

SpareBank MARKETS



Macro Weekly

Week 24/2022

June 13 2022

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

SpareBank
MARKETS

Highlights

The world around us

The Norwegian economy

Market charts & comments

Last week, part I

- **The War/Sanctions**

- » Russia is slowly conquering ground in the East, and will probably control Luhansk not before too long. Will the Russian continue? If not, real peace negotiations may start
- » **Mixed commodity prices**, oil and US natural gas up, but metals and food prices in sum down

- **The virus**

- » **Lockdowns** are gradually eased in most Chinese cities, and now even in **Beijing**, and economic activity is recovering rapidly. However, the virus is not totally eradicated even after lockdowns, and in **Shanghai** a district was closed down during the weekend – and a heavy and expensive testing regime is established

- **Global auto sales**

- » **Global auto sales** rose 12% m/m in May as **Chinese auto sales** partially recovered, but (Chinese sales) remained 16% below the pre-lockdown level. Global sales are still down 17% vs. the 2019 level. **US** is down 25% (after at 12% decline in May), **Europe** is down 37 – 40%. **Russian sales** fell further m/m, and are down 80% from February. Sales in **EM x China & Russia** is flat vs the 2019 level –

- **OECD forecasts**

- » The OECD lowered the 2022 **GDP** growth forecast by 1.2 vs the January forecast to 2.7%. The global growth forecast was cut by 1.5 pp to 3.0%. **Inflation** was revised up by 3 pp, to 6.5% for the OECD area. Next year OECD growth is expected to slow to 1.6% - and no recessions is assumed, of course

- **China**

- » **Exports** rose to ATH in May, at least in nominal terms (and not far below in price adjusted), and was 9% higher than expected. The level is miles above the pre-pandemic trend. **Imports** climbed m/m as well but remains slightly below the pre-pandemic trend in volume terms
- » **Credit growth** recovered almost to the pre-lockdown level in May, following the 'crash' in April. Underlying growth had strengthened until March, even if the construction sector is struggling, and construction starts have fallen (and they fell off the cliff in April, May data out this week)
- » **CPI** headline inflation remains at 2%, the core at 1% in May. PPI inflation slowed in May

Last week, part II

- **USA**

- » **CPI** rose more than expected in May, by 1% m/m and the annual rate accelerated to 8.6%, 0.3 – 0.4 pp higher than expected. The **core** rate rose 0.6%, and the annual rate is at 6.2%, also above expectations. Inflation is still broadening and the 3m/3m rate is at above 10%, at cycle hike. Interest rate expectations shot up – and it is the real rate component that shots up (inflation expectations are kept in check)
- » **Atlanta Fed's median wage tracker** reported a 6.5% annual growth in May, the highest on record (data from 1983). However, monthly wage increases have slowed somewhat recently
- » **Univ. of Mich. consumer sentiment** fell sharply to ATL in June. Inflation is obviously the culprit but other economic data do not explain the worst sentiment ever, since 1953!
- » **New jobless claims** rose again last week but is not much up from the bottom to flag an imminent inflation risk. But Atlanta Fed's GDP tracker suggest a 0.9% growth pace in Q2
- » **Expected growth in corporate earnings** is slowing and will very likely slow further the coming months and quarter

- **EMU**

- » **The ECB** preannounced two interest rate hikes in Q3, a July hike at 25 bps, and a September hike that could be larger if inflation forecast did not come down (they were revised upwards once more last week). The QE programs will not increase further, but maturing bonds will be reinvested as long as needed. In sum, the ECB was more hawkish than expected
- » **Unit labour cost inflation** has accelerated but is still not above 2%. The index for negotiated wages rose sharply in Q1, to 2.8% from 1.6%

- **Norway**

- » **Core CPI inflation** was substantially higher than expected at 3.4%, up from 2.6%, this time due to misses on furniture, recreation, hotels & restaurants. The **headline** was not much higher than expected as energy prices contributed less than we assumed - still very high at 5.7% (would have been 7.7% without electricity subsidies). Norges Bank will have to revise its CPI forecast substantially, at least the 2022 forecast, probably also the 2023 forecast
- » **SSB** revised its 2022 CPI forecast by 1.4 pp vs the March forecast to 4.7% . Think of it, if this forecast had been on the table before the wage negotiations started – and what Norges Bank would have said.... The 2022 GDP forecast was revised up by 0.1 pp to 3.5%
- » **Interest rates expectations** rose sharply, and a hike in both June and August in fully prices in, and a 50 bps June hike is not ruled out (a 10% probability)

The Calendar: Fed & BoE to hike, US housing. China data should be less bad than in April

Time	Count.	Indicator	Period	Forecast	Prior
Monday June 13					
08:00	NO	GDP MoM	Apr		0.7%
08:00	NO	GDP Mainland MoM	Apr	0.7%(0.6)	1.0%
08:00	UK	Monthly GDP (MoM)	Apr	0.1%	-0.1%
Tuesday June 14					
06:00	SW	PES Unemployment Rate	May		3.1%
08:00	SW	CPI YoY	May	7.0%	6.4%
08:00	SW	CPI Excl. Energy YoY	May	5.2%	4.5%
08:00	UK	Average Weekly Earnings	Apr	7.2%	7.0%
08:00	UK	IFO/LFS Unemployment rate	Mar	3.6%	3.7%
10:00	NO	NoBa Regional Surv: next 6 m.	May	1.4 (1.3)	1.65
11:00	GE	ZEW Survey Expectations	Jun	-27.5	-34.3
12:00	US	NFIB Small Business Optimism	May	93	93.2
14:30	US	PPI Final Demand YoY	May	10.8%	11.0%
Wednesday June 15					
04:00	CN	Industrial Production YoY	May	-1.0%	-2.9%
04:00	CN	Retail Sales YoY	May	-7.1%	-11.1%
04:00	CN	Fixed Assets Ex Rural YTD YoY	May	6.1%	6.8%
08:00	NO	Trade Balance	May		92.6b
11:00	EU	Industrial Production SA MoM	Apr	0.5%	-1.8%
14:30	US	Empire Manufacturing	Jun	4	-11.6
14:30	US	Retail Sales Advance MoM	May	0.2%	0.9%
14:30	US	Retail Sales Control Group	May	0.1%	1.0%
14:30	US	Import Price Index ex Petroleum	May	0.7%	0.4%
16:00	US	NAHB Housing Market Index	Jun	68	69
20:00	US	FOMC Rate Decision (upper)	Jun-15	1.50%	1.00%
Thursday June 16					
03:30	CN	New Home Prices MoM	May		-0.3%
11:00	EU	Labour Costs YoY	1Q		1.9%
13:00	UK	Bank of England Bank Rate	Jun-16	1.25%	1.00%
14:30	US	Building Permits	May	1788k	1819k
14:30	US	Housing Starts	May	1709k	1724k
14:30	US	Philadelphia Fed Business	Jun	6	2.6
14:30	US	Initial Jobless Claims	Jun-11		229k
Friday June 17					
08:00	UK	Retail Sales Inc Auto Fuel MoM	May	-0.6%	1.4%
11:00	EU	CPI YoY, Final + details	May F	8.1%	7.4%
15:15	US	Manufacturing Production	May	0.2%	0.8%
16:00	US	Leading Index	May	-0.4%	-0.3%

• China

- » **April data** were disastrous, and much weaker than expected and spurred a several initiatives from the central authorities, at least they have been stressing the need for getting the economy back on track. Most likely, activity strengthened measured m/m in May, as lockdown were eased in several cities, if not in Shanghai and restrictions were introduced in Beijing – and even if the PMIs signalled a further contraction. Exports rose sharply in May, to ATH nominally. Still, activity was very likely much weaker than in March, and will signal at Q2 is 'lost'. In addition, president Xi's scientific zero covid policy, that cannot be discussed openly (and perhaps not even within the party) seems unlikely to be a success if effective vaccines are not introduced. A district in Shanghai was closed down during the weekend due to some few new case. More will very likely come, and stimulus measures will not work as intended

• USA

- » **50 or 75?** Most likely the FOMC will hike the signal rate by another 50 bps. Will 75 bps at one of the following meetings be ruled out this time too? Probably not. Will the interest rate path (the dot plot) be lifted once more, following the unprecedented hikes in December and March? No doubt. The bank has of course fallen far behind the curve, and is now regrettably forced to speed up, reducing the probability for a soft landing in the economy
- » We are most interested in **housing market** data, especially the Housing Market survey from the Homebuilders. In May, they reported a very unusual cut in expected activity due to a sudden drop in affordability as mortgage rates soared on top of the incredible increase in house priced since before the pandemic
- » Other data points: **Retail sales** (that are still elevated), **manufacturing production** (that has been growing rapidly recent months) and the first **June manufacturing surveys** (Philadelphia & NY Fed surveys are both expected up, following the large surprise at the downside in May – that was not recognised by the manufacturing ISM)

• EMU

- » **Final inflation data, manufacturing production** will not rock the boat. ECB did the job, last week

• UK

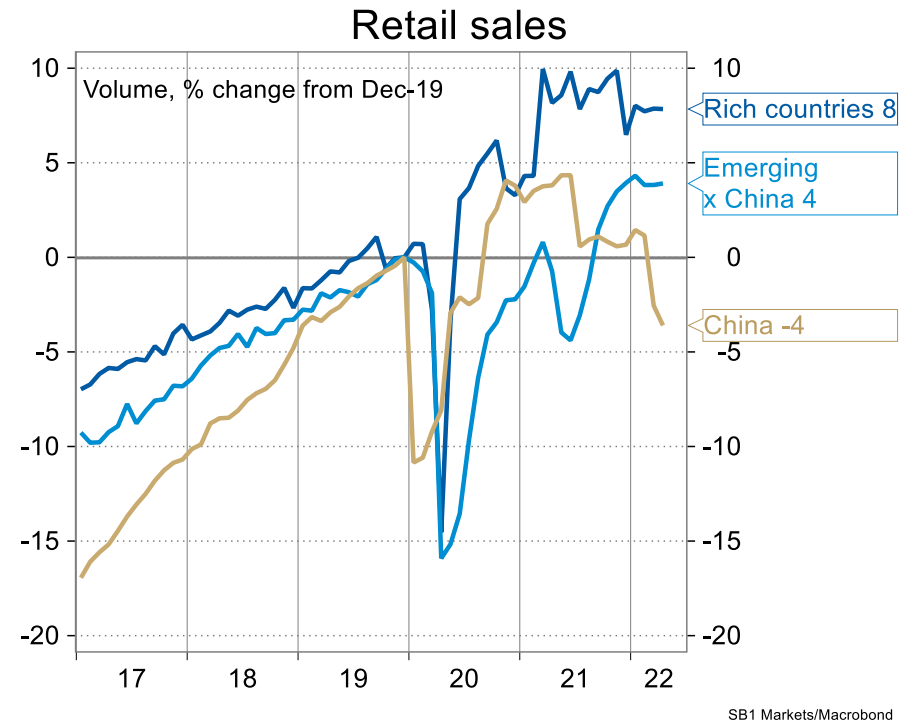
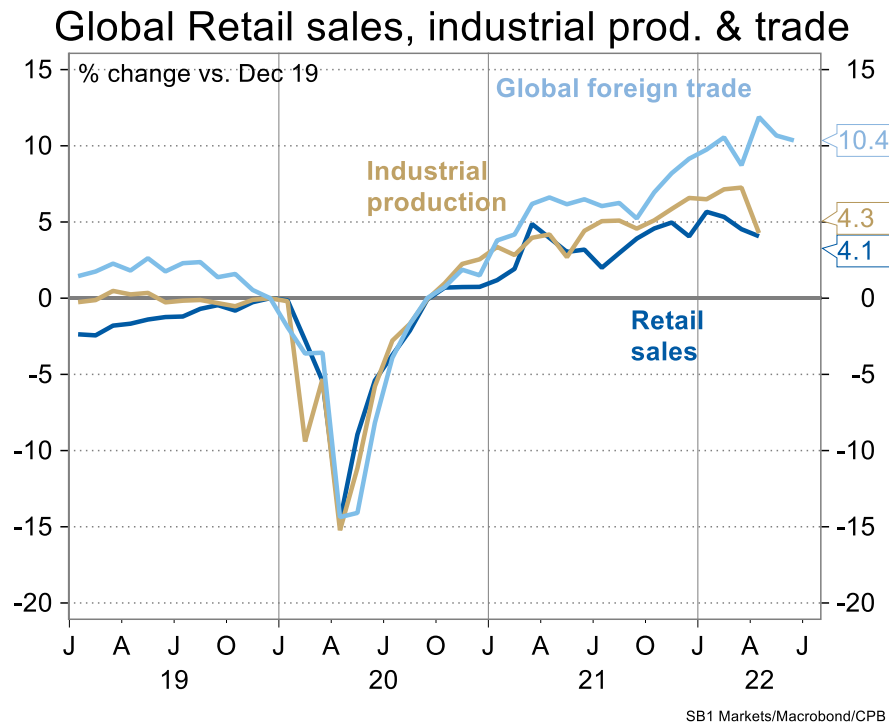
- » **Bank of England** will hike again, by the usual 25 bps, to 1.25%. Rate expectations have increased substantially since the previous meeting, we guess at least partly because aggressive wage claims have been put forward

• Norway

- » We expect **Norges Bank's Regional Network** to report slower growth the coming 6 months that it did 3 months ago, but still signal growth above trend. Retail well remain weak, household services have already recovered substantially. Oil related my report higher growth but not export industries or construction. Growth will remain in business services, but should not accelerate. Capacity utilisation will be reported up, probably labour shortages too - and wage expectations will not be lowered either. So then??
- » We expect a further increase in **Mainland GDP** in April, consensus is at 0.7%, a fair estimate

Global activity fell in March/April due to the Chinese lockdowns

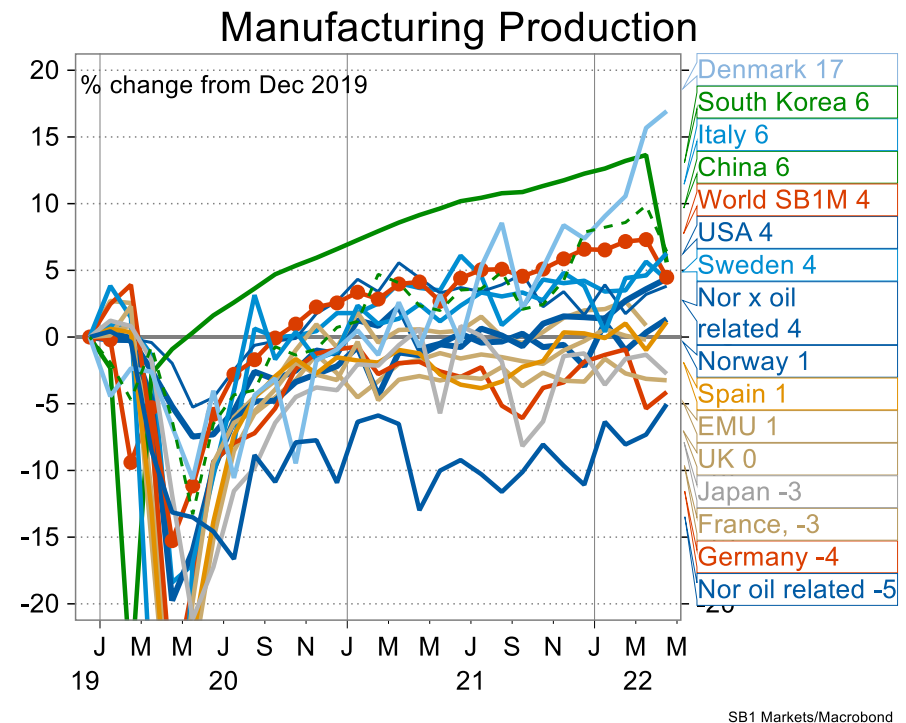
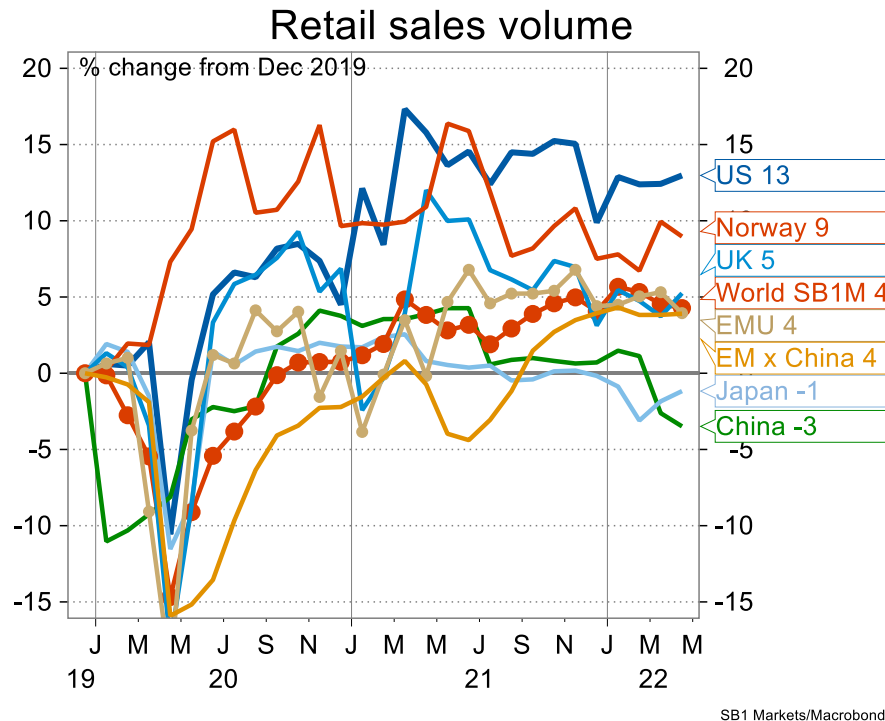
Global industrial production fell some 2% due to the 7% setback in China



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

Retail sales has slowed since January, mostly due to China

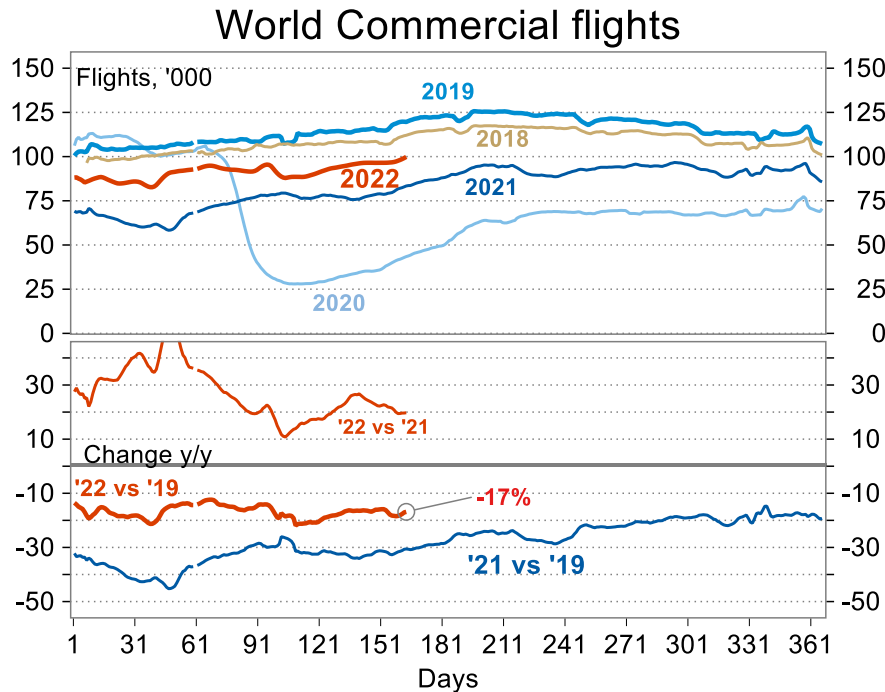
However, both other EMs and most rich countries are reporting slower sales too, it's services now!



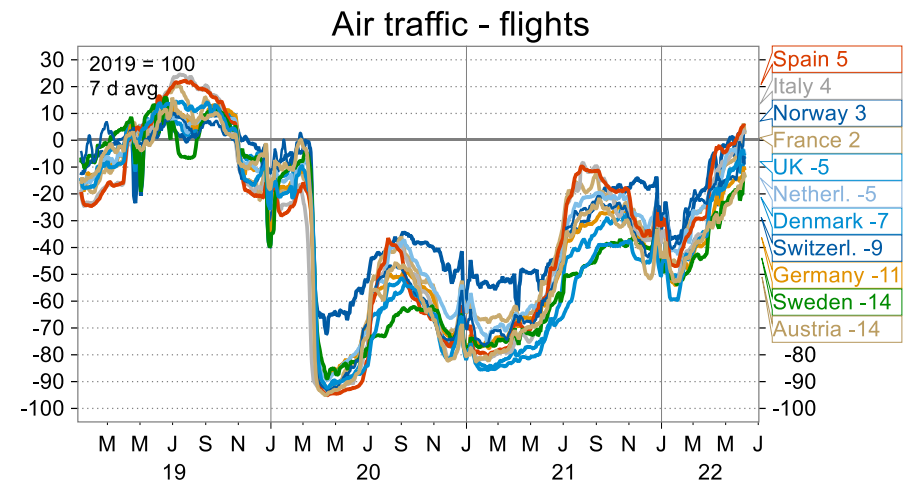
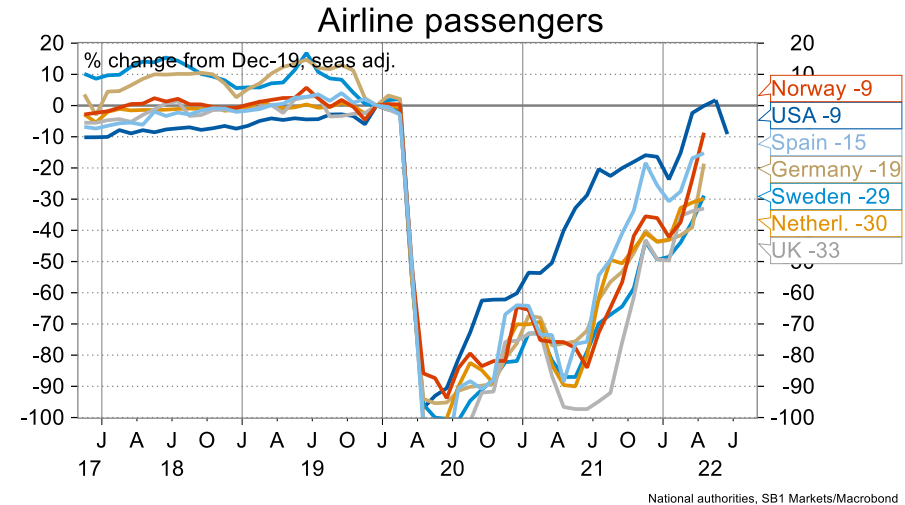
- **Manufacturing production** fell in April due to the steep decline in China
- **Manufacturing production** has been hampered by a deep decline in auto production. The manufacturing PMIs are down from the peak but are still signalling growth but not above trend
 - » China reported a sharp drop in production in April, which will the global aggregate down (but too few others have so far reported)

Global airline traffic has flattened, in a normally strong season

Geopolitics? Trouble in China? Western Europe & the US on the way up



Flightradar24 SB1 Markets/Macrobond



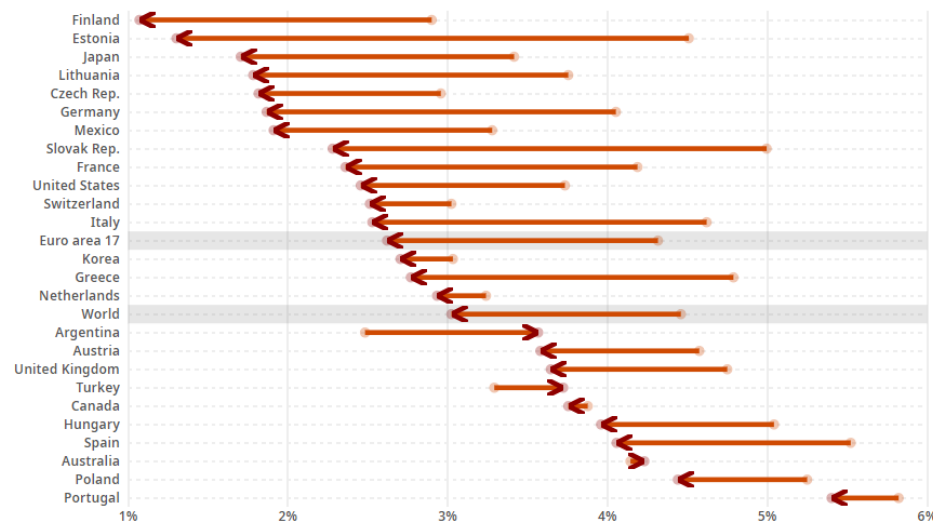
The OECD has made some forecast revisions

Growth revised down by 1.5 pp, inflation is revised up by 4 pp to 6.5 from 3.5%

Annual GDP growth projections for 2022

Year on year, %

December 2021 projection June 2022 projection

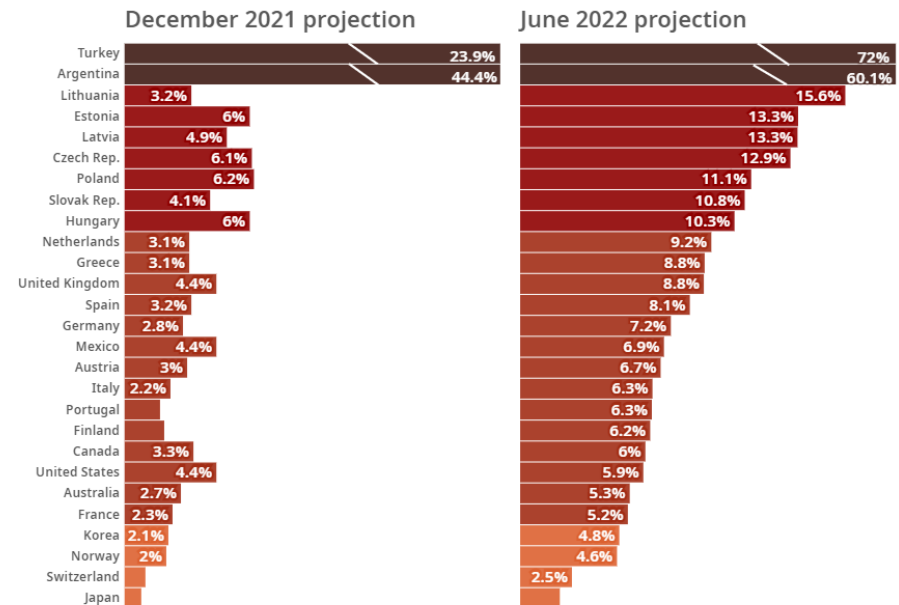


Source: OECD Economic Outlook (Edition 2022/1).

Annual inflation projections for 2022

Year-on-year, %

June 2022 projection: >20% 10-20% 5-10% <5%



Source: OECD Economic Outlook (Edition 2022/1).

- Norway is not included at the chart to the right: OECD revised 2022 GDP growth down by 0.6 pp to 4% (Mainland down to 3.5%)
- Finland and the Baltics are badly hurt

The SSB revised 2022 CPI inflation up to 4.7% from the 3.3% March forecast

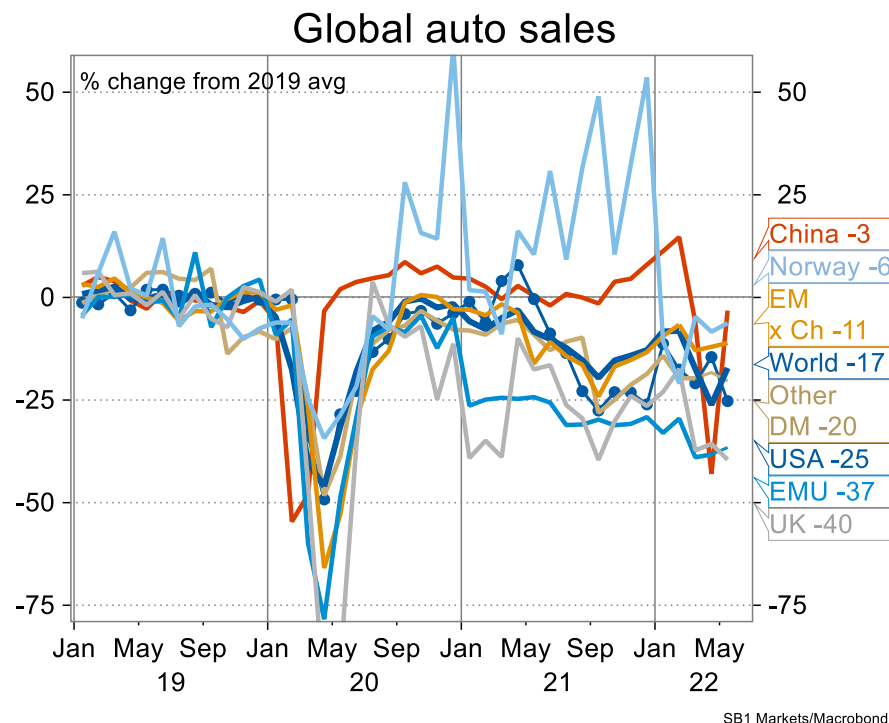
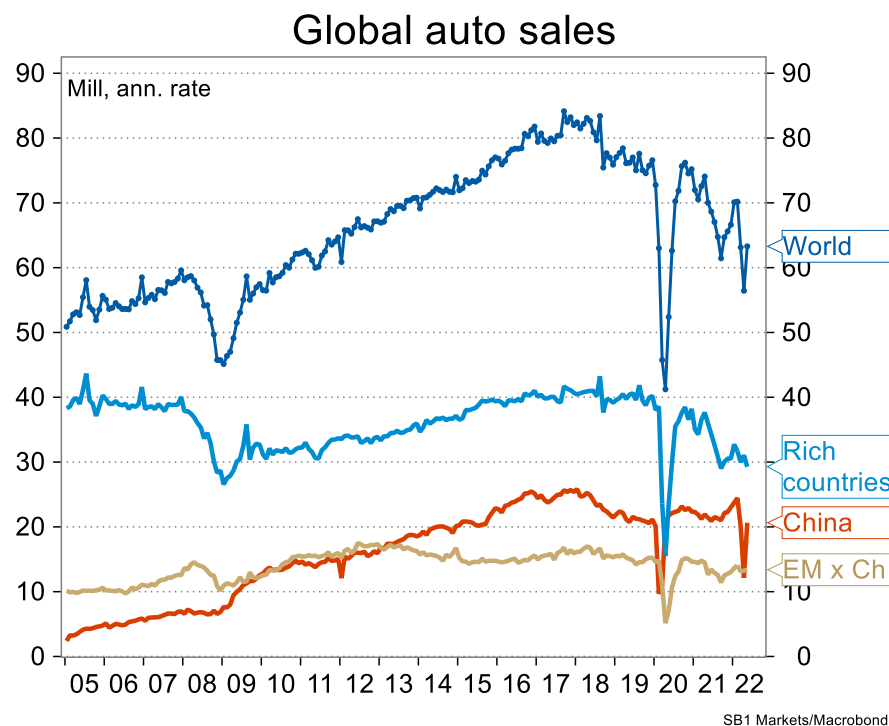
Mainland GDP growth will keep up well, up 3.7%, 0.1 pp above the previous forecast

Other key points/*comments*

- Growth among our **trading partners** will slow from 3.0% in 2022 (revised down by 0.4 pp) to 2.3% in 2022 (revised down 0.1 pp. *Downside risk*)
- **Consumption** growth will keep up
- Strong growth in **Mainland business investments**, almost double digits in both 2022 and 2023, and zero growth in 2024. *A fair est*
- **Oil investments** will increase, but not by much (*and less than we assume*)
- **Unemployment** will not decline further – and will increase in 2023. *Downside risk short term, then upside risk*
- **Real wages** will decline in 2022 (wages up 4%) but will increase rapidly in 2023 as **inflation** will decline
 - » *Think of it, what if the price prognosis had been 4.7% and not 3.3% ahead of this spring's wage negotiations?*
 - » *What would have been NoBa's response*
- Norges Bank will lift the policy rate by 50 bps in June, and further up to 2.5% in 2024, SSB expects

Chinese auto sales recovered in May, still down 16% from before lockdowns

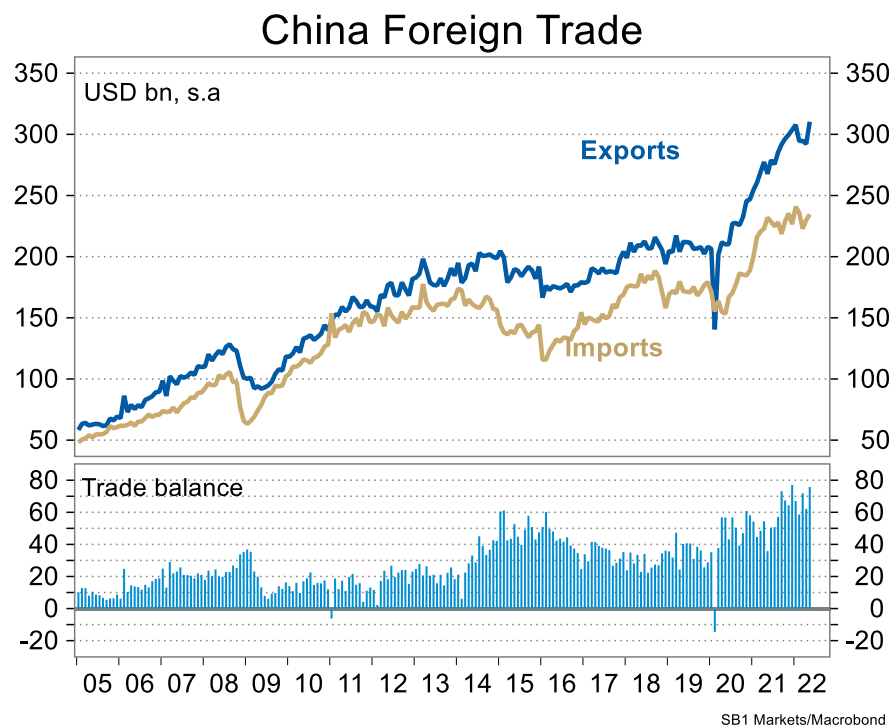
Sales fell in the rich part of the world, mostly due to the US. EM x China marginally up



- **Global auto sales** rose 12% in May, thanks to a recovery in sales in China, to 21 from 12 mill units. Global sales are still far below (-17%) the 2019 level
- Sales in the **US** fell by 13%, to -25% vs 2019. **EMU** sales (probably) rose 2% but remain 37% below 2019 level. **UK** is down 40%
- **Russian sales** are down 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' 11% vs. the 2019 level (the decline in Russia equals 10% drag – and the rest is almost back!)
- **Auto production** is limiting sales most places. We last week reported a steep increase in German production in May. The first report was dead wrong, sorry!

ATH exports in May? So they say, at least in nominal terms

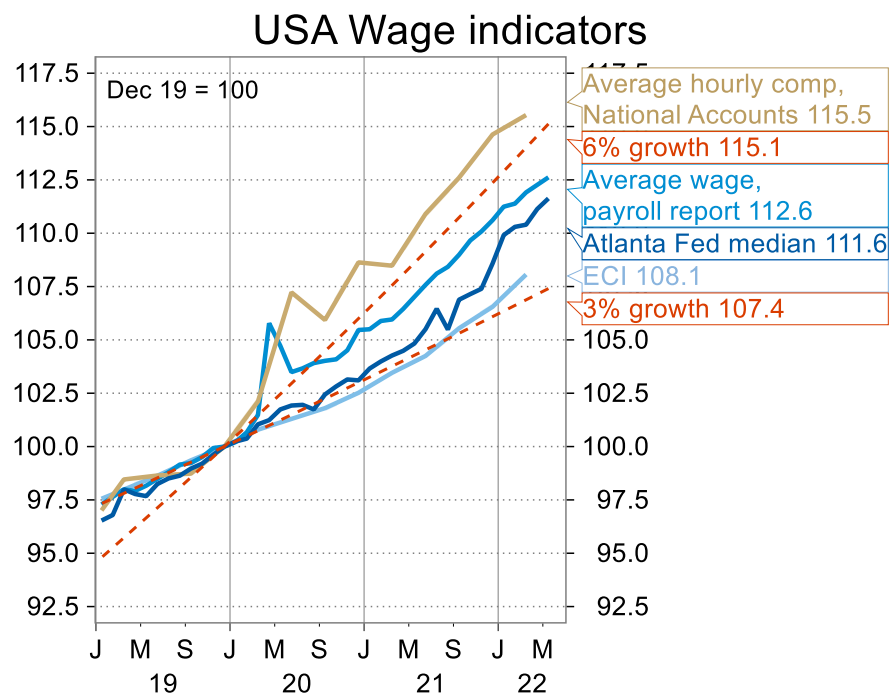
Exports gained 6% m/m, are 25% above the pre-pandemic level in volume terms



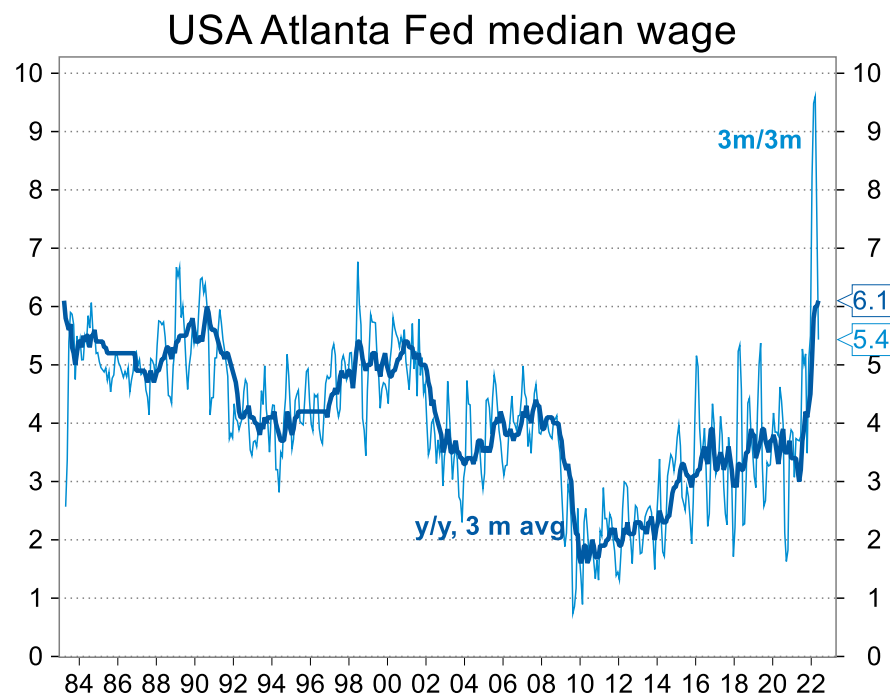
- **Export values** grew by 6% in USD terms in May (our seas adj), and are up 17% y/y, from 4% in y/y in April, 9 pp (!) better than expected (but the forecast was too low). The exports are record high! **Export volumes** very likely rise sharply too, and the level is not far below the ATH in February. Export volumes are up 25% from before the pandemic!
- **Import values** rose 2% m/m in May, and are up 4% y/y, from zero in April, in line with expectations. Import values are down 3% from the peak. In **volume terms** the decline in imports is far larger, by 10% - and by 6% since January. Imports volumes are well below the pre-pandemic trend – but very likely rose in May
- The **trade surplus** at USD 78 bn, 20 bp larger than expected, and the 2nd highest level ever seasonal adjusted, at USD 76 bn

Atlanta Fed's wage tracker may confirm somewhat slower wage growth

The median wage is up 6.5% y/y, 6.1% 3 m smoothed – but 'just' by 5.4% measured 3m/3m



SB1 Markets/Macrobond



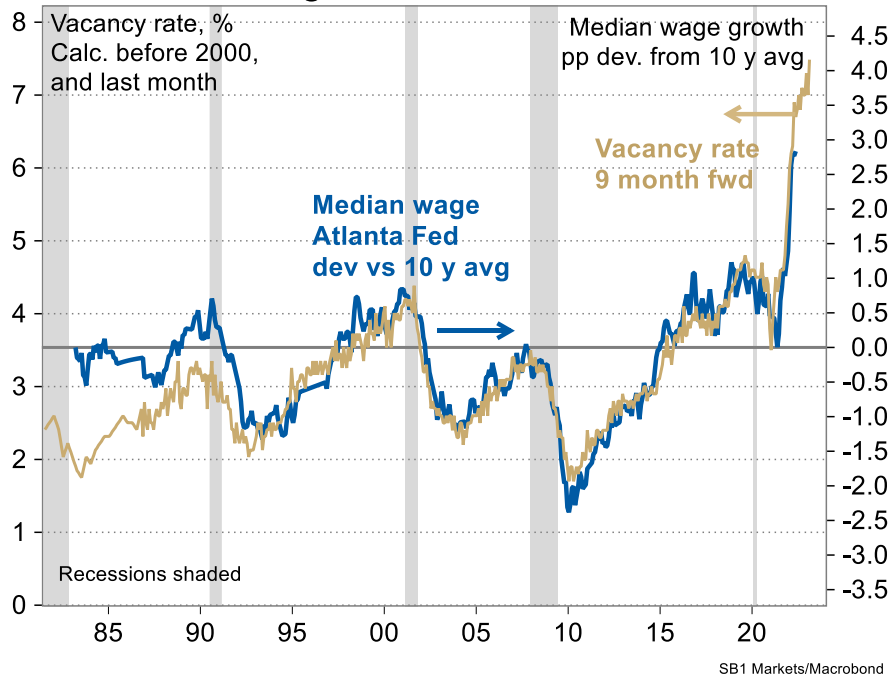
SB1 Markets/Macrobond

- **The Atlanta median wage tracker's** 6.5% lift is the highest ever, data from 1983. Smoothed over 3 months, the median wage is up 6.1% - in line with the first observation in 1983. But not seen ever since
- **The acceleration in wage growth** may be slowing, however. Following an extremely rapid m/m increase in Q4, m/m growth (calculated by us) has slowed slightly so far in 2022 - but the 3m/3m rate has fallen to 5.4%
- **All other wage indicators** are reporting fast wage growth, and all are reporting wage growth well above the recent years' average. In the payrolls report, wage inflation has also slowed slightly recent months
- It will be a 'challenge' to keep inflation at 2% if wage inflation remains at current levels. It does not seem likely that wage inflation will turn south before the labour market weakens (check next page). Productivity growth has not accelerated. Profit margins may take a beating – they very likely will – but that will not be not sufficient to bring inflation down

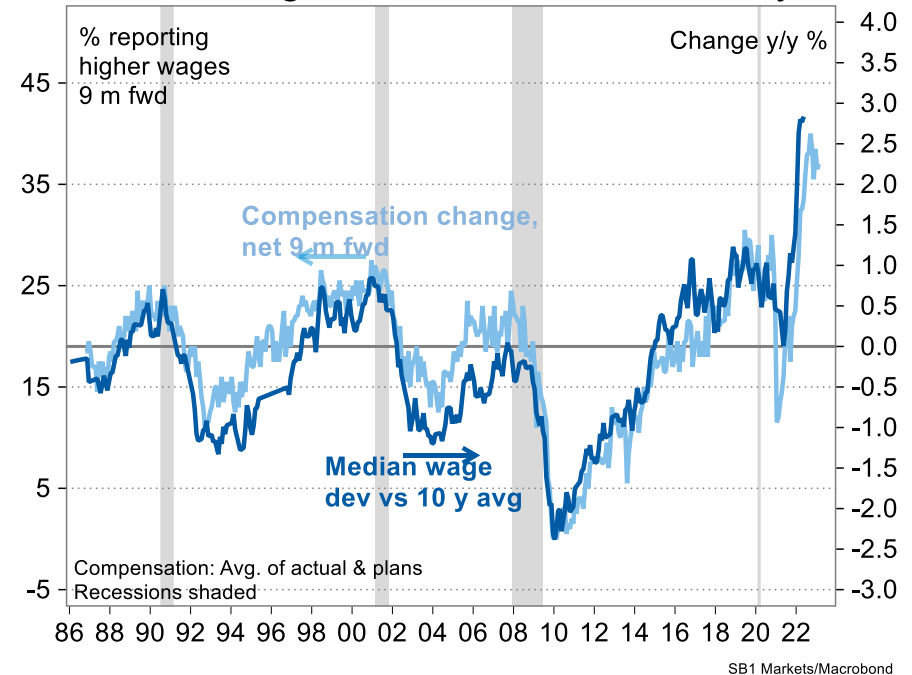
Wage inflation will remain too high as long as the labour market is very tight?

The correlation between the vacancy rate and changes in median wage growth is extremely tight

USA Wage inflation vs vacancies



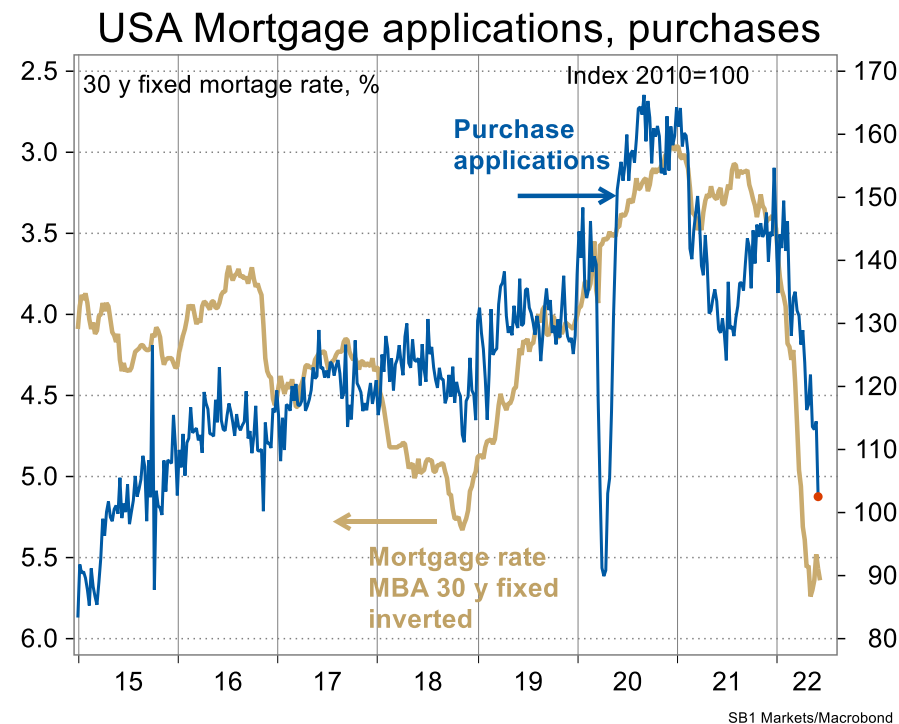
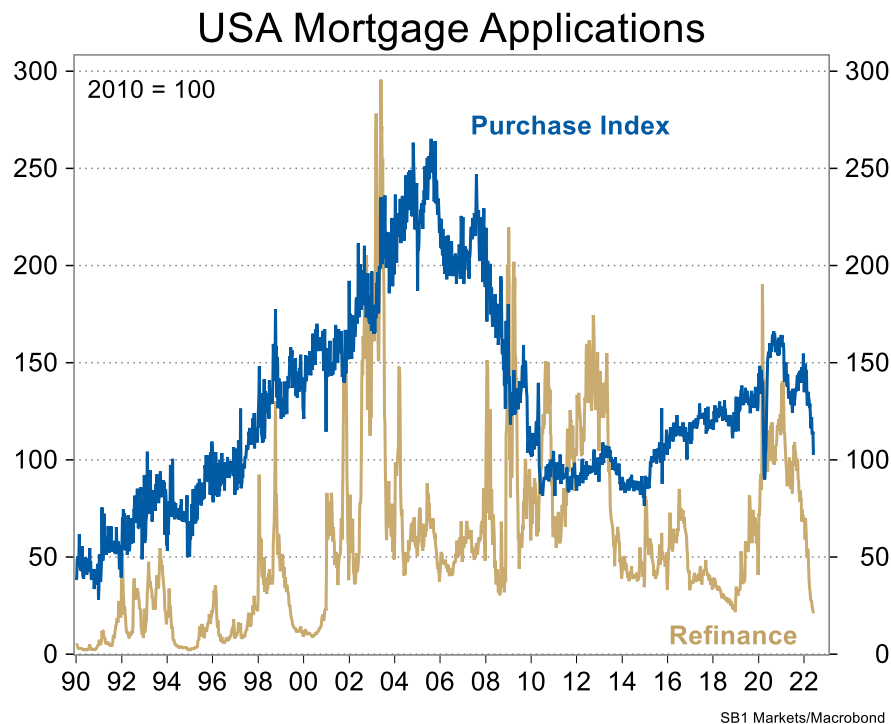
USA Wages - Actual vs NFIB survey



- Our 'Phillips curve' based on the vacancy rate does not signal any slowdown in wage inflation. Companies (SMEs) compensation plans signal continued high wage inflation but not faster than the current
- Wage inflation has already accelerated by 2.5 – 3 pp vs the 10 y average (Atlanta Fed median) and cannot possibly generate a 2% price inflation rate over time. This is Fed's main headache. And it will become the stock owners' headache too, of course, if their companies should not be able to increase their selling prices at almost a double digit pace
- **Demand for labour has to be reduced sharply in order to get wage inflation back to a sustainable level!**
- Check under which circumstances wage inflation slows on the charts above (hint: find the shaded areas, follow the wage line - as well as the vacancy rate or the wage hike plans 😊)

A 10%+ decline in demand for new mortgages last week

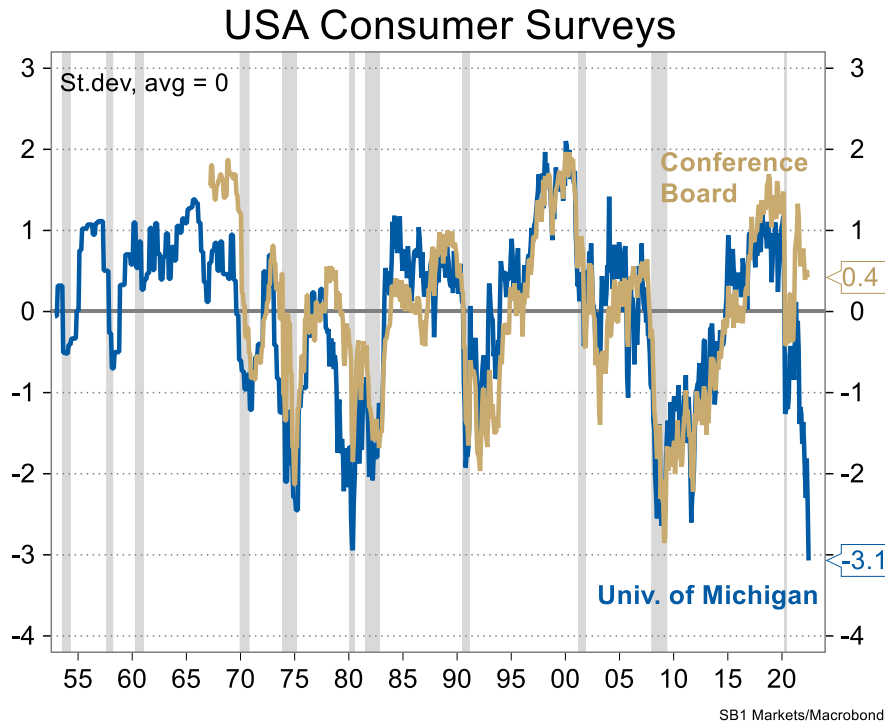
Signals a much weaker housing market following the 200 bp+ lift in mortgage rates so far in 2022



- Demand for refinancing has fallen to lowest level since 2001 – not surprising given the steep rise in mortgage rates

Univ. of Mich. sentiment down to ATL in June, data since 1953!

High inflation, gasoline prices to blame. And not a strong economy measured by other metrics

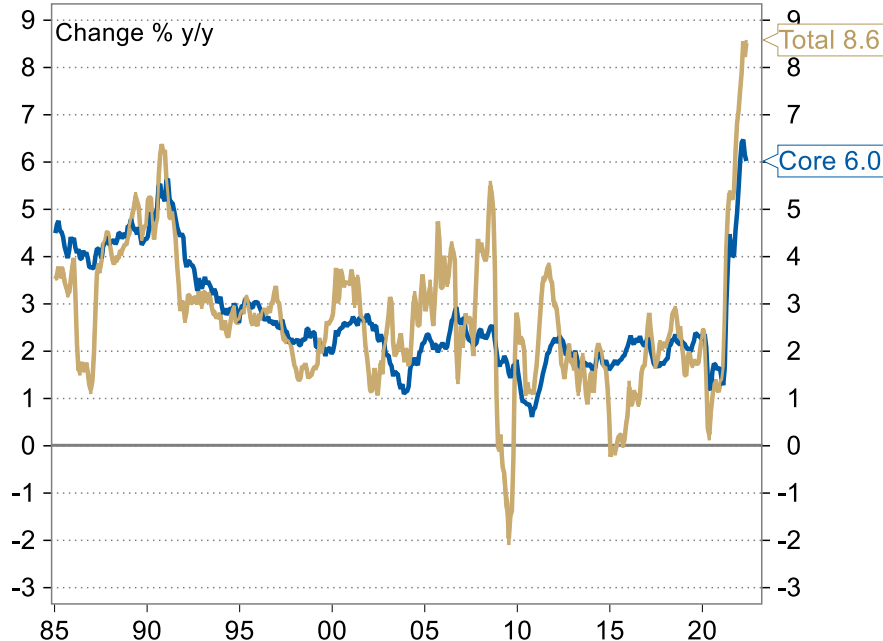


- **University of Michigan's consumer sentiment** fell to ATL at 50.2 in June from 59.1 in May, expected down to 58.5. The index fell to -3.1 st.dev below average, from -2.4 in May
 - » Households' assessment of the current situation and their expectations fell almost at the same pace, to the lowest in decades
- **2 of the other 3 consumer surveys** we are following report a confidence level far below average levels, but not yet down the same low level as UMs survey
- Just the **Conference Board's** measure is still above average (at +0.4 st.dev) in May. The discrepancy between the two 'main' surveys have never been larger
- Sure, inflation is a HUGE worry, the stock market is wobbling (but still at a high level), and mortgage rates are on the way up. Even if there are some red flags, it is not possible to explain the current extremely bad mood among households by any standard model
 - » Unemployment is close to record low, and the housing market has been strong, at least until recent weeks. Covid is not included in the model but cannot take the blame for the steep decline in the sentiment this spring
- **The risk:** The UM survey often has been an early bird in the cycle, and the survey may be 'right'

Another inflation surprise: CPI up 1% m/m, core +0.6%. The Fed is cornered

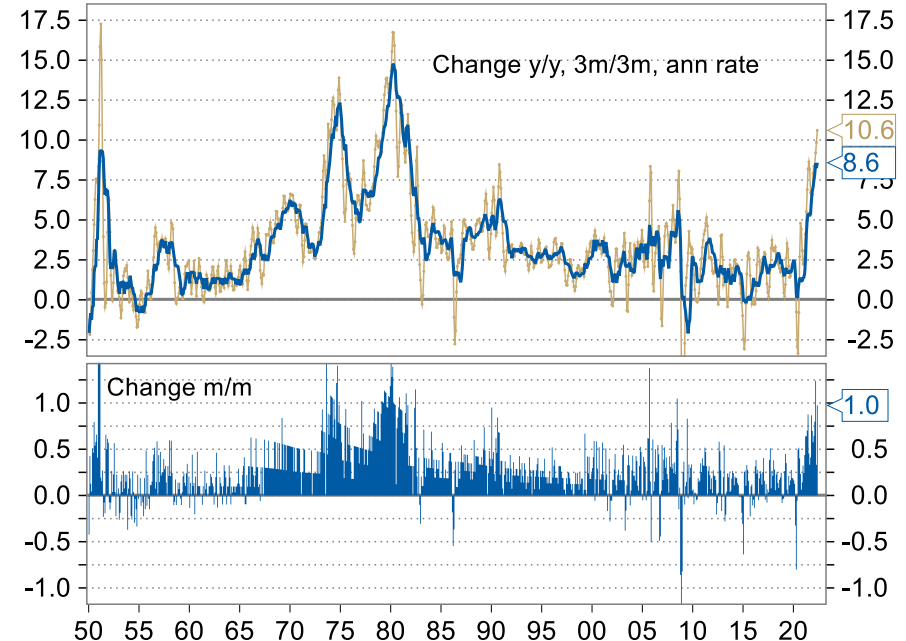
Inflation is broadening further. Fed has no choice but to lift the signal rate rapidly coming months

USA Consumer Price Index



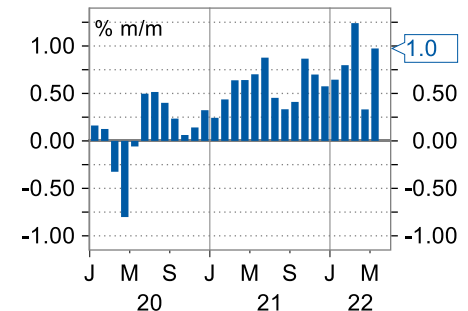
SB1 Markets/Macrobond

USA CPI



SB1 Markets/Macrobond

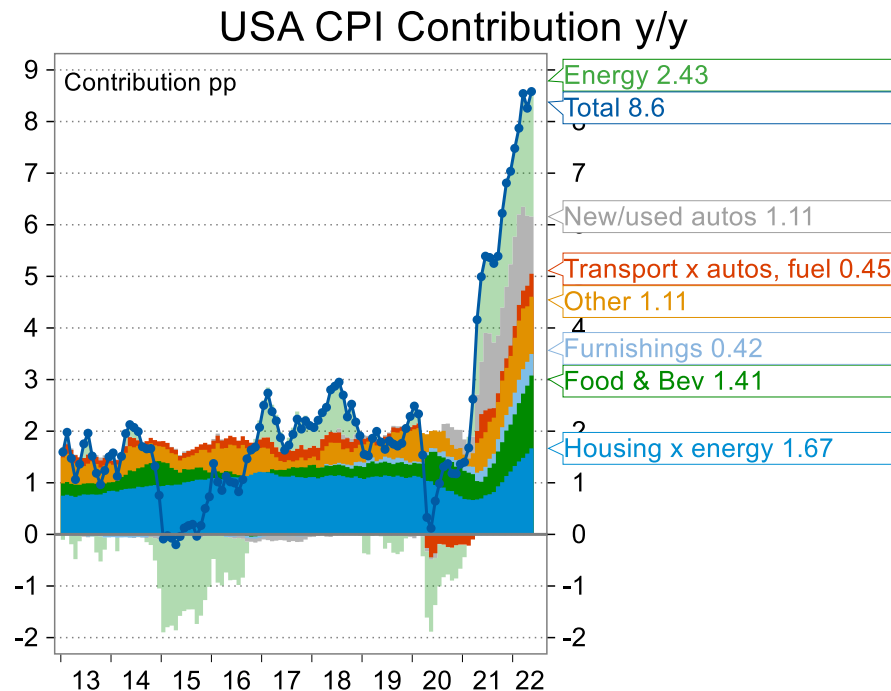
- **Headline CPI** accelerated to 8.6% in May, the highest since 1981, up from 8.3%, expected down to 8.2%. Prices rose 1.0% m/m, expected 0.7%, and up from 0.3% in April. The 3m/3m rate accelerated to 10.6%, the highest since 1980. So inflation is not yet slowing
- **Energy prices** rose 3.9% m/m and are up 35% y/y, contributing 2.4pp to the headline. Gasoline prices are up almost 50%
- **Food prices** rose 0.9% m/m and are up 9.7% y/y. (Food at home is up 12%!)
- **Public transport (mostly airline fares)** shot up 9% m/m, and are up 26% y/y (almost like in Norway)
- **Surveys** report further price increases the coming months. Some exciting months for the FOMC ahead!



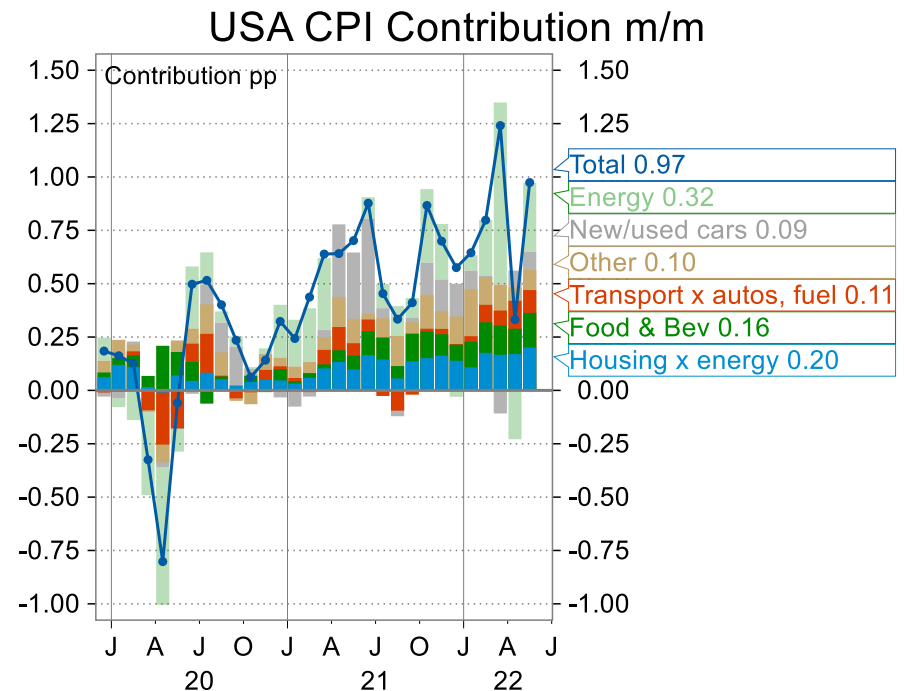
SB1 Markets/Macrobond L7

Transport (incl. used cars) & energy explain 4.0 pp of the 8.6% lift in total CPI

The problem: The rest is up by more than 5% y/y. Housing contributes 1.7 pp, alone



SB1 Markets/Macrobond



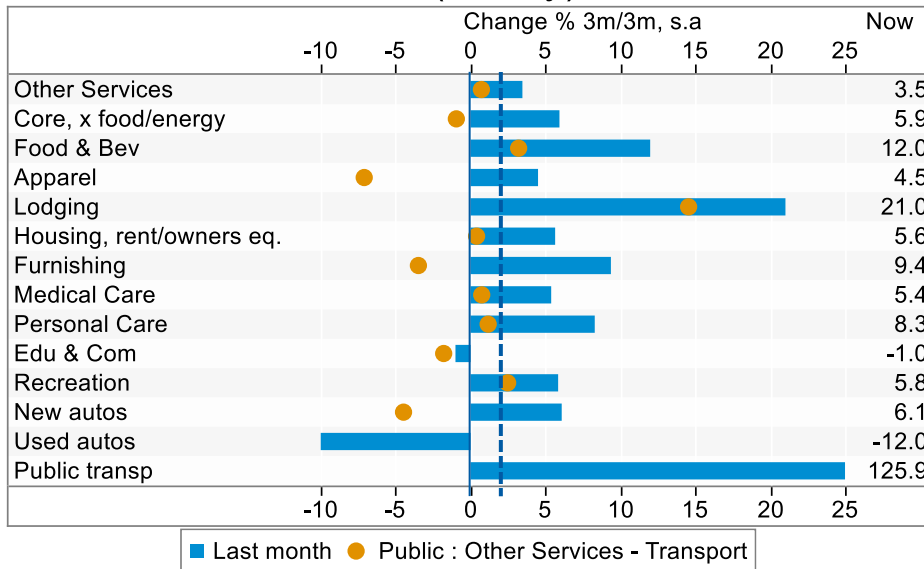
SB1 Markets/Macrobond

- **Energy** prices gained 3.9% m/m in May, as both natural gas and gasoline prices rose – and prices are up by 34.6% y/y
- **Excluding** the 4% pp contribution to the headline CPI from energy & transport, **“remaining” inflation** has accelerating rapidly
- **Housing x energy** (and x lodging) is contributing by 1.7 pp, though partly due to a low base one year ago. Rents as measured in the CPI are up almost 5% y/y, but the upside is probably now limited

Inflation measured 3m/3m: No good news

Prices are up at a 10% pace, and more sectors are reporting high underlying inflation

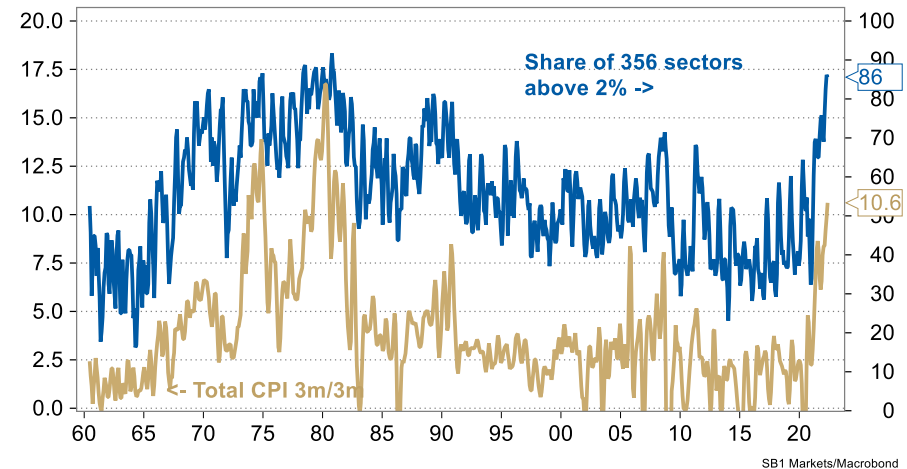
USA CPI (mostly) Core



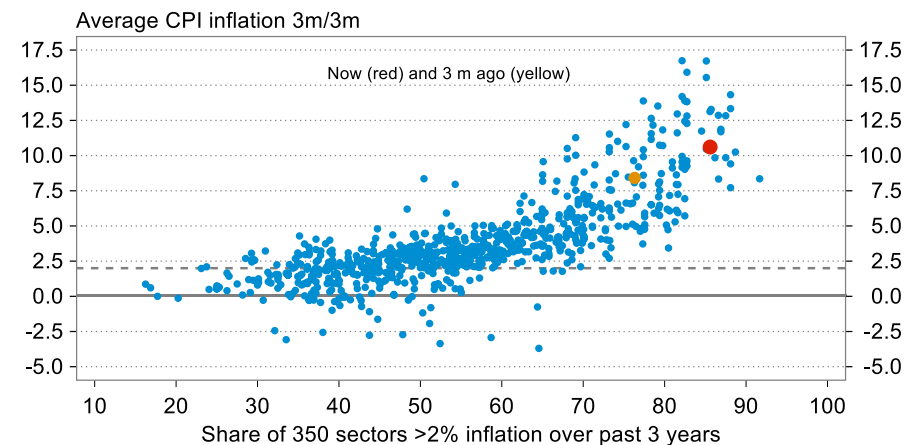
SB1 Markets/Macrobond

- Measured over the past 3m/3m inflation is accelerating in almost all sectors (barring used autos)
- Of 350 sub-sectors, 85% are up more than 2% over the 3m/3m, normally signalling an underlying inflation rate at 10% - where we now are

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



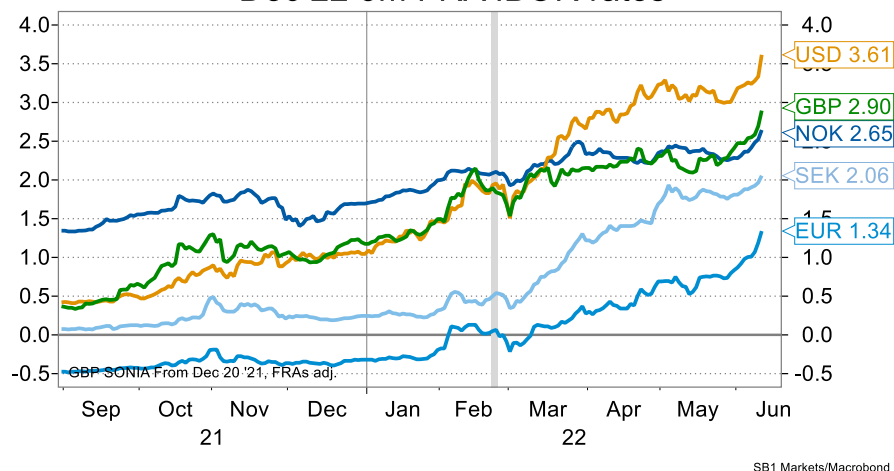
USA CPI inflation & share above 2%



The ECB confirmed that it is ready – and is even more hawkish than expected

The main reason for not hiking by 50 bps in July was that a 25 bps hike has already been signalled

Dec 22 3m FRA IBOR rates



Policy decisions

- » ECB left the **repo signal rate** unch. at -0.5%
- » The two **asset purchase programs** will end net buying of bonds now. The principal from maturing bonds will be reinvested in full as long as needed, and for one of the these programs until end of 2024. (In the US, the Federal Reserve will not reinvest such proceeds, and the stock of bonds will be reduced)

Policy signal

- » The ECB pre-announced a 25 bp hike at the late July meeting but for the September meeting signal rates may be hiked by 50 bps. The 2024 inflation forecast will decide. At the press conference Lagarde sounded really hawkish, and prepared to hike as much as needed to bring inflation down

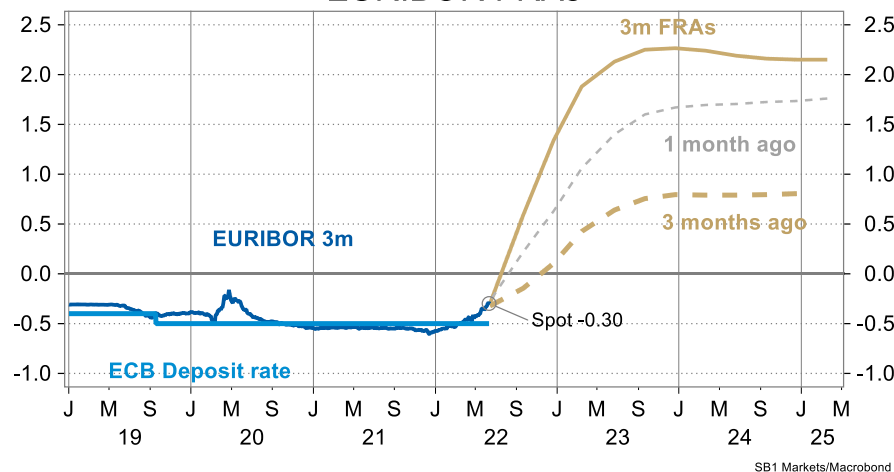
Even higher inflation, lower growth

- » The Bank revised up its inflation forecasts sharply vs. the March review. This year's forecast is lifted to 6.8% (from 5.1%), and then a decline to 3.5% (2.1%) in 2023 (from 2.1%), and to 2.1% (1.9) in 2024, as energy prices are assumed to moderate and supply chain problems to ease, and higher rates to dampen growth and inflation.
- » Growth forecasts are still rather optimistic, 2.8% in 2022 from 3.7%, then 2.1% (2.8%) next year and 2.1% (1.9%) in 2024

The market: A more hawkish ECB than expected

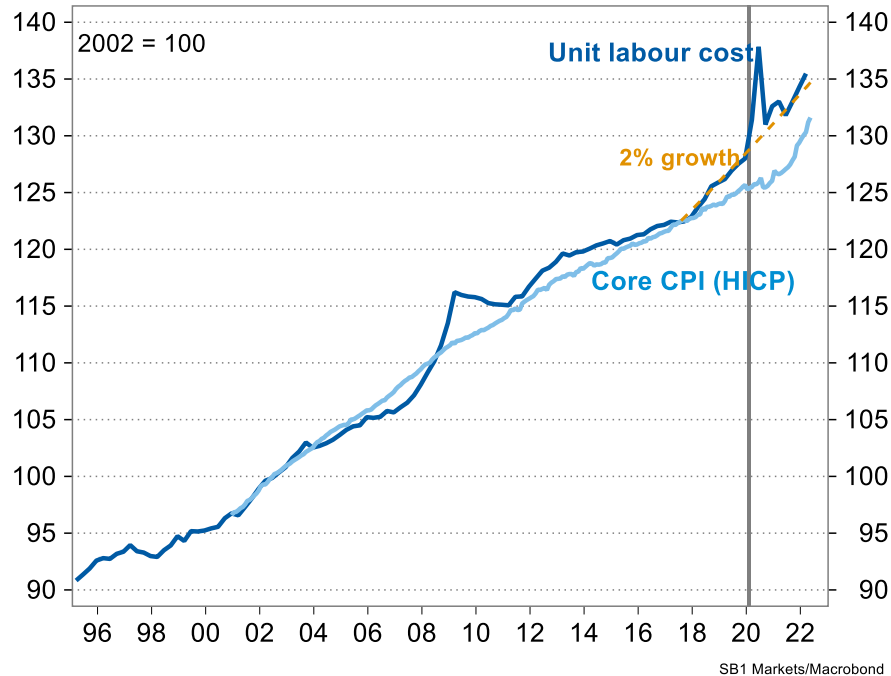
- » Money market rates rose by 12 bps (Dec 22 3 m FRA) Thursday – but even more Friday. The market expects the ECB to hike by at least 150 bps before end of 2022. We think this is rather aggressive (but we have been to dovish on the way up!)
- » The 10 y German bund yield rose just 3 bps, but ended the week up 14 bps to 1.39%, another cycle high
- » The EUR fell sharply on Friday, or rather the USD rose sharply on higher rate expectations there after the CPI report

EURIBOR FRAs



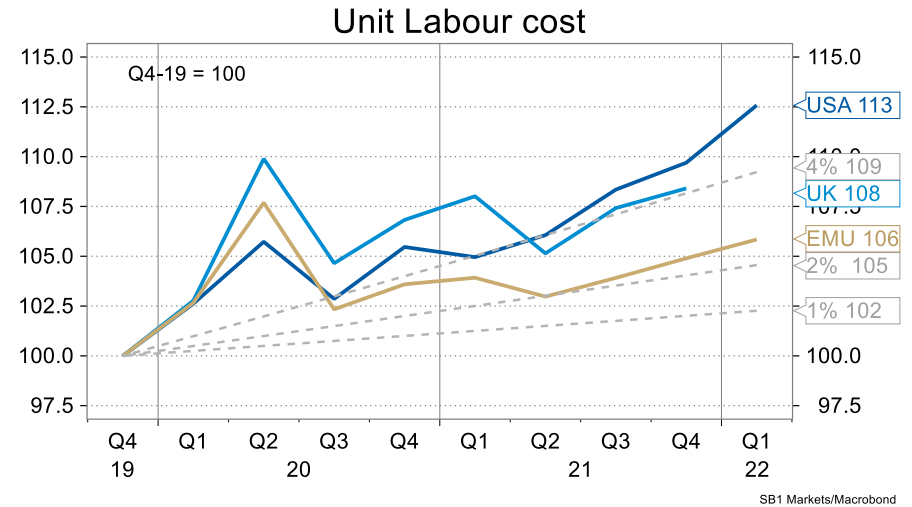
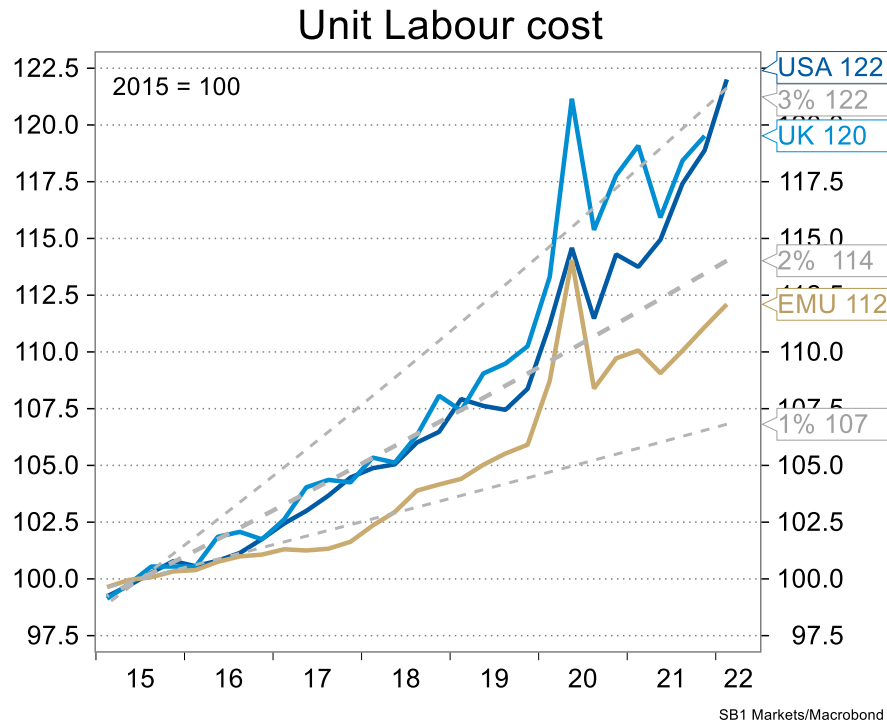
Unit labour costs are accelerating but still at a 2% trajectory

EMU Unit labour cost & core CPI



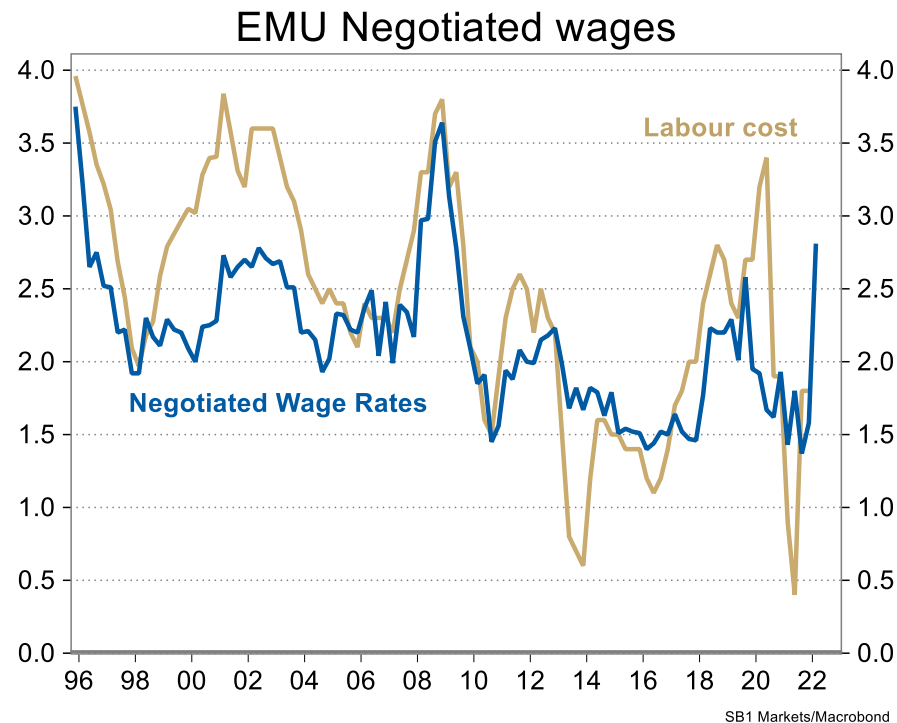
- **Unit labour cost** (labour cost per unit produced = wage cost/production volume, growth in UCL= wage growth – productivity growth) has jumped up during the pandemic as productivity fell because employment was not cut (as in the US)
- On the other hand, in the 3 years before the pandemic – and through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

Unit labour costs not the problem in the EMU



A sharp uptick in negotiated wages in Q1, to 2.8% from 1.6%

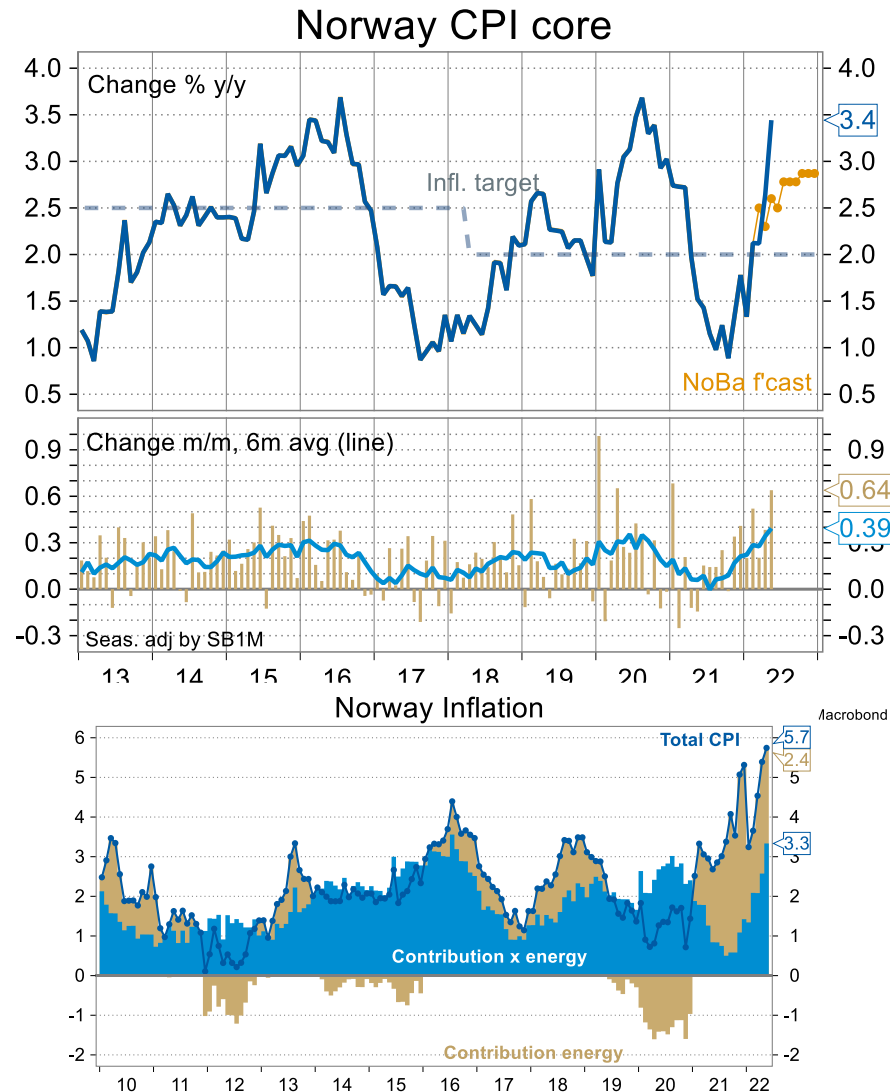
Still not a very high number, but given slow underlying productivity growth not low either



- More labour cost data will be published this week – and we will look into them!

Inflation shot up in April May. And it's broadening. NoBa will speed up

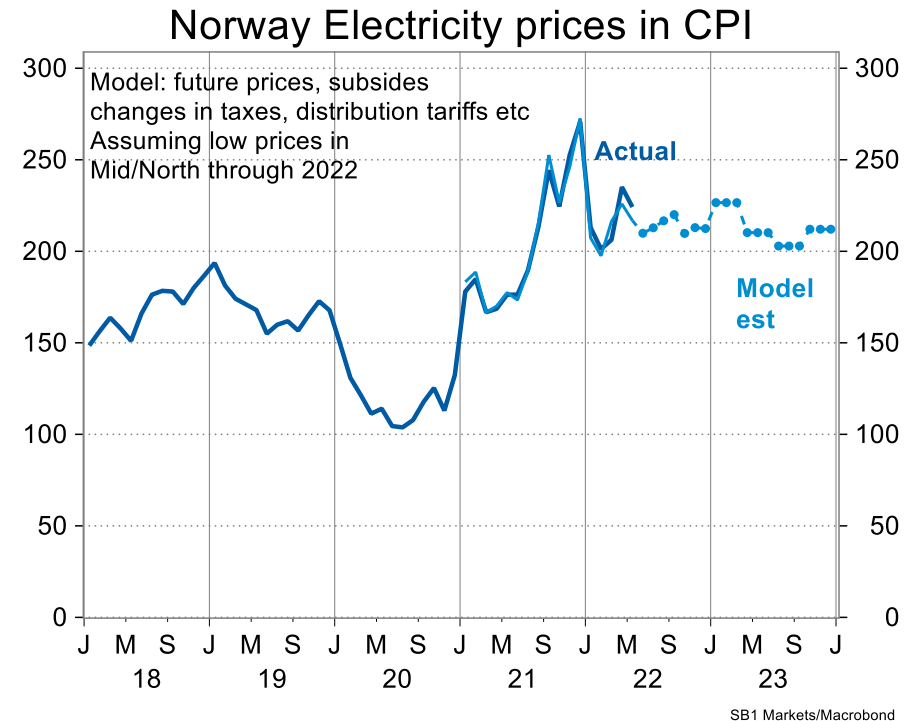
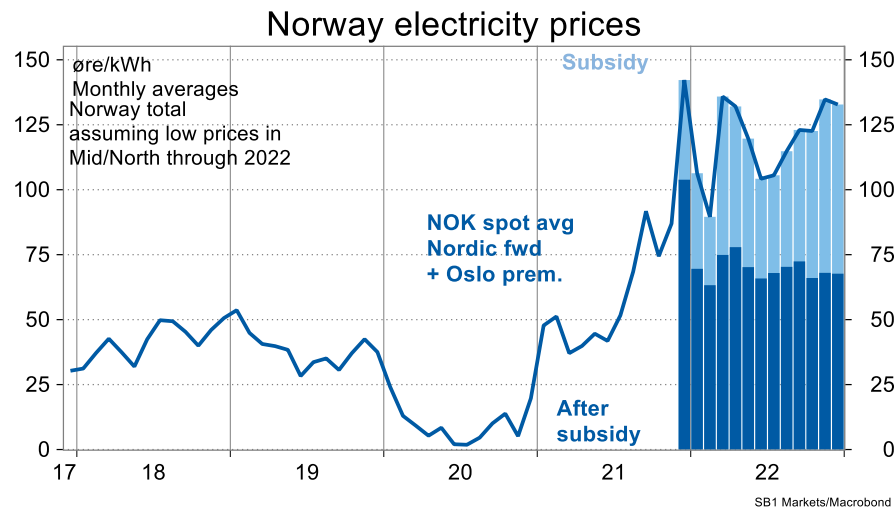
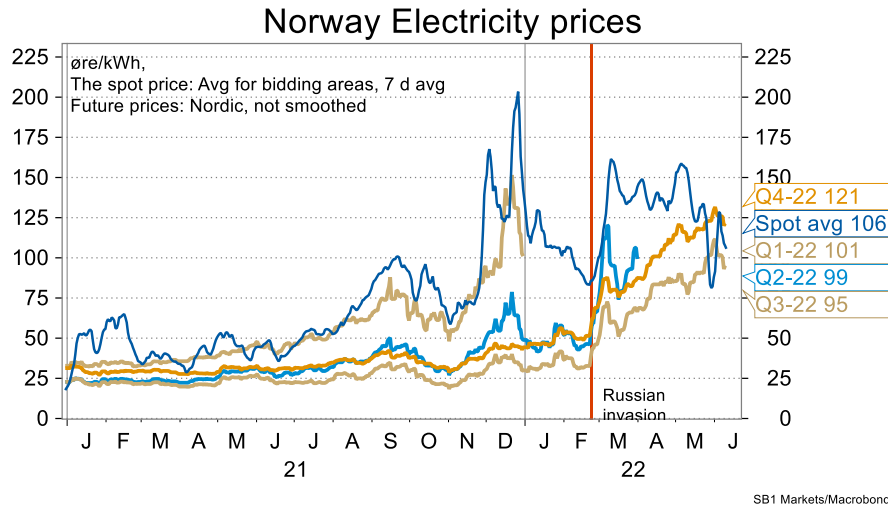
Headline inflation up 0.3 pp to 5.7% (we expected 5.5%). The core up 0.8 pp to 3.4% (we exp. 3.1%)



- **CPI-ATE** (ex. energy and taxes) rose 0.6 pp m/m, and the annual rate climbed by 0.8 p to 3.4%, expected 3.0 – 3.1%. NoBa assumed 2.6% in the March MPR
 - » **Furnitures** contributed most on the upside vs. our forecast but also recreation, transport x airfare tickets, and hotels and restaurants contributed on the upside
 - » **Airline ticket** prices fell but are still up 32% y/y
 - » Prices on **imported goods** rose 0.9% m/m, far more than we assumed, and are up 4.3% y/y, while **domestically produced** goods & services were up 0.5% m/m (like in April) and 2.8% y/y – and accelerating
 - » Most sectors report growth above 2% y/y, and most are up by more than 2% on average since 2019
- **Total inflation also accelerated, by 0.3 pp**, to 5.7%, the highest level since 1988. If not for electricity subsidies, inflation would have been 7.7%. Electricity prices fell 7% m/m, and somewhat more than we expected (the opposite was the case in April). Auto fuel prices rose 4%, well below our forecast, and if pump prices do not come down substantially from the present level, the CPI will report substantially higher fuel prices in June
- **The outlook**
 - » **The electricity bill** will remain high but the current futures prices for the rest of 2022 do not signal higher prices, and from the early autumn electricity prices will be down y/y
 - » **Core inflation** will probably accelerate somewhat more through 2022, but we do not think by much
 - » If so, **average 2022 inflation** will marginally above 4% in 2022. SSB forecasted 4.7% be well above the March estimate at 3.3%, which has been the assumption for the wage negotiations during the spring. The outcome would have been well above the agreed 3.7% – 3.8% if the exercise should have been conducted with the present forecast on the table!
- **So what?**
 - » **The uncertainty** is still large both vs. energy and food prices, as well as other impacts of the war in Ukraine
 - » **Wage inflation** may in the end surprise on the upside in a tight labour market, but so far the wage negotiations have delivered exactly the expected outcome
 - » For **Norges Bank** wage inflation is the dominant risk, and the bank will probably need some time to build a case for a faster tightening

Electricity prices fell in May – no further upside, according to the futures market

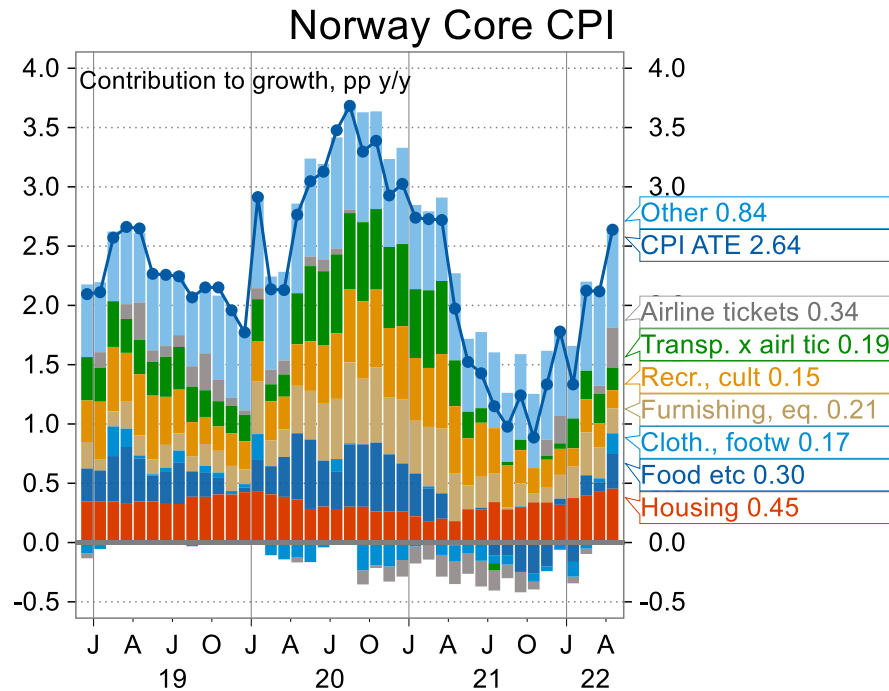
... which has not been stable



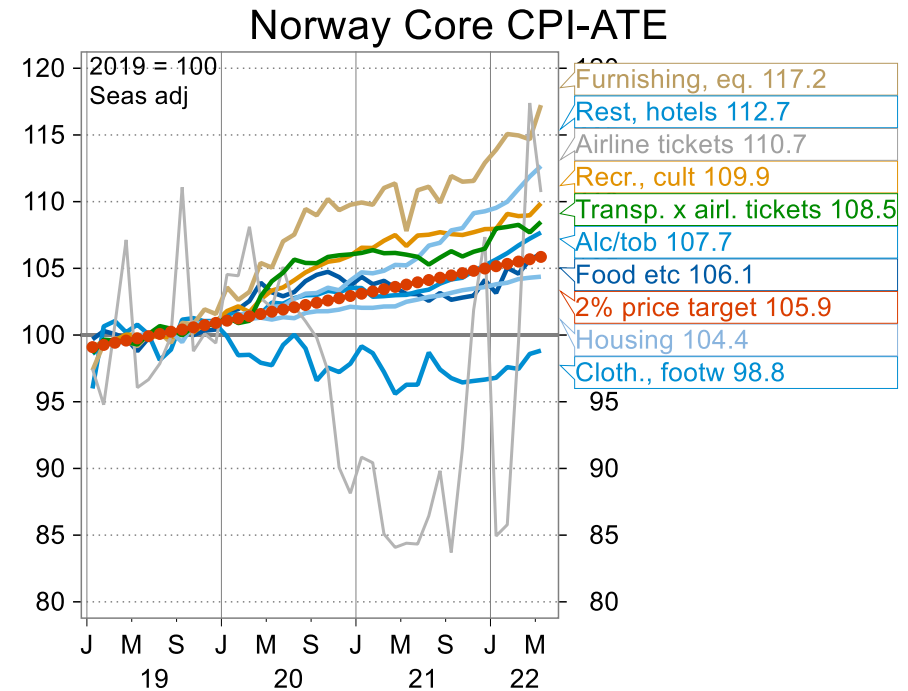
- In March, we missed on the other side – something is rotten in our rather detailed model, which copes with all regions, the subsidy program, electricity taxes, transfer tariffs and the different VAT rules, and it usually works well. (Other economists have experienced the same problem with SSBs March & April electricity component in the CPI index)
- The cost of the unprecedented surge in electricity prices, represented by the triangular area above, so far equals a 30% extra cost, above a 'normal' high price level (like in 2018-19), or 1¼ % of one year's disposable income

Faster/broader price growth recent months

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



SB1 Markets/Macrobond



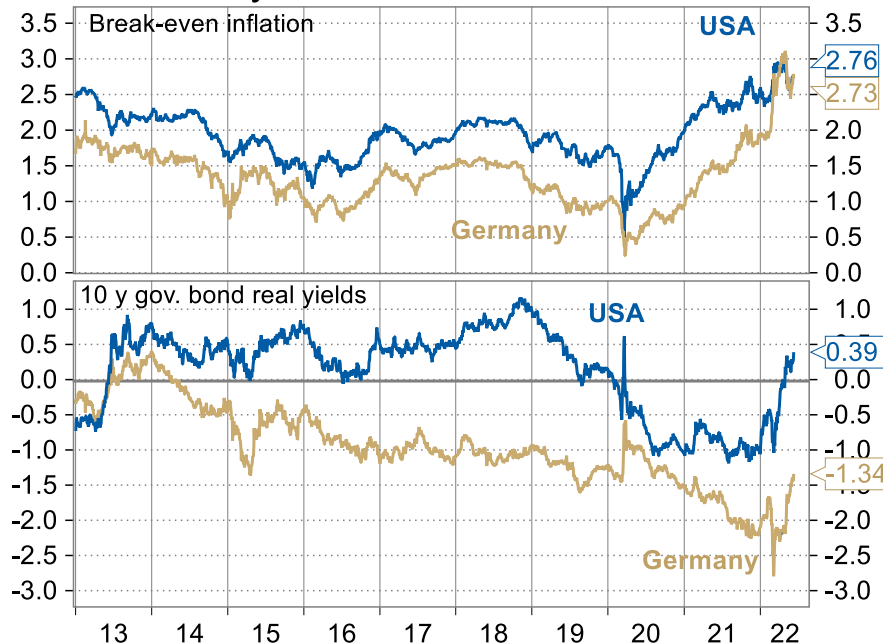
SB1 Markets/Macrobond

Real rates shot up last week, inflation expectations did not

Markets are recognising that central banks will have to & are willing to keep inflation in check

... at the cost of higher real rates, of course

Real yields, break-even inflation

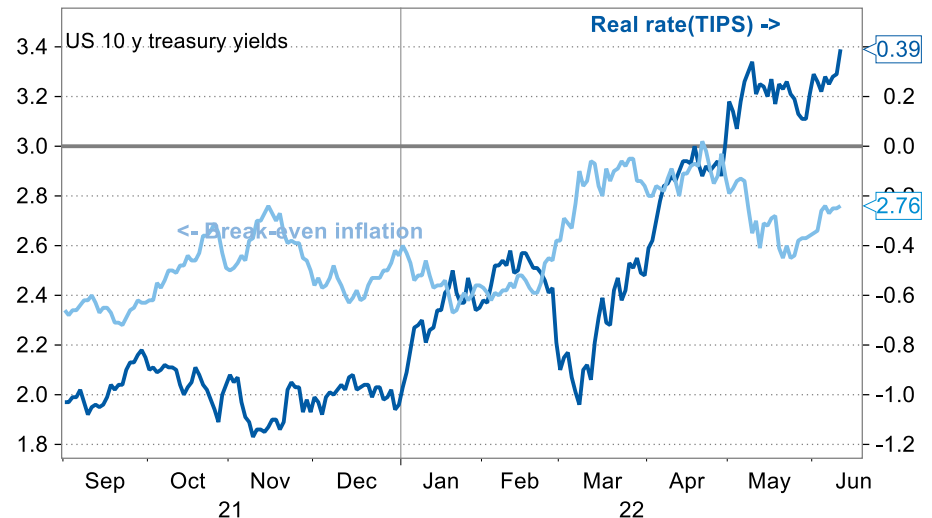


SB1 Markets/Macrobond

US & Germany 10 y Gov bond yield

	Yield	Change 1w	Change 1m	Since Feb 18	Min since April-20
USA nominal treasury	3.15	0.19	0.16	1.23	0.52
.. break-even inflation	2.76	0.02	0.11	0.35	1.06
.. TIPS real rate	0.39	0.17	0.05	0.88	-1.19
Germany nominal bund	1.39	0.14	0.33	1.17	-0.65
.. break-even inflation	2.73	0.07	0.00	0.75	0.40
.. real rate	-1.34	0.07	0.33	0.42	-2.80

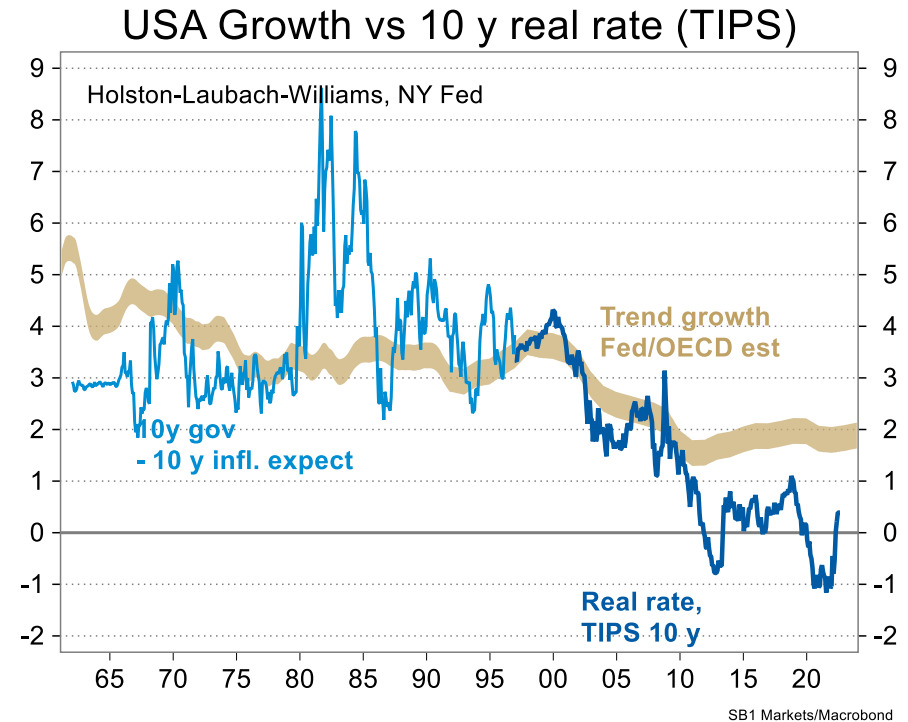
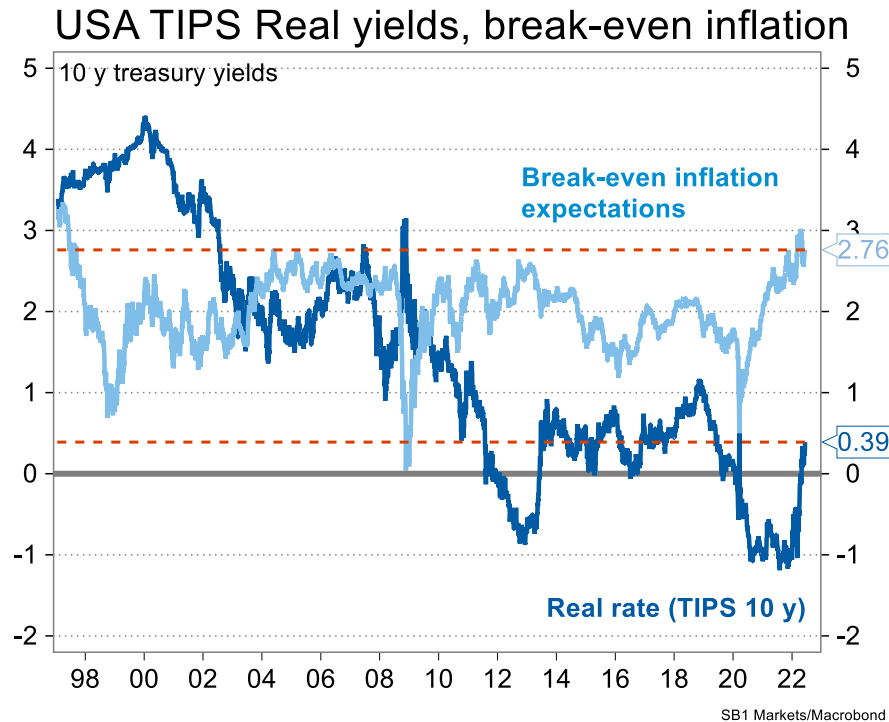
SB1 Markets/Macrobond



- **The US nominal 10 y bond yield** rose 19 bps last week to 3.15%, a cycle high
 - » **Real rates** gained 17 bps, to 0.39%, a cycle high too. **Nominal rates** up 2 bps
- **The 10 y German bund** added 15 bps to 1.39%
 - » **Real rates** rose 7 bps to -1.34%, also a cycle high
 - » Inflation expectations rose 7 bps to 2.73%, still below the above the ATH at above 3% some few weeks ago

Mind the gap: It's rapidly closing!

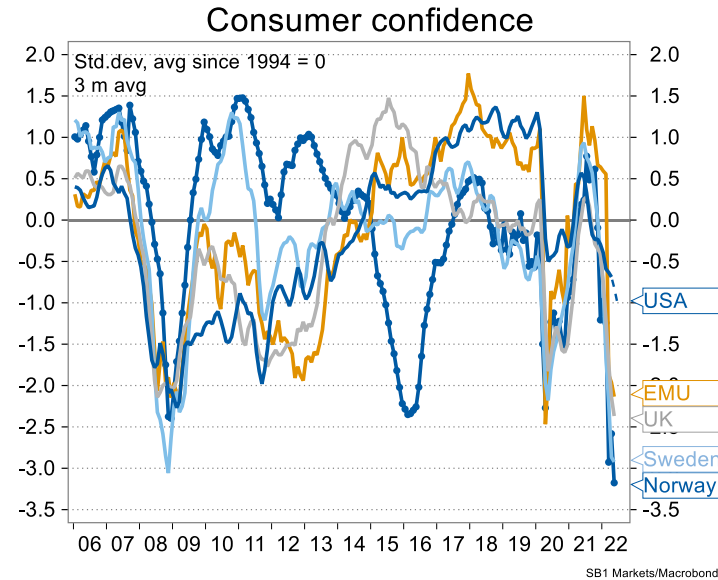
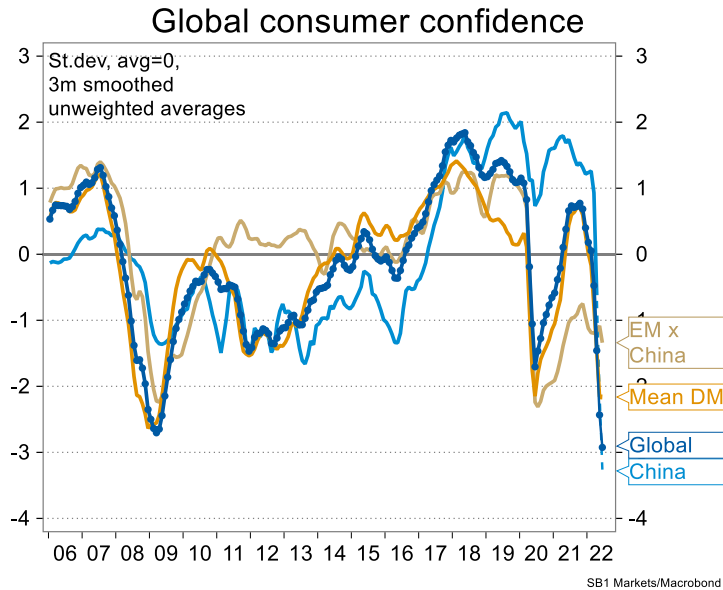
Real rates sharply up – while short/medium-term growth expectations are moving down



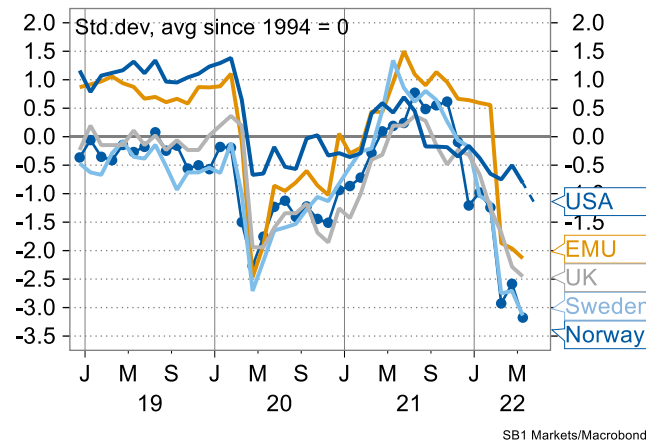
- There is no reason to believe that the current surge in real rates is due to an equivalent increase in growth expectations. It is of course the opposite: At least the short to medium-term outlook is now weakening as central banks finally enter the fight against inflation by at least bringing growth down to below trend growth
 - » Profit margins are VERY exposed
 - » Demand for labour will slow too, and unemployment will increase – in order to get wage inflation down
- The USD 10 trl question: Are all risk markets really discounting this scenario?

Consumer confidence sharply down almost everywhere

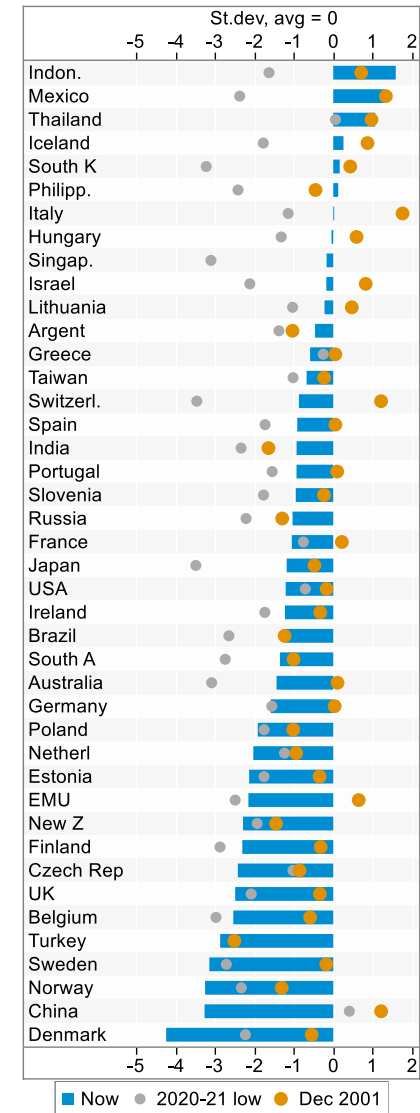
In Europe confidence is well above avg., and above the pre-pandemic level



- Most countries are reporting a significant lower confidence level than late last year. Just 6 countries are above average, 33 are below
- Sentiment has fallen more in **Europe** than in the US (at least the average of Conf. Board's & Univ. of Mich' indices, the UM is ATL, at European levels)
- The decline in **Norway & Sweden** is identical and really bad. **Denmark** is even worse. The 3 Scandics are close to the bottom of the long list
- Confidence in **China** has collapsed recent months. We think we know why
- Emerging markets ex China** has not fallen that much recently, but the level is low

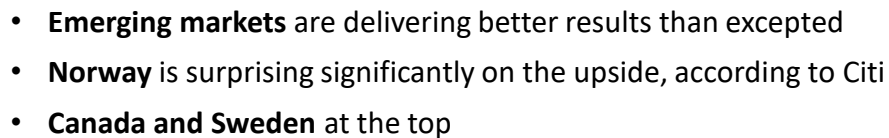


Consumer confidence



Last observation. Total EMU is leading 1 month on member countries
Norway is the average of Finans Norge & Opinion

Citi Surprise Index



Citi surprise index



Highlights

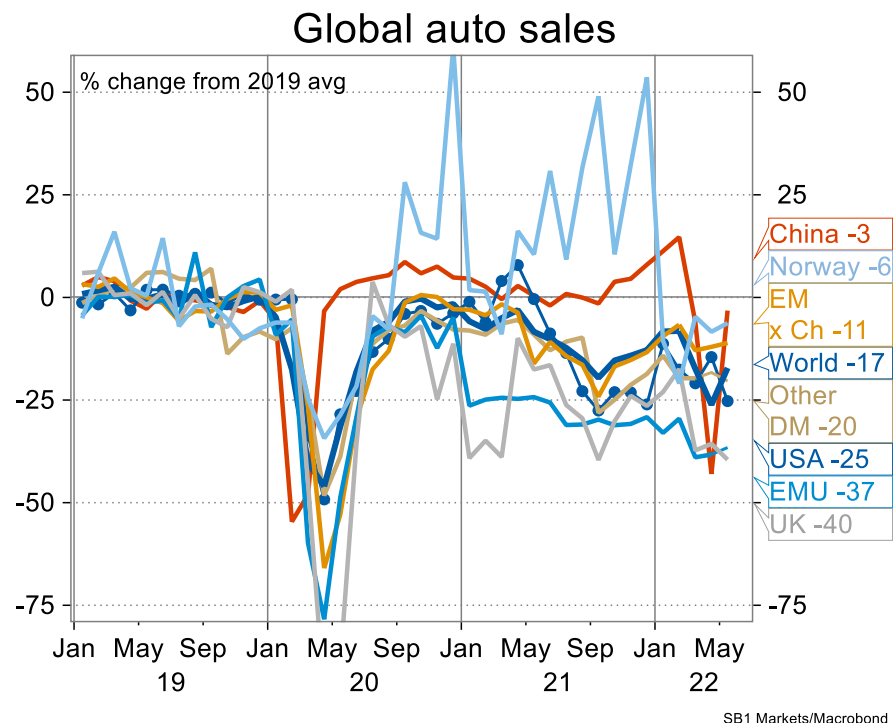
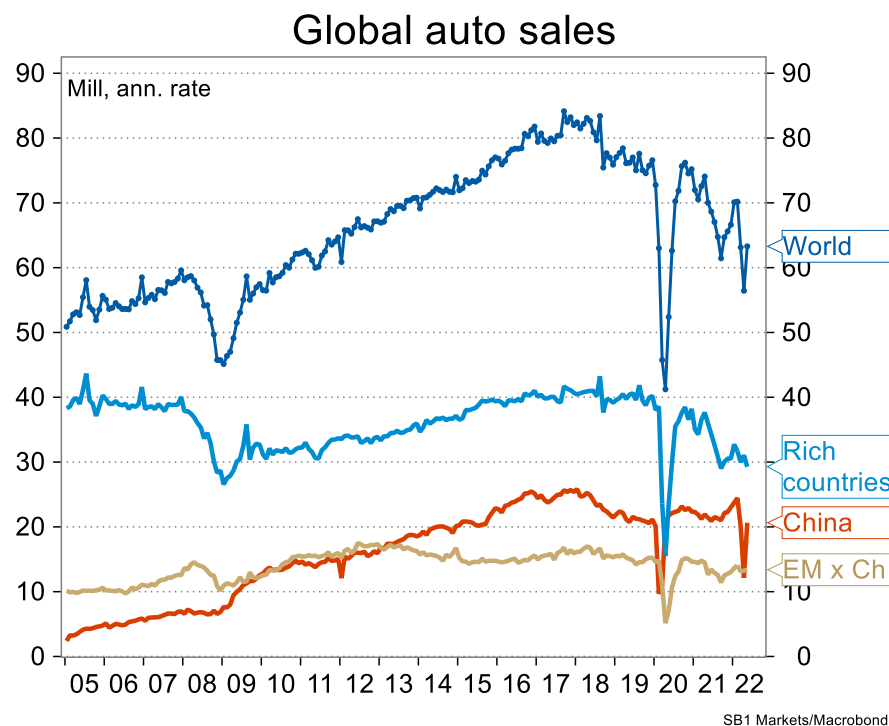
The world around us

The Norwegian economy

Market charts & comments

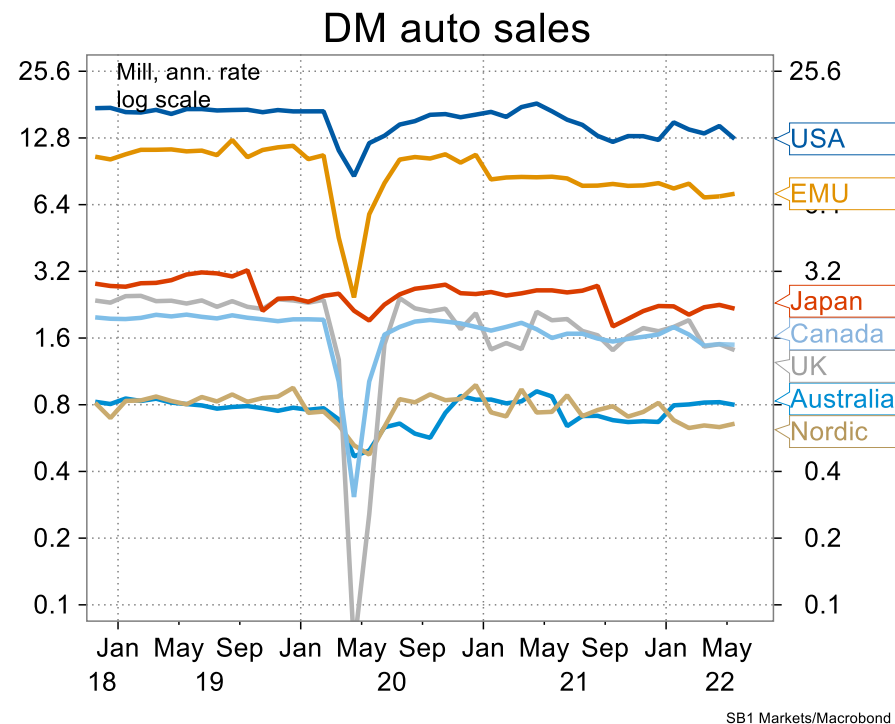
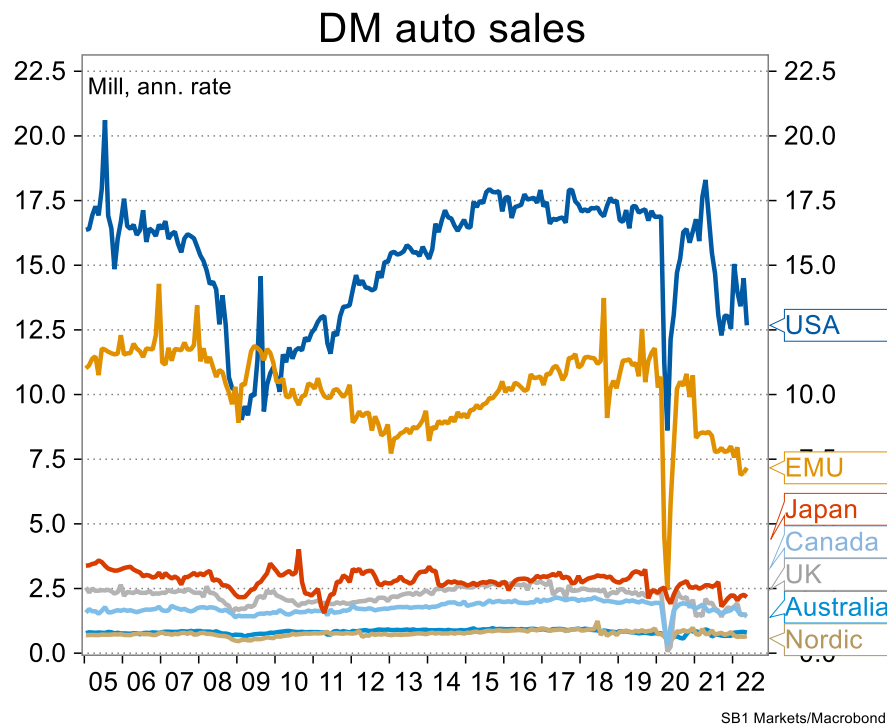
Chinese auto sales recovered in May, still down 16% from before lockdowns

Sales fell in the rich part of the world, mostly due to the US. EM x China marginally up



- **Global auto sales** rose 12% in May, thanks to a recovery in sales in China, to 21 from 12 mill units. Global sales are still far below (-17%) the 2019 level
- Sales in the **US** fell by 13%, to -25% vs 2019. **EMU** sales (probably) rose 2% but remain 37% below 2019 level. **UK** is down 40%
- **Russian sales** are down 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' 11% vs. the 2019 level (the decline in Russia equals 10% drag – and the rest is almost back!)
- **Auto production** is limiting sales most places. We last week reported a steep increase in German production in May. The first report was dead wrong, sorry!

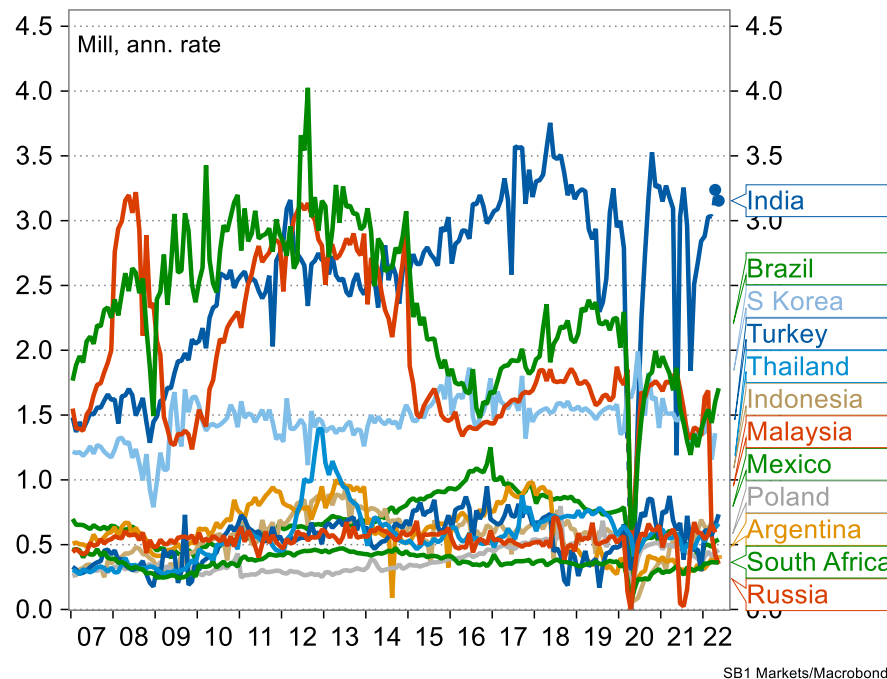
DM sales: Sales in Europe & Japan are still very low. US sales are trending up!



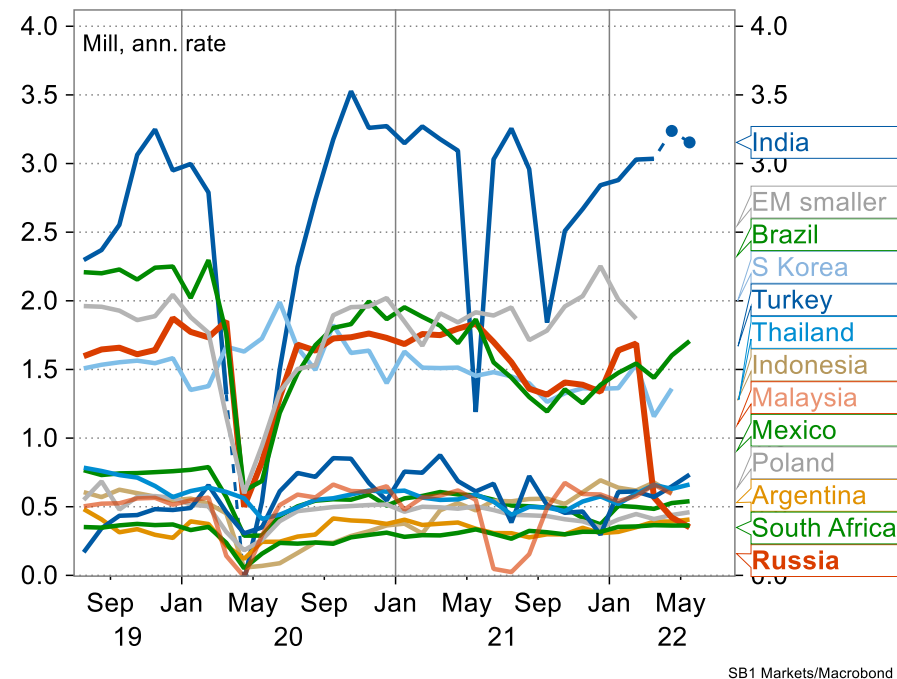
EM: Russian sales further down in April, down 80% from before the war

Sales in other EMs are ok – Indian sales probably still strong, and sales in Brazil are up

EM ex China Auto sales



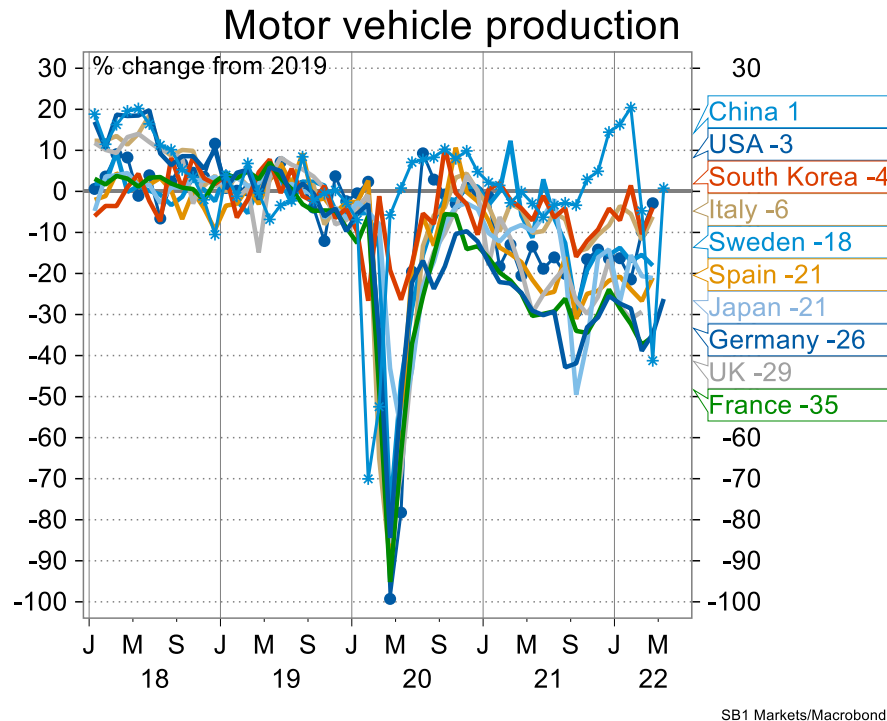
EM ex China Auto sales



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

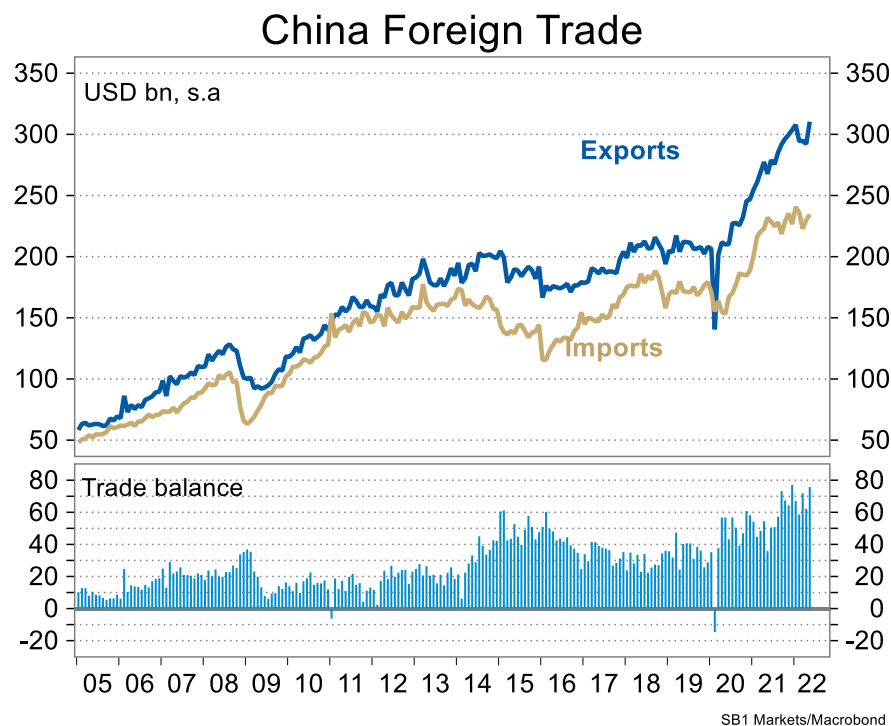
German auto production data for May has been revised down, by -25% to -26%

Chinese production climbed sharply in May, up to the 2019 avg., from 40% below in April



ATH exports in May? So they say, at least in nominal terms

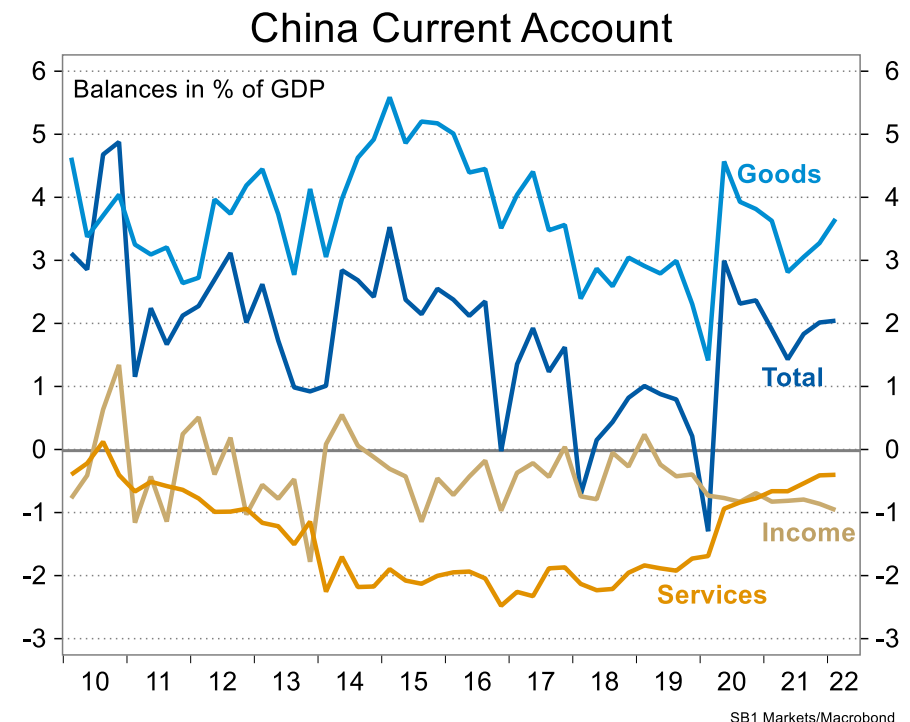
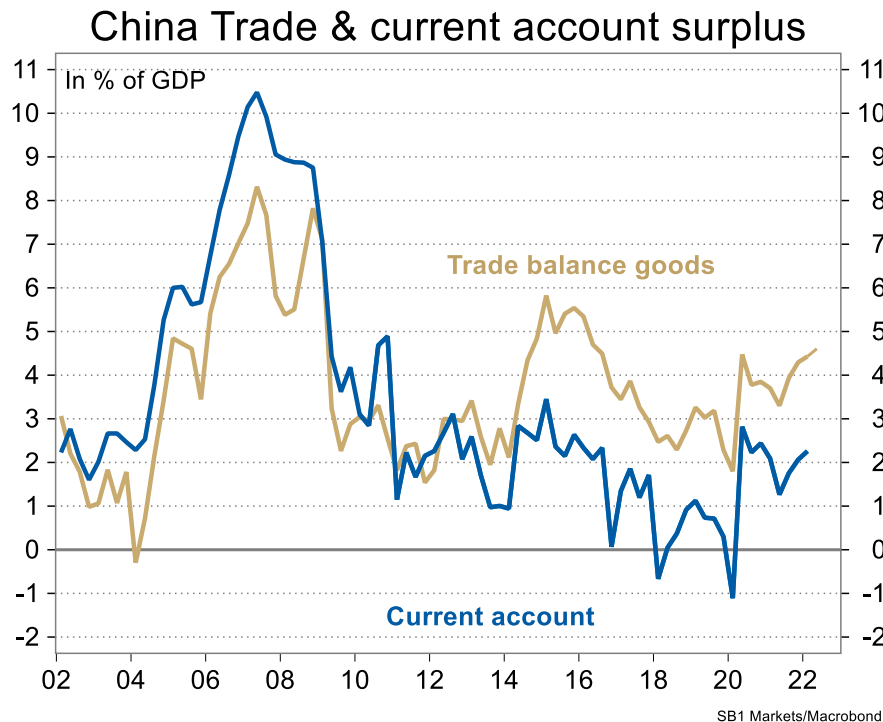
Exports gained 6% m/m, are 25% above the pre-pandemic level in volume terms



- **Export values** grew by 6% in USD terms in May (our seas adj), and are up 17% y/y, from 4% in y/y in April, 9 pp (!) better than expected (but the forecast was too low). The exports are record high! **Export volumes** very likely rise sharply too, and the level is not far below the ATH in February. Export volumes are up 25% from before the pandemic!
- **Import values** rose 2% m/m in May, and are up 4% y/y, from zero in April, in line with expectations. Import values are down 3% from the peak. In **volume terms** the decline in imports is far larger, by 10% - and by 6% since January. Imports volumes are well below the pre-pandemic trend – but very likely rose in May
- The **trade surplus** at USD 78 bn, 20 bp larger than expected, and the 2nd highest level ever seasonal adjusted, at USD 76 bn

The trade surplus is trending upwards again, even in % of GDP

The current account is in plus too

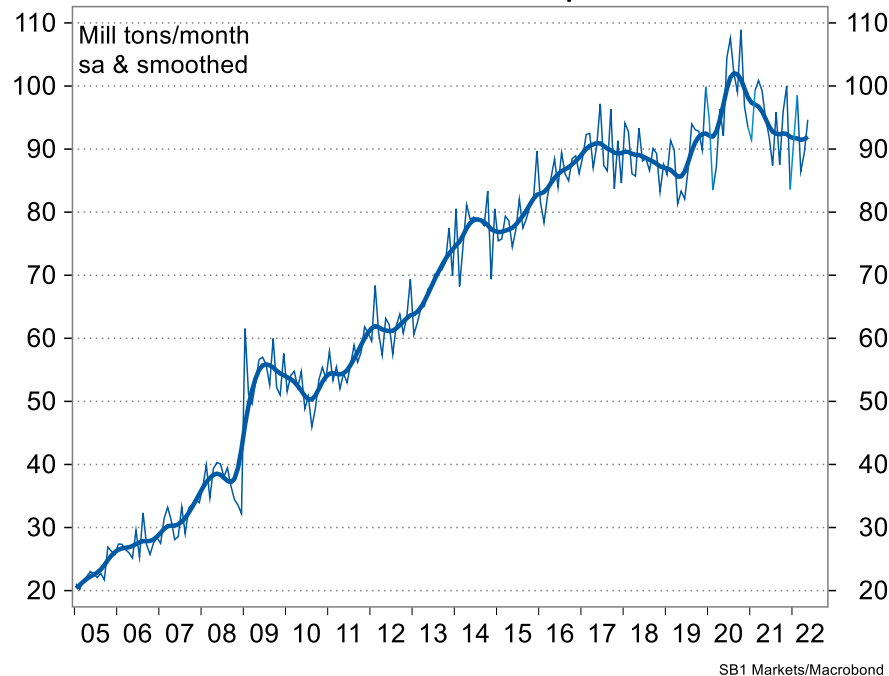


- China runs a deficit in net (mostly capital) income from abroad, even if the country has a huge net positive financial position
 - » China has invested much in low yielding US government bonds (and other low yielding investments); foreigners have been investing in profitable production capacity in China

Iron ore imports are flattening, 10% down from the peak in 2020

Steel production has stabilised too, although almost 10% below the peak in early 2021

China Iron ore imports

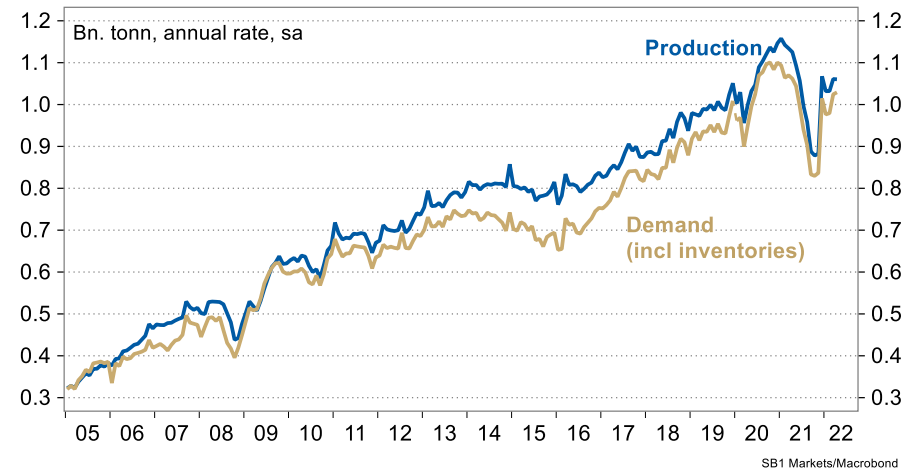


- **Production and domestic demand** (incl. inventories) fell sharply in Q2-Q3 last year – by 25% – due to public regulations and probably the setback in the construction sector
- Activity recovered sharply in December – and was stable through Q1
- Until April, production kept up – and most steel factories probably was kept running during the lockdowns. Given the decline in construction starts, inventories have probably increased

China Net steel exports

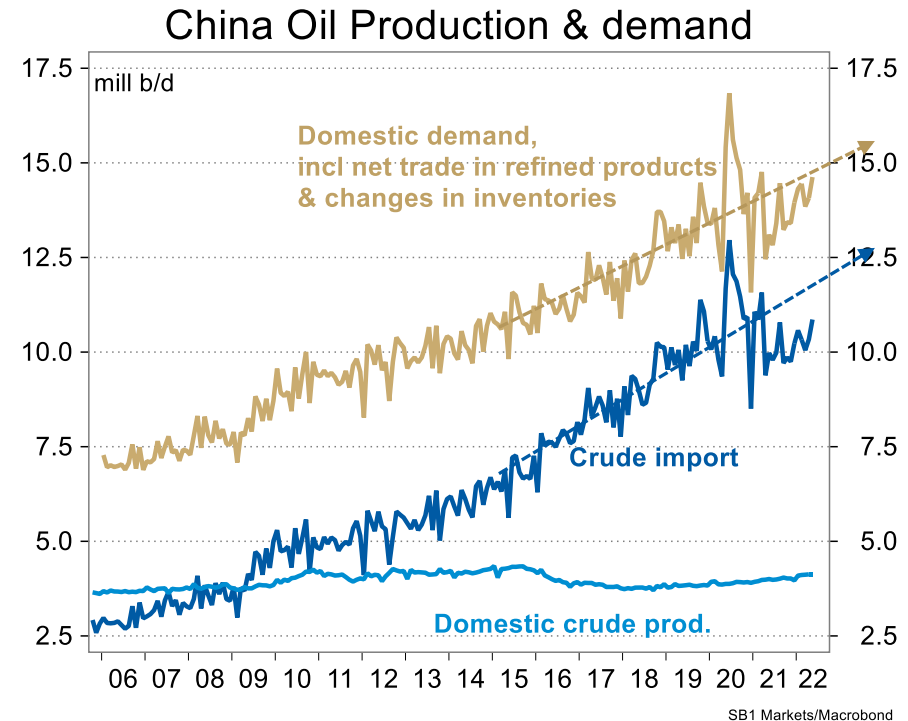
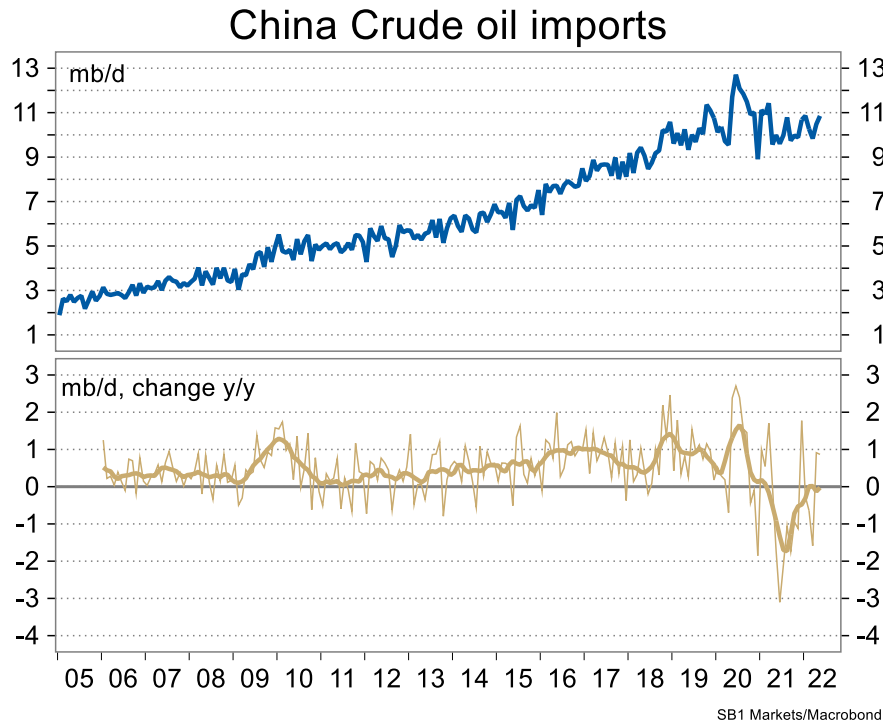


China Steel



Crude oil imports have flattened, products net imports have increased

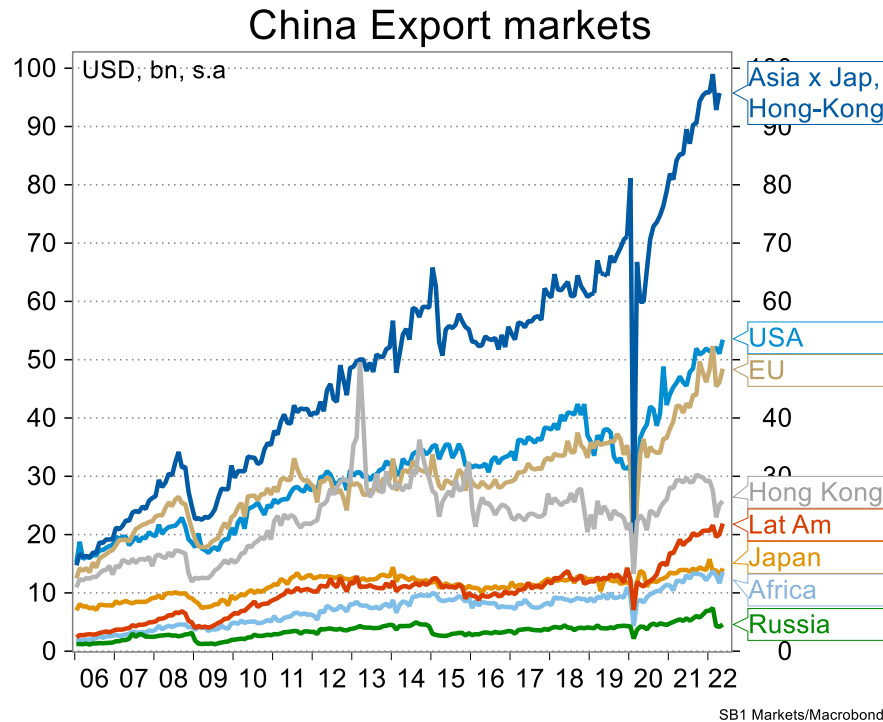
Domestic crude production is slowly moving upwards – and total domestic demand is still growing



- 4 years without growth in oil import or domestic demand is rather surprising?
- However, higher net imports of refined products since early 2020 (+2 mb/d) have compensated for most of the flattening in crude imports - implying that domestic demand for oil/oil products is still increasing
- Some inventory/reserve building/drawdowns may explain short term deviations but not the stabilisation since 2018

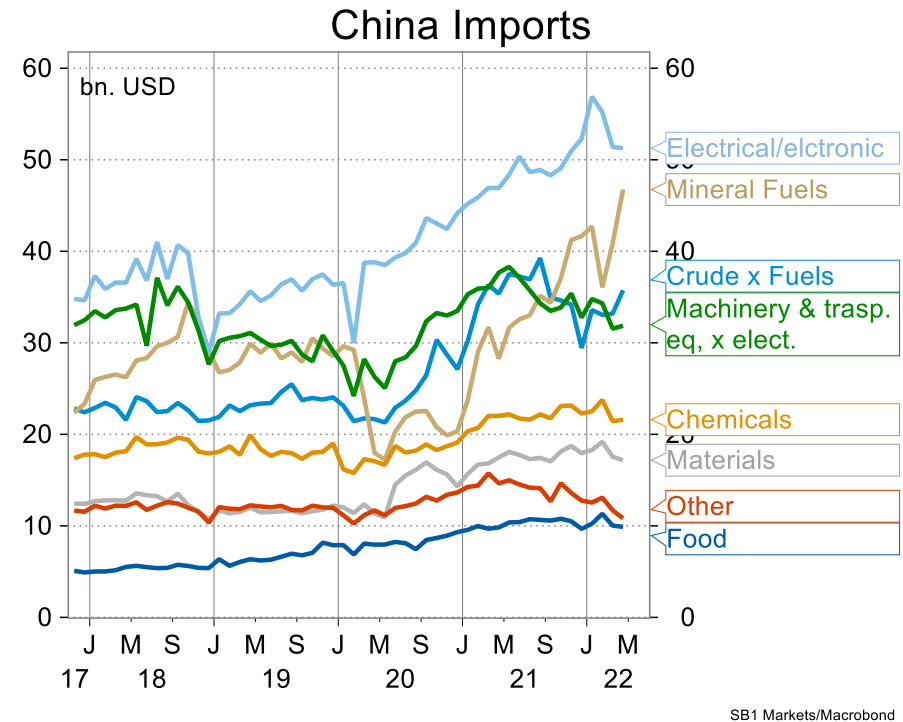
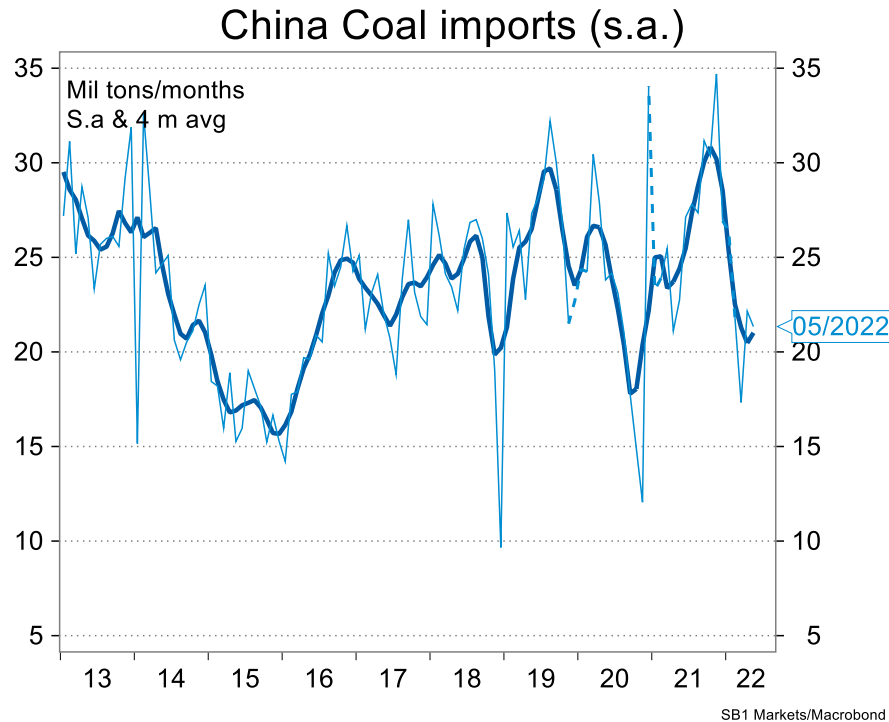
Chinese exports to Russia remained at very low level in May

While exports to the US rose to a record high

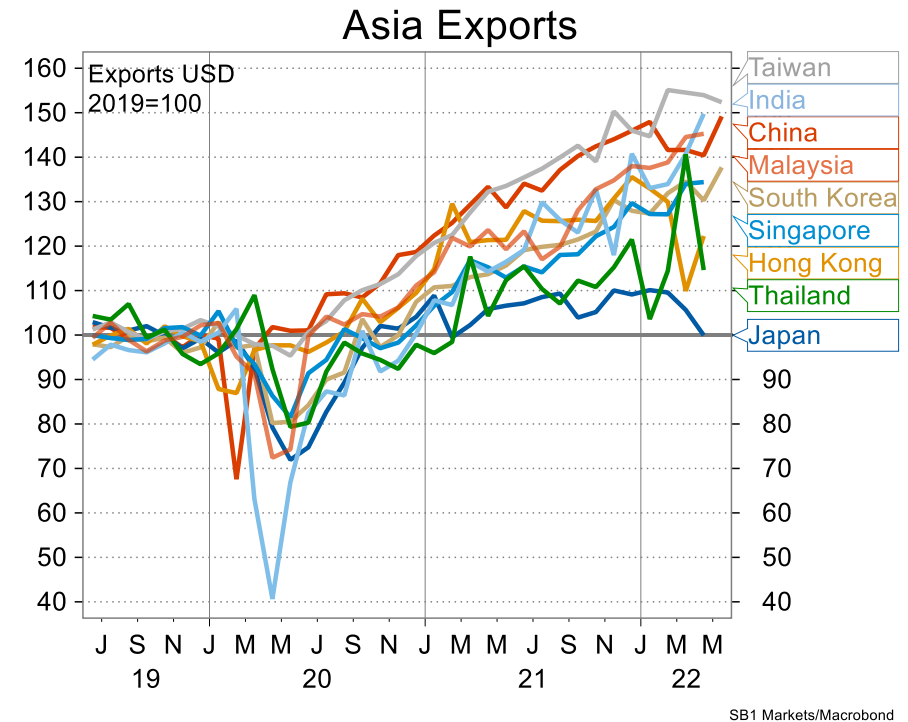
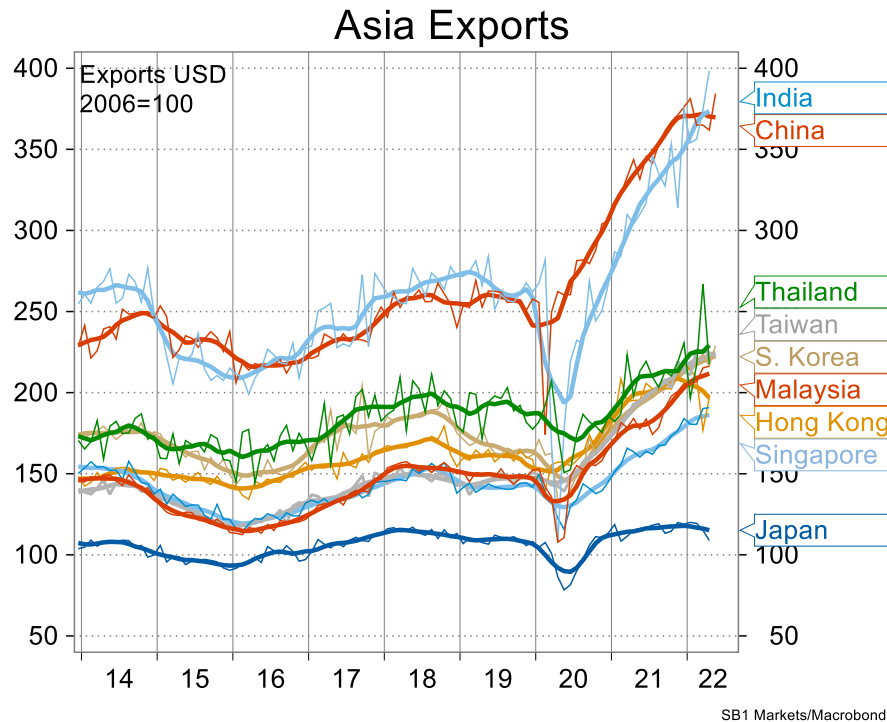


Coal imports still below a 'normal' level

Imports of most goods fell m/m in May

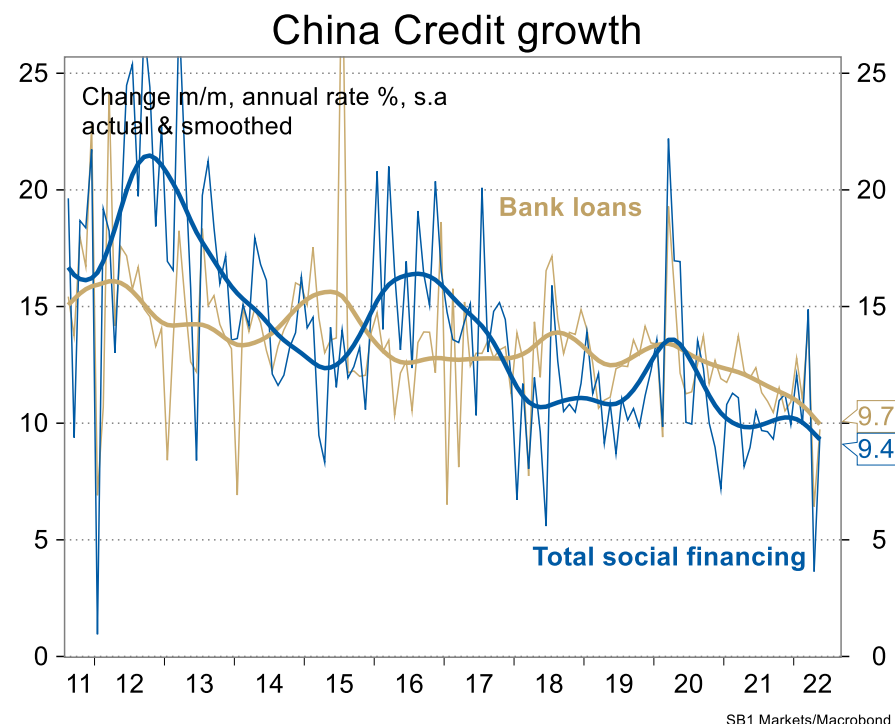
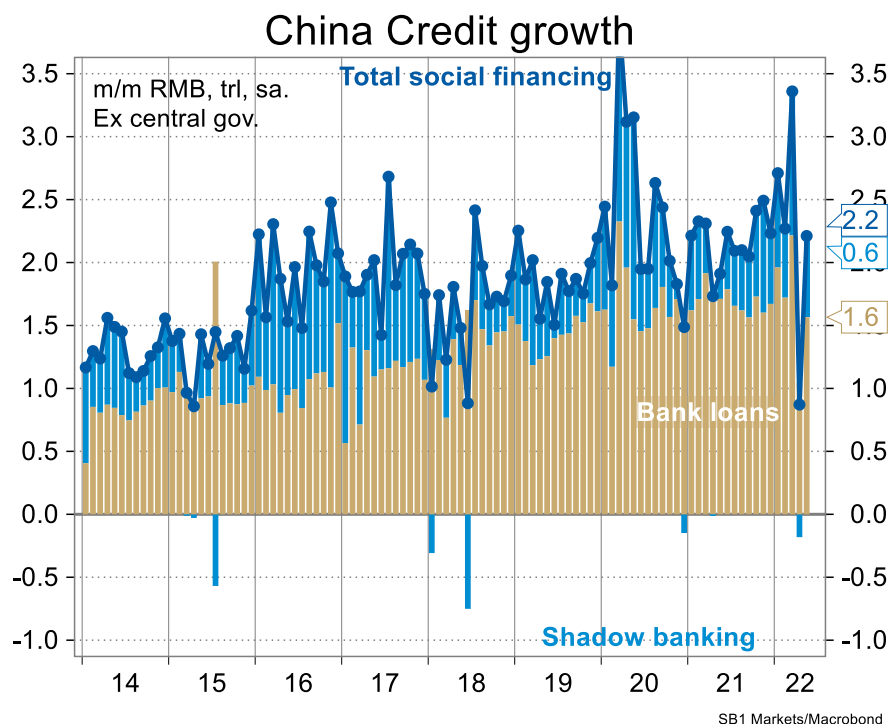


Exports from other Asian counties are in sum slowing – at high levels



Credit growth almost back up to a normal level in May

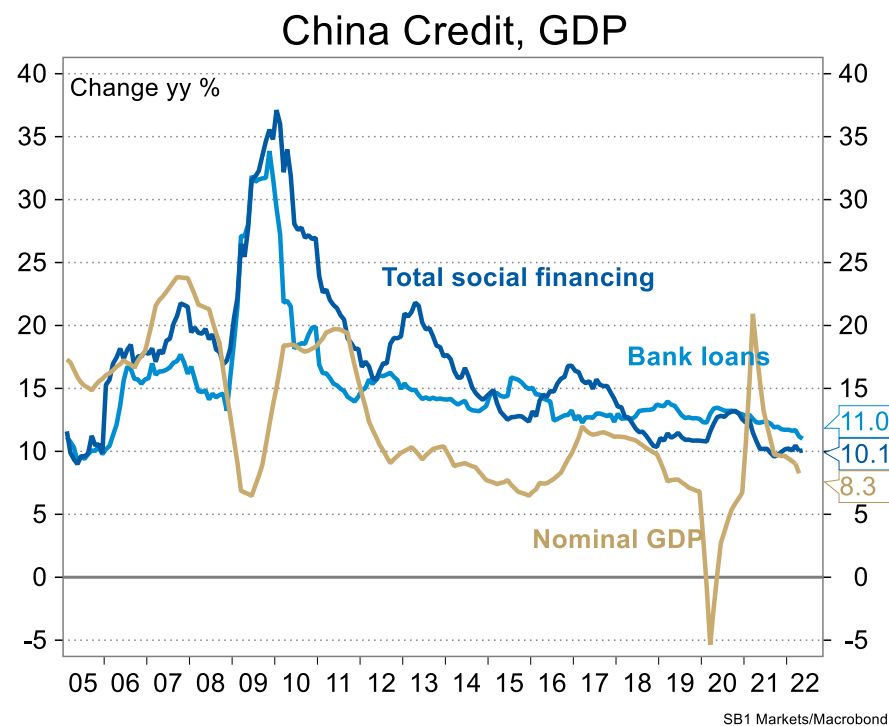
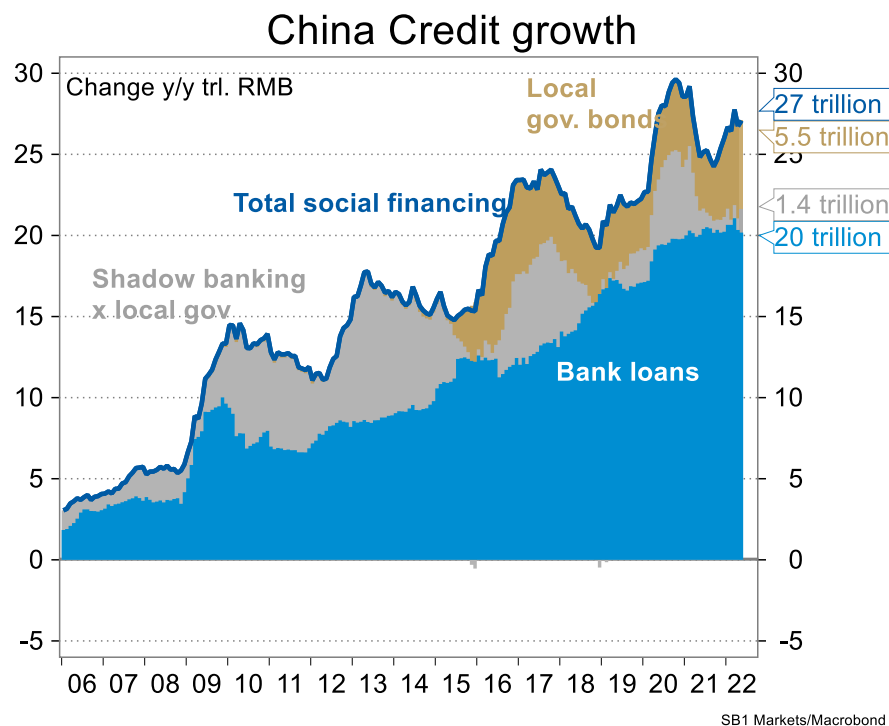
In April, the credit flow slowed to a trickle



- **Total credit** grew at a 9.4% pace in May (m/m, seas. adj. annualised), up from the unusually low level of 3.6% in April – for which we blamed the lockdowns. The annual rate gained 0.1 pp to 10.1%. Until April, underlying growth was approx. 12%, and growth had accelerated somewhat. The two past months have weakened the underlying trend
- **Total credit** rose by RMB 2.7 trl, expected 2.0 trl (not seas. adj). The ‘core’ total social credit (total ex central gov bonds & corporate equities) grew by 2.2 trl (seas adj), up from 0.9 trl in April – and almost back to the level before the April halt
 - » **Bank loans** rose by RMB 1.6 trl, s.a, or at a 9.7% annualised pace, and well above expectations. Still, growth has been slowing since mid 2020
 - » **Shadow banking credit** rose by RMB 0.6 trl, and is up 8.1% 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 has been on the way up, at least until April

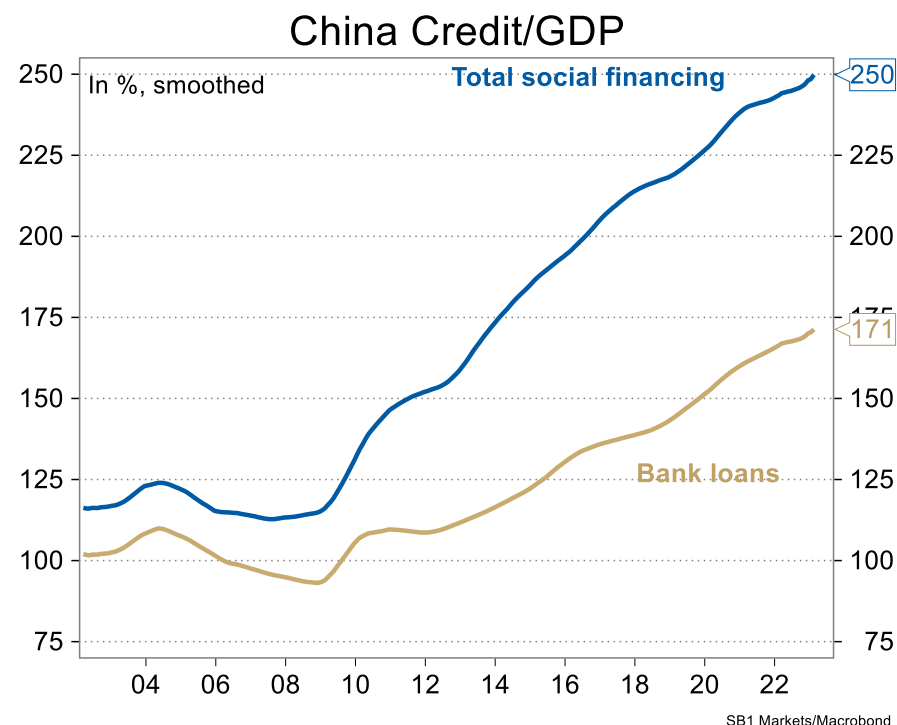
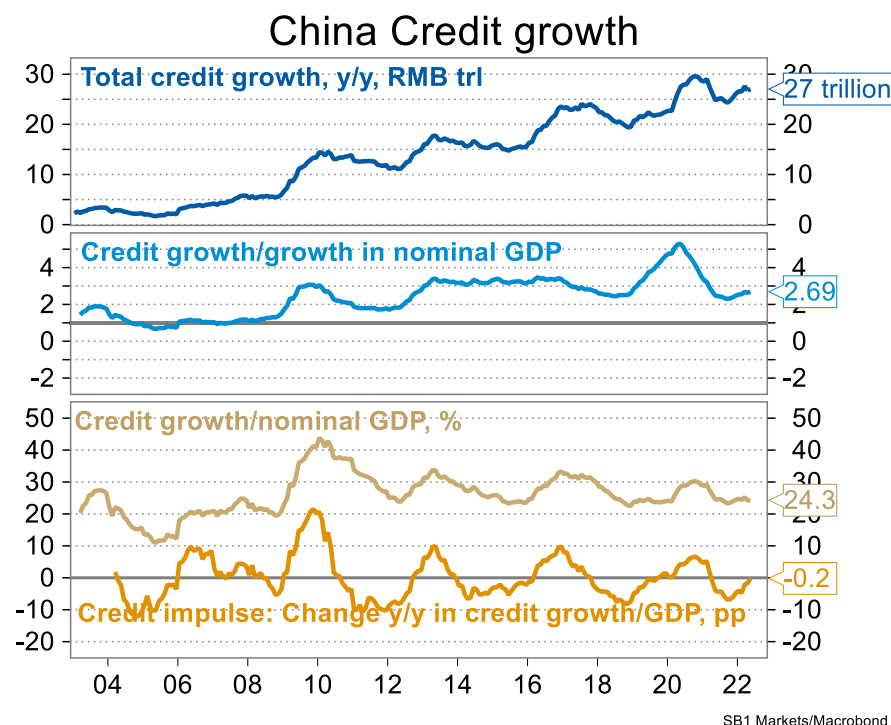
However, local government bond borrowing has been the only contributor to higher growth



- Over the past year, **total credit** has expanded by RMB 27 trl, equalling more than 25% of annual GDP, up from the 24 trl at the bottom last Sept, (but still down from 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 trl – to 24% y/y from 13% y/y back in last September!
- Growth in other credit – via the **shadow credit market x local gov bonds** – slowed to RMB 1 trl from 5 trl in 2020 (a dramatic slowdown, like many times before...)
- Total credit** growth accelerated 0.1 pp to 10.1% y/y, still above nominal GDP growth before the pandemic, and above our estimate of 5.5% potential GDP growth + a 2% rate of inflation = 7.5% growth in nominal incomes. Today this estimate may be on the upside

The credit impulse has bottomed (and in reality it is positive already, except for April)

Credit growth (in per cent) never slowed to below nominal GDP growth, credit/GDP 'always grows'

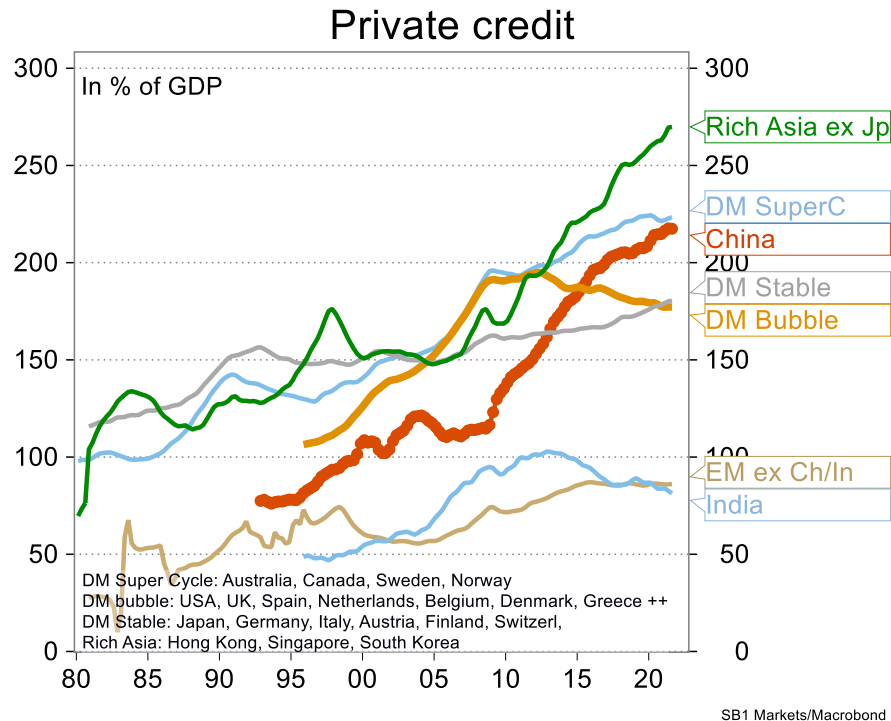


- A positive **credit impulse** implies that the credit growth/GDP ratio is increasing (the 2nd derivative of credit vs the GDP level)
 - » A negative credit impulse indicates credit tightening (or weaker demand) and has been associated with slowdowns in the Chinese economy, which have had impacts on other markets
- The **credit impulse** (here measured as the 12 m change in the 12 m credit growth/GDP ratio) bottomed in late 2018, turned positive one year later, peaked last autumn, fell into negative territory in May last year, bottomed at -6.5% in October, and is now at -0.2%. However, measured over a shorter time span, and before the April setback, credit growth has been accelerating
- The **authorities** seem to have succeeded in preventing the trouble in parts of the building sector to spread to the overall credit market. They are worried that the dependence on debt financing and the growth in the debt/GDP creates huge risks – but chooses to expand credit every time growth slows

GDP is smoothed in the calculations in the charts above

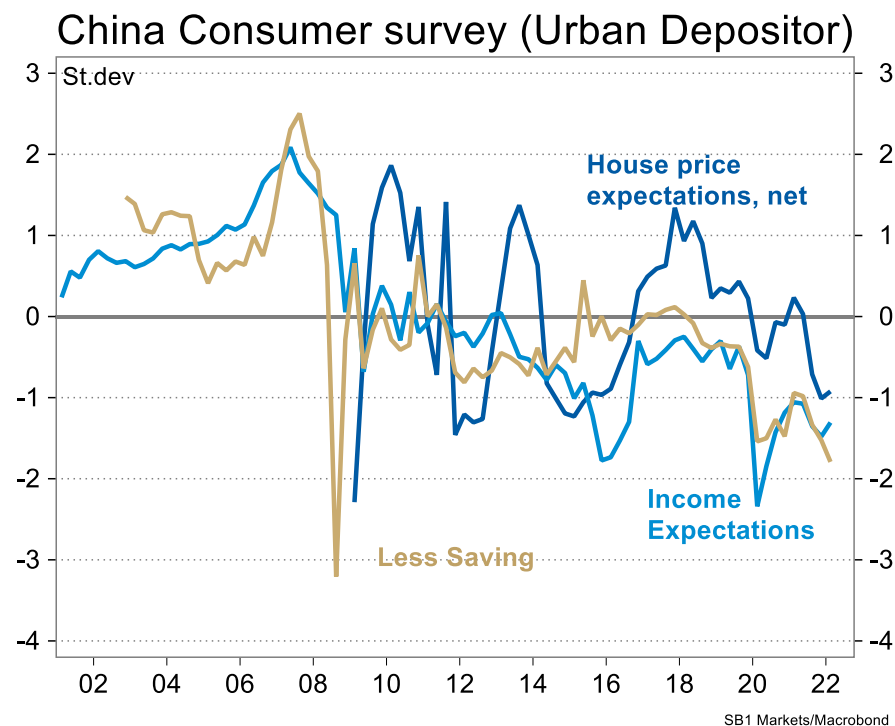
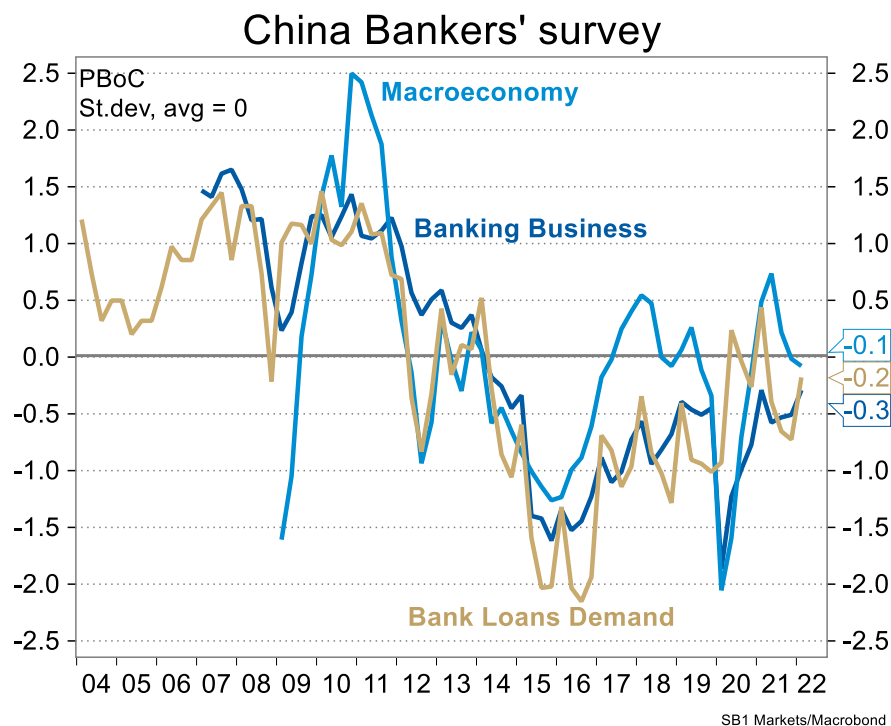
Private sector credit: China is an outlier, together with other rich Asian countries

The 'global' debt bubble is not in reality a Chinese bubble. In other EM, DM no bubble, now



Bankers are not depressed, and demand for loans is still OK, they say

Households are more cautious; have less confidence in future income

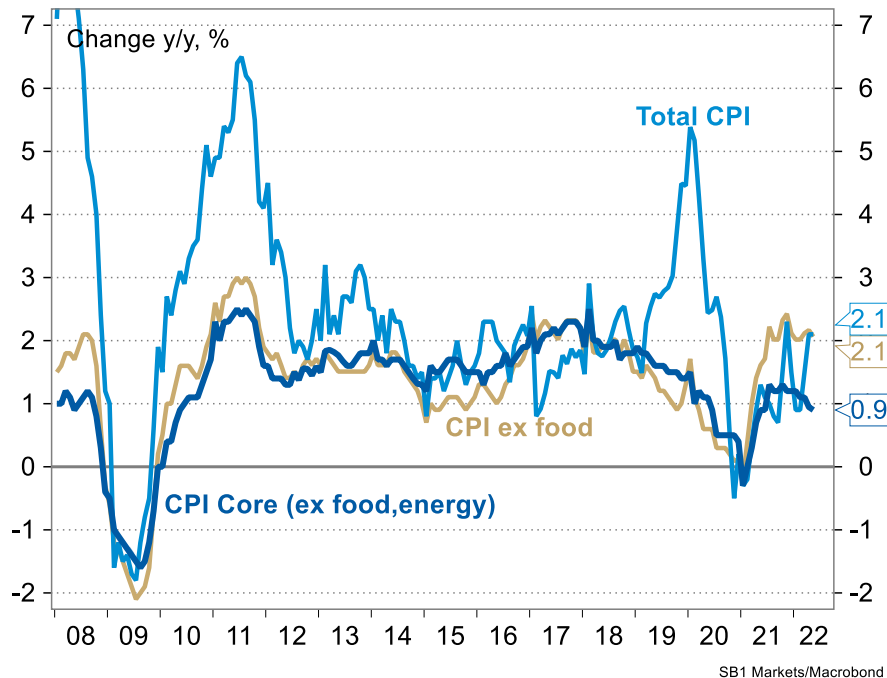


- Last obs: Q1. Something has happened in Q2...

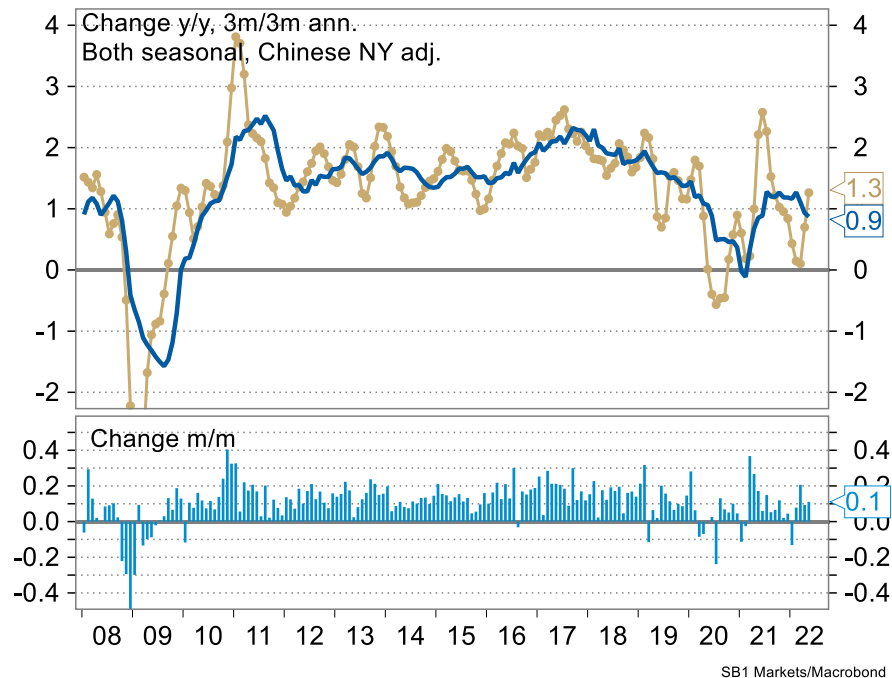
Stable inflation, headline at 2%, the core at 1%

Inflation is not China's predominant challenge these days

China CPI



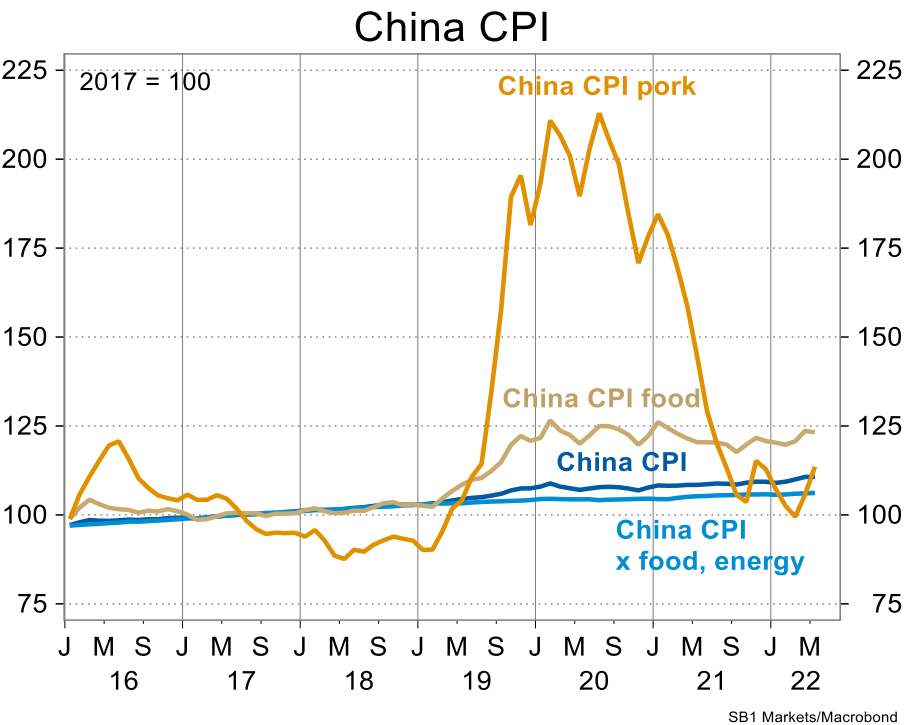
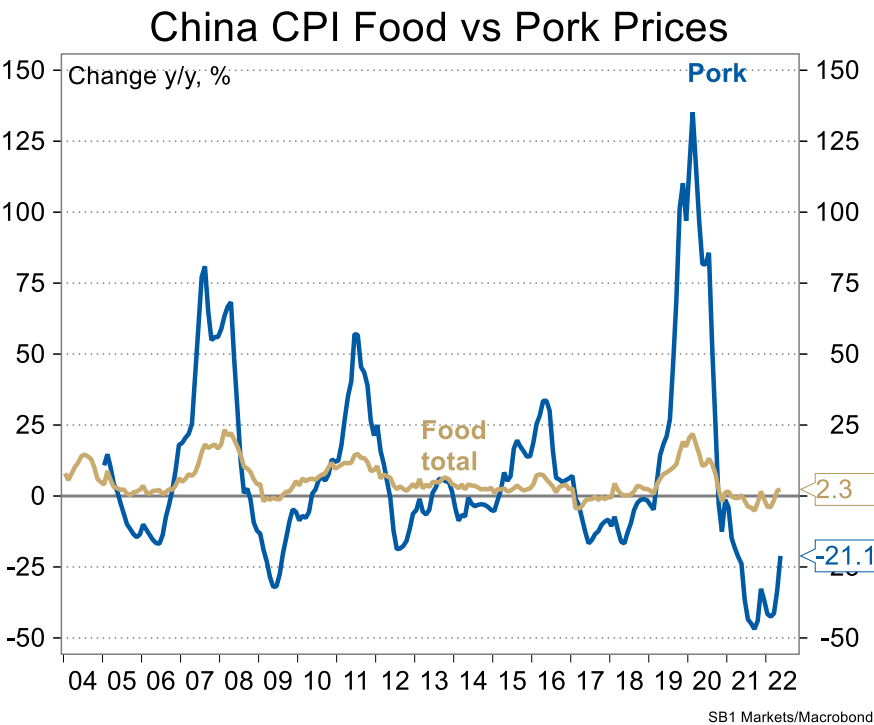
China Core CPI



- **Total annual CPI** was unch 2.1% in May. Prices rose 0.2% m/m, following the 0.6% lift in April
- **The core CPI (x energy, food)** was unch at 0.9% y/y. Prices rose 0.1 pp m/m. The 3m/3m rate is at 1.3%
- **Food prices** are up 2.3% y/y, even if pork prices are down 20% - which implies that other food prices are up some 8% (vegetables are up 25%)
- **Gasoline/fuel prices** are up 24%
- **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

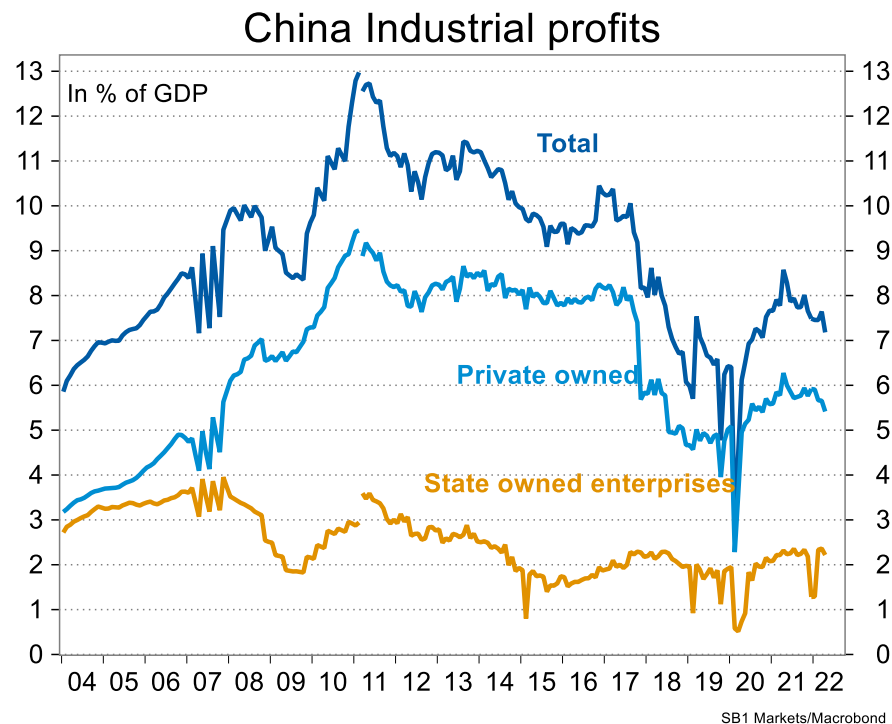
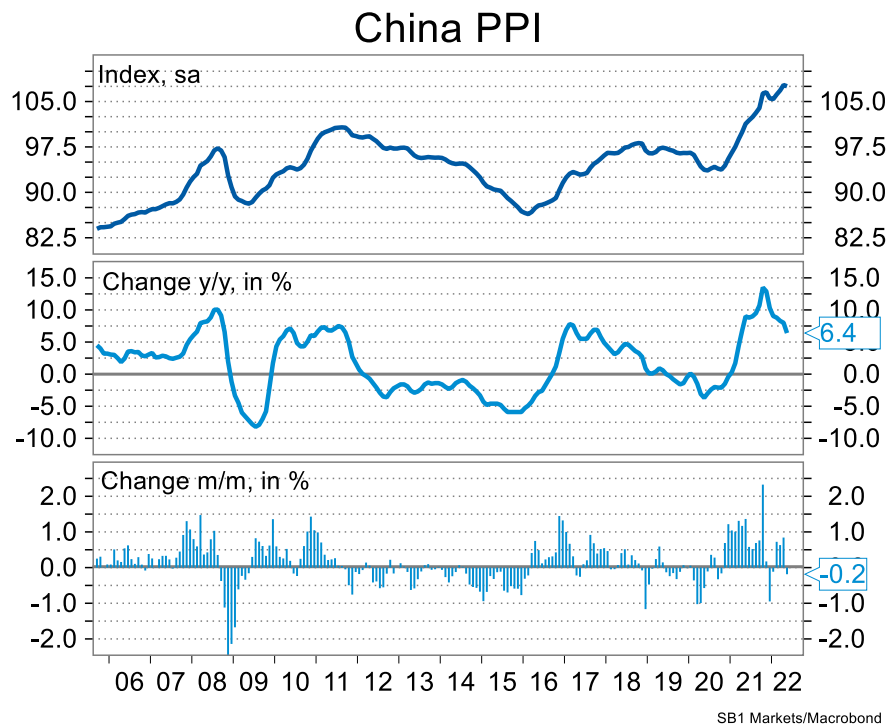
Pork prices are coming back to a normal level

... And the negative contribution to headline CPI will now fade rapidly



Producer prices fell in May – and are up just 6.4% y/y (from 13.5% at the peak)

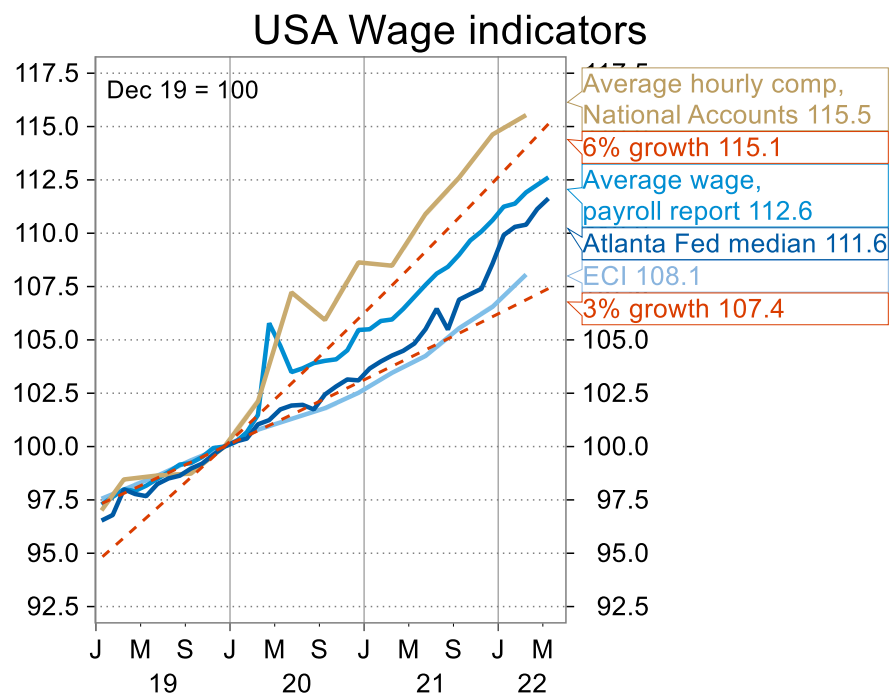
A sign of slowdown in goods inflation globally? Corporate profits are heading south



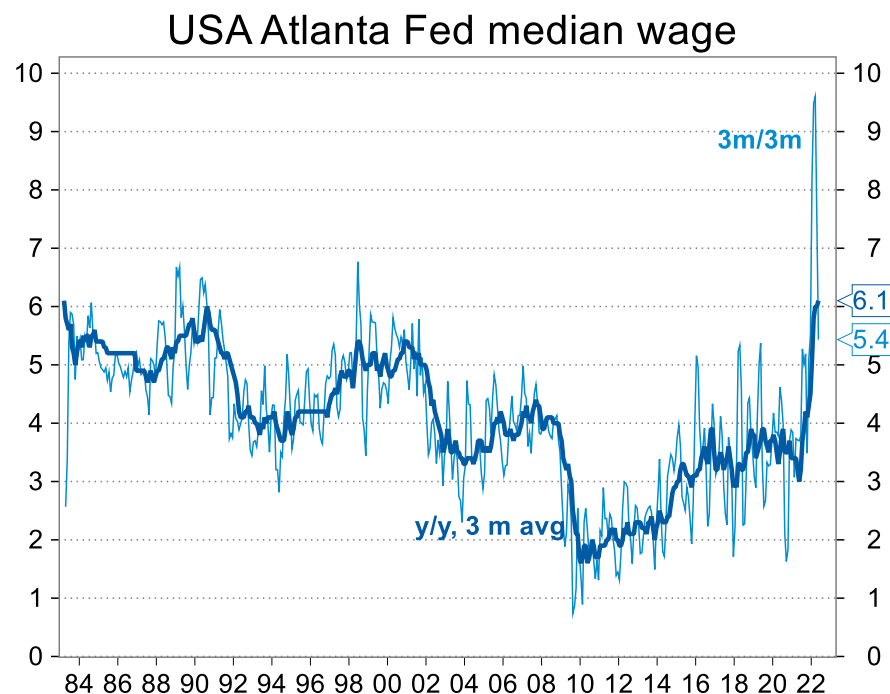
- **The PPI fell in May**, which may be due to temporary lockdown impacts
 - » Consumer goods are up just 1.2% anyway, durable consumer goods are down 0.1% y/y, raw materials are up 1%. The correlation between PPI and CPI in China is not impressive
- **Profits in privately owned industrial enterprises** are declining in % of GDP

Atlanta Fed's wage tracker may confirm somewhat slower wage growth

The median wage is up 6.5% y/y, 6.1% 3 m smoothed – but 'just' by 5.4% measured 3m/3m



SB1 Markets/Macrobond



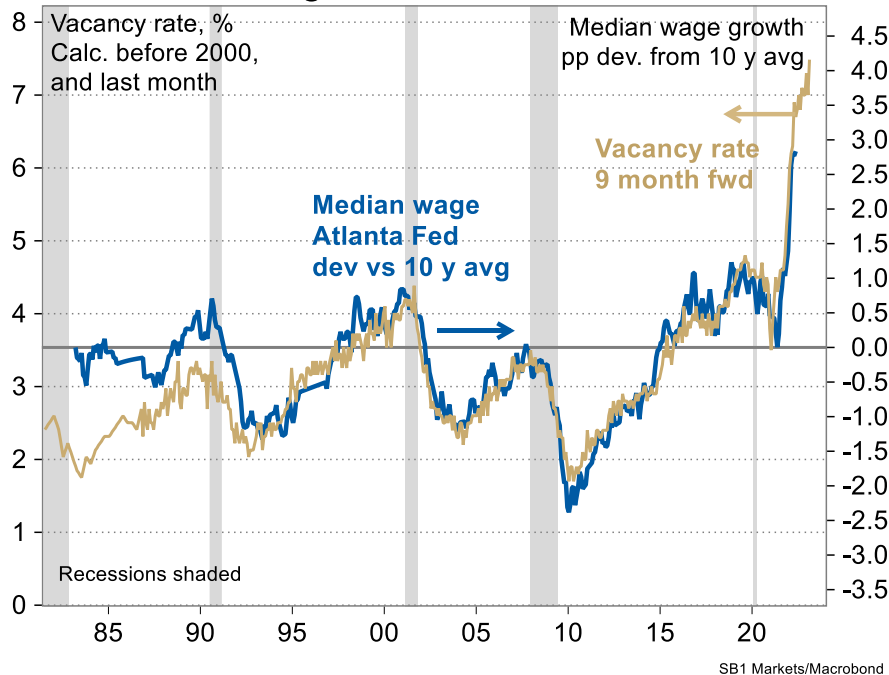
SB1 Markets/Macrobond

- **The Atlanta median wage tracker's** 6.5% lift is the highest ever, data from 1983. Smoothed over 3 months, the median wage is up 6.1% - in line with the first observation in 1983. But not seen ever since
- **The acceleration in wage growth** may be slowing, however. Following an extremely rapid m/m increase in Q4, m/m growth (calculated by us) has slowed slightly so far in 2022 - but the 3m/3m rate has fallen to 5.4%
- **All other wage indicators** are reporting fast wage growth, and all are reporting wage growth well above the recent years' average. In the payrolls report, wage inflation has also slowed slightly recent months
- It will be a 'challenge' to keep inflation at 2% if wage inflation remains at current levels. It does not seem likely that wage inflation will turn south before the labour market weakens (check next page). Productivity growth has not accelerated. Profit margins may take a beating – they very likely will – but that will not be not sufficient to bring inflation down

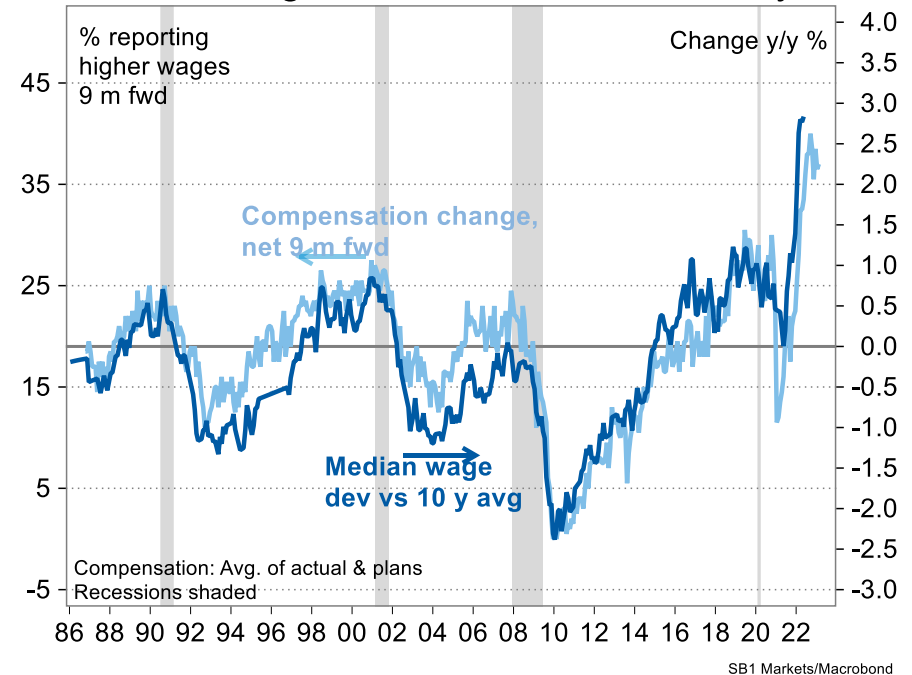
Wage inflation will remain too high as long as the labour market is very tight?

The correlation between the vacancy rate and changes in median wage growth is extremely tight

USA Wage inflation vs vacancies



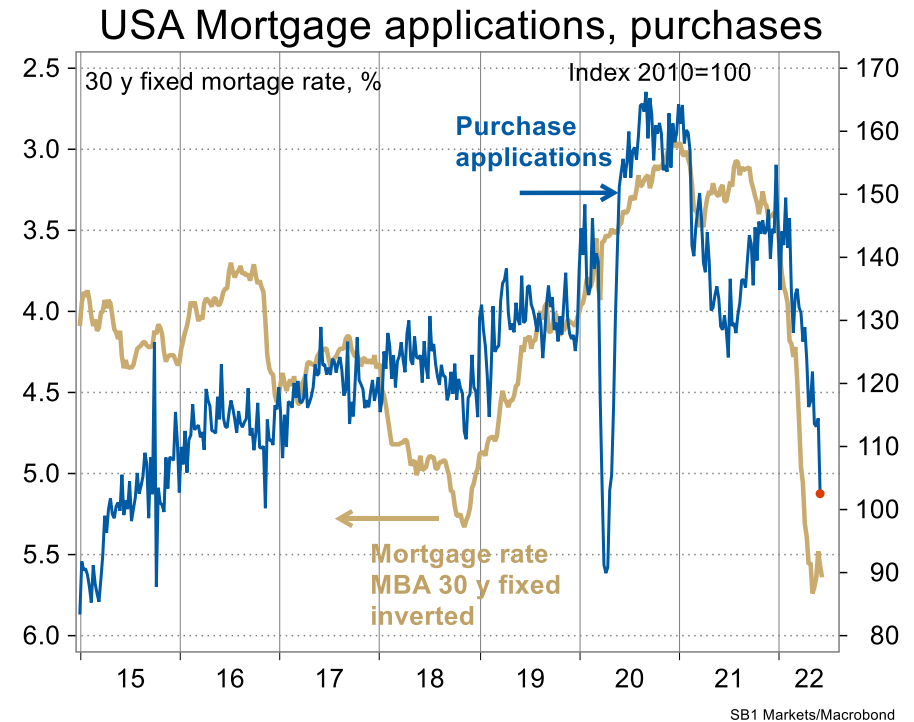
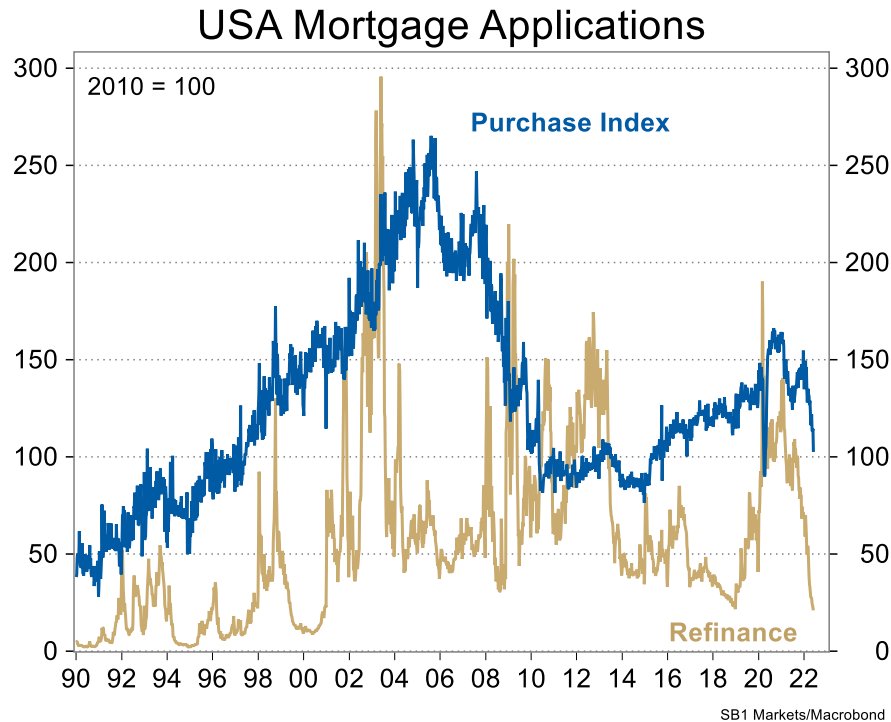
USA Wages - Actual vs NFIB survey



- Our 'Phillips curve' based on the vacancy rate does not signal any slowdown in wage inflation. Companies (SMEs) compensation plans signal continued high wage inflation but not faster than the current
- Wage inflation has already accelerated by 2.5 – 3 pp vs the 10 y average (Atlanta Fed median) and cannot possibly generate a 2% price inflation rate over time. This is Fed's main headache. And it will become the stock owners' headache too, of course, if their companies should not be able to increase their selling prices at almost a double digit pace
- **Demand for labour has to be reduced sharply in order to get wage inflation back to a sustainable level!**
- Check under which circumstances wage inflation slows on the charts above (hint: find the shaded areas, follow the wage line - as well as the vacancy rate or the wage hike plans 😊)

A 10%+ decline in demand for new mortgages last week

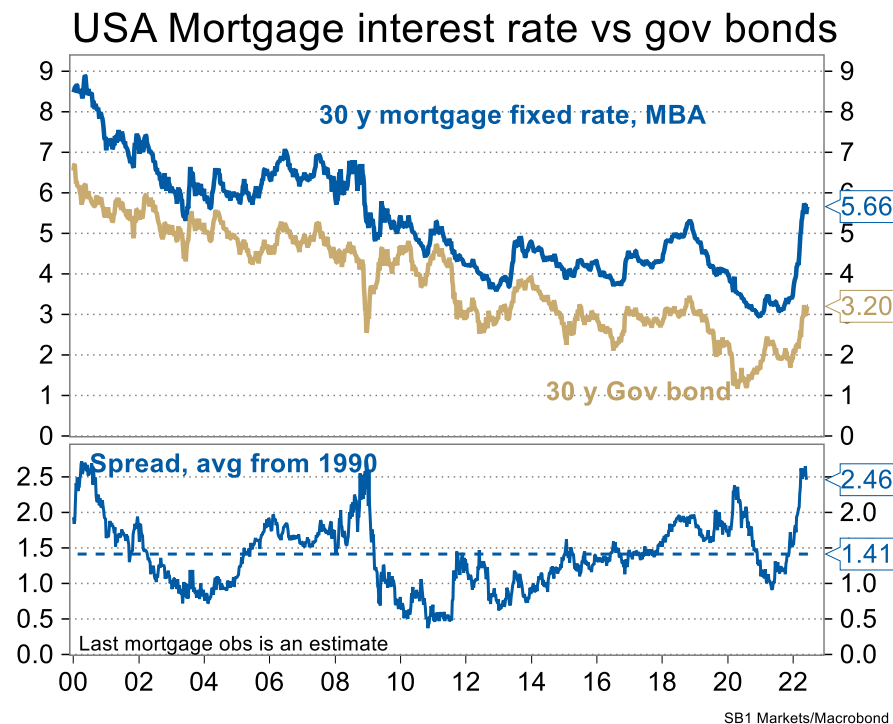
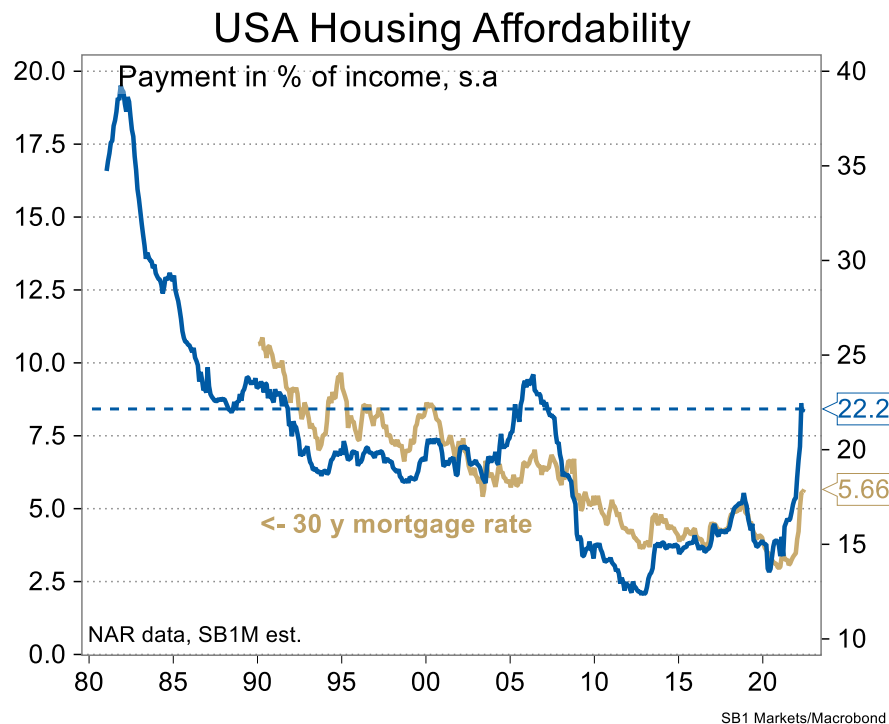
Signals a much weaker housing market following the 200 bp+ lift in mortgage rates so far in 2022



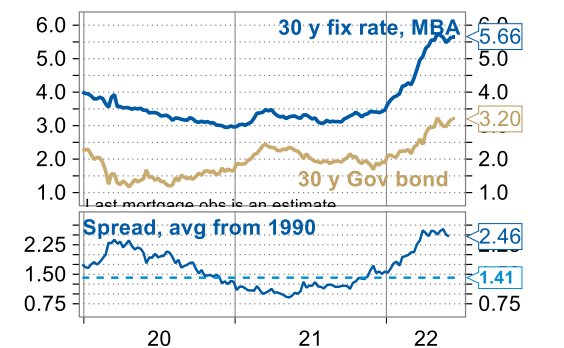
- Demand for refinancing has fallen to lowest level since 2001 – not surprising given the steep rise in mortgage rates

The least affordable housing market since 2008

Prices are up 37% since before the pandemic, the mortgage rate is up 40%. In sum....

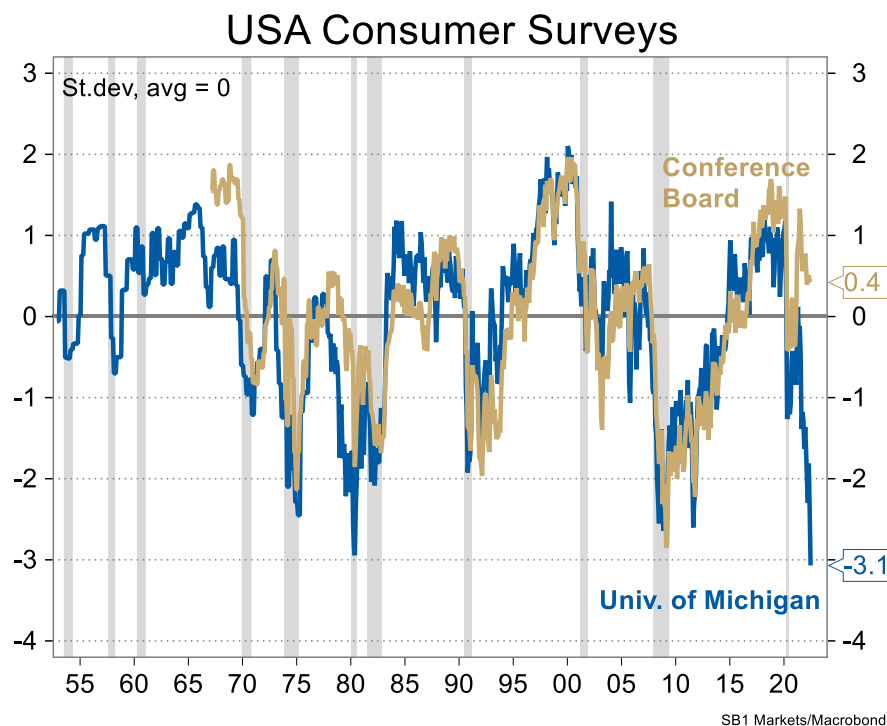


- **The 30 y fixed mortgage rate** has climbed to 5.6% (effective rate) from 3.0% last summer, from 3.5% at the start of 2022. Before the pandemic, the rate was 4.0%. From there, the rate is up by 40% (and by 60% since the start of the year)
 - » The mortgage rate has climbed MUCH faster than the 30 y Gov bond rate as the spread has widened to 246 bps from 91 bps at the bottom last spring, and it is far above the 141 bps average – and among the highest in modern times. The upside risk must be limited from here – the spread will at one stage retreat



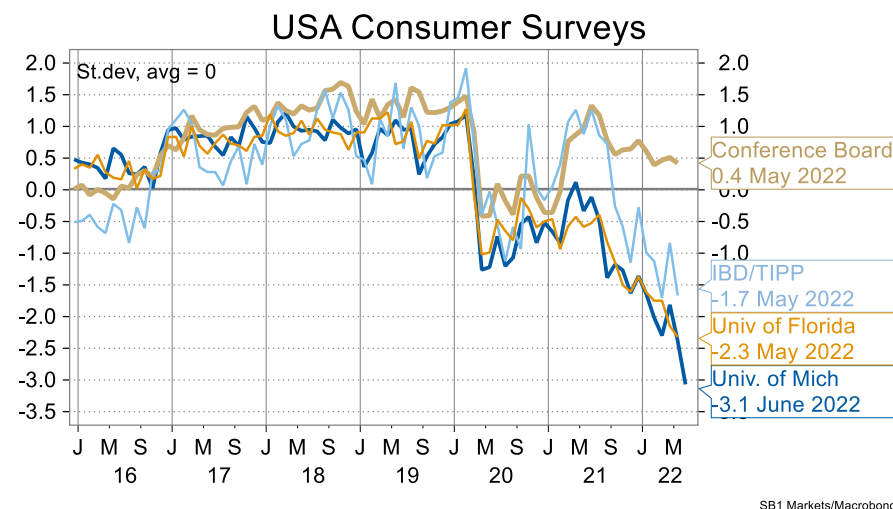
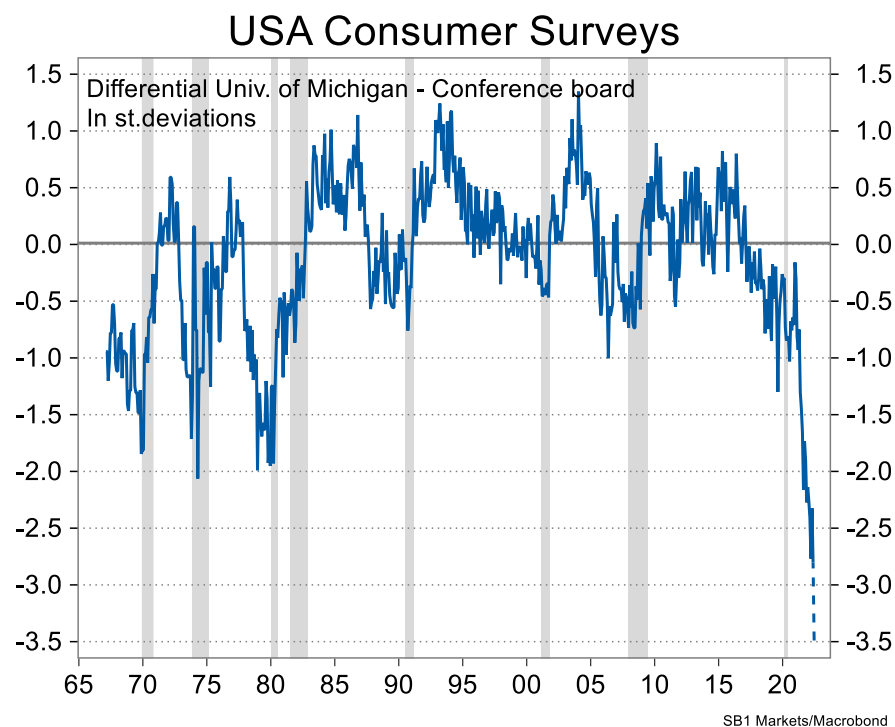
Univ. of Mich. sentiment down to ATL in June, data since 1953!

High inflation, gasoline prices to blame. And not a strong economy measured by other metrics



- **University of Michigan's consumer sentiment** fell to ATL at 50.2 in June from 59.1 in May, expected down to 58.5. The index fell to -3.1 st.dev below average, from -2.4 in May
 - » Households' assessment of the current situation and their expectations fell almost at the same pace, to the lowest in decades
- **2 of the other 3 consumer surveys** we are following report a confidence level far below average levels, but not yet down the same low level as UMs survey
- Just the **Conference Board's** measure is still above average (at +0.4 st.dev) in May. The discrepancy between the two 'main' surveys have never been larger
- Sure, inflation is a HUGE worry, the stock market is wobbling (but still at a high level), and mortgage rates are on the way up. Even if there are some red flags, it is not possible to explain the current extremely bad mood among households by any standard model
 - » Unemployment is close to record low, and the housing market has been strong, at least until recent weeks. Covid is not included in the model but cannot take the blame for the steep decline in the sentiment this spring
- **The risk:** The UM survey often has been an early bird in the cycle, and the survey may be 'right'

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

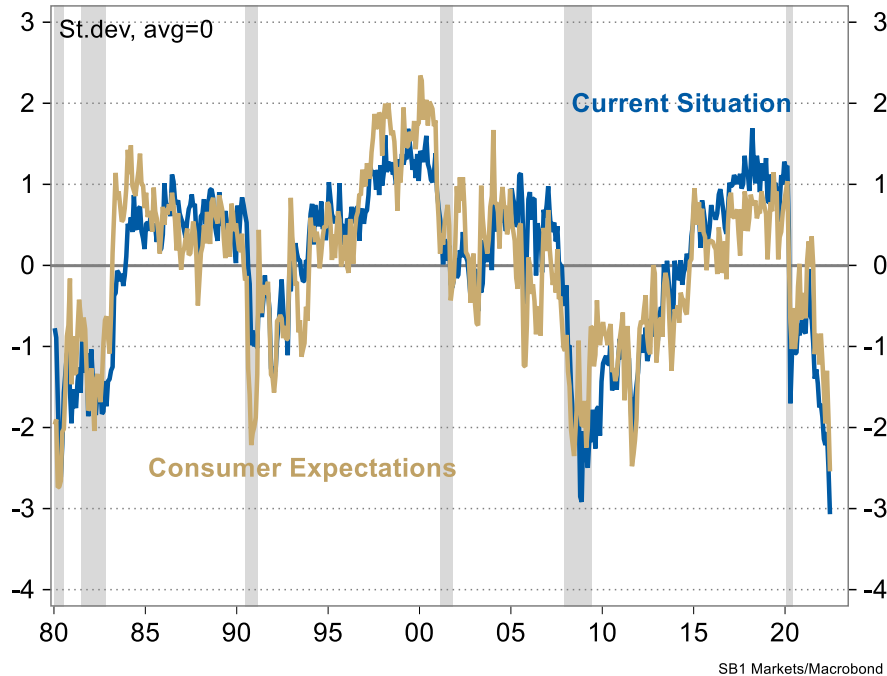


- Quite often, the UM survey has been the canary in the mine vs. recessions, it yields earlier than Conference Board's survey, and the current stance is a VERY bad sign – we have never seen anything like it!
- The IBD/TIPP the Univ. of Florida surveys both fell in May, down to -1.7 and -2.3 st.dev below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

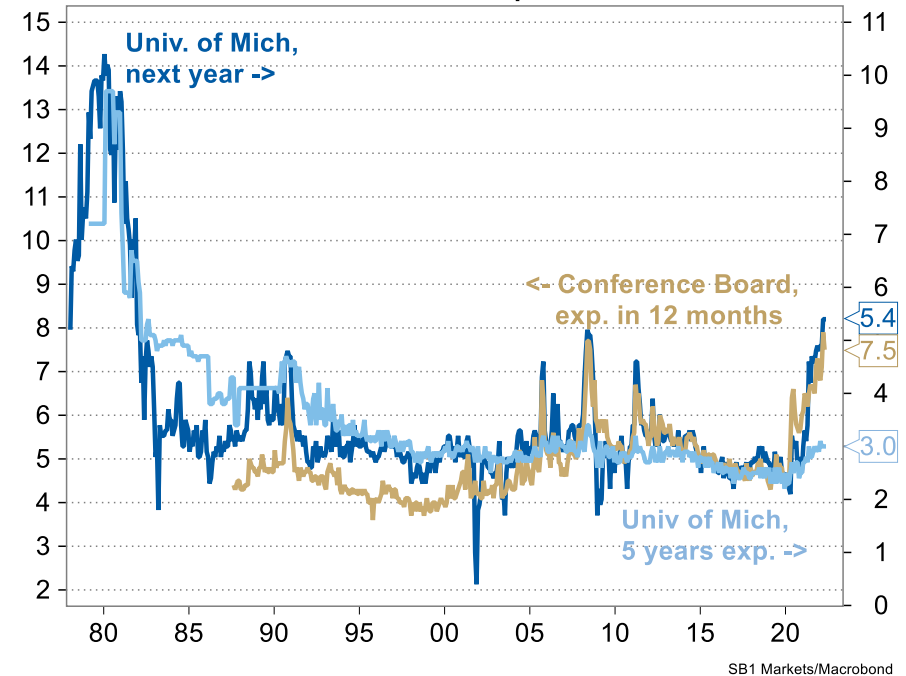
Univ of M: Finally, expectations up – but still at a rather low level

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

USA UoM Consumer Sentiment



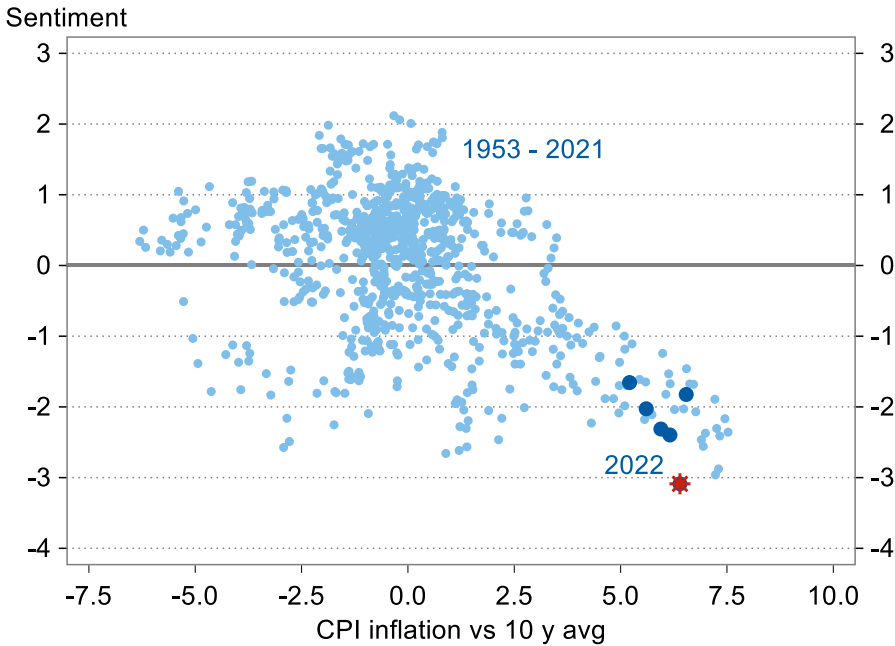
USA Inflation expectations



- The 12 m inflation f'cast was unch. at 5.4%, the highest level since 1983
- The 5 y inflation expectation was unch. at 3%, clearly above the average over the past 10 years – but not much higher than several times during the 2005 – 2012 period

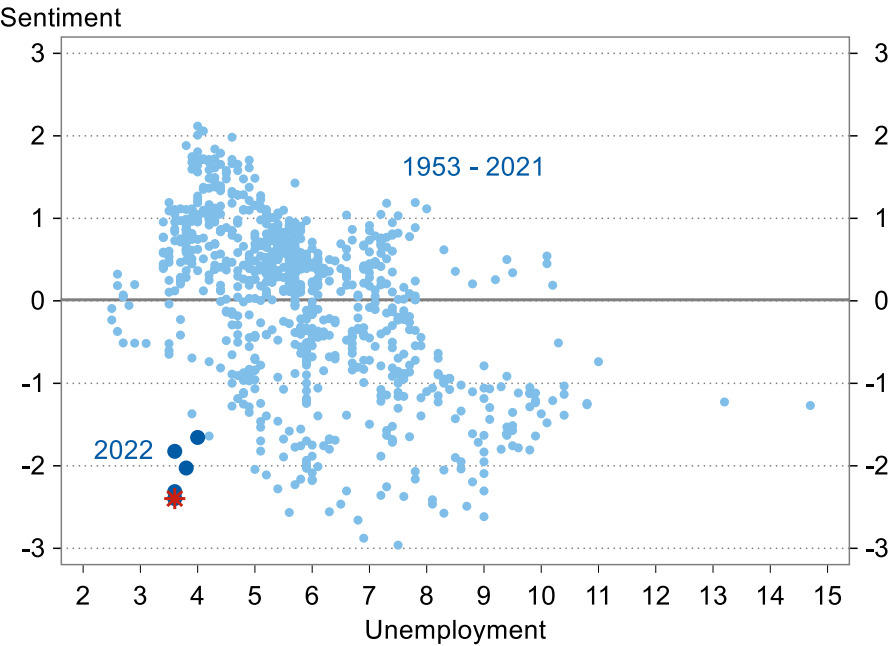
High inflation is an argument, but the labour market is not

UM sentiment vs inflation



SB1 Markets/Macrobond

UM sentiment vs unemployment

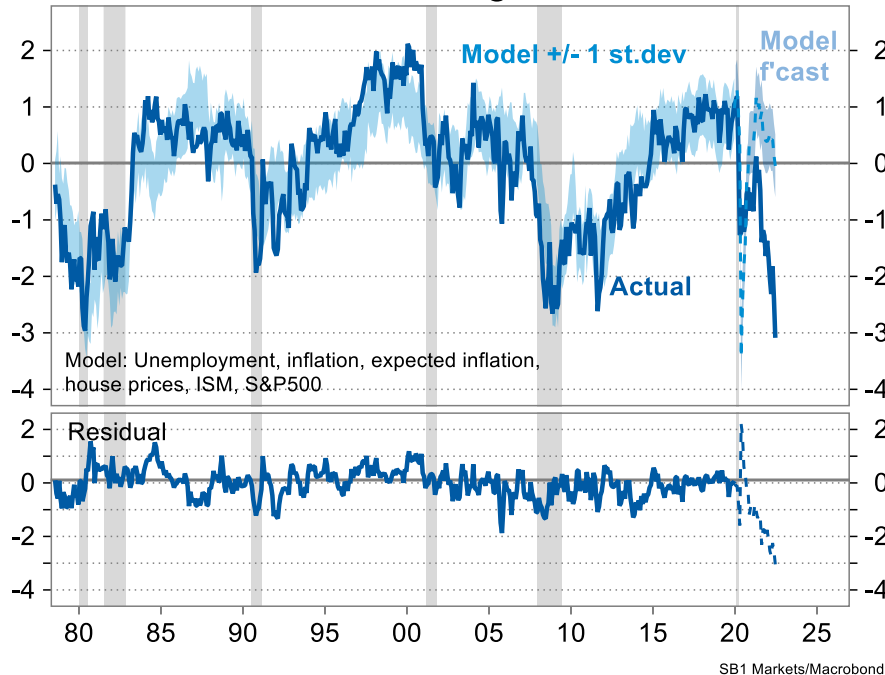


SB1 Markets/Macrobond

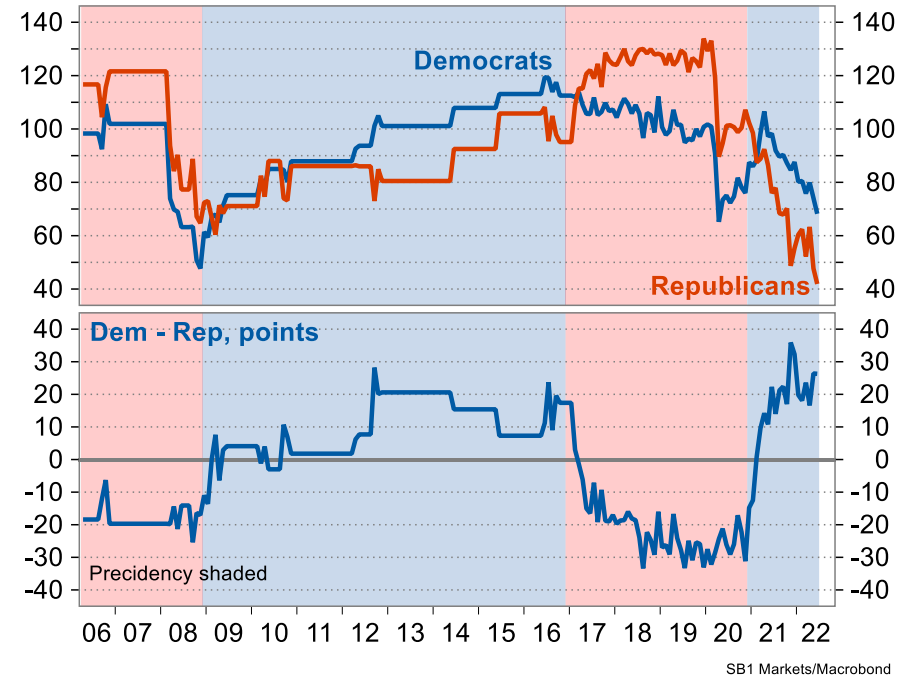
Households should have been quite happy by now, even if inflation is high

The pandemic is not included in the model

USA Univ of Michigan sentiment



USA Consumer sentiment, current situation

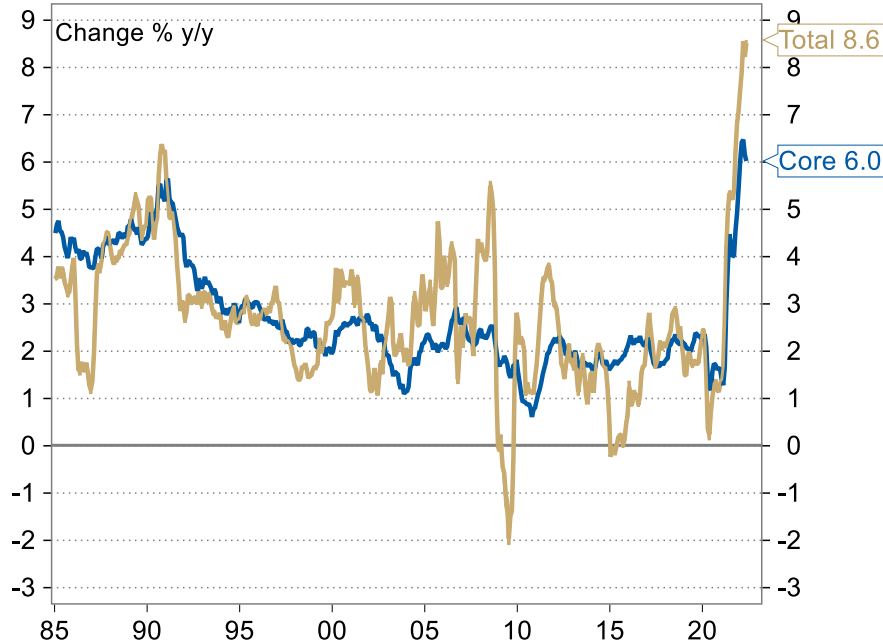


- **Our simple model** explaining the UM's sentiment survey has worked pretty well, explaining all important ups and downs by standard economic indicators. That is, until the recent months
 - » Unemployment, inflation growth (both actual vs 10 y average and expectations), ISM, the stock & housing markets, are all contributing significantly with the 'right' signs. The deviation in the early phase of the pandemic is due to the unusual developments in our lives, in the economy and in the markets. What's the 'unknown' factor now?
 - » We can not blame overly pessimistic Republicans too much either (they are very negative but not more so the recent months)

Another inflation surprise: CPI up 1% m/m, core +0.6%. The Fed is cornered

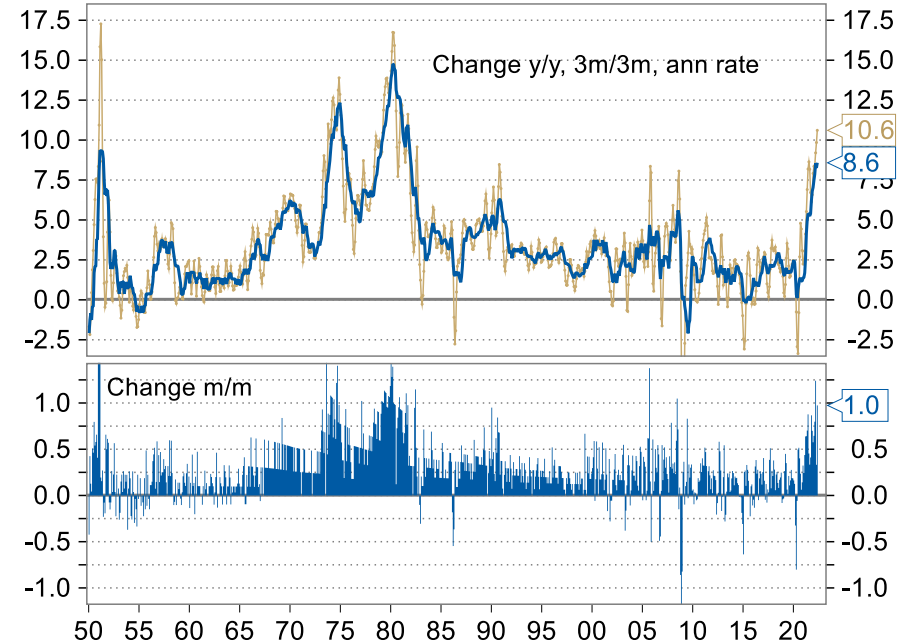
Inflation is broadening further. Fed has no choice but to lift the signal rate rapidly coming months

USA Consumer Price Index



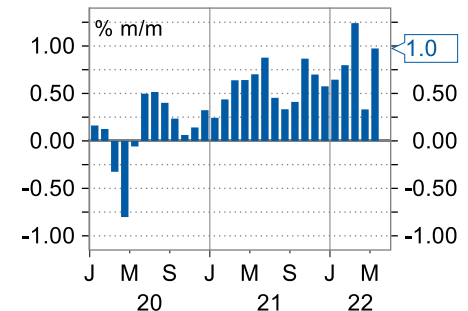
SB1 Markets/Macrobond

USA CPI



SB1 Markets/Macrobond

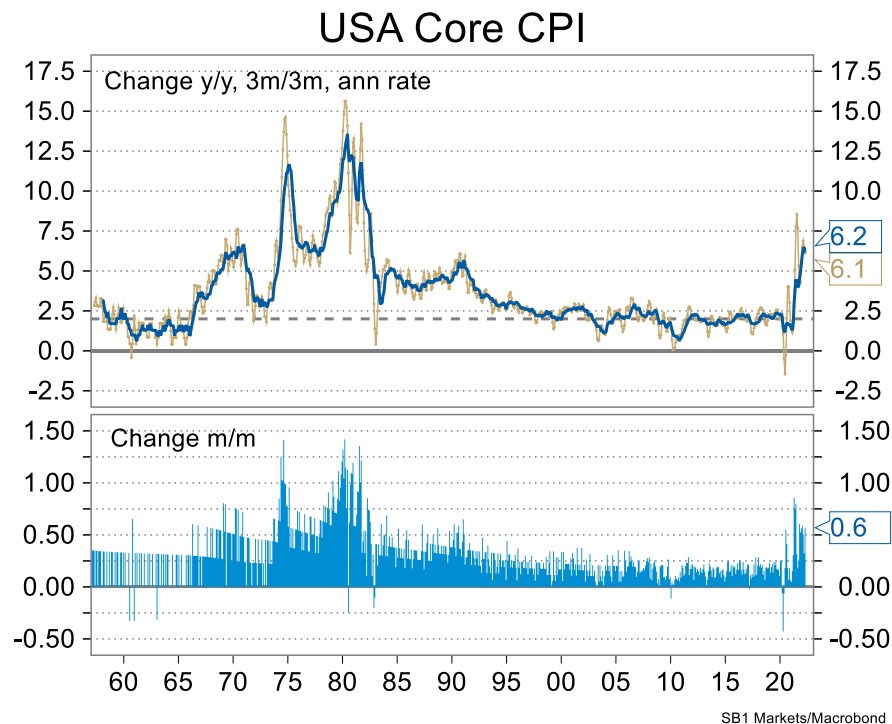
- **Headline CPI** accelerated to 8.6% in May, the highest since 1981, up from 8.3%, expected down to 8.2%. Prices rose 1.0% m/m, expected 0.7%, and up from 0.3% in April. The 3m/3m rate accelerated to 10.6%, the highest since 1980. So inflation is not yet slowing
- **Energy prices** rose 3.9% m/m and are up 35% y/y, contributing 2.4pp to the headline. Gasoline prices are up almost 50%
- **Food prices** rose 0.9% m/m and are up 9.7% y/y. (Food at home is up 12%!)
- **Public transport (mostly airline fares)** shot up 9% m/m, and are up 26% y/y (almost like in Norway)
- **Surveys** report further price increases the coming months. Some exciting months for the FOMC ahead!



SB1 Markets/Macrobond

The chart displays the US Consumer Price Index (CPI) from 1985 to 2022. The left y-axis represents the index value (0 to 9), and the right y-axis represents the percentage change (0% to 9%). The x-axis shows years from 1985 to 2022. The chart includes three data series: Total CPI (blue line), Core CPI (orange line), and Contribution from food & energy (green line). A horizontal line at 2% on the right y-axis indicates the core rate threshold. Shaded gray regions represent Fed tightening periods. Annotations include 'Fed tightening periods shaded', 'Total 8.3', 'Core 6.2', 'Core >2%', and 'Core <2%'.

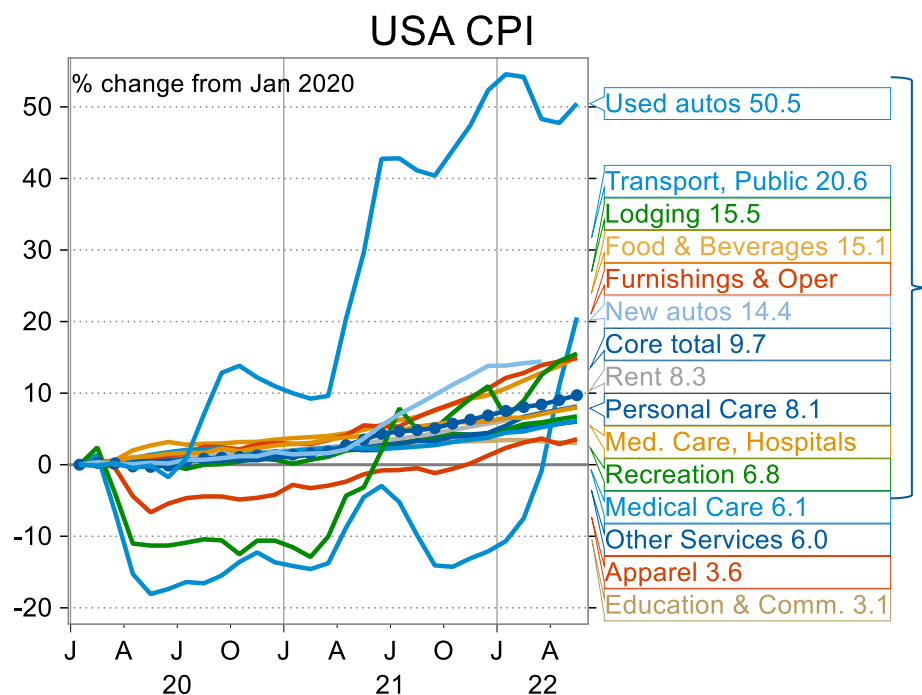
Year	Total CPI (Index)	Core CPI (Index)	Contribution from food & energy (Index)
1985	4.5	4.5	4.5
1990	5.5	5.5	5.5
1995	3.0	3.0	3.0
2000	2.5	2.5	2.5
2005	3.5	3.5	3.5
2010	2.5	2.5	2.5
2015	2.0	2.0	2.0
2020	1.5	1.5	1.5
2022	8.3	6.2	2.1



- [illegible]

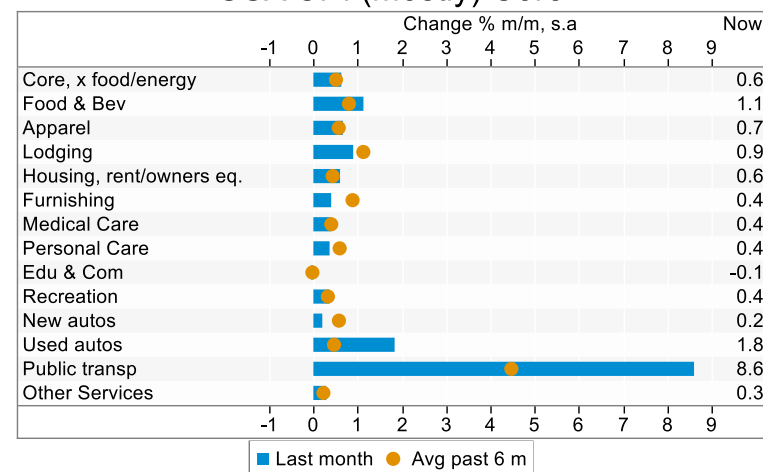
Besides energy, public transport (airline fares), lodging & autos in the lead

Food (at home) prices are up 12%! (And gasoline prices 49%)

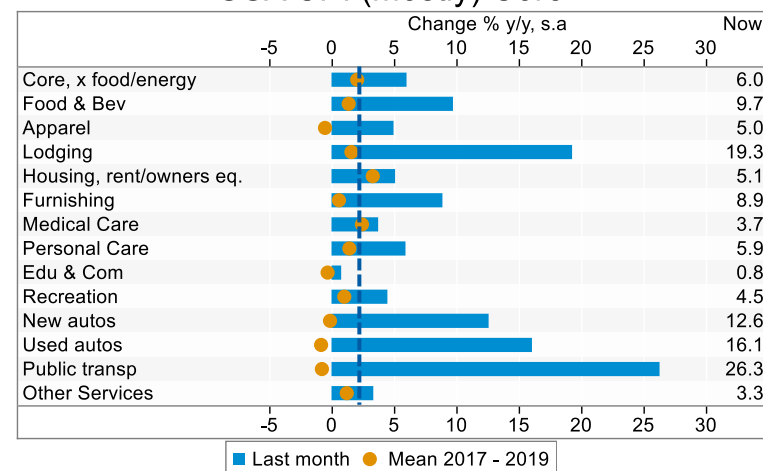


- Most sectors report growth above 2% from before the pandemic, just education & communication below
- All but two sectors, apparel and edu. & com, are up at more than a 2% pace from before the pandemic
- One day: A huge downside to used auto prices – and hopefully for some others as well

USA CPI (mostly) Core

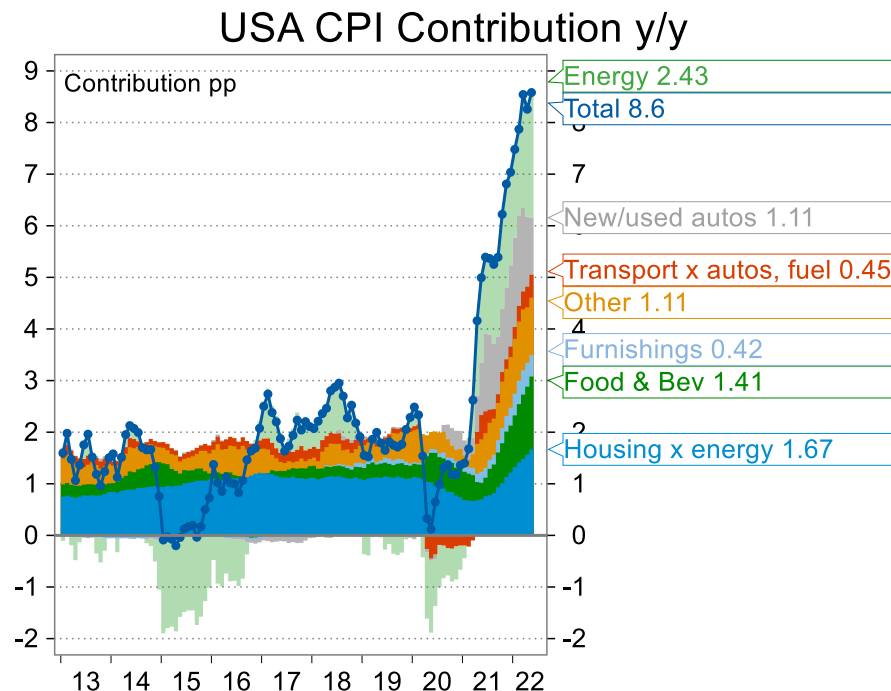


USA CPI (mostly) Core

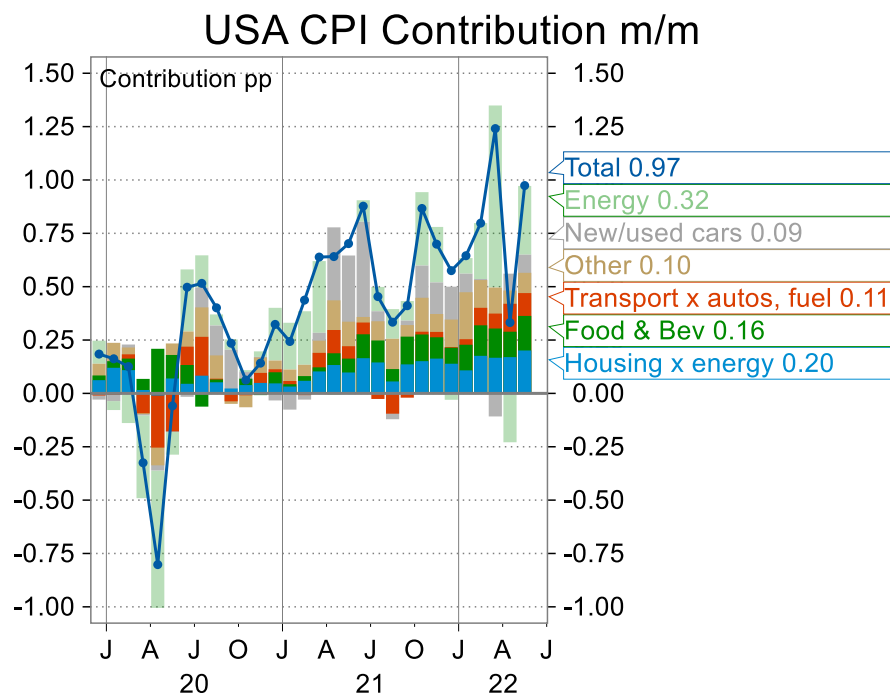


Transport (incl. used cars) & energy explain 4.0 pp of the 8.6% lift in total CPI

The problem: The rest is up by more than 5% y/y. Housing contributes 1.7 pp, alone



SB1 Markets/Macrobond



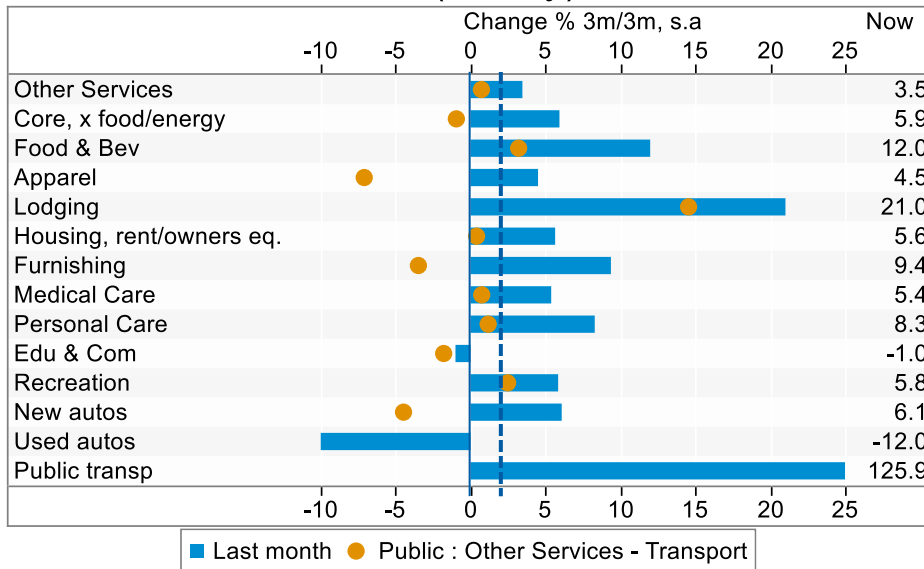
SB1 Markets/Macrobond

- **Energy** prices gained 3.9% m/m in May, as both natural gas and gasoline prices rose – and prices are up by 34.6% y/y
- **Excluding** the 4% pp contribution to the headline CPI from energy & transport, **“remaining” inflation** has accelerating rapidly
- **Housing x energy** (and x lodging) is contributing by 1.7 pp, though partly due to a low base one year ago. Rents as measured in the CPI are up almost 5% y/y, but the upside is probably now limited

Inflation measured 3m/3m: No good news

Prices are up at a 10% pace, and more sectors are reporting high underlying inflation

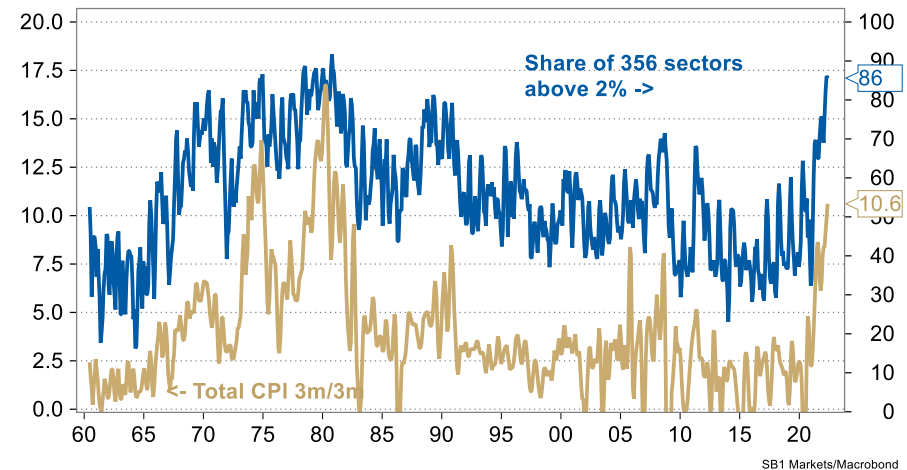
USA CPI (mostly) Core



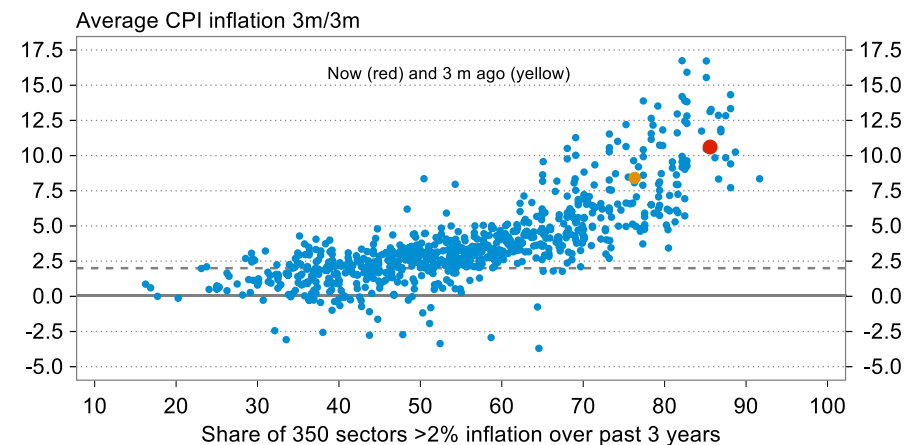
SB1 Markets/Macrobond

- Measured over the past 3m/3m inflation is accelerating in almost all sectors (barring used autos)
- Of 350 sub-sectors, 85% are up more than 2% over the 3m/3m, normally signalling an underlying inflation rate at 10% - where we now are

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

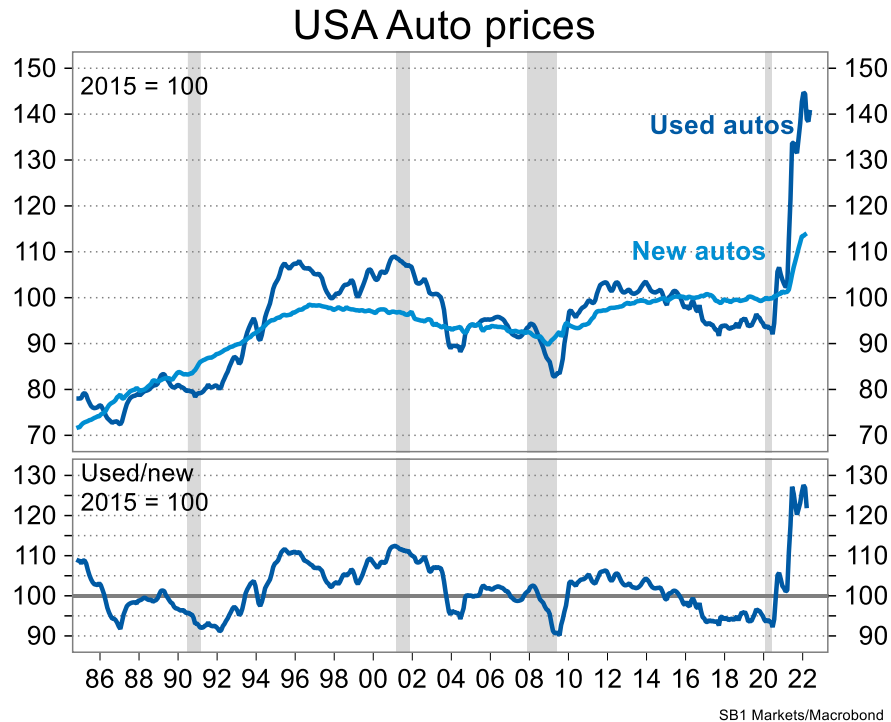


USA CPI inflation & share above 2%



SB1 Markets/Macrobond

Second-hand car prices slightly up in May – but the downside is huge

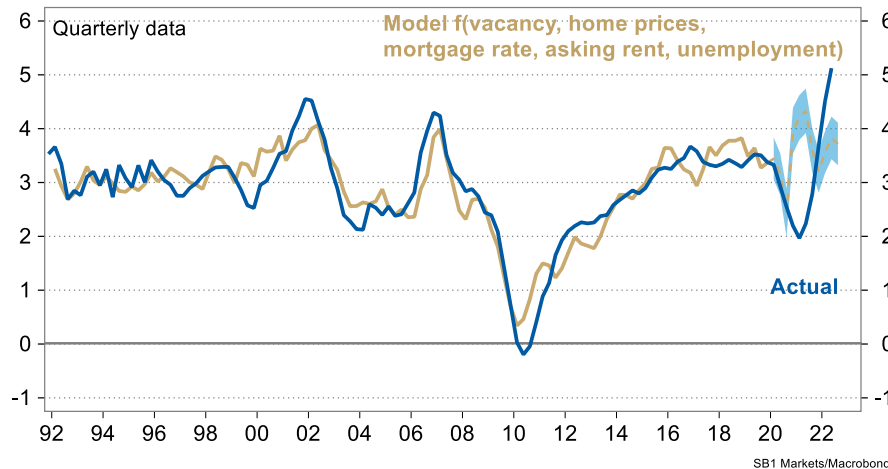


- Production of new cars is still way below demand – but prices are more up in the US than elsewhere
- At one stage, at least used auto prices will 'collapse', down to a normal level vs. new car prices – and there is a substantial downside for new cars as well

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

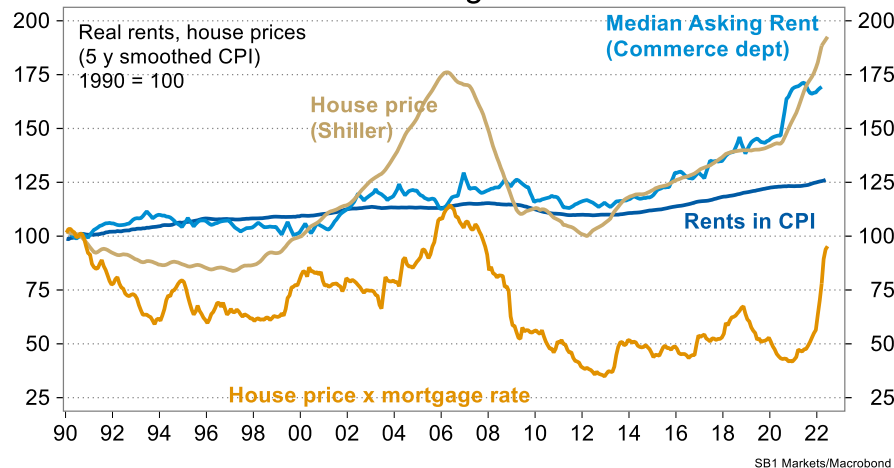
Rents are up 5.1% y/y, but 'just' 3.6% past 2 years. Still rents are climbing rapidly m/m now

US CPI Rent model

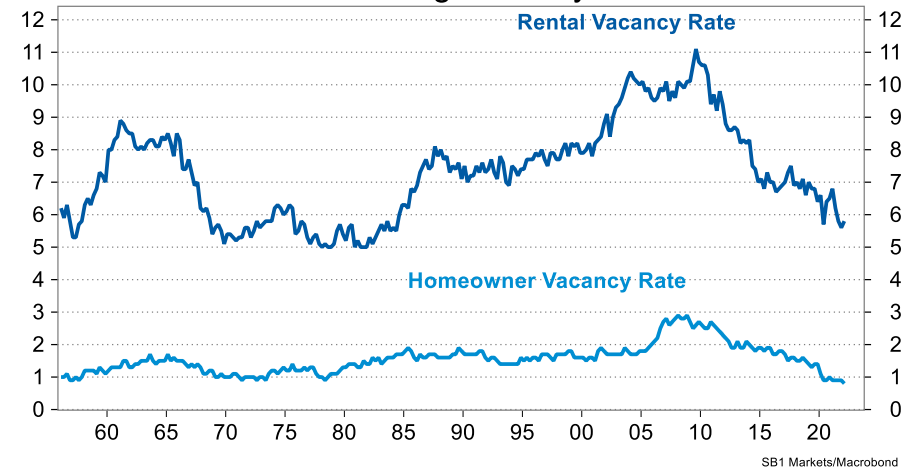


- **The official (Commerce dept) rental asking price** has been reported down since last autumn. Other rental surveys are still reporting higher rents but from a lower level
- **House prices** are up 20%, and the owner cost (price x mortgage rate) is almost doubled
- **The rental vacancy rate** has fallen sharply recent quarters, to ATL. The **homeowner vacancy rate** is trending down, and is at a record low level
- **Rent inflation measured in the CPI** has accelerated to close to 5%, from a base below trend last year. Now, rents are climbing at a 5.5% pace (m/m), and total housing costs (ex energy) contributes 2% to headline inflation!
- **Our model**, when assuming a market slowdown in rental asking price inflation and a gradual decline in existing house price inflation the coming quarters, and a flattening of the 30 y mortgage rate at 30%, signal a decline in rent inflation to below 4%

USA Rents & housing market indicators



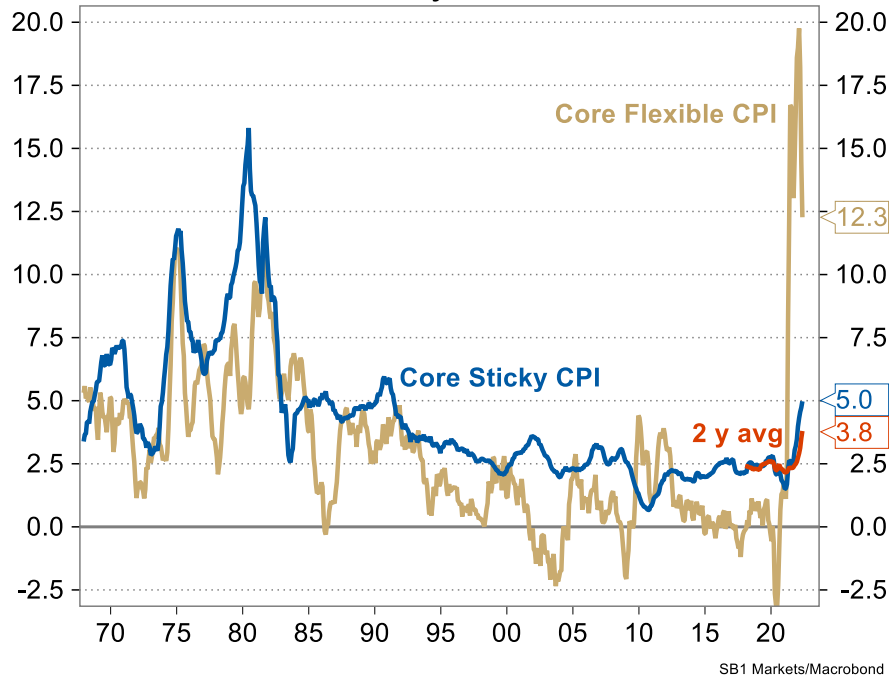
USA Housing vacancy rates



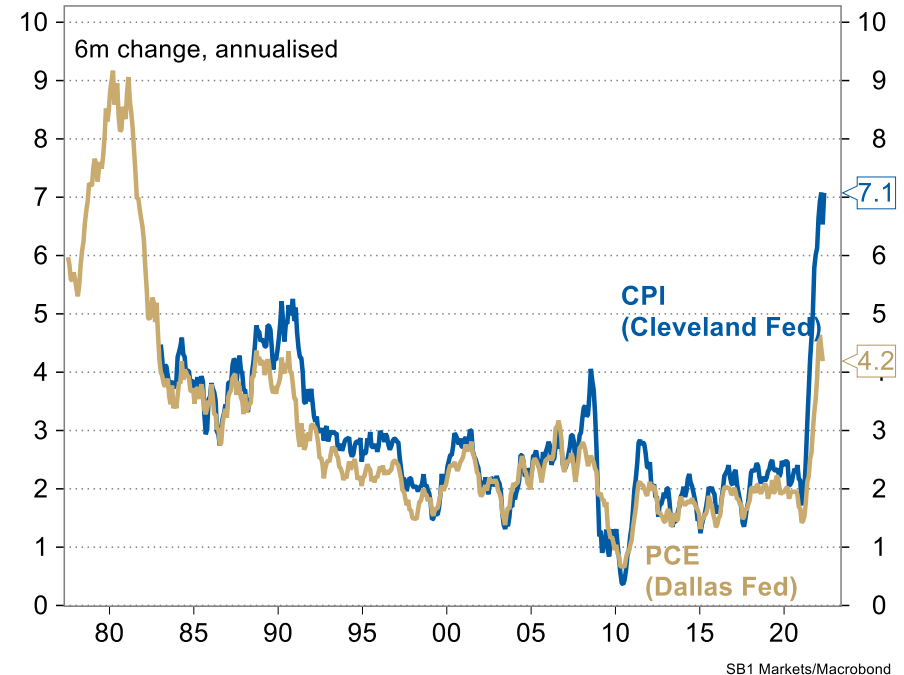
Flexible prices may have peaked but sticky prices still on the way up

... even measured over the past two years. No more excuses left, of course

USA Core sticky vs. flexible CPI



USA Trimmed median CPI, mean PCE

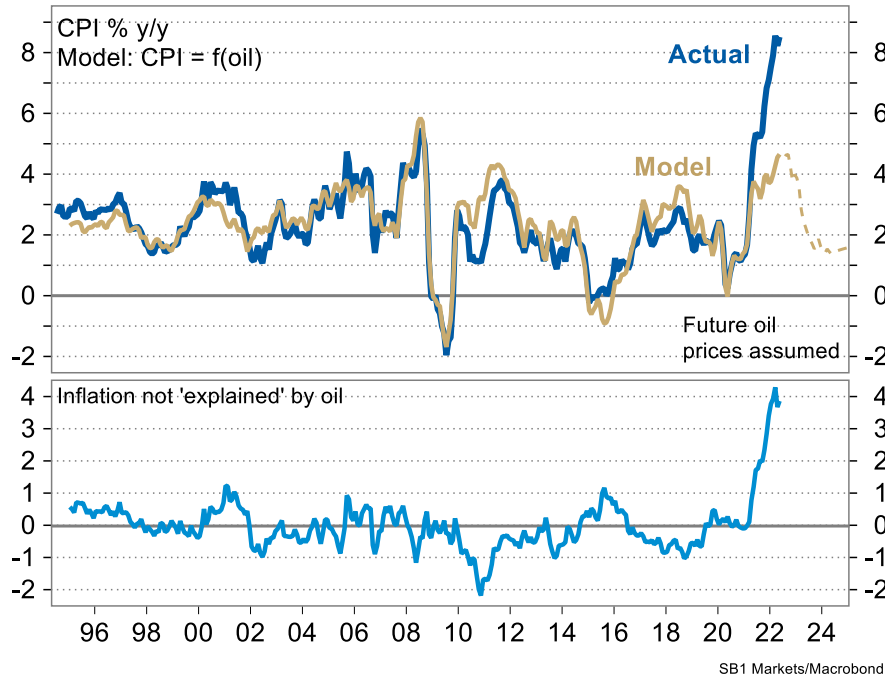


- The Cleveland Fed **trimmed median CPI** is up at a 7.1% pace over the past six months, up from 6.5% in April – and still miles above anything seen before (data from 1983). Dallas Fed's **trimmed mean PCE** was up 4.2% in April, down 0.4 pp from February – but still extremely high
- Almost all of the 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 12% y/y, down from almost 20% at the peak! But still higher than anytime before (was 11% in 1981)
- The new challenge: The **sticky components** (90 % of the core CPI) are up 5.0% y/y, the highest level since 1992 – and even the 2 y avg. is at 3.8%

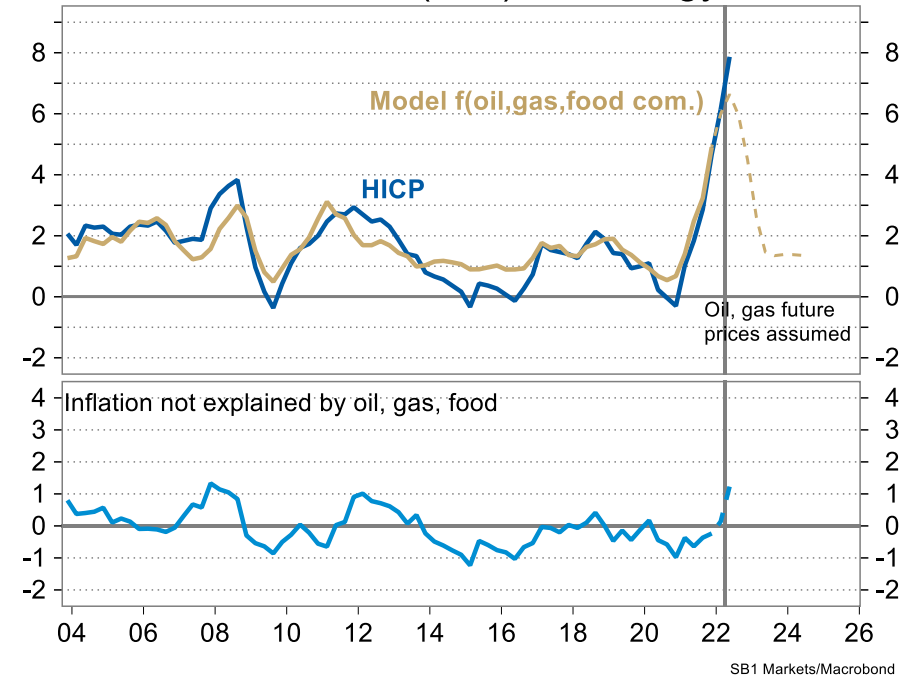
If it just was energy, CPI would have been up 4.5%. Not 8.6%

CPI is up 4 pp more than explained by the oil price, unprecedented. In EMU, 1pp more?

USA CPI vs Oil



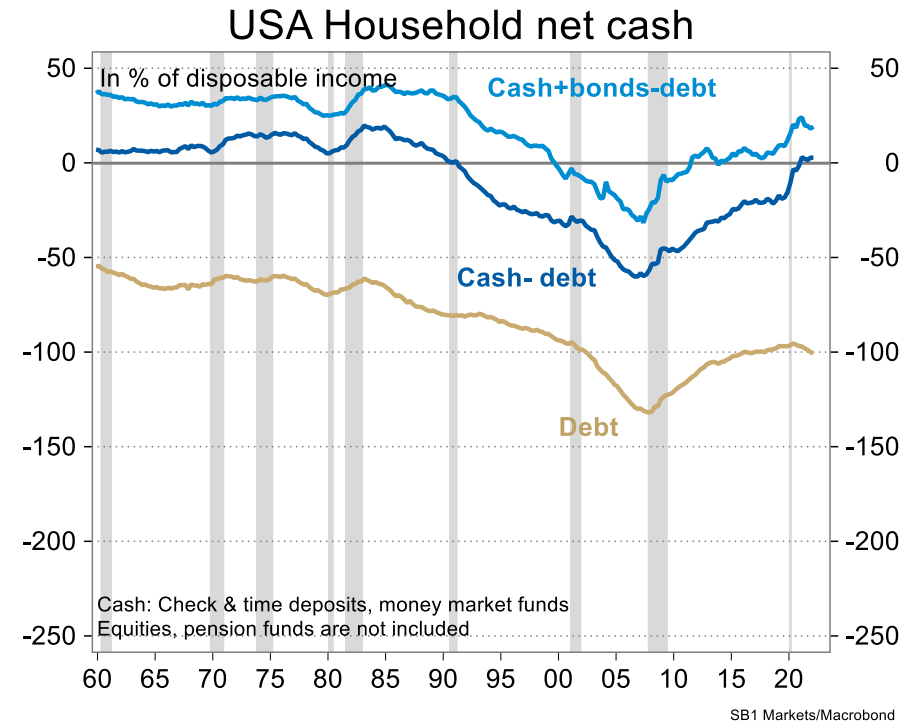
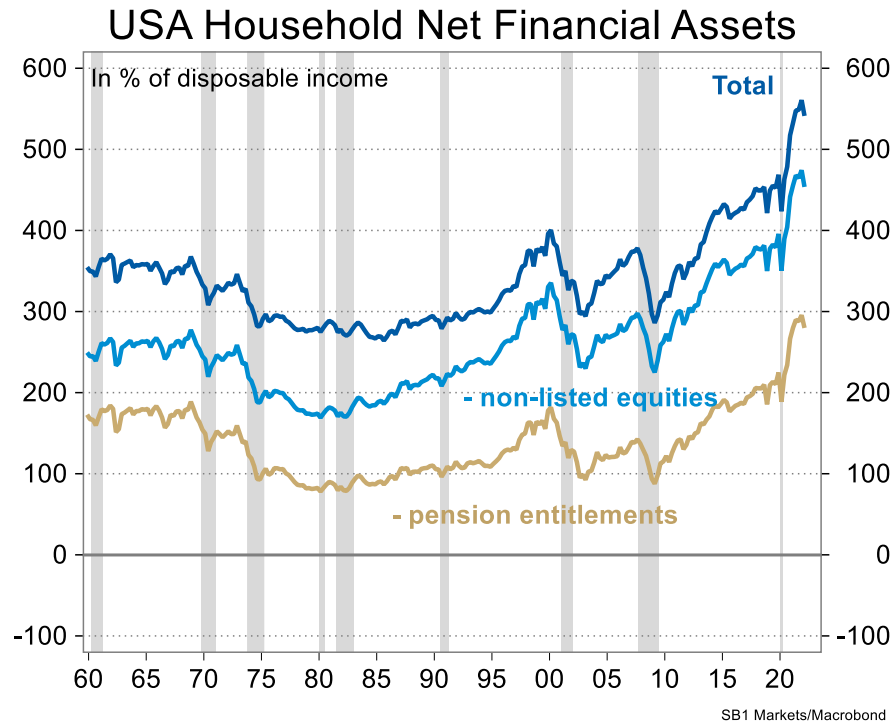
EMU HICP (CPI) vs. energy



- **Oil price cycles** have explained some 80% of the changes in the US CPI growth the past 30 years, which for all practical purposes, is “everything”
 - » In our model we incorporate all direct impacts from changes in the oil price – as well as all the indirect impacts. The current model residual, at almost 4 pp is totally unprecedented
 - » The oil price impact should peak now – and the contribution should decline rapidly, if the oil price declines as signalled by future prices
- **In EMU**, the almost all of the CPI acceleration recent months can be explained by the increase in energy prices – and if oil/natural gas prices follows the future prices, inflation is now close to the peak, and the annual growth rate will return to below 2% in early 2022

Flow of funds: Assets down in Q1 but net cash position better than in 30 years

The debt level fell sharply until 2020 – and it is still low

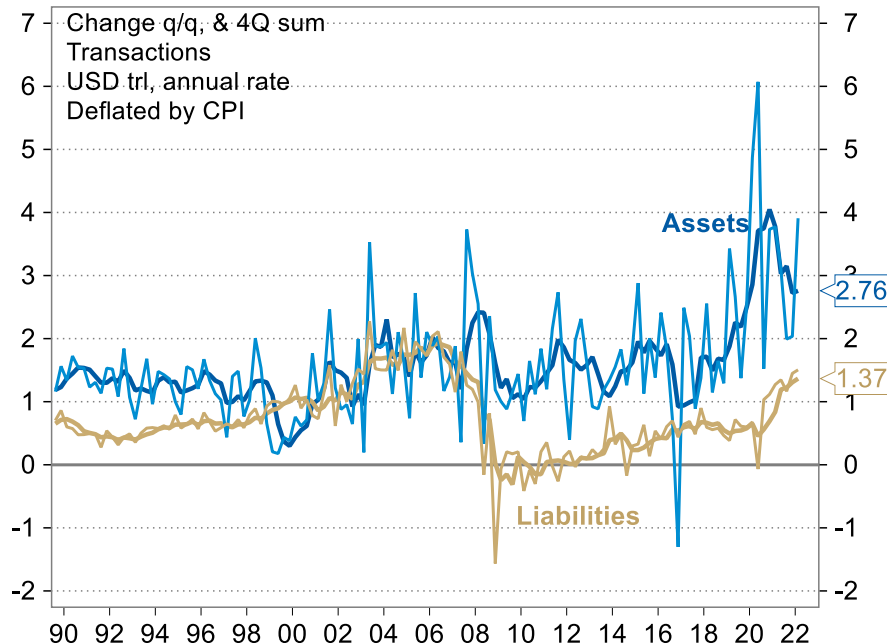


- In aggregate, US households have more in cash in banks/money market funds than their entire debt – for the first time since 1990
- Total assets – debt is at 5.5 x disposable income, and 3 x income after non-listed equities and pension entitlements (that are not liquid)
- The snag: Debt and deposits are not equally distributed...

Flow of funds: Growth in financial assets are slowing, still higher than normal

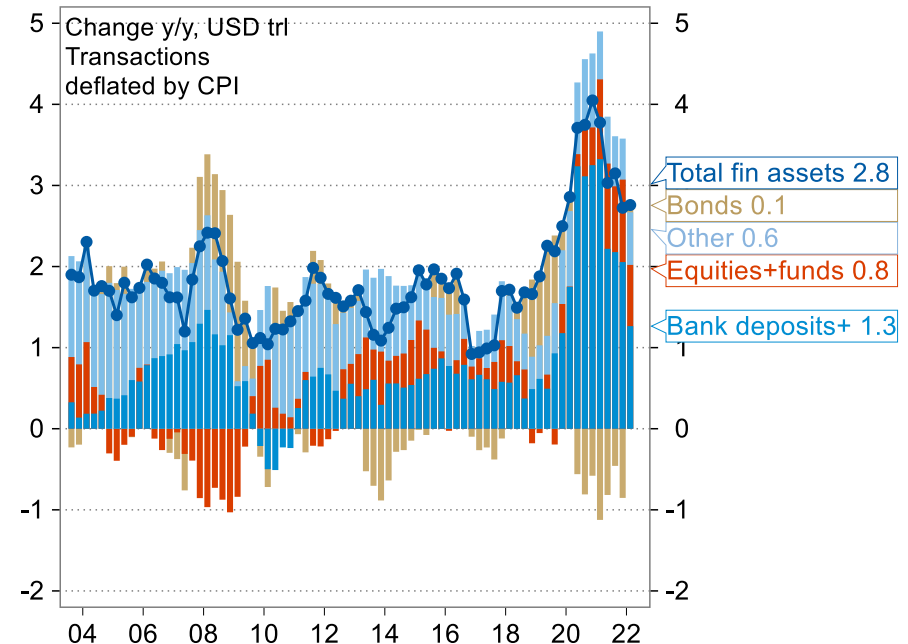
Equity investments have not slowed, but growth in bank deposits have. Debt growth is accelerating

USA Households' assets & liabilities



SB1 Markets/Macrobond

USA Households' assets

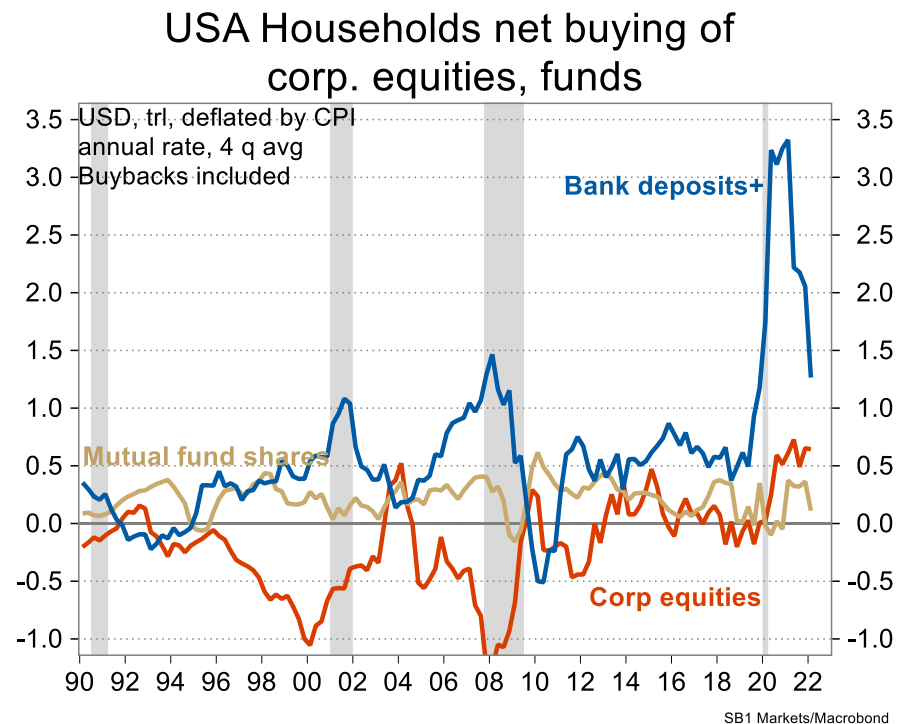


SB1 Markets/Macrobond

- **Households have increased their financial assets through transactions** by USD 2.8 trl over the past year through Q1, twice the 'normal' rate but down from 4 bn in early 2021. During the pandemic, savings exploded. Now the savings rate has fallen to below a normal level
 - » **Households are adding to their bank accounts but far less than during the pandemic**
 - » Over the past 4 quarters, households have bought **equities and fund shares** for USD 0.8 trl (net), a much higher amount than normal
 - » Households stopped cutting back on their **bonds** holdings in Q1, after unusual sales during the pandemic (where bonds were not an alternative)
- Growth in assets is partly supported by a much faster growth in debt (the balance sheet is boosted, check the chart above)

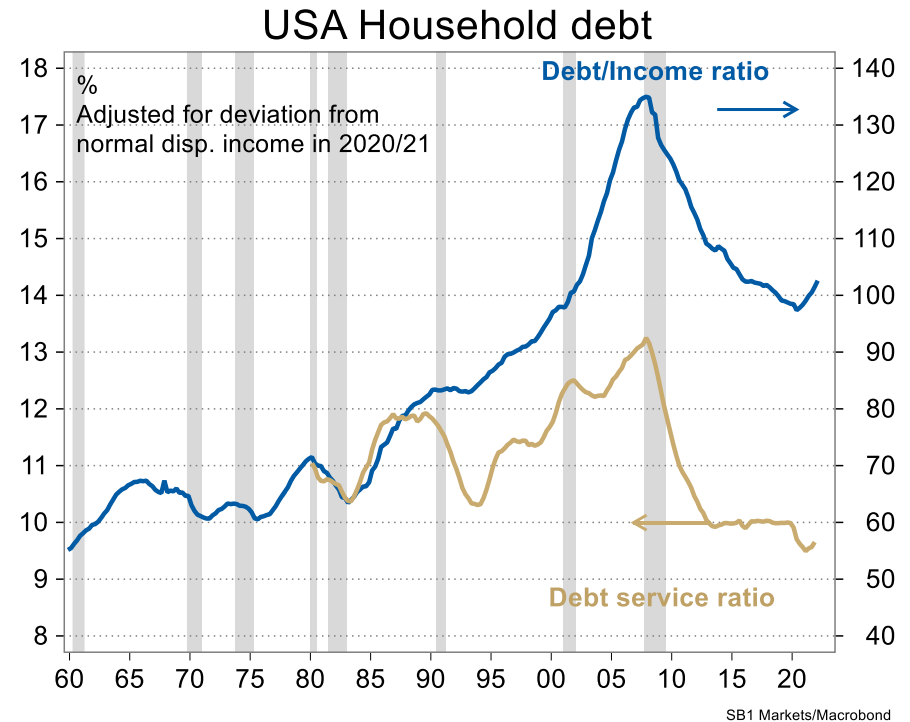
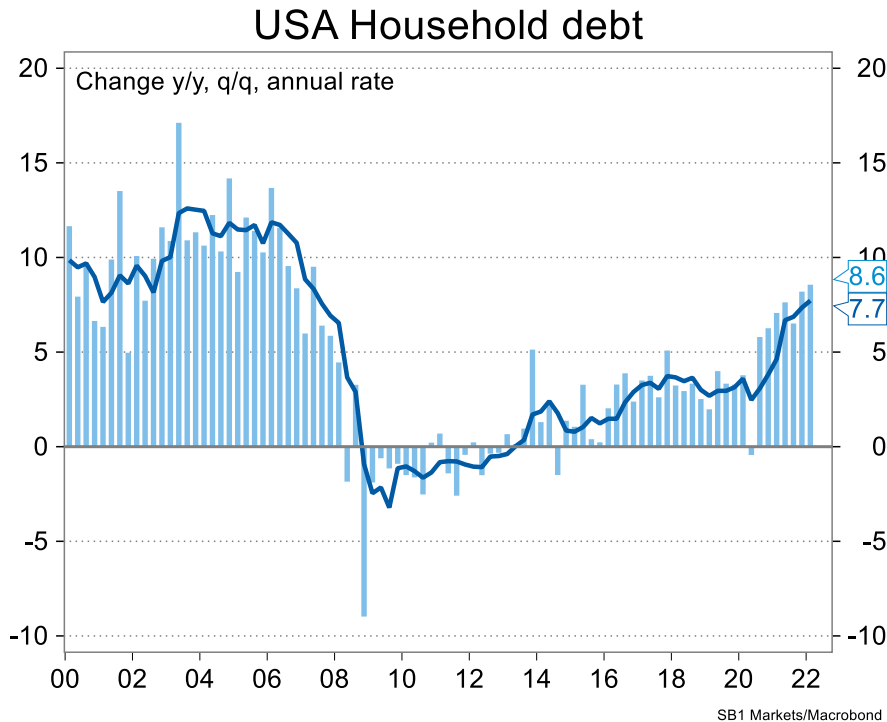
Record high net investments in corporate shares

And more inflow to mutual funds than normal (the inflow slowed in Q1)



So low rates do have an impact? Household credit growth has accelerated

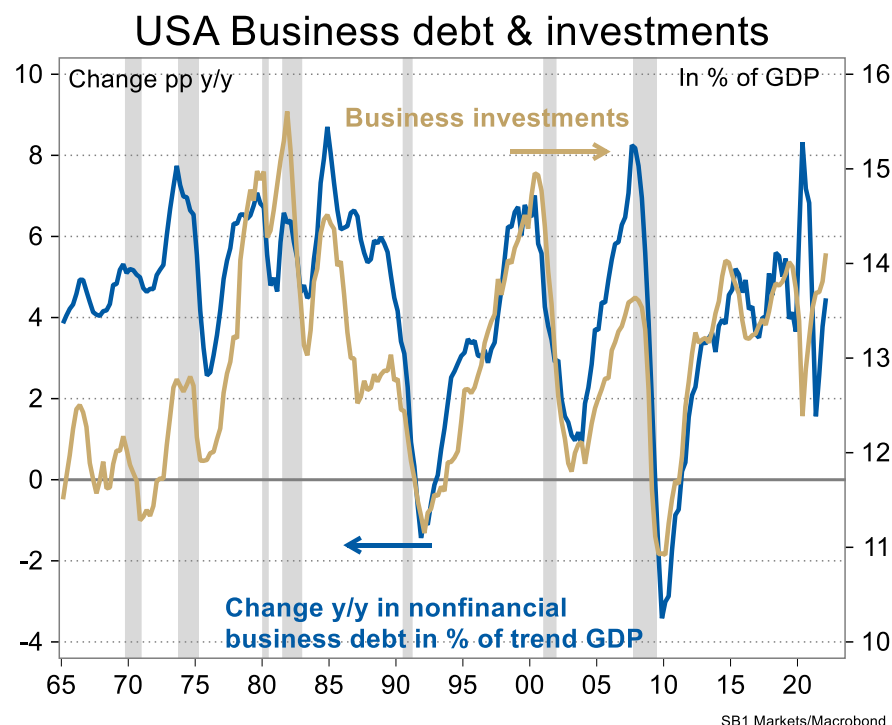
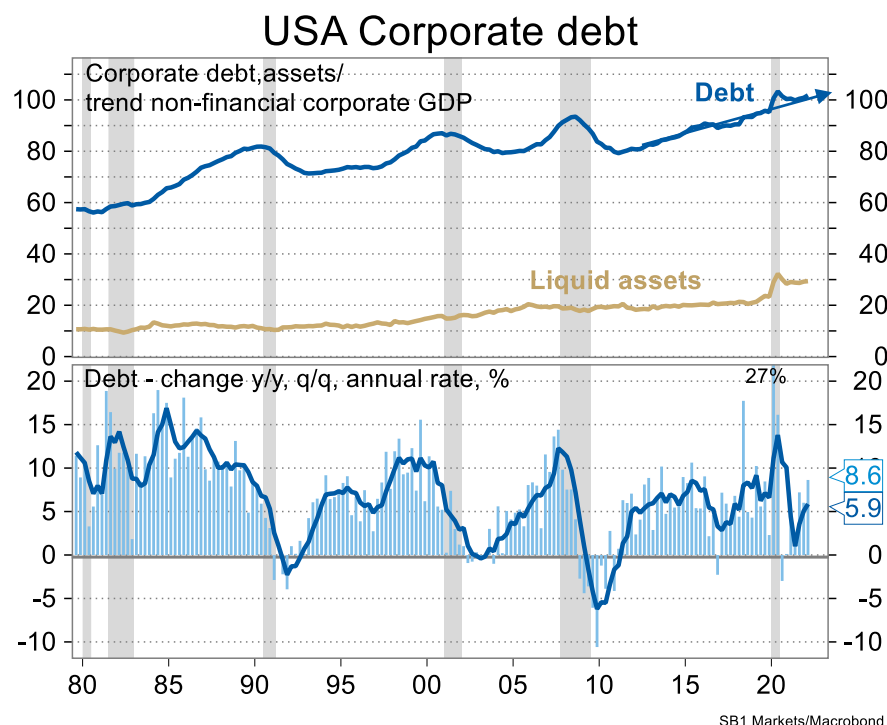
The debt/income ratio is growing again, though from far below the pre-financial crisis level



- Households have reduced their debt burden in an unprecedented way past 12 years – until 2020
- From Q2-20, growth in household debt has outpaced income growth (adjusted for the income impact of the pandemic/pandemic measures)
- In Q1-22, debt grew at a 8.6% pace, the highest growth rate since 2007. In the years before the financial crisis, debt grew by some 12% per year over several years (2003 – 2006). Debt/income ratio rose from a level equal to the current level, 100%, to 135% of disposable income. And then the bubble burst
 - The more than a decade long consolidation period from 2007 has been the toughest ever. It almost killed the economy, when credit demand (and supply) collapsed in 2008
 - Now, the deb/income ratio is at decent level – no reason to worry. (Norwegian households entertain a debt to income ratio that is > 2.5 times higher)
- The debt/income debt service ratio is record low, as interest rates have been low for a long time. In Q1 and Q2, we expect the average interest rate to increase somewhat – and the debt service ratio to increase. But the difference between now and 2007 is incredible, check the chart!

Corporate debt growth not that worrisome?

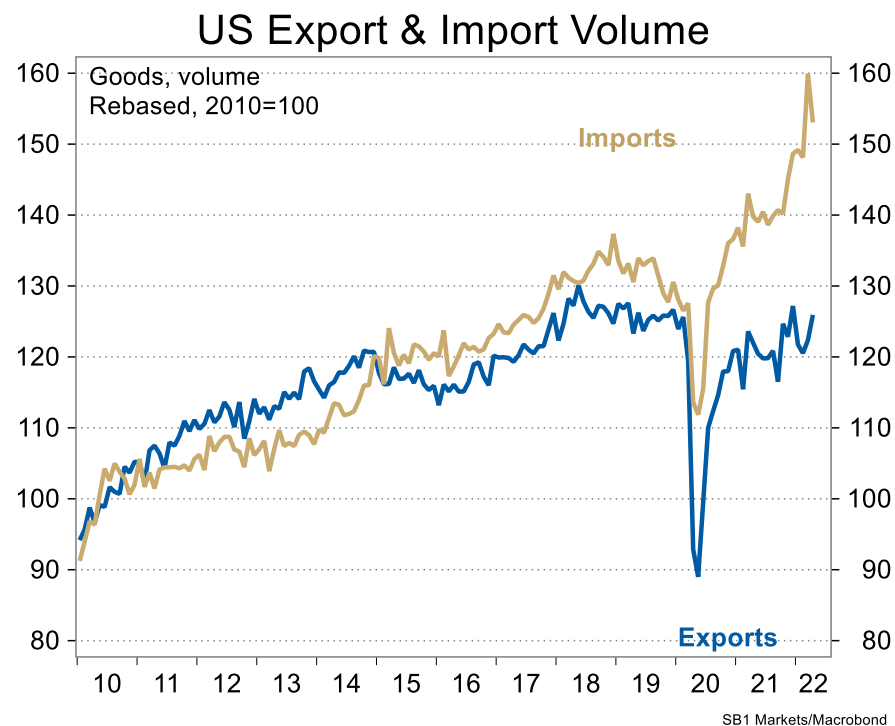
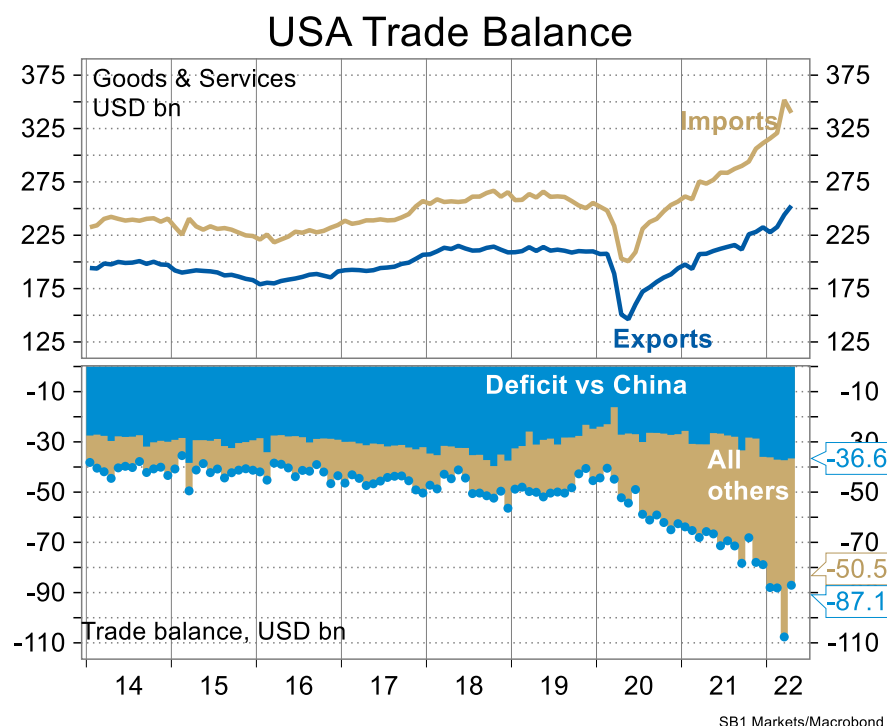
However, the debt level is high – but so is the level of liquid assets too 😊



- Corporate debt rose 8.6% (annualised) in Q1. Measured y/y, debt is up by 5.9%, a 'normal' level. The corp debt/GDP ratio is close to the long-term trend. Barring the super-high borrowing in 2020, this ratio is at a record high level
- On the other hand, companies have also increased their liquid assets sharply since before the pandemic, to the highest level ever
- In sum: Companies still have some capacity to further lift their investments – even if the profit cycle turns south

The trade deficit back down to a 'normal' level in April, less Chinese goods arrived

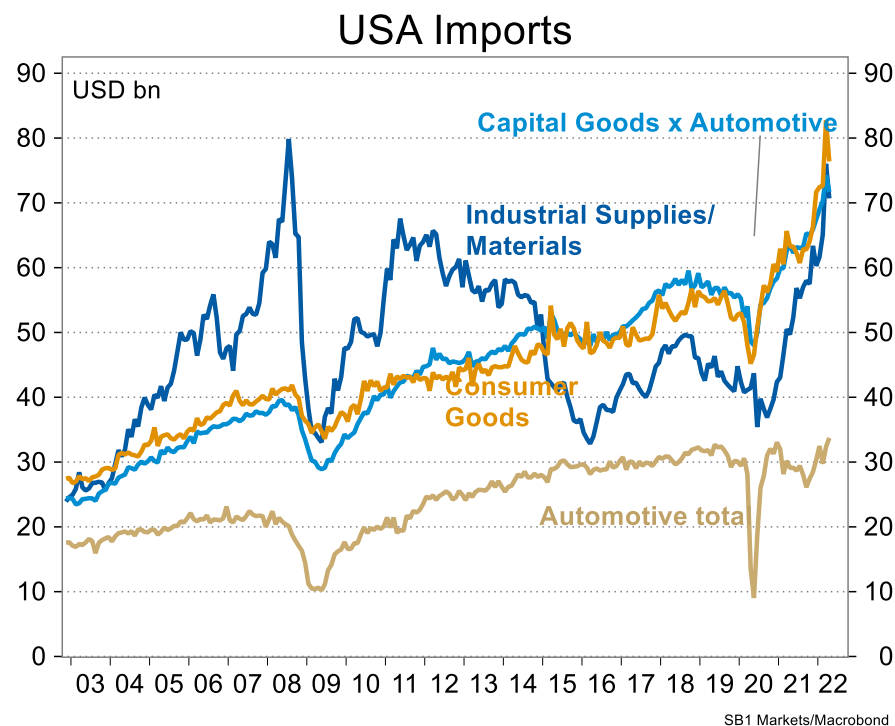
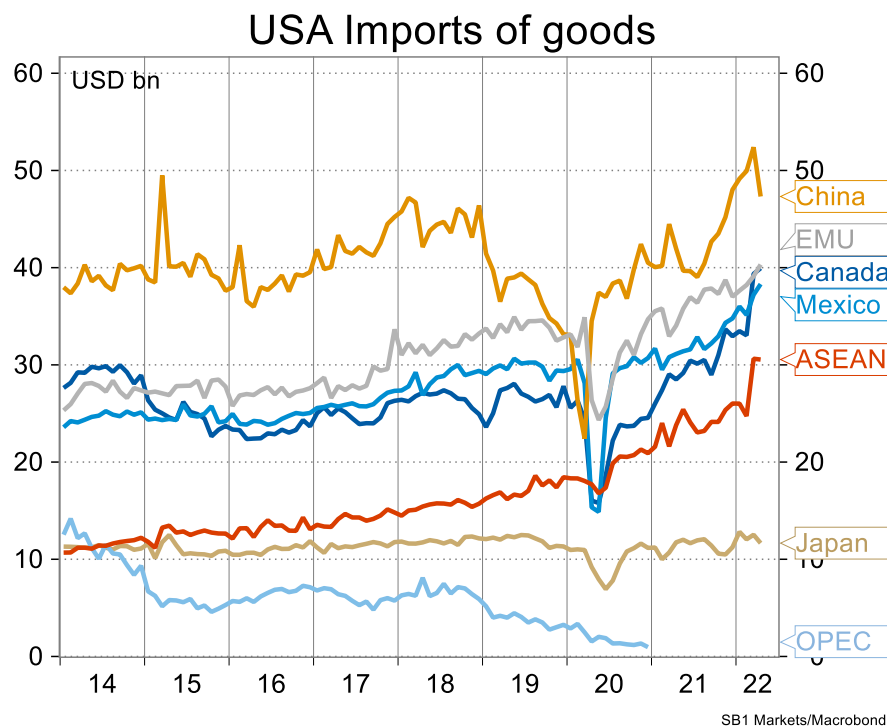
Import volumes are still very high – and exports are not impressing



- **Imports** fell by 3% in April, following the 10% surge in March, and are 36% above the pre-pandemic level! In volume terms (and just for goods), the decline in May was a tad larger than in volume terms and the volume is just up 20% vs Feb-20! Demand for goods has been strong during the pandemic, driving imports – even if auto imports have been low. We expect US households' demand for goods to slow the coming quarters, from the present very high level – dampening demand for imports too
- **Exports** rose 3% m/m in April, and the level is up just above 20% vs Feb-20. In volume terms exports for goods are just back to the pre-pandemic level – but may now be trending upwards
- **The trade deficit** shrank to USD 87 bn, from 108 bn in March, close to expectations – and back to the same level as before the March spike. However, at 4.4% of GDP, the deficit is of course still HUGE

Lower imports from China, probably due to the lockdowns

No weakness from other exporting countries



Imports from regions:

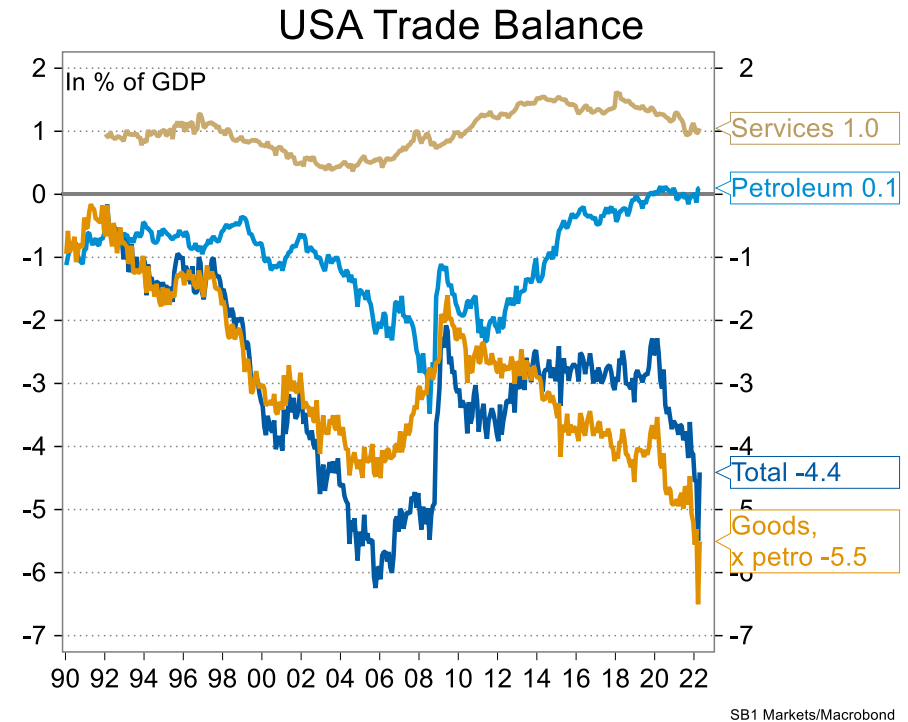
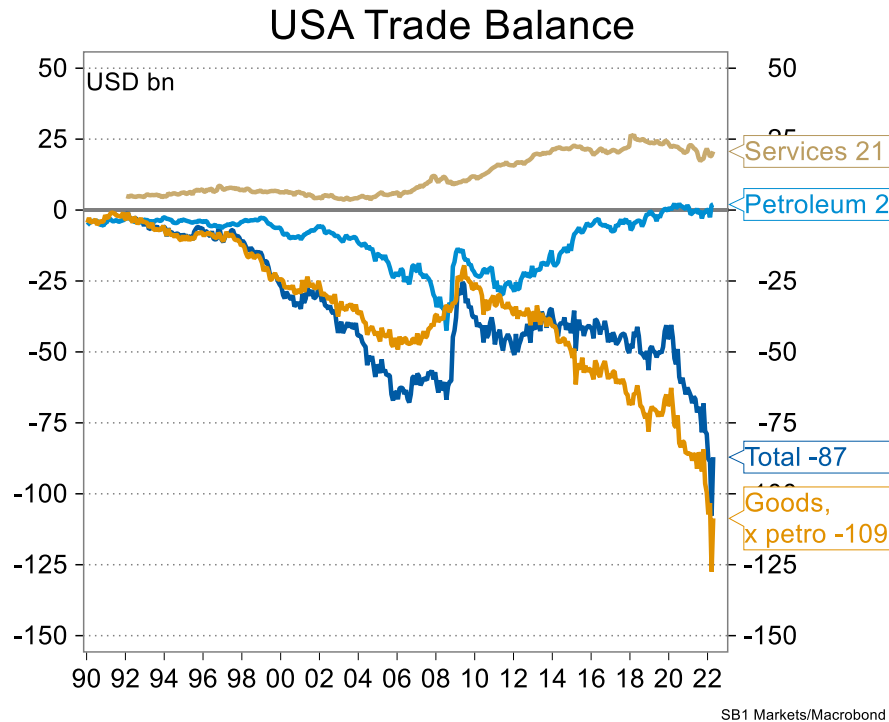
- » Imports from China fell from ATH, but Chinese export data signal higher imports from China in May/June
- » Imports from ASEAN (the minor Asians) are trending sharply up – as are imports from Canada – and both spiked in March
- » Imports from the EMU has been growing rapidly during the pandemic, and are still trending rapidly upwards

Imports by type of goods:

- » Consumer goods imports are surging, but so is imports of capital goods (up >40% vs the pre-pandemic level, and industrial supplies are up more than 80% (all figures in value terms))

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

Surplus in services keeps narrowing

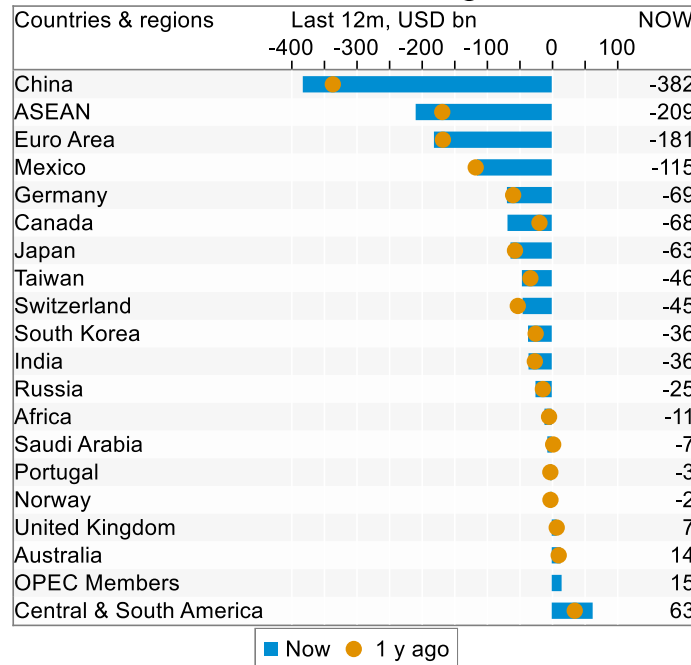


- The **total trade deficit** at USD 87 bn equals 4.4% of GDP. The deficit has widened from 2.5% in early 2020 – as domestic demand has been stronger in the US than abroad
- The US runs a **surplus** in services at USD 21 bn, equalling 1.0% of GDP, but this surplus is trending down (and the downturn started well before Covid)

The deficit vs. China is widening rapidly again, to ATH

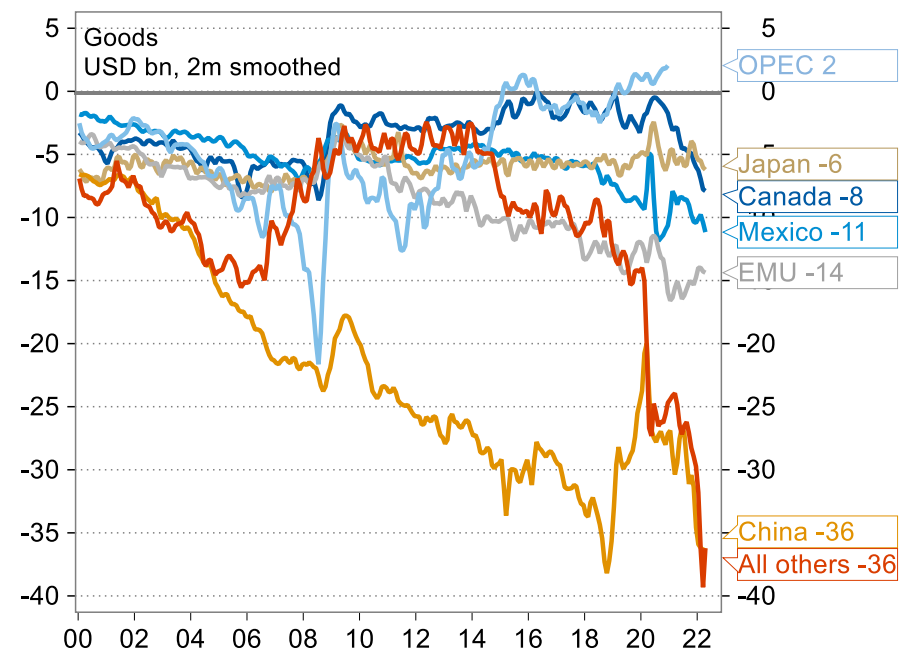
The deficit is increasing in most directions

USA Trade deficit goods



SB1 Markets/Macrobond

USA Trade deficit

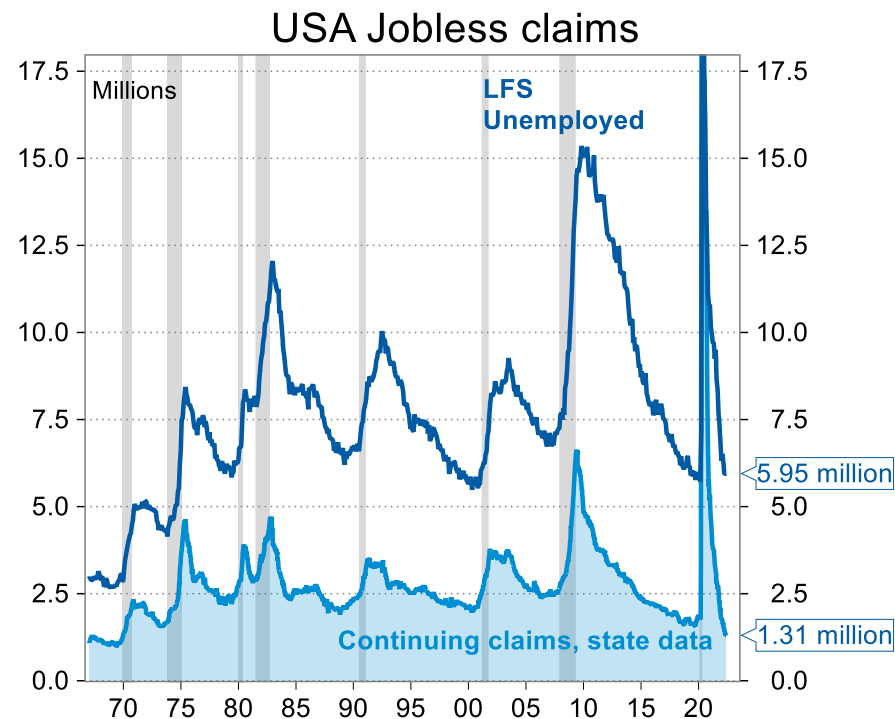
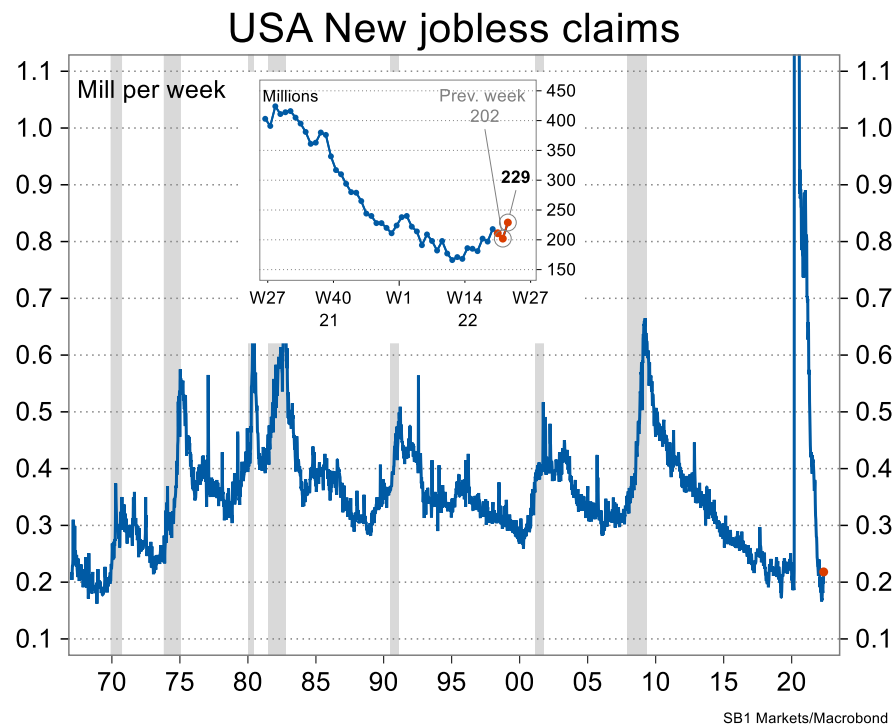


SB1 Markets/Macrobond

- The US deficit in goods (no services in these country stats) vs China equals more than 43% of the total deficit in goods, still lower than before the trade war started
- The deficit vs EMU has flattened during the pandemic – at a record high level
- The balance vs 'others' rose sharply in 2020

Jobless claims is trending upwards, the bottom was in mid-March

The increase is not yet 'recession-like' but still visible



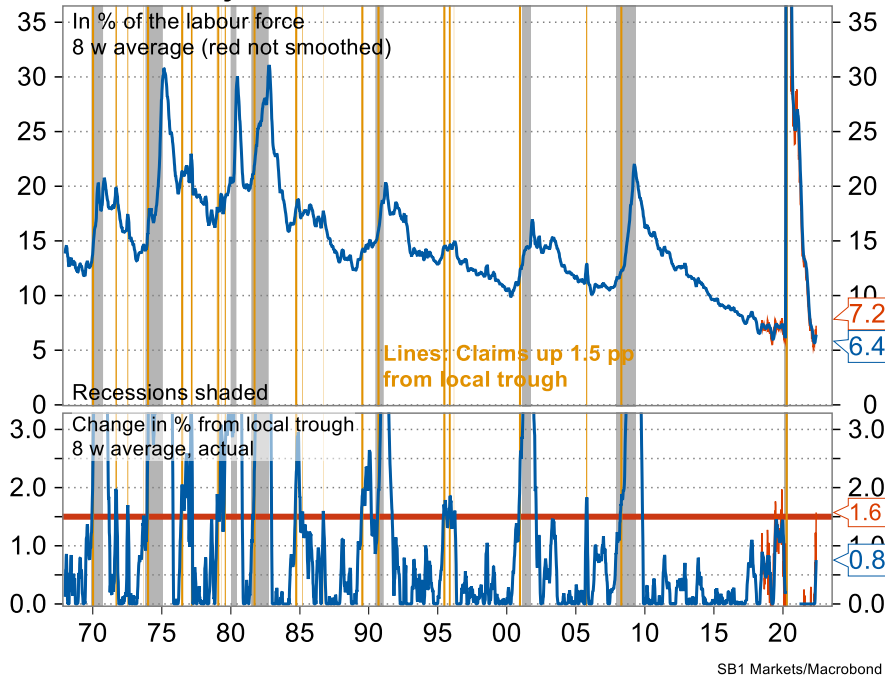
- **New jobless claims** rose by 27' in week 22 to 229'. Since the bottom in week 11 in mid-March, the inflow has increased by 63', from 166' – which was the lowest since 1969
- **Ordinary continuing claims** was unch. at 1.31 mill in week 21, at the lowest level since 1969

When a recession hits, jobless claims have been on the way up for a while

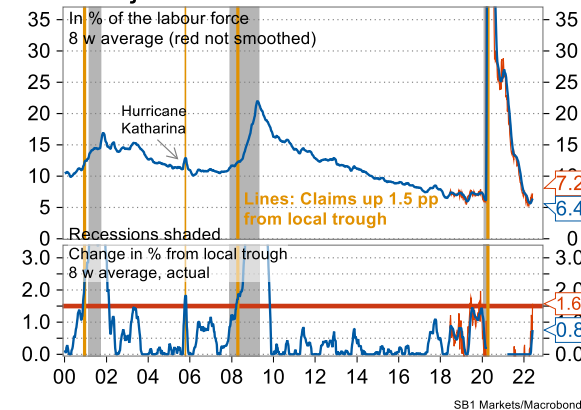
The change in the 8-week average is still too small to suggest a recession

- But the margin is shrinking

New jobless claims vs. recessions



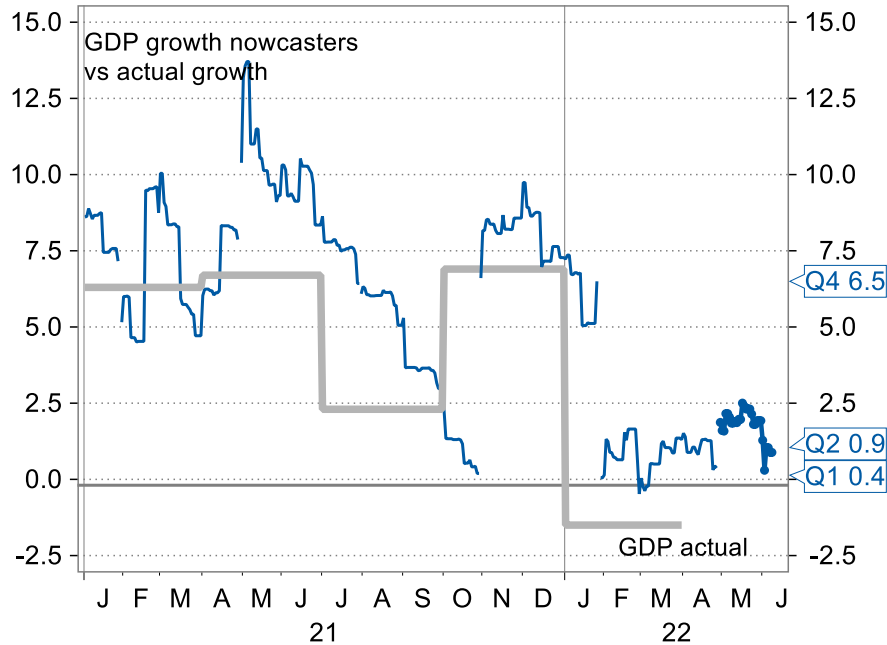
New jobless claims vs. recessions



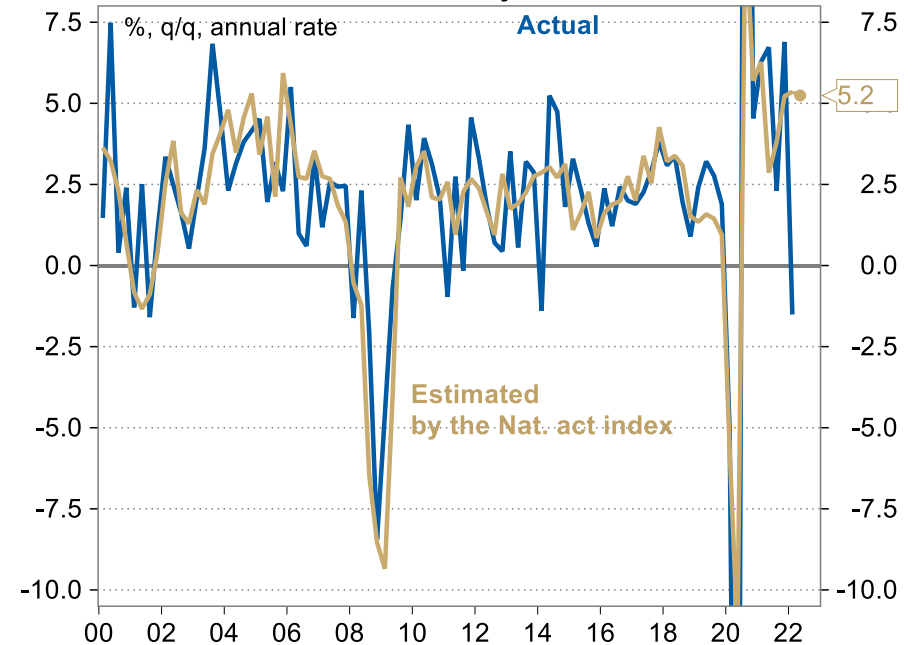
Atlanta Fed's nowcaster suggests just 1.3 % growth in Q2

However, the National Activity Index signals far higher growth – a 5% pace!

USA Atlanta Fed GDP nowcasts



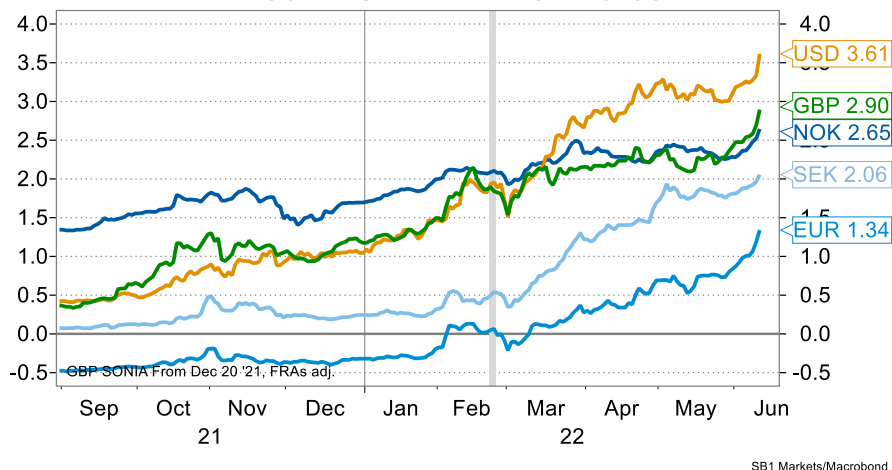
USA National activity index vs GDP



The ECB confirmed that it is ready – and is even more hawkish than expected

The main reason for not hiking by 50 bps in July was that a 25 bps hike has already been signalled

Dec 22 3m FRA IBOR rates



Policy decisions

- » ECB left the **repo signal rate** unch. at -0.5%
- » The two **asset purchase programs** will end net buying of bonds now. The principal from maturing bonds will be reinvested in full as long as needed, and for one of the these programs until end of 2024. (In the US, the Federal Reserve will not reinvest such proceeds, and the stock of bonds will be reduced)

Policy signal

- » The ECB pre-announced a 25 bp hike at the late July meeting but for the September meeting signal rates may be hiked by 50 bps. The 2024 inflation forecast will decide. At the press conference Lagarde sounded really hawkish, and prepared to hike as much as needed to bring inflation down

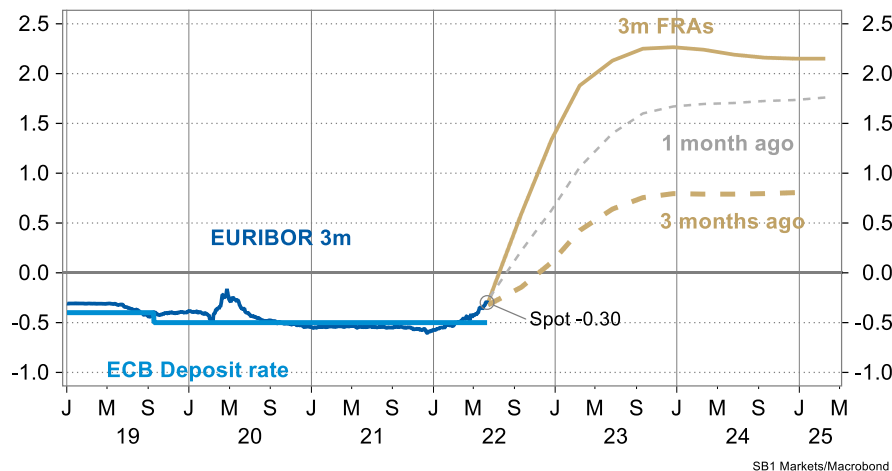
Even higher inflation, lower growth

- » The Bank revised up its inflation forecasts sharply vs. the March review. This year's forecast is lifted to 6.8% (from 5.1%), and then a decline to 3.5% (2.1%) in 2023 (from 2.1%), and to 2.1% (1.9) in 2024, as energy prices are assumed to moderate and supply chain problems to ease, and higher rates to dampen growth and inflation.
- » Growth forecasts are still rather optimistic, 2.8% in 2022 from 3.7%, then 2.1% (2.8%) next year and 2.1% (1.9%) in 2024

The market: A more hawkish ECB than expected

- » Money market rates rose by 12 bps (Dec 22 3 m FRA) Thursday – but even more Friday. The market expects the ECB to hike by at least 150 bps before end of 2022. We think this is rather aggressive (but we have been to dovish on the way up!)
- » The 10 y German bund yield rose just 3 bps, but ended the week up 14 bps to 1.39%, another cycle high
- » The EUR fell sharply on Friday, or rather the USD rose sharply on higher rate expectations there after the CPI report

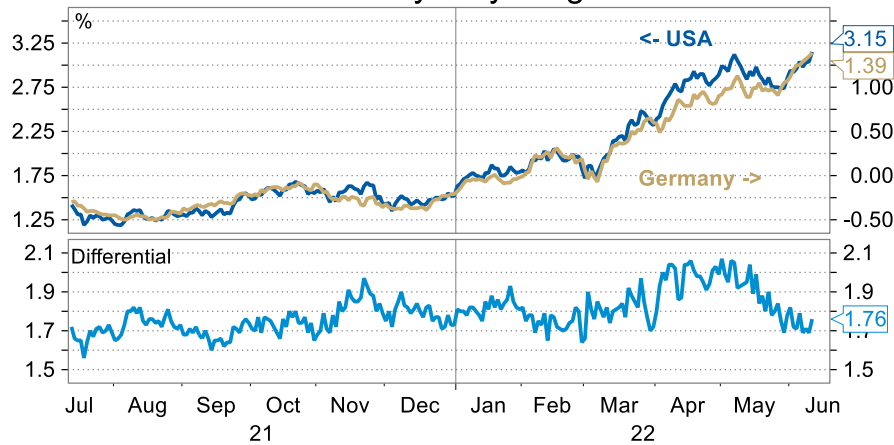
EURIBOR FRAs



German yields rather tightly correlated to US yields

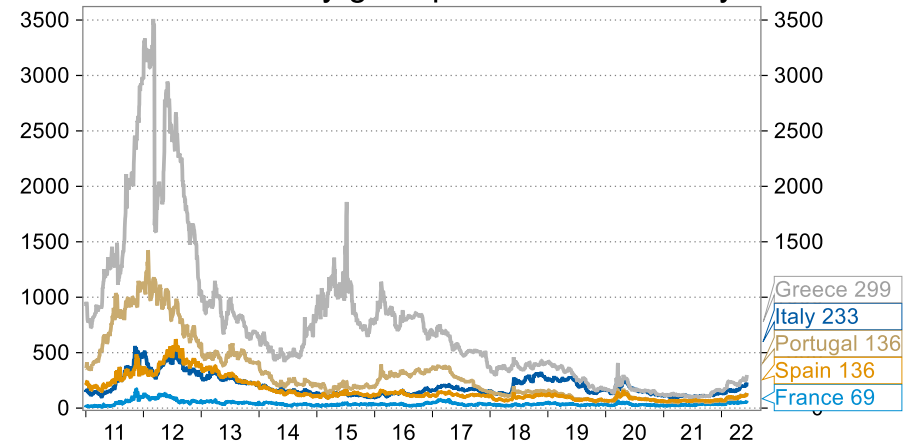
However, spreads are widening vs the periphery within the EMU, as the QE program fade out

US & Germany 10 year gov bond



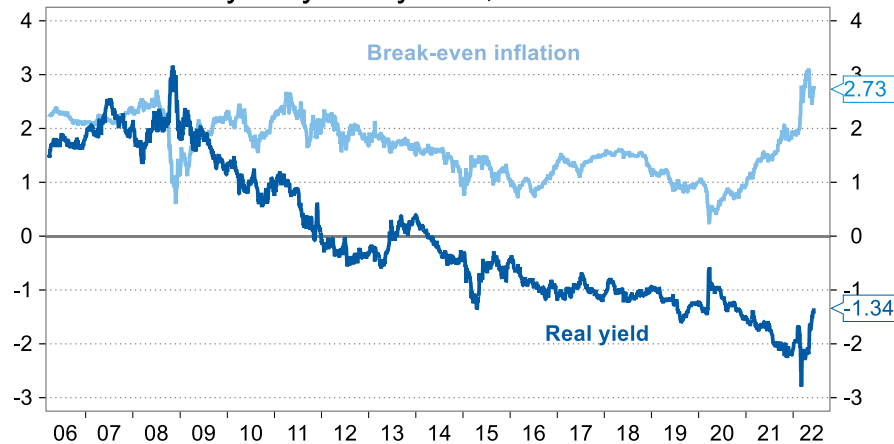
SB1 Markets/Macrobond

EMU 10 y gov spreads vs Germany



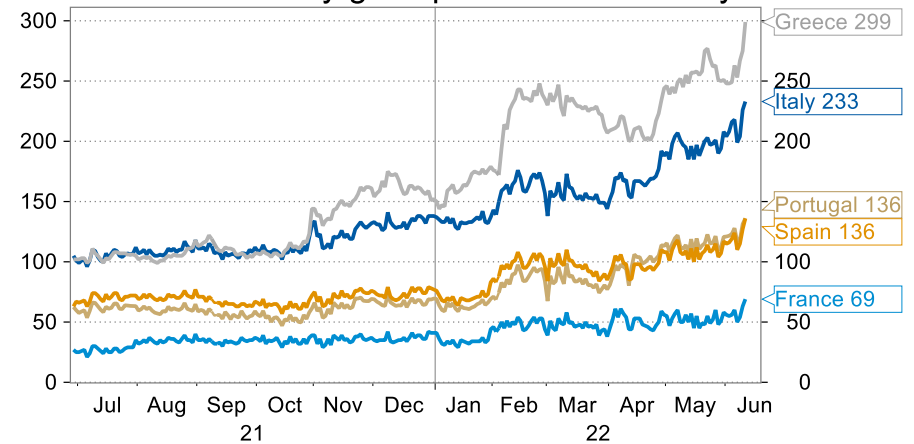
SB1 Markets/Macrobond

Germany 10 y real yields, break-even inflation



SB1 Markets/Macrobond

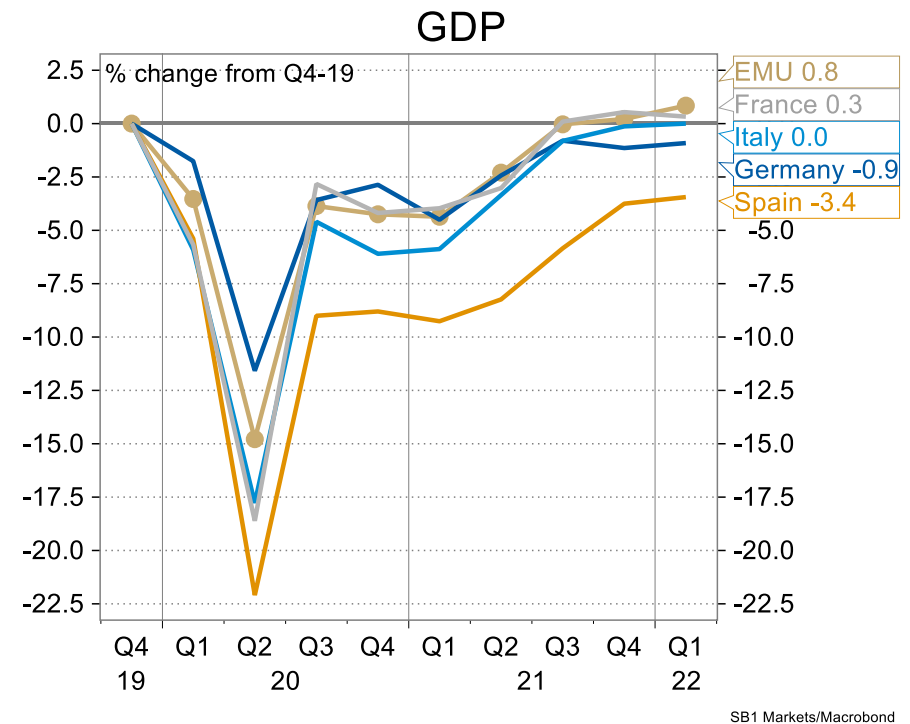
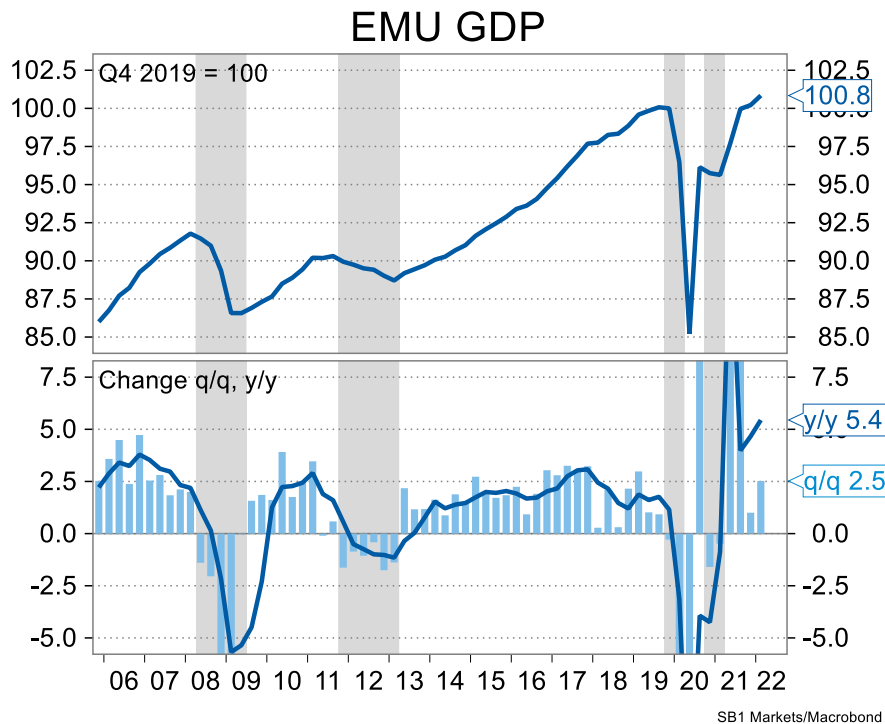
EMU 10 y gov spreads vs Germany



SB1 Markets/Macrobond

GDP up 2.5% in Q1 (0.6% not annualised), level 0.8% above the pre-Covid level

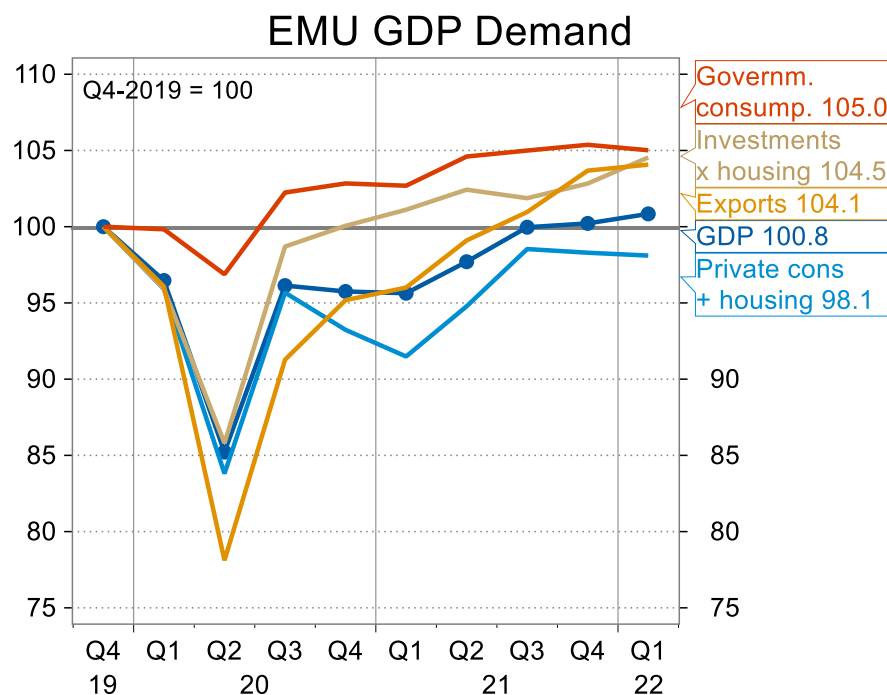
France down 0.1%, Italy -0.2%. However, Germany & Spain grew slightly, as did others, even more



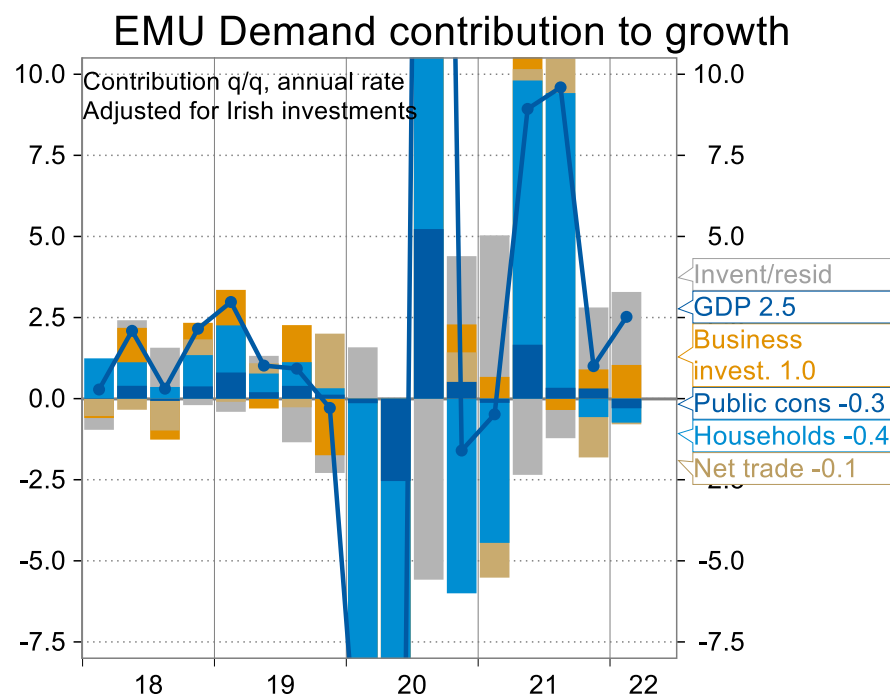
- Several smaller countries have reported better growth data than the Big 4
- Spain at the bottom, still 3.4% below Q4-19, as tourism had not yet fully recovered in Q1. Guess Q3 will be far better

Households took a break in Q4 & Q1, other demand components strengthened

Inventories have contributed more than we appreciate in Q4 and Q1



SB1 Markets/Macrobond

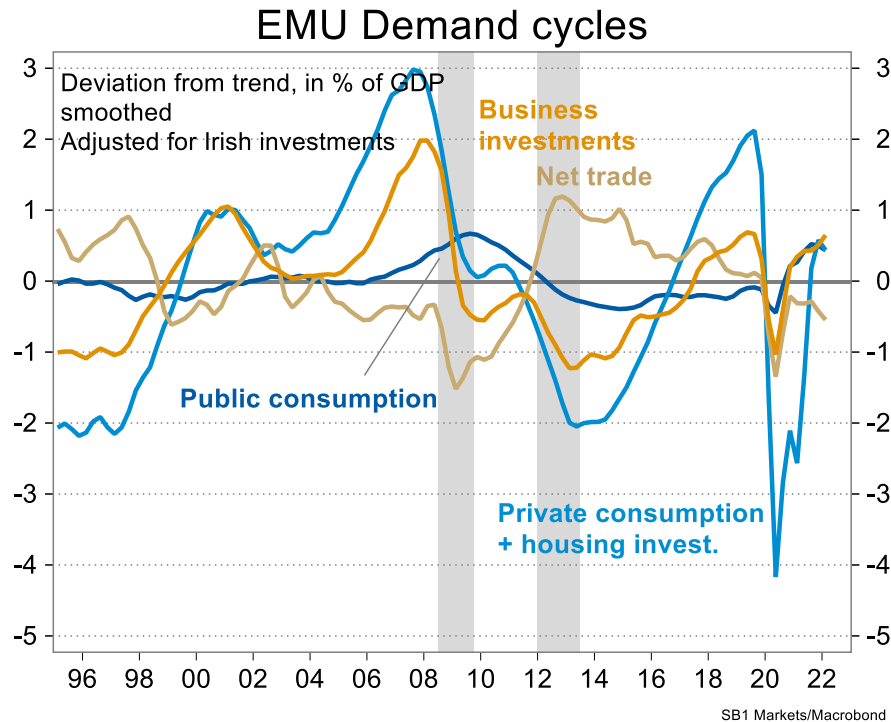


SB1 Markets/Macrobond

- Household demand may be exposed in Q2 as well, due to very high inflation and a steep decline in real disposable income as wage inflation remains muted in the EMU (last obs. at less than 2% y/y)

Household demand back on track. Net trade is slowing

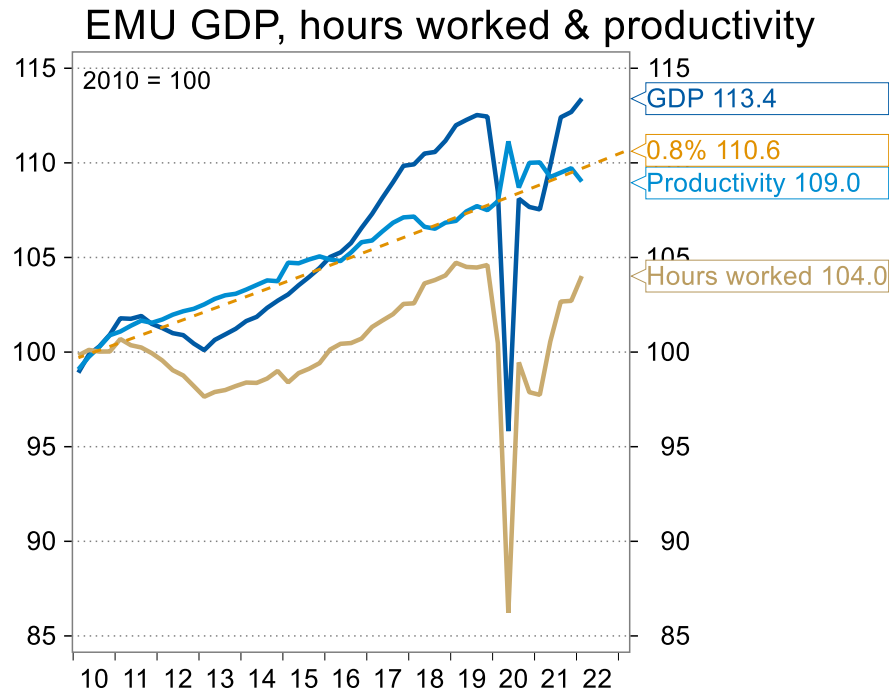
... as imports are growing faster than exports



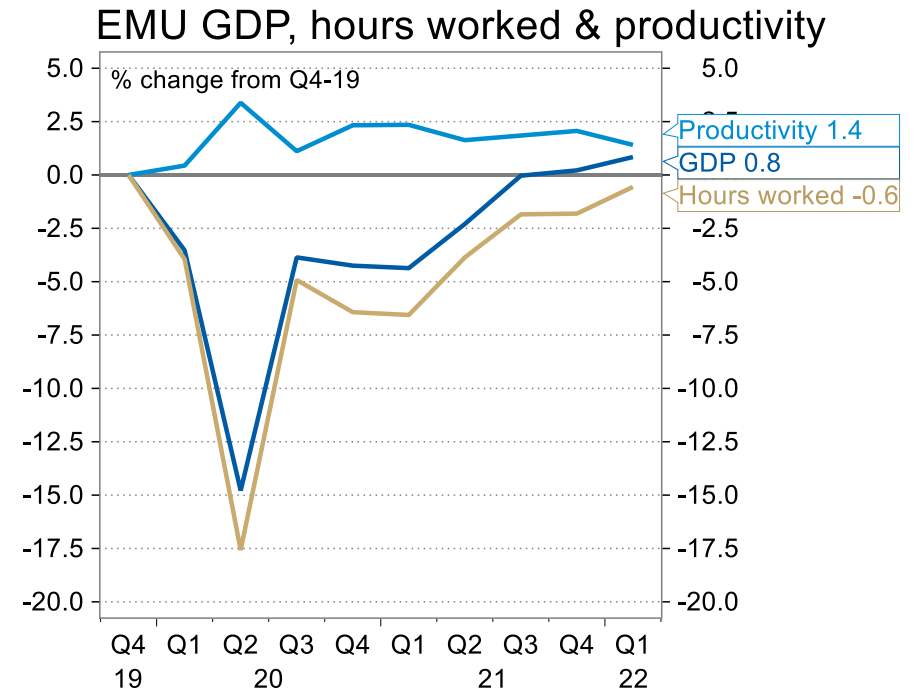
- Probably still an upside potential for **household demand**, as savings have been higher than normal during the pandemic
- **Business investments** are above the long term trend

Slow productivity growth as hours worked return to normal

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

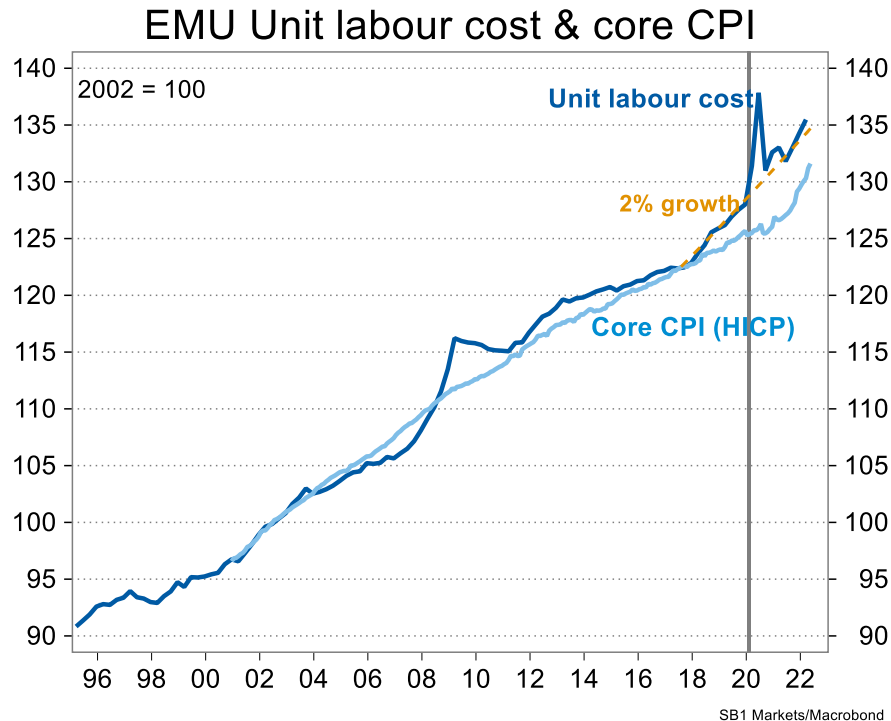


SB1 Markets/Macrobond



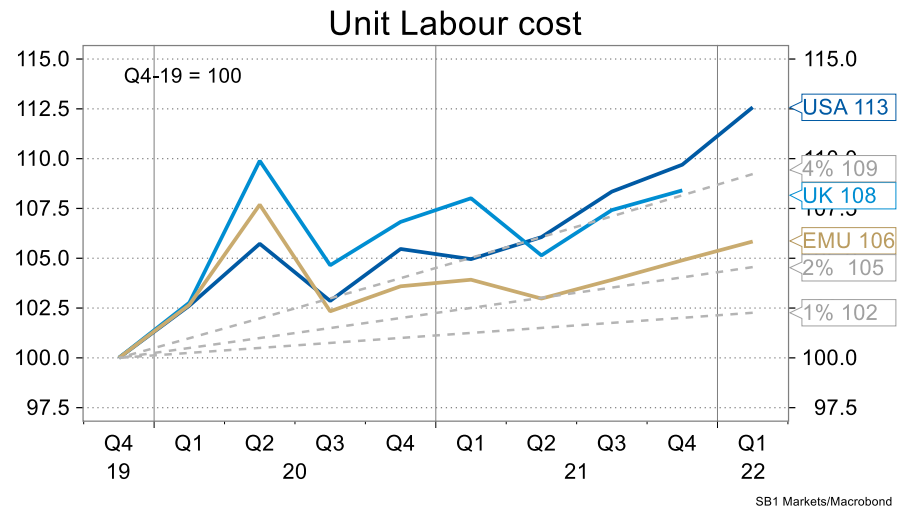
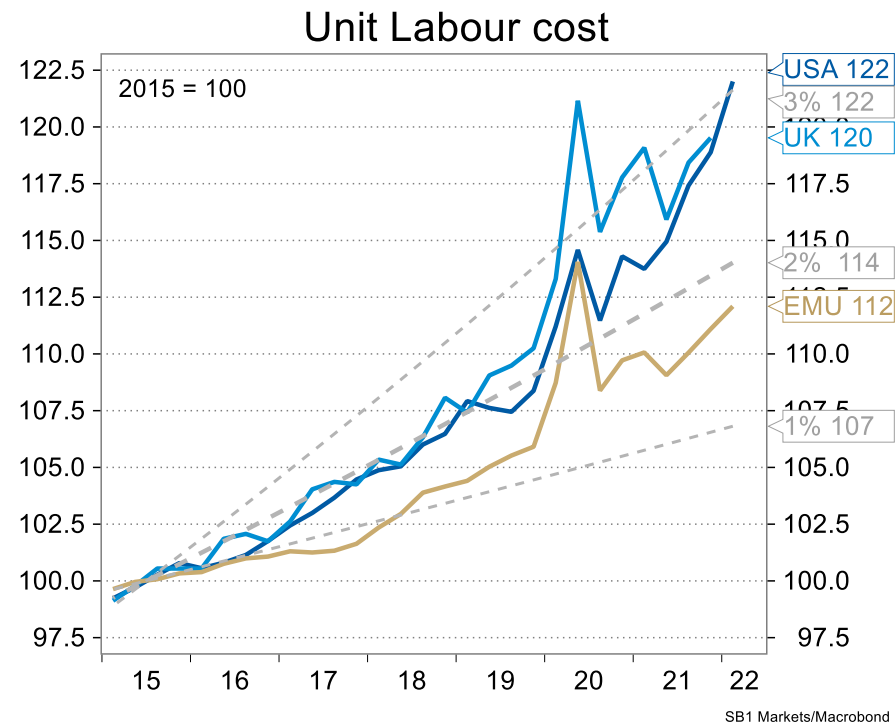
SB1 Markets/Macrobond

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



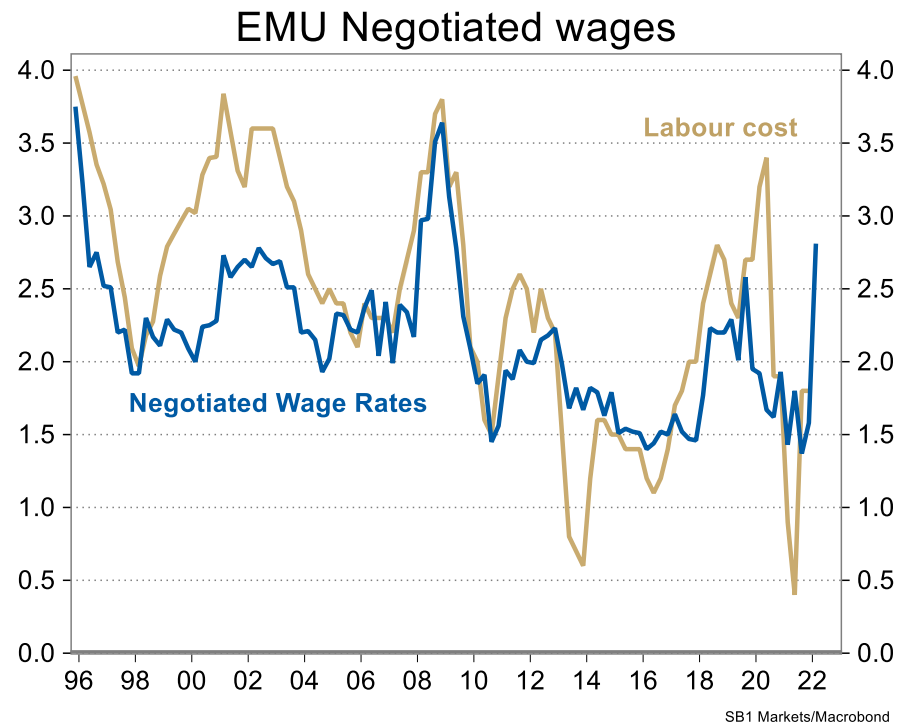
- **Unit labour cost** (labour cost per unit produced = wage cost/production volume, growth in UCL= wage growth – productivity growth) has jumped up during the pandemic as productivity fell because employment was not cut (as in the US)
- On the other hand, in the 3 years before the pandemic – and through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

Unit labour costs not the problem in the EMU



A sharp uptick in negotiated wages in Q1, to 2.8% from 1.6%

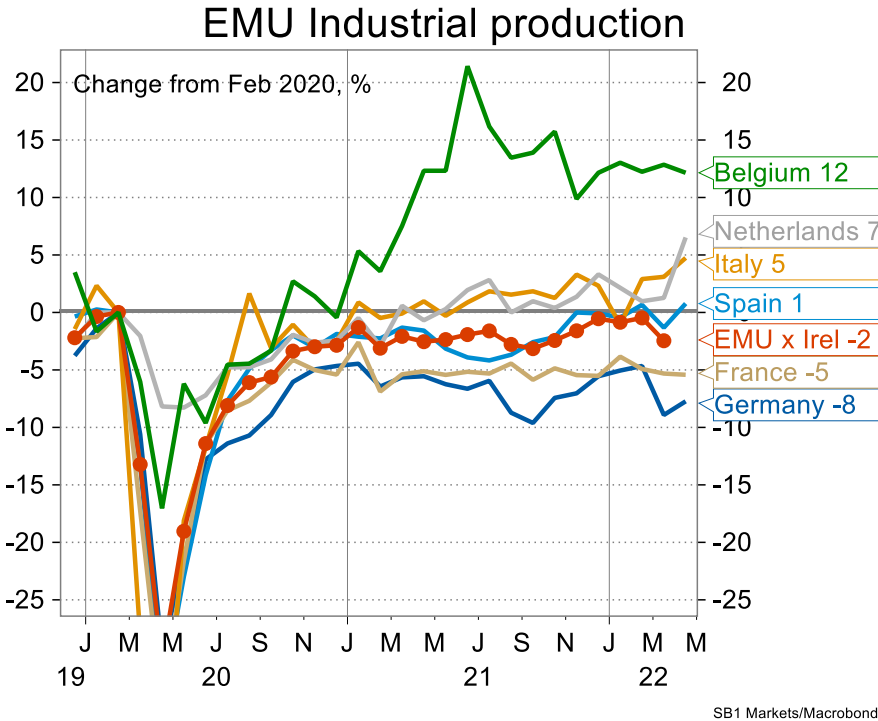
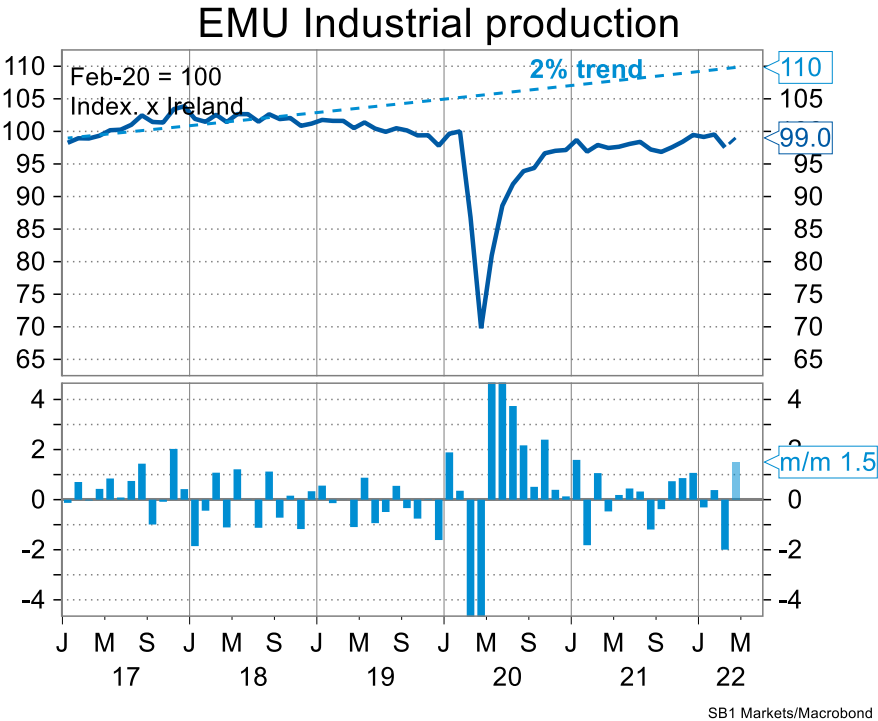
Still not a very high number, but given slow underlying productivity growth not low either



- More labour cost data will be published this week – and we will look into them!

Industrial production up 1.5% in April. After a -2% decline in March

France reported a small decline, but the other Big 3 a 1.3% – 2% lift in April. Final data out this week



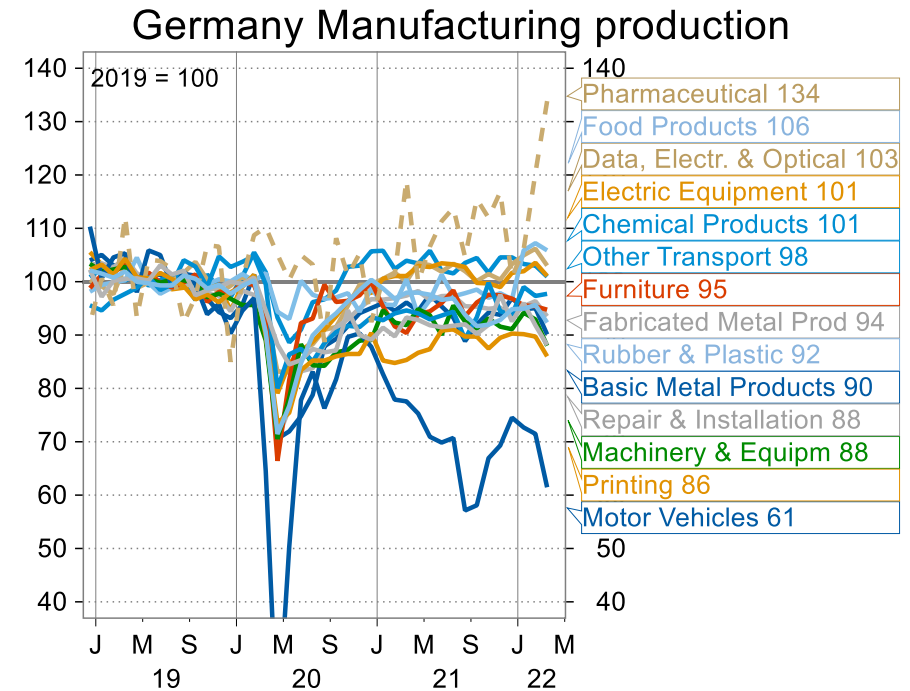
- Production is still down 1% vs Feb-20!
 - » German manufacturing production is down 8% vs the pre-pandemic level. Italy is UP 5%! The auto industry mostly to blame (but auto production was strong in May)

German factory orders down in March, alongside production

The auto sector is still the main drag – but the decline in March was rather broad, in sum 4.6%!



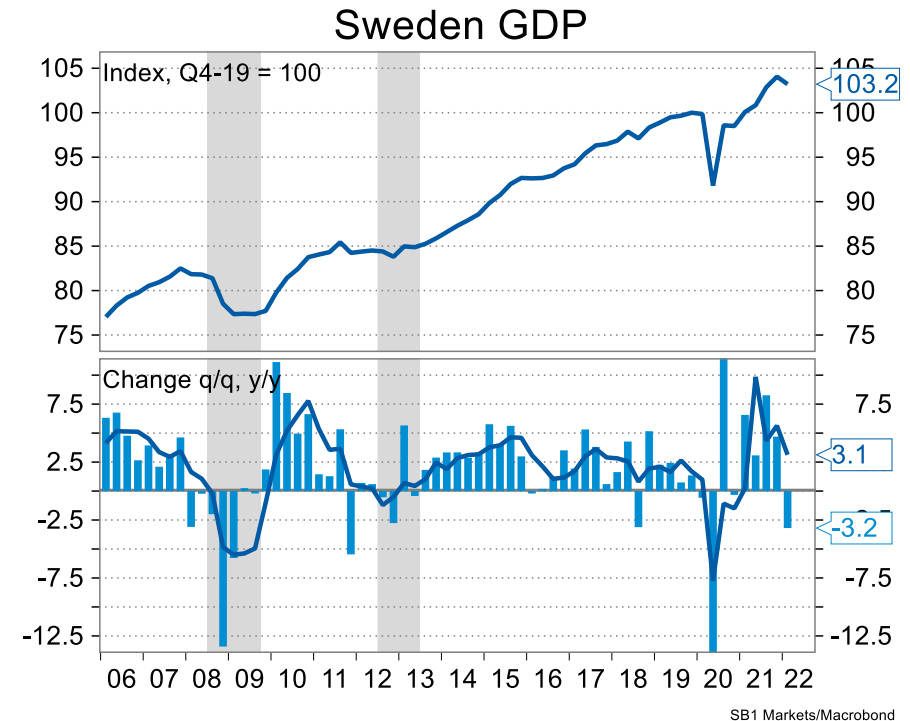
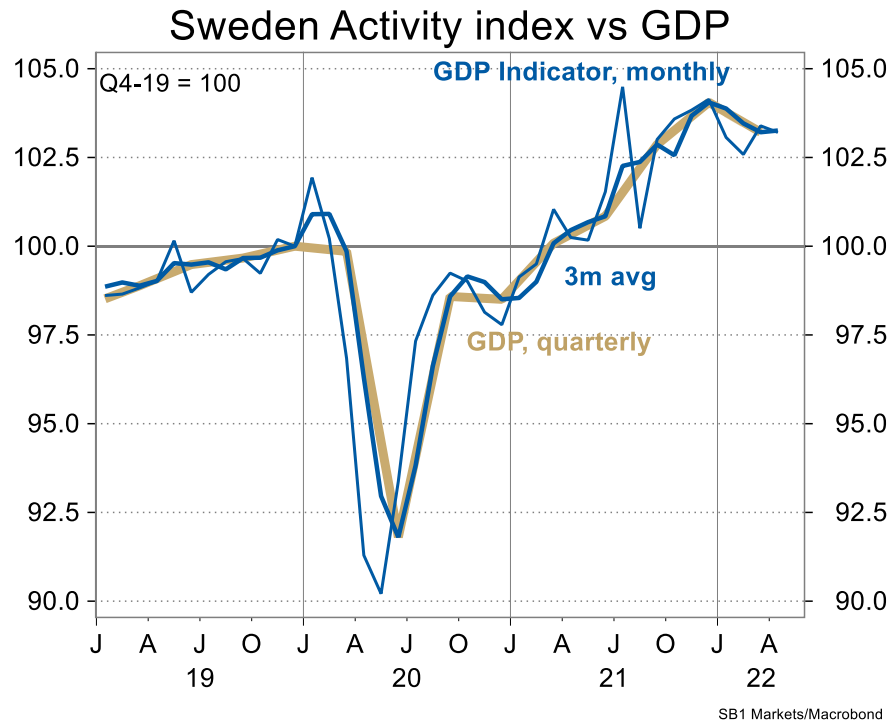
SB1 Markets/Macrobond



SB1 Markets/Macrobond

GDP down in April, from an upward revised level in March

GDP fell 0.2% in April, and the level is 0.9% below the level in Dec-21, well below our expectations



- **GDP** fell at a 3.2% pace in Q1 (-0.8% not annualised), twice as fast as expected – but growth since 2019 has been revised up
- **The outlook** remains excellent, according to Swedish companies. The KI (NIER) is down from the peak but is still at a very high level, and the March PMI was the best in the world
- Still, growth is very likely slowing, even if the business sector is extremely bullish on the outlook

Highlights

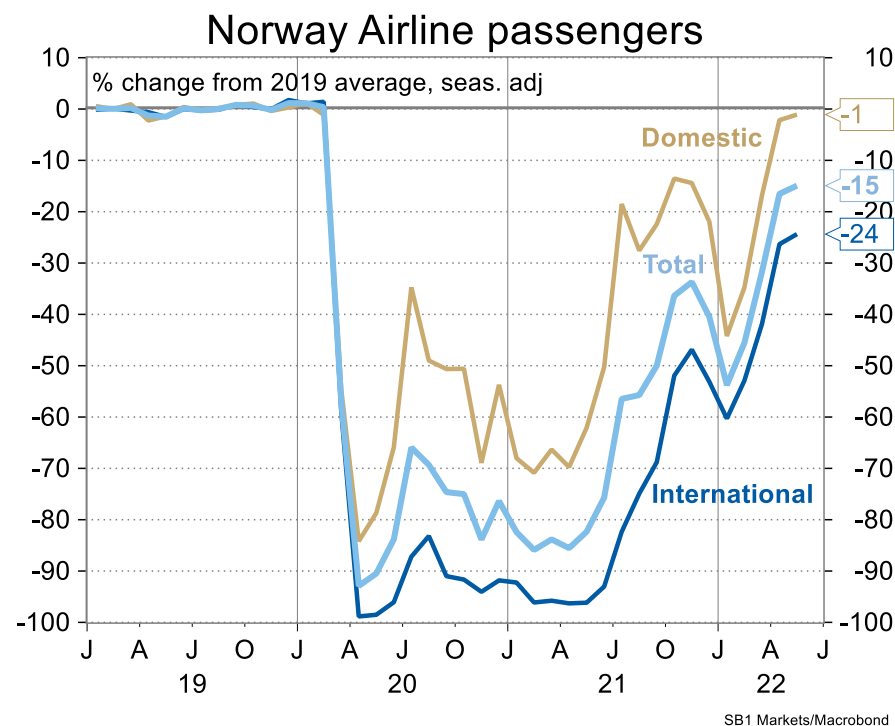
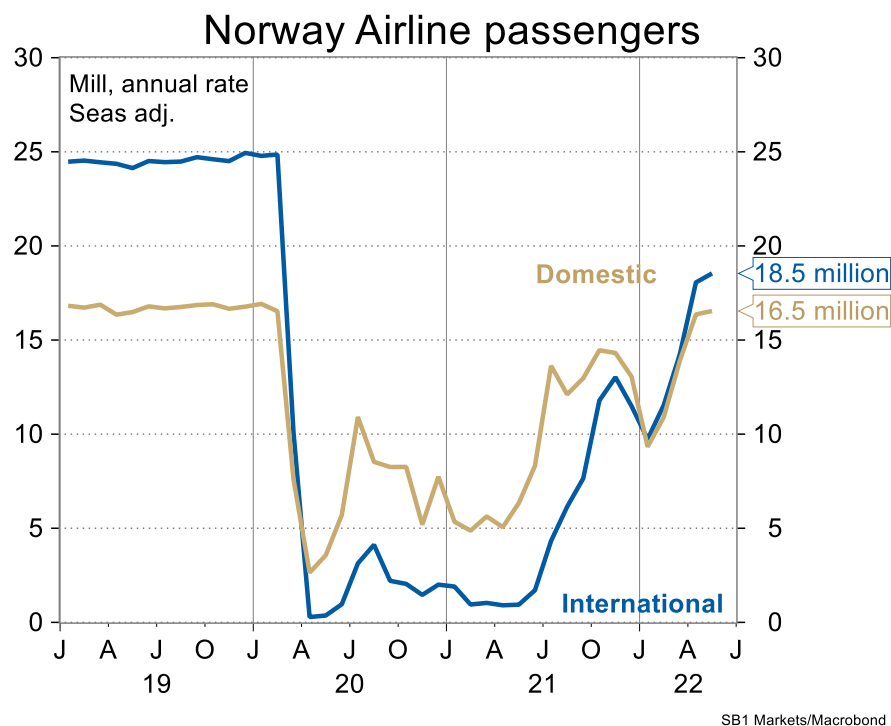
The world around us

The Norwegian economy

Market charts & comments

Domestic traffic back to normal, international still down 24% vs the 2019 level

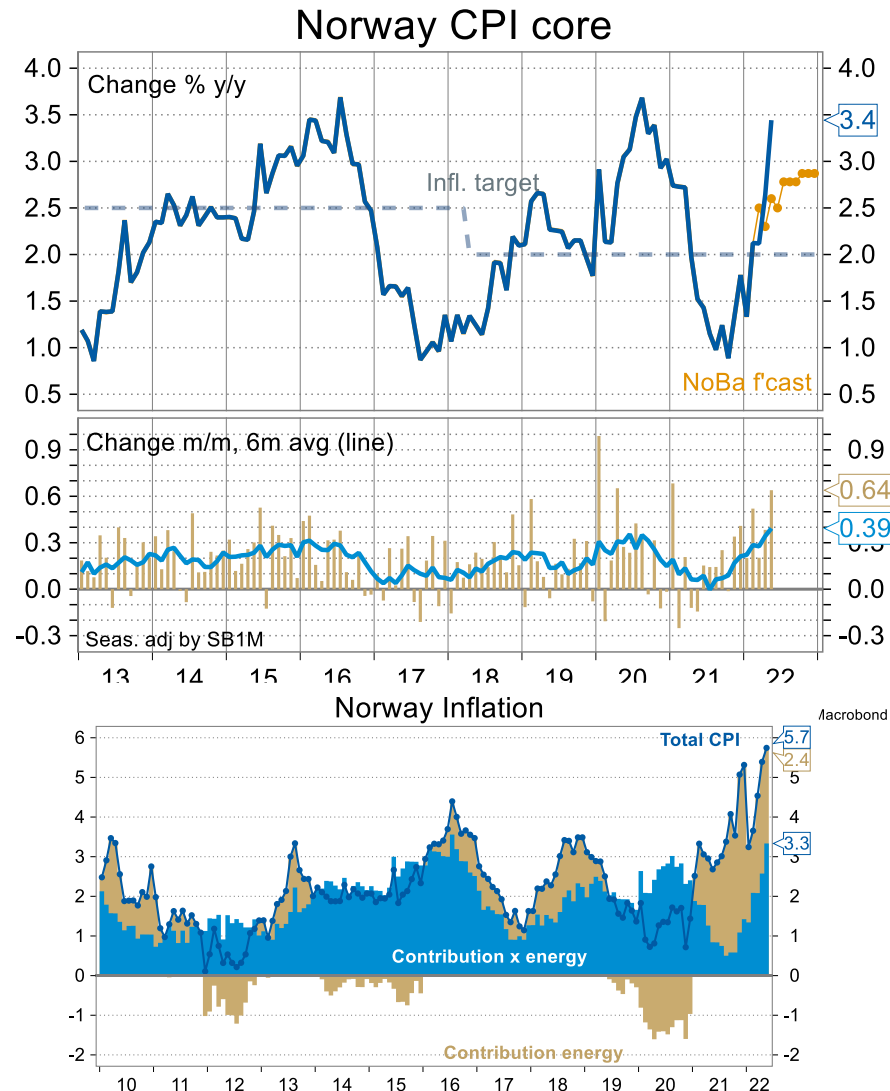
The lift in international traffic in May was less than we expected



- We expect a further growth in May, the most in international traffic

Inflation shot up in April May. And it's broadening. NoBa will speed up

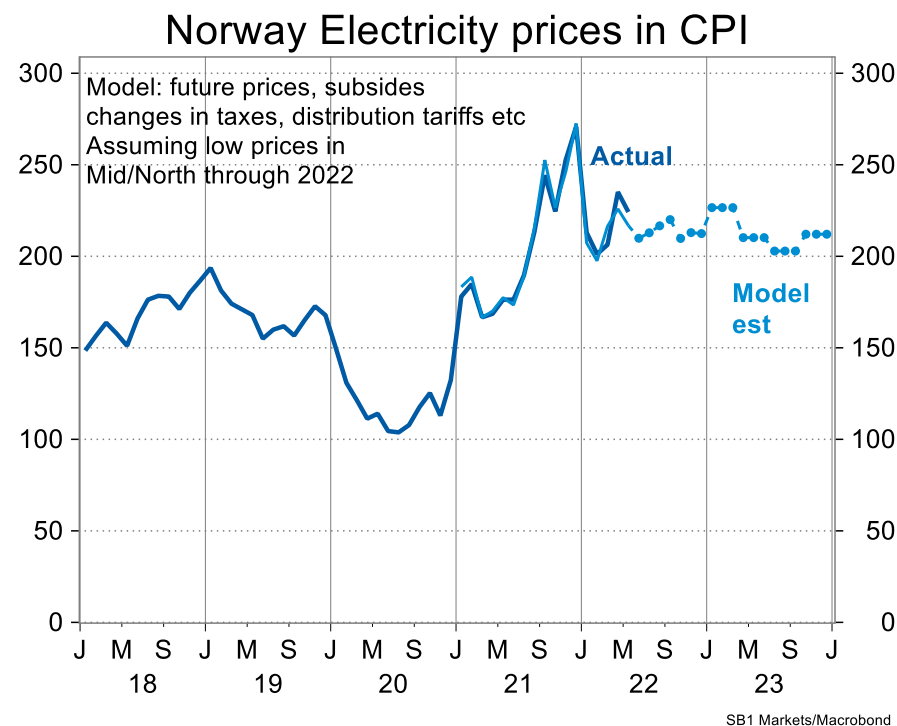
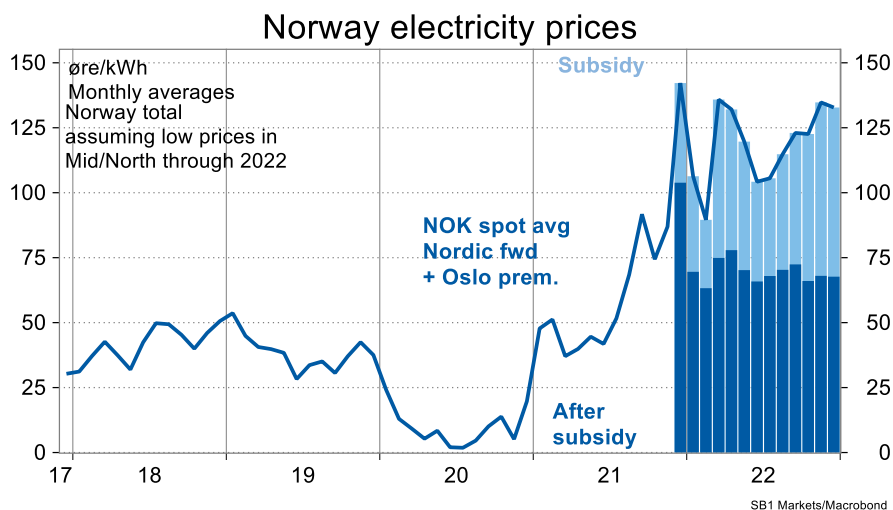
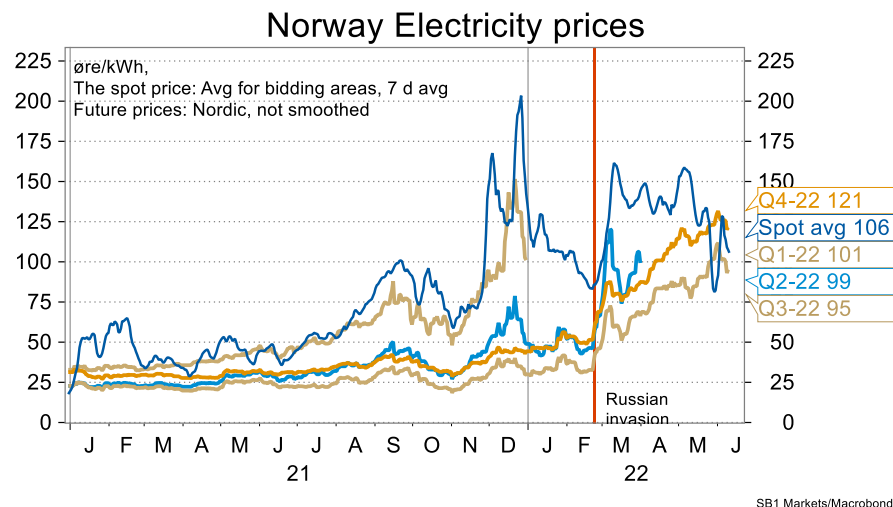
Headline inflation up 0.3 pp to 5.7% (we expected 5.5%). The core up 0.8 pp to 3.4% (we exp. 3.1%)



- **CPI-ATE** (ex. energy and taxes) rose 0.6 pp m/m, and the annual rate climbed by 0.8 p to 3.4%, expected 3.0 – 3.1%. NoBa assumed 2.6% in the March MPR
 - » **Furnitures** contributed most on the upside vs. our forecast but also recreation, transport x airfare tickets, and hotels and restaurants contributed on the upside
 - » **Airline ticket** prices fell but are still up 32% y/y
 - » Prices on **imported goods** rose 0.9% m/m, far more than we assumed, and are up 4.3% y/y, while **domestically produced** goods & services were up 0.5% m/m (like in April) and 2.8% y/y – and accelerating
 - » Most sectors report growth above 2% y/y, and most are up by more than 2% on average since 2019
- **Total inflation also accelerated, by 0.3 pp**, to 5.7%, the highest level since 1988. If not for electricity subsidies, inflation would have been 7.7%. Electricity prices fell 7% m/m, and somewhat more than we expected (the opposite was the case in April). Auto fuel prices rose 4%, well below our forecast, and if pump prices do not come down substantially from the present level, the CPI will report substantially higher fuel prices in June
- **The outlook**
 - » **The electricity bill** will remain high but the current futures prices for the rest of 2022 do not signal higher prices, and from the early autumn electricity prices will be down y/y
 - » **Core inflation** will probably accelerate somewhat more through 2022, but we do not think by much
 - » If so, **average 2022 inflation** will marginally above 4% in 2022. SSB forecasted 4.7% be well above the March estimate at 3.3%, which has been the assumption for the wage negotiations during the spring. The outcome would have been well above the agreed 3.7% – 3.8% if the exercise should have been conducted with the present forecast on the table!
- **So what?**
 - » **The uncertainty** is still large both vs. energy and food prices, as well as other impacts of the war in Ukraine
 - » **Wage inflation** may in the end surprise on the upside in a tight labour market, but so far the wage negotiations have delivered exactly the expected outcome
 - » For **Norges Bank** wage inflation is the dominant risk, and the bank will probably need some time to build a case for a faster tightening

Electricity prices fell in May – no further upside, according to the futures market

... which has not been stable

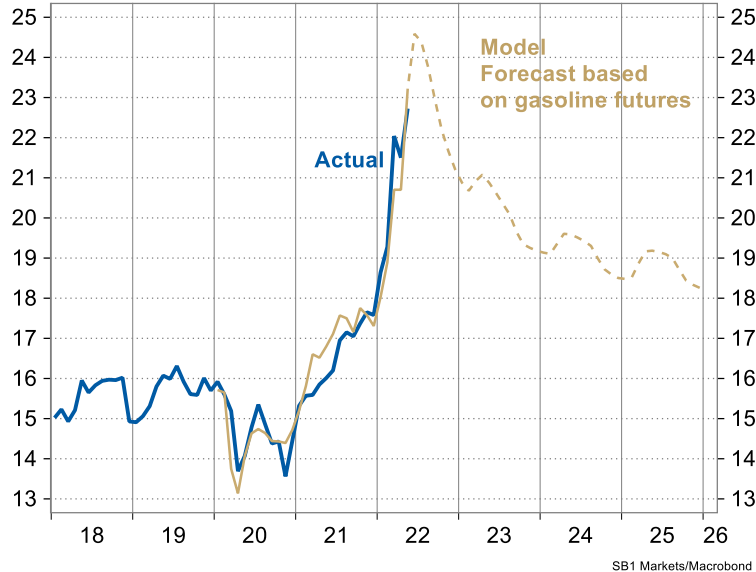


- In March, we missed on the other side – something is rotten in our rather detailed model, which copes with all regions, the subsidy program, electricity taxes, transfer tariffs and the different VAT rules, and it usually works well. (Other economists have experienced the same problem with SSBs March & April electricity component in the CPI index)
- The cost of the unprecedented surge in electricity prices, represented by the triangular area above, so far equals a 30% extra cost, above a 'normal' high price level (like in 2018-19), or 1¼ % of one year's disposable income

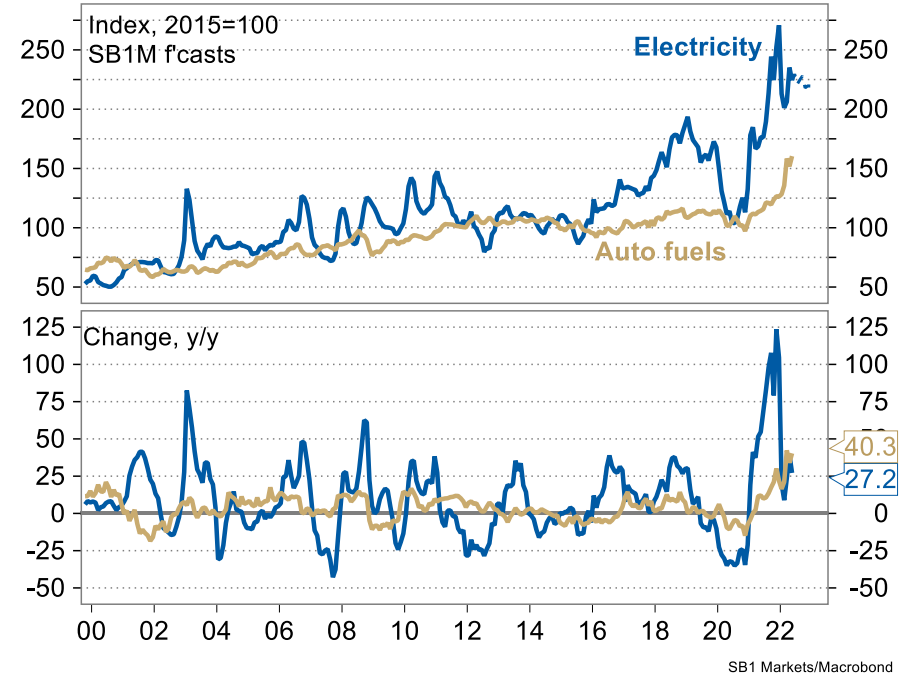
Gasoline prices probably further up

Gasoline prices have increased more than suggested by crude prices

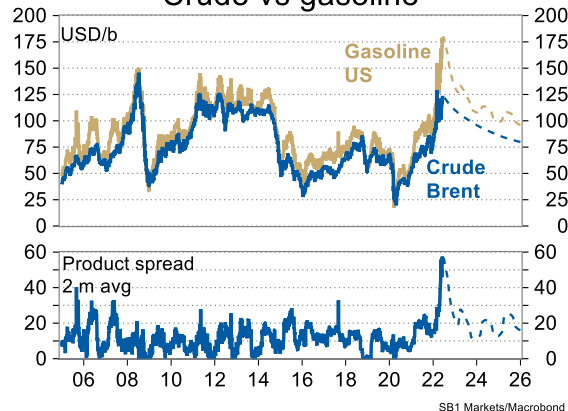
NOK gasoline prices



Norway CPI Energy prices



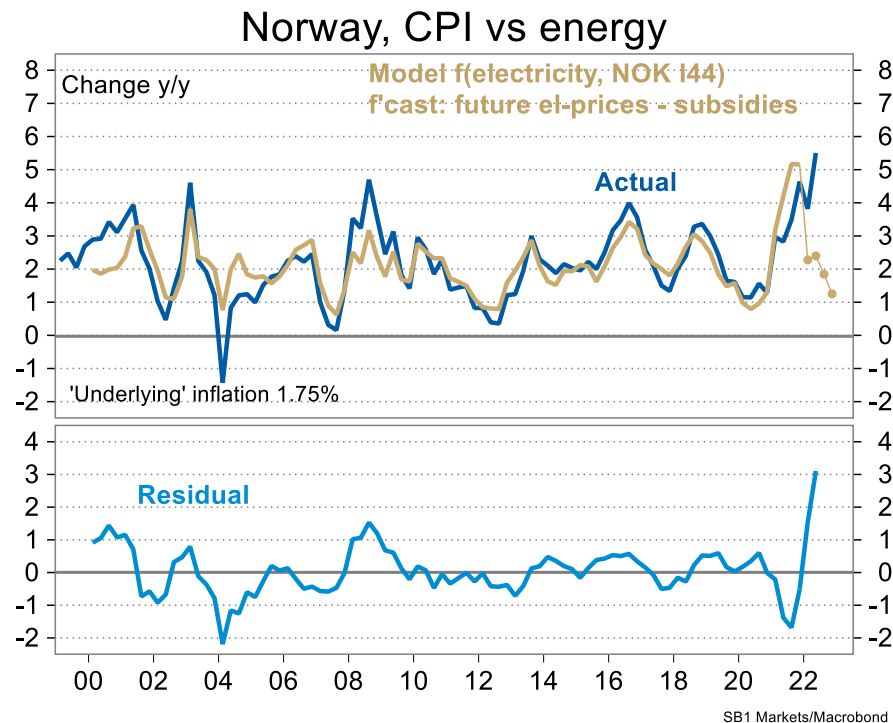
Crude vs gasoline



- Refinery/product margins have widened sharply recent months/weeks but futures markets expect a narrowing the coming months/quarters

Inflation suddenly substantially higher than suggested by electricity prices & NOK

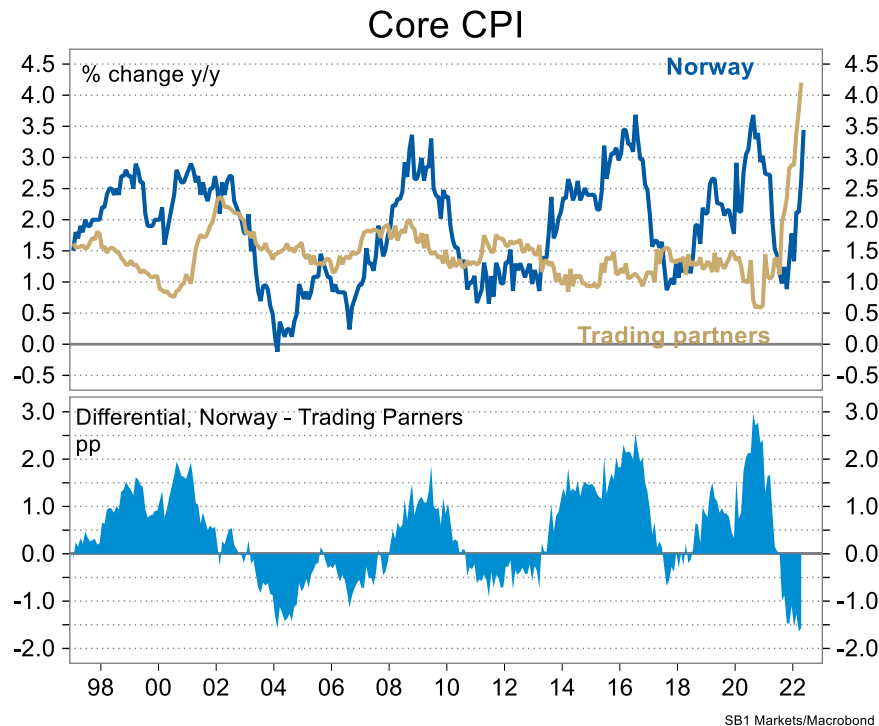
Our simple model indicates that inflation has broadened in H1-22



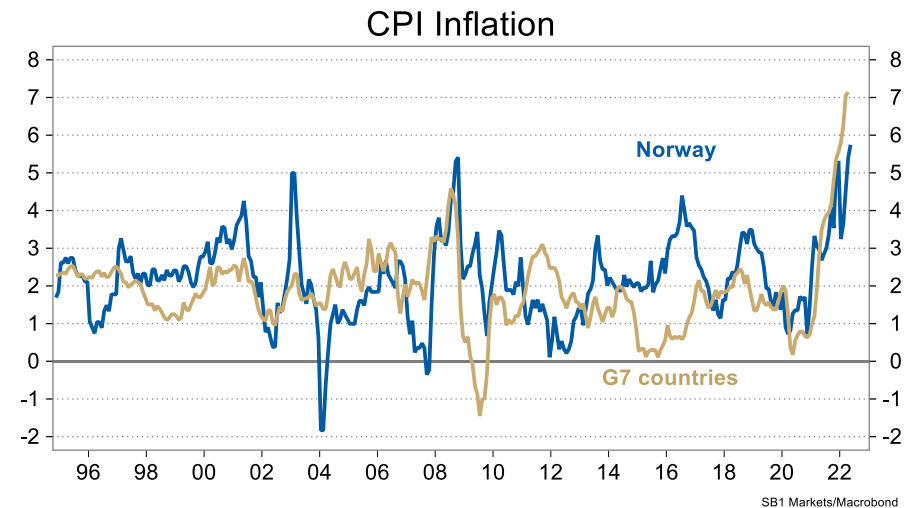
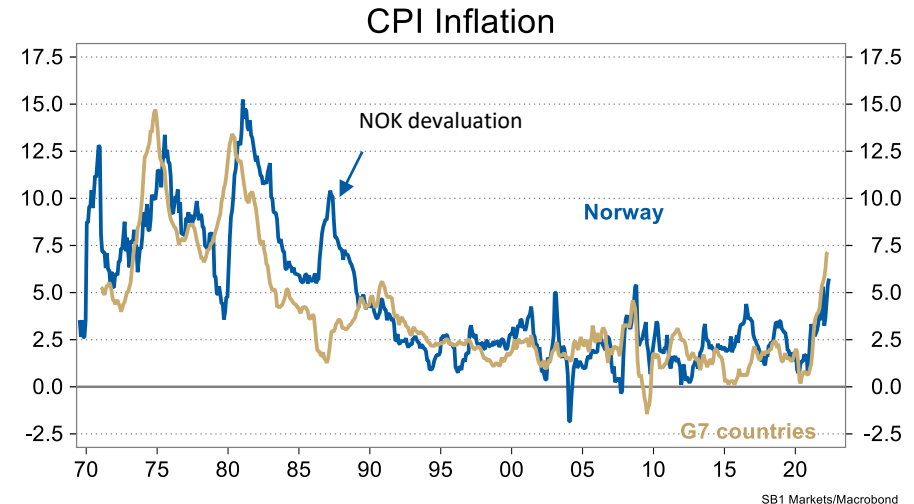
- On the other hand, actual inflation was well below the model forecast through 2021

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

But limited short-term correlation, at least in the 'low-inflation regime'. Now: Some risk on the upside



- 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)



And now furniture surprised us, as well as recreation, hotels & rest.

The core rate shot up 0.8% to 3.4% y/y, well above expectations. Energy milder than we assumed

May-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	%									
Food, non alc bev	12.9	0.4	0.3	0.1	2.2	3.0	2.6	0.06	0.39	0.02
Alcohol, tobacco	4.2	0.4	0.4	0.0	4.1	4.6	4.5	0.02	0.19	0.00
Clothing, footwear	5.1	0.3	0.1	0.2	3.1	2.5	2.8	0.01	0.13	0.01
Housing x. energy	20.2	0.1	0.2	-0.1	2.1	1.8	2.0	0.01	0.37	-0.02
Furnishing	6.9	2.2	0.5	1.7	2.9	8.9	5.2	0.15	0.62	0.12
Health	3.4	0.2	0.2	0.1	2.0	1.9	1.8	0.01	0.06	0.00
Transp. ex. gas, airl. tick	12.2	0.6	0.3	0.3	1.5	2.3	2.0	0.08	0.29	0.04
Airline tickets	0.8	-5.7	4.0	-9.7	40.2	32.1	41.9	-0.04	0.25	-0.08
Communication	2.4	-0.4	0.2	-0.6	0.0	-0.5	0.3	-0.01	-0.01	-0.01
Recreation, culture	10.8	0.8	0.2	0.7	1.3	3.1	1.7	0.09	0.33	0.07
Education	0.5	-	-	-	2.0	2.0	2.0		0.01	0.00
Restaurants, hotels	5.6	0.8	0.5	0.3	6.4	7.2	6.5	0.05	0.40	0.02
Other	8.7	0.2	0.2	0.0	2.1	2.4	2.3	0.02	0.21	0.00
CPI-ATE, s.a	93.7	0.6	0.3	0.4	2.6	3.4	3.0			0.33
<i>Norges Bank est.</i>			0.3		2.3		2.6			
Imported	36	0.9	0.2	0.7	2.3	4.3	3.3	0.33	1.57	0.26
Domestic	57	0.5	0.3	0.1	2.8	2.9	3.0	0.27	1.66	0.08
Energy, housing	4.4	-6.8	-4.0	-2.8	39.6	27.7	31.6	-0.30	1.21	-0.12
Energy, transport	2.0	3.8	14.0	-10.2	34.3	40.3	51.0	0.07	0.79	-0.20
CPI Total, s.a	100	0.4	0.4	0.0	5.4	5.7	5.7	0.41	5.74	0.05
<i>Norges Bank est.</i>			-0.1		4.5		4.3			
Change m/m, seasonally adjusted (calc by SB1M)										
Sum of parts does not necessarily add up to totals										

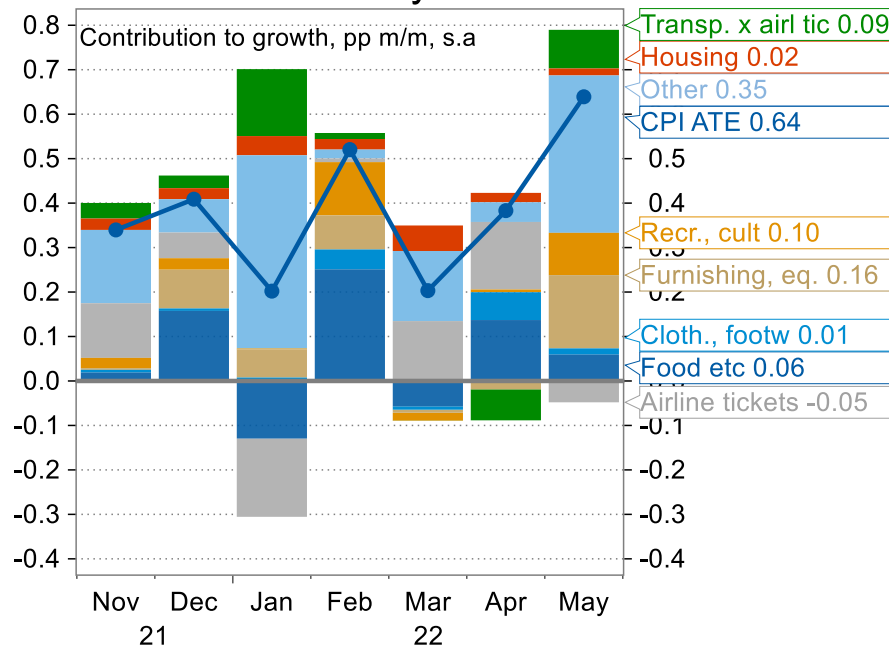
- **Food** prices rose 0.4% (ex taxes, seas. adj), 0.1 pp more than we exp. The annual growth is 3.0%
- **Clothing** prices rose 0.3%, and are up 2.5% y/y, a high figure
- **Furniture/hardware/equipm** prices leaped 2.2% m/m, up 8.9% y/y – the biggest surprise on the upside
- **Transport ex. gas & airfare tickets** rose 0.6%, up 2.3% y/y
- **Airline tickets** prices fell 6% m/m but, and are up 31% y/y, from a very low level last year
- **Recreation** prices added 0.8%, up 3.1 y/y
- **Restaurant/hotel prices** up 0.8% m/m 7.2% y/y, and far above a 2% path (starting in 2019)
- **CPI-ATE** up 0.6% m/m, 3.4% y/y, 0.3 – 0.8 pp above f'casts
- Prices on **imported goods** rose 0.9%, and are up 4.3% y/y – a substantial contribution to total (1.6pp)
- Prices on **domestically produced** goods & services rose 0.5%. The annual rate at 2.9%
- **Electricity (and other heating)** prices fell 7%, we expected -4%, and prices are up 28% y/y
- Gasoline/diesel prices rose 4%, 10 pp less than we expected. Prices are up 40% y/y
- ... **headline inflation climbed to 5.7%**, as expected

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

And now it was furniture, recreation, transport x airfare tickets (and gas)

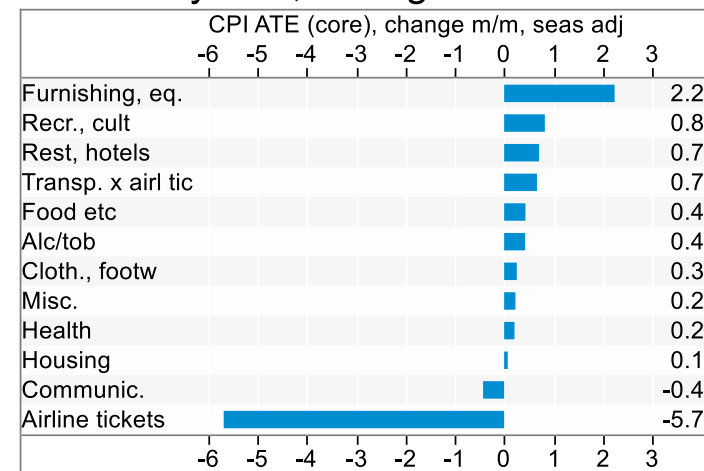
... with some help from food, hotels and restaurant. Just airfare tickets became cheaper really

Norway Core CPI



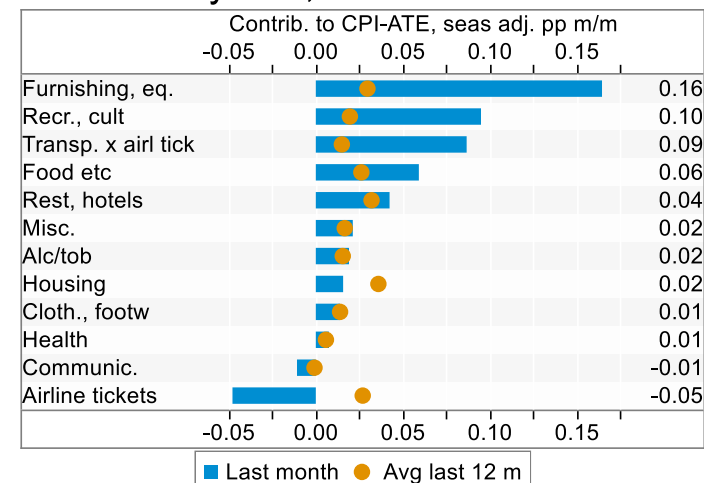
SB1 Markets/Macrobond

Norway CPI, change last month



SB1 Markets/Macrobond

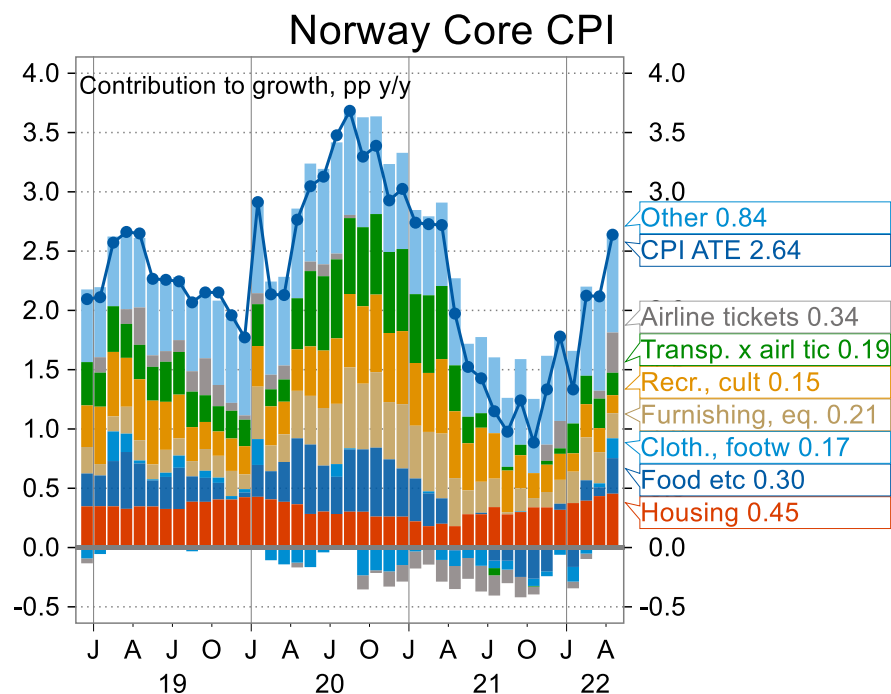
Norway CPI, core contrib. m/m



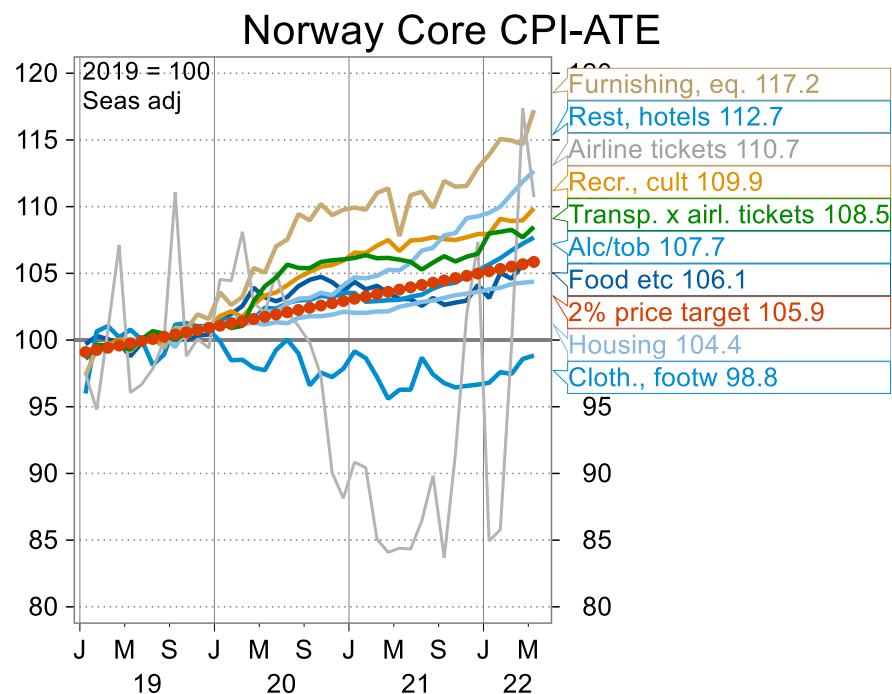
SB1 Markets/Macrobond

Faster/broader price growth recent months

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



SB1 Markets/Macrobond

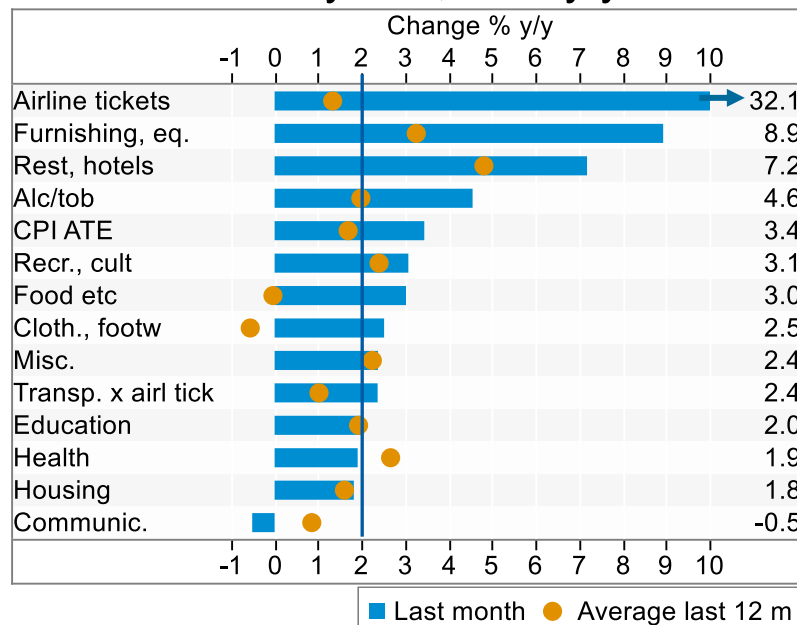


SB1 Markets/Macrobond

9 sectors report core inflation above 2.0%, just 5 are at 2% or below!

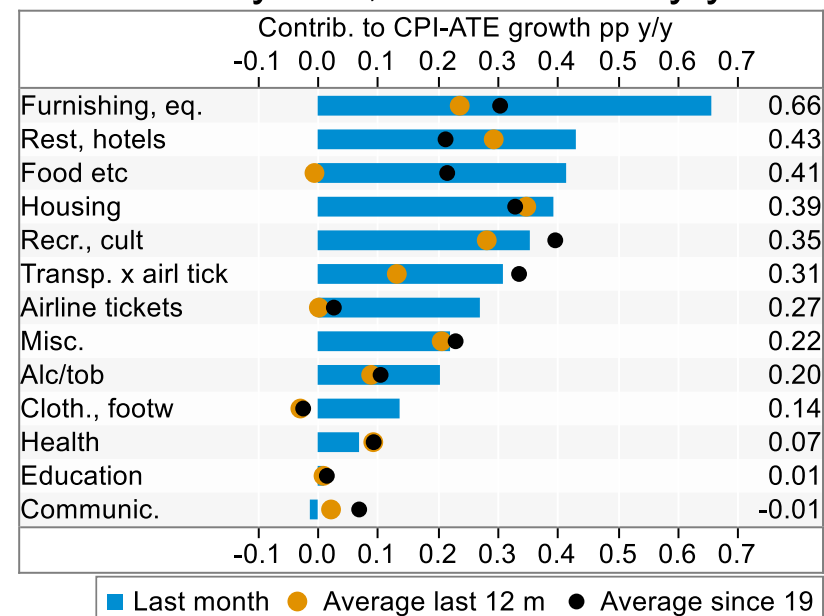
Housing, restaurants/hotels, airfare tickets & food have contributed the most y/y

Norway CPI, core y/y



SB1 Markets/Macrobond

Norway CPI, core contrib. y/y

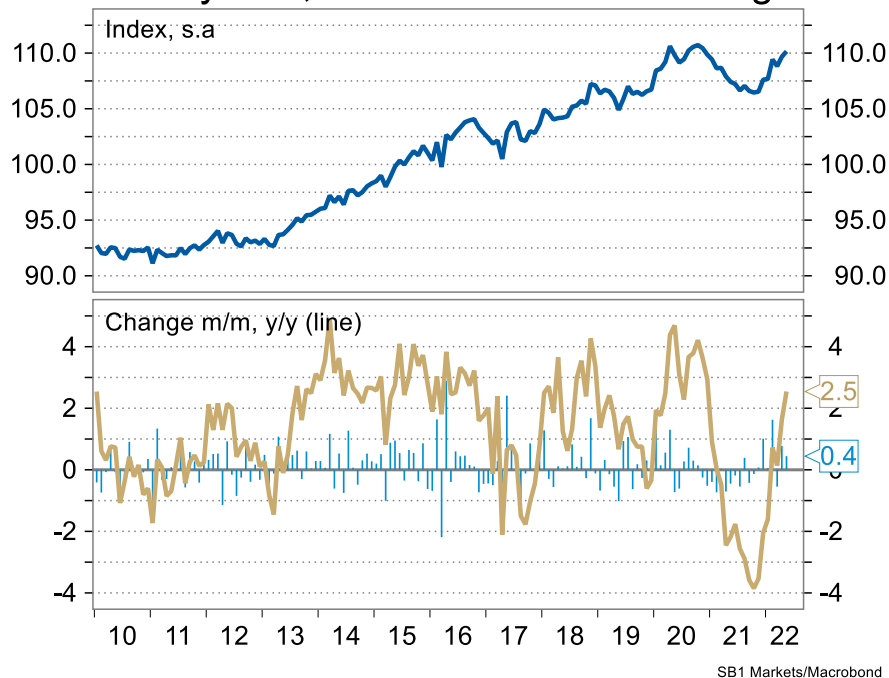


SB1 Markets/Macrobond

Food prices up 0.4% in May, but still below the peak price level in late '20

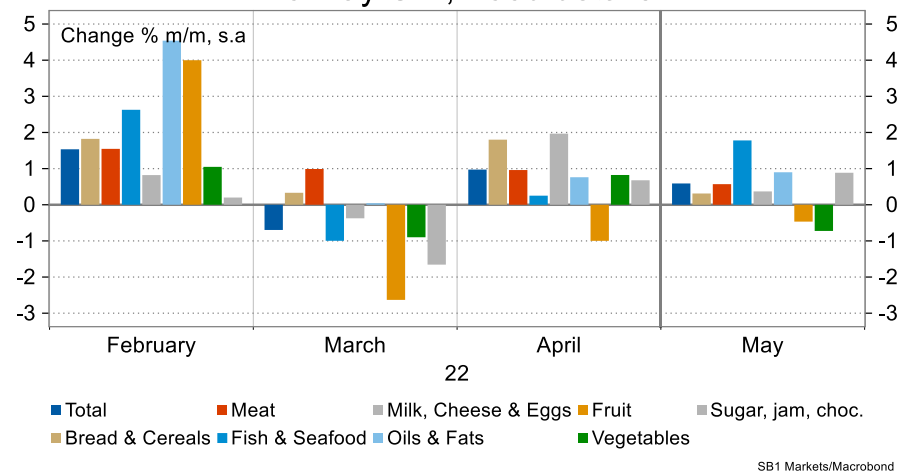
... while people 'feel' that food prices are much higher than ever before

Norway CPI, Food & non-alc beverages

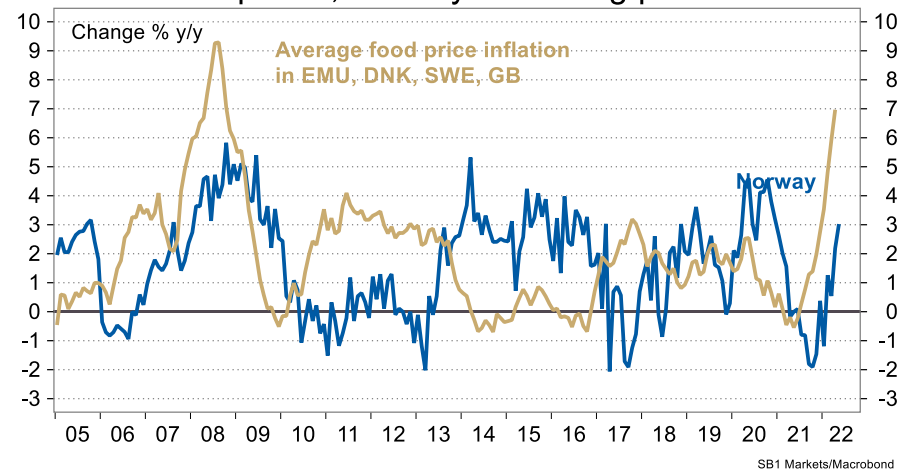


- Food price inflation is accelerating abroad, but Norwegian CPI food prices are not closely correlated with food prices among our European neighbours. The NOK exchange rate explains more

Norway CPI, Food details

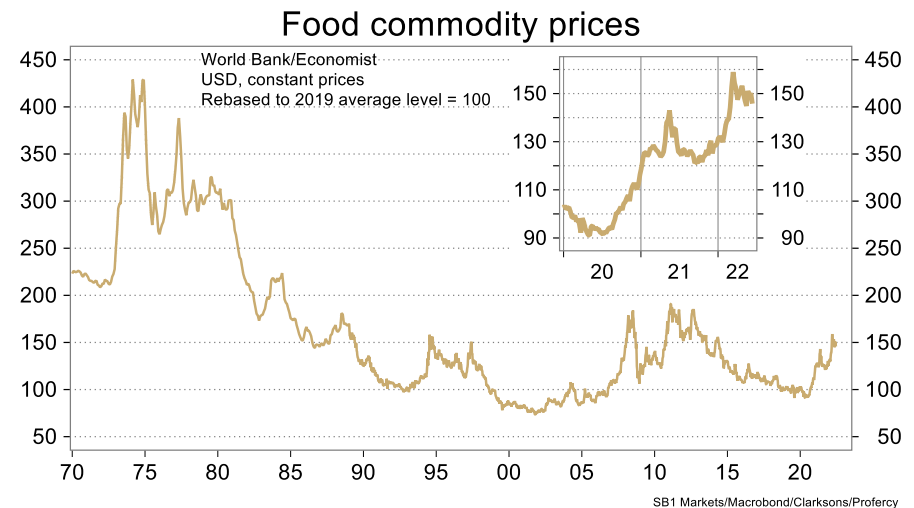
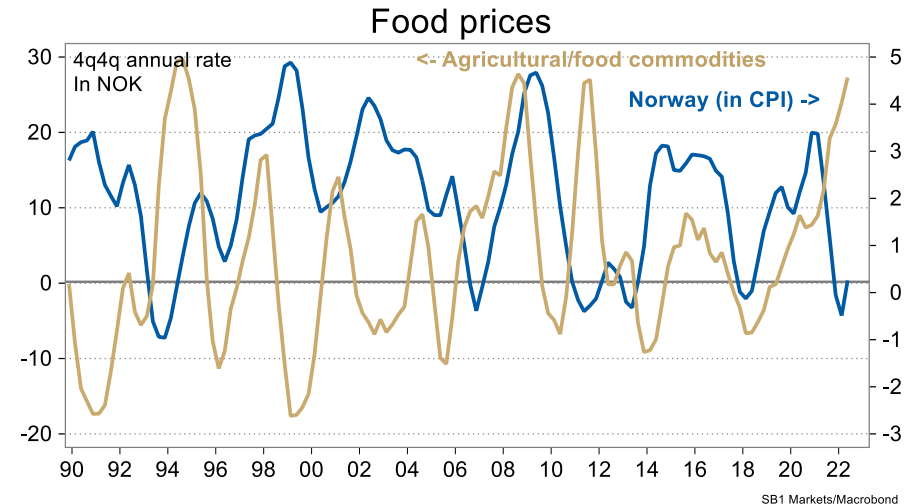
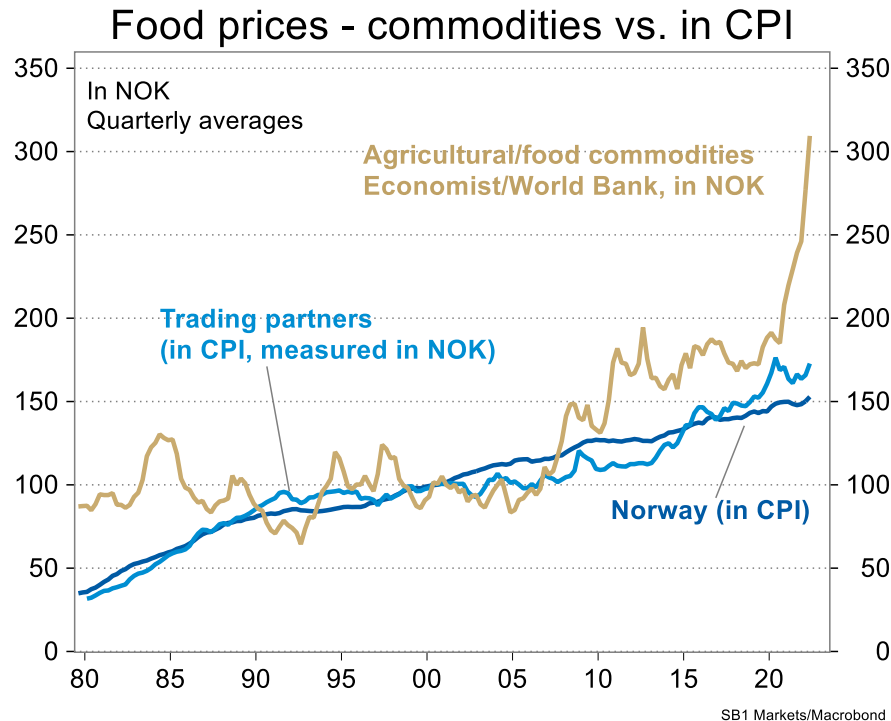


Food prices, Norway vs trading partners



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

... And no stable correlation at all to Norwegian food prices (in the CPI)

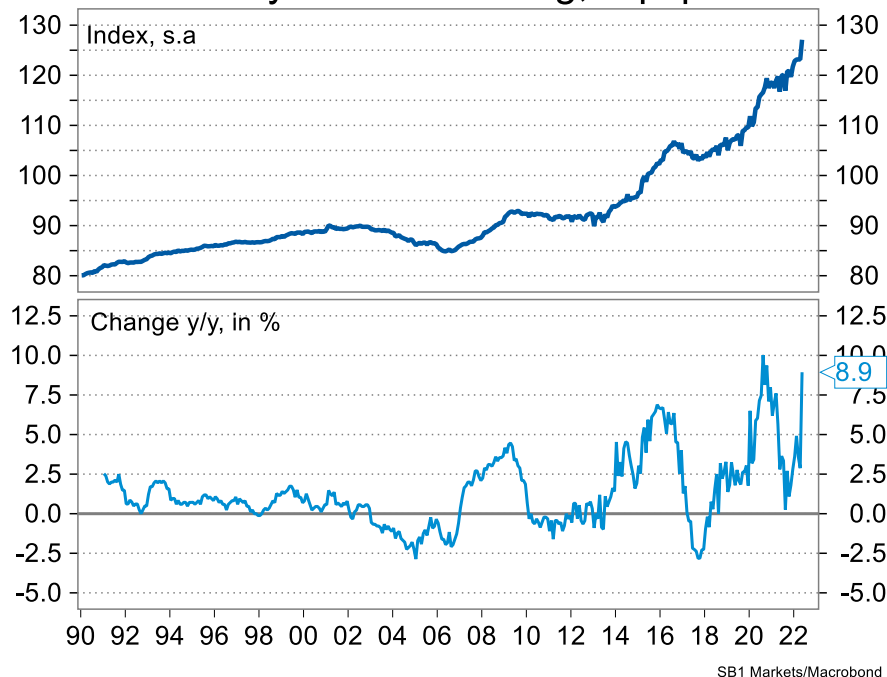


- Try to find a close, and stable correlation on the chart above to the right. There are some co-movements over short periods but no consistency at all
- Agricultural/food commodity prices are sharply up from mid 2020, and by more than 20% since early 2021 but the increase is still not worse than we have seen many times before. In real terms, prices are far from record high. Price shot up after the Russian invasion in Ukraine, but they have reversed half of this last step rise recent 4 weeks

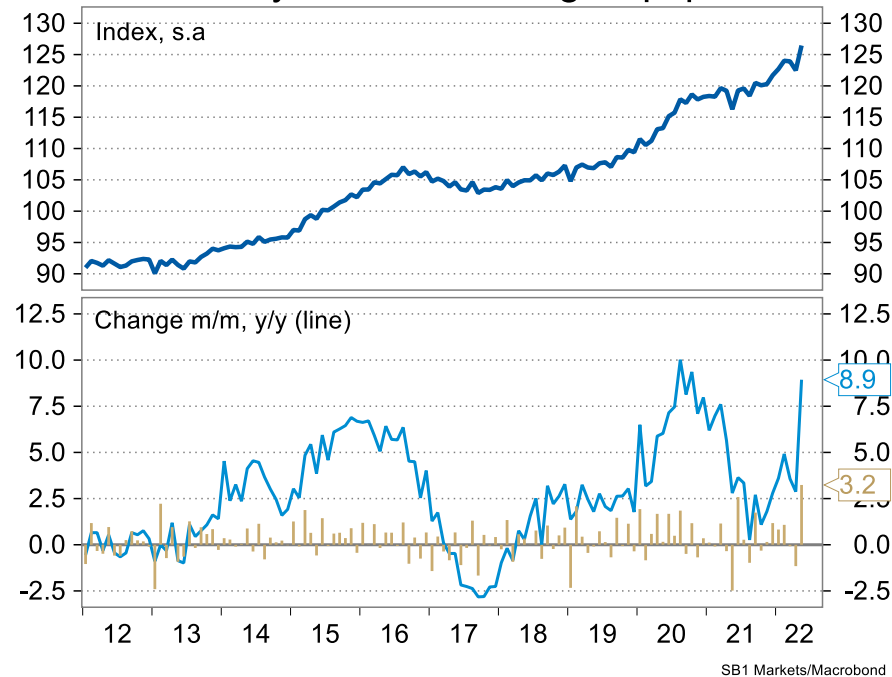
Furnishing etc. prices shot up in May – up 8.9% y/y – lifts core CPI by 0.6 pp!

Furniture up 16%, household textiles 10% - but household applications 'just' 4.8%

Norway CPI Furnishing, equipm.

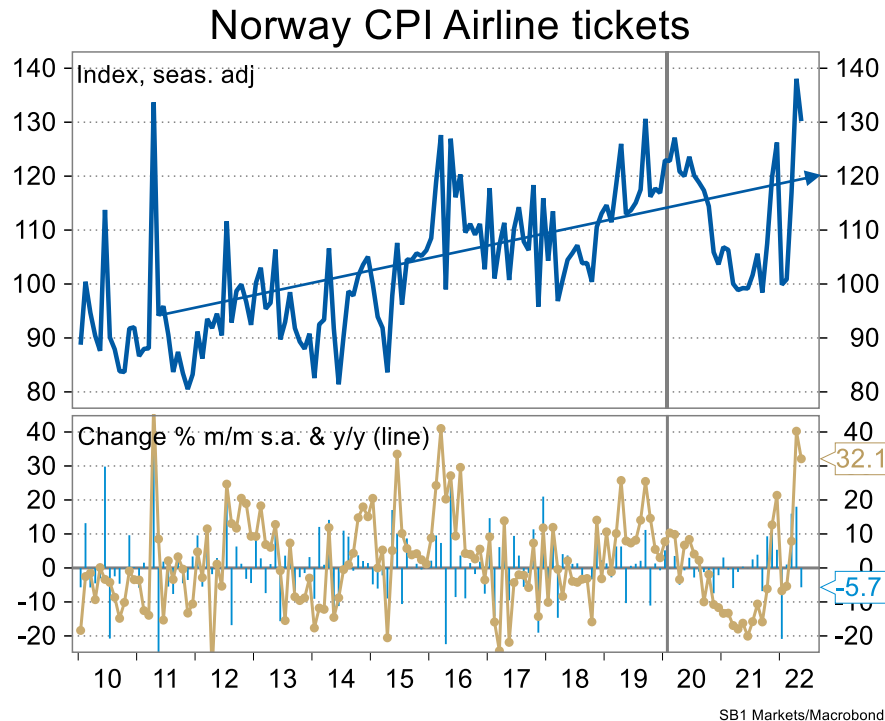


Norway CPI Furnishing, equipm.



Airfare ticket prices: Down in May – but level is rather high. Limited upside risk

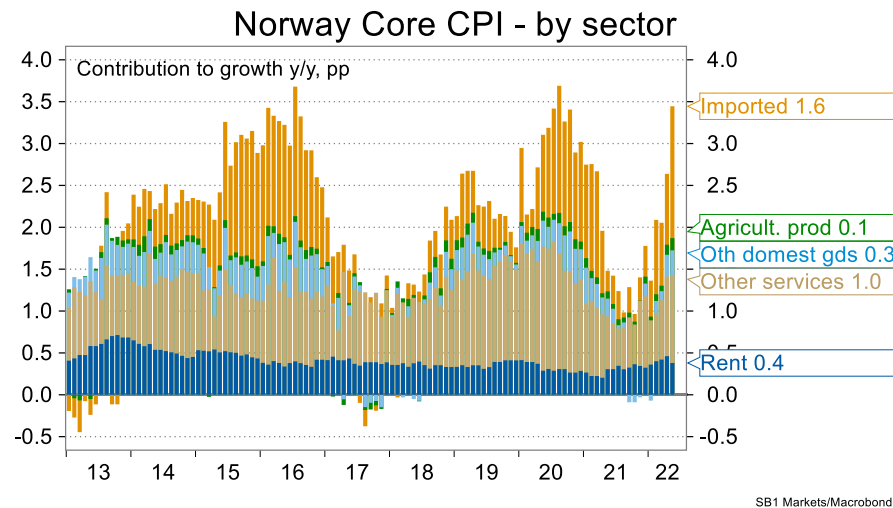
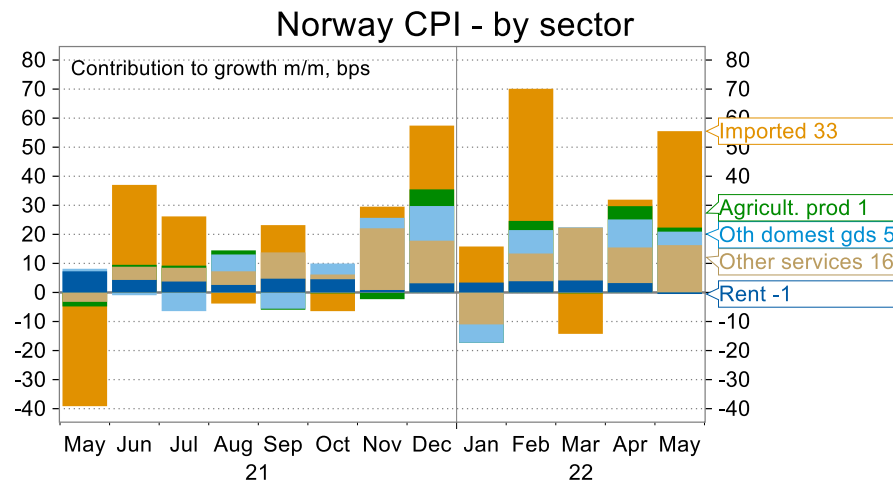
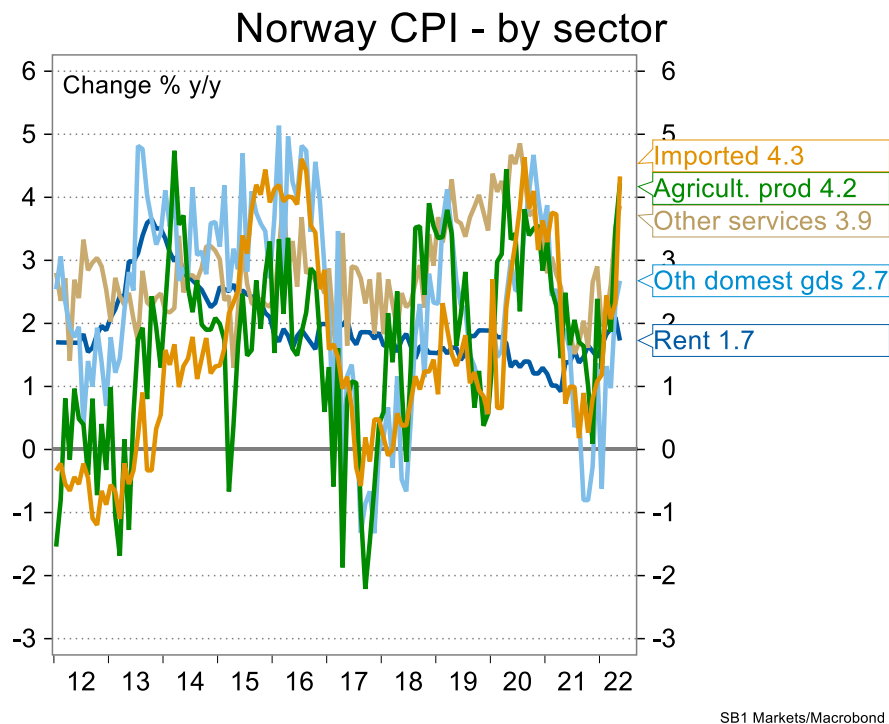
(At least if SAS survives)



- **Airfare ticket prices** fell 5% m/m in April (after a shaky seasonal adjustment procedure). Prices are up 32% y/y, from a low level last year, during the pandemic – contributing by 0.25 pp to the 3.4% y/y lift in core CPI
- **Prices** are 10% above the pre-corona trend path – which could at least partly be explained by the increase in the fuel cost
- The upside risk is probably limited – if the supply side is not hurt (let's say because SAS is grounded for a period, for some reason or another)

Imported goods up 0.9% in May, explained more than half of the total m/m lift

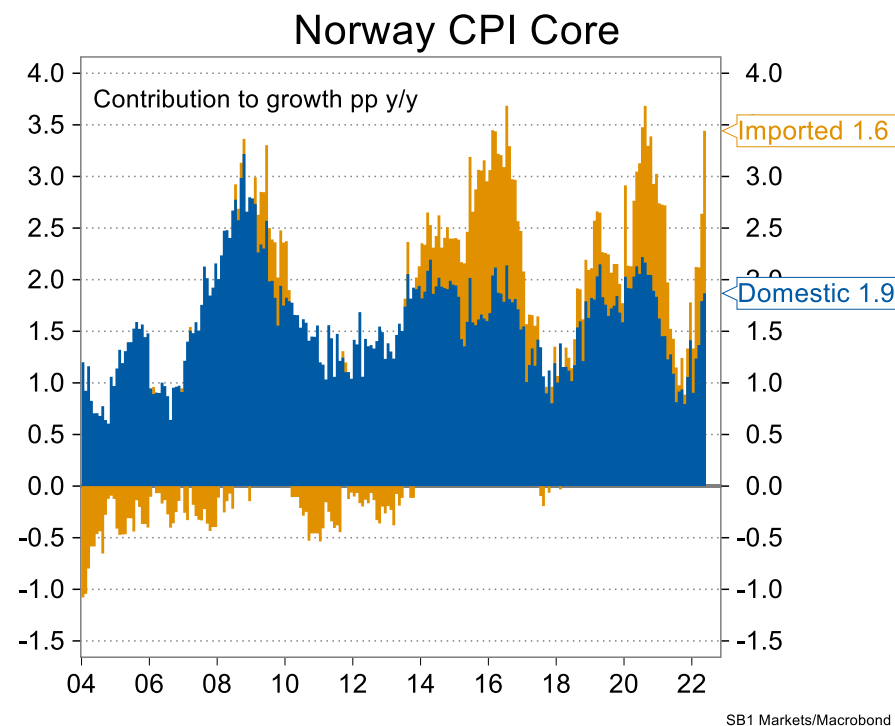
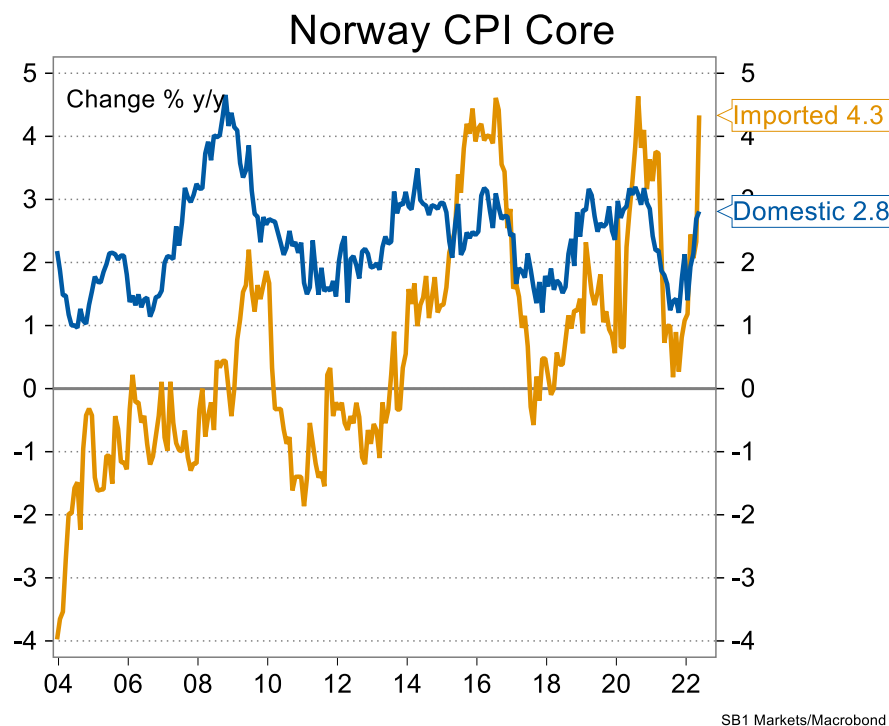
Imported goods up 4.3% y/y, explains 1.6 pp of the 3.4% increase in core prices



- **Domestic services inflation ex rents** slowed sharply during the corona crisis, and is now climbing faster, with a substantial contribution from airfare tickets (0.25 pp out of 1%) and hotels & restaurants (0.40 pp)
- **Rent inflation** slowed in May, to 1.7% but still 'explains' 0.4 pp of the core inflation rate
- **Other goods** than agricultural & imported products are up 2.7% y/y, still posing a limited treat to overall inflation, by a 0.3 pp contribution to the core inflation rate

Prices on imported goods in the lead – without a weaker NOK

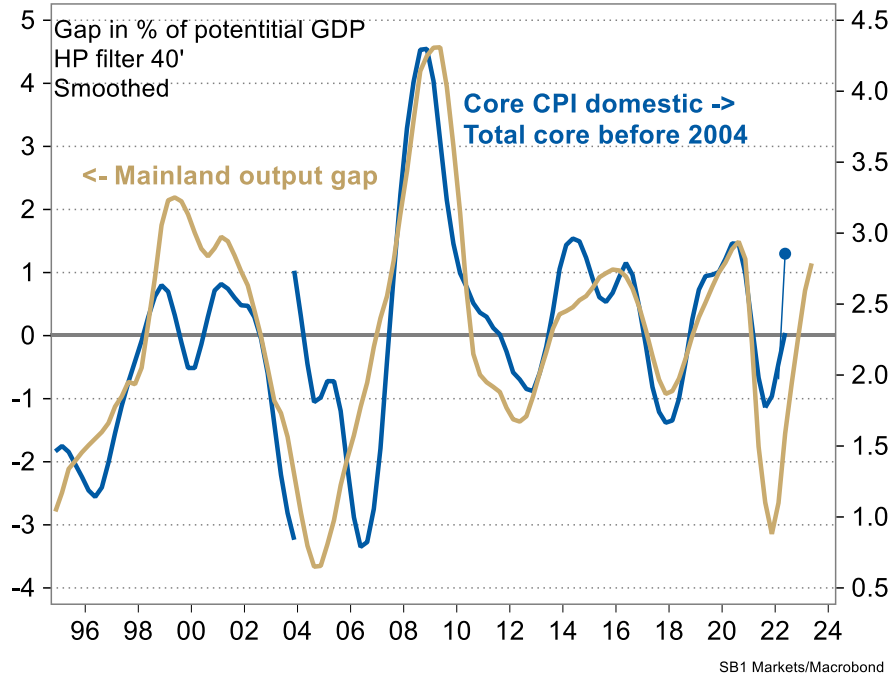
However, 'domestic' inflation is also far above the 2% inflation target



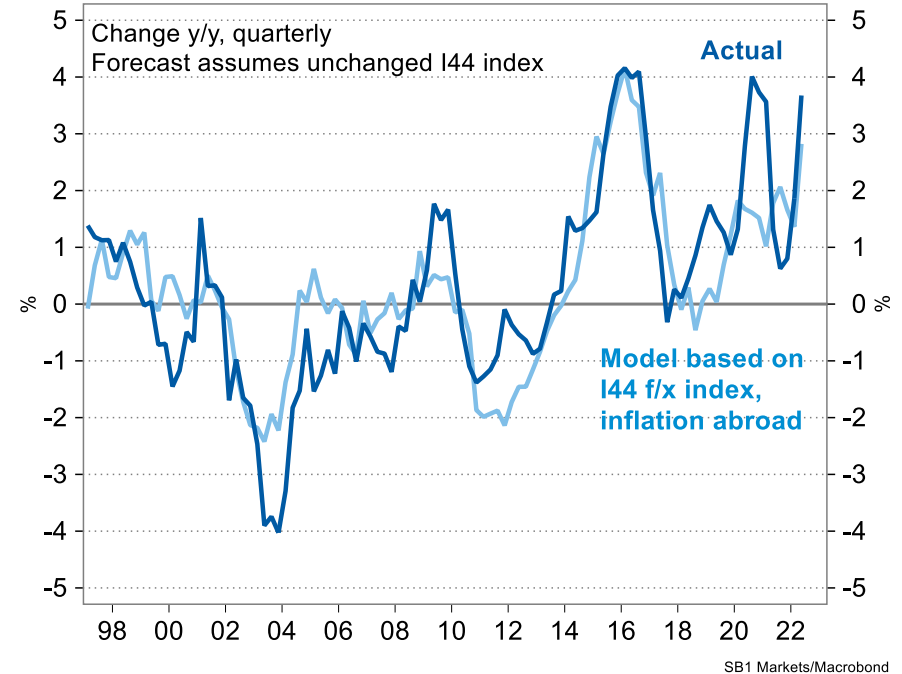
Domestic inflation up due to a strong domestic economy? Seems so

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

Norway Core CPI vs Output gap



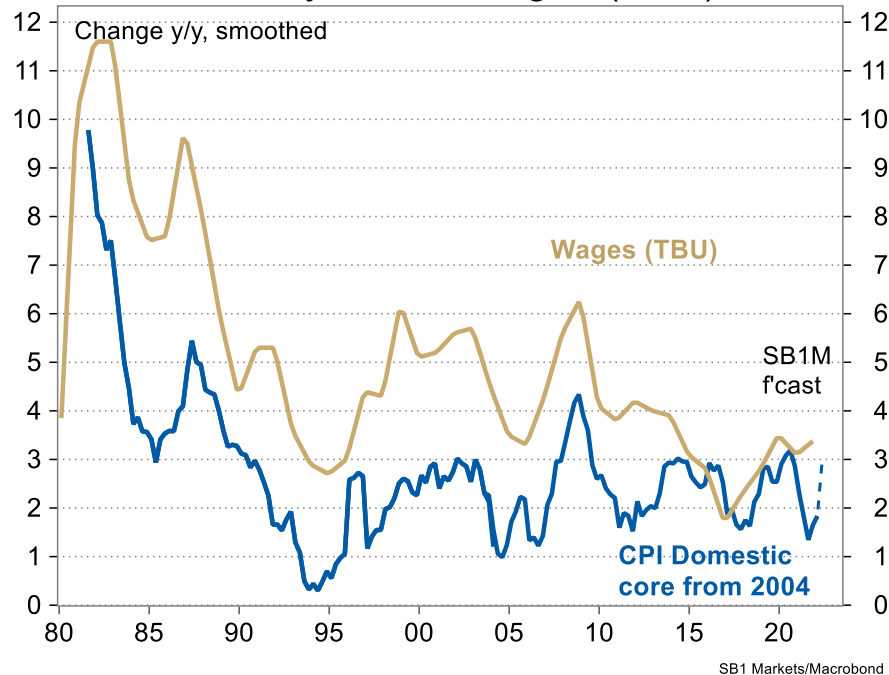
Norway Import CPI, f/x-model



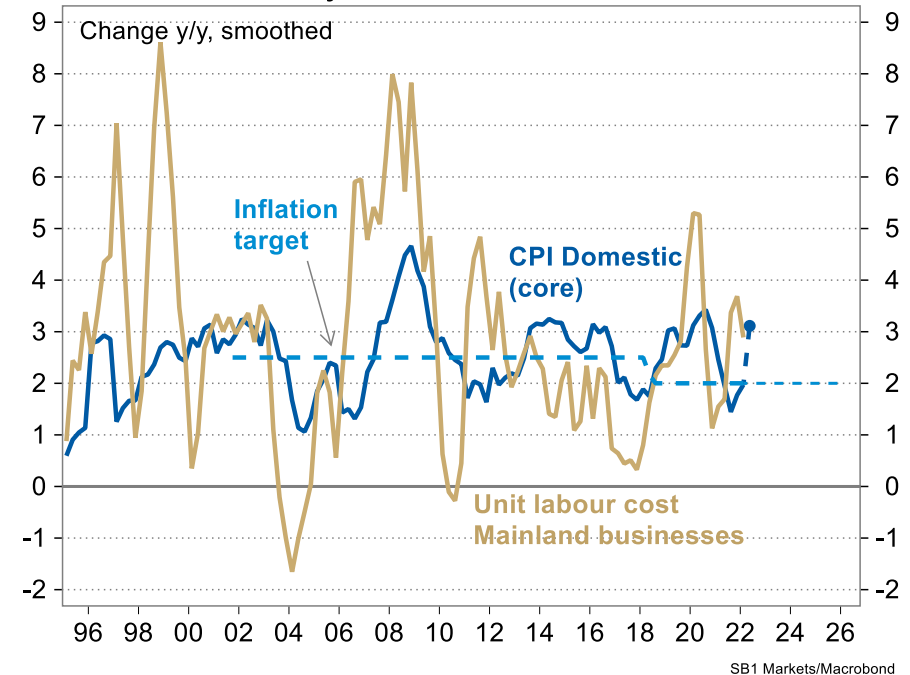
Domestic costs: Wage inflation is increasing, cost inflation above infl. target

Wage inflation has turned up. Unit labour cost up 3% y/y in Q1

Norway CPI vs wages (TBU)



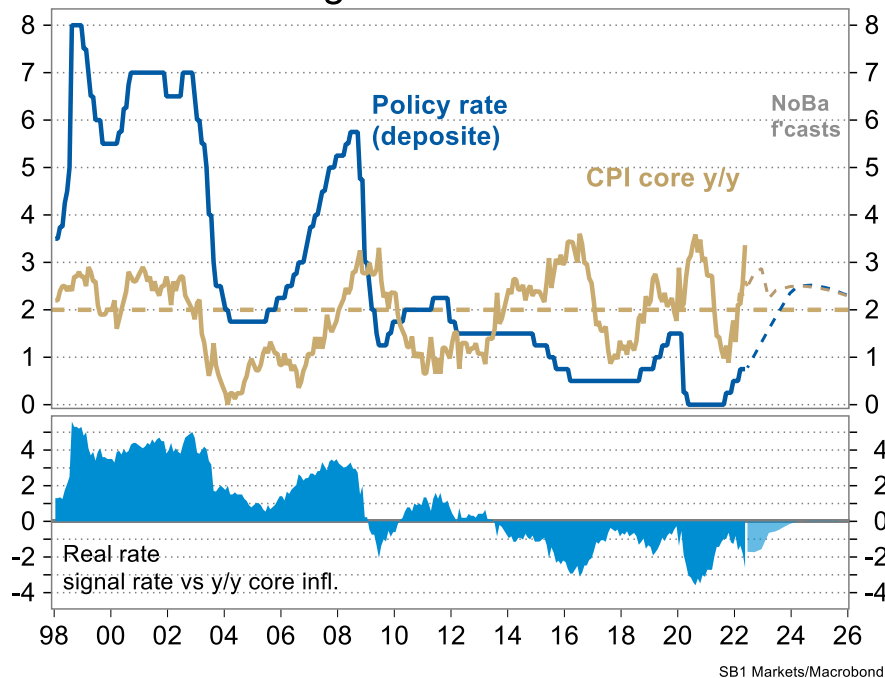
Norway CPI vs labour costs



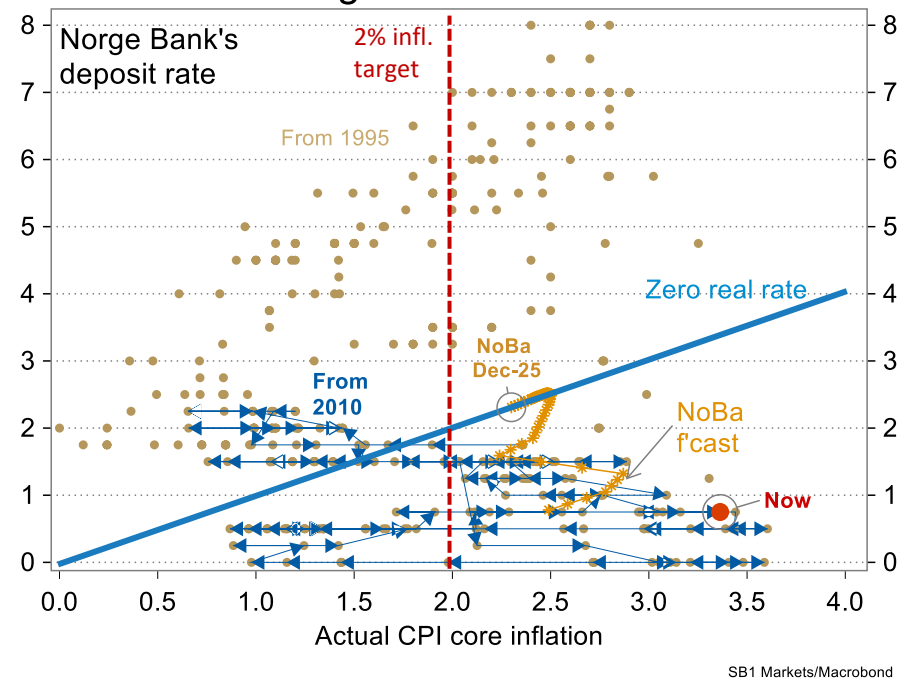
Will higher inflation trigger a steeper rate path? It will contribute

The interest rate is still very low vs prices, wages, house price inflation, unemployment....

Norges Bank vs. CPI



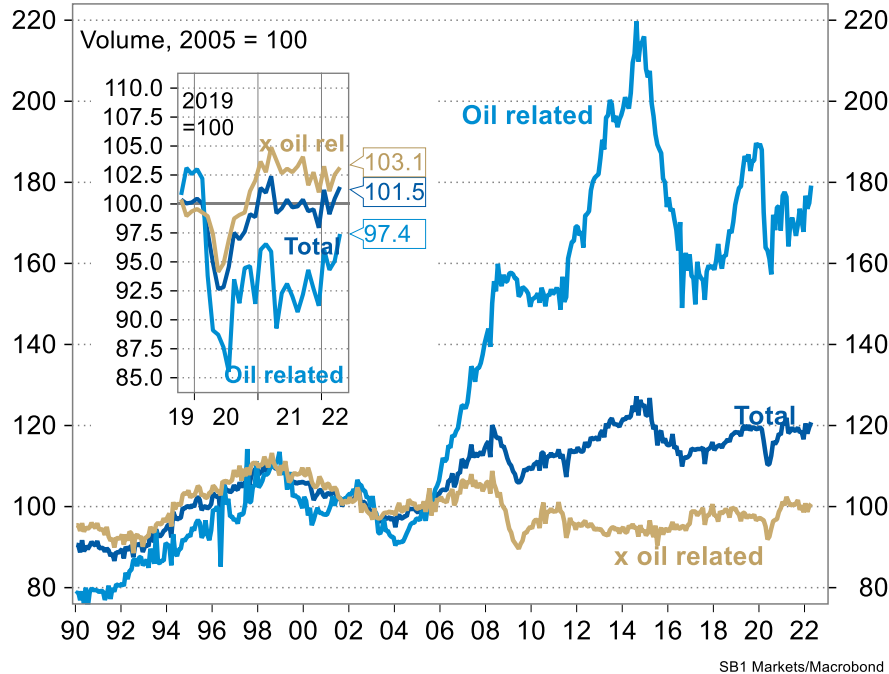
Norges Bank vs. CPI



Manufacturing production up in April, March revised up, supported by oil related

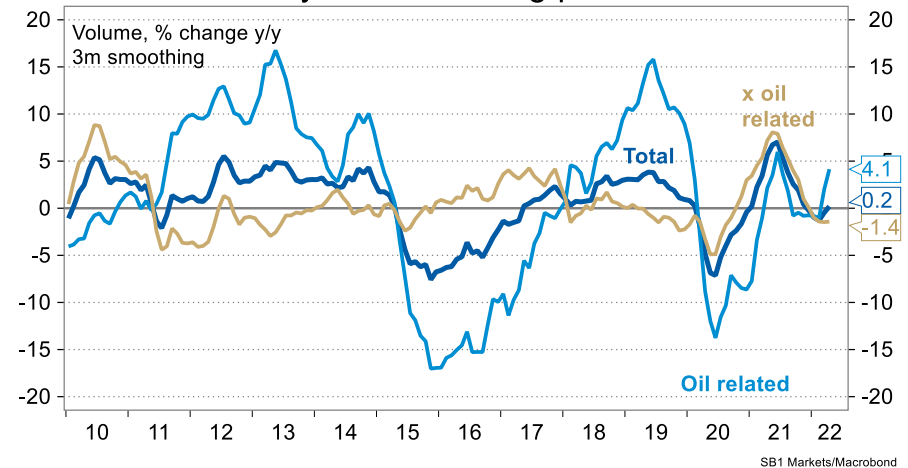
Production rose by 1% m/m, following a 1.4% lift in March (rev. from 0.6%)

Norway Manufacturing production

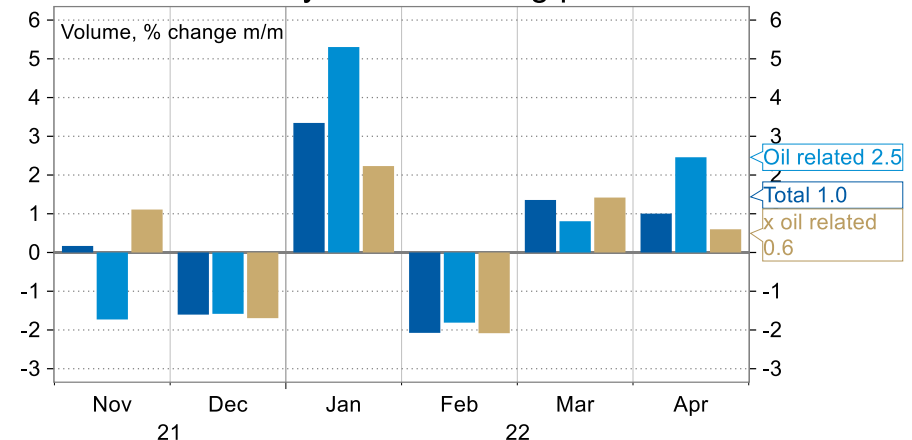


- Oil related manufacturing production climbed 2.5%, following a 0.8% lift in March (rev from -0.4%), and the trend is clearly upwards
- Other sectors gained 0.6% but the trend is flattish, at best
- Still, production x oil related sectors is 3% above 2019 level, while oil related is down 2.5%! (was reported down 7% a month ago!)
- Manufacturing surveys have been signalling strong growth in production but so far not much have been delivered (and now at least the PMI is reporting slower growth)

Norway Manufacturing production



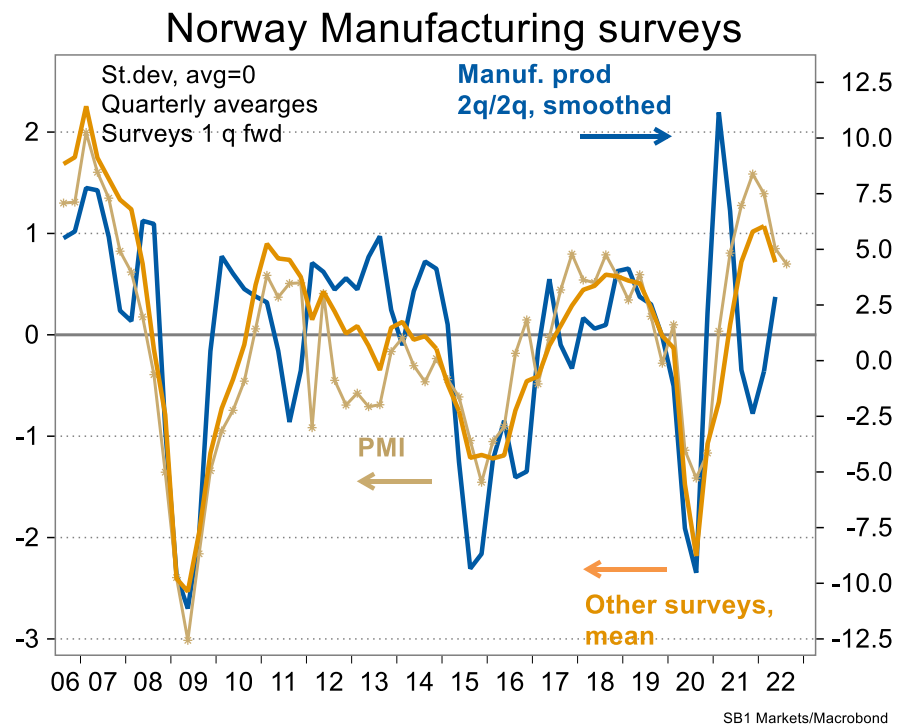
Norway Manufacturing production



SB1 Markets/Macrobond

Surveys are signalling growth (like elsewhere)

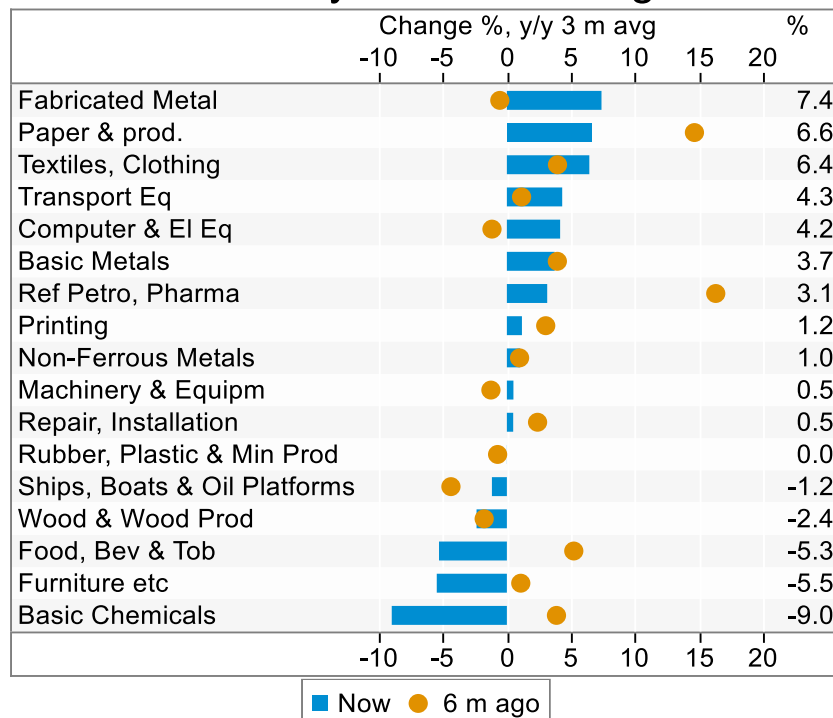
... but so far production has not been that impressive (like most other places)



Rather mixed between sectors: Chemicals, furniture, food down

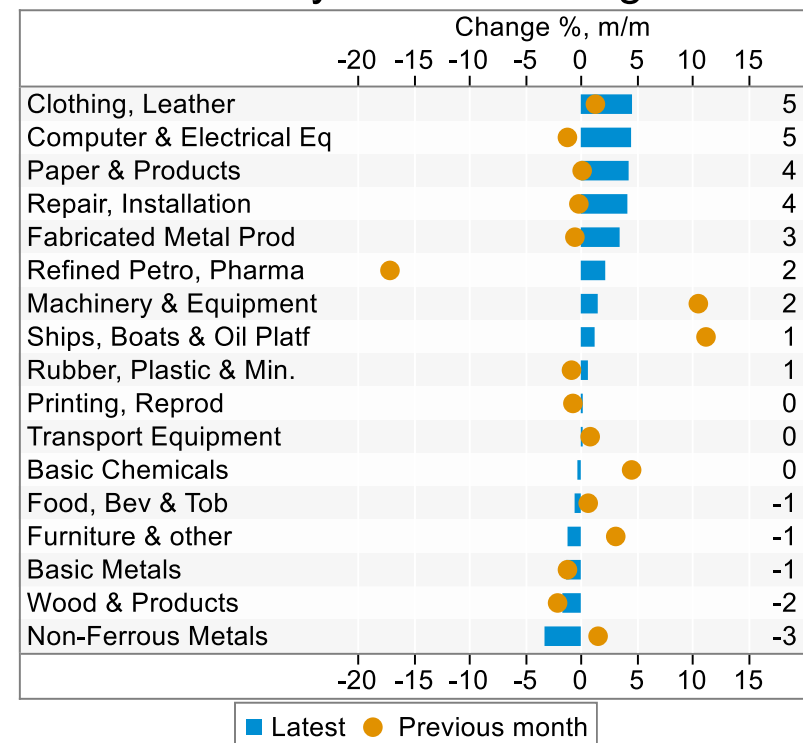
Metal products, paper, transport equipment are expanding

Norway Manufacturing



SB1 Markets/Macrobond

Norway Manufacturing

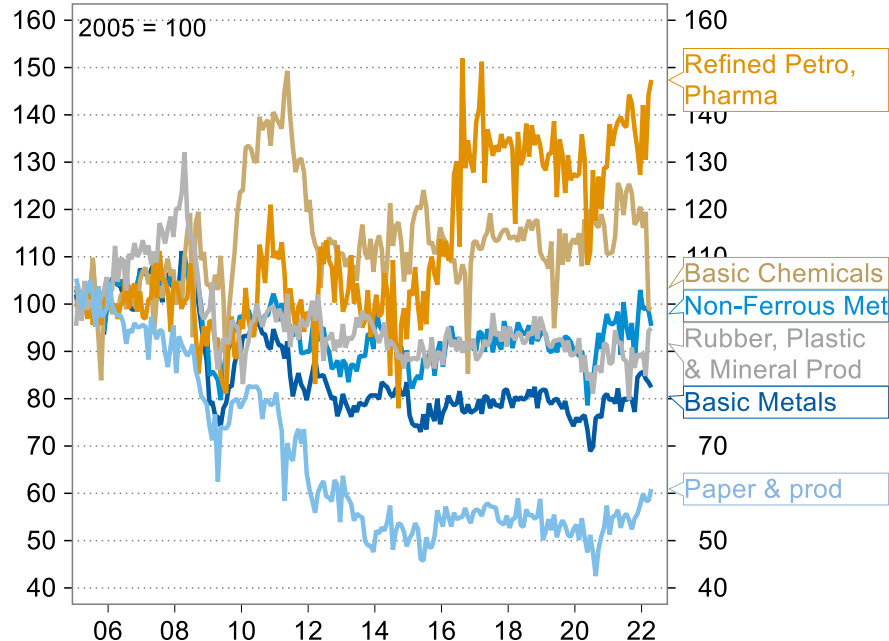


SB1 Markets/Macrobond

Engineering on the way up, now even ships and platforms

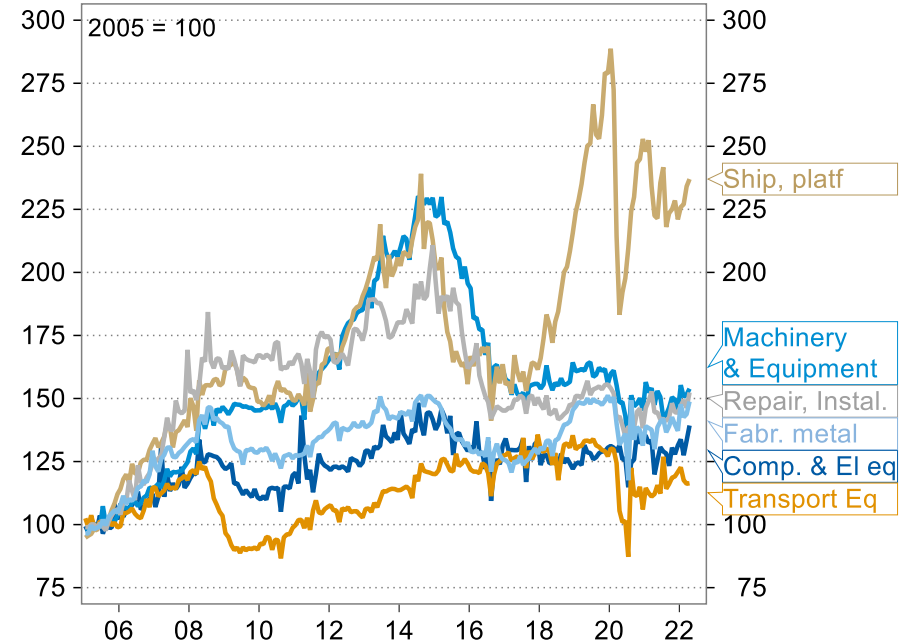
Mixed within commodities

Norway Manufacturing commodities

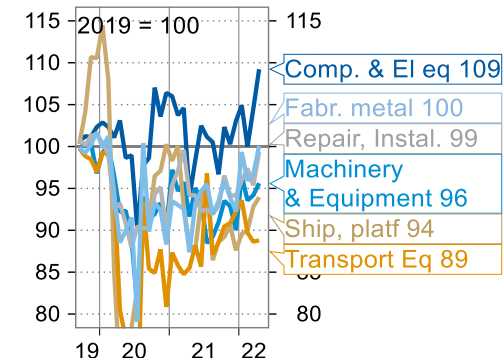


SB1 Markets/Macrobond

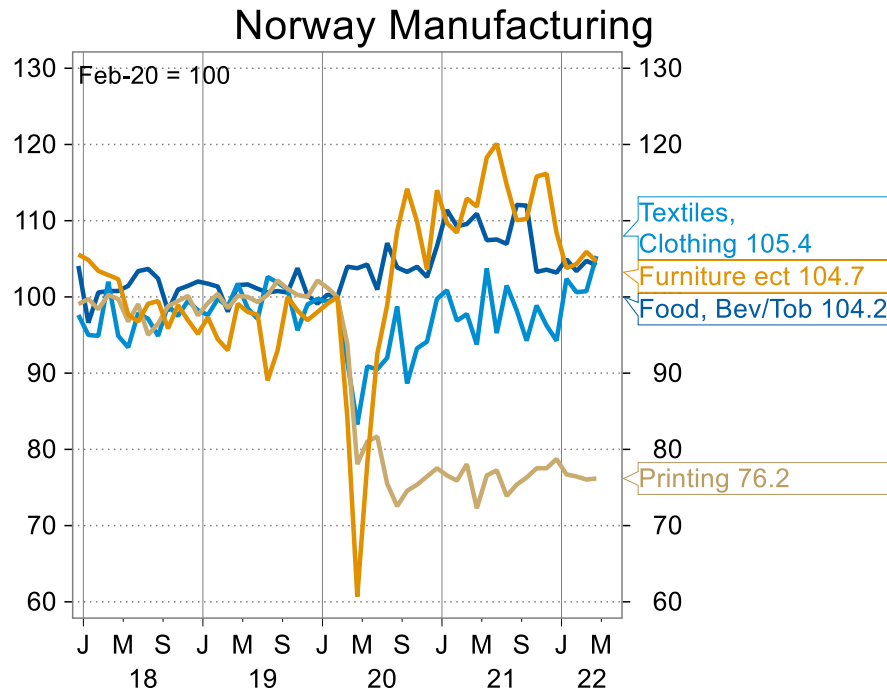
Norway Manufacturing Engineering+



- **Commodities** have been on the way up, but some branches have reported lower production recent months – and production of basic chemicals fell sharply in March and April



Food production is back to a normal level – and furniture prod. is approaching it



SB1 Markets/Macrobond

Highlights

The world around us

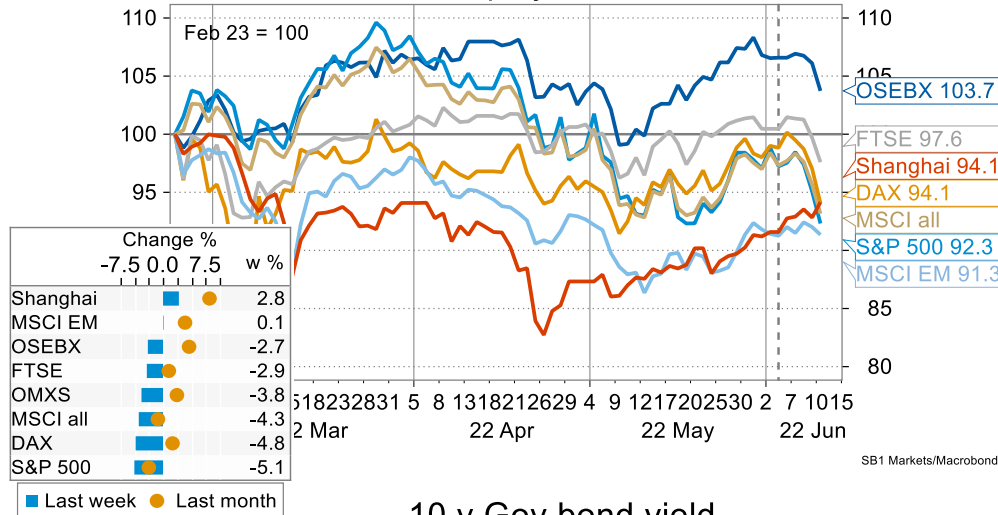
The Norwegian economy

Market charts & comments

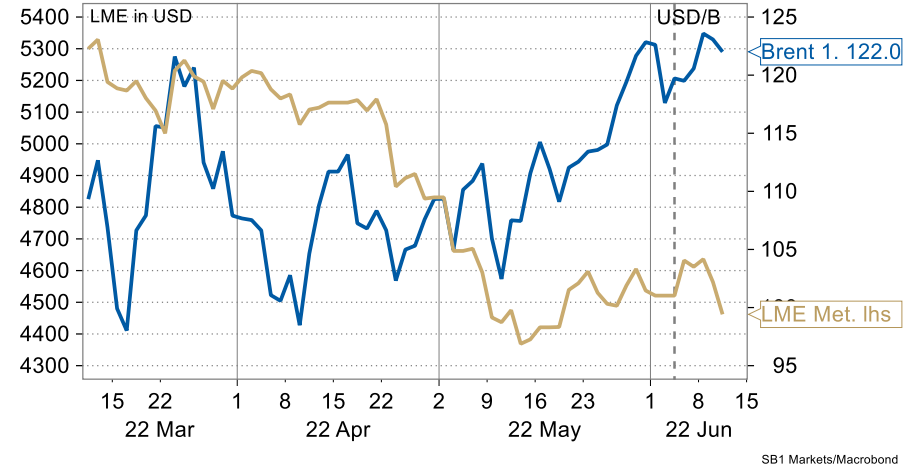
Another downturn in equity markets, yields sharply up (ECB, US inflation)

Commodity prices mostly down, but the oil price rose further. The USD sharply up

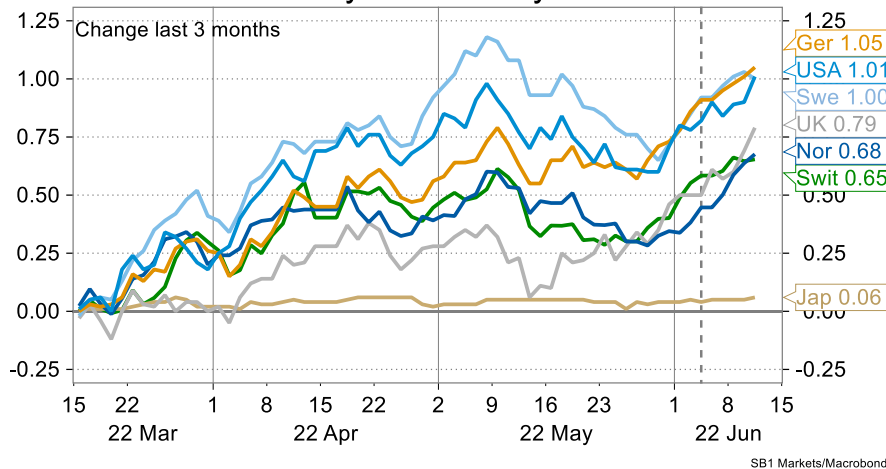
Equity Indices



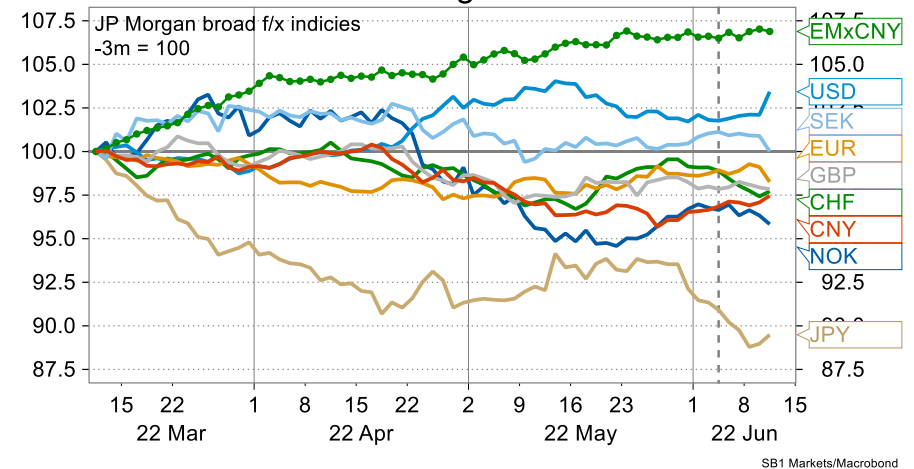
Oil vs. metals



10 y Gov bond yield



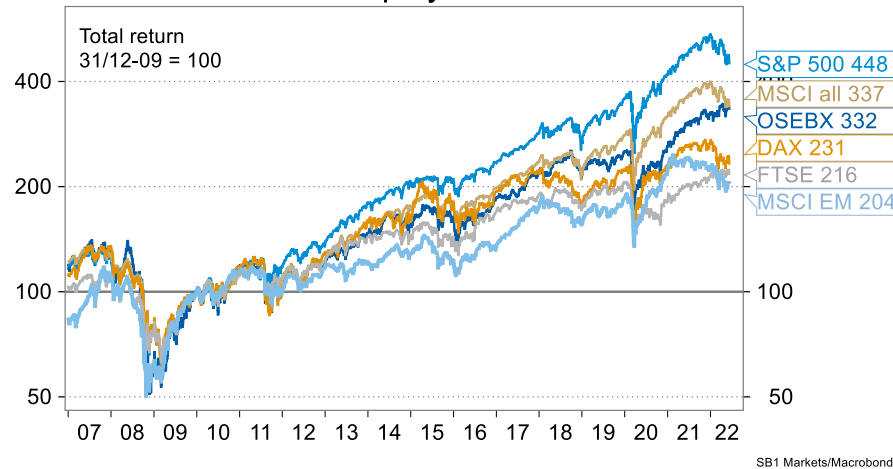
Exchange rates



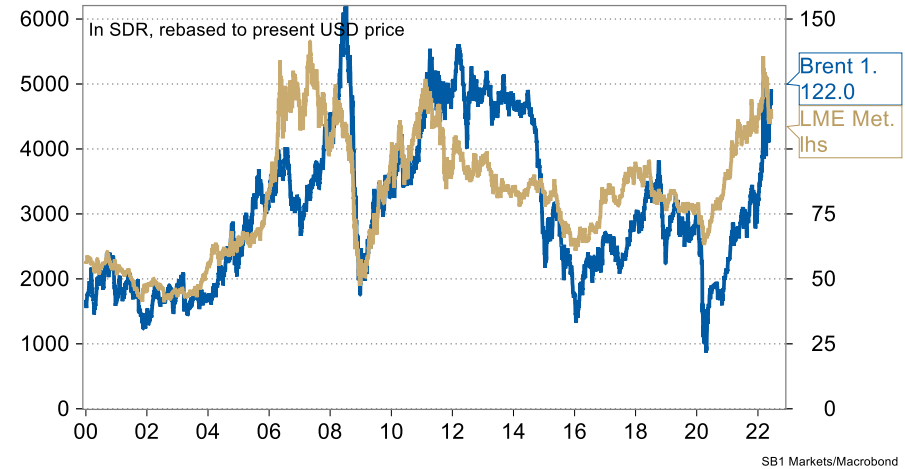
The big picture: Stock markets down (-oil rich OSEBX, FTSE), bond yields up

Commodities have taken a big step upwards – at least until early March, mixed thereafter

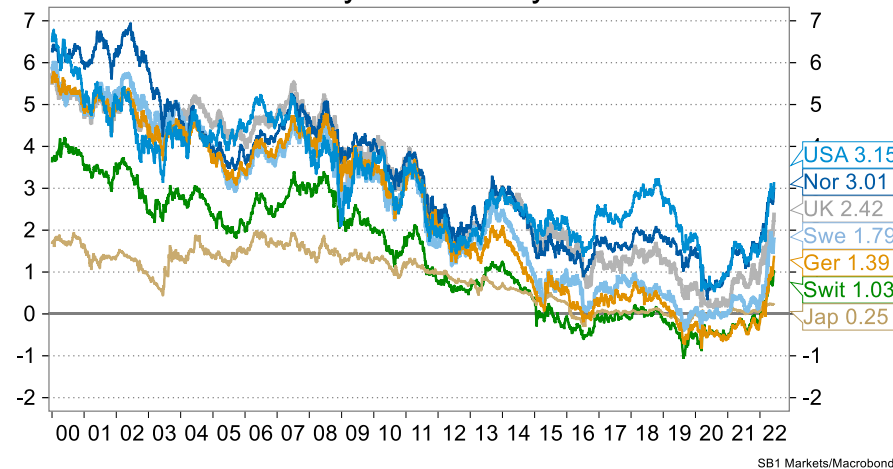
Equity Indices



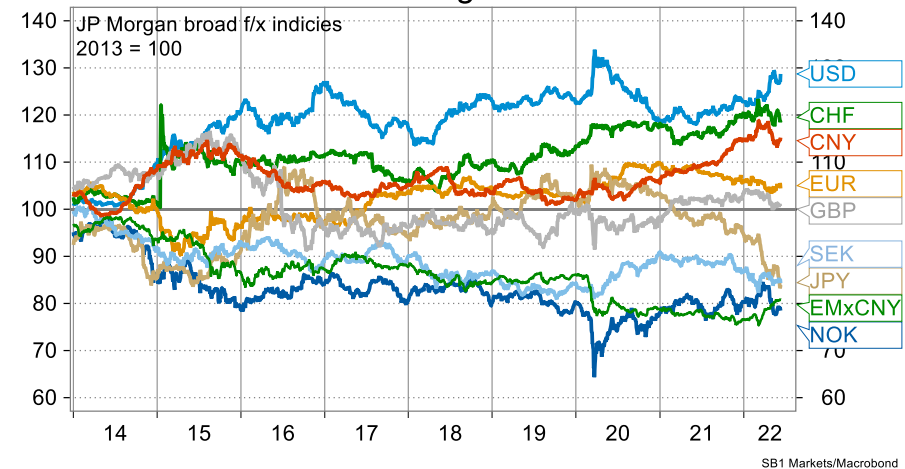
Oil vs. metals



10 y Gov bond yields

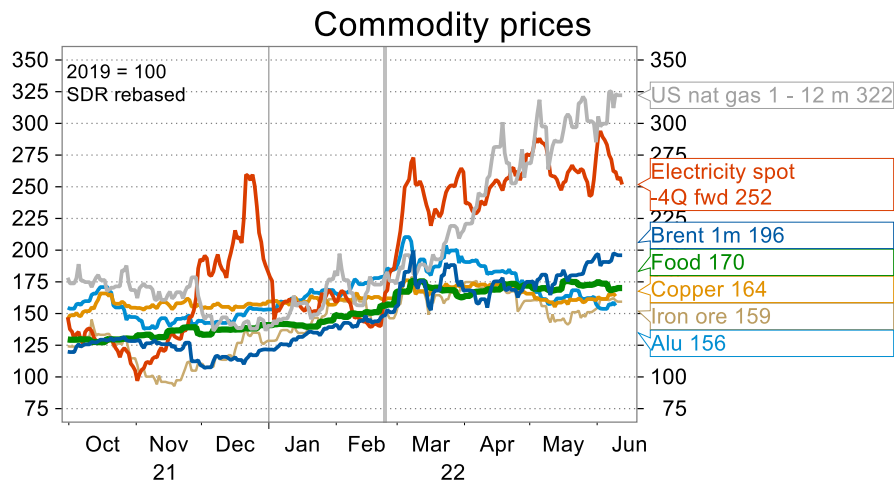


Exchange rates

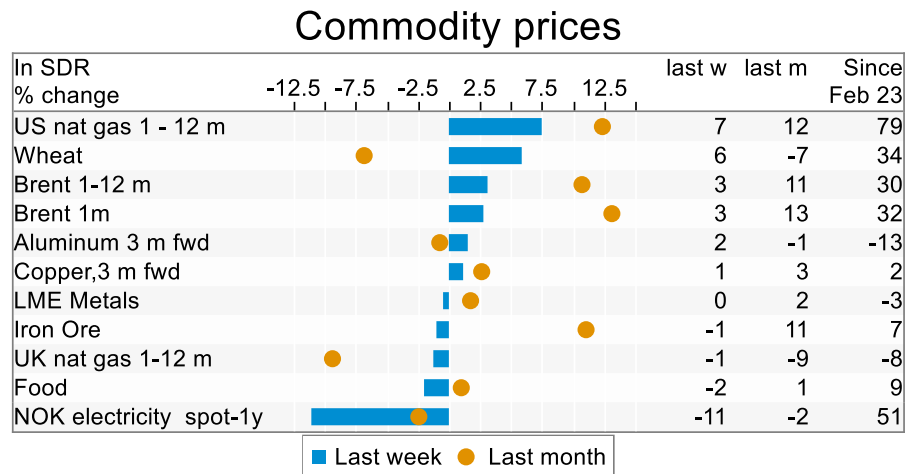


Mixed commodity prices last week too: US nat gas & oil up. LME, food down

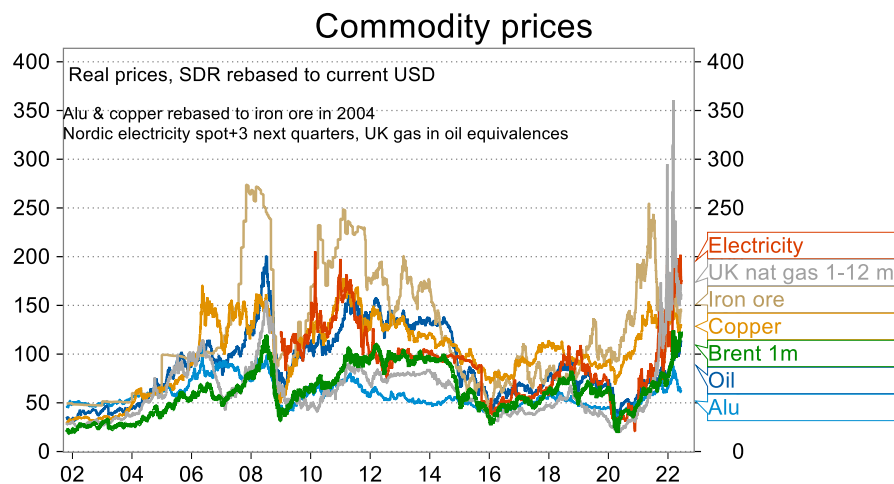
Food prices have been stable since just after the war started (in SDRs, down in USD)



SB1 Markets/Macrobond



SB1 Markets/Macrobond

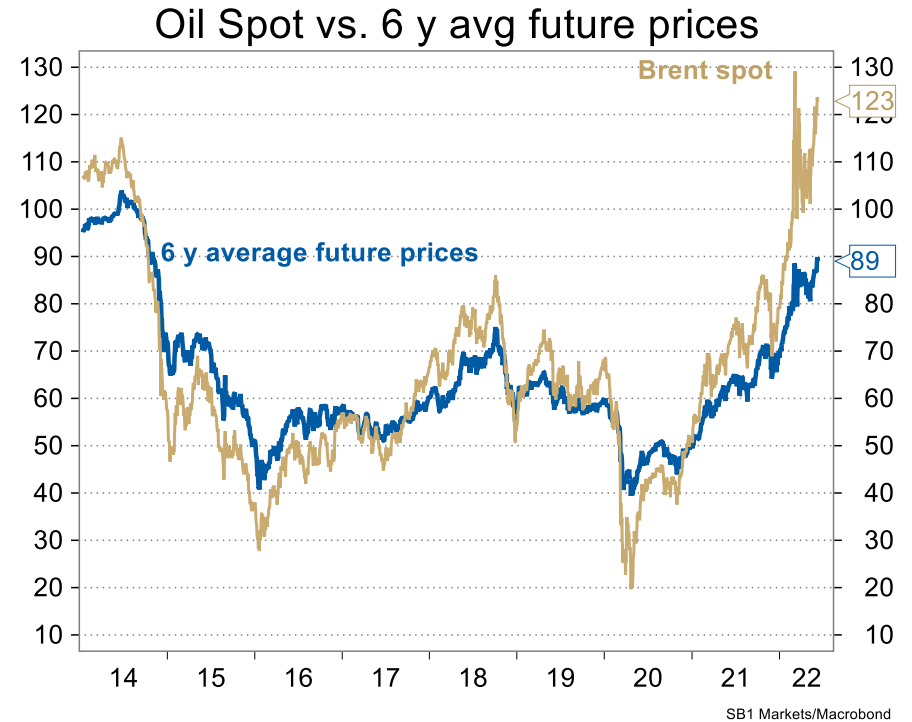
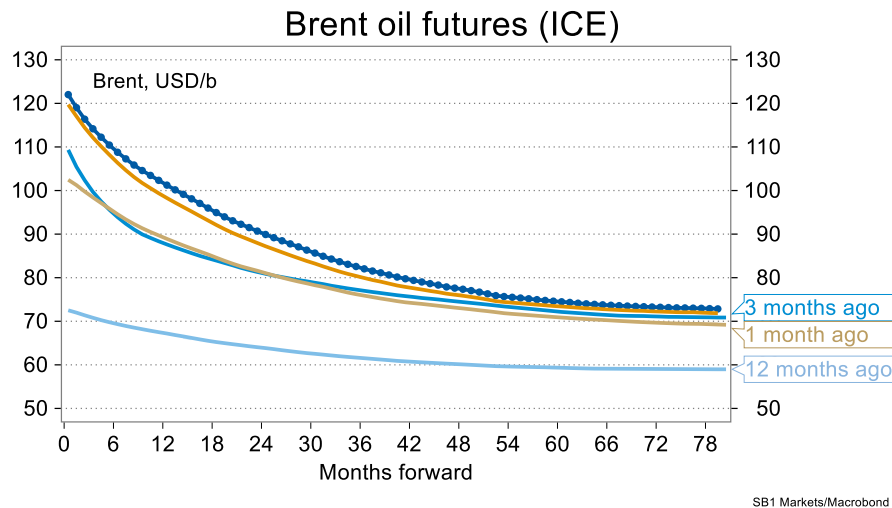
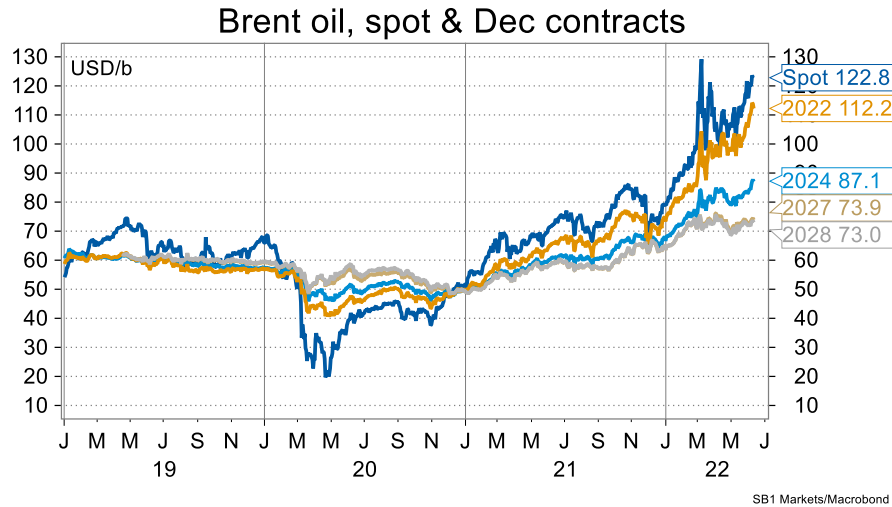


SB1 Markets/Macrobond

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

- Oil prices rose slightly last week, and they remain high
- UK natural gas prices fell last week and are down 8% down since before the invasion. (European gas prices are roughly unchanged)
- US natural gas prices are up 79% - some LNG 'leakage' to Europe?
- Norwegian electricity prices turned down last week, it's raining! (And gas prices fell)
- The Economists food commodity index fell 2% last week, and has been close to flat last month – and prices are up 9% from before the war

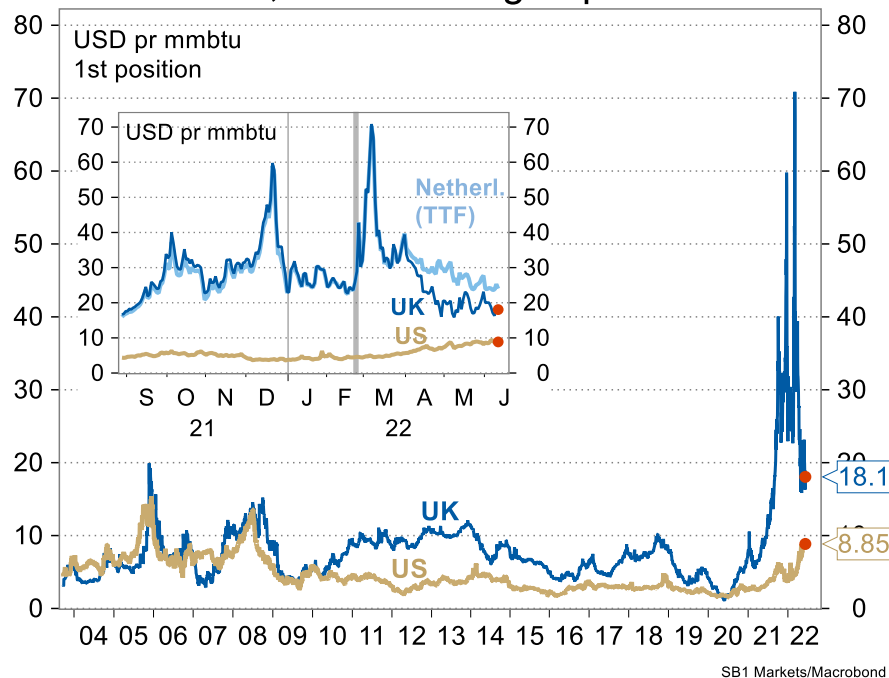
The oil price curve up to cycle high last week!



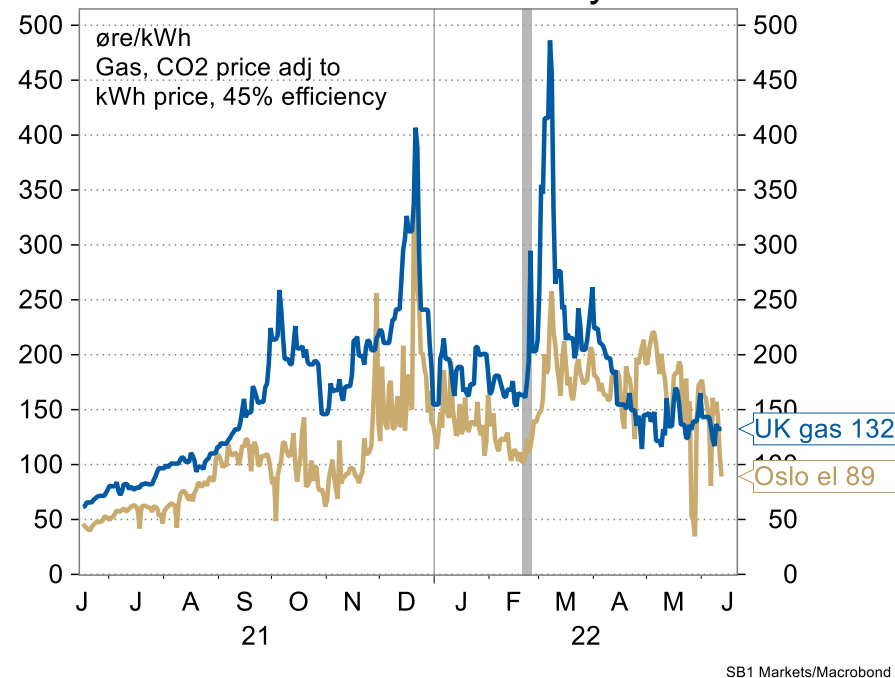
European natural gas prices are sliding down

Even as the uncertainty vs. imports from Russia remains high

UK, US natural gas prices

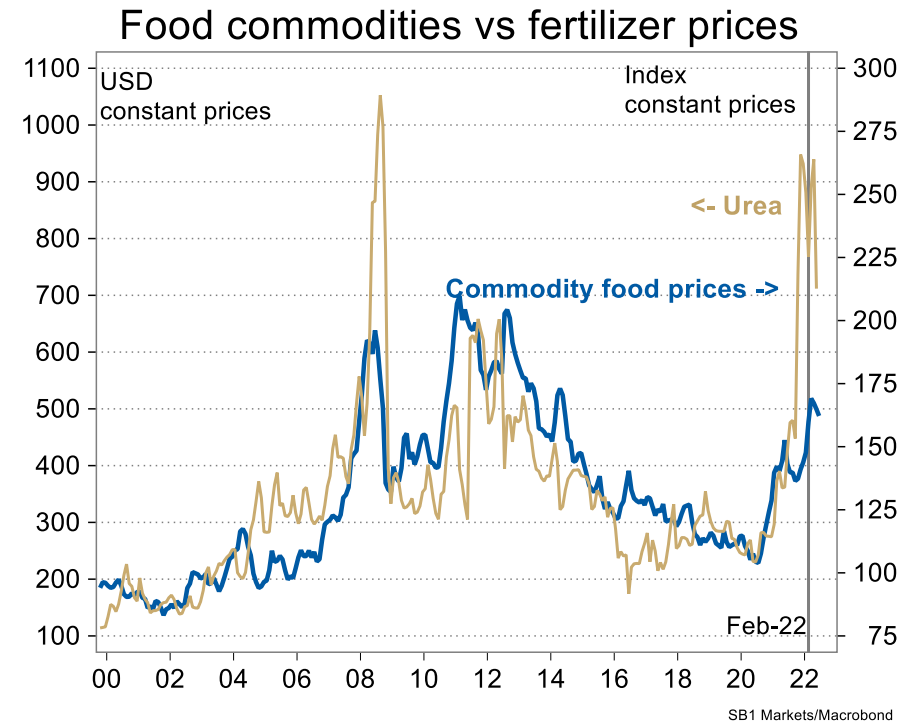
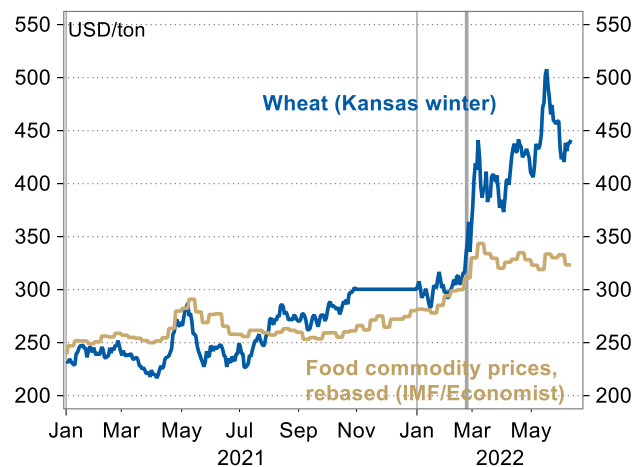
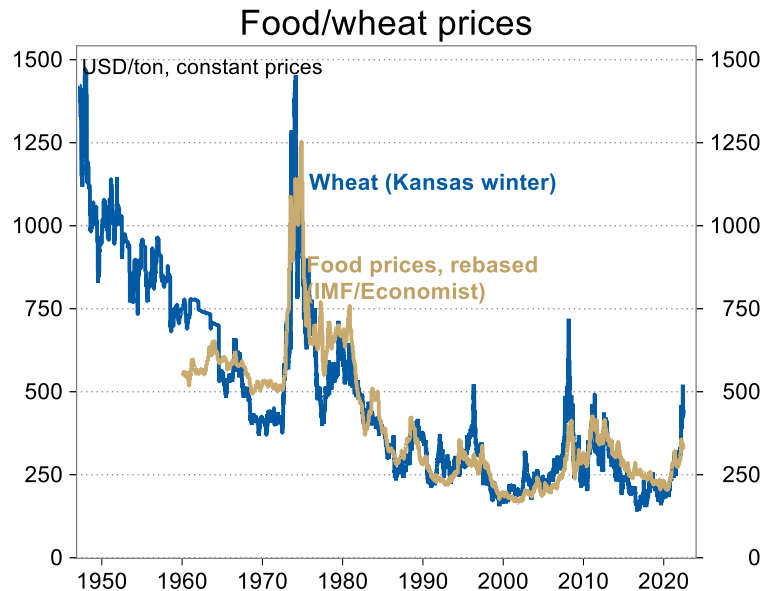


Gas & electricity



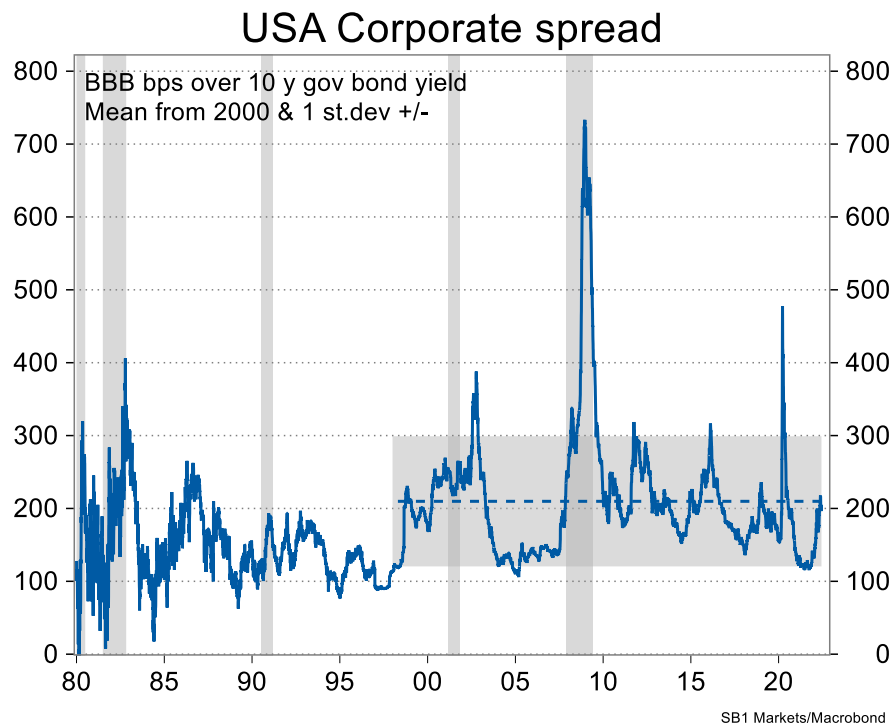
- Will LNG exports from the USA increase gas prices here? Seems like the market is discounting it – and it is not unreasonable. The cost exporting US gas to Europe may be some USD 5 – 6/mmbtu, or twice the current price differential (in the short end for the gas price curve)
- Norwegian spot electricity prices have fallen recent weeks, but the future curve has not yielded

Food prices are trending (very) slowly downwards

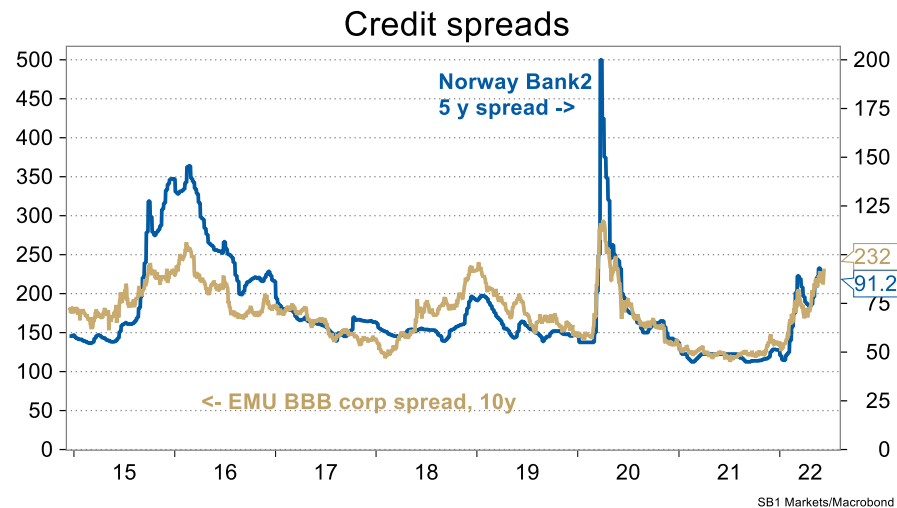
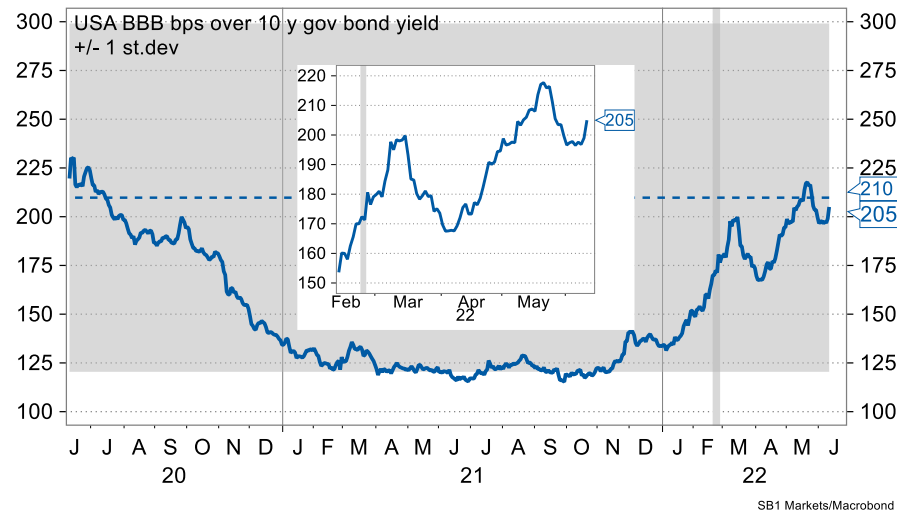


Credit spreads turned up again last week

Still, credit spreads are close to an average level, up from very low levels a few months ago



- The total capital cost has increased significantly, as the long term real government bond rate is up 150 bps +
- European and Norwegian spreads are following suit, as they usually do



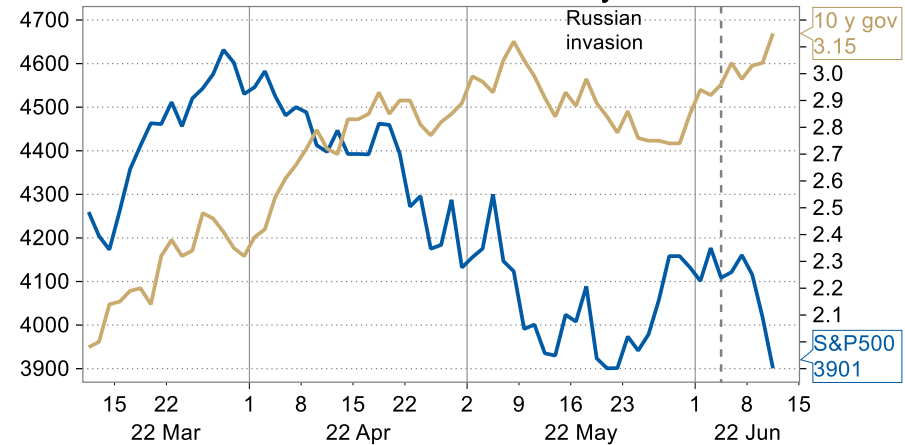
The S&P 500 down 5.1%, bond yields up to cycle high

Earnings growth is slowing, is approaching single digit. More to come

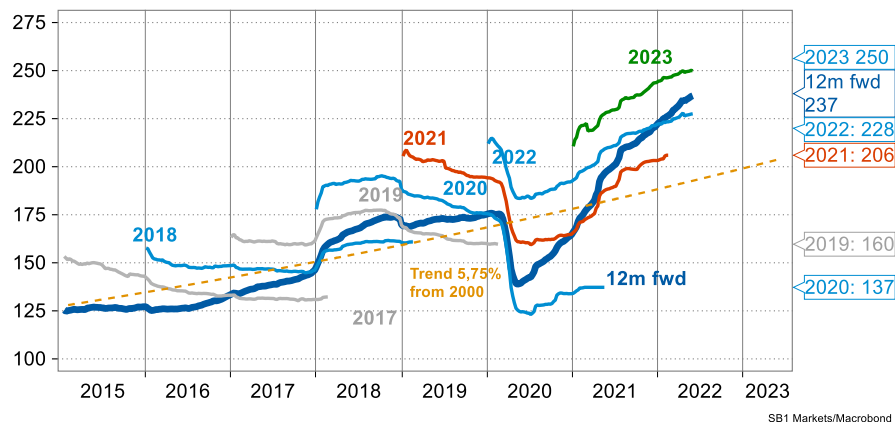
USA S&P 500 vs. bond yields



USA S&P 500 vs. bond yields



Annual S&P 500 EPS consensus (Factset)



S&P500 Earnings per share

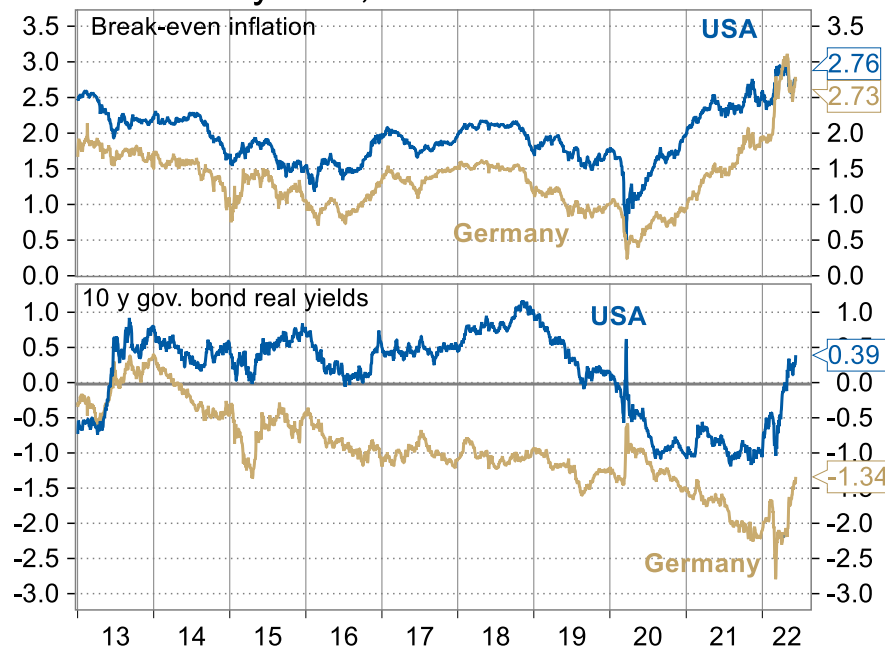


Real rates shot up last week, inflation expectations did not

Markets are recognising that central banks will have to & are willing to keep inflation in check

... at the cost of higher real rates, of course

Real yields, break-even inflation

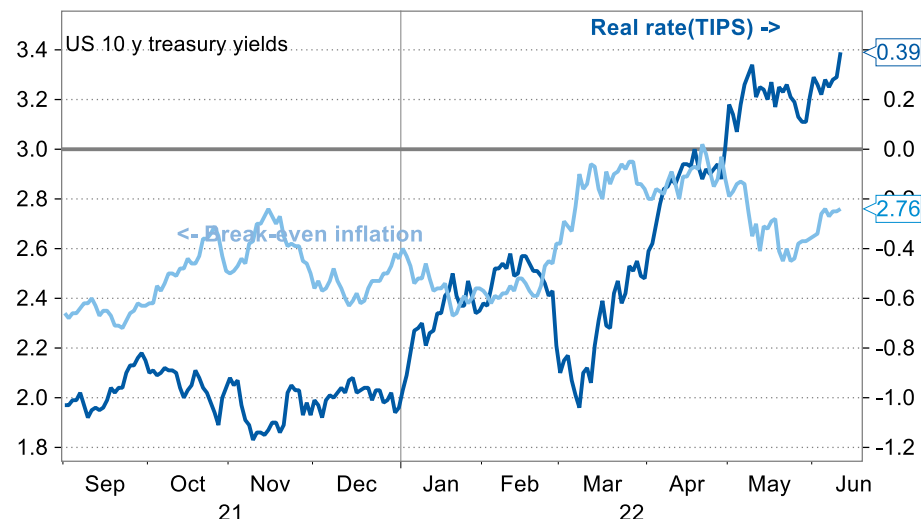


SB1 Markets/Macrobond

US & Germany 10 y Gov bond yield

	Yield	Change 1w	Change 1m	Since Feb 18	Min since April-20
USA nominal treasury	3.15	0.19	0.16	1.23	0.52
.. break-even inflation	2.76	0.02	0.11	0.35	1.06
.. TIPS real rate	0.39	0.17	0.05	0.88	-1.19
Germany nominal bund	1.39	0.14	0.33	1.17	-0.65
.. break-even inflation	2.73	0.07	0.00	0.75	0.40
.. real rate	-1.34	0.07	0.33	0.42	-2.80

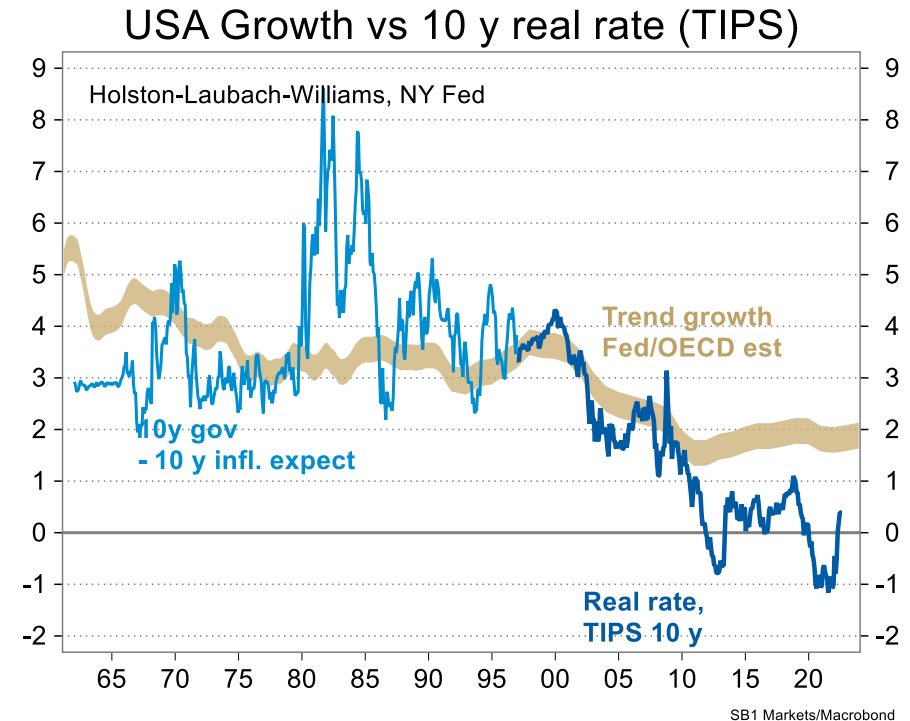
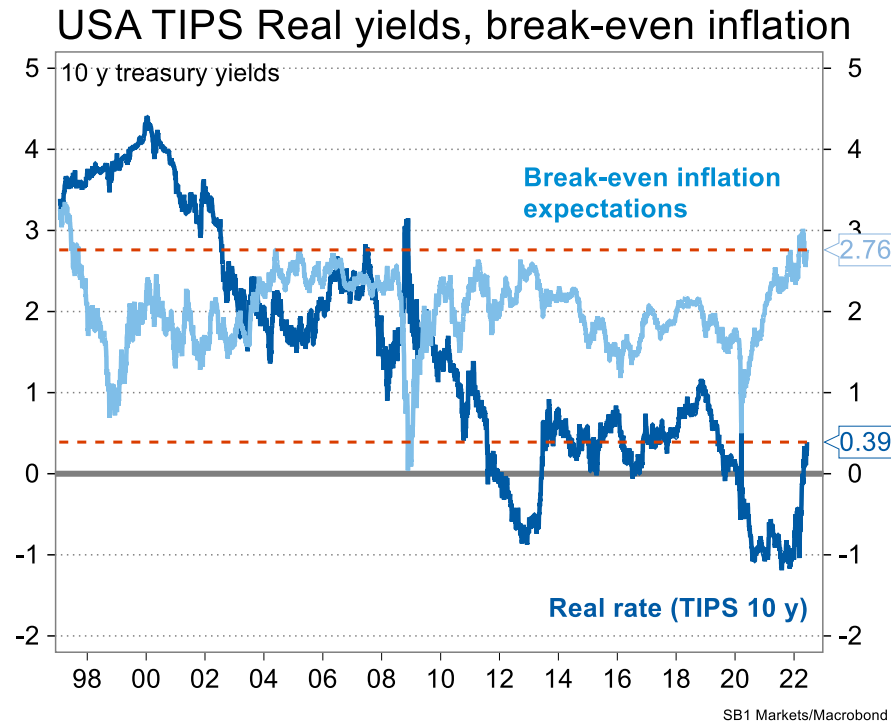
SB1 Markets/Macrobond



- **The US nominal 10 y bond yield** rose 19 bps last week to 3.15%, a cycle high
 - » **Real rates** gained 17 bps, to 0.39%, a cycle high too. **Nominal rates** up 2 bps
- **The 10 y German bund** added 15 bps to 1.39%
 - » **Real rates** rose 7 bps to -1.34%, also a cycle high
 - » Inflation expectations rose 7 bps to 2.73%, still below the above the ATH at above 3% some few weeks ago

Mind the gap: It's rapidly closing!

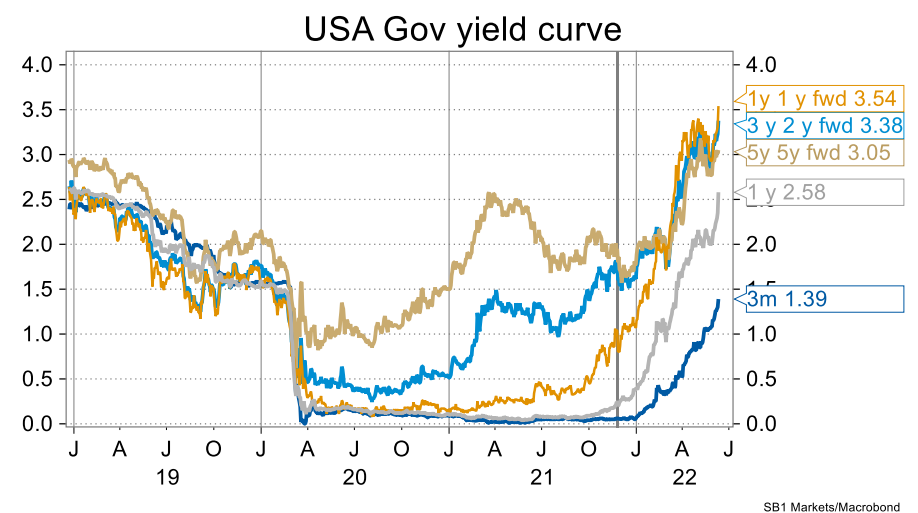
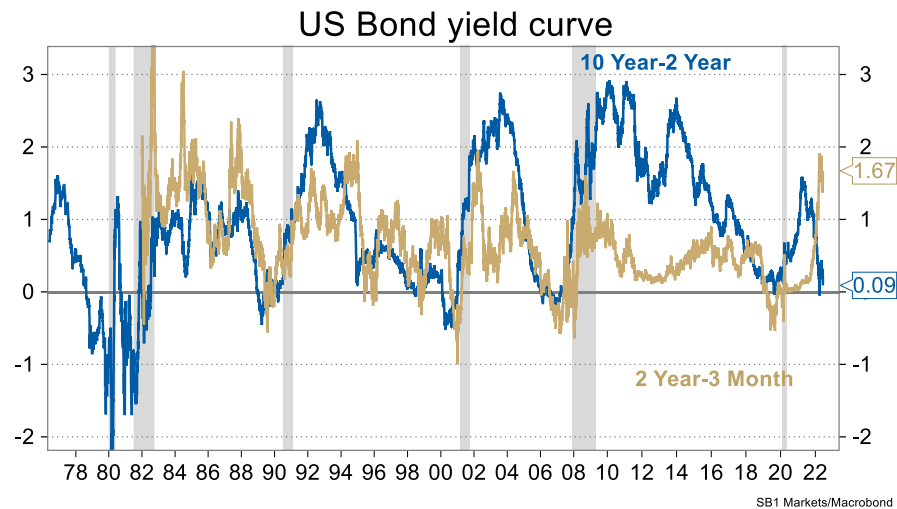
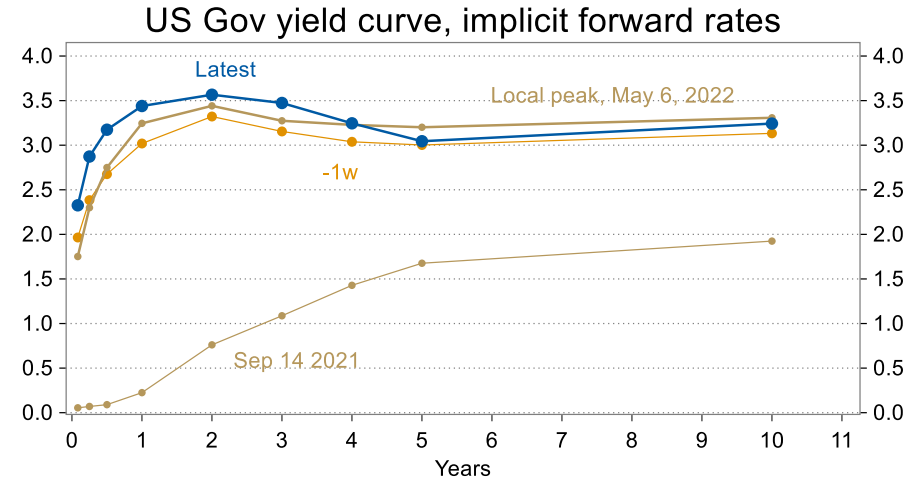
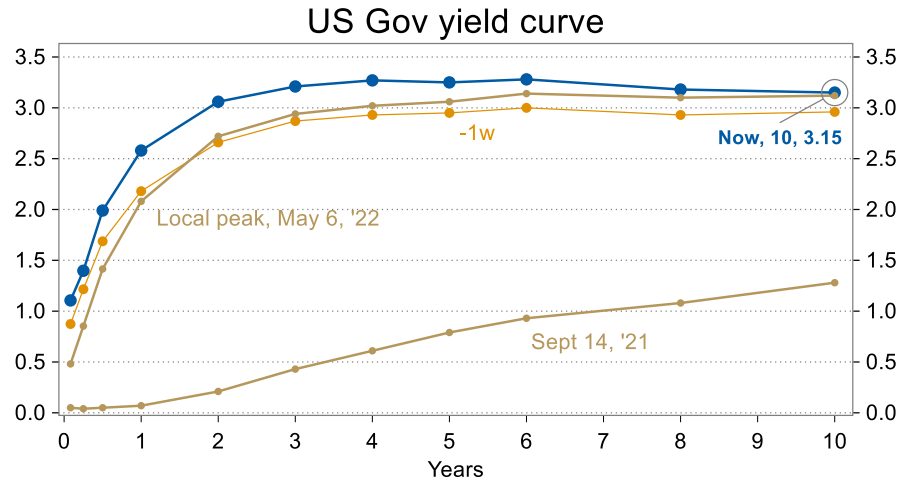
Real rates sharply up – while short/medium-term growth expectations are moving down



- There is no reason to believe that the current surge in real rates is due to an equivalent increase in growth expectations. It is of course the opposite: At least the short to medium-term outlook is now weakening as central banks finally enter the fight against inflation by at least bringing growth down to below trend growth
 - » Profit margins are VERY exposed
 - » Demand for labour will slow too, and unemployment will increase – in order to get wage inflation down
- The USD 10 trl question: Are all risk markets really discounting this scenario?

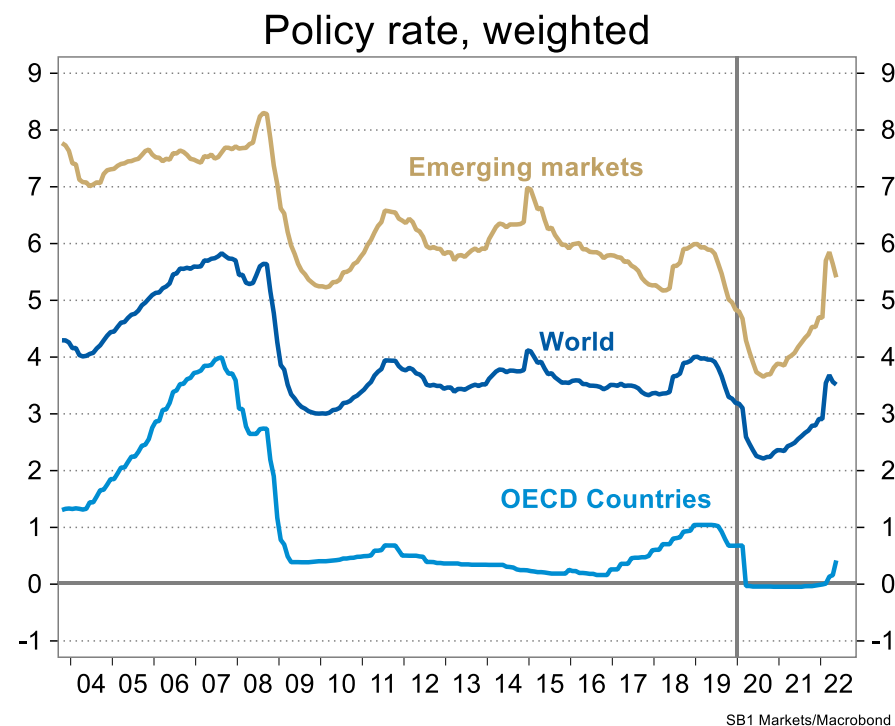
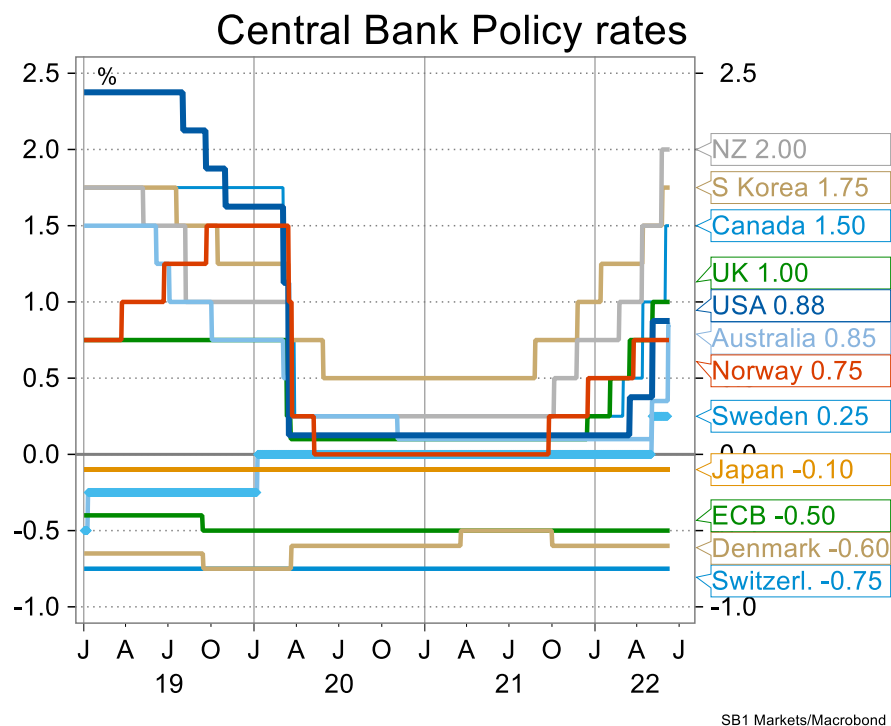
The short end of the curve sharply up last week

– and rates rose to above the early May local peak



Central banks on the move. Australia hiked by 50 bps last week, Canada the prev.

Norway is now no. 7 among rich countries. All the Anglo-Saxon + South Korea ahead

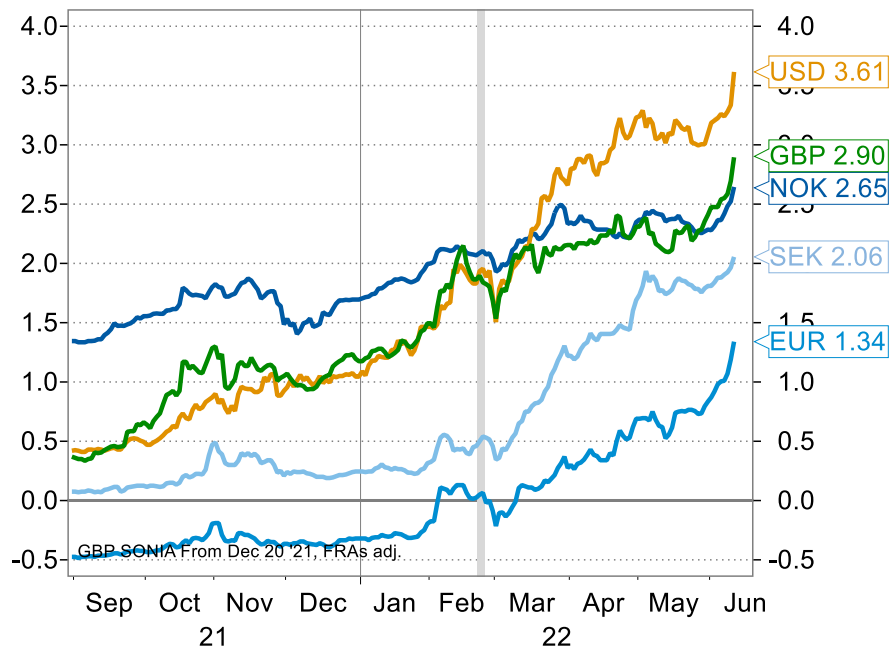


- In addition to rate hikes, central banks (x Japan and the Riksbank) have abolished their QE buying programs
- The EM average policy rate has come down due to the Russian cuts – but the trend is straight up

First a hawkish ECB, and then higher than expected US inflation

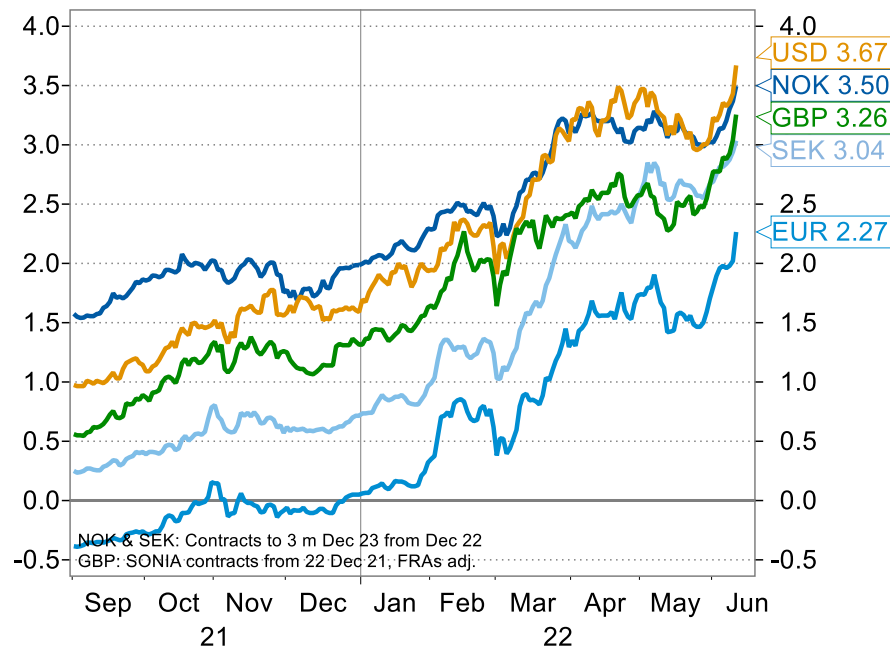
At one stage, expectations will be high enough, until the impact of tighter financial condition is observed

Dec 22 3m FRA IBOR rates



SB1 Markets/Macrobond

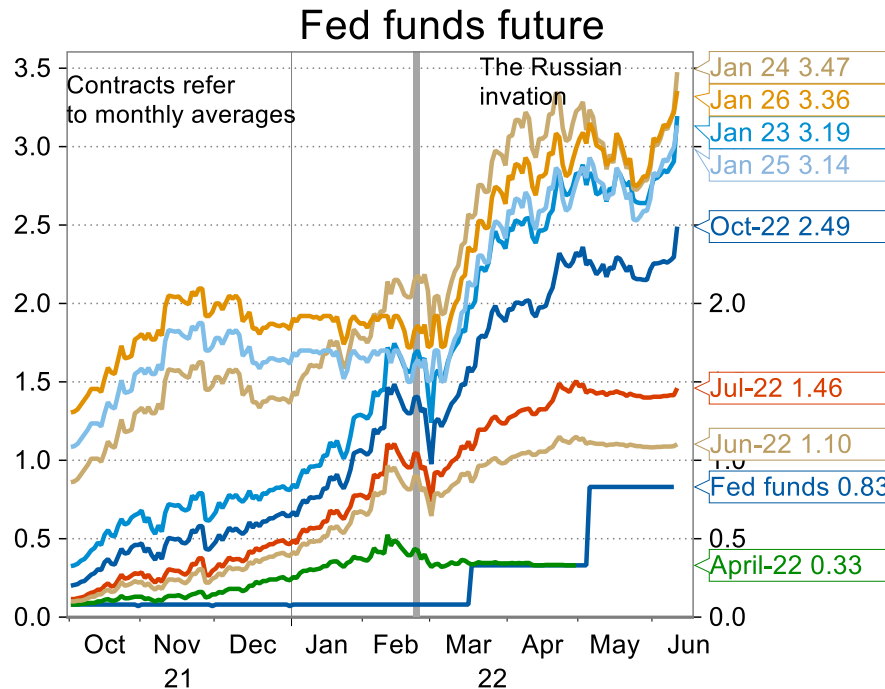
Dec 23 3m FRA IBOR rates



SB1 Markets/Macrobond

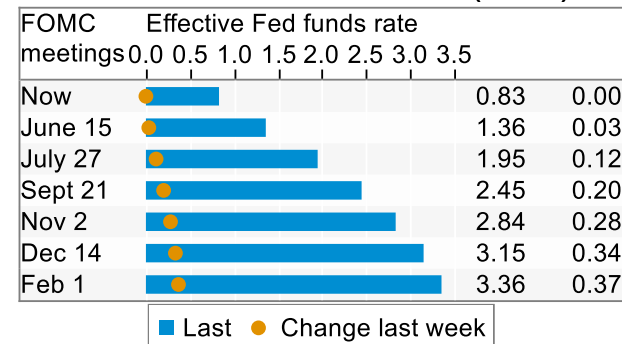
50% probability for a 75 bps hike in June, July or in Sept (of which 10 pp for June)

Friday's inflation 'shock' sent rate expectations further up, 1 ½ extra hike discounted (sum for the week)



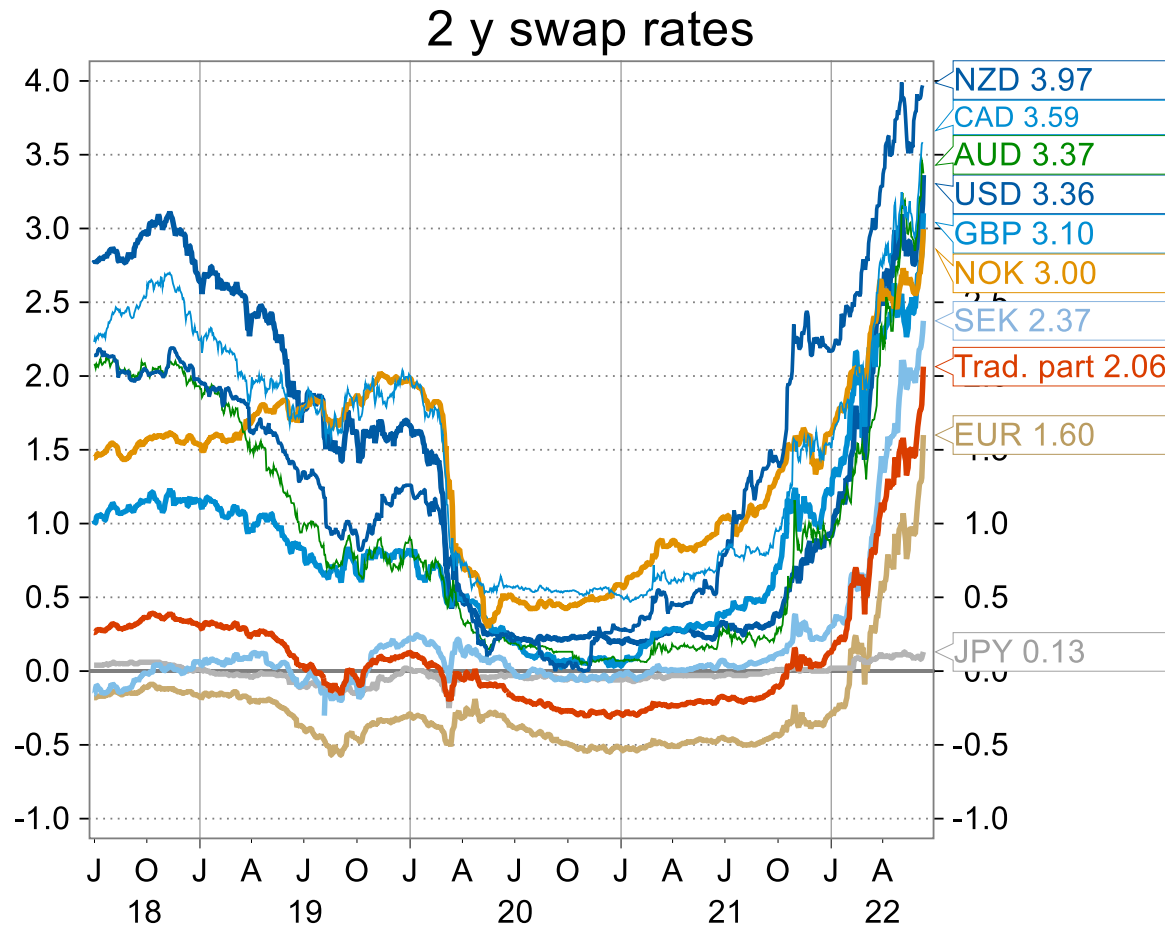
SB1 Markets/Macrobond

USA Fed funds rate (OIS)

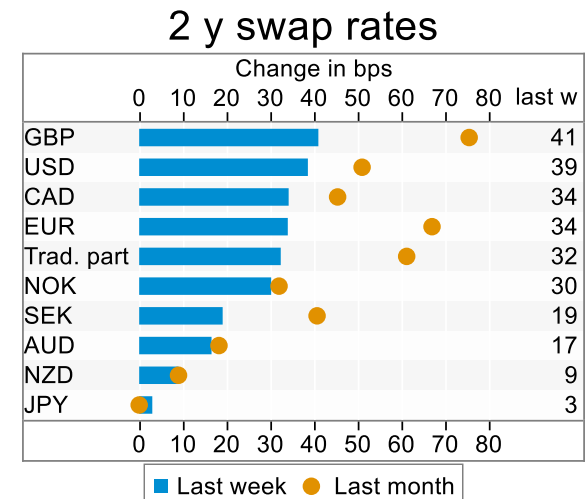
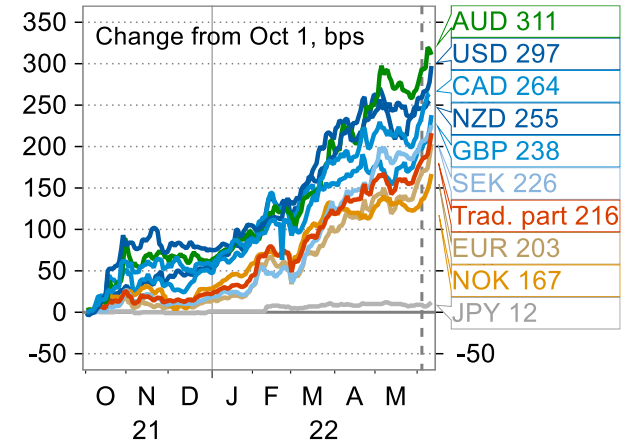


The short end of the curve straight up everywhere

Except Japan, of course



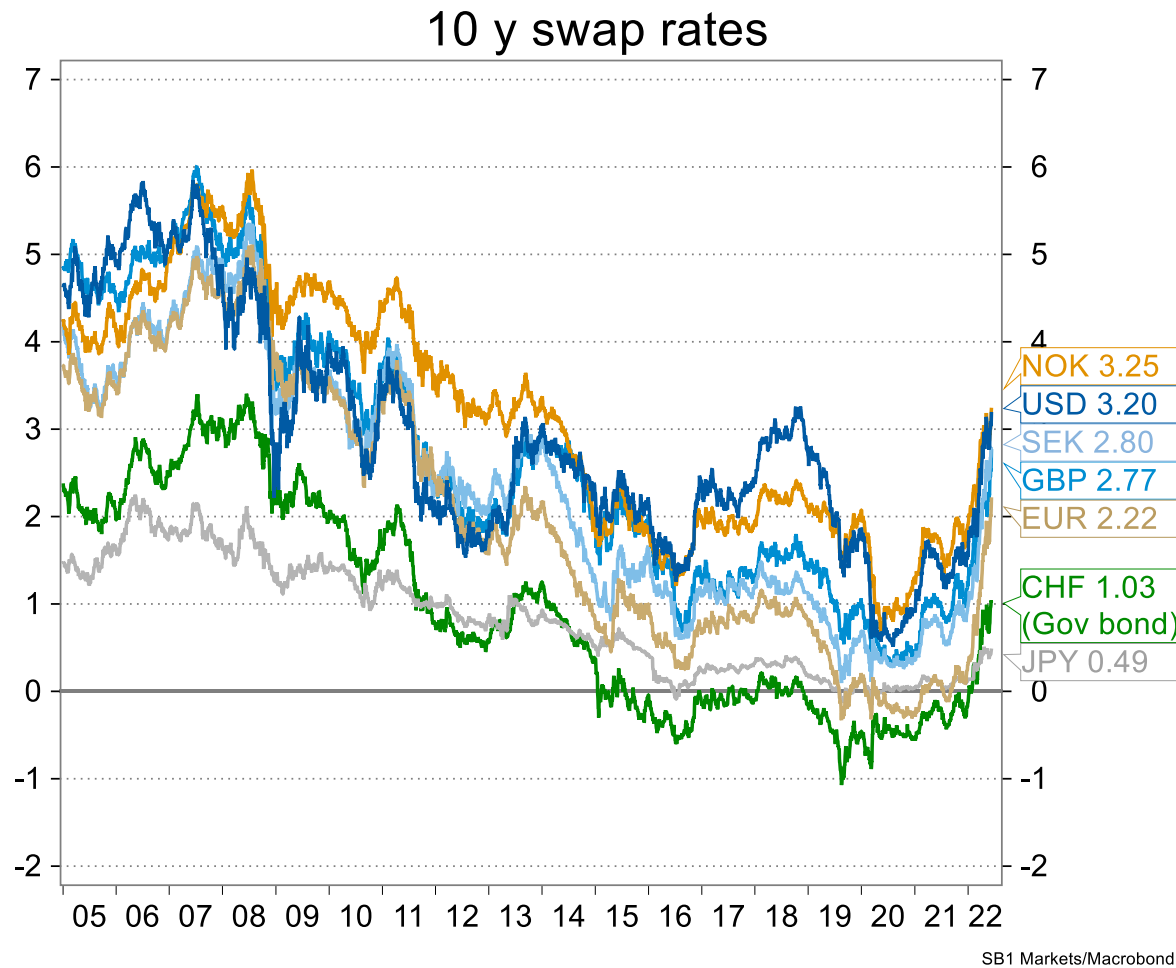
SB1 Markets/Macrobond



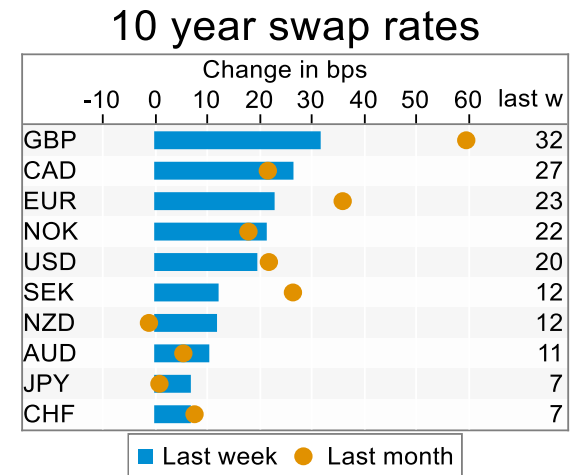
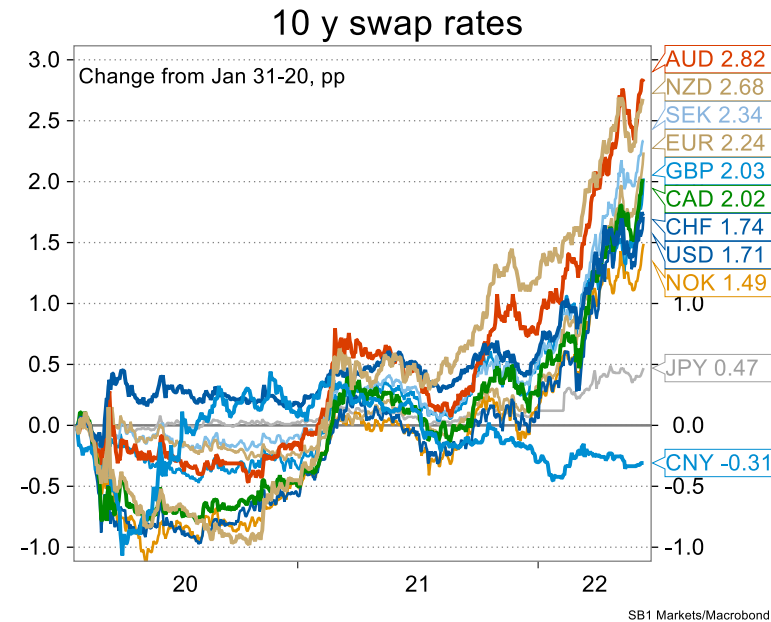
SB1 Markets/Macrobond

The long end of the curve followed suit, up everywhere by 10 – 30 bps

Almost all countries recorded new cycle highs

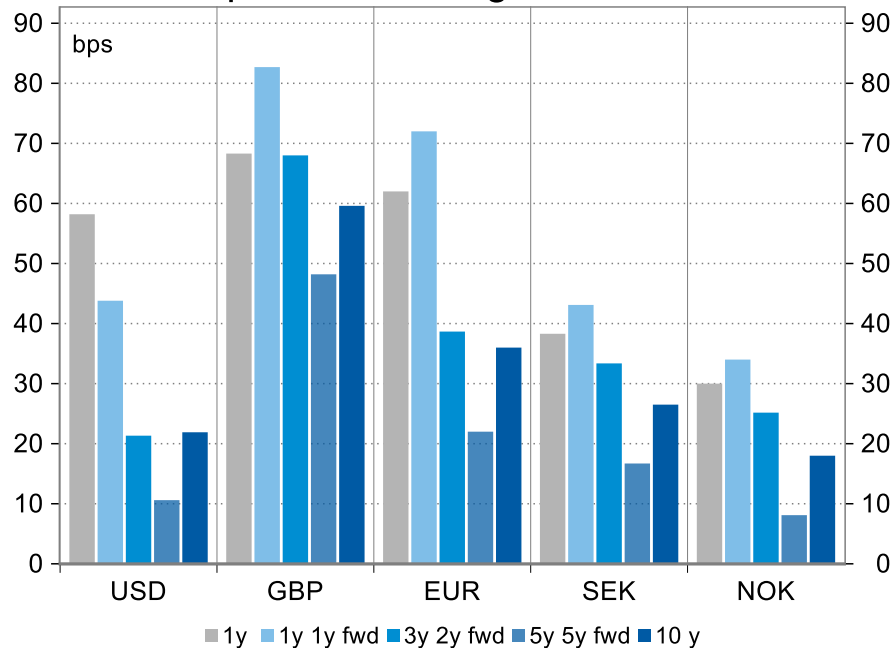


CHF: 10 y government bond yield



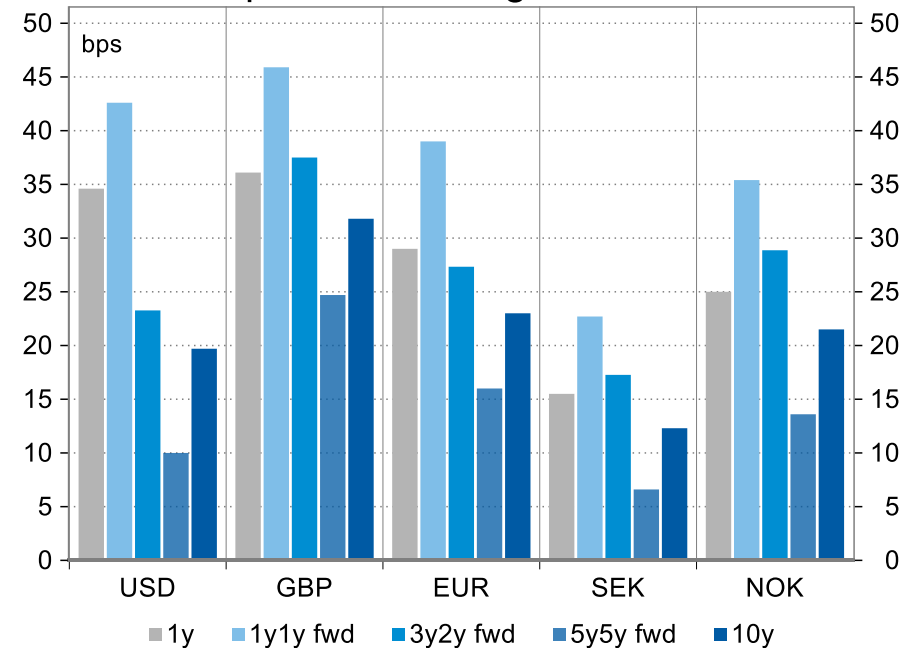
Massive lifts in interest rates, everywhere. The most in the UK

Swap Rates, changes last month



SB1 Markets/Macrobond

Swap Rates, changes last week

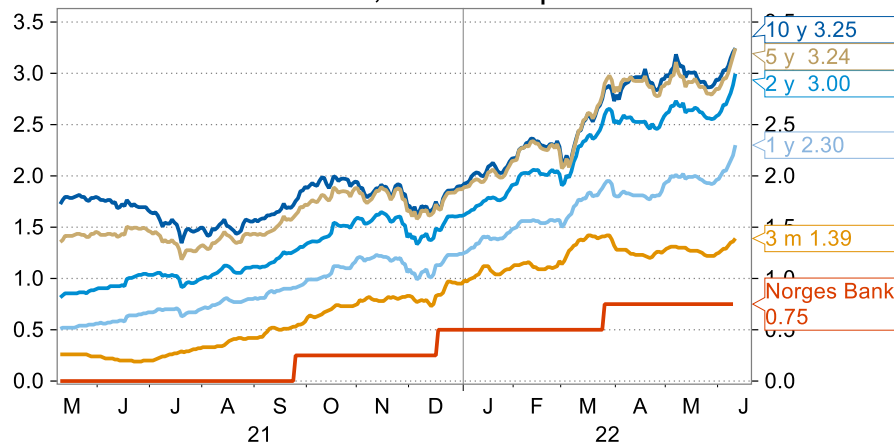


SB1 Markets/Macrobond

A shift upwards again, the most in the short end. Cycle highs from 1 y outwards

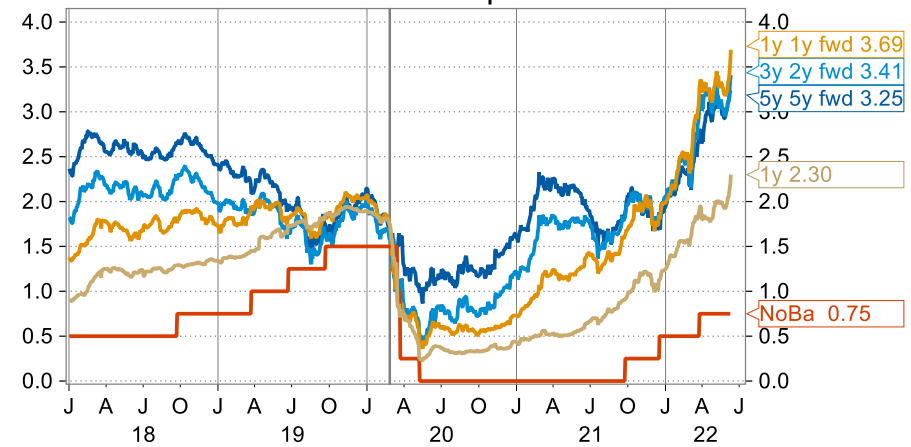
2 y at 3.0%. 10 y at 3.25%!

NIBOR, NOK swap rates



SB1 Markets/Macrobond

NOK Swap rates



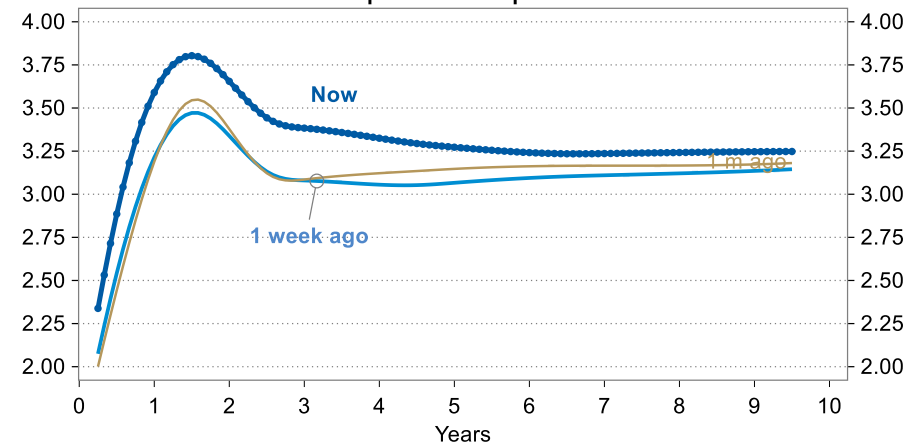
SB1 Markets/Macrobond

Norway - yield spread, 10y - 2y swap



SB1 Markets/Macrobond

NOK Implied swap forwards

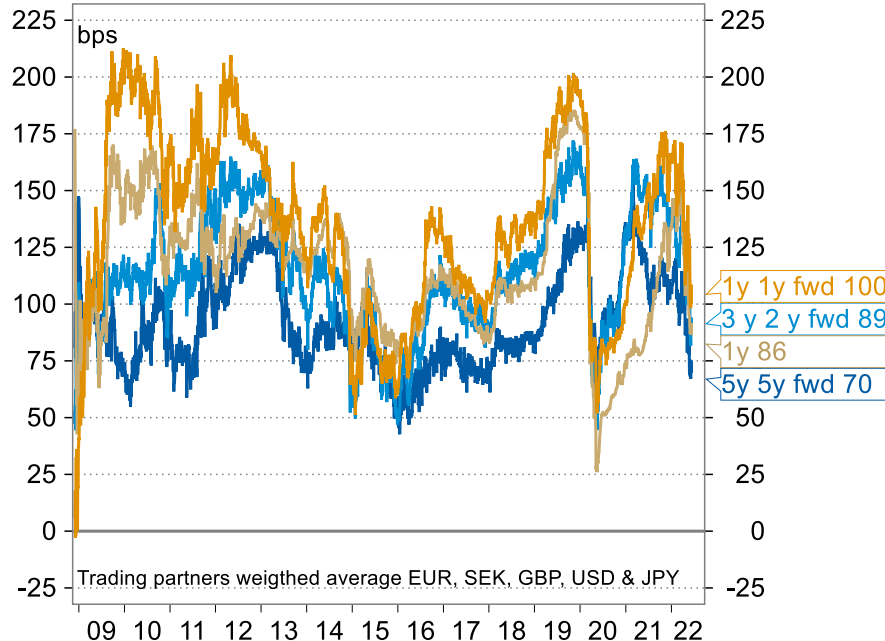


SB1 Markets/Macrobond

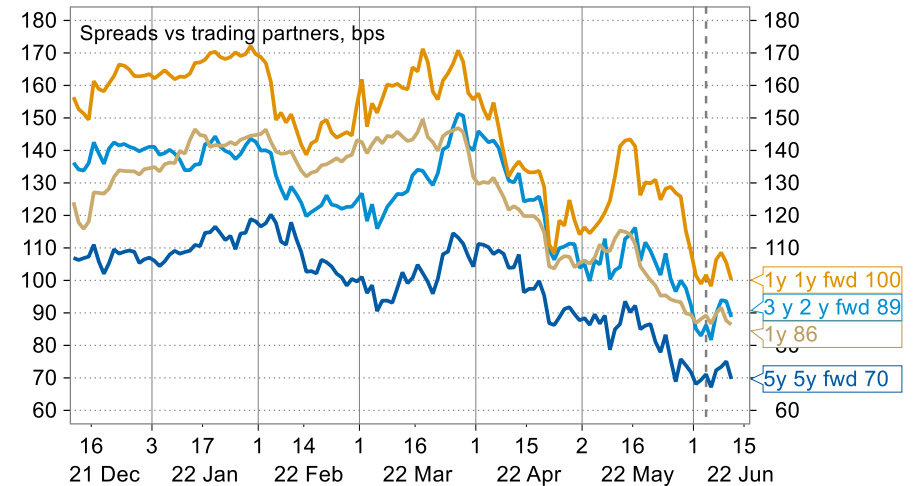
Spreads slightly up last week

Spreads vs. trading partners at slightly below average levels

Norway vs trading partners, impl swap spreads

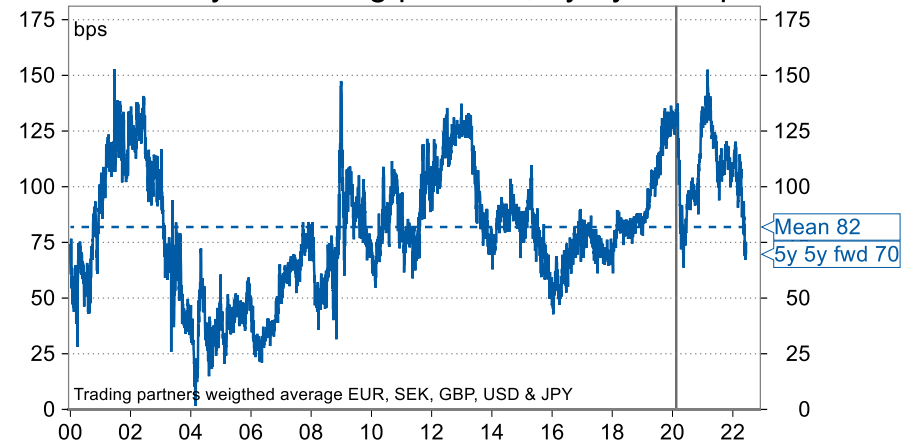


SB1 Markets/Macrobond



SB1 Markets/Macrobond

Norway vs trading partners, 5y 5y fwd spread

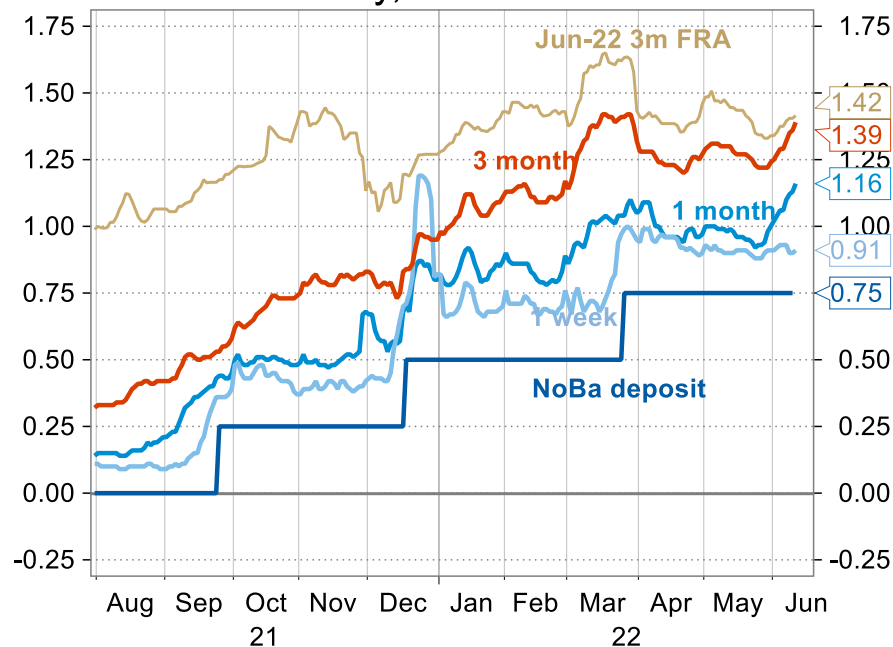


SB1 Markets/Macrobond

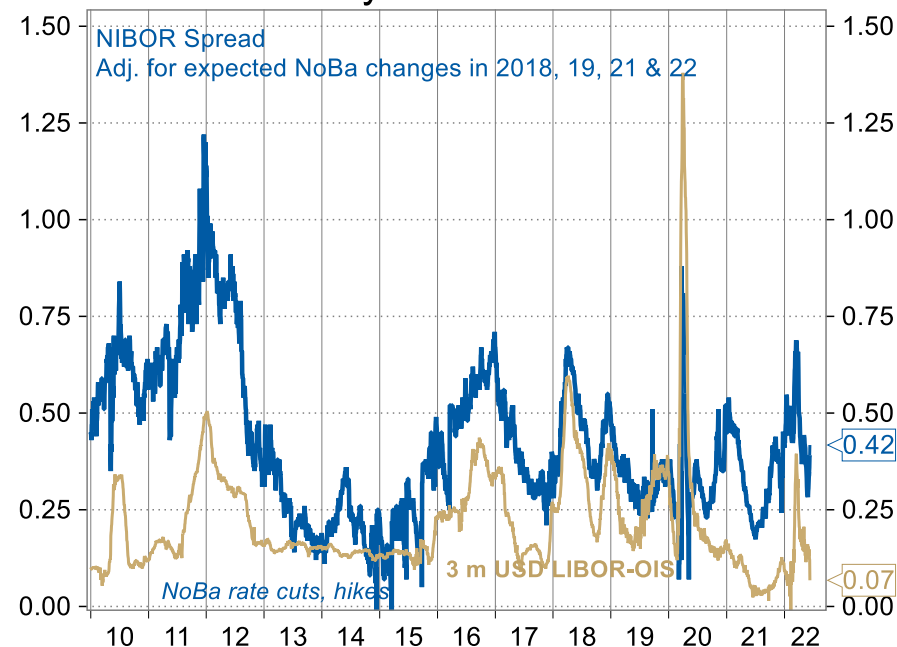
The 3m NIBOR up 10 bps to 1.39%, the NIBOR spread up 8 bps to 42 bps. Or...??

The 42 bps spread is based on a single hike in June and no hike in August. That's not a done deal now

Norway, NIBOR rates



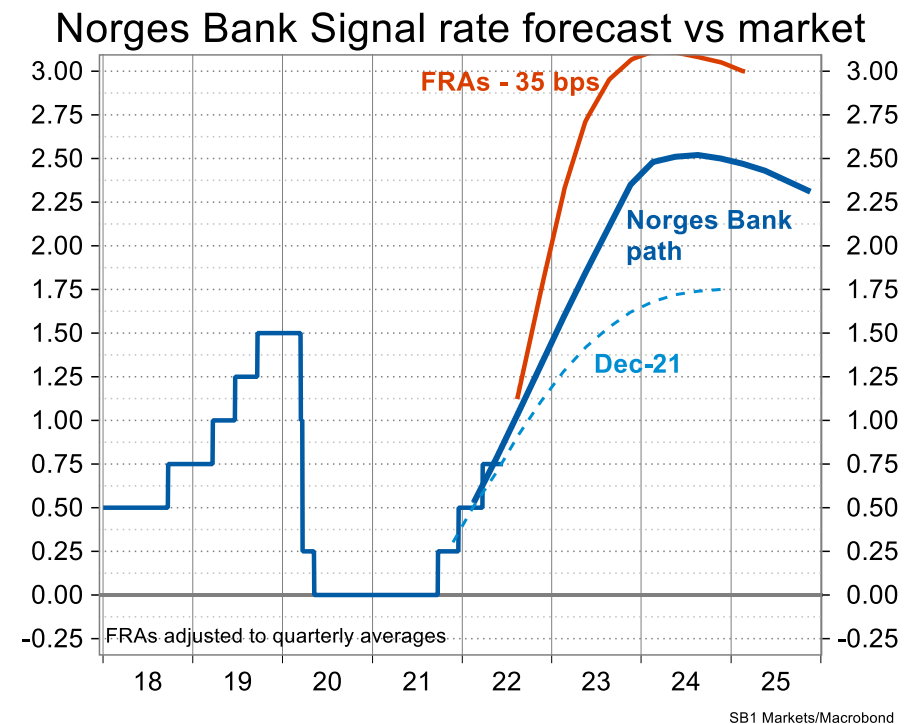
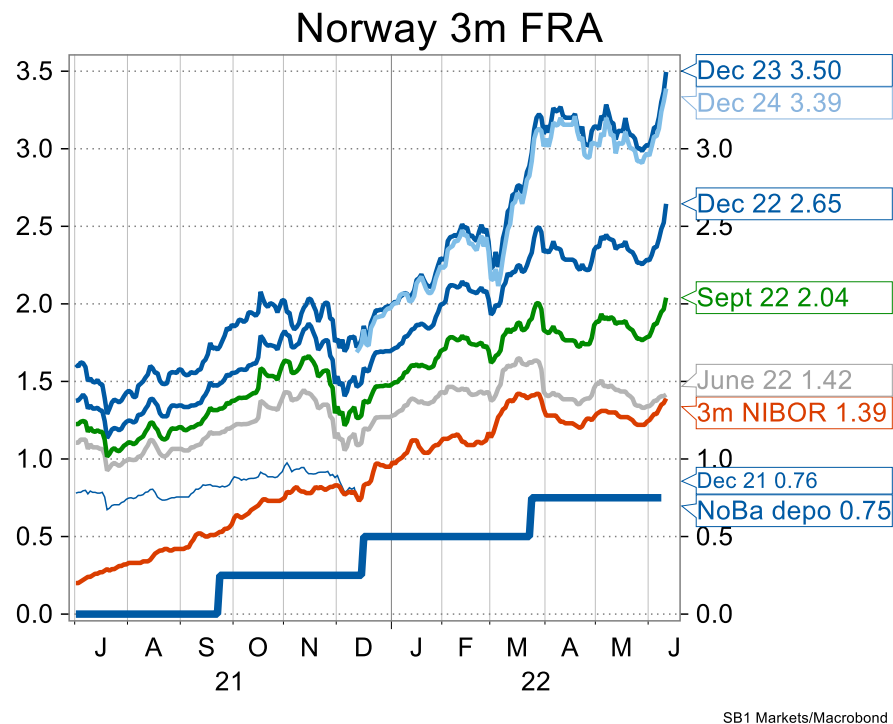
Money market friction



- Money market spread have normalised again. We assume a 35 bps spread going forward (from 40 bps)
- The USD LIBOR-OIS spread fell 7 bps to 7 bps last week – which is a very low level!

Another hike in FRA rates – up to 75 bps above NoBa's March path

Higher inflation the last nail in the coffin, alongside all many others. 50 bps in June can't be excluded



- If NoBa hikes by 25 bps to 1% at the **June 23 meeting** (and no hike in August), the average deposit rate in the duration of the June 3 m FRA contract will be 0.98%. If 25 bps in June, and 25 bps hike in August, 1.10%. If the bank hikes by 50 bps in June, the avg depo rate will be 1.21%
- **Assuming a 35 bps NIBOR spread:** The current June 3m FRA at 1.42% may be reached by combining the 3 'possible' NoBa scenarios
 - » If we exclude the possibility for a 50 bps hike, an August hike is a done deal
 - » If we do not exclude 50 bps in June, the FRA rate may be reached by 40% probability for just a June 25 bps hike, 40% for 25bps in June & August, and 20% for a 50 bps June hike. However, the Sep 3 FRA implies that a just a 25 bp hike in June/Aug is very unlikely (of not a 75 bps hike is assumed in Sept)
- The **Sept 3 m FRA** at 2.04% (+14 bps last week) is 62 bps above the June contract, implying a 1.69% expected NoBa signal rate, implying a 1/3 probability for a 50 bp hike in September, given a 50 bps hike in June/August
- The **Dec 3 m FRA** at 2.65% implies at 2.25% signal rate in average in December - March. In the MPR Norges Bank signalled 1.50 (85%) or possibly 1.75% (15%) in December. An upward revision is in the air...

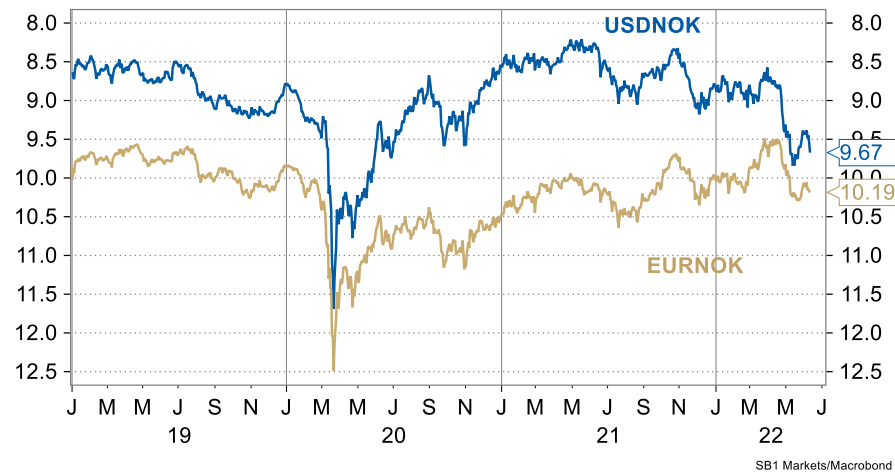
NOK down, but the AUD even more, even if RBA surprisingly hiked by 50 bps

The USD appreciated by 1.6% due to high inflation/higher rate expectations (or something else)

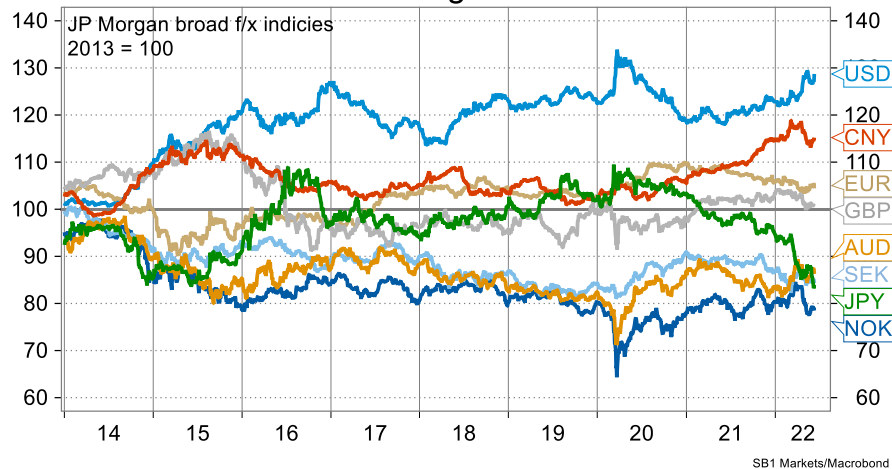
EURUSD



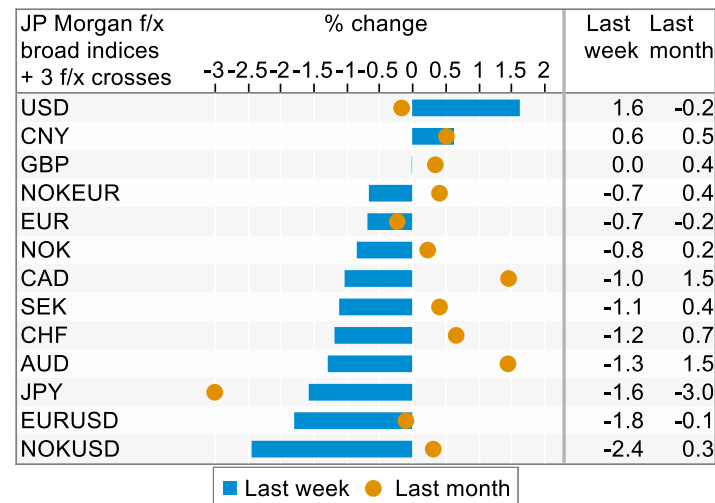
NOK vs EUR & USD



Exchange rates



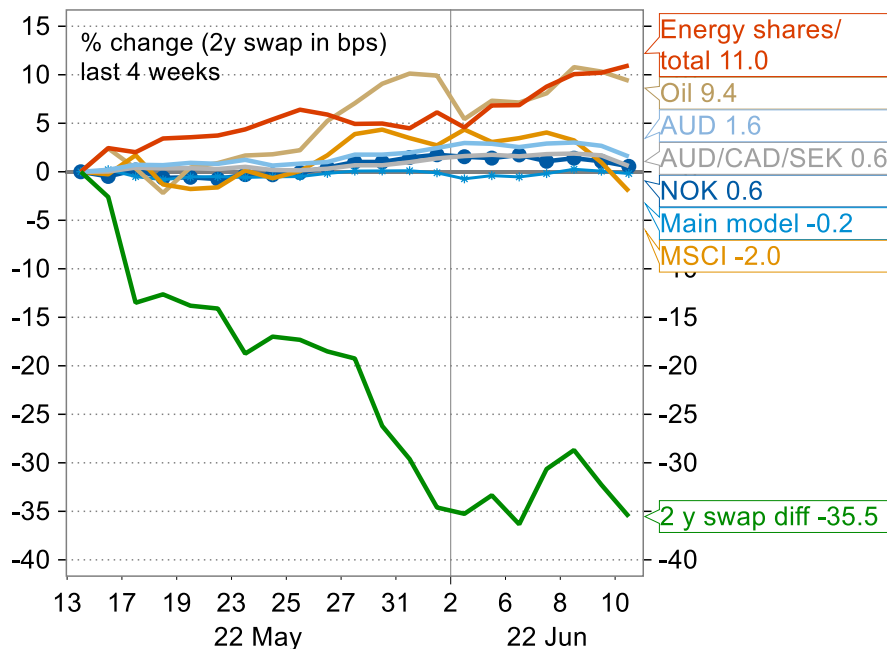
F/x markets



NOK down 0.8%, our model signalled +0.2%, due to the lift in the oil price

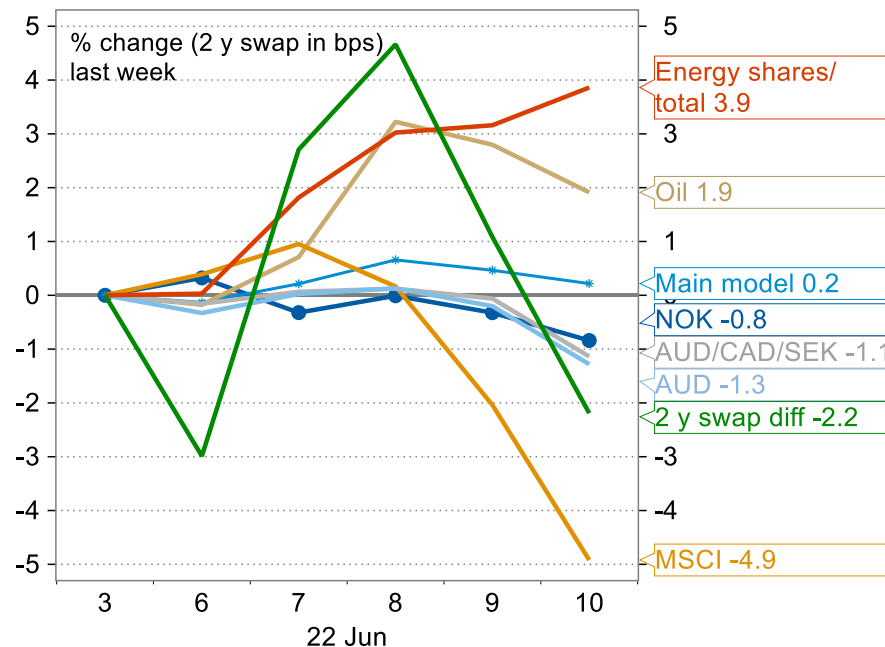
NOK is far below out model estimate, and NOK is weak vs other commodity currencies, energy shares

NOK vs main drivers



SB1 Markets/Macrobond

NOK vs main drivers



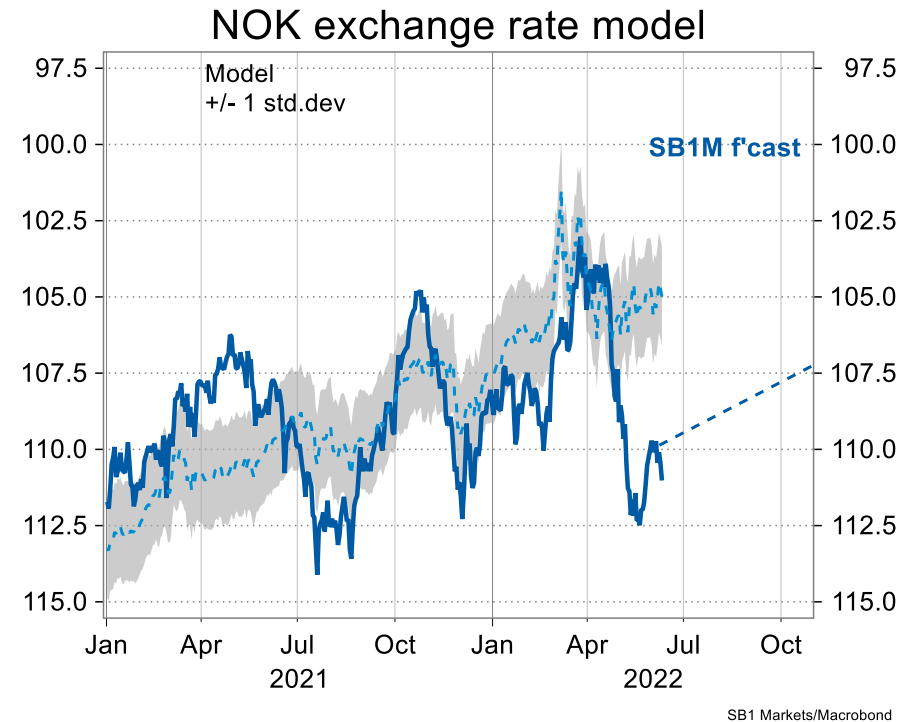
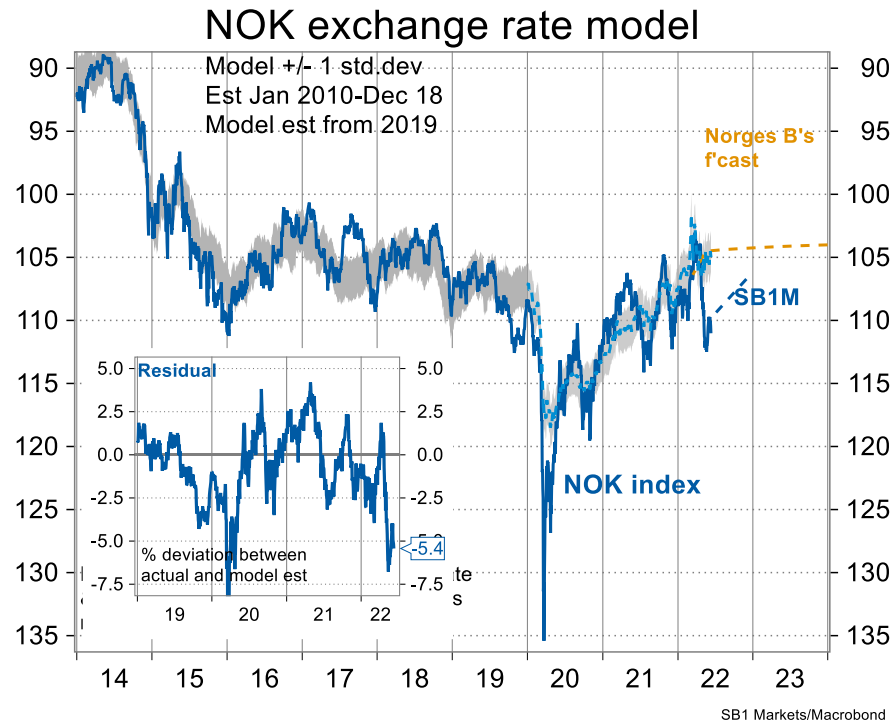
SB1 Markets/Macrobond

Gaps vs. out model estimates are wide

- **The NOK +0.4% - and it is 5.4% below our main model estimate (from -4.4%)**
- The NOK is 8% weaker than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts (from -9%)
- NOK is 4% weaker than a model which includes global energy companies equity prices (vs the global stock market) (from -3%)

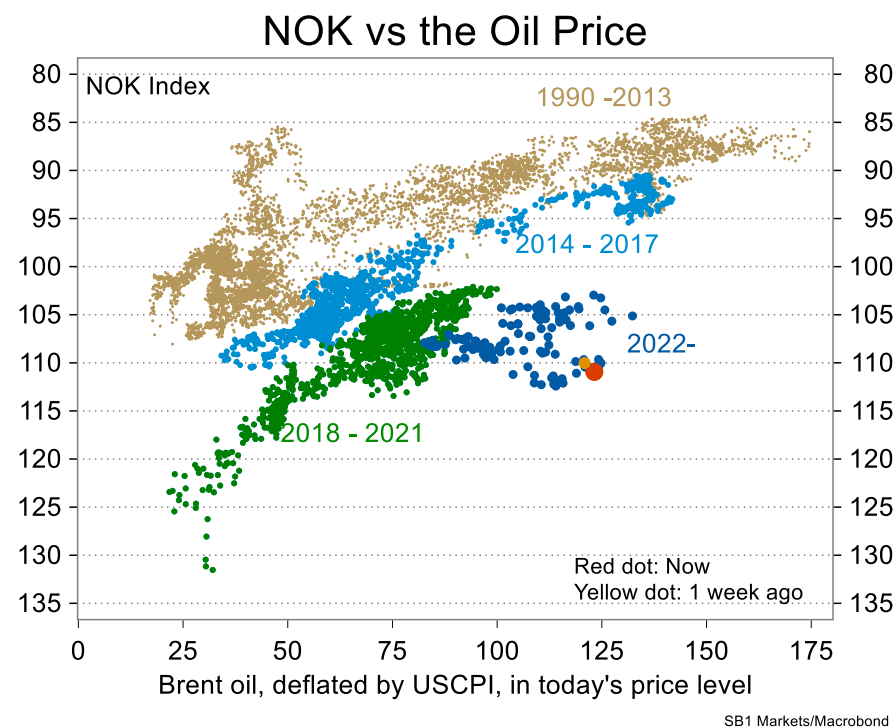
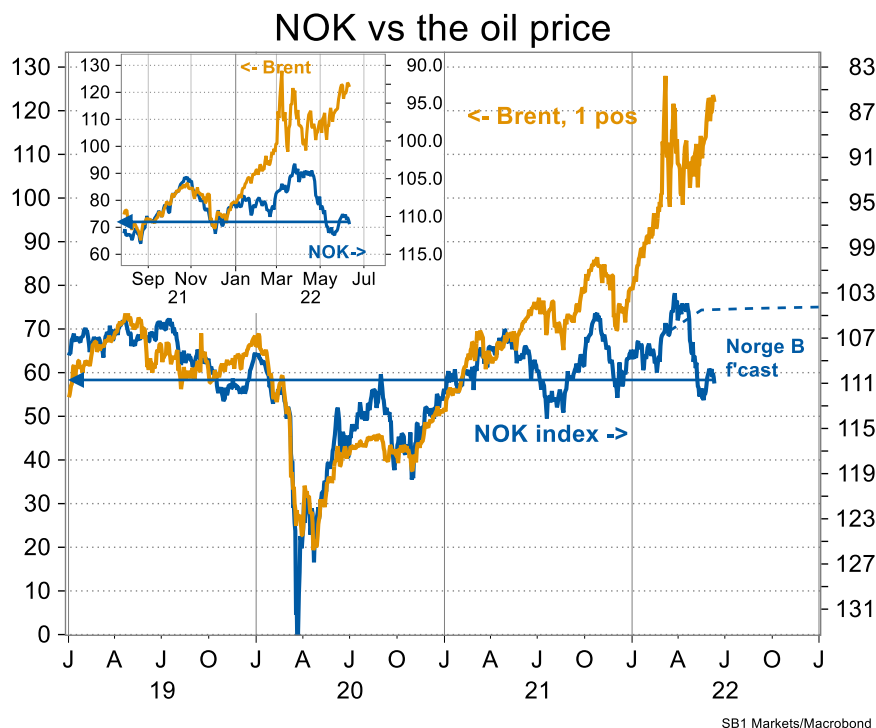
The NOK down and 5.4% below our model estimate

Rather unusual...



Oil up and NOK weaker, and very low vs. the oil price

NOK is weak, as if the oil price were USD 70/b (rebased to early Jan) or 60 (rebased to May-21)

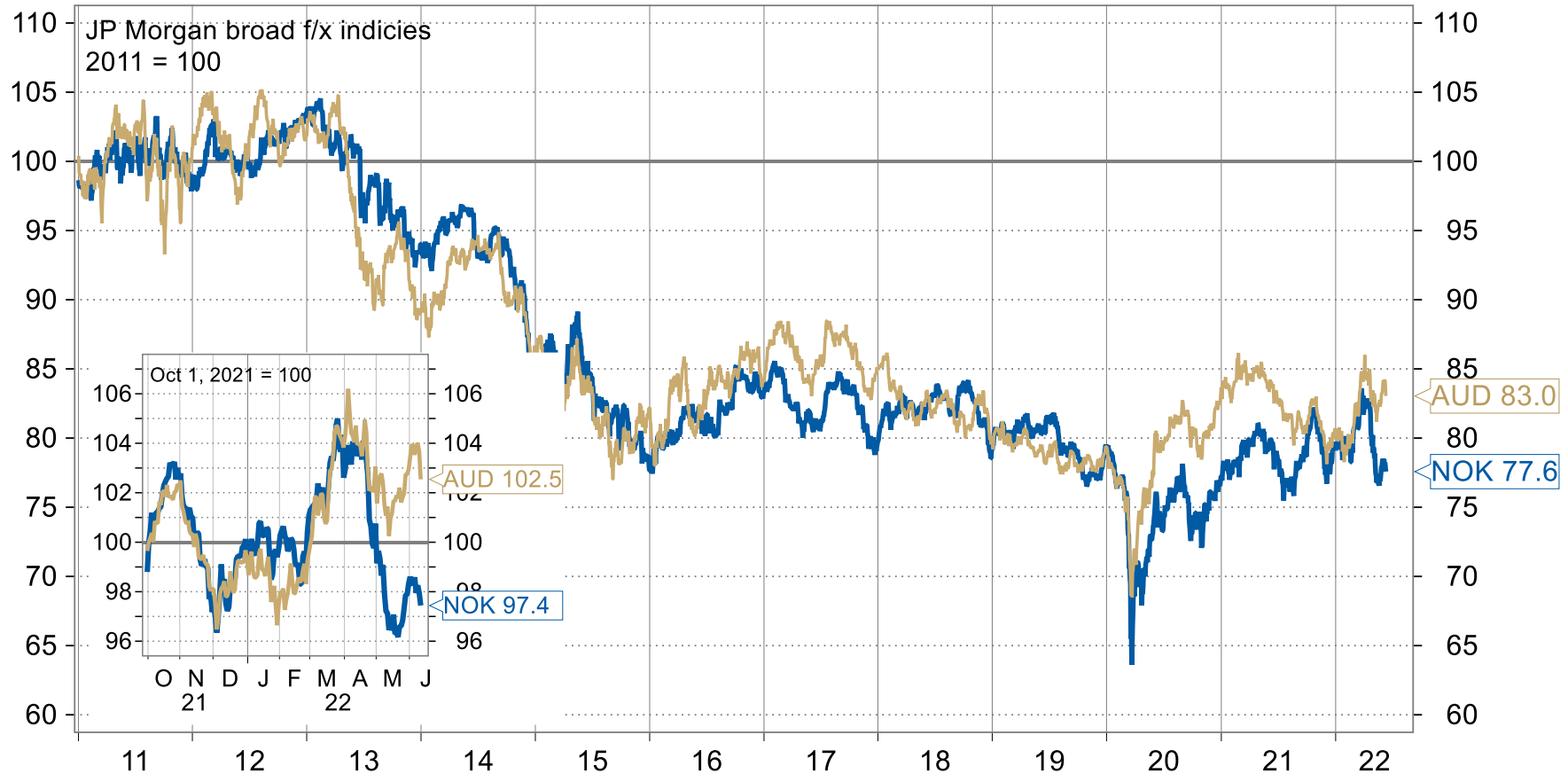


- The NOK has never before been as weak as now, given the oil price

Both the AUD & NOK down last week, the AUD the most

... even if the RBA surprisingly hiked the signal rate by 50 bps last Monday

AUD vs NOK f/x

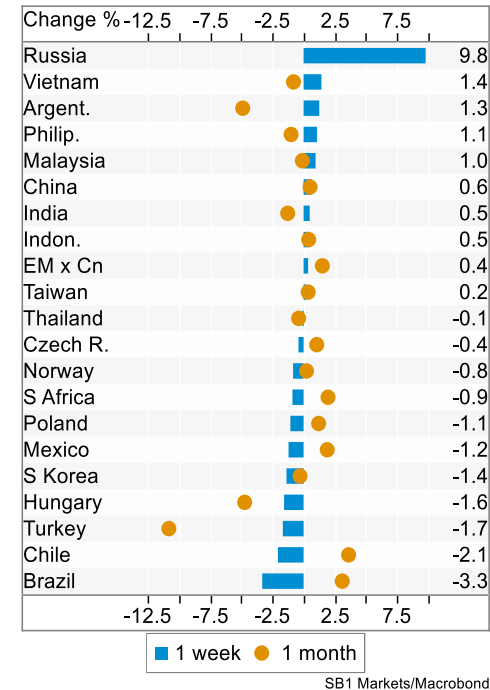
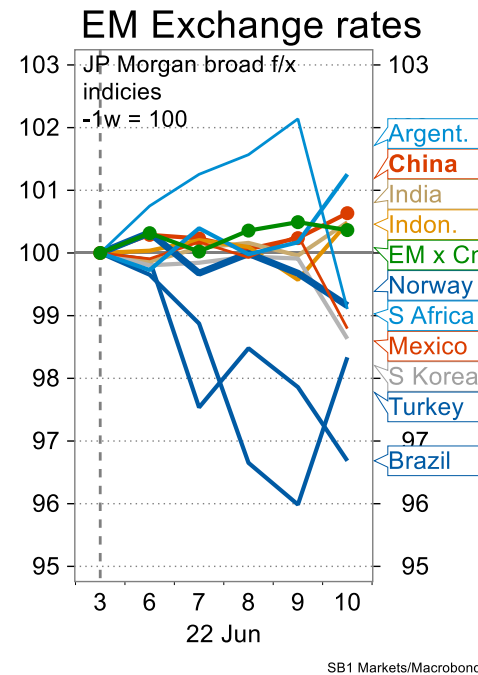
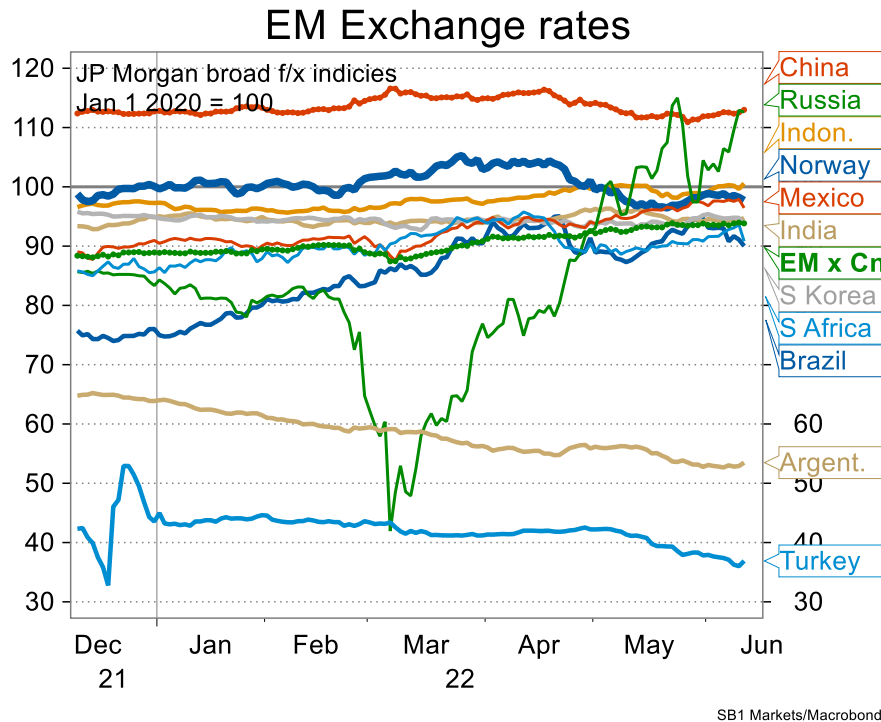


SB1 Markets/Macrobond

Usually, interest rate differentials have not been important at all for the NOK/AUD relative strength/weakness. NOK has usually strengthened vs. the AUD in times of turbulence in the stock market (VIX, S&P vs. long term trend), and when the oil price has strengthened vs. metal prices

EM f/x mixed: Russian volatility dominates the EM f/x space

The CNY is gradually recovering, perhaps as lockdowns are eased



- The Brazilian real has appreciated sharply recent months, from a low level – but fell further last week

DISCLAIMER

SpareBank 1 Markets AS ("SB1 Markets")

This report originates from SB1 Markets' research department. SB1 Markets is a limited liability company subject to the supervision of The Financial Supervisory Authority of Norway (Finanstilsynet). SB1 Markets complies with the standards issued by the Norwegian Securities Dealers Association (VPPF) and the Norwegian Society of Financial Analysts. This message, and any attachment, contains confidential information and is intended only for the use of the individual it is addressed to, and not for publication or redistribution.

No investment recommendation

Any views and opinions relating to securities mentioned in this report should be interpreted as general market commentary, and not as investment recommendations within the meaning of Regulation (EU) No 596/2014 on market abuse (market abuse regulation) and associated rules, as implemented in the relevant jurisdictions.

No personal recommendation

The information contained in this publication is general and should not be construed as a personal recommendation within the meaning of the Norwegian Securities Trading Act, section 2-3 (4). It does not provide individually tailored investment advice regarding a particular financial situation, investment experience, risk profile or preferences of the persons who may receive this report. For tailored investment advice regarding stocks mentioned in this publication, please consult our brokerage desk or your individual investment advisor.

Research for the purposes of unbundling

This report is deemed to constitute a minor non-monetary benefit for the purposes of the inducement rules under MiFID II. The report is publicly available on our website (no log-in required).

Conflicts of interest

The authors of this report do not (alone or jointly with related persons) own securities issued by the companies mentioned in this report. SB1 Markets, affiliates and staff may perform services for, solicit business from, hold long or short positions in, or otherwise be interested in the investments (including derivatives) in any stock mentioned in this publication. To mitigate possible conflicts of interest and counter the abuse of confidential information and insider knowledge, SB1 Markets has set up effective information barriers between divisions in possession of material, non-public information and other divisions of the firm. Our research team is well versed in the handling of confidential information and unpublished research material, contact with other divisions, and restrictions on personal account dealing. The views expressed in this report accurately reflect the analyst's personal views about the companies and the securities that are subject of the report, and no part of the research analyst's compensation is related to the specific recommendations or views expressed in this report. Please refer to our webpage for an overview of all investment banking assignments carried out in the last 12 months: www.sb1markets.no. Note that assignments subject to confidentiality are excluded.

Accuracy of sources

All opinions and statements in this publication are, regardless of source, given in good faith, and may only be valid as of the stated date of this publication and may be subject to change without notice. SB1 Markets has taken all reasonable steps to ensure that the information contained in this report is true and not misleading. Notwithstanding such efforts, we make no guarantee as to its accuracy or completeness.

Risk information

Return on investments is inherently exposed to risks. The value of an investment position may both rise and fall during the investment period. If the return on investments is positive at one time, there is no guarantee that it will remain such in future. In certain cases, losses may exceed the sum of the original investment.

Limitation of liability

Any use of information contained in this report is at your own individual risk. SB1 Markets assumes no liability for any losses caused by relaying on the information contained in this report, including investment decision taken on the basis of this report.

Limitation on distribution

This publication is not intended for, and must not be distributed to, individuals or entities in jurisdictions where such distribution is unlawful.