August 22, 2022

Macro Weekly

Week 34

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, part I

- **The War/Commodities**
  - » No good news from the **East front;** no end of the war in sight
  - » Most **commodity prices** fell last week in a 'risk off' environment except for **European gas and thus electricity prices. Gazprom** said late Friday that the trickle of that is left of gas the runs through Nord Stream 1 will fall to zero due to maintenance 3 days in late August. The market is not so sure it will be opened afterwards
- **China**
  - » Last Monday, as well as this morning, the PBoC decided to cut some **signal rates**, this time a long term signal rate as well as the standard rate for banks, by 10 bps and 5 bps respectively. The steps are short but they are in the same direction: easing is needed to keep the credit machine working. The question is, if demand is there…
- **USA**
  - » Housing starts and existing home sales fell further in July, and more than expected. They are down 20% and 26% since early 2022, respectively. Existing home prices have now turned south, following the almost 40% price lift during the pandemic. Homebuilders are reporting a further steep decline in housing starts, in sum 50% down from the local peak – far into a recessionary area. At least, we have never seen such downturns without a recession around. In fact, a downturn like the one we have seen so far, have normally been sufficient!
  - » **Core retail sales** of goods rose slightly more than expected but are probably just up some 0.3% in volume terms, following the 0.9% total decline in May and June. The trend is rather downwards than upwards
  - » **Manufacturing production** was also better than expected, we assume due to an 11% surge in auto production, to 7% above the Feb-20 level! Even so the trend in the manufacturing sector is flat recent months, and surveys pointing downwards…
  - » The **NY Fed** manuf. survey nosedived to a very low level in August, while **Phil Fed's** survey surprised at the upside – but less than the NY survey fell – and both are trending down, as all other surveys. New orders is the main challenge, the companies says they are falling rapidly, and they expect a further deterioration. More August surveys out this week
  - » **Leading indicators** remained under water in July and signal a recession – the current signal has almost never missed a downturn
- **EMU**
  - » **Q2 GDP** rose a tad less than initially reported, but a 2.5% growth pace (0.6 not annualised) is OK. Now, most indicators point towards an imminent recession, due to the surge in energy prices
- **UK**
  - » **CPI inflation** rose to above 10% in July, 0.3 pp higher than expect. Inflation is broadening, even food and energy are the most important contributors

Last week, part II

- **Norway**
  - Norges Bank delivered a ‘double’, lifting the signal rate up to 1.75%, to 25 bps above the pre-pandemic level, the highest level since 2011 Unemployment has fallen faster, and CPI inflation has accelerated faster than assumed, broad based. Further hikes are signalled, though depending on incoming data
  - **Interest rate expectations** rose sharply (by up to 44 bps), but mostly <u>not</u> due to NoBa’s actions and signals; FRA rates rose more in UK, and almost as much in Norway as among our trading partners in average (at least for the Dec-23 FRA), and much of the lift came before NoBa’s meeting. A 50 bps hike in September is fully discounted, a 50 bps hike in November or December (and 25 bps in the ‘other’ month) – and close to 2 more 25 bps hikes in Q1, up to almost 3.5% at peak, 40 bps above NoBa’s June forecast (and ½ year earlier). This will imply an average mortgage rate at closer to 5%. <u>Given the indebtedness of the household sector, and the ‘fat tail to the right’ if the distribution of debt, that would imply huge cuts in disposable income – more than we think is needed in order to cool down the Norwegian economy and to bring inflation down</u>
  - **Mainland GDP** grew by the expected 0.7% in Q2, even if June was weaker than expected, still up 0.3%. Most sectors contributed to growth in production in Q2. Domestic demand is slowing, but still trending up. We expect modest growth in Q3. Unemployment data will be more important for evaluating the capacity utilisation in the economy
  - **Oil companies** are still reporting a decline in investments in 2023, but an unprecedented no. of projects will be added before the end of the year (to benefit for the temporary tax cut), and some spending will occur next year from these projects. The **manufacturing sector** is reporting large increases in investments in both 2022 and 2023, partly due to several ‘green’ projects. The companies in the **power supply sector** have cut back in their investment since 2018 but they now signal an increase – and we expect more projects to be added the coming months. Demand seems to be pretty strong…
  - **Norges Bank’s expectation survey** confirms a steep in increase in expected wage and price inflation the coming years – and the 2% target is not anchored even long term among the parties in the wage negotiations (and not among any other either – and not in the bond market). A substantial challenge for the Bank, even if the bank expects high wage inflation next year
  - **Finans Norges’ Q3 consumer confidence survey** was disastrous, especially for the outlook for the personal economy. However, it may not be that surprising that there are 20% more households that expect a weaker personal economy than a stronger, as real wages are declining, and interest rate are climbing rapidly. <u>Thus, it is very likely that the current -5.5 st.dev below average print does not at all imply a total breakdown in household demand coming months</u>
  - **Building costs** rose further in July, we expected a small decline m/m. Lumber and steel prices fell but plumbing materials and cement prices rose! The latter is of course due to higher energy prices
  - **The trade surplus** equalled 80% of GDP in July, as gas prices surged. Even more to come in August. Not that strange our neighbours start wondering…

The Calendar: No Powel pivot at Jackson Hole. More US housing, infl. data. August DM PMIs

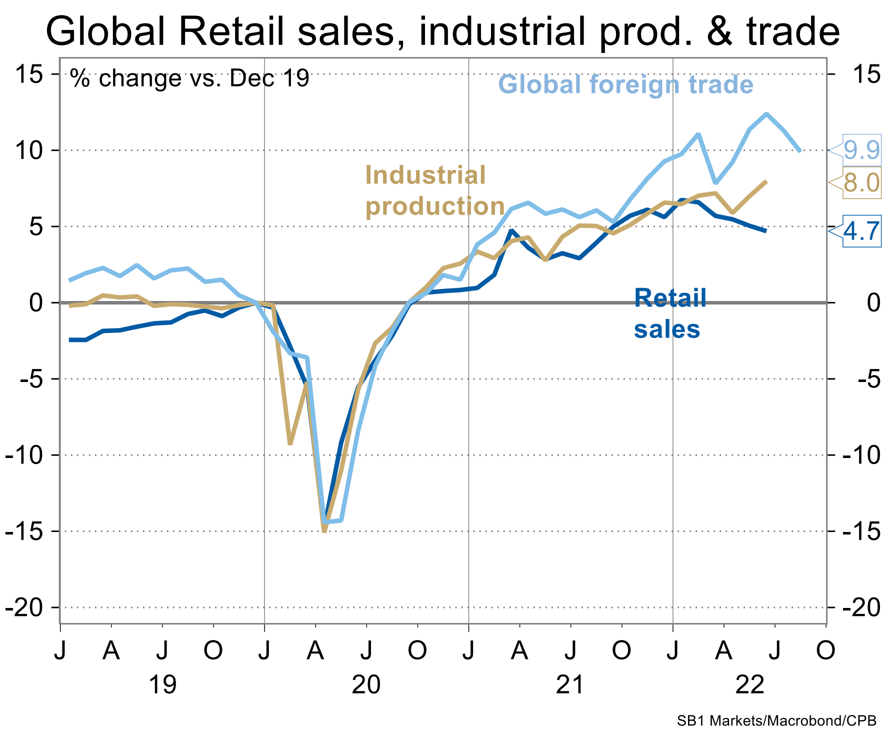
Time	Count.	Indicator	Period	Forecast	Prior
Monday August 22					
14:30	US	Chicago Fed Nat Activity Index	Jul		-0.19
Tuesday August 23					
02:30	JN	Manufacturing PMI	Aug P		52.1
06:00	SW	House prices, Valueguard HOX	Jul		
09:15	FR	Manufacturing PMI	Aug P	49.0	49.5
09:15	FR	Services PMI	Aug P	53.0	53.2
09:30	GE	Manufacturing PMI	Aug P	48.0	49.3
09:30	GE	Services PMI	Aug P	49.0	49.7
10:00	**EU**	**Manufacturing PMI**	**Aug P**	**49.0**	**49.8**
10:00	**EU**	**Services PMI**	**Aug P**	**50.5**	**51.2**
10:00	**EU**	**Composite PMI**	**Aug P**	**48.9**	**49.9**
10:30	UK	Manufacturing PMI	Aug P	51.9	52.6
10:30	UK	Services PMI	Aug P	51.0	52.1
15:45	**US**	**Manufacturing PMI**	**Aug P**	**51.9**	**52.2**
15:45	**US**	**Services PMI**	**Aug P**	**50.0**	**47.3**
15:45	**US**	**Composite PMI**	**Aug P**		**47.7**
16:00	EU	Consumer Confidence	Aug P	-28	-27
16:00	**US**	**New Home Sales**	**Jul**	**575k**	**590k**
Wednesday August 24					
08:00	NO	Credit Indicator Growth YoY	Jul	(5.1)	5.1%
14:30	US	Durable Goods Orders	Jul P	0.7%	2.0%
14:30	US	Cap Goods Orders Nondef Ex Air	Jul P	0.3%	0.7%
16:00	US	Pending Home Sales MoM	Jul	-2.0%	-8.6%
Thursday August 25					
08:00	NO	Unemployment Rate AKU	Jun	(3.1)	3.2%
08:00	NO	Jobs & wages	Jul		
08:00	GE	GDP SA QoQ. revision	2Q F	0.0%	0.0%
10:00	GE	IFO Business Climate	Aug	86.8	88.6
14:30	US	Initial Jobless Claims	Aug-20	255k	250k
14:30	US	GDP Annualized QoQ. 2nd rev.	2Q S	-0.8%	-0.9%
Friday August 26					
08:00	NO	Retail Sales W/Auto Fuel MoM	Jul	-1.5% (0)	0.0%
08:00	SW	Unemployment Rate SA	Jul	7.6%	7.7%
10:00	EU	M3 Money Supply, Credit YoY	Jul	5.5%	5.7%
14:30	US	Advance Goods Trade Balance	Jul	-$98.5b	-$98.2b
14:30	US	Personal Income, MoM	Jul	0.6%	0.6%
14:30	US	Personal Spending, MoM	Jul	0.5%	1.1%
14:30	**US**	**PCE Deflator MoM**	**Jul**	**0.1%**	**1.0%**
14:30	**US**	**PCE Core Deflator MoM**	**Jul**	**0.3%**	**0.6%**
14:30	US	PCE Core Deflator YoY	Jul	4.7%	4.8%
16:00	US	Fed's Powell at Jackson Hole			

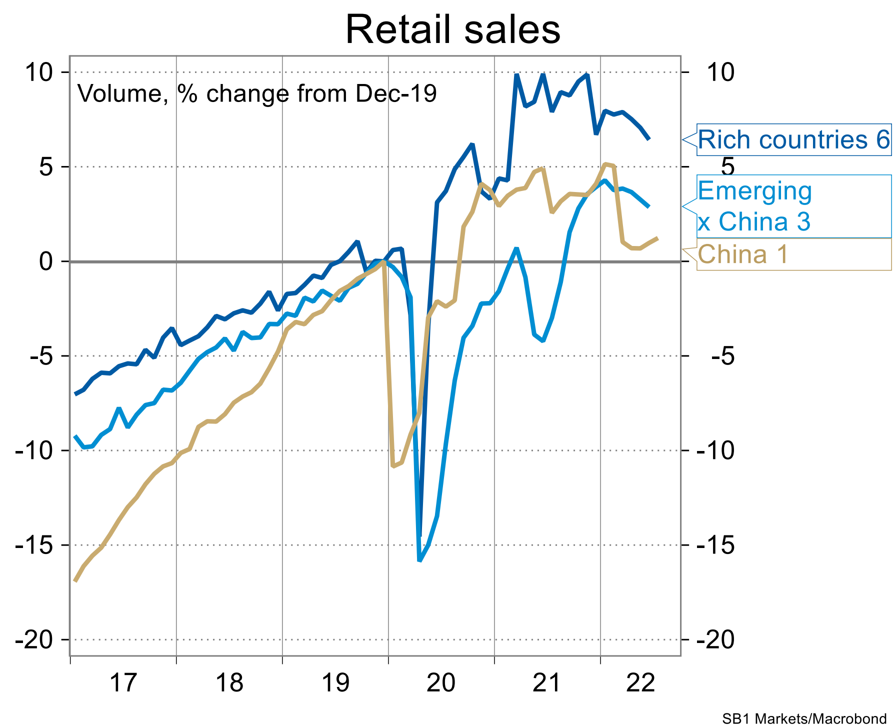
- **Preliminary August PMIs from rich countries**
  - In the rich part of the world (DM), the PMIs have fallen sharply recent months, and to below 50 in both the EMU and the US. The US Service sector PMI was probably 'too weak' in July, and is expected to recover in June, which may bring the composite index up to above 50. On the other hand, regional Federal Reserve manufacturing surveys so far signal a weaker manufacturing PMI (and ISM) print. NY Fed's survey was a 'disaster'. In Europe, a further decline in the PMIs is expected, as the continent is suffering from an unprecedented energy shock. Still, we expect PMI price indices to decline further
- **USA**
  - **Powell to Jackson Hole, no 'pivot':** Important policy changes have been signalled at the central bank conference at the mountain resort before but now the FOMC and the Federal Reserve have enough challenges if not trying to signal a new policy mix or explaining the present in a new way. The fight against inflation is the BIG thing, for good reasons. We no not think Powell will elaborate more into the trade off between inflation and unemployment, as it is a mine field these days. But on the other hand, do not expect to get any hints that the job is done or a policy turnaround, a pivot as it is called today – just that the bank is flexible and responsive to incoming data
  - **More housing data:** New homes sales, and pending sales of existing homes in July; both are trending down, and like housing starts and actual transactions of existing homes, are close or well into a recessionary areas. And now, prices are falling, even if inventories are still low, at least for existing homes. However, there are quite a lot of new homes on the market!
  - In June, July, and so far in August, manufacturers have been reporting a steep decline in **new orders**, in all the surveys we are following. In fact, a clear recession signal is sent! However, until June at least, actual durable order inflow has been strong. July data out this week. The risk should be on the downside
  - **More peak inflation?** The PCE deflators will probably confirm the CPI report: peak inflation is behind us. More data on consumption, income and savings as well. Consumption has flattened
- **Sweden**
  - More **house price** data – and the **LFS unemployment survey**. Housing data have been really week since the spring, like in Australia, Canada and New Zealand. Only Norway is holding up among our 'super cyclical' countries
- **Norway**
  - **Retail sales** are normalising – and may have come down to a reasonable level again, at least in volume terms. We expect no growth in July (with little conviction), the consensus is for a decline
  - We expect the **LFS unemployment** to decline one tick, and employment growth is slowing. The participation rate has flattened. The population is growing faster, but probably will it take time to employ the Ukrainian refuges (which explains the population growth)
  - **Credit growth** (C2) has surprised on the upside recently, not because households are borrowing more (they don't) but due to an increase in business sector debt

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

Retail sales are still soft, manufacturing production recovered in May and June

Global trade is still going strong. Some risk vs. manufacturing production given trend in retail sales

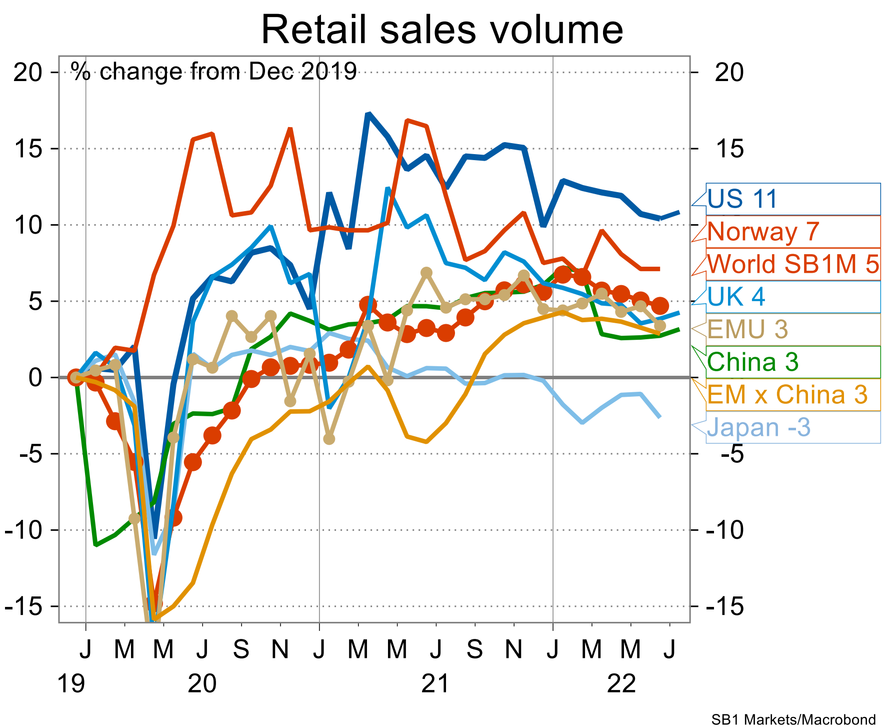


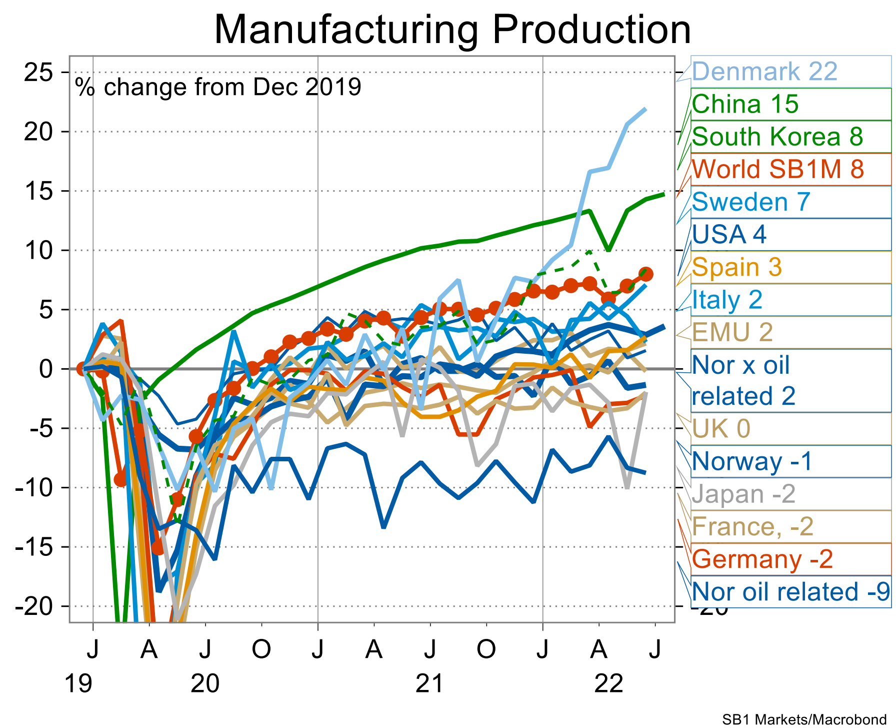


Global trade: The last months are estimates from the Kiel Institute, they are also making a prognoses for the next month based on shipping activity etc.

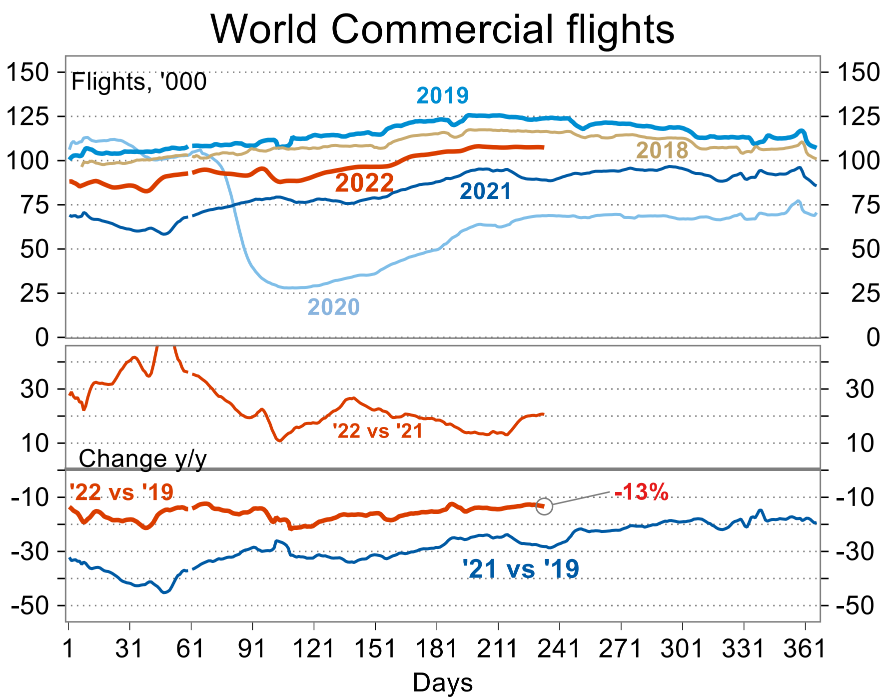
A broad slowdown of retail sales

Is manufacturing exposed? Surveys, like the July PMIs are sending a warning sign too

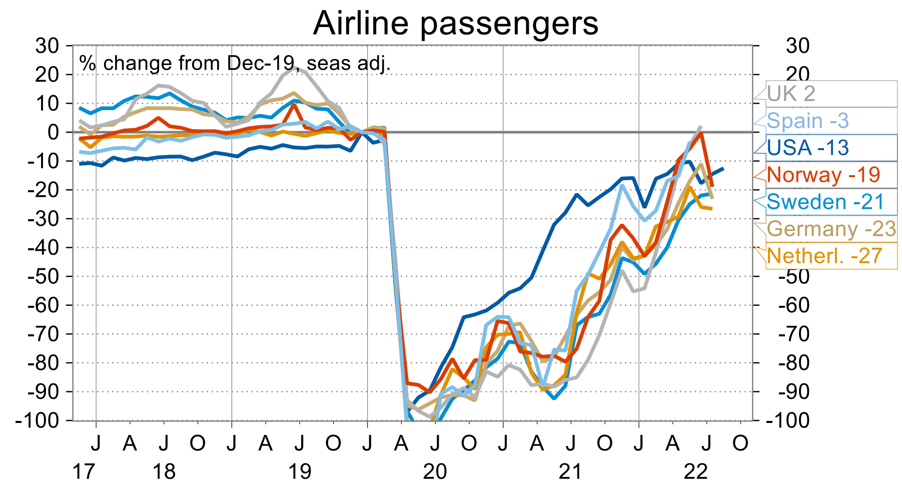




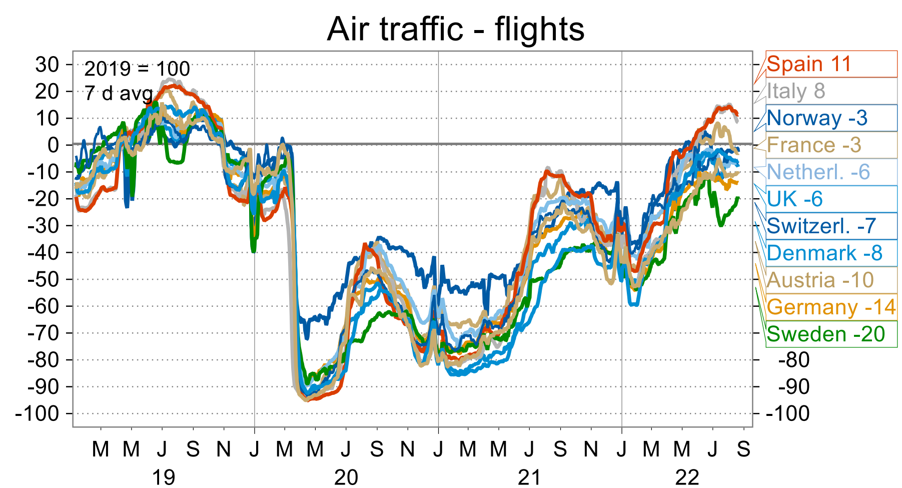
Global airline traffic has flattened recently, still down 13% vs. 2019



Flightradar24 SB1 Markets/Macrobond



National authorities, SB1 Markets/Macrobond

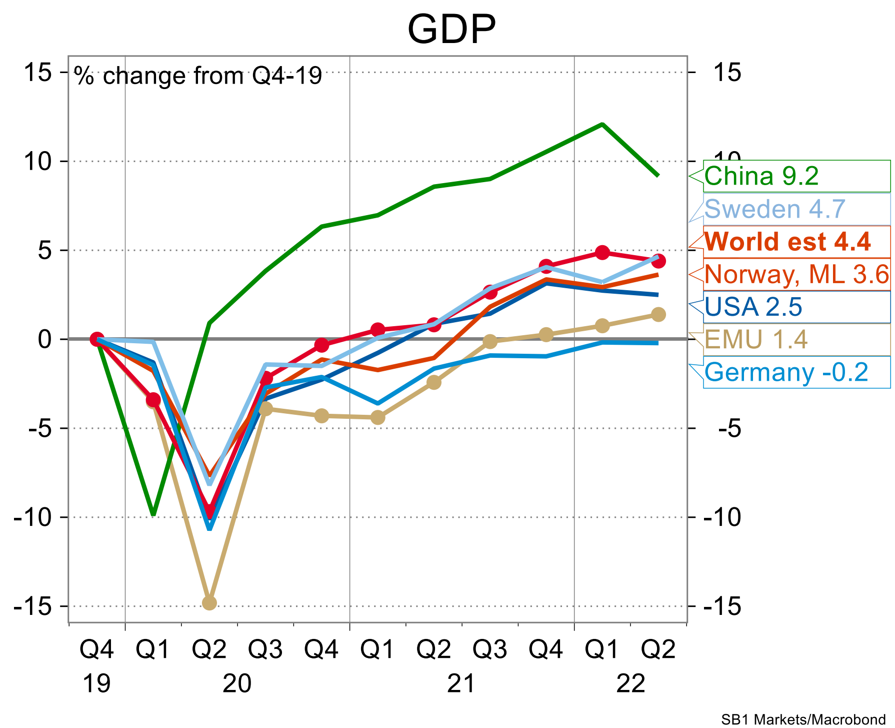


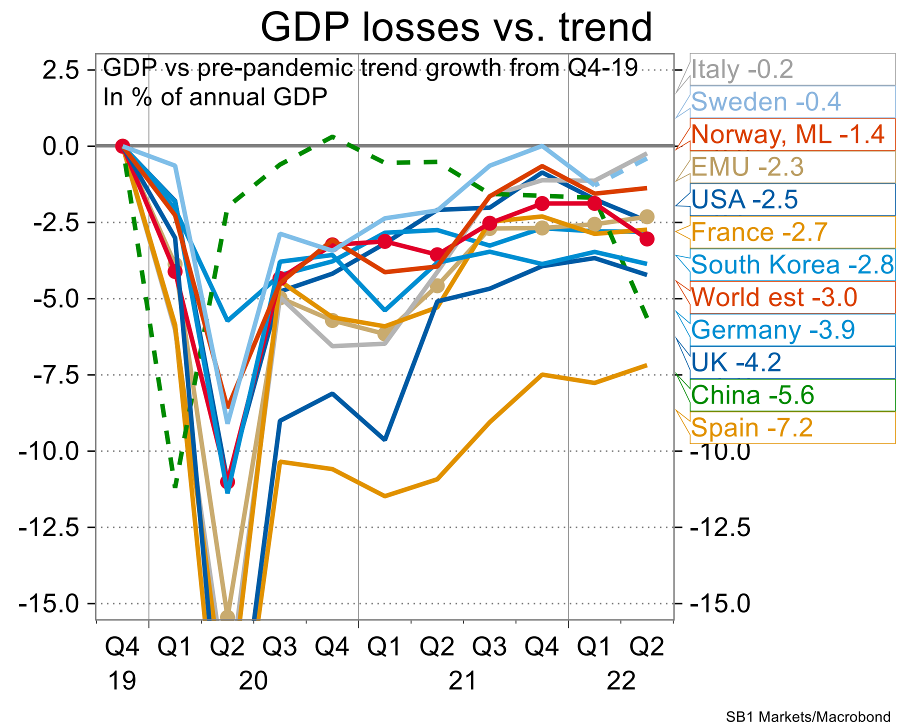
SB1 Markets/Macrobond

Global trade: The last months are estimates from Kiel Institute

GDP fell in Q2, mostly due to the Chinese lockdowns, and the US 'recession'

Global GDP fell at a 1.4% pace in Q2 (-0.4% not annualised)





- Global GDP is some 3% below the pre-pandemic growth path

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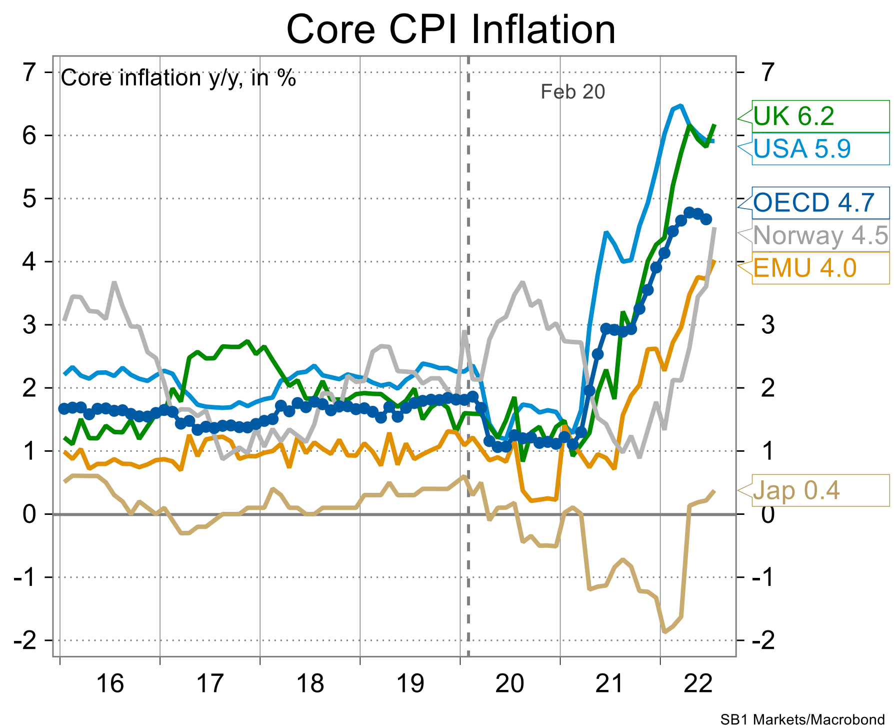
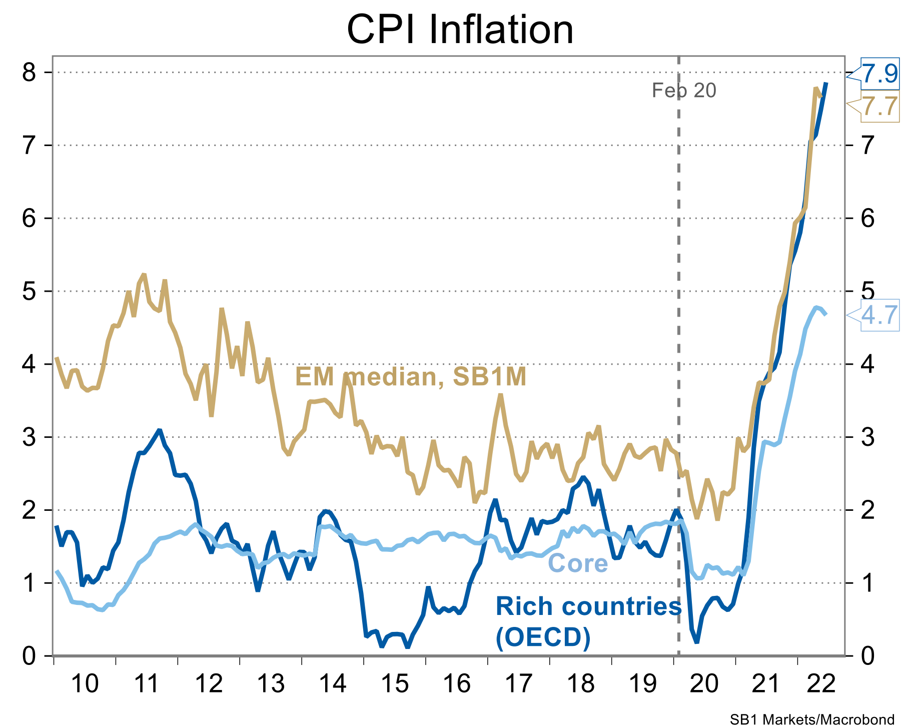
Core CPI has peaked where it is the highest – but it is far too high everywhere

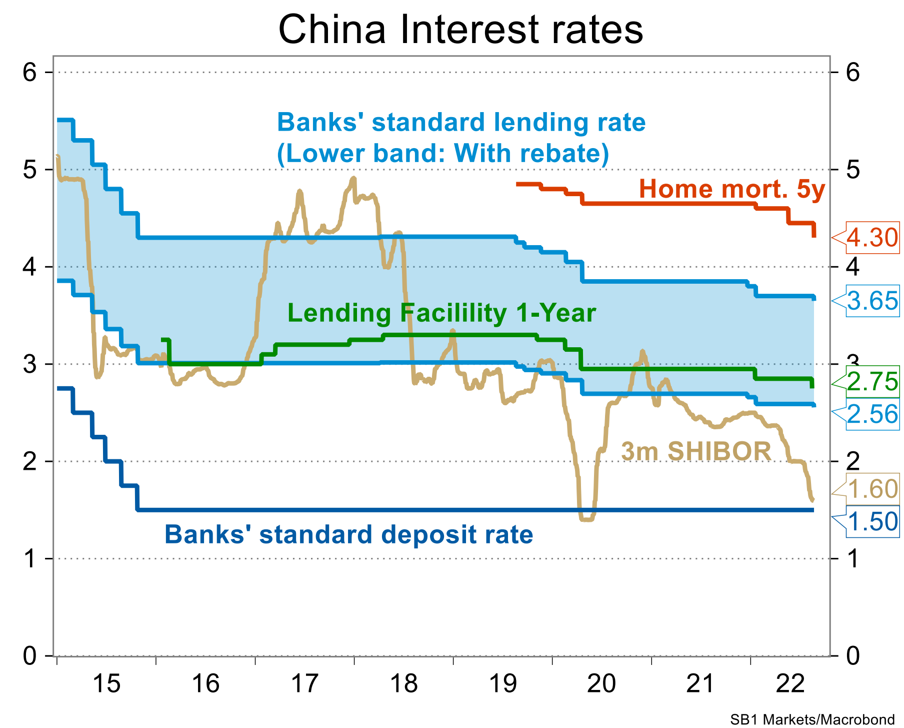
Energy prices the main culprit, but core prices are also contributing. However, some peaks are seen?





Easy easening, another cut in signals rates this Monday morning

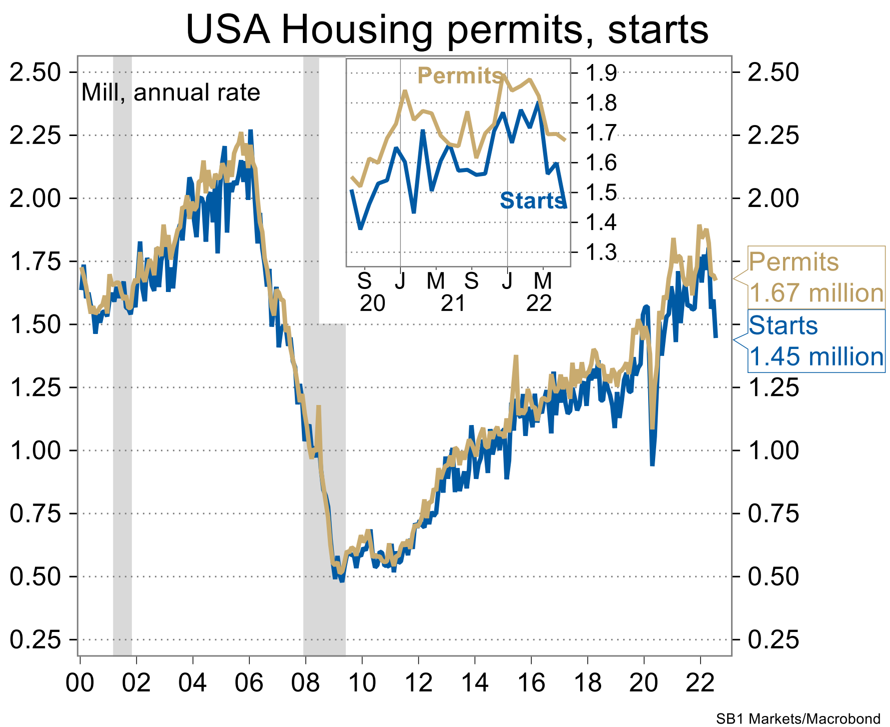
The steps are small, 5 to 15 bps. But the trend is clear – beacuse some stimulus is needed

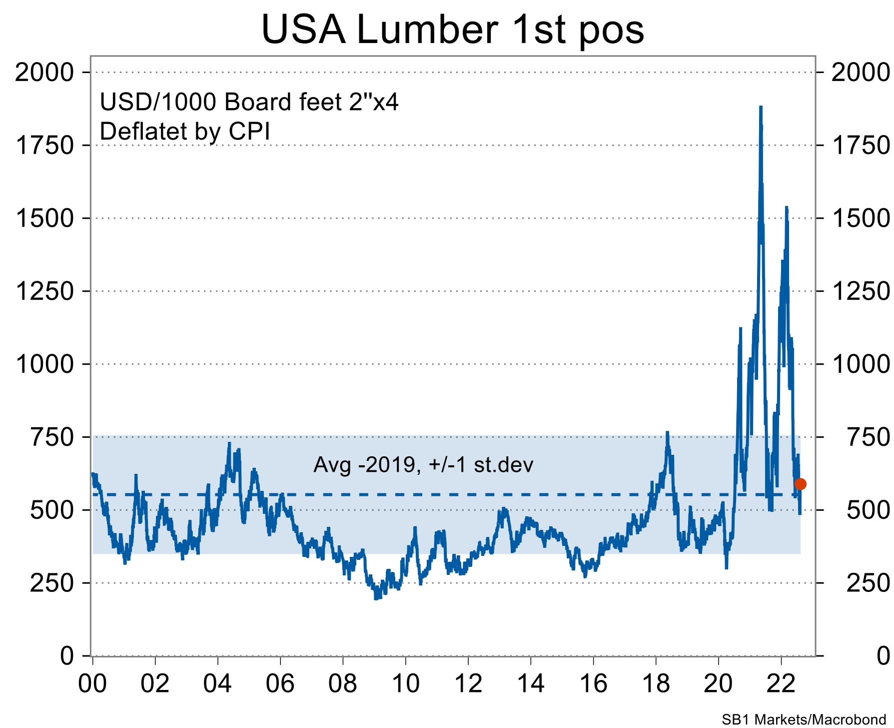


- Today, the 5 y mortgage rate was cut by 15 bps to 4.30% In addition, banks' standard lending rate was cut by 5 bps to 3.65%
- A week ago, a 1 year lending rate was cut by 10 bps to 2.75%

Housing starts sharply down in July, and homebuilders say much more to come

Starts are down 20% from the local peak in April! Permits are down 12%

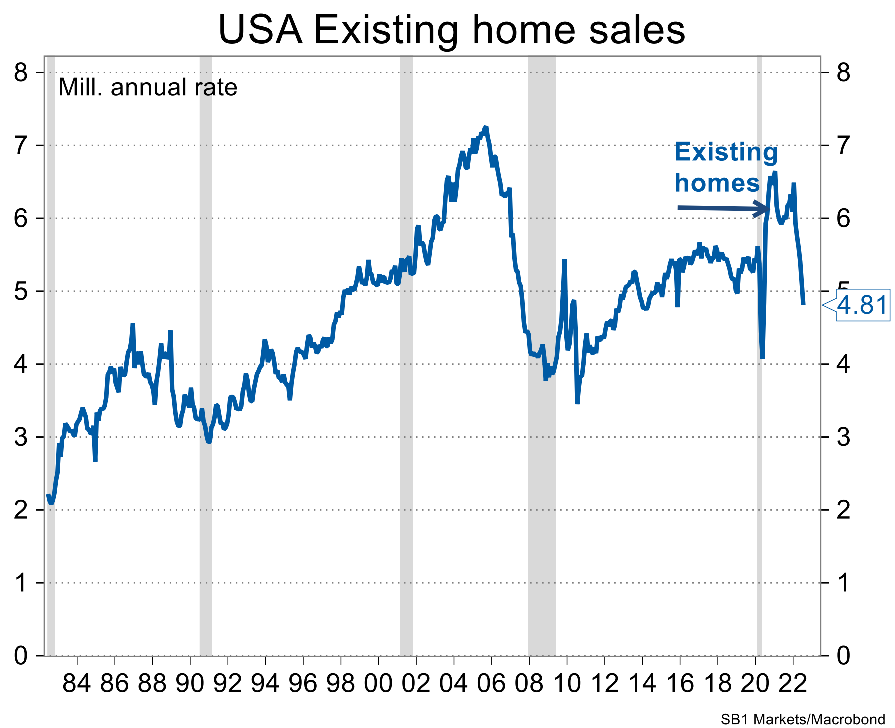


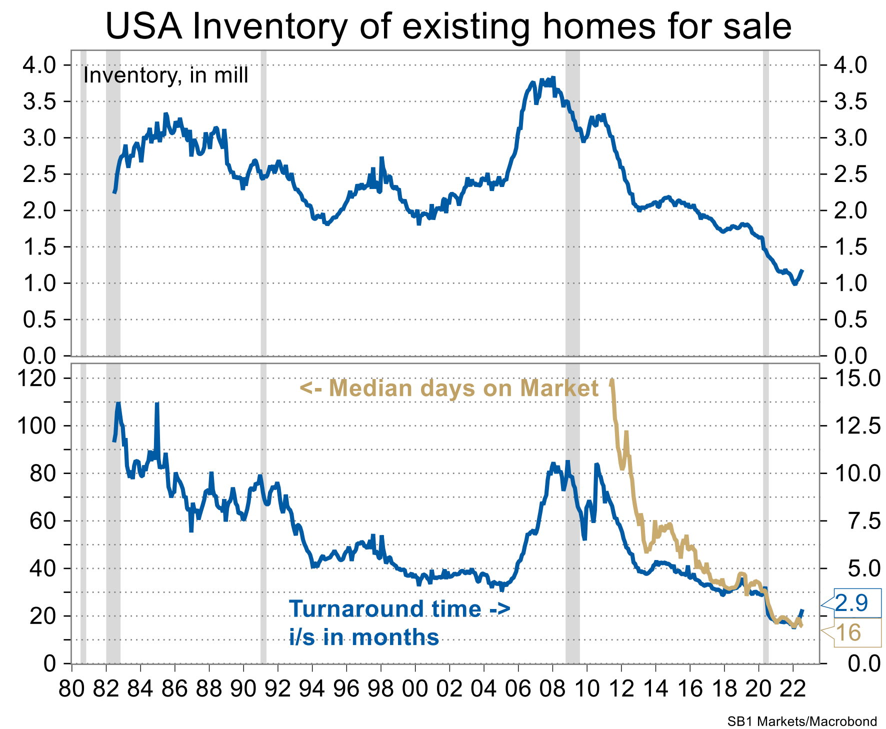


- **Housing starts** fell to 1.45 mill in July from 1.60 (revised from 1.56), expected 1.54 mil. **Building permits** landed at 1.67 mill, better than the expected 1.65 mill, from 1.69 mill in May. The decline in starts is a clear recession warning but the less volatile permits are still not down enough (but if new home sales are unch. in July, the average of the two (our preferred measure) will send a recession warning in July. If Homebuilders are right (next page), US will very likely be in a recession soon
- Building **material cost inflation** has come to a sudden halt. **Lumber prices** are back to a normal level, steel prices are falling rapidly too

Existing home sales further down in July, and by 26% from Jan. Prices are falling!

The inventory is still very low – but has increased marginally the past 5 months

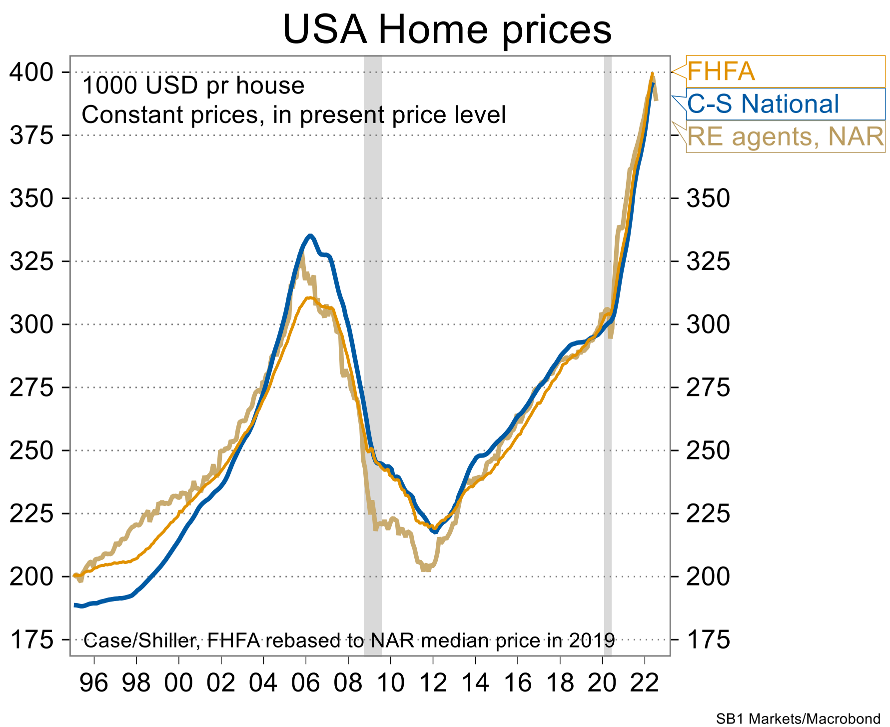


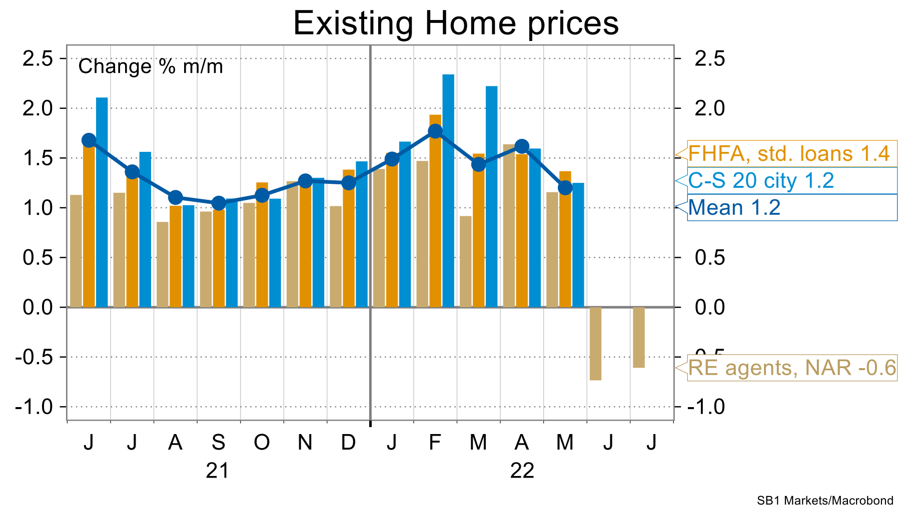


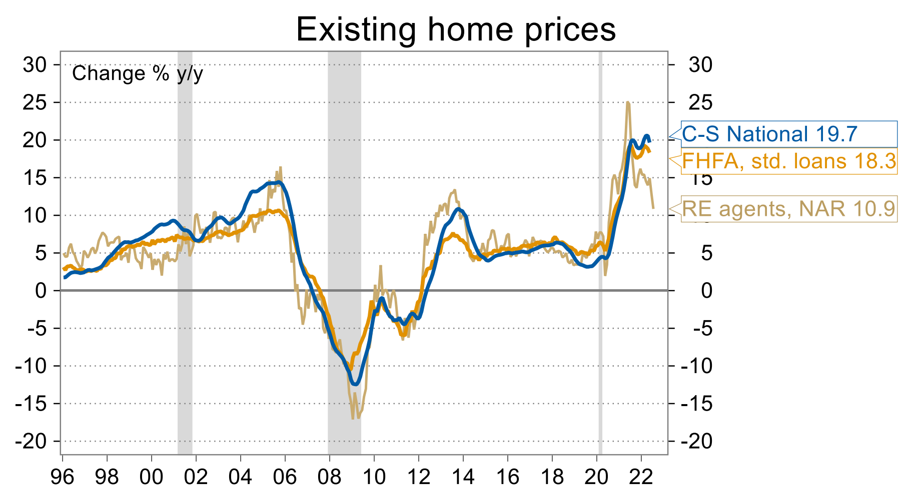
- Sales of **existing homes** fell to 4.81 mill in July (annualised rate), from 5.12 mill in June, expected down to 4.86 mill. Sales have fallen by 26% from local peak in January. Sales are down 10% vs. the pre-pandemic level. **Pending sales** stats signal a further decline in actual transactions
- **The inventory of unsold homes** rose marginally in July, as during the previous months – from at ATL in February
  - » The inventory equals 2.9 months of sales (up from 2.6 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
  - » A signal of a still hot market: The median time on the market for those homes actually sold is just 16 days, and close to ATL. Before the pandemic the time on market was at 30 days (and 120 days in 2011!)
- **Prices** fell 0.6% m/m, following a 0.7% decline in June, previously reported to +0.1%. *Check more next page*
- **Mortgage rates** have fallen recent weeks but remain far higher than over the previous years – and together with the high price level (up close to 40% since before the pandemic) have crushed affordability – and the impact is now very visible. We are witnessing a housing market recession

Now it's 'official': House prices are falling!

Prices fell m/m in both June and July. Prices are still up 10.9% y/y, down from 12.8% in June



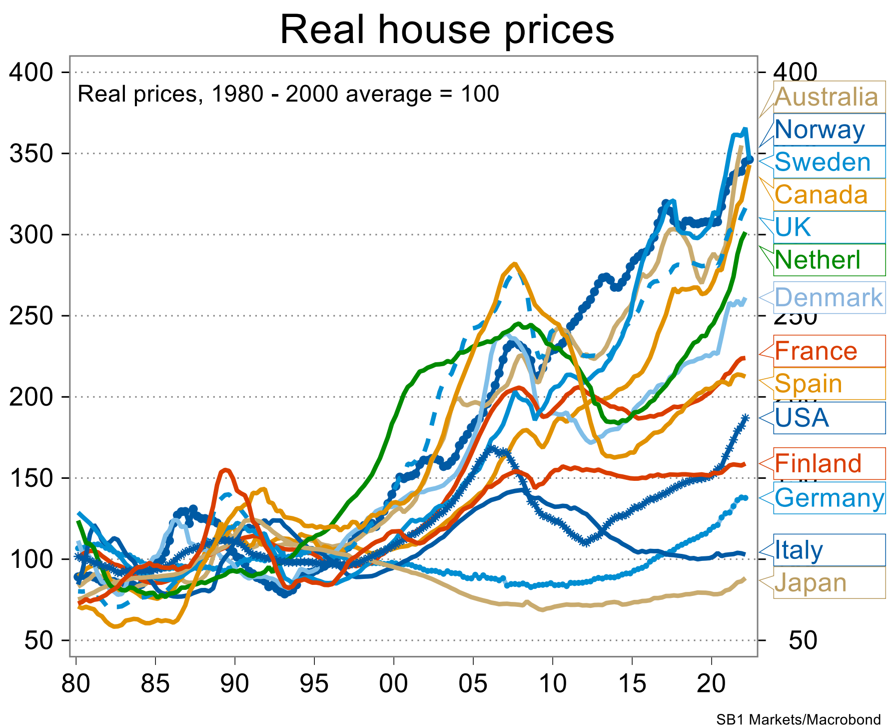


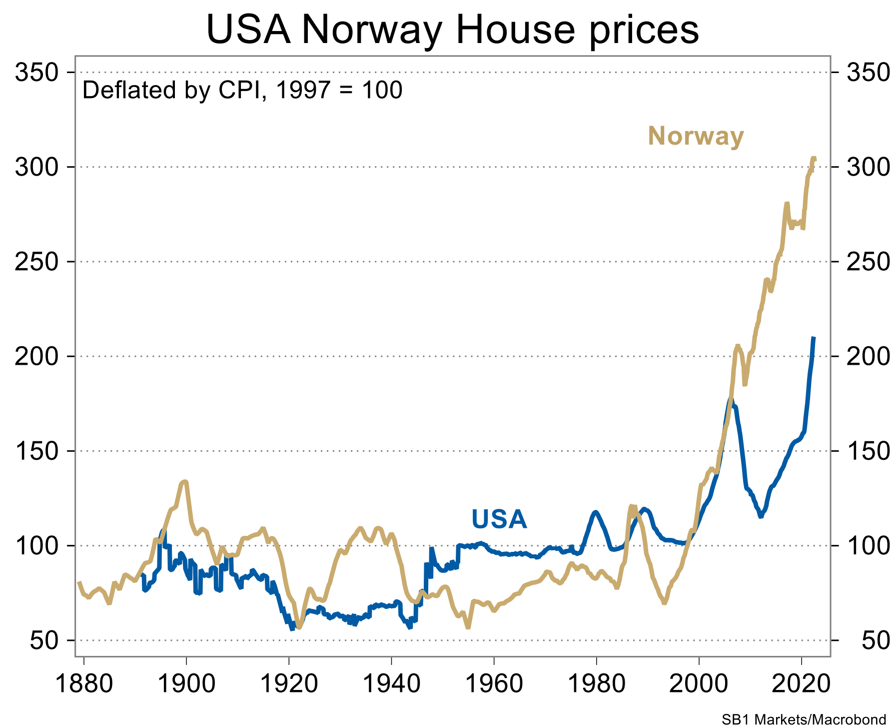


- **Prices** fell 0.6% in July, following a 0.7% decline in June, as June prices were revised down. (We reported a 0.1% gain in June, based on the initial data. The seasonal adjustment of these data is not perfect, so some caution on these m/m data. July prices are mostly based on transactions agreed upon in June. The annual rate fell 2 pp to 10.9%, (from a 0.7 pp downward revised rate in June). In May, the annual inflation rate was 15%
- Other indices are up 18% - 20% y/y. Prices are normally lagging sales by almost 1 year, and the recent decline in sales very likely signals a turnaround in prices too, we think the impact now is coming sooner due the rapid deterioration of affordability
- Home prices are up almost 40% from before the pandemic, and way above the 2006 level, even in constant prices (up some 15%)

Where are the biggest housing market risks?

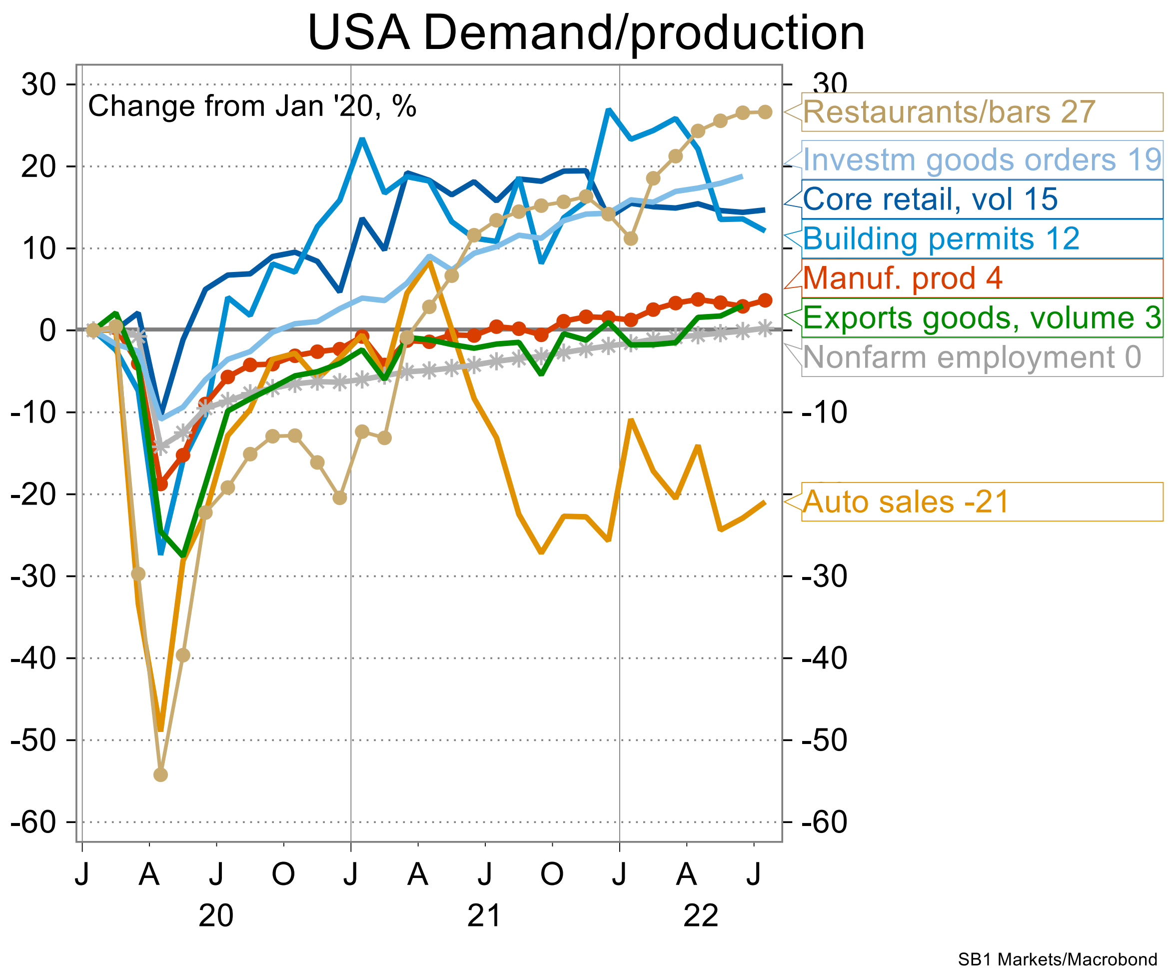
Monthly price data have already turned south in Australia, Canada, Sweden and New Zealand





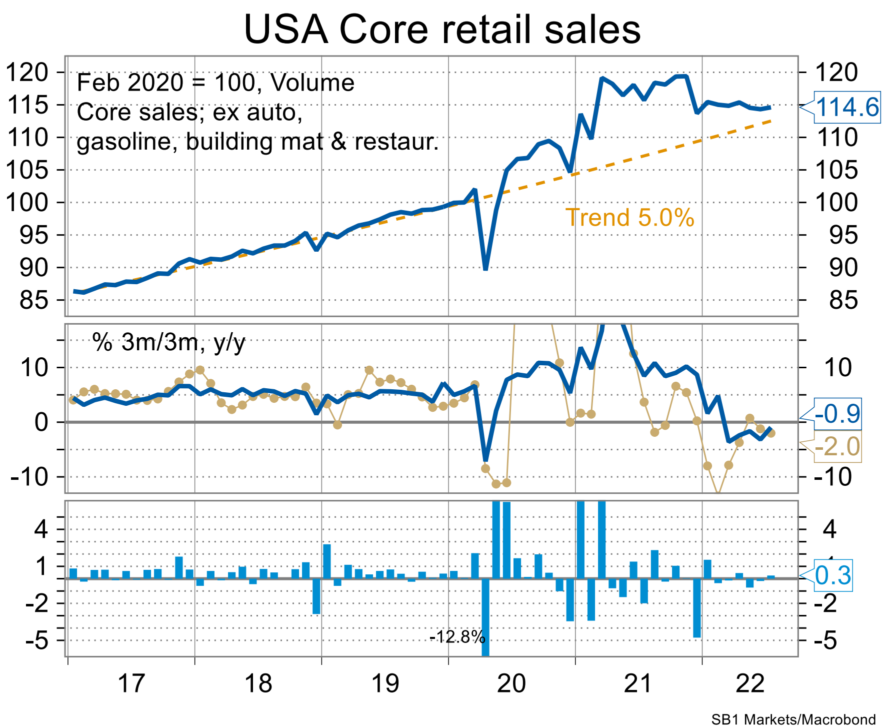
US: Housing has rolled over, core retail sales are at best flattish

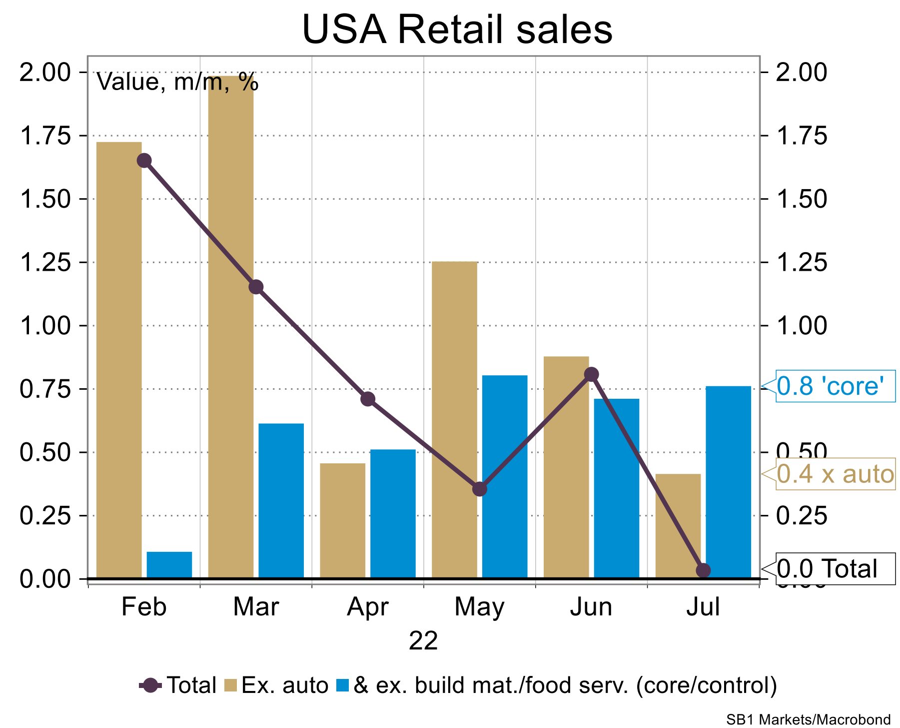
Manufacturing production is flattening too. However new orders, exports are still drifting upwards



Core retail sales up in July, but very likely not that impressive in volume terms

Real core goods sales are trending flat, at best

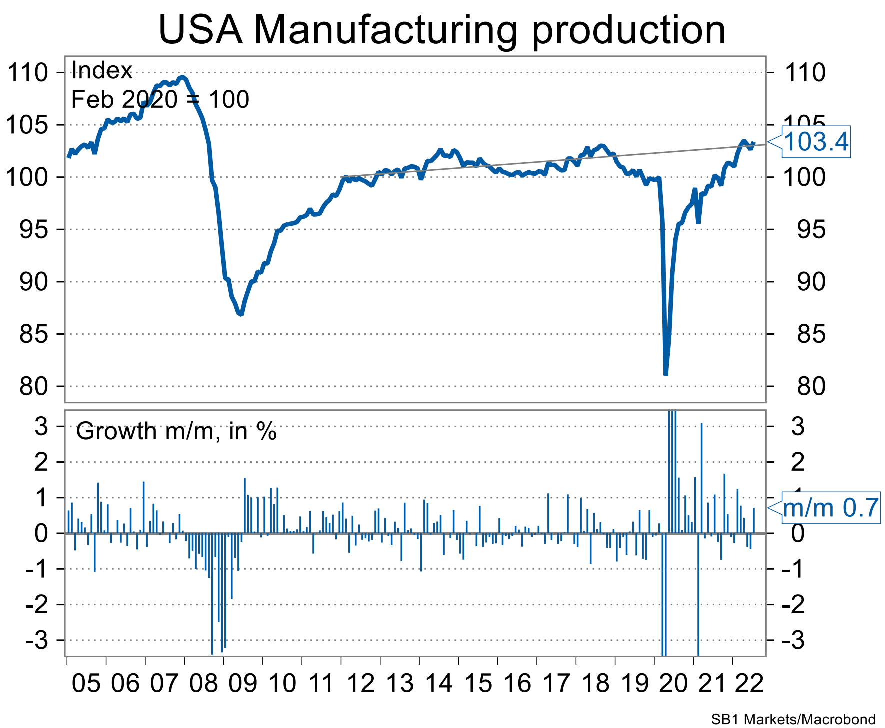


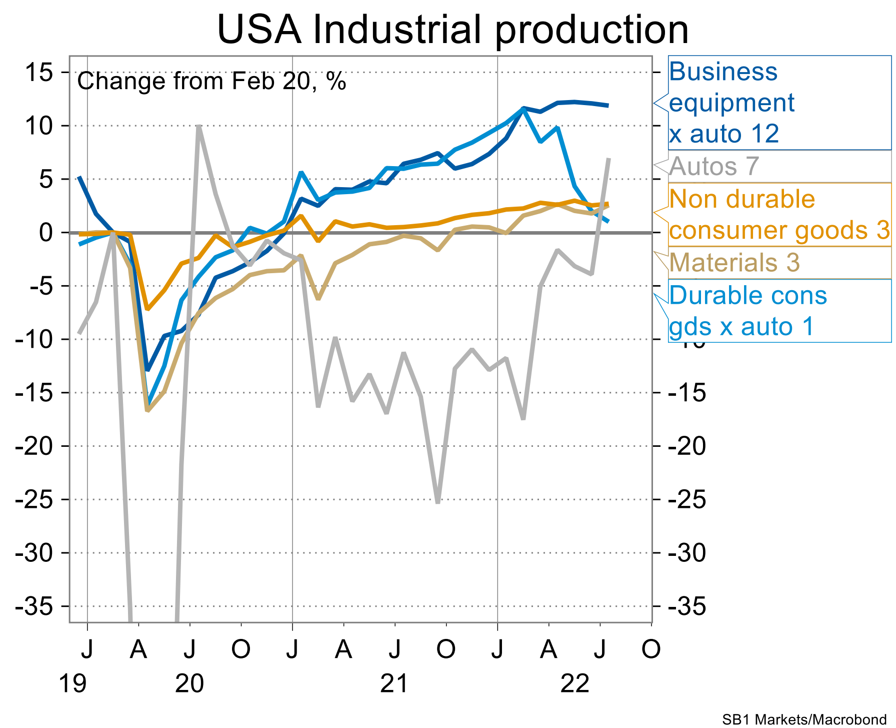


- **Total nominal sales** was flat in July, close to expectations, and June was revised down by 0.3 pp to 0.7%. Auto sales fell, we assume due to lower second-hand car sales, as total new car sales rose. In addition gasoline sales fell, together with gasoline prices. Total nominal sales are up 30% vs. the Feb 2020 level
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) climbed 0.8% in July in value terms, 0.2pp more than expected
- **In volume terms**, core sales are trending slightly downwards: We assume prices rose by 0.5% m/m in July. Thus, in volume terms, sales rose by 0.3% following a 0.7% drop in May and further -0.2% in June. 'Real' sales are trending marginally downwards (-2% 3m/3m), and are approaching the pre-pandemic trend! Sales are 5% below the level from last November, which was the highest ever

Manufacturing production better than expected, due to a lift in auto production

Auto production rose 11% in July, to 7% above the Feb-20 level! Total manuf. prod up 0.7%, exp. +0.2





- **Manufacturing production** grew 0.5 pp more than expected, very likely because auto production suddenly increased by 11%, to a decent level. Non-durable consumer goods added 0.1% and materials 0.8%. Business equipment cut back 0.2%, and production of durable consumption goods x autos fell by 1%. Still, the trend recent months is close to flat
  - » Durable consumer goods x autos are heading sharply down, by 10% the recent months
- **Total industrial production**, including utilities, mines/oil production gained 0.2% in June
- **Capacity utilisation** rose somewhat in July, and the level is the highest in 20 years
- **Surveys** have weakened substantially in May, June, July, and the two first August reports are in sum down, as the NY Fed survey collapsed, and much more than the Phil Fed (surprisingly) recovered

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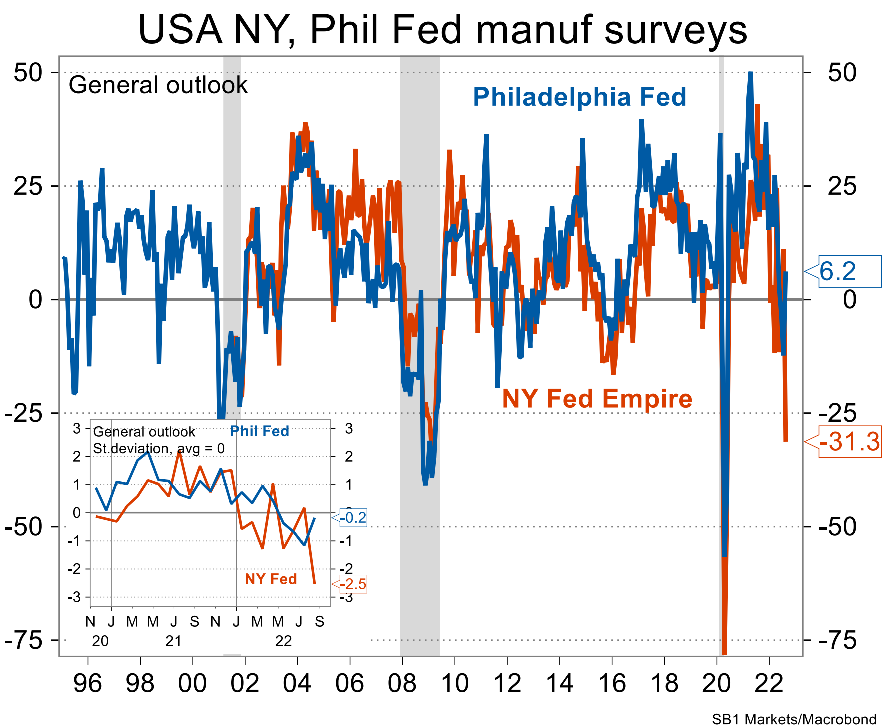
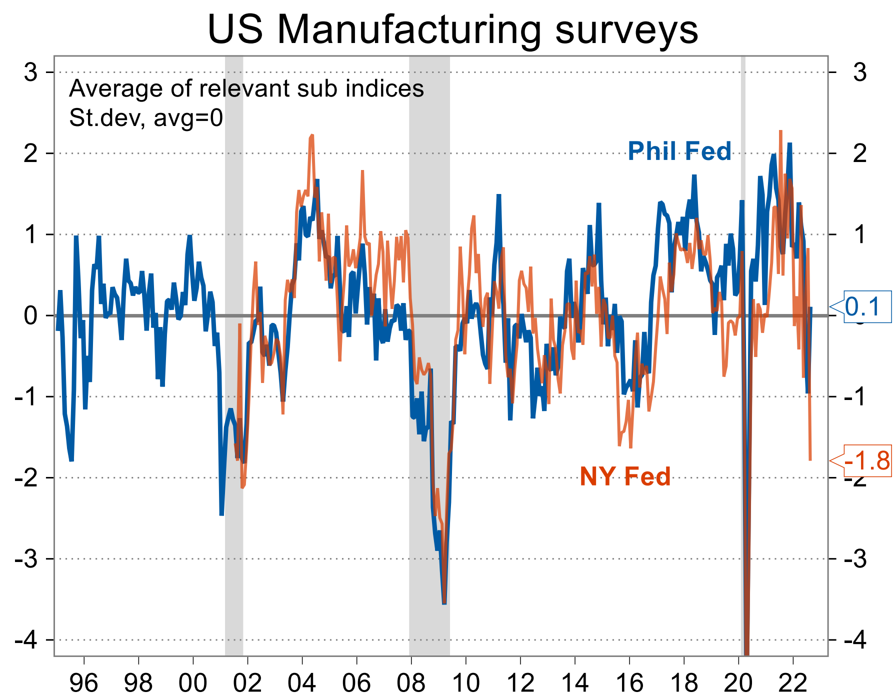
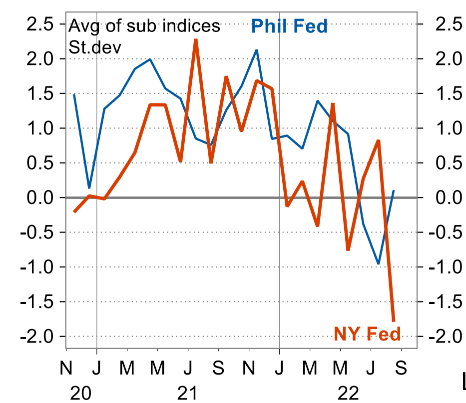
The Philly Fed survey up to an avg. level, NY Fed's deep into a recession level

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



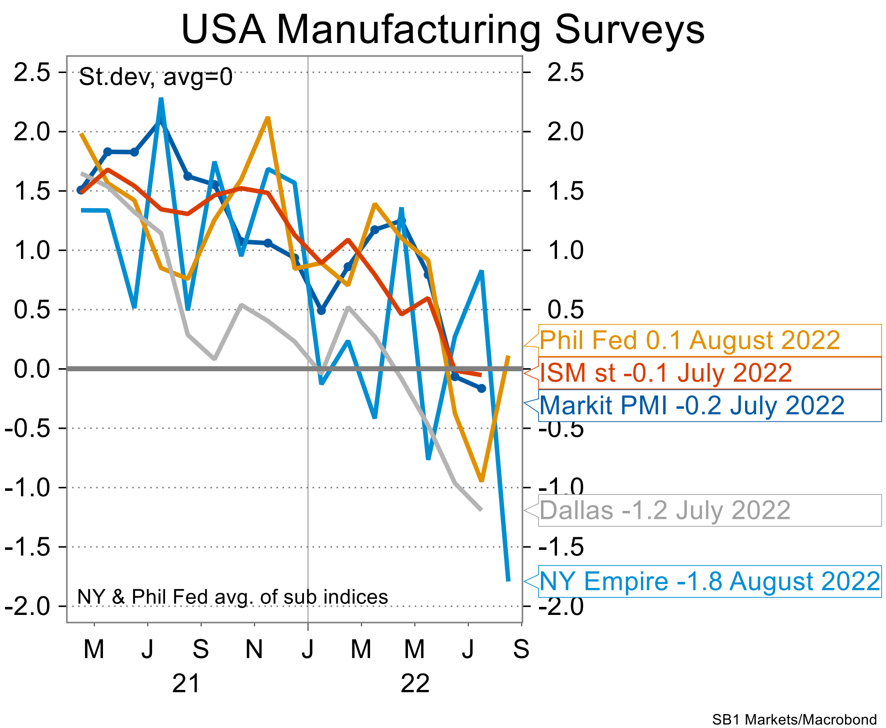


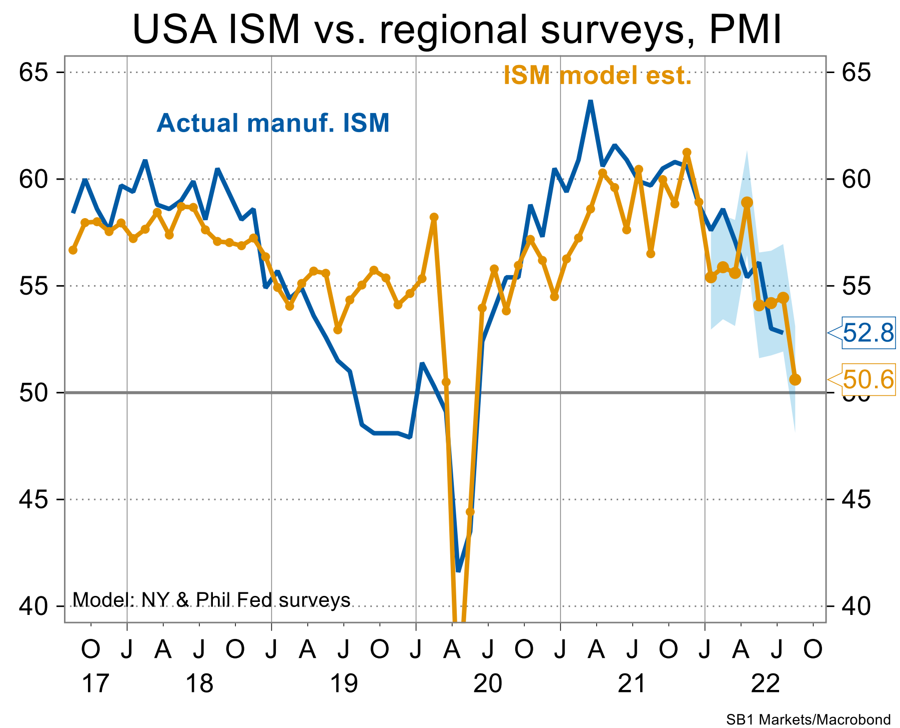
- **NY Fed Empire State manufacturing index** all of the sudden fell by 42.4 p to -31.3 in August, expected UP to +5!. The index fell from an average level to -2.5 st.dev below average. The decline was the 2nd largest ever (just Apr-20 was even worse), and the index has been lower just some few months in 2009, and in Apr-20
- **Philadelphia Fed's manufacturing index** surprised on the upside, up to +6 from -12, expected up to -5
  - » The details were in sum upbeat too, but new orders are still declining and the outlook is deemed to be very weak. Price inflation is slowing rapidly, as in the NY survey
- **Taken together:** close to a recession signal



Towards another decline in the ISM? The NY Fed survey was a warning shot

However, the NY Fed survey is rather volatile (which is taken care of in our model)

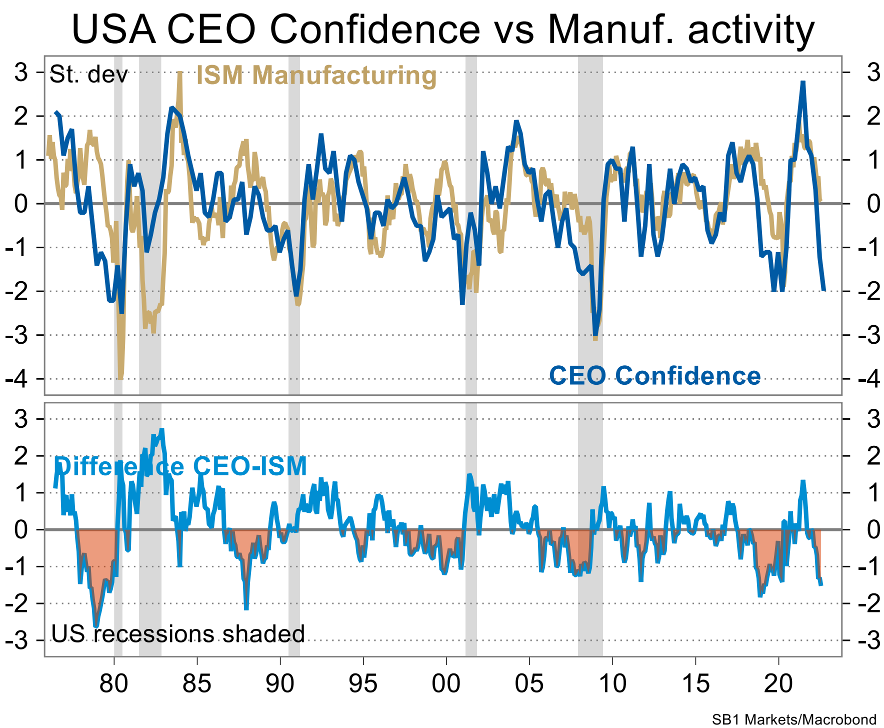


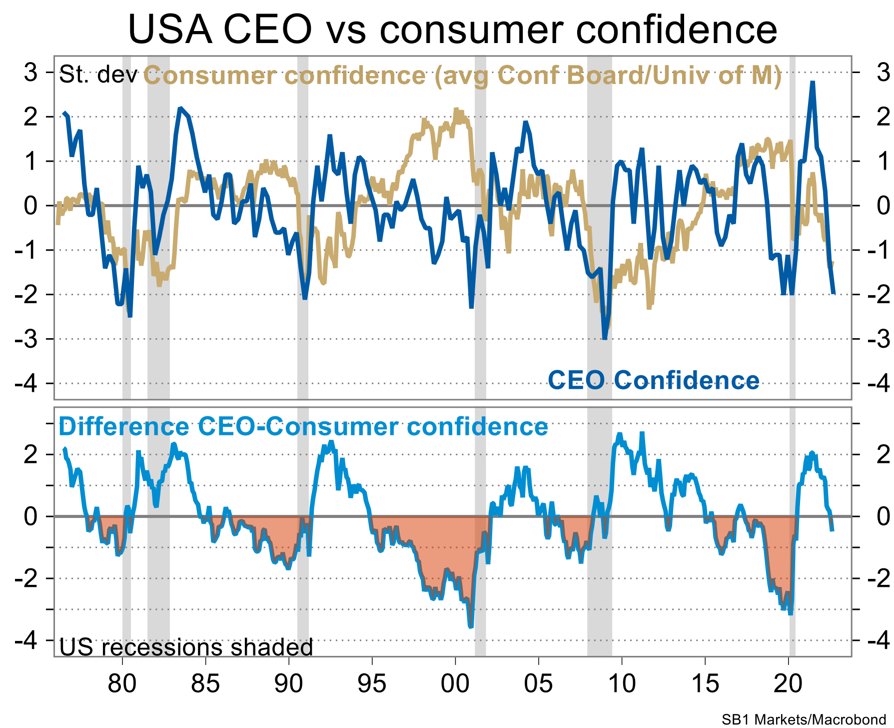


- Big picture: Growth is slowing sharply but manufacturing indices do not signal that the economy has entered a recession (even if order indices are really worrisome)

CEOs are looking down, probably for good reasons

Households are pessimistic too (at least the Univ. of Mich. survey). Businesses (ISM) still too upbeat?

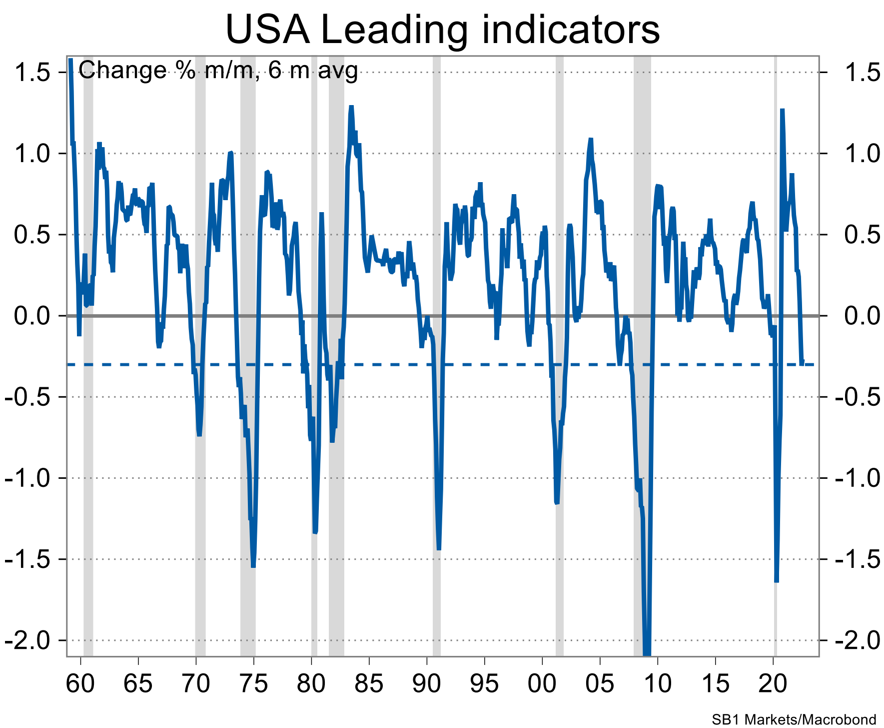


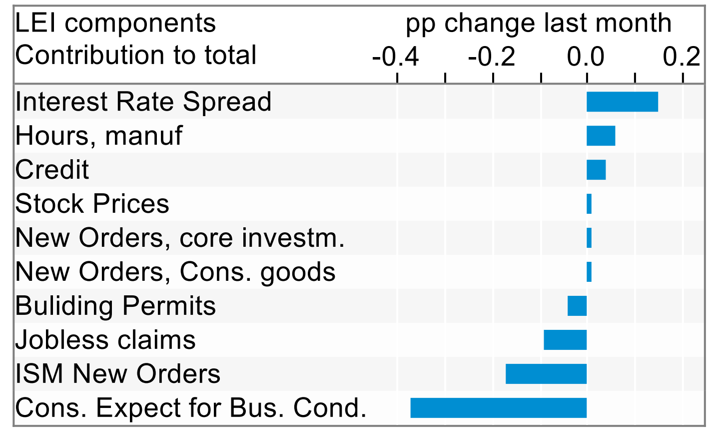


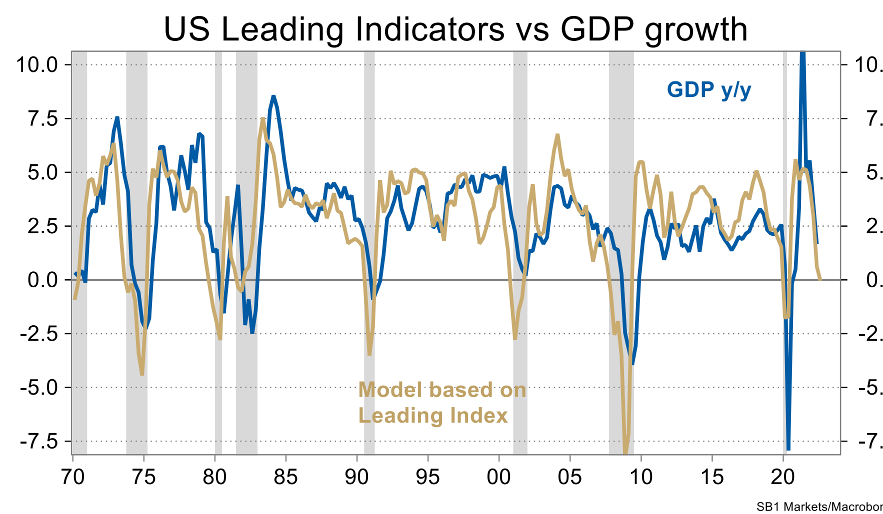
- The CEO confidence survey fell further in Q2, down to -1.1 st.dev below par, from +0.3 in Q1
- Normally, a weaker confidence corresponds to lower business investments

The Leading Economic Indicators suggest US is in or close to a recession

A 6-month avg at June's -0.3% level detected 8 of the 8 past recessions, just ½ false positive, no false neg



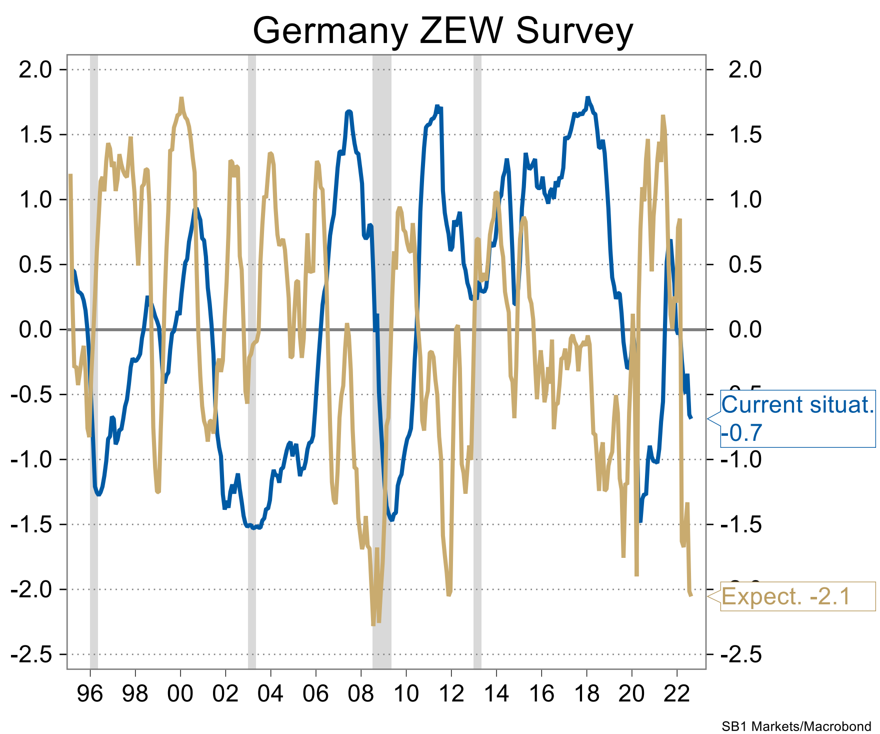




- The LEI fell 0.4% in July, 0.1 pp less than expected, following the 0.8% drop in June
- The 6 m average is unch. at -0.3%. The LEI has fallen to this level 9 times since 1965
  - At 8 occasions the US economy was very close to or had entered a recession, the 9th took place 1 year before the 2007-recession started
  - Thus, the LEI 6 m avg at -0.3 'detected' all 8 recessions since 1970, and barring the 2006-signal, no false positives (and no false negatives, at least since 1970. In 1960, US entered a recession without any clear warning sign from the LEI

ZEW expectations stabilised in August – at a close to record low level

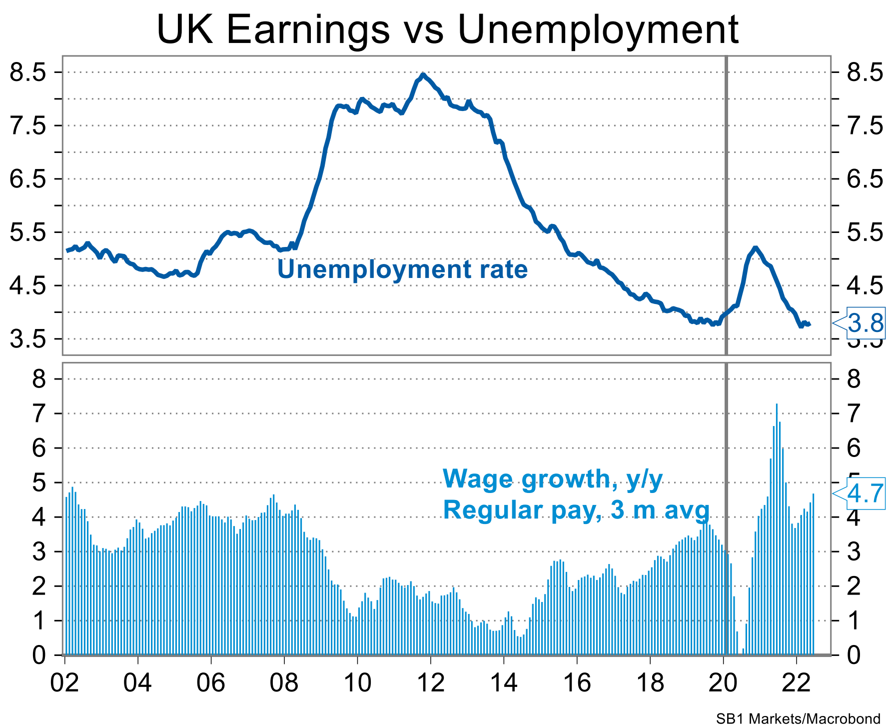
German investors/analysts are extremely negative vs. the outlook; The current situation is weakening

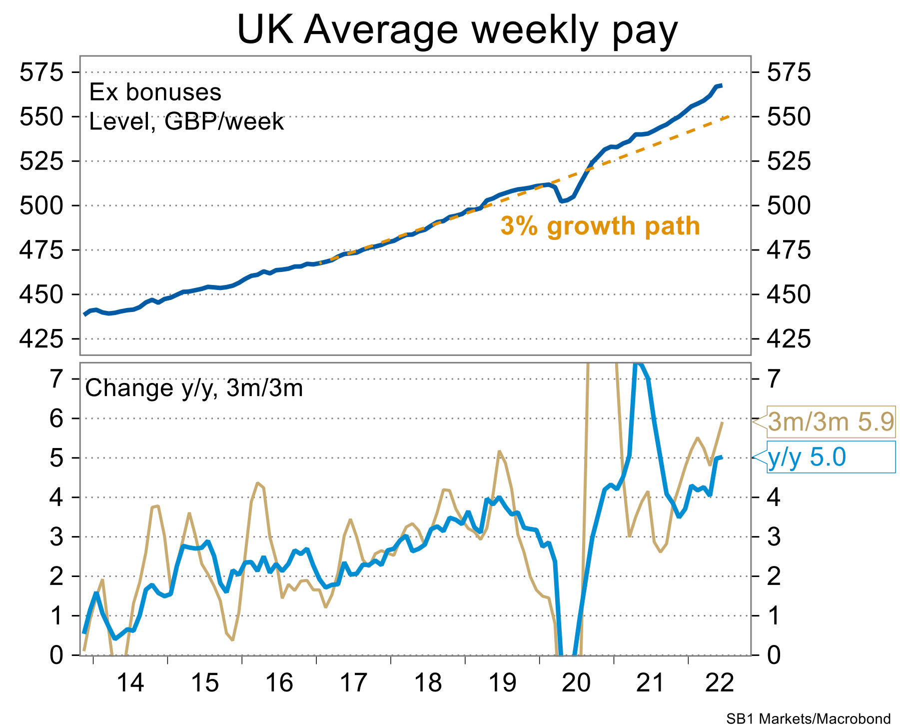


- The **ZEW expectation** fell 1.5 p to -55.3, expected marginally up to 52.7. The level is 2.1 st.dev below average. It has been (slightly) weaker just once, in 2008
- The **current situation** index also fell marginally, and has fallen to 0.7 st.dev below par
- <u>ZEW of course signals a deep recession in Germany</u>

Unemployment has fallen to a low level – and wage inflation is on the way up

... wages ex. bonuses up 4.7% 3m/3m, up from the pre-pandemic level at 2 – 3½%

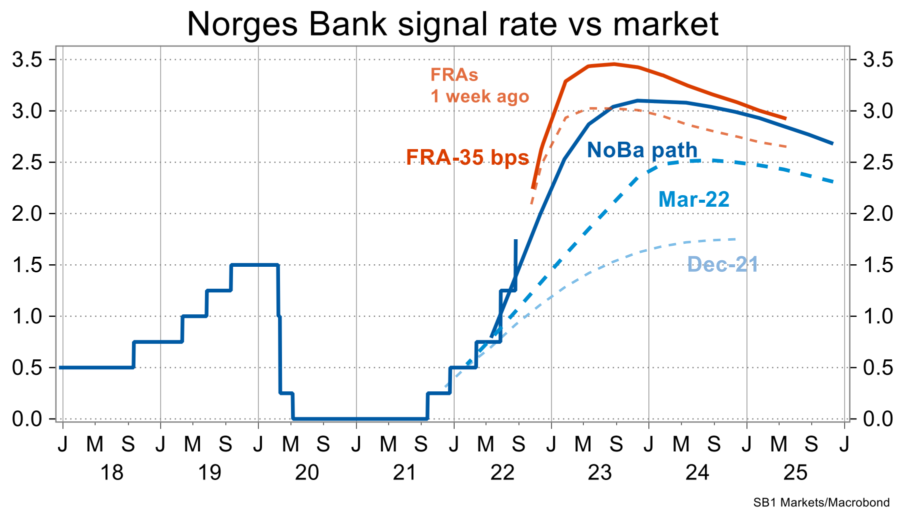


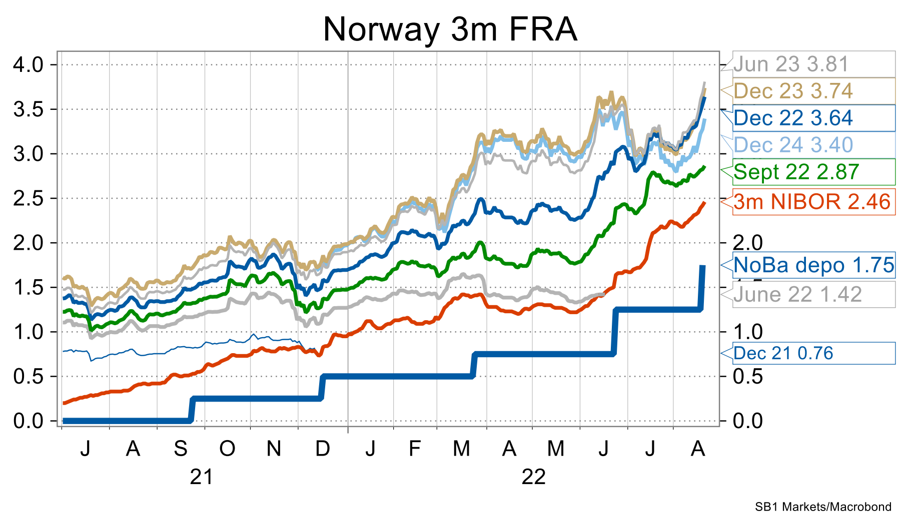


- **Annual wage growth** (regular pay, 3 m avg) accelerated 0.3 pp to 4.7% in June, expected 4.5%. Not smoothed, wages were up 5.0%, and the underlying 3m/3m rate accelerated to 5.9%
- **Including bonuses**, total wages are up 5.1% y/y (3 m avg), 0.5 pp higher than expected (*charts next page*)
- Just 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 approaching 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

Norges Bank delivered the 2nd 'double', and the job is still not finished

However, following a 40+ bps lift in the FRA-curve last week, the market has become too aggressive?

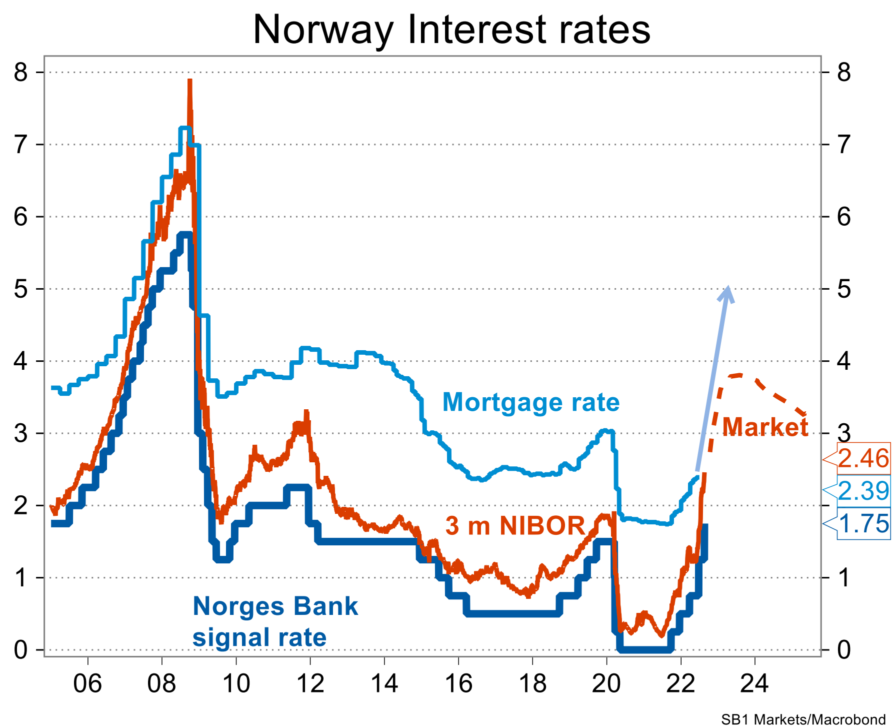


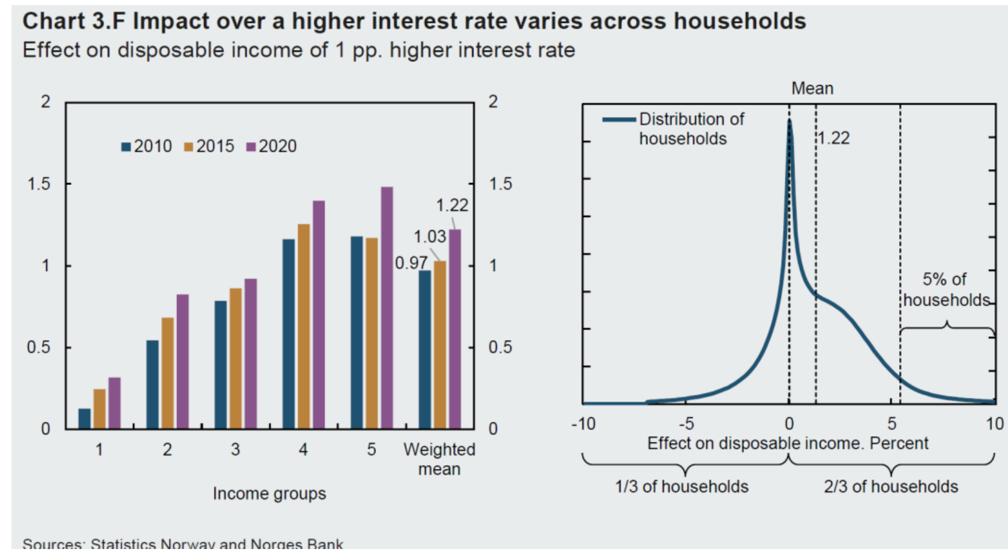


- **The signal rate** was hiked by 50 bps to 1.75%, as the market and almost all economists had predicted
  - » Higher inflation, lower unemployment and a high rate of capacity utilisation were mentioned as reasons for a more aggressive tightening than signalled in June (a 25 bps hike was indicated)
  - » Governor Bache: A markedly higher policy rate is needed to ease the pressures in the Norwegian economy and to bring inflation down towards the target
    - ▪ A broad-based increase in inflation increases the risk for inflation to remain too high for too long – and a faster rate rise now will reduce the need for a sharper tightening further out
    - ▪ Thus, the press release states that the policy rate most likely will be hiked again at the September meeting
  - » Still, the MPC is stressing the uncertainty, both on the upside vs. inflation and on the downside vs the housing market and household consumption – as well as a global economic downturn
- Market response:
  - » Approx half of the lift in FRA rates last weel took place before the meeting, the other half afterwards. FRA rates rose sharply abroad as well, and for Dec 23 just as much as in Norway (the trade weighted average), and the NoBa hike had no visible impact!
  - » The market is discounting another 50-bps hike in Sept, and 25 bps in Nov followed by 50 bps again in Dec, as well as 25 bps in Jan and in March next year, up to 3,5% - as the 3m Dec FRA contract is at 3.64%! However, the NIBOR spread might have widened due to (we think irrelevant) fear of a money market liquidity squeeze due to mismatch between oil tax payments and transfers to the Oil fund
  - » Whatever reason for the surge, we think FRAs are too high, as we doubt a 5% mortgage rate is needed to slow down the Norwegian economy sufficiently

Anybody for a 5% mortgage rate?

A 3.3 pp lift from the 1.7% rock bottom: 35% of households down 6.6% or more in disp. income

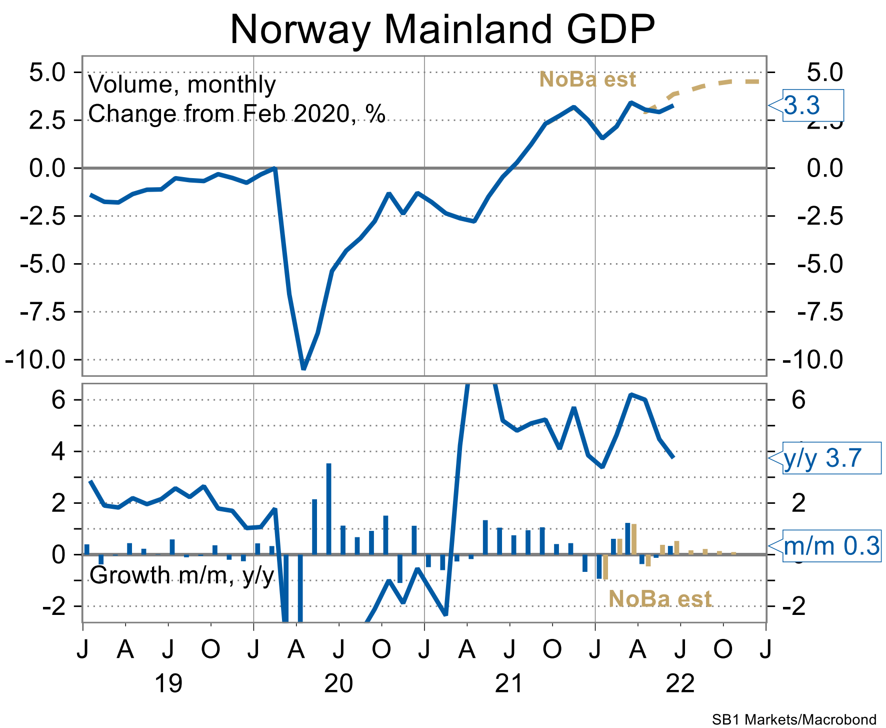




- **In average**, this 1/3 of households will be down 12% in disposable income
- **For those with debt:** An average drop in 7.4% in disposable income
- **For all households:** A 4% drop in disposable income (as some net cash positive ☺)
- **As a comparison**: Inflation may end up at more than 5% in 2023, while inflation may reach 4%. Thus, a 1.5% drop in disposable income

Mainland GDP up 0.3% in June – and less than expected (0.7%)

GDP has not been increasing since March, and the June level is 0.5% below NoBa's f'cast

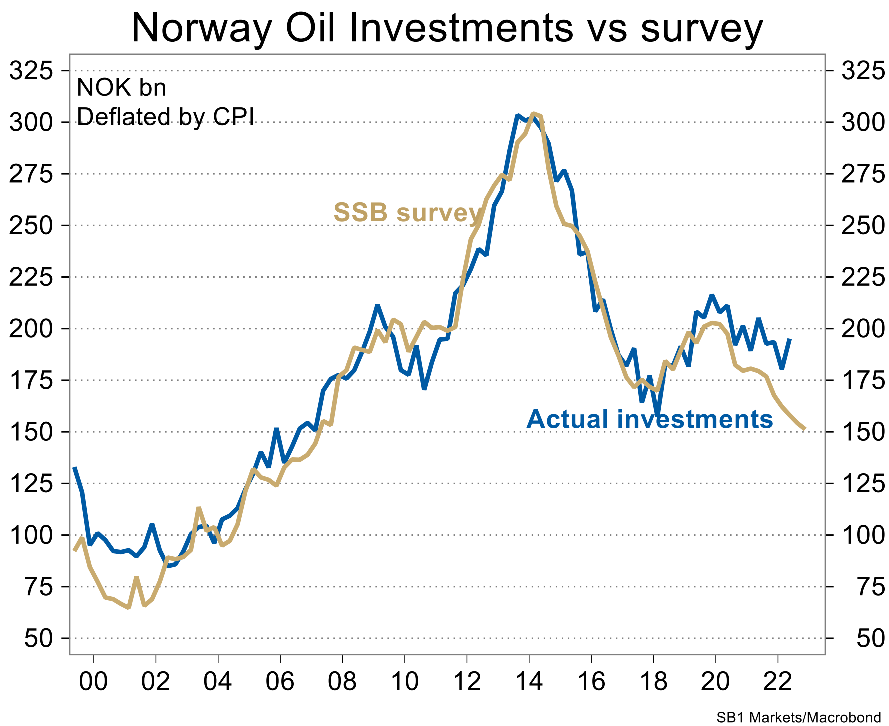


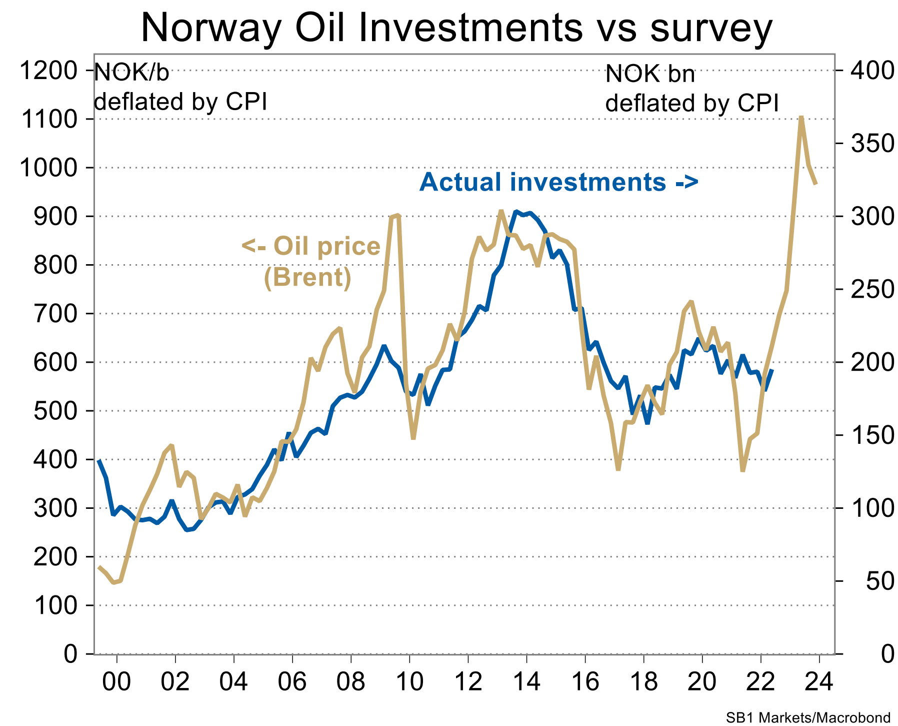
- **Mainland GDP** fell in both April and May but recovered somewhat in June – although less than we and other economists expected. Still, the Q2 growth rate at 0.7% was as expected, as history was marginally revised up, following the 0.4% drop in Q1. Thus, growth in H1 has been modest
  - **Production:** Most sectors contributed to growth in June (and in Q2). Manufacturing is still the weakest sector since before the pandemic
  - **Demand:** Household demand in Norway gained marginally in June while spending abroad increased. Just small changes in housing or business investments. Net exports fell marginally
- **Mainland GDP** is up 2.9% vs the Feb-20 level, which is well below a normal growth path over these two year (4 – 4.5%), indicating an output gap well below the level 2 years ago
  - However, unemployment is well below the pre-pandemic level, and close to record low levels, the employment rate (among Norwegian citizens) is far above, and businesses are reporting unusual lack of labour
  - Businesses are also reporting a much higher capacity utilisation than before the pandemic
  - Thus, Norges Bank is very likely right when it assumes that the output gap is substantially higher now, than before the pandemic
  - In addition, underlying inflation is far higher

SpareBank 1 MARKETS

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

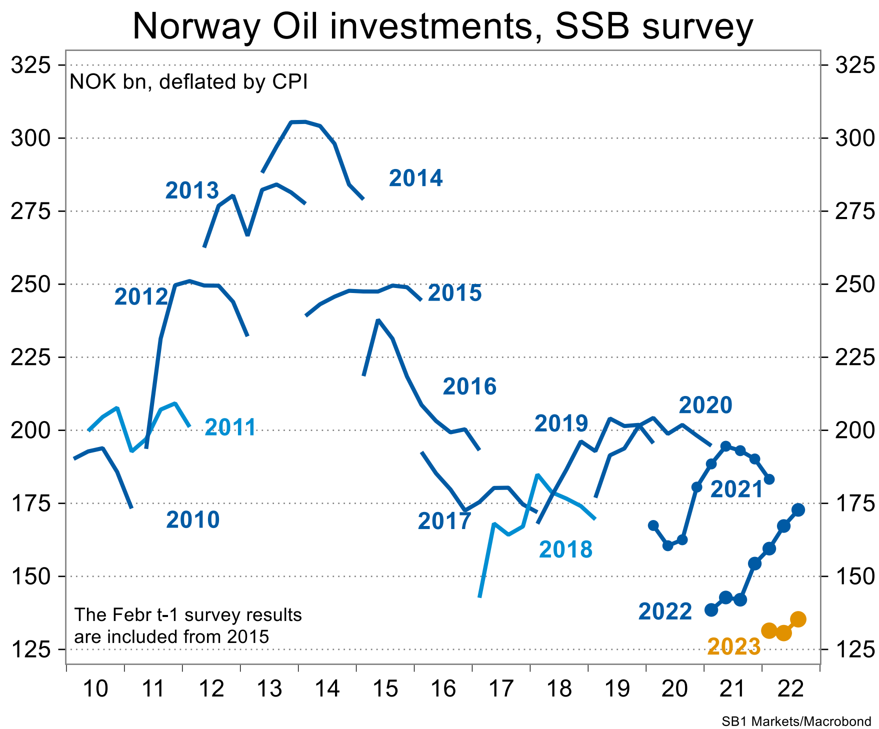
The temporary tax relief and high oil prices will lift investments in 2023 (and '24+)





- **Oil companies lifted their 2022 investment estimate** by 3% to 173 bn. The estimate is still 5% below the equivalent 2021 estimate. Several investment projects will be added to the list (a PDO delivered) before end of 2022 in order to benefit from the temporary tax cuts decided in 2020 – 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 August estimate is still down 5% vs the equivalent 2022 estimate (as we expected). Many more projects will be added, both due to the temporary tax cut and the high oil og gas prices (check the chart to the right above investments vs. the oil price)

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

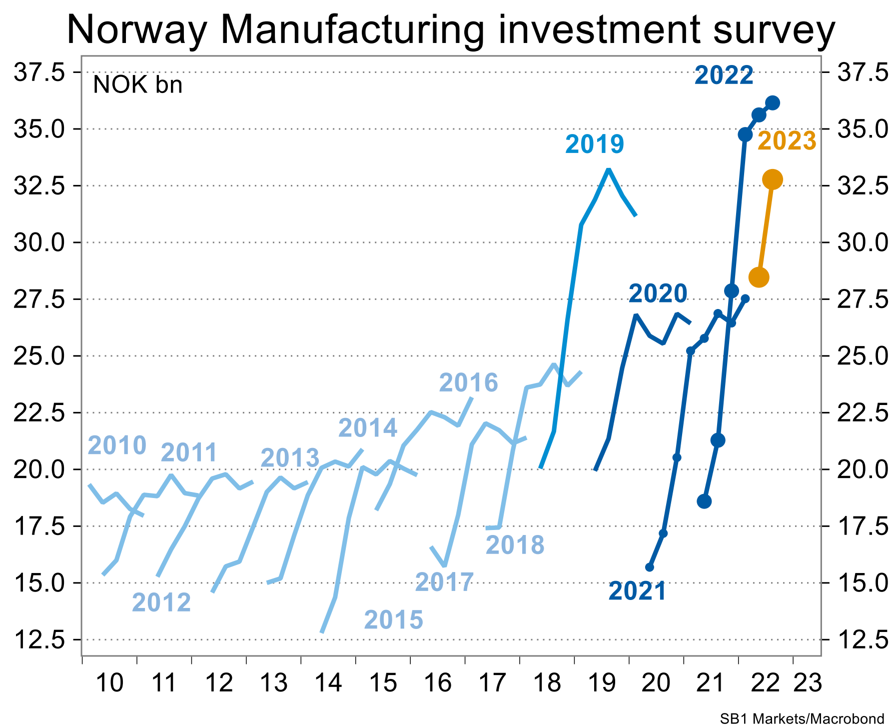


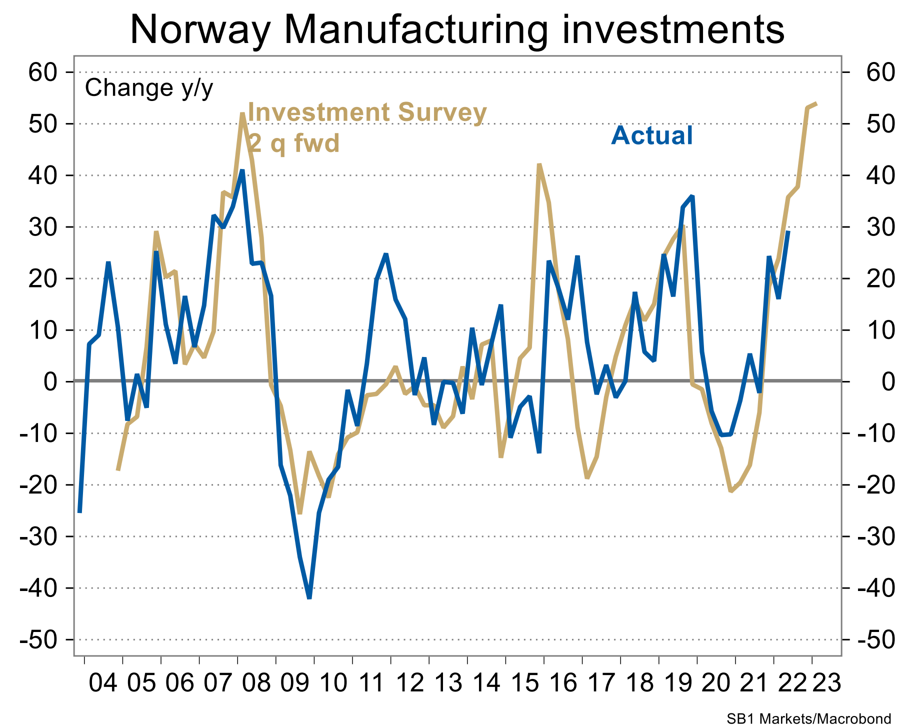
- In SSB's Q3 oil & gas investment survey, companies reported a small further increase in the **<u>2022</u> investments in NOK**
- **The 2022 investment estimate** was revised up by 3% to NOK 173 bn, still down 5% vs the equivalent '21 estimate. A large number of projects will be added before the end of 2022 in order to benefit from the temporary cut in oil taxes, and some spending on these projects may be booked on the 2022 accounts. Still, a decline in both value and even more volume from 2021 is still very likely
  - » 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 rather 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 Q4 or 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

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

At least 20% volume growth in 2022, and a further, steep 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 least 20% growth in volume terms (prices are rising rapidly)

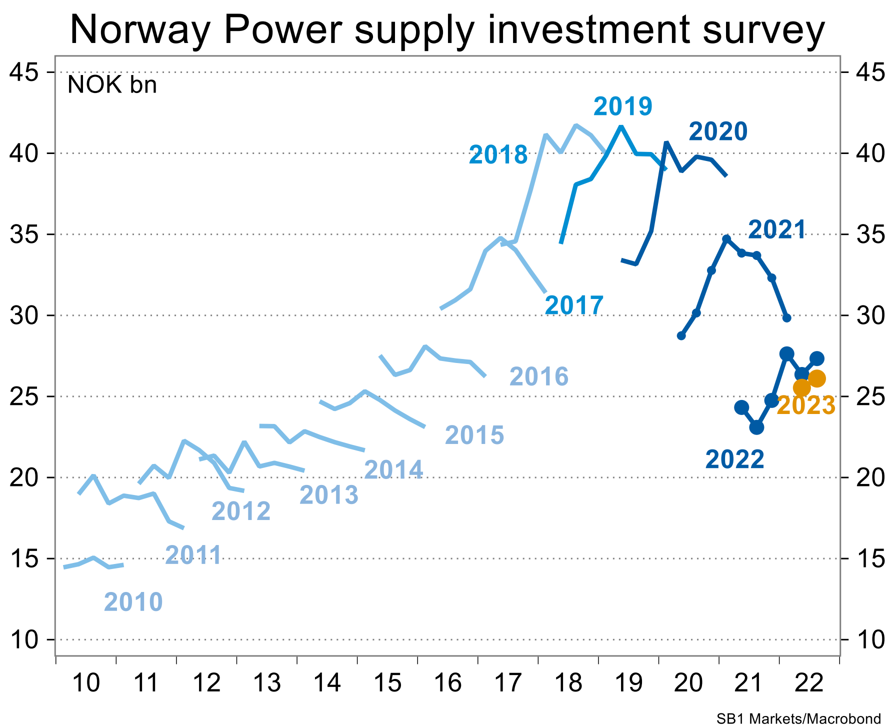
The **2023 estimate** was lifted by 15%, and it is 54% higher than the 2022 forecast, given one year ago. The estimate for 2022 has been revised upwards much more than normal, and we do not expect the 2023 estimate to follow the same path. Still a substantial further growth in investments in 2023 seems very likely, we assume 20% in nominal terms and 10% in volume terms

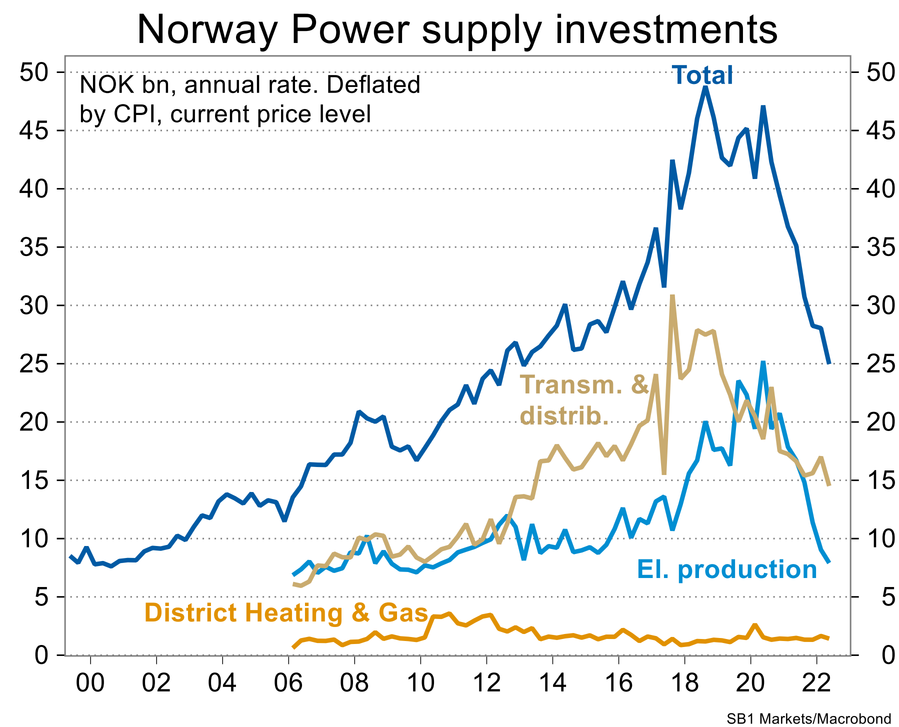
- **Computer/electrical equipment** contributes the most to the increase in the 2022, followed by non-ferrous metals
- **Non-ferrous metal industry** reports very aggressive investment plans in 2023 as well, as does the computer/electrical industry. We assume batteries are included in the electrical industry

SpareBank 1 MARKETS

Power supply: After 2 years of decline, a small uptick next year?

Investments are down more than 35% since 2018, now prices should make (all) projects profitable?



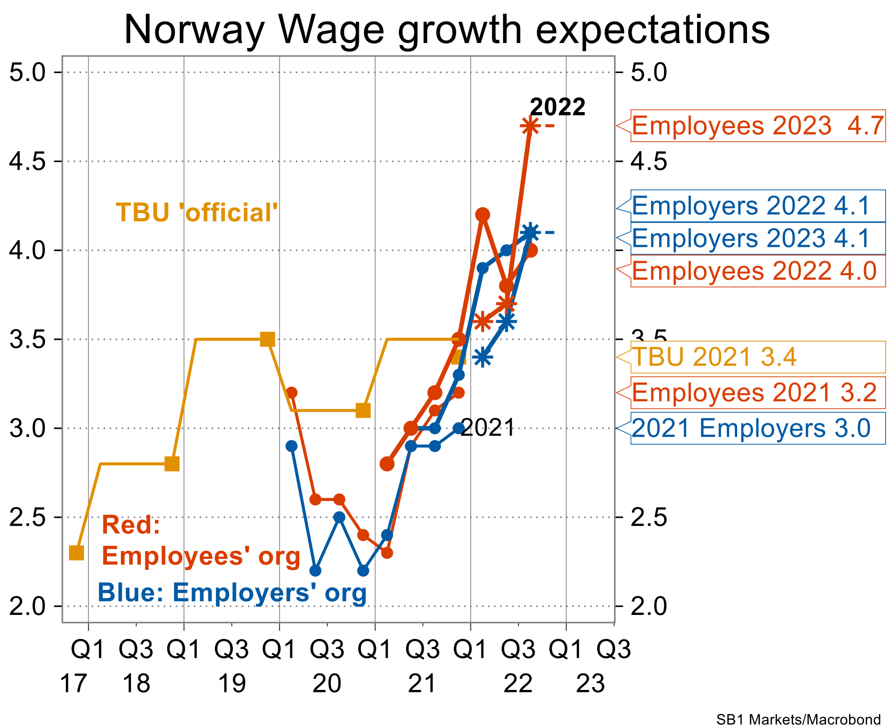


- **Power supply** (production & distribution) companies assume investments will decline by some 15% to NOK 26 bn in 2022
- The second **2023 forecast** was 13% above the equivalent 2022 forecast, and we expect the final outcome to be well above
- Until 2018, power supply investments had more than quadrupled since early 2000, by more than 10% p.a on average. The investment level as % of Mainland GDP was above 1%, the highest in decades. Both production & transmission have contributed. To 2022 from 2018, investments may decline by 36%, in nominal terms, and more in real terms.
- The current & future prices should make ‘all’ projects profitable, and activity will very likely increase, both production and transmission, both off and onshore (wind and hydroelectric, even some solar)– as soon as the authorities are able give their thumbs up

SpareBank 1 MARKETS

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 4.1% wage lift this year, above the agreed 3.7 – 3.8% agreed upon this spring
- **Norges Bank** assumed a 3.9 % growth rate in the June MPR

2023

- **Employers** aim for 4.1%, up from 3.6% forecast in Q2, a substantial lift
- **The unions** expect 4.7% wage inflation, up from 3.7% in Q2, the largest q/q lift ever, and the largest gap to employer's organisations ever!
- **Norges Bank pencilled** 4.5% in June – so the unions may perhaps not be that far off?

In sum

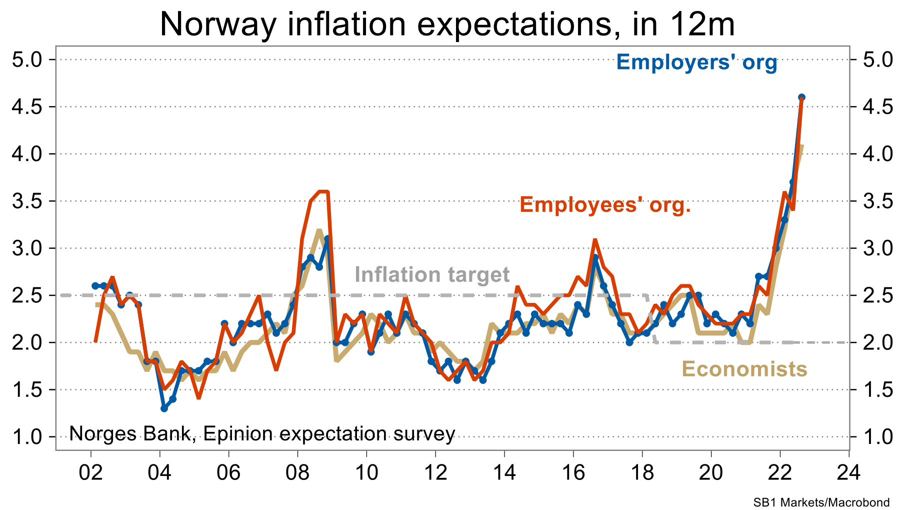
- Wage inflation expectations are accelerating sharply but that is also reflected in NoBa's forecast. Still, the huge lift in the expectations among the leaders in employees' organisations illustrates that challenging times are ahead

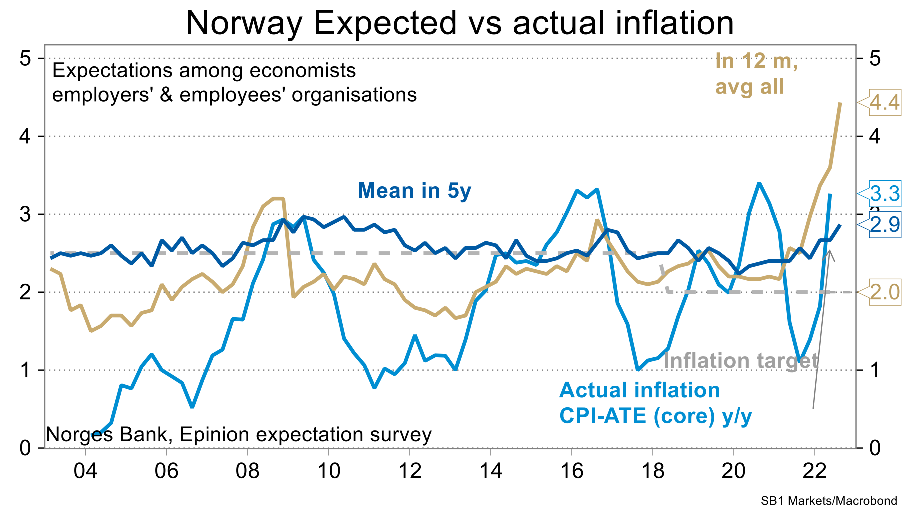
However, inflation expectations are drifting upwards

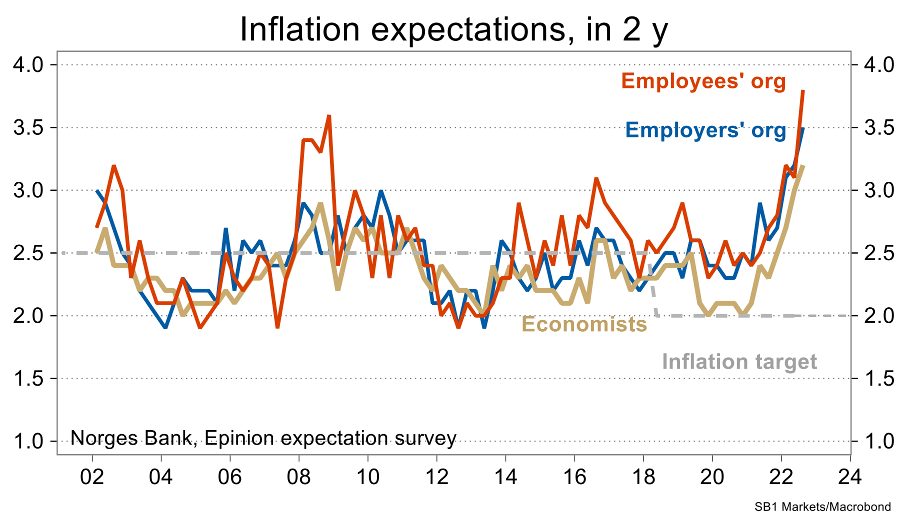
- In addition – and not surprising - inflation expectations for the coming years, and even for the long run is well above the 2% inflation target
- This is surely a huge challenge for Norges Bank: How 'forcefully' should the bank be in order to 'correct' these expectations, or even more important, prevent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

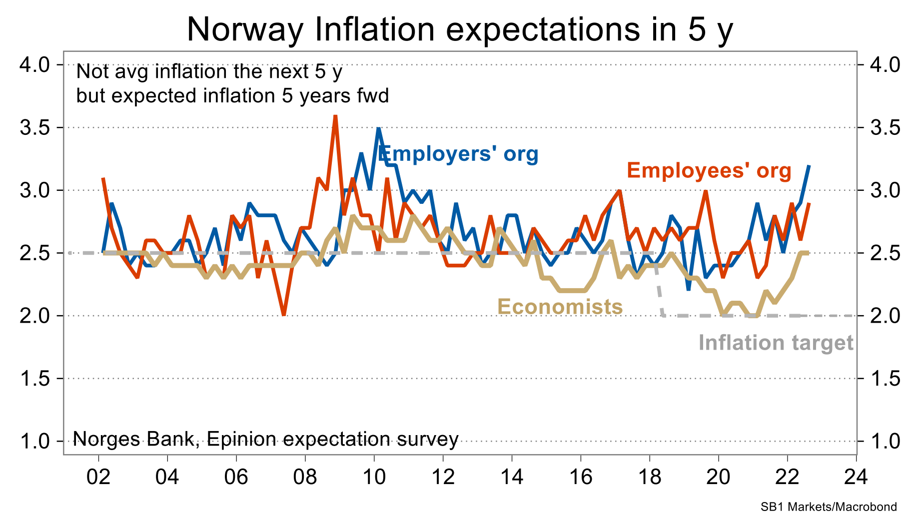
Inflation expectations still on the way up, also long term expectations

Employer's org/unions expect 3.5 – 3.75% is 2 years' time. Nobody believes in the 2% inflation target anymore!





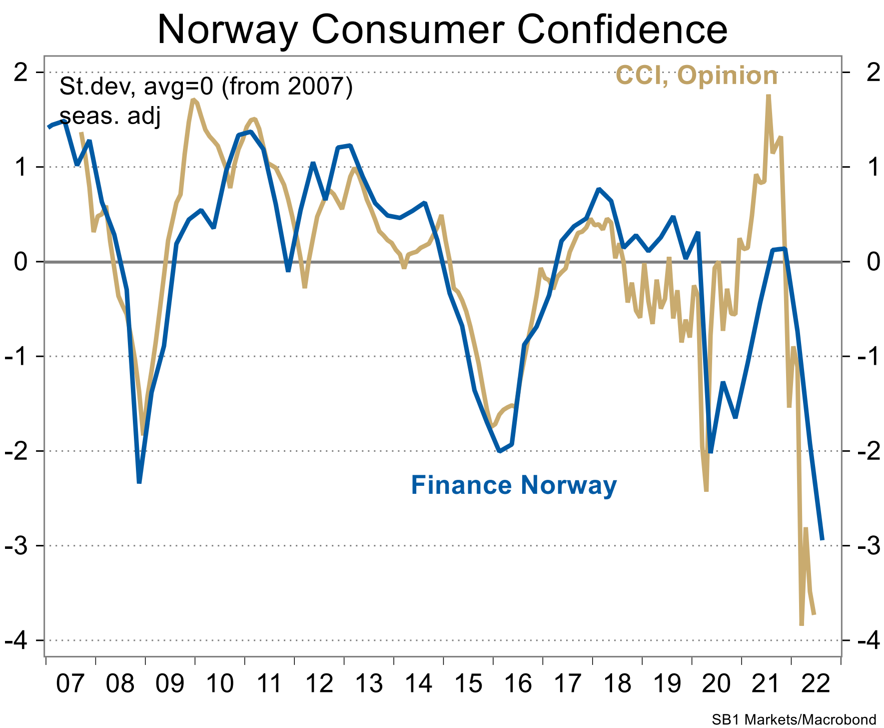


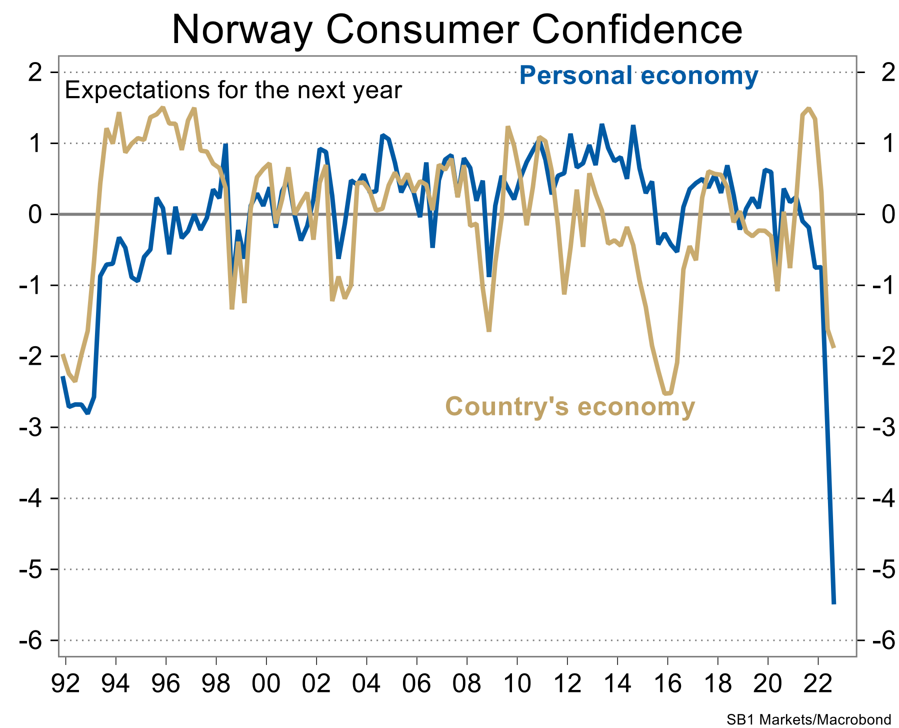


In these charts, results from economists (academia, market), leaders in trade unions and in employers' associations are presented, not businesses or households

Finans Norges' Q2 consumer confidence down to -3 st.dev

However, personal economy expectations collapsed to -5.5 st.dev! Totally unprecedented

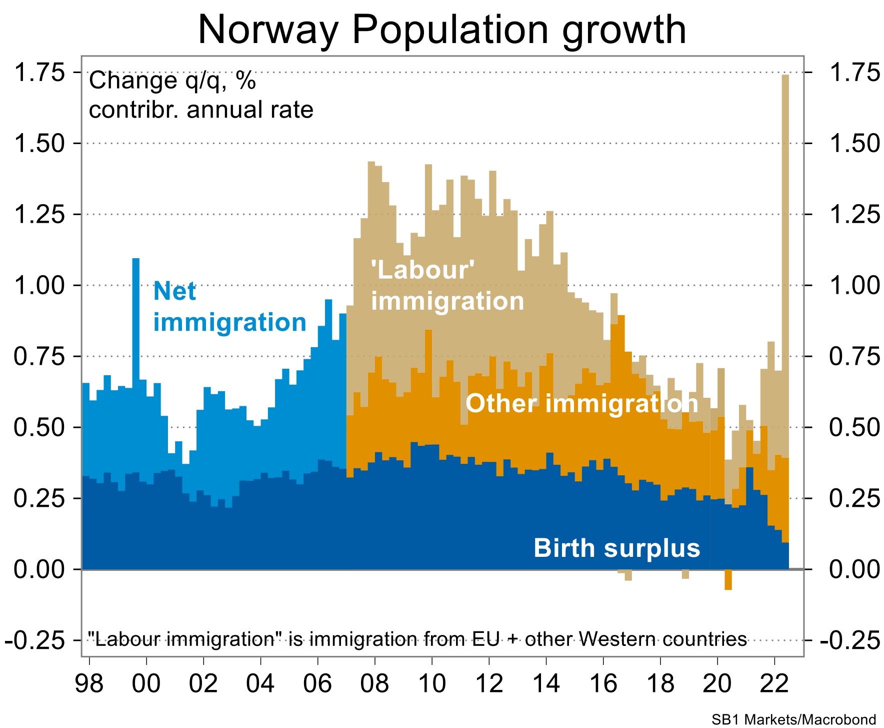


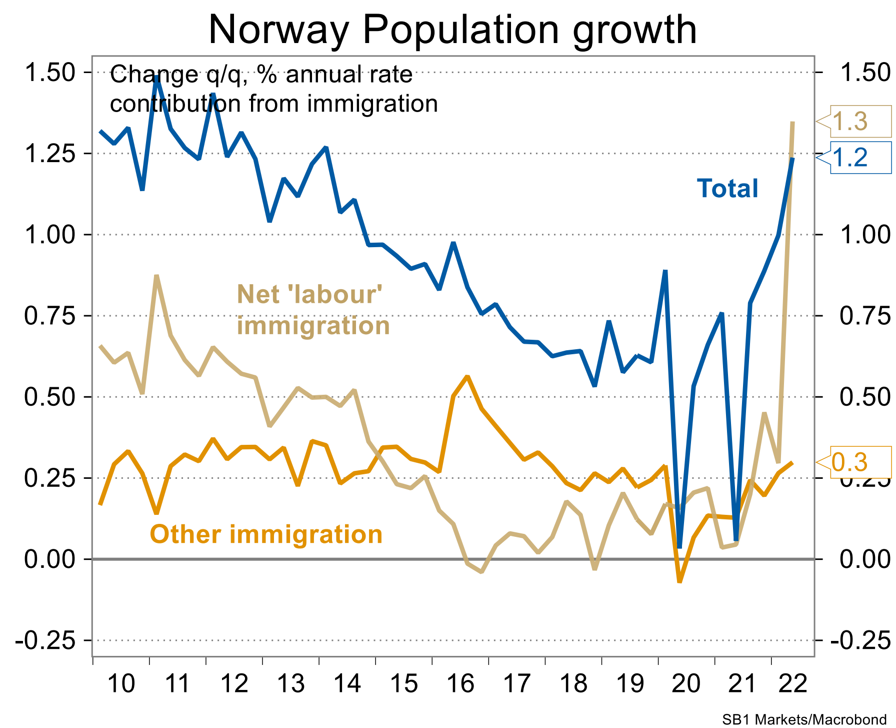


- **Finance Norway's quarterly consumer confidence index** fell to -27 in Q3 from -15.8 in Q2 (revised from -11.7 in Q2). The index fell by 1 st.dev to -2.9, to the lowest level ever, date from 1992
- **Households' expectations** of their own economy fell sharply once more, by almost 2 st.dev to -5.5!! The actual index number fell to -20 p, the second negative print ever: So the balance is still not <u>that weak per se</u>, there is just a majority that has a negative outlook, which is not strange given decline in real wages and higher interest rates, check the chart on the next page too. <u>It may be that spending will not become that weak</u>
- **Opinion's monthly consumer confidence index (CCI)** has not been reported since June (Aug data will be available this week) but has been just as week as Finans Norges' survey

Ukrainian immigration boosts population growth sharply

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

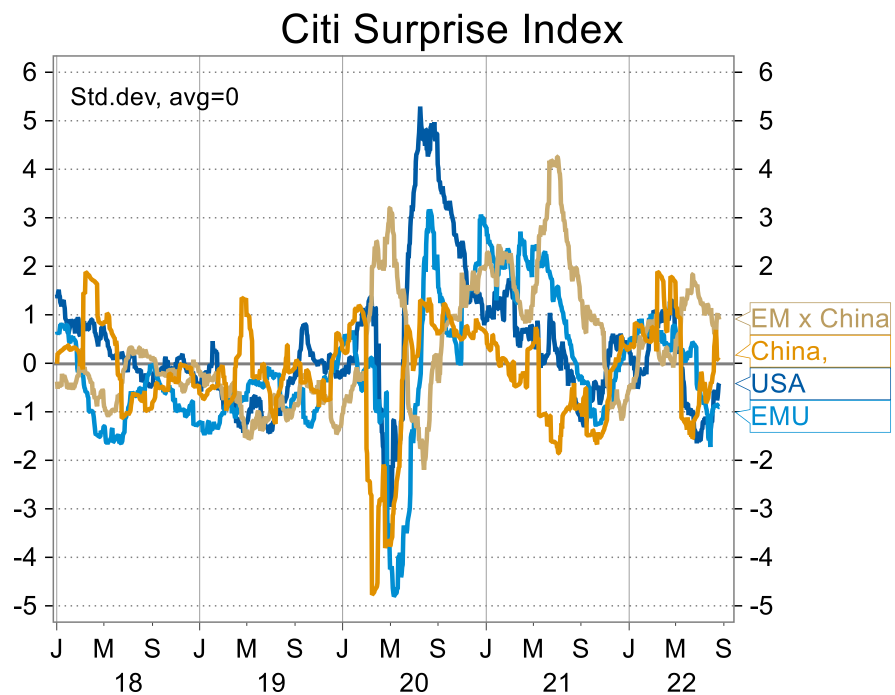


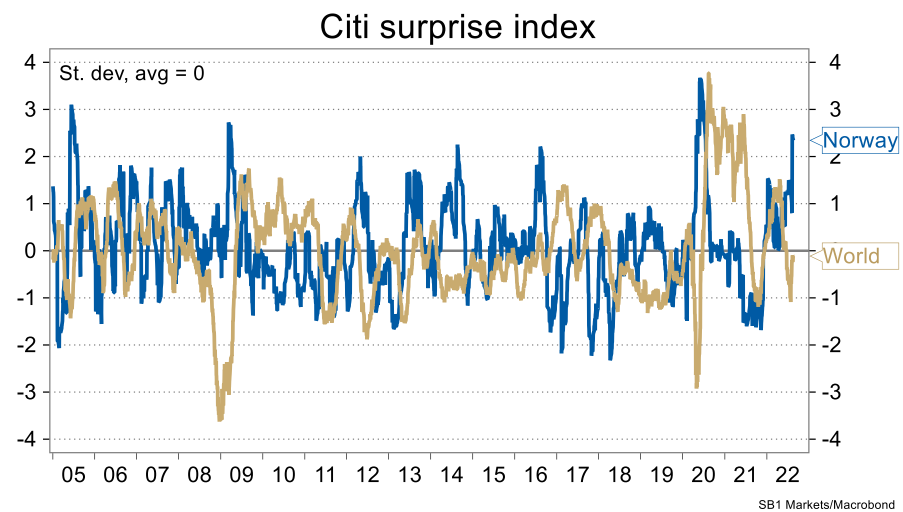


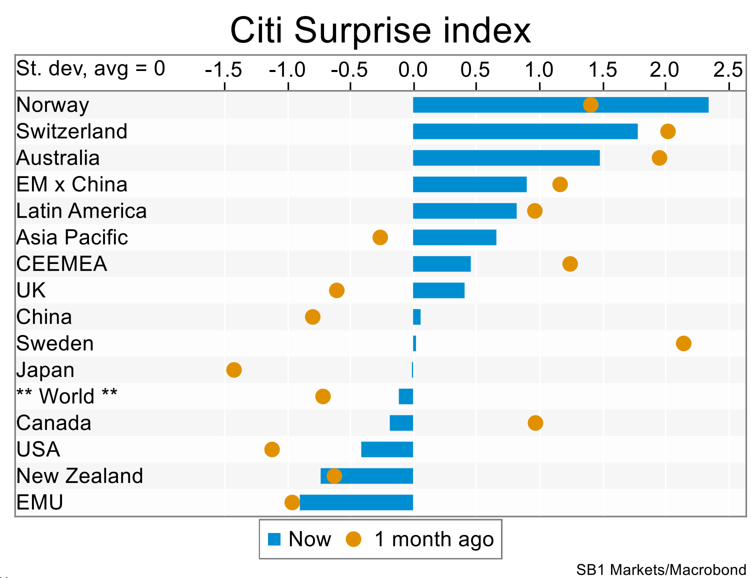
- Total population grew by 20.000 in Q2, equalling a 1.5% annualised rate close to the highest and record (and the highest ever, in seasonal adjusted terms). The steep increase was due to 15' immigrants from Ukraine. Excluding this inflow, population growth would have been lower than normal
  - » Immigration from the Nordics, the Baltics and other rich countries well below a normal level in Q2
- The net birth surplus fell to the lowest level ever in Q1. Births are slowing from the Covid spike in Q1-21 (but remain above 'normal' and the number of deaths is some 5' (12%) above a normal level, both due to Covid deaths, and '3 years of accumulated flu'-deaths

Globally, fewer disappointments past 2 weeks – even if China came back to Earth

US and EMU is still below par, but less so than some weeks ago (US) and last week (EMU)







- **Emerging markets** x China are still delivering better results than excepted
- **Norway** is suddenly at the top, we guess mostly due to the July inflation report

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

Highlights

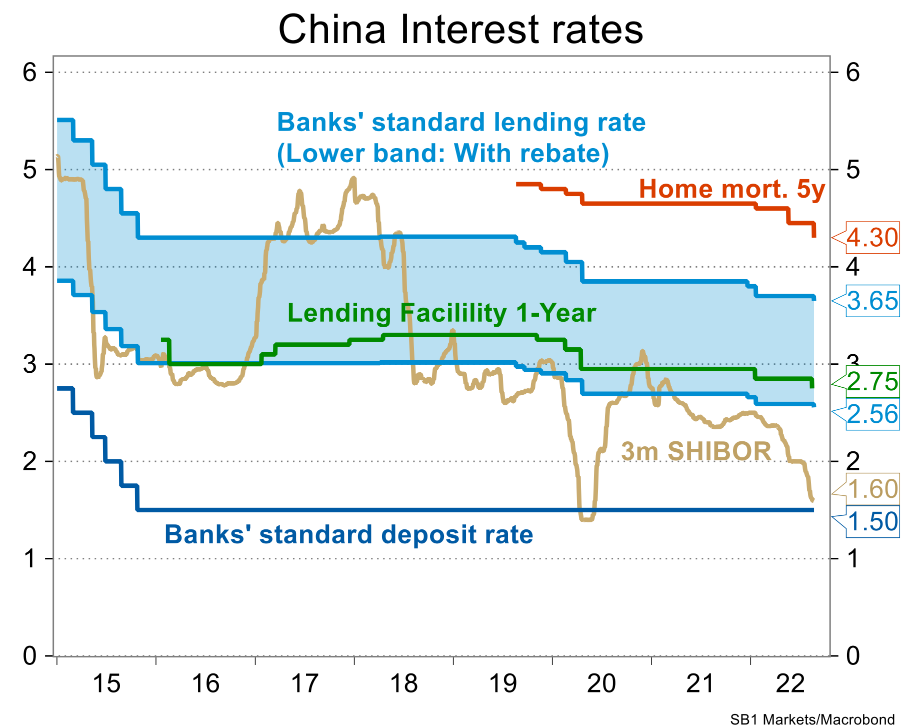
The world around us

The Norwegian economy

Market charts & comments

Easy easening, another cut in signals rates this Monday morning

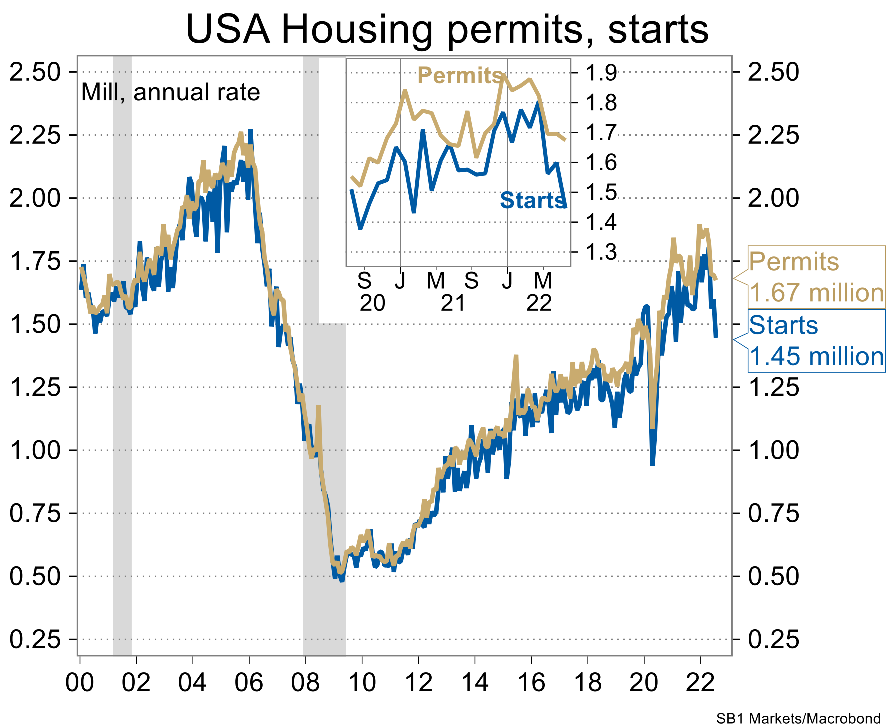
The steps are small, 5 to 15 bps. But the trend is clear – beacuse some stimulus is needed

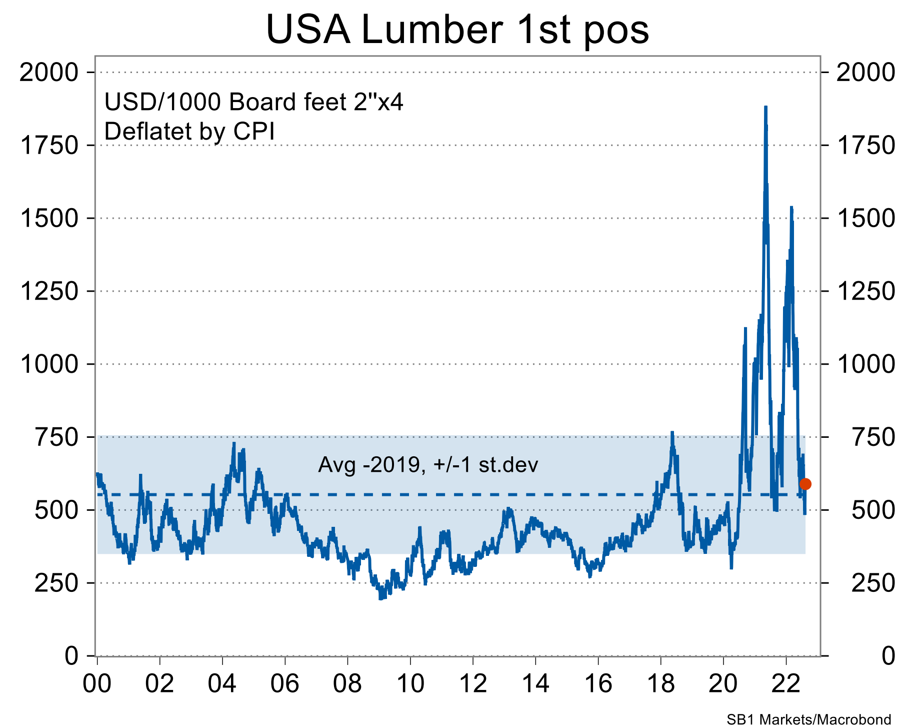


- Today, the 5 y mortgage rate was cut by 15 bps to 4.30% In addition, banks' standard lending rate was cut by 5 bps to 3.65%
- A week ago, a 1 year lending rate was cut by 10 bps to 2.75%

Housing starts sharply down in July, and homebuilders say much more to come

Starts are down 20% from the local peak in April! Permits are down 12%

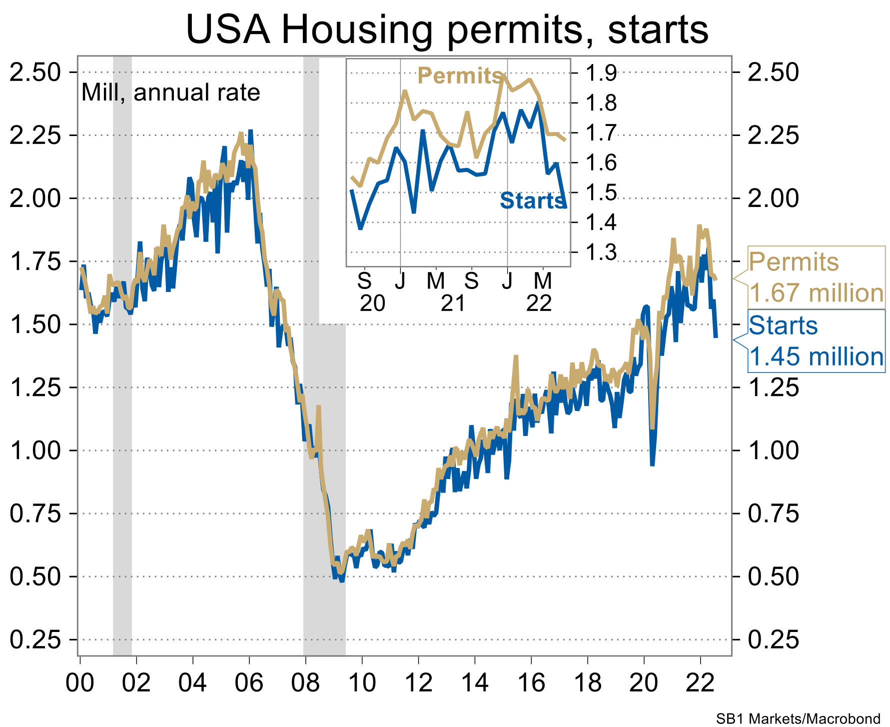


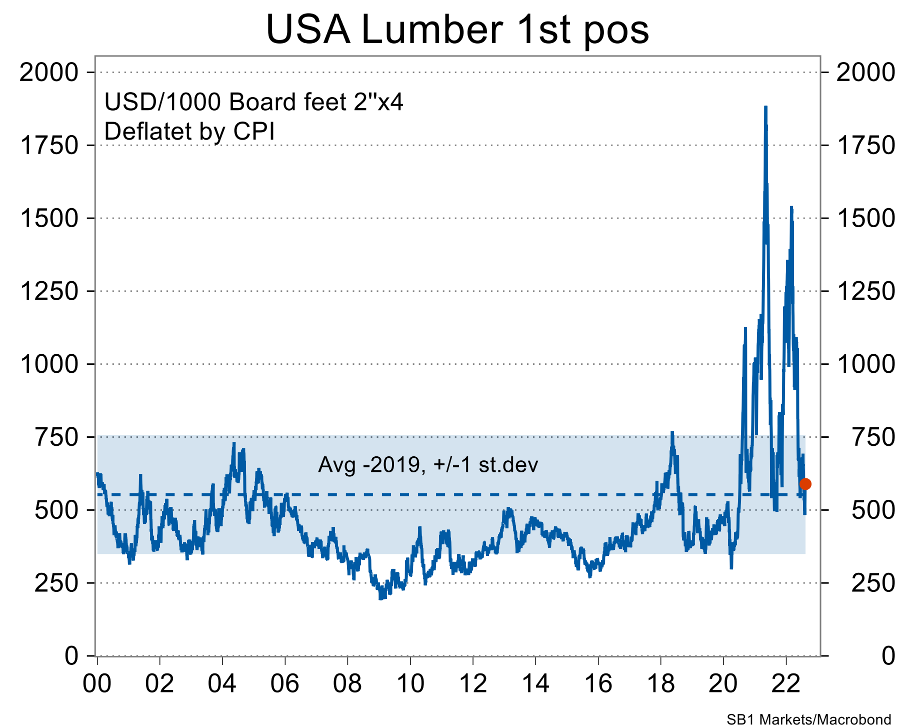


- **Housing starts** fell to 1.45 mill in July from 1.60 (revised from 1.56), expected 1.54 mil. **Building permits** landed at 1.67 mill, better than the expected 1.65 mill, from 1.69 mill in May. The decline in starts is a clear recession warning but the less volatile permits are still not down enough (but if new home sales are unch. in July, the average of the two (our preferred measure) will send a recession warning in July. If Homebuilders are right (next page), US will very likely be in a recession soon
- Building **material cost inflation** has come to a sudden halt. **Lumber prices** are back to a normal level, steel prices are falling rapidly too

Housing starts sharply down in July, and homebuilders say much more to come

Starts are down 20% from the local peak in April! Permits are down 12%





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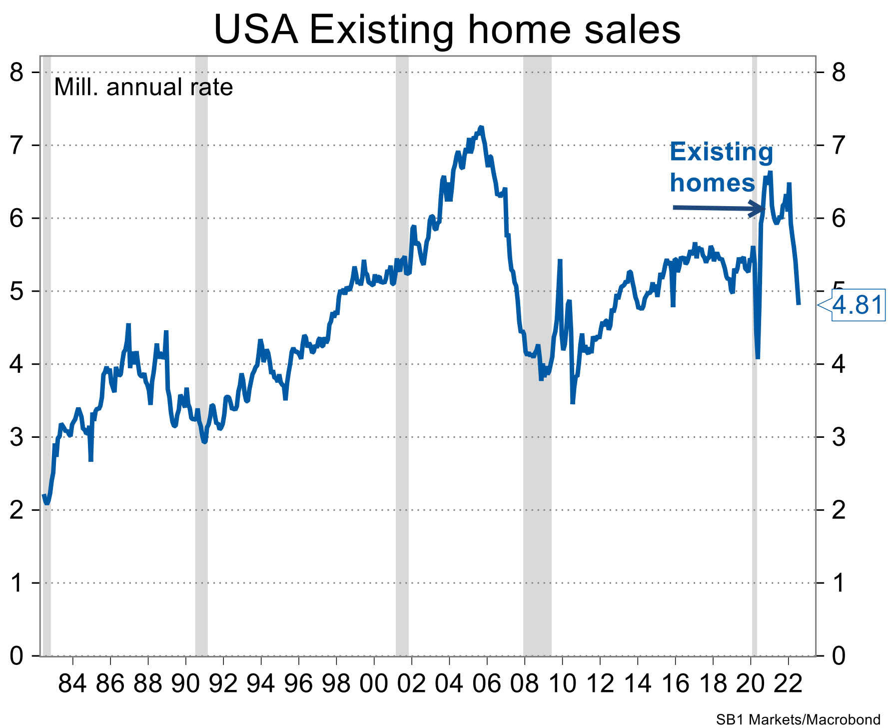
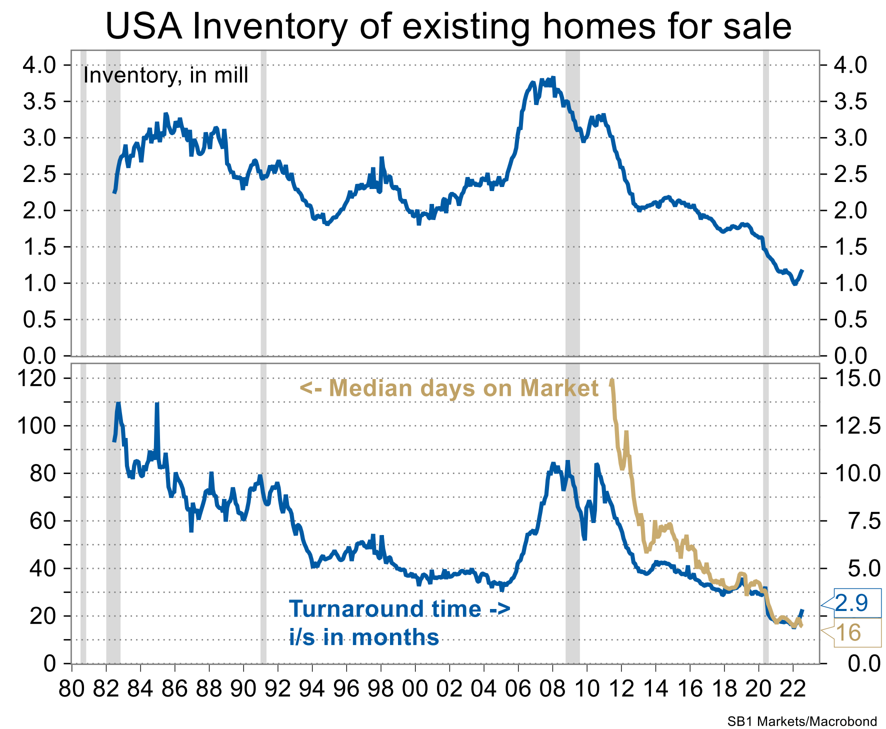
- Building **material cost inflation** has come to a sudden halt. **Lumber prices** are back to a normal level, steel prices are falling rapidly too

Existing home sales further down in July, and by 26% from Jan. Prices are falling!

The inventory is still very low – but has increased marginally the past 5 months

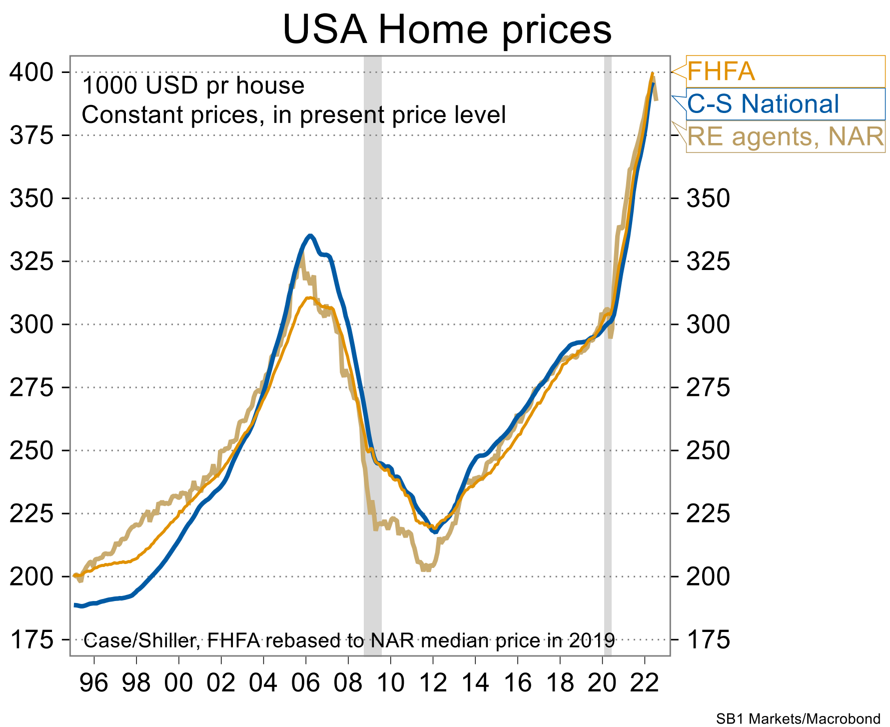


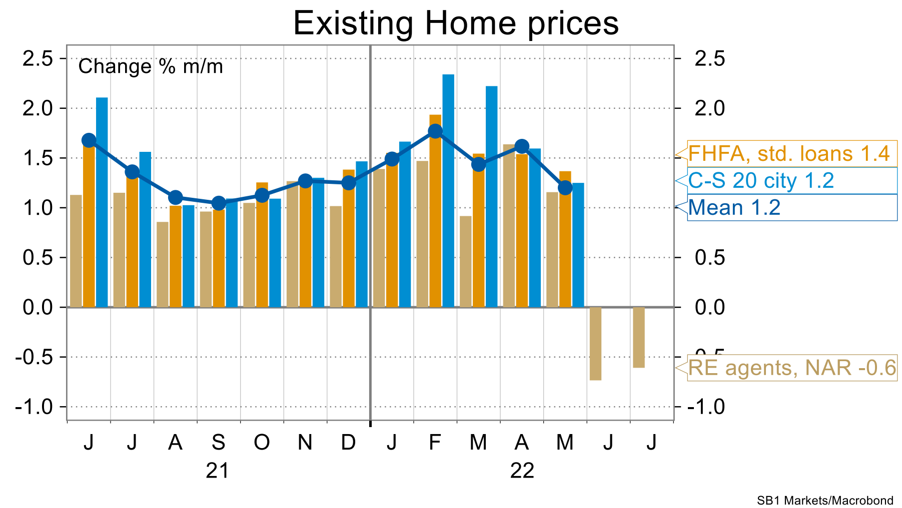


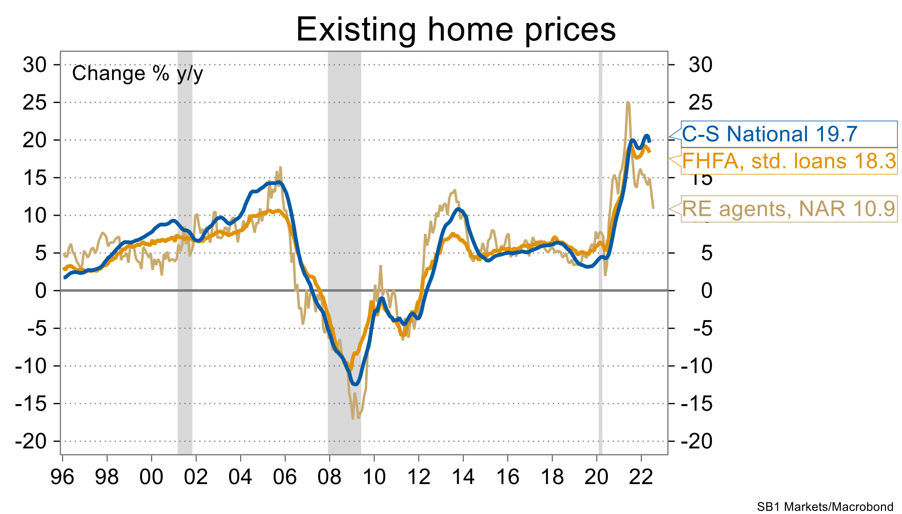
- Sales of **existing homes** fell to 4.81 mill in July (annualised rate), from 5.12 mill in June, expected down to 4.86 mill. Sales have fallen by 26% from local peak in January. Sales are down 10% vs. the pre-pandemic level. **Pending sales** stats signal a further decline in actual transactions
- **The inventory of unsold homes** rose marginally in July, as during the previous months – from at ATL in February
  - » The inventory equals 2.9 months of sales (up from 2.6 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
  - » A signal of a still hot market: The median time on the market for those homes actually sold is just 16 days, and close to ATL. Before the pandemic the time on market was at 30 days (and 120 days in 2011!)
- **Prices** fell 0.6% m/m, following a 0.7% decline in June, previously reported to +0.1%. *Check more next page*
- **Mortgage rates** have fallen recent weeks but remain far higher than over the previous years – and together with the high price level (up close to 40% since before the pandemic) have crushed affordability – and the impact is now very visible. <u>We are witnessing a housing market recession</u>

Now it's 'official': House prices are falling!

Prices fell m/m in both June and July. Prices are still up 10.9% y/y, down from 12.8% in June



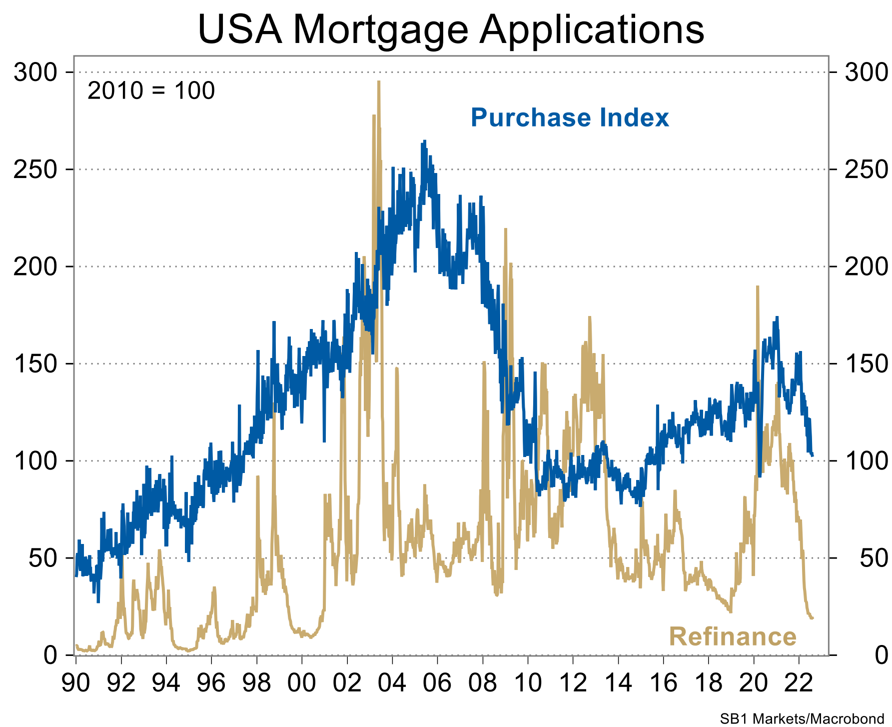


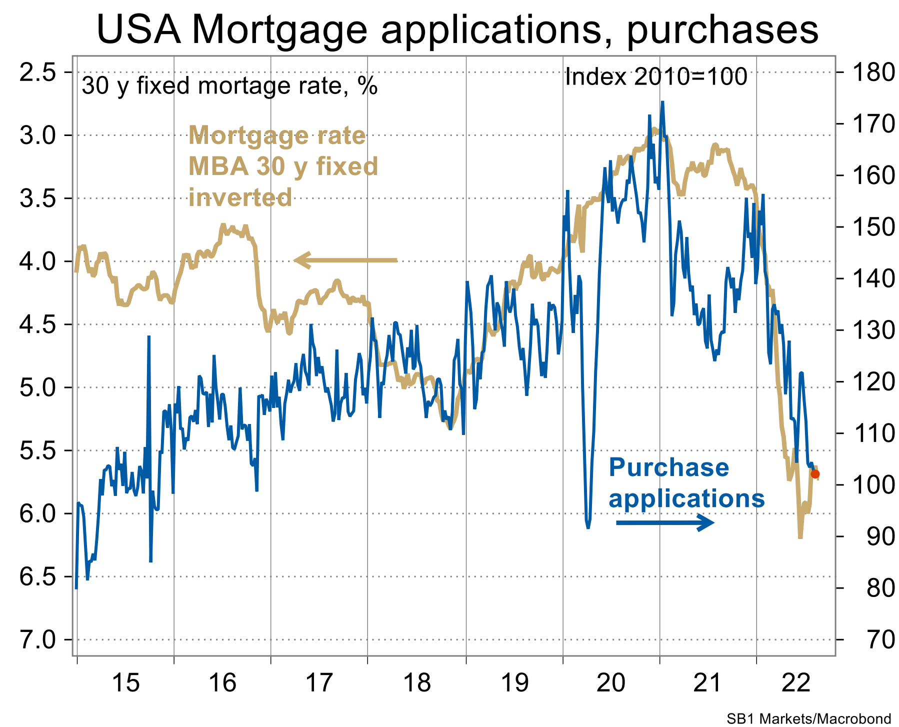


- **Prices** fell 0.6% in July, following a 0.7% decline in June, as June prices were revised down. (We reported a 0.1% gain in June, based on the initial data. The seasonal adjustment of these data is not perfect, so some caution on these m/m data. July prices are mostly based on transactions agreed upon in June. The annual rate fell 2 pp to 10.9%, (from a 0.7 pp downward revised rate in June). In May, the annual inflation rate was 15%
- Other indices are up 18% - 20% y/y. Prices are normally lagging sales by almost 1 year, and the recent decline in sales very likely signals a turnaround in prices too, we think the impact now is coming sooner due the rapid deterioration of affordability
- Home prices are up almost 40% from before the pandemic, and way above the 2006 level, even in constant prices (up some 15%)

Mortgage applications are still trending down

Applications for new loans are down by 1/3 from the local peak in January, and still trending down

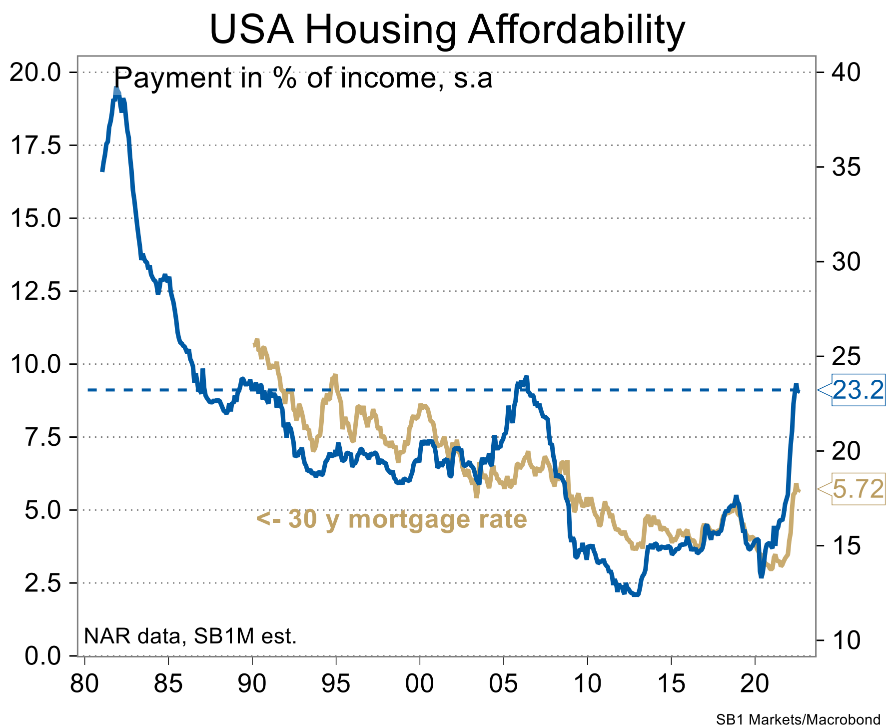


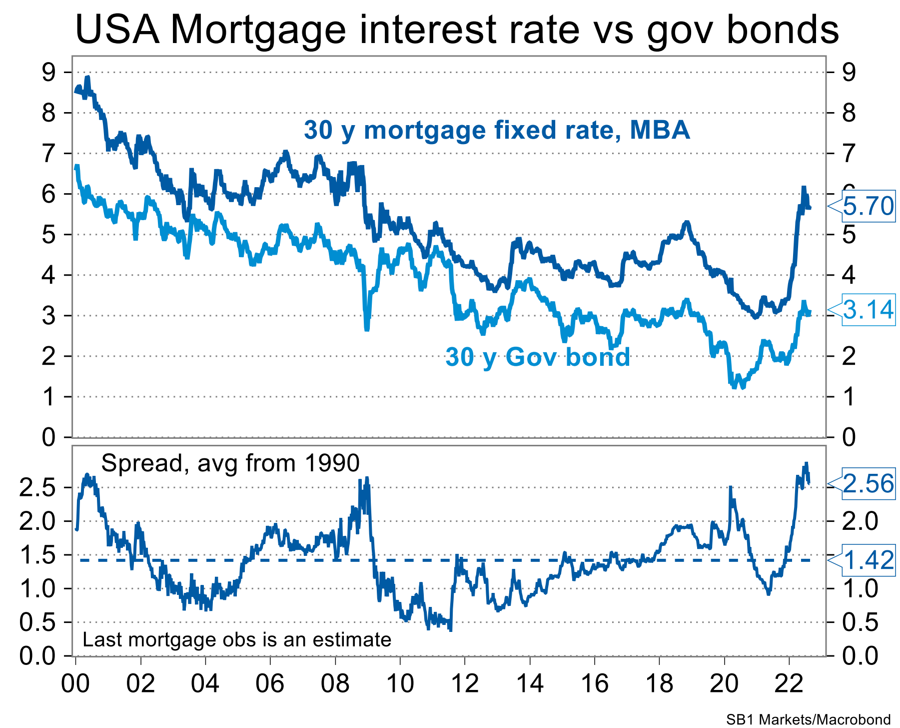


- Demand for new loans is not yet extremely low – and the level is 'just' 20% below the pre-pandemic level
- Recently, mortgage rates have fallen, alongside the decline in the 30 y treasury bond rate (*check next page too*)

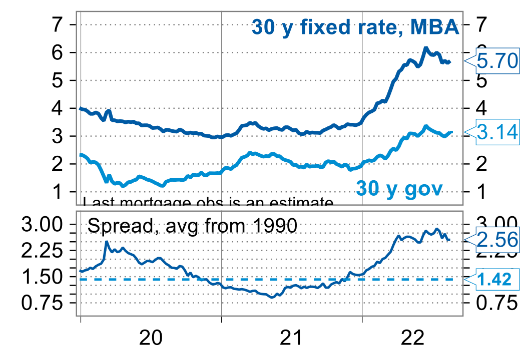
The least affordable housing market since 2008 (almost since 1987)

Prices are up almost 40% since before the pandemic, the mortgage rate is up 50%. In sum….



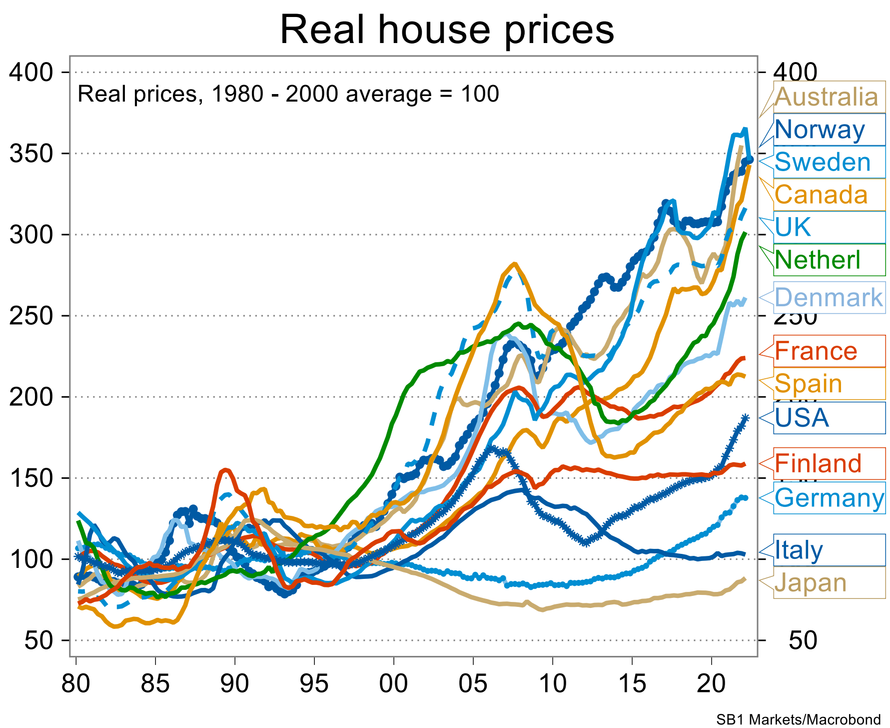


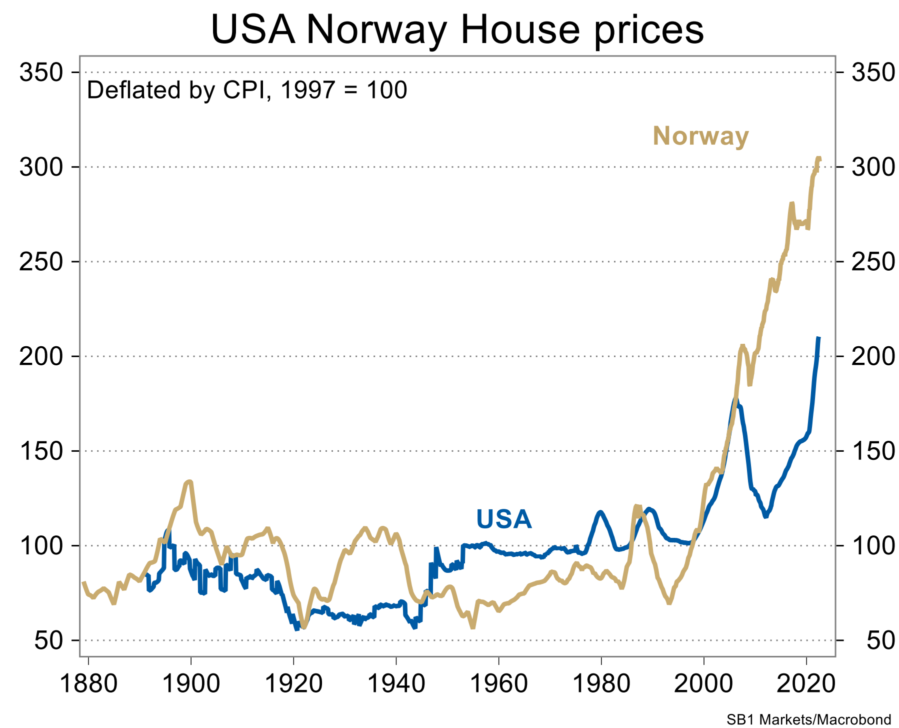
- **The 30 y fixed mortgage rate** has climbed to 5.70% (effective rate) from 3.0% last summer, from 3.5% at the start of 2022. Before the pandemic, the rate was 4.0%
- The **Federal Reserve** concluded its mortgage backed bonds buying campaign in March - <u>and is now reducing its holdings. No doubt, this shift explains much of the surge in the mortgage spread, to 2.56 pp, way above the average at 1.41 pp</u>
  - This spread has been retreating somewhat recent weeks. It might be due to the general spread narrowing over the summer, but the housing spread is far higher than other credit spreads, on a relative basis. <u>There must be a substantial downside potential, as the long term credit risk is not that large, given current low average debt levels</u>



Where are the biggest housing market risks?

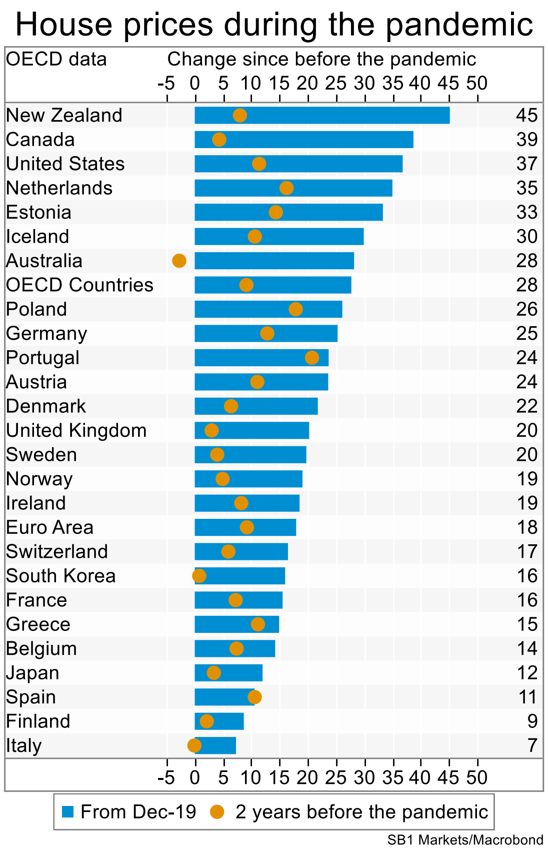
Monthly price data have already turned south in Australia, Canada, Sweden and New Zealand

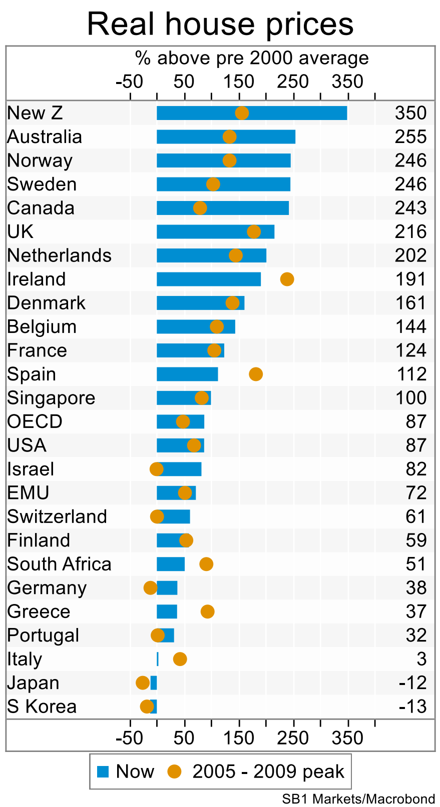


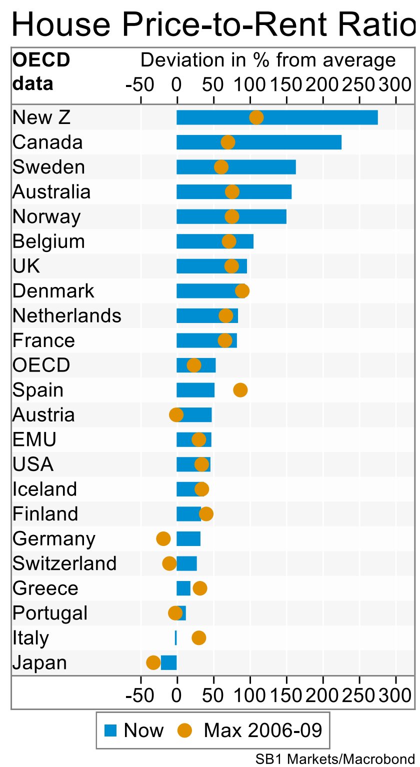


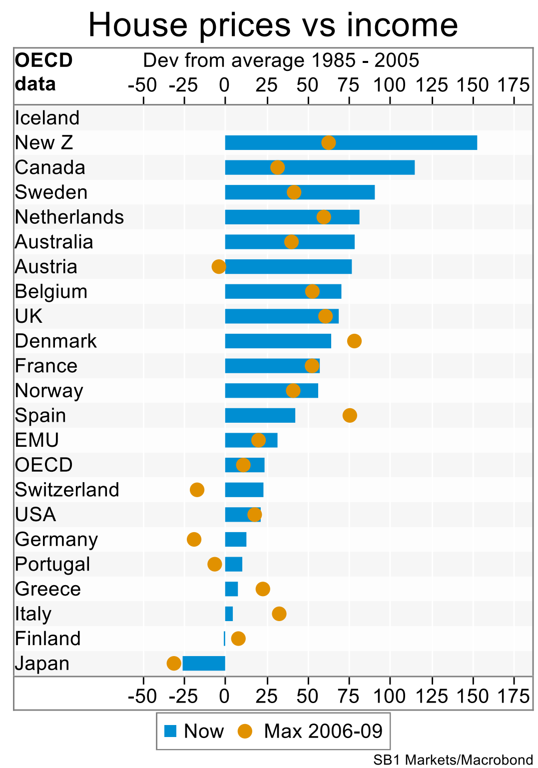
Some more charts for reflection

New Zealand seems to be the most exposed. Norway is not close to the top on all lists



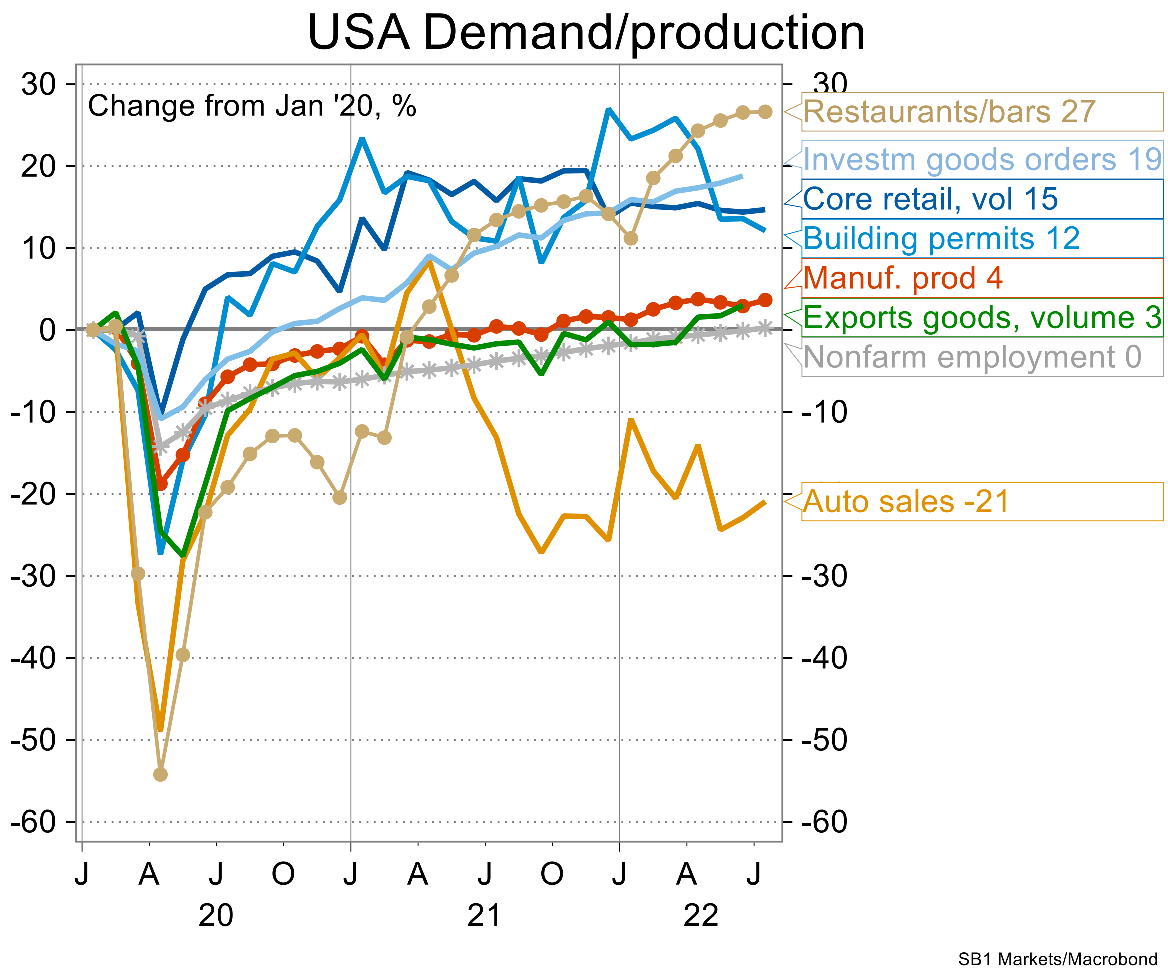






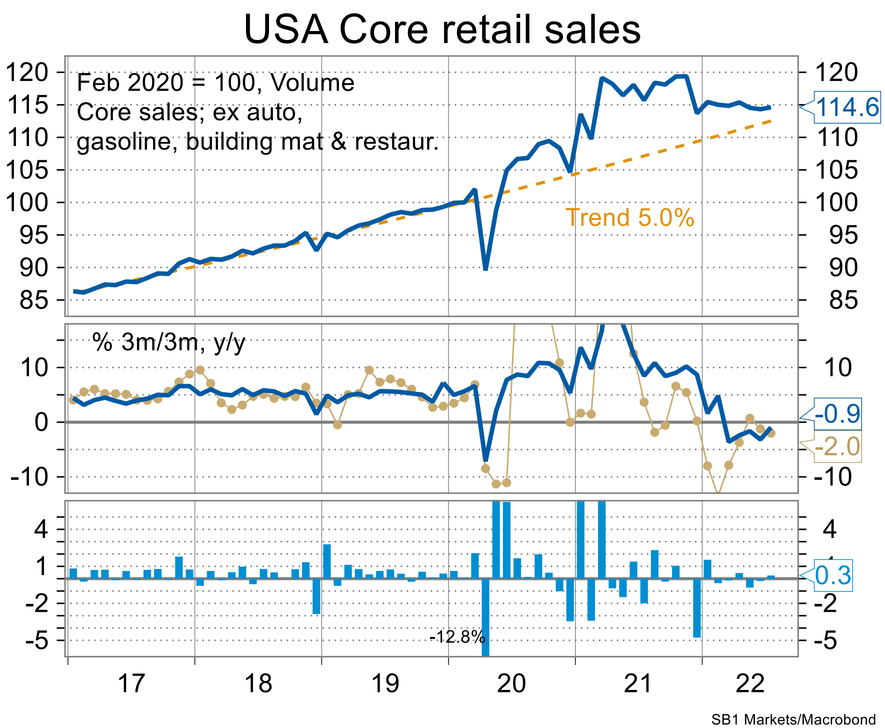
US: Housing has rolled over, core retail sales are at best flattish

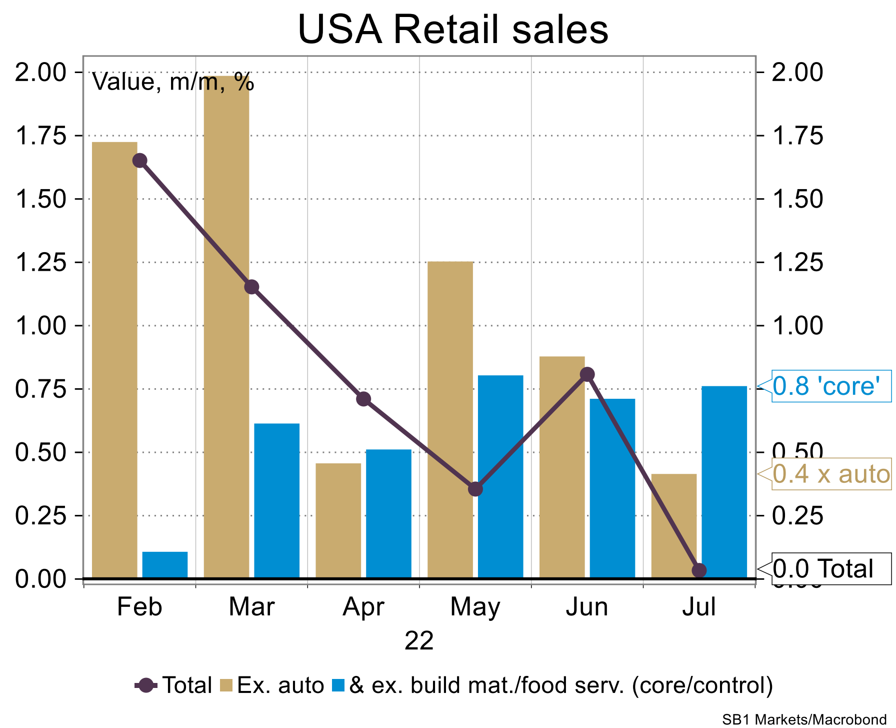
Manufacturing production is flattening too. However new orders, exports are still drifting upwards



Core retail sales up in July, but very likely not that impressive in volume terms

Real core goods sales are trending flat, at best

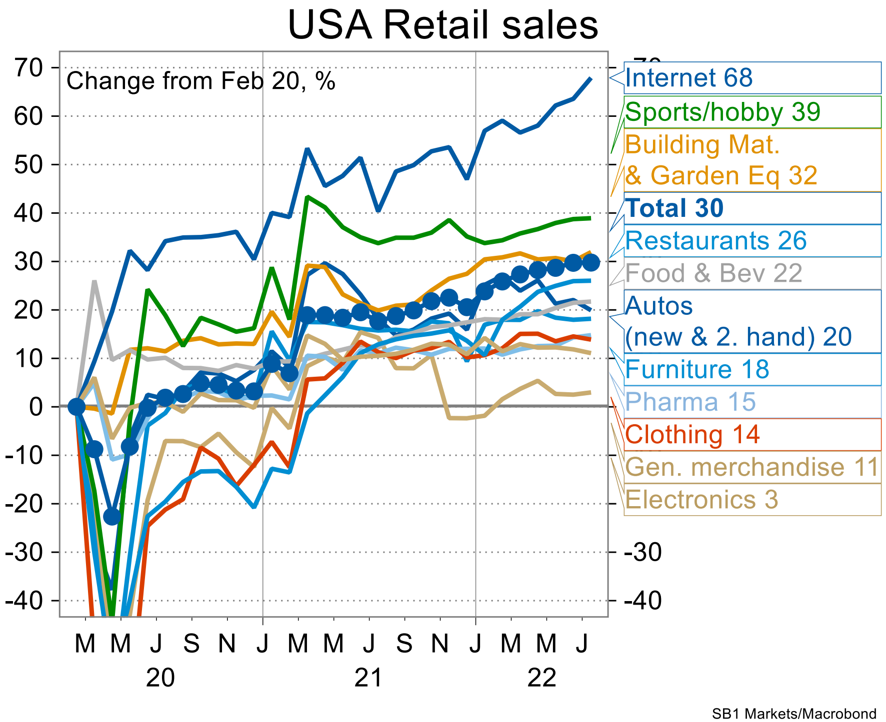




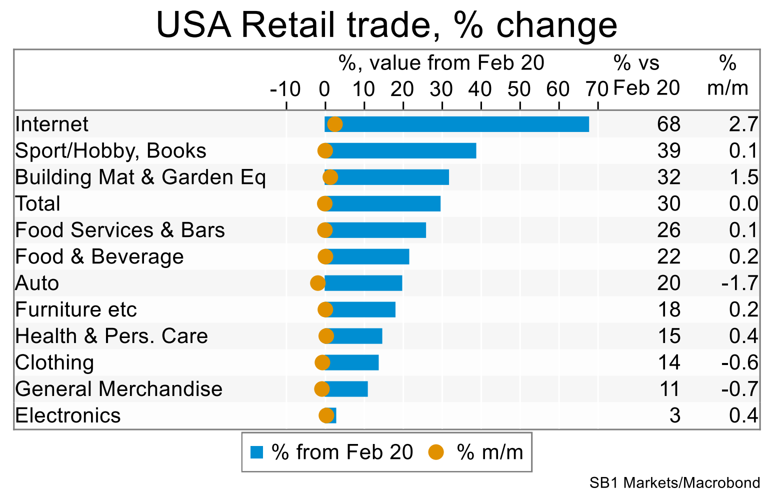
- **Total nominal sales** was flat in July, close to expectations, and June was revised down by 0.3 pp to 0.7%. Auto sales fell, we assume due to lower second-hand car sales, as total new car sales rose. In addition gasoline sales fell, together with gasoline prices. Total nominal sales are up 30% vs. the Feb 2020 level
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) climbed 0.8% in July in value terms, 0.2pp more than expected
- **In volume terms**, core sales are trending slightly downwards: We assume prices rose by 0.5% m/m in July. Thus, in volume terms, sales rose by 0.3% following a 0.7% drop in May and further -0.2% in June. 'Real' sales are trending marginally downwards (-2% 3m/3m), and are approaching the pre-pandemic trend! Sales are 5% below the level from last November, which was the highest ever

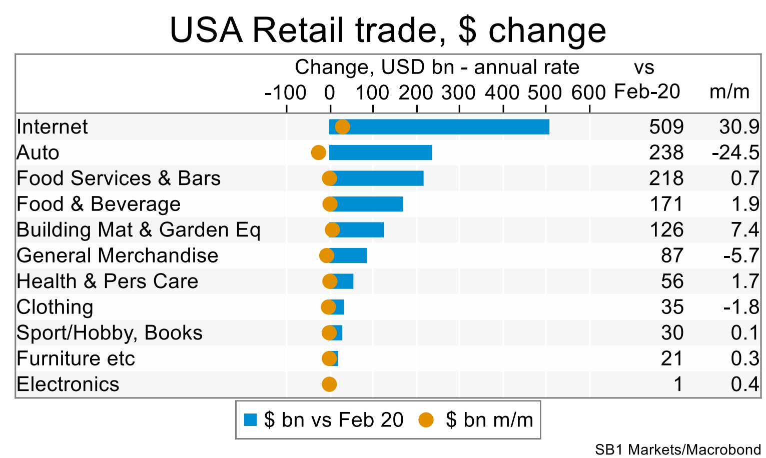
Most sectors reported higher sales in July

Auto sales fell, as did gasoline sales (as prices declined)



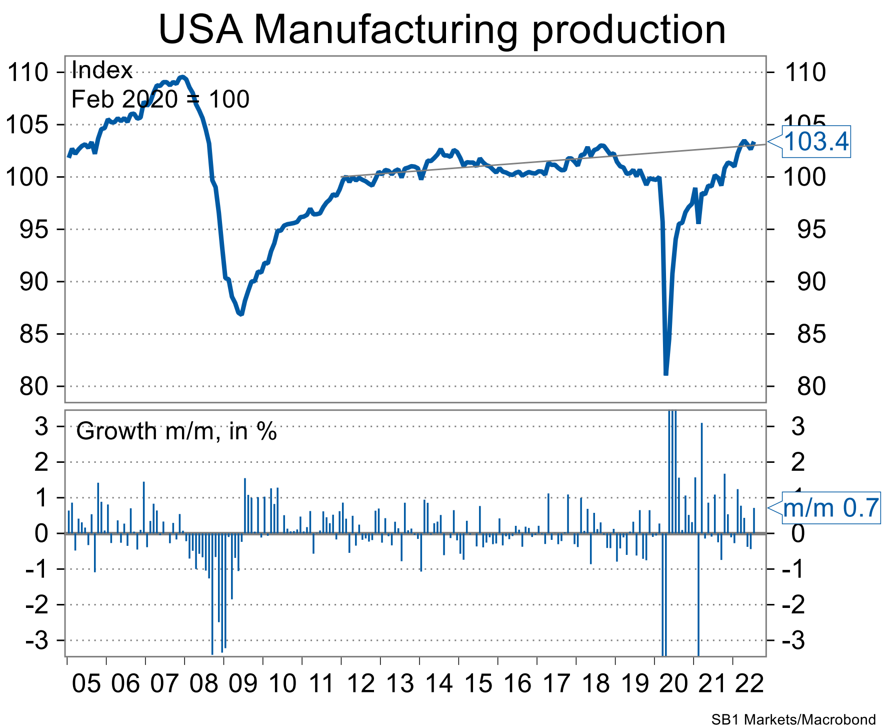
- 3 out of 11 main sectors reported lower sales in July, 8 reported higher sales
- Total sales are up 30% in value terms vs Feb. 20
- Restaurants are up 26% vs Feb-20!
- Internet sales are up 68%
- Clothing are up just 14%
- Electronics are up just 3% - in value terms

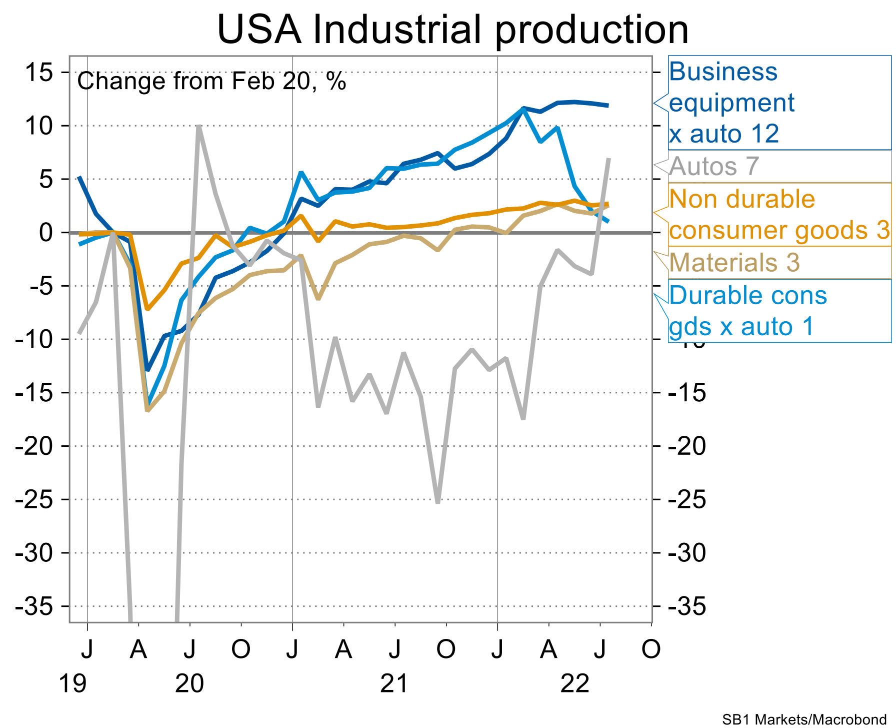




Manufacturing production better than expected, due to a lift in auto production

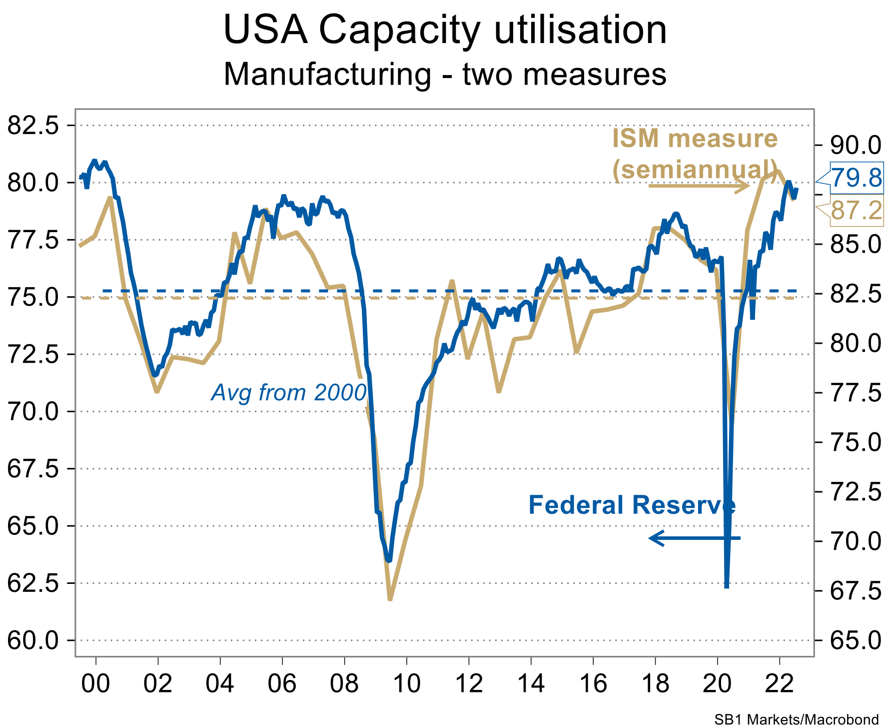
Auto production rose 11% in July, to 7% above the Feb-20 level! Total manuf. prod up 0.7%, exp. +0.2





- **Manufacturing production** grew 0.5 pp more than expected, very likely because auto production suddenly increased by 11%, to a decent level. Non-durable consumer goods added 0.1% and materials 0.8%. Business equipment cut back 0.2%, and production of durable consumption goods x autos fell by 1%. Still, the trend recent months is close to flat
  - » Durable consumer goods x autos are heading sharply down, by 10% the recent months
- **Total industrial production**, including utilities, mines/oil production gained 0.2% in June
- **Capacity utilisation** rose somewhat in July, and the level is the highest in 20 years
- **Surveys** have weakened substantially in May, June, July, and the two first August reports are in sum down, as the NY Fed survey collapsed, and much more than the Phil Fed (surprisingly) recovered

Capacity utilisation remains very high



- **The Federal Reserve** reported a small increase in capacity utilisation in July and the level is just marginally below the highest level in 20 years
- **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

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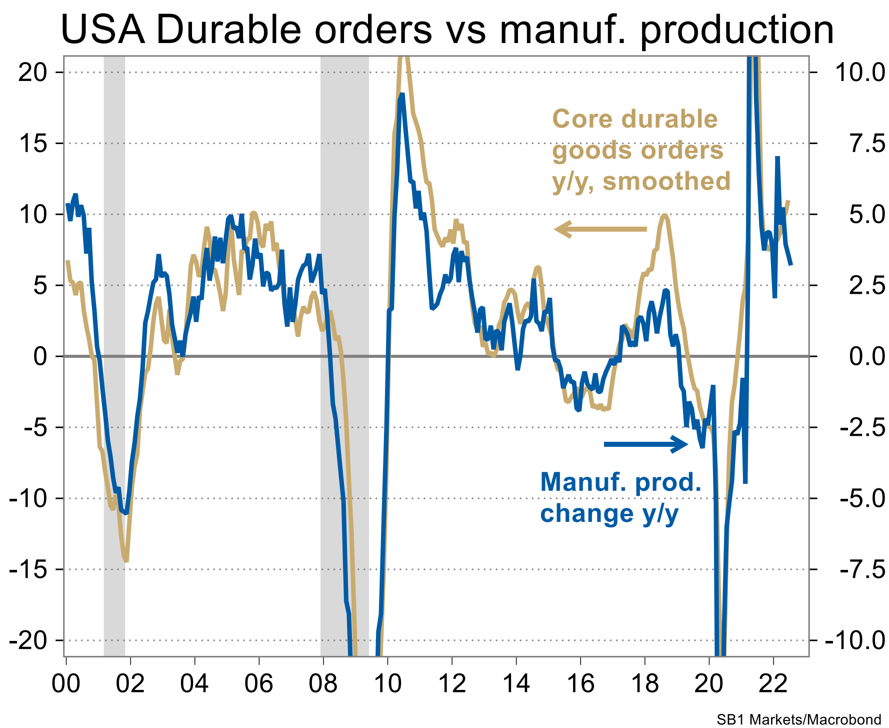
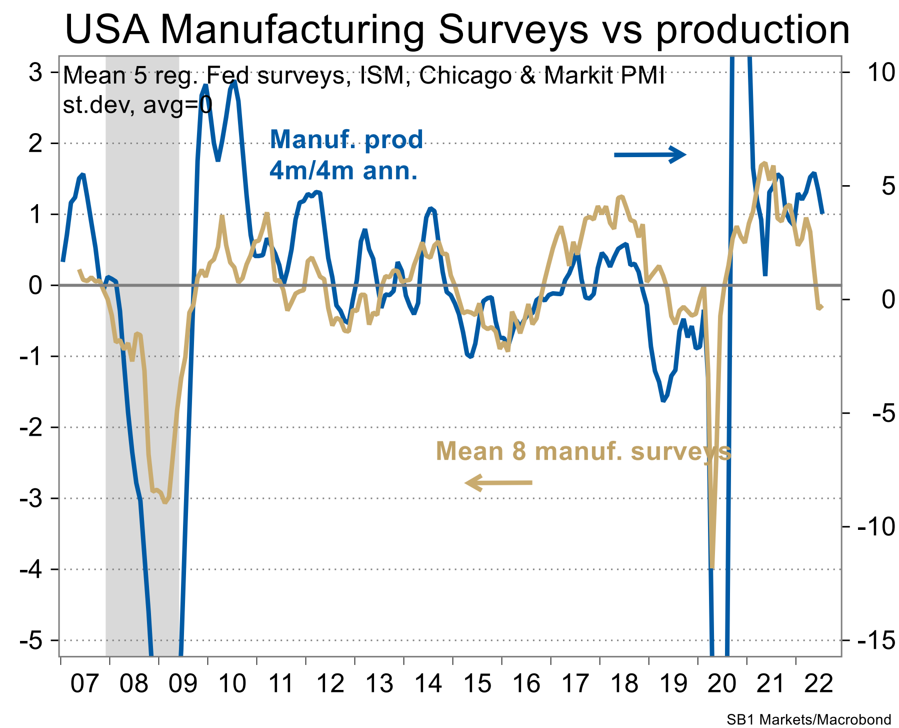
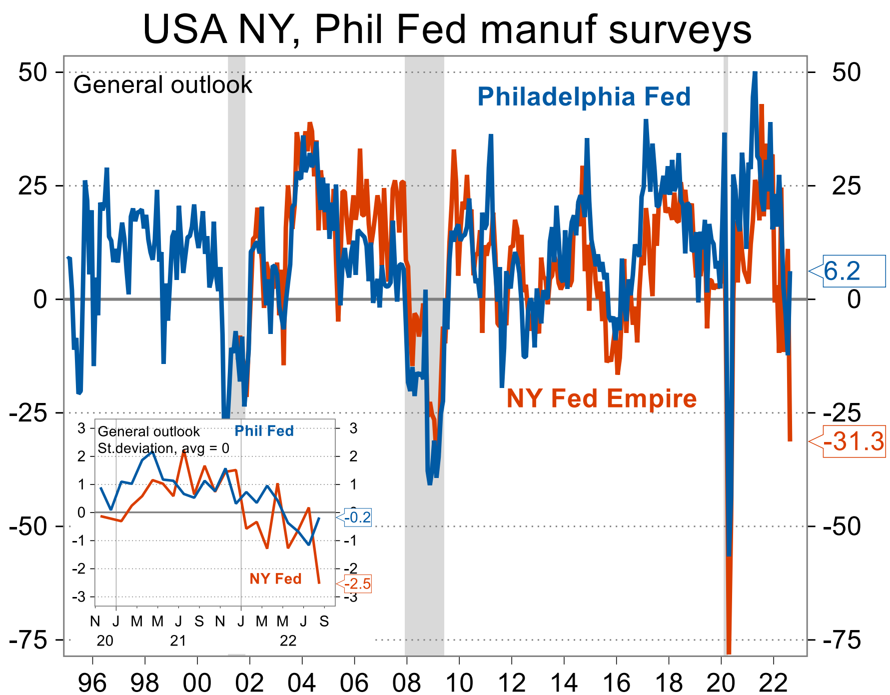
Order inflow signals further growth in production, surveys not

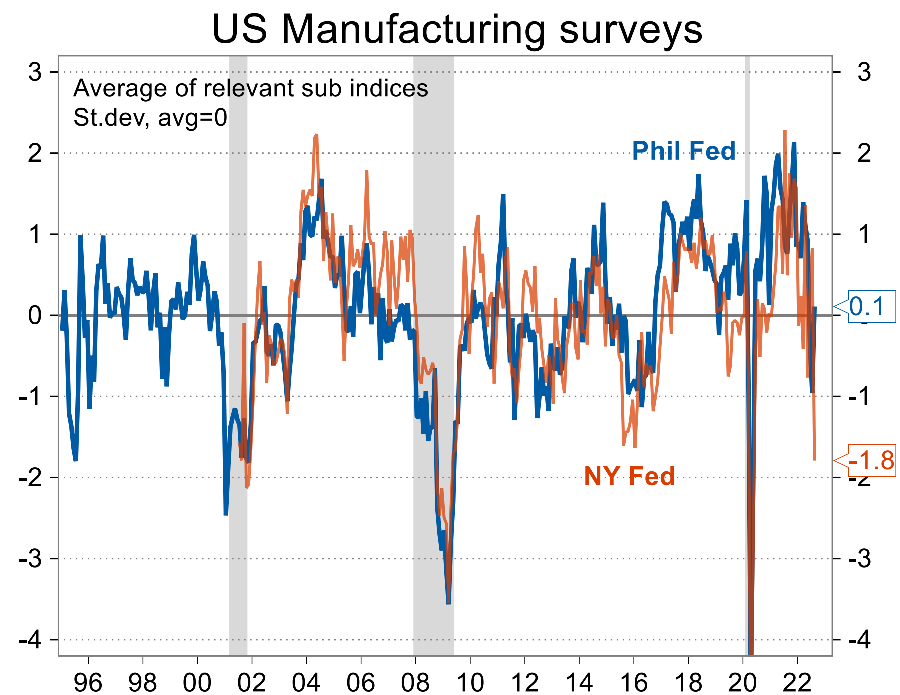




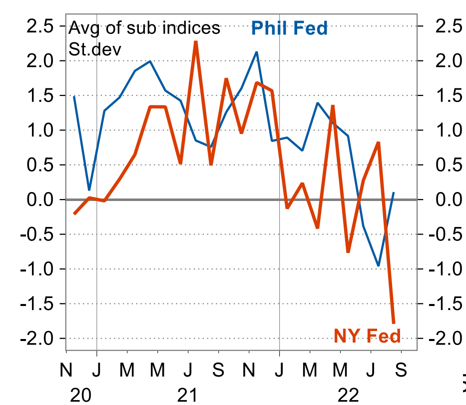
The Philly Fed survey up to an avg. level, NY Fed's deep into a recession level

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





- **NY Fed Empire State manufacturing index** all of the sudden fell by 42.4 p to -31.3 in August, expected UP to +5!. The index fell from an average level to -2.5 st.dev below average. The decline was the 2nd largest ever (just Apr-20 was even worse), and the index has been lower just some few months in 2009, and in Apr-20
- **Philadelphia Fed's manufacturing index** surprised on the upside, up to +6 from -12, expected up to -5
  - » The details were in sum upbeat too, but new orders are still declining and the outlook is deemed to be very weak. Price inflation is slowing rapidly, as in the NY survey
- **Taken together:** close to a recession signal



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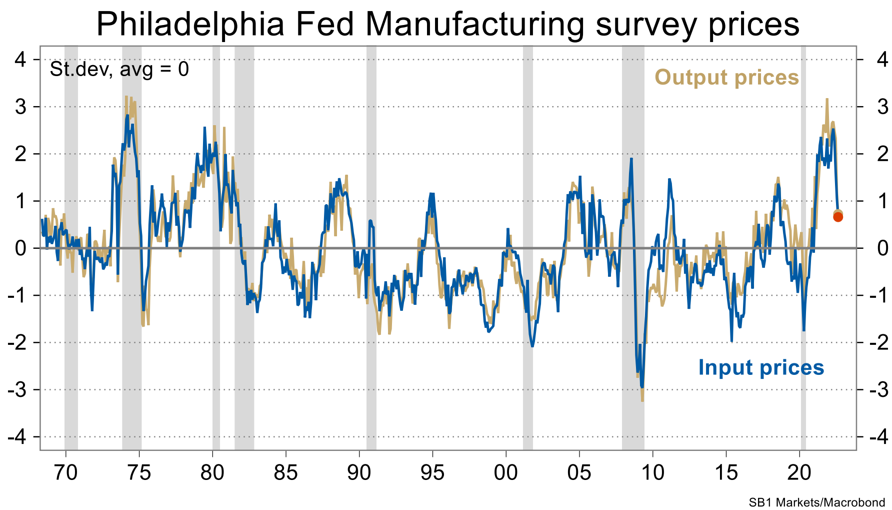
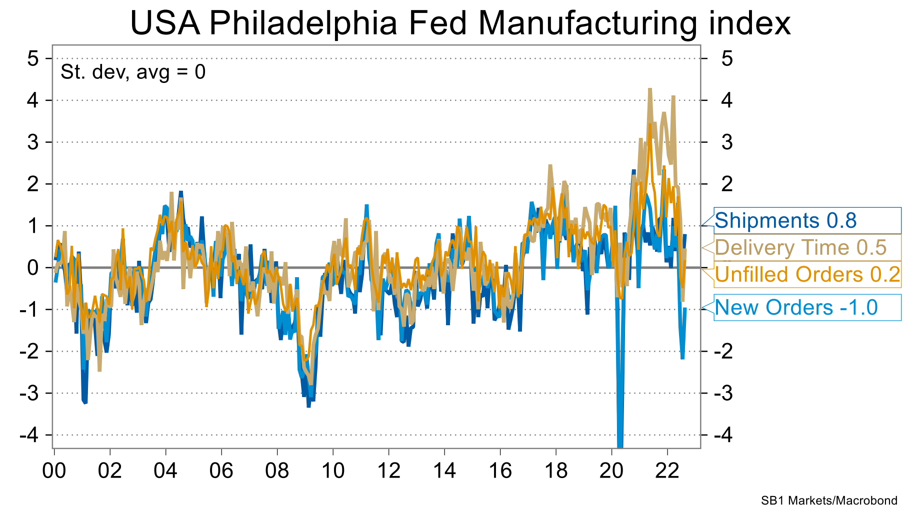
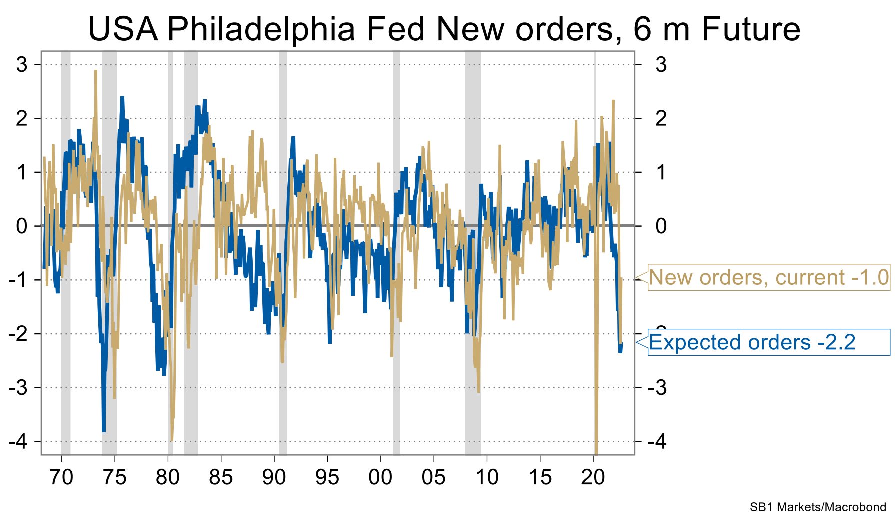
Phil Fed: New orders still down but not as in July. Expectations are still weak

Shipments and delivery times rose. The really good news: Price inflation is slowing rapidly



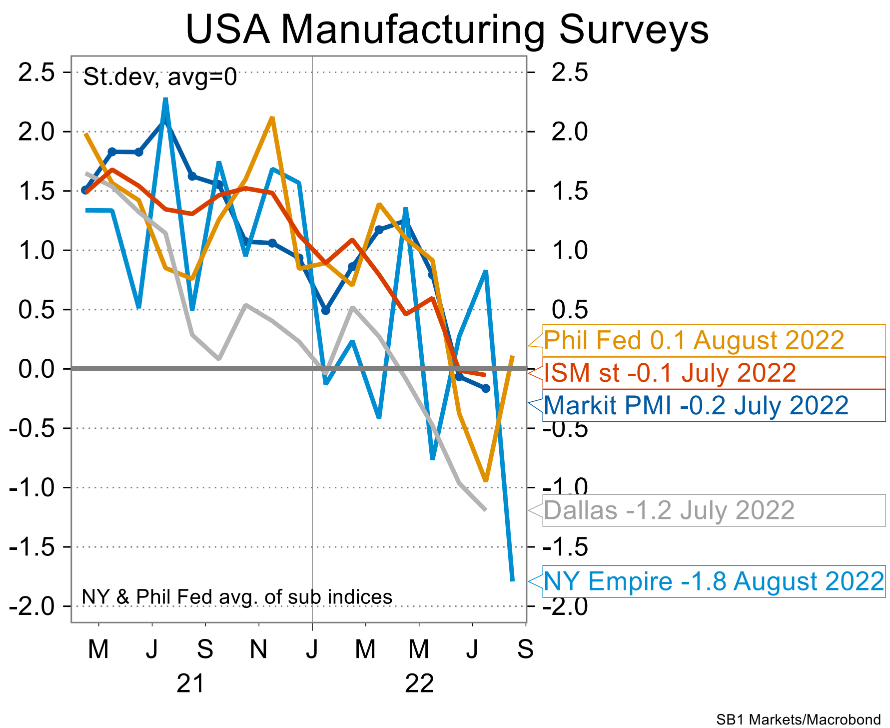


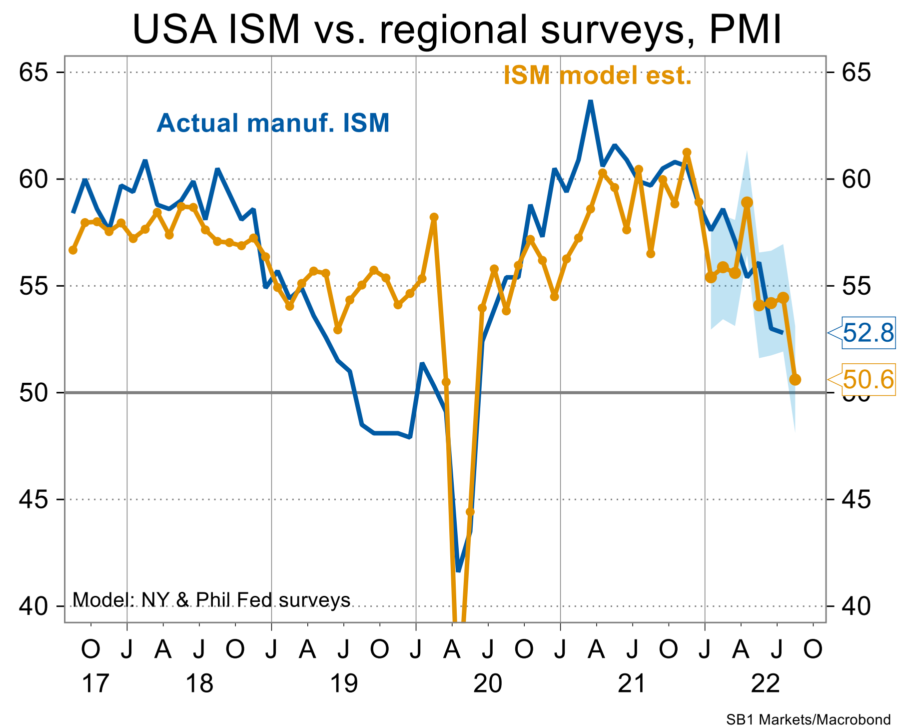


- **The new orders** index fell almost 3 st.dev in June and July, but recovered 1 st.dev in August – However, it is still 1 st.dev below average. Expected orders are 2.2 st.dev under wager, which happens only before or in recessions
- **Shipments** rose in August, and delivery times rose again, somewhat surprising
- **Price indices** are still signalling price increases, but not that much more than normal, the indices are 0.7 st.dev above par

Towards another decline in the ISM? The NY Fed survey was a warning shot

However, the NY Fed survey is rather volatile (which is taken care of in our model)

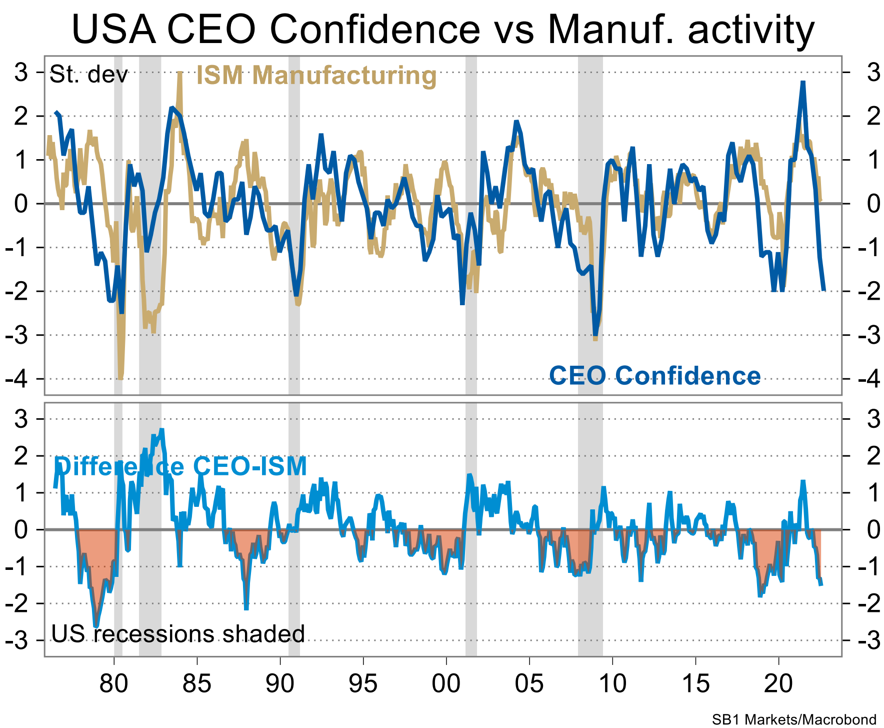


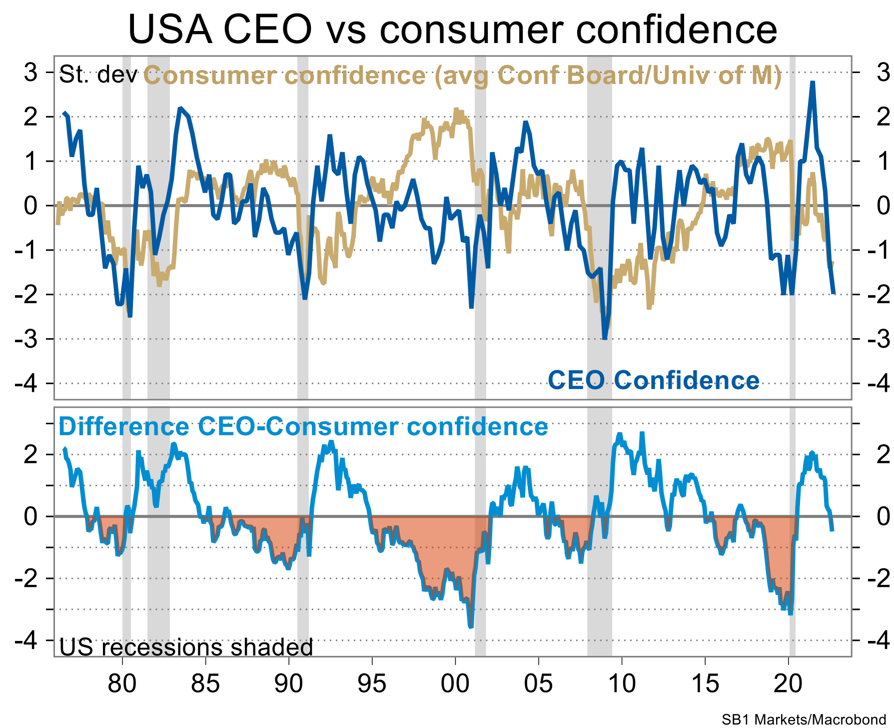


- Big picture: Growth is slowing sharply but manufacturing indices do not signal that the economy has entered a recession (even if order indices are really worrisome)

CEOs are looking down, probably for good reasons

Households are pessimistic too (at least the Univ. of Mich. survey). Businesses (ISM) still too upbeat?

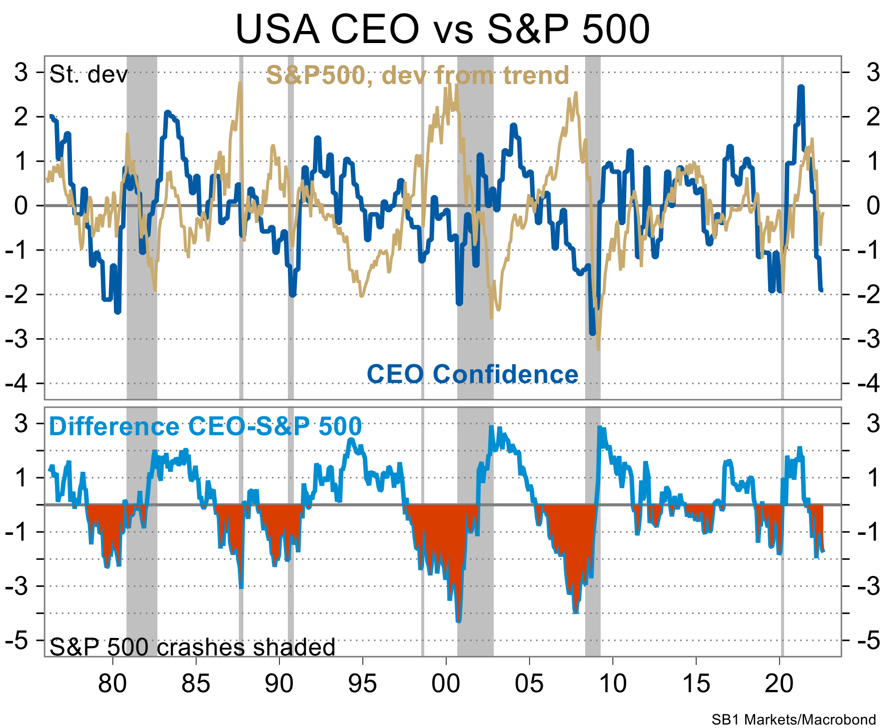




- The CEO confidence survey fell further in Q2, down to -1.1 st.dev below par, from +0.3 in Q1
- Normally, a weaker confidence corresponds to lower business investments

CEOs are more downbeat than the equity owners

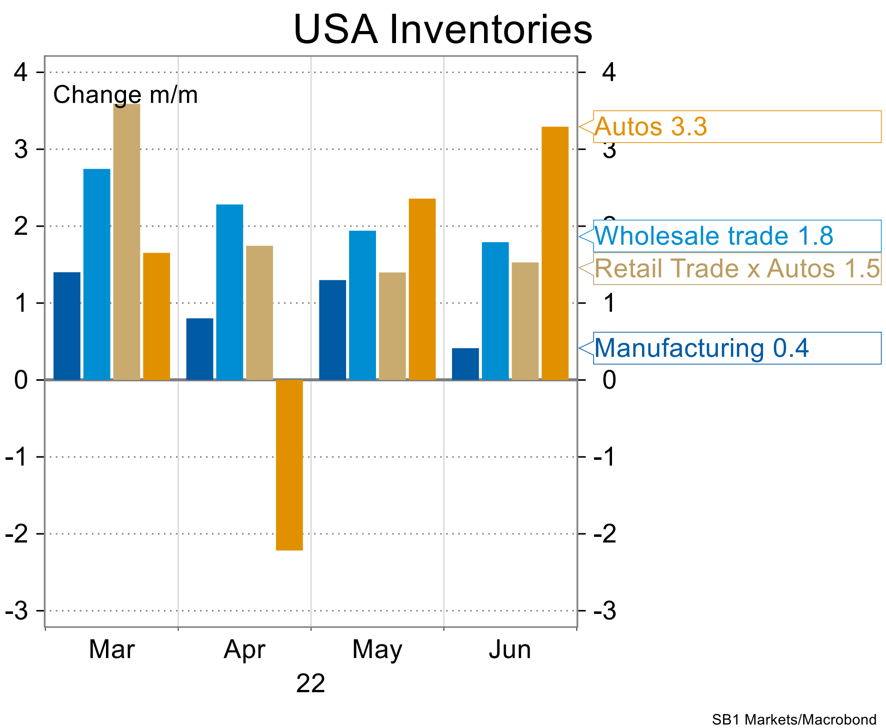
Before all previous S&P crashes, the CEOs have become downbeat before the market took notice

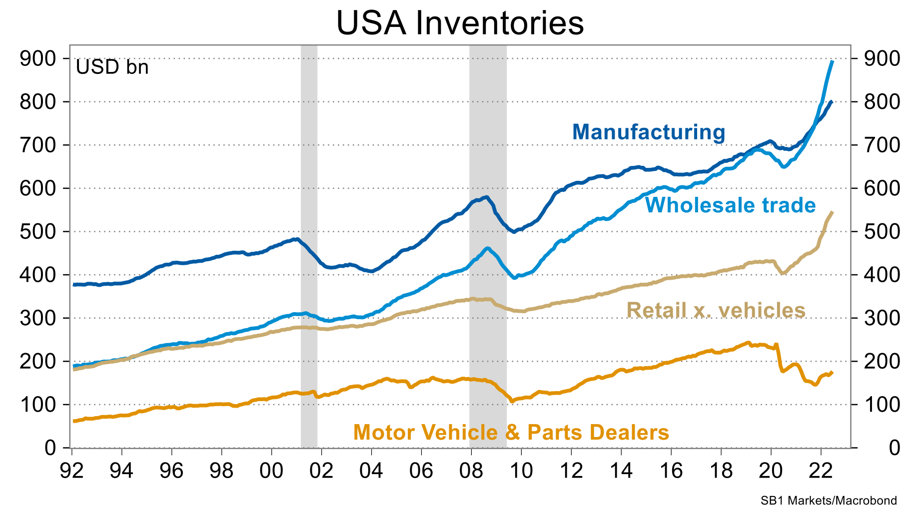


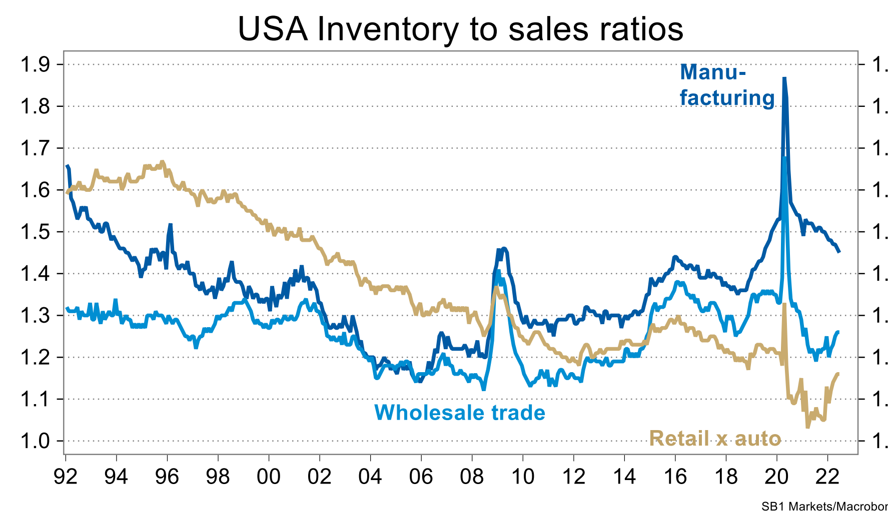
- The red sones at the chart to the left is when CEO's mood sours before the stock market tanks, usually over several years (and the CEO survey is thus not a precise timing instrument)
- Now the market has come down at least partially in tandem with the CEO sentiment, clearly a positive sign (considering the alternative, a still very bullish stock market) but following the lift in the market the recent weeks the gap is pretty large again
- The CEO survey is the best on the way out of recessions – it kicks up immediately, and never with false signals – at least if the threshold is set a crossing the average level (st.dev = 0)

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

Inventories in trade are not very high vs sales but growth in inventories will very likely slow



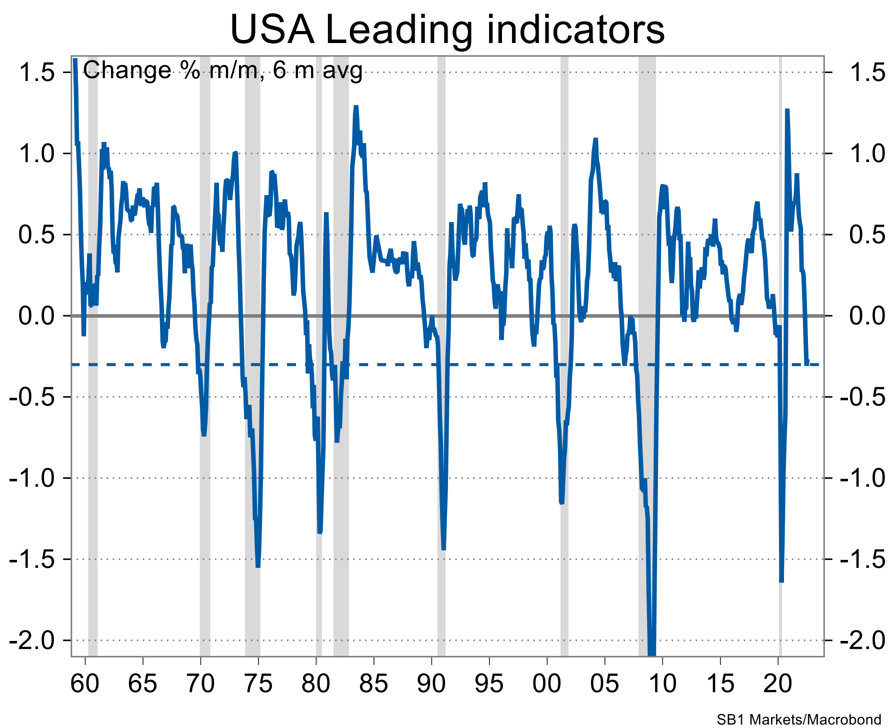


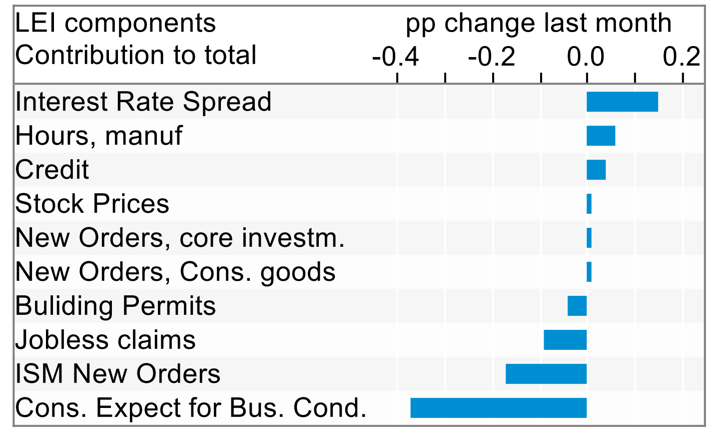


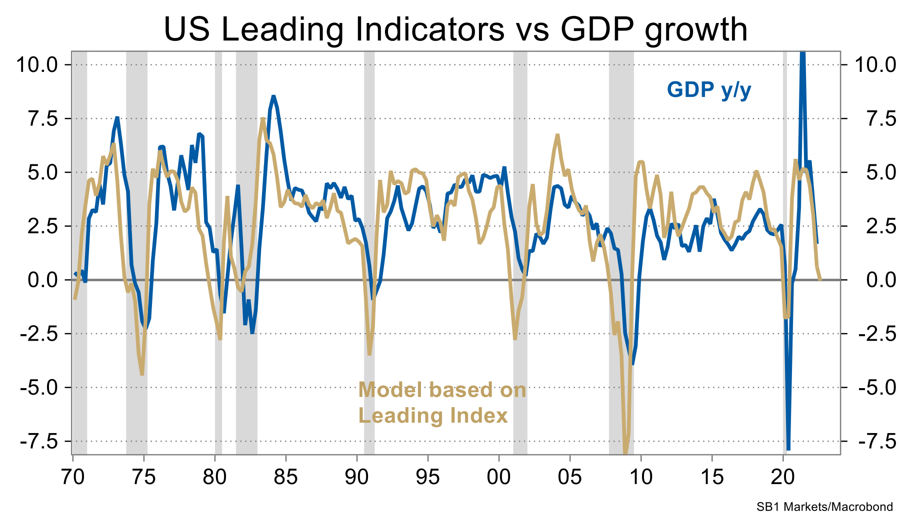
- Inventories in the **manufacturing sector** are falling vs. sales, from a high level – probably a substantial potential for lowering inventories from here

The Leading Economic Indicators suggest US is in or close to a recession

A 6-month avg at June's -0.3% level detected 8 of the 8 past recessions, just ½ false positive, no false neg



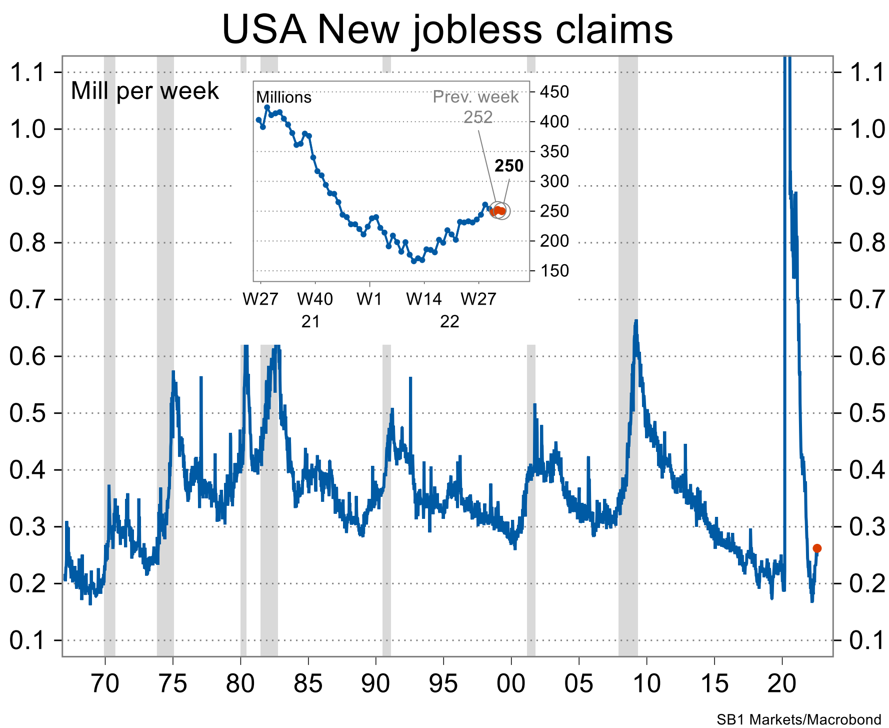


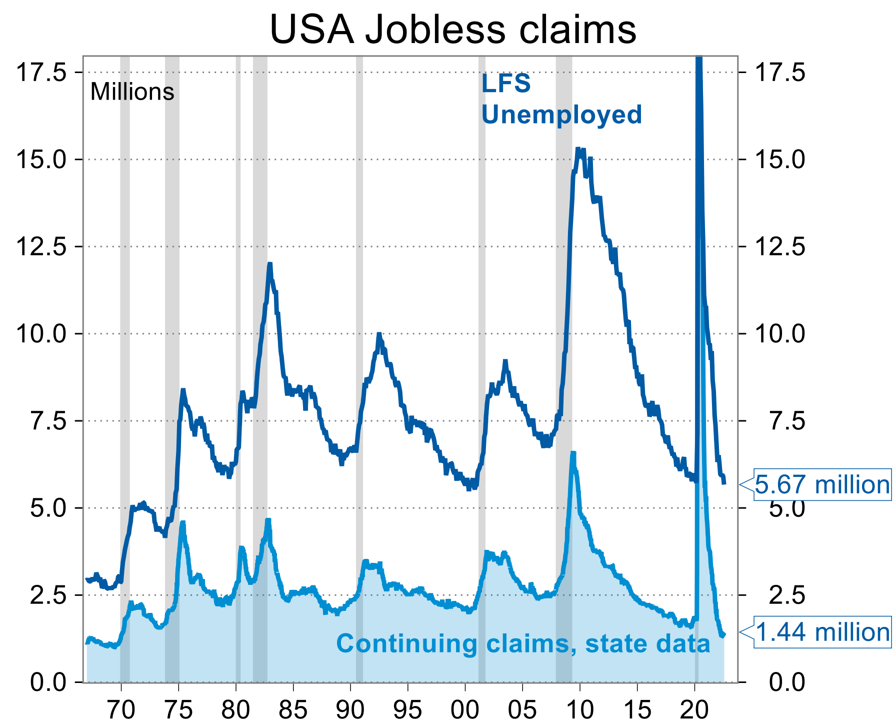


- The LEI fell 0.4% in July, 0.1 pp less than expected, following the 0.8% drop in June
- The 6 m average is unch. at -0.3%. The LEI has fallen to this level 9 times since 1965
  - At 8 occasions the US economy was very close to or had entered a recession, the 9th took place 1 year before the 2007-recession started
  - Thus, the LEI 6 m avg at -0.3 'detected' all 8 recessions since 1970, and barring the 2006-signal, no false positives (and no false negatives, at least since 1970. In 1960, US entered a recession without any clear warning sign from the LEI

New jobless claims up like before recession but no further increase recent weeks

New claims are on the way up, normally not a signal of strength…





- **New jobless claims** fell by 2’ in week 32 to 252’ (but from a 10’ downward revised level the prev. week!) Since the bottom in week 11 in mid-March, the weekly inflow has increased by 84’, from 166’ – which was the lowest level since 1969
- **Ordinary continuing claims** is has increased marginally from the rock bottom – and is up by 140’ to 1.44’ a remarkable low level

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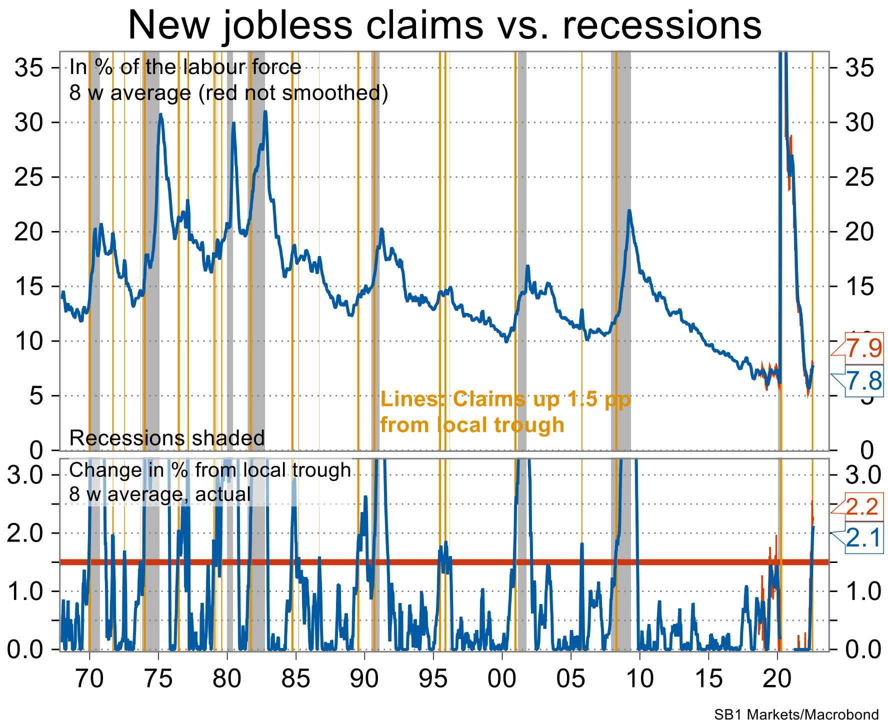
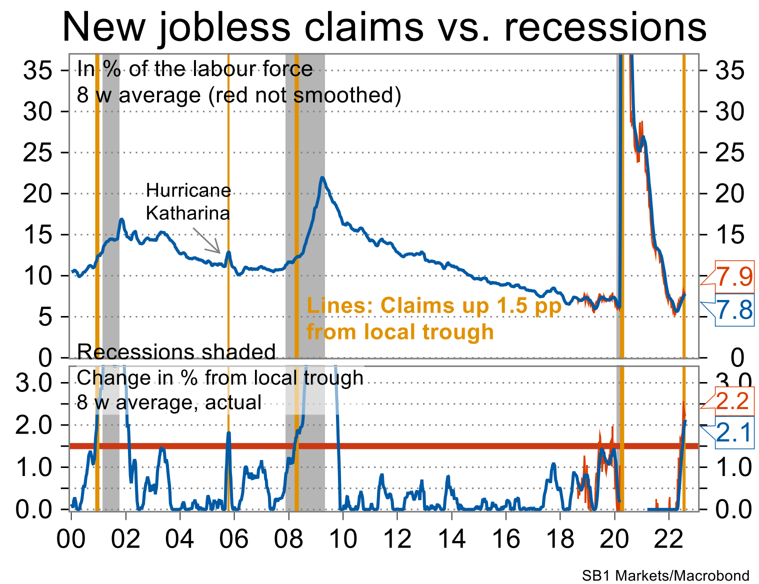
A warning line is drawn:

The lift in the 8-week average crossed an important threshold (4 weeks ago)

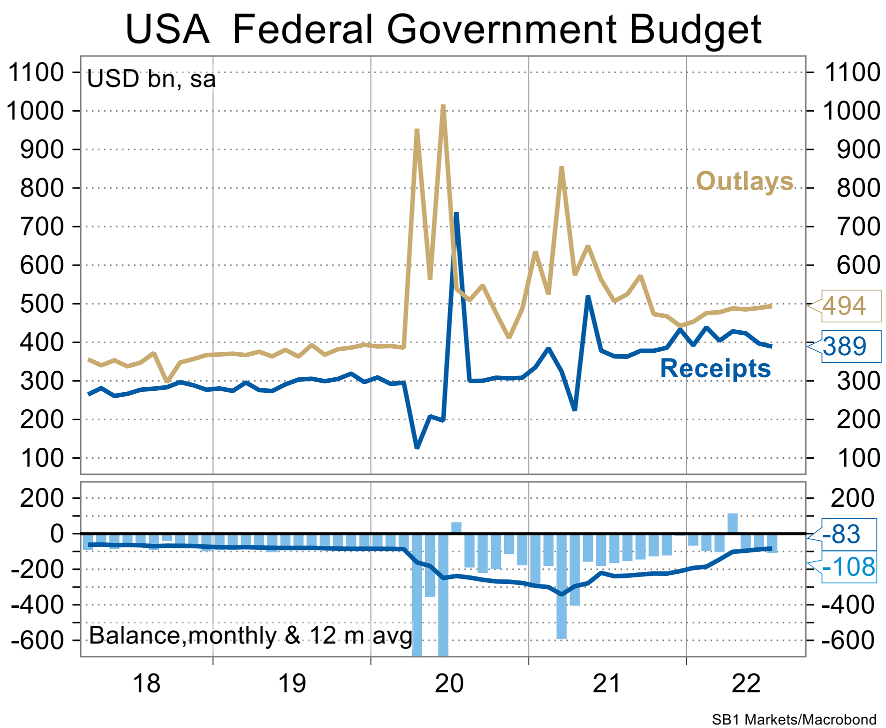


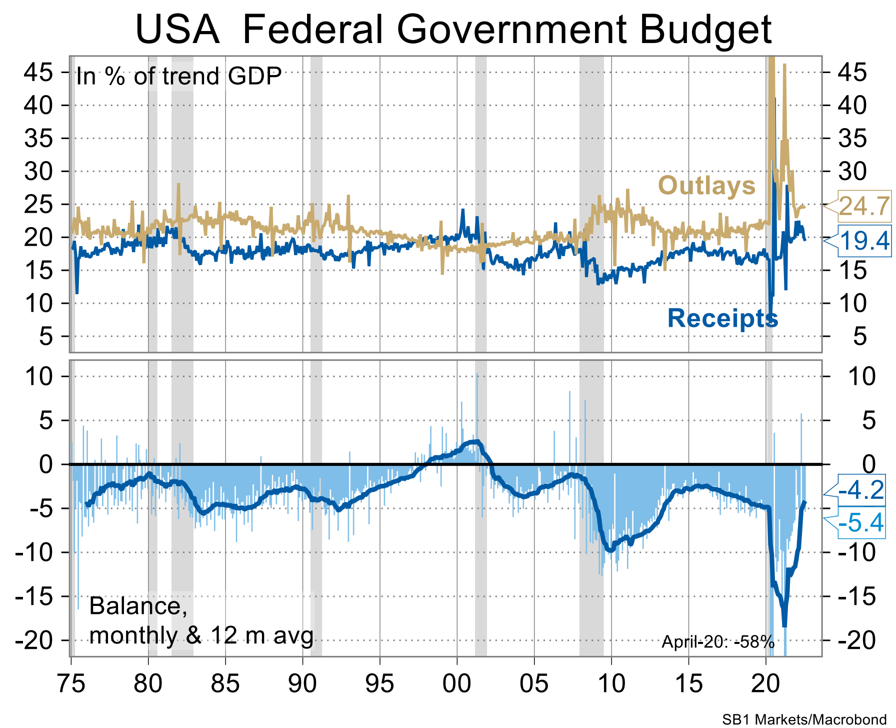


- The yellow lines: New jobless claims (8-week average) up 1.5 pp vs. the labour force
- Now, the average is up 2.1 pp, unch. from the previous week. Thus, a yellow line is now drawn at the charts above, for the first time since 2005 (Hurricane Katharina), without a recession around the corner (the lines in 2008, 2020), and before that in 1996
- Our recession signal model based on new jobless claims has sent several false signals (false positives), and even the correct signals often comes too late for a real time conclusion. Even so, the inflow of new unemployed persons is tightly correlated to the economic cycle – and the cycle is now weakening (Lifting the threshold to say 2% would strengthen the signal/noise ratio substantially. We may be there pretty soon)

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

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

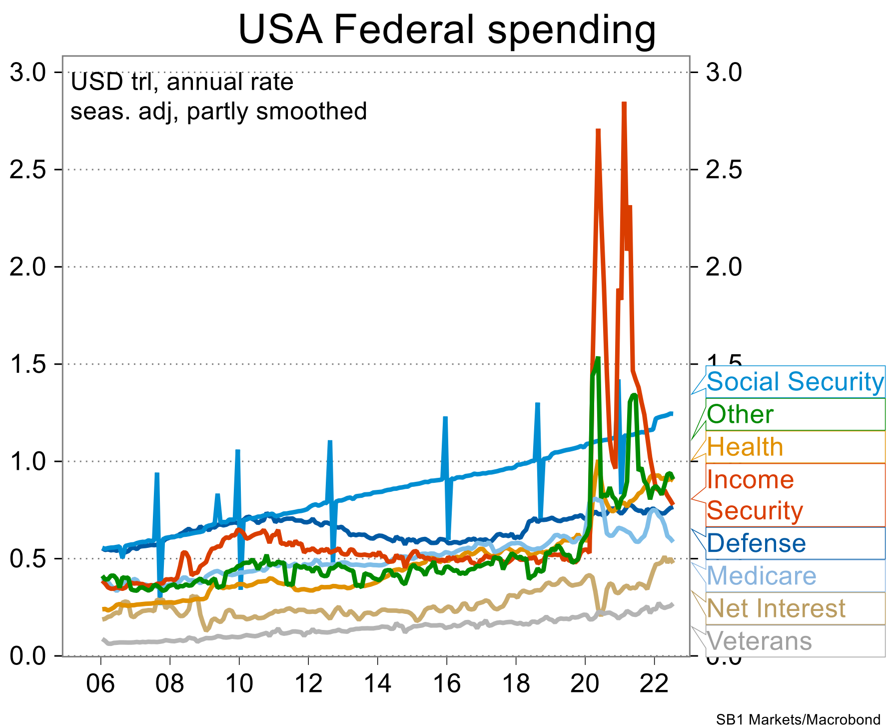


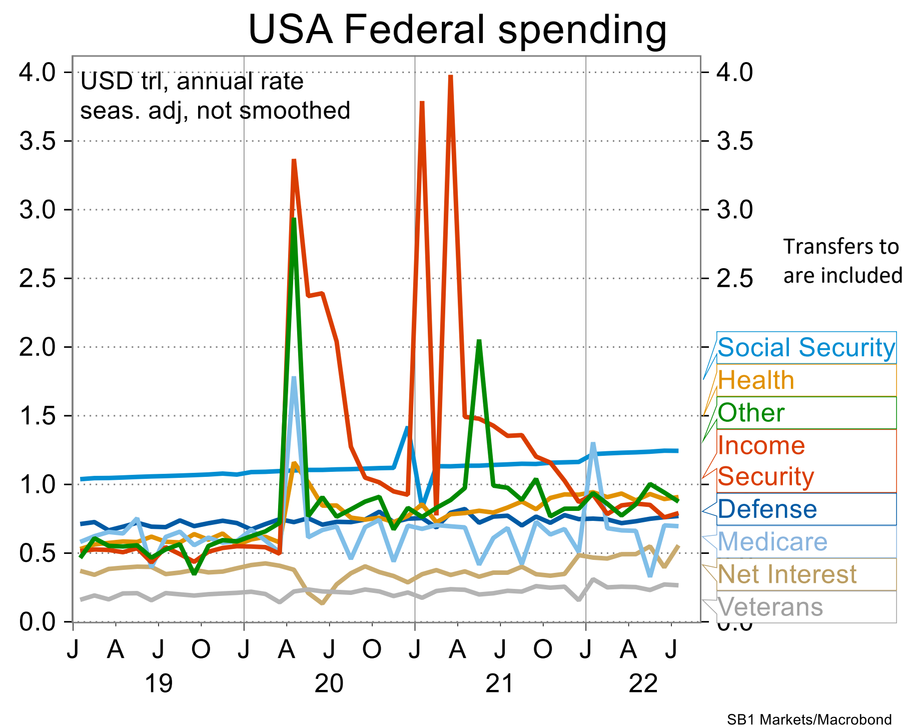


- **Federal expenses** fell through last year but are now trending slowly upwards again – and are 20% above the pre-pandemic level. The expenditures equal almost 25% of GDP, up from 21% – 22% before the pandemic
- **Federal receipts** have recovered sharply since last summer, due to robust growth in GDP and employment. Now, revenues are flattening, or declining slightly. Revenues are up 30% vs the late 2019 level. Revenues equal 19% of GDP, which far above the pre-Covid level at some 17%
- The actual **deficit** was just USD 211 bn in July, or USD 83 seas. adj, or 5.4% of GDP. Over the past 12 months the Federal deficit has equalled 4.2% of GDP. Before corona, the federal deficit also was at close to 5%. In a booming economy, the budget should of course have been in surplus, now even more than before the pandemic

Income security & 'other' spending (much to states) on the way down, still high

Net interest rate payment have increased by 1/3, equalling 0.5% of GDP





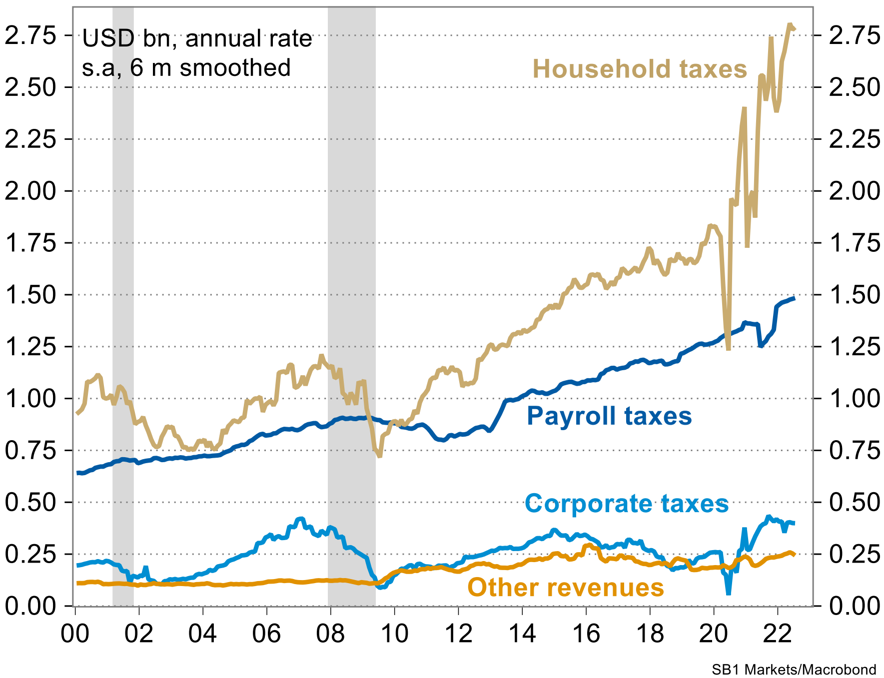
Transfers to local gov. are included in others

- Both Income security and 'other spending' are well above the pre-pandemic level. Health spending is up too

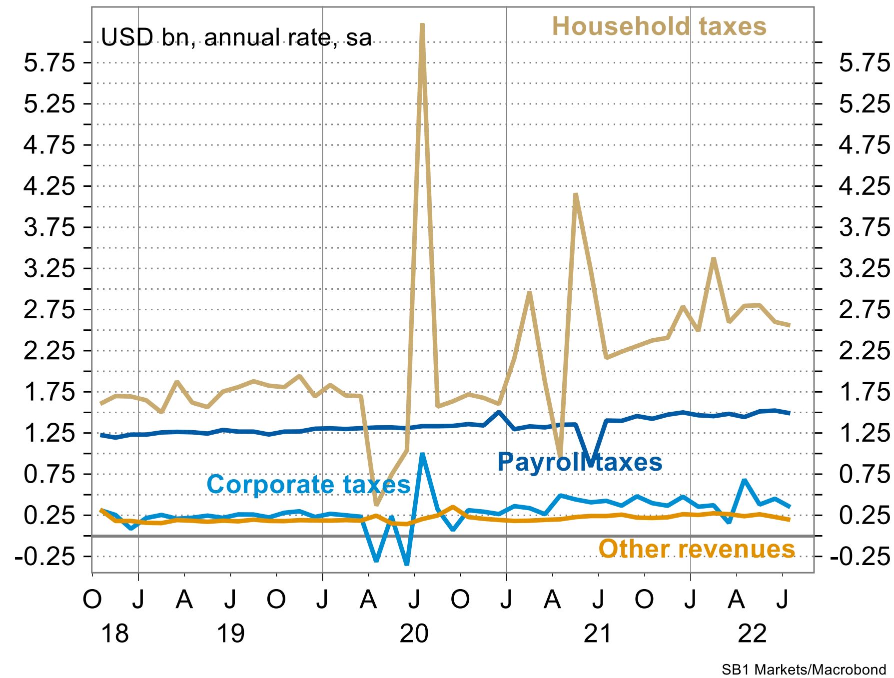
Tax revenues are remarkably higher than before the pandemic

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

USA Federal Revenues

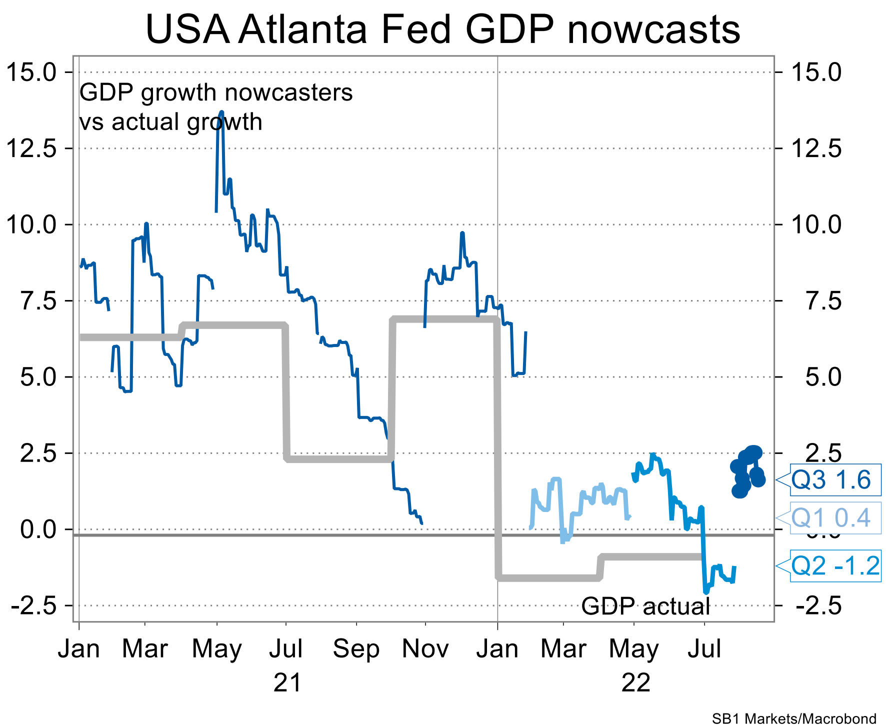


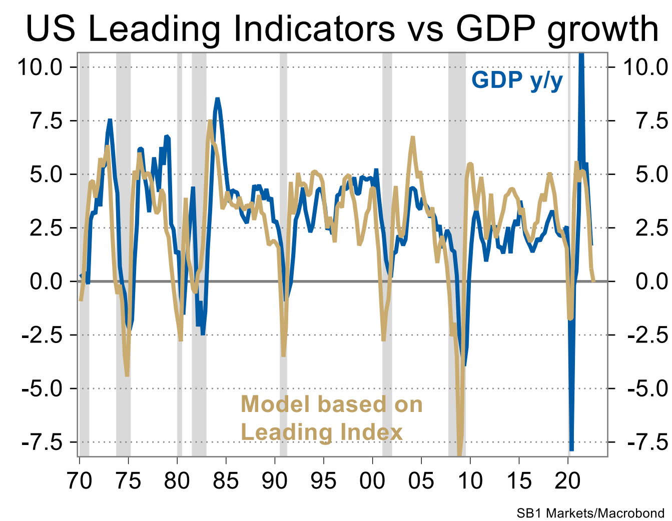
USA Federal Taxes

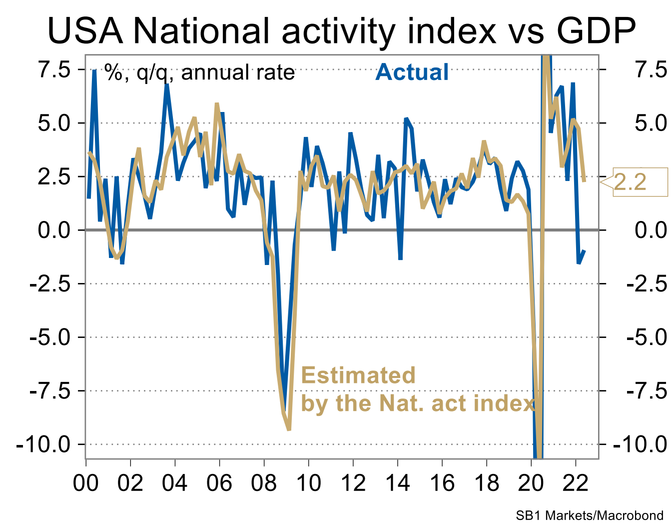


Atlanta Fed's nowcaster was right on Q2 GDP. Now it reports 1.6% growth in Q3

However, leading indicators are signalling no growth in Q3



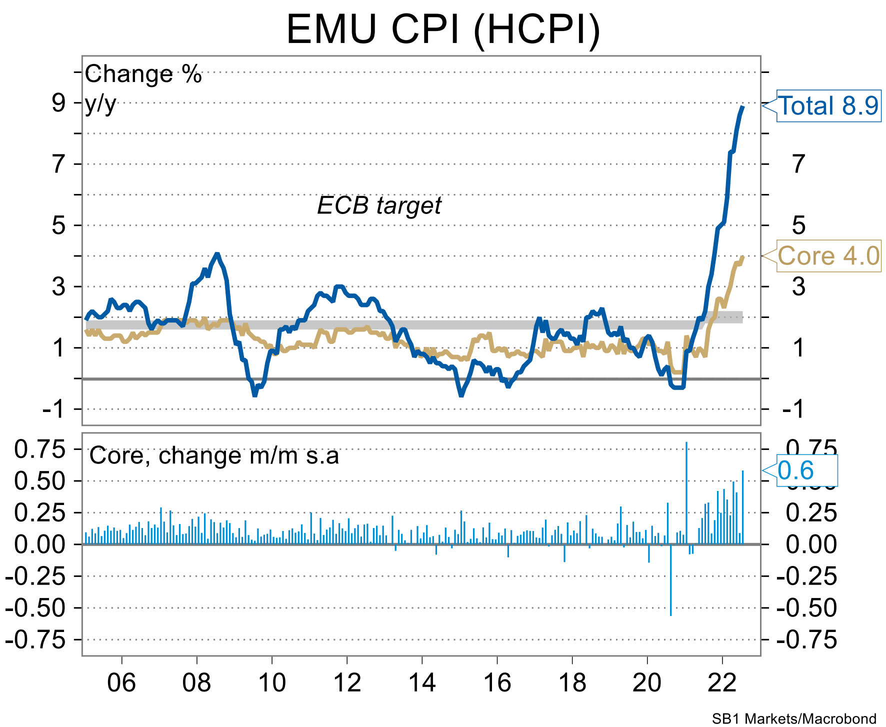


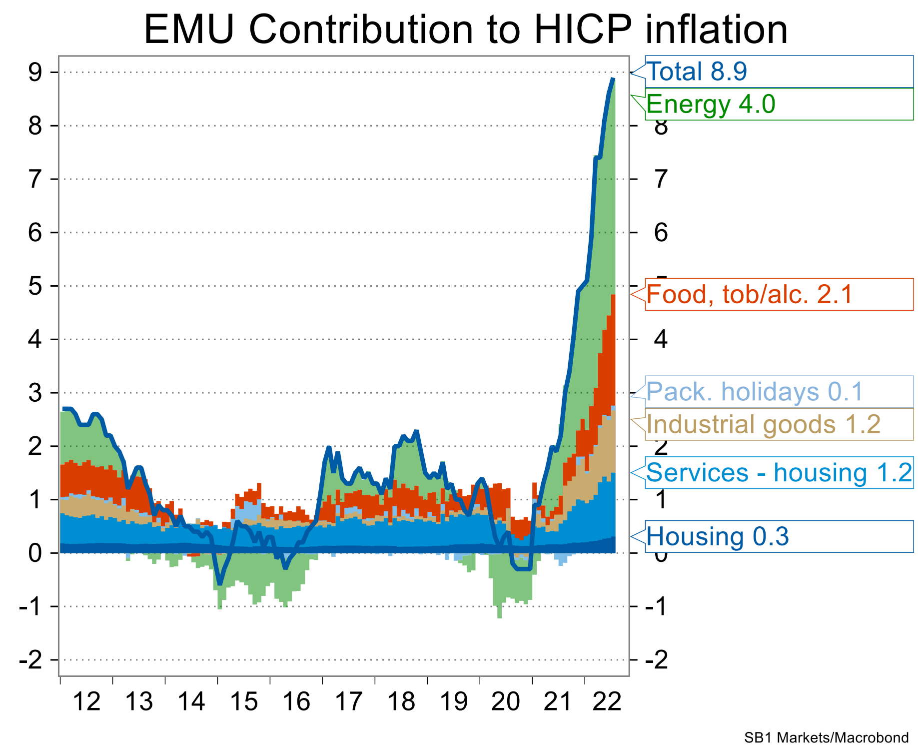


- **In a quarterly model**, the National Activity index (a 3rd nowcaster) suggested a 2.2% growth pace in Q2, way above any other forecast and way too optimistic. In May and June alone, a 1% growth signal was sent
- **In Q2 GDP** fell 0.9%

The July 8.9% headline inflation confirmed, the core at 4.0%

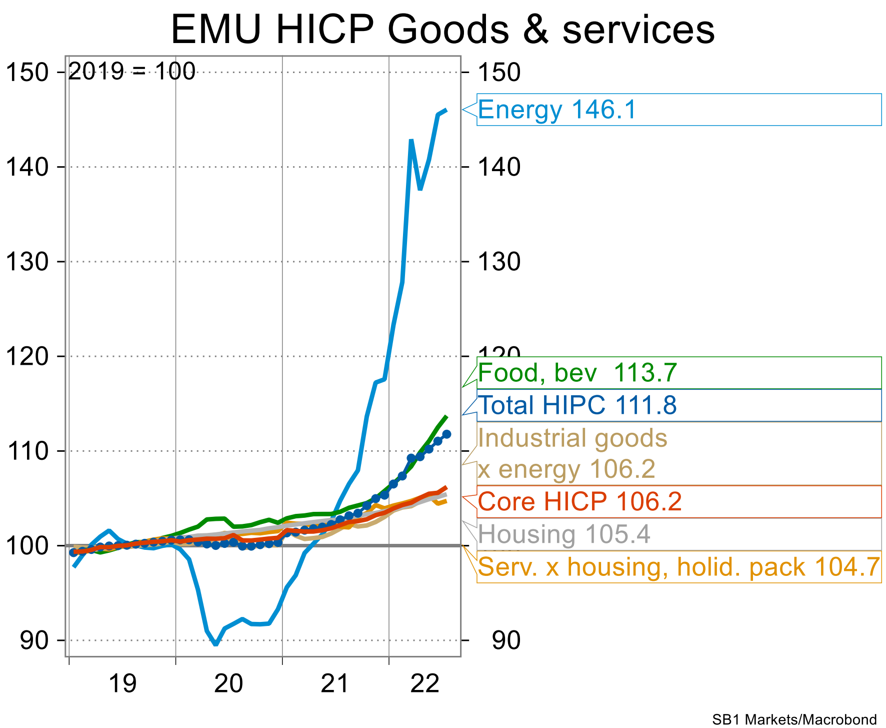
The headline index up 0.7% m/m, the core 0.6%, the 2nd highest ever

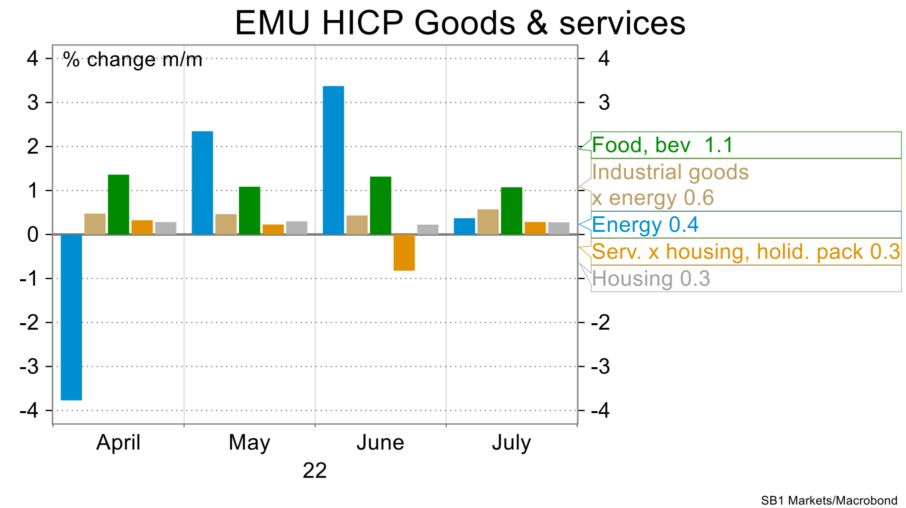


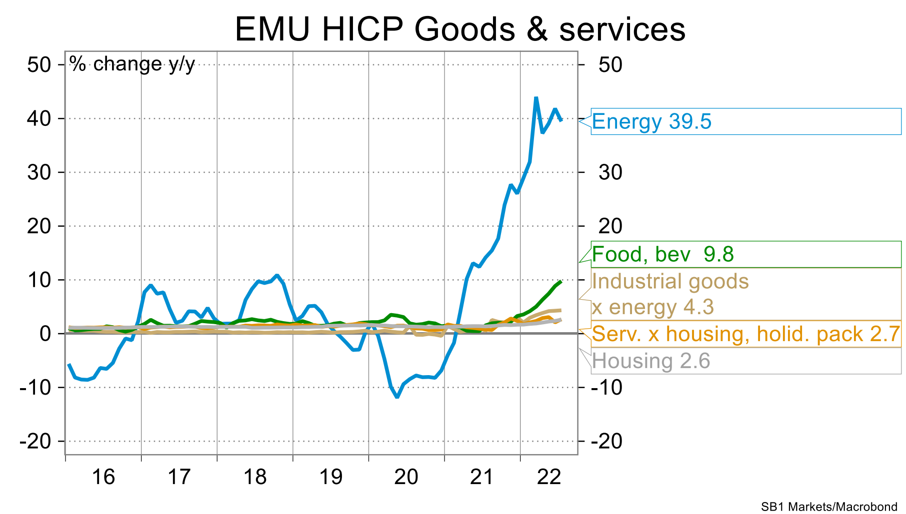


- **Energy prices** directly explains 4 pp of the headline at 8.9%. In July energy prices flattened, but given the surge in gas prices, the coming months will be challenging, to put it mildly

Energy prices in the lead, by far. Food prices are climbing >1% m/m, up 9.8% y/y



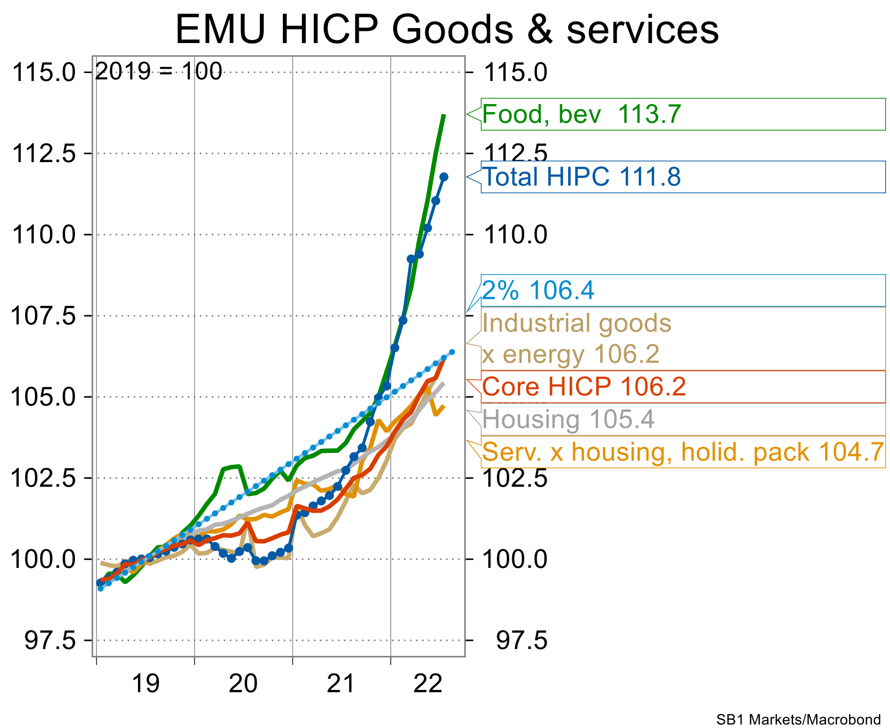


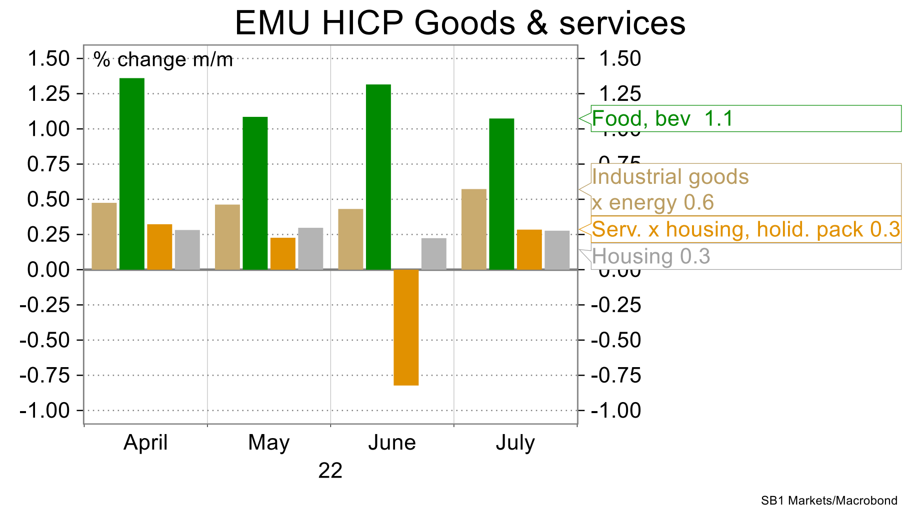


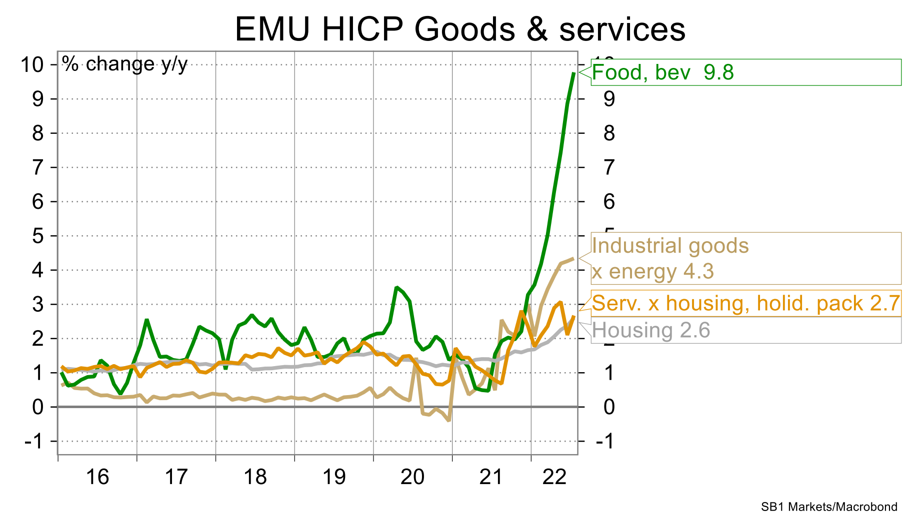
- But the peak is behind us, check two pages forward

And prices ex energy and food are accelerating too

Industrial goods x energy at 4.3% y/y, and services ex housing 2.7%. Housing is up 2.6%







- Industrial goods prices increased by 0.6% in July, and are up 4.3% y/y. Still, these prices are just up a 2% path since 2019 – and the annual growth rate may decline the next months, given the surge in mid 2021
- Service prices (ex housing, holiday travel) rose 0.3% in July, and these prices are below a 2% path vs the 2019 level. Transport and hotels/restaurants have contributed on the upside last year

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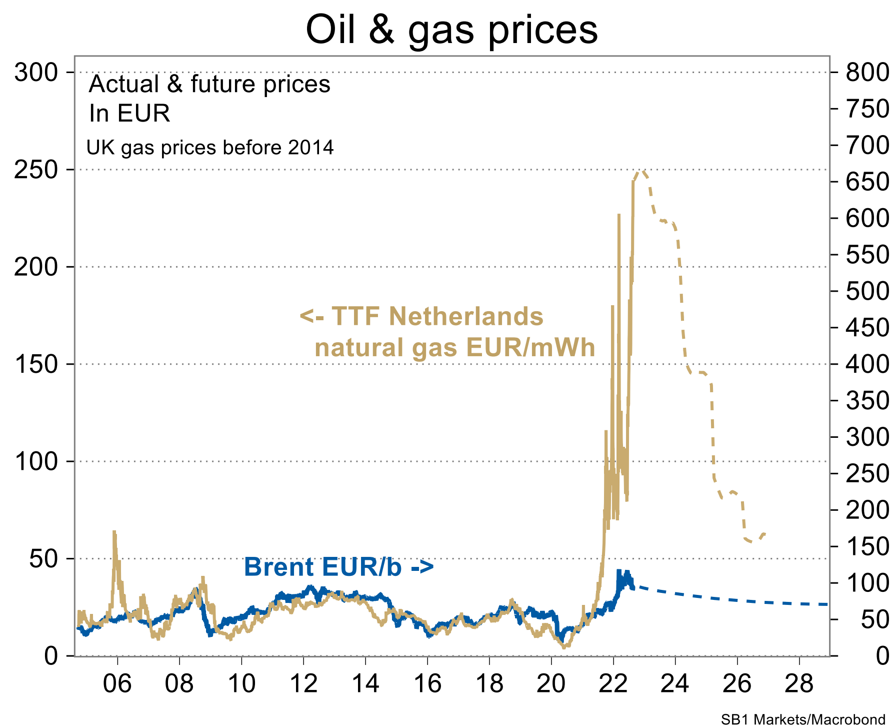
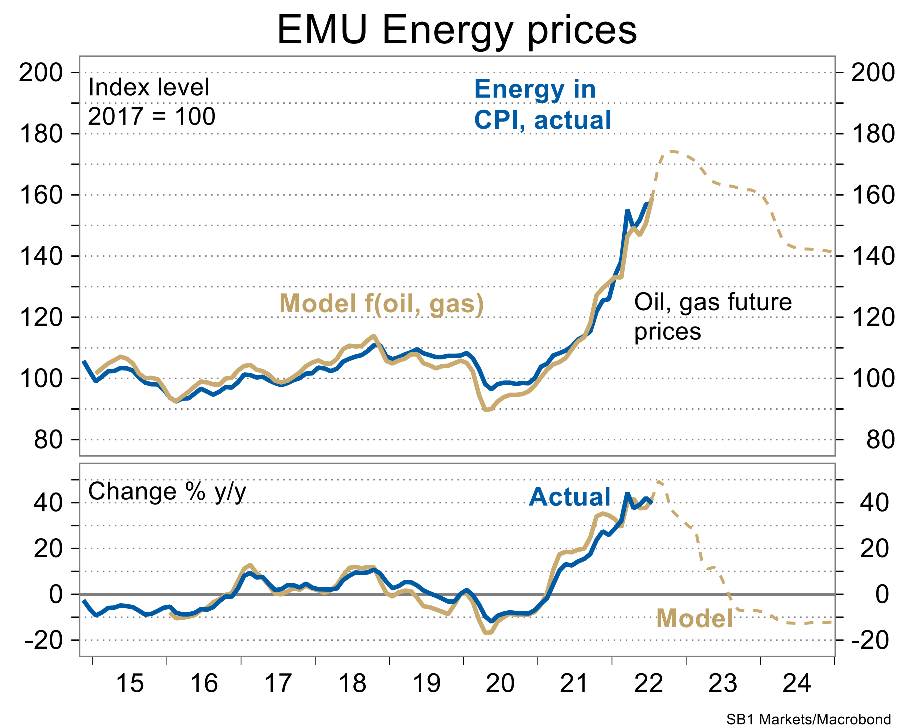
Gas, oil prices have lifted 'energy CPI inflation' up to 40% but….

… the peak is still ahead of us, given the surge in gas prices recent weeks



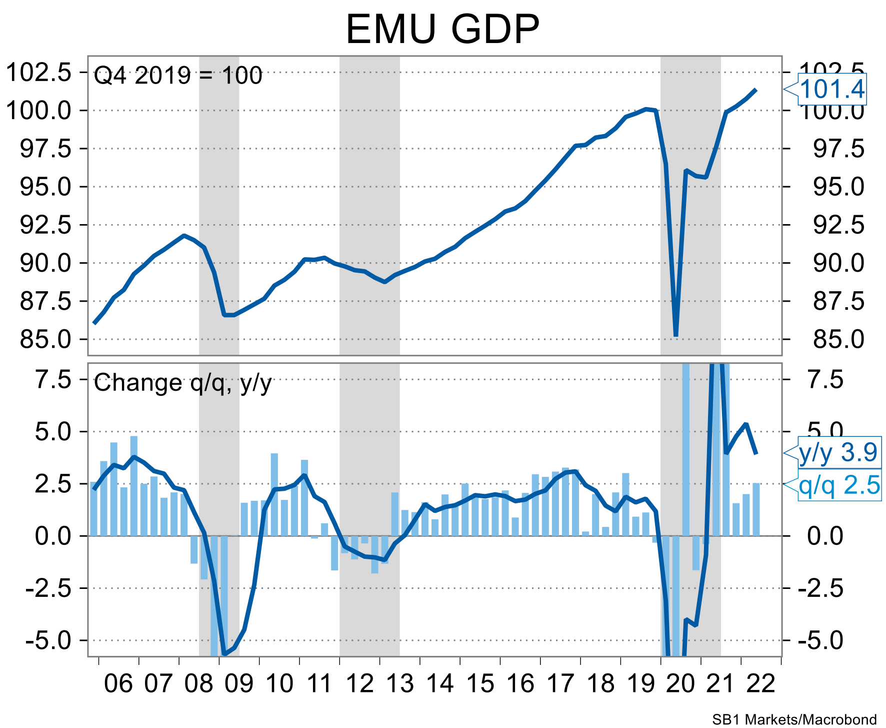


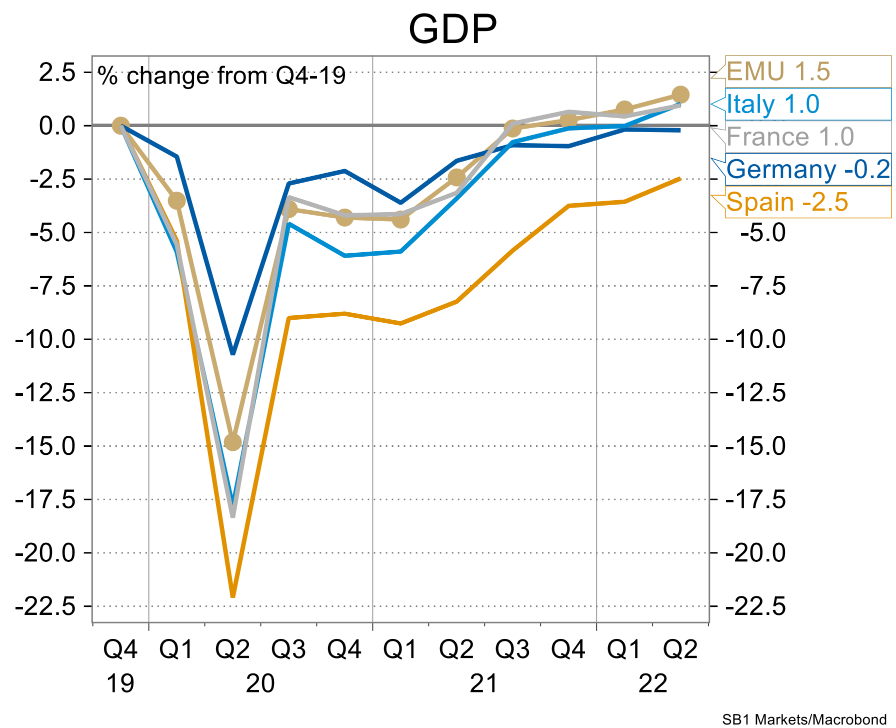
- Futures prices are still on the way up but the peak is well above the July level
  » The risk may be on the upside short term – but the current energy price level is 'impossible'. Both supply and demand will respond –and prices will normalise, we guess faster than the market now anticipates

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

Q2 GDP growth marginally revised down, but still up 2.5% q/q

Italy and Spain contributed the most (4%, 4.4%), France grew 2%, while <u>Germany stagnated</u>

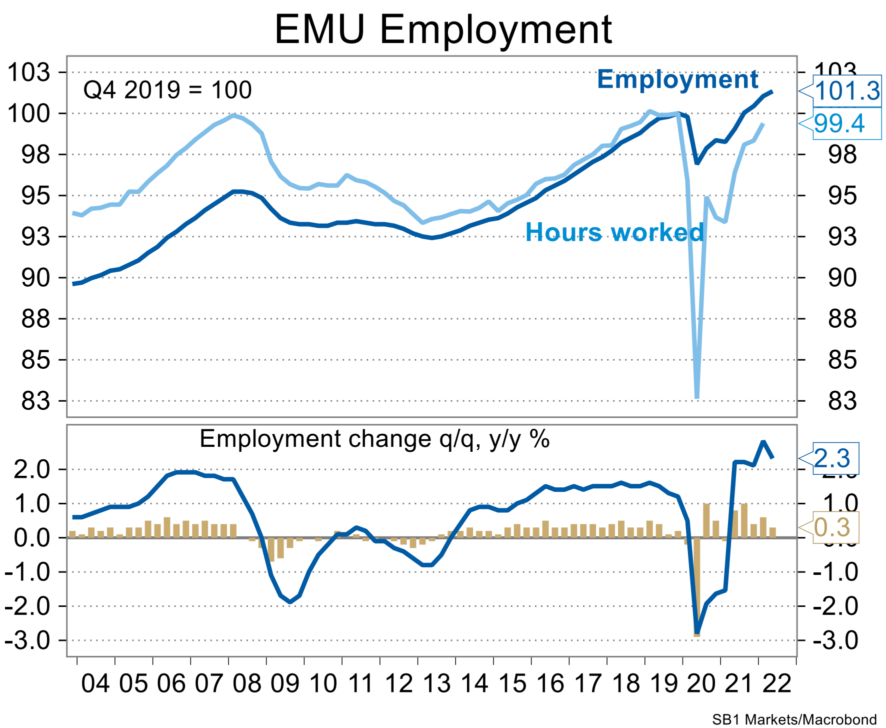


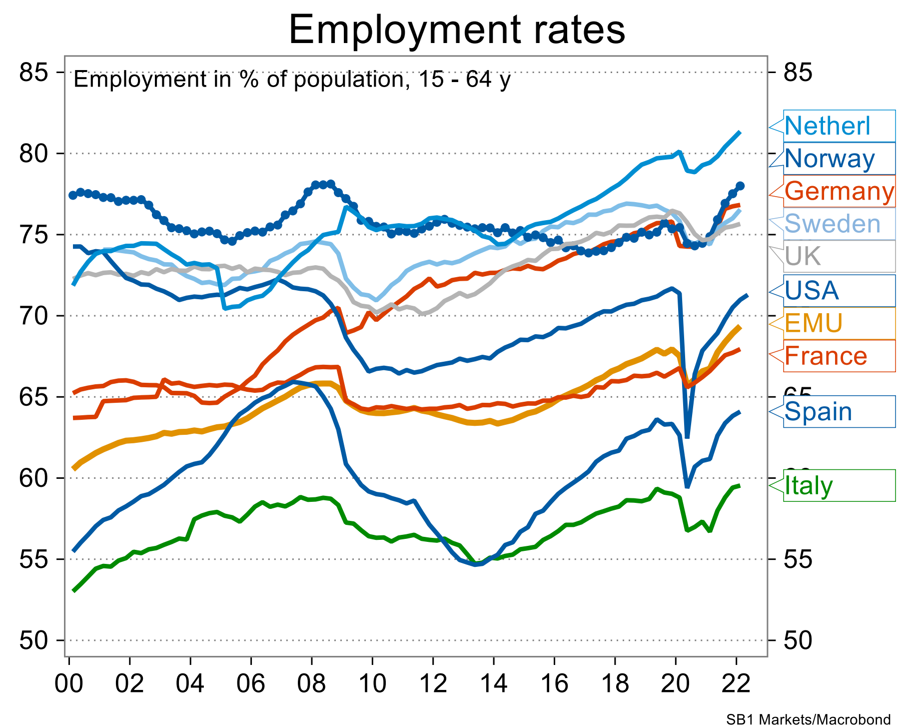


- GDP grew 0.6% in Q2, initially reported 0.7% (or 2.5% vs. 2.8% at an annualised ‘US’ pace)
- Spain grew rapidly in Q2, but is still the laggard, GDP is still 2.5% below the pre-pandemic level
- German GDP was flat - and is still down 0.2% vs. Q4-19

Employment slowed further in Q2 but remains impressive

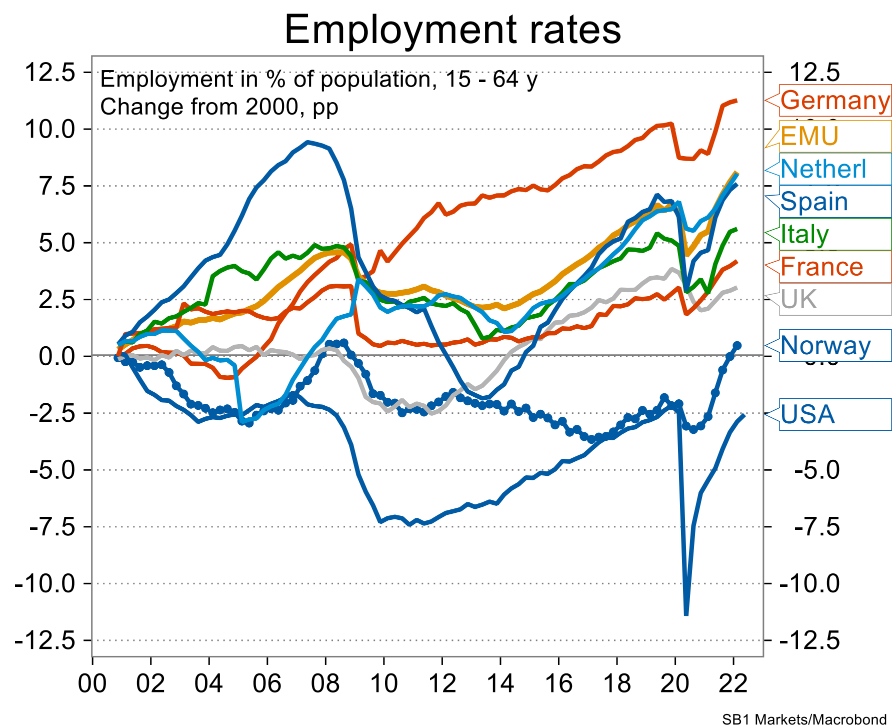
The employment rate is well above the pre pandemic level. Hours worked are not (at least not in Q1)





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

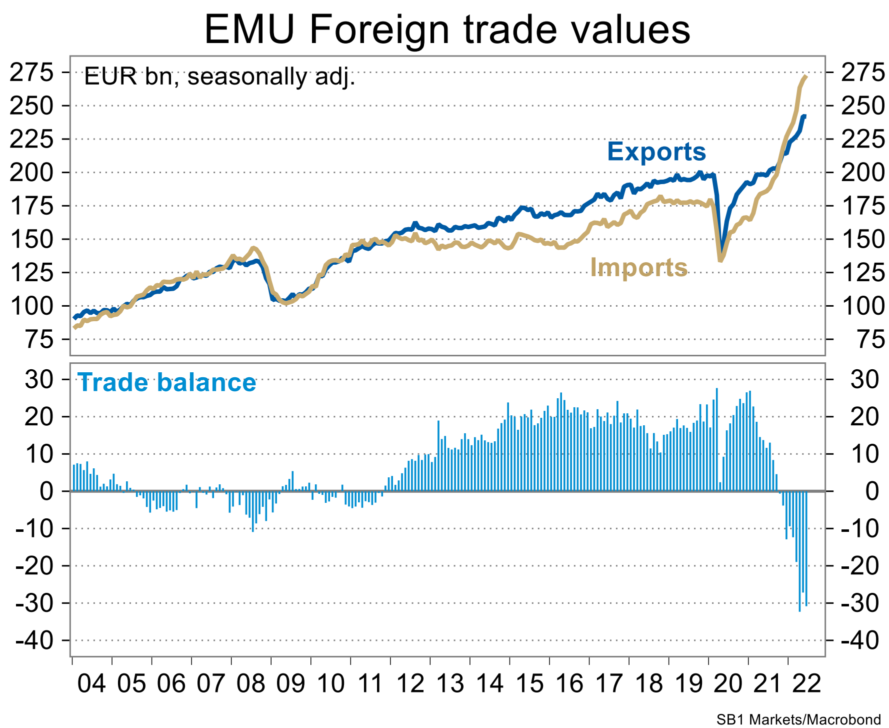
Some interesting changes at the labour markets past two decades

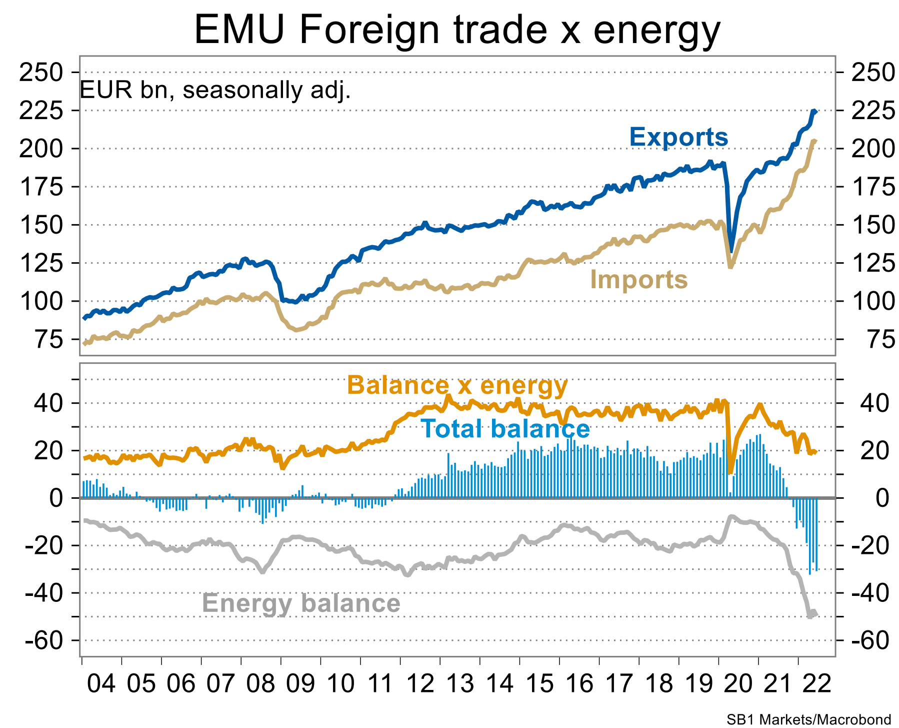


SpareBank 1 MARKETS

Imports are exploding, and just not only due to higher energy prices

The Euro Area is now running a trade deficit at 2.6% of GDP, the energy import costs 4.4%, usually 2%

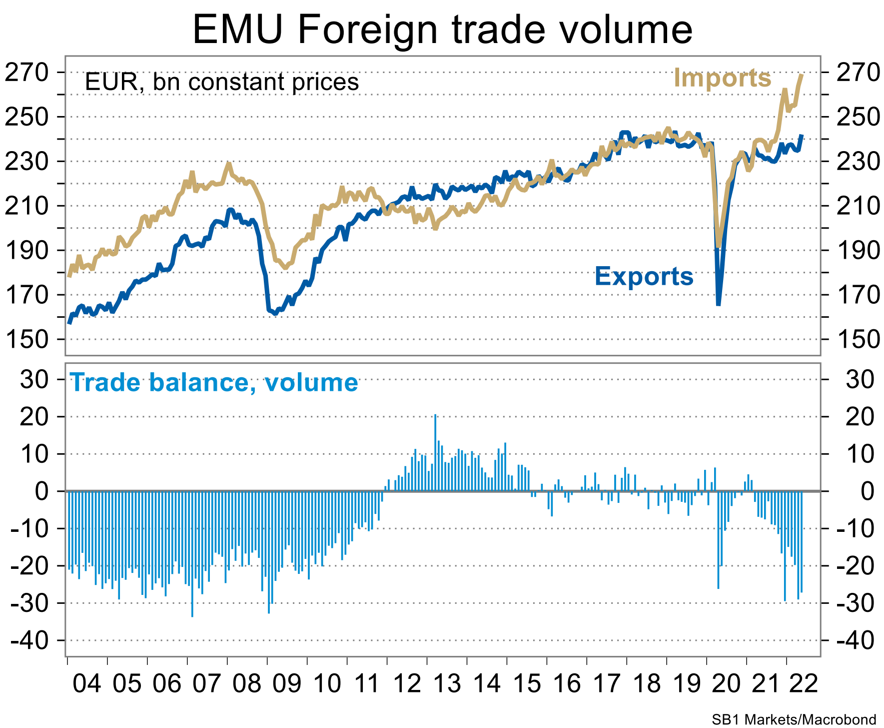




- The trade deficit widened again in June as energy prices soared, to EUR 31 bn, close to the April ATH
- Imports are up 68% y/y, while exports are up ‘just’ 19%. In volume terms, quite another story, check next page

Import volumes up 20% from Feb-20, exports volumes are at the same level

Domestic demand has been strong – and still seems to be

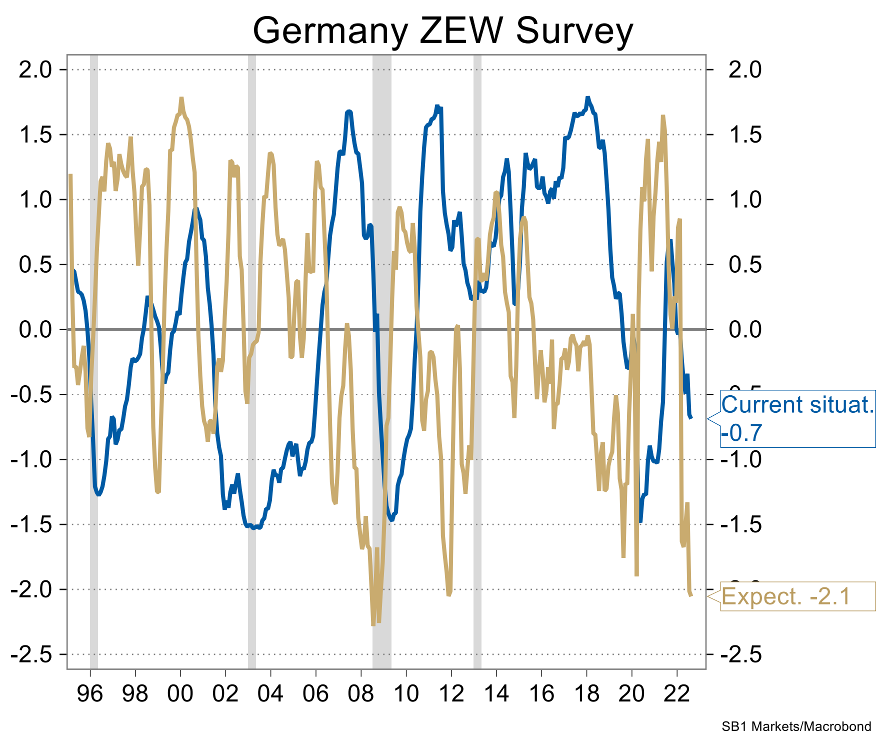


- Import volumes are up 12% y/y
- Export volumes are up 4% y/y

Volume data are lagging value data by one month

ZEW expectations stabilised in August – at a close to record low level

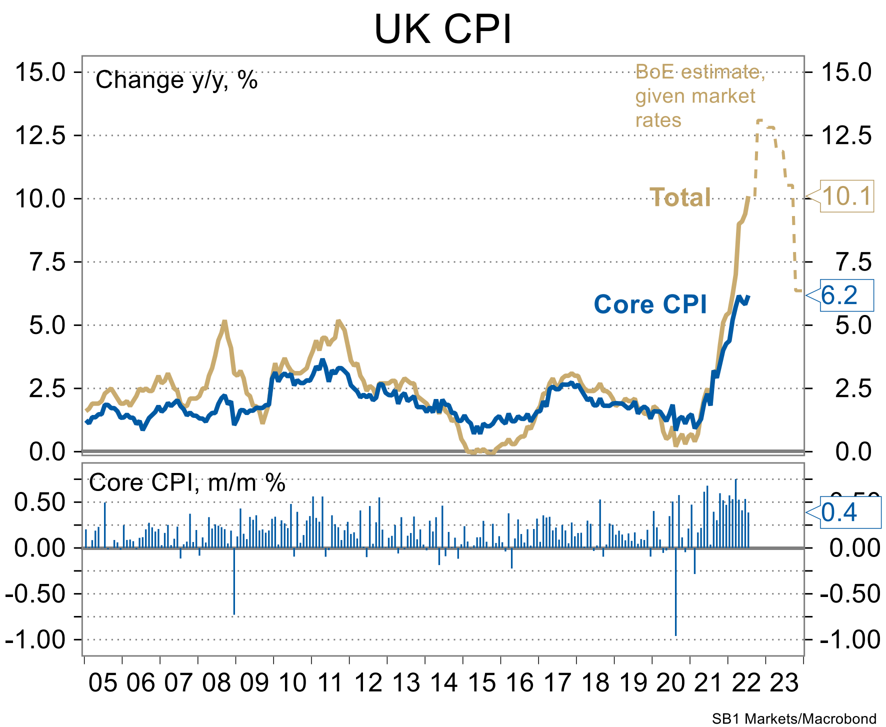
German investors/analysts are extremely negative vs. the outlook; The current situation is weakening

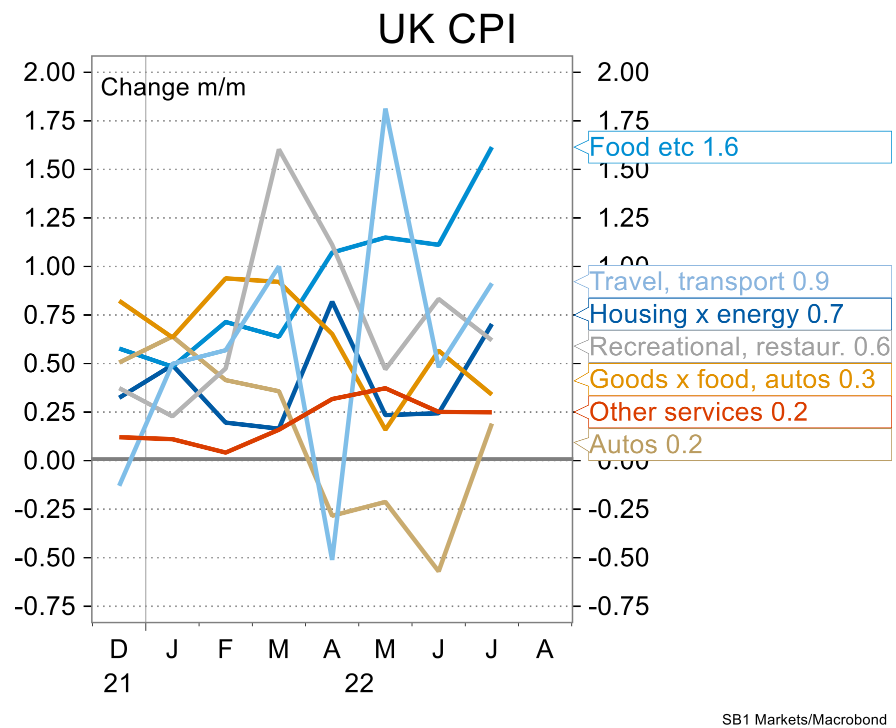


- The **ZEW expectation** fell 1.5 p to -55.3, expected marginally up to 52.7. The level is 2.1 st.dev below average. It has been (slightly) weaker just once, in 2008
- The **current situation** index also fell marginally, and has fallen to 0.7 st.dev below par
- <u>ZEW of course signals a deep recession in Germany</u>

Headline inflation up to 10.1%, the core at 6.2%, 0.2 – 0.3 pp higher than expect.

The core CPI rose 0.4% m/m but is gradually slowing. Food prices are surging

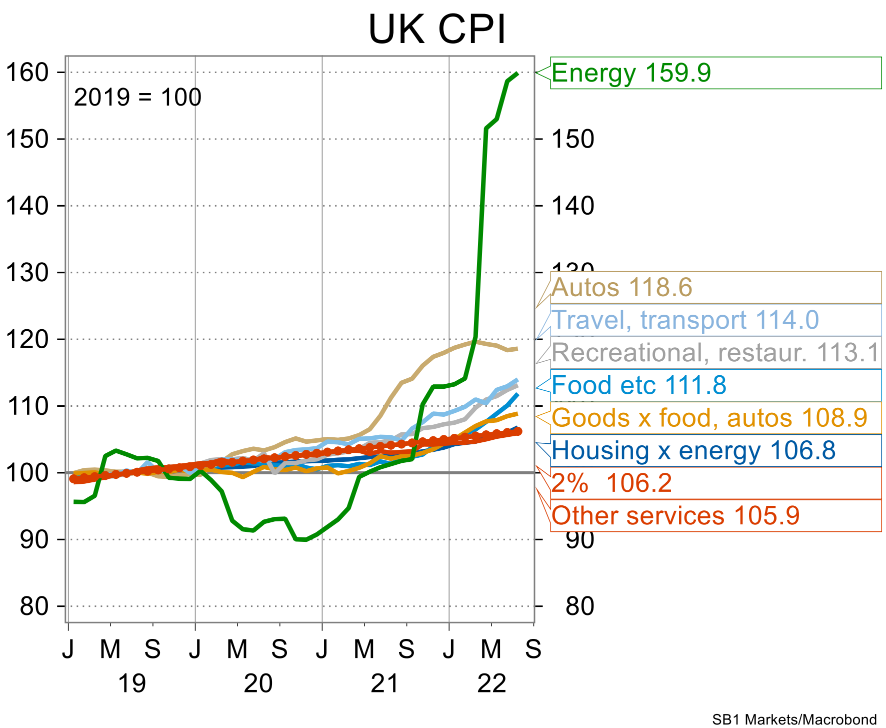


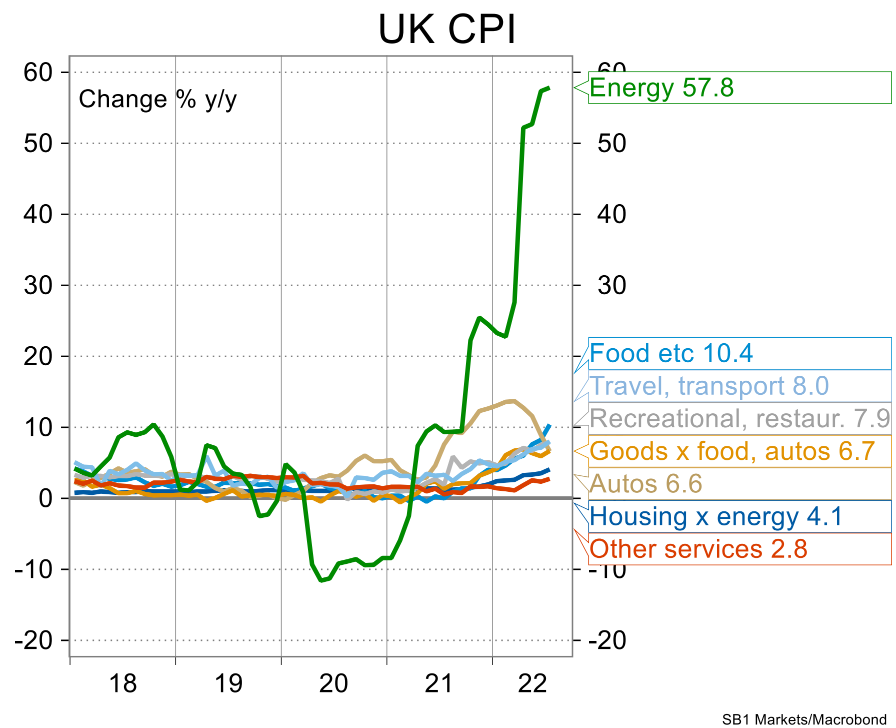


- **The total CPI** rose 0.8% m/m in July, as in June. The annual rate rose 0.6 pp to 10.1%, a 40 y high, expected up 0.3 pp to 9.8%.
- **Energy prices** rose 'just' 1.3% in July but is up by 58% y/y and has lifted the headline y/y rate by 3.8 pp. The regulated price cap for energy was lifted substantially in April (a semi-annual adjustment, the next in October – and then Bank of England expects 13% headline inflation)
- **Food prices** rose 1.6% in July, and they are up 10.4% y/y (like in Norway), lifting the headline by 1.7 pp!
- The **core CPI** (ex food and energy) rose 0.4% m/m well <u>below</u> the norm recent months. The core is up 6.2% y/y, up from 5.9%, 0.3 pp > expect.
- **Auto prices** are now trending down, and price increases for goods x autos & food have slowed too. However, service prices are on the way up
- **All major sectors** are reporting growth above 2%, and almost all up by more than a 2% pace since before the pandemic. This is BoE's problem, inflation is broadening, and are also drive by home-made factors. The gas problem cannot be slowed by the bank, of course

Energy is a main culprit

… but most main components are above the 2% growth path

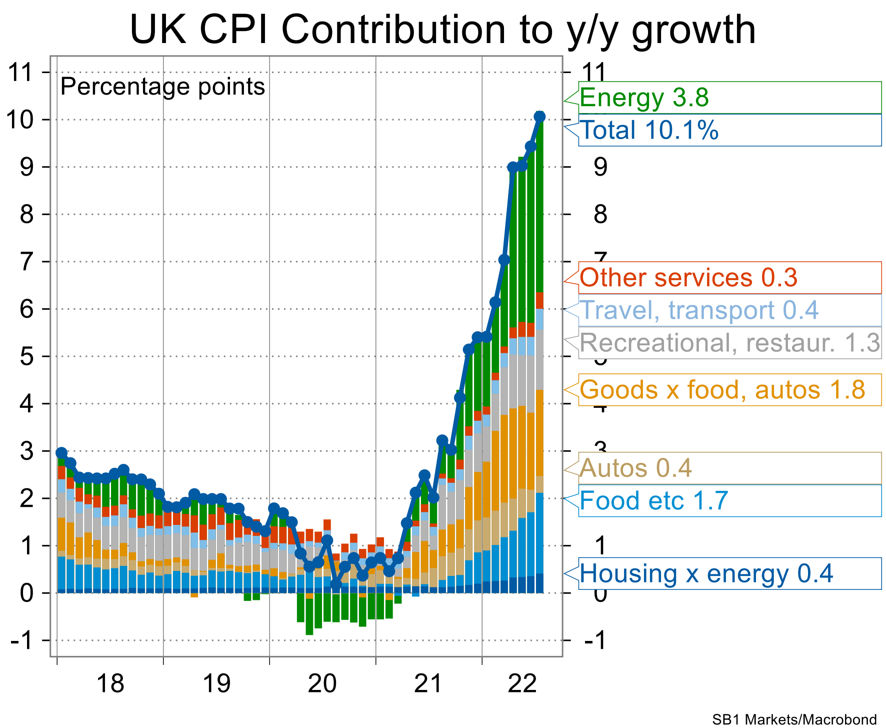


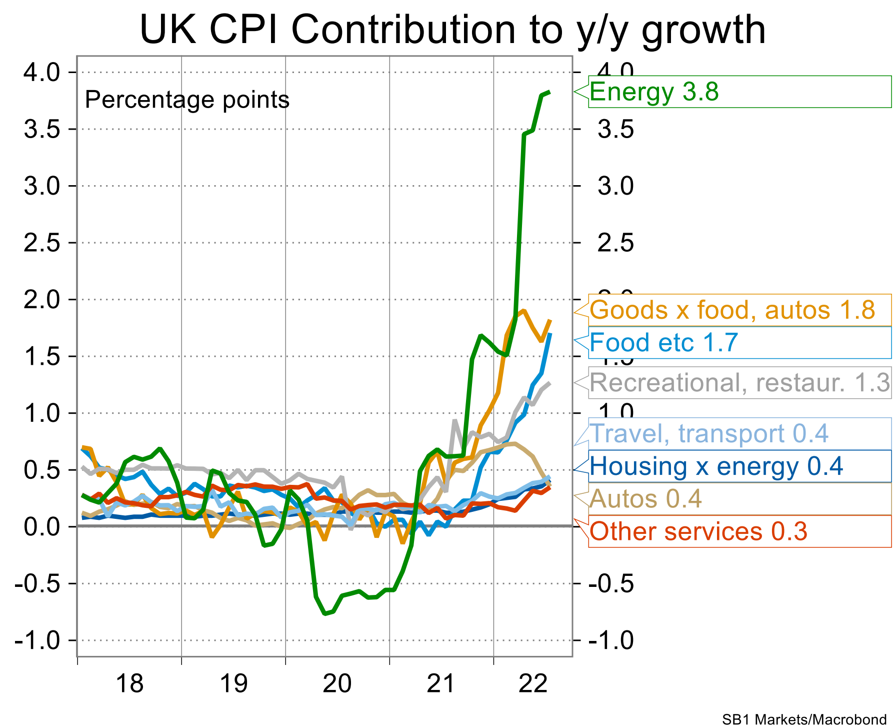


- **Energy prices** are up 58% y/y, much of it due to the 26% m/m surge in April, when semi-annual price cap adjustments were undertaken (the next adjustment is scheduled for October)
- Some better signs: Goods x food, and are auto prices are down from the peak

Energy is important, but several components contribute as well

Goods x food & autos prices have shot up, as have recreational services/restaurants, foods, autos



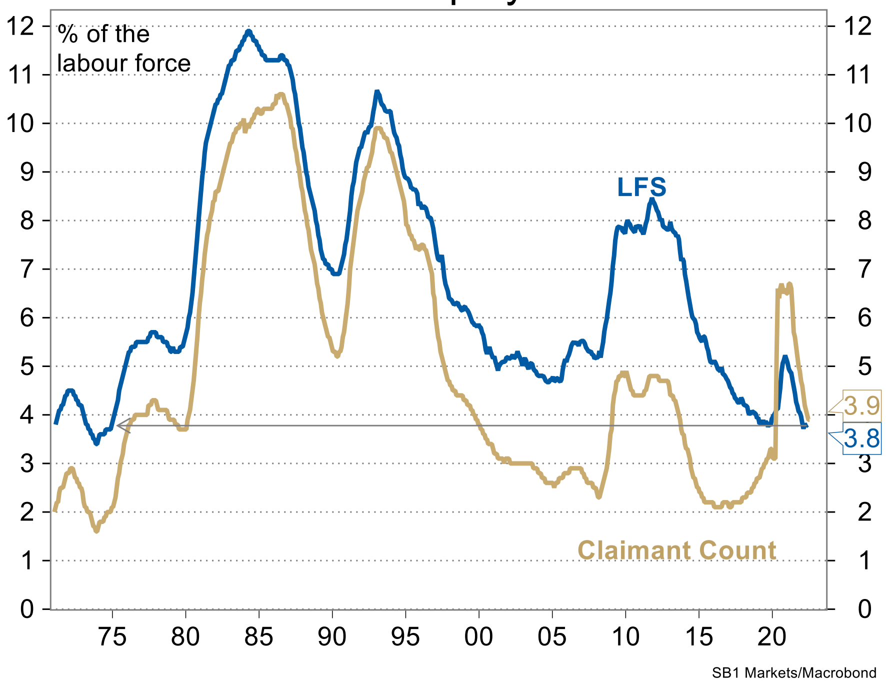


SpareBank 1 MARKETS

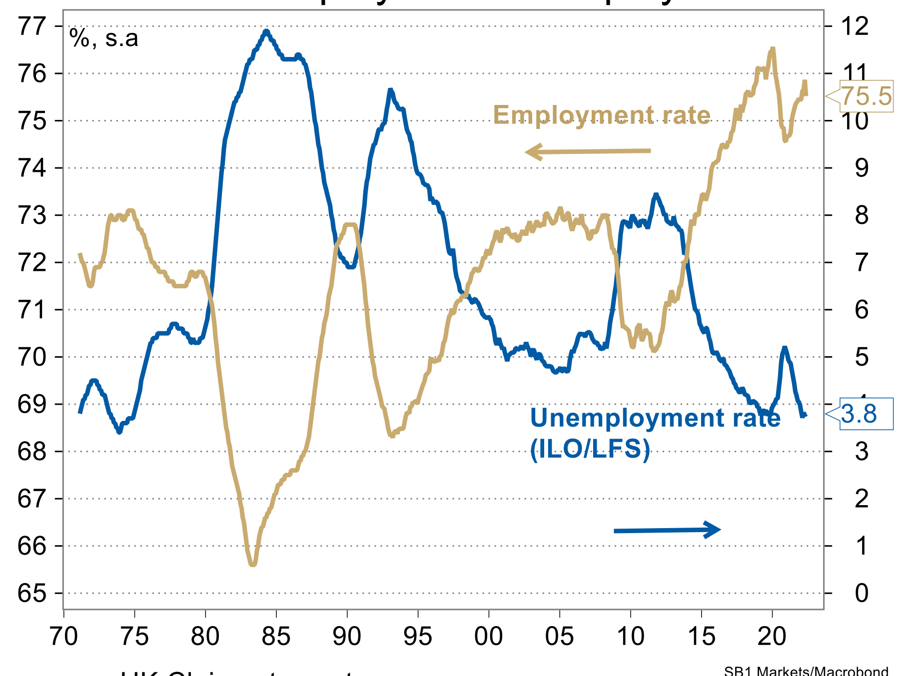
Unemployment flat at 3.8% in May, wage inflation higher than expected

The employment rate fell sharply, by 0.4 p, still at a high level. (Participation fell too)

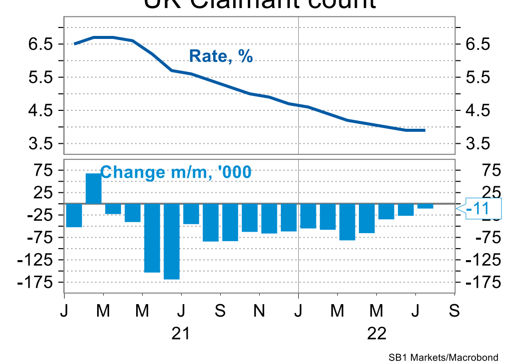
UK Unemployment

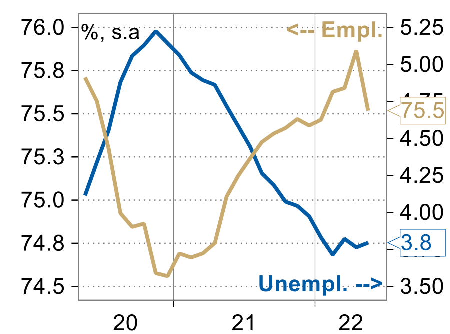


UK Unemployment & Employment



UK Claimant count

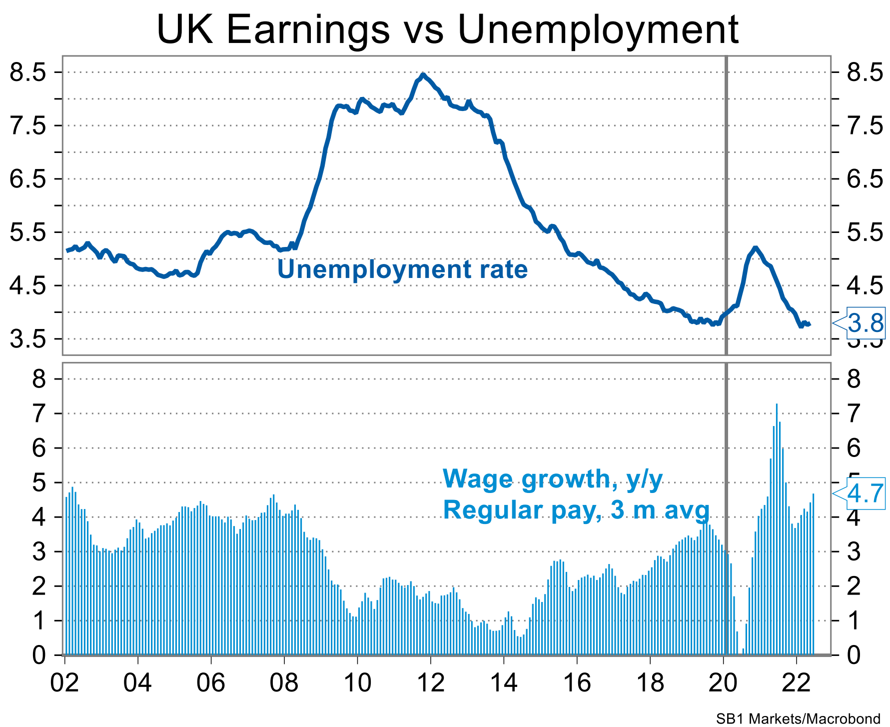


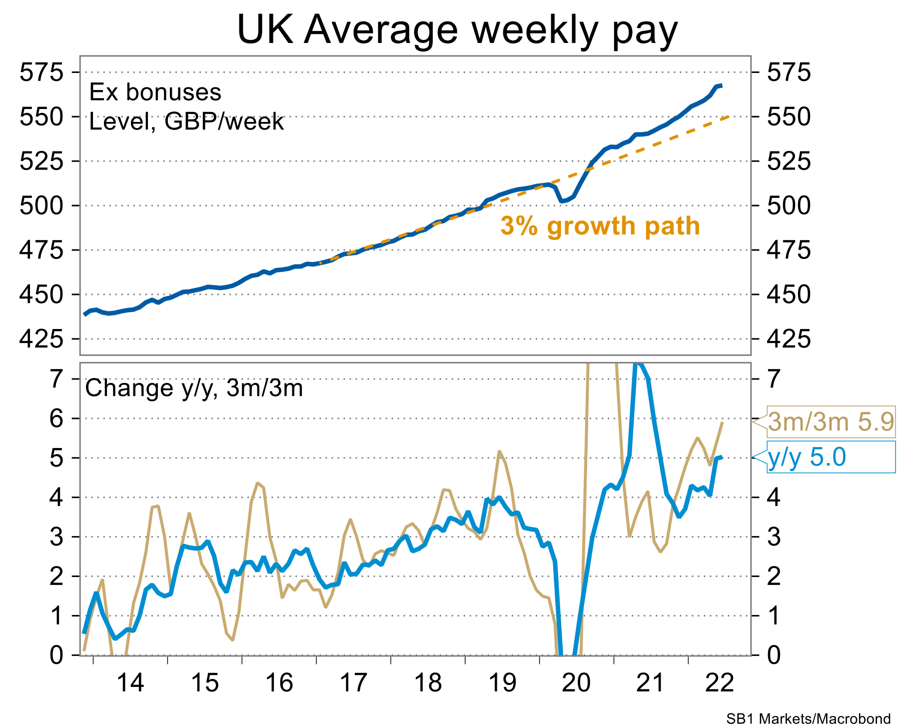


- **ILO/LFS ('AKU') unemployment** is close to the lowest level since 1975 (just up 1/10 from the through in Feb)
- The decline in the **employment rate** is somewhat strange, even if GDP fell in June and Q2. Unemployment is unch, as the participation declined in line with the employment rate
- **Claimant counts** ('open unemployment') is still falling, but the 3.9% rate is well above the pre-pandemic level. The no. of unfilled vacancies fell slightly in July, but remains very high

Unemployment has fallen to a low level – and wage inflation is on the way up

… wages ex. bonuses up 4.7% 3m/3m, up from the pre-pandemic level at 2 – 3½%

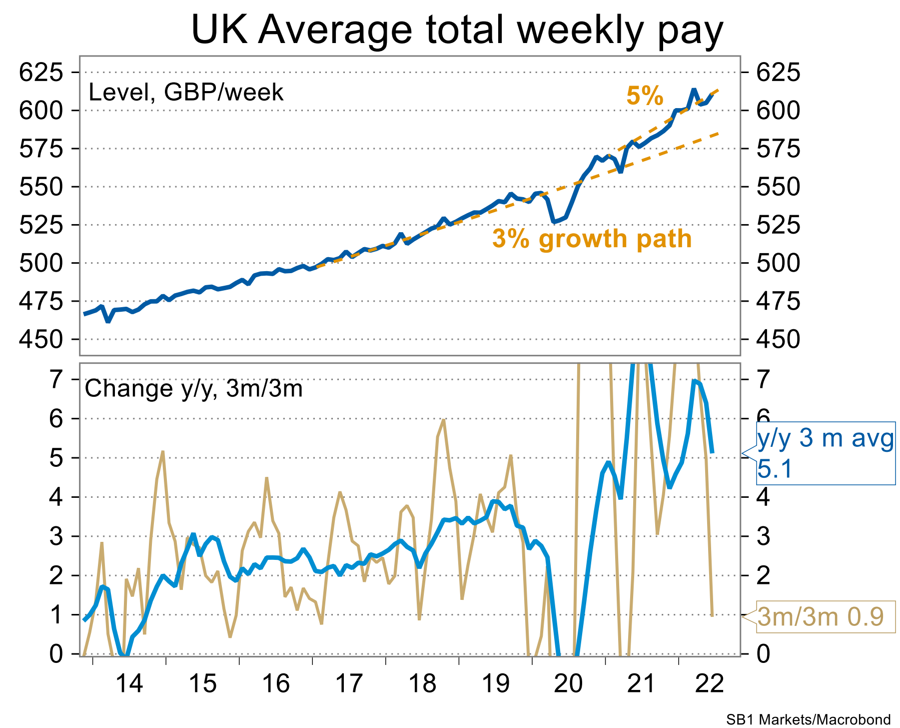




- **Annual wage growth** (regular pay, 3 m avg) accelerated 0.3 pp to 4.7% in June, expected 4.5%. Not smoothed, wages were up 5.0%, and the underlying 3m/3m rate accelerated to 5.9%
- **Including bonuses**, total wages are up 5.1% y/y (3 m avg), 0.5 pp higher than expected (*charts next page*)
- Just 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 approaching 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

Total pay, including bonuses, is accelerating rapidly

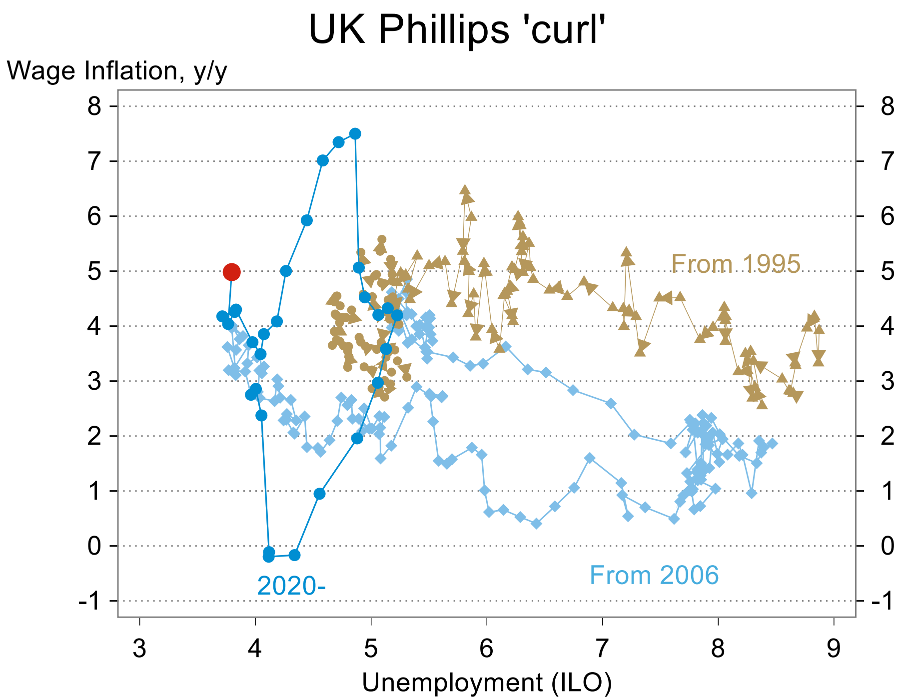
The sum up 5.1% y/y, in line with the trend path since early 2001 – well above pre-p trends

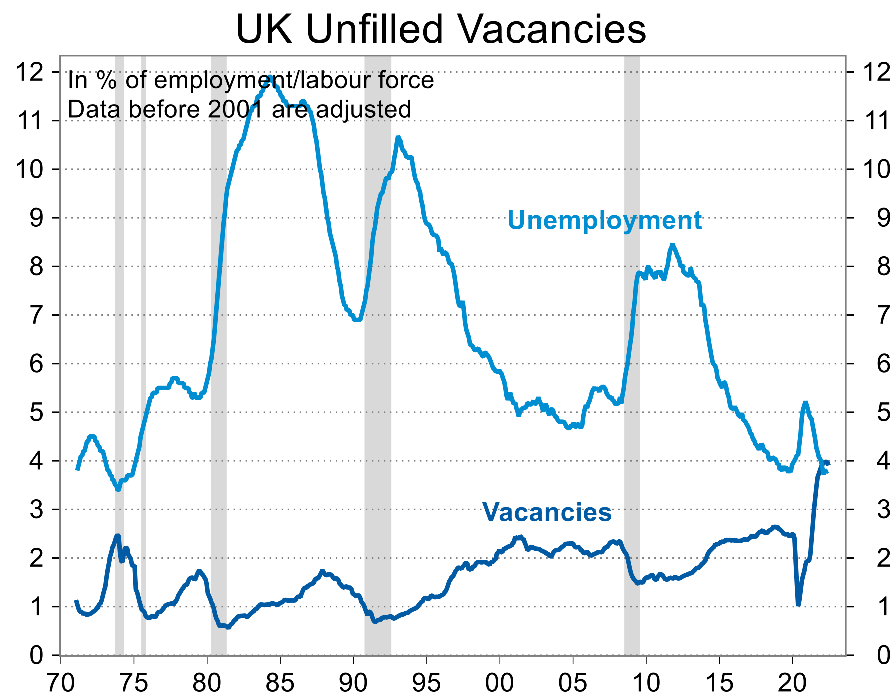


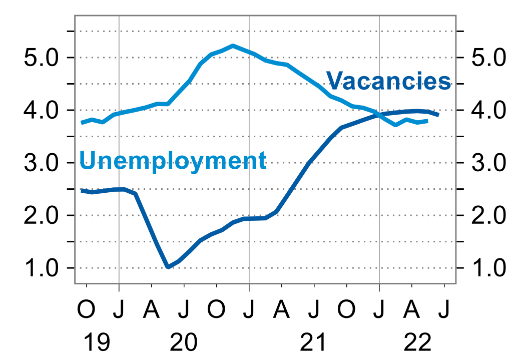
- It is completely impossible to bring inflation back to 2% over time if wage inflation remains above 5%, probably even above 4%. With a 3% wage inflation rate, inflation was just marginally below the 2% target

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

The vacancy rate fell marginally in June



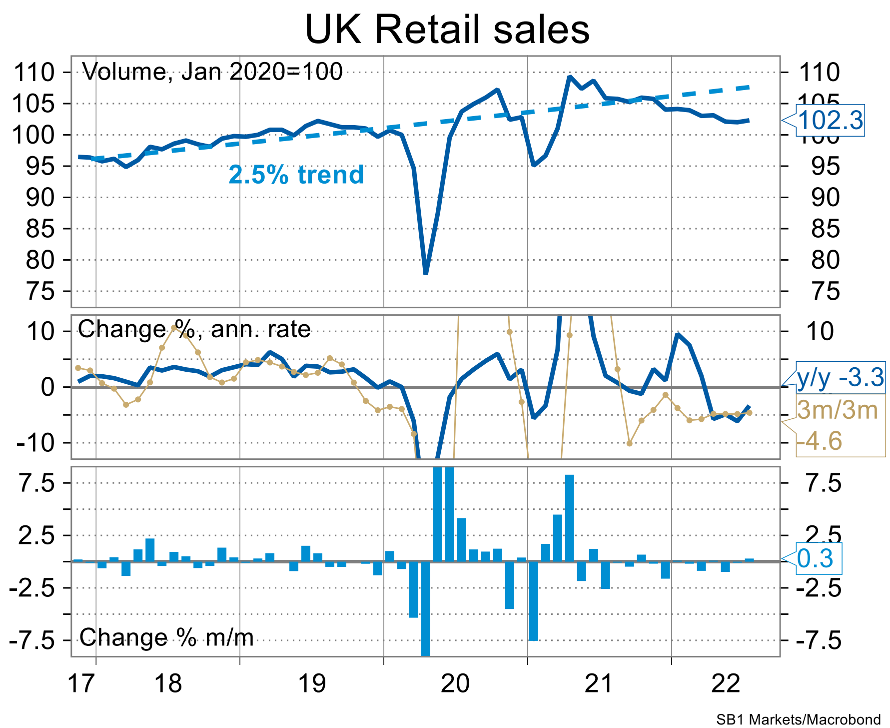


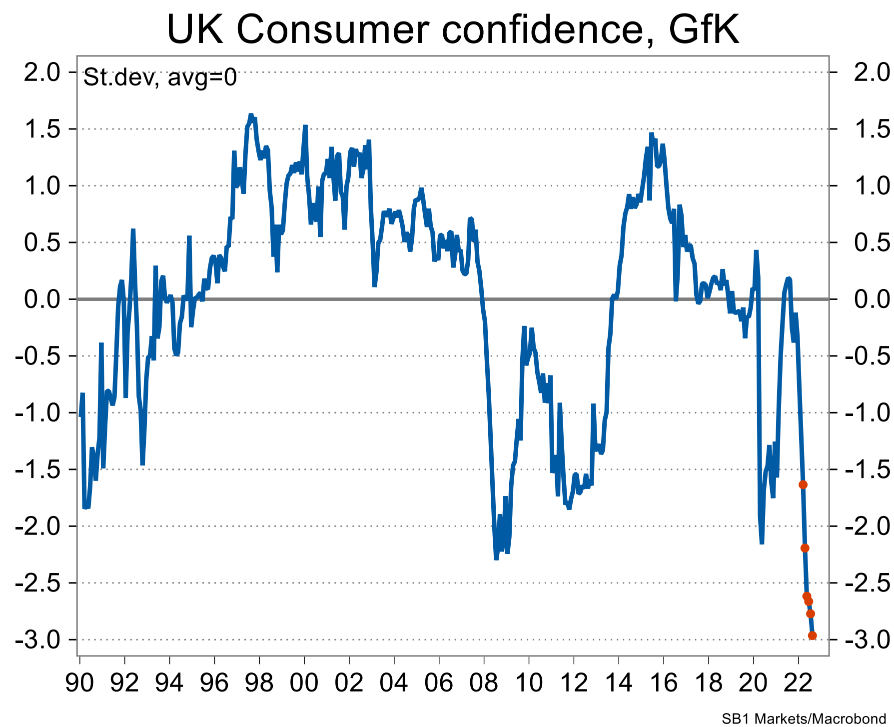


- Wages are on the way up alongside something that looks like a Phillips curve

Retail sales are trending downwards. In volume terms, that is

However, sales rose 0.3% in July, expected down 0.2%. As inflation surges, confidence collapses

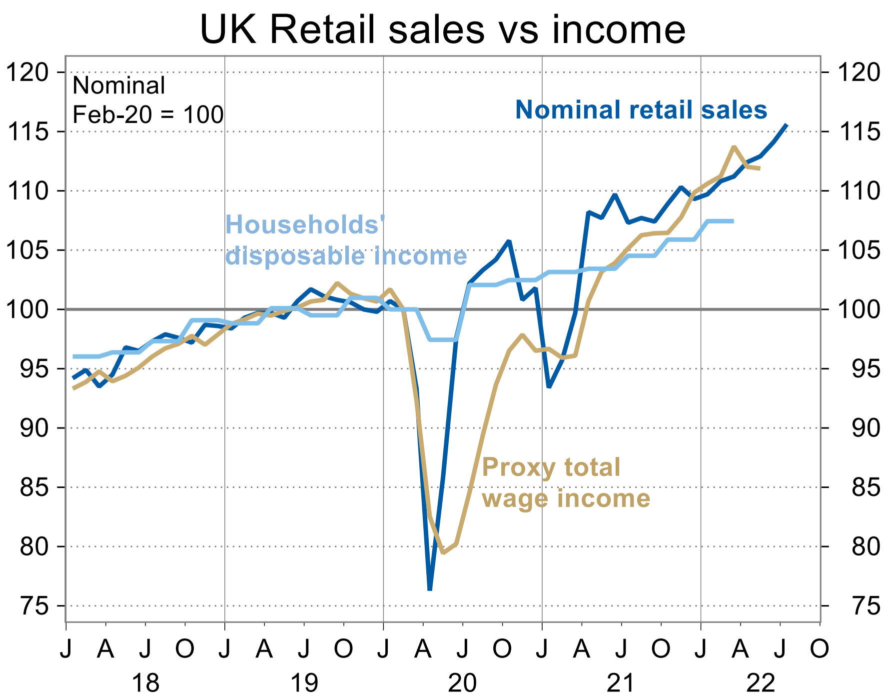




- **Retail sales** peaked Apr-21, and the gradual decline brought sales down to well below the pre-pandemic 2.5% growth path. Sales are down at a 4.6% pace measured 3m/3m, a substantial drag on GDP growth
- **Consumer confidence** fell further in August, to -3 st.dev below average, the lowest ever
  - » High inflation, declining real wages and higher interest rates may be the most important reasons. Beside that, the labour market is strong, the unemployment rate the lowest in 4 decades

Total wage income has kept up with nominal retail sales

... and total consumption is weaker than normal vs. total disp. income (=savings higher than normal)



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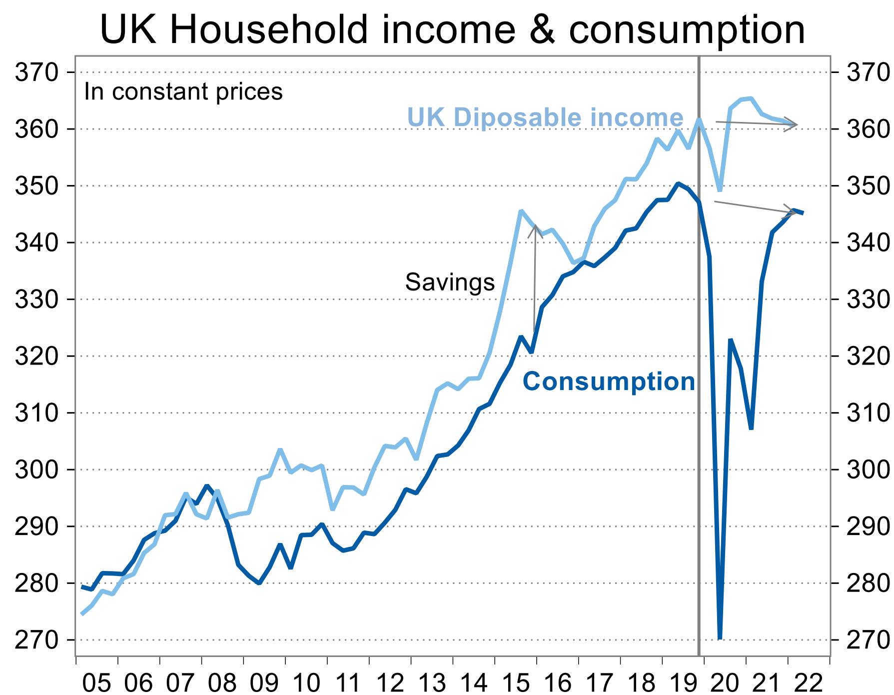

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Highlights

The world around us

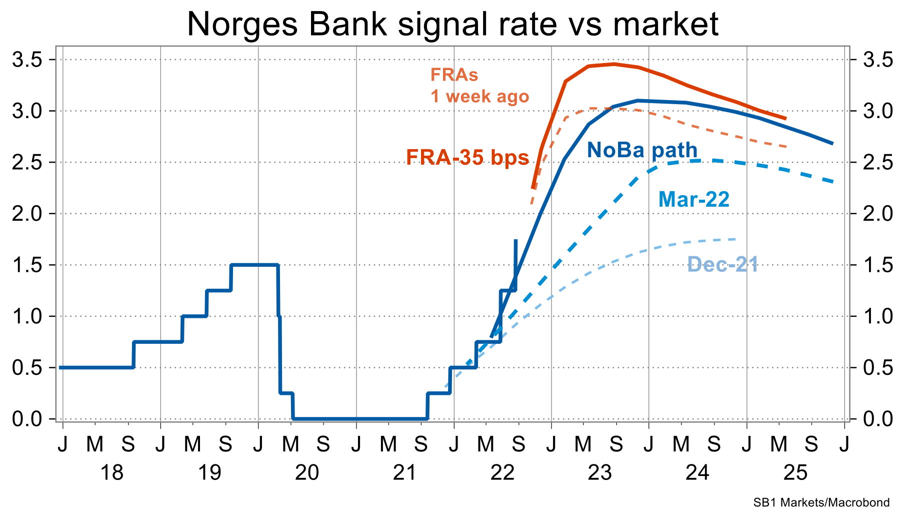
The Norwegian economy

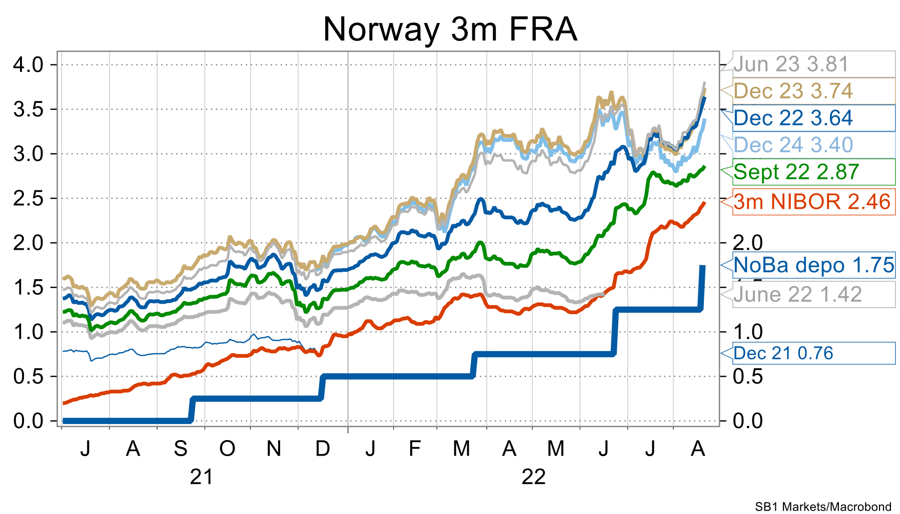
Market charts & comments

SpareBank 1 MARKETS

Norges Bank delivered the 2nd ‘double’, and the job is still not finished

However, following a 40+ bps lift in the FRA-curve last week, the market has become too aggressive?

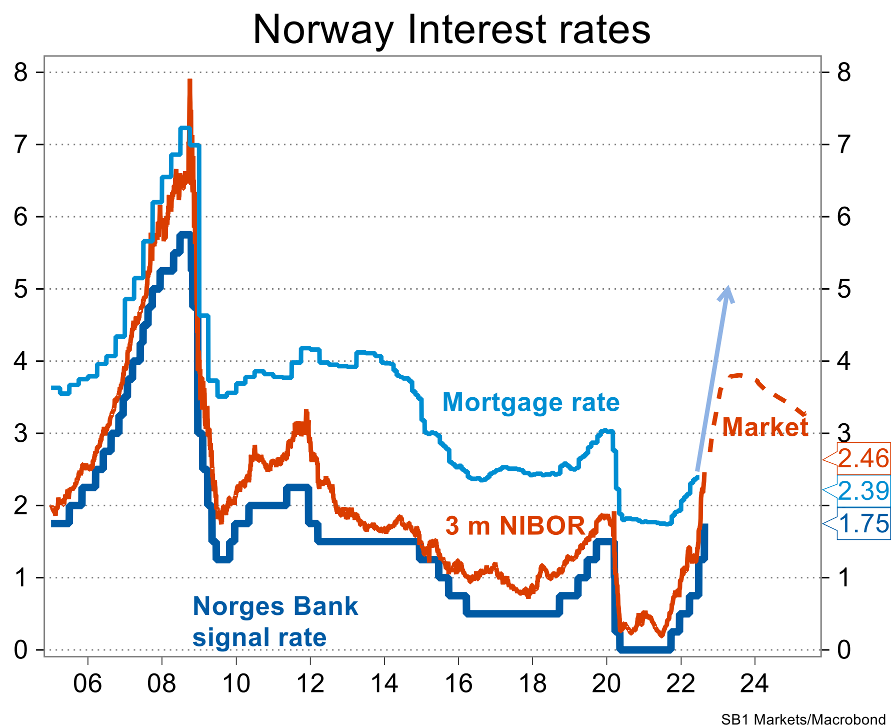


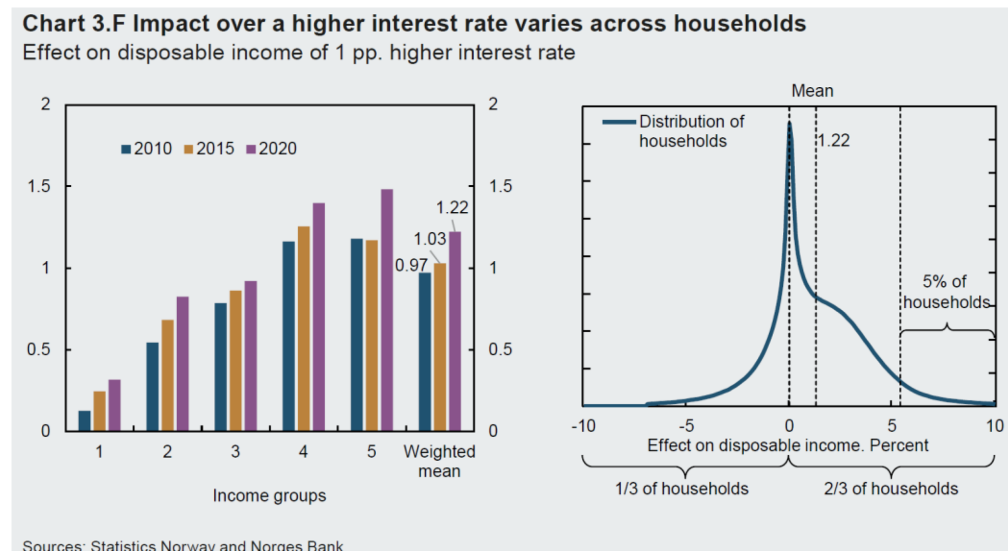


- **The signal rate** was hiked by 50 bps to 1.75%, as the market and almost all economists had predicted
  - » Higher inflation, lower unemployment and a high rate of capacity utilisation were mentioned as reasons for a more aggressive tightening than signalled in June (a 25 bps hike was indicated)
  - » Governor Bache: A markedly higher policy rate is needed to ease the pressures in the Norwegian economy and to bring inflation down towards the target
    - A broad-based increase in inflation increases the risk for inflation to remain too high for too long – and a faster rate rise now will reduce the need for a sharper tightening further out
    - Thus, the press release states that the policy rate most likely will be hiked again at the September meeting
  - » Still, the MPC is stressing the uncertainty, both on the upside vs. inflation and on the downside vs the housing market and household consumption – as well as a global economic downturn
- Market response:
  - » Approx half of the lift in FRA rates last weel took place before the meeting, the other half afterwards. FRA rates rose sharply abroad as well, and for Dec 23 just as much as in Norway (the trade weighted average), and the NoBa hike had no visible impact!
  - » The market is discounting another 50-bps hike in Sept, and 25 bps in Nov followed by 50 bps again in Dec, as well as 25 bps in Jan and in March next year, up to 3,5% - as the 3m Dec FRA contract is at 3.64%! However, the NIBOR spread might have widened due to (we think irrelevant) fear of a money market liquidity squeeze due to mismatch between oil tax payments and transfers to the Oil fund
  - » Whatever reason for the surge, we think FRAs are too high, as we doubt a 5% mortgage rate is needed to slow down the Norwegian economy sufficiently

Anybody for a 5% mortgage rate?

A 3.3 pp lift from the 1.7% rock bottom: 35% of households down 6.6% <u>or more</u> in disp. income

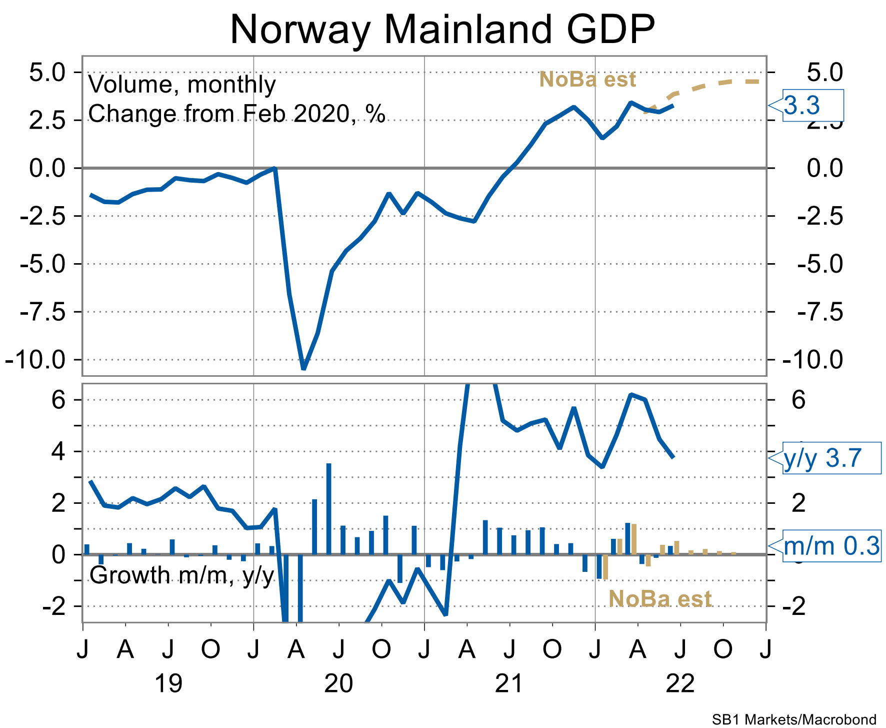




- **In average**, this 1/3 of households will be down 12% in disposable income
- **For those with debt:** An average drop in 7.4% in disposable income
- **For all households:** A 4% drop in disposable income (as some net cash positive ☺)
- **As a comparison**: Inflation may end up at more than 5% in 2023, while inflation may reach 4%. Thus, a 1.5% drop in disposable income

Mainland GDP up 0.3% in June – and less than expected (0.7%)

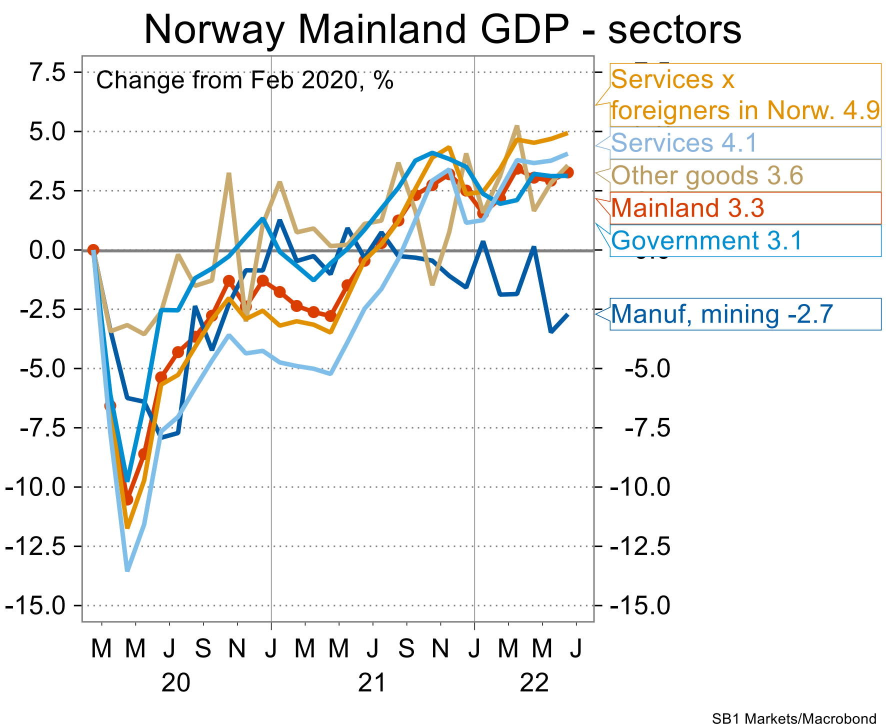
GDP has not been increasing since March, and the June level is 0.5% below NoBa's f'cast

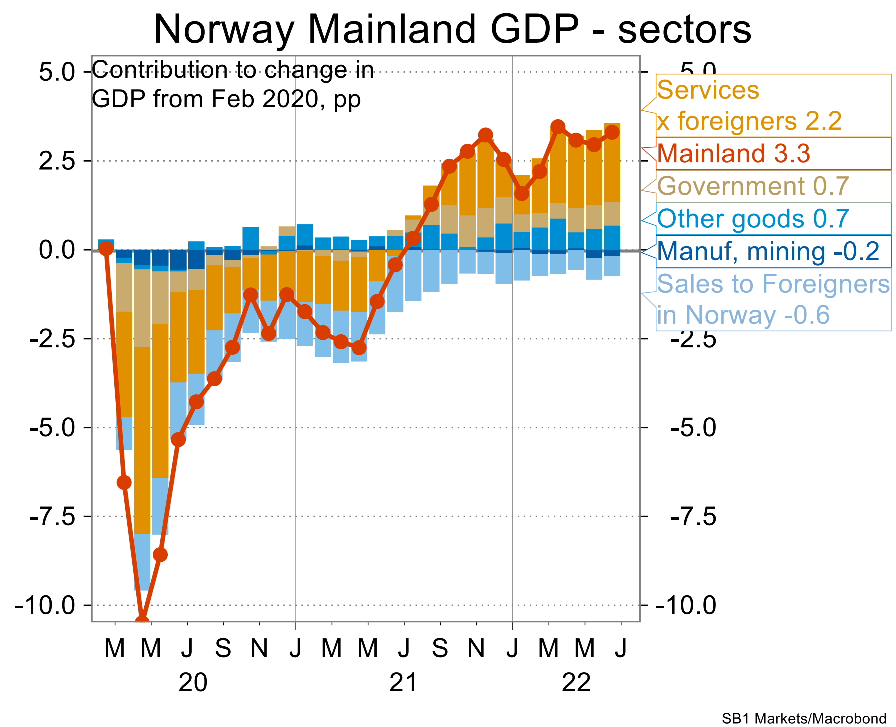


- **Mainland GDP** fell in both April and May but recovered somewhat in June – although less than we and other economists expected. Still, the Q2 growth rate at 0.7% was as expected, as history was marginally revised up, following the 0.4% drop in Q1. Thus, growth in H1 has been modest
  - **Production:** Most sectors contributed to growth in June (and in Q2). Manufacturing is still the weakest sector since before the pandemic
  - **Demand:** Household demand in Norway gained marginally in June while spending abroad increased. Just small changes in housing or business investments. Net exports fell marginally
- **Mainland GDP** is up 2.9% vs the Feb-20 level, which is well below a normal growth path over these two year (4 – 4.5%), indicating an output gap well below the level 2 years ago
  - However, unemployment is well below the pre-pandemic level, and close to record low levels, the employment rate (among Norwegian citizens) is far above, and businesses are reporting unusual lack of labour
  - Businesses are also reporting a much higher capacity utilisation than before the pandemic
  - Thus, Norges Bank is very likely right when it assumes that the output gap is substantially higher now, than before the pandemic
  - In addition, underlying inflation is far higher

Production: Most sectors report growth in June

Manufacturing is still the weakest sector, down 2.7% vs the pre-pandemic level

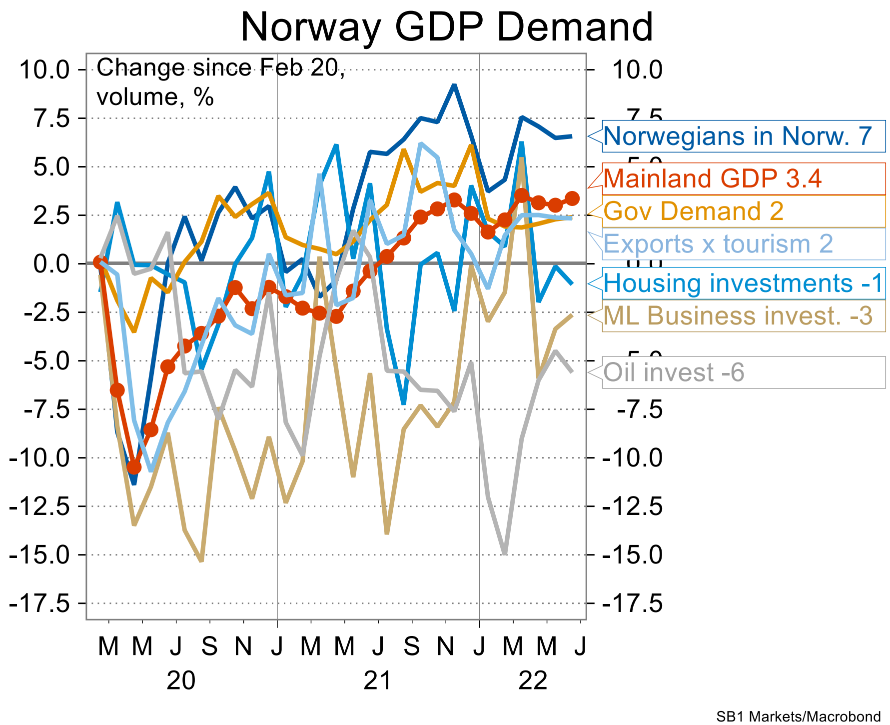


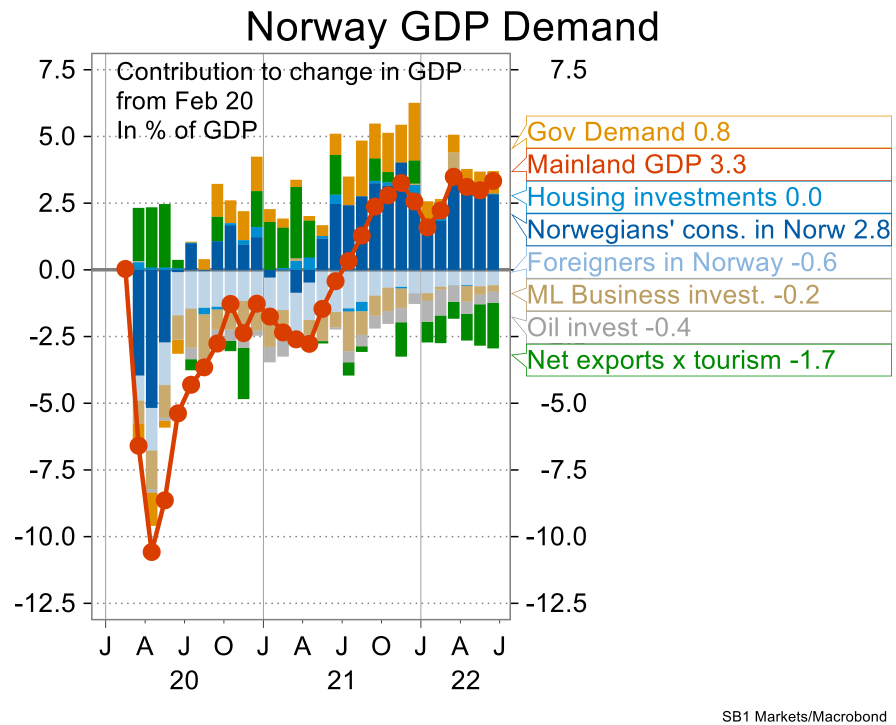


- The ‘other goods’ sector includes fish-farming, fisheries and construction

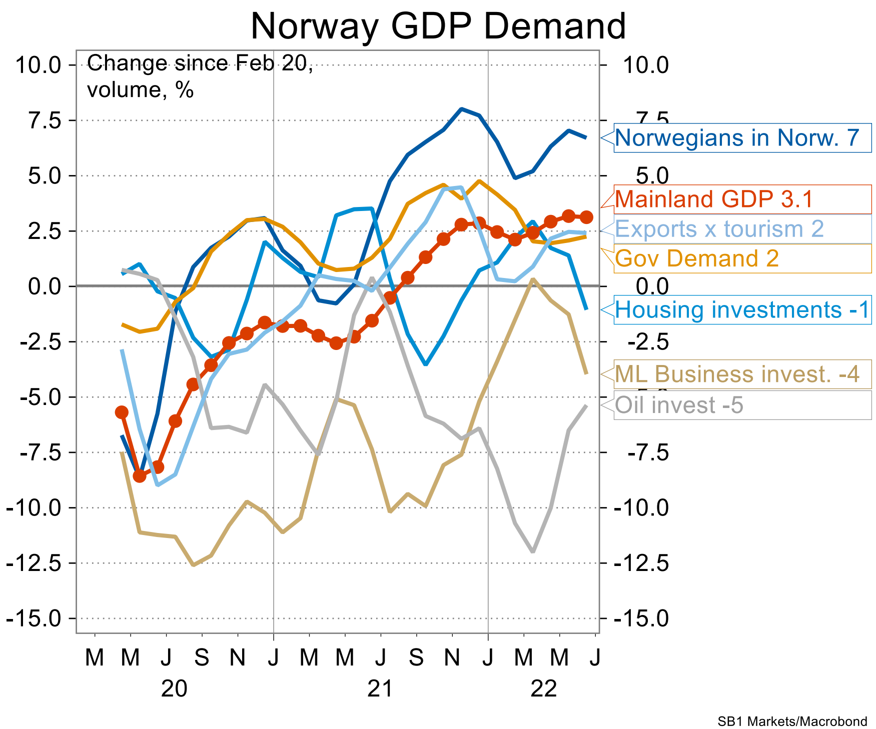
Demand: Consumption in Norway flattened in June

Housing investments fell, as did oil investments



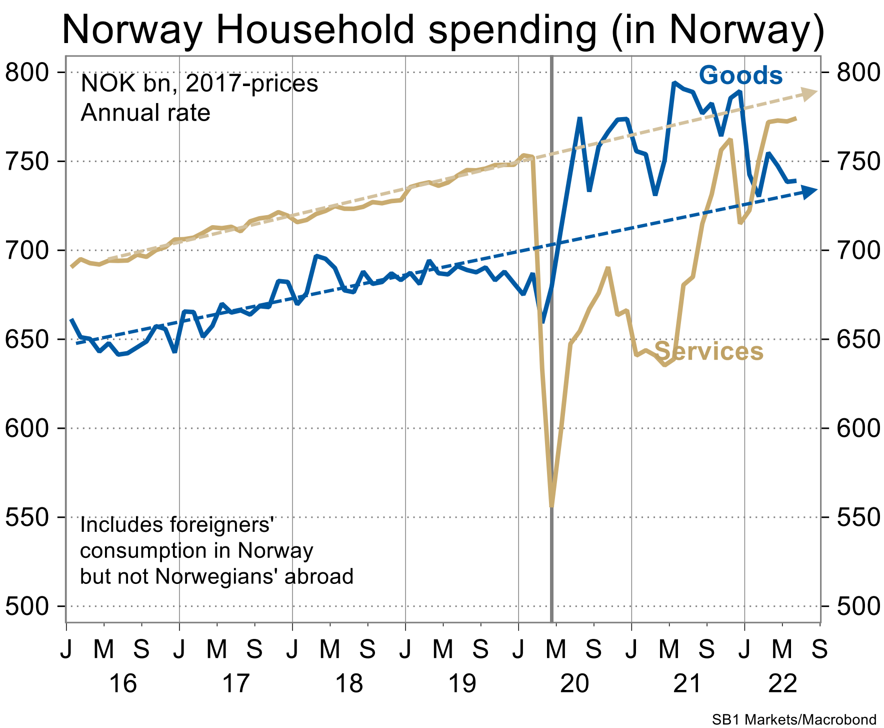


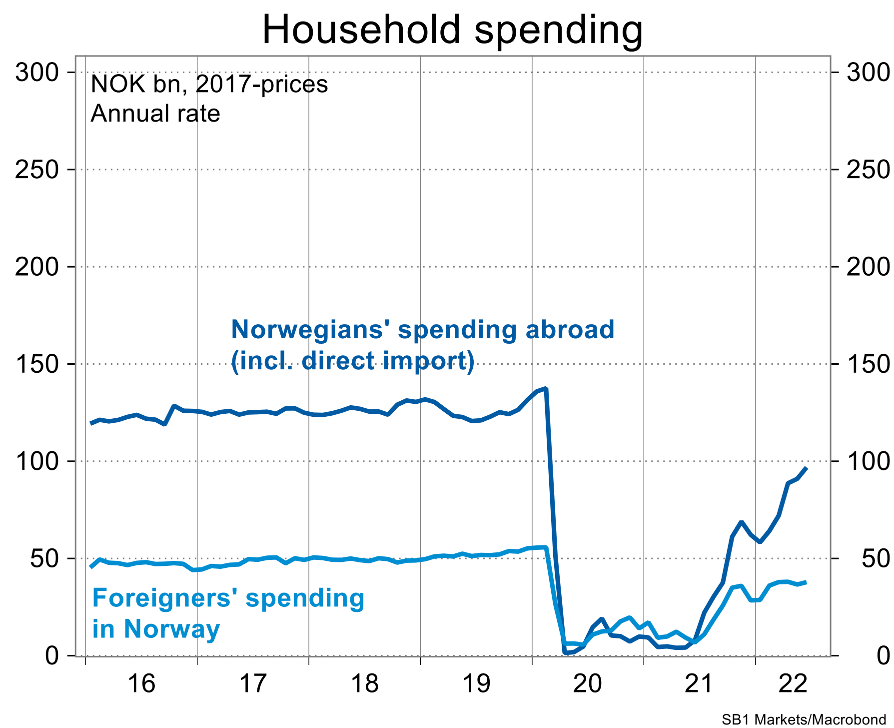
A more smoothed demand view



Spending on goods back down to the (pre)pre-pandemic trend

Services has almost recovered but remains somewhat below the old trend

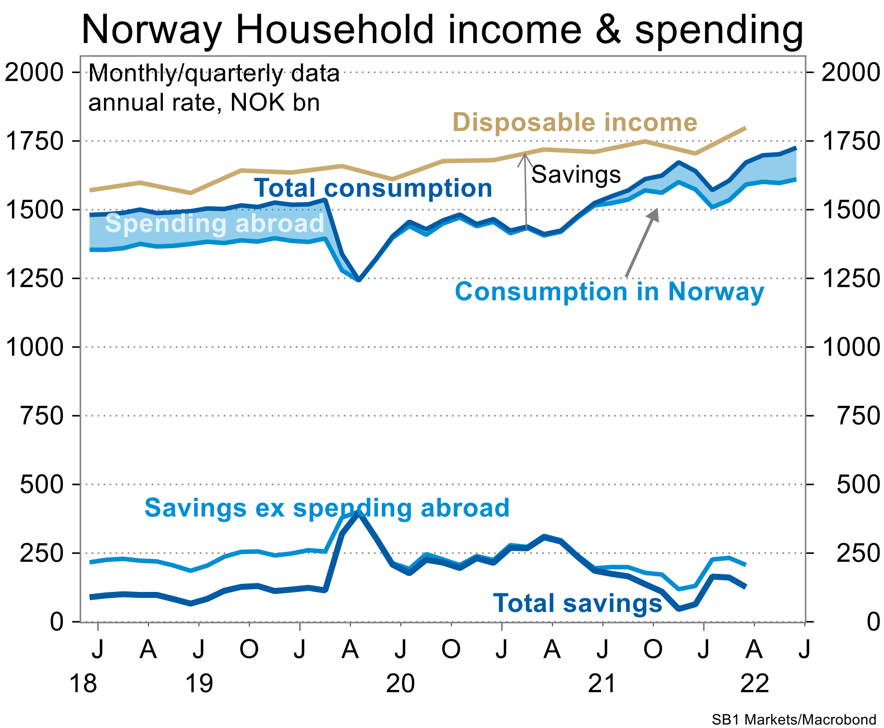




- Spending abroad still 20% below a normal level – and will probably recover further the coming months/quarters
- Foreigners’ spending in Norway is down 30% vs the pre-pandemic level

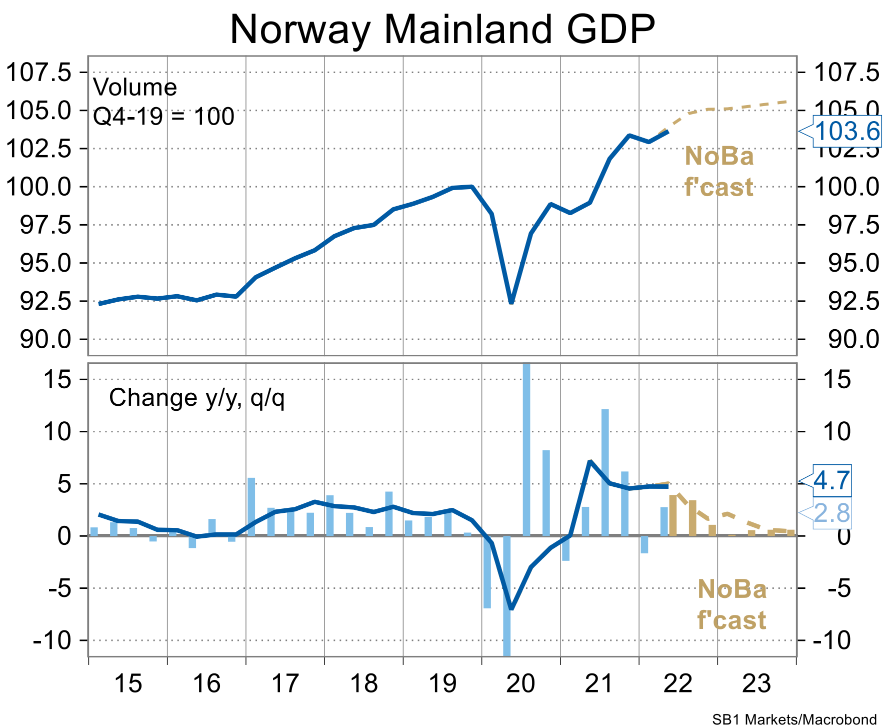
Total household consumption is growing faster than consumption in Norway

… as spending abroad is recovering. Total savings are almost back to a normal level (Q2 data next w.)



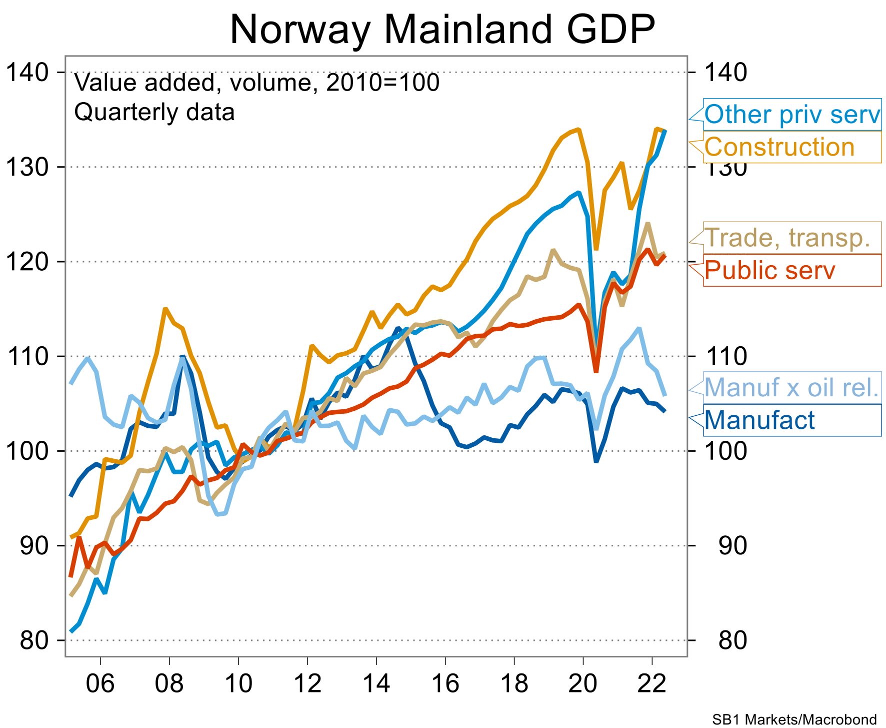
Q2 GDP: Up 0.7% (2.8% annualised), up 3.6% from before the pandemic

Growth has been slower than NoBa expected recent months as well as in Q2



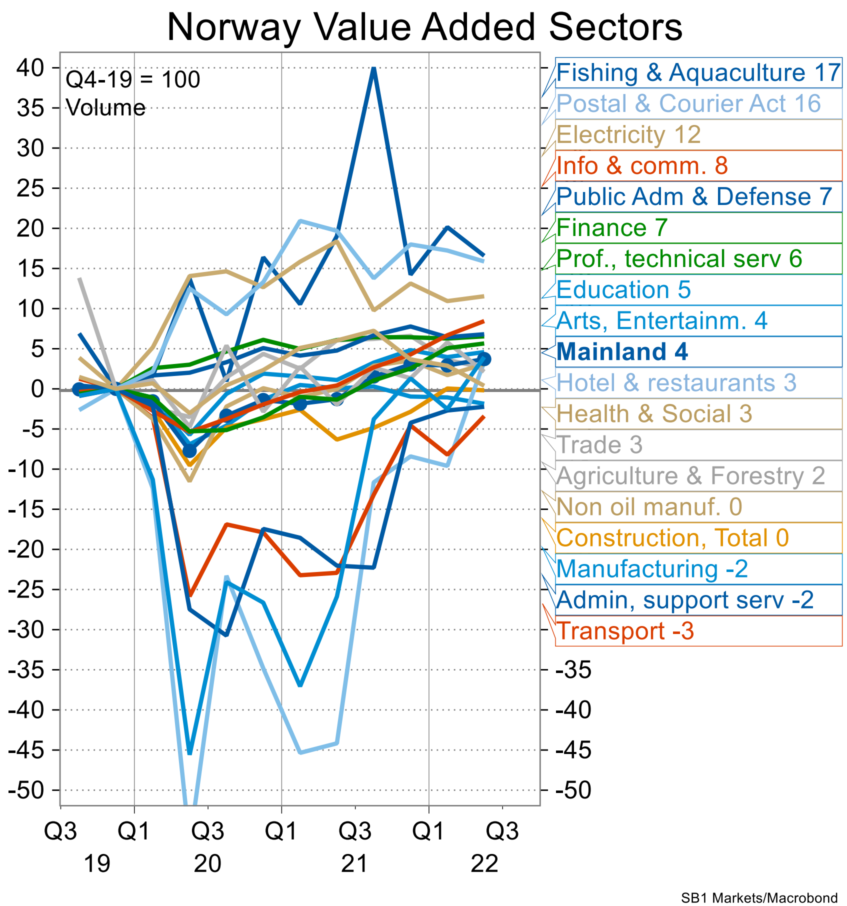
Manufacturing the weak link in the chain, services and construction in the lead

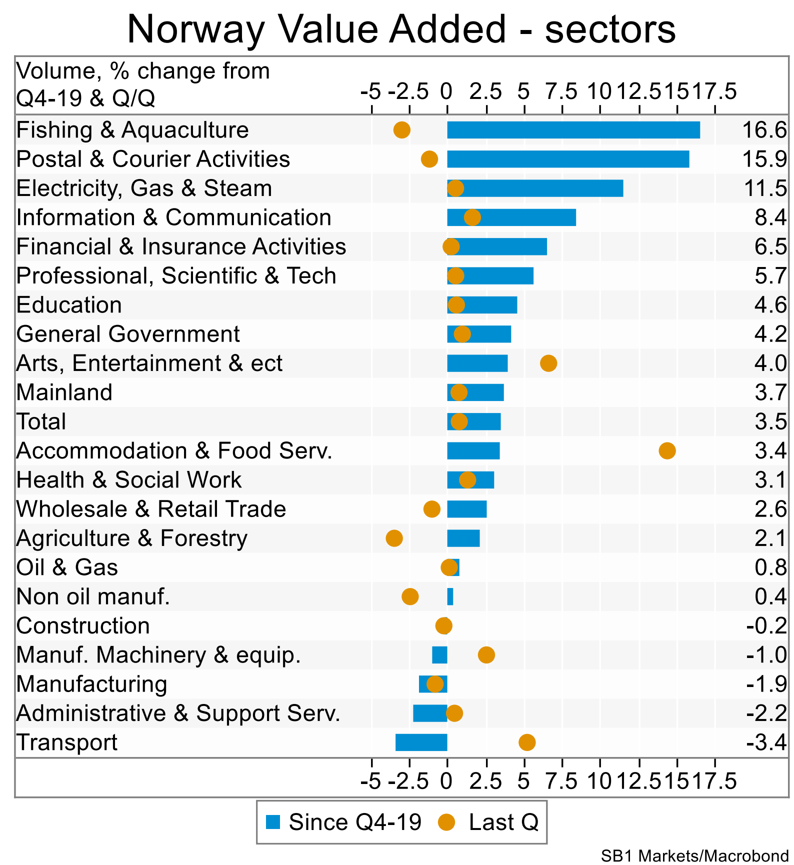
Services reported strong growth in Q2, as all covid restrictions were lifted. Trade is down from peak



Most sectors at the upside in Q2, hotels and restaurants gained the most

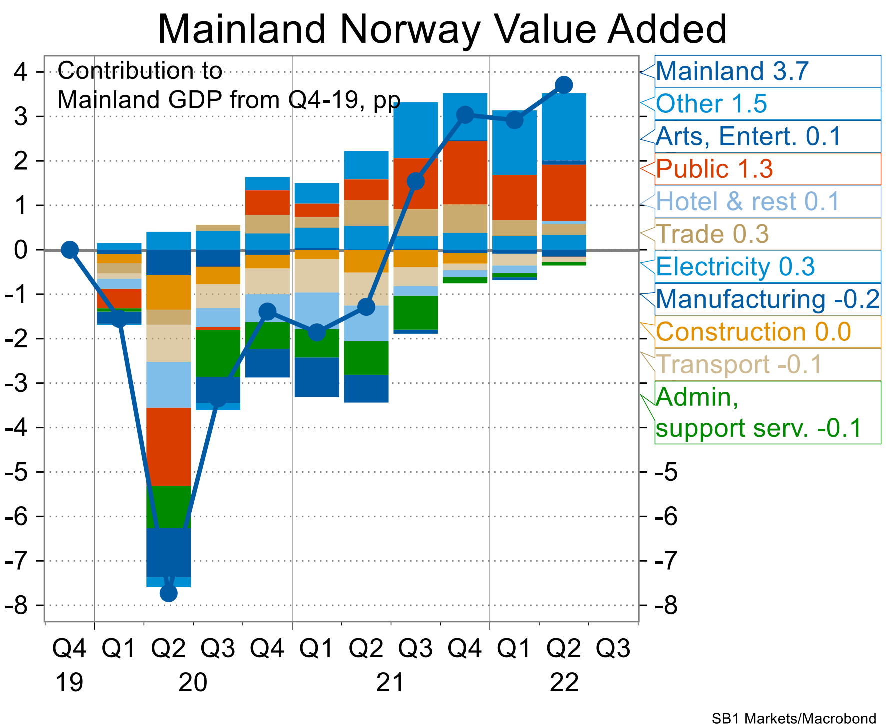
Fishing & Aquaculture and agriculture contributed at the downside in Q2

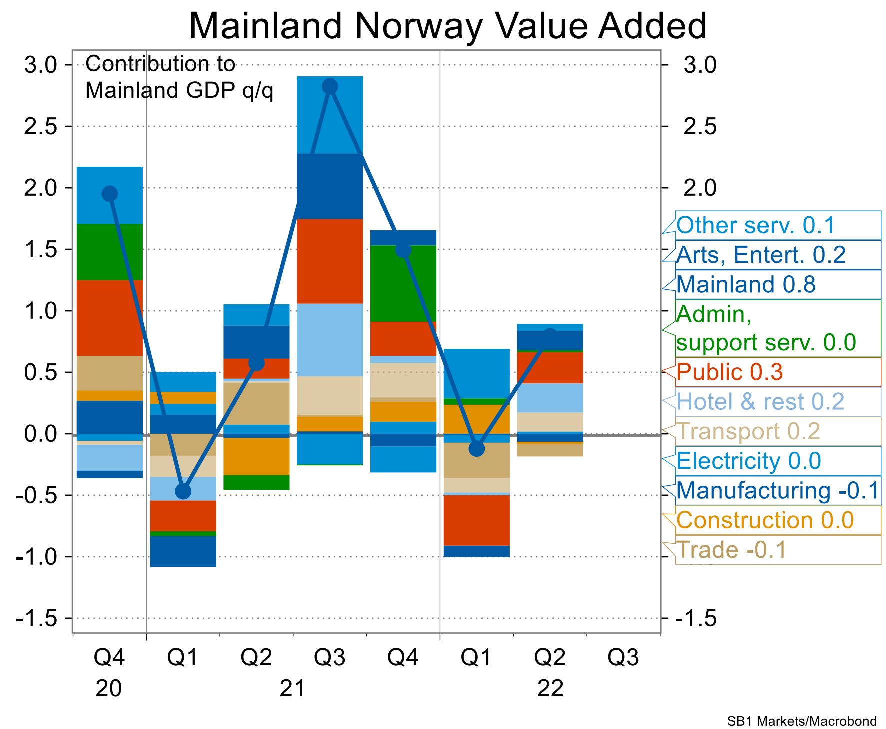




Trade is slowing, manufacturing has been lagging for a while

Services the main growht engine, together with the public sector





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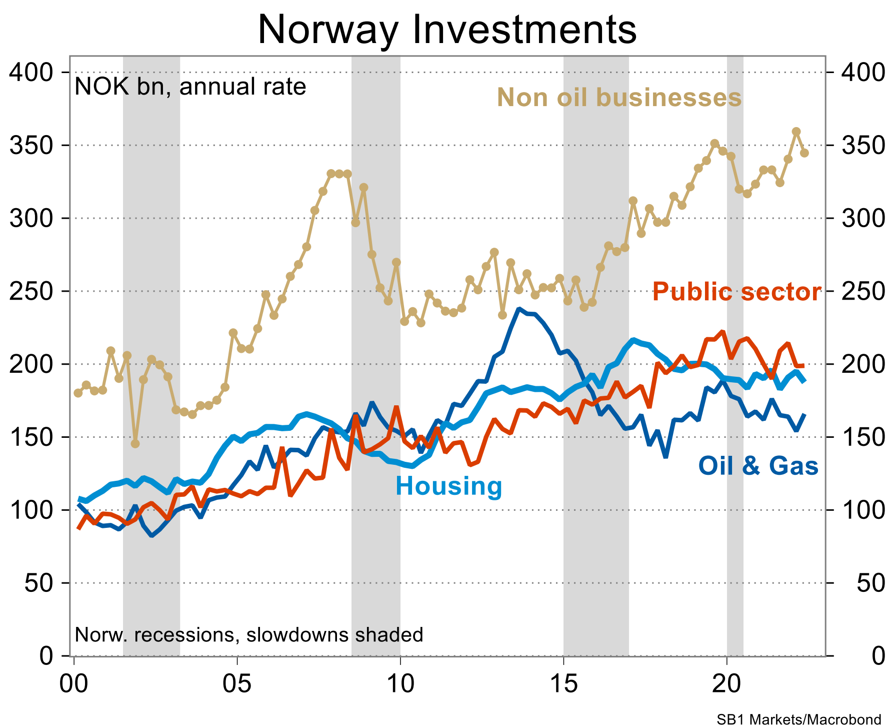
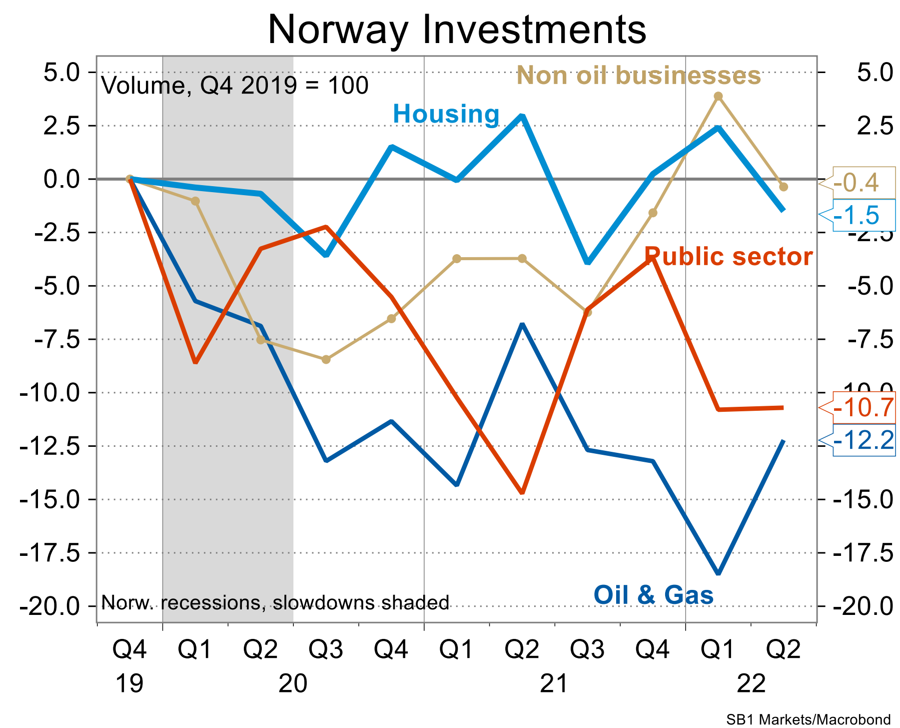
Investments: Oil up in Q2, Mainland businesses & housing down

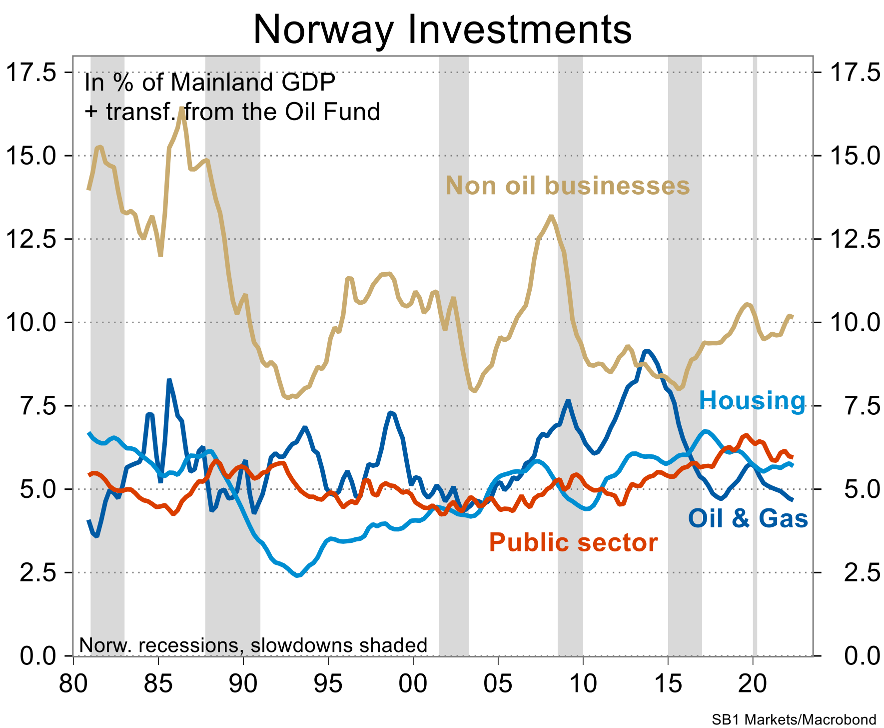
Trends: Mainl. business invest. have been quite strong recent years, housing not even flat, oil weak

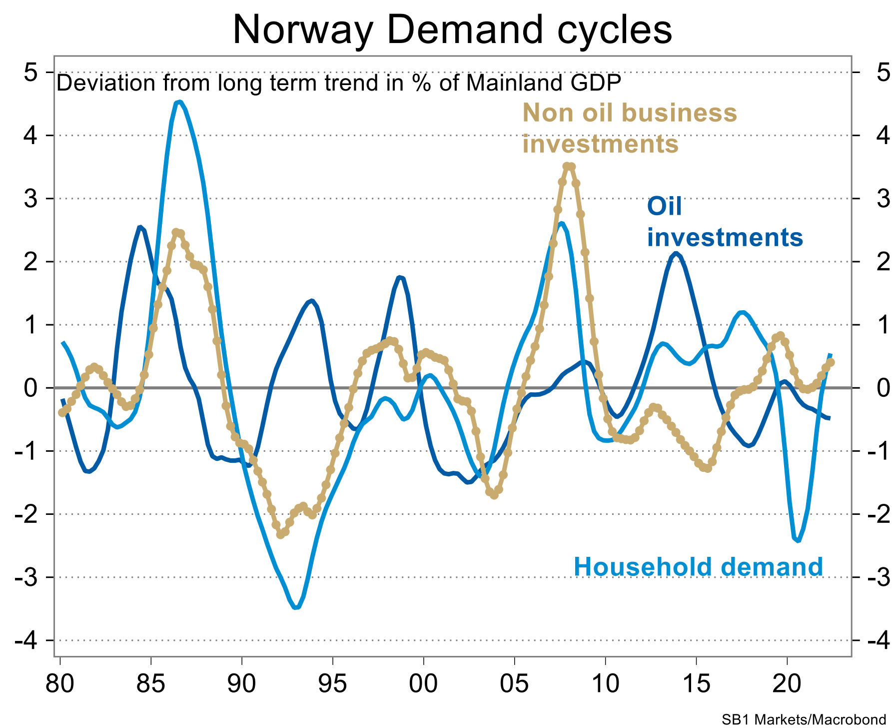




- Both Mainland business, housing, and oil sector investments were heading down before the corona virus hit as signaled by investment plans/surveys (manufacturing & oil)
- Mainland business investments have been on the way up since Q4-20 but fell in Q2 - and is now even with the pre-pandemic level
- Housing has been stable since the start of the pandemic
- Oil investments have been steadily declining, but rose in Q2. Still, it is 12% below the pre-pandemic level
- Public sector investments has been trending down, and is 11% below the Q4-19 level – which was rather high

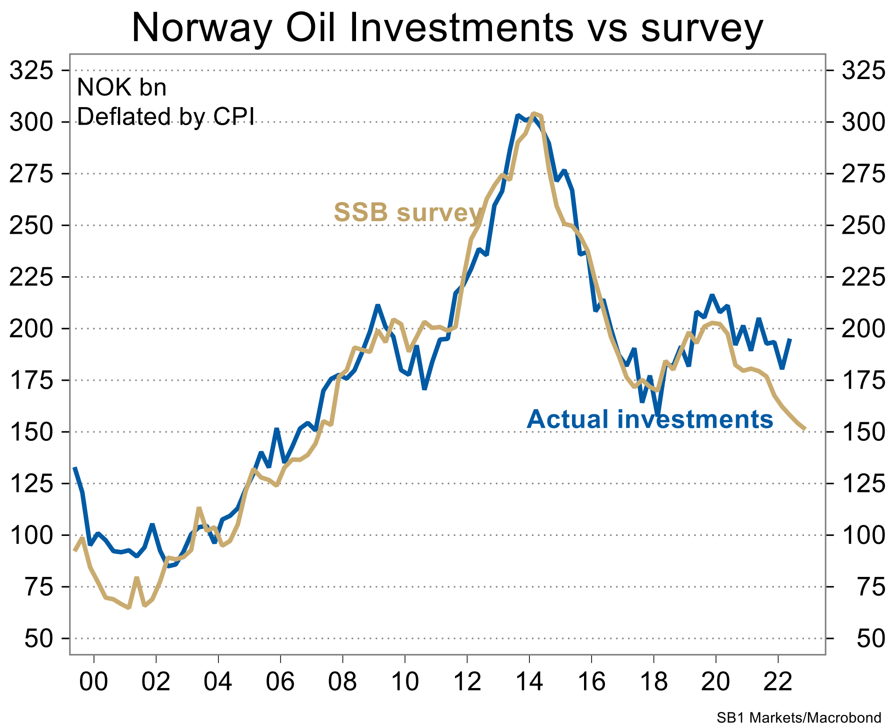
The investment cycles: Mainland businesses probably above trend

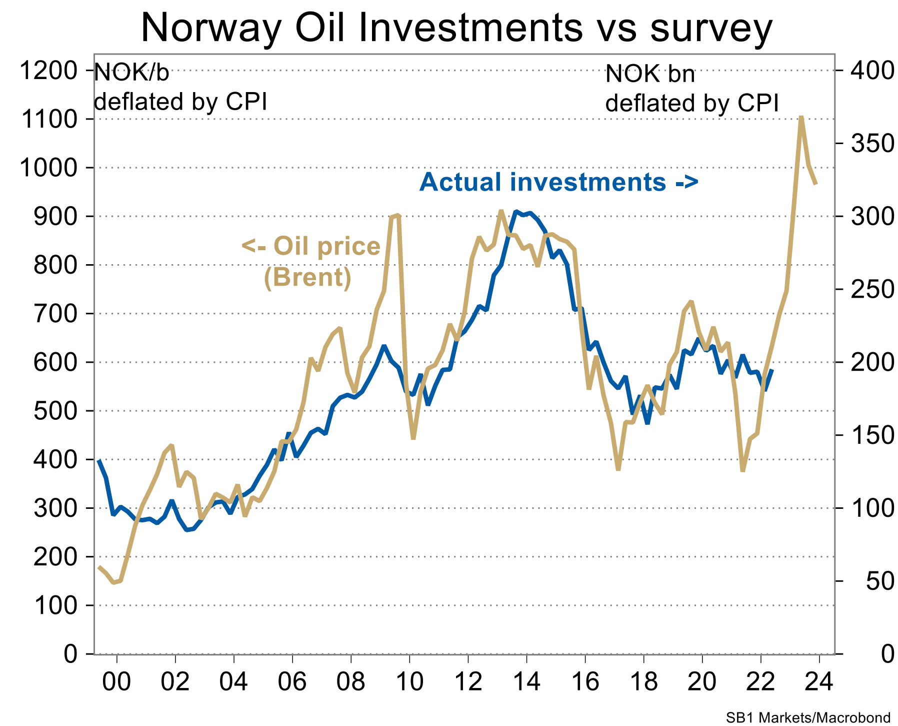




Oil investments: 2022 will (probably) be the local bottom

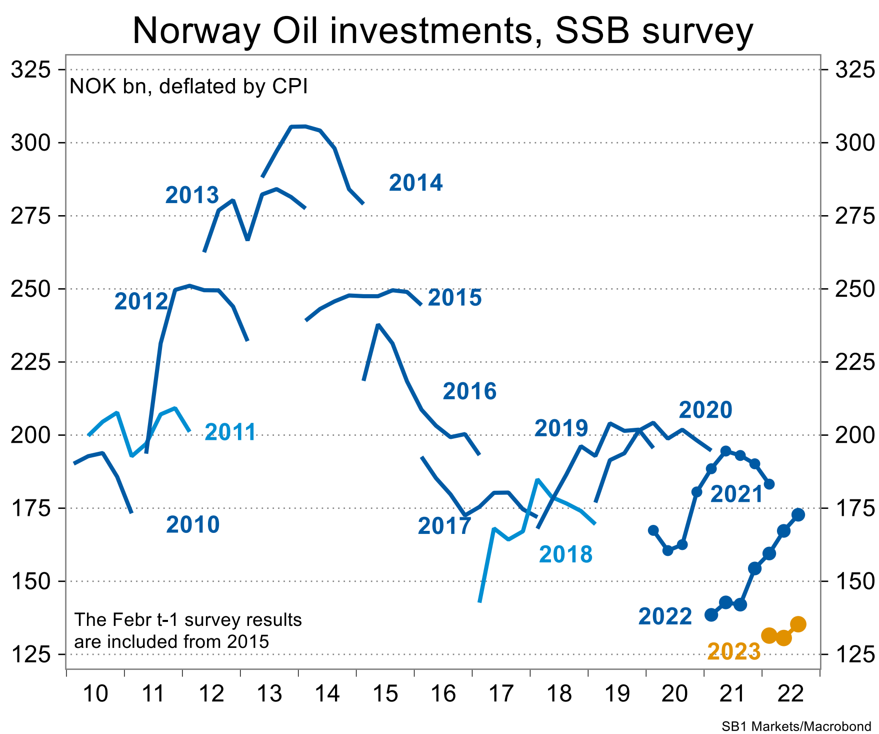
The temporary tax relief and high oil prices will lift investments in 2023 (and '24+)





- **Oil companies lifted their 2022 investment estimate** by 3% to 173 bn. The estimate is still 5% below the equivalent 2021 estimate. Several investment projects will be added to the list (a PDO delivered) before end of 2022 in order to benefit from the temporary tax cuts decided in 2020 – 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 August estimate is still down 5% vs the equivalent 2022 estimate (as we expected). Many more projects will be added, both due to the temporary tax cut and the high oil og gas prices (check the chart to the right above investments vs. the oil price)

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

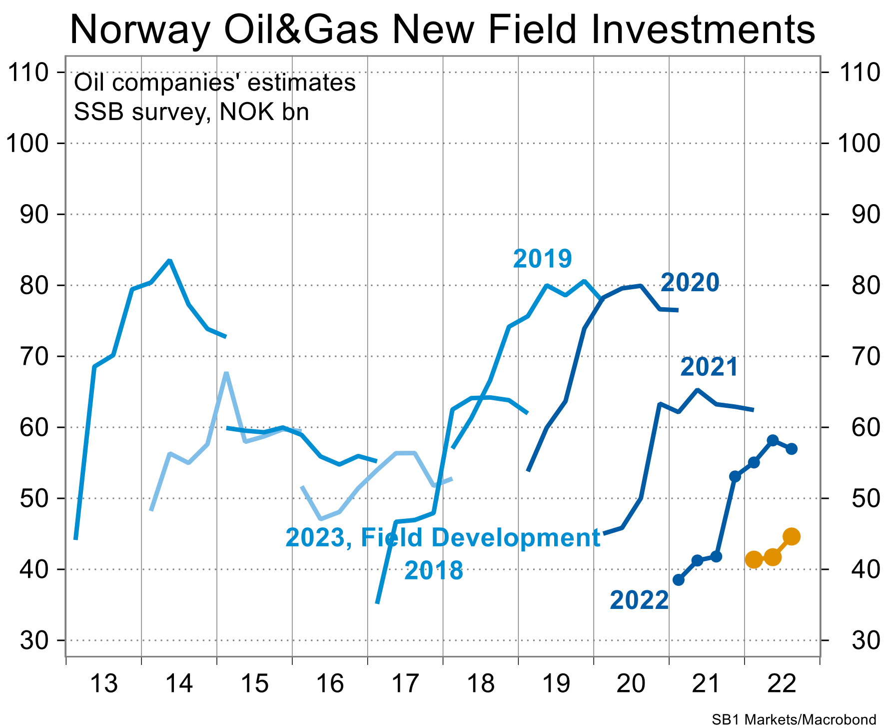


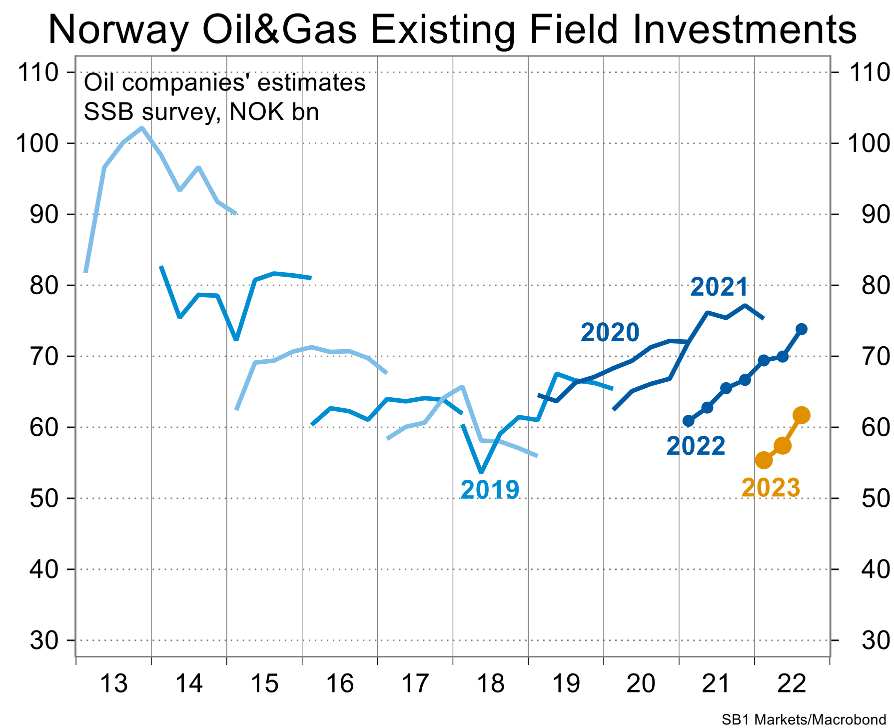
- In SSB's Q3 oil & gas investment survey, companies reported a small further increase in the **2022 investments in NOK**
- **The 2022 investment estimate** was revised up by 3% to NOK 173 bn, still down 5% vs the equivalent '21 estimate. A large number of projects will be added before the end of 2022 in order to benefit from the temporary cut in oil taxes, and some spending on these projects may be booked on the 2022 accounts. Still, a decline in both value and even more volume from 2021 is still very likely
  - » 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 rather 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 Q4 or 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

Companies gradually lift their field investment forecasts

A small decline in 2022 is still likely. The 2023 forecasts will be revised sharply op



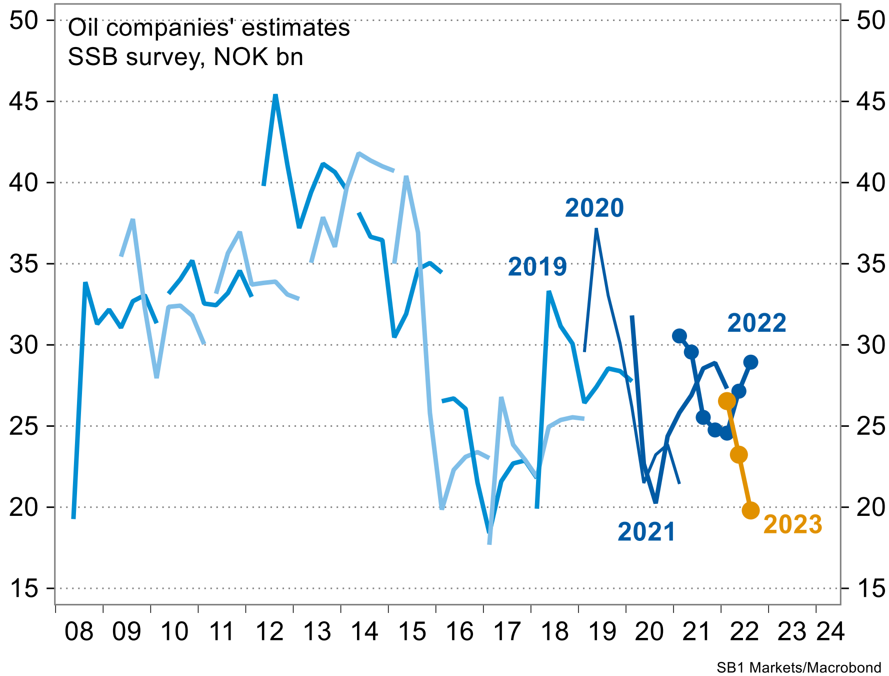


- **Investments in new fields**
  - » The '22 forecast was revised slightly down, which is normal at this time of the year. The current forecast is down 8% vs. the 2021 estimate delivered in August last year
  - » The '23 forecast is still very low – but very likely irrelevant (check the previous page)
- **Investments in fields on stream**
  - » The '22 forecast was revised upwards, in a normal manner. Companies signal an unch level in 2022 vs. 2021
  - » A bit more surprising, companies are still signalling a substantial decline in investments in existing fields in 2023, by some 7%. Some more rehabs will probably be added the coming quarters

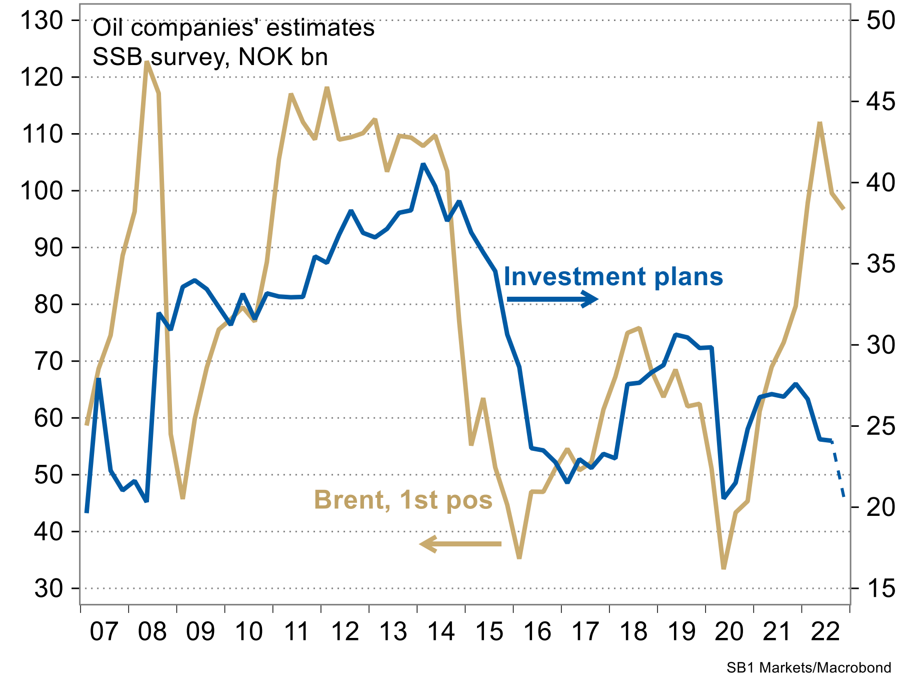
Spending plans for exploration & concept studies sharply down in 2023

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

Norway Oil&Gas Investments - Exploration



Norway Oil&Gas Exploration inv. vs oil price

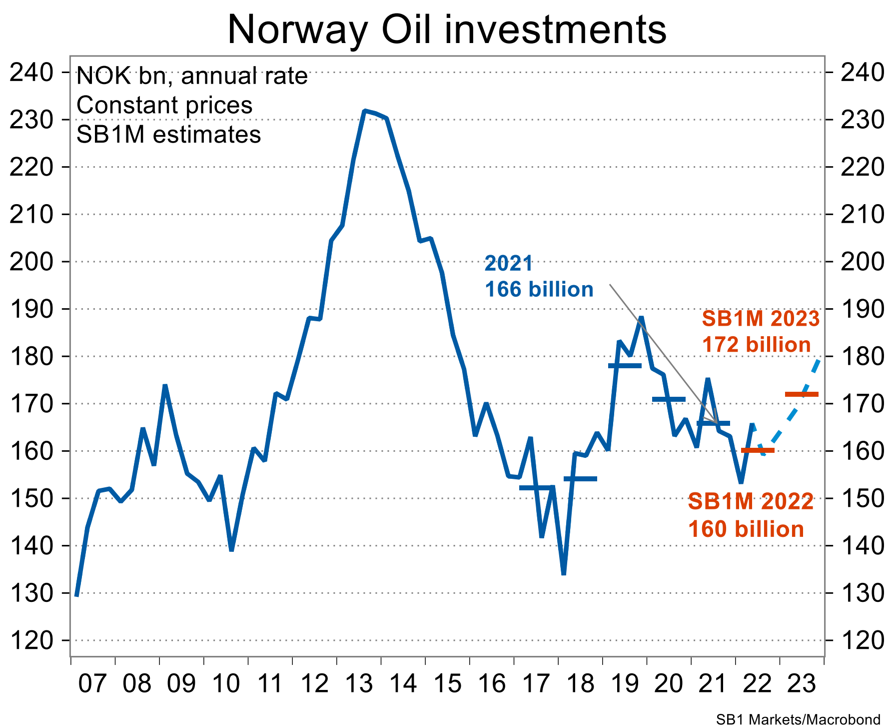


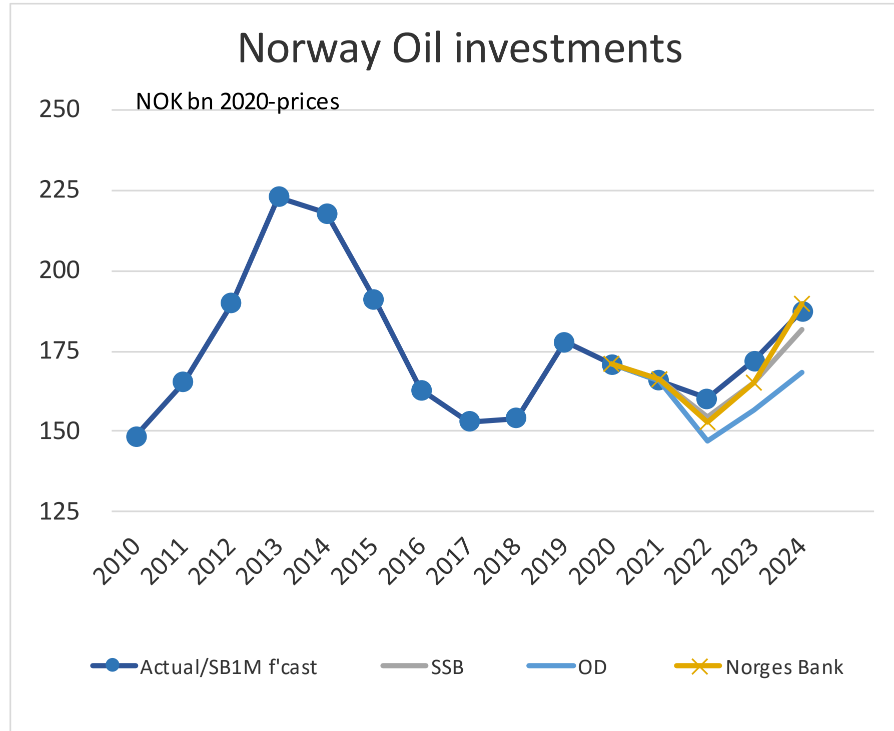
- The current '22 estimate is somewhat above the 2021 outcome
- The 2023 estimate is 23% (!) below the equivalent 2022 estimate – and 1/3 down vs the current 2022 estimate! Which cannot be explained by the current oil and gas prices! Do the oil companies not need to search for more??

SpareBank 1 MARKETS

Oil investments further down in 2022 – before the next mini boom?

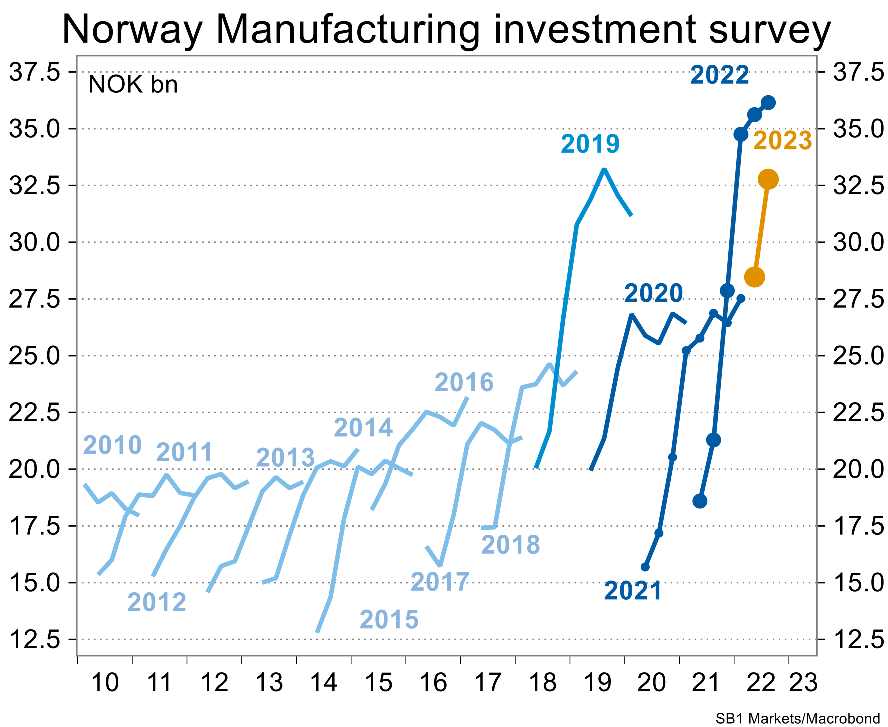
Investments are expected up in both 2023 and 2004, according to other forecasters

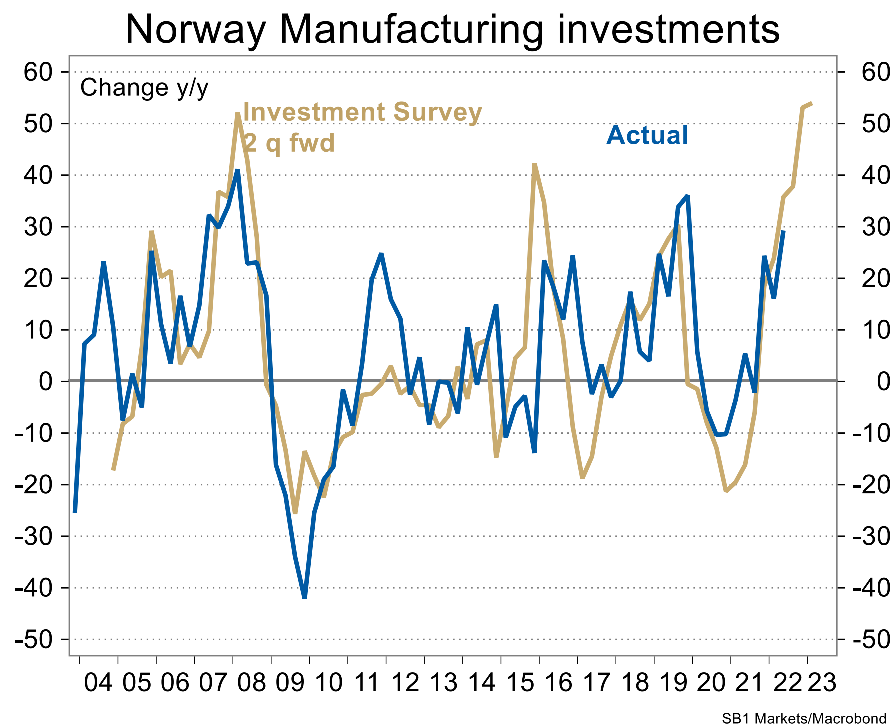




WOW, manufacturing investments ~~probably~~ very likely further up in 2023

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





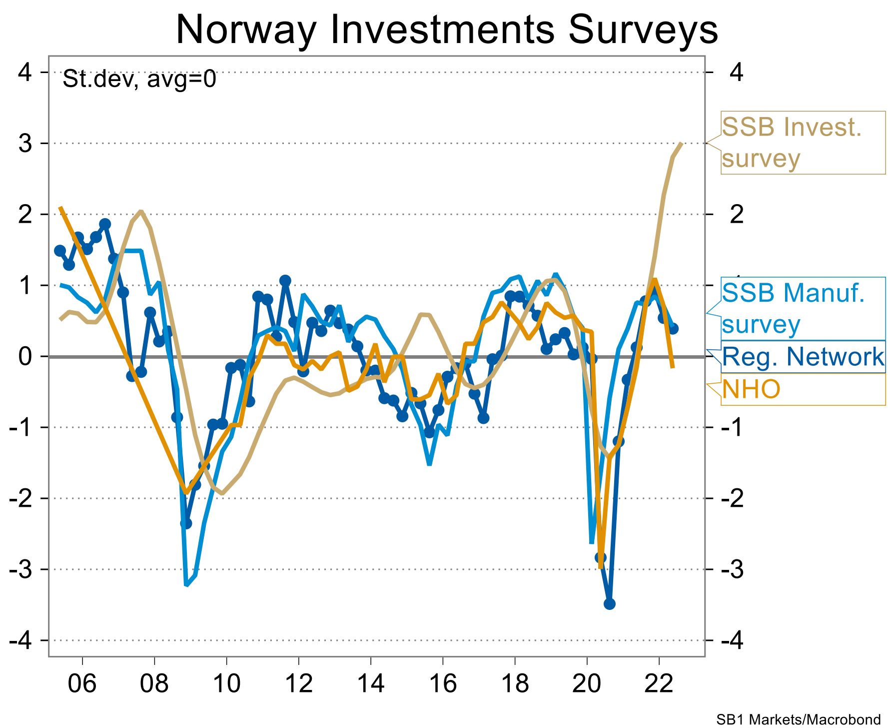
- Manufacturing companies report a 35% growth in **investments in 2022** – to the highest level ever, at least in nominal terms – NOK 36 bn. We assume at least 20% growth in volume terms (prices are rising rapidly)

The **2023 estimate** was lifted by 15%, and it is 54% 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

- **Computer/electrical equipment** contributes the most to the increase in the 2022, followed by non-ferrous metals
- **Non-ferrous metal industry** reports very aggressive investment plans in 2023 as well, as does the computer/electrical industry. We assume batteries are included in the electrical industry

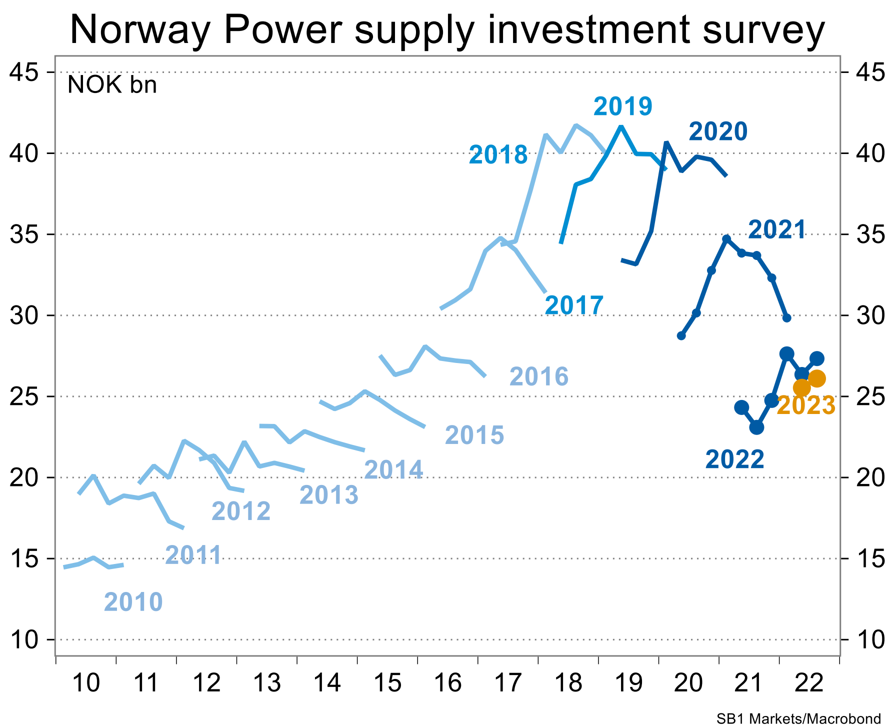
Other surveys are signalling a slowdown in manufacturing investments

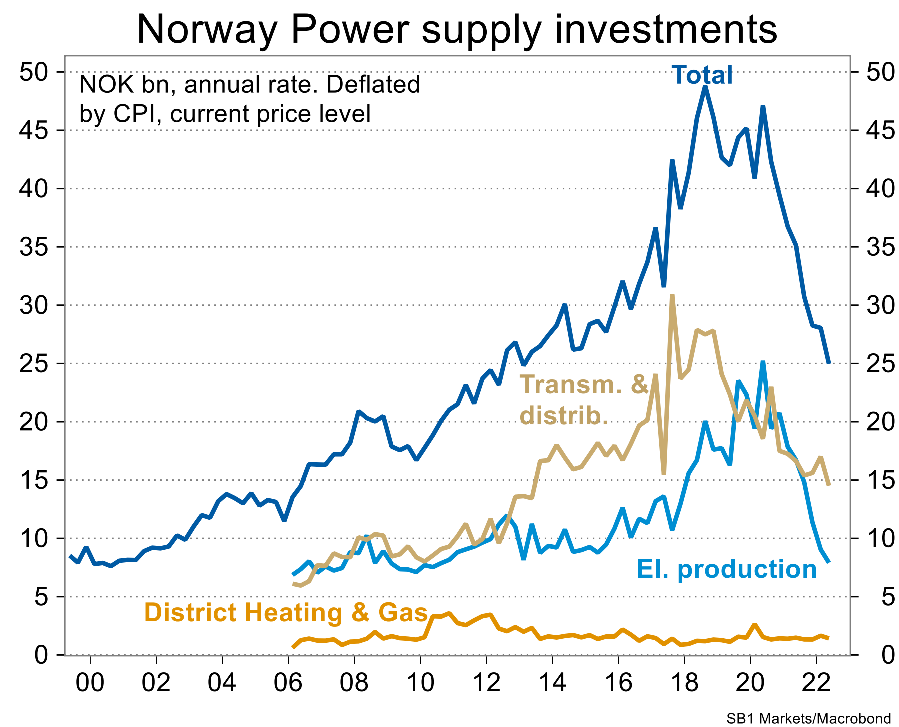
The discrepancy to other surveys has never been as large as now



Power supply: After 2 years of decline, a small uptick next year?

Investments are down more than 35% since 2018, now prices should make (all) projects profitable?

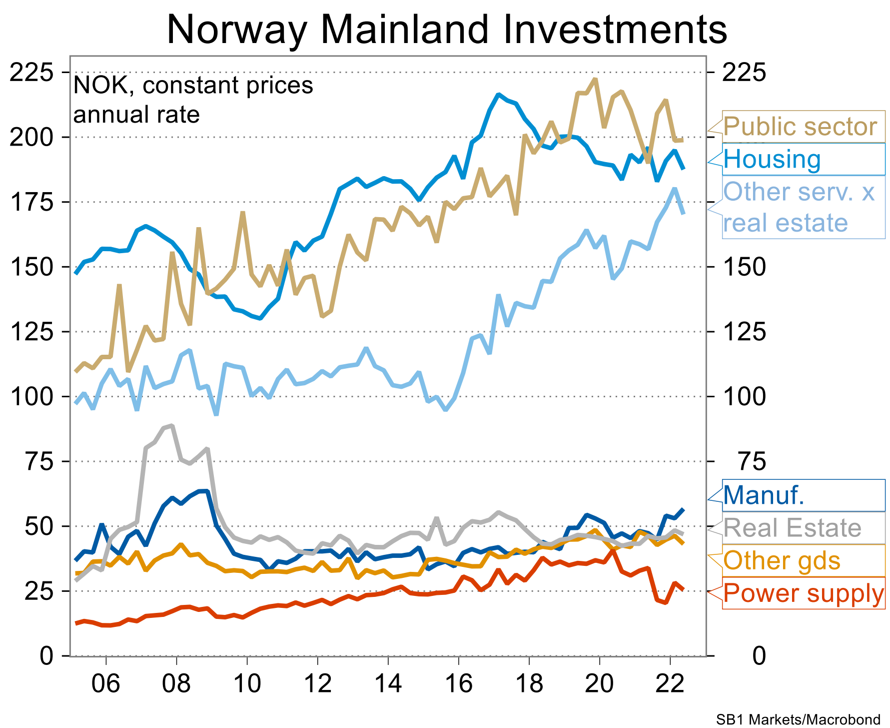


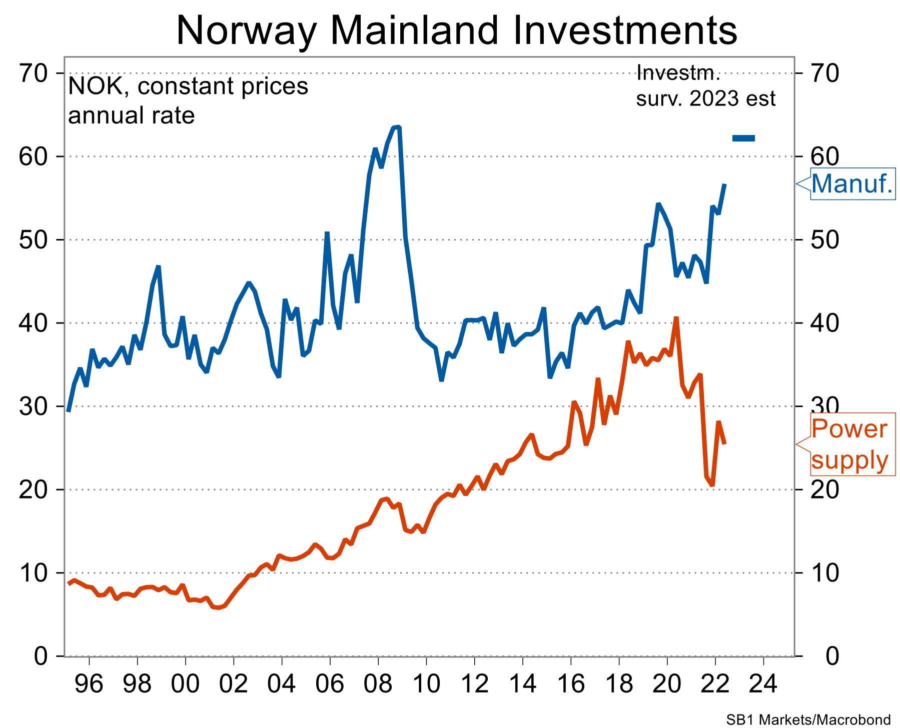


- **Power supply** (production & distribution) companies assume investments will decline by some 15% to NOK 26 bn in 2022
- The second **2023 forecast** was 13% above the equivalent 2022 forecast, and we expect the final outcome to be well above
- Until 2018, power supply investments had more than quadrupled since early 2000, by more than 10% p.a on average. The investment level as % of Mainland GDP was above 1%, the highest in decades. Both production & transmission have contributed. To 2022 from 2018, investments may decline by 36%, in nominal terms, and more in real terms.
- The current & future prices should make 'all' projects profitable, and activity will very likely increase, both production and transmission, both off and onshore (wind and hydroelectric, even some solar)– as soon as the authorities are able give their thumbs up

SpareBank 1 MARKETS

Manufacturing and power supply investments have diverged sharply

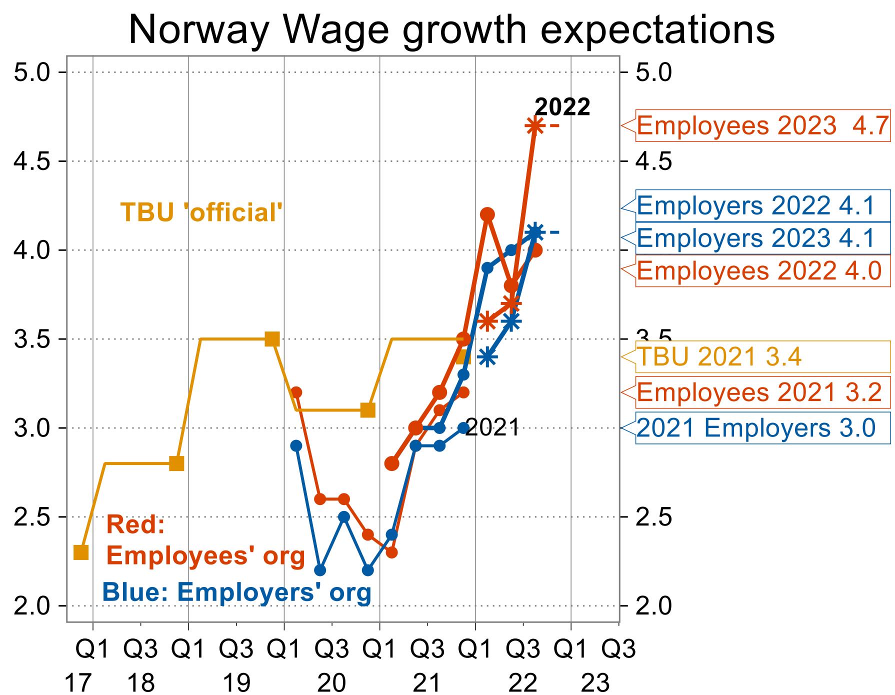




- SSB's survey signals a huge leap in manufacturing investments in 2023, + 10%, in volume terms to NOK 61 bn

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



SB1 Markets/Macrobond

2022

- Both employers organisations and unions expect a 4.1% wage lift this year, above the agreed 3.7 – 3.8% agreed upon this spring
- **Norges Bank** assumed a 3.9 % growth rate in the June MPR

2023

- **Employers** aim for 4.1%, up from 3.6% forecast in Q2, a substantial lift
- **The unions** expect 4.7% wage inflation, up from 3.7% in Q2, the largest q/q lift ever, and the largest gap to employer's organisations ever!
- **Norges Bank pencilled** 4.5% in June – so the unions may perhaps not be that far off?

In sum

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

However, inflation expectations are drifting upwards

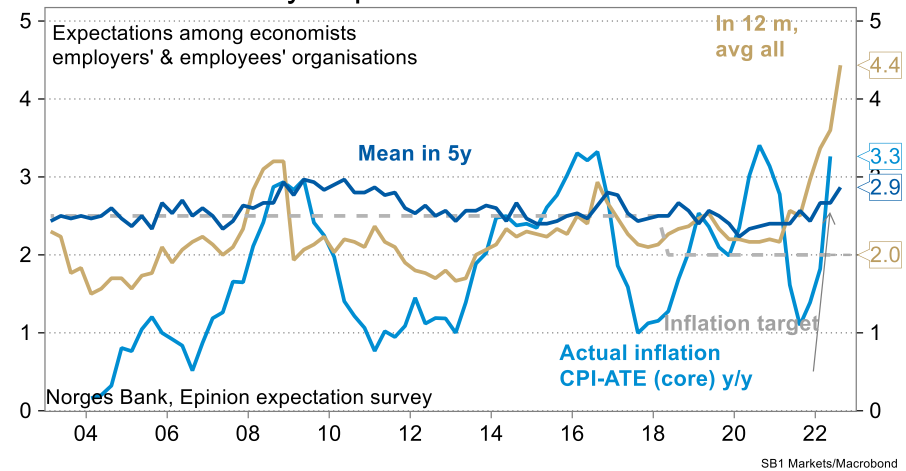
- In addition – and not surprising - inflation expectations for the coming years, and even for the long run is well above the 2% inflation target
- This is surely a huge challenge for Norges Bank: How 'forcefully' should the bank be in order to 'correct' these expectations, or even more important, prevent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

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

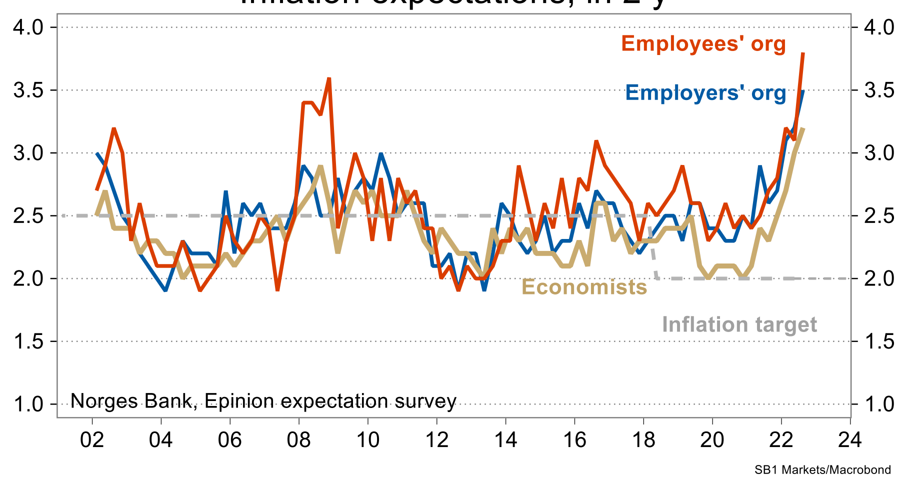
Employer's org/unions expect 3.5 – 3.75% is 2 years' time. Nobody believes in the 2% inflation target anymore!

Norway inflation expectations, in 12m

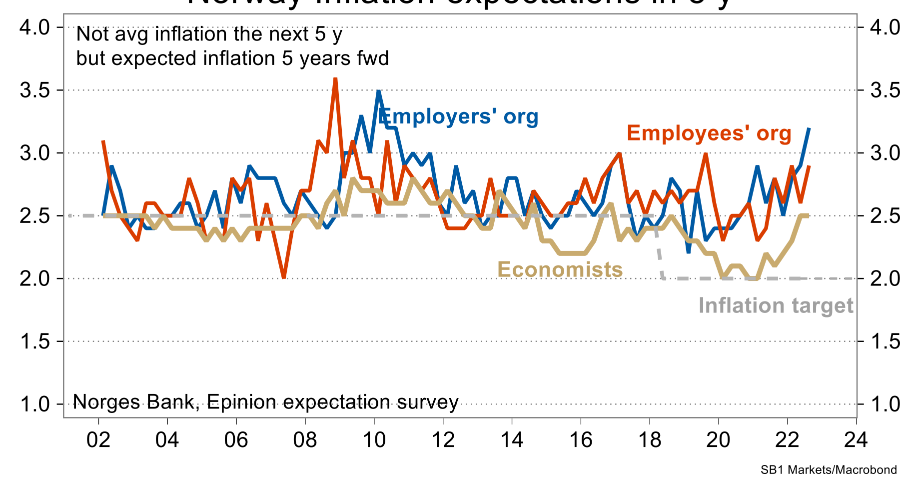
Norway Expected vs actual inflation



Inflation expectations, in 2 y



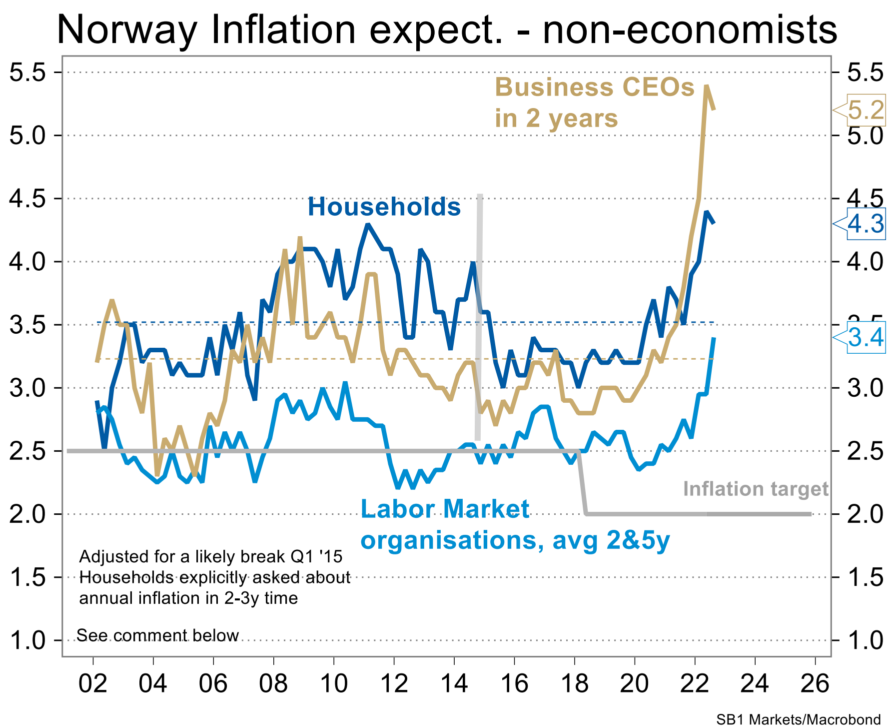
Norway Inflation expectations in 5 y



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

Household, business inflation expectation are not particularly well anchored

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



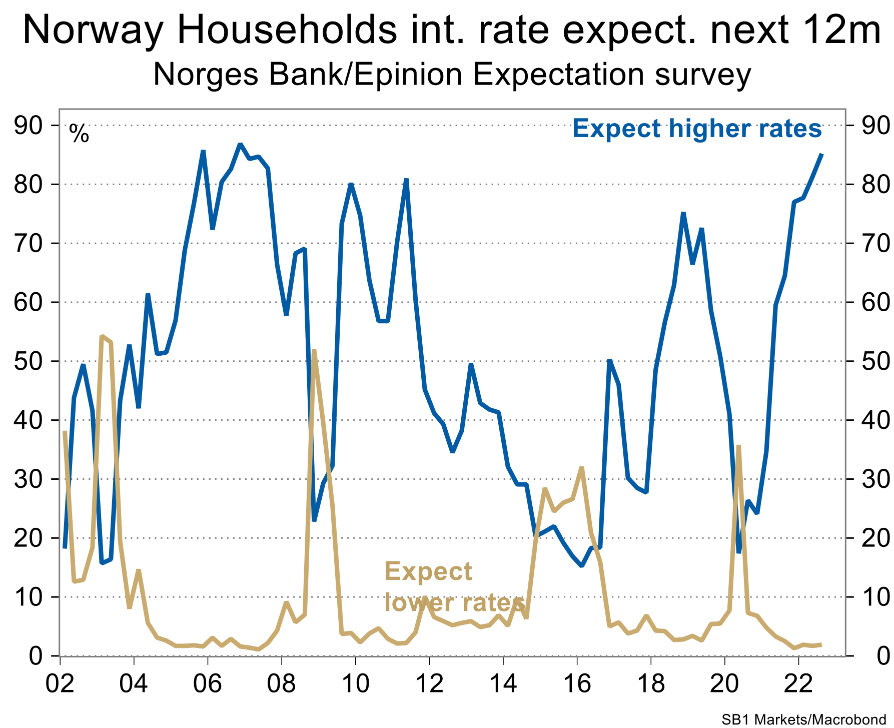
Business leaders' & households' expectations have climbed to well above normal (very high) levels – but fell marginally in Q3!

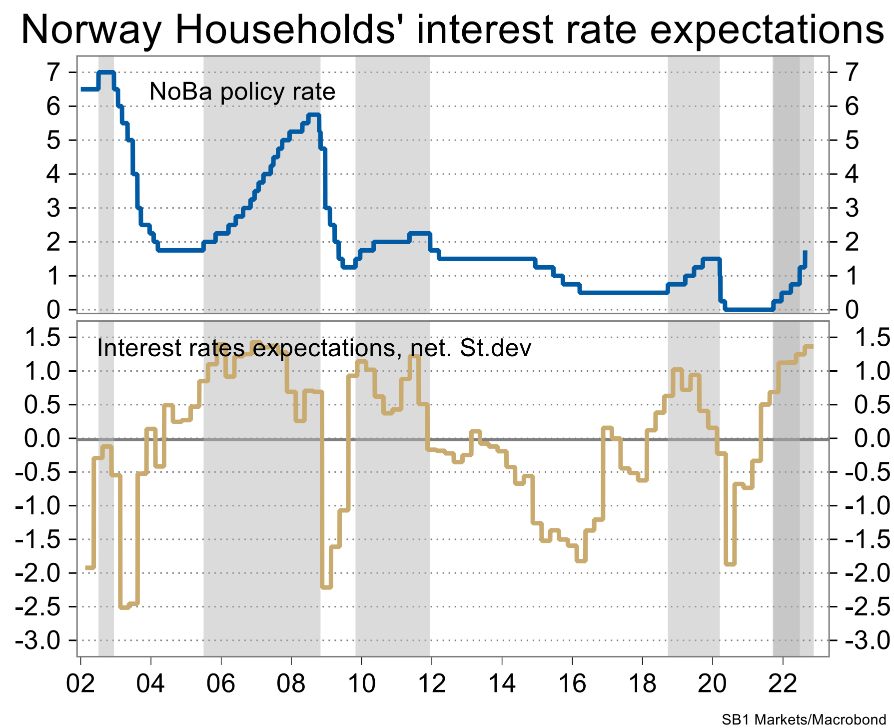
- **Labour market participants** (leaders in trade unions & employees' assoc.) are probably listening to their economists, but they still expect 3.4% long term inflation rate (2 y & 5 y avg). The cut in the inflation target to 2% in 2018 has not influenced inflation expectations at all
- **Business leaders** are expecting a 5.2% inflation rate in 2 years time – up more than 2 pp since before corona, and much higher than their average expectation (3.1%) (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 4.3% in** 2 to 3 years time, down 0.1 pp from Q2 but 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 recognises that interest rates are on the way up

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

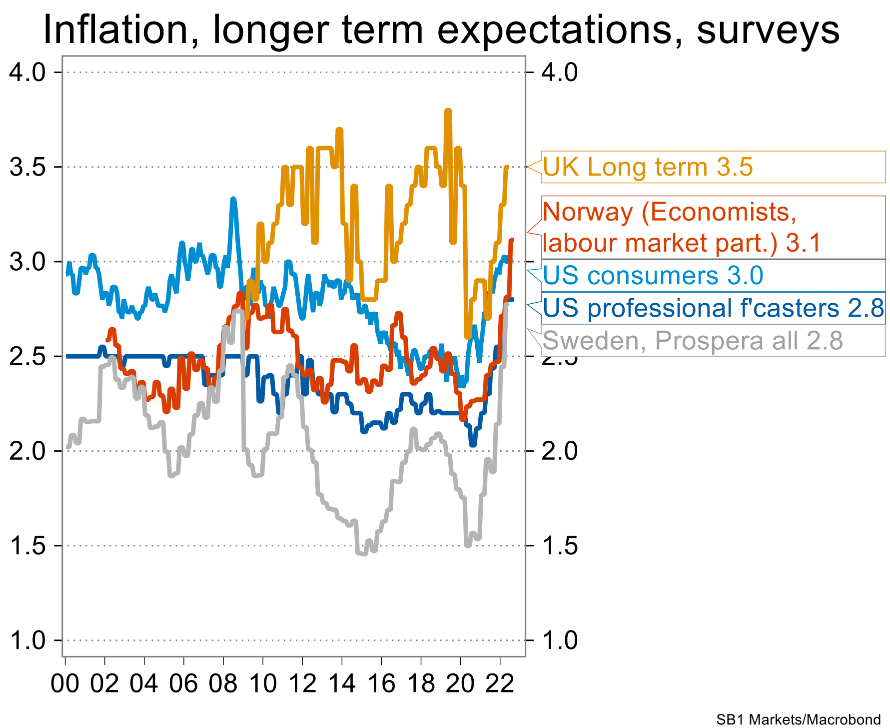


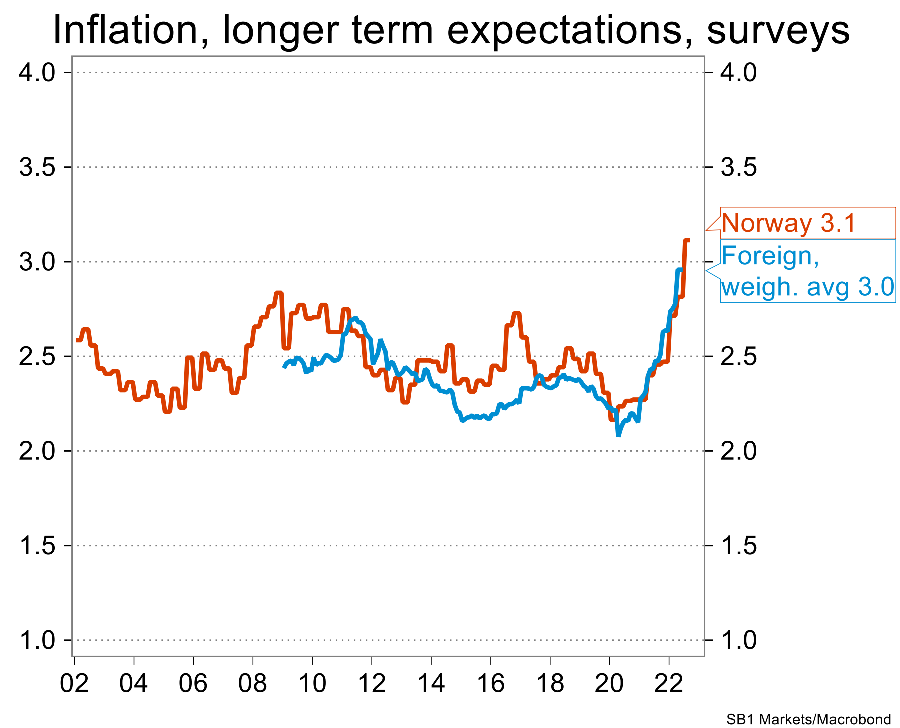


- 85% of households expect Norges Bank to hike the policy rate the coming 12 months, up from 65% 12 months ago, before NoBa started hiking. Nobody (or just 2%) expect NoBa to lower rates

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

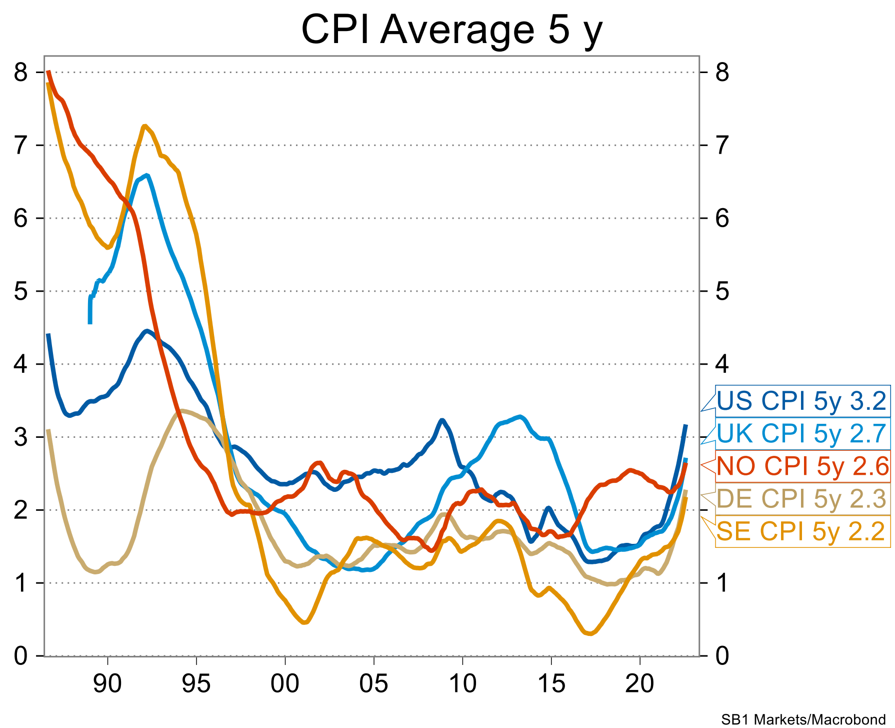
And they are on the way up now, everywhere. The discrepancy is neglectable. They are all at 3%...

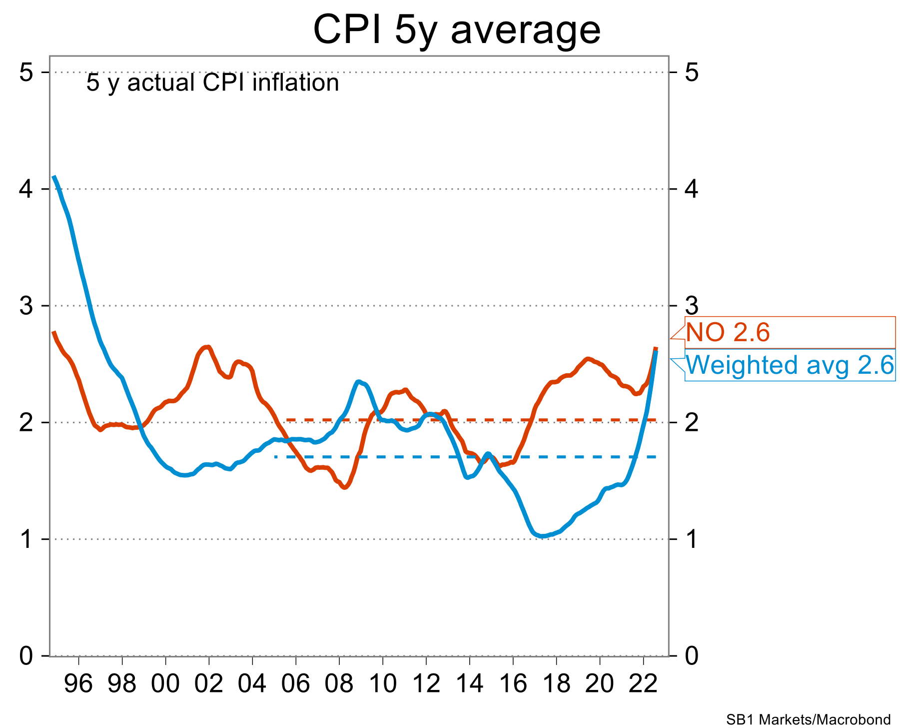




Long term: Actual inflation has been higher in Norway than abroad

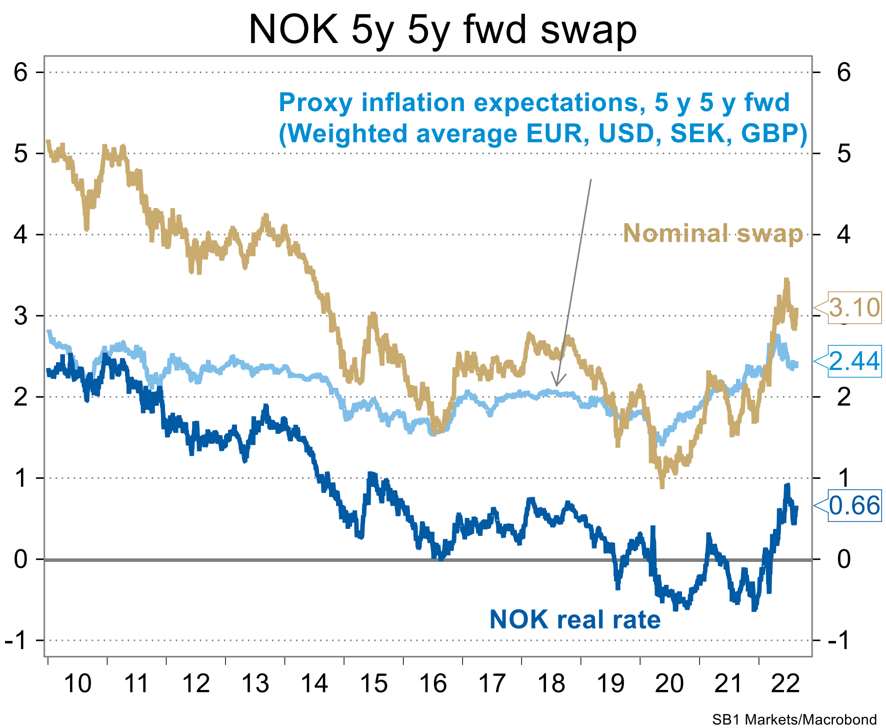
… But not consistently. The past 5 years, no difference at all

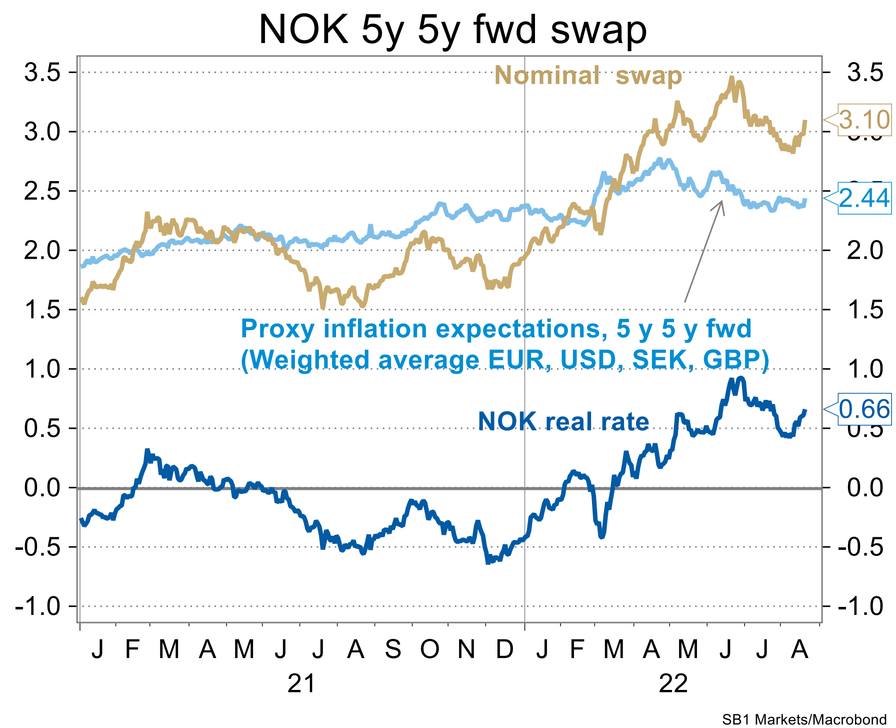




Where are the Norwegian market based inflation expectations?

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

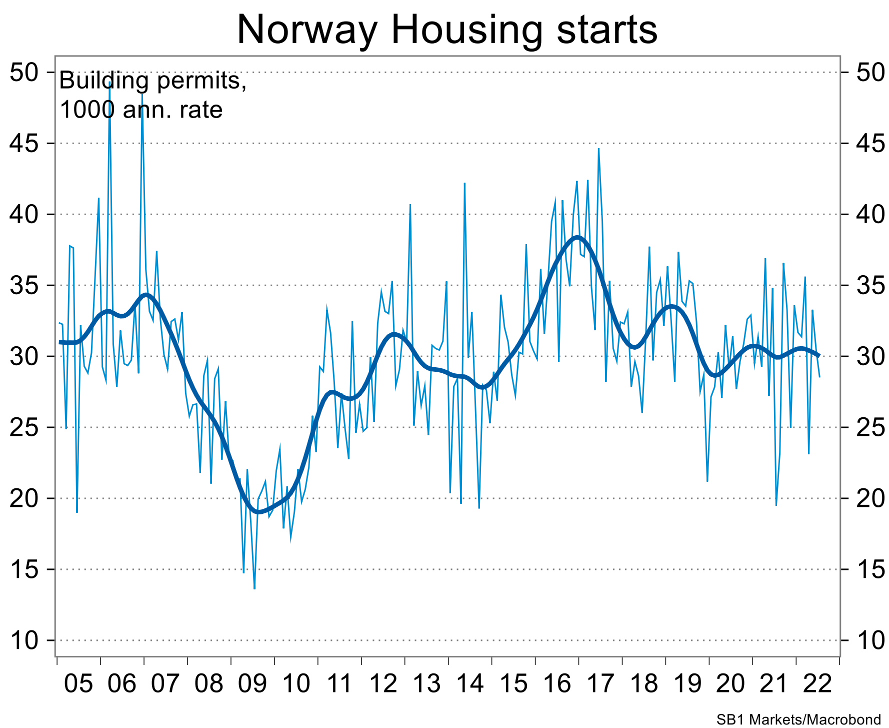


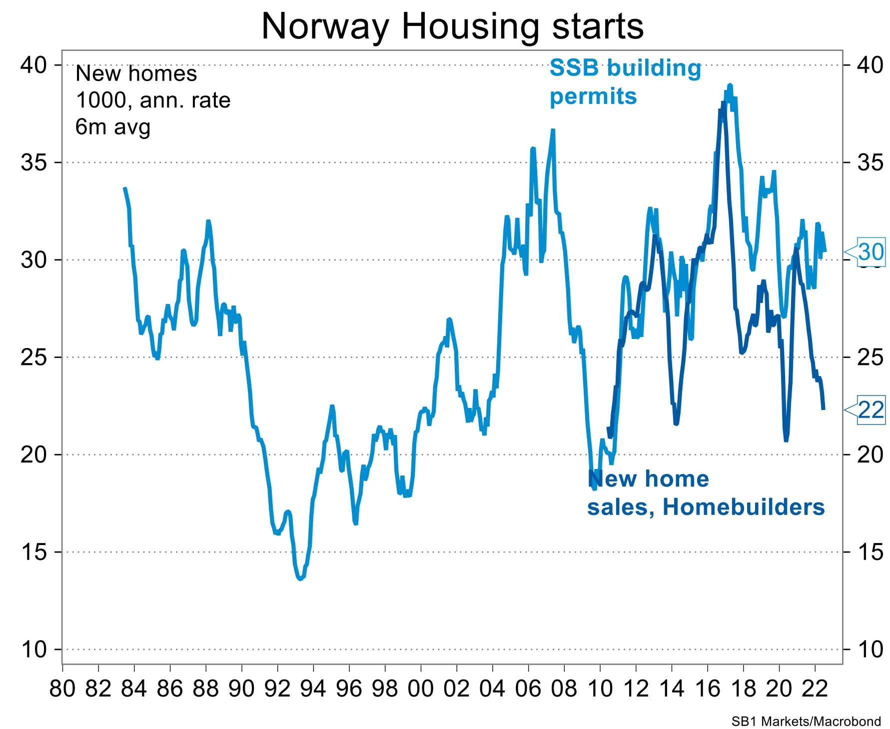


- We have constructed a proxy for Norwegian inflation expectations derived from break-even swaps in EUR, USD, SEK and GBP. Our peers vary somewhat level-wise, but the short term changes are very similar. We have just weighted them together (and adjusted GBP swaps for the CPI/RPI differential)
- The current estimated 5 y 5 y NOK inflation 'break-even' is 2.36%, almost 50 bps higher than a 'normal' level at 2%. The 10 y break-even is at 2.75%
- 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

SSB: Housing permits are still keeping up

Permits down to 29' from 33', and the trend is stable at 30'

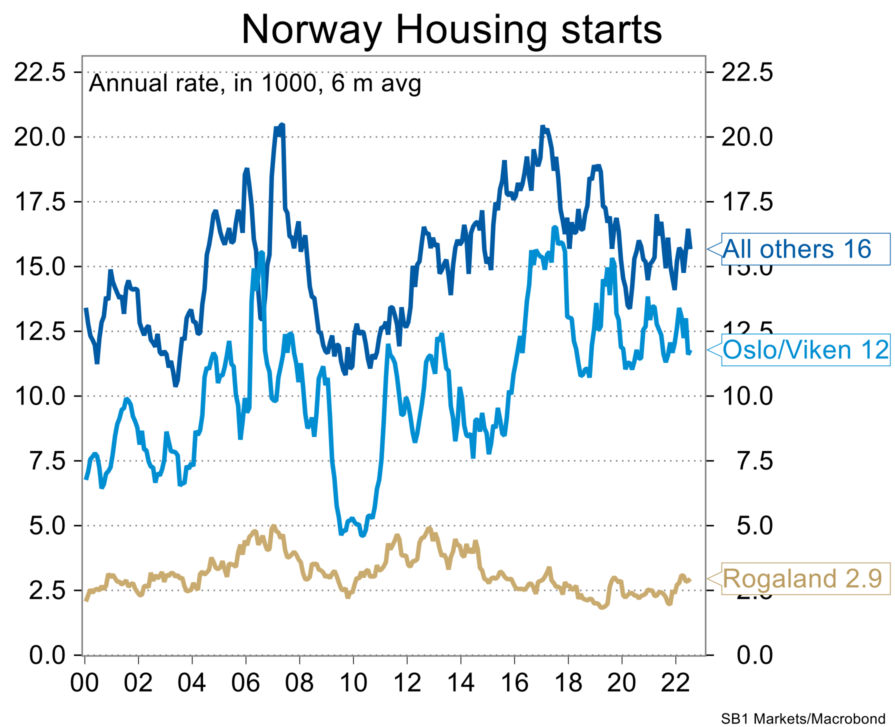


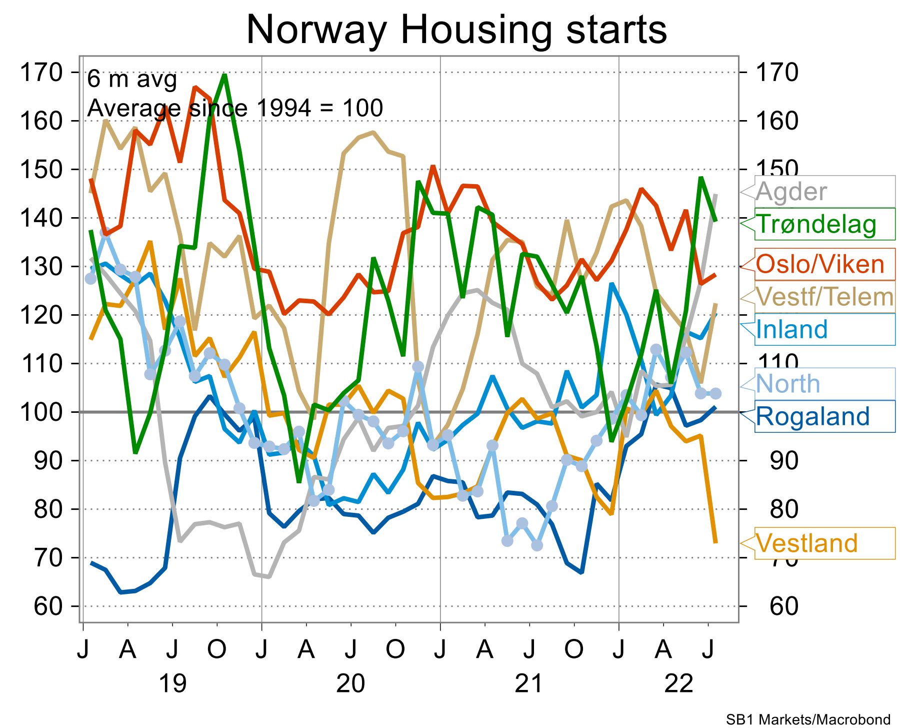


- The average no. of permits the past 6 months is at 30' (annualised), not far below the estimate at 28' from the Homebuilders (Boligprodusentene). However, sales have been somewhat weaker, according to the homebuilders, at 22' (shown at the chart)
- Student homes, and assisted-living/nursing homes are not included in data from the Homebuilders. Some larger players do not report either.

Rogaland, Trøndelag, Agder up; Vestland down

Most regions are reporting more starts than past 25 y avg

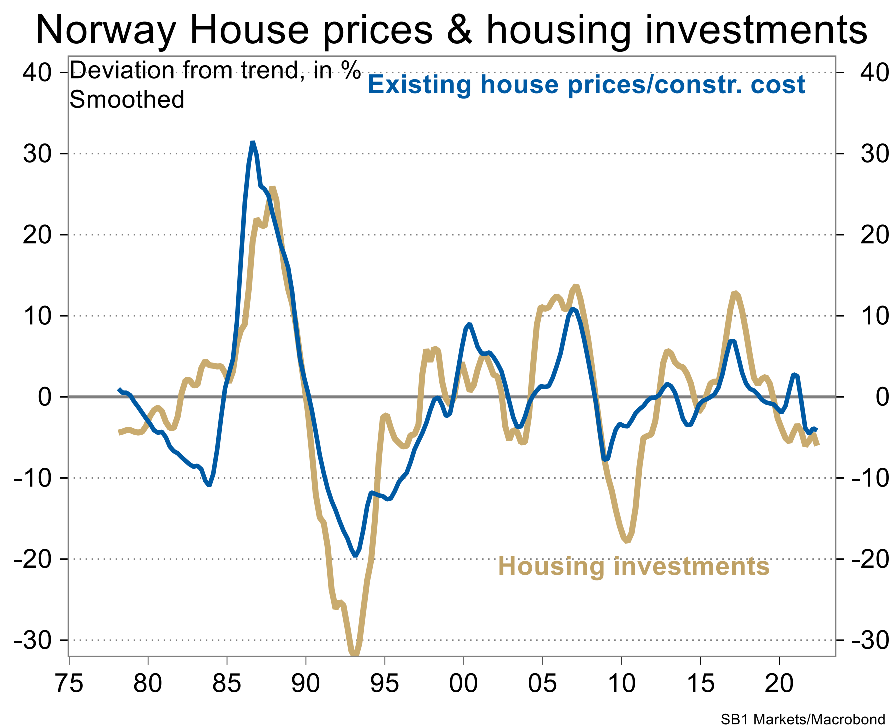


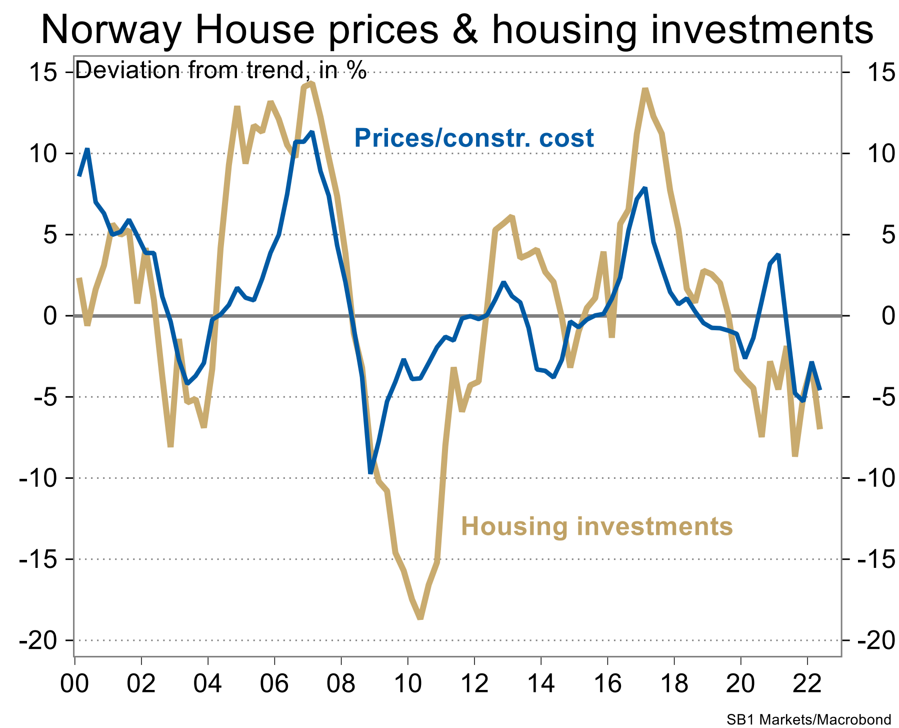


SpareBank 1 MARKETS

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

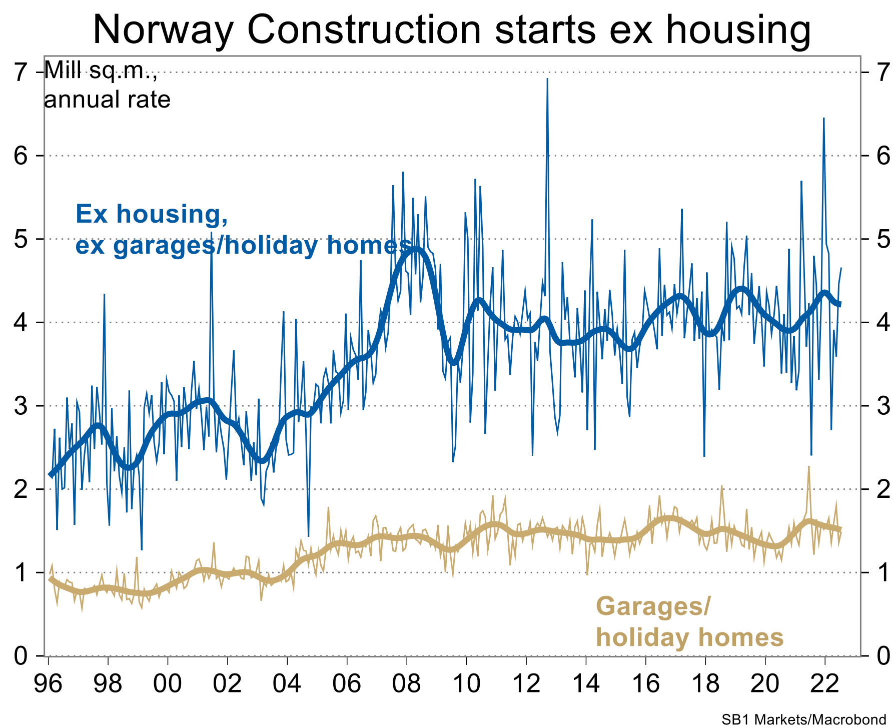
Prices have strengthened recent months – but higher building costs are weighting on starts

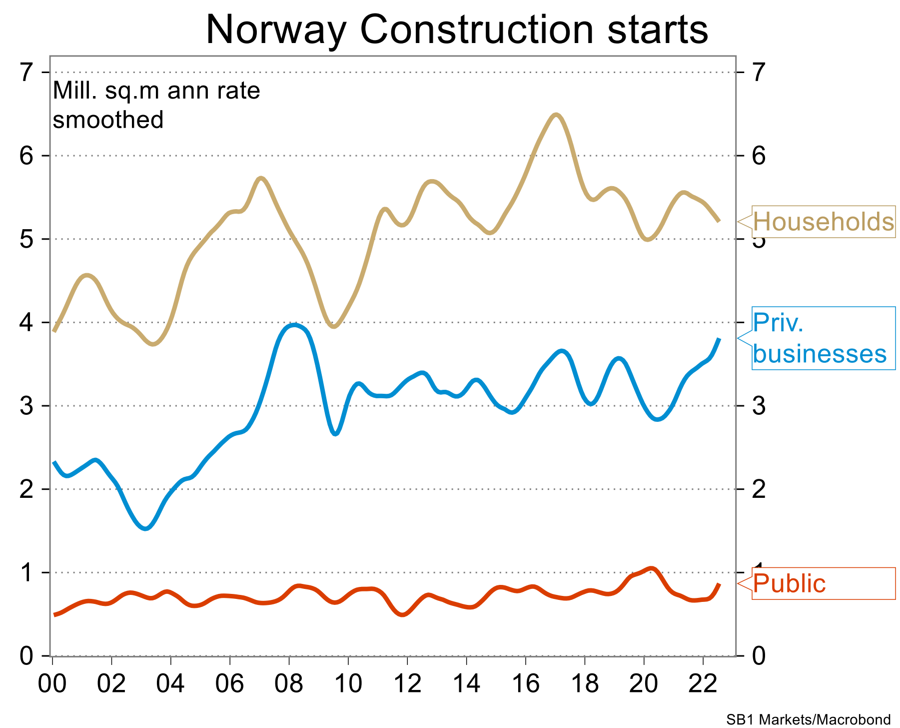




Non-residential construction keep up well

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



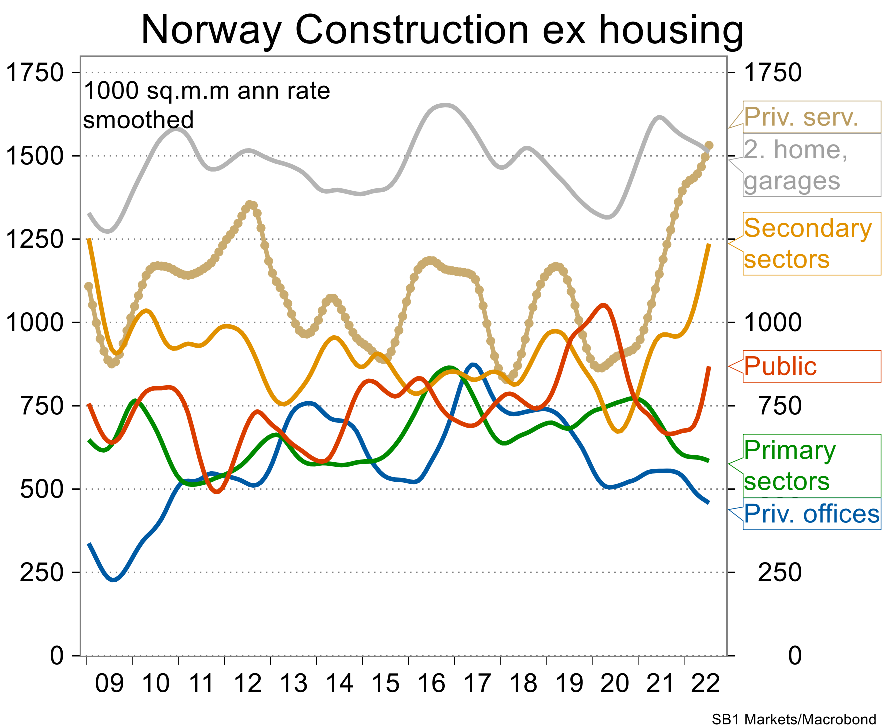


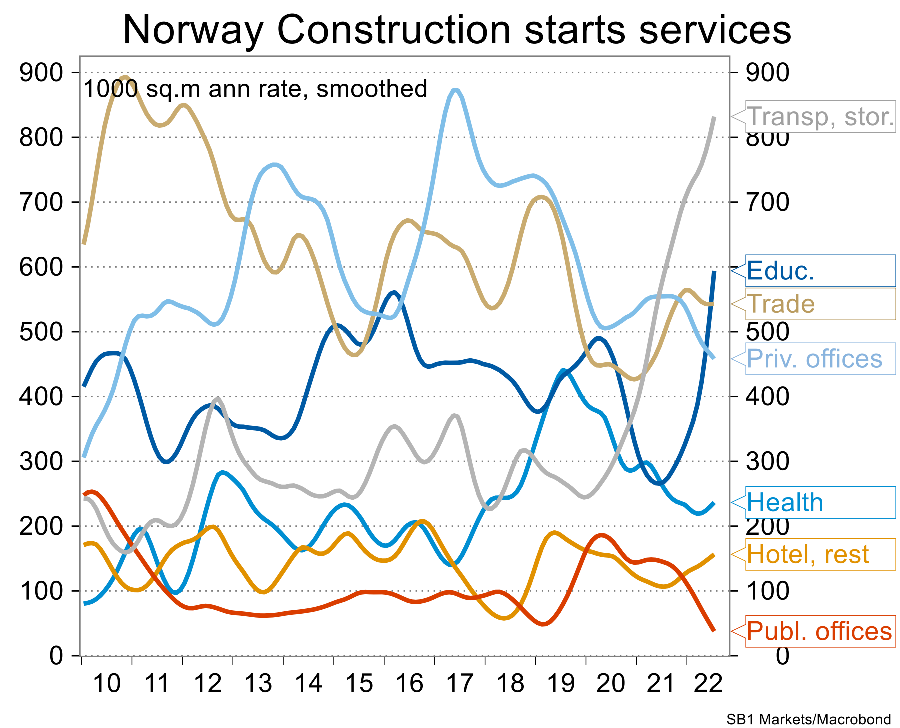
- **Construction starts ex housing & garages/cabins** are very volatile, short term, influenced by single projects
  - » **Private non-residential starts** climbed in are trending slowly upwards, and the level is the highest since 2008
  - » **Public sector construction starts** have recovered recently, following a decline in 2021
  - » **Construction starts of cabins/garages** climbed 30% – 40% from early 2020 until late 2021– but are now trending slowly down

SpareBank 1 MARKETS

Private services in the lead, transport/storage & trade + education on the way up

Private offices, public sector (health) have slowed substantially. Hotels & restaurants have turned up!



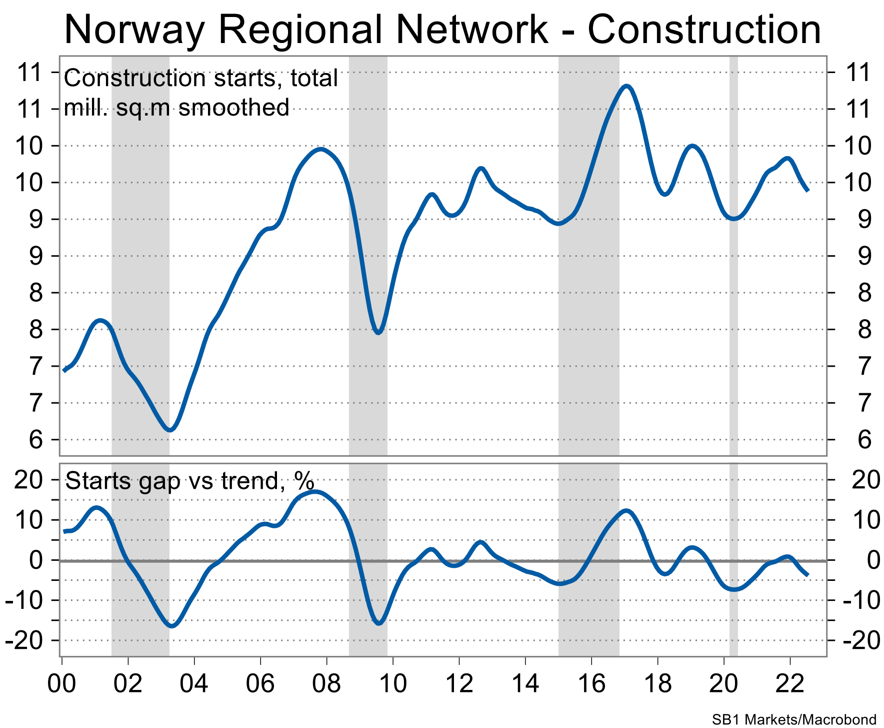


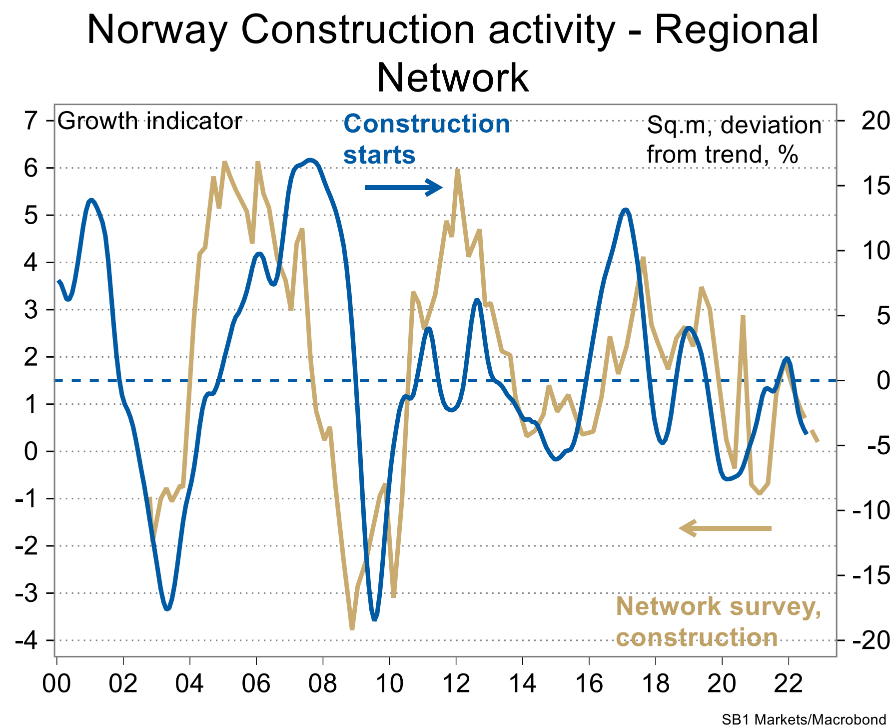
Public on the chart to the left, and at the previous page: Construction starts in public administration, education and health

SpareBank 1 MARKETS

The Q1 NoBa Regional Network signals a slowdown in the construction sector

... while total construction starts have come slightly down already

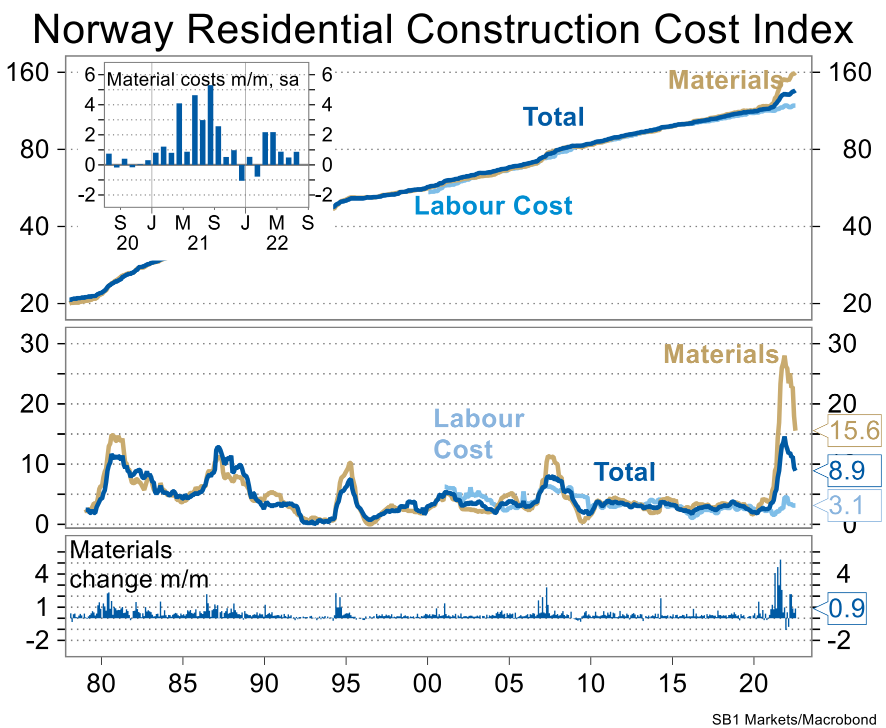


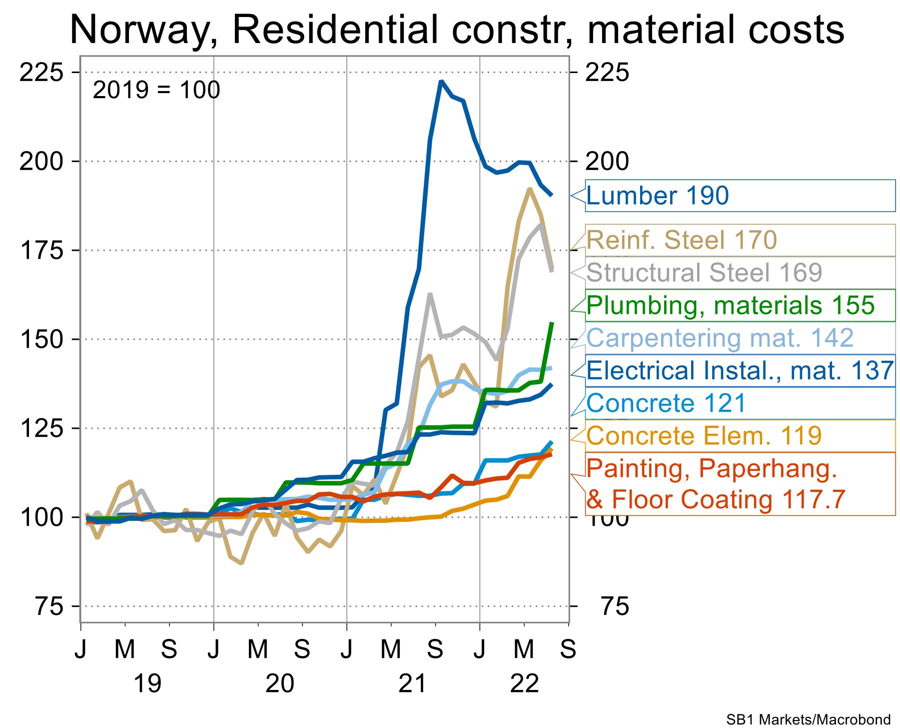


- The 'long term' trend in total starts is down since early 2017

Building costs: A further lift in material prices in July too – but lumber, steel down

Now, plumbing materials, concrete pushed material prices higher. Still, annual growth slows rapidly

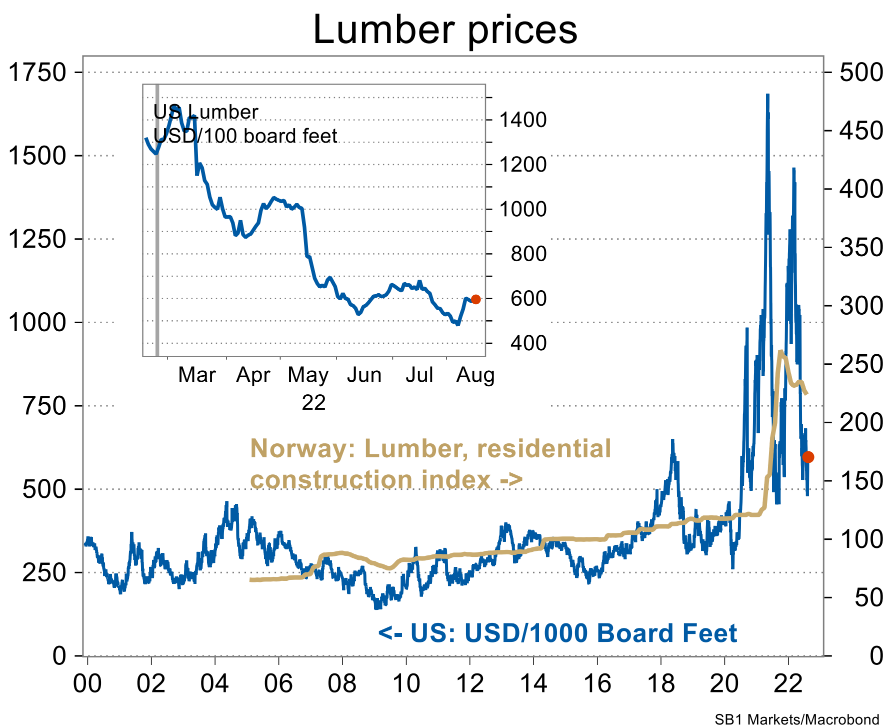




- **Material prices** (houses and apartments) added 0.9% in July, from 0.5% in June. Prices are up 17.9% y/y, down from 17.9% y/y in June (and 28% at the peak). We expected a decline m/m
  - » Lumber prices are trending down, and reports signal further declines the coming months. Steel prices fell in July, and given the recent setback in metal prices on the exchanges, end user prices will very likely be cut further
  - » However, other material prices are still trending up; Plumbing materials gained 12% m/m, are up 24% y/y, and 55% from before the pandemic! Concrete prices are also trending upwards, as electricity prices are pushing production costs up. The continued surge in European gas an electricity prices may also lift other prices
- **Labour costs** were just up 3.1% y/y in Q2, down from 4.5% in Q4 (which was the highest growth rate since 2009)
- Including labour costs, the **total building** cost index is up by 8.9%, down from the ATH at 14.6% at the peak last Oct. Going forward, we still think lower material costs will bring total construction costs down to more normal levels

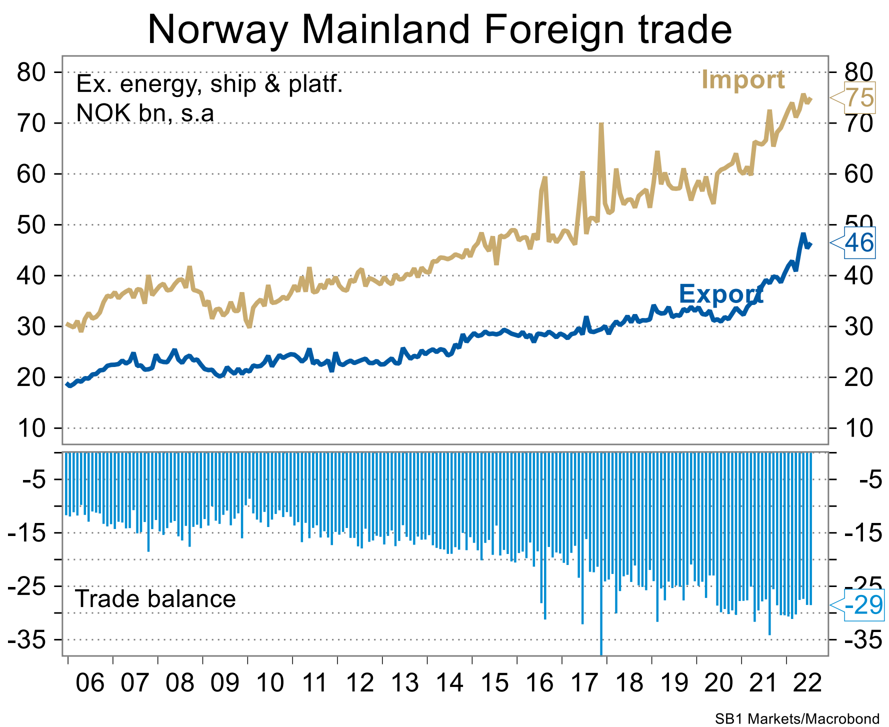
US lumber prices (2''x4) almost back to a normal level

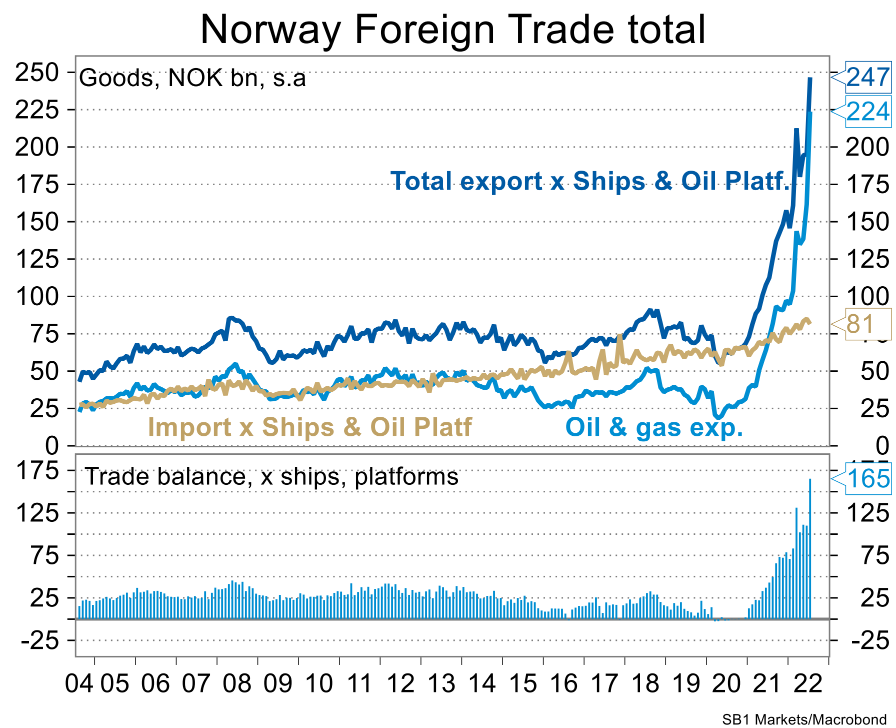
… and steel prices have been in a free fall recent months! More to come in Norway too



Another stellar ATH trade balance surplus. Thank you Mr. Putin

Gas exports through the roof, petro exports at NOK 224 bn in July, 77% of Mainland GDP…

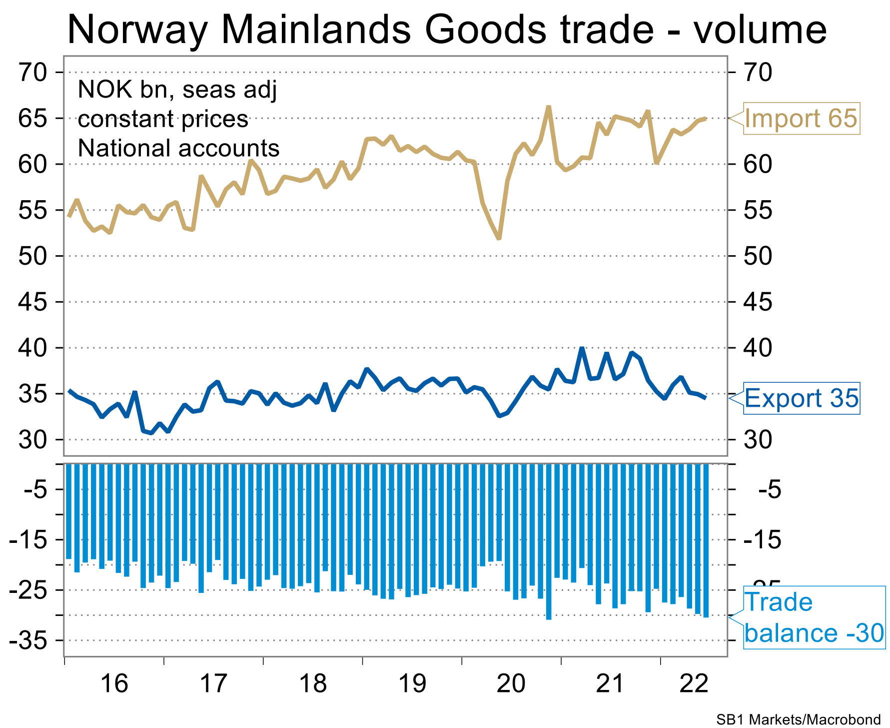




- The seasonally adjusted **overall trade surplus** in goods at NOK 247 bn is the highest ever, equalling some 80% of GDP!
- **Natural gas exports** shot up in July, due to higher prices. Export volumes were high too. The value of oil exports rose marginally
- **The <u>Mainland (non energy) trade deficit in goods</u>** was unch at NOK 29 bn, equalling 10% of Mainland GDP (however, most imports for oil investments are categorised as Mainland imports and sales from the Mainland to the oil sector (both op.ex and cap.ex) are not counted as exports – and the 'real' Mainland trade balance is far, far stronger)
- **Non-energy exports** rose marginally in July, NOK 46 bn, the 2nd highest level ever. The underlying growth rate over the past year is more than 25%. Exports are up 50% since 2020, mostly due to higher prices but volumes are up as well. Fish, metals & chemicals are reporting strong growth
- **Imports** also rose marginally to 75 bn, and remain at 13% growth pace

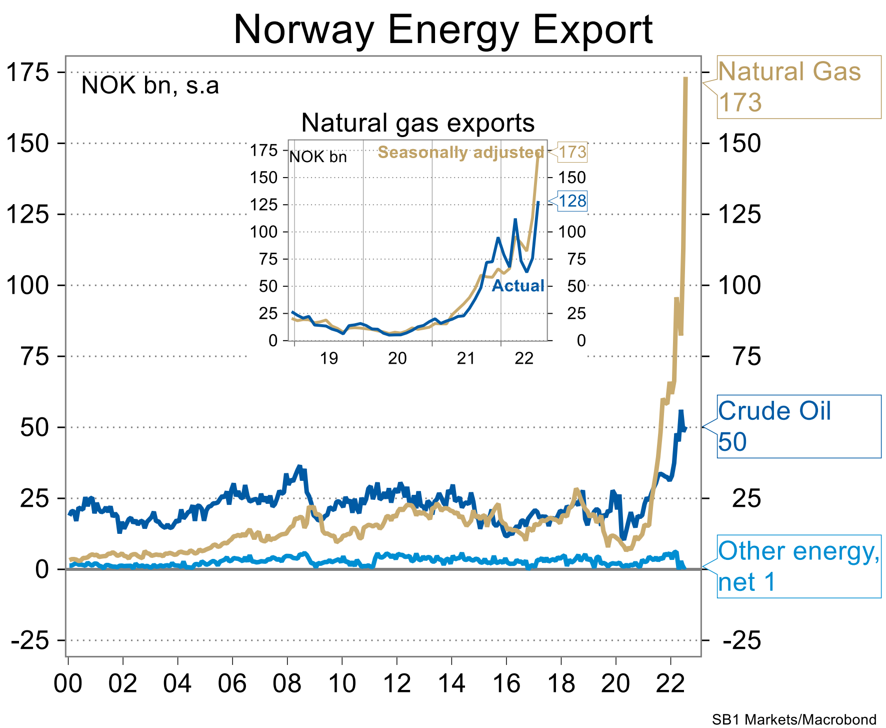
In volume terms, trade data are not that impressive

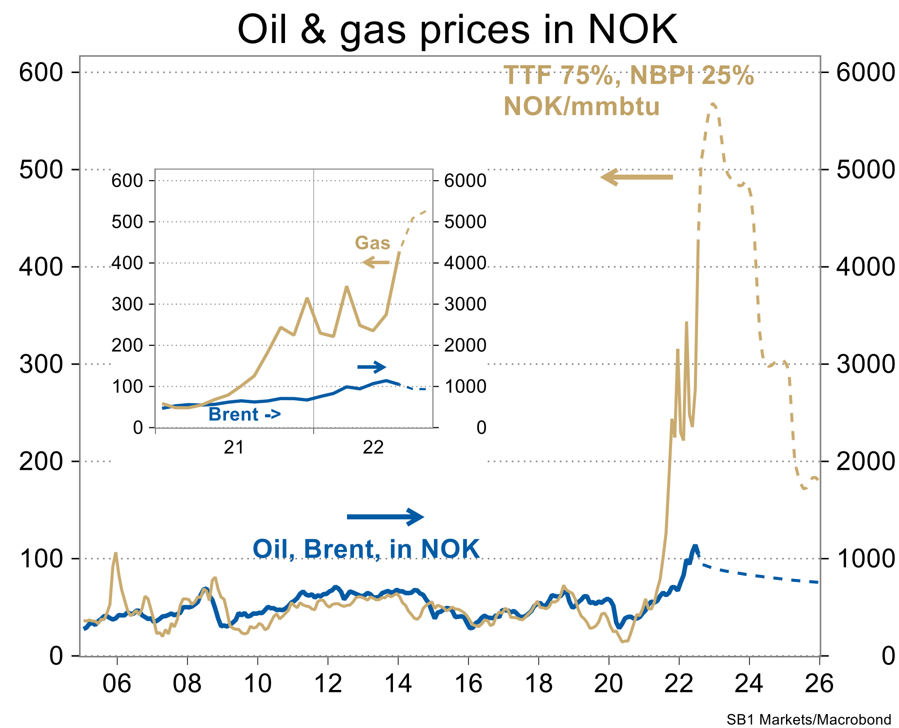
Export volumes are trending down, and imports have more or less flattened



Gas exports are surging, and more to come, according to future prices

Crude oil exports fell in July, on lower prices

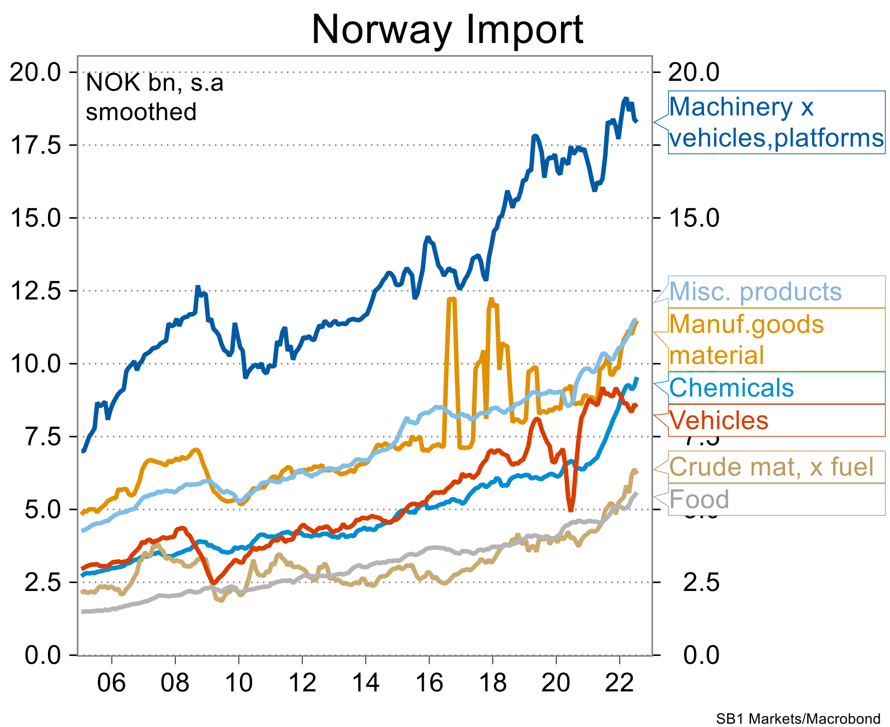


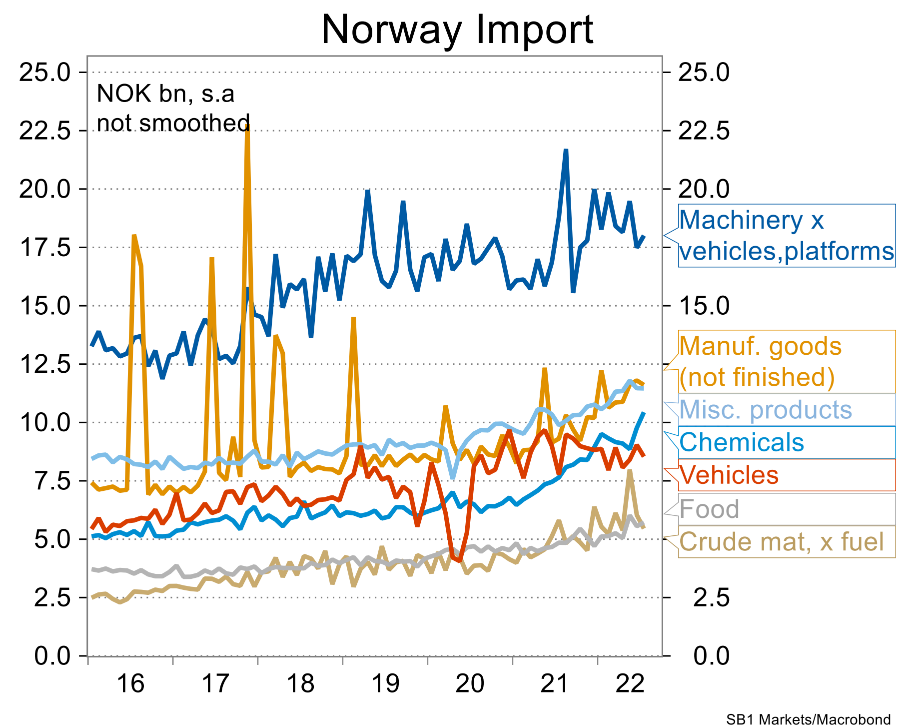


- **Gas prices** (75% TTF Netherland gas prices, 25% NBP UK prices) have shot up as Russian exports to Europa has been cut further down. In July, prices rose by 56%, to ATH. Actual gas exports rose by 70% to NOK 128, while the seasonally adjusted figure was up 53% to NOK 173These seas. adj price are rather uncertain is the seasonal patterns in both volumes and price may be influenced by the current European energy crisis
- **Crude oil exports** climbed rose marginally to NOK 50 bp, below the ATH at 58 bn in April
- In sum, **petro exports** at 224 bn (seas adj), ATH by far. Most of it, not far below NOK 200 bn, will end up in the Government's coffers and thereafter transferred directly to the Oil fund
- **Other energy exports** were low in July, as Norwegian electricity production was kept in check due to a low level of reservoirs in the hydroelectrical system (and we exported electricity surplus in the North at a low price)

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

However, vehicle imports are finally yielding but probably mostly due to delivery problems

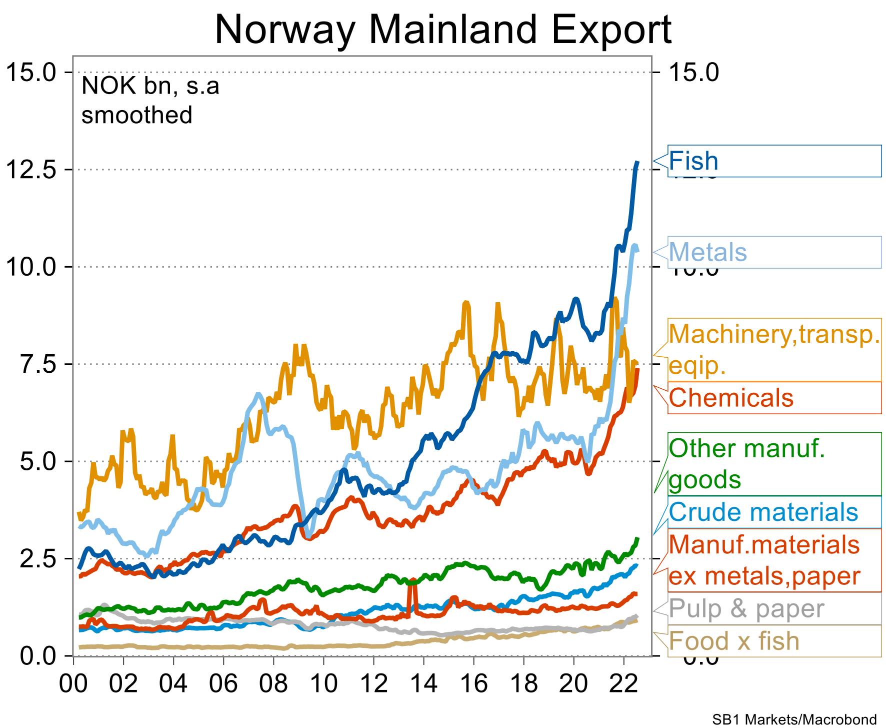


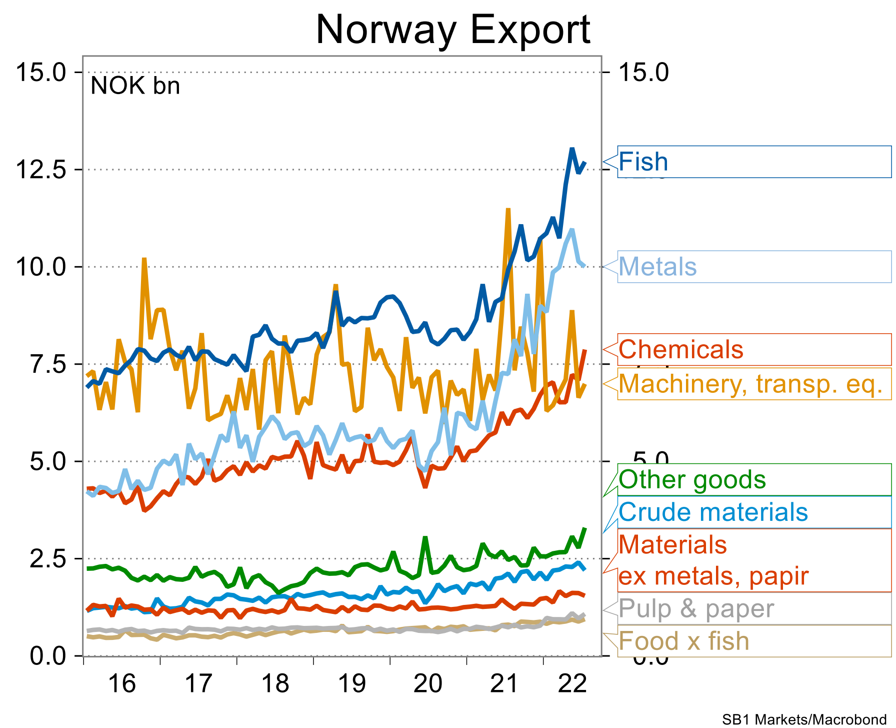


- The spikes in imports of manufactured goods are due to unfinished platforms or ships

Fish exports are surging, metals & chemicals are sprinting upwards too

Exports of machinery & transport eq. sharply down recent months, level unch. from 2014 (and 2007)

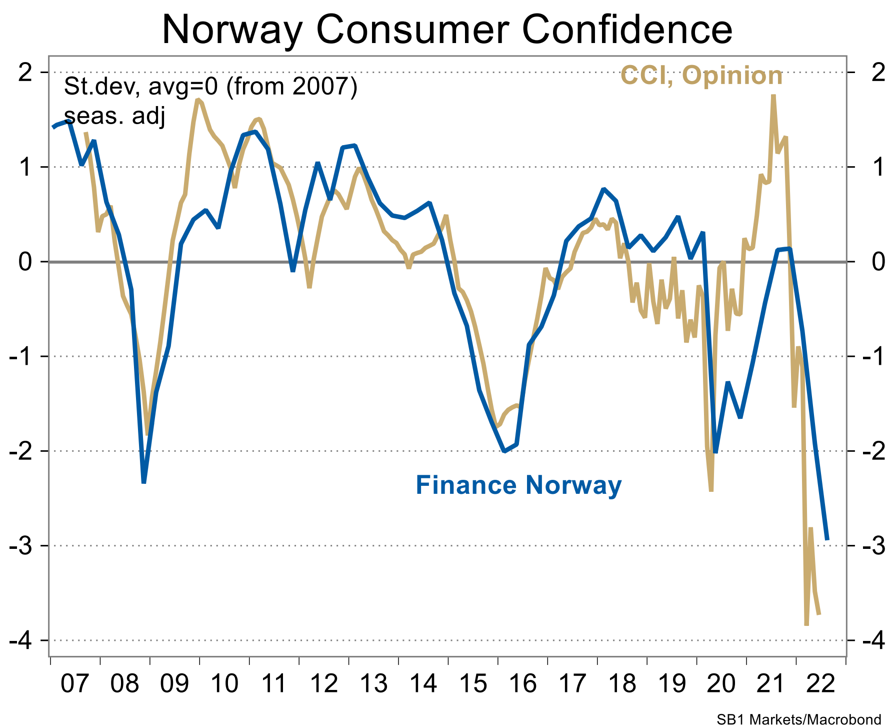


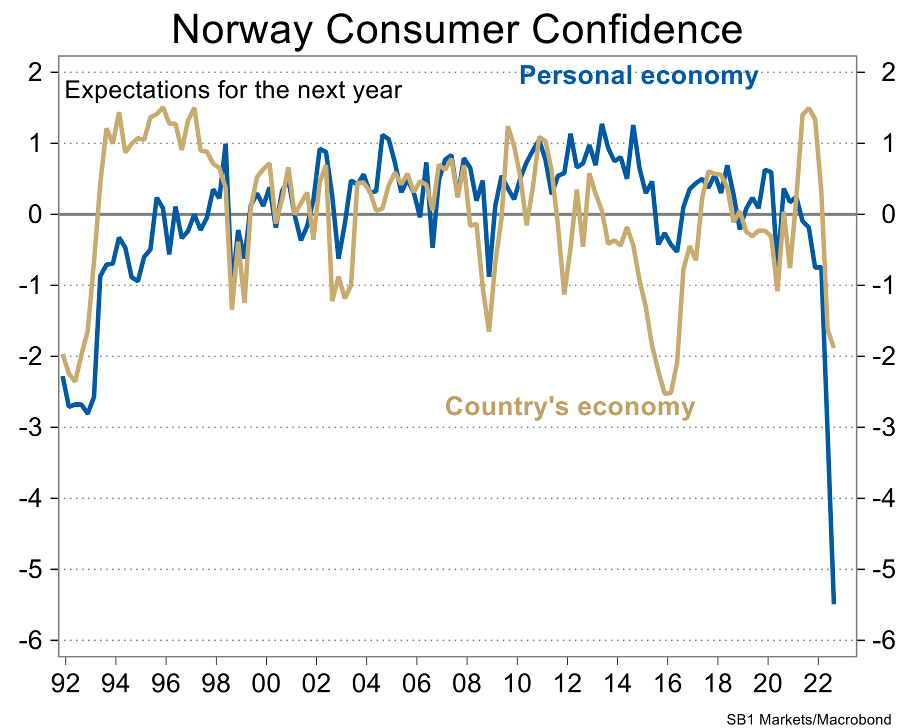


- Raw material prices will very likely come down from the precent high levels (many are on the way down already). Then the value of commodity exports will come down as well

Finans Norges' Q2 consumer confidence down to -3 st.dev

However, personal economy expectations collapsed to -5.5 st.dev! Totally unprecedented

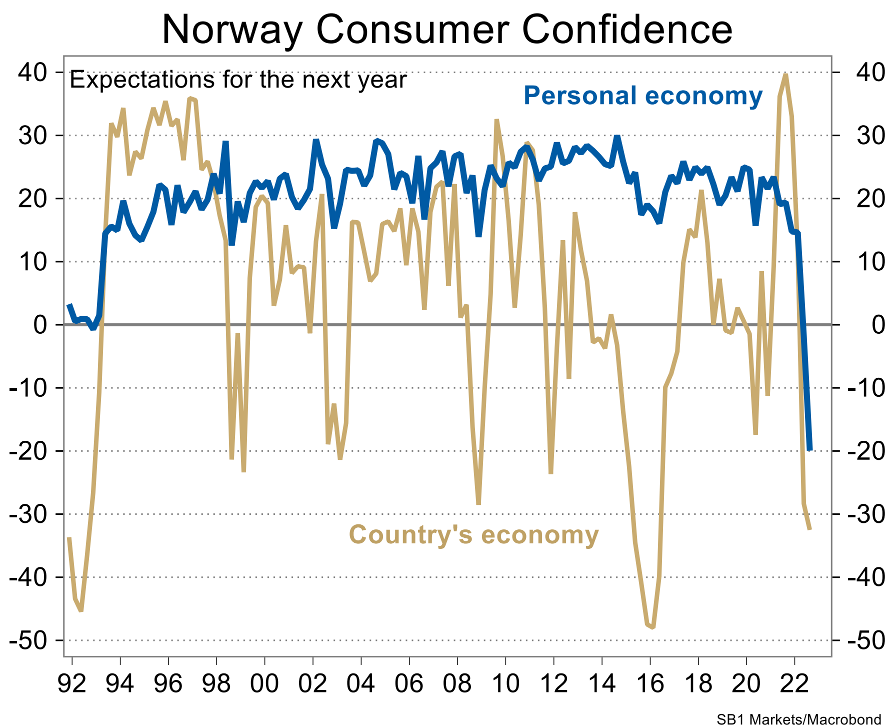


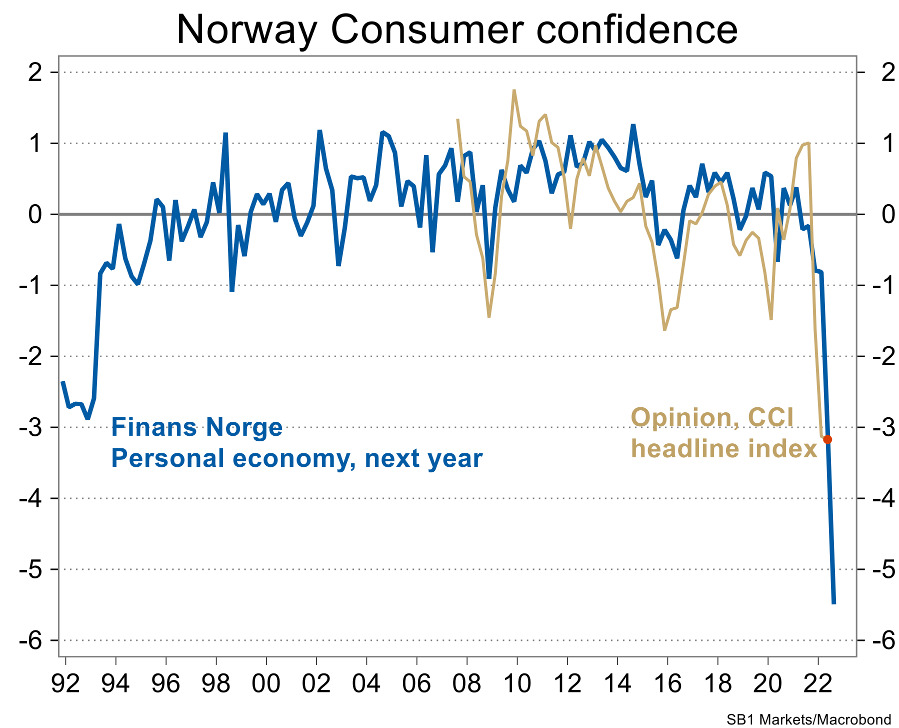


- **Finance Norway's quarterly consumer confidence index** fell to -27 in Q3 from -15.8 in Q2 (revised from -11.7 in Q2). The index fell by 1 st.dev to -2.9, to the lowest level ever, date from 1992
- **Households' expectations** of their own economy fell sharply once more, by almost 2 st.dev to -5.5!! The actual index number fell to -20 p, the second negative print ever: So the balance is still not that weak per se, there is just a majority that has a negative outlook, which is not strange given decline in real wages and higher interest rates, check the chart on the next page too. It may be that spending will not become that weak
- **Opinion's monthly consumer confidence index (CCI)** has not been reported since June (Aug data will be available this week) but has been just as week as Finans Norges' survey

A very special data point for personal economy outlook. -5.5 st.dev below par!!

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

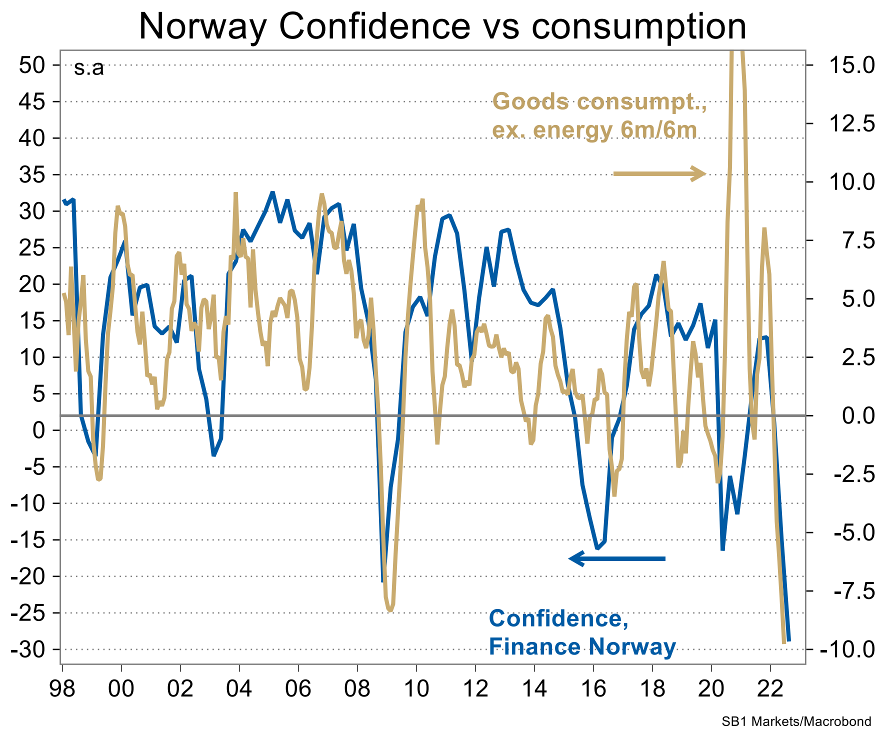


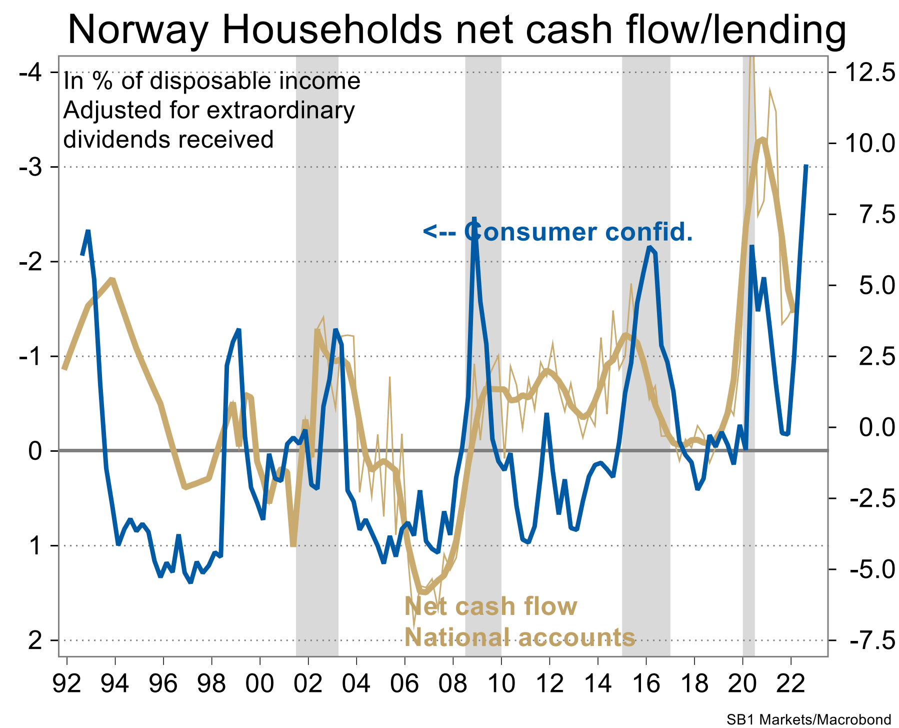


- If so, a the negative print may be 'too negative' vs actual demand – yes, real disposable income is down for most of us, but if most of us are not too hard hit, demand may not take a hit at a scale signalled by the extreme confidence indicator print

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

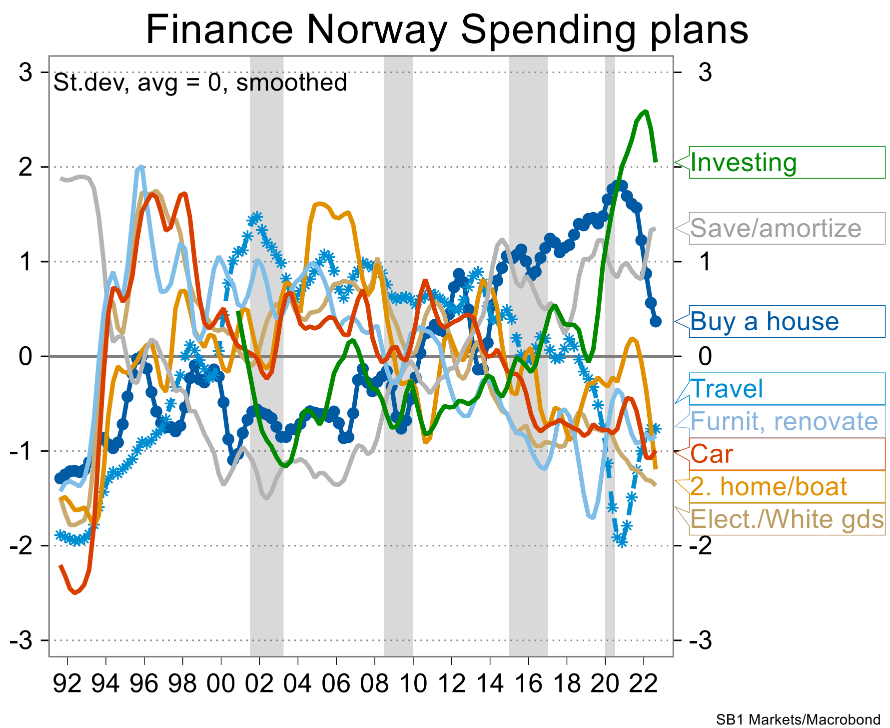
Neither consumption nor savings have been uncorrelated to the level/changes in confididence

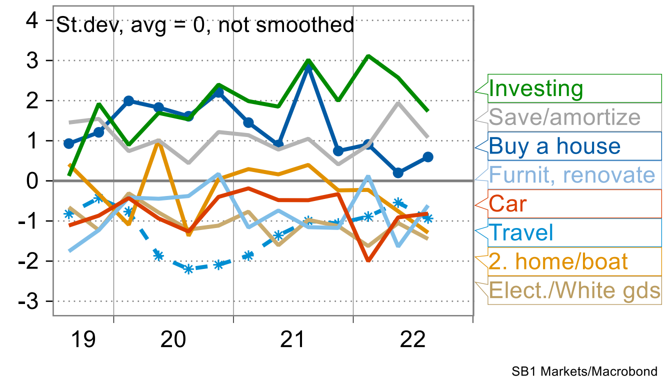


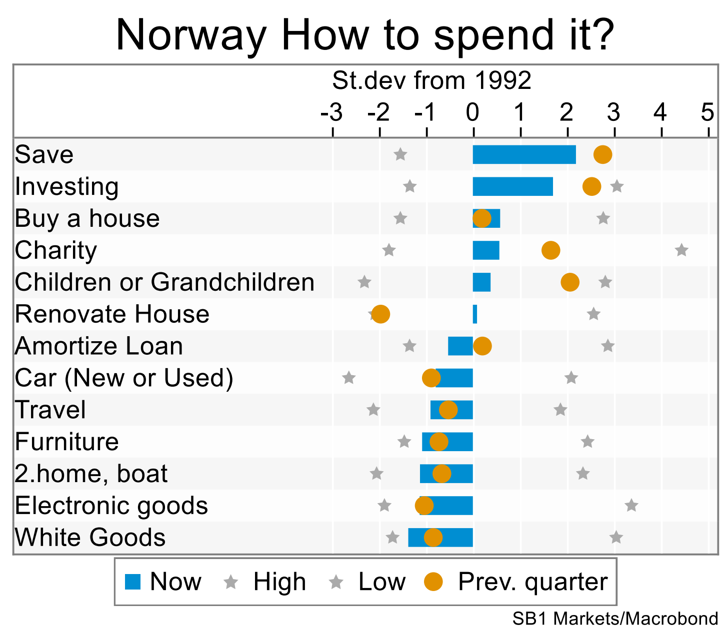


Saving and investments more popular than normal,

2. homes/furniture are not at the top of the list. Housing still above par but not by much anymore



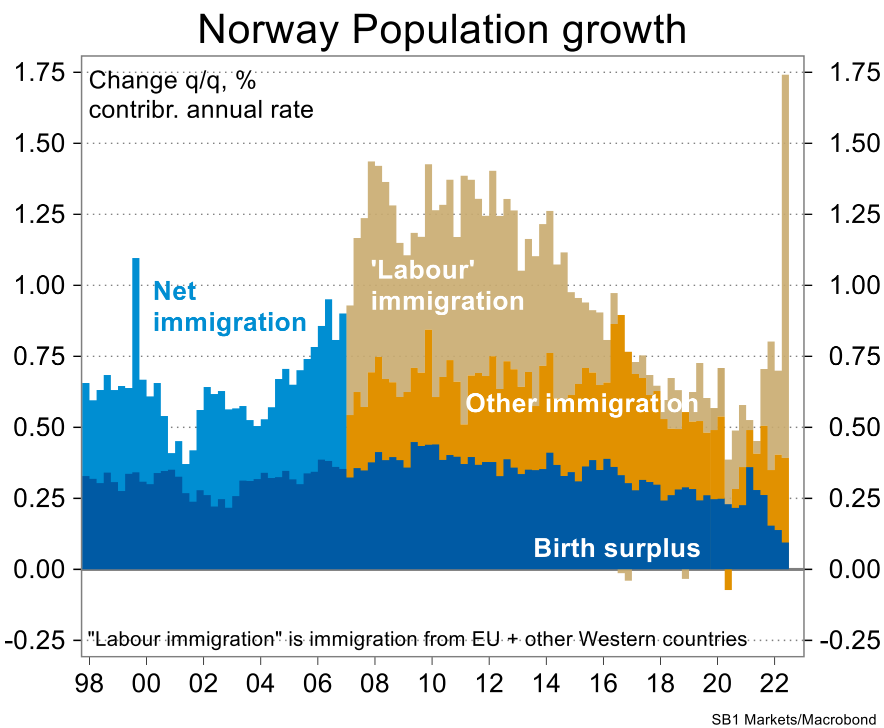


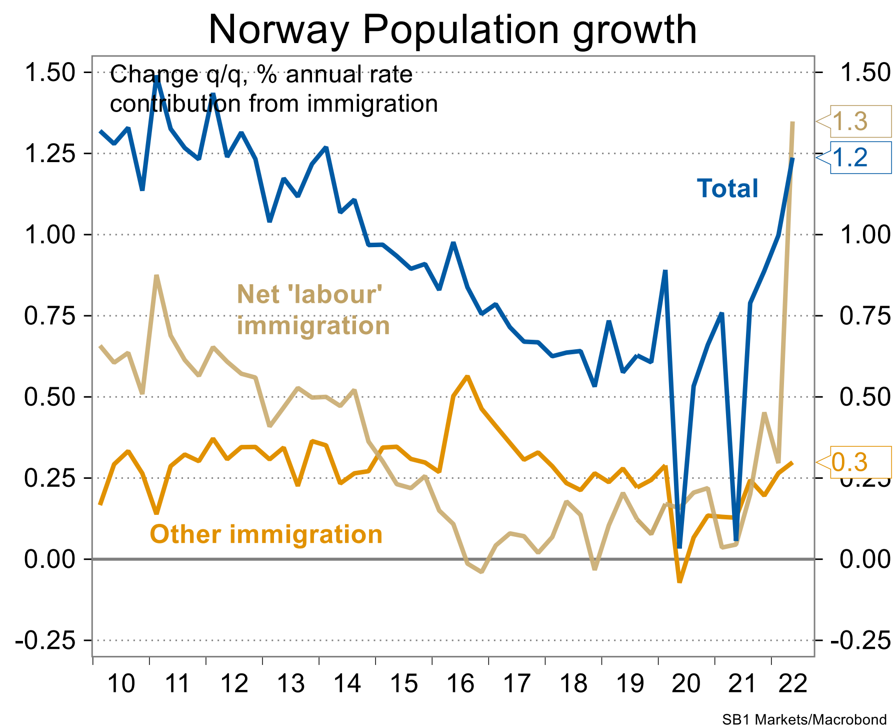


- **Home buying plans** have fallen sharply (however not further in Q3), but the rate is higher than the average from 1992 – but in line with the avg. since 2000
- Demand for **2nd homes and boats** has fallen below average, **car buying** plans rose but are still below par. **Furniture/renovate house** fell sharply. **Travel** is ticking upwards, but is still well below par
- **Savings plans** and **'investment'** plans are still the stronger than normal! We do not know what sort of investments households are referring too

Ukrainian immigration boosts population growth sharply

Other ‘western’ immigration and the birth surplus were lower than normal

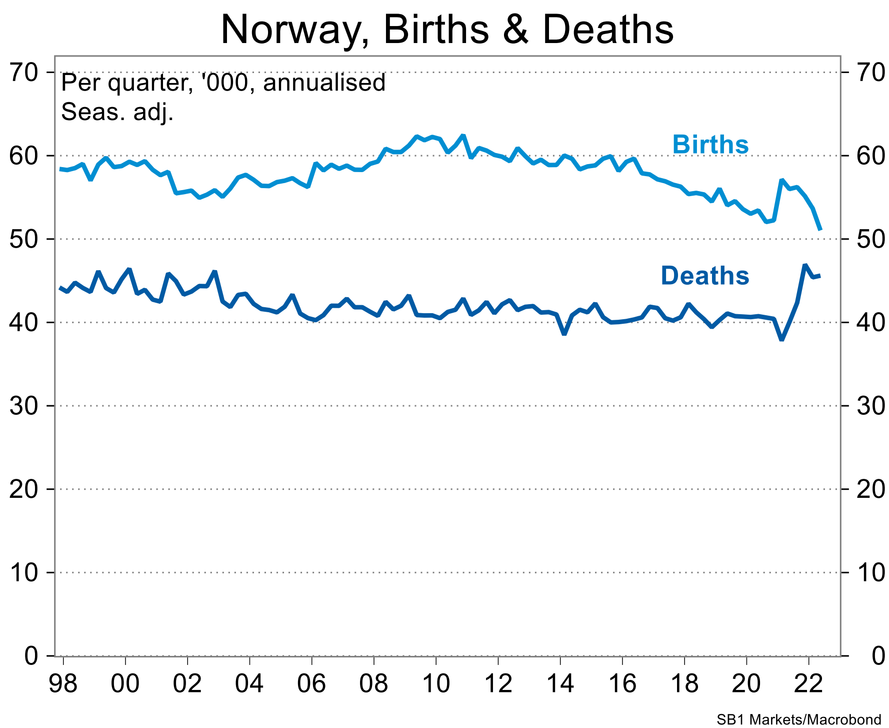




- Total population grew by 20.000 in Q2, equalling a 1.5% annualised rate close to the highest and record (and the highest ever, in seasonal adjusted terms). The steep increase was due to 15’ immigrants from Ukraine. Excluding this inflow, population growth would have been lower than normal
  - » Immigration from the Nordics, the Baltics and other rich countries well below a normal level in Q2
- The net birth surplus fell to the lowest level ever in Q1. Births are slowing from the Covid spike in Q1-21 (but remain above ‘normal’ and the number of deaths is some 5’ (12%) above a normal level, both due to Covid deaths, and ‘3 years of accumulated flu’-deaths

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

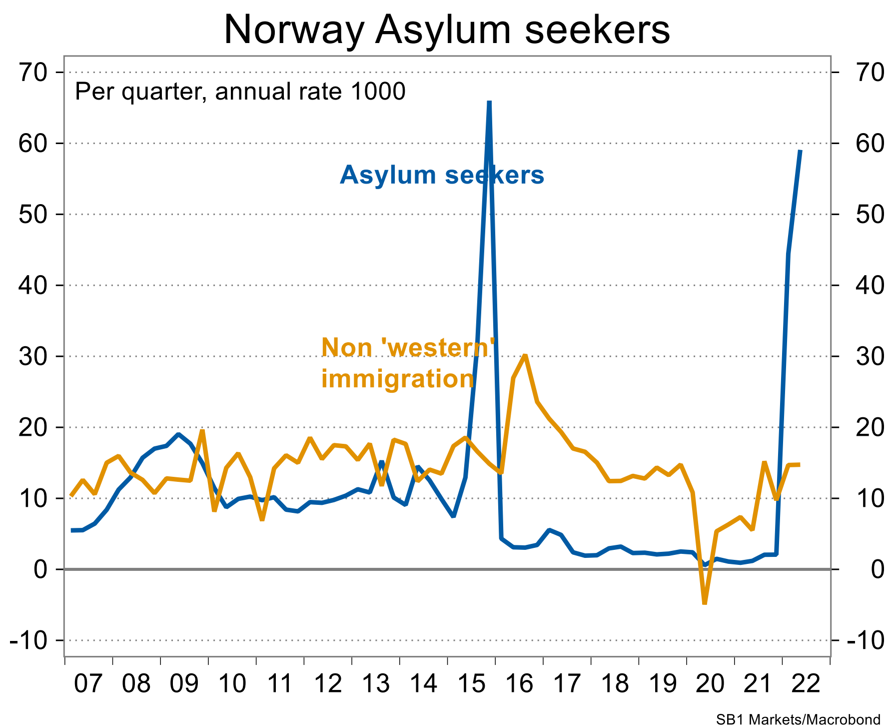
... as many old citizens are still dying due to (or with) covid sickness

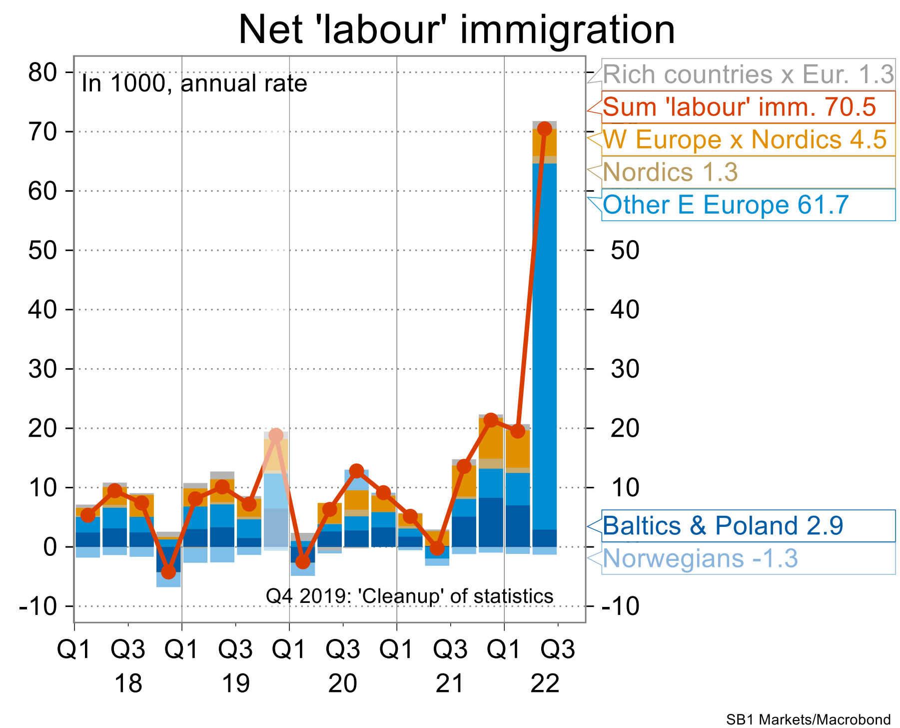


- ... and others that survived in 2020 and 2021 due to the very mild flu season (all viruses were surpressed), now get the flu – and die from it

A huge inflow of Ukrainian refugees in H1

More than 50' has arrived, 15' has immigrated

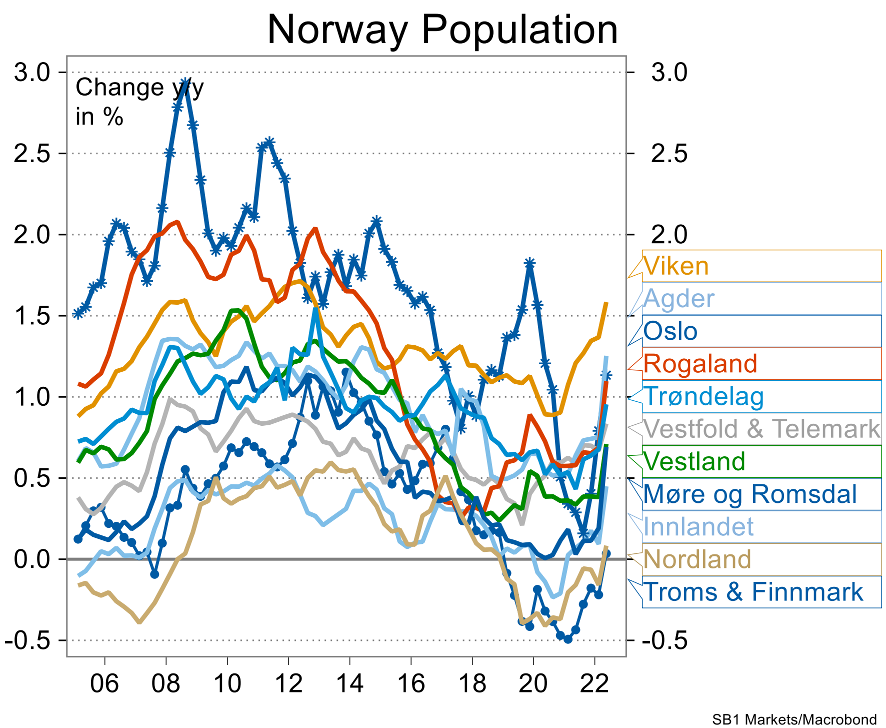


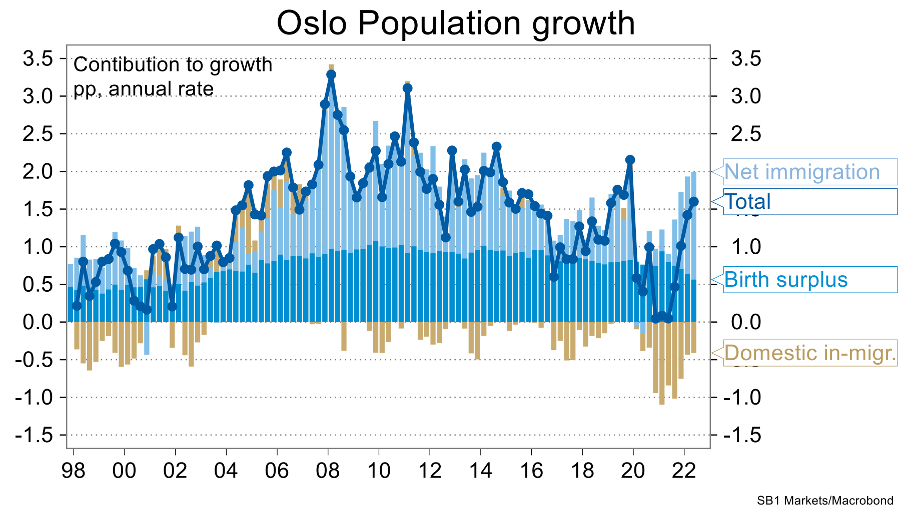


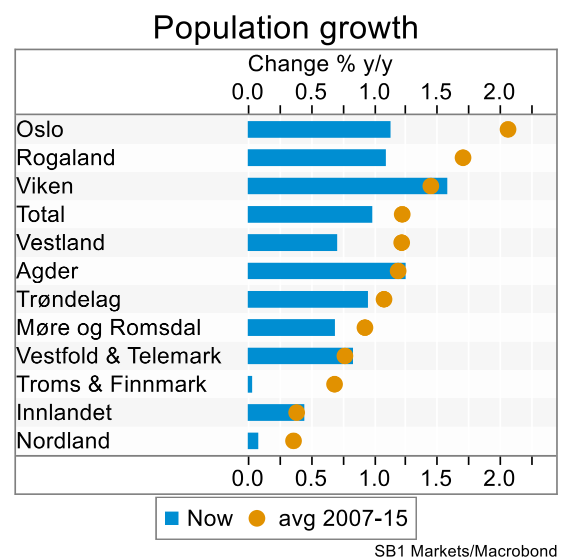
- The inflow of asylum seekers has been virtually flat, at a very low level – approx. 1000 in an annual rate since the Syrian refugee crisis in 2015 – until the Ukrainians turned up in March
- Net immigration from Western European countries and the Baltics was low in Q2
- We has labelled Ukrainian immigration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

More immigration lift population growth everywhere

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







- From 2012/13 until 2018, population growth slowed in most regions – but the least in Viken (Akershus kept up best) and Vestfold & Telemark. Following a mini immigration wave in 2019, growth slowed sharply in Oslo. Now, growth here is on the way up again
- Population growth has cooled substantially in all other regions recent years, to well below 2010-2015 levels, but growth is once more accelerating
- Due to higher domestic out migration, population growth is close to zero or below in Møre & Romsdal, Innlandet, Nordland, and Troms & Finnmark

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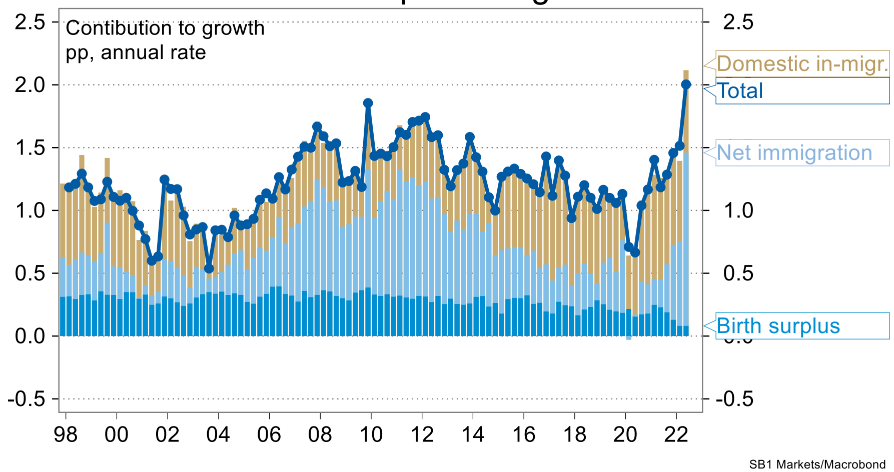
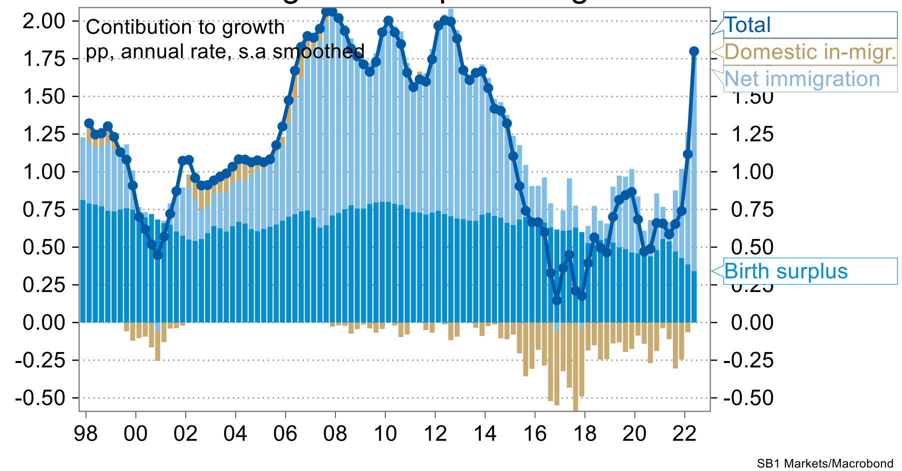
Immigration is not equally distributed

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

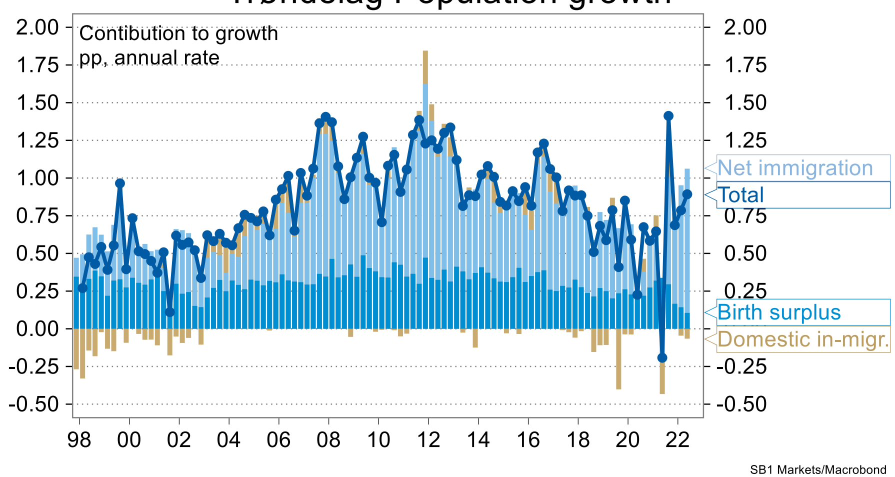
Viken Population growth



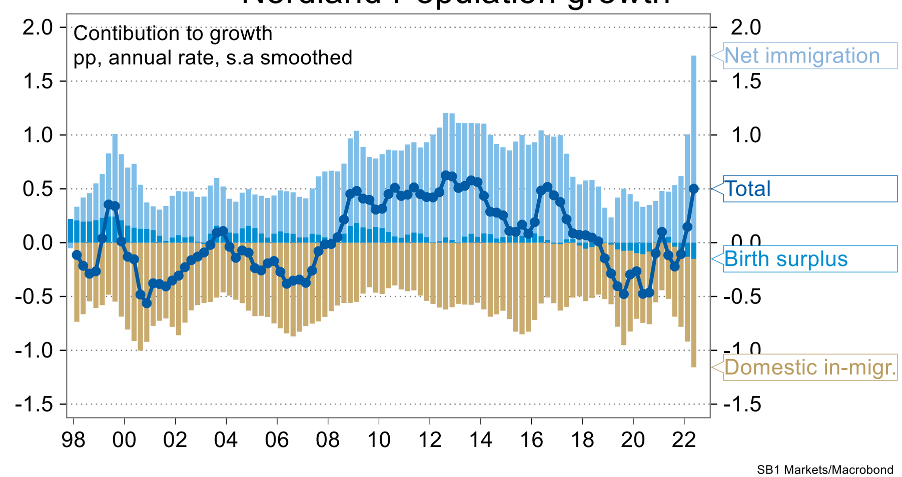
Rogaland Population growth



Trøndelag Population growth



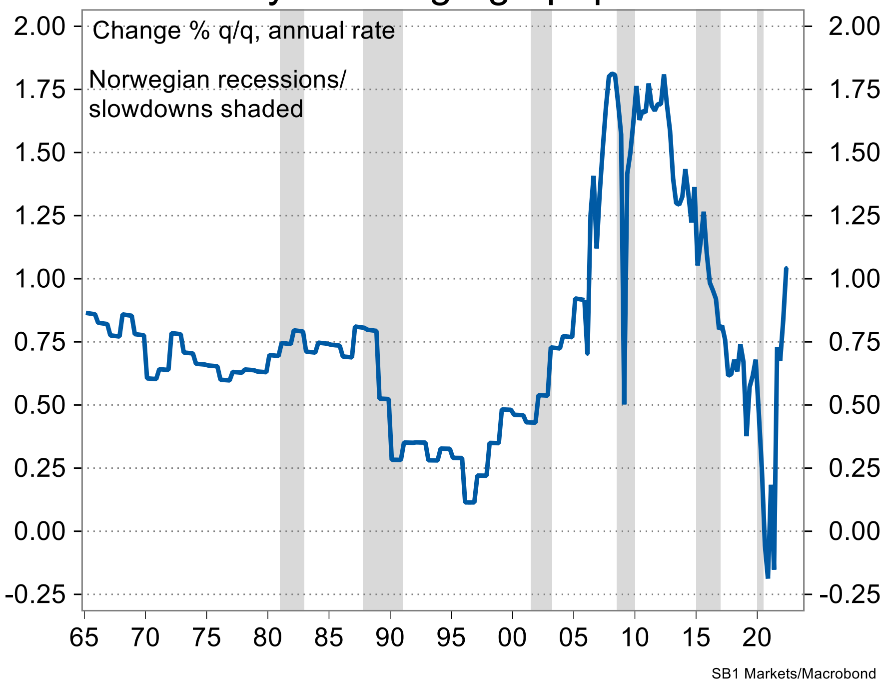
Nordland Population growth



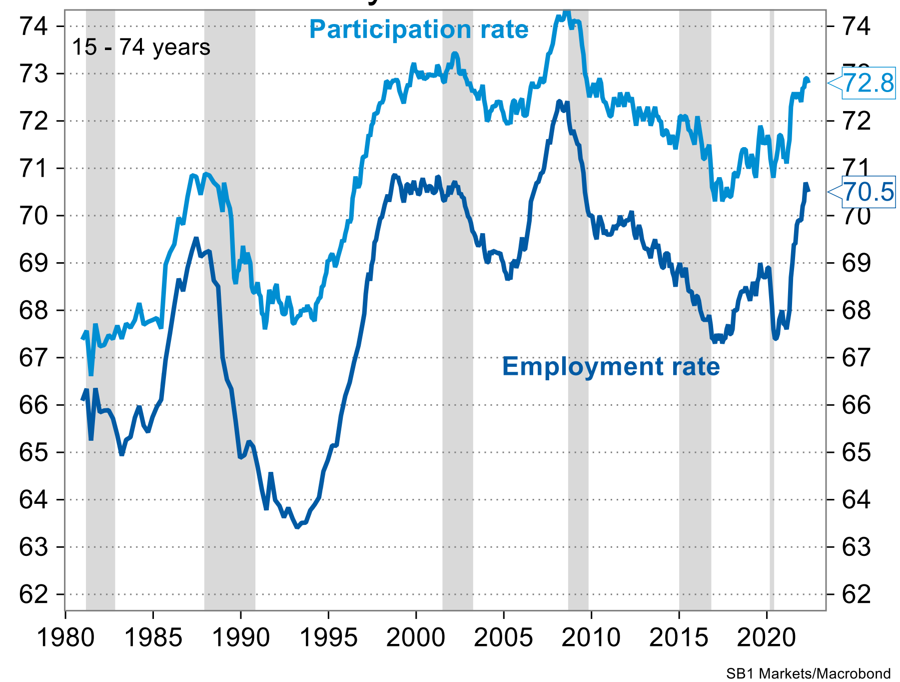
Working age population growth boosted by Ukrainian immigration

Hope they want to enter and succeed in the labour market

Norway Working age population



Norway Labour market



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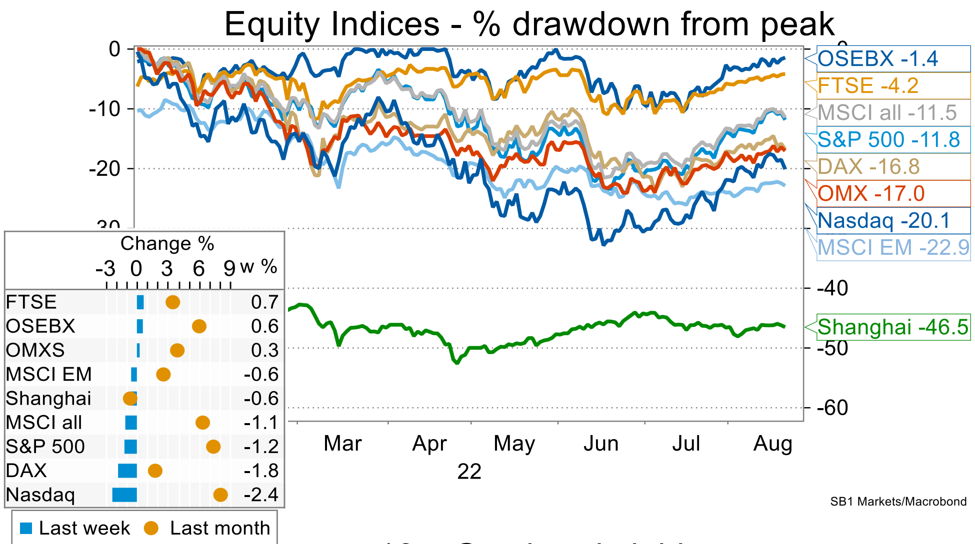
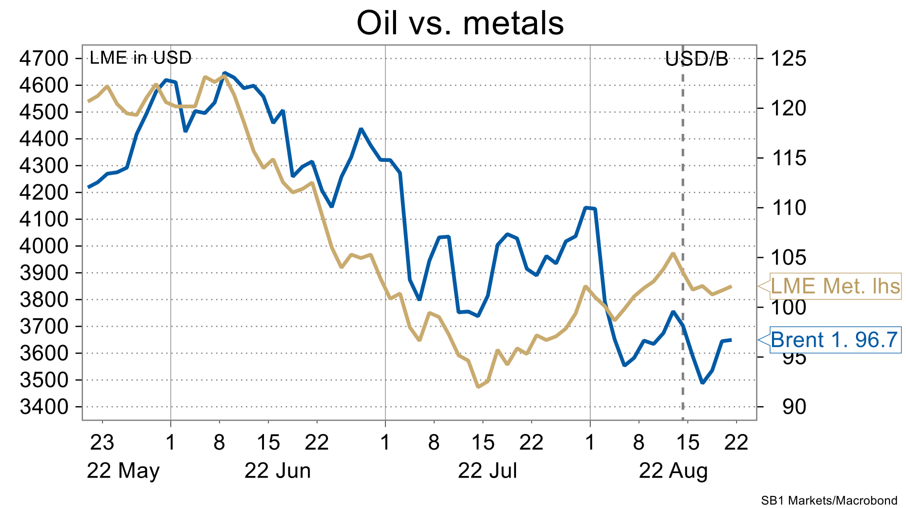
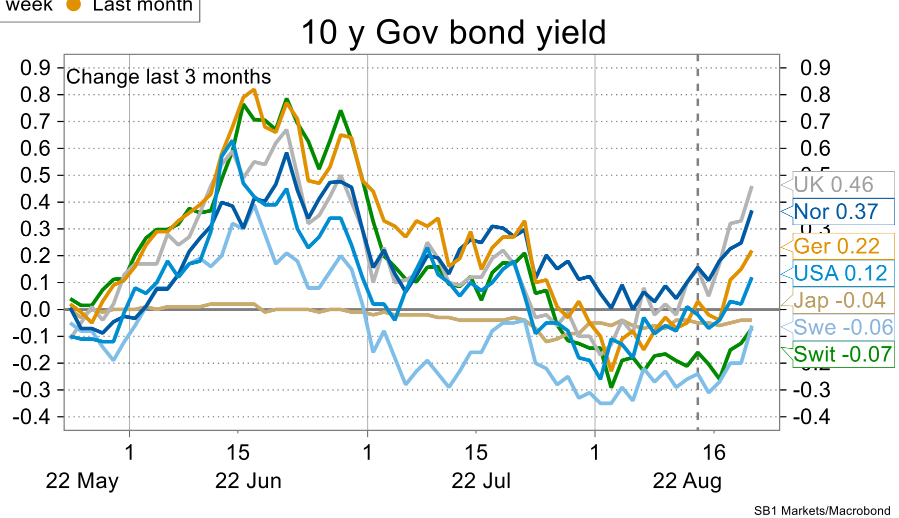
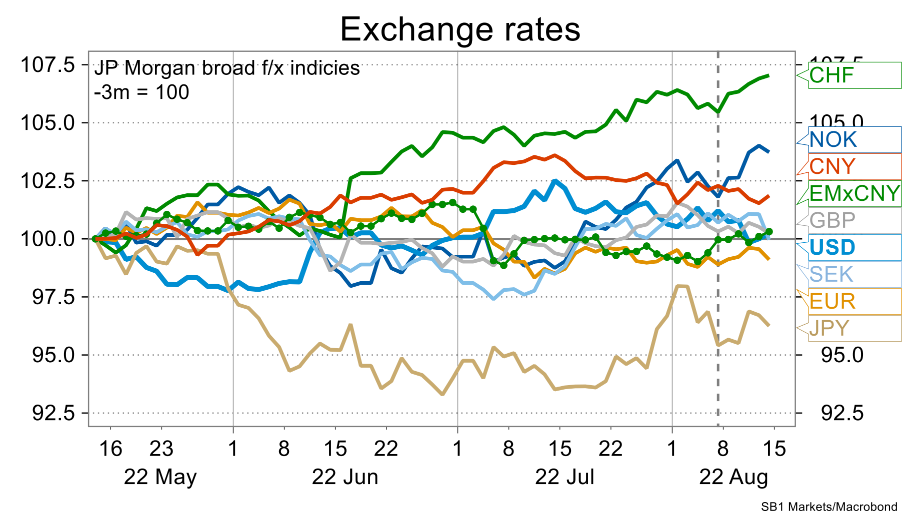
Risk markets slightly down, while bond yield rose sharply (without strong data)

Commodity prices too a break too (except European gas/electricity prices, of course)





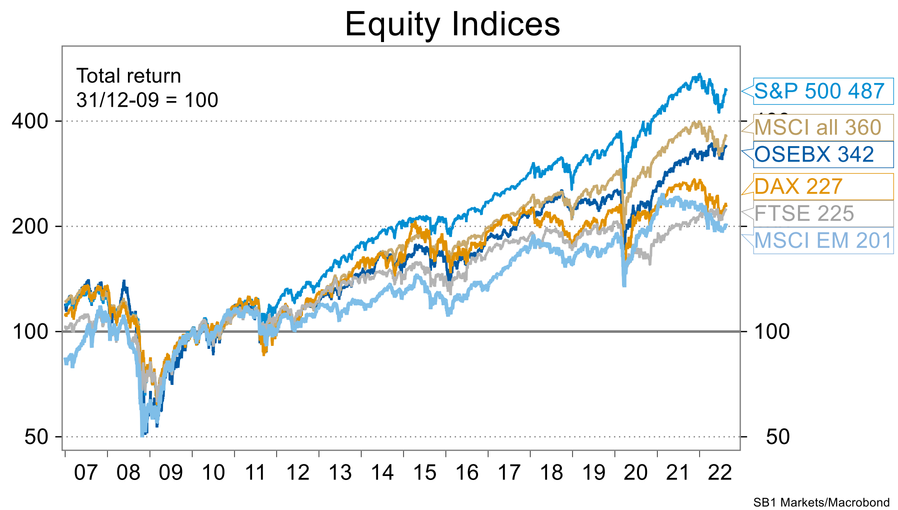


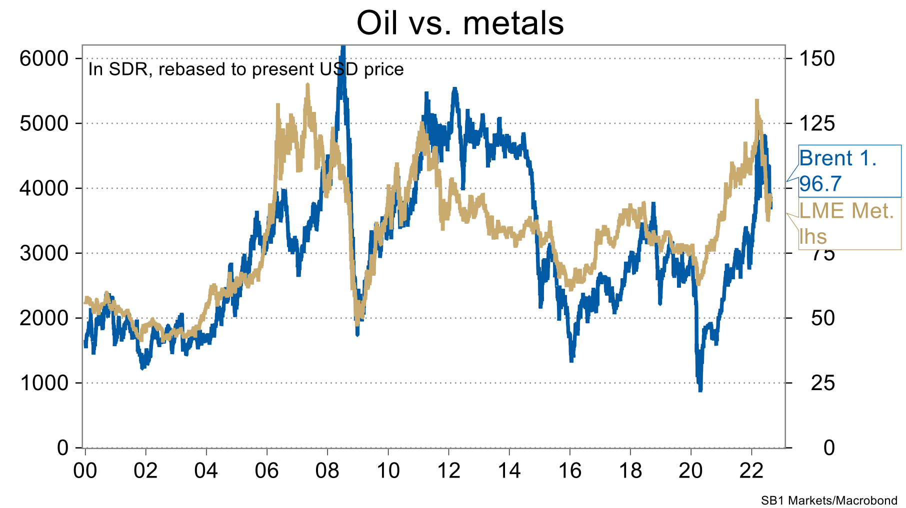


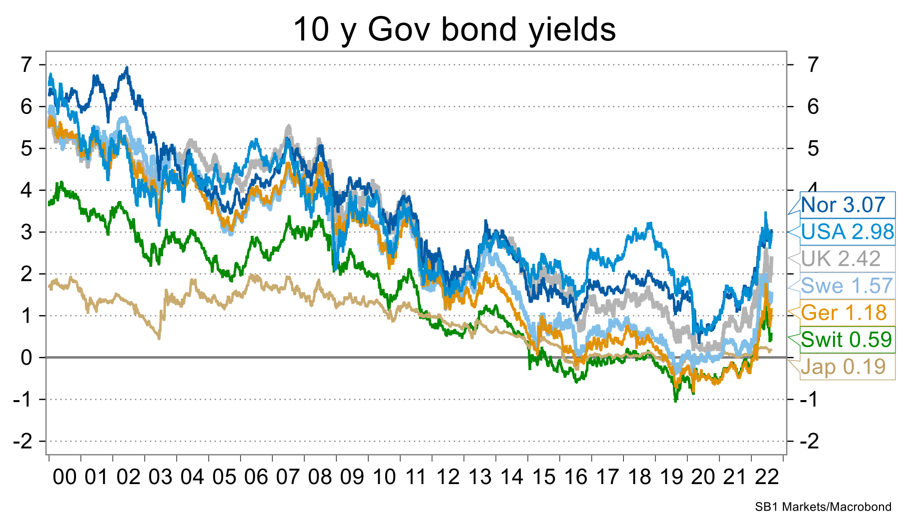
SpareBank 1 MARKETS

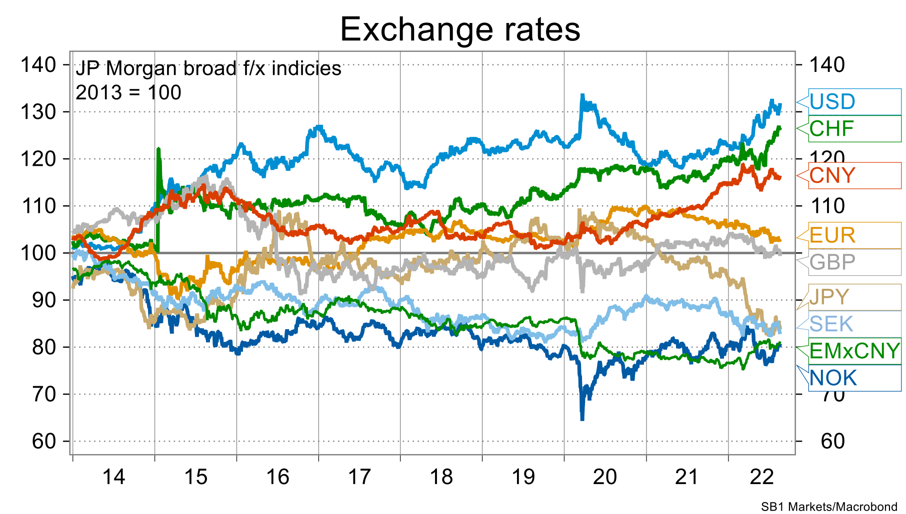
The big picture: Stock markets down, bond yields up

Commodities are on the way down again





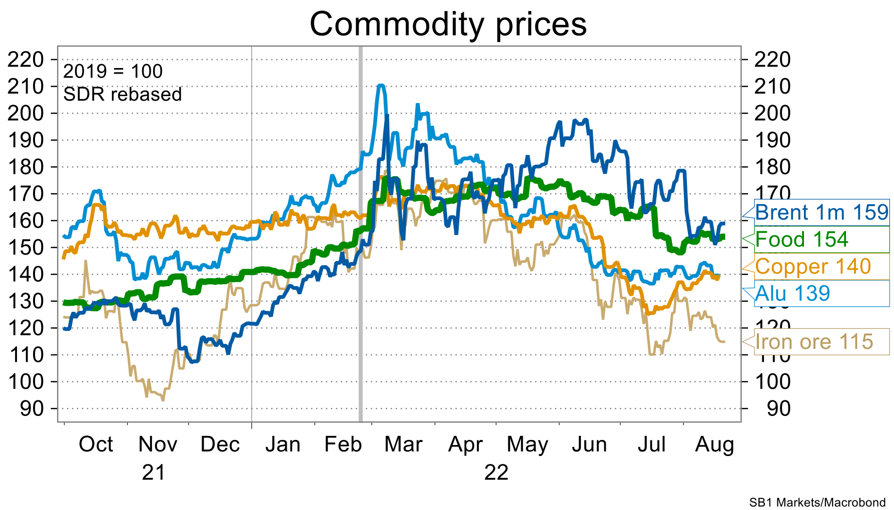


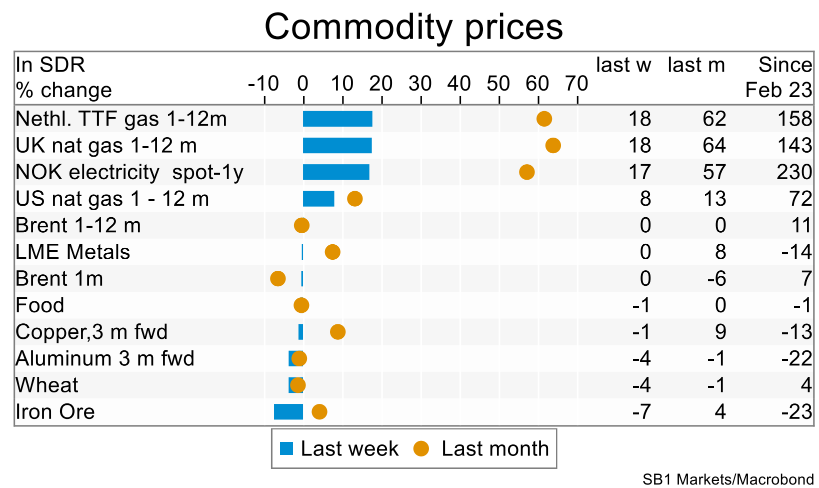


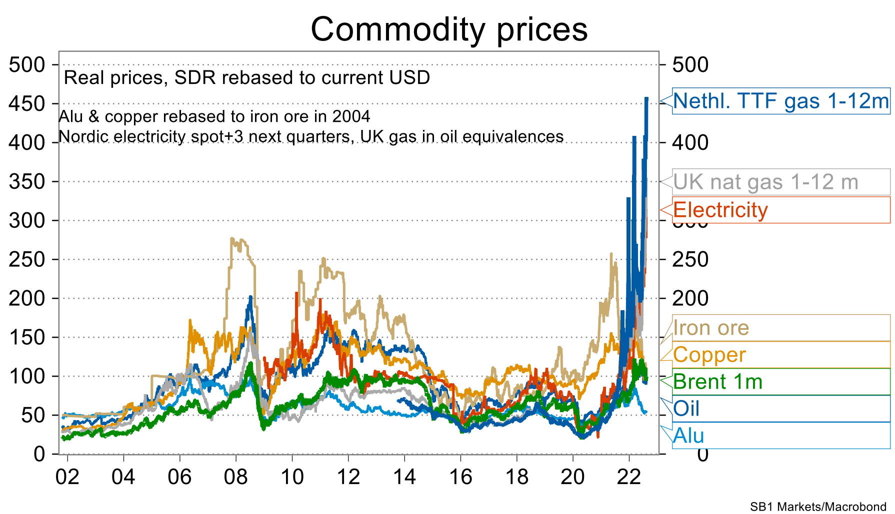
SpareBank 1 MARKETS

Most commodity down last week, risk off? But European gas/el. prices further up

Europe cannot survive for long with current energy prices. Something will turn up. But what??







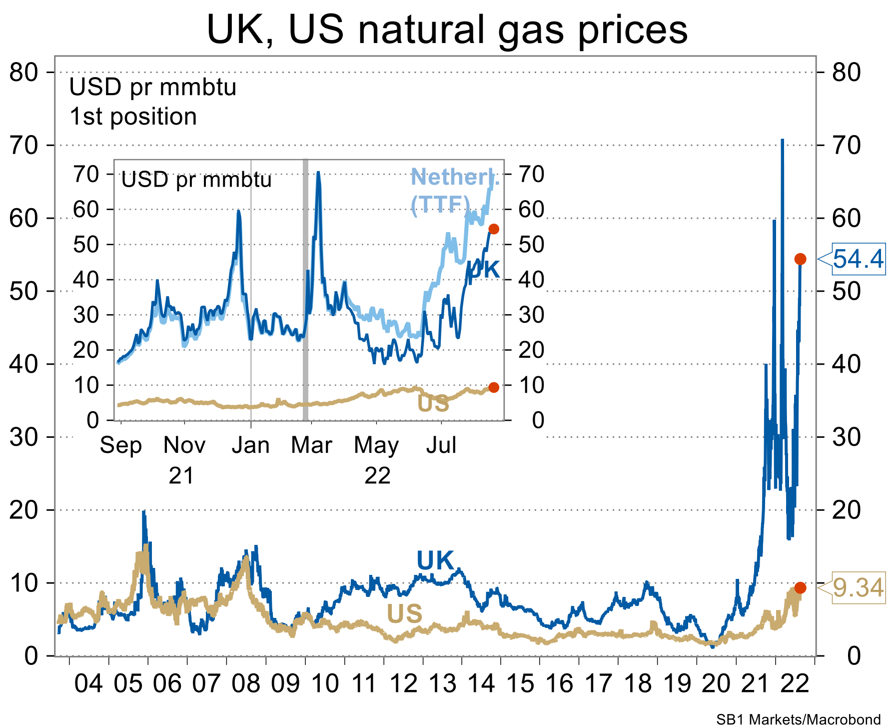
Last week

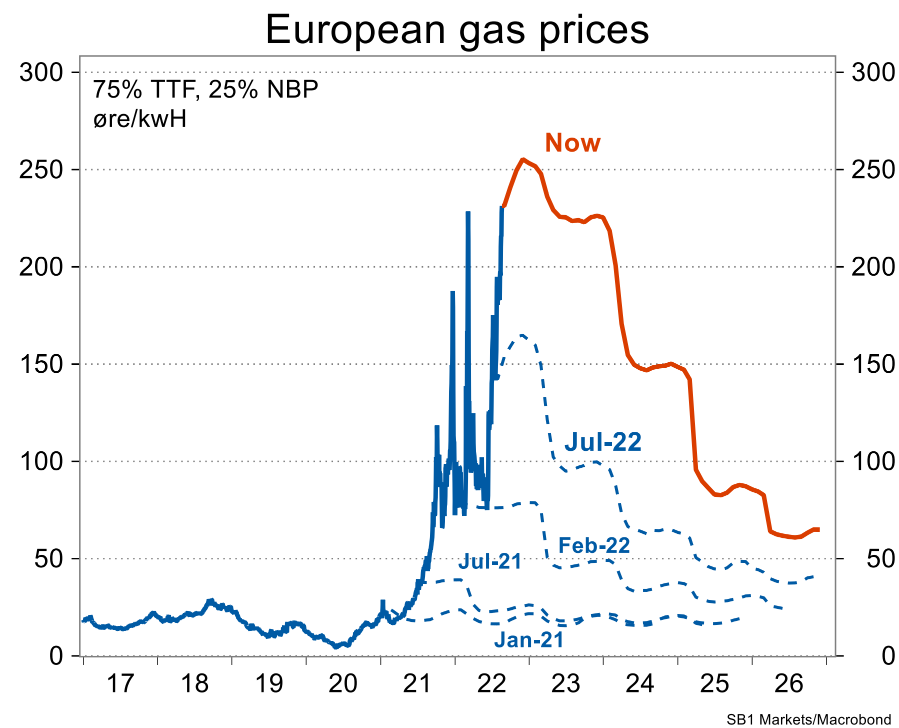
- **Oil** prices flat. The short end is down 6% last month, longer dated contracts are flat
- **European natural gas** prices – and thus electricity prices gained some 20% last week, and are up 60% last month, as gas supplies from Russian has been sharply cu
  - » In addition, Nord Stream 1 will be closed down for 'maintenance' 3 days in late August, Gazprom said Friday afternoon. And prices climbed further: what if the tap is not turned on again??
- The Economists **food commodity** fell marginally last week, is flat over the last month
- **Metal prices** fell further. **Iron ore** the most, as Chinese construction data were terrible weak

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

The main challenge: European gas supplies & prices

Russian gas exports remain at a very low level. Most likely Russia has decided to 'kill' Europe



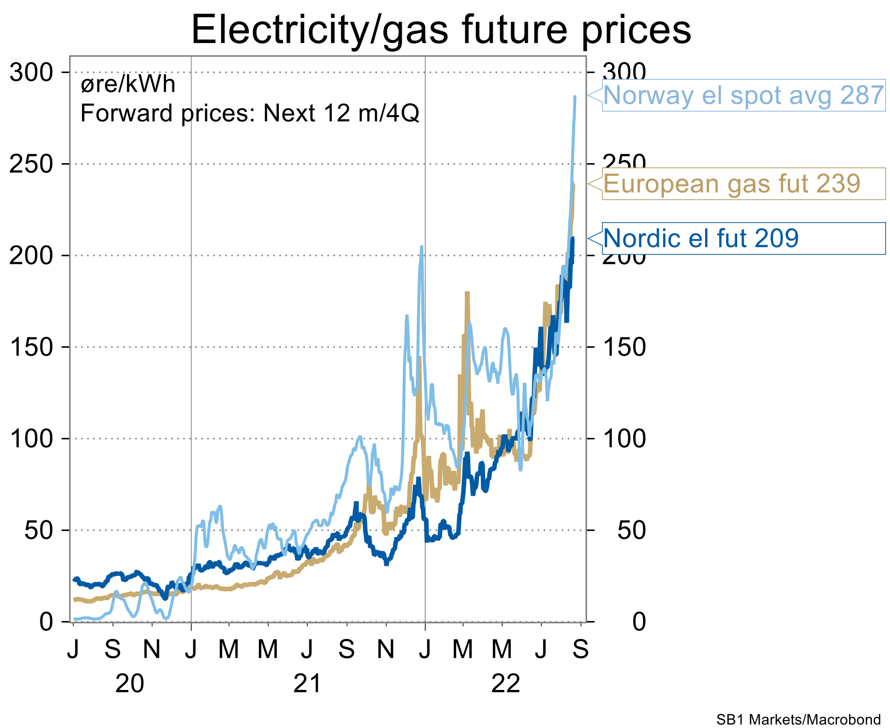


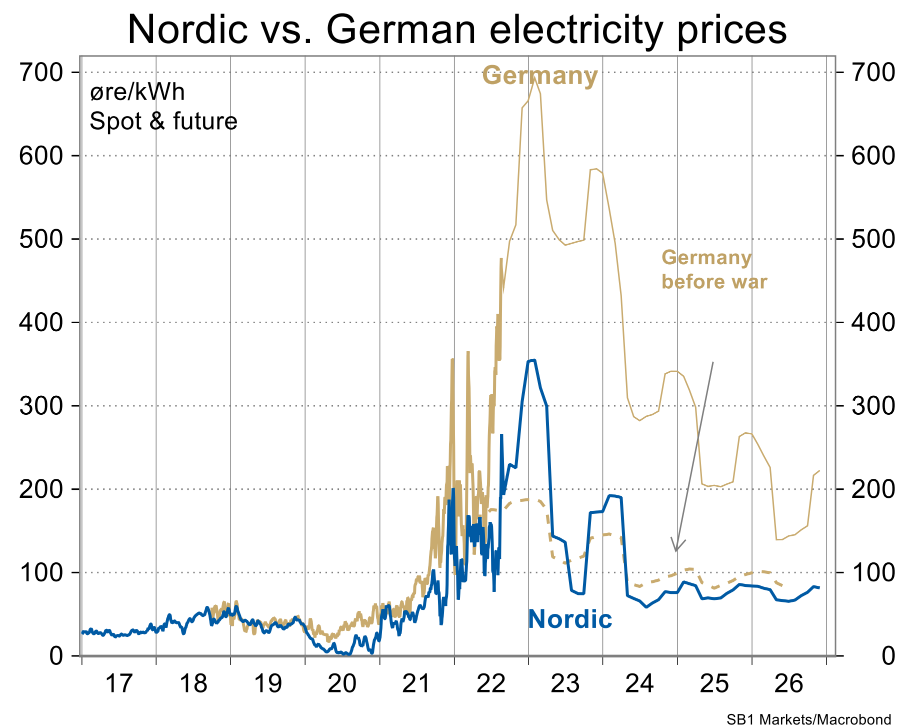
- Gas prices are extremely high, as supply from Russia is running very low – and may be fully closed down
- More bad news: Nuclear electricity plants in France are lacking cooling water due to empty rivers, coal transport up the Rhine may be hurt by too little water. And Russia will stop gas export for 3 days in late August

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

European gas & electricity prices further up

Russian gas exports remain at a very low level. Most likely, Russia has decided to 'kill' Europe



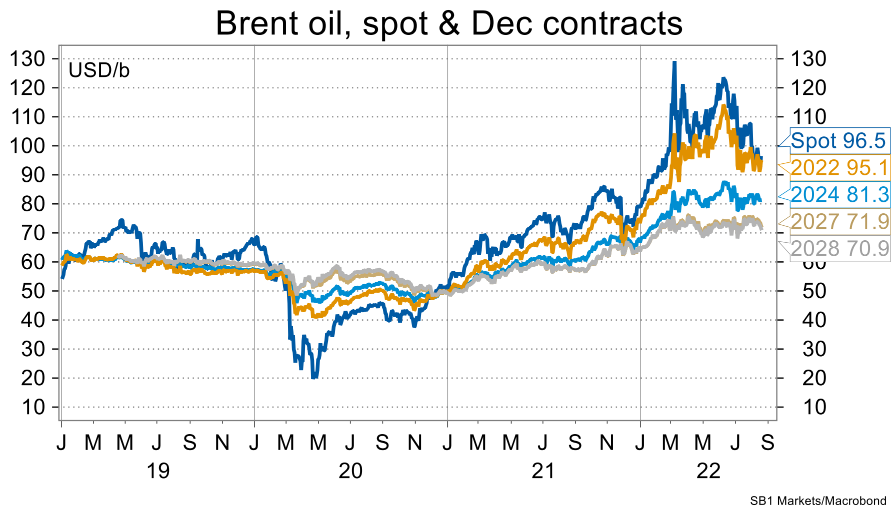


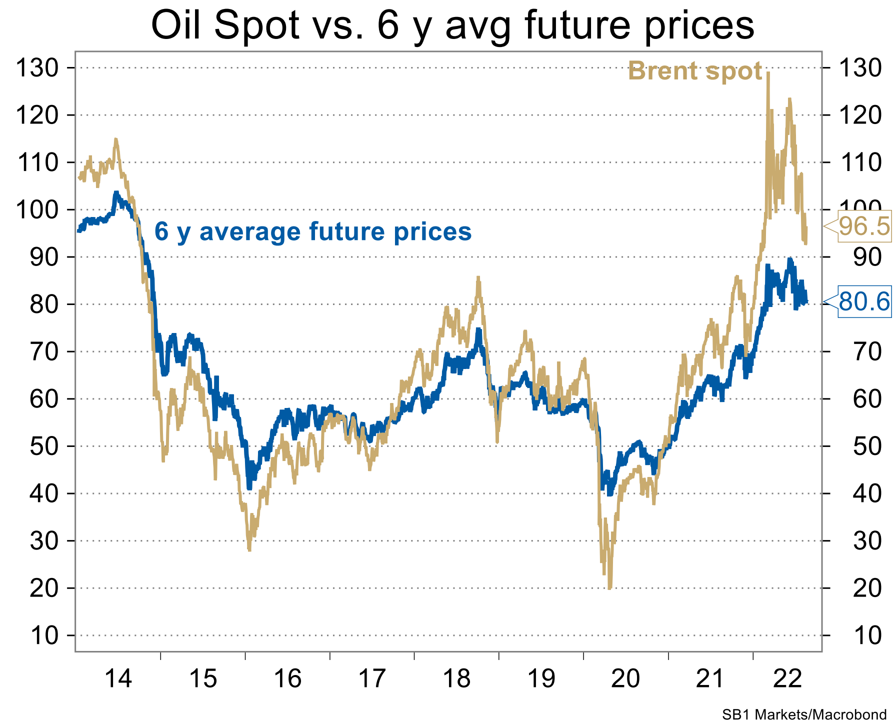
- Nordic (Nordic average) future electricity prices for the coming 12 months are almost 30% below the present average spot level in Norway – which is at a record high level
- Even included price differentials to Southern Norway (by up to 90 øre/kWh), future prices are far lower here than in Germany

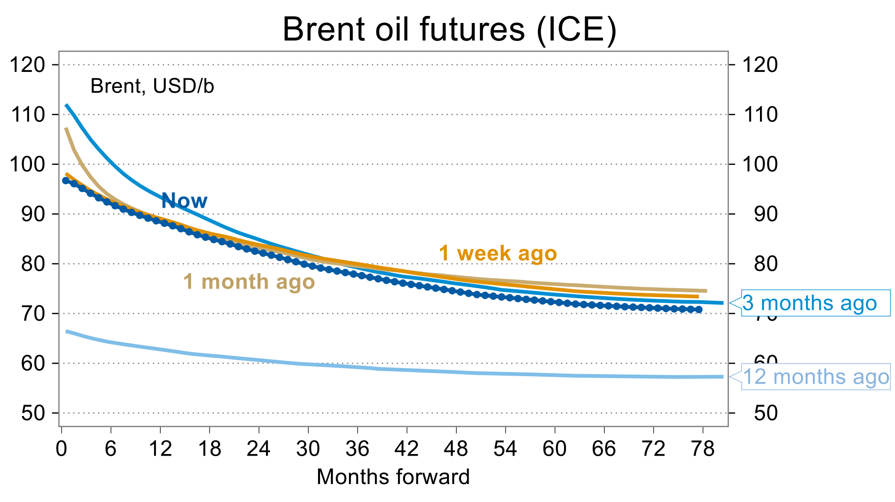
European gas: 75% Dutch TTF, 25% UK NBP, excl. CO2 cost

The short end of the oil curve up last week; The long end quite stable

… at USD 75 – 80/b – but is yielding marginally

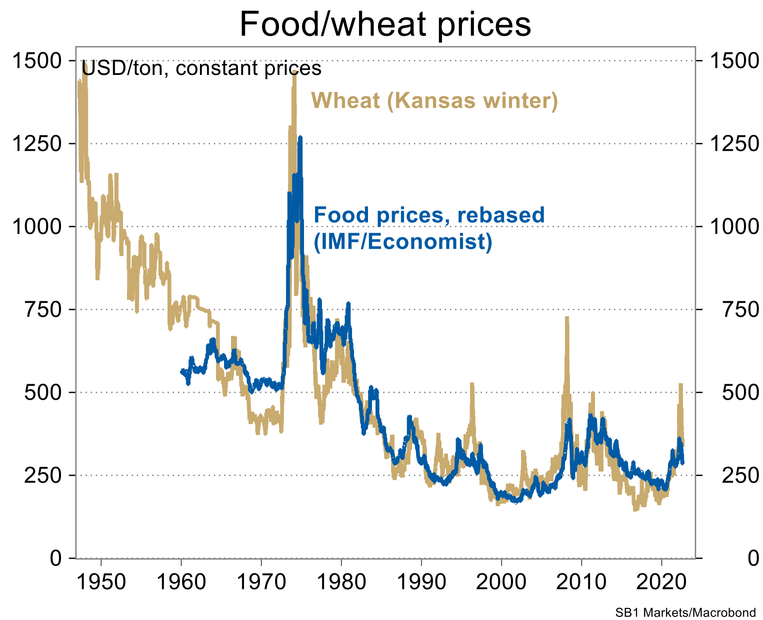


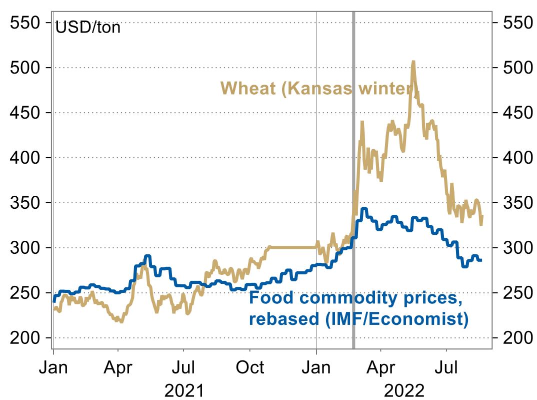


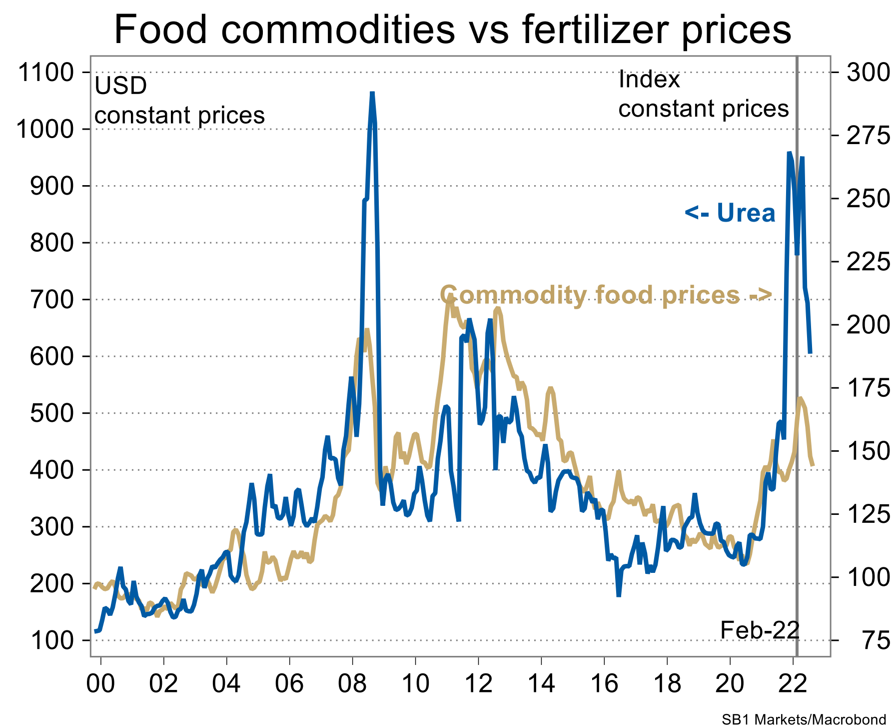


Food prices slightly up past two weeks but are trending down

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





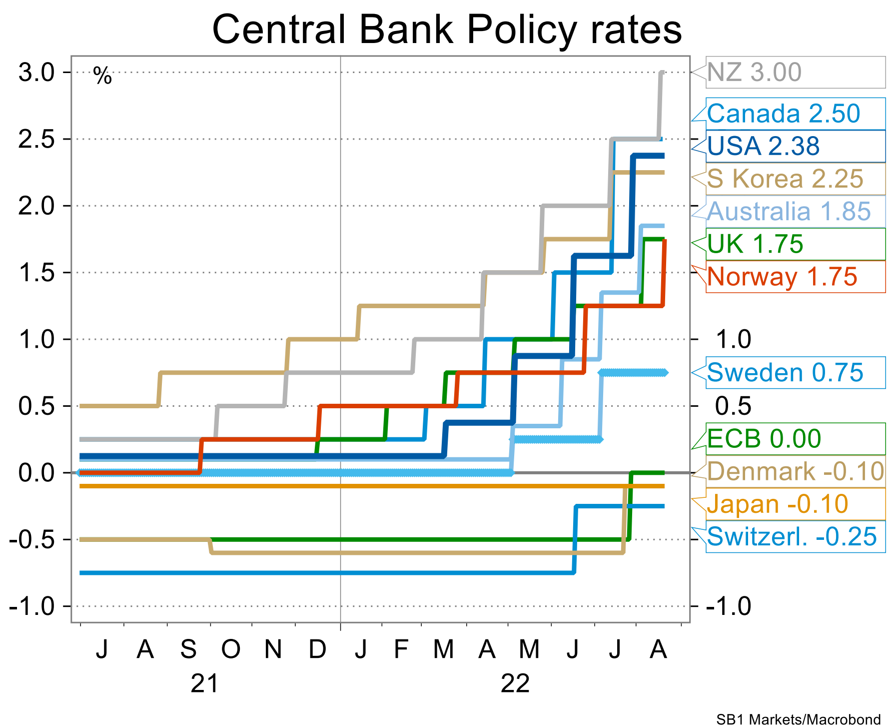


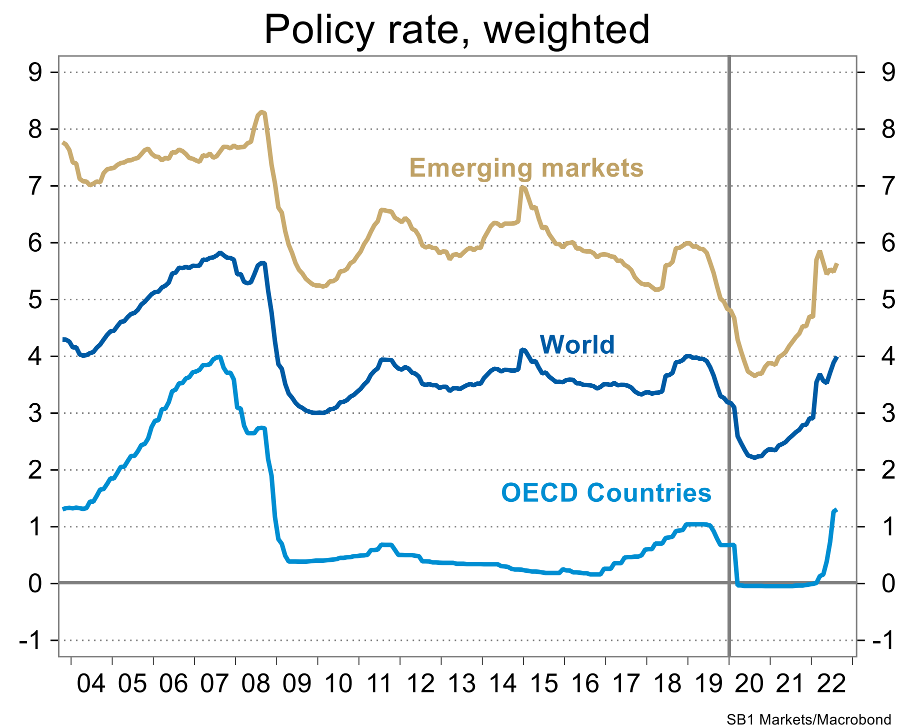
Urea prices are falling rapidly too (but are not low vs. food prices)

SpareBank 1 MARKETS

Short term rates in the rich part of the world the highest since 2008

New Zealand hiked by 50 bps last week, together with Norway



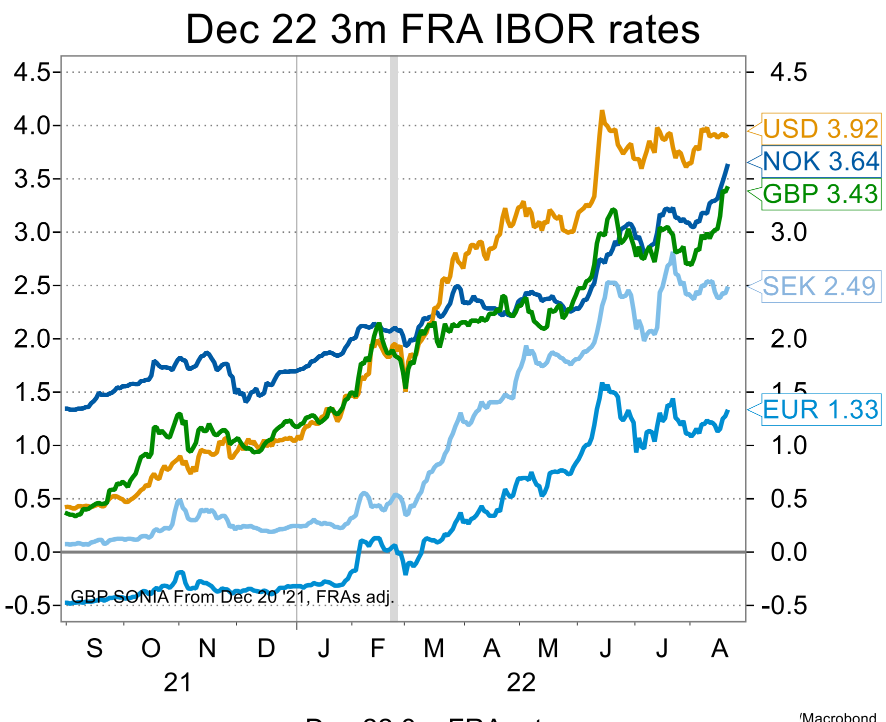


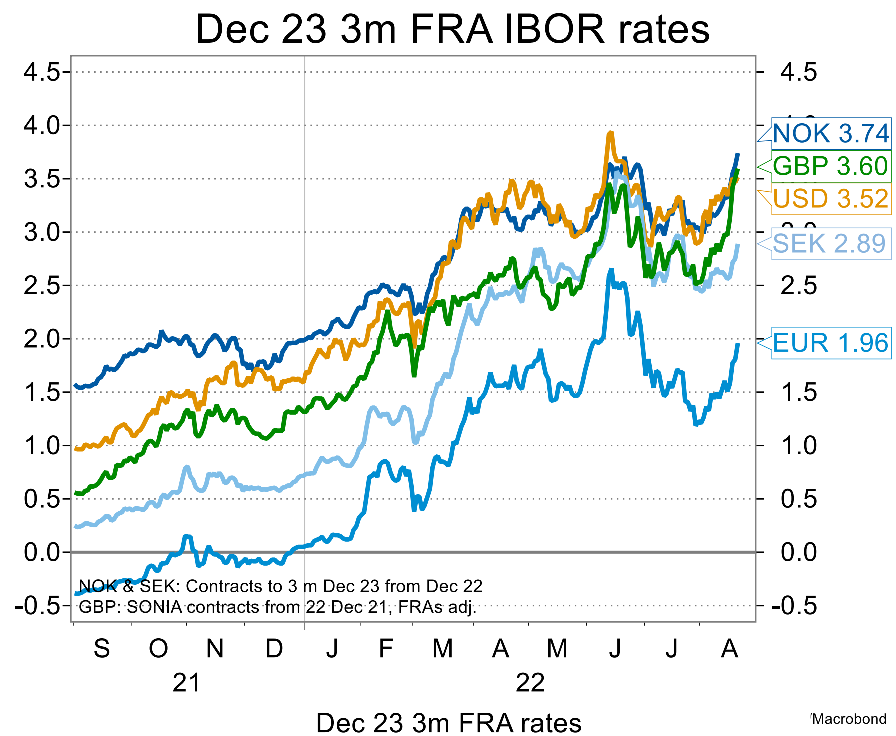
- In addition to rate hikes, most central banks have ended their QE buying programs (well, the ECB established a new program two weeks ago, the Transmission Protection Instrument, TPI (and not TIP as we named it ☹). Some banks will start reducing their holdings
- The EM average policy rate has come down due to the large Russian interest rate cuts (and some Chinese baby steps) – but the trend is straight up in the rest of the EM universe

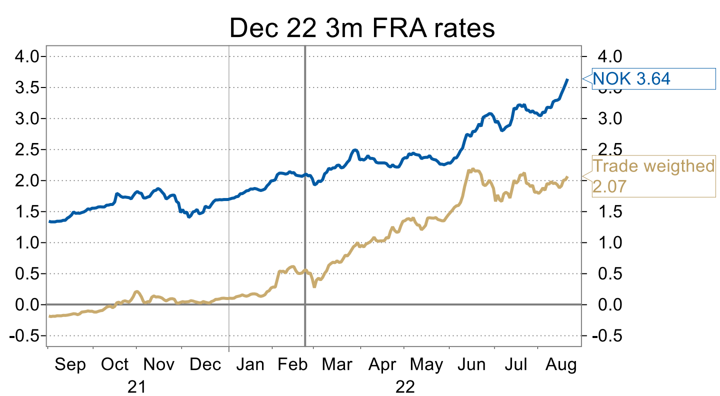
SpareBank 1 MARKETS

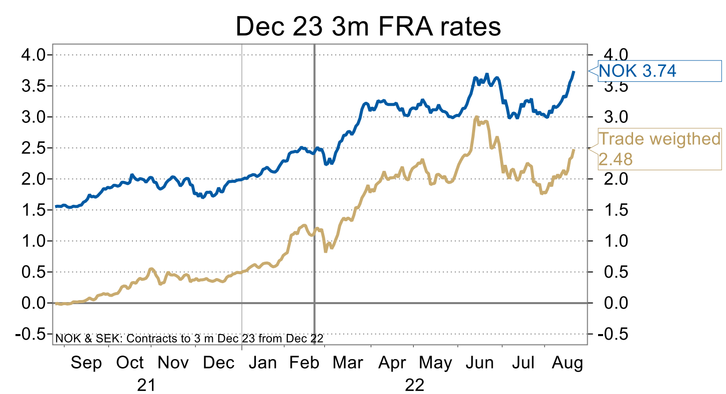
FRAs up almost everywhere last week

GBP rates rose more than NOK rates – and trading partner rose just as much as NOK in Dec 23





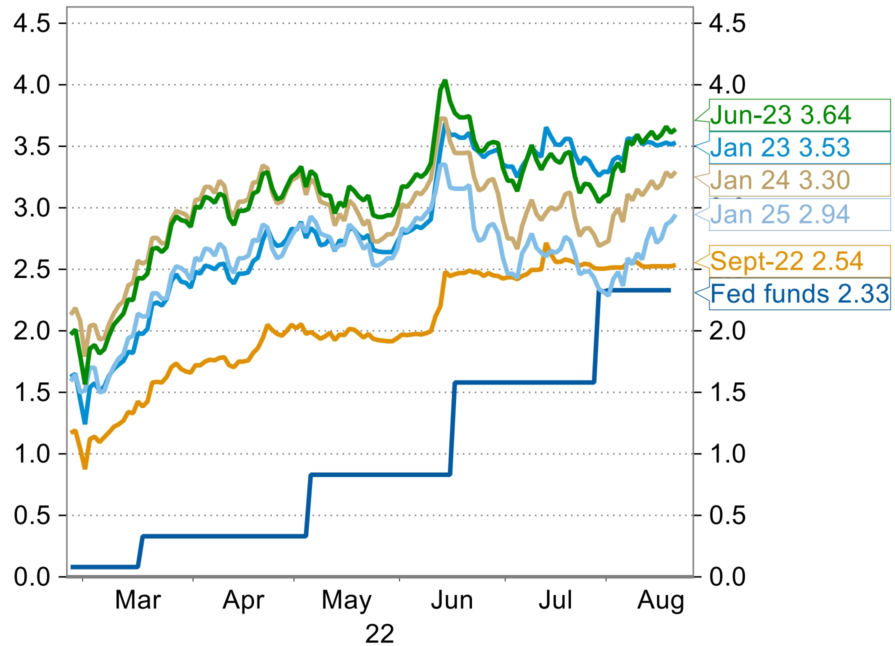




Stable in the short end last week, almost 50/50 for 50 or 75 bps in Sept

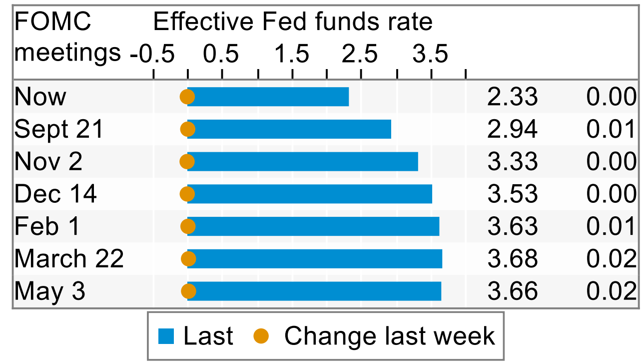
Longer dated Fed Funds contracts rose further, partly due to hawkish Fed speakers

Fed funds future

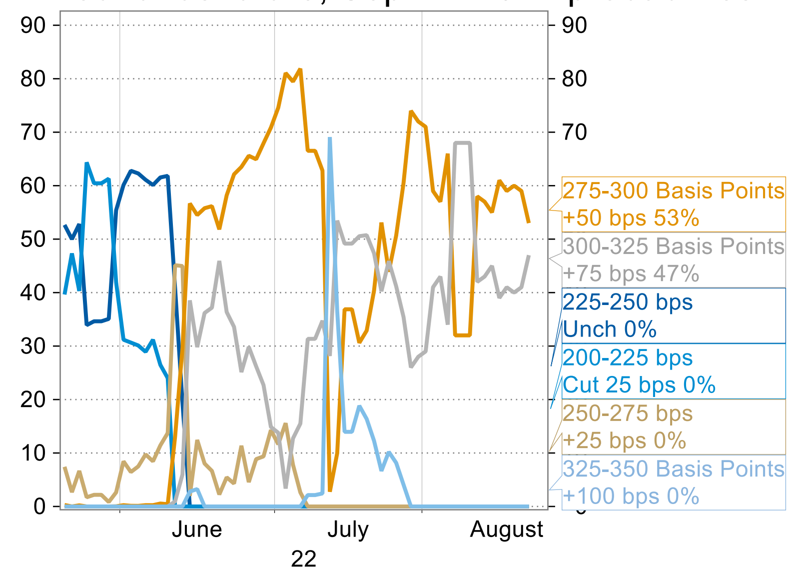


SB1 Markets/Macrobond

USA Fed funds rate (OIS)



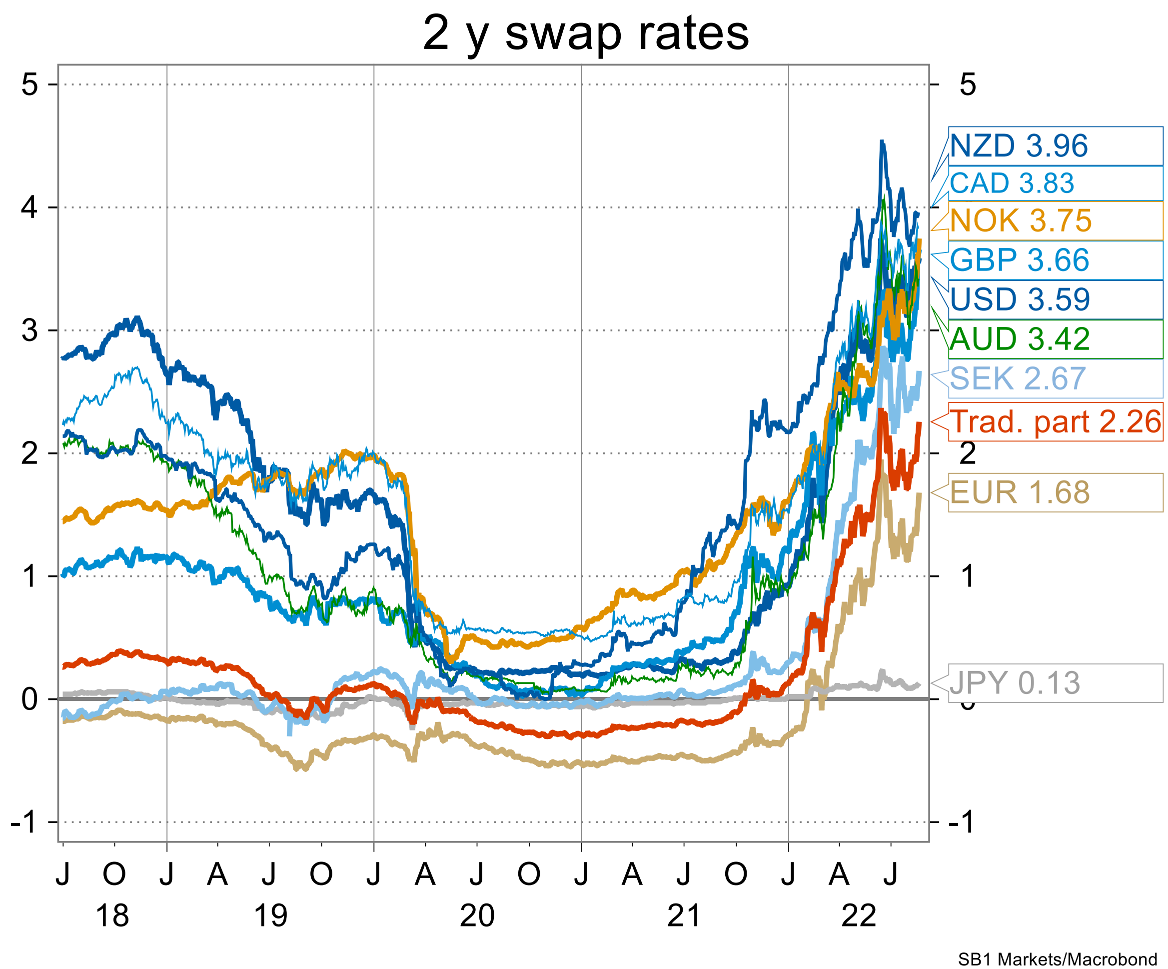
Fed funds future, Sept 21 2022 probabilites

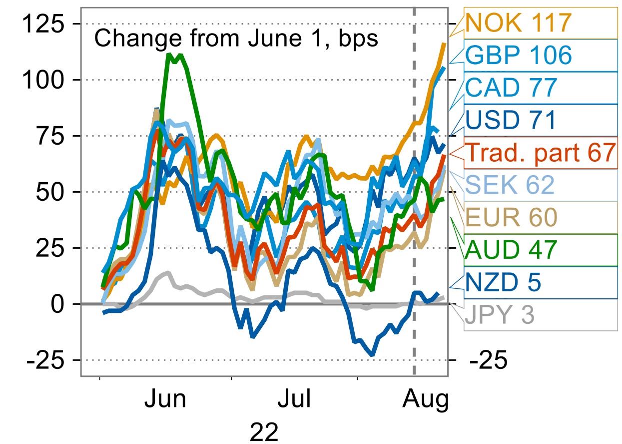


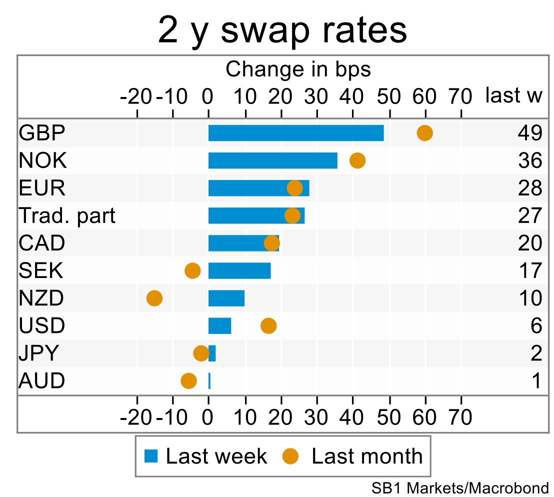
SB1 Markets/Macrobond

Short term rates up everywhere. Norway close to the top of the list w/w

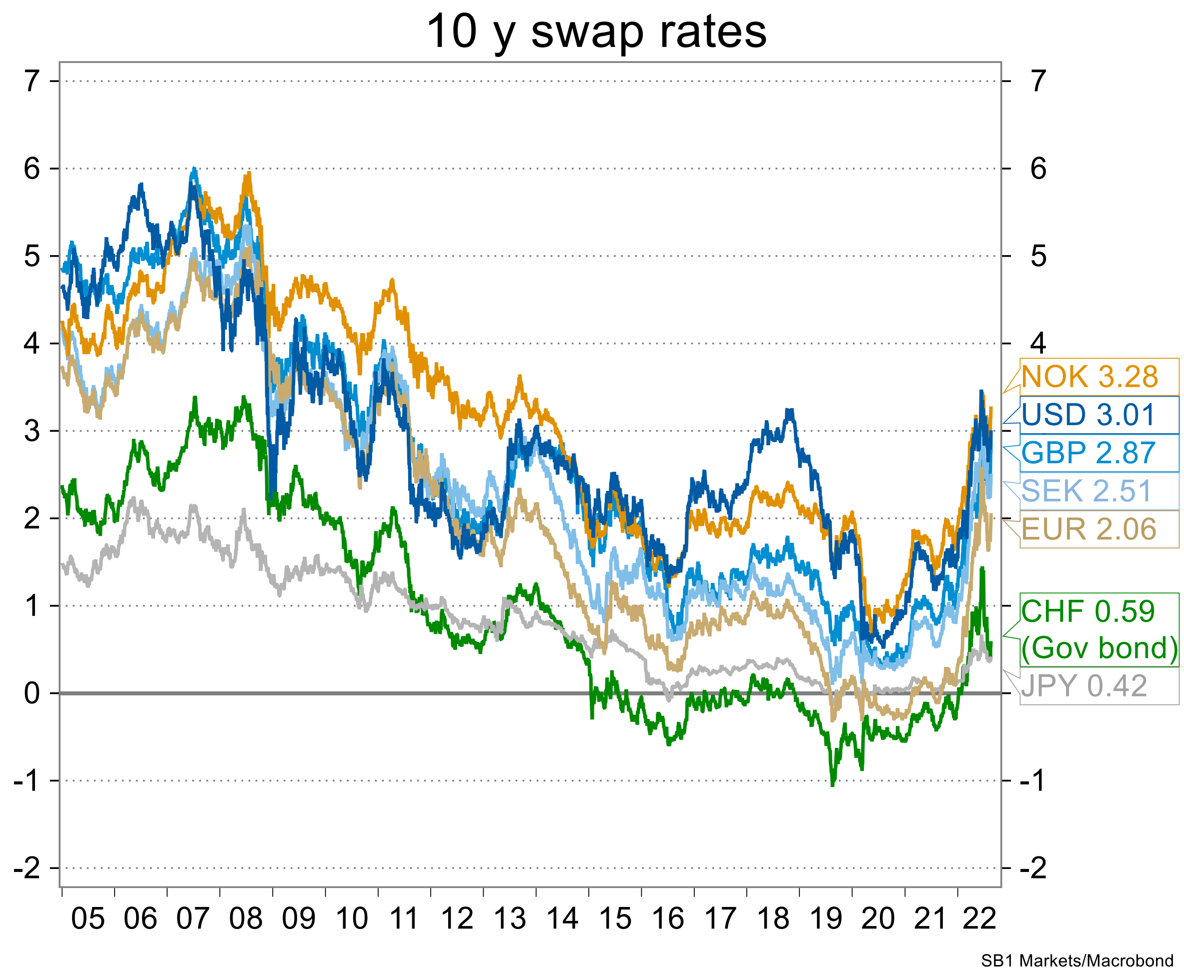
The 2 y GBP swap rate up 49, NOK 36, and EUR 28 bps. *So there is more than NoBa to blame…*

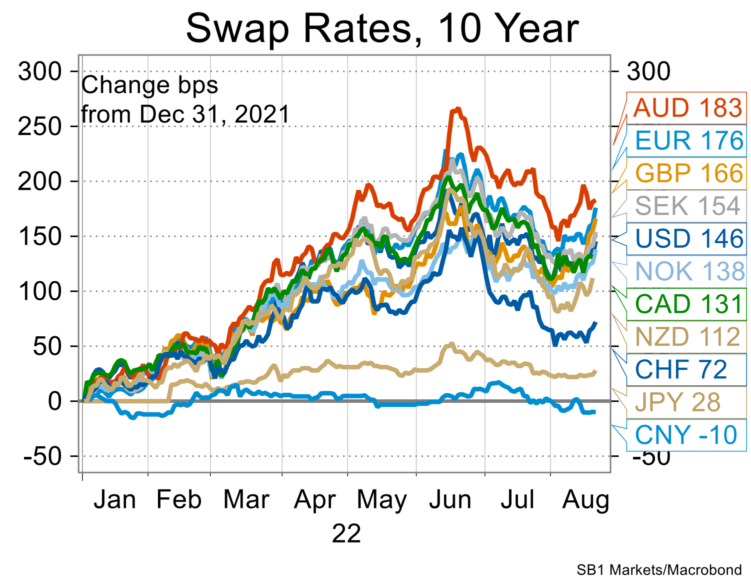


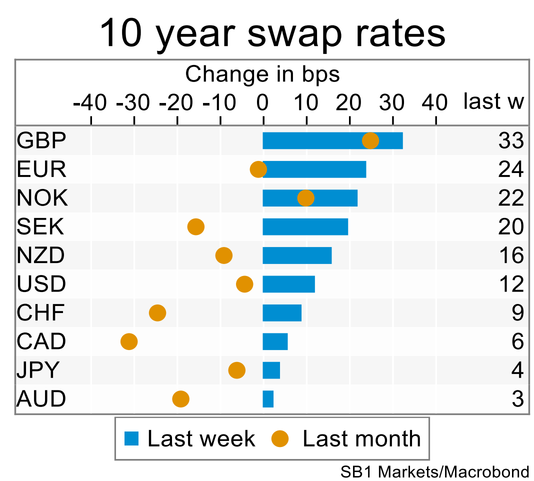




Longer dated rates sharply up too, and more in rest of Europe than in NOK

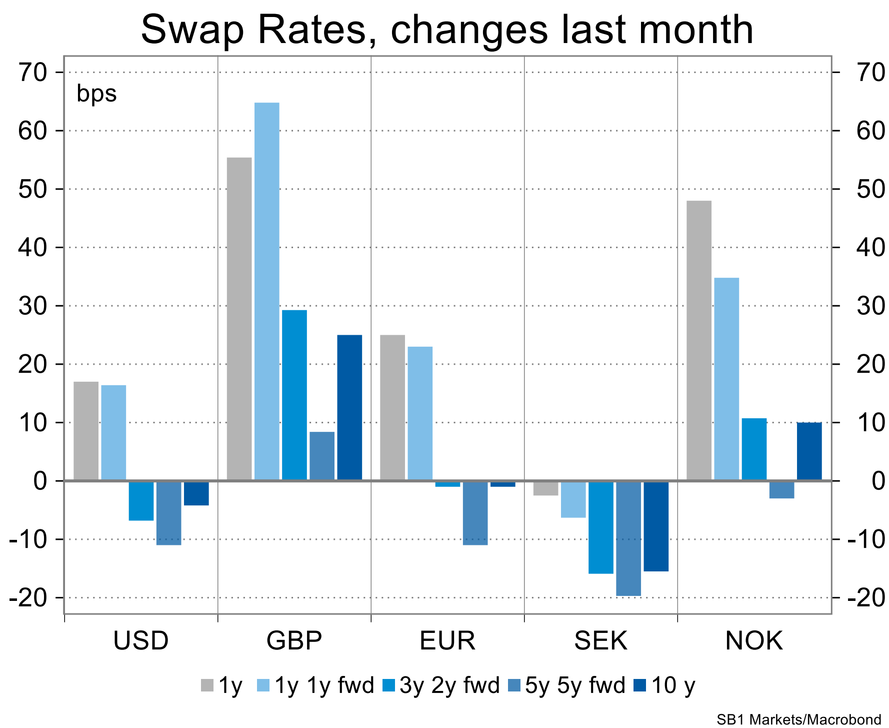


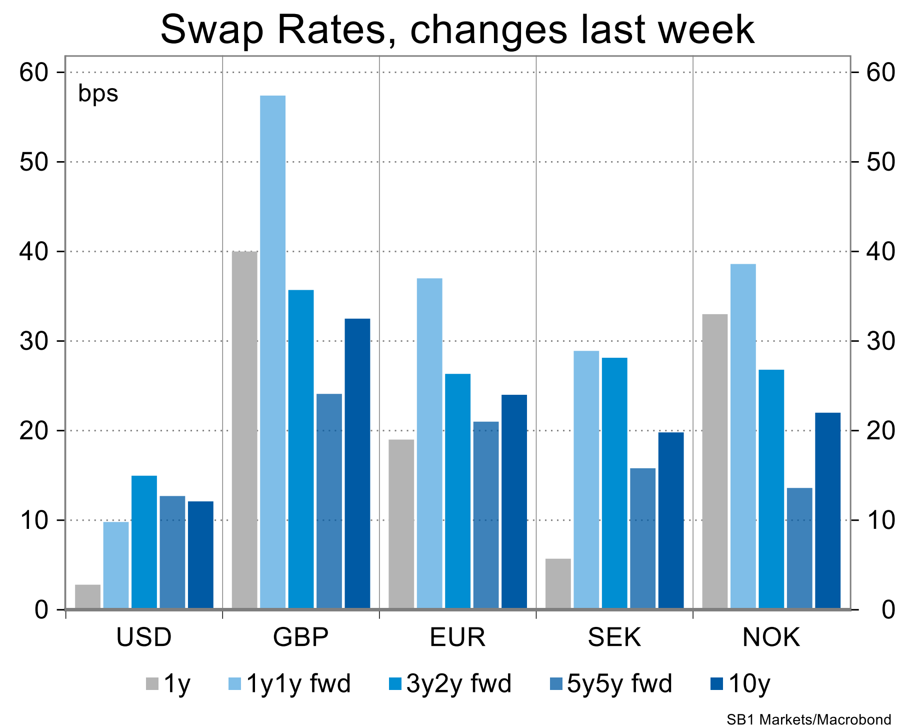




CHF: 10 y government bond yield

All rates up everywhere, and more in rest of Europe than in Norway

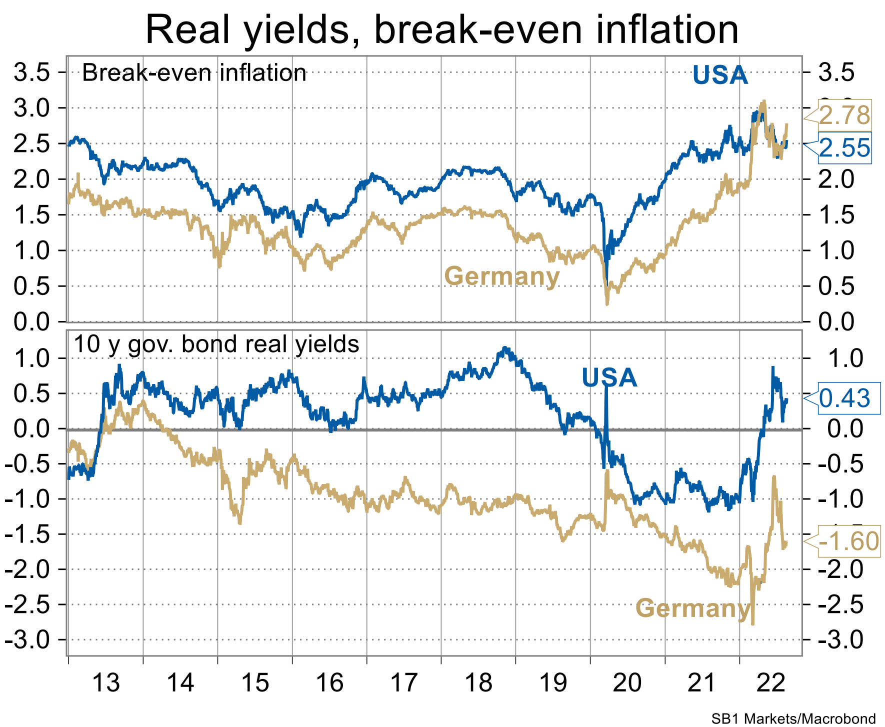


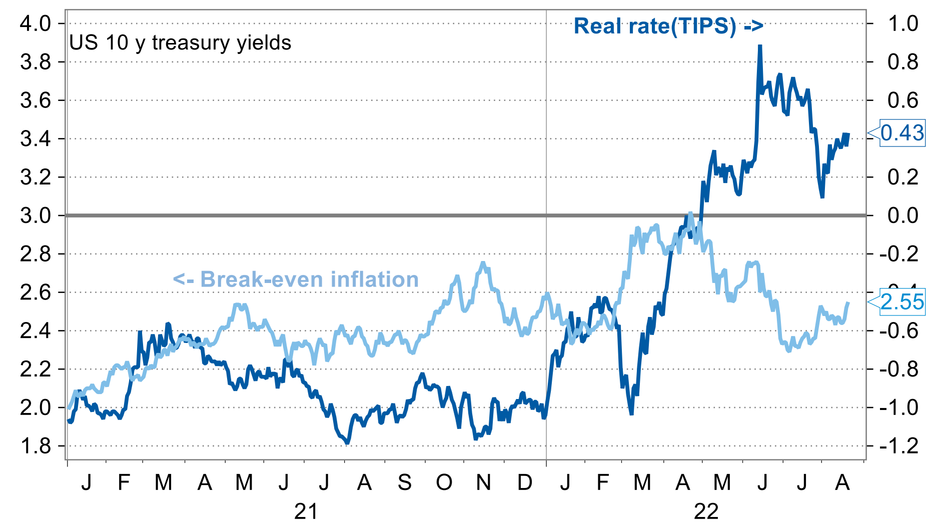


SpareBank 1 MARKETS

Both inflation and real rate expectations up last week, both in US and Germany

The 10 bps hike in Germany Bunds was mainly due to higher inflation expectations though





US & Germany 10 y Gov bond yield

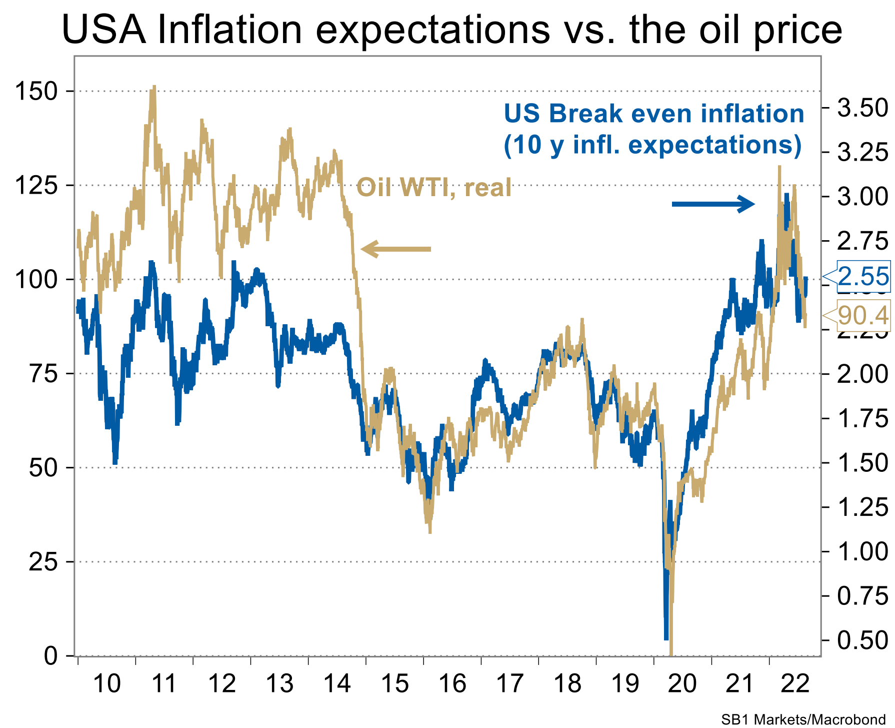
	Yield	Change 1w	Change 1m	Since Feb 18	Min since April-20
USA nominal treasury	2.98	0.14	-0.03	1.06	0.52
.. break-even inflation	2.55	0.08	0.16	0.14	1.06
.. TIPS real rate	0.43	0.06	-0.19	0.92	-1.19
Germany nominal bund	1.18	0.19	-0.05	0.96	-0.65
.. break-even inflation	2.78	0.15	0.36	0.80	0.40
.. real rate	-1.60	0.04	-0.41	0.16	-2.80

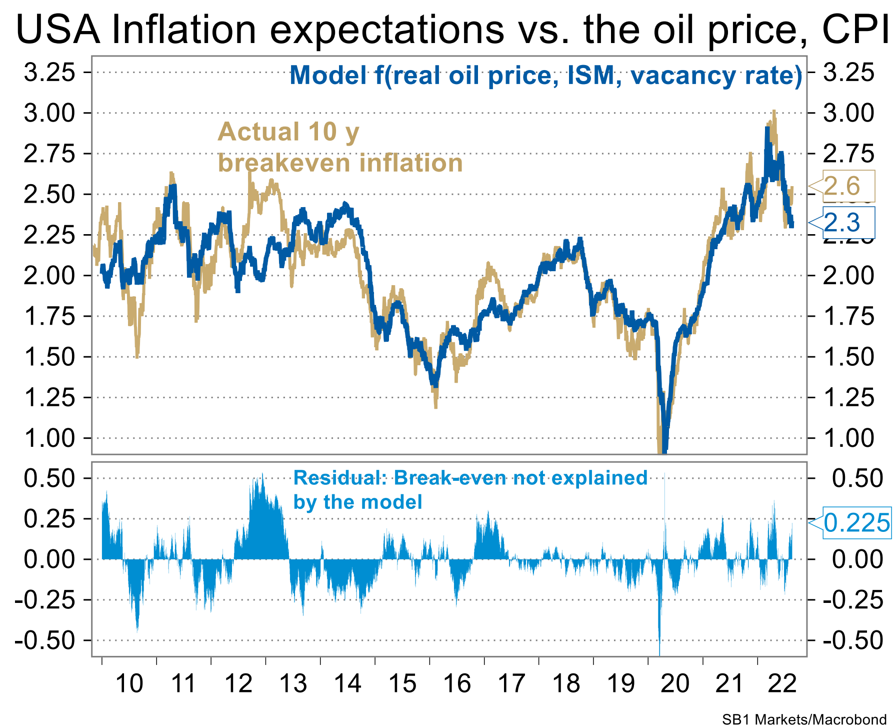
SB1 Markets/Macrobond

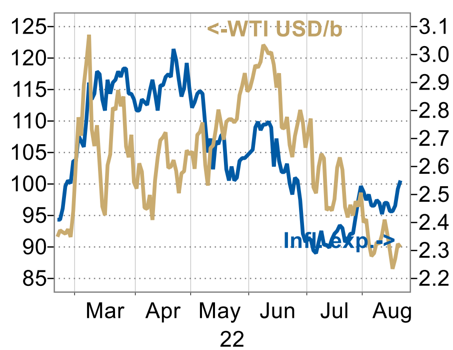
- **In Germany** the 10 y gov Bund added 19 bps, with a 15 bps support from higher inflation expectations, almost identical to the previous week. The real rate at -1.60% is still very low

(Longer-term) Inflation expectations up, without help from the oil price

The recent hike in inflation expectations are not that easy to explain?



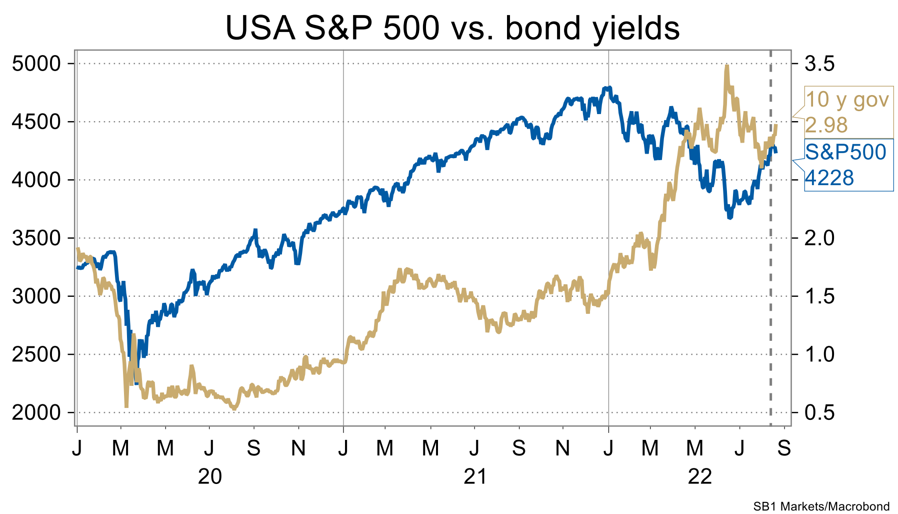


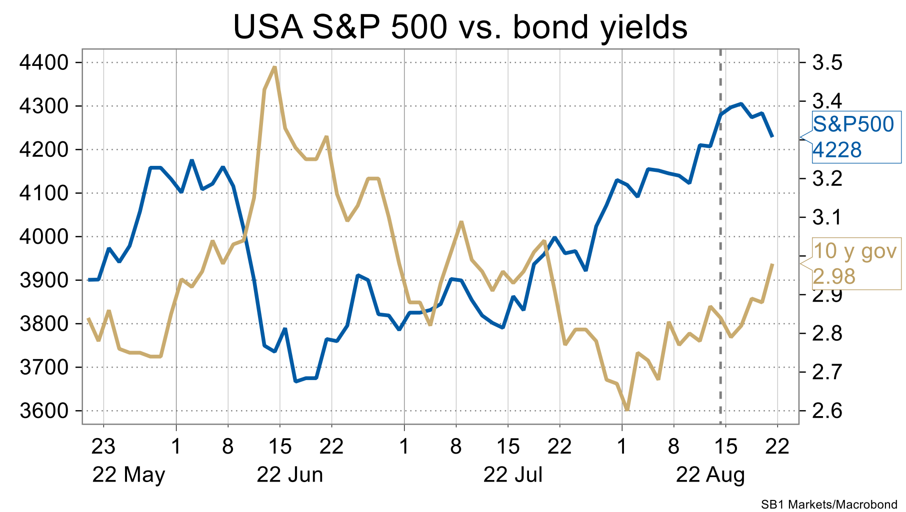


- A simple model including the <u>spot</u> oil price, the <u>current</u> ISM and the <u>current</u> vacancy rate pretty well explains the <u>long-term</u> breakeven inflation expectation in the bond yield curve
- What now? We are uncertain on the oil price, but rather confident that both the ISM, and the vacancy rate will decline. Impact vs the 10 y break-even expected inflation rate
  - » -5 ISM points: -12 bps
  - » -3 vacancy pts, (to 3.6% from 6.6%): -36 bps
  - » - 10 USD/b: -10 bps

SpareBank 1 MARKETS

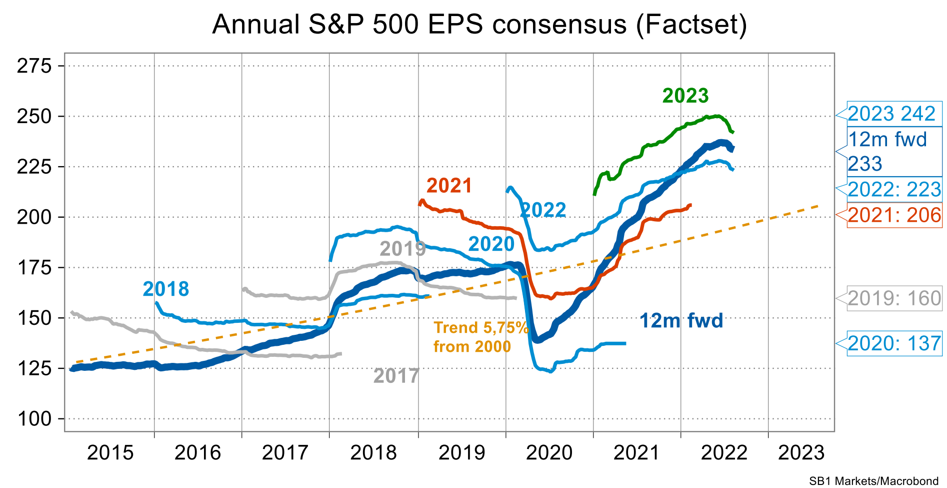
The 10 y US bond yield up 14 bps to almost 3%, the S&P500 down 1.2%

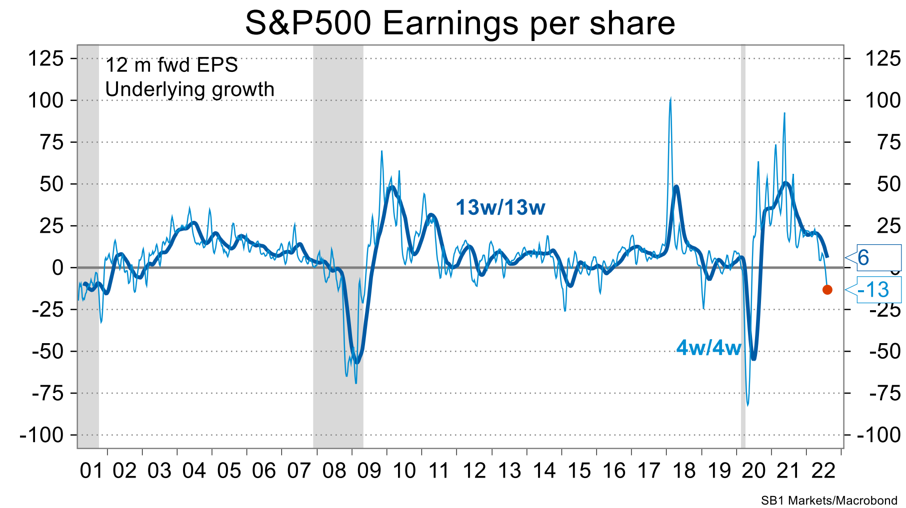


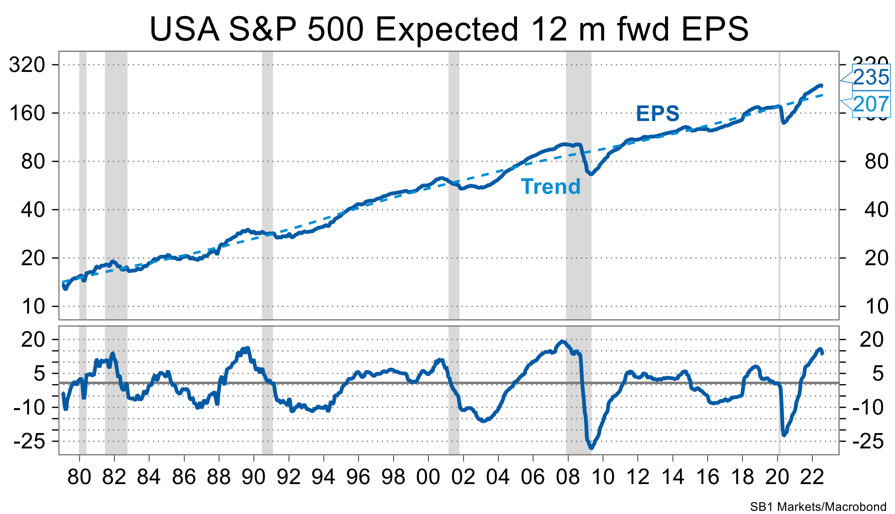


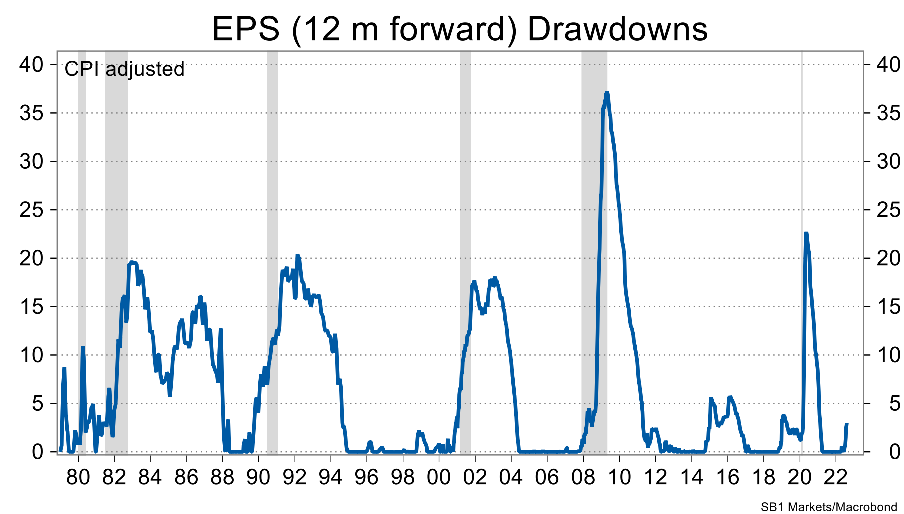
Earnings forecasts finally on the way down – and more is likely to come

S&P500 expected 12 m fws EPS is some 15% above trend – and it always falls below in recessions





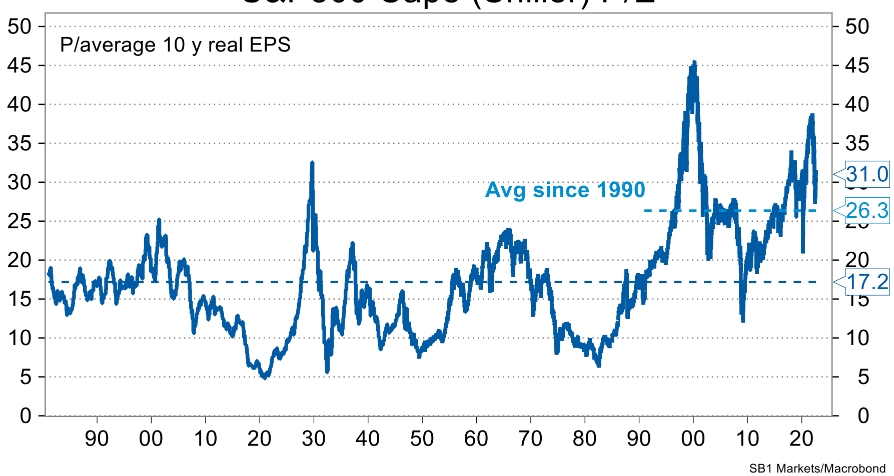




4 valuation charts

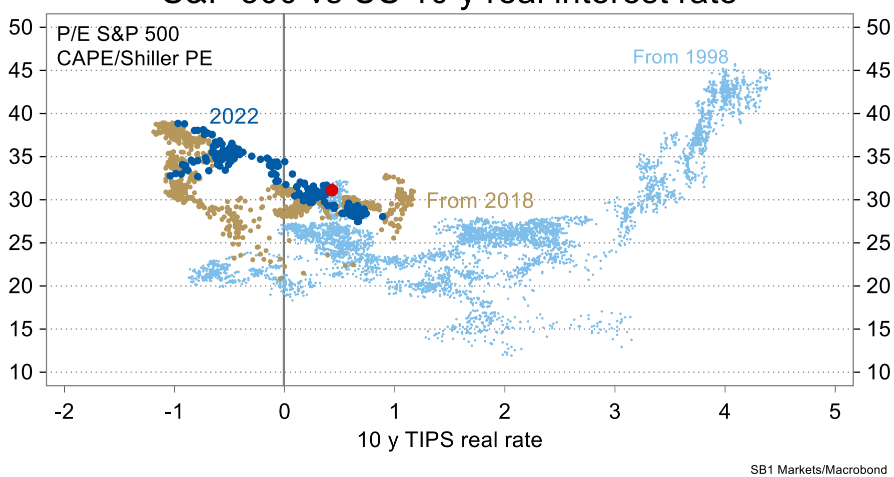
The TIPS real rate has been the main driver for the P/E since 2018

S&P500 Cape (Shiller) P/E

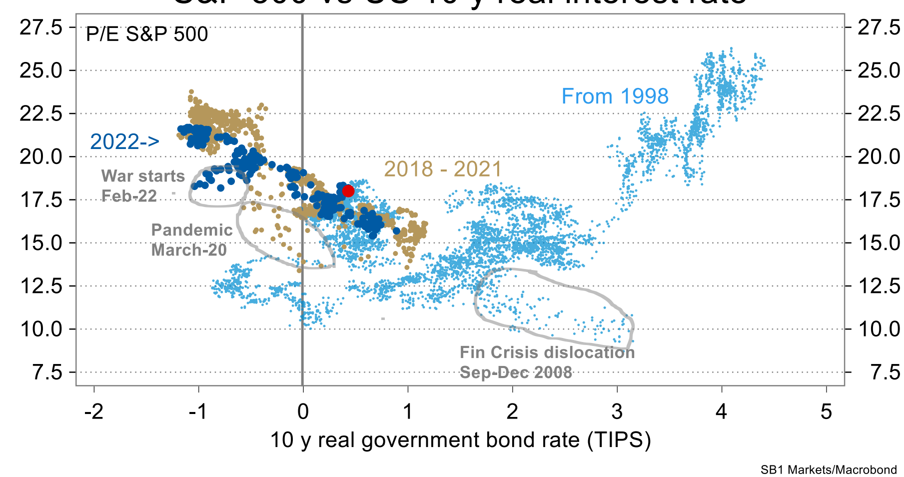


USA S&P 500 12 m fwd P/E

S&P 500 vs US 10 y real interest rate



S&P 500 vs US 10 y real interest rate



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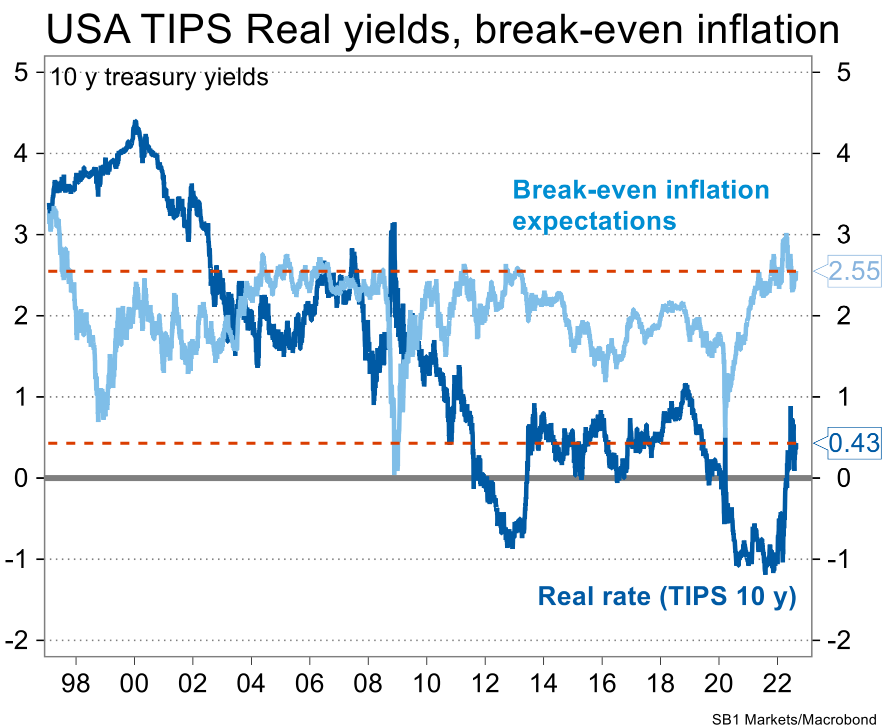
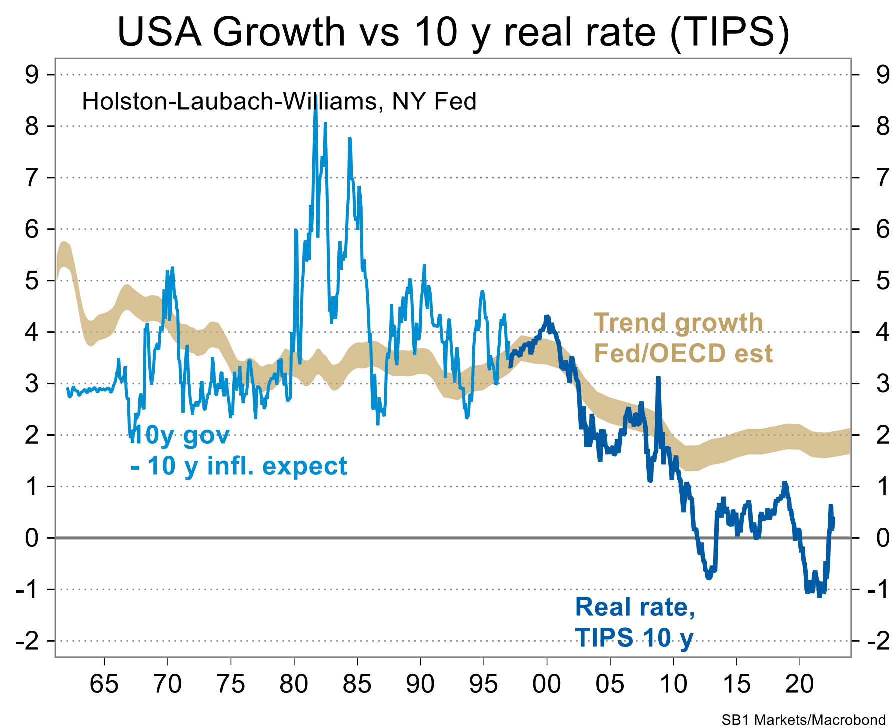
The gap real yield growth gap is widening again. Or is it??

Real rates have fallen from the June local peak – and asset markets are thriving!

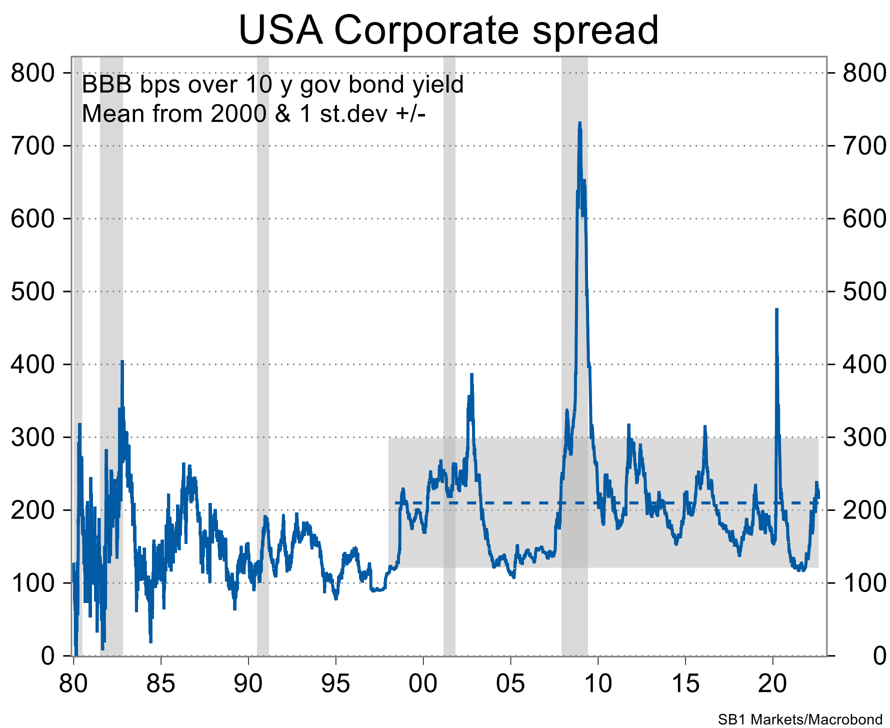


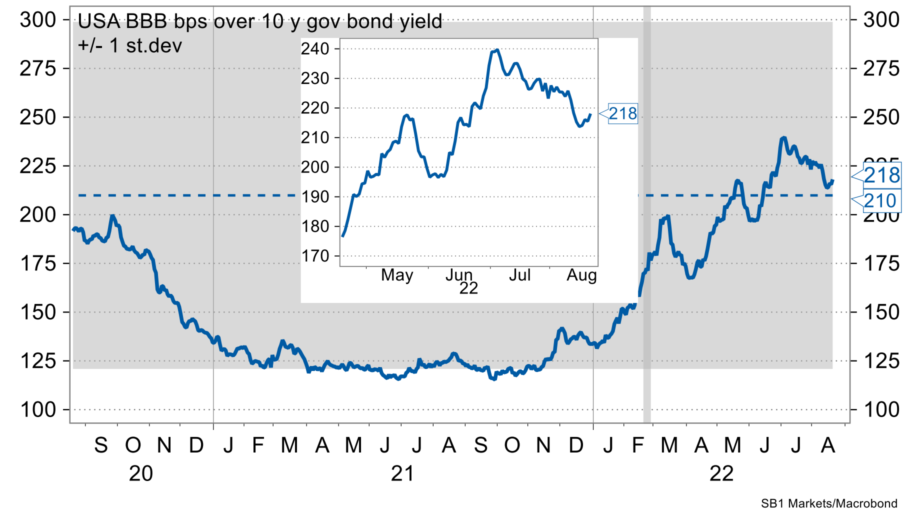


- But what if the growth outlook is weakening, at least short/medium term?

Risk on: Credit spreads fell last week, inflation has peaked!

Still, spreads are close to an average level

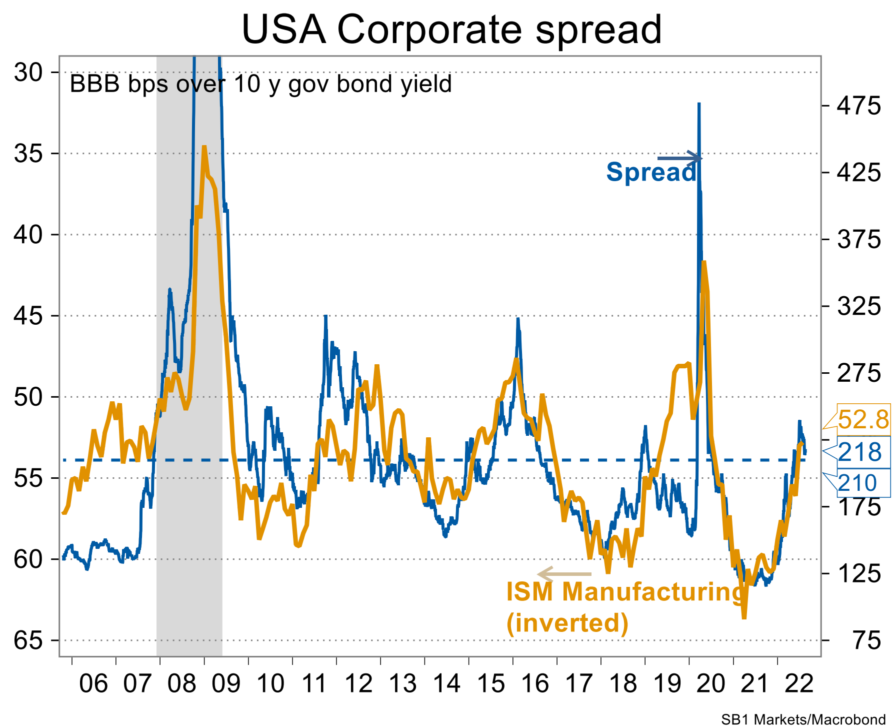


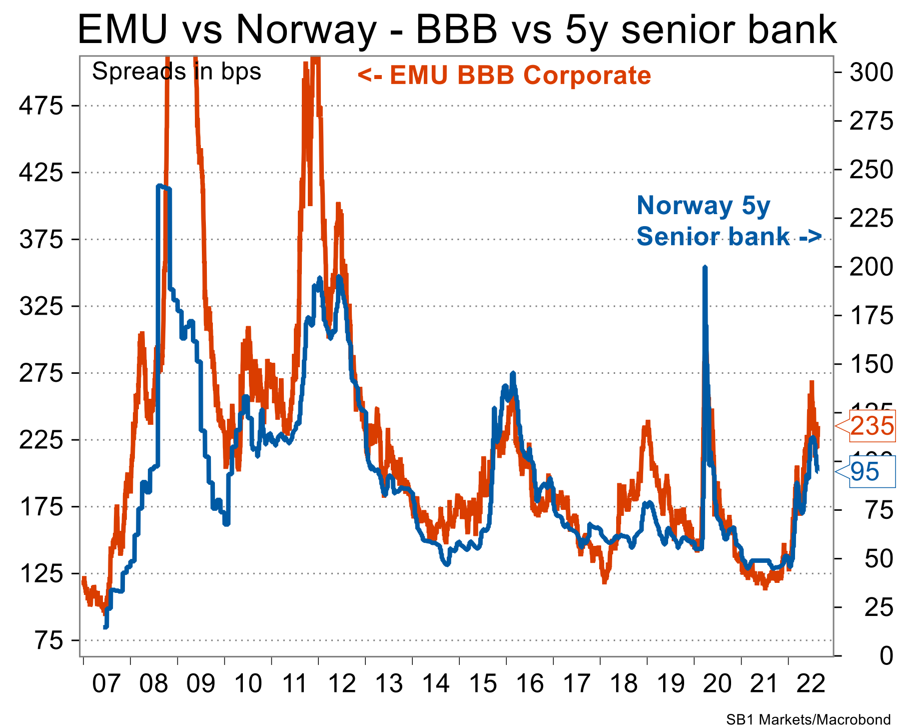


- The US BBB spread is still up almost 100 bps from the bottom last autumn, almost a doubling

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

What do you think is more likely: An ISM at ~~50~~ 45 or 60 in some few months time? We are quite sure..

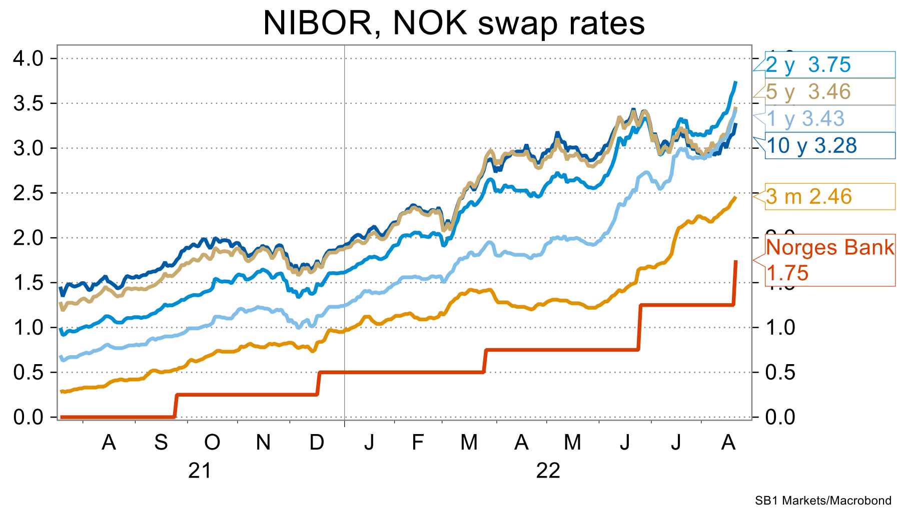


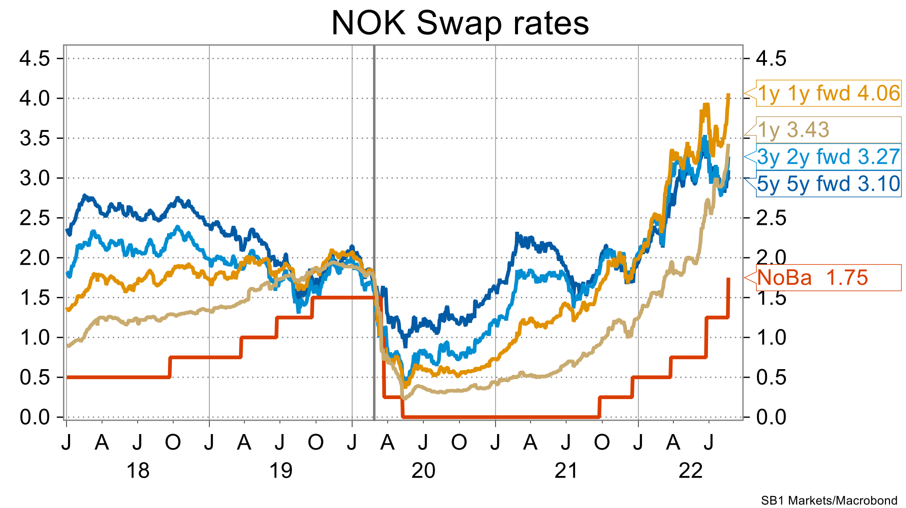


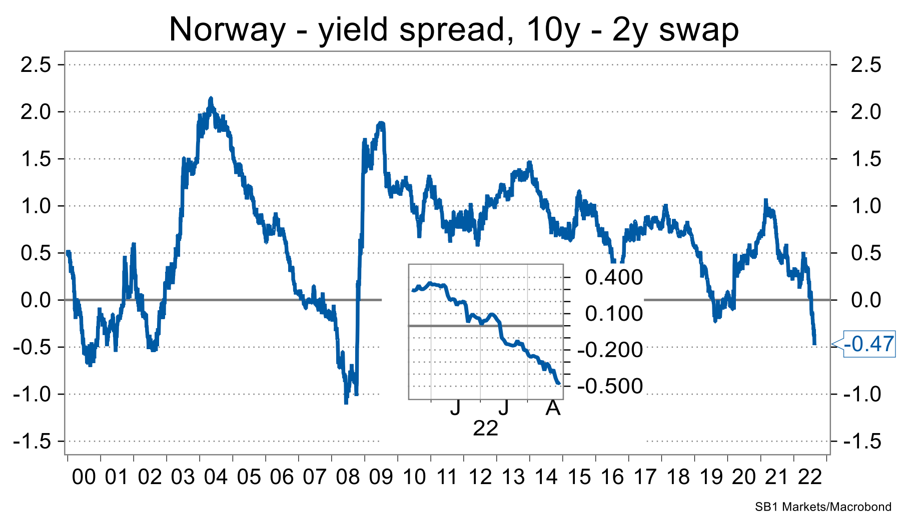
- The answer is not irrelevant for your view on the outlook for spreads, we think
- And do you think Norwegian spreads will be influenced by changes in the global credit market?
- Last week: Norwegian credit spreads adjusted further down following the decline abroad the previous weeks

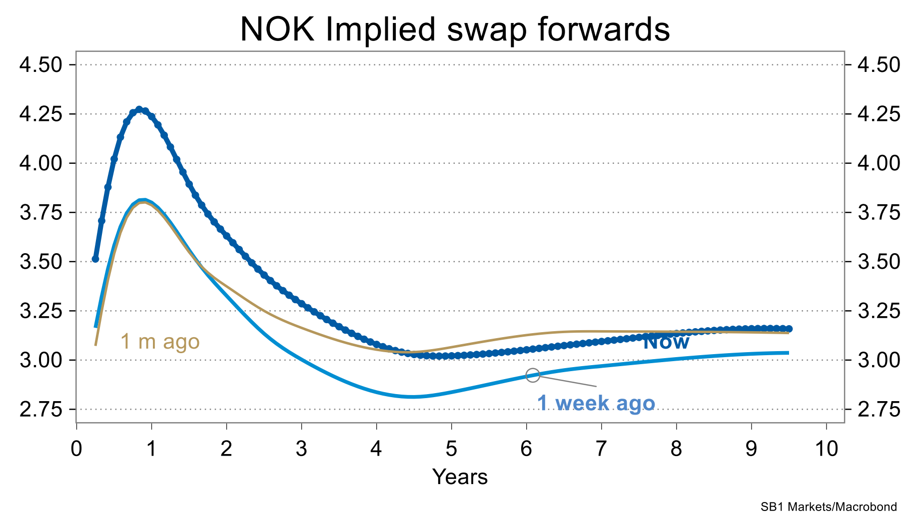
Rates up all over the curve

The 10 - 2y is inverted, by 47 bps



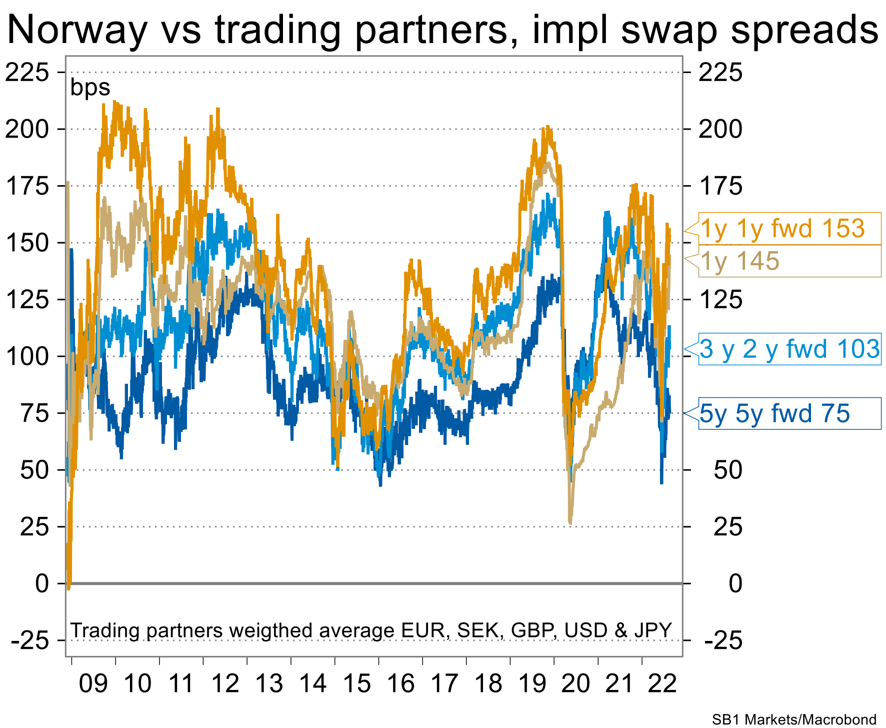


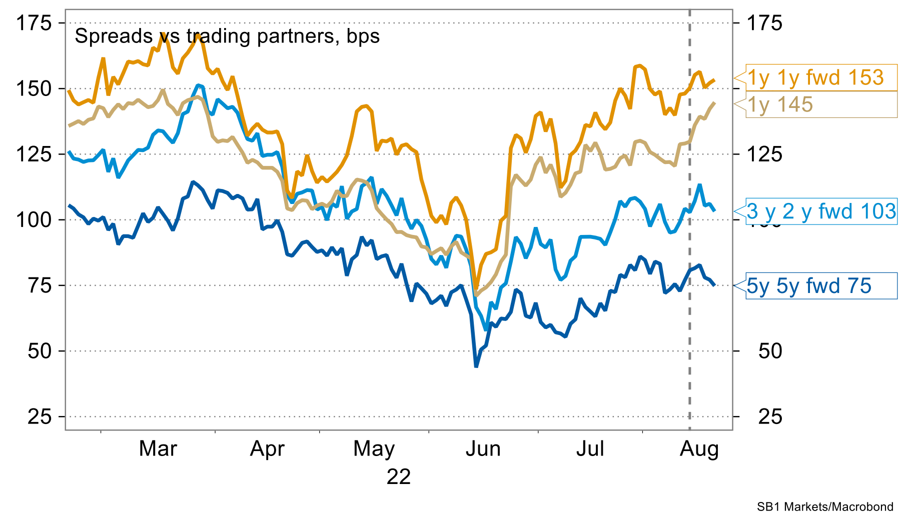


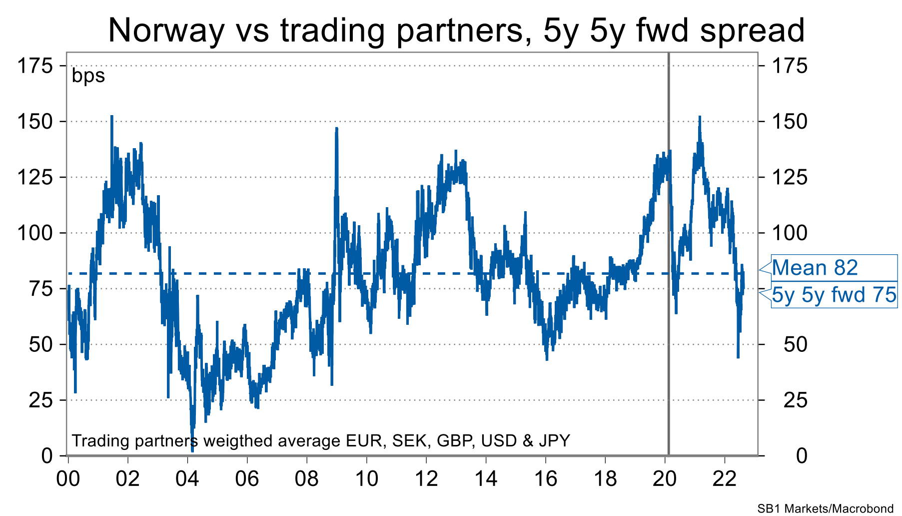


Spreads vs trading partners up but just in the very short end

Spread are once more on the high side, following the upward trend since mid June

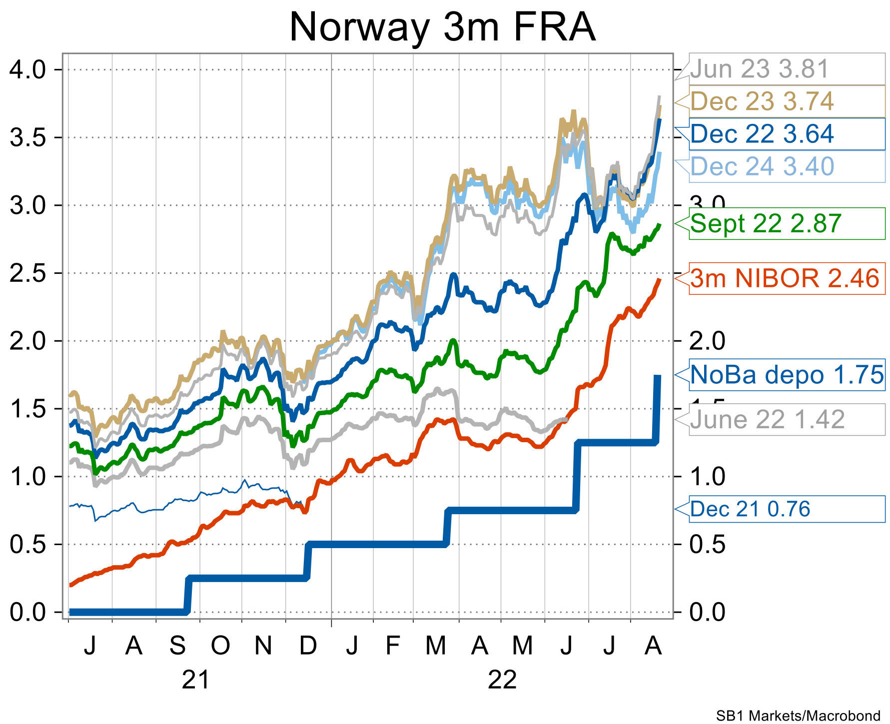


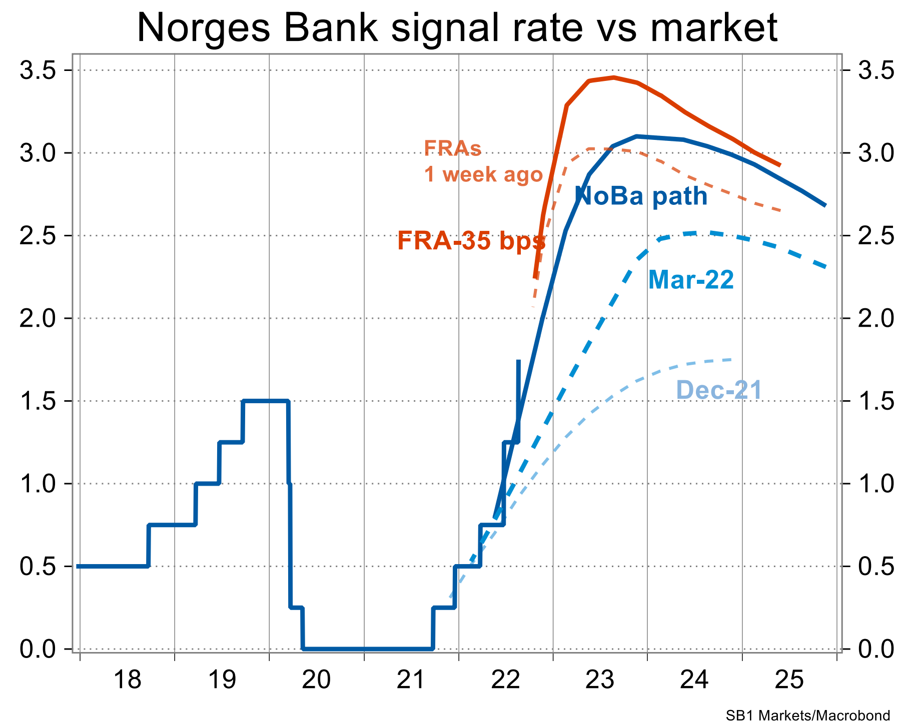




FRAs further up – and too much?

A 50 bps hike to 2.25% in Sept is a done the further up to almost 3.5%. And a 5% mortgage rate??





- FRA rates climbed by up to 44 bps last week, less than in UK, and not much more than among our trading partners in average. Norges Bank had an impact in the very short end of the curve, Sept and Dec gained 1 bp and 8 bps resp. when NoBa hiked at Thursday. During the week, these contracts rose by 13 and 35 bp, most/half of it before Thursday! So Norges Bank is not that much to blame for the lift in rate expectations
- The expected NIBOR spread may have increased due to some media comments on a possible liquidity squeeze on the Norwegian money marked, due to a mismatch between payment of oil taxes and transfers to the Oil fund. Wue think Norges Bank will be able to adjust its liquidity measures if an unwarranted surge in NIBOR rates should take place
- <u>We think the current FRA rates are too aggressive</u>. A close to 5% average mortgage rate is now discounted. Given the average debt level, as well as the proportion of households within the 'fat tail to the right', household demand will hurt too much, and house prices could fall faster and more than is needed to take the inflationary pressure out of the Norwegian economy. Real wages are under pressure as well, and growth impulses from abroad will calm down as well

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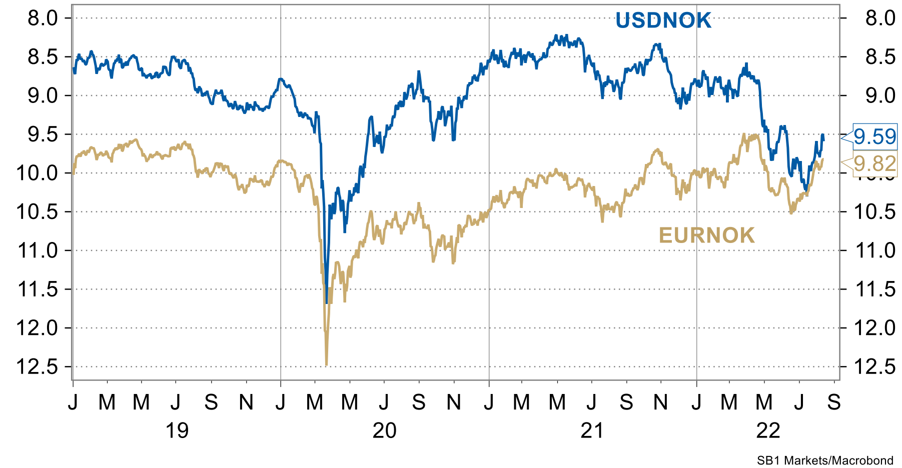
The USD recovered, the NOK survived a 'risk off' week

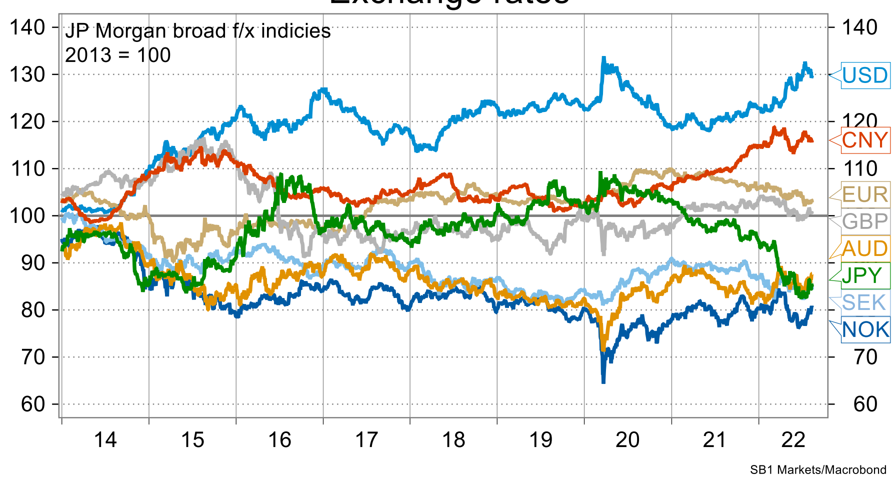
Probably supported by a more aggressive NoBa (but the int. rate spread did not climb by much)

EURUSD

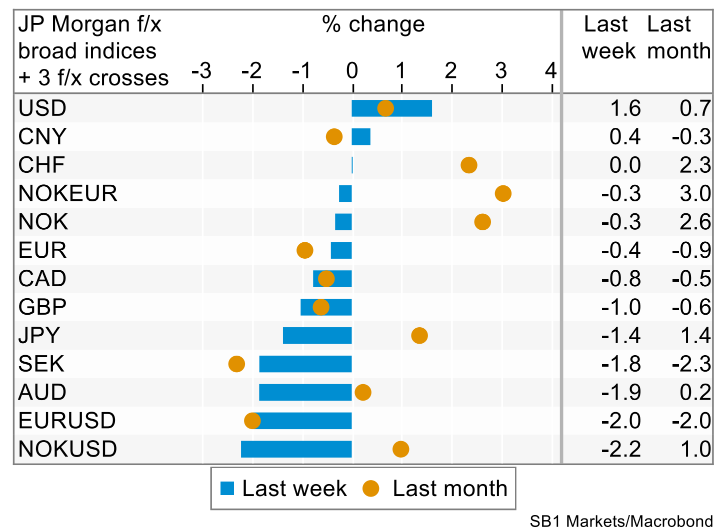
NOK vs EUR & USD



Exchange rates

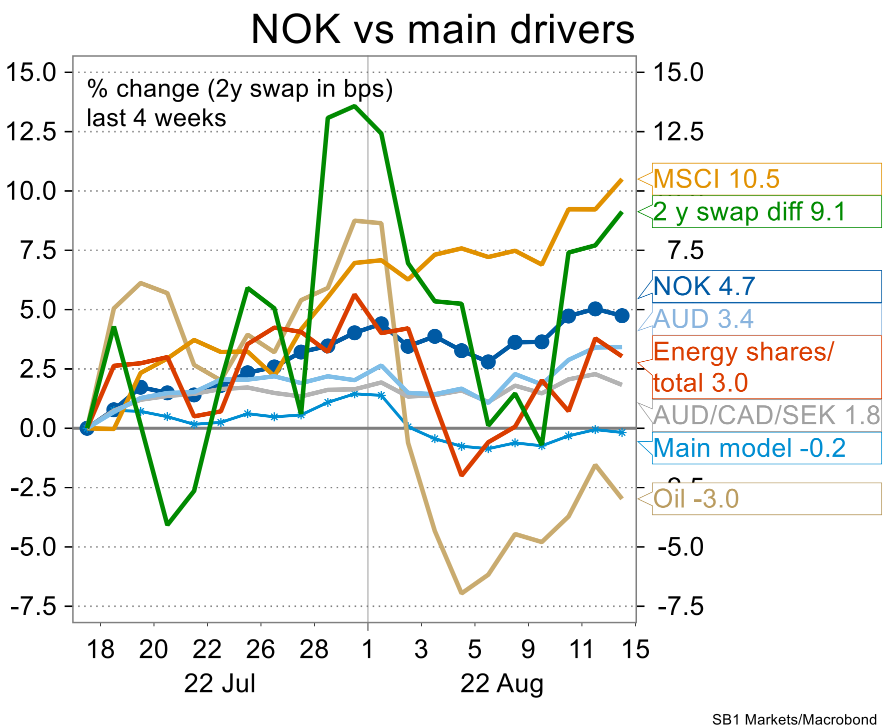


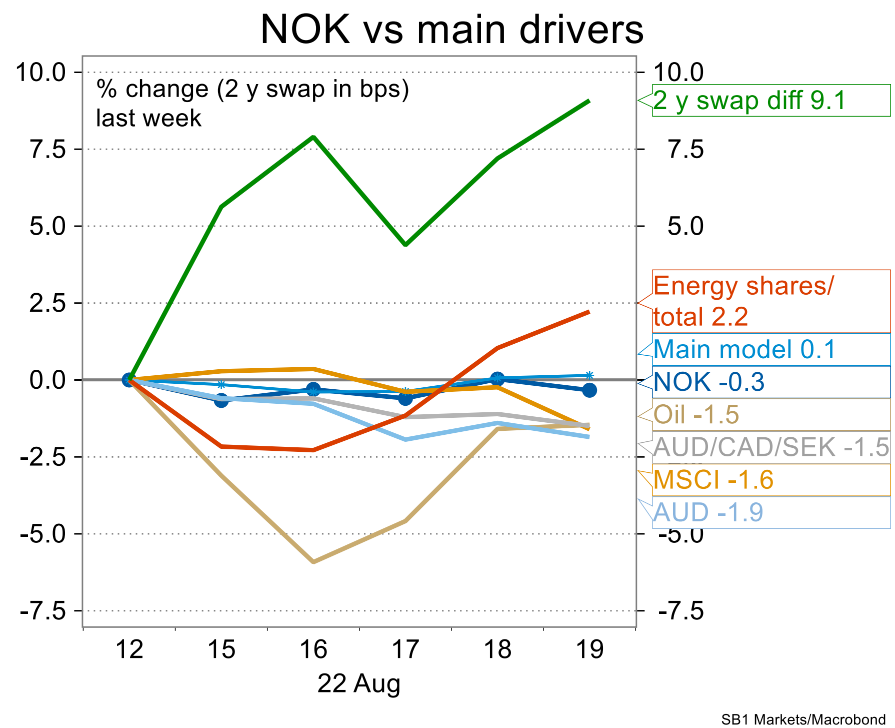
F/x markets



JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
USD	1.6	0.7
CNY	0.4	-0.3
CHF	0.0	2.3
NOKEUR	-0.3	3.0
NOK	-0.3	2.6
EUR	-0.4	-0.9
CAD	-0.8	-0.5
GBP	-1.0	-0.6
JPY	-1.4	1.4
SEK	-1.8	-2.3
AUD	-1.9	0.2
EURUSD	-2.0	-2.0
NOKUSD	-2.2	1.0

NOK down 0.3%, our model suggested +0.1%. NOK rates more up than abroad





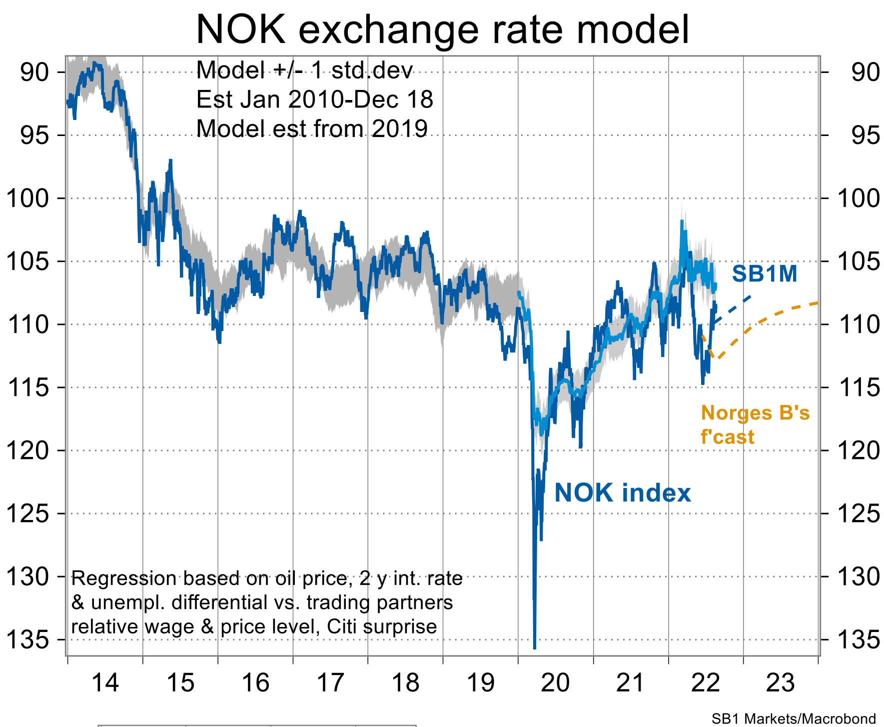
Gaps vs. out model estimates are narrowing

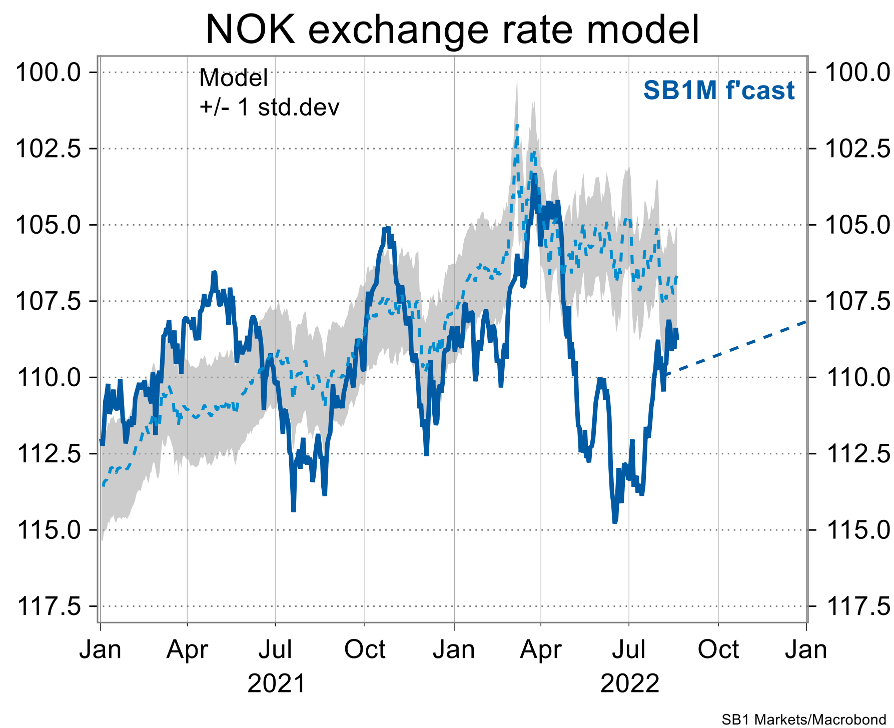
- ***The NOK down 0.3%, our main model said +0.1%% - and NOK is 1.9% <u>below</u> our main model estimate (from –1.5%)***
- The NOK is 5.7% <u>weaker</u> than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts (from -6.4%)
- NOK is 1.6% <u>weaker</u> vs an estimate from a model that includes global energy companies equity prices (vs the global stock market) (from in line)

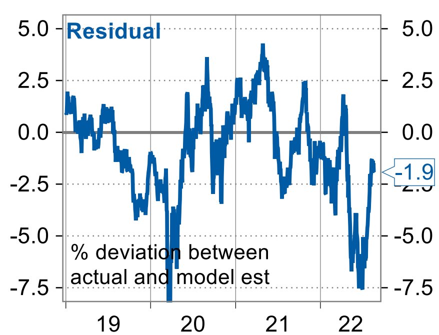
At this and the following pages we have swapped Norges Bank's I44 index for JP Morgan's broad NOK index and rebased it to the current index value for the I44. The I44 has an earlier closing time than the 'official' closing time for f/x crosses. There are no substantial difference between these two indices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

The NOK is 1.9% below our model estimate

The NOK has recovered but is somewhat still on the weak side vs our models







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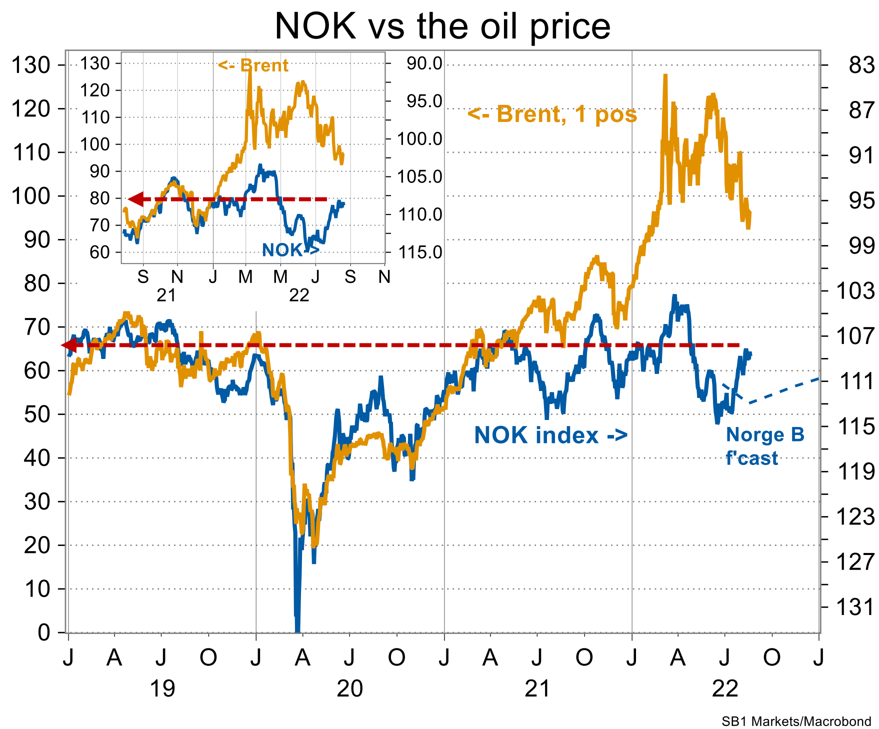
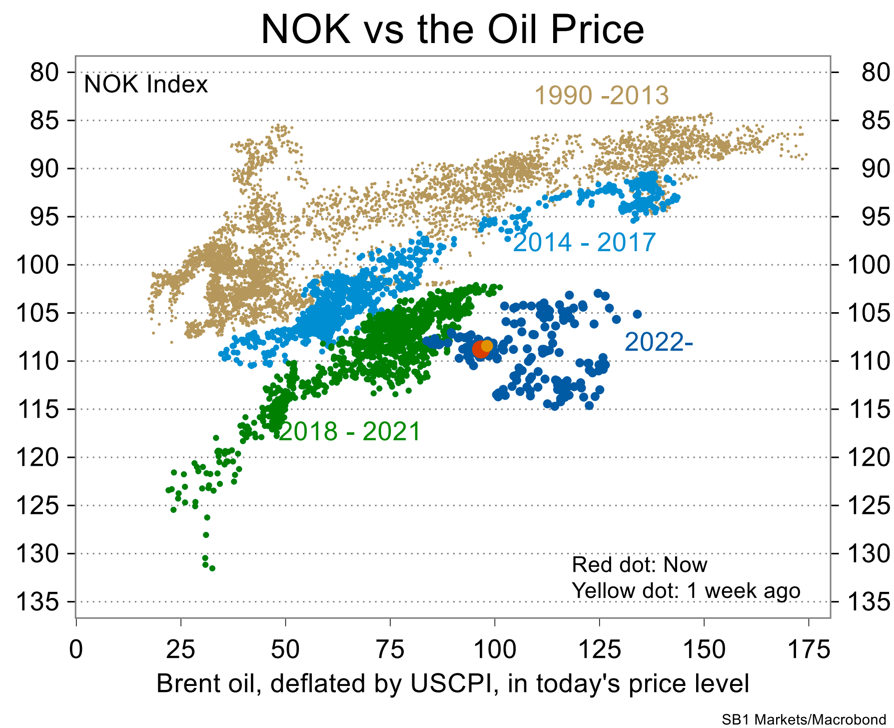
Oil is trending down, the NOK is trending up – but NOK is still rather weak vs oil

.. as if the oil price was USD 80/b (rebased to early Jan) or USD 65/b (rebased to May-21)





- The the x/y chart to the right, the NOK vs the oil price has come closer to the 2018 – 2021 pricing regime
- However, the correlation between the NOK and the oil price has been non-existent since the start of 2022

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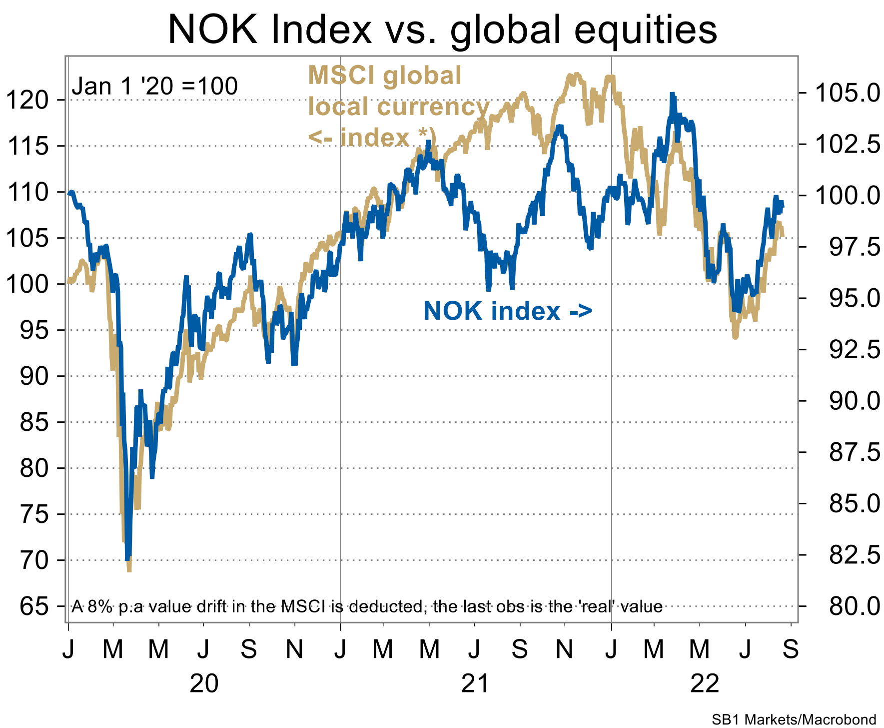
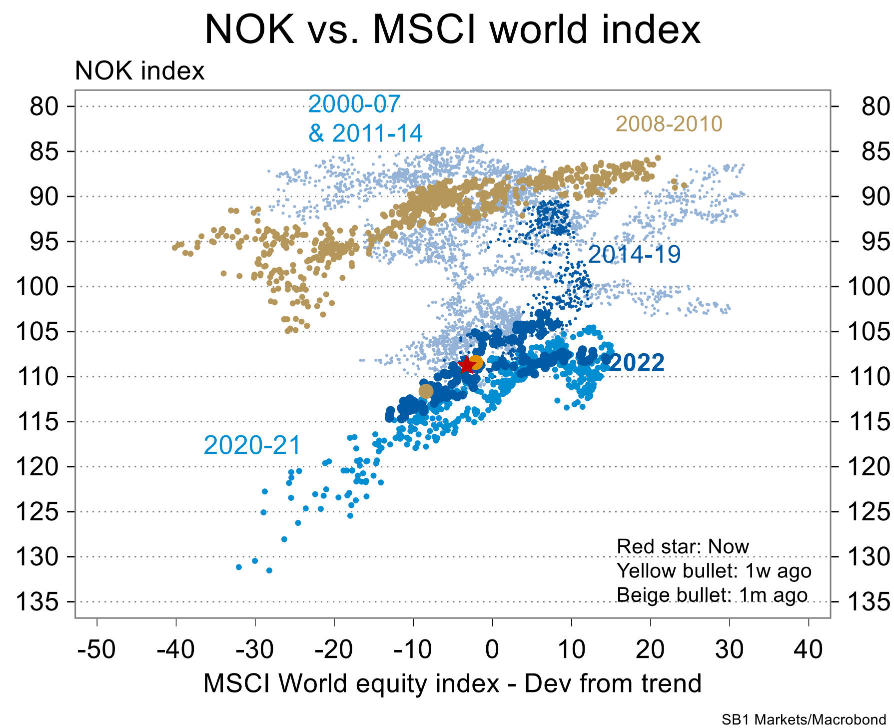
The NOK has been closely correlated to the stock market. Since April

… but there is no stable correlation over time, and when it is, the oil price is normally the real driver





- However, since April oil has not contributed at all vs. the decline and then the recovery in the NOK. So there may be 'something' here, vs the equity markets

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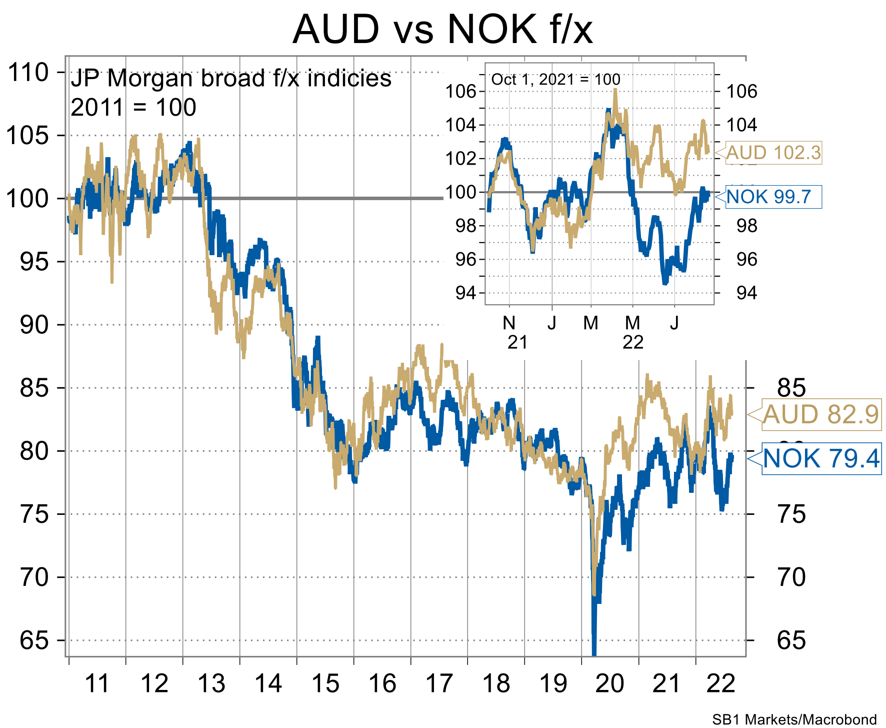
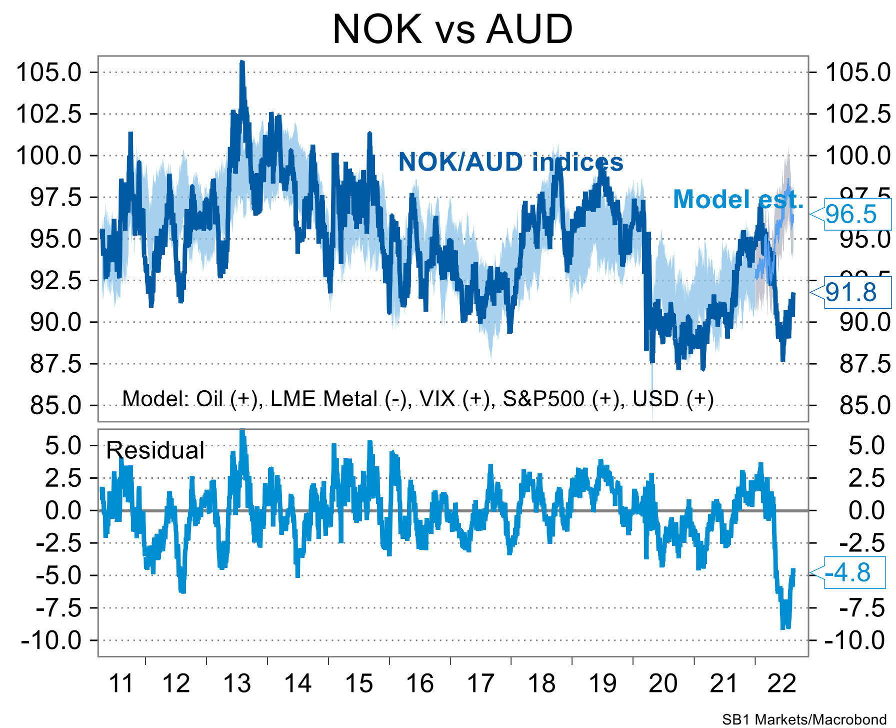
NOK & AUD down last week – but the AUD-NOK gap is slowly narrowing

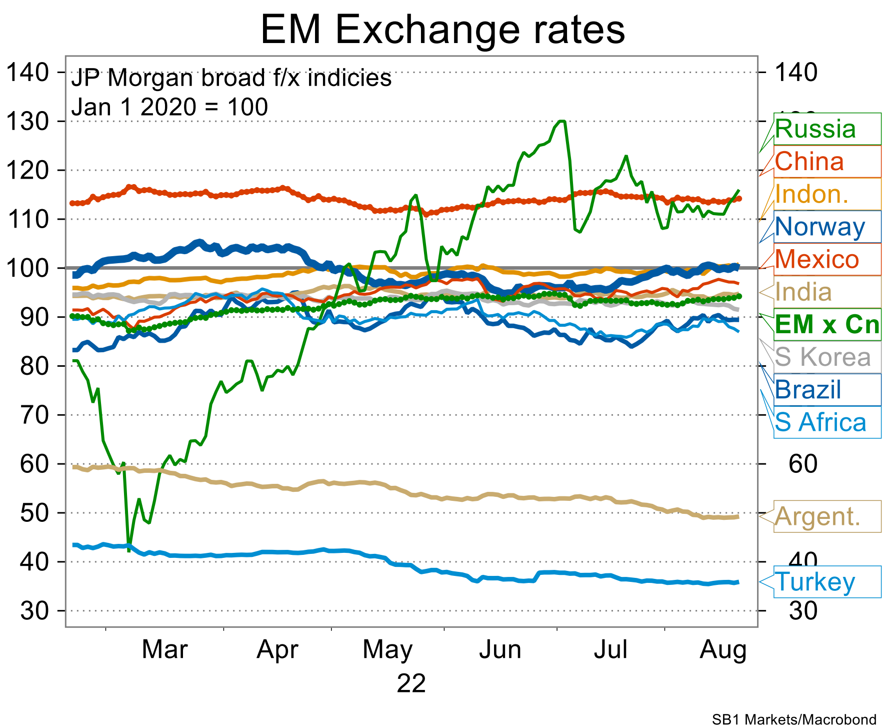


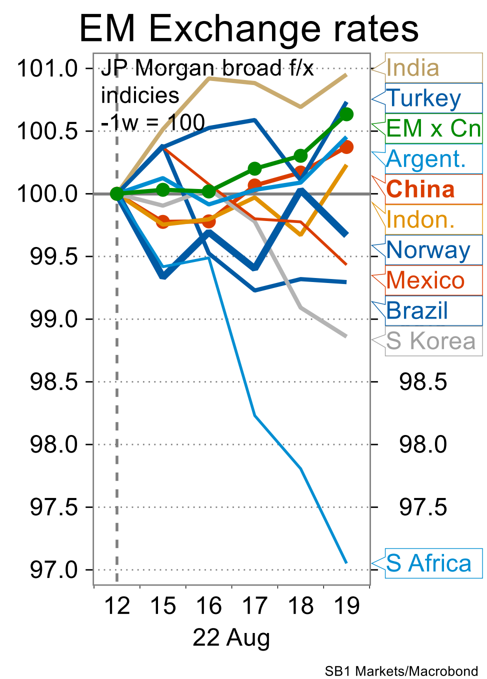


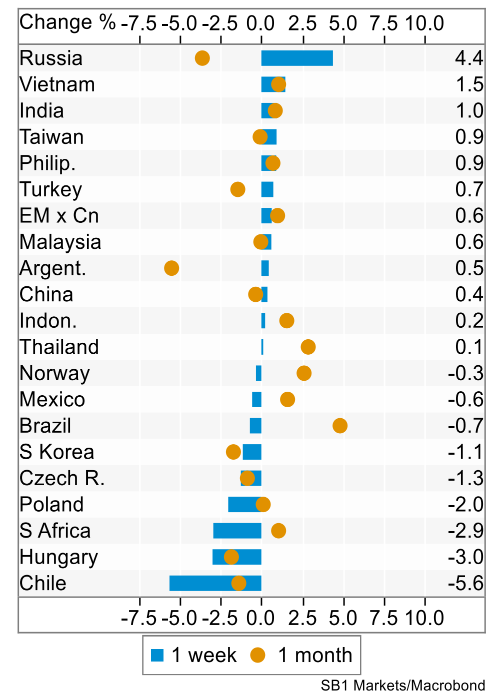
- The discrepancy between the NOK and AUD is highly unusual, given the normal factors that decide the limited gap
- Normally, NOK strengthens vs the AUD when the oil prices rises vs. the LME metal index, when VIX, and the S&P500 index increases, and the USD index appreciates. Seem like we need a new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

EM f/x: In sum up, with the RUB in the lead

The EM f/x markets in aggregate has been stable recent months, is spite of DM rate hikes







- The Taiwanese dollar has not been hurt by political turmoil recenty

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