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Macro Weekly

Week 37

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Last week, I

- **The War/European Energy/Commodities**
  - » **Ukraine forces** have surprisingly pushed Russians out of substantial areas in North-East and East. The facts on the ground do probably not favour any near time peace negotiations. Besides, even if the war ended now, Russia would remain a pariah, at least in the west as long current Russian regime stays in power. Now, the risk may be that Putin will try something desperate to save his face
  - » **European gas prices** initially rose on Monday following the full closure of the Nord Stream 1 gas pipeline but prices soon fell back the level before Russia's decision, at least in the short end of the curve. Prices are down 40% from the peak in late August
  - » **EU** is working hard to get gas and electricity prices down. A broad price cap for imported gas is favoured, but no model is presented – and it is anyway challenging, as the real problem is lack of gas, and a cap will at least not lift supply, just demand. The pressure on Norway as a 'war profiteer' to contribute more than just symbolic in one way or another is rapidly building, a morally challenging position. A windfall tax on energy companies with super-profits within the EU (like Norwegian oil & electricity rent taxes), is a lower hanging fruit. Revenues could be transferred to exposed households
  - » **Other commodity prices** were mixed last week; Metals were mostly up, oil was close to flat, while food prices fell
- **Global PMI**
  - » The **global composite PMI** fell 1.5 p 49.3 in August, with both manufacturing & services output below the 50-line. The US S&P (Markit) PMI was the weakest of all (!), down 5.4 p to 44.6, even weaker than the initial estimate. However, the ISMs were much stronger, thanks to a strong service sector print. Our calculated US ISM composite was up 0.2 to 56.1, implying an unprecedented gap to the PMI. Actual US data will soon reveal which index is to trust, they cannot both be correct (but both could be equally wrong, of course). The Euro Area PMI also fell further below the 50-line, but just to 48.9, and no dramatic energy price shock is so far to be seen, even if actual production very likely fell in July. The Chinese PMI held far better, and EM x China was close to unchanged, at 53.8. So, the rich part of the world is on the lead on the way down. Delivery times are falling, and price increases are slowing, underscoring that inflation has peaked or is close to the peak
- **Global Auto Sales**
  - » Sales rose further in August, as **Chinese** sales kept up at a very high level, and more cars were sold in **other EMs** as well as in **Europe**. Sales fell slightly in the **US**. Global sales are down 5% vs. the 2019 average, with China in the lead, up more than 30% (which signals that households are not knocked down, even if the housing market is in disarray). Most rich countries are down 20 – 30% (Norway just -8%). Auto production is on the way up most places. Will demand soon become the constraining factor? If so, prices will come down, especially for used & rental cars, which have been in short supply. <u>We are very likely not there yet</u>
- **USA**
  - » **Fed's Beige book** ('regional network') reports that growth has come to a halt, clearly a weaker report than 6 weeks ago. 5 districts report a contraction, 2 reported no growth and the remaining 5 reported modest growth – in sum no growth! High inflation had made a dent in consumption, and demand for housing had weakened significantly. Price and wage pressures are easing, but are still elevated. The Fed has not finished its job yet. FRA's rose, and there is a 90% probability for a 75 bps hike next week. Real rates rose further, the 10 y TIPS by 16 bps to 0,91%, a cycle high
  - » **Atlanta Fed's median wage tracker** report a 6.7% annual growth rate, unch. from July. In September, probably a downtick. The problem is that the current wage inflation is 3 – 3.5 pp higher than what used to yield 2% CPI inflation – and the surge in wage inflation is closely correlated the excess demand for labour. A decline in new jobless claims recent weeks signal that demand is still strong, as do all other stats too

Last week, II

- **China**
  - **Exports** fell by 5% in August, perhaps due to weaker demand for goods in the West, and were far below expectations. Exports are still very strong, up 44% in value and 15% in volume terms from before the pandemic, far above the pre-pandemic trend. **Imports** also fell m/m in August, and are far below the pre-pandemic trend, after falling 14% in volume terms since last spring – reflecting weak domestic demand, especially in the construction sector. The trade surplus fell in August, but remains very high – China is again partially (net) export led
  - **Credit growth** returned to a normal level in August, following the abrupt slowdown in July. Bank lending is still low, while shadow banking credit gained track, with some important details still not published (local government net bond issuances). The authorities have announced several stimulus measures, mostly by allowing local governments to borrow more to fund infrastructure projects, and to bail out failed residential projects. We are not sure this trick will work this time around
  - **CPI inflation** fell in August, to well below expectations. The core is up 0.8% y/y, the headline 2.5%. Producer prices decline for the 2nd month in row, and the annual inflation rate is falling rapidly, now down to 2.3%
- **EMU**
  - The **ECB** lifted its signal rates by 75 bps as widely expected, the repo rate (which is close to the EURIBOR rate) to 0.75%. This was the largest hike in history, and the bank signalled that more is to come – even if the growth outlook was revised down. Very short term rates rose marginally, but the bank's signals were more hawkish than expected, and longer dated rates rose sharply, the Dec-22 FRA rose 21 bps since before the meeting, to 2.03%. Rather aggressive since the underlying cost pressure in the EMU still is muted – and real wages are falling some 5%
  - **Retail sales** rose marginally in July, while **industrial production** probably fall some ¾ %. Q2 GDP was revised up to a 3.1% growth pace. Unit cost inflation is at a 2% growth path (vs some 5% in the US!)
- **Sweden**
  - **House prices** fell further in August, according to the first published index – and prices are down 9% past 5 months
- **Norway**
  - **CPI inflation** surprised on downside in August, as electricity prices rose less than we (and we guess others) assumed. The headline rate fell to 6.5% from 6.8%. However, the core inflation accelerated by 0.2 pp to 4.7%, as prices rose 0.2% m/m, with transport (ex gasoline) in the lead. Norges Bank will have to revise its price forecast somewhat upwards
  - **Mainland GDP** fell 0.3% in July, well below expectations, and the history was revised down. Almost no growth since last Sept, and the July level was 1.4% below NoBa's f'cast in the June MPR! Public sector demand/production is down, but growth in the private sector is muted. Both private consumption, housing and business investments, both off- and onshore has been weak recent months, while inventories have been build rapidly up. Still, the labour market and the bank's assessment of wage inflation will decide the pace of rate hikes, and the markets is still very tight, though without signs of much higher wage inflation (but unit labour cost may accelerate due to dismal productivity growth)
  - **House prices** fell surprisingly rose 0.6% in August, we expected a 0.5% decline. The supply is on the way up, and the inventory is growing. We are still confident that price will turn south not before long
  - **Household savings** fell in Q2, as prices rose sharply. Households still has a better free cash flow than normal, and bank deposits are higher than normal vs income, due to the excess savings through the pandemic

The Calendar: China housing starts, US CPI, BoE, NoBa network survey

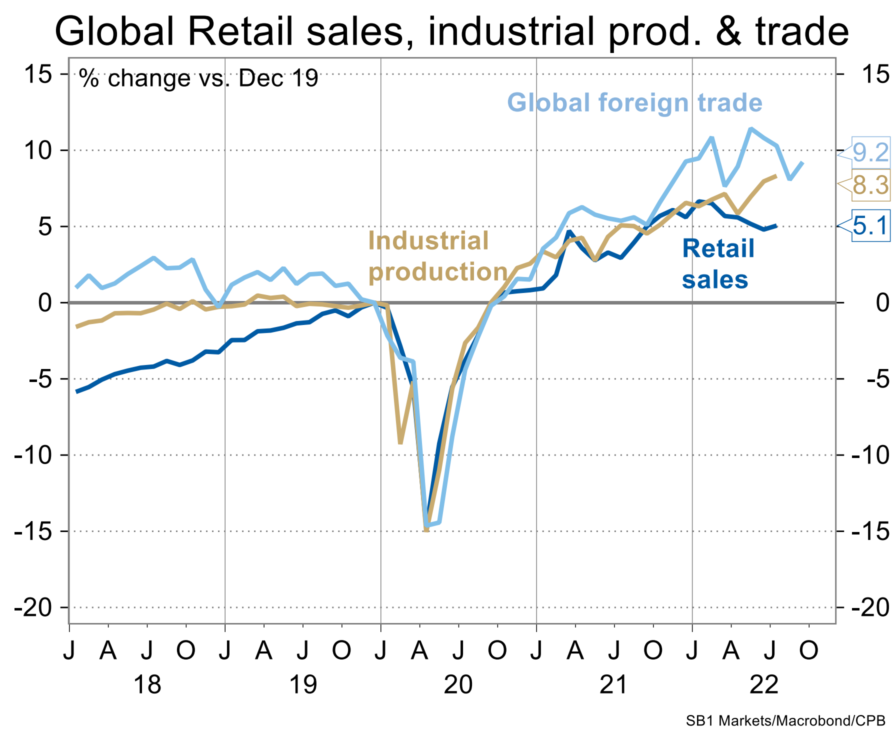
Time	Count.	Indicator	Period	Forecast	Prior
Monday September 12					
08:00	UK	Monthly GDP (MoM)	Jul	0.3%	-0.6%
08:00	UK	Manufacturing Production MoM	Jul	0.3%	-1.6%
Tuesday September 13					
08:00	UK	Weekly Earnings ex Bonus	Jul	5.1%	4.7%
00:00	UK	Unemployment, ILO	Jul	3.8%	3.8%
10:00	**NO**	**Norges Bank Reg Network, exp.**	**Aug**	**0.5**	**1.6**
11:00	GE	ZEW Survey Expectations	Sep	-60	-55.3
12:00	US	NFIB Small Business Optimism	Aug	90.2	89.9
14:30	**US**	**CPI Ex Food and Energy YoY**	**Aug**	**6.1%**	**5.9%**
14:30	**US**	**CPI Ex Food and Energy MoM**	**Aug**	**0.3%**	**0.3%**
14:30	**US**	**CPI YoY**	**Aug**	**8.1%**	**8.5%**
20:00	US	Monthly Budget Statement	Aug	$296b	-$211.1b
Wednesday September 14					
06:00	SW	PES Unemployment Rate	Aug		3.2%
08:00	UK	CPI YoY	Aug	10.2%	10.1%
08:00	UK	CPI Core YoY	Aug	6.3%	6.2%
08:00	SW	CPI YoY	Aug	9.6%	8.5%
08:00	SW	CPIF Excl. Energy YoY	Aug	6.9%	6.6%
11:00	**EA**	**Industrial Production SA MoM**	**Jul**	**-1.0%**	**0.7%**
13:00	US	MBA Mortgage Applications	Sep-09		-0.8%
14:30	US	PPI Final Demand YoY	Aug	8.7%	9.8%
Thursday September 15					
08:00	NO	Trade Balance	Aug		153.2b
08:00	NO	New Home Prices SSB	Q2		
10:00	NO	New Home sales, Homebuilders	Aug		
11:00	EA	Trade Balance SA	Jul		-30.8b
11:00	**EA**	**Labour Costs YoY**	**2Q**		**3.80%**
13:00	**UK**	**Bank of England Bank Rate**	**Sep-15**	**2.25%**	**1.75%**
14:30	US	Initial Jobless Claims	Sep-10	226k	222k
14:30	US	Empire Manufacturing	Sep	-10	-31.3
14:30	US	Retail Sales Advance MoM	Aug	0.0%	0.0%
14:30	US	Retail Sales Core, MoM	Aug	0.6%	0.8%
14:30	US	Philadelphia Fed Business	Sep	2.0	6.2
15:15	US	Manufacturing Production	Aug	-0.1%	0.7%
Friday September 16					
03:30	CN	New Home Prices MoM	Aug		-0.1%
04:30	**CN**	**Housing starts**	**Aug**		
04:00	**CN**	**Industrial Production YoY**	**Aug**	**3.8%**	**3.8%**
04:00	CN	Retail Sales YoY	Aug	3.2%	2.7%
04:00	CN	Fixed Assets Ex Rural YTD YoY	Aug	5.5%	5.7%
08:00	NO	Housing Starts SSB	Aug		
08:00	UK	Retail Sales Ex Auto Fuel MoM	Aug	-0.5%	0.4%
11:00	EA	CPI YoY, final	Aug F	9.1%	9.1%
11:00	EA	CPI Core YoY, final	Aug F	4.3%	4.3%
16:00	US	U. of Mich. Sentiment	Sep P	59.3	58.2

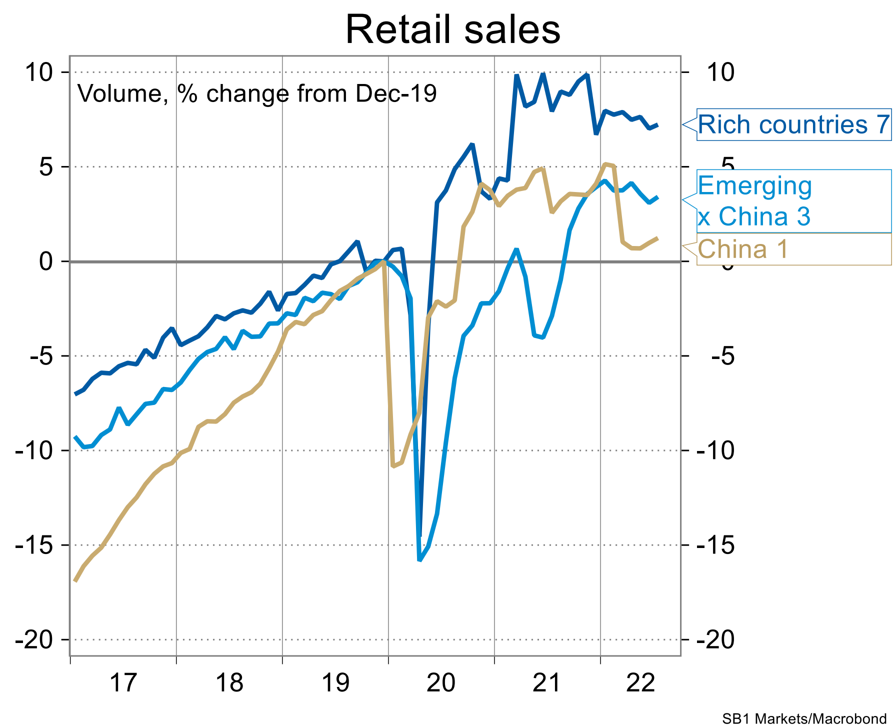
- **China**
  - **Industrial & service sector, production, retail sales, and fixed investments**. Industrial activity is back on track after the lockdowns but may be hit by lower demand from abroad. The service sector is on the way back, as confirmed by the August PMIs, even if there are scattered Covid lockdowns. Retail sales remain muted, and housing starts are disastrous, down 50% from the peak, unprecedented. Probably not a global macro risk, but a challenge for the Chinese economy, which the authorities are trying to counter by boosting credit (again)
- **USA**
  - **Inflation** has peaked. More to come in August, at least vs the headline, as energy prices are declining. However, some months less extreme inflation prints in and of itself is not going to move the Fed's dial when it comes to rate hikes. The bank will have to see that inflation is coming down over time, and more importantly, it will have to see that the balance in the labour market is restored and that wage pressures are waning
  - **Manufacturing production** has flattened and is expected down in August. NY Fed's manuf. survey is expected up following the August crash, Phil Fed a tad down – and the two in sum still on the weak side
  - **Retail sales of goods is heading down, in volume terms, as in most of DM countries**
  - **The University of Michigan's consumer sentiment** has risen the past two months, but from an ATL in June, and the level is still 2 st.dev below avg. The risk: UM has normally been the canary in the mine before recessions
- **EMU**
  - **Industrial production** was likely down in July, as production in both Germany, France and Spain fell
  - The EMU and the ECB's problem has not been **labour costs or wages,** and should the annual growth rate come sharply down in Q2, like we think they will (due to large base effects), and a 2.5% trend is confirmed, it is not by itself an argument for raising interest rates (higher margins and an initially very low rate level still could be). Negotiated wages are also kept in check
- **Norway**
  - **Norges Bank's Regional network survey** is the most important local data out this week. We expect companies to have recognised that growth has slowed **past months** (as reported by Nat. Accounts), to some 1% GDP pace (a 0.5 growth index.). **The outlook** has also weakened, we assume to 0.5% from 1.6% (a 0.25 growth index), which still would be in line with NoBa's June modest growth forecast
  - The Homebuilders' **new home sales** are out on Thursday, and sales have been falling more or less since Dec-20, whereas the avg no. of **starts** has hoovered around 25', give or take, in the same period, but the trend is down. The Q1 NoBa Regional Network signaled a slowdown in the construction sector and the prospect of higher rates is likely to bring down starts somewhat. SSB has so far reported stable housing starts, Aug. data out this week

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

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

Global trade may have flattened. Both manuf. Prod. & global trade exposed to lower retail sales

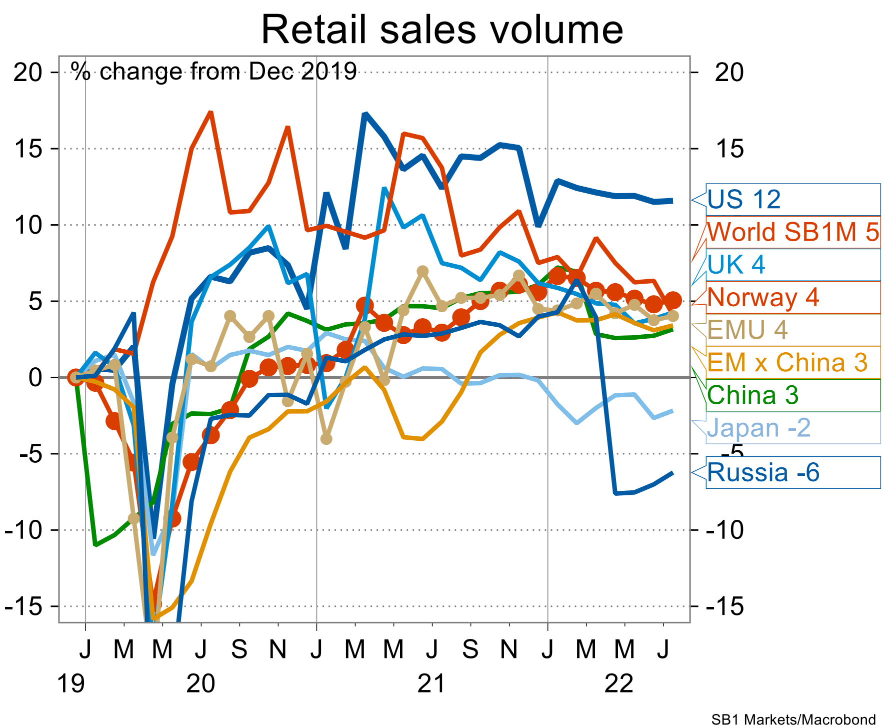


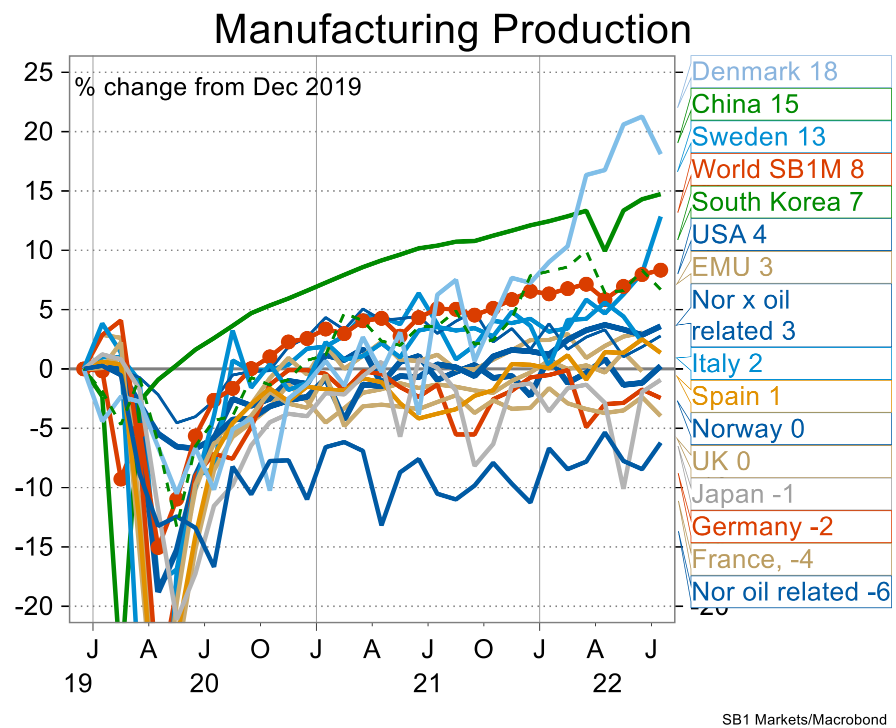


Global trade: The last months are estimates from the Kiel Institute, they are also making a prognoses for the next month based on shipping activity etc.

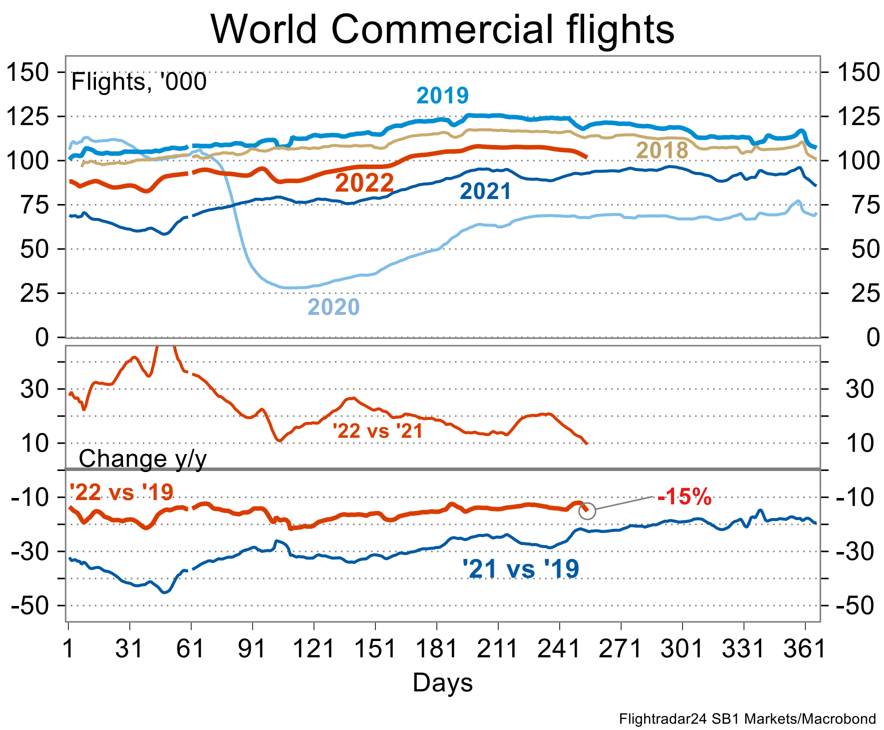
A broad slowdown of retail sales

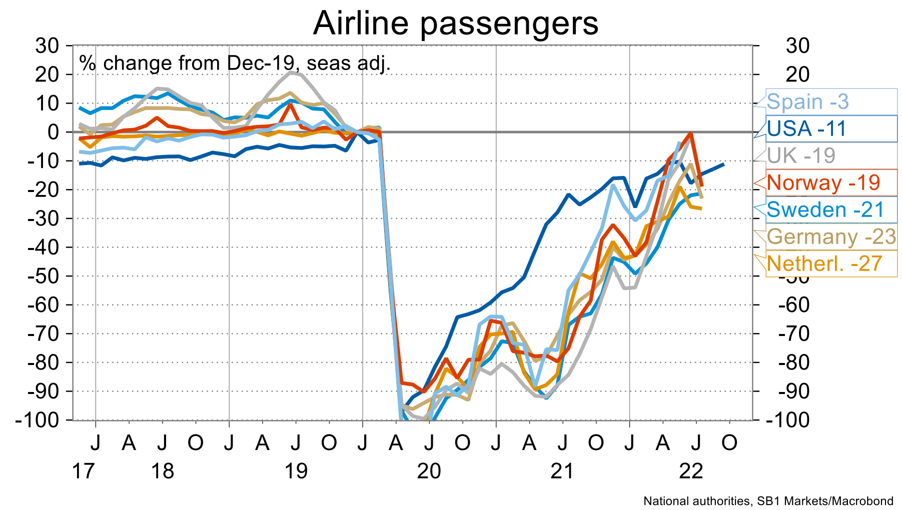
Is manufacturing exposed? Surveys, like the August PMIs send a warning sign too

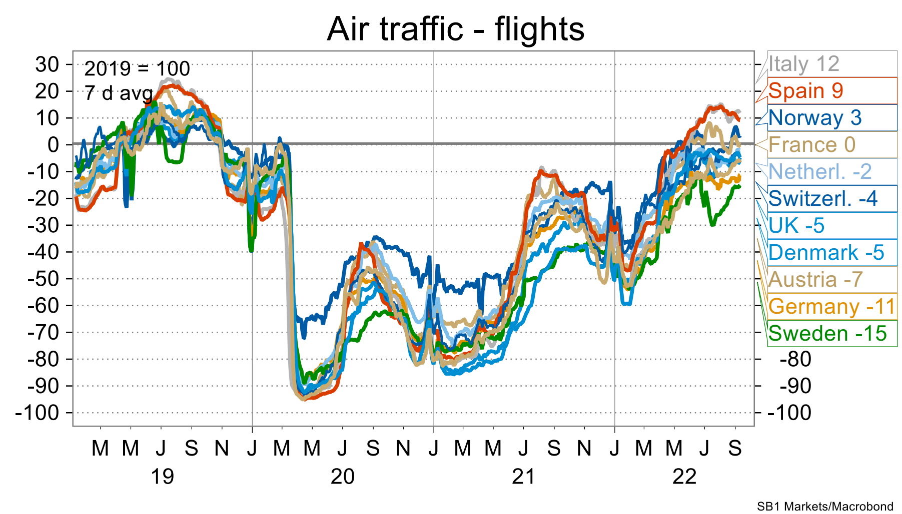




Global airline traffic down last week but it may be temporary (like in 2019)







Global trade: The last months are estimates from Kiel Institute

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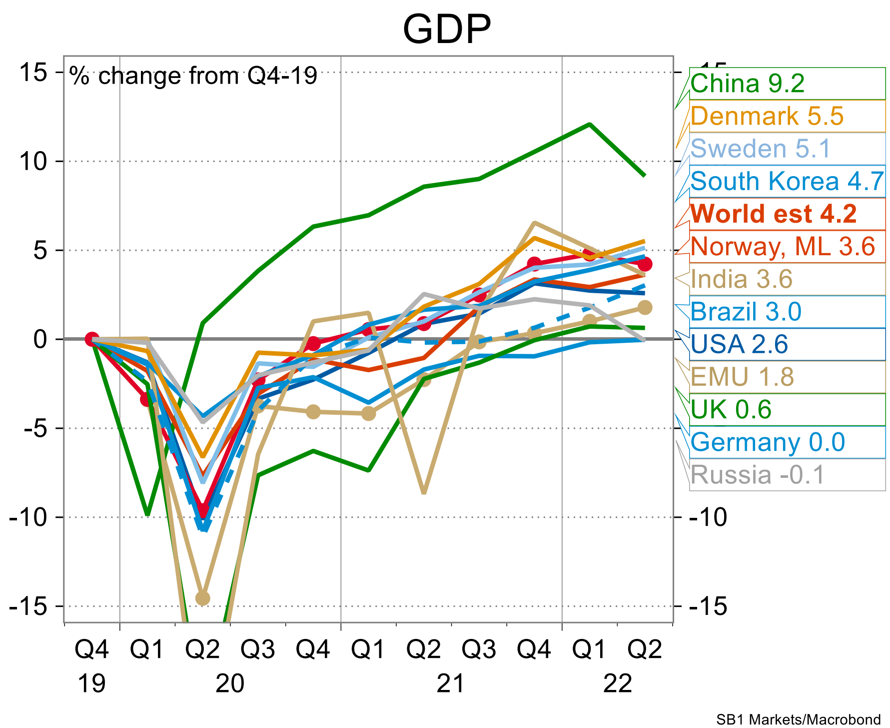
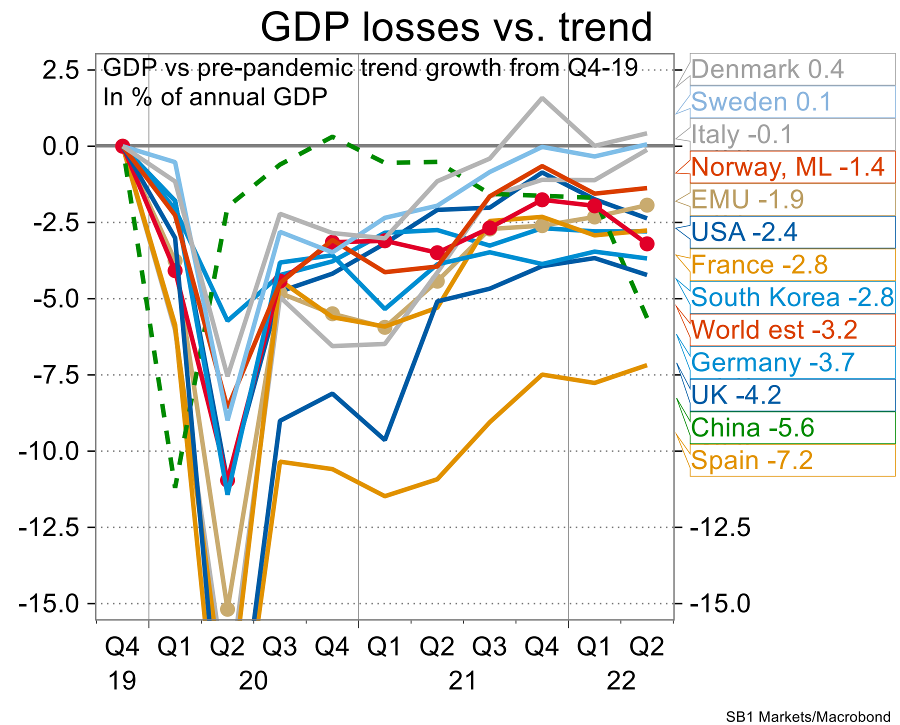
GDP fell in Q2, mostly due to the Chinese lockdowns, and the US ‘recession’

Global GDP fell at a 2.1% pace in Q2 (-0.5% not annualised)

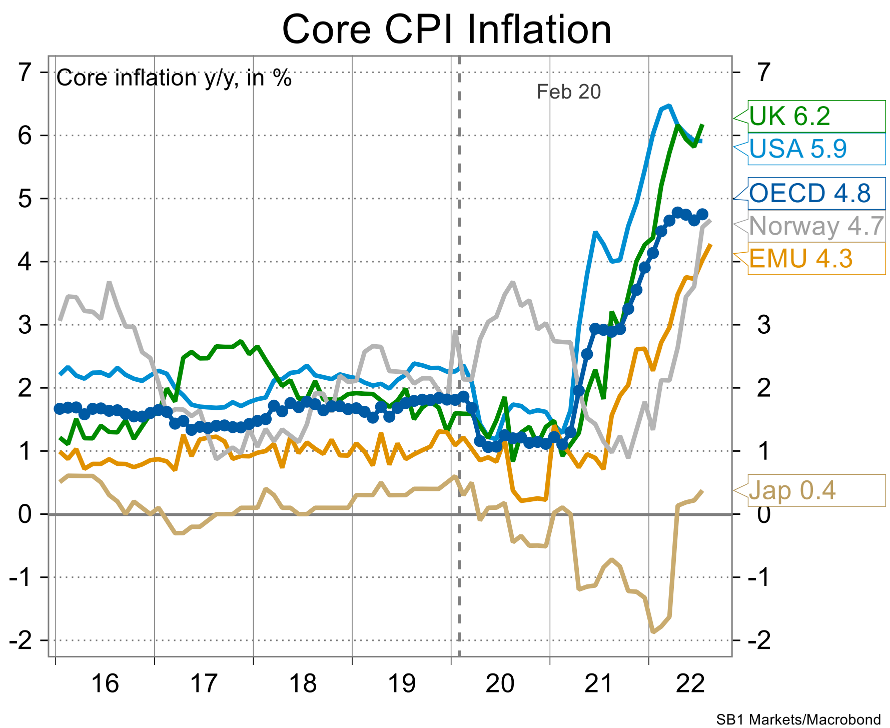


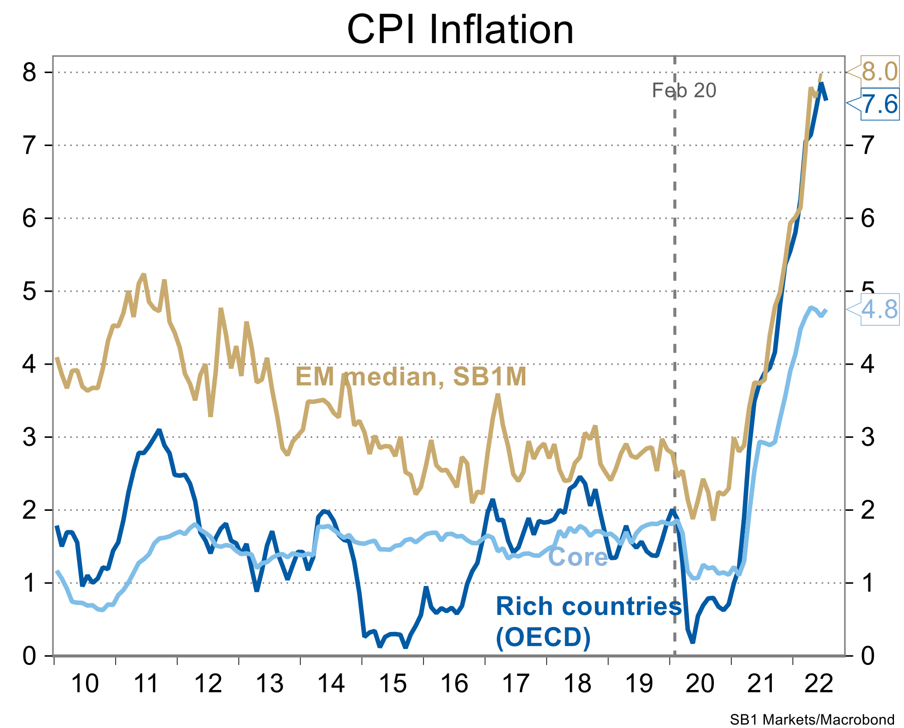


- GDP in Russia fell at a 7.4% pace in Q2, (-1.9%), and the previous two quarters were revised significantly down. GDP in Russia is now back to the same level as in Q4-19 (and thus in line with Germany…)
- Global GDP is some 3% below the pre-pandemic growth path – as the global economy is now slowing

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

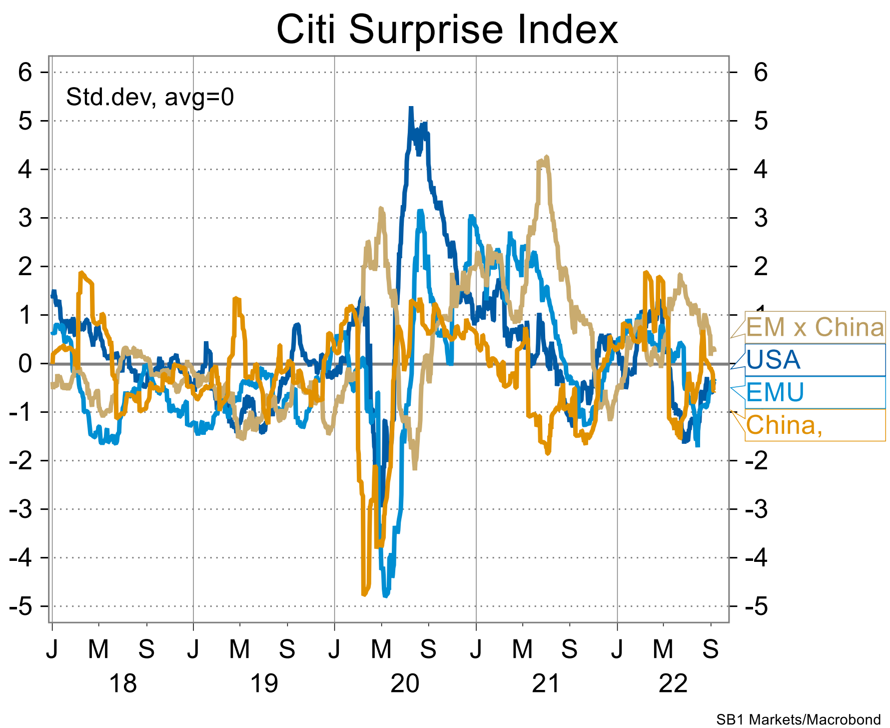
Energy prices the main culprit, but core prices are also contributing. However, some peaks are seen?

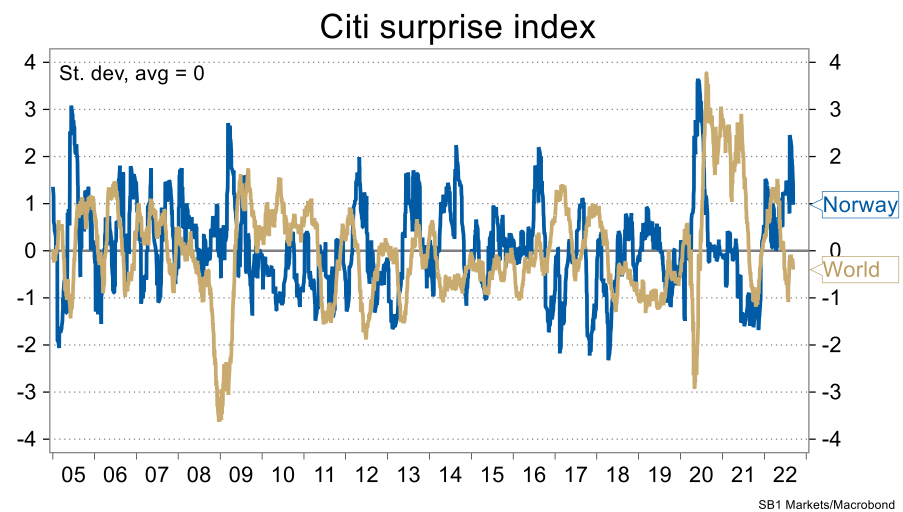


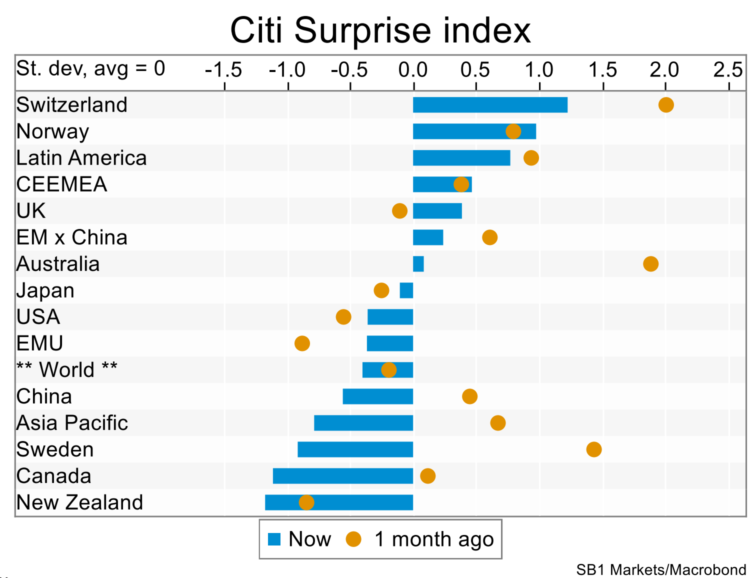


Data still slightly on the downside but most countries/regions close to neutral

US, EMU and China are all below par





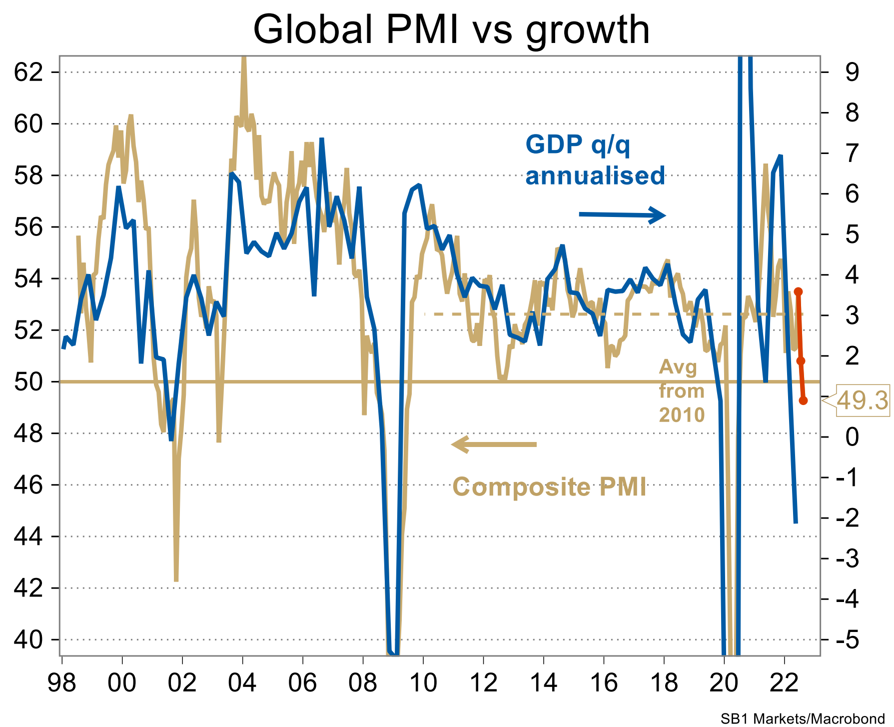


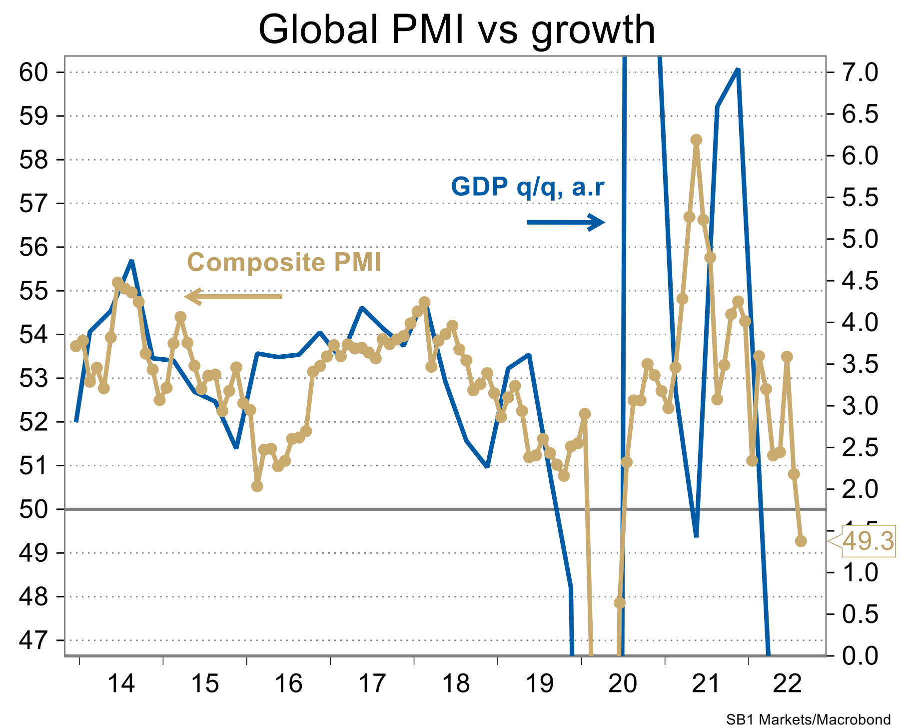
- **Norway** down to no. 2 a the list, even if data have not been that strong?

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

The global PMI crossed the 50-line in August

The global index fell by 1.5 p to 49.3, 0.2 p below our estimate. The trend is clearly down

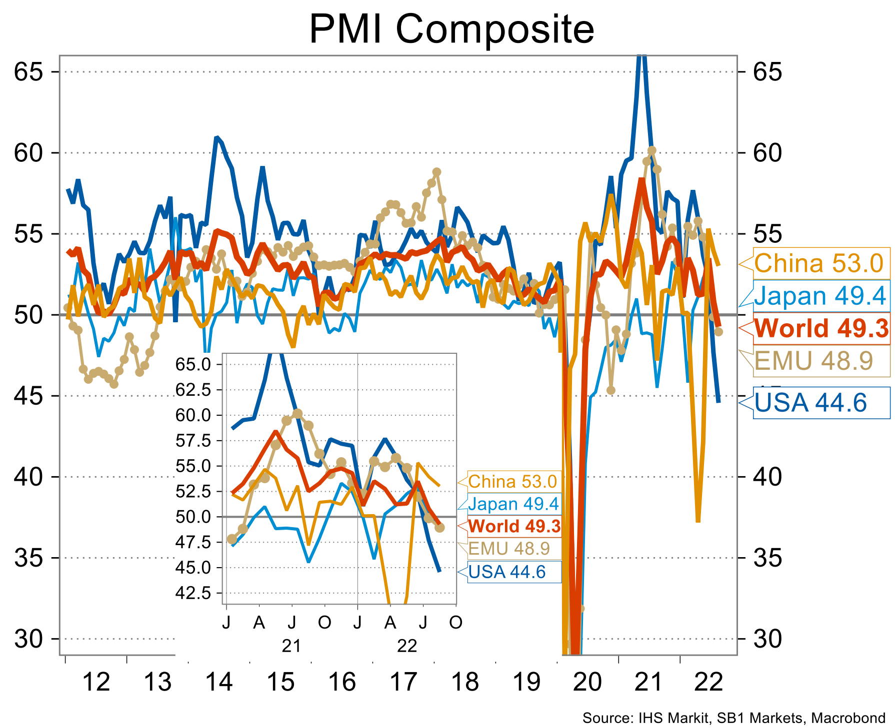


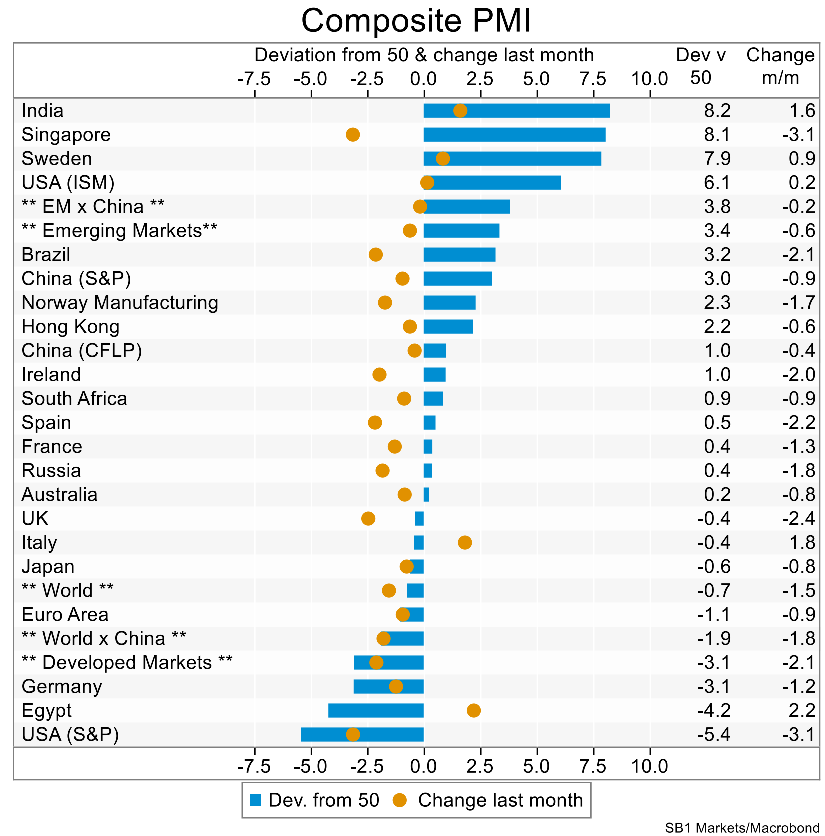


- The composite PMIs fell sharpy in the US, and declined in Japan, the UK, and in the EMU as well, while China and other EMs in average reported just a small setback
- The US index is now at the bottom of the league, at 44.6, down 3.1 p, lower than the preliminary estimate at 45 – while the parallel ISM index is at 56.1 (out composite est.)

Only 5 countries reported a higher composite PMI, 22 countries/region a decline

10 countries below the 50 line (including EMU, UK, US, Japan); the majority is still above

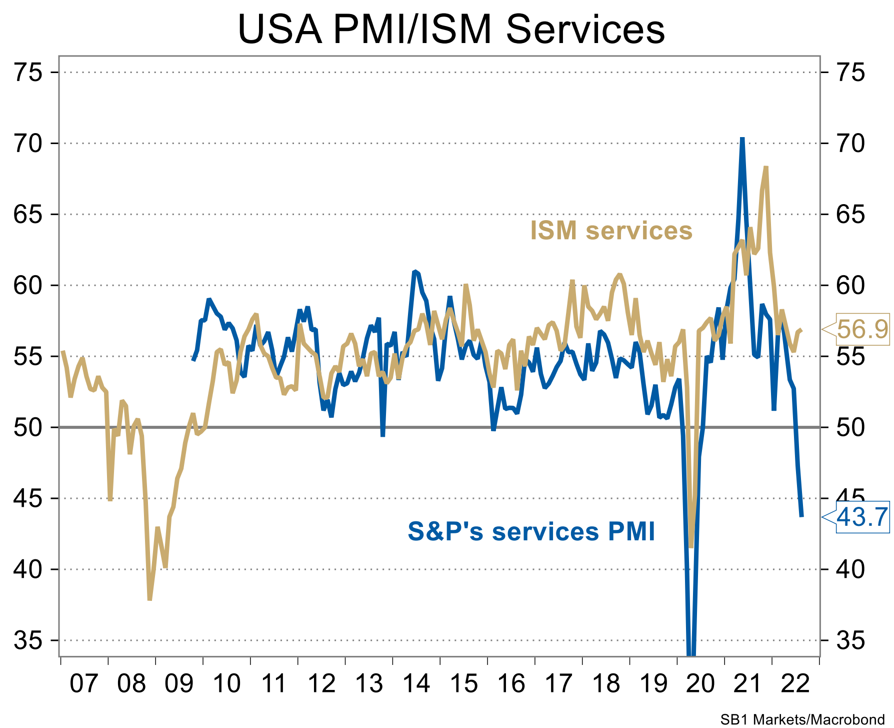


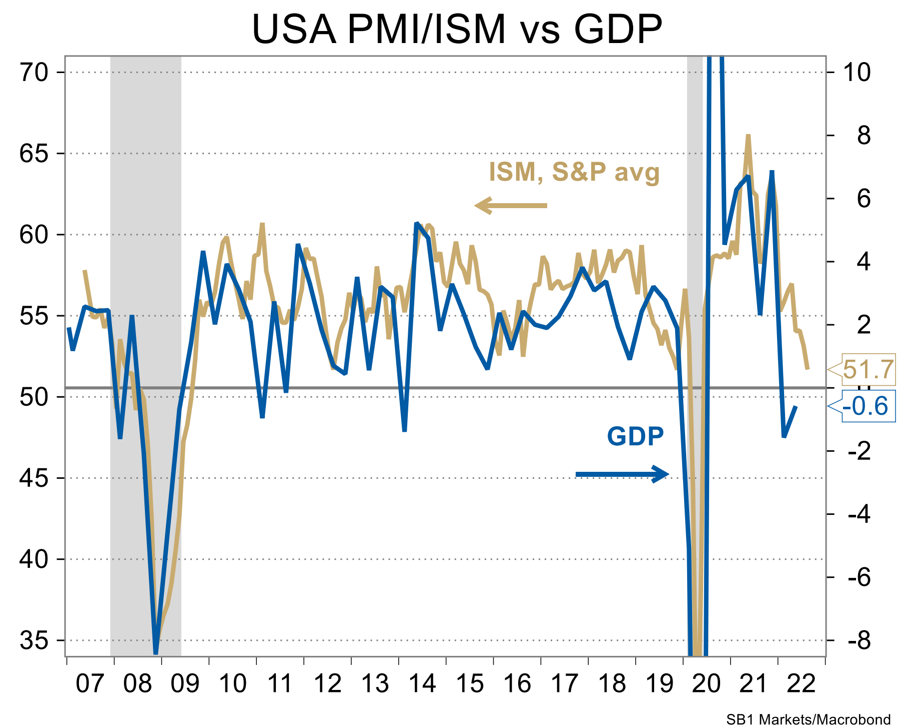


- **The rich countries** (Developed Markets, DM) PMIs have fallen to the bottom of the list
  - » One exception: The **Italian** PMI was up 1.8 p due to strength in the service sector
- The **ISM survey** is far better than **S&P's US survey** – the ISM 'composite' gained 0.2 to 56.1, while the S&P survey was down 3.7 p to 44.6! This discrepancy is more than strange – and is entirely due to the diverging service sector indices (ISM covers mostly larger companies)
- (**Norway** does not compete here, we just have a manufacturing PMI. The August index would have yielded a 5th place in the composite race)

Mind the gap: S&P says services are contracting further, while the ISM was up

The history of the two surveys are too similar and too short to judge which is the best survey

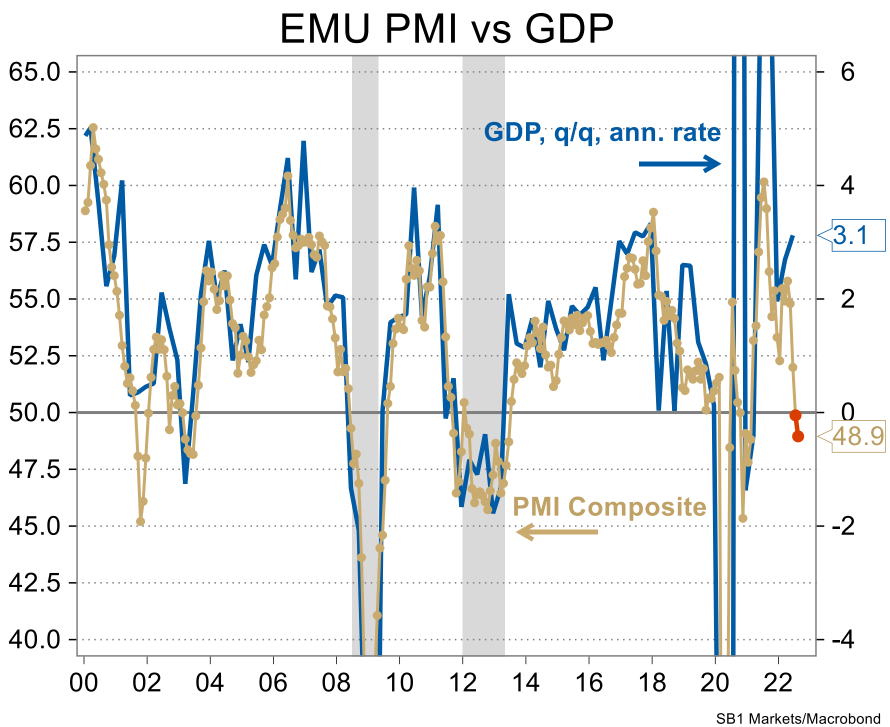


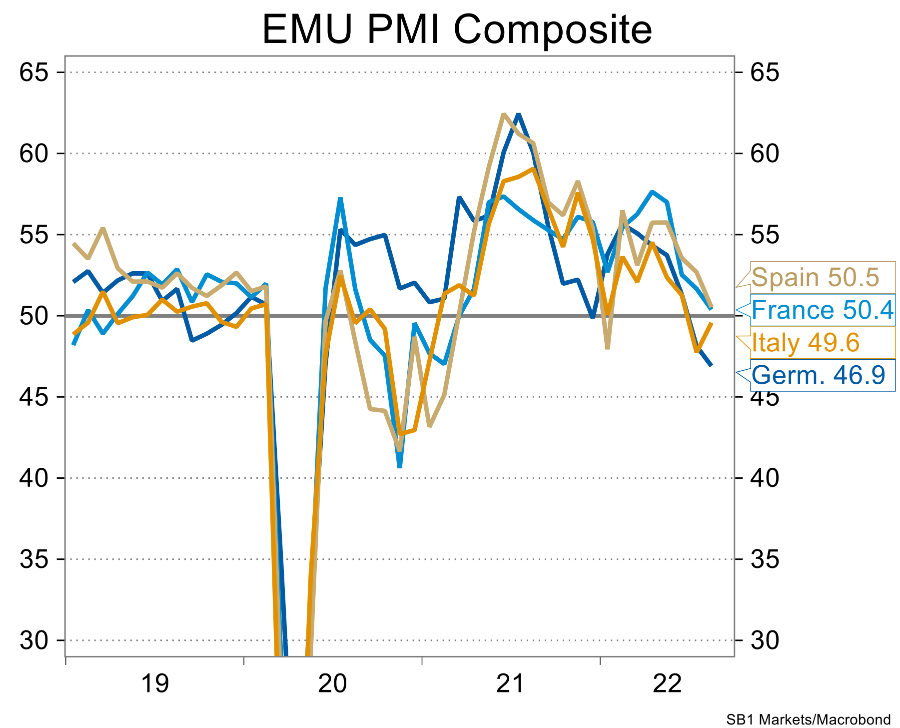


- … but in some few months we will find out ☺
  - » In formal regressions vs service sector production (quarterly National Accounts) or households' consumption of services, the S&P (aka Markit) survey is clearly more reliable than the ISM survey but we do not really trust this outcome
- The ISM services index gained 0.2 p to 56.9, expected 55.1. This survey is tilted towards the larger companies
  - » 14 sectors reported growth, just 2 a decline vs. July, primary sectors & arts/entert./recreation
- S&P's PMI (aka Markit) fell 3.6 p to 43.7, 0.6 p lower than the preliminary estimate!
- The average of the ISMs and PMIs is down – but is not signalling any recession (thanks to ISM services)

The Eurozone final PMIs confirmed in contractionary territory

The composite down 0.9 p to 48.9, not a positive growth signal, by and large due to weak German data





- The decline in the flash EMU PMIs was confirmed. The Germany, Italy, and the manufacturing sector in general are the weak links
- The **manufacturing output** index increased ever so slightly, but output is still contracting
- Italian and French service PMIs surprised on the upside and are still signalling growth, however, the sum of the parts for the Eurozone points to around a 0.5% contraction in GDP
- GDP growth in both Q1 and Q2 has been revised up, in Q2 up to 3.1%
  - » During the pandemic the correlation between the PMIs and actual growth numbers has been so-so. We now assumes the PMIs will become much better as predictors of growth.
- The August print is not the best – but still it does not show a dramatic impact of the surge in energy prices in Europe recent months

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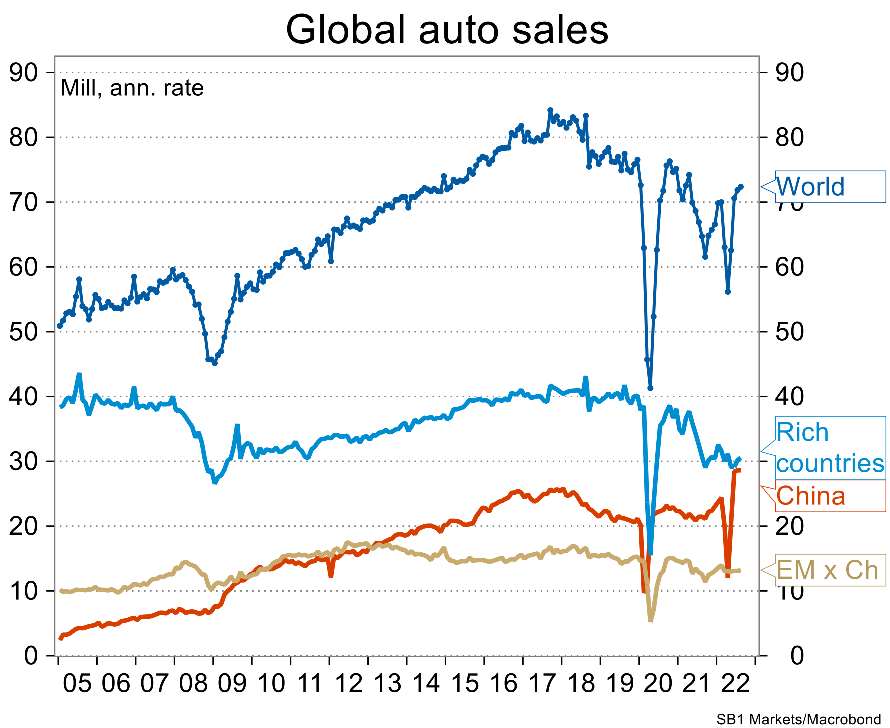
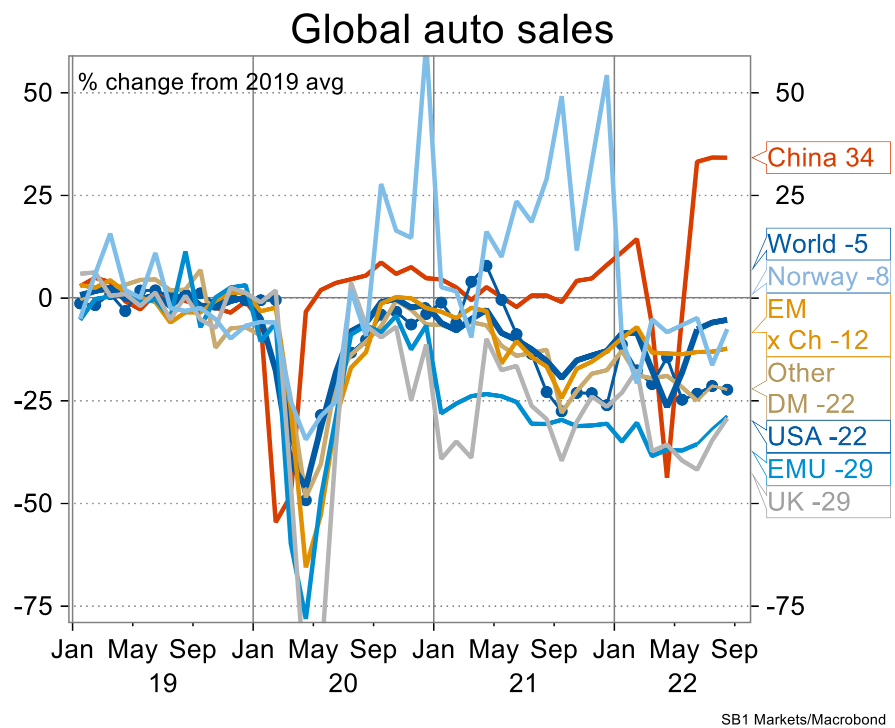
Incredible strong Chinese auto sales – so no panic even if housing is struggling

Global sales further up in August, as production is recovering. Sales are still 5% below the 2019 avg.





- **Global auto sales** rose 1% in August, following the 2% lift in July. Sales are the best since early 2021, and 'just' 5% below the 2019 level
- The regional differences are substantial: Sales kept up at high level in **China** (+34% vs 2019 avg.), and the slump in sales during the lockdowns is more than compensated. Sales in the **US** fell marginally to -22% vs 2019. **EMU** sales rose some 5% (our est.) but remain 29% below the 2019 level. **UK** sales rose as well, but also down 29%! **Norwegian** sales rose, and are just 8% below the 2019 level, best among rich countries
- **Russian sales** rose, but are down more than 70% since before the war, probably both due to lack of supply (imported cars at least) and reduced demand from households
- Still, **EM x China total** is down 'just' 12% vs. the 2019 level (the decline in Russia equals almost a 10 pp drag – and the rest is not that far below the '19 level)
- **Auto production** is very likely limiting sales most places. However, production is now heading upwards. Chinese production was 32% above the 2019 level in July. South Korea is also above the 2019 level, but auto production is well below a normal level in all western countries and in Japan

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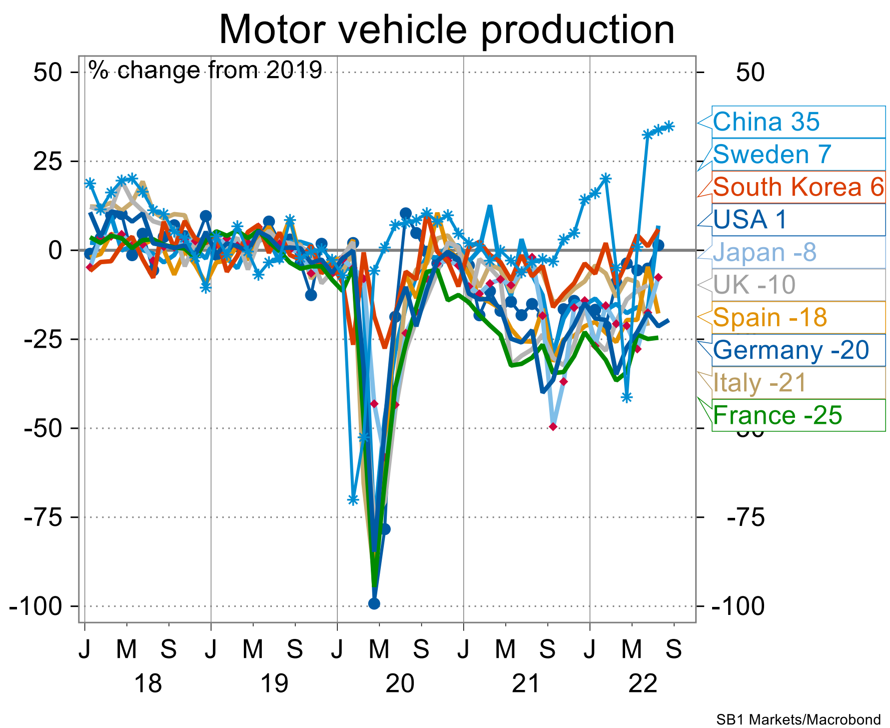
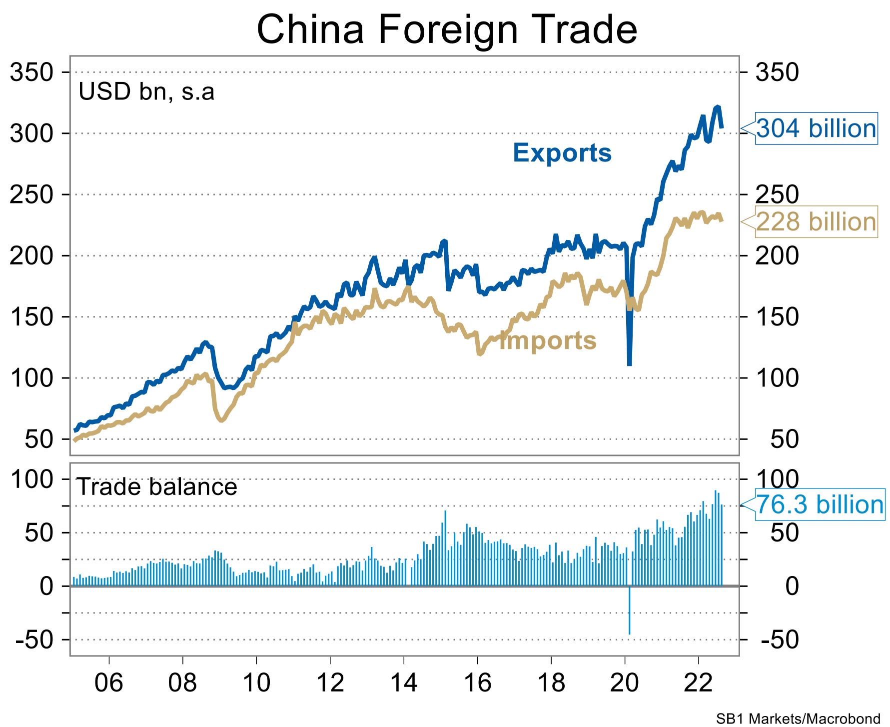
Full speed ahead in China – and others are recovering too

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



Global demand is softening. Exports down from ATH

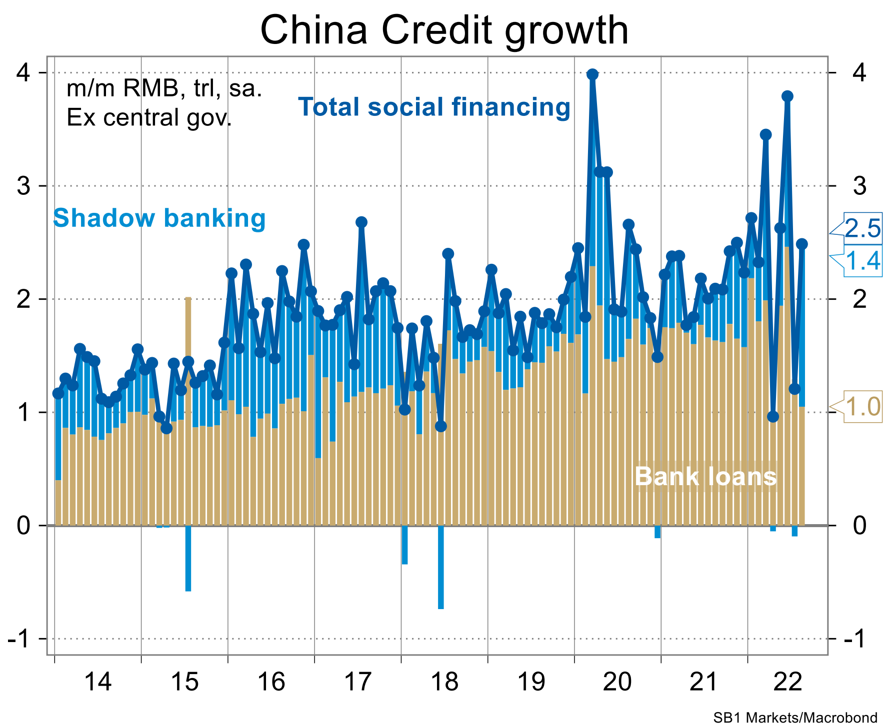
Imports down 3% (value terms) amid lockdowns, real estate slowdown

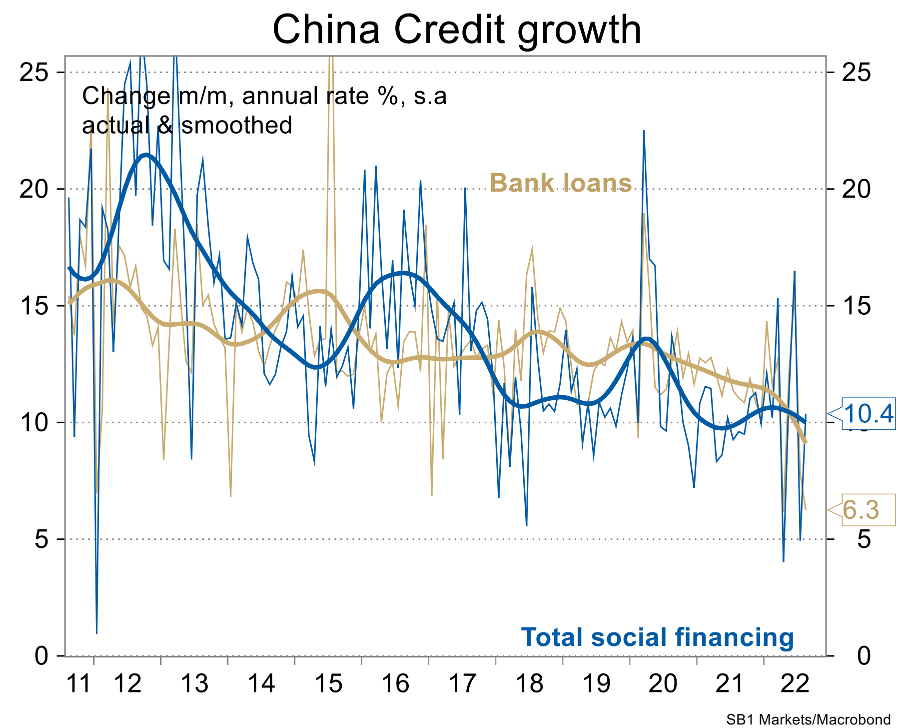


- **Export values** fell 5% in Aug following three strong month's post lockdown gains in May-July. Exports are up 6.2% y/y, 6.6 pp below expectations! Export values are still up 44% from before the pandemic, and **export volumes** are up 15%. Economic data and surveys have pointed to a slowdown in trading partners' economies and it seem as if this is now showing up in the Chinese data
- **Imports** were down 3% m/m in Aug, and are down 1.3% y/y, close to expectations. In **volume terms** imports are down by 14% from the peak level last spring – and roughly 8% below the pre-pandemic trend path
- The **trade surplus** at USD 79 bn was 13 bn smaller than expected, but the surplus is still among the highest ever. In seasonally adjusted terms, the surplus equalled USD 76 bn, or some 5% of GDP. Even if exports fell in August, Chinese growth has become (net) export led, once more? At least partially, as a higher trade surplus in goods have lifted GDP by some 2% since before the pandemic

Bank credit declined further, shadow banking came back in August

Total credit growth higher than expected – up to a 10.4% pace from a 5% pace in July

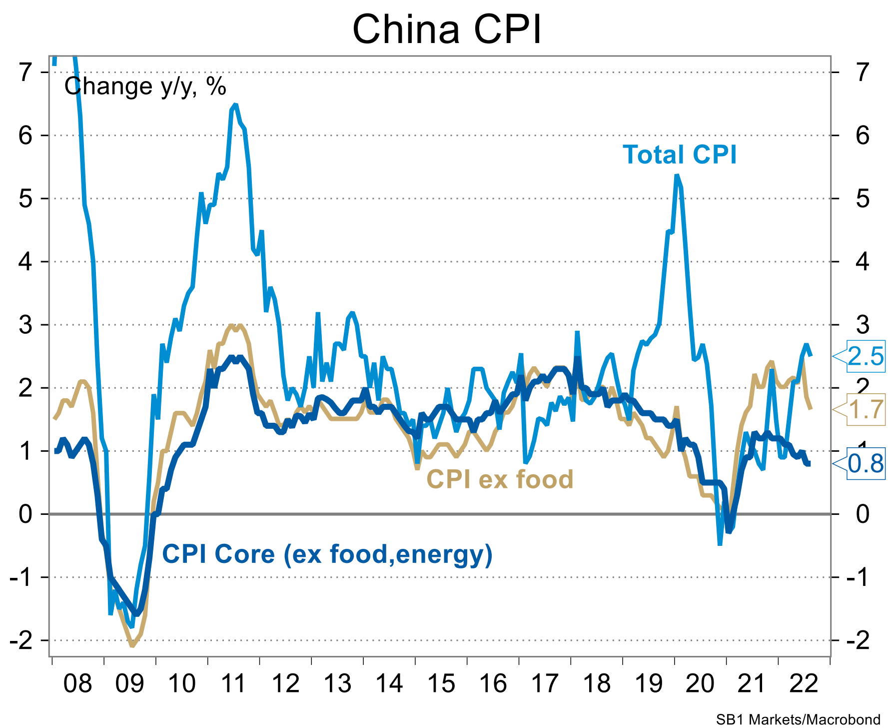


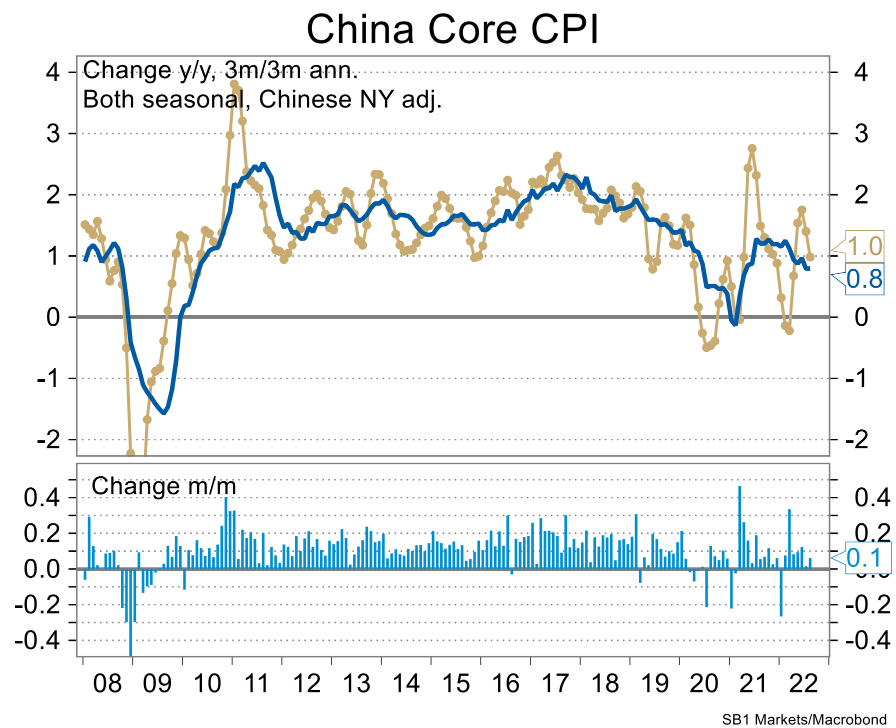


- **Total credit** grew at a 10.4% pace in July (m/m, seas. adj. annualised), however, up from one of the lowest prints ever. The annual growth rate gained 0.1 pp to 10.5%, and the growth rate is trending upwards
- **Total credit** rose by 2.4 RMB trl, expected 2.1 trl (not seas. adj). The 'core' total social credit (total ex central gov bonds & corporate equites) grew by 2.5 trl (seas adj), up from 1.2 trl in July. The August growth rate is close to 'normal', following the unusual slow growth in August
  - **Bank loans** rose by RMB 1.0 trl (s.a) or at a 6.3% annualised pace, below expectations of RMB 1.5 trl – the 2nd month in row with unusual slow growth in bank loans. Guess authorities are somewhat anxious…
  - **Shadow banking credit** rose by RMB 1.4 trl, and is up 9.7% y/y
  - **Local governments have been** responsible for most of the increase in credit outside banks recent months. Less revenues from sale of land, and public financing of unfinished building projects may explain the steep increase in debt (25% y/y)

Headline inflation down 0.2 pp to 2.5%, the core flat at 0.8%

Inflation is not China's predominant challenge these days, to put it mildly



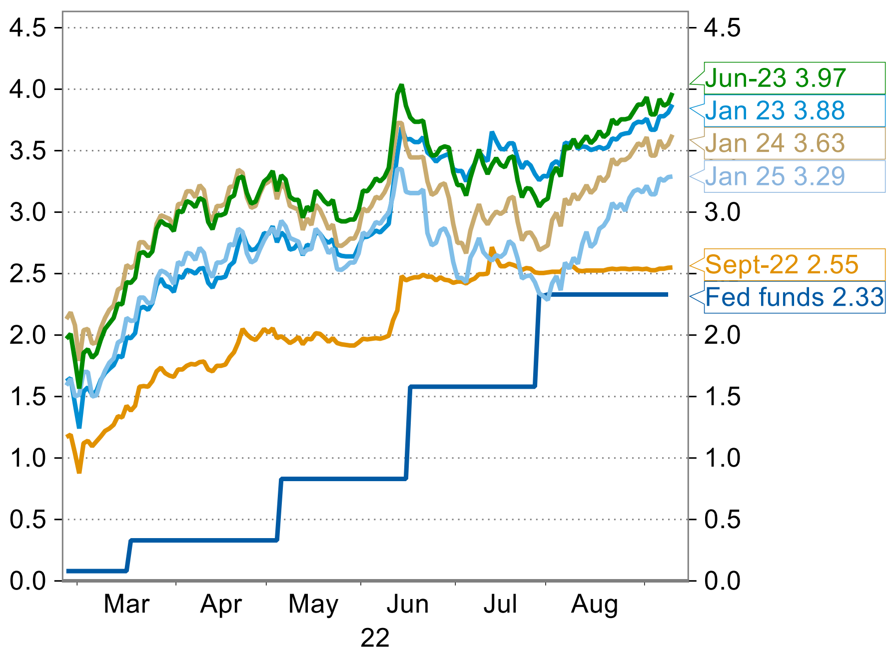


- **Total annual CPI** was decelerated to 2.5% in Aug, expected up to 2.8%. Prices fell 0.1% m/m, down from 0.5% in July
- **The core CPI** (x energy, food) was rose 0.1% m/m in Aug, and the annual rate was flat at 0.8% y/y. The 3m/3m rate is at 1.0%
- **Food prices** are up 6.1% y/y, with pork prices again in the lead, up 22%
- **Gasoline/fuel prices** are up 20% (still down from 24% y/y in July)
- **Both core & headline inflation** is still low. **Monetary policy** will not respond to actual inflation data if inflation is not really high or low, the real economy and the credit market is more important. Now authorities try to kickstart the economy again after the lockdowns

Fed's Beige book reports that activity has flattened!

... and wage, price pressures are easing but are still elevated. Still a 75 bps hike next week. But then?

Fed funds future



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USA Fed funds rate (OIS)

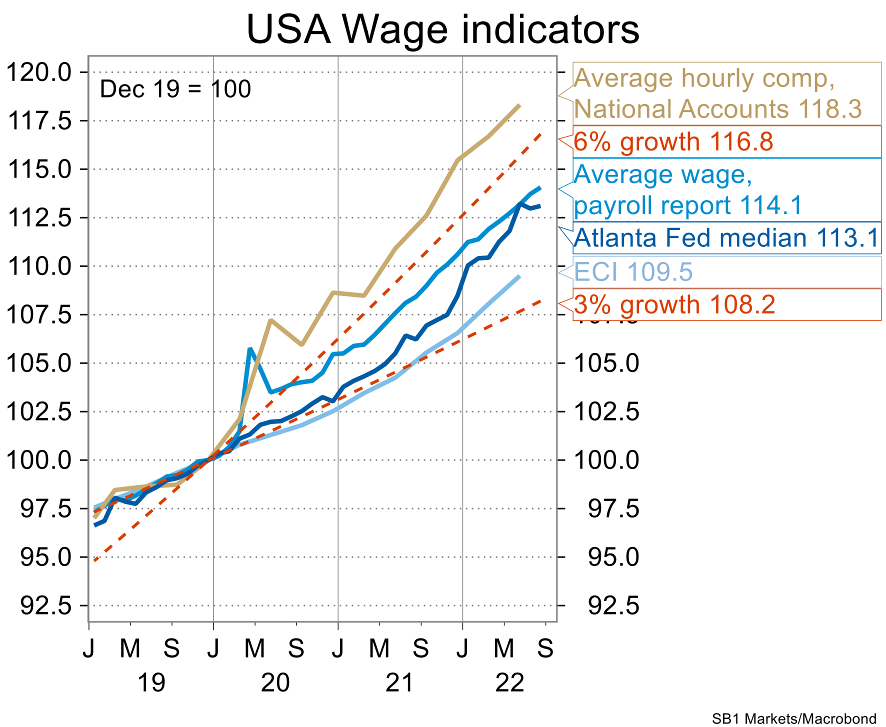
FOMC meetings	Effective Fed funds rate (Last)	Change last week
Now	2.33	0.00
Sept 21	3.04	0.07
Nov 2	3.55	0.11
Dec 14	3.83	0.13
Feb 1	3.93	0.11
March 22	3.95	0.09
May 3	3.93	0.08

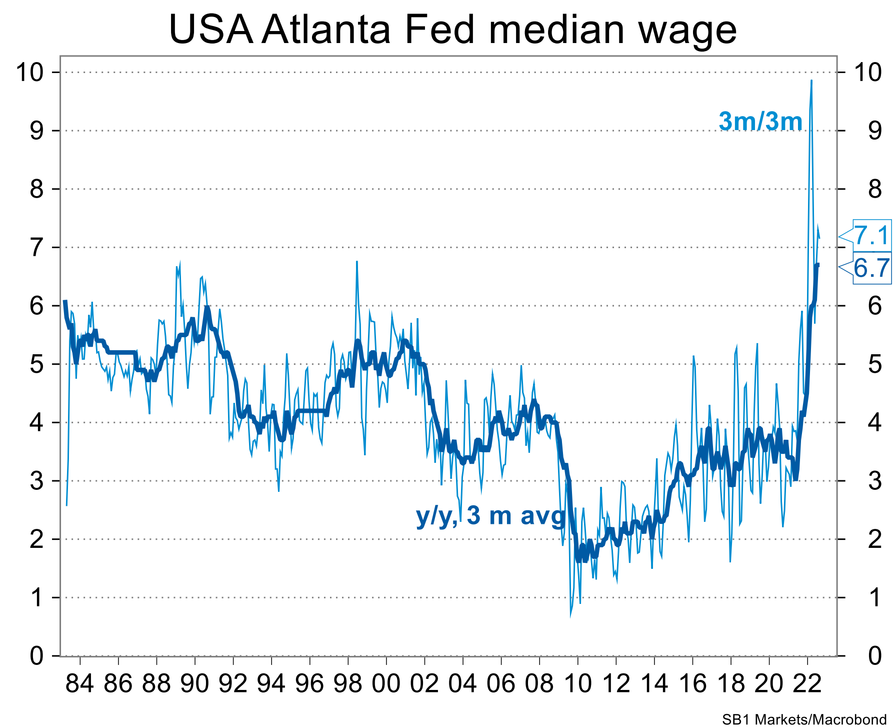
Last ● Change last week

- Main messages from the regional survey
  - » On average, economic activity was unchanged from the last report. 5 districts report that activity contracted modestly, and 2 districts said growth had stalled, and the remaining 5 reported modest growth
  - » High inflation had made a dent in household demand; essentials are being prioritised
  - » Demand for housing weakened noticeably – home sales fell in all districts
  - » Mixed activity in the manufacturing sector – still issues with regards to labour shortages and supply chain problems
  - » The labour market was still very tight but nearly all districts noted modest improvements in labour availability (which not has been signalled by surveys) – and wage pressures were easing some places, but there were reports of mid-year rises to offset higher costs of living (a wage/price spiral?)
  - » Overall inflation moderated in 9 districts, but the level is still high. Substantial increases for the price of food, rent and utilities were observed
- Taken face value, the Beige book confirms that growth has halted, but not that the economy is a recession now
- Even so, the interest rate market is now pricing in an over 90% likelihood for a 3rd 75 bps hike in September
- The Fed clearly stated at Jackson Hole that it has its eyes solely on inflation, and that the labour market is completely out of balance
  - » Bigger-than-normal rate hikes are to be expected, and rates will remain higher for longer. The market is expecting a 4%& rate next summer.
  - » Still, in the end, the data will decide

Atlanta Fed: Wage inflation is (probably) not slowing

The median wage is up 6.3% y/y, 6.7% 3 m avg (unch.), 3+ pp higher than ‘normal’ wage growth

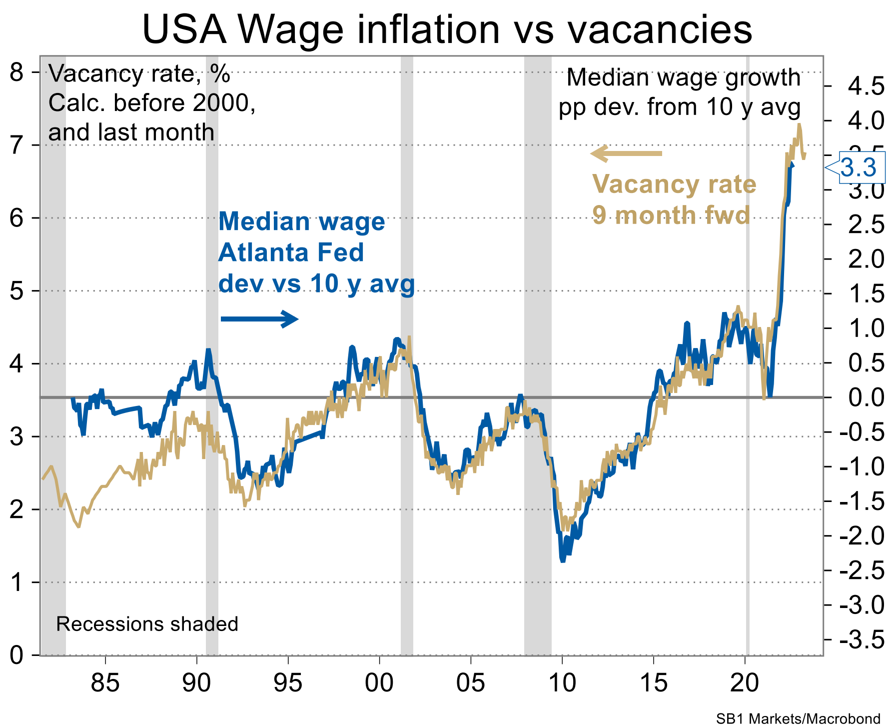


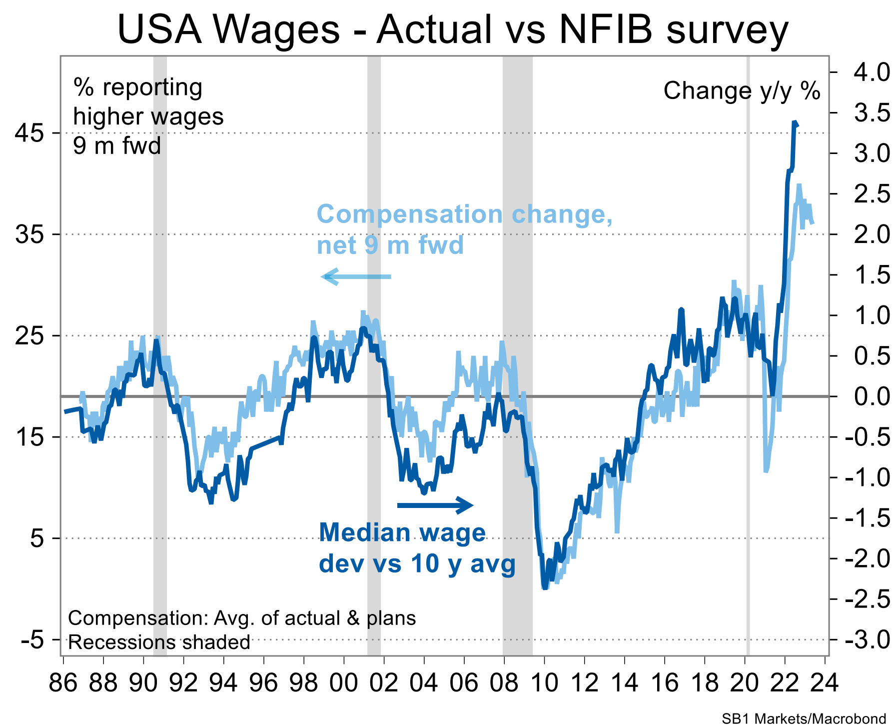


- **Atlanta Fed’s median tracker reported** a 6.3% growth in August, unch. from July. Our calculated m/m was just slightly above zero, following a small decline in June. The 3m/3m rate is still at 7.1%. The **3 m average annual wage** growth at 6.7% is the highest ever, and the current wage inflation is 3.3 pp higher than the past 10 average, a wage acceleration we have never seen before (all data from 1983)
- **All** ages, occupation, industry, job switcher (or not), race, education, urban or rural, region all report a sharp acceleration in wage inflation. The only laggards: those who are paid the best but even this group report higher wage growth recent months
- **All other wage indicators** are reporting fast wage growth, and all are reporting wage growth well above the recent years’ average, some are still accelerating, other are slowing marginally but all are growing 2.8% – 4% faster than the past 10 years’ average – which will make it impossible to reach the 2% price target over time

So why is wage inflation soaring like never before?

Because vacancies are higher than anytime before, it seems like. How to bring wage inflation down?

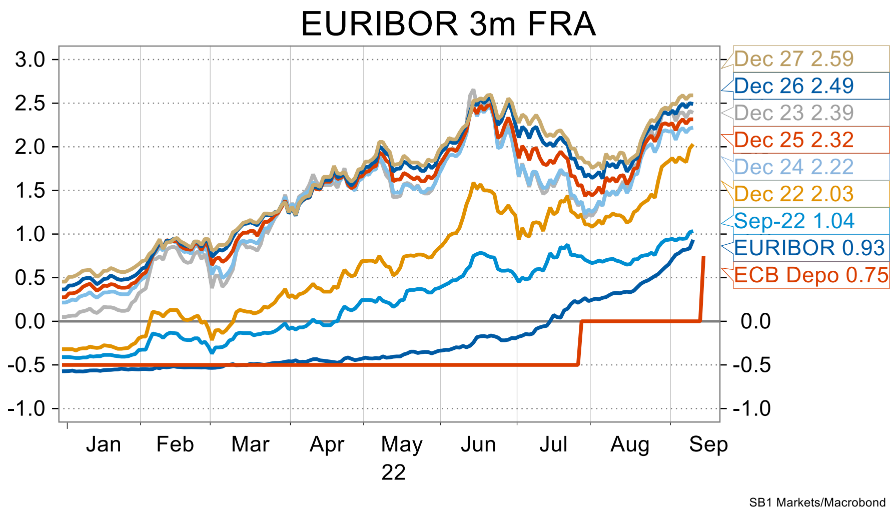


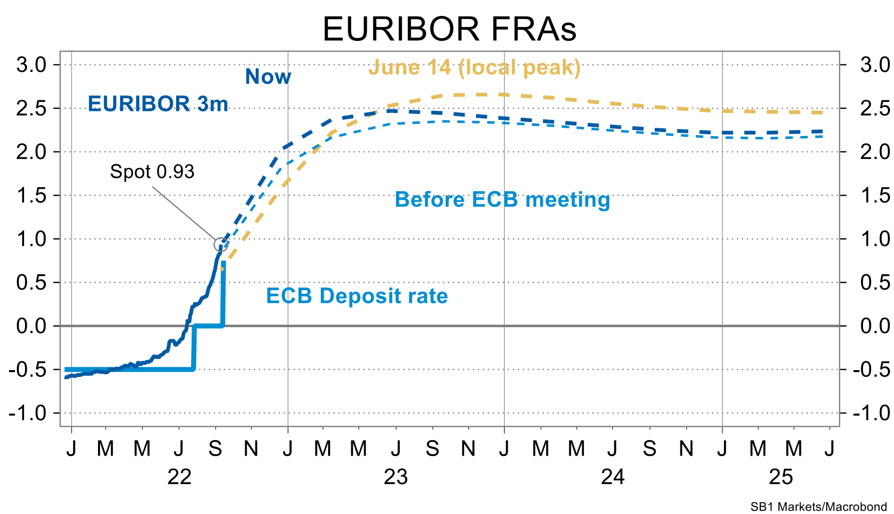


- **Our 'Phillips curve'** based on the vacancy rate signals a further increase in wage inflation the coming quarters even if vacances have peaked. The vacancy rate leads changes in wage inflation quite consistently by 3 quarters. However, we would not be surprised if the current extraordinary high wage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

ECB with biggest hike in history – saying there is more to come

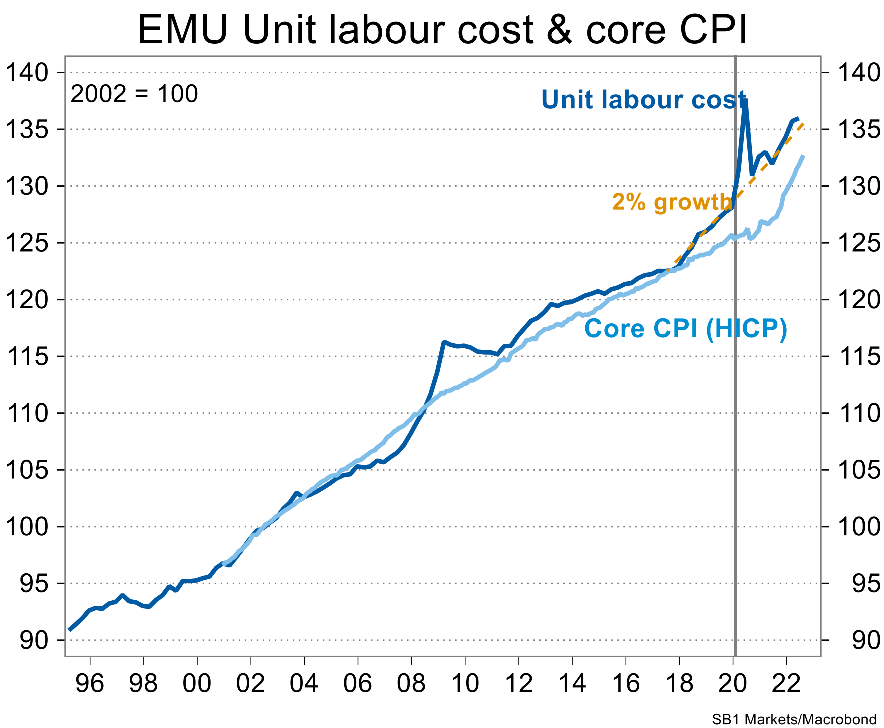
The ECB hiked the signal rate by 75 bps - *«because inflation is far too high»*





- **The 75 bps hike** was expected by the majority of economists some days before the meeting, and almost fully priced into the market, the 3 m EURIBOR rate rose by just 2 bps but longer dated FRA rose more. The repo rate (which is close to the money market rate) was then lifted to 0.75%, while the deposit rate was lifted to 1.25%
- The bank stated **that inflation is far too high** and likely to stay above target for an extended period, and that the bank stands ready to adjust all of its instruments within their mandate to bring inflation down. However, **the TLTRO programme** (encouraging bank lending) was not discussed at this meeting, and a **tightening of the QT** was not at the table – but the discussion will soon start
- The bank **revised down its GDP growth projections for next year** significantly to 0.9% from 2.1% in the June report. GDP growth for 2022 was revised up by 0.3 pp to 3.1%, while 2024 projections are down 0.2 pp to 1.9% - in sum a 1.3% downward revision
- At the same time, the bank did **not give any forward guidance**. It said it will be data dependent and follow a meeting-by-meeting approach (central banks always do that anyway, even with a forward guidance). When asked what the bank sees at the terminal rate, president Lagarde answered that they will hike until they see inflation returning to the target, which is **probably more than two hikes, including this one, but probably less than five**
- **Short term market rates** rose just slightly after the announcement (and further at Friday), while longer dated EURIBOR FRAs remained virtually unchanged as the growth outlook rapidly deteriorates. From mid June, the assumed peak for EURIBOR rates have fallen to less than 2.45% from 2.65%. Still, following a 20 bps lift in the Dec-22 EURIBOR 3 m FRA, another 100+ bps hikes are discounted before the end of 2022. Too aggressive, we think. The EUR fell as Lagarde spoke, but rebounded again afterward

Unit labour costs are accelerating but still on a 2% trajectory

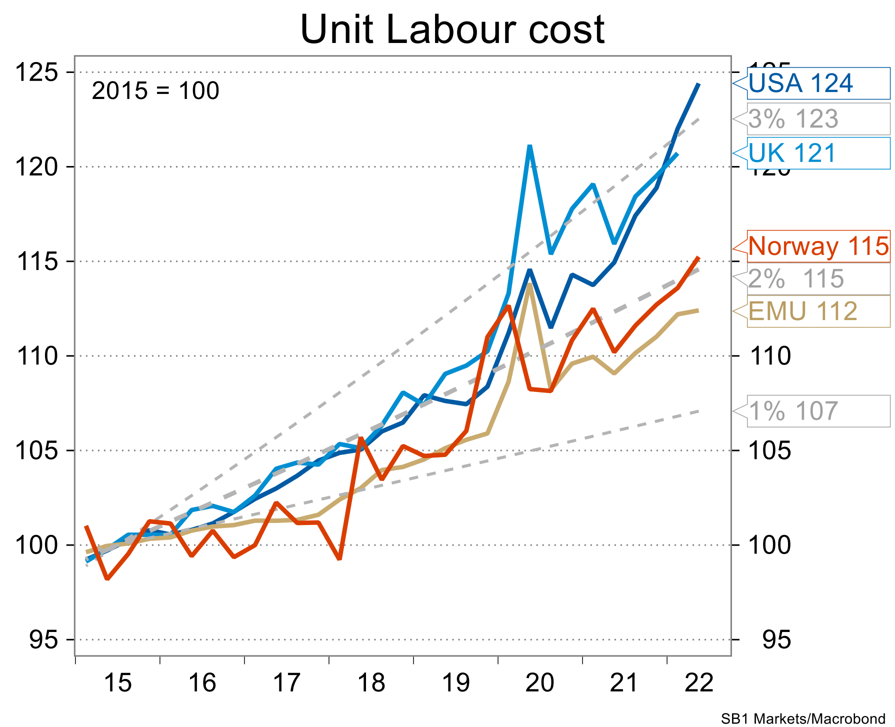


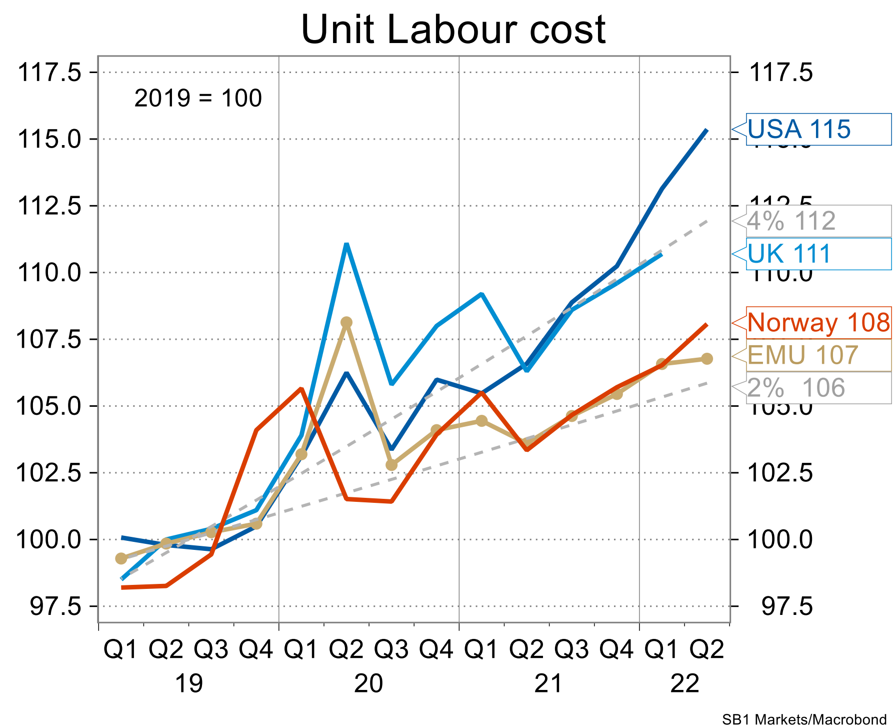
- **Unit labour cost** (labour cost per unit produced = wage cost/production volume, growth in UCL= wage growth – productivity growth) has jumped up during the pandemic as productivity fell because employment was not cut (as in the US)
- On the other hand, in the 3 years before the pandemic – and through the pandemic so far – ULC has accelerated to 2% from 1%. The 1% growth in unit cost corresponded to the long term growth in core rate of inflation at 1% – and a 2% ULC inflation will <u>over time</u> yield a 2% CPI inflation
- More Q2 labour cost data from the EMU out this week

SpareBank 1 MARKETS

Unit labour costs not the problem in the EMU, nor in Norway

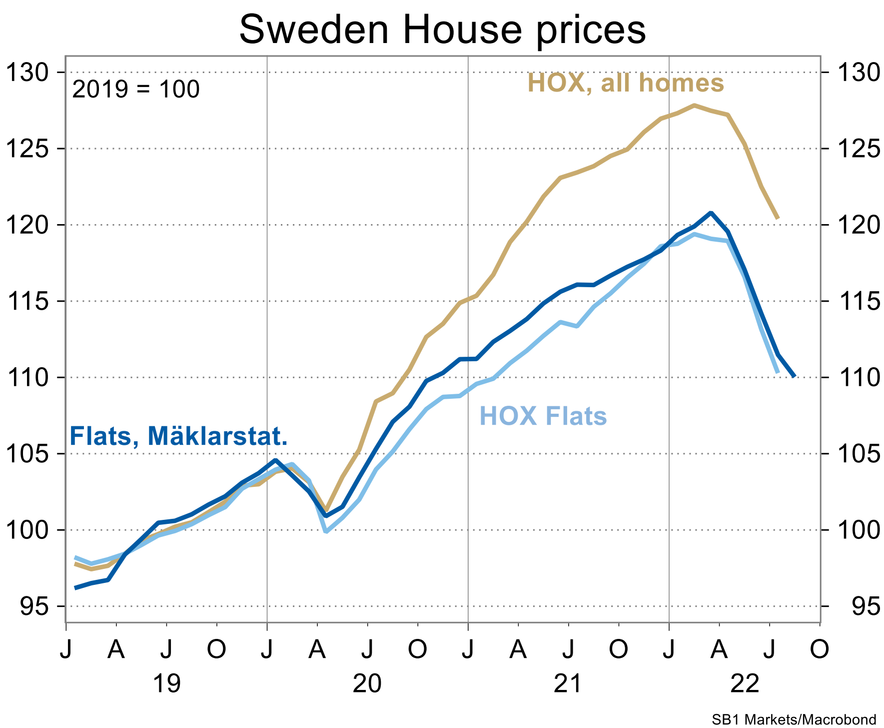
However, cost are no rising slighlty above a 2% pace

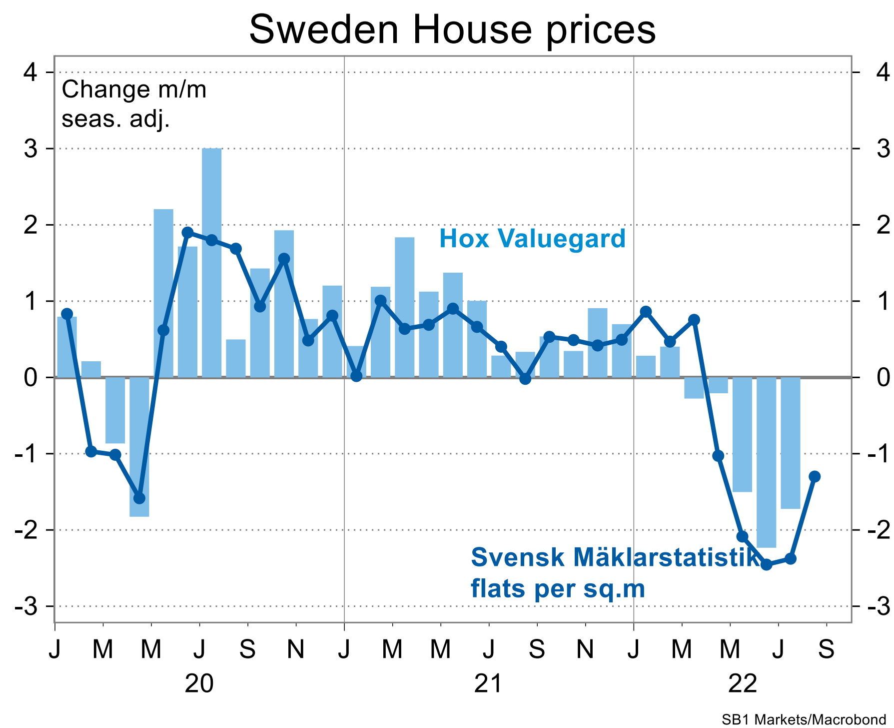




Swedish house prices keep falling, according to Svensk Mäklarstatistik

The realtors reported a 1.2% m/m decline in apartment prices Aug, and prices are down 9% past 5 m

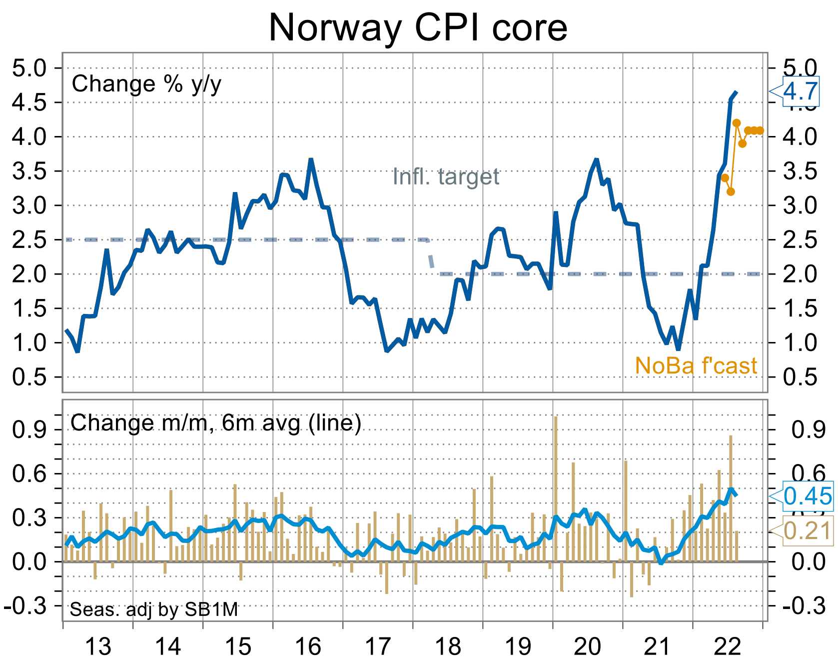


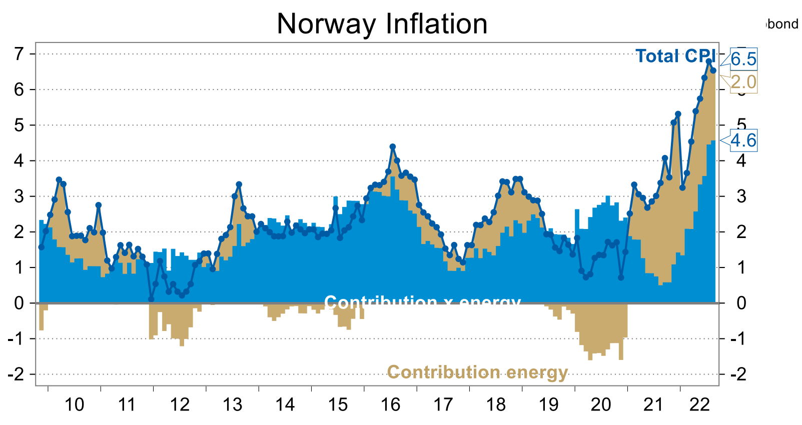


- Prices fell in all big cities, and by 3% m/m in Stockholm (apartments, single-homes were down 2% in the country as a whole and -4% in Stockholm)

Headline CPI lower than expected, but inflation still broad and well above target

Headline CPI was up 6.5% y/y, down from 6.8% in July. The core further up to 4.7% y/y

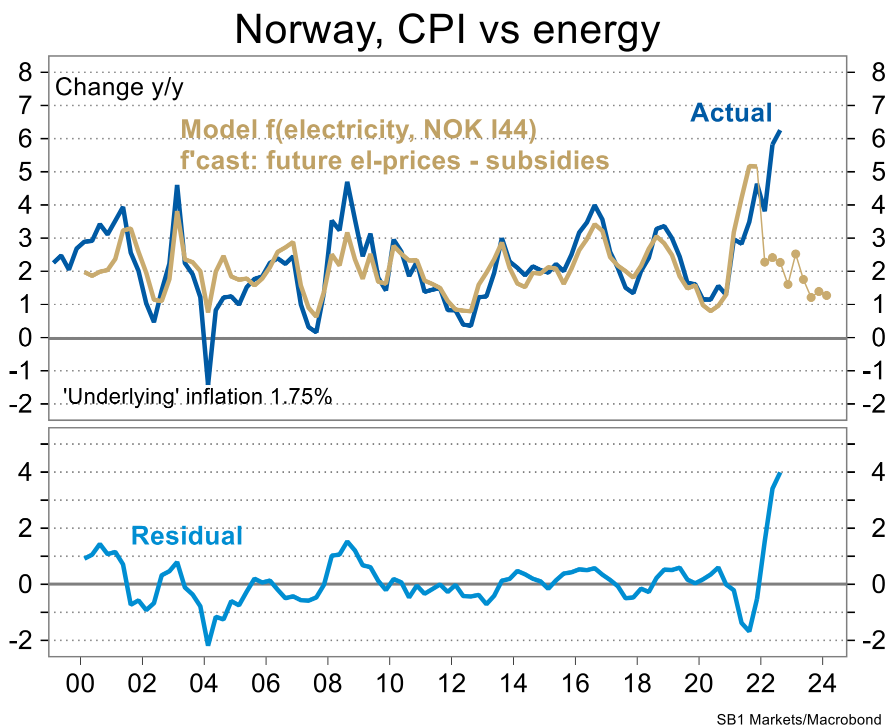


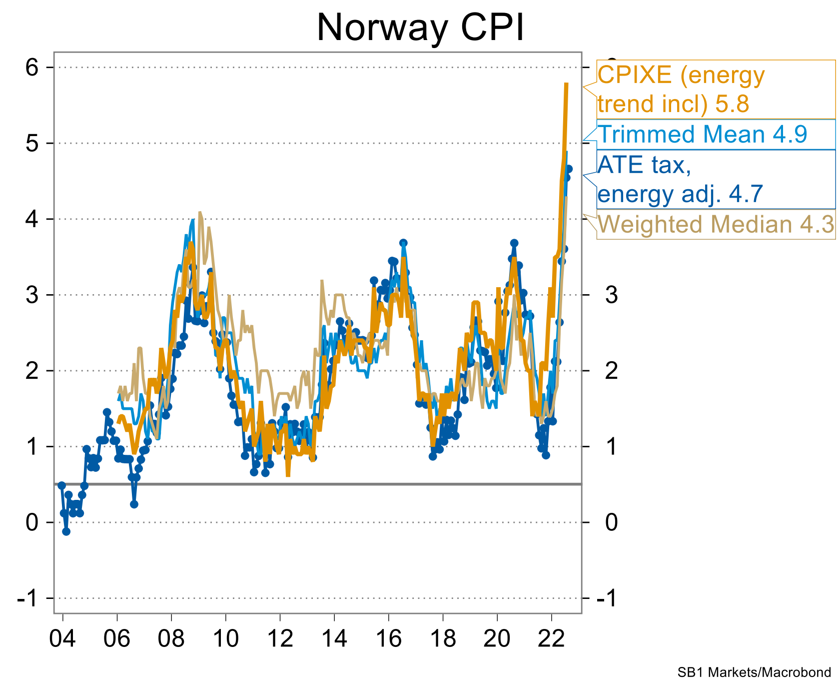


- **CPI-ATE** (ex. energy and taxes) rose 0.2% m/m (s.a), and the annual rate climbed by 0.2 pp to 4.7% pp, we expected 4.6%. Consensus was at 4.8%, NoBa expected 4.2%
- **Food prices** rose 0.3%, we expected unch., following the 7.6% surge in July. We do not expect further (seas. adj) price increases the coming months, but the annual rate will remain lofty the coming year. At one stage, prices will be cut
  - **Transportation and airline ticket prices** rose sharply, and several other sectors also contributed
  - Prices on **imported goods** rose 0.2% m/m, and are up 4.6% y/y; **domestically produced** goods & services were also up 0.2% m/m and are up 4.7% y/y
  - **10 sectors** reported growth above 2% y/y, and just 2 are below (and one at 2%). All trimmed/median measures tell the same story: Inflation has broadened
- **Total inflation fell by 0.3 pp**, to 6.5%, which is still a very high level historically. We expected 7.2%. If not for electricity subsidies, inflation would have been 9%, a normal rate these days. Electricity prices rose 14% in August, we expected far more. Gasoline prices fell by 12%, close to our forecast
- **The outlook**
  - **Most of the lift in electricity prices are behind us, due to the generous government subsidies**
  - **Gasoline prices** are on the way down and will contribute to a decline in headline CPI
  - If so, **average 2022 inflation** will be some 5.5%, and above Norges Bank's 4.6% f'cast. The core inflation may average 3.5%, which is no more than 0.3 pp above NoBa's f'cast
- **So what?**
  - **Core inflation** is higher than NoBa's f'cast, but not dramatically. Higher headline inflation hits real income (and 2022 wage inflation will not be revised much upwards), and will dampen demand
  - For **Norges Bank** wage inflation is the dominant risk vs inflation over time. The headline inflation in 2022 may end up more than 2 pp above the 3.3% which was the basis for the wage negotiations last spring. What the inflation forecast will be in Feb-23, before the the wage negotiations is still in the blue but the risk is that wage inflation will end up on the high side, if just to compensate for 2+ pp loss in 2022
  - A 50 bps hike next week is probably a done deal, and the bank will reach the 2.25% level the assumed to be reached in Dec, in the June MPR. However, the next 2 x 50 the market is now discounting, is probably too aggressive

All measures of inflation suggest a broadening, to a 4% – 6% level

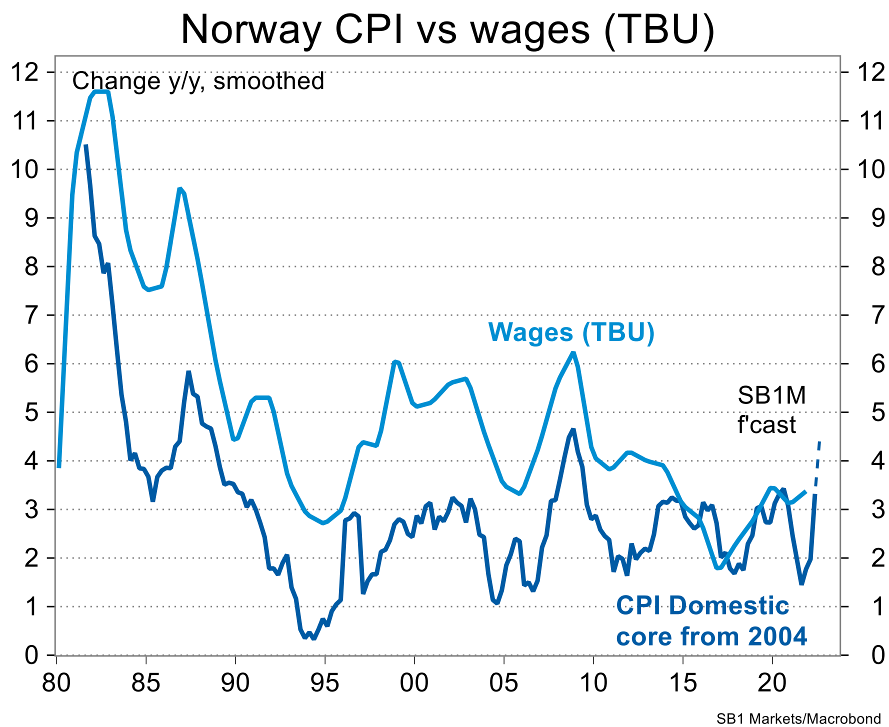
… and inflation is far higher than suggested by electricity prices & NOK

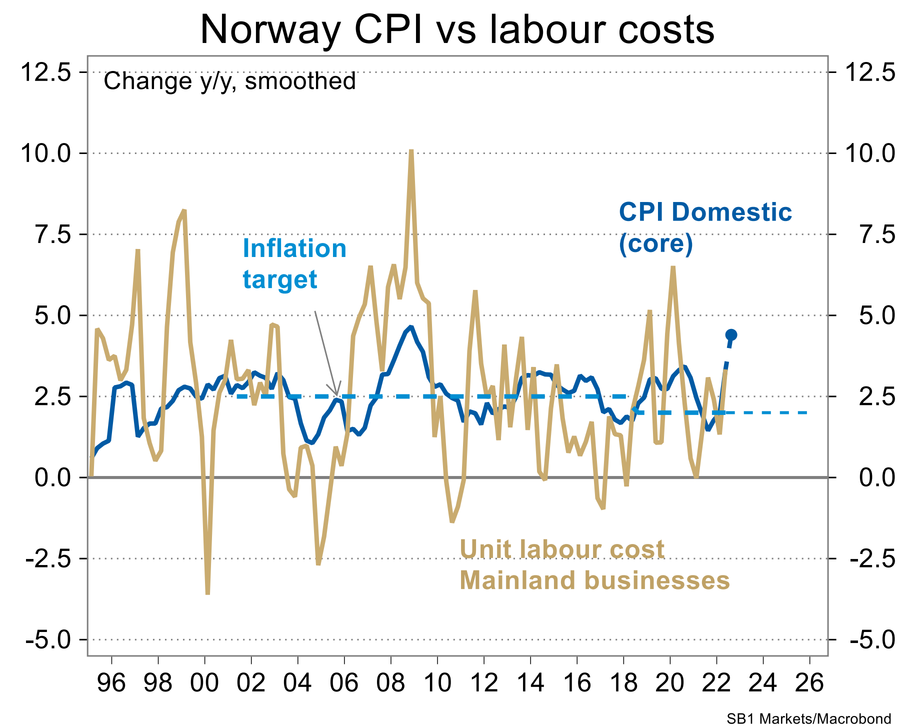




Domestic costs: Weak productivity growth is lifting unit labour costs

Wage inflation has not accelerated (we thought it would)

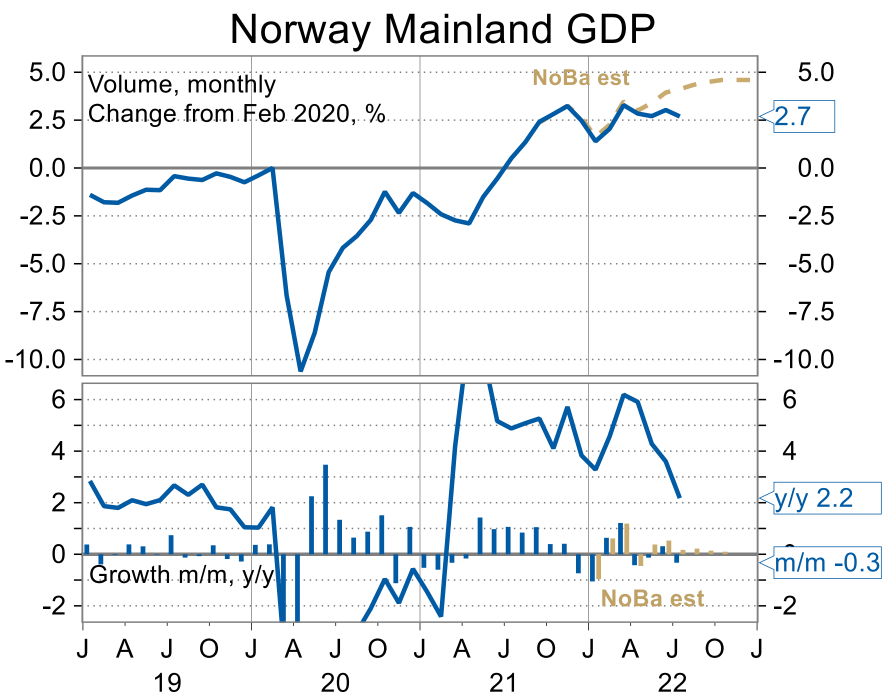




- Unit Labour Cost is up more than 3% y/y, but underlying growth well below 3%

Mainland GDP unchanged since… last September. How aggressive will NoBa be?

GDP fell by 0.3% in June, expected up 0.2% (consensus & NoBa). The GDP level is 1.4% below NB est.



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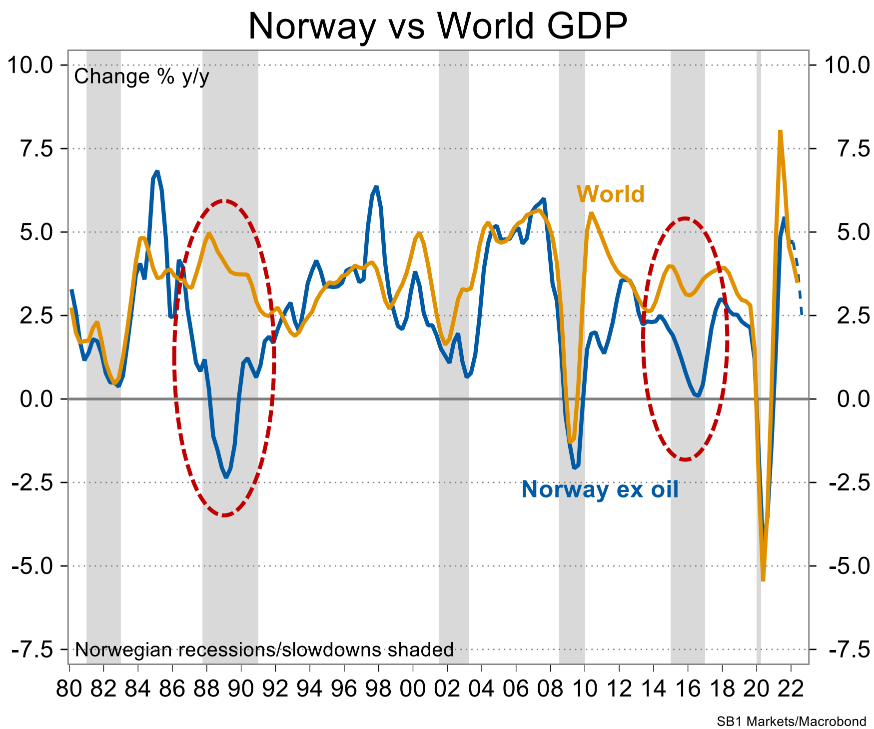
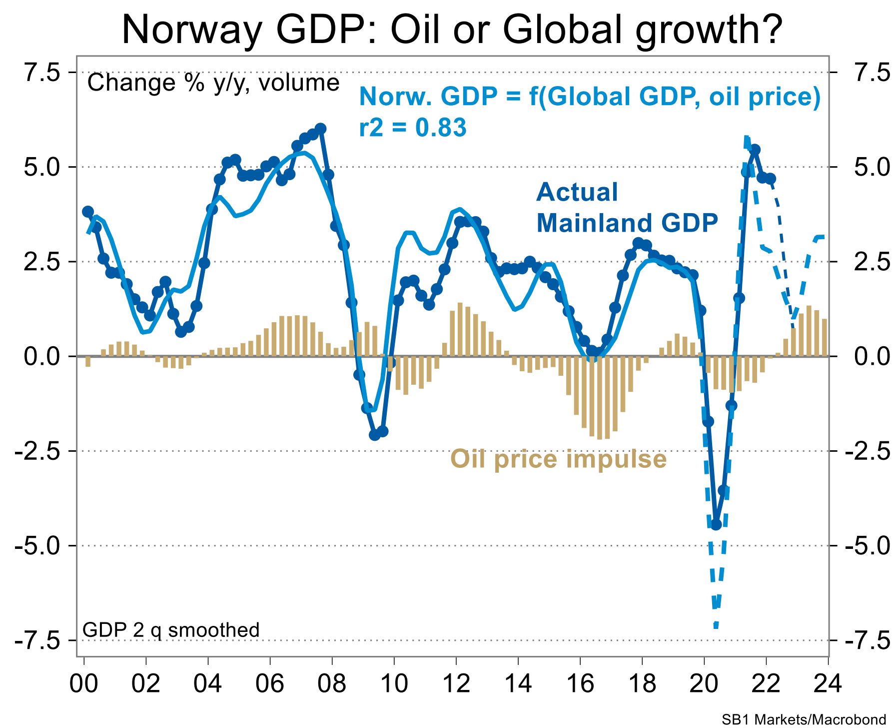
- **Mainland GDP** growth has slowed faster than we and most other, Norges Bank included, have expected. The history (level in June) was revised down by 0.2%. Thus, just 0.3% growth from last Sept!
  - » Even so, employment has increased substantially, by some 1.7% (to July from Sep-21), and the unemployment rate has fallen (albeit not by much recent months). Hours worked (quarterly National accounts) are up almost 5%! Thus, the flattening of GDP is somewhat surprising.
- **Why** has GDP stagnated?
  - » **Production:** Public sector has activity has fallen by 2.1% since last September, at least partly due to downscaling og Covid related activities - a 0.5 pp drag on Mainland GDP. Ex. this drag, GDP is up 0.8% since last Sept, close to a normal growth rate. In June Government GDP fell further, and GDP ex government grew 0.2%, in line with expectations. Services, and in June also manufacturing production, are up by 2% since last autumn. Within service, trade is contracting, in line with the decline in consumption of goods
    - On a technical note, value added adjusted for changes in subsidies & taxes is up by 1.1% since last Sept
  - » **Demand:** Household demand in Norway has fallen sharply due to less demand for goods, a 8.8% drop, and much larger than the increase in spending on services. In July, both components fell. Oil investments, mainland business investments and housing are all down since last Sept (and revised down). Net trade has contributed on the downside too, both goods and services (but just more travel abroad). A much larger increase in inventories has contributed heavily on the upside, we assume at least partly due to more oil investment under work in manufacturing industries
- **So what?**
  - » There are some excuses, and labour market data do not confirm any worrisome weakening of the economy, rather the opposite. Still, growth is slowing, and we do not expect any recovery near term due to the decline in real income and higher interest rates. <u>Our dovish view vs. the FRA market's aggressive rate expectations is strengthened</u>

Norway is slowing, like the rest of the world

The Norwegian business cycle is very closely correlated to the global cycle. Now, both are slowing

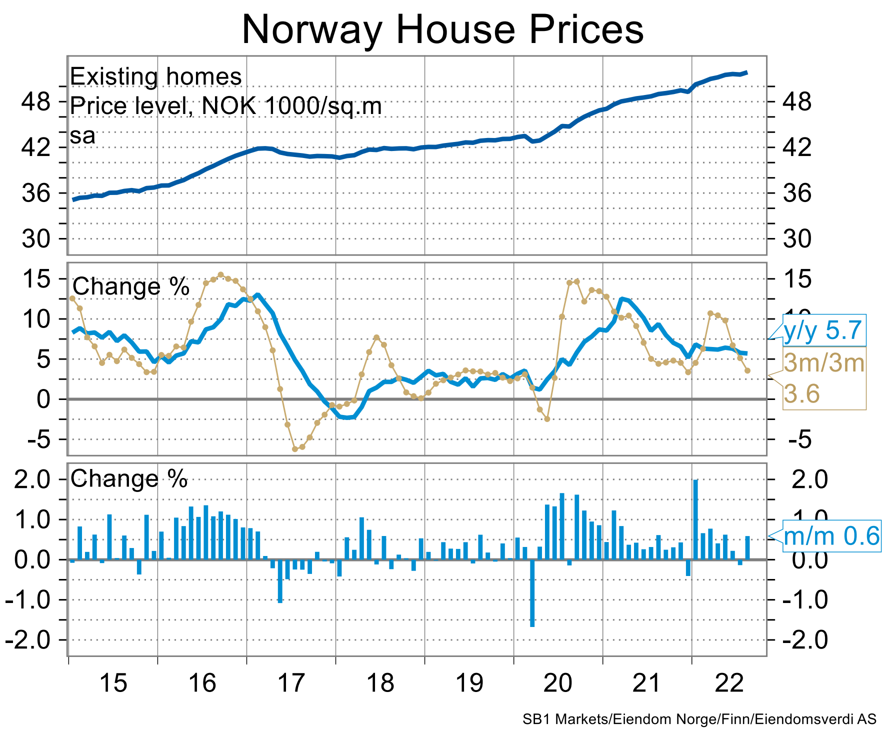


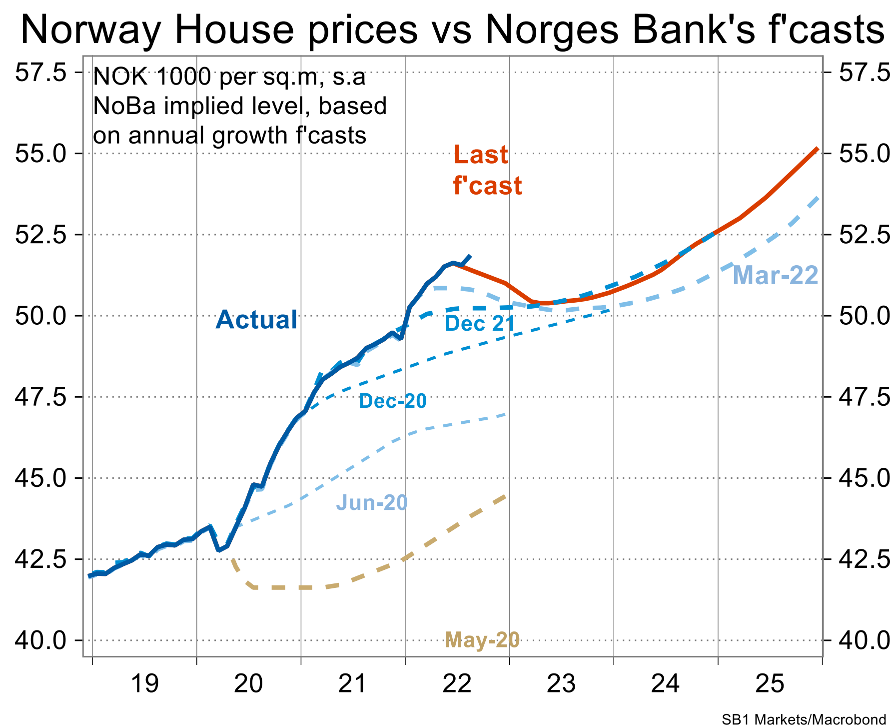


- **Global GDP vs Norwegian GDP**: A banking crisis (1988 – 1992) and the oil sector recession (2014 – 2017) are the only important exceptions
- **The oil price** is from time to time contributing both at the upside and the downside, and a model based on global GDP and the oil price explains everything you need to know about the Norwegian Mainland (ex oil production) GDP
  - » Now, a positive contribution is assumed, as a response to the lift in the oil price vs. the level in 2020 and 2021

House prices surprised on the upside in August, up 0.6%

Prospect of higher rates is not biting yet. However, supply of homes for sale turned up





- **House prices** were far stronger than we, most economists, and NoBa expected in August (we assumed -0.5%). July data was revised marginally up, to -0.1% from -0.2%. Prices rose in all cities in August, the most in Stavanger and Kristiansand where prices fall sharply in July. Oslo prices rose by 0.4%
- The **no. of transactions** has come down to a normal level, following the early pandemic surge while **new approvals** for sale rose sharply in August. **The inventory** rose to 9,9’ in Aug from 9,2 in July, and is now at the highest level since July-21
- In the June MPR, **Norges Bank** expected that prices start declining in July, and continue downwards until Q2 next year, in sum by 2¼%. If the current plan is not sufficient, rates will probably continue upwards until they bite. The reason: The main transmission mechanisms between interest rates and the real economy is through the housing market, and the impact on household disposable income. The August price hike underpins the market expectation of another 50 bp hike from NoBa in Sept.
- **In Sweden**, prices have fallen sharply recent months, especially in Stockholm. Preliminary data signals a further decline in July, in sum 9% over the past 5 months

Highlights

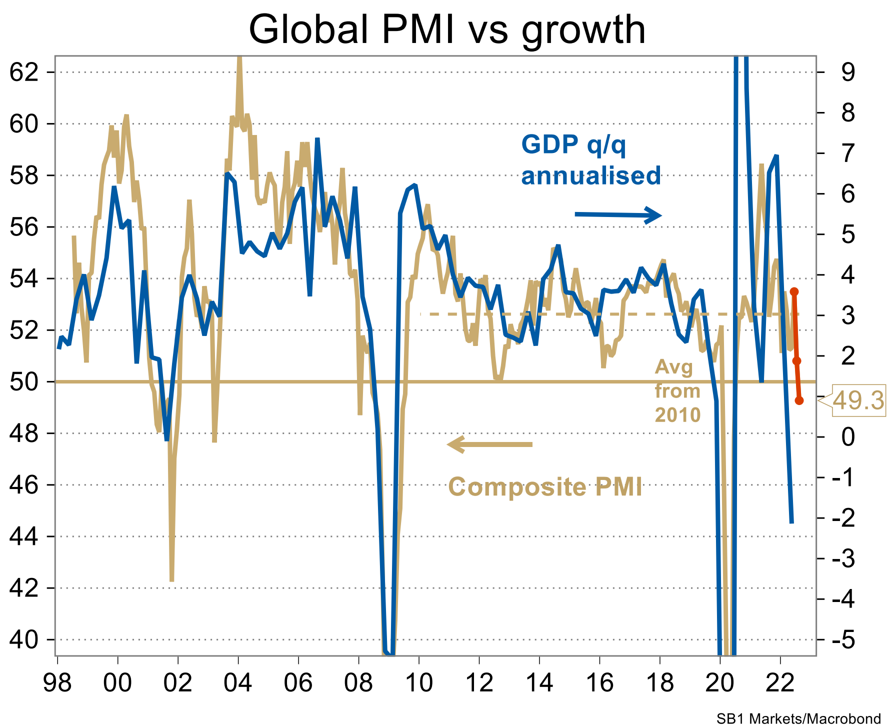
The world around us

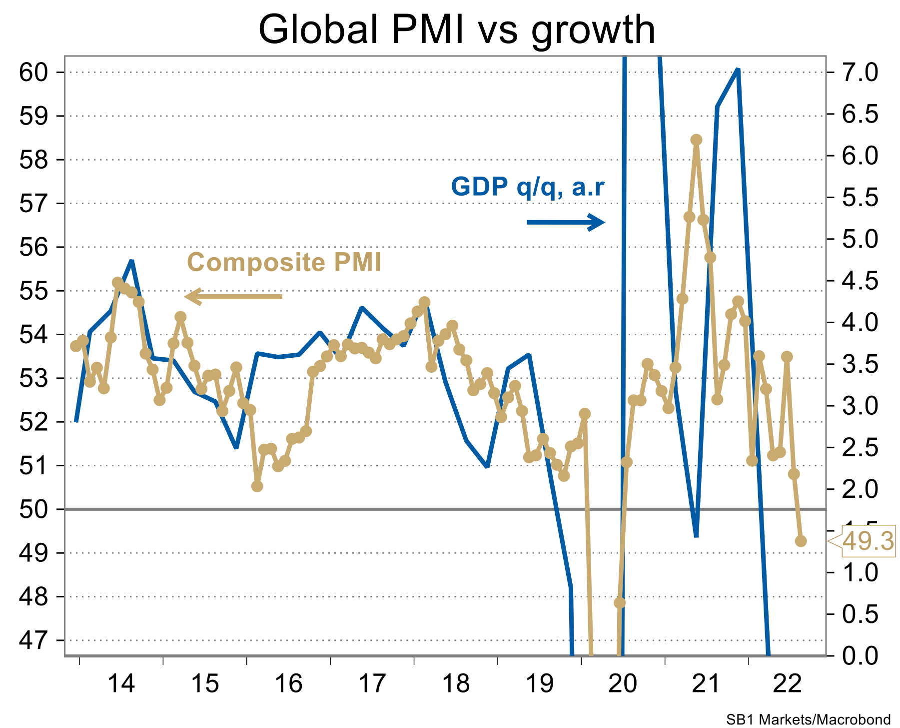
The Norwegian economy

Market charts & comments

The global PMI crossed the 50-line in August

The global index fell by 1.5 p to 49.3, 0.2 p below our estimate. The trend is clearly down

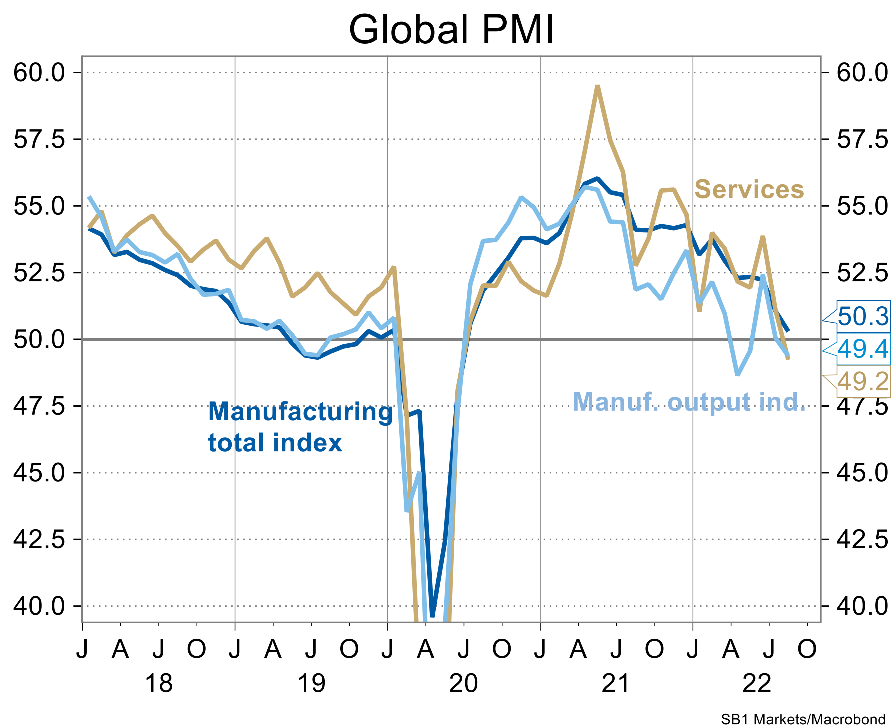


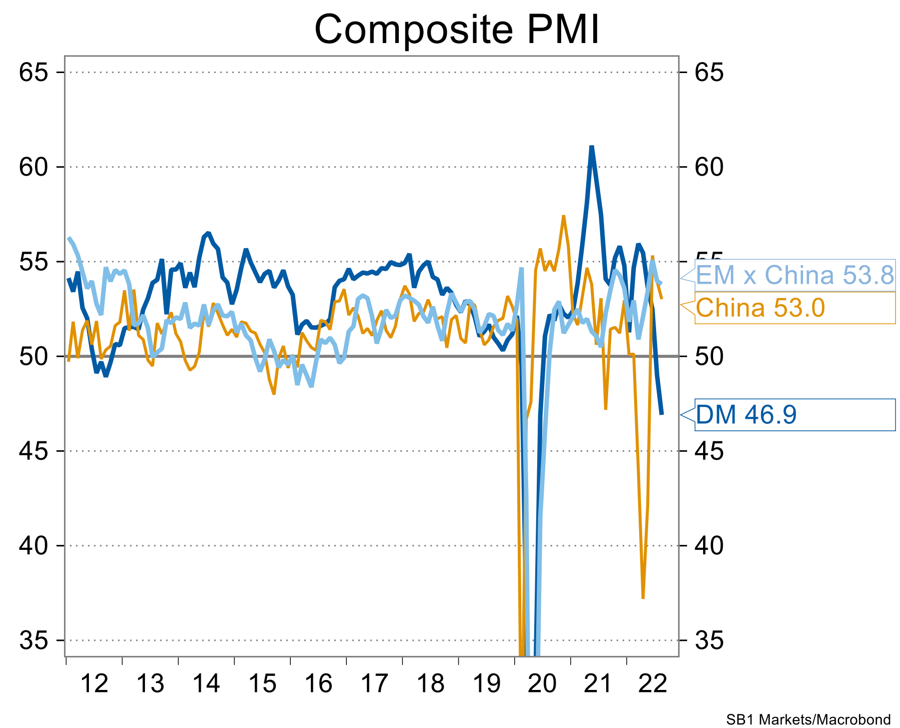


- The composite PMIs fell sharpy in the US, and declined in Japan, the UK, and in the EMU as well, while China and other EMs in average reported just a small setback
- The US index is now at the bottom of the league, <u>at 44.6</u>, down 3.1 p, lower than the preliminary estimate at 45 – while the parallel ISM index is at 56.1 (out composite est.)

An unusual steep decline in rich countries, by 2.1 p to 46.9, the US to 44.6

China and Emerging Markets x China kept up far better, and both remain well above 50

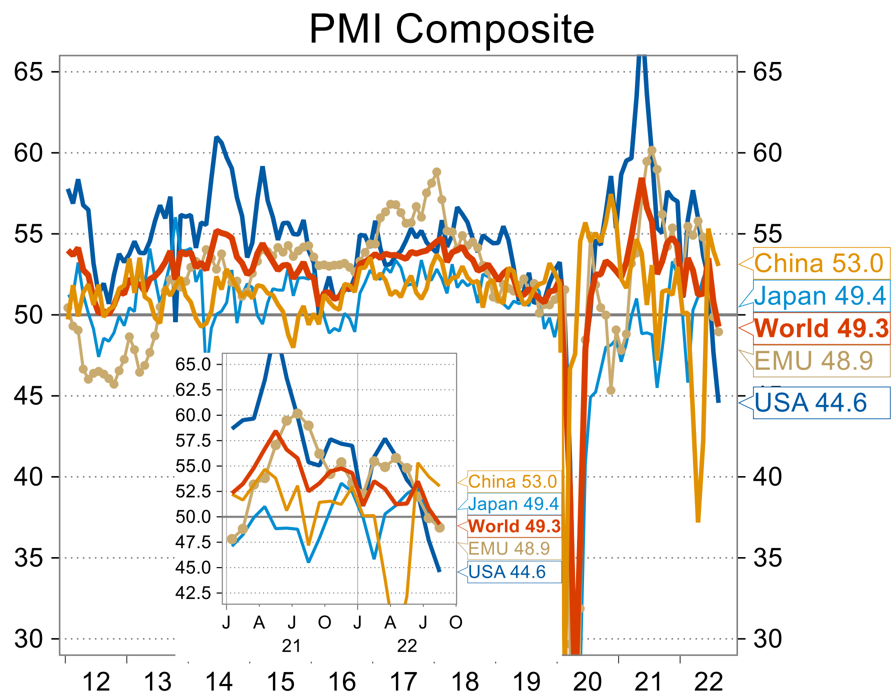


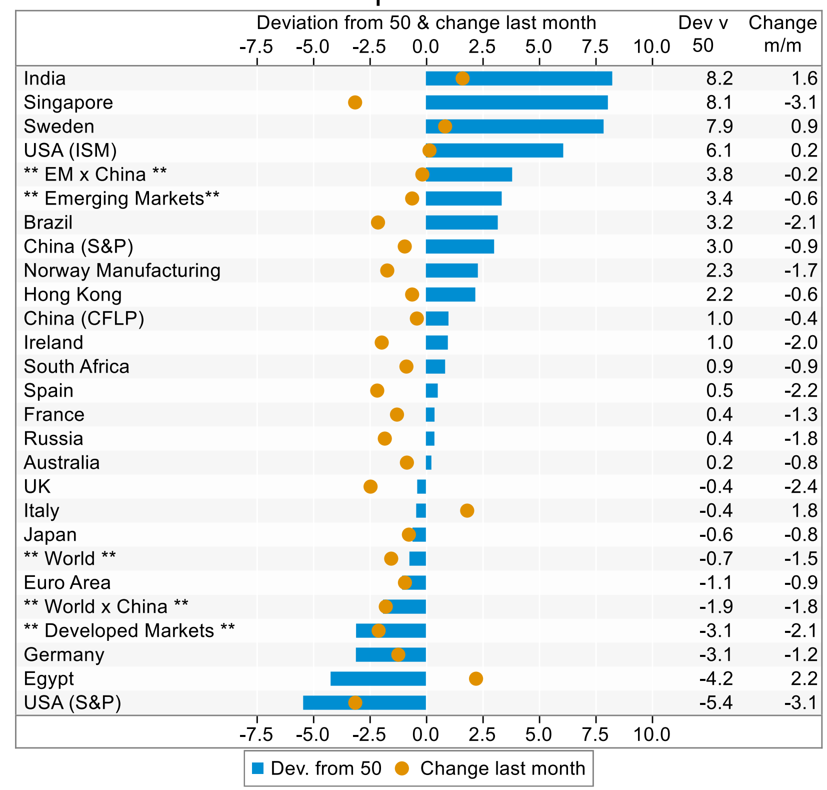


- Both manufacturing & services contributed to the decline in the global aggregate in August

Only 5 countries reported a higher composite PMI, 22 countries/region a decline

10 countries below the 50 line (including EMU, UK, US, Japan); the majority is still above

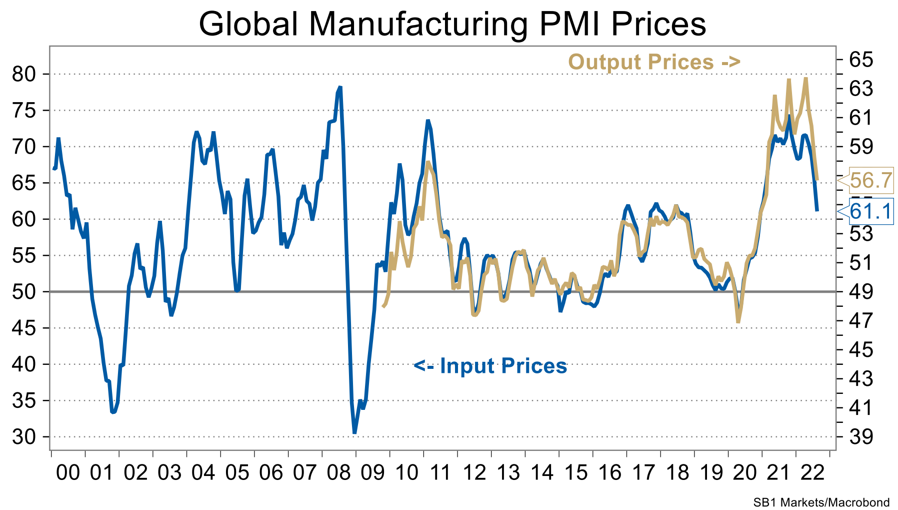


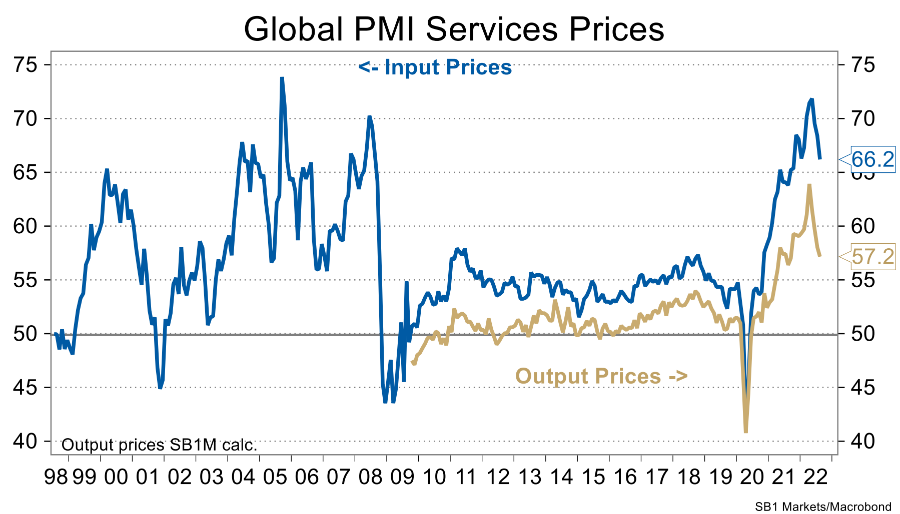


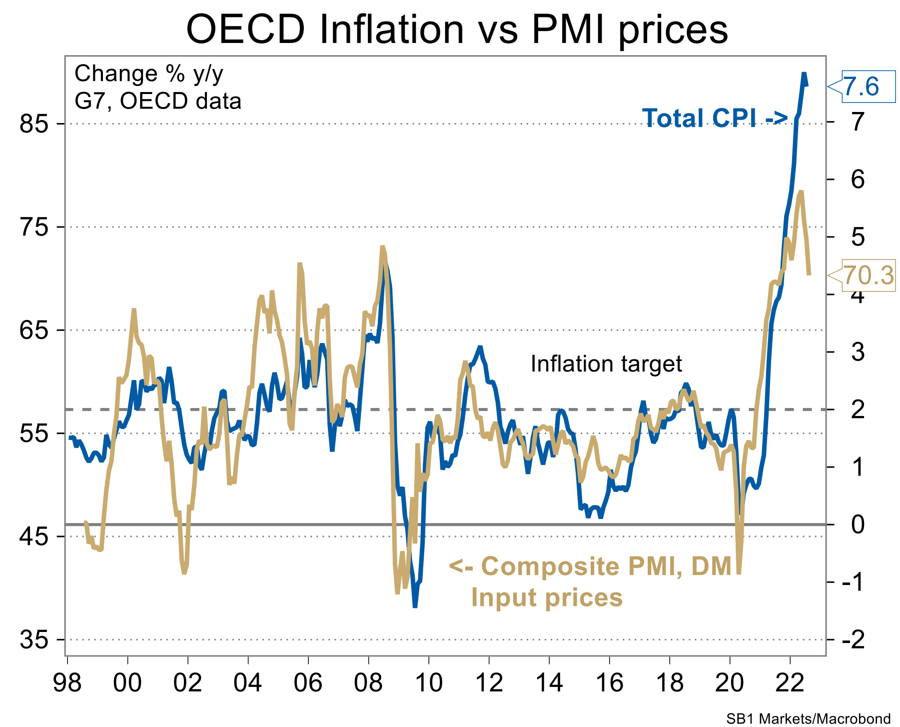
- **The rich countries** (Developed Markets, DM) PMIs have fallen to the bottom of the list
  - » One exception: The **Italian** PMI was up 1.8 p due to strength in the service sector
- The **ISM survey** is far better than **S&P's US survey** – the ISM 'composite' gained 0.2 to 56.1, while the S&P survey was down 3.1 p to 44.6! This discrepancy is more than strange – and is entirely due to the diverging service sector indices (ISM covers mostly larger companies)
- (**Norway** does not compete here, we just have a manufacturing PMI. The August index would have yielded a 5th place in the composite race)

Price increases are slowing, according to the PMIs

All price indices remain at very high levels, though

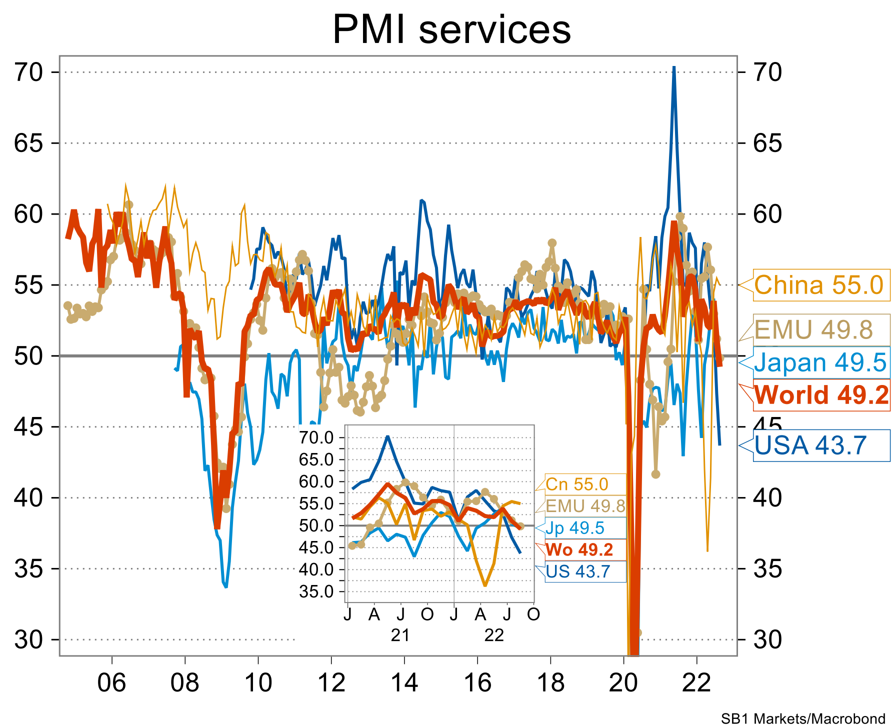


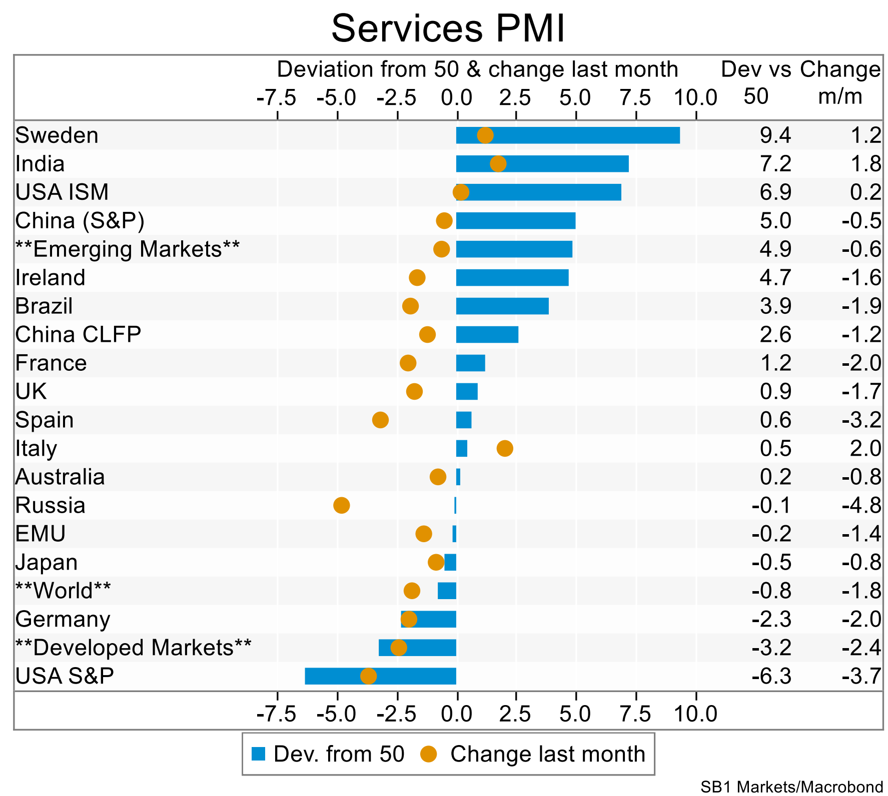




Services PMI down 1.9 p to 49.2, into contraction territory

US up almost to the top of the list, or down to the bottom. Rather confusing

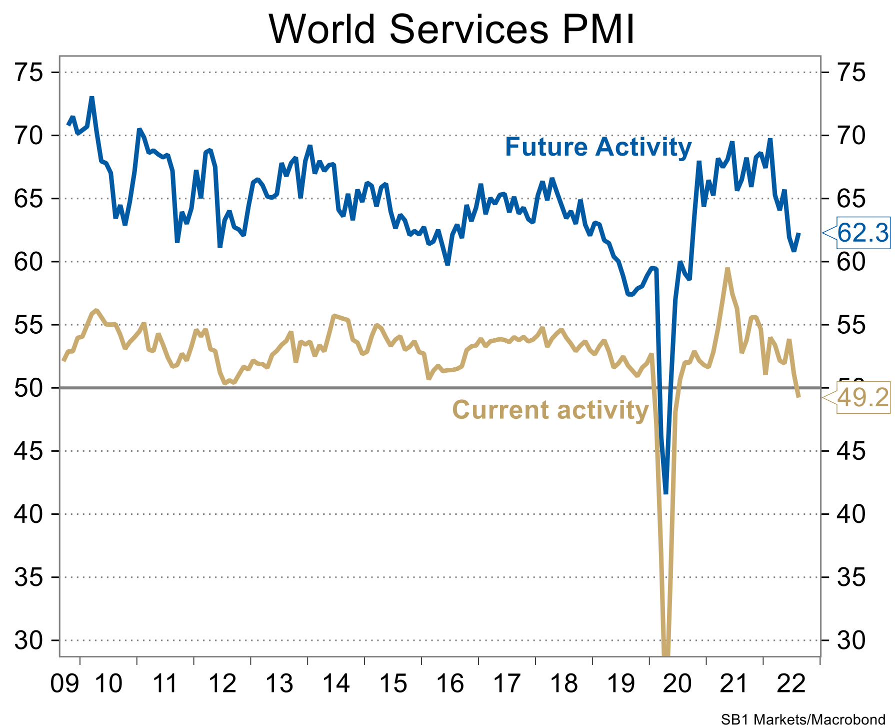


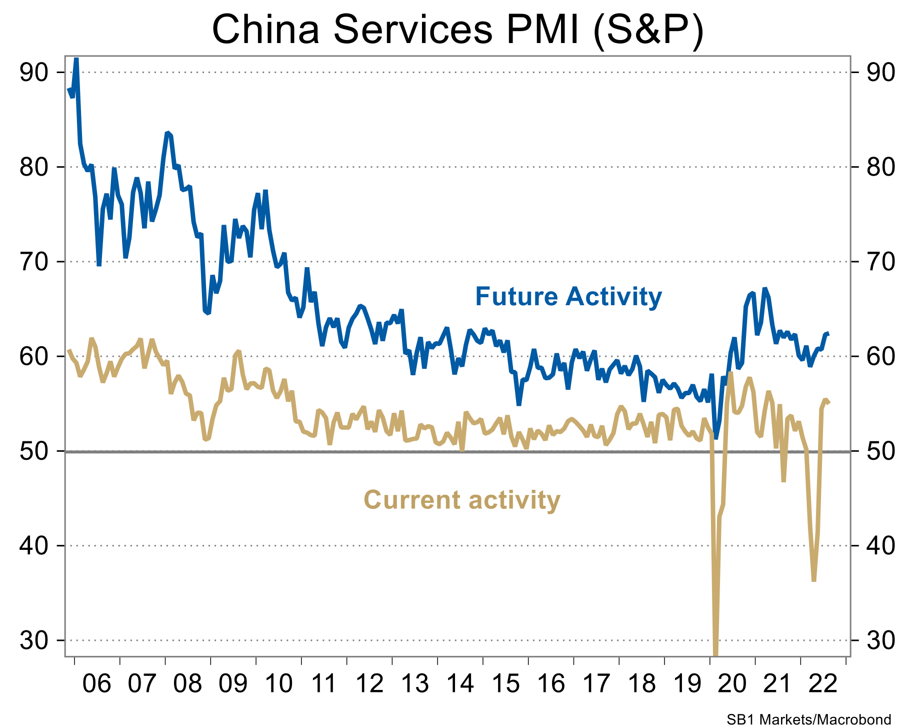


If the ISM is correct, however, the service sector as a whole may be faring better

Future activity aspects in the service sector turned up

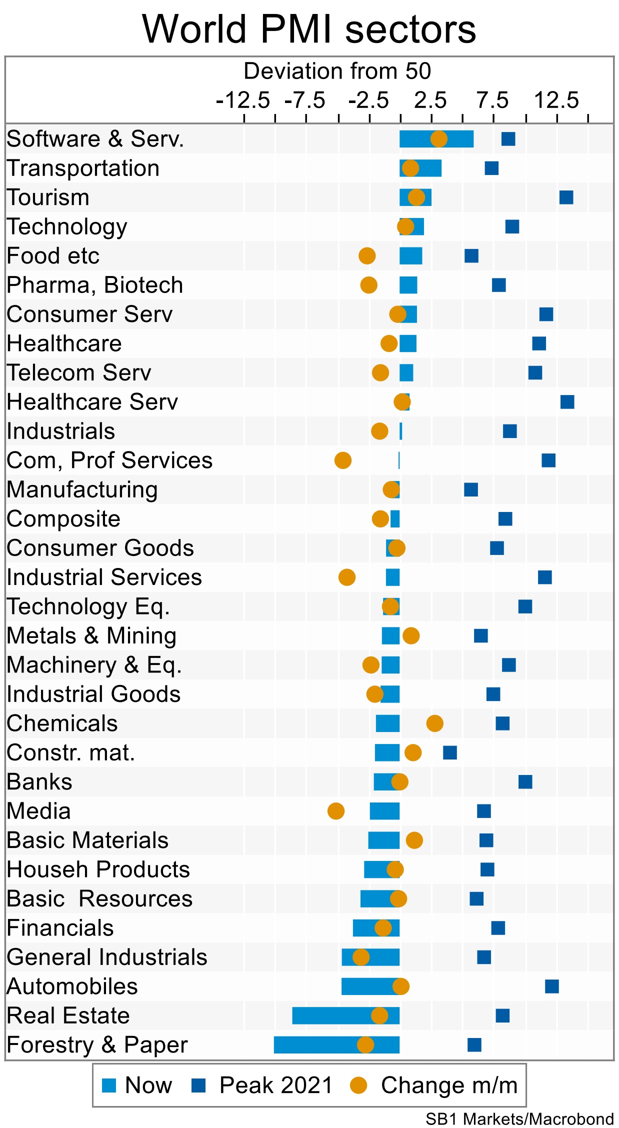
China reports growth above normal in services – and the future is pretty bright

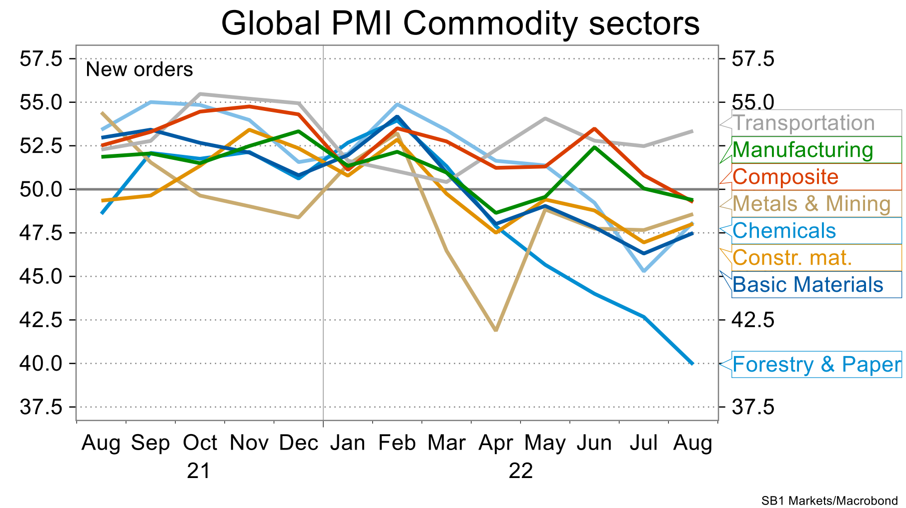


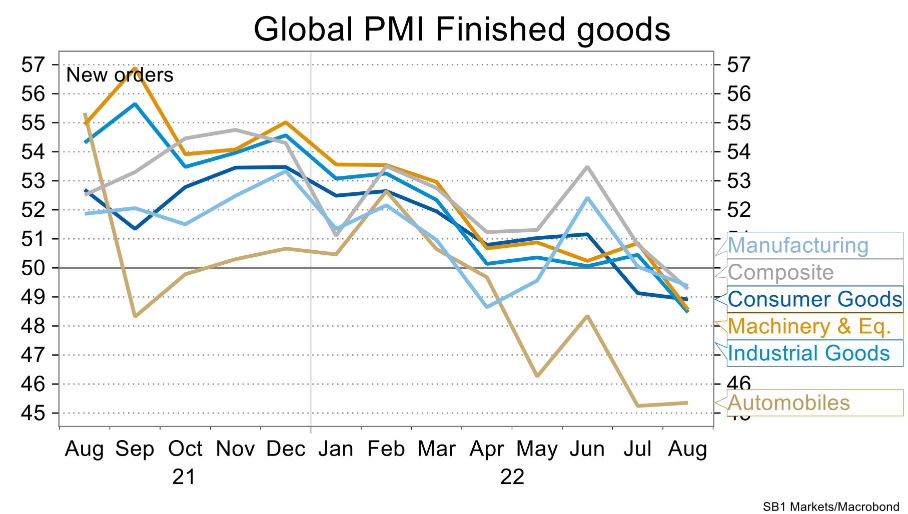


Almost all sectors reported slower growth in August, 2/3 are below the 50 line

8 sectors up, 21 down. 20 sectors are below the 50-line, just 11 are still above



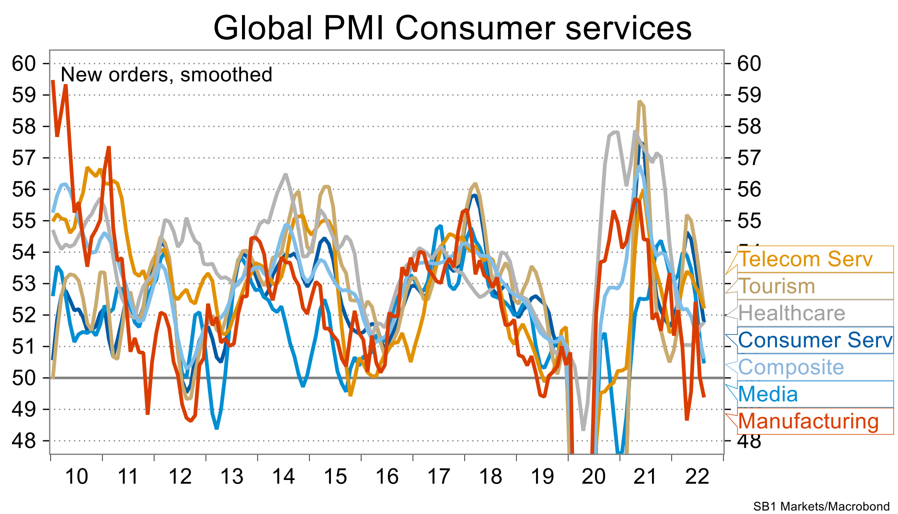


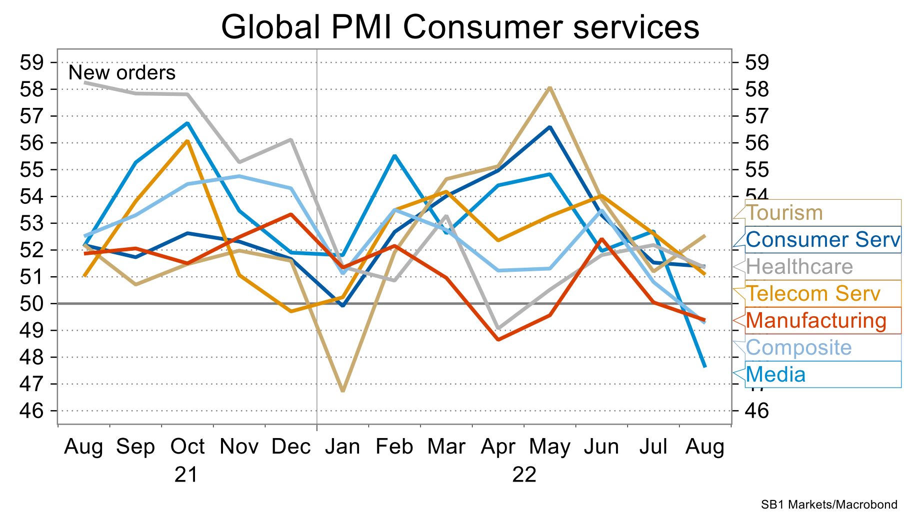


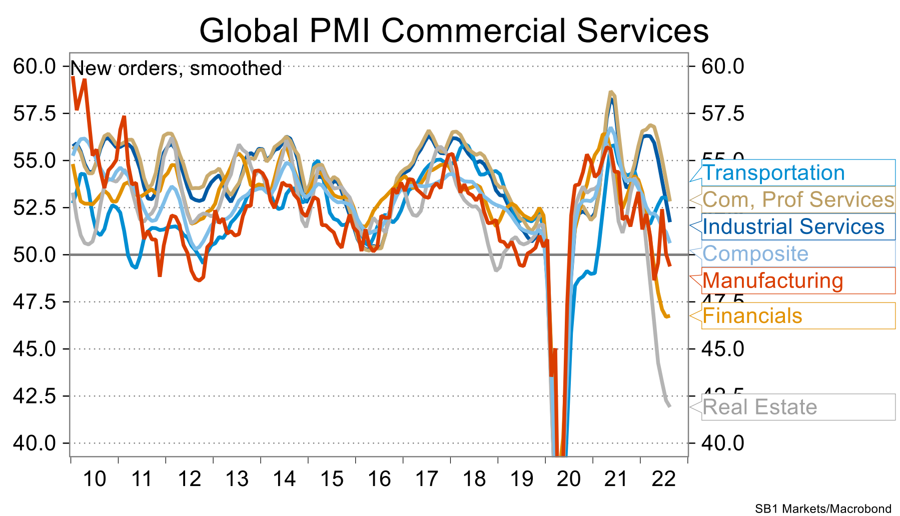
SpareBank 1 MARKETS

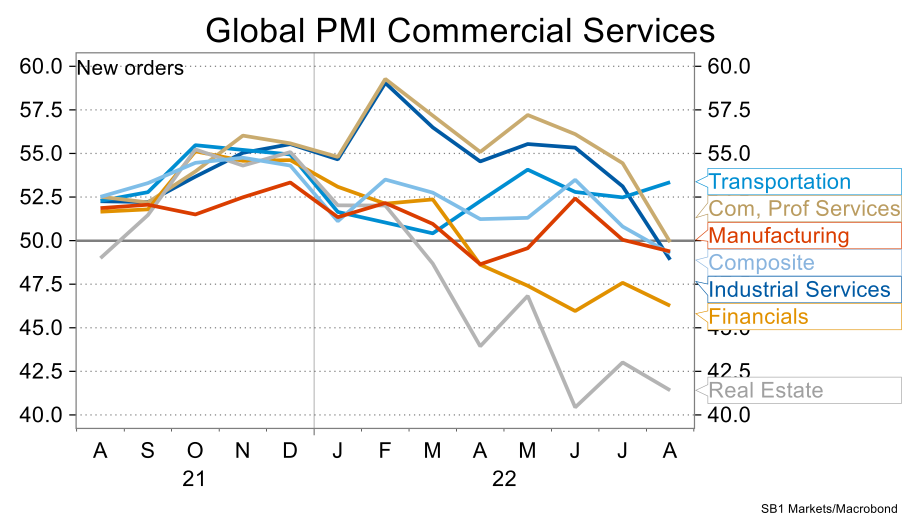
Many service sectors are contracting

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



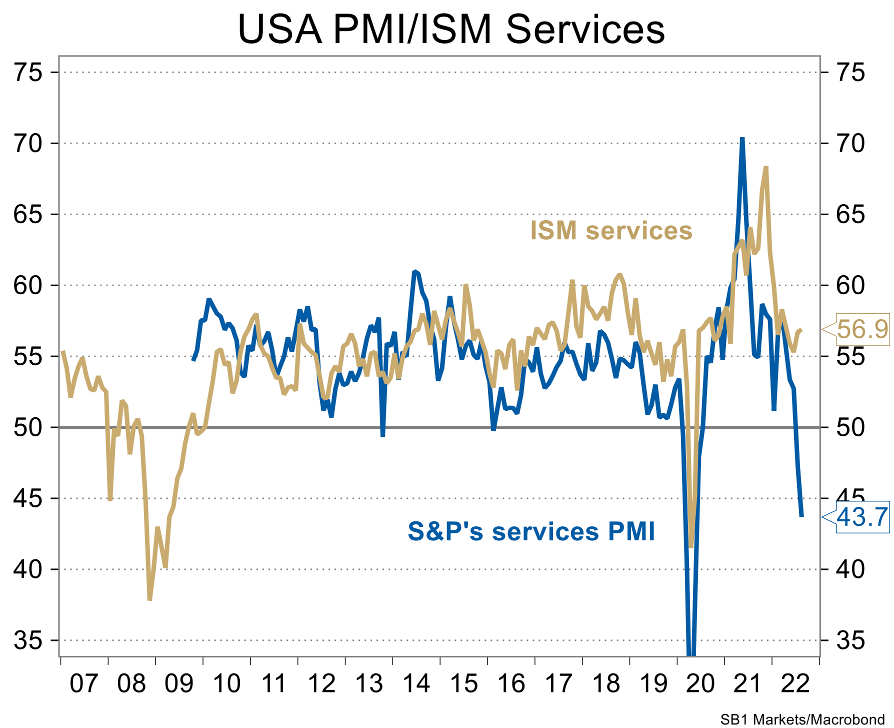


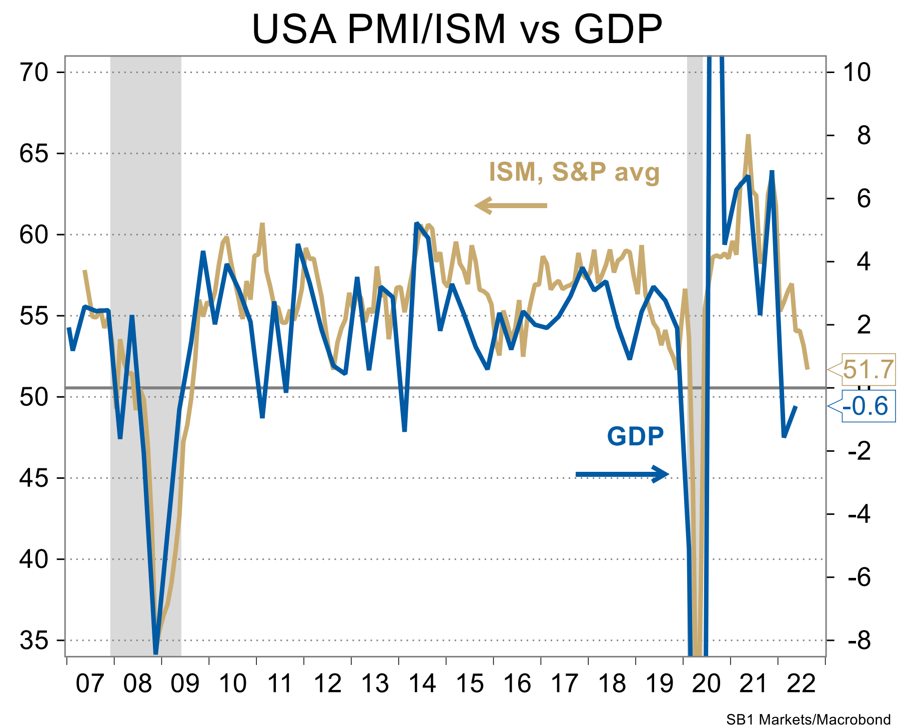




Mind the gap: S&P says services are contracting further, while the ISM was up

The history of the two surveys are too similar and too short to judge which is the best survey

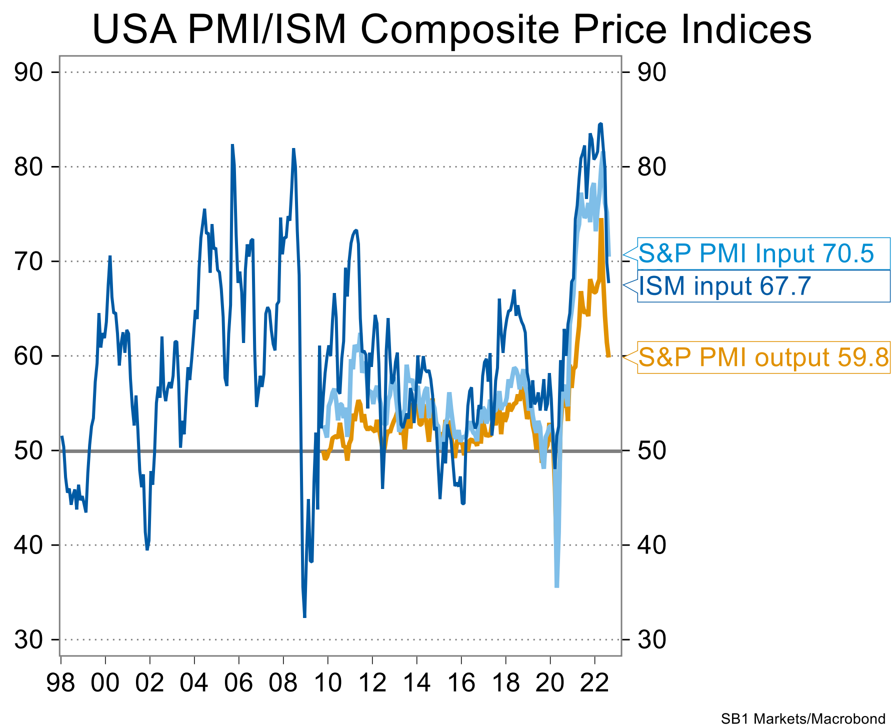


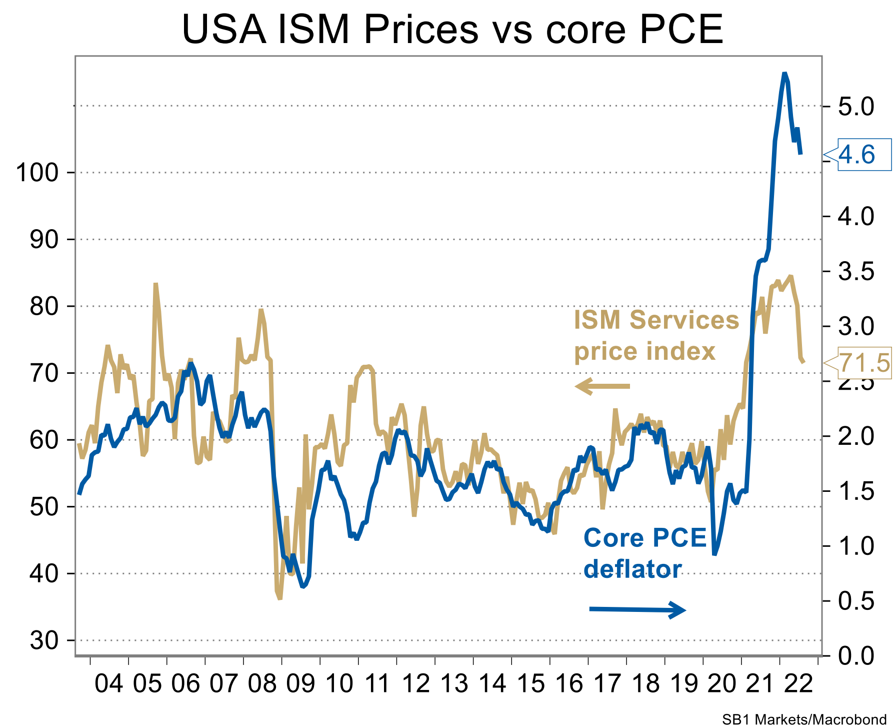


- … but in some few months we will find out ☺
  - » In formal regressions vs service sector production (quarterly National Accounts) or households' consumption of services, the S&P (aka Markit) survey is clearly more reliable than the ISM survey but we do not really trust this outcome
- The ISM services index gained 0.2 p to 56.9, expected 55.1. This survey is tilted towards the larger companies
  - » 14 sectors reported growth, just 2 a decline vs. July, primary sectors & arts/entert./recreation
- S&P's PMI (aka Markit) fell 3.7 p to 43.7, 0.6 p lower than the preliminary estimate!
- The average of the ISMs and PMIs is down – but is not signalling a recession (thanks to ISM services)

Both input and output price indices further down in August

Price pressures are easing and inflation will very likely come further down

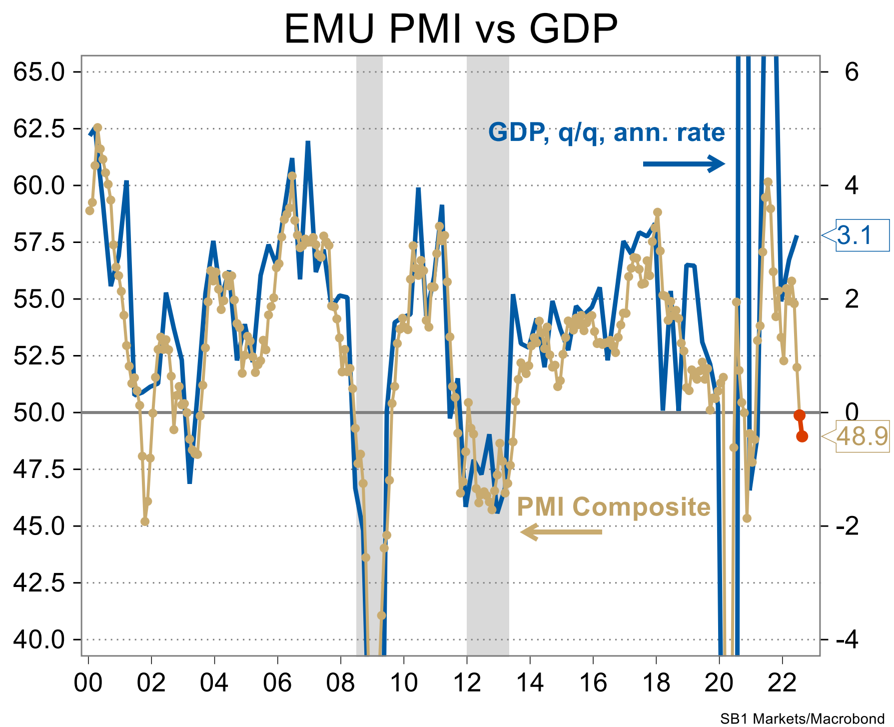


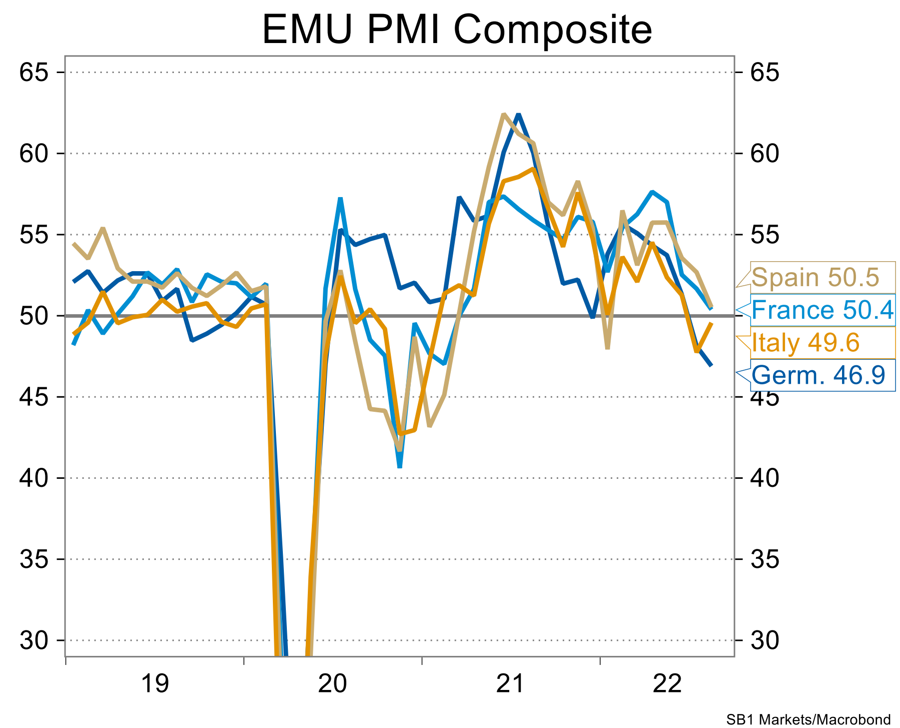


- However, as wage inflation remains much higher than before, and there is no surge in productivity – the real inflation problem remains unsolved

The Eurozone final PMIs confirmed in contractionary territory

The composite down 0.9 p to 48.9, not a positive growth signal, by and large due to weak German data

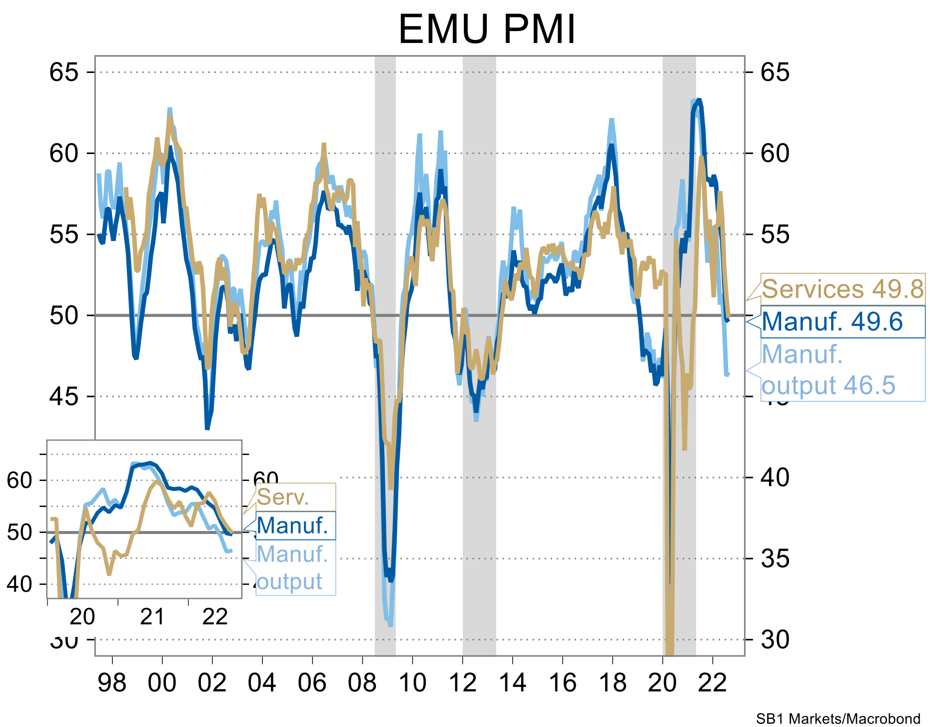


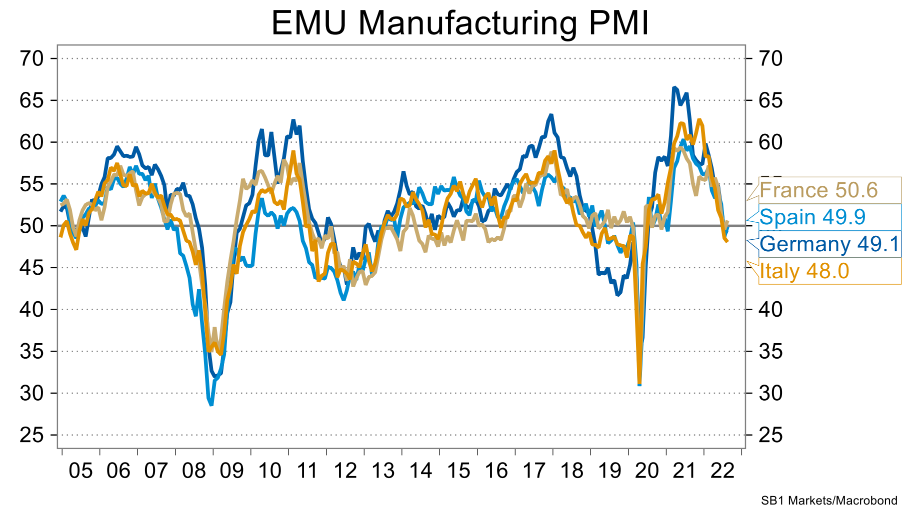


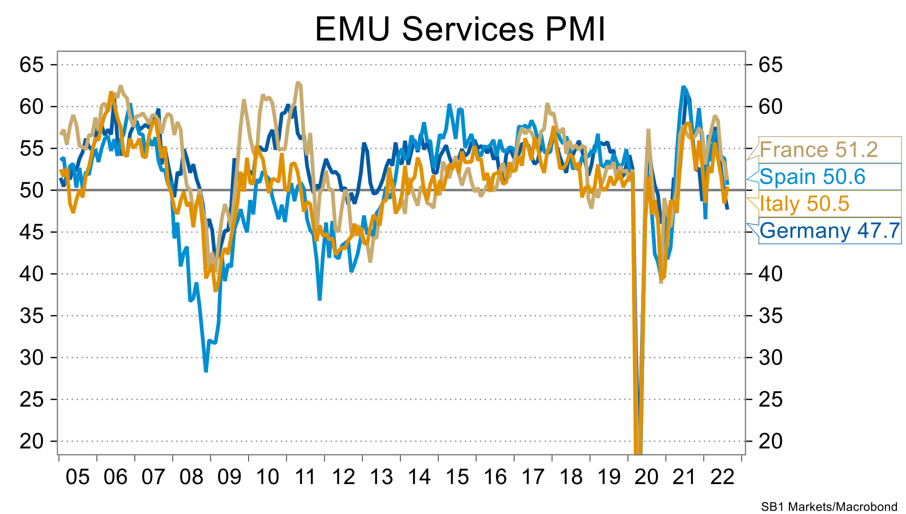
- The decline in the flash EMU PMIs was confirmed. The Germany, Italy, and the manufacturing sector in general are the weak links
- The **manufacturing output** index increased ever so slightly, but output is still contracting
- Italian and French service PMIs surprised on the upside and are still signalling growth, however, the sum of the parts for the Eurozone points to around a 0.5% contraction in GDP
- GDP growth in both Q1 and Q2 has been revised up, in Q2 up to 3.1%
  - During the pandemic the correlation between the PMIs and actual growth numbers has been so-so. We now assumes the PMIs will become much better as predictors of growth.
- The August print is not the best – <u>but still it does not show a dramatic impact of the surge in energy prices in Europe recent months</u>

Manufacturing and services PMIs further down in the Eurozone

Spain and France are still reporting growth. Services below 50 only in Germany out of the big 4



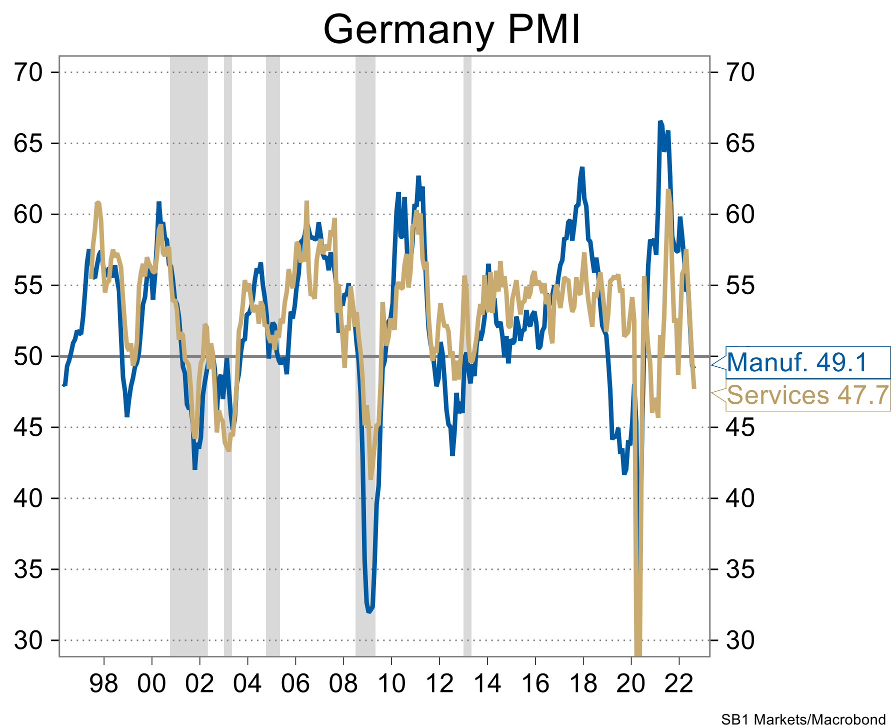


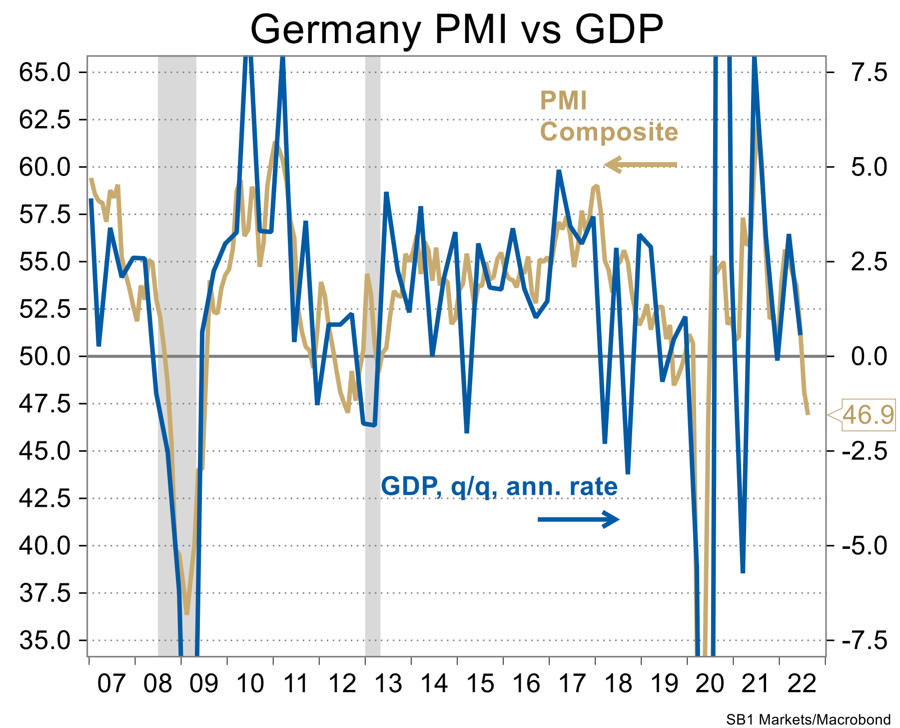


- The manufacturing output component is a warning sign. And even more the order index (which increased in Aug, but is still under water), *check next page*

Germany: The composite PMI now signals some 1.5% fall in GDP

Both manufacturers and the service sector reported lower activity in August

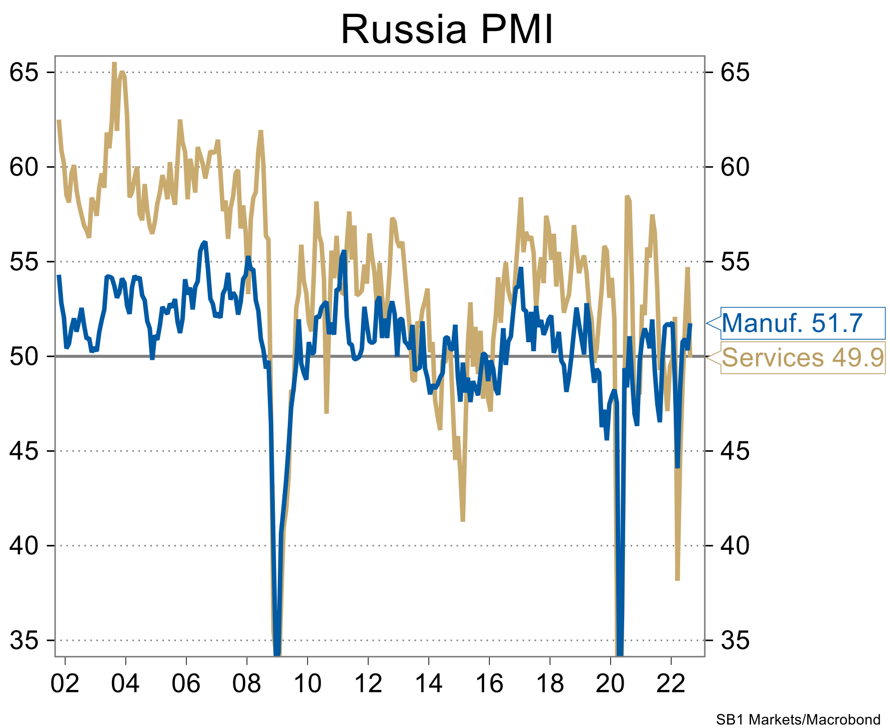


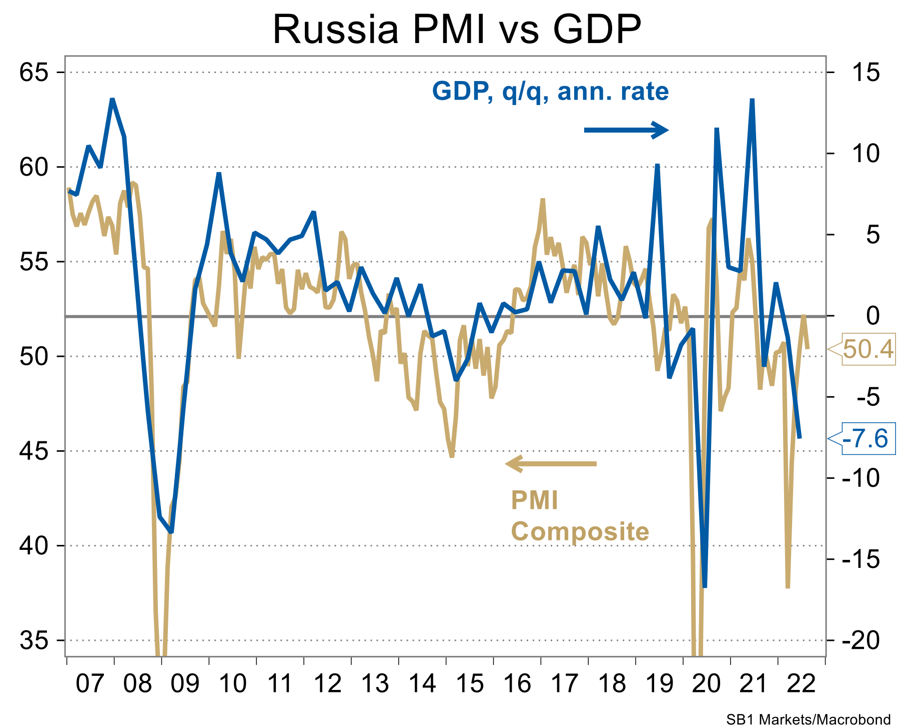


- All 3 indices came in below the initial estimate, signalling a weakening through the month
  - » The service sector PMI fell by 2 p to 47.7, vs 48.2 in mid August. High inflation has softened demand, and the energy crisis adds harm to injury, we assume. The prospect of higher interest rates is probably not helping either
- However, the manufacturing sector is not beaten to death even if gas consumption is sharply reduced, and energy prices have been soaring, the headline index is at 49.1 (however, new orders and output is further down the lane)

Russian service sector PMI plummeted in August, into contractionary territory

The service sector PMI declined 4.8 p to 49.9, while manuf. PMI was up 1.4 p to 51.7

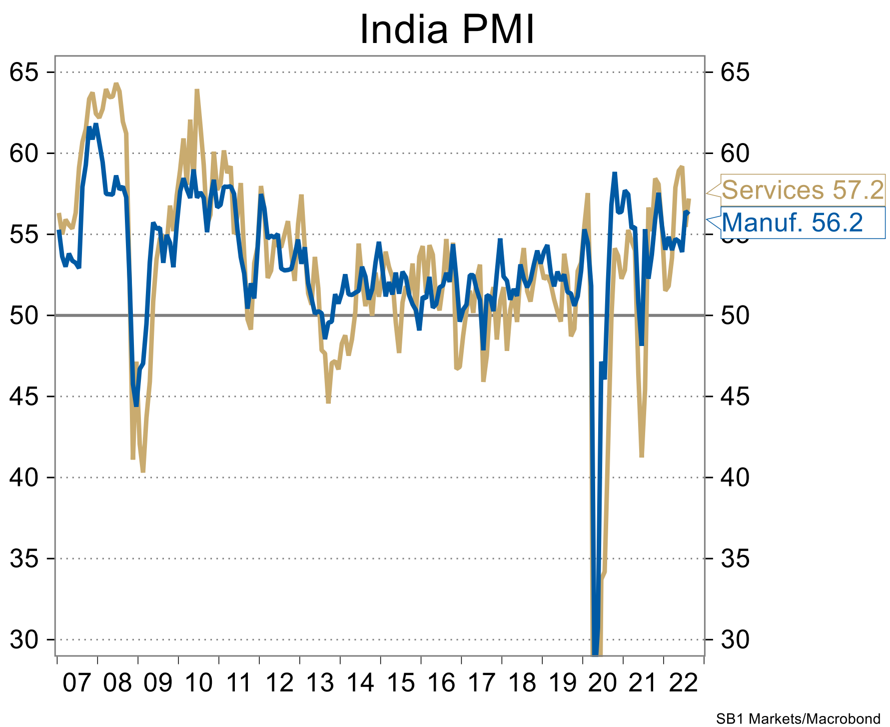


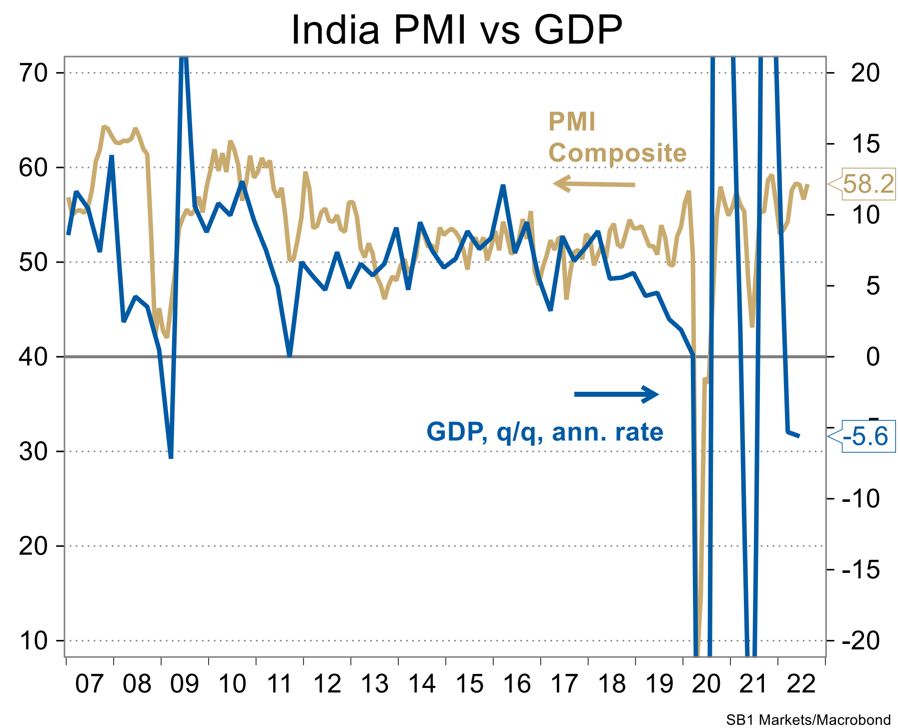


- **The composite PMI** is still above the 50-line
- **Reliable data from Russia** are in short supply these days. What we have? Retail sales are down 10%, auto sales are down 70%, imports have fallen sharply (based on export data from other countries). Still, industrial production is down just 3% since February (and petroleum production is included in industrial production). Official Q2 GDP data reports a 1.9% (7% annualised) decline from Q1, in addition to a substantial cut in growth the previous two quarters
- **A reminder:** The PMIs are not sentiment surveys – respondents are asked about in changes in actual activity (new orders, output, employment, inventories) from the previous month

The composite PMI up 1.6 p to 58.2 thanks to strong services PMI print

Manuf. PMI marginally down, but both services and manuf. PMI levels are very strong. 12% growth??

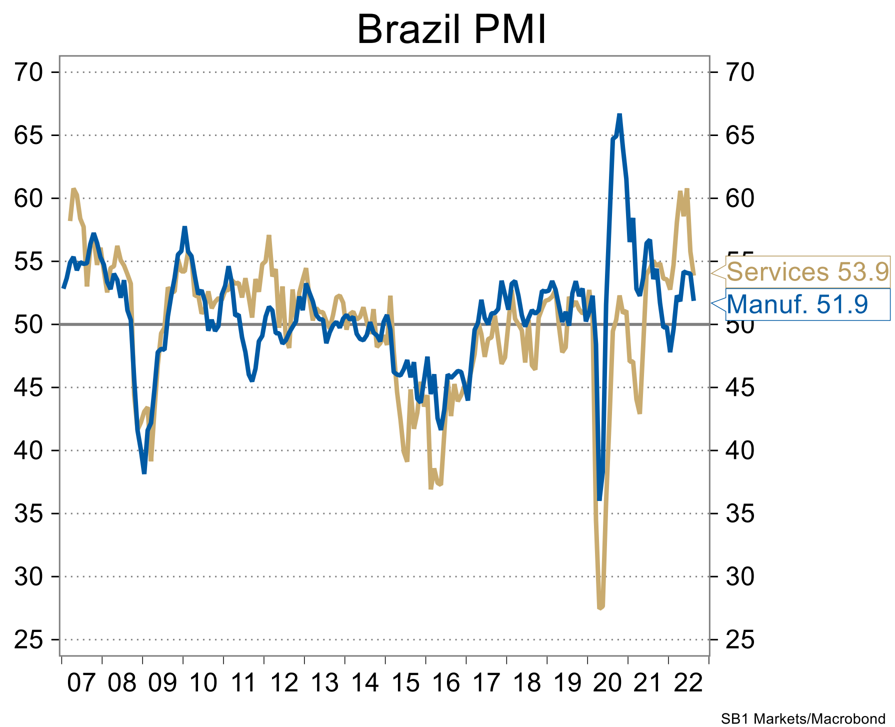


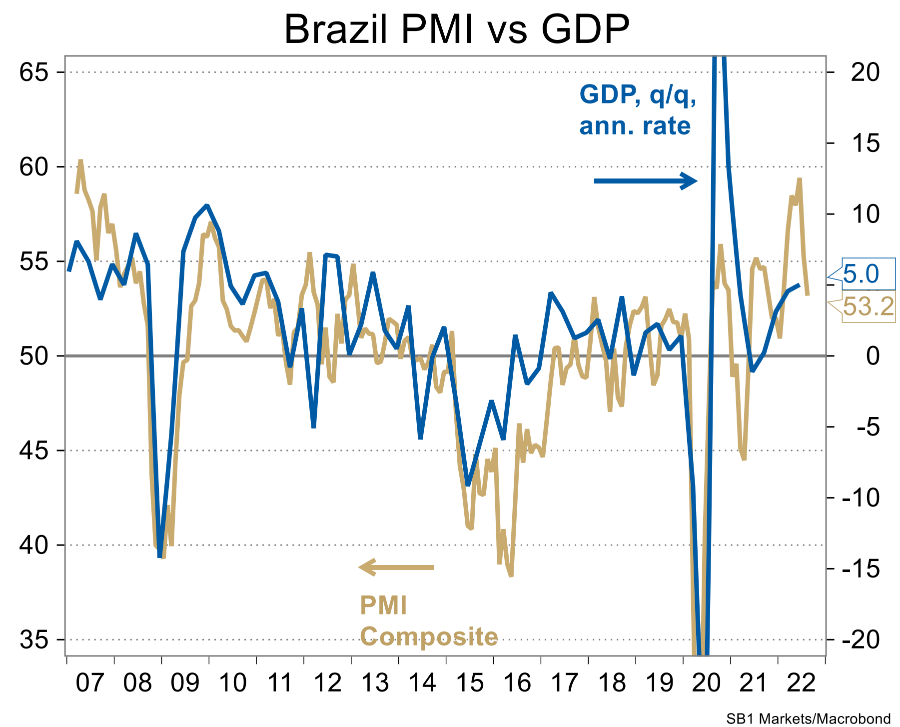


- So far in 2022, GDP has contracted! In Q2, **Indian GDP fell** at a 5.6% pace, close to the decline in Q1. The PMI signals a 12% + quarterly growth rate in Q3 – which is been doing for a while, at the same time as GDP growth was negative…
  - » The correlation between the Indian PMIs and its GDP has always been weak – and has been even worse during the pandemic
  - » Just for the record: Measured y/y GDP was still up in 13% y/y in Q2, up from 3.6% % in Q1.

Both manufacturing and service sector PMIs weaker in August

Services are still reporting rapid growth, and the composite PMI at 53.2 signals growth at close to 5%

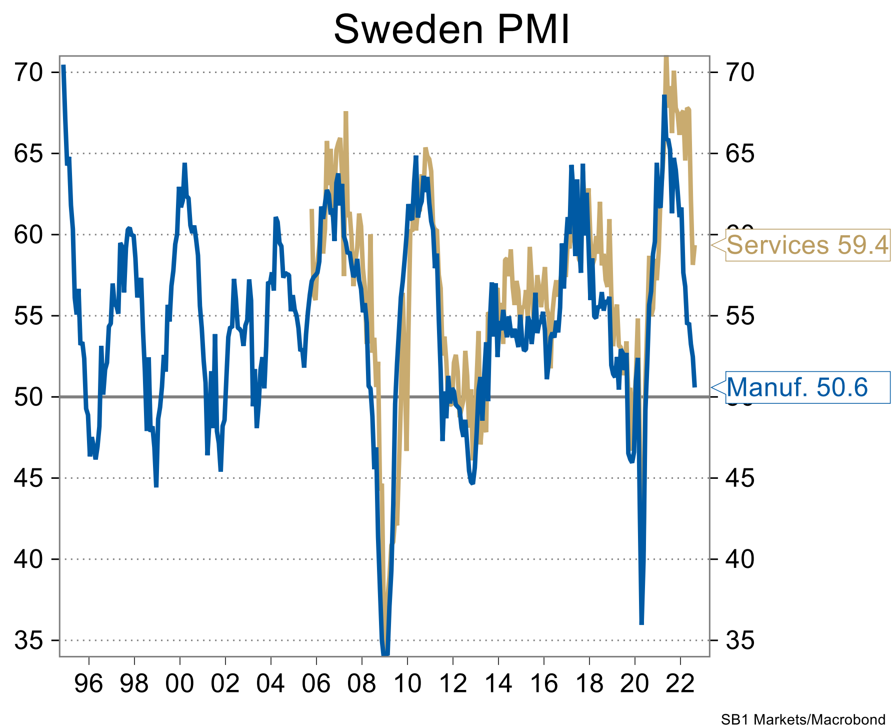


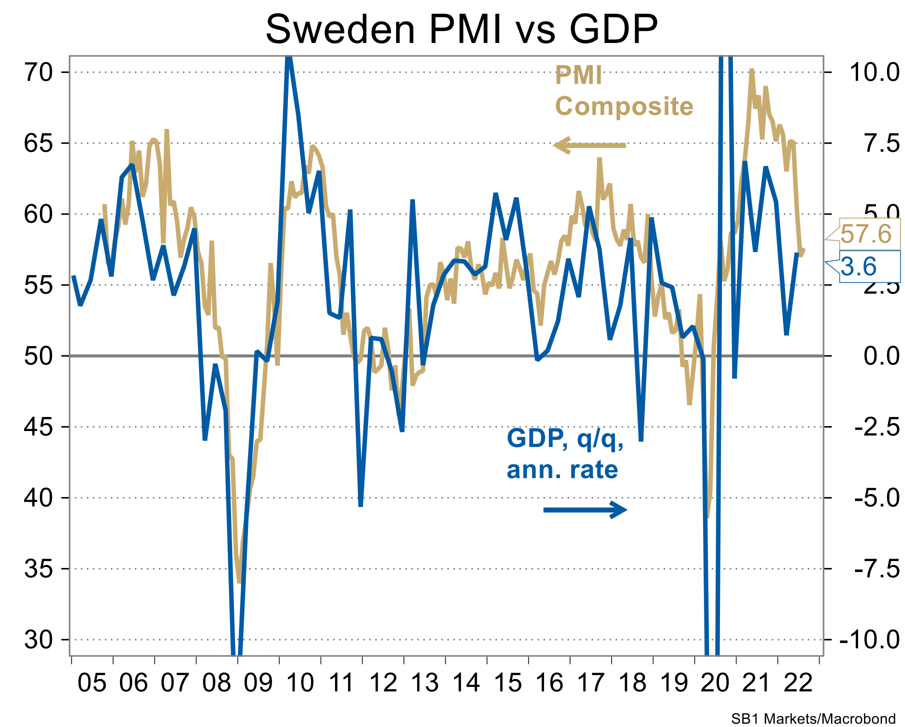


- GDP growth has picked up some steam the past 3 quarters

Services PMI way down from the peaks but still rock solid in August

The service PMI gained 1.3 p to 59.4, resulting in an increase in the composite PMI

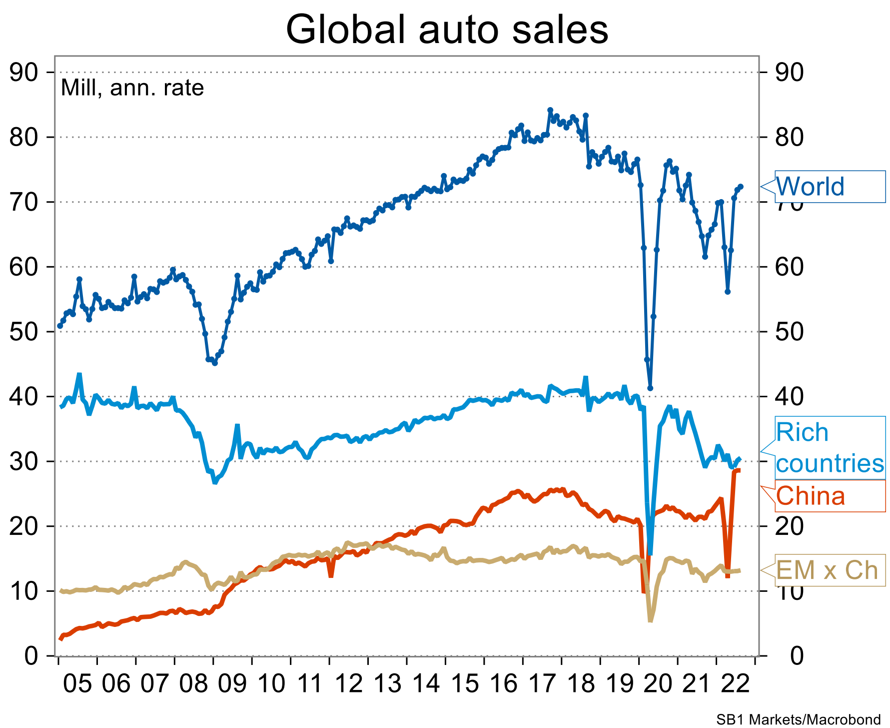


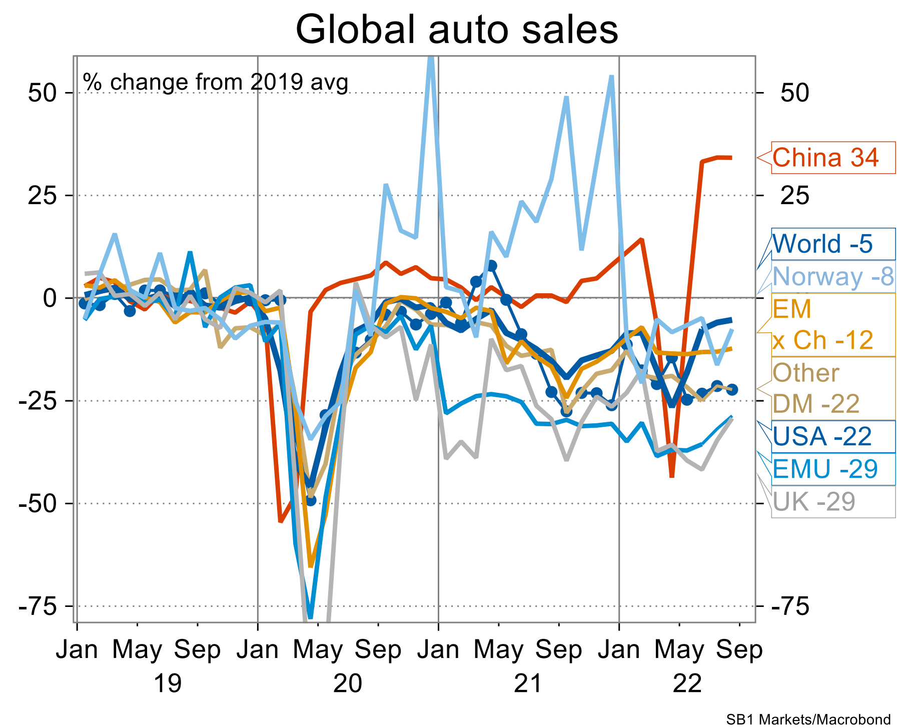


- The composite index rose by 0.6 p to 57.6. Although the PMIs have come down recently, the service sector is at a very high level. The manufacturing PMI declined by 1.9 p to 50.6 and is still expanding ever so slightly
- In Q2, **GDP** shot up at a 3.6% pace (0.9% not annualised, and revised upward, together with the Q1 outcome). At current levels, the composite PMI is signalling a GDP growth at around 3.8%

Incredible strong Chinese auto sales – so no panic even if housing is struggling

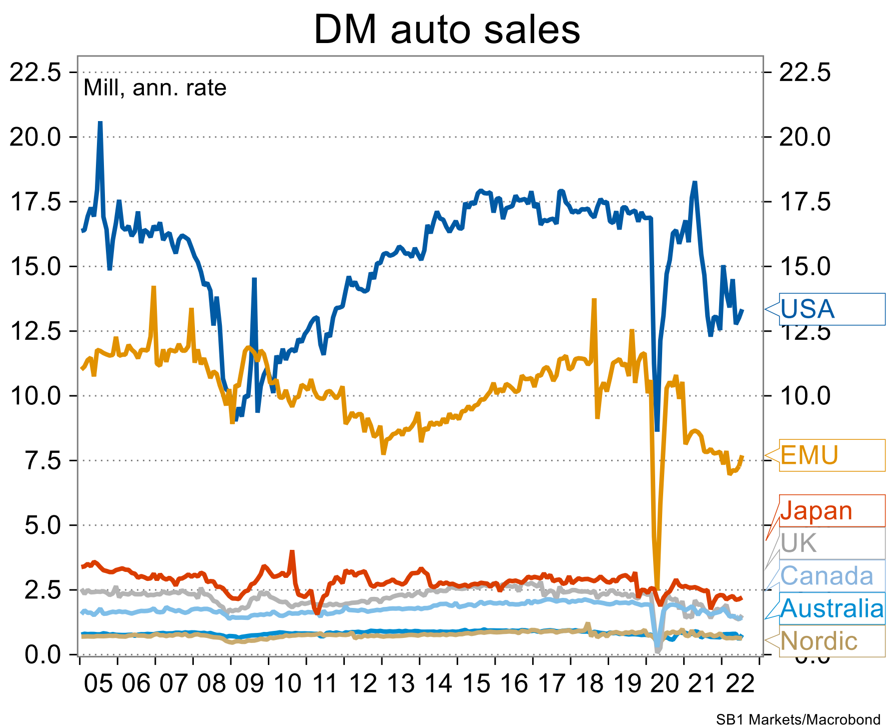
Global sales further up in August, as production is recovering. Sales are still 5% below the 2019 avg.

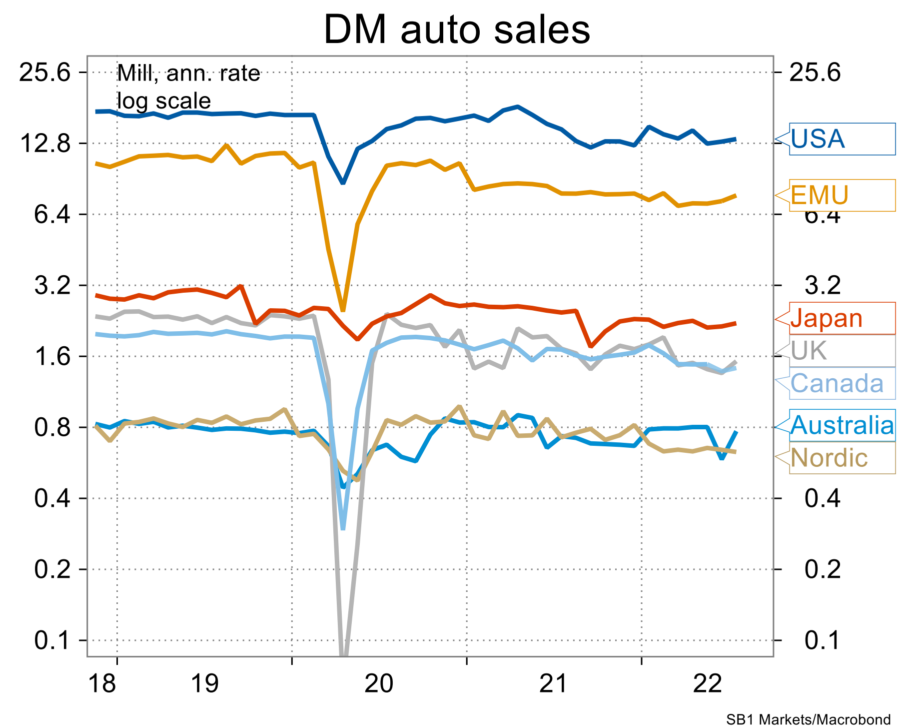




- **Global auto sales** rose 1% in August, following the 2% lift in July. Sales are the best since early 2021, and 'just' 5% below the 2019 level
- The regional differences are substantial: Sales kept up at high level in **China** (+34% vs 2019 avg.), and the slump in sales during the lockdowns is more than compensated. Sales in the **US** fell marginally to -22% vs 2019. **EMU** sales rose some 5% (our est.) but remain 29% below the 2019 level. **UK** sales rose as well, but also down 29%! **Norwegian** sales rose, and are just 8% below the 2019 level, best among rich countries
- **Russian sales** rose, but are down more than 70% since before the war, probably both due to lack of supply (imported cars at least) and reduced demand from households
- Still, **EM x China total** is down 'just' 12% vs. the 2019 level (the decline in Russia equals almost a 10 pp drag – and the rest is not that far below the '19 level)
- **Auto production** is very likely limiting sales most places. However, production is now heading upwards. Chinese production was 32% above the 2019 level in July. South Korea is also above the 2019 level, but auto production is well below a normal level in all western countries and in Japan

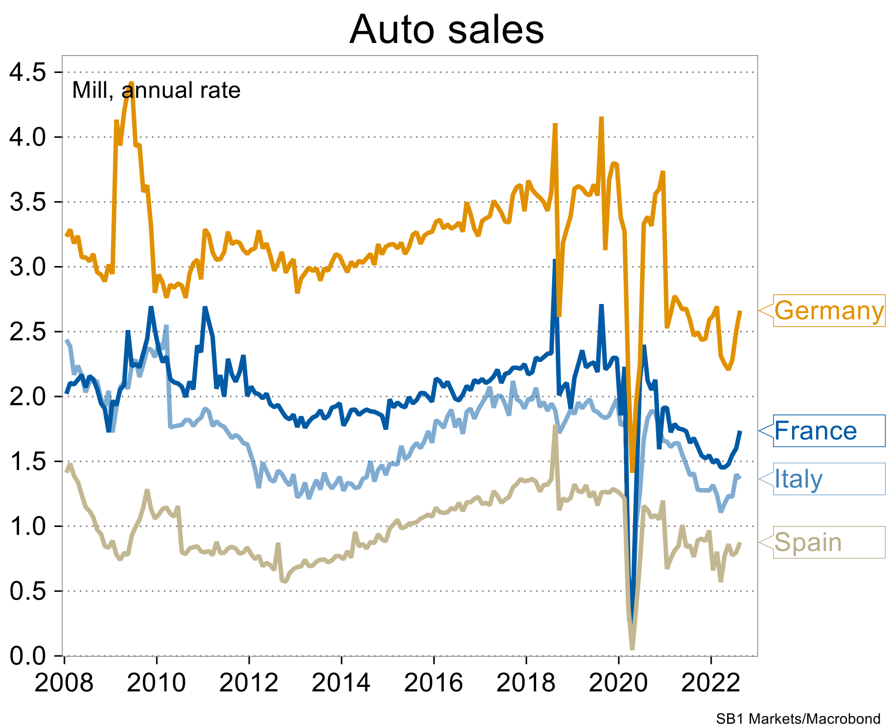
DM sales: Sales are mixed, and many are still trending down

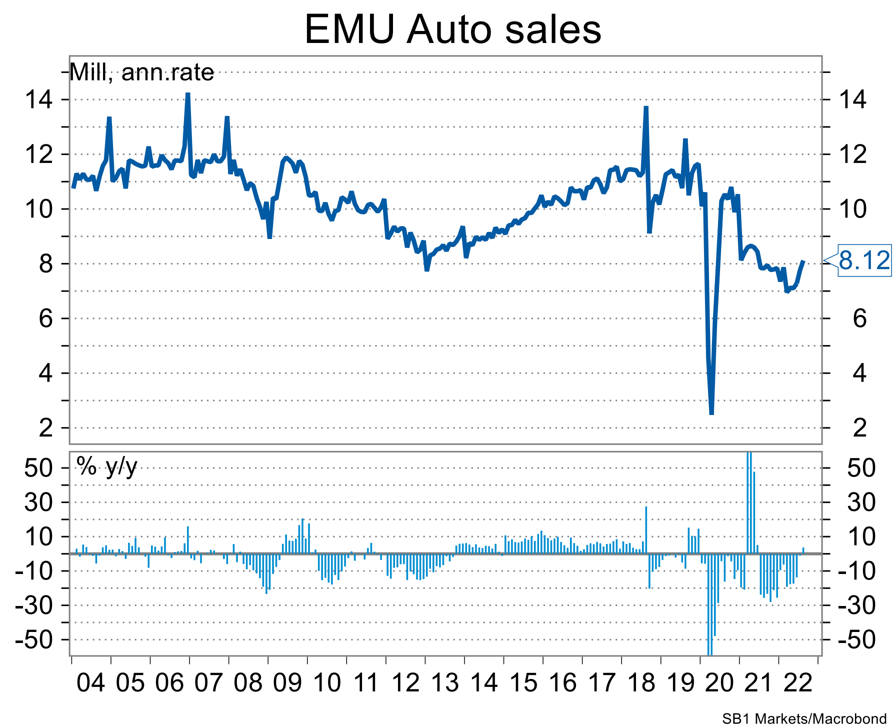




EMU: Sales further up in August – best since early 2021, still low

Sales rose the most in Germany and France

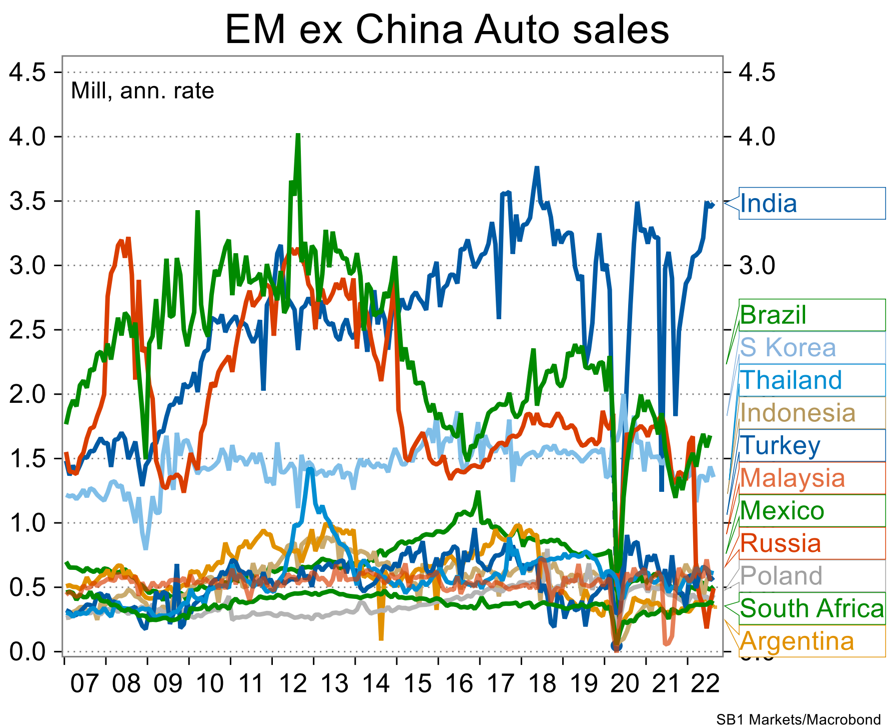


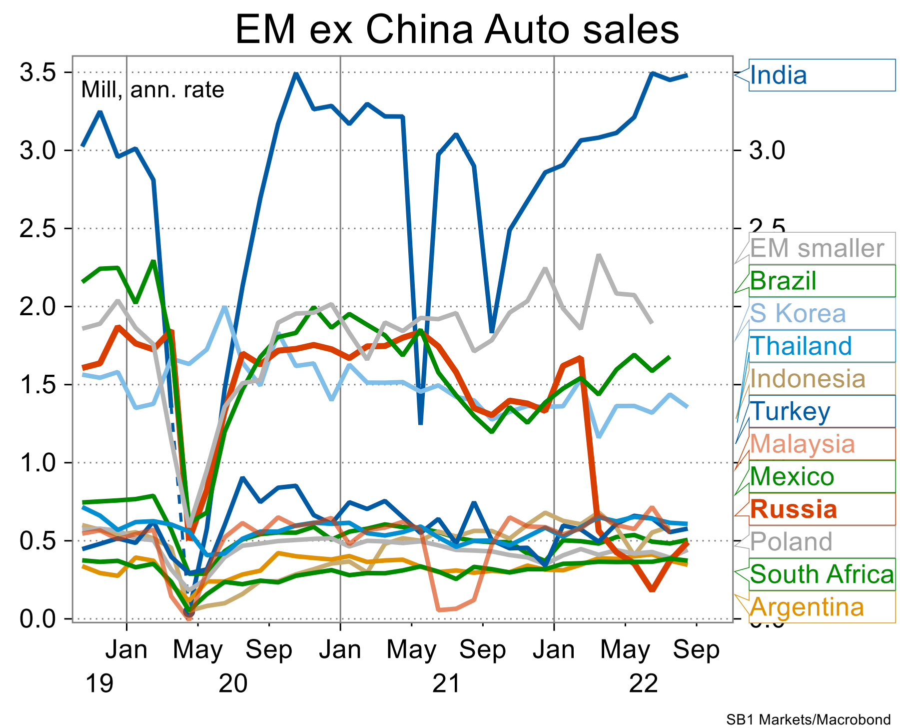


- Total EMU sales are our estimate

EM: Russian sales up in July but still down more than 80% from February

Sales in other EMs are ok – Indian sales still strong, and sales in Brazil, South Korea are on the way up



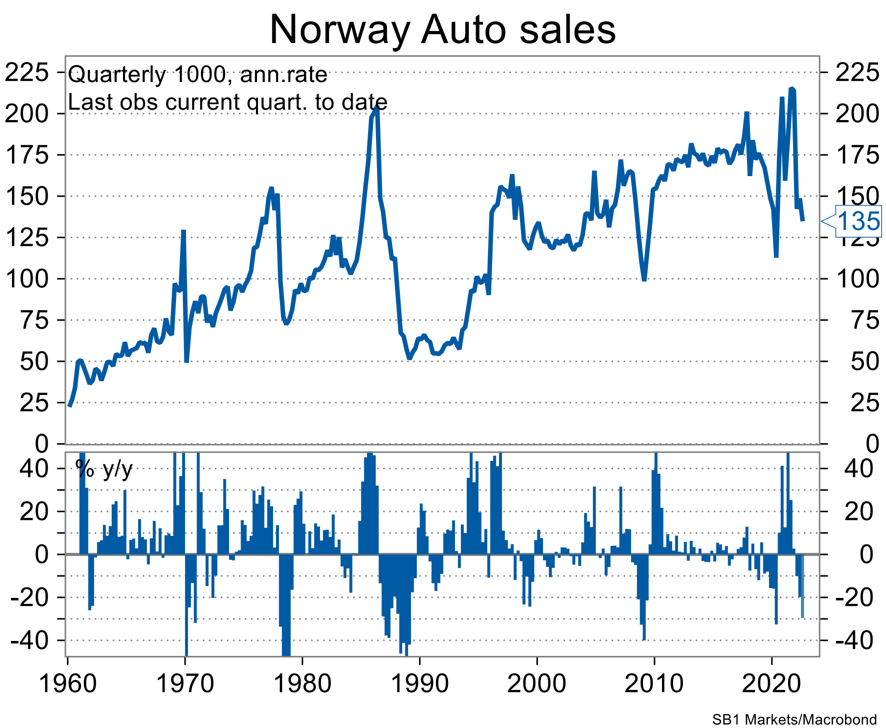


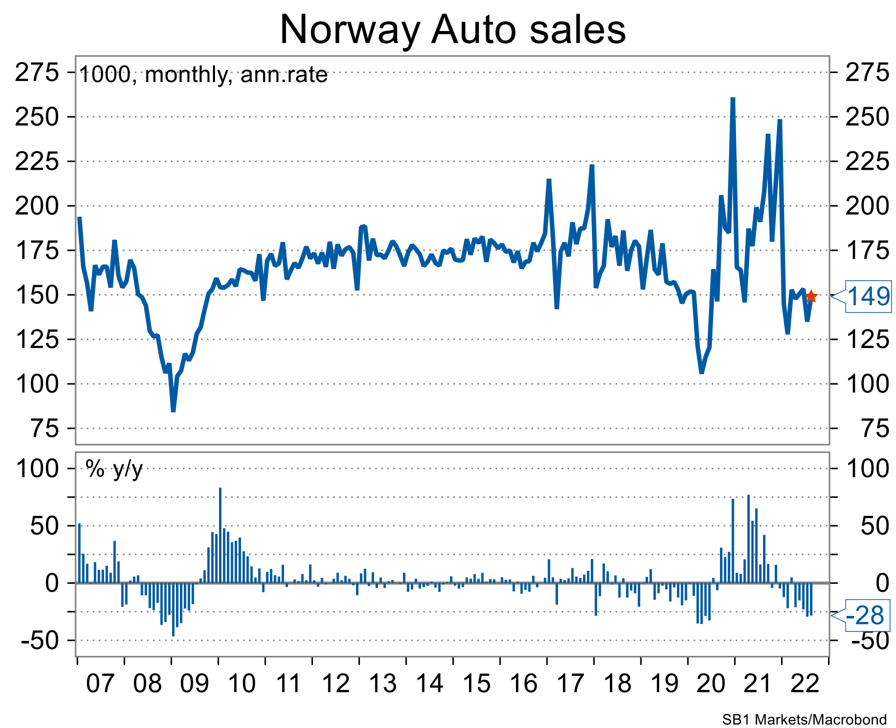
- Sales in EM x China & Russia are just marginally down vs the 2019 level

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

Norway: More new registrations in August, level well down from last years peaks

Media reports indicate that demand is no problem, but deliveries are the real challenge

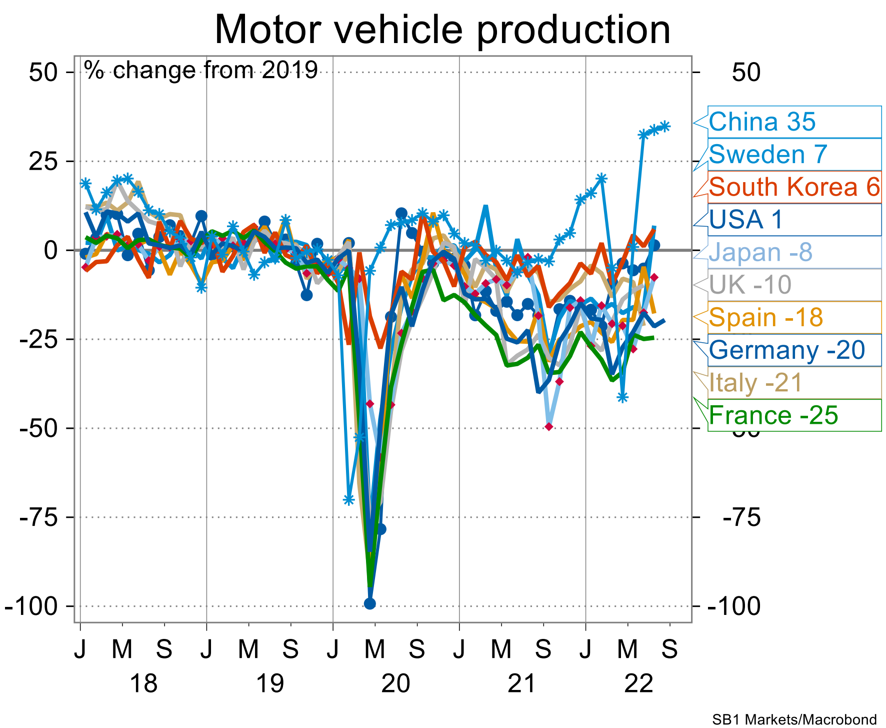




- New regs up to 149' from 135' in July – in line with the March-June level – and down 8% vs. the 2019 average, one of the best in DM

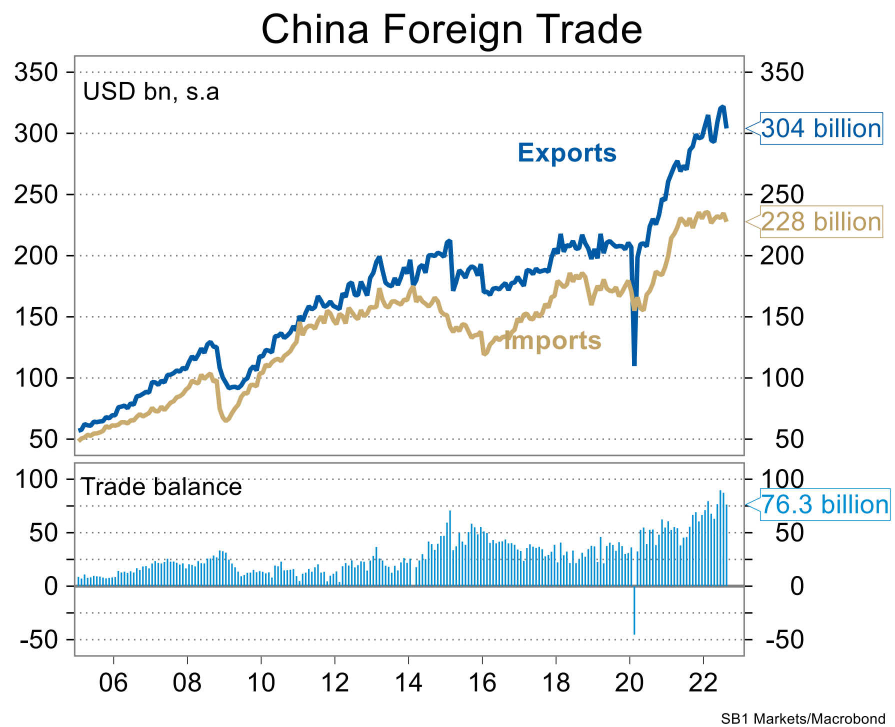
Full speed ahead in China – and others are recovering too

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



Global demand is softening. Exports down from ATH

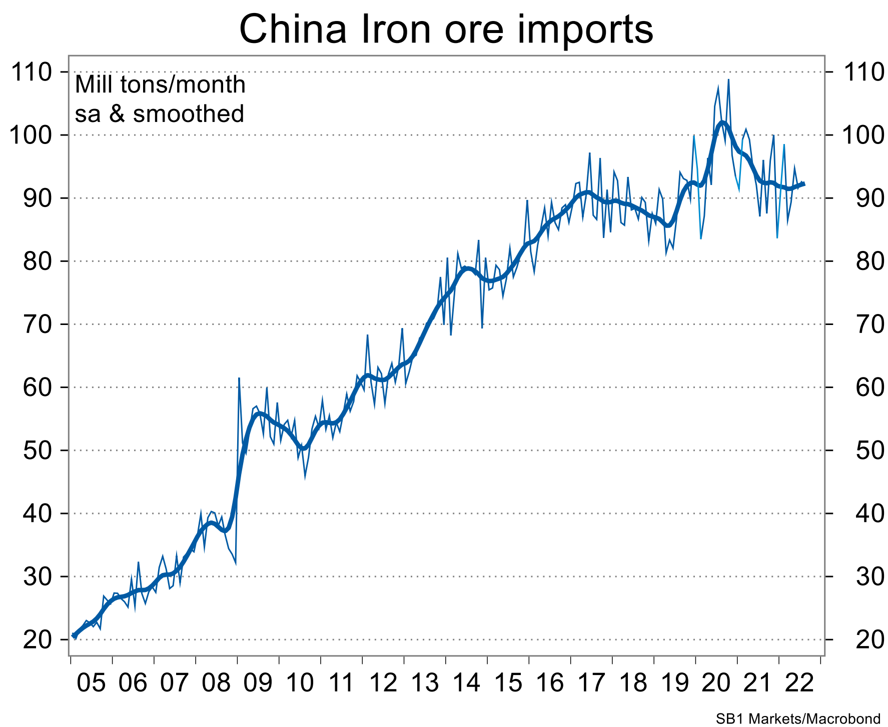
Imports down 3% (value terms) amid lockdowns, real estate slowdown

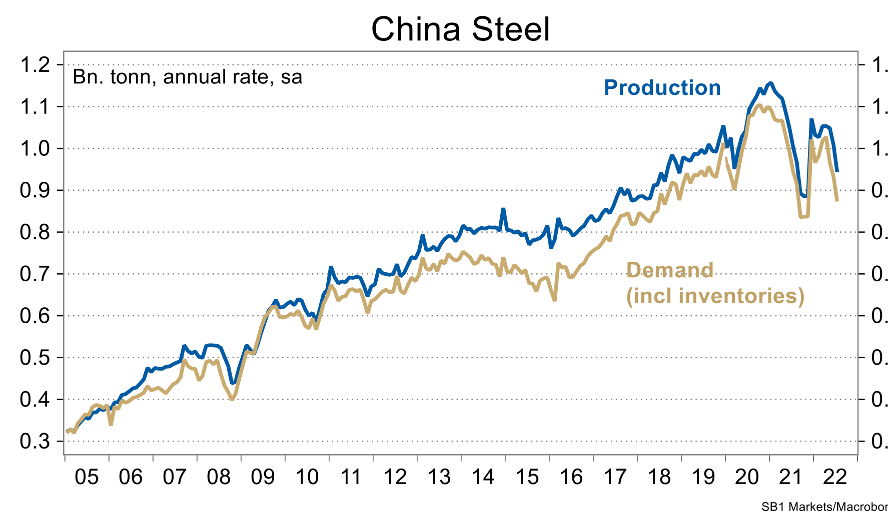


- **Export values** fell 5% in Aug following three strong month's post lockdown gains in May-July. Exports are up 6.2% y/y, 6.6 pp below expectations! Export values are still up 44% from before the pandemic, and **export volumes** are up 15%. Economic data and surveys have pointed to a slowdown in trading partners' economies and it seem as if this is now showing up in the Chinese data
- **Imports** were down 3% m/m in Aug, and are down 1.3% y/y, close to expectations. In **volume terms** imports are down by 14% from the peak level last spring – and roughly 8% below the pre-pandemic trend path
- The **trade surplus** at USD 79 bn was 13 bn smaller than expected, but the surplus is still among the highest ever. In seasonally adjusted terms, the surplus equalled USD 76 bn, or some 5% of GDP. Even if exports fell in August, Chinese growth has become (net) export led, once more? At least partially, as a higher trade surplus in goods have lifted GDP by some 2% since before the pandemic

Iron ore imports have flattened – 10% down from the peak in 2020

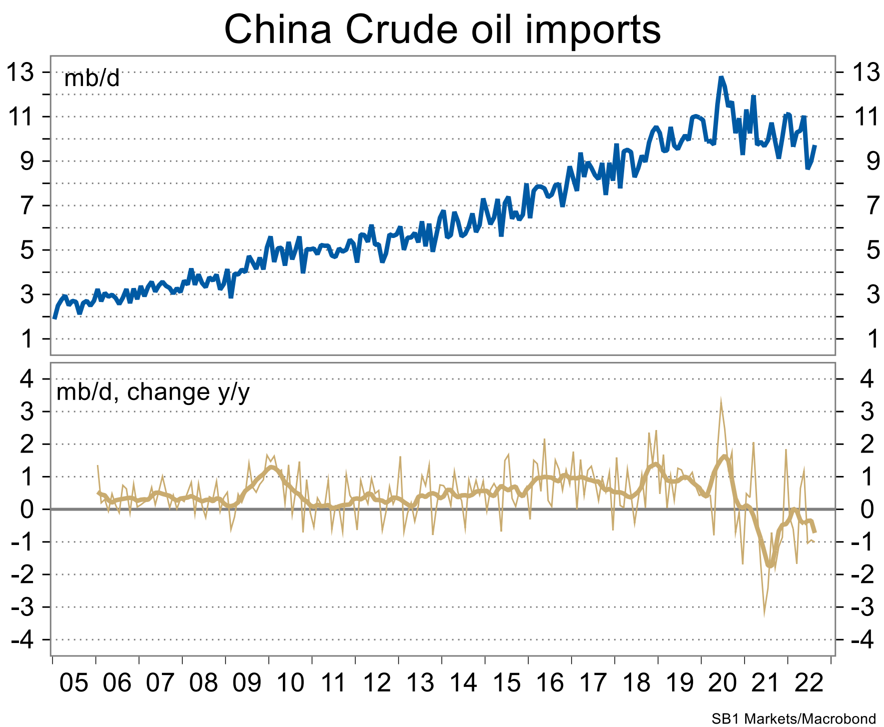
Steel production was down 6% in July, and is 18% below the peak in early 2021

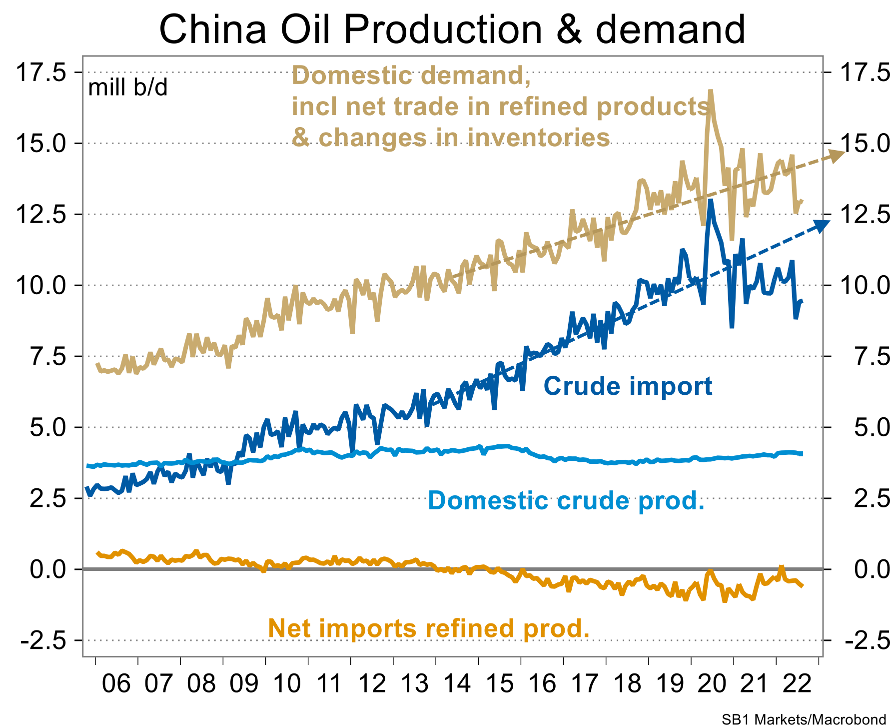




- **Steel production and domestic demand** (incl. inventories) fell sharply in Q2-Q3 last year – by 25% – due to public regulations and probably the setback in the construction sector
- Activity recovered sharply in December – and was stable through Q1, but is **down 10% April - July**
- **Domestic demand** has slowed past 4 months, probably due to the sharp contraction in construction starts. The 50% decline in starts signals a substantial cut in steel production the coming quarters

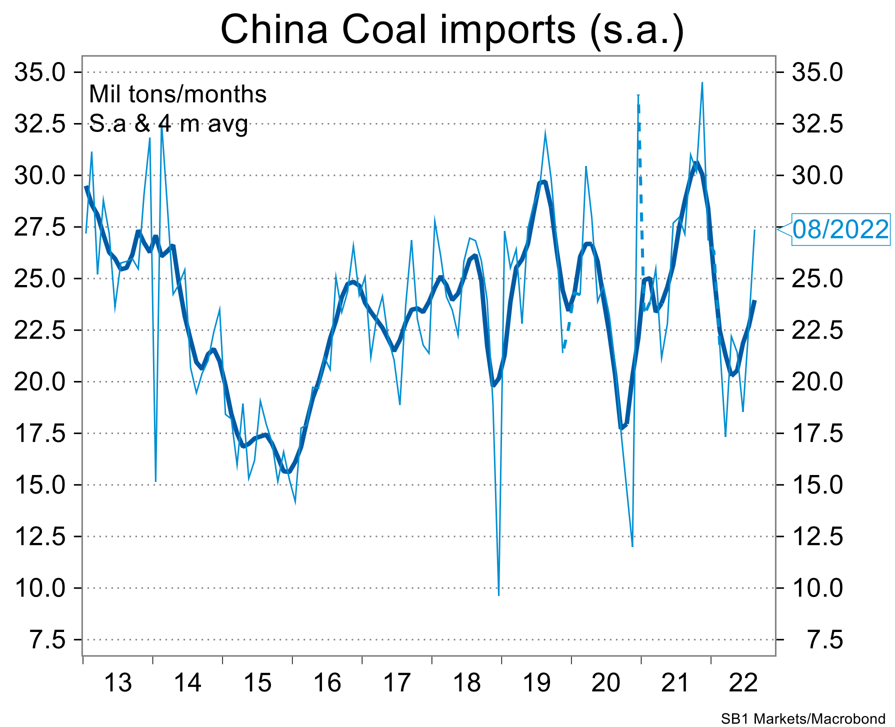
Crude oil imports slightly higher, still at a low level

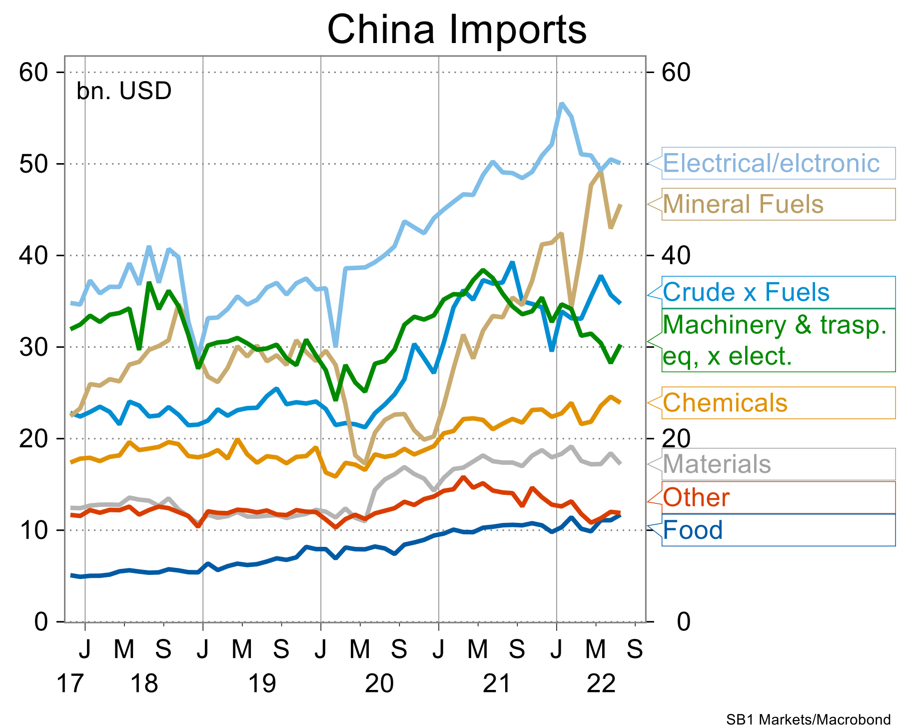




- 4 years without growth in **crude oil** import or domestic demand is rather surprising?
- However, higher net imports of **refined products** since early 2020 (almost 1 mb/d) and a small increase in domestic crude production have partly compensated for the flattening in crude imports - implying that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

Coal imports up 20% m/m in August, to an above average level

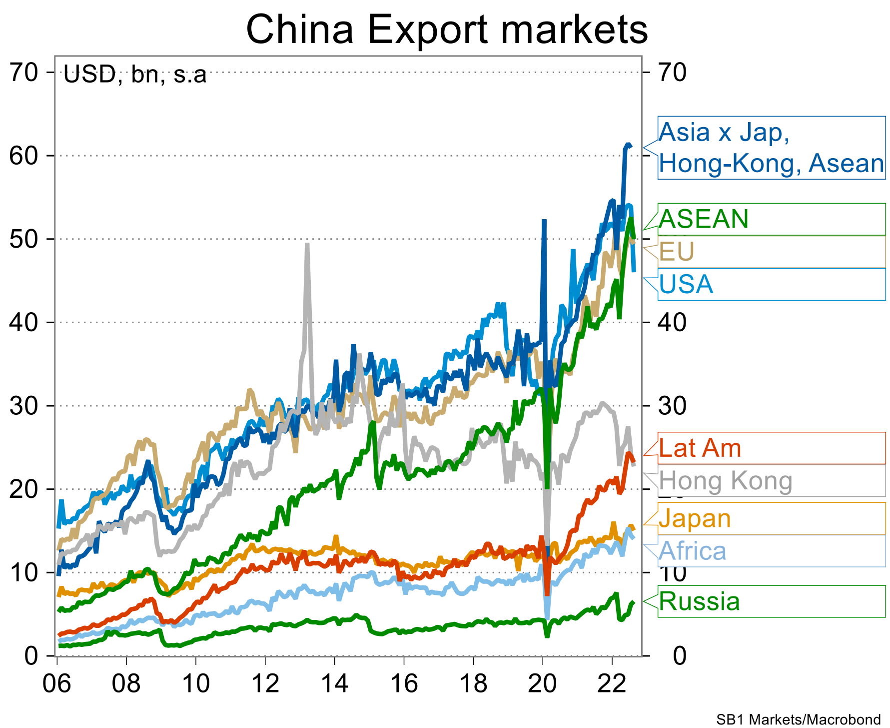


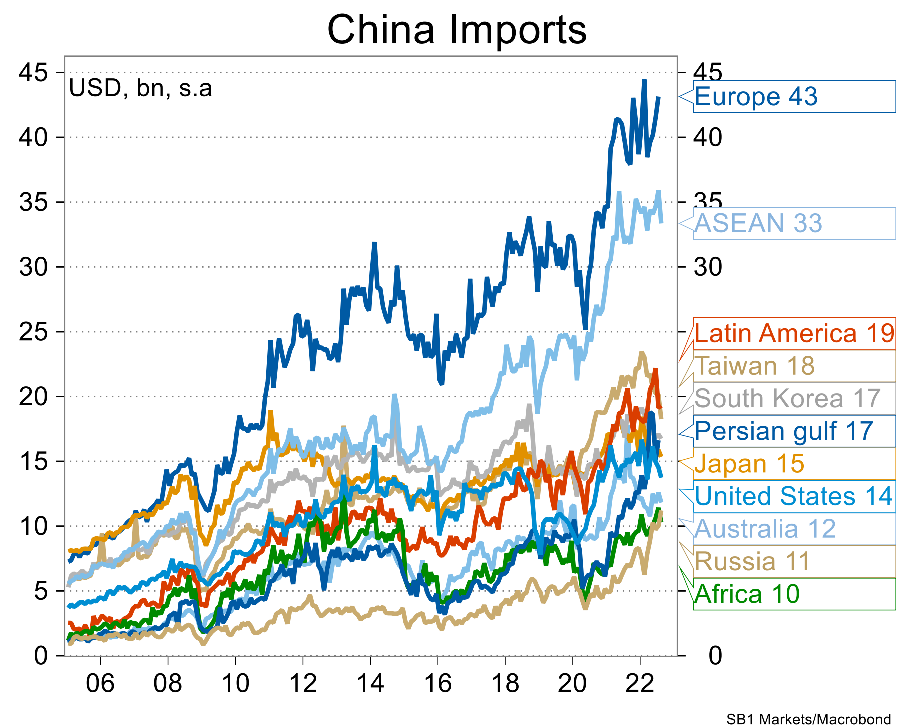


- Imports of machinery and mineral fuels rebounded in July after dipping in June

Chinese exports to Russia are still well below the pre-war level (but not low)

Imports from Russia are <u>much higher</u> than before the invasion in Ukraine, due to more oil imports

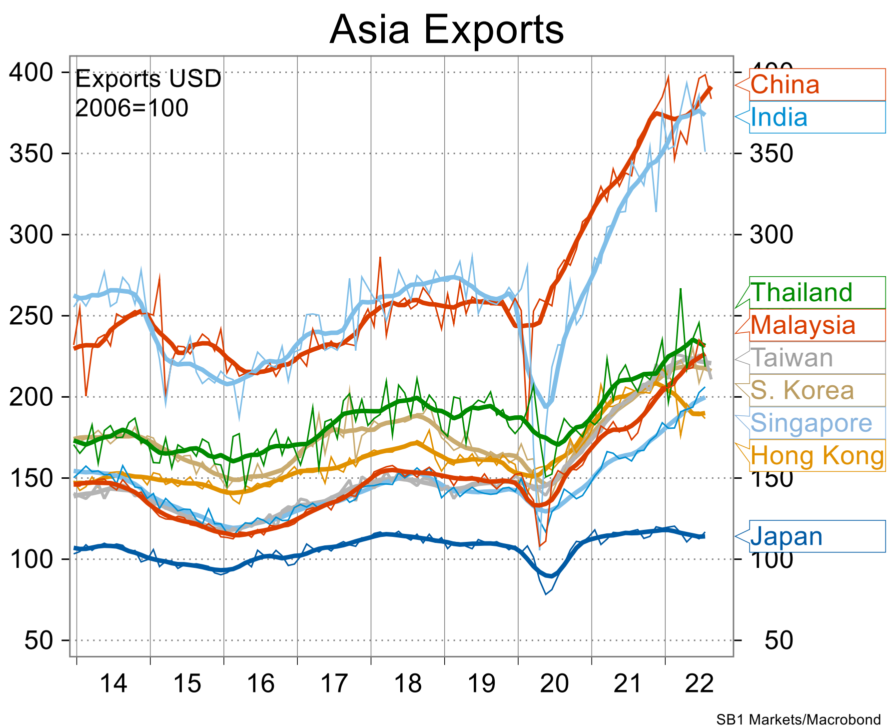


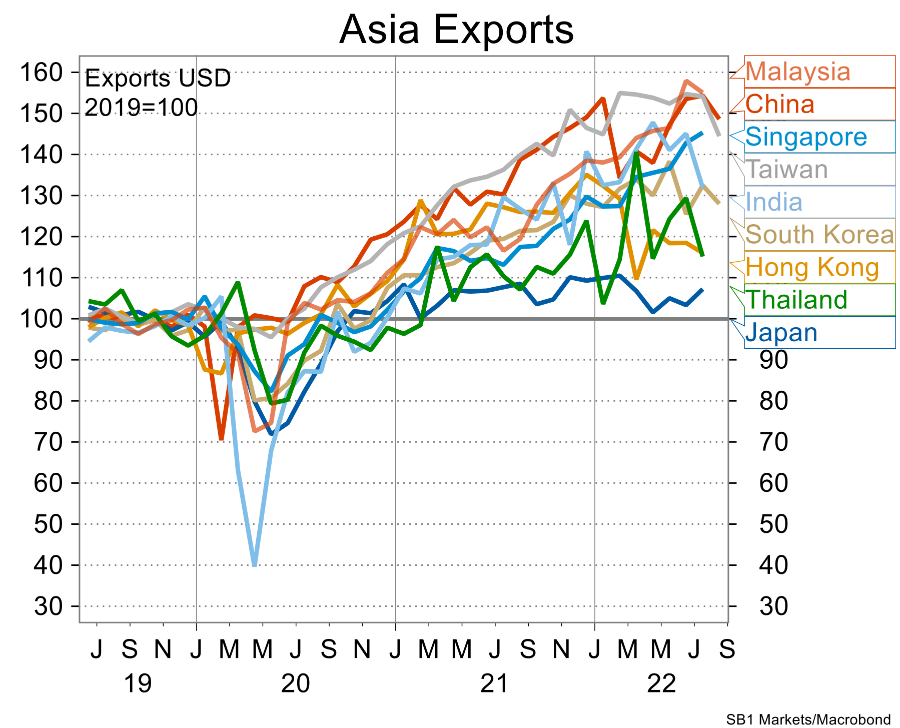


SpareBank 1 MARKETS

Exports from other Asian countries also down in August (ex Japan, Singapore)

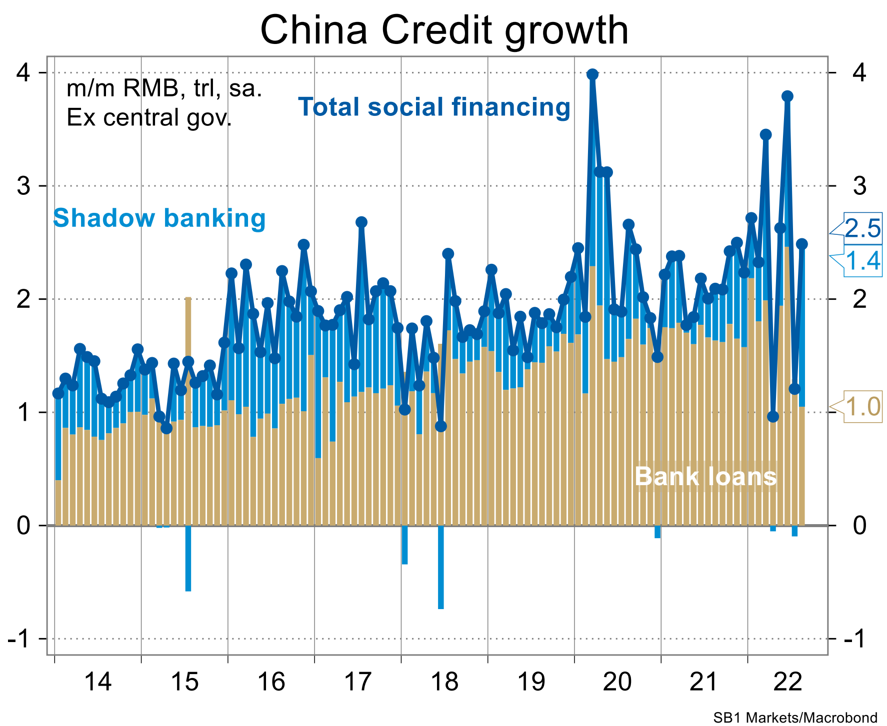
South Korea, Taiwan, Hong Kong, Japan are all trending down

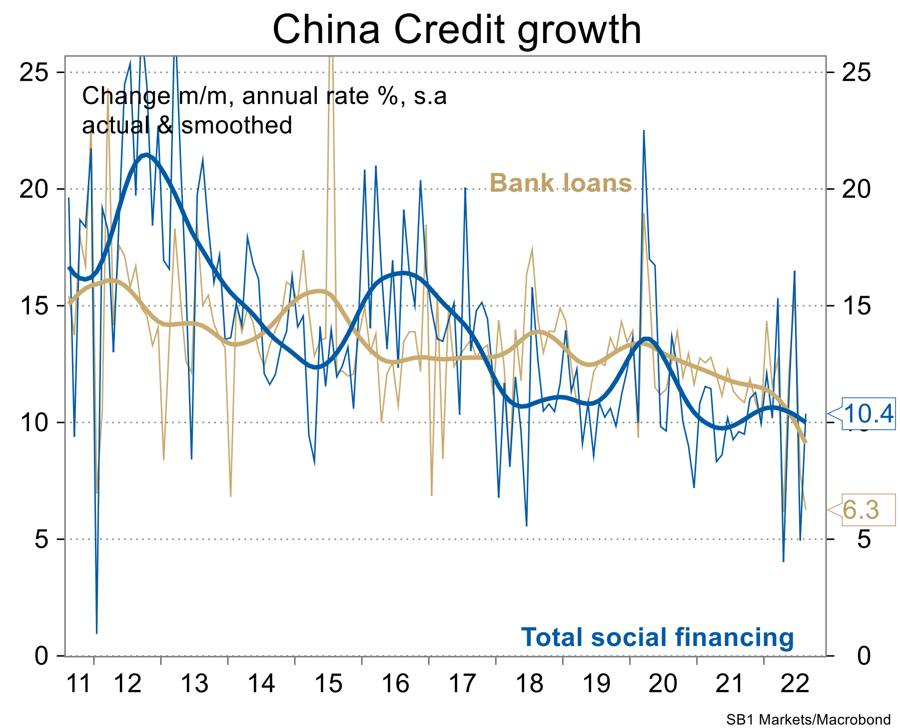




Bank credit declined further, shadow banking came back in August

Total credit growth higher than expected – up to a 10.4% pace from a 5% pace in July

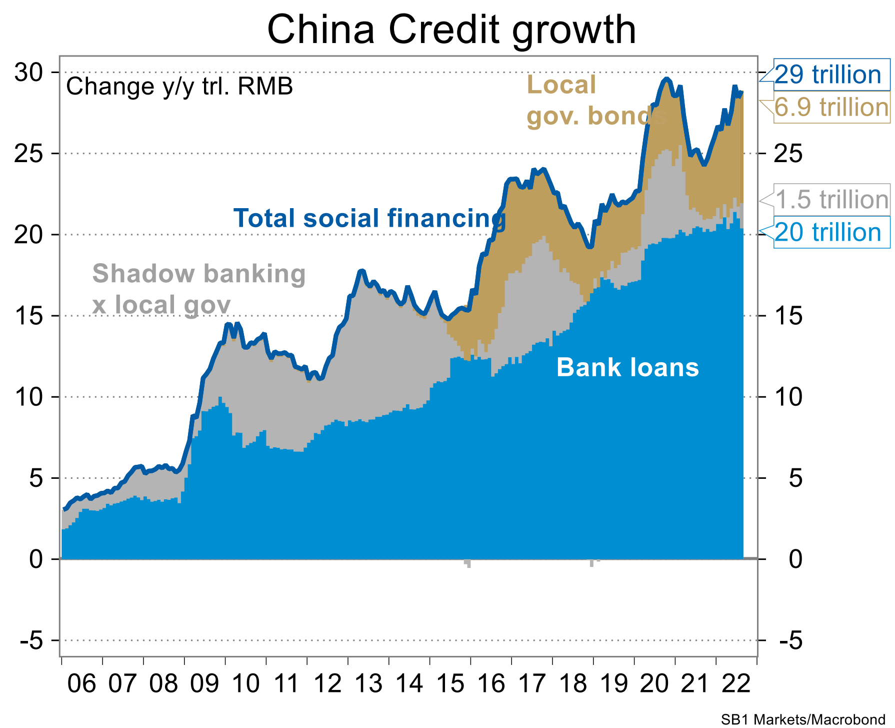


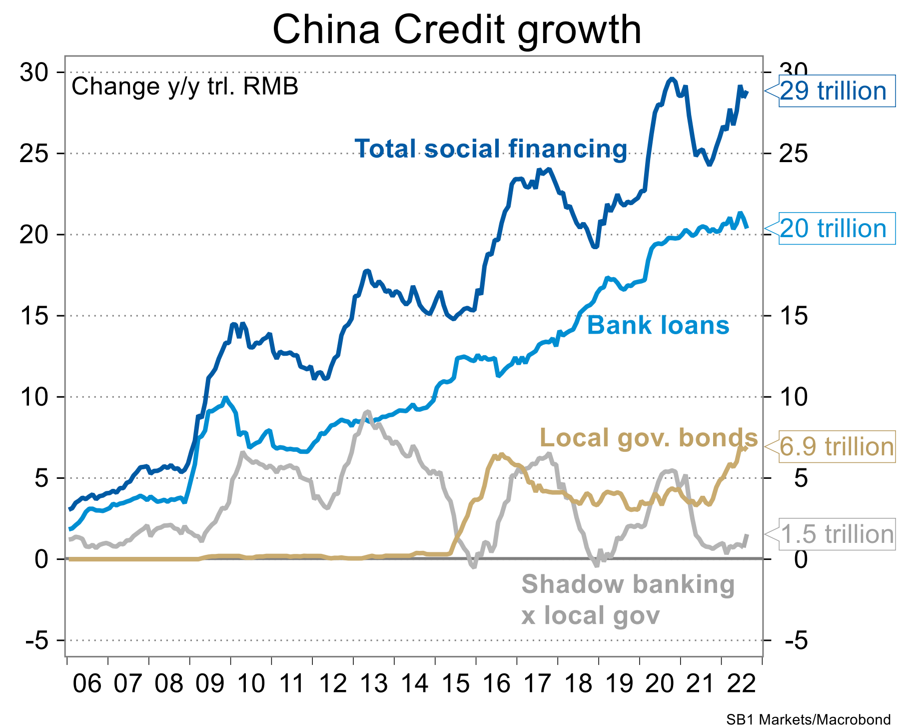


- **Total credit** grew at a 10.4% pace in July (m/m, seas. adj. annualised), however, up from one of the lowest prints ever. The annual growth rate gained 0.1 pp to 10.5%, and the growth rate is trending upwards
- **Total credit** rose by 2.4 RMB trl, expected 2.1 trl (not seas. adj). The 'core' total social credit (total ex central gov bonds & corporate equites) grew by 2.5 trl (seas adj), up from 1.2 trl in July. The August growth rate is close to 'normal', following the unusual slow growth in August
  - » **Bank loans** rose by RMB 1.0 trl (s.a) or at a 6.3% annualised pace, below expectations of RMB 1.5 trl – the 2nd month in row with unusual slow growth in bank loans. Guess authorities are somewhat anxious…
  - » **Shadow banking credit** rose by RMB 1.4 trl, and is up 9.7% y/y
  - » **Local governments have been** responsible for most of the increase in credit outside banks recent months. Less revenues from sale of land, and public financing of unfinished building projects may explain the steep increase in debt (25% y/y)

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

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

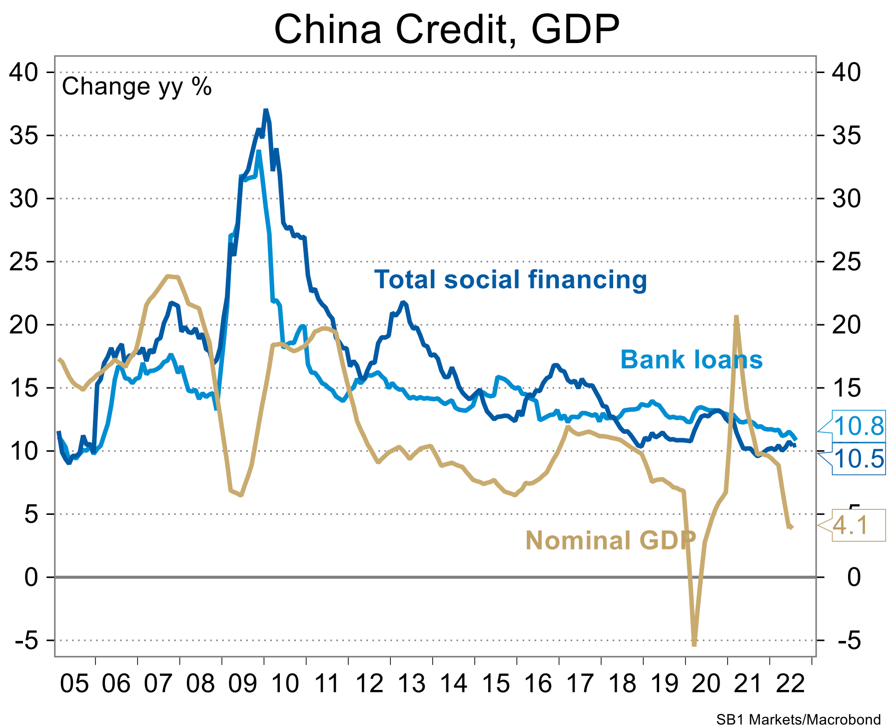


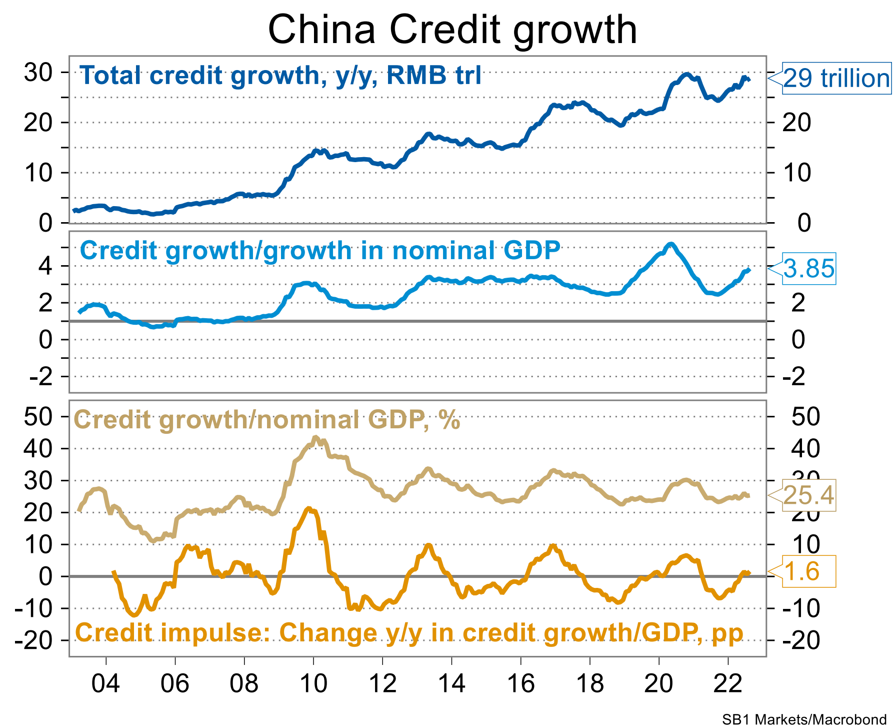


- Over the past year, **total credit** has expanded by RMB 29 trl, equalling more than 25% of annual GDP, up from the 24 trl at the bottom last Sept, (but still down from almost RMB 30 trl at the peak in 2020)
- **Banks** supplied RMB 20 trl of the y/y increase – and the rate has been almost flat since early last year, implying a gradual decline in the y/y growth
- **Local governments** have accelerated their credit growth, now up 6.9 trl – to 25% y/y, up from 13% y/y last September!
- Growth in other credit – via the **shadow credit market x local gov bonds** – has slowed to RMB 1.5 trl from 5 trl in 2020 (a dramatic slowdown, like many times before…). Growth has increased slightly the past 3 months

Big picture: Credit growth has accelerated, supported by more local gov. debt

… and now central authorities order local governments to borrow even more

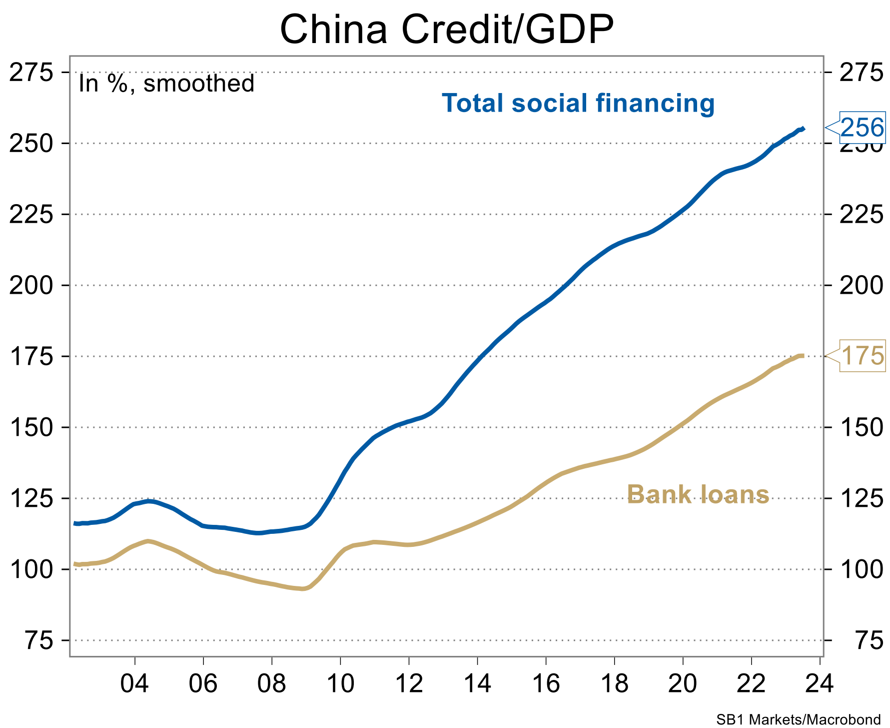


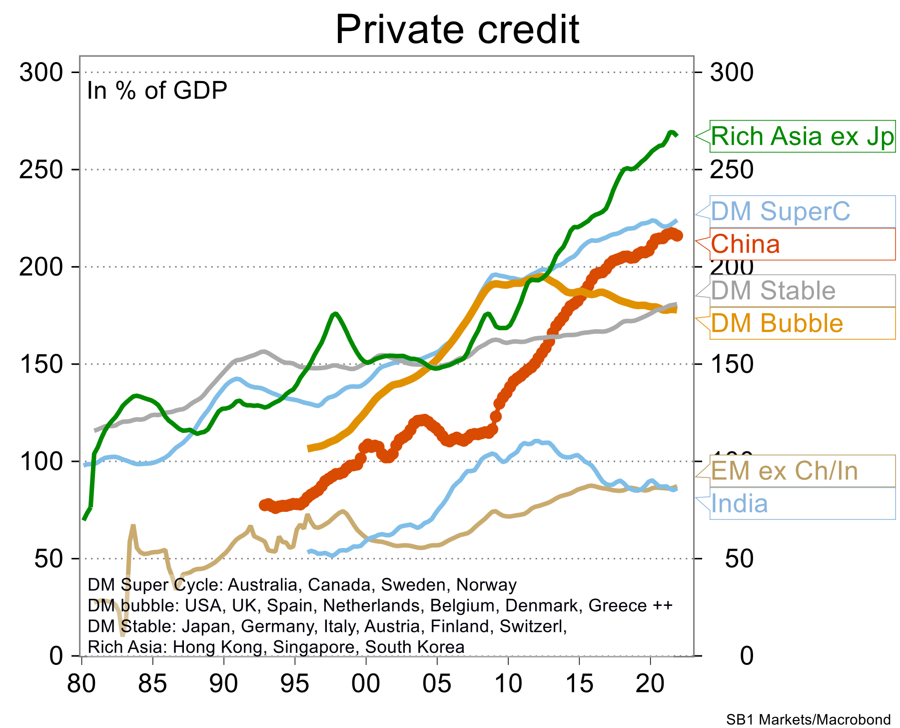


- The credit impulse (change in credit growth vs. nominal GDP) has turned positive, even after the decline in the annual growth rate in July
- **Central authorities** have signalled that **local governments** will be allowed to borrow an additional 1.5 trl by issuing special bonds in H2 in order to fund **infrastructure investments**, lifting overall credit growth by some 0.6 pp (from the present 10.5%).
  - » If executed, local governments may increase their bond debt by an extra 0.25 trl/m, we assume in addition the 'ordinary' RMB 0.6 trl/month
- Bank lending is still soft – The PBoC is likely to take further action, and it has room to do so as China does not have an inflation problem (*see two pages forward*)

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

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

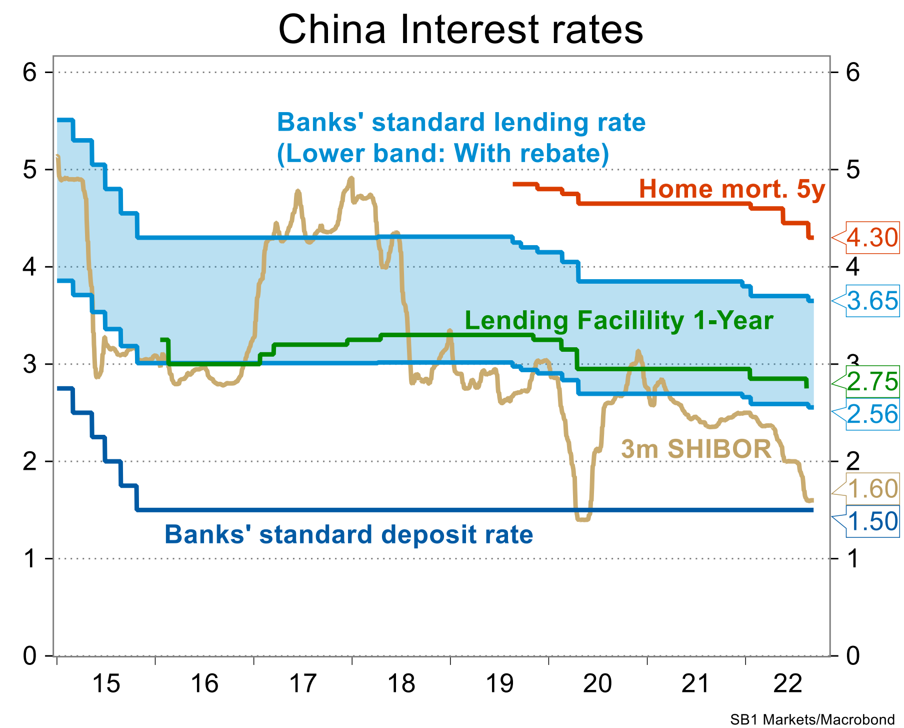


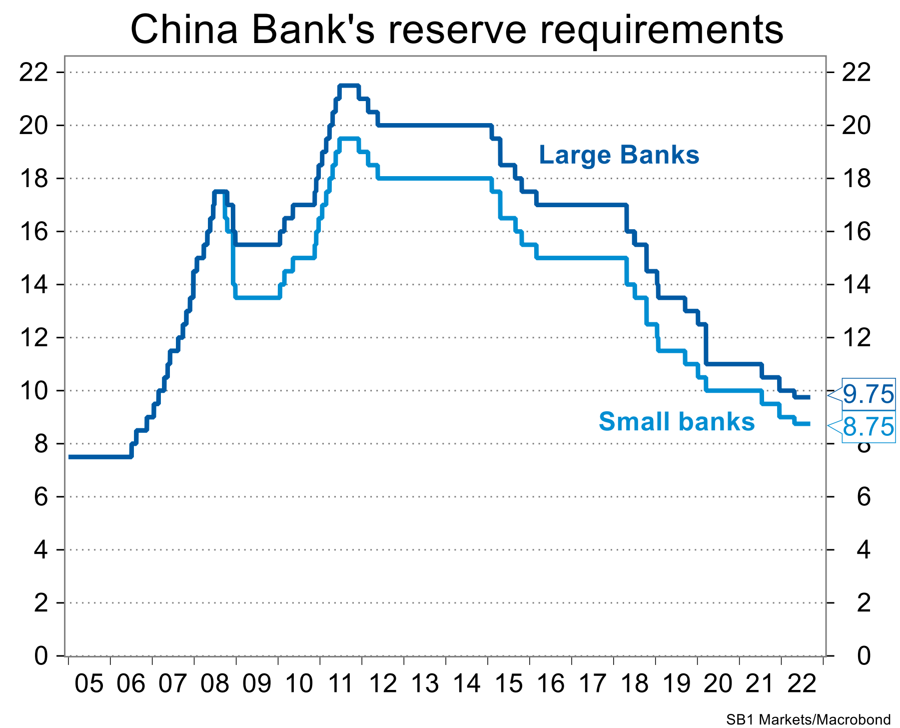


- And there some other outliers: DM Supercyclicals (Australia, Canada, Norway, Sweden)

More easing in the cards?

Reserve requirements may be cut further, as may signal policy rates

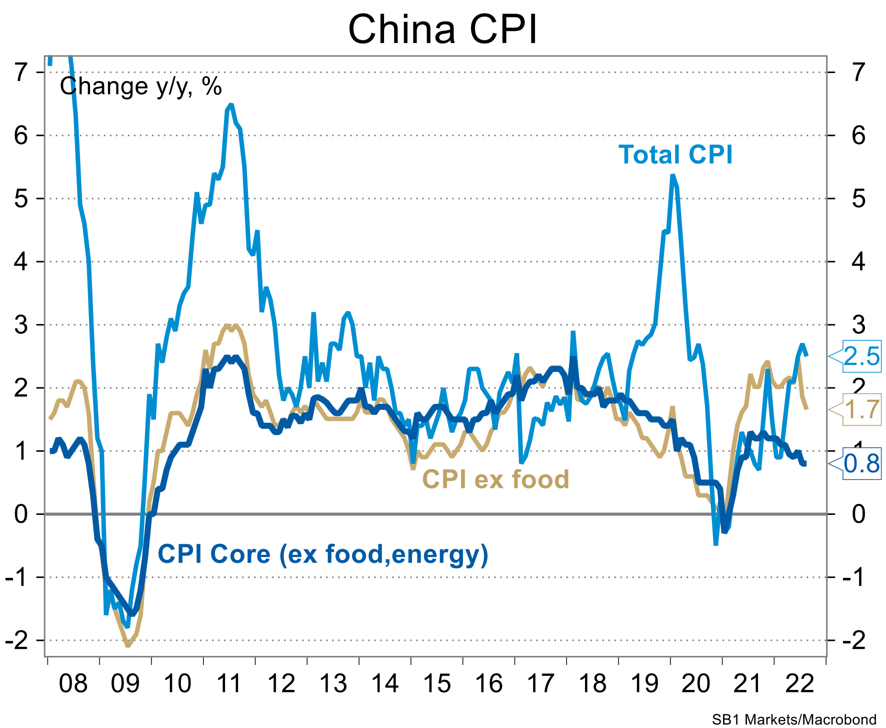


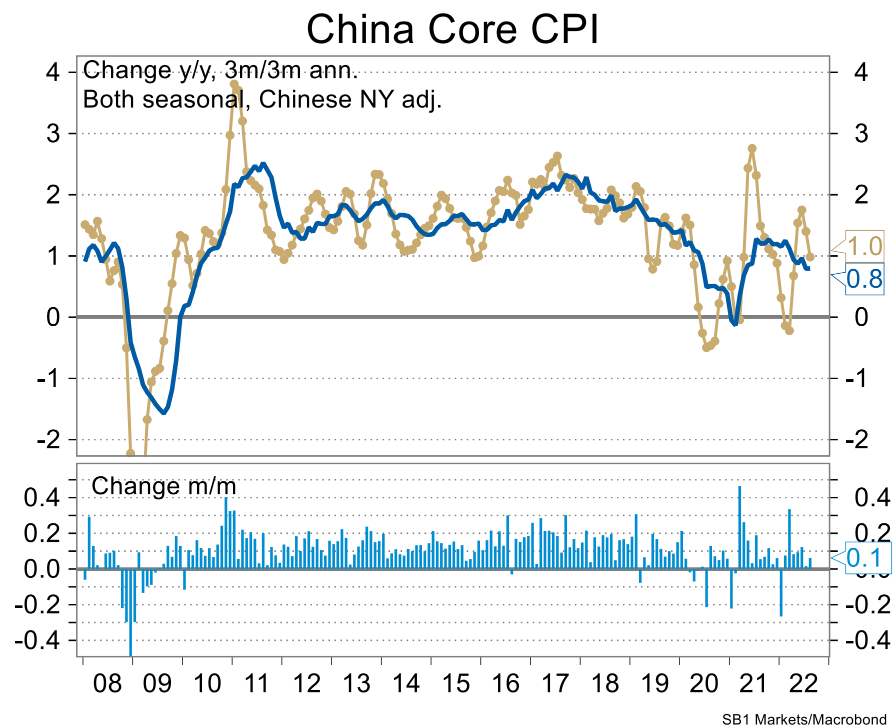


- In addition to minor cuts in signal rates, a series of ambitious schemes for funding of infrastructure projects (and some housing emergency financing) have been announced recent months and weeks, primarily funded via higher quotas for local government borrowing in the bond market. Let’s hope and pray these money are well spent.

Headline inflation down 0.2 pp to 2.5%, the core flat at 0.8%

Inflation is not China's predominant challenge these days, to put it mildly

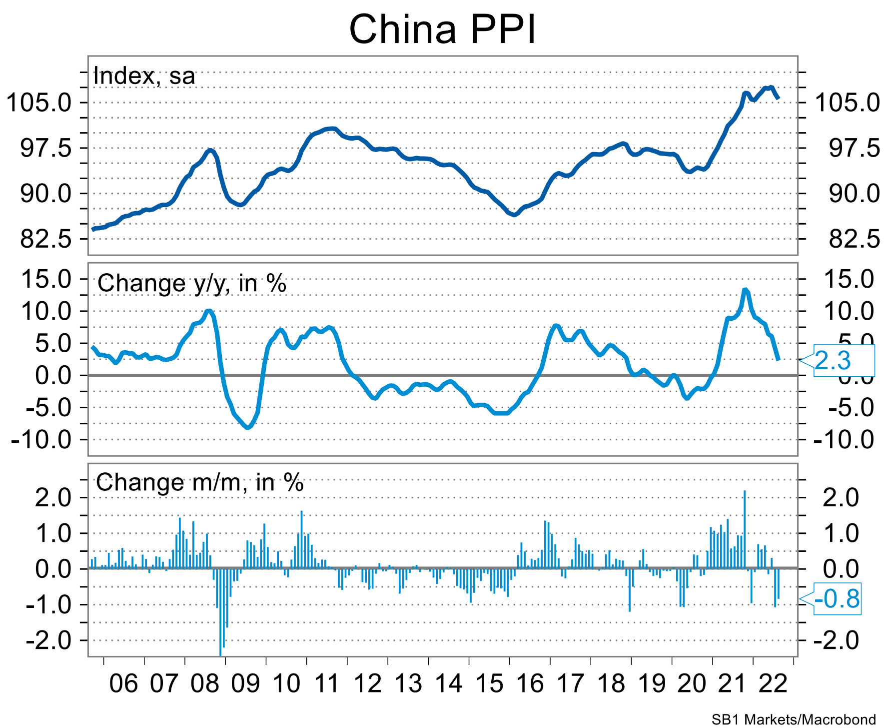


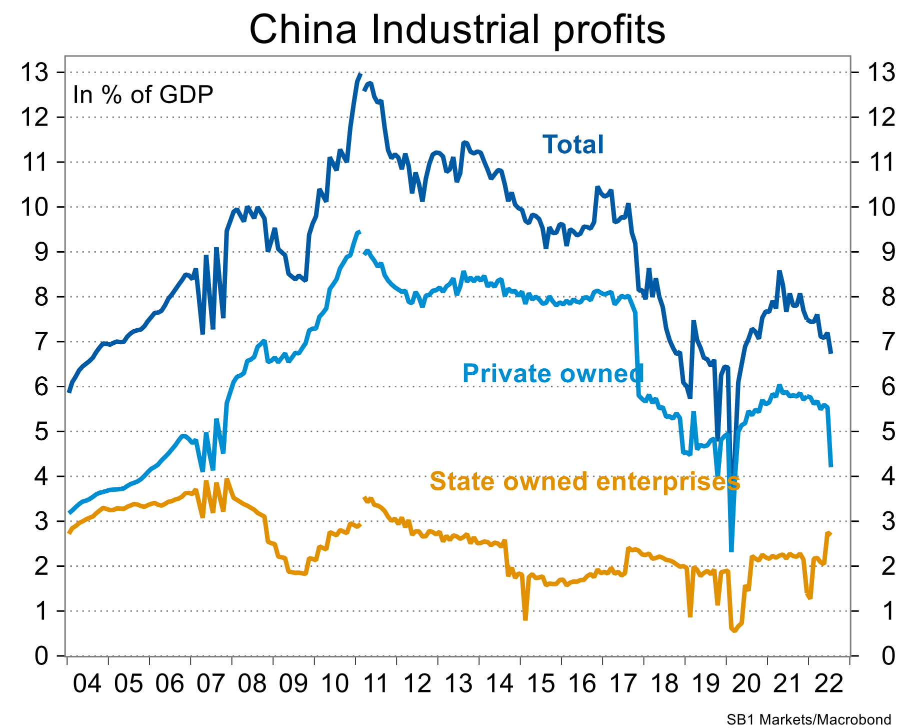


- **Total annual CPI** was decelerated to 2.5% in Aug, expected up to 2.8%. Prices fell 0.1% m/m, down from 0.5% in July
- **The core CPI** (x energy, food) was rose 0.1% m/m in Aug, and the annual rate was flat at 0.8% y/y. The 3m/3m rate is at 1.0%
- **Food prices** are up 6.1% y/y, with pork prices again in the lead, up 22%
- **Gasoline/fuel prices** are up 20% (still down from 24% y/y in July)
- **Both core & headline inflation** is still low. **Monetary policy** will not respond to actual inflation data if inflation is not really high or low, the real economy and the credit market is more important. Now authorities try to kickstart the economy again after the lockdowns

Producer prices keep falling, down 0.8% in July; annual rate has fallen to 2.3%

A sign of slowdown in goods inflation globally? Corporate profits are heading south

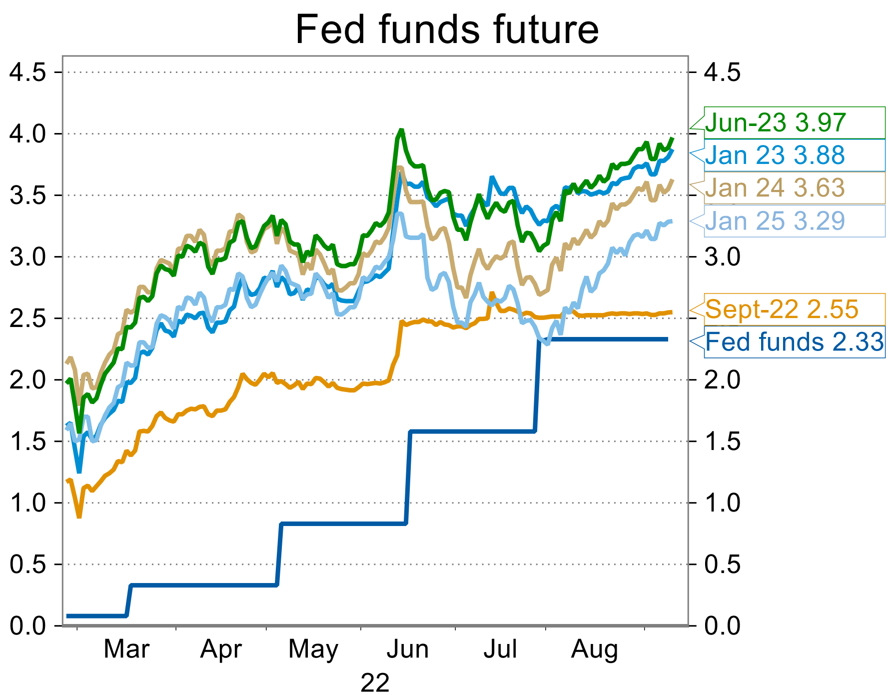




- **At the peak**, the PPI was up 13.5%, in last October
- **The PPI** fell by 1.2% m/m in July, and now by 0.8% in Aug. World demand softening?
- **Consumer goods** are up just 1.6% y/y, durable consumer goods are <u>down</u> 0.6% y/y, while raw materials are up 8% - explaining the squeeze on profits
- The correlation between PPI and CPI in China is not impressive (but far better with the US CPI…)
- **Profits in privately owned industrial enterprises** are declining in % of GDP. The drop in July must be due to reclassification of some companies, state owned enterprises were lifted substantially (though in June)

Fed's Beige book reports that activity has flattened!

… and wage, price pressures are easing but are still elevated. Still a 75 bps hike next week. But then?



SB1 Markets/Macrobond

USA Fed funds rate (OIS)

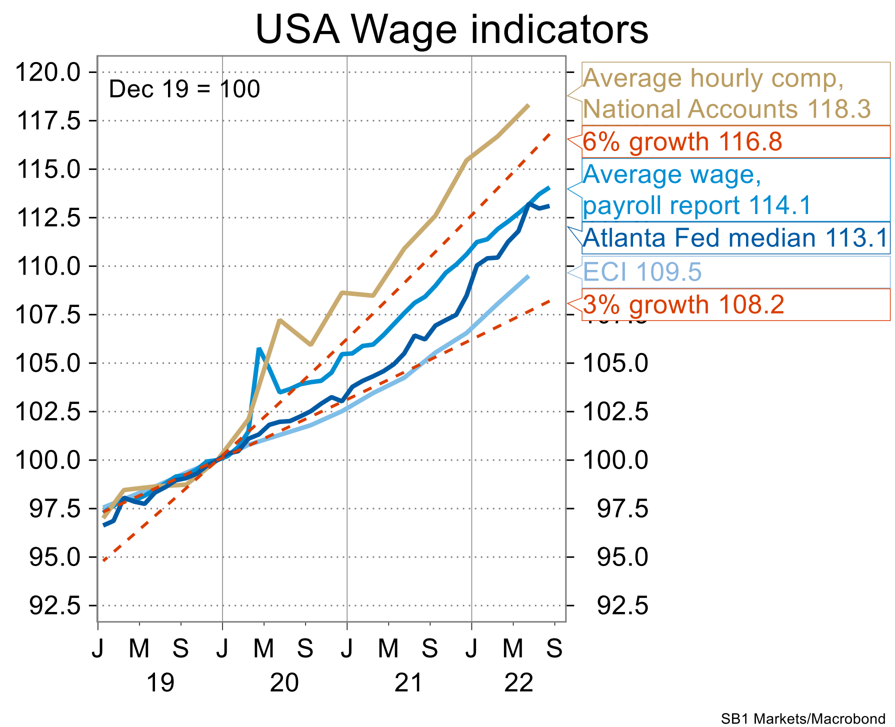
FOMC meetings	Effective Fed funds rate	Last	Change last week
Now		2.33	0.00
Sept 21		3.04	0.07
Nov 2		3.55	0.11
Dec 14		3.83	0.13
Feb 1		3.93	0.11
March 22		3.95	0.09
May 3		3.93	0.08

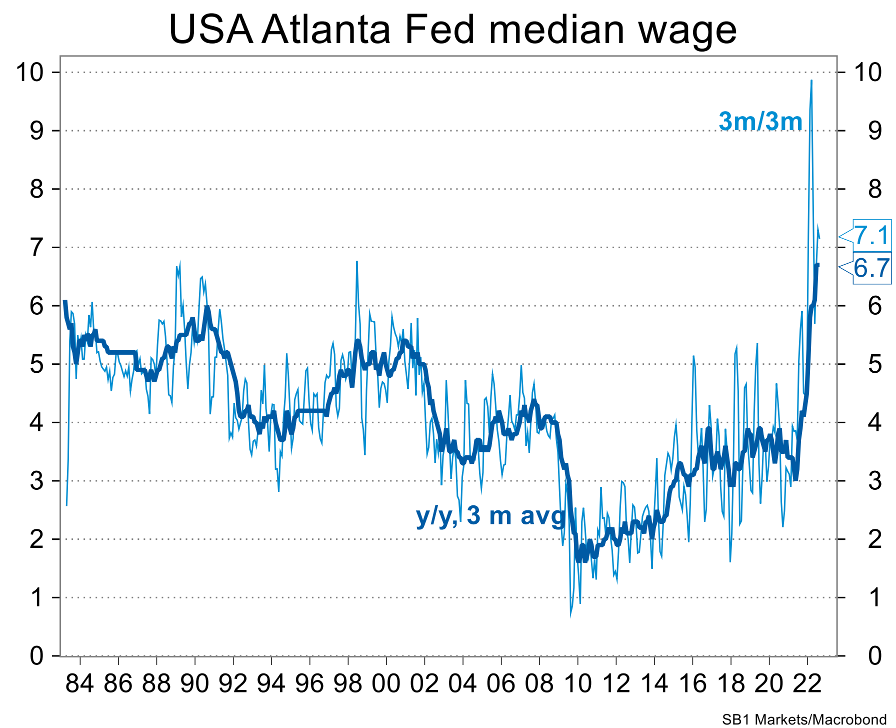
■ Last ● Change last week

- Main messages from the regional survey
  - » On average, economic activity was unchanged from the last report. 5 districts report that activity contracted modestly, and 2 districts said growth had stalled, and the remaining 5 reported modest growth
  - » High inflation had made a dent in household demand; essentials are being prioritised
  - » Demand for housing weakened noticeably – home sales fell in all districts
  - » Mixed activity in the manufacturing sector – still issues with regards to labour shortages and supply chain problems
  - » The labour market was still very tight but nearly all districts noted modest improvements in labour availability (which not has been signalled by surveys) – and wage pressures were easing some places, but there were reports of mid-year rises to offset higher costs of living (a wage/price spiral?)
  - » Overall inflation moderated in 9 districts, but the level is still high. Substantial increases for the price of food, rent and utilities were observed
- Taken face value, the Beige book confirms that growth has halted, but not that the economy is a recession now
- Even so, the interest rate market is now pricing in an over 90% likelihood for a 3rd 75 bps hike in September
- The Fed clearly stated at Jackson Hole that it has its eyes solely on inflation, and that the labour market is completely out of balance
  - » Bigger-than-normal rate hikes are to be expected, and rates will remain higher for longer. The market is expecting a 4%& rate next summer.
  - » Still, in the end, the data will decide

Atlanta Fed: Wage inflation is (probably) not slowing

The median wage is up 6.3% y/y, 6.7% 3 m avg (unch.), 3+ pp higher than ‘normal’ wage growth

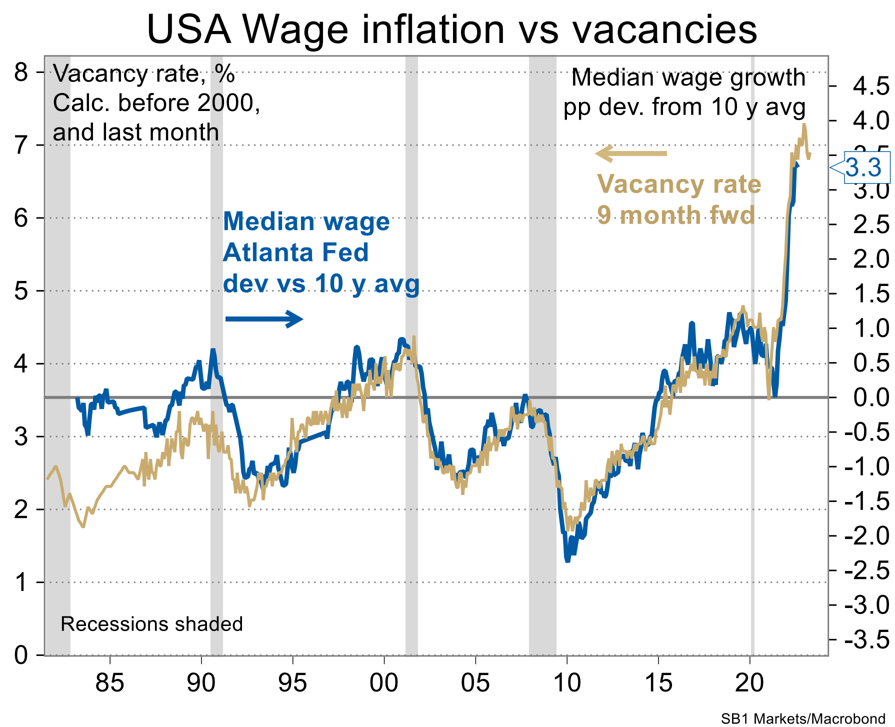


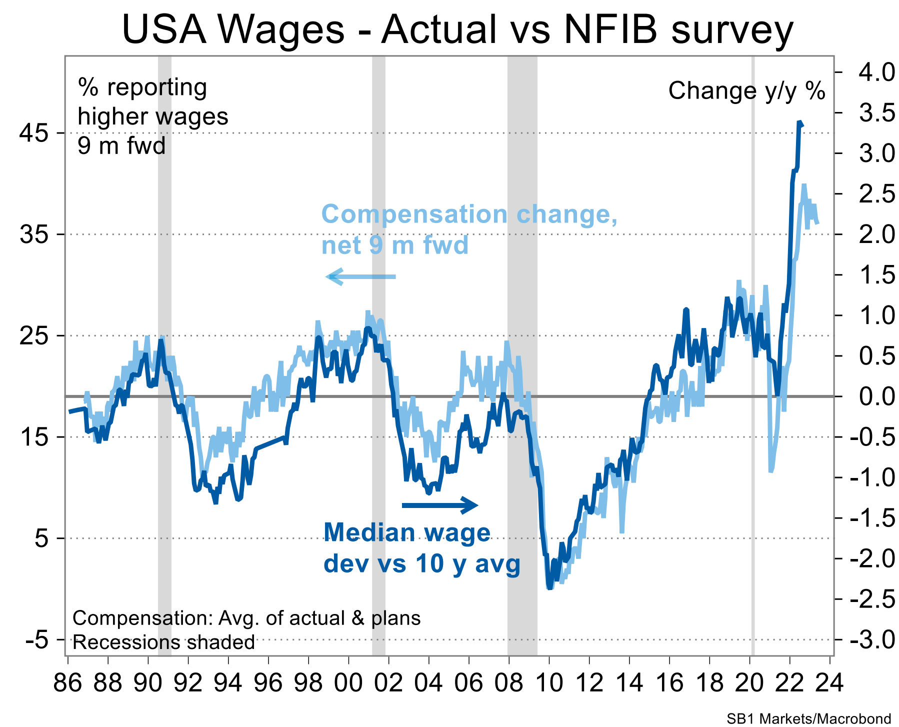


- **Atlanta Fed’s median tracker reported** a 6.3% growth in August, unch. from July. Our calculated m/m was just slightly above zero, following a small decline in June. The 3m/3m rate is still at 7.1%. The **3 m average annual wage** growth at 6.7% is the highest ever, and the current wage inflation is 3.3 pp higher than the past 10 average, a wage acceleration we have never seen before (all data from 1983)
- **All** ages, occupation, industry, job switcher (or not), race, education, urban or rural, region all report a sharp acceleration in wage inflation. The only laggards: those who are paid the best but even this group report higher wage growth recent months
- **All other wage indicators** are reporting fast wage growth, and all are reporting wage growth well above the recent years’ average, some are still accelerating, other are slowing marginally but all are growing 2.8% – 4% faster than the past 10 years’ average – which will make it impossible to reach the 2% price target over time

So why is wage inflation soaring like never before?

Because vacancies are higher than anytime before, it seems like. How to bring wage inflation down?

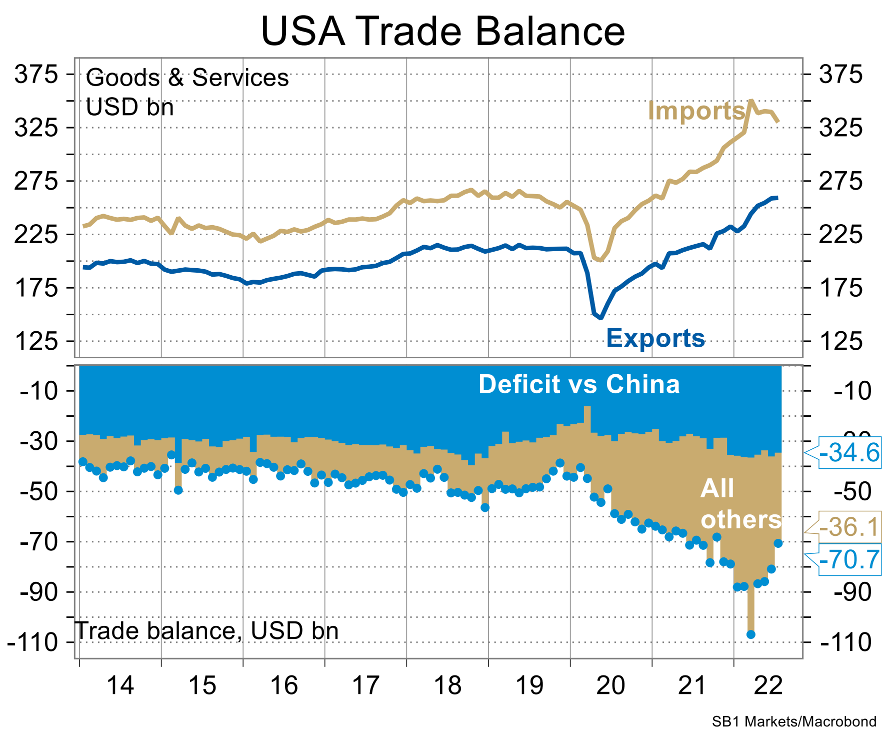


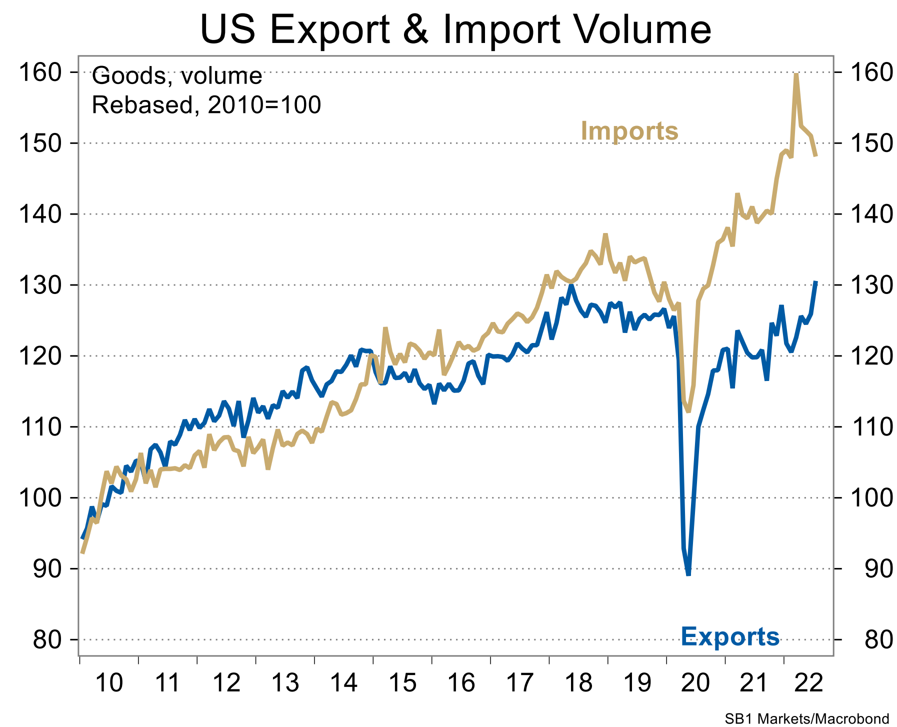


- **Our 'Phillips curve'** based on the vacancy rate signals a further increase in wage inflation the coming quarters even if vacances have peaked. The vacancy rate leads changes in wage inflation quite consistently by 3 quarters. However, we would not be surprised if the current extraordinary high wage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

US trade deficit keeps shrinking

Deficit shrank to USD 71 bn in July – mainly on the back of lower imports. Export volumes finally up

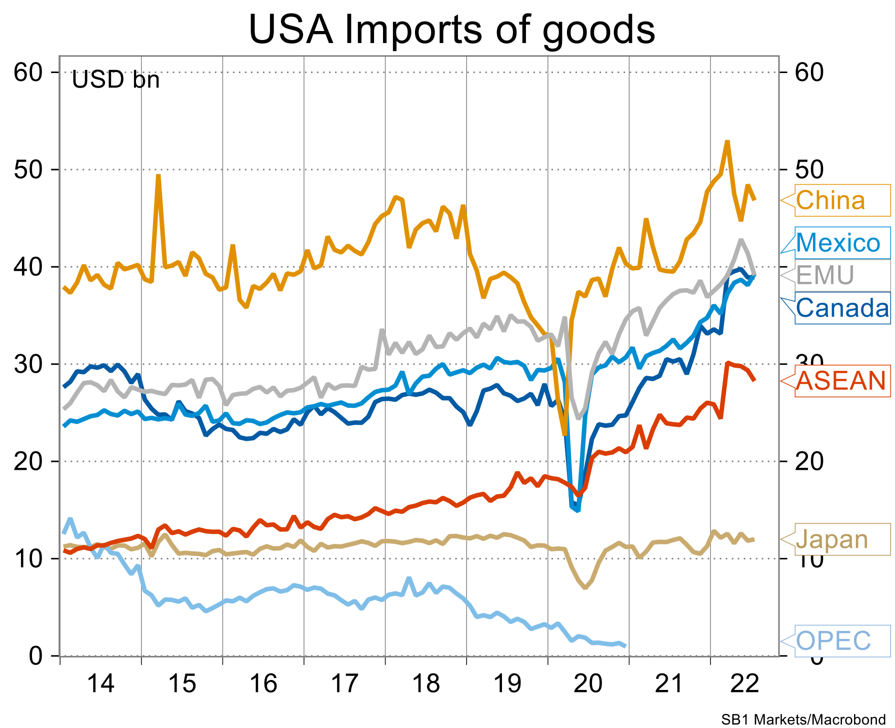


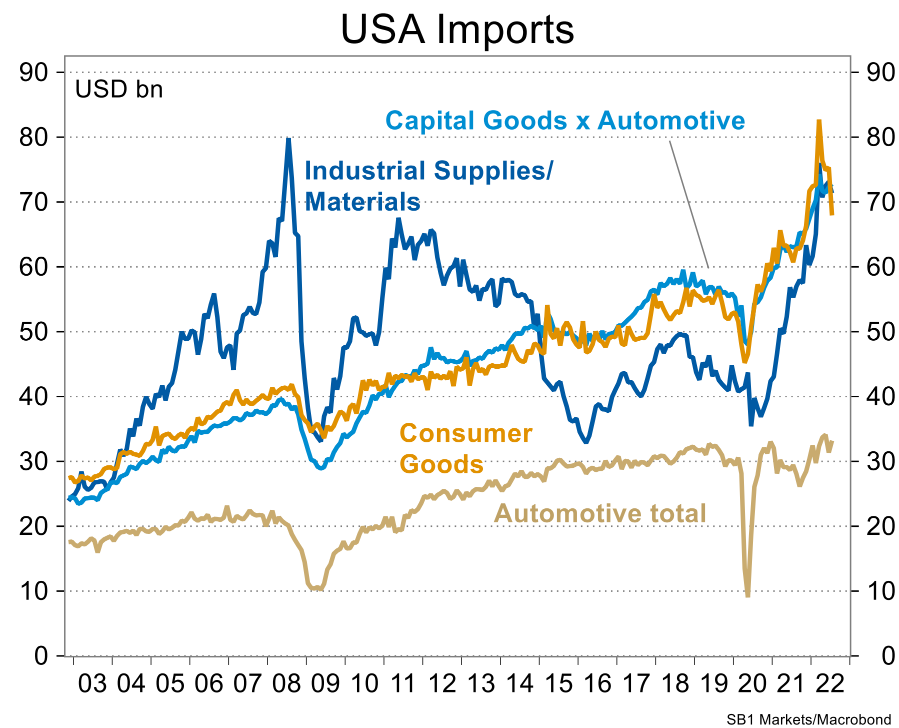


- **Imports** fell by 2.9% in July but are still 33% above the pre-pandemic level, in nominal terms! In volume terms (and just for goods), the decline in July was 1.9% and the volume is just up 17% vs Feb-20! Demand for goods has been strong during the pandemic, driving imports – even if auto imports have been low. The sharp decline in import volumes recent months is probably due to a slowdown in domestic final demand as well as an inventory drawdown
- **Exports** rose 0.2% m/m in July, and the level is up 20% vs Feb-20. However, in volume terms exports for goods are just 4% above the pre-pandemic level – but is now growing rapidly
- **The trade deficit** shrank to USD 71 bn, from 81 bn in June. However, at 3.5% of GDP, the deficit is, of course, still sizeable

Imports of consumer goods sharply down in July

Imports from neighbouring countries & Japan up, while imports from rest of Asia and EMU lower

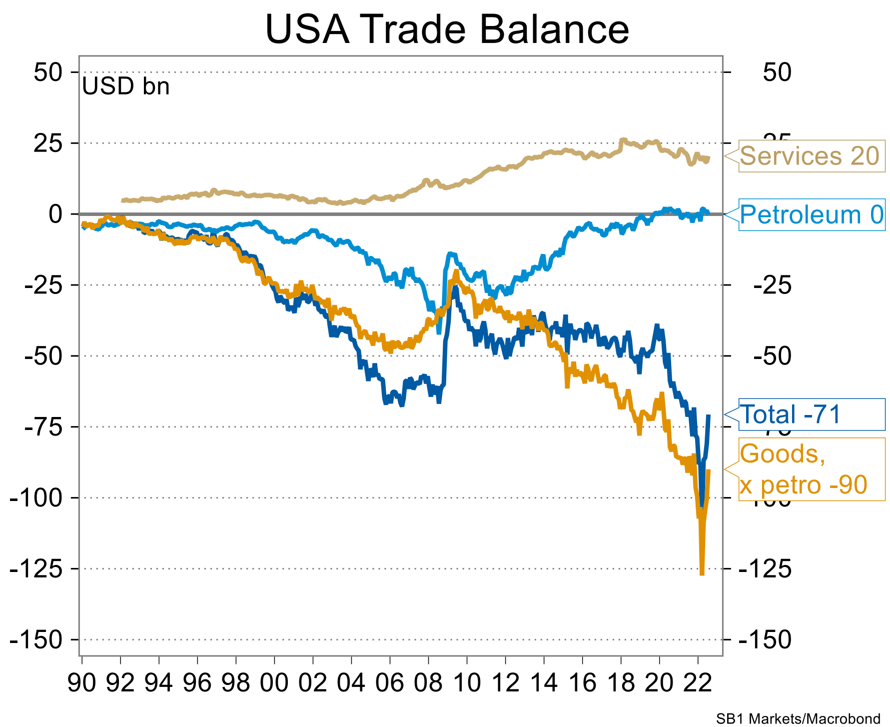


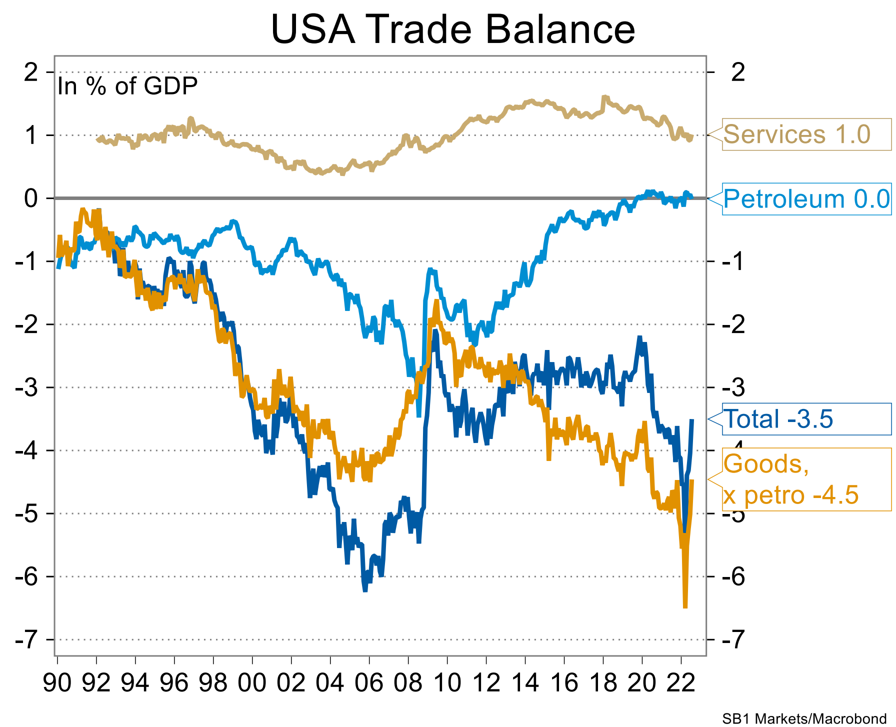


- **Imports from regions:**
  - Imports from Canada, Mexico and Japan increased slightly in July – imports from neighbouring countries are clearly trending up. China is the leading exporter to US
  - Imports from ASEAN (the minor Asians) has decreased significantly over the past couple of months
  - Imports from the EMU has been growing rapidly during the pandemic, but turned down in June, and decreased by 5% m/m in July
- **Imports by type of goods:**
  - The import of all type of goods has been surging since the pandemic, but the import of consumer goods has fallen since March, and fell by almost 10% in July (all figures in value terms) – at least party due to an inventory drawdown (final demand did not fall 10% in August ☺)

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

Surplus in services keeps narrowing

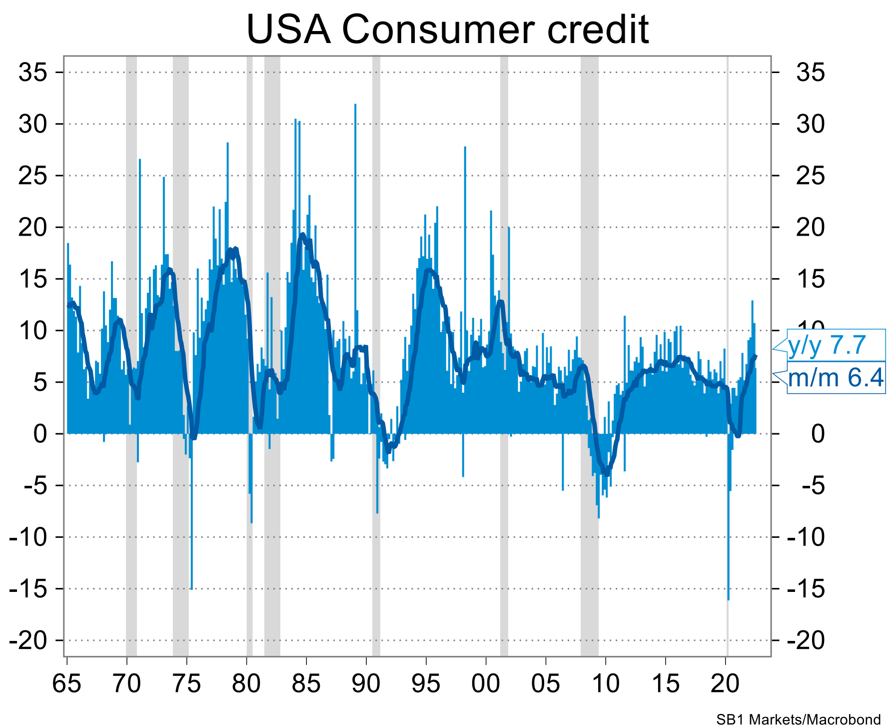


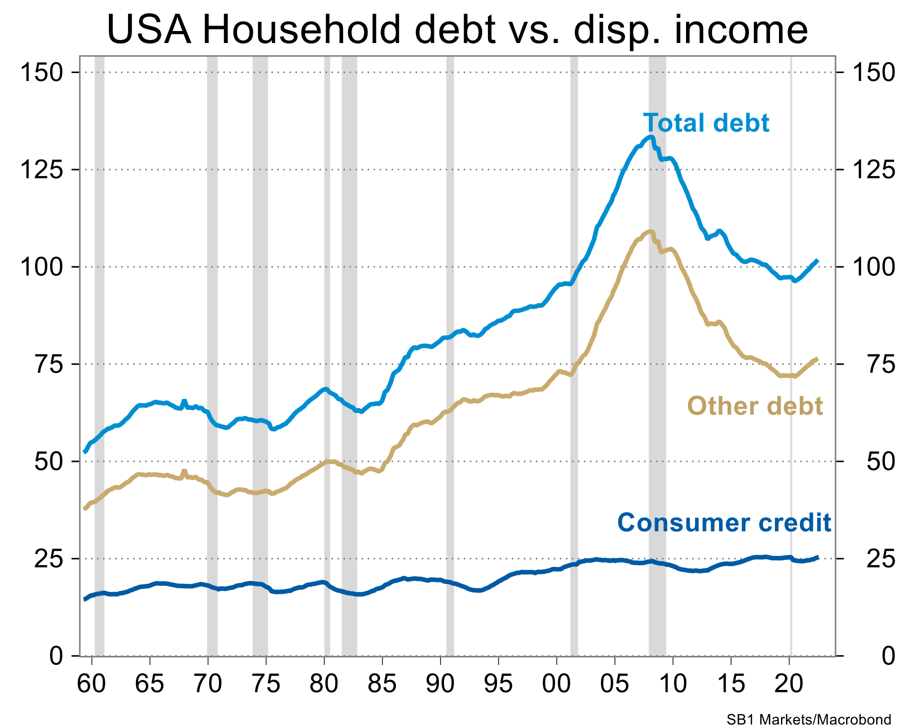


- The **total trade deficit** at USD 71 bn equals 3.5% of GDP. The deficit has widened from 2.5% in early 2020 – as domestic demand has been stronger in the US than abroad
- **The US runs a surplus in services** at USD 20 bn, equalling 1.0% of GDP, but this surplus is trending down (and the downturn started well before Covid)

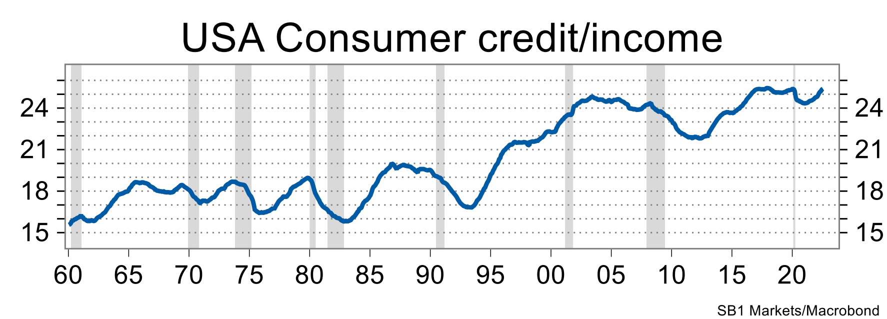
Consumer credit has acceleated, but not that much vs disposable income

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

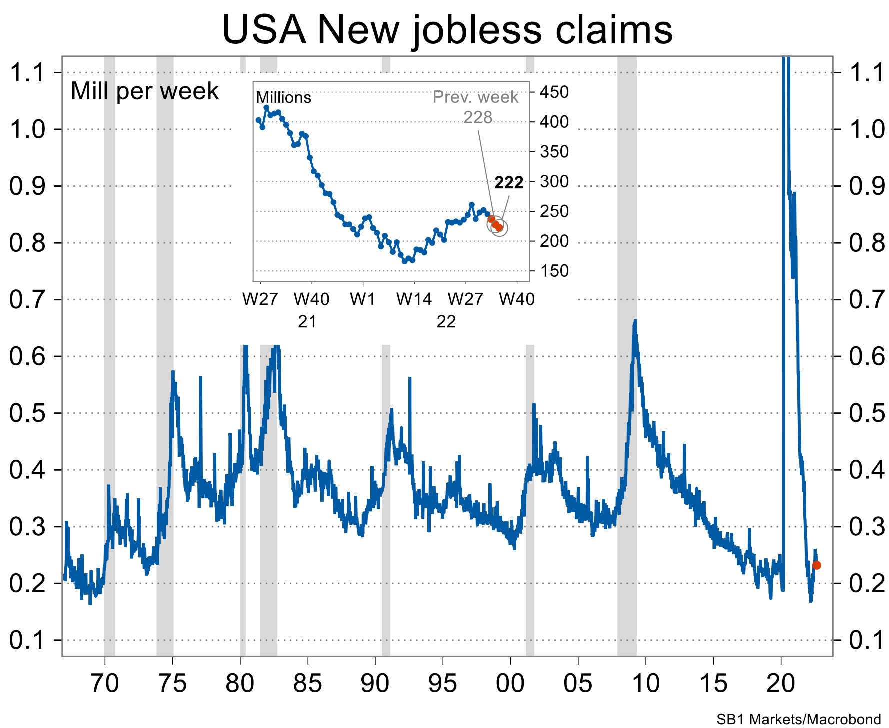


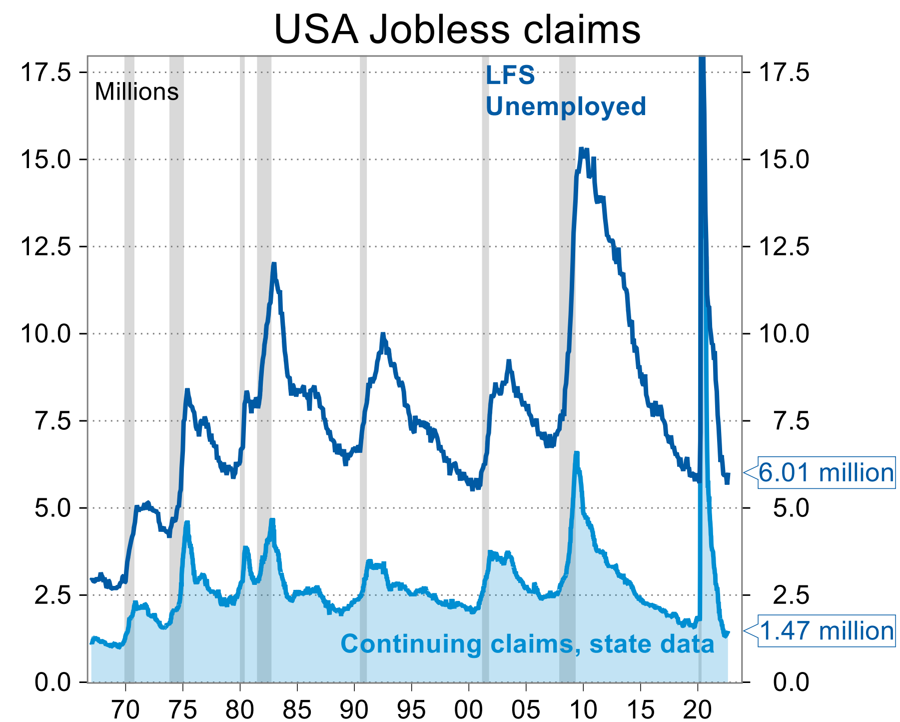


- However, some spurts in consumer credit has taken place ahead of recessions (but no strong recession model at all)



Yet another downward move for new jobless claims

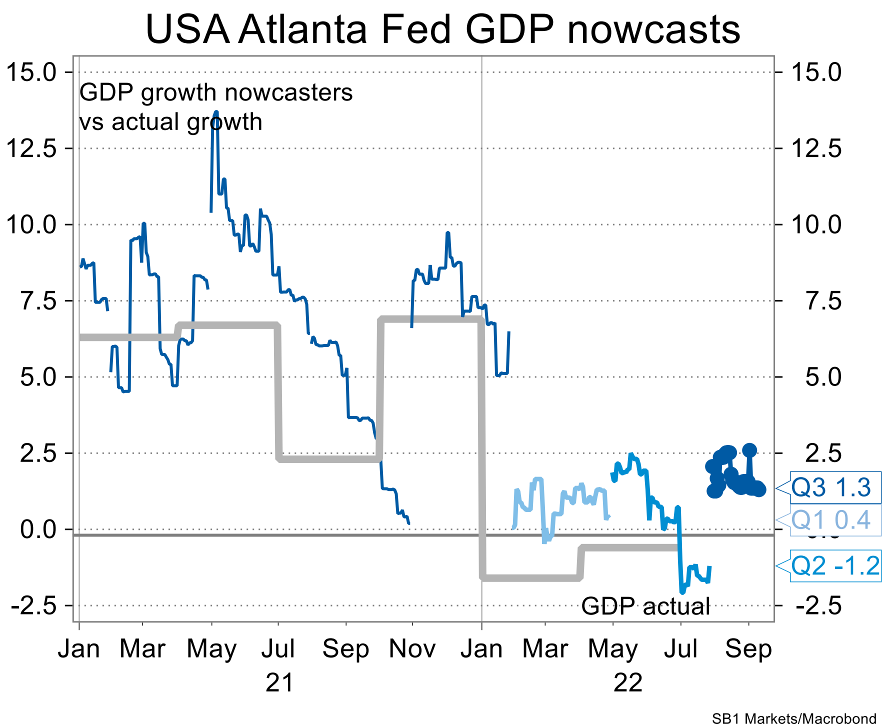


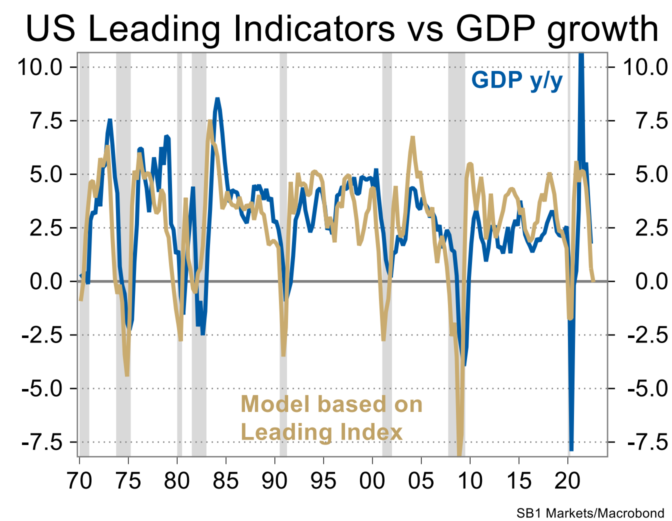


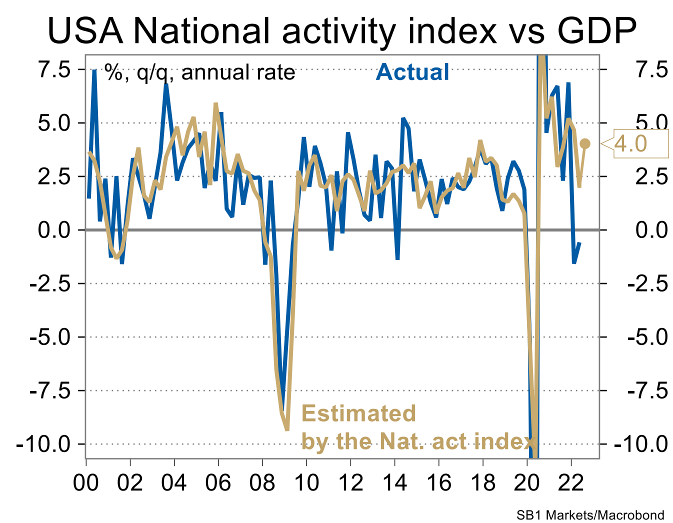
- **New jobless claims** fell by 6’ in week 35 to 222’ (from a 4’ downward revised level the prev. week!). <u>New claims have fallen by 30’ from 5 weeks ago!</u>
- **Continuing claims** rose by 36’, but remain lower than avg.

Atlanta Fed's nowcaster was right on Q2 GDP. Now it reports 1.3% growth in Q3

Down from 2.6% a week ago



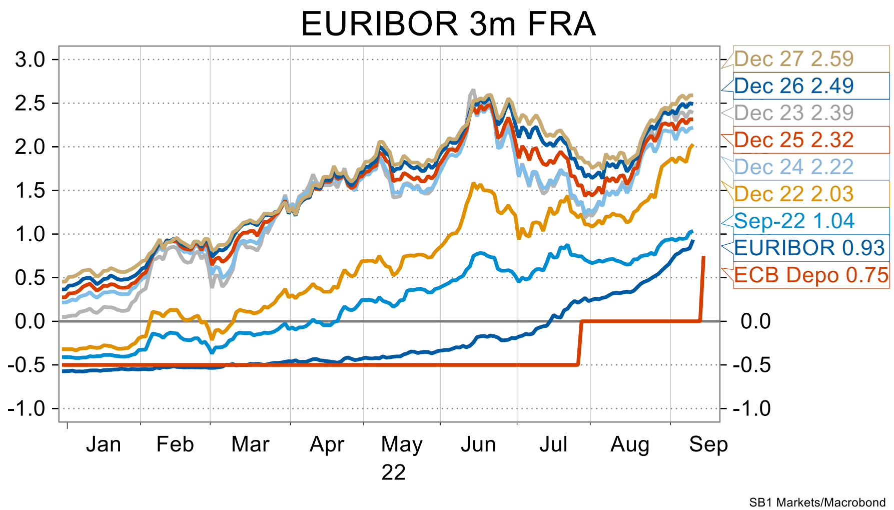


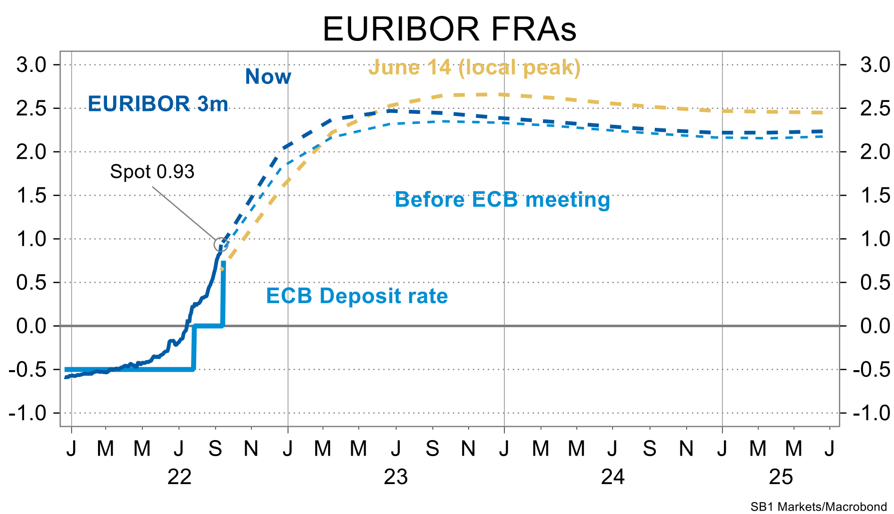


- National Activity index suggests 4% (the July pace). Leading indicators say zero!
- **Q2 GDP** fell 0.6%, revised up from -0.9%

ECB with biggest hike in history – saying there is more to come

The ECB hiked the signal rate by 75 bps - *«because inflation is far too high»*

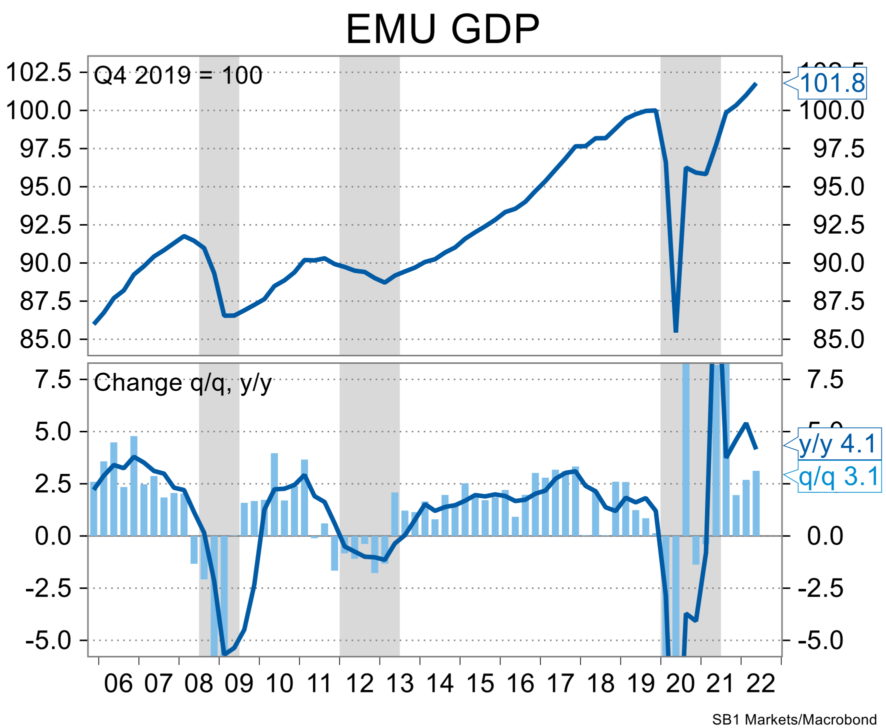


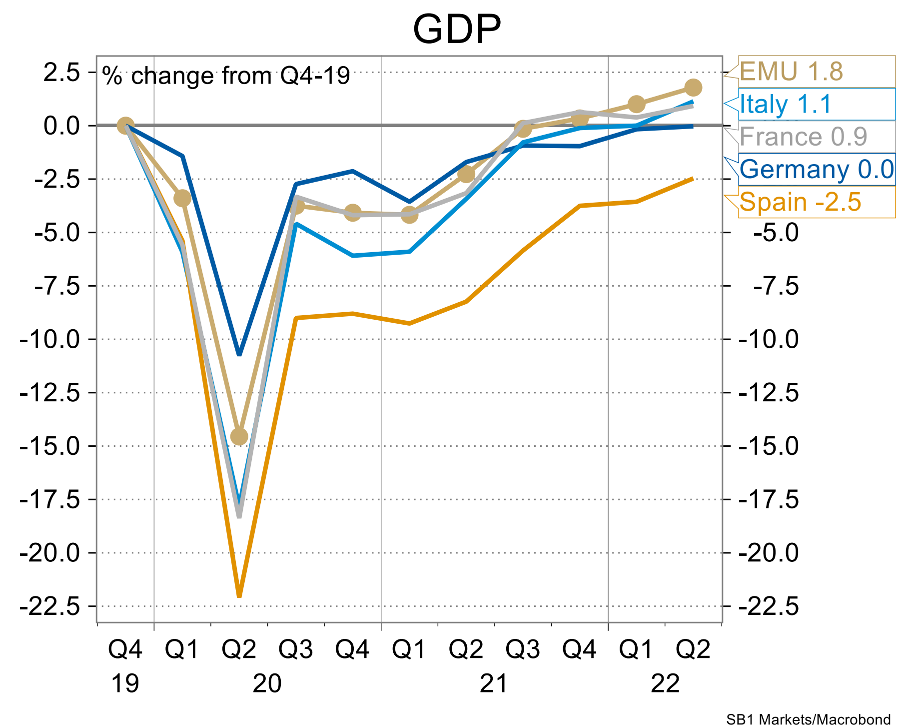


- **The 75 bps hike** was expected by the majority of economists some days before the meeting, and almost fully priced into the market, the 3 m EURIBOR rate rose by just 2 bps but longer dated FRA rose more. The repo rate (which is close to the money market rate) was then lifted to 0.75%, while the deposit rate was lifted to 1.25%
- The bank stated **that inflation is far too high** and likely to stay above target for an extended period, and that the bank stands ready to adjust all of its instruments within their mandate to bring inflation down. However, **the TLTRO programme** (encouraging bank lending) was not discussed at this meeting, and a **tightening of the QT** was not at the table – but the discussion will soon start
- The bank **revised down its GDP growth projections for next year** significantly to 0.9% from 2.1% in the June report. GDP growth for 2022 was revised up by 0.3 pp to 3.1%, while 2024 projections are down 0.2 pp to 1.9% - in sum a 1.3% downward revision
- At the same time, the bank did **not give any forward guidance**. It said it will be data dependent and follow a meeting-by-meeting approach (central banks always do that anyway, even with a forward guidance). When asked what the bank sees at the terminal rate, president Lagarde answered that they will hike until they see inflation returning to the target, which is **probably more than two hikes, including this one, but probably less than five**
- **Short term market rates** rose just slightly after the announcement (and further at Friday), while longer dated EURIBOR FRAs remained virtually unchanged as the growth outlook rapidly deteriorates. From mid June, the assumed peak for EURIBOR rates have fallen to less than 2.45% from 2.65%. Still, following a 20 bps lift in the Dec-22 EURIBOR 3 m FRA, another 100+ bps hikes are discounted before the end of 2022. Too aggressive, we think. The EUR fell as Lagarde spoke, but rebounded again afterward

Q2 GDP growth revised up – Eurozone expanded at 3.1% (annualised) pace

Italy and Spain contributed the most (4.5%), France grew 2.2%, while Germany stagnated

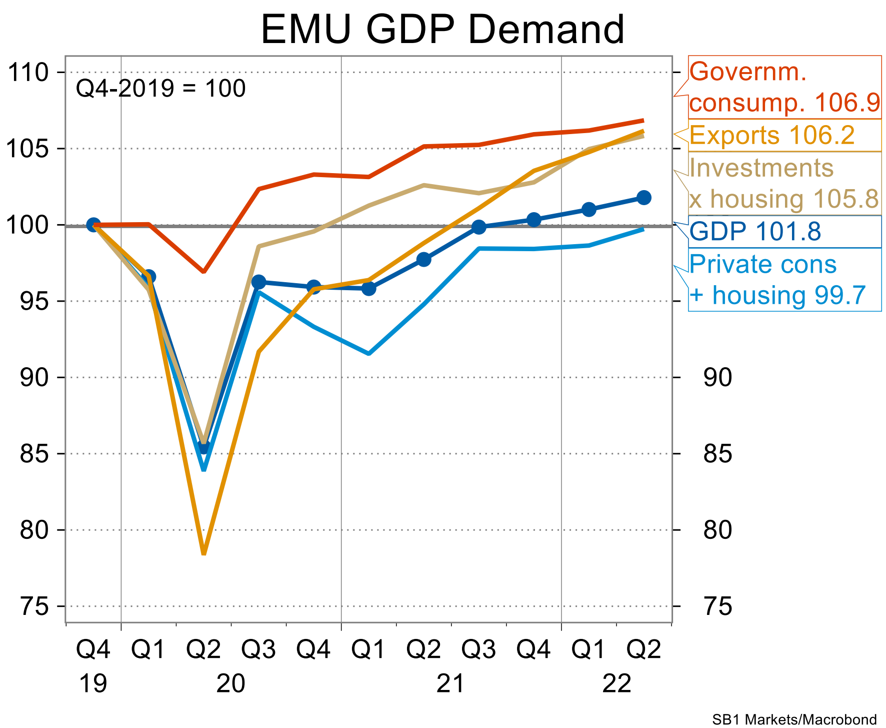


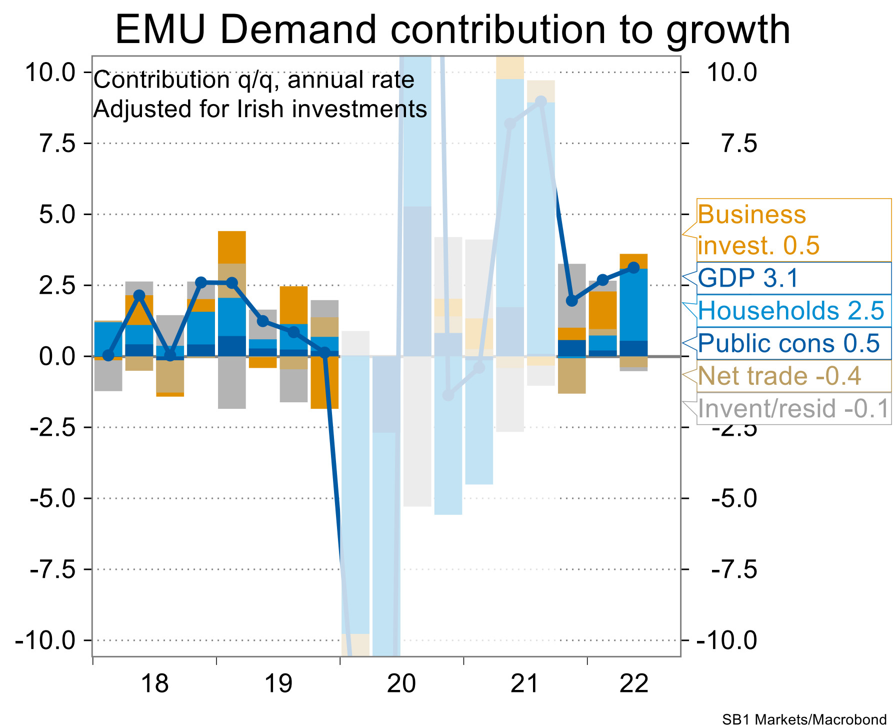


- GDP grew 0.8% in Q2 (not annualised), initially reported 0.7%, the revised down to 0.6% but now revised up! GDP is now 1.8% above the Q4-19 level
- Spain grew rapidly in Q2, but is still the laggard, GDP is still 2.5% below the pre-pandemic level
- German GDP was flat - and at par vs. Q4-19

Households and public consumption contributed on the upside in Q2

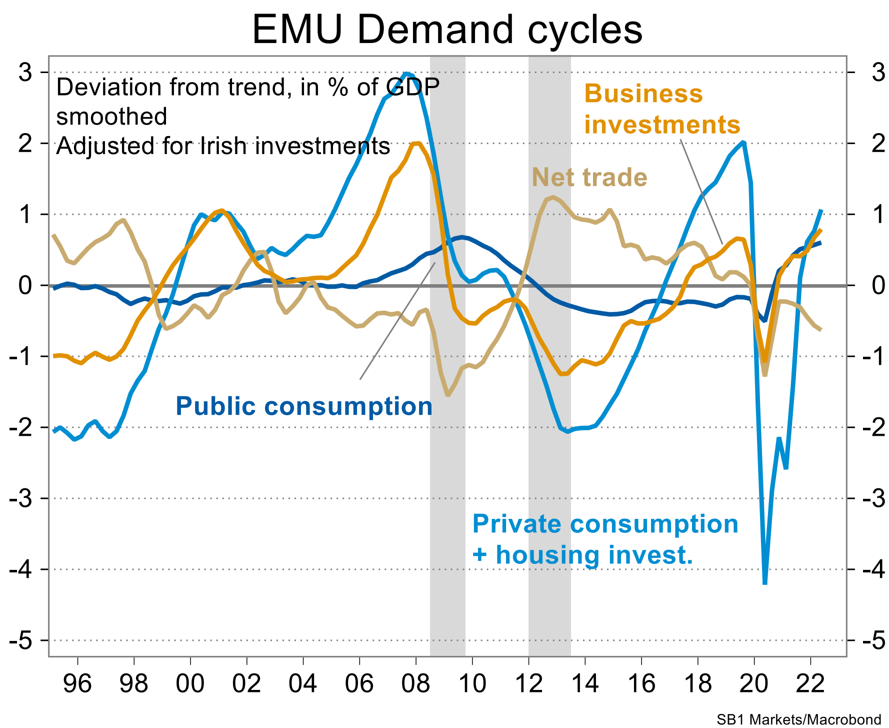
Demand likely to soften in Q3, as soaring energy prices and higher rates hit households





Demand is above par, both from the private and the public sector

Net exports are sagging as imports are growing faster than exports, also in volume terms

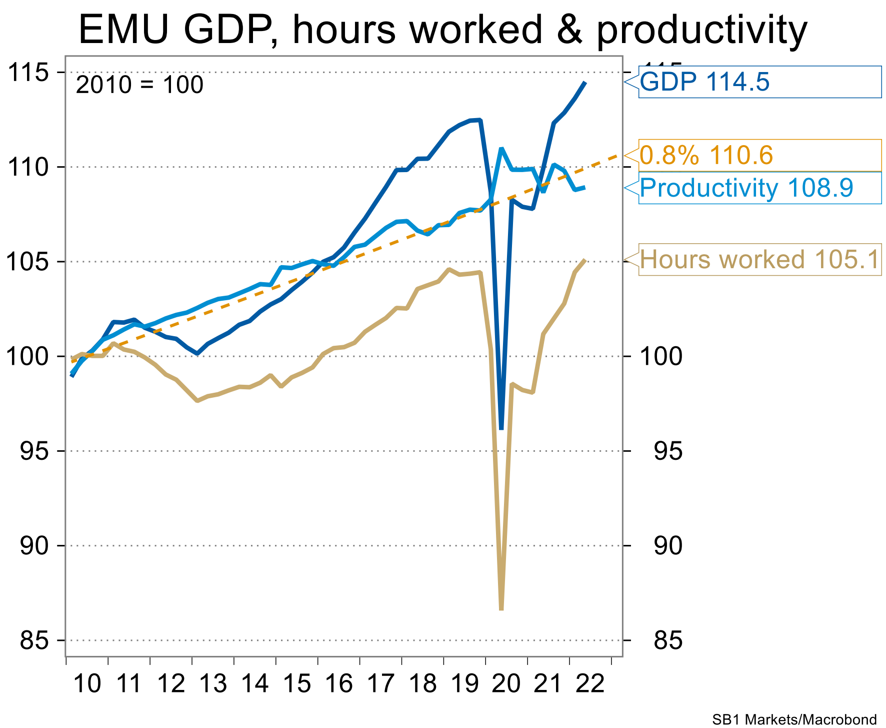


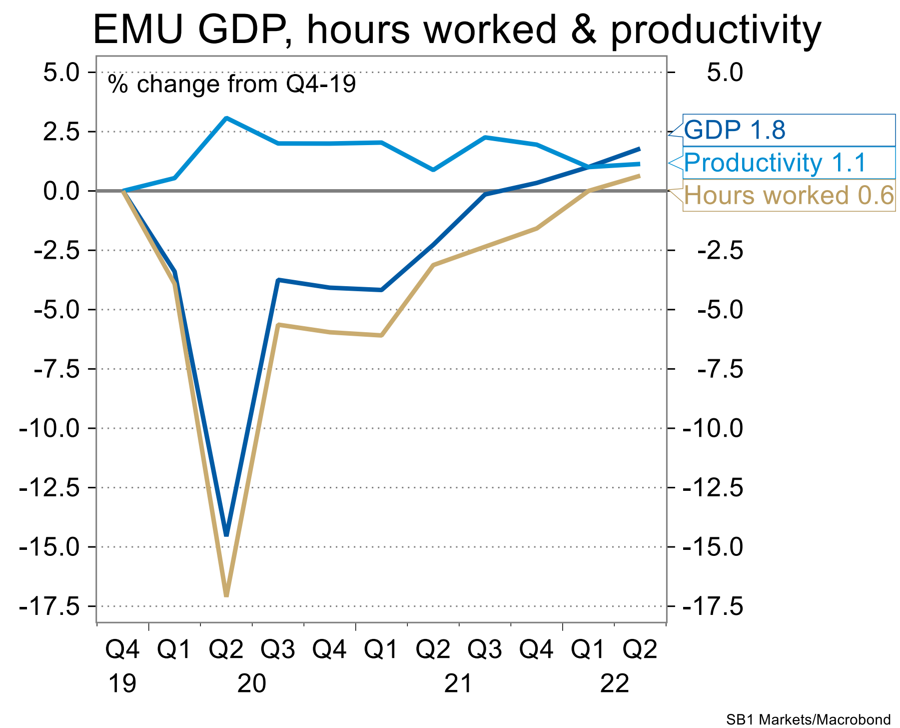
- **Household demand** is exposed high inflation, as higher rates leading to lower disposable income (in both nominal and real terms) weigh on the public
- **Business investments** are above the long term trend, as in most other places

SpareBank 1 MARKETS

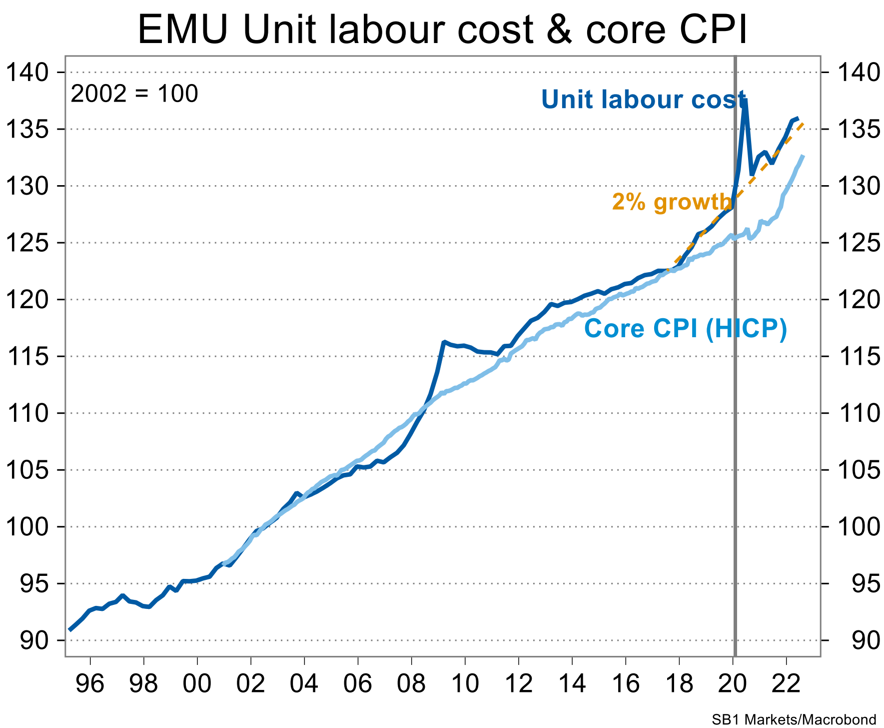
Slow productivity growth as hours worked return to normal

Low paid (and low productive) workers were re-engaged in the service sector





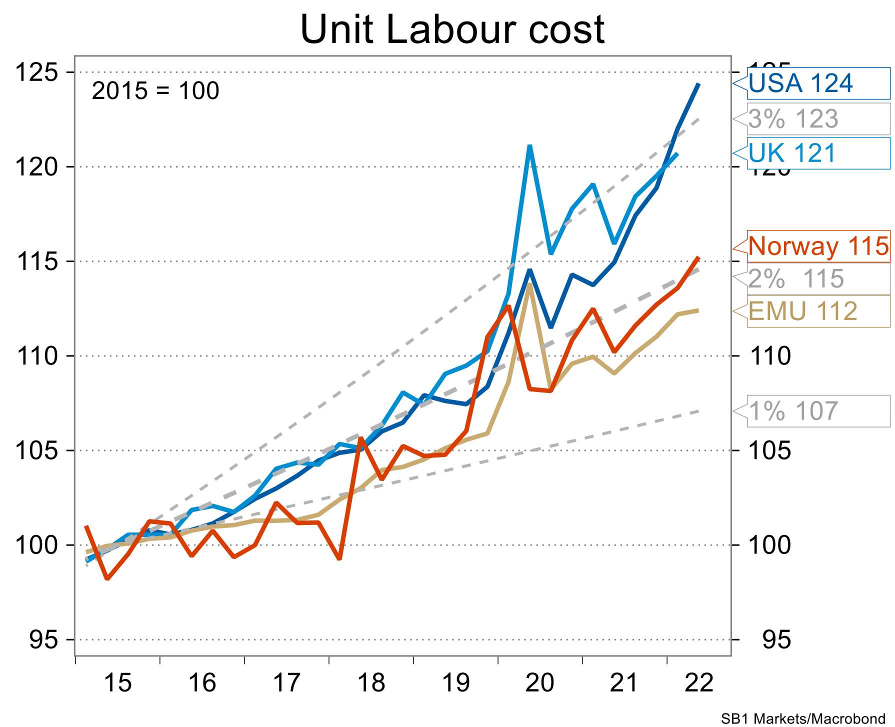
Unit labour costs are accelerating but still on a 2% trajectory

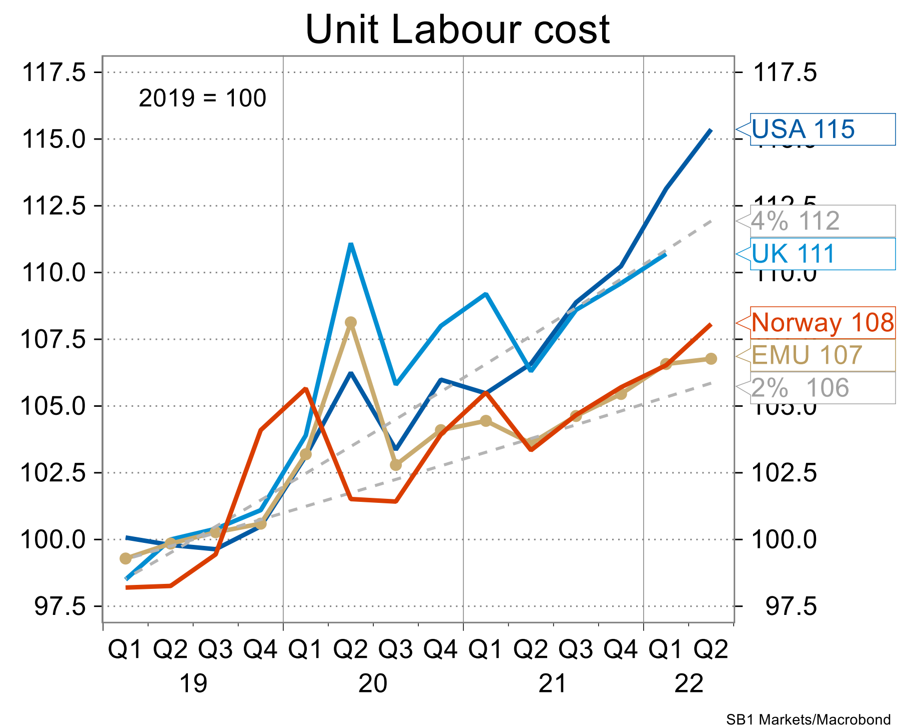


- **Unit labour cost** (labour cost per unit produced = wage cost/production volume, growth in UCL= wage growth – productivity growth) has jumped up during the pandemic as productivity fell because employment was not cut (as in the US)
- On the other hand, in the 3 years before the pandemic – and through the pandemic so far – ULC has accelerated to 2% from 1%. The 1% growth in unit cost corresponded to the long term growth in core rate of inflation at 1% – and a 2% ULC inflation will <u>over time</u> yield a 2% CPI inflation
- More Q2 labour cost data from the EMU out this week

Unit labour costs not the problem in the EMU, nor in Norway

However, cost are no rising slighlty above a 2% pace

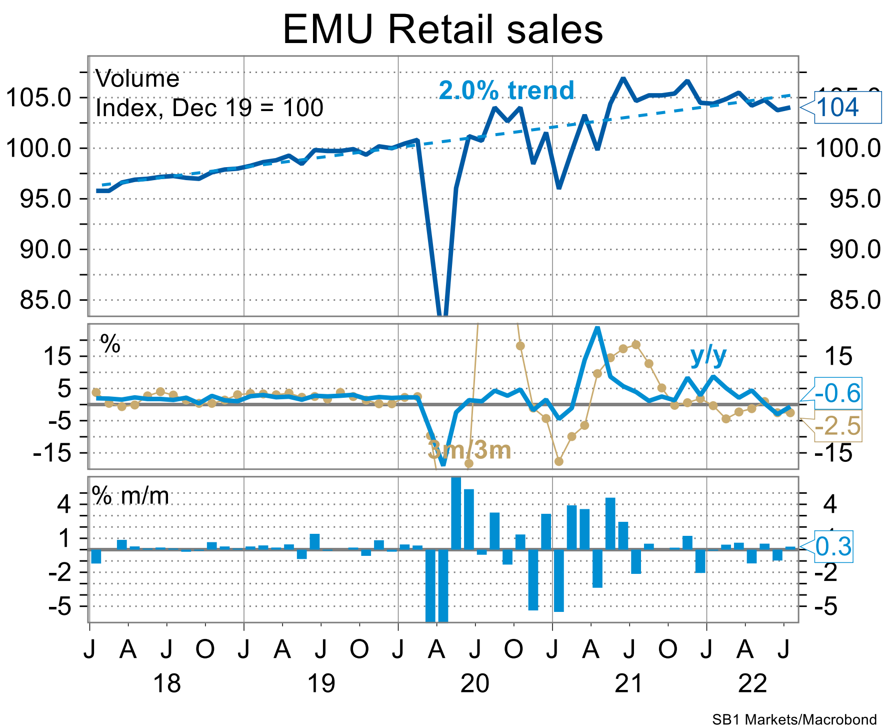


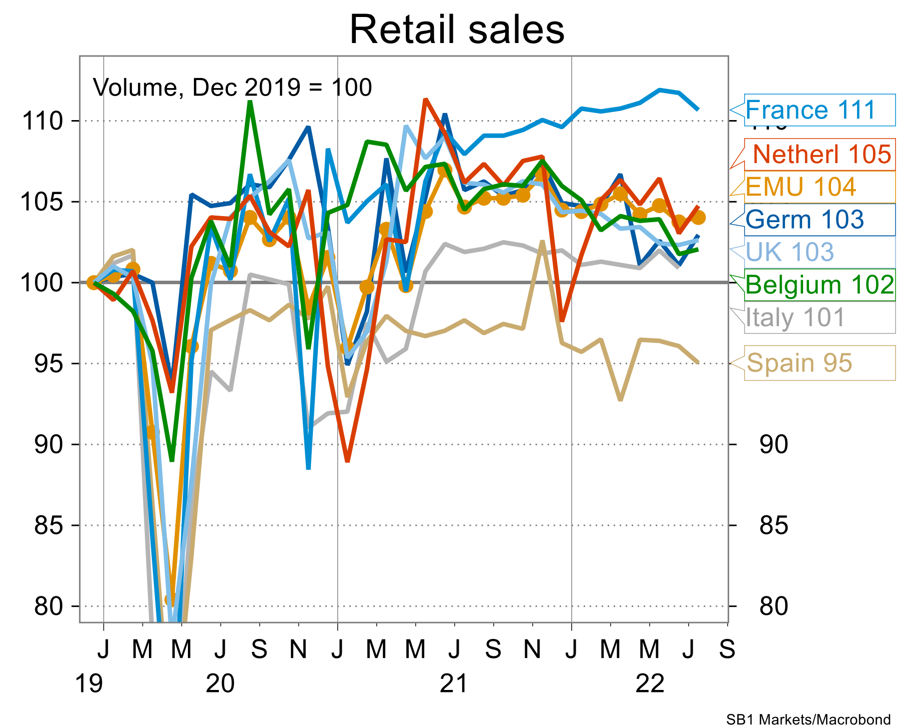


SpareBank 1 MARKETS

Retail sales mixed in July; Spain and France down, Germany up. The total +0.3%

Sales came in 0.1 pp below expectations; June data revised up to -1.0% from -1.2%

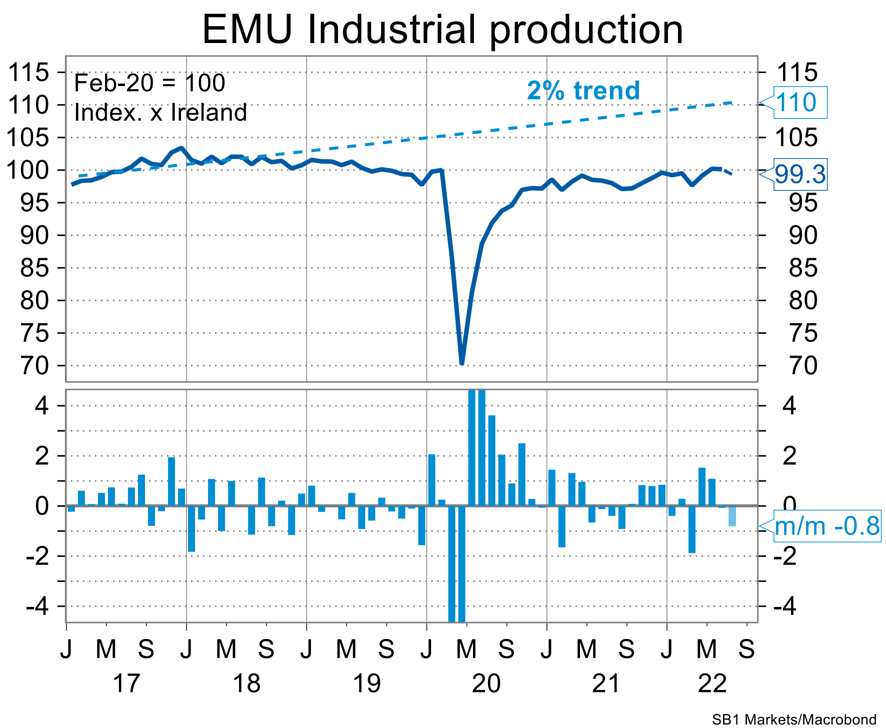


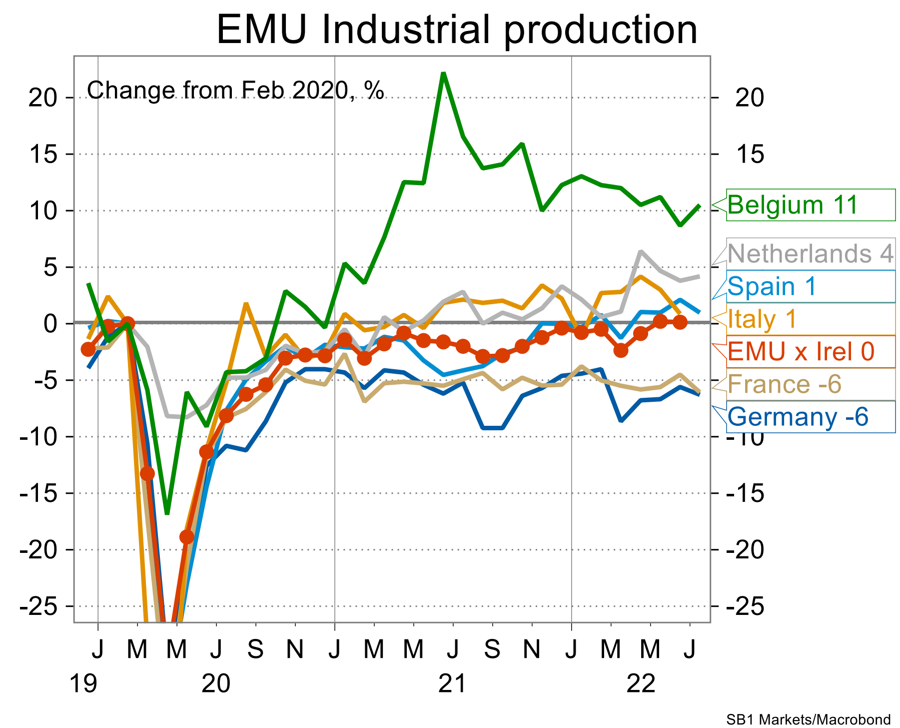


- The trend is down, and sales are now below the pre-pandemic growth path of 2%

Industrial production very likely down in July, 3 of the big 4 signals -1%

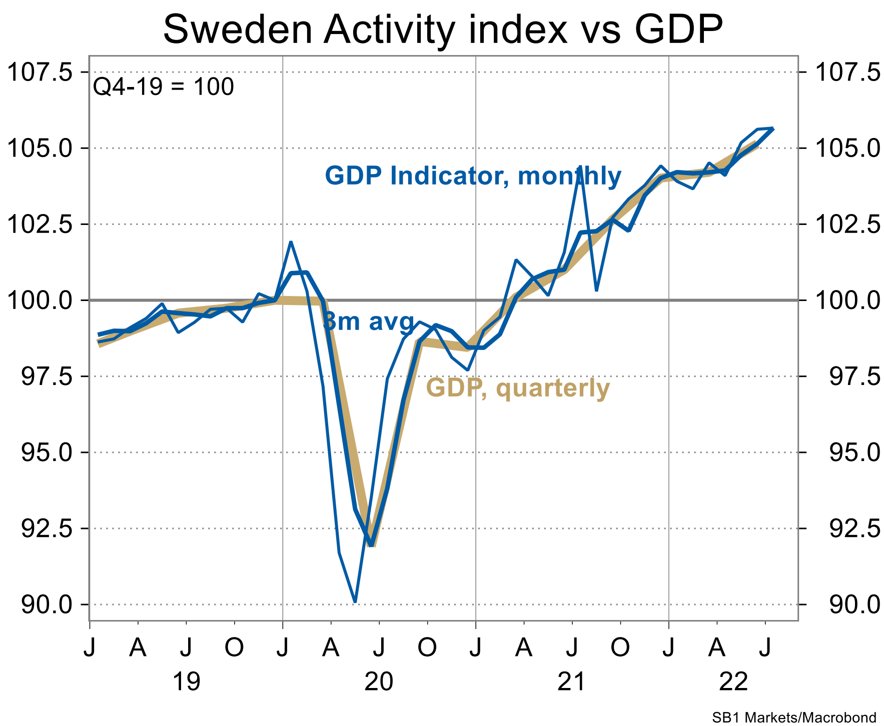
Germany, Spain and France report a 0.7% – 1.6% setback in July. Belgium & Netherlands slightly up

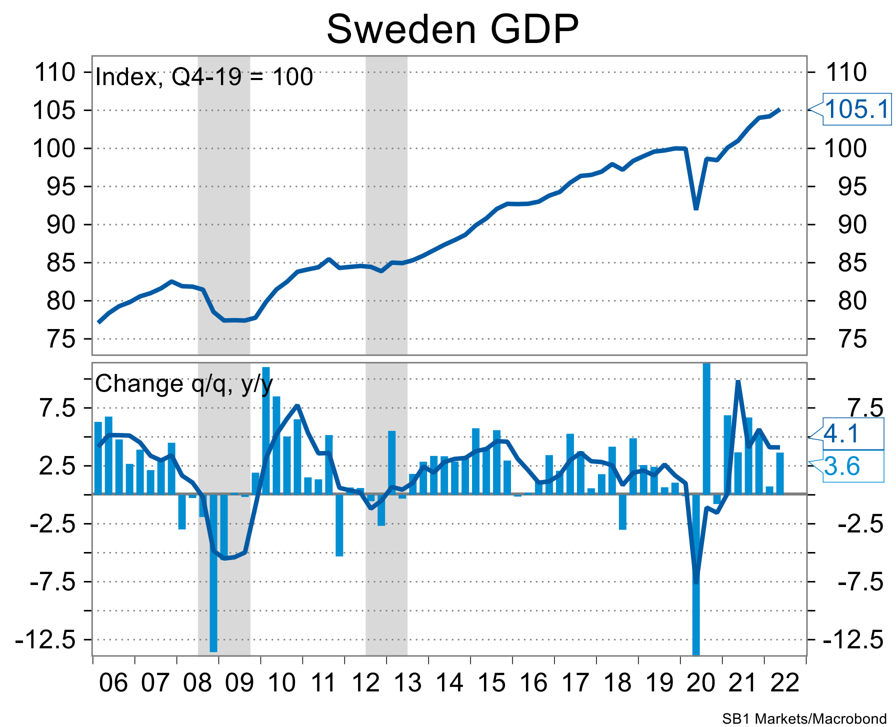




- In sum, a 0.8% decline in July?
  - » At one stage, shutdowns due to gas shortages/high prices should be visible in these stats
- German manufacturing production is down 6% vs the pre-pandemic level, as is France. Italy is up 1% (at least in June)! The auto industry mostly to blame

Swedish GDP flat in July, still drifting upwards

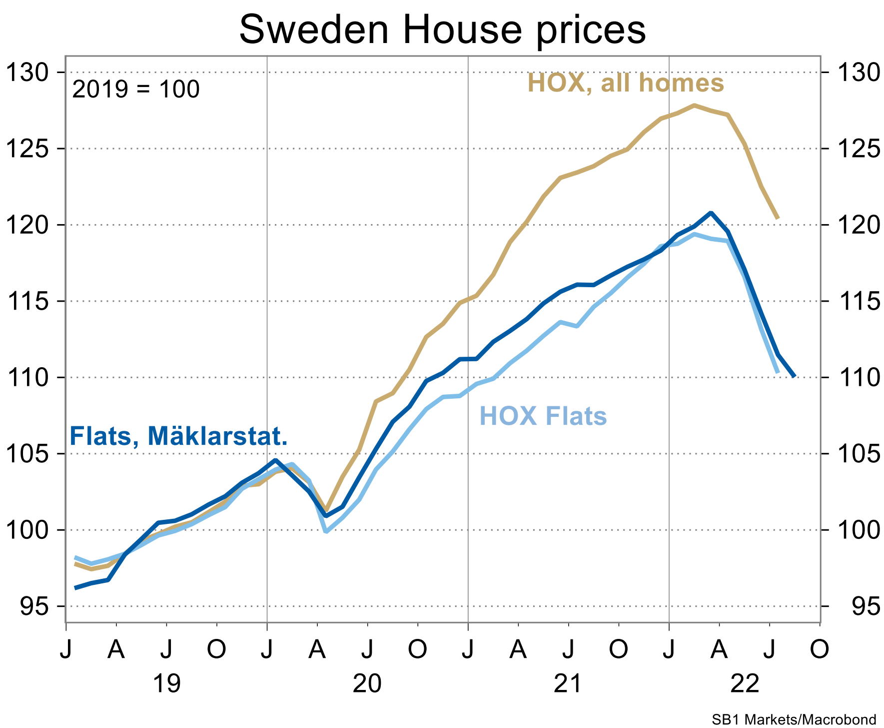


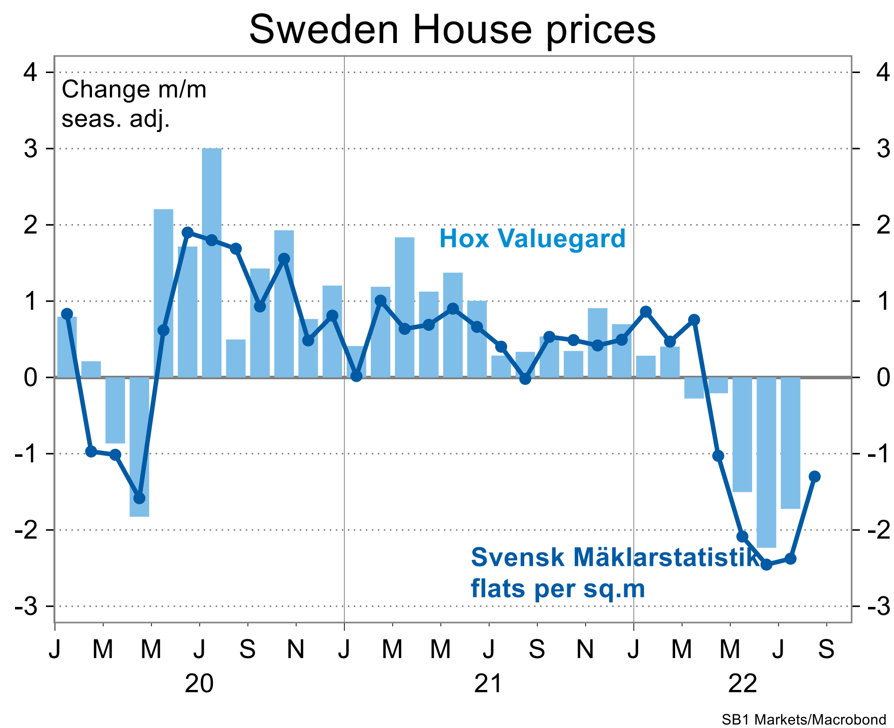


- If GDP is unchanged at the July level through the rest of Q3, GDP still will grow by 0.5% in Q3 or at a 2% annualised pace from Q2 (the carry-over impact in June was higher than the Q2 average)
  - » In Q2, GDP expanded by 3.6% (ann.)
- **The outlook** is weakening though, according to Swedish companies. The KI (NIER) has fallen to slightly below average, signalling growth below trend (but still +2%)

Swedish house prices keep falling, according to Svensk Mäklarstatistik

The realtors reported a 1.2% m/m decline in apartment prices Aug, and prices are down 9% past 5 m





- Prices fell in all big cities, and by 3% m/m in Stockholm (apartments, single-homes were down 2% in the country as a whole and -4% in Stockholm)

Highlights

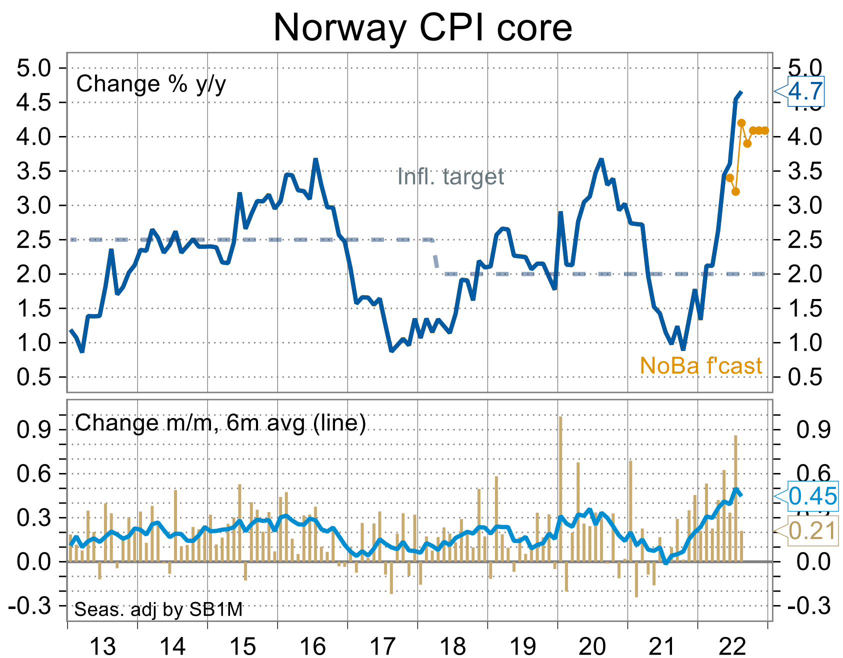
The world around us

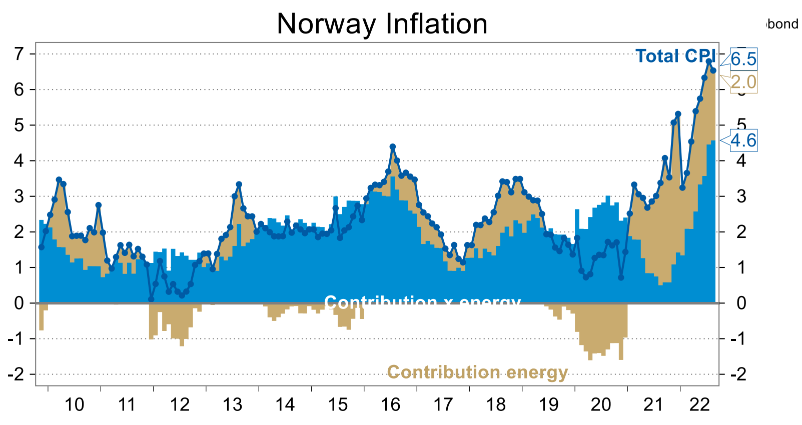
The Norwegian economy

Market charts & comments

Headline CPI lower than expected, but inflation still broad and well above target

Headline CPI was up 6.5% y/y, down from 6.8% in July. The core further up to 4.7% y/y

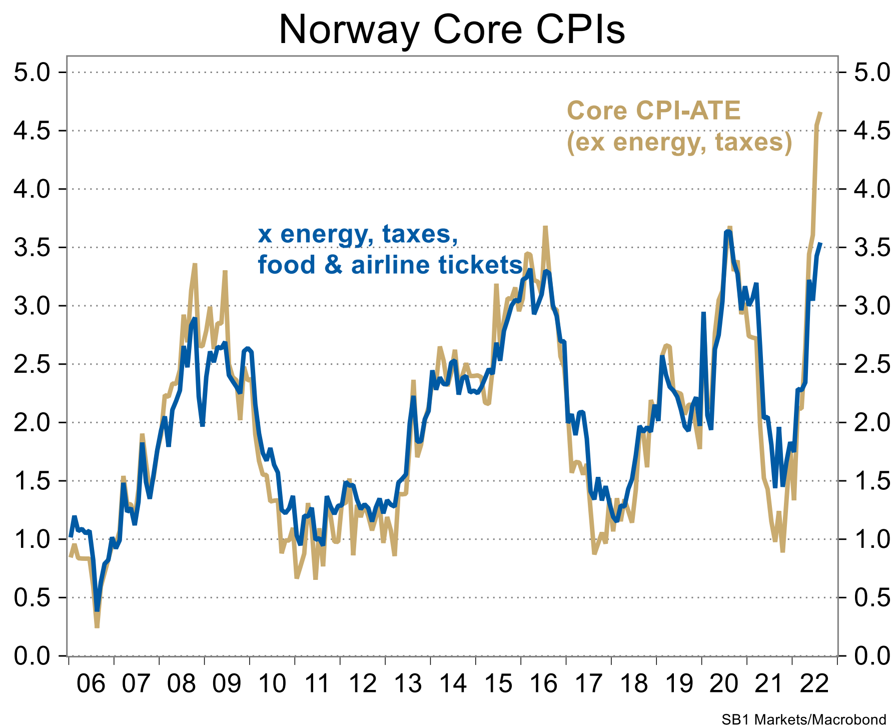


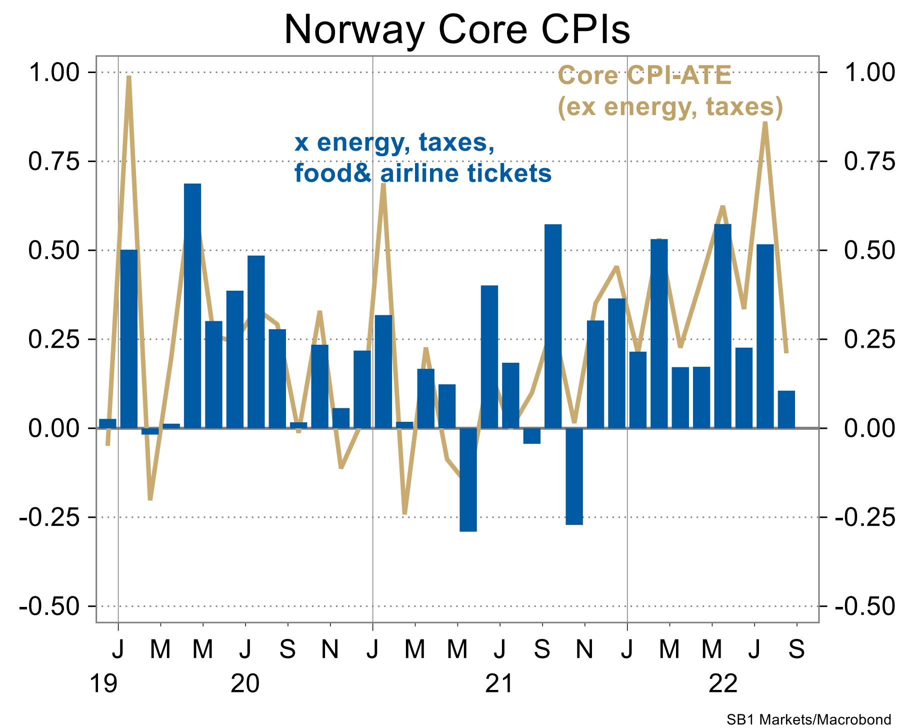


- **CPI-ATE** (ex. energy and taxes) rose 0.2% m/m (s.a), and the annual rate climbed by 0.2 pp to 4.7% pp, we expected 4.6%. Consensus was at 4.8%, NoBa expected 4.2%
- **Food prices** rose 0.3%, we expected unch., following the 7.6% surge in July. We do not expect further (seas. adj) price increases the coming months, but the annual rate will remain lofty the coming year. At one stage, prices will be cut
  - **Transportation and airline ticket prices** rose sharply, and several other sectors also contributed
  - Prices on **imported goods** rose 0.2% m/m, and are up 4.6% y/y; **domestically produced** goods & services were also up 0.2% m/m and are up 4.7% y/y
  - **10 sectors** reported growth above 2% y/y, and just 2 are below (and one at 2%). All trimmed/median measures tell the same story: Inflation has broadened
- **Total inflation fell by 0.3 pp**, to 6.5%, which is still a very high level historically. We expected 7.2%. If not for electricity subsidies, inflation would have been 9%, a normal rate these days. Electricity prices rose 14% in August, we expected far more. Gasoline prices fell by 12%, close to our forecast
- **The outlook**
  - **Most of the lift in electricity prices are behind us, due to the generous government subsidies**
  - **Gasoline prices** are on the way down and will contribute to a decline in headline CPI
  - If so, **average 2022 inflation** will be some 5.5%, and above Norges Bank's 4.6% f'cast. The core inflation may average 3.5%, which is no more than 0.3 pp above NoBa's f'cast
- **So what?**
  - **Core inflation** is higher than NoBa's f'cast, but not dramatically. Higher headline inflation hits real income (and 2022 wage inflation will not be revised much upwards), and will dampen demand
  - For **Norges Bank** wage inflation is the dominant risk vs inflation over time. The headline inflation in 2022 may end up more than 2 pp above the 3.3% which was the basis for the wage negotiations last spring. What the inflation forecast will be in Feb-23, before the the wage negotiations is still in the blue but the risk is that wage inflation will end up on the high side, if just to compensate for 2+ pp loss in 2022
  - A 50 bps hike next week is probably a done deal, and the bank will reach the 2.25% level the assumed to be reached in Dec, in the June MPR. However, the next 2 x 50 the market is now discounting, is probably too aggressive

The real core is a problem too: Core ex food & energy

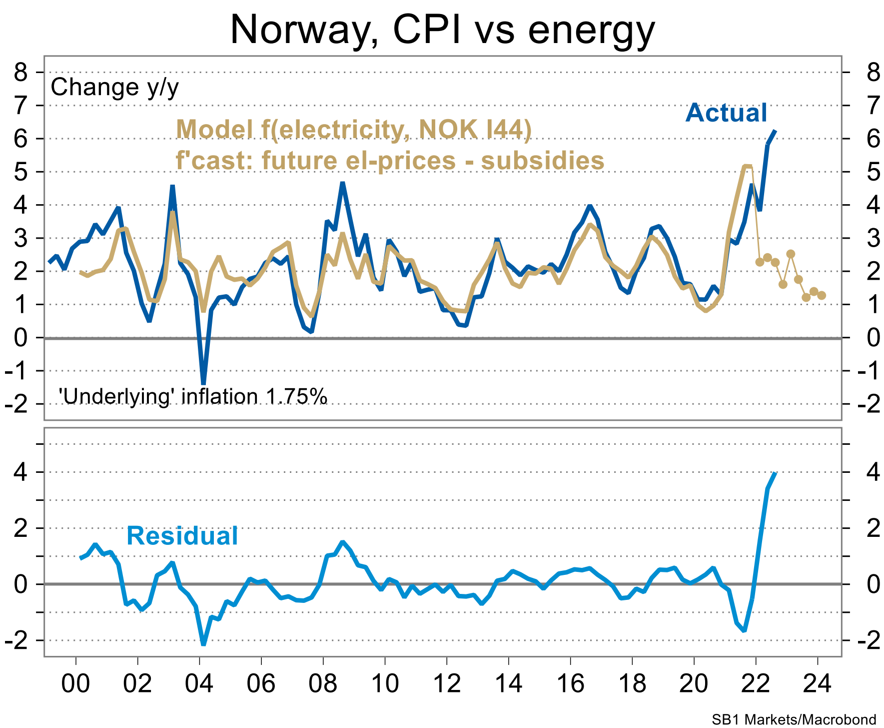
If food & airfare tickets are excluded from the core CPI, it is still at 3.5%

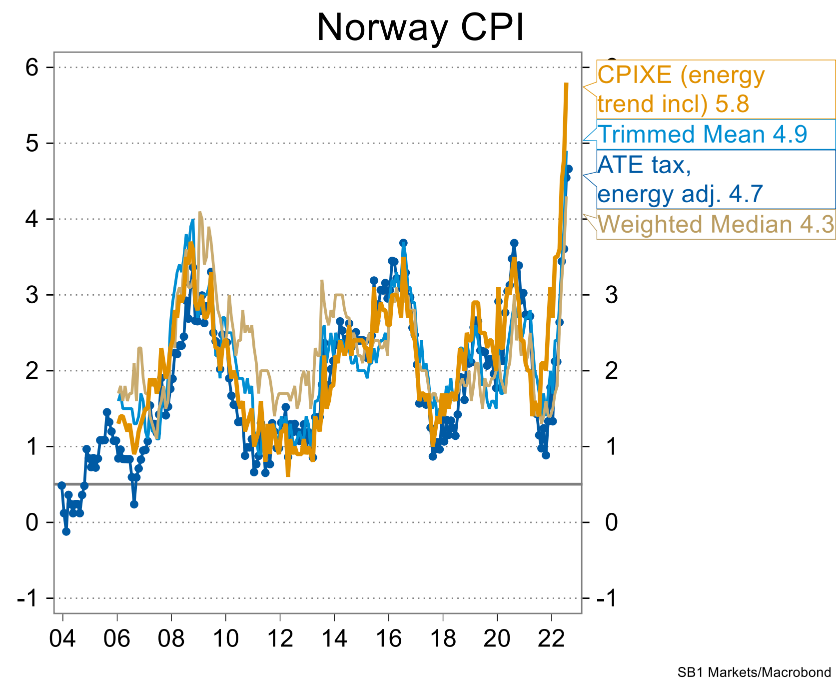




All measures of inflation suggest a broadening, to a 4% – 6% level

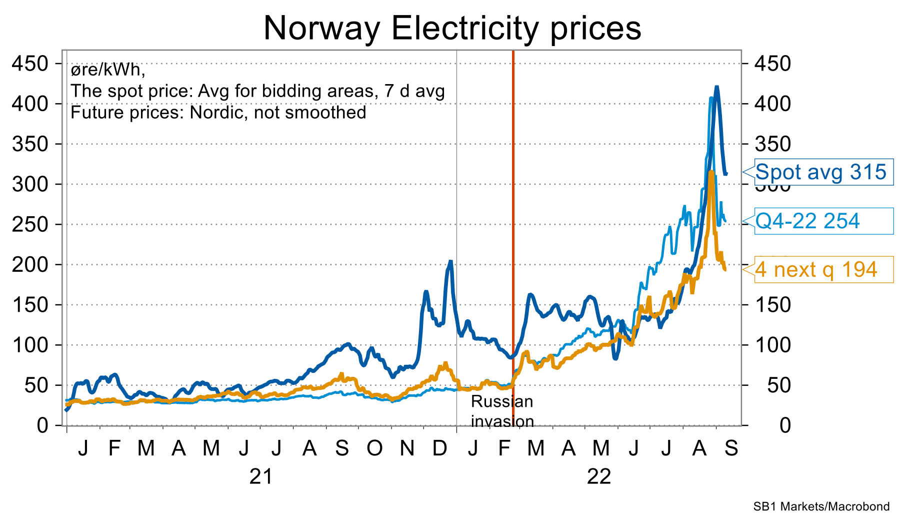
… and inflation is far higher than suggested by electricity prices & NOK

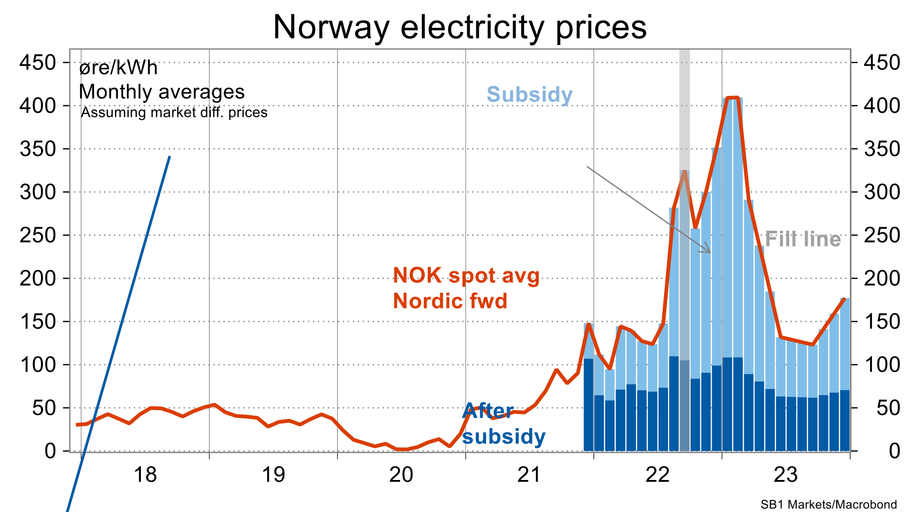


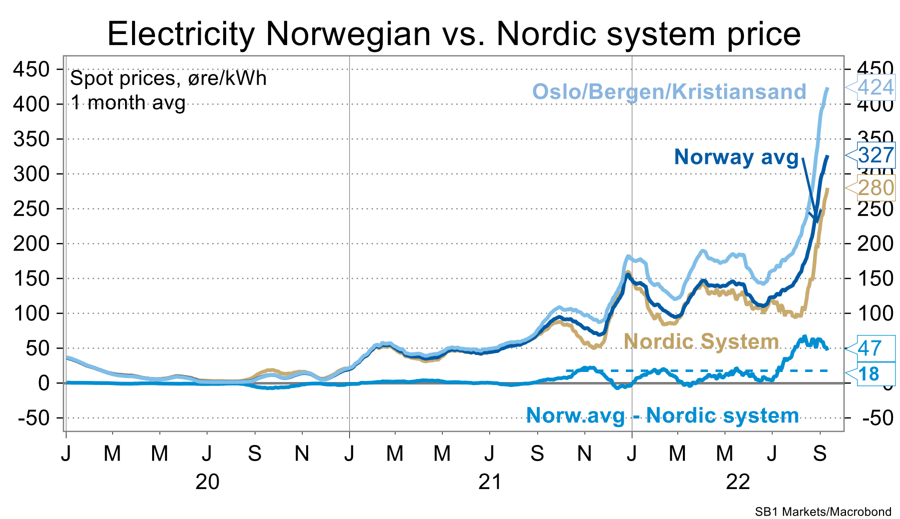


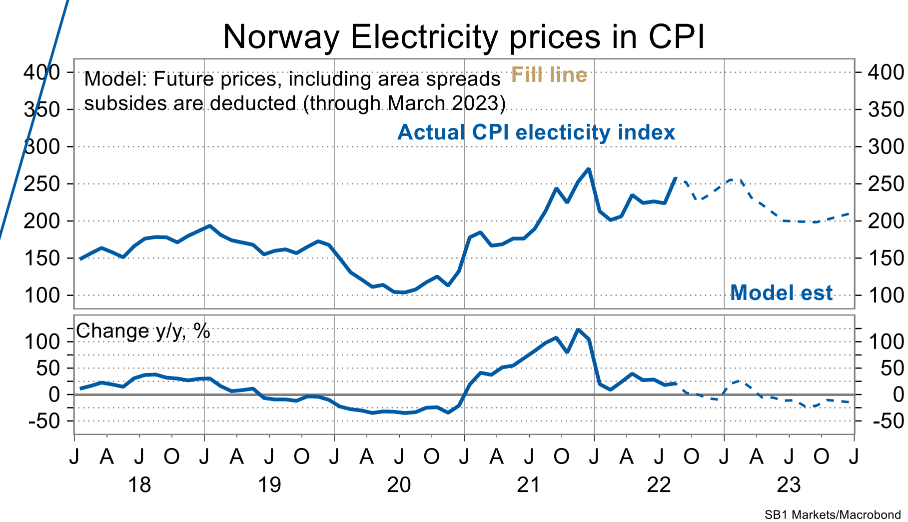
Electricity future prices sharply down but still very high!

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



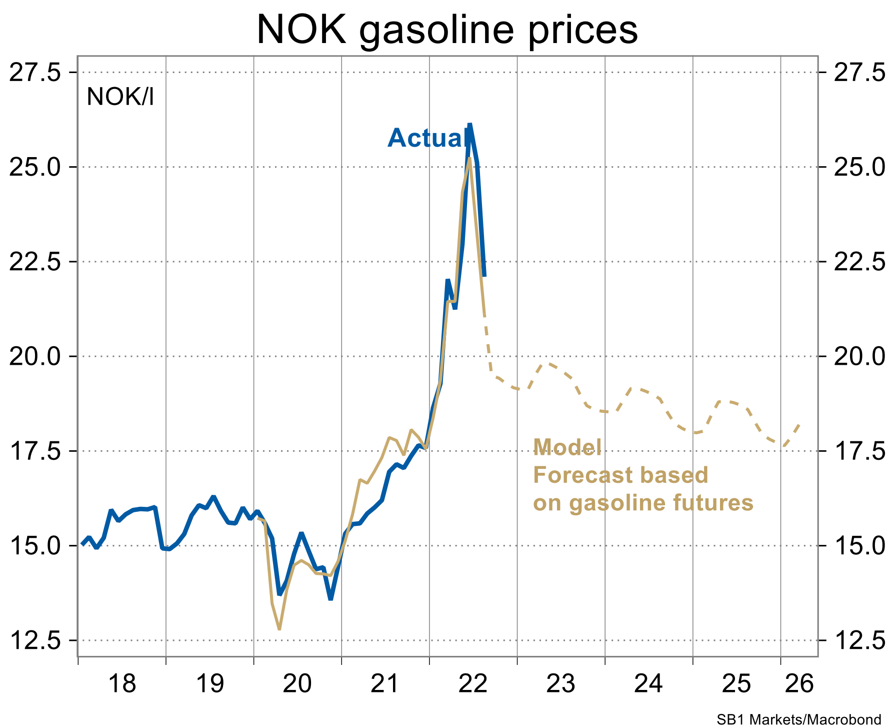


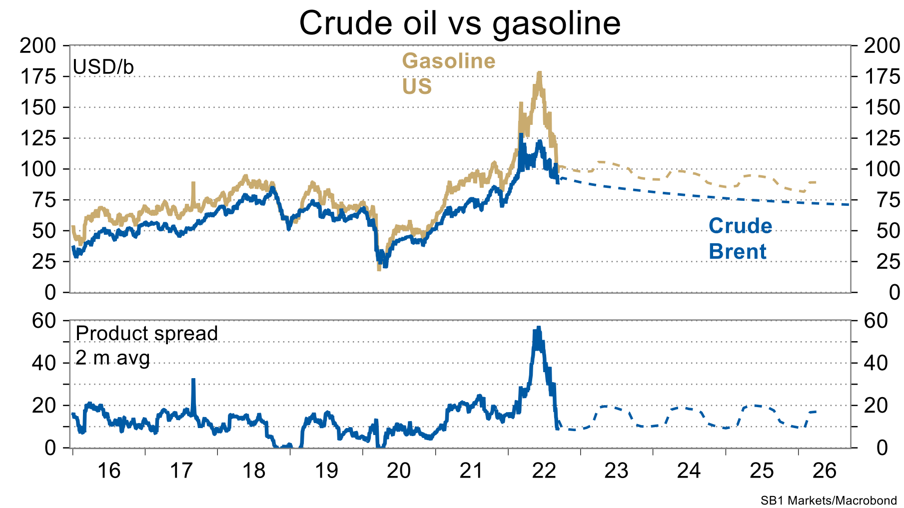


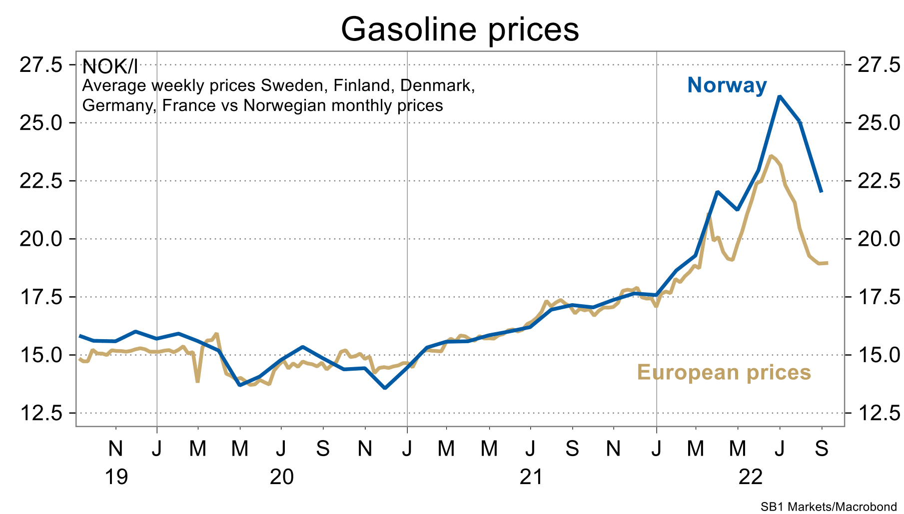


Gasoline prices rapidly on the way down

The oil price is down from the peak, and gasoline margins have collapsed, to a normal level



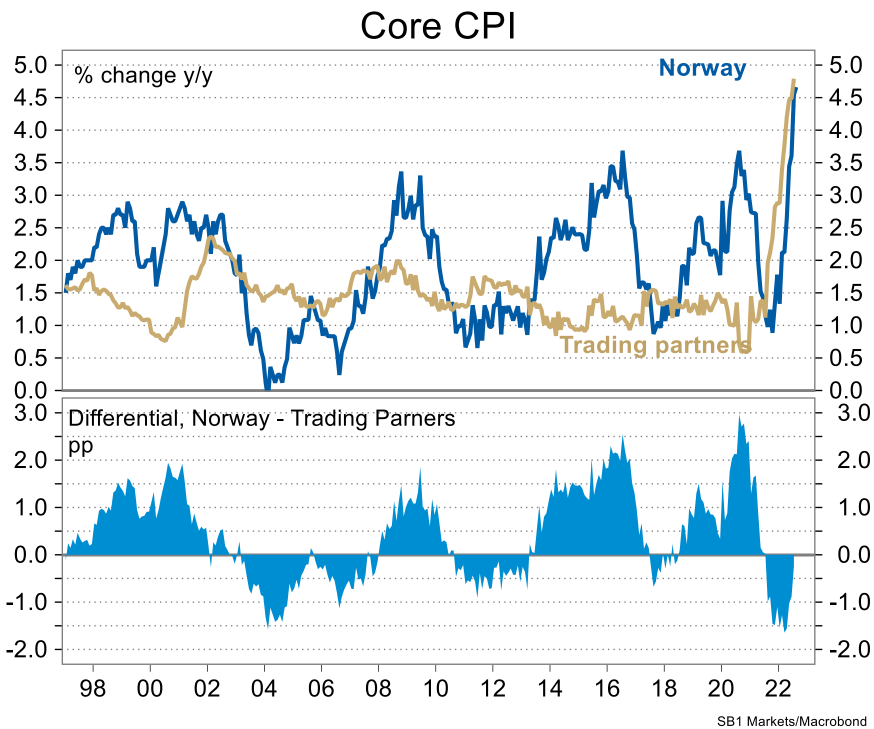


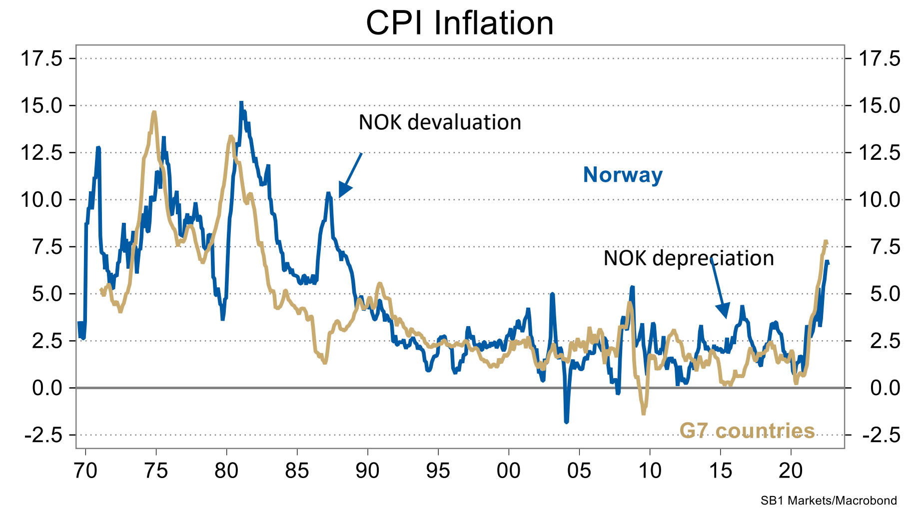


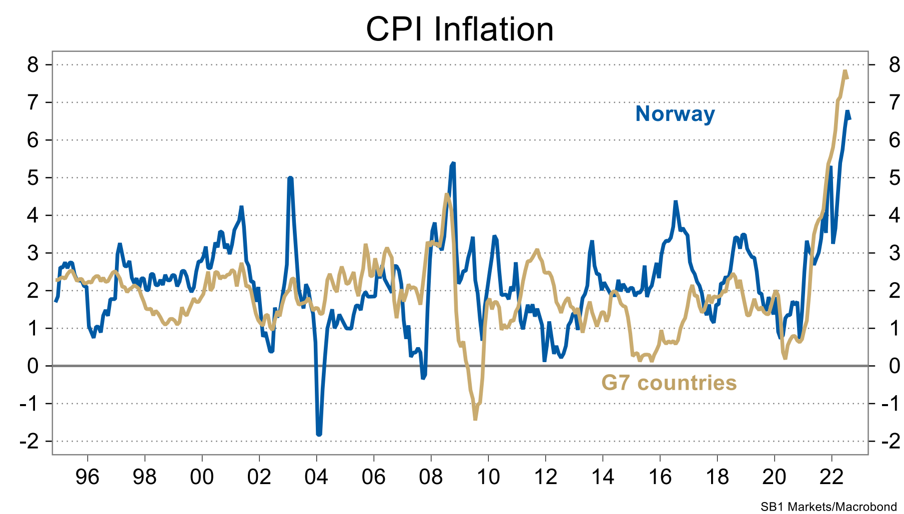
- Refinery/product margins widened sharply in February, but has fallen back to normal level since the peak in early June. In the US as well as in Europe, gasoline prices have fallen recently (US and European, as well as Norwegian prices are closely correlated – even in US prices of course is lower than European prices)
- In August, gasoline price fell all over the place. So far, the decline in Sept is limited, partly due to the stronger USD/weaker NOK

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

But limited short-term correlation, at least in the ‘low-inflation regime’. *In which we are not anymore*







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

Domestic inflation still very high, and rather broad

Electricity prices rose far less than we expected

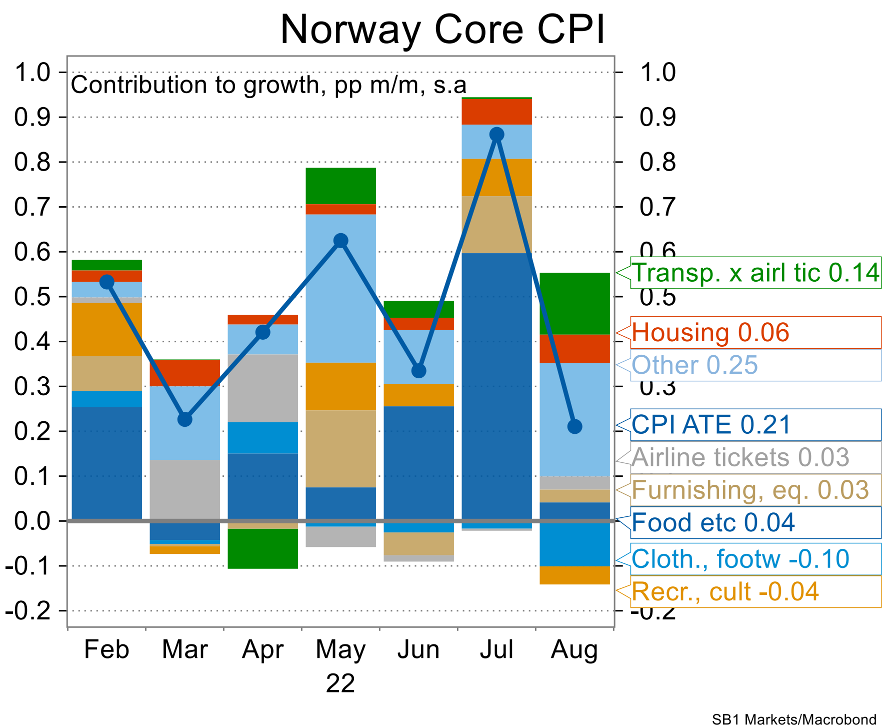
		Change m/m, seas. adj			Change y/y			Contribution, pp		
Aug-22	Weight	Out-	SB1M	Dev.	Prev.	Out-	SB1M			Dev. vs
CPI ATE, seas adj.	%	come	f'cast	pp	month	come	f'cast	m/m	y/y	f'cast
Food, non alc bev	12.9	0.3	0.0	0.3	10.4	10.3	9.8	0.04	1.33	0.04
Alcohol, tobacco	4.2	0.4	0.5	-0.1	5.9	6.0	6.0	0.02	0.25	-0.00
Clothing, footwear	5.1	-1.9	0.2	-2.0	-1.6	-1.9	0.4	-0.09	-0.09	-0.10
Housing x. energy	20.2	0.3	0.2	0.1	1.9	2.2	2.0	0.06	0.44	0.02
Furnishing	6.9	0.4	-1.0	1.4	7.1	8.6	7.0	0.03	0.59	0.10
Health	3.4	0.2	0.3	-0.0	2.4	2.7	2.7	0.01	0.09	-0.00
Transp. ex. gas, airl. tick	12.2	1.0	0.3	0.8	3.4	4.1	3.1	0.13	0.50	0.10
Airline tickets	0.8	3.5	0.2	3.3	26.2	28.7	21.4	0.03	0.23	0.03
Communication	2.4	0.6	0.0	0.6	-0.4	0.8	-0.1	0.01	0.02	0.01
Recreation, culture	10.8	-0.4	0.3	-0.7	3.5	3.0	3.5	-0.04	0.32	-0.07
Education	0.5	-	-	-	2.0	2.0	2.0		0.01	0.00
Restaurants, hotels	5.6	0.5	0.4	0.1	8.0	8.6	8.4	0.03	0.48	0.01
Other	8.7	-0.9	0.3	-1.1	3.4	2.4	3.6	-0.08	0.21	-0.10
CPI-ATE, s.a	93.7	**0.2**	**0.1**	0.1	**4.5**	**4.7**	**4.6**			0.08
Norges Bank est.			1.1		3.2		4.2			
Imported	36	0.2	-0.0	0.3	4.4	4.6	4.3	0.09	1.69	0.10
Domestic	57	0.2	0.2	-0.0	4.5	4.7	4.7	0.11	2.67	-0.02
Energy, housing	4.4	13.9	24.0	-10.1	18.0	21.0	36.9	0.61	0.92	-0.44
Energy, transport	2.0	-12.4	-10.0	-2.4	47.4	29.6	32.0	-0.24	0.58	-0.05
CPI Total, s.a	100	**0.4**	**1.0**	-0.6	**6.8**	**6.5**	**7.2**	0.41	6.54	-0.57
Norges Bank est.			0.9		5.1		5.4			
Change m/m, seasonally adjusted (calc by SB1M)										
Sum of parts does not necessarily add up to totals										

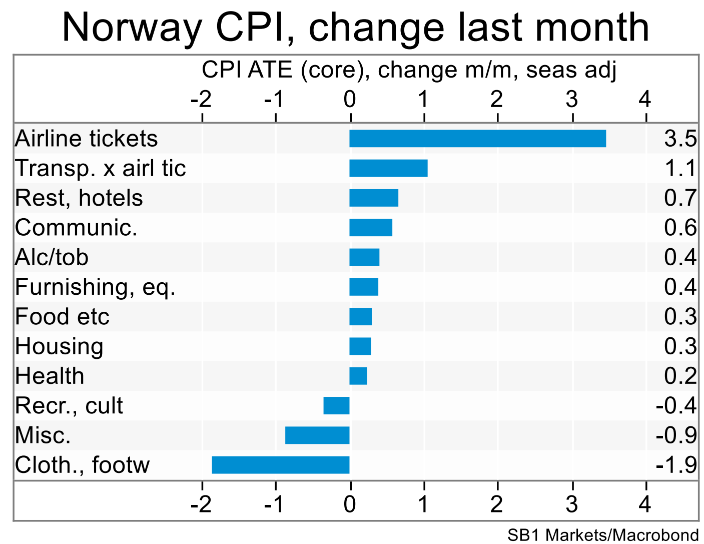
- **Food, non-alc bev.** prices rose 0.3% (ex taxes, seas. adj), we expected them to remain flat. Price fell 1.1% not adj. The annual growth declined 0.1 pp to 10.3%
- **Clothing** prices fell further, down 1.9%, and are up down 1.9% y/y. We expected 0.2% m/m increase
- **Furniture/hardware/equipm** prices once more surprised on the upside, 0.4% m/m, 8.6% y/y
- **Transport ex. gas & airfare tickets** rose 1.0%, up 4.1% y/y, surprisingly low given global auto prices
- **Airline tickets** prices were up 3.5% m/m but are up 29% y/y, from a very low level last year
- **Recreation** prices fell 0.4%, up 3.0 y/y
- **Restaurant/hotel prices** up 0.5% m/m, 8.6% y/y, and way above a 2% path (starting in 2019)
- **CPI-ATE** up 0.2% m/m, 4.7% y/y, 0.1 pp above our forecast and 0.1 pp below consensus, and 0.5 pp above NoBa's 'cast
- Prices on **imported goods** rose 0.2%, and are up 4.6% y/y – a substantial contribution to total (1.7 pp)
- Prices on **domestically produced** goods & services were also up 0.2%. The annual rate at 4.7% is remarkably high
- **Electricity (and other heating)** prices increased by 14%. We expected a substantially larger increase (24%)
- Gasoline/diesel prices fell 10.0%, in line with our expectations
- … **headline inflation fell to 6.5%, 0.7 pp below our f'cast**

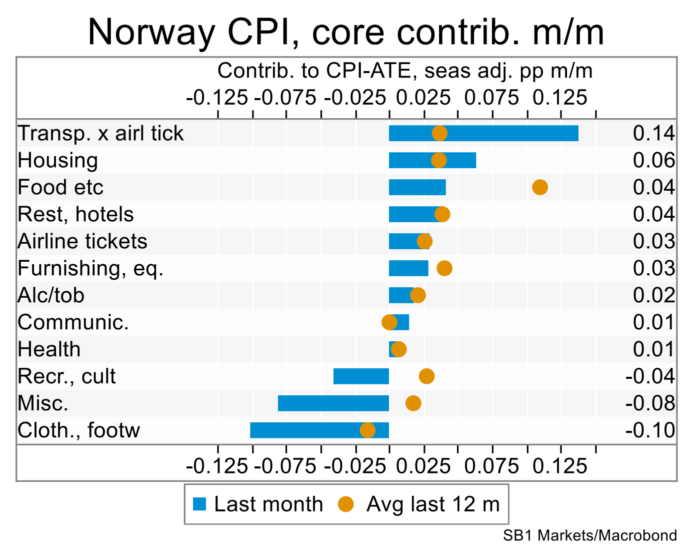
Monthly changes are seasonally adjusted by SB1 Markets. The weighted sum of the components does not necessarily sum exactly up to the total, and deviations m/m and y/y do not necessarily add up. Norges Bank m/m s.a. estimate is implied, calculated by us. Sources: SSB, Norges Bank, SB1 Markets calculations

Transportation & airline tickets, housing (rent, electr.) contributed on the upside

Clothing cheaper, while food prices keep rising



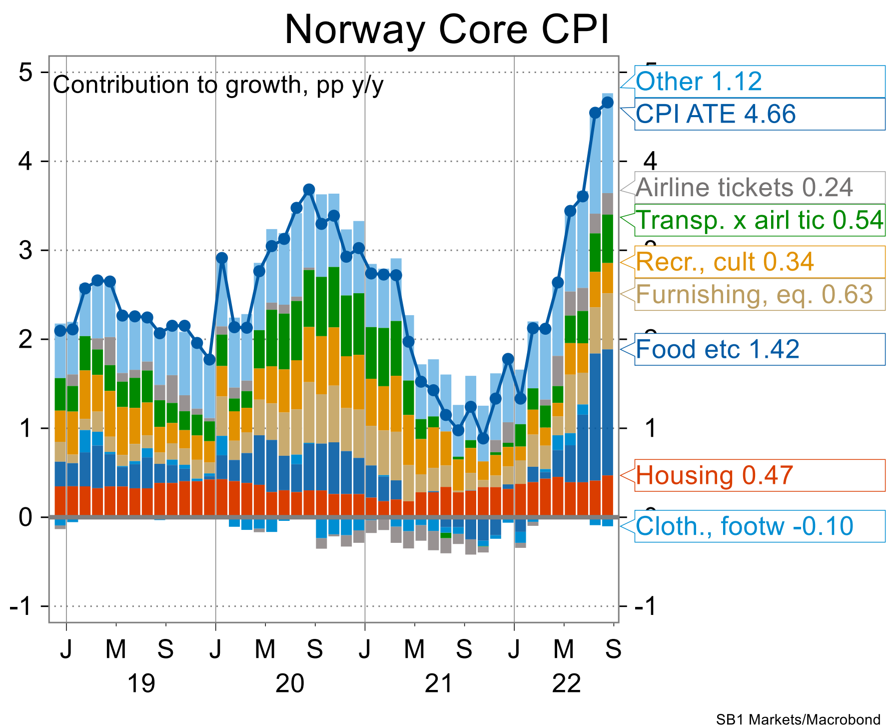


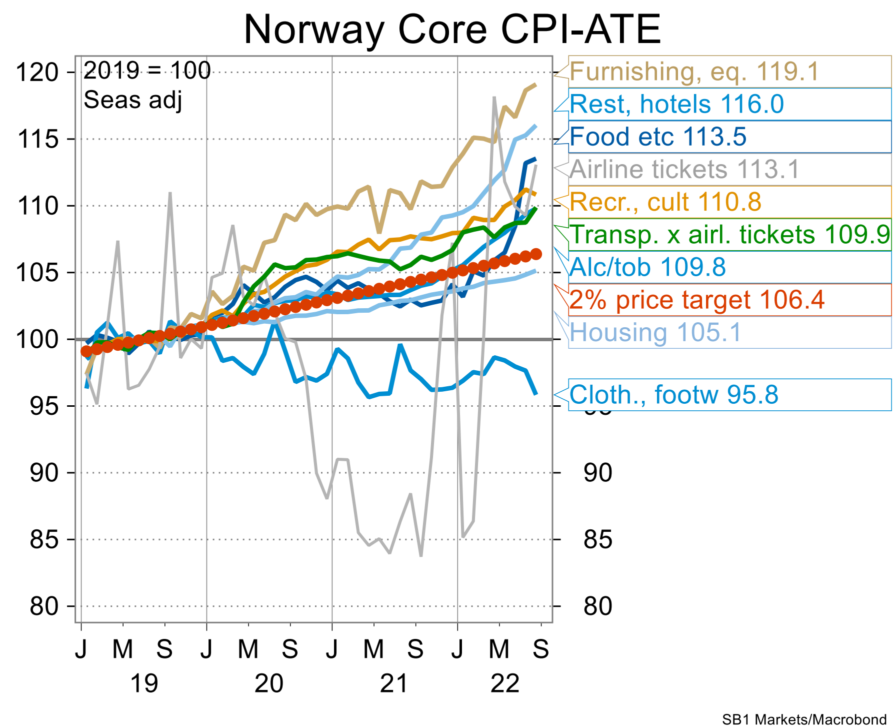


SpareBank 1 MARKETS

Faster/broader price growth recent months

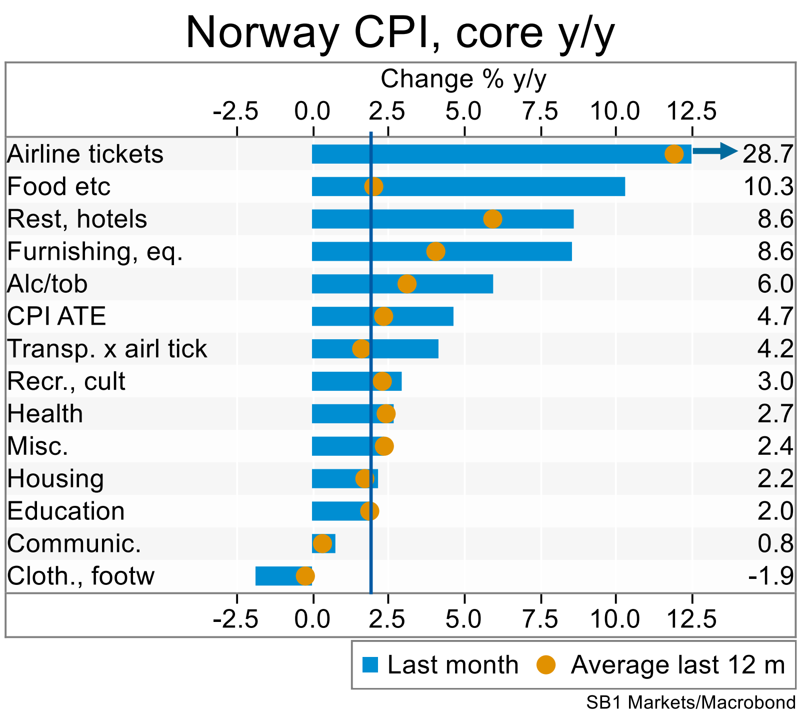
Just clothing/footwear, and housing ex energy below the 2% path since 2019

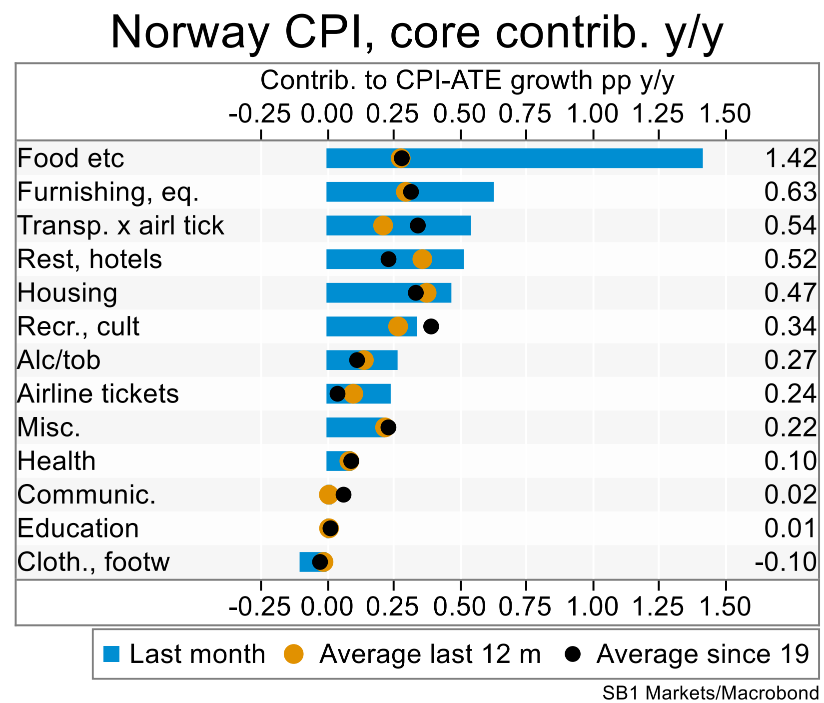




10 sectors report core inflation above 2.0%, just 2 are below

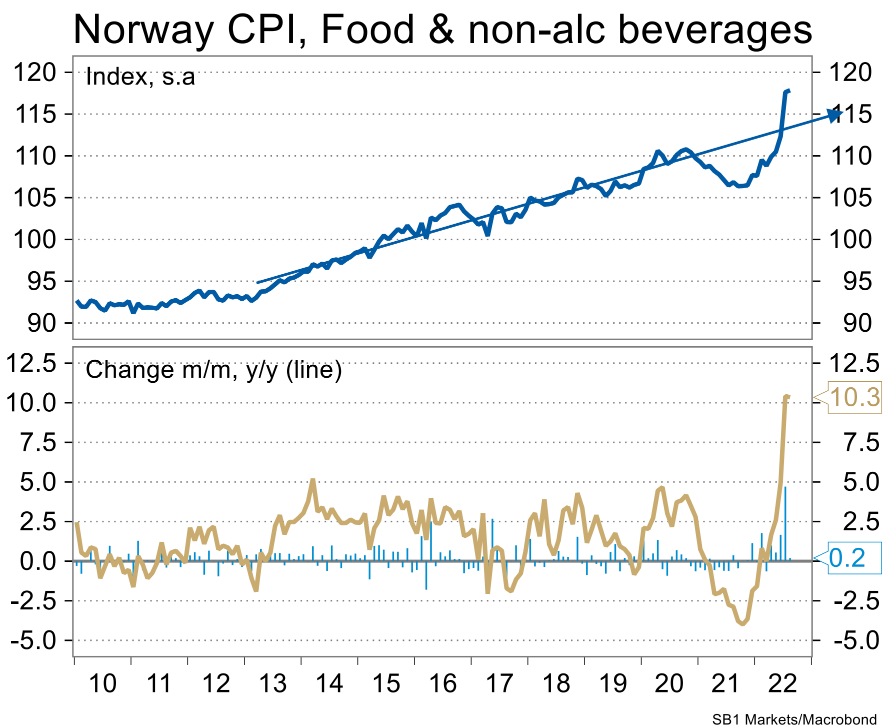
Food, furnishings, restaurants/hotels & transportation have contributed the most y/y

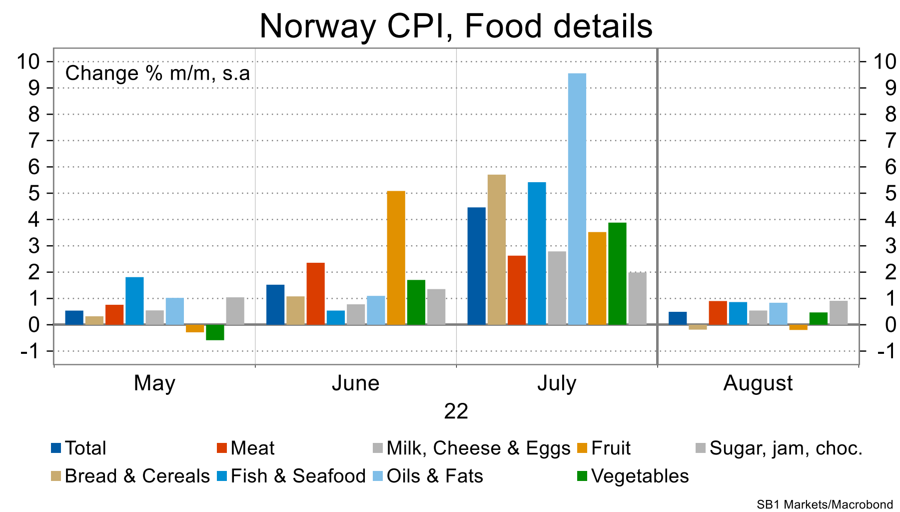


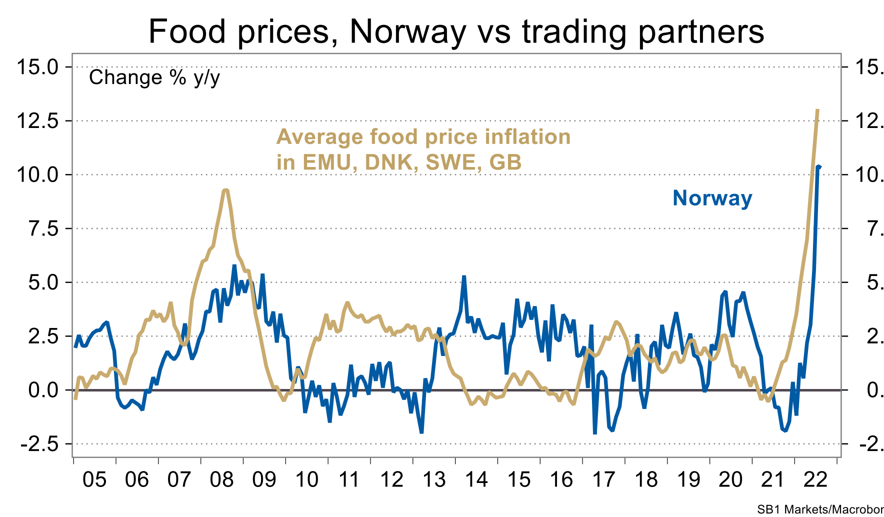


Food prices rose marginally in August, following the June/July surge

Broad price increases



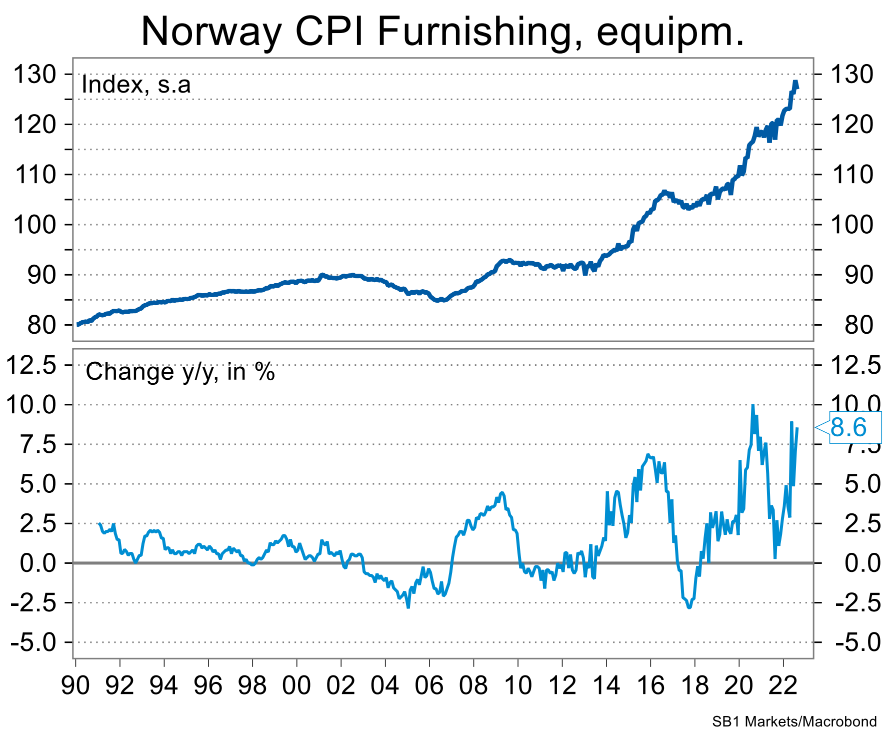


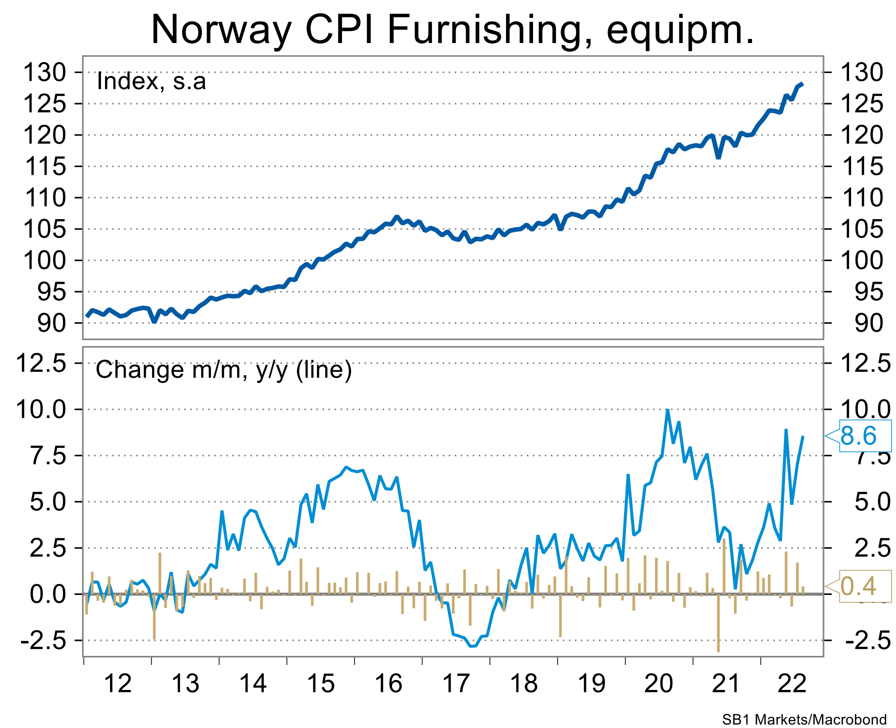


- Norwegian food prices are now up in line with prices abroad – which is not the norm at all in the highly regulated Norwegian agricultural/food market. The good news now: Food prices (commodities) are 'collapsing' globally!
- The price level is not that high vs. the pre-2021 trend, less than 4%, as prices were unusual during most of 2021. Thus, the 10% lift is not 'for real'

Furnishing etc. prices up 0.4% in July – and by 8.6% y/y

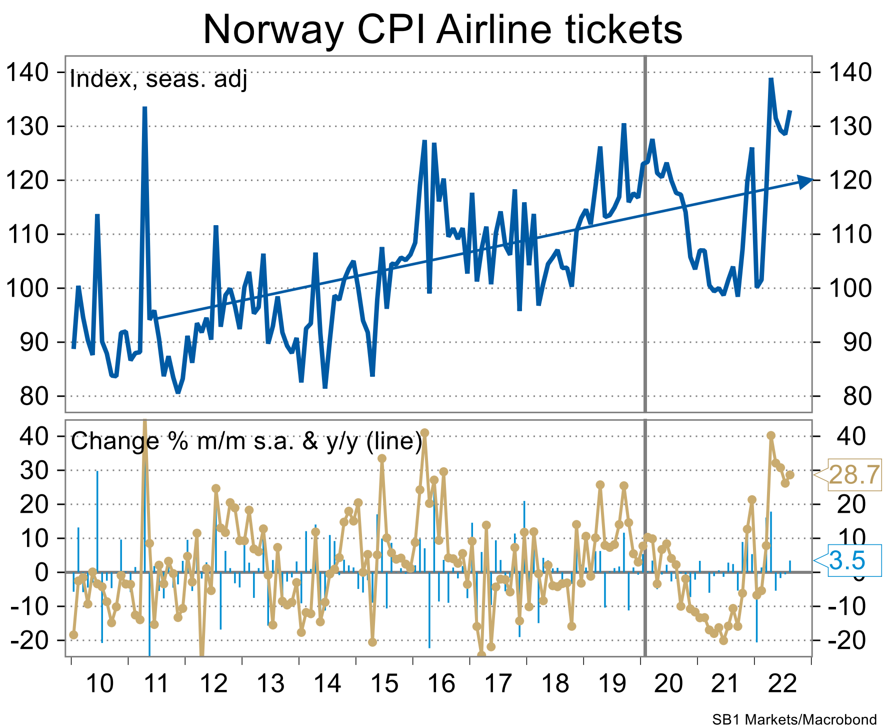
Furniture up 13% but household appliances just 3.4%



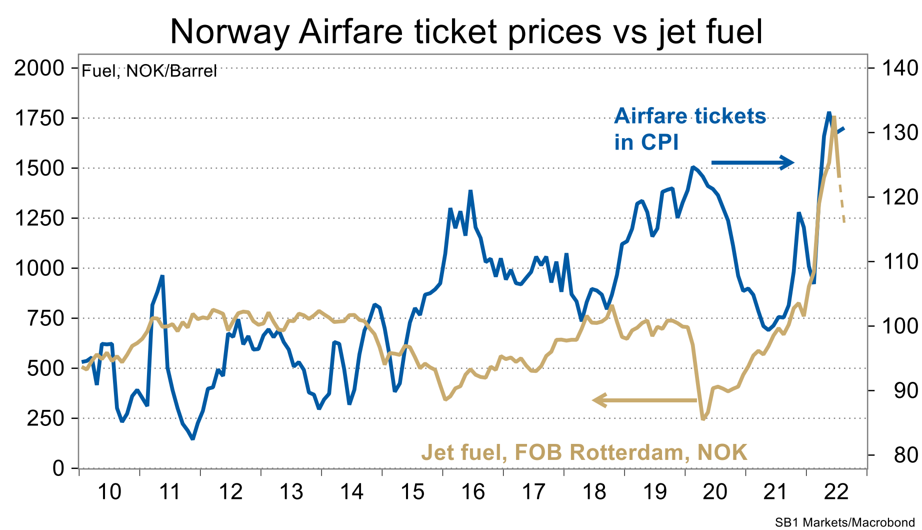


Airfare ticket prices up 3.5% m/m in August

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

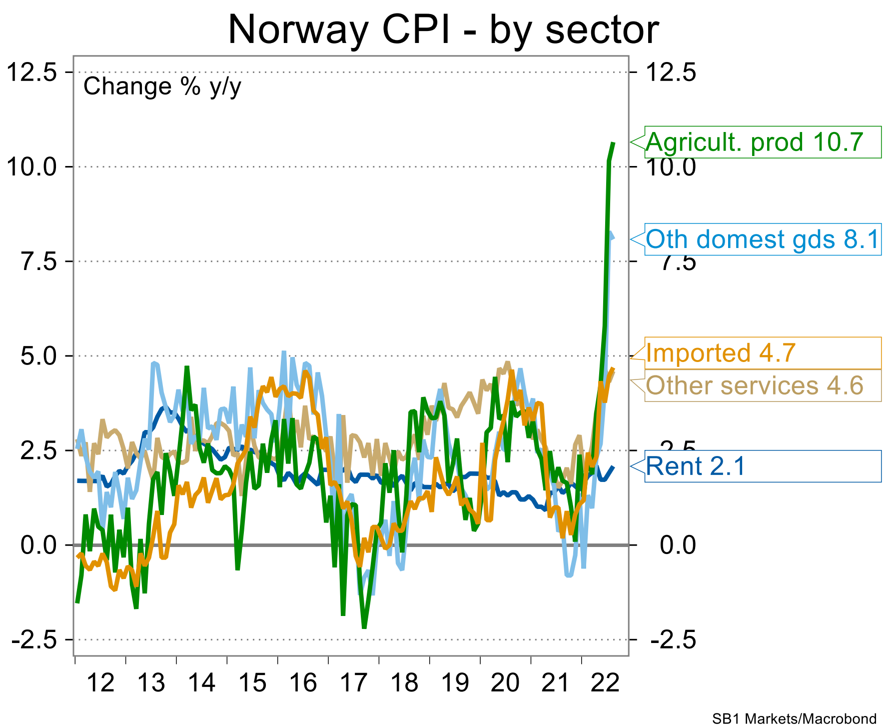


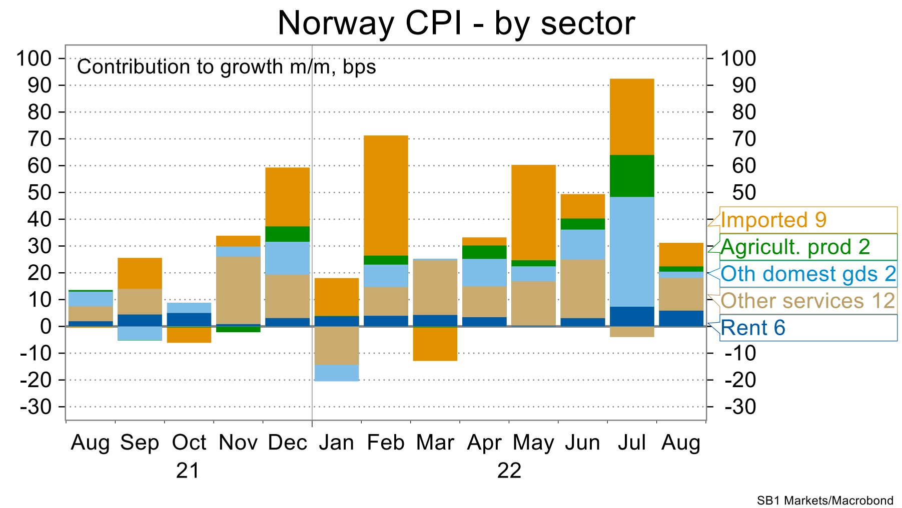
- **Airfare ticket prices** rose 3.5% m/m in August, after falling in July. We expected a 0.2% lift. Prices are up 29% y/y, from a low level last year, during the pandemic – but anyway contributing 0.23 pp to the 4.7% y/y lift in core CPI
- **Prices** are less than 10% above the pre-corona trend path – which could at least partly be explained by the increase in the fuel cost. However, there is no historical correlation between ticket prices and the fuel cost, check the chart below (and fuel prices are on the way down, by more than 30% since June)

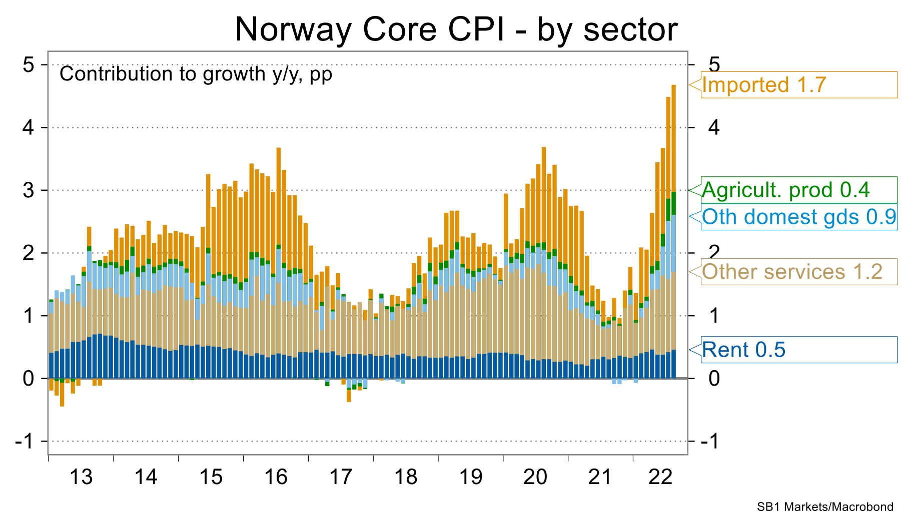


Services contributed on the upside in August

Imported goods are still contributing on the upside



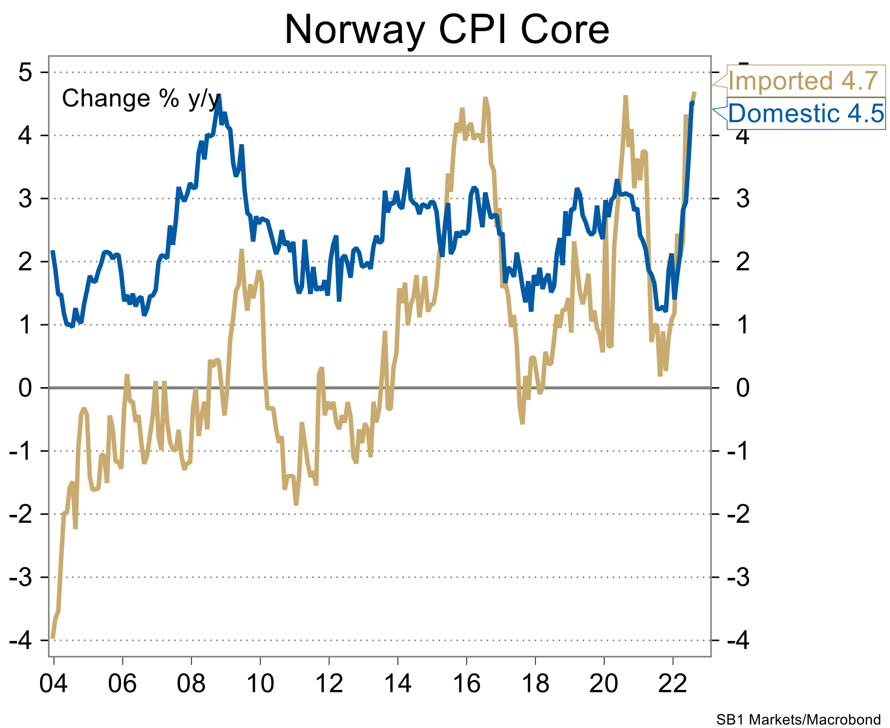


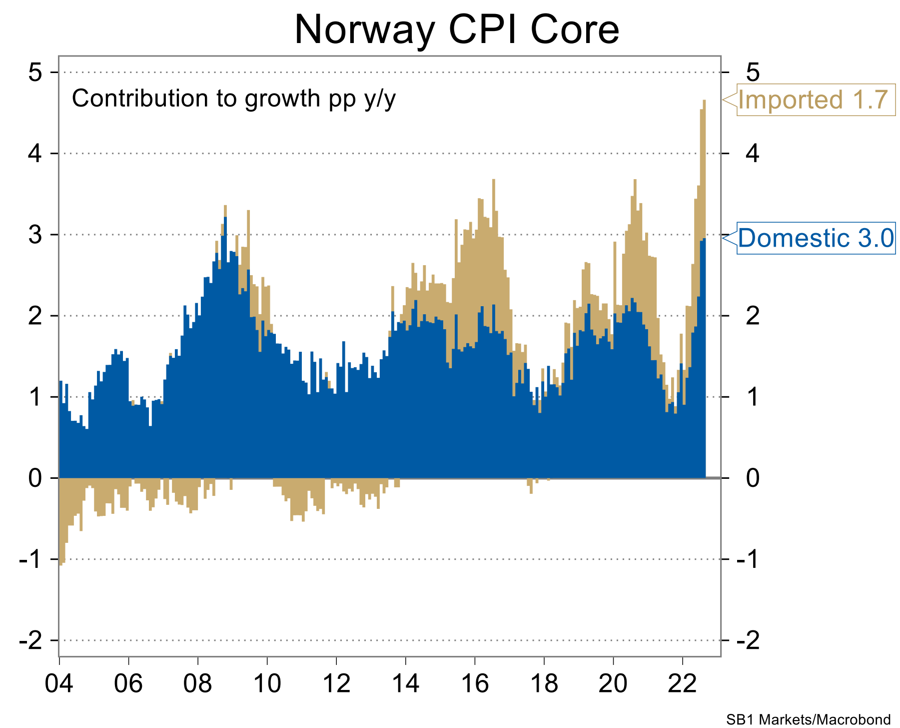


- **Domestic services inflation ex rents** slowed sharply during the corona crisis, and is now climbing faster, up 4.6% y/y, contributing 1.2% to core inflation, with substantial contributions from airline tickets (0.23 pp to total CPI) and hotels/restaurants (0.5 pp) – but also much more
- **Domestically produced agricultural products** are up 10.7% y/y, new ATH, contributing 0.2 pp to the overall core rate
- **Other goods** than agricultural & imported products are up 8.1% y/y, and contributed by a 0.2 pp contribution to the core inflation rate, by far the highest ever
- **Rent inflation** has stabilised around the 2%-mark

Imported goods up 4.7%, domestically produced goods & services up 4.5%

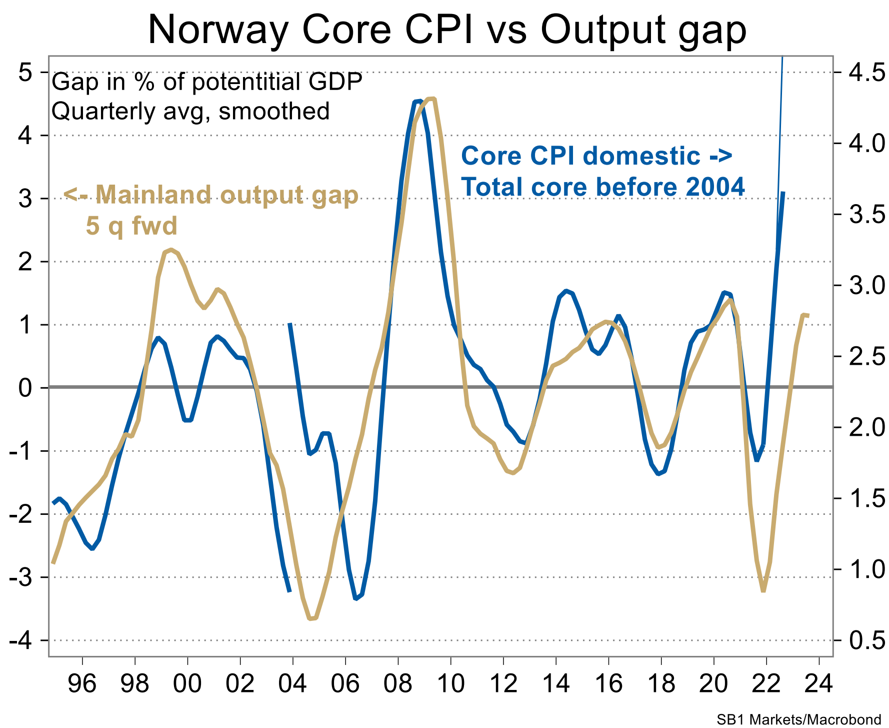
… and the largest contribution to total (core) inflation is from the domestic component

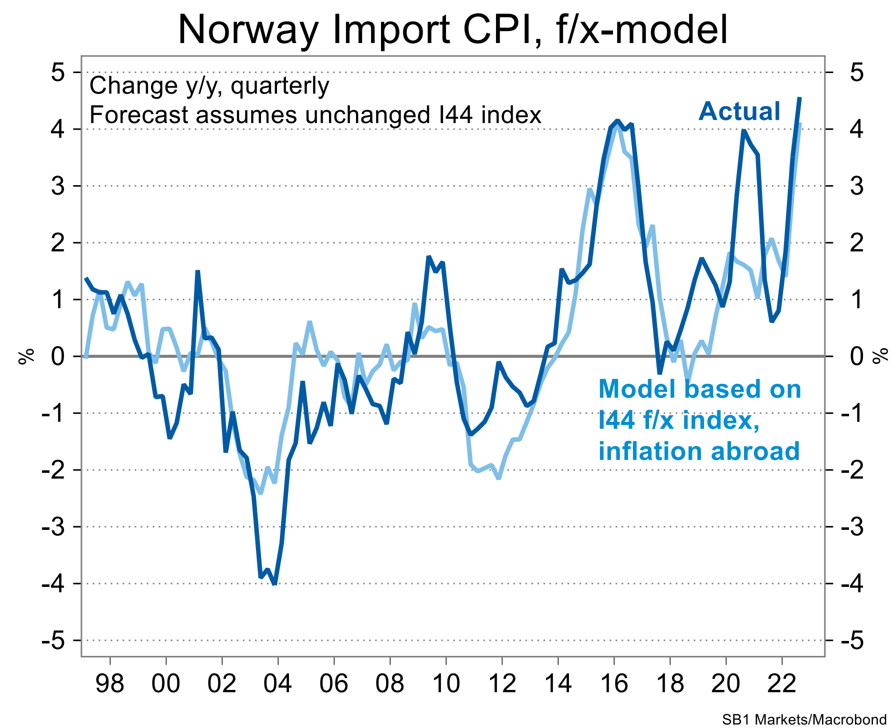




Domestic inflation up due to a strong domestic economy? At least partly

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

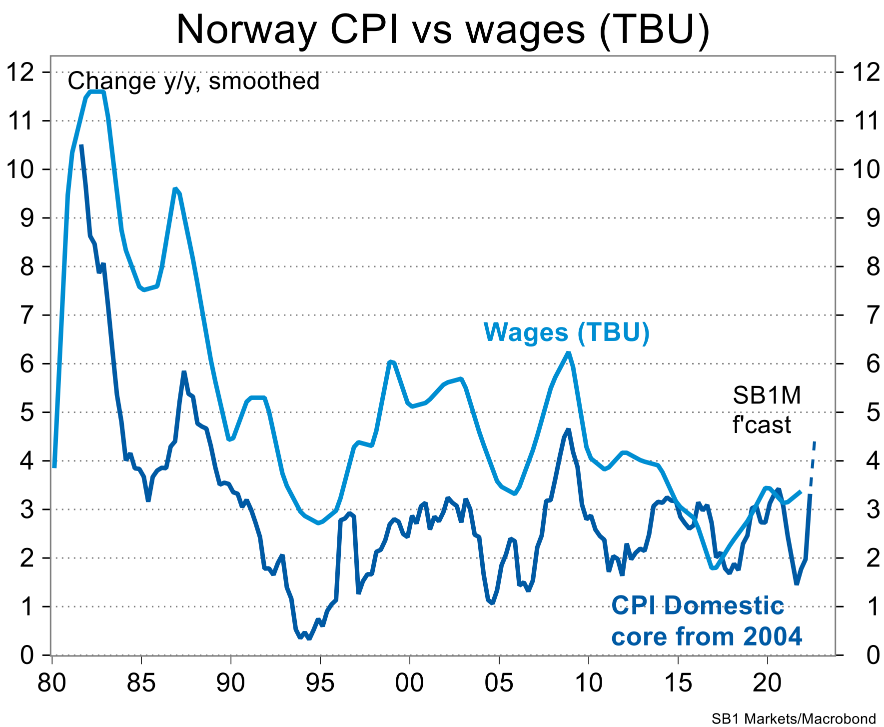


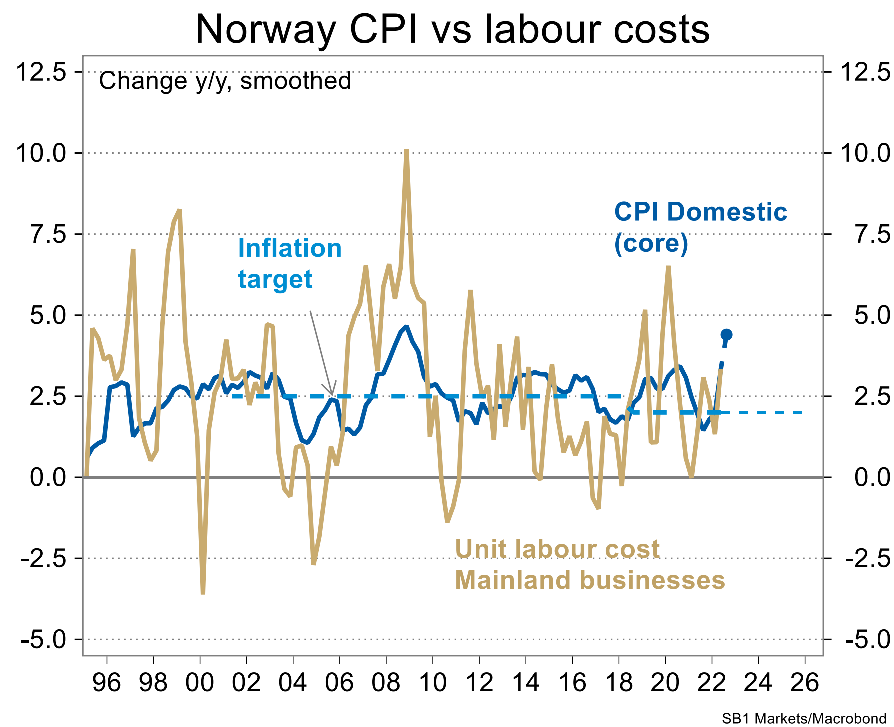


- **Labour market data and surveys** indicate that the output gap is higher than the mechanic calculation on the chart above

Domestic costs: Weak productivity growth is lifting unit labour costs

Wage inflation has not accelerated (we thought it would)

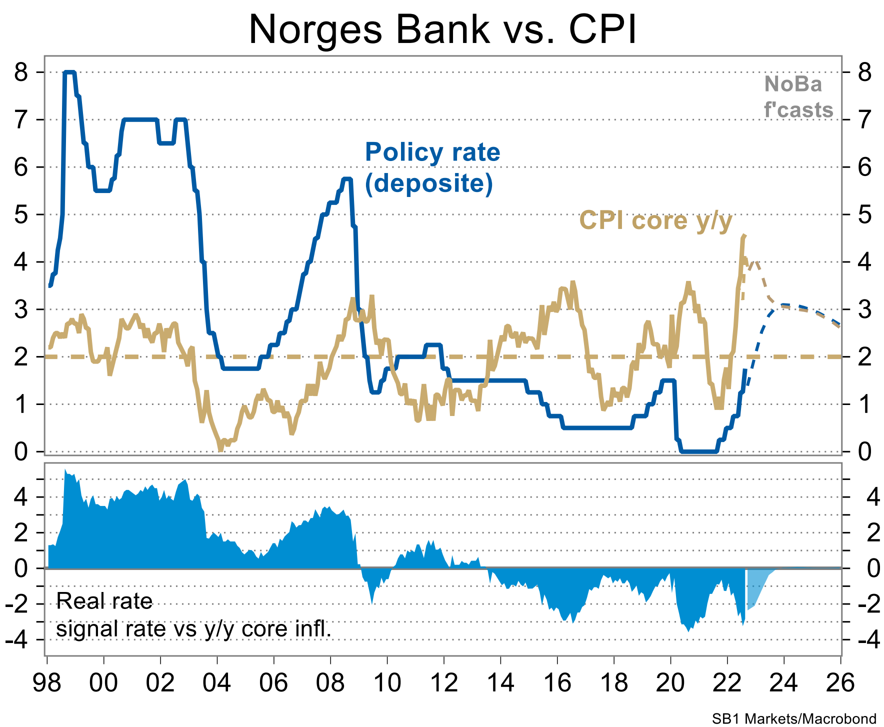


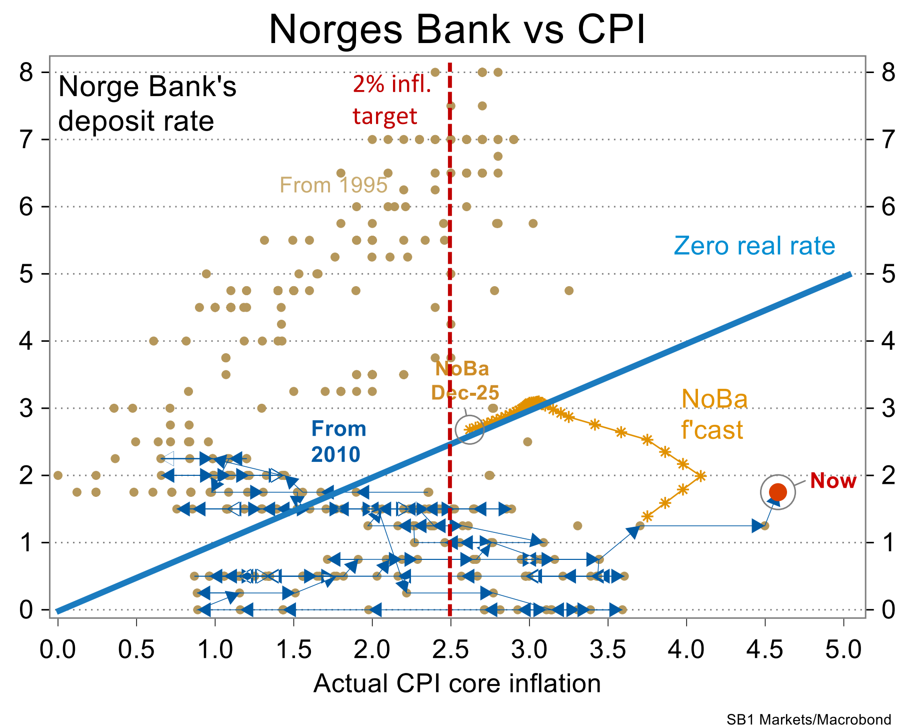


- Unit Labour Cost is up more than 3% y/y, but underlying growth well below 3%

Higher core inflation is increasing the pressure on Norges Bank

The policy rate is already hiked more than signalled in June, and the interest rate path will be lifted

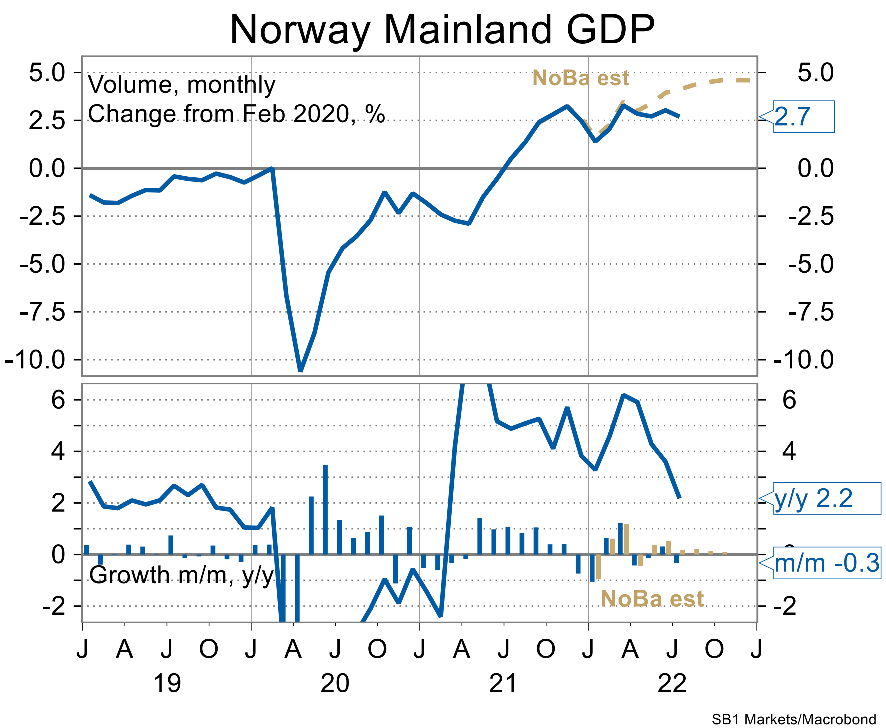




- **<u>-- but just in the short end?</u>** That is, the 3% peak level will be reached faster than assumed in June – but the peak will not be lifted? The FRA market assumes 50 bps more – which we think is too much

Mainland GDP unchanged since... last September. How aggressive will NoBa be?

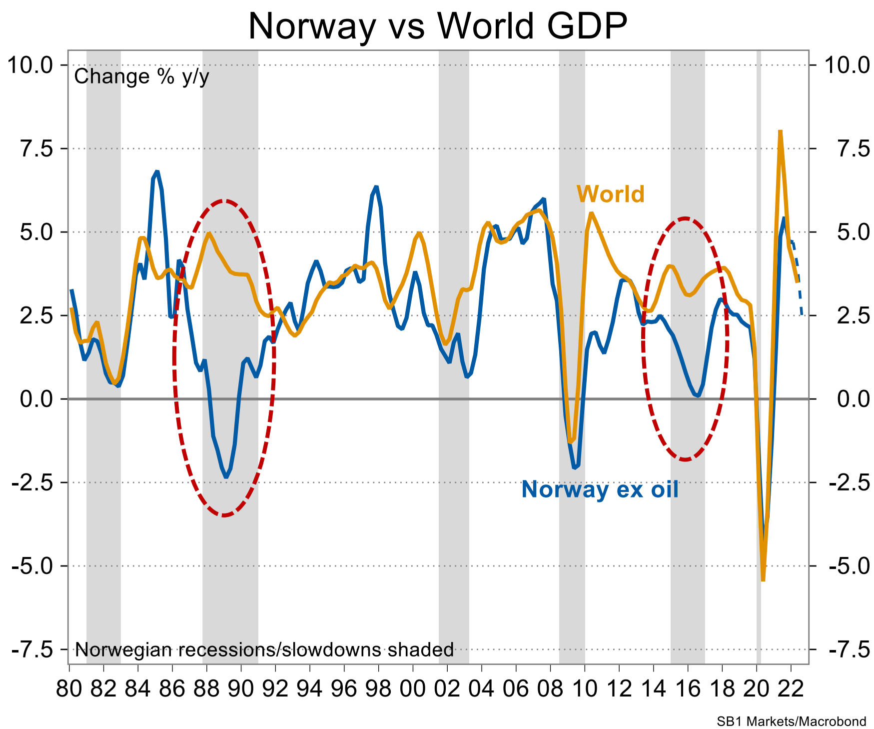
GDP fell by 0.3% in June, expected up 0.2% (consensus & NoBa). The GDP level is 1.4% below NB est.

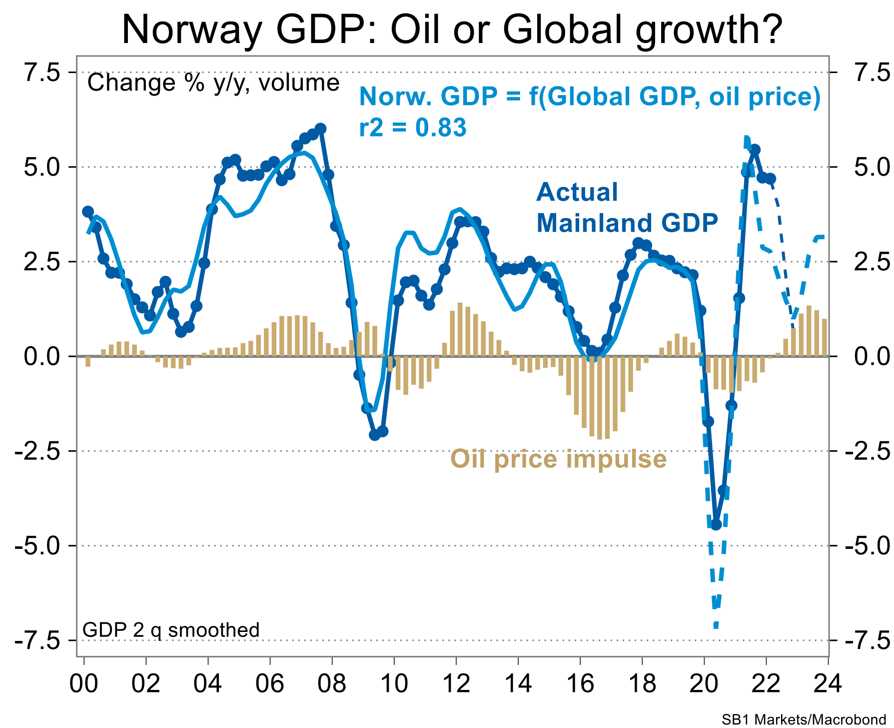


- **Mainland GDP** growth has slowed faster than we and most other, Norges Bank included, have expected. The history (level in June) was revised down by 0.2%. Thus, just 0.3% growth from last Sept!
  - » Even so, employment has increased substantially, by some 1.7% (to July from Sep-21), and the unemployment rate has fallen (albeit not by much recent months). Hours worked (quarterly National accounts) are up almost 5%! Thus, the flattening of GDP is somewhat surprising.
- **Why** has GDP stagnated?
  - » **Production:** Public sector has activity has fallen by 2.1% since last September, at least partly due to downscaling og Covid related activities - a 0.5 pp drag on Mainland GDP. Ex. this drag, GDP is up 0.8% since last Sept, close to a normal growth rate. In June Government GDP fell further, and GDP ex government grew 0.2%, in line with expectations. Services, and in June also manufacturing production, are up by 2% since last autumn. Within service, trade is contracting, in line with the decline in consumption of goods
    - On a technical note, value added adjusted for changes in subsidies & taxes is up by 1.1% since last Sept
  - » **Demand:** Household demand in Norway has fallen sharply due to less demand for goods, a 8.8% drop, and much larger than the increase in spending on services. In July, both components fell. Oil investments, mainland business investments and housing are all down since last Sept (and revised down). Net trade has contributed on the downside too, both goods and services (but just more travel abroad). A much larger increase in inventories has contributed heavily on the upside, we assume at least partly due to more oil investment under work in manufacturing industries
- **So what?**
  - » There are some excuses, and labour market data do not confirm any worrisome weakening of the economy, rather the opposite. Still, growth is slowing, and we do not expect any recovery near term due to the decline in real income and higher interest rates. <u>Our dovish view vs. the FRA market's aggressive rate expectations is strengthened</u>

Norway is slowing, like the rest of the world

The Norwegian business cycle is very closely correlated to the global cycle. Now, both are slowing

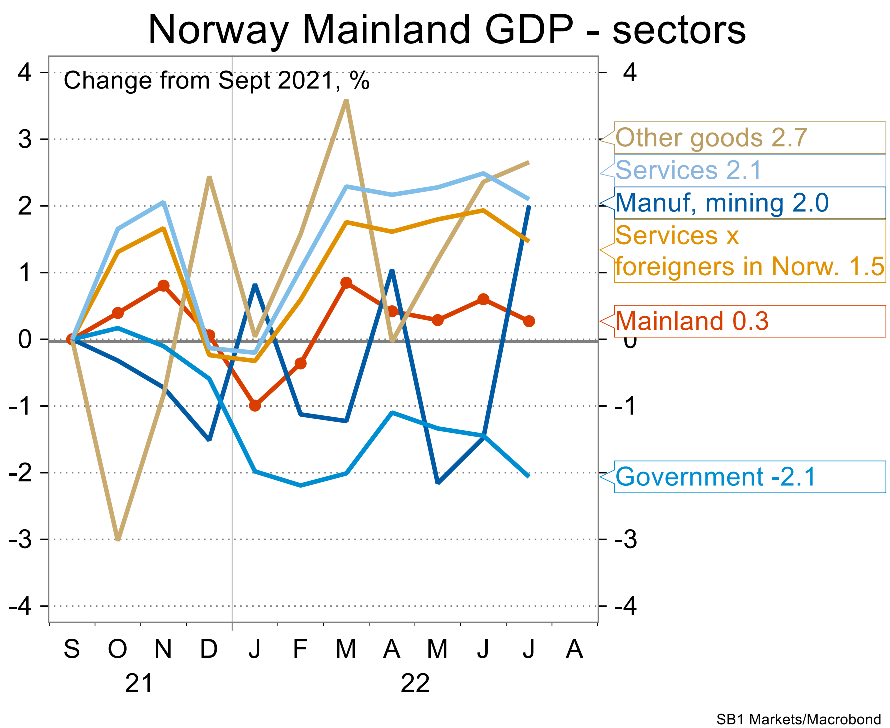


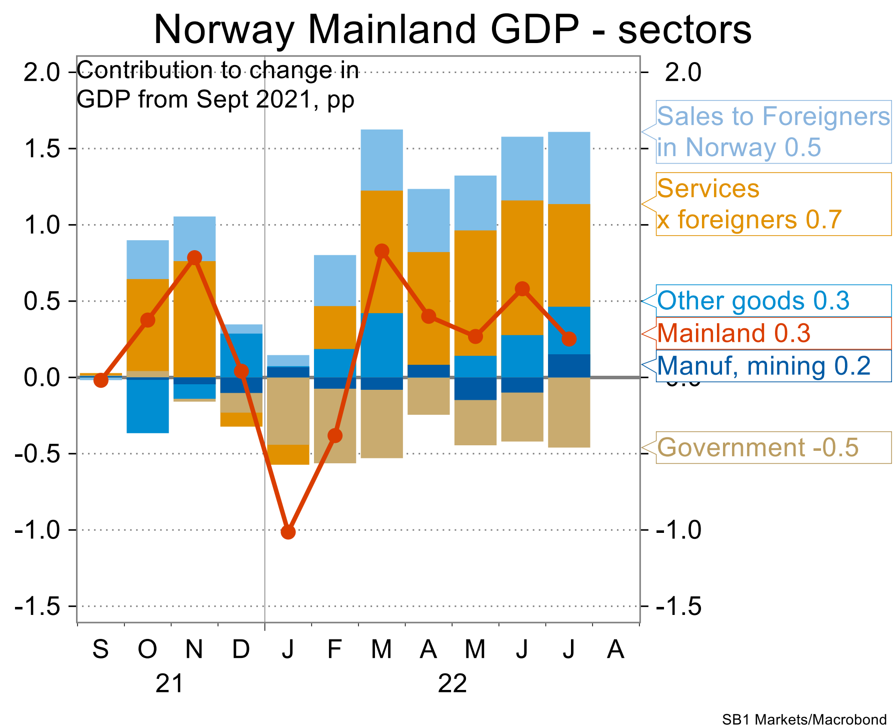


- **Global GDP vs Norwegian GDP**: A banking crisis (1988 – 1992) and the oil sector recession (2014 – 2017) are the only important exceptions
- **The oil price** is from time to time contributing both at the upside and the downside, and a model based on global GDP and the oil price explains everything you need to know about the Norwegian Mainland (ex oil production) GDP
  - » Now, a positive contribution is assumed, as a response to the lift in the oil price vs. the level in 2020 and 2021

Production: The public sector on the downside, private sectors are still growing

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

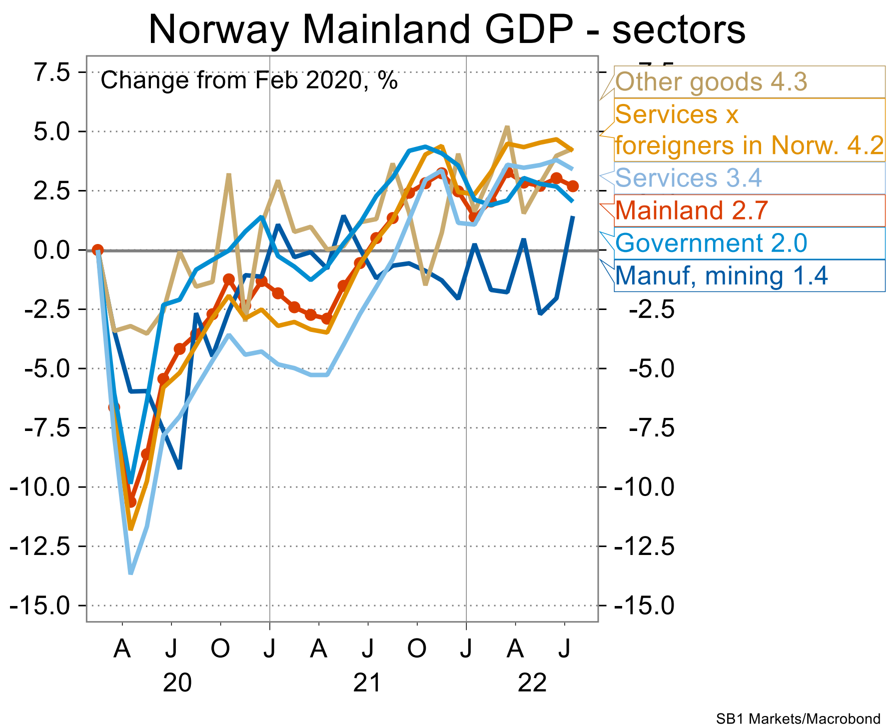


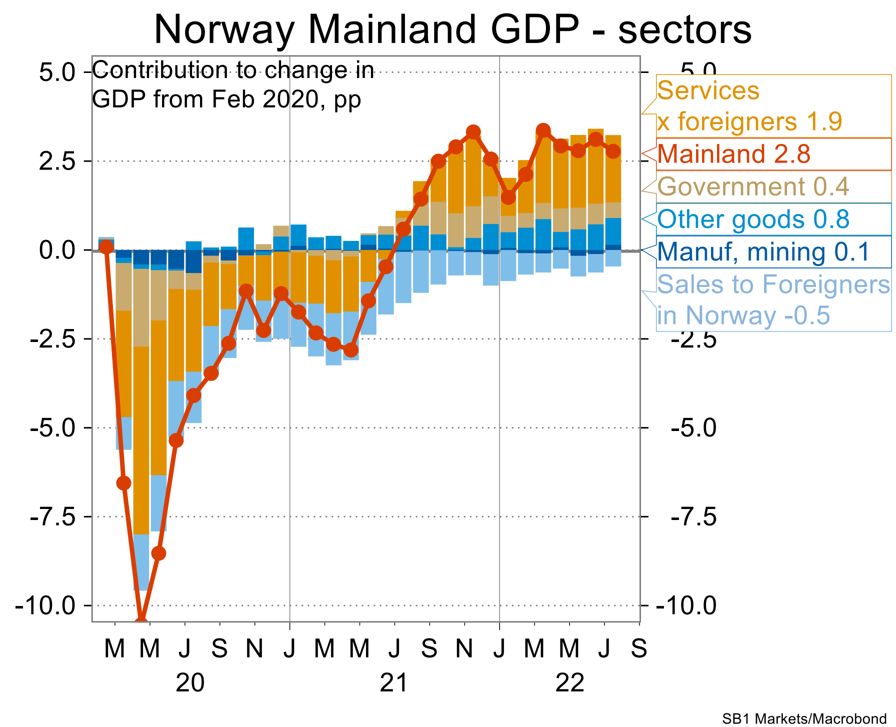


- The ‘other goods’ sector includes among other sectors fish-farming, fisheries and construction

Production: Most sectors report growth in June

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

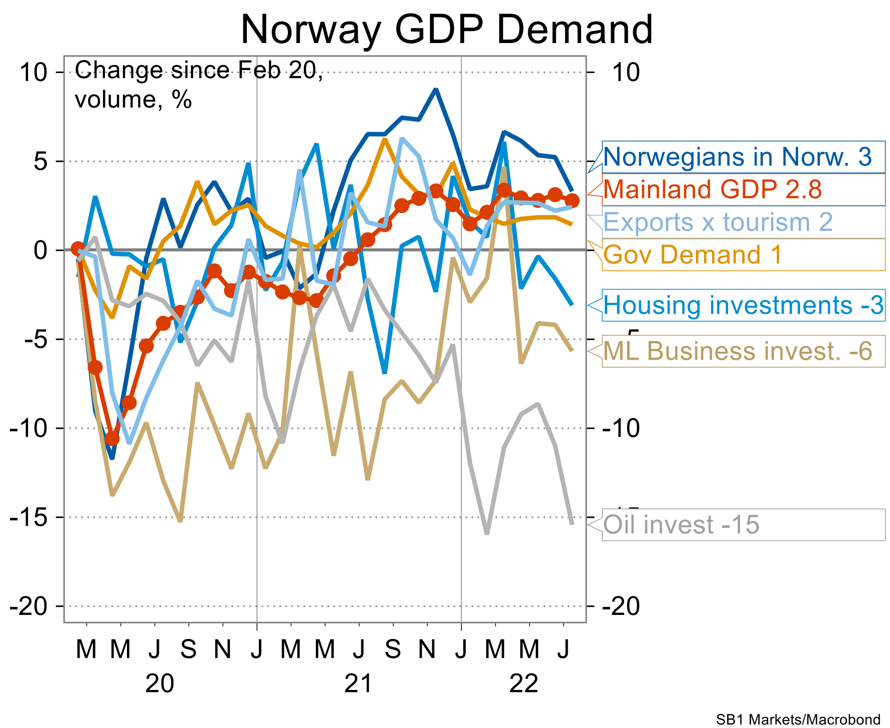


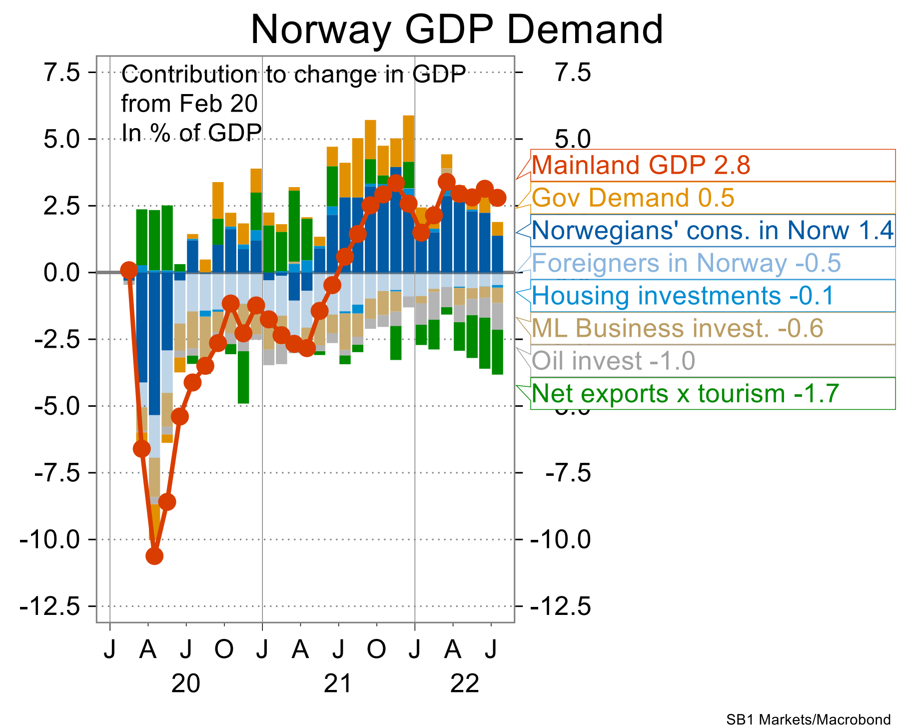


- The 'other goods' sector includes among other sectors fish-farming, fisheries and construction

Demand: Consumption in Norway sharply down in July as we went abroad

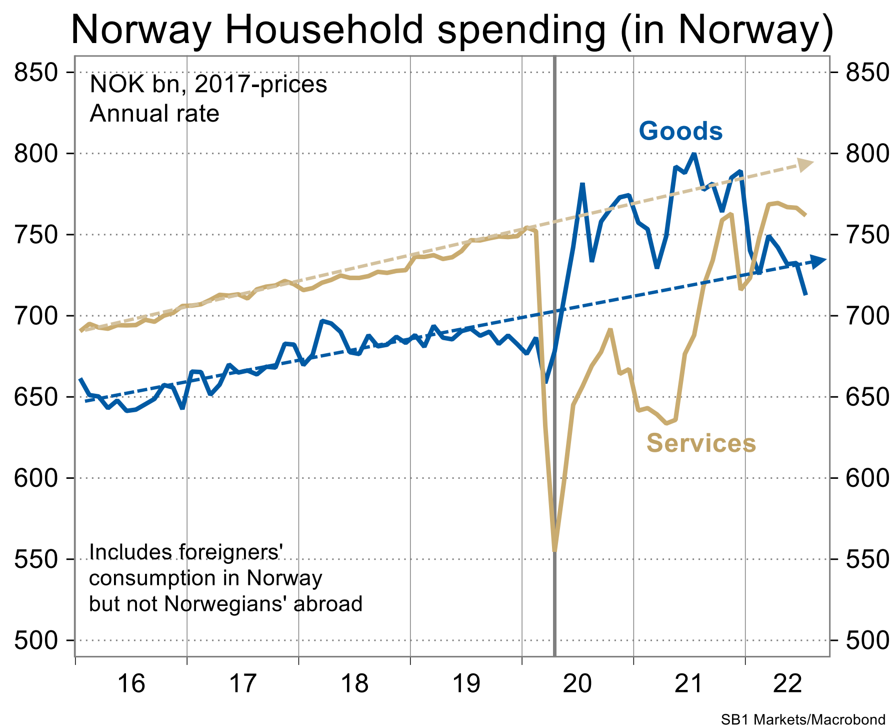
Consumption in Norway has been falling since last autumn

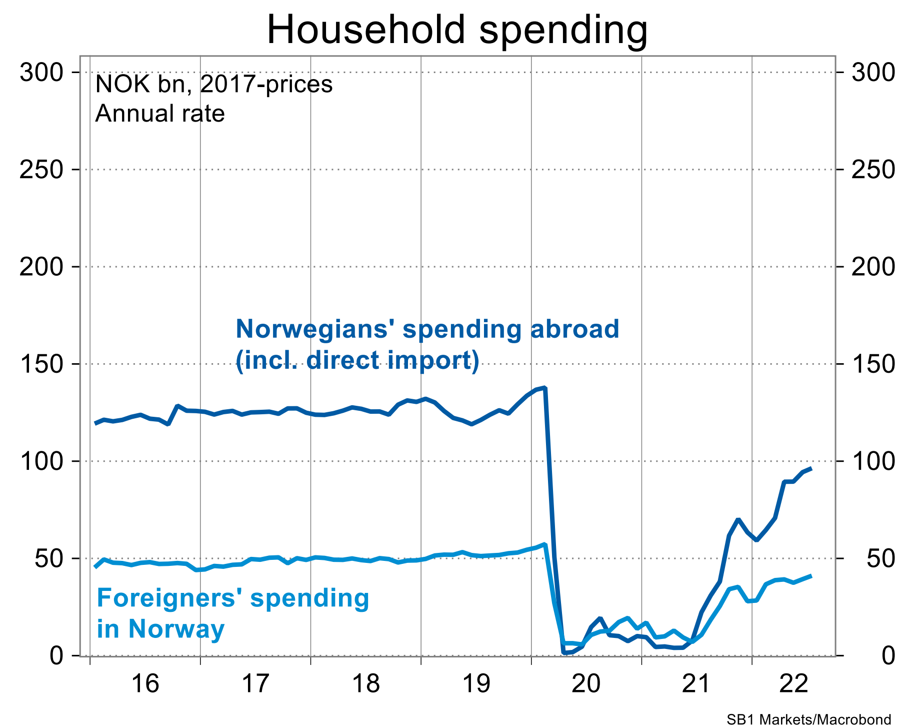




Household spending in Norway down in July, and not due to spending abroad

Service consumption down, and goods consumption even more – 11% down from the '21 peak

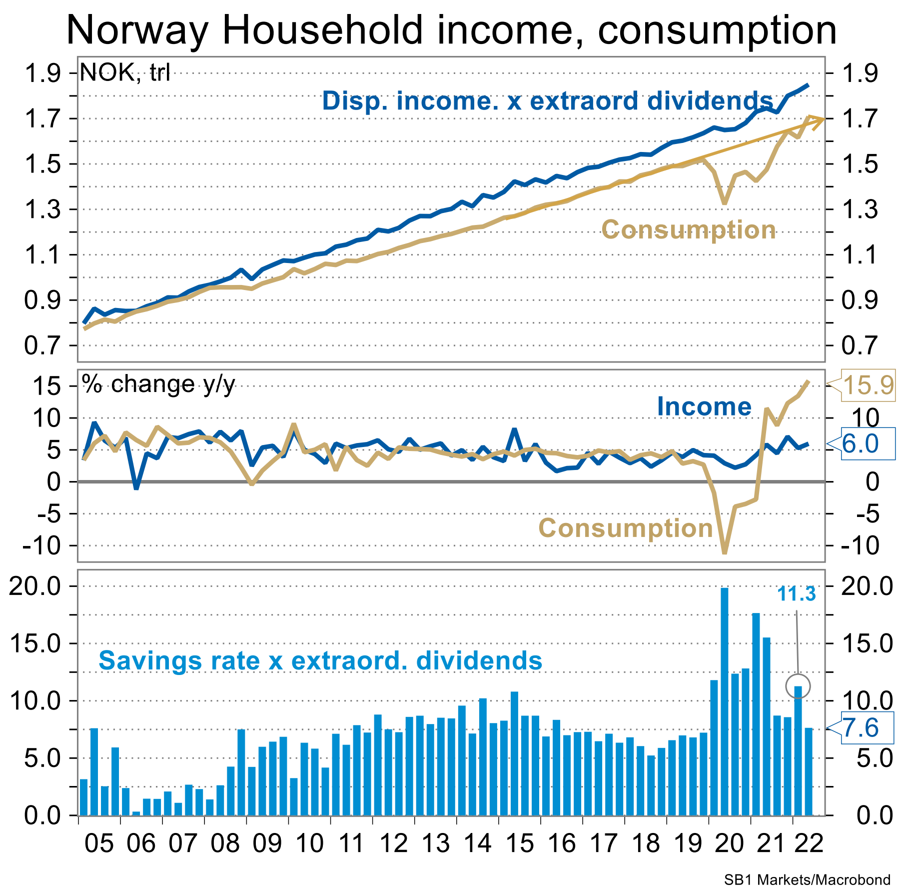




- Spending abroad is still some 25% below a normal level – but will probably recover further the coming months/quarters
- Foreigners' spending in Norway is also down approx. 25% vs the pre-pandemic level

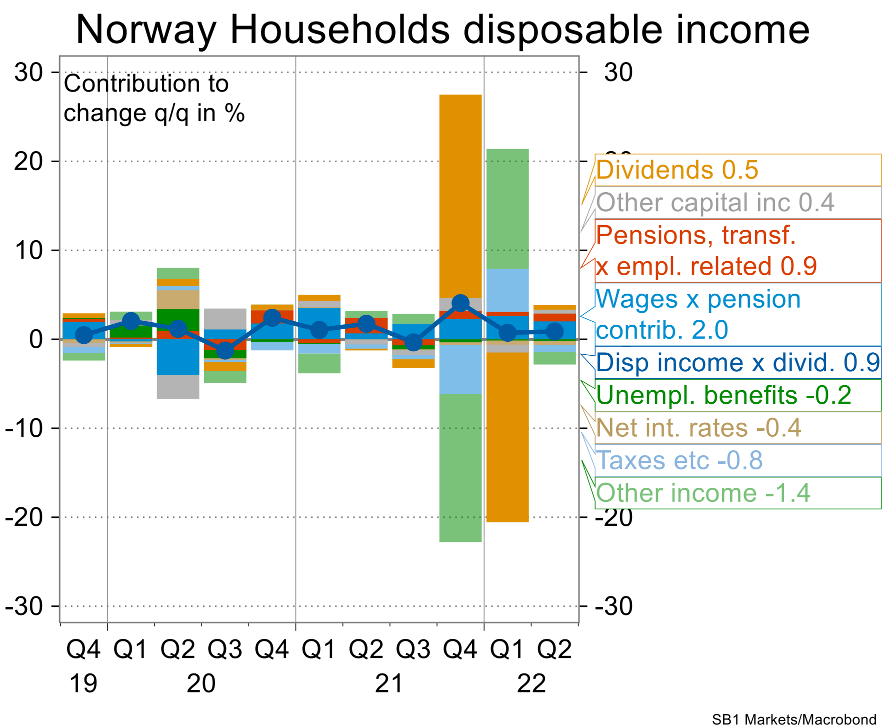
Consumption up 5.7% (in value) in Q2, income 'just' 0.9% (x extraord. dividends)

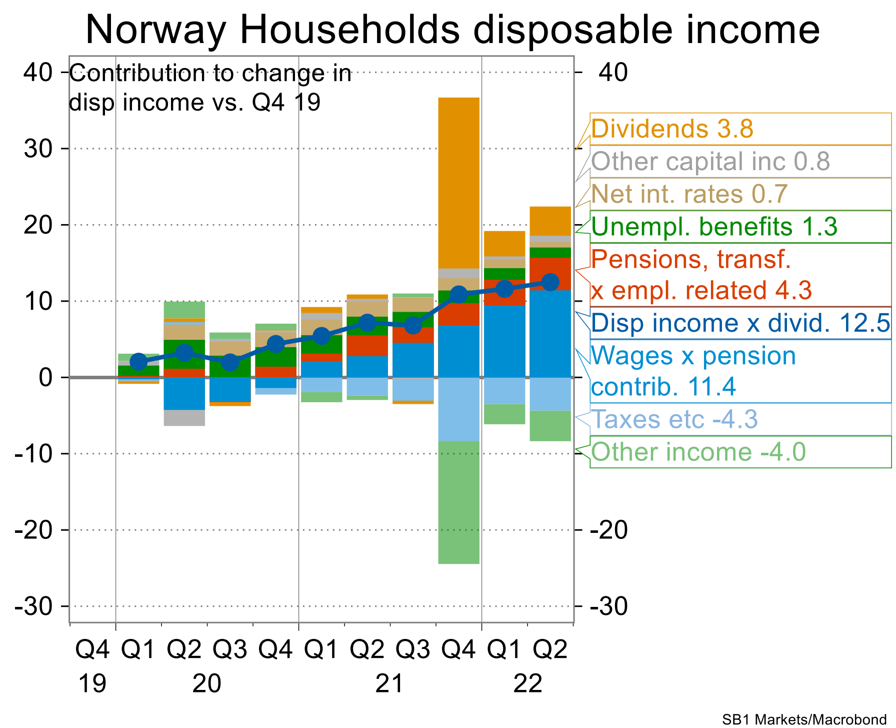
The core savings rate fell to 7.6% from 11.3%, and the cash flow is much stronger than normal



- **Total household disposable** income rose 1.1 q/q in Q2, in nominal terms. Adjusted for extraordinary dividends & pension rights, income rose by 0.9%. Total disposable incomes are up 5.6% y/y. Wage revenues are up 9.3% y/y!
- **Nominal growth in consumption** climbed 5.7% - and by 16% y/y! The price deflator is up 5.3%, and volume growth is 10.8%, from a very low level one year ago
- **The extraordinary dividends adjusted savings rate** fell by almost 3.7 pp 7.6%, in line with the pre-pandemic level
- **The savings rate** has been far higher than normal during the pandemic. The extra saving during the pandemic equalled approx. 12% of one year's disposable income
  - » How these money are invested, check some few pages forward

Wage revenues are coming back, unemployment benefits contribute less

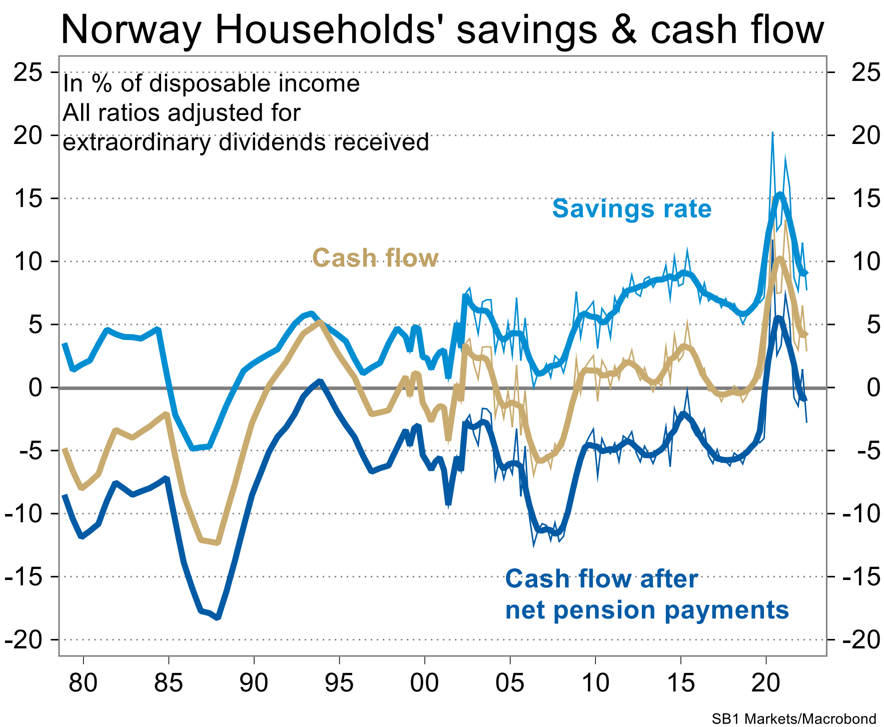


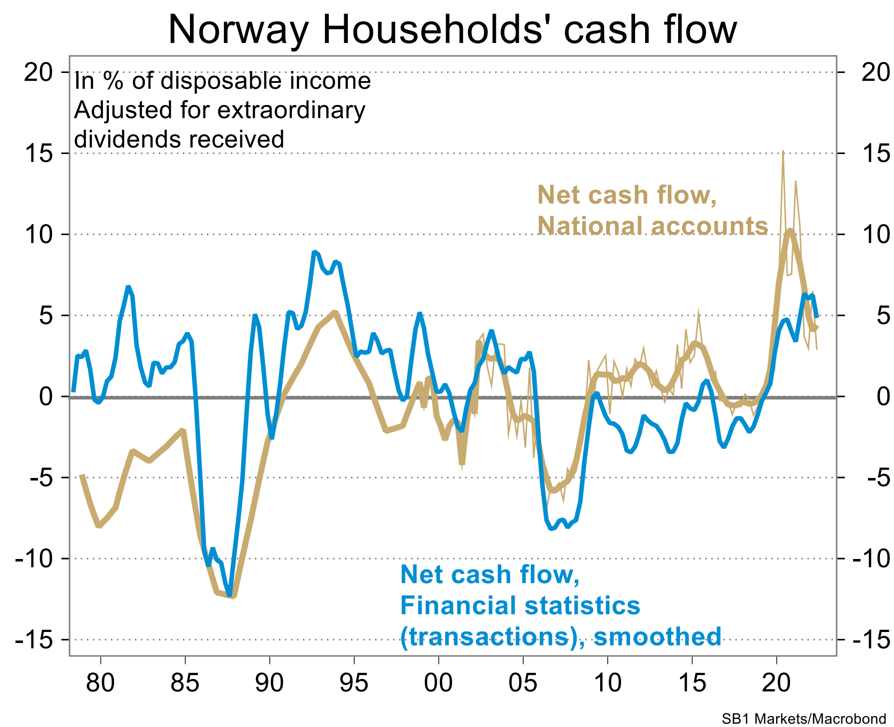


- Household net disposable income (before adjustments of pension rights), adjusted for short term volatility in dividends, rose by 0.9% - and are up by 12.5% vs. the pre-pandemic level
  - » The large increase in dividends in Q4 last year was an adaption to the increase in the tax rate on received dividends. Dividends fell to a normal level in Q1
- In Norway, extra government transfers to households during the pandemic have been rather limited. Unemployment benefits were up but no ‘cheques for free’ were distributed. Still, consumption on services and spending abroad were cut sharply back, and saving rose sharply

The savings rate has come down back to earth – but it is still higher than normal

More spending on services & abroad and high inflation has taken the savings rate down

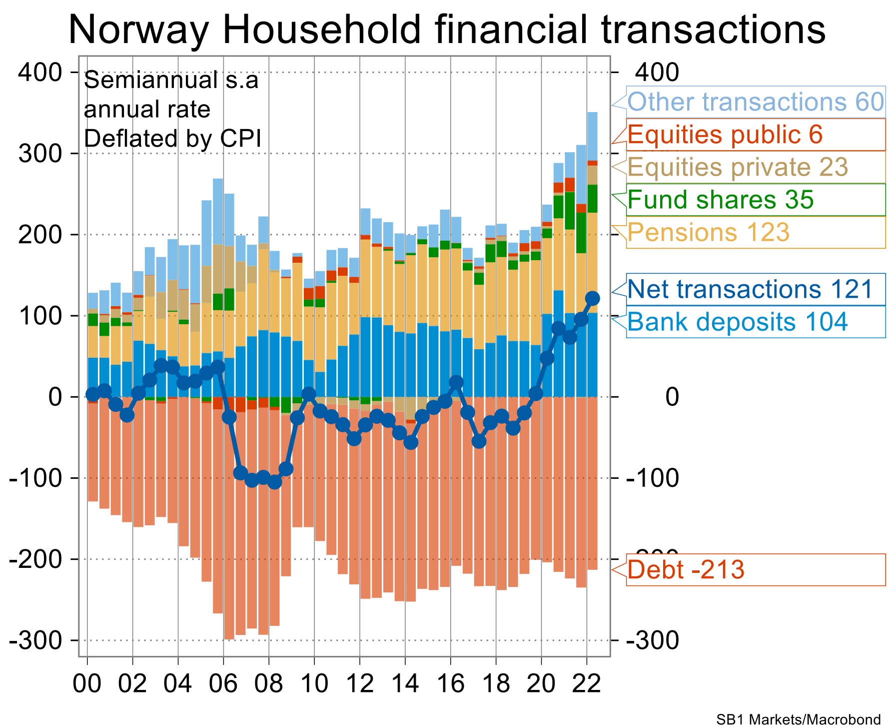


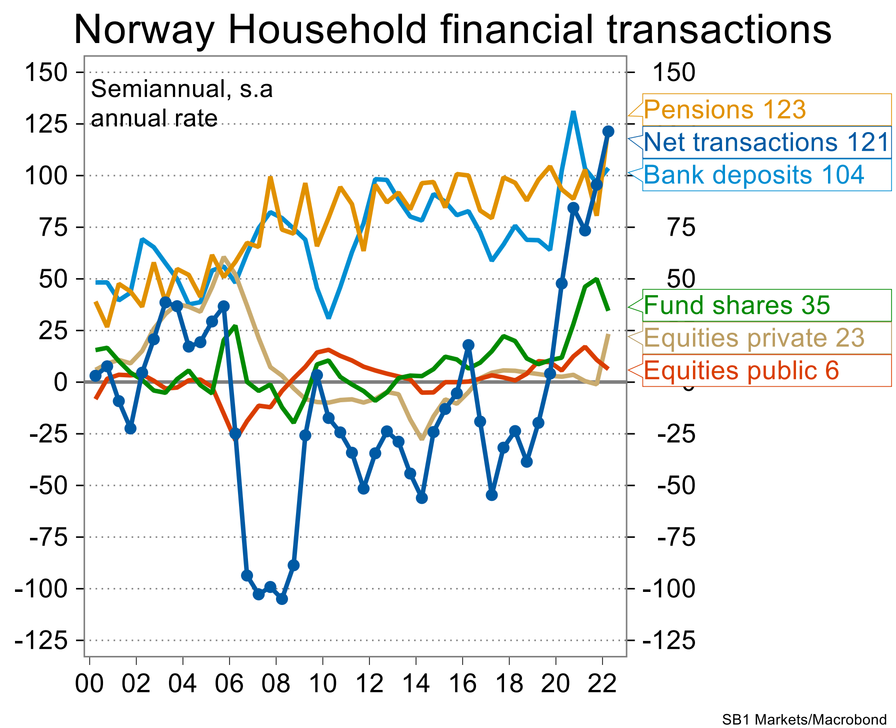


- As households normally invest more in new homes than depreciation on their old ones (which is included in total consumption), their **net cash flow** is lower than their savings (savings = income – consumption). <u>The cash flow is much stronger than normal</u>, equalling 3% of disposable income (and 5% according to financial accounts). Even if there are some many crises that are hitting the households these days….
- Households also have to fill up their pension contracts, and the **'free' cash flow** is even lower, at some -5% of disposable income since 2001 and until the pandemic. During the pandemic, spending was slashed, and even the free cash flow turned positive. <u>Now the free cash flow is back in negative territory but still above the pre-pandemic norm</u>
- **National and financial accounts** now agree that the net cash flow is positive, at some 5% of disposable income (before net pension payments)

Households have increased savings in banks since before the pandemic

Investments in fund shares are higher than normal – some NOK 20 bn extra (ann. rate) since Q1-21

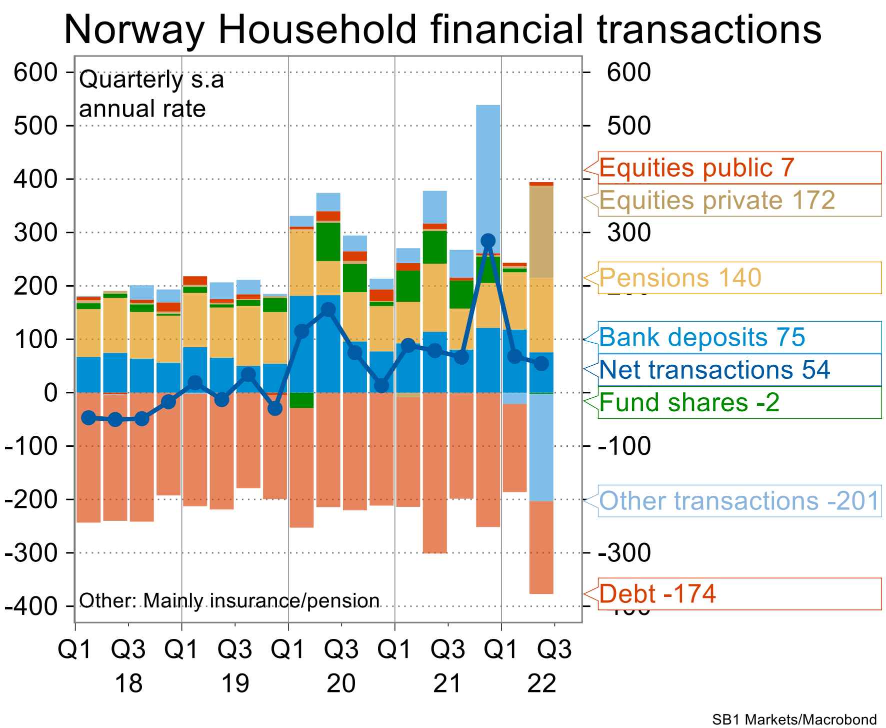


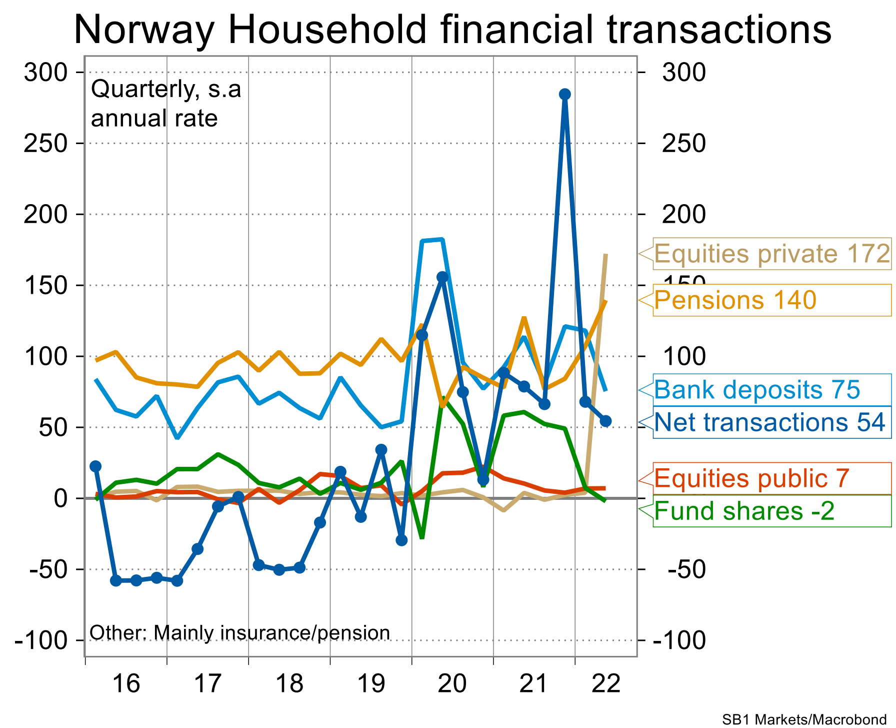


- During the pandemic households accumulated almost NOK 100 bn more than normal in bank deposits, some of that has since been spent/invested elsewhere. This number is likely to decline further as the cost of living has increased noticeably

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

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

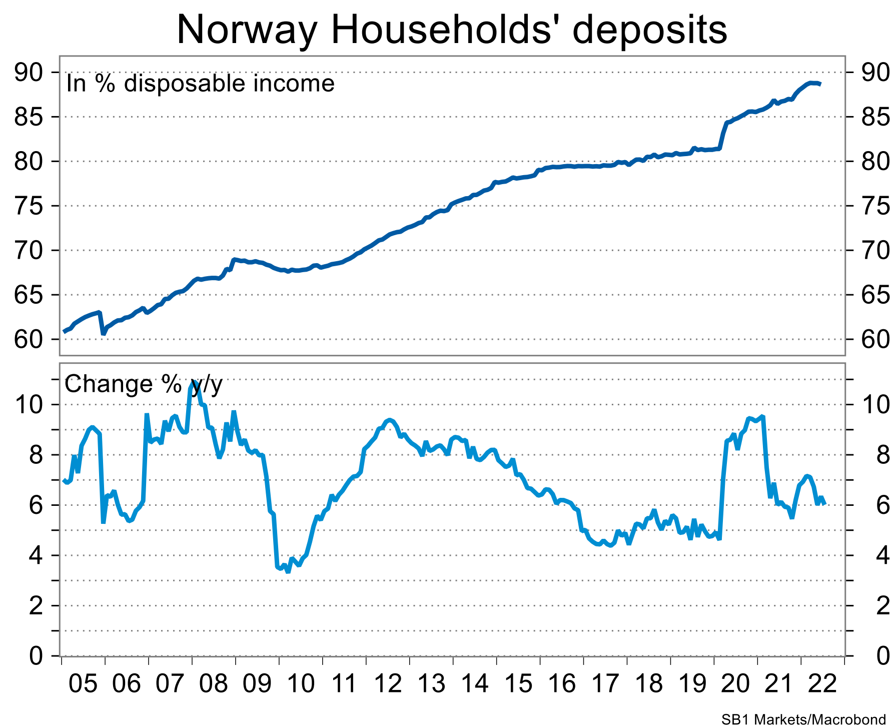


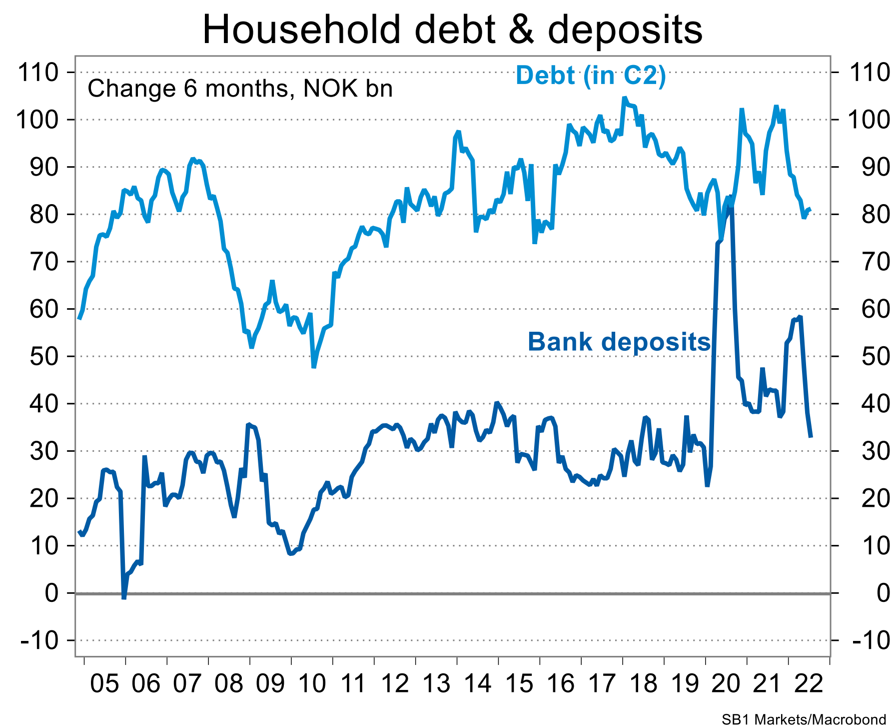


SpareBank 1 MARKETS

Bank accounts still well filled up – but now they are growing at a normal pace

Growth in debt is slowing

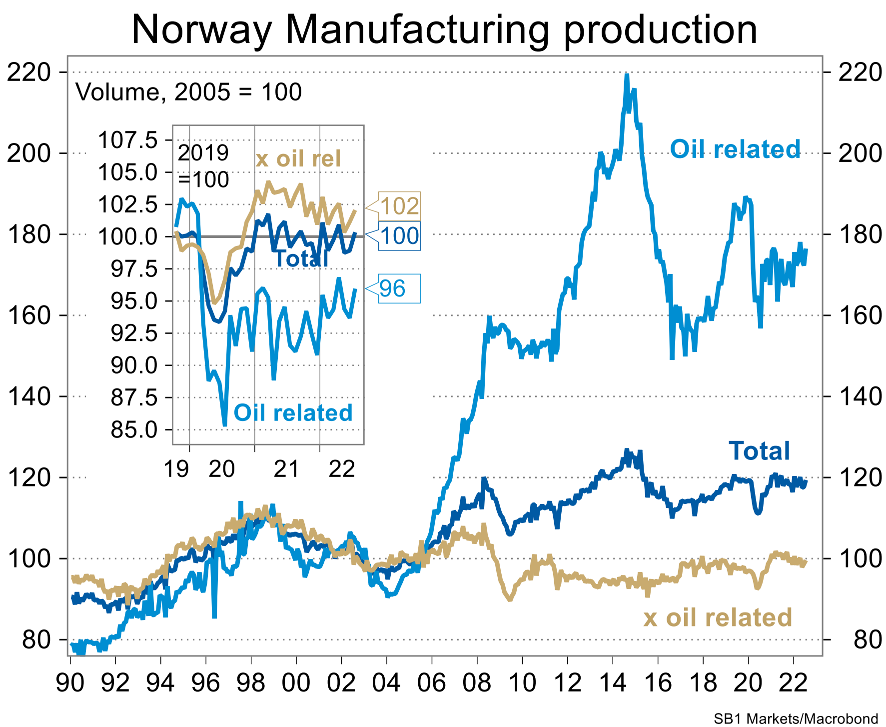


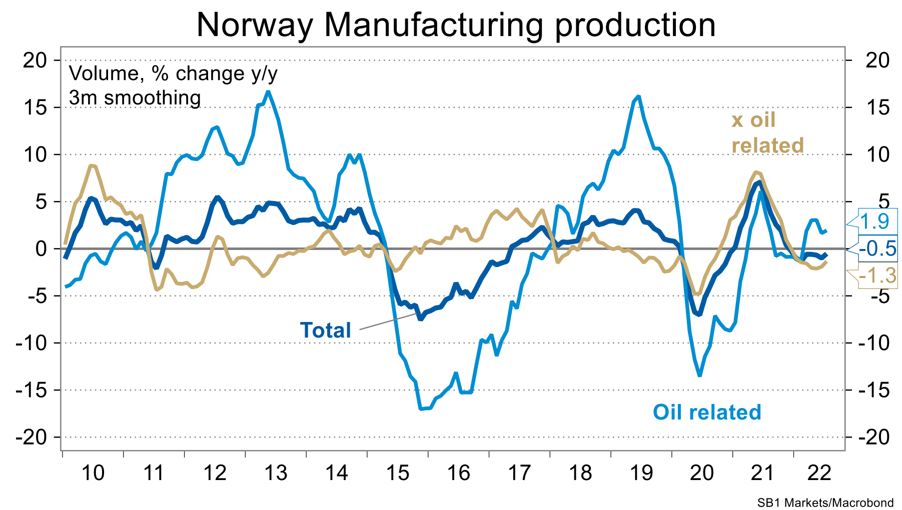


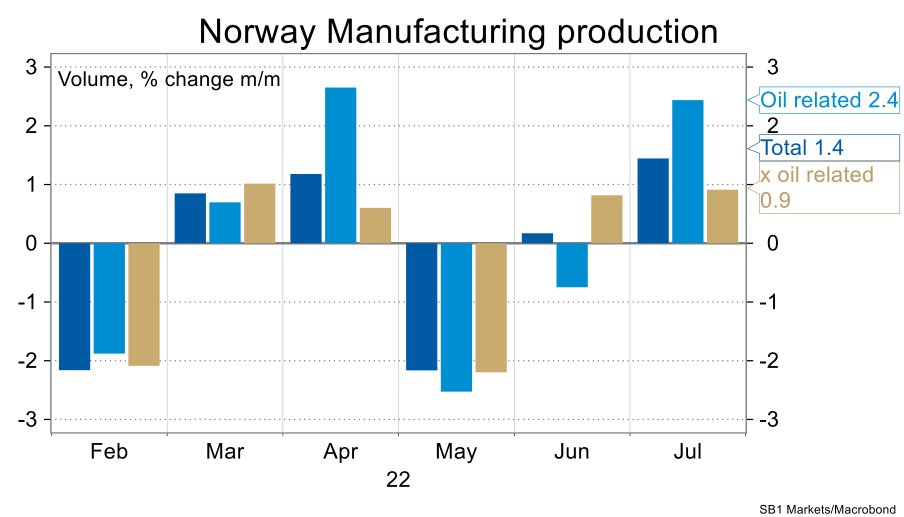
SpareBank 1 MARKETS

Manufacturing production up in July, oil related on the way up – others not

Total production up 1.4% m/m, oil related 2.4%, others 0.9% - but the latter is trending down



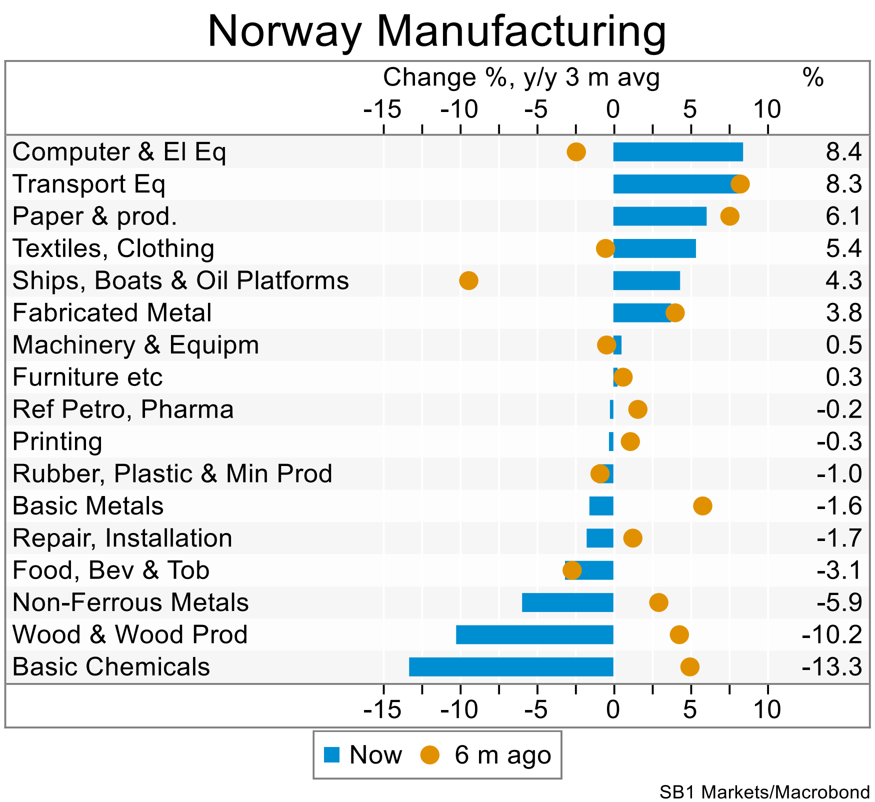


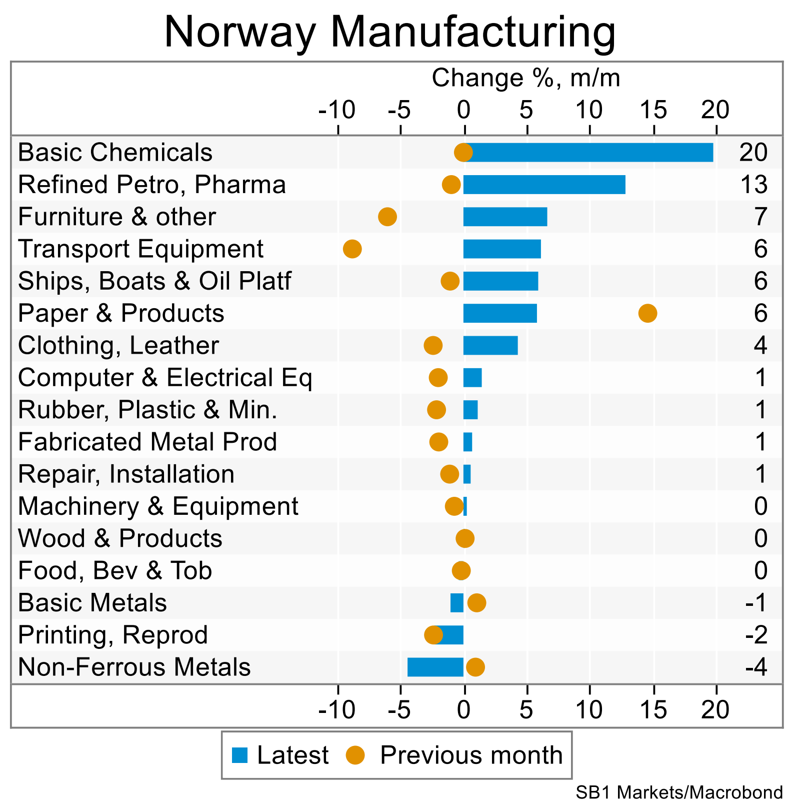


- **Oil related manufacturing production** (yards etc) fell both in May in June, but recovered in July, by 2.4%
- **Other sectors** gained 0.9% but production has been trending down since last year, and is down 1.3% y/y
- **Manufacturing surveys** have been signalling strong growth in production but so far not much have been delivered - and now surveys are heading south

Rather mixed between sectors: Chemicals, refined petro and furniture higher

Printing, metals production declined in July

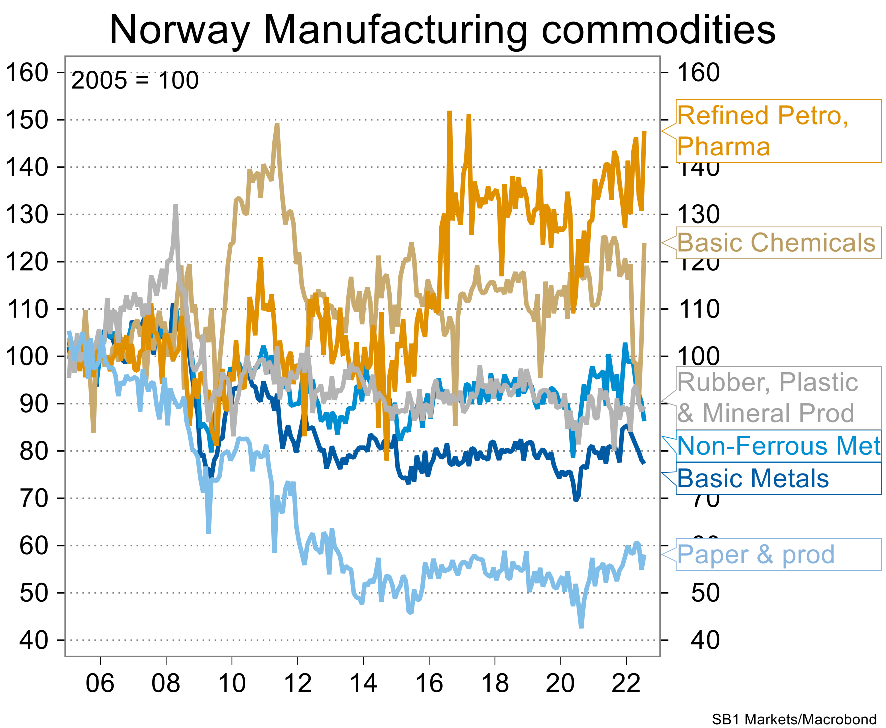


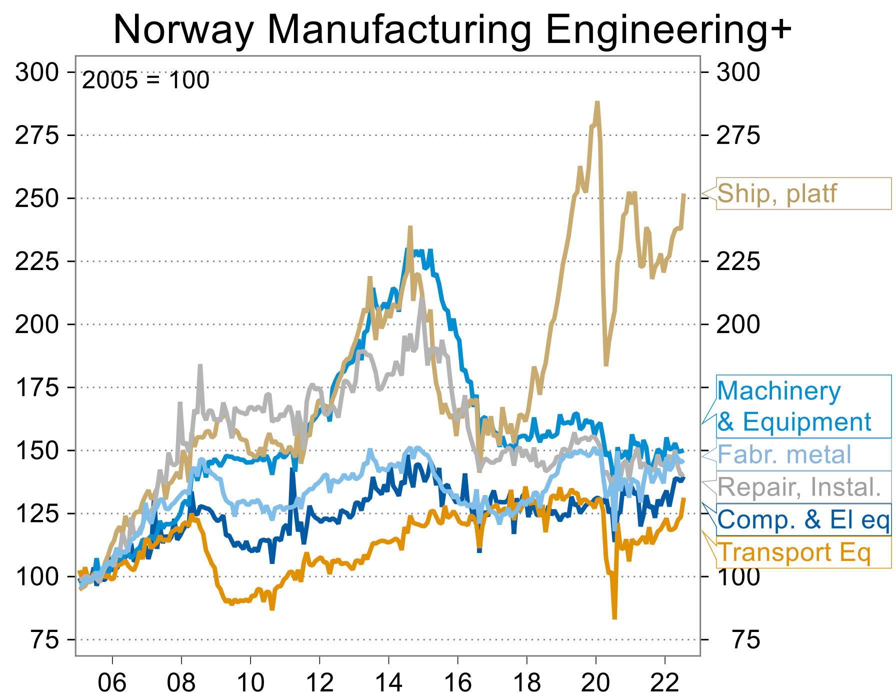


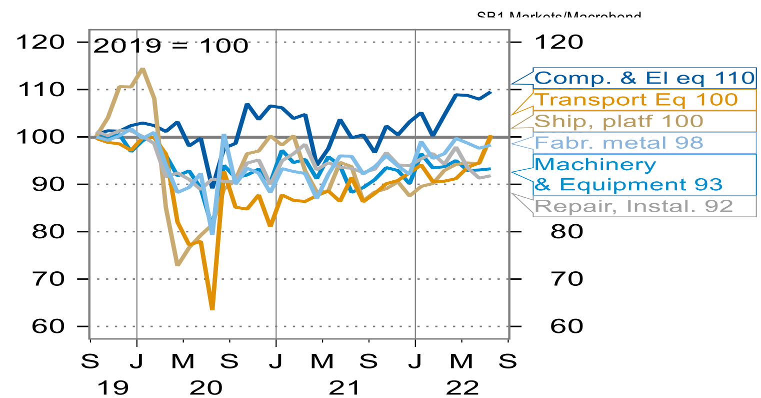
Norway

Engineering on the way up, now even ships and platforms

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



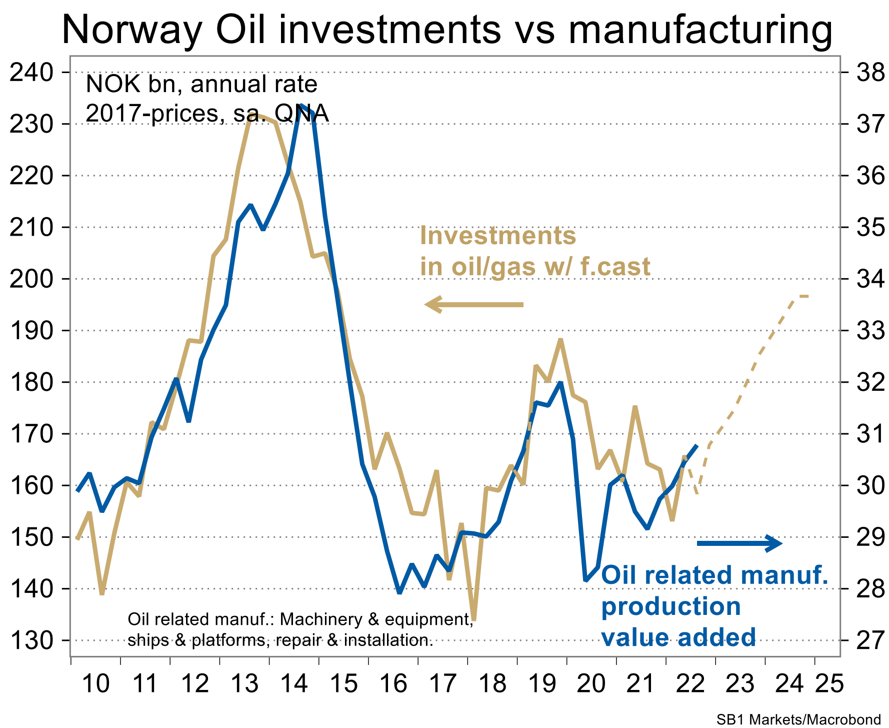


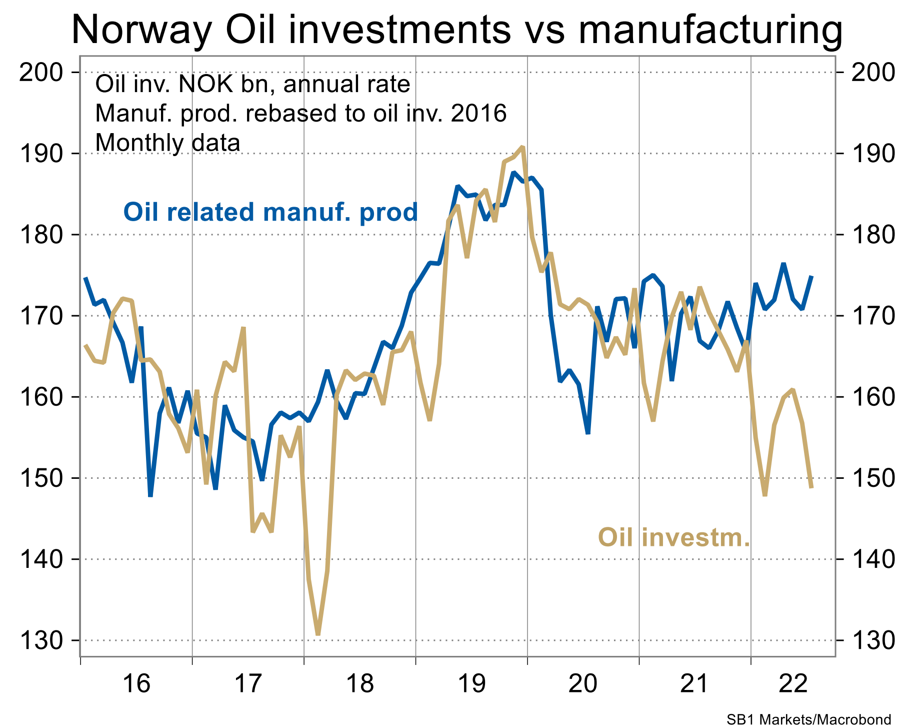


SpareBank 1 MARKETS

High oil & gas process, tax incentives will trigger a lift in oil sector investments

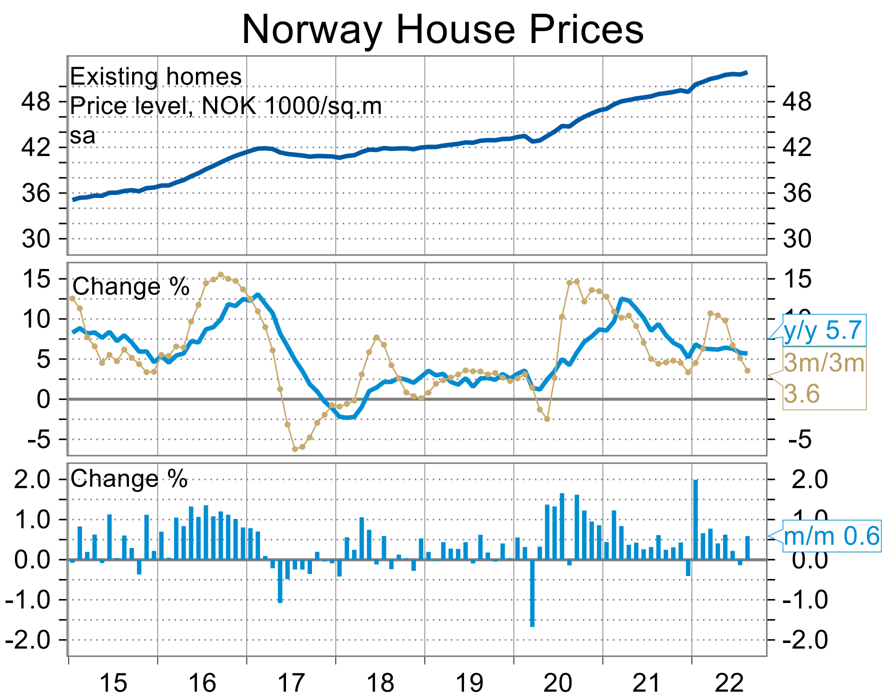
Now, investments are reported down – and are weak vs. oil related manufacturing production

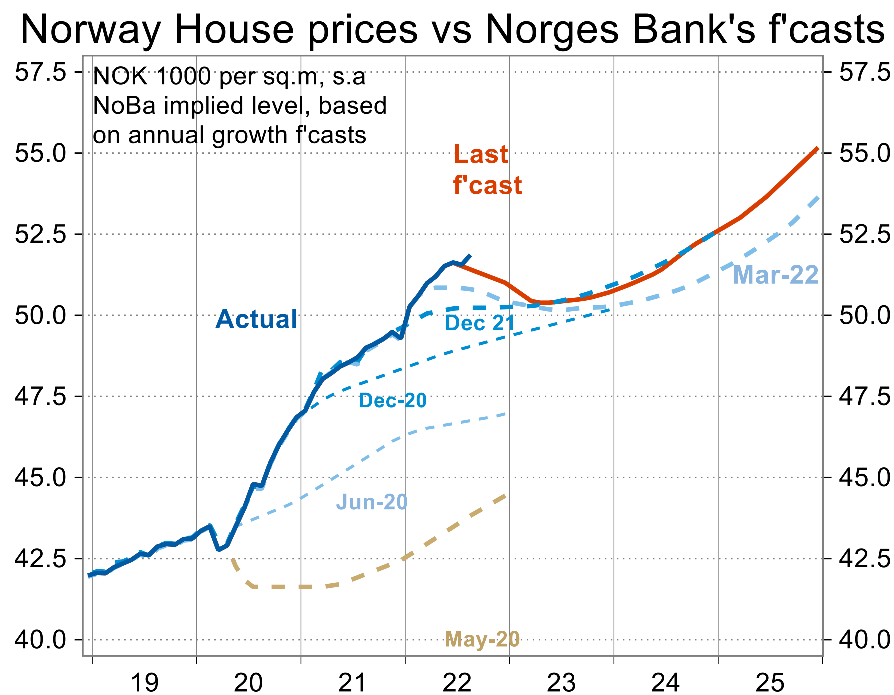




House prices surprised on the upside in August, up 0.6%

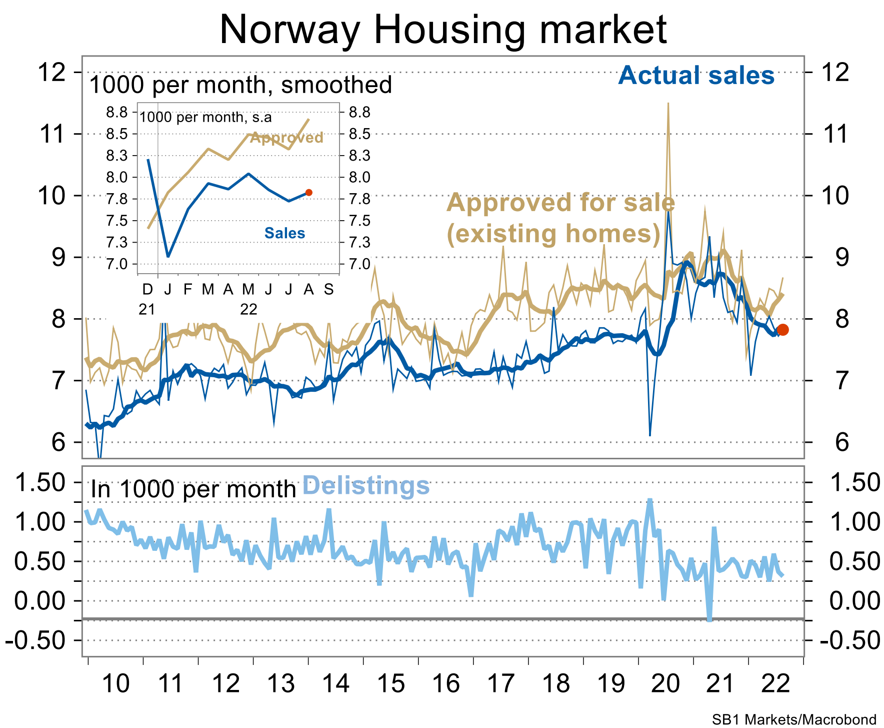
Prospect of higher rates is not biting yet. However, supply of homes for sale turned up

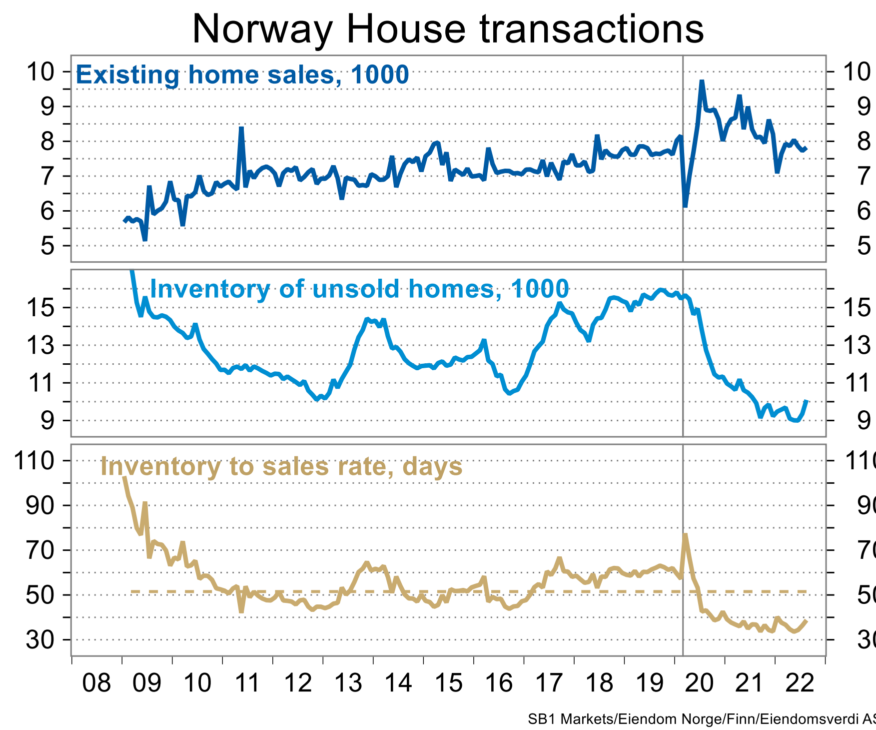




- **House prices** were far stronger than we, most economists, and NoBa expected in August (we assumed -0.5%). July data was revised marginally up, to -0.1% from -0.2%. Prices rose in all cities in August, the most in Stavanger and Kristiansand where prices fall sharply in July. Oslo prices rose by 0.4%
- The **no. of transactions** has come down to a normal level, following the early pandemic surge while **new approvals** for sale rose sharply in August. **The inventory** rose to 9,9' in Aug from 9,2 in July, and is now at the highest level since July-21
- In the June MPR, **Norges Bank** expected that prices start declining in July, and continue downwards until Q2 next year, in sum by 2¼%. If the current plan is not sufficient, rates will probably continue upwards until they bite. The reason: The main transmission mechanisms between interest rates and the real economy is through the housing market, and the impact on household disposable income. The August price hike underpins the market expectation of another 50 bp hike from NoBa in Sept.
- **In Sweden**, prices have fallen sharply recent months, especially in Stockholm. Preliminary data signals a further decline in July, in sum 9% over the past 5 months

Inventory of homes for sale up but still at a very low level

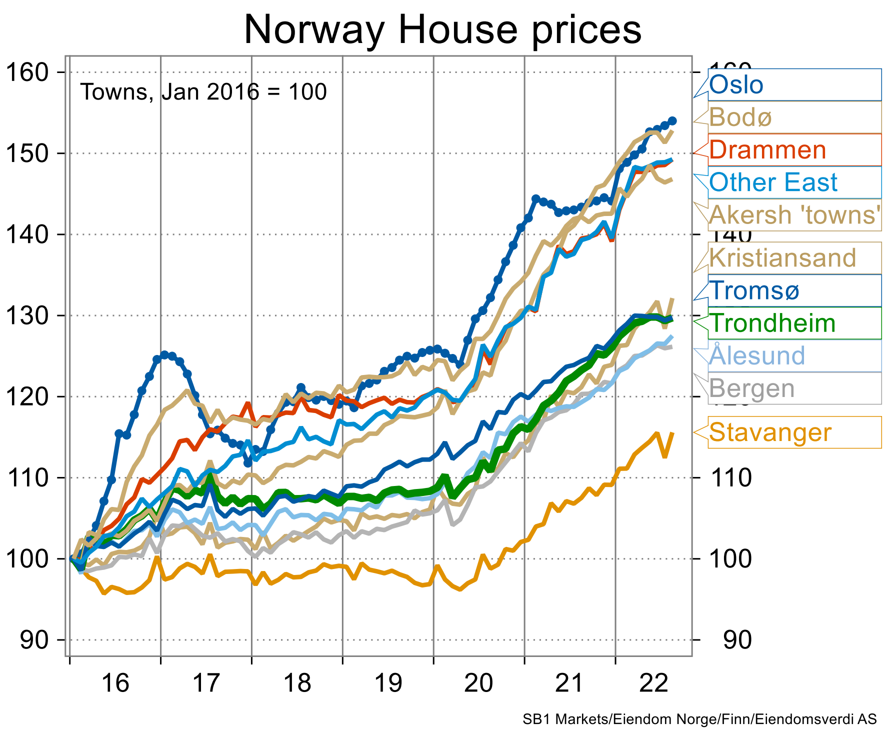


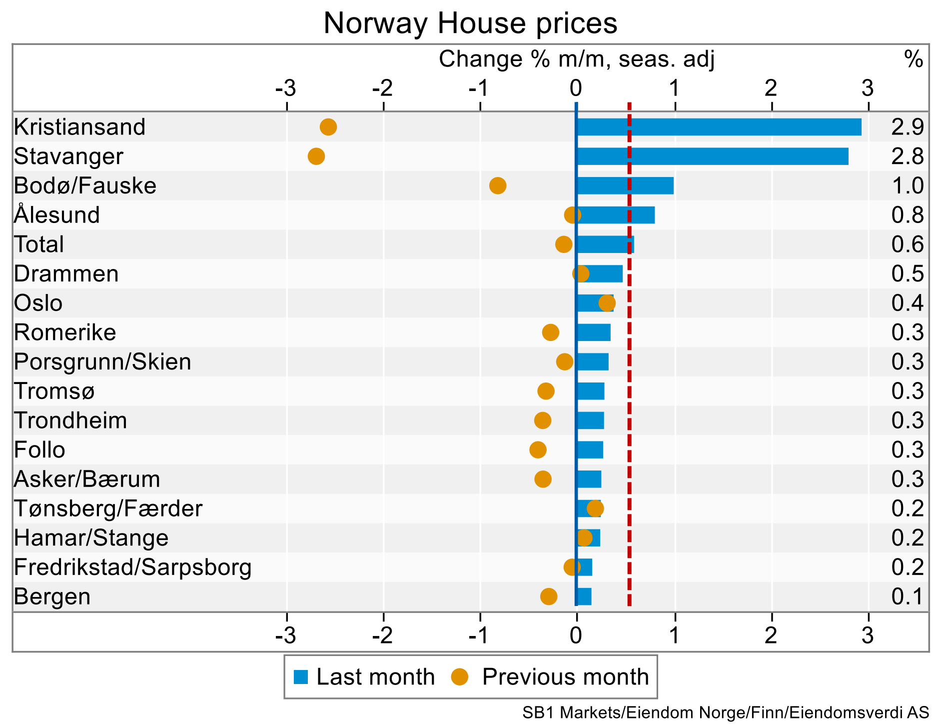


- **The number of transactions** has almost come back to a 'normal' (2019) level, following the surge in the first part of the pandemic
- The **supply of new existing homes for sale (approvals)** rose to a normal level in August, and there are fewer de-listings than before the pandemic
- The **inventory of unsold homes** increased further in August. The level is still very low, at just above 10' units.
- The **inventory/sales ratio** added 4 days to 39 days, vs an average at 52 days
- The **actual time on market** for those homes actually sold declined 4 days, to 31 days (average 42 days)

Price increases in Stavanger and Kristiansand surprisingly large

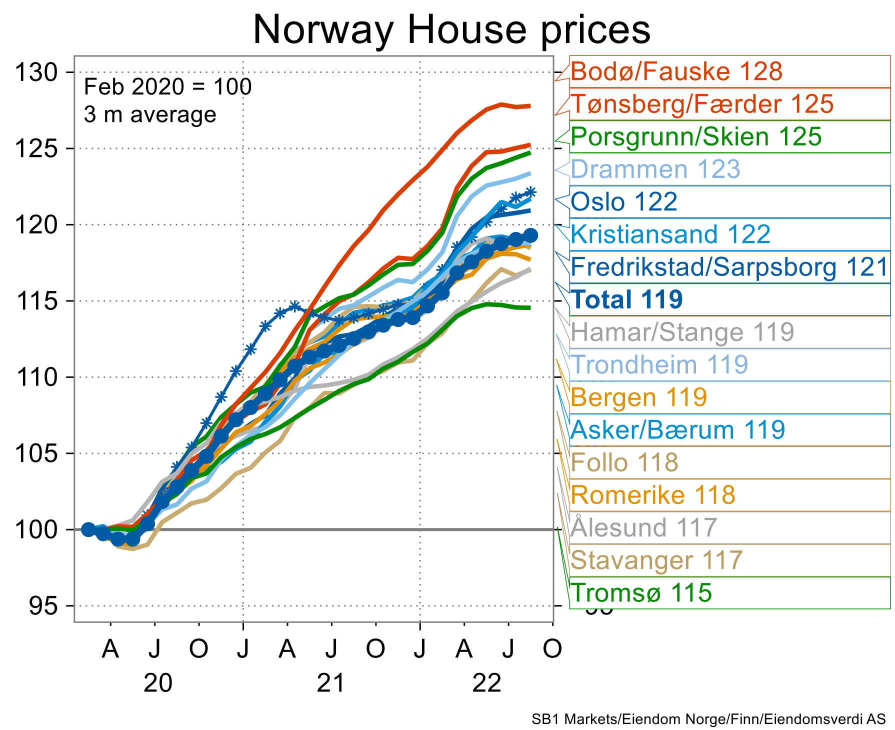
… if not the same two cities had surprised just as much on the downside the previous month

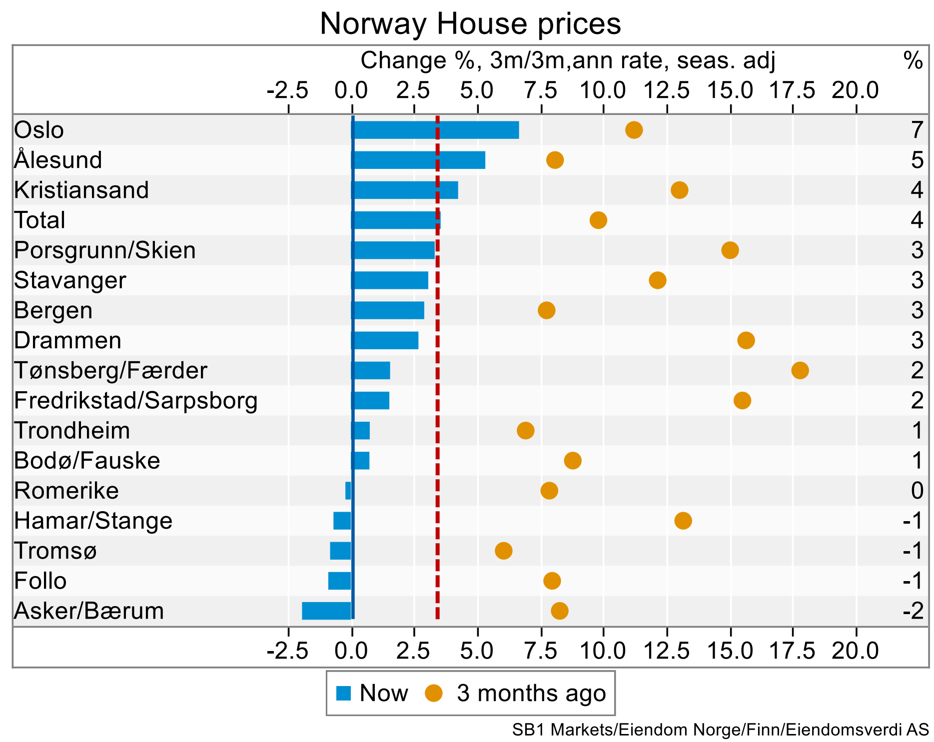




The big picture: Price increases have slowed everywhere

Oslo in the lead recent months, up at 7% pace. Prices are now heading down in 5 of 16 'cities'

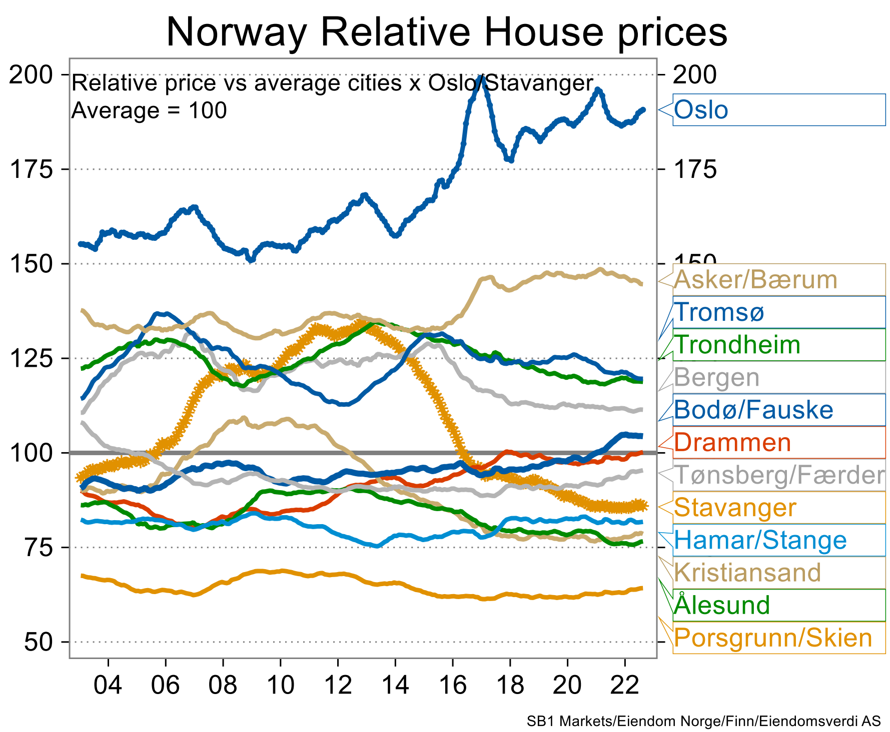


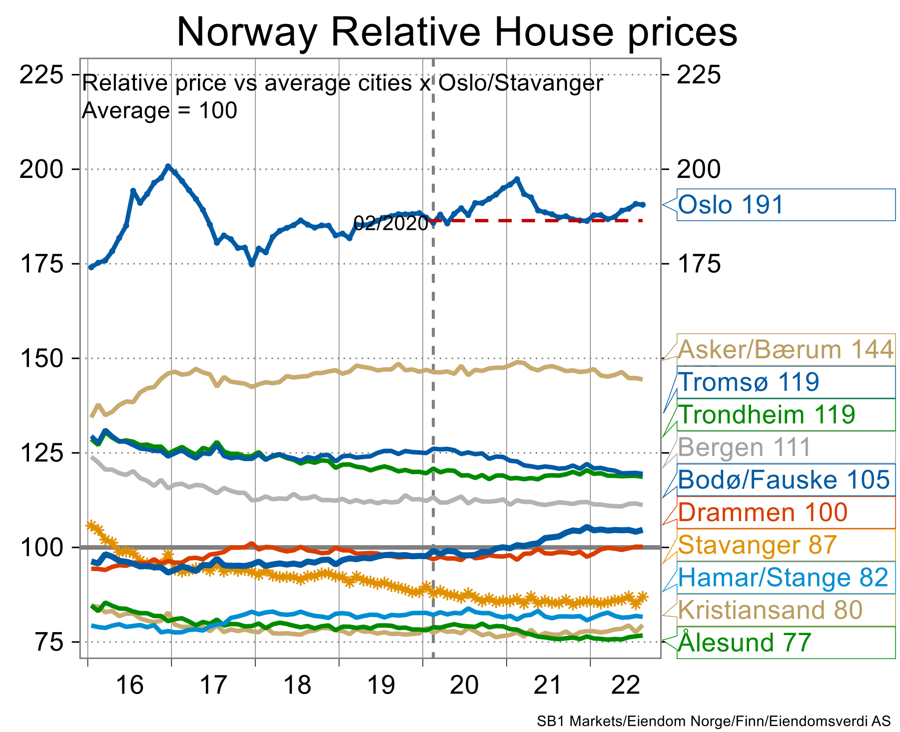


- Bodø the winner through the pandemic (but Oslo since 2016, check the previous page). Recent months, prices in Bodø have flattened
- After Bodø, eastern towns have been the winners since early 2020; Tønsberg, Porsgunn/Skien, Drammen, Oslo, and Fredrikstad/Sarpsborg, and prices are still climbing here
- Tromsø, Stavanger, Ålesund and the bottom of the list (vs. early 2020)
- Now: Price inflation is slowing everywhere, and- prices are falling in 5 'cities', while 11 still are up measured 3m/3m

Oslo <u>relative</u> prices above the pre-pandemic level again

Stavanger has been slowly recovering

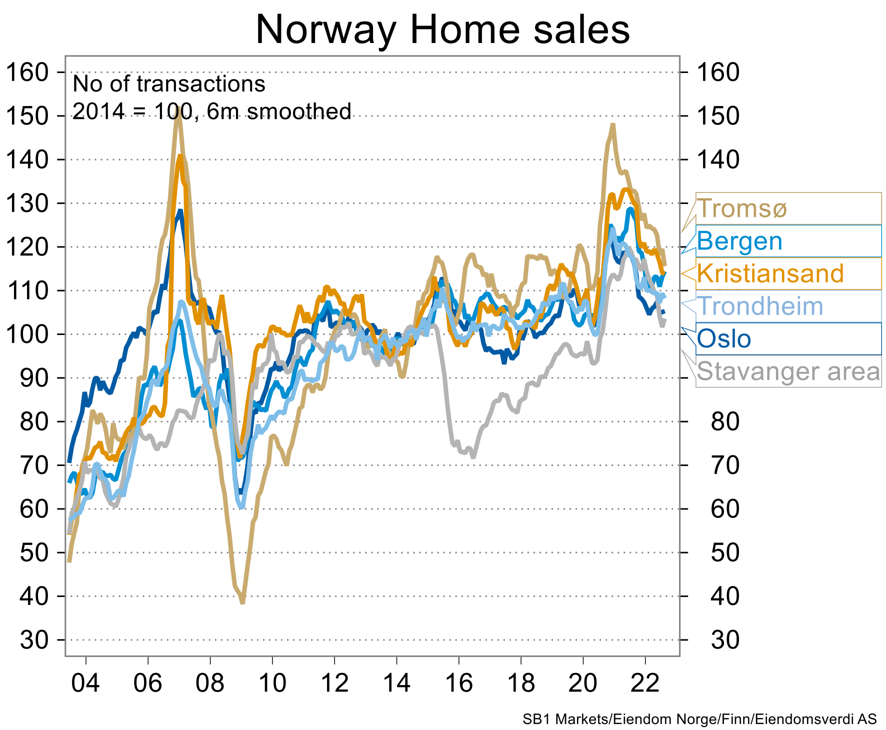


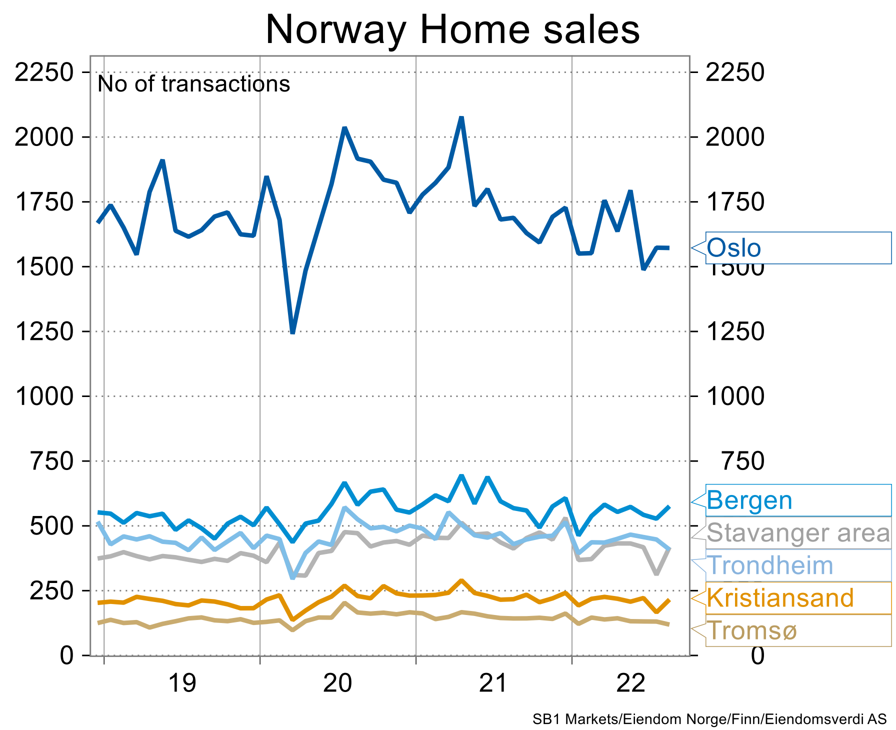


- Housing starts in Stavanger/Rogaland are still not lower than normal. It is still profitable to build, even at 'Hamar/Stange' prices! And why shouldn't it??

Number of transactions flattened in Oslo; down in Trondheim and Tromsø

However, levels are not low anywhere – just back to the pre-pandemic level, take or give

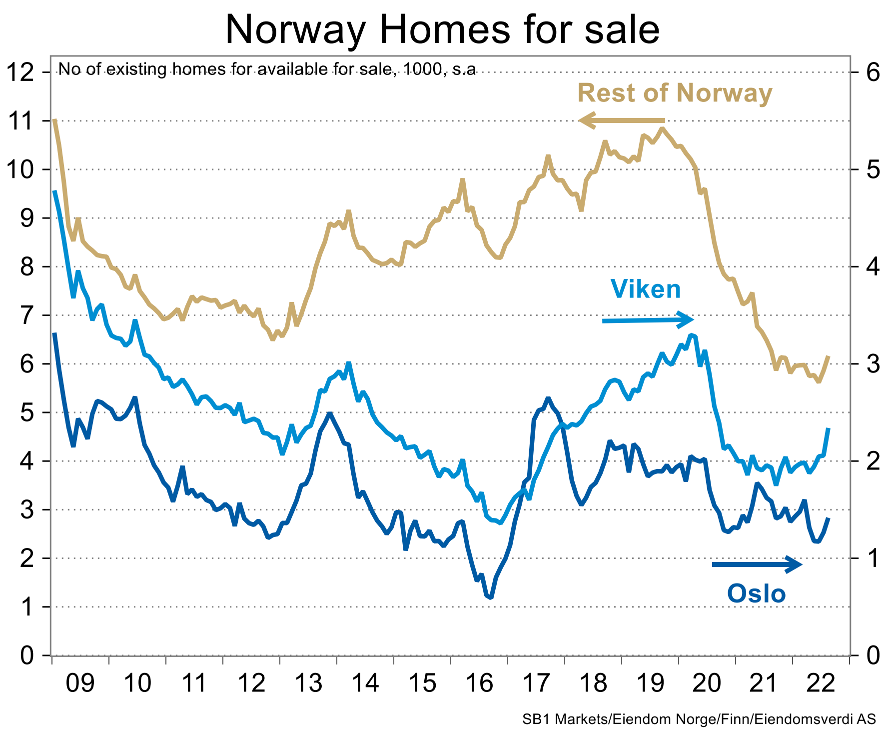


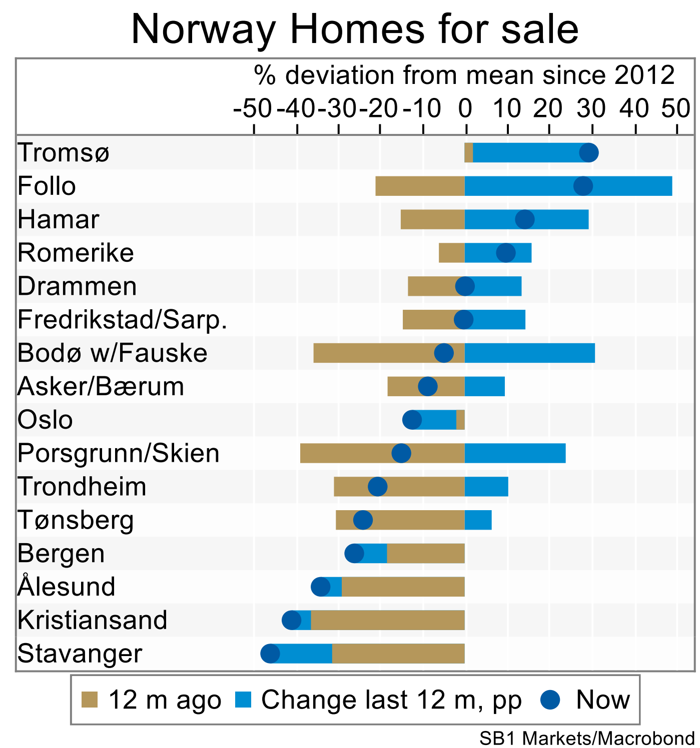


- Transactions sharply up in Stavanger and Kristiansand, the cities with the largest price increases in August

The inventory continued to increase in August

11 cities reported higher inventories than one year ago, up from 9 in July. 4 are down

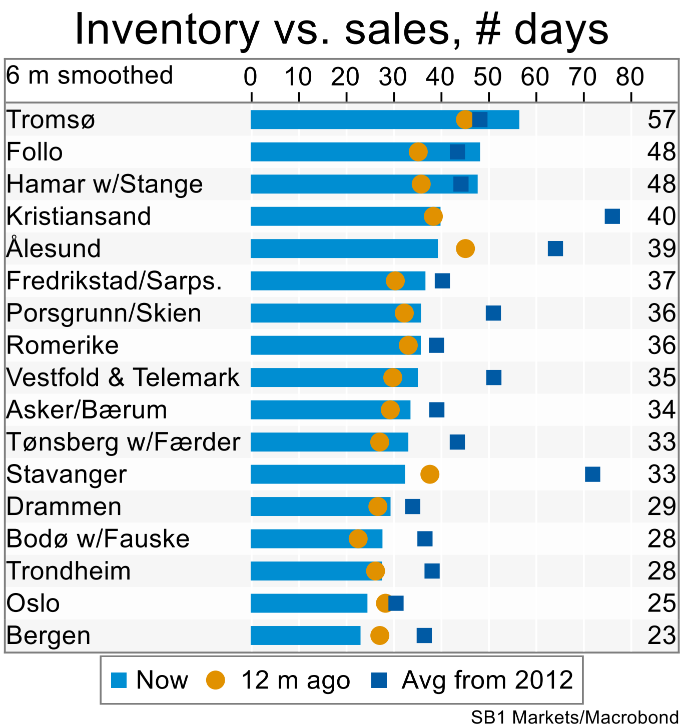




- Over the past year, the inventory has fallen the most in Oslo, Bergen and Ålesund
- Follo is reporting the largest increase

The inventory is turned around faster than normal almost everywhere

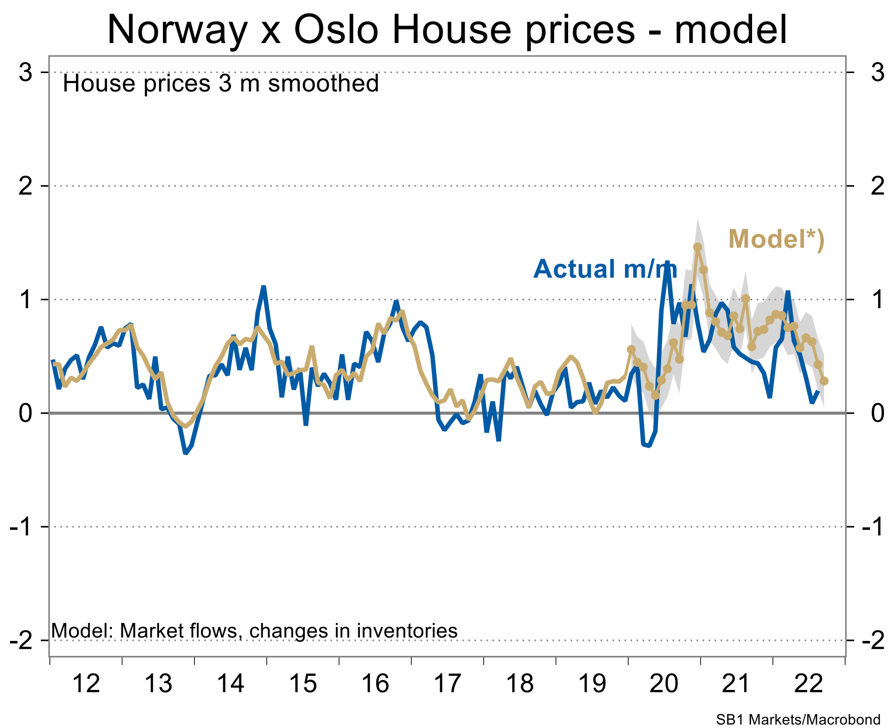
Still, most cities report higher turnaround times than one year ago, just 4 are down

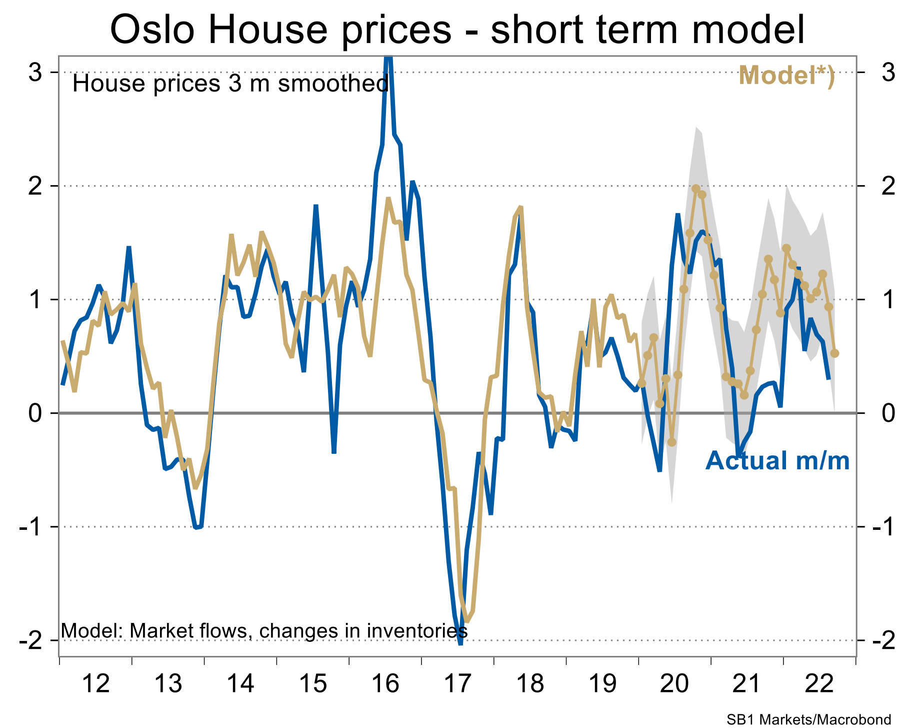


- On average, the i/s ratio higher than it was a year ago
- Oslo, Bergen, Stavanger, and Ålesund are still reporting a lower turnaround time than one year ago
- Tromsø, Follo, and Hamar now report a higher turnaround time than the avg. from 2012!

Short term market flows suggest continued price growth, especially in Oslo

But at a slower pace. May higher mortgage rate also contribute to a slowdown coming months?



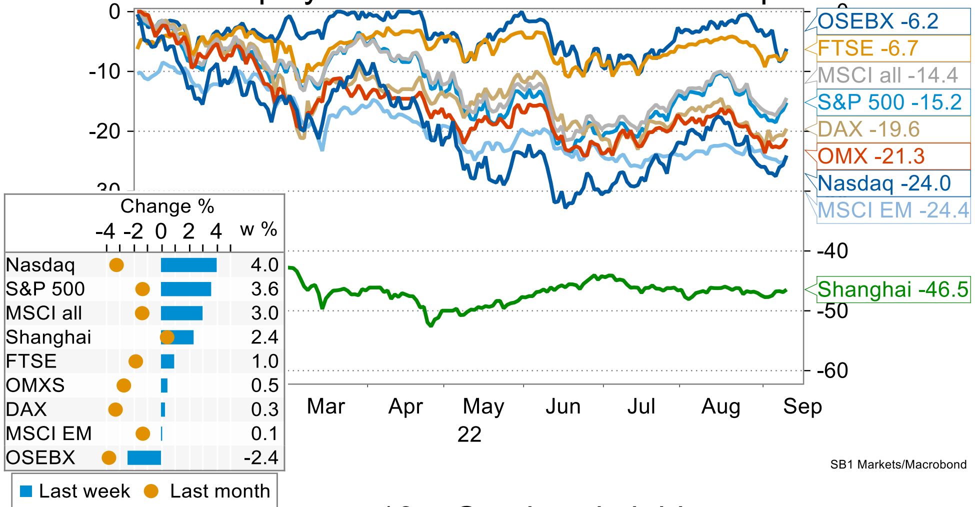


- Our **national x Oslo model** based on flows and the inventory signals a 0.3% growth in house prices per month (in comparison, prices in Norway x Oslo grew by 0.2% in Aug)
- Our **Oslo model** signals 0.5% m/m growth, above the 0.7% lift per month the past 3 months
- **Mortgage rates** are not included in these short-term market models, because they have not consistently added to the models' performance. Still, over time, mortgage rates and credit growth are important driver for house prices, and now rates are on the way up
- *These models are not long-term price models, just short-term models based on flows of (existing) houses approved for sale, actual sales and changes in inventories – which are normally correlated to prices*

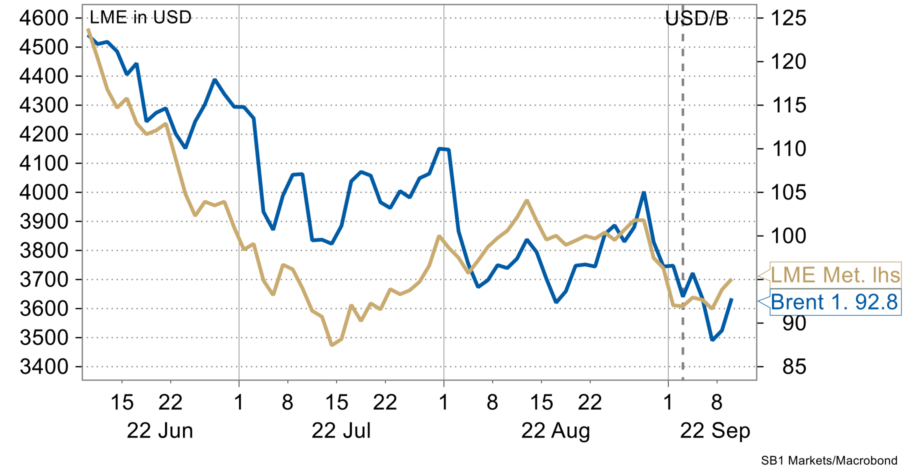
SpareBank 1 MARKETS

Most equity markets up last week, yields flat to up, commodities mixed

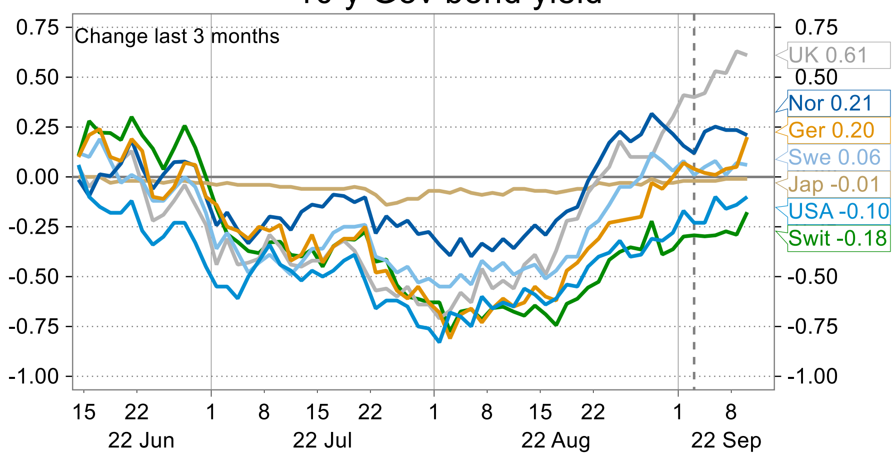
Equity Indices - % drawdown from peak



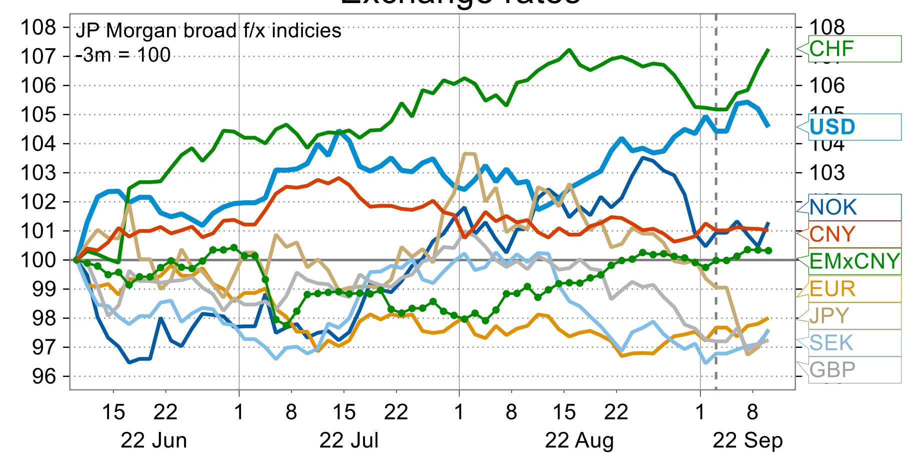
Oil vs. metals



10 y Gov bond yield



Exchange rates

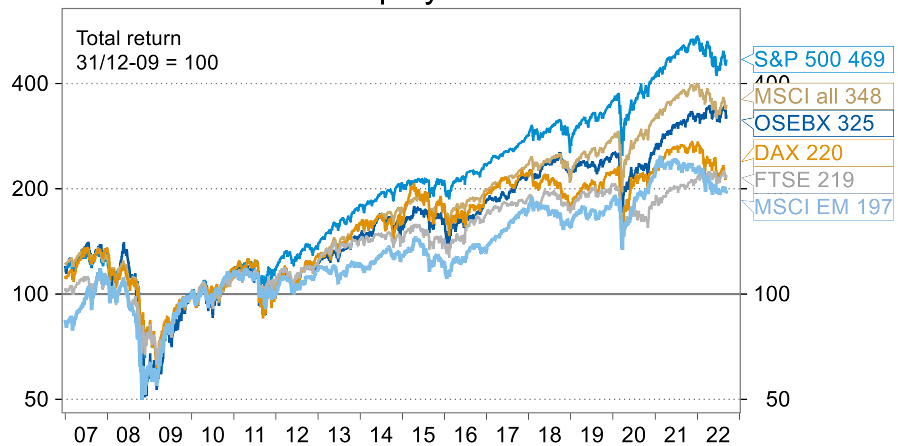


SpareBank 1 MARKETS

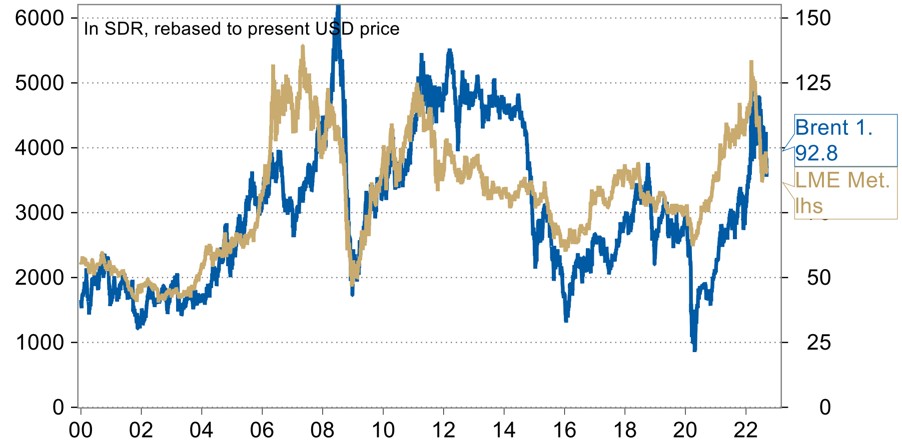
The big picture: Stock markets down, bond yields up

Commodities are on the way down again. The USD is very strong, most other DMs are slipping. EM OK

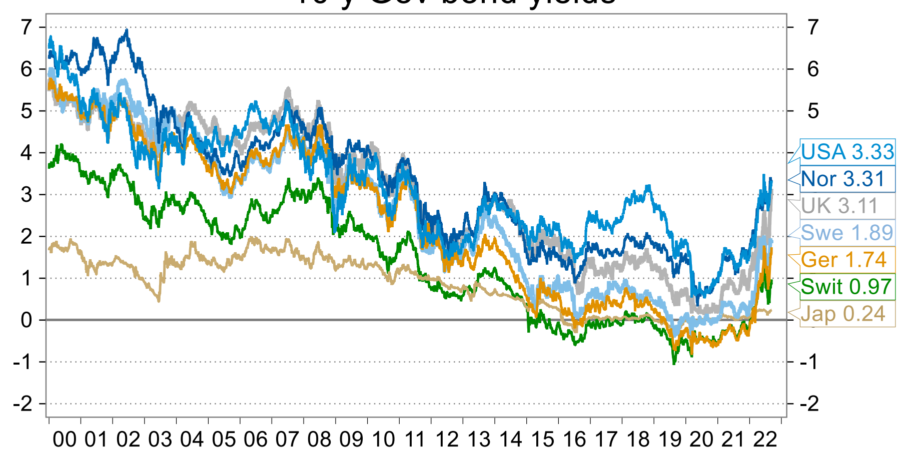
Equity Indices



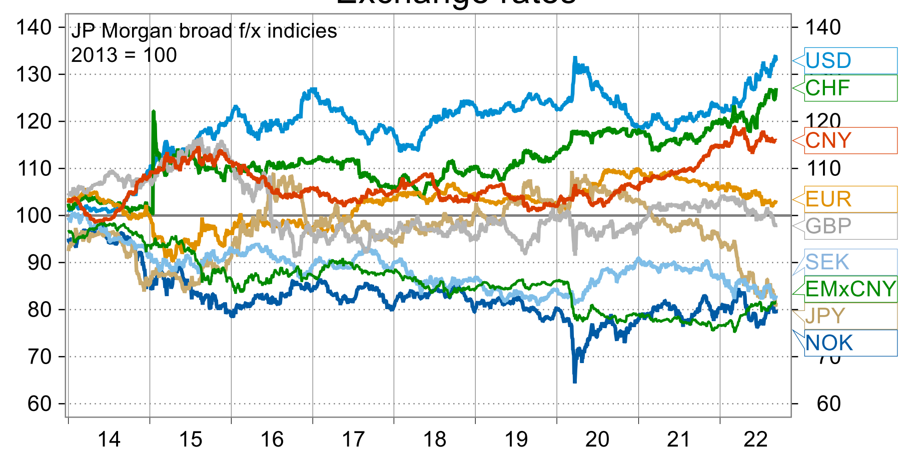
Oil vs. metals



10 y Gov bond yields



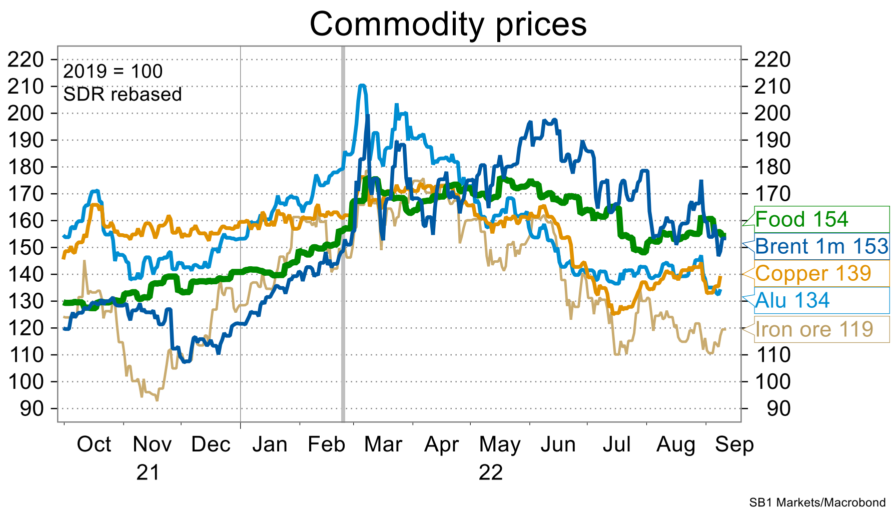
Exchange rates

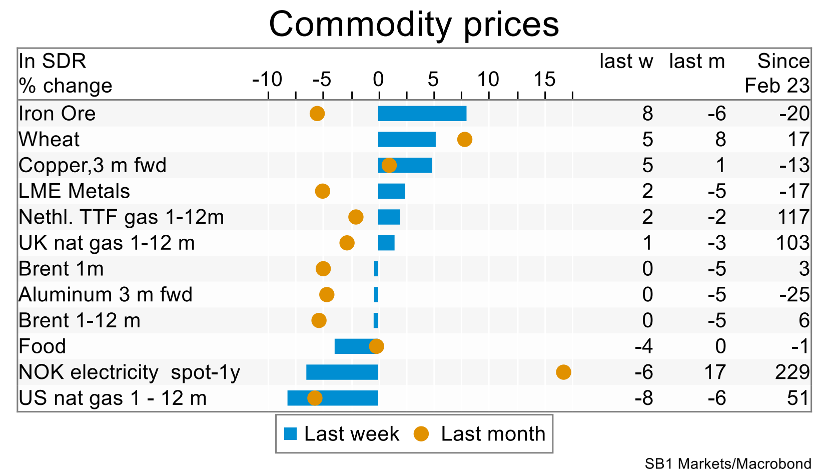


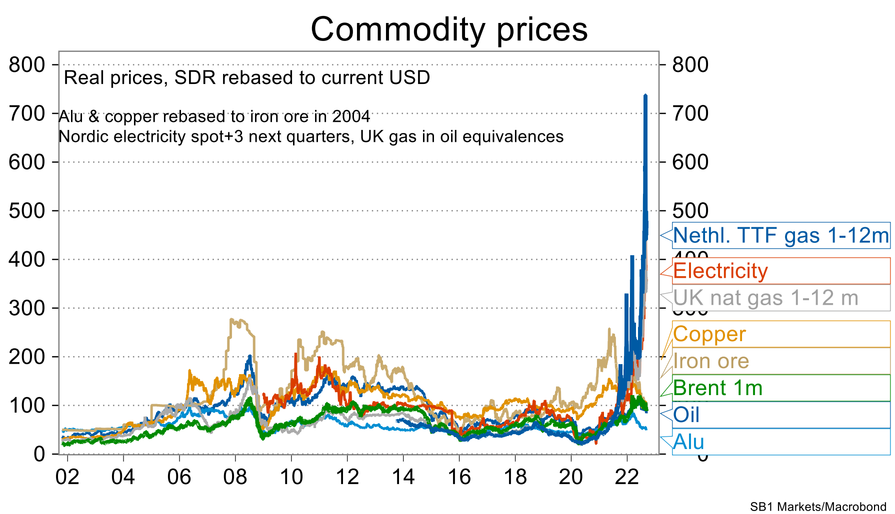
SpareBank 1 MARKETS

Metals up, oil and gas flattish, food prices down (and Norw. el. prices)

US natural gas prices fell to, and remains far below European prices







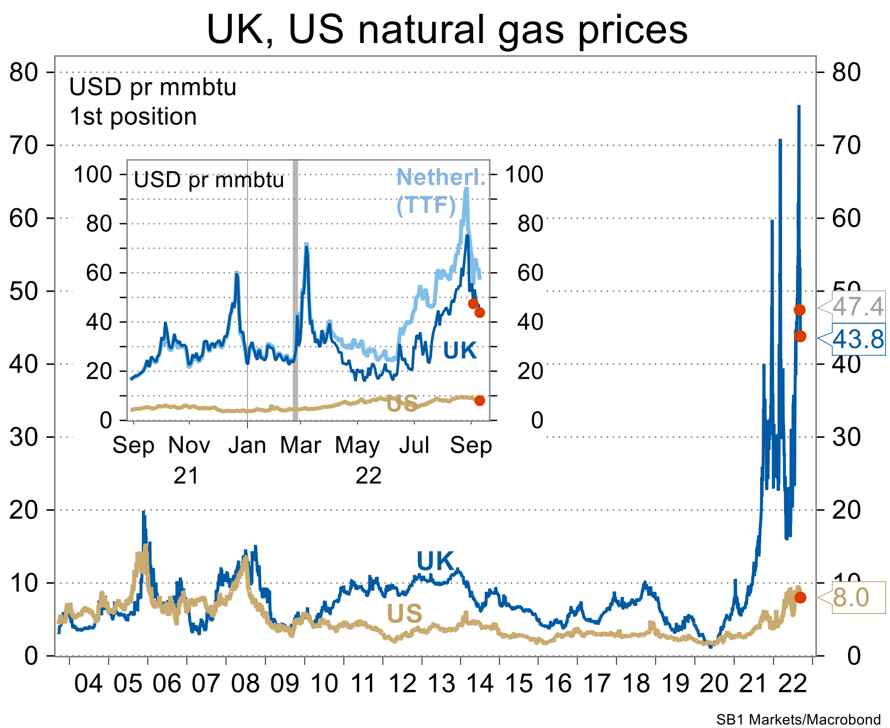
Last week

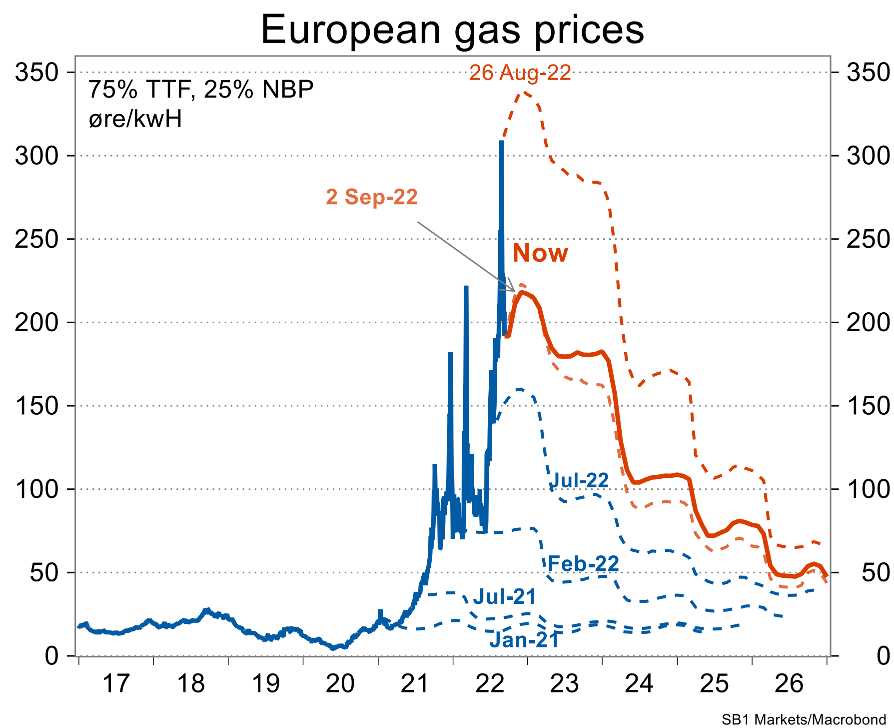
- **European natural gas** has been extremely volatile recent weeks but was more or less unch. last week, even if Russia after the market close the previous Friday closed down the Nord Stream 1 completely. Prices are down some 40% from the peak, but still just back to the same level as one months ago – a very high price level. EU is discussing price caps but it is still unclear how it should be implemented, and who should pay the price
- **Oil prices** are trending downwards but not further last weeks
- The Economists **food commodity fell 4% las week** (in SDRs), and is trending down. Wheat prices rose last week, though
- Most **metal prices** recovered last week, including iron ore

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

Extreme volatility in the European gas market

… but prices were marginally down in the short end last week. Longer dated contracts slightly up



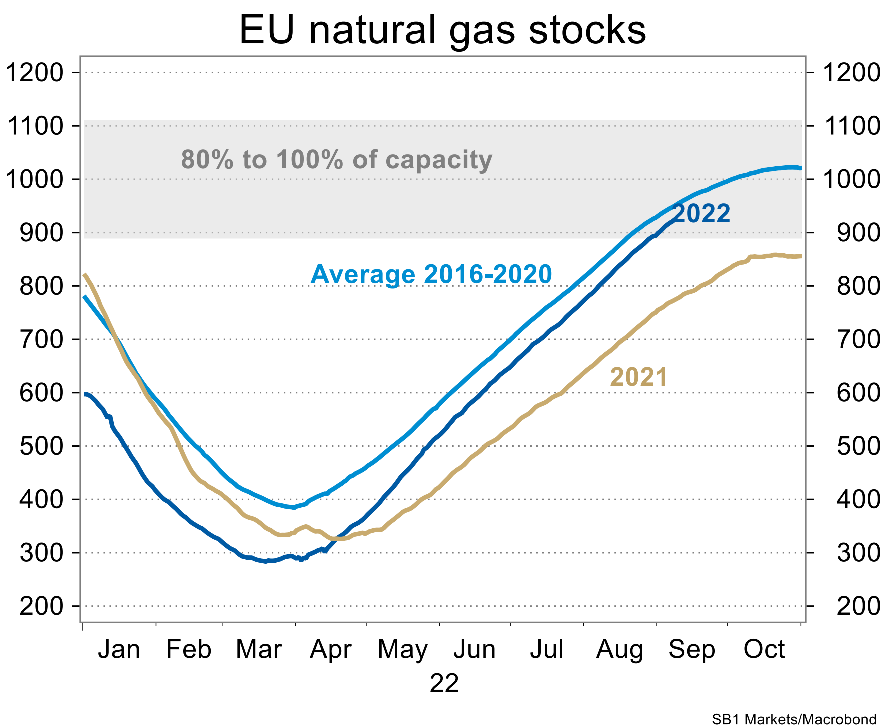


- Russia's closure of Nord Stream 1 did not shock the European gas marked, at least not after some few hours, prices quickly returned to the previous Friday's levels pretty soon, at least in the short end of the curve. Further out, prices are still up vs. the Sept 2 level, check the chart above
- The sliver lining: At prices well below current prices, **demand for gas in the EU has fallen more than 20%, equalling more than half of normal exports from Russia** - and we assume demand will decline further the longer prices stay high (more measures will be taken, including temporarily closing down high energy activities). At the same time, LNG imports have increased sharply recent months, vs the normal import levels, compensating for some 1/3 of the decline in Russian exports. The result: Gas inventories in EU have been building up faster than normal, as demand has fallen more than total supply. The coming quarters, LNG import capacity will increase substantially. However, the global production and transport capacity will probably be constraining factors. So at lot of rain, a windy and not too cold winter as well as more nuclear power from France may be needed in order to prevent a squeeze on supply next spring

European gas: 75% Dutch TTF, 25% UK NBP, excl. CO2 cost. Red dots: Last and 1 week ago

European gas stocks are filling up faster than normal

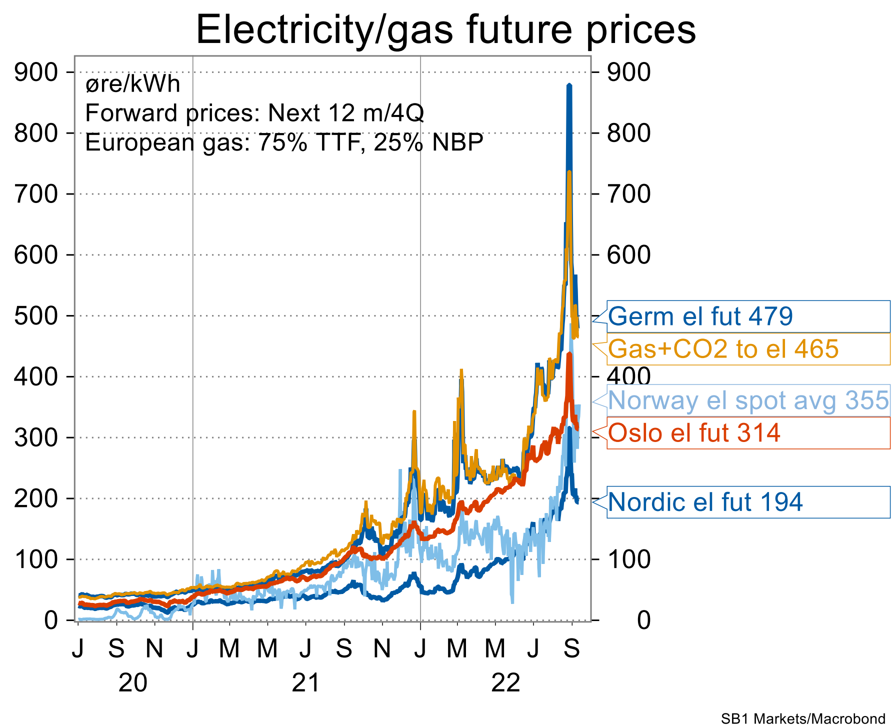
Thus, demand must have fallen more than supply

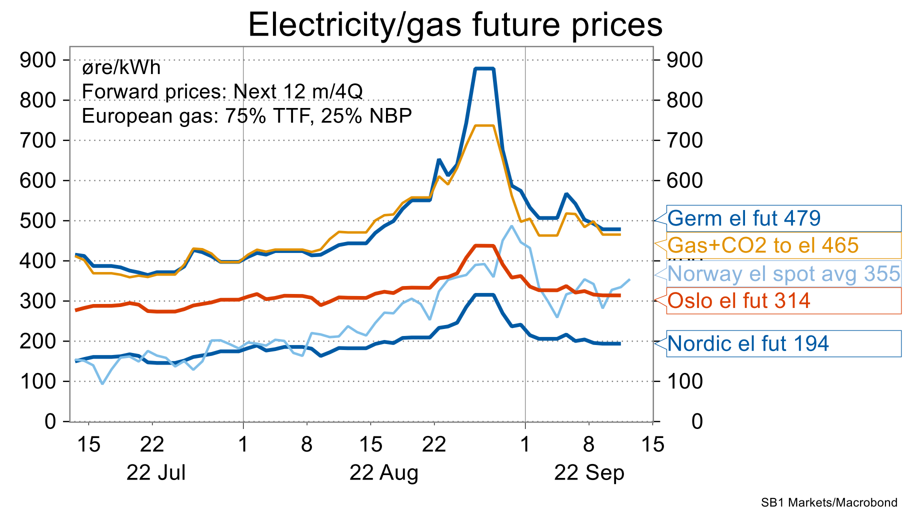


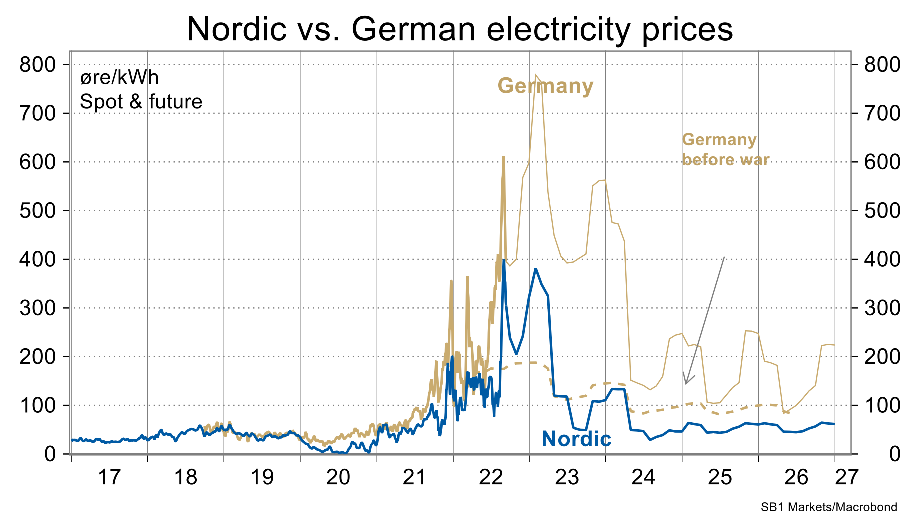
- Stock should increase faster than normal even after the full closedown of Nord Stream 1
  - » The closure of Nord-Stream 1 reduces imports from Russian equalling 7% of the normal (2019) export level, or by 0.35 TWh/day
  - » BTW, that equals the loss from lower nuclear production in France per day, due to the maintenance and lack of cooling water problems. EdF promises these problems will be sorted out before the winter (but compared to the total loss of energy from Russian gas, it does not count for that much)

European gas & electricity prices stabilised last week, following the 40% drop

... but the price level remains extremely high





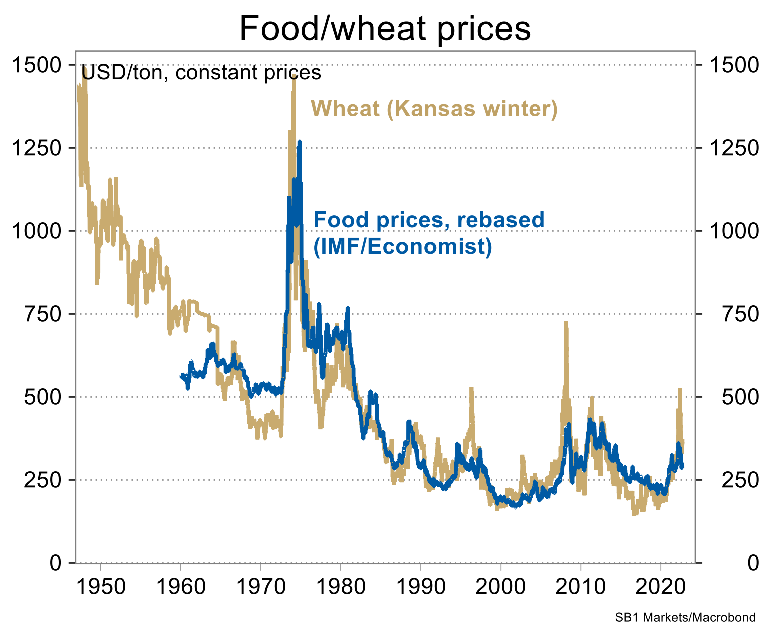


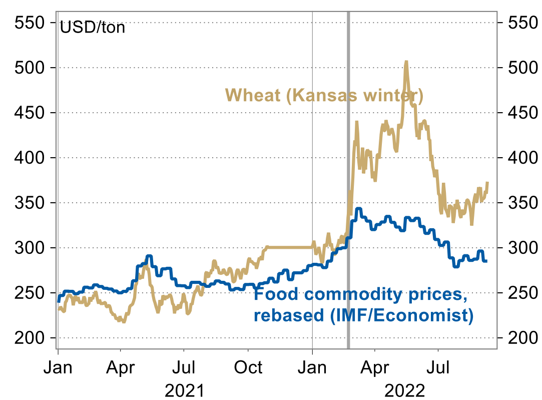
- The EU gas price cap is still a pie in the sky, but may of course be introduced, if so at the expense of Norway (but we are probably able to shoulder the cost…)

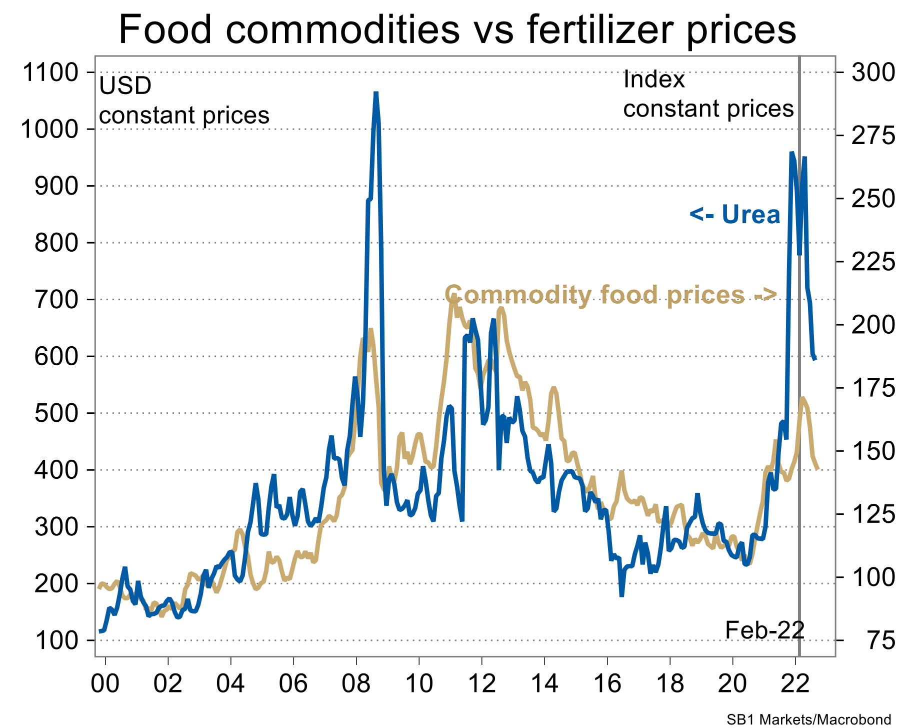
European gas: 75% Dutch TTF, 25% UK NBP, excl. CO2 cost

Food prices slightly down last week, and are trending downwards

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



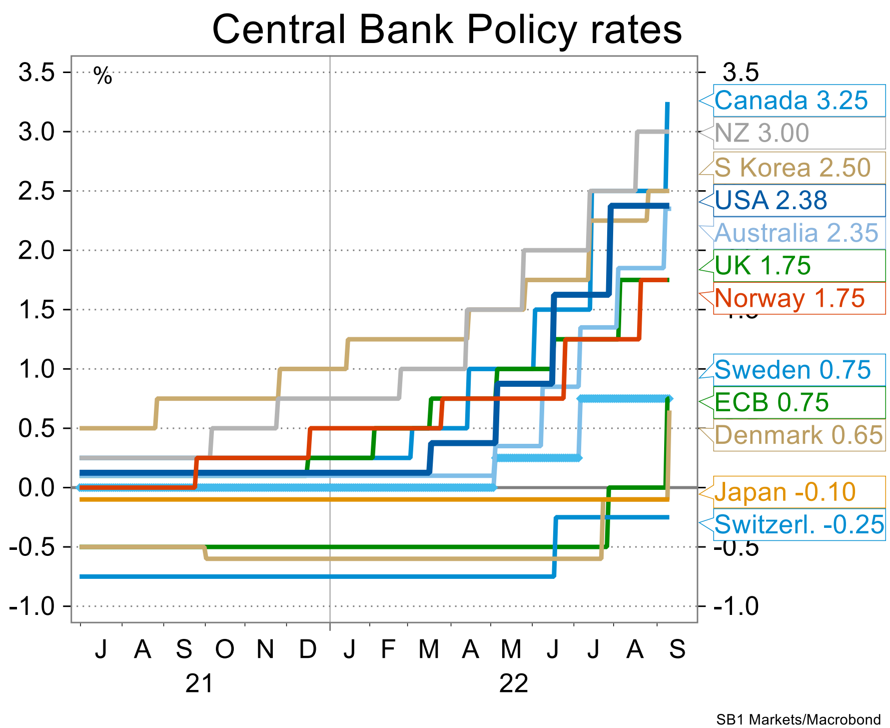


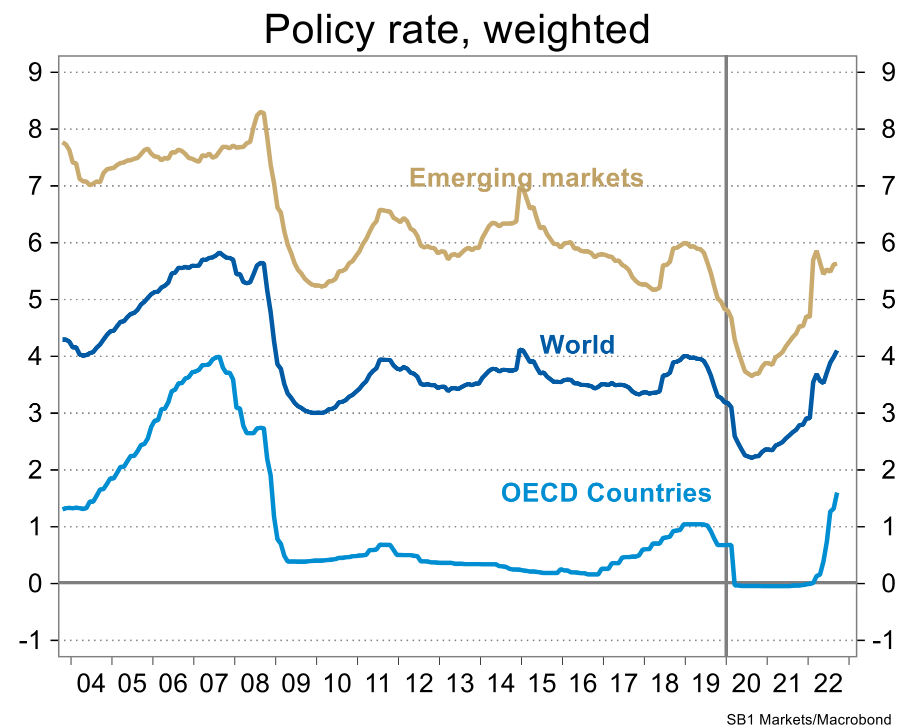


Urea prices are falling rapidly too (but are not low vs. food prices)

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

Canada hiked by another 50 bps, so did Australia. Euro Area and shadowing Denmark + 75 bps

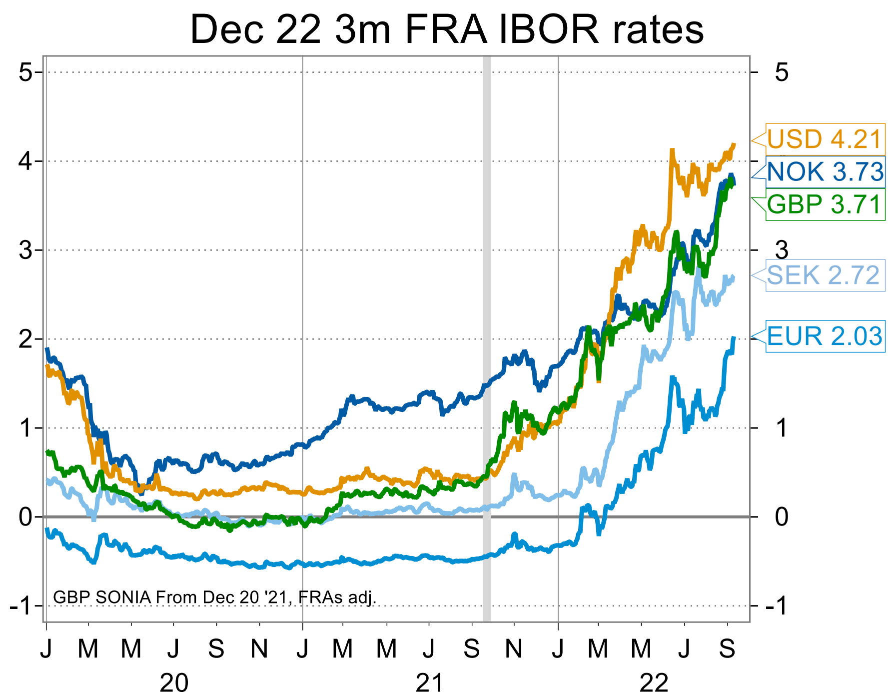


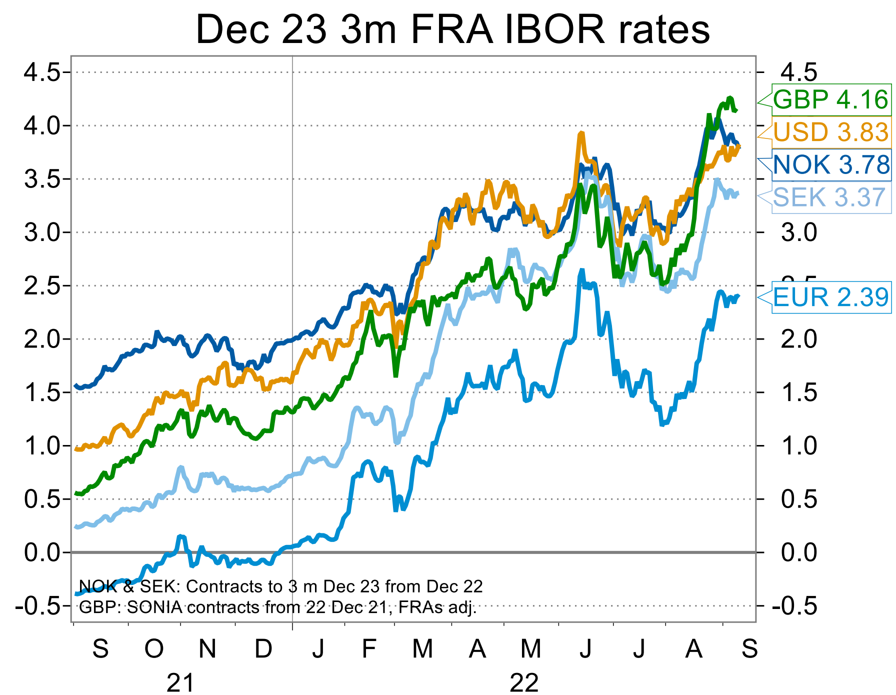


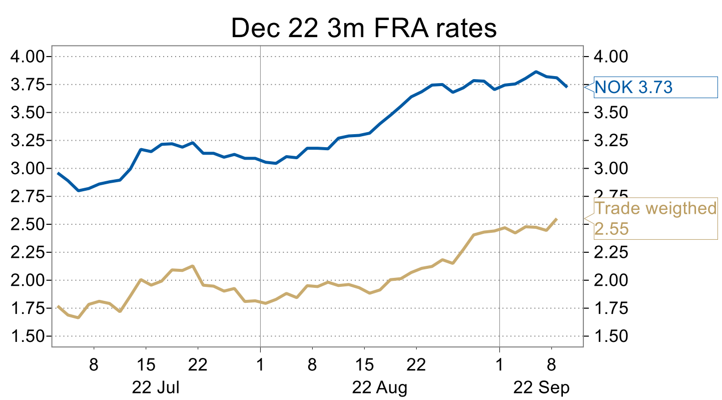
- The EM average policy rate has come down due to the Russian cuts – but the average is on the way up again
- In addition to rate hikes, most central banks have ended their QE buying programs. Some banks will start reducing their holdings, moving into the QT zone. US ramped up it's QT program (doubled the pace) from the beginning of September

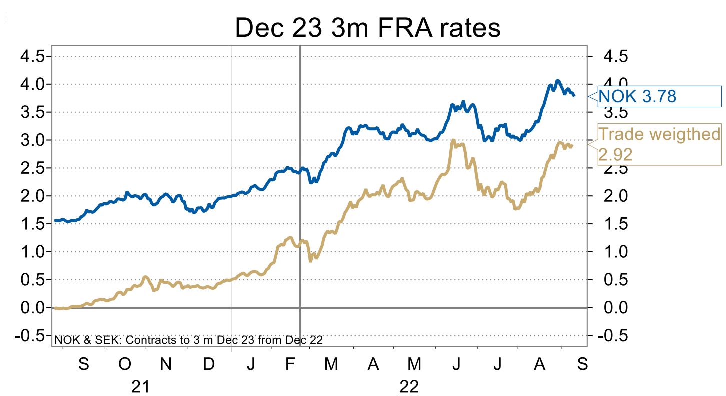
NOK longer dated FRAs down, the others flattish

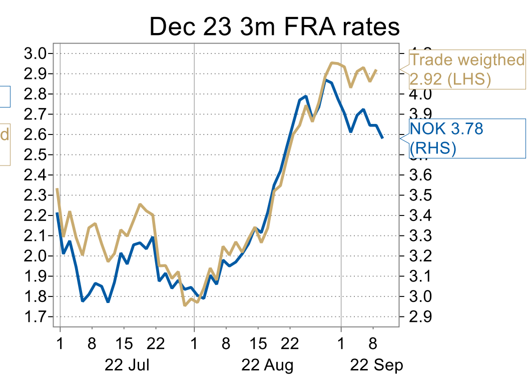
Markets are still closely correlated, check the Dec-23 FRA contracts, NOK vs. trading partners





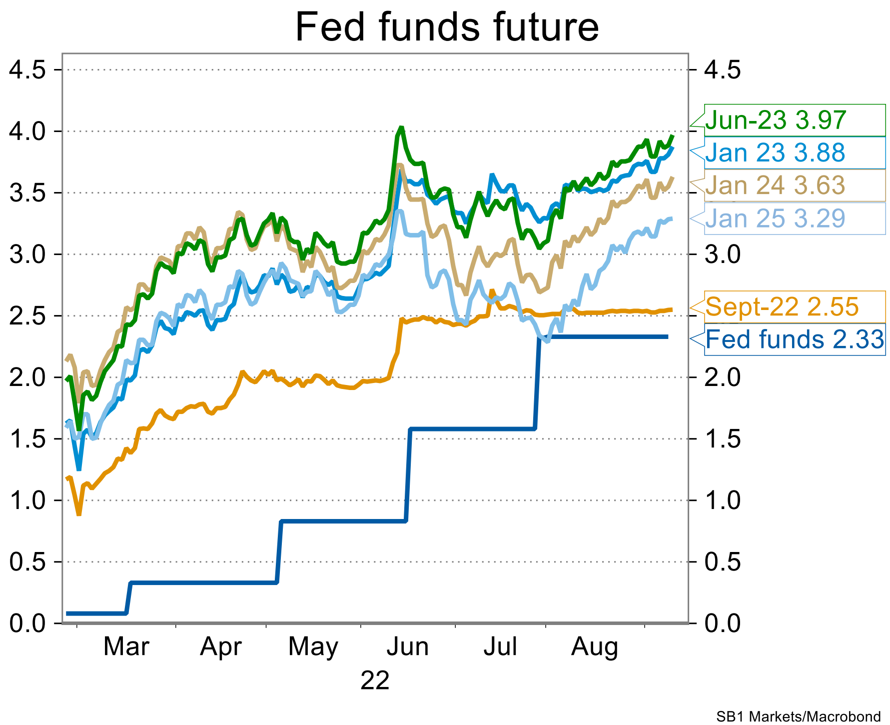


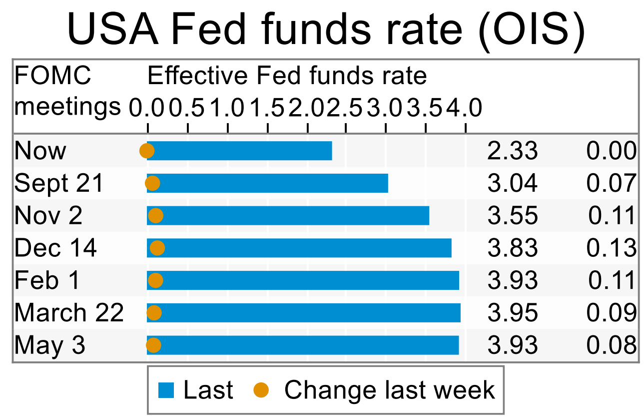


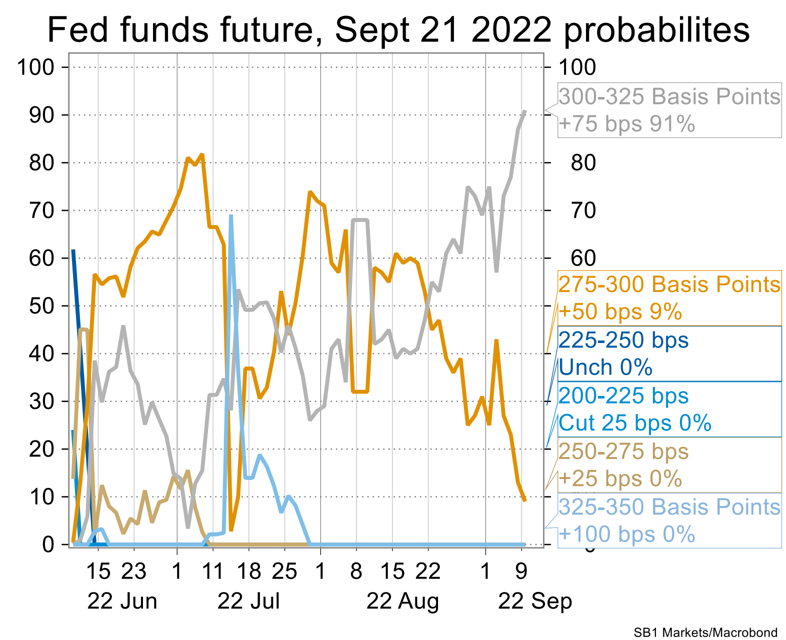


Federal Reserve: 75 bps hike to 3.0% – 3.35% next week a done deal? Seems so

The peak is still expected to be in March next year, at just below 4%

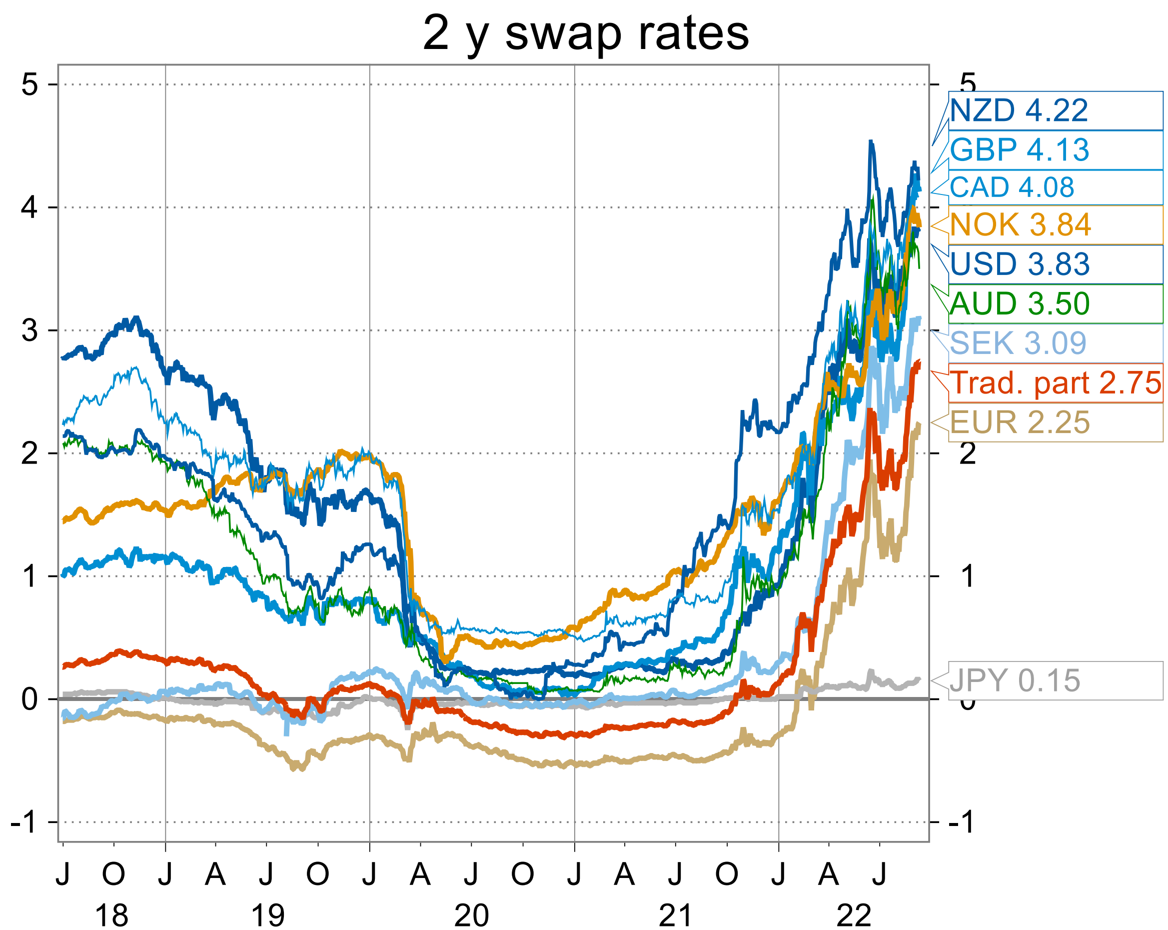




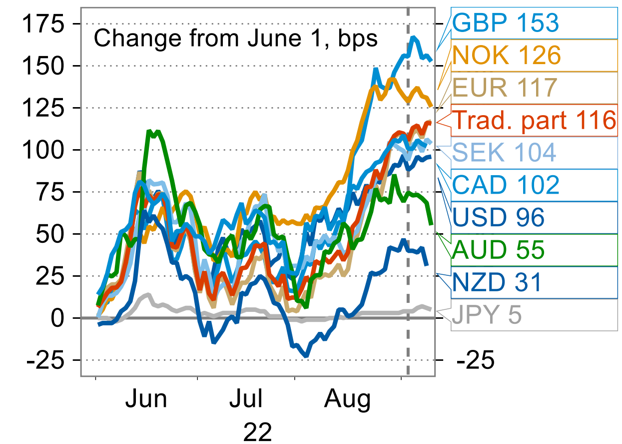


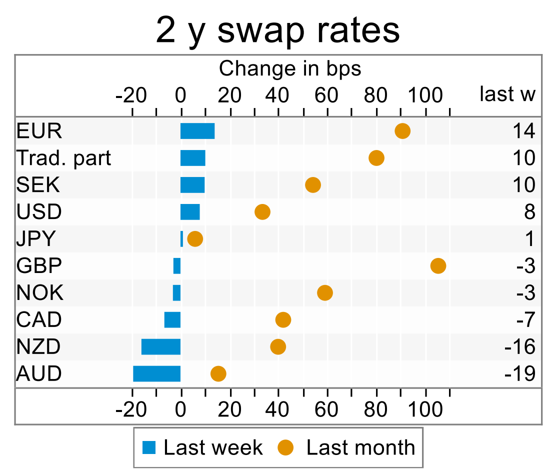
After some extreme weeks: Less volatility last week; Some up, some down

The 2 y NOK swap rate down 4 bps, our trading partners up 10 bps in average, thanks to EUR rates



SB1 Markets/Macrobond





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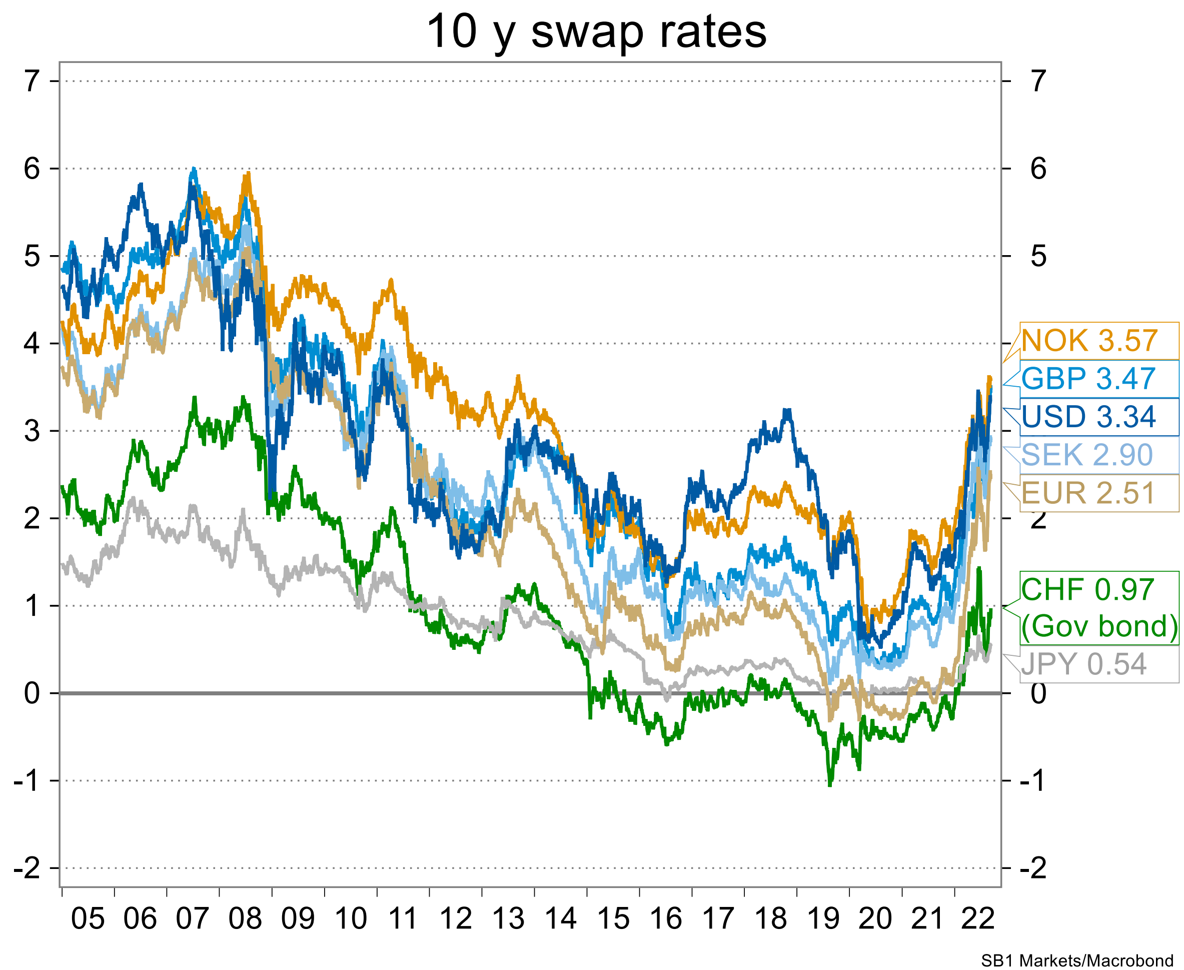
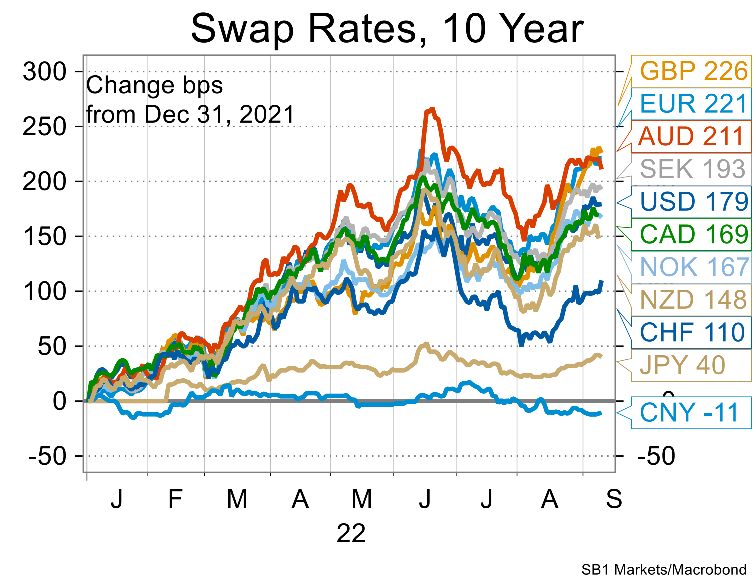
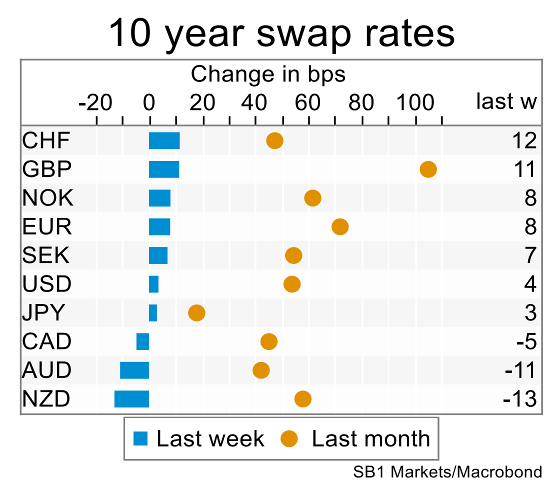
Mixed in the long end as well, more up than down





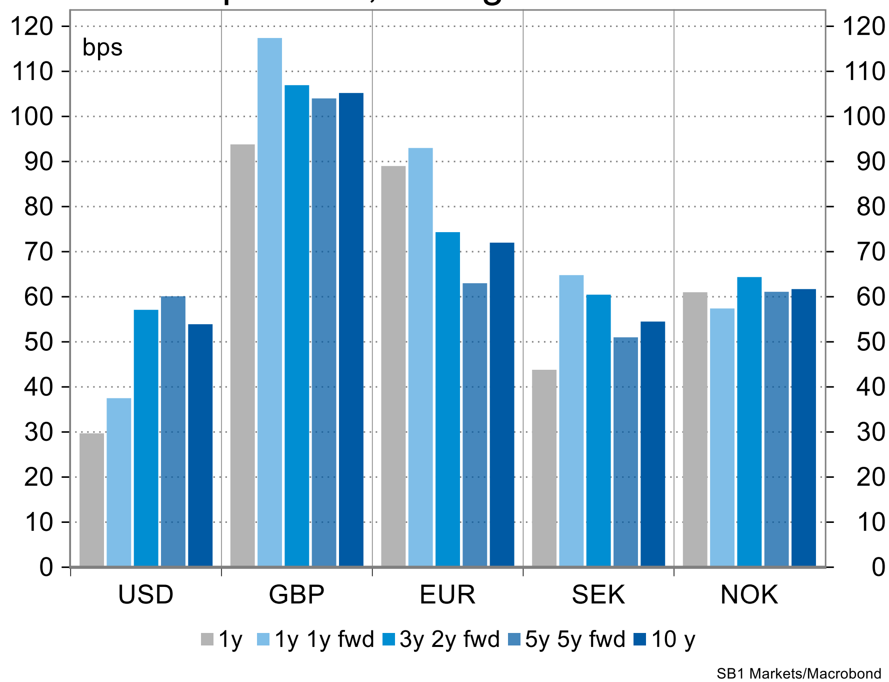


CHF: 10 y government bond yield

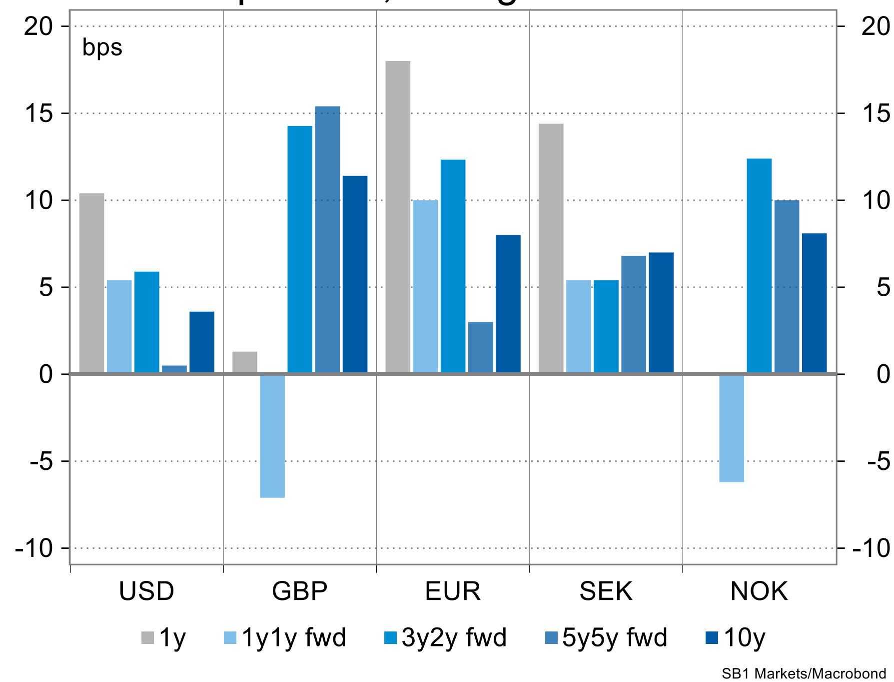
The EUR short end up due to a more hawkish ECB than expected

Even if the 75 bps was not a big surprise

Swap Rates, changes last month



Swap Rates, changes last week



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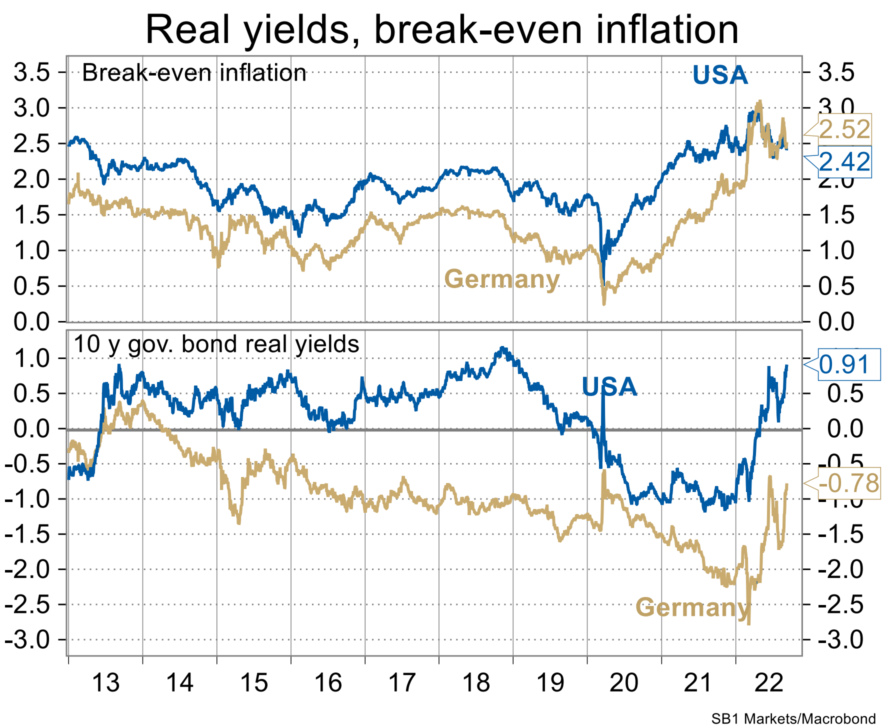
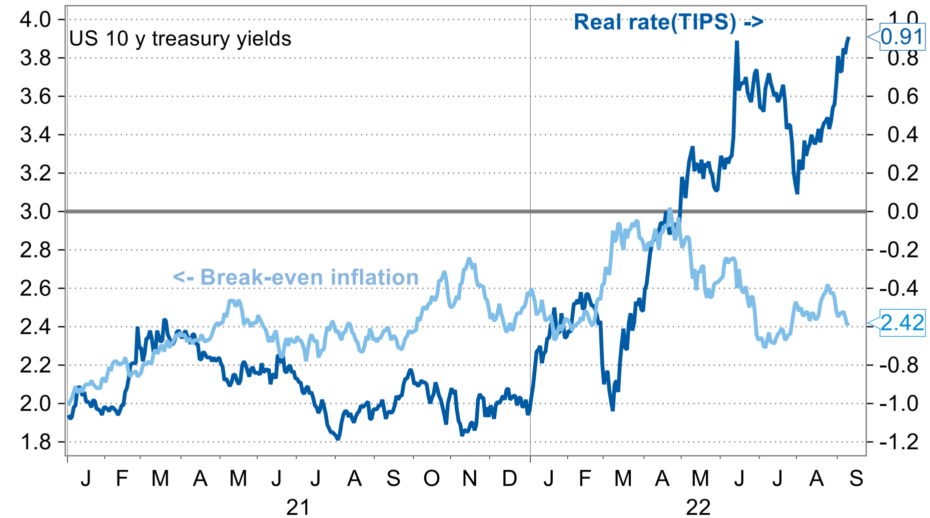
US 10 y real rate up 18 bps to 0.91%, the German real rate up too, still at 0.78%

Inflation expectations close to unchanged





US & Germany 10 y Gov bond yield

	Yield	Change 1w	Change 1m	Since Feb 18	Min since April-20
USA nominal treasury	3.33	0.13	0.53	1.41	0.52
.. break-even inflation	2.42	-0.05	-0.05	0.01	1.06
.. TIPS real rate	0.91	0.18	0.58	1.40	-1.19
Germany nominal bund	1.74	0.16	0.81	1.52	-0.65
.. break-even inflation	2.52	0.03	-0.10	0.54	0.40
.. real rate	-0.78	0.13	0.91	0.98	-2.80

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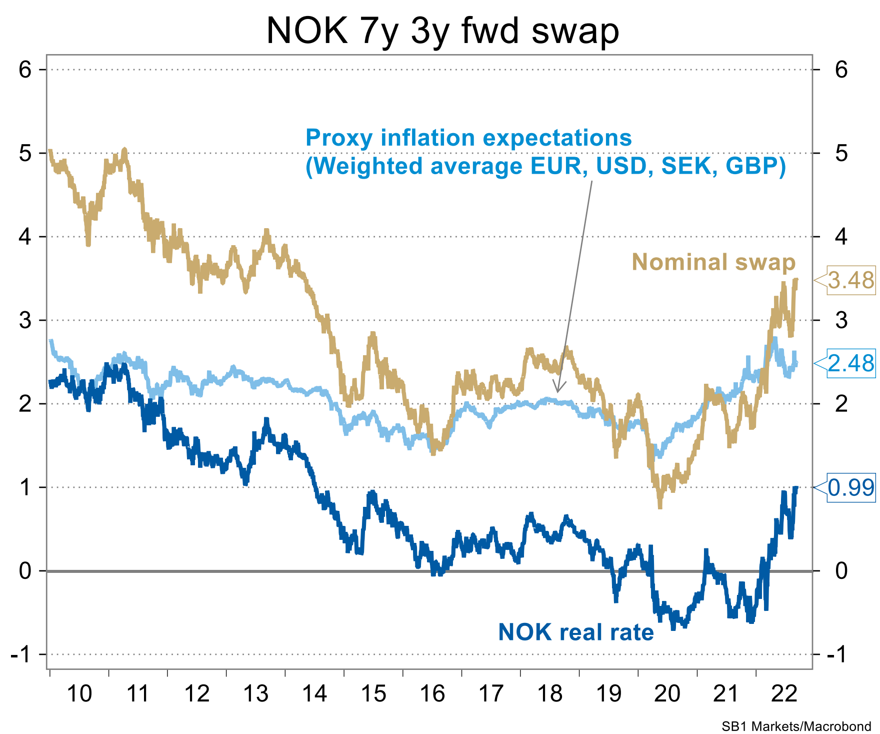
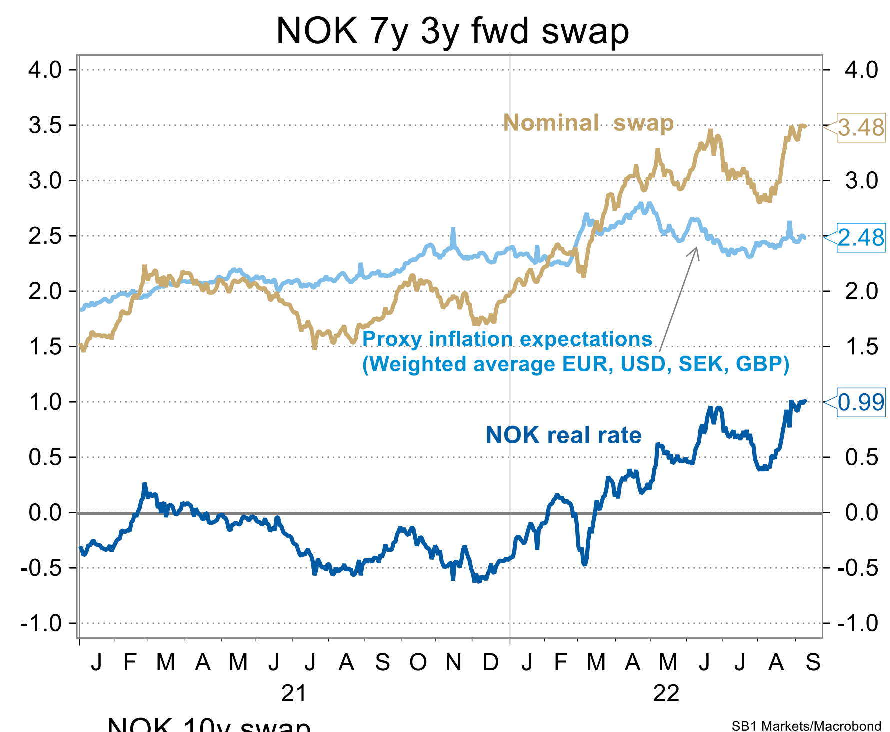
- **The 10 y German inflation expectation** at 2.52% is primarily driven by high expected inflation the first year (8%, measured via inflation swaps). Thereafter, inflation is rapidly expected to fall to 2% and below again. Real rates move the opposite direction – they are turning positive

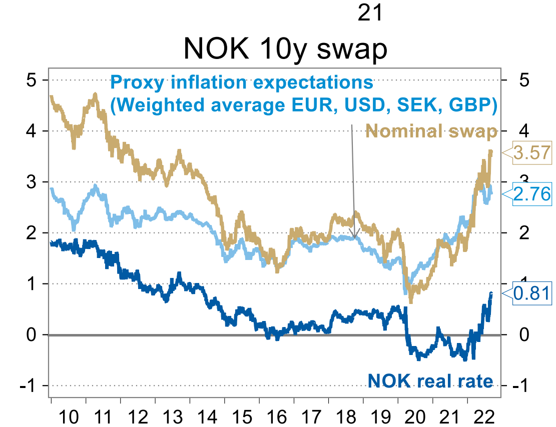
Norway: NOK real rates also up last week (if we have had any…)

Inflation expect. (7y 3 y fwd) have increased to 2.5% from 2%. Real rates are back to 1%, from -0.5%





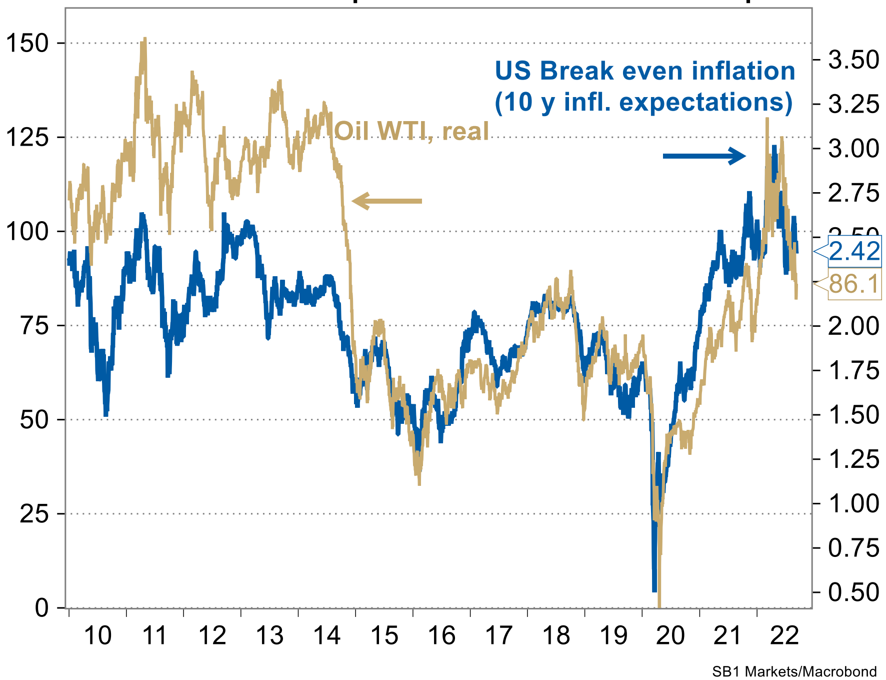
- Thus most of the lift in nominal swap rates recent months is due to higher real rate expectations, not higher inflation expectations
- Our NOK inflation expectation proxy is a weighted average of EUR, SEK, GBP, and USD inflation swaps, cross-checked vs actual inflation differentials and inflation expectations from surveys



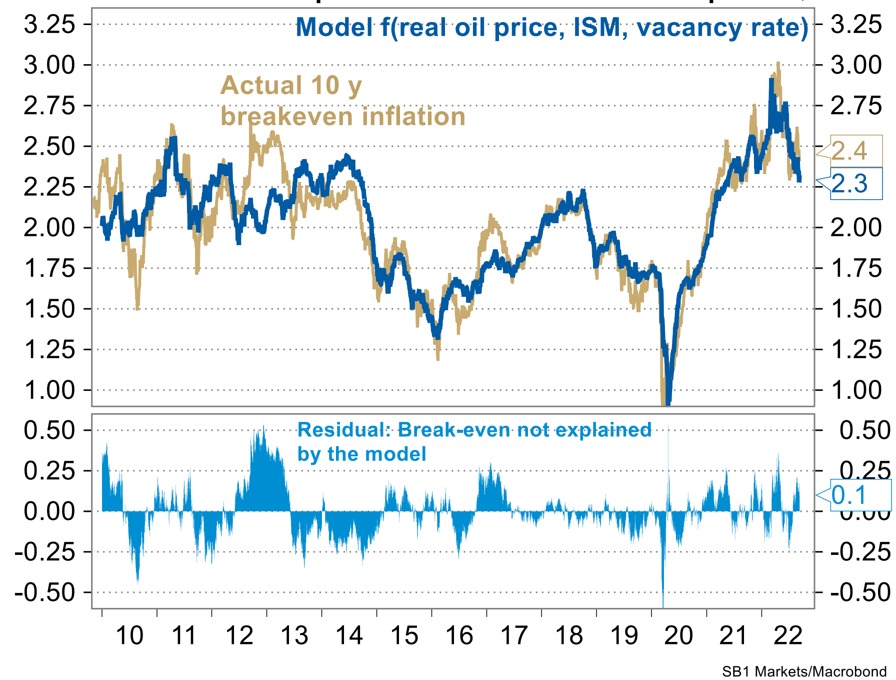
(Longer-term) Inflation expectations marginally down – still somewhat too high?

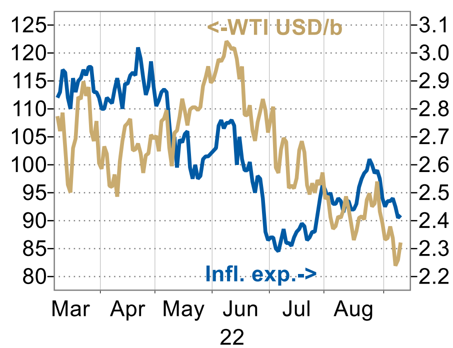
If the economy slows – and the oil price does not surge – inflation expectations should come down

USA Inflation expectations vs. the oil price



USA Inflation expectations vs. the oil price, CPI





- 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

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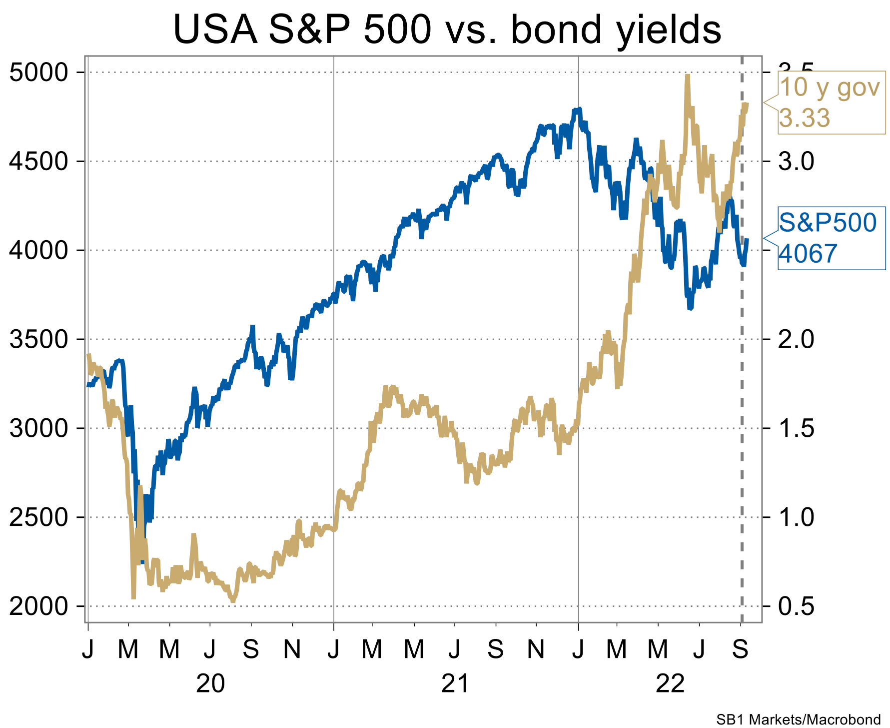
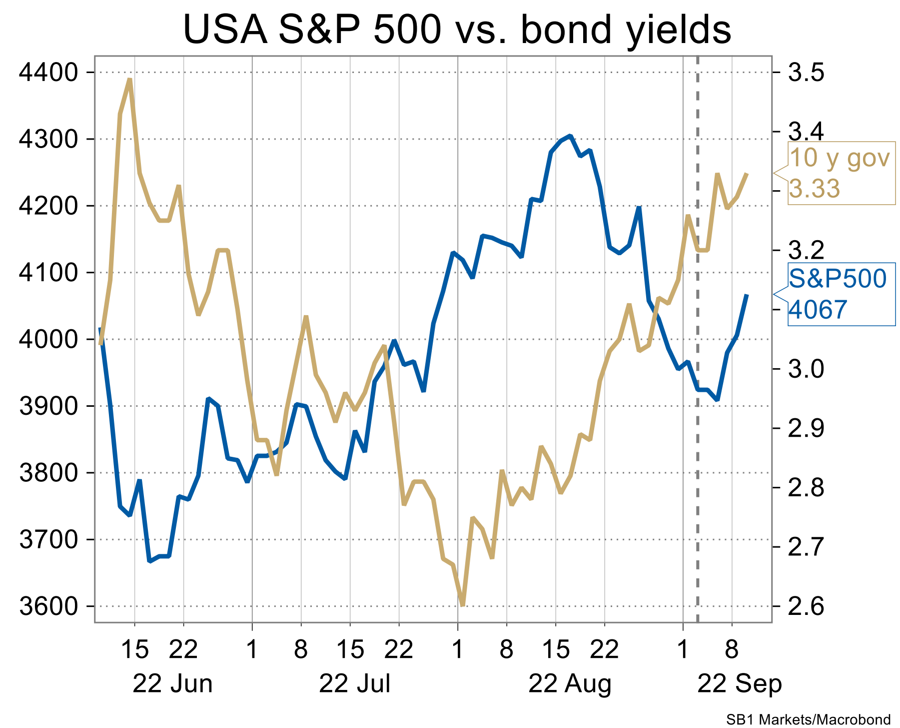
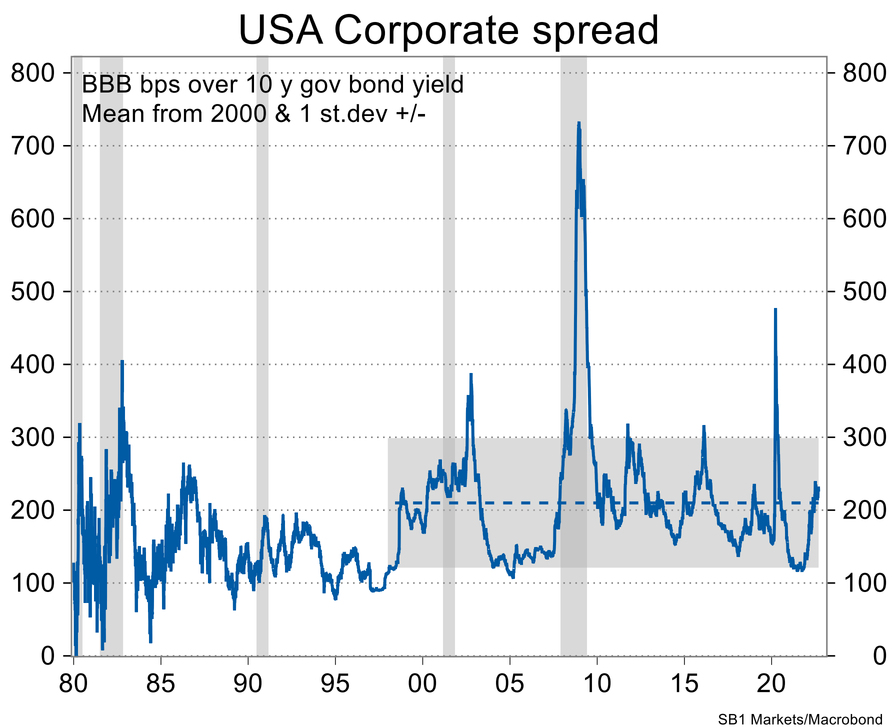
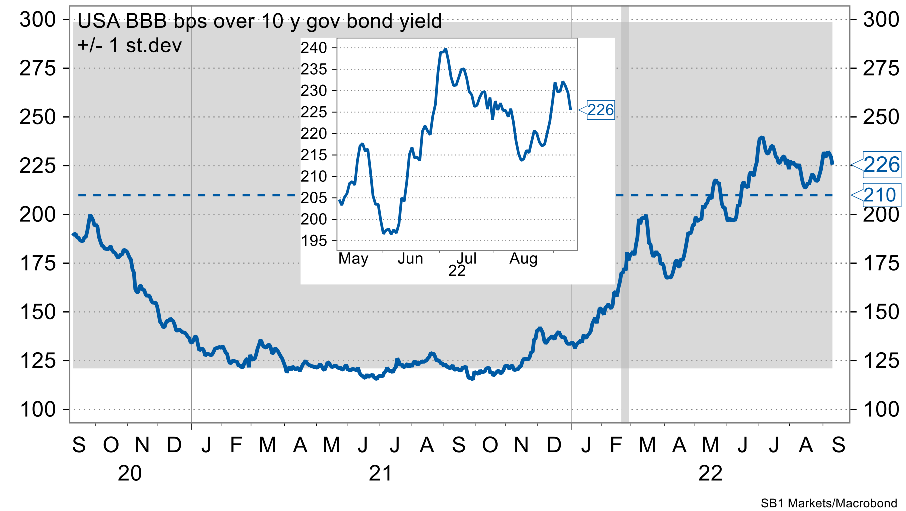
Most stock markets turned up again last week, even if (real) yields rose further





Risk on: Credit spreads slightly down – but the longer trend is still up?





- The US BBB spread is up more than 100 bps from the bottom last autumn, almost a doubling
- In addition, real rates have increased by almost 200 bps since late last year
- Thus, the basis for all valuation metrics has changed dramatically, check the chart two pages forward!

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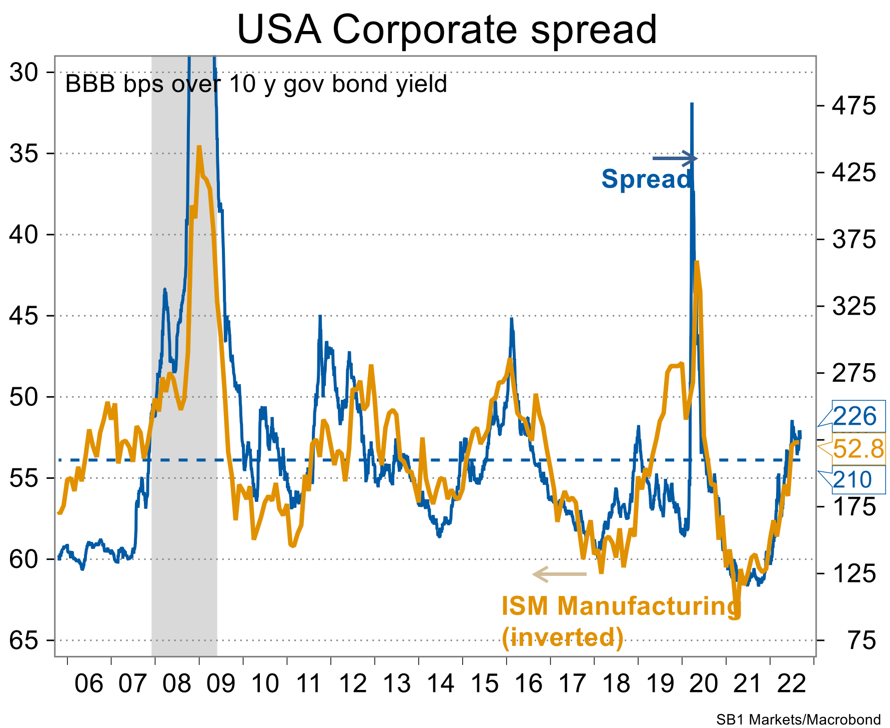
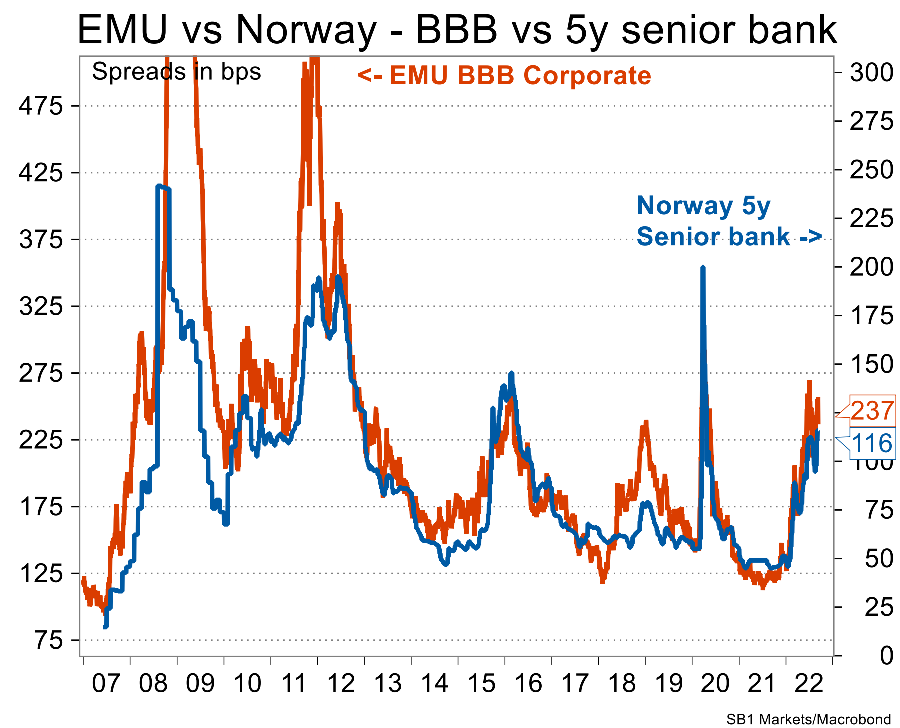
Why have credit spreads widened in 2022? Could it be the slowing economy?

What do you think is more likely: An ISM at 45 or 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 rose in sympathy with higher spreads abroad the previous week

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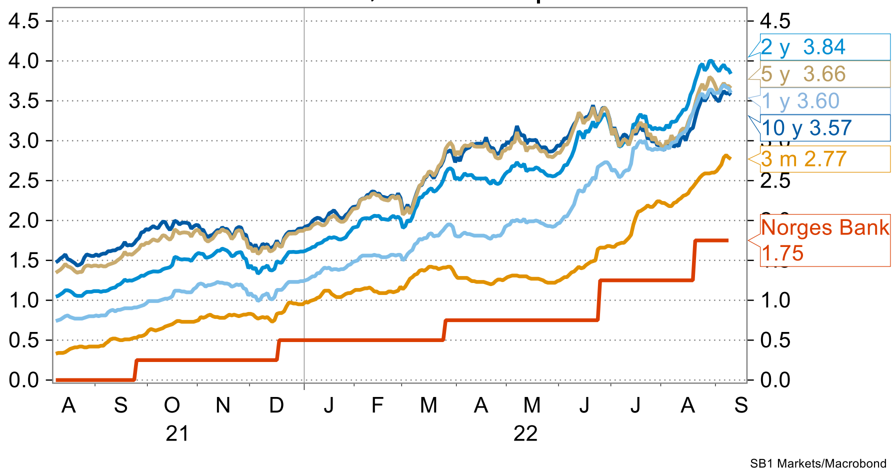
Norwegian rates are rolling over? Well, just the short end fell last week

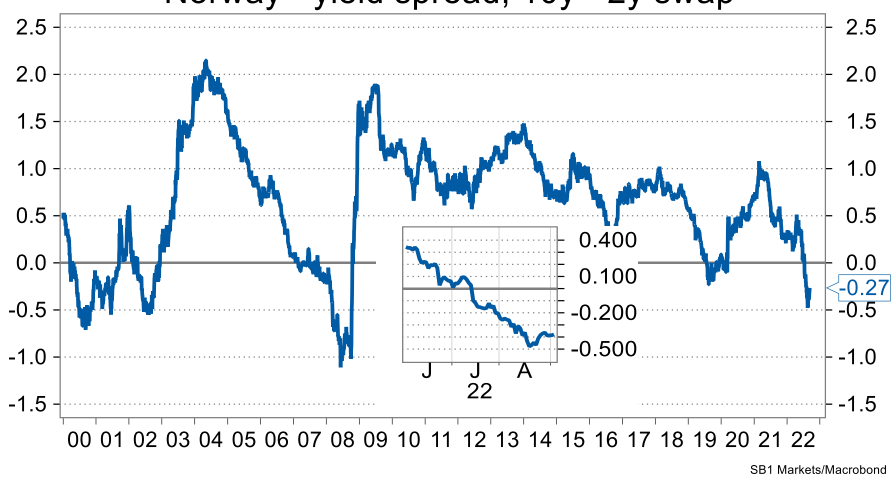
The 10 - 2y is inverted, by 27 bps

NIBOR, NOK swap rates

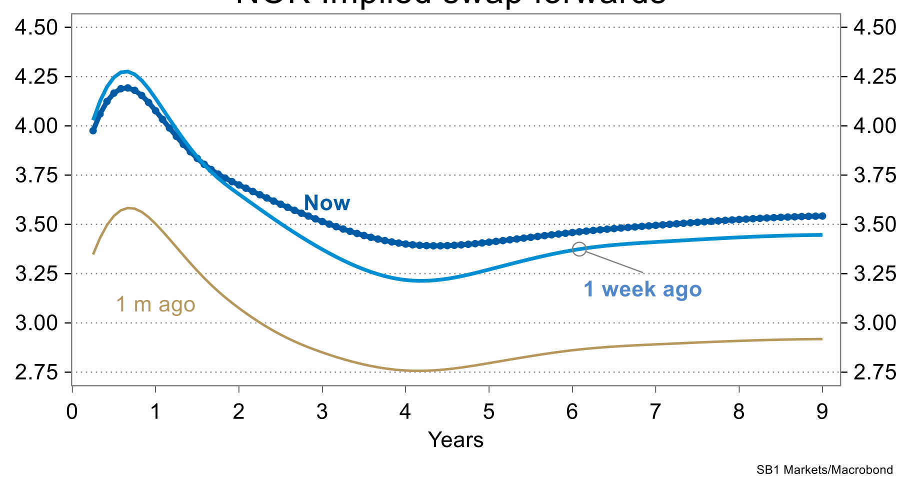


NOK Swap rates

Norway - yield spread, 10y - 2y swap

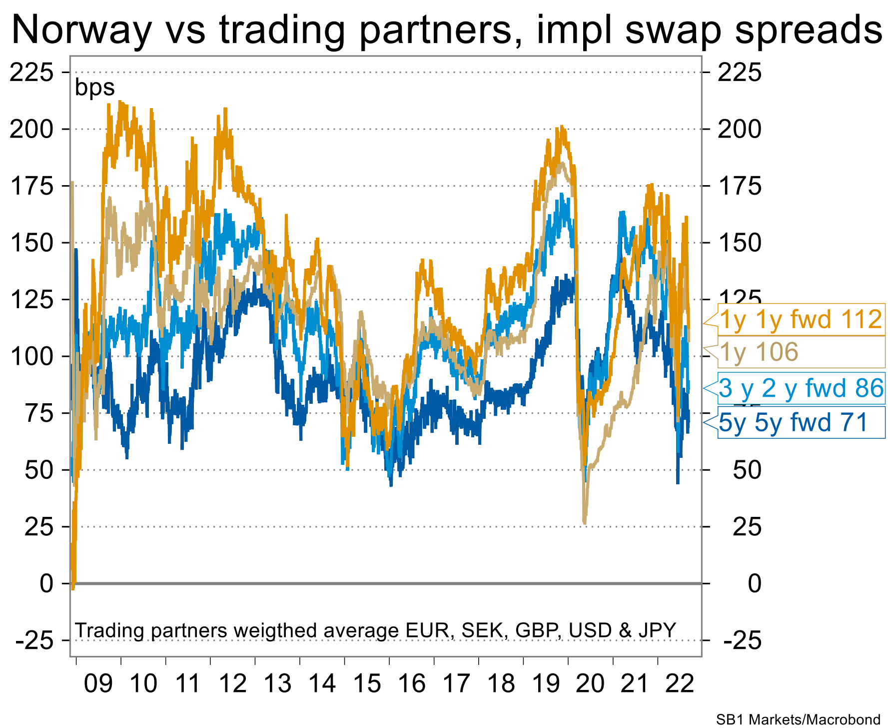


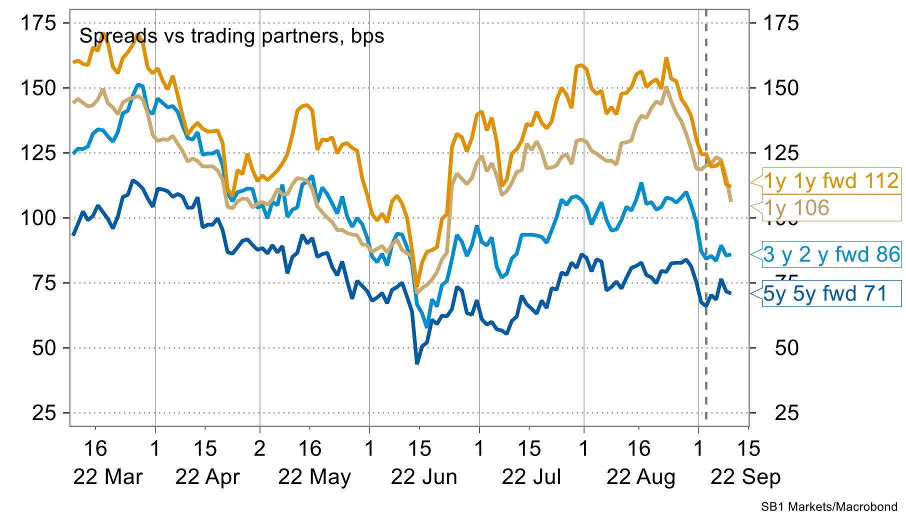
NOK Implied swap forwards

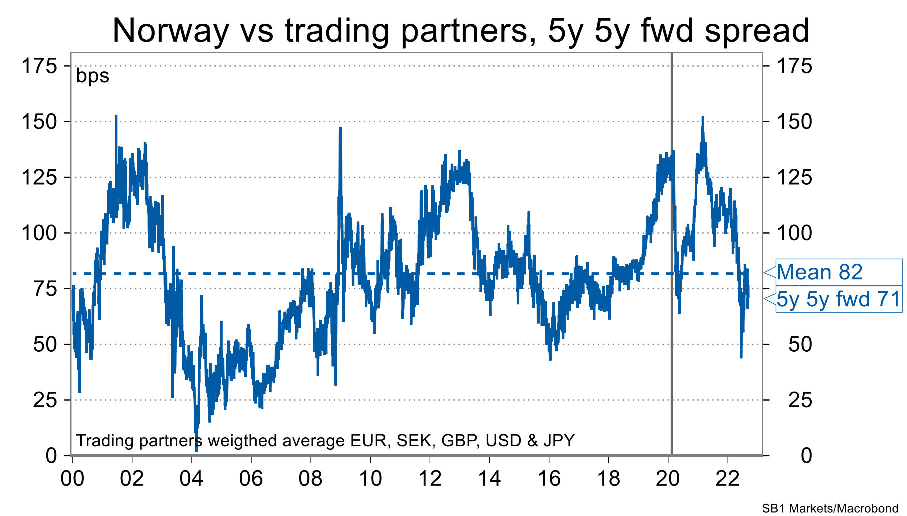


Spreads vs trading partners down but just in the short end last week

From 2 years forward, implied spreads are lower than average – which they should be



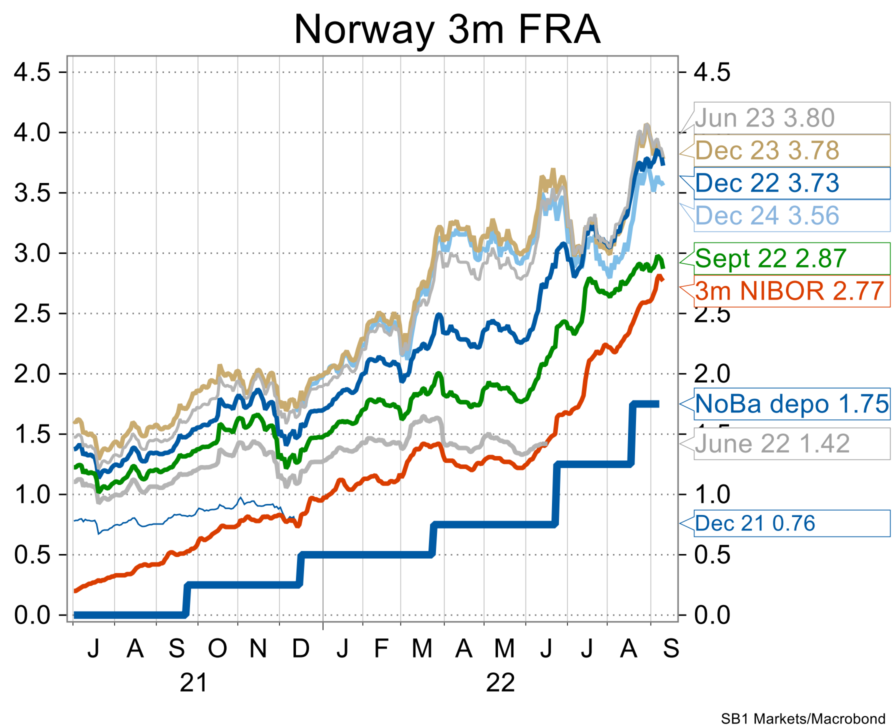


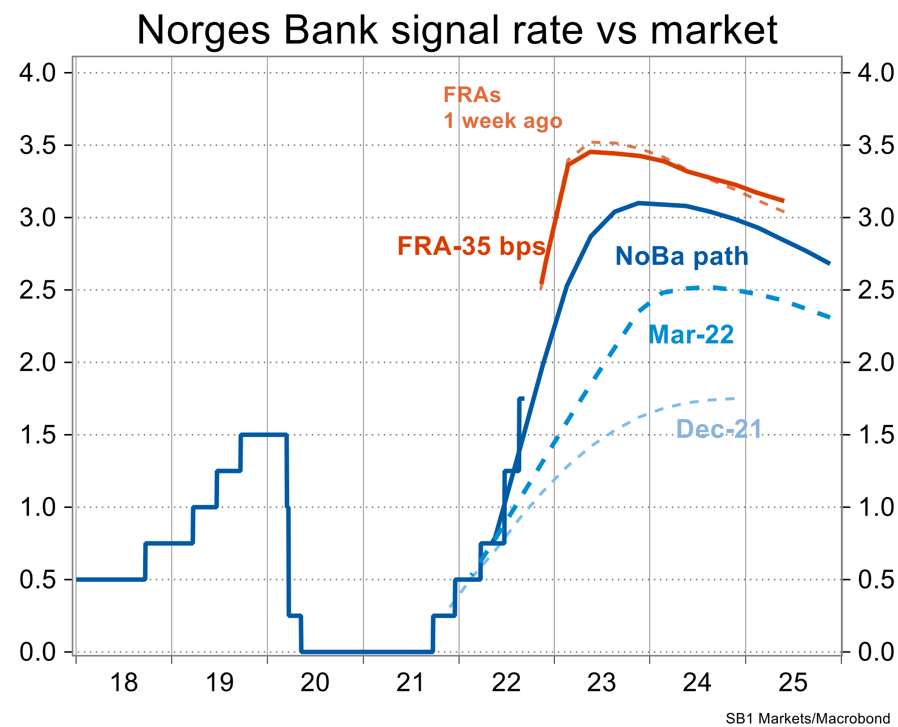


- The 8 y, 2 y fwd spread is 73 bps, below the 90 bps average since 2000. However, the current spread is probably not too narrow:
  - » Long term, Norway will not have that much high real rates or inflation than the world around us

FRAs mostly down last week. Still 3 x 50 bps, in Sep, Nov & Dec. +25 bps in Jan

That's too aggressive, the economy is slowing, wage inflation is not accelerating





- The 3 m NIBOR gained 11 bps to 2.77% last week
- FRA rates fell by up to 7 bps (June-23) last week, and are down by up to 30 bps from the peak in late August. Still, we assume market expectations are too aggressive. A 3 m NIBOR at 3.8% will lift the average mortgage rate to 5%, up from the 1.7% level at the rock bottom (and 2.4% in July). 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 there are few signs of higher wage inflation. Growth has came to a standstill, and growth impulses from abroad will keep growth in check the coming quarters
- We expect **Norges Bank** to lift the short end of the interest rate path next week – is has already done it by hiking 50 bps in August, and we assume a 50 bps hike now. We think the bank will aim for a policy rate at 2.75% by the end of 2020, with 2.50% being more likely than 3.0%. We will make our final call in next week's report

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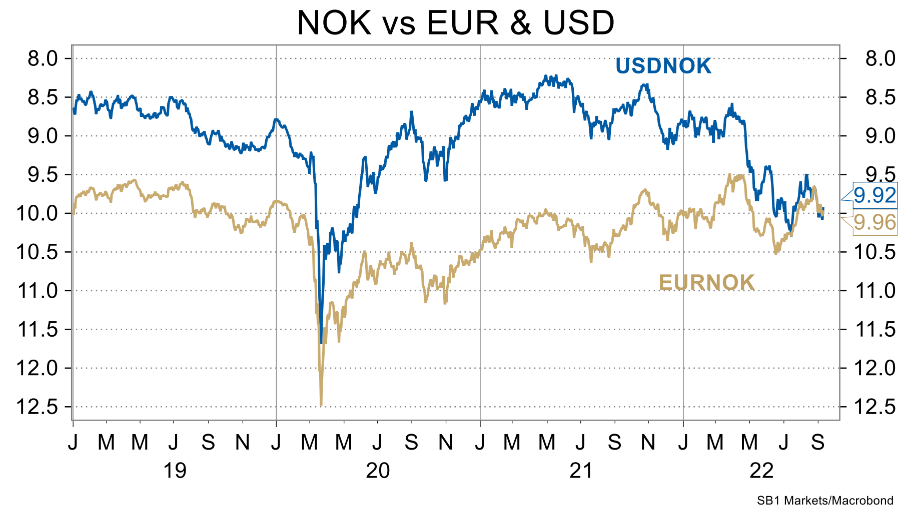
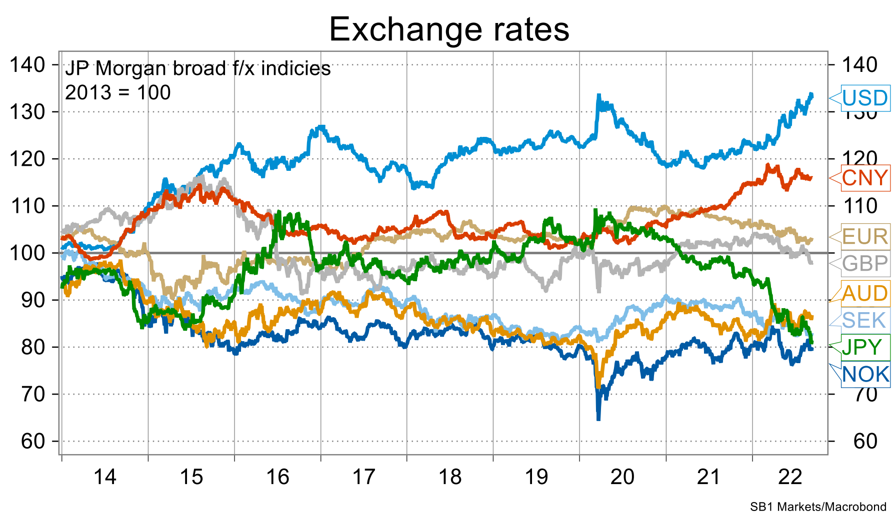
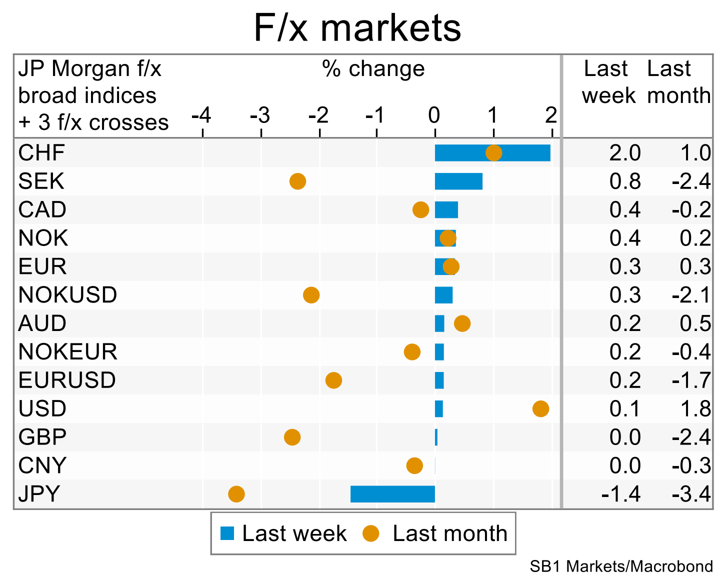
King Dollar further up last week – to a very high level. NOK & friends up too

JPY the big loser, no hikes in Japan. The CHF at the top, but no hike before the end of the month?



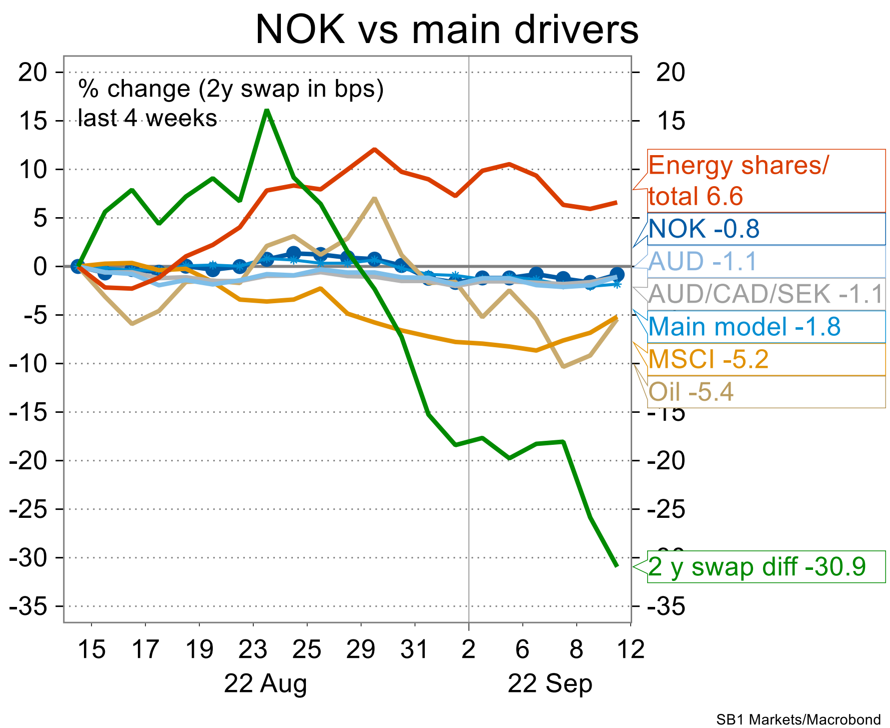


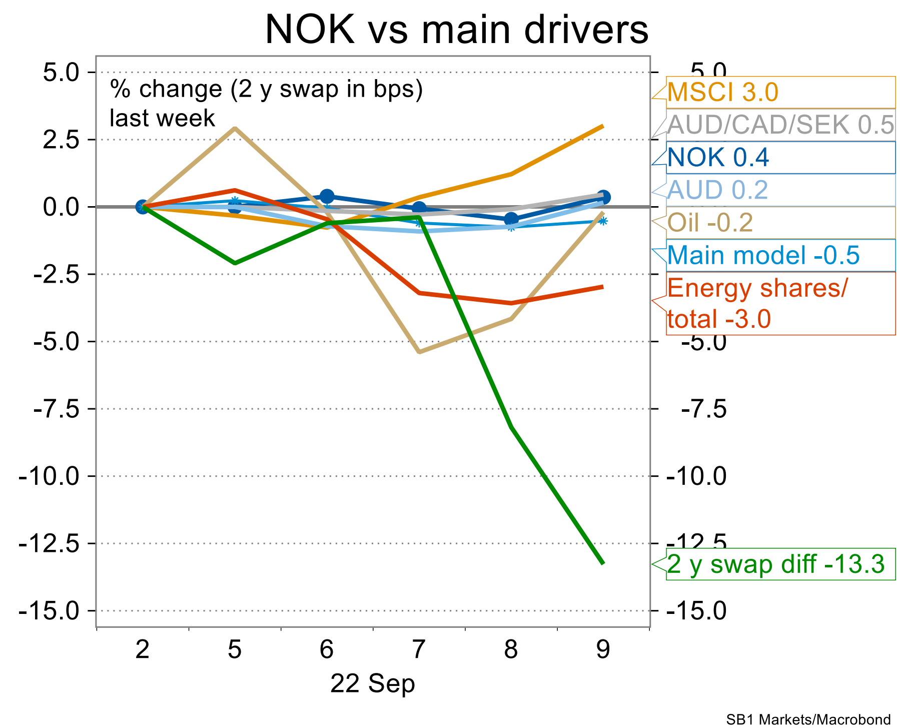


JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
CHF	2.0	1.0
SEK	0.8	-2.4
CAD	0.4	-0.2
NOK	0.4	0.2
EUR	0.3	0.3
NOKUSD	0.3	-2.1
AUD	0.2	0.5
NOKEUR	0.2	-0.4
EURUSD	0.2	-1.7
USD	0.1	1.8
GBP	0.0	-2.4
CNY	0.0	-0.3
JPY	-1.4	-3.4

NOK 0.4%, our model suggested -0.5%. The gap vs the model est fell to just 0.5%

The oil price fell marginally, and the interest rate spread more. Our Super-cyclical peers also rose





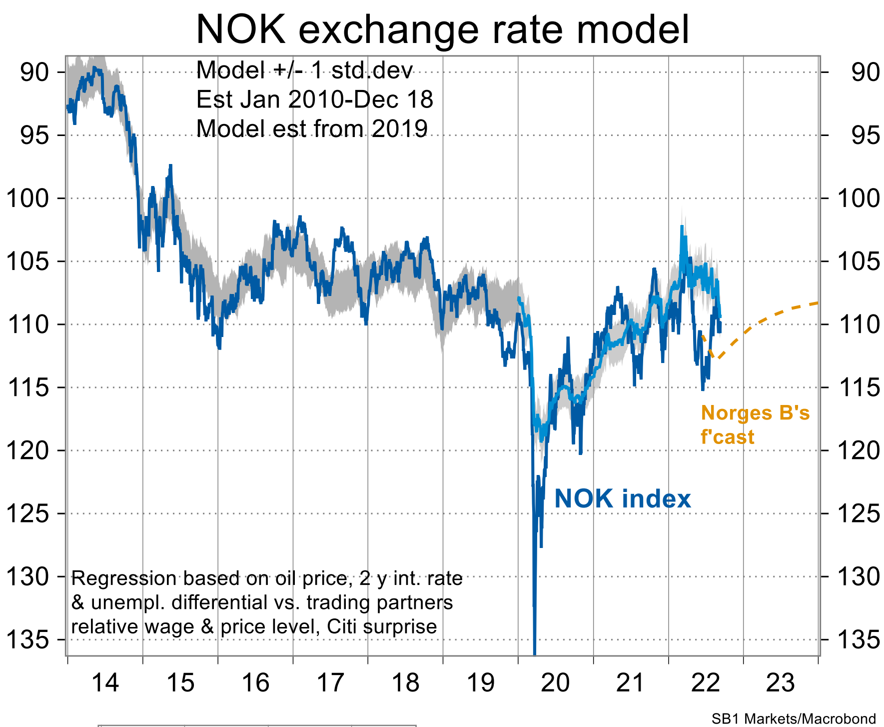
Gaps vs. out model estimates have narrowed – but not last week

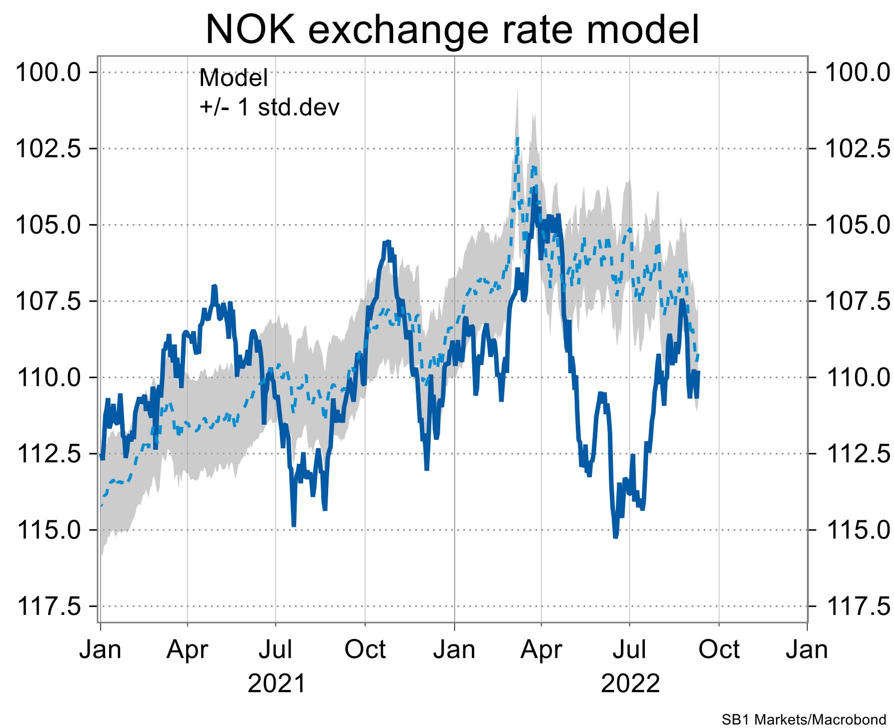
- ***NOK is 0.5% <u>below</u> our main model estimate (from –1.4%)***
- The NOK is 7% <u>weaker</u> than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts, a substantial weakening (-unch)
- NOK is 1% <u>weaker</u> vs an estimate from a model that includes global energy companies equity prices (vs the global stock market) (from -3%)

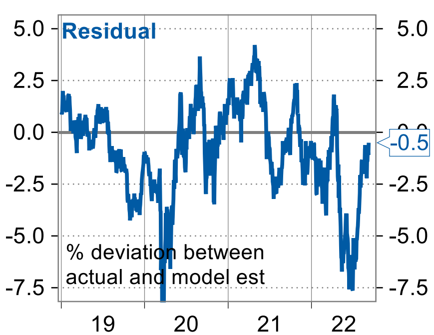
At this and the following pages we have swapped Norges Bank's I44 index for JP Morgan's broad NOK index and rebased it to the current index value for the I44. The I44 has an earlier closing time than the 'official' closing time for f/x crosses. There are no substantial difference between these two indices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

The NOK is just 0.5% below our beloved model

The NOK has recovered recent weeks, even if the oil price is trending down. Gas prices are… volatile

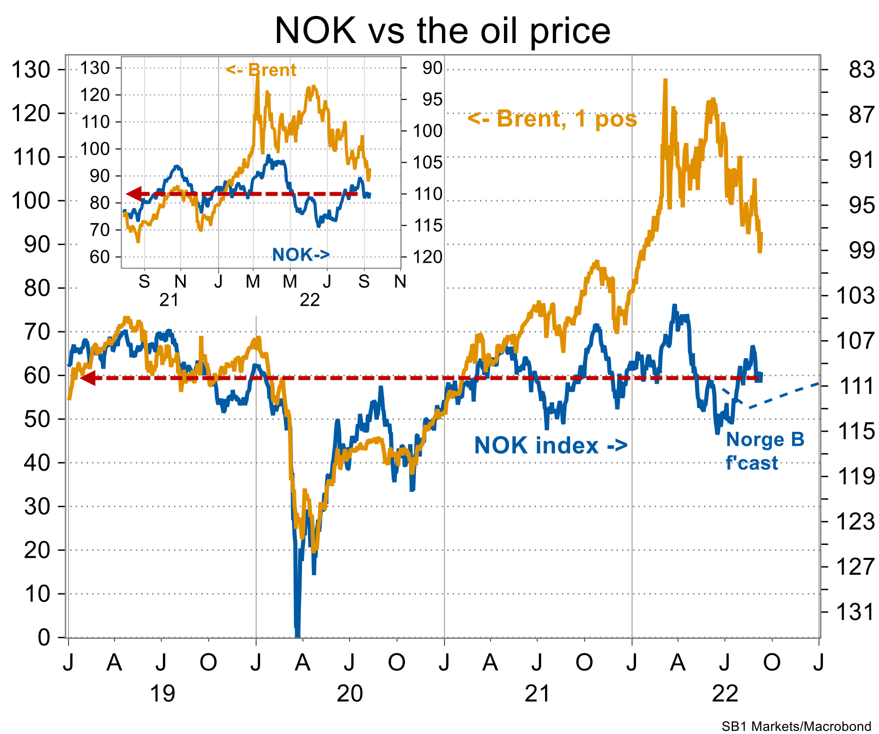


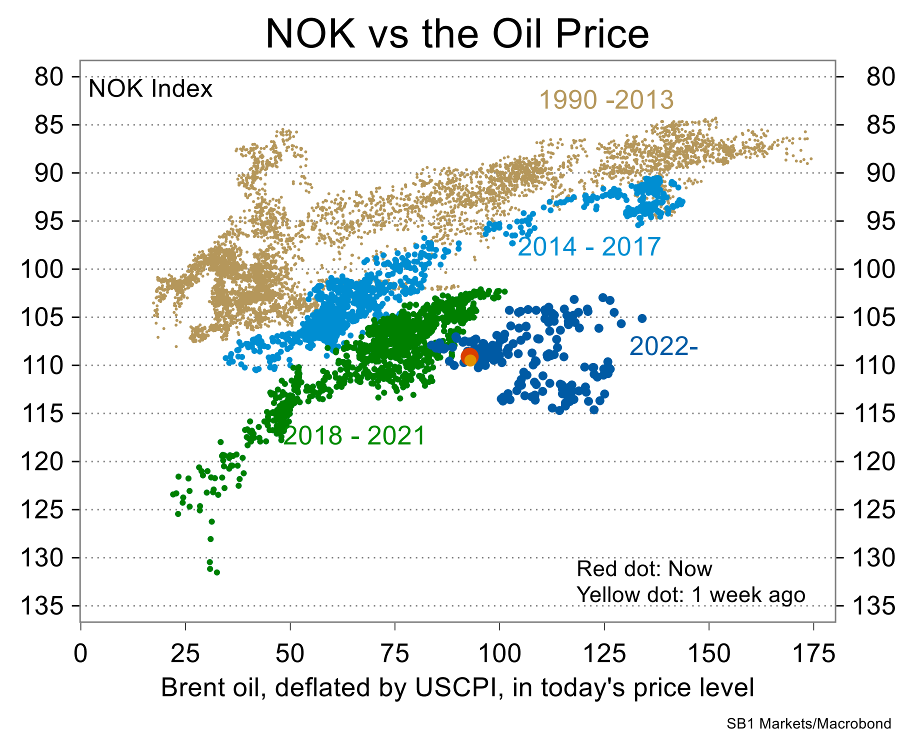




Oil prices are trending down, the NOK not

NOK is approaching the 2018 – 2021 regime – even if gas has become the dominant export article

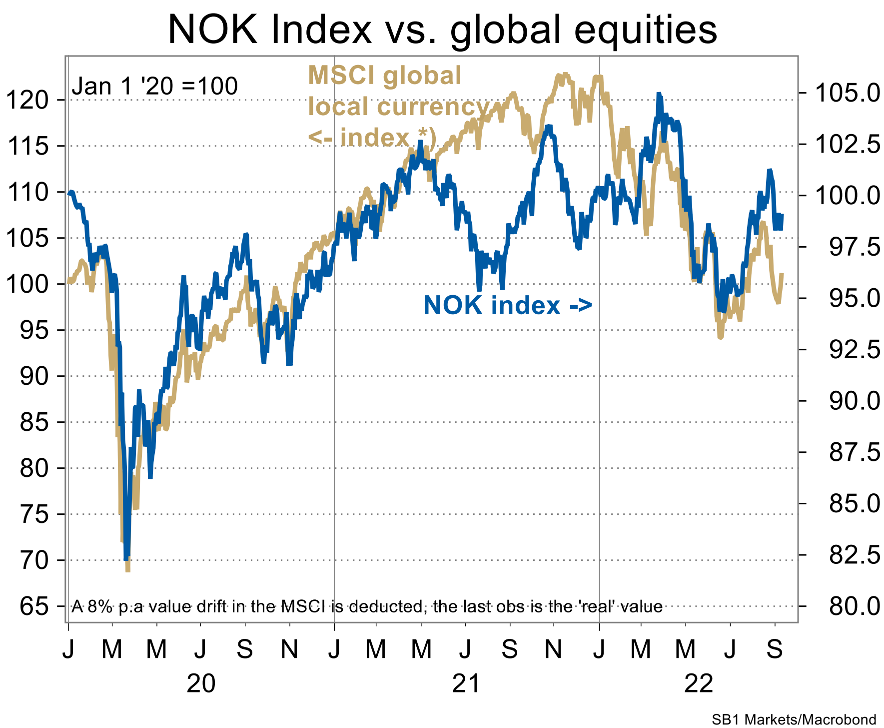


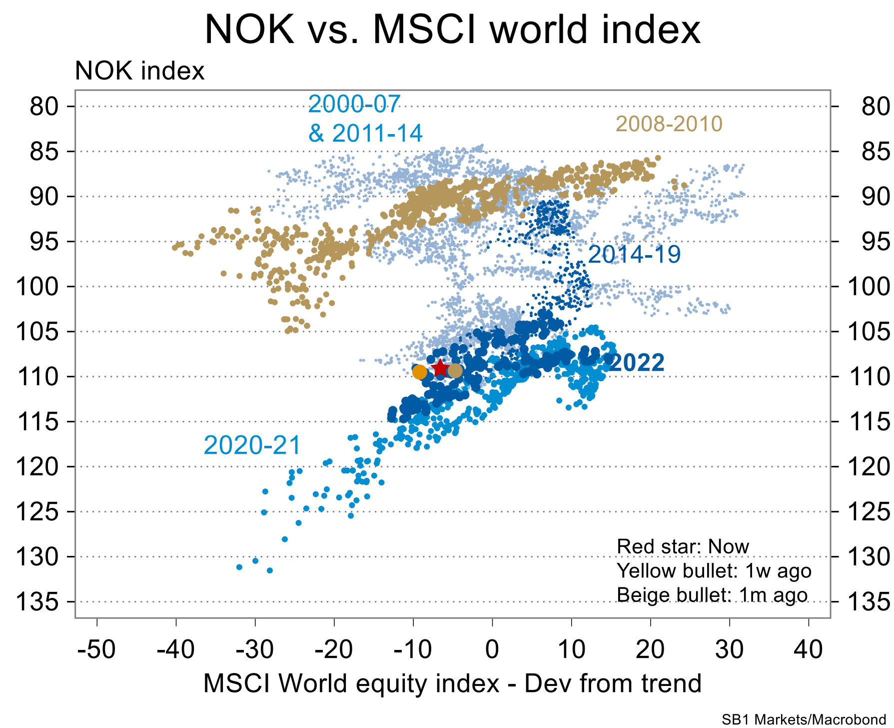


- The x/y chart to the right, the NOK vs the oil price has come closer to the 2018 – 2021 pricing regime
- However, the correlation between the NOK and the oil price has been non-existent since the start of 2022

The NOK marginally up, and less than global equities

The NOK has been more in sync with stock markets than normal since April

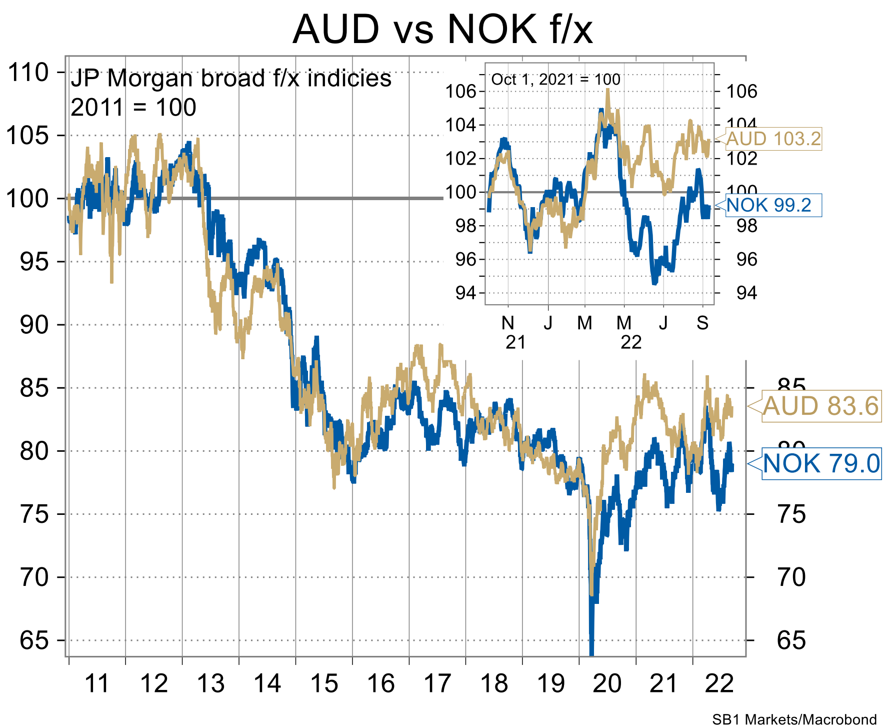


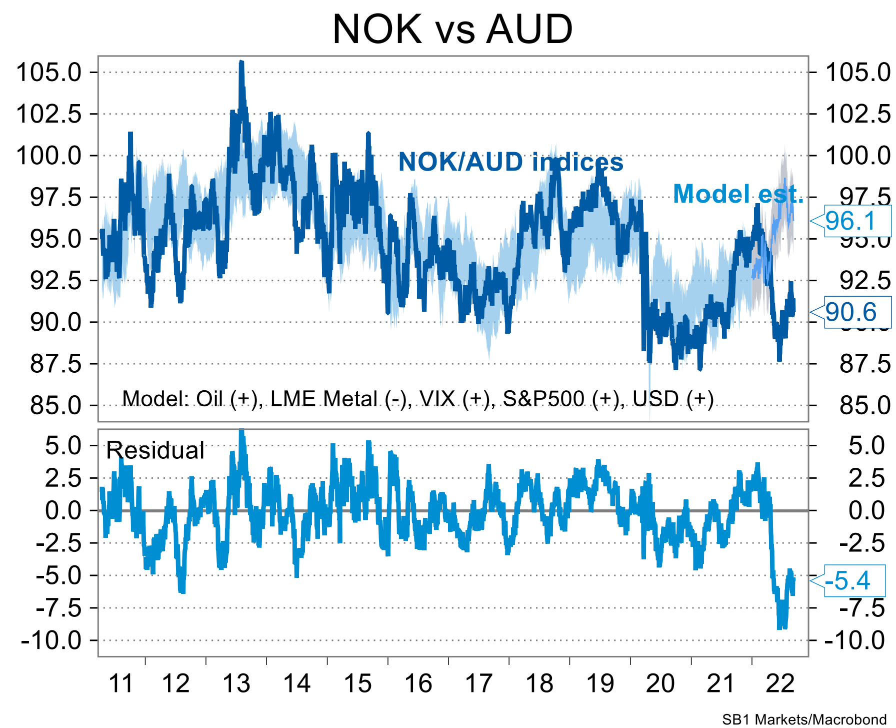


- There is no stable correlation over time, and when it is, the oil price is normally the real driver

Both NOK & AUD marginally up last week

NOK is 5% below our model f'cast vs AUD, even if the gas price is not included

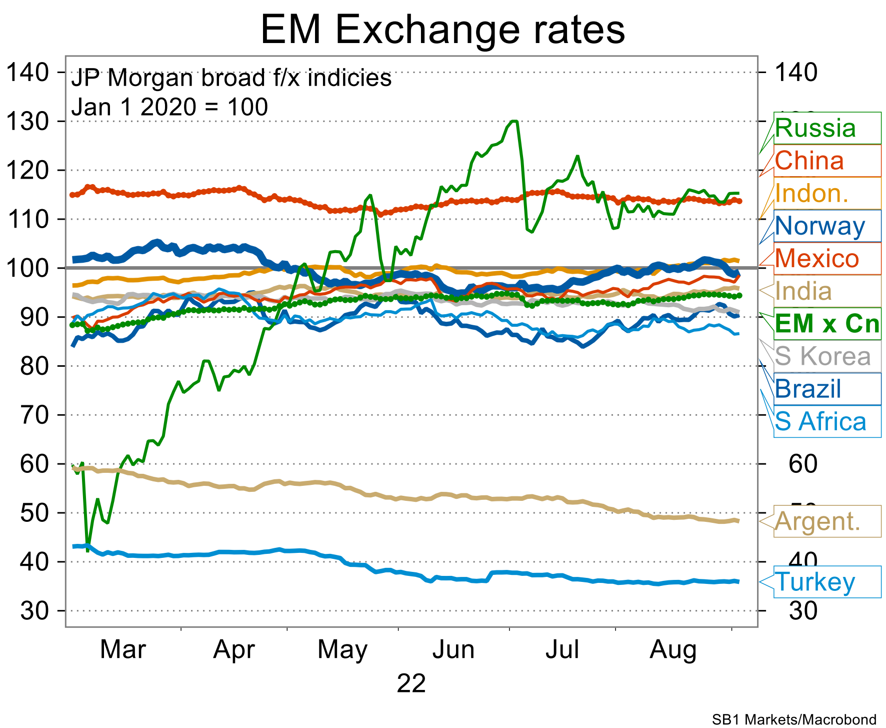


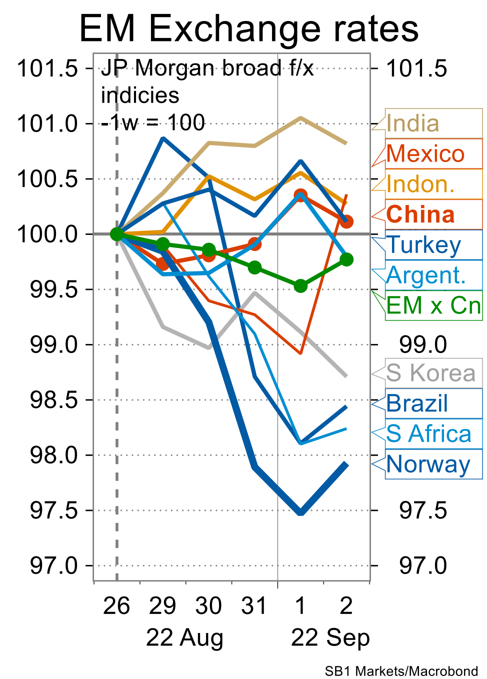


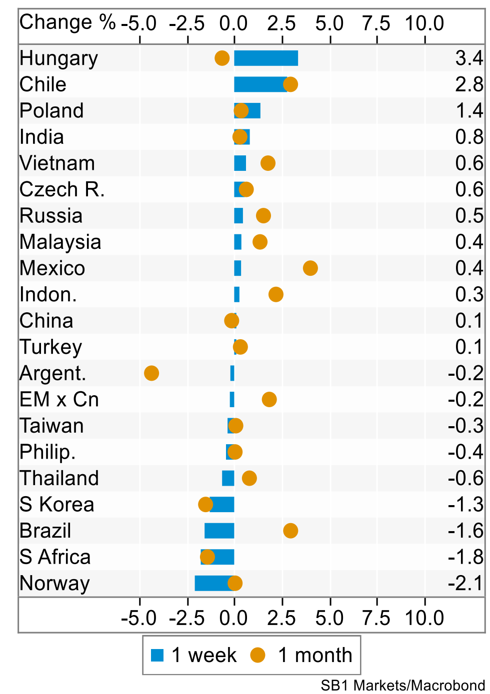
- The discrepancy between the NOK and AUD is highly unusual, given the normal factors that decide the limited gap between the two
- Normally, NOK strengthens vs the AUD when the oil price rises vs. the LME metal index, when VIX, and the S&P500 index increases, and the USD index appreciates. Seem like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

EM f/x: In sum slightly down

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







- The CNY has been slightly on the weak side recent weeks

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