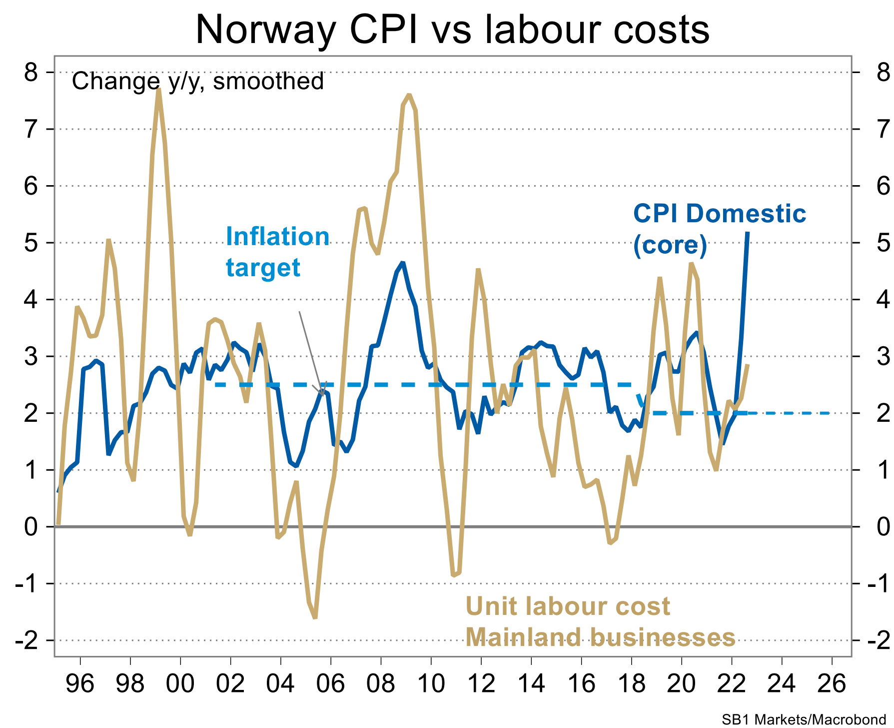
All indicators are below 4%. The spring 2023 wage agreement at 3.7% – 3.8% will probably hold



Wage inflation still moderate, but cost inflation somewhat too high

Due to the slowdown in productivity growth

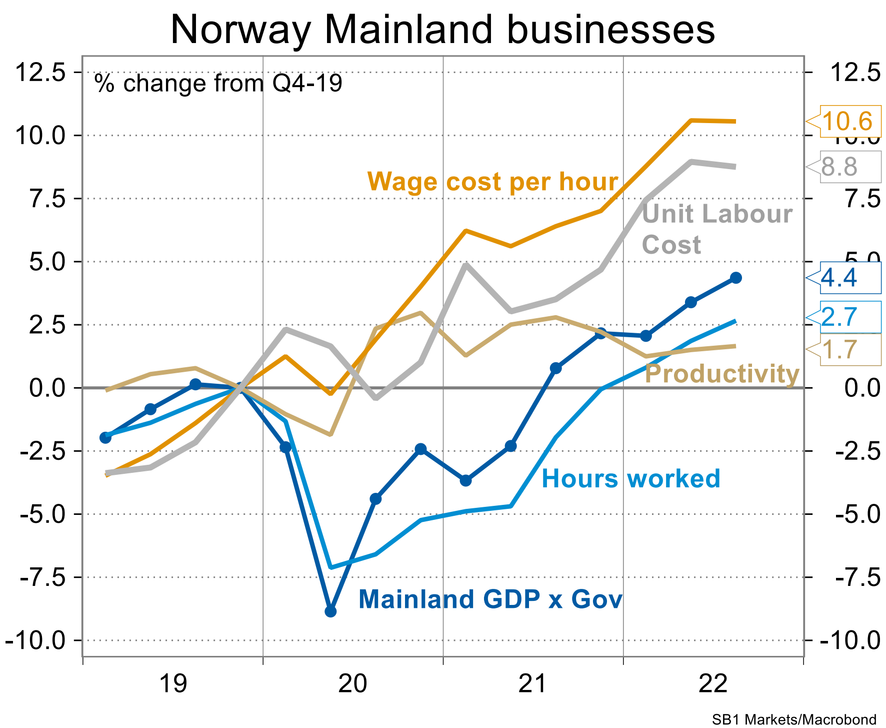


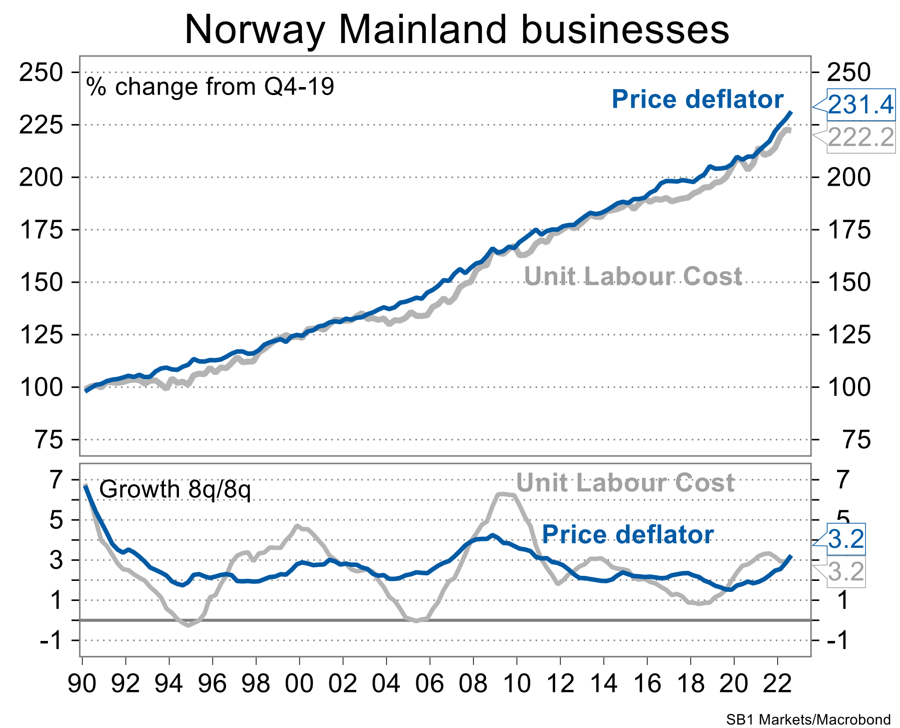


- Over time: Domestic core CPI inflation is over time equal to cost inflation (Unit Labour Cost)

Unit labour cost inflation up at a 2.7% pace since Q4-19

Wages are up a 3.7% pace, productivity just 0.6%. Not assuring vs the 2% inflation target





- **Wage cost pr hour** has been revised up – and has been growing at a 3.7% pace since Q4-19, and growth is not accelerating
- **Productivity** has flattened since Q4-20 – and just up 1.7% since Q4-19 (a 0.6% pace!) – even after an upward revision of the past quarters
- **Unit labour cost** has climbed at a 3.1% pace since Q4-19, and the underlying growth seems to be stable – even if UCL fell marginally in Q3. This is somewhat higher than before the pandemic, and somewhat too high to reach a 2% inflation target over time (even if import prices normally are contributing at the downside)
- Over time, the Mainland GDP (businesses x electricty) price deflator equals unit labour cost. Now, both are up 3.5% measured 8q/8q

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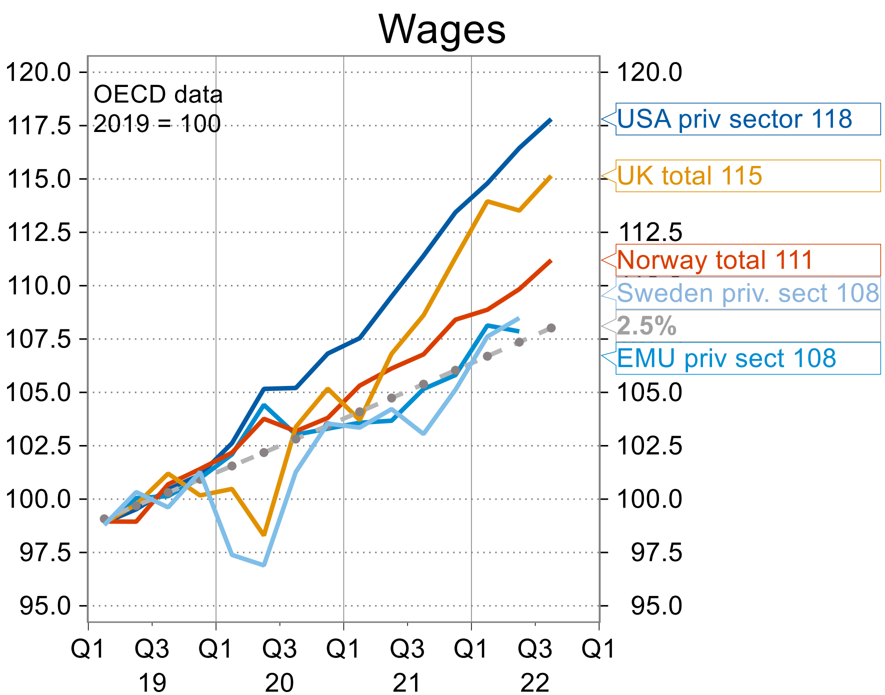
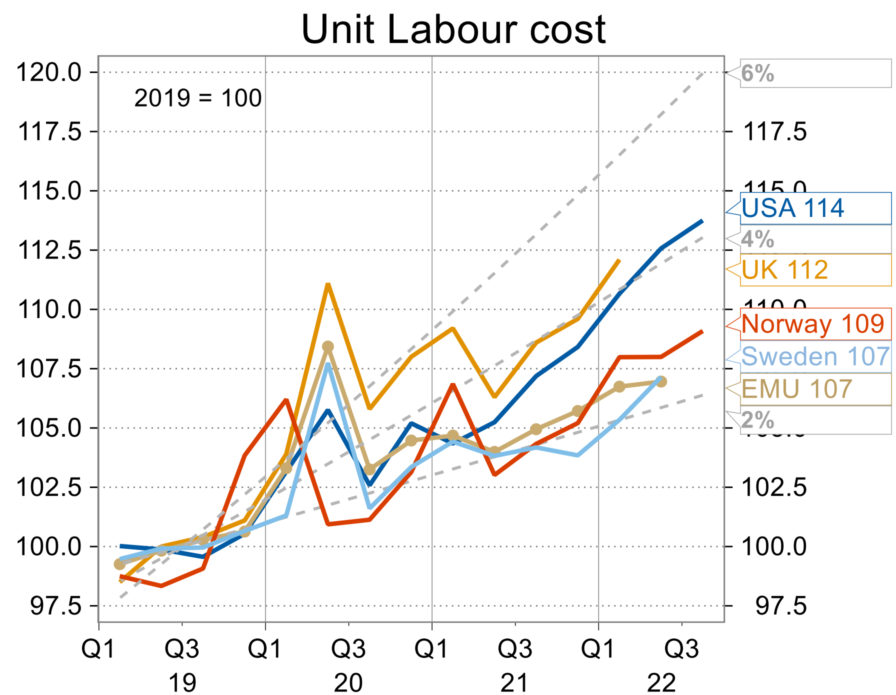
Norway does not yet have a (serious) cost problem

However, low productivity growth yields a ULC growth that is somewhat too high



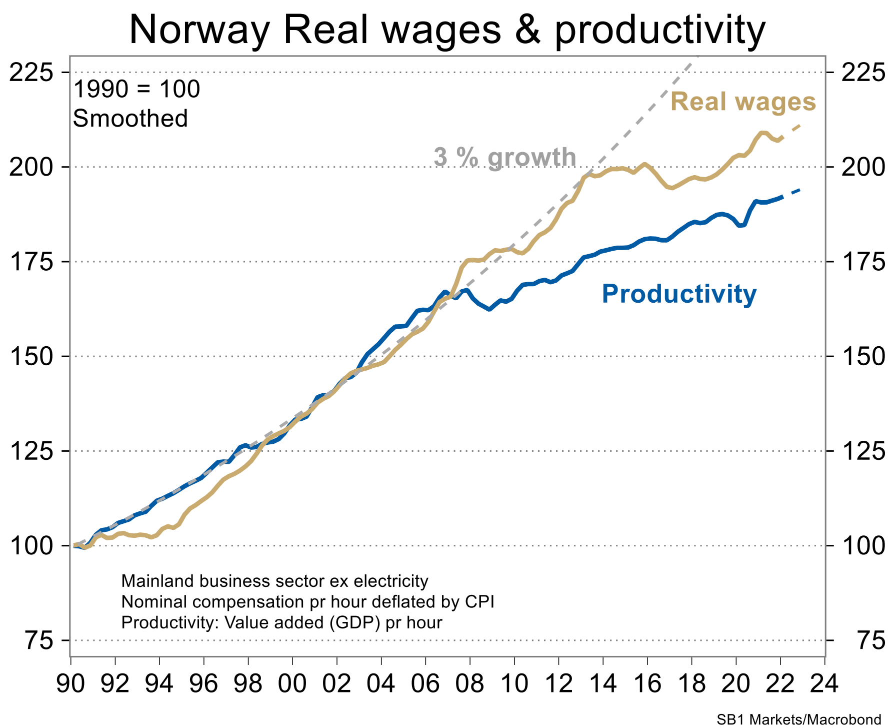
SB1 Markets/Macrobond



SB1 Markets/Macrobond

Real wages down due to the surge in electricity prices

Underlying growth slow due to low growth in productivity since 2006



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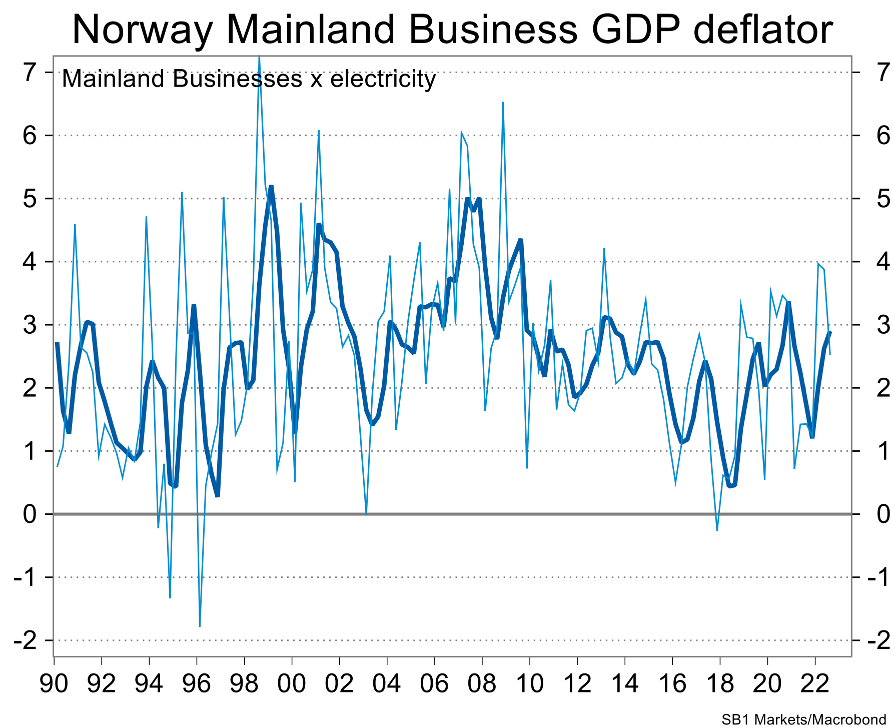
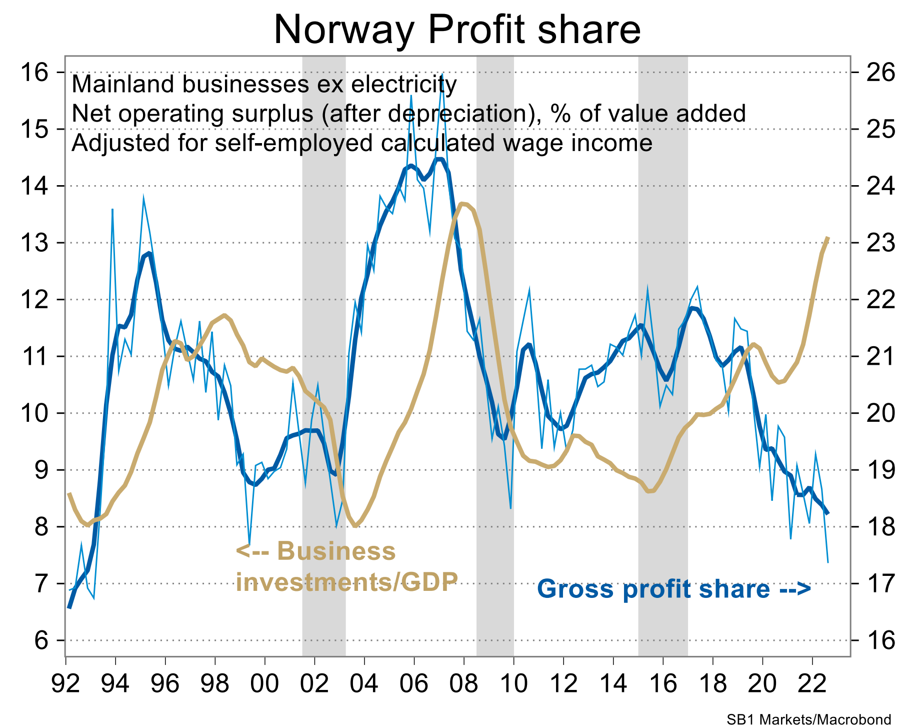
The profit share was under pressure, before corona – and still is

Operating margins have stabilised at a rather low level. Investments are exposed?

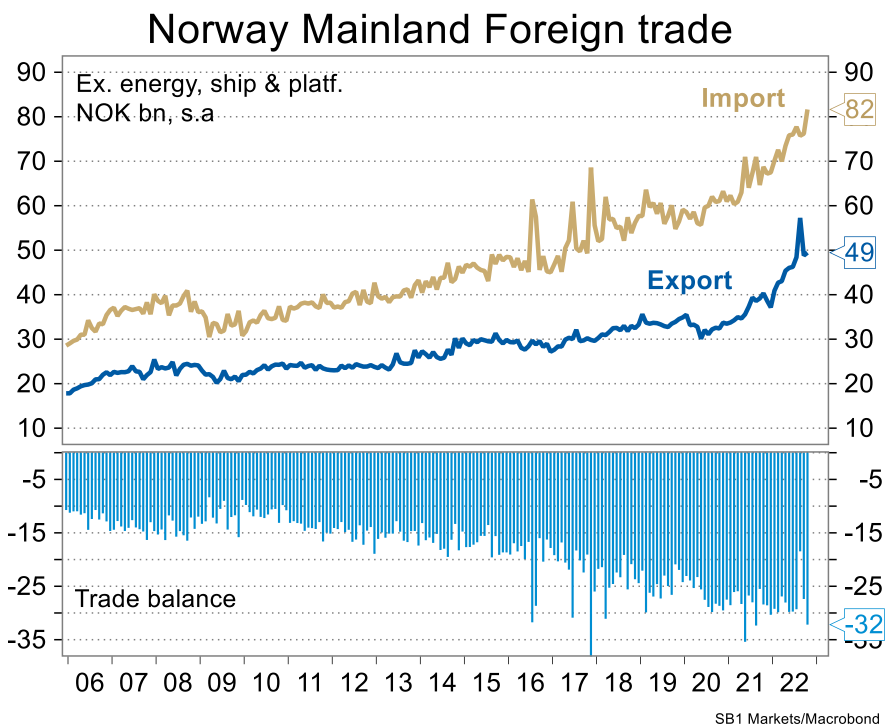


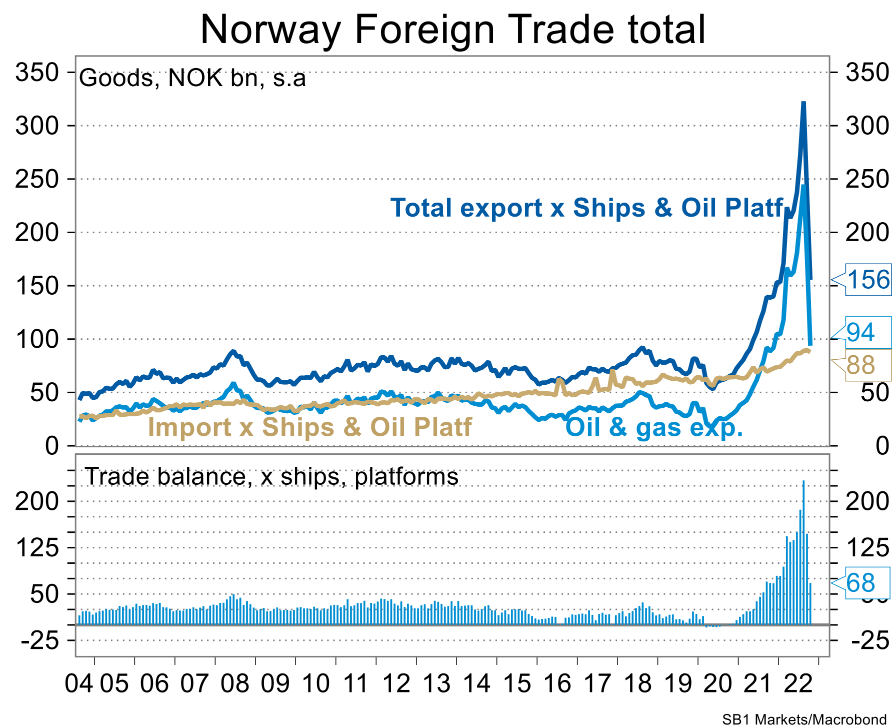


- The **Mainland business GDP price deflator** (ex the extra volatile electricity sector) is up 2.5% - 3%, and is not accelerating
- **Unit labour cost** (wage growth – productivity growth) is higher, at 3%, and the gross margin is still deteriorating
- The **Mainland business (ex electricity) gross margin** level is low – which signals an obvious risk vs the above average investment ration

Trade surplus lower due to falling gas prices and higher imports

The Mainland x energy balance has strengthened over the summer

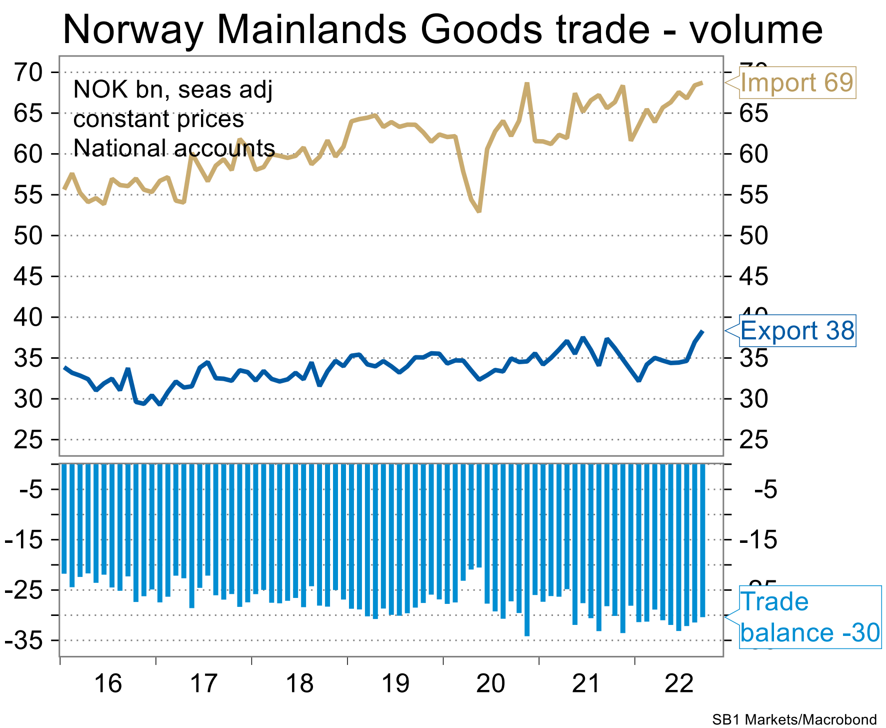




- The October **overall trade surplus** in goods was NOK 68 bn, down from the ATH of 147 bn in September. The surplus in October equals 24% of Mainland GDP
- **Oil & natural gas exports** were down 34% m/m, after a 33% decline in Sept, due the sharp decline in gas prices. So far in November, gas prices have slid further, but higher-than-average future prices towards early 2023 signal high trade surpluses the coming months too
- **The Mainland (and non-energy) trade deficit in goods** decreased by 5 bn to NOK 32 bn, equalling 11% of Mainland GDP (however, deliveries from the Mainland to the oil sector (cap. ex and op.ex) are not counted as exports from the Mainland but imported intermediate goods for producing 'exports' to the oil sector are counted as imports – and the 'real' Mainland trade balance is far, far stronger)
- **Non-energy exports** were virtually unch. at NOK 49 bn. Mainland exports have been very strong in value terms during and after the pandemic, and the underlying growth rate over the past year is some 30%. Exports are up 48% since the end of 2020, almost entirely due to higher prices. Fish, metals & chemicals are reporting strong growth. Measured in volume terms, non-energy exports are up 10% since July (Check next page)
- **Imports** also rose by 6 bn to 82 bn in Oct, and at an 7% growth pace, in value terms, that is

In volume terms, Mainland trade data are not that impressive

However, export volumes have climbed 10% since the summer! And imports are close to ATH



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

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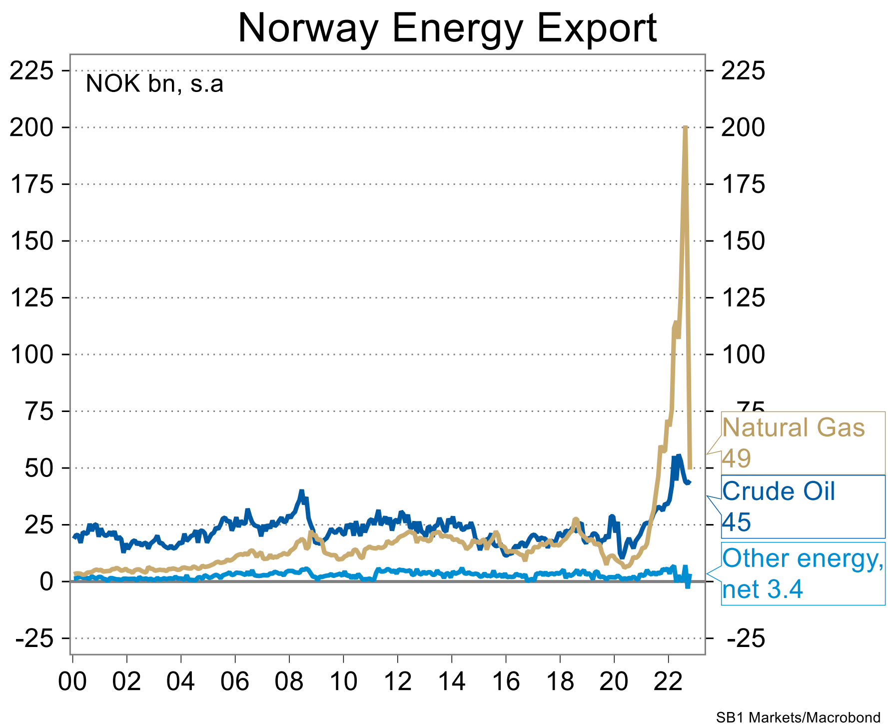
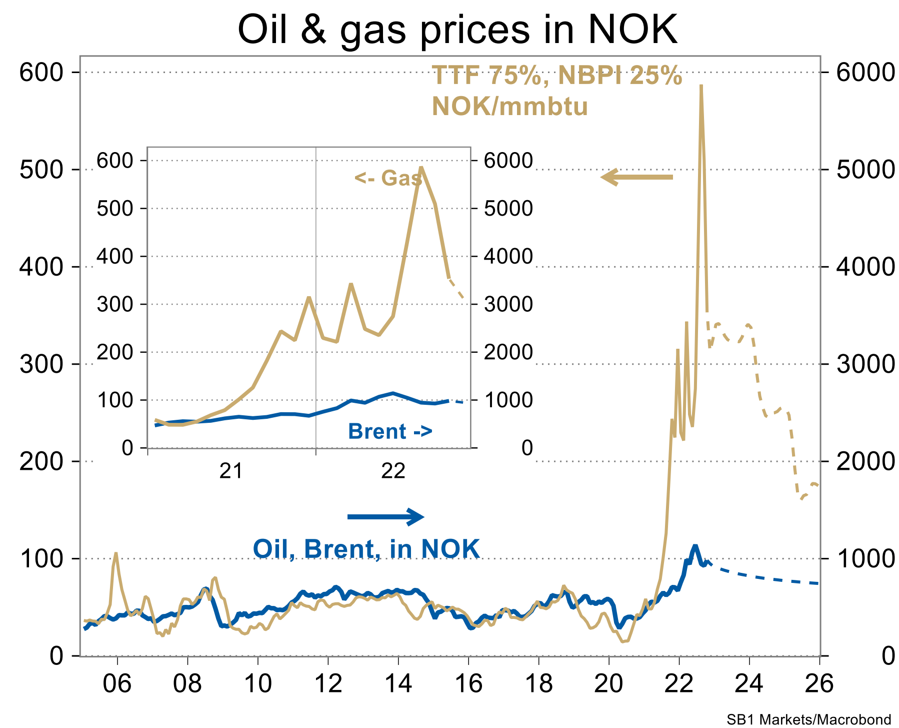
Gas exports down 76% from peak, due to falling prices, still 4x a normal level

Gas prices will probably decline further in November

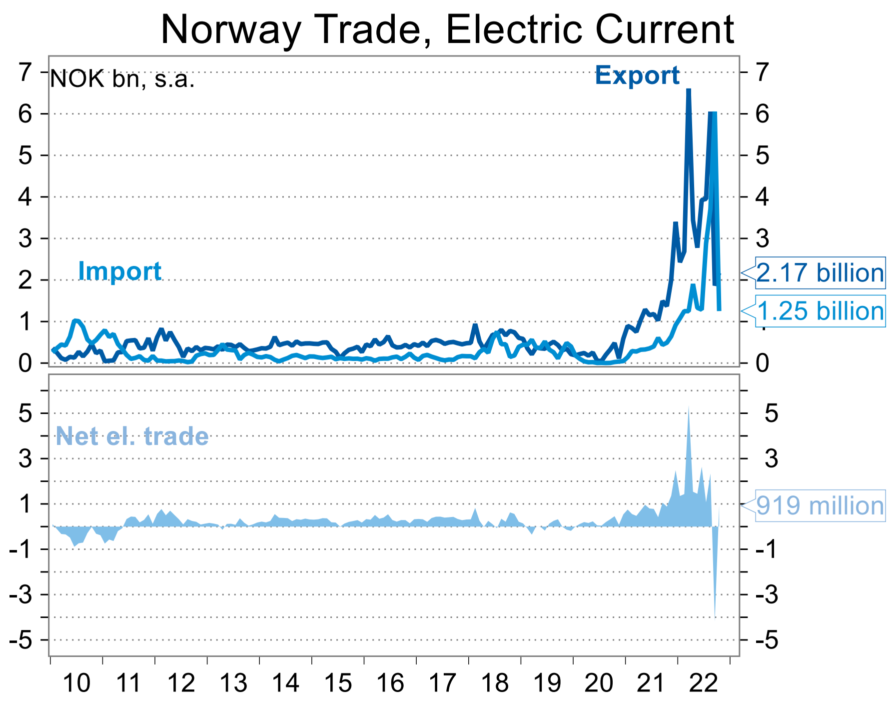




- **Gas prices** (75% TTF Netherland gas prices, 25% NBP UK prices) climbed 10x above a normal level to August, from early 2021, of course because Russian exports to Europe have been almost completely cut off. However, prices have fallen sharply. Actual gas exports fell to NOK 49 bn, down from NOK 200 bn at the peak in Aug. Volume wise, gas exports were up 20% m/m in October
- **Crude oil exports** increased by 1.5 bn to NOK 44.5 bn (+3.5%, seas.adj.), due to a higher oil price and weaker NOK
- In sum, **petro exports** have been sky high, and although gas exports at NOK 49 bn is 76% down from ATH, it is still some 4x a normal level. Some of it is due to higher volumes, as more capacity was utilised to supply Europe with gas post the Russian cut off. However, the majority of the increase is due to higher gas prices. Most of the new earned fortunes will end up in the Government's coffers and thereafter transferred directly to the Oil fund – before being returned to the budget via the long term 3% (of the Fund's capital) spending rule
- **Other energy exports** were up in October

Back to being a net importer of electricity again in October

... at least in value terms

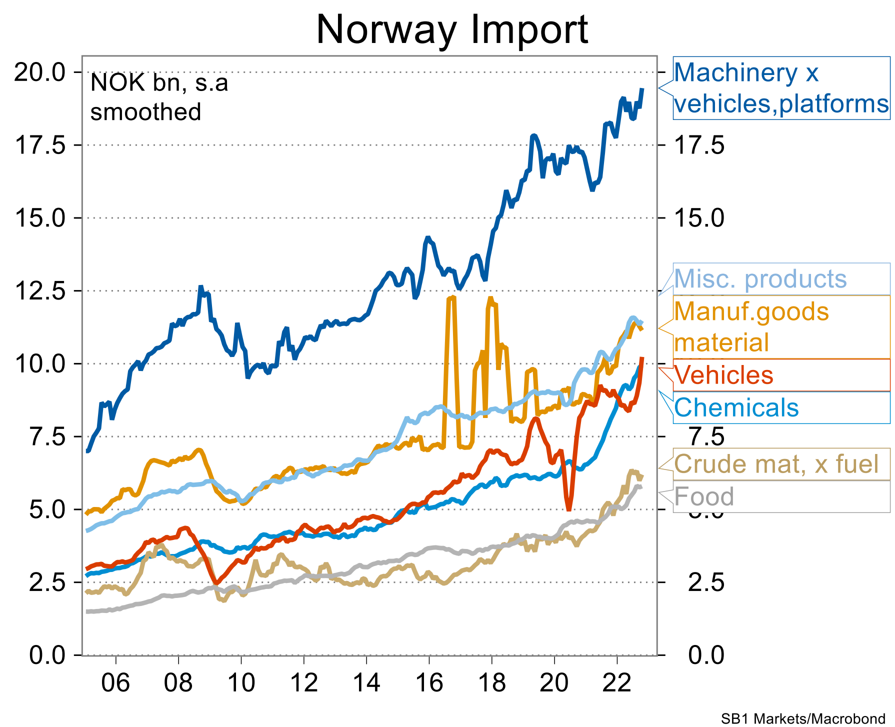


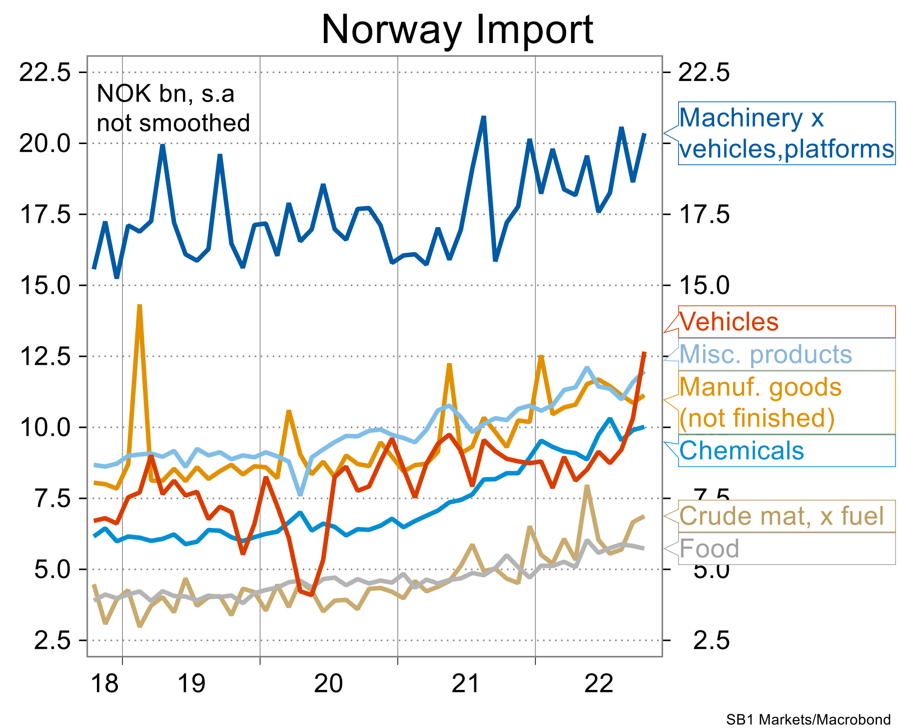
SB1 Markets/Macrobond

- In October, el. exports amounted to NOK 2.2 bn (seas. adj.) up from NOK 1.9 bn in September
- Imports equalled 1.3 bn, up from 0.6 bn the previous month

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

.. And prices are soaring. Vehicle imports have also turned back up

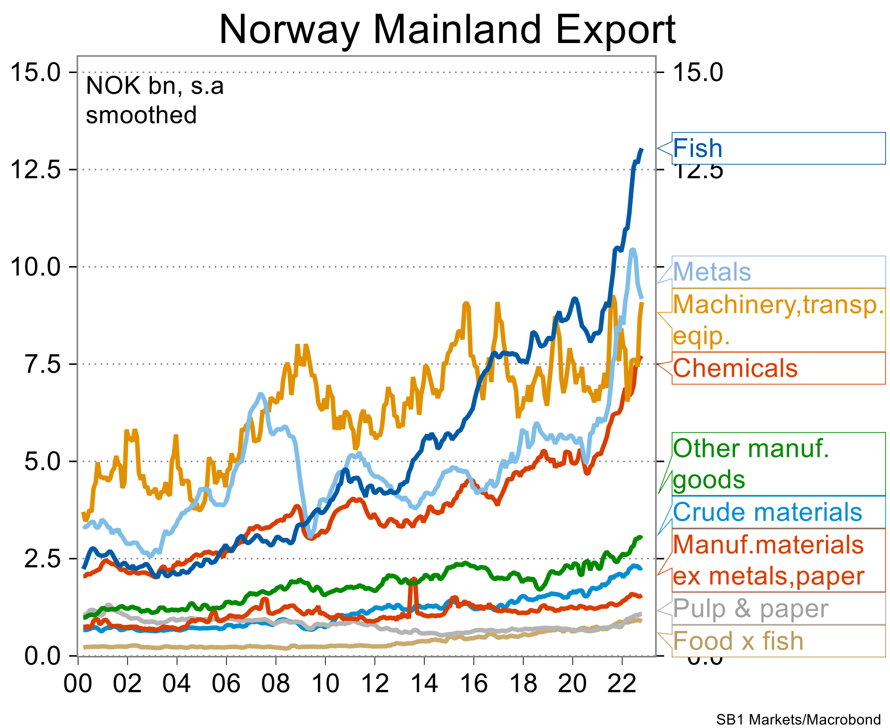


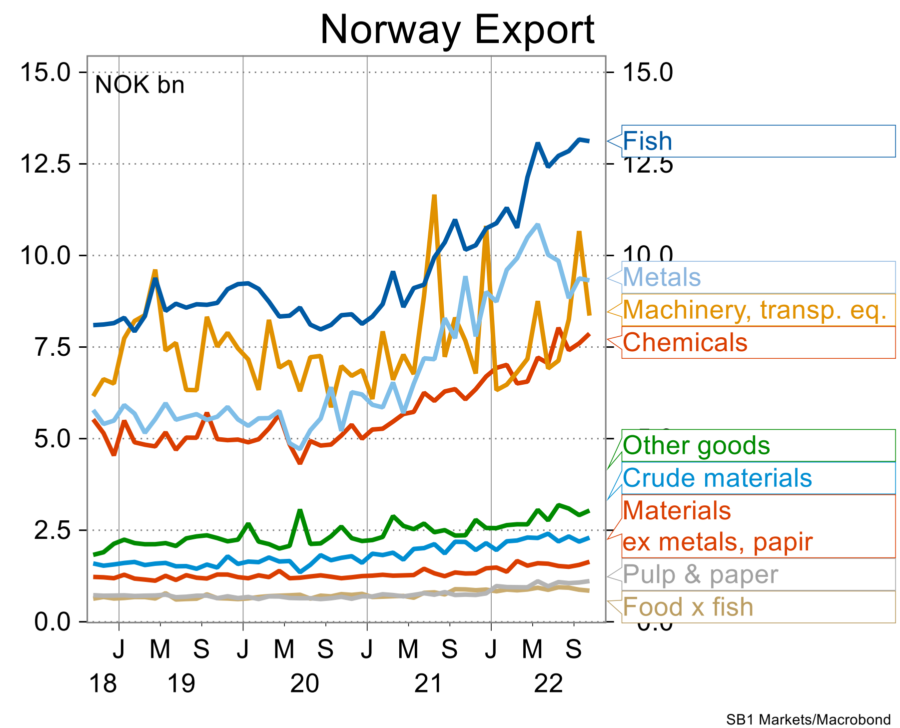


- The spikes in imports of manufactured goods are due to unfinished platforms or ships

Mainland exports: Fish and metals exports slightly lower, chemicals further up

Metals exports were up 3.5% in Sept and are up 30% y/y. Machinery exports not that impressive

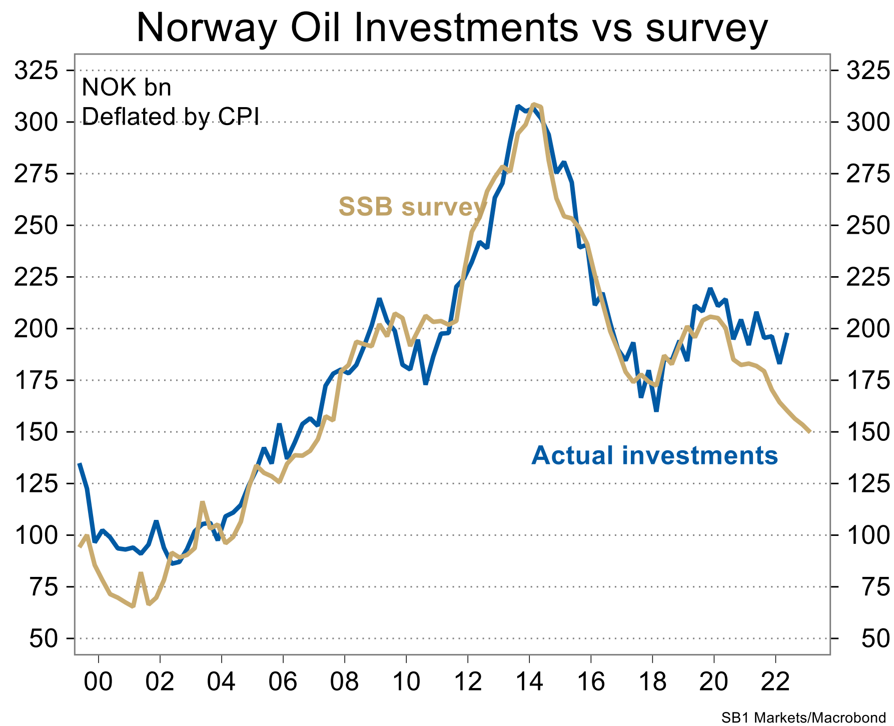


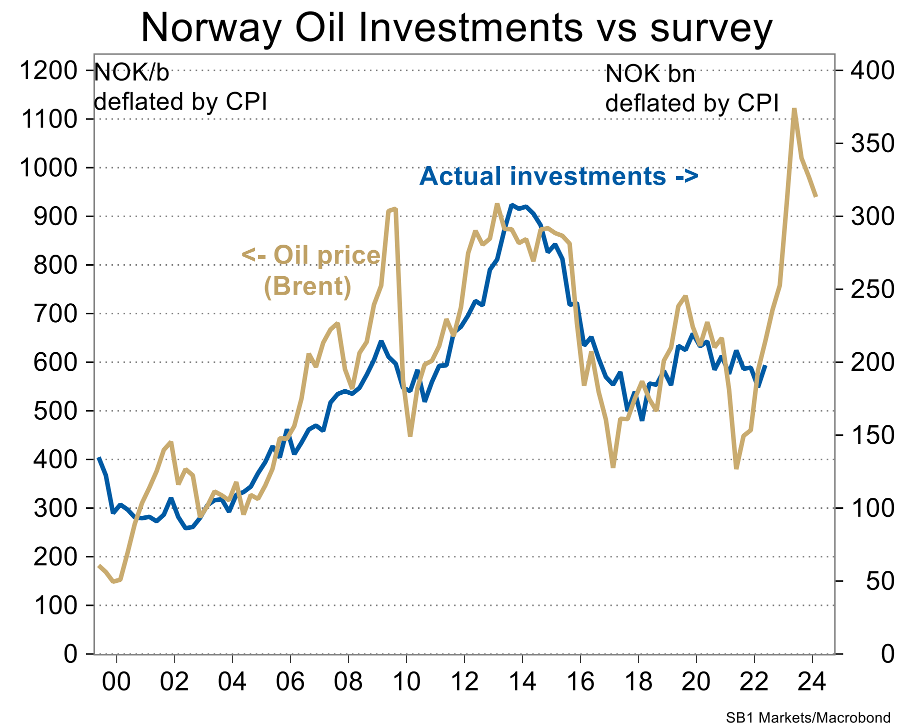


- Raw material prices are now turning south, and exports for metals are down from the peak

Oil investments: 2022 will (probably) be the local bottom

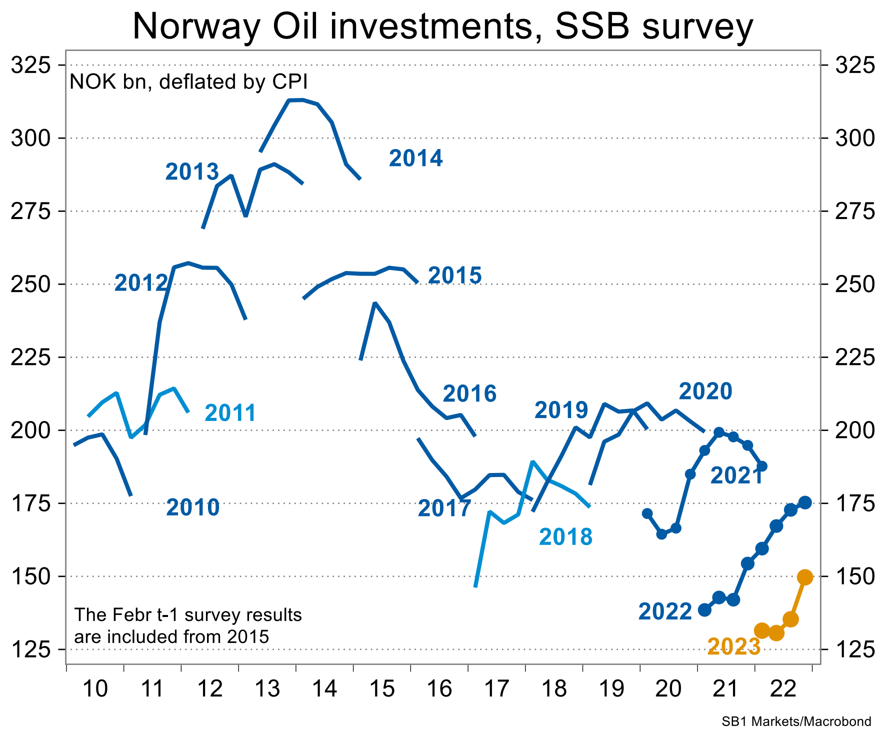
... even if the 2023 oil investment survey still suggest a further decline





- **Oil companies lifted their 2022 investment estimate** by 1% to 175 bn. The estimate is still 5% below the equivalent 2021 estimate. Some projects may be added to the list (a PDO delivered) before end of 2022 in order to benefit– and a higher oil price is also supportive – and there is some upside vs. the current estimate
- **The 2023 outlook** is far better, even if the November estimate at NOK 150 bn is still down 5% vs the equivalent 2022 estimate (as we expected). Many more projects will be added before end of 2022 in order to benefit from the temporary tax cuts decided in 2020, and we expect the February survey to signal far higher investments in 2023 than the current survey signals and a further lift in 2024

The 2023 forecast is still not relevant, many projects will be added

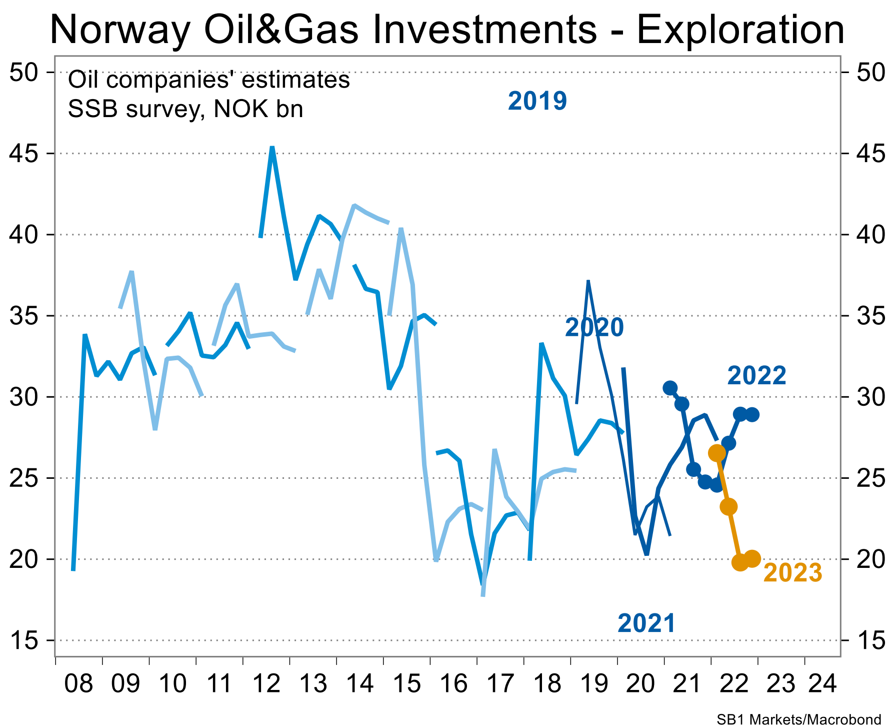


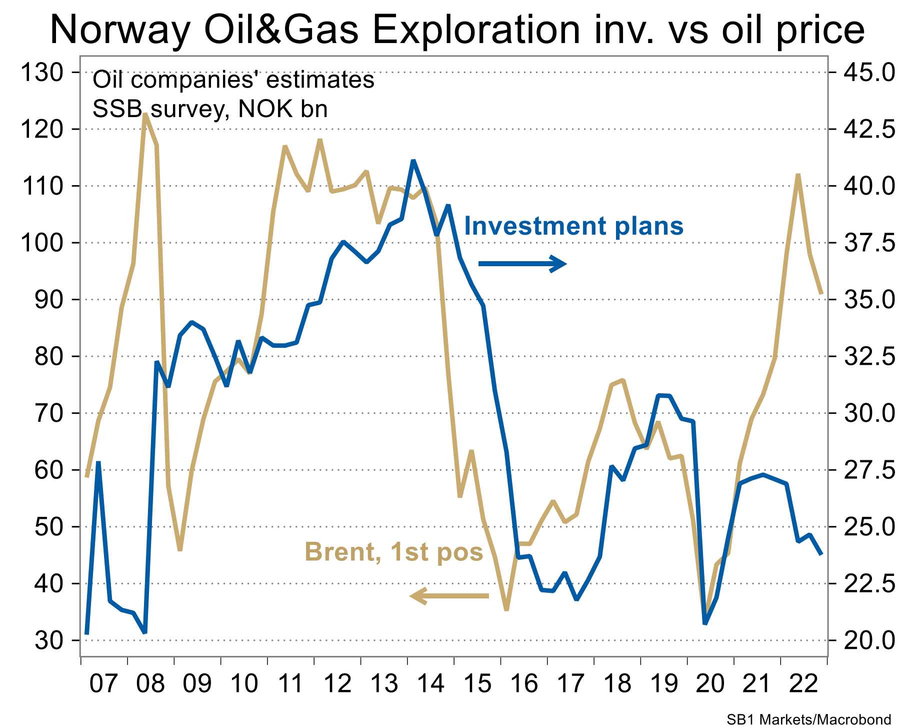
- In SSB's Q4 oil & gas investment survey, companies reported a small further increase in the **<u>2022</u> investments in NOK**
- **The 2022 investment estimate** was revised up by 1% to NOK 175 bn, still down 5% vs the equivalent '21 estimate. Both investments in new and existing fields are expected down in 2022
- **The 2023 estimate** rose 4% vs the May forecast, to NOK 135 bn, as we expected, still down 5% vs. the equivalent '21 estimate, as in May
  - » However, these 2023 estimates are irrelevant due to the temporary tax cut for the oil sector. Oil companies cannot include spending on projects before a Plan for Development and Operation (PDO) is delivered to the Min. of Petroleum and Energy. In order to utilise the tax cuts, PDOs must be delivered before Dec 31 2022. Thus, a record high no. of PDOs will be delivered before year end – and will be included in the investment survey in Q1 next year. We assume oil companies will spend substantial amounts next year on some of the projects
  - » The increase in the oil & gas prices are also an argument for expecting a lift in investments in 2023

- **Conclusion:** A short and quite shallow downturn in oil investments in 2021 and 2022 – then another boom, at least a mini boom

Spending plans for exploration & concept studies sharply down in 2023

A possible explanation: Oil companies have emptied the queue before the tax rebate deadline?

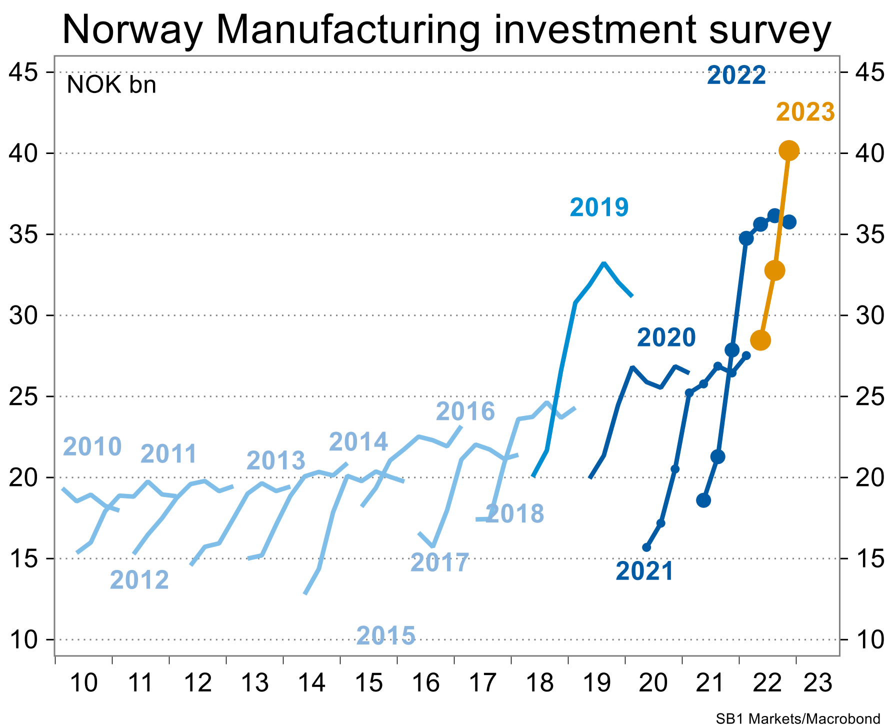


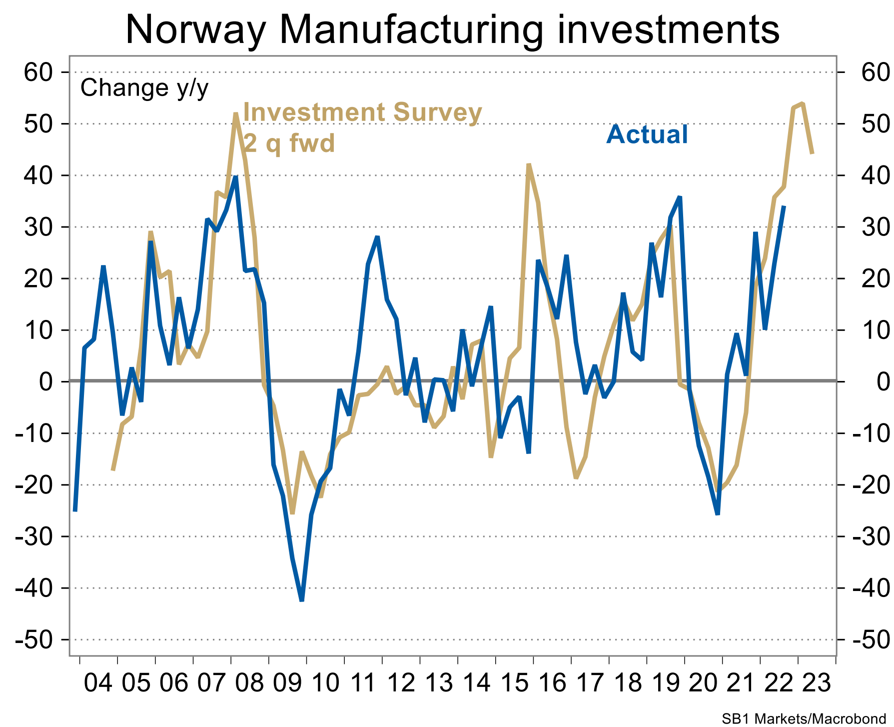


- The current 2022 estimate is somewhat above the 2021 outcome
- The 2023 estimate is 30% (!) below the equivalent 2022 estimate – and 1/3 down vs the current 2022 estimate! Which cannot be explained by the current oil and gas prices! Do the oil companies not need to search for more??

WOW, manufacturing investments ~~probably~~ further up in 2023

At least 20% volume growth in 2022, and a further, lift in 2023~~?~~!

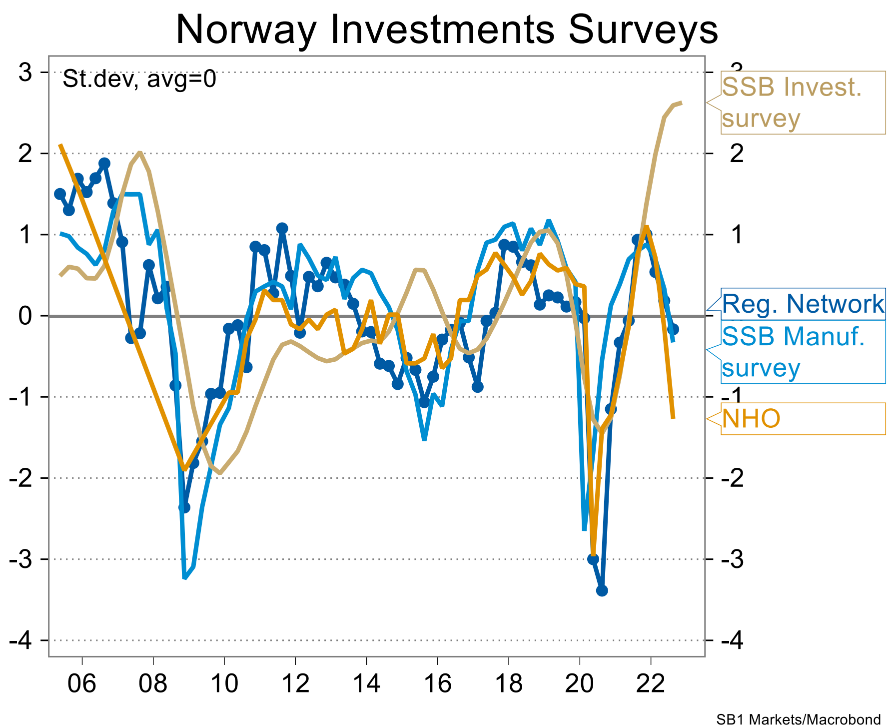




- Manufacturing companies report a 35% growth in **investments in 2022** – to the highest level ever, at least in nominal terms – NOK 36 bn. We assume at 15% growth in volume terms (based on National accounts, prices are rising rapidly)
- The **2023 estimate** was lifted by 23%, and it is 44% higher than the 2022 forecast, given one year ago. The estimate for 2022 has been revised upwards much more than normal, and we do not expect the 2023 estimate to follow the same path. Still a substantial further growth in investments in 2023 seems very likely, we assume 20% in nominal terms and 10% in volume terms. According the current forecasts from the companies, nominal investments are up 150% to 2021 to 2023!
- Computers/Electronic equipment are up 6x to '23 from 21, to 5 bn, mineral products 3x, ship/platform yards 2,5x, metals 2x

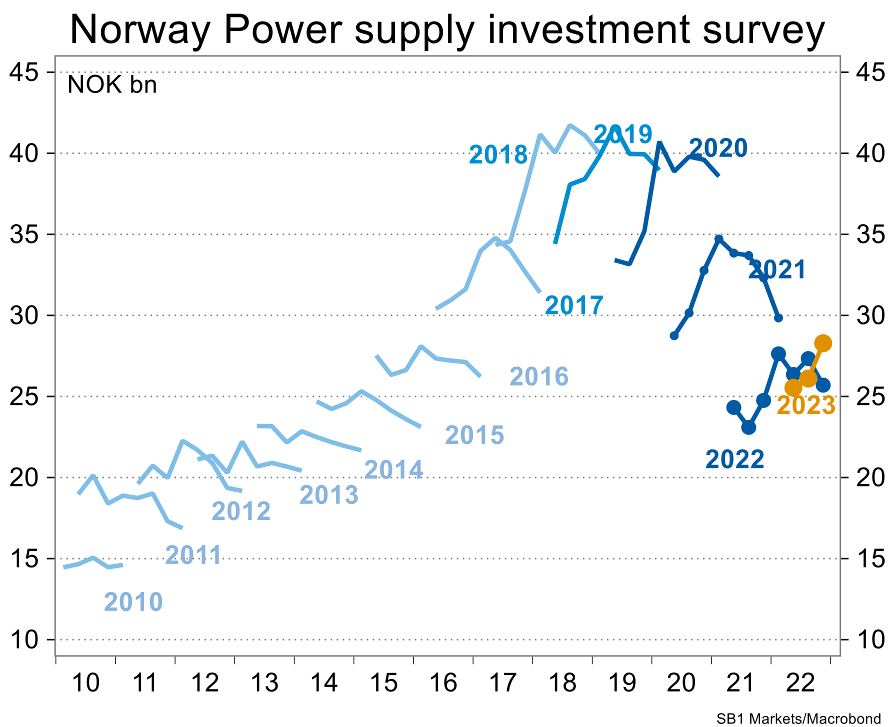
Other surveys are signalling a slowdown in manufacturing investments

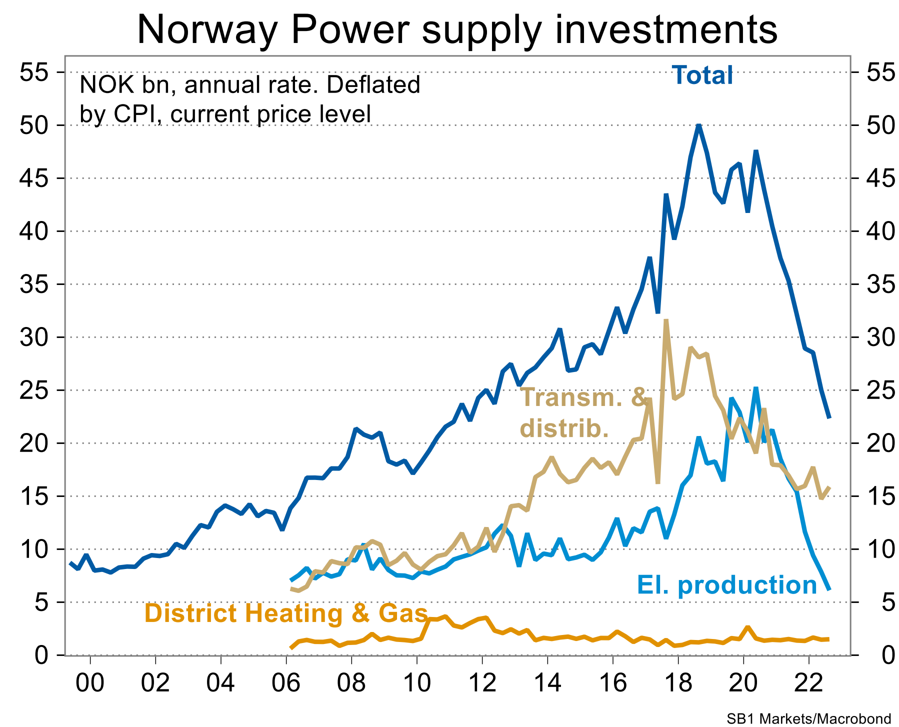
The discrepancy to other surveys has never been as large as now



Power supply: After 2 years of decline, an uptick in 2023?

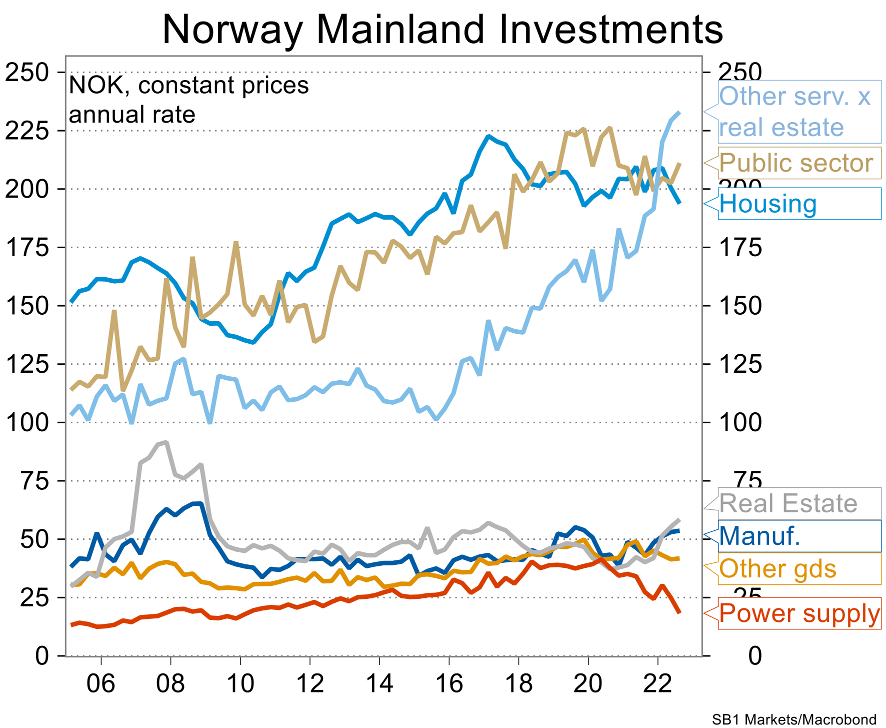
Investments have been cut in half since 2020 (CPI deflated)

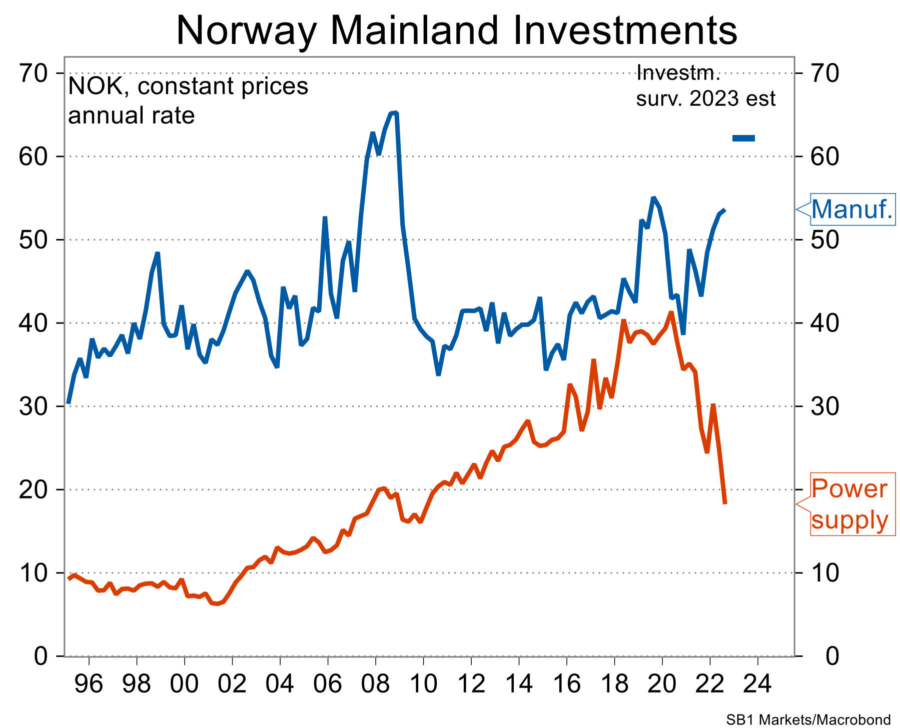




- **Power supply** (production & distribution) companies assume investments will decline by some 20% to NOK 26 bn in 2022
- The **2023 forecast** rose more than normal and is 14% above the similar estimate for 2022. We expect the final outcome to be well above (even if the current tax debacle may dampen investments for a while, even if electricity prices are high, and are expected to stay higher than normal the coming years)
- The decline in investments past years are rather spectacular, following the spectacular growth since year 2000

Manufacturing and power supply investments have diverged sharply

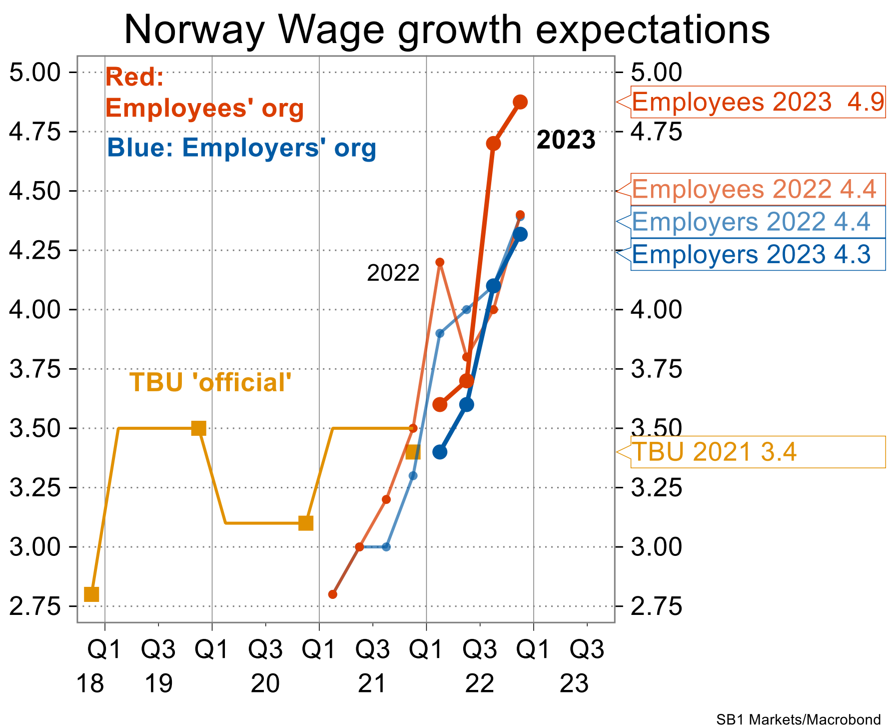




- SSB's survey signals a huge leap in manufacturing investments in 2023, + 10%, in volume terms to NOK 61 bn

NoBa Expectation survey: Trade unions expect 4.7% wage inflation in 2023

The employers think 4.1% should be sufficient. Inflation expect. are on the way up too, even long term



2022

- Both employers organisations and unions expect a 4.4% wage lift this year, above the agreed 3.7% – 3.8% agreed upon this spring, and well above actual wage data published so far
- **Norges Bank** assumed a 4.0 % growth rate in the September MPR

2023

- **Employers** aim for 4.3%, up from 4.1% forecast in Q3, a substantial lift
- **The unions** expect 4.9% wage inflation, up from 4.7% in Q3, and the gap to employer's organisations remains the largest ever!
- **Norges Bank pencilled** 4.6% in September – equalling the average of the forecast for employers and the unions

In sum

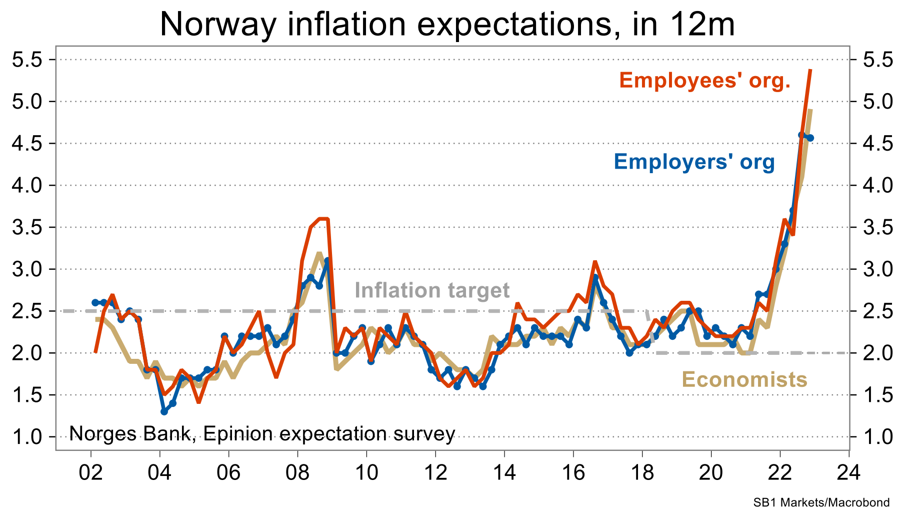
- Wage inflation expectations are accelerating sharply, which is partly reflected in NoBa's forecast. Still, the huge lift in the expectations among the leaders in employees' organisations illustrates that challenging times are ahead

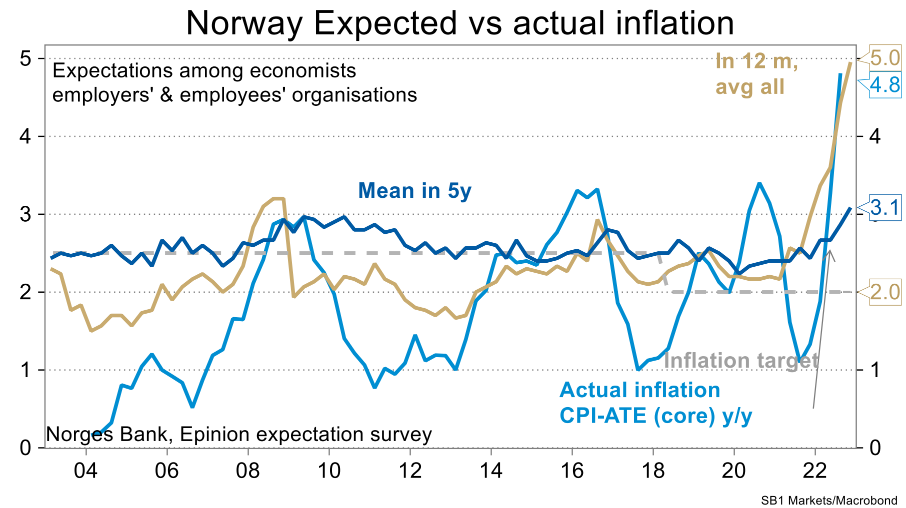
Inflation expectations are drifting upwards

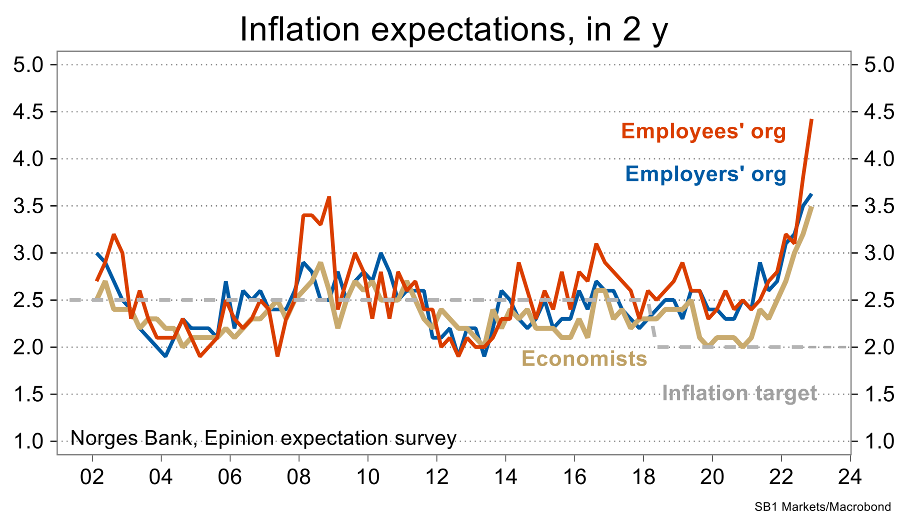
- In addition – and not surprising - inflation expectations for the coming years, and even for the long run is way above the 2% inflation target
- This is surely a huge challenge for Norges Bank: How 'forcefully' should the bank be in order to 'correct' these expectations, or even more important, prevent this outcome?

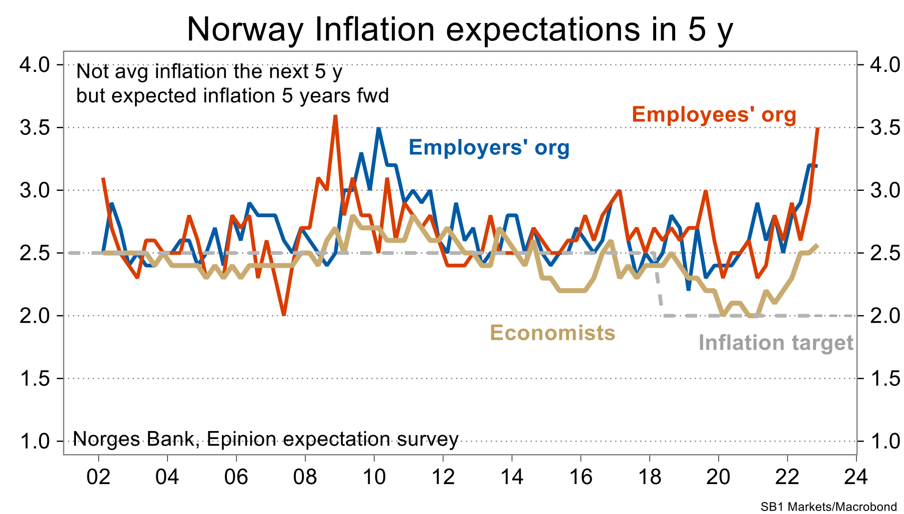
Inflation expectations still on the way up, also long term expectations

Nobody believes in the 2% inflation target anymore! Unions expect 4.4% in 2 years' time, and 3.5% in 5 years'





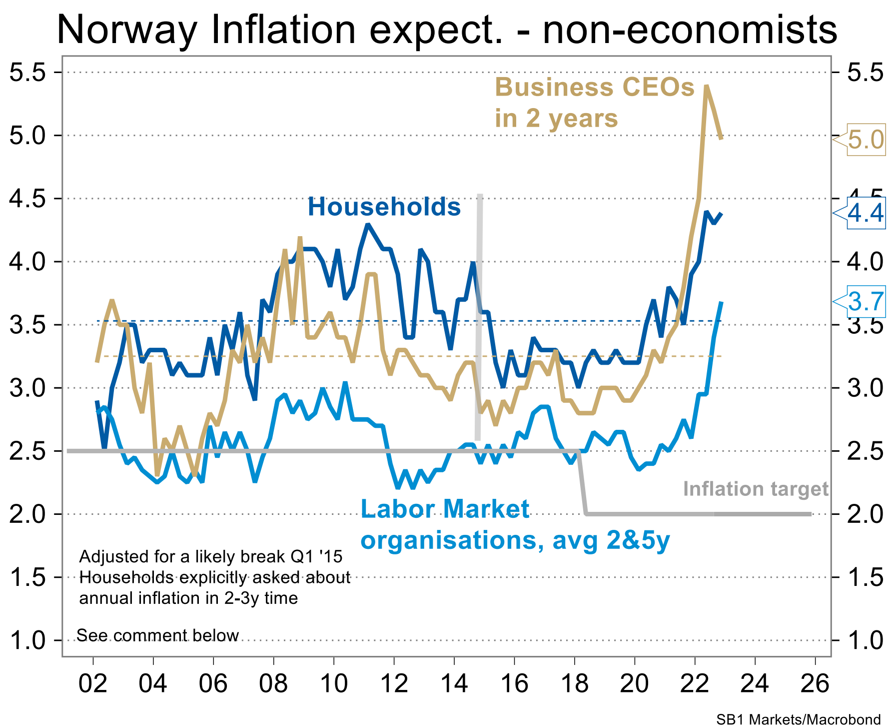




In these charts, results from economists (academia, market), leaders in trade unions and in employers' associations are presented, not businesses or households

Household, business inflation expectation are not particularly well anchored

And the labour market organisations also have no faith in the inflation target



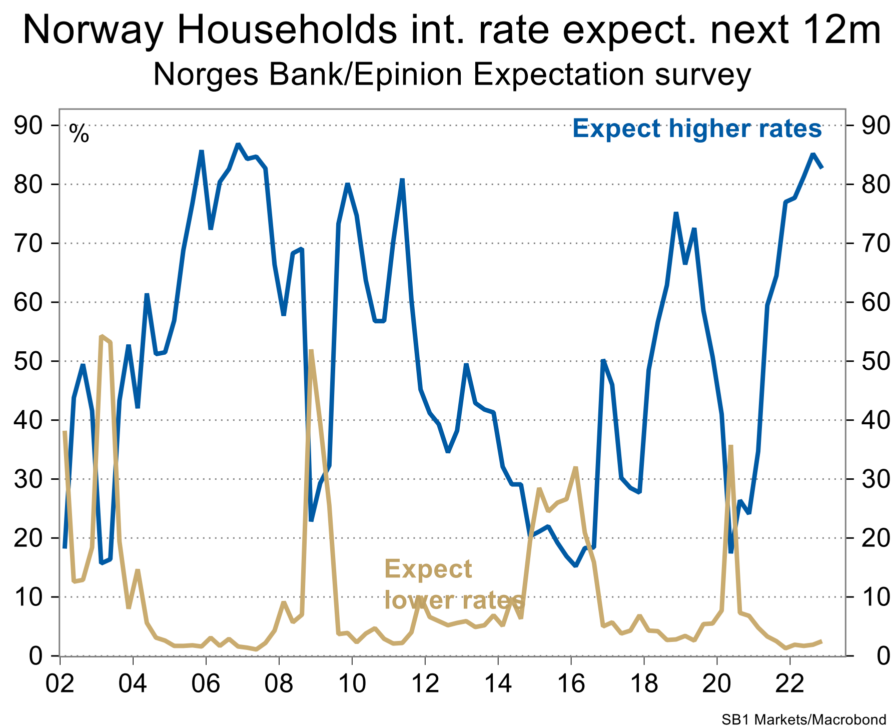
Business leaders' & households' expectations have climbed to well above normal (very high) levels – but CEOs believe that inflation has peaked and their expectations fell again in Q4!

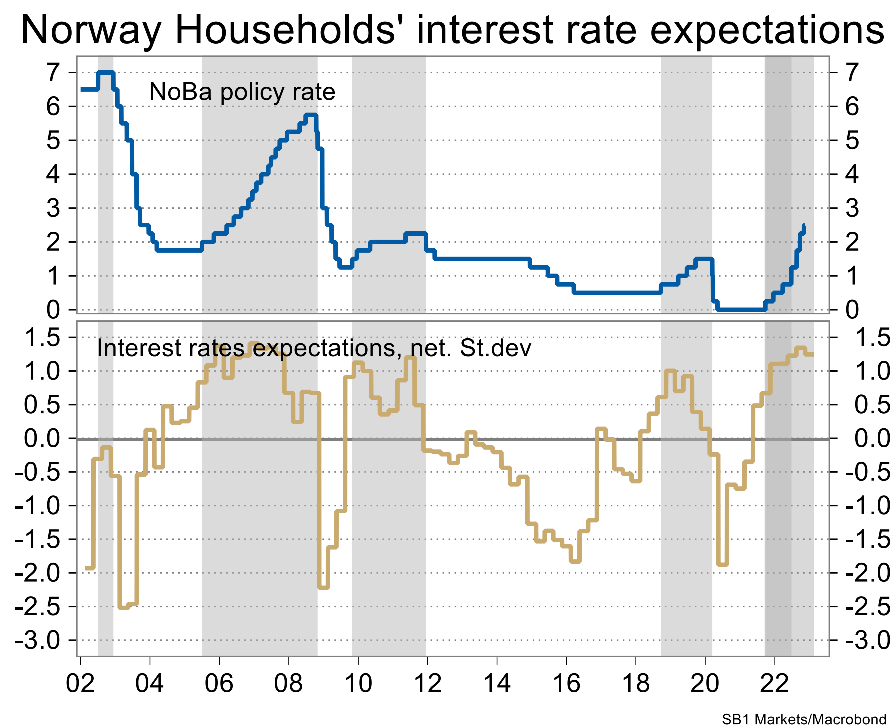
- **Labour market participants** (leaders in trade unions & employees' assoc.) are probably listening to their economists, but they still expect 3.7% long term inflation rate (2 y & 5 y avg). The cut in the inflation target to 2% in 2018 has not influenced inflation expectations at all
- **Business leaders** are expecting a 5.0% inflation rate in 2 years time – up approx. 2 pp since before corona, and much higher than their average expectation (3.2%) (and no impact of the lower inflation target)
- **Households** have always expected incredibly high inflation going forward (even after an adjustment of data prior to Q1 '15, due to a clarification of 'inflation', see below) – on average 3.5%. Now, **they expect 4.4%** in 2 to 3 years time, up 0.1 pp from Q3, and over 1 pp higher than from before corona
- Should we just ignore these 'silly' expectations, or should we reflect on them?
  - » We should at least put some emphasis on the significant rise in inflation expectations – to above average levels

The questions regarding expected inflation in 2 or 2 – 3 years time for business leaders and households were slightly altered in Q1 2015 survey. Since then, they have been asked about the expected rate of annual inflation in 2/2-3 year time, not just 'inflation' which could have an unambiguous interpretation. Household revised their expectations down by 0.6 pp in the Q1 '15 vs the Q4 '14 survey due to this clarification. Business CEO's revised their expectations a tad upwards. Since there were no other major change in actual inflation or inflation expectations among other groups during these months, we have just revised households' expectations down by 0.6 pp pre Q4 '14 at the chart above

Households recognise that interest rates are on the way up

Households are often ahead of the curve when NoBa (well communicated) starts hiking

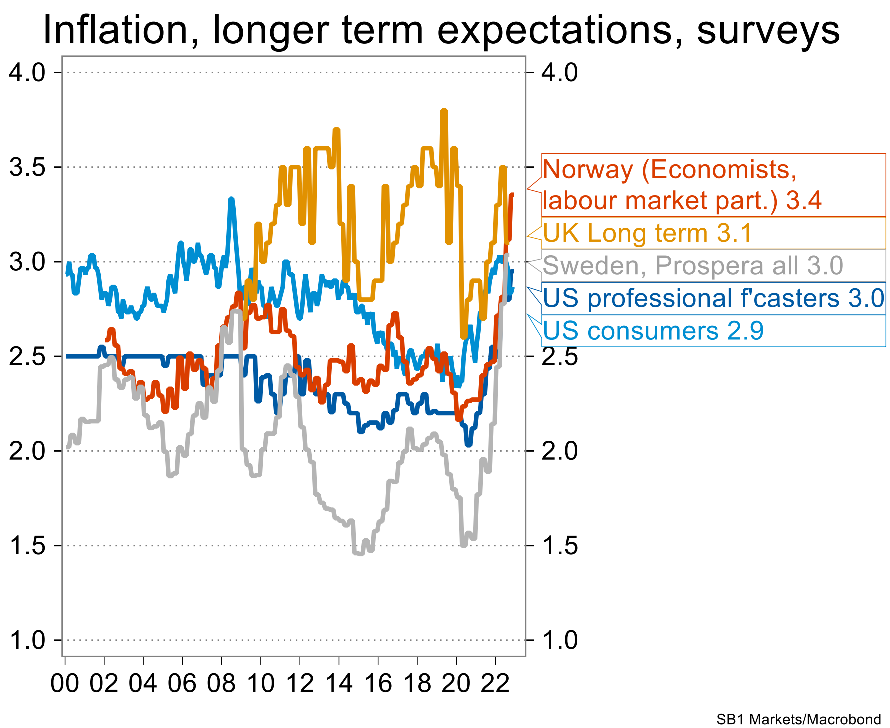


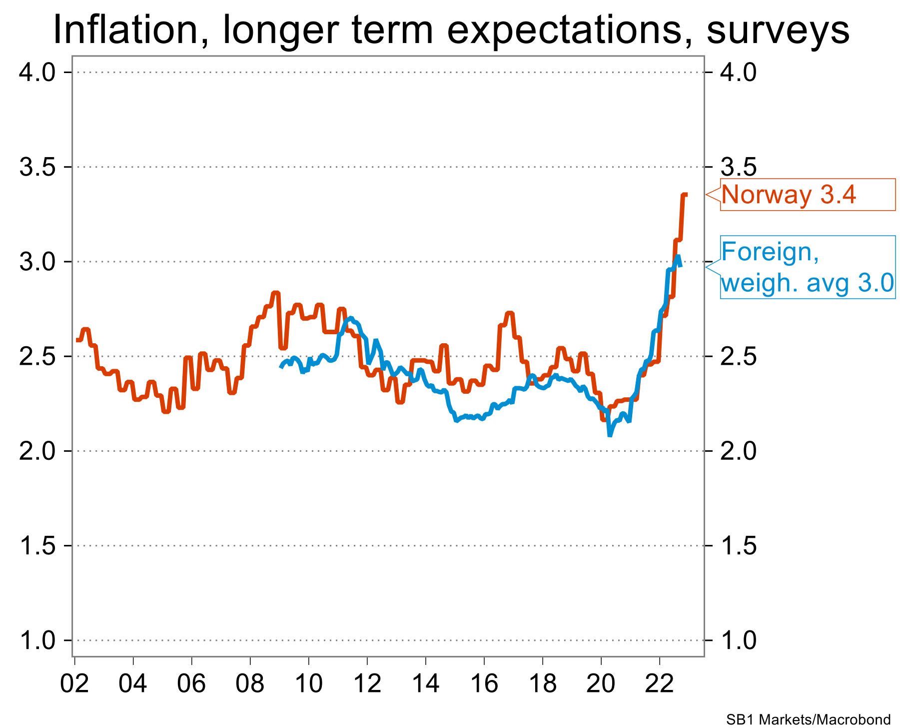


- 83% of households expect Norges Bank to hike the policy rate the coming 12 months, up from 65% since before NoBa started hiking. Nobody (or just 2.5%) expect NoBa to lower rates

Survey based inflation expectations in Norway vs. other countries: Quite similar

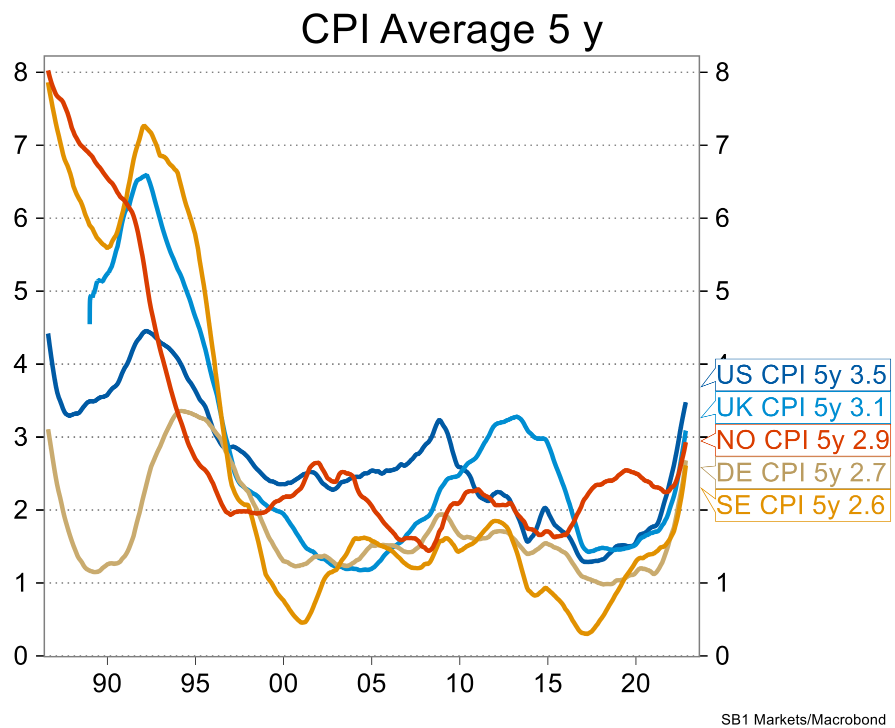
…but now inflation expectations in Norway have surpassed those abroad

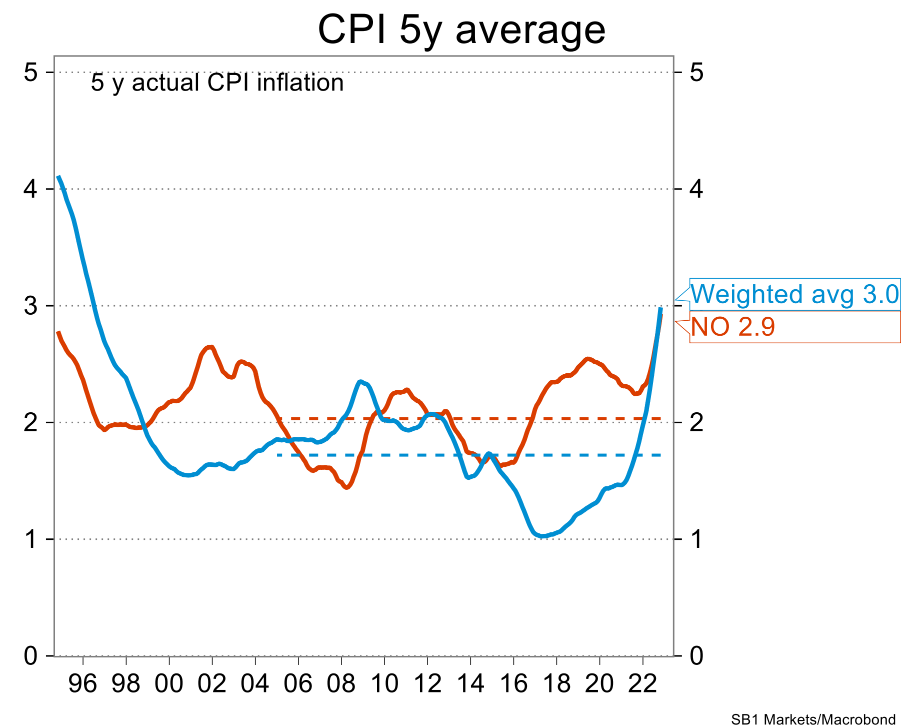




Long term: Actual inflation has been higher in Norway than abroad

… But not consistently. The past 5 years, no difference at all





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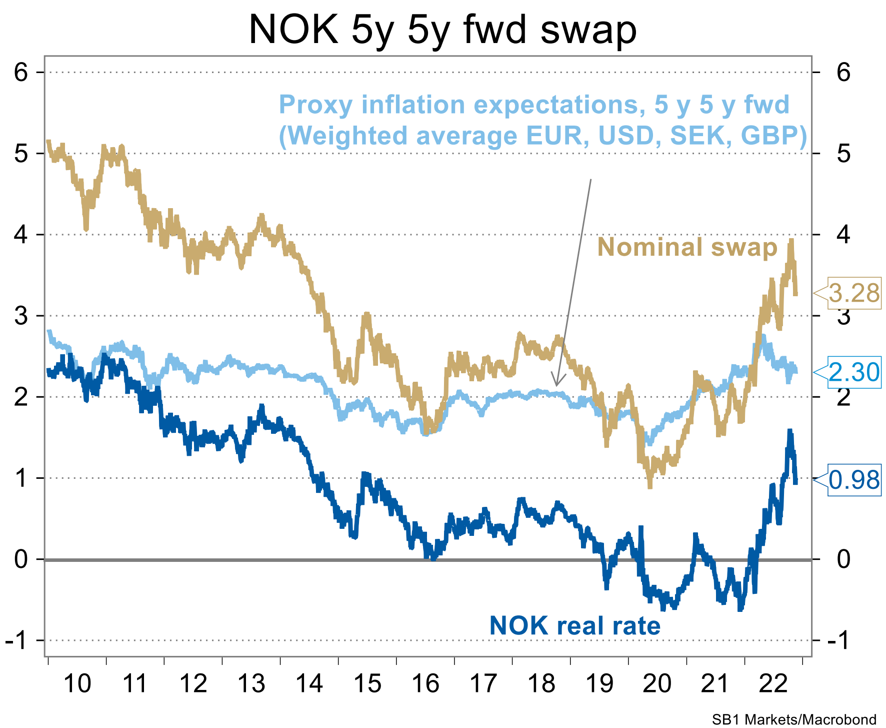
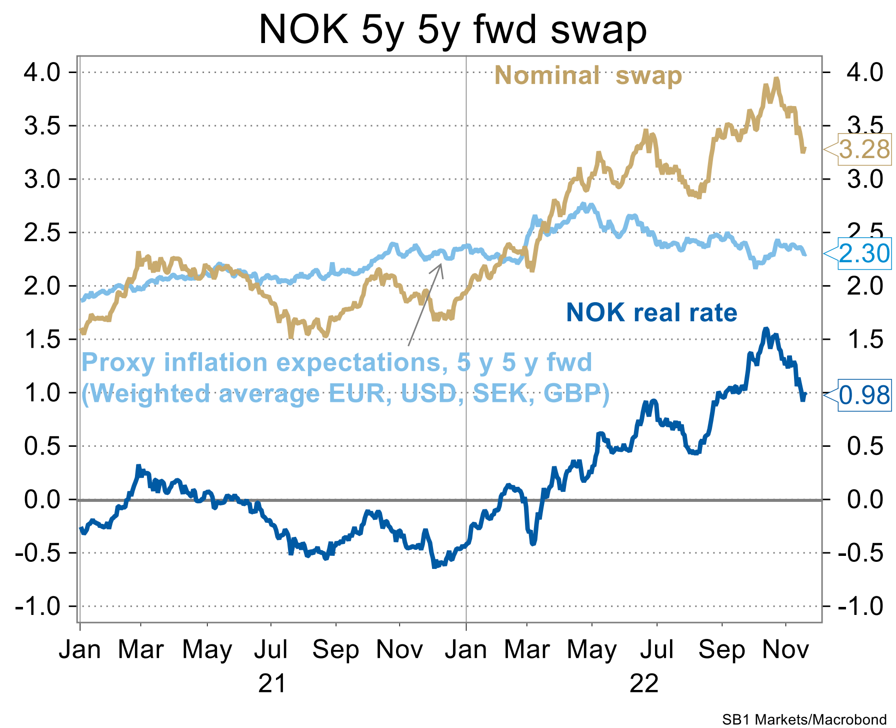
Where are the Norwegian market based inflation expectations?

Problem: There are no NOK break-evens (or real rate) bonds or swaps. So just construct a proxy?





- We have constructed a proxy for Norwegian inflation expectations derived from break-even swaps in EUR, USD, SEK and GBP. Our peers vary somewhat level-wise, but the short term changes are very similar. We have just weighted them together (and adjusted GBP swaps for the CPI/RPI differential)
- The current estimated 5 y 5 y NOK inflation 'break-even' is 2.3%, 30 bps higher than a 'normal' level at 2%. The 10 y break-even is at 2.58%
- A NOK real rate is just a residual when expected inflation is calculated: It has surged here too – which has profound impact on all NPV-models (in real estate and everywhere else). There is no reason to believe that expected real growth in rents/earnings have appreciated alongside the rise in long term real rate

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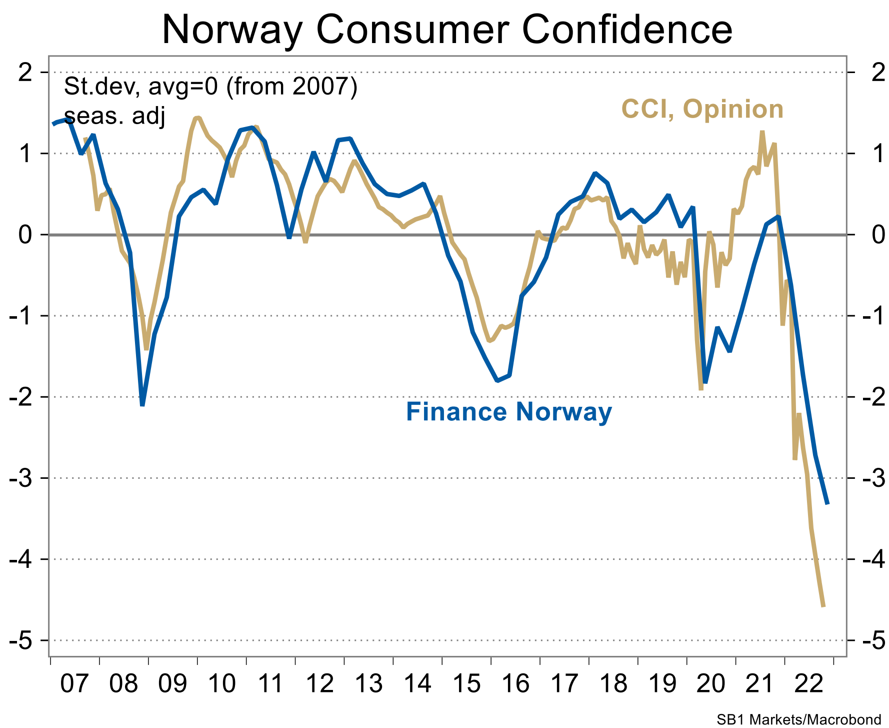
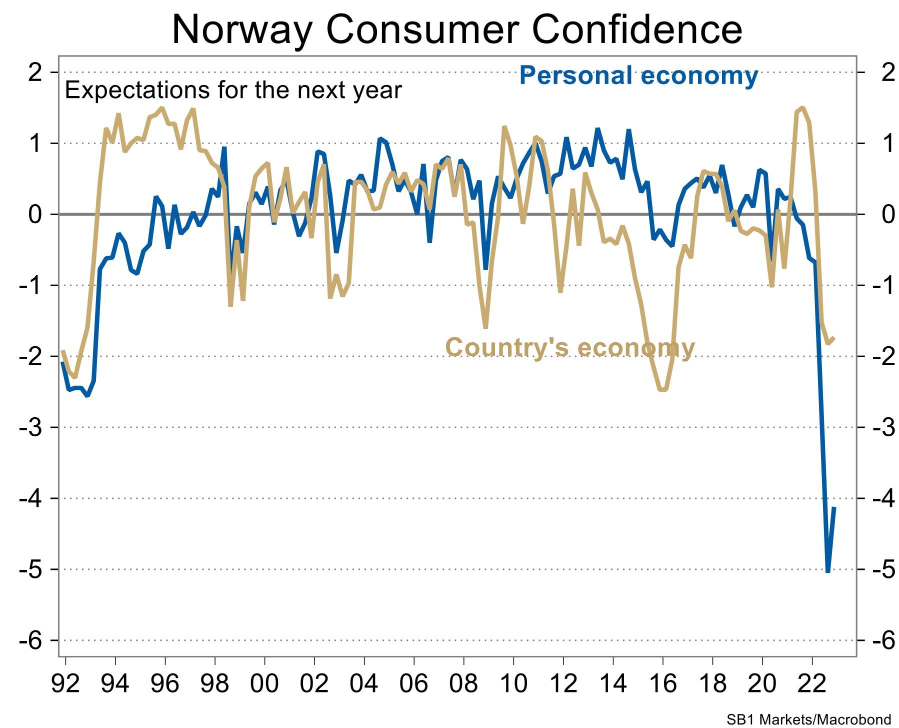
Finans Norges' Q4 consumer confidence down to -3.3 st.dev

However, a small uptick in expectations for the next year – but levels are extremely low

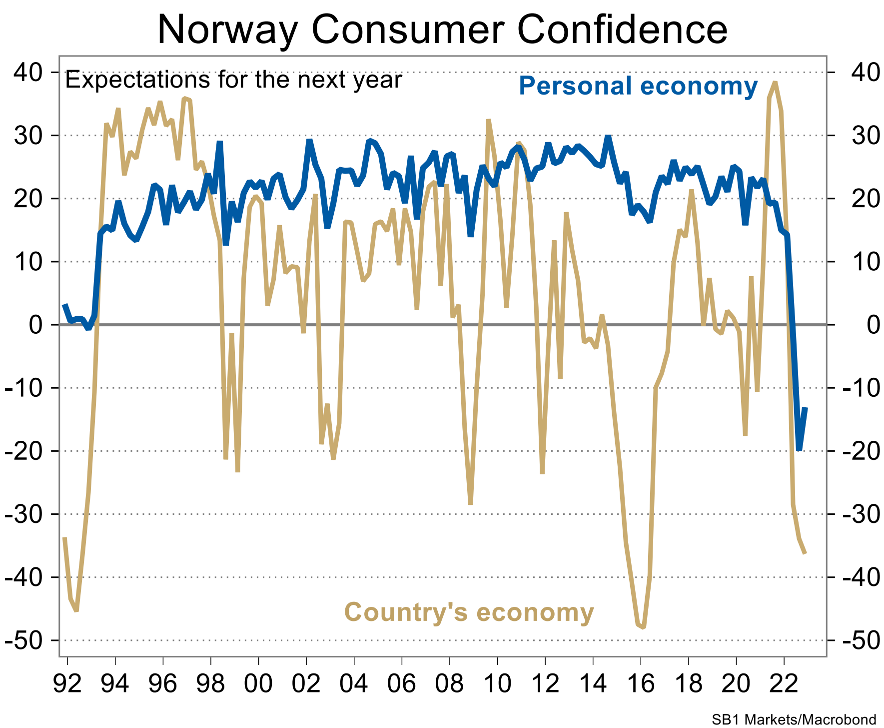


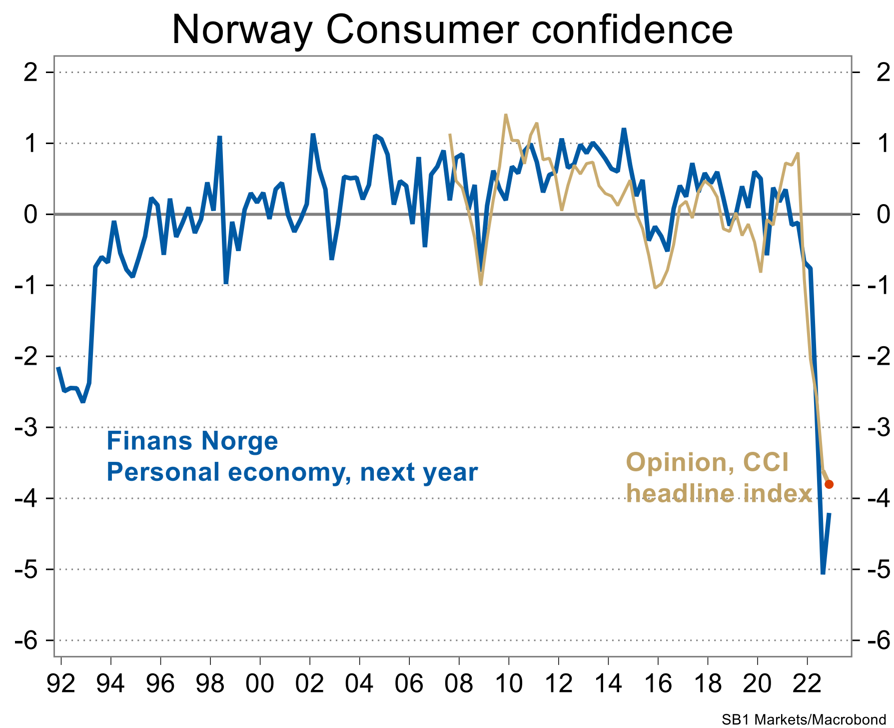


- **Finance Norway's quarterly consumer confidence index** fell to -38 in Q4 from -30 in Q3 (revised from -27), we expected -40. The index fell by 0.6 st.dev to -3.3 below average, another ATL
- **Households' expectations** of their own economy recovered marginally, from -5 to -4.1 st.dev. The actual index number fell rose 6 p to -14: So the balance is not that weak per se, the overweight of respondents that are negative is not that large and the impact on demand may not be that disastrous (but of course, normally most respondents have a positive outlook)
- **Opinion's monthly consumer confidence index (CCI)** is even weaker than Finans Norge's survey

A very special data point for personal economy outlook

However, as real wages are down, interest rates are up, most househ. should report a negative outl.

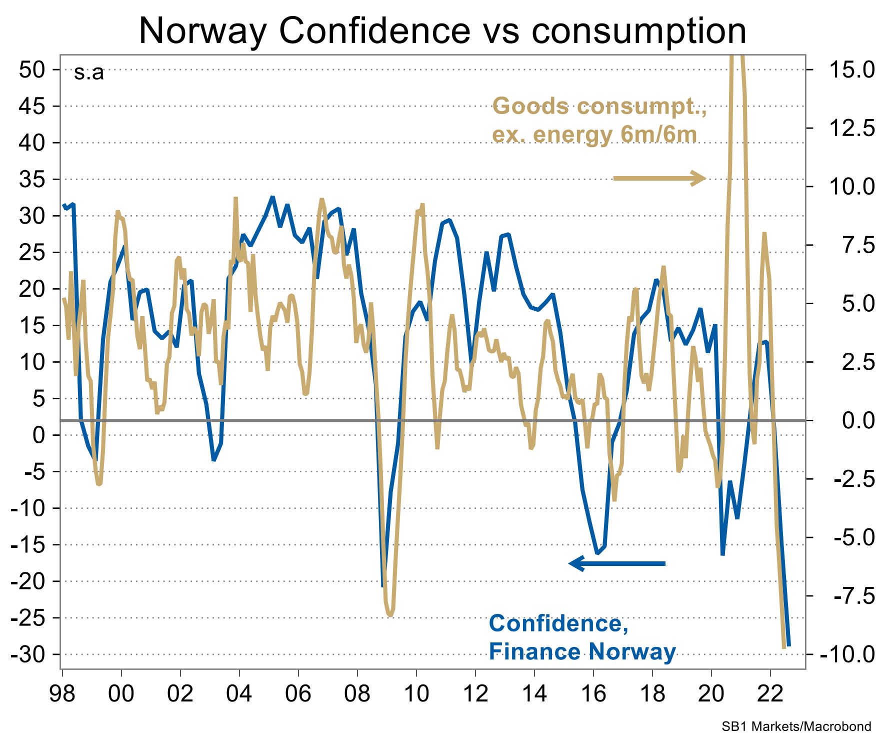


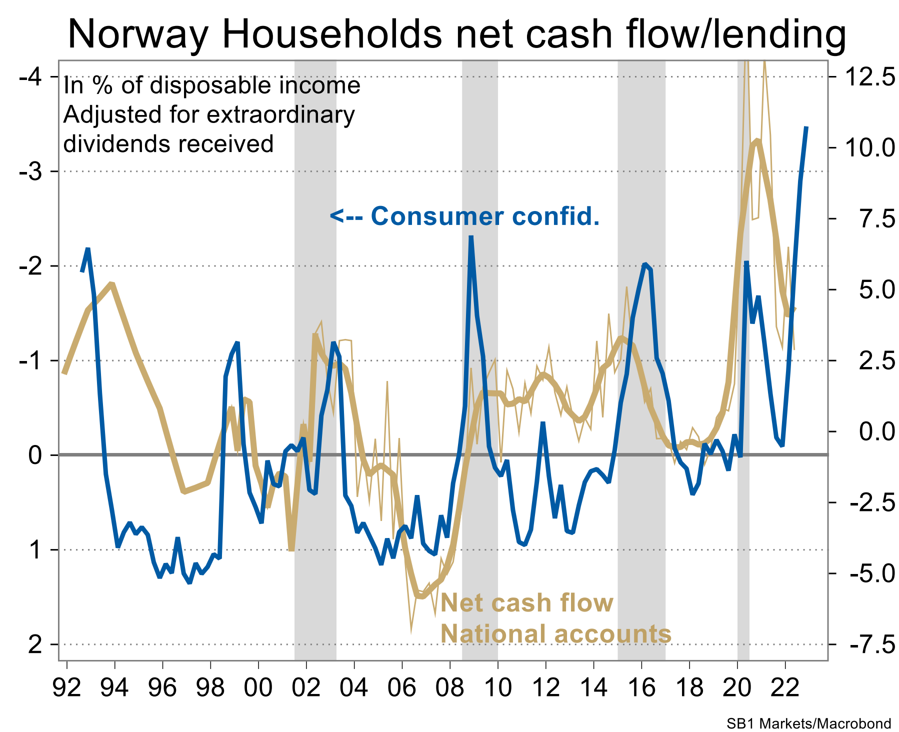


- Expectations for the country's economy is of course weak but it have been lower before, like during the oil 'crisis', in 2015/16

Still : A sharp decline in consumer confidence is normally not a good sign

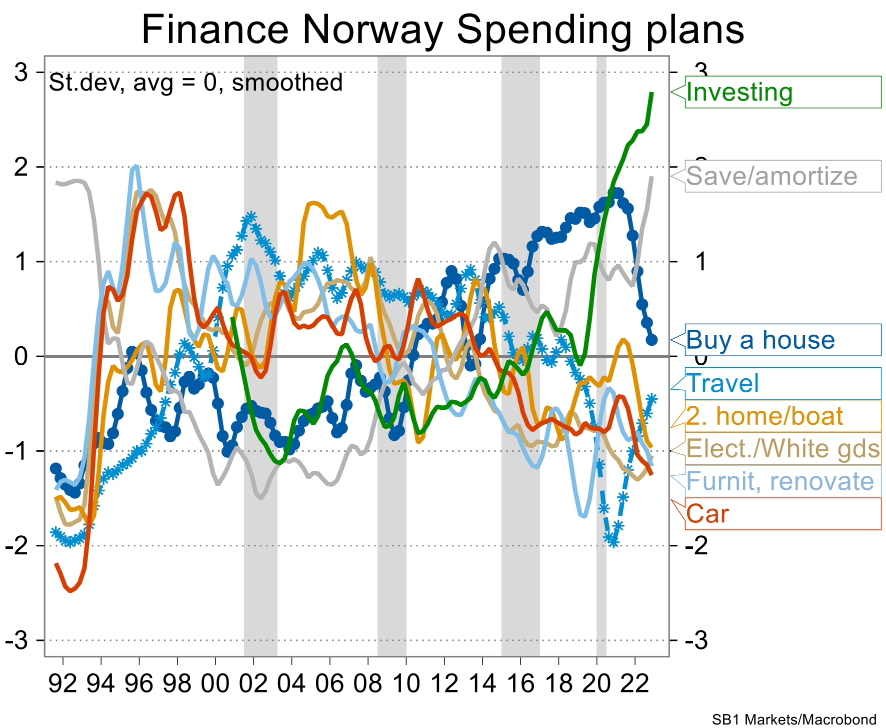
Neither consumption nor savings have been uncorrelated to the level/changes in confidence

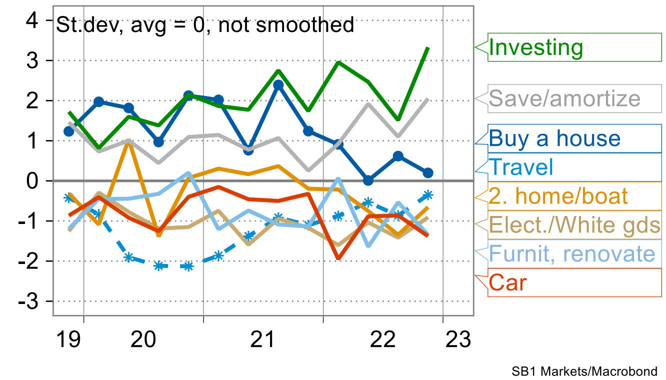


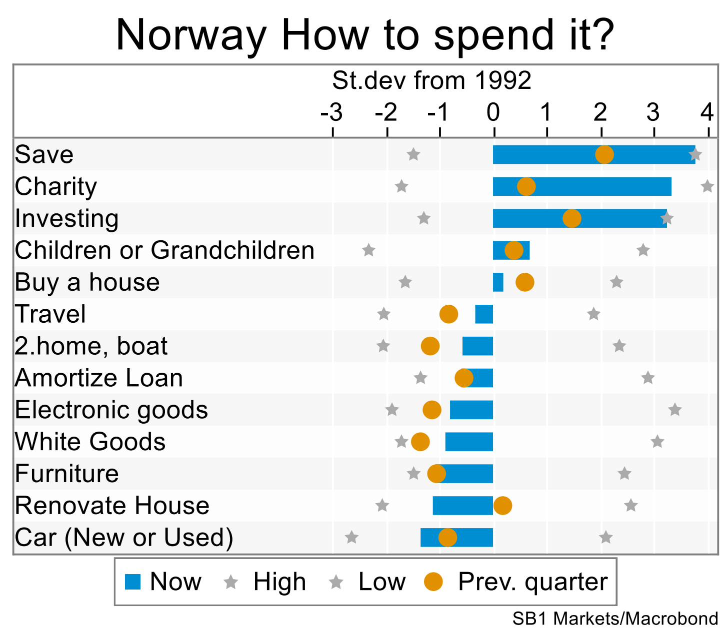


Saving and investing more popular than ever

Housing still above par but not by much anymore, from he highest level in late 2021



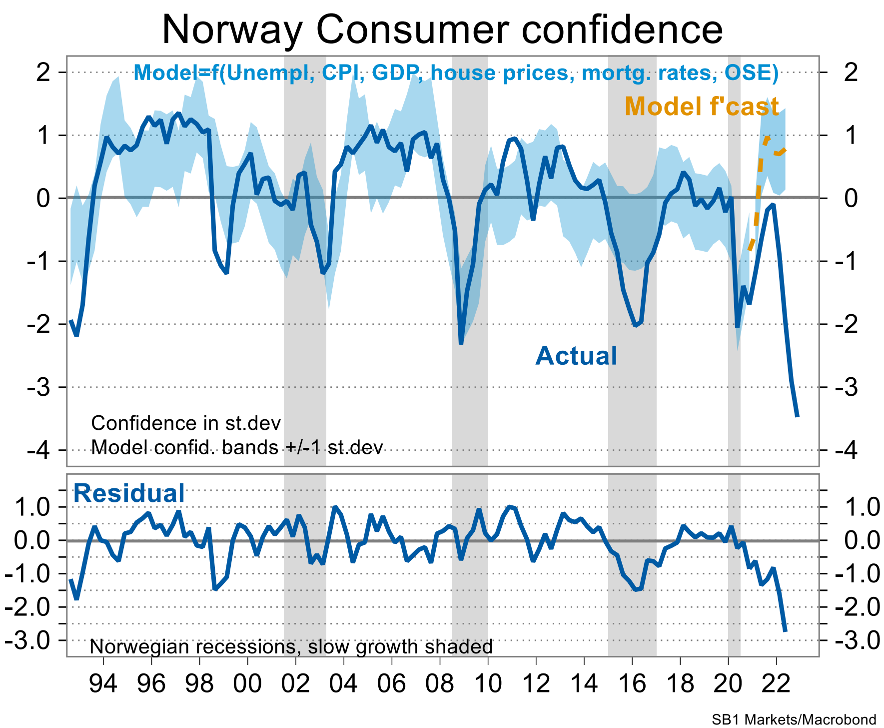


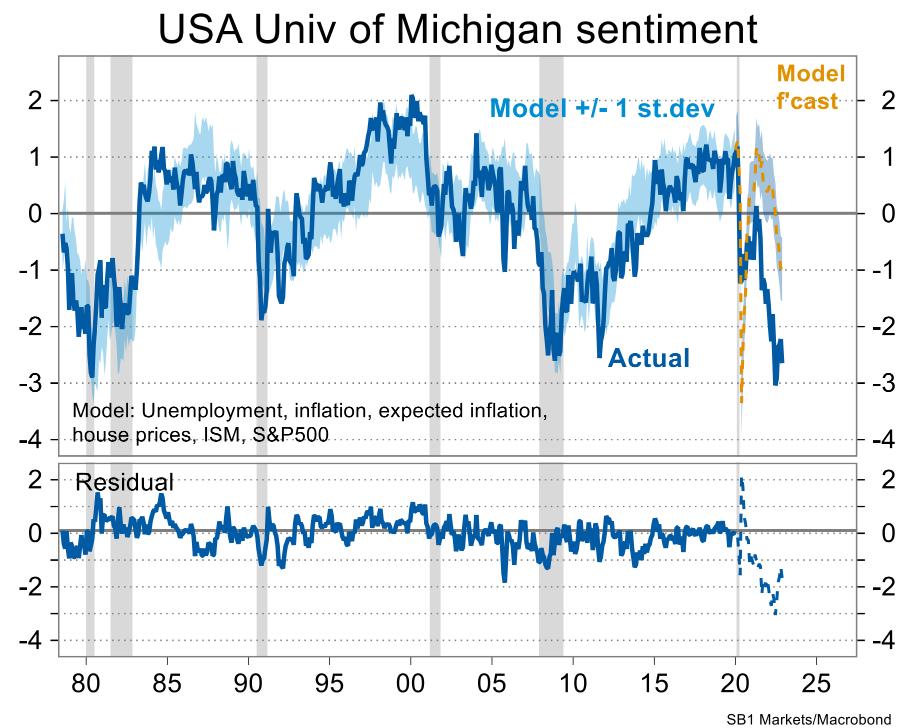


- Demand for **2nd homes and boats** has fallen below average, **car buying** plans rose but are still below par. **Furniture/renovate house** fell sharply. **Travel** is ticking upwards, but is still well below par
- **Savings plans** and **'investment'** plans have climbed to the highest level ever. We do not know what sort of investments households are referring too

Why are we (and others) in such a bad mood? Our models can not explain it

OK, our models are not perfect, especially the Norwegain version, but still…

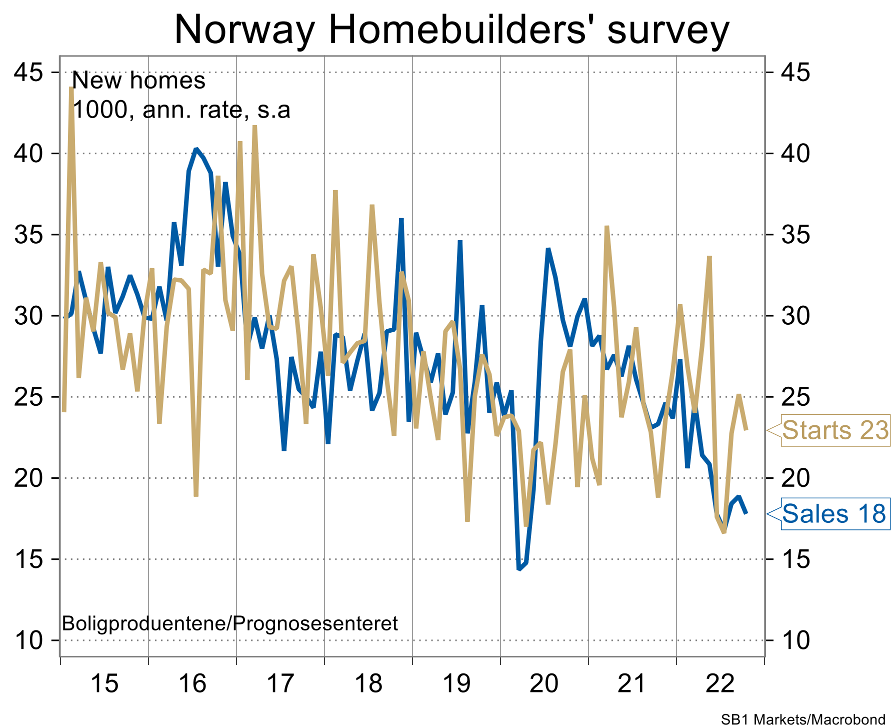


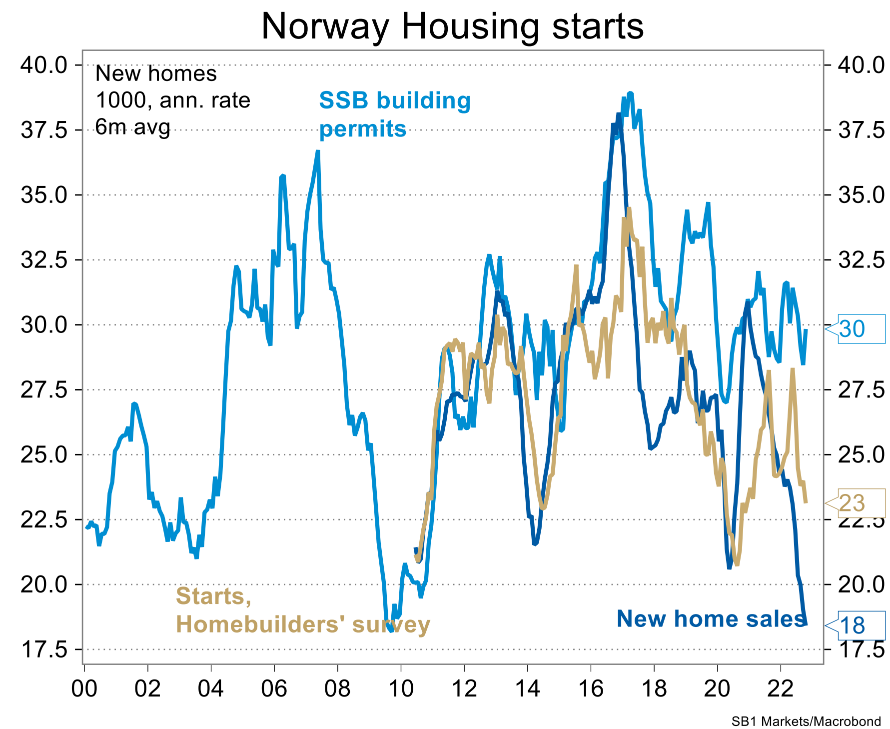


- The gap has closed somewhat in the US, as the stock market has tanked

New home sales remained at a low level in October

… according to the home builders. SSB reports declining building permits

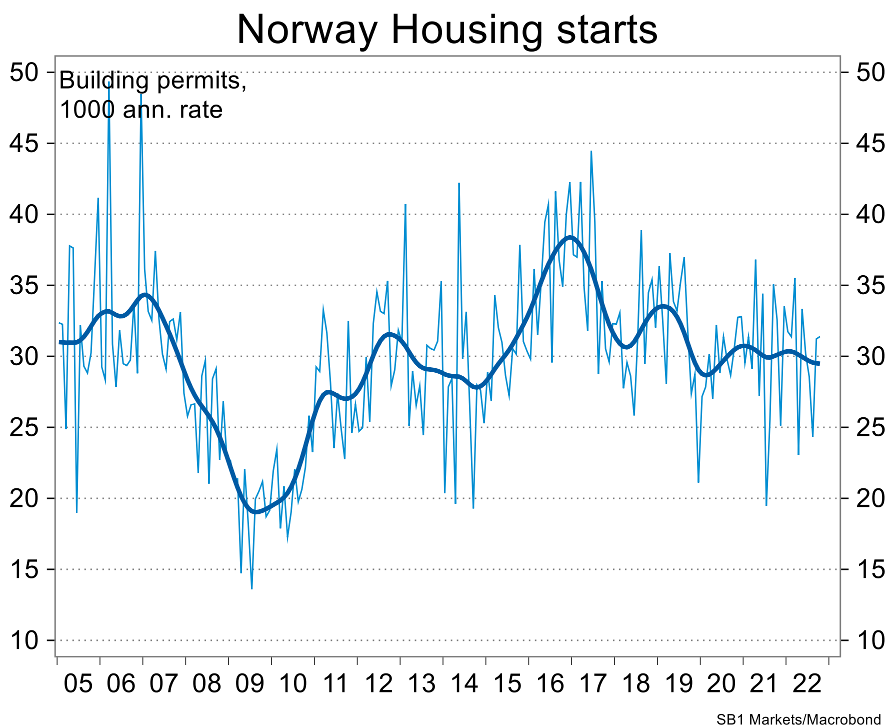




- Boligprodusentene (Home builders) reported a small decrease in new home sales in October, but the level is rather low at 18' and the trend has been down since early 2021. The average over the past 6 months is 18', the lowest on record from the Home builders
- Starts decreased by 2' to 23' in October. The average over the past 6 months is at 23', while SSBs building permits gained 5' to 30' in Oct, though with a 6 m average at 28 – which is trending down
- The rather steady decline in new home sales signals a downturn in new starts/permits the coming months. The sharp lift in construction costs and now much higher mortgage rates are reasonable explanations

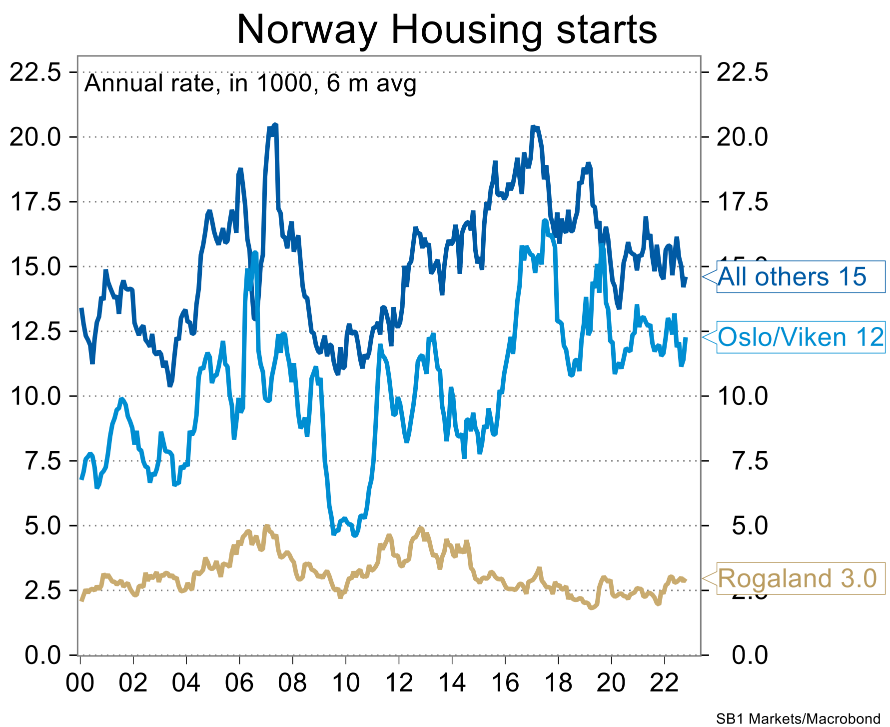
SSB: Housing permits stable at a rather level in October

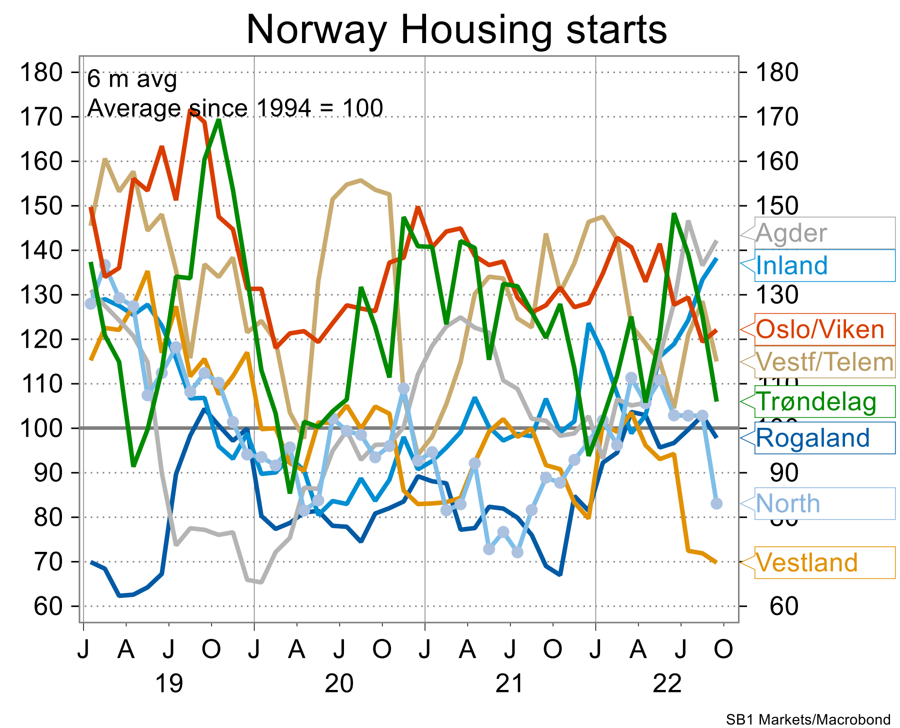
Permits at 31’– and the trend is just slightly down



- The average no. of permits the past 6 months is at 30’ (annualised), while Home builders (Boligprodusentene) report a 23’ pace in actual starts
- Student homes and assisted-living/nursing homes are not included in data from the Home builders. Some larger players do not report their activity to the Home builders’ association either

Housing starts mixed between regions – most are down

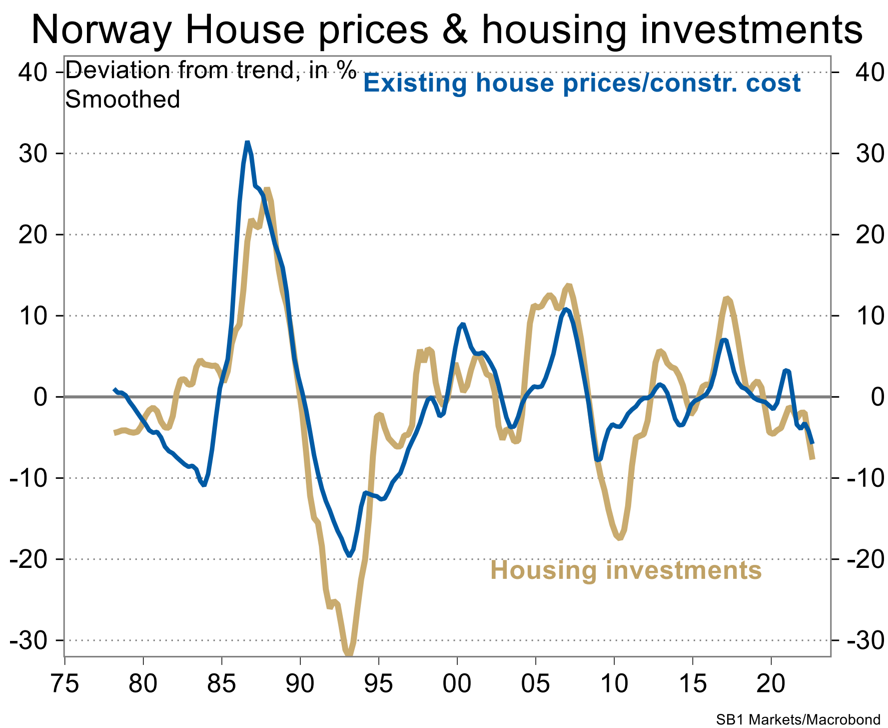


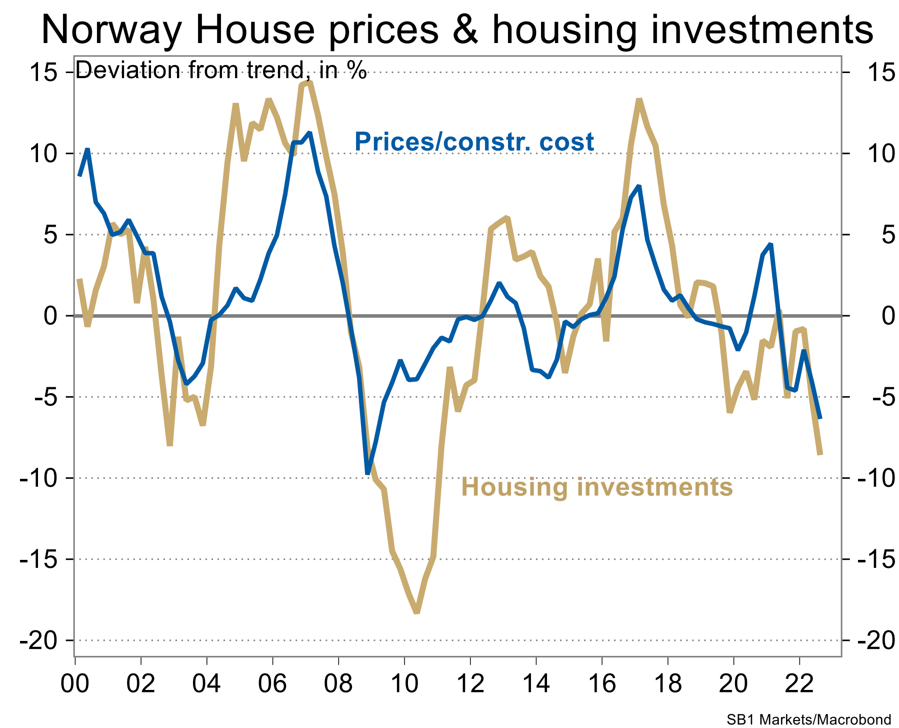


- Vestland, Northern Norway, and Rogaland are reporting less starts than past 25 y avg. (measured over the past 6 m average)

Housing starts/investments normally in tandem with house prices, no surprise

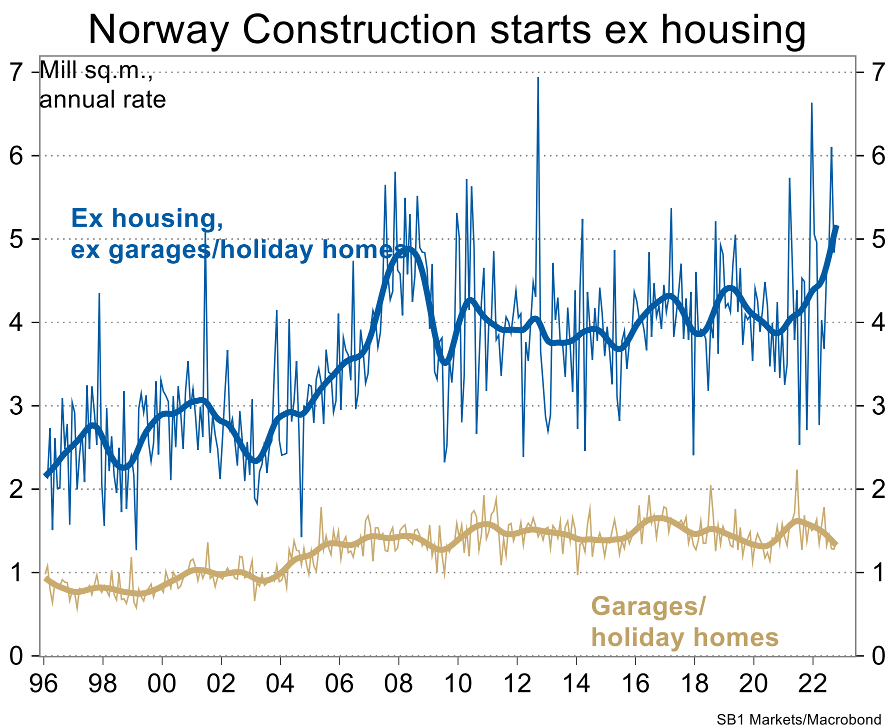
…and now prices are falling

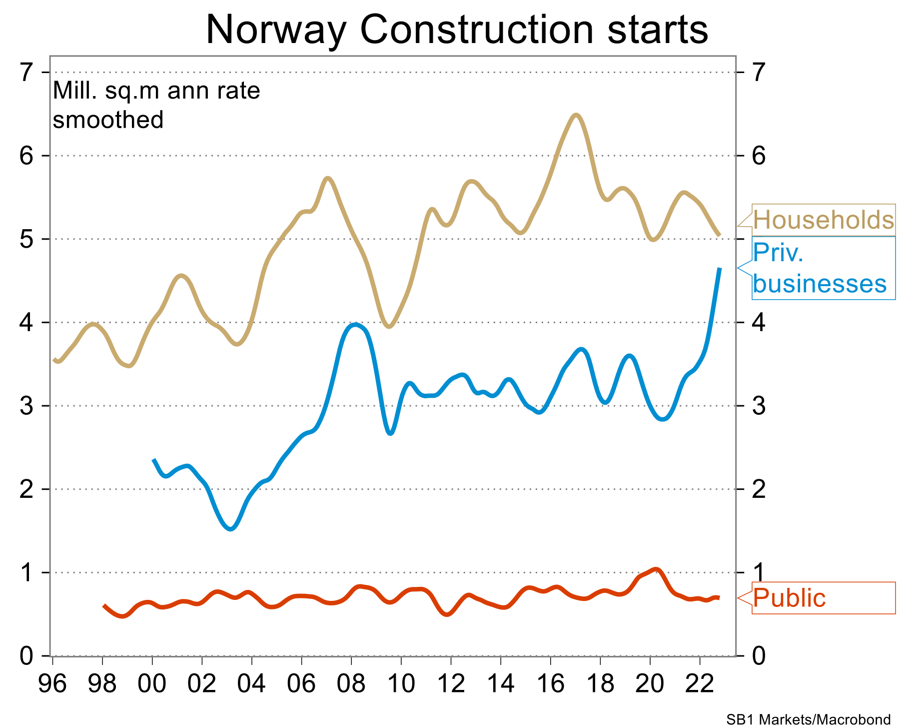




Non-residential construction still going VERY strong

Both the private and the public sector are starting up more projects, the private sector level is high

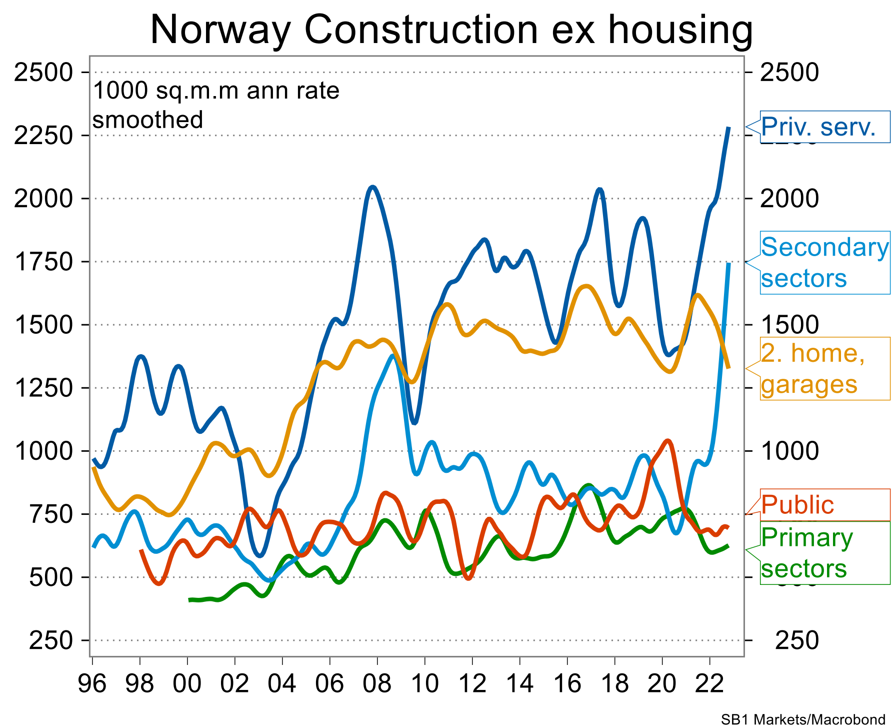


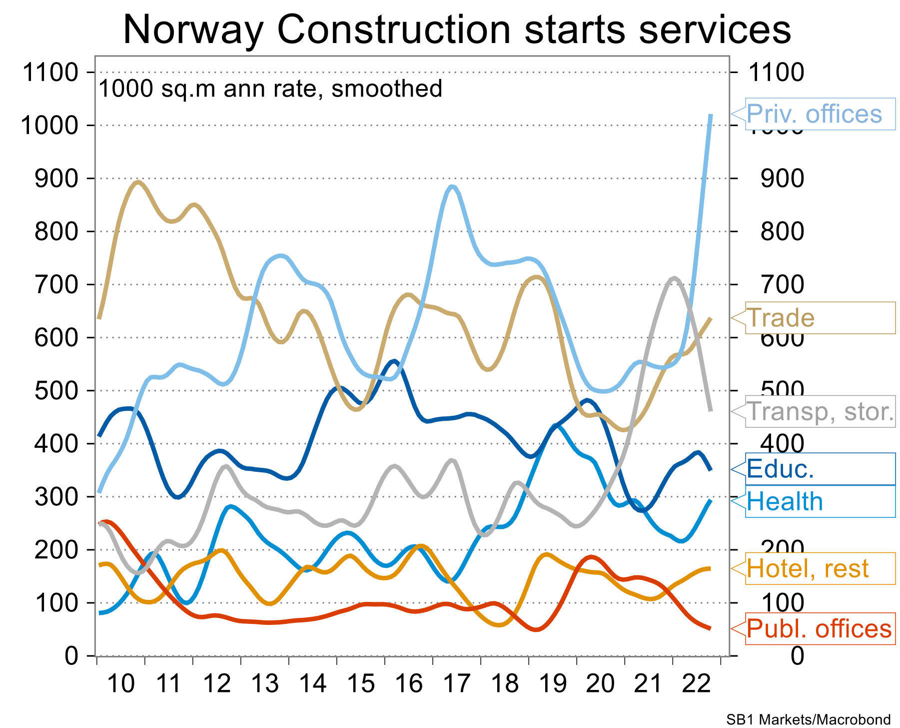


- **Construction starts ex housing & garages/cabins** are very volatile, short term, influenced by single projects
  - » **Private non-residential starts** climbed and are trending upwards, and the level is on par with the highest ever
  - » **Public sector construction starts** have recovered recently, following a decline in 2021
  - » **Construction starts of cabins/garages** climbed 30% – 40% from early 2020 until late 2021– but are now trending down, and is soon back to the pre-pandemic level

Both private services and manufacturers are building 'like crazy'

Both well above their pre-financial crisis peak levels. Offices in the lead



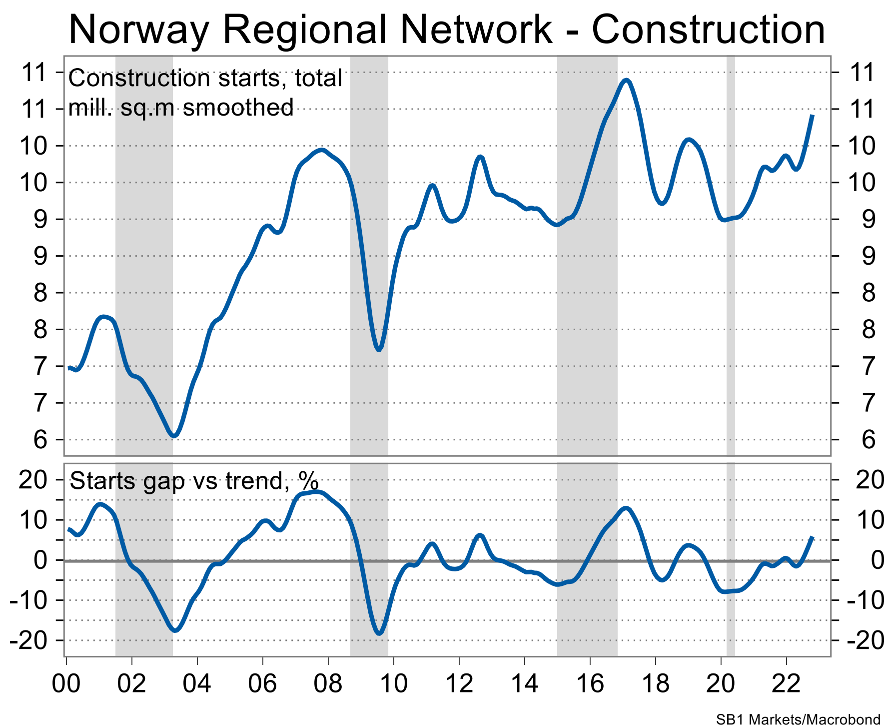


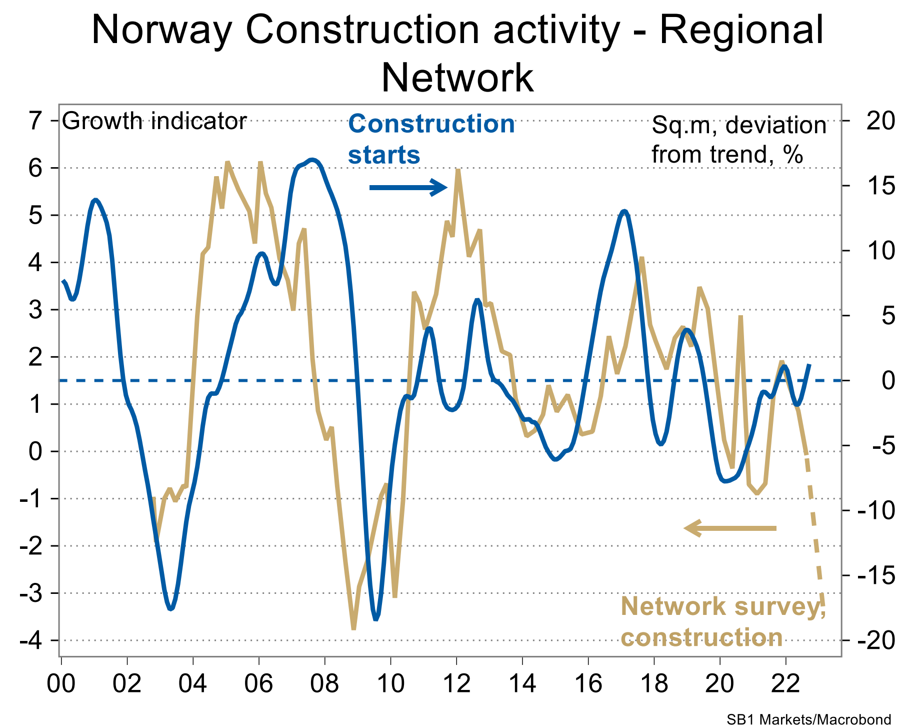
- **Secondary sectors** (read: manufacturing) sharply up, to the best level ever, at least with data back to 1996. Some battery factories have found their way into our building statistics
- Starts in **private services** are very strong led by private offices and trade. Starts for transport & storage, although still at a high level, has fallen since Jan-20
- Starts of **public offices** have fallen sharply, education and health somewhat up recent months

Public on the chart to the left, and at the previous page: Construction starts in public administration, education and health

The Q3 NoBa Regional Network signals a hard landing in the construction sector

… while total construction starts are <u>still rapidly on the way up</u>, thanks to private services (offices)





- Companies in the construction sector now report the sharpest contraction since the Financial Crisis. Back then, starts fell almost 30%
- The 'long term' trend in total starts is down since early 2017

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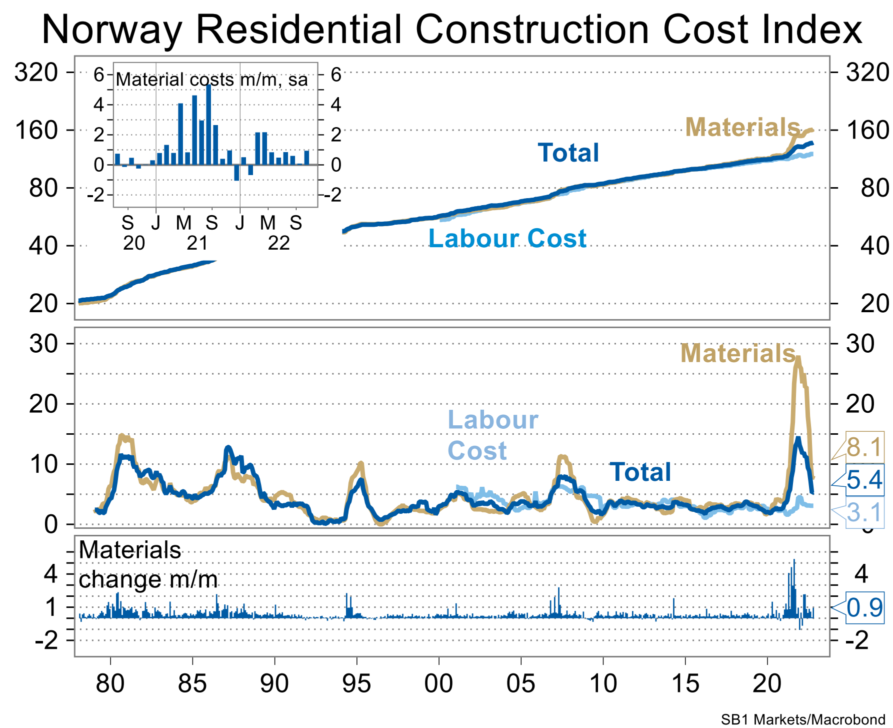
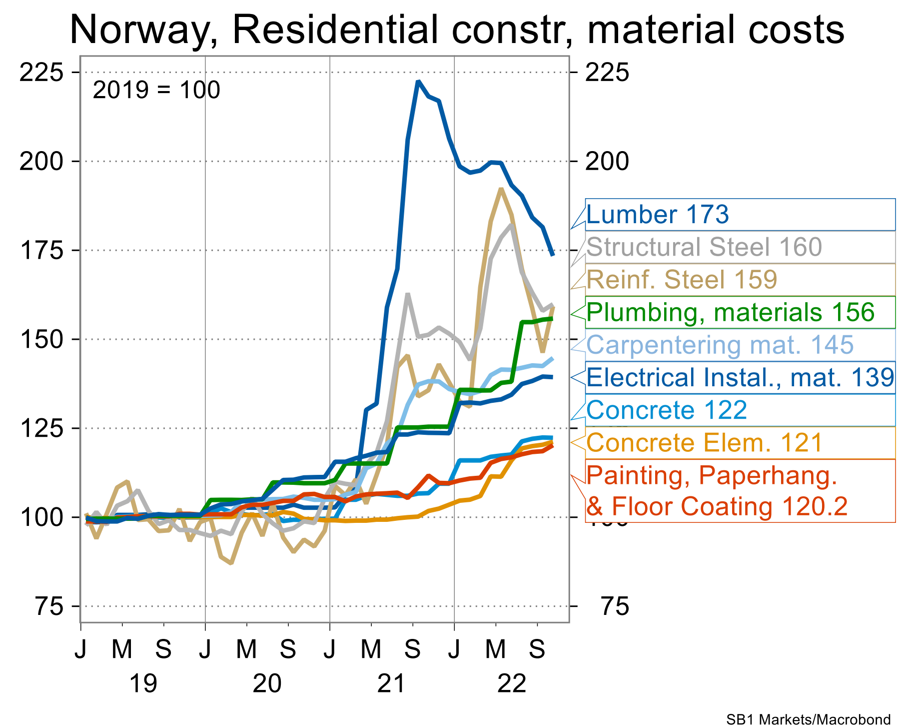
Building costs rose faster in October – but the end of cost inflation in sight?

Lumber and steel is down, but other materials are still drifting upwards

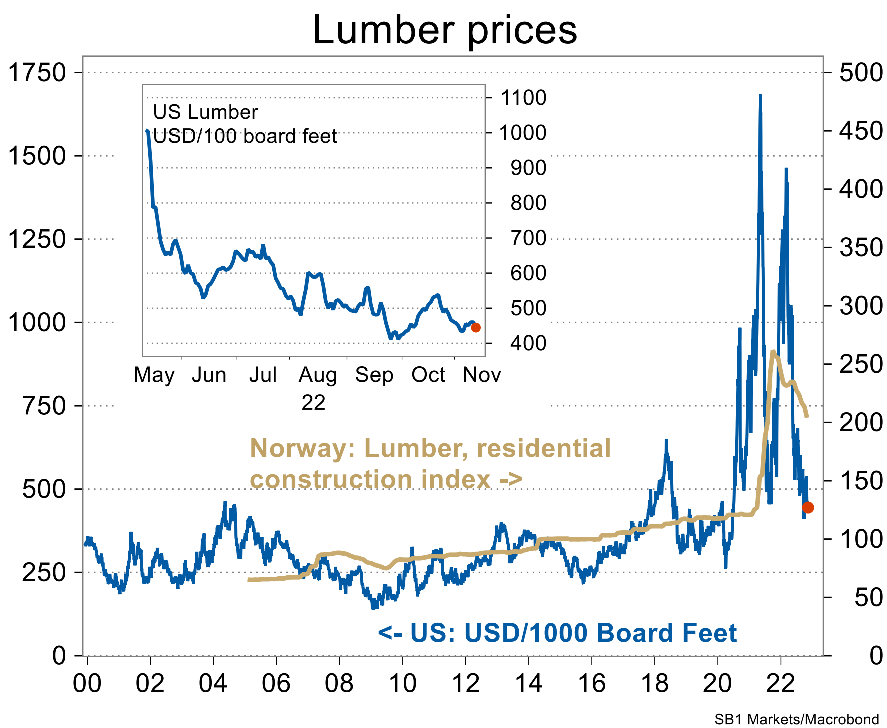




- **Material prices** (houses and apartments) added 1% October. Prices are up 8.1%, down from 28% at the peak. We expected a decline m/m.
  - » Lumber prices are trending down, and reports signal further declines the coming months. Steel prices rose in Oct but the trend is down, here too, as on the global steel market
  - » Other material prices are still trending up; but slower Both plumbing materials, electrical equipment and concreate rose slightly in both August and September
- **Labour costs** were just up 3.1% y/y in Q3, unch. from Q2, below the 4.5% gain in Q4 last year (which was the highest growth rate since 2009)
- Including labour costs, the **total building** cost index is up by 5.4%, down from the ATH at 14.6% at the peak last Oct. The price level is up 13% vs. the pre-pandemic 2.5% growth path. <u>Going forward, we still think lower material costs will bring total construction costs down to more normal levels.</u>

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

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



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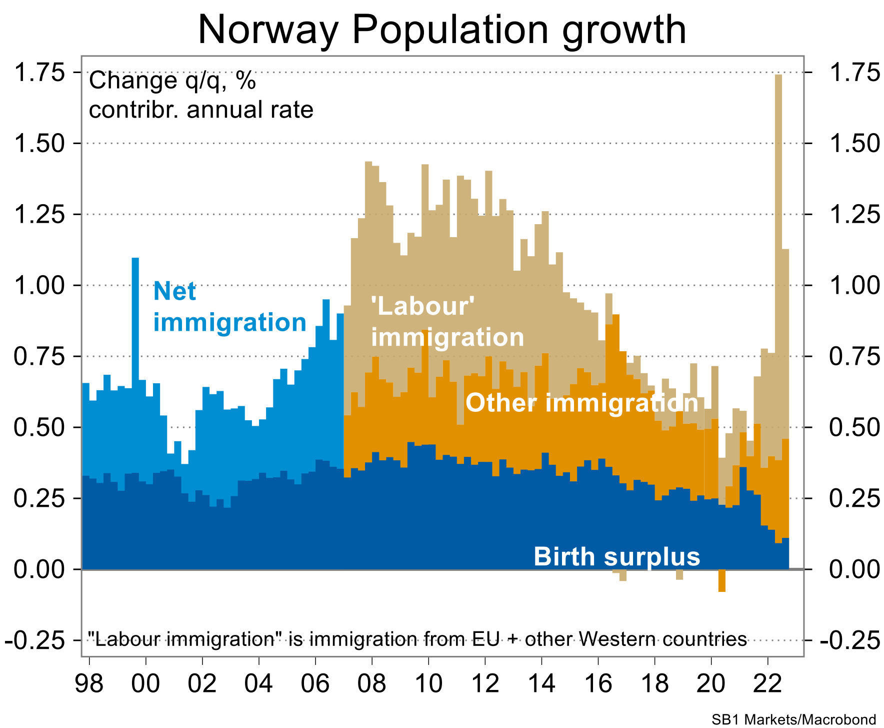
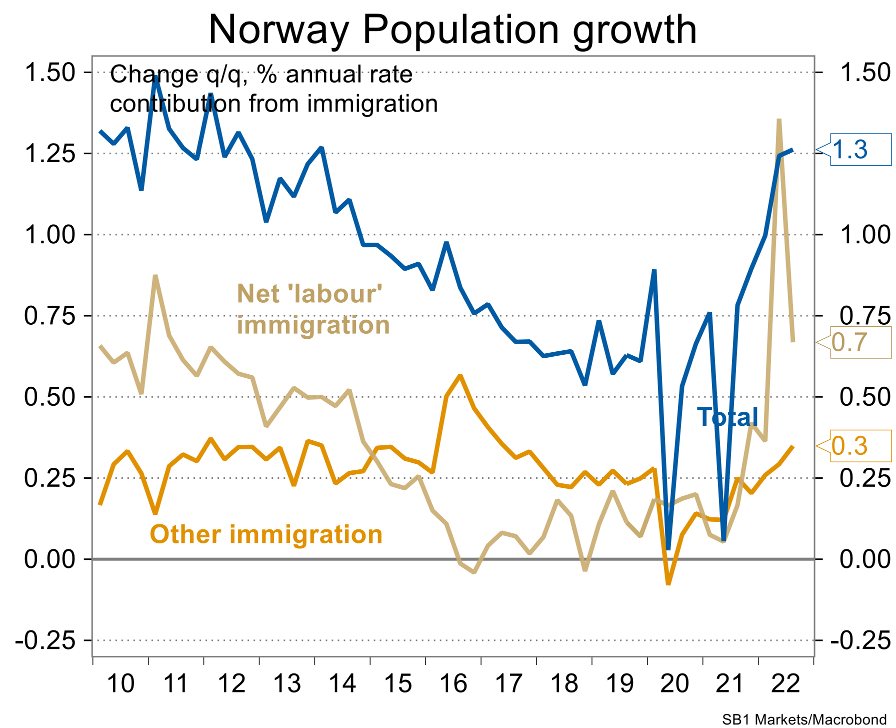
Ukrainian immigration boosts population growth sharply in Q3 too

Other 'western' immigration and the birth surplus were lower than normal

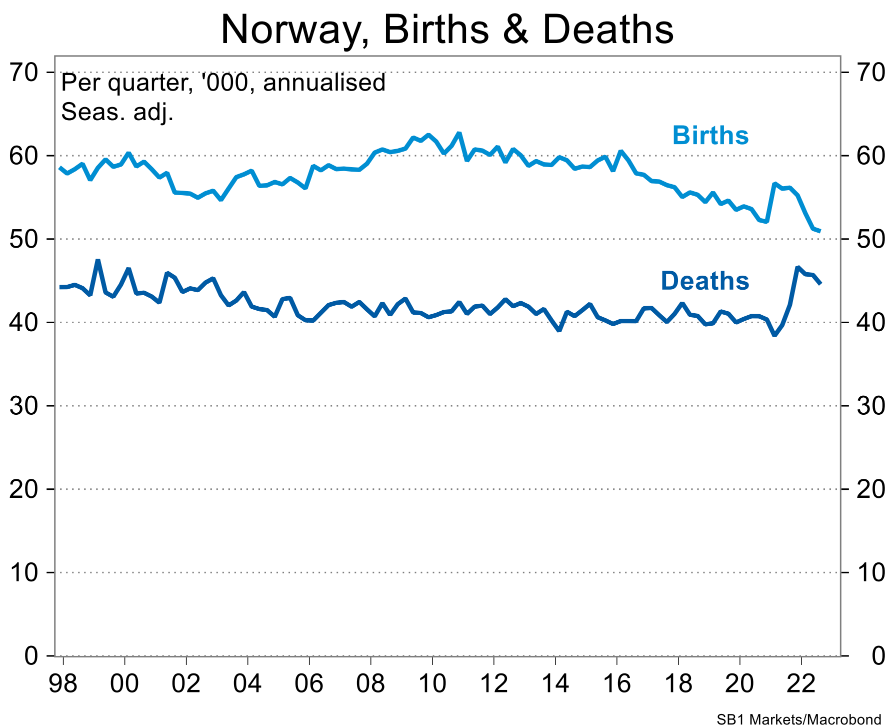




- Total population grew by 19,700 in Q3, equalling a 1.3% annualised rate close to the highest and record (and the highest ever, in seasonal adjusted terms). The steep increase was due to 11' immigrants from Ukraine. Excluding this inflow, population growth would have been lower than normal
  - » Immigration from the Baltics and other rich countries well below a normal level in Q3
- The net birth surplus fell to the lowest level ever in Q1. Births are slowing from the Covid spike in Q1-21 and are now back on the downward trend since before the pandemic. The number of deaths is some 5' (12%) above a normal level, both due to Covid deaths, '3 years of accumulated flu'-deaths, and an ageing population

Births on the way down, deaths are still 12% higher than normal

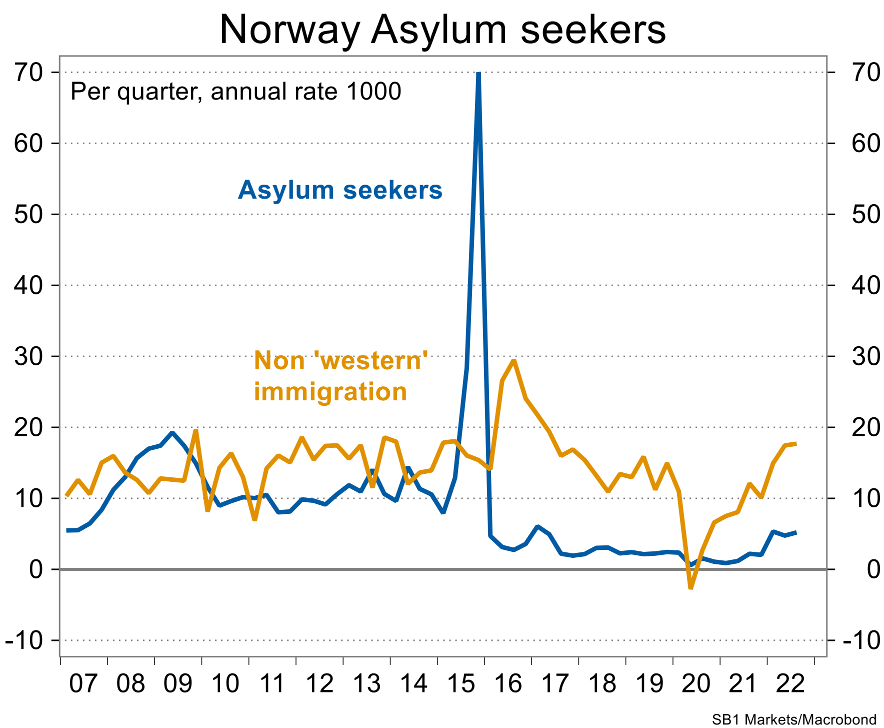
... as many old citizens are still dying due to (or with) covid sickness

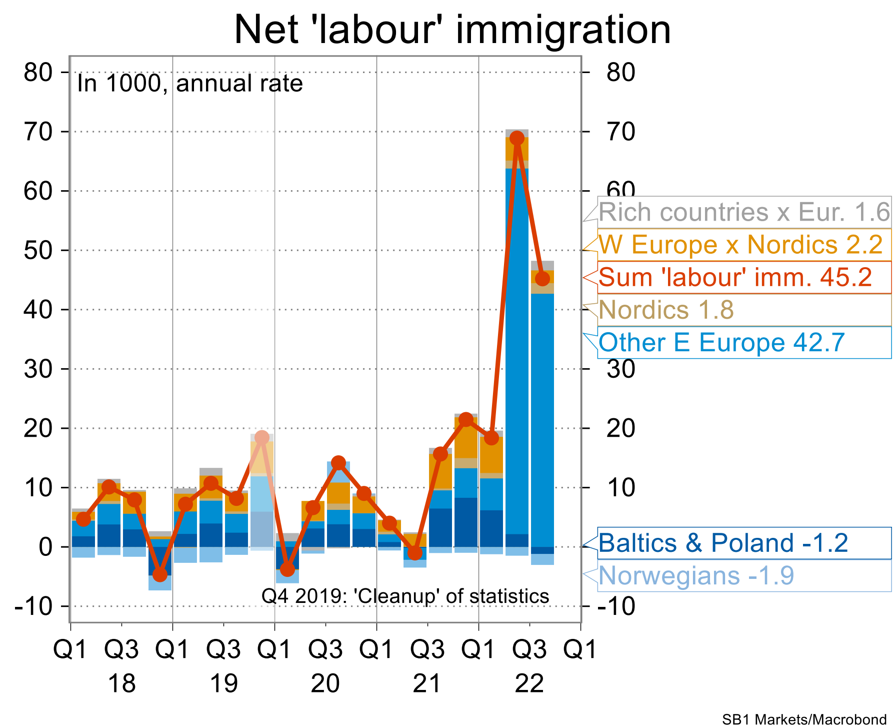


- ... and others that survived in 2020 and 2021 due to the very mild flu season (all viruses were suppressed), now get the flu – and die from it

A huge inflow of Ukrainian refugees so far in 2022

More than 30’ have arrived, 25’ have immigrated





- The inflow of asylum seekers has been virtually flat, at a very low level – approx. 1000 in an annual rate since the Syrian refugee crisis in 2015 – until the Ukrainians turned up in March
- Net immigration from Western European countries and the Baltics was low in Q3, as in Q2
- We has labelled Ukrainian immigration as ‘labour’ immigration, which may be a somewhat optimistic assumption

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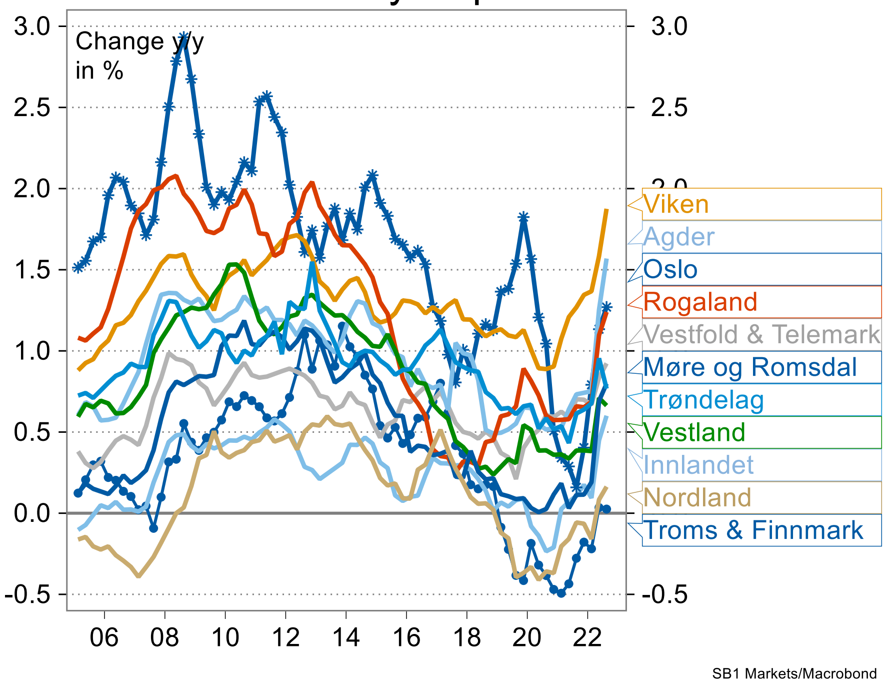
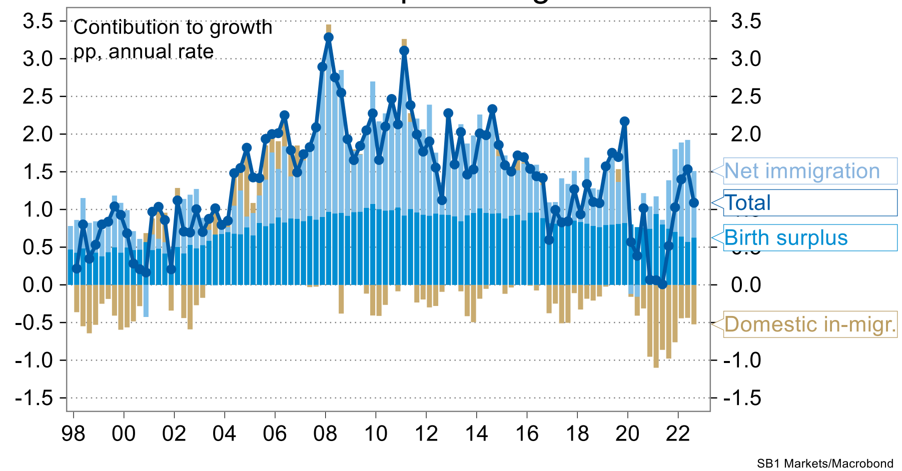
More immigration lift population growth everywhere

…but just Viken, Vestfold & Telemark, Innlandet and Agder are back to good ol' days

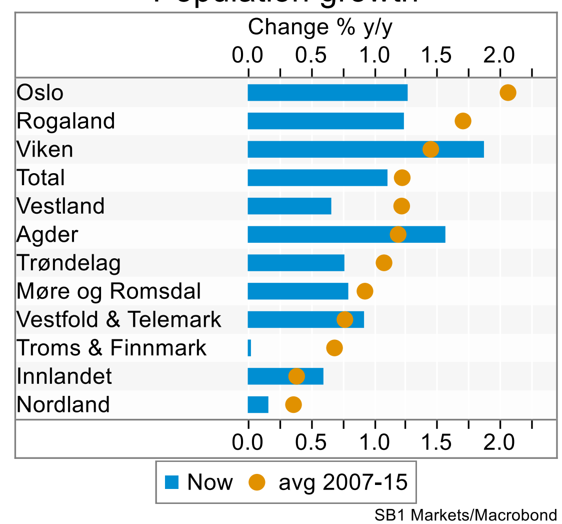
Norway Population



Oslo Population growth



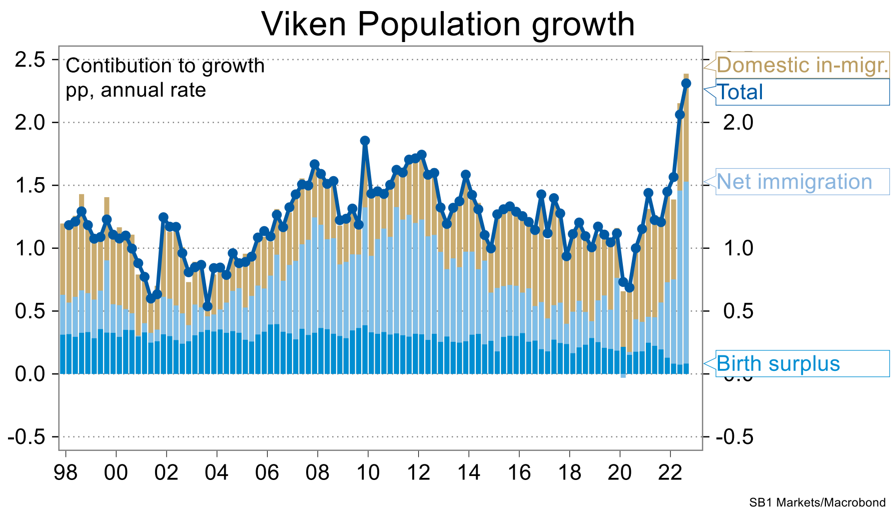
Population growth

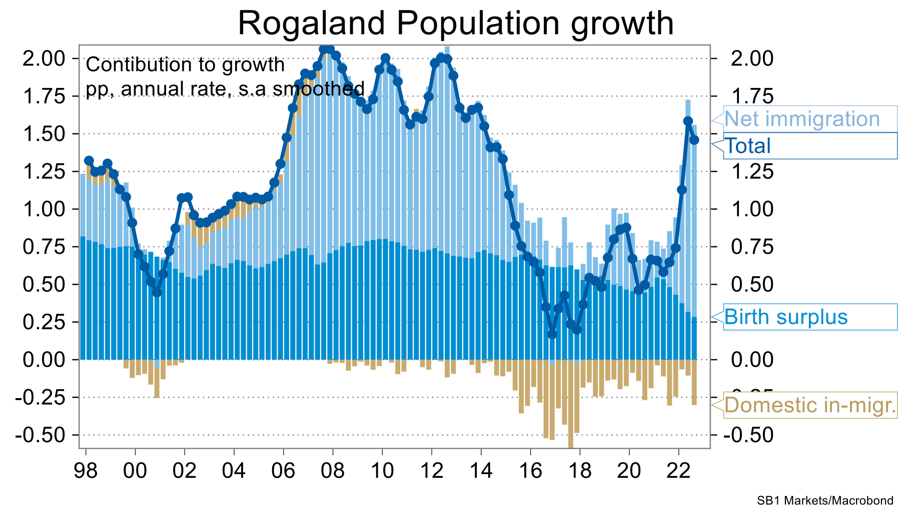


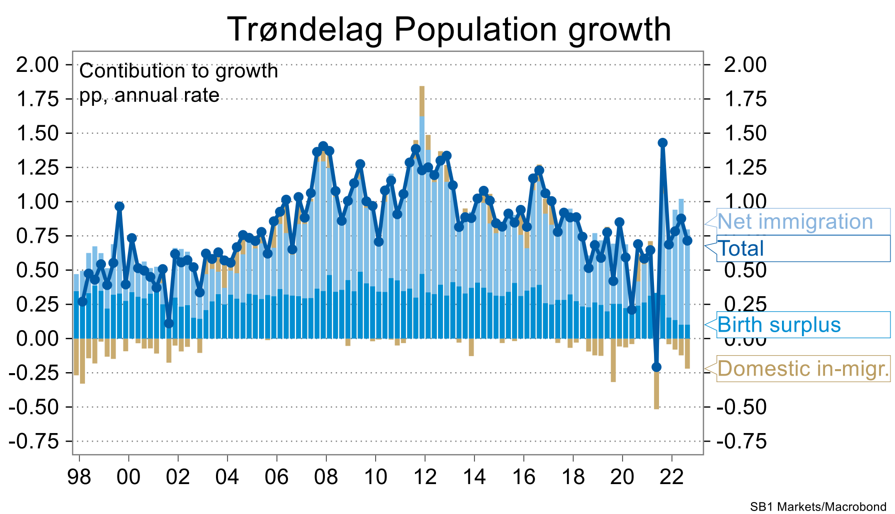
- From 2012/13 until 2018, population growth slowed in most regions – but the least in Viken (Akershus kept up the best) and Vestfold & Telemark. Following a mini immigration wave in 2019, growth slowed sharply in Oslo. From Q1-20 to Q2-22 growth rebounded, but decreased again in Q3-22
- Population growth has cooled substantially in all other regions recent years, to well below 2007-2015 levels, but growth is once more accelerating
- Due to higher domestic out migration and low/birth surpluses, population growth is close to zero or below in Nordland and Troms & Finnmark

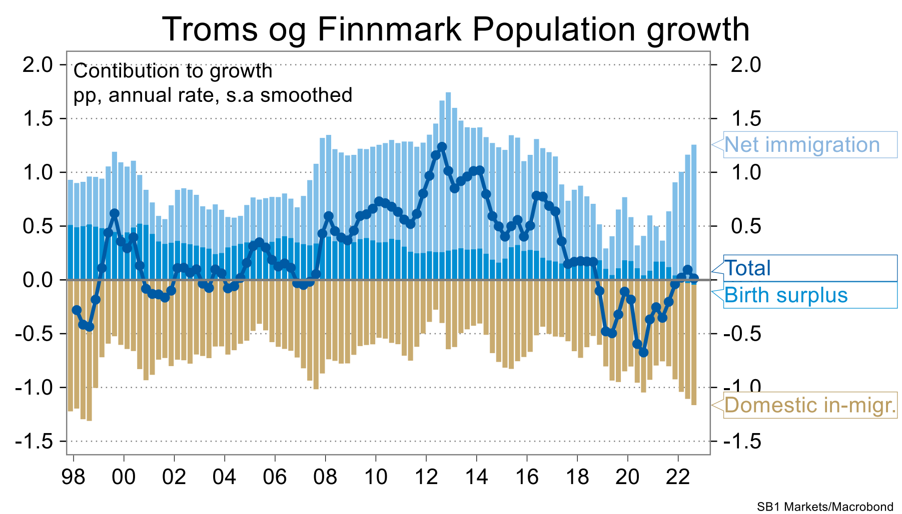
Immigration is not equally distributed

(Sum Oslo & Viken records a substantial net domestic in-migration)



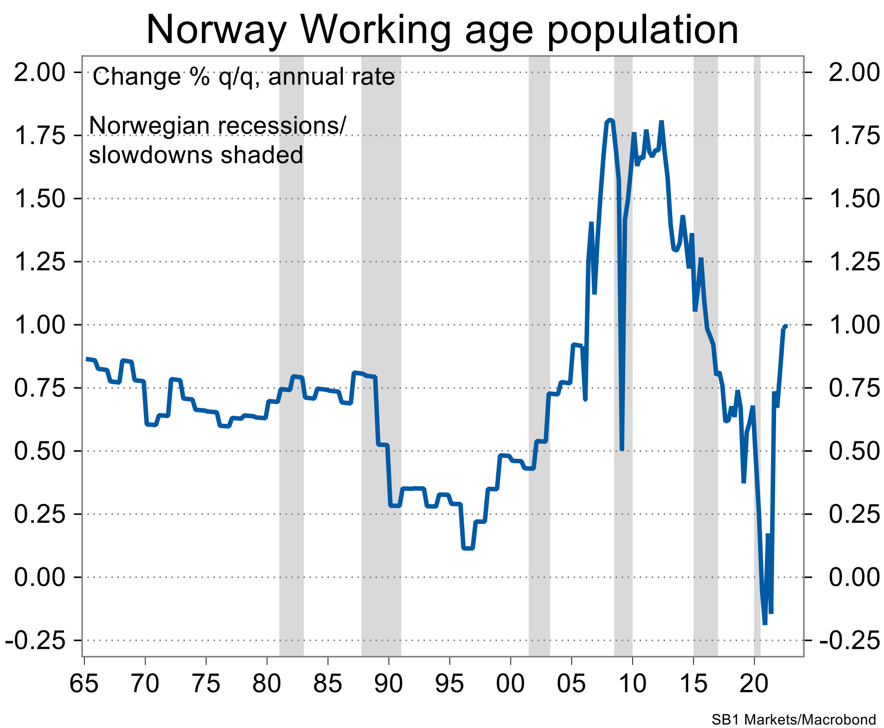


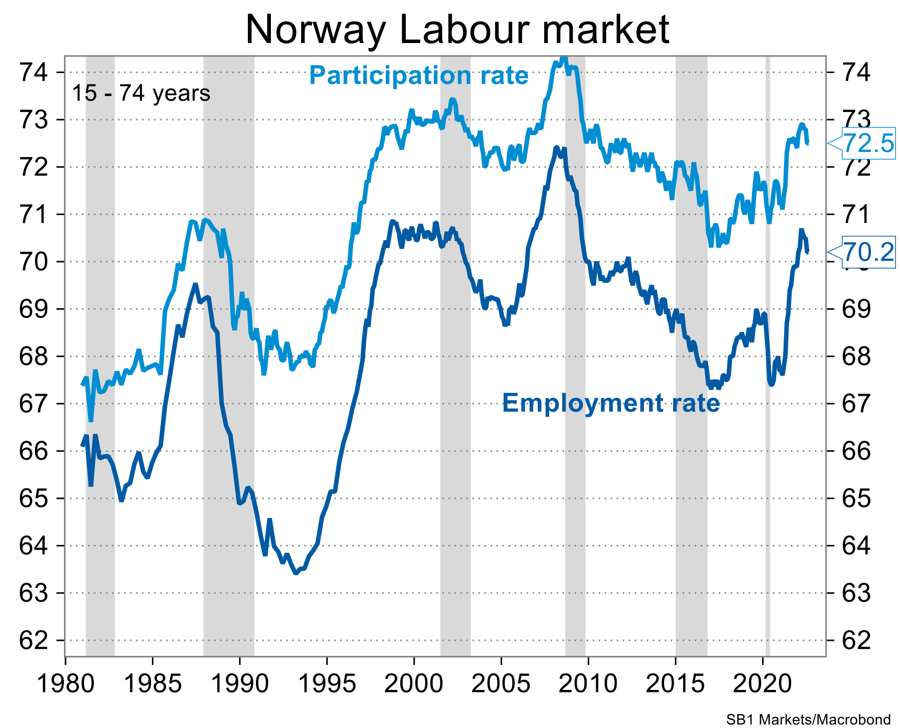




Working age population growth boosted by Ukrainian immigration

Hope they want to enter and succeed in the labour market

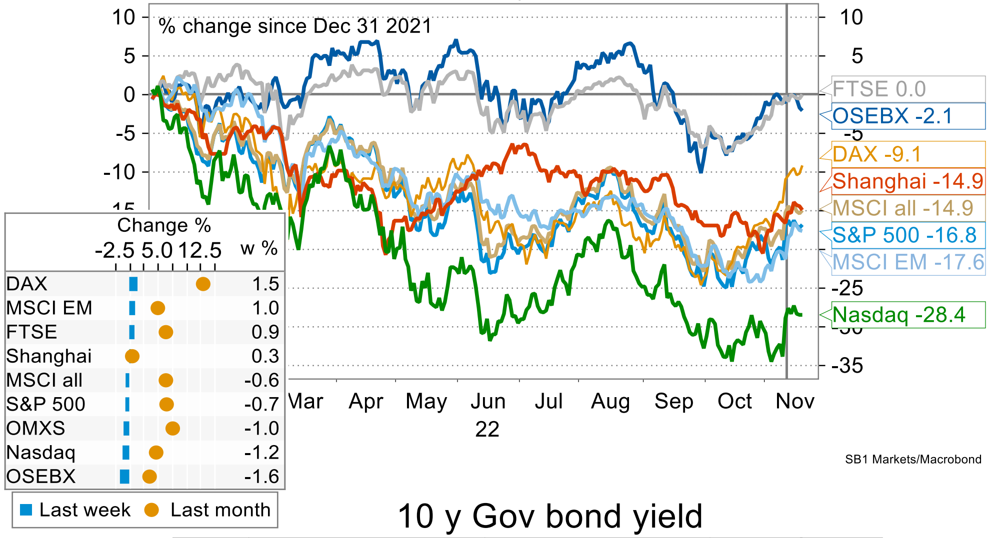




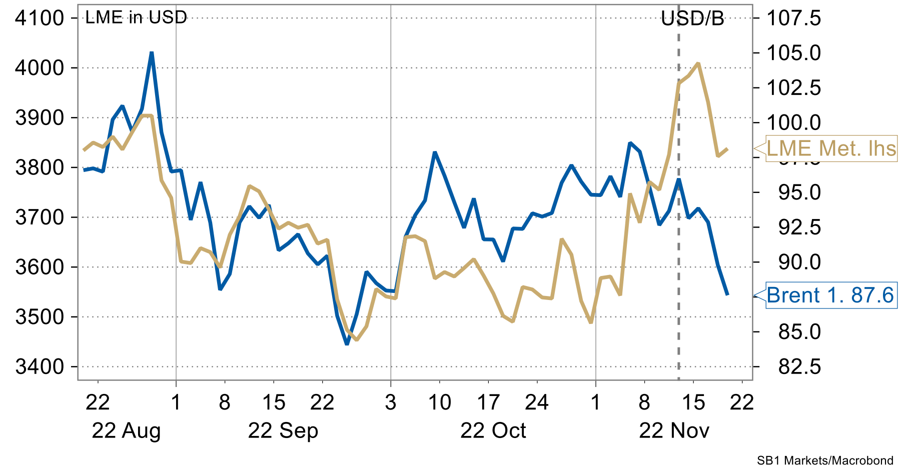
Equity markets, bond yields mostly down. Raw materials/oil, NOK down too

Hawkish Fed speak and better-than-expected retail sales sent equities lower

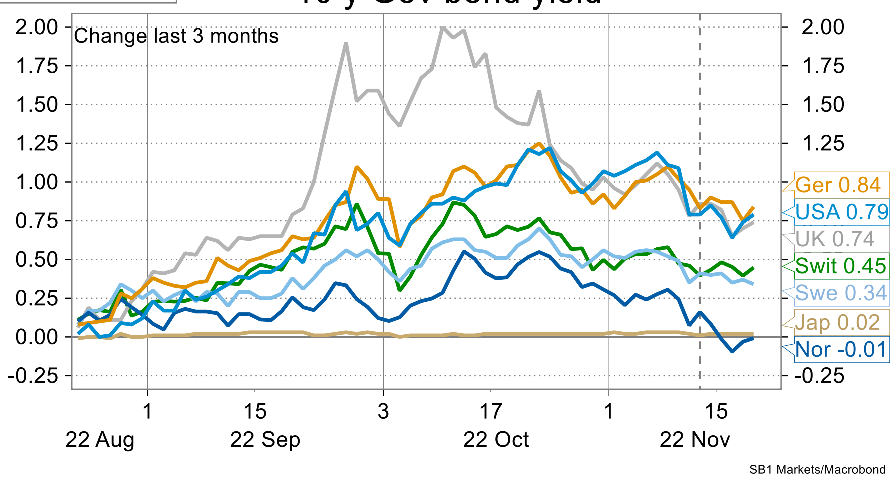
Equity Indices



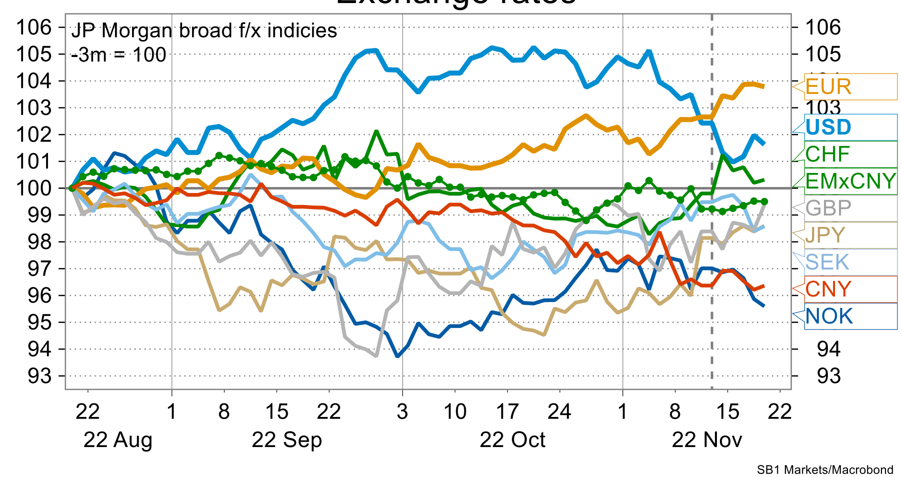
Oil vs. metals



10 y Gov bond yield



Exchange rates



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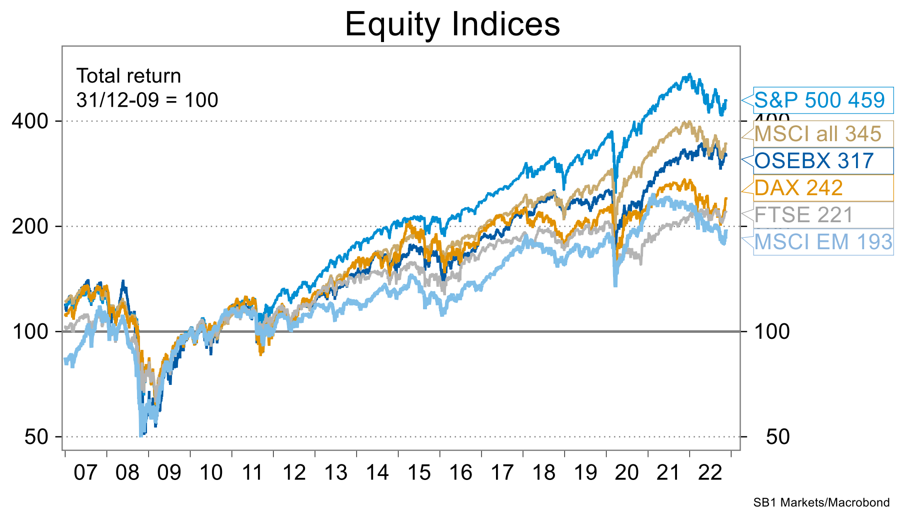
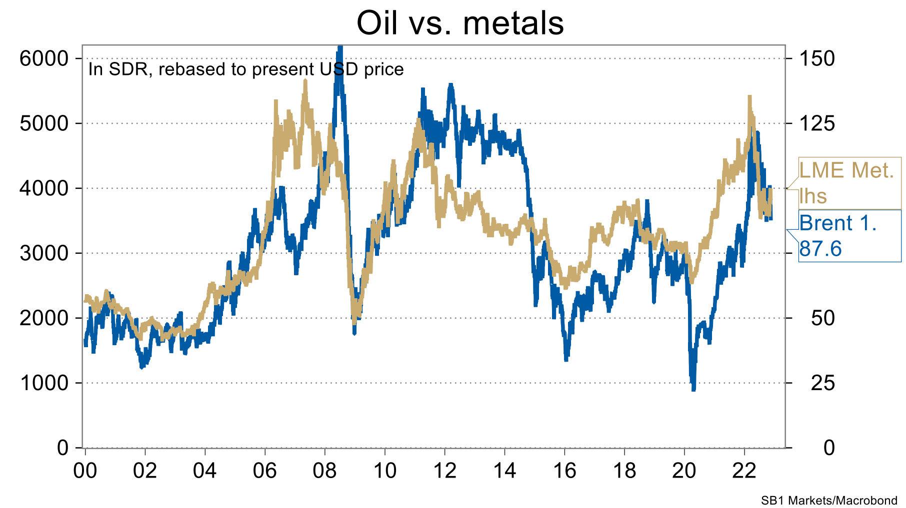
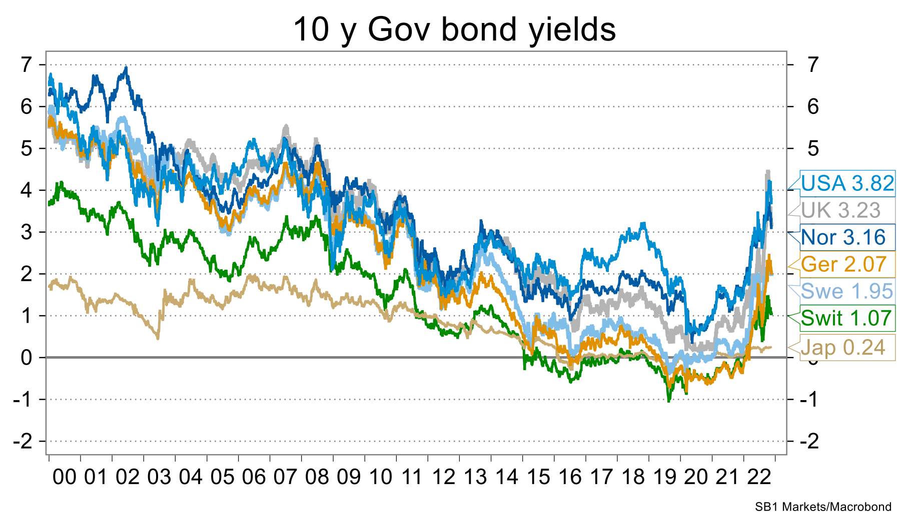
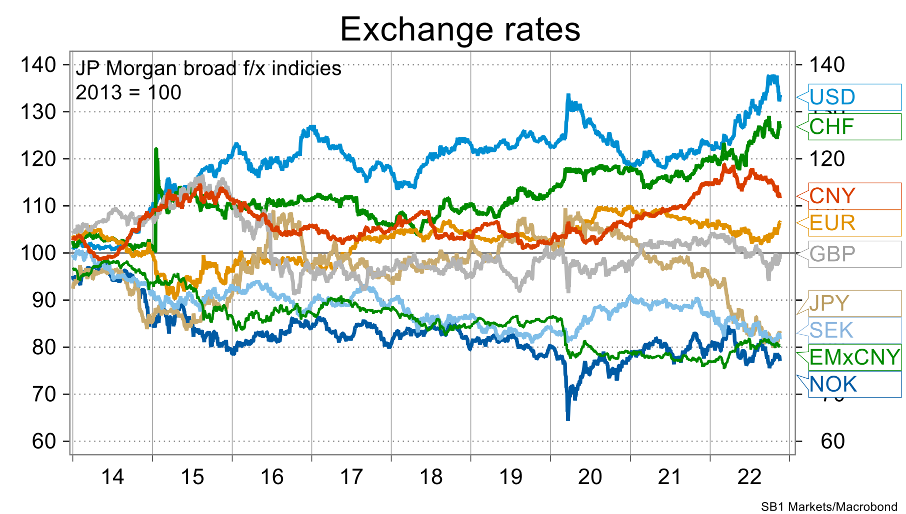
The long-term picture: Stock markets down, commodities down, bond yields up

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









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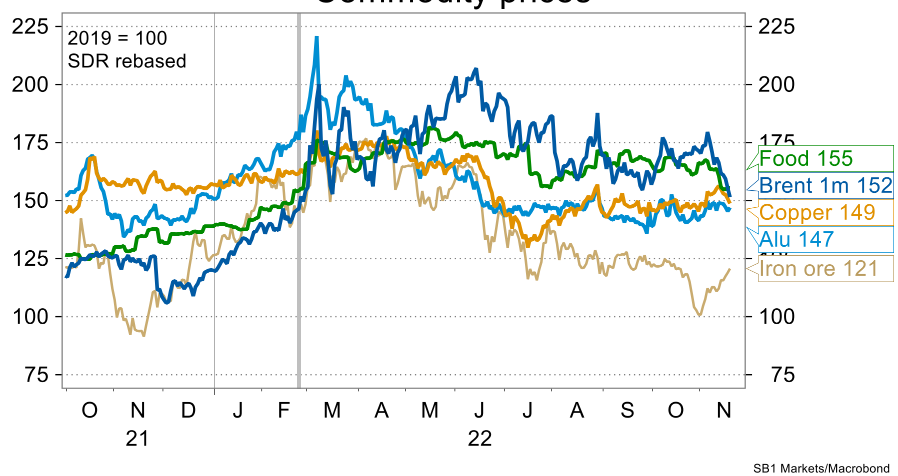
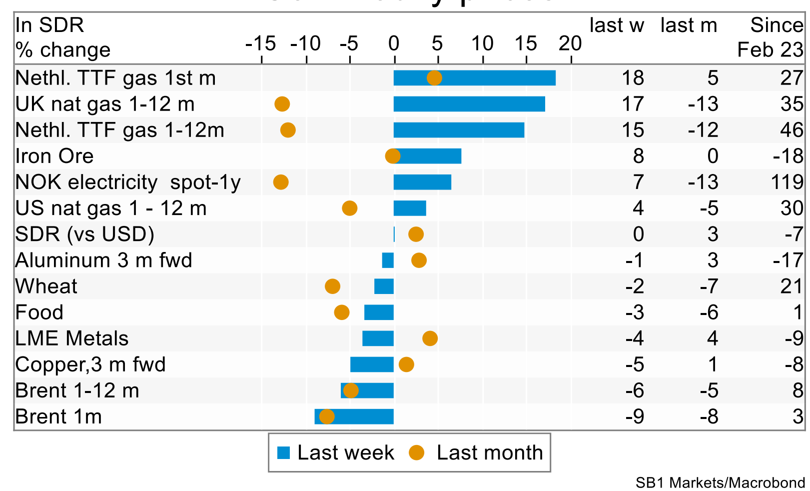
Gas/el. prices up for coming 12 months, as the winter arrived

Most other commodities down, with oil at the bottom of the list – but iron ore prices rose further

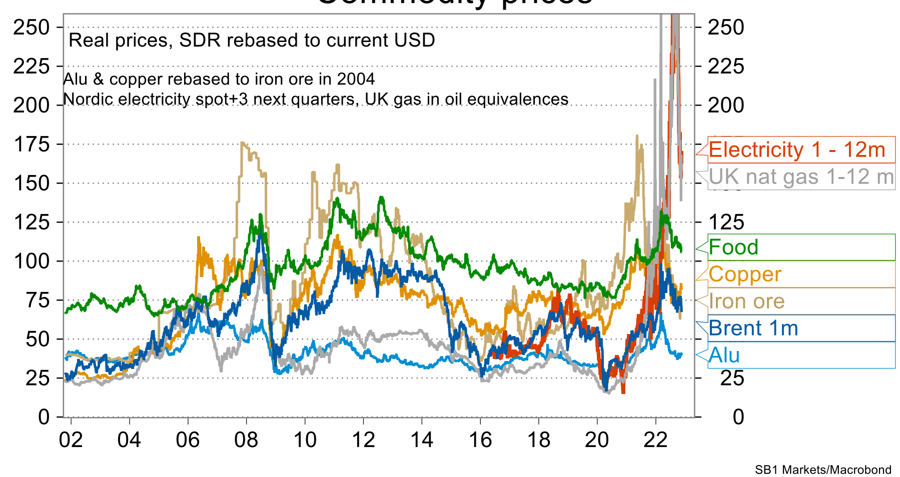
Commodity prices



Commodity prices



Commodity prices



Last week – prices in SDR

- **European natural gas** turned north last week, all over the curve – for no other reason that winter temperatures arrived?
- **The oil price** still fell sharply, to the lowest level since late September
- The Economist's **food commodity index** turned fell further
- **Metal prices** fell further perhaps partly due LME's decision against a ban on Russian metals

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

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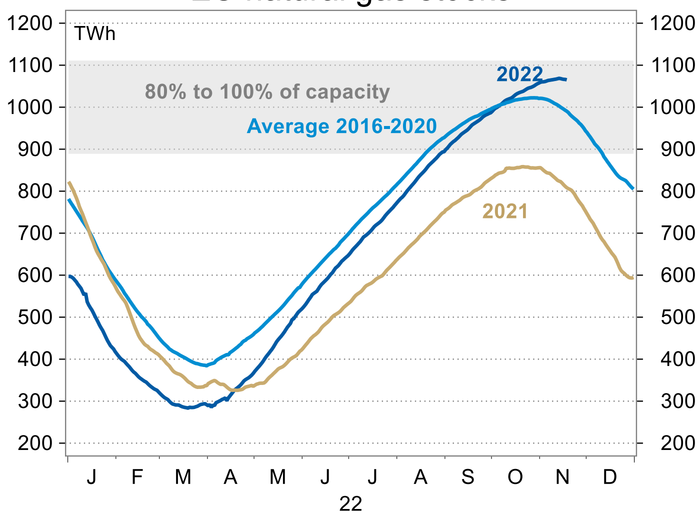
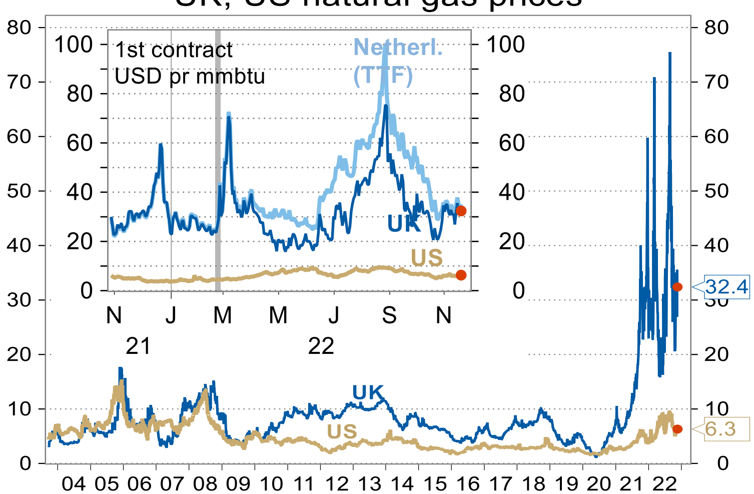
European gas up last week, and electricity prices followed suit

EU natural gas stocks



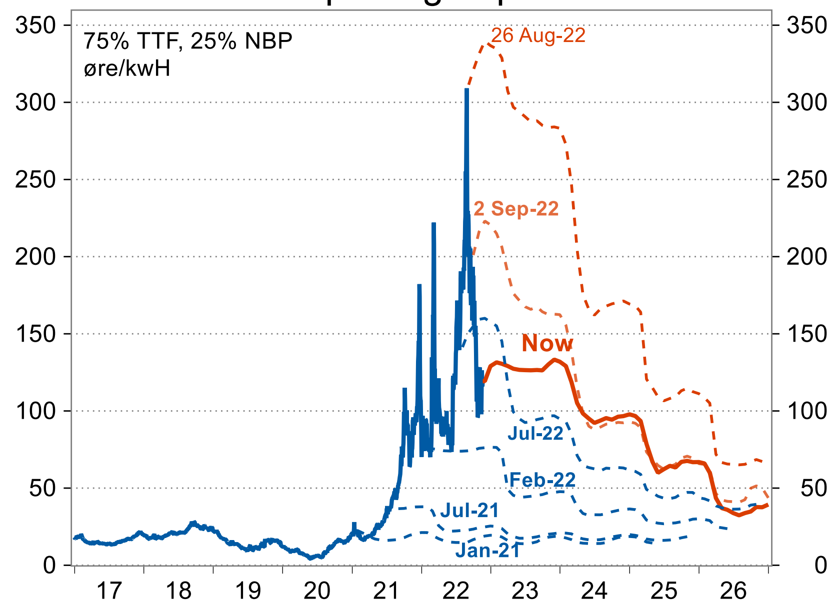
SB1 Markets/Macrobond

UK, US natural gas prices

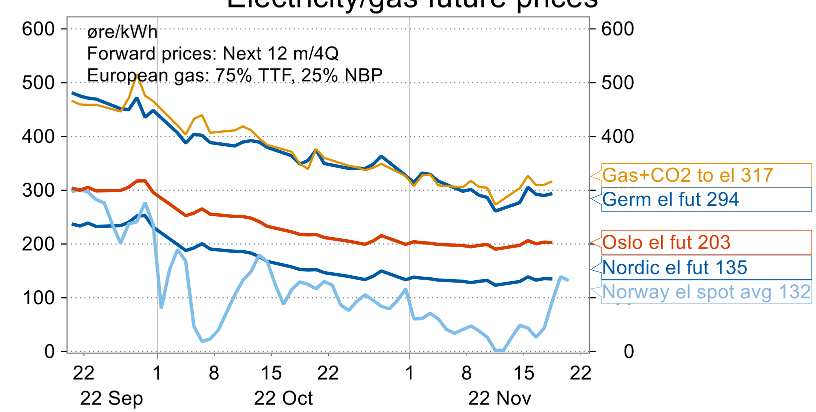


SB1 Markets/Macrobond

European gas prices



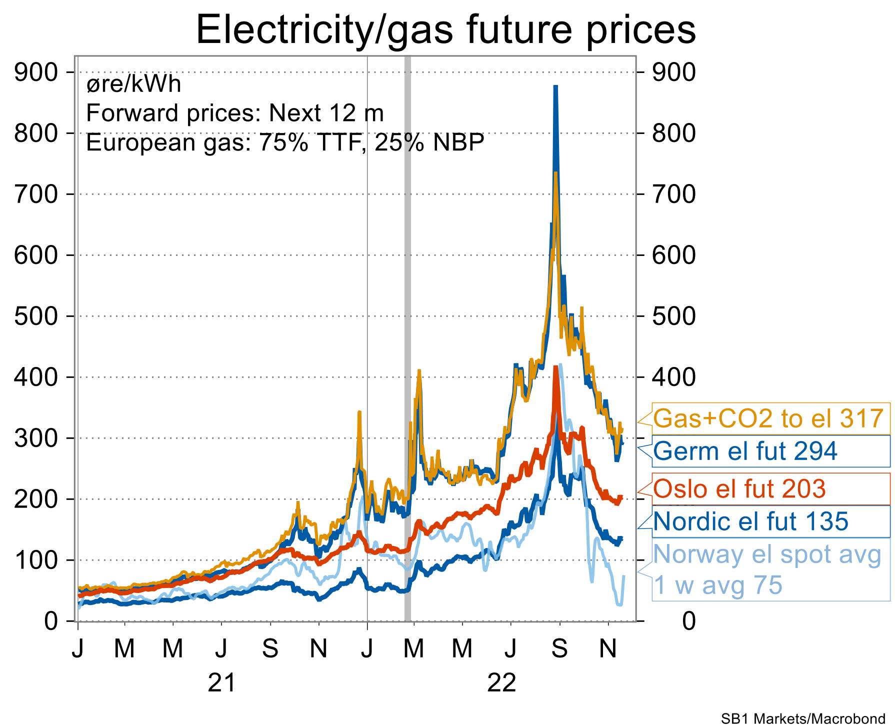
Electricity/gas future prices

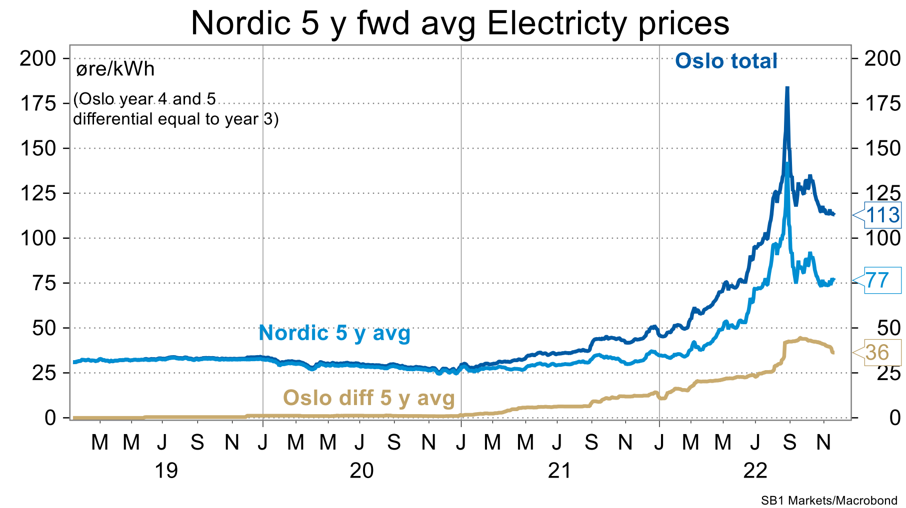


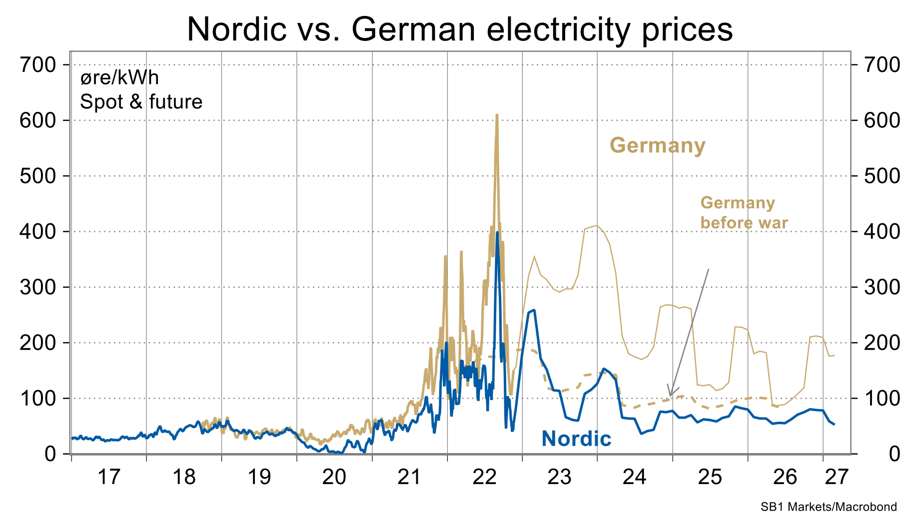
SB1 Markets/Macrobond

European gas & electricity turned up last week

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



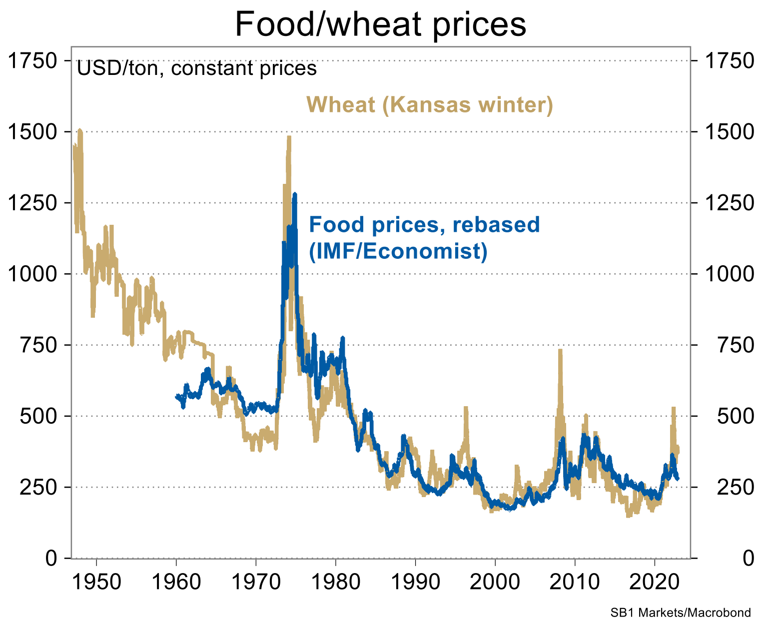


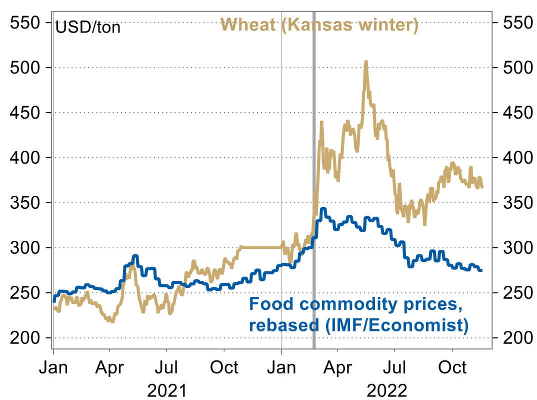


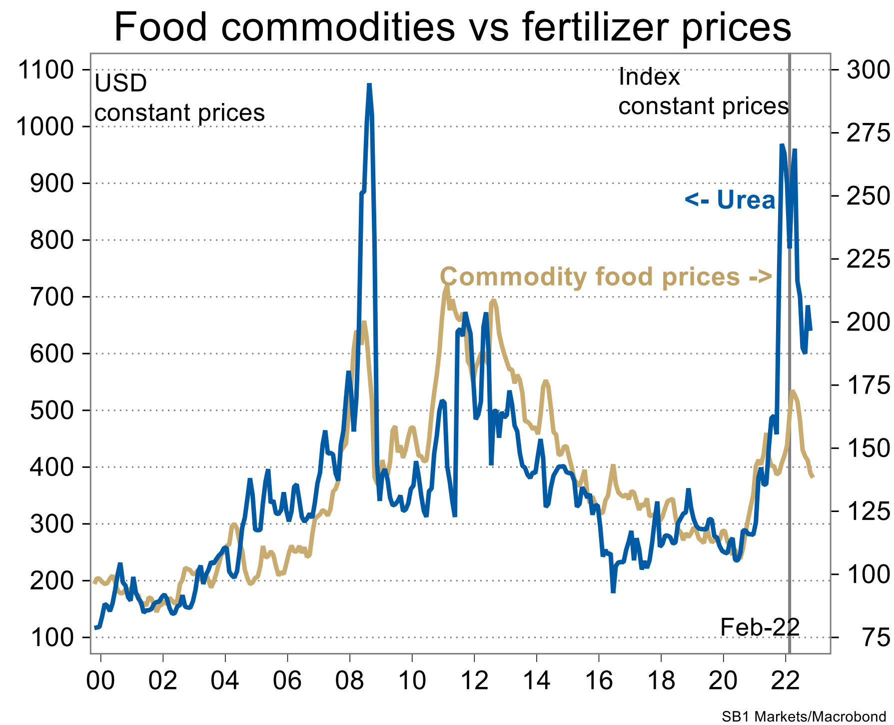
European gas: 75% Dutch TTF, 25% UK NBP, CO2 cost included at the chart above

Food prices are trending down

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







Urea prices have been falling too

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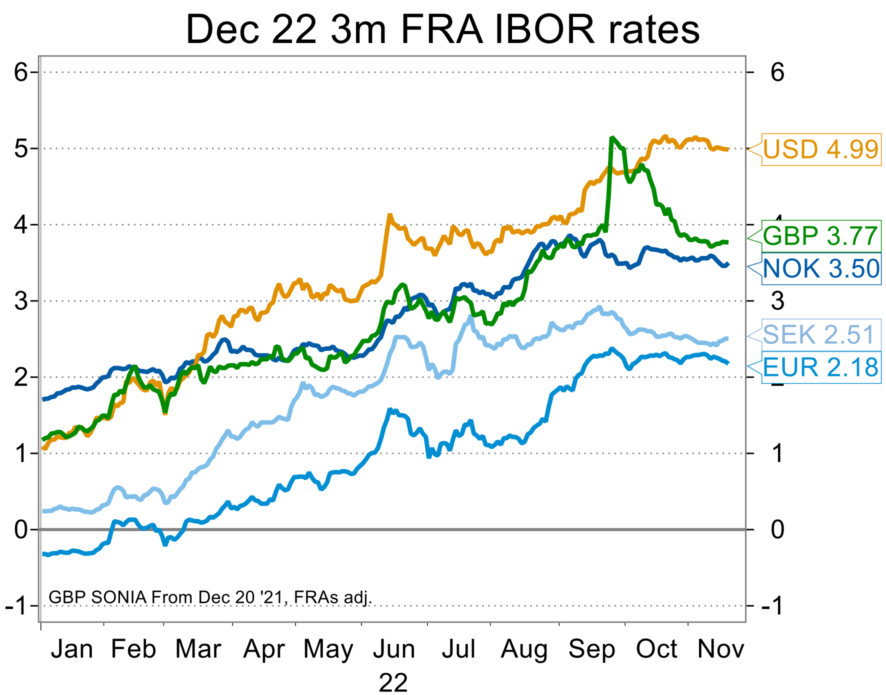
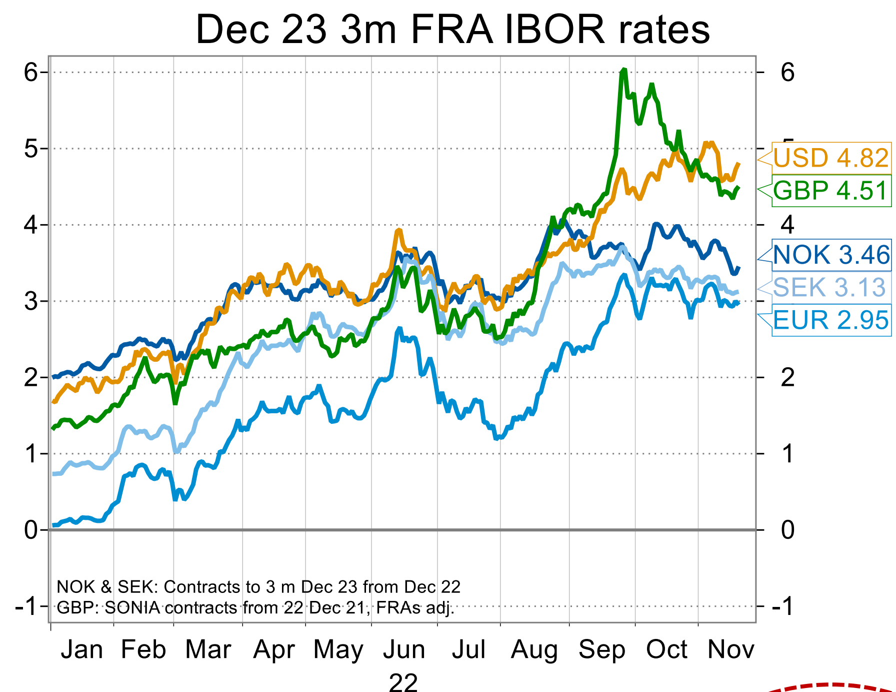
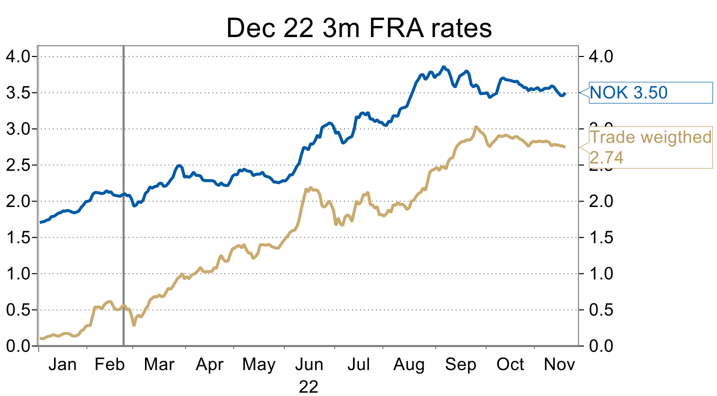
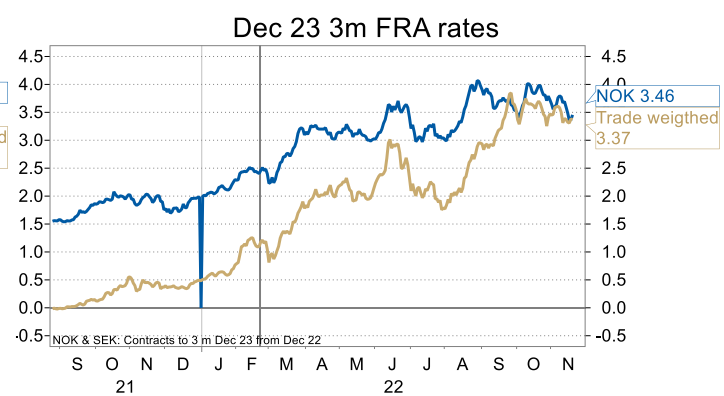
FRAs on the way down most places, last week the most in Norway

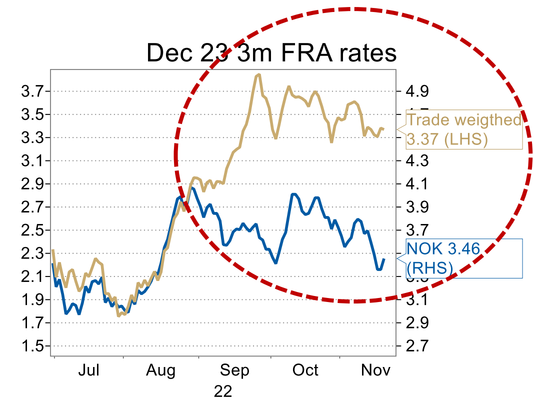
... even if Mainland GDP surprised significantly on the upside. US FRAs mostly rosed











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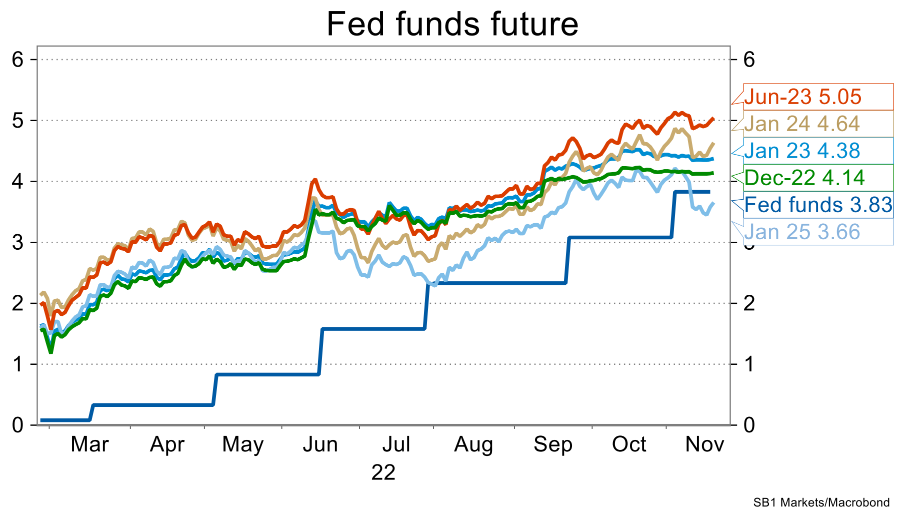
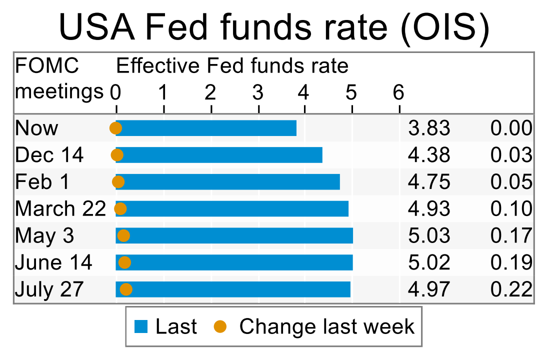
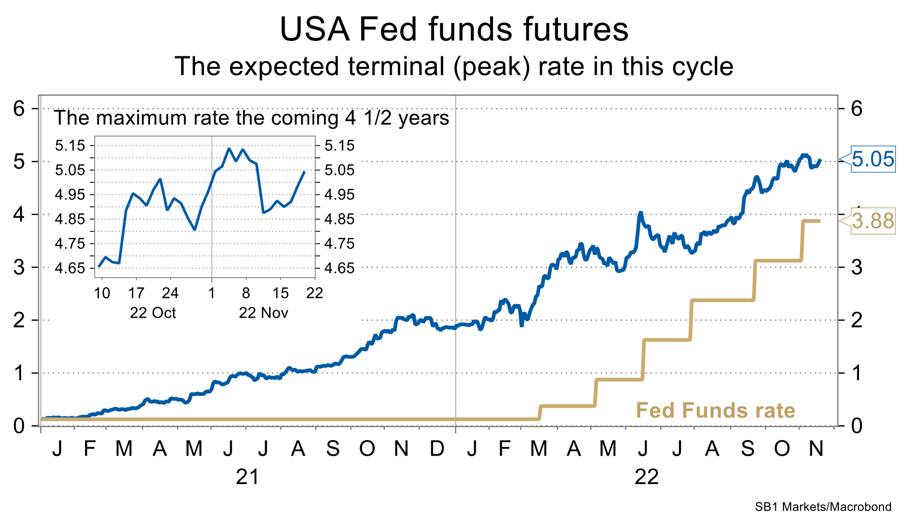
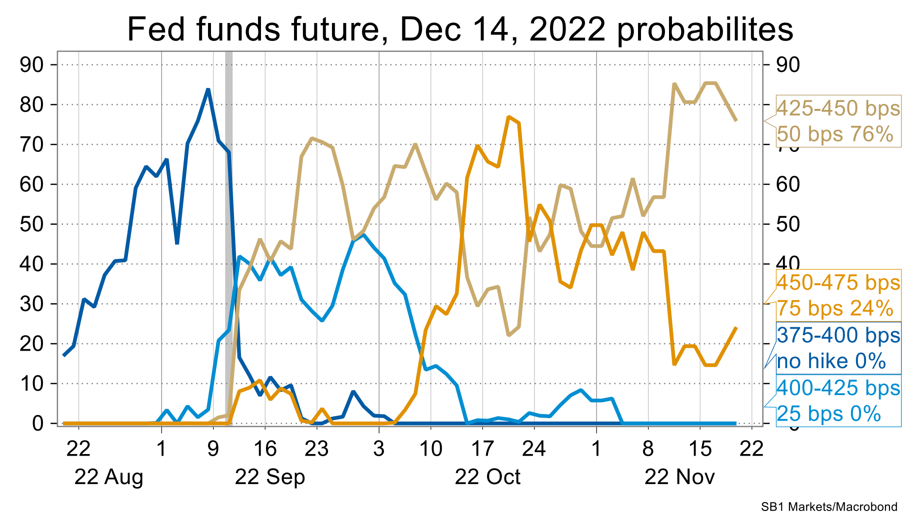
US rates slightly up last week on hawkish Fed-speak

Still, a 50-bps hike in Dec is deemed much more likely than a 75-bps lift

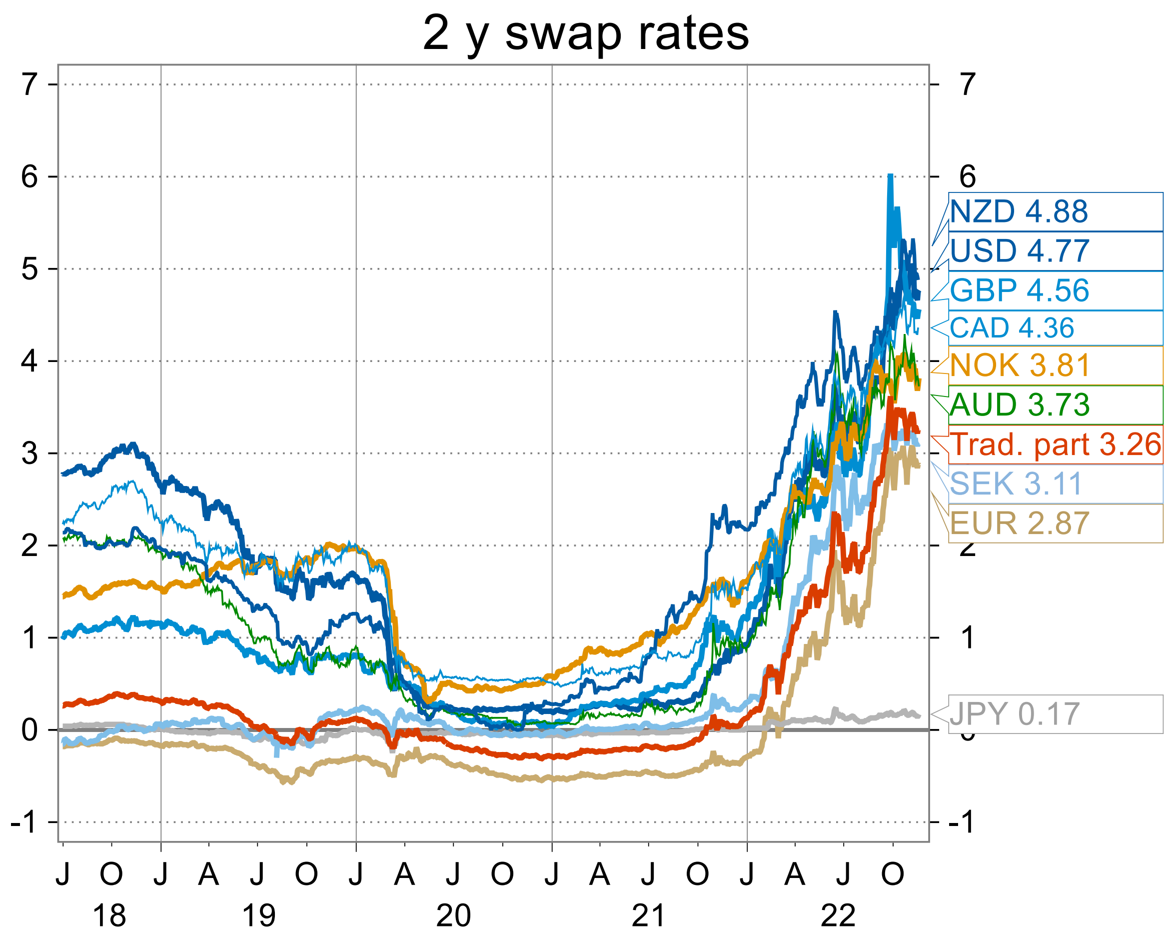




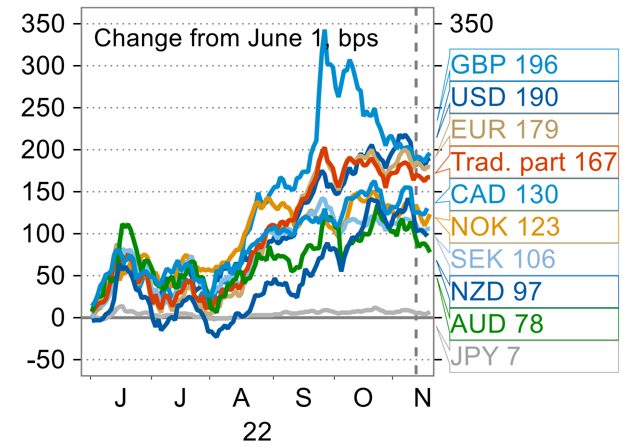


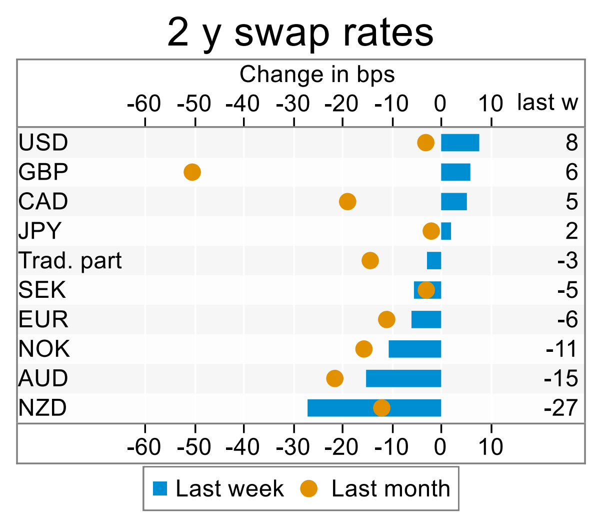


USD, GBP 2 y swaps up, others down



SB1 Markets/Macrobond





SB1 Markets/Macrobond

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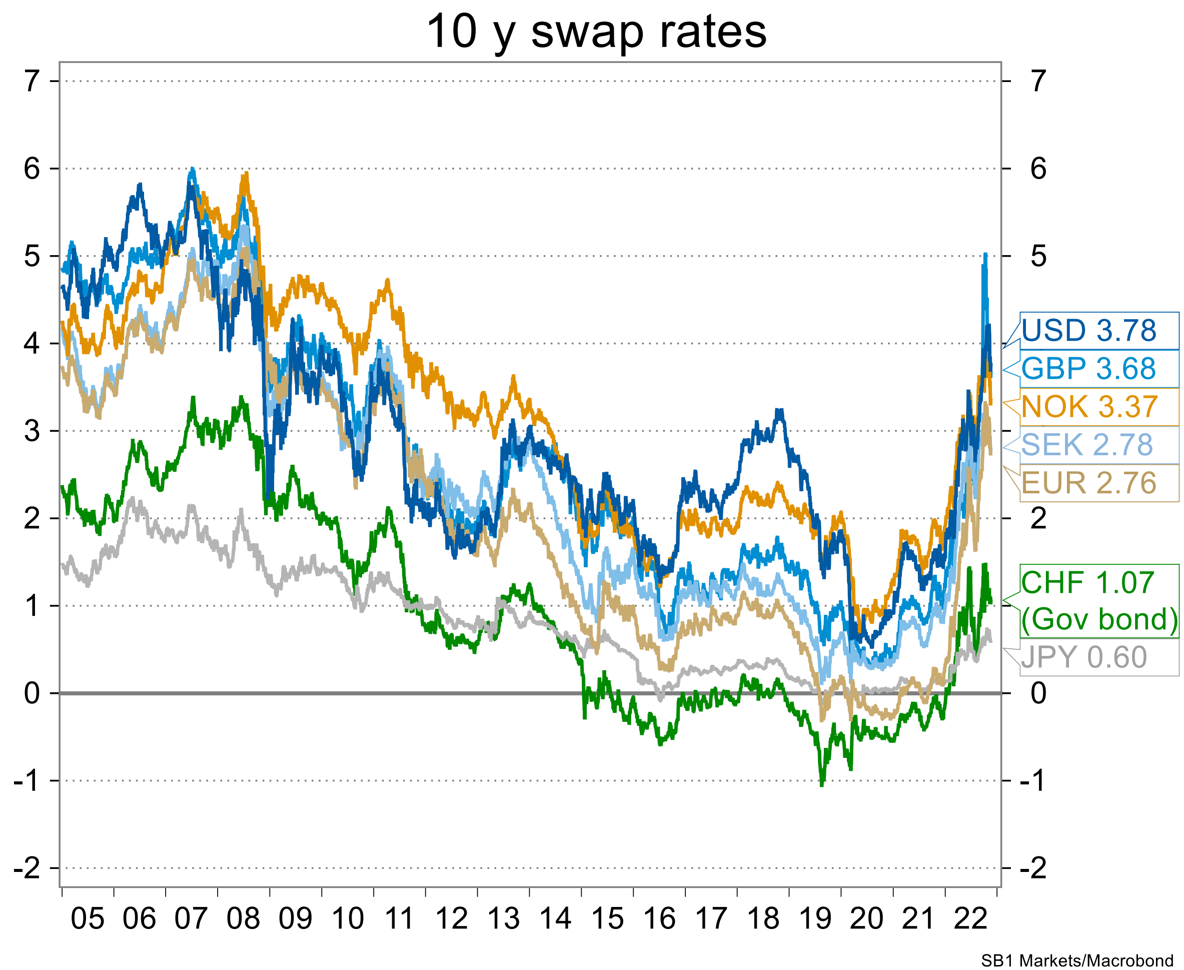
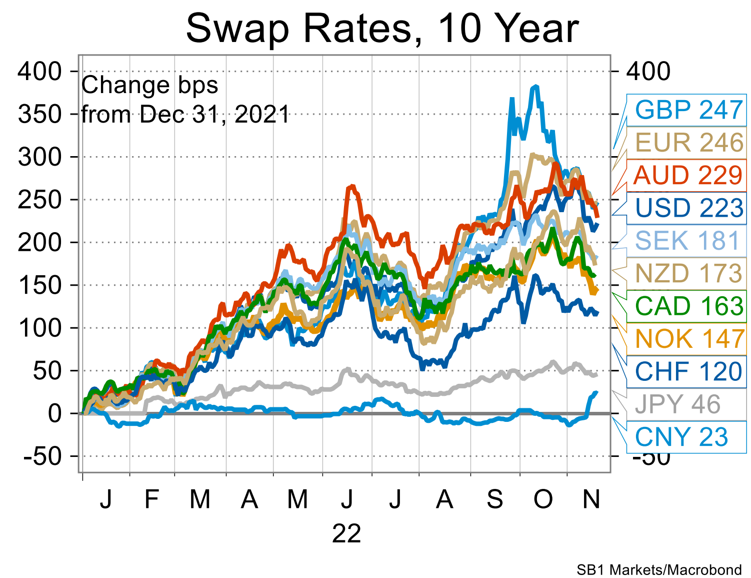
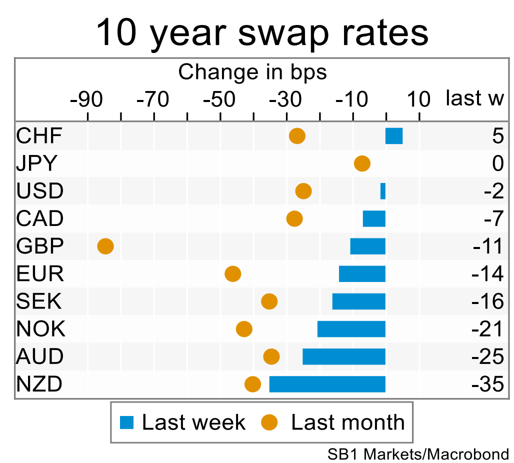
Long rates down everywhere – NOK close to the bottom

(CHF bond yields rose marginally)



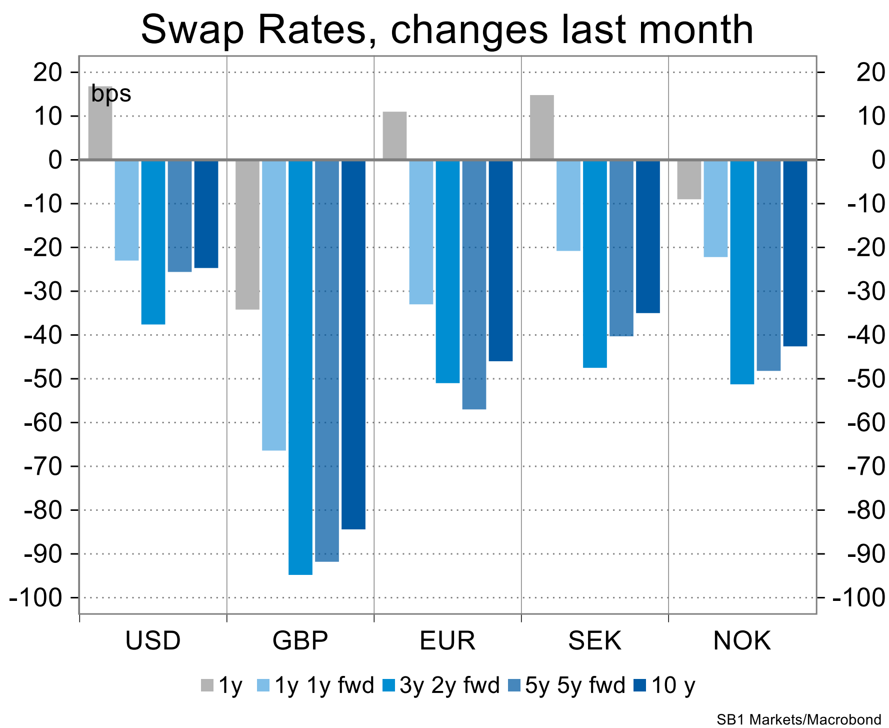


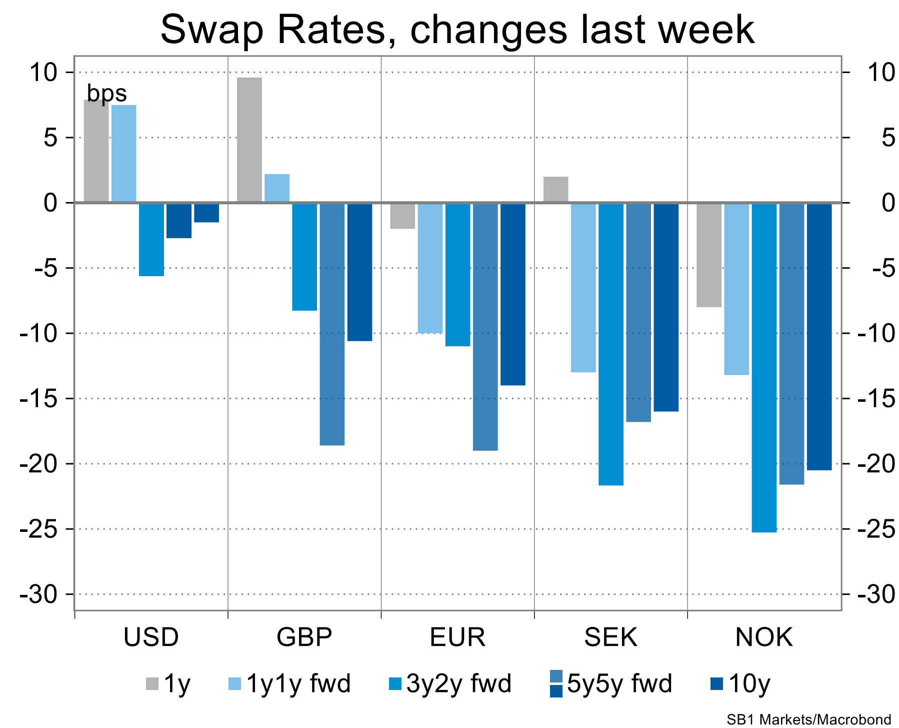


CHF: 10 y government bond yield

Most of the yield curves down last week – and last month

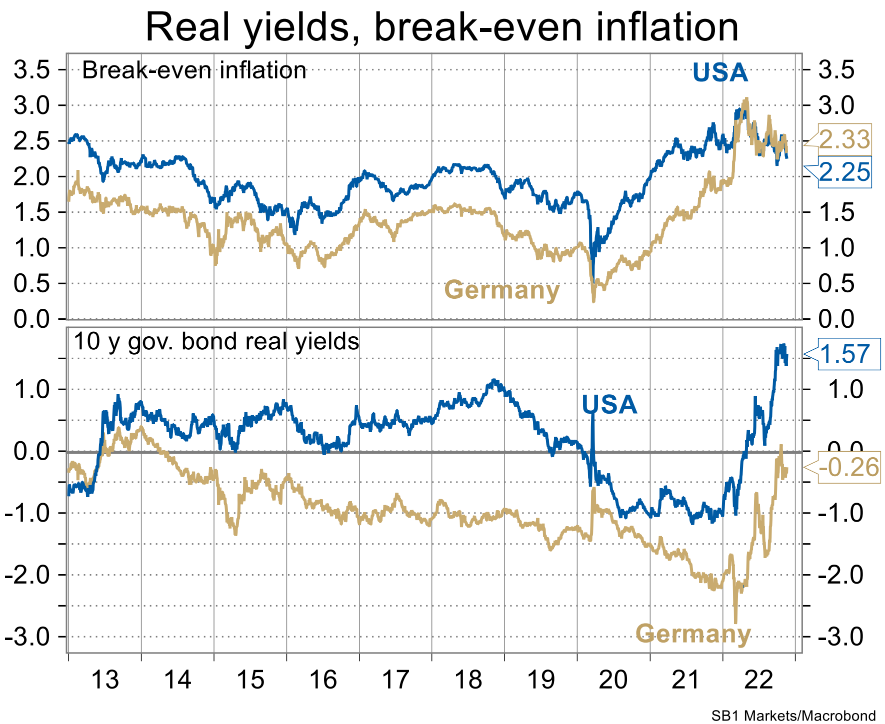
Last week, NOK rates fell the most, by 20 bps in the long end

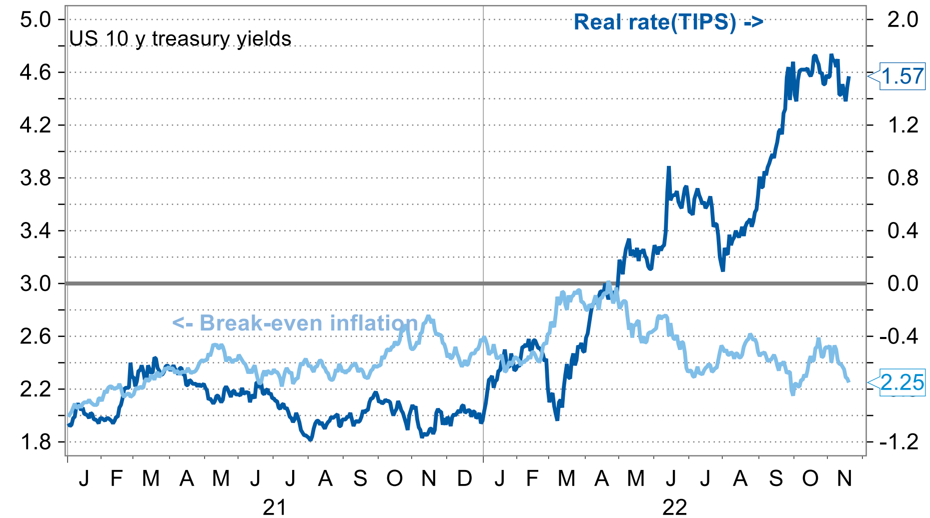




US 10 y real rates have flattened past two months, up 250 bps from the bottom

Last week, real rates rose, while inflation expectations fell, almost to the lowest level in 20 months





US & Germany 10 y Gov bond yield

	Yield	Change 1w	Change 1m	YTD	Min since April-20
USA nominal treasury	3.82	0.00	-0.19	2.30	0.52
.. break-even inflation	2.25	-0.14	-0.16	-0.31	1.06
.. TIPS real rate	1.57	0.14	-0.03	2.61	-1.19
Germany nominal bund	2.07	0.01	-0.26	2.28	-0.65
.. break-even inflation	2.33	-0.16	-0.08	0.44	0.40
.. real rate	-0.26	0.17	-0.18	1.84	-2.80

SB1 Markets/Macrobond

- The lift in real rates is one for the history books!
- No signs of war angst or flight to safety
- In the US, a 10 y CPI expectation at 2.25 is close to Fed's 2% target for the PCE-deflator (which on average is some 0.3 pp below CPI inflation)

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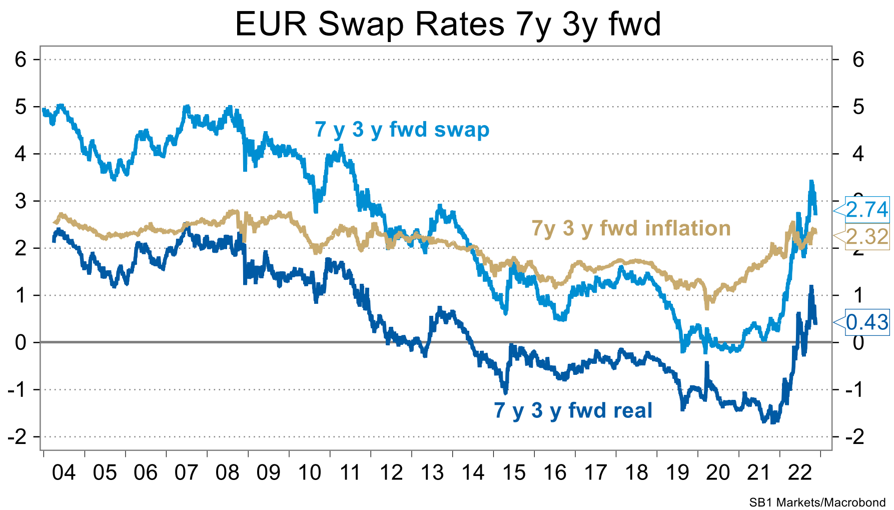
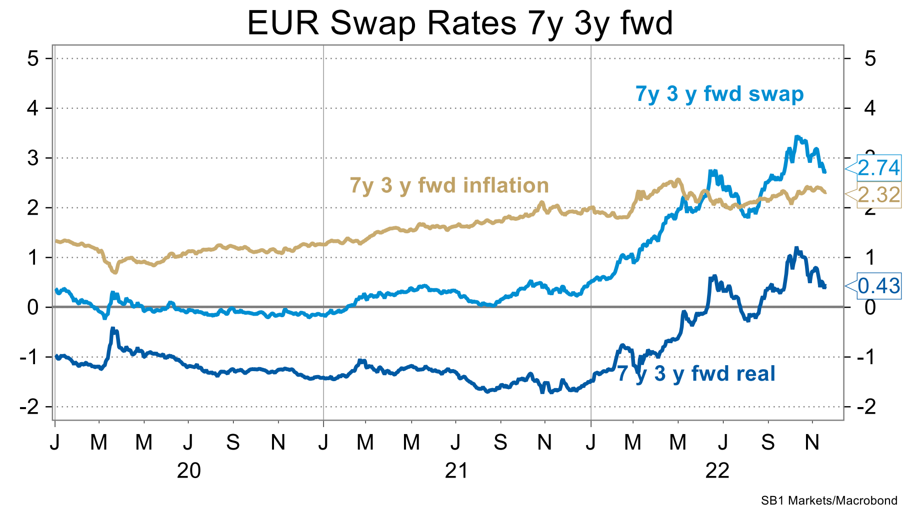
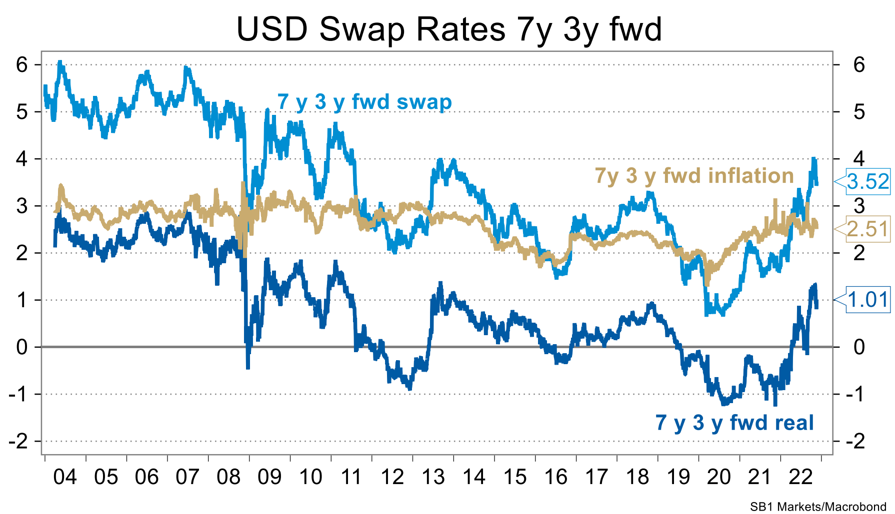
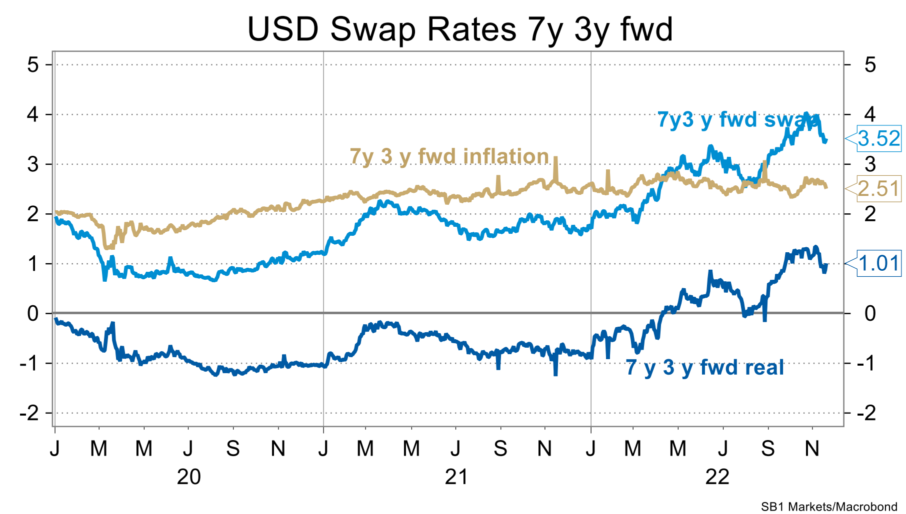
European real (swap) rates unchanged, are up 200 bps from the bottom

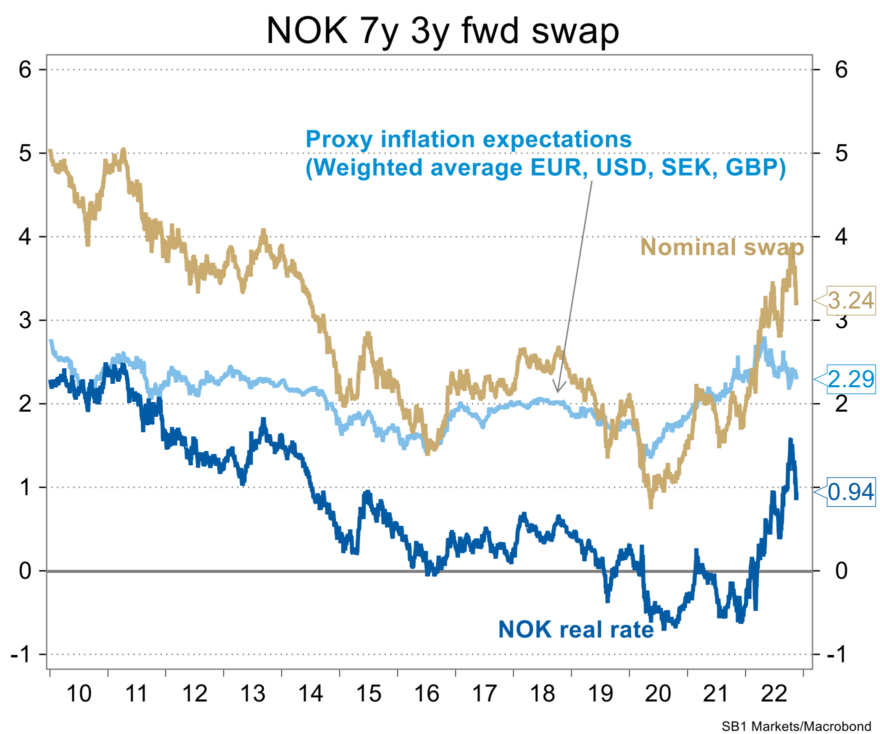


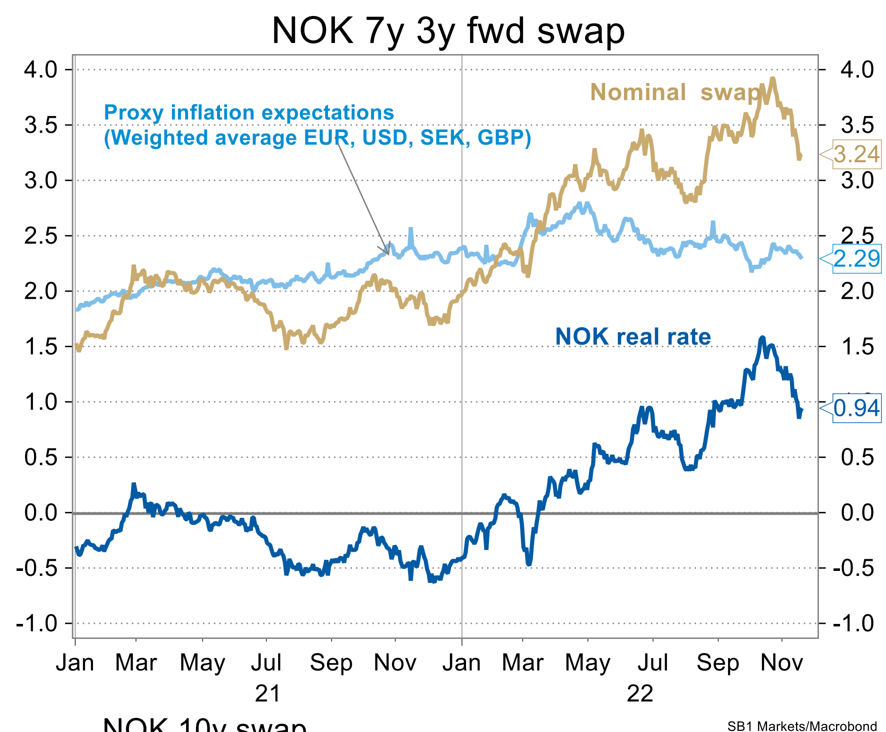


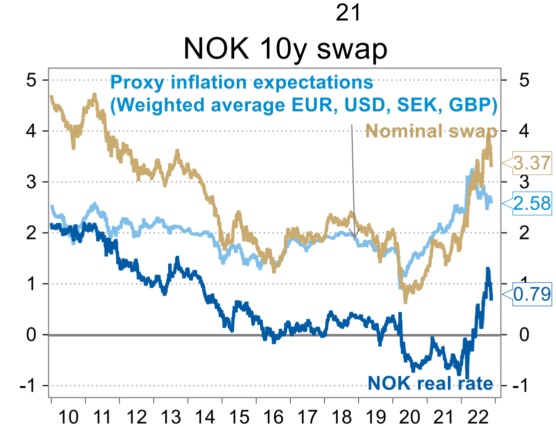




NOK real rates probably slightly up, are up 150 bps from the bottom



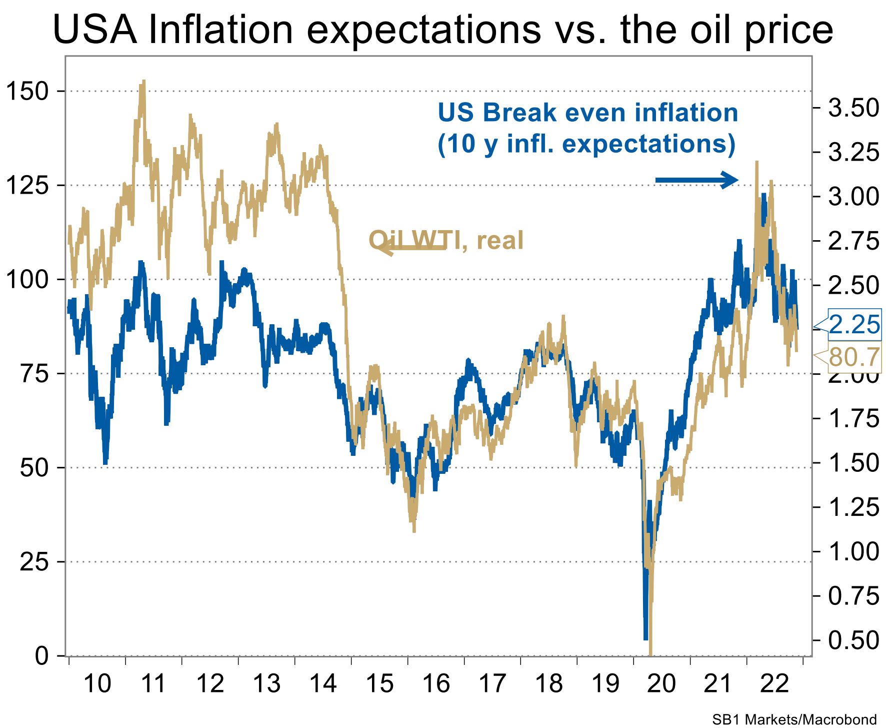


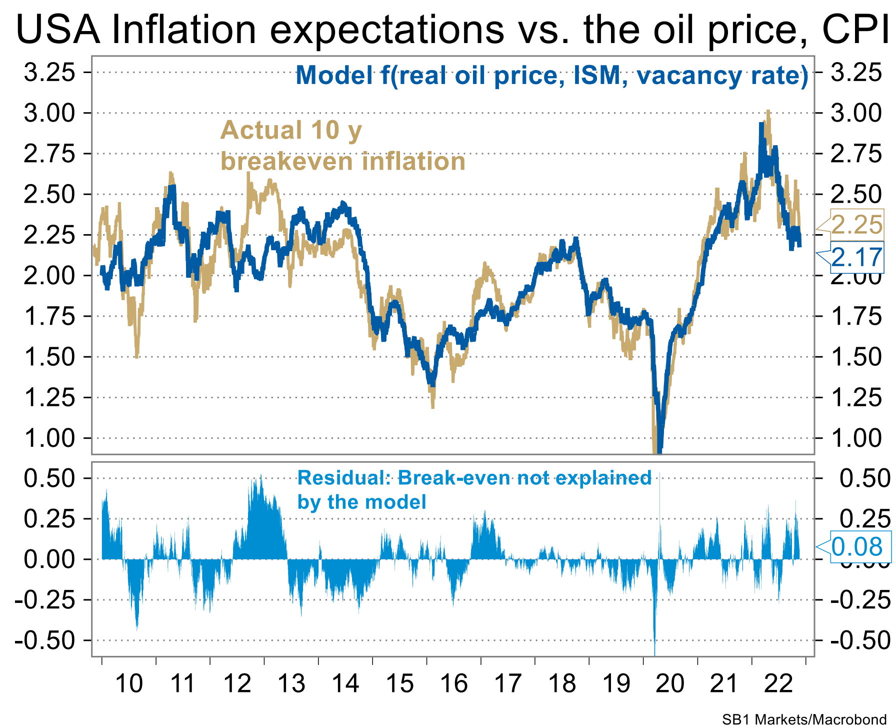


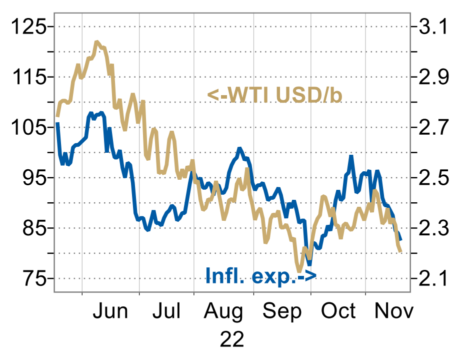
Memo: Our NOK inflation expectation proxy is a weighted average of EUR, SEK, GBP, and USD inflation swaps, cross-checked vs historical inflation differentials and inflation expectations from surveys

US inflation expectations down last week, the gap to our model est. is closing

Are 10 y inflation expectations just explained by the current oil price, ISM & labour vacancy rate?



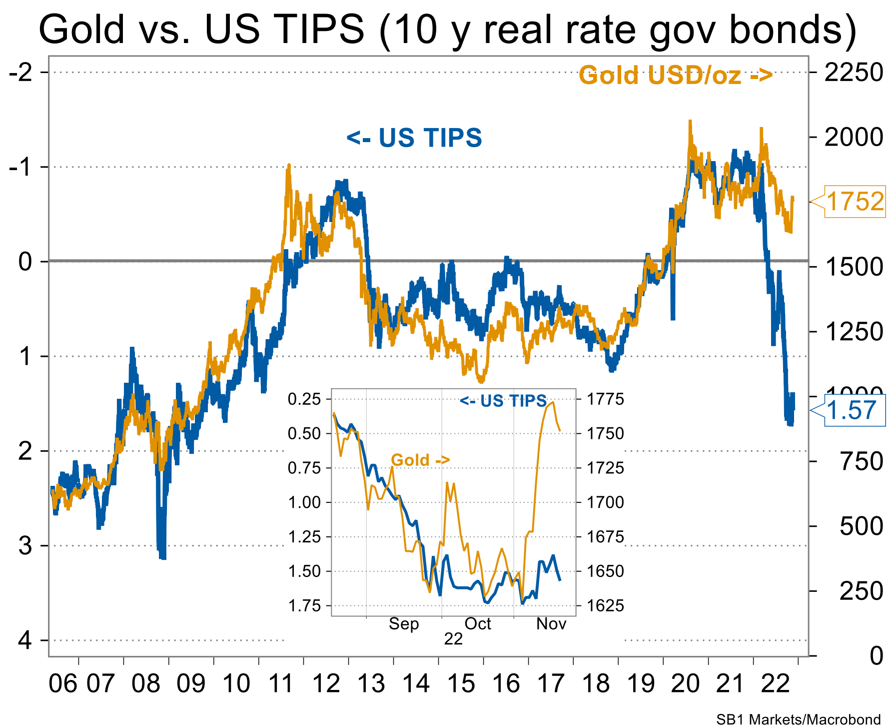




- A simple model including the spot oil price, the current ISM and the current vacancy rate pretty well explains the long-term breakeven inflation expectation in the bond yield curve
- What now? We are uncertain about the oil price, but rather confident that both the ISM, and the vacancy rate will decline. 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

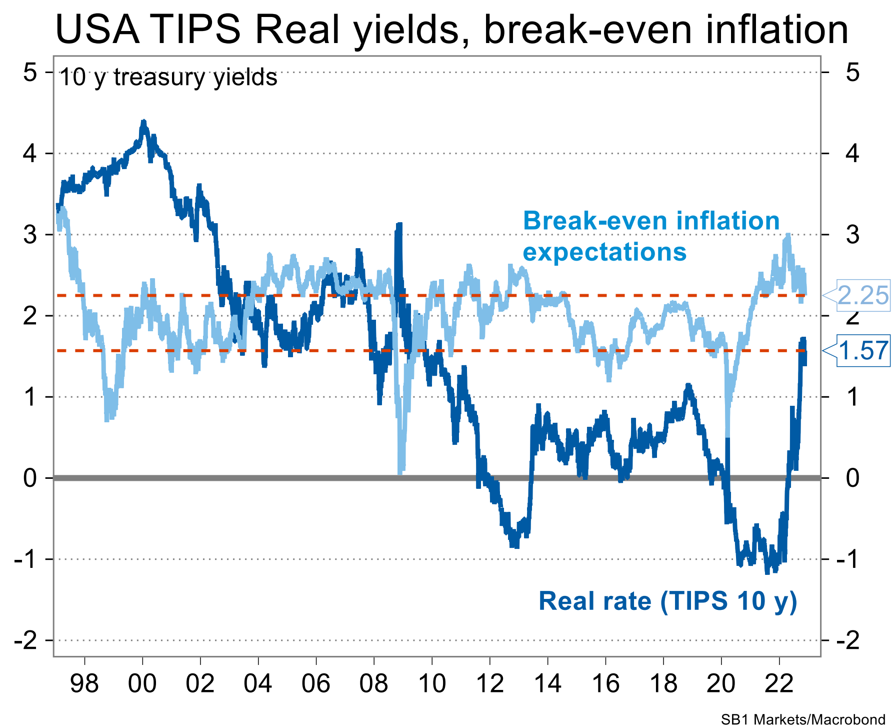
Why is the gold price still hanging up there? The real rate signals USD 1000/oz

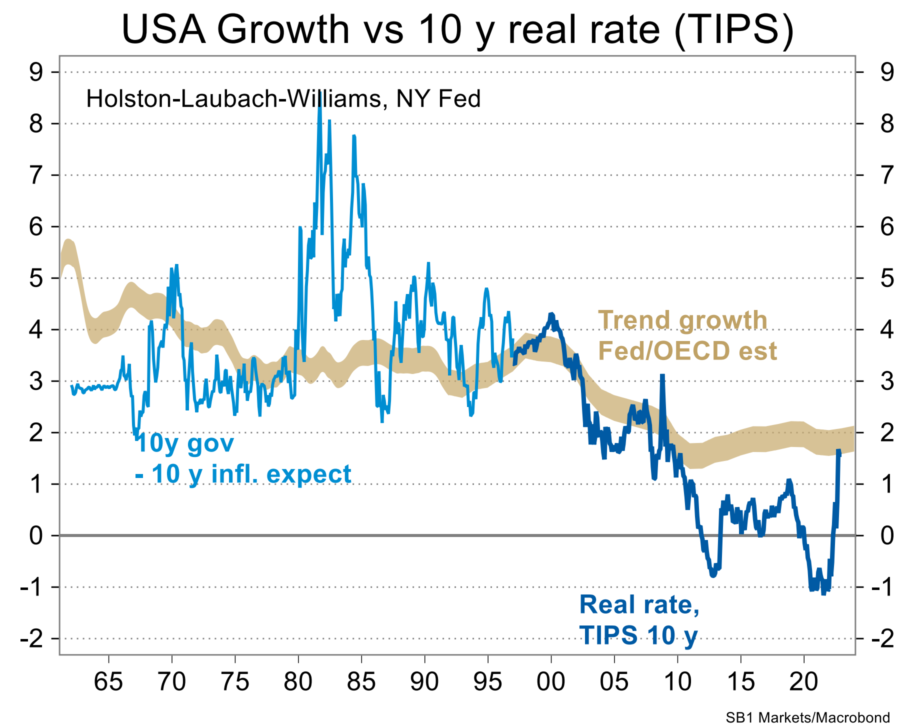
An 80% premium due to geopolitics, inflation fears (which are not captured in the yield curve)?



- Seems rather excessive

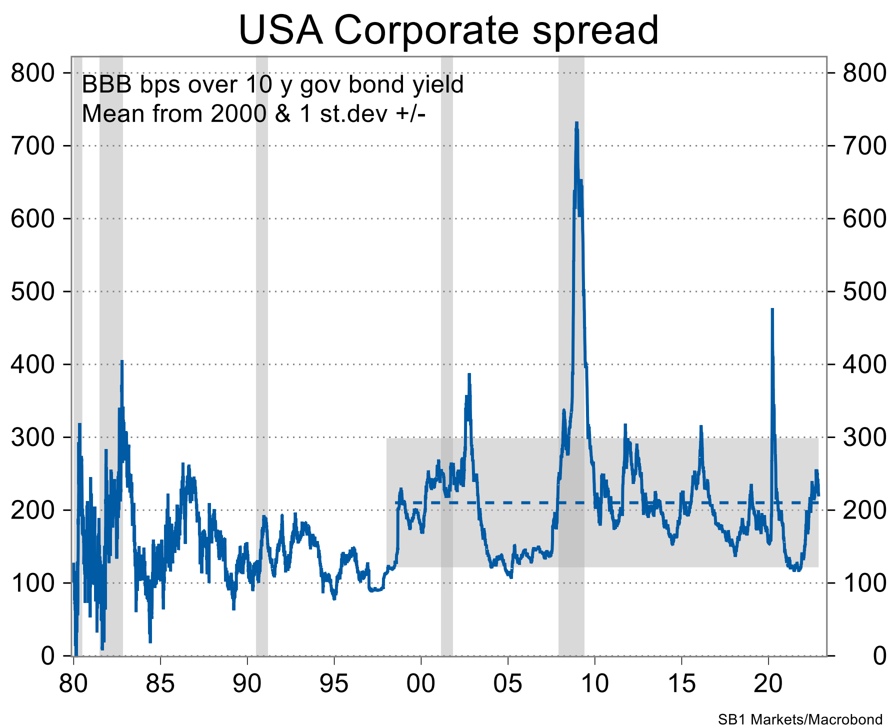
Growth vs real rates: The gap is closed





Risk on: Credit spreads trend down again, still above average

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



- The US BBB spread is up 100 bps from the bottom last autumn, more than a doubling
- In addition, real rates have increased by 250 bps from the bottom late last year
- Thus, the basis for all valuation metrics has changed dramatically, check the chart two pages forward!

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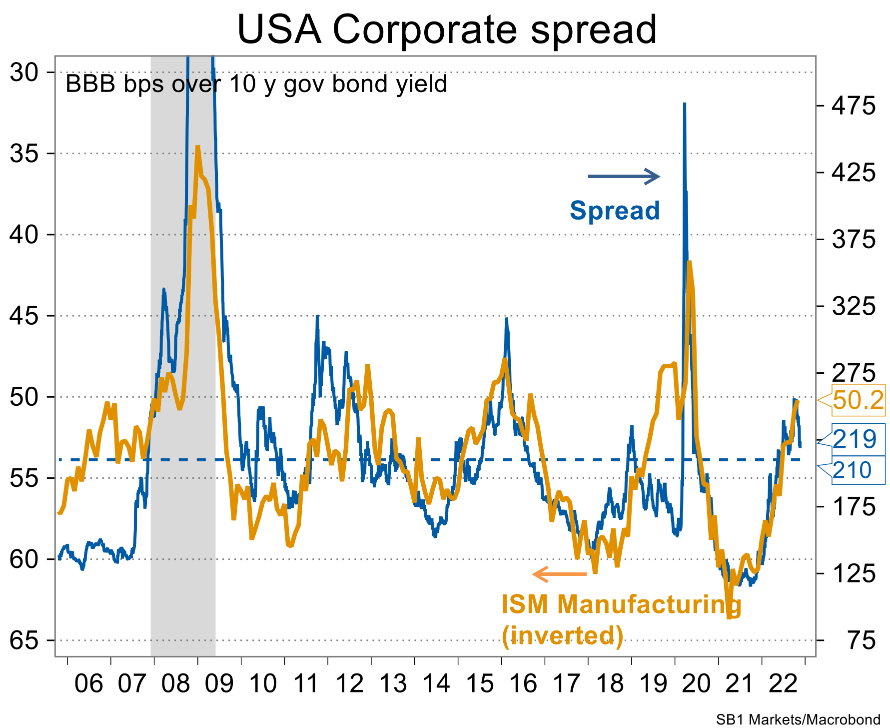
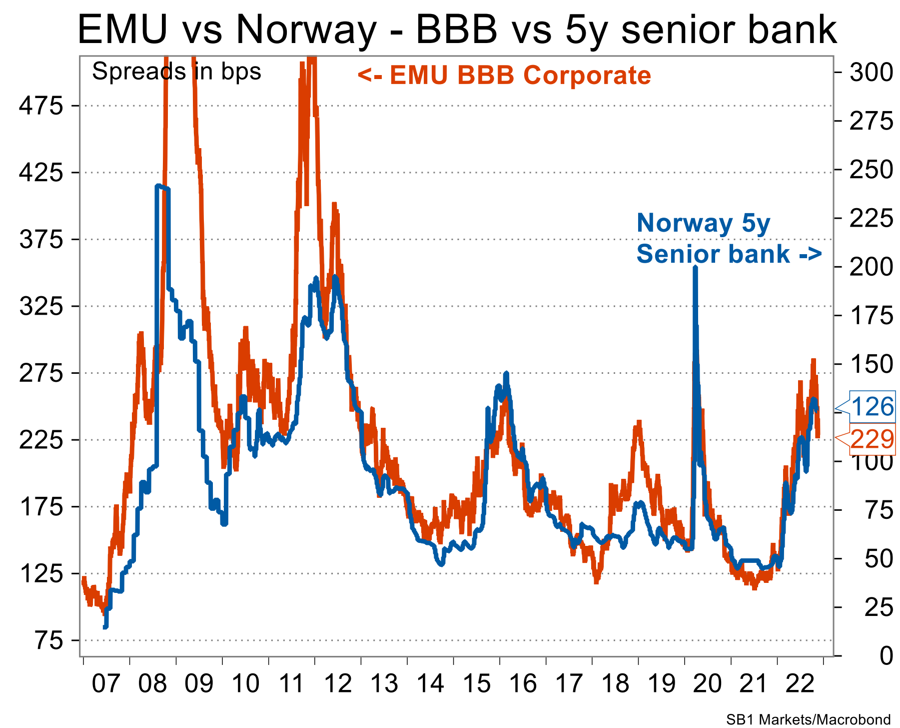
Why have credit spreads widened in 2022? Could it be the slowing economy?

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

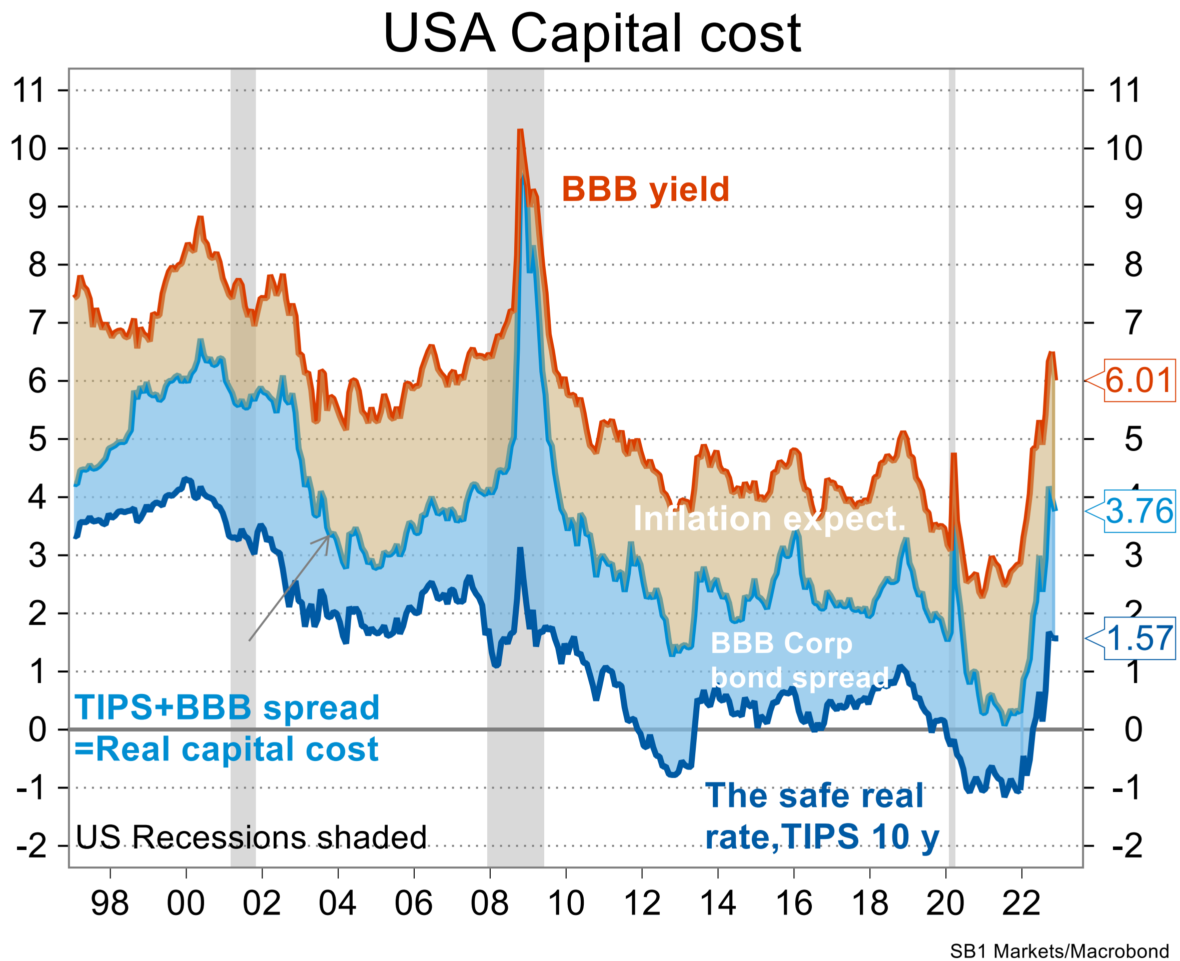




- The answer is not irrelevant for your view on the outlook for spreads, we think
- And do you think Norwegian spreads will be influenced by changes in the global credit market?
- Last week: Norwegian credit spreads continued downwards but less than the decline in 'global' spreads indicates
- The good news: The recent hike in spreads have made these credit instruments far more attractive, at least from a hold to maturity perspective

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 + 157 bps
  - » The BBB corporate investment grade spread is up from 120 bps to 220!
- Add on modest inflation expectations, the nominal borrowing cost has increased from well below 3% to 6% (though down from 6.7% at the local peak in October)

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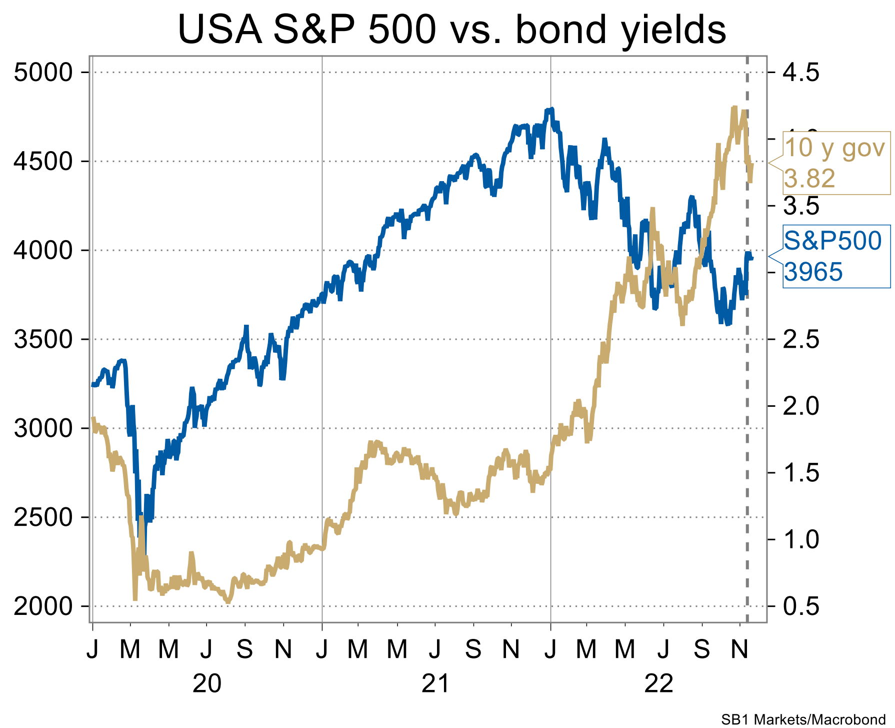
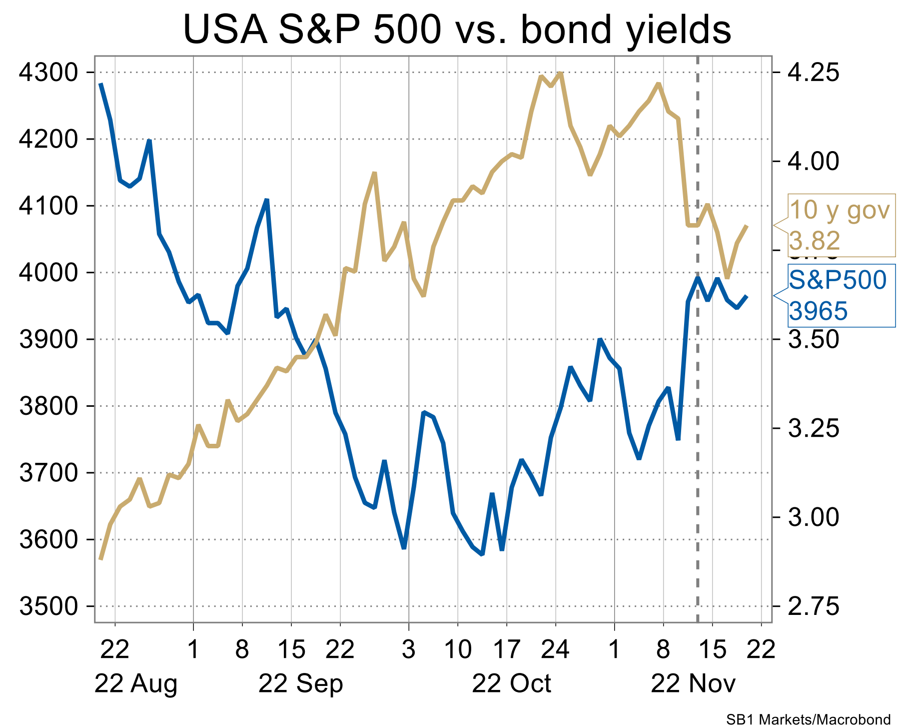
S&P marginally down, following a strong (bear market?) rally

The 10 y bond yield flat last week





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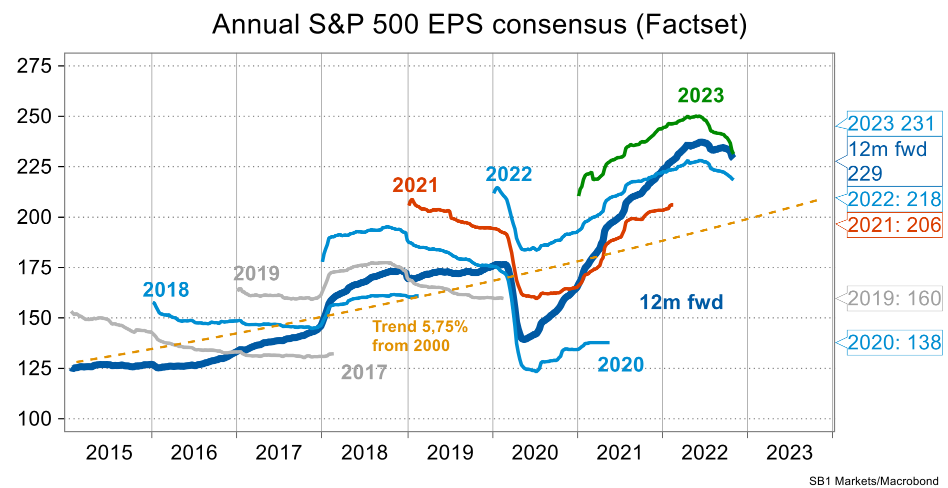
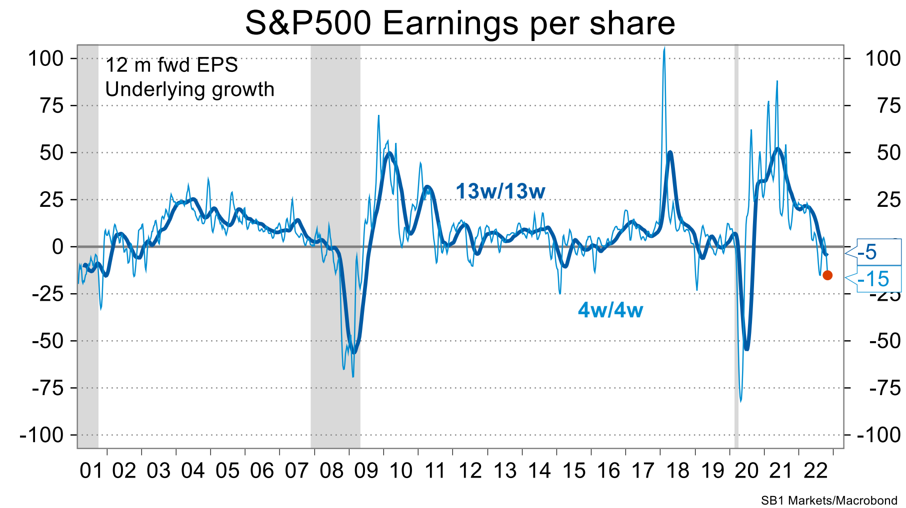
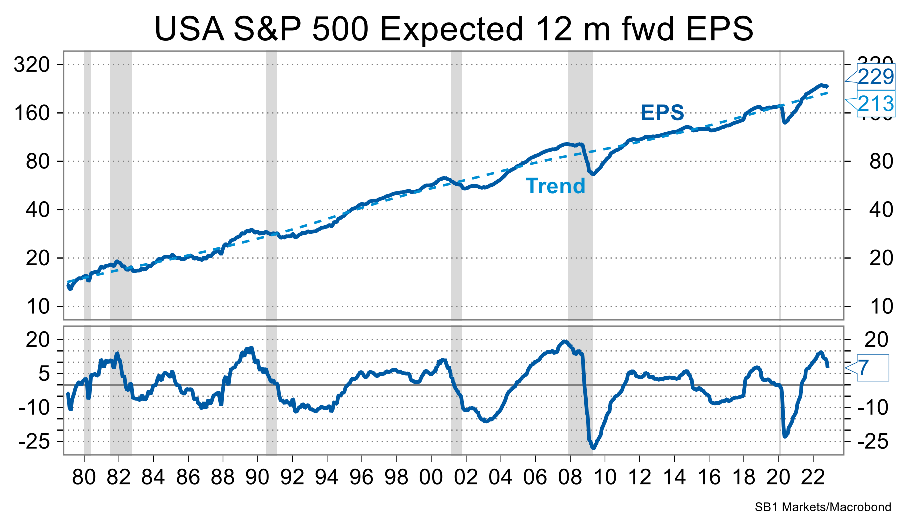
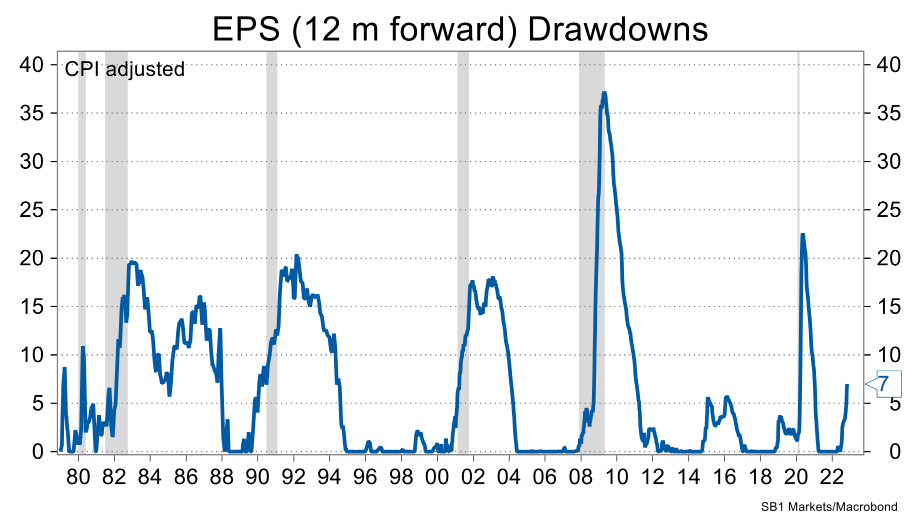
Earnings forecasts downward revisions are accelerating

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









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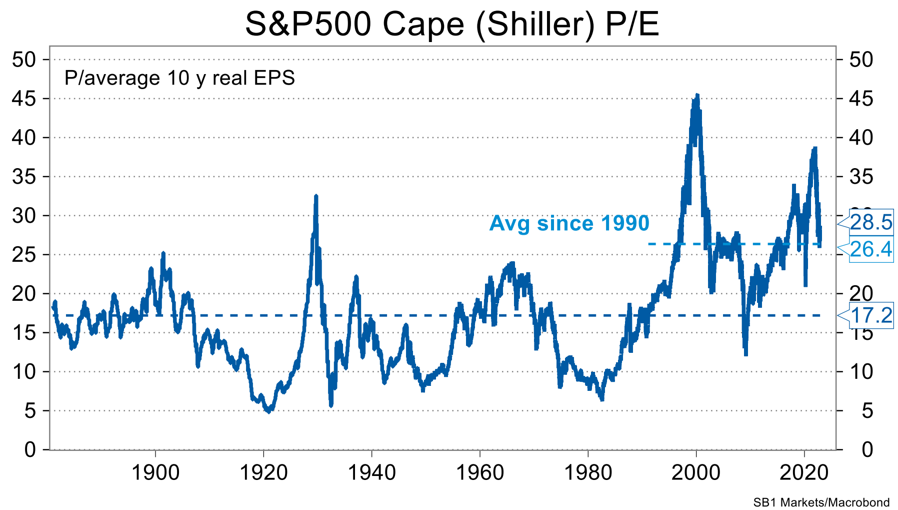
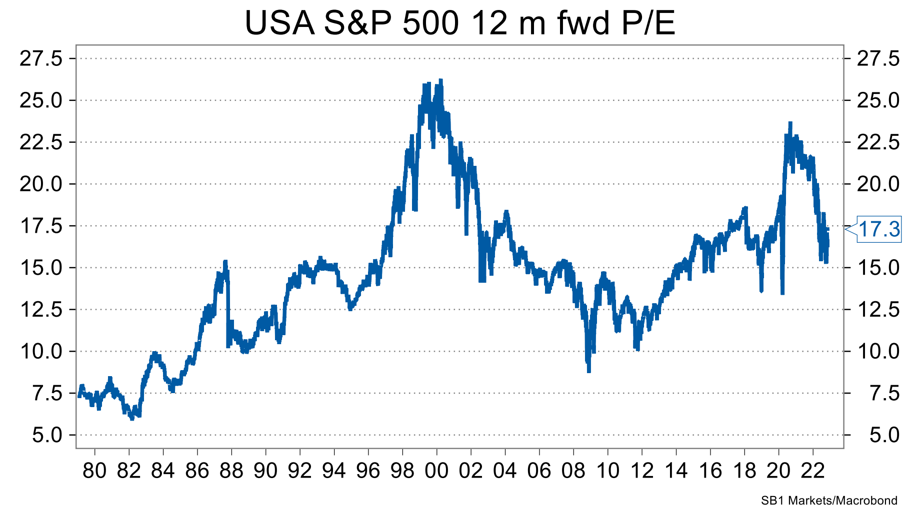
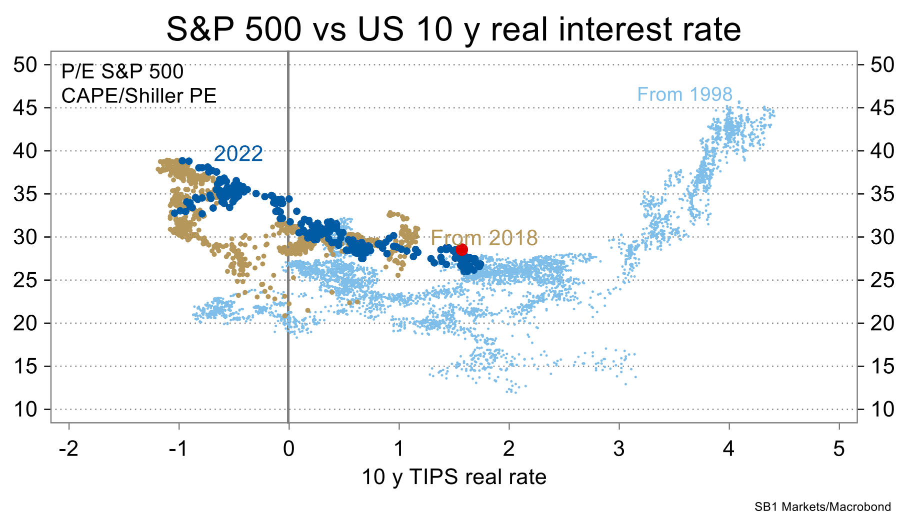
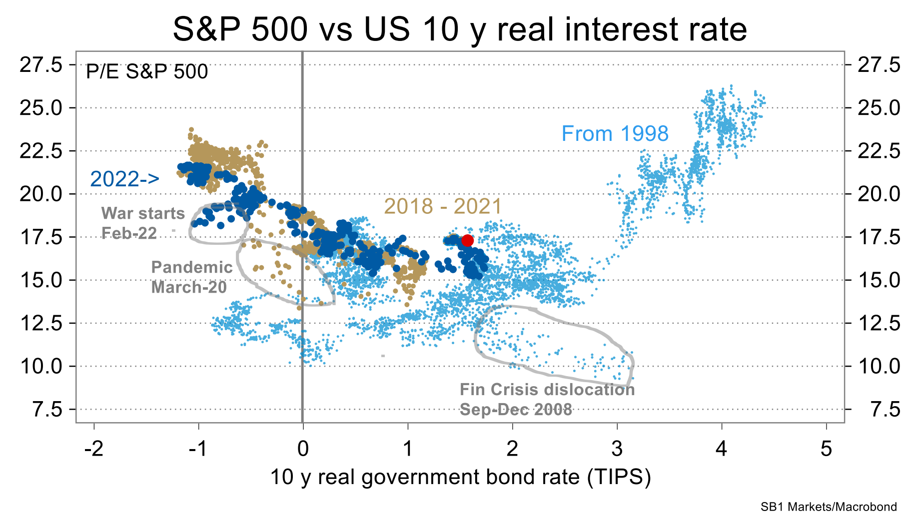
4 valuation charts: Check the extreme tight correlation between real rates, P/E

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









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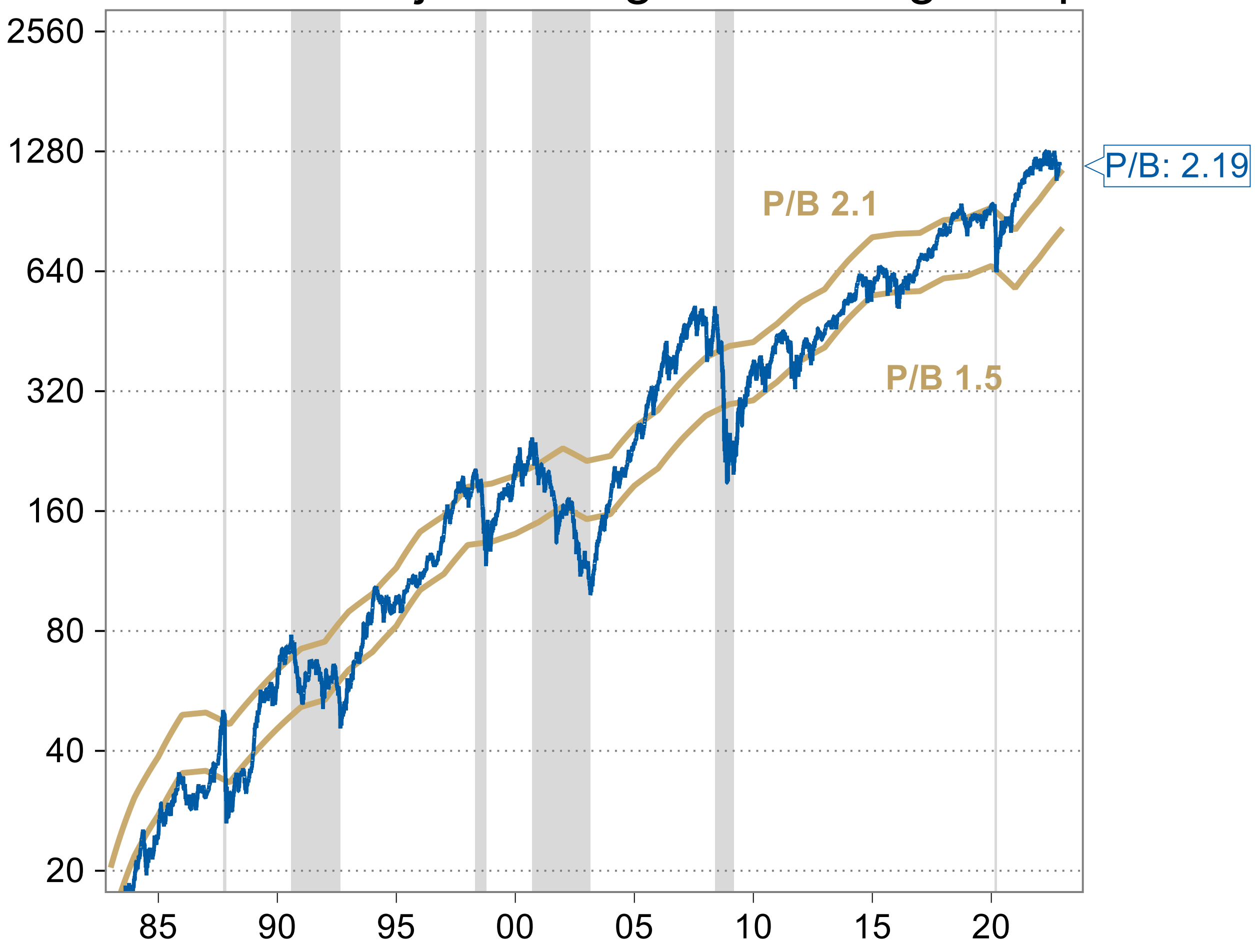
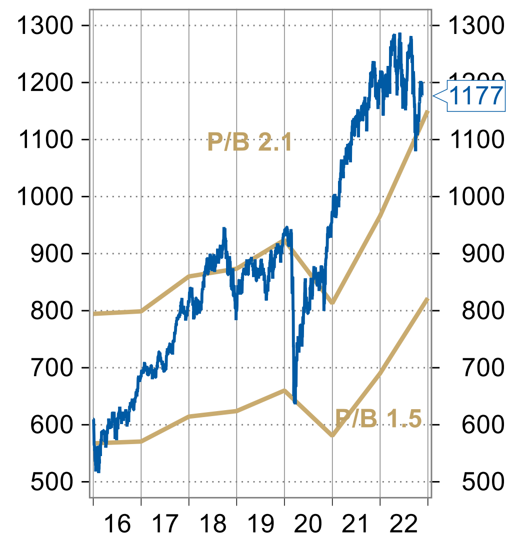
The OSEBX down 1.6% - to a Price/Book at 2.19

Oslo Børs - aksjeverdi og verdi av egenkapitalen



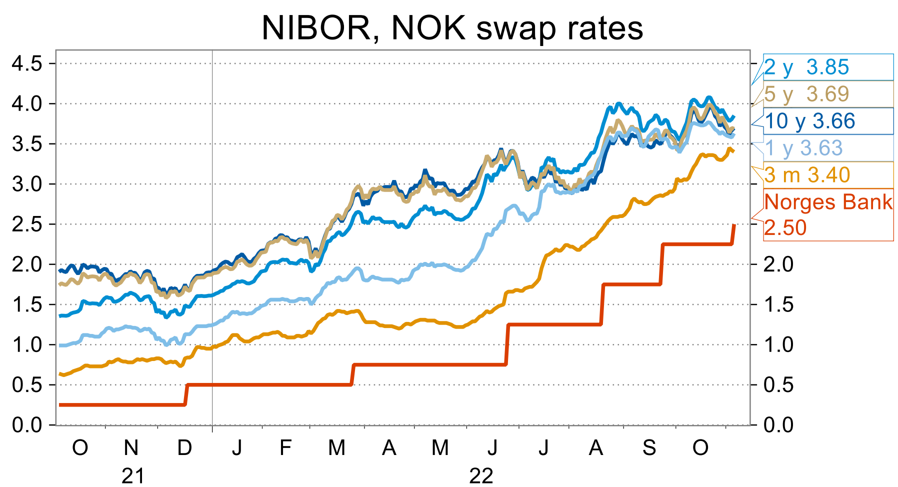
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

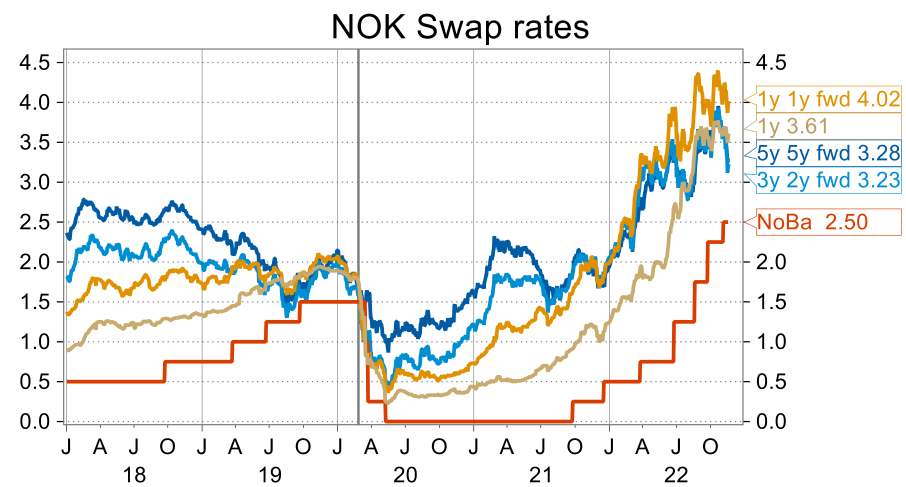


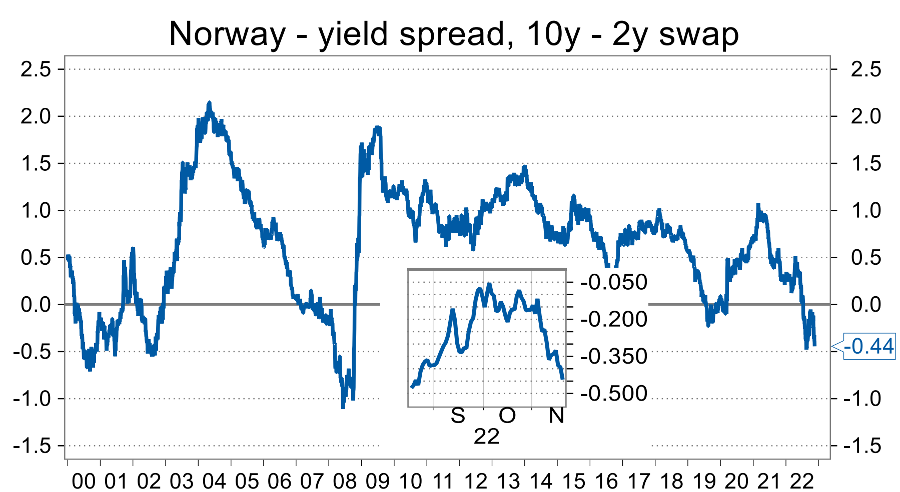
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

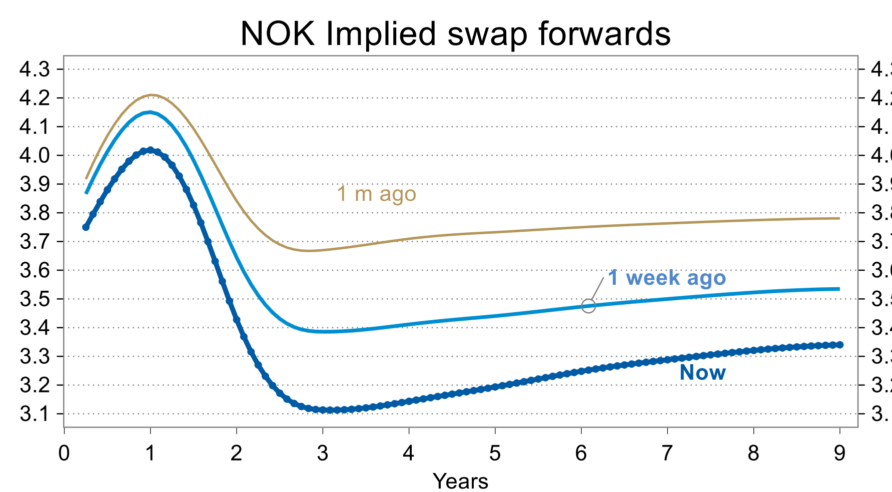
Norwegian rates down all over the curve, by 20+ bps

The 3m NIBOR unch at 3.36%



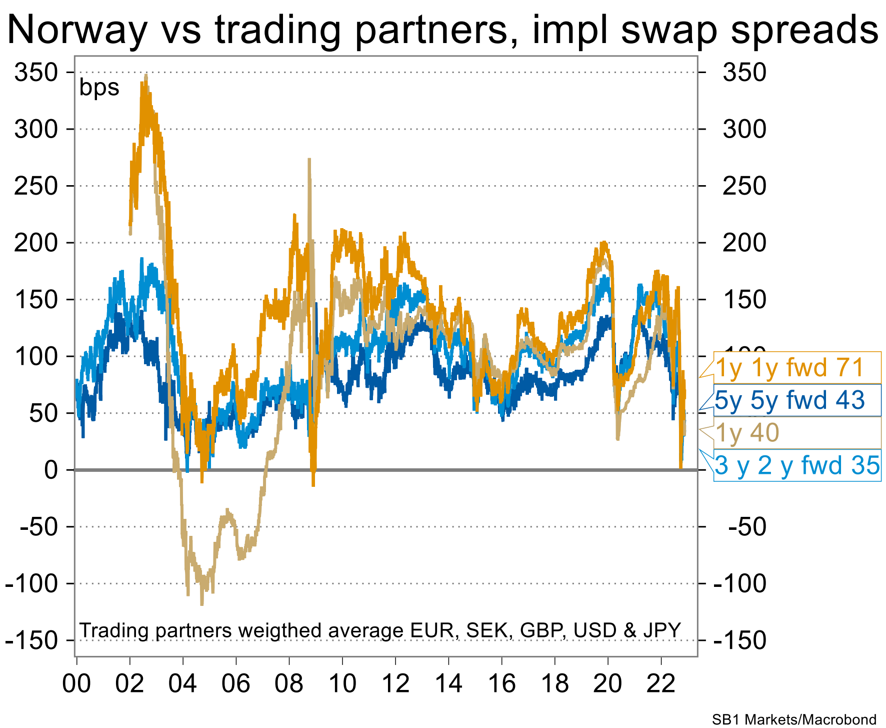


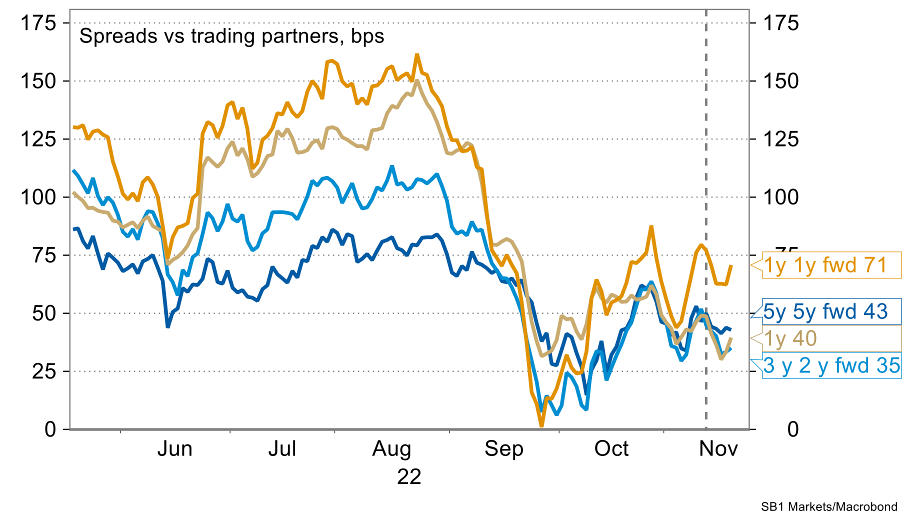




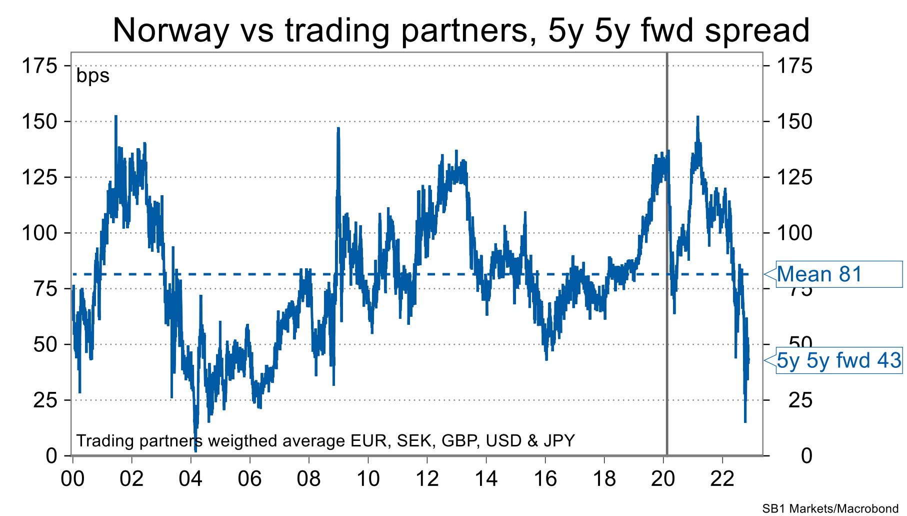
Rate spreads marginally slimmer last week, all over the curve

The potential at the downside is probably limited (barring a Norwegian housing collapse)





- NOK rates are far below the <u>average</u> level among our trading partners
- We assume spreads now should be far lower than the historical average but that that positive spreads are still more likely than a negative spread, due to still low EMU rates
  - » The main downside risk vs spreads: A much weaker Norwegian housing market



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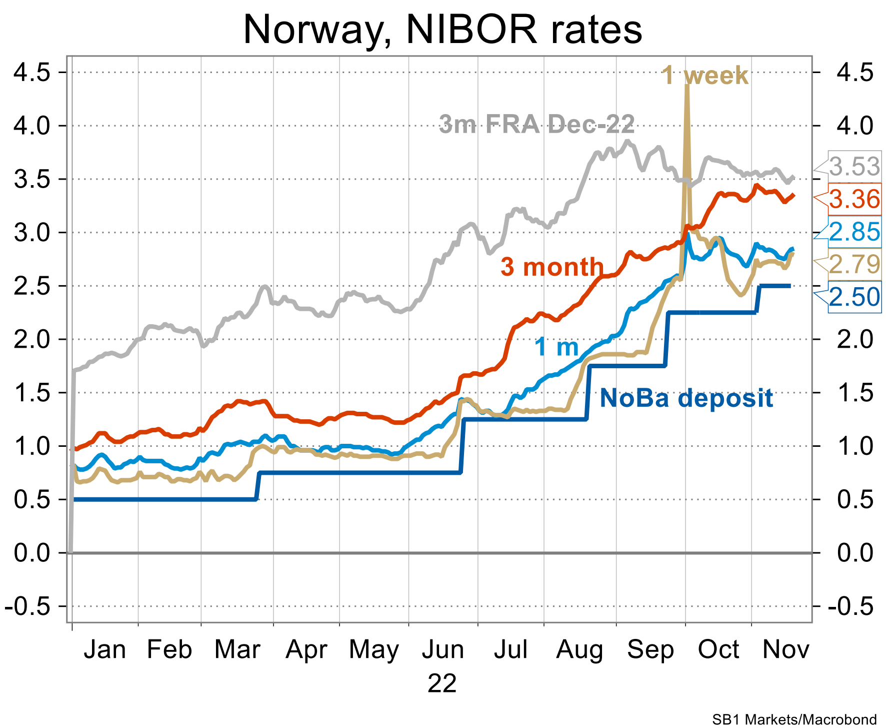
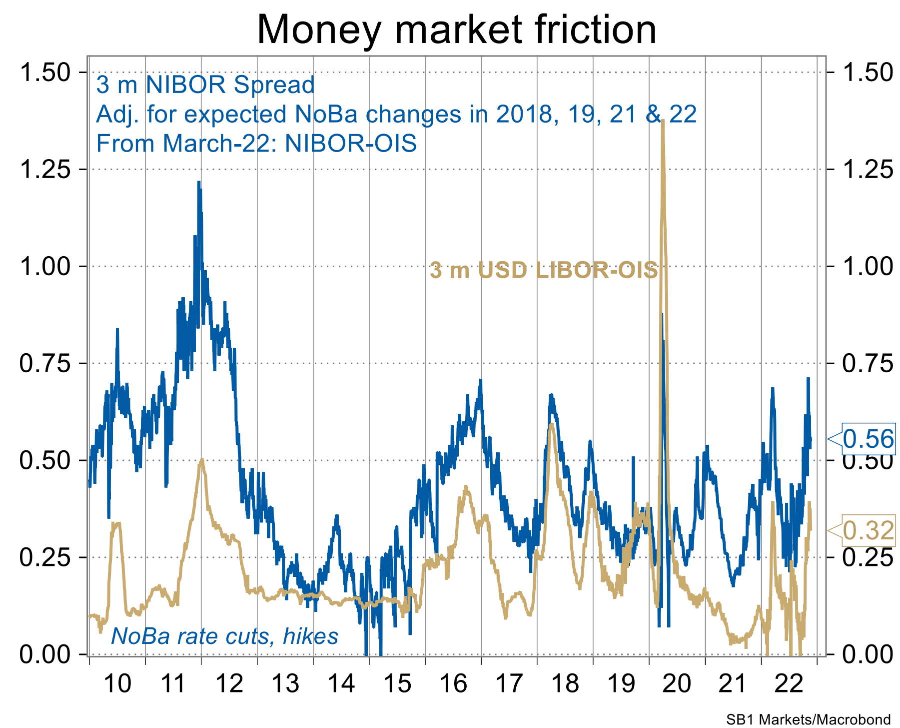
The 3 NIBOR unch. at 3.36%, the NIBOR spread is gradually narrowing

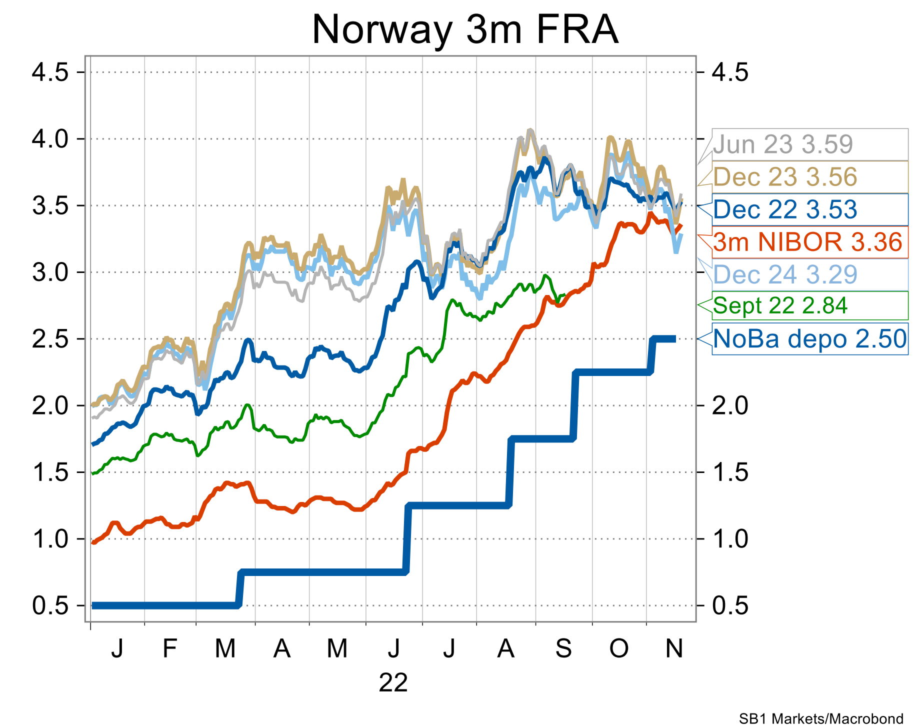
The spread is still well above a normal level, likely at some 56 bps (vs a 35 bs average level)

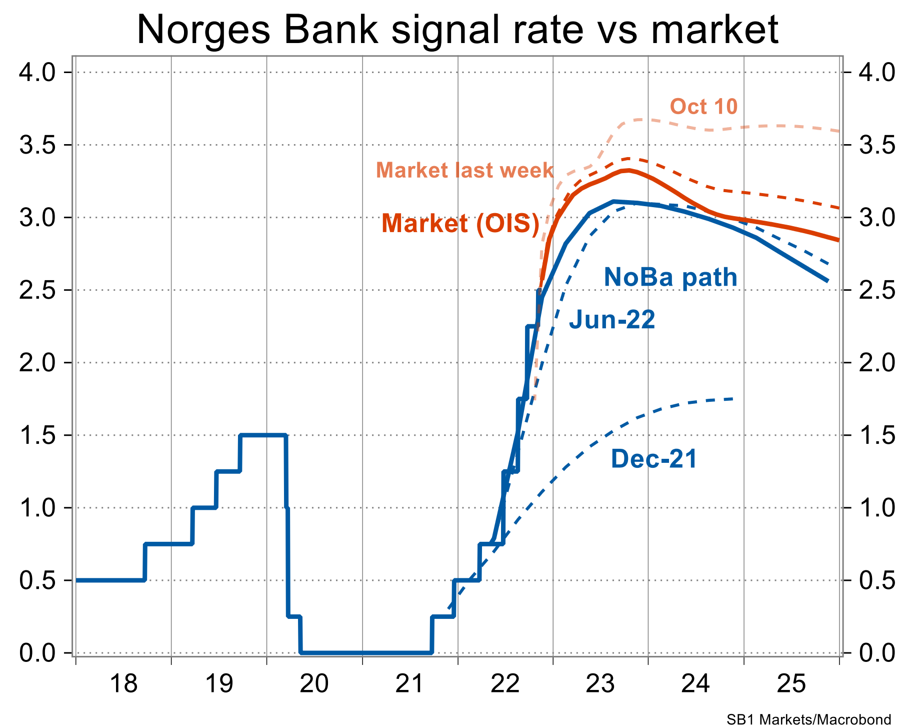




- We are now (finally) utilising the NOK OIS (Overnight Index Swaps, which are bets on the NoBa signal rate (or formally the NOWA rate)

Rate expectations down last week, a 60/40 for a 25 vs 50 bps hike in December

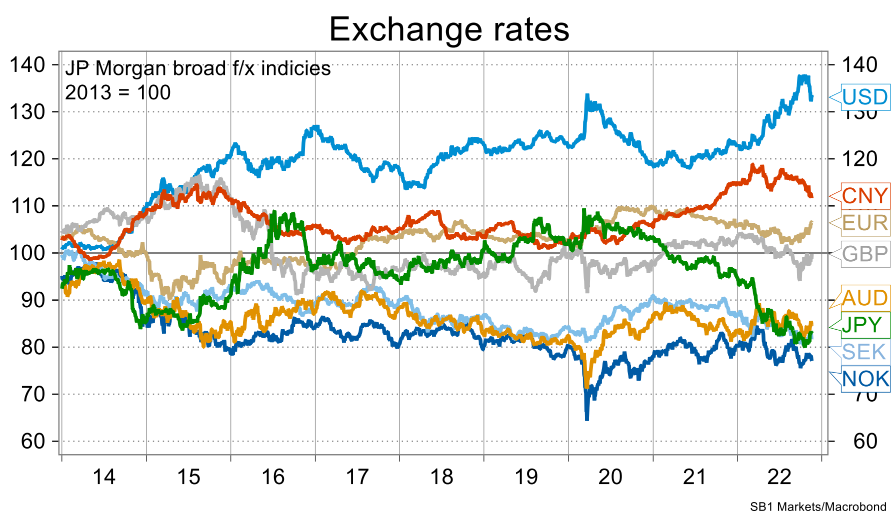


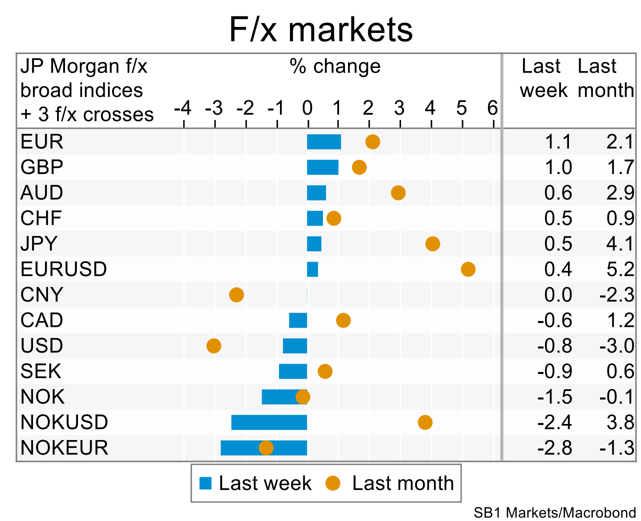


- The short end of the NOK OIS curve signals a 60% probability for a 25 bps hike in December, and 40% for a 50 bps hike, from 50/50 one week ago – even if GDP data were much stronger than expected
- Thereafter, 2 x 25 bps hikes are discounted in 2023, up to 3.3% in Q4-23, 20 bps above NoBa's September interest rate path

NOK the loser last week, and the USD fell further

The EUR gained the most last week, and is up last month. The NOK is flat



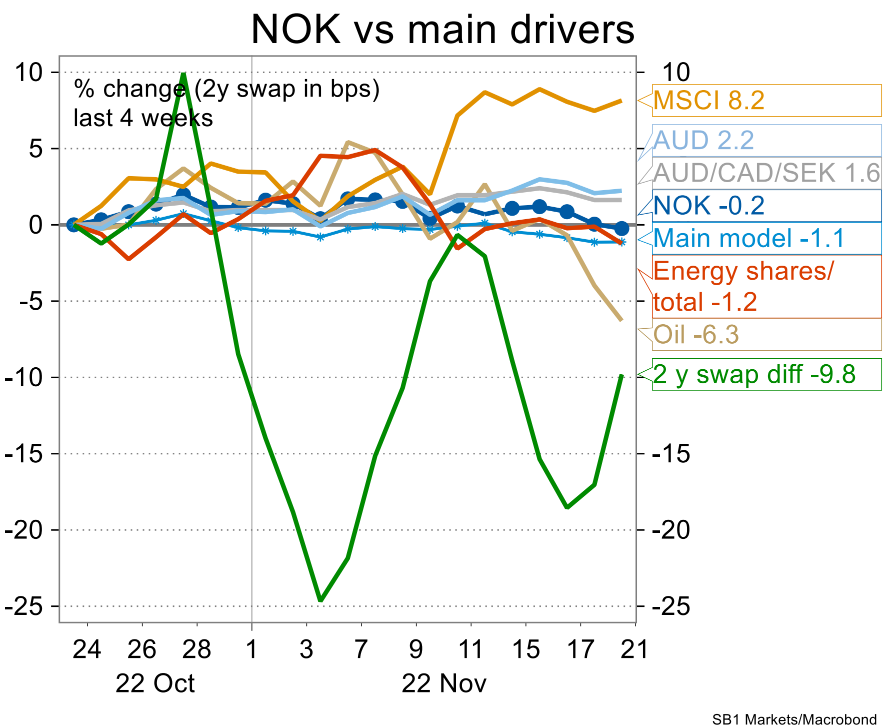


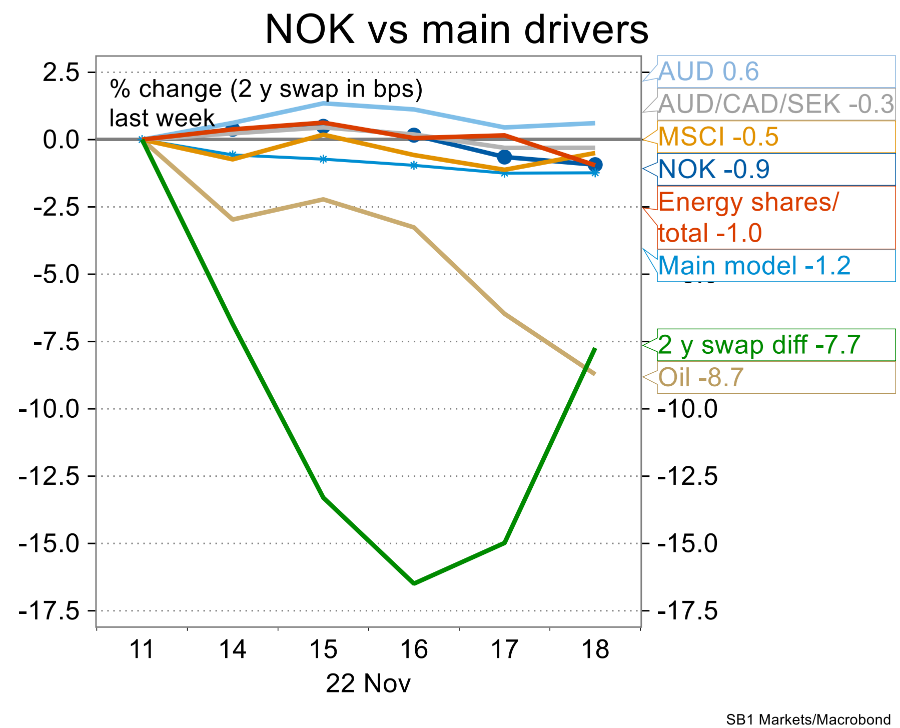
JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
EUR	1.1	2.1
GBP	1.0	1.7
AUD	0.6	2.9
CHF	0.5	0.9
JPY	0.5	4.1
EURUSD	0.4	5.2
CNY	0.0	-2.3
CAD	-0.6	1.2
USD	-0.8	-3.0
SEK	-0.9	0.6
NOK	-1.5	-0.1
NOKUSD	-2.4	3.8
NOKEUR	-2.8	-1.3

NOK

NOK down 0.9%, as the oil price fell sharply (as did the interest rate differential)

The NOK is 1% below our model estimate





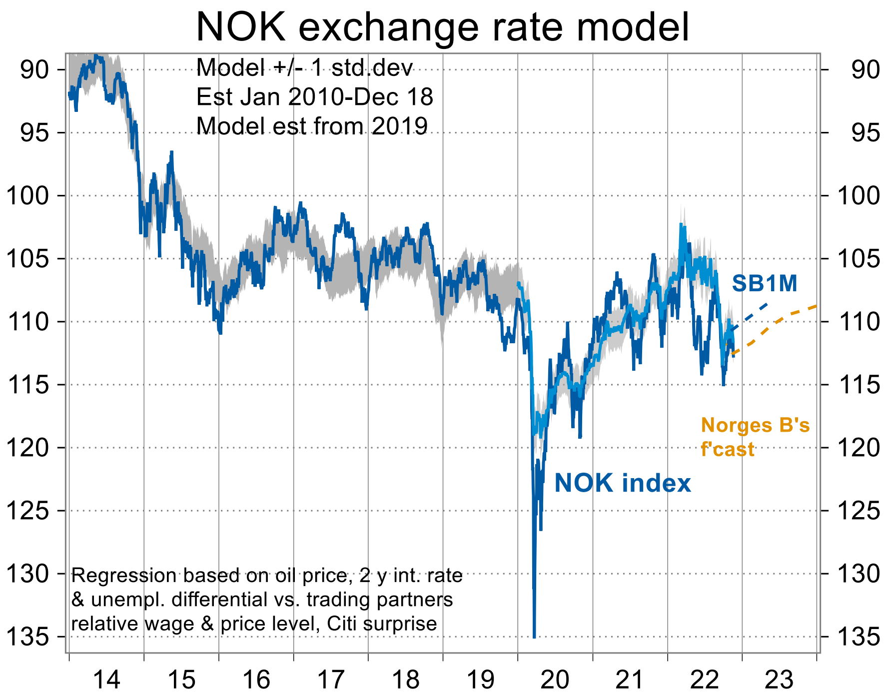
Gaps vs. our model estimates narrowed further last week

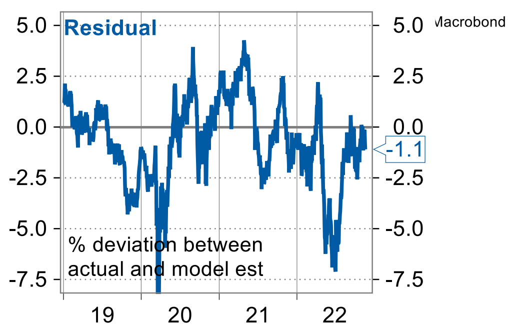
- ***NOK is 1.1% below our main model estimate (from -0.9%)***
- The NOK is 6% weaker than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts, a substantial weakening (unch)
- NOK is 4% weaker than an estimate from a model that includes global energy companies equity prices (vs the global stock market) (unch)

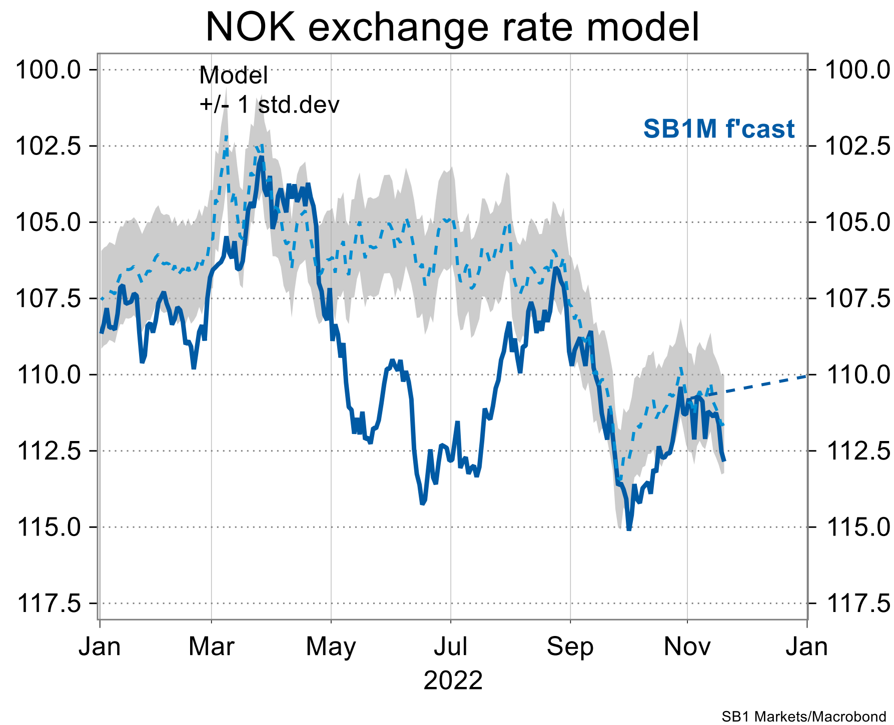
At this and the following pages we have swapped Norges Bank's I44 index for JP Morgan's broad NOK index and rebased it to the current index value for the I44. The I44 has an earlier closing time than the 'official' closing time for f/x crosses. There are no substantial difference between these two indices over time

The NOK is 1.1% below the model estimate

… and 2.5% below our early Nov f'cast…







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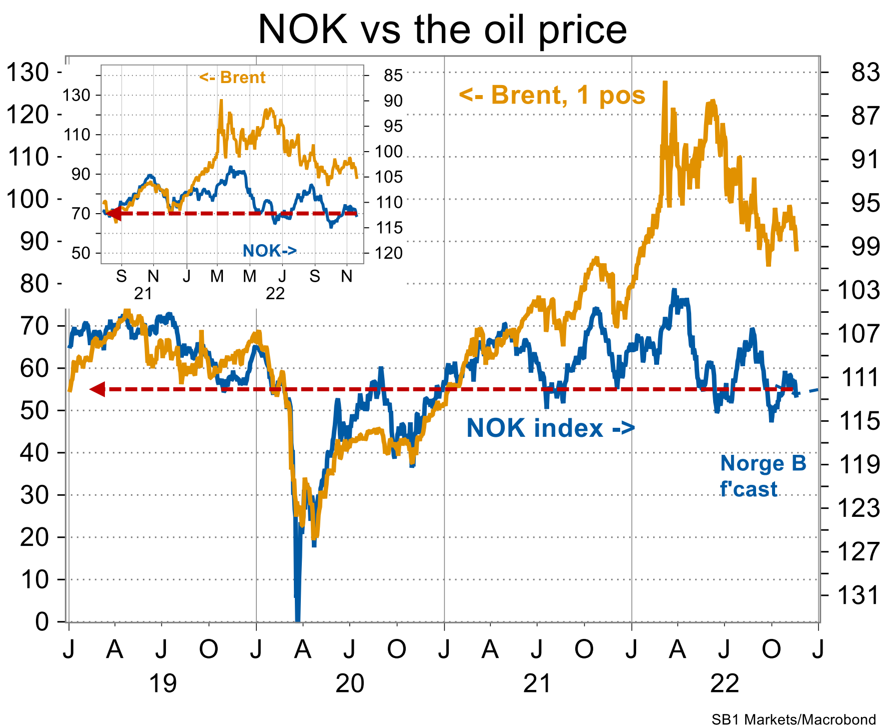
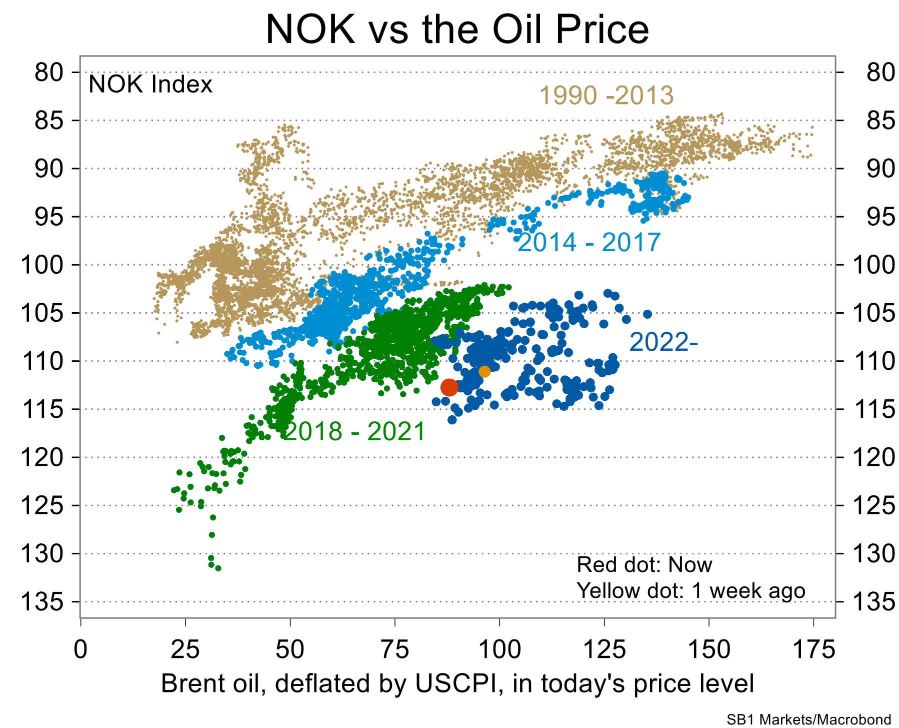
Oil down, NOK down

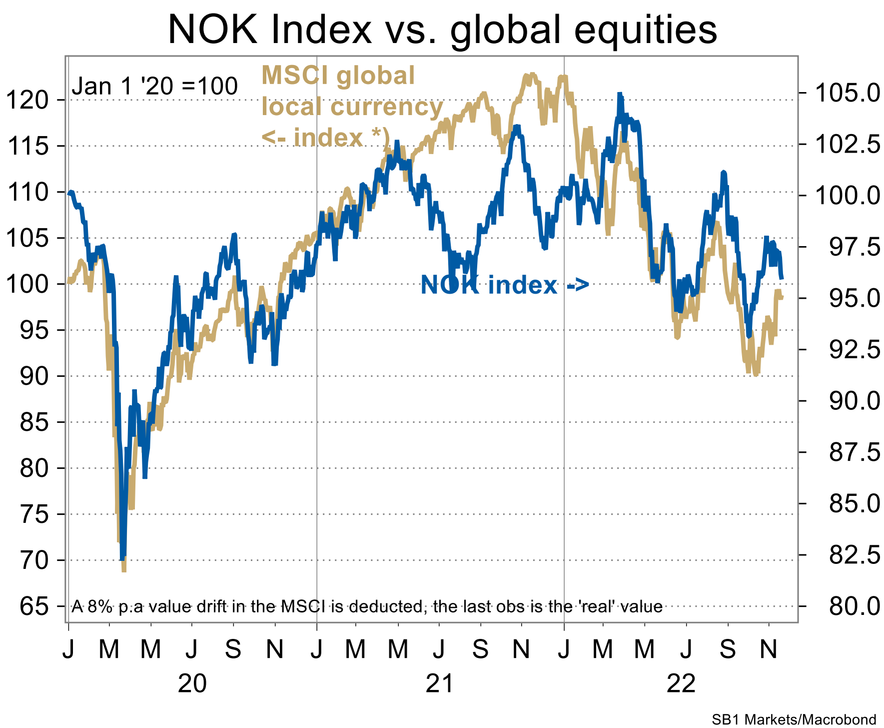


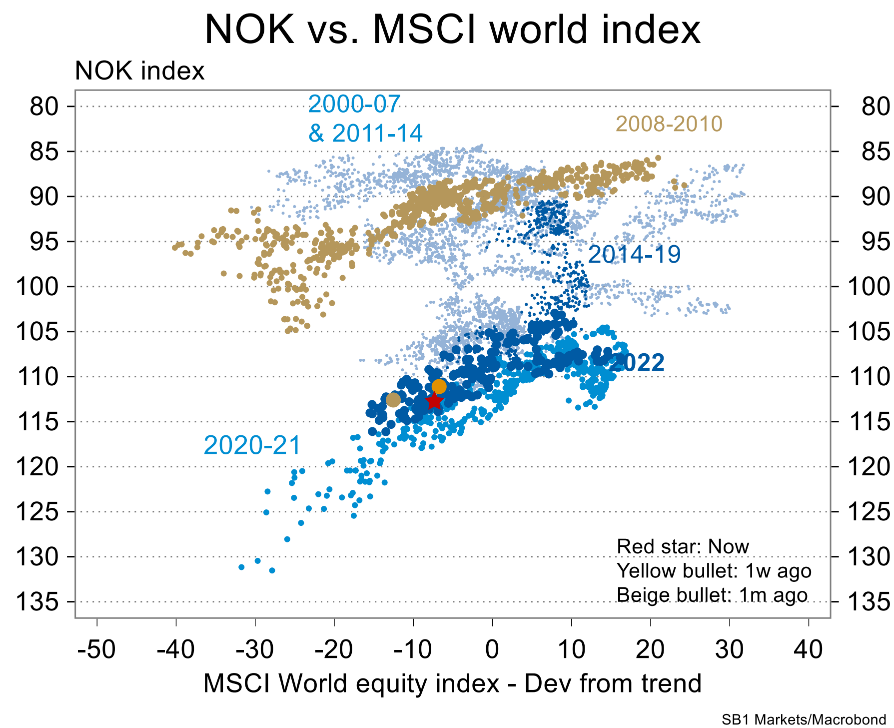


- The correlation between the NOK and the oil price has been close to non-existent since the start of 2022, rather unusual

The NOK down, as was the global stock market

The NOK has been closely in sync with the global stock market since April (but not recent weeks)

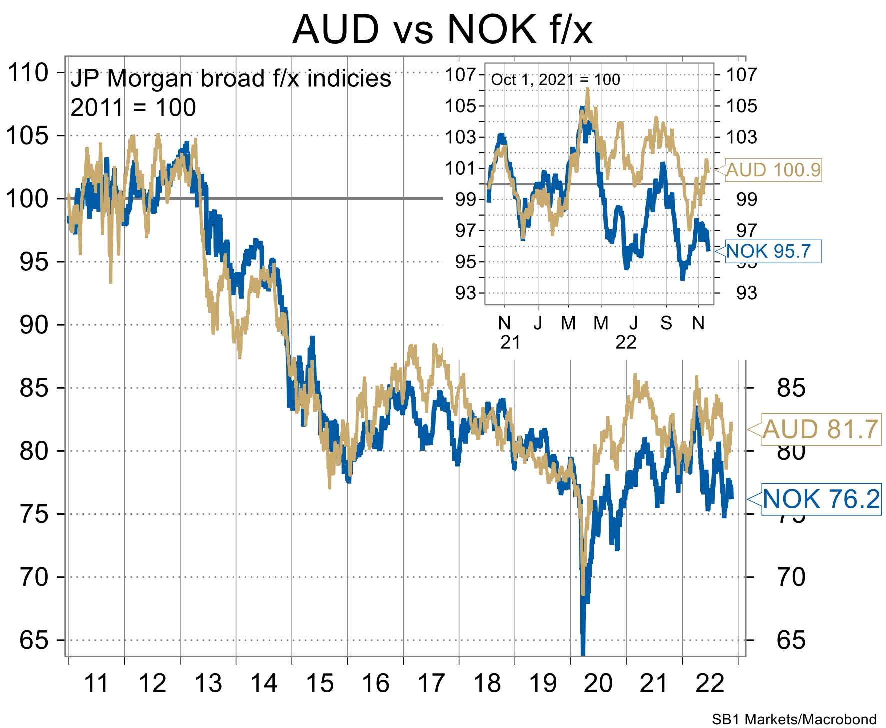


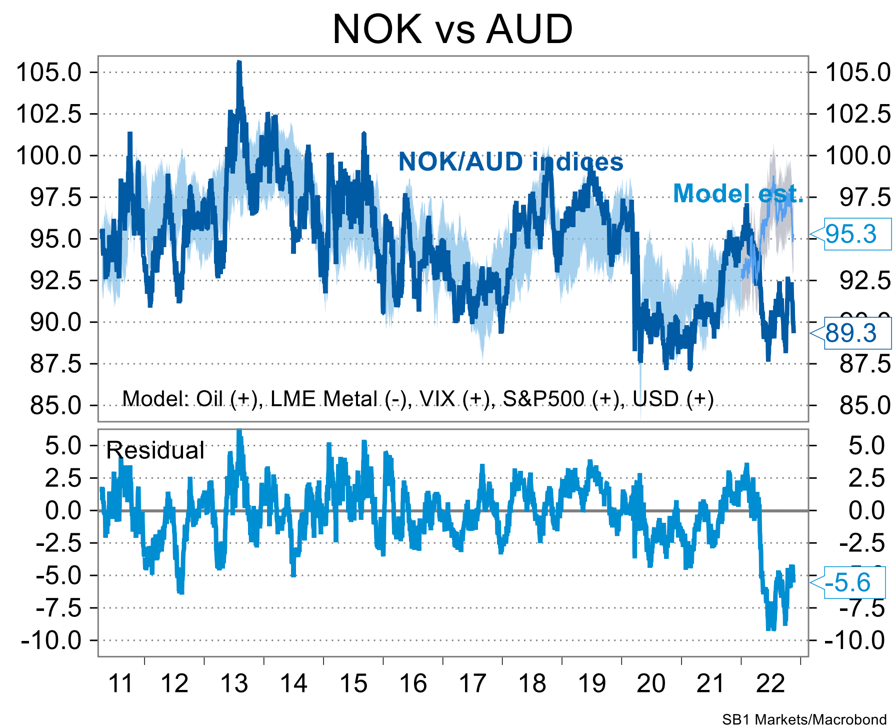


- There has not been any stable correlation over time, and when it is, the oil price is normally the real driver. Not so much now

The AUD up, NOK down – as the oil price fell, iron ore prices rose

NOK is 5.6 % below our model f'cast vs AUD

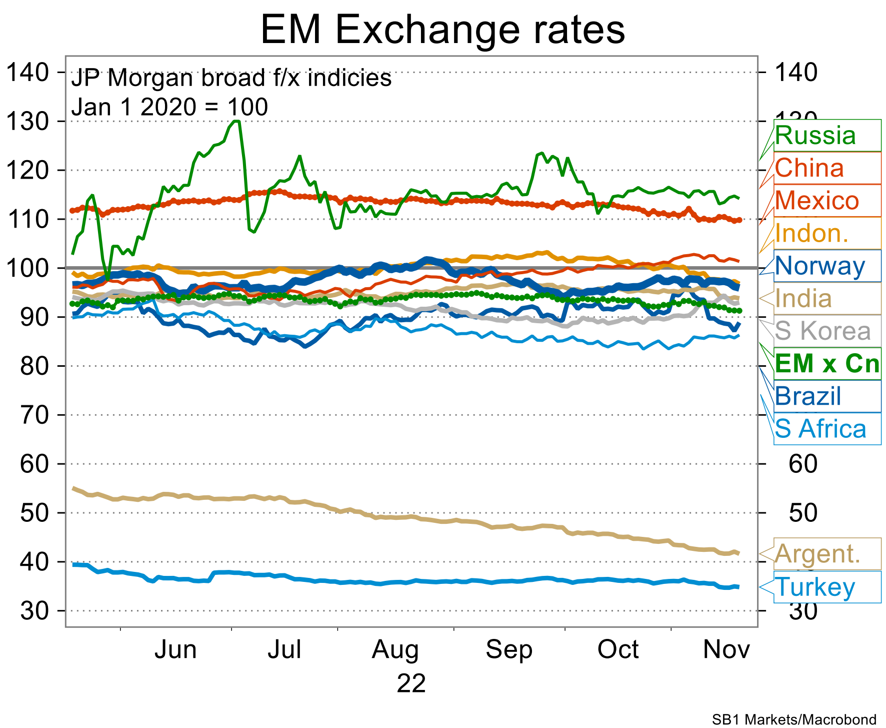


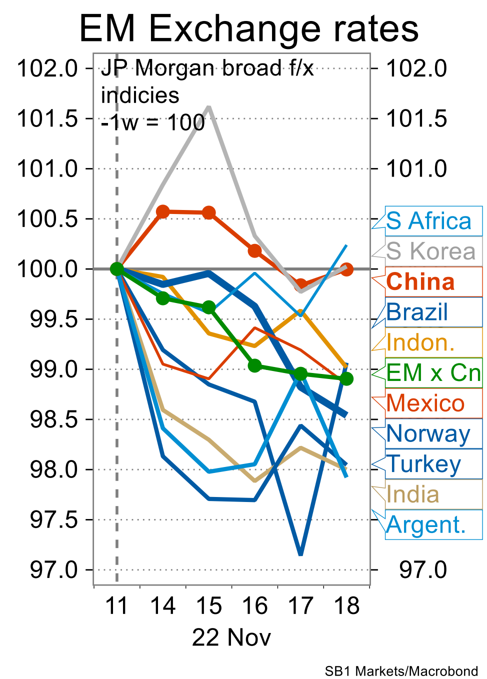


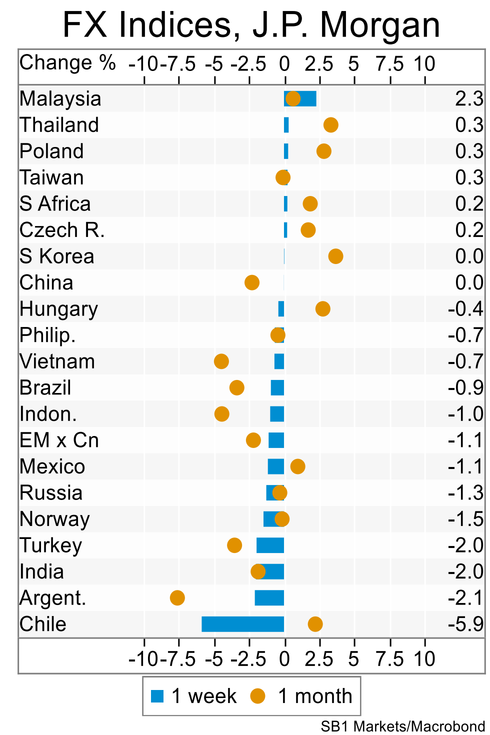
- The discrepancy between the NOK and AUD is unusual, given the normal factors that normally has explained the limited gap between the two
- Normally, NOK strengthens vs the AUD when the oil price rises vs. the LME metal index, when VIX, and the S&P500 index increases, and the USD index appreciates.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

EM f/x (x China) down last week, not many on the upside

The CNY has been slightly on the weak side recent weeks, but flattened last week







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