

SpareBank MARKETS



Macro Weekly

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Week 33

Harald Magnus Andreassen

Phone : (+47) 24 13 36 21

Mobile : (+47) 91 14 88 31

E-mail : hma@sb1markets.no

Tina Norden

Phone : (+47) 24 13 37 48

Mobile : (+47) 93 22 62 24

E-mail : tina.norden@sb1markets.no

SpareBank 1 Markets

Phone : (+47) 24 14 74 00

Visit address : Olav Vs gate 5, 0161 Oslo

Post address : PO Box 1398 Vika, 0114 Oslo

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MARKETS 

Last week

- **The War/Commodities**

- » Few news from the **East front** no end of the war in sight
- » Most **commodity prices** rose last week, and they have strengthened somewhat recently – but except **for** European gas and thus electricity prices, they are lower than before the pandemic

- **Global auto sales**

- » Auto sales rose 2% in July to the highest level since early 2021, and sales are no more than 6% below the 2019 average level. Sales in China kept up at a very high level (+35% vs 2019), while both US (-21%), EMU (-32%) and UK (-35%) reported higher sales. Emerging markets ex China was close to flat (-14%) – but just some 5% if Russia is excluded. Production is heading up most places, but remain very low in Europe

- **China**

- » **July data** were much weaker than expected, even if both industrial production, retail sales and investments rose m/m. **Industrial production** is back to the pre-lockdown (and pre-pandemic) trends, but grew 0.7% less than expected y/y, 3.8%. Service sector production was weaker though, down 3% m/m. **Retail sales** were expected up 5% y/y, but delivered just 2.7%. Sale volumes are still very weak, as they have not recovered from the lockdown setback. Volumes are at the same level as late 2020. **Investments** also surprised at the downside, but are back to normal growth paths. However, **new home sales** and even more **housing (as well as non-residential) starts** fell further in July, and starts are more than 50% down vs the early 2021 level (sales are down 40%) – an unprecedented decline. **Headline inflation** is up due to higher food prices but still moderate at 2.7%. The core is up just 0.8%
- » **Credit growth** stalled in July, as **bank lending** slowed substantially. Recent months, growth in total credit has accelerated but just **local governments** have been on a borrowing binge, probably both in order to compensate for lower land sales and propping up real estate developers/finalising new homes. The authorities are now urging local governments to speed up borrowing further in H2. The annual growth rate is already 25%. So then all problems will be solved...

- **UK**

- » **GDP** fell less than expected in June & Q2, and there are some excuses for the Q2 contraction (like the Queen's jubilee). The recent trend is still close to flat, and Bank of England expect a decline (a recession) the coming quarters

- **Sweden**

- » **Flat prices** fell 3% m/m in July, according to Svensk Mäklarstatistik. Prices are down by more than 8% since March, a rather steep decline – and more than half of the pandemic gain is wiped out in 4 months
- » **Unemployment** is still falling and is probably soon the lowest since the late 80'ies, before the house market crash and the following banking crisis
- » **Headline inflation** fell marginally to 8.5%, but the core (ex energy, but incl. food) accelerated 0.5 pp to 6.6%. However, core prices gained just 0.2% m/m in July

Last week

• USA

- » **Peak inflation!** The **CPI, the PPI and import prices** surprised at the downside in July, paving the way for a further uptick at the stock market, even if just the very short end of the FRA curve yielded, rates rose at the rest of the curve. Lower gasoline prices, cheaper airfare tickets and low hotel prices contributed to the flat headline CPI to lower than expected 0.2% m/m increase in the core CPI. The total CPI slowed to 8.5% from 9.1%, expected 8.8%. The core was 0.2 pp lower than expected, but the annual rate at 5.9% still very high and all underlying measures signal a tough inflationary pressure as prices on a large majority of products & services are up at high rates. Producer prices fell sharply, due to lower energy prices, but core crude commodity prices are heading down too, as signalled by the broad decline in commodity prices – and it seems likely that headline inflation will slow the coming months. In the **SME survey**, fewer companies reported they plan to hike prices – but the share is still higher than any time since the early 80'ies (barring the previous months) – but the tide has turned
- » However, even if it is good news for the economic outlook that inflation is slowing due to lower energy/commodity prices, Fed's real challenge remain: **Too high wage and labour cost inflation** is the only real treat against low inflation, over time. Last week brought few good news: **Atlanta Fed's median wage tracker** still report 6.7% wage inflation. **National accounts** (in the productivity report) also report 6.7% higher labour costs. As **productivity** has fallen sharply the past two quarters, **Unit Labour Cost** have increased by 9.5% y/y. That's very likely an outlier, but trend productivity growth is at the best 1.5%, and wage inflation above 3.5% will either yield too high inflation or a decline in profit margins. The distance down to a sustainable wage growth is larger than seen since the early 80'ies, and it is well explained by the unprecedented labour market tightness. So far in history, a substantial decline in demand for labour (a drop in vacancies) and higher unemployment have been the only way to get wage inflation under control – which normally requires fiscal or monetary policy tightening. A substantial monetary tightening is underway, and we assume it will work this time around too. Lower 'commodity' inflation and/or booming financial/assets markets may enhance the real inflation problem as demand for goods & services will be kept up. If so, more to do for the Federal Reserve. And as referred above, just the nearest FRA contracts fell last week
- » The Congress approved the **Inflation Reduction Act**, which has nothing to do with inflation. However, the program is ambitious vs new energy but also opens up GOM for more drilling. The health elements are probably a useful extension to a minimal welfare state

• Norway

- » The **core CPI-ATE** accelerated to 4.5% in July, from 3.6% in June, following a 0.9% m/m lift (seas. adj). Food prices rose 7.6% m/mm, and are up 10.4% y/y. The **headline** accelerated 0.5 pp to 6.8%. These outcomes were close to spot on vs. our estimates, but far above consensus (3.8% for the core) and way above Norges Bank's 3.2% core f'cast. Thus, interest rate expectations rose sharply, and most economist now argue that 50 bps on Thursday is a done deal. Core excluding food is just below 4%, and 10 main sectors report price inflation above 2%, 3% below. All median and trimmed measures confirm, a lot of prices are up well above 2%
- » **Manufacturing production** gained 0.3% in June but the trend is down, due to weakness in non-oil related sectors. Surveys have been too upbeat, is seems like. The PMI fell less than we assumed in July, to 54.6, but the order index has fallen to the 50-line
- » **Homebuilders** report a further (and steady) decline in new home sales in June, down to 18' (annual rate) while volatile starts nosedived to the same level in June. Have new homes become too expensive? The existing home market has been strong, at least until the small July drop.
- » **Airline traffic** fell in July, probably due to the SAS strike. No. of passengers are down 17% vs. the 2019 avg level, both domestically & international. We expect better August data
- » Banks are lifting spread vs. the business sector and expect demand to slow somewhat, according to **Norges Bank's lending survey**. Household loan rates are of course on the way up, not not the lending margin. Some softness in demand is expected

The Calendar: US housing, retail/manufacturing. Norges Bank to hike 50 bps; GDP + surveys

Time	Count.	Indicator	Period	Forecast	Prior
Monday August 15					
08:00	NO	Trade Balance	Jul		87.5b
14:30	US	Empire Manufacturing	Aug	5	11.1
16:00	US	NAHB Housing Market Index	Aug	55	55
Tuesday August 16					
08:00	UK	Average Weekly Earnings	Jun	4.6%	6.2%
08:00	UK	Unemployment	Jun	3.8%	3.8%
11:00	GE	ZEW Survey Expectations	Aug	-53.9	-53.8
11:00	EC	Trade Balance SA	Jun	-20.0b	-26.0b
14:30	US	Building Permits	Jul	1645k	1685k
14:30	US	Housing Starts	Jul	1537k	1559k
15:15	US	Manufacturing (SIC) Production	Jul	0.2%	-0.5%
Wednesday August 17					
08:00	NO	Building costs, YoY	Jul		9.4%
08:00	UK	CPI YoY	Jul	9.8%	9.4%
08:00	UK	CPI Core YoY	Jul	5.9%	5.8%
08:30	NO	Consumer Confidence	3Q		-11.7
11:00	EC	Employment QoQ	2Q P		0.6%
11:00	EC	GDP SA QoQ, revision	2Q	0.7%	0.7%
14:30	US	Retail Sales Advance MoM	Jul	0.1%	1.0%
14:30	US	Retail Sales Control Group	Jul	0.6%	0.8%
16:00	US	Business inventories	Jun	1.4%	1.4%
20:00	US	FOMC Meeting Minutes	Jul-27		
Thursday August 18					
08:00	NO	GDP Mainland MoM	Jun	0.5% (0.6)	-0.2%
08:00	NO	GDP Mainland QoQ	2Q	0.7% (0.7)	-0.6%
08:00	NO	Investment plans oil/gas, YoY '23	Q3	(-5%)	-9.0%
08:00	NO	Invest. plans manuf, power suppl	Q3		
08:00	NO	Population growth/immigr.	Q2		
10:00	NO	Norges Bank Deposit Rate	Aug-18	1.75%(1.75)	1.25%
11:00	EC	CPI YoY, final	Jul F	8.9%	8.6%
13:00	NO	Norges Bank, governor Bache			
14:30	US	Initial Jobless Claims	Aug-13	265k	262k
14:30	US	Philadelphia Fed Business	Aug	-4	-12.3
16:00	US	Existing Home Sales	Jul	4.88m	5.12m
Friday Aug 19					
08:00	NO	Housing starts	Jul		
08:00	UK	Retail Sales Inc Auto Fuel MoM	Jul	-0.2%	-0.1%

• USA

- » The **housing market** is normally a (or the) main contributor to recessions. Now, the surge in mortgage rates on the top of an unprecedented surge in house prices (40%!) during the pandemic have crushed affordability. The decline in starts/permits/new home sales is already substantial, in fact like we normally see ahead of or early in recessions (and very seldom if not a recession around). In addition, in July the Homebuilder index (HMI) fell more than anytime before (barring April 2020), signalling a 1/3 further drop in starts. If Homebuilders are proven right, a foolproof recession message. The **HMI** is expected unch following the July crash, and **starts/permits** as well as **existing home sales** are all expected further down. We expect realtors to report falling **prices** as well
- » **Retail sales & manufacturing production** will also shed light on the growth momentum (or lack of it). New orders have been reported sharply down in manufacturing surveys in both June and July (also a recession like signal)

• UK

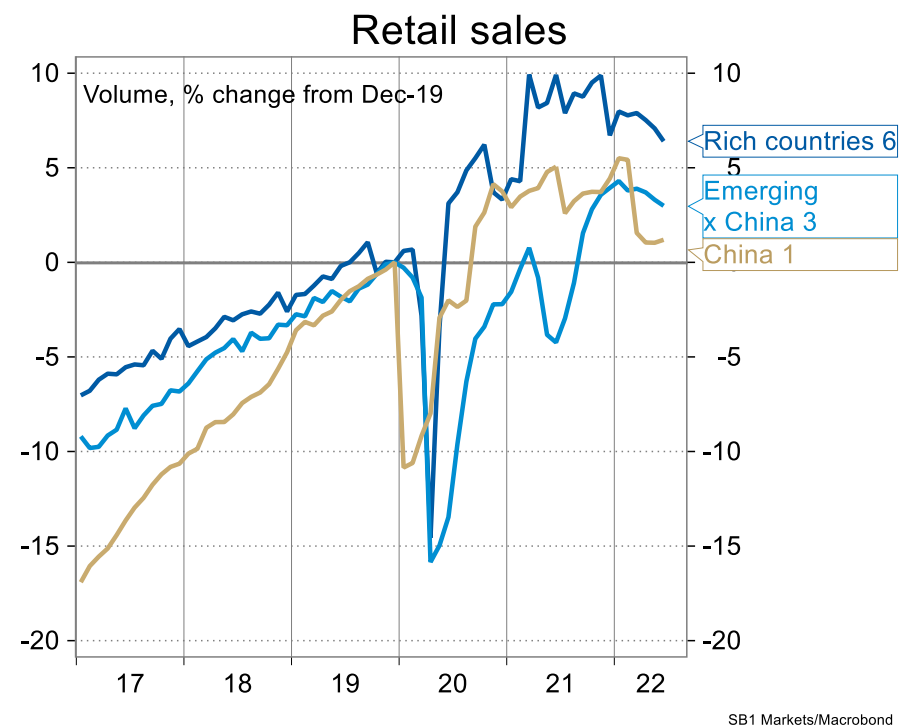
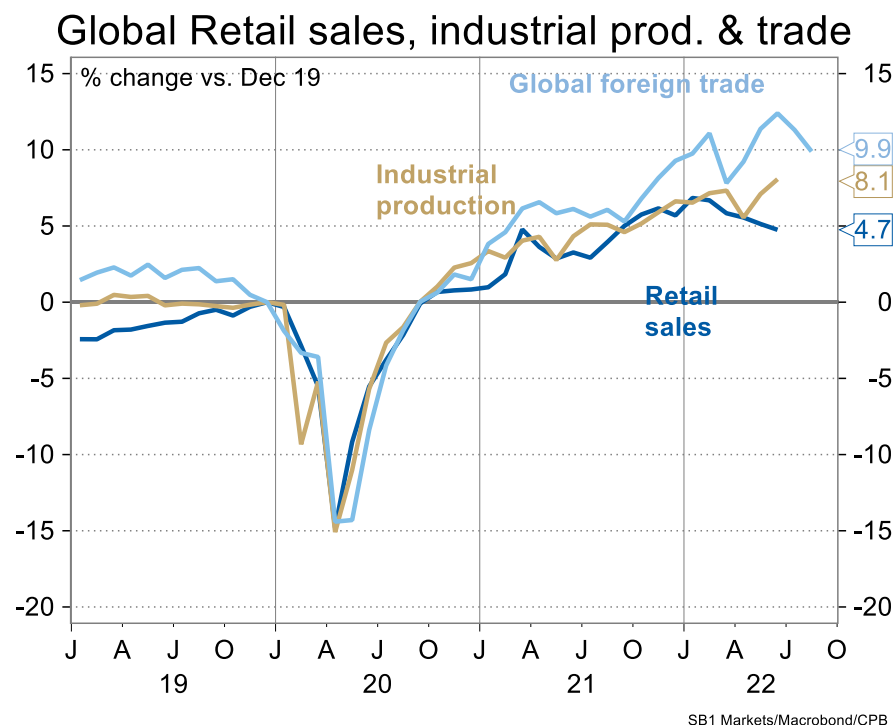
- » **CPI inflation** is approaching 10%, **wage inflation** is just half of that – but still far above a level that will yield 2% price inflation over time. The unemployment rate is the lowest since mid 70'ies.

• Norway

- » Will **Norges Bank** deliver another 'double', lifting the signal rate up to 1.75%, 25 bps above the pre-pandemic level? Very likely, even if just a 25 bps hike was signalled in June. Unemployment has fallen faster, and core CPI inflation has accelerated faster than assumed. The mood among central bankers everywhere has switched to a more frontloaded tightening, and we expect NoBa to fall in line. The market is fully discounting a 50 bps hike in Aug and in Sept, and 25 bps in Nov and Dec. No Monetary Policy report, no press conference at this 'mid-meeting', which would have been useful this time around (but governor Bache will deliver a speech at Arendalsuka the same day)
- » **Mainland GDP** is expected up in June, following two months of decline. Employment is still growing, and even if activity fell in both April and May, Q2 should yield a 0.7% growth, following the 0.6% decline in Q1. A 7% lift in electricity production will lift Mainland GDP in June by 0.2% (but oil and gas production probably fell by 5%, lowering the total GDP growth in June)
- » Usually we do not highlight **Norges Bank's expectation survey** but now wage and inflation expectations are far more important than normally. BTW, nobody believes in the 2% inflation target anymore
- » Check out **Finans Norges' Q3 consumer confidence** at Wednesday. Households were extreme depressed in Q2 – but have so far kept up spending ☺
- » **Building costs** are close to the peak – we expect a decline m/m in July. And if not in July, in August

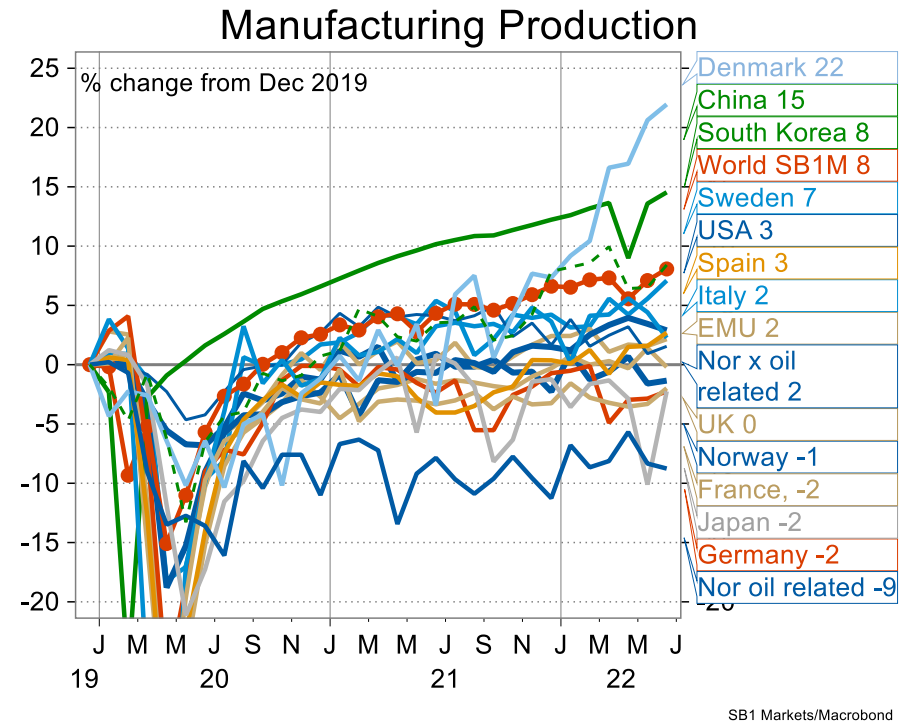
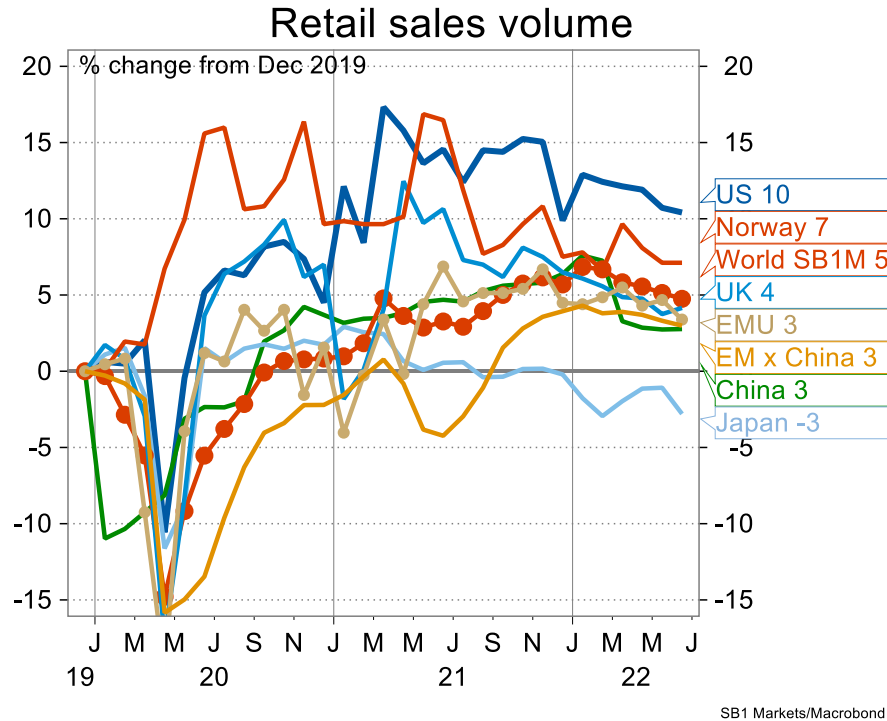
Retail sales are still soft, manufacturing production recovered in May and June

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



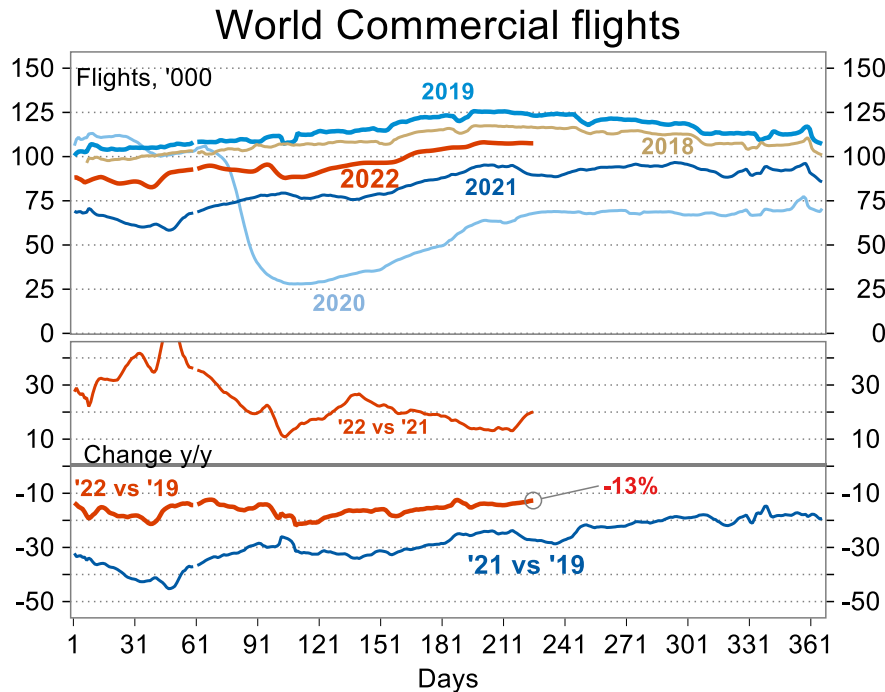
A broad slowdown of retail sales

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

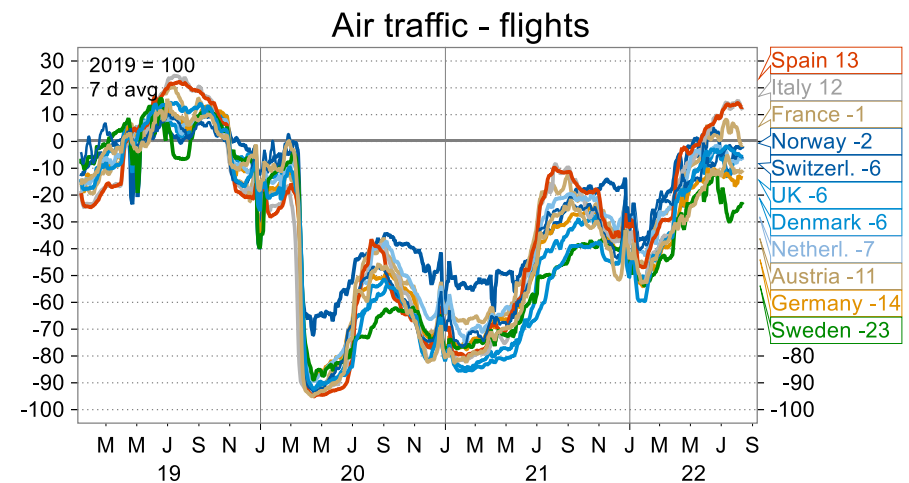
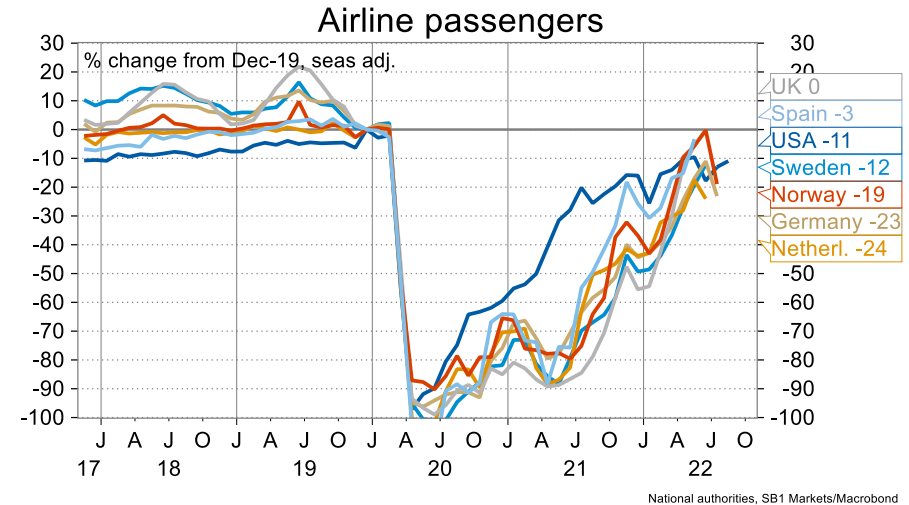


Global airline traffic has flattened recently, still down 13% vs. 2019

Slightly better than the seasonal normal last week

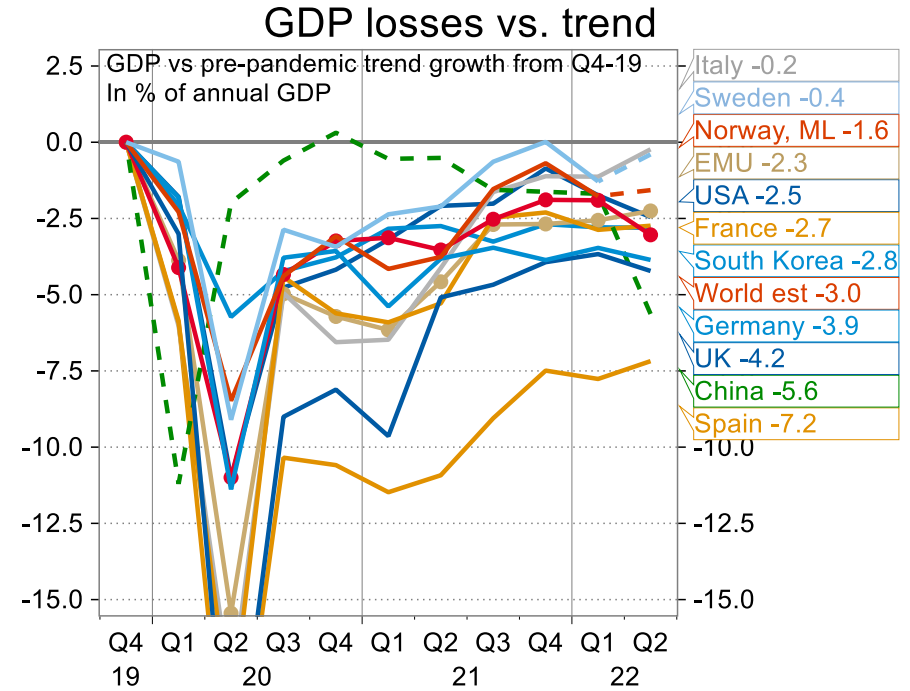
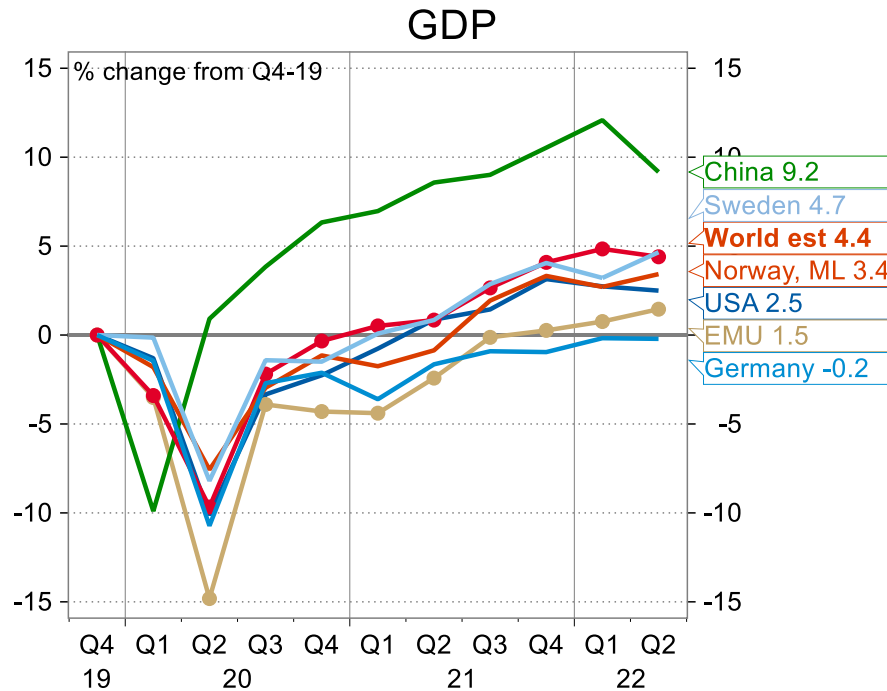


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GDP fell in Q2, mostly due to the Chinese lockdowns, and the US 'recession'

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

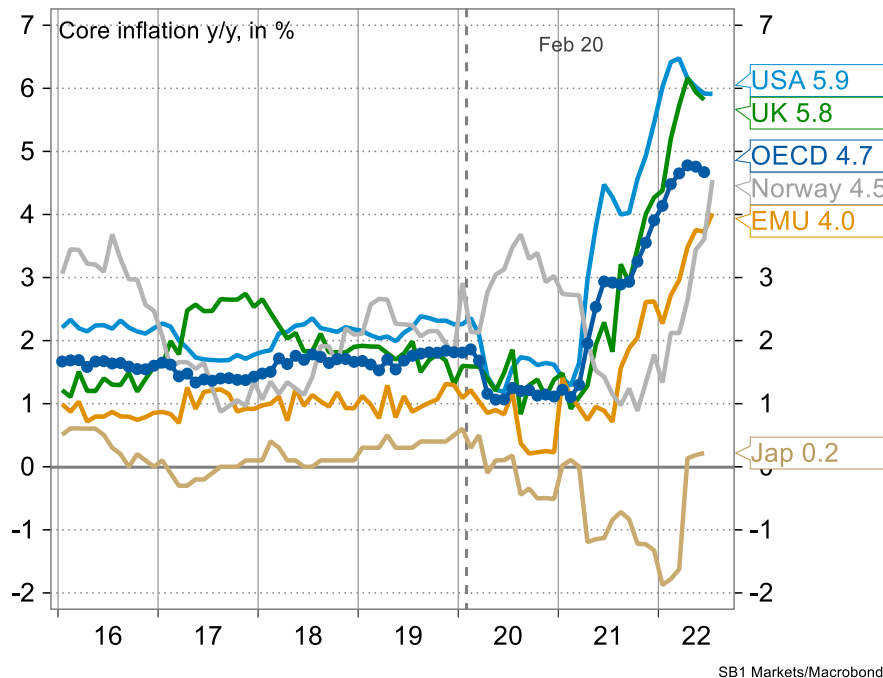


- Global GDP is some 3% below the pre-pandemic growth path

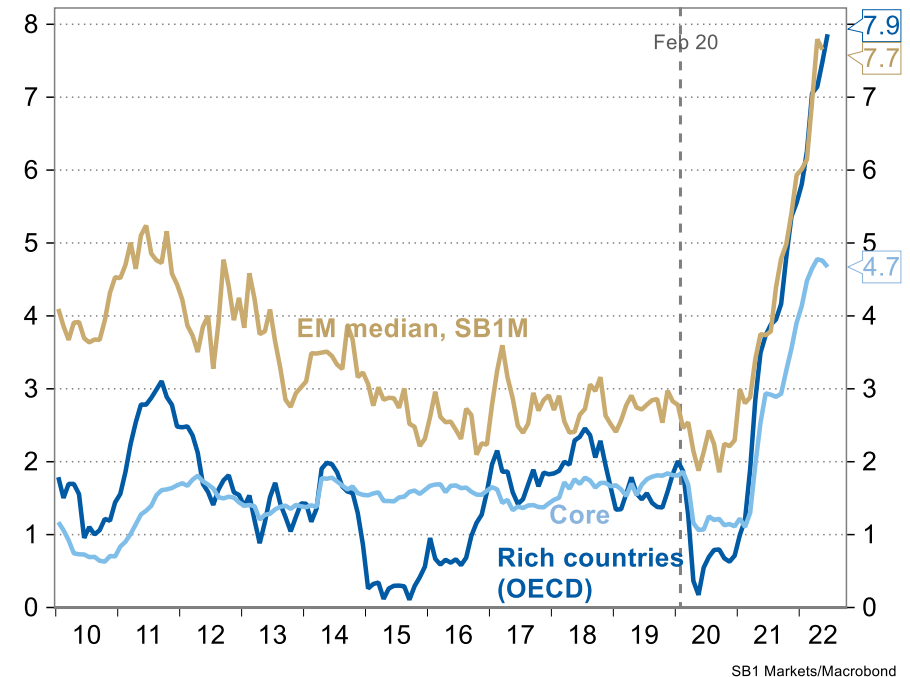
Core CPI has peaked where it is the highest – but it is far too high everywhere

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

Core CPI Inflation

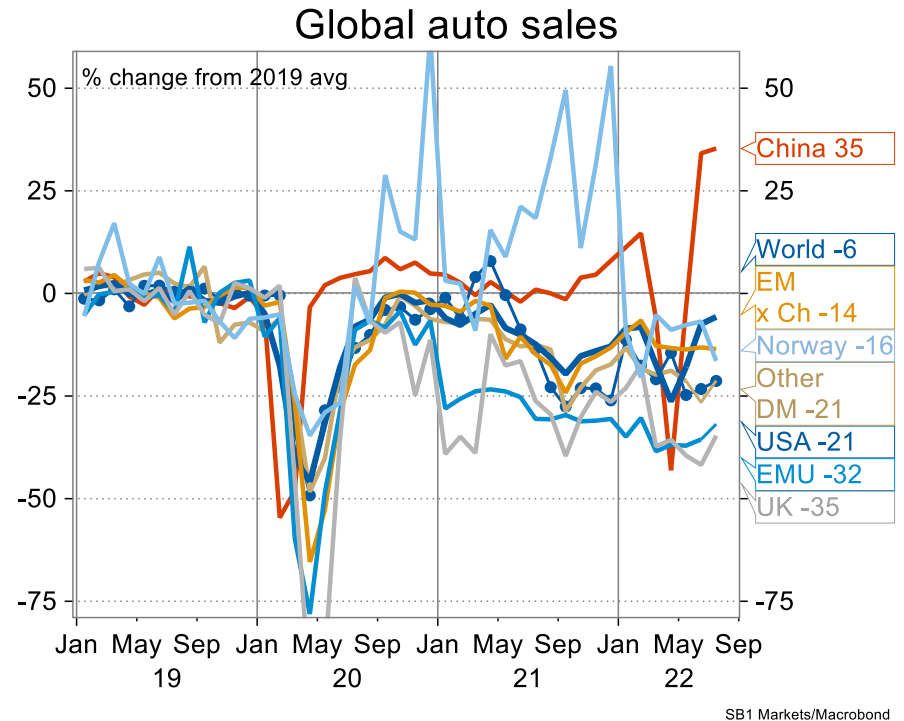
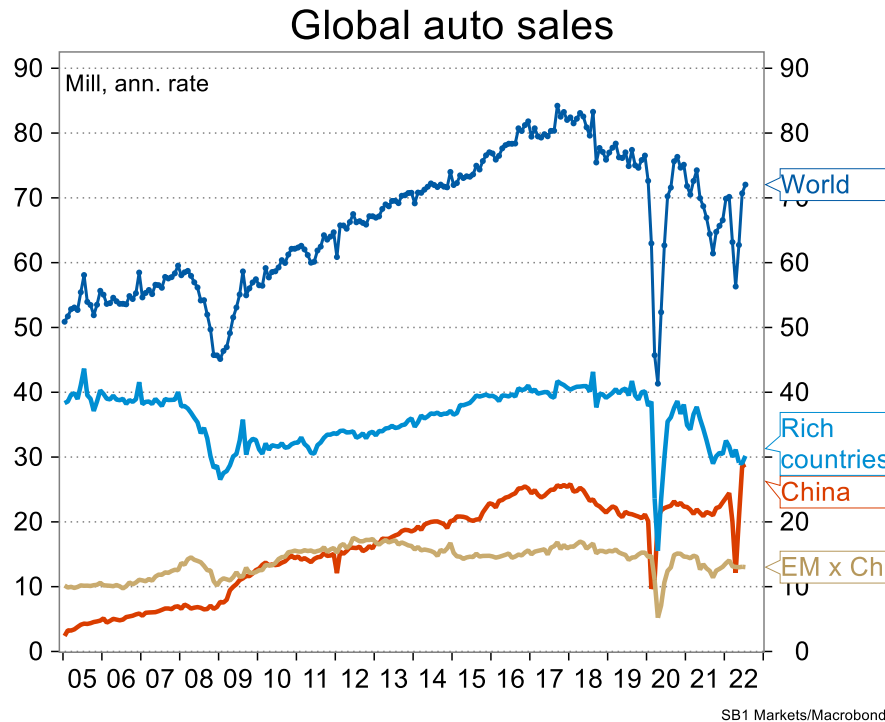


CPI Inflation



Chinese auto sales kept up at a very high level in July, others slightly up

Global sales the highest since early 2021, and just 6% below the 2019 level (but -13% vs 2017...)

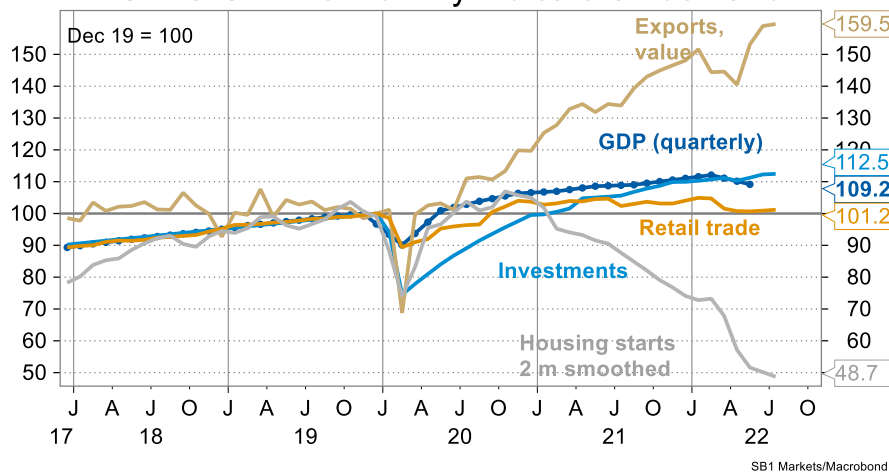


- **Global auto sales** rose 2% in July. Global sales are still low, but just 6% below the 2019 level
- The regional differences are substantial: Sales kept up at high level in **China** (+35% vs 2019 avg) and the slump in sales during the lockdowns is more than compensated. Sales in the **US** rose marginally to -21% vs 2019. **EMU** sales rose somewhat more but remain 32% below the 2019 level. **UK** sales also rose, but are down 35%! **Norwegian** sales fell, and are 16% below the 2019 level
- **Russian sales** rose but are down more than 80% 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' 14% 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, Chinese production was 32% above the 2019 level in June. South Korea is also above the 2019 level, but auto production is well below a normal level in all western countries and in Japan

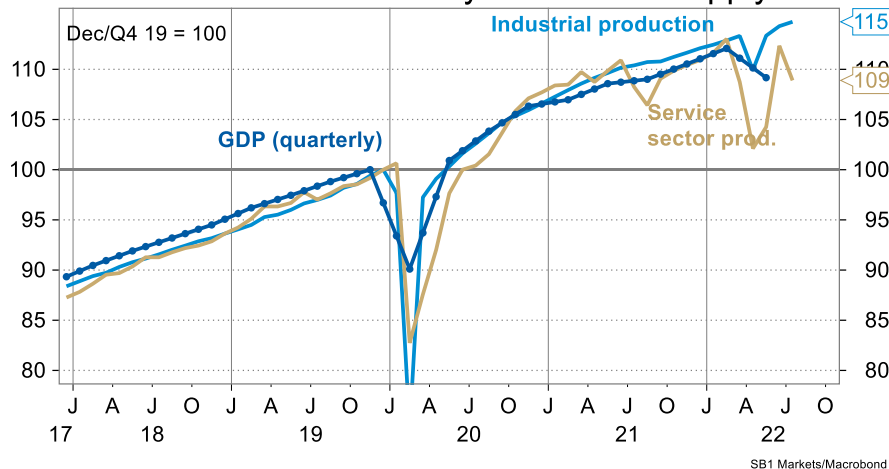
Data far weaker than expected in July – just exports remained strong

A sudden halt in credit, housing starts are still falling, and services yielded again

China GDP vs monthly indicators - demand



China GDP vs monthly indicators - supply

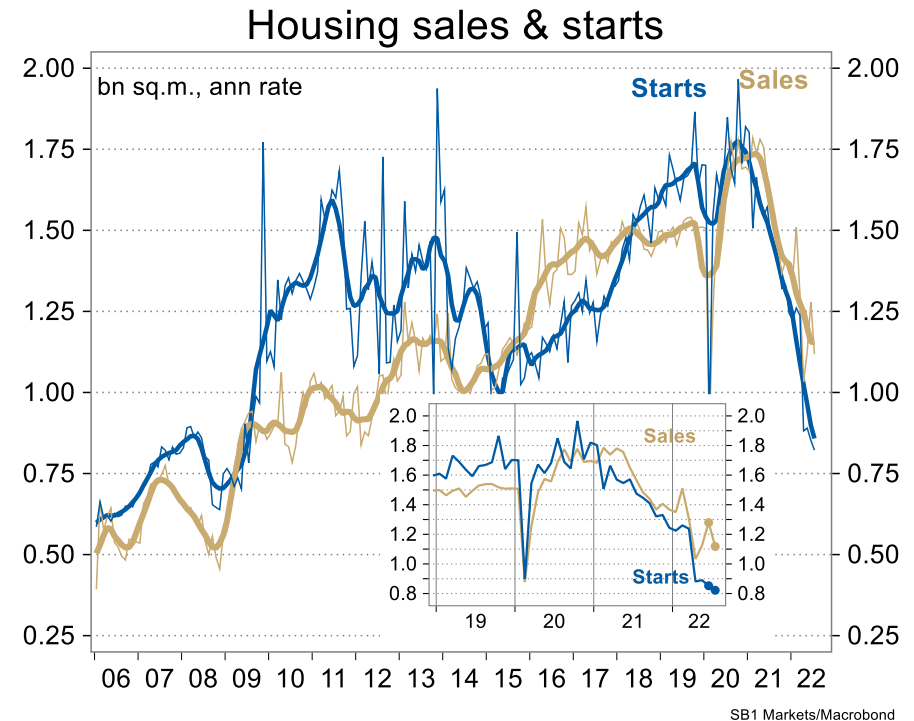
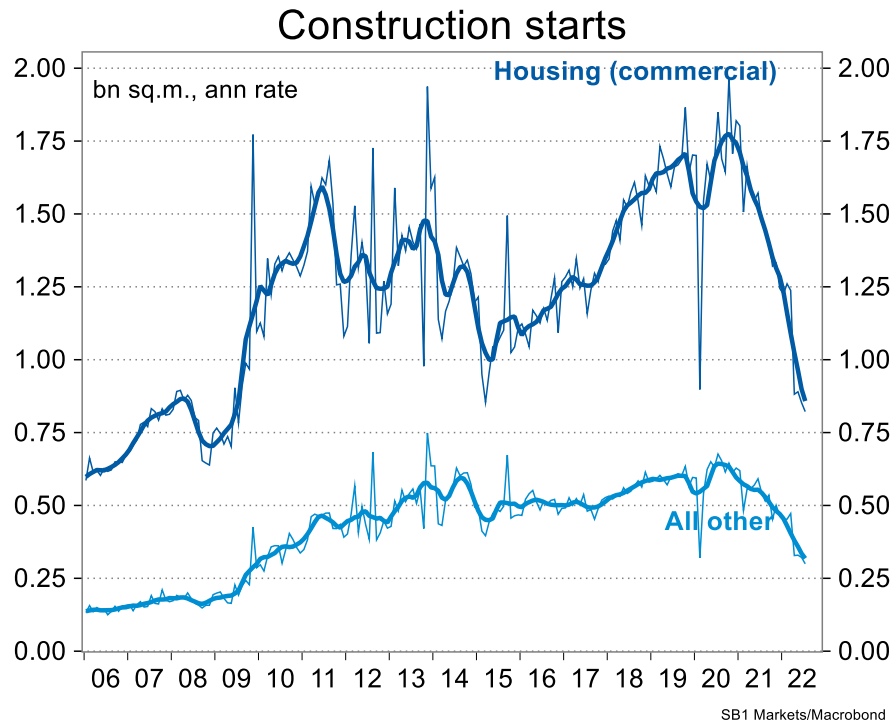


- **Industrial production** rose 0.4% in July and is back to the pre-lockdown trend, but still well below expectations, 3.8% y/y, expected 4.5%. Steel production is falling sharply. Autos in the lead!
- **Service sector production** fell by 3% in July, following the post-lockdown recover in May and June. Activity is 2% below the level in early '22, and is up just 0.6% y/y
- **Retail sales** rose marginally in both nominal and real terms (our est) in July but remains weak, the volume is down 3% from early '22. Sales rose 2.7% y/y, expected 5%!
- **Investments** rose 0.2% in July, and is back on track, even if both **residential and commercial construction starts** has fallen by more than 50% from the peak early last year (the largest contraction ever), without signs of any recovery, starts fell further in July. **New home sales** also fell sharply in July, and is down almost 40% from the peak last year! **House prices** are still falling but at a slightly slower pace
- **Credit growth** fell sharply in July, as growth in bank lending fell sharply (to a 5% pace). Credit growth has been accelerating recent months but just due to a very rapid growth in local government debt (lack of revenues from land sales, funding of real estate projects?). The **central authorities** have decided that local governments should increase borrowing further in H2, a massive policy shift, in order to support growth like in the good ol' days
- **CPI inflation** has increased somewhat, but remains low (2.7%),.. especially ex. food & energy (0.8%) However, food inflation is creeping upwards, to 6%
- **Exports** remained at ATH in July, even in volume terms, and to far above any recent trend paths. (No supply chain disruptions?). **Imports** are still subdued, and the trade surplus is at a record high level. An imbalanced economy?

In sum: July was far weaker than expected. More old-school policy steps are likely. However, we are not sure that more debt-funded infrastructure spending will solve underlying growth challenges. There 50% drop in housing (and non-residential) starts may have brought construction down to a more sustainable level

New home sales down 15% m/m in July, starts are continuing downwards

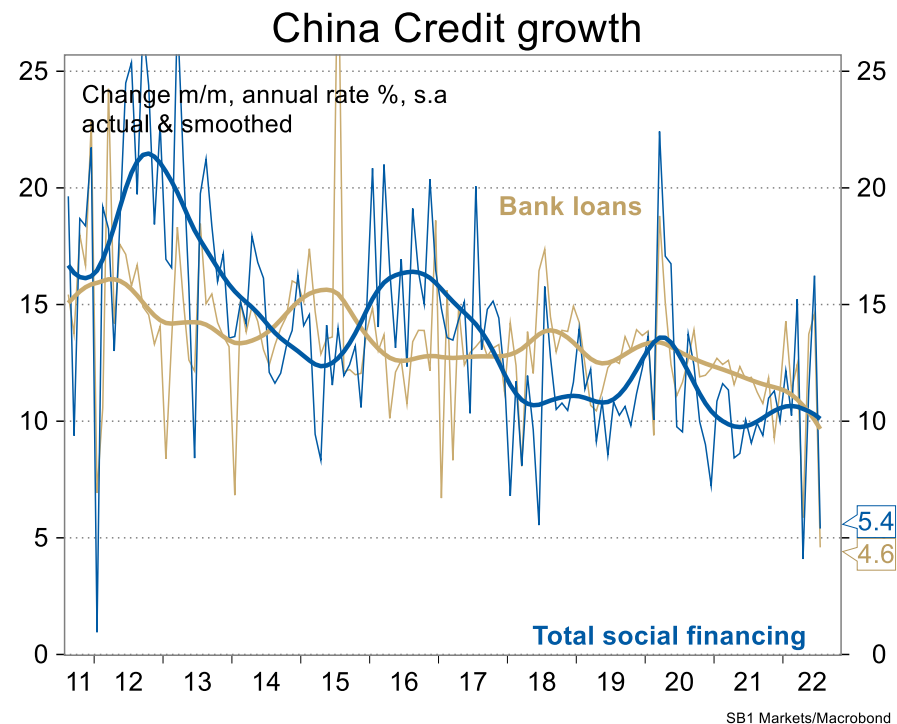
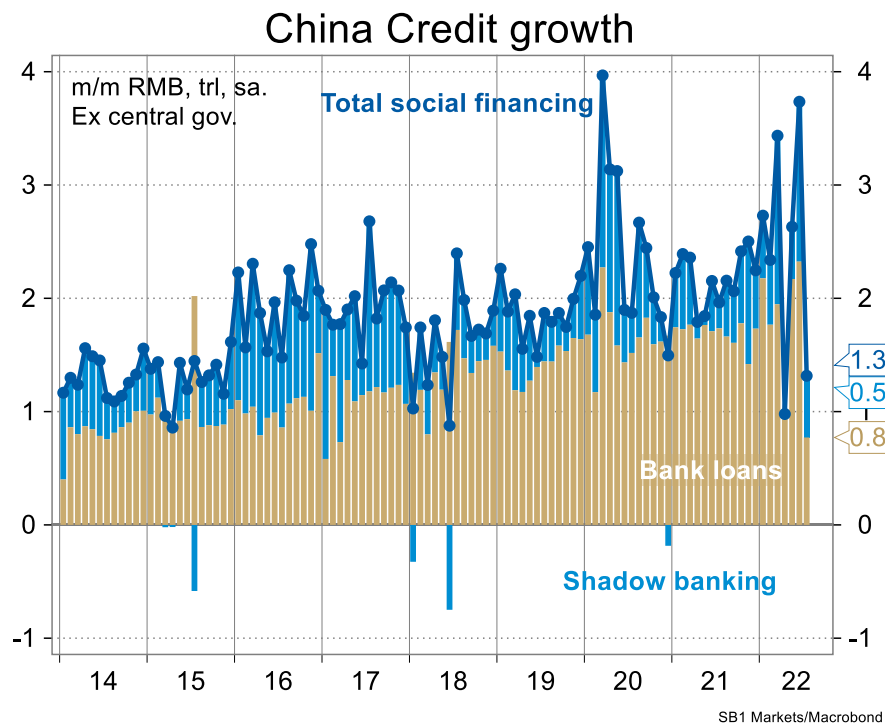
Sales are down almost 40% vs. the level in peak in early 2021. Starts are down more than 50%!!



- **New home sales** fell 15% m/m in July following the 10% lift in May and 12% in June. The level is but the level is 20% below the pre-lockdown level – and some 37% down from the peak early last year – and the lowest since 2015
- **Housing starts** fell 4% m/m June, and is thus continuing downwards, following the steep decline in April, during the lock-downs. Starts are down 54% since early 2021, the largest downturn ever! The level is the lowest since 2009!
- **Non-residential construction starts** are also more than cut in half and the level is the lowest since 2009
- This unprecedented decline in construction starts lowers growth in the Chinese economy substantially

A sudden stop in bank credit in July, darker in the shadows as well

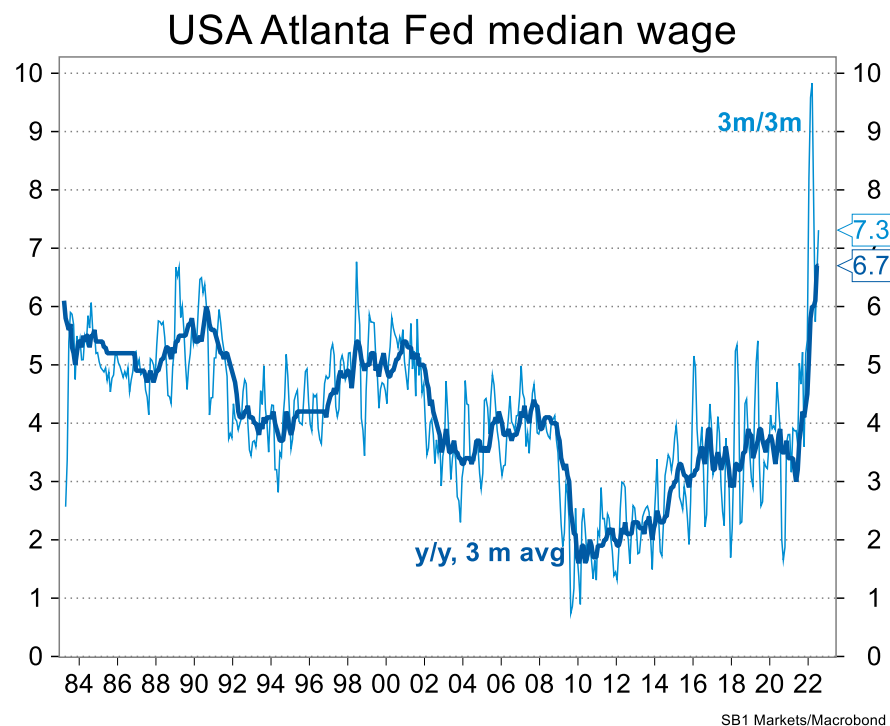
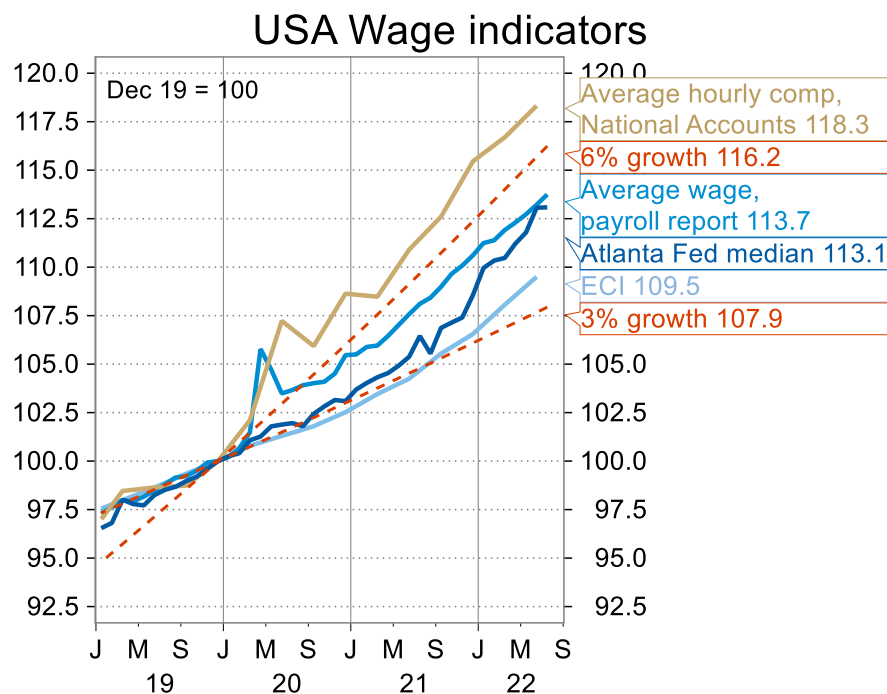
Total credit growth much lower than expected – down to a 5.4% pace, like during the April lockdowns



- However, credit growth in June was revised sharply upwards, as local governments increased their debt sharply, by 4%, in one month! No local gov. data for July yet, but we assume much lower (or even no) monthly growth
- **Total credit** grew at a 5.4% pace in June (m/m, seas. adj. annualised), one of the lowest prints ever. The annual rate slowed 0.2 pp to 10.5%, still well above any reasonable estimate of nominal GDP (=income) growth
- **Total credit** rose by 0.8 RMB trl, expected 1.3 trl (not seas. Adj). The 'core' total social credit (total ex central gov bonds & corporate equities) grew by 1.3 trl (seas adj), way below the 3.7 bn growth in June
 - » **Bank loans** rose by RMB 0.7 trl (or 0.8 trl s.a) or at a 4.6% annualised pace, well below expectations and the lowest monthly growth rate since 2011
 - » **Shadow banking credit** rose by RMB 0.5 trl, and is up 8.6% 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)

Atlanta Fed: Wage inflation is not slowing

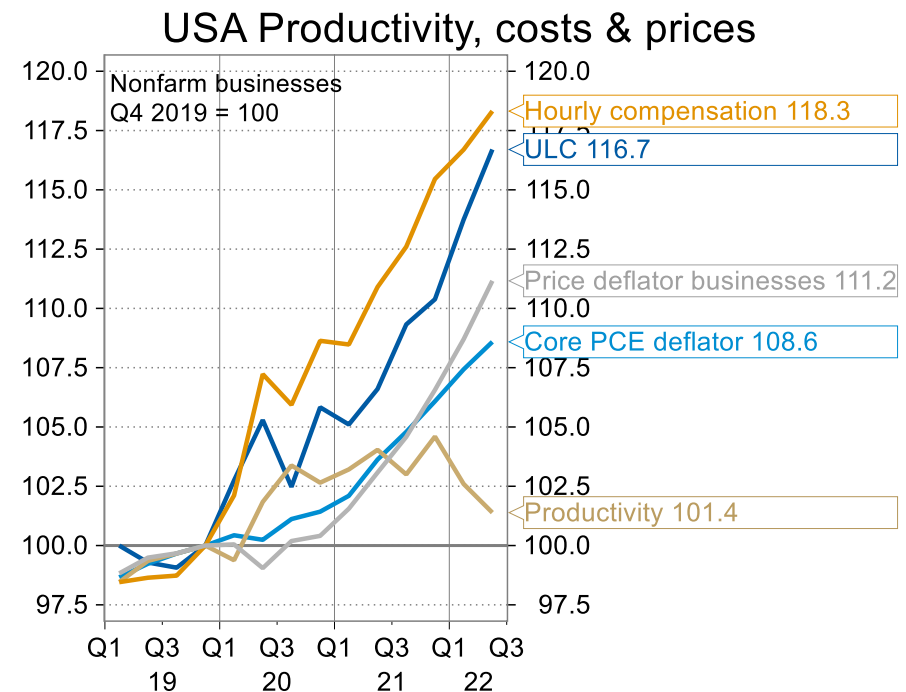
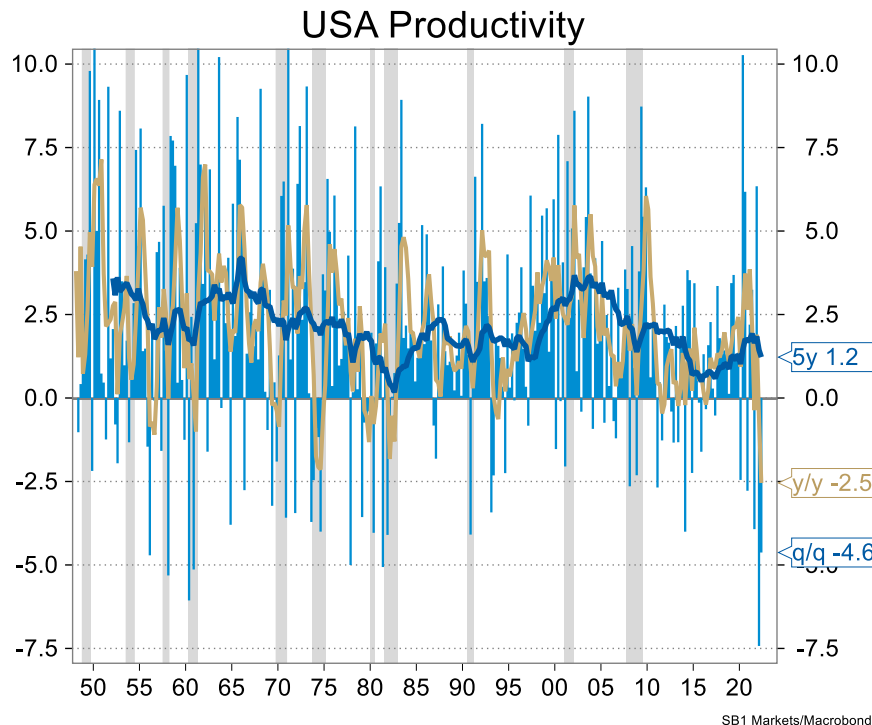
The median wage is up 6.3% y/y, 6.7% 3 m avg (unch). Take off 'for everybody' (x the very best paid)



- **Atlanta Fed's median tracker reported** a 6.3% growth in July, down from 7.4% in June (which was ATH). Our calculated m/m rate fell to zero, following strong growth in June (1.1%). In August last year wages fell by 0.8%, and the annual growth rate will probably accelerate next month. The **3 m average annual wage** growth at 6.7% is the highest ever, and the current wage inflation is 3.4 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

Another productivity outlier but the real problem is a dismal trend. ULC explodes

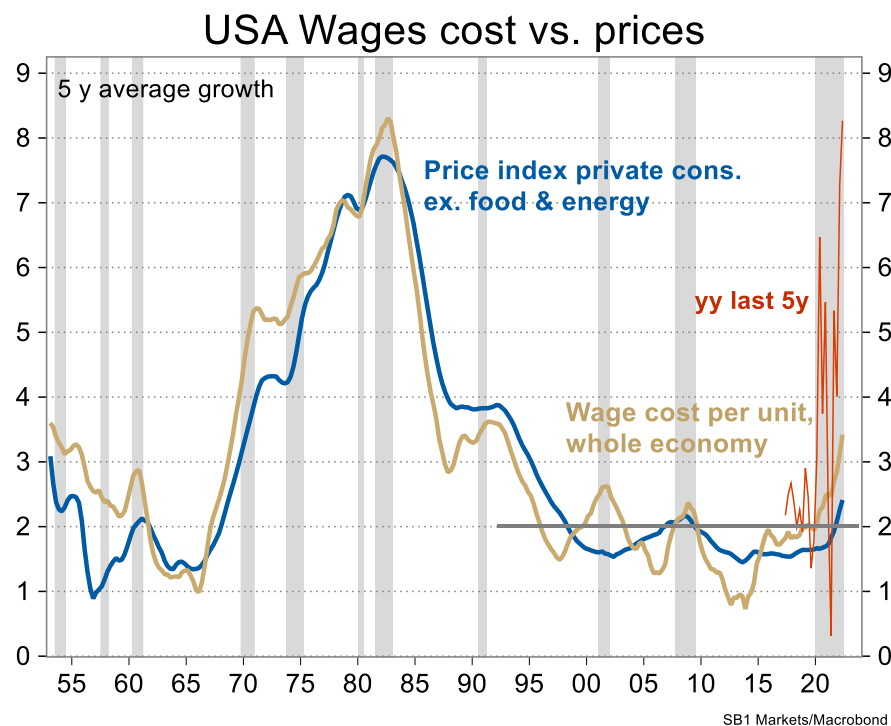
Productivity fell by 4.6%, following the 7.4% Q1 drop, down 2.5% y/y. Unit Labour Cost up 9.5% y/y



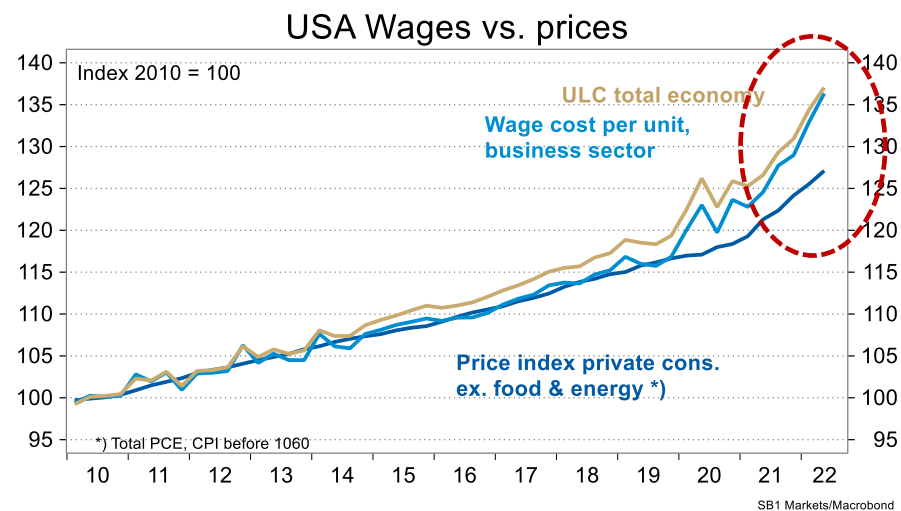
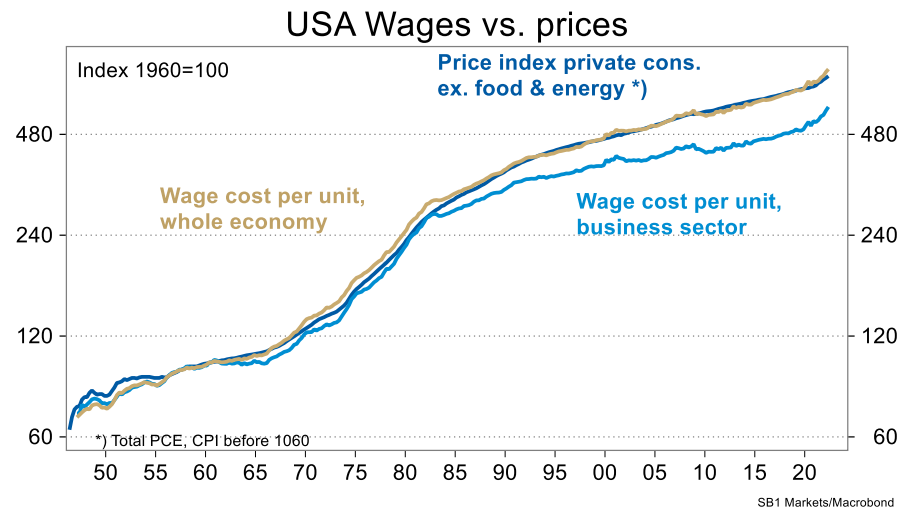
- **Productivity data** are very volatile but the decline the past two quarters are unprecedented, and very likely due to a surprising slowdown in activity, which was not met with an adjustment of labour, hours worked rose 2.6% in Q2, while output fell by 2.1% - and productivity fell further
- Still, the problem is a weak **underlying trend**. Productivity is now well below a 1.5% trend path (from 2016, the 5 y avg is at just 1.2%, and since Q4-19 just) – but should recover somewhat the coming quarters
- **Hourly compensation (wages ++)** grew at a 5.7% pace in Q2, and the annual rate is 6.7%. Average growth since Q4-19 is 7%. The slowdown is not convincing
- **Unit labour costs** (hourly compensation – productivity) grew by 10.8% in Q2 (expected 9.7%), up 9.5% y/y, the highest since 1982. Since Q4-19, ULC has grown at a 6.4% pace, far above a normal level – which of course is totally incompatible vs the 2% inflation target

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

Still risk vs core inflation given the cost surge recent quarters



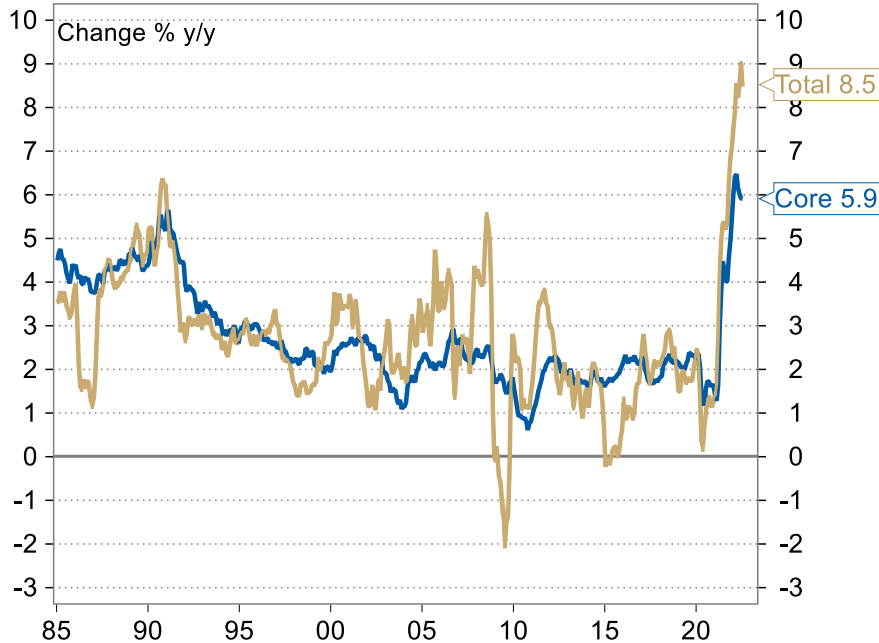
- Costs have climbed faster than core prices since before the pandemic



Finally, a positive CPI surprise: Inflation 0.2 – 0.3 pp lower than expected

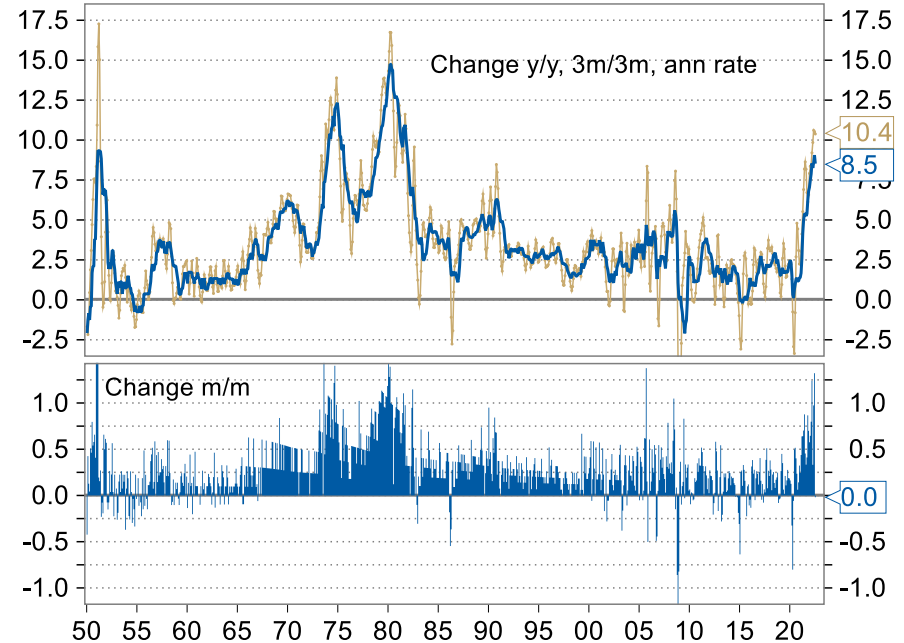
Inflation is slowing but remains very high, and broad

USA Consumer Price Index



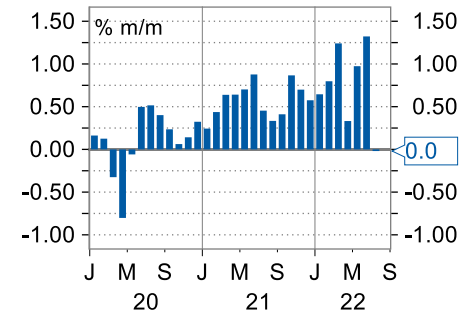
SB1 Markets/Macrobond

USA CPI



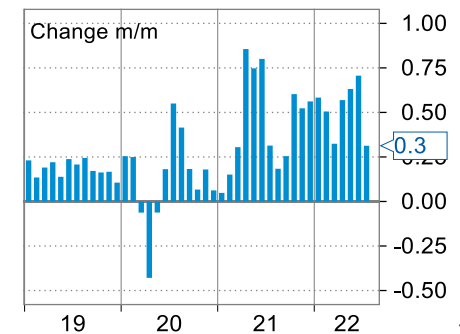
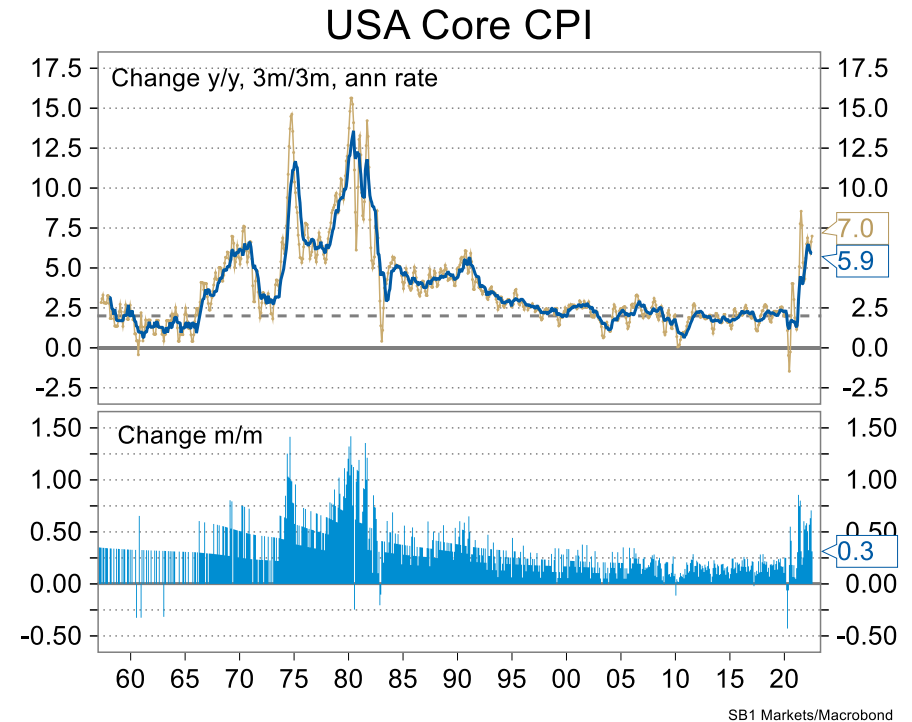
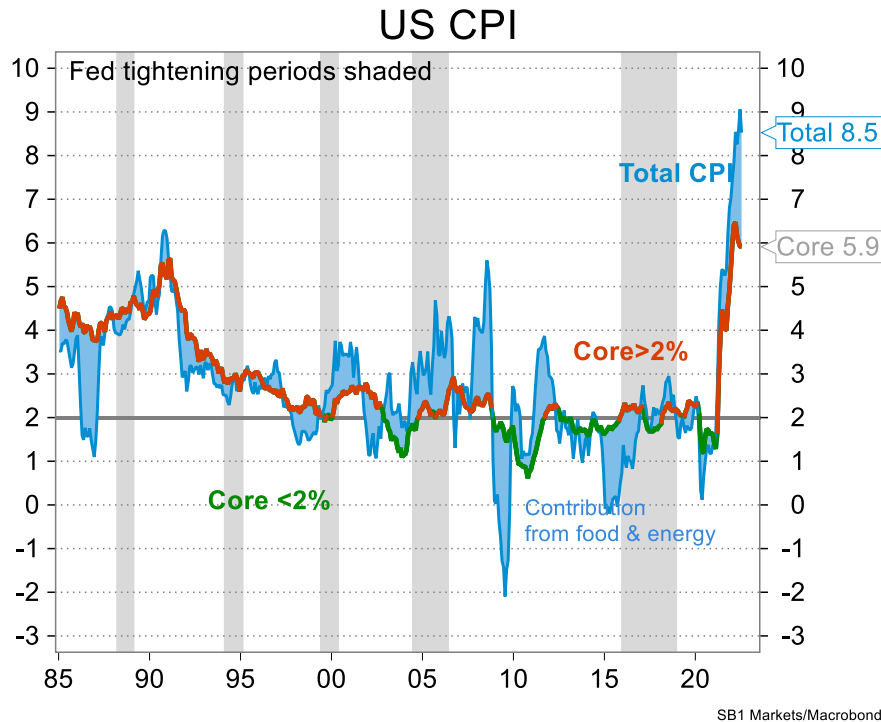
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- **Headline CPI** slowed 0.6 pp to 8.5% in July, expected down to 8.8%. Prices were flat m/m, with a substantial contribution from lower gasoline prices
- Energy prices fell by 4.6% (gasoline 7.7%) – and a further decline in August is very likely. Energy is still contributing 2.4% to the headline rate
- **Food prices** rose 1.1% m/m and are up 10.9% y/y, lifting the CPI by 1.5%. (Food at home is up 13.1%!). Food prices fell at the PPI level in July, some hope for August or September CPI prices?
- **Surveys** report further price increases the coming months, but at a somewhat slower pace than over the prev. months
- The 'peak' CPI (together with peak PPI as well as the peak Imported goods inflation) made a 50 bps hike in September more likely vs. a 75 bps hike which was discounted after the strong employment report the previous week
- We still markets focus too much on actual inflation, especially driven by commodity prices, and too little on cost inflation, *check the previous pages!*



Core inflation 0.2 pp lower than expected, unchanged at 5.9% y/y

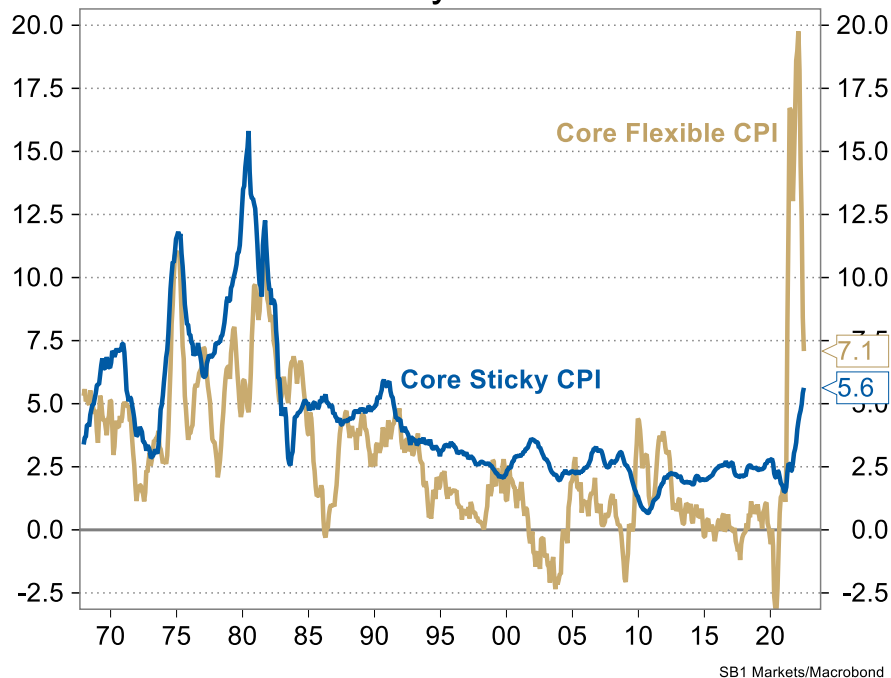
Prices rose 'just' 0.3% m/m, the lowest since March. The 3m/3m accelerated by 0.4 pp to 7.0%



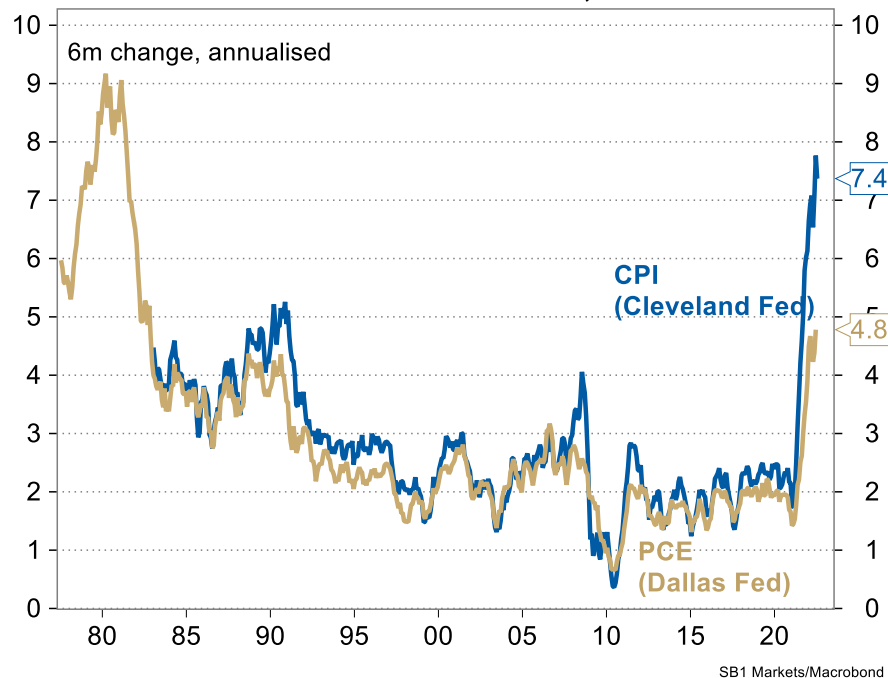
Flexible prices are coming rapidly down *but sticky prices still on the way up*

They are up 5.6% (90% of the CPI). Trimmed price measures are still lofty – but are down from peak

USA Core sticky vs. flexible CPI



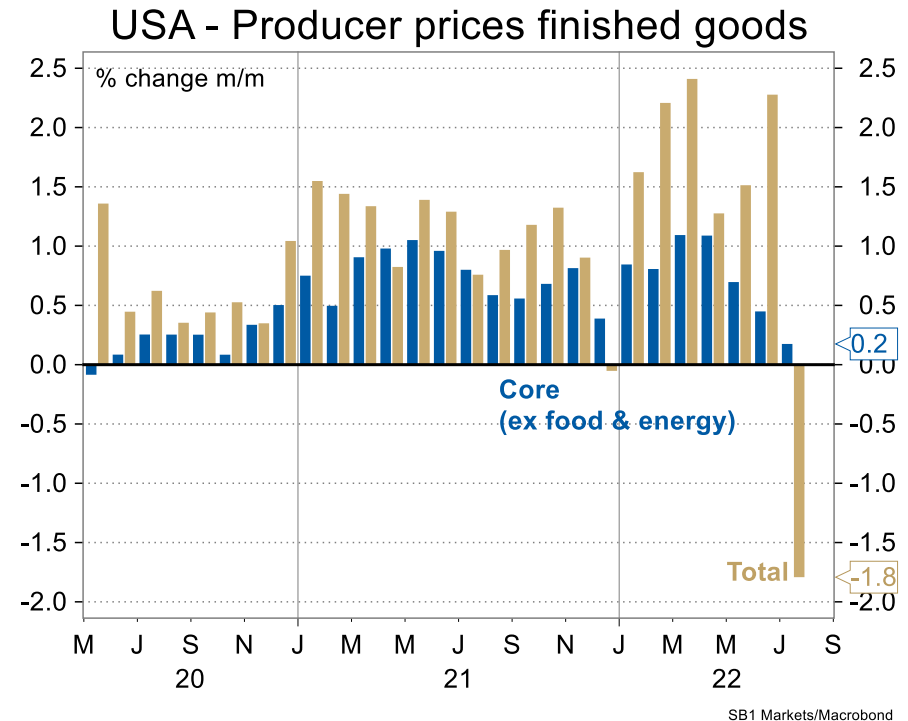
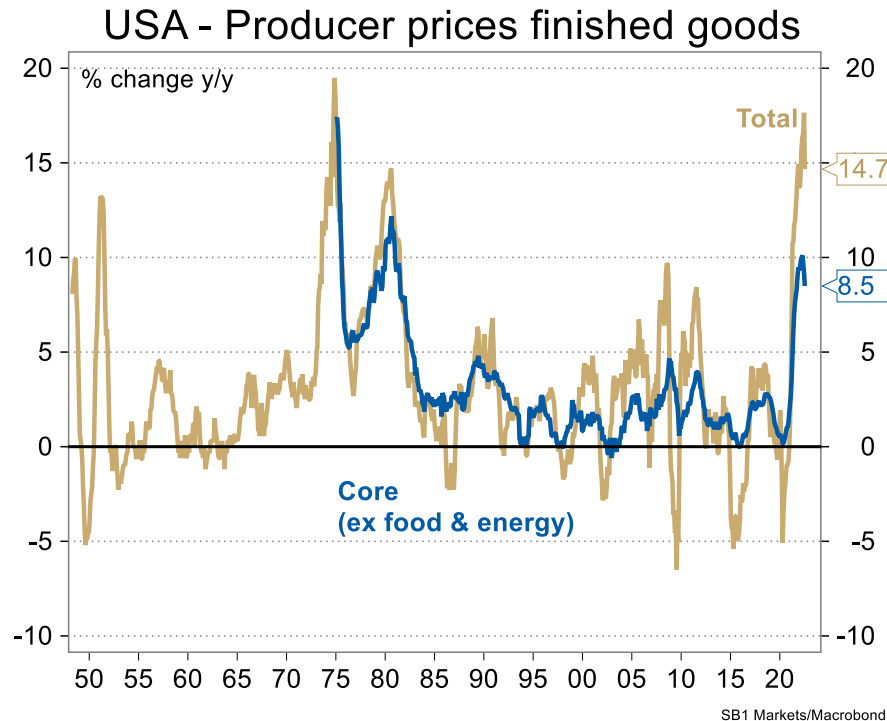
USA Trimmed median CPI, mean PCE



- The Cleveland Fed **trimmed median CPI** is up at a 7.4% pace over the past six months, down from 7.8% in June – but still miles above anything seen before (data from 1983). Dallas Fed's **trimmed mean PCE** was up 4.8% in June, at ATH
- Almost all of the initial lift in core CPI was due to prices of good & services that often fluctuate, with rapid price increases followed by deep price cuts. These prices are '**flexible**' and represent some 10% of the core CPI. The core flexible CPI is up 7.1% y/y, down from almost 20% at the peak! But still higher than anytime since 1981
- The new challenge: The **sticky components** (90 % of the core CPI) are up 5.6% y/y (up from 5.4% in June). The surge in the sticky index is much more worrisome for the inflation outlook than the ups and downs in the 'flexible' CPI

Peak inflation: The finished goods PPI fell 1.8 % m/m as energy prices fell sharply

However, the core PPI also slowed to 0.2%. In addition: core & intermed. crude material prices slow

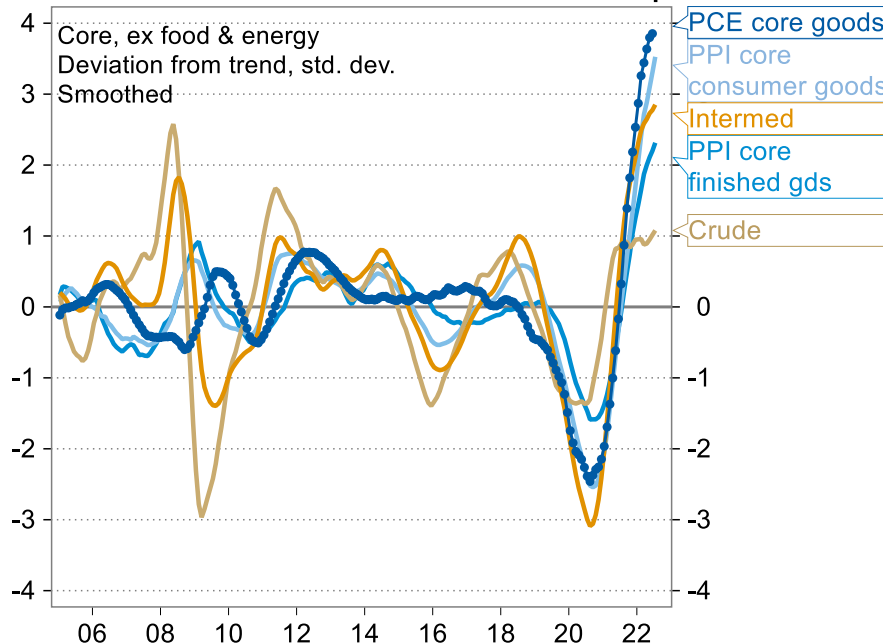


- **The headline finished goods PPI** fell by 1.8% in July, following the 2.3% lift in June. The annual rate slipped 3 pp to 14.7%. Energy prices fell 9% and food prices by 0.9%
- **Core finished goods x food & energy PPI** rose by 0.2%, down from 0.4% in June. The annual growth rate fell by 0.6 pp to 8.5%
- **Crude material prices** are on the retreat – normally the first sign of easing price pressures in the supply chain, and now intermediate material prices are flattening too
- **Core consumer goods prices** (PCE, like in the CPI) have already climbed more than usual vs. PPI prices (partly due to second-hand auto prices, not included in the PPI), limiting the upside risk
- **The 'official' total final demand PPI**, including services, fell by 0.5% m/m in July, following the June surge. The annual rate at 9.7% was 0.7 pp lower than expected!

Crude core material prices are yielding

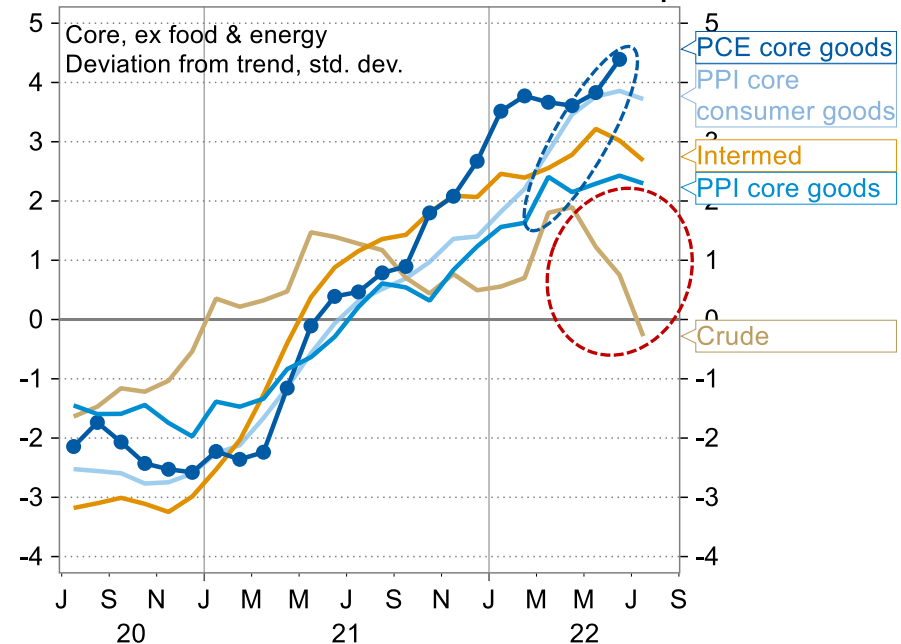
And now intermediate goods follow suit – and the core consumer goods PPI grows in line with trend

USA Producer & consumer prices



SB1 Markets/Macrobond

USA Producer & consumer prices

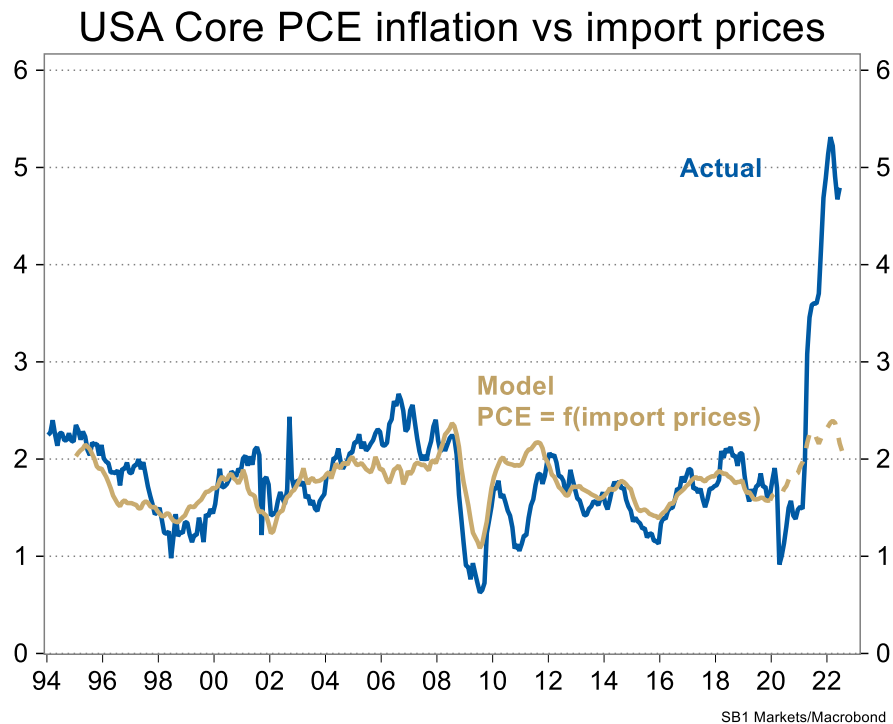


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- **Crude goods prices** are leading intermediate goods prices by 4 months, and consumer prices by 12 months. Following several months with slow growth in these prices to February from last summer, they rose in March and remained at a high level in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

There is some impact to domestic inflation from import prices

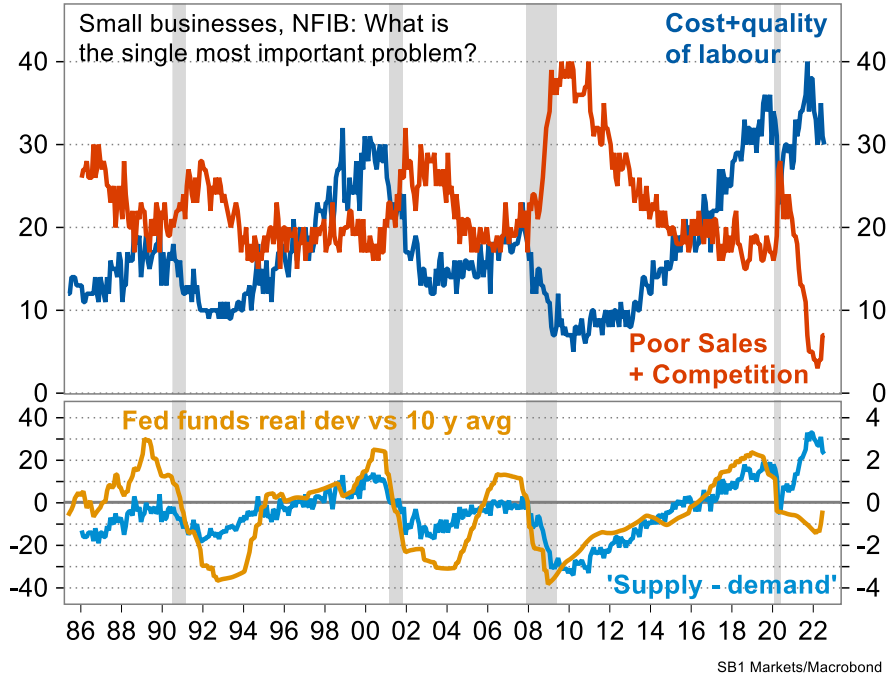
However, import prices cannot in any way explain the recent surge in US inflation



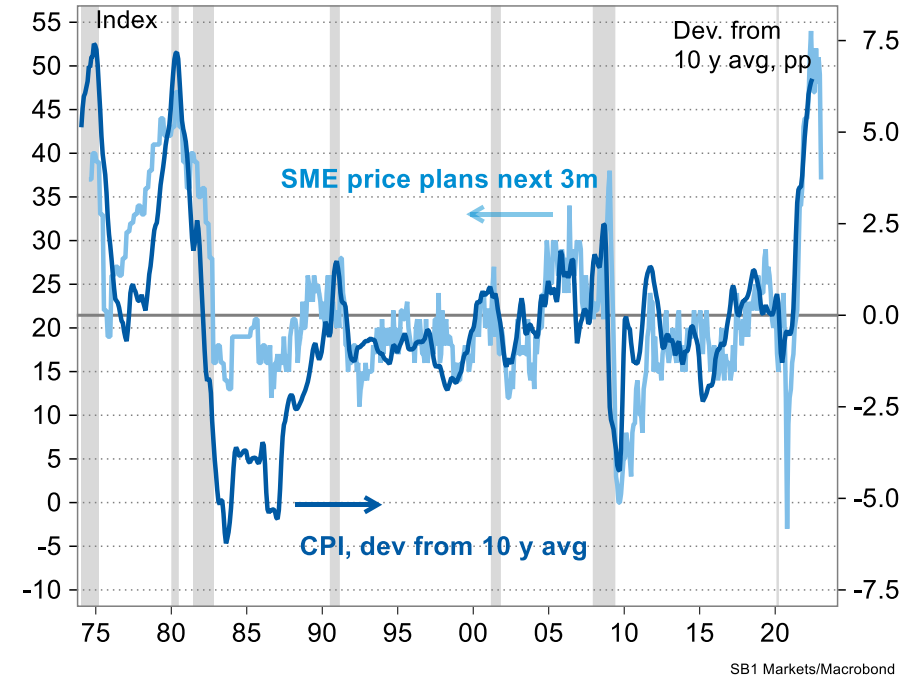
Has the tide turned? More companies report demand weakness (but still very few)

Far fewer companies report they plan to lift prices (but still many more than normal)

USA What's the problem: Supply or Demand?



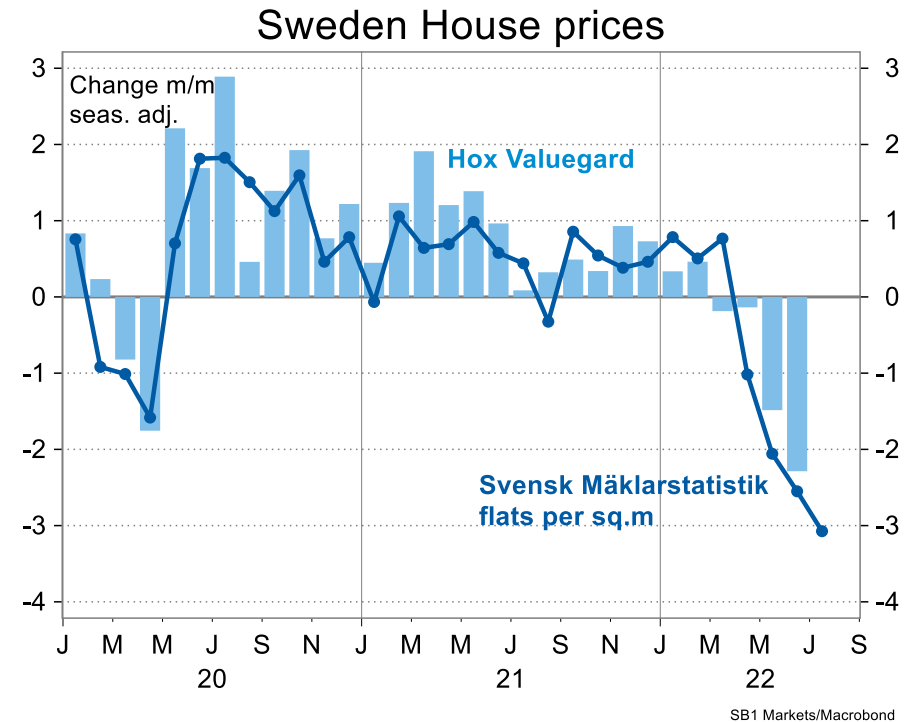
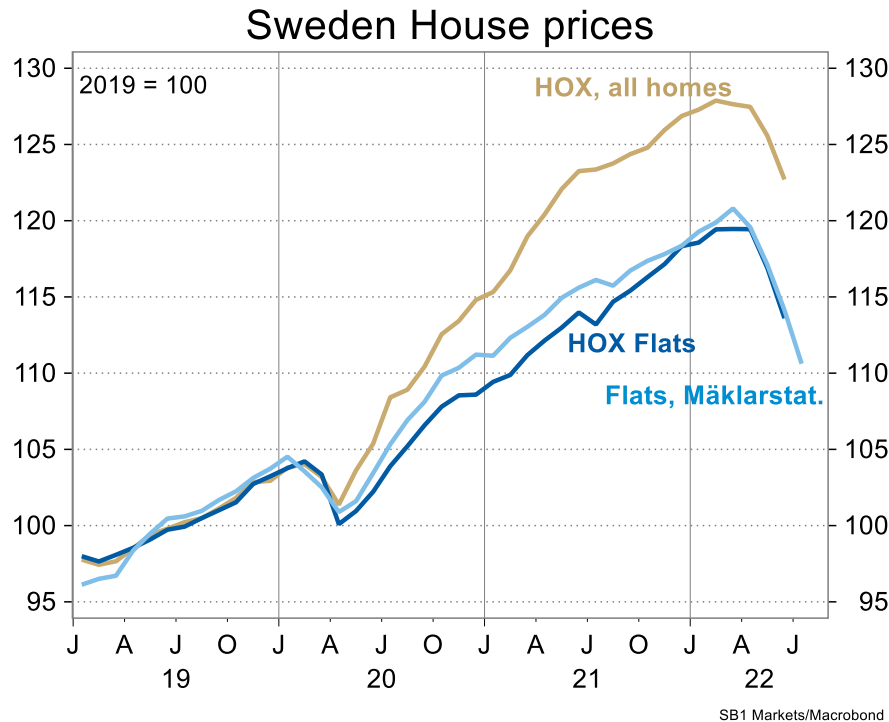
USA Small Businesses Price Plans



- The 'gap' between supply and demand concerns is still very large, but it is now heading down
- At the same time, the share of **companies that plan to lift prices**, fell sharply in July, to 37% from 49%. The 12 p decline was the 2nd largest ever! We guess energy and raw material related products explain the reduction. However, the 37% rate is far above an average 21% share, and inflation far above the past 10 y average is still signalled
- **Cost & quality of labour** is stated as the most important problem for a much higher share of companies than normal. However, the share has fallen somewhat from the peak – and compensation plans are marginally revised down
- **We have no doubt:** Over the coming months and quarters, the red line will climb sharply – and the blue line will come back down to Mother Earth as financial conditions tightens, with or without help from the Federal Reserve. It's normally labelled as a recession, as soon as the red line crosses the 50-line

House prices are falling rapidly

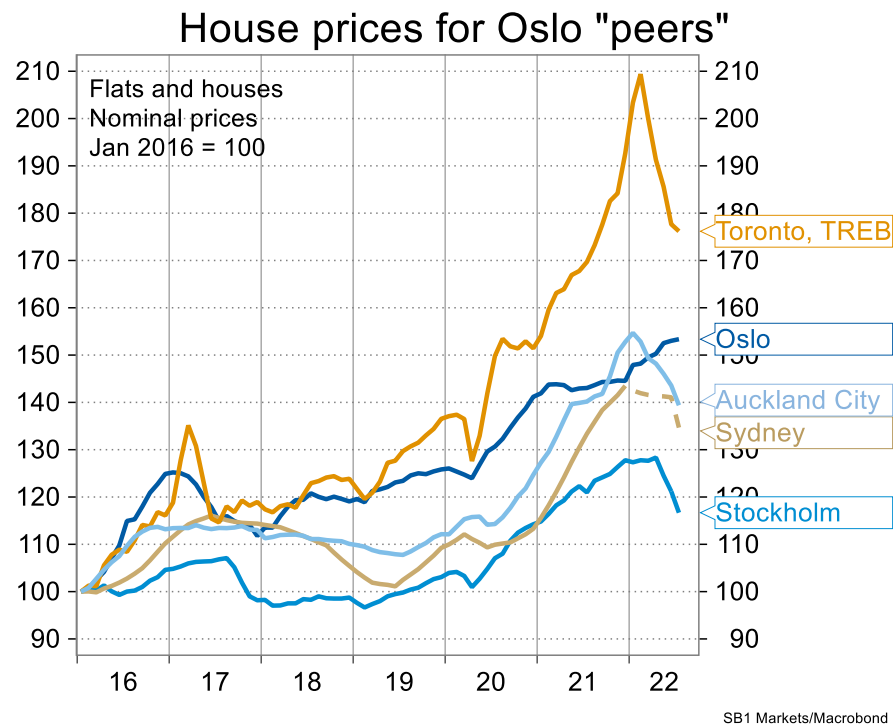
Svensk Mäklarstatistik reported a 3.1% decline in flat prices in July, and a 8.4% drop since March



- We have usually reported prices measured by the HOX/Valuegard index, but Svensk Mäklarstatistik's index is also useful – and is published earlier than the HOX index
- Now, the Swedish property market is rather interesting as prices suddenly are heading south-wards amid high inflation and rising mortgage rates

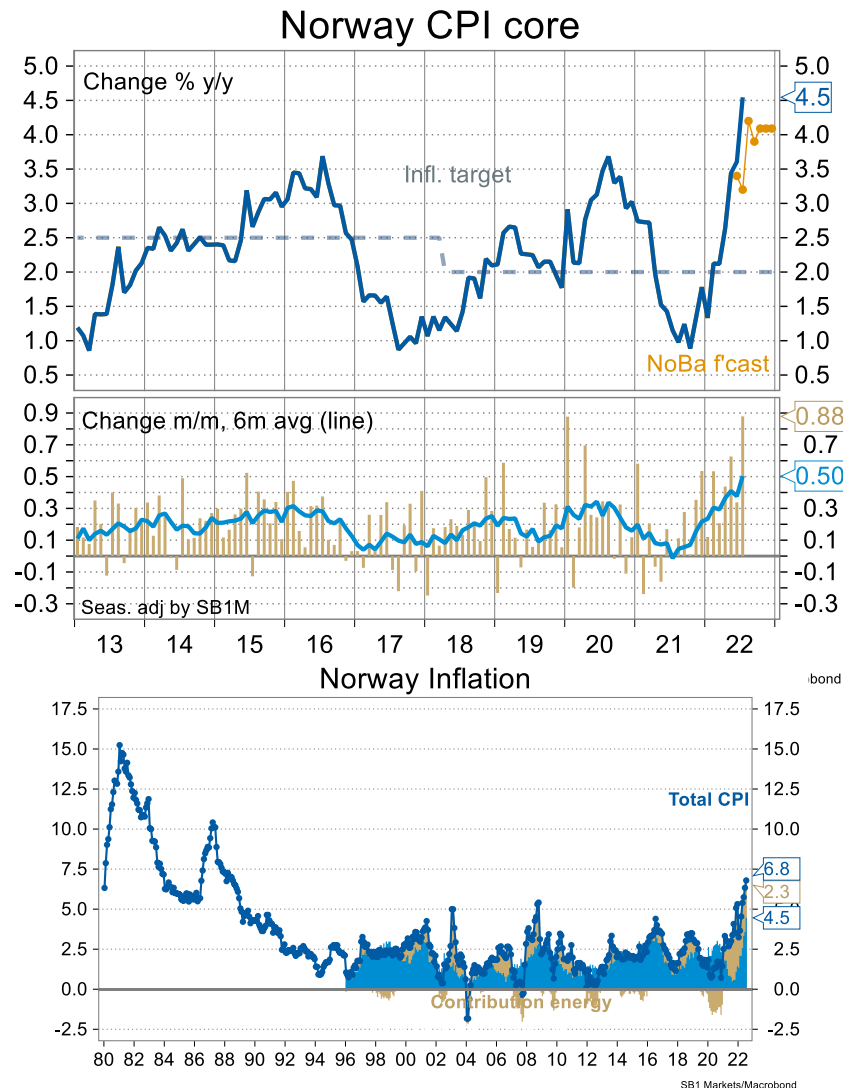
House prices are falling other places as well

By 6 – 16% in the supercyclical capitals. Guess why? Oslo has not yielded, yet



Another inflation shock in July, for everybody (except us)

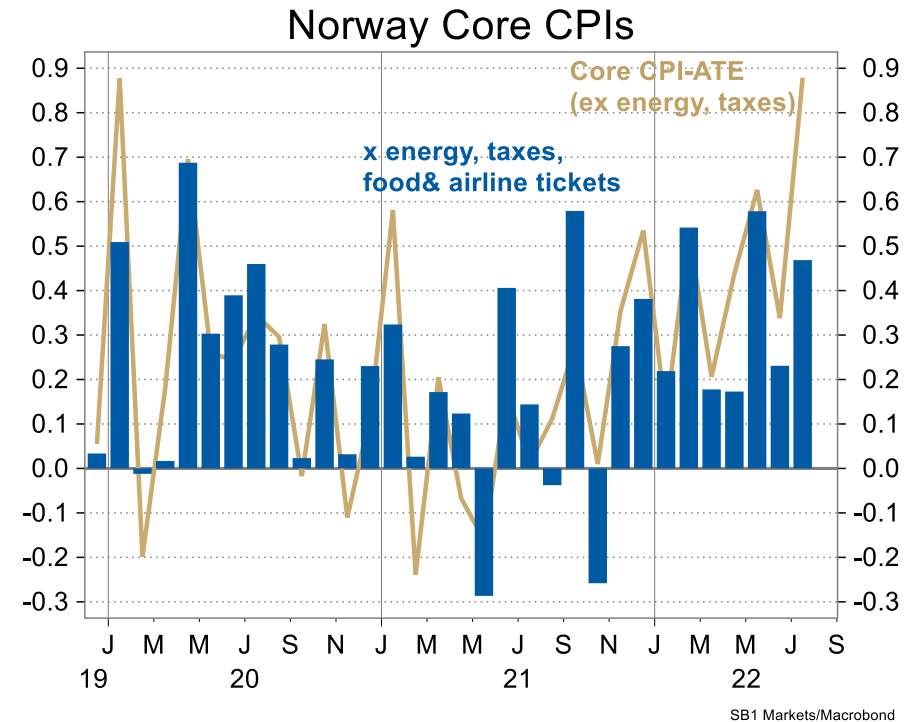
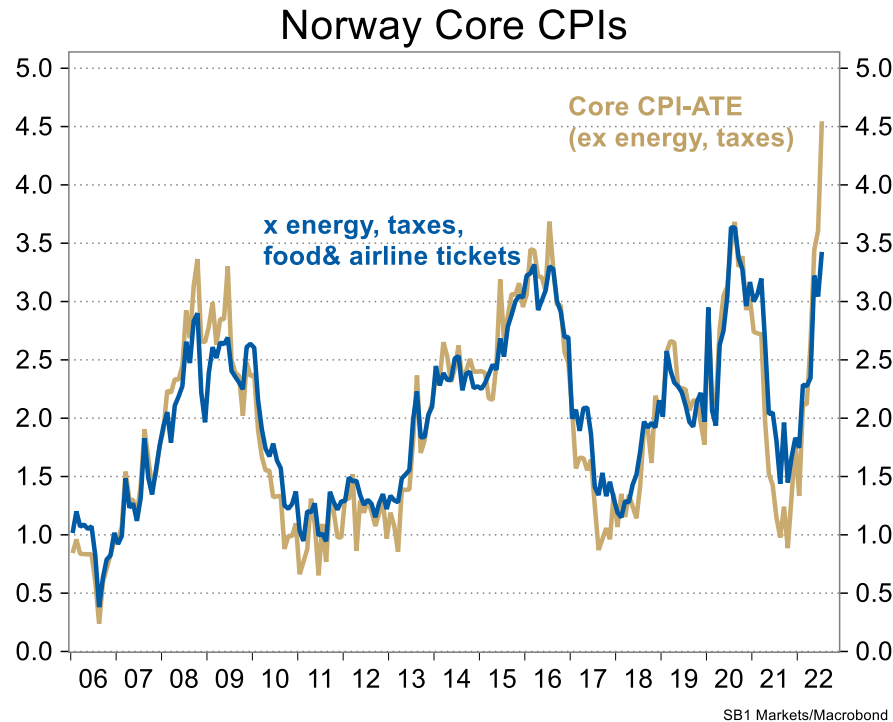
Food prices rose 7.6% m/m, the core shot up to 4.5% y/y, the headline to 6.8%!



- **CPI-ATE** (ex. energy and taxes) rose 0.9% m/m (s.a), and the annual rate climbed by 0.9 pp to 4.5% pp, we expected 4.4%. Consensus was at 3.8%, NoBa expected 3.2% (but the Bank assumed a surge in prices in August, the annual rate up to 4.2%)
 - » **Food prices** rose 7.6%, we expected 8%, and the annual rate shot up by 5 pp to 10.4% - in line with food inflation abroad, even if Norwegian food prices normally are pretty well sheltered from food prices abroad. 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
 - » **Furnishing prices** also rose sharply, and several other sectors also contributed
 - » Prices on **imported goods** rose 0.8% m/m, and are up 4.4% y/y, while **domestically produced goods & services** were up 0.9% m/m and are up 4.5% y/y
 - » **10 sectors** report growth above 2% y/y, and just 3 are below. All trimmed/median measures tells the same story: Inflation has broadened
- **Total inflation also accelerated, by 0.5 pp, to 6.8%**, the highest since 1988, we expected 6.6%. If not for electricity subsidies, inflation would have been 8.9%, a normal rate these days. Electricity prices fell marginally m/m. Auto fuel prices also fell but less than we assumed
- **The outlook**
 - » **The electricity price** will increase in August – and climb steeply the coming months. The impact on the CPI is limited though, as 90% of the price above NOK 0.7/kWh is paid by the government
 - » **Gasoline prices** are now falling sharply – and will contribute to a decline in headline CPI
 - » If so, **average 2022 inflation** will slightly above 5%, and above Norges Bank's 4.6% f'cast
- **So what?**
 - » **Real disposable income** is substantially reduced, even if **wage inflation** may in the end surprise on the upside in a tight labour market. Lower savings will partly compensate, but household demand is exposed too
 - » For **Norges Bank** wage inflation is the dominant risk but actual inflation will influence wage inflation, and even more as the labour market is still very tight. A 2 x 50 bps in August and September is fully discounted. For good reasons, we think

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

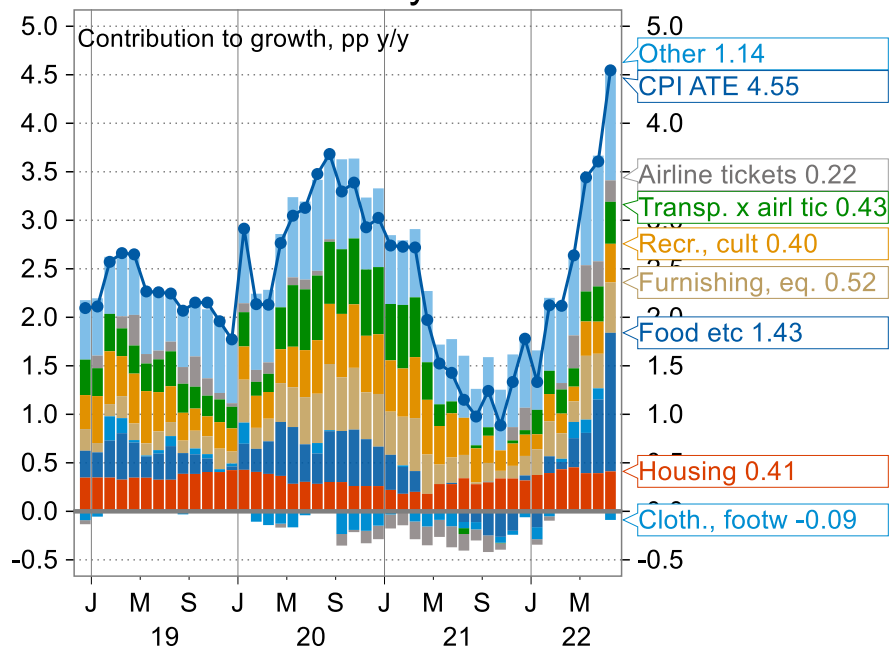
If food & airfare tickets are excluded from the core CPI, it is still at 3.4%, and it is not slowing m/m



Faster/broader price growth recent months, but airfare tickets are normalising

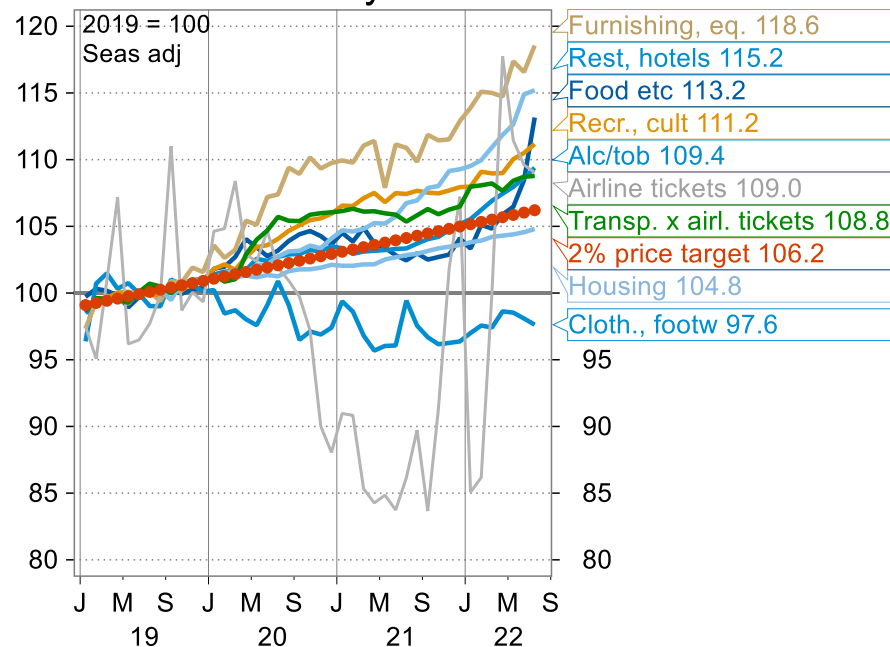
Just clothing/footwear, and housing ex energy below the 2% path since 2019

Norway Core CPI



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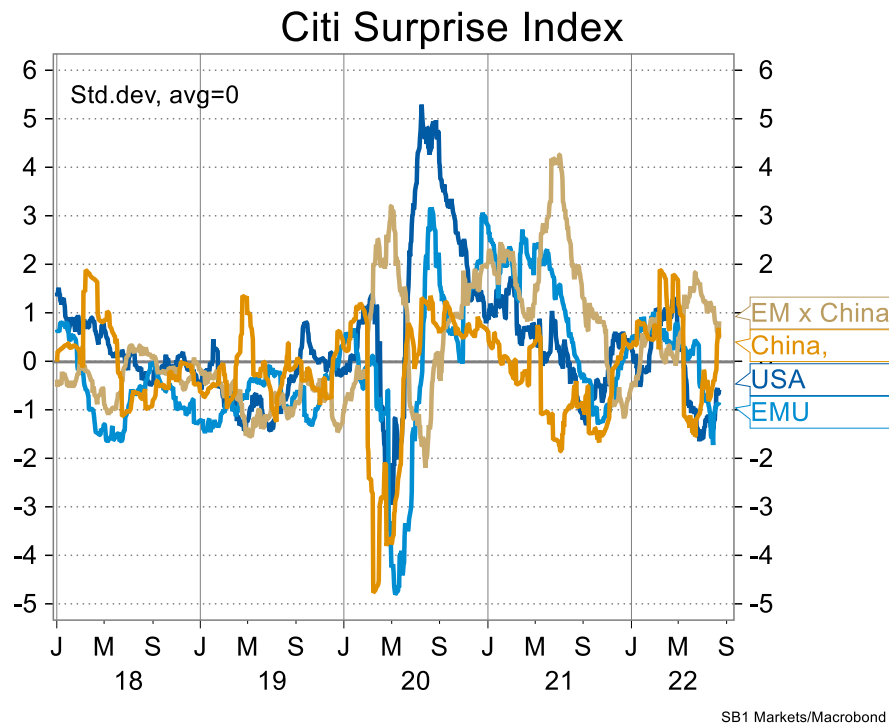
Norway Core CPI-ATE



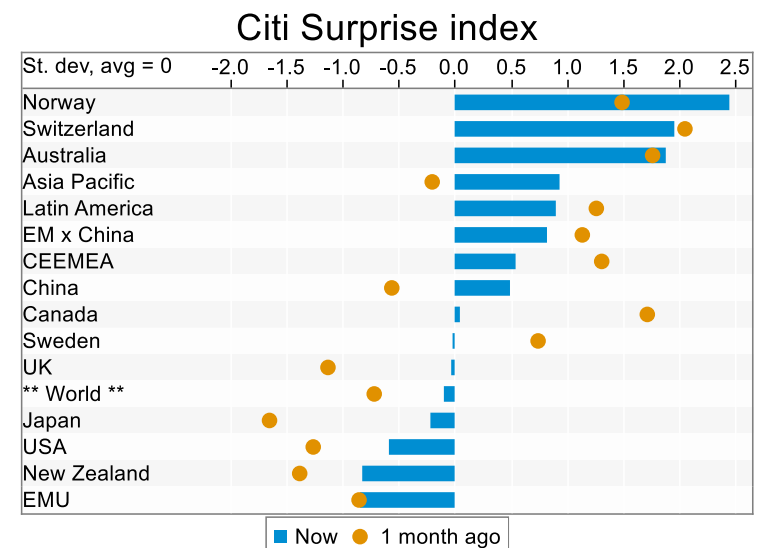
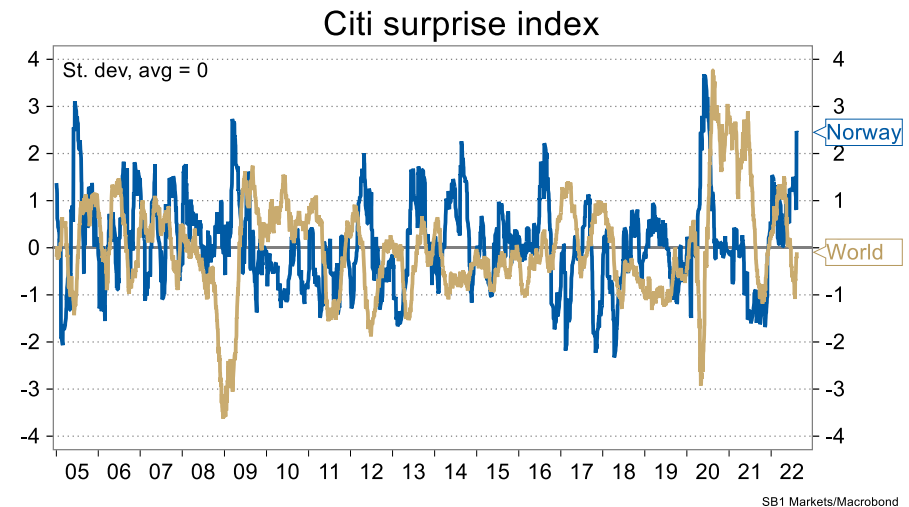
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Now, EMU surprises most at the downside, the US somewhat less

... as is the world



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



Highlights

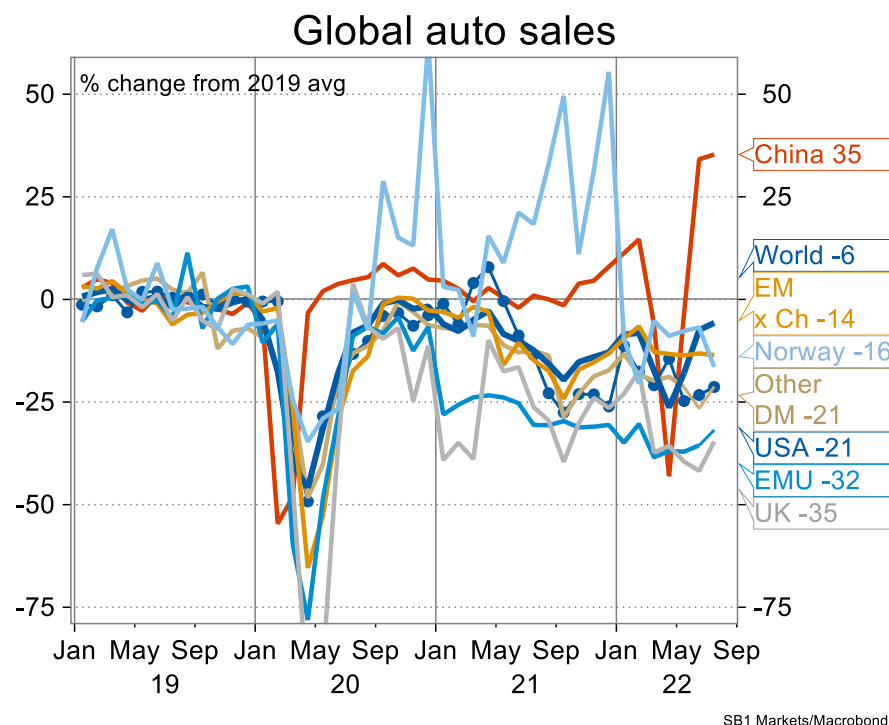
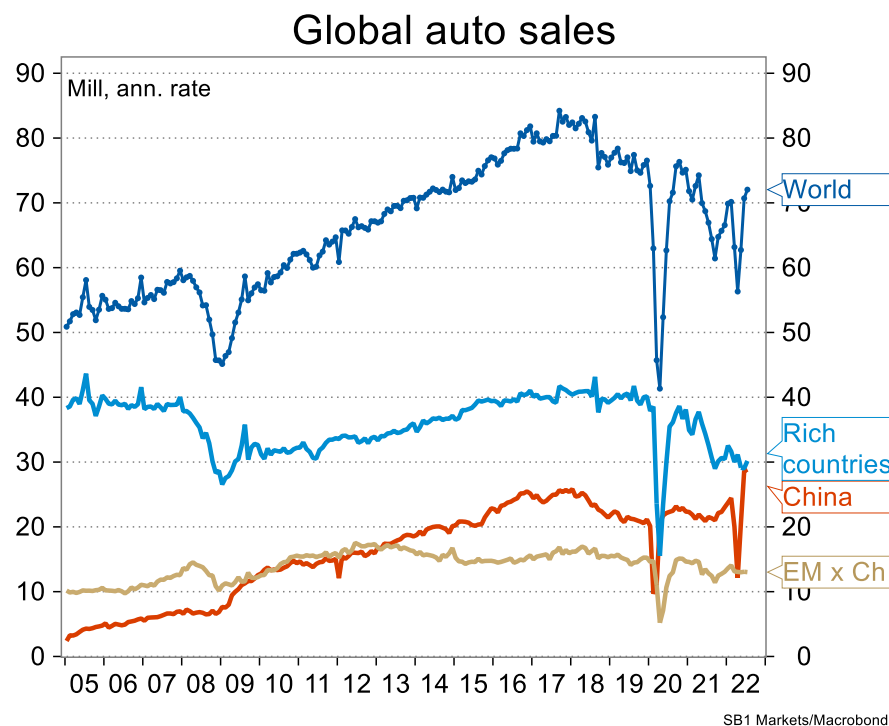
The world around us

The Norwegian economy

Market charts & comments

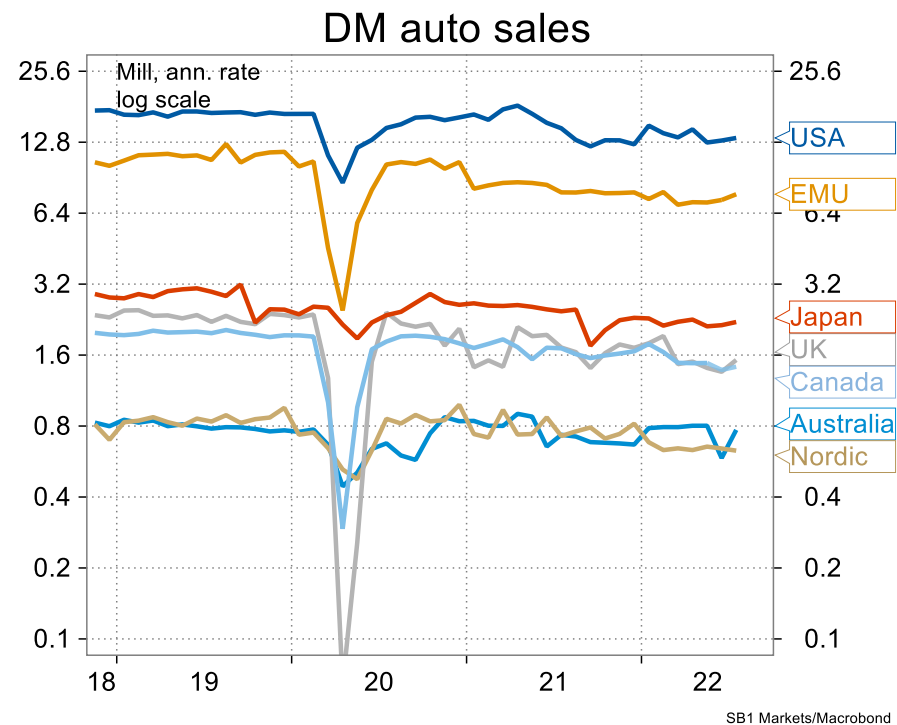
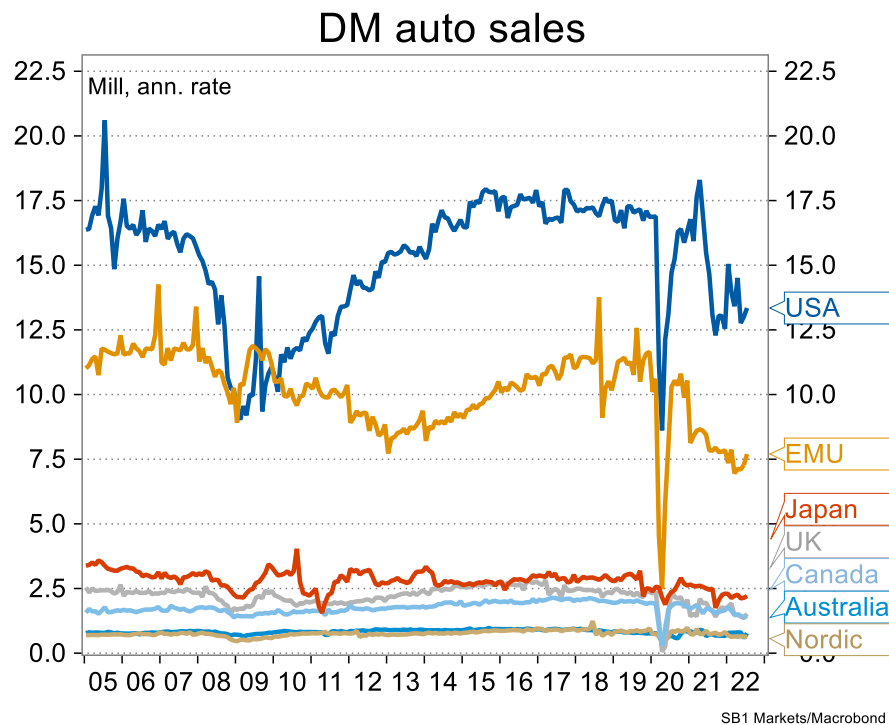
Chinese auto sales kept up at a very high level in July, others slightly up

Global sales the highest since early 2021, and just 6% below the 2019 level (but -13% vs 2017...)



- **Global auto sales** rose 2% in July. Global sales are still low, but just 6% below the 2019 level
- The regional differences are substantial: Sales kept up at high level in **China** (+35% vs 2019 avg) and the slump in sales during the lockdowns is more than compensated. Sales in the **US** rose marginally to -21% vs 2019. **EMU** sales rose somewhat more but remain 32% below the 2019 level. **UK** sales also rose, but are down 35%! **Norwegian** sales fell, and are 16% below the 2019 level
- **Russian sales** rose but are down more than 80% 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' 14% 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, Chinese production was 32% above the 2019 level in June. South Korea is also above the 2019 level, but auto production is well below a normal level in all western countries and in Japan

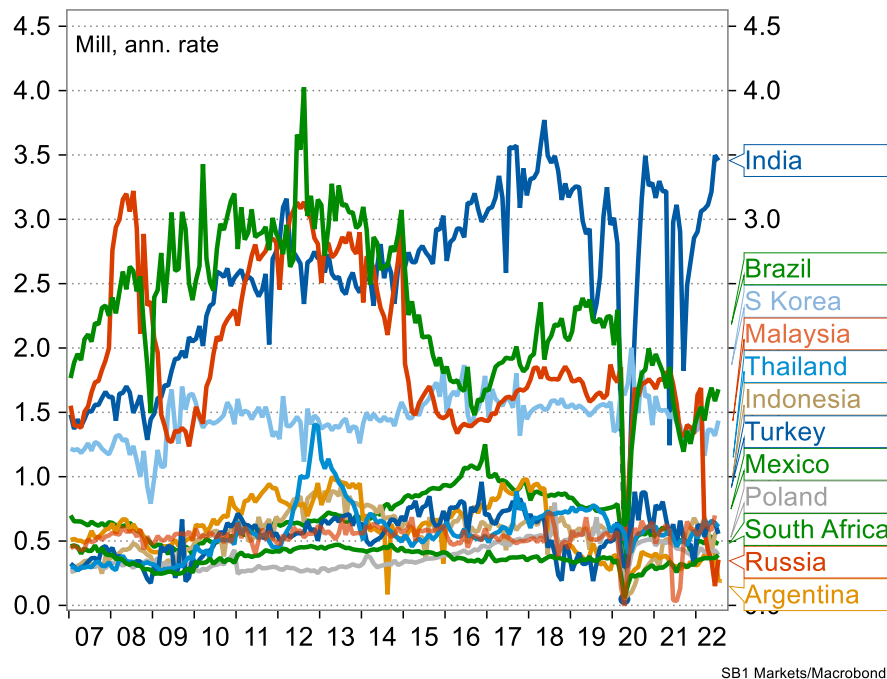
DM sales: Broad weakness but up in June/July



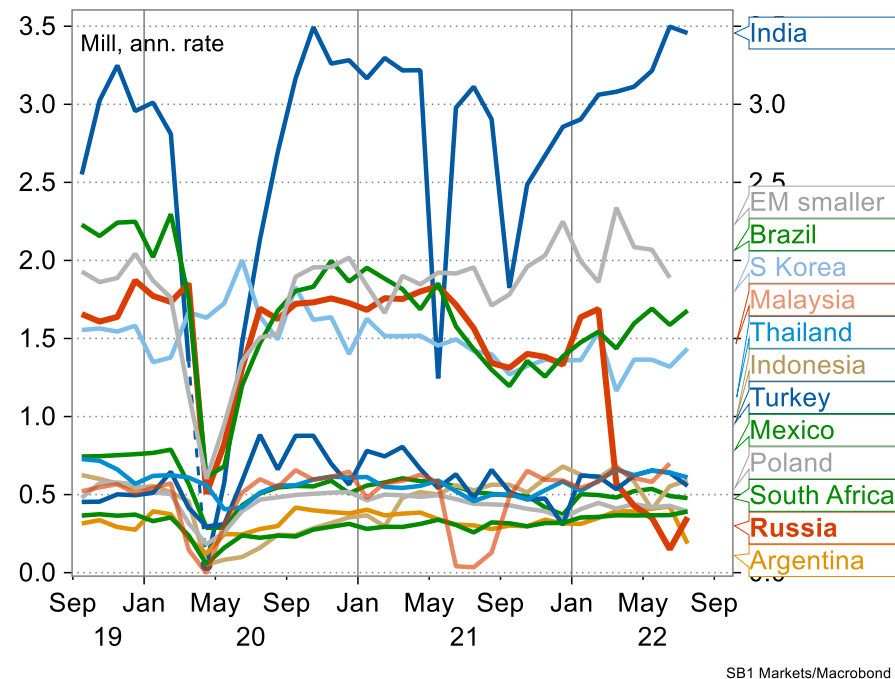
EM: Russian sales up in July but still down more than 80% from February

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

EM ex China Auto sales



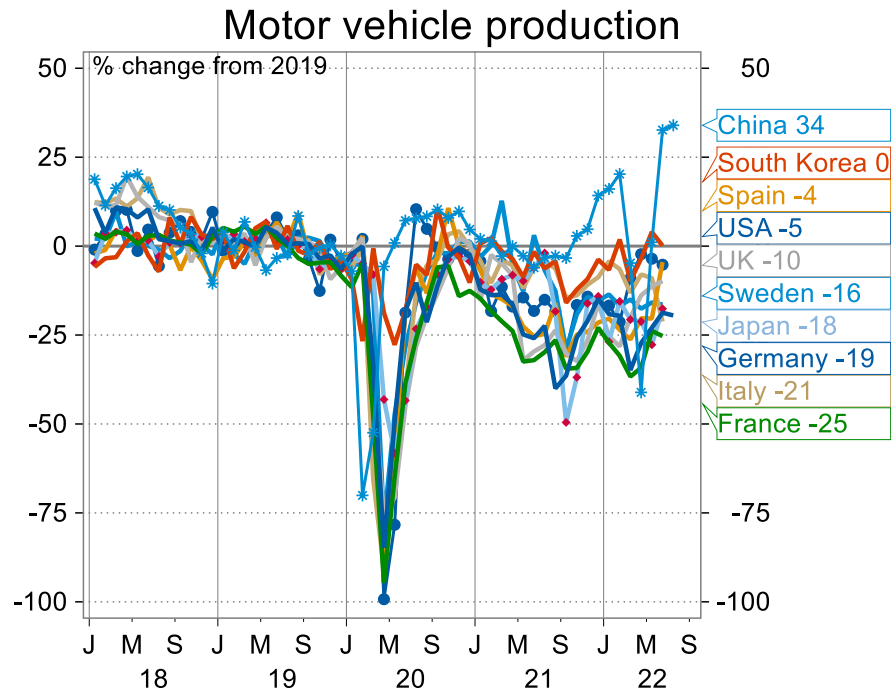
EM ex China Auto sales



- Sales in Argentina fell sharply again. If not, sales in EM x China would have turned up in July

Full speed ahead in China, Korea OK too. US just 5% below the 2019 level

Auto production in most of Europe and Japan is still down 15 – 25%

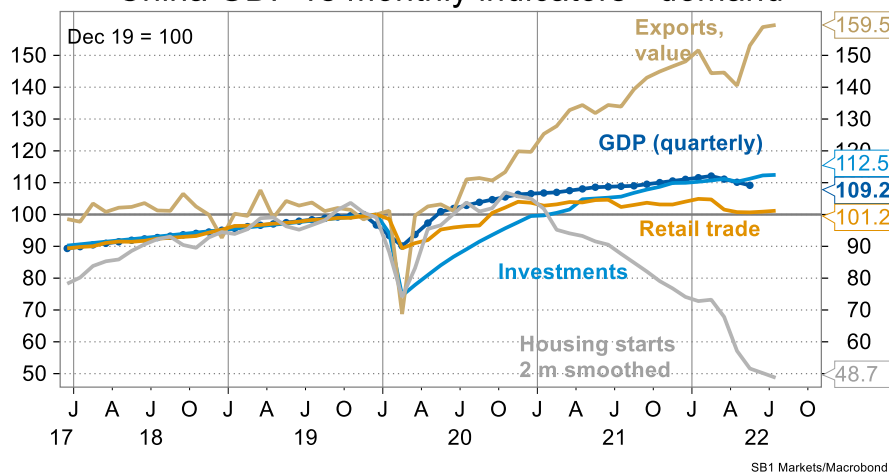


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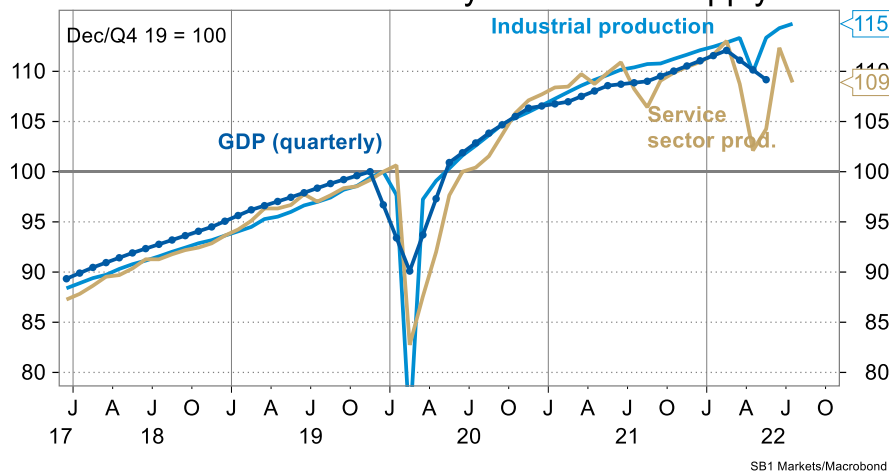
Data far weaker than expected in July – just exports remained strong

A sudden halt in credit, housing starts are still falling, and services yielded again

China GDP vs monthly indicators - demand



China GDP vs monthly indicators - supply

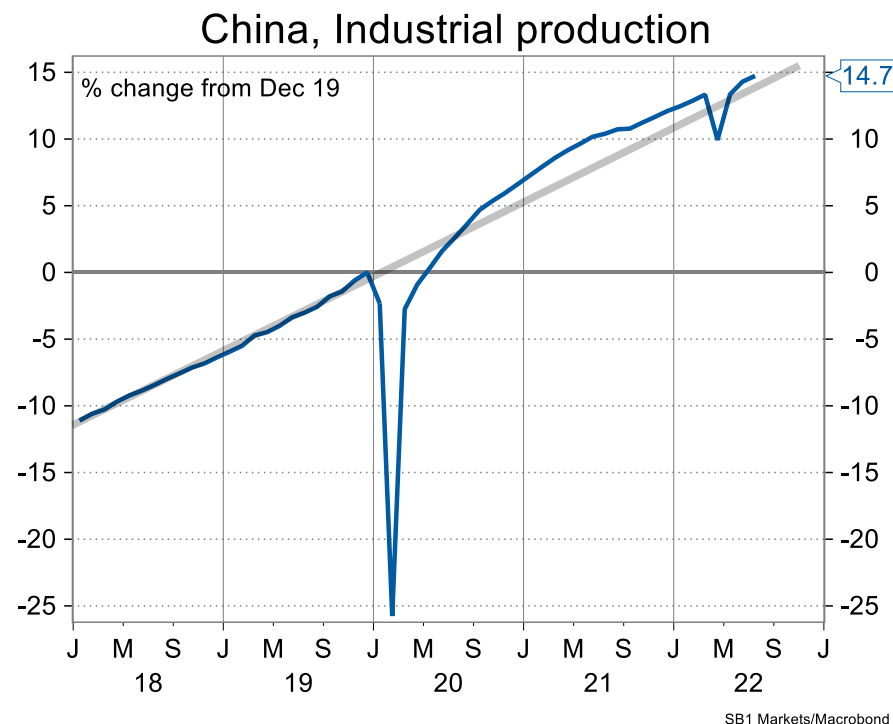
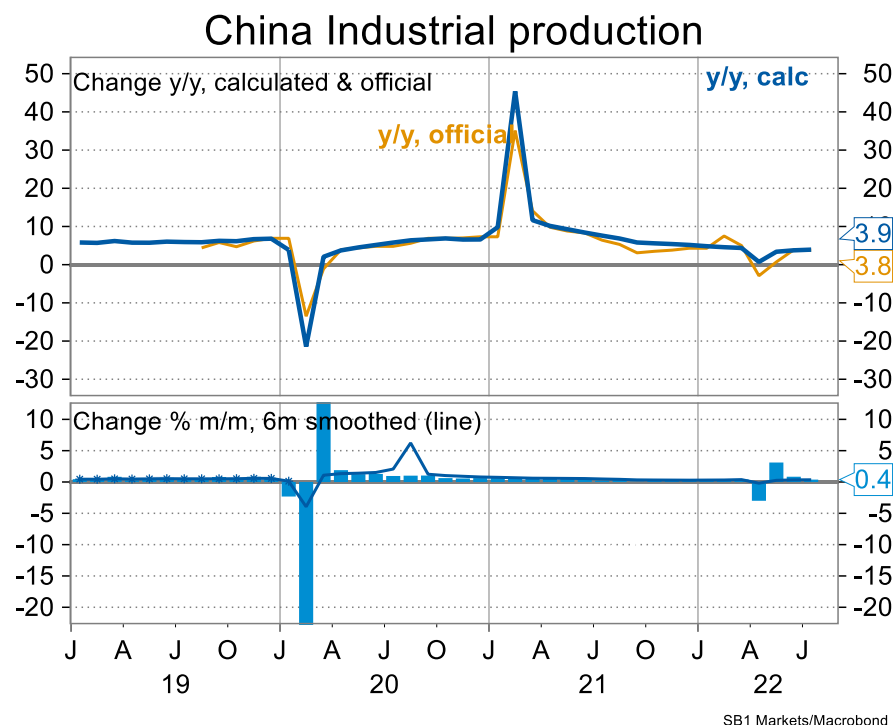


- **Industrial production** rose 0.4% in July and is back to the pre-lockdown trend, but still well below expectations, 3.8% y/y, expected 4.5%. Steel production is falling sharply. Autos in the lead!
- **Service sector production** fell by 3% in July, following the post-lockdown recover in May and June. Activity is 2% below the level in early '22, and is up just 0.6% y/y
- **Retail sales** rose marginally in both nominal and real terms (our est) in July but remains weak, the volume is down 3% from early '22. Sales rose 2.7% y/y, expected 5%!
- **Investments** rose 0.2% in July, and is back on track, even if both **residential and commercial construction starts** has fallen by more than 50% from the peak early last year (the largest contraction ever), without signs of any recovery, starts fell further in July. **New home sales** also fell sharply in July, and is down almost 40% from the peak last year! **House prices** are still falling but at a slightly slower pace
- **Credit growth** fell sharply in July, as growth in bank lending fell sharply (to a 5% pace). Credit growth has been accelerating recent months but just due to a very rapid growth in local government debt (lack of revenues from land sales, funding of real estate projects?). The **central authorities** have decided that local governments should increase borrowing further in H2, a massive policy shift, in order to support growth like in the good ol' days
- **CPI inflation** has increased somewhat, but remains low (2.7%),.. especially ex. food & energy (0.8%) However, food inflation is creeping upwards, to 6%
- **Exports** remained at ATH in July, even in volume terms, and to far above any recent trend paths. (No supply chain disruptions?). **Imports** are still subdued, and the trade surplus is at a record high level. An imbalanced economy?

In sum: July was far weaker than expected. More old-school policy steps are likely. However, we are not sure that more debt-funded infrastructure spending will solve underlying growth challenges. There 50% drop in housing (and non-residential) starts may have brought construction down to a more sustainable level

Industrial production slowed, to a 'normal' pace in July. But still 0.7 pp below exp.

Production rose by 0.4% m/m in June, as production is back to the pre-lockdown trend path

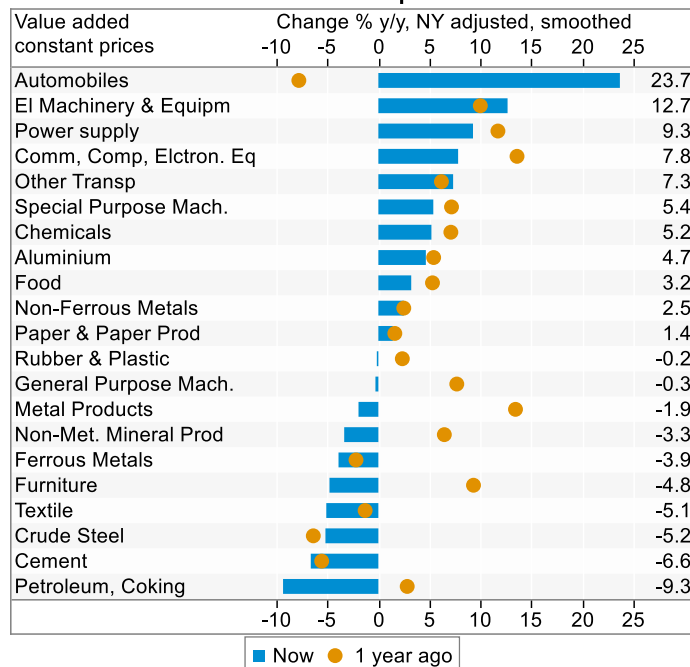


- **The production level** returned to the pre-pandemic trend path in May (grey line at the chart to the right) and was close to the pre-lockdown trend path in July
- **Production grew** 3.8% y/y according to the official data, 0.7 pp below expectations, and down from 3.9% in June

Mixed between sectors: Aluminum up; Steel and cement down

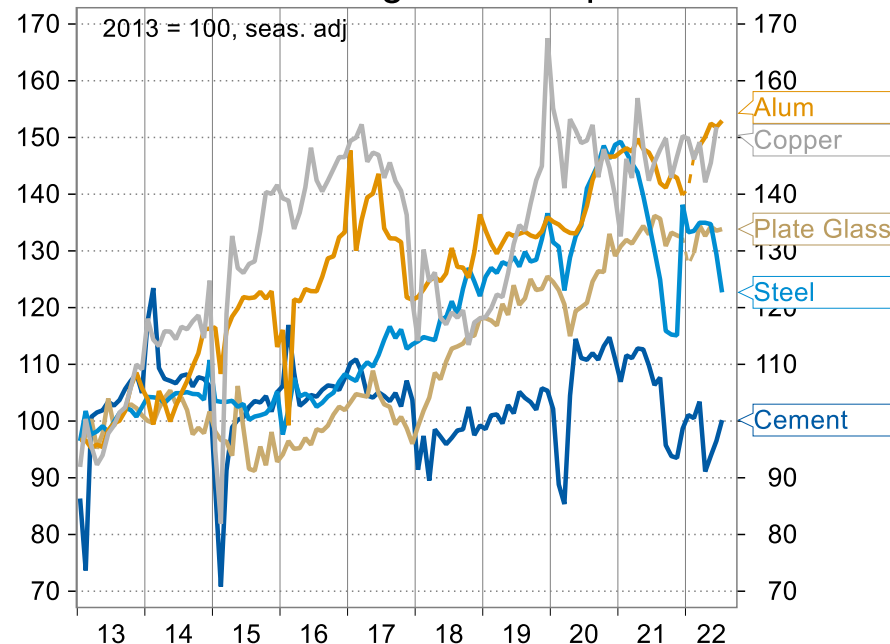
In the lead: Auto production, as sales are soaring

China Industrial production



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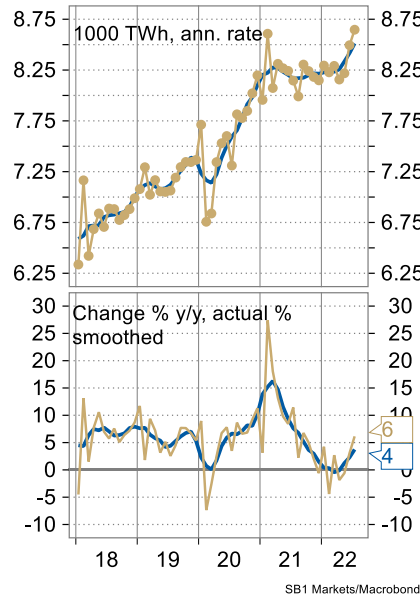
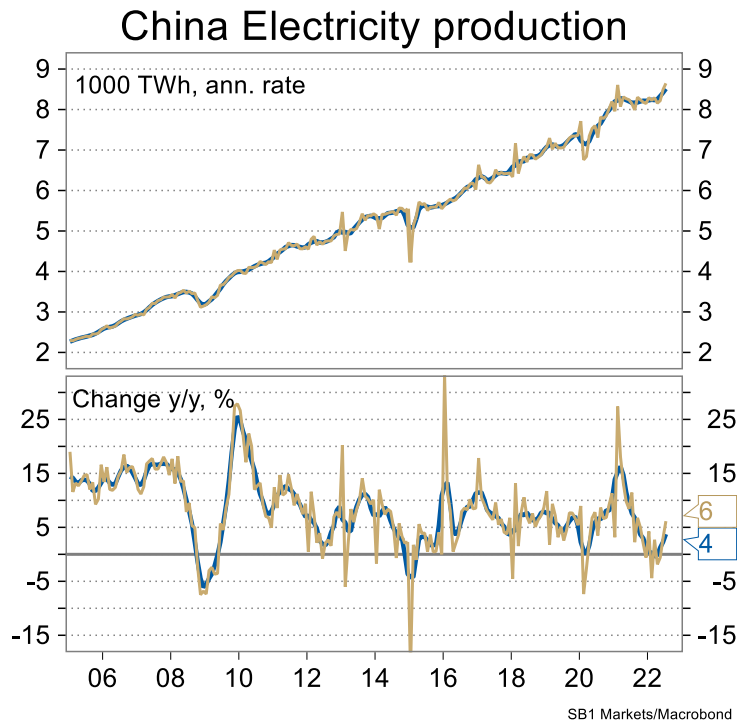
China 'Building' material production



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Electricity production further up in July, strange given weakness in heavy industries

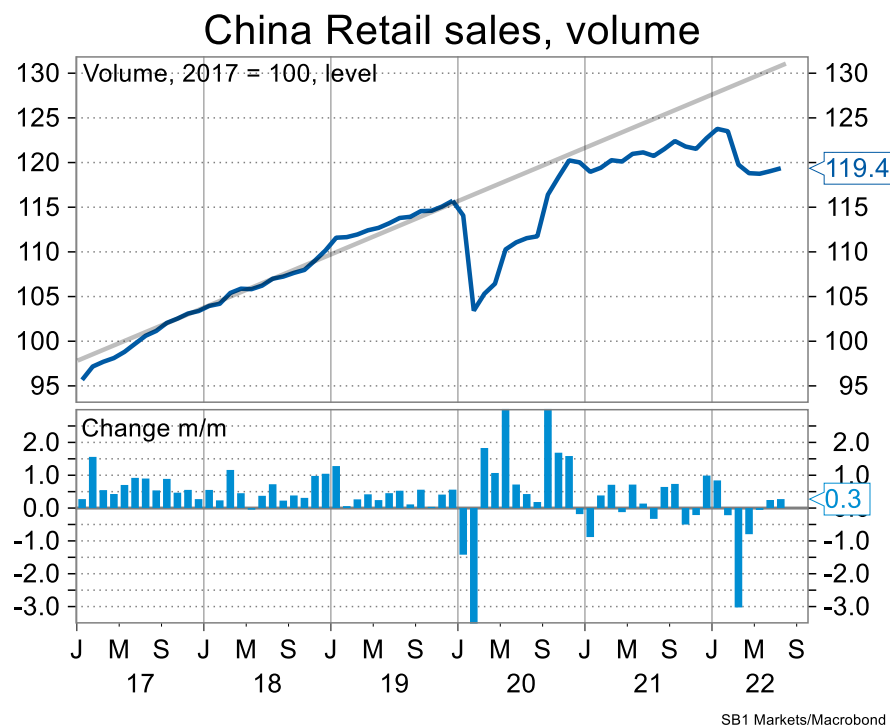
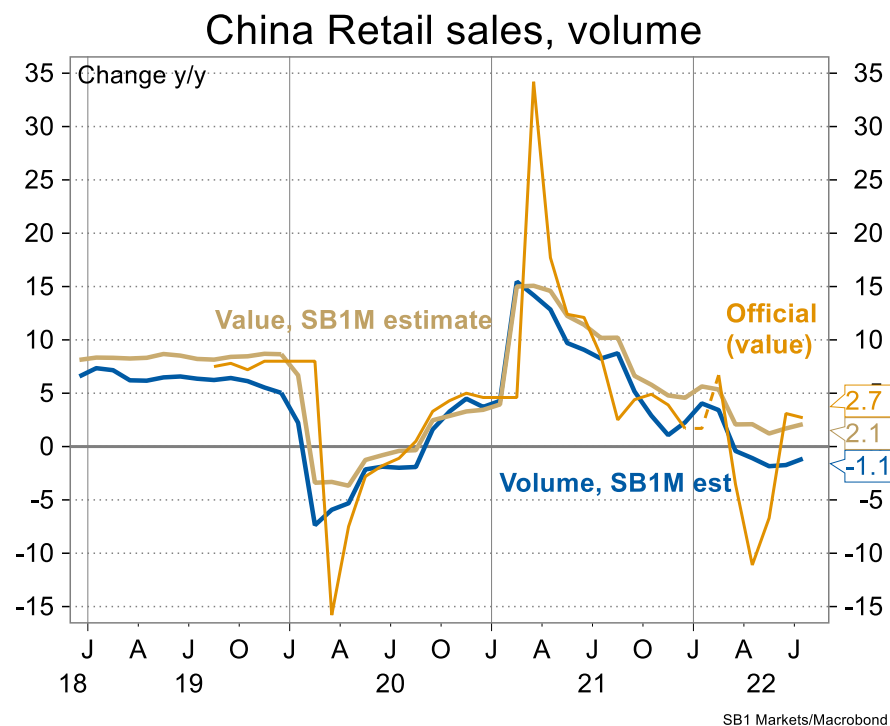
The trend was flat until May, from late 2020



- Seaport traffic has flattened, even if export data are very strong (but imports are not, as domestic demand is weak)
- Even so, domestic railway freight traffic is growing at a normal pace

Retail sales slowly, slowly upwards but still 3% lower than in early 2022

Nominal sales up just 2.7% y/y, far below expectations at 5.0%, down from 3.1% in June

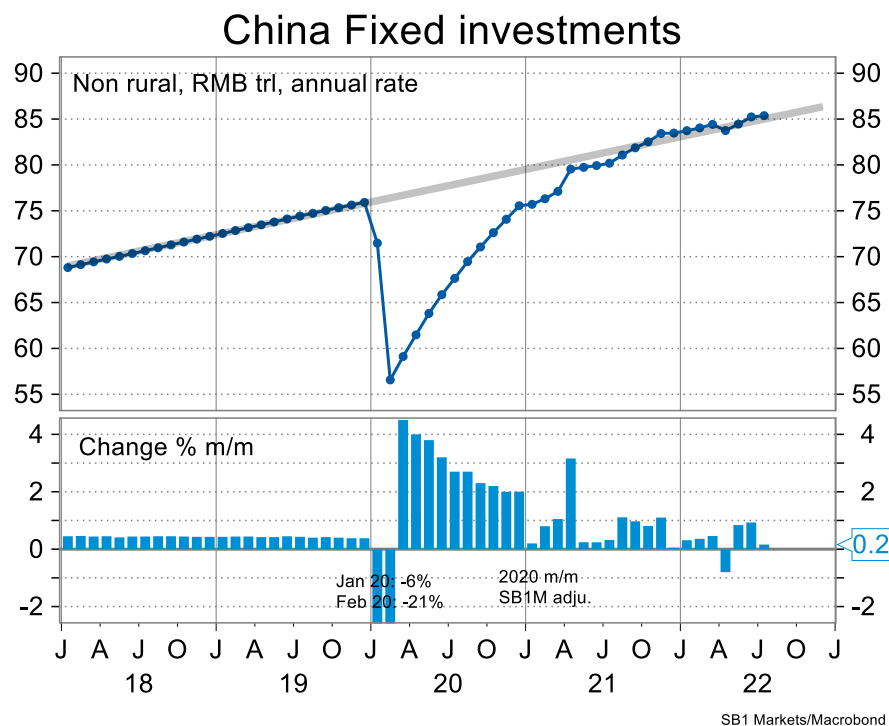


- Sales rose 0.3% m/m in **nominal terms**, and according to our estimate, **volume growth** was 0.3% as well, like in June
 - » Sales in volume terms are down 1.1% from July last year
- Retail sales volumes are some 9% below the pre-pandemic trend path – and at the same level as late 2020!

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

Investments slowed in July, up just 0.2% m/m – and below expectations

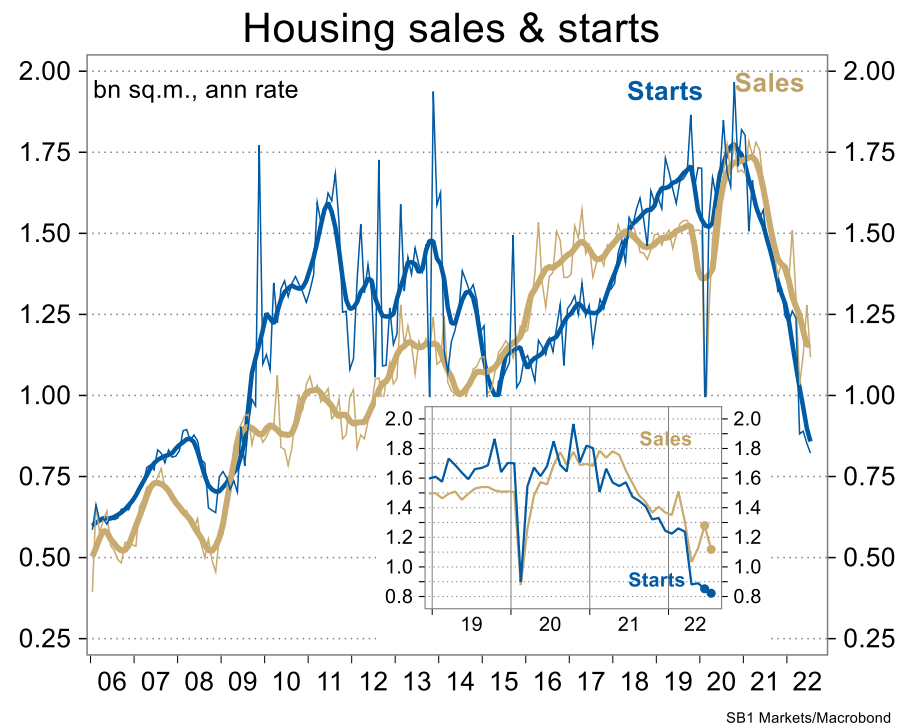
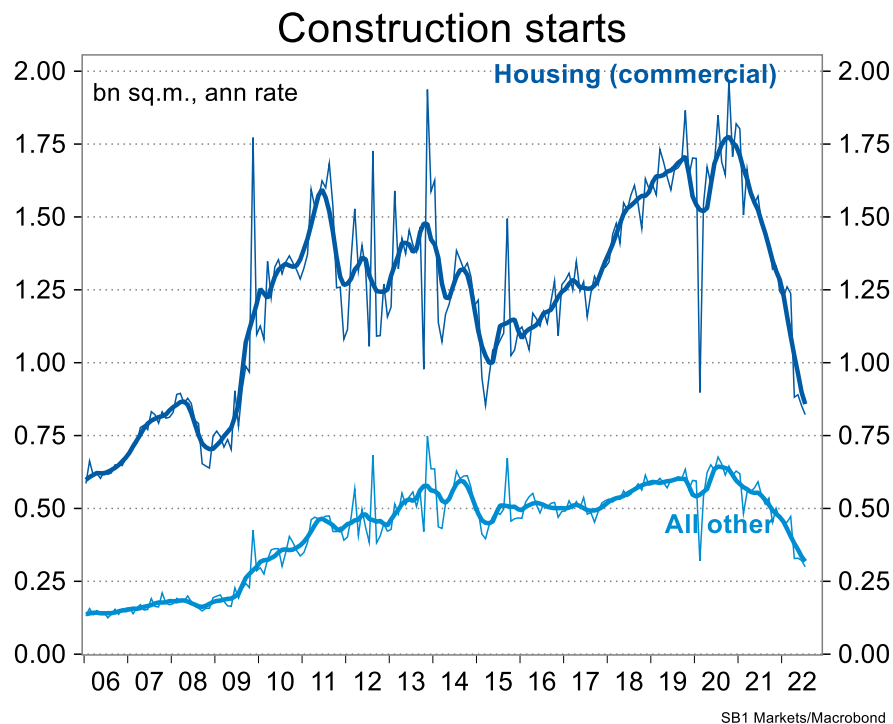
Overall investments are still (strangely) robust, given the downturn in construction starts past 3 m



- **Measured YTD**, nominal urban investments rose 5.7% in July, weaker than the expected 6.2%, and down from 6.1% in June. Growth was 6% measured y/y in June
 - » However, in volume terms, growth was just some 3%, according to our calculations
- The **investment level** is back to the pre-pandemic growth path

New home sales down 15% m/m in July, starts are continuing downwards

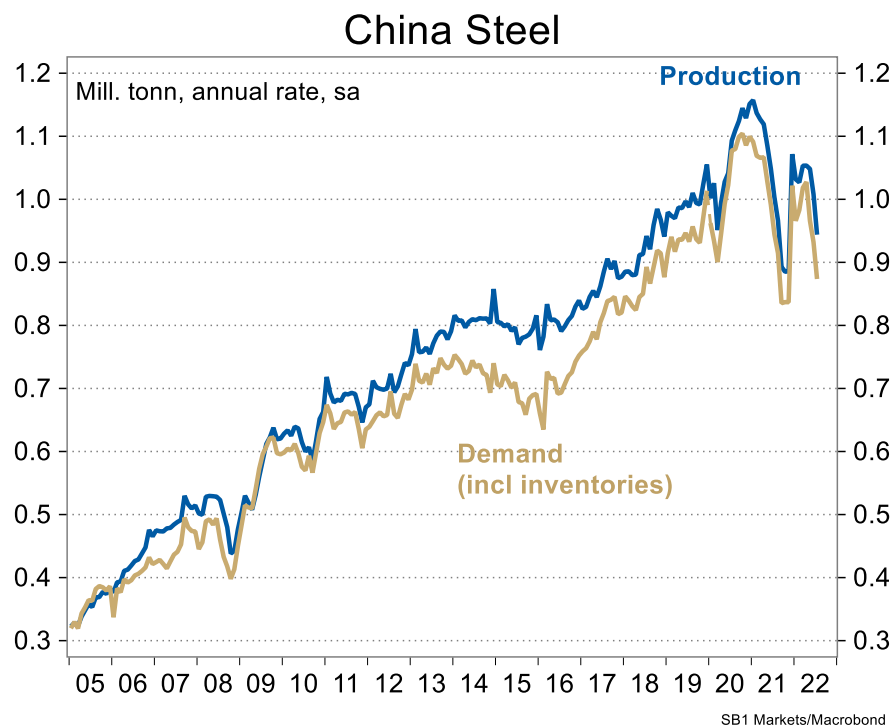
Sales are down almost 40% vs. the level in peak in early 2021. Starts are down more than 50%!!



- **New home sales** fell 15% m/m in July following the 10% lift in May and 12% in June. The level is but the level is 20% below the pre-lockdown level – and some 37% down from the peak early last year – and the lowest since 2015
- **Housing starts** fell 4% m/m June, and is thus continuing downwards, following the steep decline in April, during the lock-downs. Starts are down 54% since early 2021, the largest downturn ever! The level is the lowest since 2009!
- **Non-residential construction starts** are also more than cut in half and the level is the lowest since 2009
- This unprecedented decline in construction starts lowers growth in the Chinese economy substantially

Further downside risk for domestic demand for steel?

Construction starts are much weaker than current steel production/demand

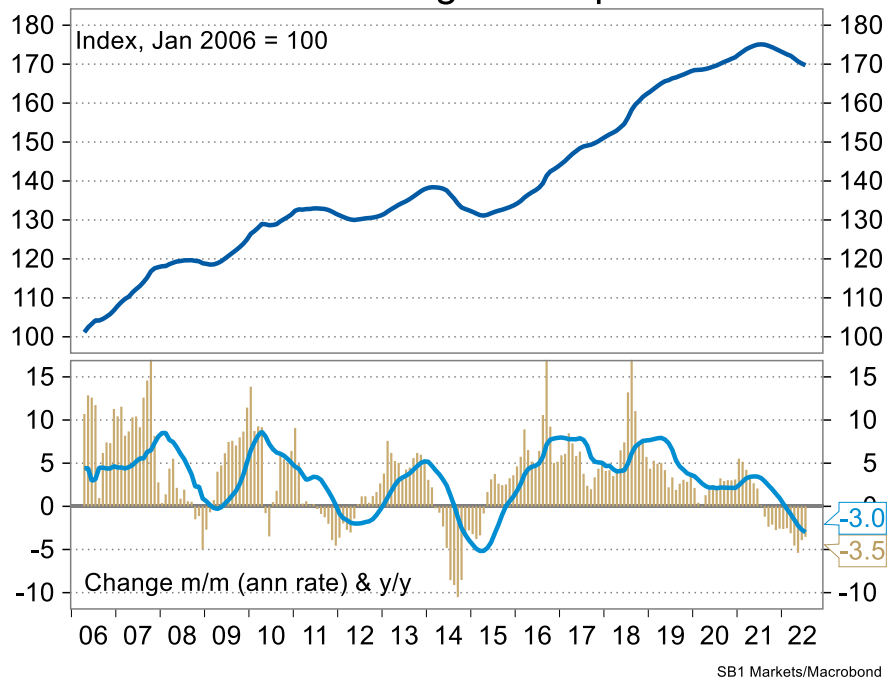


- Construction activity will be under pressure as new starts have fallen sharply. Demand for steel comes early in the building process as well

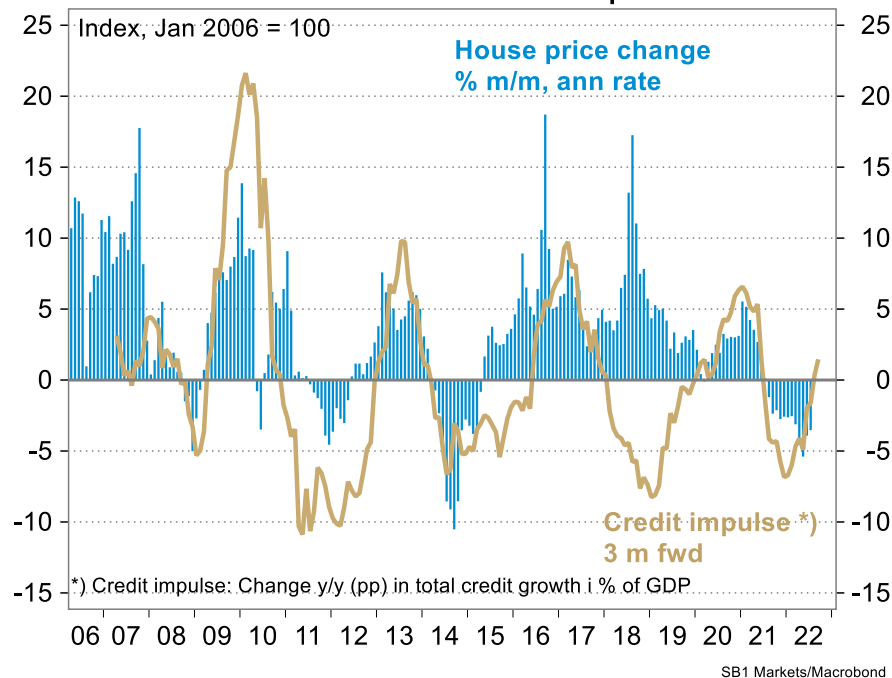
Existing home prices fell further in June July but at a slower pace than in May June

Prices fell for the 12th month in row, and are down 3.0% y/y. New home prices on the way down too

China Existing Home prices



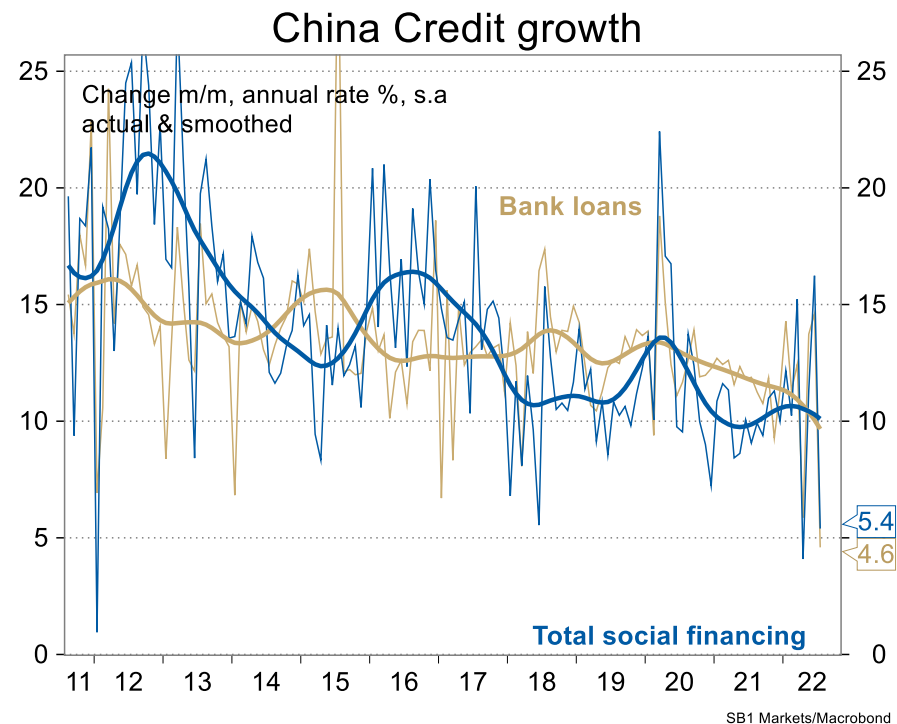
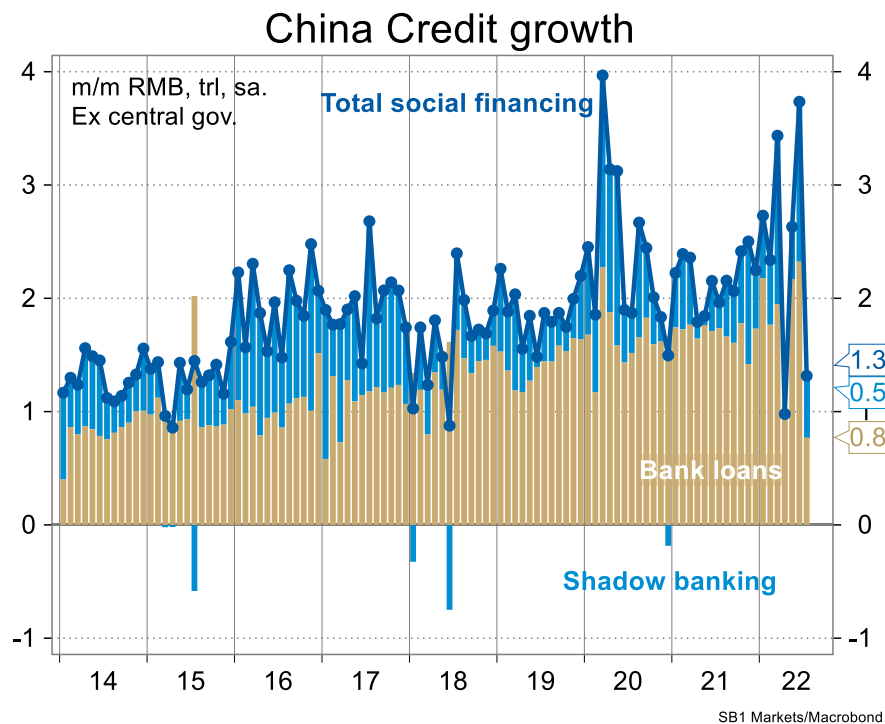
China Credit vs Home prices



- **Existing home prices** peaked last July, and have been falling at an gradually faster pace, until May. In June and July prices fell further but at slower pace, in July by 3.5%, from -5.4% in May. Prices are down 3% y/y, less than the price setback in 2014/15
- **New home prices** also fell last autumn but at a slower pace than existing home prices. In July, price fell at a 2.6% pace m/m (the peak decline was -4.1% in April), and they are down 1.7% y/y. Some builders have reported deep price cuts to reduce the inventory and secure financing. Analysts have questioned the reliability of the official data, to which we refer here. There are numerous reports on dissatisfied new home buyers that are forced to fulfil their obligations
- The gradual decline in prices since last summer is probably due both some fire sales from construction companies that run out of other sources of financing, and some hesitance from home buyers. The credit impulse has been negative too (*check the next story*)
- **Central authorities** have signalled willingness to expand credit supply again, especially to the construction sector, partly through local governments that would be allowed to borrow (even) more

A sudden stop in bank credit in July, darker in the shadows as well

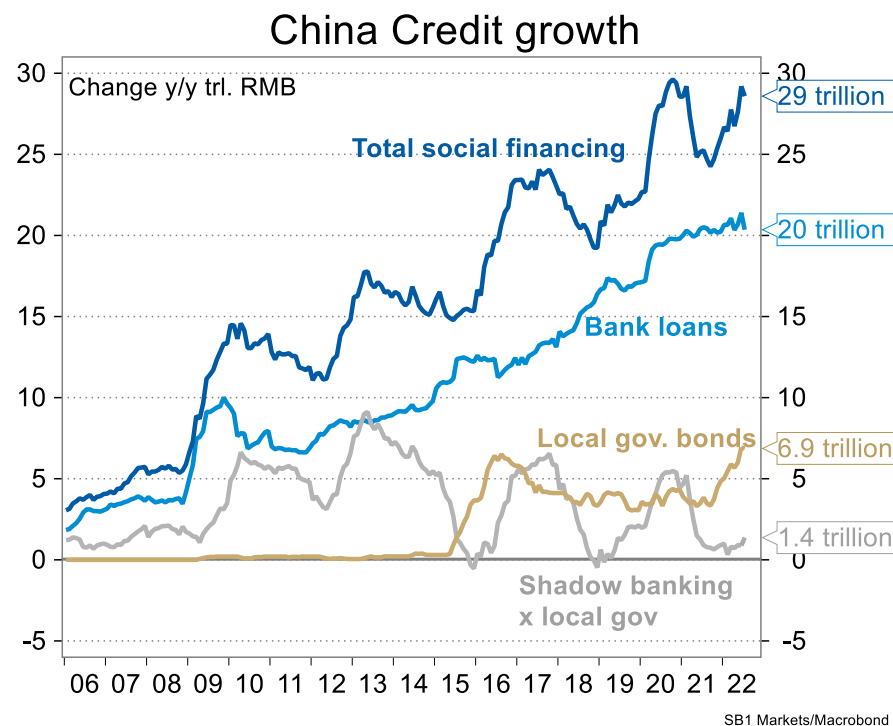
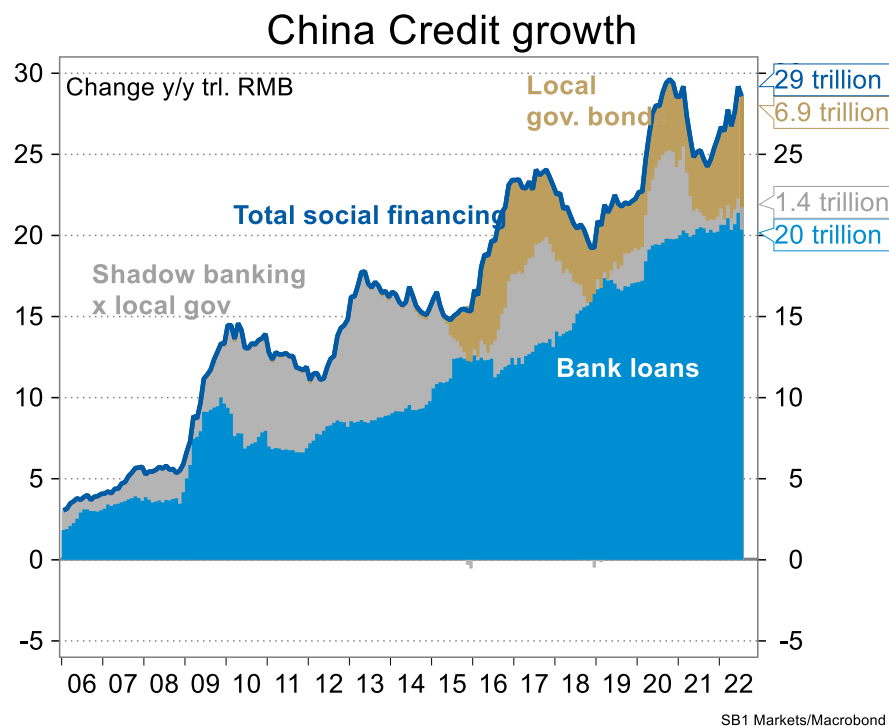
Total credit growth much lower than expected – down to a 5.4% pace, like during the April lockdowns



- However, credit growth in June was revised sharply upwards, as local governments increased their debt sharply, by 4%, in one month! No local gov. data for July yet, but we assume much lower (or even no) monthly growth
- **Total credit** grew at a 5.4% pace in June (m/m, seas. adj. annualised), one of the lowest prints ever. The annual rate slowed 0.2 pp to 10.5%, still well above any reasonable estimate of nominal GDP (=income) growth
- **Total credit** rose by 0.8 RMB trl, expected 1.3 trl (not seas. Adj). The 'core' total social credit (total ex central gov bonds & corporate equities) grew by 1.3 trl (seas adj), way below the 3.7 bn growth in June
 - » **Bank loans** rose by RMB 0.7 trl (or 0.8 trl s.a) or at a 4.6% annualised pace, well below expectations and the lowest monthly growth rate since 2011
 - » **Shadow banking credit** rose by RMB 0.5 trl, and is up 8.6% 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 government bond issuances

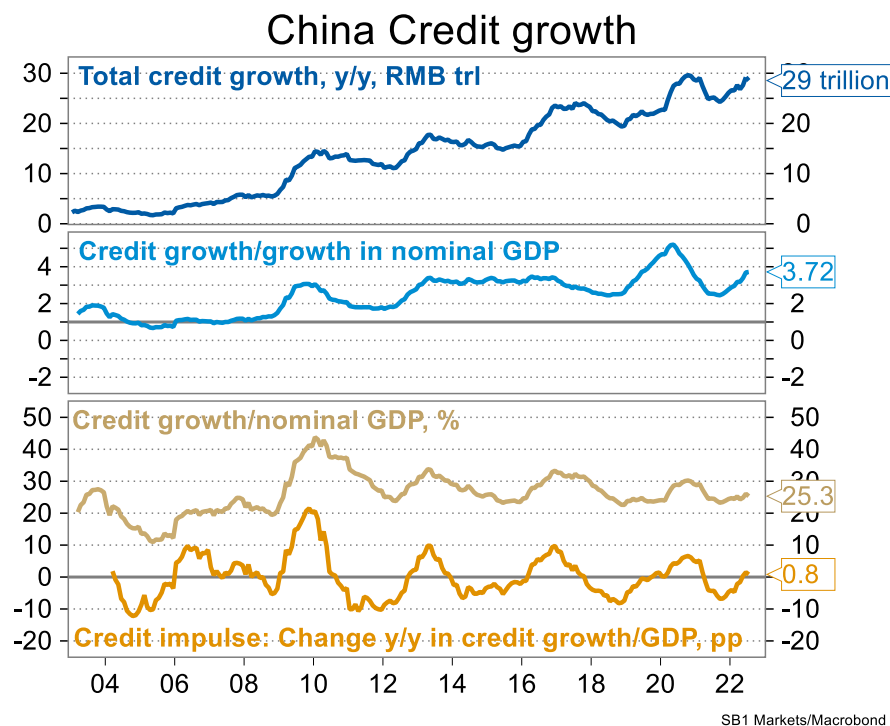
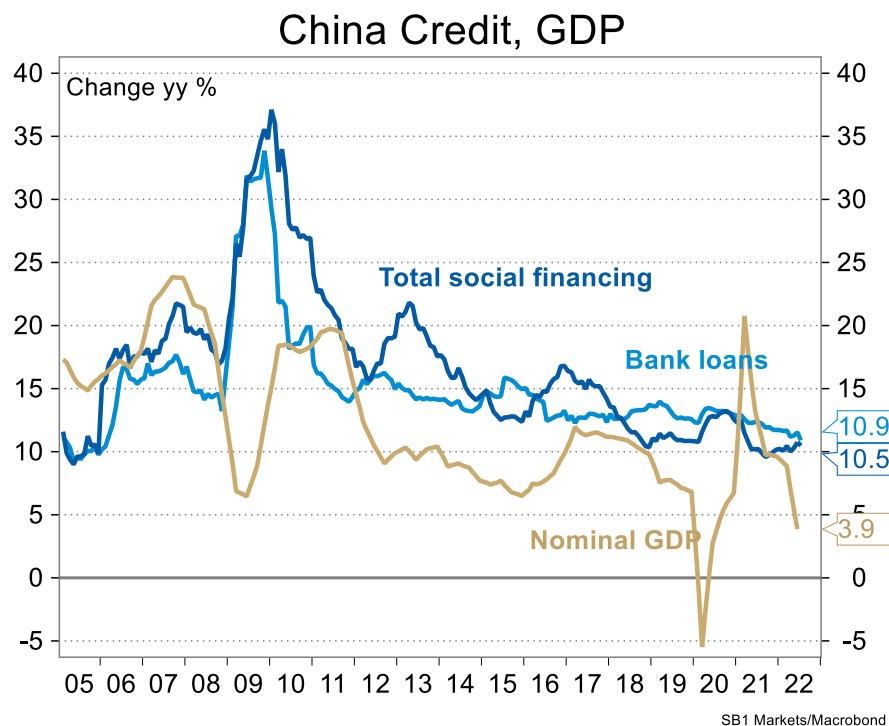
Bank loans are flattening, and there is limited growth in credit outside banks (other than local gov)



- 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 1.4 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

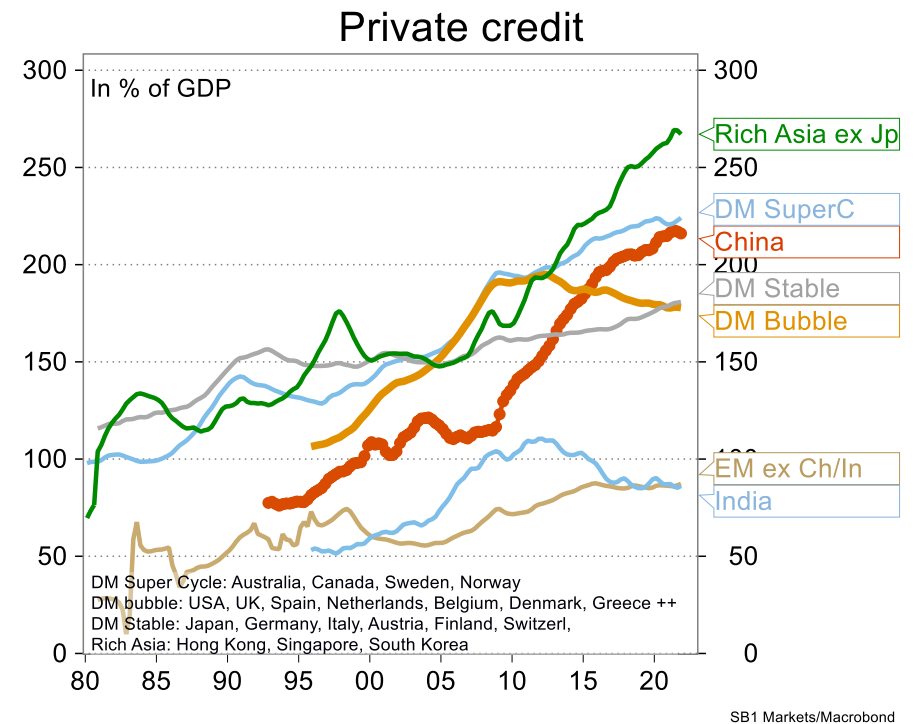
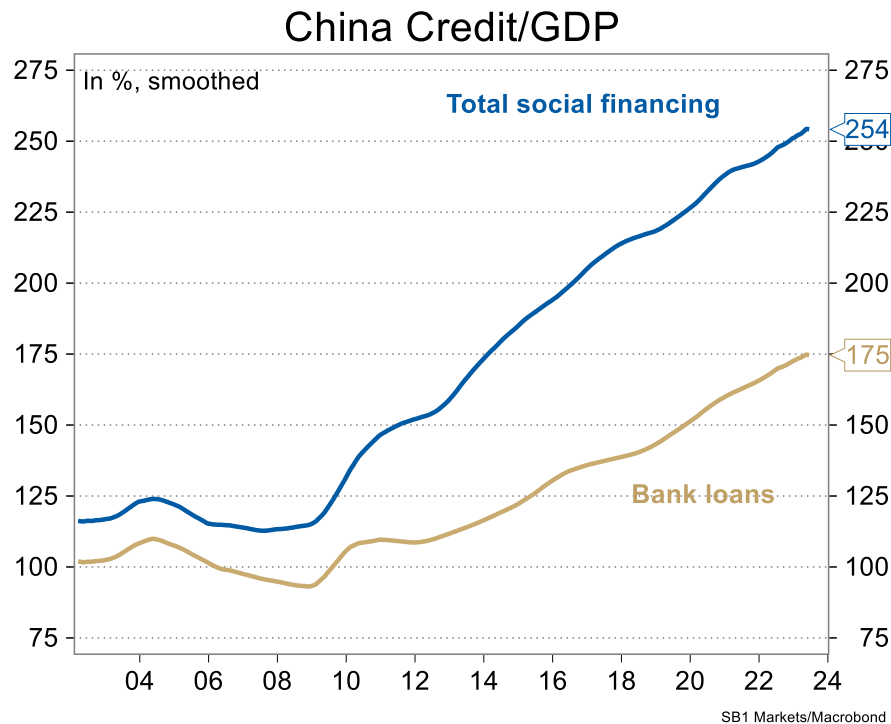
... and now central authorities order local governments to borrow even more



- 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 10.4%).
 - » 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
- If banks are not able/willing to lend more in August, we suspect more policy measures will be applied

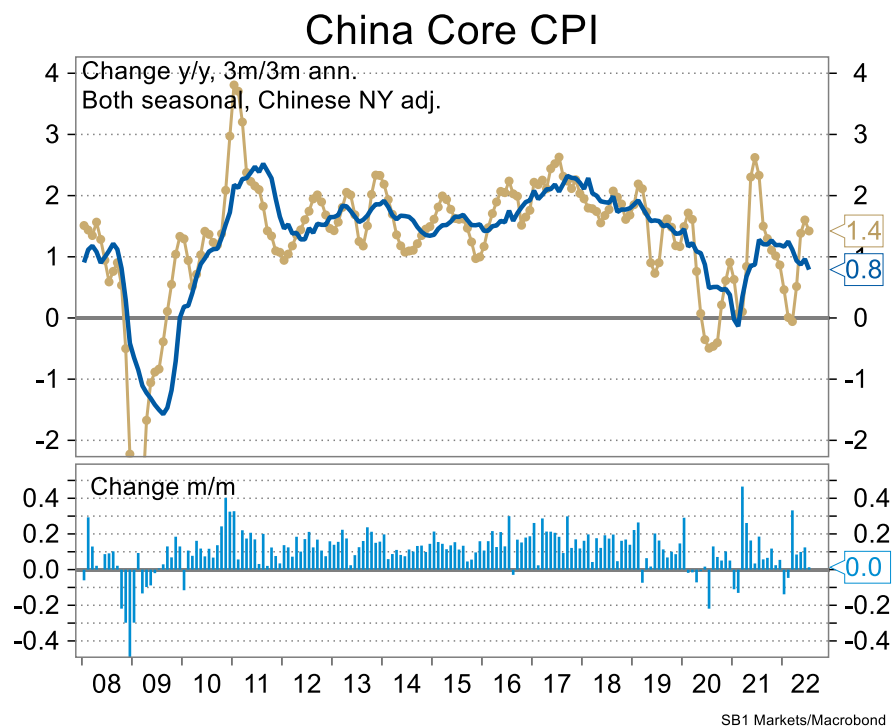
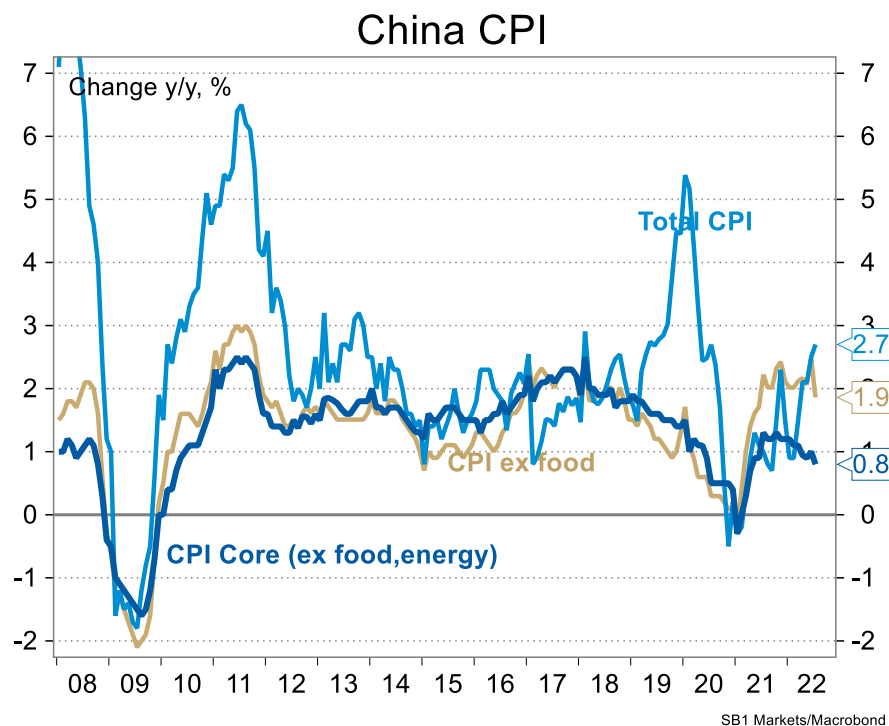
Private sector credit: China is an outlier, together with other rich Asian countries

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



Headline inflation up 0.2 pp to 2.7%, the core down 0.2 pp to 0.8%

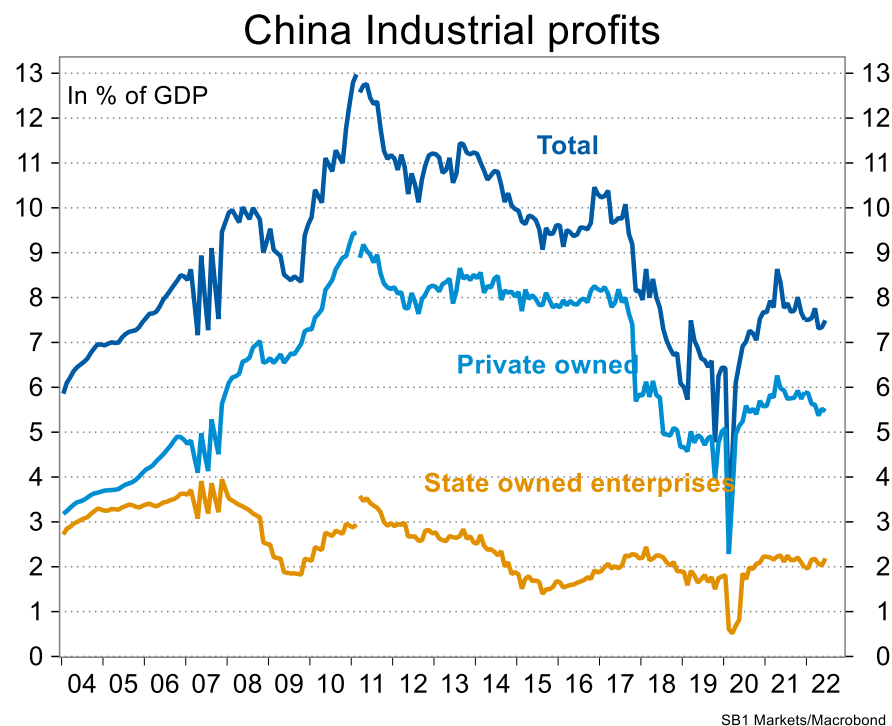
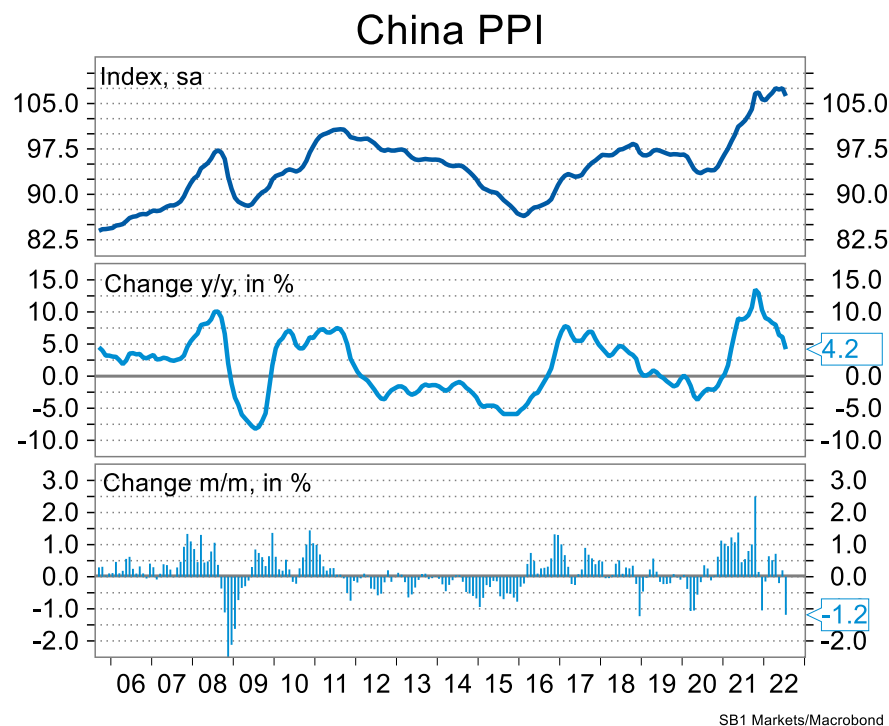
Inflation is not China's predominant challenge these days, to put it mildly



- **Total annual CPI** was accelerated to 2.7% in June, expected up to 2.9%. Prices rose 0.3% m/m, down from 0.4% in June
- **The core CPI** (x energy, food) was flat m/m in July, and the annual rate fell 0.2 pp to 0.8% y/y. The 3m/3m rate is at 1.4%
- **Food prices** are up 6.3% y/y, with pork prices again in the lead, up 20%
- **Gasoline/fuel prices** are up 24% (still down from 33% y/y in June)
- **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 up down 1.2% in July, and the annual rate has fallen to 4.2%

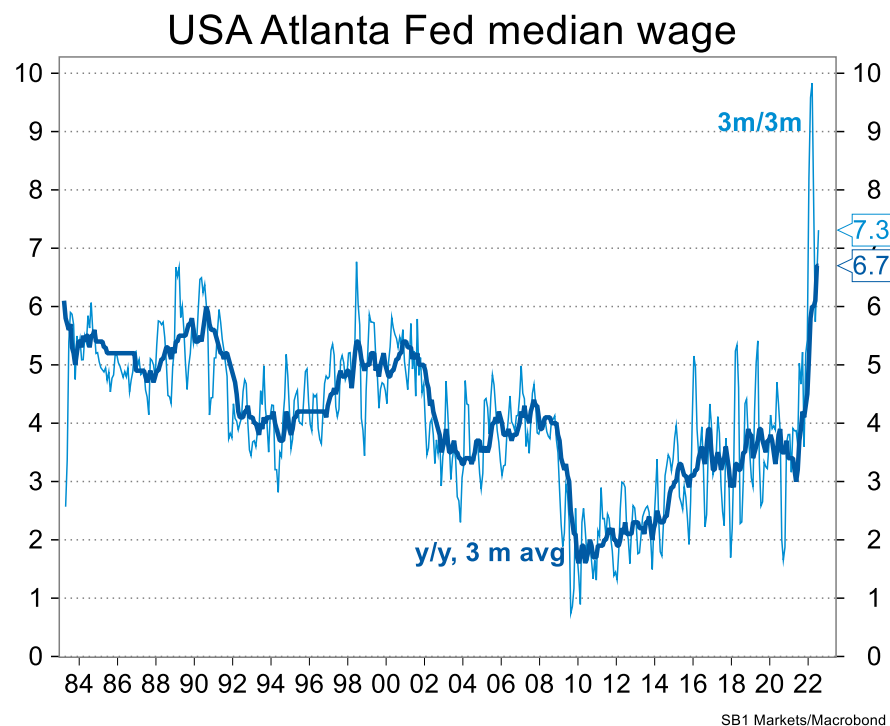
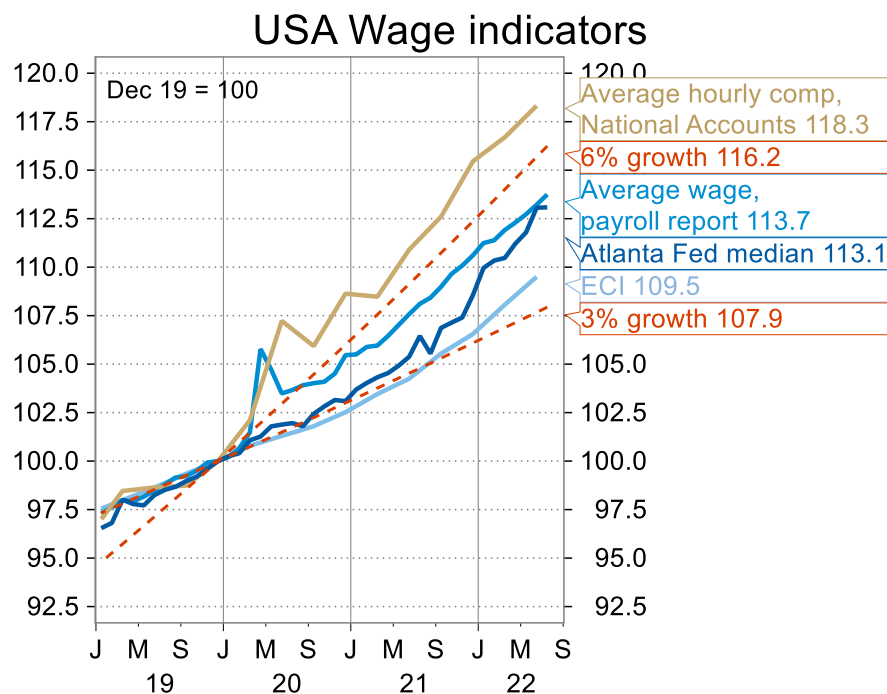
A sign of slowdown in goods inflation globally? Corporate profits are heading south



- **At the peak**, the PPI was up 13.5, in last October
- **The PPI** was in sum unch m/m the previous two months, before the 1.2% drop in July
- **Consumer goods** are up just 1.7% y/y, durable consumer goods are down 0.3% y/y, while raw materials are up 11% - 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

Atlanta Fed: Wage inflation is not slowing

The median wage is up 6.3% y/y, 6.7% 3 m avg (unch). Take off 'for everybody' (x the very best paid)

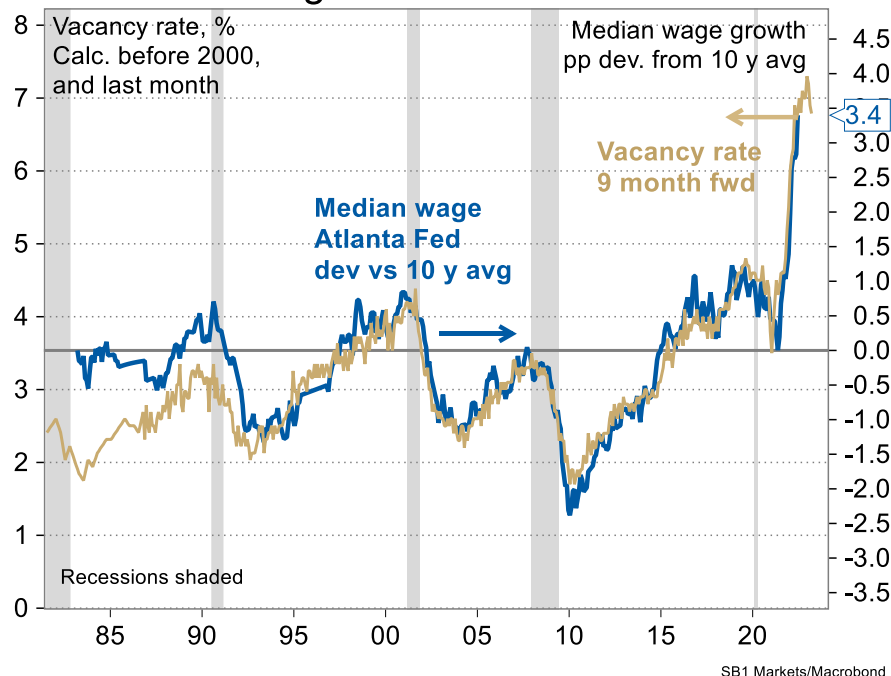


- **Atlanta Fed's median tracker reported** a 6.3% growth in July, down from 7.4% in June (which was ATH). Our calculated m/m rate fell to zero, following strong growth in June (1.1%). In August last year wages fell by 0.8%, and the annual growth rate will probably accelerate next month. The **3 m average annual wage** growth at 6.7% is the highest ever, and the current wage inflation is 3.4 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

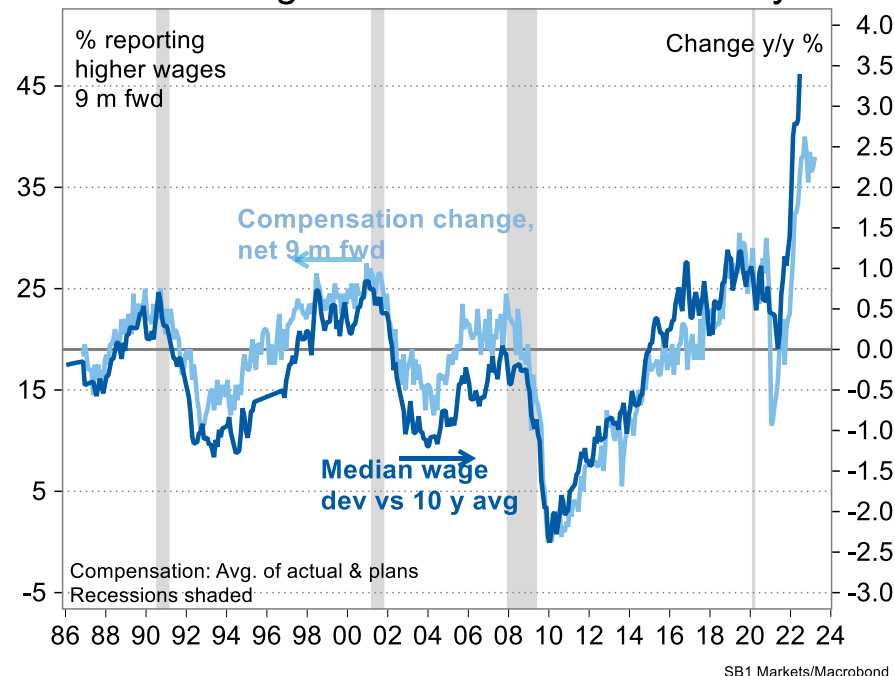
So why are wage inflation soaring like never before?

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

USA Wage inflation vs vacancies



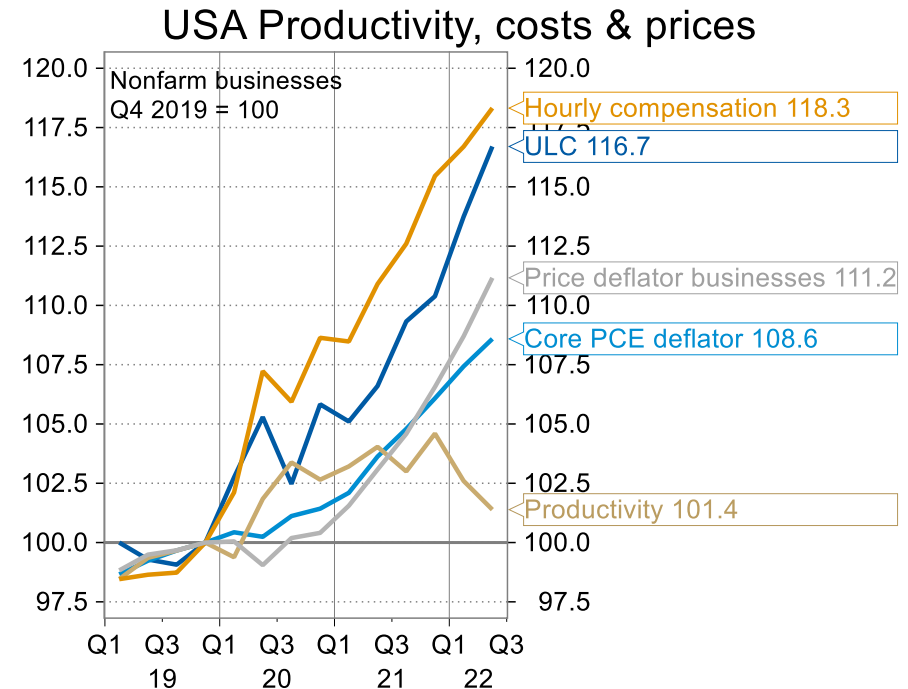
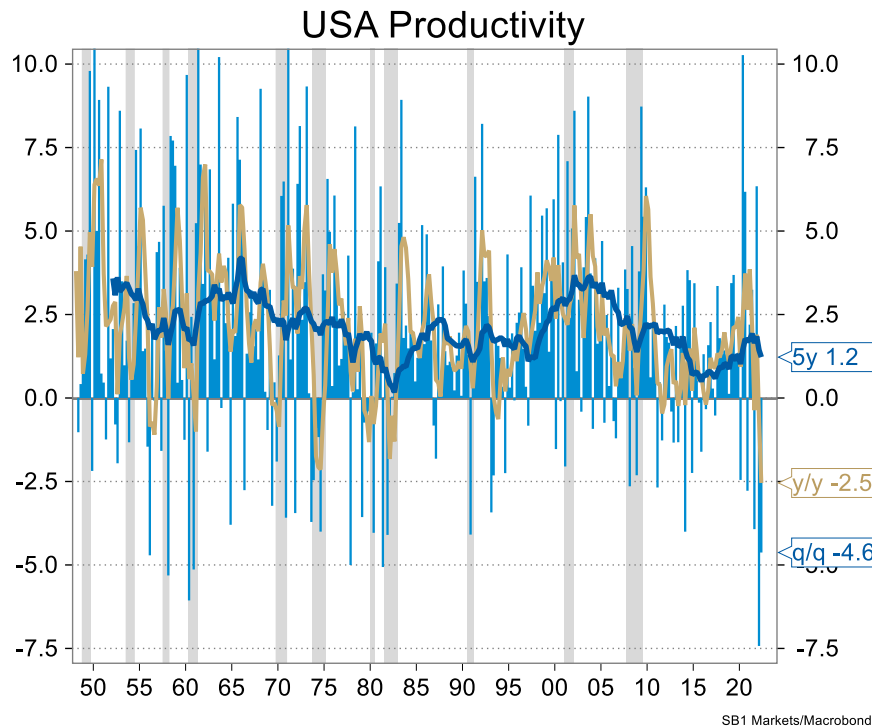
USA Wages - Actual vs NFIB survey



- **Our 'Phillips curve'** based on the vacancy rate signals a further increase in wage inflation the coming quarters even if vacancies 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 3.4 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

Another productivity outlier but the real problem is a dismal trend. ULC explodes

Productivity fell by 4.6%, following the 7.4% Q1 drop, down 2.5% y/y. Unit Labour Cost up 9.5% y/y

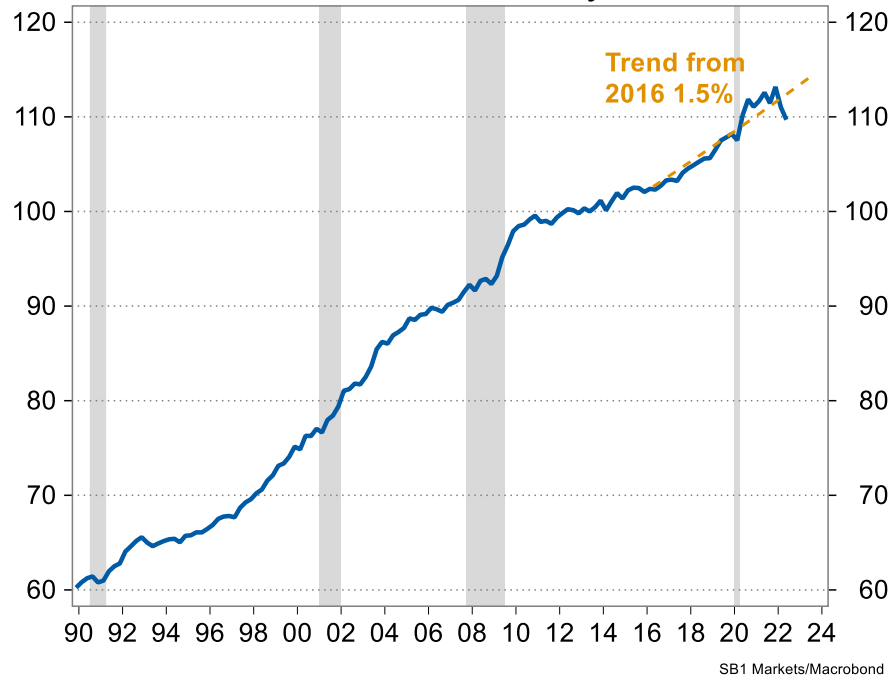


- **Productivity data** are very volatile but the decline the past two quarters are unprecedented, and very likely due to a surprising slowdown in activity, which was not met with an adjustment of labour, hours worked rose 2.6% in Q2, while output fell by 2.1% - and productivity fell further
- Still, the problem is a weak **underlying trend**. Productivity is now well below a 1.5% trend path (from 2016, the 5 y avg is at just 1.2%, and since Q4-19 just) – but should recover somewhat the coming quarters
- **Hourly compensation (wages ++)** grew at a 5.7% pace in Q2, and the annual rate is 6.7%. Average growth since Q4-19 is 7%. The slowdown is not convincing
- **Unit labour costs** (hourly compensation – productivity) grew by 10.8% in Q2 (expected 9.7%), up 9.5% y/y, the highest since 1982. Since Q4-19, ULC has grown at a 6.4% pace, far above a normal level – which of course is totally incompatible vs the 2% inflation target

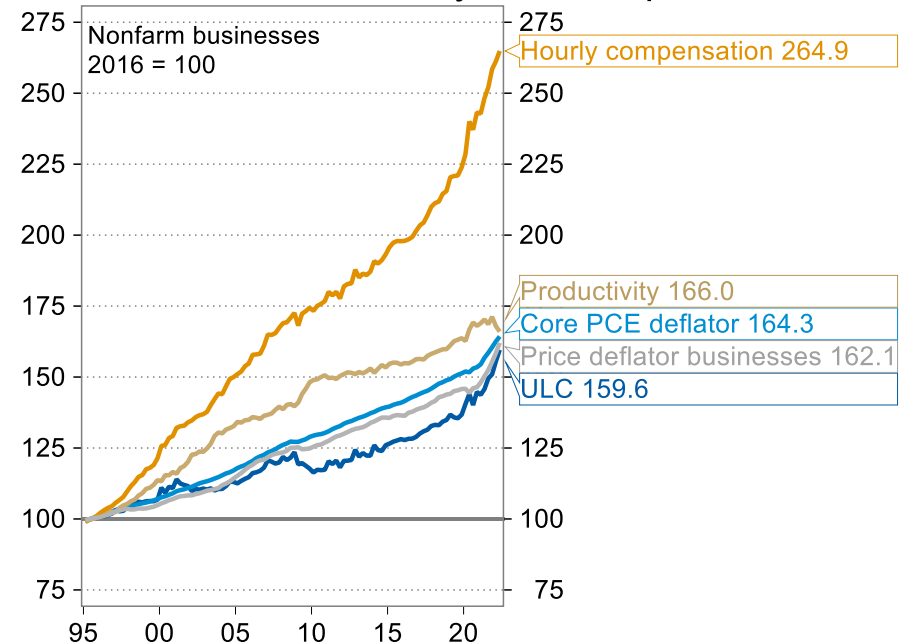
Current productivity is very likely well below trend, but the trend is weak too

When hourly compensation surges at the same time, unit labour cost explode

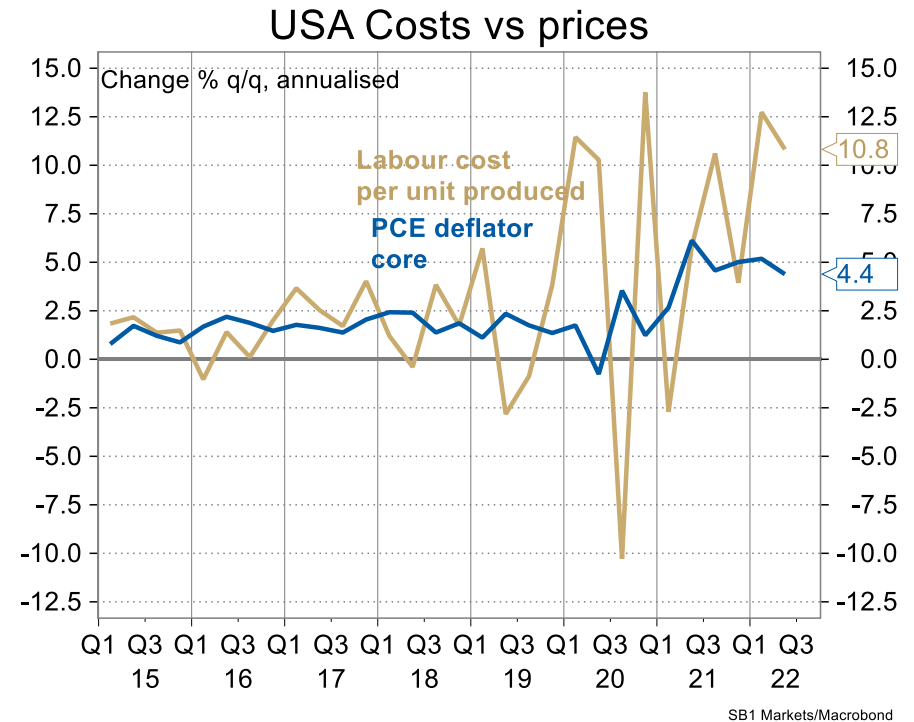
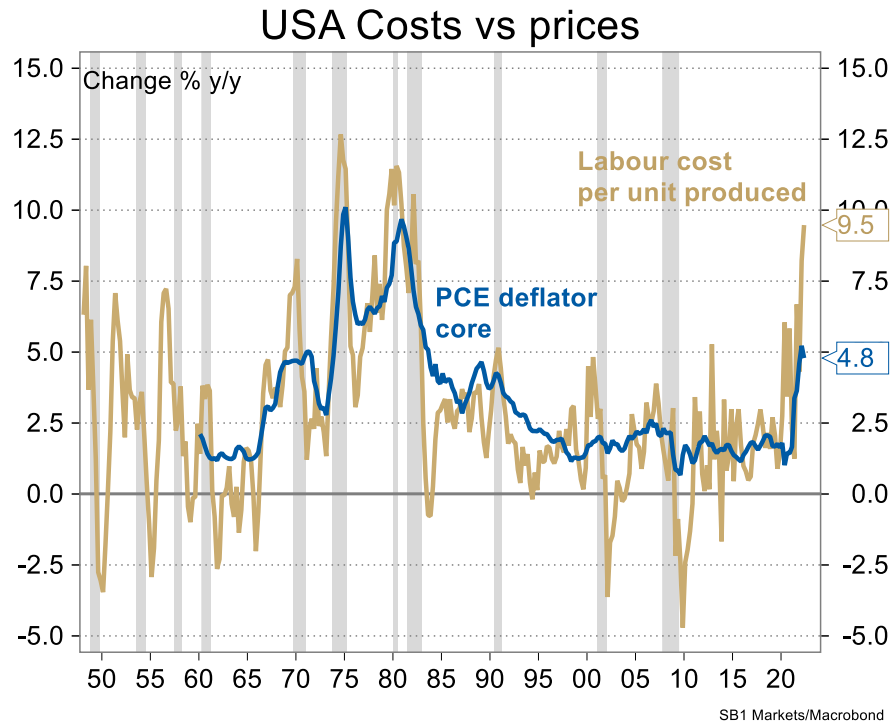
USA Productivity



USA Productivity, costs & prices

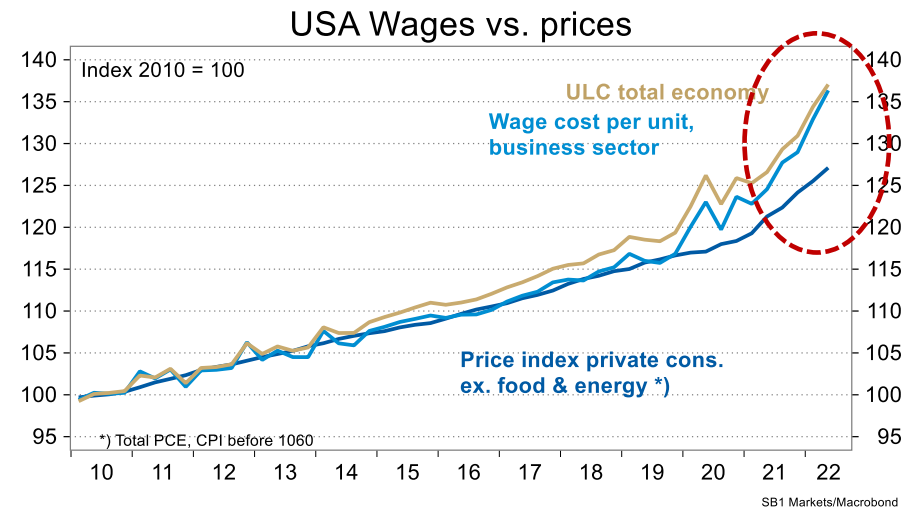
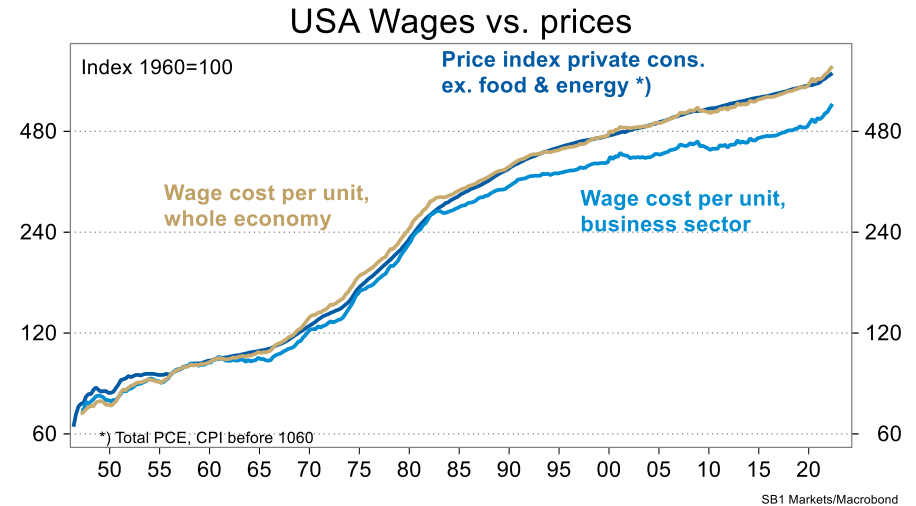
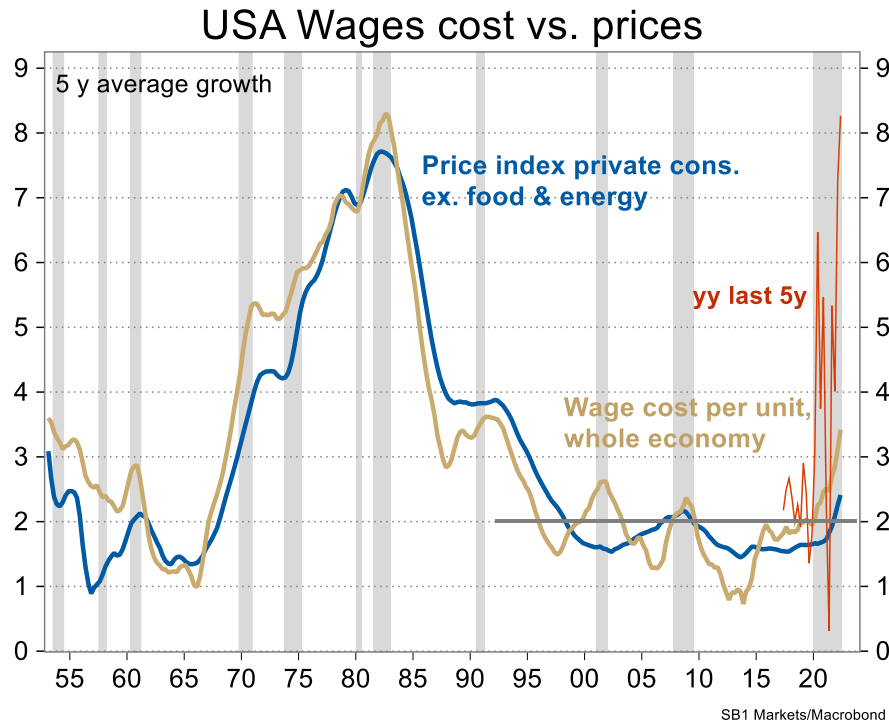


Labour costs per unit produced has grown in a rather unusual way



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

Still risk vs core inflation given the cost surge recent quarters

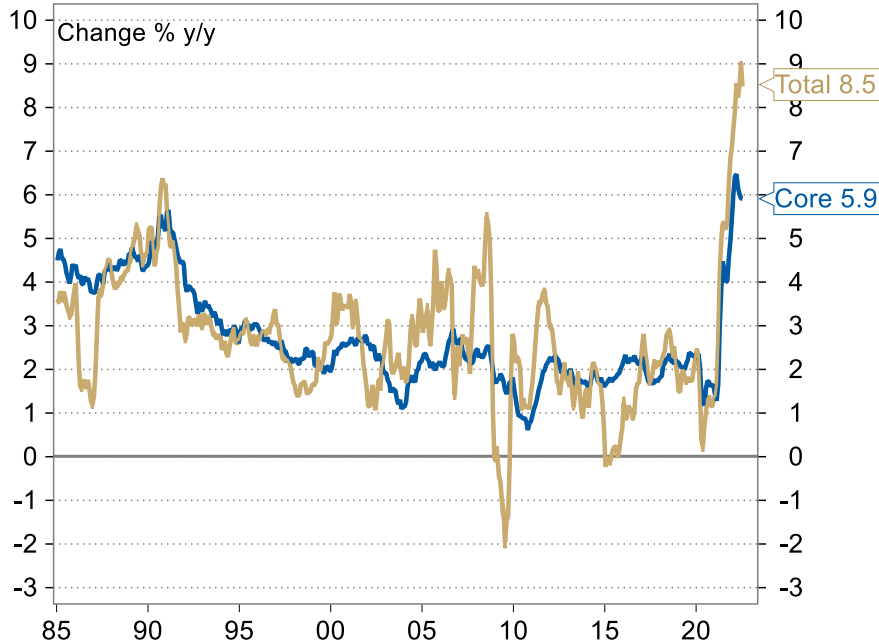


- Costs have climbed faster than core prices since before the pandemic

Finally, a positive CPI surprise: Inflation 0.2 – 0.3 pp lower than expected

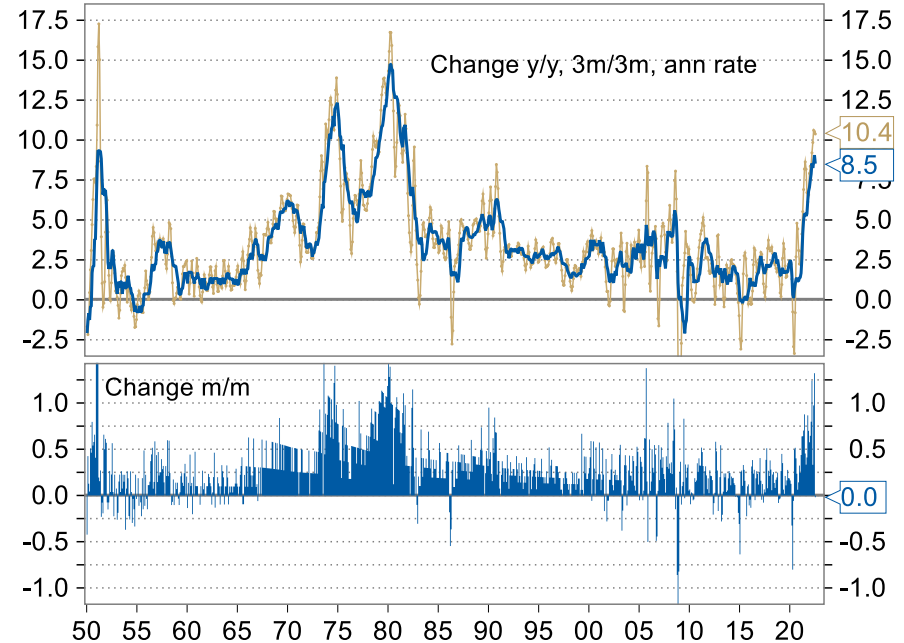
Inflation is slowing but remains very high, and broad

USA Consumer Price Index



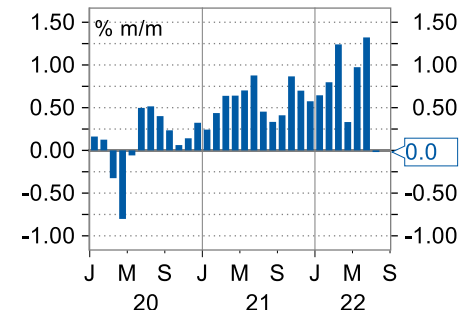
SB1 Markets/Macrobond

USA CPI



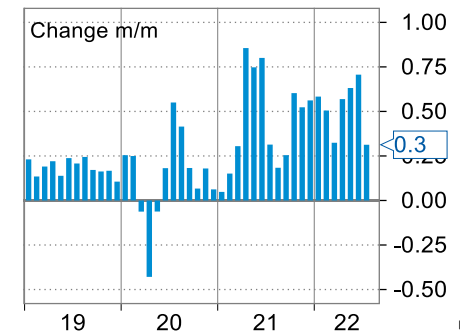
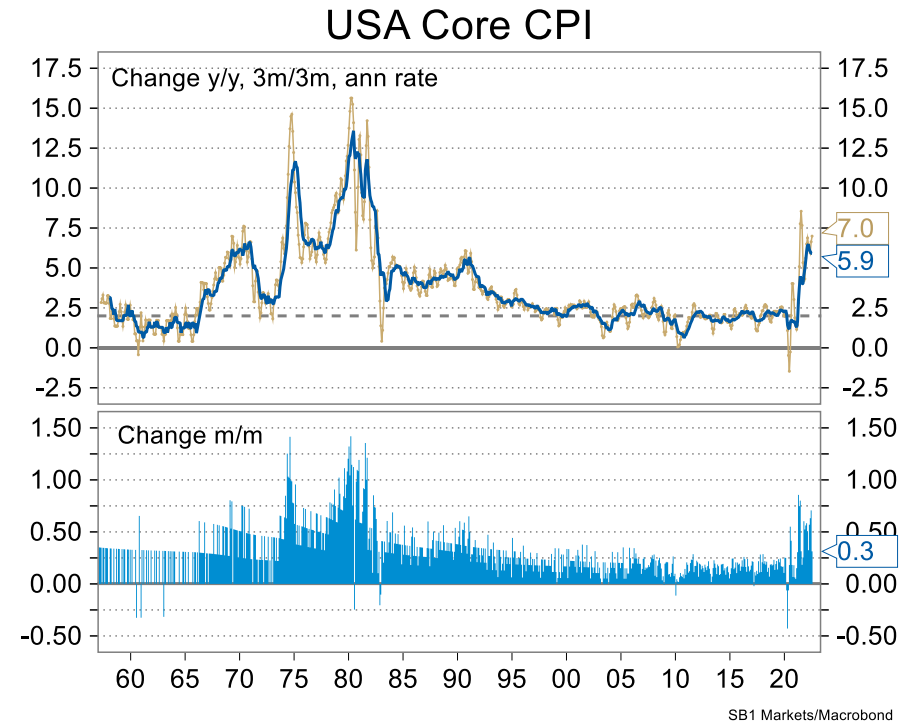
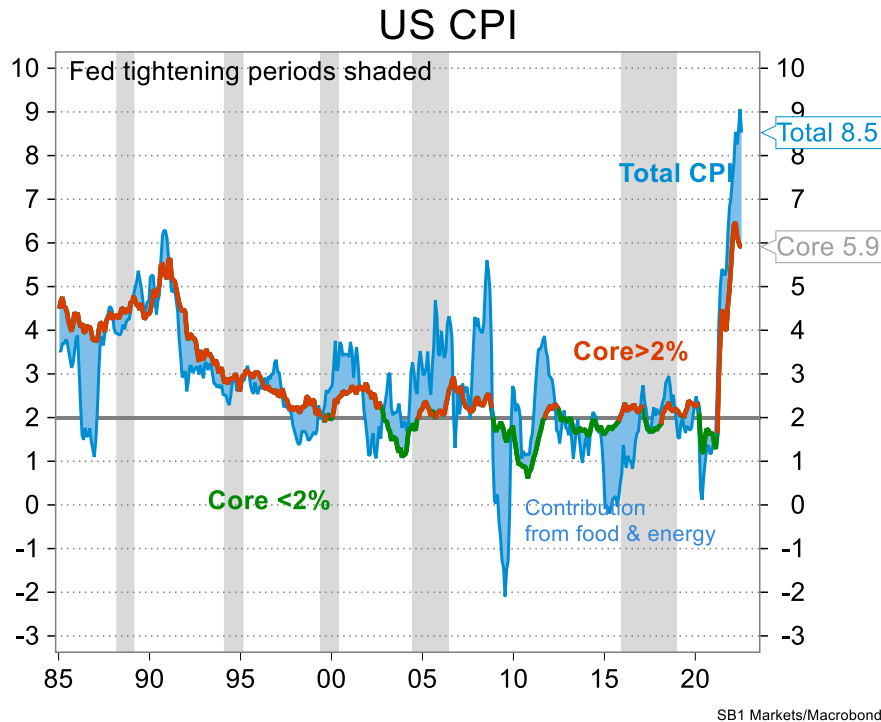
SB1 Markets/Macrobond

- **Headline CPI** slowed 0.6 pp to 8.5% in July, expected down to 8.8%. Prices were flat m/m, with a substantial contribution from lower gasoline prices
- Energy prices fell by 4.6% (gasoline 7.7%) – and a further decline in August is very likely. Energy is still contributing 2.4% to the headline rate
- **Food prices** rose 1.1% m/m and are up 10.9% y/y, lifting the CPI by 1.5%. (Food at home is up 13.1%!). Food prices fell at the PPI level in July, some hope for August or September CPI prices?
- **Surveys** report further price increases the coming months, but at a somewhat slower pace than the over the prev. months
- The 'peak' CPI (together with peak PPI as well as the peak Imported goods inflation) made a 50 bps hike in September more likely vs. a 75 bps hike which was discounted after the strong employment report the previous week
- We still markets focus too much on actual inflation, especially driven by commodity prices, and too little on cost inflation, *check the previous pages!*



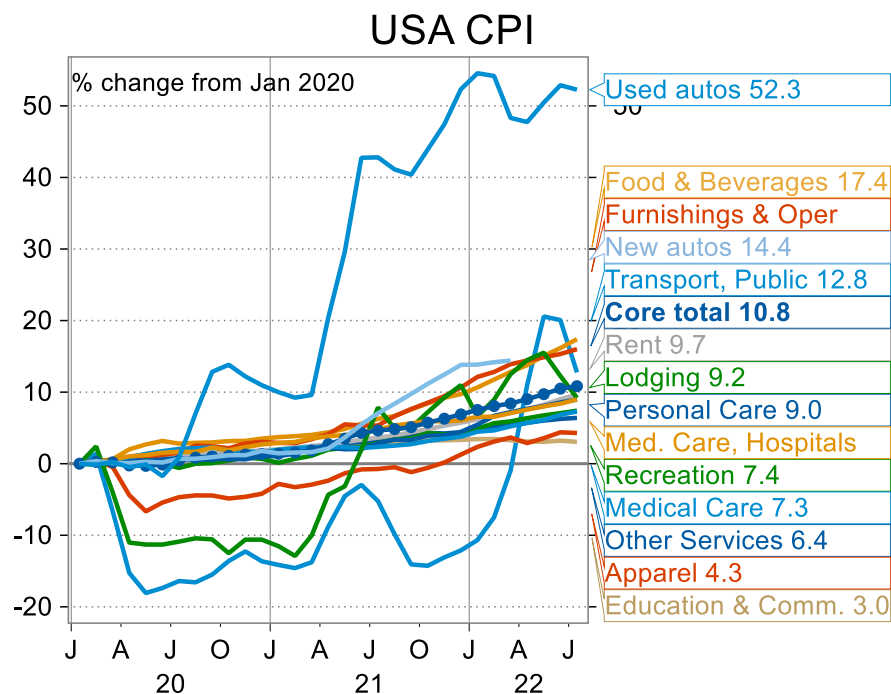
Core inflation 0.2 pp lower than expected, unchanged at 5.9% y/y

Prices rose 'just' 0.3% m/m, the lowest since March. The 3m/3m accelerated by 0.4 pp to 7.0%



Besides energy, public transport (airline fares), lodging slowed core inflation

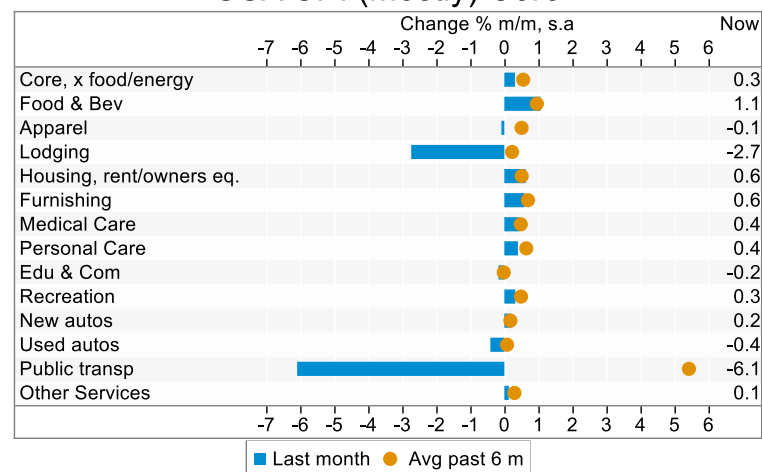
Public transport prices down 6.1% m/m, lodging (hotels) prices down 2.7%



SB1 Markets/Macrobond

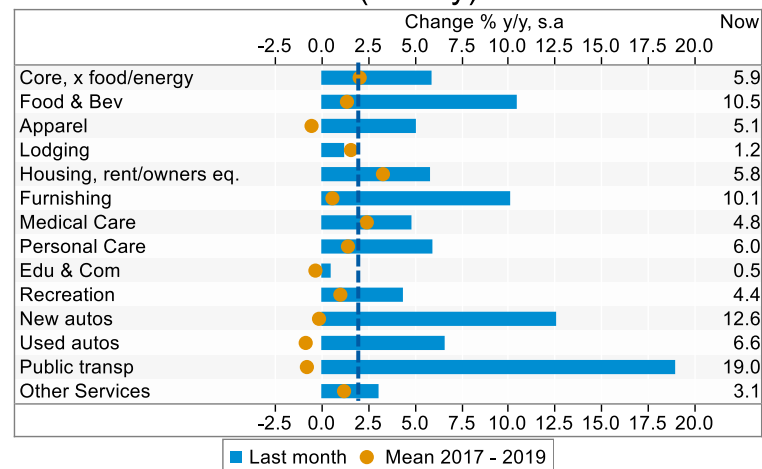
- Most sectors report inflation above 2% from before the pandemic, just apparel education & communication below
- All but two sectors, apparel and education & communication, are up at more than a 2% pace from before the pandemic
- Just 2 sector are up less than 2% y/y: lodging and edu & com.
- One day: A huge downside to used auto prices – and hopefully for some others as well, like food and furnishing prices

USA CPI (mostly) Core



SB1 Markets/Macrobond

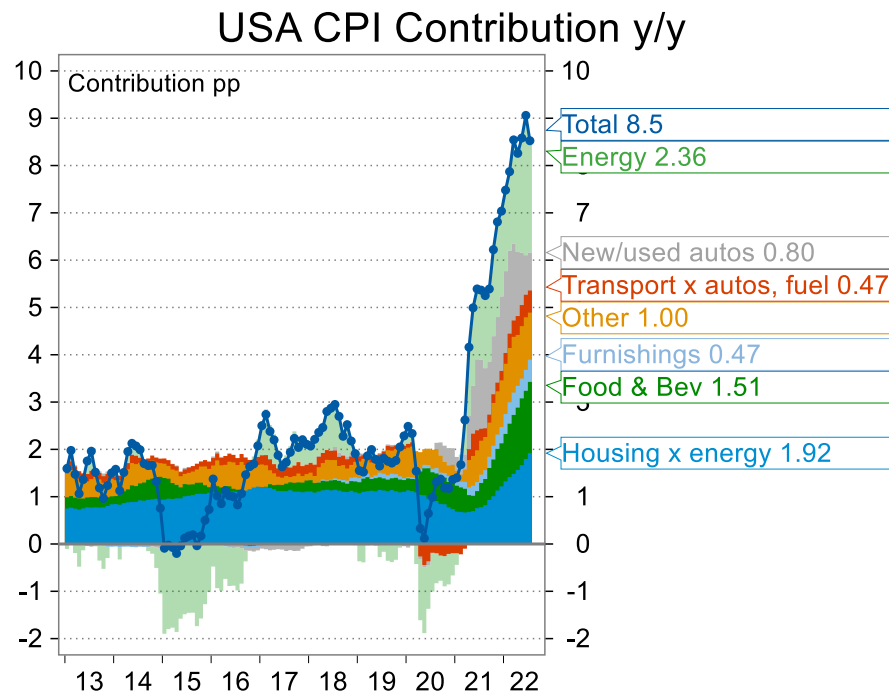
USA CPI (mostly) Core



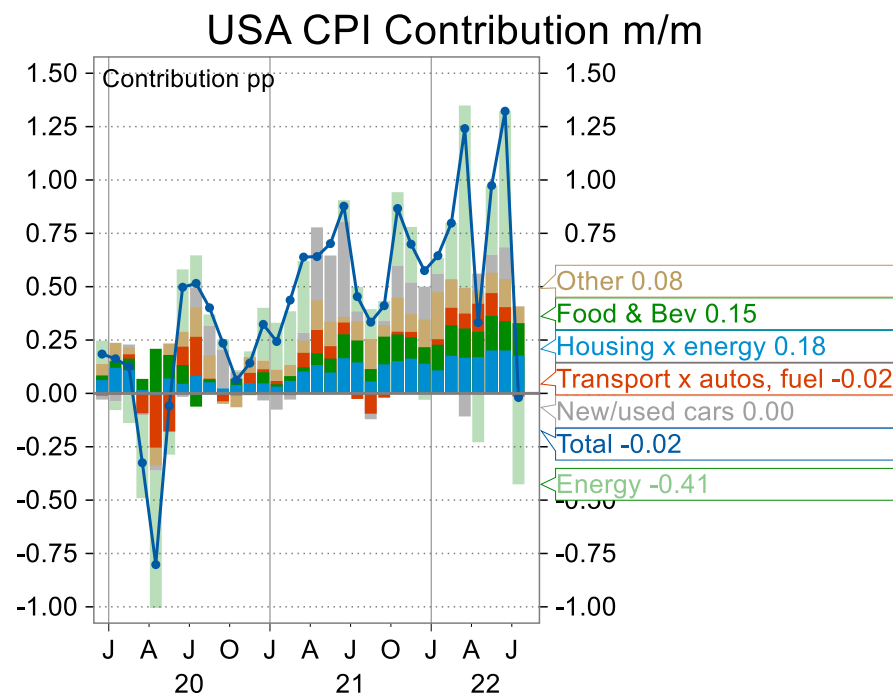
SB1 Markets/Macrobond

Transport (incl. used cars) & energy explain 3.6 pp of the 8.5% lift in total CPI

The problem: The rest is up by almost 6% y/y. Housing alone contributes 1.9 pp. Food 1.5 pp



SB1 Markets/Macrobond



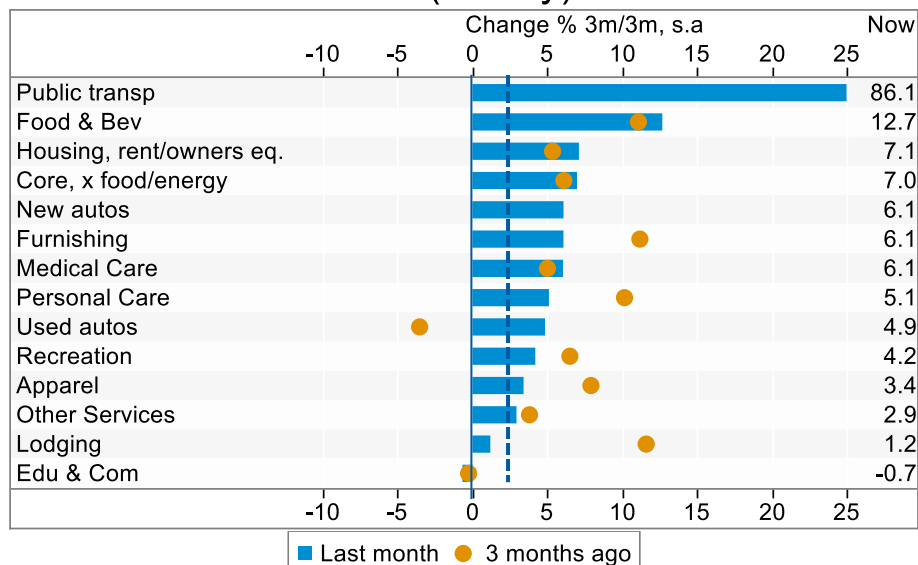
SB1 Markets/Macrobond

- **Energy** prices fell in July, and will very likely decline further in August
- **Excluding** the 3.6 pp contribution to the headline CPI from energy & transport, **“remaining” inflation** has accelerated rapidly
- **Housing x energy** (and x lodging) is contributing by 1.9 pp, though partly due to a low base one year ago. Rents as measured in the CPI are up almost 6% y/y, but the upside is probably now limited

Inflation measured 3m/3m: Mixed news – but more slowing than accelerating

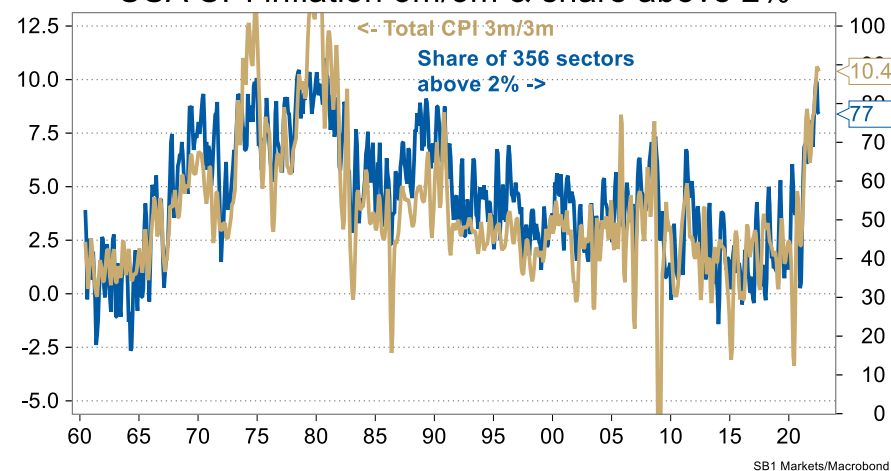
Prices are up at a 10.4% pace, and a large majority of sectors are reporting high underlying inflation

USA CPI (mostly) Core

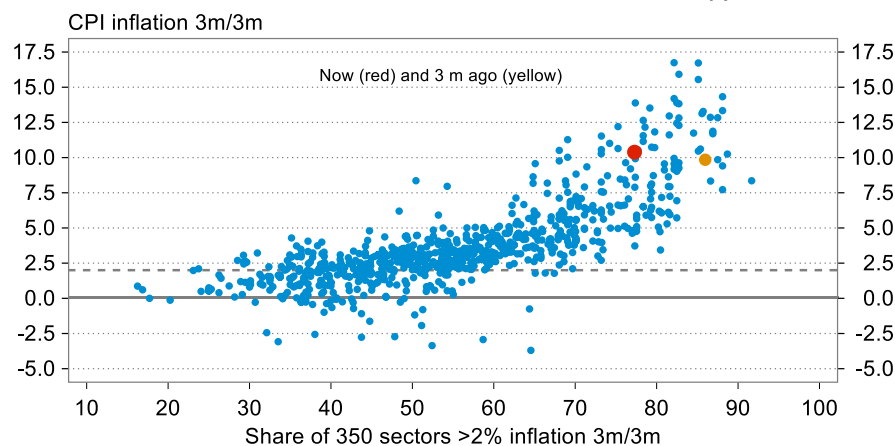


SB1 Markets/Macrobond

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

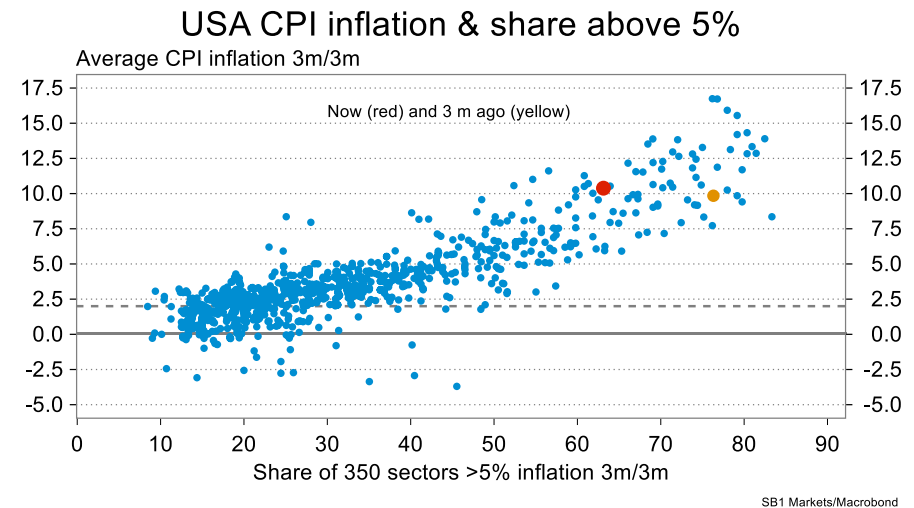
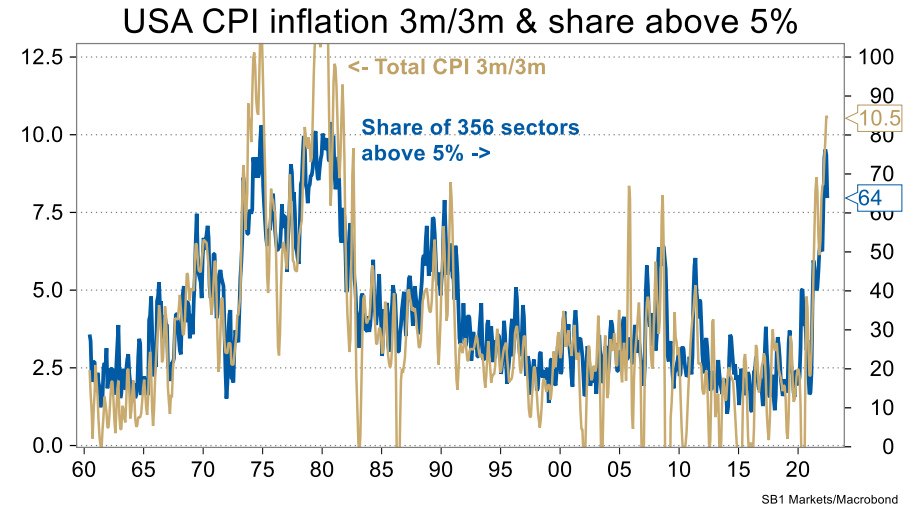


USA CPI inflation & share above 2%

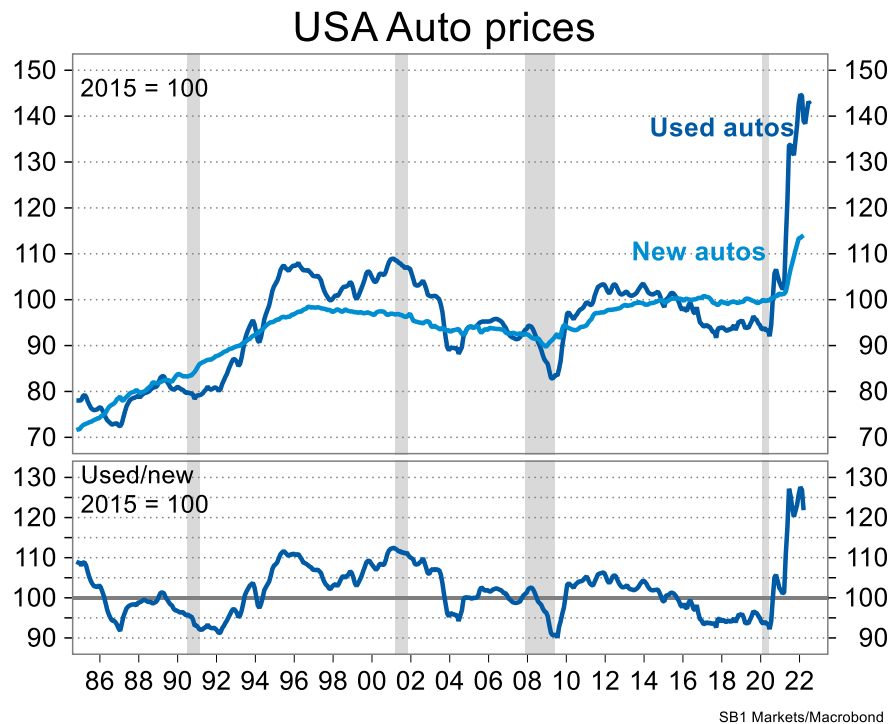


- Almost 80% of sub-sectors are up more than 2%, and 64% are up more than 5% (!)
- However, more sectors are reported a slowdown in underlying (3m/3m) pace of inflation

... and 2/3 of the CPI is up by more than a 5% pace recent months



Second-hand car prices up in July – but has very likely peaked

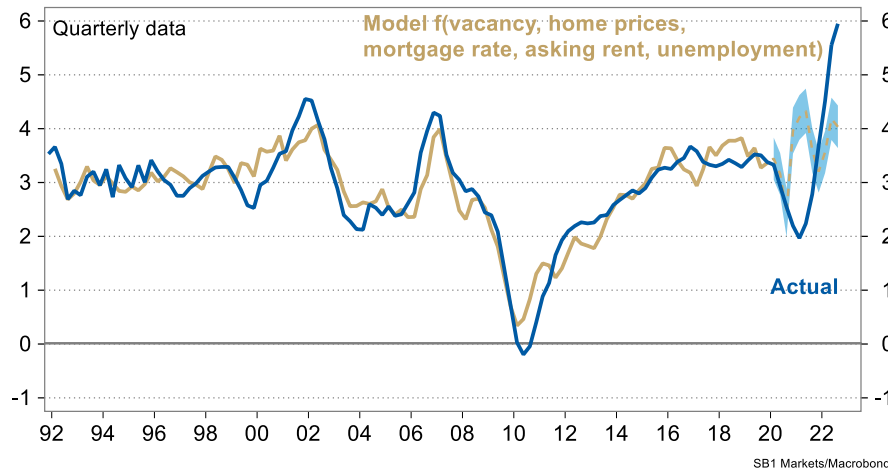


- Production of new cars is still way below demand – but prices are more up in the US than elsewhere
- At one stage, at least used auto prices will 'collapse', down to a normal level vs. new car prices – and there is a substantial downside for new cars as well

Rents are still accelerating, though from a low level last year. Will soon peak?

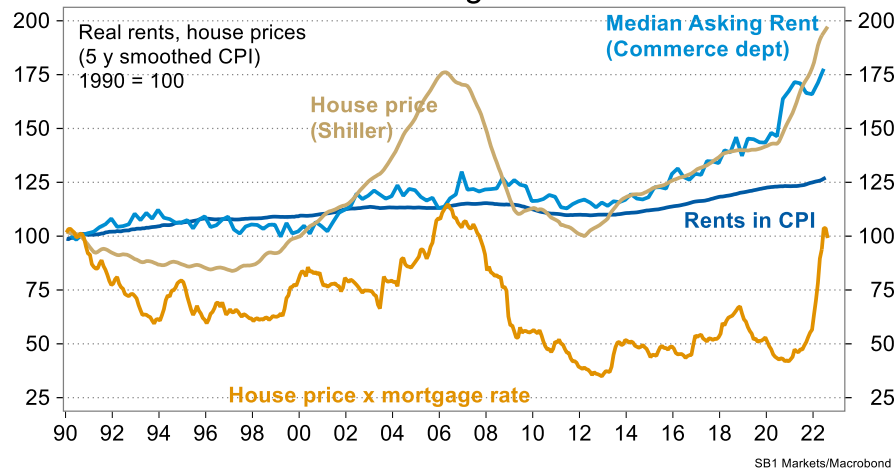
Rents are up 6% y/y, while signals from the rental market are mixed

US CPI Rent model

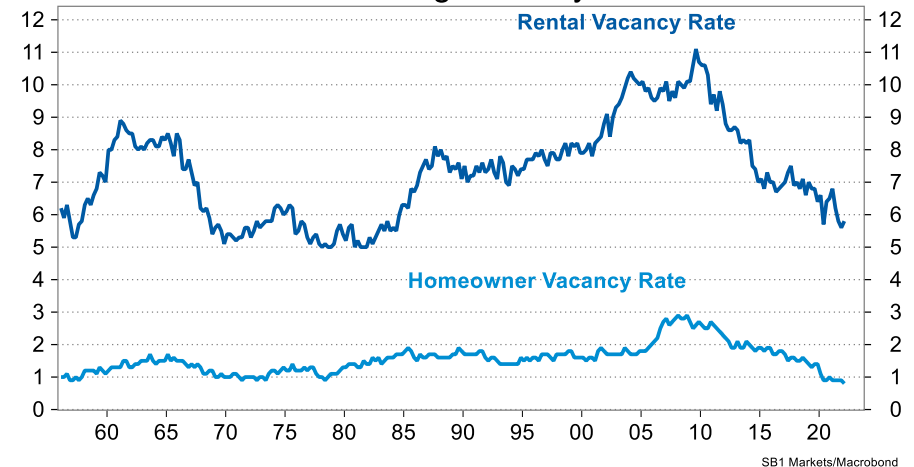


- **The official (Commerce dept) rental asking price** is on the way up again following a slowdown last autumn
- **House prices** are up 20%, and the owner cost (price x mortgage rate) has almost doubled
- **The rental vacancy rate** has fallen sharply recent quarters, to ATL. The **homeowner vacancy rate** is trending down, and is also a record low level
- **Rent inflation measured in the CPI** has accelerated to 5.8%, though from a base below trend last year and past months rents have been climbing at a 8-9% pace (m/m), and total housing costs (ex energy) contributes 1.9 pp to headline annual inflation!
- **Our model**, when assuming a market slowdown in rental asking price inflation and a rapid decline in existing house price inflation the coming quarters, and a flattening of the 30 y mortgage rate at 5.2%, signals a decline in rent inflation to below 4%. However, the outlook for the rental market is highly uncertain

USA Rents & housing market indicators



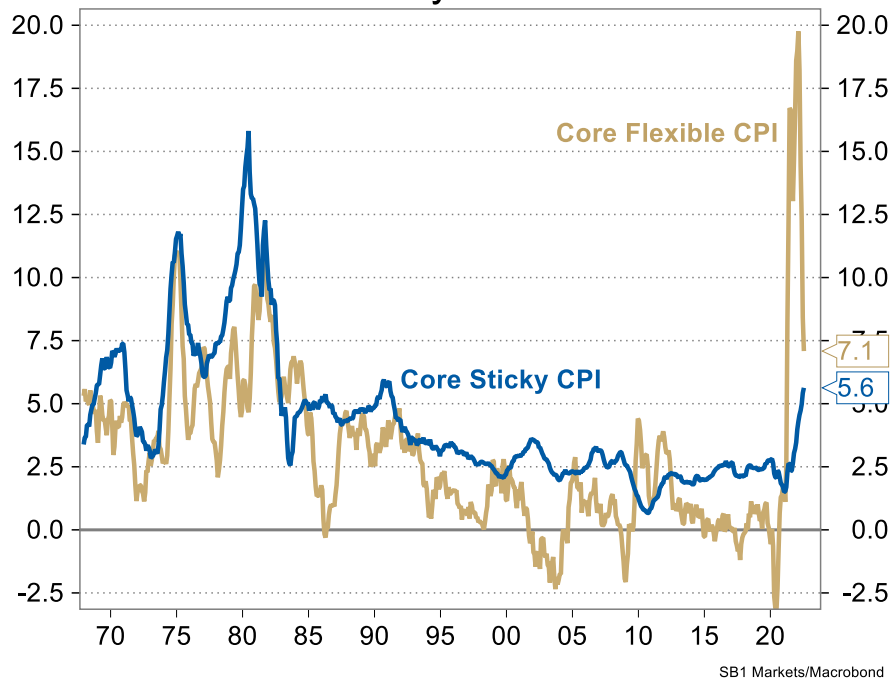
USA Housing vacancy rates



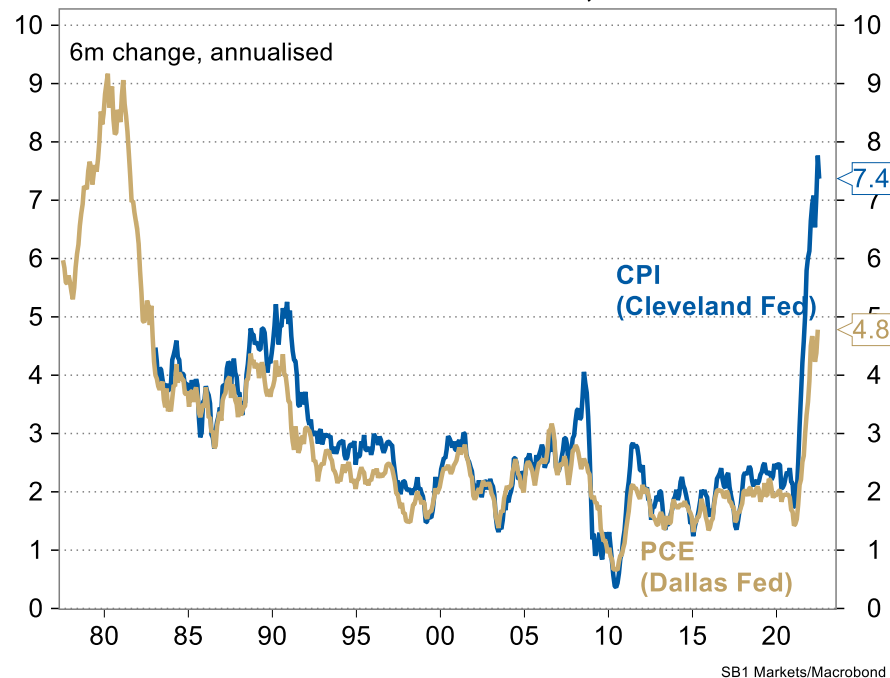
Flexible prices are coming rapidly down *but sticky prices still on the way up*

They are up 5.6% (90% of the CPI). Trimmed price measures are still lofty – but are down from peak

USA Core sticky vs. flexible CPI



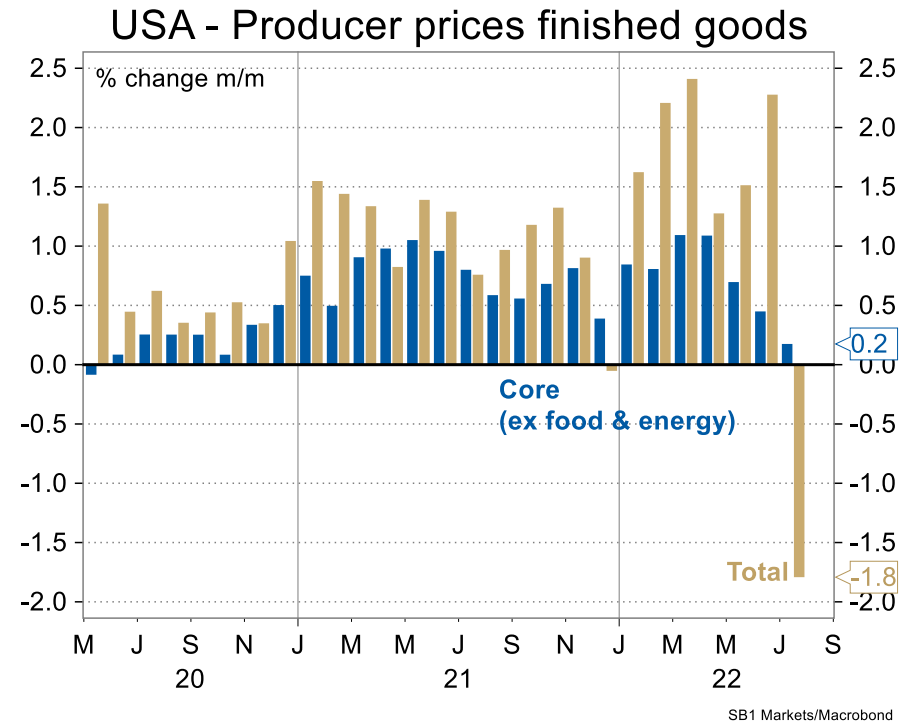
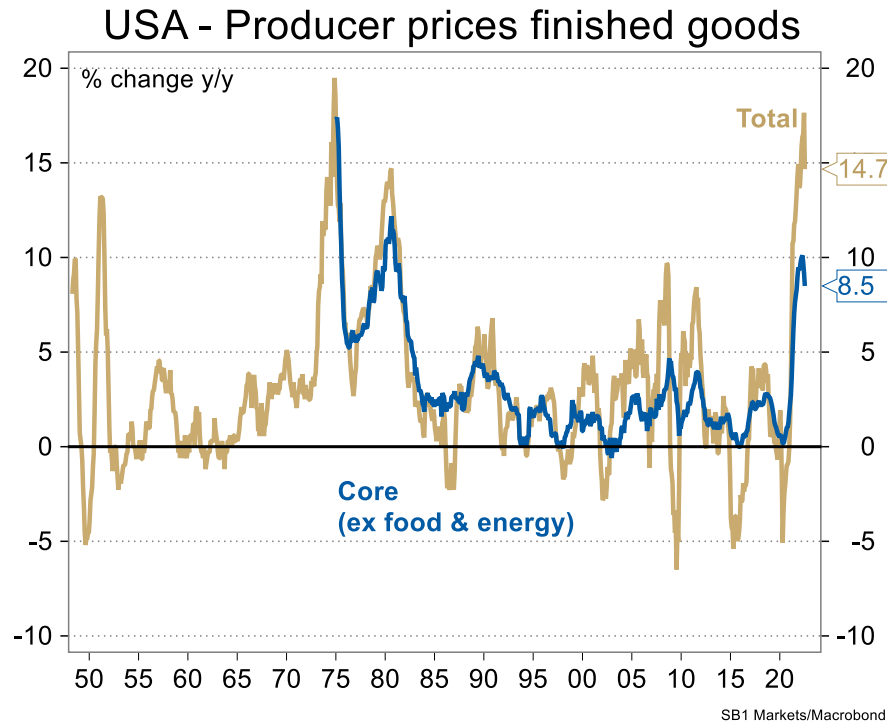
USA Trimmed median CPI, mean PCE



- The Cleveland Fed **trimmed median CPI** is up at a 7.4% pace over the past six months, down from 7.8% in June – but still miles above anything seen before (data from 1983). Dallas Fed's **trimmed mean PCE** was up 4.8% in June, at ATH
- Almost all of the initial lift in core CPI was due to prices of good & services that often fluctuate, with rapid price increases followed by deep price cuts. These prices are '**flexible**' and represent some 10% of the core CPI. The core flexible CPI is up 7.1% y/y, down from almost 20% at the peak! But still higher than anytime since 1981
- The new challenge: The **sticky components** (90 % of the core CPI) are up 5.6% y/y (up from 5.4% in June). The surge in the sticky index is much more worrisome for the inflation outlook than the ups and downs in the 'flexible' CPI

Peak inflation: The finished goods PPI fell 1.8 % m/m as energy prices fell sharply

However, the core PPI also slowed to 0.2%. In addition: core & intermed. crude material prices slow

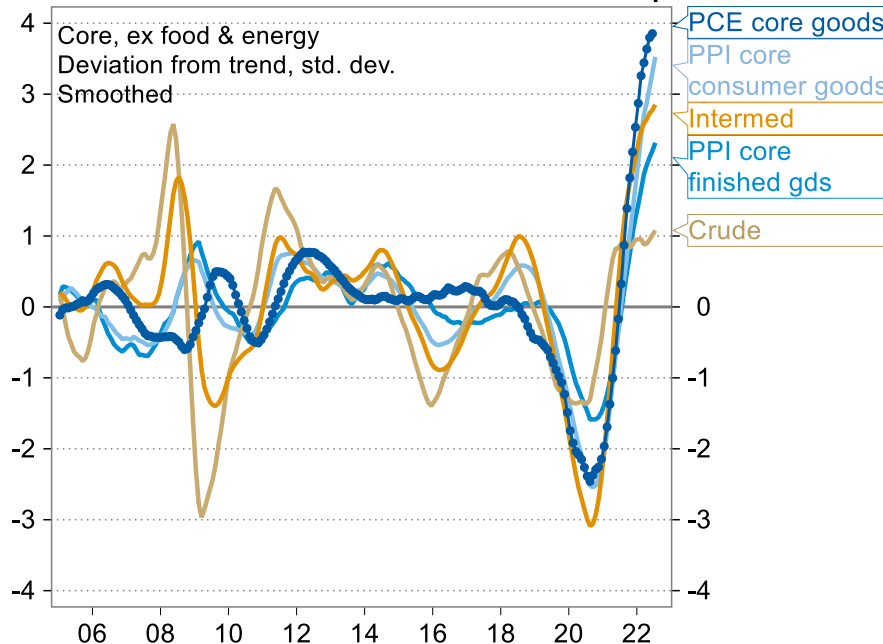


- **The headline finished goods PPI** fell by 1.8% in July, following the 2.3% lift in June. The annual rate slipped 3 pp to 14.7%. Energy prices fell 9% and food prices by 0.9%
- **Core finished goods x food & energy PPI** rose by 0.2%, down from 0.4% in June. The annual growth rate fell by 0.6 pp to 8.5%
- **Crude material prices** are on the retreat – normally the first sign of easing price pressures in the supply chain, and now intermediate material prices are flattening too
- **Core consumer goods prices** (PCE, like in the CPI) have already climbed more than usual vs. PPI prices (partly due to second-hand auto prices, not included in the PPI), limiting the upside risk
- **The 'official' total final demand PPI**, including services, fell by 0.5% m/m in July, following the June surge. The annual rate at 9.7% was 0.7 pp lower than expected!

Crude core material prices are yielding

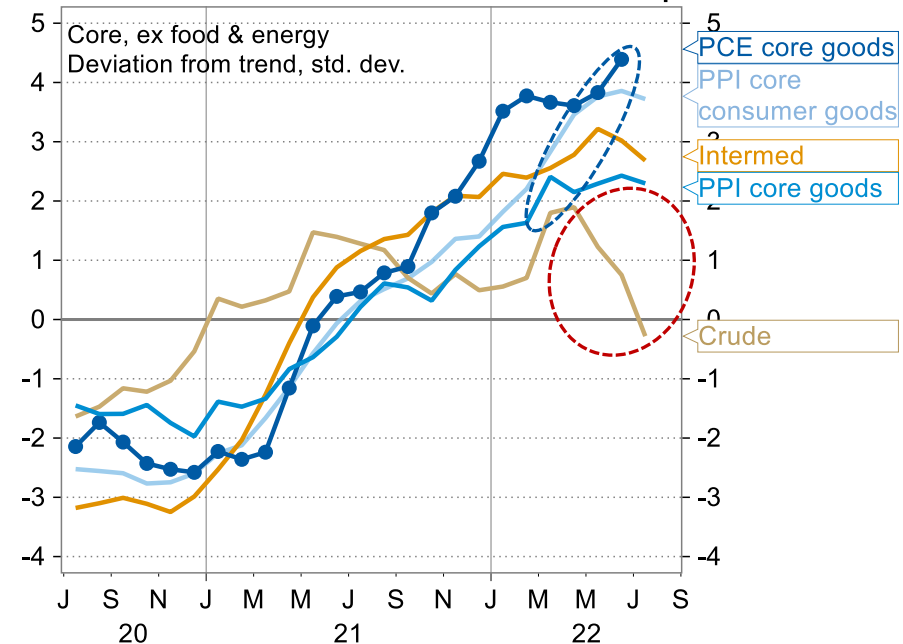
And now intermediate goods follow suit – and the core consumer goods PPI grows in line with trend

USA Producer & consumer prices



SB1 Markets/Macrobond

USA Producer & consumer prices



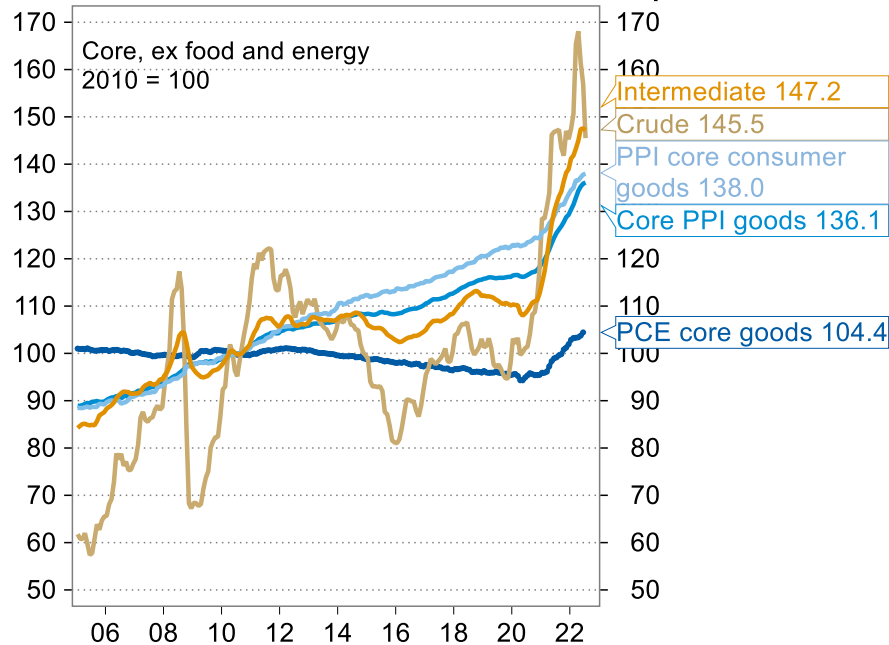
SB1 Markets/Macrobond

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

Crude core material prices are yielding

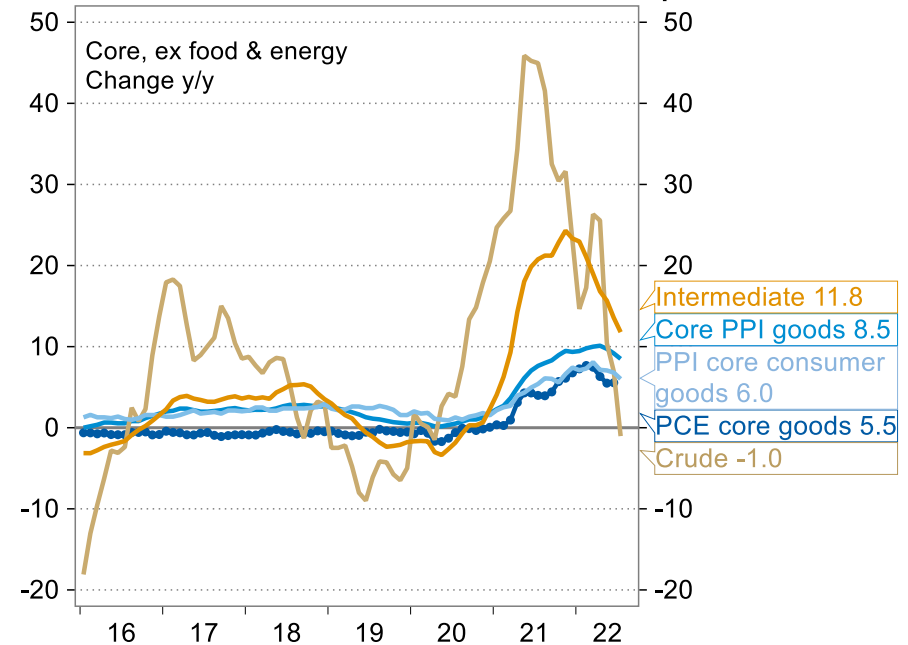
(level & growth rates, same series as at the prev page)

USA Producer & consumer prices



SB1 Markets/Macrobond

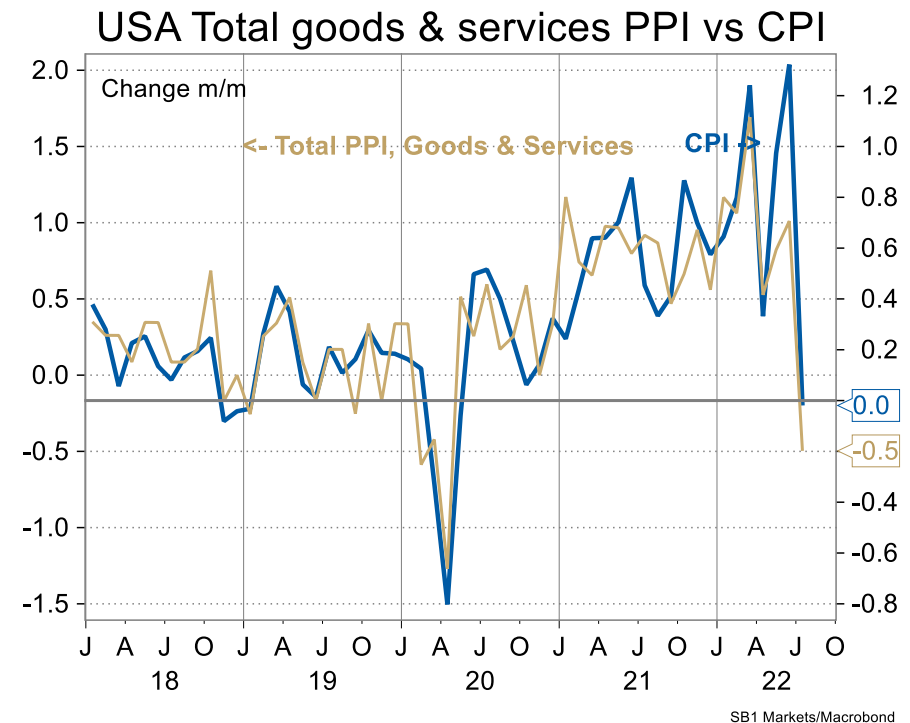
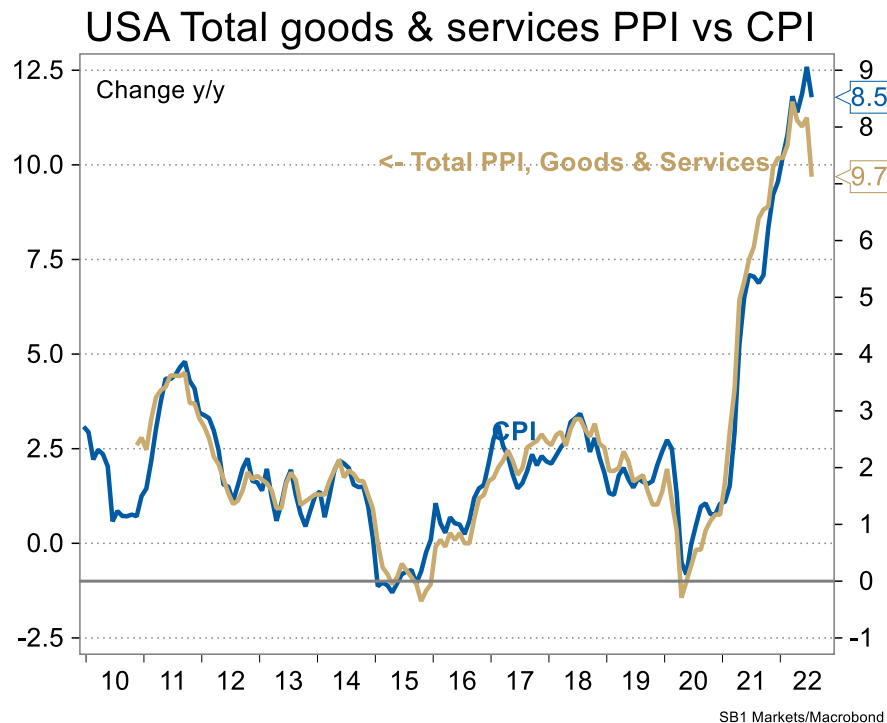
USA Producer & consumer prices



SB1 Markets/Macrobond

Total PPI (services incl.) -0.5% m/m, and the annual rate down 1.5 pp to 9.7%

Another peak inflation message

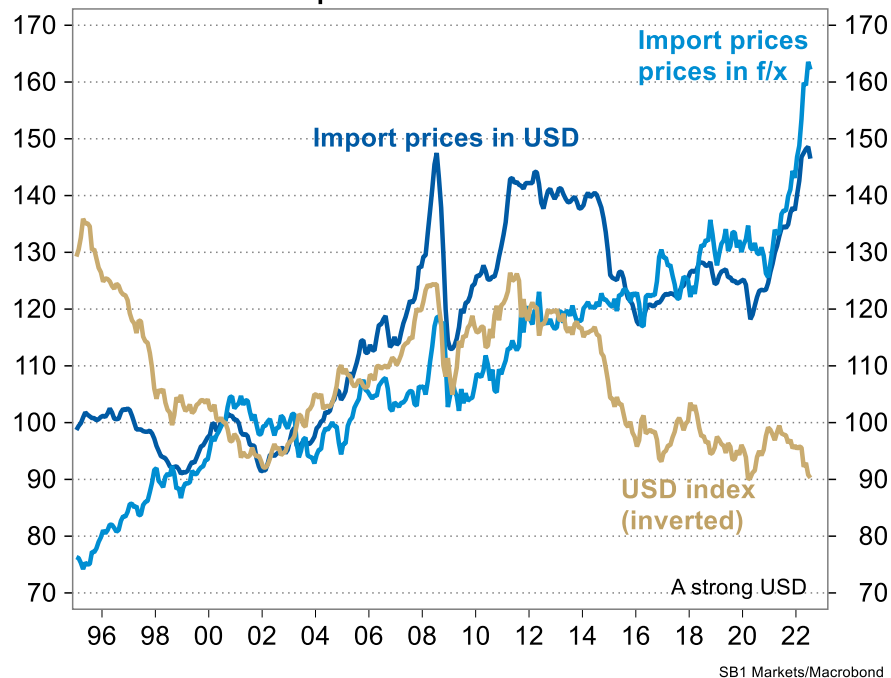


- The correlation between the total PPI, which includes all sorts of services in addition to goods, and the CPI is very close. The current 9.7% annual growth rate, signals a further decline in CPI inflation the coming months

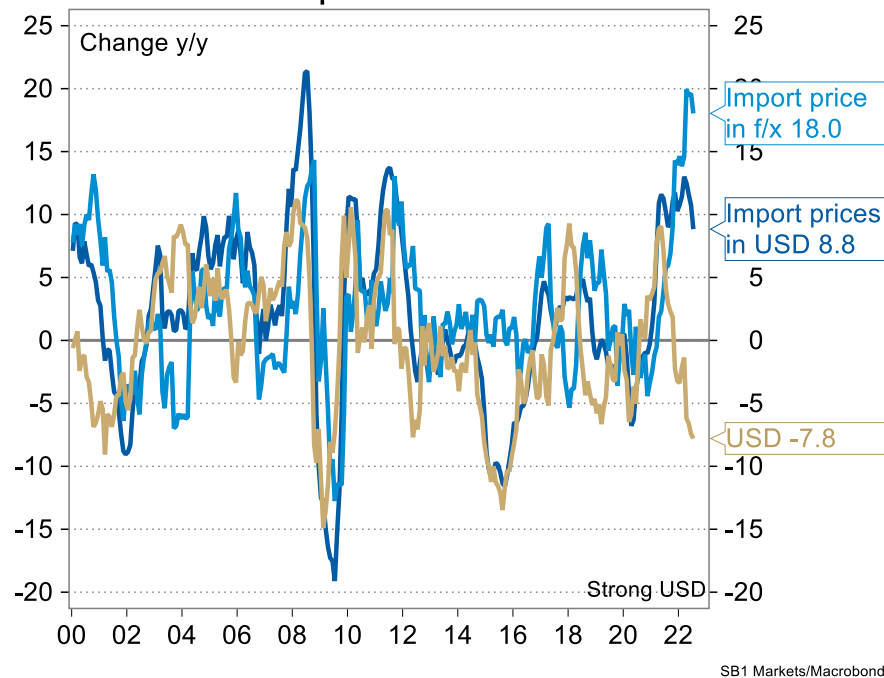
Peak import prices too – but they are not that important

Import prices are up 8.8% y/y, down from the 13% peak in March. A strong USD has cut the bill by 8%

USA Import Prices & the USD



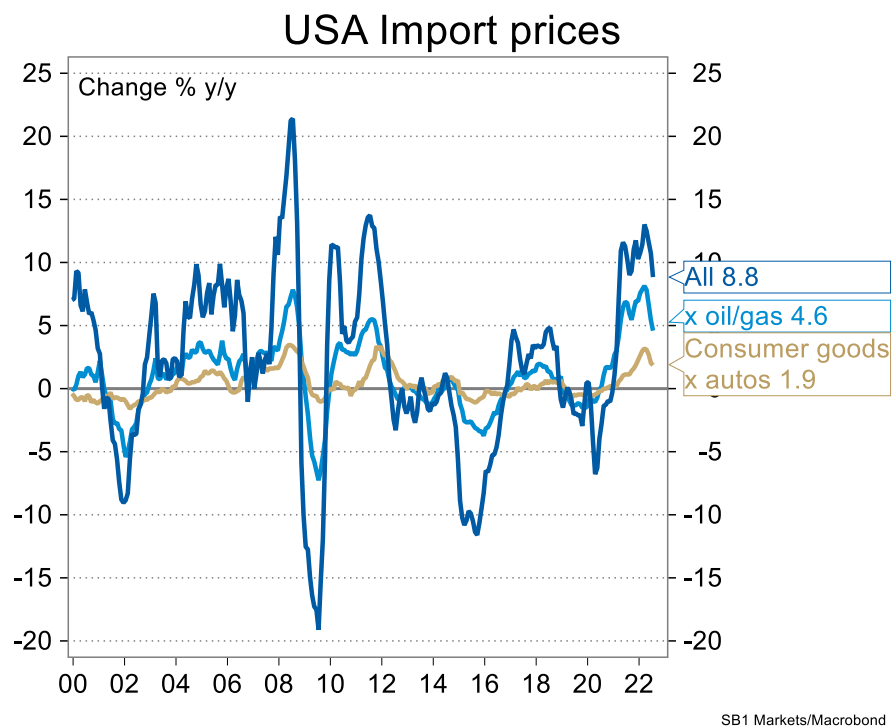
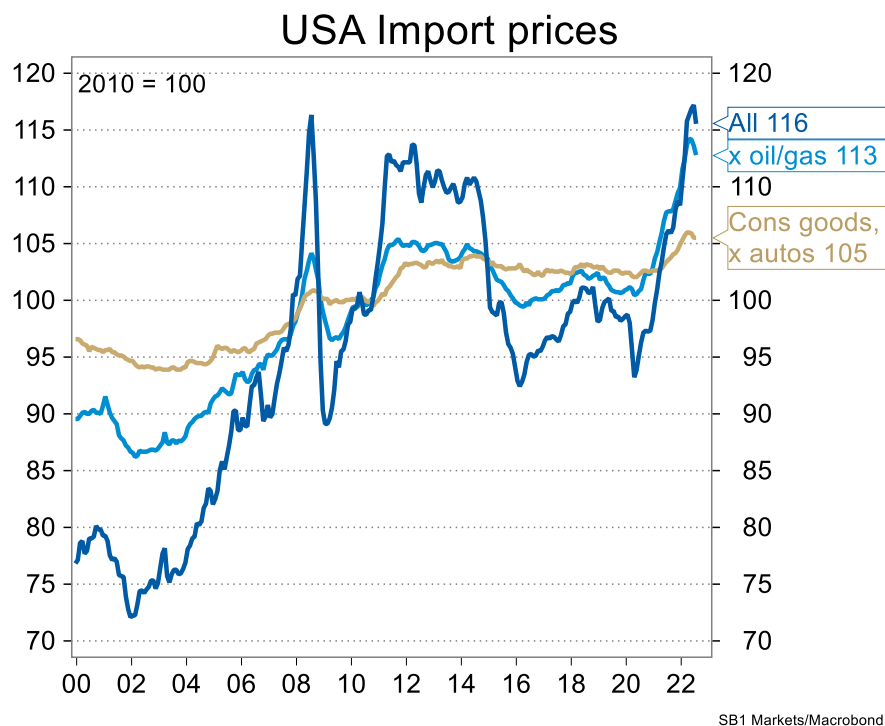
USA Import Prices & the USD



- Import prices, measured in sellers' currencies have been accelerating past months, to 19% y/y (which should be appreciated by the sellers 😊)

Prices are up 4.6% ex oil/gas, while consumer goods ex auto are up just 1.9%

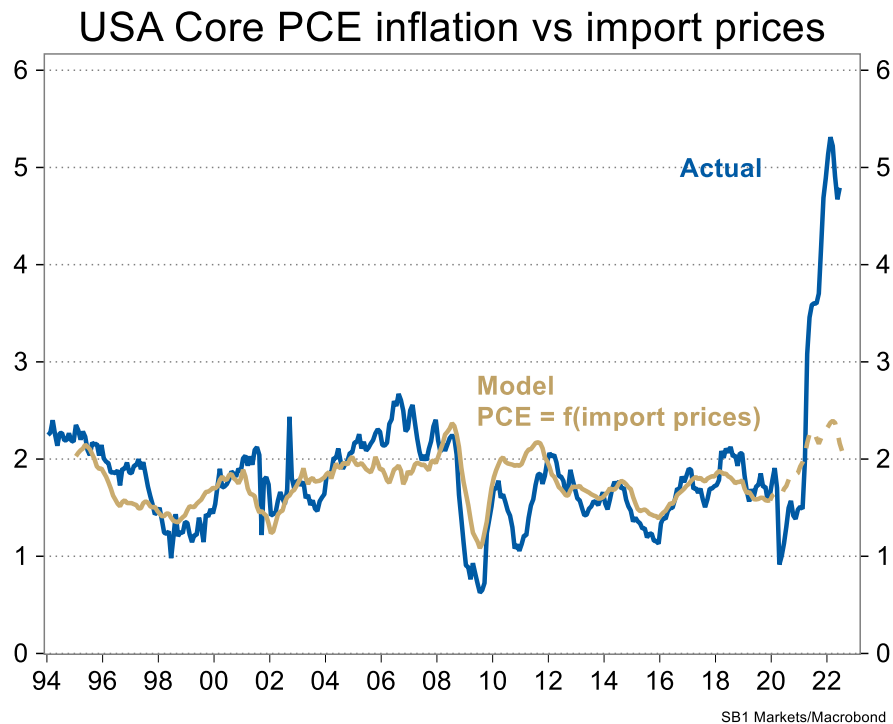
Total import prices fell 1.4% m/m, and by 0.7% ex oil & gas. Consumer goods were flat (and 'low')



- The total was expected down 1%

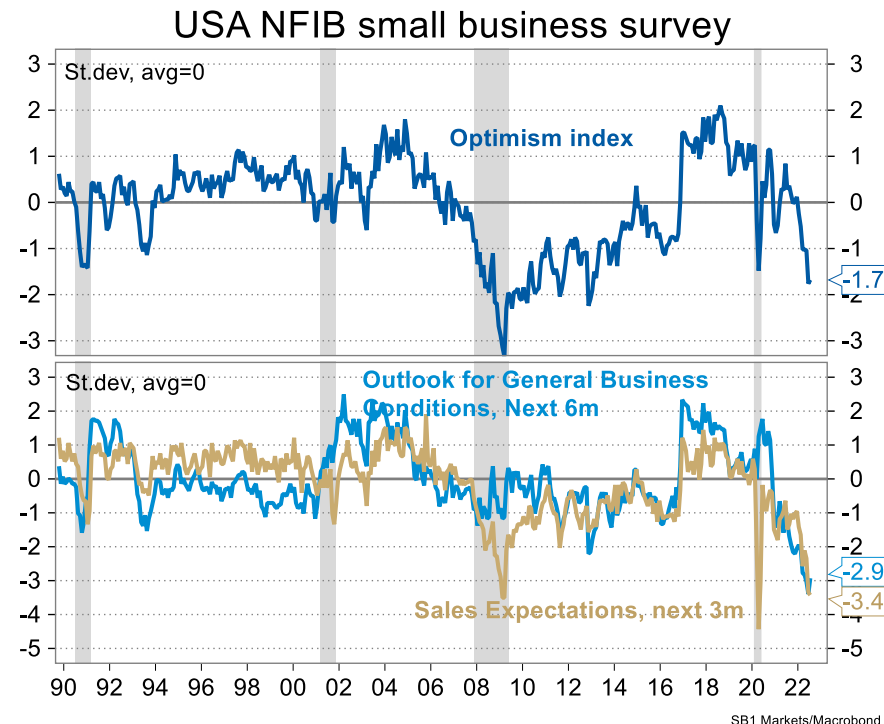
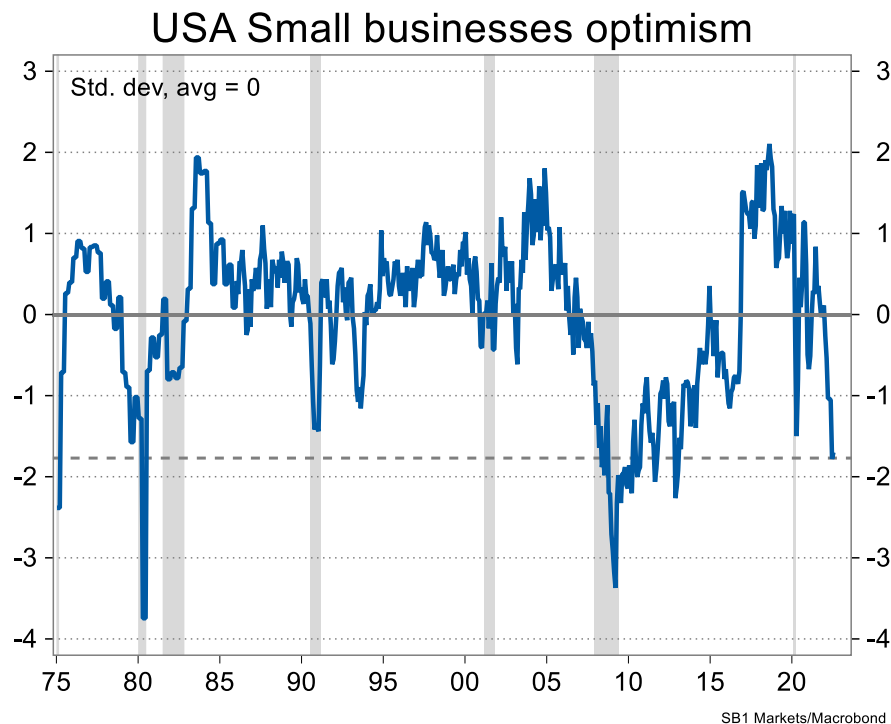
There is some impact to domestic inflation from import prices

However, import prices cannot in any way explain the recent surge in US inflation



Small businesses optimism marginally up in July, still at a very low level

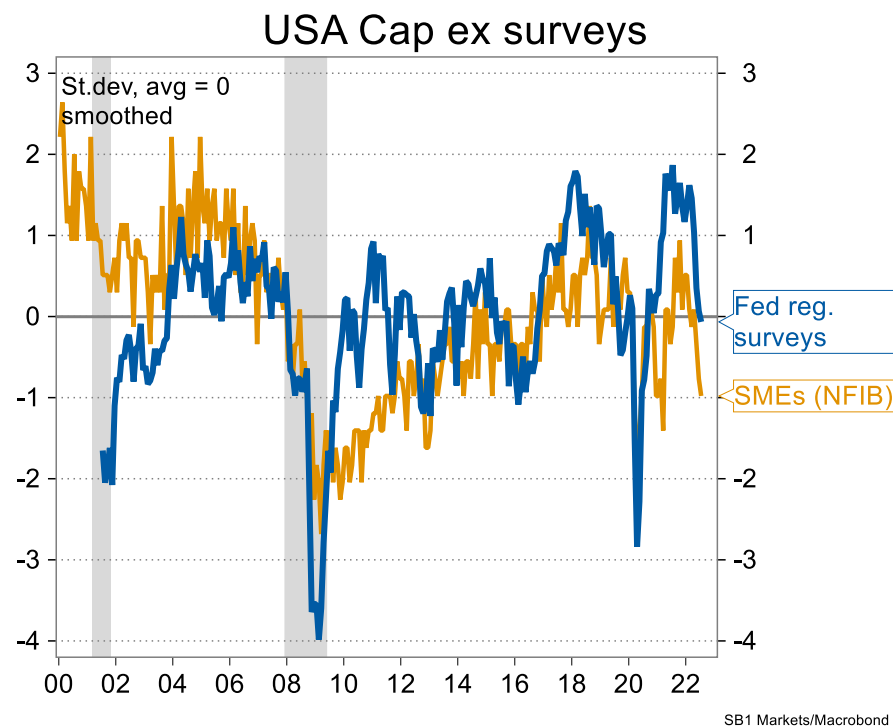
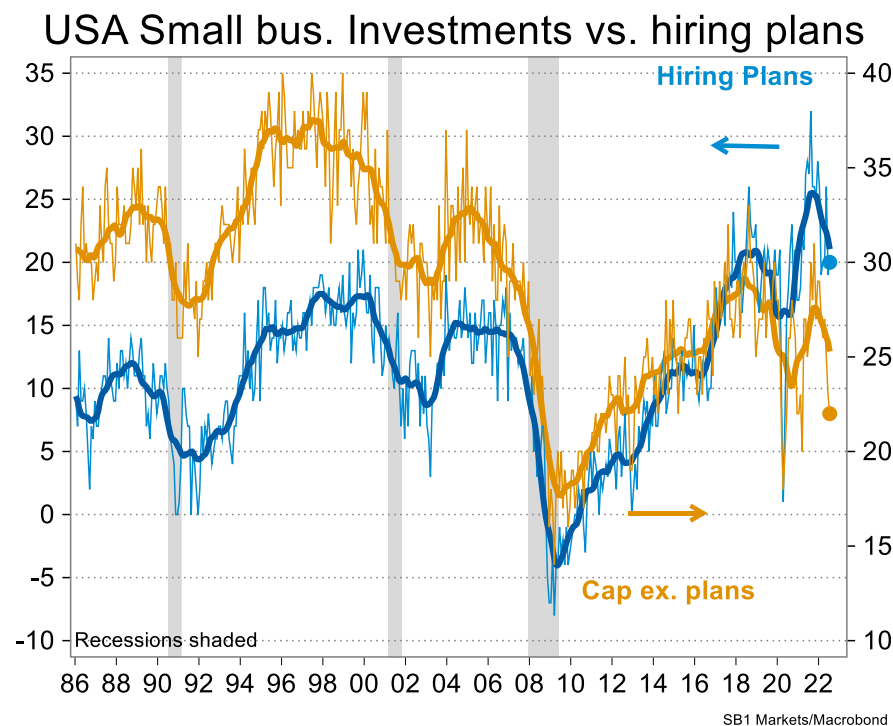
The optimism is 1.7 st.dev below par, and the outlook is even worse, at 2.9 below



- The **NFIB optimism index** added 0.4 p to 89.9 in July expected down 0.2 p. The level equals 1.7 st.dev below average. **The outlook for the next 6 months** also rose marginally, but is at a very low level, 2.9 st dev, up from ATL at -3.0 in June. **Sales expectations** are 3.4 st.dev below avg, rather unusual
- **Inflation, lack of qualified labour and labour costs** are still the main worries for the SMEs. However, some more companies report that **competition or poor sales** are worries but the share is still very low. Still, that was sufficient to cut the share of companies that **plans to lift prices** by 12 p to 37%. That is not a low share (the average is at 21%), and signals continued inflation far above the past 10 y average
- **Investment plans** fell were cut further down. **Hiring plans** fell to, but remain aggressive – and companies still report they are not able to **fill their vacancies**, and a close to a record share of SMEs report they plan to **lift compensation further**. So it ain't over yet

The SMEs (and others) are cutting back on their investment plans, not hiring plans

Hiring plans climbed up to a very high level

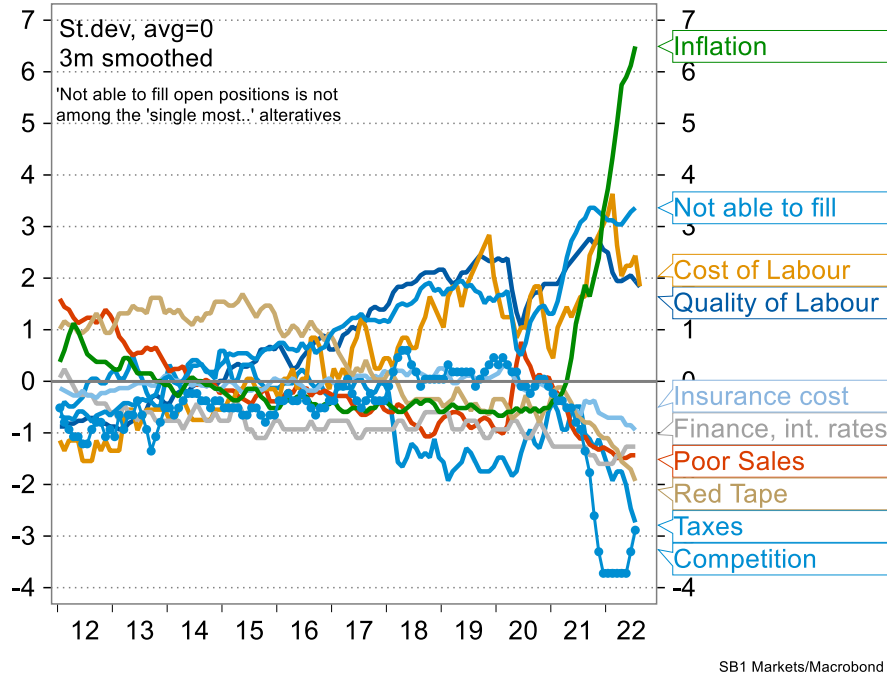


- The NFIB survey now report investment plans far below average
- Other (regional Fed) investment surveys are falling rapidly but remain above average

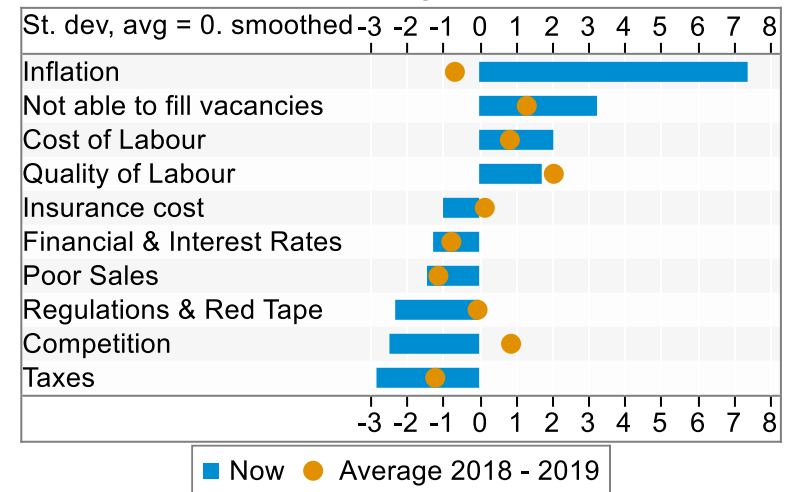
Slightly more companies say that poor sales & competition is their main worry

... but still extremely few. Inflation is the biggest challenge (even if the businesses are 'selling' it)

USA Small businesses Single most problem



Small businesses (NFIB) What's the problem?



SB1 Markets/Macrobond

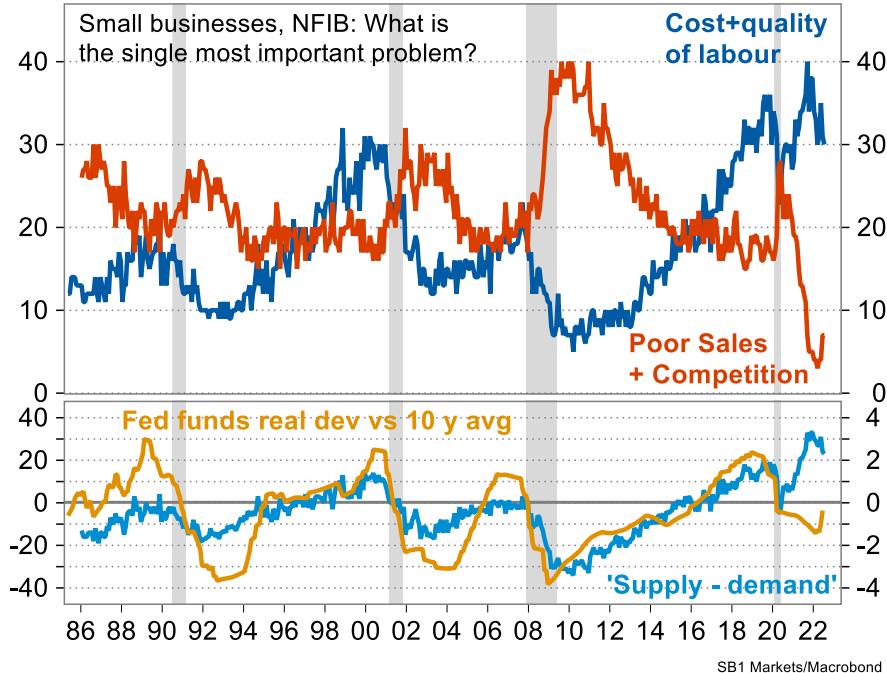
- Companies still report they are constrained from the **supply side**, not from the **demand side**

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

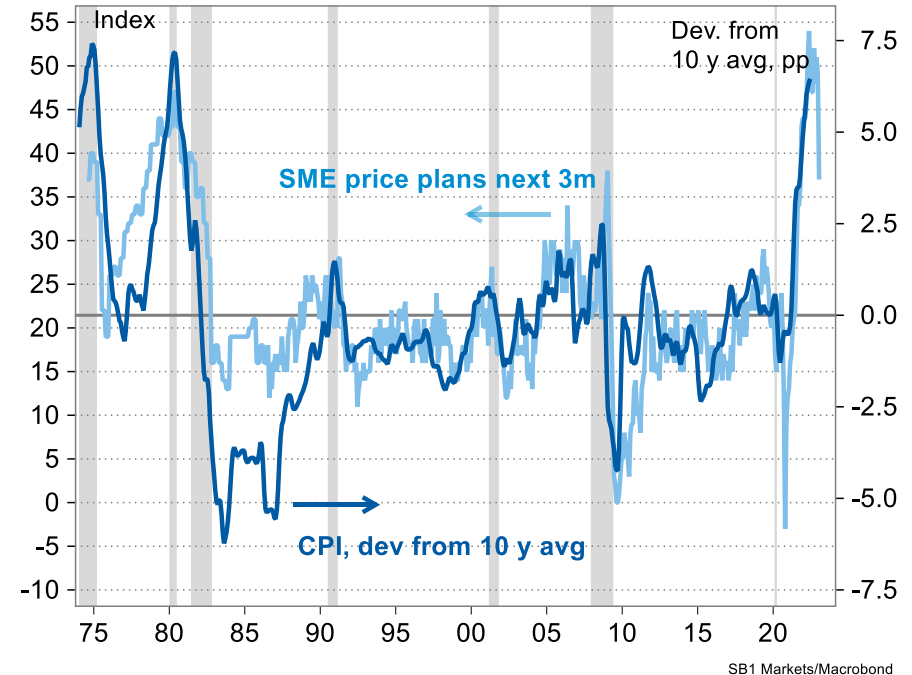
Has the tide turned? More companies report demand weakness (but still very few)

Far fewer companies report they plan to lift prices (but still many more than normal)

USA What's the problem: Supply or Demand?



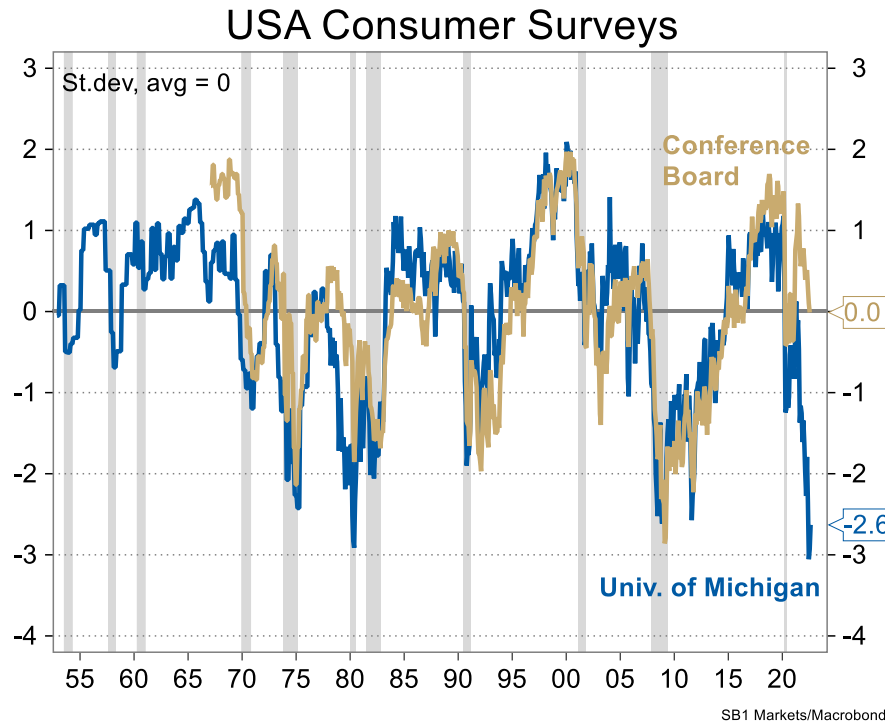
USA Small Businesses Price Plans



- The 'gap' between supply and demand concerns is still very large, but it is now heading down
- At the same time, the share of **companies that plan to lift prices**, fell sharply in July, to 37% from 49%. The 12 p decline was the 2nd largest ever! We guess energy and raw material related products explain the reduction. However, the 37% rate is far above an average 21% share, and inflation far above the past 10 y average is still signalled
- **Cost & quality of labour** is stated as the most important problem for a much higher share of companies than normal. However, the share has fallen somewhat from the peak – and compensation plans are marginally revised down
- **We have no doubt:** Over the coming months and quarters, the red line will climb sharply – and the blue line will come back down to Mother Earth as financial conditions tightens, with or without help from the Federal Reserve. It's normally labelled as a recession, as soon as the red line crosses the 50-line

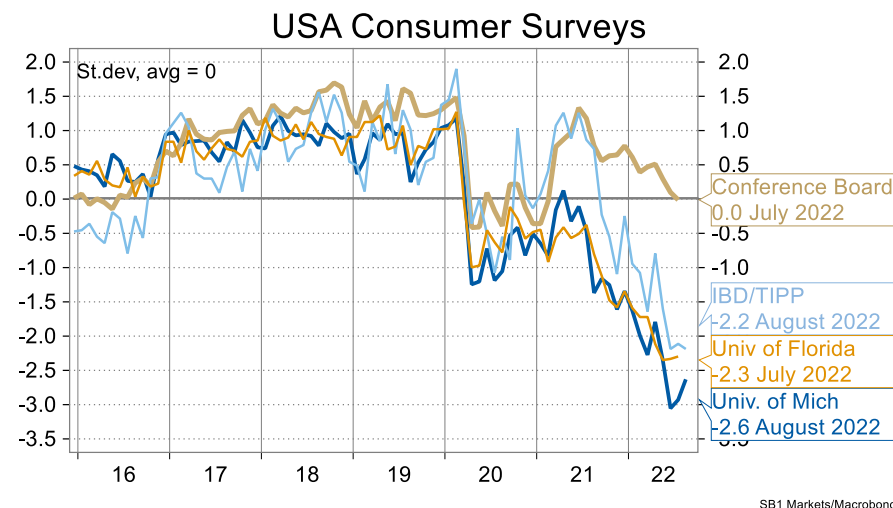
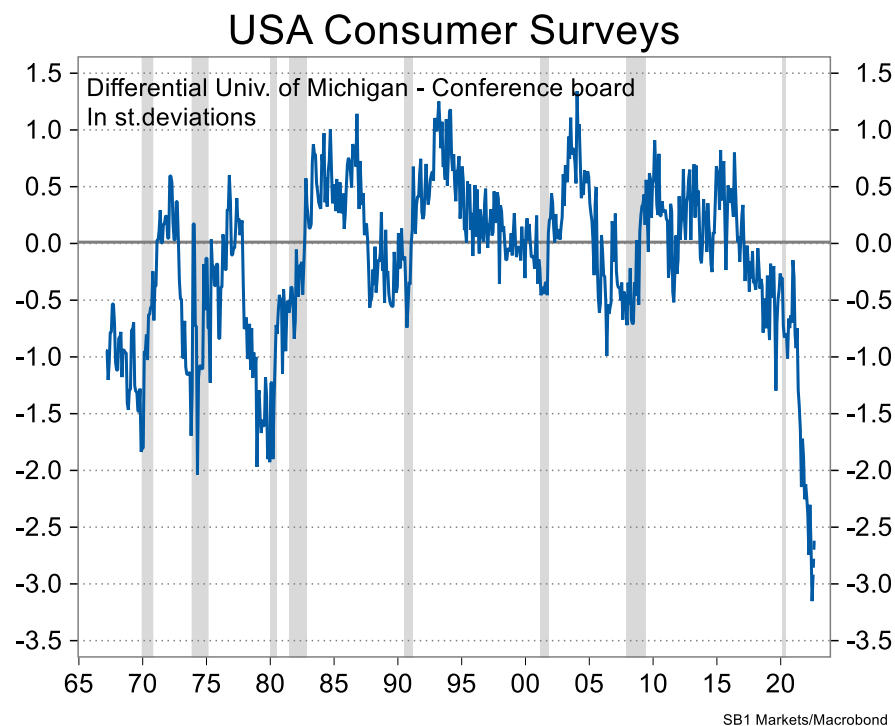
Univ. of Mich. sentiment up in August too, still at a very low level

Short term inflation expectations fell, and long term expectations have never been that high



- **University of Michigan's consumer sentiment** fell to ATL at 50.0 in June, rose to 51.1 in June and further up to 55.1 in the first part of August, expected 52.0. The level is still extremely low, at -2.6 st.dev below average
 - » Households' assessment of the current situation fell marginally, and the level is lower than ever seen before (except for May, data back to 1980)
 - » Expectations rose further, from an extreme low level last month
 - » Just the **Conference Board's** survey is still at a normal level (until July, at least). The discrepancy between the two 'main' surveys has never been larger
 - » **The other 2 minor consumer surveys** we are following also reported an uptick in June/July, but both are deep in negative territory, at below -2 st.dev
- **Longer-term inflation expectations** has been stable at close to 3% recent months, which is not much above the past 10 y avg. Short term expectations fell by 0.4 p to 5% in August
- **The risk:** The UM survey often has been an early bird in the cycle, and the survey may be 'right'
 - » In the Conference Board survey, expectations have fallen sharply, and the discrepancy to households' assessment of the current situation has never been larger

The gap between Conf. Board & Univ. of Mich is larger than ever before

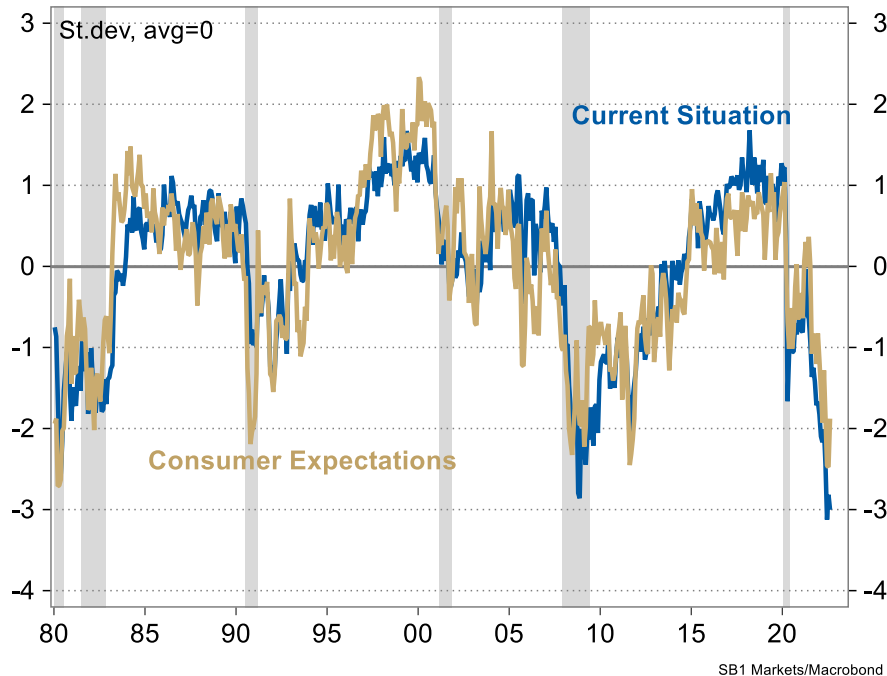


- Quite often, the UM survey has been the canary in the mine vs. recessions, it yields earlier than Conference Board's survey, and the current stance is a VERY bad sign – we have never seen anything like it!
- The IBD/TIPP the Univ. of Florida surveys both fell in May, down to -1.7 and -2.3 st.dev below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

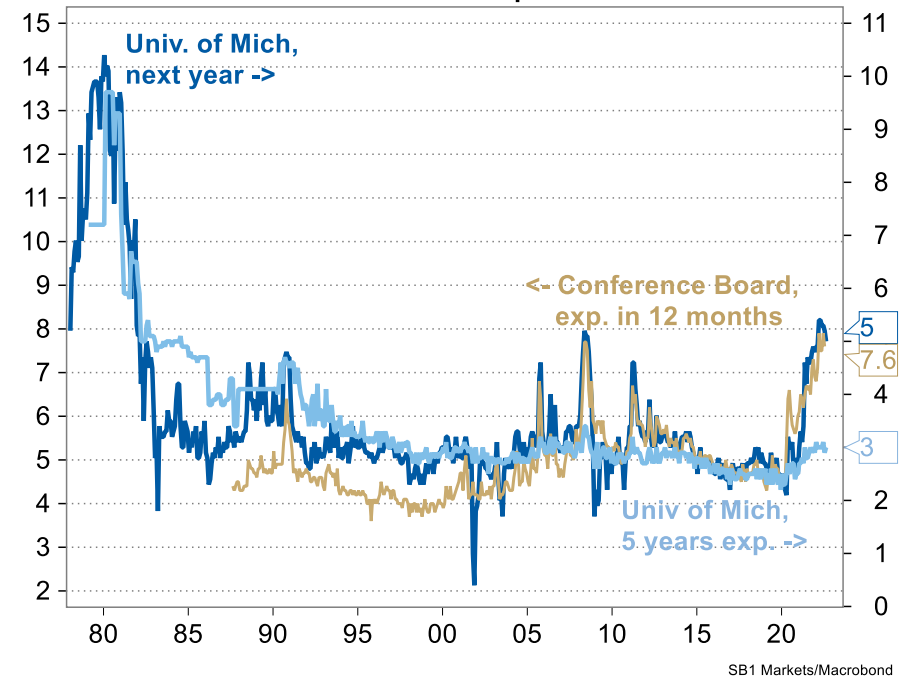
Univ of M: Expectations up – but still at a very low level

Inflation expectations have stabilised – at a far higher level than normal (in the short end)

USA UoM Consumer Sentiment



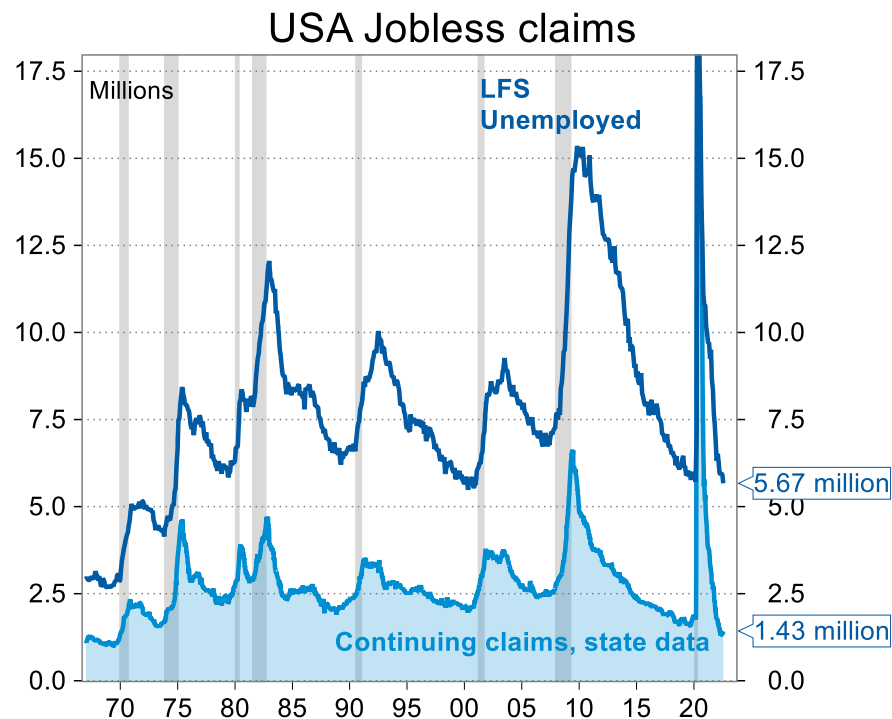
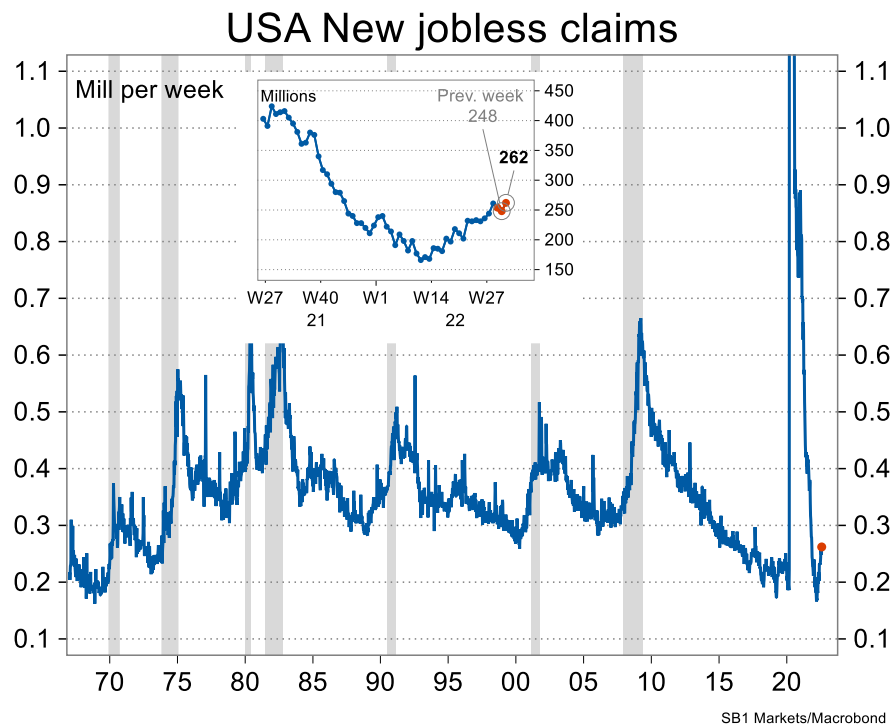
USA Inflation expectations



- The 12 m inflation f'cast fell 0.4 pp to 5.0%, the first significant decline!
- The 5 y inflation expectation added one tenth to 3.0%. These expectations have stable recent months, clearly above the average over the past 10 years – but not much higher than several times during the 2005 – 2012 period – and just a fraction of expectations when the previous great battle against inflation took place, around 1980

New jobless claims are sending a warning signal: A recession not unlikely at all

New claims are on the way up, normal not a signal of strength...

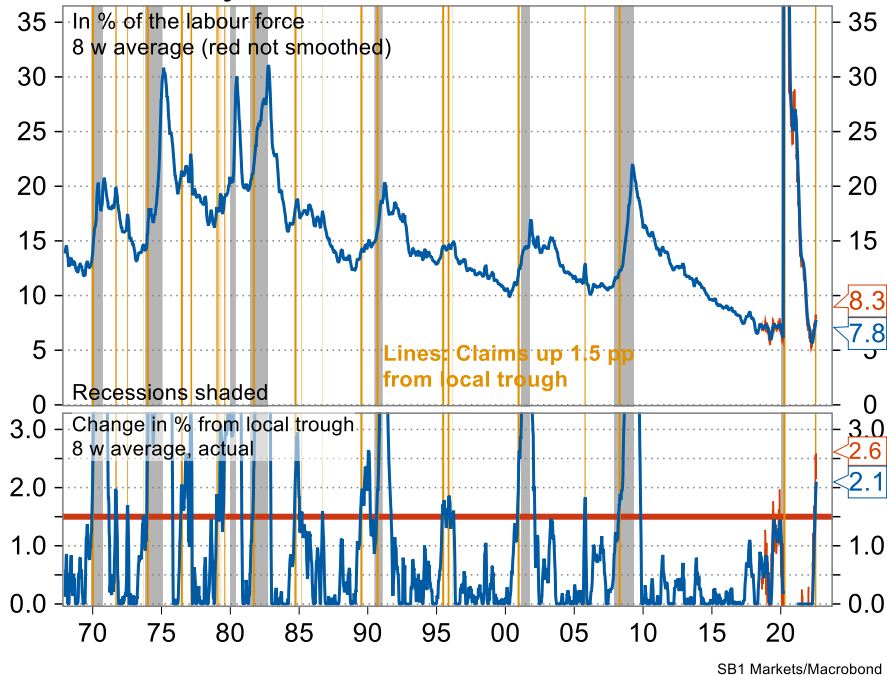


- **New jobless claims** rose by 14' in week 31 to 262' (but from a 12' downward revised level the prev. week. Since the bottom in week 11 in mid-March, the weekly inflow has increased by 96', from 166' – which was the lowest level since 1969
- **Ordinary continuing claims** is still close to rock bottom but rose by 8' the previous week – and is up by 130' from the bottom in the spring, to 1.43''

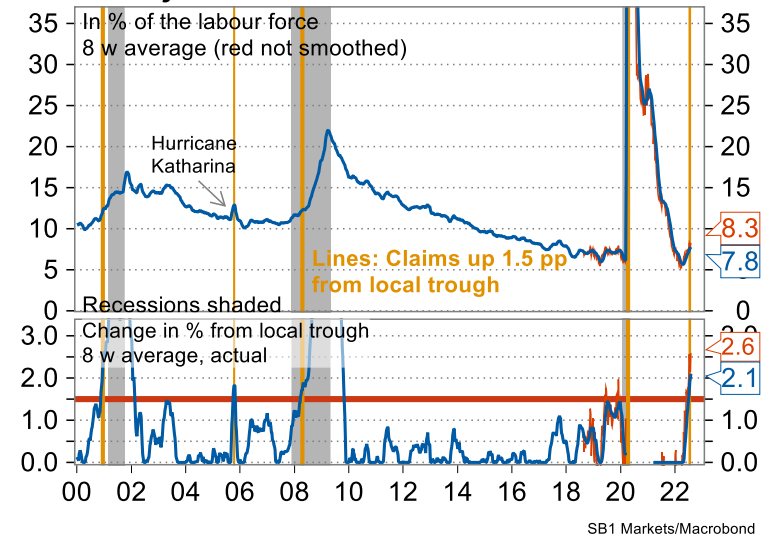
A warning line is drawn:

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

New jobless claims vs. recessions



New jobless claims vs. recessions

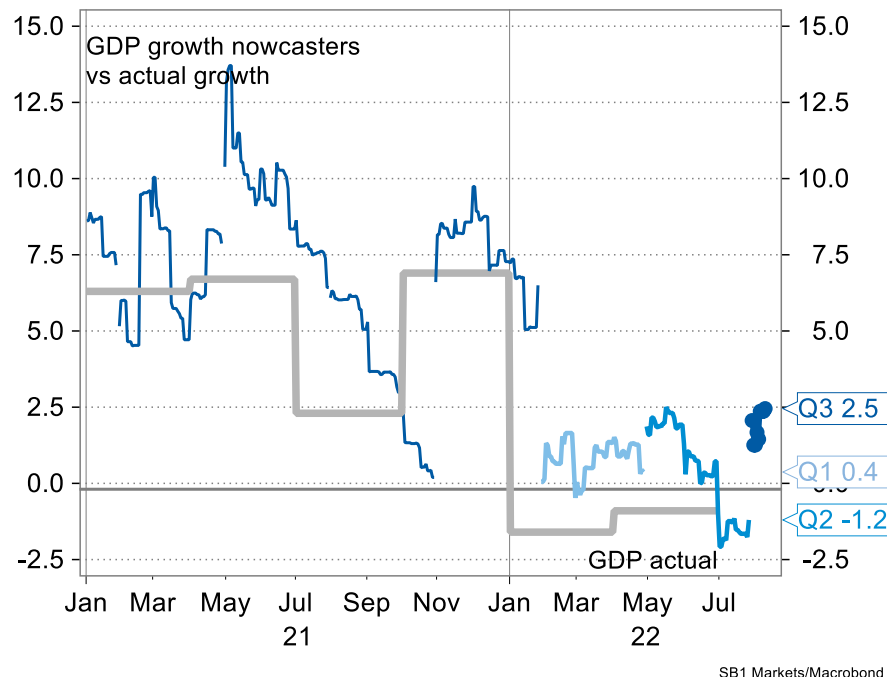


- The yellow lines: New jobless claims (8-week average) up 1.5 pp vs. the labour force
- Now, the average is up 2.1 pp, from 2.0 pp the previous week. Thus, a yellow line is now drawn at the charts above, for the first time since 2005 (Hurricane Katharina), without a recession around the corner (the lines in 2008, 2020), and before that in 1996
- Our recession signal model based on new jobless claims has sent several false signals (false positives), and even the correct signals often comes too late for a real time conclusion. Even so, the inflow of new unemployed persons is tightly correlated to the economic cycle – and the cycle is now weakening (Lifting the threshold to say 2% would strengthen the signal/noise ratio substantially. We may be there pretty soon)

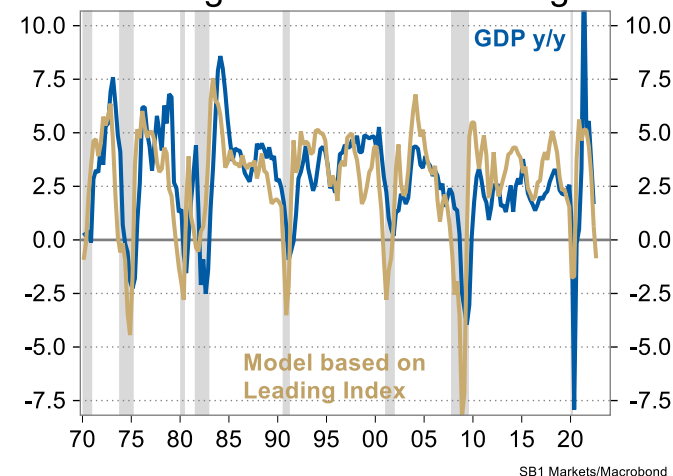
USA Atlanta Fed's nowcaster was right on Q2 GDP. Now it report 2.5% growth in Q3

However, leading indicators are signalling a further decline in GDP

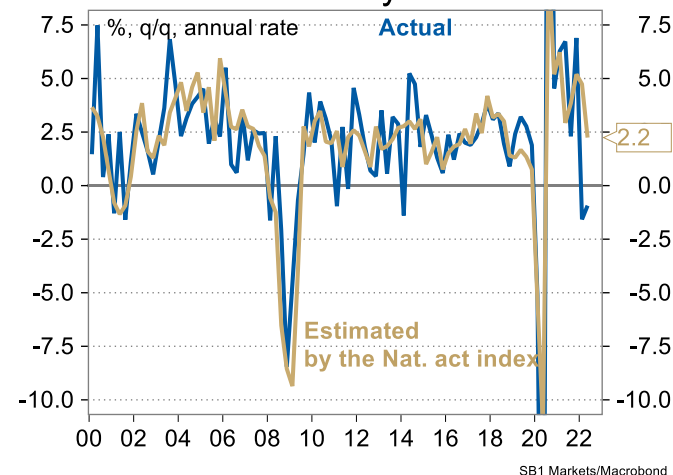
USA Atlanta Fed GDP nowcasts



US Leading Indicators vs GDP growth



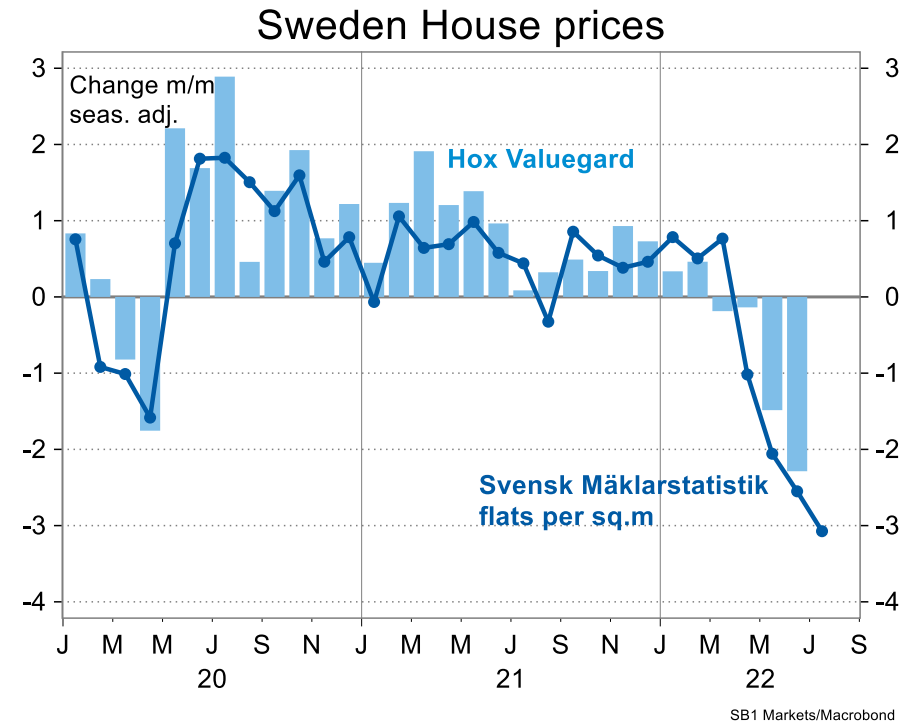
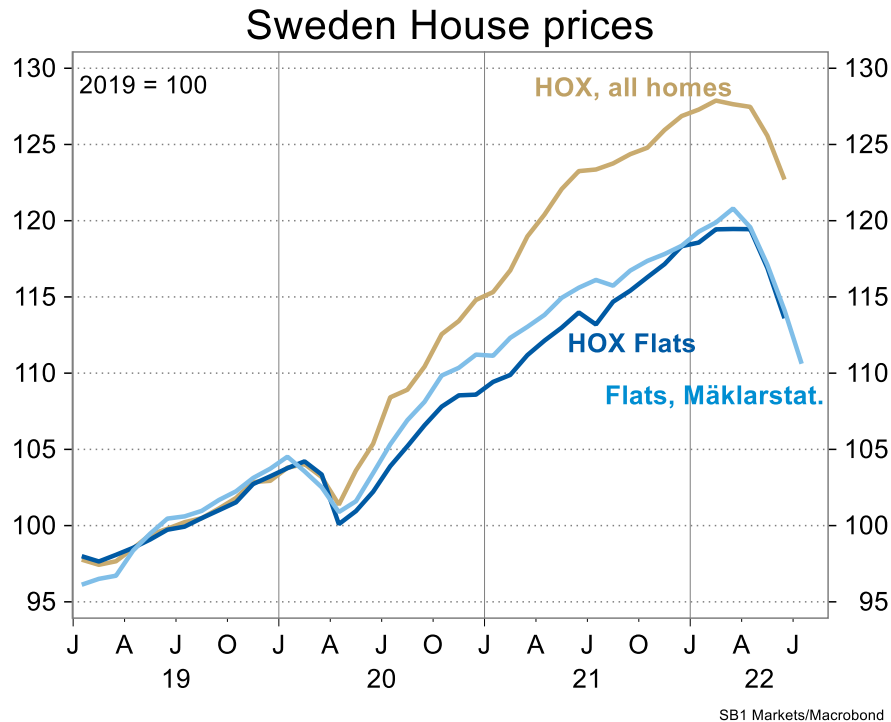
USA National activity index vs GDP



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

House prices are falling rapidly

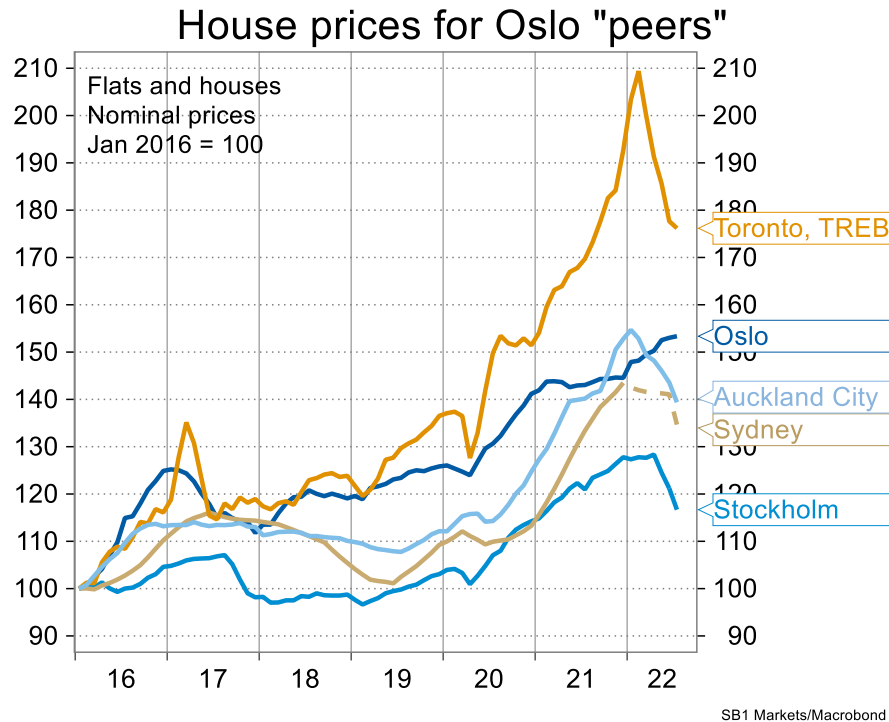
Svensk Mäklarstatistik reported a 3.1% decline in flat prices in July, and a 8.4% drop since March



- We have usually reported prices measured by the HOX/Valuegard index, but Svensk Mäklarstatistik's index is also useful – and is published earlier than the HOX index
- Now, the Swedish property market is rather interesting as prices suddenly are heading south-wards amid high inflation and rising mortgage rates

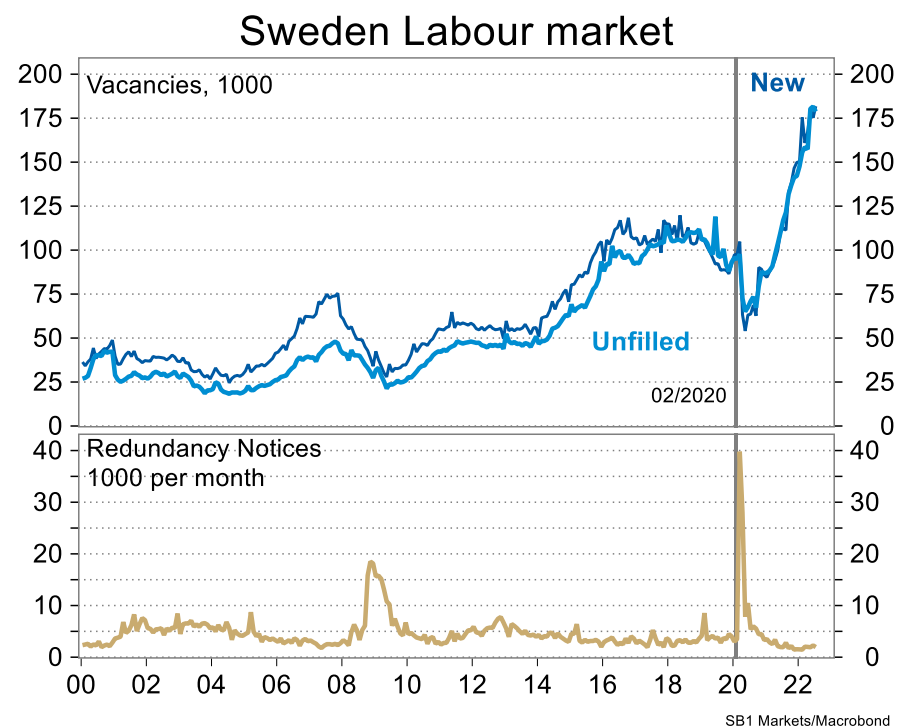
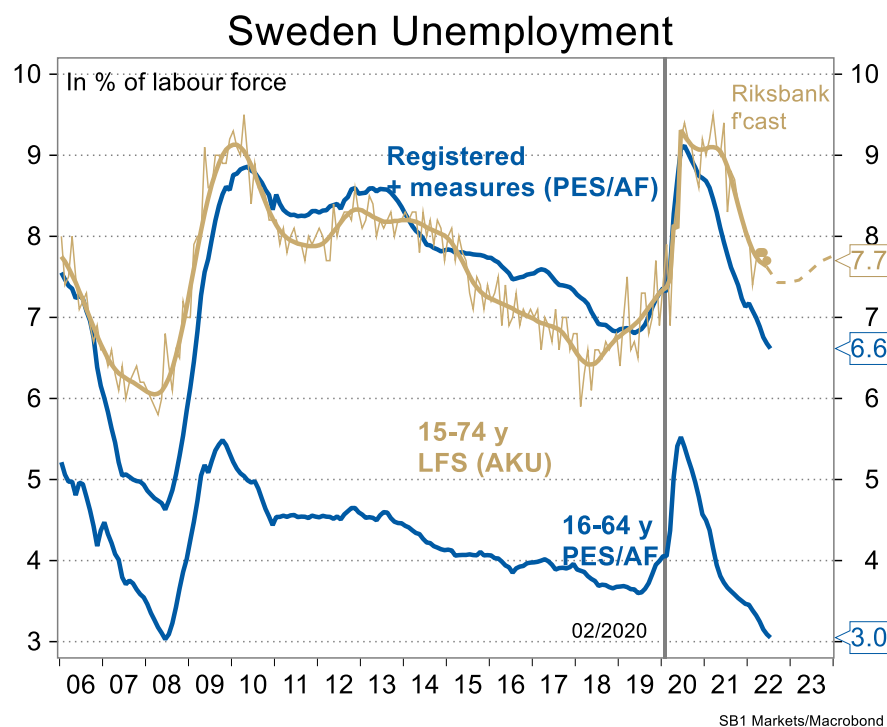
House prices are falling other places as well

By 6 – 16% in the supercyclical capitals. Guess why? Oslo has not yielded, yet



Reg. unemployment further down, new & unfilled vacancies higher than ever

The open unemployment rate continued down by 0.1 pp to 3.0%, the lowest since 2008

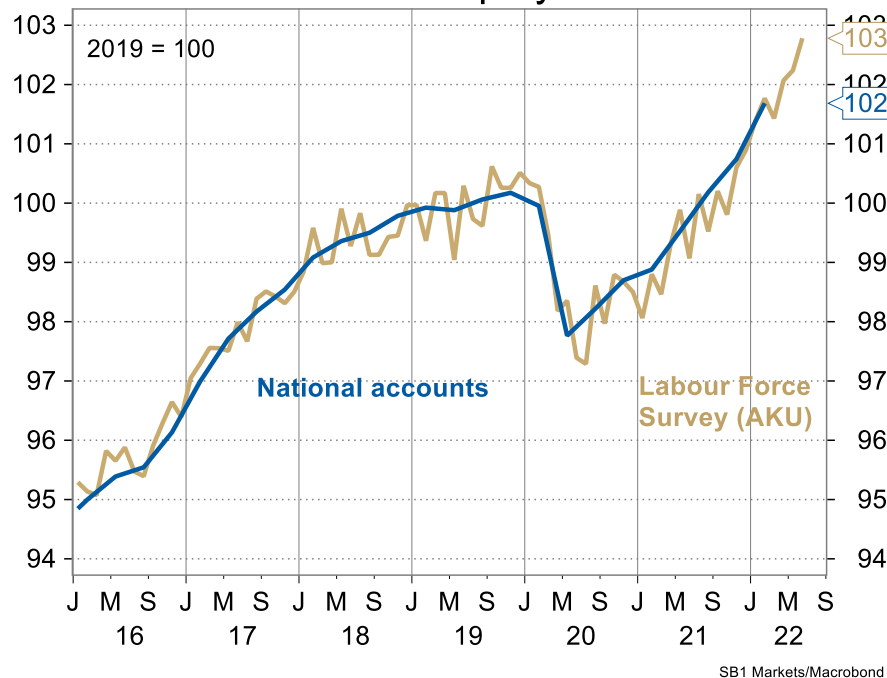


- The **'open' registered unemployment rate** at 3.0% is far below the pre-pandemic level – and a couple of ticks down, at the lowest levels since 1990, before the housing and banking crisis
 - » **Unemployment including labour market** measures has fallen to 6.6% - which is finally below the level just before the pandemic hit
 - » The LFS ('AKU') unemployment at 7.7% is still well above the pre-pandemic level, as the participation rate has increased even more than the employment rate vs. the (high) pre-pandemic levels
- Both the number of **new vacancies** and the number of **unfilled vacancies** remained at ATH levels in July

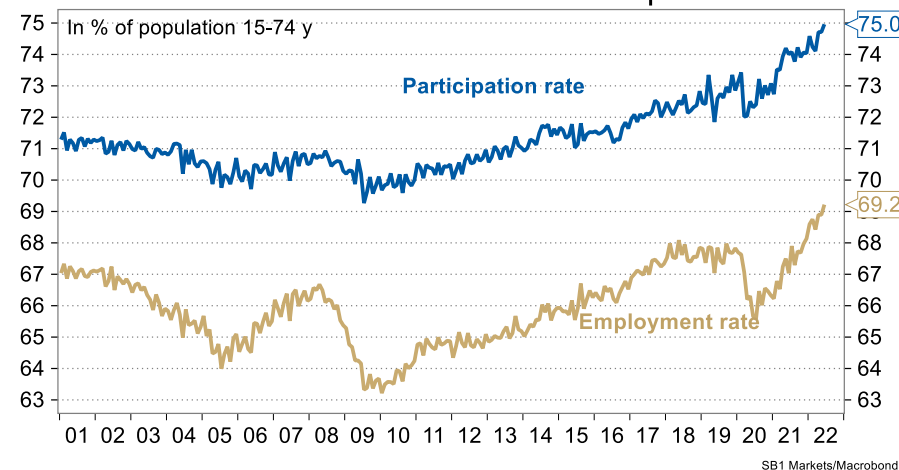
Strong employment growth – and the employment rate is the highest in decades

However, hours worked still below the pre-pandemic level, strange given the high vacancy rate

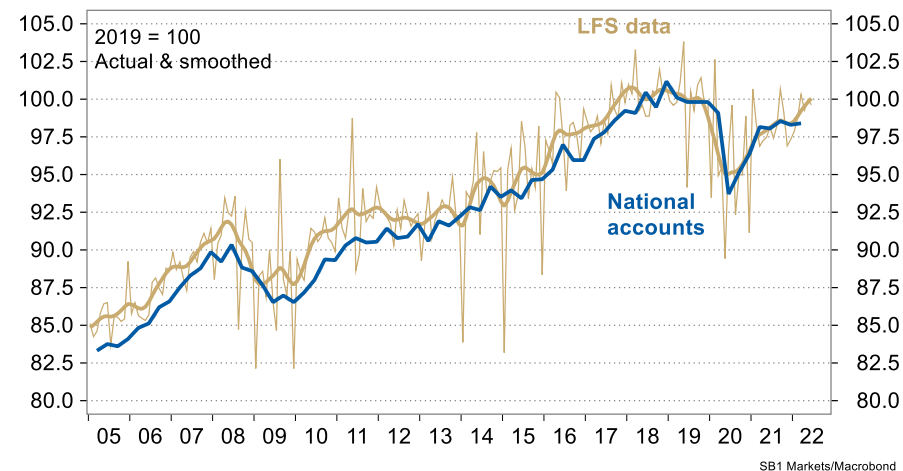
Sweden Employment



Sweden Labour Market Participation



Sweden Hours worked

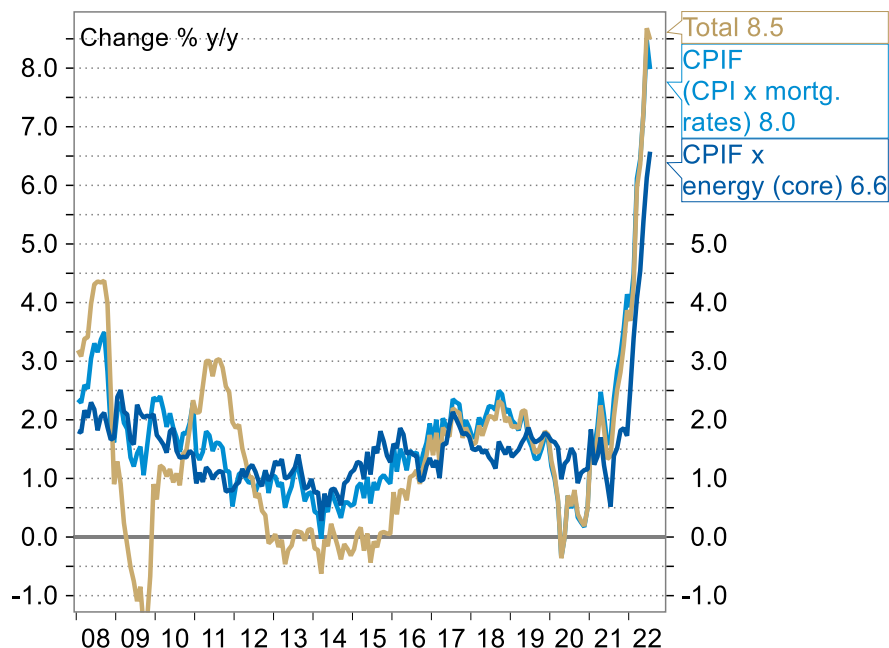


- Is the decline in hours worked due to the supply side, people do not want to work too long hours?

Headline inflation a tad down to 8.5% but the core up 0.5 pp to 6.6%

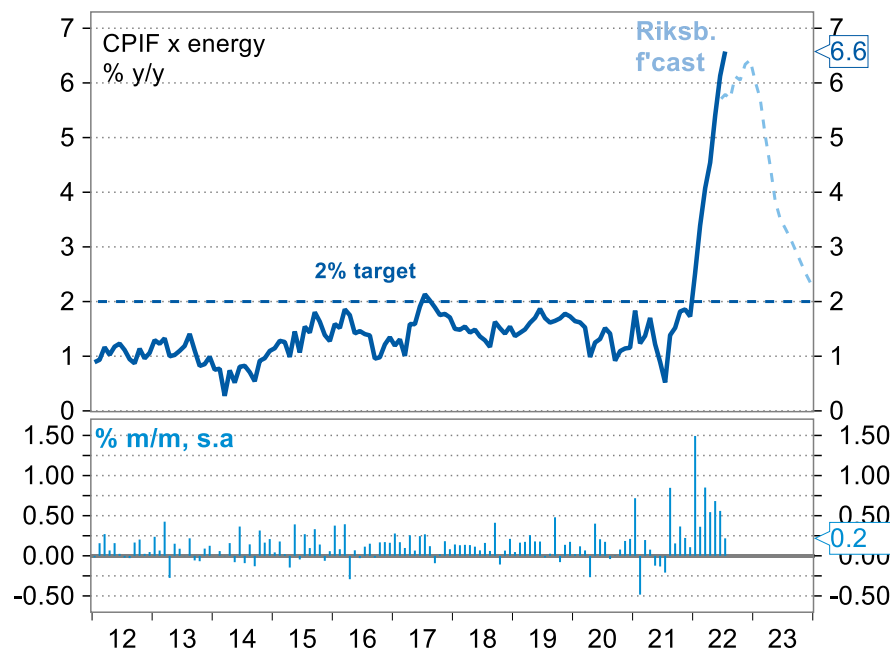
The headline was 0.2 pp below expectations, the core as expected, and just up 0.2% m/m

Sweden CPI



SB1 Markets/Macrobond

Sweden CPI core

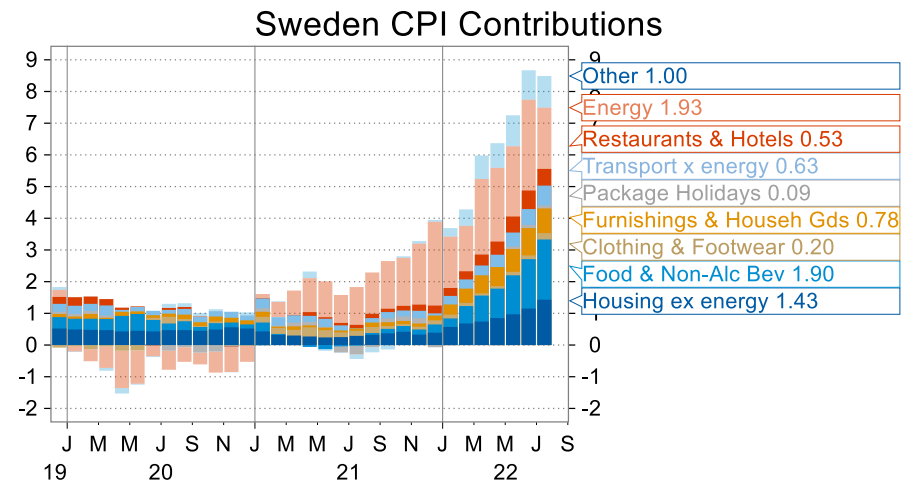
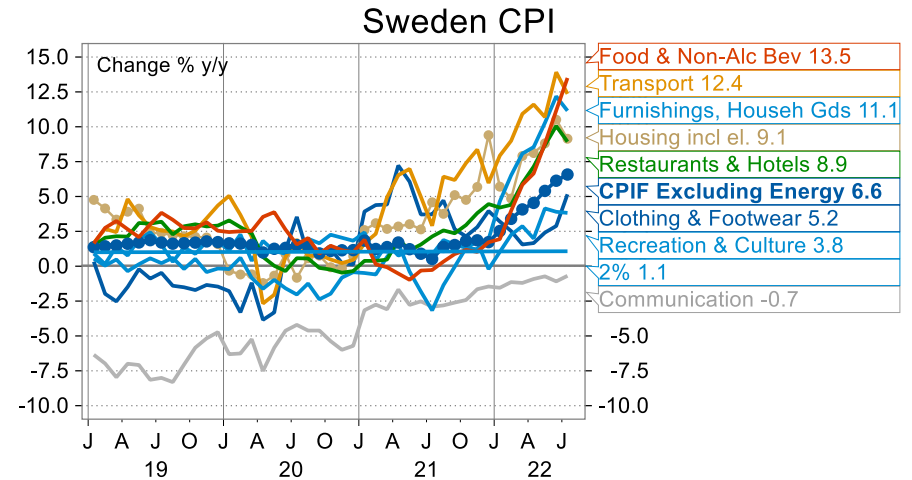
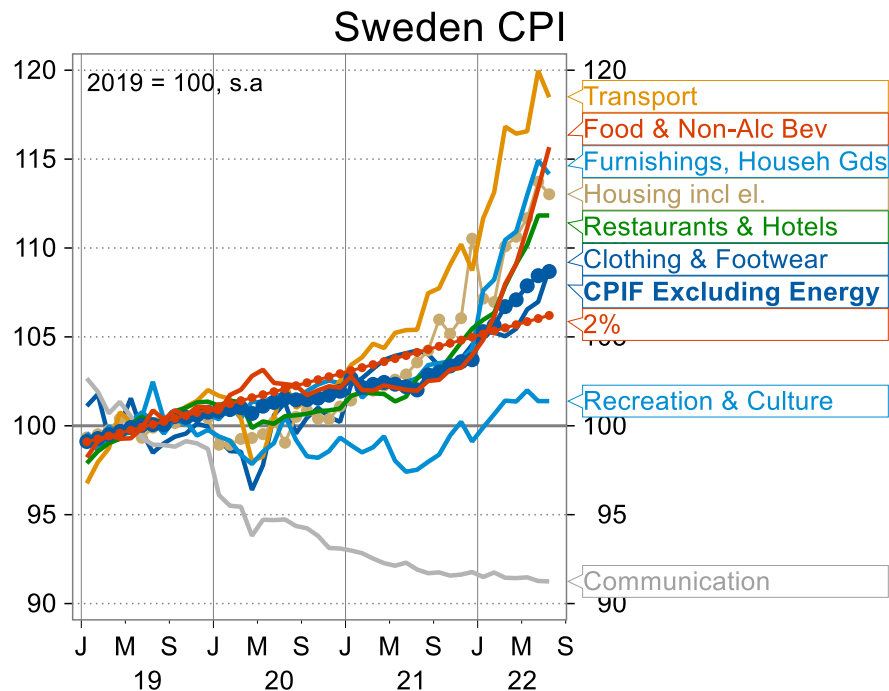


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- **CPI-F x energy, the 'real core'**, rose 0.2% in July (seas. adj). The core rate has accelerated sharply recent months, to 6.6% from 1.7% in last December – and again to well above the Riksbank's f'cast
 - » Why is inflation so high? Food prices are up 13.5% y/y, hotels & restaurants 8.9%, furnishings 11.9%!
 - » All other measures of underlying inflation are sharply up – and at the highest level in some 30 years
 - » Until Q4, inflation was pretty well explained by higher energy prices, now many more elements are on the move upwards
- **Headline inflation** slowed due to lower energy prices, both gasoline and electricity

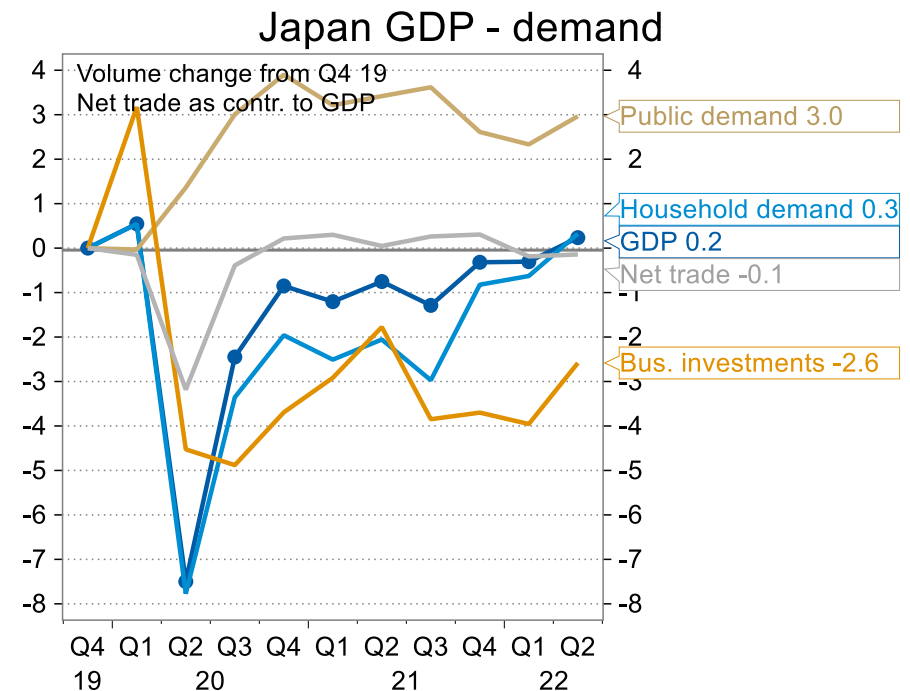
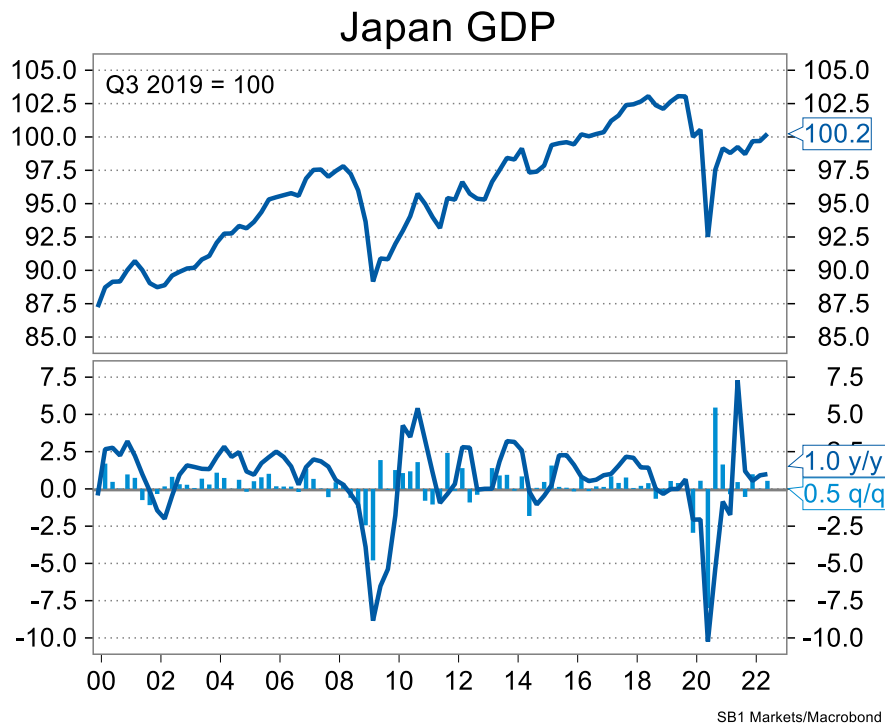
Inflation in Sweden: a broad acceleration – until June. In July, some easing

However, just communication is below 2% y/y



GDP up at a 2.2% pace in Q1, and is trending up. Still just 0.2 above Q4-19

All demand components contributed to the lift in activity in Q2, even business investments



- Slightly weaker than expected (2.8% q/q)
- GDP is just 0.2% above the Q4-19 level, and Q4-19 was not an impressive starting point (partly due to the VAT hike in Oct-19). GDP is more than 2% below the late 2018 level!

Highlights

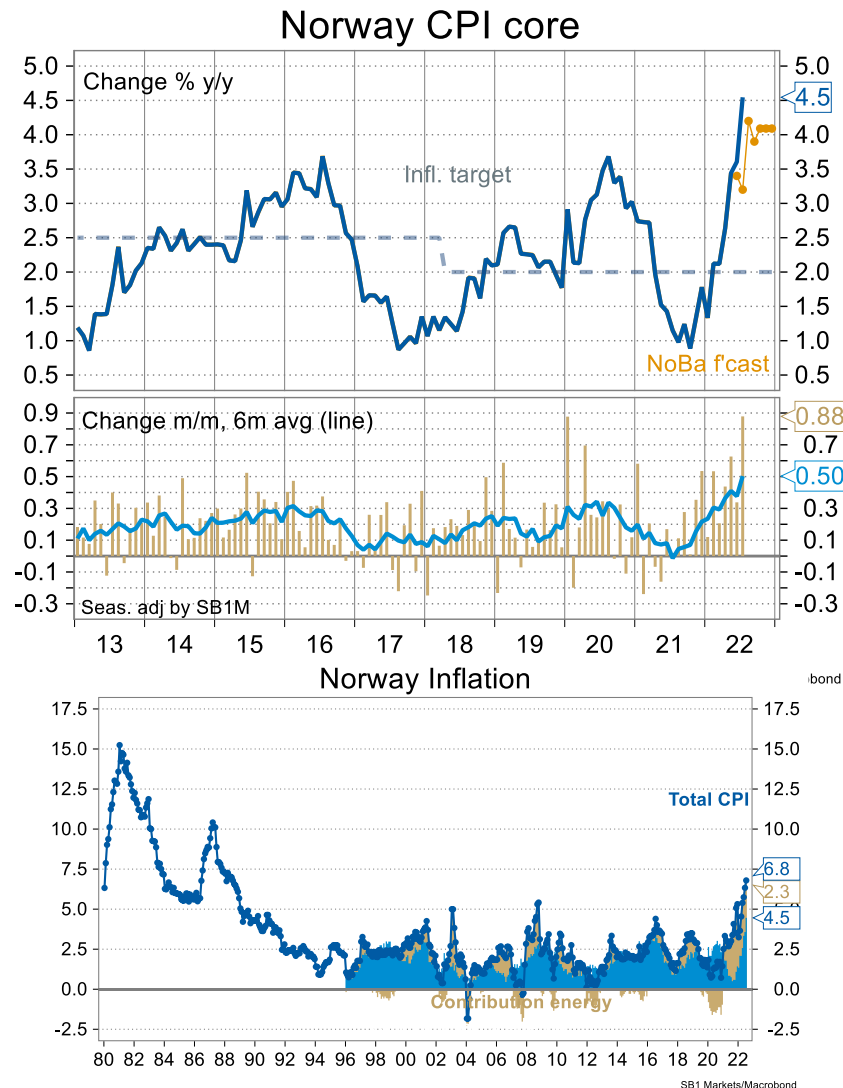
The world around us

The Norwegian economy

Market charts & comments

Another inflation shock in July, for everybody (except us)

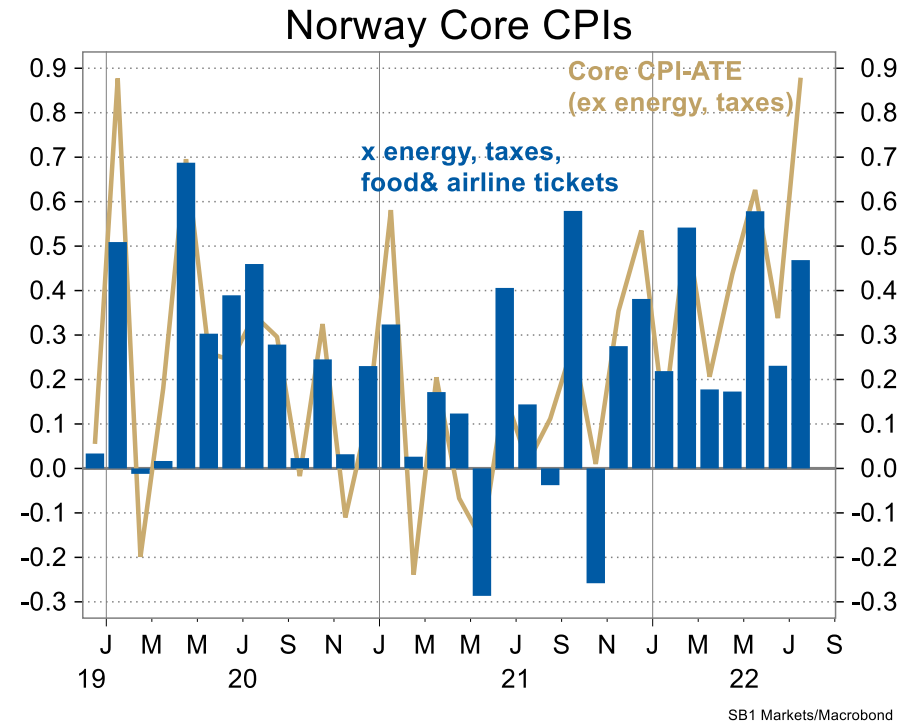
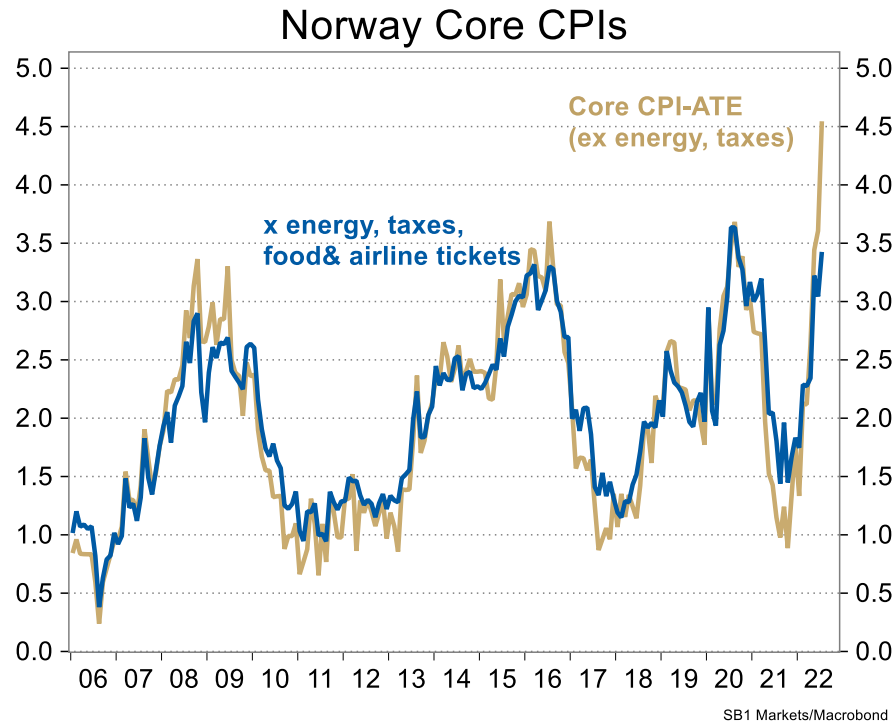
Food prices rose 7.6% m/m, the core shot up to 4.5% y/y, the headline to 6.8%!



- **CPI-ATE** (ex. energy and taxes) rose 0.9% m/m (s.a), and the annual rate climbed by 0.9 pp to 4.5% pp, we expected 4.4%. Consensus was at 3.8%, NoBa expected 3.2% (but the Bank assumed a surge in prices in August, the annual rate up to 4.2%)
 - » **Food prices** rose 7.6%, we expected 8%, and the annual rate shot up by 5 pp to 10.4% - in line with food inflation abroad, even if Norwegian food prices normally are pretty well sheltered from food prices abroad. 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
 - » **Furnishing prices** also rose sharply, and several other sectors also contributed
 - » Prices on **imported goods** rose 0.8% m/m, and are up 4.4% y/y, while **domestically produced goods & services** were up 0.9% m/m and are up 4.5% y/y
 - » **10 sectors** report growth above 2% y/y, and just 3 are below. All trimmed/median measures tells the same story: Inflation has broadened
- **Total inflation also accelerated, by 0.5 pp, to 6.8%**, the highest since 1988, we expected 6.6%. If not for electricity subsidies, inflation would have been 8.9%, a normal rate these days. Electricity prices fell marginally m/m. Auto fuel prices also fell but less than we assumed
- **The outlook**
 - » **The electricity price** will increase in August – and climb steeply the coming months. The impact on the CPI is limited though, as 90% of the price above NOK 0.7/kWh is paid by the government
 - » **Gasoline prices** are now falling sharply – and will contribute to a decline in headline CPI
 - » If so, **average 2022 inflation** will slightly above 5%, and above Norges Bank's 4.6% f'cast
- **So what?**
 - » **Real disposable income** is substantially reduced, even if **wage inflation** may in the end surprise on the upside in a tight labour market. Lower savings will partly compensate, but household demand is exposed too
 - » For **Norges Bank** wage inflation is the dominant risk but actual inflation will influence wage inflation, and even more as the labour market is still very tight. A 2 x 50 bps in August and September is fully discounted. For good reasons, we think

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

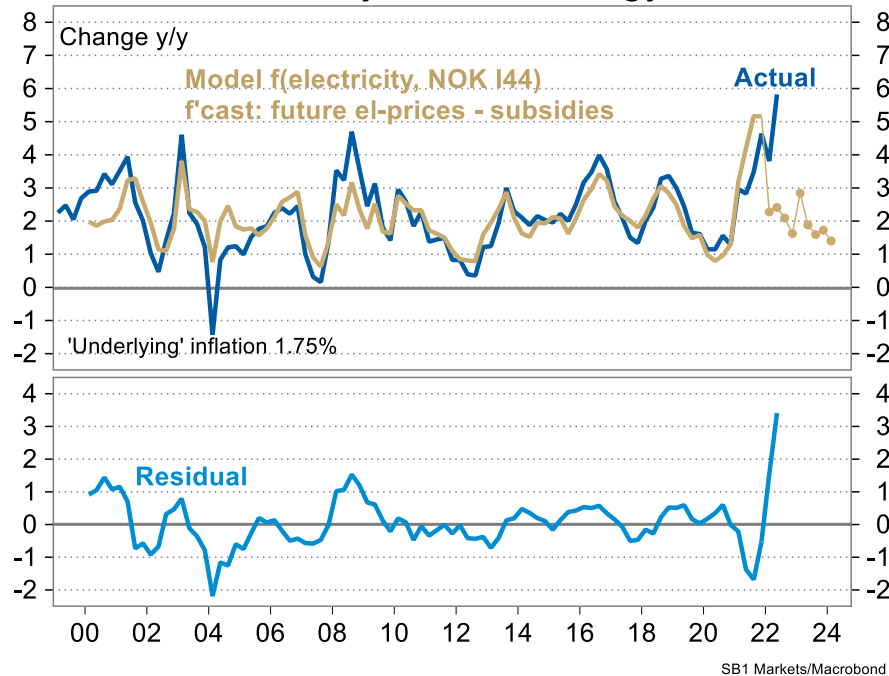
If food & airfare tickets are excluded from the core CPI, it is still at 3.4%, and it is not slowing m/m



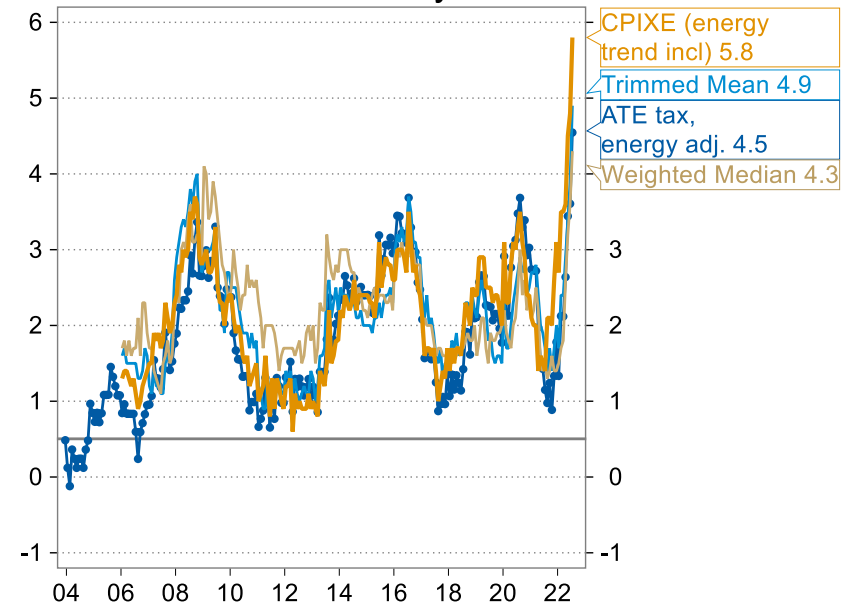
Inflation suddenly substantially higher than suggested by electricity prices & NOK

Our simple model confirms that inflation has broadened in H1-22, like other median/trimmed measures

Norway, CPI vs energy



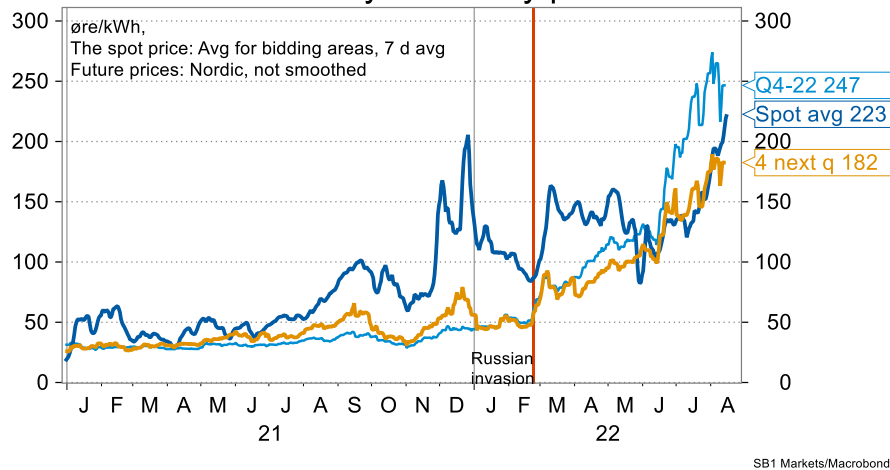
Norway CPI



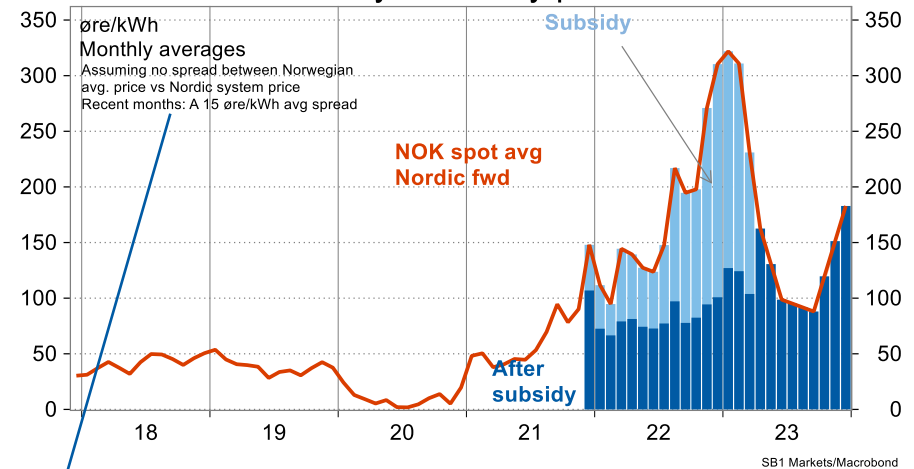
Future el. prices sharply up recent weeks – due to the tight European gas market

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

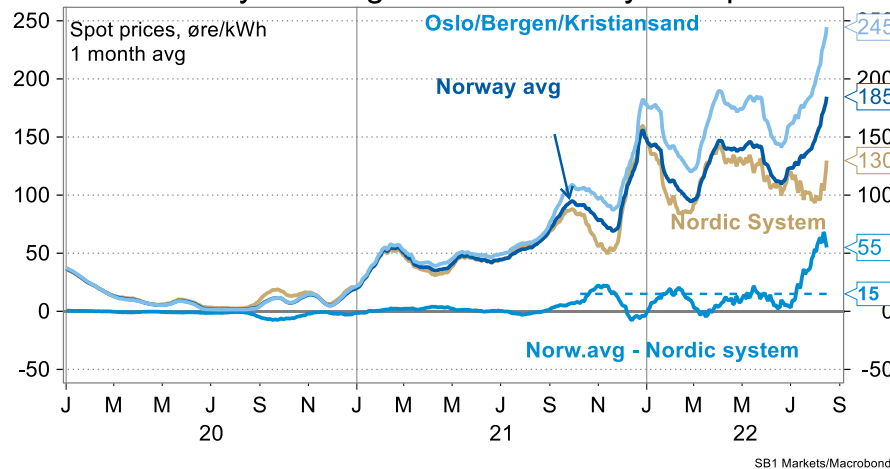
Norway Electricity prices



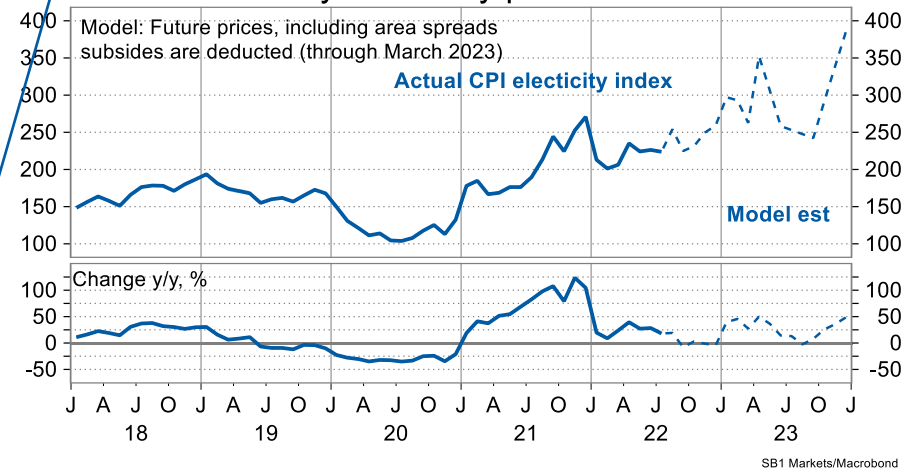
Norway electricity prices



Electricity Norwegian vs. Nordic system price

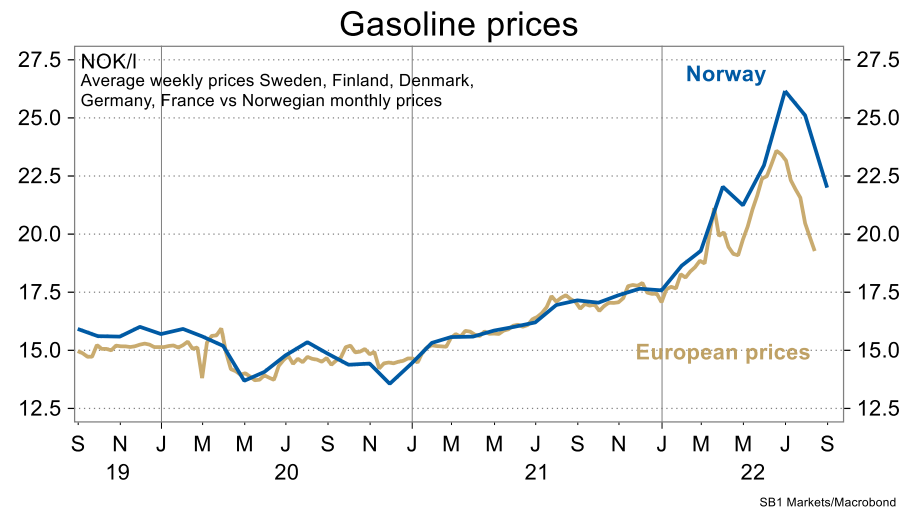
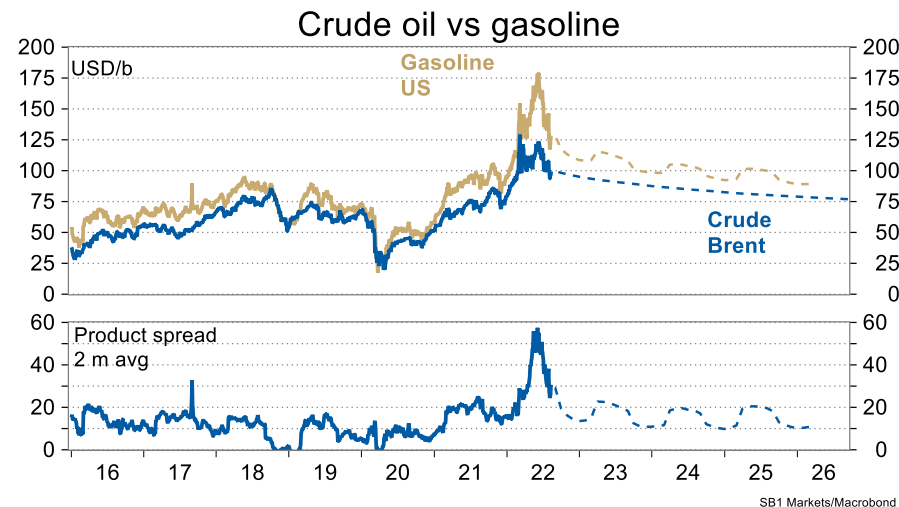
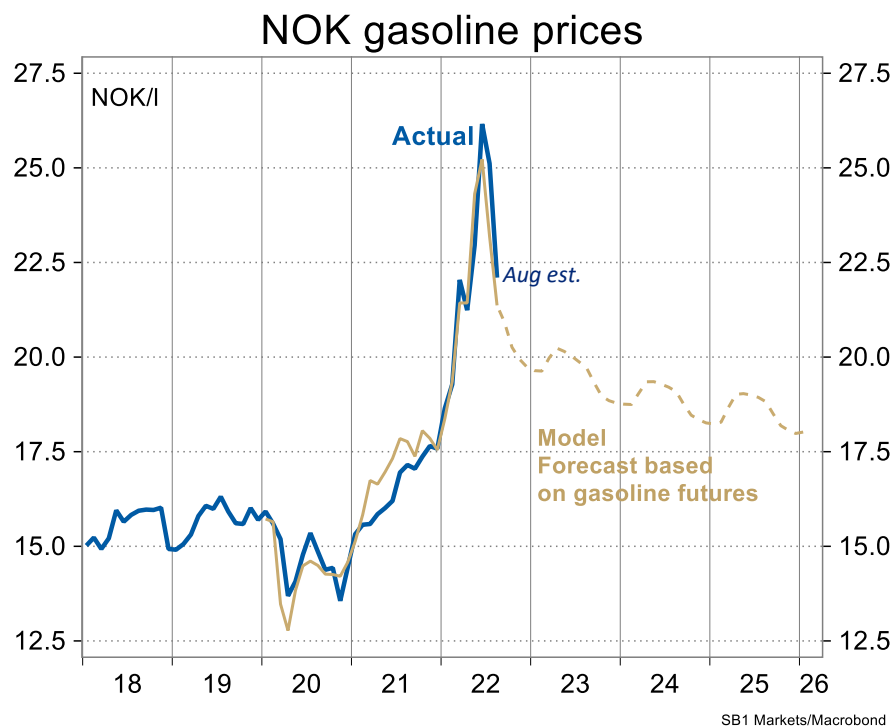


Norway Electricity prices in CPI



Gasoline prices rapidly on the way down – to below NOK 20/l many places

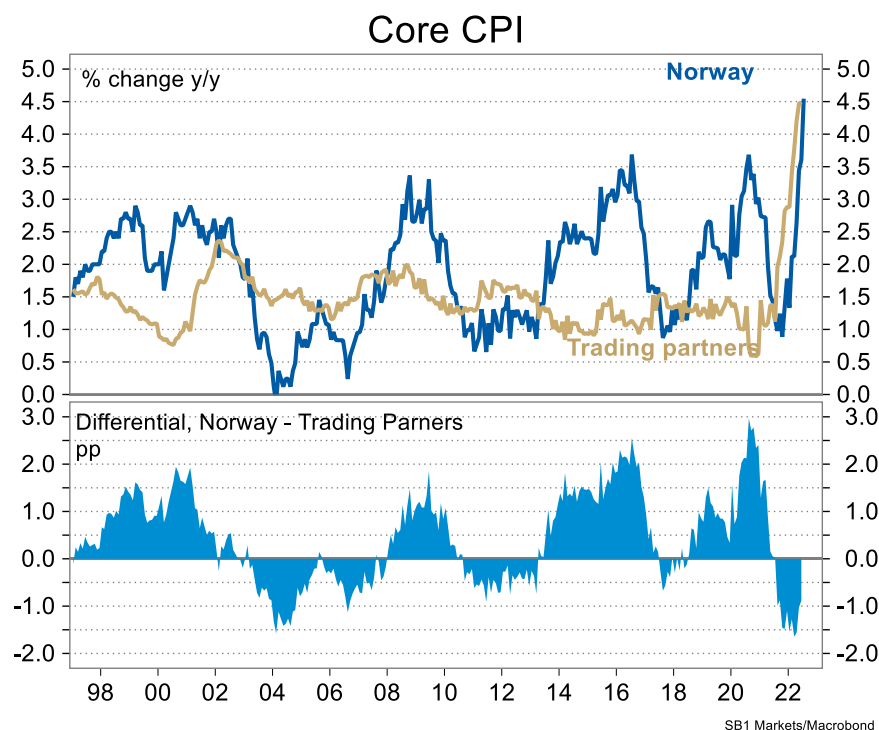
The oil price is down from the peak, and gasoline margins are narrowing (but are still above avg)



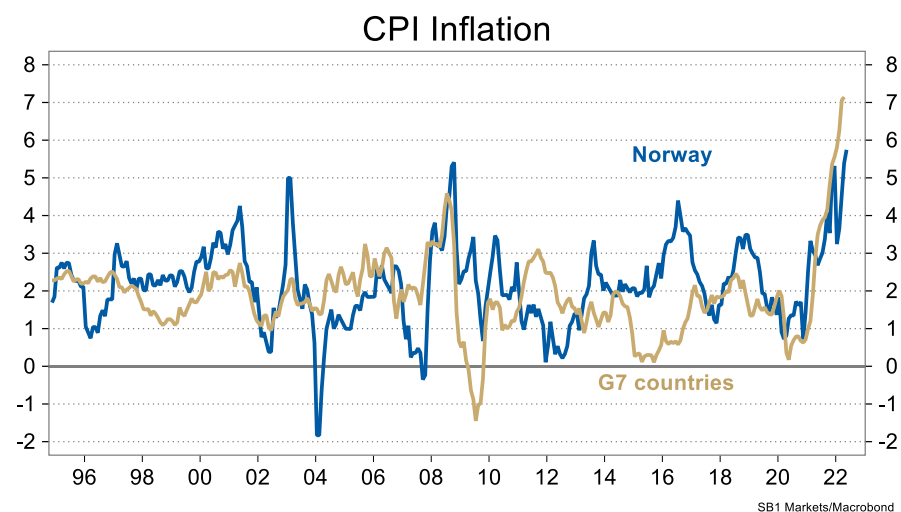
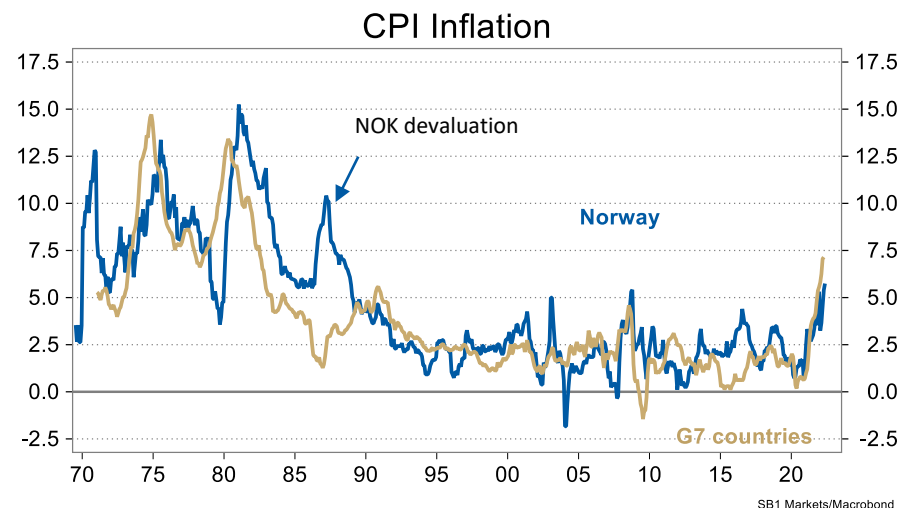
- Refinery/product margins have widened sharply since February. However, recently the margin has fallen substantially, and futures are down the coming months/quarters. In the US as well as in Europe, gasoline prices have fallen recently (US and European, as well as Norwegian prices are closely correlated – even in US prices of course is lower than European prices)
- In August, prices have so far fallen sharply, both abroad and in Norway, and will contribute to a lower CPI print next month

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)



Food prices rose sharply, and furnishings well – and several other sectors

Food prices rose almost as much as we assumed but far more than others expected

Jul-22	Weight	Change m/m, seas. adj			Change y/y			Contribution, pp		
		Out- come	SB1M f'cast	Dev. pp	Prev. month	Out- come	SB1M f'cast	m/m	y/y	Dev. vs f'cast
CPI ATE, seas adj.	%									
Food, non alc bev	12.9	4.3	5.0	-0.7	5.5	10.4	11.2	0.56	1.34	-0.09
Alcohol, tobacco	4.2	0.7	0.6	0.1	5.2	5.9	5.7	0.03	0.25	0.00
Clothing, footwear	5.1	-0.5	0.1	-0.6	2.1	-1.6	-0.9	-0.02	-0.08	-0.03
Housing x. energy	20.2	0.2	0.2	0.1	1.8	1.9	1.8	0.05	0.39	0.01
Furnishing	6.9	1.7	0.3	1.5	4.8	7.1	4.9	0.12	0.49	0.10
Health	3.4	0.3	0.2	0.1	2.2	2.4	2.3	0.01	0.08	0.00
Transp. ex. gas, airl. tick	12.2	0.1	0.4	-0.3	2.8	3.4	3.8	0.01	0.41	-0.04
Airline tickets	0.8	-0.5	5.0	-5.5	30.8	26.2	32.9	-0.00	0.21	-0.04
Communication	2.4	0.4	-0.1	0.5	-0.9	-0.4	-1.2	0.01	-0.01	0.01
Recreation, culture	10.8	0.6	0.4	0.2	2.9	3.5	3.2	0.07	0.37	0.02
Education	0.5	-	-	-	2.0	2.0	2.0		0.01	0.00
Restaurants, hotels	5.6	0.3	0.4	-0.1	8.7	8.0	8.1	0.02	0.45	-0.01
Other	8.7	0.7	0.2	0.5	3.0	3.4	2.7	0.06	0.30	0.05
CPI-ATE, s.a	93.7	0.9	1.0	-0.1	3.6	4.5	4.4			-0.07
<i>Norges Bank est.</i>			-0.0		3.4		3.2			
Imported	36	0.8	0.2	0.5	3.8	4.4	3.4	0.28	1.59	0.20
Domestic	57	0.9	1.4	-0.5	3.5	4.5	5.0	0.54	2.61	-0.27
Energy, housing	4.4	-1.7	4.0	-5.7	28.3	19.4	26.3	-0.07	0.85	-0.25
Energy, transport	2.0	-1.5	-7.0	5.5	54.4	47.3	40.0	-0.03	0.92	0.11
CPI Total, s.a	100	0.7	0.9	-0.2	6.3	6.8	6.6	0.73	6.79	-0.20
<i>Norges Bank est.</i>			0.2		5.6		5.1			
Change m/m, seasonally adjusted (calc by SB1M)										
Sum of parts does not necessarily add up to totals										

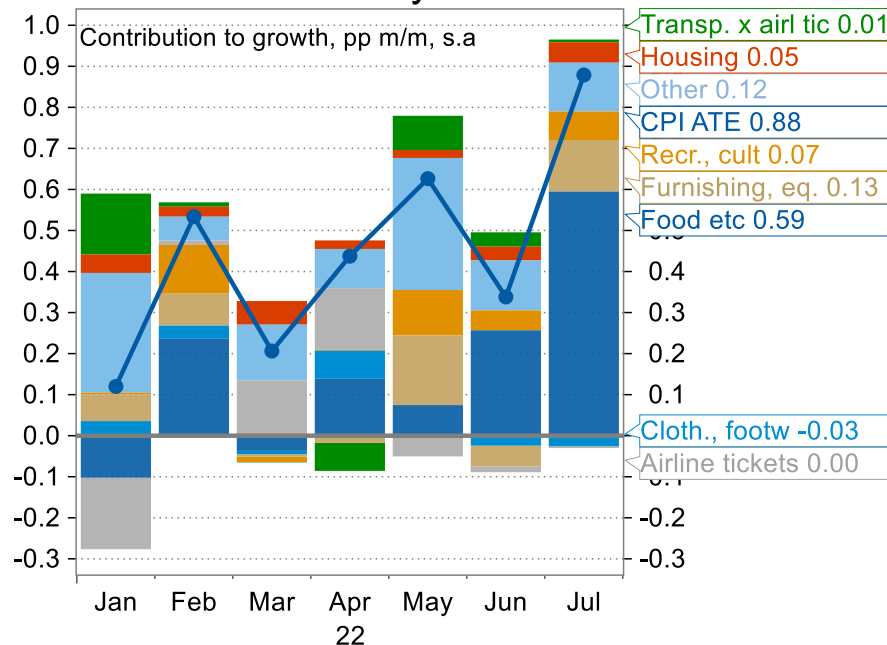
- **Food, non-alc bev.** prices rose 4.3% (ex taxes, seas. adj), 0.7 pp more than we exp! Price increased 7.6% not adj. The annual growth shot up 5 pp to 10.4%
- **Clothing** prices fell 0.5%, and are up down 1.6% y/y
- **Furniture/hardware/equipm** prices once more surprised at the upside, 1.7% m/m, 7.1% y/y
- **Transport ex. gas & airfare tickets** rose 0.1%, up 3.4% y/y, surprisingly low given global auto prices
- **Airline tickets** prices fell 0.5% m/m but are up 26% y/y, from a very low level last year
- **Recreation** prices added 0.6%, up 3.2 y/y
- **Restaurant/hotel prices** up 0.6% m/m, 8.0% y/y, and way above a 2% path (starting in 2019)
- **CPI-ATE** up 0.9% m/m, 4.5 y/y, close to our forecast but 0.7 pp above consensus, and 1.3 pp above NoBa's 'cast
- Prices on **imported goods** rose 0.8%, and are up 4.4% y/y – a substantial contribution to total (1.6pp)
- Prices on **domestically produced** goods & services rose 0.9%. The annual rate at 4.5% is remarkably high
- **Electricity (and other heating)** prices fell 1.7%, we expected a small increase
- Gasoline/diesel prices fell 1.5, far less more than we assume. In August, a huge drop is very likely
- ... **headline inflation climbed to 6.8%, 0.2 pp above 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

Food prices made the heavy lifting in July, as we expected

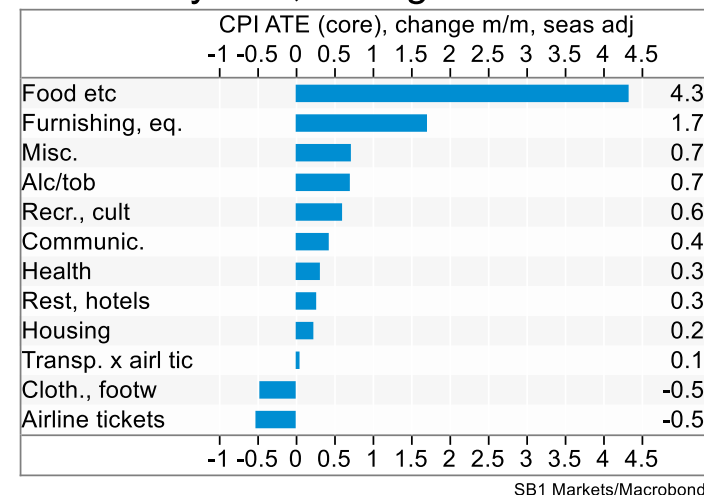
Furnishings also sharply up – but several components contributes. Apparel & airfare tickets cheaper

Norway Core CPI

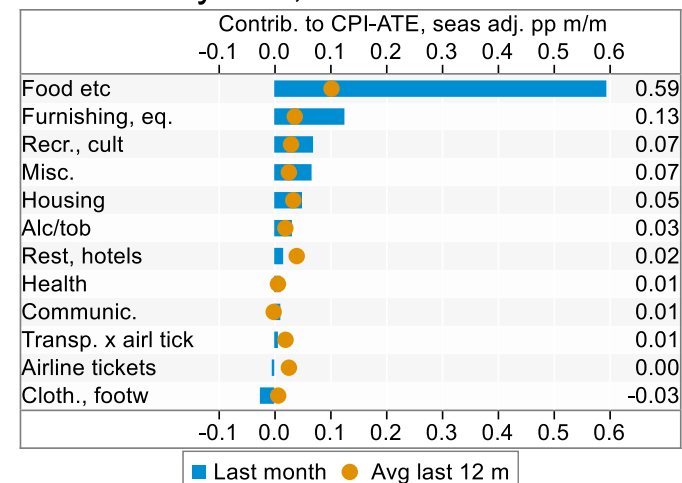


SB1 Markets/Macrobond

Norway CPI, change last month



Norway CPI, core contrib. m/m

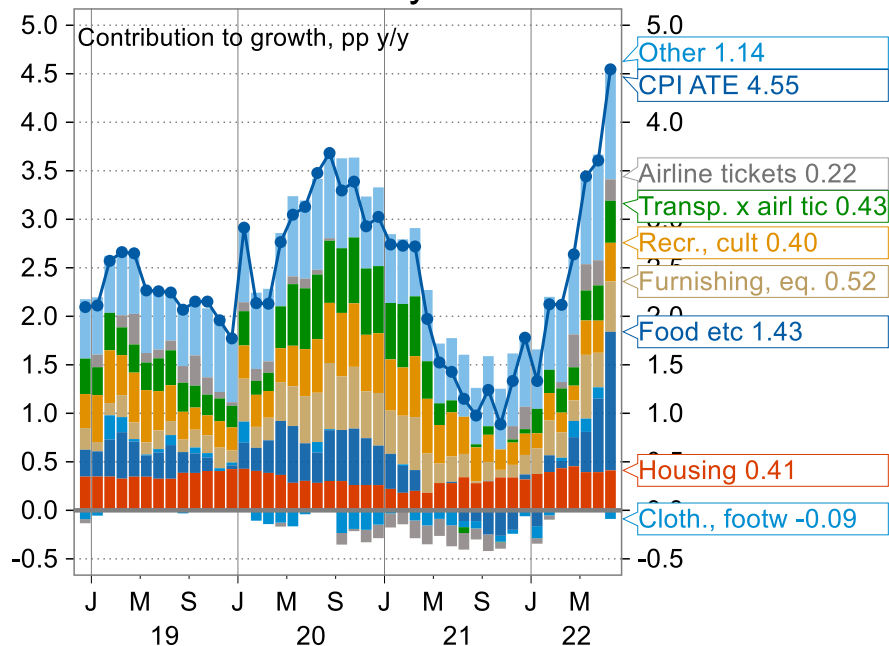


SB1 Markets/Macrobond

Faster/broader price growth recent months, but airfare tickets are normalising

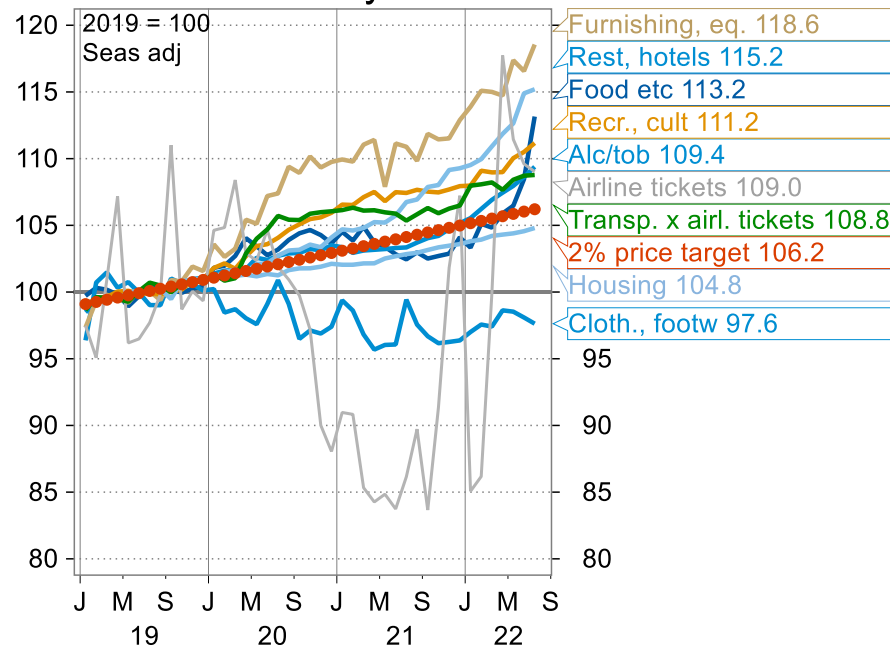
Just clothing/footwear, and housing ex energy below the 2% path since 2019

Norway Core CPI



SB1 Markets/Macrobond

Norway Core CPI-ATE

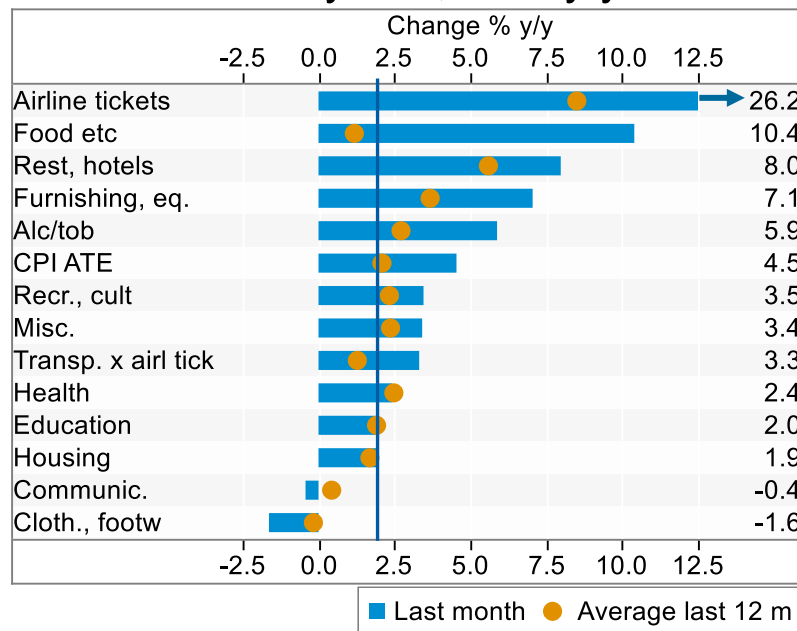


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10 sectors report core inflation above 2.0%, just 3 are below

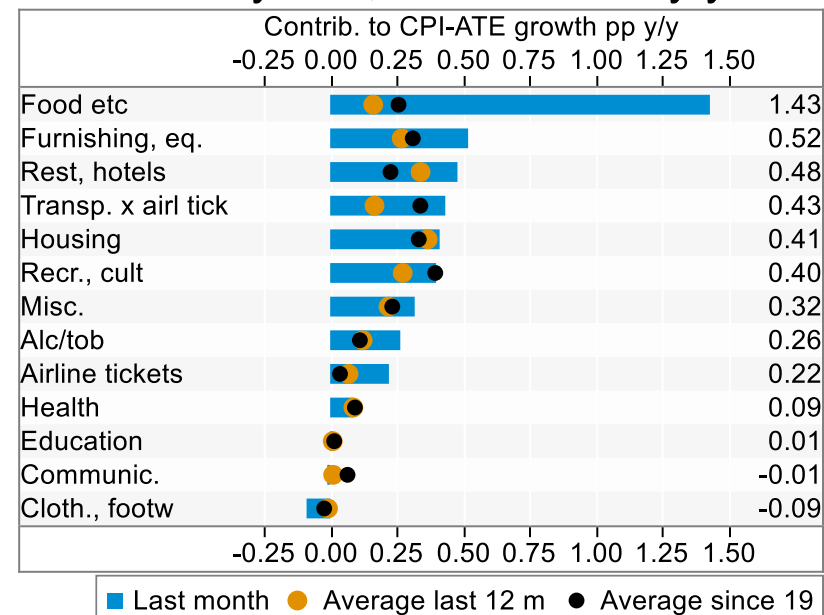
Food, furnishings, restaurants/hotels & housing have contributed the most y/y

Norway CPI, core y/y



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Norway CPI, core contrib. y/y

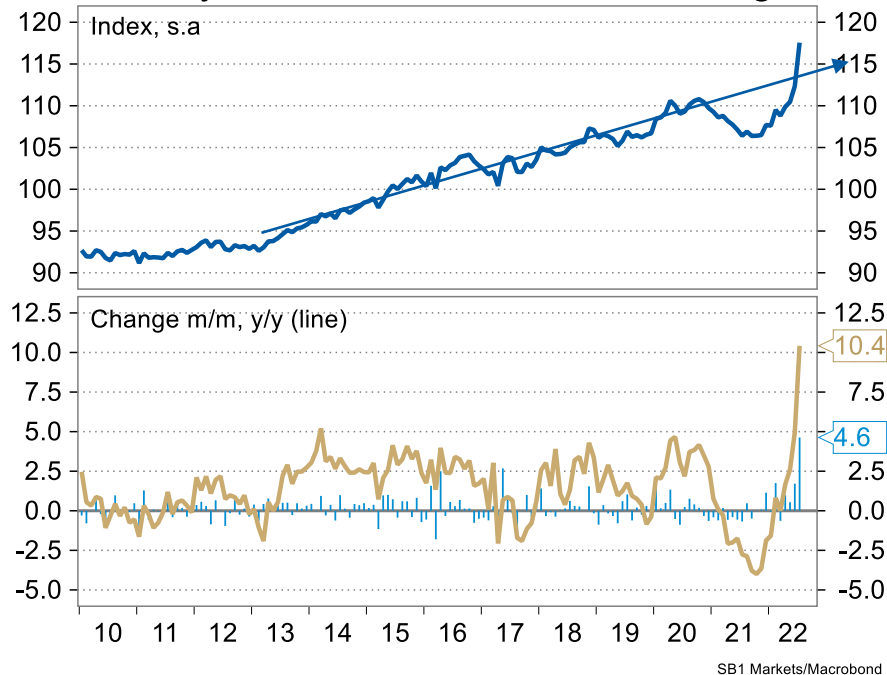


SB1 Markets/Macrobond

Finally, now we too have a real food inflation challenge!

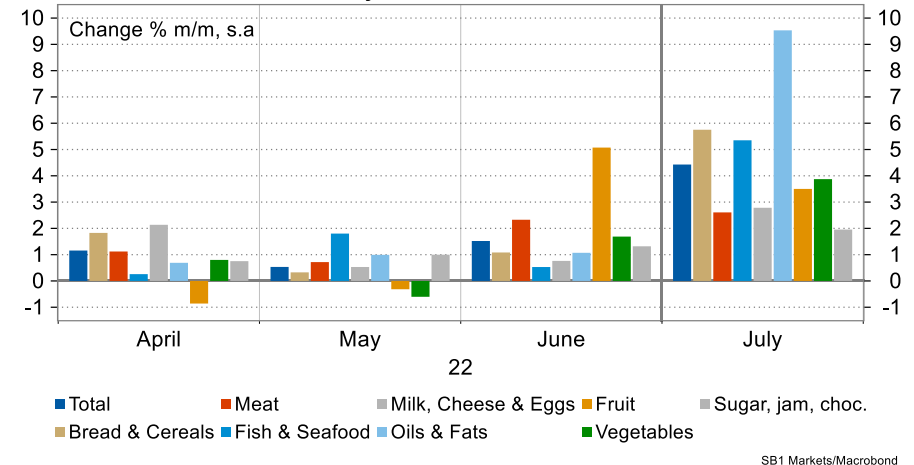
Food prices rose 7.6% m/m (we exp. 8%), or by 4.6% seas adj. Prices are up 10.4% y/y. Like abroad

Norway CPI, Food & non-alc beverages

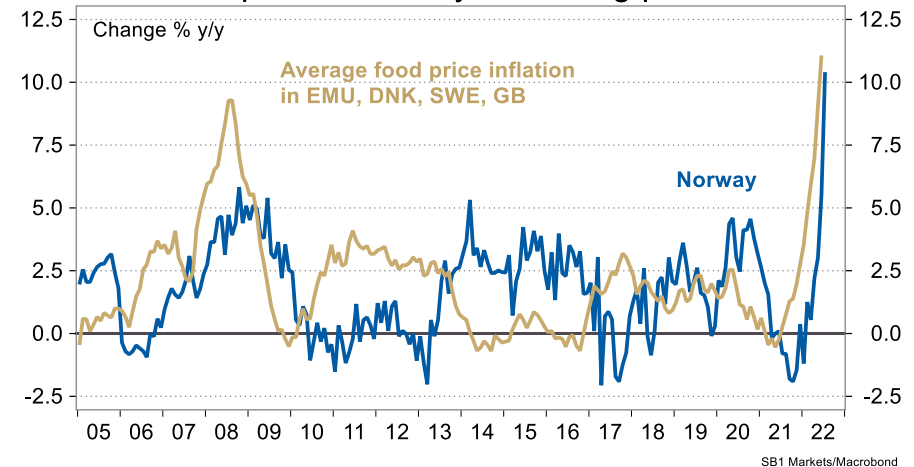


- For reasons we do not understand, other economist had not recognised the lift in food prices in July, following the semi-annual price negotiations between wholesalers/producers, and the retail chains. Our 8% m/m f'cast turned out to be close to spot on the 7.6% outcome. Seasonally adjusted prices rose 4.6%, the highest ever, with a wide margin
- The price lifts in July were broad, but unusually strong for oils/fats (9%, s.a.), bread 6% and fish (5%)
- 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'

Norway CPI, Food details

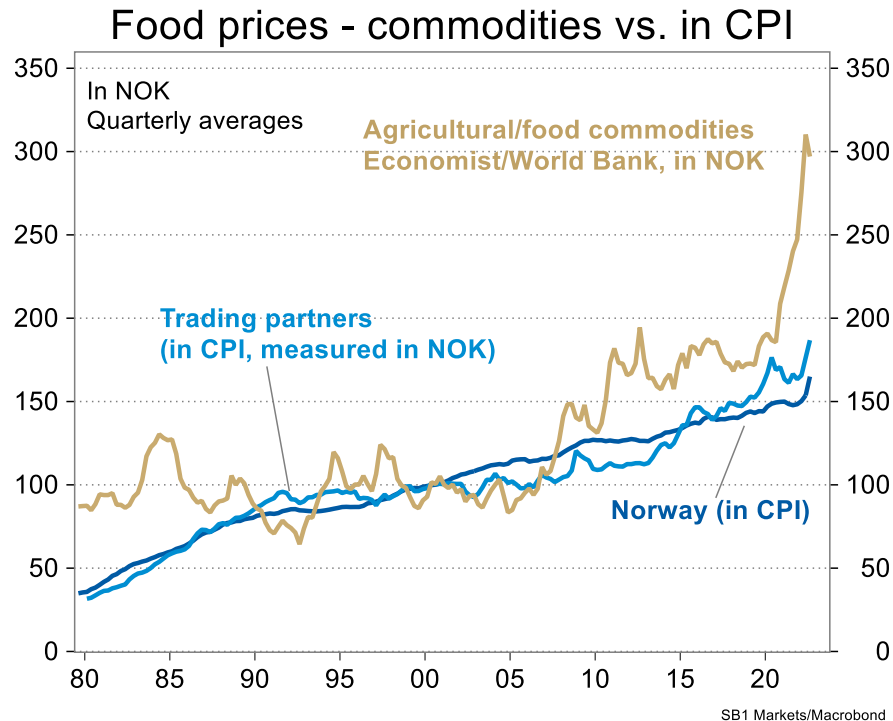


Food prices, Norway vs trading partners

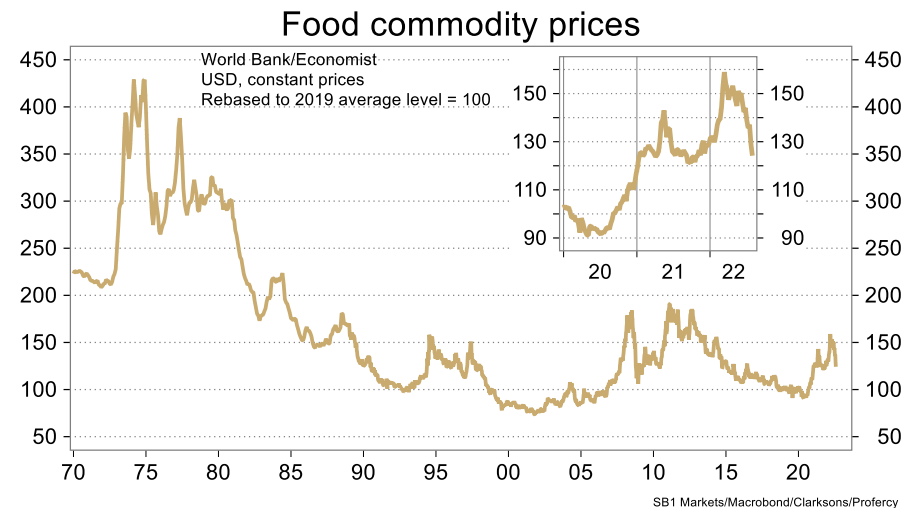
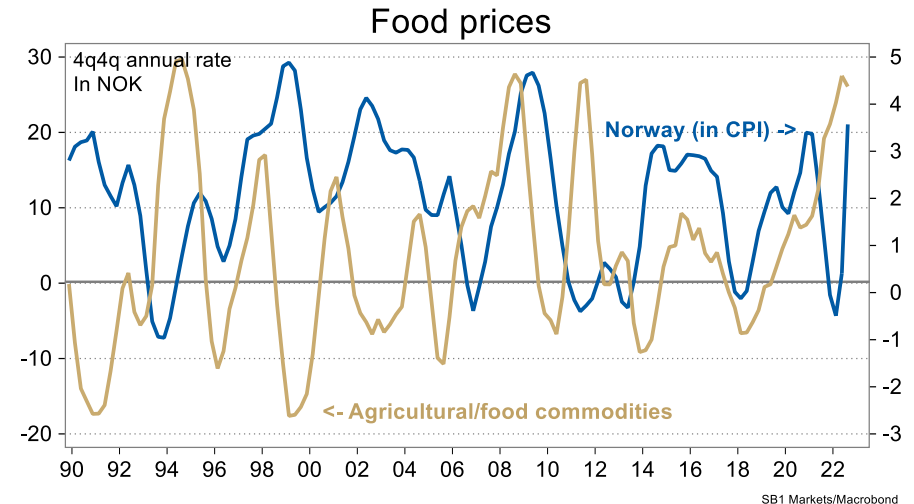


Food commodity prices: Limited correlation to trading partners' food prices

... And no stable correlation to Norwegian food prices (in the CPI). Now, food com. prices are falling



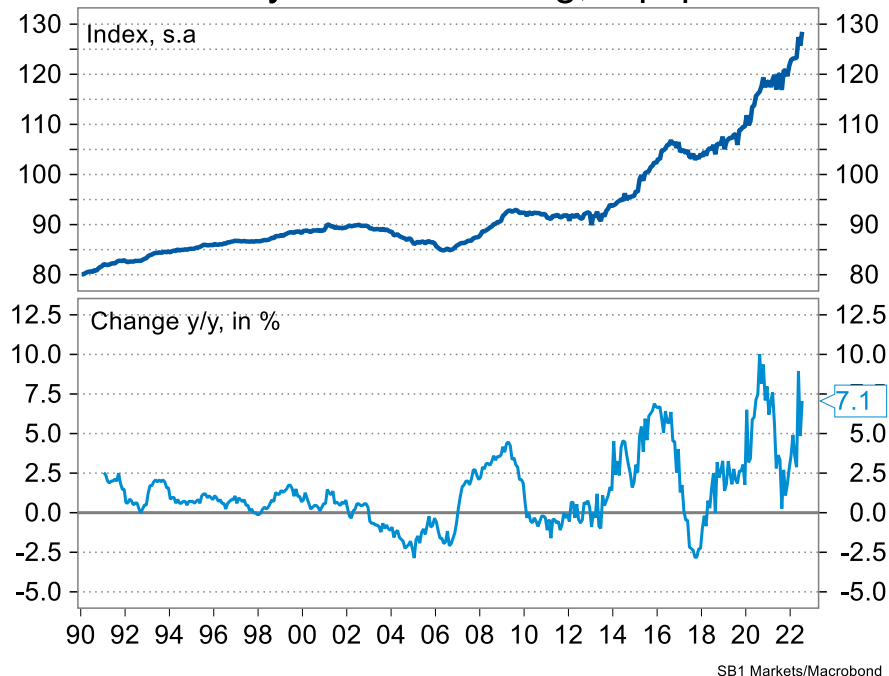
- Agricultural/food commodity prices are sharply up from mid 2020, but have fallen sharply since March, and are now 20% down from the peak. In real terms, prices are far from record high



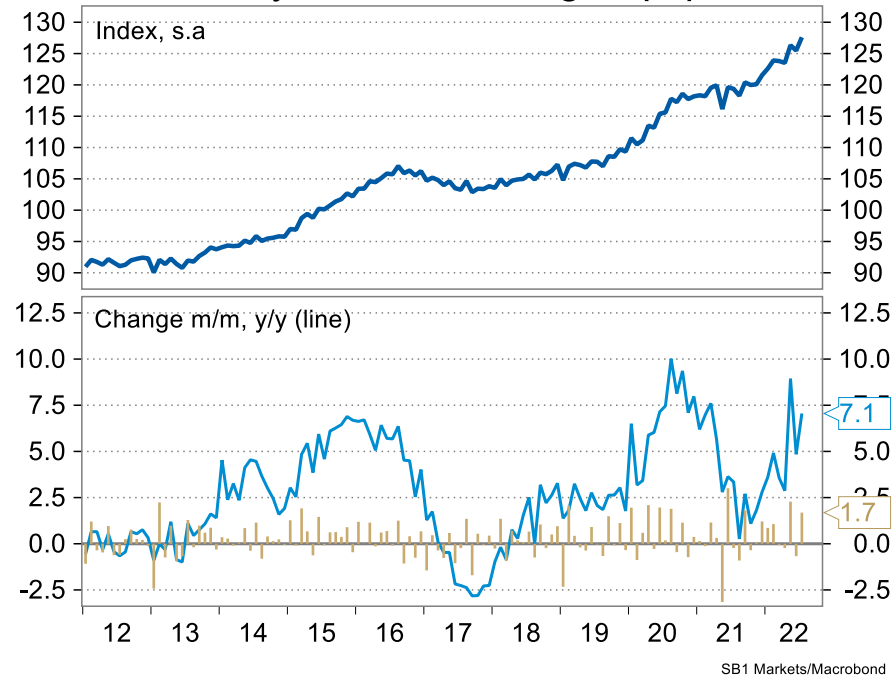
Furnishing etc. prices up 1.7% in July – and by 7.1% y/y

Furniture up 13% but household applications just 0.7%

Norway CPI Furnishing, equipm.



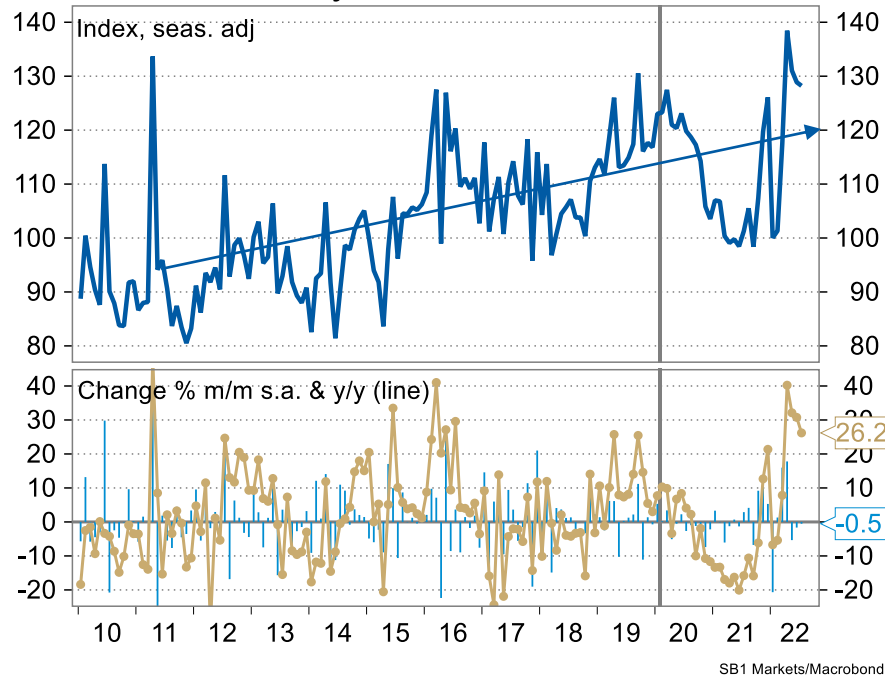
Norway CPI Furnishing, equipm.



Airfare ticket prices: Slightly down in July, in spite of the SAS strike (reduce supply)

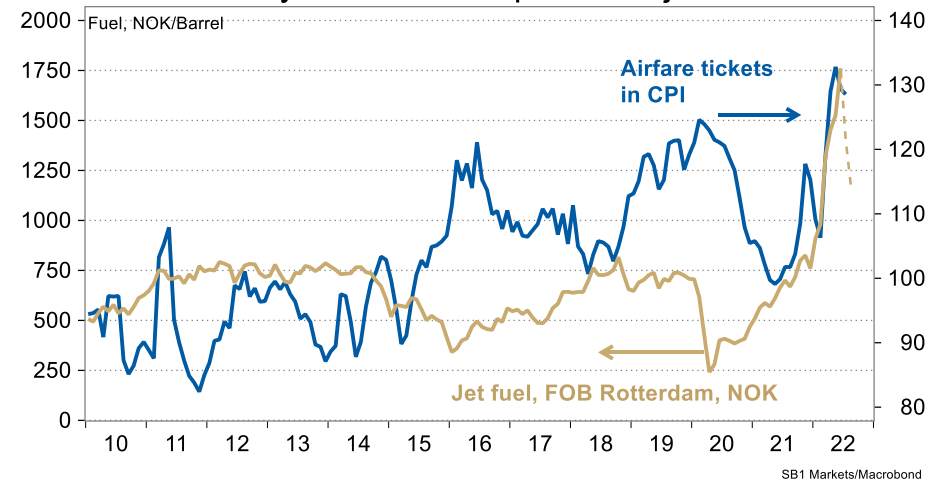
Prices are slightly above a long term trend (2 ¼ % per year) - and not by much given the fuel cost

Norway CPI Airline tickets



- **Airfare ticket prices** fell 0.5% m/m in July (after a shaky seasonal adjustment procedure), we expected a 5% lift. Prices are still up 26% y/y, from a low level last year, during the pandemic – contributing 0.20 pp to the 4.5% 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 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)

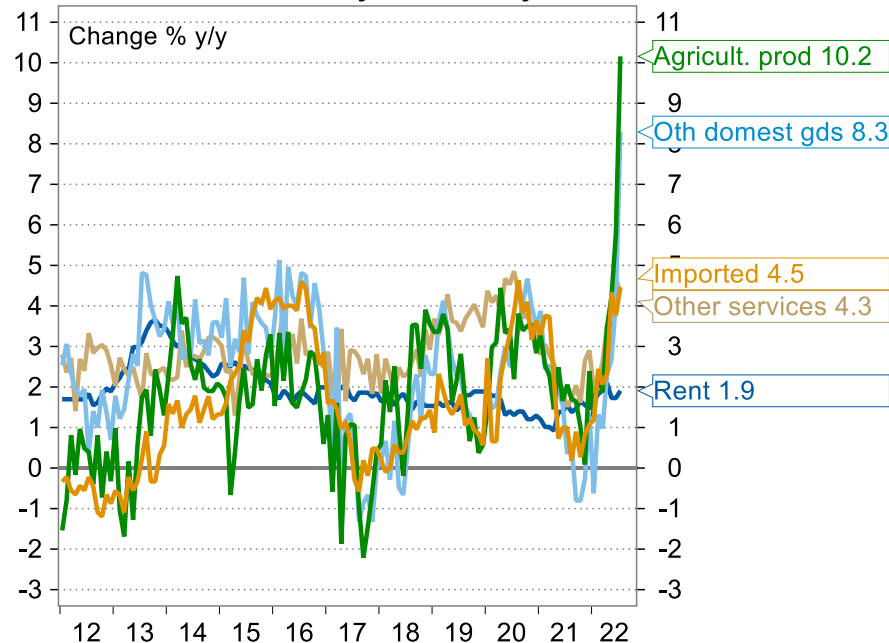
Norway Airfare ticket prices vs jet fuel



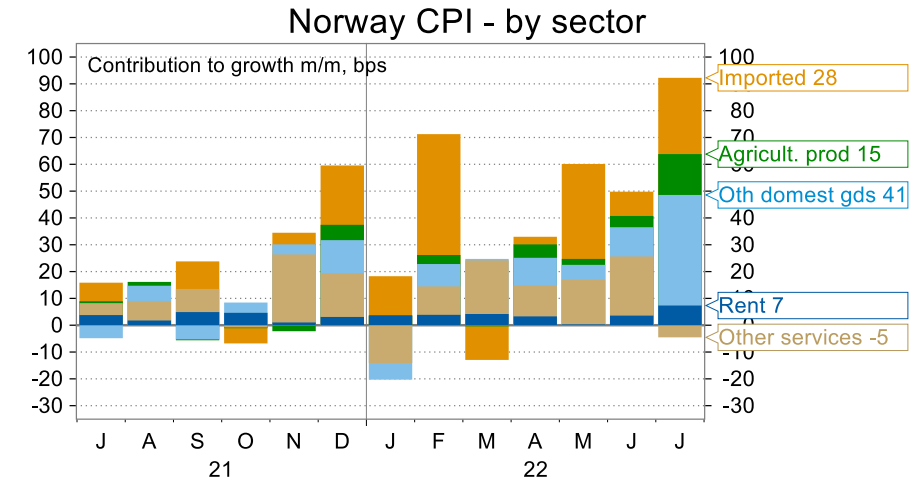
Some services at the downside in July (like airfare tickets) but...

Large contributions from imported goods, and even more from domestic goods

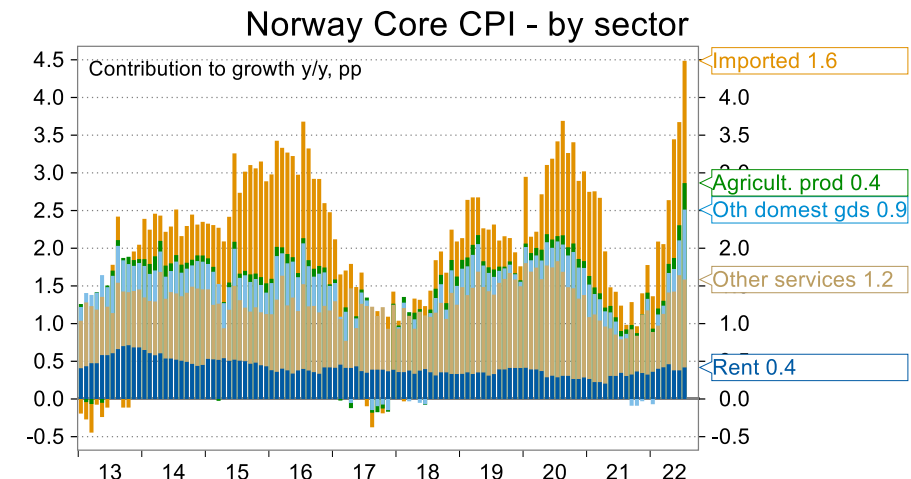
Norway CPI - by sector



SB1 Markets/Macrobond



SB1 Markets/Macrobond

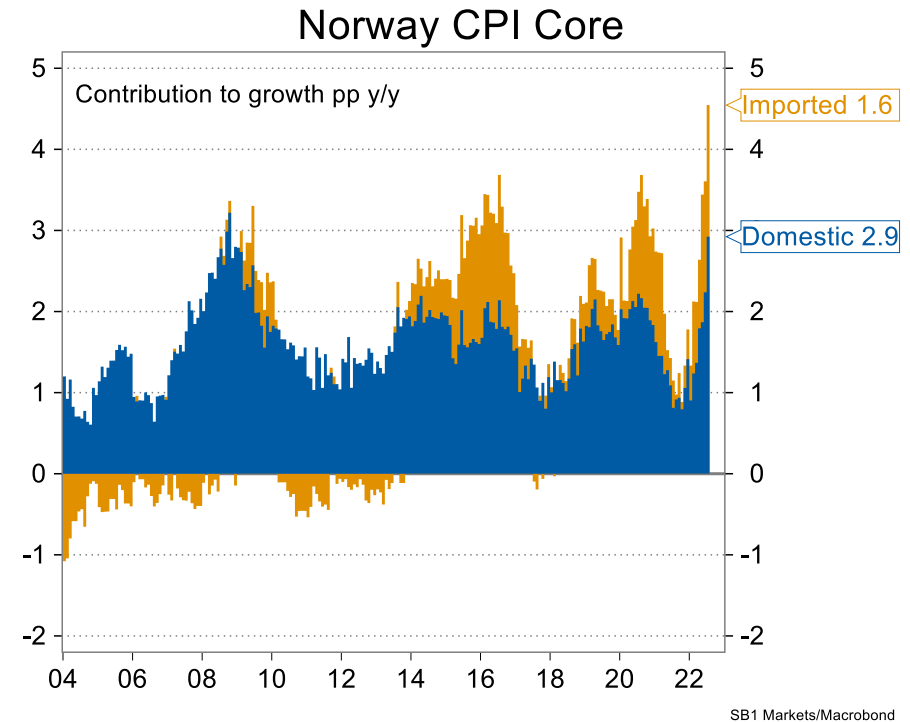
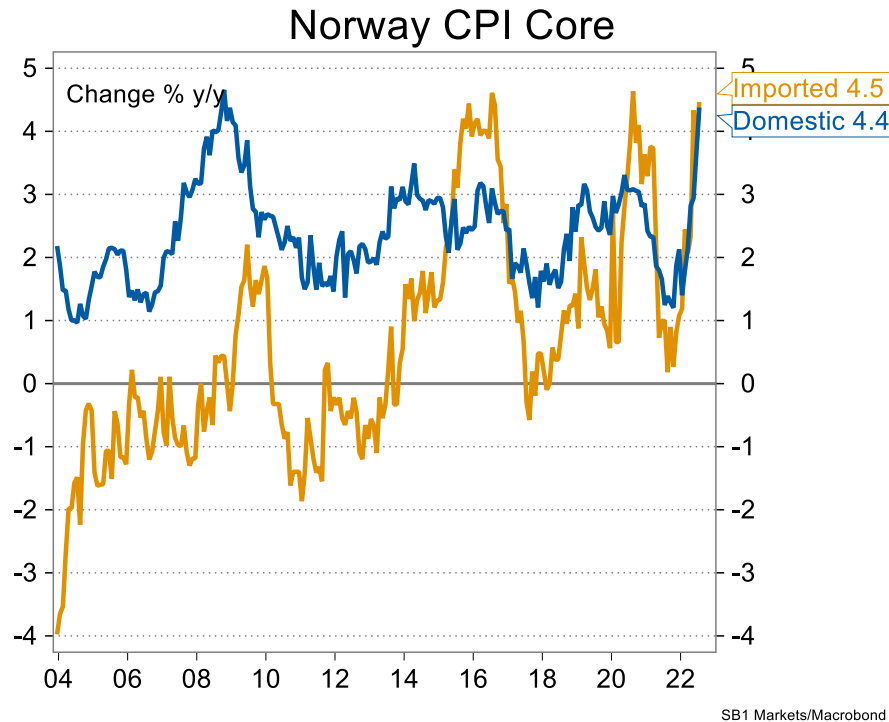


SB1 Markets/Macrobond

- **Domestic services inflation ex rents** slowed sharply during the corona crisis, and is now climbing faster, up 4.3% y/y, contributing 1.2% to core inflation, with substantial contributions from airline tickets (0.2 pp to total CPI) and hotels/restaurants (0.5 pp) – but also much more
- **Domestically produced agricultural products** are up 10.2% y/y, new ATH, contributing 0.4 pp to the overall core rate
- **Other goods** than agricultural & imported products are up 8.3% y/y, and contributed by a 0.9 pp contribution to the core inflation rate, by far the highest ever. It smells (fish)
- **Rent inflation** has stabilised slightly below 2%

Both imported goods as well as domestically produced goods & services up 4.5%

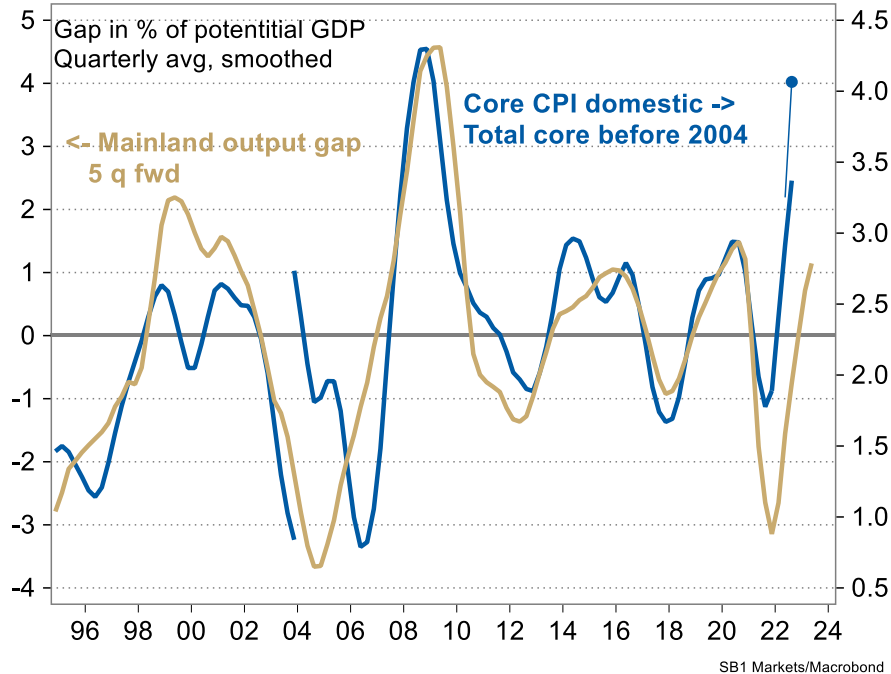
... and the largest contribution to total (core) inflation is from the domestic component



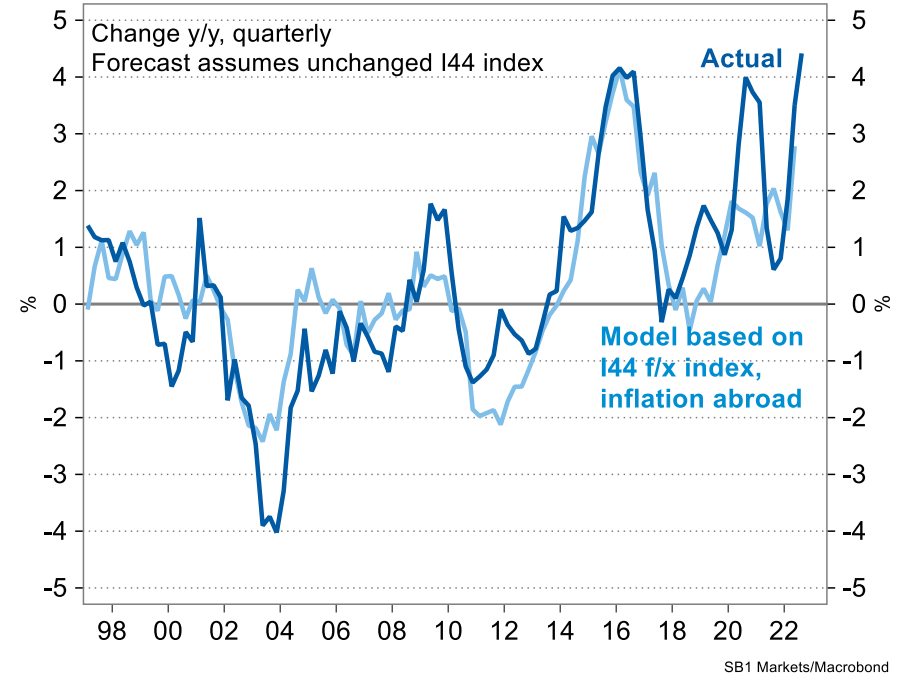
Domestic inflation up due to a strong domestic economy? Seems so

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

Norway Core CPI vs Output gap



Norway Import CPI, f/x-model

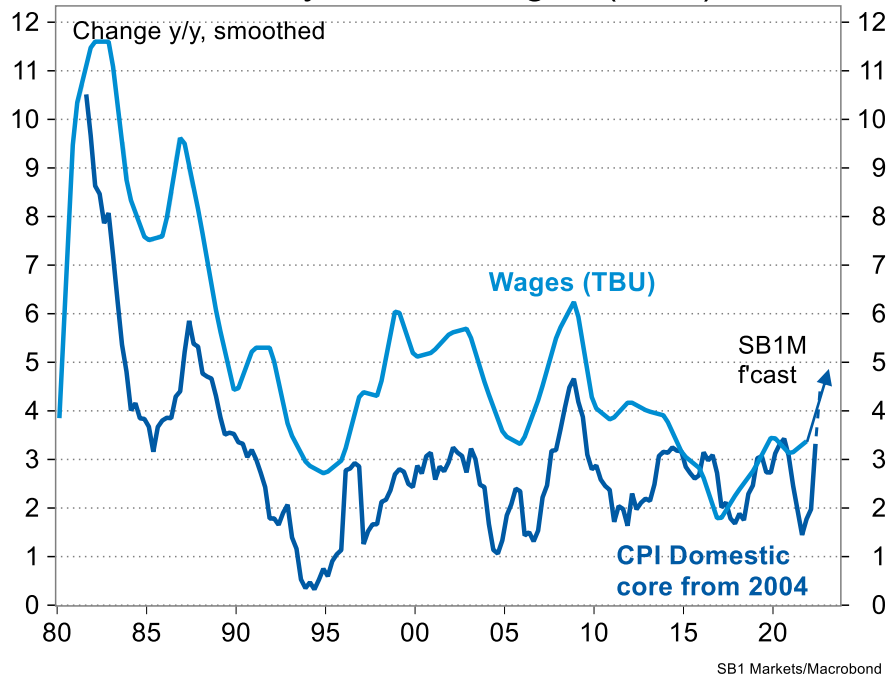


- **Labour market data and surveys** indicate that the output gap is higher than the mechanic calculation at the chart above

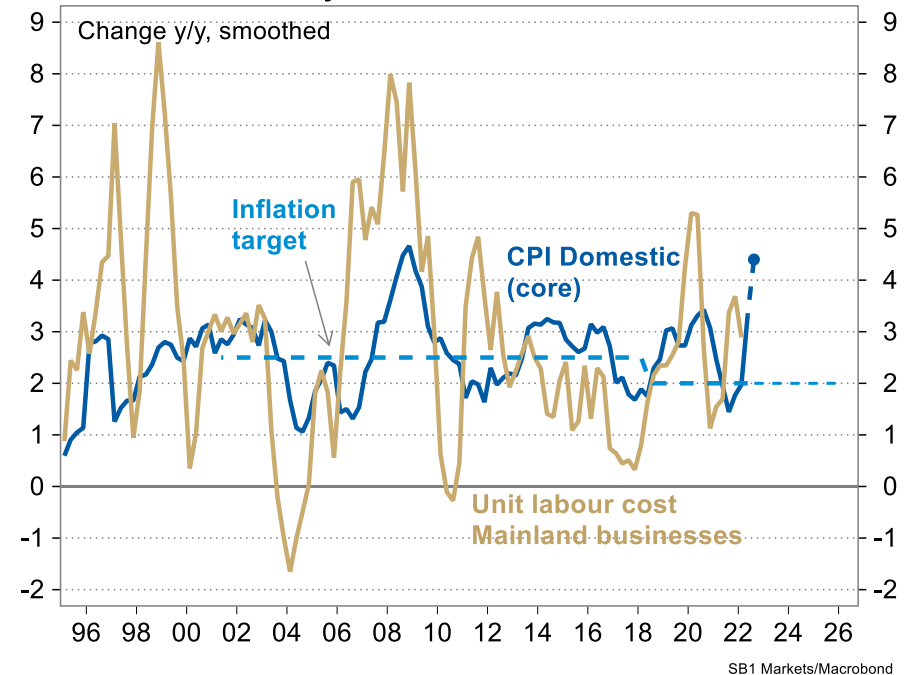
Domestic costs: Wage inflation is increasing, cost inflation well above infl. target

Wage inflation has turned up. Unit Labour Cost up more than 3% y/y past 3 quarters

Norway CPI vs wages (TBU)



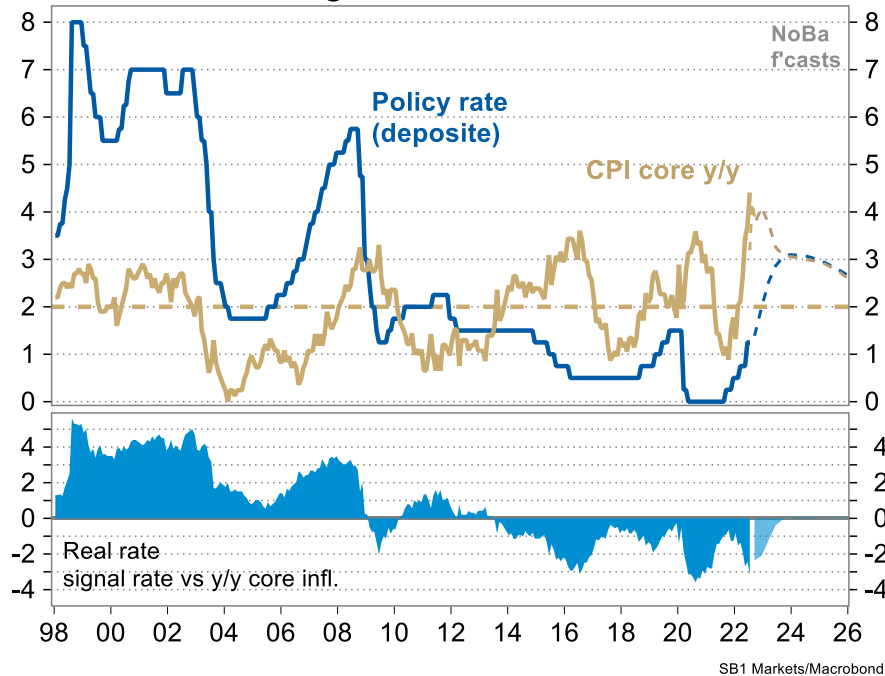
Norway CPI vs labour costs



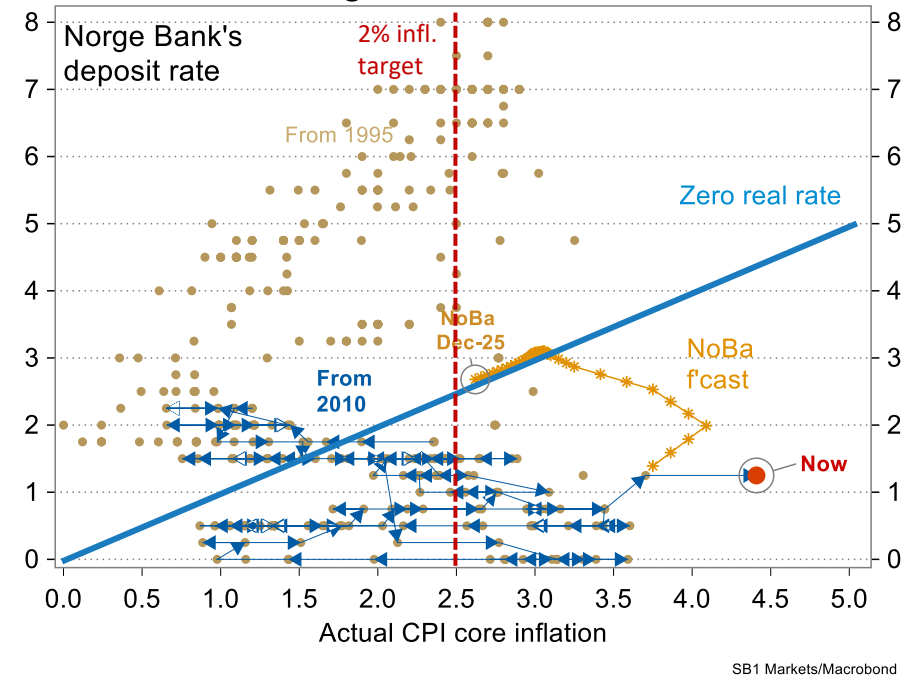
Will Higher inflation will increase the pressure on Norges Bank?!

Faster hikes than signalled in June very likely

Norges Bank vs. CPI



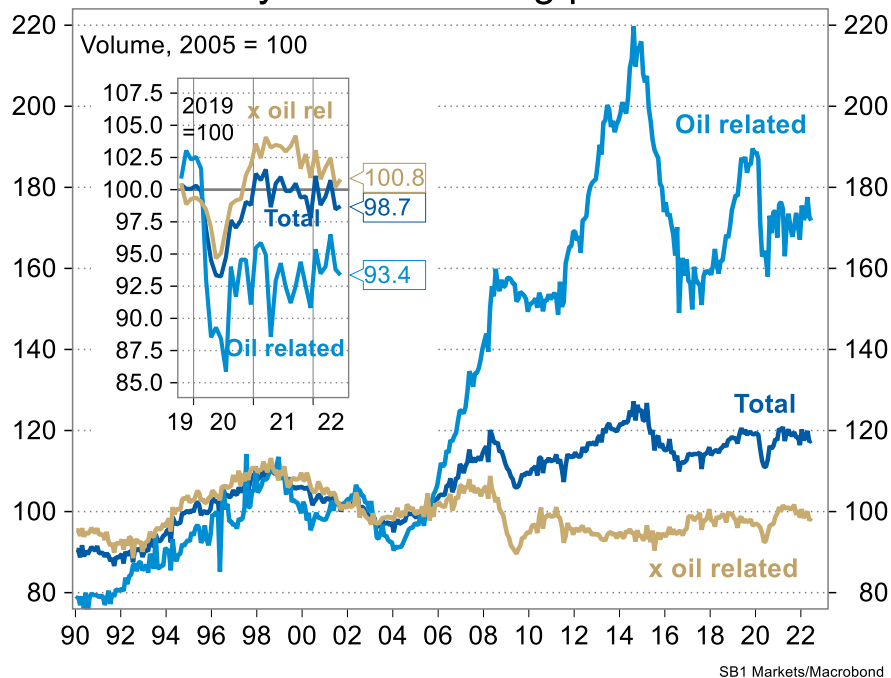
Norges Bank vs CPI



Manufacturing production on the way down, weakness in non-oil related sectors

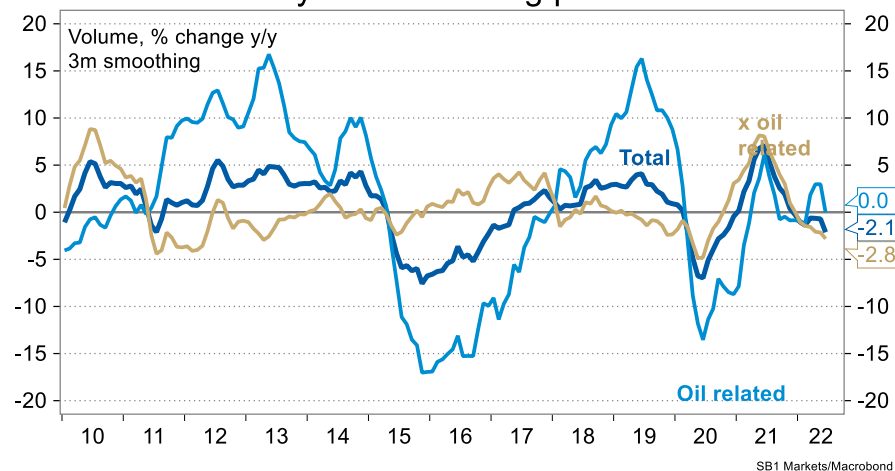
Production rose by 0.3% in June, following the 2.3% decline in May – Q2 down 0.5%

Norway Manufacturing production

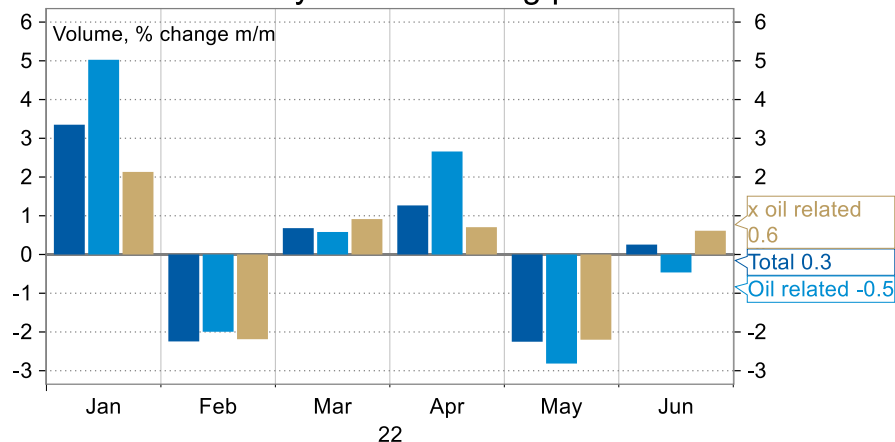


- **Oil related manufacturing production** (yards etc) fell both in May in June, but is still trending upwards (but Q2 up just 0.3%_m, not annualised)
- **Other sectors** gained 0.3% but production has been trending down since last year, and by 0.7% in Q2
- **Manufacturing surveys** have been signalling strong growth in production but so far not much have been delivered - and now surveys are heading southwards

Norway Manufacturing production



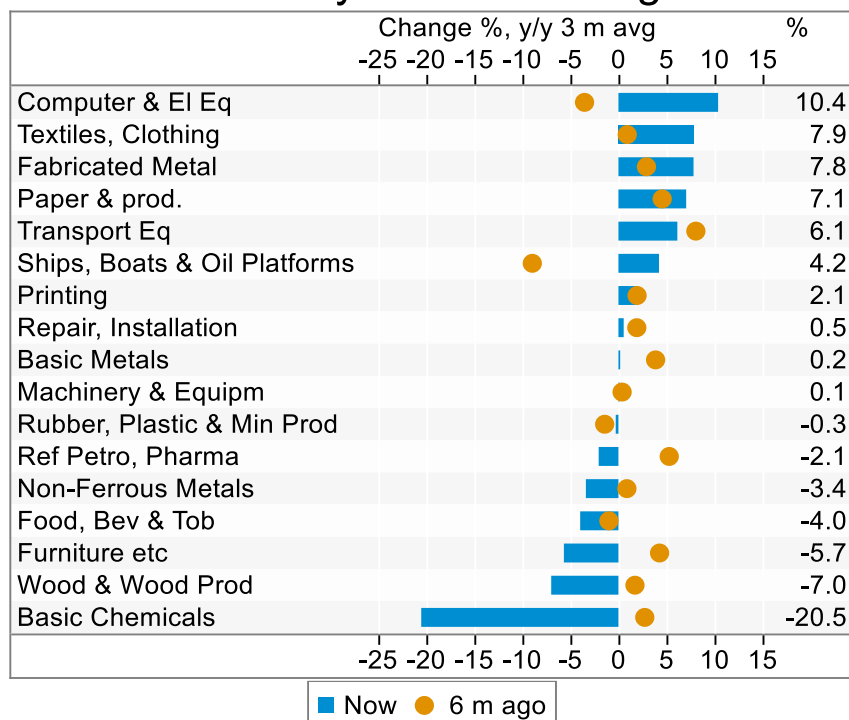
Norway Manufacturing production



Rather mixed between sectors: Chemicals, furniture, food down

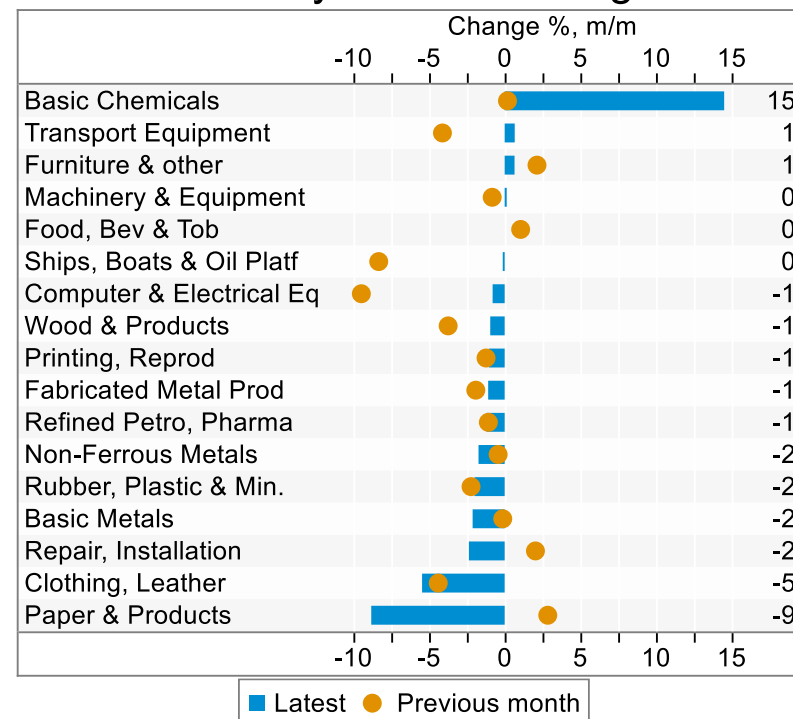
Metal products, paper, transport equipment are expanding

Norway Manufacturing



SB1 Markets/Macrobond

Norway Manufacturing

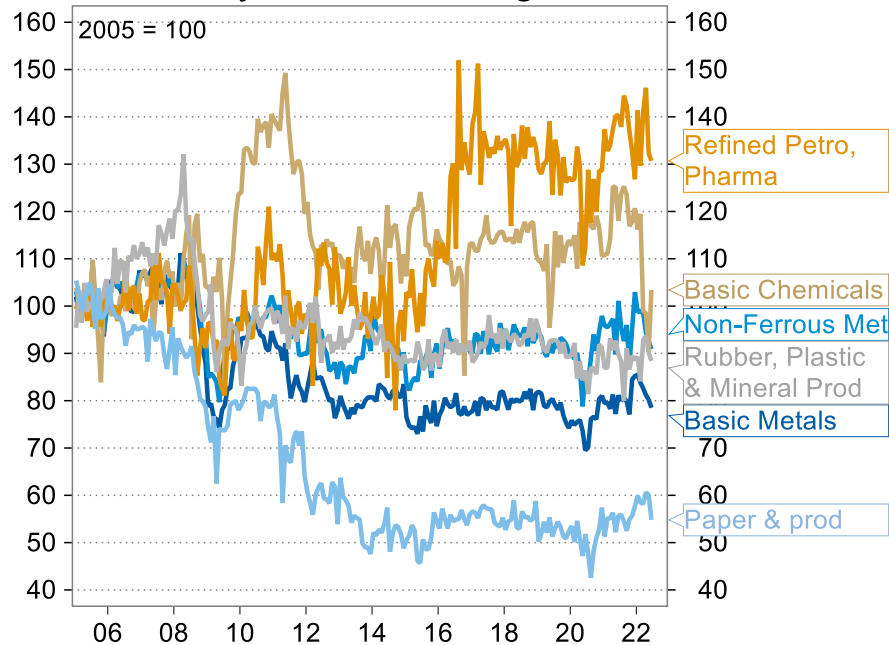


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Engineering on the way up, now even ships and platforms

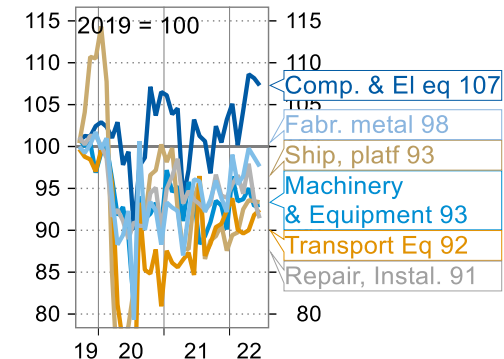
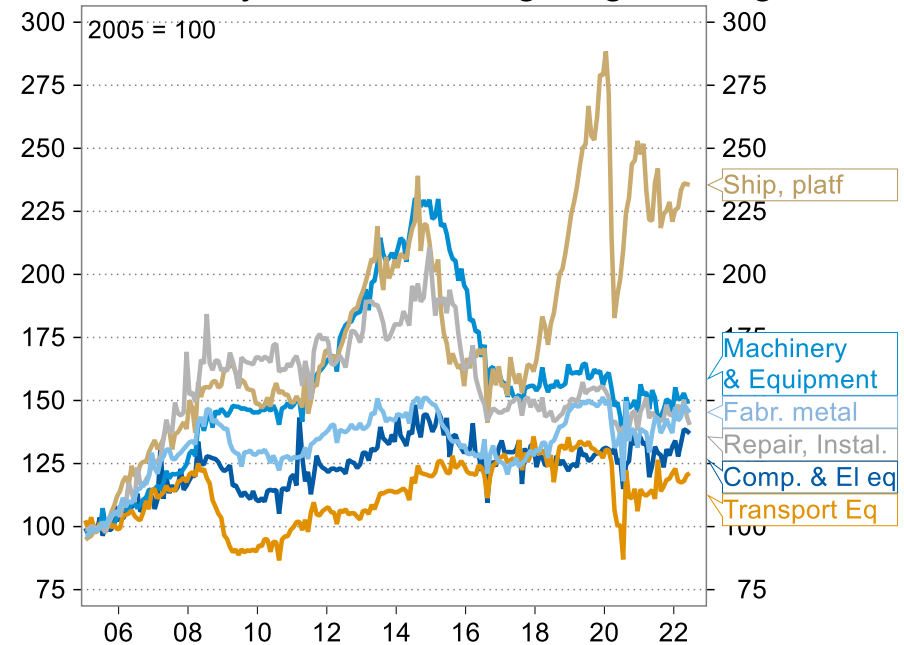
Mixed within commodities, chemicals, metal and paper down (are the selling their electricity?)

Norway Manufacturing commodities



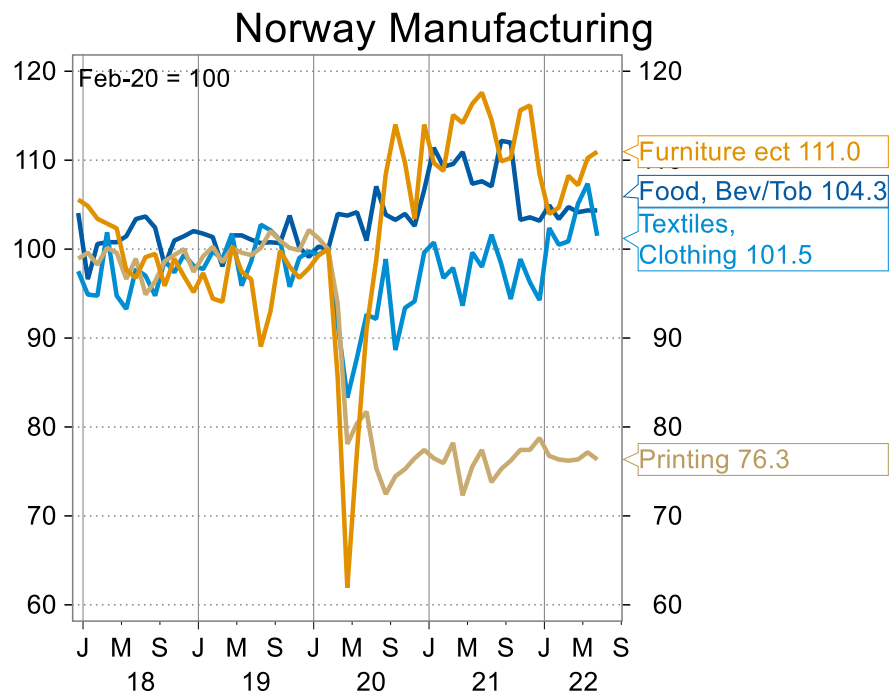
SB1 Markets/Macrobond

Norway Manufacturing Engineering+



Food production is back to a normal level

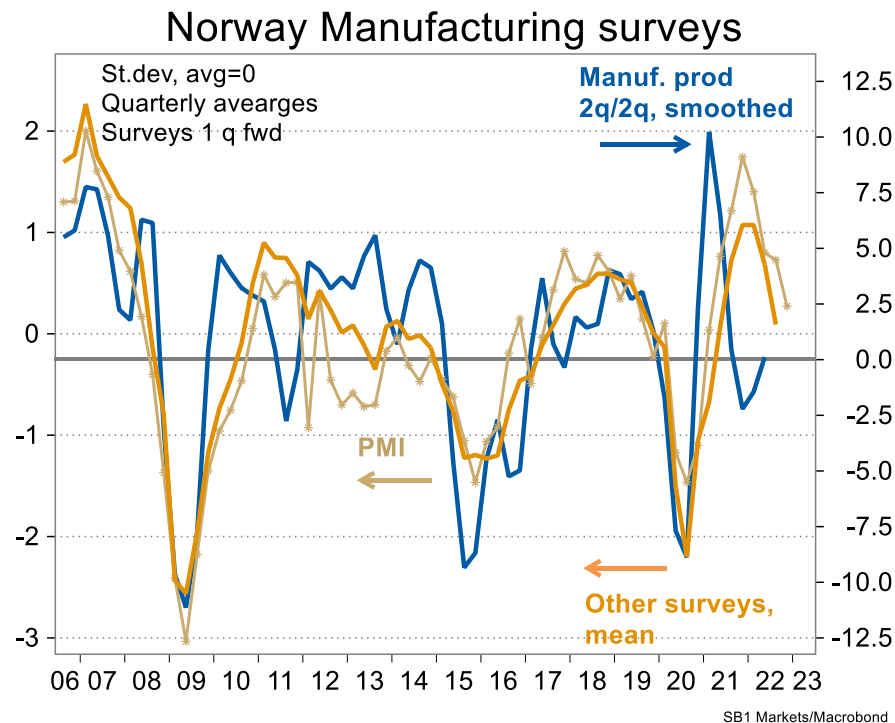
Furniture, textile/clothing are still above pre-pandemic levels. Printing is not, down 24%



SB1 Markets/Macrobond

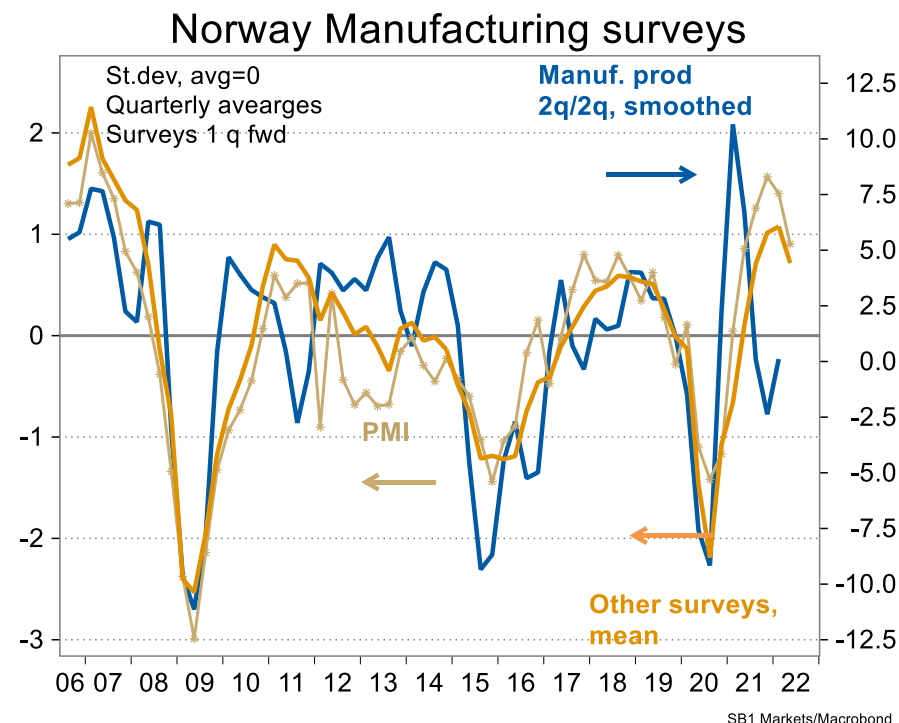
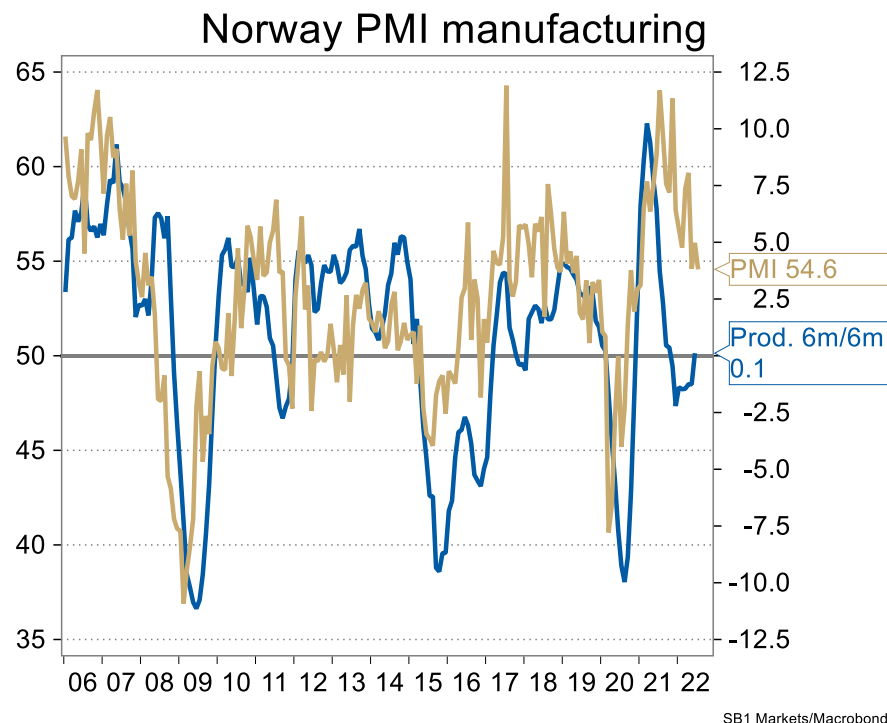
Surveys are signalling slower growth (like elsewhere)

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



The manufacturing PMI down in July but less than we expected, -1.4 p to 54.6

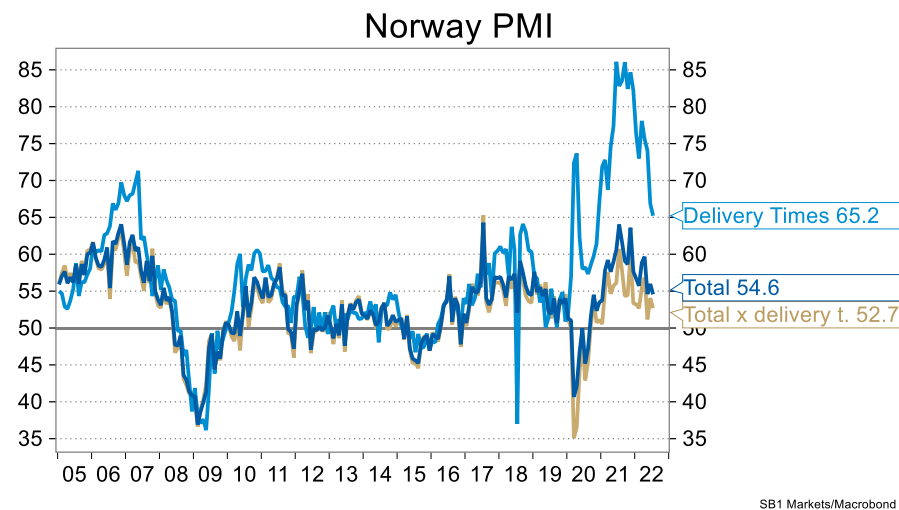
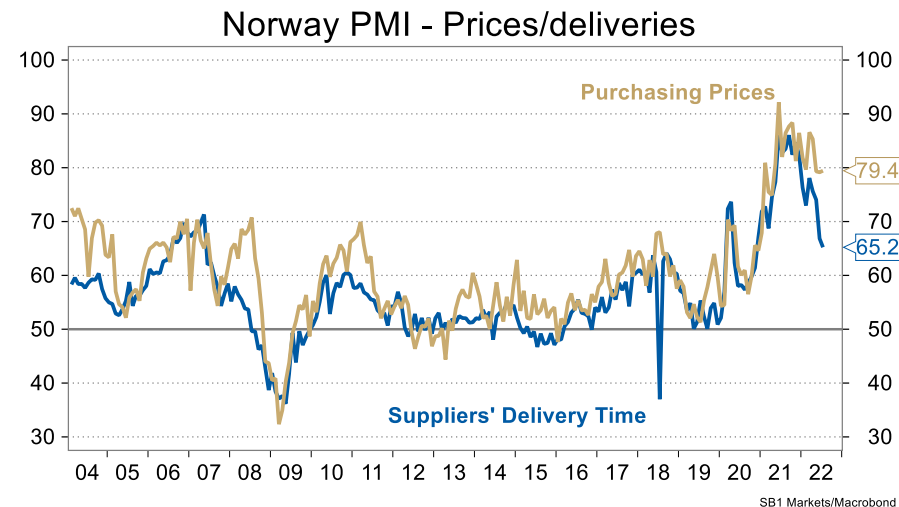
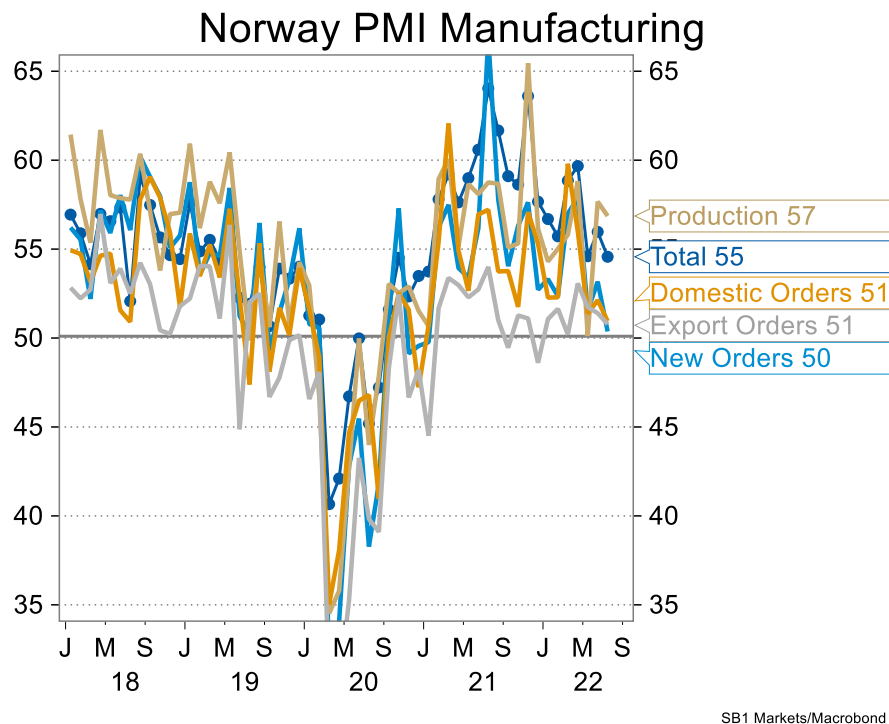
The trend is down, and orders have flattened. Delivery times slows a little, but price infl. still high



- The **manufacturing PMI index** is trending down but fell less than we expected (our f'cast 53)
- Other **manufacturing surveys** are marginally down too
- Even if surveys have been reporting growth, **actual production** has fallen slightly since last April

Orders have flattened (sub-indices at 50), production will probably follow

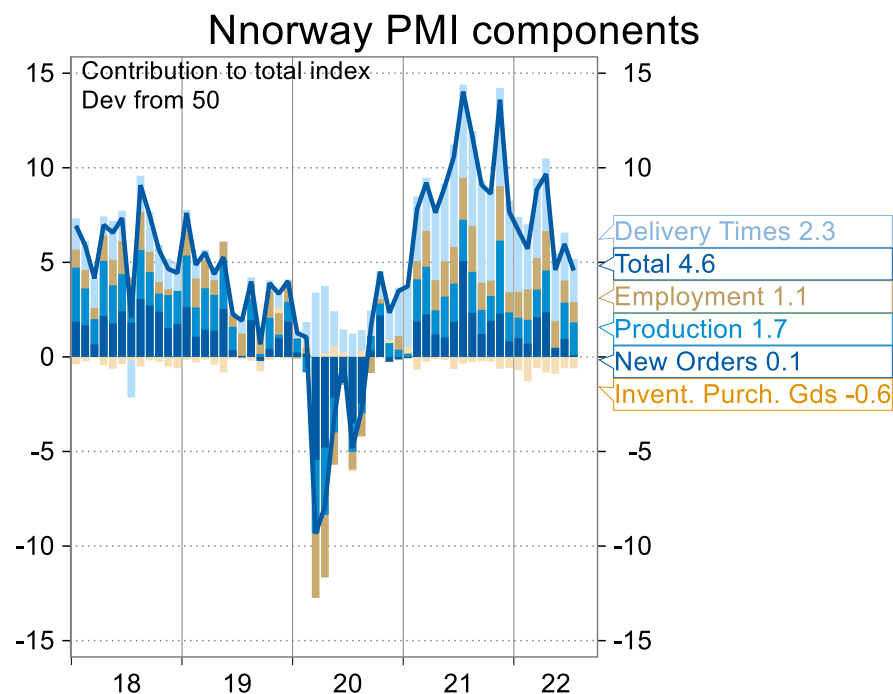
The delivery index down but still at a high level – but the input price index have not yielded by much



- The input goods price index have been unchanged past two months

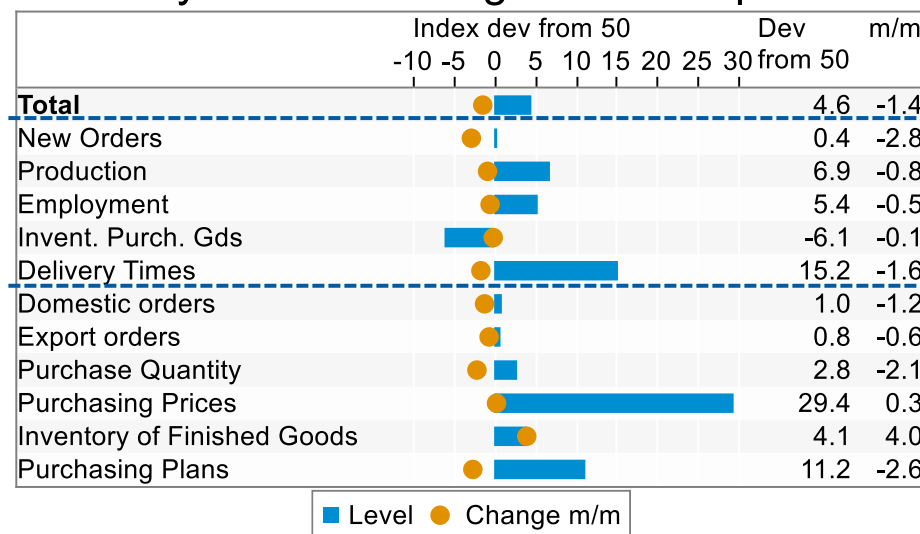
The delivery times index still lifts the headline PMI 'artificially'

.. But just by 2.3 p in July



SB1 Markets/Macrobond

Norway Manufacturing PMI - components



SB1 Markets/Macrobond

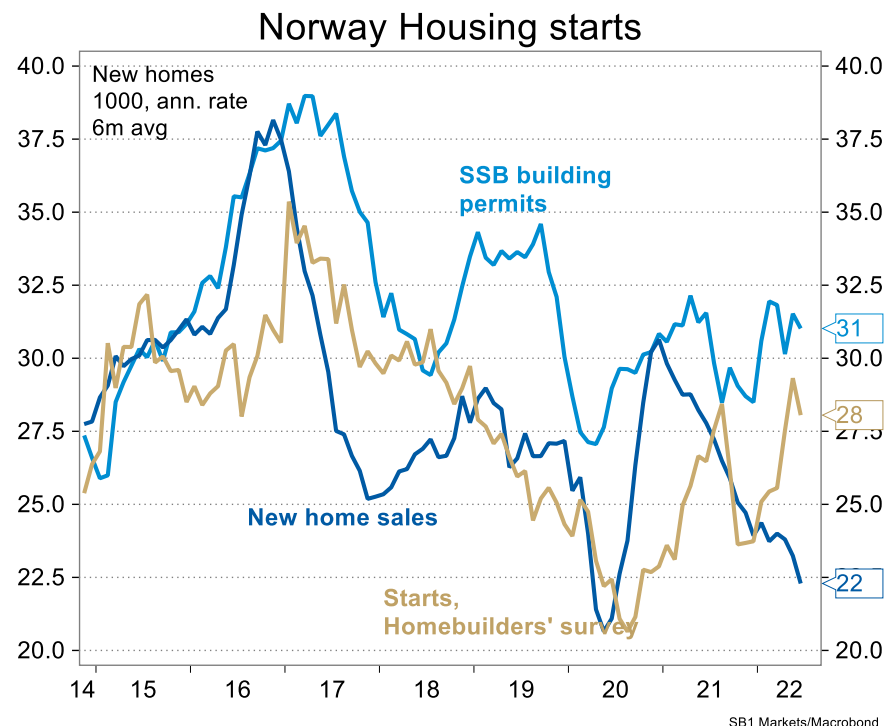
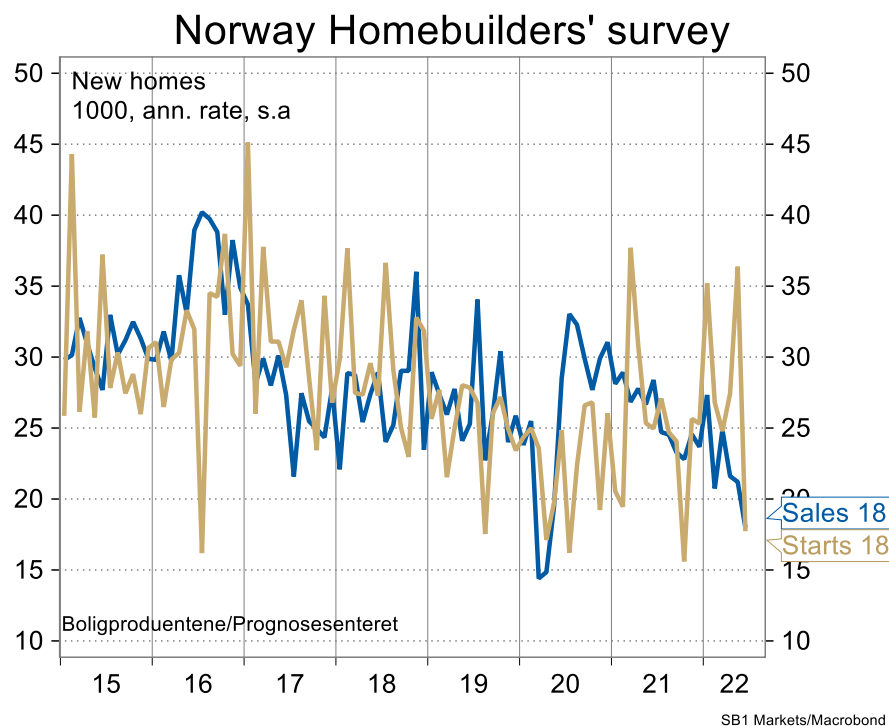
The total index is the average of the first 5 sub-indices

- Normally, the **delivery times index** has not had any significant impact on the total PMI index as the delivery times index has been quite closely correlated other components in the headline index. Now, it makes a substantial difference, by 4 pp to the total index

The total PMI index is a weighted index of new orders, production, employment, inventory of purchased goods, and delivery time. The 6 next sub indices at the table to the right are not included in the total index calculus

New home sales are trending sharply down, starts followed suit in June

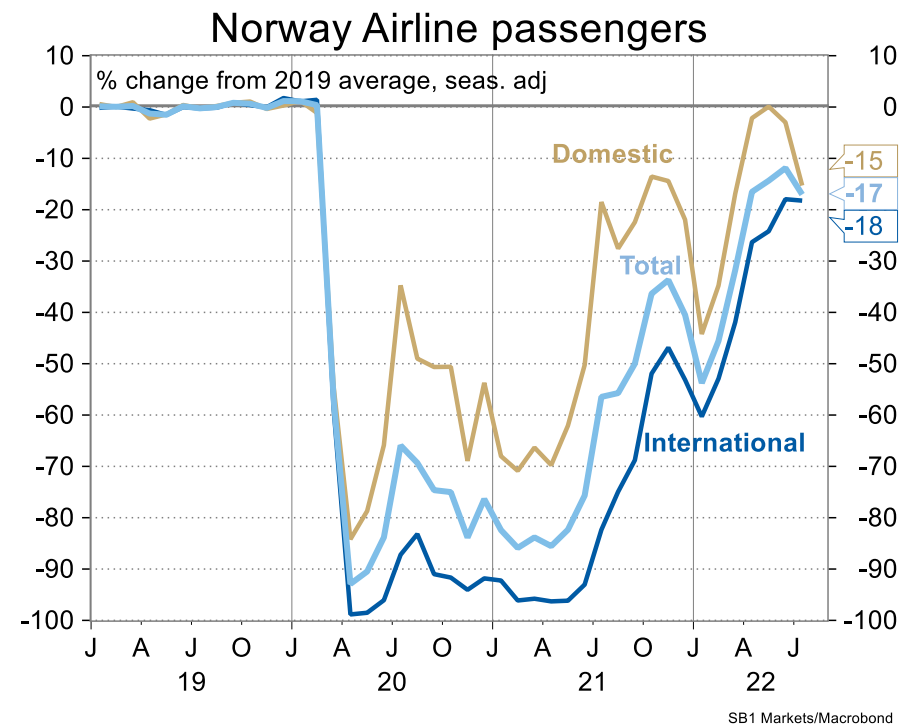
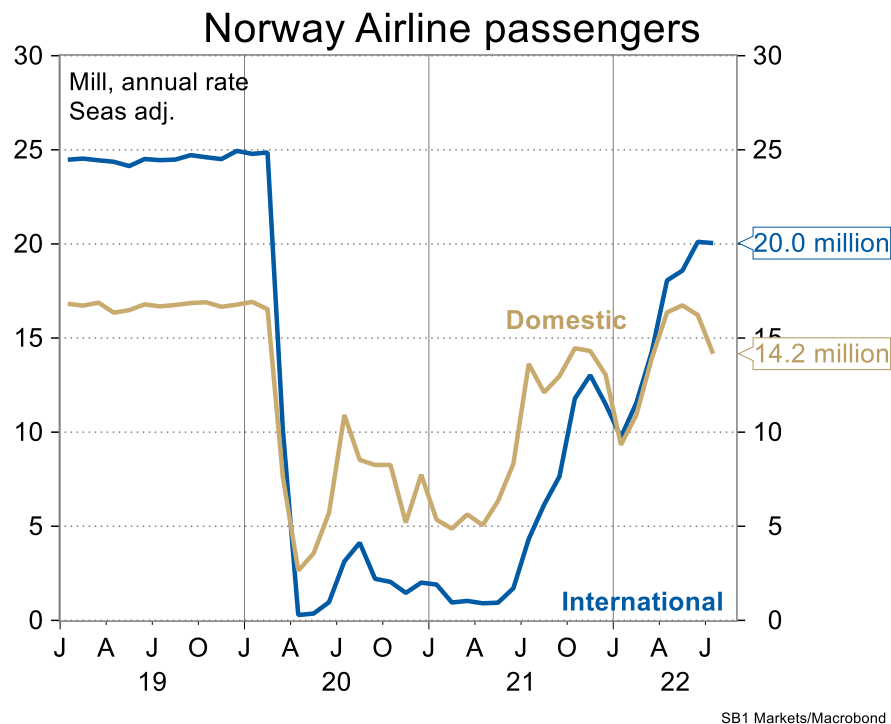
... according to the homebuilders. SSB have so far reported far higher building permits



- Boligprodusentene (Home builders) 'always' report that building activity is declining and that it is too low. Now, June sales were on the weak side, at 18' annualised and the trend is now clearly down
- Starts fell to 18' from 36' – a very volatile data series. The average over the past 6 months is at 28', not far from SSBs building permits at 31'
- However, the rather steady decline in sales may signal downturn in new starts the coming months. The sharp lift in construction costs and higher mortgage rates may be reasonable explanations

Domestic airline traffic down in July – the SAS strike to blame?

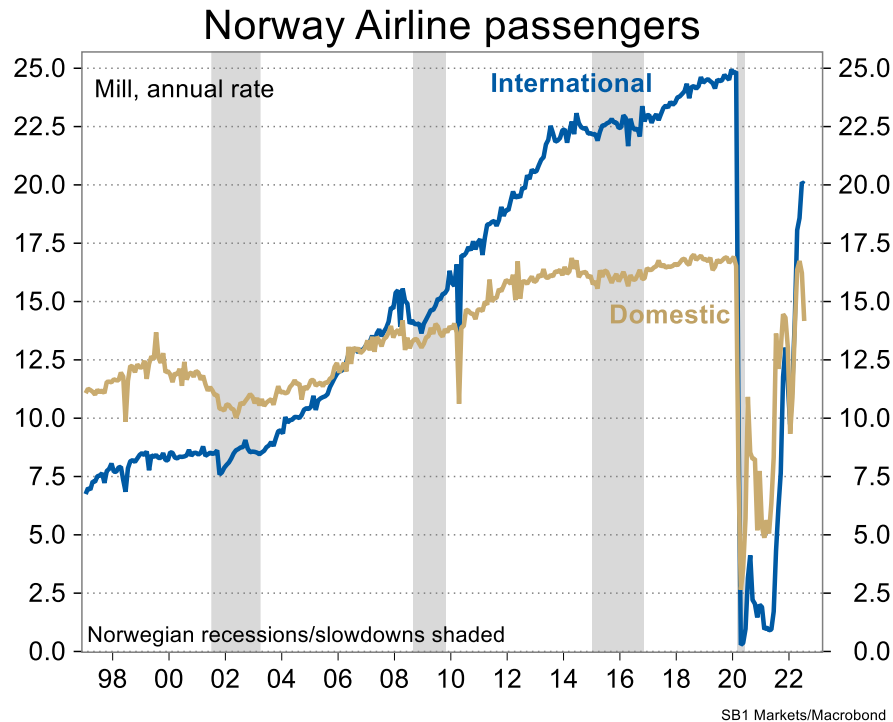
International traffic unchanged m/m. Both are down 15 – 18% vs. the 2019 pre-pandemic level



- We expect a substantial increase in traffic in August

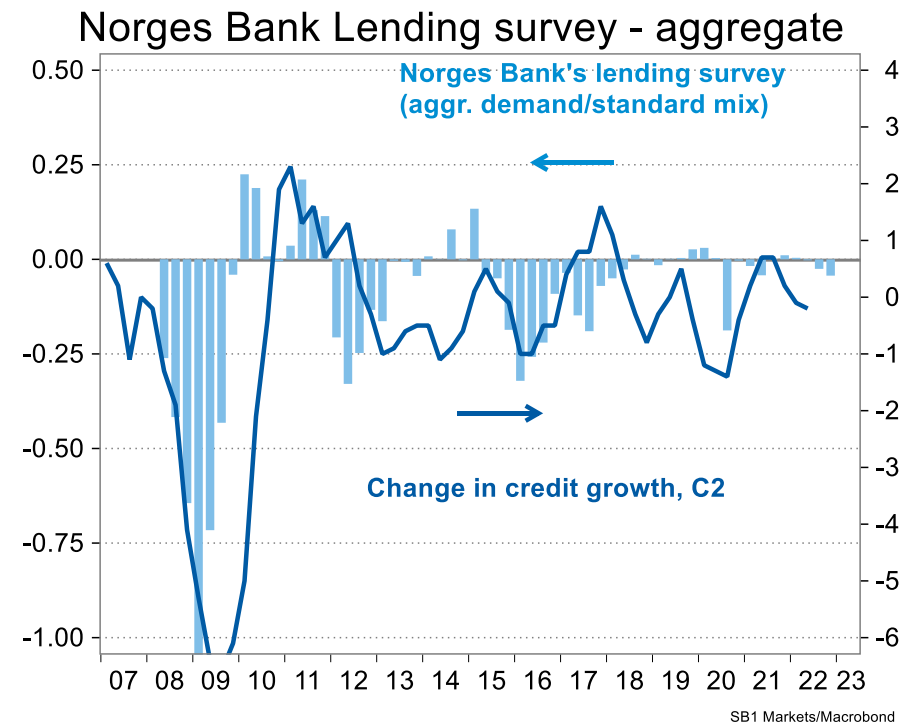
A Longer term view – this recovery is not complete yet

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



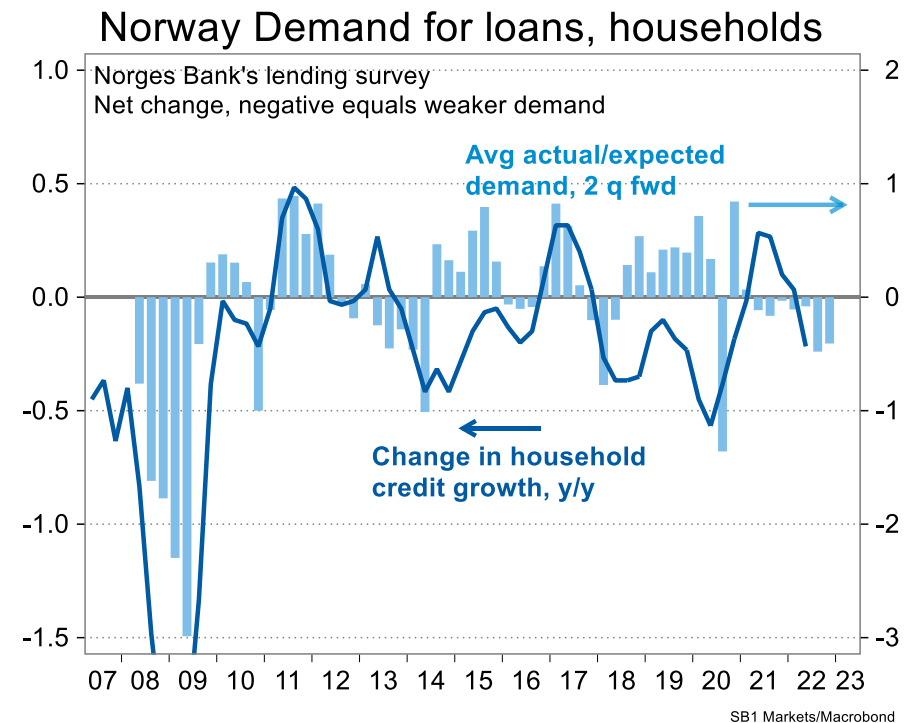
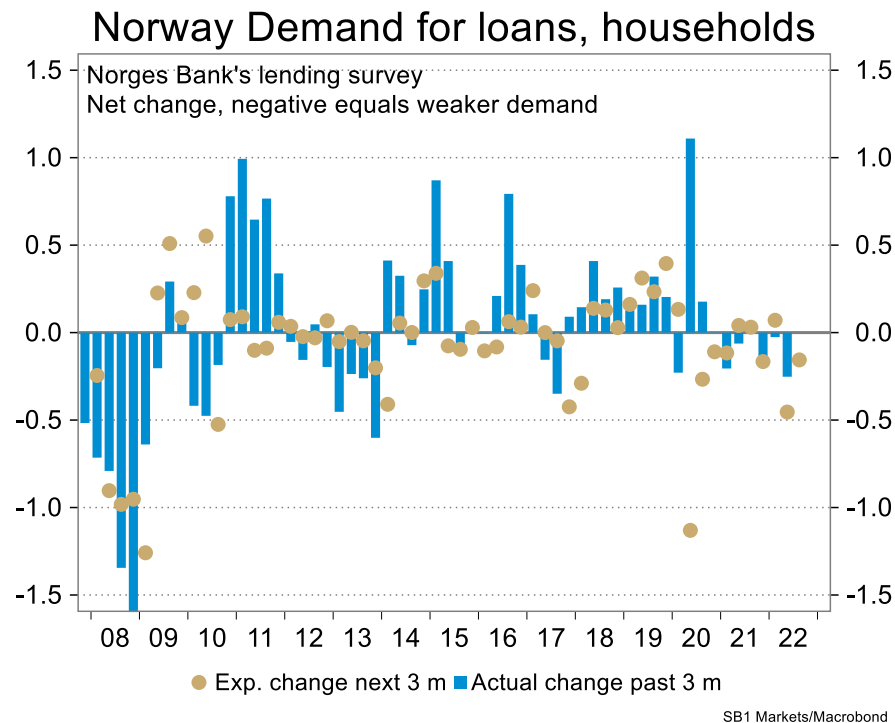
Bank lending survey signal some tightening vs. businesses

Demand is expected slightly down both from households and businesses



- The NoBa survey has not given any strong signals recent quarters – and not much in Q2 either
 - » No important changes in demand and credit standards
- Banks have been able to increase their lending margin (above NIBOR) vs. businesses, and expect to lift the margin further in Q2

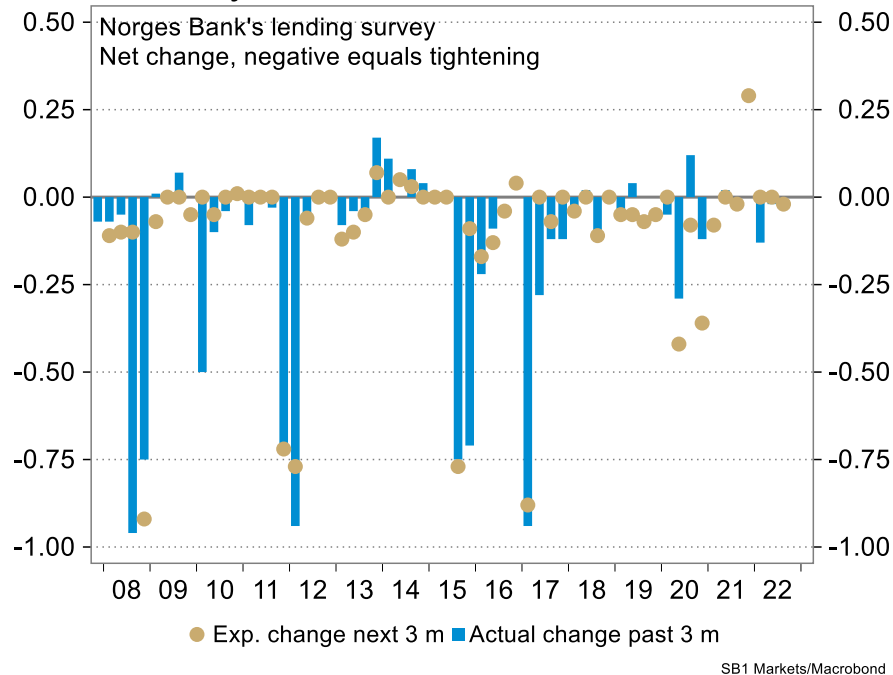
Demand from households a tad weaker in Q2, is expected blow pr in Q3 too



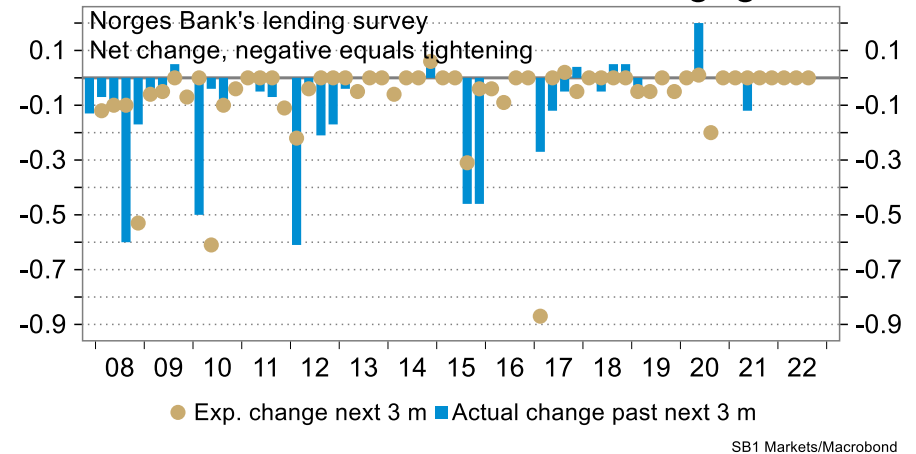
- There is not any tight correlation between banks' expectations for household demand for credit or their assessment of actual growth and the realised growth in households credit, as measured by the C2 credit indicator)
 - » Still, the lending survey probably tells the sentiment among bankers pretty well

No tightening vs households

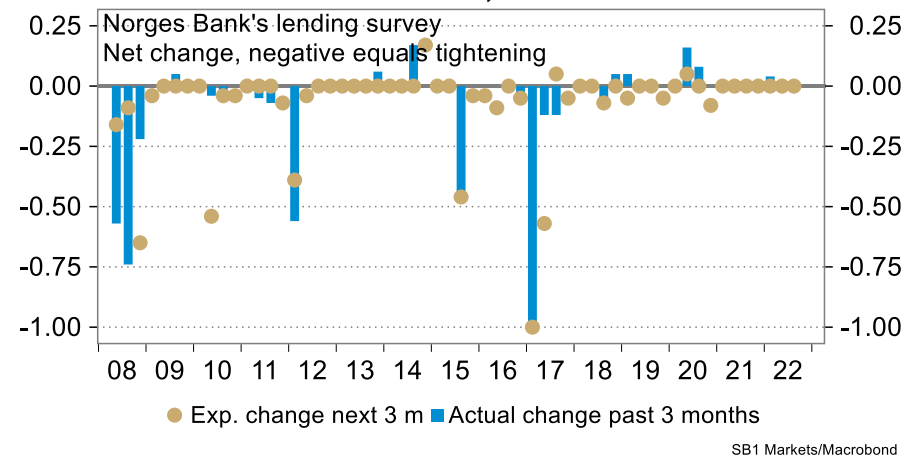
Norway Credit standards households



Loan to Value Household mortgages

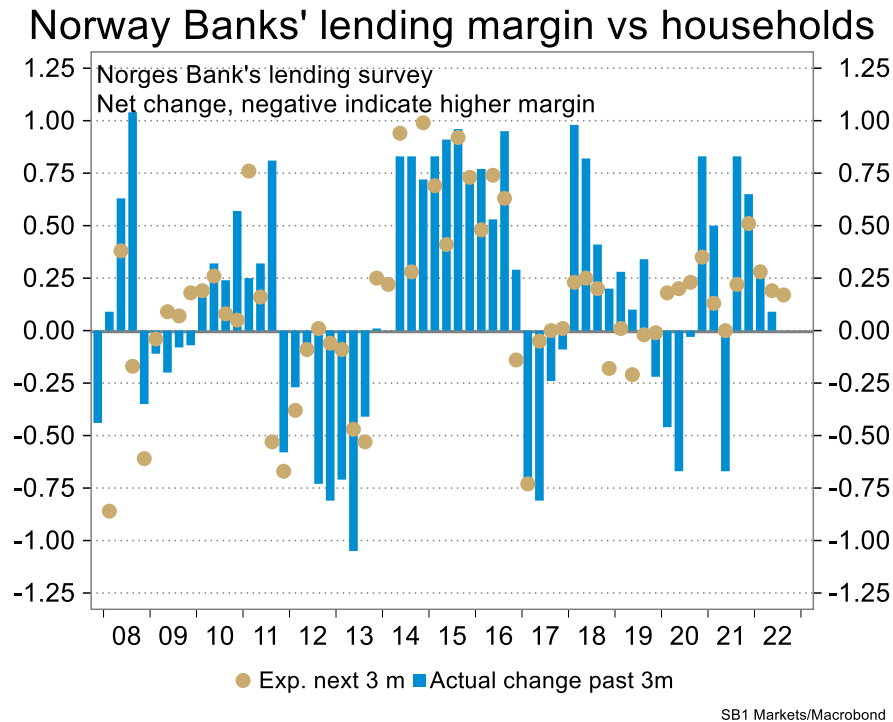


Loan to Income, Households

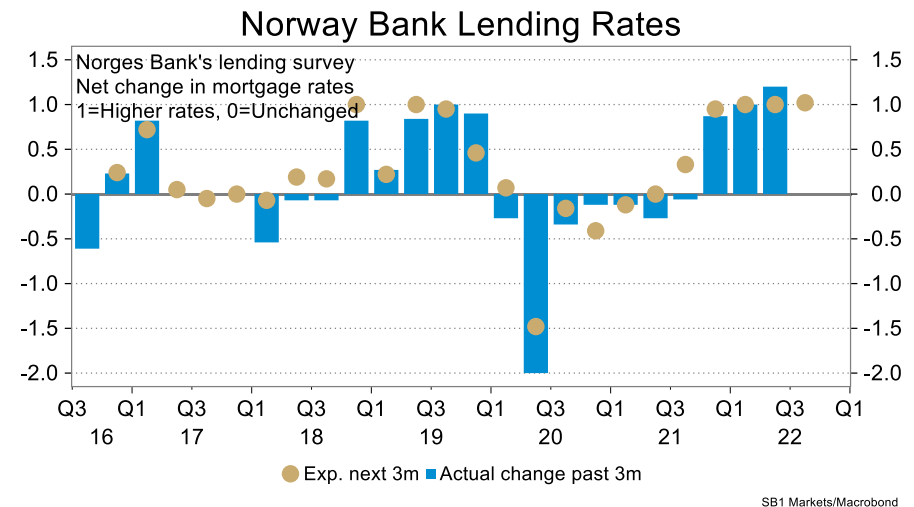
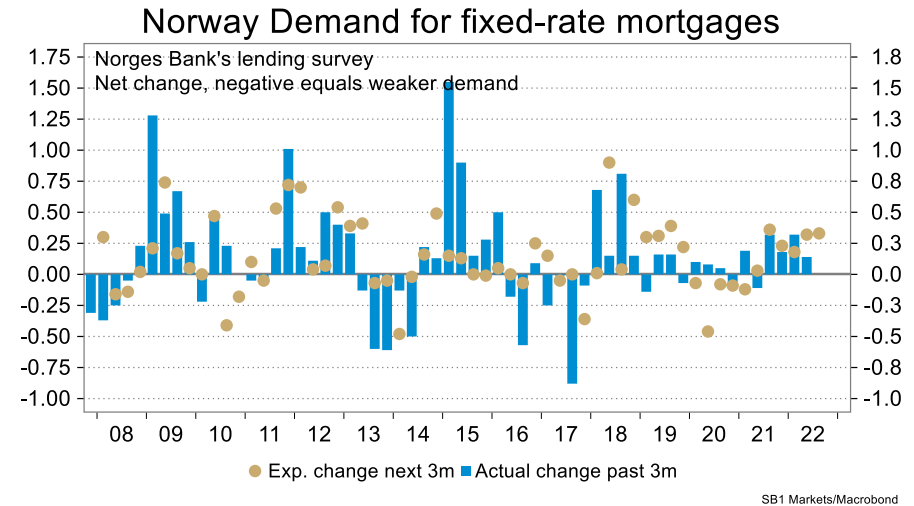


Banks increased their lending margins in Q2, expect higher margins in Q3

(Actual margins vs NIBOR have fallen, while spreads vs. deposits have increased)



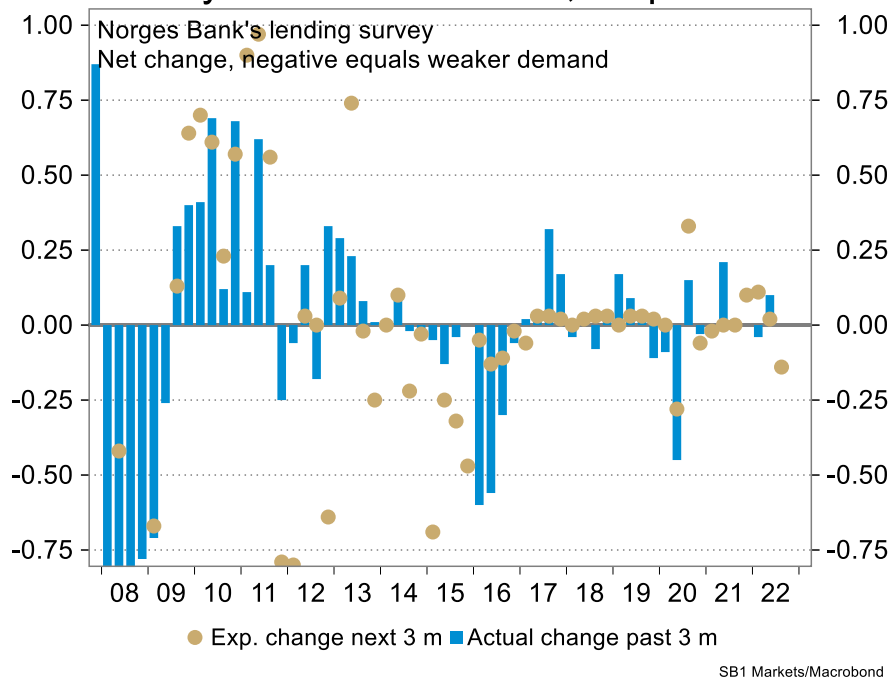
- Lending rates are of course on the way up – and are expected further up
- Moderate demand for fixed-rate loans



Banks expect somewhat lower demand from the business sector

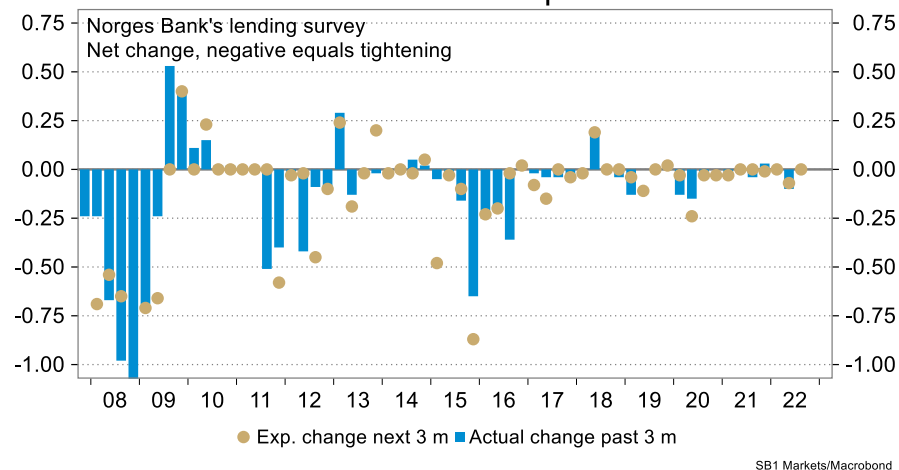
Demand grew faster than normal and more than expected in Q2. No change in credit standards

Norway Demand for loans, corporations

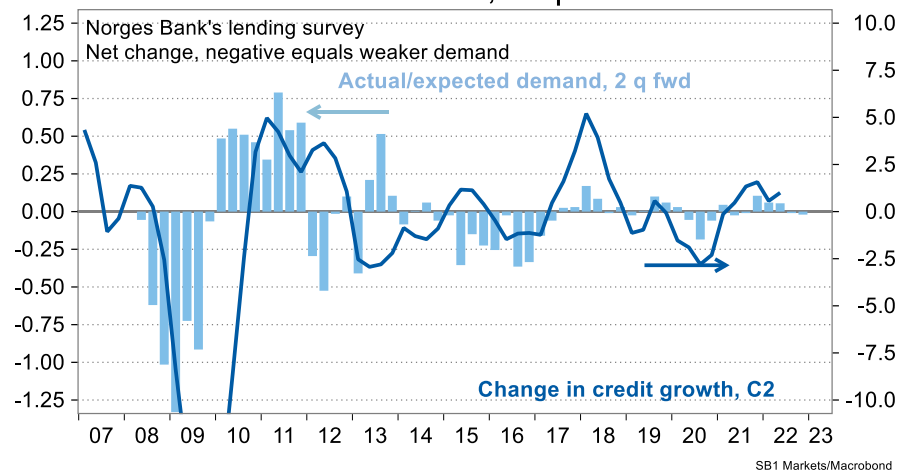


- We expected banks to report somewhat lower demand from the business sector but so far no signs of any slowdown
- However, actual credit growth has slowed

Credit standards Corporations



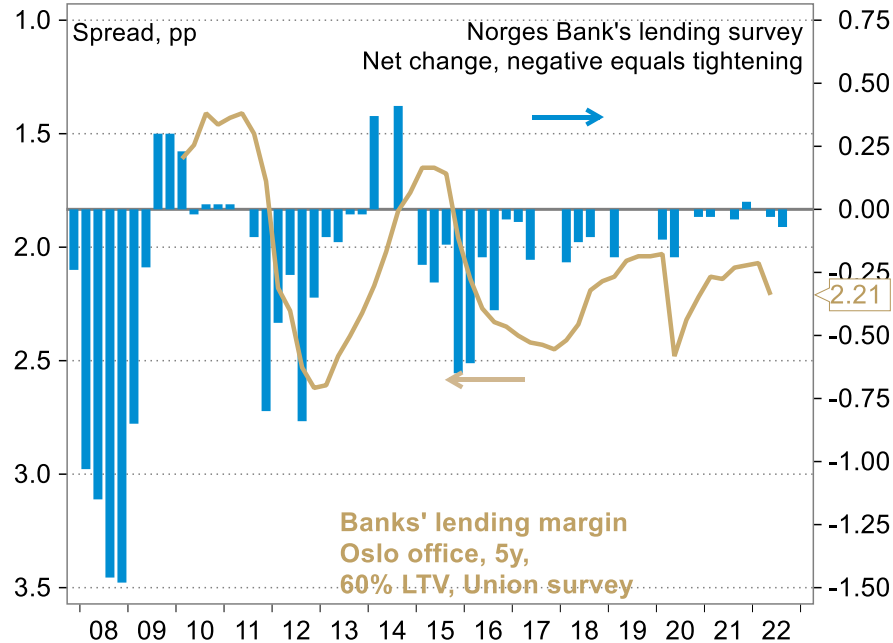
Demand for loans, corporations



Real estate loan standards flat, but business lending margins widens sharply

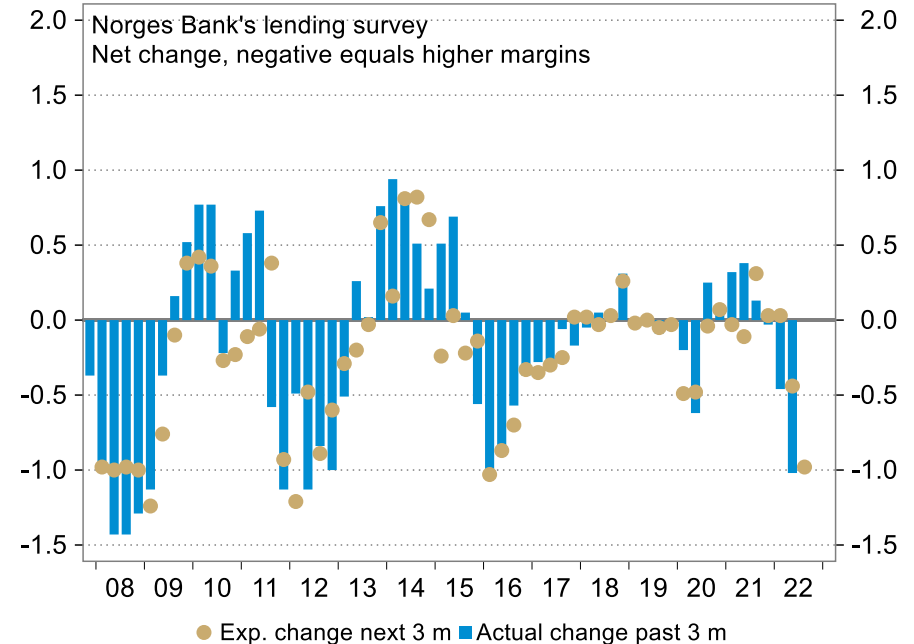
Banks widened their lending margin further in Q2 (vs. NIBOR), expect more to come

Credit standards commercial real estate



SB1 Markets/Macrobond

Lending margins Corporations

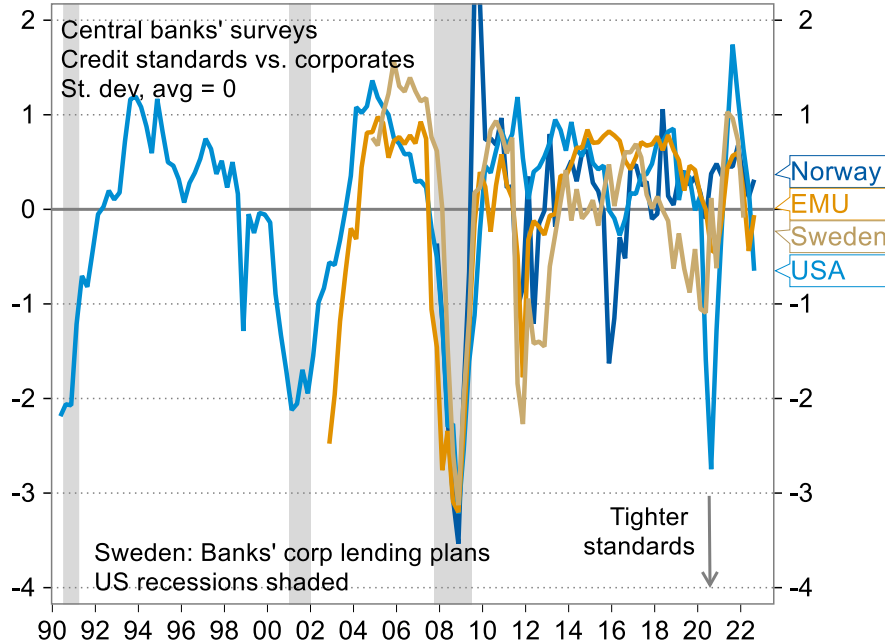


SB1 Markets/Macrobond

Global view: European banks have tightened vs. the household sector

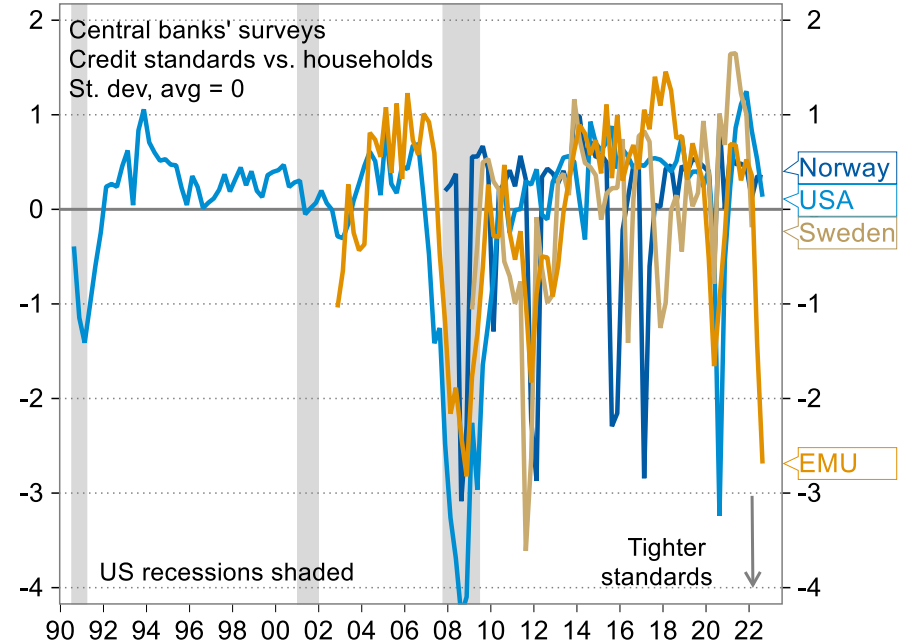
And US banks starts to tighten vs. the corporate sector

Bank lending surveys - corporates



SB1 Markets/Macrobond

Bank lending surveys - households



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Highlights

The world around us

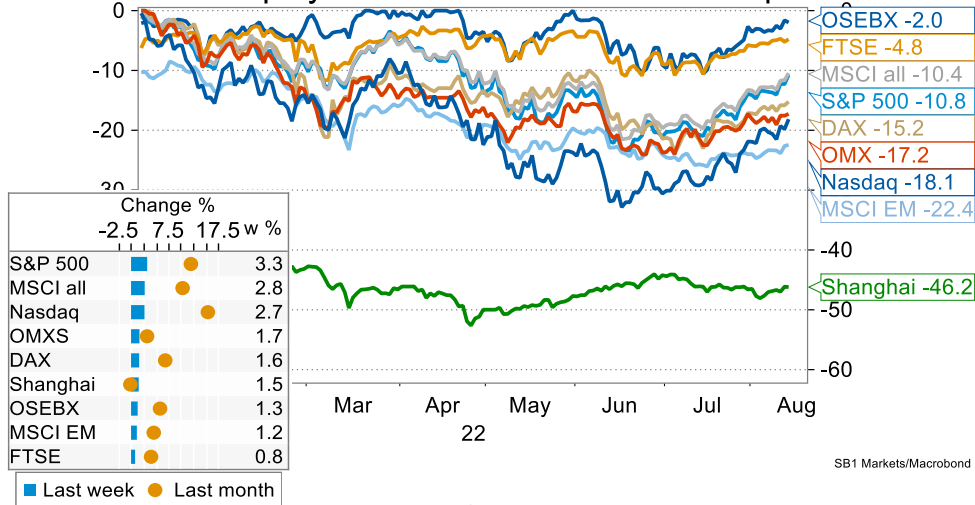
The Norwegian economy

Market charts & comments

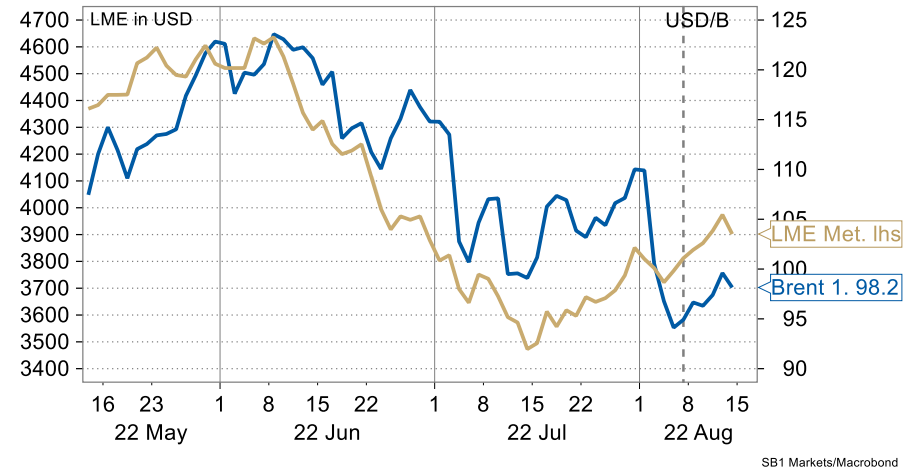
Peak inflation! Equity markets cheered – while bond yields rose

Some ½ of the H1 decline in equities is reversed. Commodity prices up with the equity market recent weeks

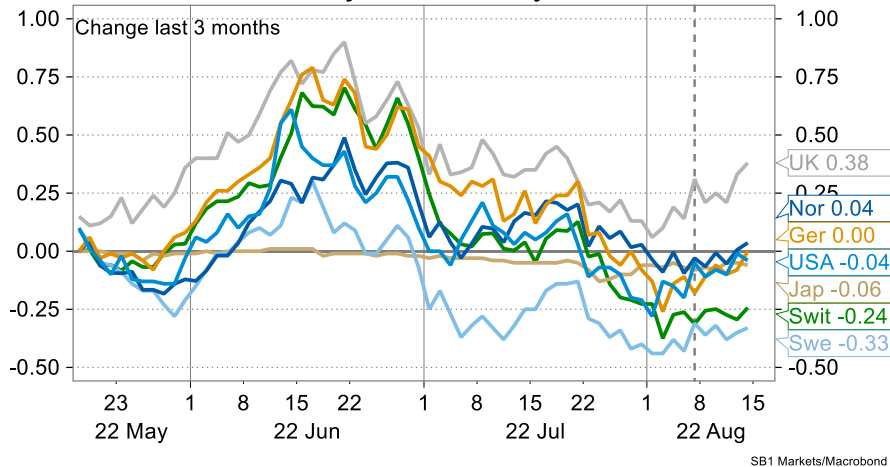
Equity Indices - % drawdown from peak



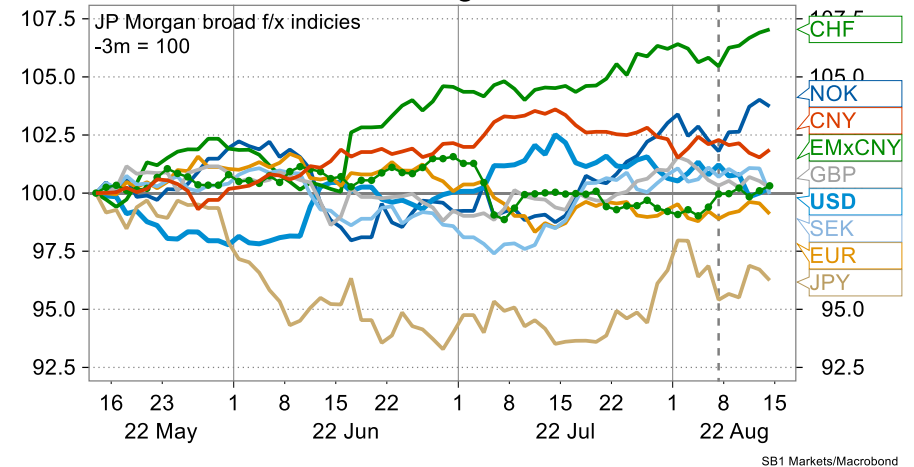
Oil vs. metals



10 y Gov bond yield



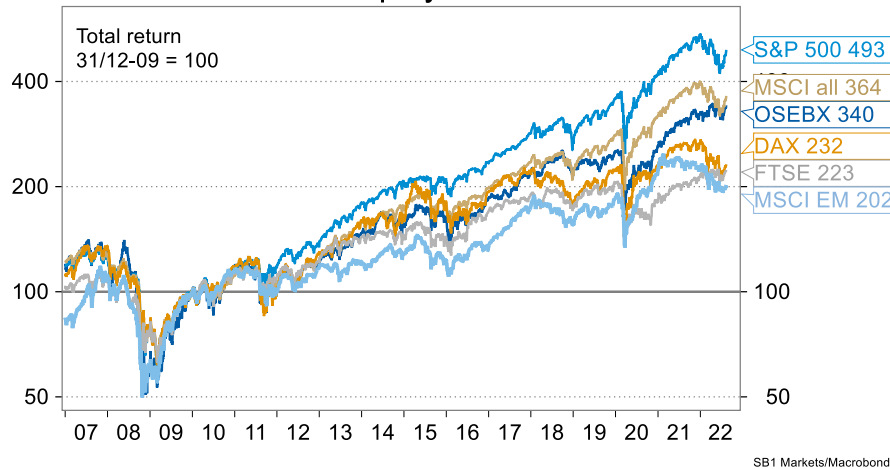
Exchange rates



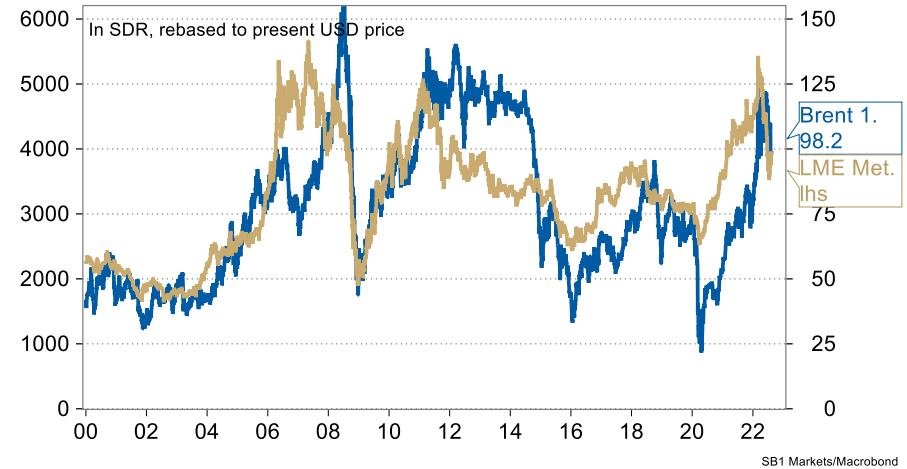
The big picture: Stock markets down, bond yields up

Commodities are on the way down again

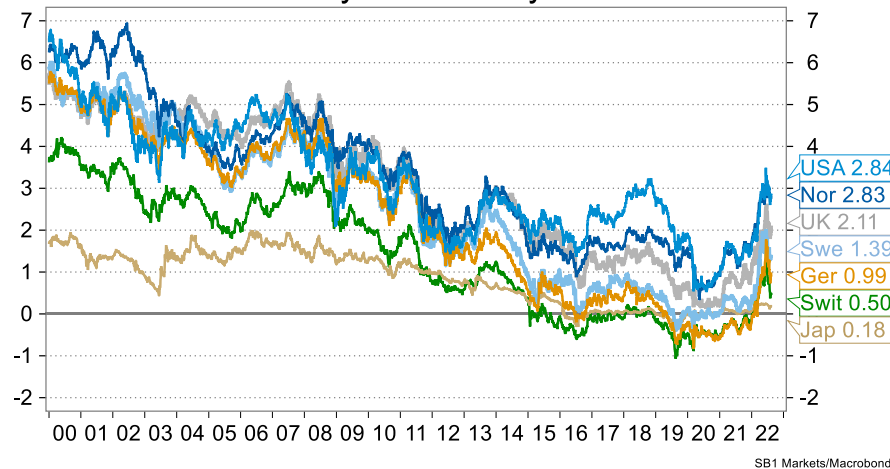
Equity Indices



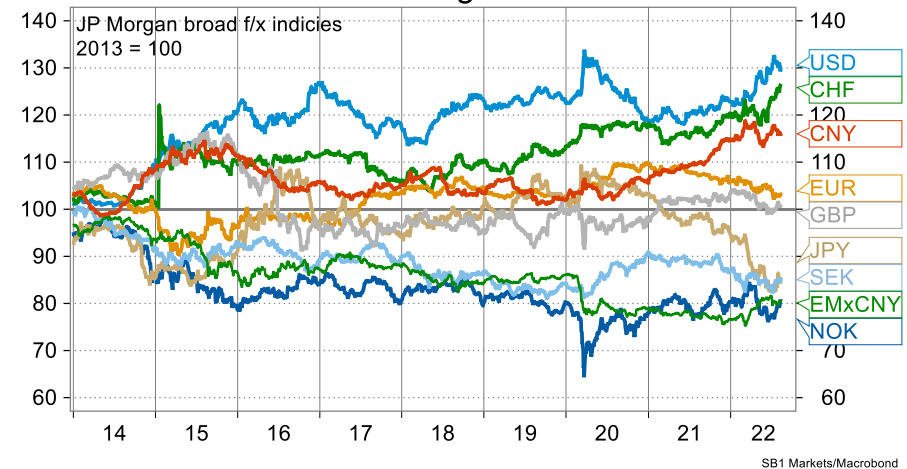
Oil vs. metals



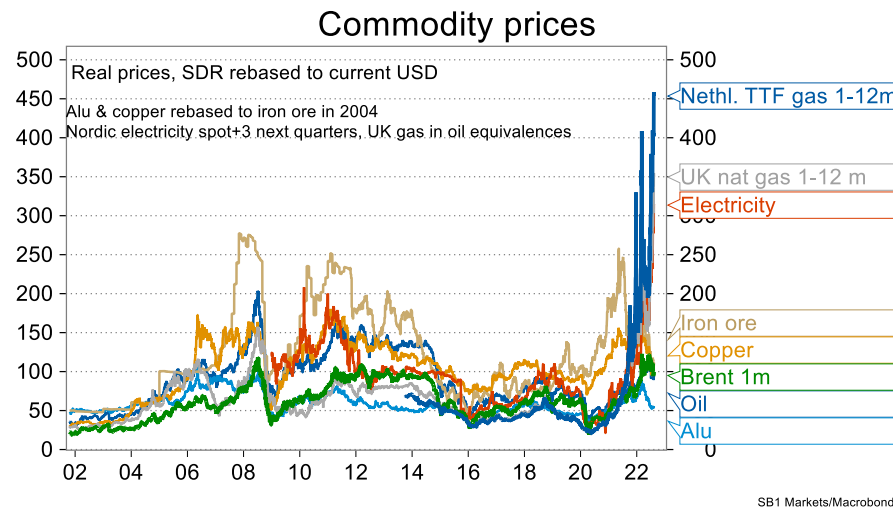
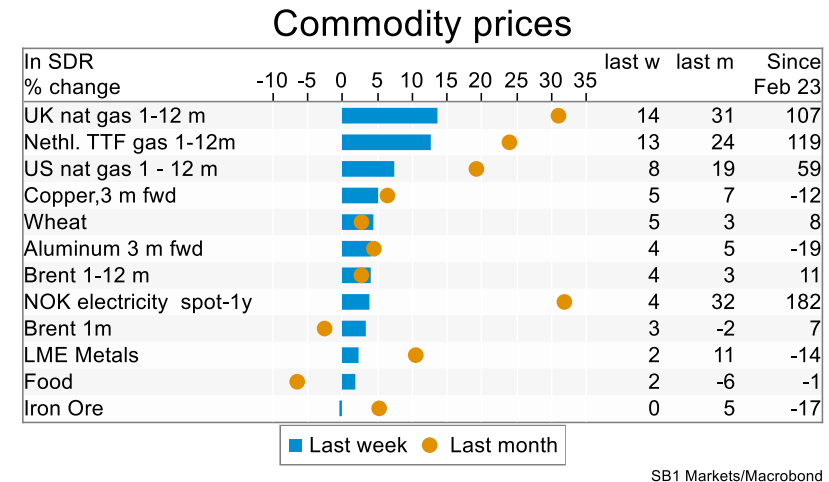
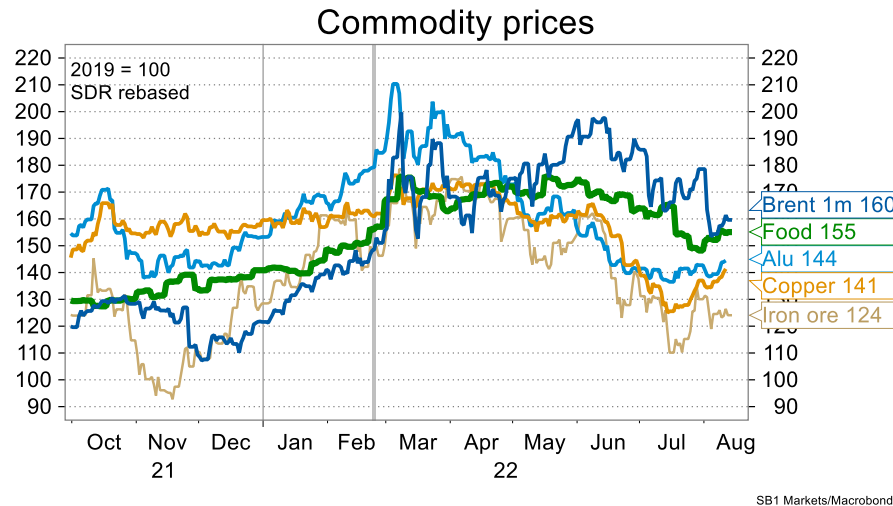
10 y Gov bond yields



Exchange rates



Most commodity are turning up, alongside more growth optimism



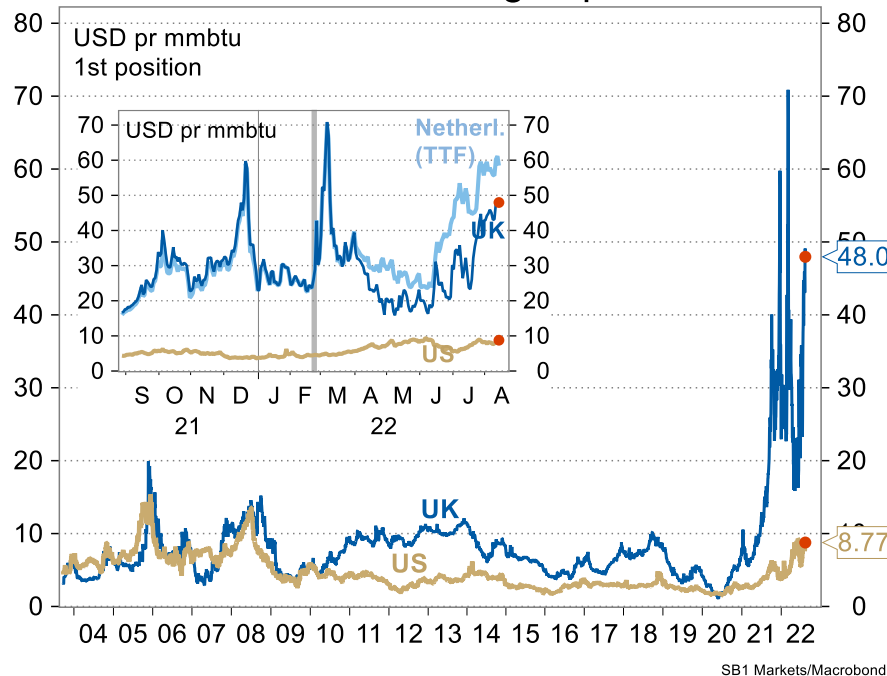
SDR: IMF's Special Drawing Rights – a 'global currency'

- Oil prices slightly up last week
- **European natural gas** prices – and thus electricity prices - rose further last week (charts next pages)
- The Economists **food commodity** index rose past two weeks but the trend is down
- **Metal prices** also recovered some losses last week but are well down from before the war

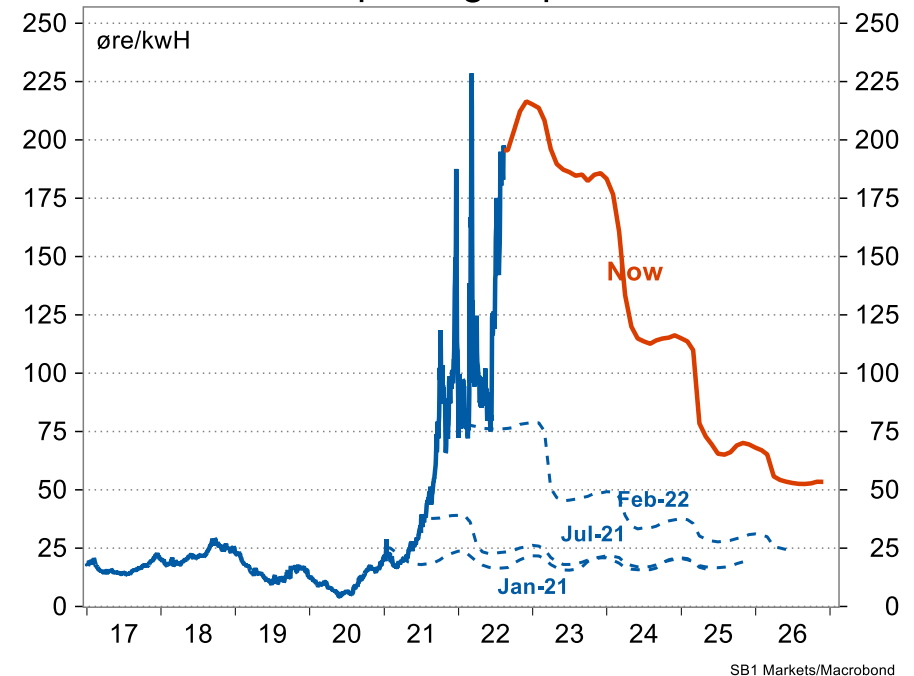
The main challenge: European gas supplies & prices

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

UK, US natural gas prices



European gas prices

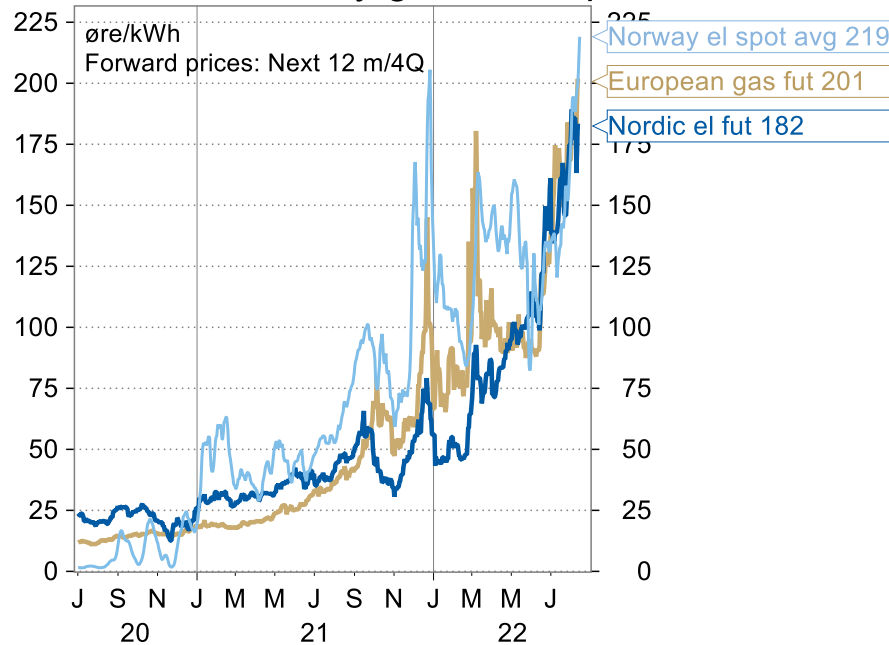


- Gas prices are extremely high, as supply from Russia is running very low – and may be fully closed down
- More bad news: Nuclear electricity plants in France are lacking cooling water due to empty rivers, coal transport up the Rhine may be hurt by too little water.

The main challenge: European gas supplies & prices

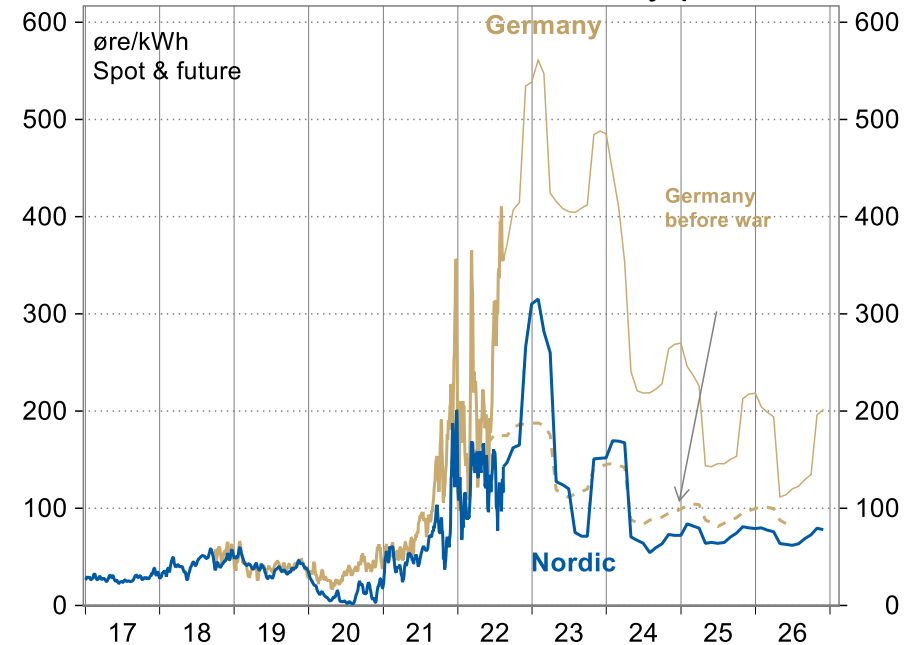
Russian gas exports remain at a very low level. Most likely Russia has decided to 'kill' Europe

Electricity/gas future prices



SB1 Markets/Macrobond

Nordic vs. German electricity prices

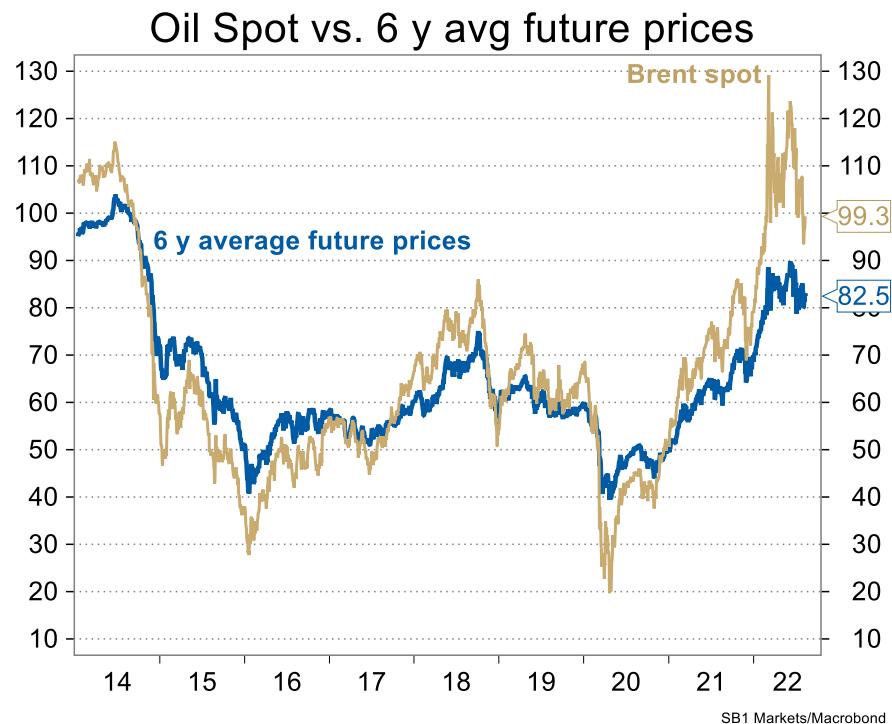
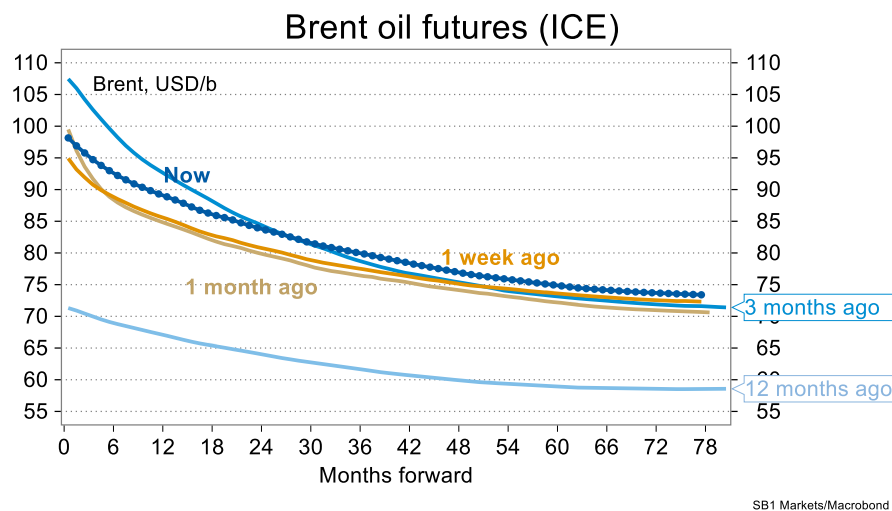
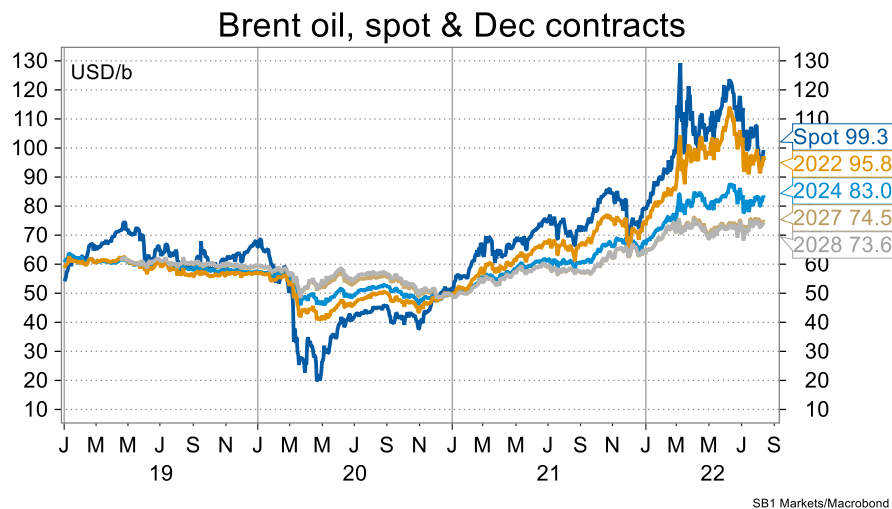


SB1 Markets/Macrobond

- Nordic (Nordic average) future electricity prices for the coming 12 months are almost 20% below the present average spot level in Norway – which is at a record high level

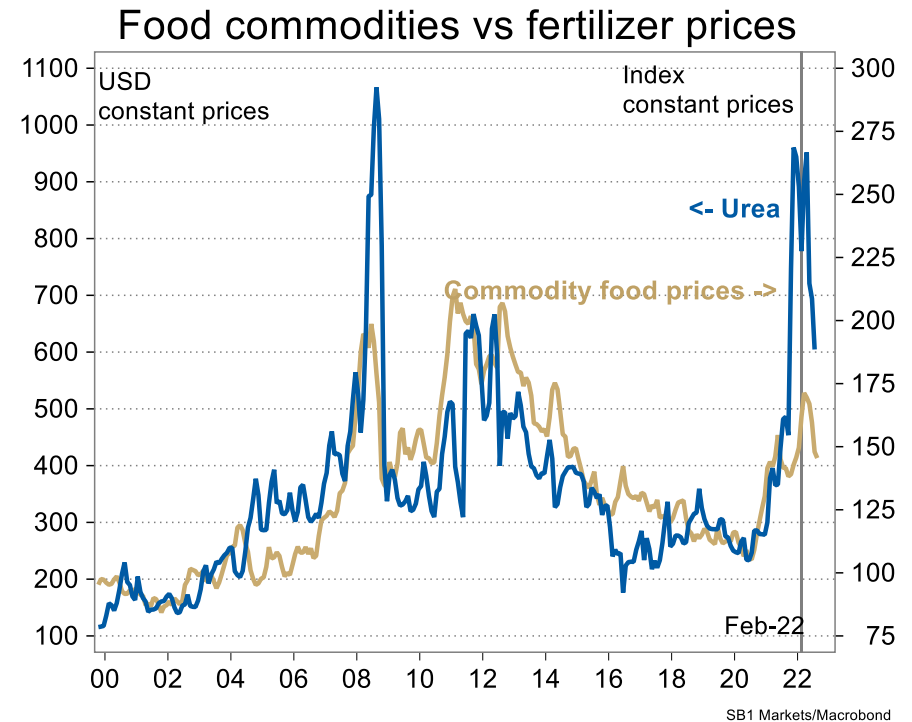
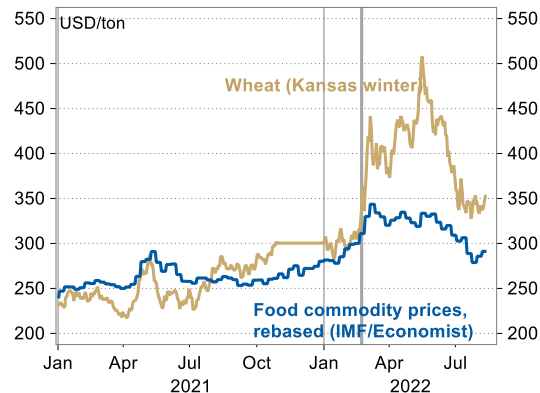
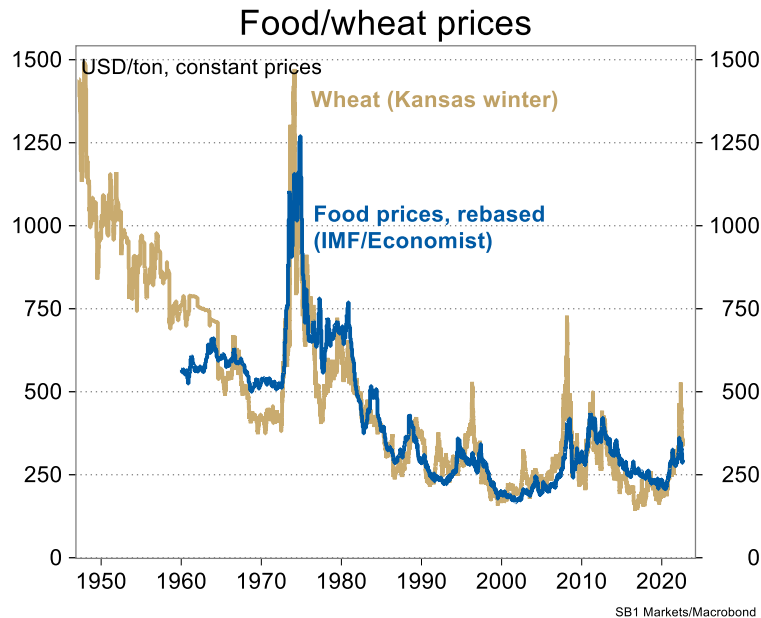
The short end of the oil curve up last week; The long end quite stable

... at USD 75 – 80/b



Food prices slightly up past two weeks but are trending down

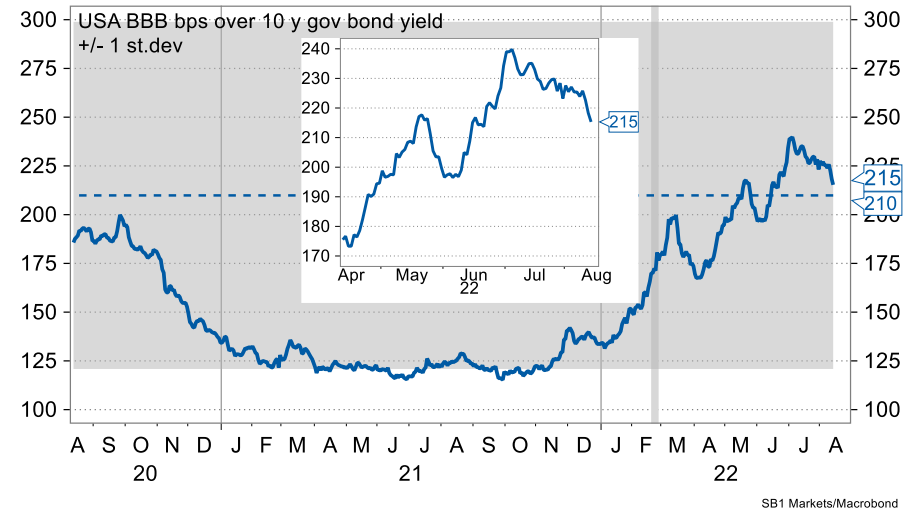
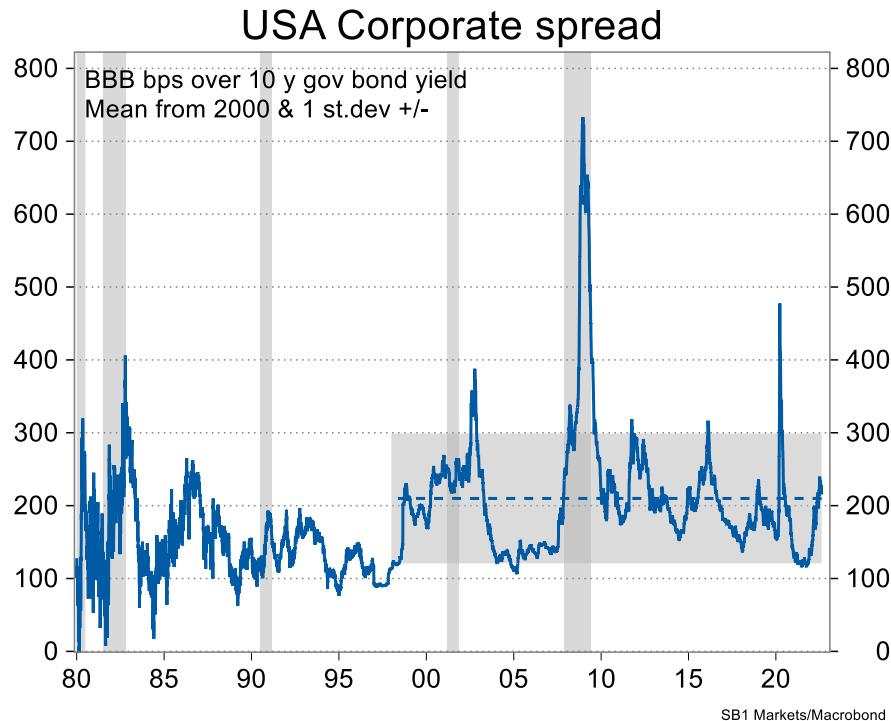
The real price level is not that high, *and below the 10 y average. Where is the global food crisis??*



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

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

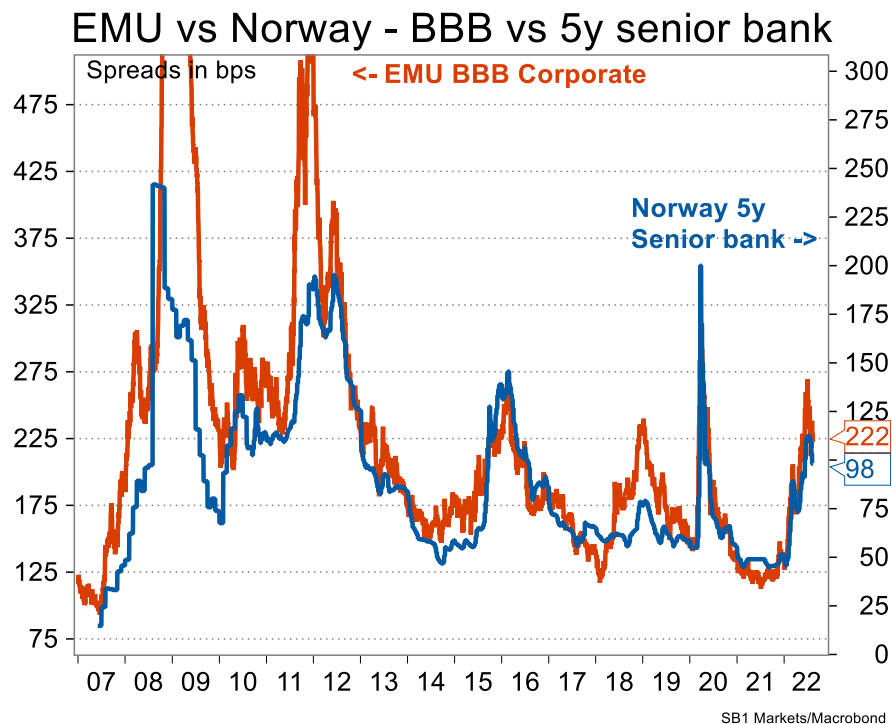
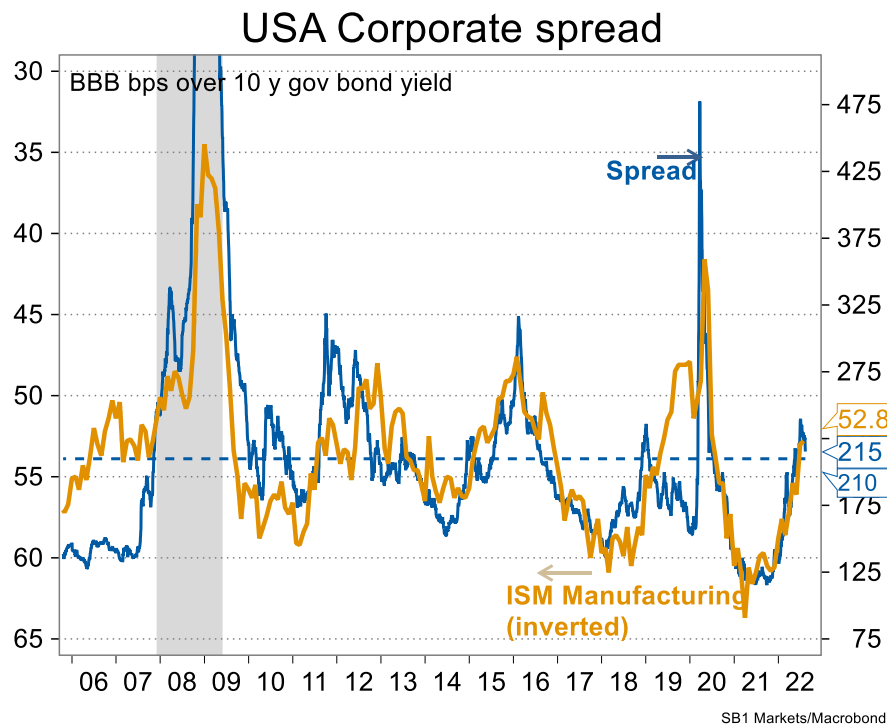
Still, spreads are close to an average level



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

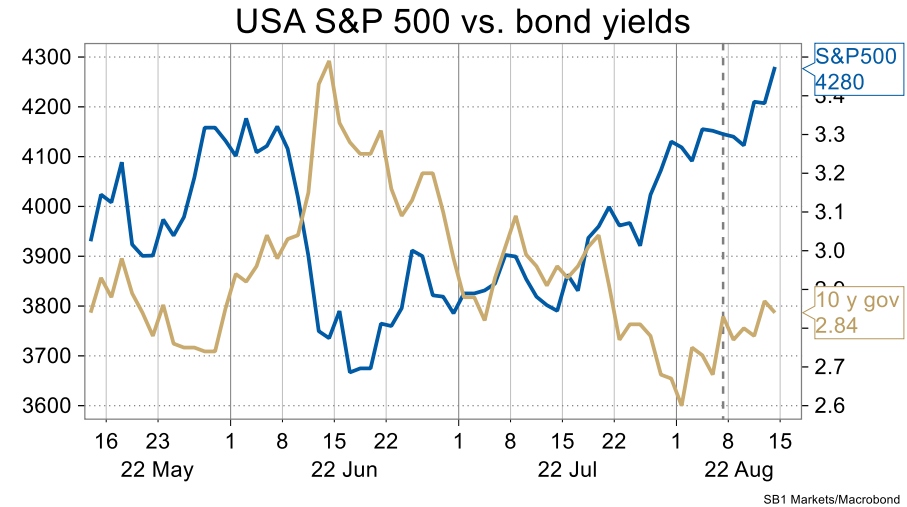
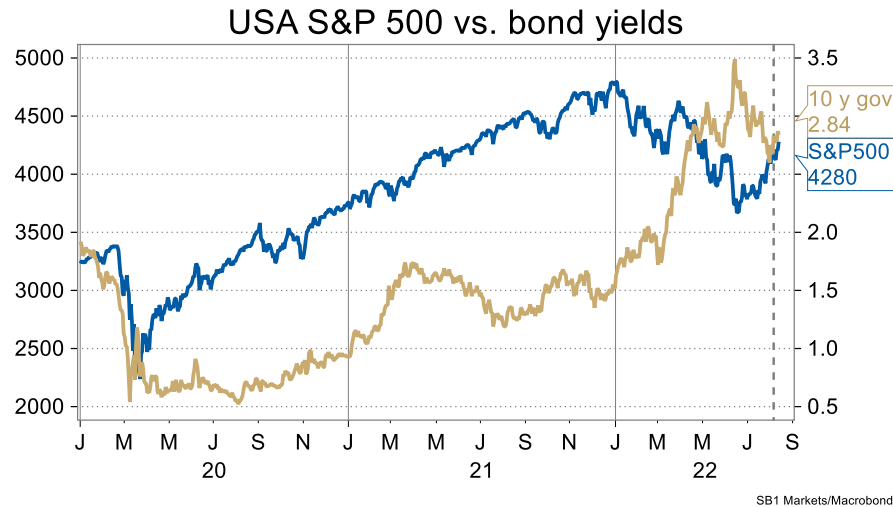
Why have credit spreads widened? Could it be the slowing economy?

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



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

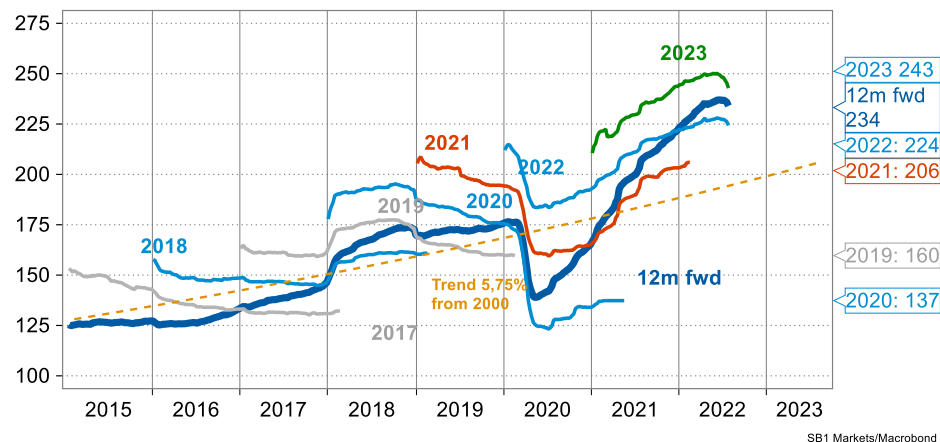
Peak inflation lifted equities – but did not lower bond yields



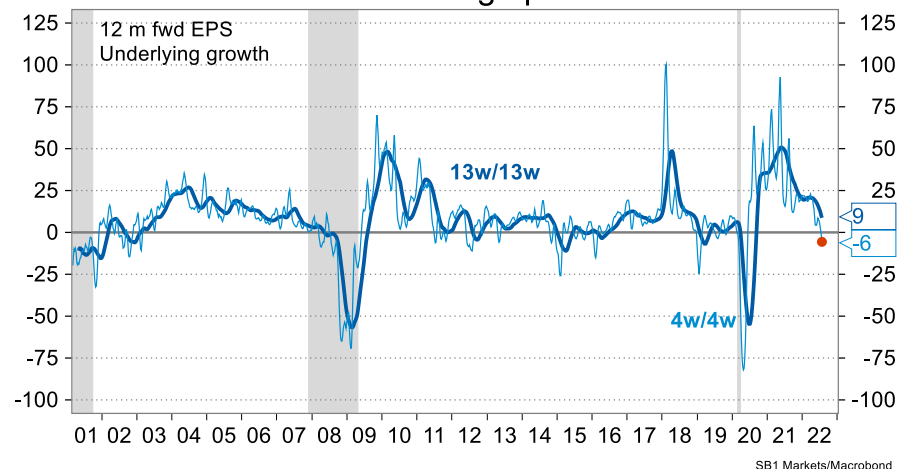
Earnings forecasts finally on the way down – and more is likely to come

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

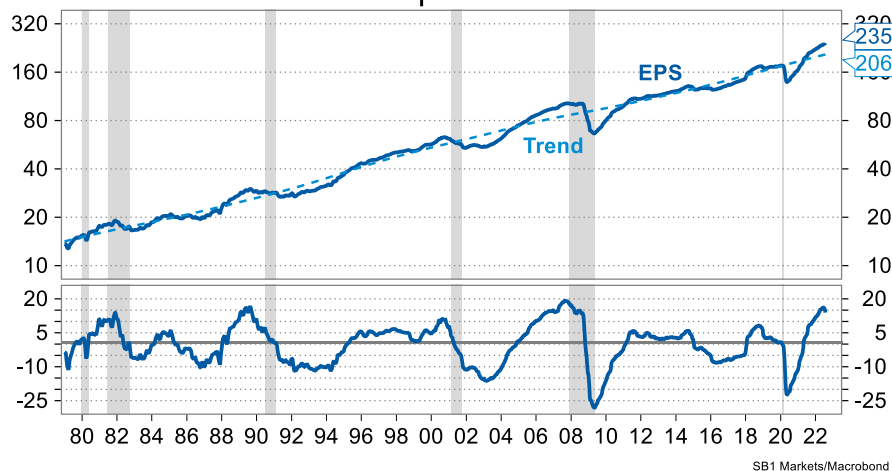
Annual S&P 500 EPS consensus (Factset)



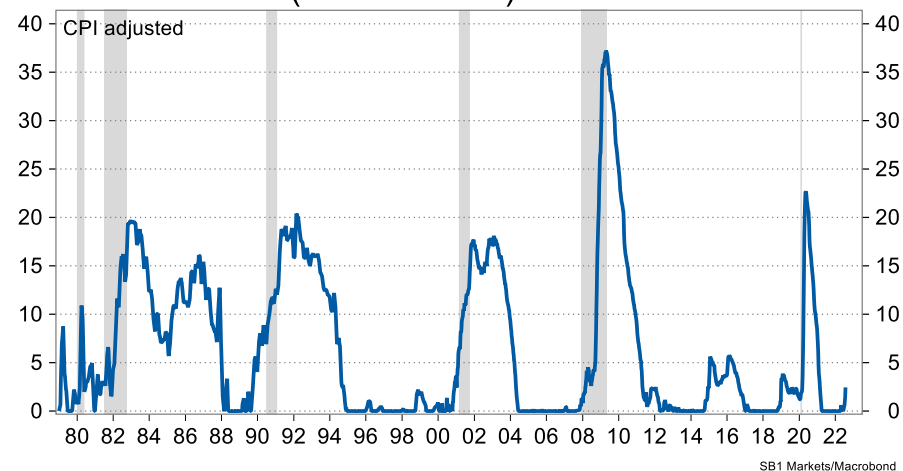
S&P500 Earnings per share



USA S&P 500 Expected 12 m fwd EPS

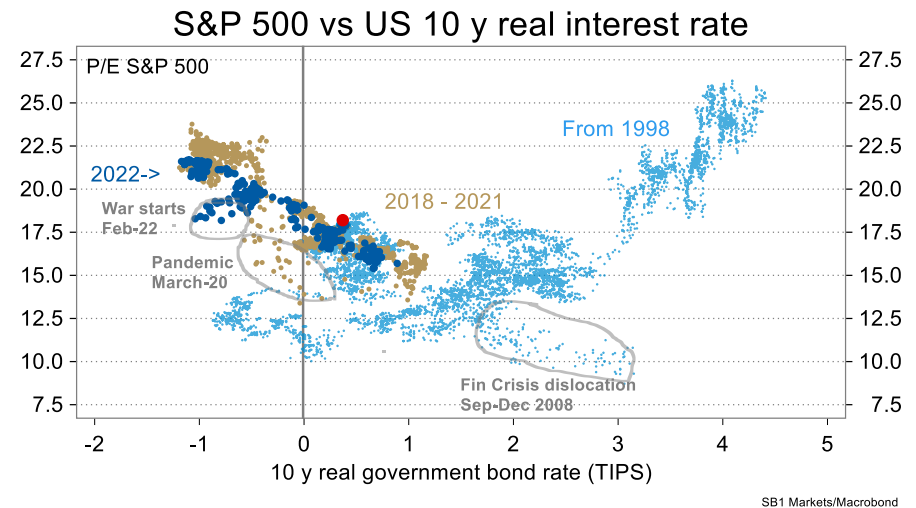
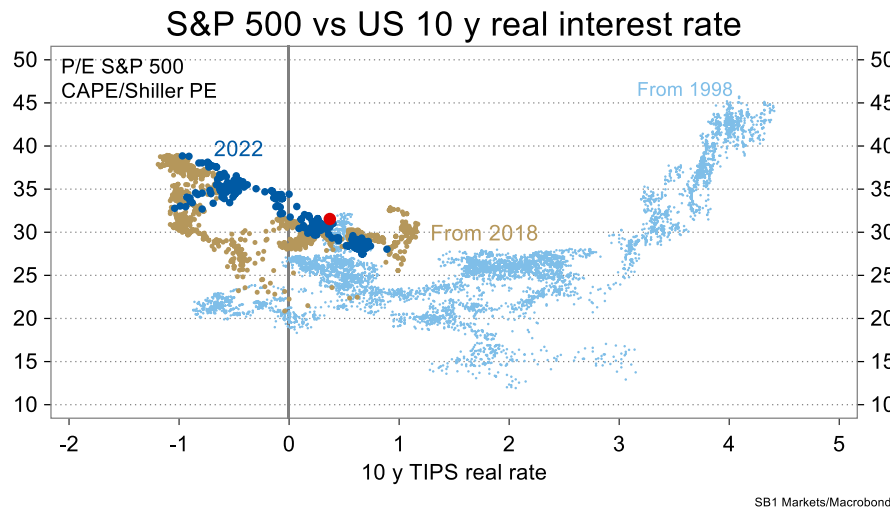
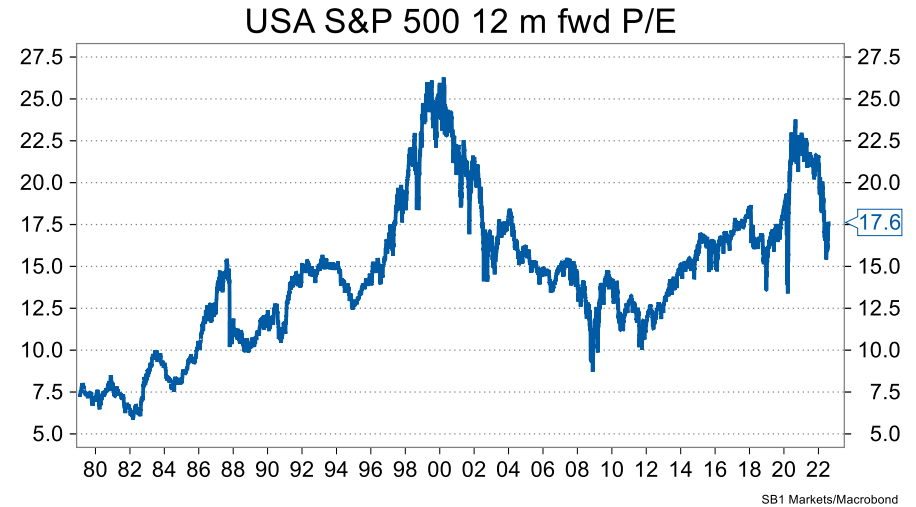
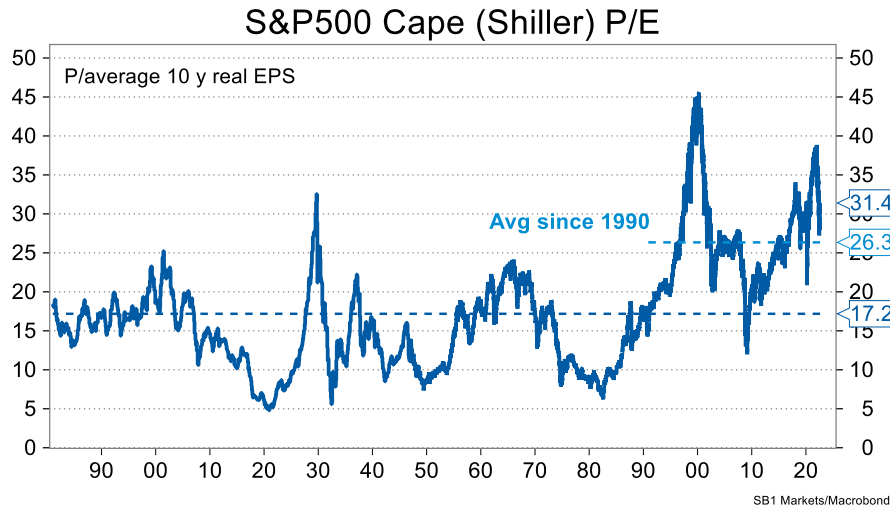


EPS (12 m forward) Drawdowns



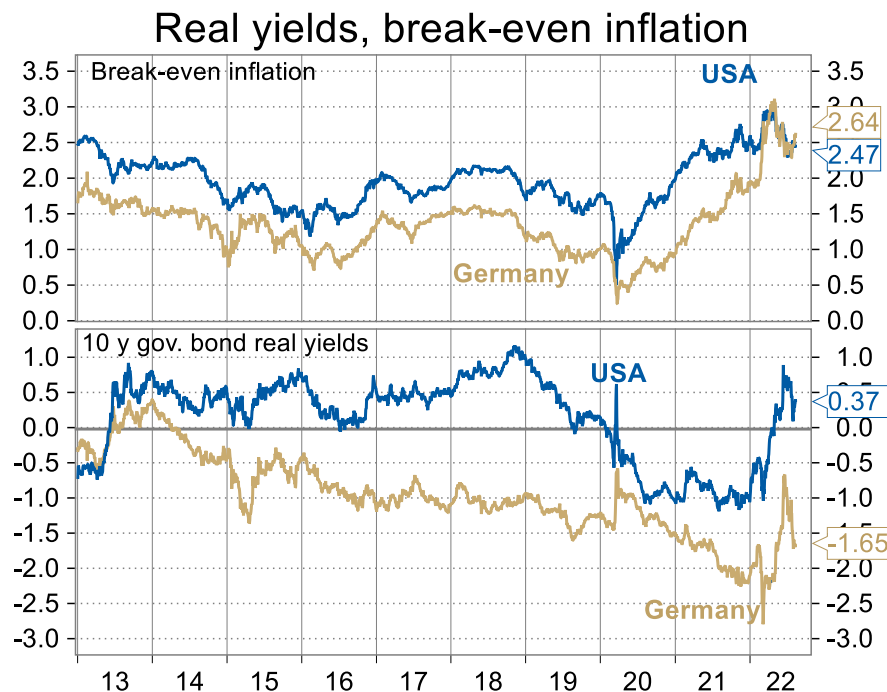
4 valuation charts

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



Unch. bond yields in the US, +20 bps in Germany, due to higher inflation expect.

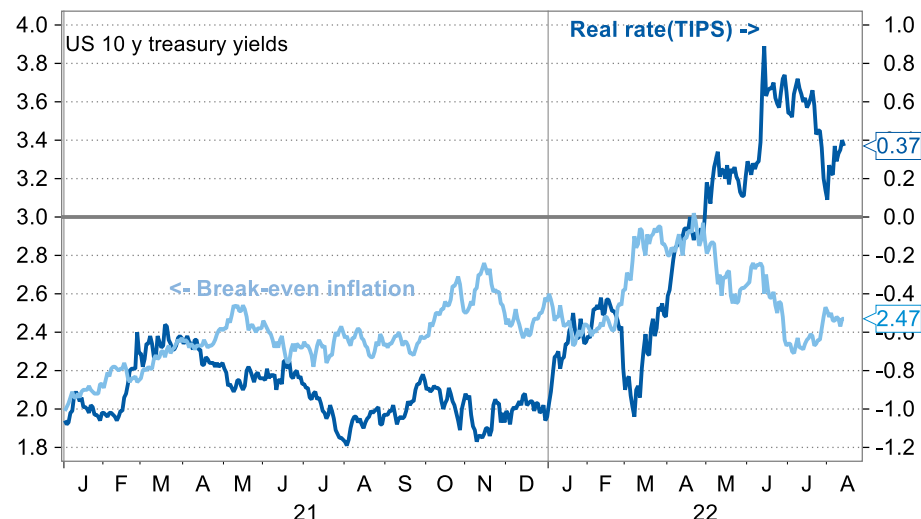
The peak inflation news did not alter inflation expectations or expected real rates in the US



US & Germany 10 y Gov bond yield

	Yield	Change 1w	Change 1m	Since Feb 18	Min since April-20
USA nominal treasury	2.84	0.01	-0.12	0.92	0.52
.. break-even inflation	2.47	0.01	0.15	0.06	1.06
.. TIPS real rate	0.37	0.00	-0.27	0.86	-1.19
Germany nominal bund	0.99	0.18	-0.13	0.77	-0.65
.. break-even inflation	2.64	0.15	0.19	0.65	0.40
.. real rate	-1.65	0.03	-0.32	0.12	-2.80

SB1 Markets/Macrobond

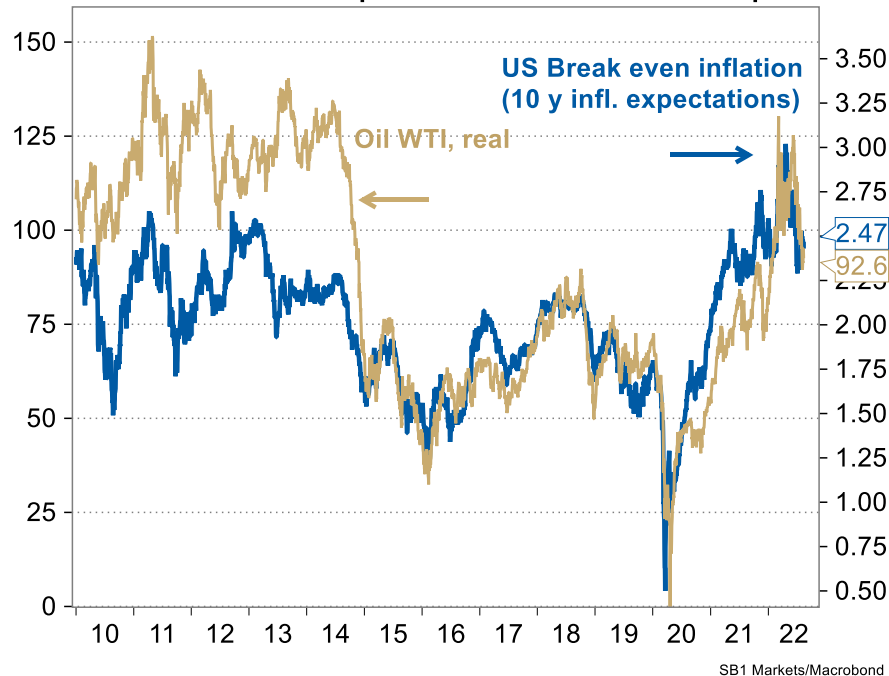


- In Germany the 10 y gov Bund added 18 bps, with a 15 bps support from higher inflation expectations. The real rate at -1.65% is still very low

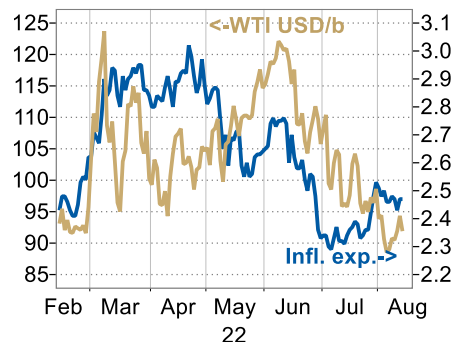
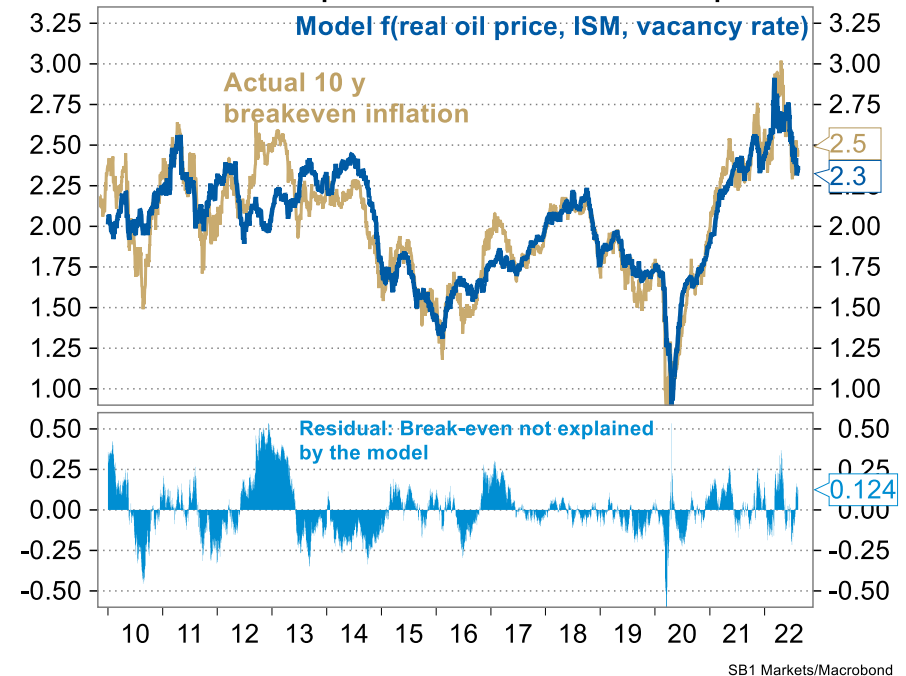
(Longer-term) Inflation expectations down as the (spot) oil price retreats

Our model is not perfect but most of the variations in long term break-evens can be explained

USA Inflation expectations vs. the oil price



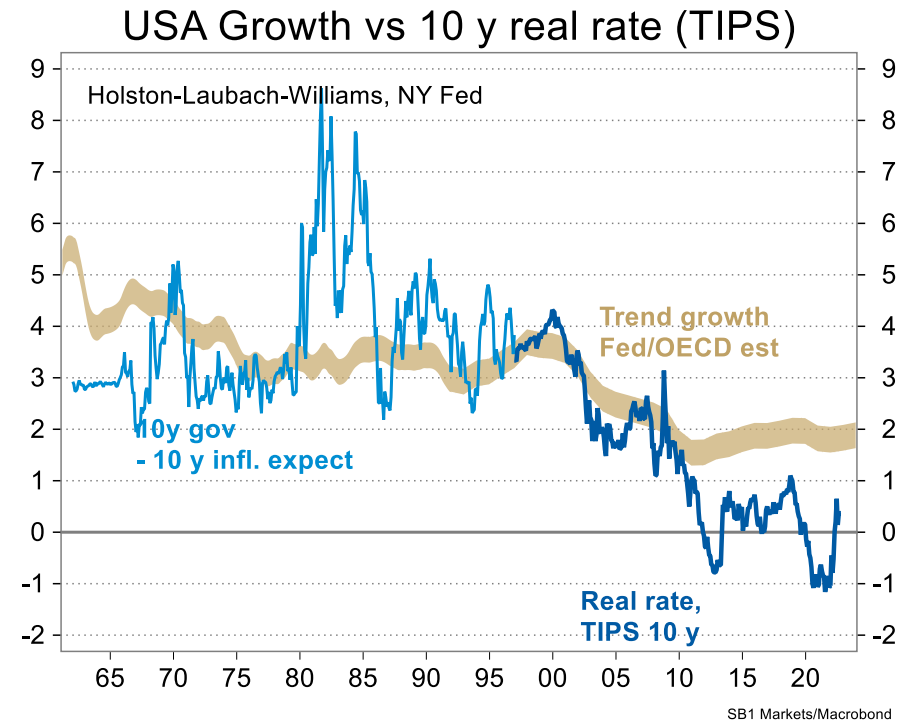
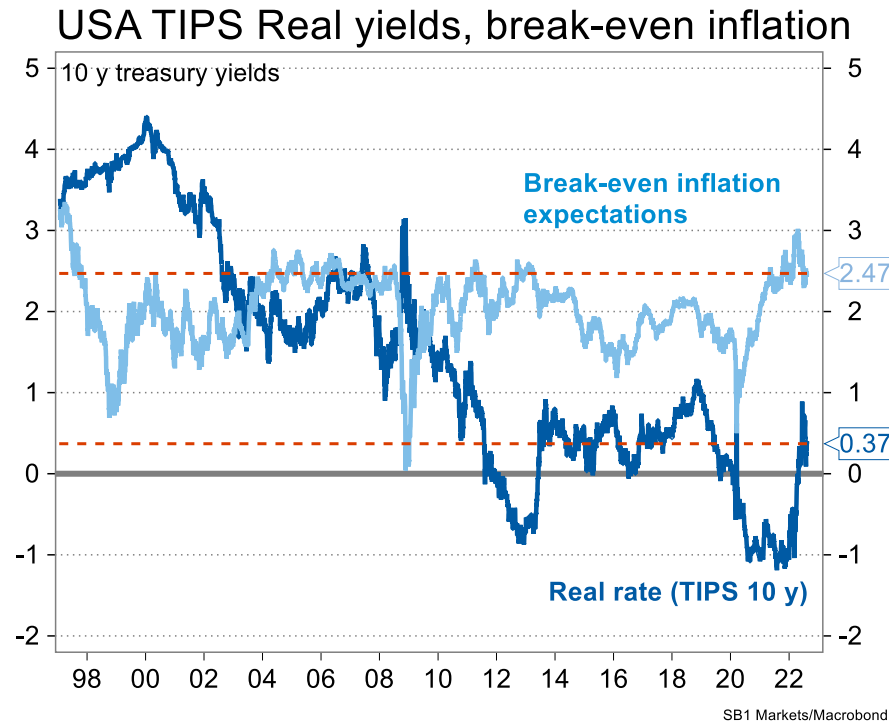
USA Inflation expectations vs. the oil price, CPI



- A simple model including the oil price, the ISM and the vacancy rate pretty well explains the long-term 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

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

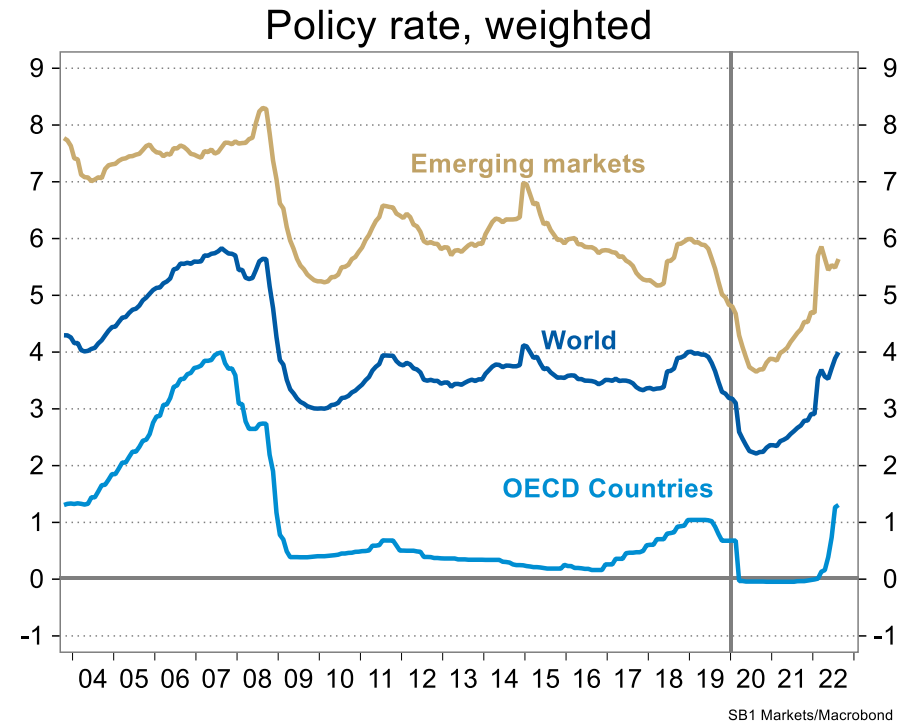
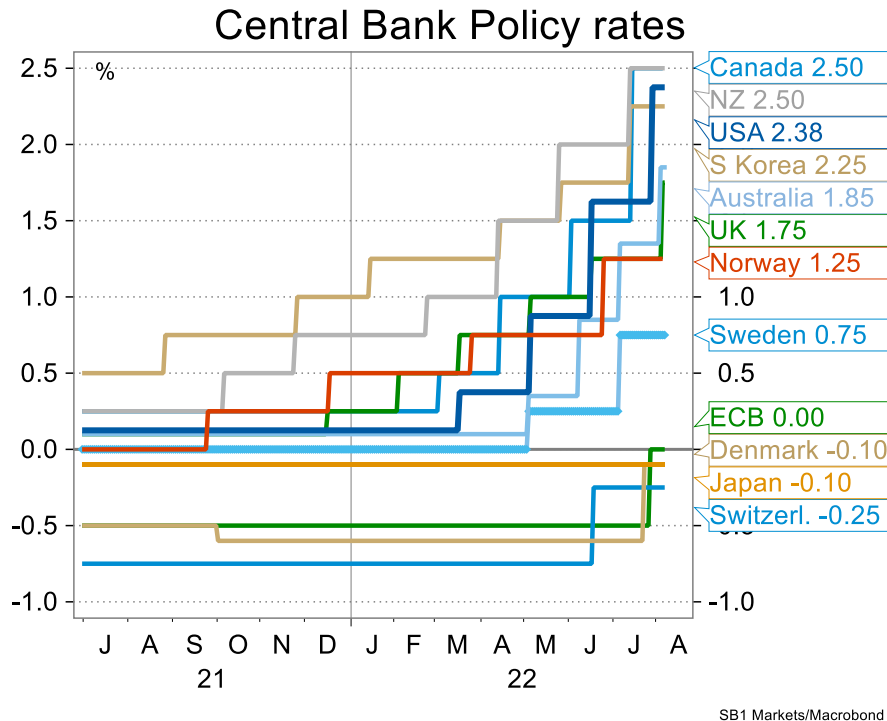
Real rates have fallen from the June local peak – and asset markets are thriving!



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

Short term rates in the rich part of the world is above the 2018/19 peak

.. and 60 bps above the pre-pandemic level. Norway is now at the 7th position among rich countries



- In addition to rate hikes, most central banks have abolished their QE buying programs (well, the ECB established a new program two weeks ago, the Transmission Protection Instrument, TPI (and not TIP as we named it ☹️))
- The EM average policy rate has come down due to the Russian cuts – but the trend is straight up

FRA rates mixed: Some down in the very short end, most up in the 'long' end

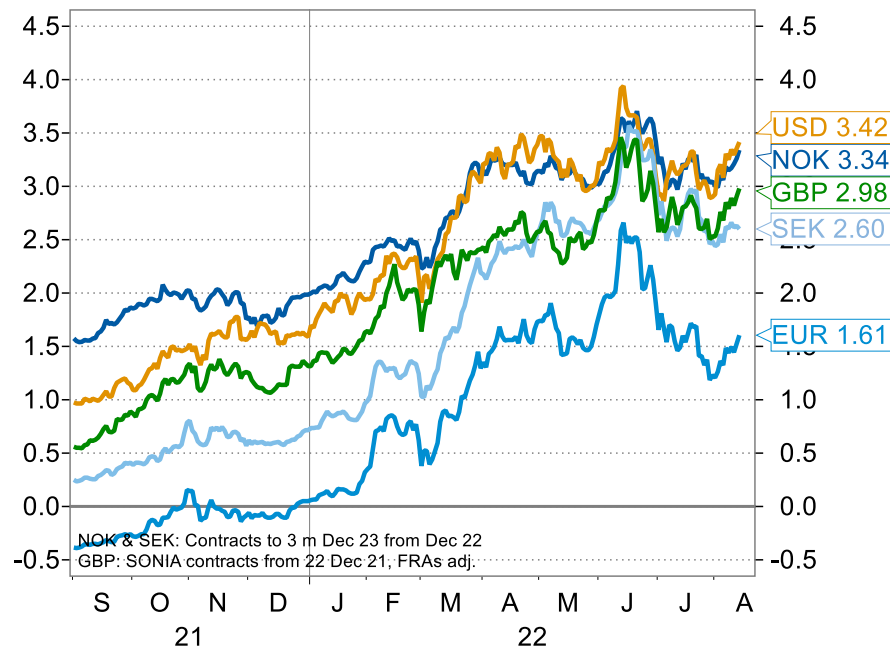
NOK rates up on a high CPI print, USD rates marginally down on several peak inflation signals

Dec 22 3m FRA IBOR rates



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Dec 23 3m FRA IBOR rates



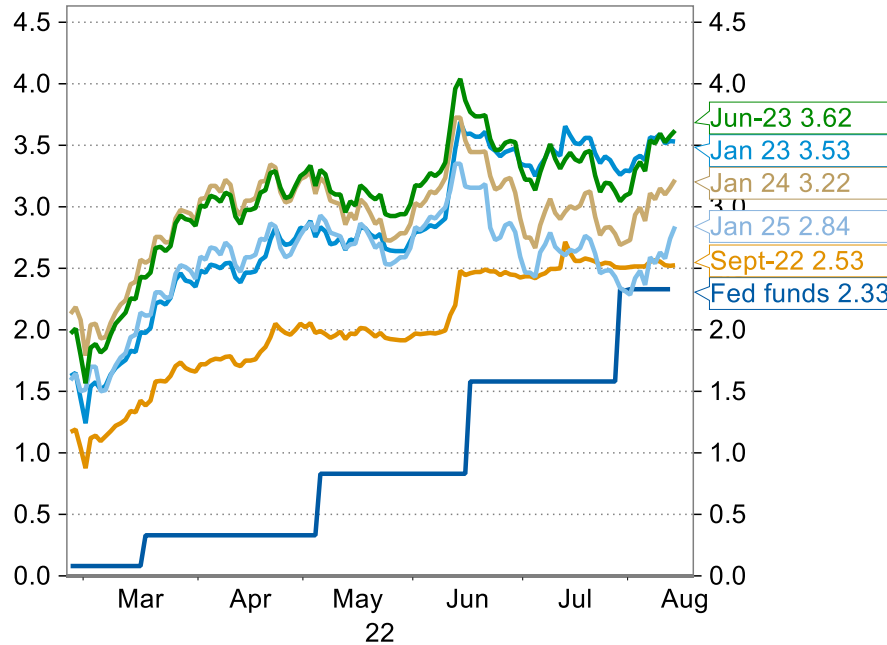
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- Out on the curve, US rates rose last week, like everywhere, except for Sweden (due to the steep decline in house prices?)

Another flip flop in the very short end (50 bps is enough in Sept?)

But longer dated Fed Funds contracts rose further. Several peak inflation signals, but hawkish FOMC spe

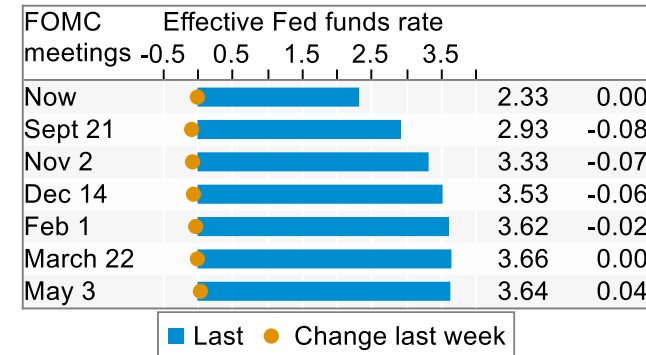
Fed funds future



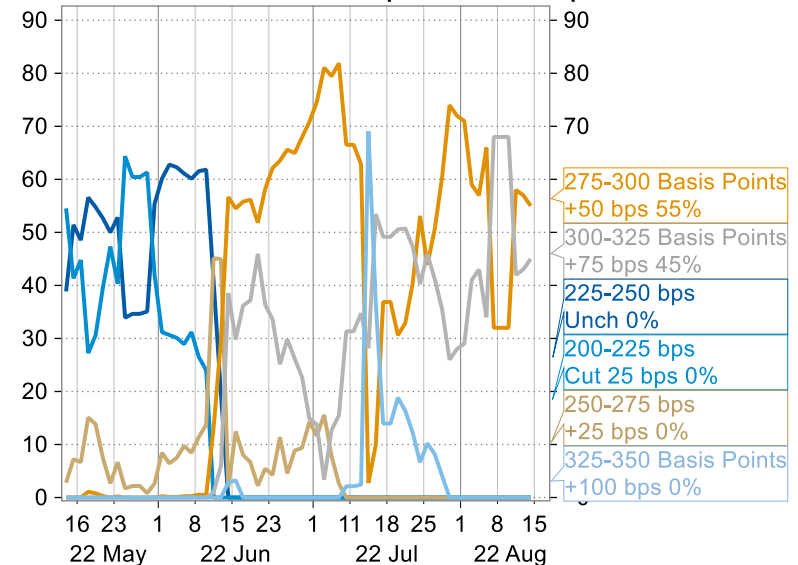
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- The peak of the curve is moved outwards, to March – and then a very measured decline, the first cut in late 2023/first part of 2024, and then another 2 – 3 cuts before end of 2024 – a very soft landing is discounted?

USA Fed funds rate (OIS)



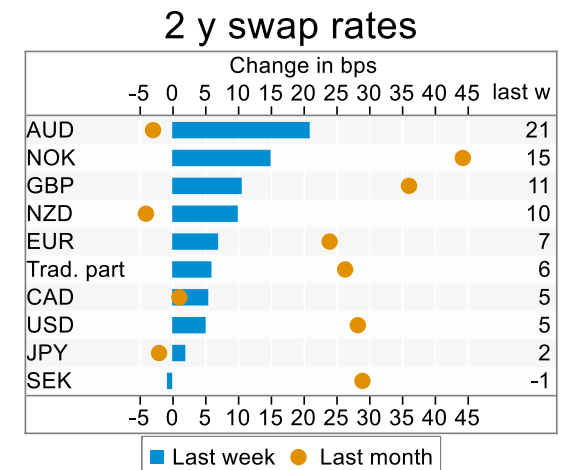
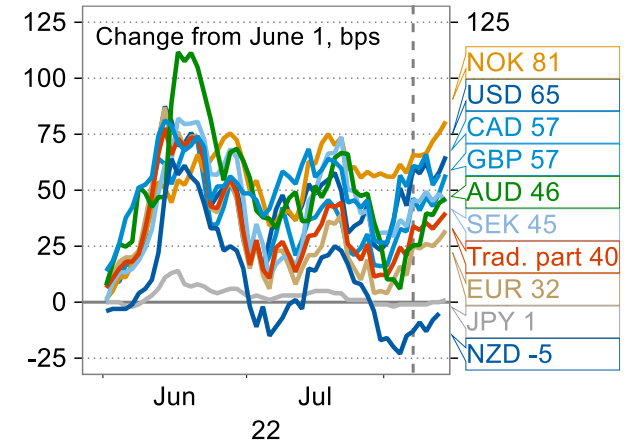
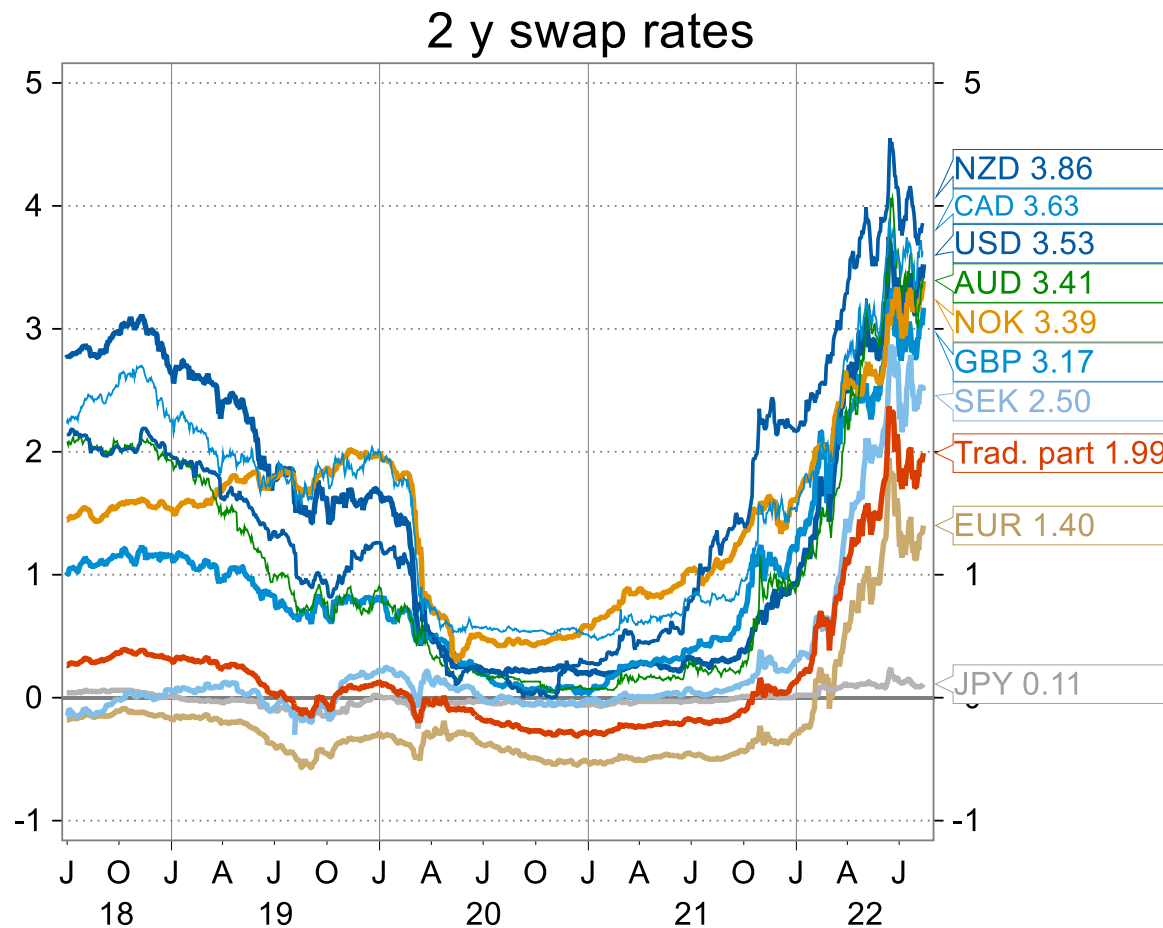
Fed funds future, Sept 21 2022 probabilities



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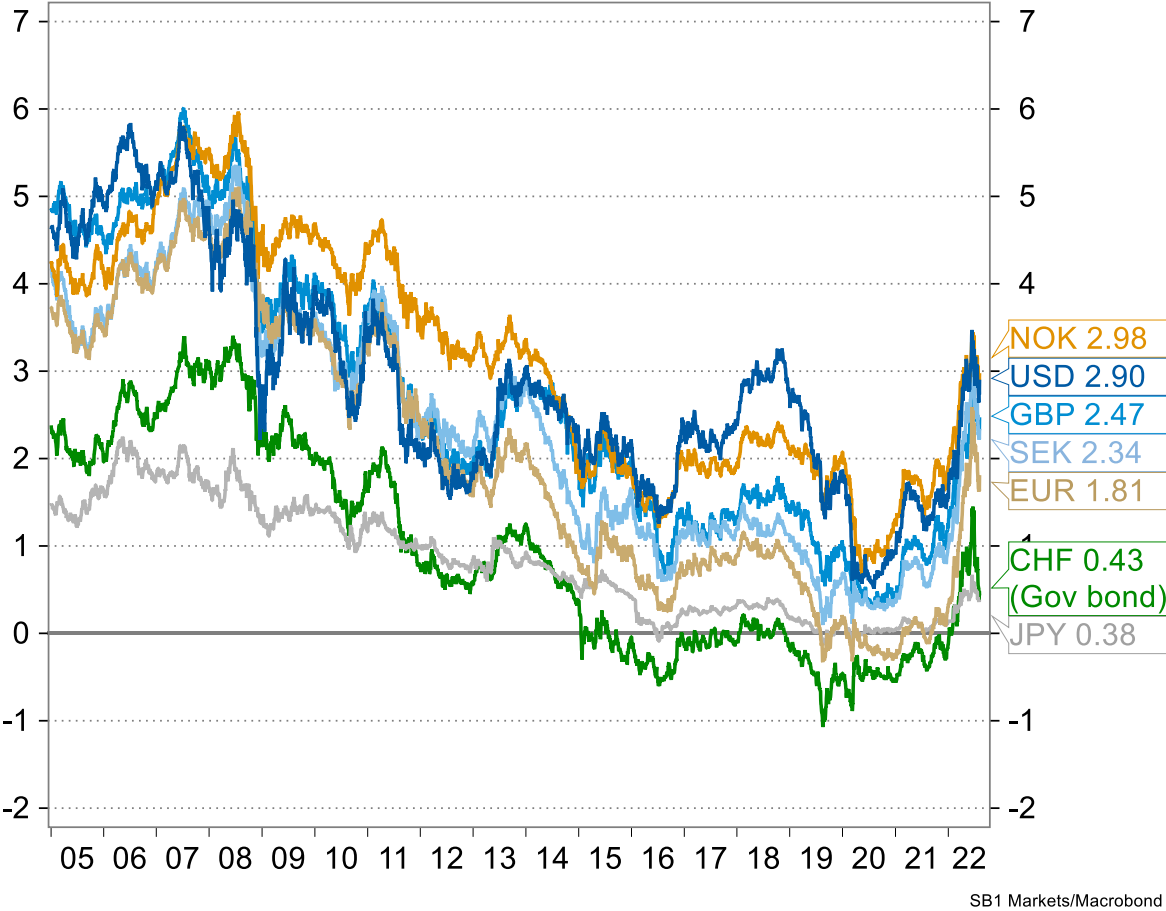
Still high volatility in the short end of the curve, rates up almost everywhere

NOK rates supported by a high CPI print. SEK rates fell. House prices? The CPI?

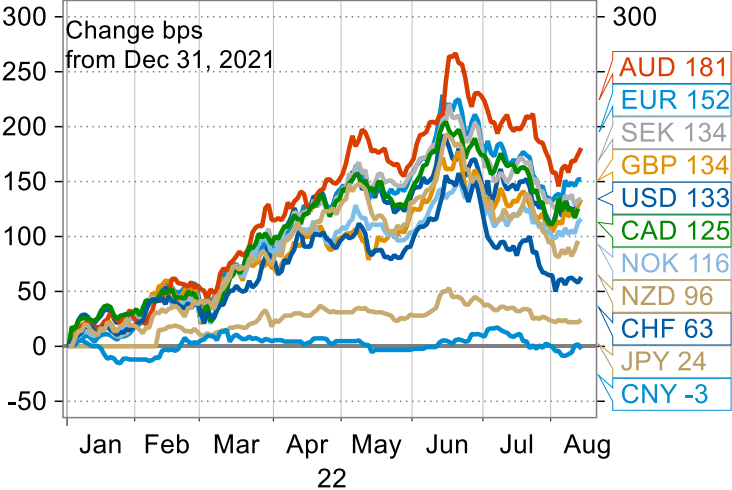


A small correction upwards in the long end too

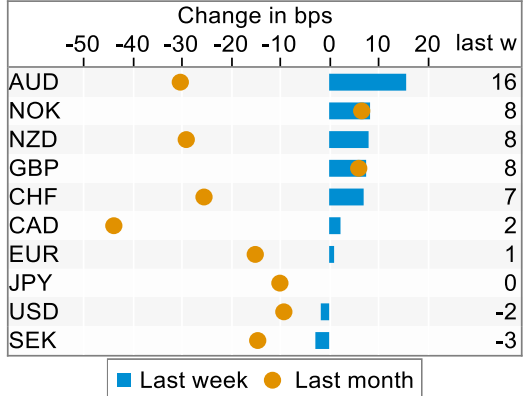
10 y swap rates



Swap Rates, 10 Year



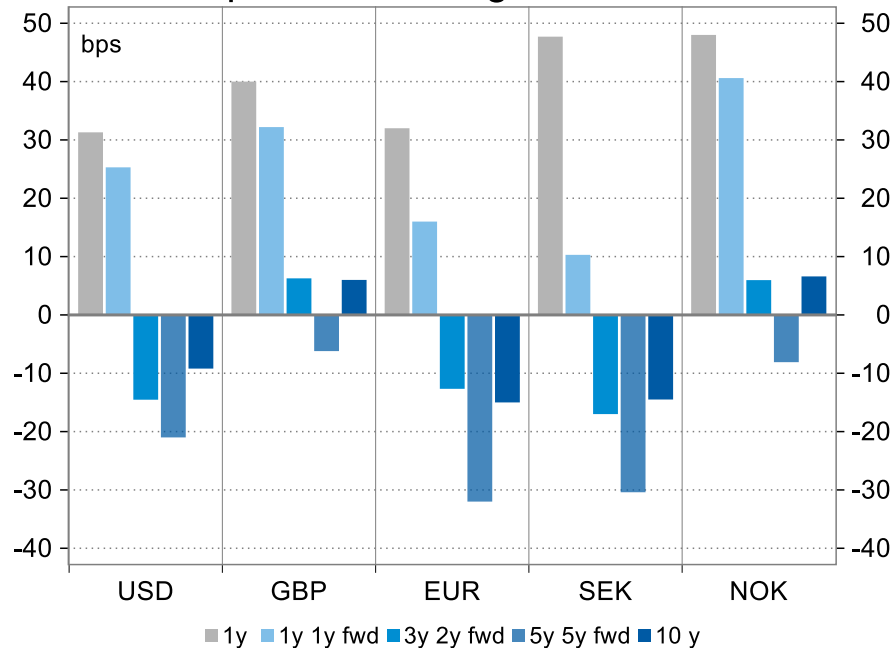
10 year swap rates



A further curve inversion everywhere – the sort end mostly up, even in the US last w.

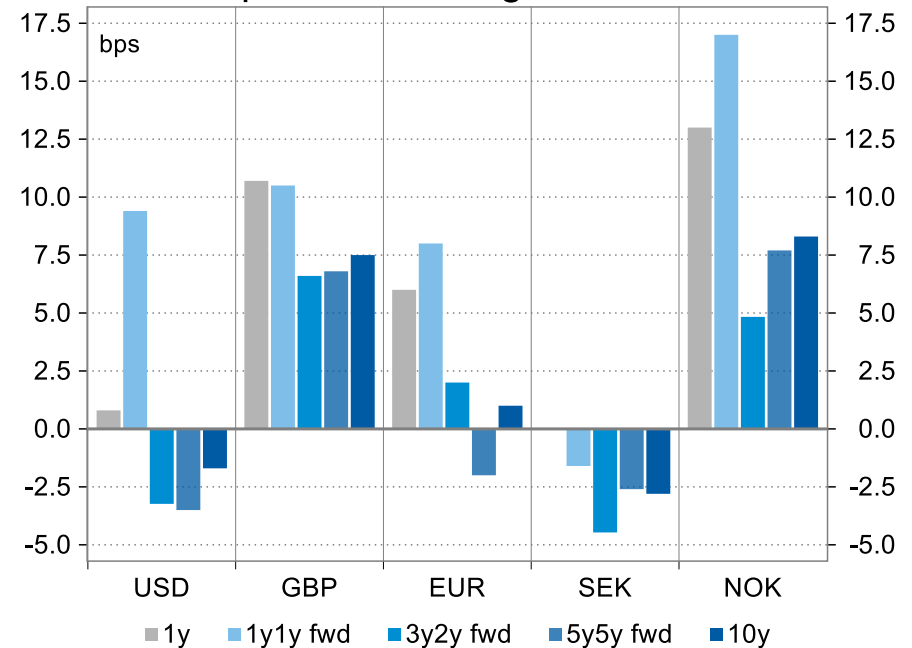
Both the short and the long end up the most in NOK! Blame the CPI

Swap Rates, changes last month



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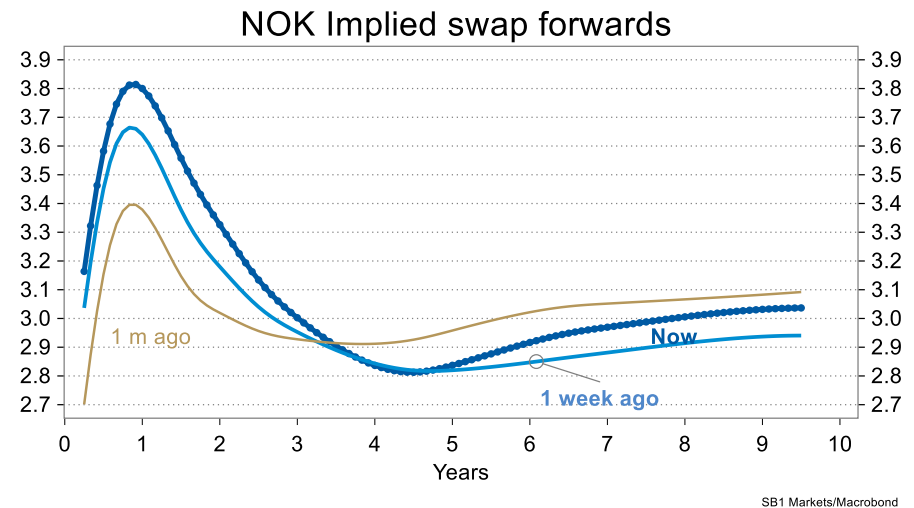
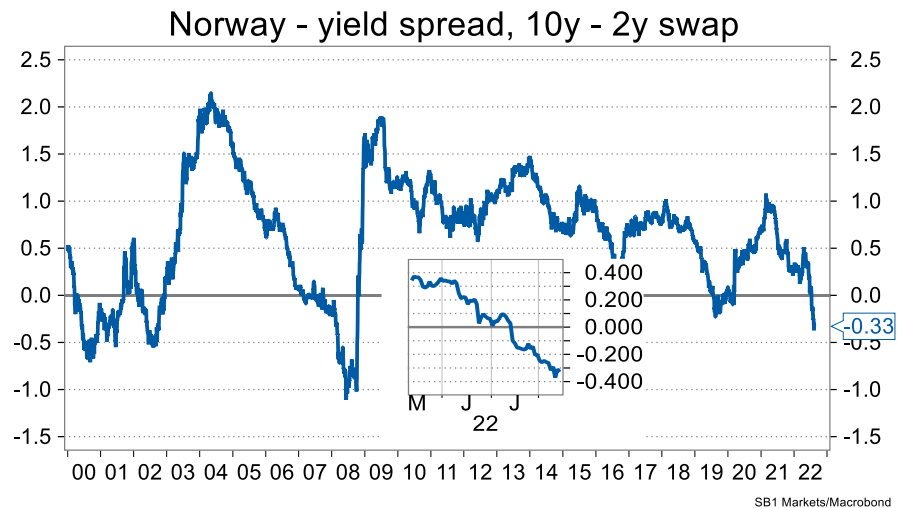
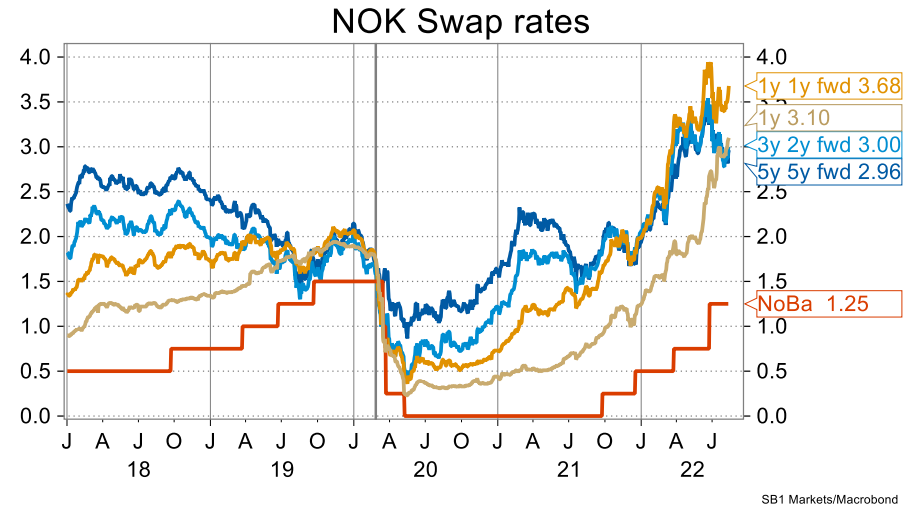
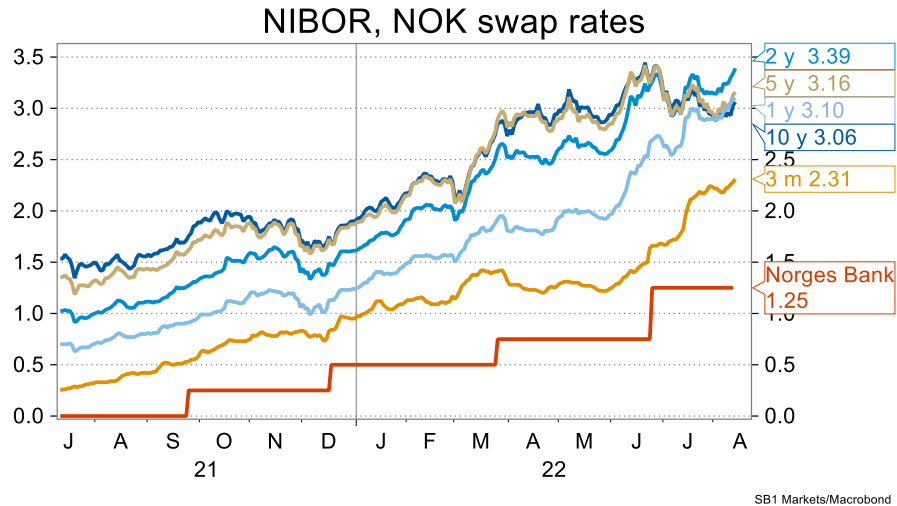
Swap Rates, changes last week



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Rates up almost all over the curve – barring the mid segment (implied)

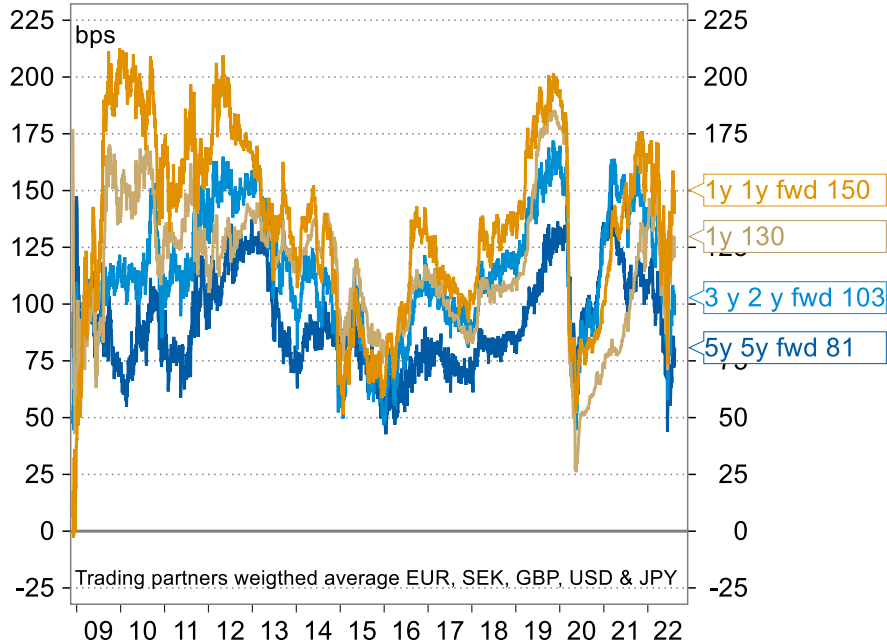
The 10 - 2y is inverted, by 33 bps



Spreads reversed the decline the previous week – thanks to the high NOK CPI

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

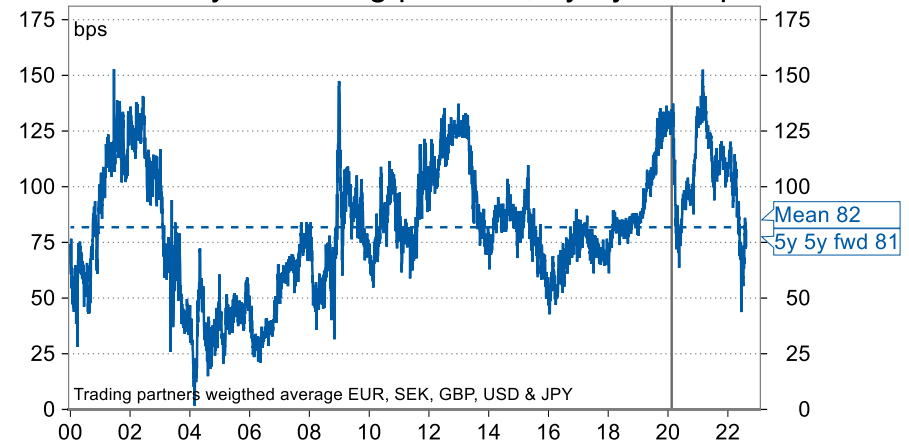
Norway vs trading partners, impl swap spreads



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Norway vs trading partners, 5y 5y fwd spread

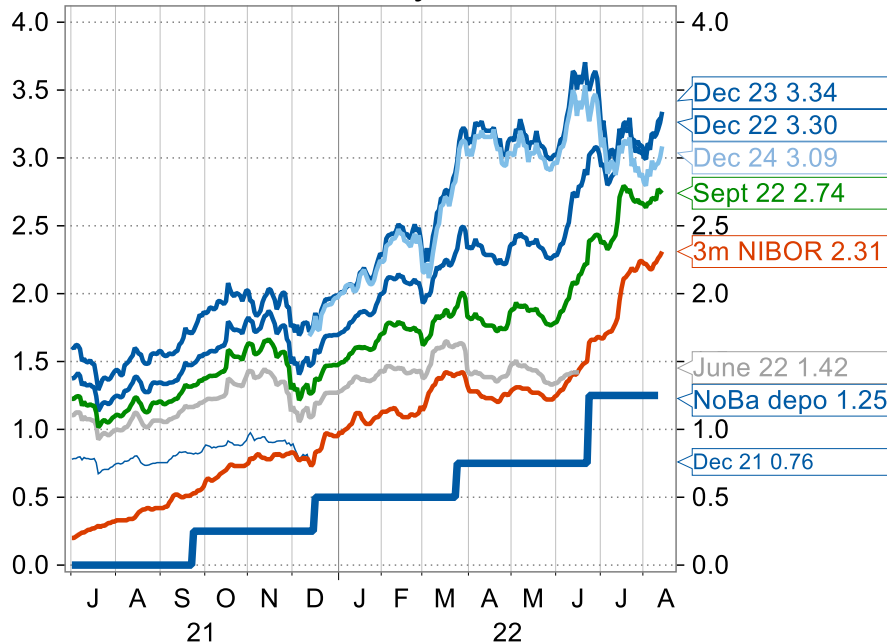


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FRAs up again, driven by the lift in the CPI

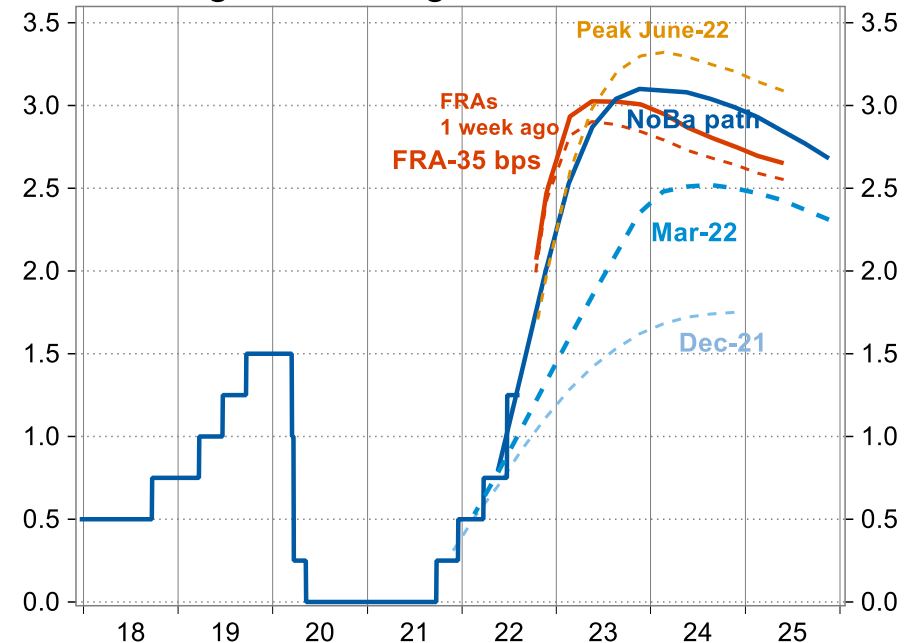
The Sep 3 FRA at 2.74% signal a close to 100% probability for 2 x 50 bps in Aug, Sep (and 25 in Nov)

Norway 3m FRA



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Norges Bank signal rate vs market

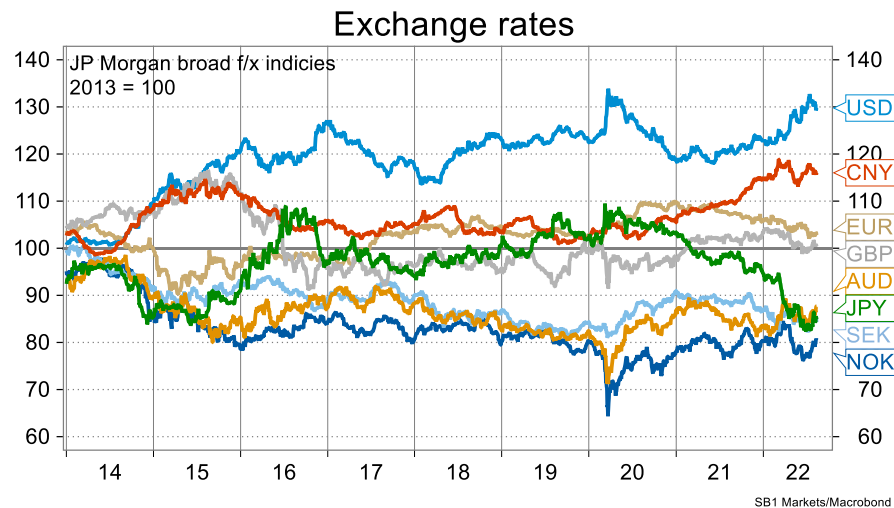
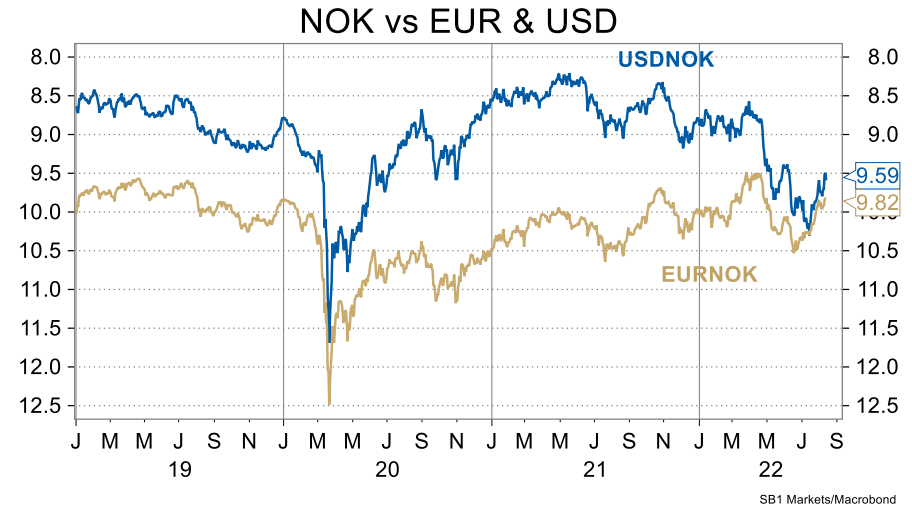


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- However, the **3 m NIBOR** at 2.31% is 10 bps too low if NoBa hikes by 50 bps both this week and in Sept (all estimates based on a 35 bps NIBOR spread – which is an uncertain assumption, of course)
- Thereafter, the FRA market discounts a 25 bp hike in both November and December, up to 2.75%, and a further hike to 3.0% in January. This is assumed to be the peak, just some few bps below the peak in NoBa's June path – but the market expects rates to peak in early 2023, not by the end of the year. The curve has become much more frontloaded, as in all other countries
- We still think the 50 + 50 bps hikes in August and September are the most aggressive Norges Bank may deliver. Thus, we think the upside risk for FRA rates is less than the risk at the downside, at the short end of the curve

Lower US inflation & rates lowered the USD, from the top of the list previous week

Higher Norwegian inflation & rates lifted the NOK, from the bottom of the list the previous week



F/x markets

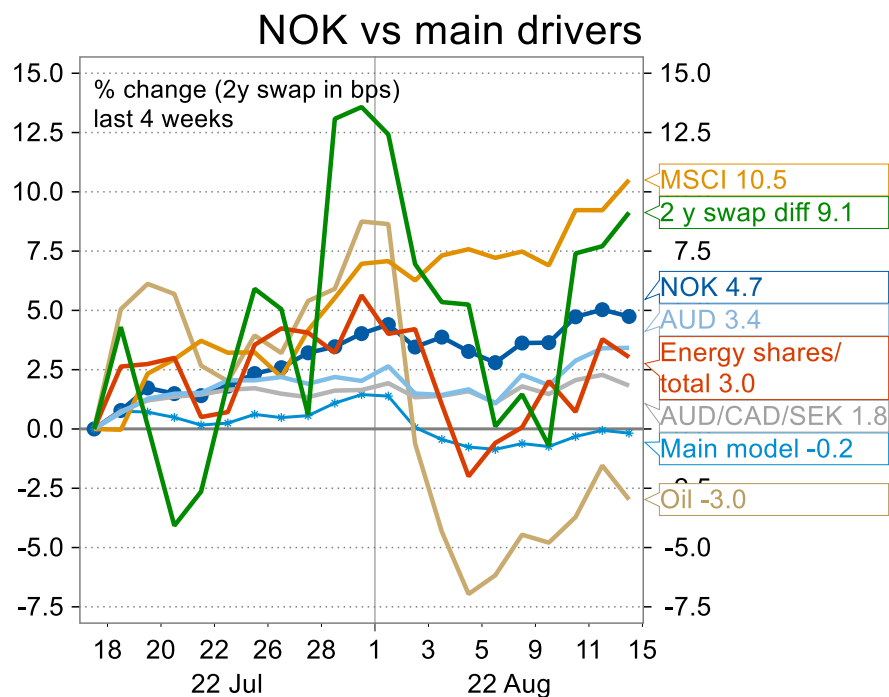
JP Morgan f/x broad indices + 3 f/x crosses	% change										Last week	Last month
	-2	-1	0	1	2	3	4	5	6	7		
AUD											2.3	4.3
NOKUSD											2.2	6.5
NOK											1.9	4.8
CHF											1.5	2.5
NOKEUR											1.4	4.5
JPY											0.9	1.8
EURUSD											0.8	1.9
CAD											0.6	0.8
EUR											0.2	0.8
GBP											-0.1	0.5
CNY											-0.4	-1.6
SEK											-0.7	2.2
USD											-1.0	-1.8

■ Last week ● Last month

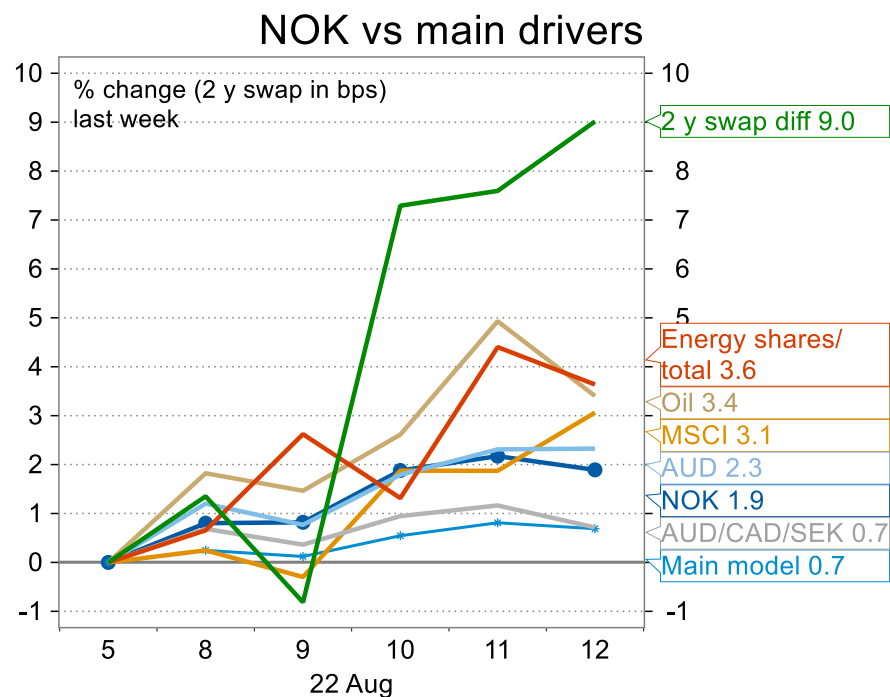
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NOK up 1.9%, our model suggested +0.7%. All factors contributed at the upside

The oil price climbed 3% and the Norwegian CPI surprise lifted the 2 y swap spread, in sum +9 bps last week



SB1 Markets/Macrobond



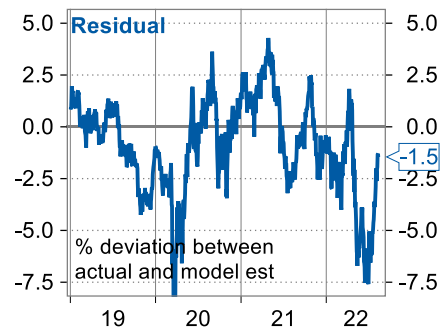
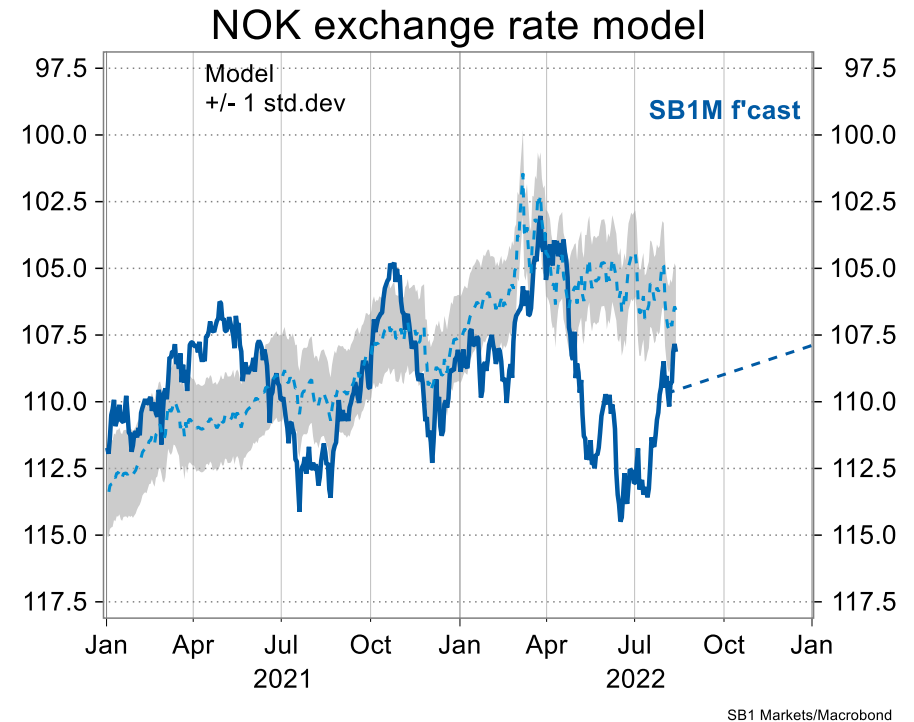
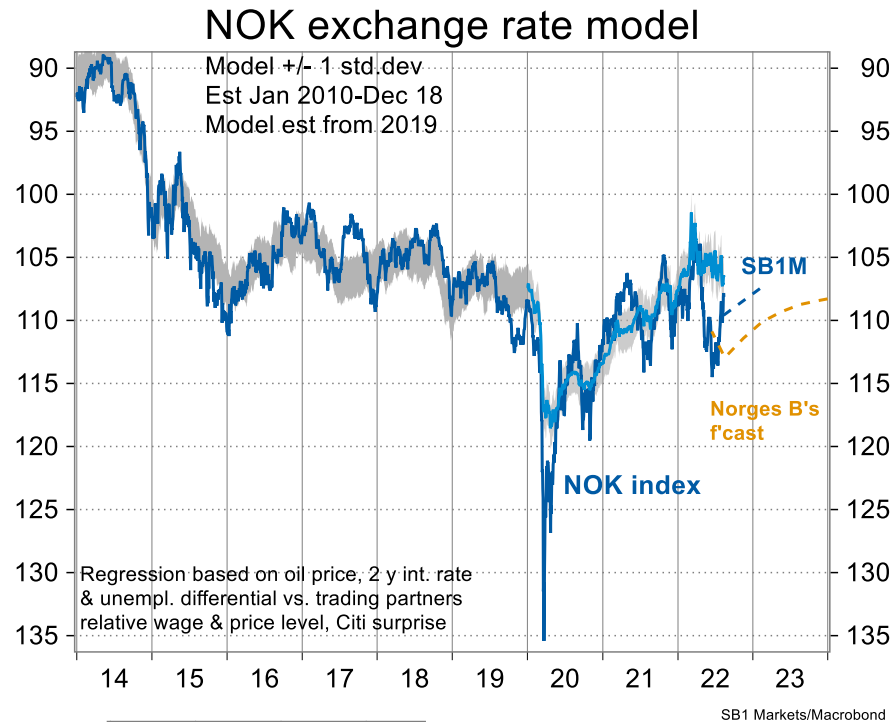
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Gaps vs. out model estimates are narrowing

- **The NOK +1.9%, our main model said +0.7% - and NOK is 1.5% below our main model estimate (from -2.4%)**
- The NOK is 6.5% weaker than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts (from -7.5%)
- NOK is on par with the estimate from a model that includes global energy companies equity prices (vs the global stock market) (from 0.5% weaker)

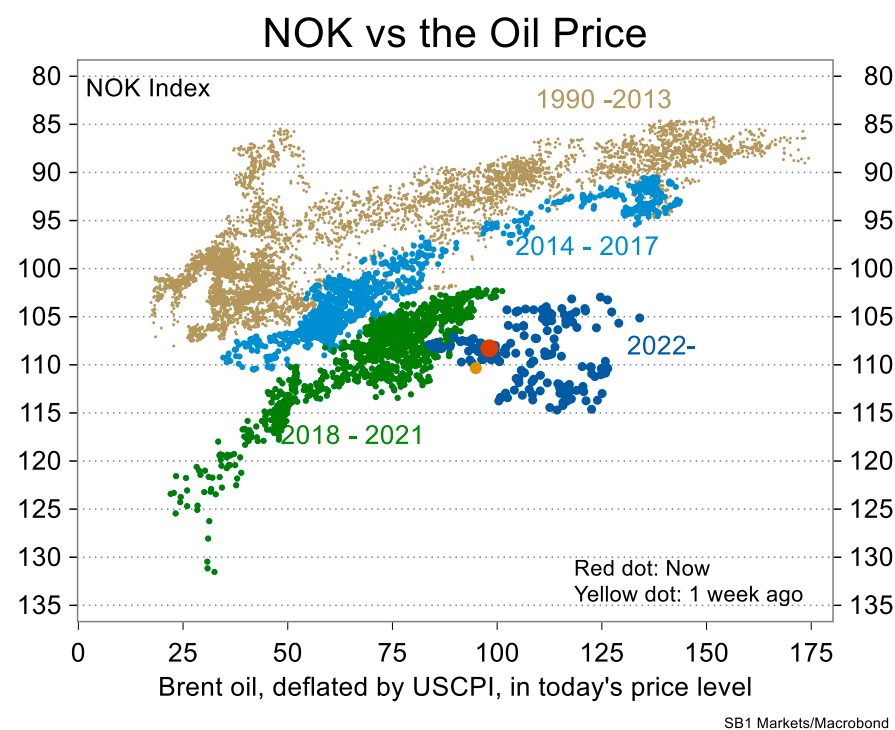
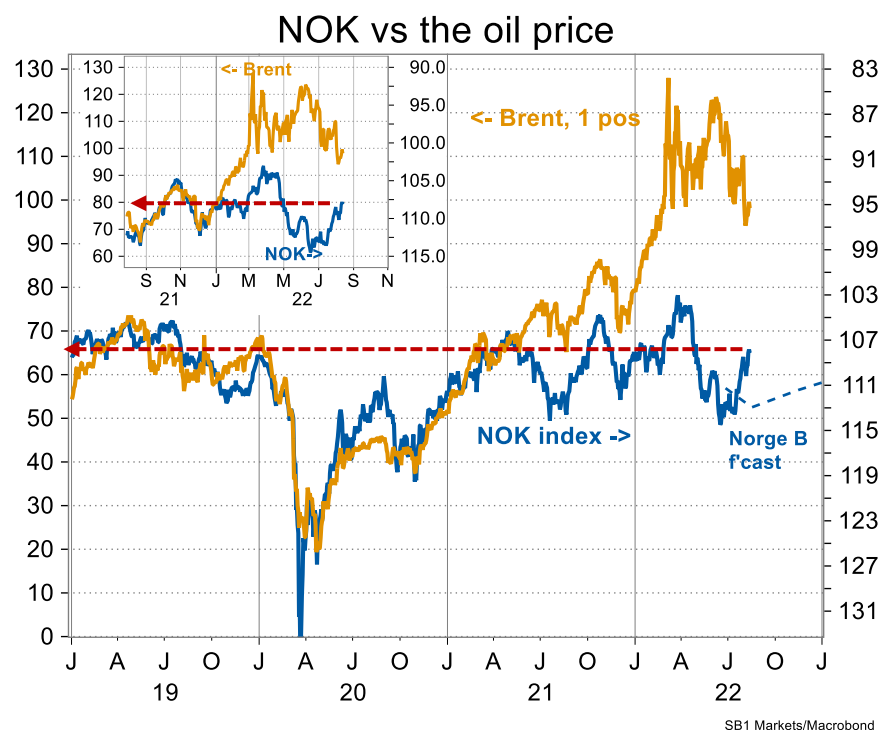
The NOK is just 1.5% below our model estimate

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



NOK 'more' up than the oil price. The NOK is still on the weak side but less

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



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

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

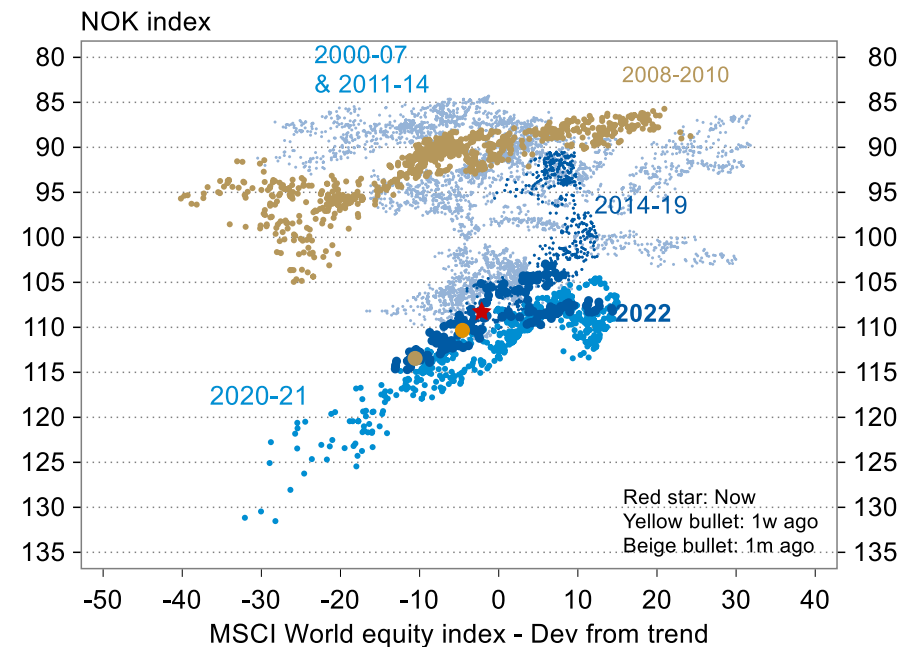
... but there is no stable correlation over time, and when it is, the oil price is normally the real driver

NOK Index vs. global equities



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NOK vs. MSCI world index

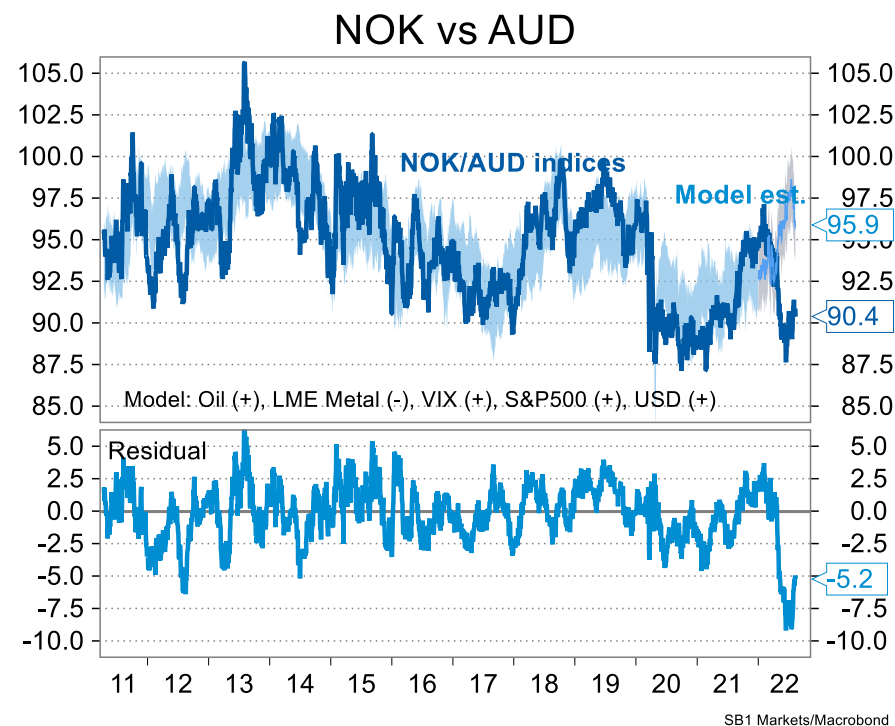
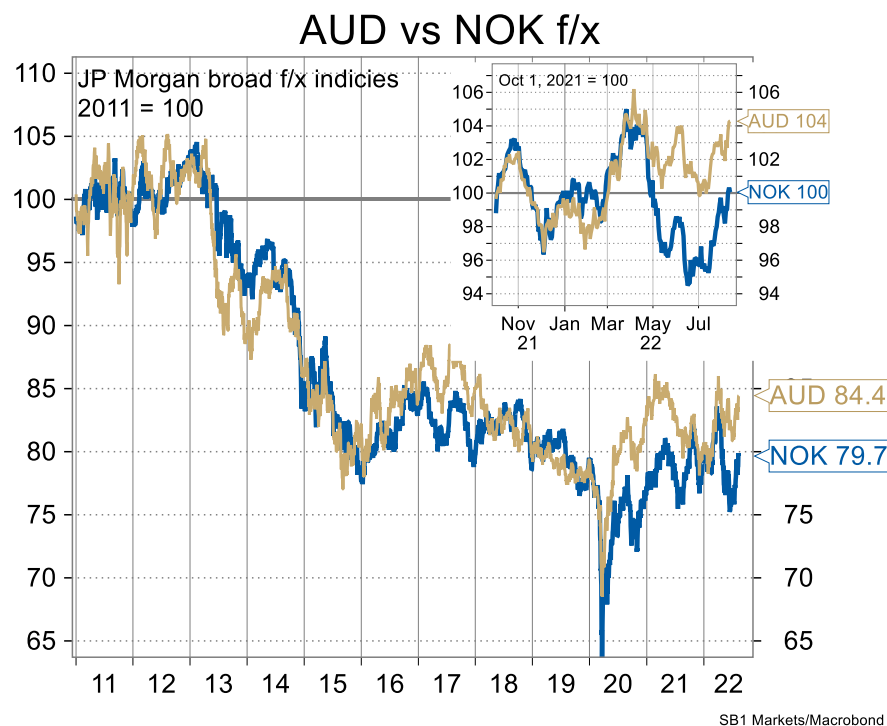


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- However, since April oil has not contributed at all vs. the decline and then the recovery in the NOK. So there may be 'something' here, vs the equity markets

NOK & AUD up but the NOK is still a laggard

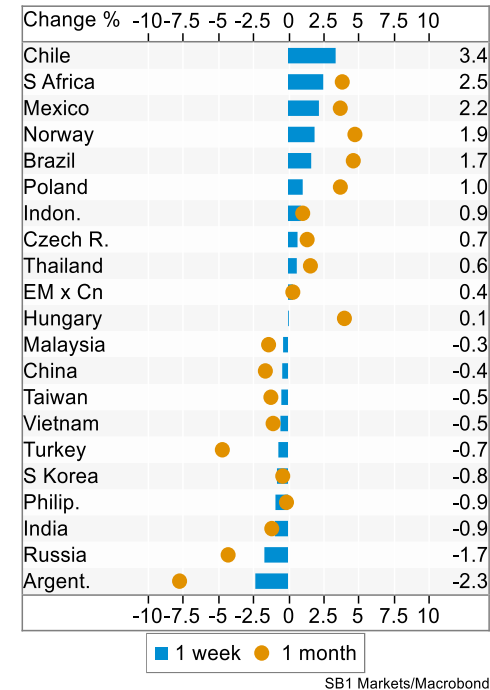
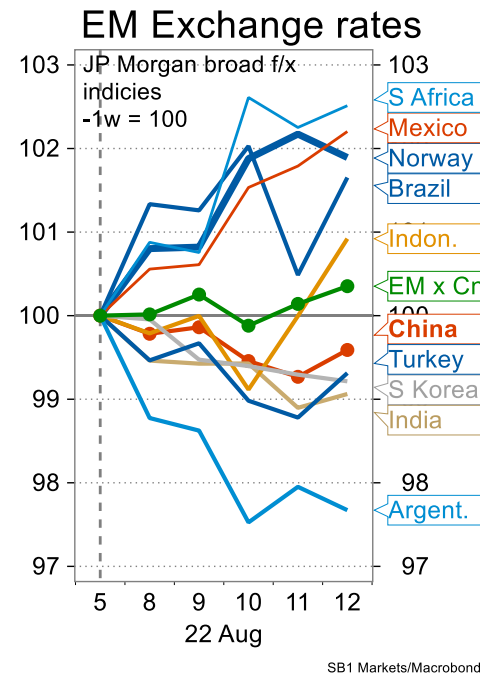
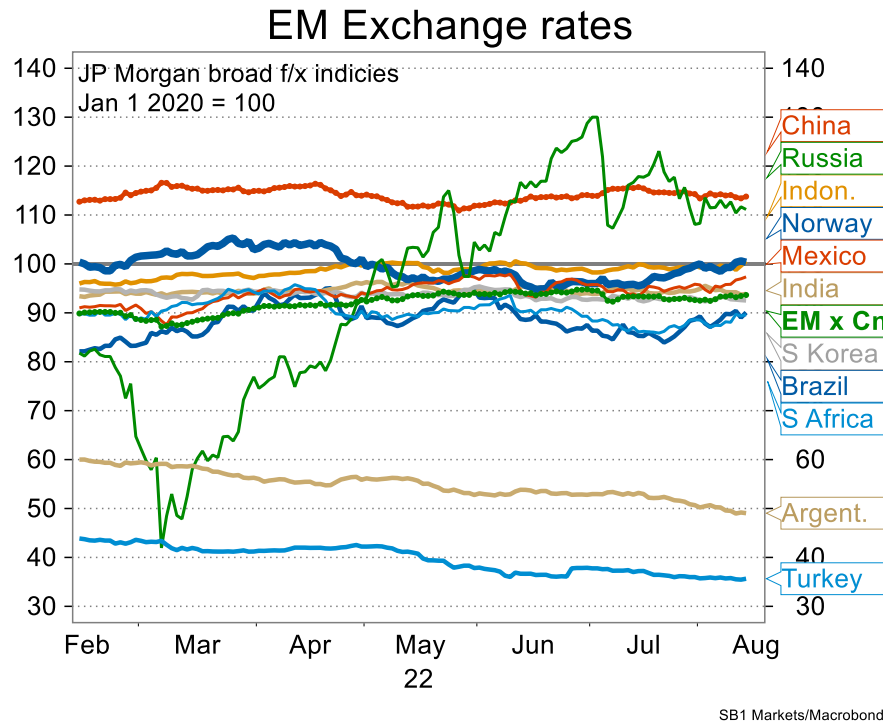
... and our model can not explain the gap



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

EM f/x mixed: If not for Russia, the EM f/x space mostly down - less risk appetite

However, EM f/x markets have not been weak in aggregate recent months, in spite of DM rate hikes



- The Taiwanese dollar was not hurt by speaker Pelosi's visit last week

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