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Macro Weekly

Week 12/2022

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

Last week, part I

- **The War & Sanctions**
  - » **Mixed news on peace negotiations** as Russia is bombarding more Ukrainian cities – and refugees are pouring into neighbouring countries
  - » **Sanctions** are escalated day by day. Russia has introduced some counter-sanctions – and more may come
- **The Virus**
  - » **China** is still struggling to handle the virus due to less effective vaccines.
  - » **A new variant** has turned up in the West, new cases & hospitalisations have increased like in the UK, but the variant is probably not more serious than the Omicron mutation
- **OECD outlook**
  - » **The OECD revised its 2022 growth forecasts** down by 1 – 1.5 pp, and inflation by up to 2 pp. This is in line with the forecast we made when the oil and gas prices were much higher than today. Anyway, exact forecasts are rather useless given the current volatility and markets. Much will depend on how long the war will last, and by trade measures taken by Russia. Still, the sign of the forecasts are of course reasonable, and EMU will take a harder hit than the US.
- **China**
  - » China is not responding coherently to the **Russian invasion**, and we cannot rule out that trade (and other) relations with the West could deteriorate again. From an economic point of view, Russia is unimportant for China compared to its links to Europa or the US, but policy makers have other objectives as well these days (as always)
  - » The authorities have behaved aggressively vs. tech companies - and have been hostile vs. markets. The stock market has tanked, by 50%. Last week, the Vice Premier Liu He ensured market participants that the government should 'actively introduce **policies that benefit markets**,' that the policies vs. **tech companies** will be eased, the **property market** should be stabilized, and **overall growth policies** boosted. That's brave commie policies (or are they preparing for wars on other fronts?)
  - » **Data from Jan/Feb** was better than expected, especially if official y/y growth rates are applied. However, both **retail sales** and **investments** were better, while manufacturing production slowed. New home sales are recovering, and housing starts rose in February. New home prices are stabilizing, at least according to the authorities (some builders (and media) still report deep price cuts to clear the inventory and strengthen their balances sheet. Credit growth slowed a tad in February, but the underlying trend is slowly upwards – though partly due to more local government borrowing, perhaps not a sign of strength

Last week, part II

- **USA**
  - » The Fed hiked the funds rate by 25 bps, as announced and widely expected. The interest rate path was lifted by up to 120 bp, the largest revision ever, beating the previous record set in December, by 70 bps, now signalling 6 more hikes in 2022, and further 3 – 4 hikes in 2023 – up to 2.75% in this tightening cycle, in the end bringing the Fed funds up to above a neutral level (assumed to be 2.4%). Market response was muted but the short end of the curve rose. For the week in total, yields rose by 20 – 25 bps but peace hopes ect. may also have contributed. The FOMC revised its price prognosis sharply upwards. The new 'plan' implies a price level in 2024 which will be 6.XX% above the 'promised' 2% growth path. In addition, unemployment is below what FOMC members assumes is the long term equilibrium unemployment rate. Thus, the Fed assumes to miss both of its targets, at the same side. Demand is expected to remain too high to achieve 2% inflation and full employment, as the signal rate is kept below what is assumed to be the neutral rate for too long. The market does not believe in the 2% inflation target either. The Fed will decide on the reduction of the balance sheet (QT) at a coming month
  - » **Retail sales** was weaker than expected in February but January was revised sharply up, but up to 2% (core good sales). Still, core sales have been flat since last March, in volume terms
  - » **Building permits & housing starts** are still trending upwards. **Existing home sales** fell in February but prices are climbing faster again. Because the inventory of unsold homes is smaller than ever? It is unfair to blame for higher mortgage rates for the decline in sales – which anyway remain at the highest level ever, barring some months in 2005
- **EMU**
  - » **EMU labour costs** rose 2,0% q/q in Q4, and by 2,0% y/y. Negotiated wages are up 1.6 y/y. The contrast to the US, and partly to UK and Norway is striking
  - » **Expectations in the German ZWE survey** fell much more than ever before and much more than expected, from +1 st.dev above avg to -1.7! The survey was conducted when the oil price was up in the sky, and the DAX in the lower basement. Still, a warning sign, of course
- **UK**
  - » **Bank of England** hiked the signal rate for the 3rd time, to 0.75%, as expected. The Bank expect the bank rate to climb further but signalled just a 'modest' pace as growth would be hurt by a steep increase in inflation, and falling real wages. Market rates fell visibly – but the curve is still peaking at 2.2%. Thus 6 more hikes are expected
- **Norway**
  - » **Norges Bank's regional network** reports a growth speed at 3.3% the coming 6 months, report a further increase in capacity utilisation, and labour shortages, both not far below the ATH in 2007. Both observations implies that NoBa's estimate of the output gap will be revised substantially upwards. Expected wage growth was revised to 3.7% from 3.2% in the Q4 report, we have not seen larger adjustments before. In the private sector, businesses expect a 3.9% wage growth. Price expectations are well above normal too, of course. Private businesses expect a 3.9% wage growth in 2022. The challenge for the bank: Wage and price inflation will rapidly become too high, and the output gap will at the same time be significantly above zero. So why is the signal rate kept below what is assumed to be the neutral rate (1.75%) for still a long while? At least, that was the rate forecast in December. Watch out for the new MPR this week!
  - » The **trade balance** is just fantastic, surplus at 28% of GDP in February. Just wait for March… Mainland exports and even more imports are on the way up too

This week: Besides War, Sanctions, Commodity Prices – March PMIs, and Norges Bank

Time	Count.	Indicator	Period	Forecast	Prior
Monday March 21					
06:00	SW	Home prices	Feb		
13:30	US	Chicago Fed Nat Activity Index	Feb		0.69
Tuesday March 22					
11:00	EC	Construction Output YoY	Jan		-3.9%
Wednesday March 23					
08:00	UK	CPI YoY	Feb	5.9%	5.5%
08:00	UK	CPI Core YoY	Feb	4.9%	4.4%
15:00	US	New Home Sales	Feb	815k	801k
16:00	**EC**	**Consumer Confidence**	**Mar A**	**-13**	**-8.8**
Thursday March 24					
01:30	JN	Manufacturing PMI	Mar P		52.7
08:00	**NO**	**Unemployment Rate AKU**	**Jan**	**3.3%(3.2)**	**3.3%**
08:00	**NO**	**Payrolls, wages**	**Feb**		
09:15	FR	Manufacturing PMI	Mar P	55.1	57.2
09:15	FR	Services PMI	Mar P	55.0	55.5
09:30	GE	Manufacturing PMI	Mar P	56.0	58.4
09:30	GE	Services PMI	Mar P	53.9	55.8
10:00	**EC**	**Manufacturing PMI**	**Mar P**	**56.0**	**58.2**
10:00	**EC**	**Services PMI**	**Mar P**	**54.1**	**55.5**
10:00	**EC**	**Composite PMI**	**Mar P**	**53.8**	**55.5**
10:00	**NO**	**Deposit Rates**	**Mar-24**	**0.75(0.75)**	**0.50%**
10:30	UK	Manufacturing PMI	Mar P	56.8	58.0
10:30	UK	Services PMI	Mar P	58.0	60.5
13:30	US	Current Account Balance	4Q	-$218.0b	-$214.8b
13:30	US	Initial Jobless Claims	Mar-19	211k	214k
13:30	US	Durable Goods Orders	Feb P	-0.5%	1.6%
13:30	US	Cap Goods Orders Nondef Ex Air	Feb P	0.5%	1.0%
14:45	US	Manufacturing PMI	Mar P	56.5	57.3
14:45	US	Services PMI	Mar P	56.0	56.5
Friday March 25					
08:00	NO	Hotel guest nights	Feb		
08:00	UK	Retail Sales Inc Auto Fuel MoM	Feb	0.6%	1.9%
08:00	SW	Household Lending YoY	Feb		6.7%
10:00	EC	Credit growth	Feb	6.3%	6.4%
10:00	**GE**	**IFO Expectations**	**Mar**	**92.0**	**99.2**
15:00	US	Pending Home Sales MoM	Feb	1.0%	-5.7%
15:00	US	U. of Mich. Sentiment	Mar F	59.7	59.7

… and perhaps some few economic data?

- **Preliminary March PMIs**
  - These surveys (and some other national surveys like the German Ifo) may tell something vs the impact of the war++. However, data will be hard to decipher as it is too early to tell, also for most companies, commodity prices have been very unstable – and most have fallen past two weeks, and many respondents probably replied too late to catch these price changes etc. Analysts expect a modest decline in the European PMIs, and nothing compared to the unprecedented decline in expectations in the ZEW survey (conducted when most markets were in a disarray
- **USA**
  - **Durable orders** are still on the way up, including investment goods orders
- **EMU**
  - **Is consumer confidence** hit by the war? Quite likely. Can we interpret that as signal that spending will be cut? Probably not
- **Norway**
  - **Norges Bank** will lift the signal rate by 0.25 pp to 0.75%. The interest rate path will be lifted as well at least if the bank does not take an unusual large precautionary wait-and-see stance. Market FRAs are up to 70 bps above NoBa's interest rate path in the Dec MPR. If we check the changes in the status and outlook, we arrive at the same conclusion (check next page). We do not expect the bank to revise its path up by 70 bps (even if the Federal Reserve has revised it 'path' – the dot plot – by 70 + 120 bps at the two last 'main' meetings). However, at 40 – 50 bps lift is 'needed' and the change may be smoothed by assurances that rates will only be hiked only if the economy develops as well as expected. The uncertainty will be the main message, we assume
  - **The LFS unemployment rate** has collapsed, as **employment** is still growing rapidly while the **participation rate** has flattened since last summer. The latter indicates that there limited reserves left at the labour market, as demand for labour has been very strong for months.
  - **The monthly payroll stats** is just as interesting, growth has been strong even through the two Omicron months, and we expect a further increase in February (cut-off date in the middle of the month)

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

Norges Bank: how much will the interest rate path be lifted?

The FRA market (given a normal spread) is up to 70 bps above NoBa's Dec path, and is peaking at 2.7%

Changes in the interest rate path from the Dec NoBa meeting	Impact bps
Domestic demand (incl oil price), capacity util.	58
Money Market (money market, lending spreads)	-6
Prices, wages	41
Foreign factors	15
NOK	-15
Judgement (surveys, fin. stab, global risk etc)	-45
Sum	**48**
Changes in NOK Dec-22/23 FRA since after Dec m.	80
Change in the interest path 1 - 2 years from now	

Interest rate paths

	NoBa Path 4-21	SB1M 1-22 est	Change	Fair FRA *) @IMM, NB	FRA** now	SB1M est-FRA
Q1 22	0.51	***0.52***	***0.01***	1.18	-	
Q2 22	0.70	***0.77***	***0.07***	1.38	**1.62**	-0.23
Q3 22	0.92	***1.02***	***0.10***	1.60	**1.83**	-0.23
Q4 22	1.11	***1.29***	***0.18***	1.87	**2.16**	-0.29
Q1 23	1.28	***1.56***	***0.28***	2.12	**2.40**	-0.28
Q2 23	1.42	***1.81***	***0.39***	2.33	**2.56**	-0.23
Q3 23	1.53	***2.01***	***0.48***	2.46	**2.65**	-0.19
Q4 23	1.62	***2.13***	***0.51***	2.54	**2.67**	-0.13
Q1 24	1.68	***2.20***	***0.52***	2.55	**2.68**	-0.13
Q2 24	1.72	***2.20***	***0.48***	2.55	**2.66**	-0.11
Q3 24	1.74	***2.20***	***0.46***	2.55	**2.65**	-0.09
Q4 24	1.75	***2.20***	***0.45***	2.55	**2.61**	-0.05

*) *Assuming a 35 bps NIBOR spread from Q4-22, down from 45 in Q2*

**) Q4 FRAs adjusted for liquidity prem

- In fact, our **traditional sum of the parts analysis**, implies a lift at the same size, at least before we take the into account possible negative growth consequences due to the war & sanctions
  - Much higher **rate expectations abroad, up 100 bps** (which not should be that important, we think
  - A huge lift in the **oil price**
  - **Unemployment** is well below the Dec forecast
  - **Capacity utilisation** significantly higher (as signalled in the Regional Network report)
  - **Wage inflation** will be revised sharply up, to at least 3.6% from the 3.2% Dec forecast. (We expect the final outcome to be closer to 4%, given the tightness at the labour market
  - **Core CPI inflation** will be revised up, by at least 0.4 pp to above 2%
    - Actual inflation the past 3 months has been 0.6 pp higher than NoBa forecasted
    - Higher food prices, higher energy and other consequences of war & sanctions will lift both the core and the headline rate of inflation
    - During the 3 weeks up to March 10, the TBU committee revised its CPI forecast up by 0.7 pp, to 3.3% (vs. NoBa's 2.7% Dec f'cast)
  - **The NOK** is some 3% stronger than assumed in Dec
  - **House prices** have shot up but the increase may be excused due to new loads of paper worked that have cut back supply on the market
  - **Credit growth** is in line. **Consumer confidence** has weakened, but **business confidence** so far not
- So what to say about **war & sanctions**?
  - Stress the **increased uncertainty**, also regarding the interest rate outlook
  - **Negative drag on growth abroad**, but uncertain how much
  - **Positive impact on inflation**, also in Norway
  - However, Norway will be supported by the increase in the oil price, higher interest rates
  - We have to deduct almost 50 bps to arrive at our 50 bps estimate for the change in NoBa's interest rate path
- **Our forecast** is up to 30 bps <u>below</u> the current FRA curve

US vs. Norway: The need for a monetary policy tightening

Less need for tightening in Norway, and households' response to higher short term rates far stronger

	USA	Norway
Inflation	Total 7.9%/core 6.5%	Total 3.7%, core 2.1%
Inflation expectations	Market 10 y at 2.9%, households 3%++	Not higher (but probably not much lower either)
Employment rate	Still below par	Well above the p-p level
Unemployment	Close to record low	Below average
Vacancies	Record high	High
Wage inflation	Accelerating rapidly, 6%++	Accelerating slowly, 3.5%
House prices	Up 30% from Q4-19 Up 18% y/y now	Up 16% from Q4-19 Up 6% y/y now
Household debt	To 8% y/y from 3%	Unch at 5%
Househ. debt/inc. Ratio (vs. impact of higher short term rates)	>100%, from 135% in '08	246%, from 196% in '08
Floating or fixed mortgage rates	Fixed	Floating

- US has a majority of the 'red' cells – in favour of a faster monetary tightening
  - » The economy is 'hotter'
  - » The impact of higher rates will be stronger in Norway than in the US

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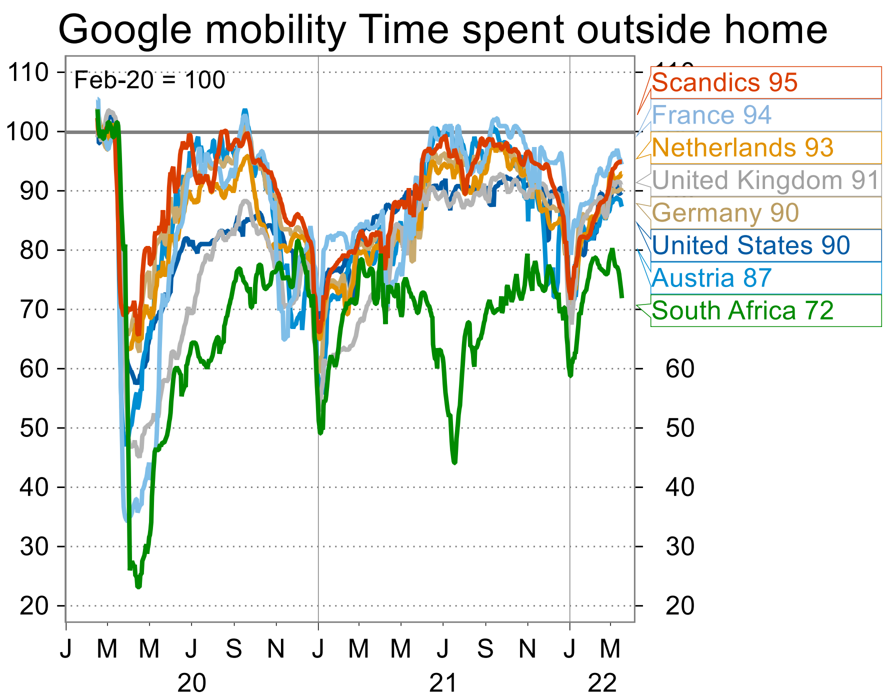
Mobility on the way up in the West, still some' challenges in the East (x Japan)



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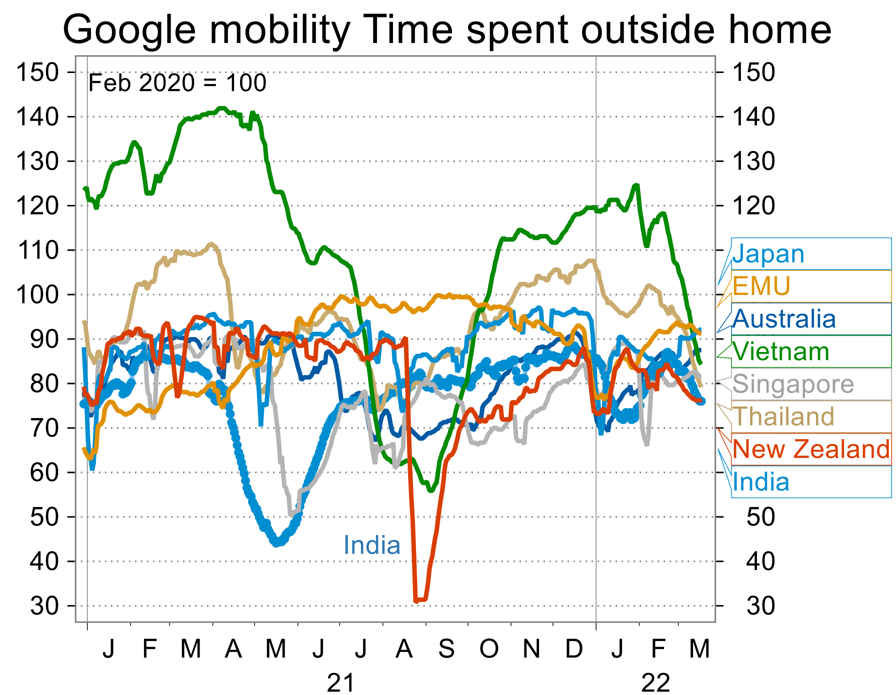

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Mobility is on the way up in the Scandics, and in all parts of Norway

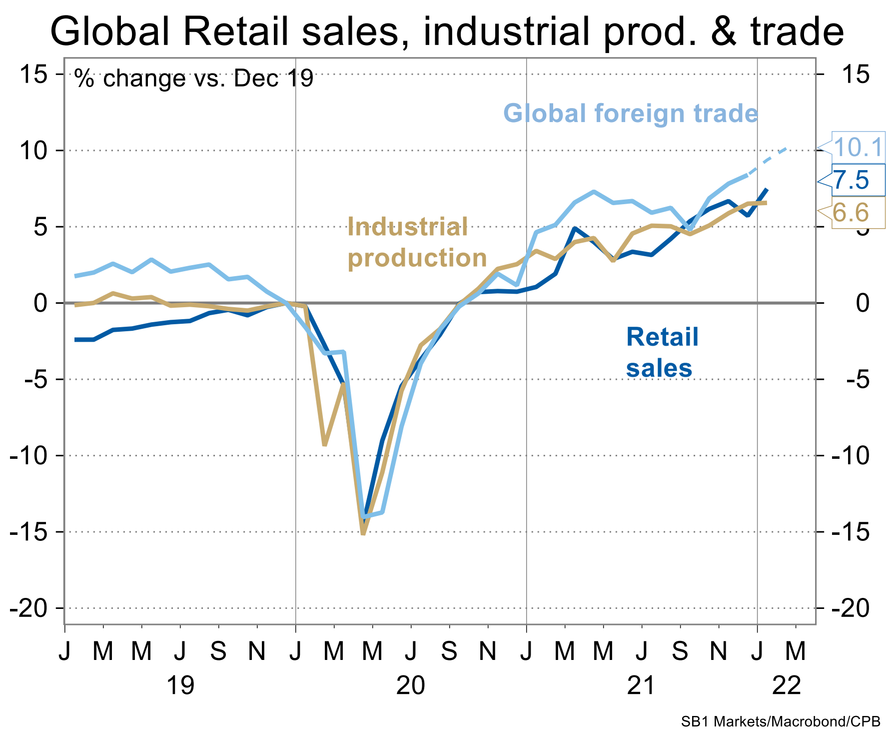
For good reasons

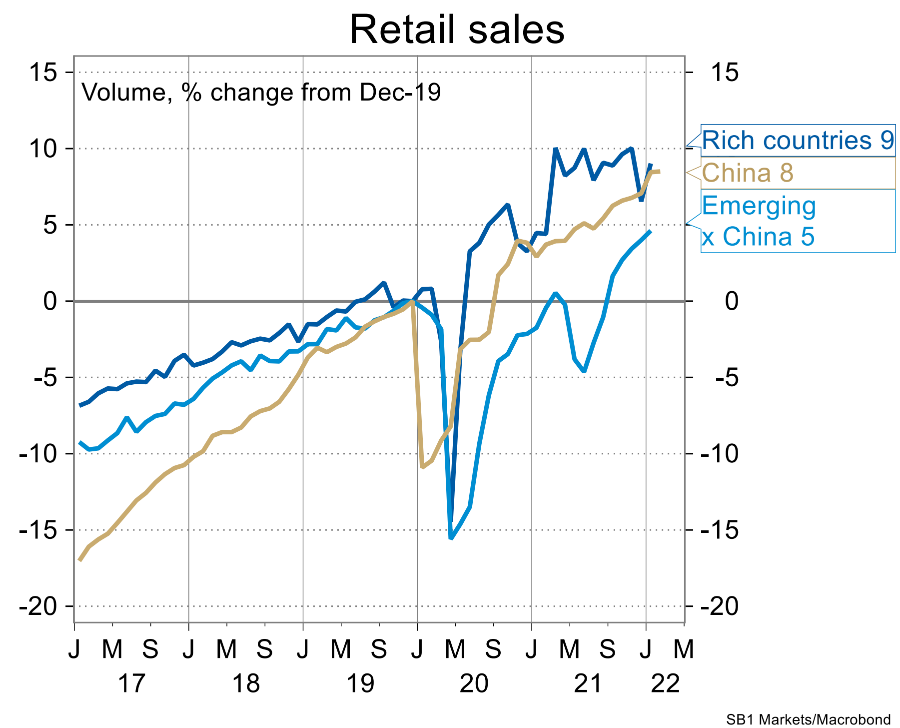
Google mobility Time spent outside home

Google mobility Time spent outside home

Global retail sales recovered in January. Global trade OK

Chinese data revised up, lifting the global retail sales visibly

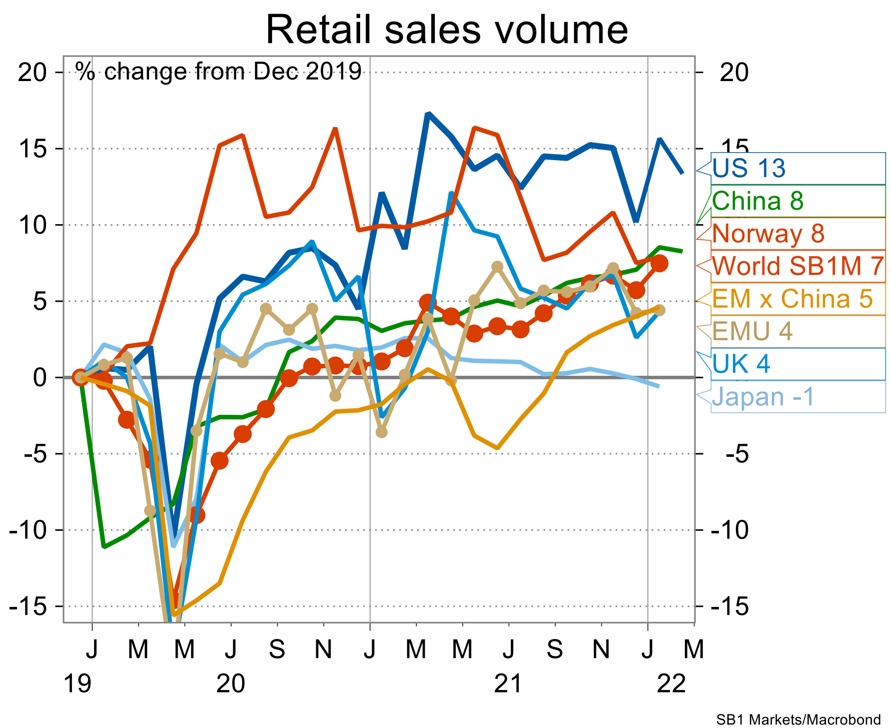


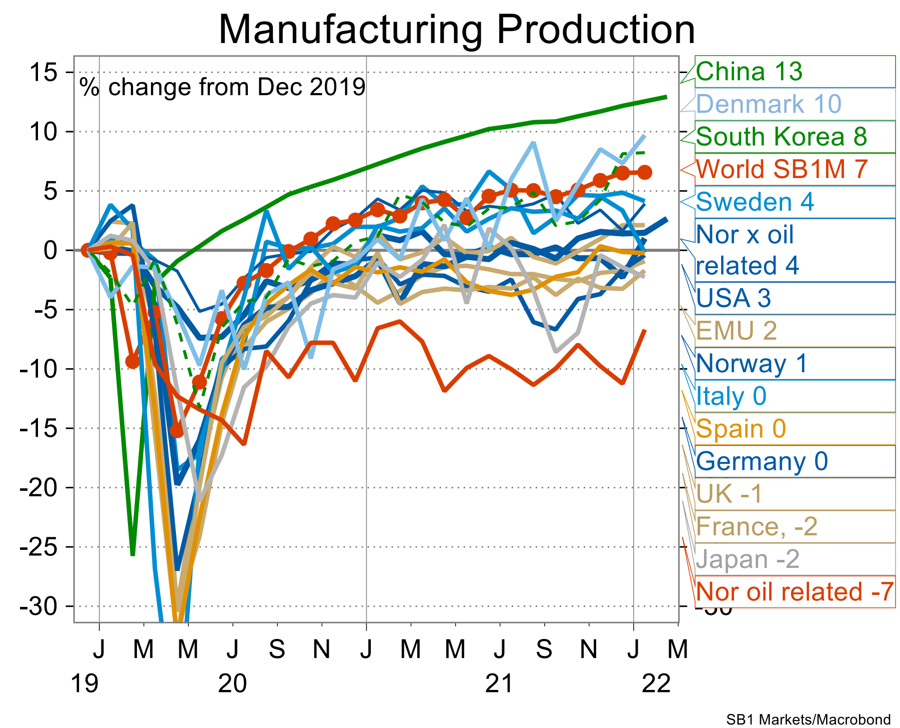


- **Global retail sales** recovered the December loss in January
- **Global manufacturing production** has recovered since the autumn, and growth continued into Q1
- **Global foreign trade** is still on the way up (the two last data point are estimates from Kiel Institute)

Retail sales are still trending up, thanks to EM, China included

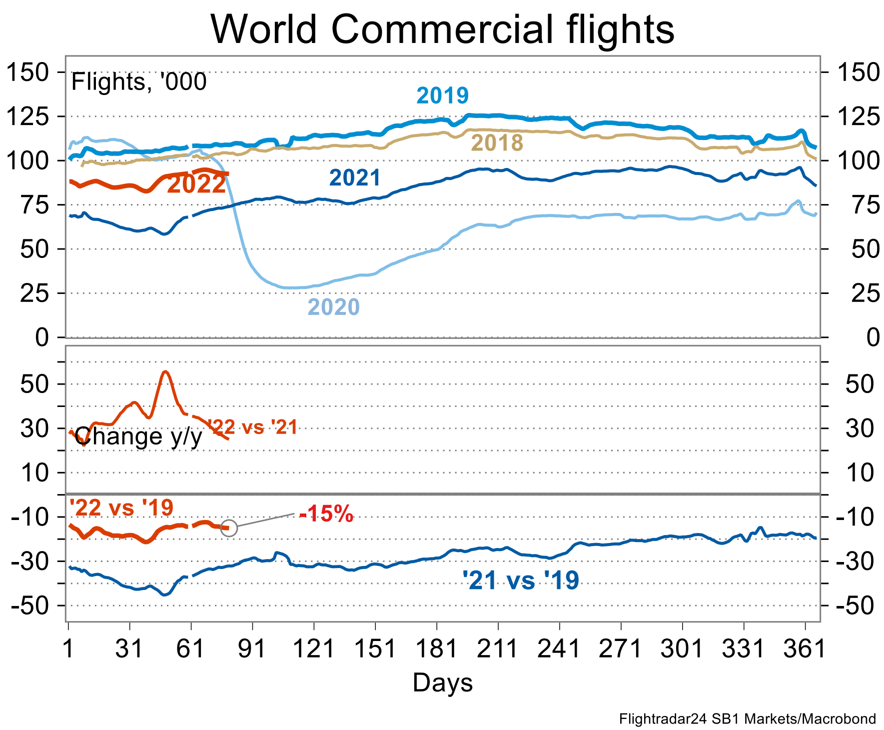
However, the trend is very likely down in the rich part of the world. Manufacturing prod. still OK

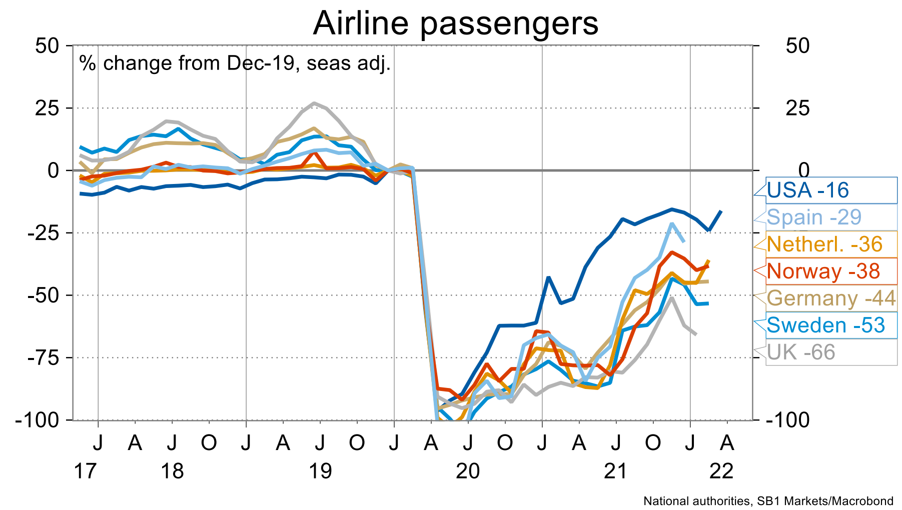


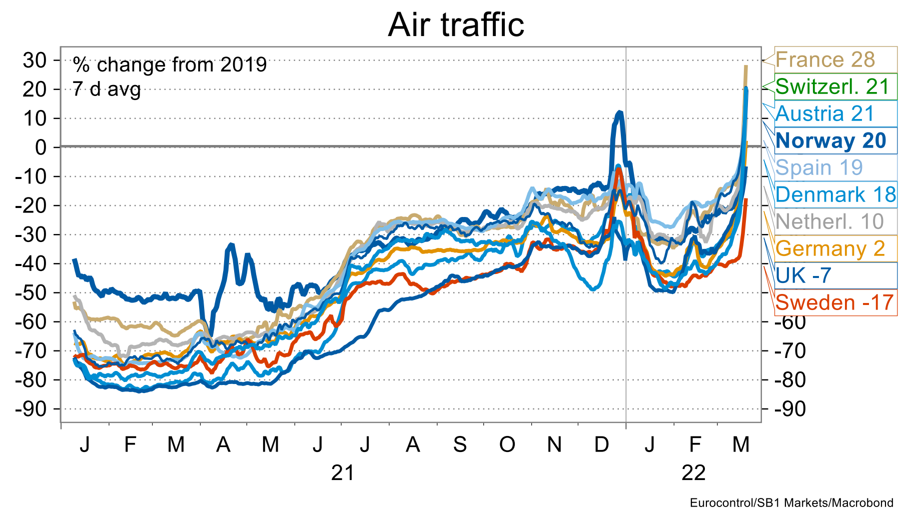


- **Retail sales** in Emerging Markets x China are recovering but is far below pre-pandemic trends
- **Manufacturing production** has been hampered by a deep decline in auto production. The manufacturing PMIs are down from the peak but aare still signalling growth above trend

Global airline traffic has stabilised, still down 15% vs. 2019



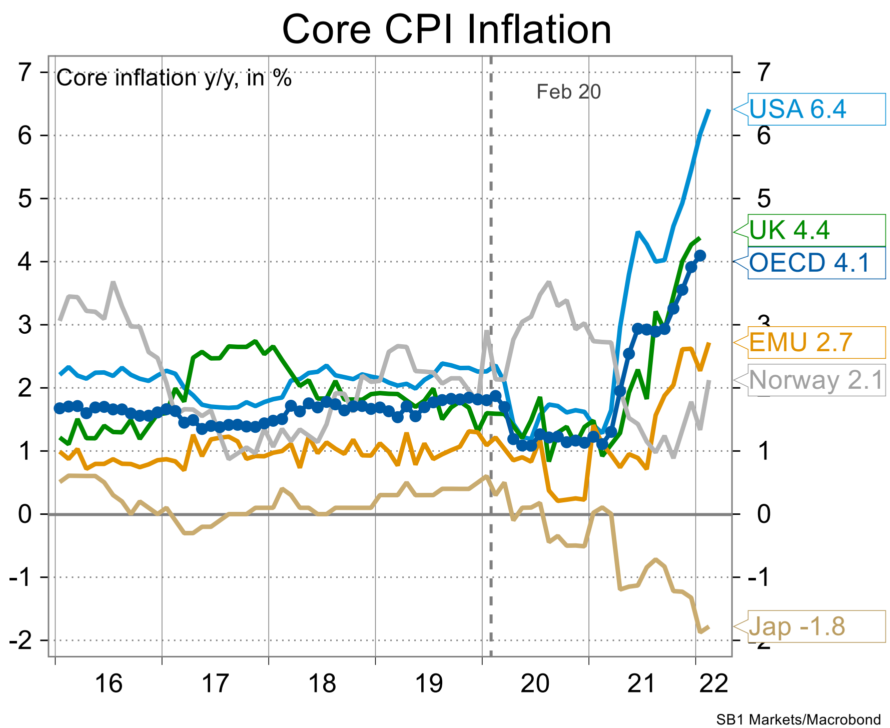


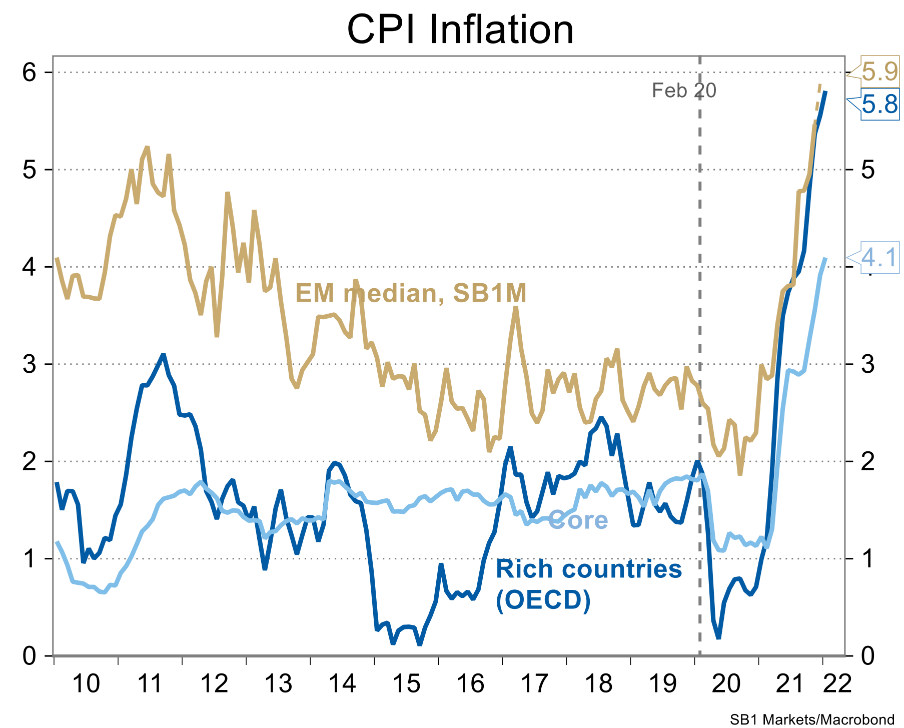


- Some Easter effects vs European vs no. of flights last week? Or something wrong with data?

Inflation still rapidly on the way up

Energy prices the main culprit, but core inflation has turned up most places

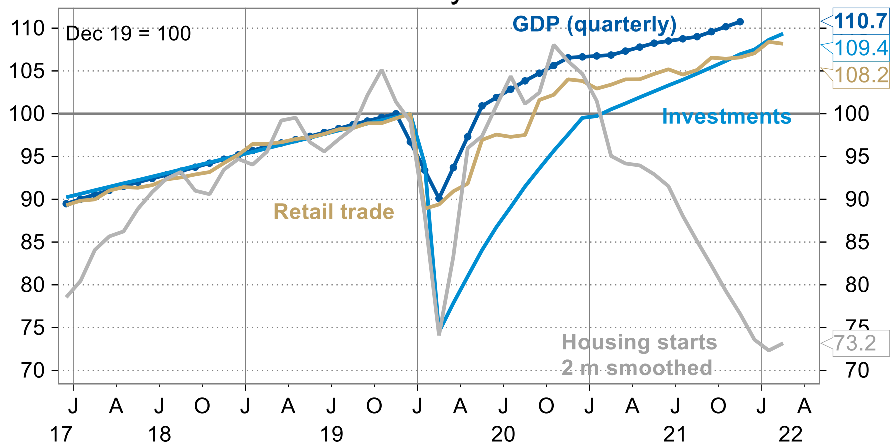




A pretty good start of the new year, even if official y/y data not reflect reality

Monthly data in sum better than expected, but retail sales construction is weak. 2 signal rates cut today

China GDP vs monthly indicators - demand



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China GDP vs monthly indicators - supply

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- **Industrial production** rose by 0.3% m/m in both Jan & Feb, and growth has slowed somewhat. The annual rate fallen to 4.6% (our calc). The official annual growth rate at 7.5% was 4 pp higher than expected, but very likely not a relevant figure. Steel production rose sharply in December, and remained at the same level in Jan/Feb (but level is still down 10% from the peak early last year)
- **Service sector production** rose 0.6% in Jan and 1,2% in Feb. Following the virus slowdown in Q3, activity is still somewhat below the pre-pandemic trend. New problems now?
- **Retail sales** volumes gained 0.5% in Jan/Feb, following a 0.6% increase in Dec. In addition, sales through last year were revised upwards by some 3%! The level is still below the pre-pandemic trend, but not by much, and sales are up 4.6% y/y. Sales rose 7.5% y/y in nominal terms according to official data, expected up 3.5%. Auto sales are climbing month by month, and are 15% above the 2019 level!
- **Investments** grew by 0.7%, in line with the average growth rate through last year – which was revised sharply up from some 0.2%. Prices are no doubt increasing – and in volume terms, growth is probably still moted. Annual growth was 12.2% ytd in February, expected 5%
- **New homes sales** bottomed in October, and grew further in Jan and Feb. **Housing starts** rose in February, and other construction starts have flattened. Construction is still down 20 – 25% vs. peaks in 2020 and 2021. **New home prices** have flattened following a minor decline in H2, while **existing home prices** are still heading down at a 2.5% pace, and they are down 0.3% y/y.
- **Credit growth** slowed in February but growth has accelerated since last autumn
- **Exports** is still trending up, also in volume terms while **imports** flattened through last year
- **CPI inflation is still muted, close to 1%. PPI infl.** may have peaked but prices are still sharply up y/y

In sum: Official annual growth data were far above expectations, but at least partly irrelevant. However, following revisions, both retail sales and investments are now at decent growth paths. Manufacturing production is slowing somewhat, at a high level

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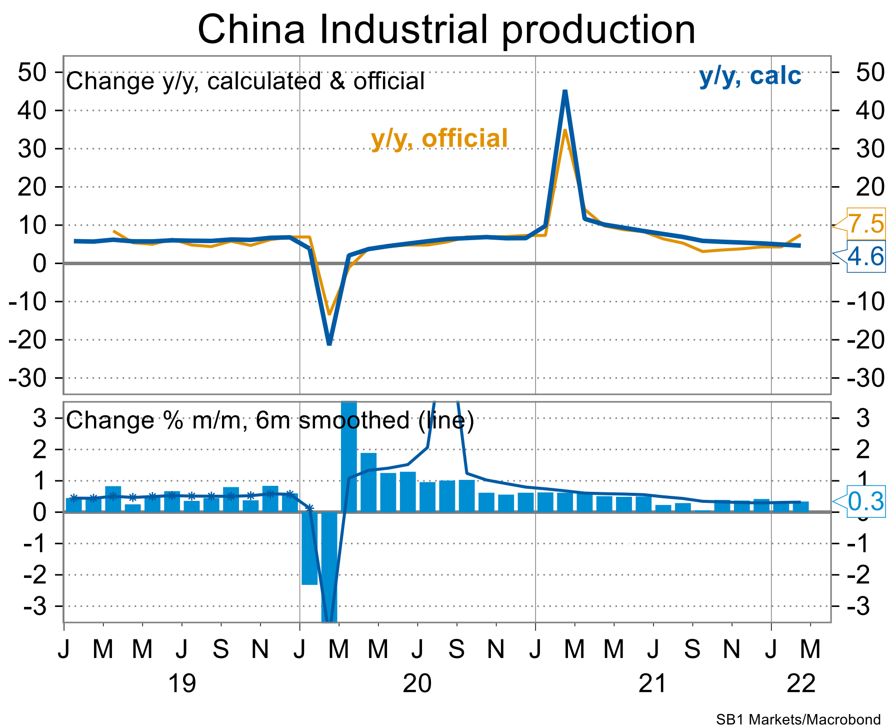
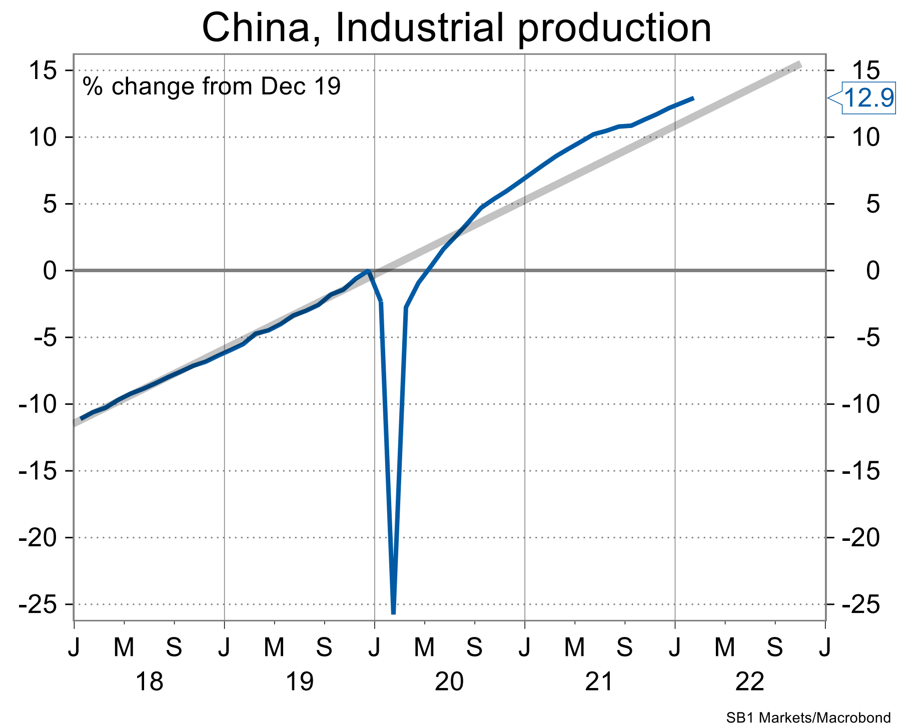
Industrial production growth has slowed to 0.3% m/m, up less than 5% y/y

Official y/y growth rate up 7.5%, expected 3.5%. Level almost 2% <u>above</u> p-p trend

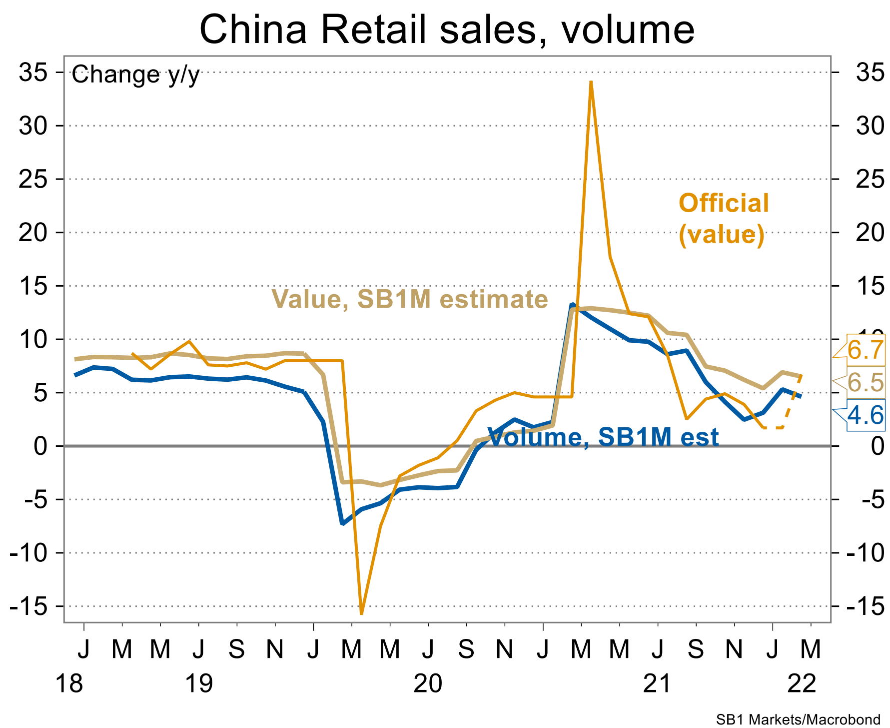


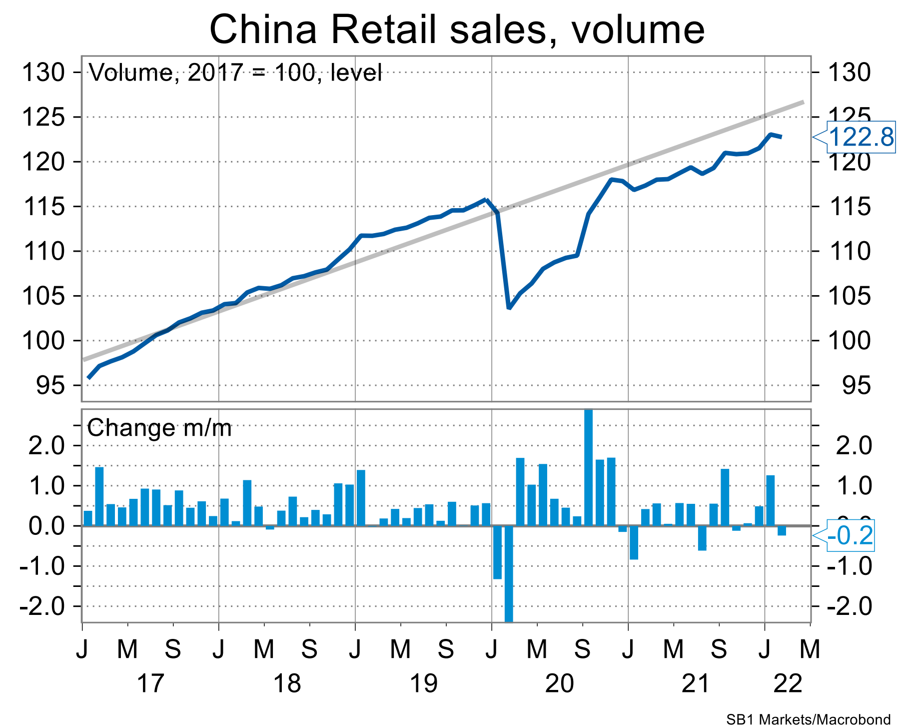


- **Production** growth has been stable at a 0.3% m/m increase since last October. This almost ½ of a 'normal' Chinese growth rate, and the 'real' annual rate is trending down. Still, the production level is above the pre-pandemic trend path
- **The strong reported annual growth** rate was greeted as good news, but we think data are not that impressive

Retail sales revised up – and not that bad in Dec - Feb

Sales through last year revised up by more than 3% - and sales grew a 6% pace in Dec-Feb

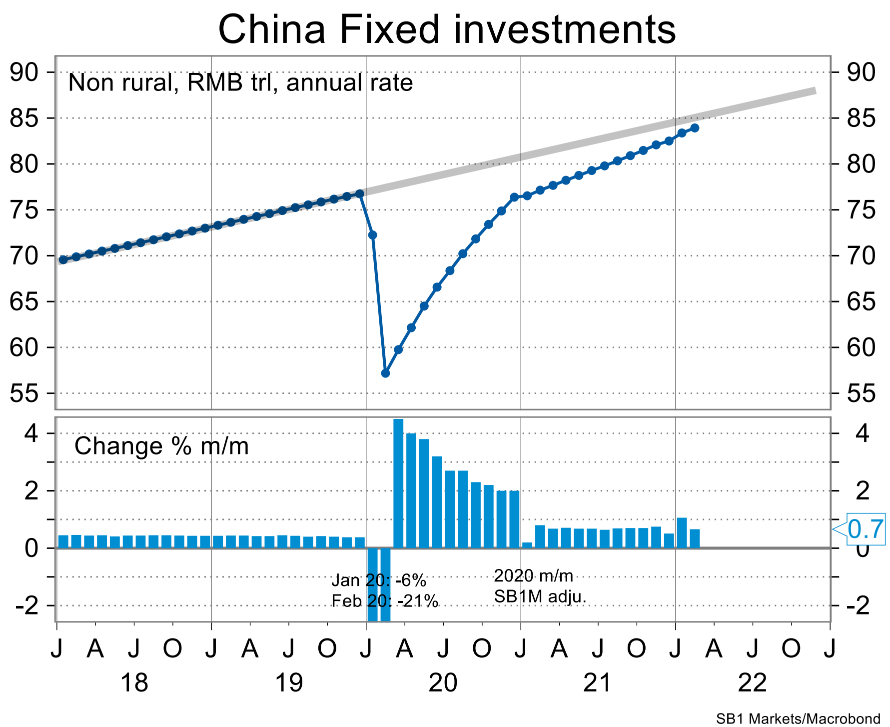




- **Official nominal retail sales** were up 6.7% YTD in Feb, up from 1.7% in December, expected 4.2%
- In **nominal terms** sales rose 0.3% in February, following a 0.6% lift in January. In **volume terms**, we assume an average 0.5% growth rate, following the 0.6% increase in December – a faster growth than since
- Following the substantial upward revision of last year's monthly growth rates, the level is just 2.5% below the pre-pandemic trend. Based on the December report, we estimated at 6% gap

Investments revised upwards too, and is growing steadily

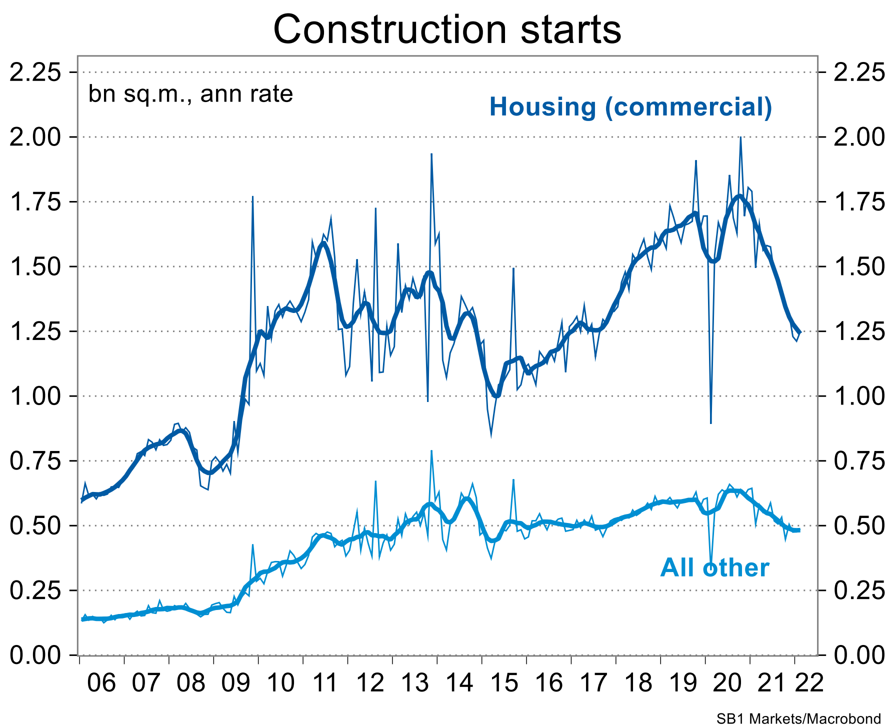
… at least in value terms. Prices are sharply up, and in real terms growth is muted indeed

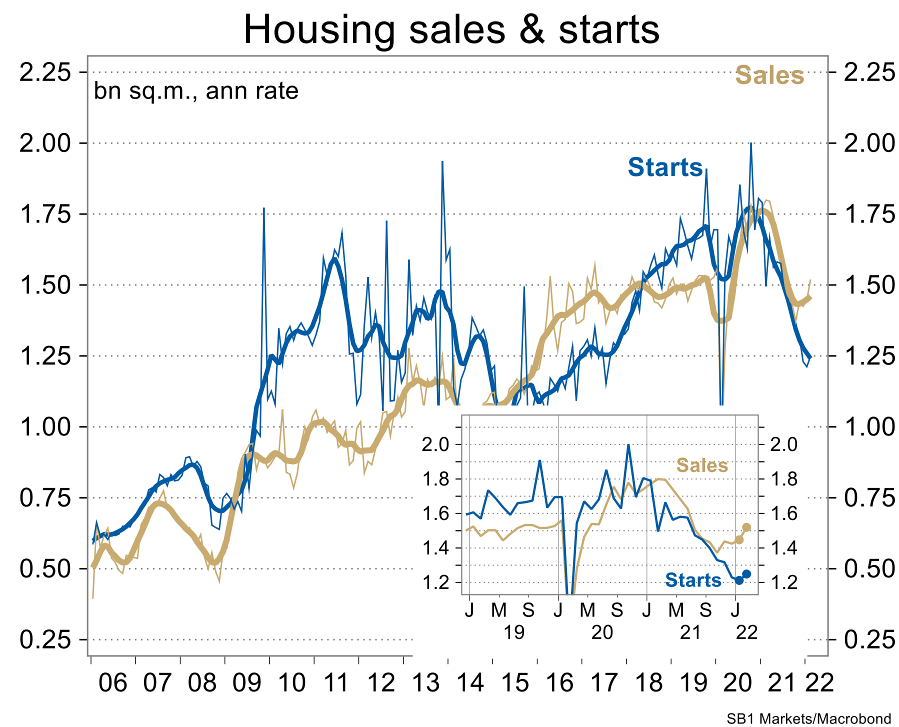


- **Measured YTD**, nominal urban investments rose 12%, far above the expected 5%, which was greeted as a sign of great strength. We are not able to reconstruct this scenario by other published data, check the chart to the right
- **Monthly growth** through last year has been sharply revised upwards, from 0.2% to some 0.6 – 0.7% per month - even if there has been a substantial reduction in construction starts. However, in volume terms, growth has still been modest, as prices are some 7% y/y
- The **investment level** is not far below the pre-pandemic growth trajectory, at least in value terms

New homes sales on the way up, starts may have bottomed too

Sales bottomed last October, and rose in Jan/Feb. Start may have bottomed in January

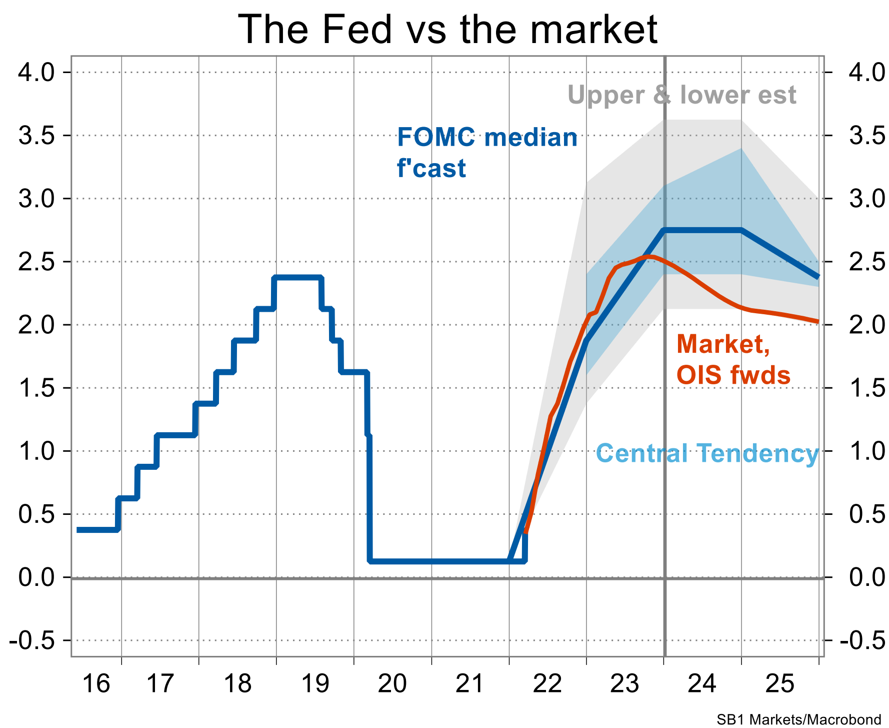




- **One month uptick** in starts is surely not enough to state that the bottom is behind us but given the increase in sales since last autumn, not an implausible hypothesis
- **Big picture: New home sales** have fallen 25% from early 2021, following the spectacular recovery from Q2-2020, following the 'sudden death' in Q1, due to the virus. New home sales fell less, some 10%, and are now on the way up again. Sales have been running faster than starts, indicating a reduction in the inventory
- **Non-residential construction starts** have flattened recent months, following a 25% decline since mid 2020. Both housing & non-residential starts are at the lowest level since 2017
- The decline in **construction starts** has been among the largest ever, but we are witnessing sings of stabilisation- *Check prices next page.*

The FOMC lifted the dot plot (int. rate path) by 120 bp, following the 70 Dec hike

Powell confirms that the Fed is behind the curve, signals 6 more hikes in 2022, and 3 more in 2023



- **The first 25 bps hike in this cycle was delivered, as very well communicated on beforehand**
- **The unprecedented 120 bps lift in the interest rate path was larger than we expected. However, given the increase in inflation forecasts, for both 2022, '23 and '24, the momentum in the FOMC has turned towards fighting inflation**
- **The Bank will decide on the reduction of the bond holdings at a coming meeting**
- At the press conference, Powell recognised that the Fed had fallen behind the curve, inflation is become too high – though he stressed factors outside his control, the pandemic and supply chain problems, as well as higher energy prices
- The challenge for the Fed is simple, even after lifting the interest rate estimate big time: Even after this lift, the FOMC expect
  1) Inflation to remain above the target until the end of the forecast period. By the end of 2024 the expected (core) PCE price level will be 4.6% above the 'promised' 2%. The headline price level will be some 2 pp more above the target
  2) Unemployment to remain below the long term equilibrium rate at 4% - it already is. Formally, that implies that the FOMC expect that the 'maximum employment' target is not met – at least unemployment is too low (which results in a price level well above the target
- Thus, the FOMC members do not expect their targets to be met, even if there is no trade-off between them as both targets misses 'at the same side'
- Sure, there may be arguments for this solution (we do not have them), but at least the monetary strategy will have to be reformulated. Less than 2 years ago Powell introduced at 2% average-inflation-over-time-target, so that a future price level target could be met. Is will not.
- **Market reactions: The short end rose more than 15 bps on Wednesday and by 25 during the week. Long term inflation expectations fell (together with the oil price) but real rates rose more**

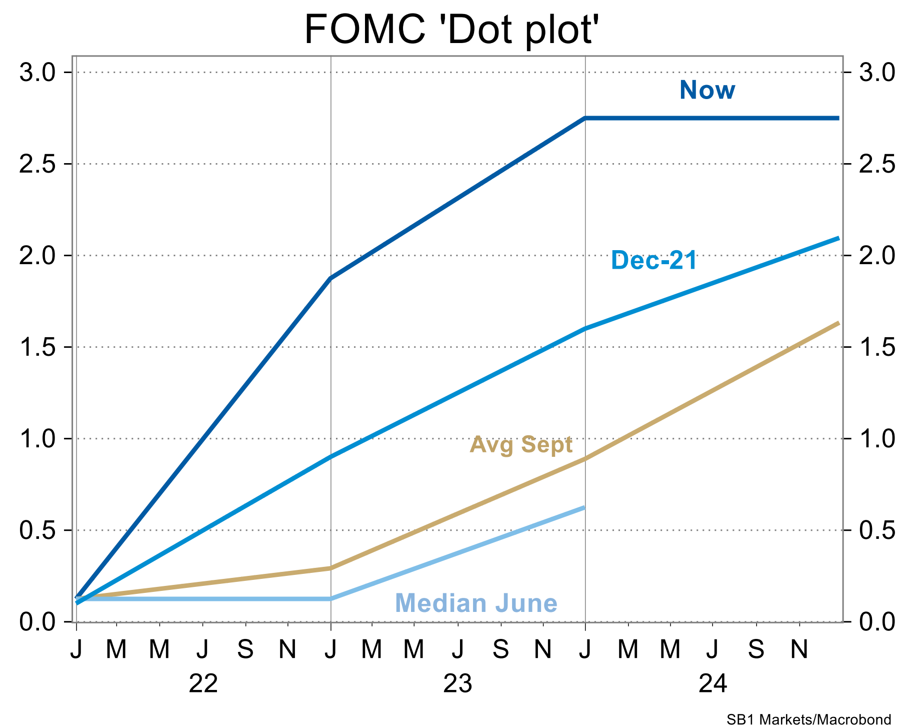
SpareBank 1 MARKETS

Inflation revised up – and so was the interest rate path

Up to 5 more hikes baked into the dot plot, totally unprecedented

Percent

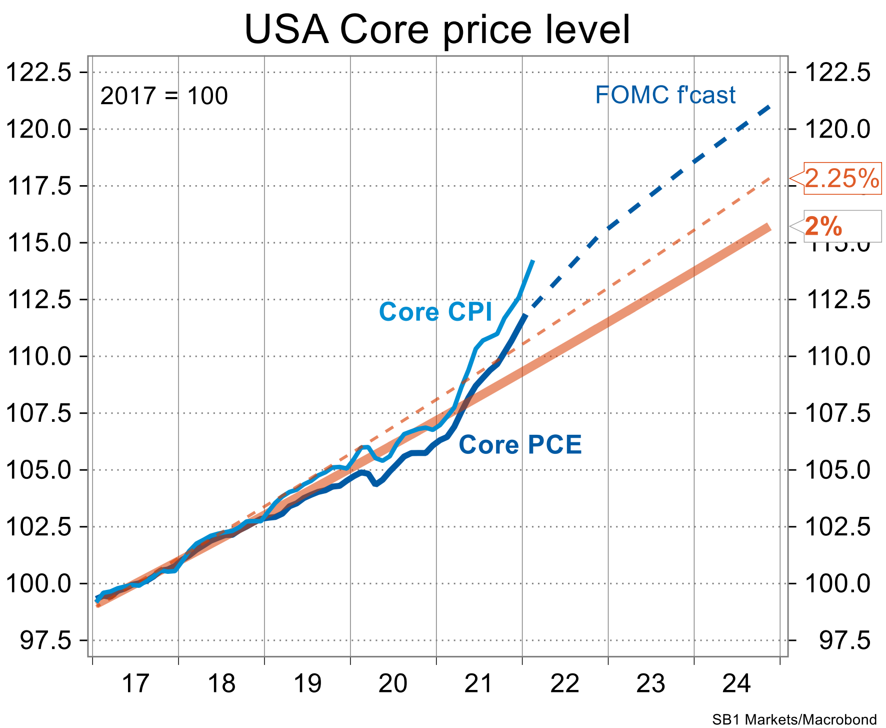
Variable	Median[1] 2022	2023	2024	Longer run
Change in real GDP	2.8	2.2	2.0	1.8
December projection	4.0	2.2	2.0	1.8
Unemployment rate	3.5	3.5	3.6	4.0
December projection	3.5	3.5	3.5	4.0
PCE inflation	4.3	2.7	2.3	2.0
December projection	2.6	2.3	2.1	2.0
Core PCE inflation[4]	4.1	2.6	2.3	
December projection	2.7	2.3	2.1	
Memo: Projected appropriate policy path				
Federal funds rate	1.9	2.8	2.8	2.4
December projection	0.9	1.6	2.1	2.5

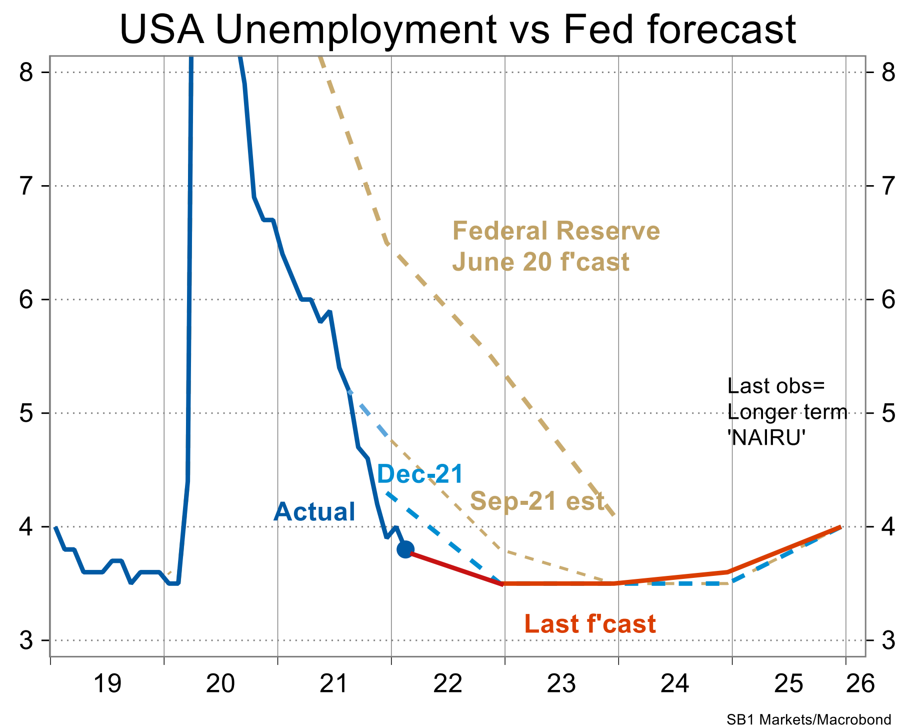


- The **'22 GDP f'cast** was revised down by 1.2 pp to 2.8%. **Unemployment** was still expected down to 3.5%, like in December to below the long term 4% NAIRU estimate. So maximum employment is reached, according to this criteria
- **Inflation** was revised sharply up, the core price level in 2024 by 1.9% and the estimate is 4.6% above a reasonable 2% price growth path
- **The median dot plot**, the individual FOMC members interest rate forecasts, was revised up by up to 120 bps, the largest revision ever (dot plots have been published since 2012), following the 70 bps upward revision in December. A total turnaround, of course
- **The long term neutral Fed funds rate** is assumed to be 2.4% (median, down 0.1 p), implying a (long term) 0.4% positive real rate. The neutral rate is assume to be reached around Q3 2023, 1½ year from now. This is – at least formally – suggesting that the FOMC plans to run an expansionary monetary policy, even if the prices level is well above the promised path, and unemployment is too low. A substantial quantitative tightening (QT, QE in reverse) by selling bond, could add to the tightening but no plan is yet publised

The anchor is lifted? The price level in 2024 will be 4.6% higher than 'promised'

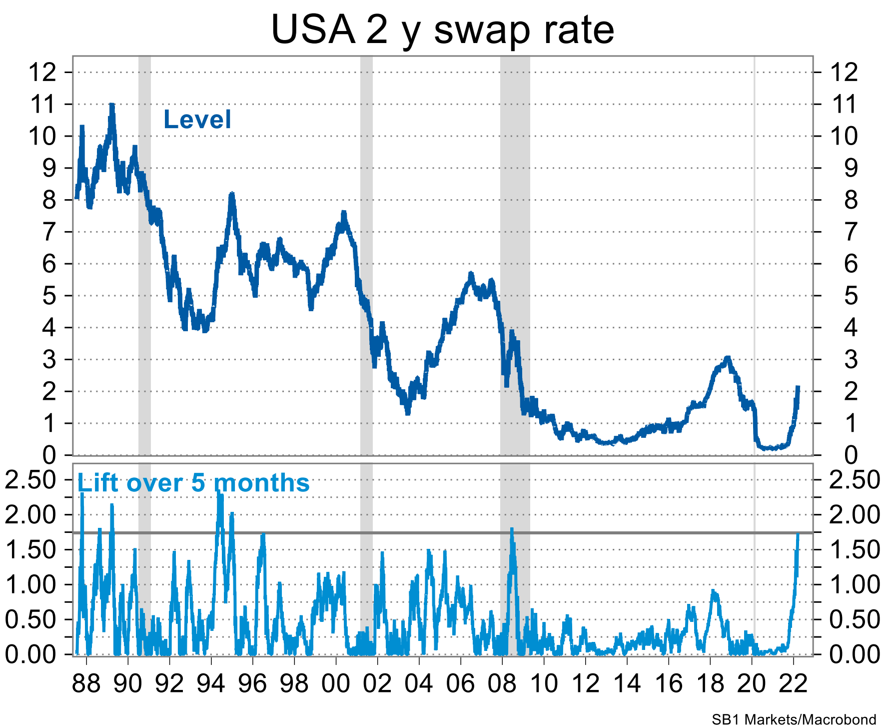
Will the Fed accept both the price and the max. employment target to be breached at the 'same side'?





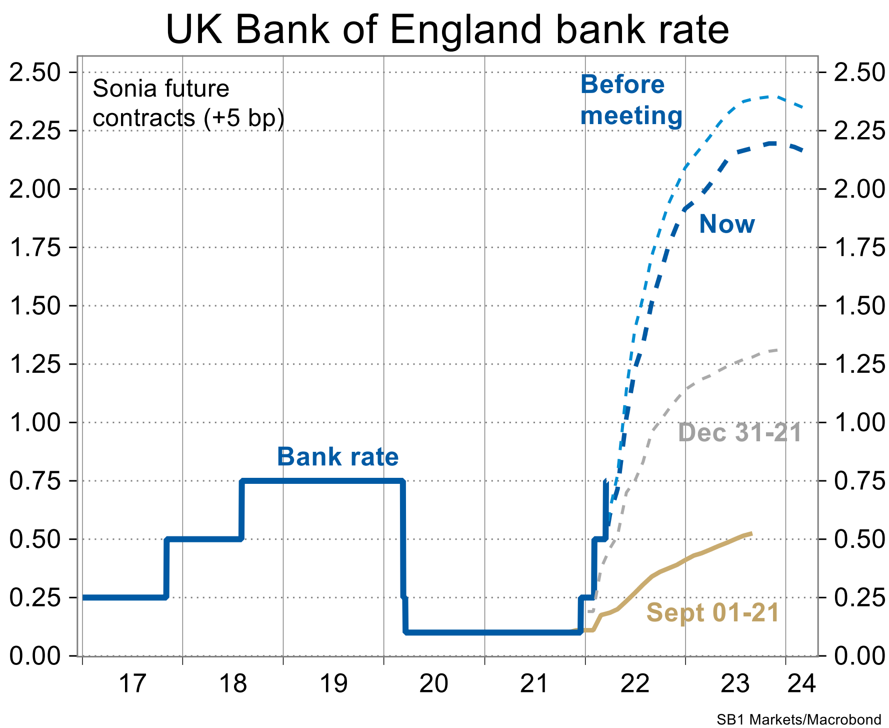
- In August 2020, the FOMC introduced its new **price level target**. The bank aims to reach an <u>average rate of inflation</u> of 2% over time.
- If inflation has been below 2%, annual inflation should be allowed to stay above 2% in order lift the price level up to the long term 2%-path
  - » And vice versa, at least in principle…
- Unemployment expected to stay below the NAIRU the next 3 years

A substantial monetary policy shift over the past 5 months



Bank of England: the 3rd hike, many more to come. But how many?

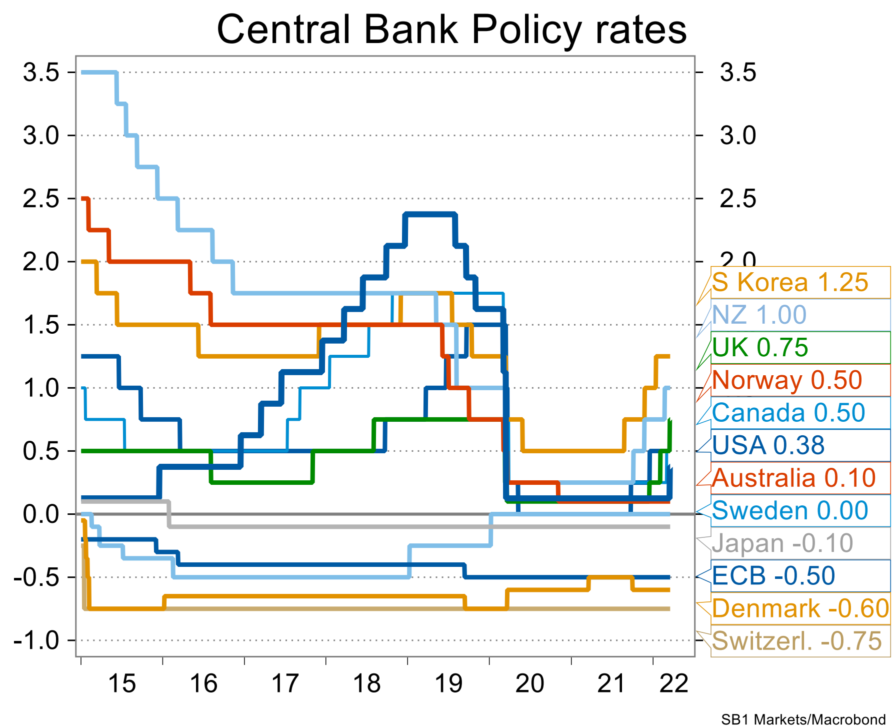
The BoE less hawkish than expected – still many more hikes to come: 4 – 5 in 2022

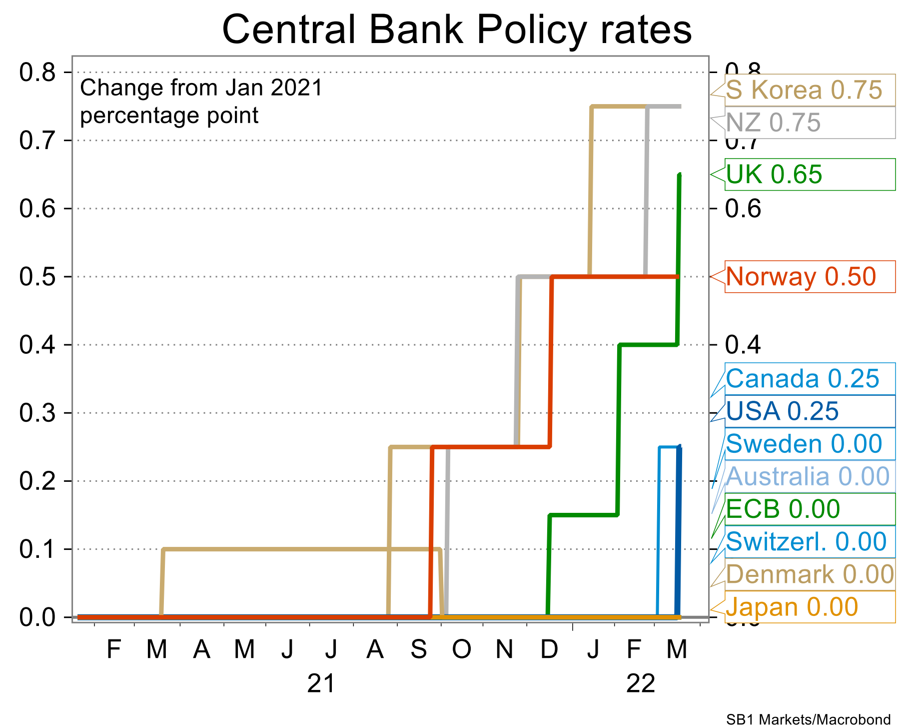


- The 3rd hike since the Bank started tightening in December was expected by everyone
- The MPC expect inflation to accelerate to 8% in the Q2, 1 pp higher than assumed in February – and that may not be the peak – if energy prices turns put to be as high as future prices signal
- The bank is more cautious vs the growth outlook: Falling disposable income and declining consumer confidence could lower demand – and growth
- The bank said some further modest tightening in monetary policy might be needed – which was less hawkish than markets expected
- The future (SONIA) curve fell by up to 20 bps but still signal 6 more hikes, up to 2,2% until H2 next year
- The GBP fell 1.7% last week. So from time to time, interest rates are important for the f/x market!

6 DM central banks have started, 6 to go?

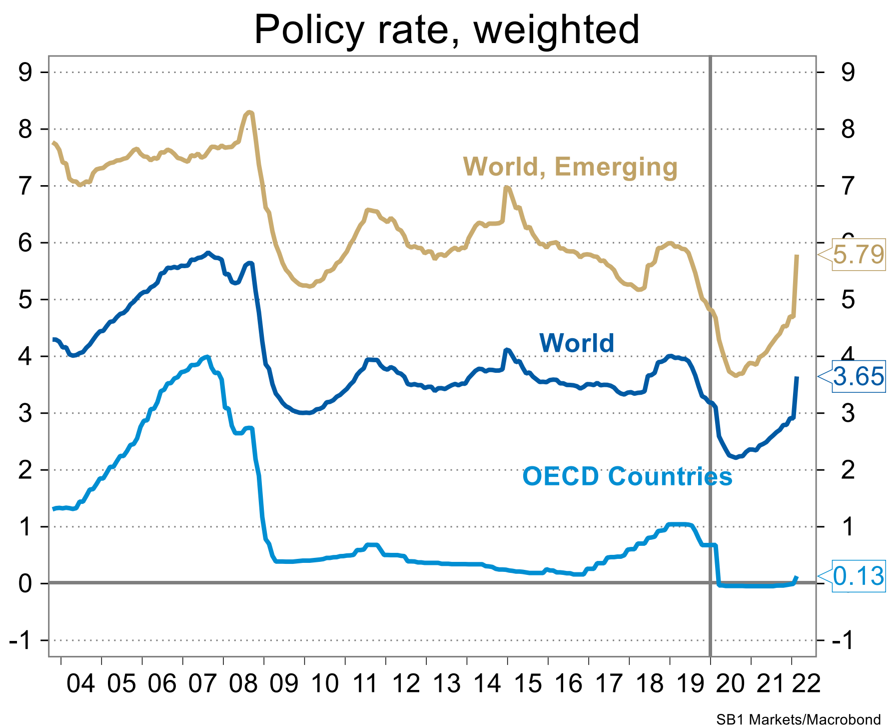
South Korea, New Zealand in the lead, UK no. 3 (until Thursday, that is)





Interest rates are on the way up, especially in Emerging markets (x China)

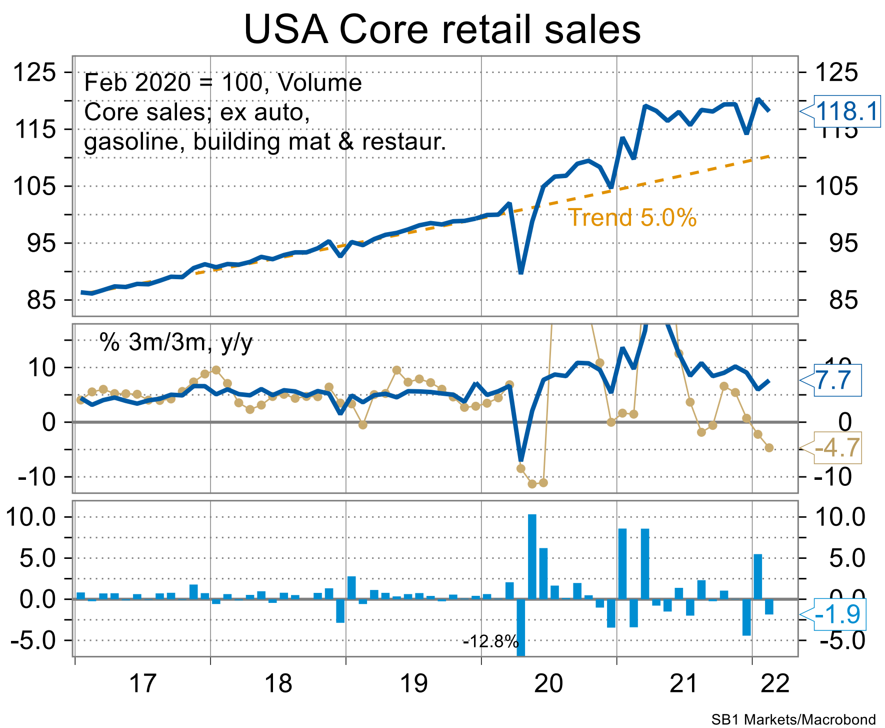
Russia contributed significantly by hiking 10.5 pp to 20%. But 49 other countries have started hiking

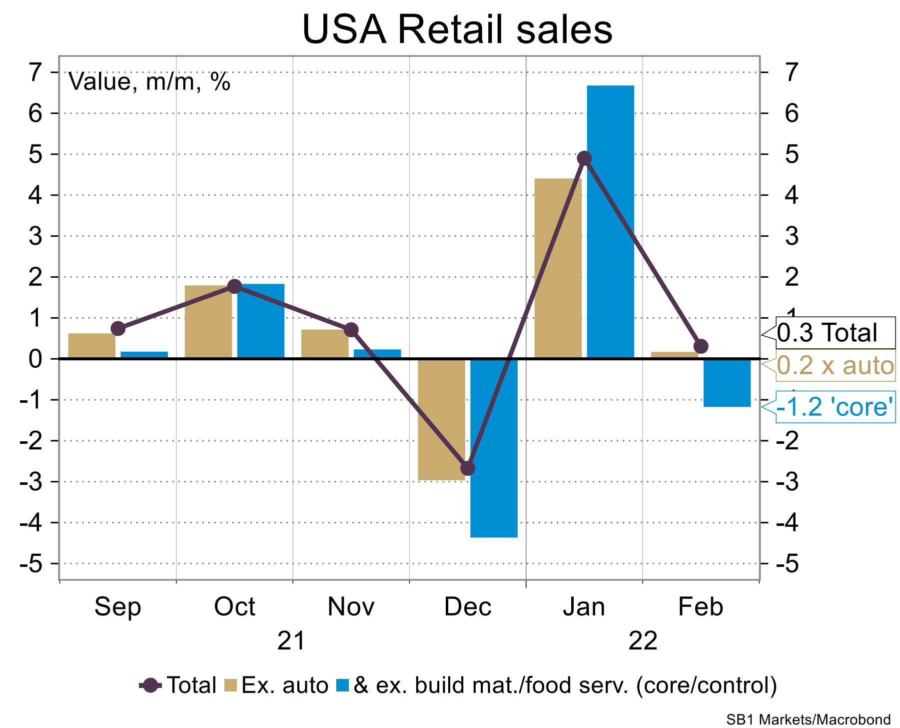


- Rates are well above the pre-pandemic level in a majority of countries – because inflation is well above

Retail sales slowed in February – from a sharply upward revised January

Sales are still far above pre-pandemic trend paths. Total sales are up 25% in value terms

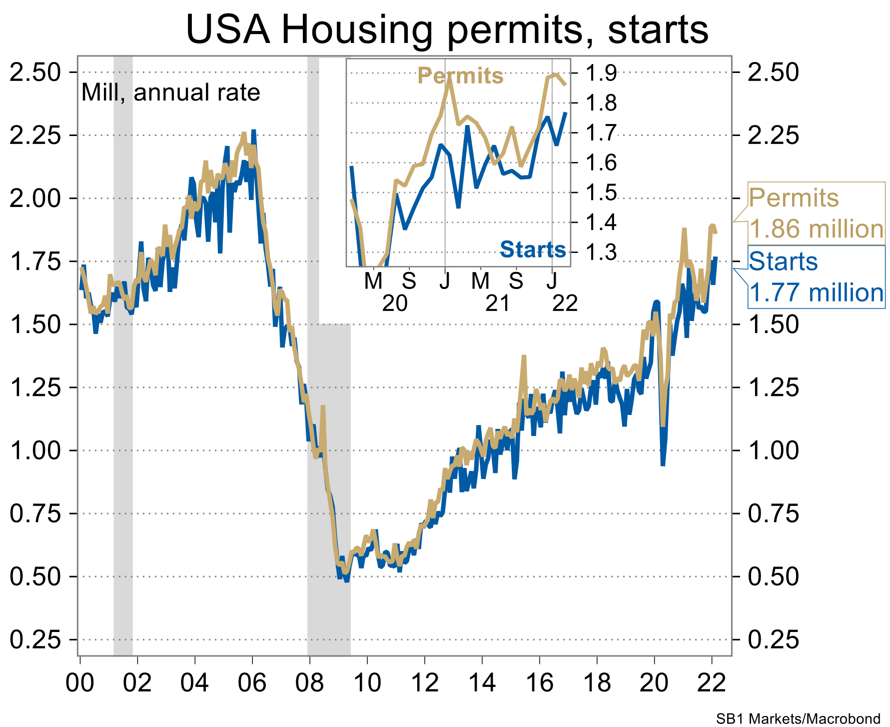


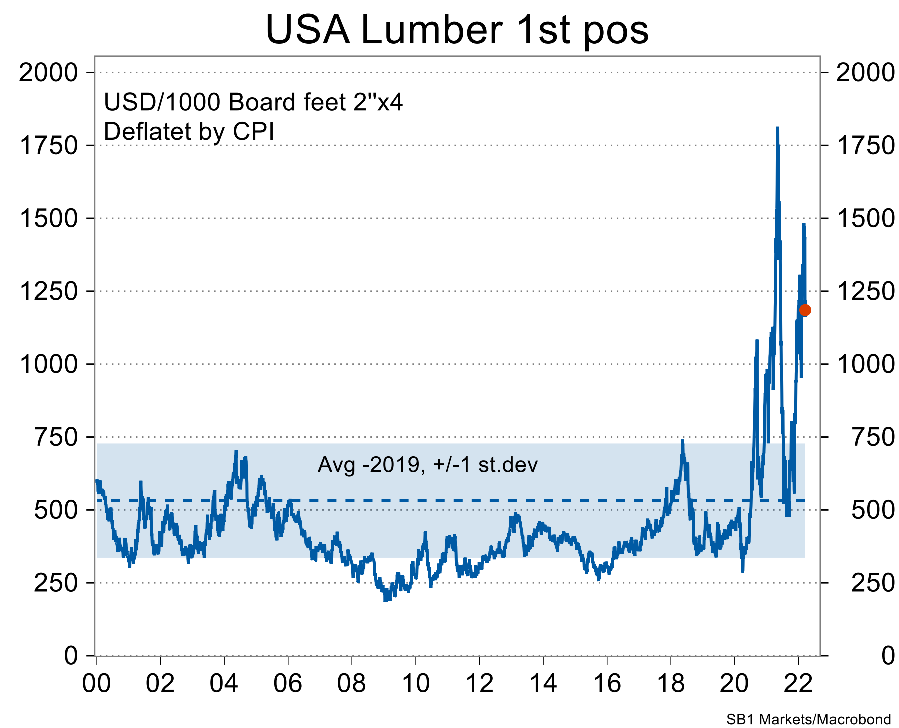


- **Total nominal sales** rose 0.3% in February, down from 4.9% in February initially reported up 3.8%. Thus, the level was well above expectations (as January was too)
  - » Total nominal sales are up 25% – vs. the Feb 2020 level!
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) fell 1.2% in Jan, expected up 0.3%. However growth is Jan was revised up to 6.7%, from 4.8% (while Dec was revised just marginally down)
- In **volume terms** we estimate a 1.9% decline in core sales in February following a more than 5% jump in January
- **Consumption of goods** is very likely well above a sustainable level, and we still expect sales to decline the coming months/quarters – even if parts of the adjustment already has taken place (vs. a long term growth path, growth in consumption of goods has been slow since last March – and sale volumes in Feb was lower than in March 21!)

Building permits, housing starts are still trending upwards

The surge in construction costs are probably dampening demand somewhat

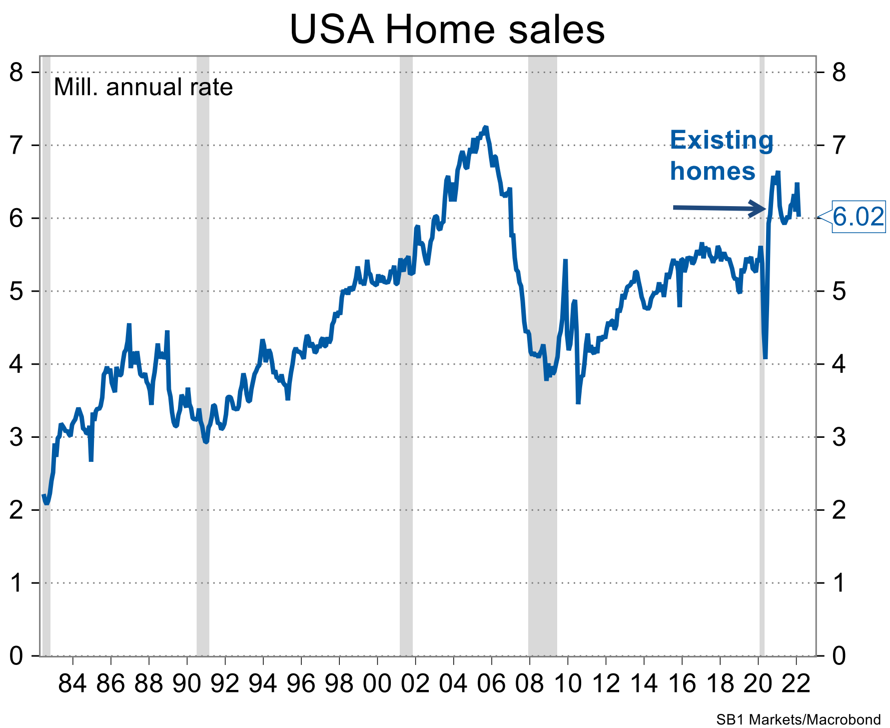


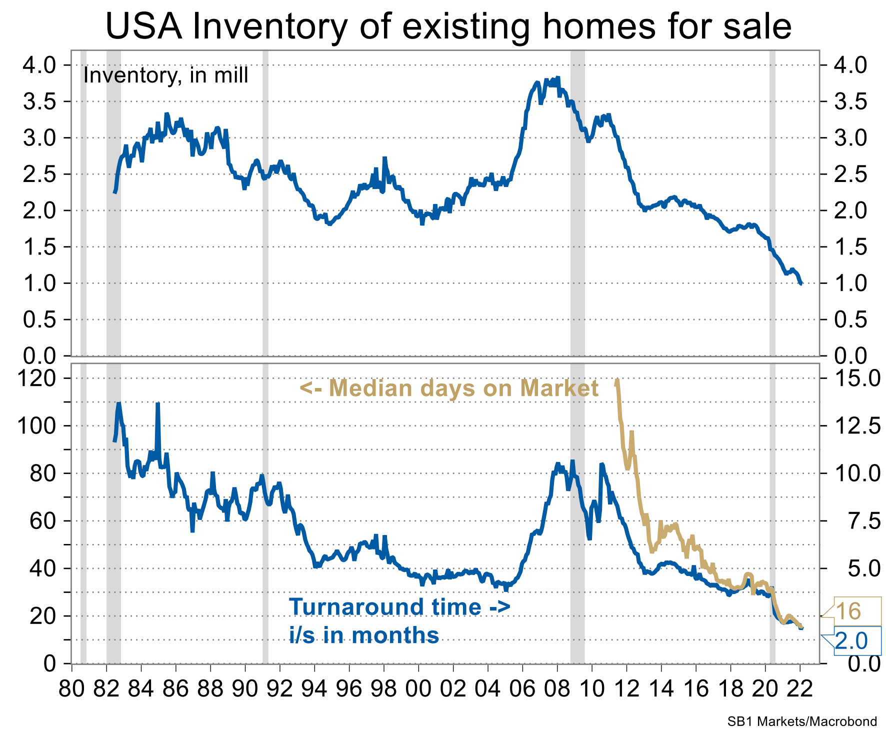


- **Housing starts** rose to 1.77 mill in Feb, from 1.66 mill in Jan (revised up 0.02 mill), expected up to 1.70 mill
- **Building permits** declined slightly to 1.86 mill, up from 1.89 in Jan, expected down to 1.85. The Jan print was the highest since 2006!
- **Given the strong end of the year, the trend is still slightly up.** The level is some 15% above the pre-pandemic level. However, given the incredible strong existing home market, and soaring prices, starts should normally have strengthened further, amid still moderate mortgage rates and a recovering economy
- **Supply & capacity problems and higher cost** in the building sector may explain the lack of response. Lumber (2''x4) prices are still unusually elevated, at more than 2x the average price (however, prices have not increase further after the Russian invasion into Ukraine

Existing home sales down in February but prices are sparing

Lack of supply seems to be a better explanation than higher mortgage rates for the decline in sales

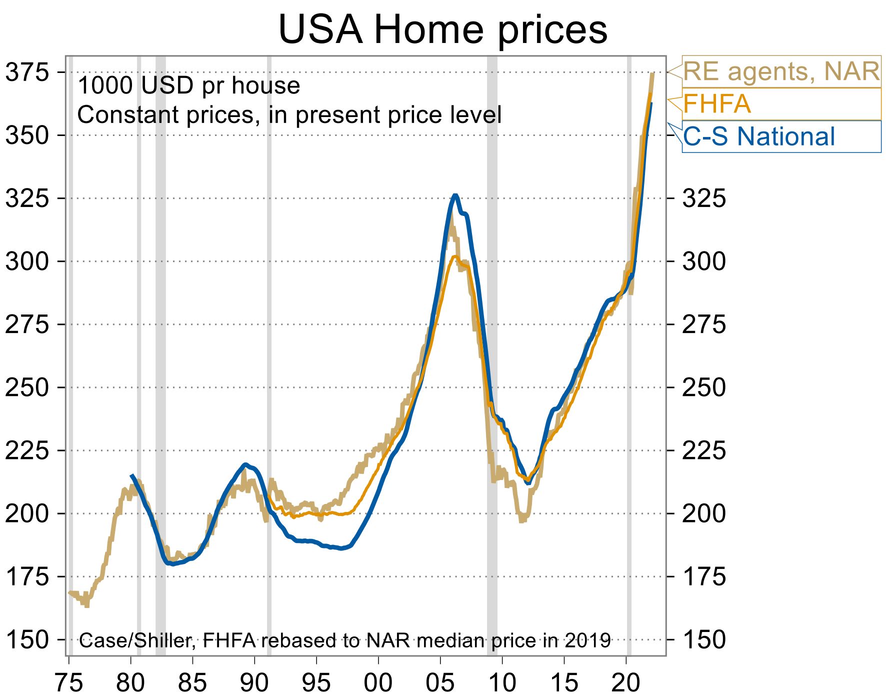




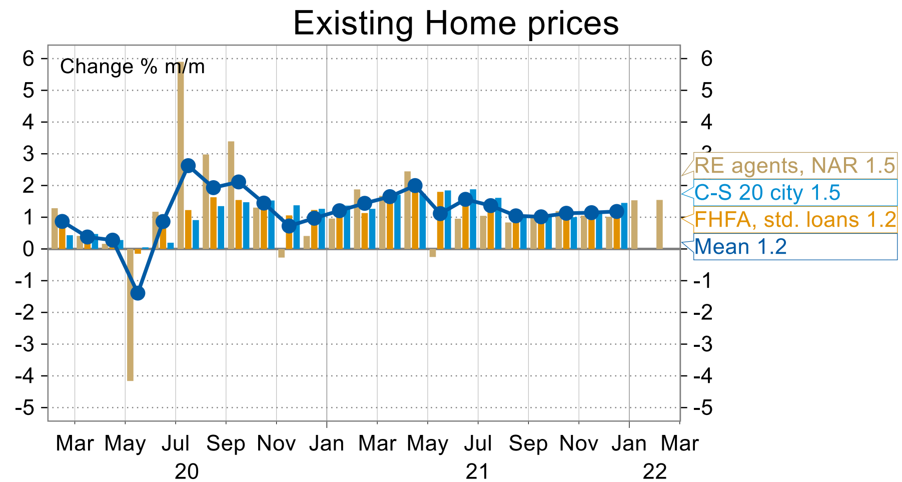
- Sales of **existing homes** fell to 6.02 mill in February, from 6.48 mill in Jan, expected down to 6.1 mill (annualised rates). The trend has been flattish since Q3-2020 – at a far higher level than normal (but below the 2005 peak at above 7 mill)
- **The inventory of unsold homes** fell further in Feb, to another ATL.
  - » The inventory equals 2.0 months of sales. During the 2005 boom, the i/s ratio was 4 months, in bad times it has been as high as 10 months
  - » The median time on the market for those homes sold is just 16 days, down from 30 days before the pandemic (and 120 days in 2011!)
- **Prices** rose 1.5% m/m in February, like in Jan – the fastest pace since last spring. The annual rate is 15%. Other indices confirm a faster price appreciation, and annual rates are 17 - 19%
- No doubt, the lack of supply keeps the number of transactions down, more than the increase in the 30 y fixed mortgage rate to above 4.5%

Existing home prices up 1.5% m/m in Feb too!

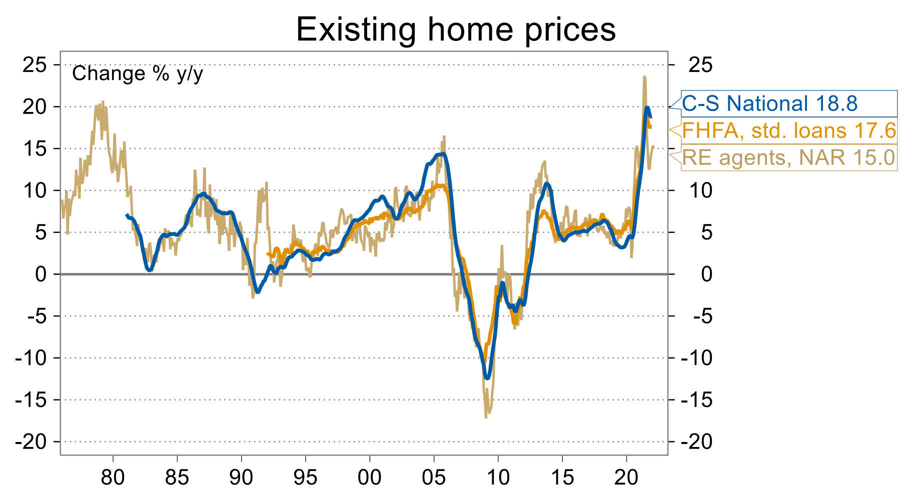
Prices are climbing faster again, according to the realtors – and others agree



SB1 Markets/Macrobond



SB1 Markets/Macrobond



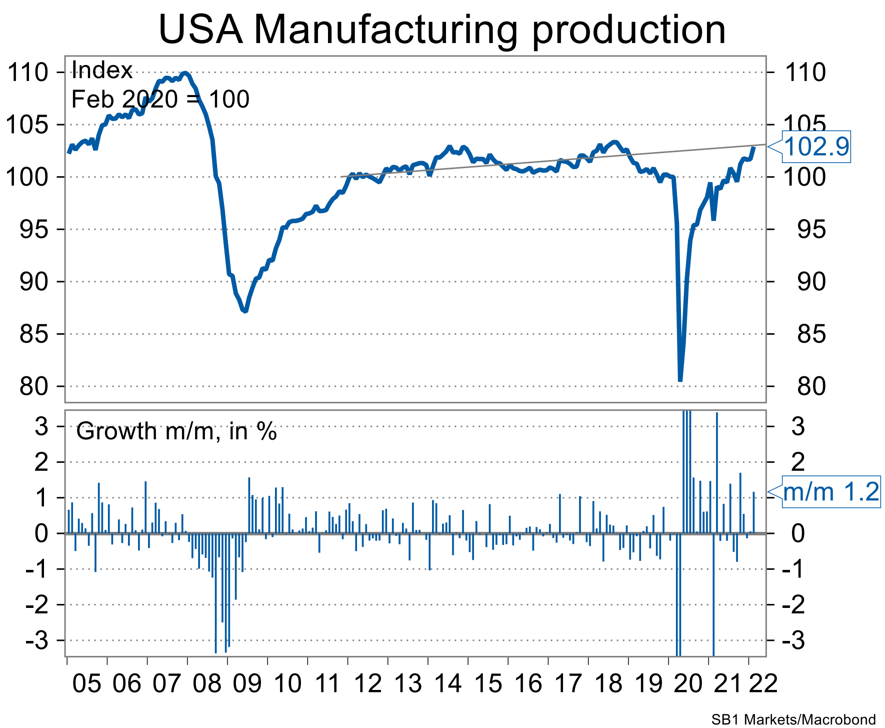
SB1 Markets/Macrobond

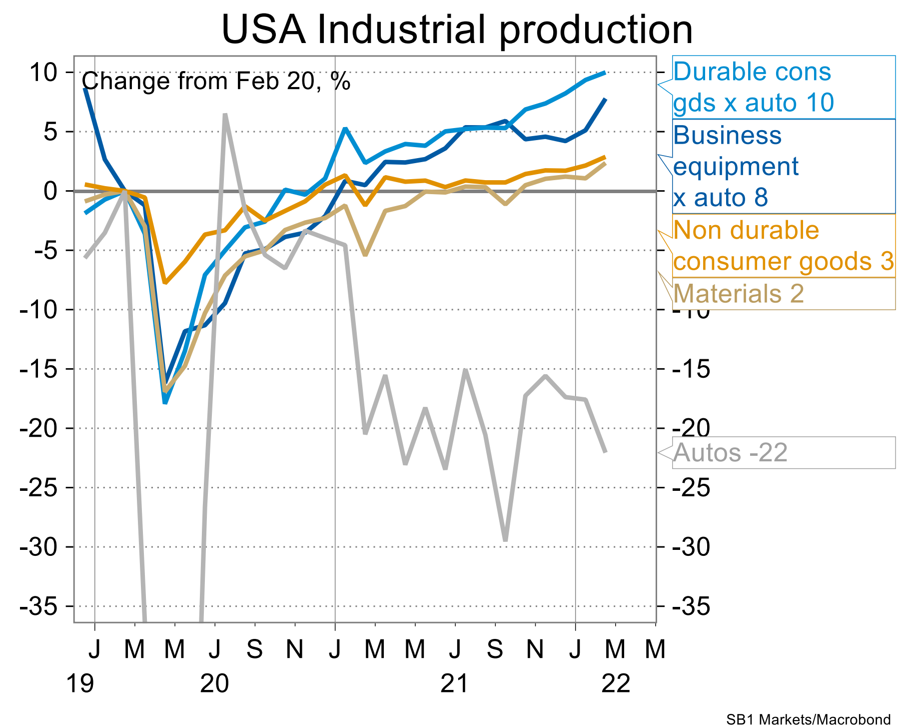
- **Prices** rose 1.5% m/m in Feb, according to the realtors, like in Jan but significantly faster than since last spring. The annual rate is at 15%
- **Other price indices** confirm a red hot housing market; monthly price increase have been trending upwards during the autumn – data until December. Prices are up 17 – 19% (an these indices are much more precise than the raw measure from the realtors)
- Prices are up more than 30% vs. the pre-pandemic level – and the real price level is far above the 2005/6 peak – which generated far too much construction of new homes

SpareBank 1 MARKETS

Manufacturing production 1.2% in February, even if auto production fell sharply

Auto production is down 22% vs Feb 20, total is up 2.9%, and it is back to the pre-pandemic trend

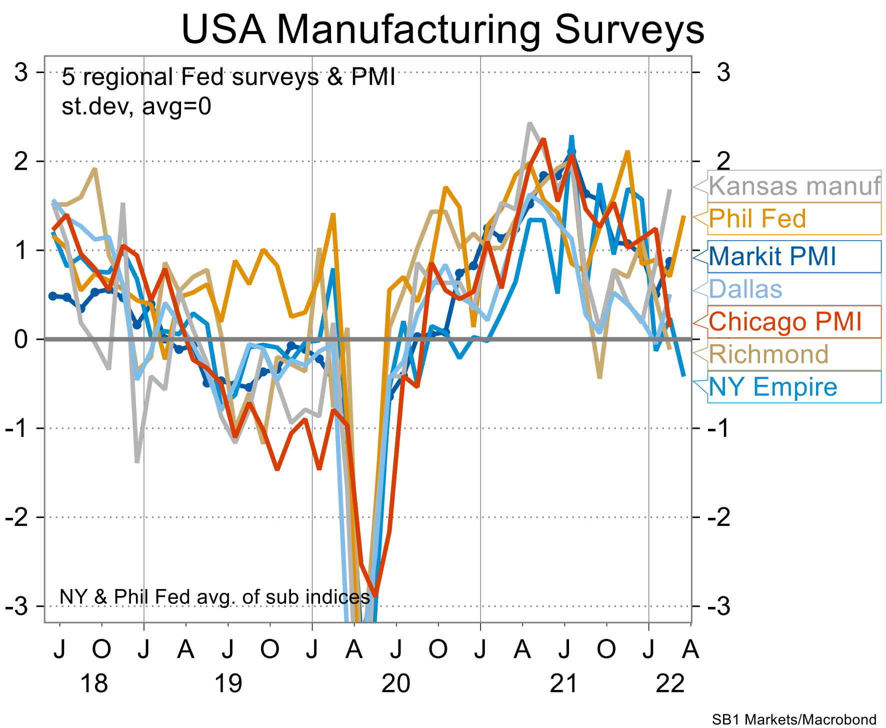


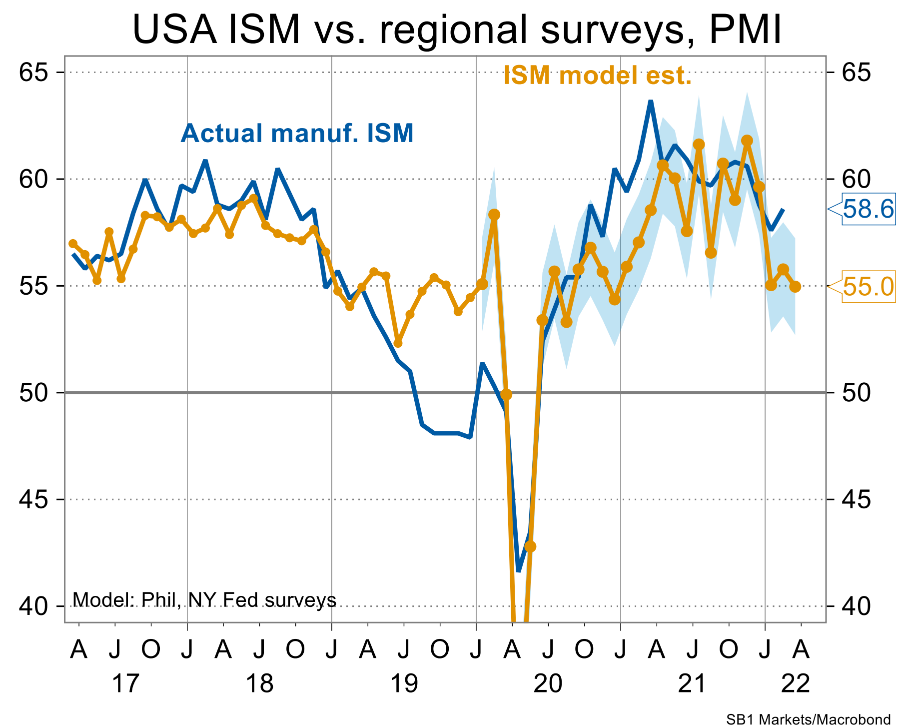


- **Manufacturing production** was expected up 1%
  - » **Production** is trending upwards – and it is finally back to the pre-pandemic trend
  - » The steep decline in auto production has been a drag on overall production in 2021 and into 2022
- **Total industrial production**, including utilities, mines/oil production rose 0.5, as expected
- **PMI/ISM and all other surveys** signal a continued recovery but at slower pace than until now
- **Capacity utilization** shot up in February and is far above average. The ISM survey reports a record high utilization, check next page

No clear signal so far in March

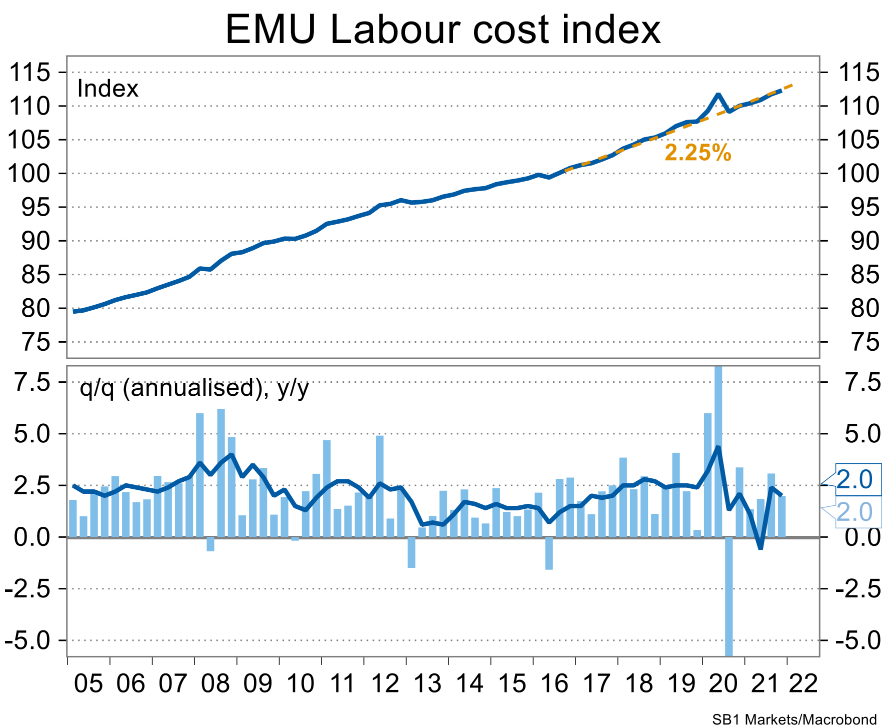
The big picture: Surveys are heading down, manufacturing growth is slowing

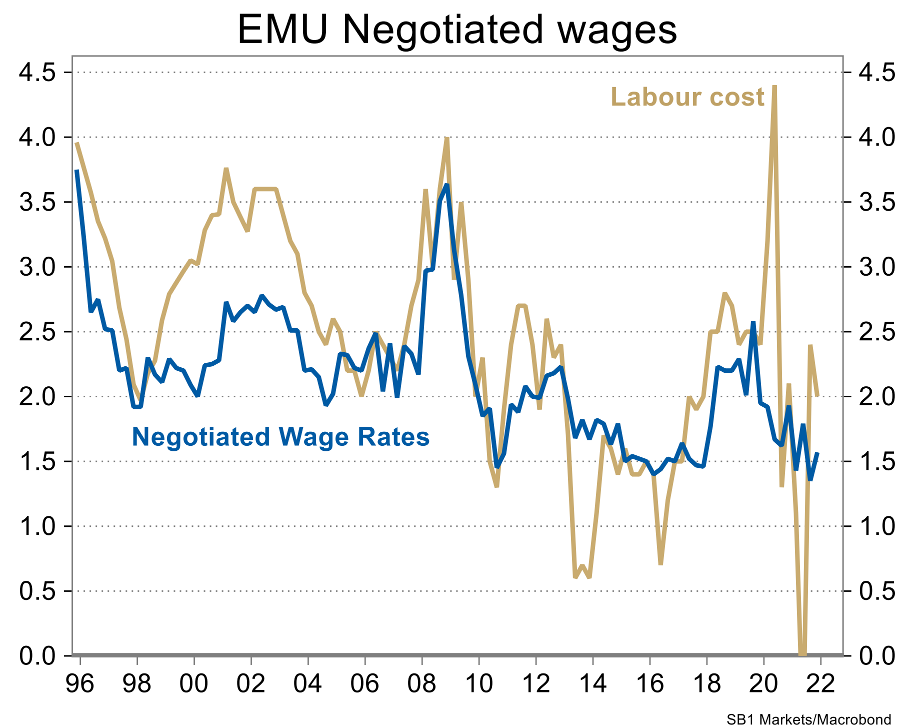




Labour cost inflation still just at 2.0%. No reason for the ECB to panic

But if unemployment is at the lowest since 1981, a negative signal rate is perhaps not needed either?

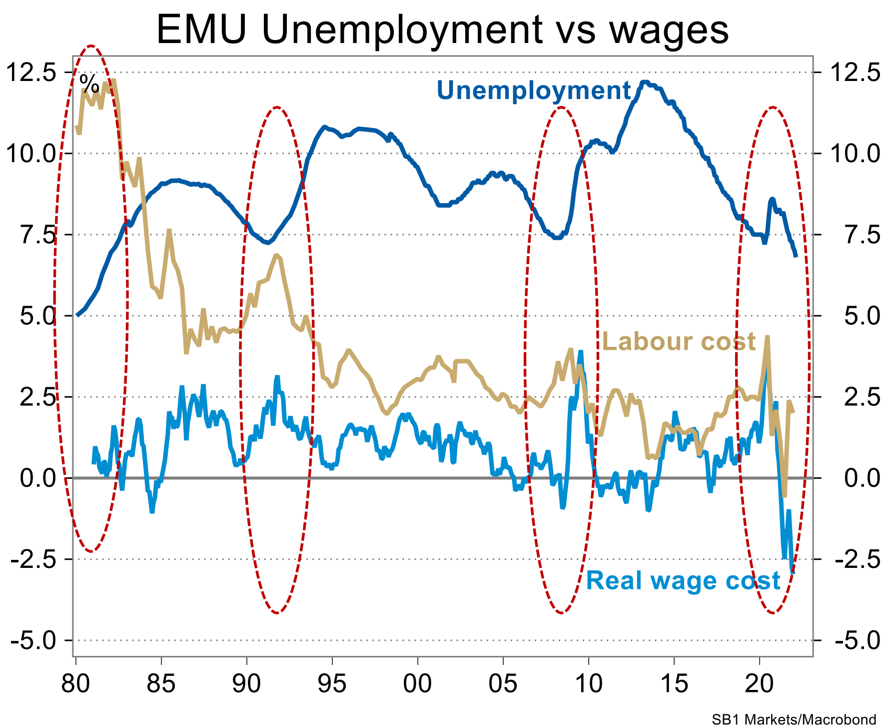


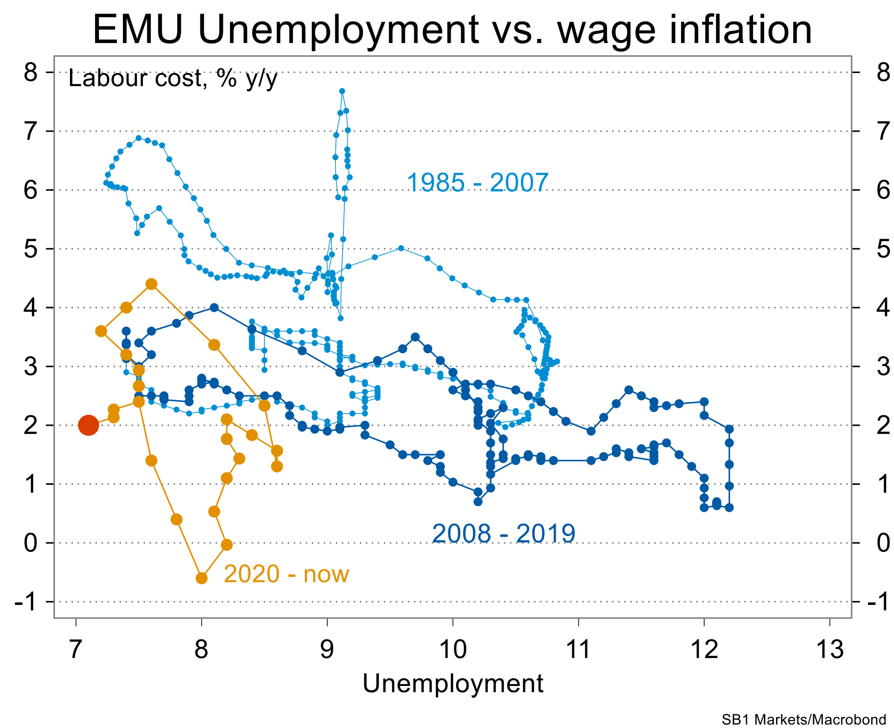


- **Labour costs** in the business sector grew at a 2% pace in Q4, and by 2.0% y/y
  - » Labour costs = Wages + taxes – subsidies (the two latter paid by/received to the employers)
- ECB's indicator for **negotiated wages** is up 1.6% y/y
- No signs of acceleration, whatsoever

Unemployment is the lowest since 1981, vacancies are at ATH

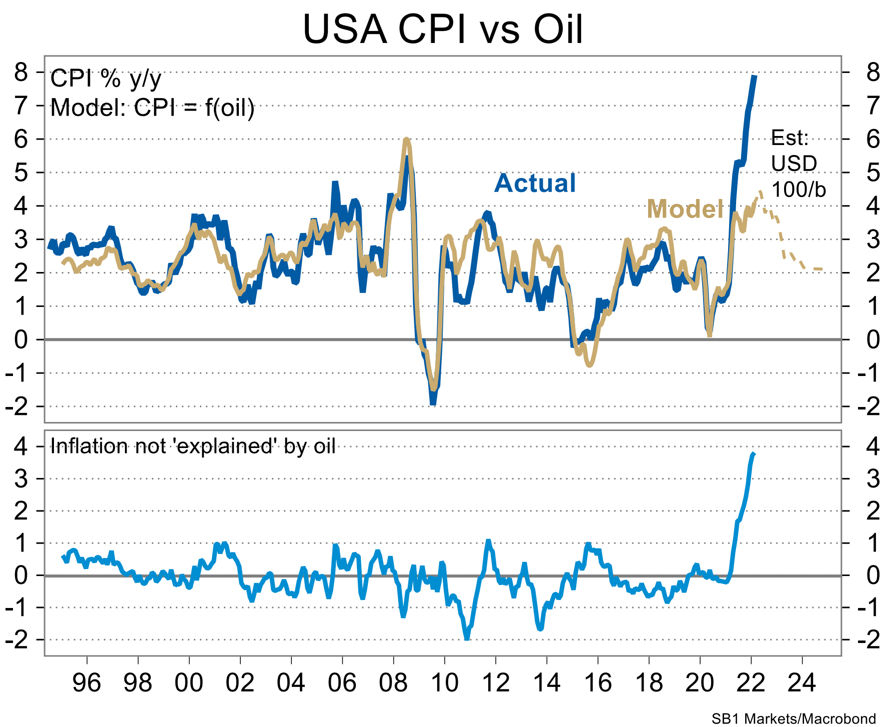
There may be some wage inflation risk in the EMU too?

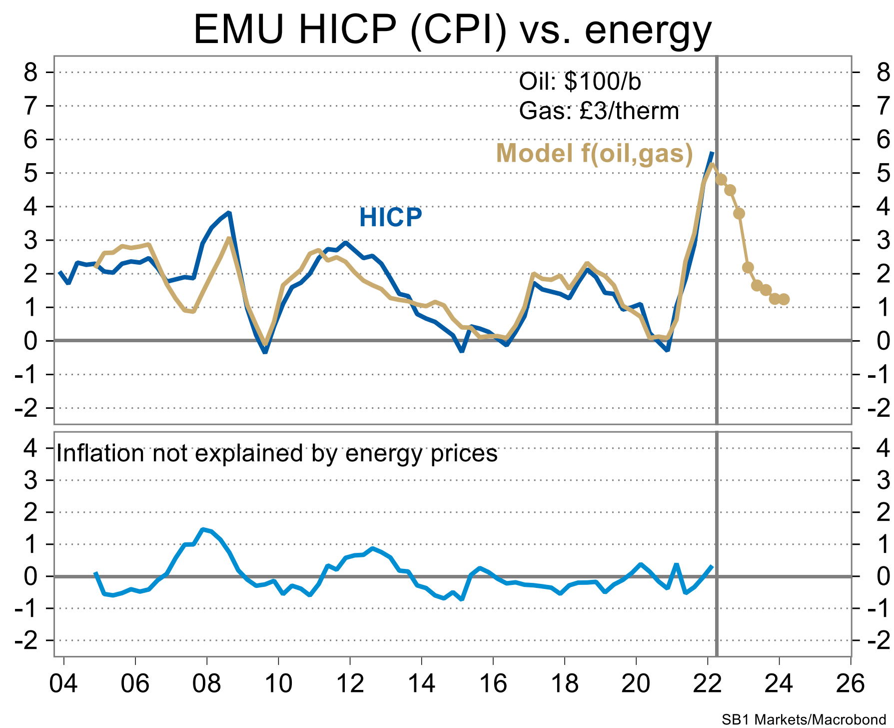




EMU vs USA: Spot the difference

Just half of the 8% US CPI inflation can be explained by energy. In the EMU it's nothing but energy

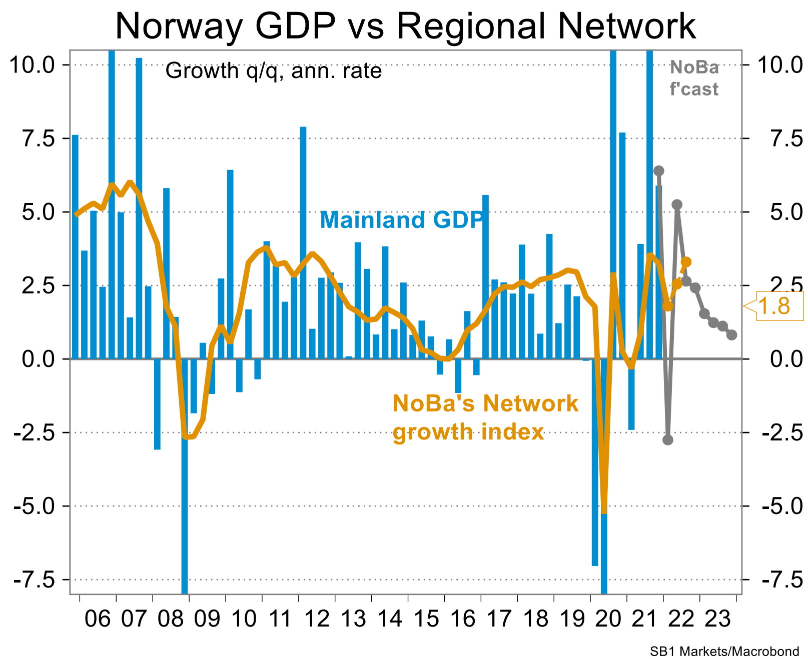




- **Oil price cycles** have explained some 80% of the changes in the US CPI growth the past 30 years, which for practical purposes, is "everything". The same goes for oil and gas prices in Europe.
  - » In our models we incorporate all direct impacts from changes in the oil price – as well as the impacts from other factors that influences inflation which correlates to the oil price. These models do NOT capture the impacts of energy subsidies etc
- Now, inflation is way above the model estimate in the US, but spot on in the EMU
- If the oil price stabilises at USD 100/b, and gas prices at the current (very high) level
  - » **US:** A small uptick in inflation (but from a very starting level)
  - » **EMU:** Energy inflation – and total inflation is close to peak. Inflation would have fallen far faster in energy prices returned to 'normal' levels

Norges Bank's Regional Network expect brisk growth, serious capacity constraints

… including lack of labour and much higher wage inflation. While the signal rate is far below neutral



- **Implications**
  - » Taken face value, the network report delivers strong arguments for <u>a more rapid pace in normalisation of Norges Banks policy rate</u>. Capacity constraints and labour shortages are building faster than ever before, wage and price inflation is expected to accelerate sharply
  - » So why spend one year to bring the signal rate up what the bank assumes to be the neutral rate. <u>When wage and price inflation is high, unemployment is below are normal levels as companies are reporting unusual capacity constraints, should not the signal rate be ABOVE the assumed neutral rate</u>?

Activity the past 3 months

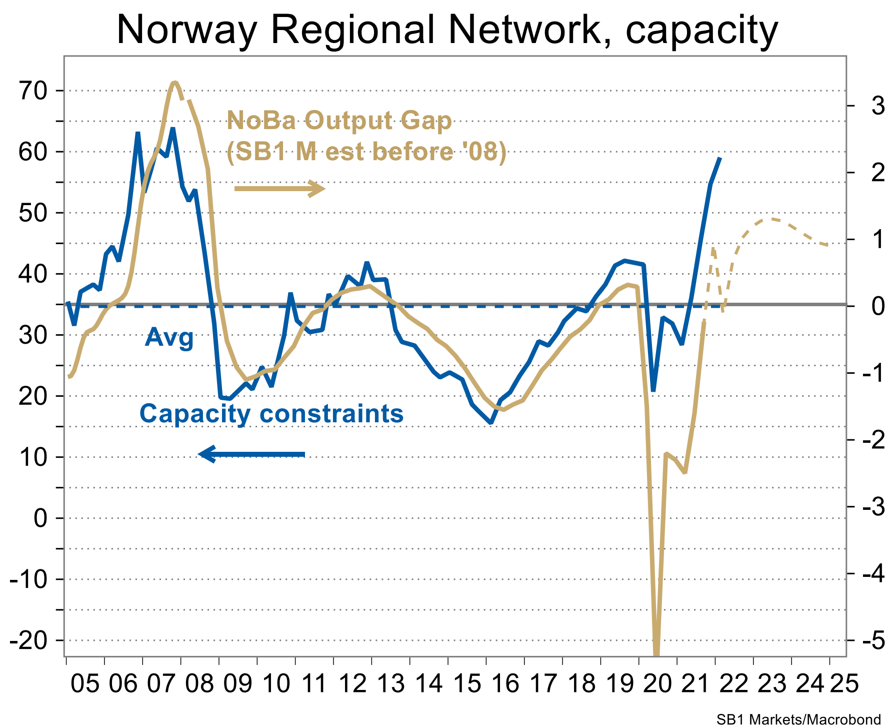
- The Network reports a 1.8% growth pace in Nov-Jan period (index value 0.9), 1.6 pp higher than we assumed. The Omicron restrictions have not been that serious, according to the Network. Actual Mainland GDP growth was 0.8% (annualised) past 3 months.
  - » Household services reported a decline, retail sales rather slow growth
  - » **Capacity utilisation** rose further and are close to ATH, and **labour shortages** became even more widespread, and are not far below ATH. <u>Both have climbed faster than ever the past 3 quarters</u>.

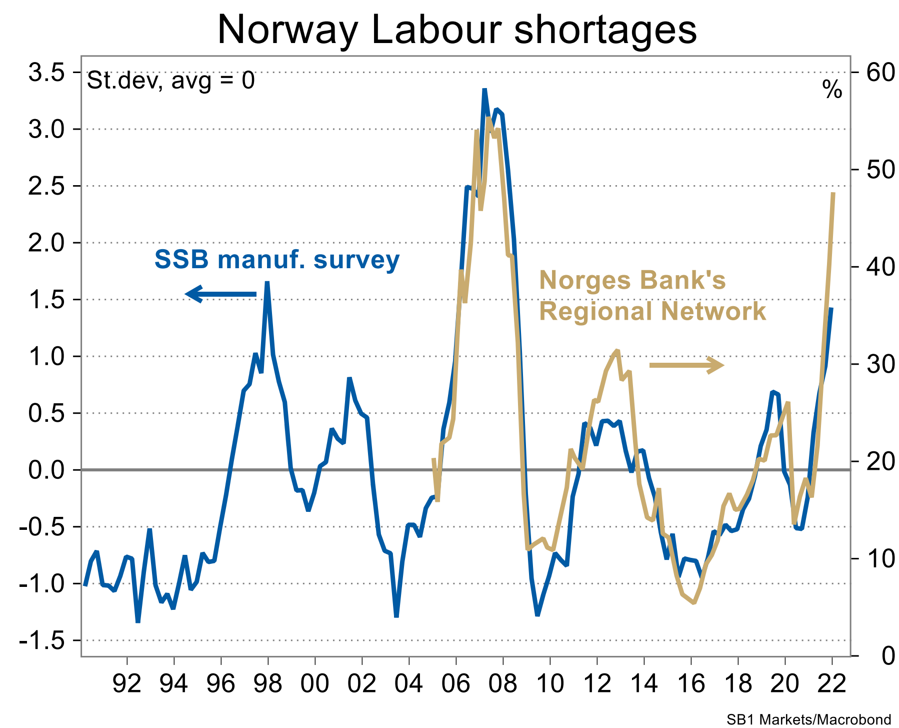
Expectations for the coming months

- The Network expects a 3.3% growth pace the next 6 months (index 1.65), up from 1.9% 3 months ago. We expected 2.4%.(which arguably was to too low estimate). In December, Norges Bank assumed a 2.5% growth pace over the next 6 months, from November. The survey was finalised February 18, that is well before Russia's invasion in Ukraine. Most likely, most companies has not changes
  - » Retail trad expects sales to slow – which is reasonable as consumption of goods have been 'artificially' higher than normal during the pandemic
  - » Household and commercial surveys expect strong growth the next 6 months, for good reasons
  - » Other sectors report growth at or above normal
- **Investment** were revised slightly down, from the highest level in 10 years
- **Wage inflation** expectations were revised up by 0.5 pp to 3.7% - and to 3.9% in the private sector. Expectations have not been revised more upwards q/q before
- Companies expect **prices** to increase at an unusual paces

Capacity constraints close to ATH, NoBa will have to revise the output gap est. up

Labour shortages even more wide spread, not far below the 2007 ATH

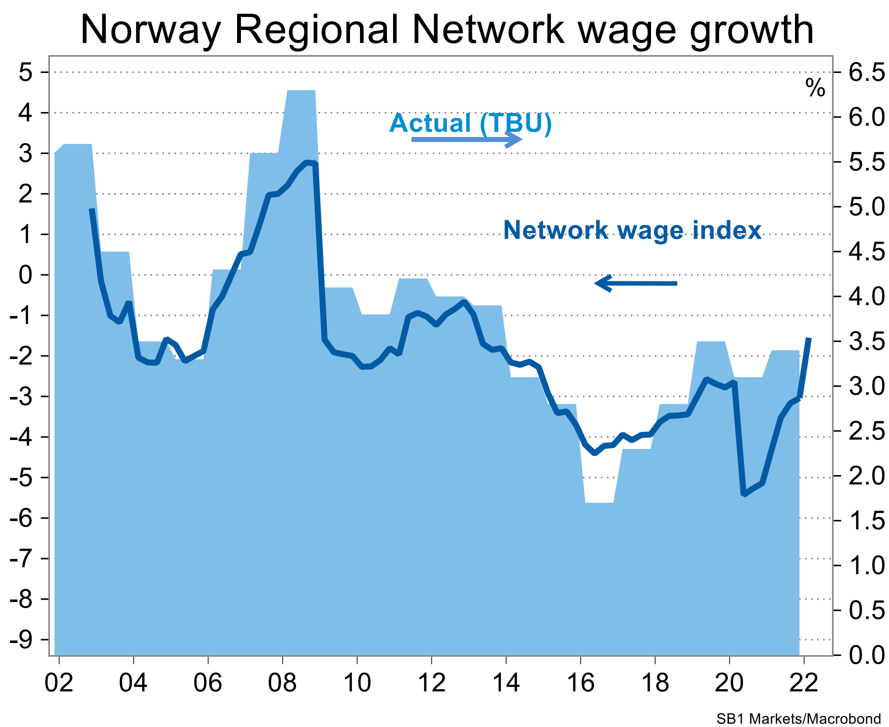




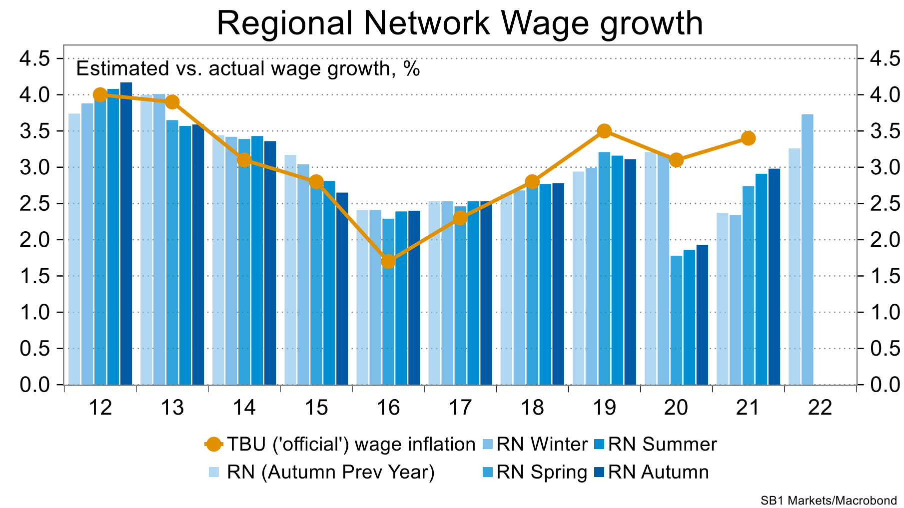
- More companies than since 2007 are reporting **capacity constraints** following the steepest surge ever, over the past 3 quarters. The correlation to NoBa's assessment of the **output gap** is not 1:1 but the Network report suggest than the Bank's estimate has to revised substantially upwards. The 2.1% unemployment rate in February, and a stagnant labour force participation rate also indicate a higher positive output gap
- **Labour supply** shortages are shooting up, also faster than like never before – and the level is rapidly approaching the ATH level as in 2007. Given growth expectations well above average – and plans to lift employment, the labour market will very likely tighten further the coming months. Where will companies find available workers?
- **Wage expectations** have never climbed faster either, check the two pages forward

Tic toc, tic toc. Wage expect. on the way up, approaching 4% in the priv. sector

The average wage expectation at 3.7% but at 3.9% in the private sector. NoBa will revise sharply upw.



- Just once, in 2011, the Network has revised up its wage expectations more in one go than between Feb and May



- **Wages growth in 2021** was 3.5% (all employees, and 3.4% in areas covered by wage negotiations) in 2021, well above the Network estimate last December
- **Wage growth in 2022** is expected at 3.7%, up from the 3.2% December forecast. We have never seen larger quarterly upward revisions before (but a similar adjustment was reported in Q2 2007 and Q2 2011)
- **In Norges Bank Q1 expectation survey**, economists in trade unions expected 4.2% wage growth in 2022, while employers associations forecasted a 3.9 growth, both up by 0.75 pp vs. the Q4 survey (and close to +1 pp vs the Q3-21 survey)
- **Norges Bank** assumed 3.2% wage growth in 2022 in its Dec MPR. Now NoBa will now have to revise its forecast at least to 3.6% (SSB's f'cast last week). We think 3.9% or higher is too much for swallow for NoBa, in one go. So, let's say 3.7%

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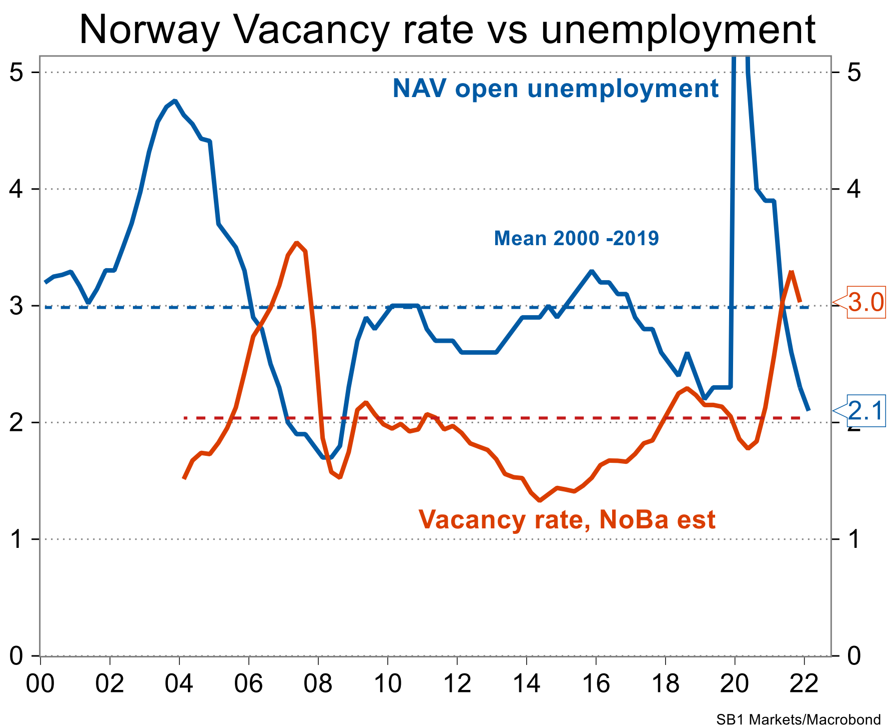
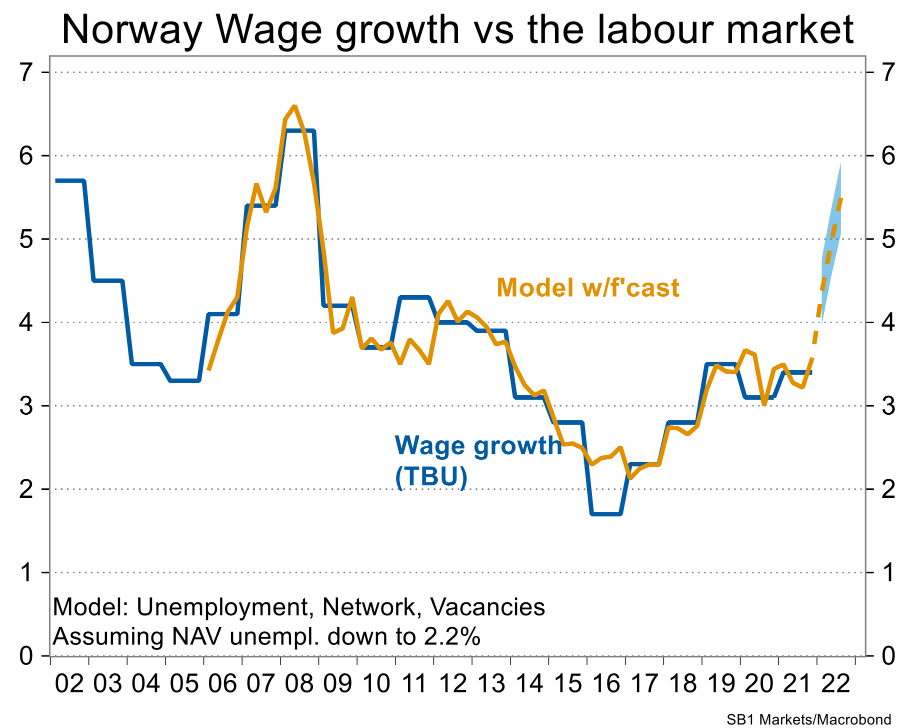
The labour market is tightening rapidly, and wage expectations are slipping

We not expect this spring's wage negotiations to yield 4% wage growth. However…



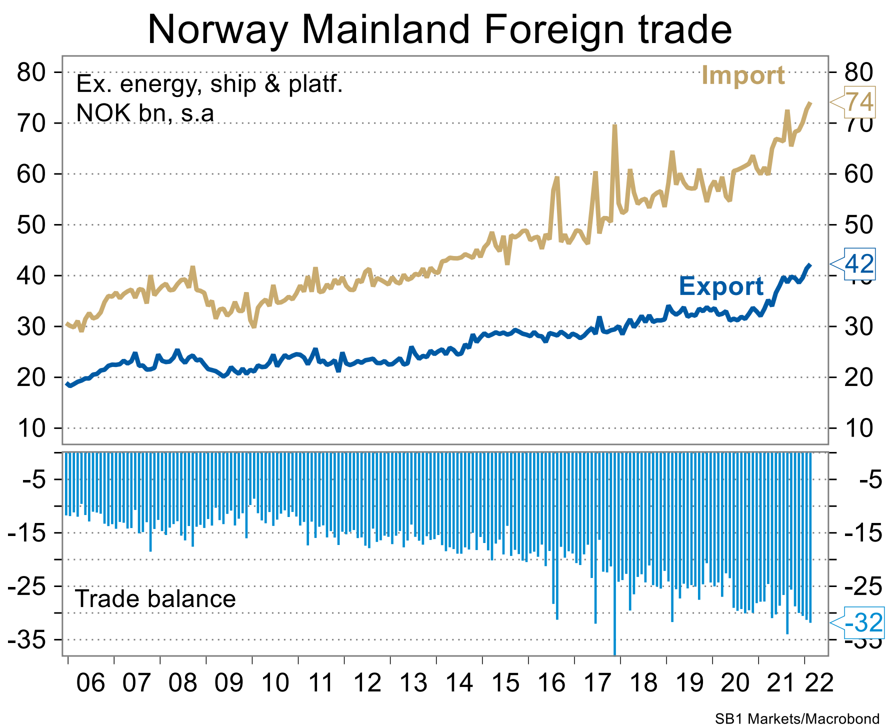


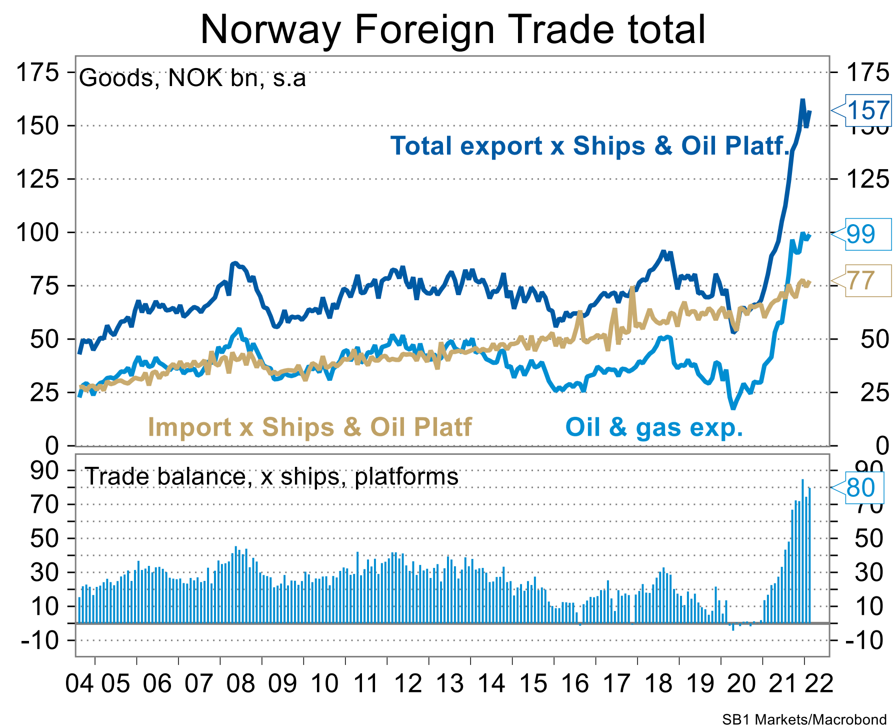
- Actual wage inflation may easily accelerate to 4% through 2022 – if the economy is not hit by a negative demand shock

SpareBank 1 MARKETS

Trade surplus at NOK 80 bn, 28% of GDP! Both Mainland imports & exports up

The Mainland trade deficit is widening but petroleum exports are soaring

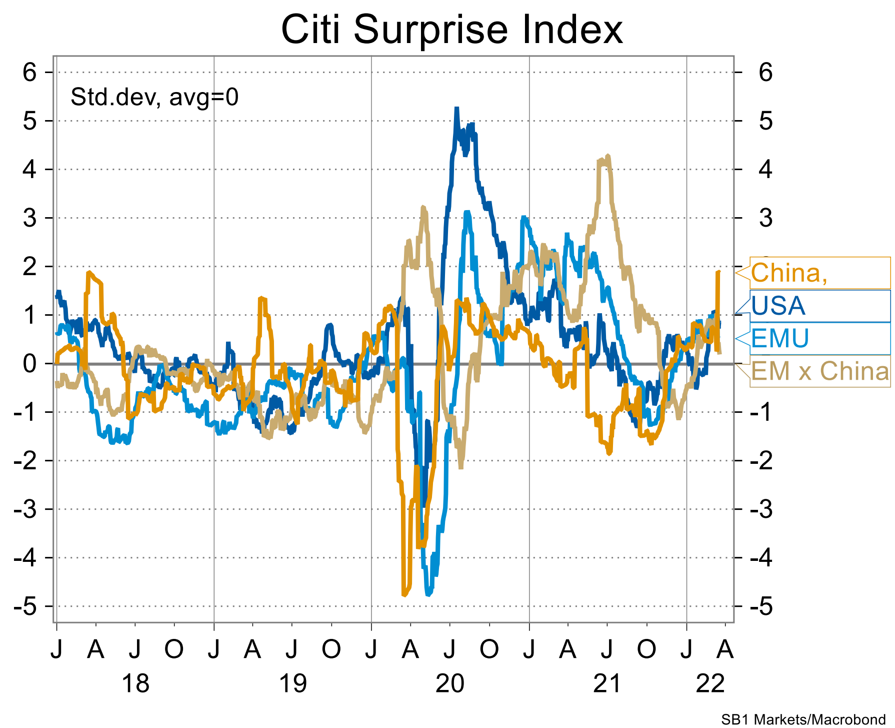


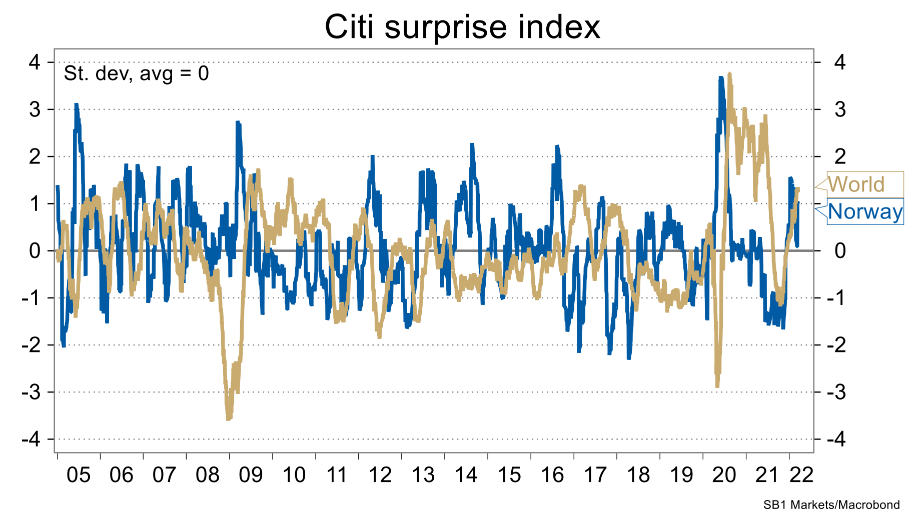


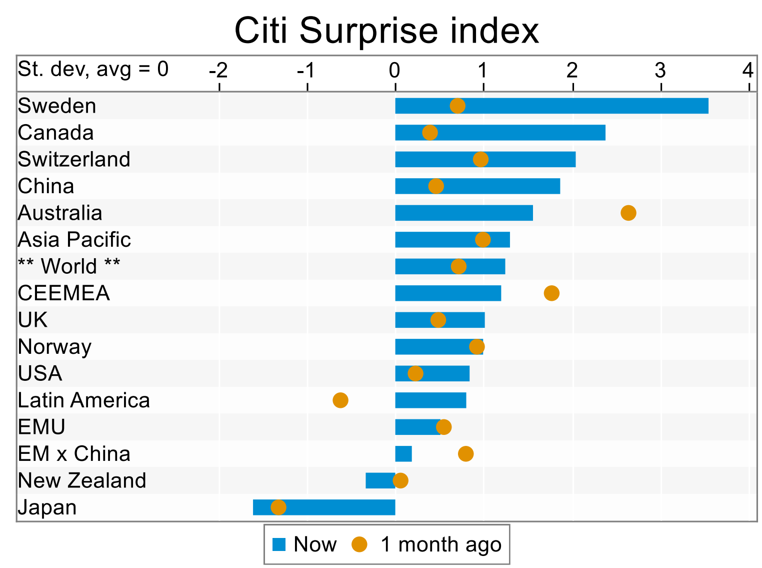
- **The <u>Mainland (non energy) trade deficit in goods</u>** rose marginally to NOK 32 bn, equalling 10% of Mainland GDP (however, most imports for oil investments are categorised as Mainland imports and sales from the Mainland to the oil sector (both op.ex and cap.ex)
- **Non-energy exports** rose further in February, to NOK 42 bn. Exports are up more than 30% since 2020, mostly due to higher prices but volumes are up as well. Fish, metals & chemicals are reporting string growth
- **Imports** added some few bn and remain at 10% growth path
- **Gas exports** fell slightly in February but remains at an incredible high level. In March the export value will climb to an even more incredible level, thank you Mr. Putin. **Oil exports** rose almost to an ATH – and the oil price was ATH, measured in NOK
- **The trade surplus in goods** (ex ships/platforms) fell rose to NOK 80, an enormous amount, 28% of Mainland GDP!
- **The government's <u>extra</u> revenues** from oil and gas exports (and direct ownership) now equals some NOK 80 – 90 bn per month

The world is surprising even more at the upside. At least so far…

China almost up to the top of the list on Jan/Feb data. Just Japan at the downside vs expectations







- **Norway** was surprising sharply on the downside through most of 2021, according to Citi. But in early December we crossed the zero line, and shot up in January – and we are still well above average

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

Highlights

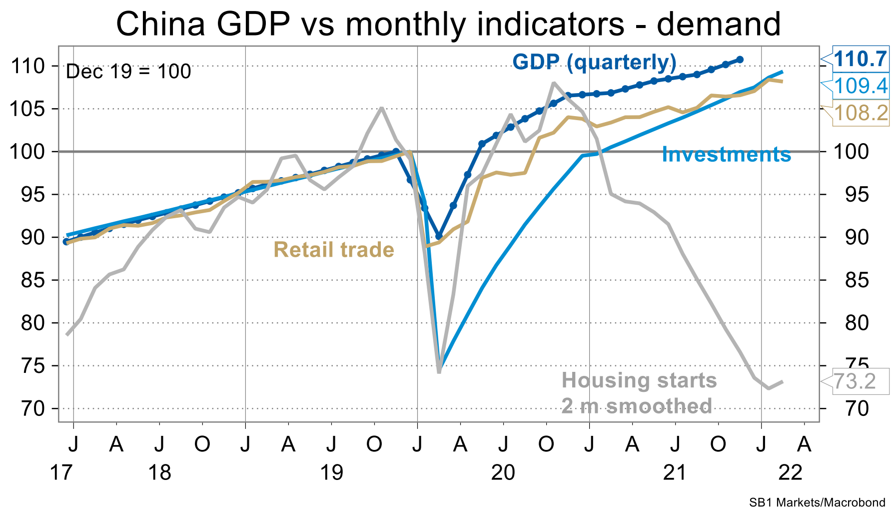
The world around us

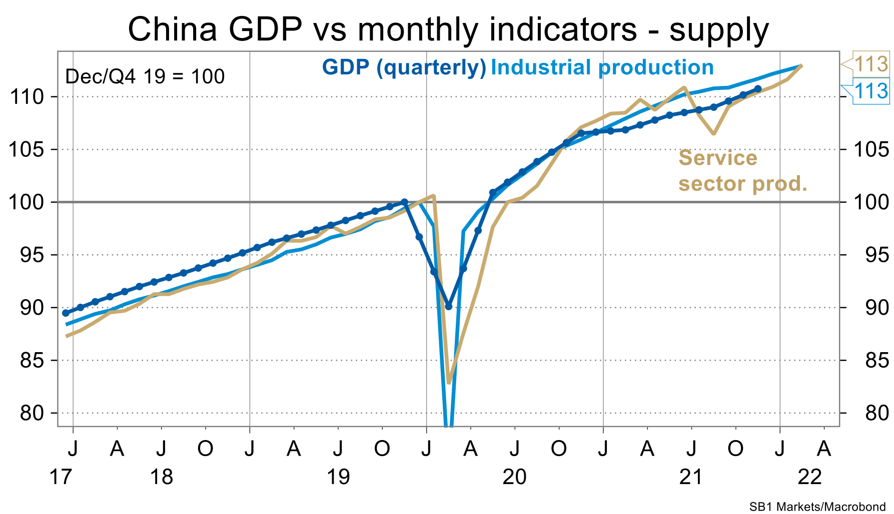
The Norwegian economy

Market charts & comments

A pretty good start of the new year, even if official y/y data not reflect reality

Monthly data in sum better than expected, but retail sales construction is weak. 2 signal rates cut today



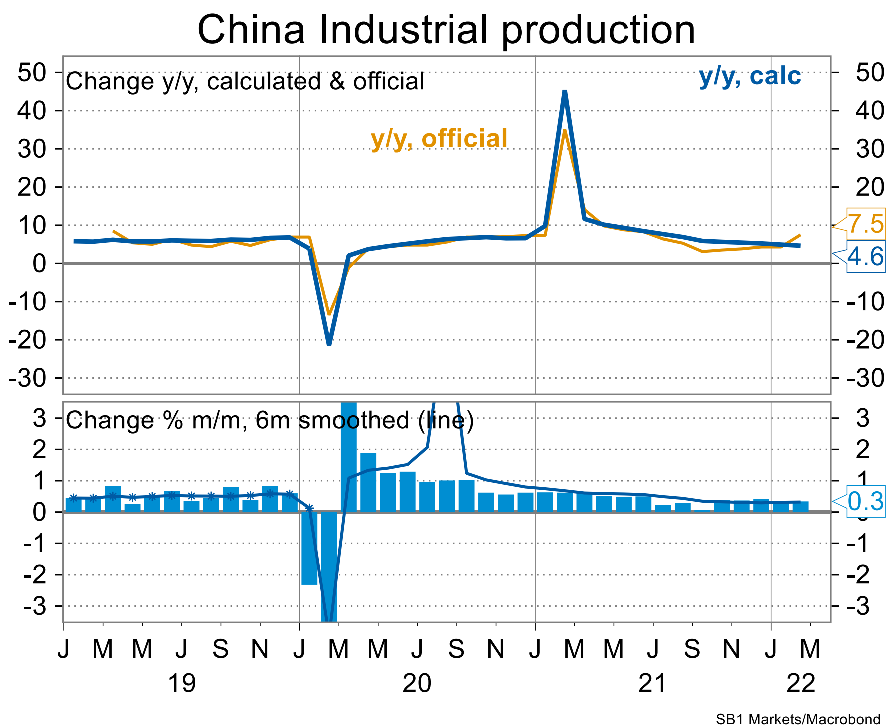


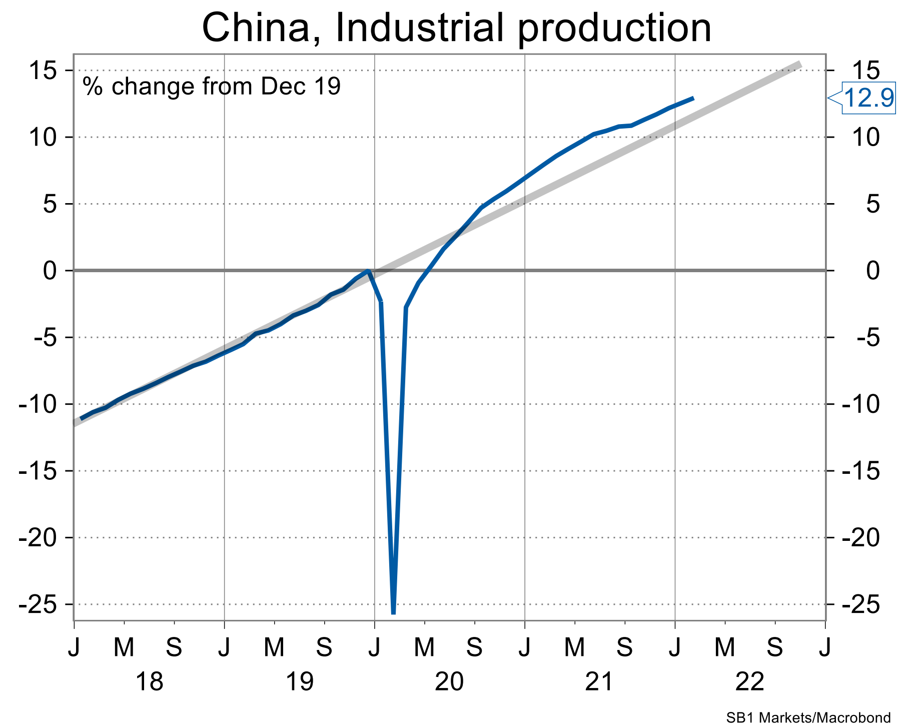
- **Industrial production** rose by 0.3% m/m in both Jan & Feb, and growth has slowed somewhat. The annual rate fallen to 4.6% (our calc). The official annual growth rate at 7.5% was 4 pp higher than expected, but very likely not a relevant figure. Steel production rose sharply in December, and remained at the same level in Jan/Feb (but level is still down 10% from the peak early last year)
- **Service sector production** rose 0.6% in Jan and 1,2% in Feb. Following the virus slowdown in Q3, activity is still somewhat below the pre-pandemic trend. New problems now?
- **Retail sales** volumes gained 0.5% in Jan/Feb, following a 0.6% increase in Dec. In addition, sales through last year were revised upwards by some 3%! The level is still below the pre-pandemic trend, but not by much, and sales are up 4.6% y/y. Sales rose 7.5% y/y in nominal terms according to official data, expected up 3.5%. Auto sales are climbing month by month, and are 15% above the 2019 level!
- **Investments** grew by 0.7%, in line with the average growth rate through last year – which was revised sharply up from some 0.2%. Prices are no doubt increasing – and in volume terms, growth is probably still moted. Annual growth was 12.2% ytd in February, expected 5%
- **New homes sales** bottomed in October, and grew further in Jan and Feb. **Housing starts** rose in February, and other construction starts have flattened. Construction is still down 20 – 25% vs. peaks in 2020 and 2021. **New home prices** have flattened following a minor decline in H2, while **existing home prices** are still heading down at a 2.5% pace, and they are down 0.3% y/y.
- **Credit growth** slowed in February but growth has accelerated since last autumn
- **Exports** is still trending up, also in volume terms while **imports** flattened through last year
- **CPI inflation is still muted, close to 1%. PPI infl.** may have peaked but prices are still sharply up y/y

In sum: Official annual growth data were far above expectations, but at least partly irrelevant. However, following revisions, both retail sales and investments are now at decent growth paths. Manufacturing production is slowing somewhat, at a high level

Industrial production growth has slowed to 0.3% m/m, up less than 5% y/y

Official y/y growth rate up 7.5%, expected 3.5%. Level almost 2% above p-p trend

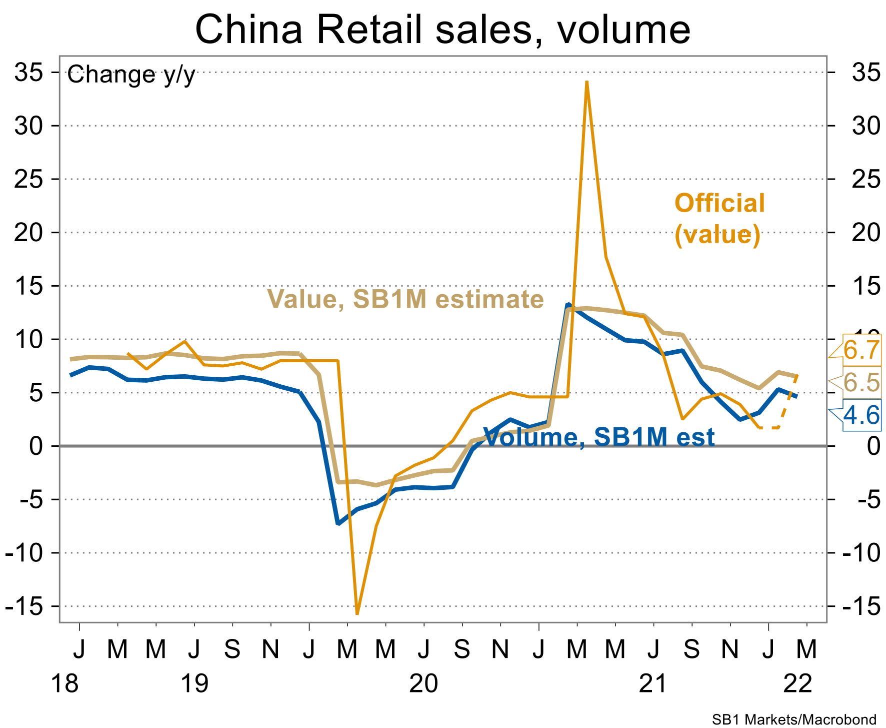


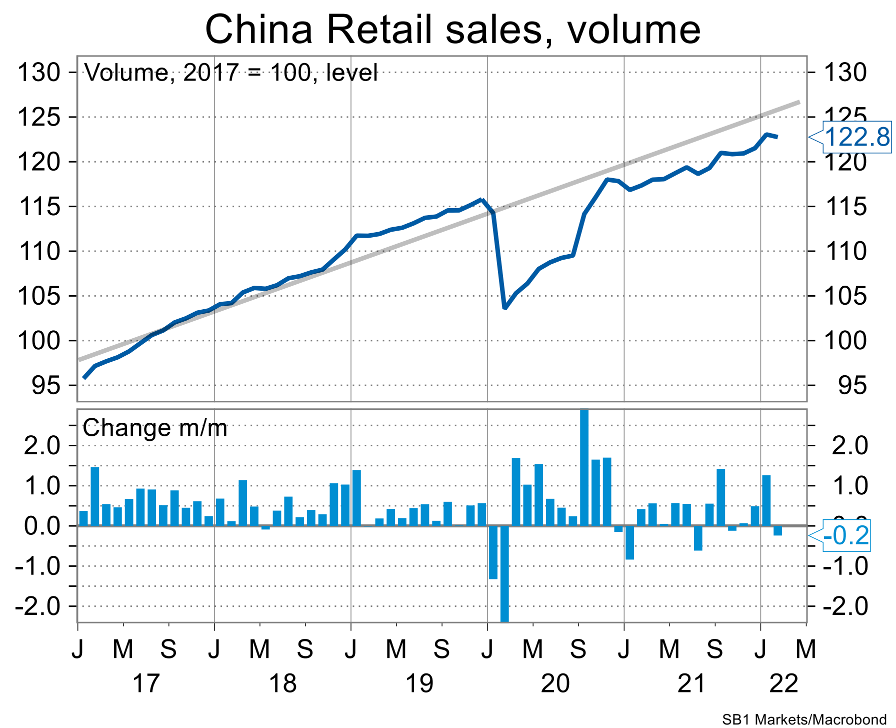


- **Production** growth has been stable at a 0.3% m/m increase since last October. This almost ½ of a 'normal' Chinese growth rate, and the 'real' annual rate is trending down. Still, the production level is above the pre-pandemic trend path
- **The strong reported annual growth** rate was greeted as good news, but we think data are not that impressive

Retail sales revised up – and not that bad in Dec - Feb

Sales through last year revised up by more than 3% - and sales grew a 6% pace in Dec-Feb

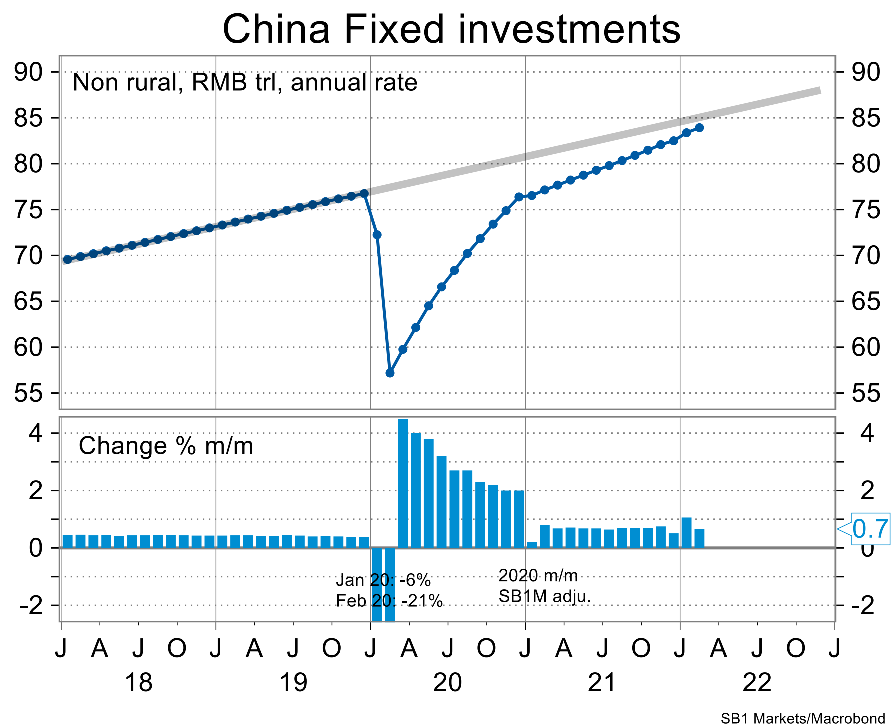




- **Official nominal retail sales** were up 6.7% YTD in Feb, up from 1.7% in December, expected 4.2%
- In **nominal terms** sales rose 0.3% in February, following a 0.6% lift in January. In **volume terms**, we assume an average 0.5% growth rate, following the 0.6% increase in December – a faster growth than since
- Following the substantial upward revision of last year's monthly growth rates, the level is just 2.5% below the pre-pandemic trend. Based on the December report, we estimated at 6% gap

Investments revised upwards too, and is growing steadily

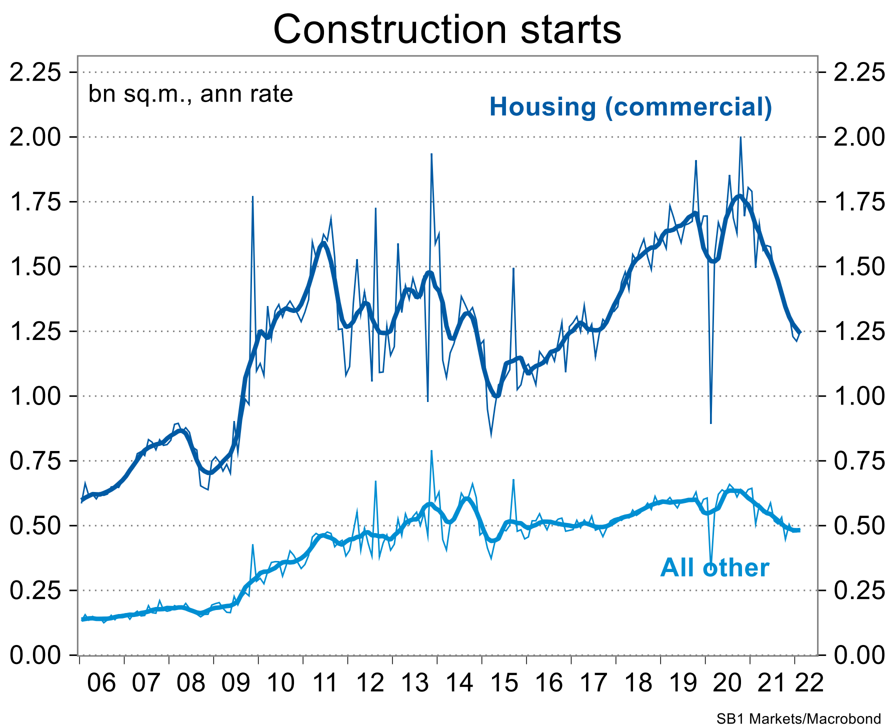
… at least in value terms. Prices are sharply up, and in real terms growth is muted indeed

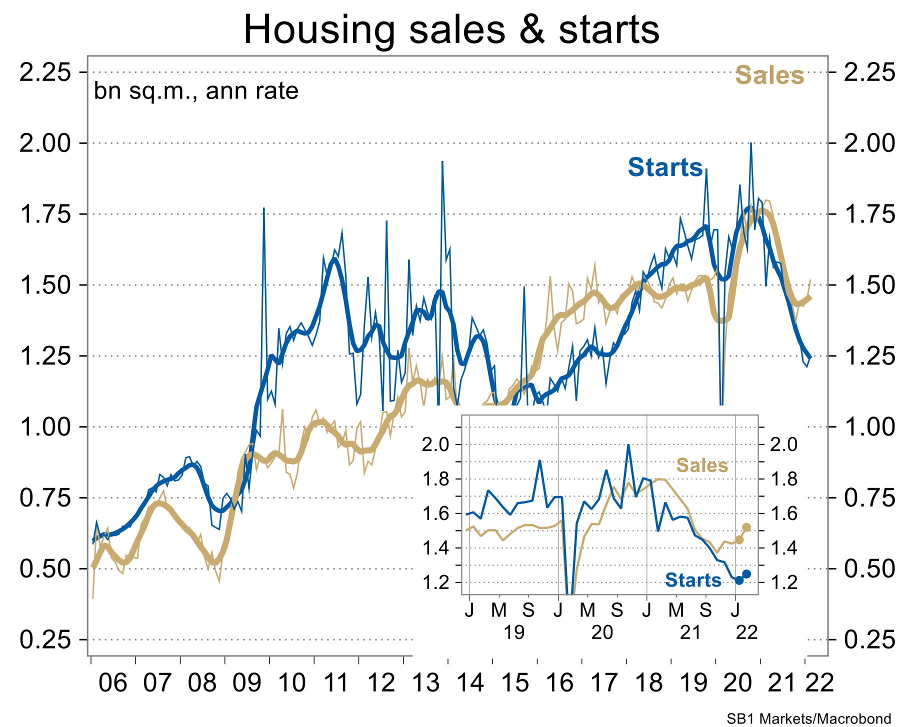


- **Measured YTD**, nominal urban investments rose 12%, far above the expected 5%, which was greeted as a sign of great strength. We are not able to reconstruct this scenario by other published data, check the chart to the right
- **Monthly growth** through last year has been sharply revised upwards, from 0.2% to some 0.6 – 0.7% per month - even if there has been a substantial reduction in construction starts. However, in volume terms, growth has still been modest, as prices are some 7% y/y
- The **investment level** is not far below the pre-pandemic growth trajectory, at least in value terms

New homes sales on the way up, starts may have bottomed too

Sales bottomed last October, and rose in Jan/Feb. Start may have bottomed in January

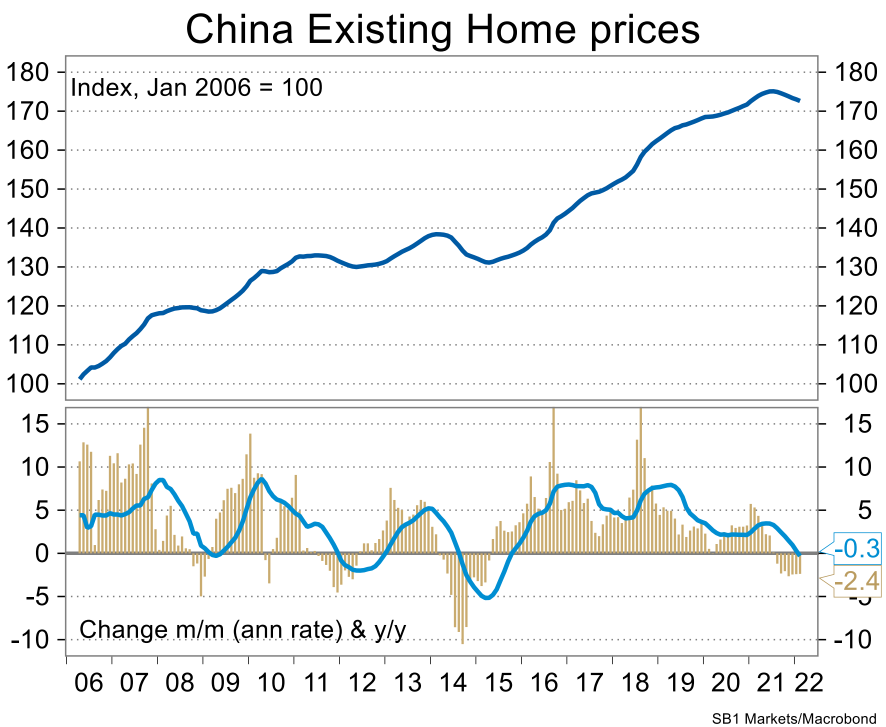


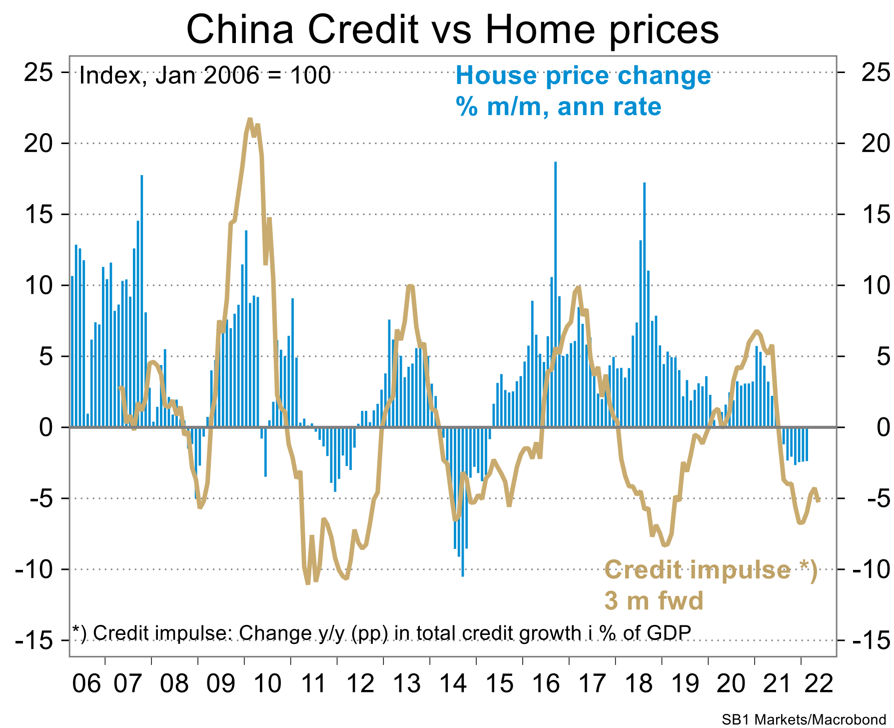


- **One month uptick** in starts is surely not enough to state that the bottom is behind us but given the increase in sales since last autumn, not an implausible hypothesis
- **Big picture: New home sales** have fallen 25% from early 2021, following the spectacular recovery from Q2-2020, following the 'sudden death' in Q1, due to the virus. New home sales fell less, some 10%, and are now on the way up again. Sales have been running faster than starts, indicating a reduction in the inventory
- **Non-residential construction starts** have flattened recent months, following a 25% decline since mid 2020. Both housing & non-residential starts are at the lowest level since 2017
- The decline in **construction starts** has been <u>among the largest ever, but we are witnessing sings of stabilisation- </u> *Check prices next page.*

House prices are still falling but not faster

Prices fell for the 6th month in row, and are finally down y/y, first time since 2015. Still not panic?

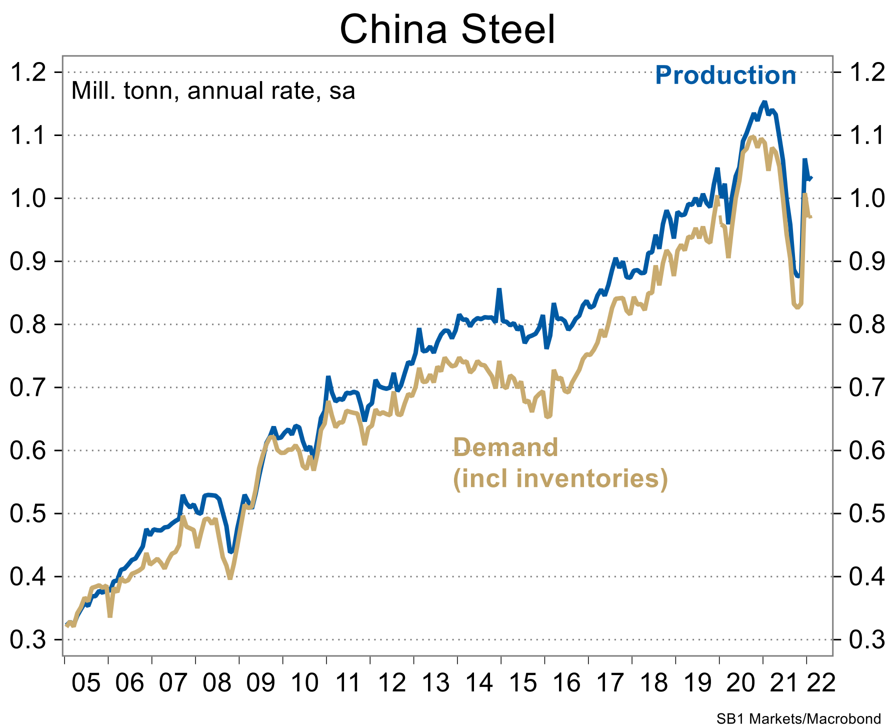




- **Existing home prices** peaked last July, and have fallen at a 2 – 2.5% pace since then – and by 2.4% annualised in February. Prices turned negative measured y/y
- **New home prices** also fell last autumn but not as fast as existing home prices, and they have been flat since December. These price data are the numbers from the authorities. Some builders report deep price cuts to reduce the inventory and secure financing
- **Credit growth** accelerated marginally during last year, however mostly due to increased borrowing from local governments
- **The Evergrande crisis** has obviously not shaken home buyers. New home sales have increased since last autumn, without deep cuts in preces. As long as household demand for housing stays up (for whatever motive, living there, for let or as an investment (without seeking rental income), investments in new homes will be kept up

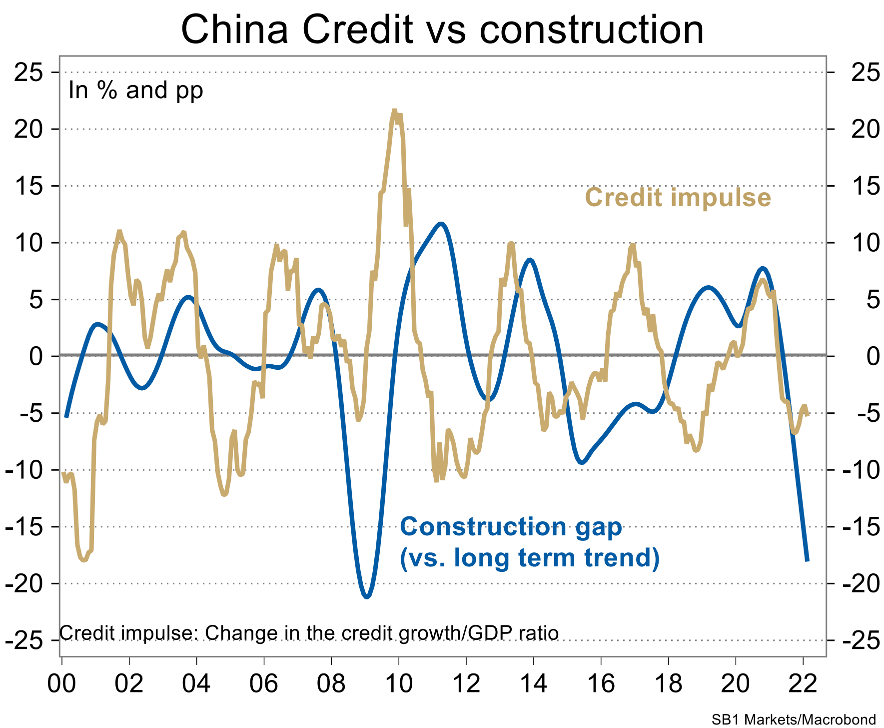
Steel/demand 'kept up' in Jan/Feb following the Dec hike

Production is still down 10% from early last year – and construction shows signs of stabilising



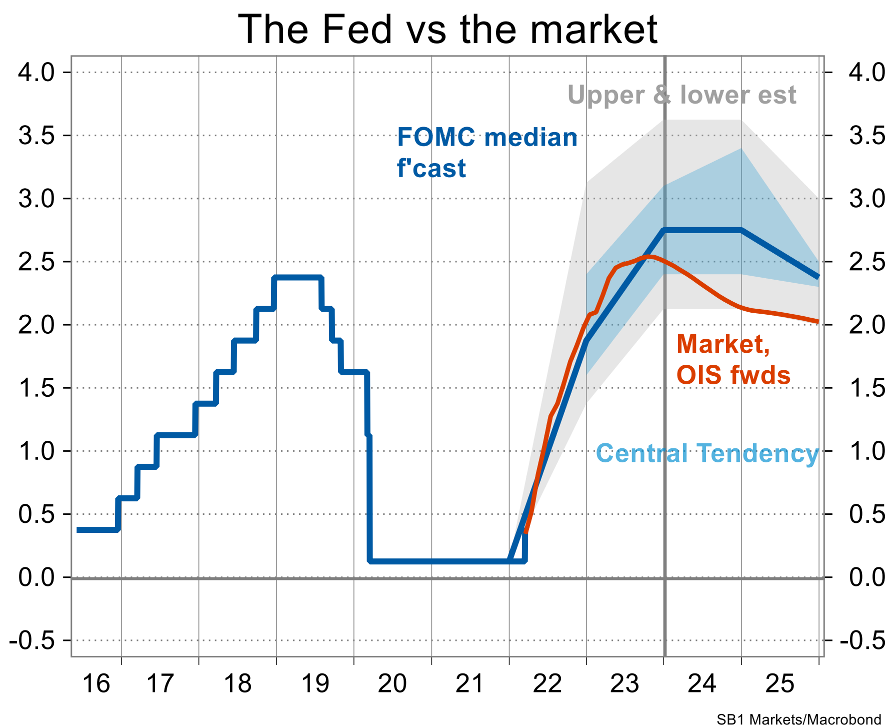
Credit growth has slowed – and construction is rapidly on the way down

… but recent months are somewhat encouraging, credit & construction is stabilising



The FOMC lifted the dot plot (int. rate path) by 120 bp, following the 70 Dec hike

Powell confirms that the Fed is behind the curve, signals 6 more hikes in 2022, and 3 more in 2023



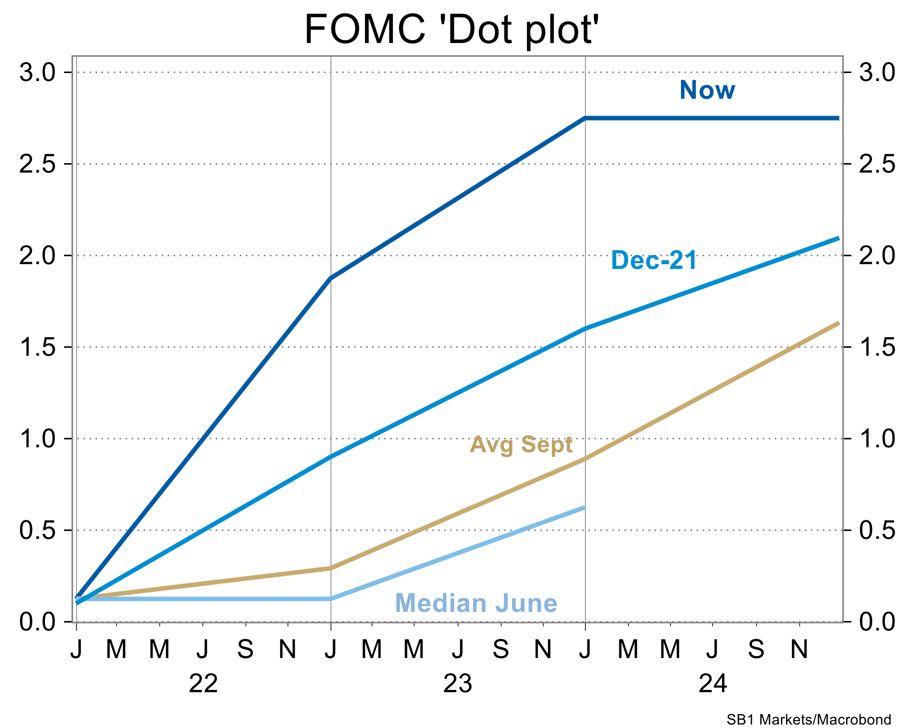
- **The first 25 bps hike in this cycle was delivered, as very well communicated on beforehand**
- **The unprecedented 120 bps lift in the interest rate path was larger than we expected. However, given the increase in inflation forecasts, for both 2022, '23 and '24, the momentum in the FOMC has turned towards fighting inflation**
- **The Bank will decide on the reduction of the bond holdings at a coming meeting**
- At the press conference, Powell recognised that the Fed had fallen behind the curve, inflation is become too high – though he stressed factors outside his control, the pandemic and supply chain problems, as well as higher energy prices
- The challenge for the Fed is simple, even after lifting the interest rate estimate big time: Even after this lift, the FOMC expect
  1) Inflation to remain above the target until the end of the forecast period. By the end of 2024 the expected (core) PCE price level will be 4.6% above the 'promised' 2%. The headline price level will be some 2 pp more above the target
  2) Unemployment to remain below the long term equilibrium rate at 4% - it already is. Formally, that implies that the FOMC expect that the 'maximum employment' target is not met – at least unemployment is too low (which results in a price level well above the target
- Thus, the FOMC members do not expect their targets to be met, even if there is no trade-off between them as both targets misses 'at the same side'
- Sure, there may be arguments for this solution (we do not have them), but at least the monetary strategy will have to be reformulated. Less than 2 years ago Powell introduced at 2% average-inflation-over-time-target, so that a future price level target could be met. Is will not.
- **Market reactions: The short end rose more than 15 bps on Wednesday and by 25 during the week. Long term inflation expectations fell (together with the oil price) but real rates rose more**

Inflation revised up – and so was the interest rate path

Up to 5 more hikes baked into the dot plot, totally unprecedented

Percent

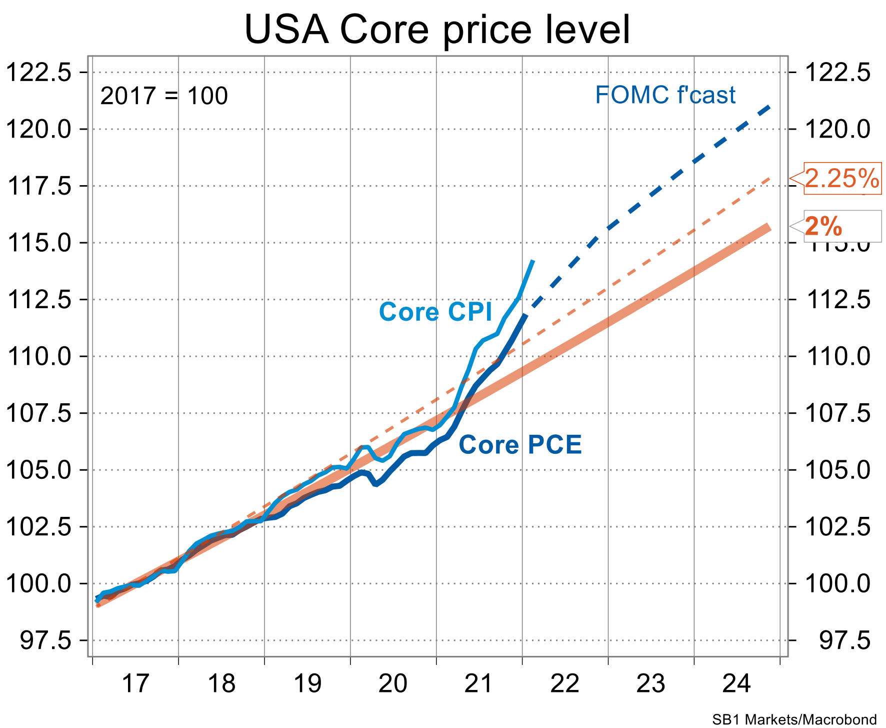
Variable	Median[1] 2022	2023	2024	Longer run
Change in real GDP	2.8	2.2	2.0	1.8
December projection	4.0	2.2	2.0	1.8
Unemployment rate	3.5	3.5	3.6	4.0
December projection	3.5	3.5	3.5	4.0
PCE inflation	4.3	2.7	2.3	2.0
December projection	2.6	2.3	2.1	2.0
Core PCE inflation[4]	4.1	2.6	2.3	
December projection	2.7	2.3	2.1	
Memo: Projected appropriate policy path				
Federal funds rate	1.9	2.8	2.8	2.4
December projection	0.9	1.6	2.1	2.5

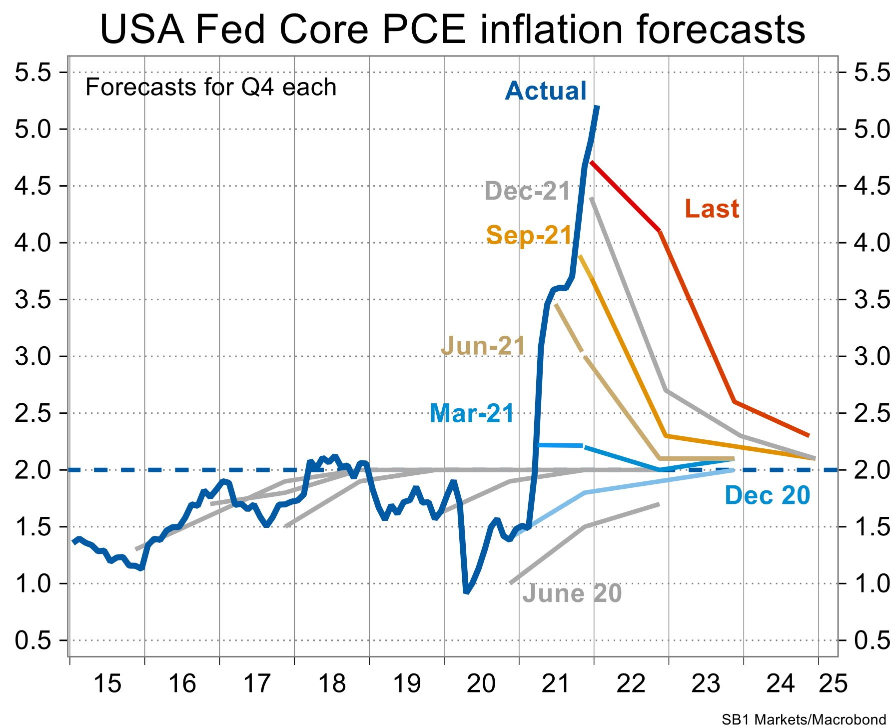


- The **'22 GDP f'cast** was revised down by 1.2 pp to 2.8%. **Unemployment** was still expected down to 3.5%, like in December to below the long term 4% NAIRU estimate. So maximum employment is reached, according to this criteria
- **Inflation** was revised sharply up, the core price level in 2024 by 1.9% and the estimate is 4.6% above a reasonable 2% price growth path
- **The median dot plot**, the individual FOMC members interest rate forecasts, was revised up by up to 120 bps, the largest revision ever (dot plots have been published since 2012), following the 70 bps upward revision in December. A total turnaround, of course
- **The long term neutral Fed funds rate** is assumed to be 2.4% (median, down 0.1 p), implying a (long term) 0.4% positive real rate. The neutral rate is assume to be reached around Q3 2023, 1½ year from now. This is – at least formally – suggesting that the FOMC plans to run an expansionary monetary policy, even if the prices level is well above the promised path, and unemployment is too low. A substantial quantitative tightening (QT, QE in reverse) by selling bond, could add to the tightening but no plan is yet publised

The anchor is lifted? The price level in 2024 will be 4.6% higher than 'promised'

Will the Fed accept both the price and the max. employment target to be breached at the 'same side'?

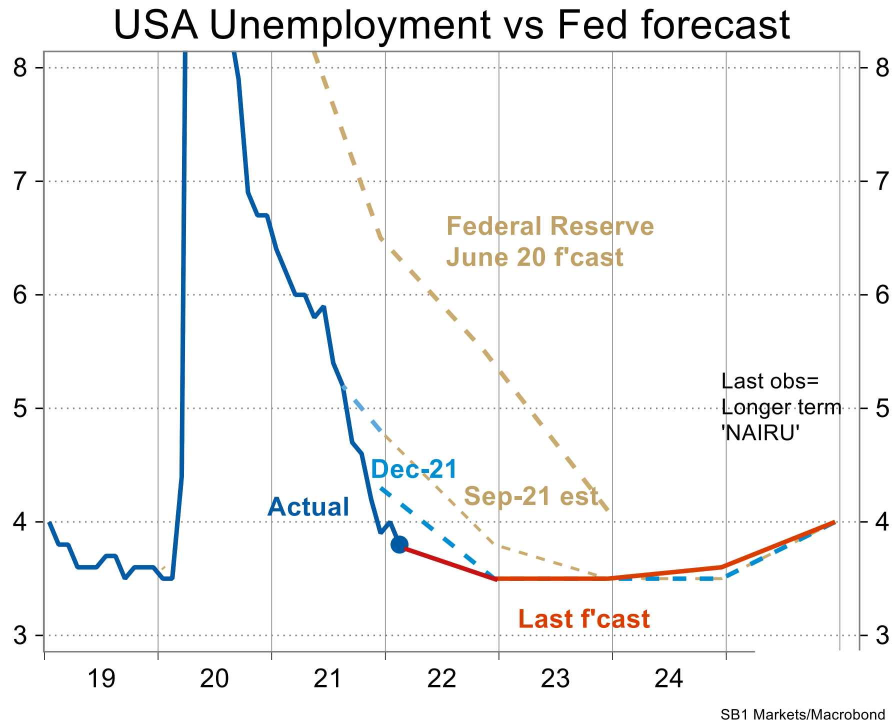




- In August 2020, the FOMC introduced its new **price level target**. The bank aims to reach an average rate of inflation of 2% over time.
- If inflation has been below 2%, annual inflation should be allowed to stay above 2% in order lift the price level up to the long term 2%-path
- And vice versa, at least in principle…

Unemployment expected to stay below the NAIRU the next 3 years

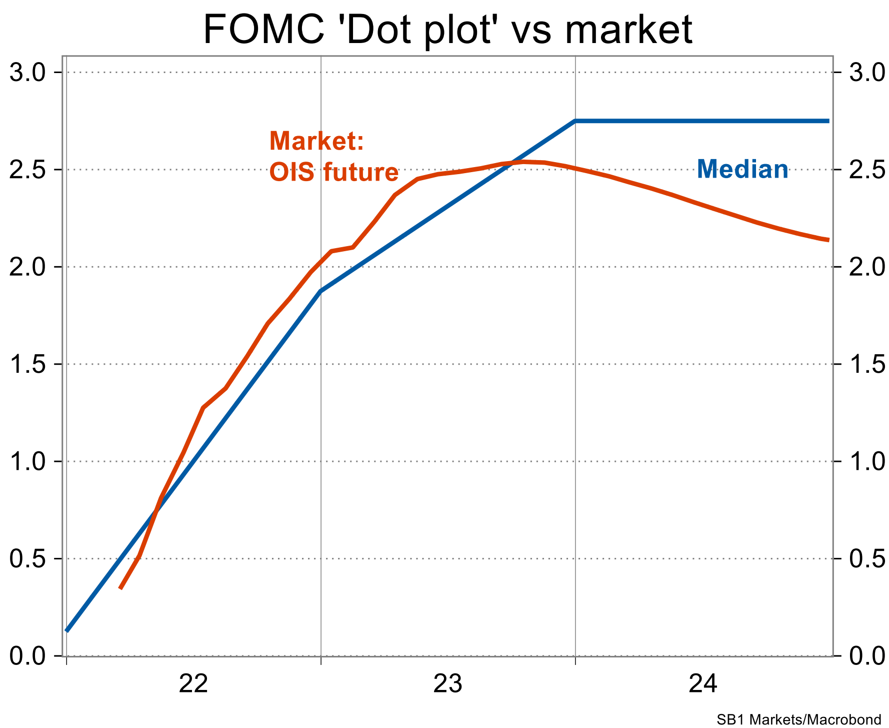
The long term NAIRU *) rate is still assumed to be 4%, 0.2 pp above the present level

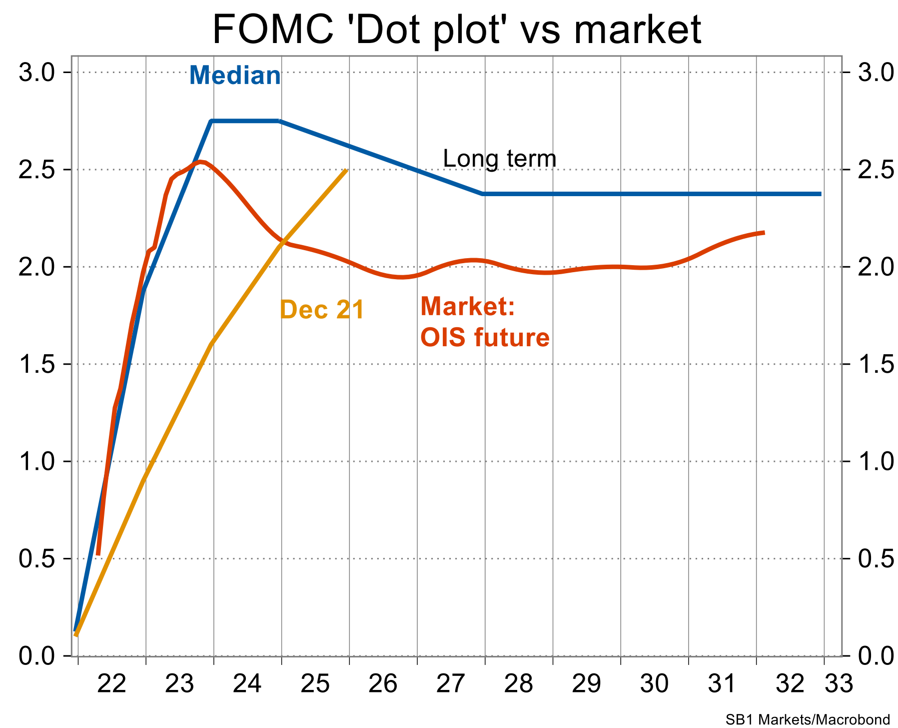


*) NAIRU: The Non-Accelerating Inflation Rate of Unemployment – an unemployment rate that balances the labour market. It is not stable, and it can be quantified only 'after the fact' but still a useful analytical concept.

Mind the gap: The market does not believe in Fed's est. of a neutral funds rate

The market is satisfied with a 2% long term rate, the FOMC says 2.4%

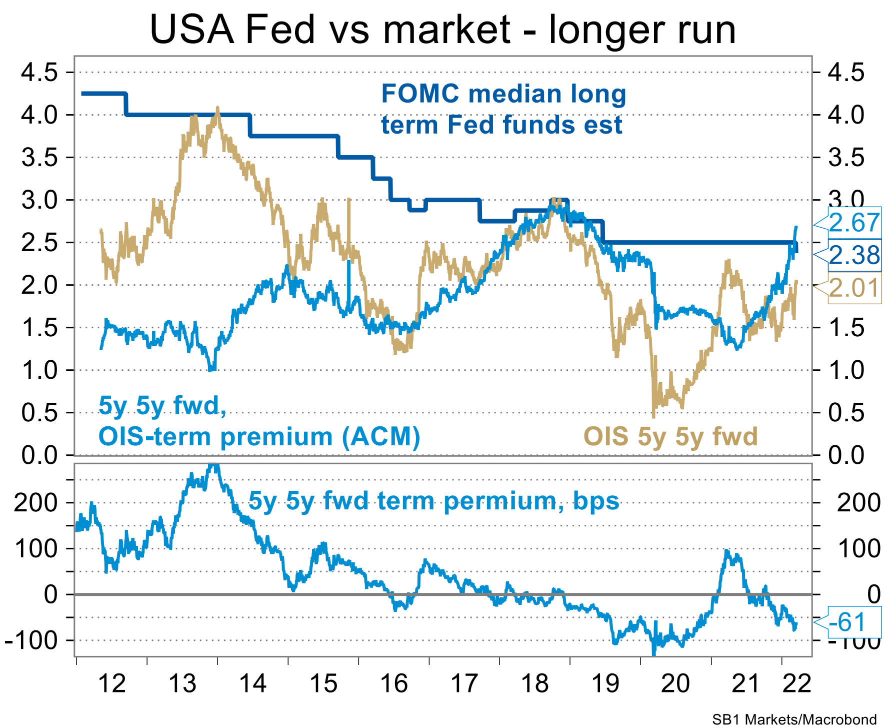




- The market accepts the next 8 Fed hikes, then the curve bends downwards
- In December, the long end of the OIS curve was at 1.5%, and 1 pp below Fed's 2.5 long term neutral rate

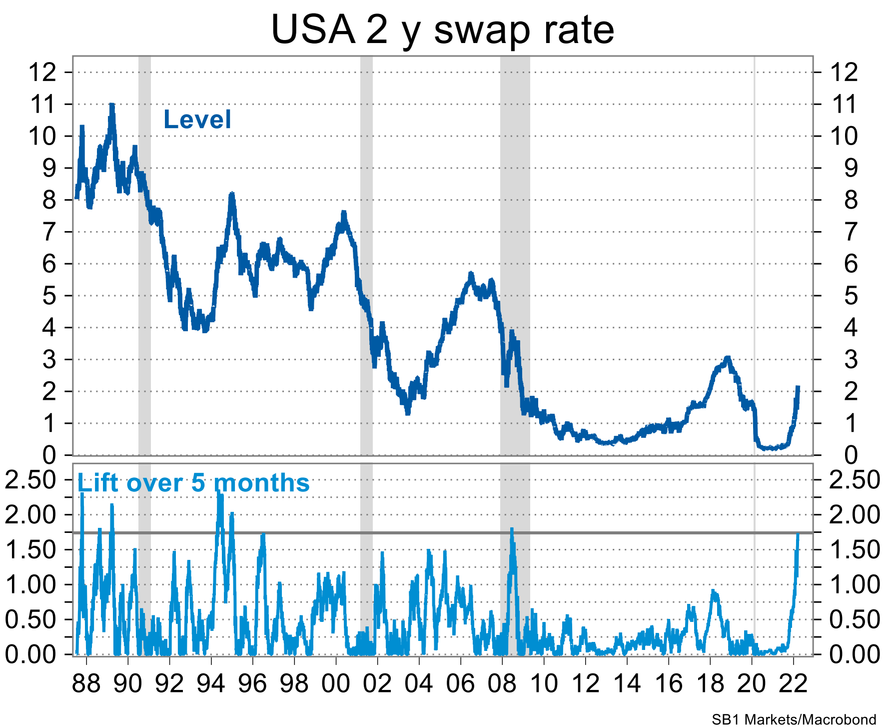
May a negative term premium explain half of the gap between the market & Fed?

The (ACM) term premium has turned negative, implying that the market 'expects' a 2.7% long term funds r.



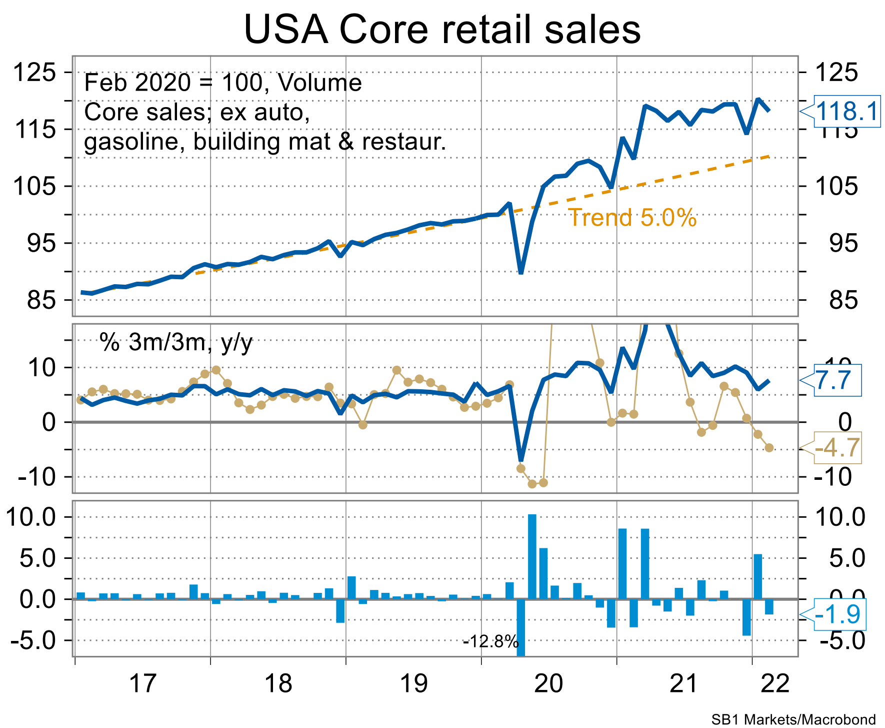
- The 5y 5 y fws OIS rate was at 2.01%, is 50 bps below the 2.4% FOMC estimate of the long term nominal Fed funds rate
- The term premium in the yield curve (the difference between the actual bond yield and the expected short term rate over the same period) has fallen to below zero again, according to the ACM model
  - » Put the opposite way: The actual long term yield – the term premium expresses the market's expected short term rate
  - » The term premium has been drifting downwards since the 80'ies, and has been fluctuating around zero since 2016, according the ACM model (one of several term premium models)
- **Adjusted for the term spread** (calculated from the bond yield curve), the market assumes a long term OIS rate at 2.7%, which is ABOVE Fed's long term estimate
- **The term premium estimate** is uncertain, and the ACM model is dependent on the shape of the yield curve, based on an assumption that the long term expected short term interest rate basically is closely correlated to the current fed funds rate (or even better, the 2y government bond rate)
  - » The ACM term premium can be rather precisely estimated by just ACM = -1.5 + 1.3*10y Gov – 0.9*2y Gov

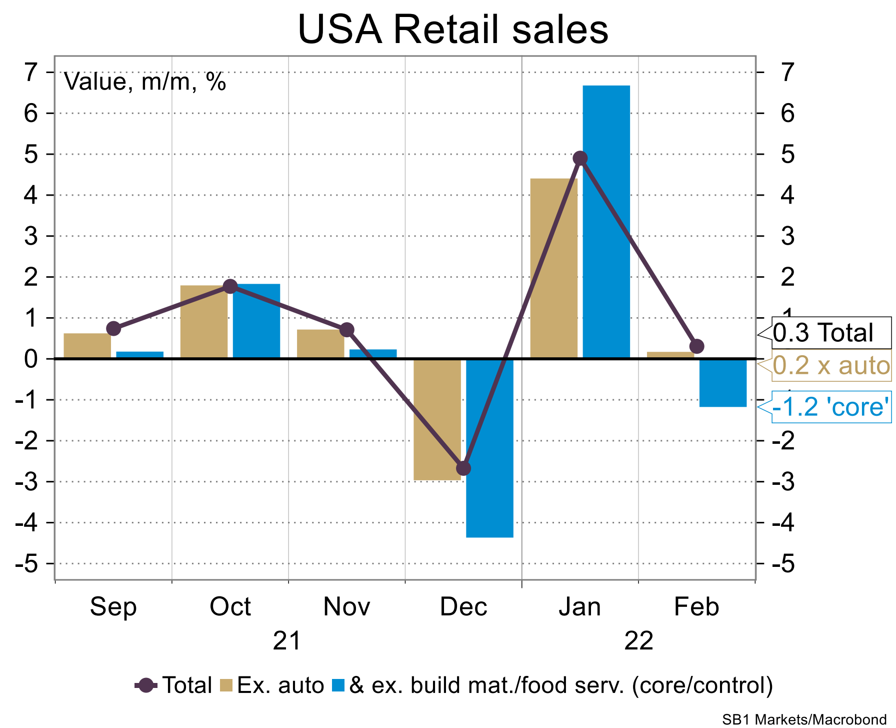
A substantial monetary policy shift over the past 5 months



Retail sales slowed in February – from a sharply upward revised January

Sales are still far above pre-pandemic trend paths. Total sales are up 25% in value terms



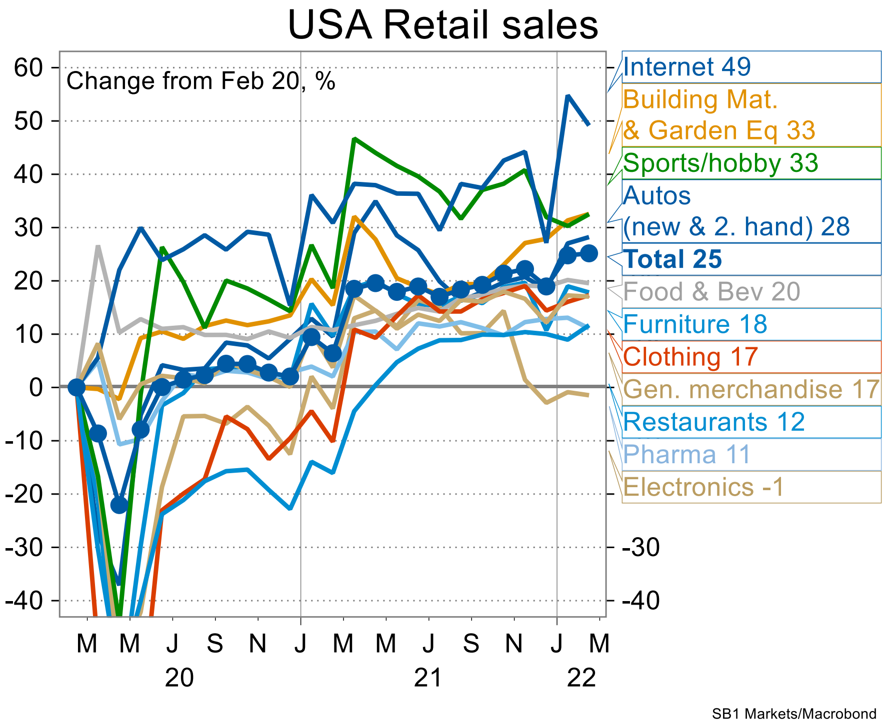


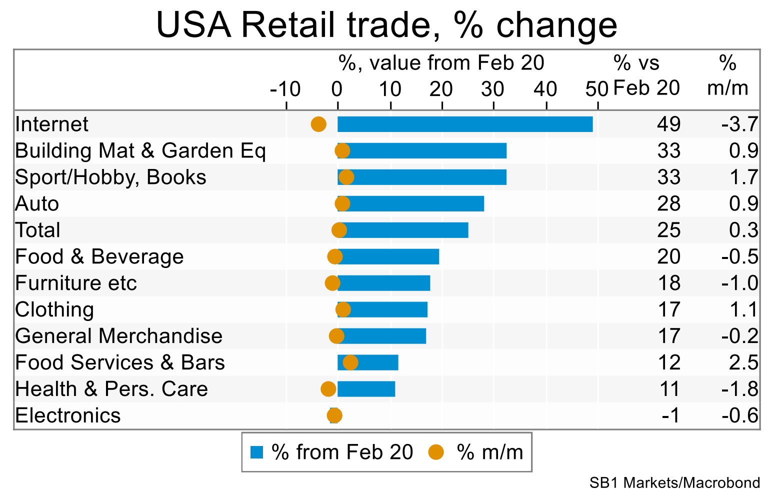
- **Total nominal sales** rose 0.3% in February, down from 4.9% in February initially reported up 3.8%. Thus, the level was well above expectations (as January was too)
  - Total nominal sales are up 25% – vs. the Feb 2020 level!
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) fell 1.2% in Jan, expected up 0.3%. However growth is Jan was revised up to 6.7%, from 4.8% (while Dec was revised just marginally down)
- In **volume terms** we estimate a 1.9% decline in core sales in February following a more than 5% jump in January
- **Consumption of goods** is very likely well above a sustainable level, and we still expect sales to decline the coming months/quarters – even if parts of the adjustment already has taken place (vs. a long term growth path, growth in consumption of goods has been slow since last March – and sale volumes in Feb was lower than in March 21!)

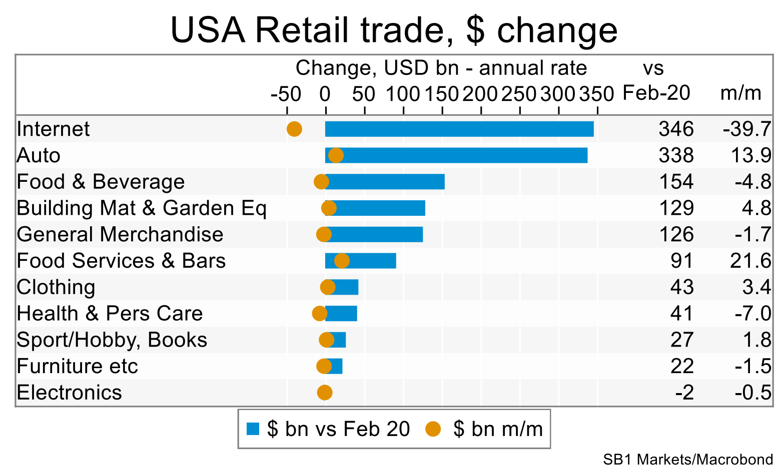
SpareBank 1 MARKETS

Mixed among sectors in Feb, after the broad lift in Jan (after a weak Dec)

Just electronics report lower sales than before the pandemic, in nominal terms







Last month

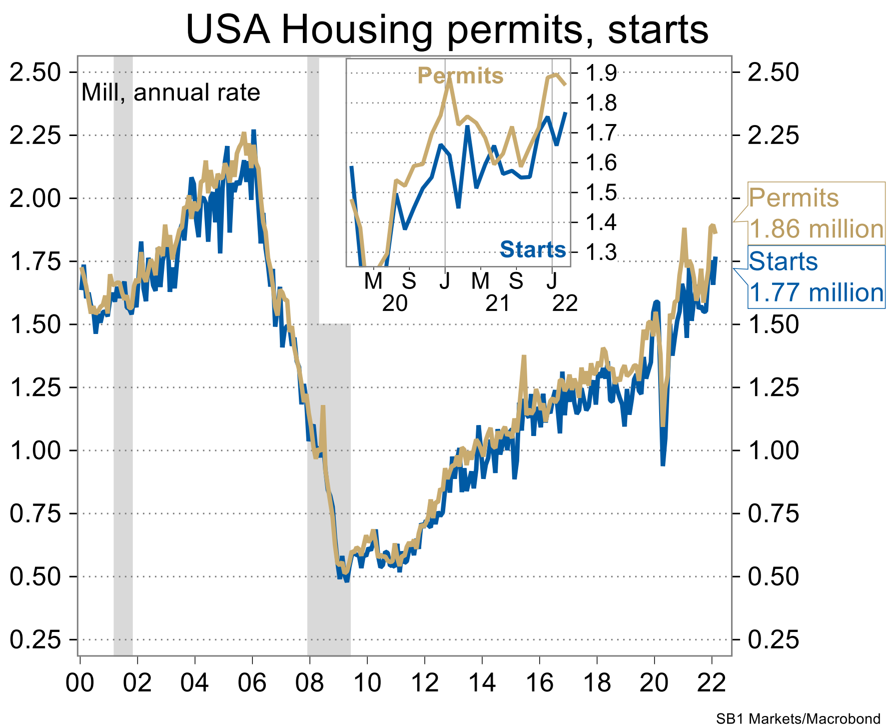
- 6 out of 11 main sectors reported lower sales, 5 higher sales
- Internet sales rose fell slightly but the level is high after the Jan surge (which was much larger than initially reported)

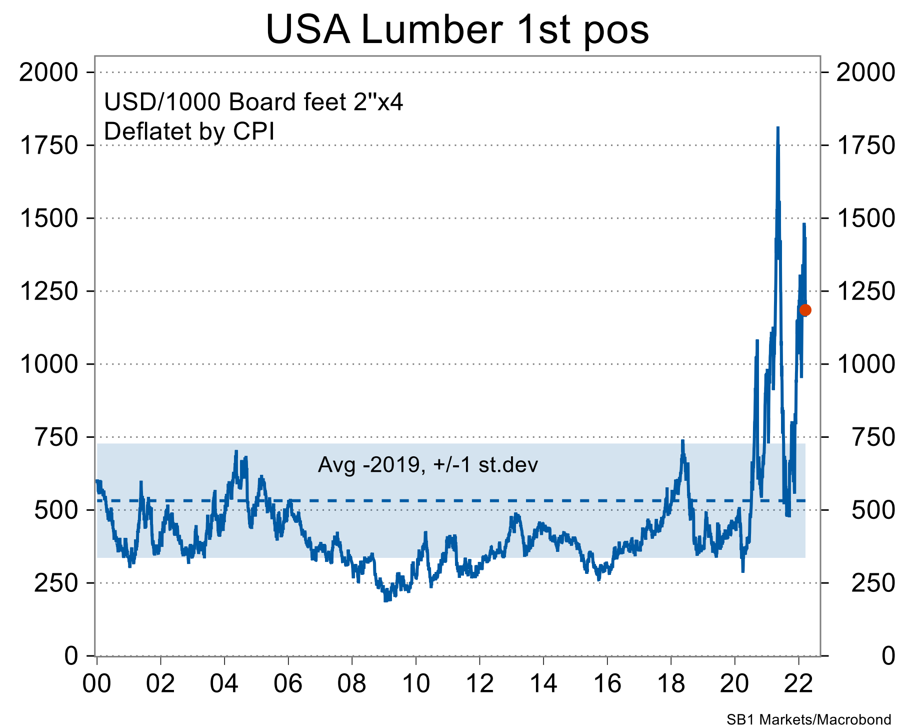
Since pre corona: Electronics down, all others are up

- **Internet** sales are up 49%!
- **Restaurants** are up 12%

Building permits, housing starts are still trending upwards

The surge in construction costs are probably dampening demand somewhat

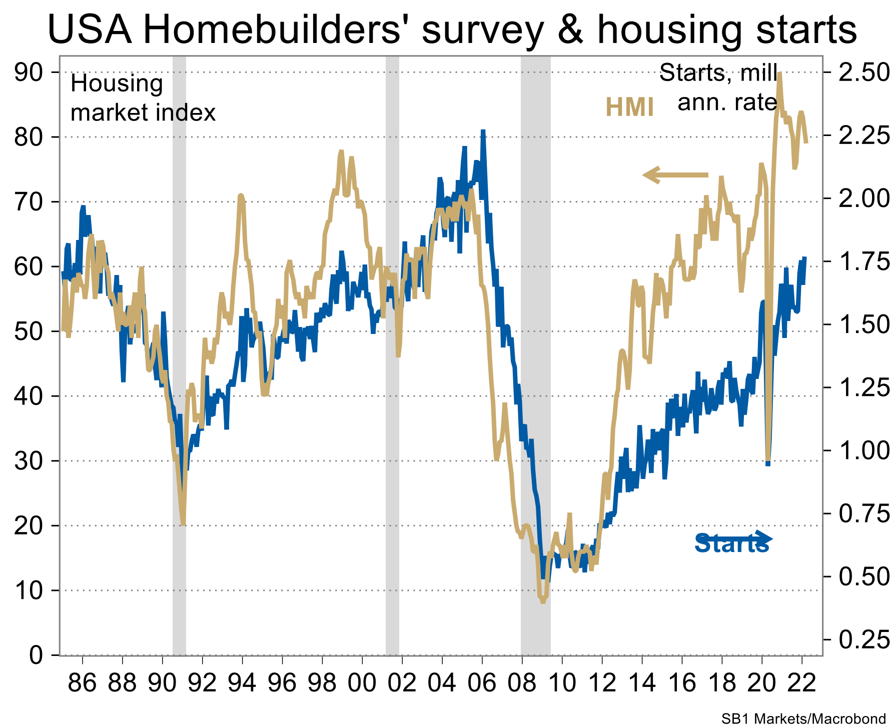


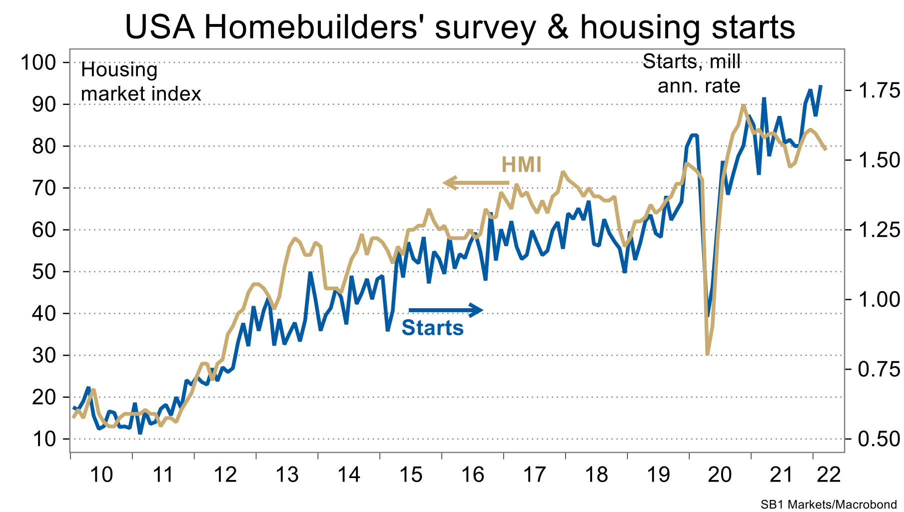


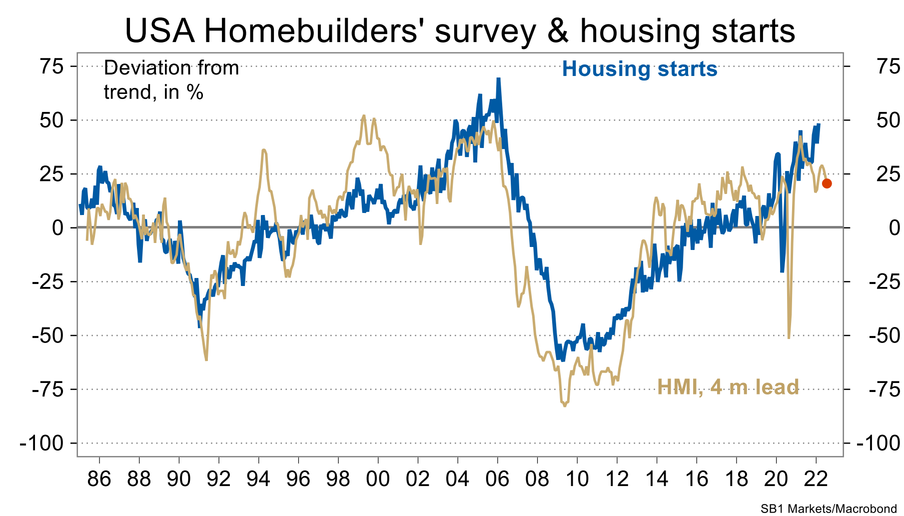
- **Housing starts** rose to 1.77 mill in Feb, from 1.66 mill in Jan (revised up 0.02 mill), expected up to 1.70 mill
- **Building permits** declined slightly to 1.86 mill, up from 1.89 in Jan, expected down to 1.85. The Jan print was the highest since 2006!
- **Given the strong end of the year, the trend is still slightly up.** The level is some 15% above the pre-pandemic level. However, given the incredible strong existing home market, and soaring prices, starts should normally have strengthened further, amid still moderate mortgage rates and a recovering economy
- **Supply & capacity problems and higher cost** in the building sector may explain the lack of response. Lumber (2''x4) prices are still unusually elevated, at more than 2x the average price (however, prices have not increase further after the Russian invasion into Ukraine

Homebuilders' market index one more tick down, the level is high…

Still, the index may signal weaker housing starts



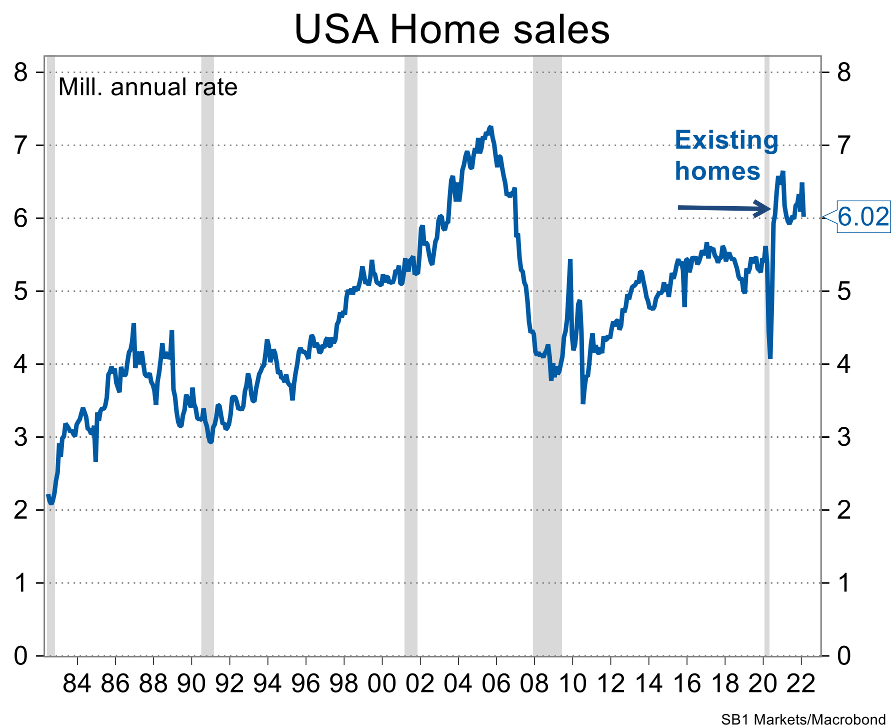


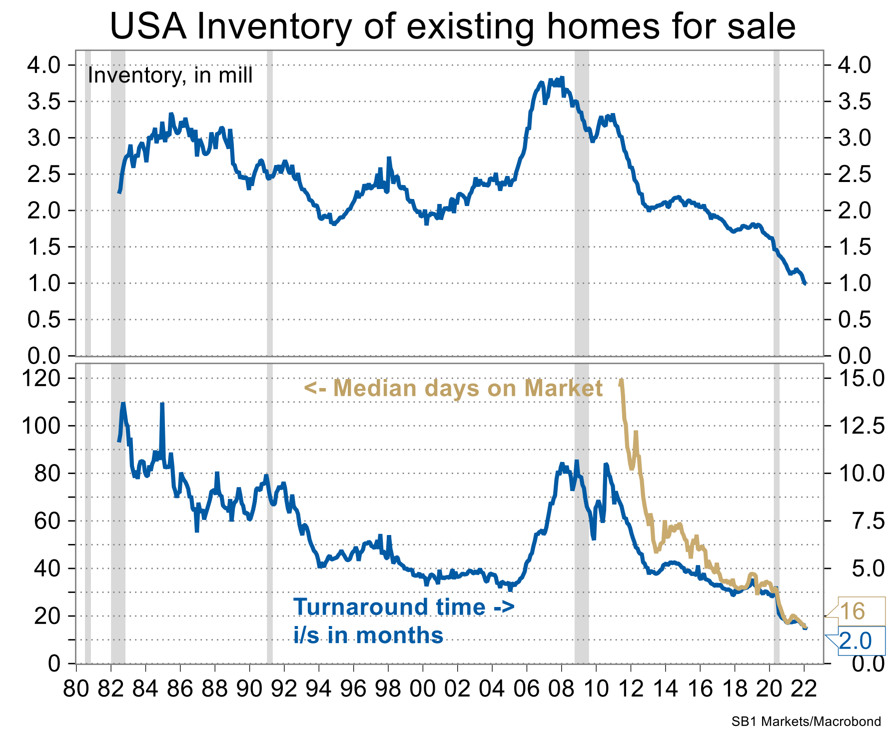


- **The Homebuilders' Housing Market Index** lost 3 p to 79 in March, expected down to 81. The level is high but still down from 90 last Nov. Expected sales was the weakest sub-component
- **Rising material prices, supply chain and labour shortages are still** creating challenges for the home builders, according to the NAHB – but those shortages may have peaked (even of lumber prices are soaring again!)
- <u>Even if the index level is very high, the HMI does not signal higher housing starts, ref. the chart on the bottom right</u>

Existing home sales down in February but prices are sparing

Lack of supply seems to be a better explanation than higher mortgage rates for the decline in sales

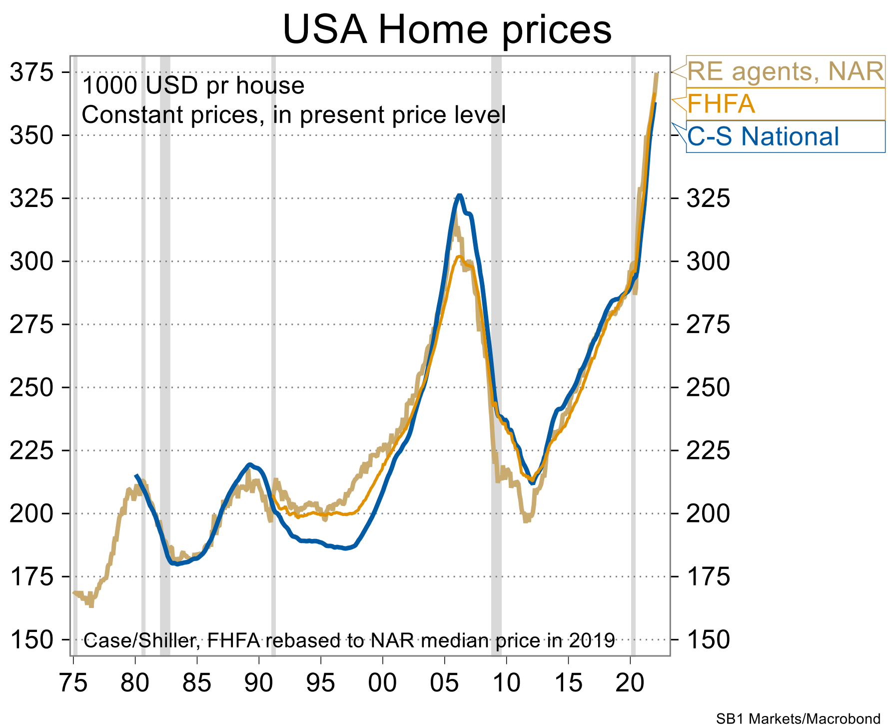


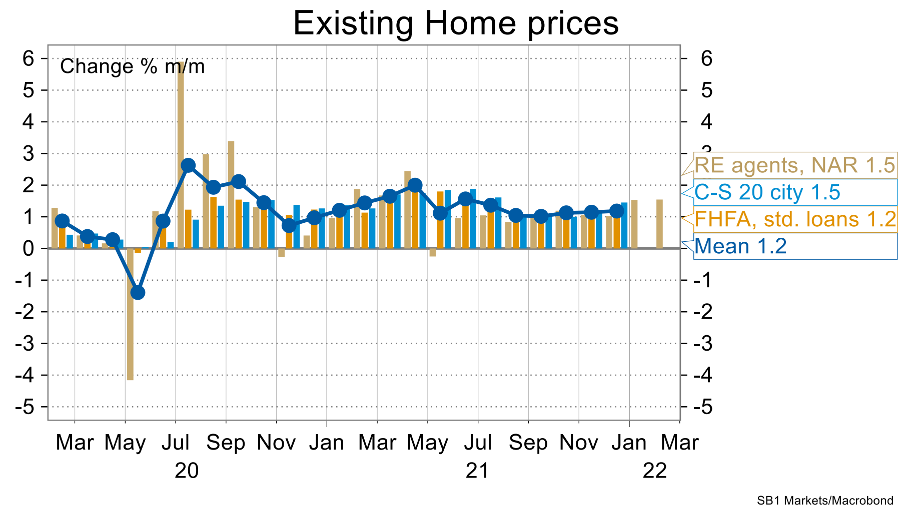


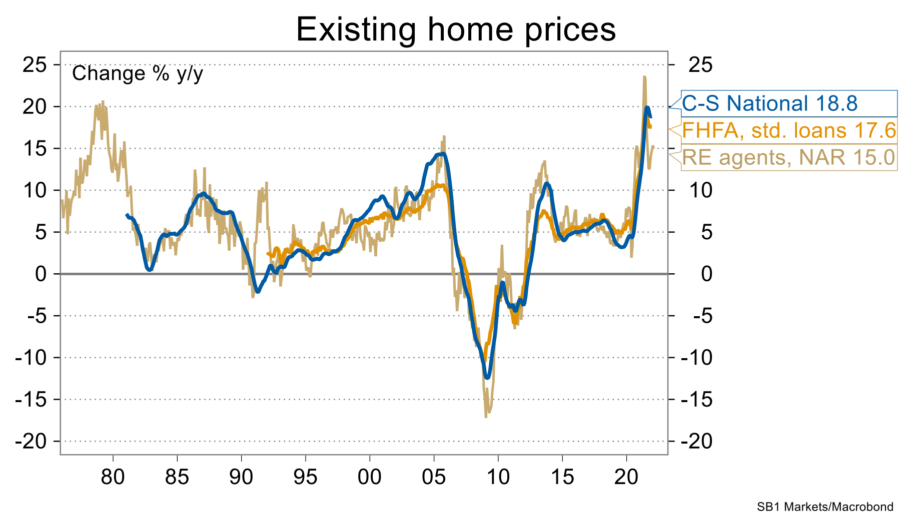
- Sales of **existing homes** fell to 6.02 mill in February, from 6.48 mill in Jan, expected down to 6.1 mill (annualised rates). The trend has been flattish since Q3-2020 – at a far higher level than normal (but below the 2005 peak at above 7 mill)
- **The inventory of unsold homes** fell further in Feb, to another ATL.
  - » The inventory equals 2.0 months of sales. During the 2005 boom, the i/s ratio was 4 months, in bad times it has been as high as 10 months
  - » The median time on the market for those homes sold is just 16 days, down from 30 days before the pandemic (and 120 days in 2011!)
- **Prices** rose 1.5% m/m in February, like in Jan – the fastest pace since last spring. The annual rate is 15%. Other indices confirm a faster price appreciation, and annual rates are 17 - 19%
- No doubt, the lack of supply keeps the number of transactions down, more than the increase in the 30 y fixed mortgage rate to above 4.5%

Existing home prices up 1.5% m/m in Feb too!

Prices are climbing faster again, according to the realtors – and others agree



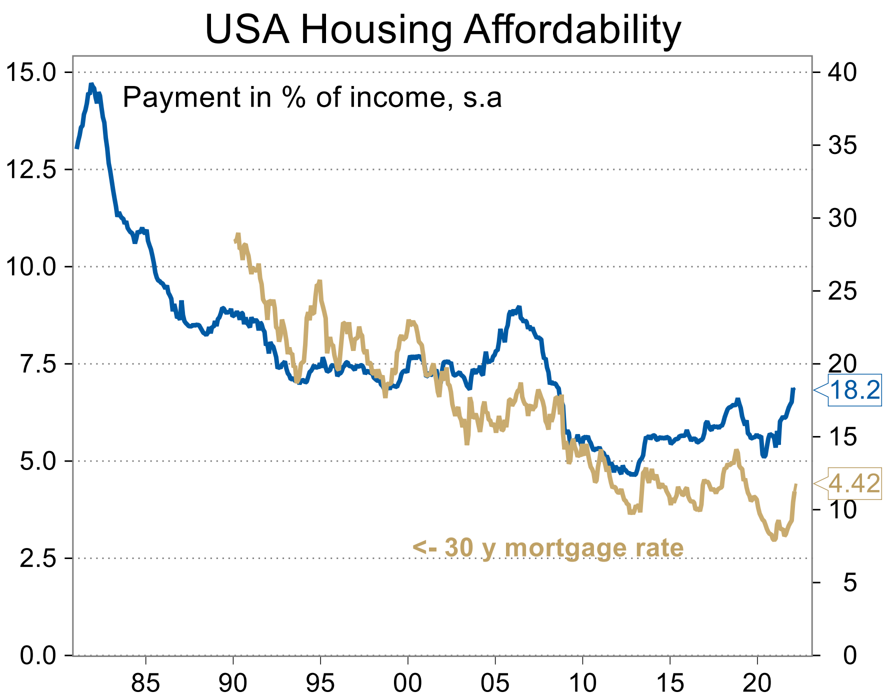


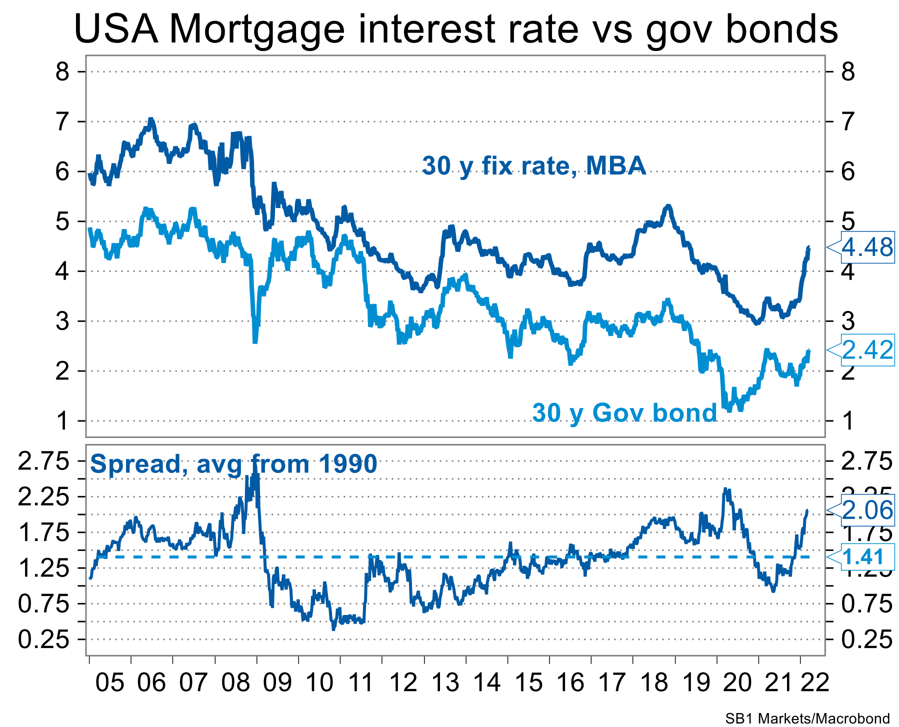


- **Prices** rose 1.5% m/m in Feb, according to the realtors, like in Jan but significantly faster than since last spring. The annual rate is at 15%
- **Other price indices** confirm a red hot housing market; monthly price increase have been trending upwards during the autumn – data until December. Prices are up 17 – 19% (an these indices are much more precise than the raw measure from the realtors)
- Prices are up more than 30% vs. the pre-pandemic level – and the real price level is far above the 2005/6 peak – which generated far too much construction of new homes

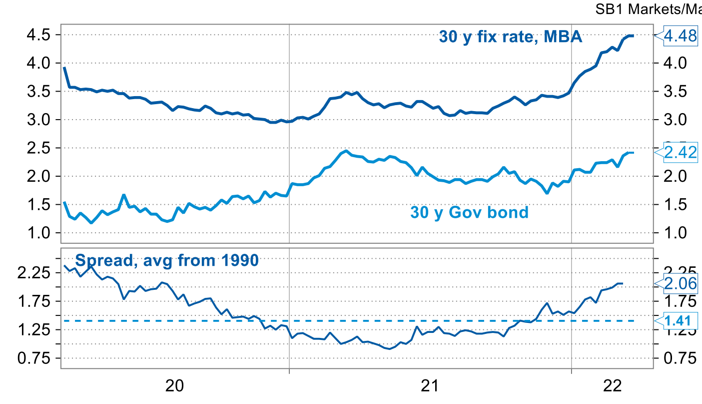
Prices are up 30% since before the pandemic, the mortgage rate is higher

So the affordability is not what it used to be. That is, it is still lower than anytime before 2008



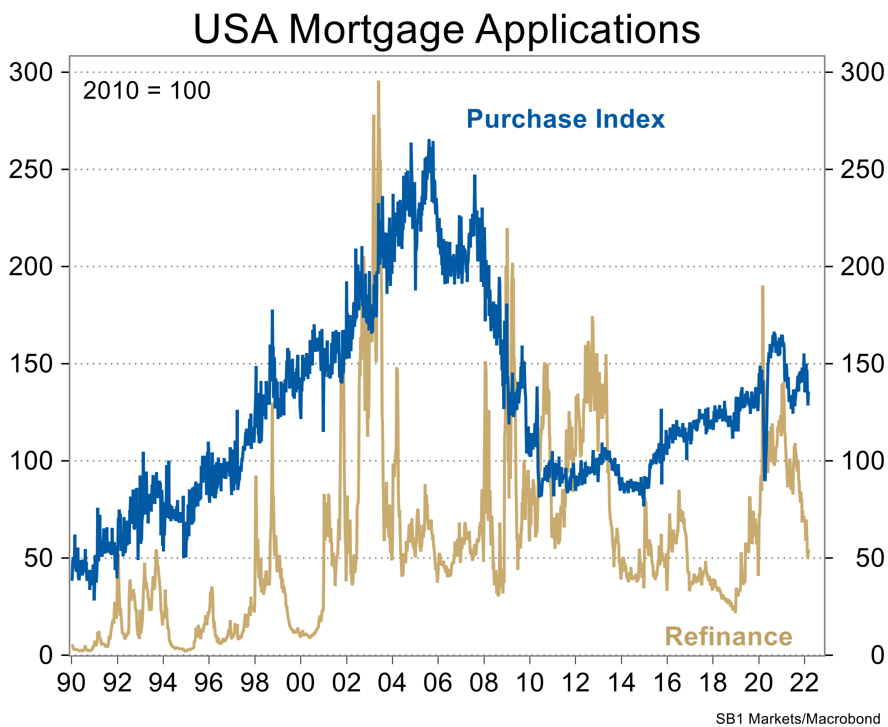


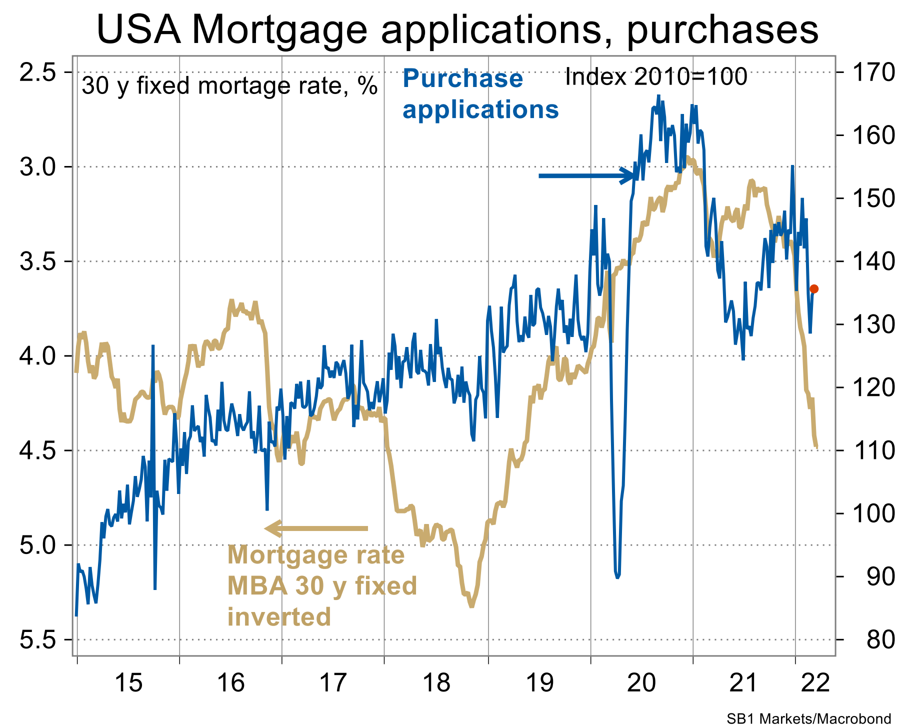
- **The 30 y fixed mortgage rate** has climbed to 4.5% from 3.0% last summer
  - » The rate has increased MUCH more than the 30 y Gov bond rate. The spread has widened to 206 bps from 91 at the bottom last spring and it is far above the 140 bps average
- The **Federal Reserve** is now rapidly <u>tapering off its buying of mortgage backed bonds – and signals eagerness to reduce its holdings, which very likely explains the steep increase in the spread</u>
  - » The central bank has funded most of the housing marked during the pandemic, at least until mortgage lending shot up through 2021



Mortgage rates are up – but demand for new mortgages is still strong

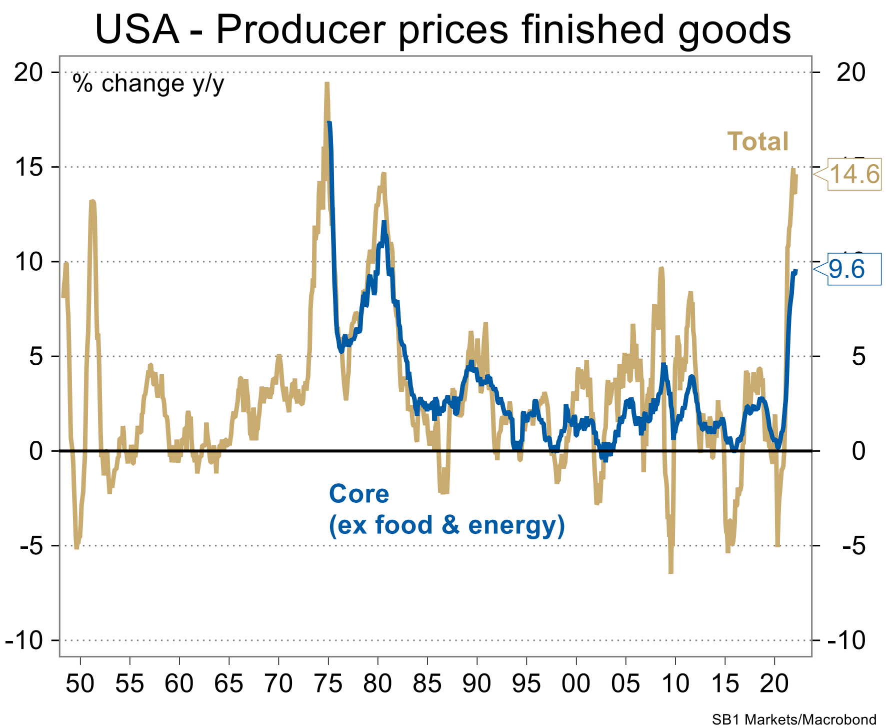
So far, home buyers does not seem to be scared by the substantial lift in mortgage rates

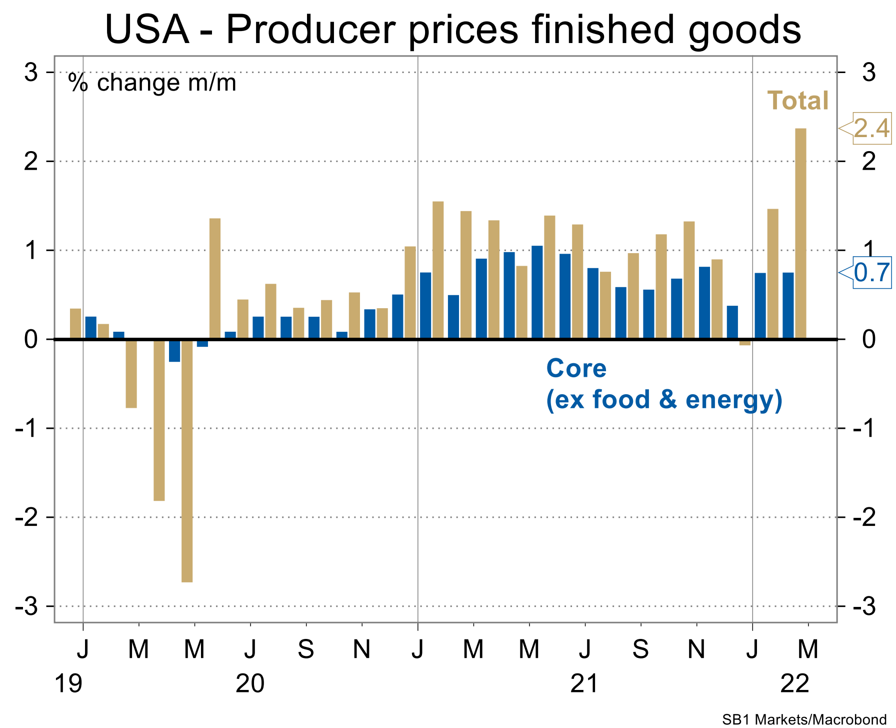




The manufacturing PPI up 2.4% in February – and up 14.6% y/y, the core up 9.6%

However, crude materials (ex energy) are slowing. At least they were, before War & Sanctions hit

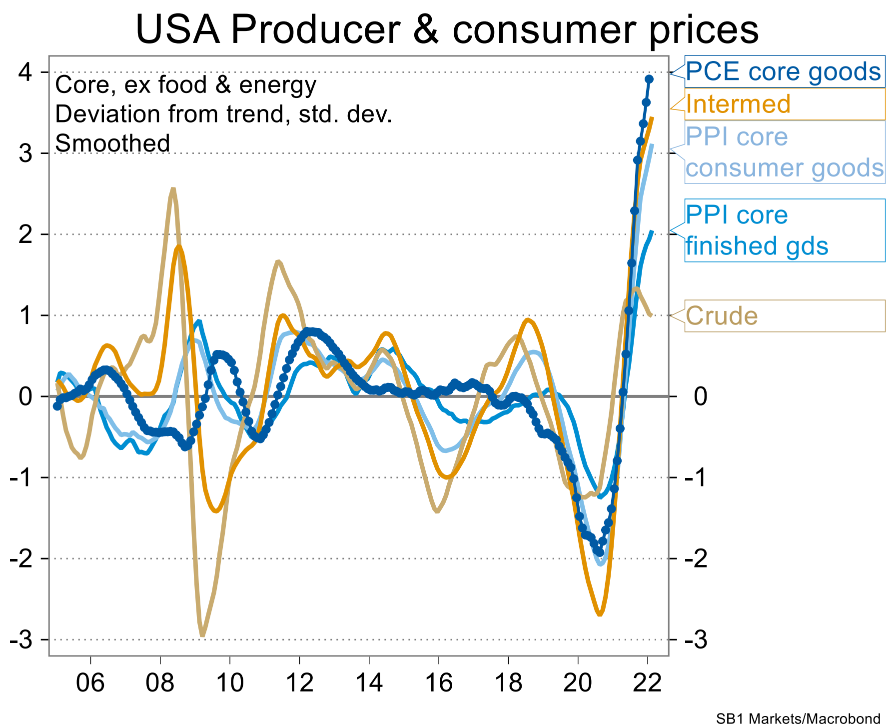


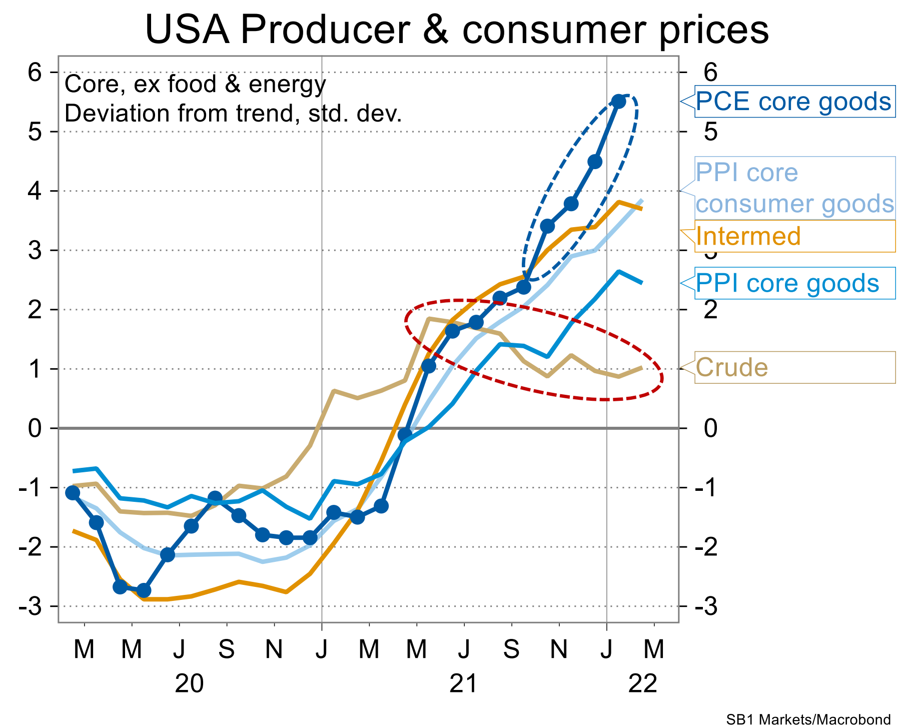


- **The headline finished goods PPI** shot up 2.4% in February, the largest m/m increase since 1975. The annual rate accelerated to 14.6%, which has been seen in decades either
- **Core finished goods x food & energy** PPI rose by 0.7%. The annual growth rate gained 0.2 pp to 9.6%, highest level since 1982
- The good news: **Crude material prices x energy** have been retreating recent months. In addition, **core CPI goods prices** have already climbed more than usual vs. PPI prices (due to 2nd hand auto prices), limiting the upside risk
- **The 'official' total final demand PPI**, including **services**, rose by 0.8%. The annual rate is at 10% - 'explaining' the 8% rate of CPI inflation

Before War & Sanctions: Crude materials had peaked, always the first sign

Even intermediate goods had most likely started to slow down. Now, the future is more uncertain

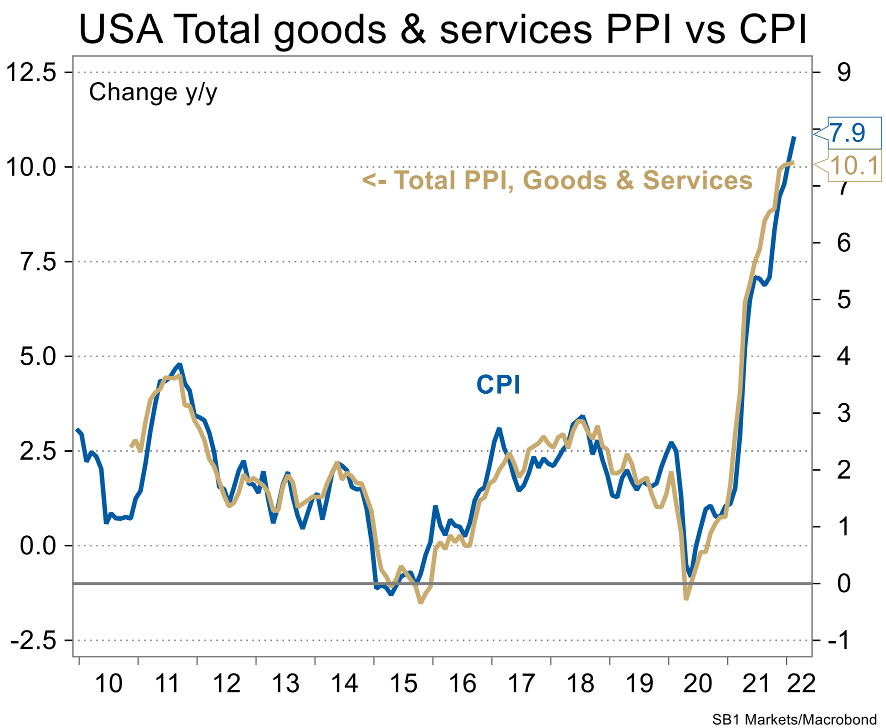


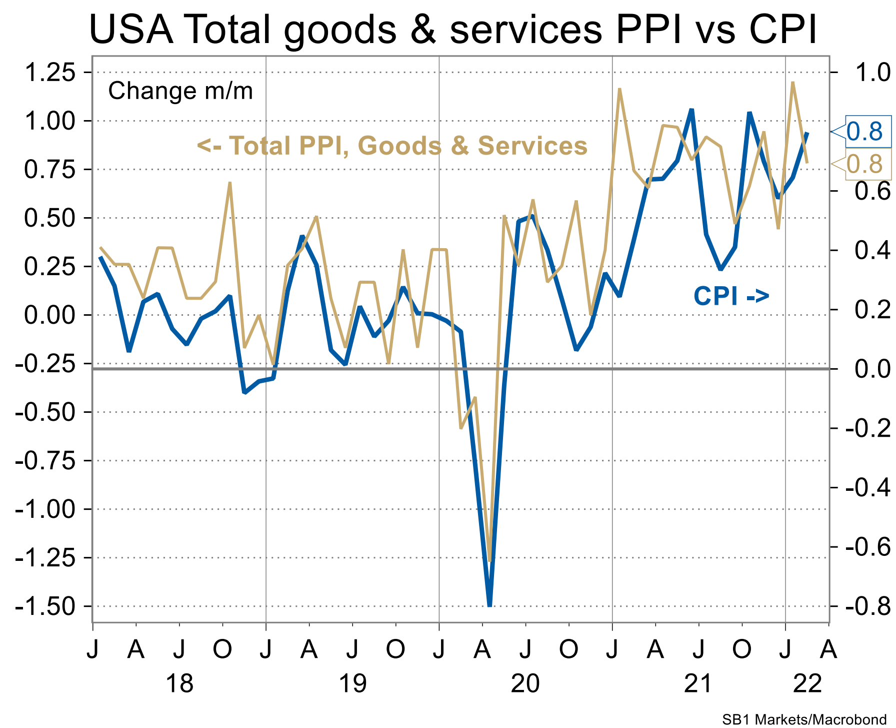


- **Crude goods prices** are leading intermediate goods prices by 4 months, and consumer prices by 12 months. Now, crude prices have clearly peaked (see the red ellipse on the chart to the right). However, **intermediate prices** have not yet yielded by much – and they will push finished goods prices further up the coming months
- Some more comfort: **Prices at the consumer level** (blue ellipse on the chart to the right) have responded earlier and more than normally vs the PPI core consumer goods index. That is very likely due to the unprecedented (and very likely not permanent) hike in 2nd hand cars prices which are not a part of the PPI index. Thus the upside risk for the core goods component of the PCE may be limited the coming months. If global commodity markets do not melt up

Bottom line: Total PPI (services included) confirms 8% CPI growth

The total PPI rose 0.8% m/m in Feb, expected 0.9%. Up 10.1% y/y

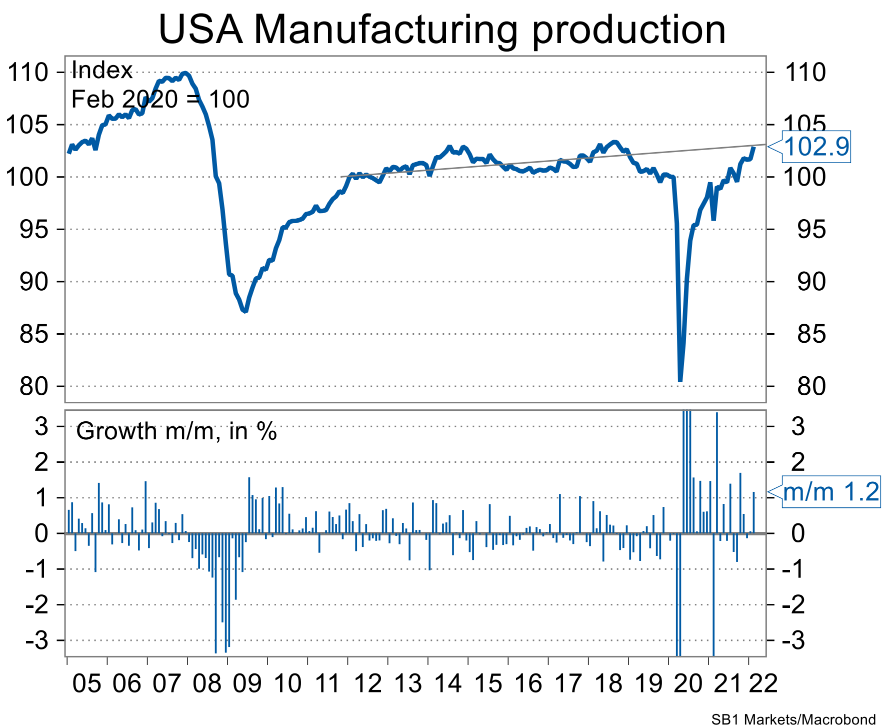


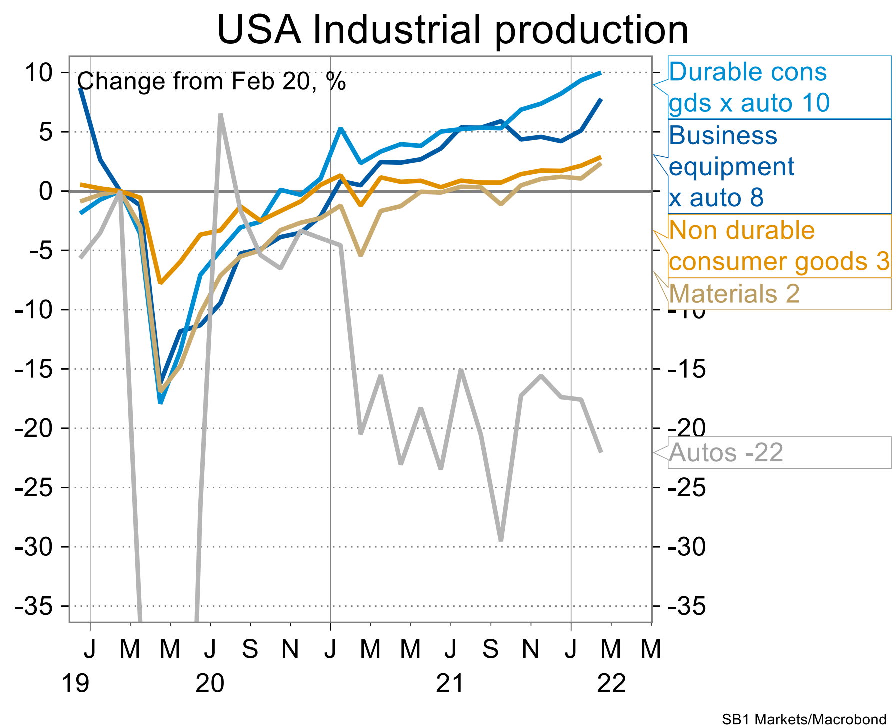


- The correlation between the 'new' total PPI, which includes all sort of services in addition to goods vs the CPI is pretty close. The current close to 10% annual growth rate in the PPI signals some 7.5% y/y growth rate in the CPI index. Which seems to be a precise estimate ☺

Manufacturing production 1.2% in February, even if auto production fell sharply

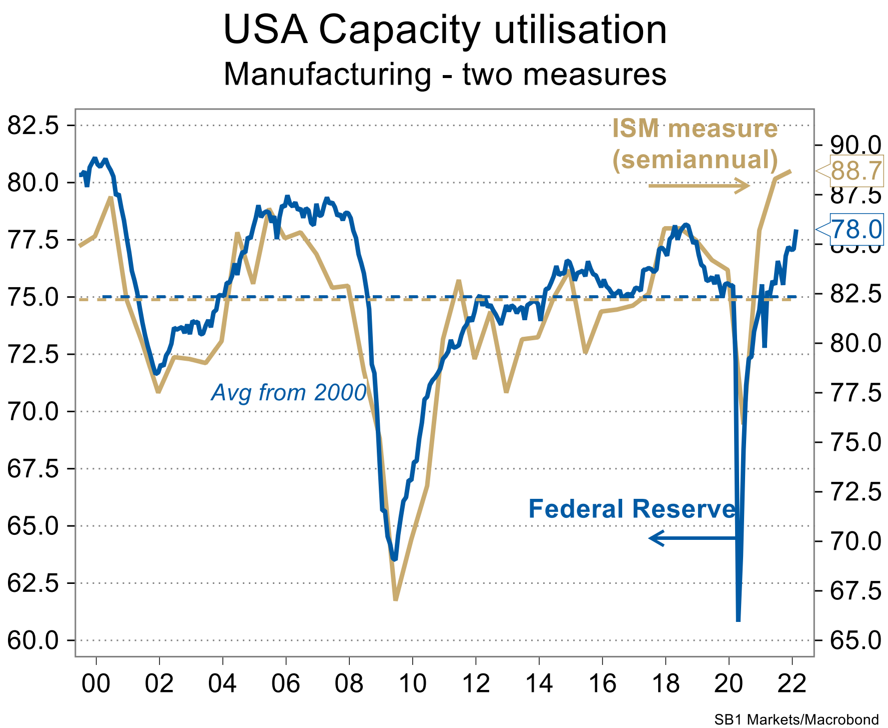
Auto production is down 22% vs Feb 20, total is up 2.9%, and it is back to the pre-pandemic trend





- **Manufacturing production** was expected up 1%
  - » **Production** is trending upwards – and it is finally back to the pre-pandemic trend
  - » The steep decline in auto production has been a drag on overall production in 2021 and into 2022
- **Total industrial production**, including utilities, mines/oil production rose 0.5, as expected
- **PMI/ISM and all other surveys** signal a continued recovery but at slower pace than until now
- **Capacity utilization** shot up in February and is far above average. The ISM survey reports a record high utilization, check next page

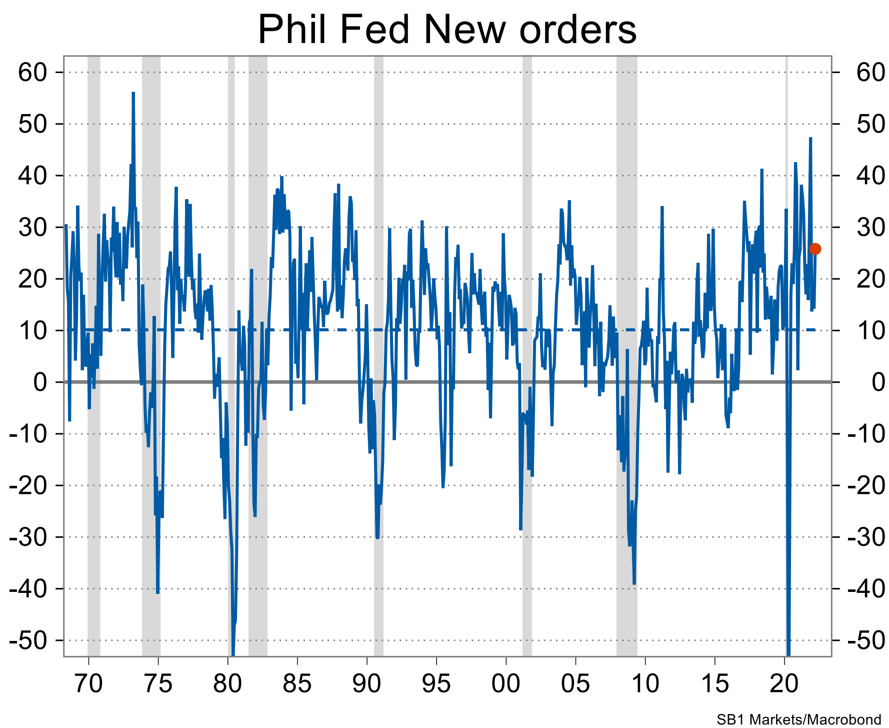
Capacity utilisation very high or record high

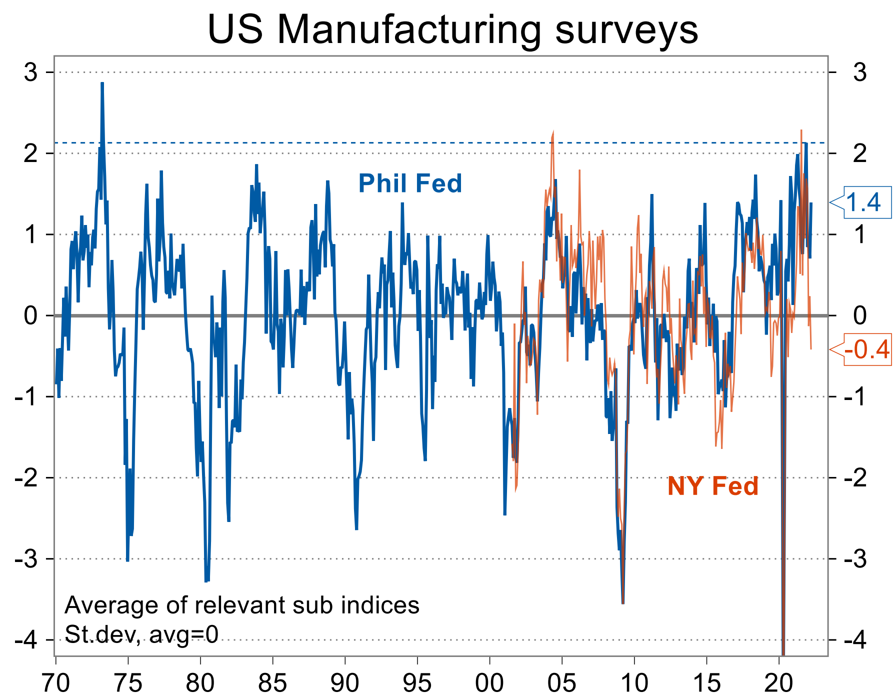


- **The Federal Reserve** report a 0.9 pp increase in manufacturing to 78%, a very high print, especially vs. the long term declining trend
- **ISM's semi-annual** survey reported a further increase H2-21/Dec, to another ATH at 88.7% vs the average at 82.5%
  - » These two measures have not been 100% correlated but the current discrepancy is large – and quite important when assessing the growth outlook
- The Fed's estimate is model based, while the ISM survey is based on companies assessment of their own capacity utilisation
- Given reports on labour shortages, material shortages, prices, the ISM survey seems to give the most reasonable result

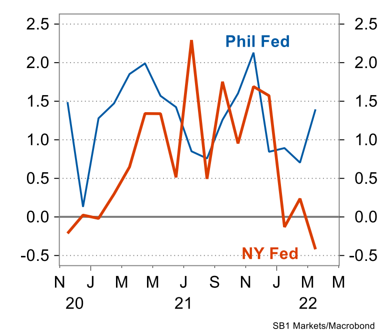
Philadelphia Fed's index up, well above avg, NY Fed's index down, to below par

Mixed growth signals. Prices, delivery times up again.



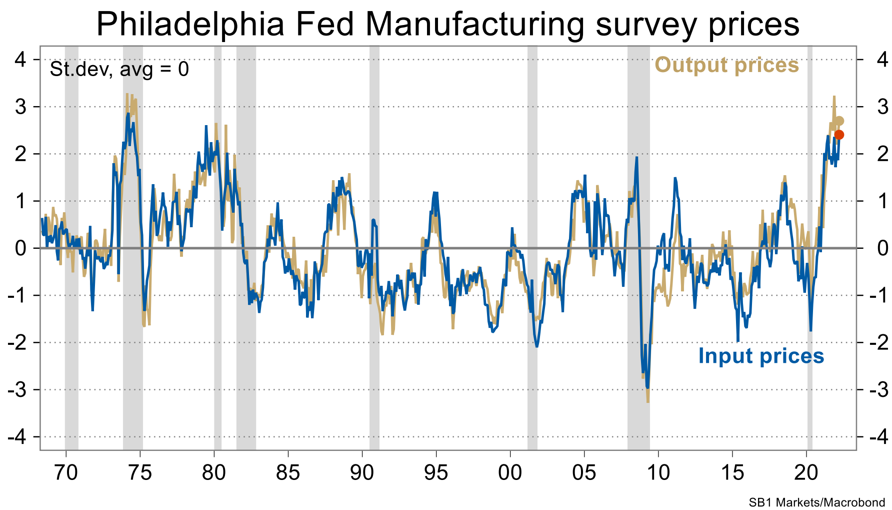


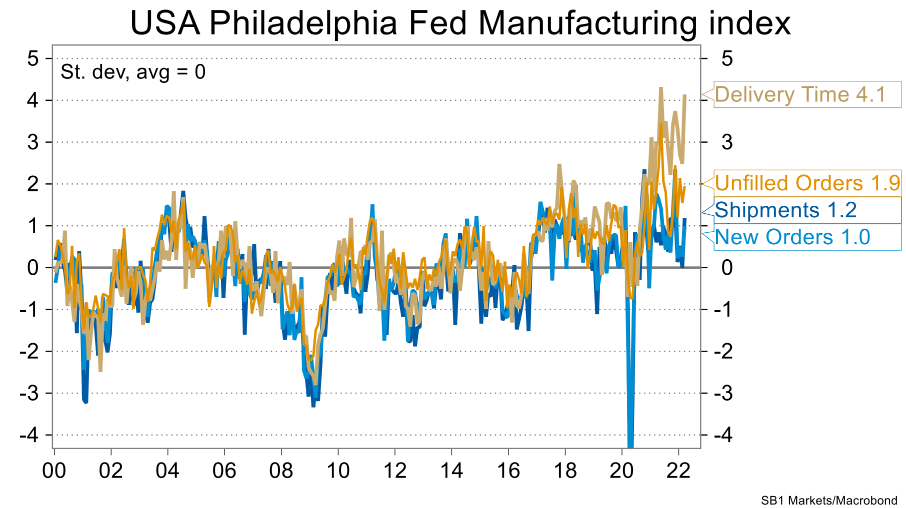
- Phil Fed up to 27.4 in March from 16, expected down to 14
  - » New orders, shipments up – delivery times, prices even faster up
- NY Fed down to -11.8 in March from 3.1, expected up to 6.4 – following the surising decline in February
  - » New orders, shipments reported down – delivery times up, prices received up to record high

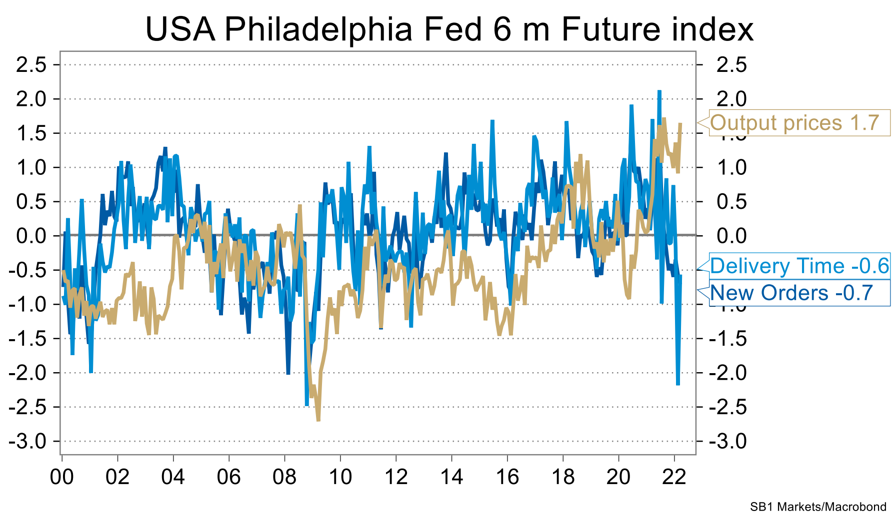


Phil Fed: Delivery times & price pressures up again

Was the war in Ukraine felt in Philadelpia already in the early days in March? However, activity up too



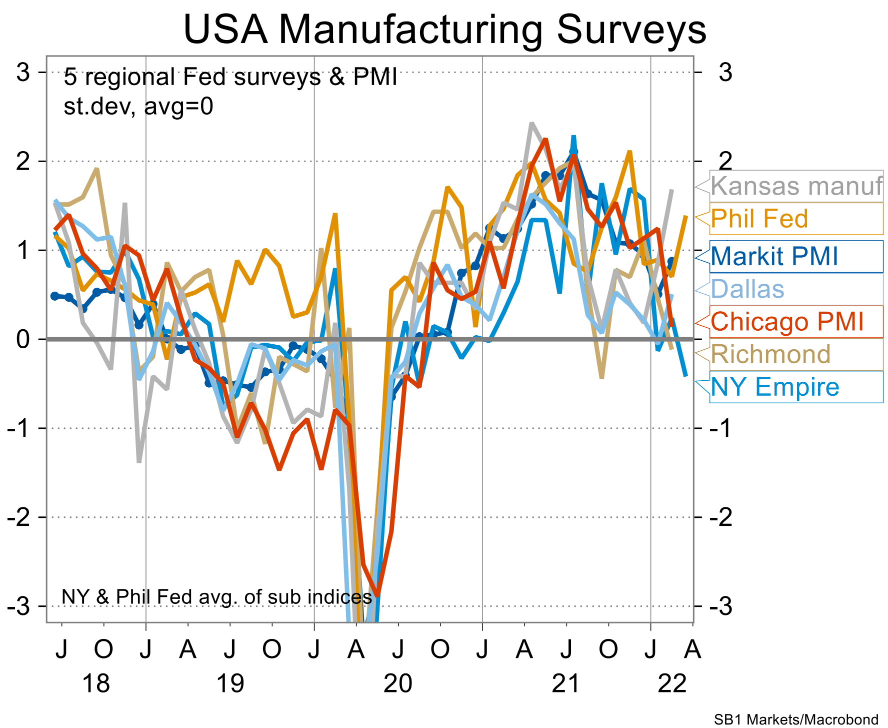


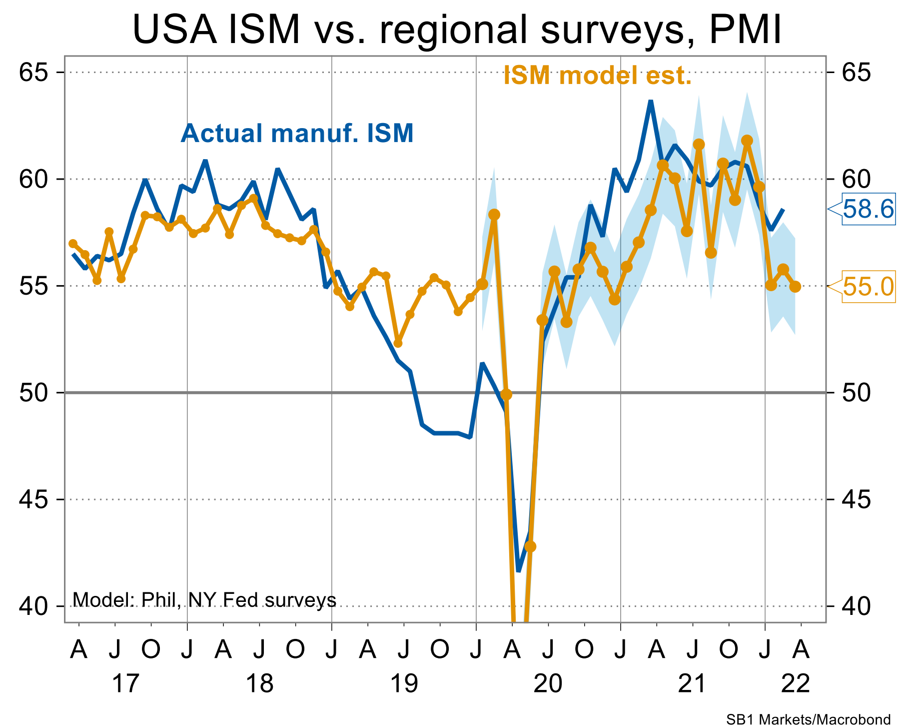


- The **current prices** increases are still very high, both input and output prices – and delivery times surged
- Growth in **new orders and shipments** accelerated in March
- **The outlook:** Supply chains problems are expected to ease substantially but also the order inflow. Even so, output prices are expected to increase rapidly – and even more some in the March survey.
  - » A bit strange mix? Stagflation??

No clear signal so far in March

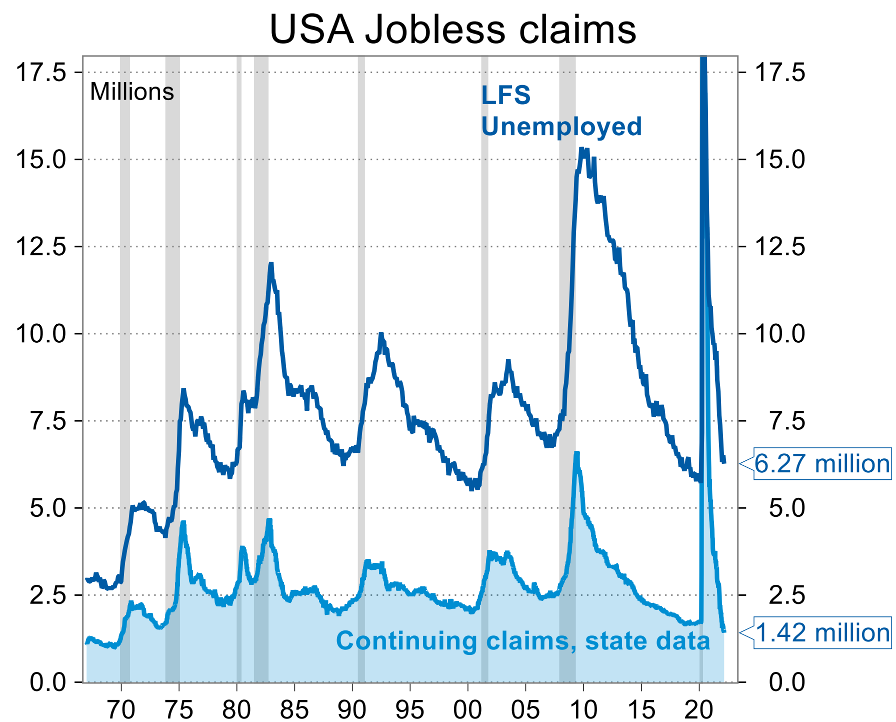
The big picture: Surveys are heading down, manufacturing growth is slowing





New jobless claims further down last week – and very few left on the dole

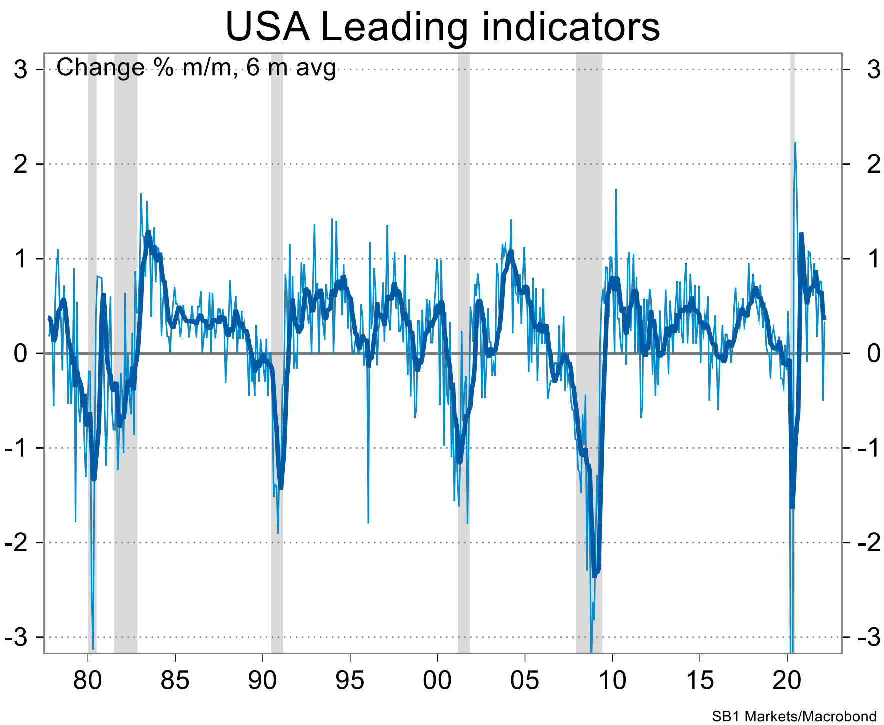
Confirms an extremely tight labour market – and no slowdown in the economy now

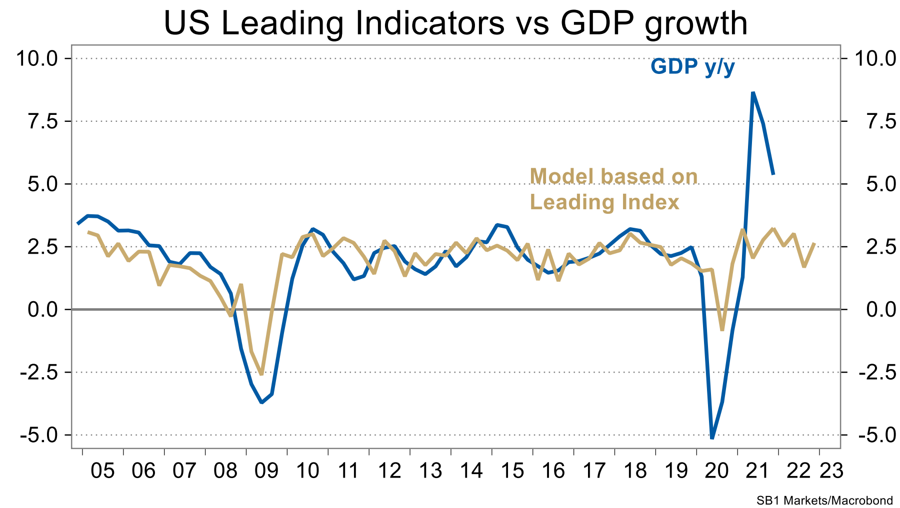


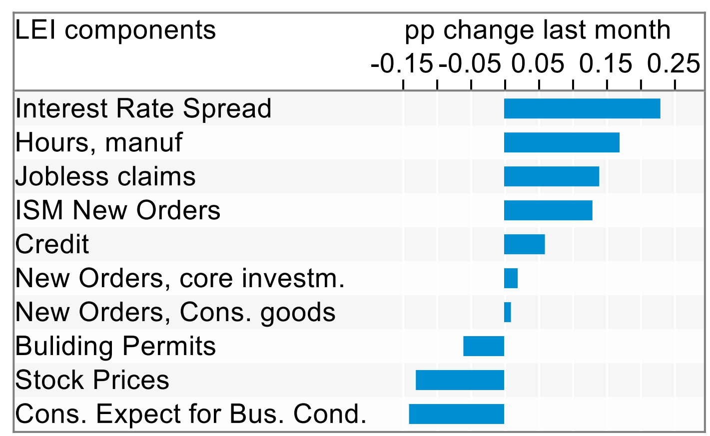
- **New jobless claims** fell 15' in week 10 to 214' the lowest inflow so far in 2022 but still marginally above the ATLs late last year
- **Ordinary continuing claims** fell 71' in week 9, to 1.42 mill, to lowest level since 1970, and as share of the labour force, the lowest ever, by far

Leading indicators (Conference Board's LEI) back in black in February

The index signals growth close to trend



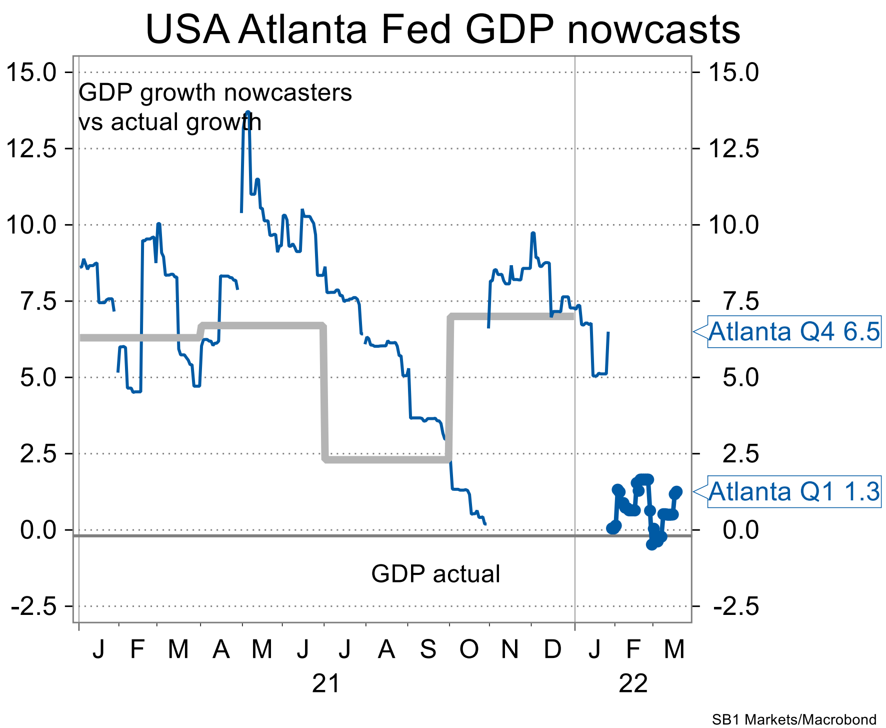


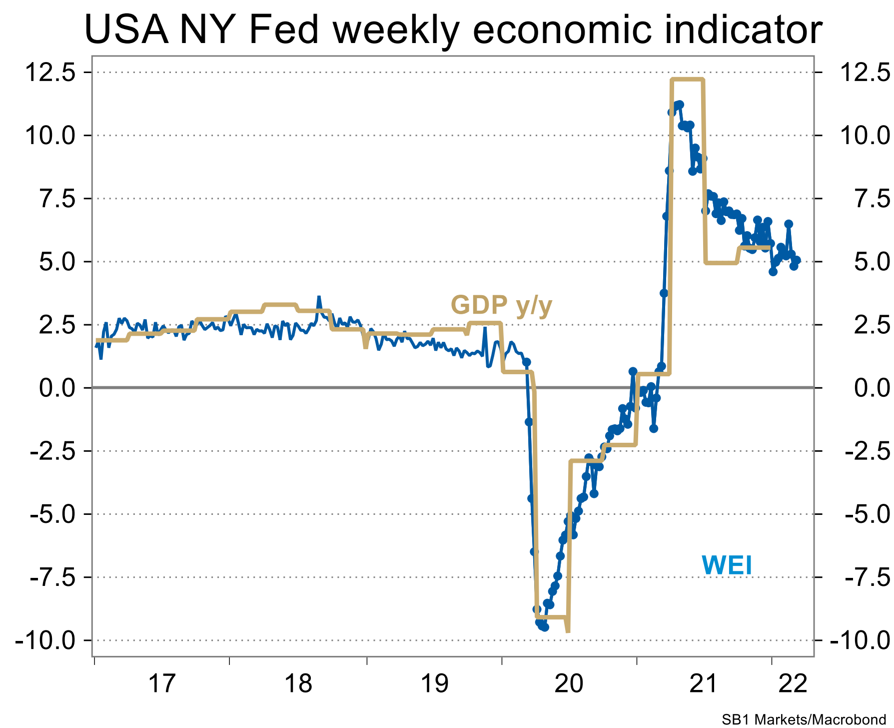


- The index rose 0.3% m/m in Feb, as expected, following a 0.5% decline in Jan (revised from 0.3%)
  - » One negative print does not signal a recession

Atlanta Fed's nowcaster suggests 0.5% growth in Q1

Net trade & inventories contributes at the downside, according to Atlanta Fed



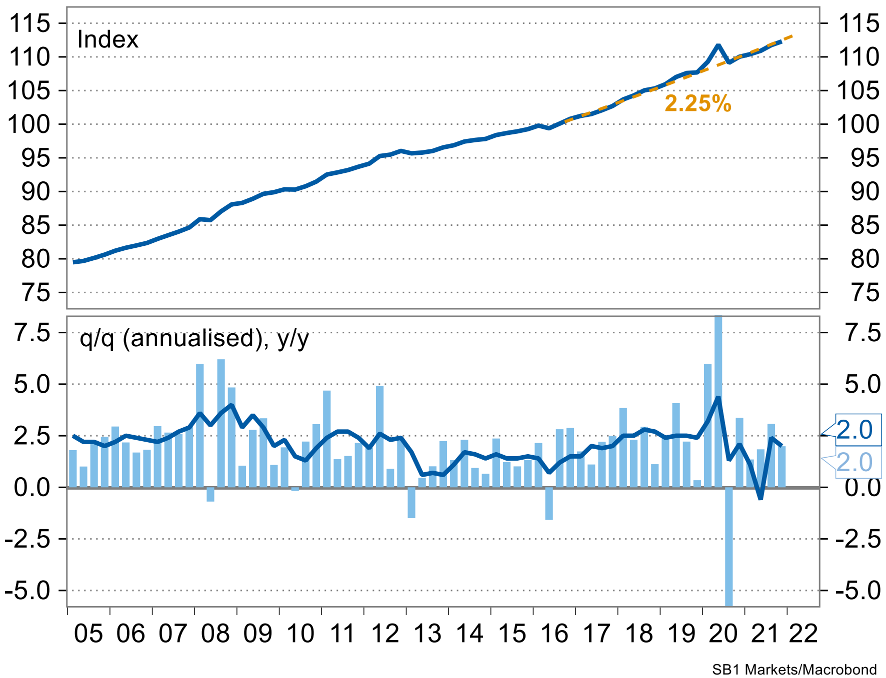


SpareBank 1 MARKETS

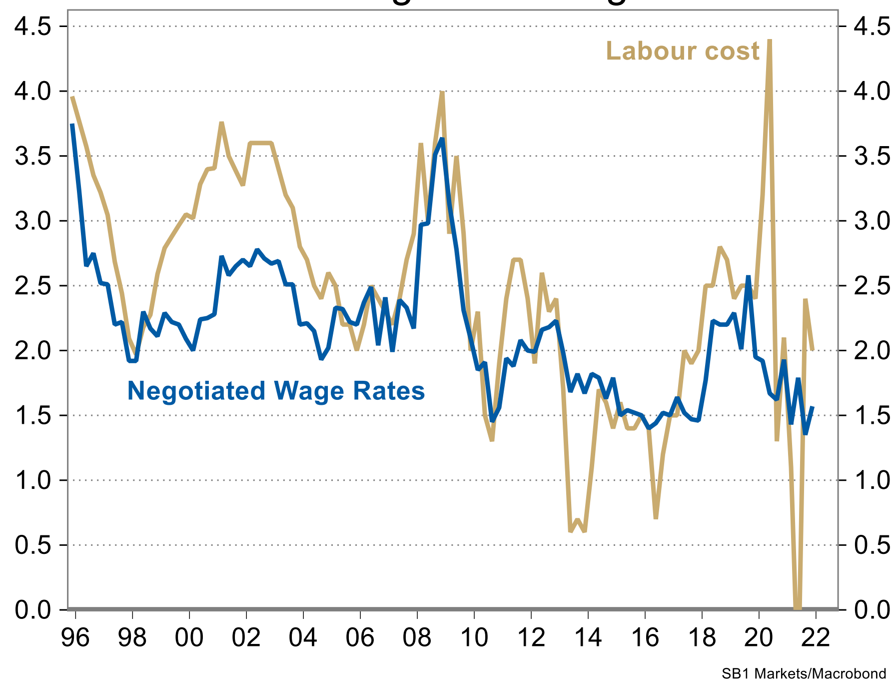
Labour cost inflation still just at 2.0%. No reason for the ECB to panic

But if unemployment is at the lowest since 1981, a negative signal rate is perhaps not needed either?

EMU Labour cost index



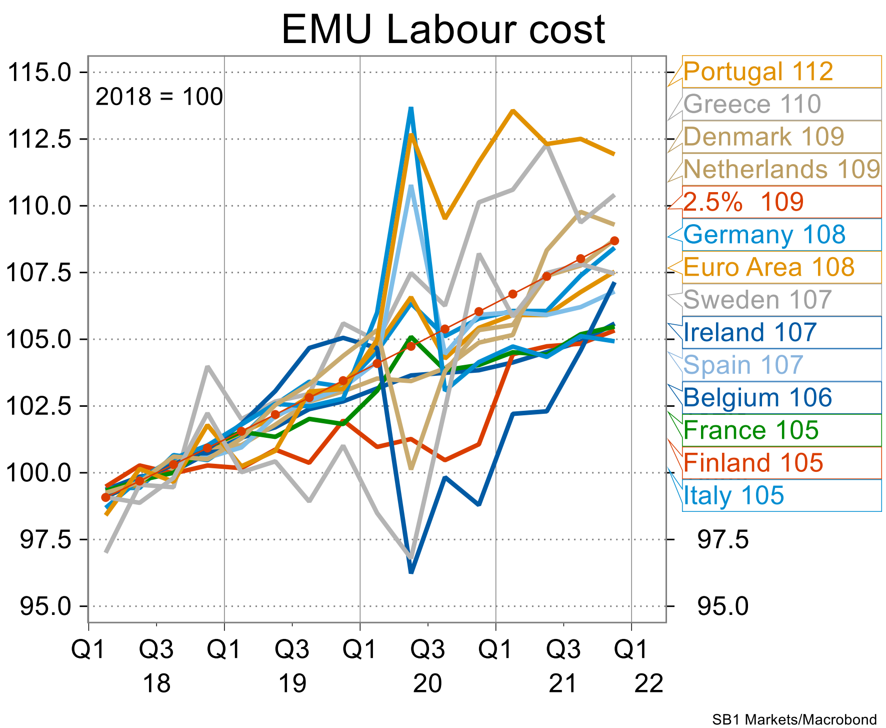
EMU Negotiated wages



- **Labour costs** in the business sector grew at a 2% pace in Q4, and by 2.0% y/y
  - » Labour costs = Wages + taxes – subsidies (the two latter paid by/received to the employers)
- ECB's indicator for **negotiated wages** is up 1.6% y/y
- No signs of acceleration, whatsoever

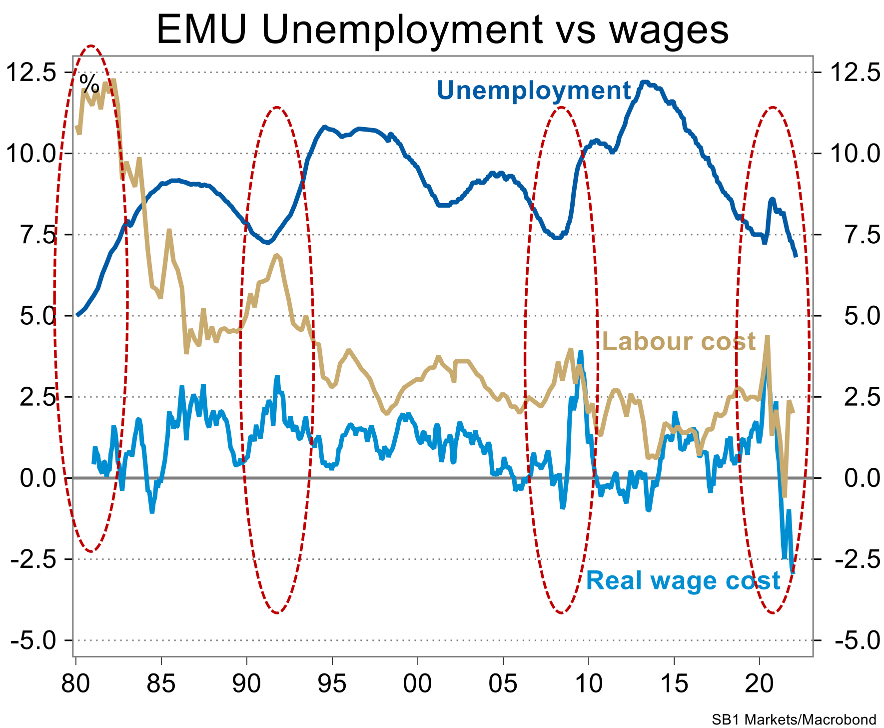
Substatial divergencies between EMU countries during the pandemic

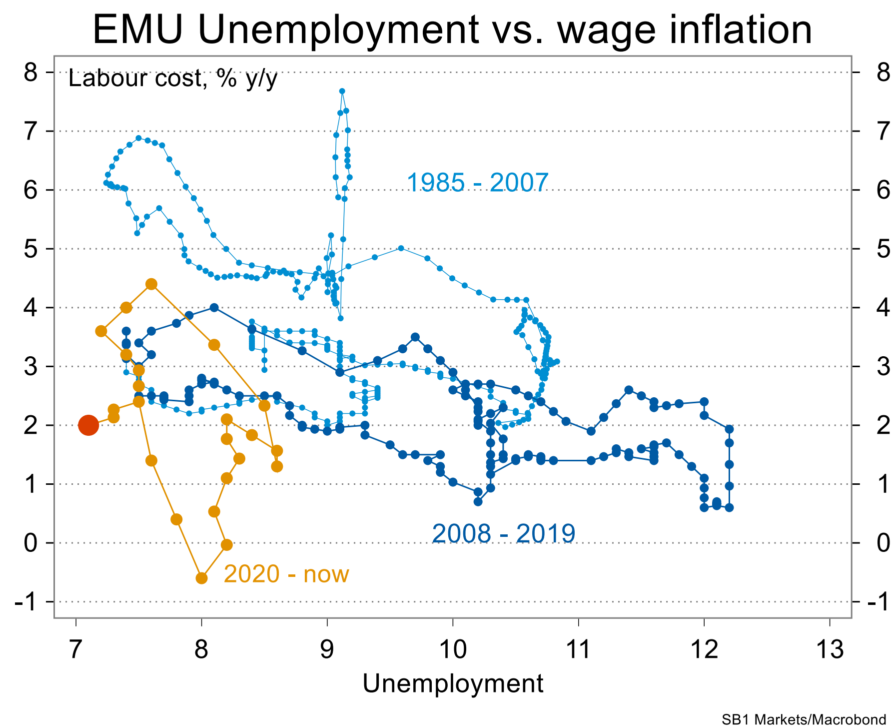
Mostly due to how public support to businesses and labour was organised and booked



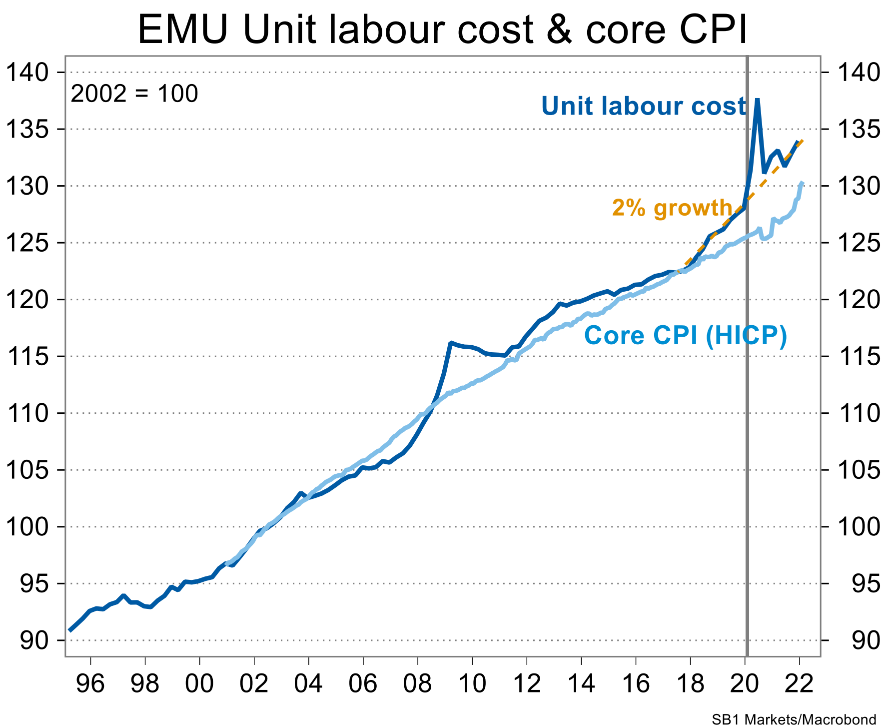
Unemployment is the lowest since 1981, vacancies are at ATH

There may be some wage inflation risk in the EMU too?



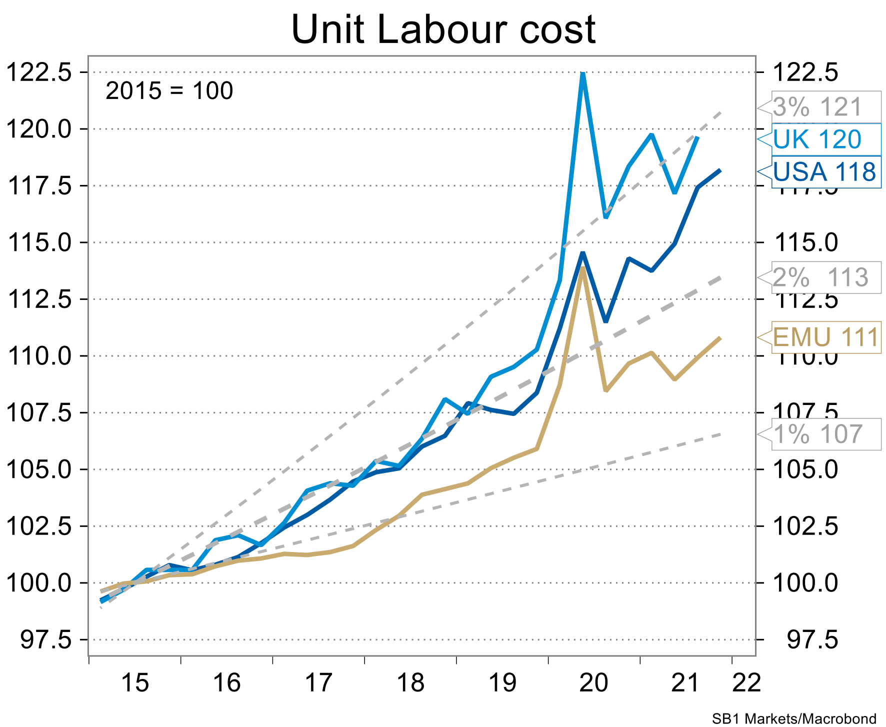


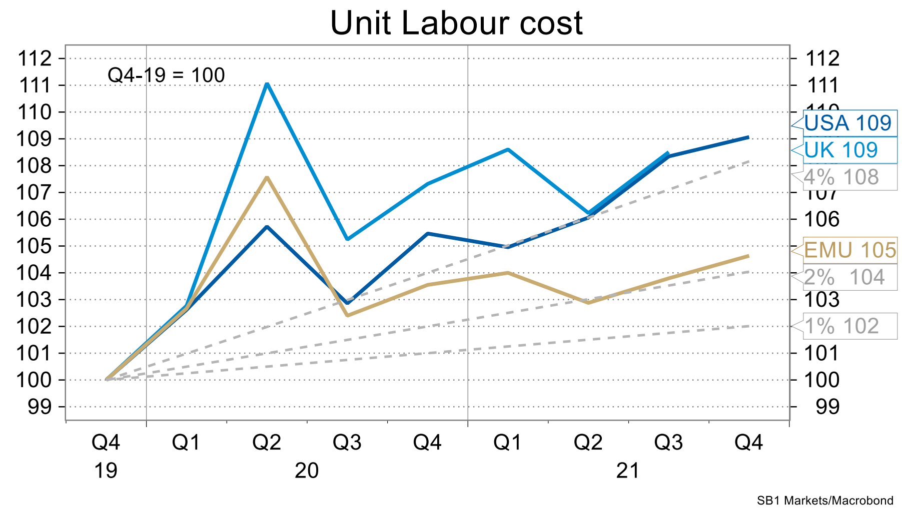
No serious cost inflation either



- **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. However, as employment normalises, the ULC will probably normalise too – it has fallen sharply from the peak in Q2 2020
  - » 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
  - » In addition: Costs have been running faster than price inflation since 2017, keeping a lid on corporate profits. If demand is strong, businesses could (and should) restore profits by hiking prices to 'close' the gap vs ULC – helping the ECB to reach its inflation target over time

Volatile Unit Labour Cost data; US, perhaps UK have a problem, EMU not





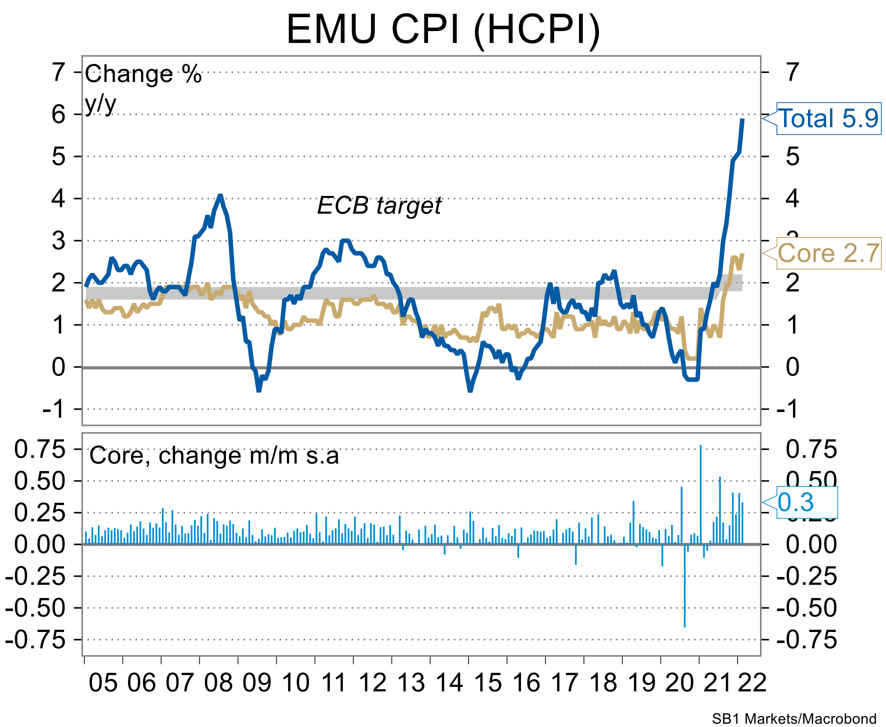
- US labour costs were revised upwards two weeks ago

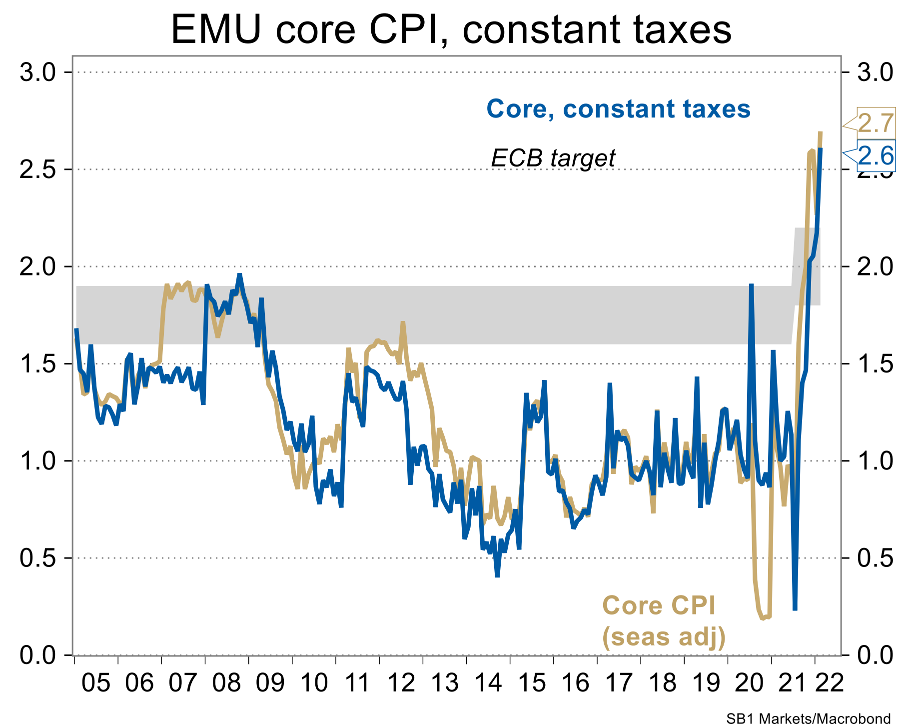
- However, the correlation between ULC & CPI is not that precise over just some few years

SpareBank 1 MARKETS

Eurozone inflation 0.1 higher than the initial estimate, up 0.8 pp to 5.9% in Feb

Core inflation up 0.4 pp to 2.7%, in line with the first estimate



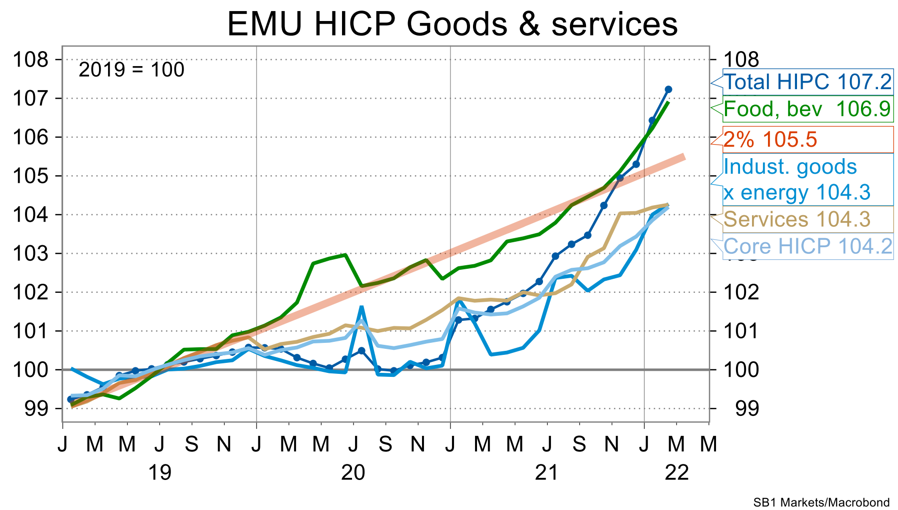


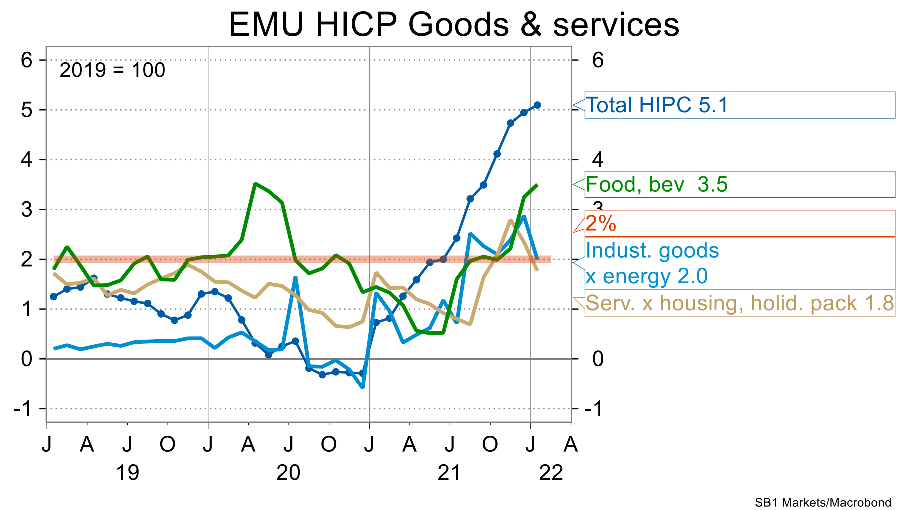
- **The headline HICP** rose 0.8% m/m, and the headline rate at 5.9% is the highest ever in the EMU history, and the highest since early 1980'ies in the EMU countries. Inflation is above 4% everywhere, and almost 10% in Belgium!
  - » Energy prices rose 3.2% - and they are up 31.5% y/y, contributing 3.1 pp to the headline 5.9% growth rate. Food prices rose 0.6%, and are up 4.1% y/y
- **Core prices** rose 0.3% m/m, in line with the monthly increases past months – implying an underlying rate at above 3.5%
- Tax changes have no material impact on the HICP now

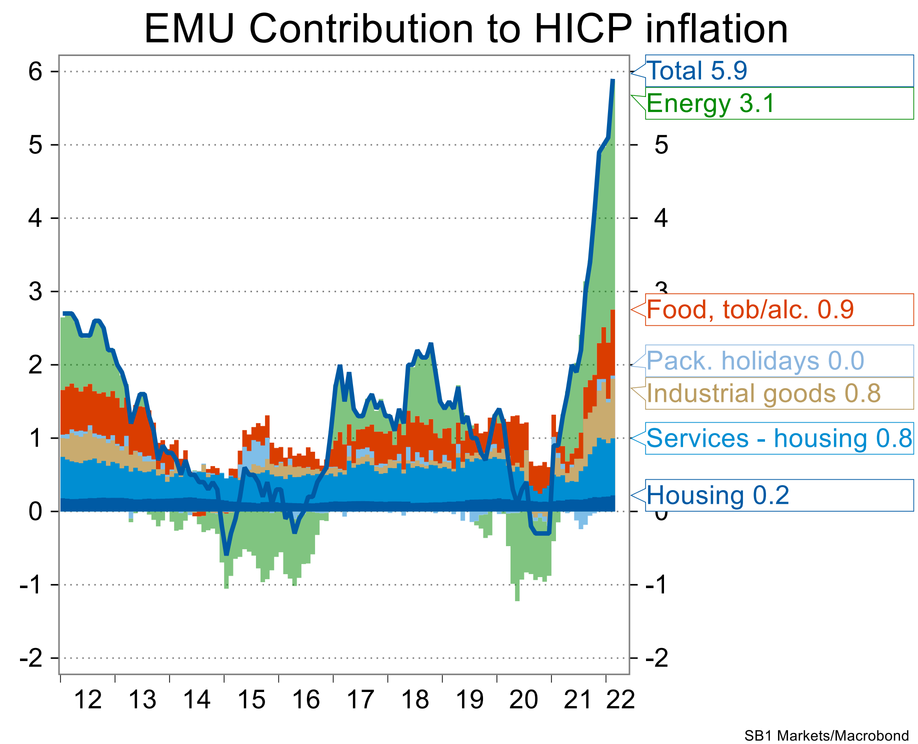
SpareBank 1 MARKETS

Energy remains main culprit, but food prices, and some others on the move too

Even so, energy is probably to blame, check next page



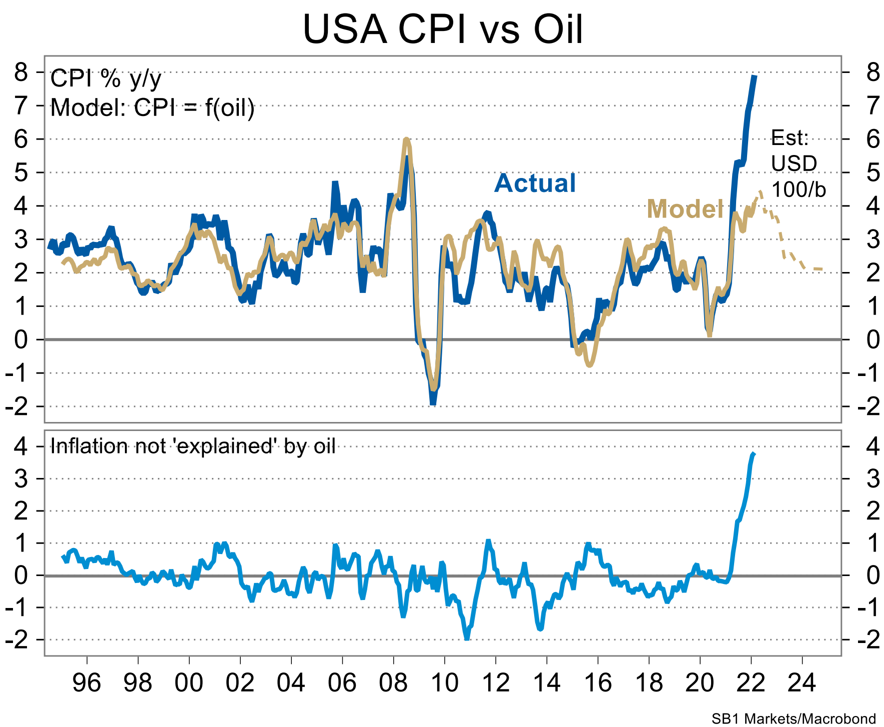


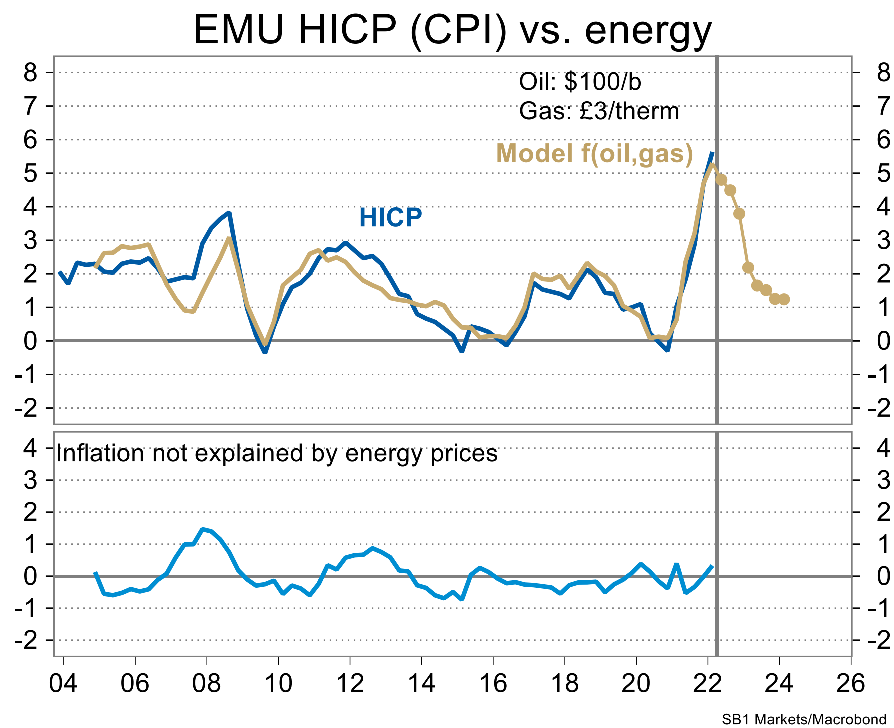


- **Industrial goods x energy** rose 1.2% m/m, following the 1.3% hike in January. Prices are up 3% y/y. Several goods contributed, like furniture etc (5.7%), autos (new and used) 10%
- **Service** prices rose too, both hotels, package holidays & airfares, maintenance services

EMU vs USA: Spot the difference

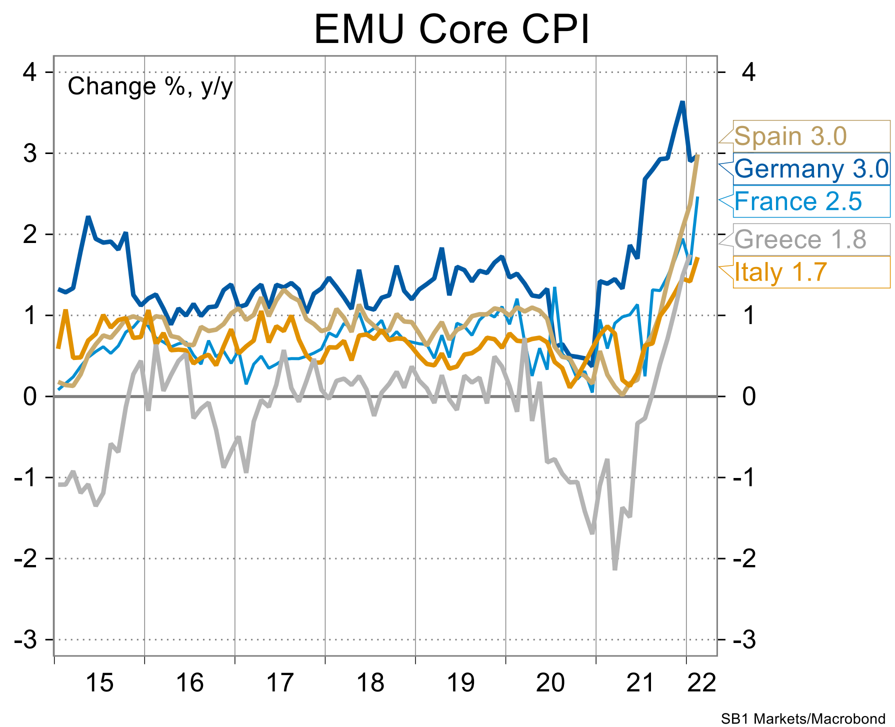
Just half of the 8% US CPI inflation can be explained by energy. In the EMU it's nothing but energy

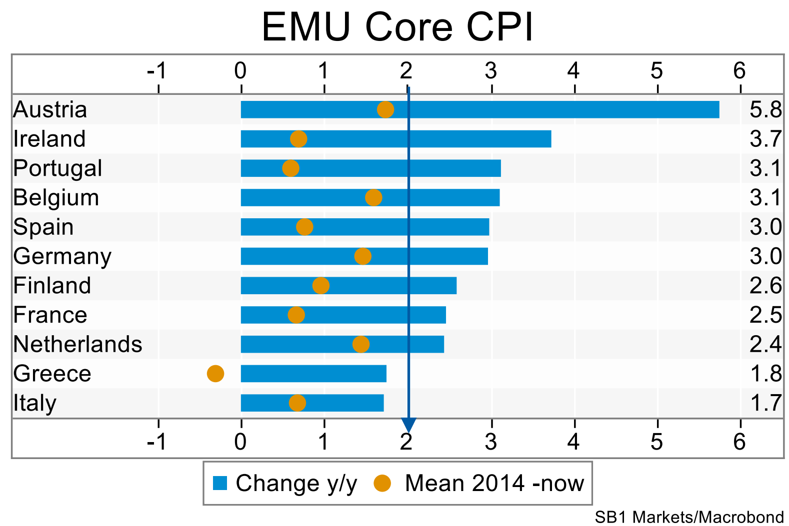


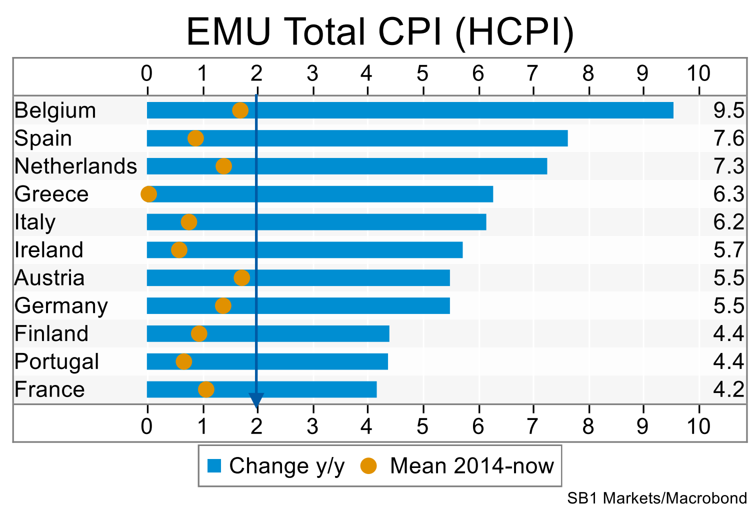


- **Oil price cycles** have explained some 80% of the changes in the US CPI growth the past 30 years, which for practical purposes, is "everything". The same goes for oil and gas prices in Europe.
  - » In our models we incorporate all direct impacts from changes in the oil price – as well as the impacts from other factors that influences inflation which correlates to the oil price. These models do NOT capture the impacts of energy subsidies etc
- Now, inflation is way above the model estimate in the US, but spot on in the EMU
- If the oil price stabilises at USD 100/b, and gas prices at the current (very high) level
  - » **US:** A small uptick in inflation (but from a very starting level)
  - » **EMU:** Energy inflation – and total inflation is close to peak. Inflation would have fallen far faster in energy prices returned to 'normal' levels

Core inflation now above 2% in a majority of countries



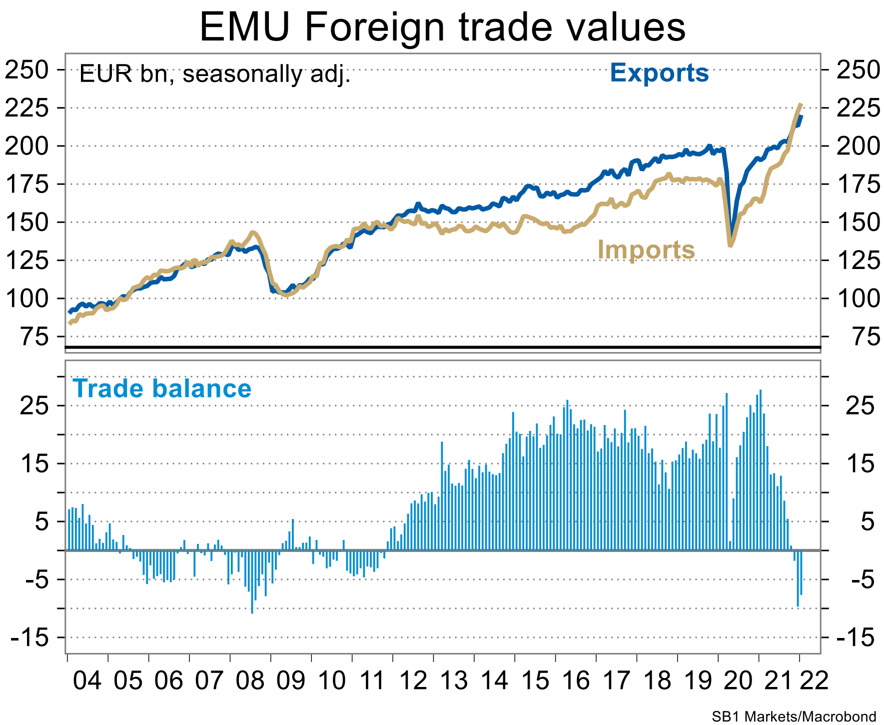


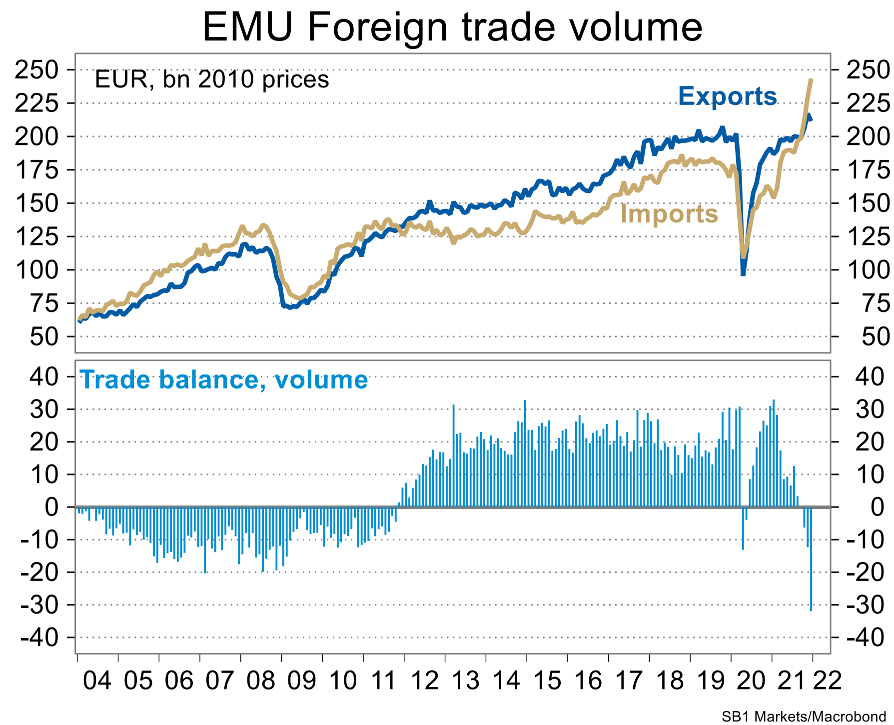


- The base effect is substantial: *Check next page*

Import volumes are exploding, exports strong as well

However, the union is running a trade deficit, for the first time in more than 10 years

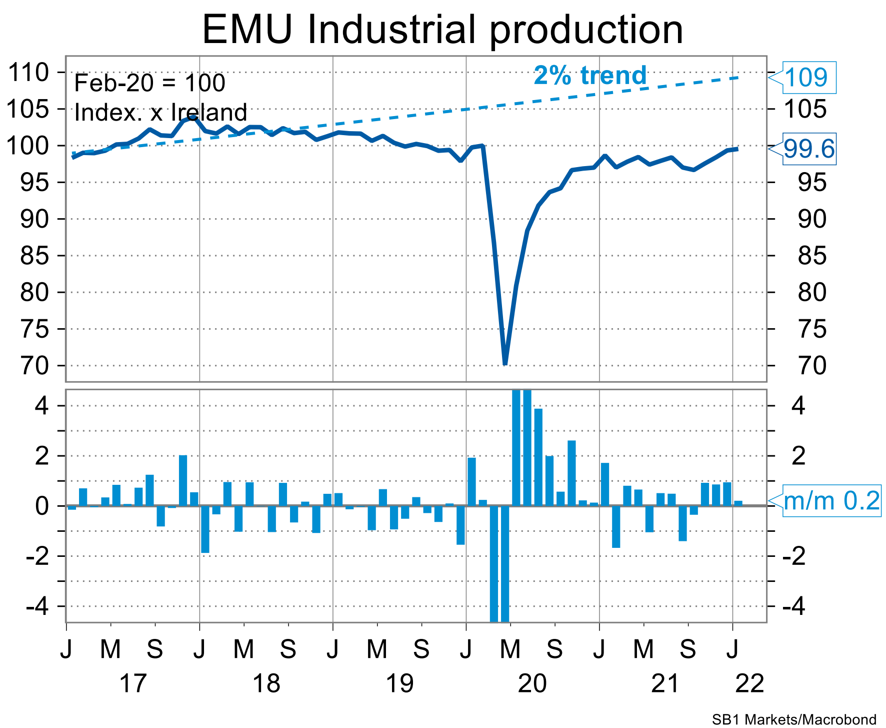


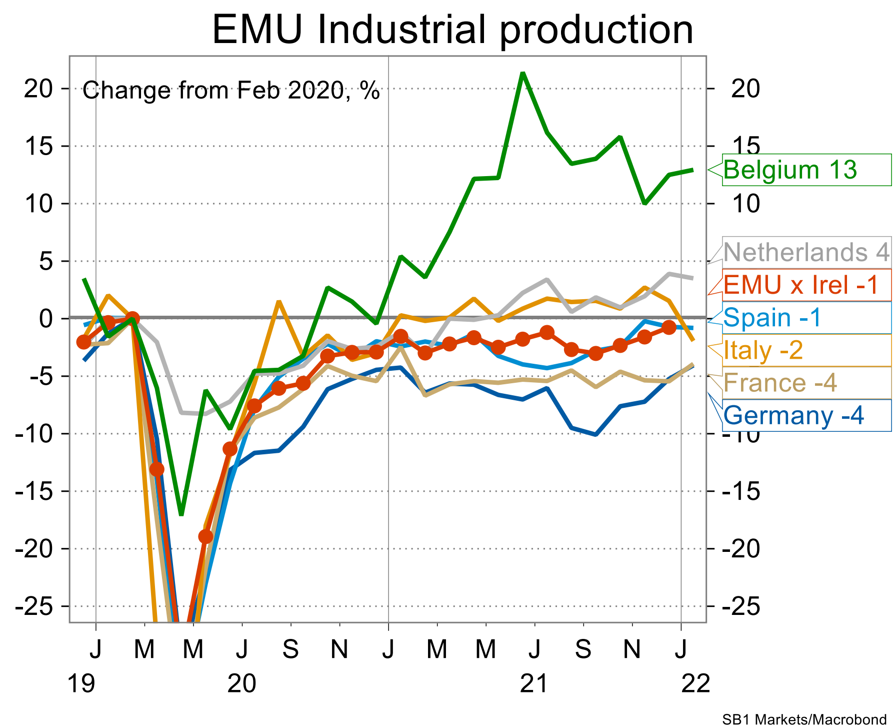


- XXx analysis

Industrial production probably up 0.2% in January

Germany, France reported decent growth, 1.2 – 1.6% m/m. However, Italy down 3.4%

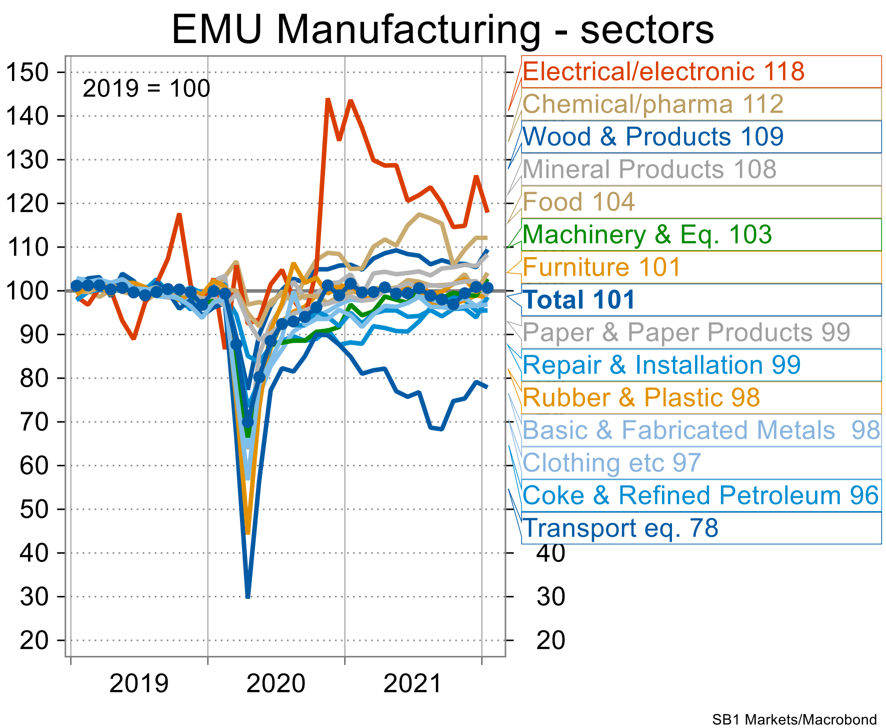




- The level in Dec was revised slightly up, and production is 0.4% below Feb-20 activity
- **Industrial production** in both France & Germany down 4% vs 2020, mostly due to the auto industry
- We exclude the volatile **Irish industrial sector** from the calculation. No big difference this time, production was flat, Ireland included – expected up 0.1%

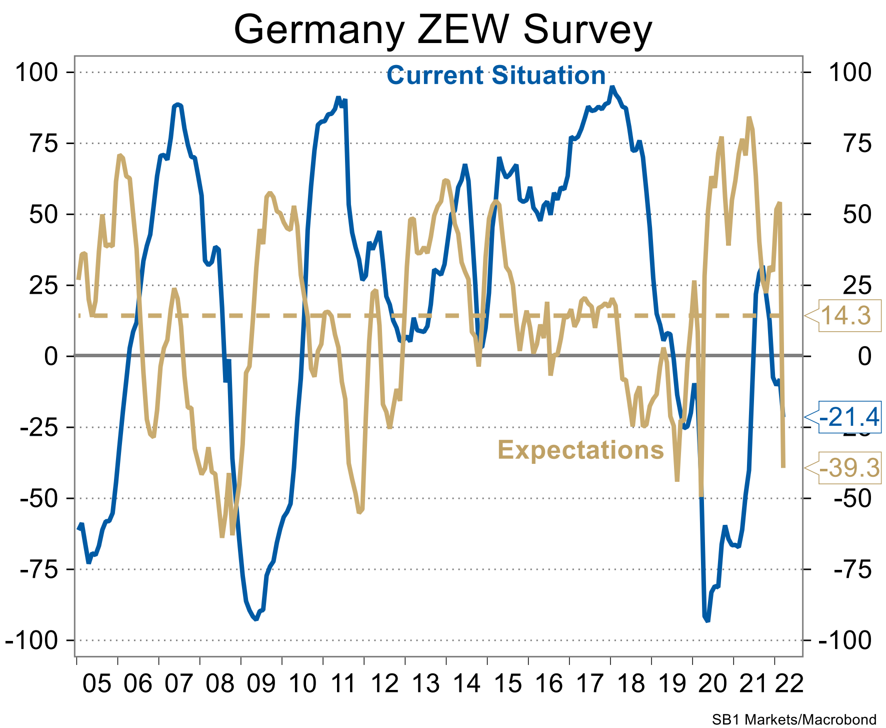
Auto production on the way back, still down 22%

Auto production lowers total production by more than 2%



ZEW expectations more down than ever before – to a rather low level

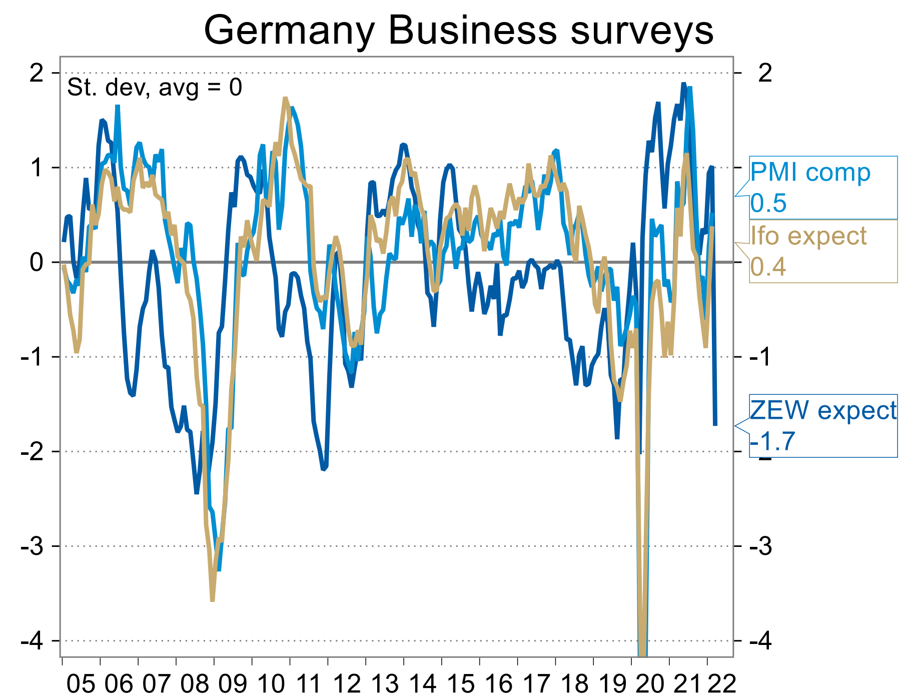
German investors/analysts totally shocked by the war & its possible consequences



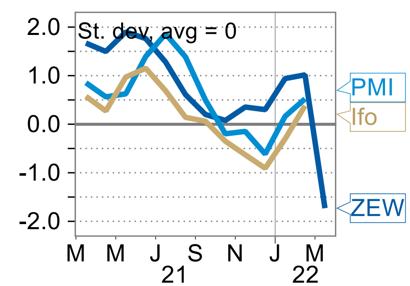
- The **ZEW expectation** index fell to -39 in March from +54 in February, or from +1 above st.dev to -1.7 st.dev below average. The decline was the largest by far (-94 p in March vs. the largest drop so far, -58 in March 2020). The level normally signals a decline in GDP – a substantial decline. There is of course just one possible explanation
- Assessment of the **current situation** also fell, but less dramatic
- The survey was conducted some days ago, when the DAX index was in freefall and gas prices were up in the stratosphere. Still the unprecedented decline is a of course a warning sign, German decision makers may now become risk adverse. However, it is far too early to judge!

Just ZEW has reported March data

‘Ordinary businesses’ will report this week, in the Ifo & PMI indices XXX sjekk XX

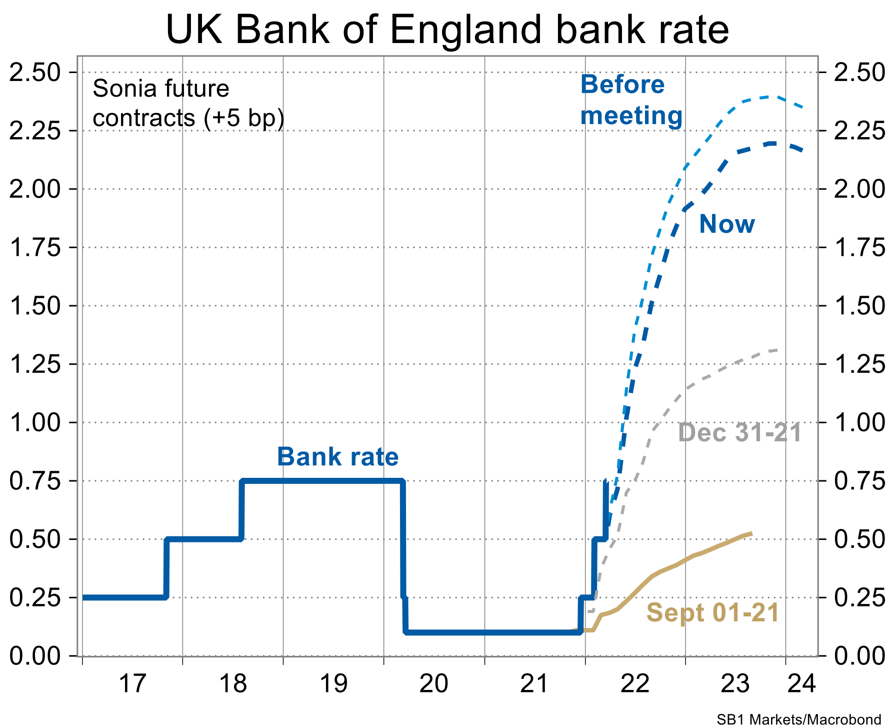


SB1 Markets/Macrobond



Bank of England: the 3rd hike, many more to come. But how many?

The BoE less hawkish than expected – still many more hikes to come: 4 – 5 in 2022

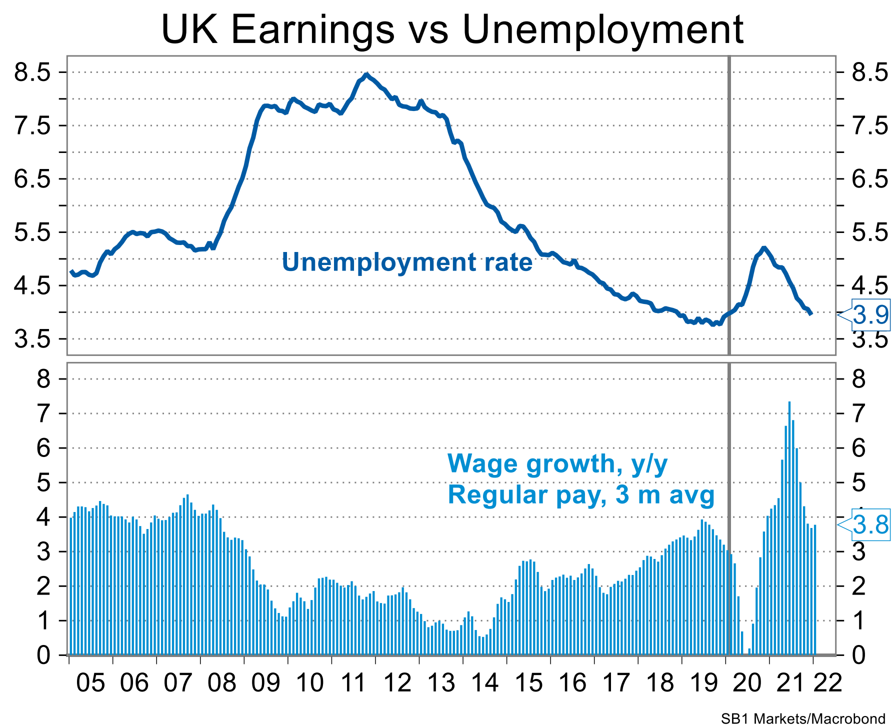


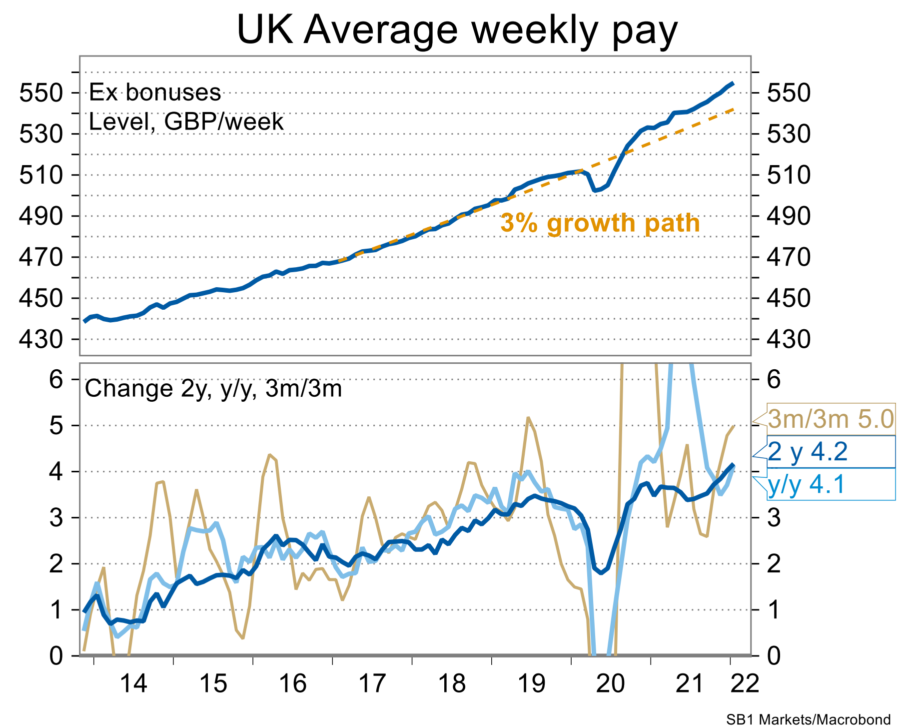
- The 3rd hike since the Bank started tightening in December was expected by everyone
- The MPC expect inflation to accelerate to 8% in the Q2, 1 pp higher than assumed in February – and that may not be the peak – if energy prices turns put to be as high as future prices signal
- The bank is more cautious vs the growth outlook: Falling disposable income and declining consumer confidence could lower demand – and growth
- The bank said some further modest tightening in monetary policy might be needed – which was less hawkish than markets expected
- The future (SONIA) curve fell by up to 20 bps but still signal 6 more hikes, up to 2,2% until H2 next year
- The GBP fell 1.7% last week. So from time to time, interest rates are important for the f/x market!

SpareBank 1 MARKETS

Unemployment is trending down - to just marginally above the pre-p level

Wage inflation is accelerating, the pace is now above 5% (regular pay), and 8% (including bonuses)

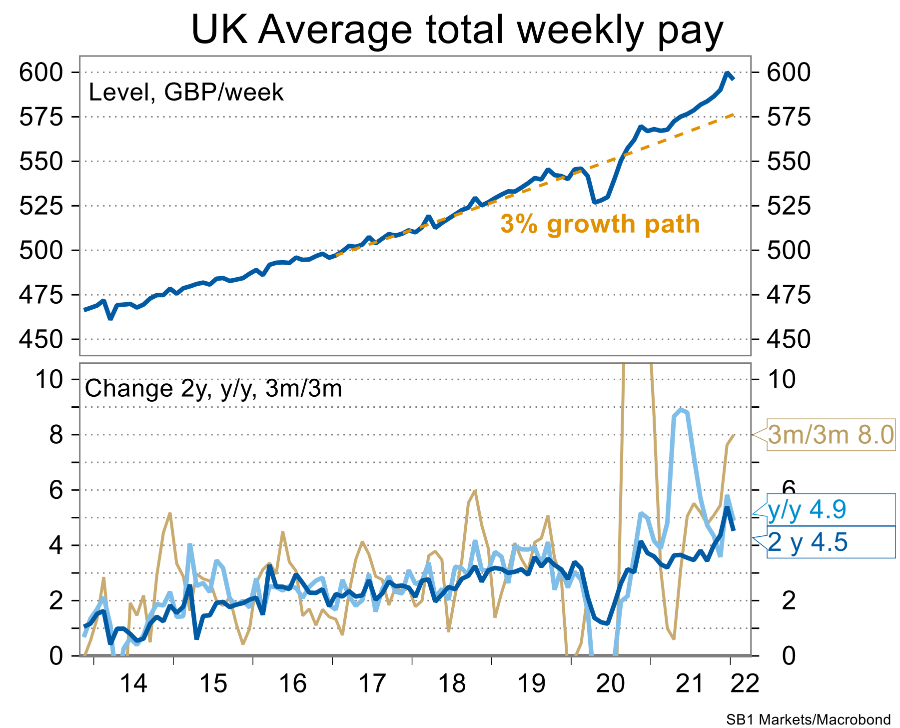




- **Annual wage growth** (regular pay, 3 m avg) accelerated 0.1 pp to 3.8% in January, expected unchanged. Not smoothed, wages were up 4.1%. The underlying 3m/3m rate rose further too, now at 5%
- Including bonuses, wages are up 4.1%, but the 3 m avg rose to 4.8% from 4.6%, expected down to 4.3%. Underlying 3m/3m growth equals 8%!
  - » Over the 2 past years, total weekly pay is up 4.5% in average.
- Just before the pandemic, wage inflation was approx 3% (total pay) to 4% (regular pay) – but just between 2 and 3% the preceding years. Thus, the current wage inflation rates are well above the British 'norm'
- The **'LFS/ILO' unemployment rate** fell to 3.9% in December, from 4.1% in November

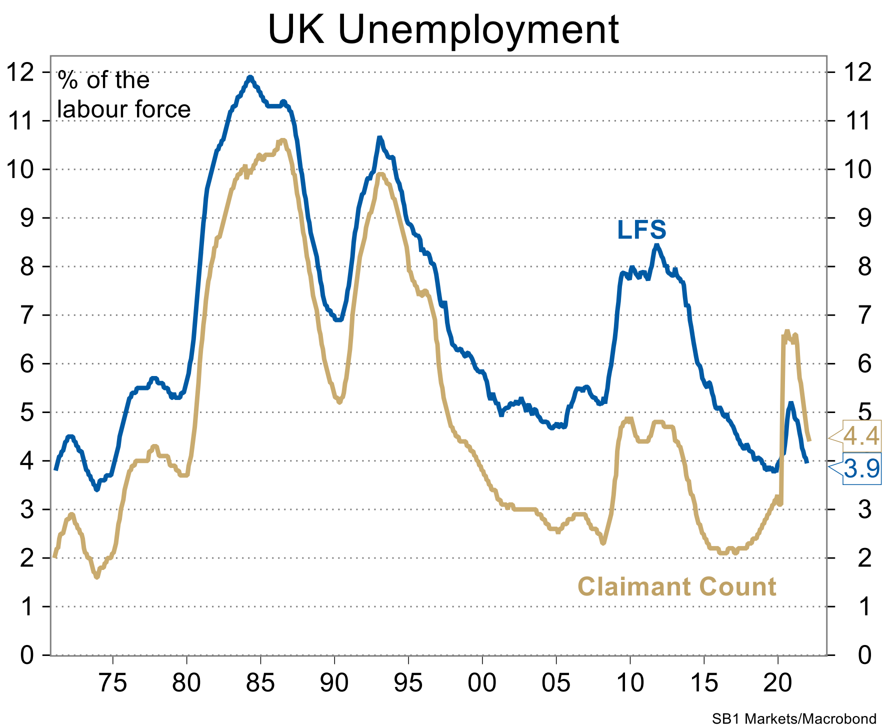
SpareBank 1 MARKETS

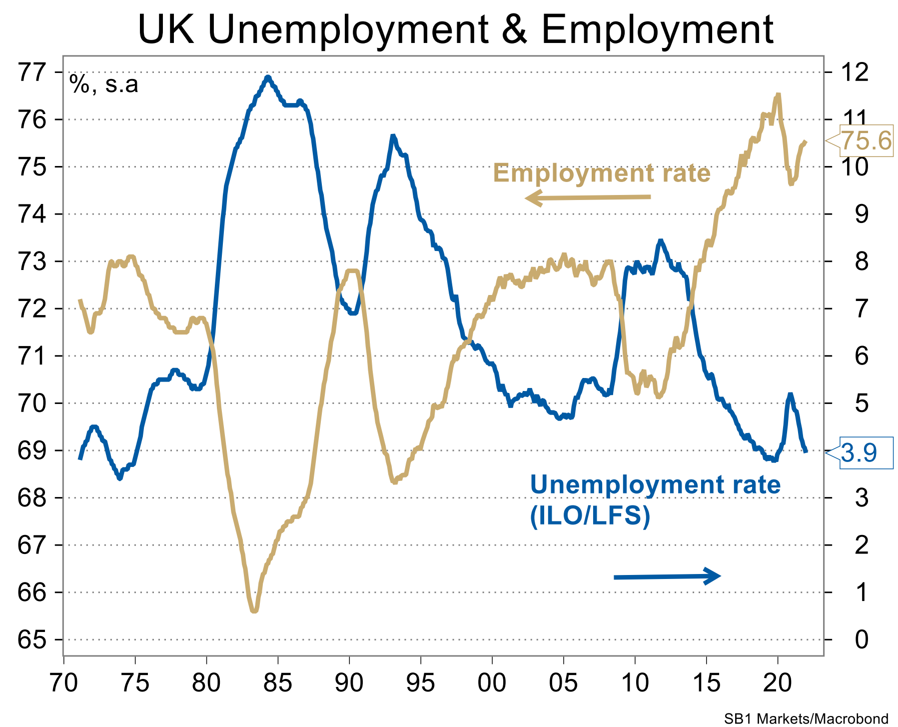
Total pay, including bonuses, is accelerating even faster



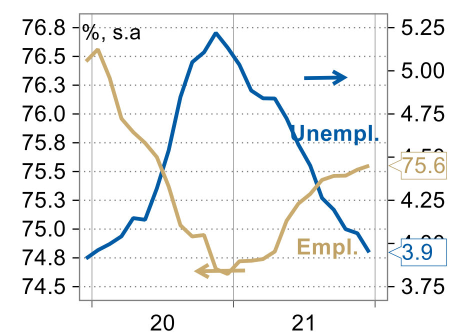
'Open' registered unempl. at 4.4%, sharply down since the spring but still 'high'

The LFS (ILO, 'AKU') unemployment rate has fallen bellow 4%. Soon the lowest since 1975?



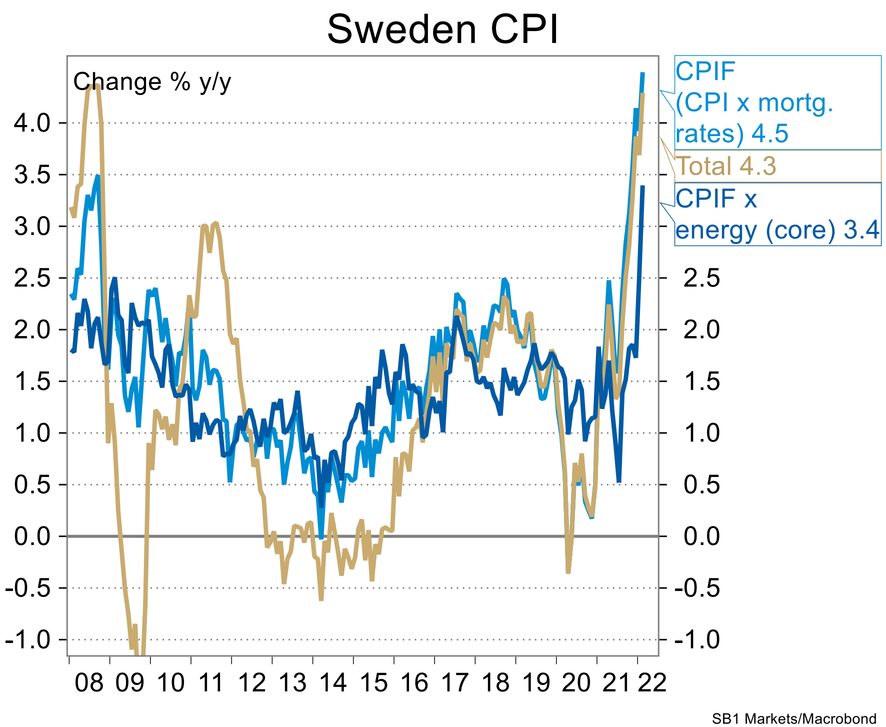


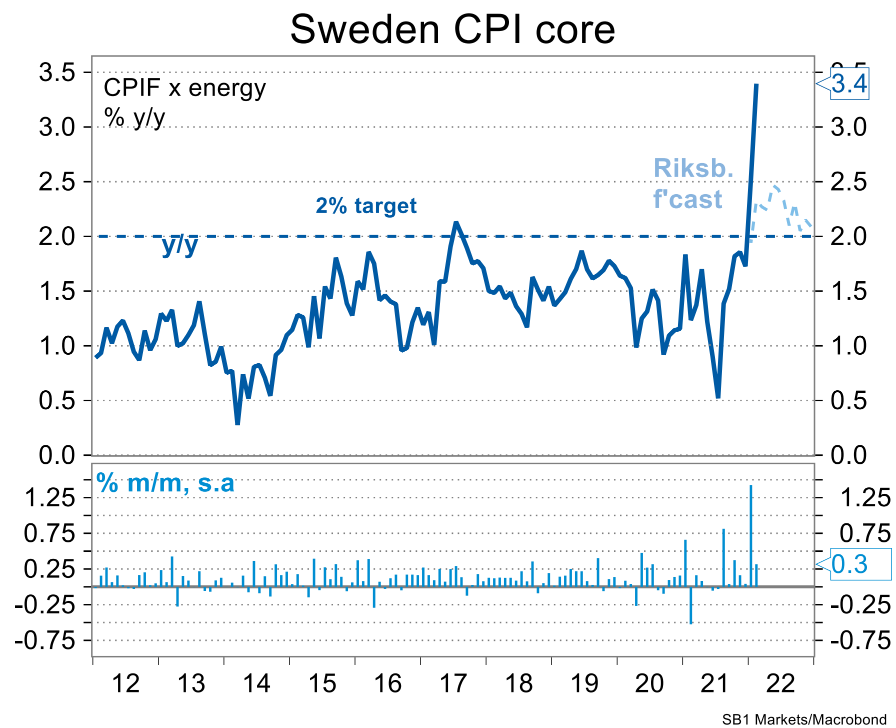
- However, the employment rate is still 1 pp below the record high pre pandemic level
- On the other hand: The no. of unfilled vacancies is record high and still increasing rapidly



Inflation is exploding, here too. Headline +0.6 p to 4.3%, the core 0.9 pp to 3.4%

… and 0.3 pp higher than expected. Still, core prices just up 0.3% m/m, following the 1.4% Jan jump…

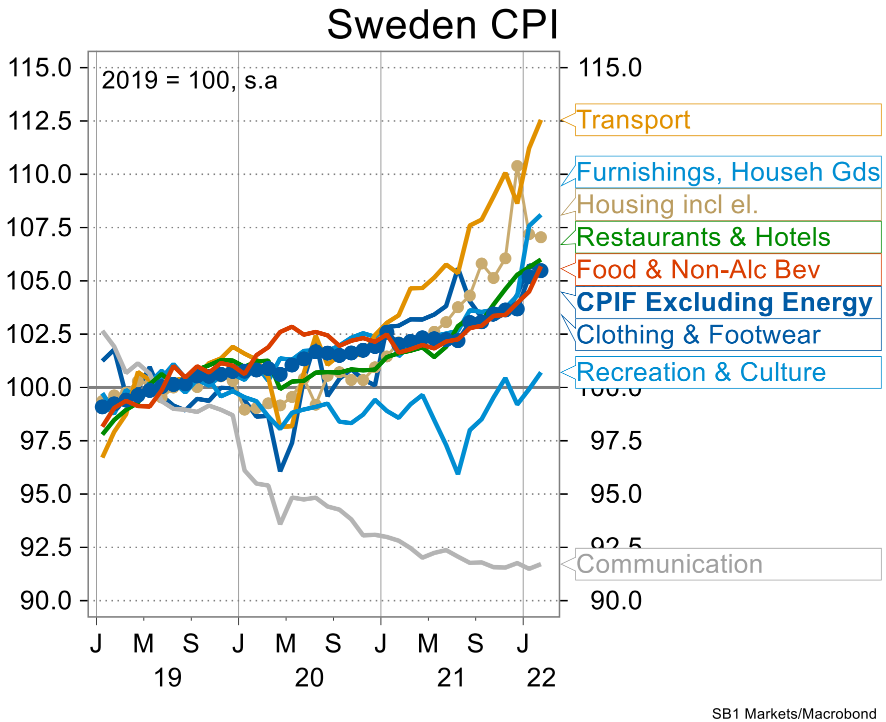


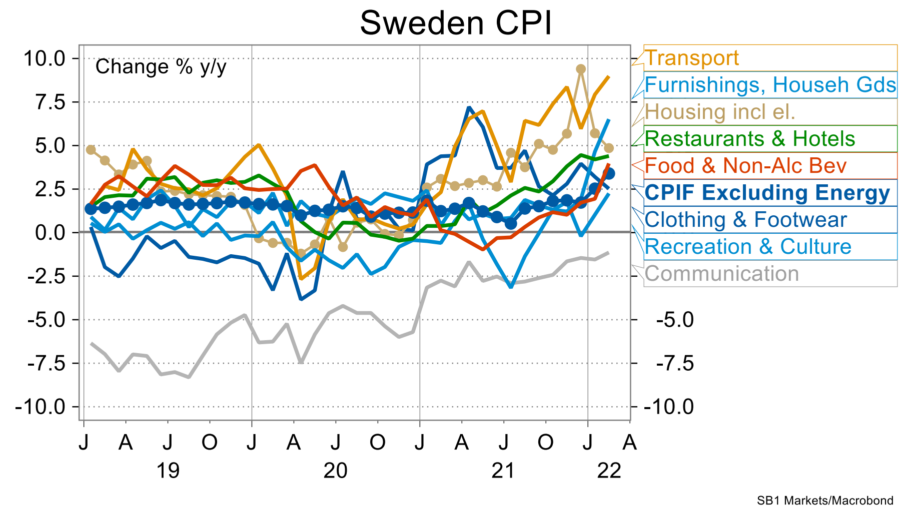


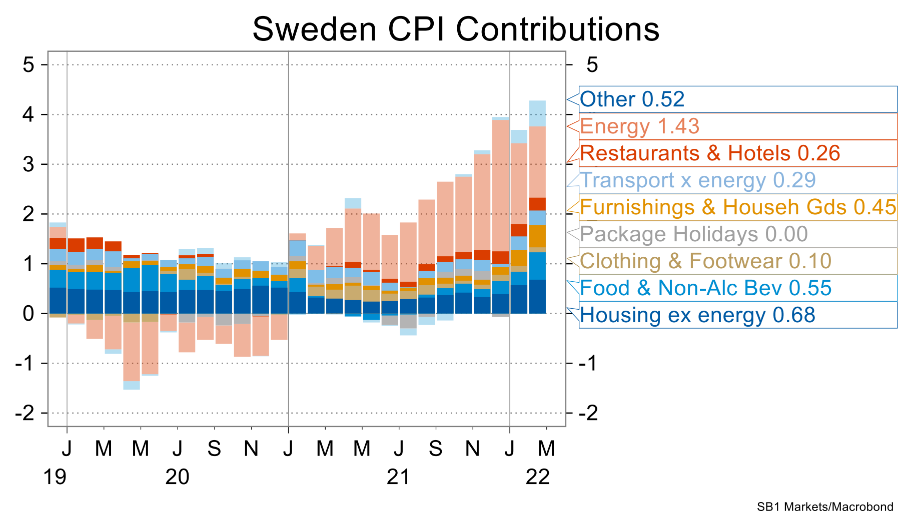
- **CPI-F x energy, the 'real core'**, rose 0.3% in February (seas. adj). The annual rate shot up because prices fell 0.5% m/m last February. Still, inflation has accelerated sharply, and the rate is now 1.1 pp higher than the Riksbank expected!
  - Why is inflation so high? Food prices up 4% y/y, furnishings 4.9%, hotels & restaurants 4.4%
  - All other measures of underlying inflation is sharply up – and at the highest level in some 30 years
  - The Riksbank will have to revise its inflation forecast sharply - and then to announce that the signal rate can be lifted before H2-2024. The market expect 3 XXX hikes in 2022, and 3 more in 2023 (rate expectations rose by 3 – 5 bps XXX on Monday, following the CPI report
  - Still, inflation is pretty well explained by the increase in electricity prices
- **Headline inflation** also accelerated, and not because energy prices accelerated

Inflation in Sweden: it's used to be just energy, but not so anymore

Energy prices fell in February too, but other prices are accelerating



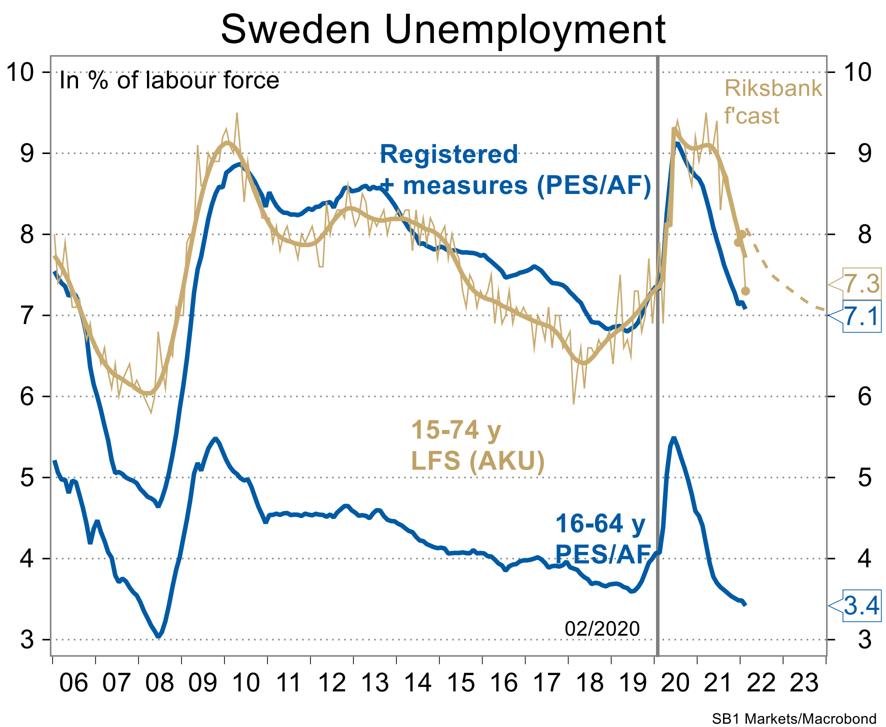


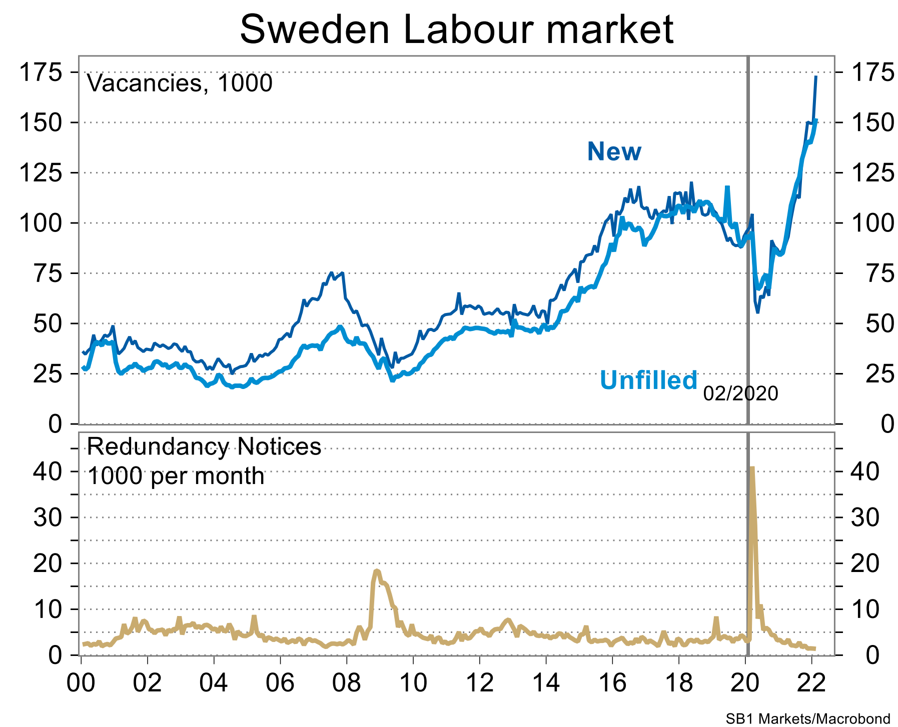


- Food prices rose 1.1% m/m. Furnishings, recreation, restauration also contributed at the upside in Feb.
- Housing ex energy is accelerating too

Unemployment suddenly collapsed in February, to 7.3% from 8.0%

Vacancies are soaring, from a record high level.

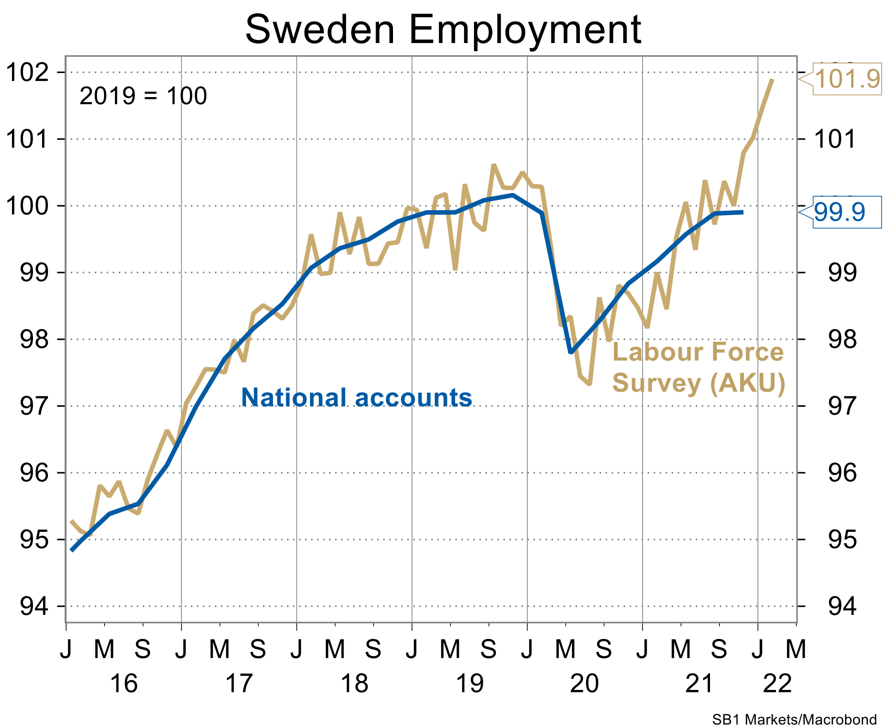


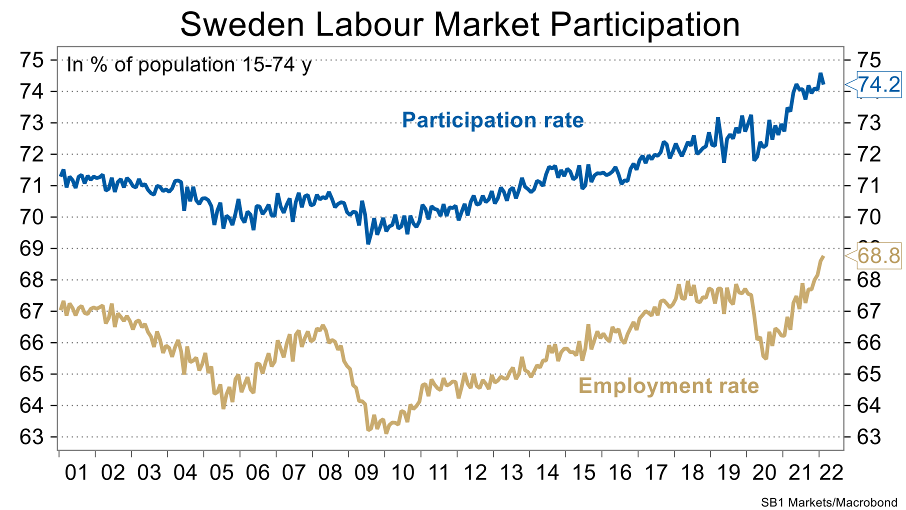


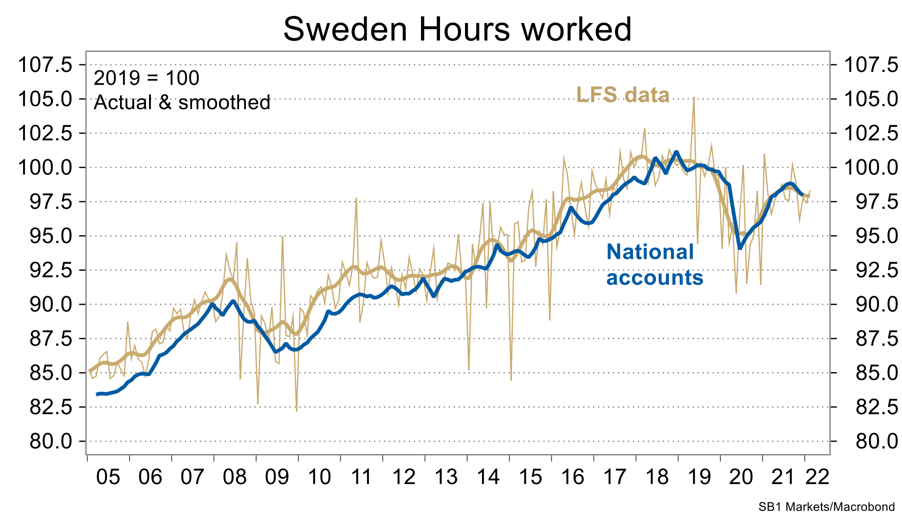
- The participation rate fell following the spike to a record high level in January, while the employment rate climbed further.
- The **LFS (AKU) monthly data** are volatile. The decline in unemployment in large but not unusual and it is normally wholly or partially reversed the following months
- Still, the trend is anyway down, 'open' registered unemployment is far below a normal lave, employment is climbing rapidly, the participation rate is record high, and vacancies are off the chart. In sum, the labour market is tight. The only counter argument: Hours worked is still below the pre pandemic level

Both participation & employment rates are the highest in 3 decades

Data were revises sharply up last months. The soft spot: Hours worked are still below the 2019 level

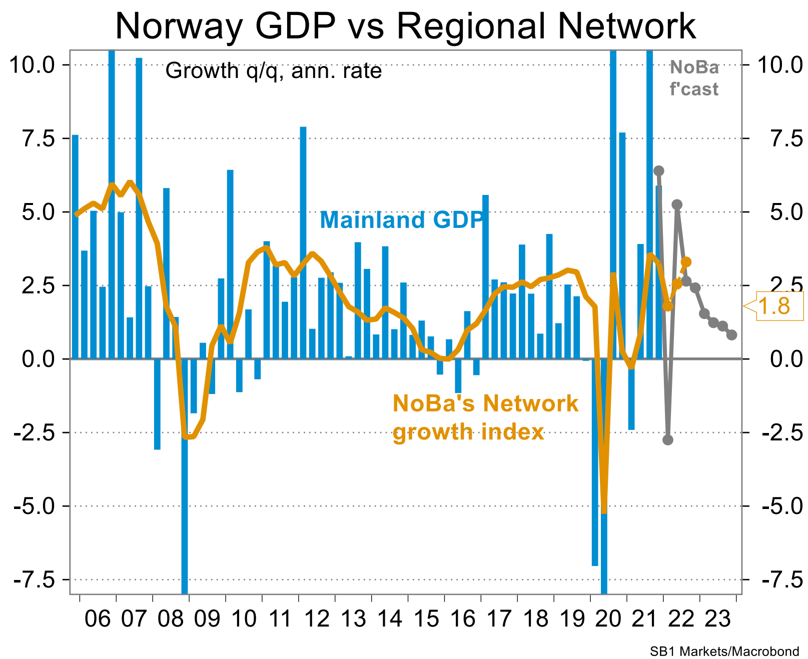






Norges Bank's Regional Network expect brisk growth, serious capacity constraints

… including lack of labour and much higher wage inflation. While the signal rate is far below neutral



- **Implications**
  - » Taken face value, the network report delivers strong arguments for <u>a more rapid pace in normalisation of Norges Banks policy rate</u>. Capacity constraints and labour shortages are building faster than ever before, wage and price inflation is expected to accelerate sharply
  - » So why spend one year to bring the signal rate up what the bank assumes to be the neutral rate. <u>When wage and price inflation is high, unemployment is below are normal levels as companies are reporting unusual capacity constraints, should not the signal rate be ABOVE the assumed neutral rate</u>?

Activity the past 3 months

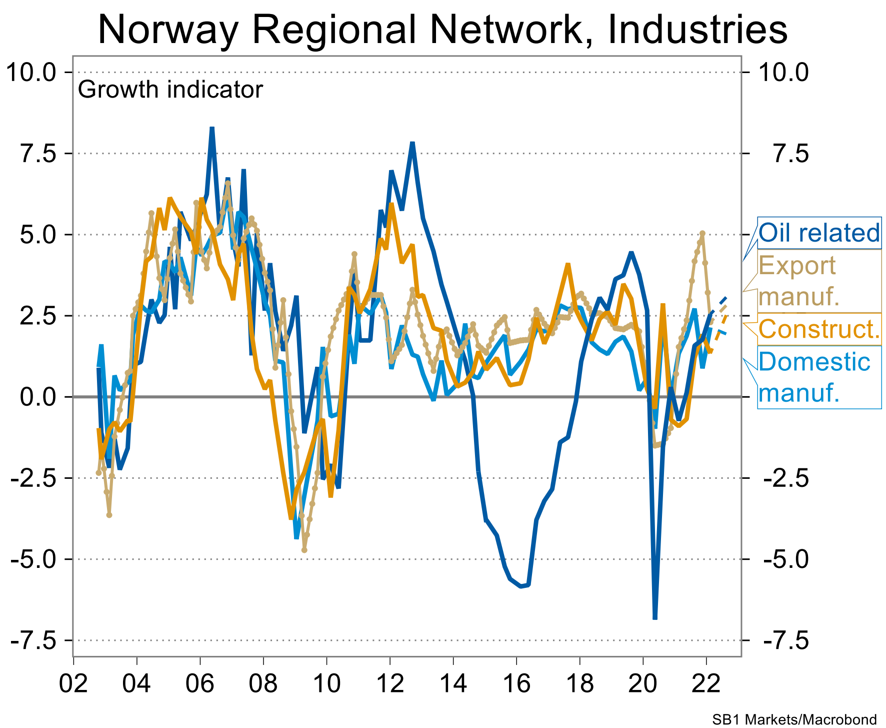
- The Network reports a 1.8% growth pace in Nov-Jan period (index value 0.9), 1.6 pp higher than we assumed. The Omicron restrictions have not been that serious, according to the Network. Actual Mainland GDP growth was 0.8% (annualised) past 3 months.
  - » Household services reported a decline, retail sales rather slow growth
  - » **Capacity utilisation** rose further and are close to ATH, and **labour shortages** became even more widespread, and are not far below ATH. <u>Both have climbed faster than ever the past 3 quarters</u>.

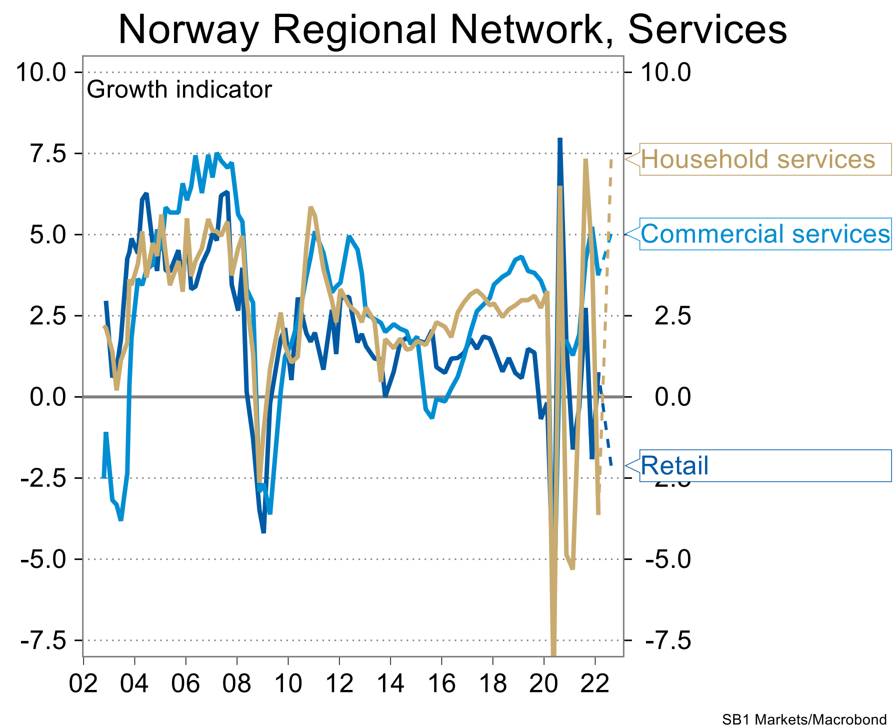
Expectations for the coming months

- The Network expects a 3.3% growth pace the next 6 months (index 1.65), up from 1.9% 3 months ago. We expected 2.4%.(which arguably was to too low estimate). In December, Norges Bank assumed a 2.5% growth pace over the next 6 months, from November. The survey was finalised February 18, that is well before Russia's invasion in Ukraine. Most likely, most companies has not changes
  - » Retail trad expects sales to slow – which is reasonable as consumption of goods have been 'artificially' higher than normal during the pandemic
  - » Household and commercial surveys expect strong growth the next 6 months, for good reasons
  - » Other sectors report growth at or above normal
- **Investment** were revised slightly down, from the highest level in 10 years
- **Wage inflation** expectations were revised up by 0.5 pp to 3.7% - and to 3.9% in the private sector. Expectations have not been revised more upwards q/q before
- Companies expect **prices** to increase at an unusual paces

Household services full speed out of the corona downturn

While retail trade recognises that the exceptional times are behind us. Other sectors report OK growth

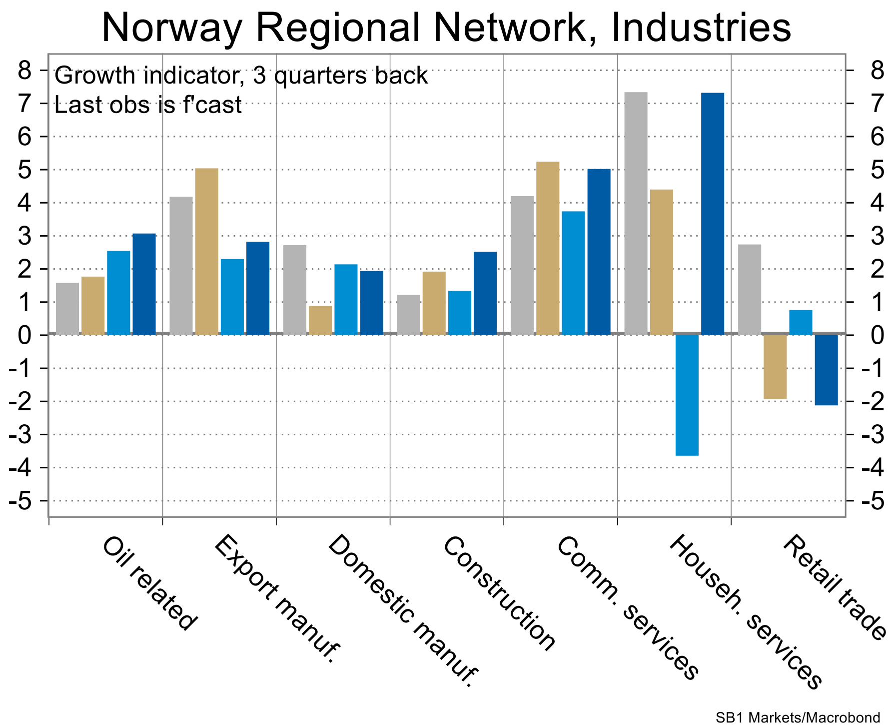




- Both household and commercial services expects strong growth – with household services in the lead, following the virus restriction downturn in Dec/Jan
- Export industries report slower but not slow growth
- Oil investments expect a further acceleration

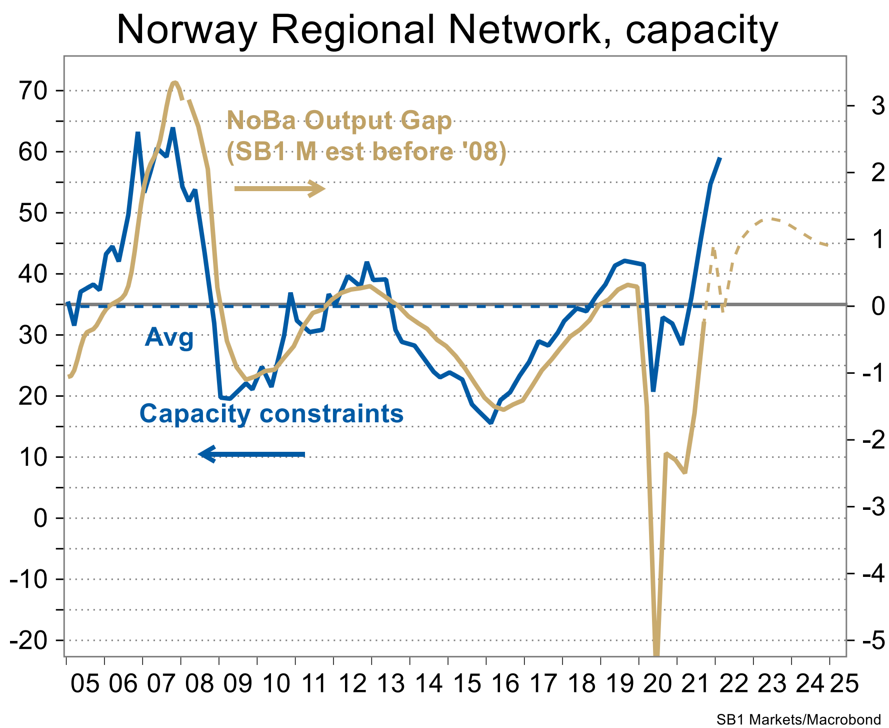
Just retail trade expect lower activity, most others expect higher growth

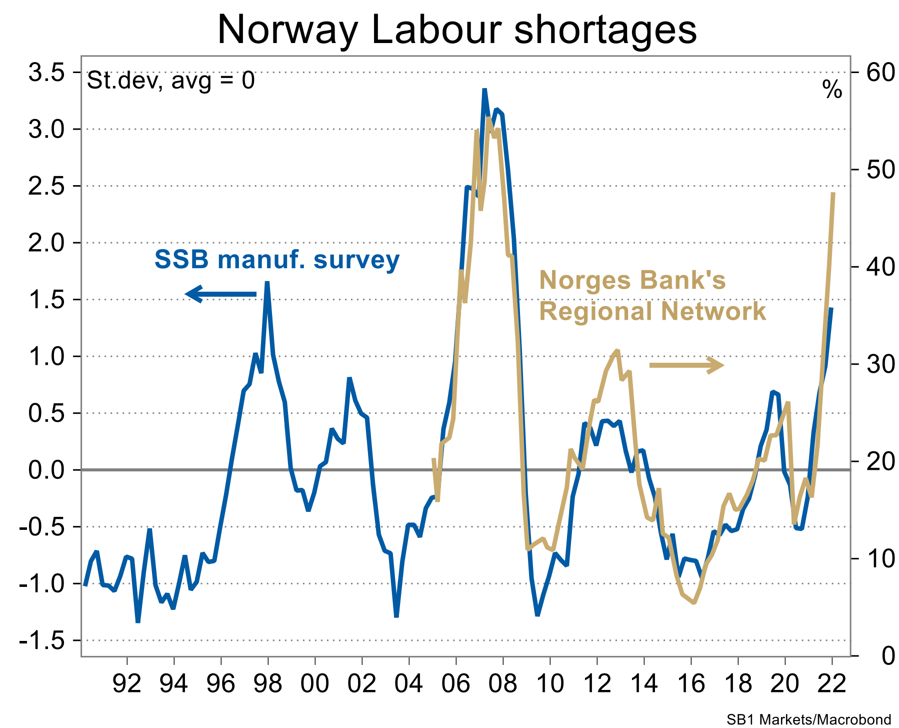
The inevitable normalisation of retail sales is well recognised. Strong growth in services



Capacity constraints close to ATH, NoBa will have to revise the output gap est. up

Labour shortages even more wide spread, not far below the 2007 ATH



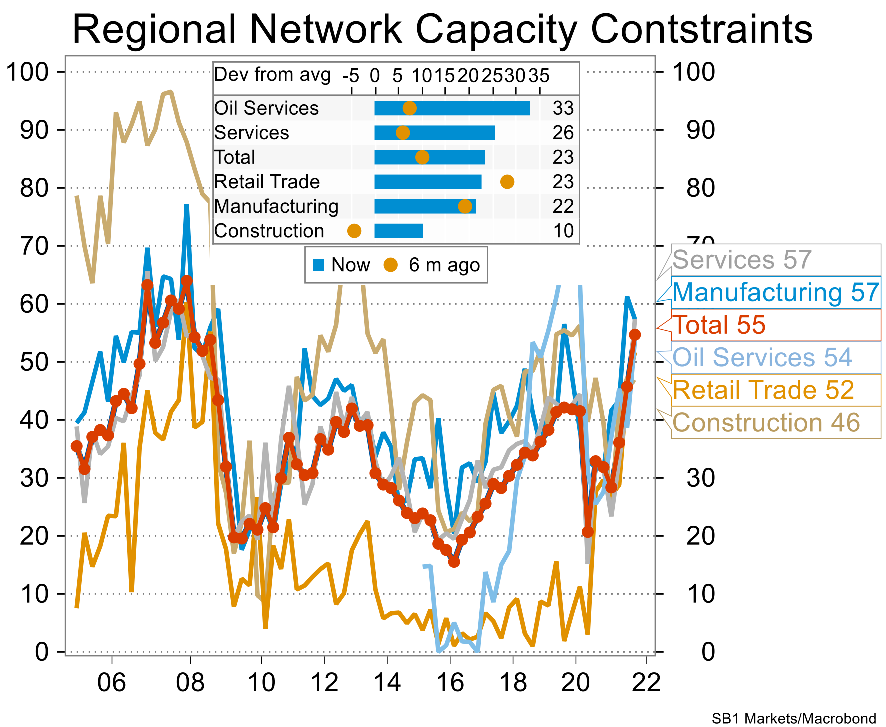


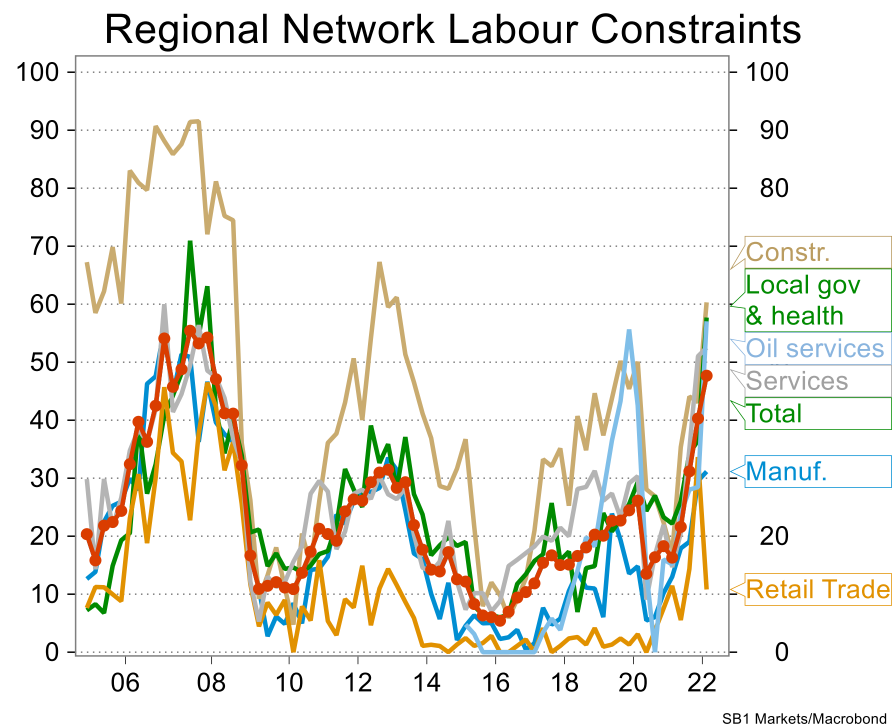
- More companies than since 2007 are reporting **capacity constraints** following the steepest surge ever, over the past 3 quarters. The correlation to NoBa's assessment of the **output gap** is not 1:1 but the Network report suggest than the Bank's estimate has to revised substantially upwards. The 2.1% unemployment rate in February, and a stagnant labour force participation rate also indicate a higher positive output gap
- **Labour supply** shortages are shooting up, also <u>faster than like never before</u> – and the level is rapidly approaching the ATH level as in 2007. Given growth expectations well above average – and plans to lift employment, the labour market will very likely tighten further the coming months. Where will companies find available workers?
- **Wage expectations** have never climbed faster either, check the two pages forward

SpareBank 1 MARKETS

Retail trade reports lower capacity utilisation the grand total sharply up

All sectors report higher capacity utilisation than normal

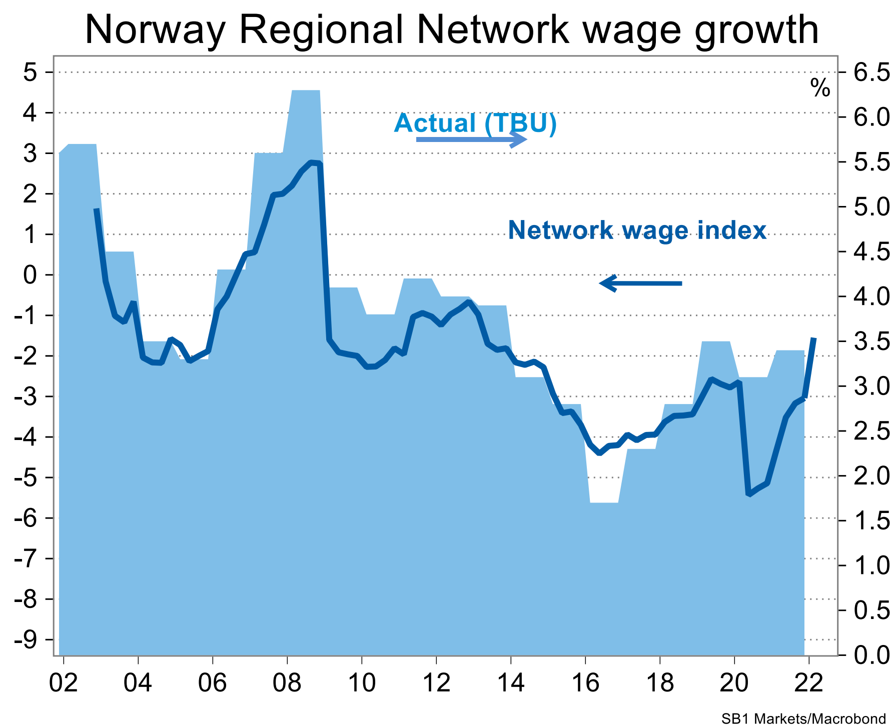




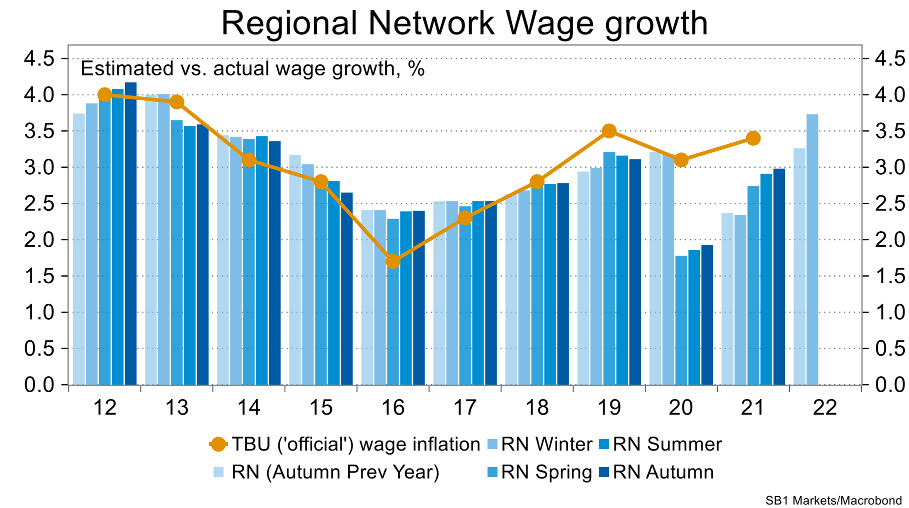
- All sectors are reporting a substantial increase in more labour shortages – retail sales
- Lack of raw materials and delivery problems have also (of course) increased

Tic toc, tic toc. Wage expect. on the way up, approaching 4% in the priv. sector

The average wage expectation at 3.7% but at 3.9% in the private sector. NoBa will revise sharply upw.



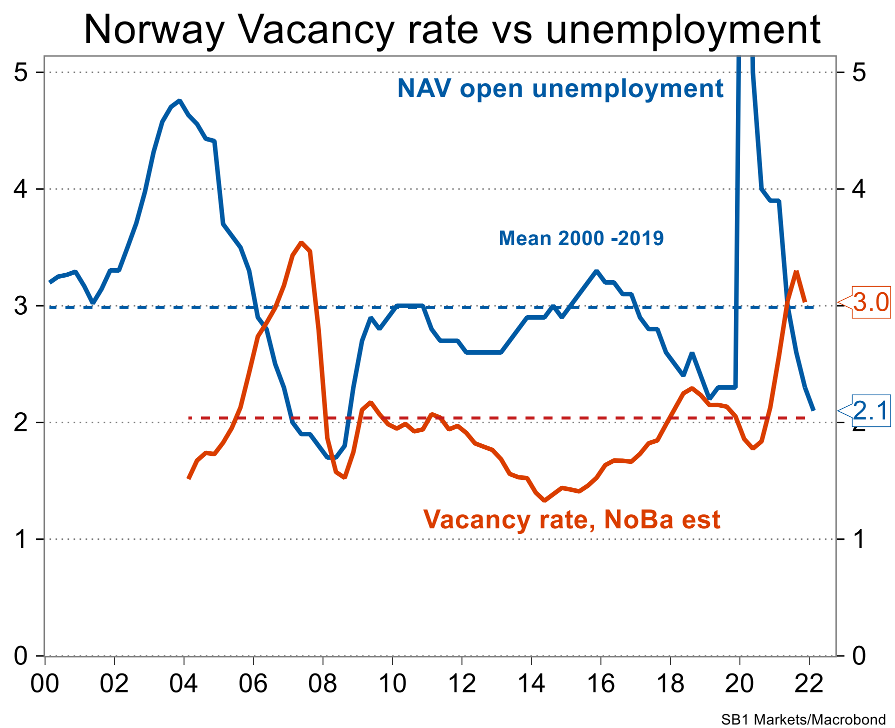
- Just once, in 2011, the Network has revised up its wage expectations more in one go than between Feb and May

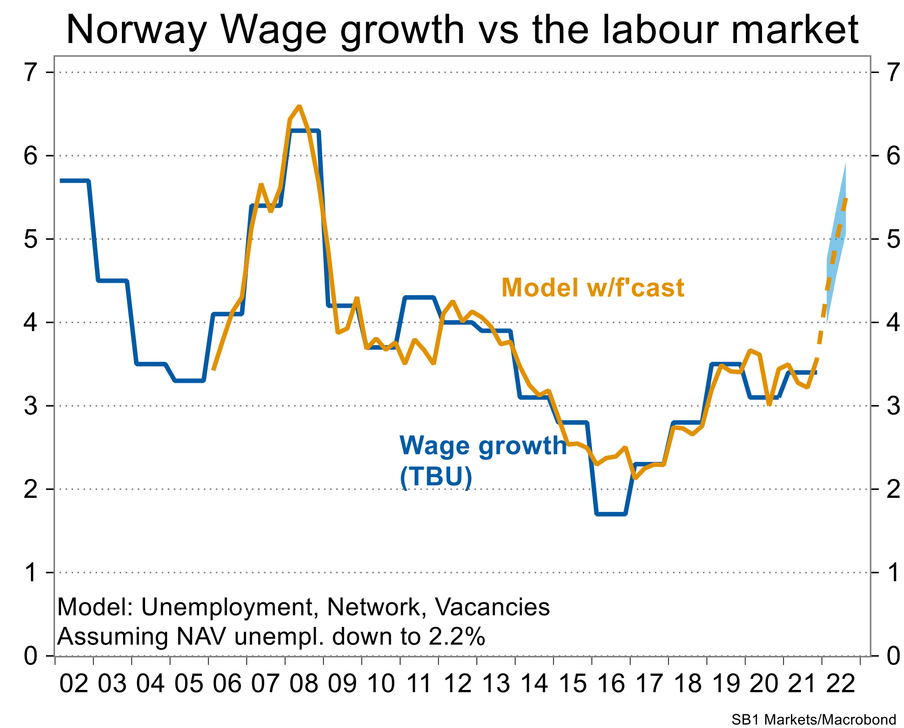


- **Wages growth in 2021** was 3.5% (all employees, and 3.4% in areas covered by wage negotiations) in 2021, well above the Network estimate last December
- **Wage growth in 2022** is expected at 3.7%, up from the 3.2% December forecast. We have never seen larger quarterly upward revisions before (but a similar adjustment was reported in Q2 2007 and Q2 2011)
- **In Norges Bank Q1 expectation survey**, economists in trade unions expected 4.2% wage growth in 2022, while employers associations forecasted a 3.9 growth, both up by 0.75 pp vs. the Q4 survey (and close to +1 pp vs the Q3-21 survey)
- **Norges Bank** assumed 3.2% wage growth in 2022 in its Dec MPR. Now NoBa will now have to revise its forecast at least to 3.6% (SSB's f'cast last week). We think 3.9% or higher is too much for swallow for NoBa, in one go. So, let's say 3.7%

The labour market is tightening rapidly, and wage expectations are slipping

We not expect this spring's wage negotiations to yield 4% wage growth. However…

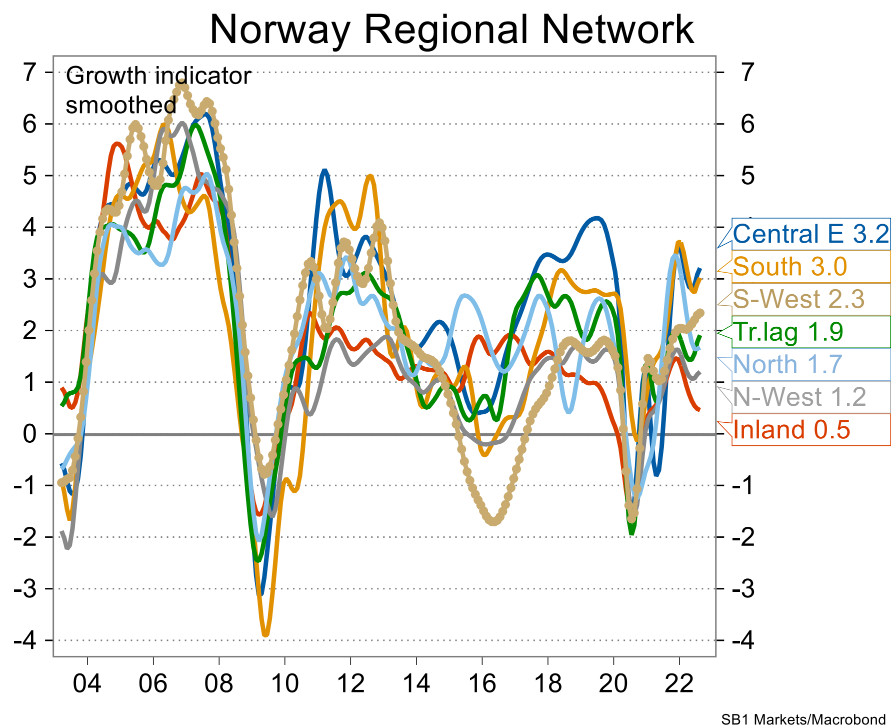


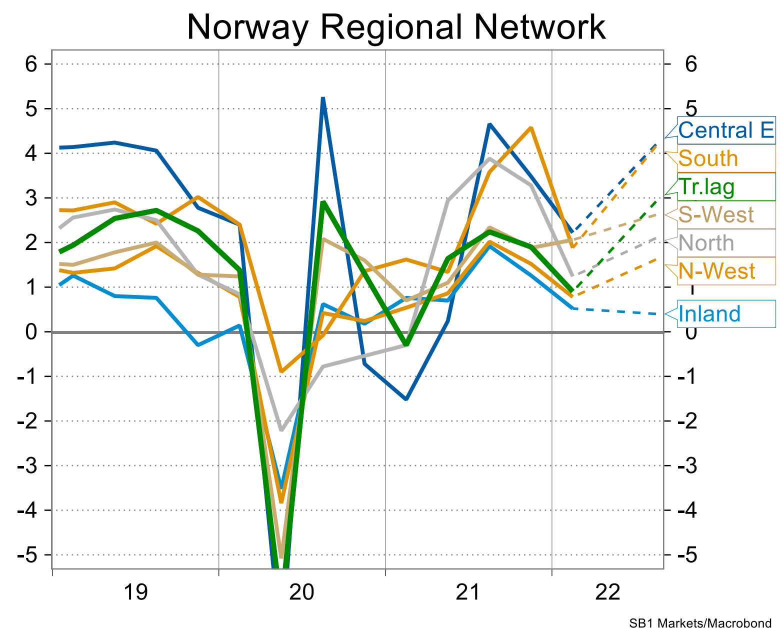


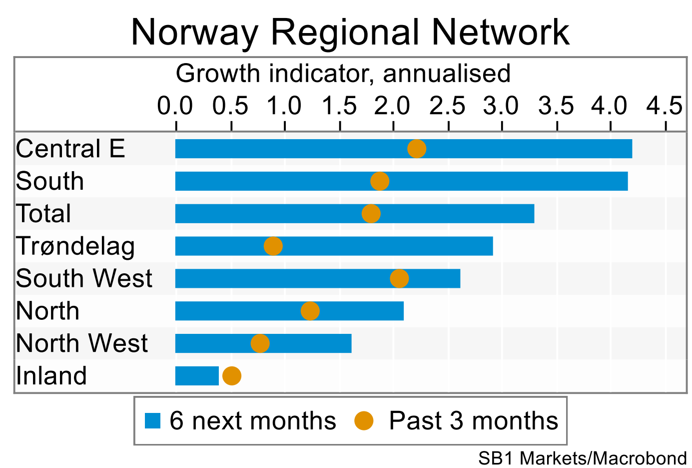
- Actual wage inflation may easily accelerate to 4% through 2022 – if the economy is not hit by a negative demand shock

Regions: All the Inland expect faster – and most sectors above trend growth

Lack of capacity may dampen the growth outlook



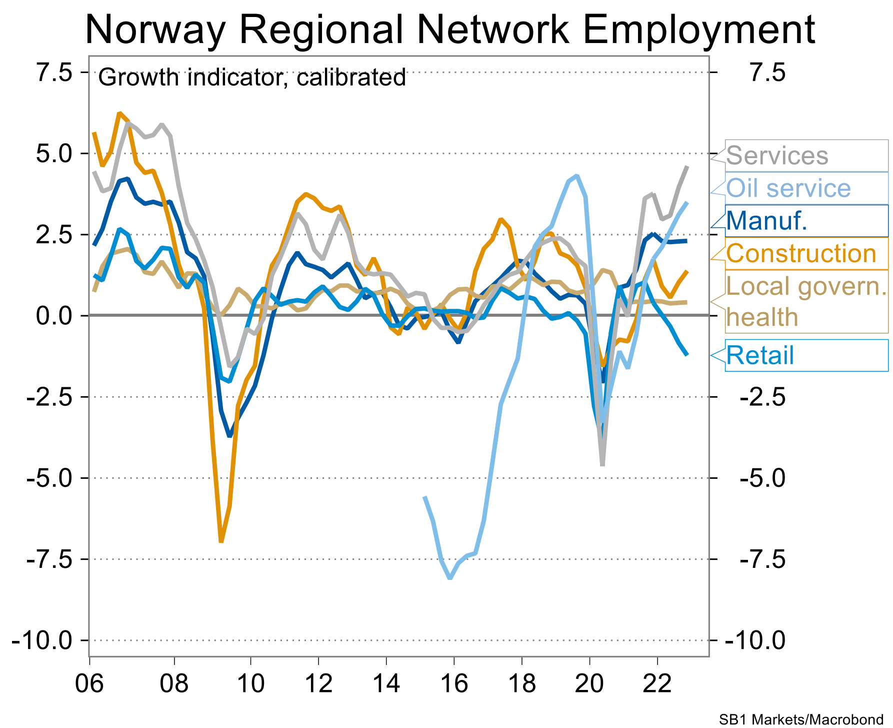


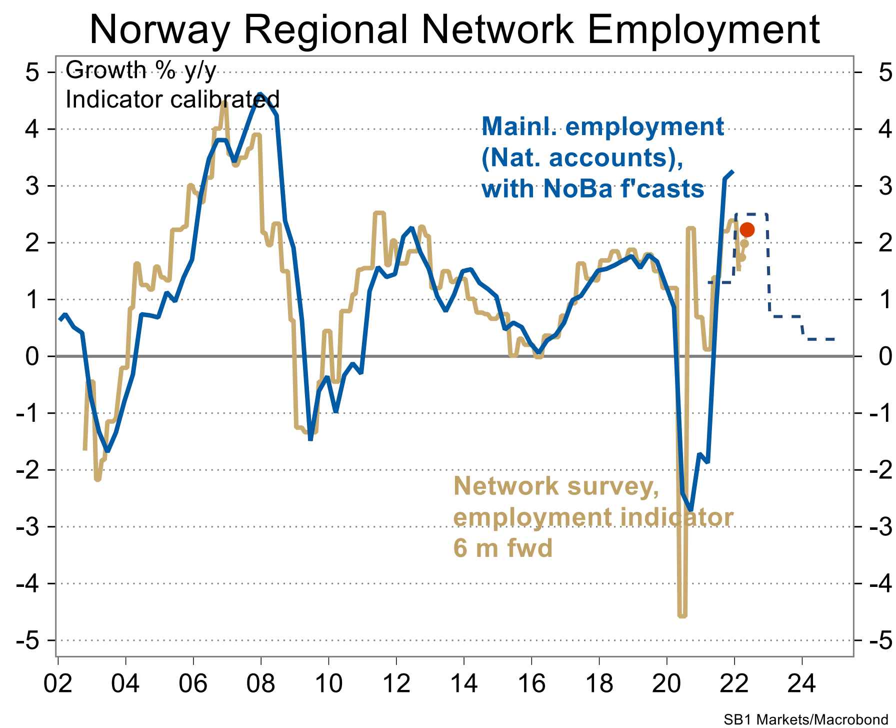


- All regions reported slower growth during the fight against the Omicron variant

The network reports & expects rapid employment growth

… just retail trade on the downside. BTW, where will all those employees come from??



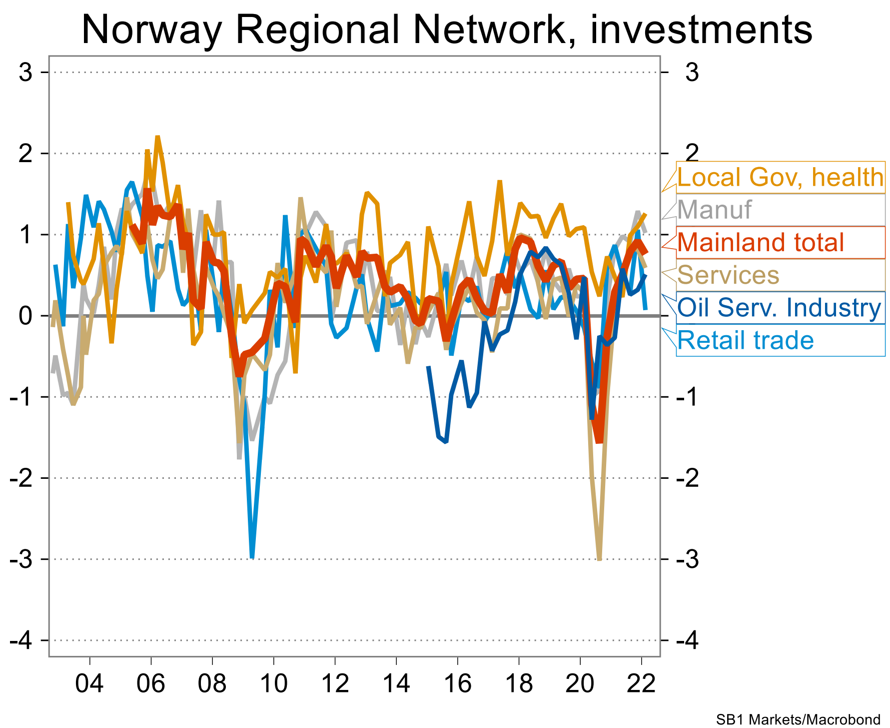


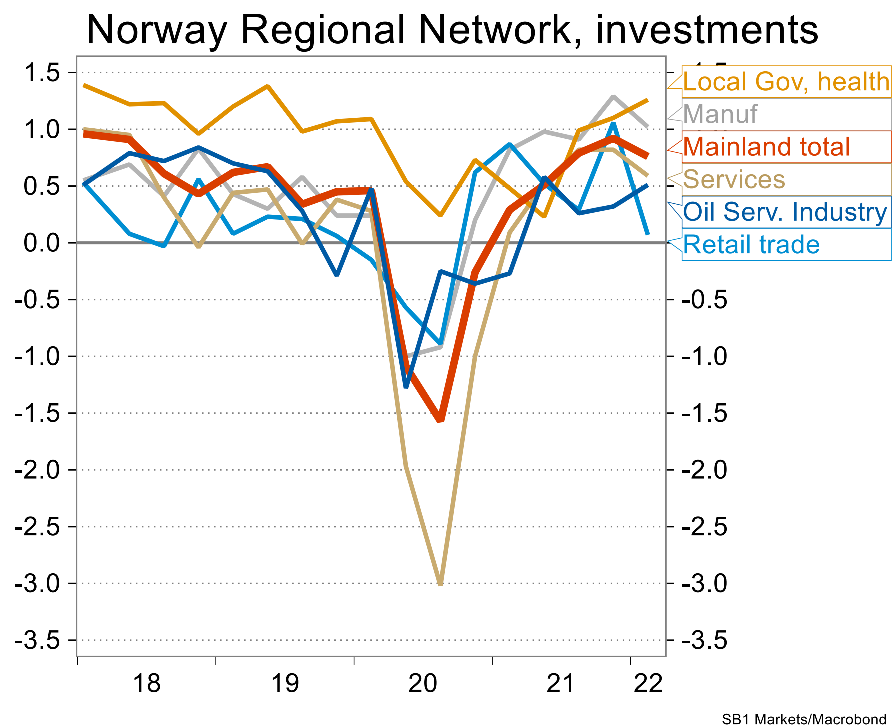
- Services & oil services are in the lead
- The NoBa forecast on the chart to the right represents the bank's annual averages

SpareBank 1 MARKETS

The Network revised investment plans slightly down – but plans are still upbeat

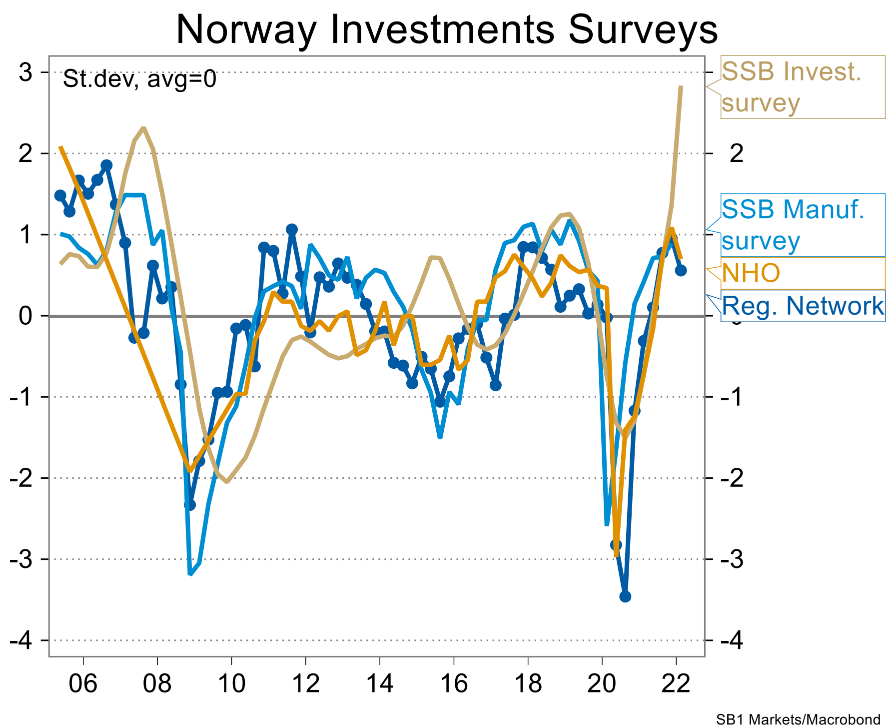
Retail trade will take a break, others not – even if growth ambitions were revised slightly down

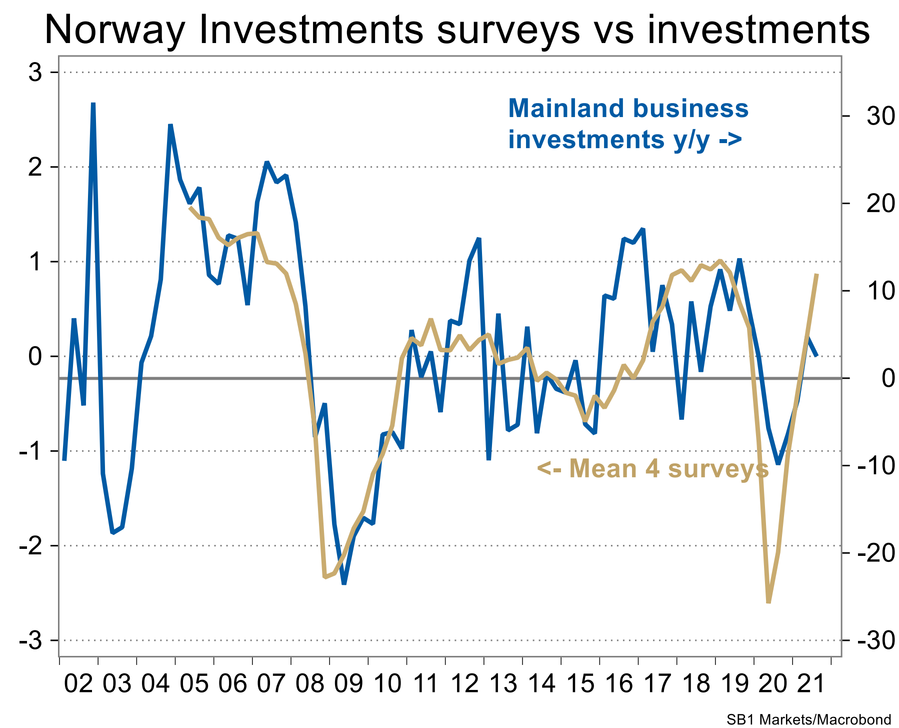




Other investment surveys tell the same story: a strong outlook

SSB's investment survey reported extremely strong investment plans, other surveys not that strong

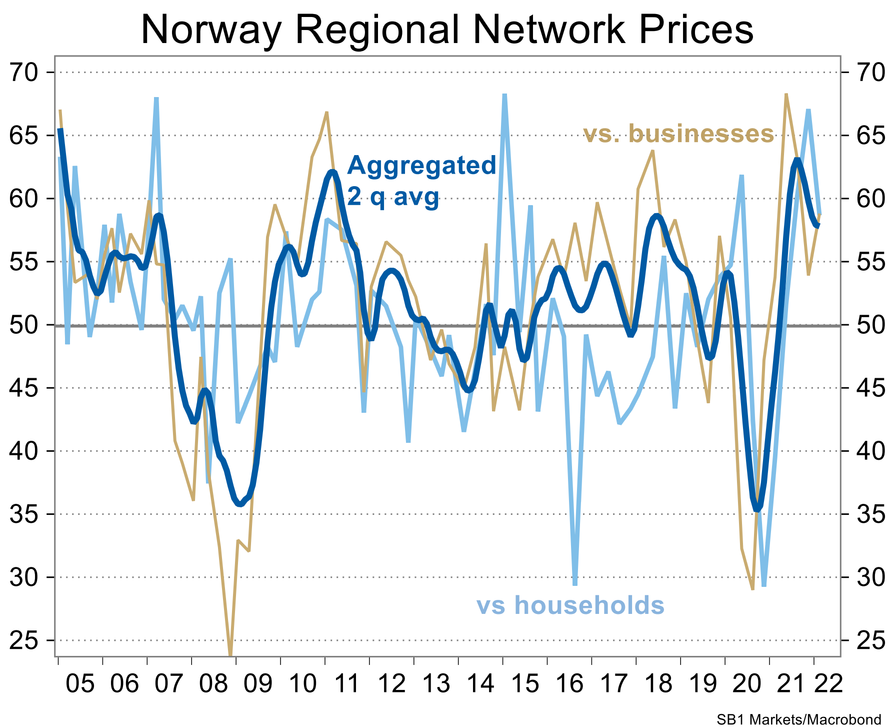




* However, all surveys signal growth in investments above trend – and in sum a substantial lift in Mainland investments

The network signals much higher price inflation than over the past 15 years

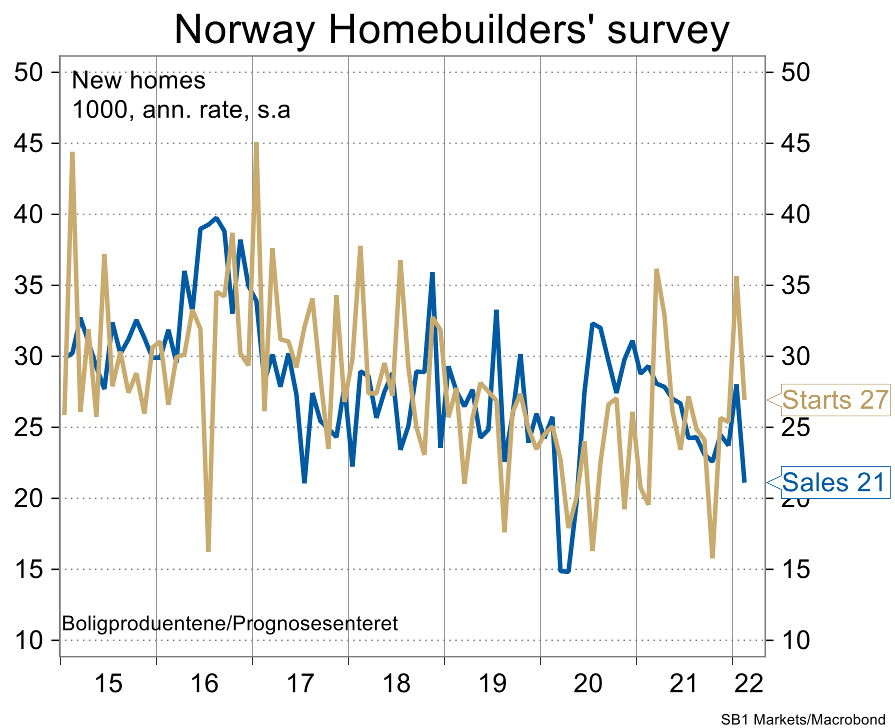
Which is not a big surprise, of course

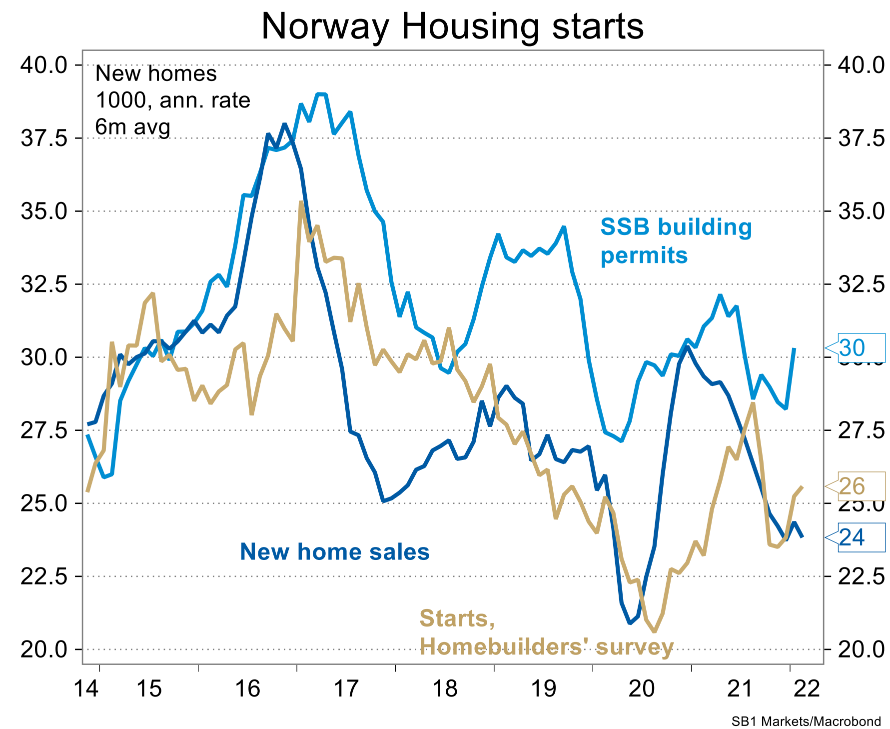


- However, the correlation vs. actual CPI (headline or core) not close to non-exist

New home sales sharply down in February but Jan/Feb avg at a ‘normal’ level

Starts fell to but from a high level, the Jan/Feb level on the high side

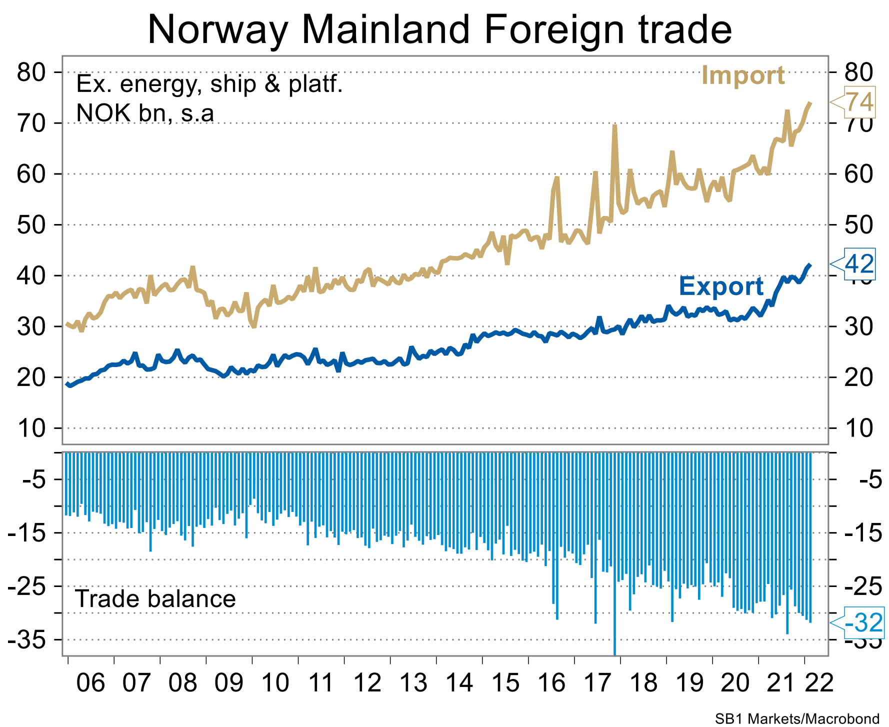


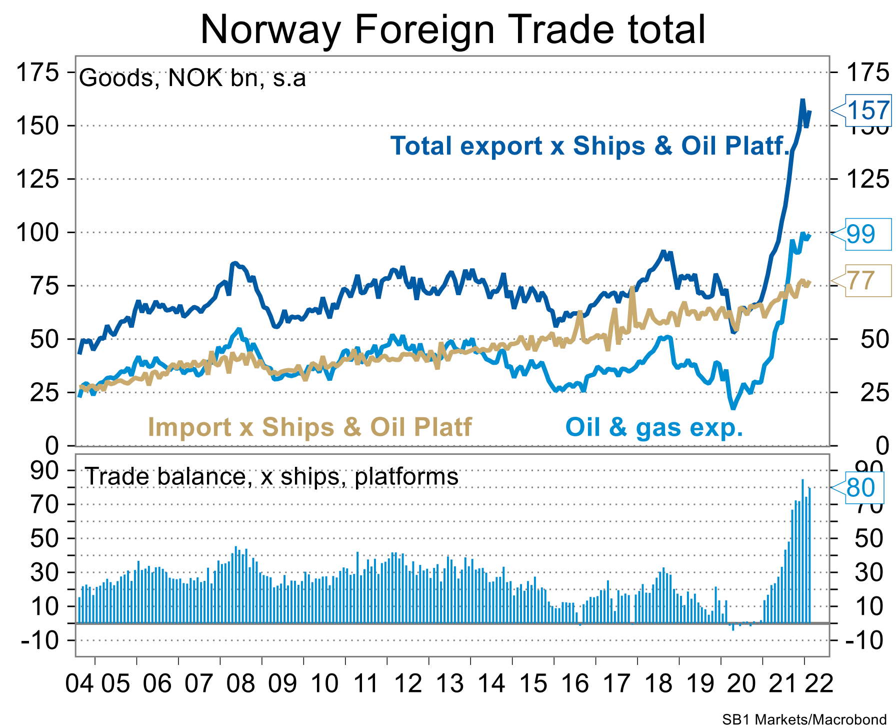


- **Boligprodusentene (Home builders)** blamed higher material and land costs for the decline in sales, not an unreasonable hypothesis (but strangely enough, higher interest rates has not been mentioned). However, as existing home prices are substantially up over the past year, new homes are probably still competitive. The war in Ukraine is also mentioned as reason for the decline sales in February, even if the 2nd hand housing market was strong in Feb.
- **SSB** also reported at decline in starts in (building permits) last year but the going rate during H2 was 30’, which is not a low level
  - » The two stats for housing starts are far from identical. Many single home projects are not included in the Home builders’ data. Nursing and student homes are not included either

Trade surplus at NOK 80 bn, 28% of GDP! Both Mainland imports & exports up

The Mainland trade deficit is widening but petroleum exports are soaring

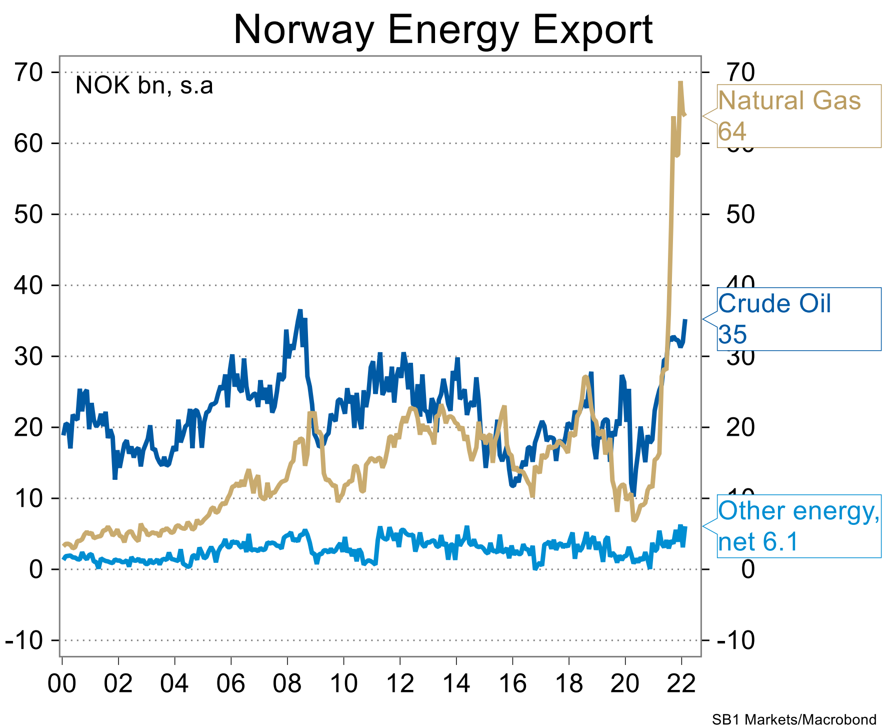


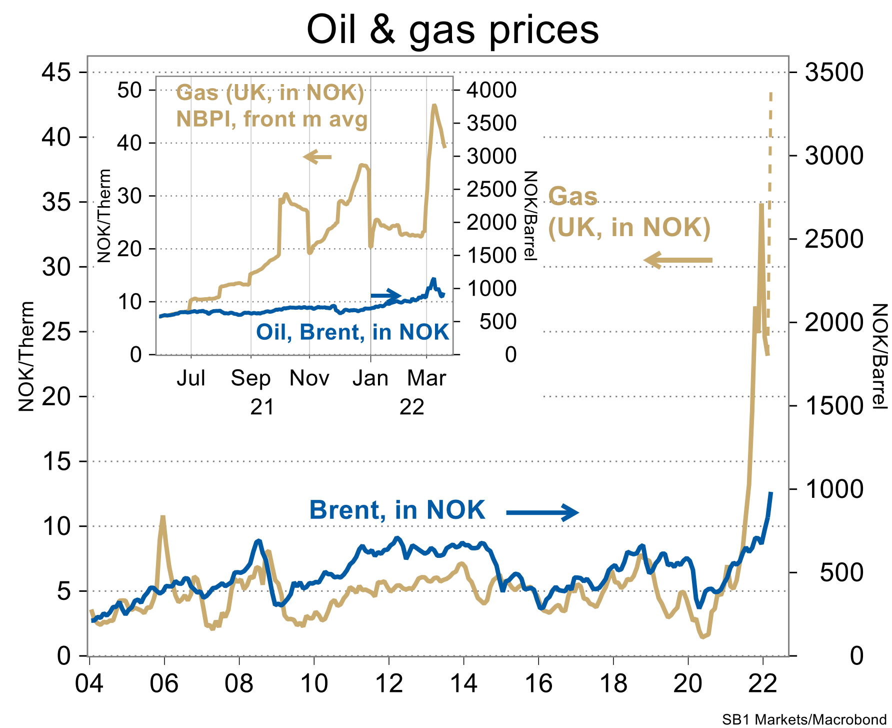


- **The <u>Mainland (non energy) trade deficit in goods</u>** rose marginally to NOK 32 bn, equalling 10% of Mainland GDP (however, most imports for oil investments are categorised as Mainland imports and sales from the Mainland to the oil sector (both op.ex and cap.ex)
- **Non-energy exports** rose further in February, to NOK 42 bn. Exports are up more than 30% since 2020, mostly due to higher prices but volumes are up as well. Fish, metals & chemicals are reporting string growth
- **Imports** added some few bn and remain at 10% growth path
- **Gas exports** fell slightly in February but remains at an incredible high level. In March the export value will climb to an even more incredible level, thank you Mr. Putin. **Oil exports** rose almost to an ATH – and the oil price was ATH, measured in NOK
- **The trade surplus in goods** (ex ships/platforms) fell rose to NOK 80, an enormous amount, 28% of Mainland GDP!
- **The government's <u>extra</u> revenues** from oil and gas exports (and direct ownership) now equals some NOK 80 – 90 bn per month

Gas exports marginally down in February but just wait for March…

Gas exports is now equalling more than 20% of Mainland GDP!

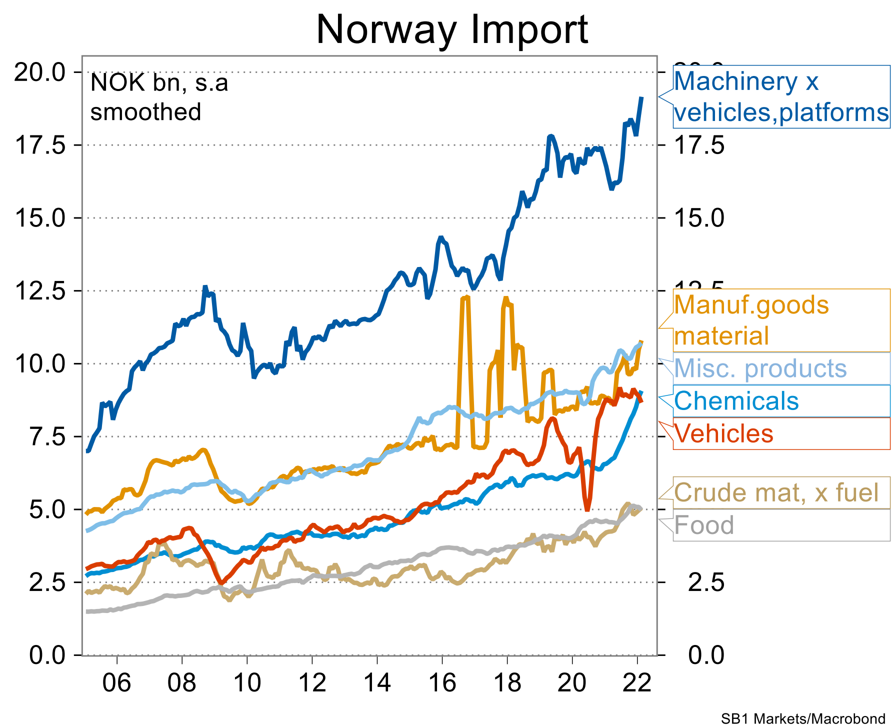


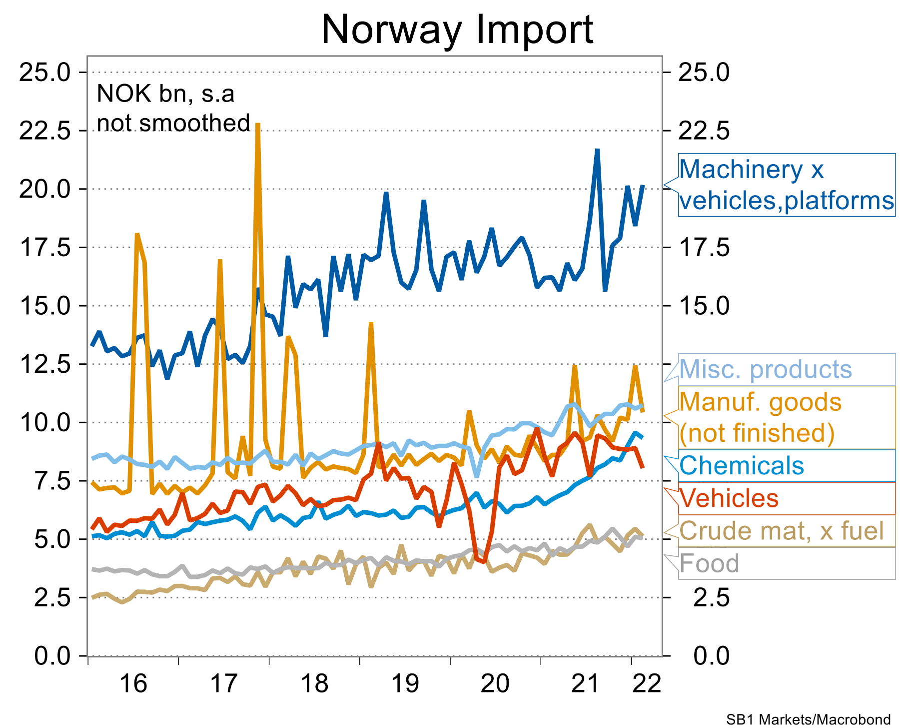


- **British gas** prises rose fell in 30% January and slightly in February as well. (The NBPI at the charts to the right, the average for each month, calculated from the start of the month, the front month, check the small chart inserted). So far in March, prices are up some 80%. So export values will be rather impressive in March. Gas exports were close to unch at NOK 64 bn
- Measured in NOK, the **oil price** is at a an ATH level. Oil exports rose to NOK 35 bn, close to ATH (from 2008)

Most imports are trending upwards

Vehicle imports down in January – in line with auto sales

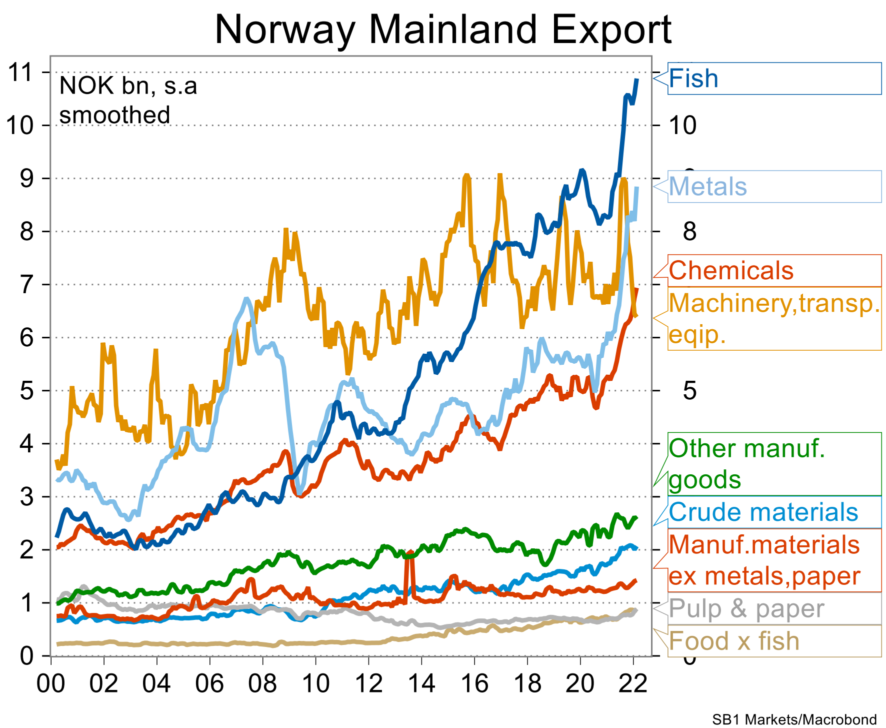


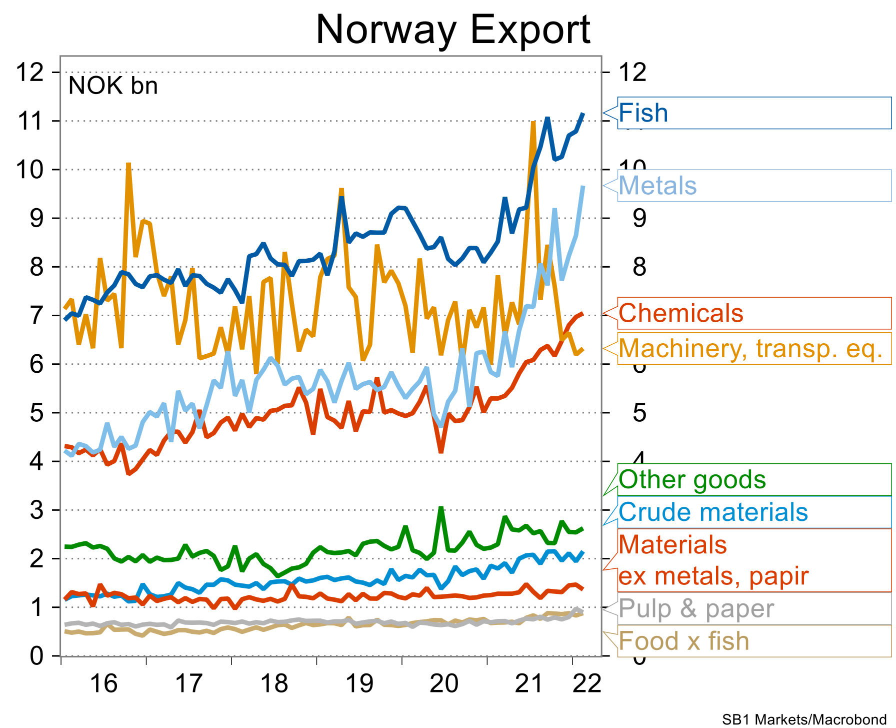


- The spikes in imports of manufactured goods are due to unfinished platforms or ships

Fish exports are surging, metals, chemicals sprinting upwards too

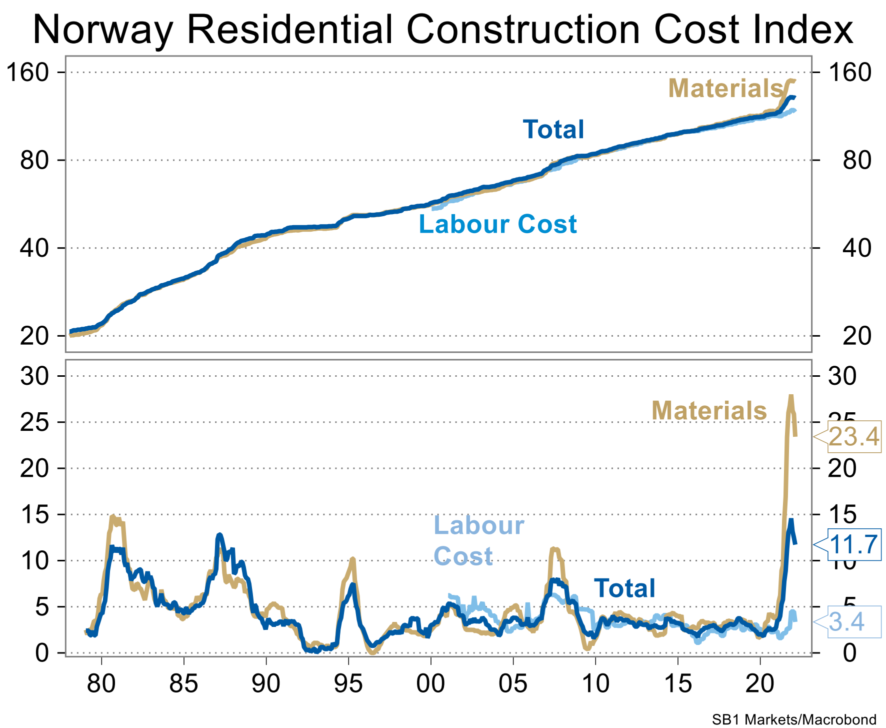
Exports of machinery & transport eq. sharply down recent months, level unch. from 2014

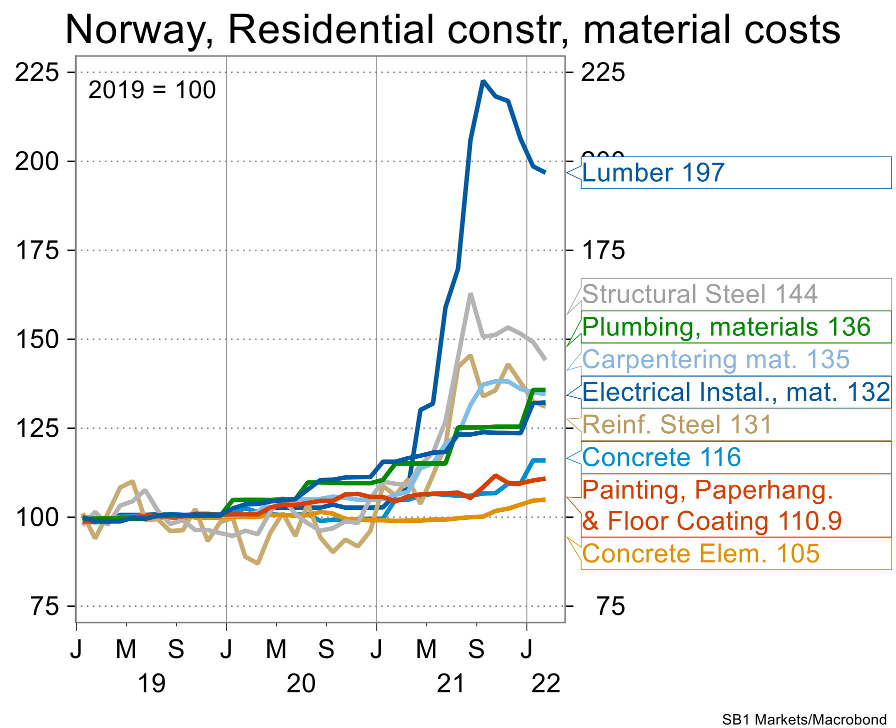




Cost pressures in the construction sector had peaked. But..

the war & sanctions may push prices higher again





- In total, **material prices** have flattened the past 5 months, as lumber prices have fallen 10%. The annual inflation rate has moderated slightly but remains at 23.4%! (The previous record was 15% back in 1980!)
  - » Steel prices, and carpentering materials have also headed down recent months. Other types of materials are still heading upwards
- **Labour cost inflation** slowed to 3.4% y/y in Q1 from 4.5% in Q3 (which was the highest growth rate since 2009)
- Including labour costs, the **total building** cost index is up by 11.7%, down from the ATH at 14.6% at the peak in Oct

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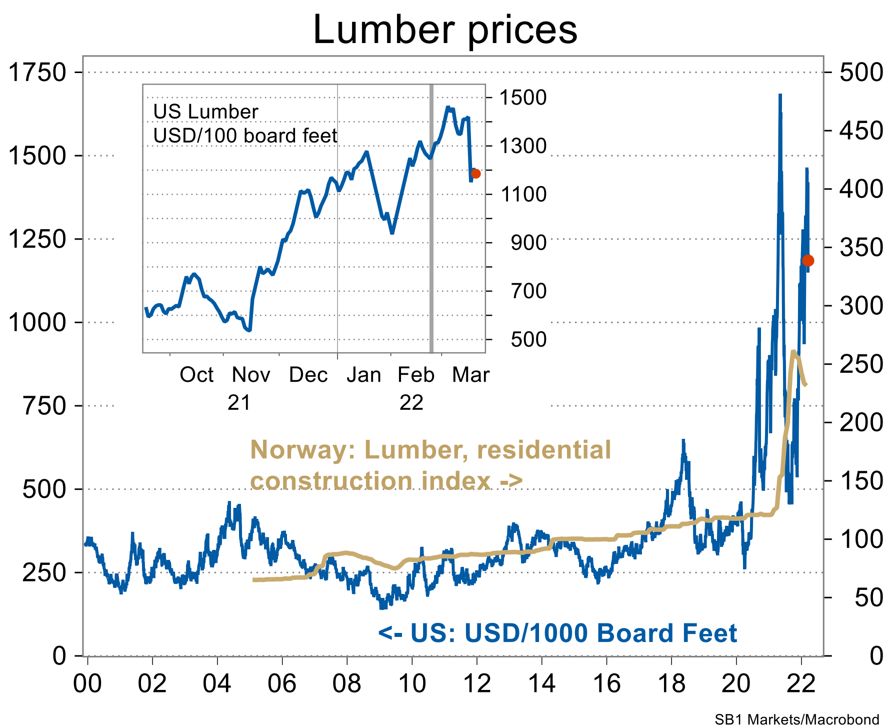
New warning: In the US, a 2nd lumber wave!

Lumber (2''x4'') prices on the way up again but not further after the Russian invasion in Ukraine



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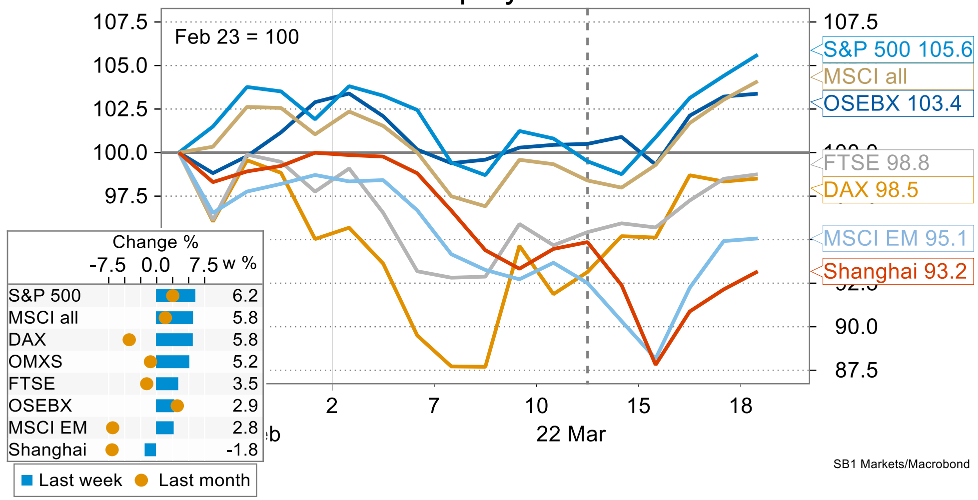
S&P500 up 6.2% - and up 5.6% vs Feb 23. Yields up. Oil & metals down

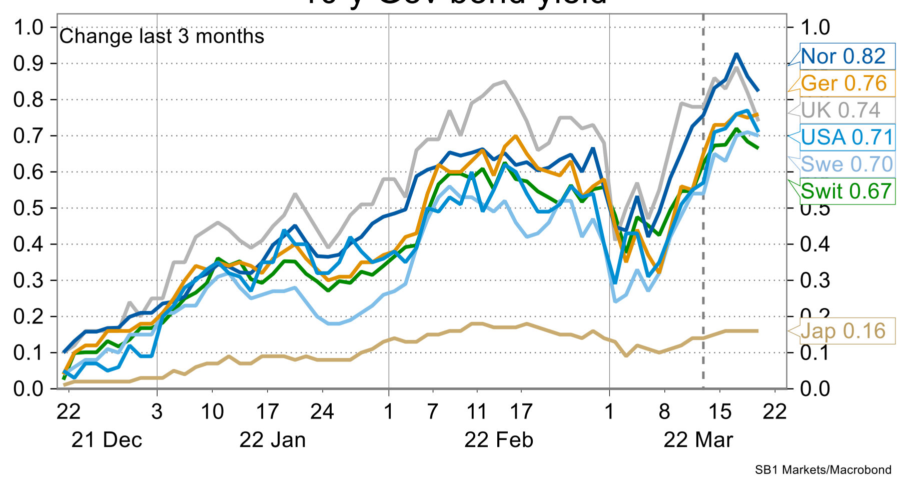
Some sort of peace hope trade? Chinese quities sharply up too, probably mostly due to new policy signals

Equity Indices

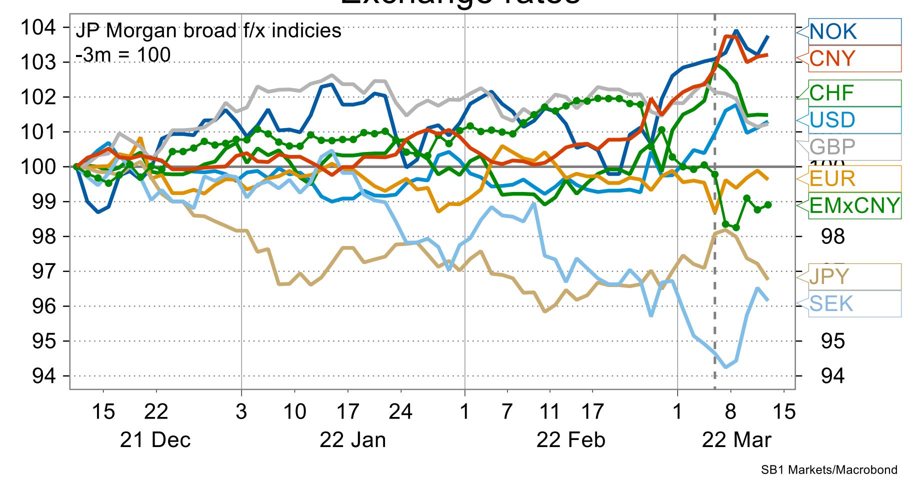


Oil vs. metals

10 y Gov bond yield



Exchange rates



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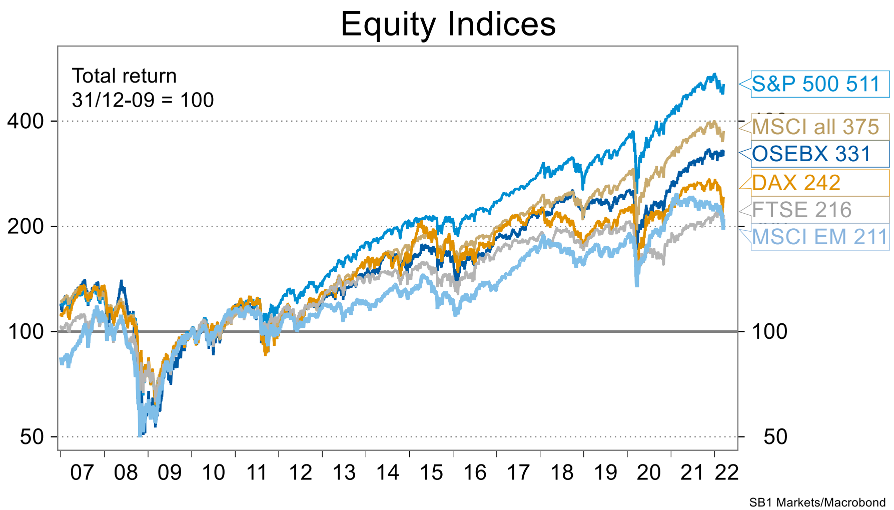
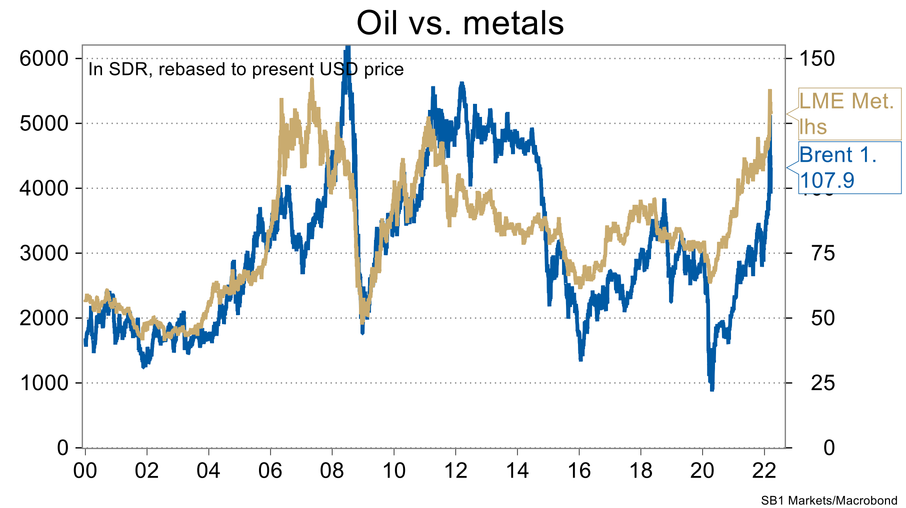
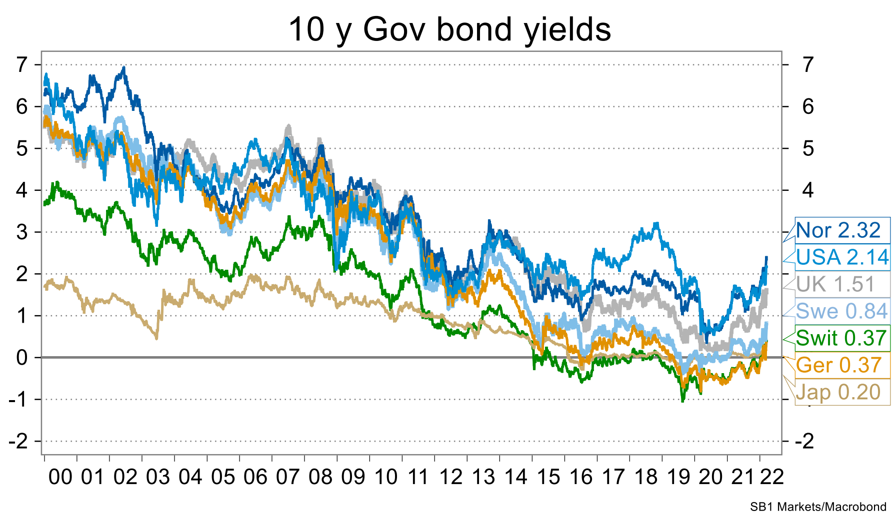
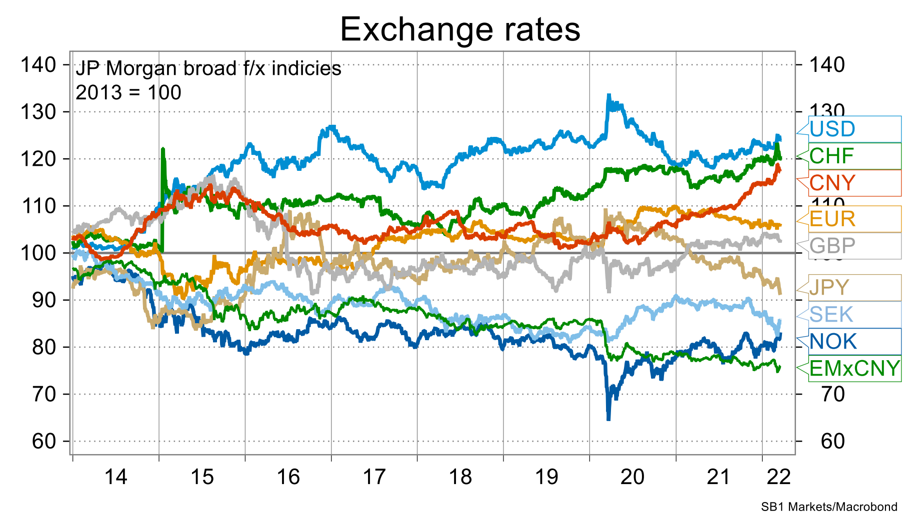
The big picture: Stock markets down, bond yields up

Oil exchanges, like OSEBX and FTSE have feared better than others recent months



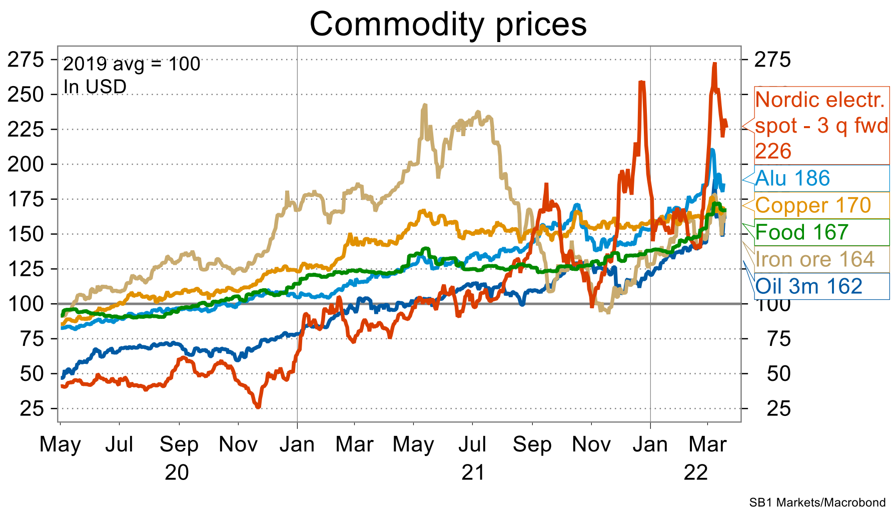


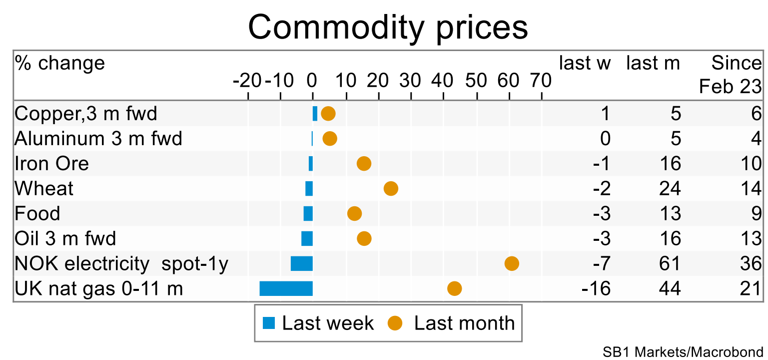


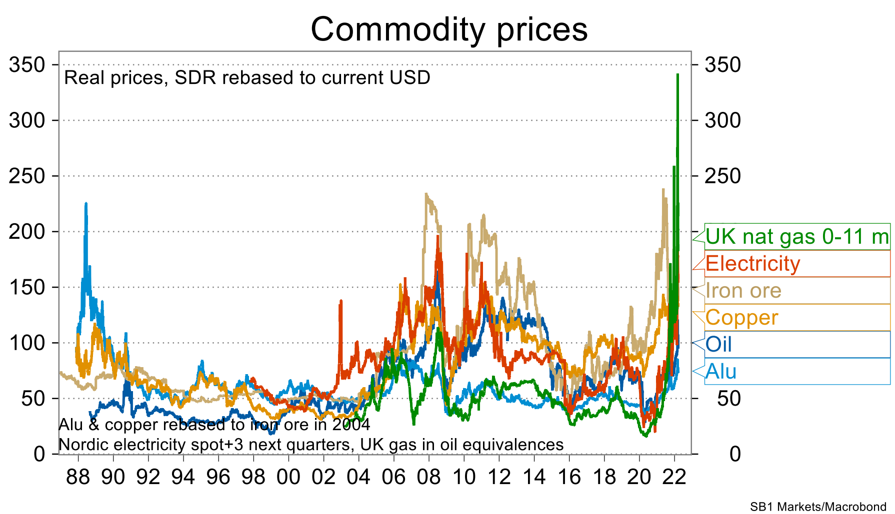


Most commodity prices down last week too

Most price changes since the start of the war are significant but not that dramatic anymore



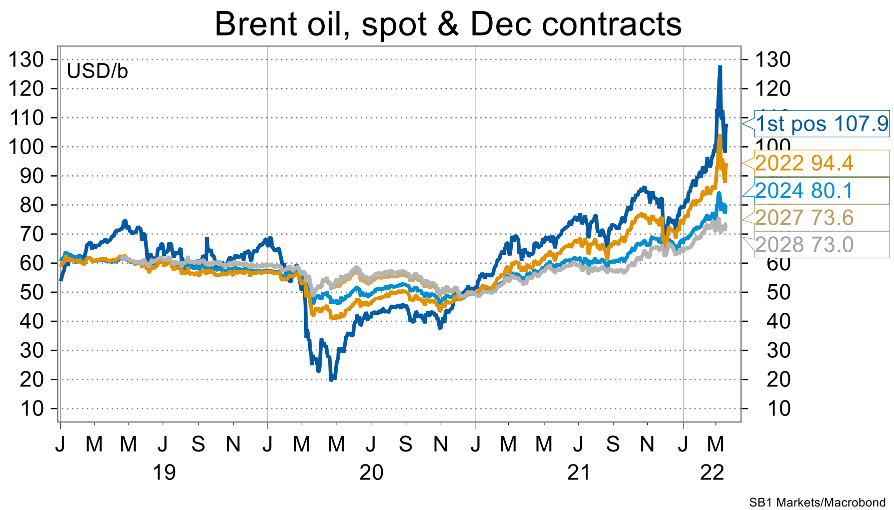


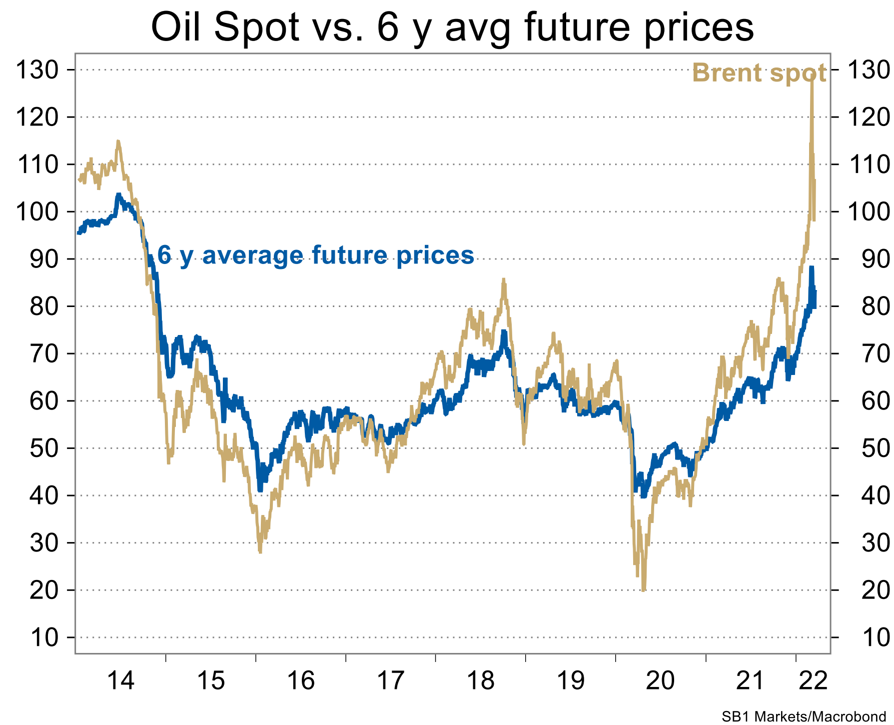


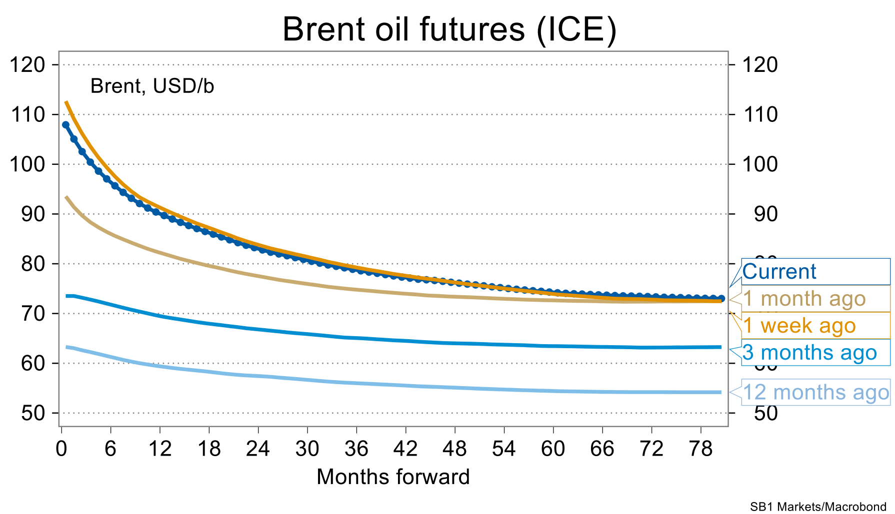
- Will **Russia be allowed to export** oil and gas, will buyers abroad buy the stuff or will **Russia turn the tap off**?
  - » There seems to be many willing buyers of rebated Russian oil
  - » Russia is still pushing gas through the pipelines to Europe
- Will Russia/Ukraine sell grain – restrictions are introduced (as for many other goods)

The oil price is still volatile – down USD 30/b, to the pre-war level, then +10/b

Future prices have been much more stable than the short end of the curve – as usual



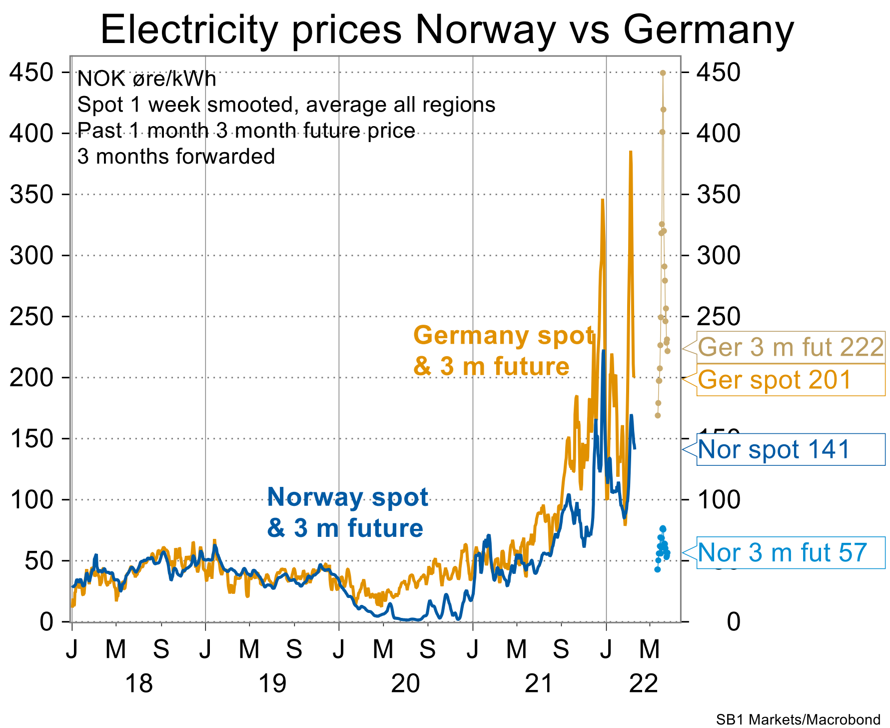


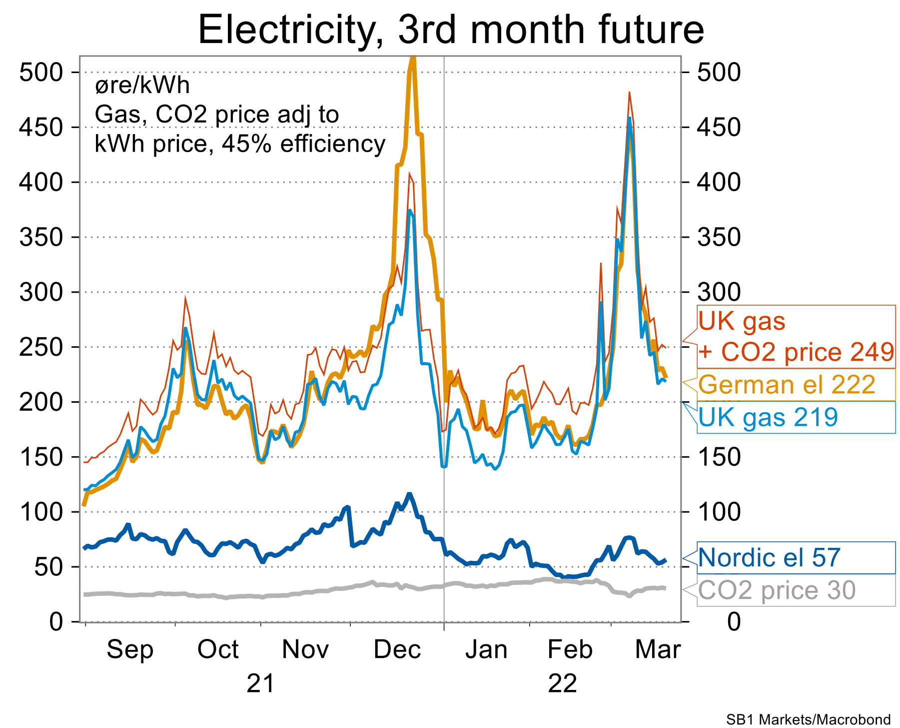


- Future prices have been lower than normal vs. the short end of the curve after the invasion – because markets assume that in the end, oil will flow

European gas & electricity prices are trending further down

Russia have so far supplied more gas to Europe – and Europe wants to buy it

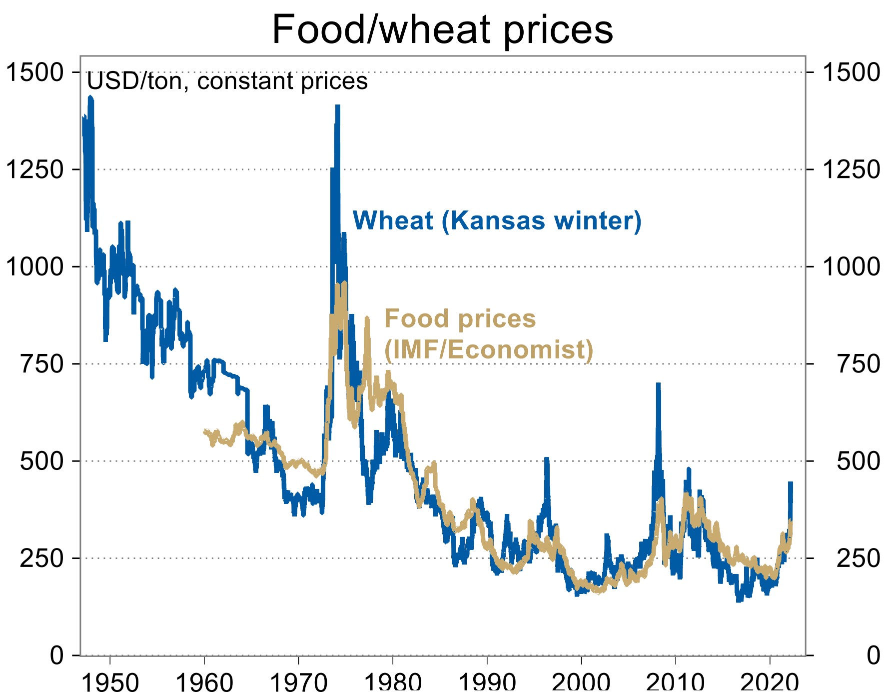


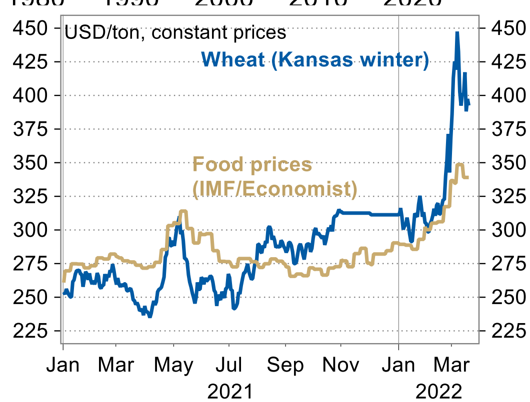


- **The 'Norwegian' risk**: Nordic future electricity prices remain far below European forward prices
- The Norwegian 2022 prices are up by approx. 27 øre/kWh since before the Russian invasion. At the CPI level (assumed continued subsidies, and low prices in Mid/Northern Norway), this increase will lift the overall 2022 CPI by 0.4 pp. Still, the average electricity price will be lower in 2022 vs. 2021, and 2023 below the 2022 level
  - » The 80% subsidy for prices above 70 øre/kWh reduces the impact of higher electricity prices for Norwegian consumers substantially

Food prices are up from before the invasion but are calming down

Even if Russia & Ukraine is are huge grain exporters, their exports equal just 4% of global cons.

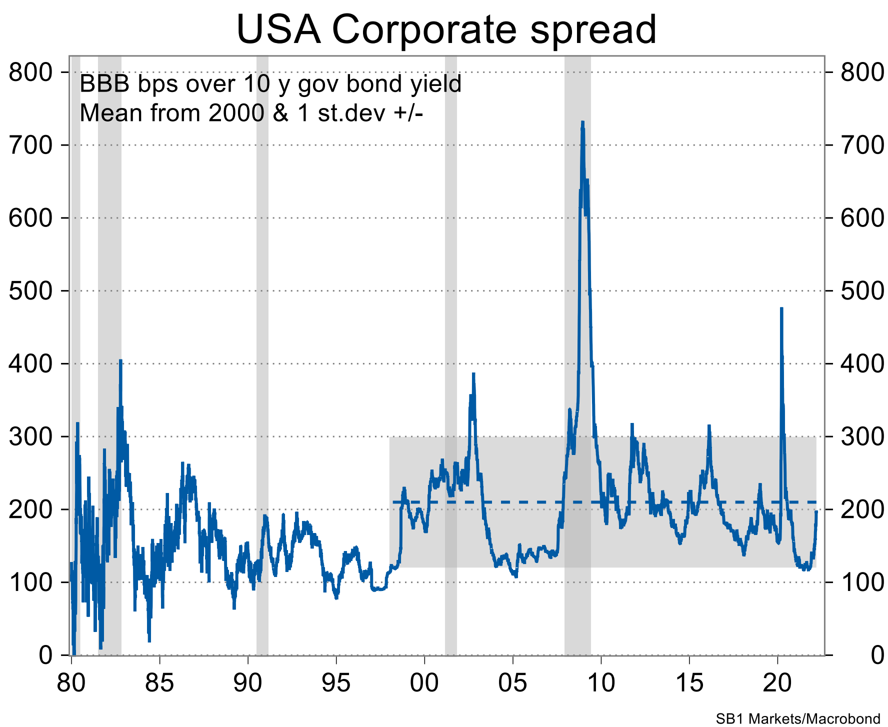


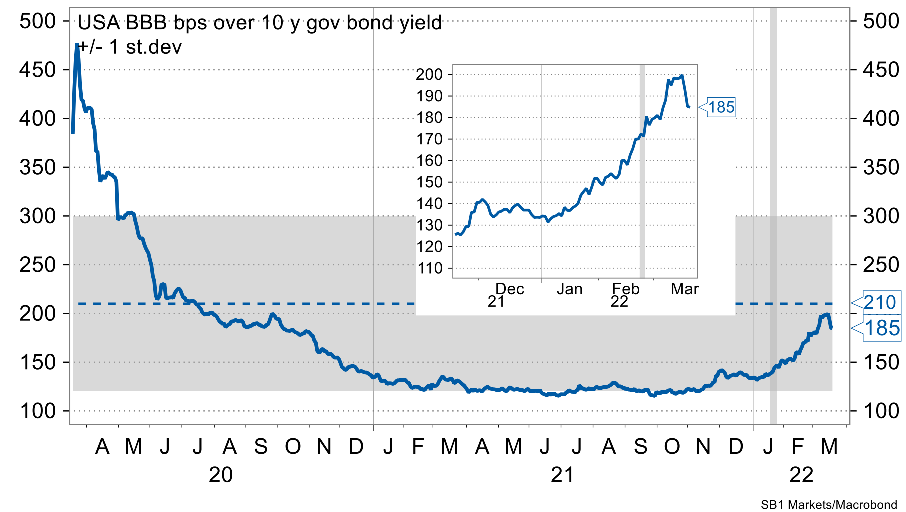


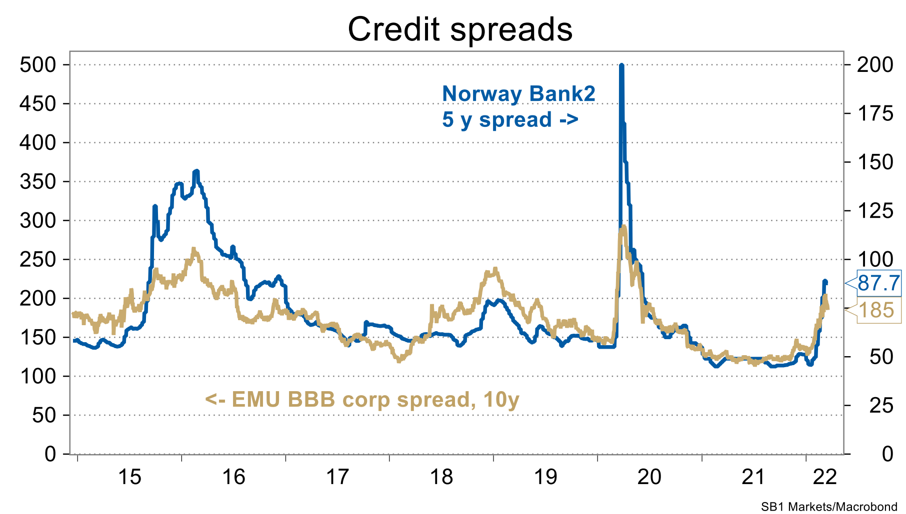
- **Russia and Ukraine** together exports 24% of global grain exports (and 25% of all wheat exports)
- However, exports (and imports) of grains equals 'just' 18% of **total consumption** – and Russian/Ukrainian exports equals 'just' 4% of global consumption – and somewhat higher for wheat
- **Russia & Ukraine exports** 103 mill tons in grains. Grain production is increasing over time, but is also declining from time to time – like by 50 mill tons in 2017/18 – without sending prices to the sky
- **Grain stocks** are somewhat below normal but not by much, at 26-27% vs. the 28% average (of annual consumption)
- Of total consumption, less than **1/3 is eaten by humans**, while almost 50% is used as feedstock for animals/birds (we then eat)
  - » Industrial use, like production bio ethanol, also consumes a significant share of total grain production

Credit spreads down last week – in sympathy with stronger equity markets

Norwegian bank spreads peaked one week ago – will probably decline further this week





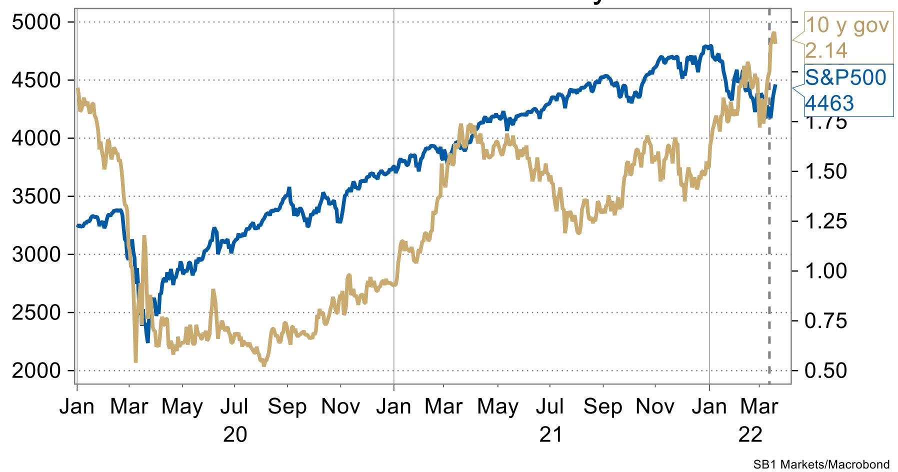


- Until the 15 bps decline in the US Corporate BBB spread from the peak early last week, spreads were up 80 bps, equalling the half of a 'small credit cycle'

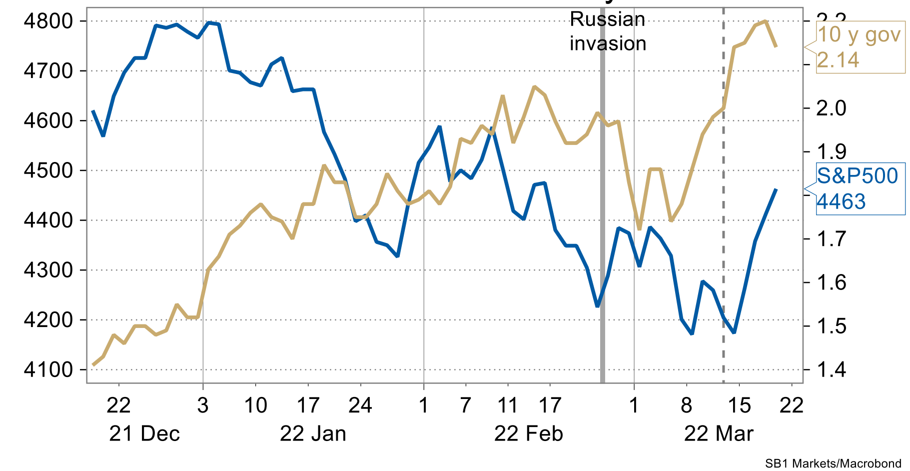
A strong recovery, half of the decline since late 2021 was reversed, yields up

The well announced first Fed hike was not a shock. And perhaps less war angst too

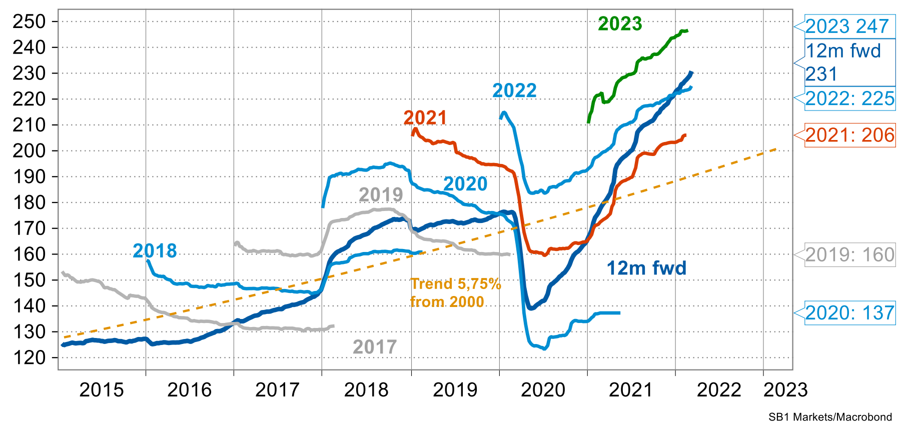
USA S&P 500 vs. bond yields



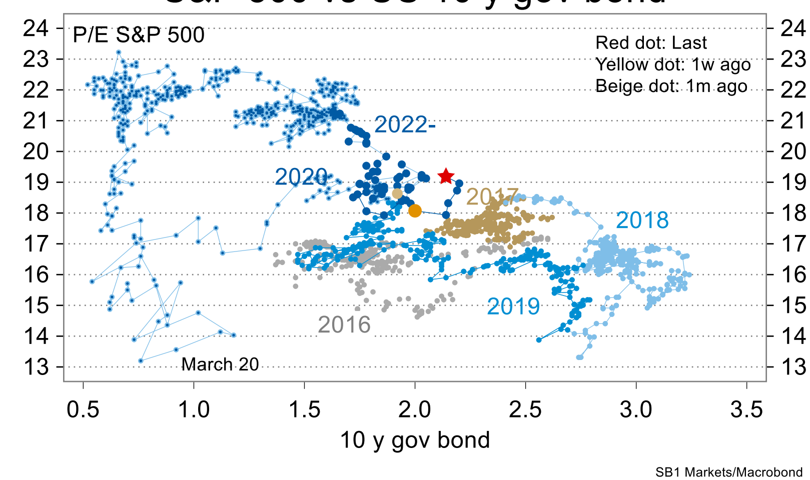
USA S&P 500 vs. bond yields



Annual S&P 500 EPS consensus (Factset)

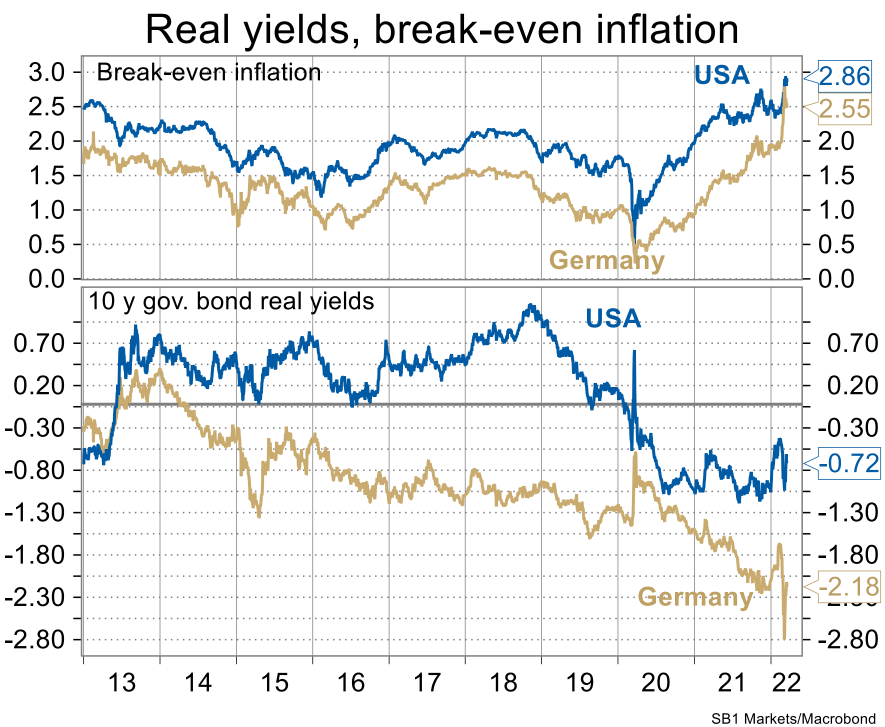


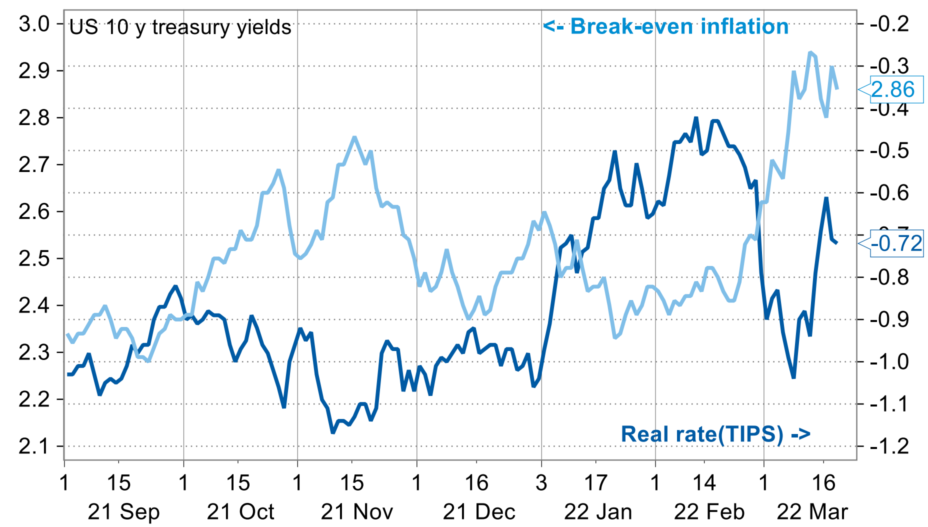
S&P 500 vs US 10 y gov bond



Real rates up, especially in the US, inflation expect. Down, due to Fed & oil prices

Inflation expectations are still high – as in Germany. Real rate up here too, from very low levels





US & Germany 10 y Gov bond yield

	Yield	Change 1w	Change 1m	Since Feb 18	Min since April-20
USA nominal treasury	2.14	0.14	0.22	0.22	0.52
.. break-even inflation	2.86	-0.08	0.45	0.45	1.06
.. TIPS real rate	-0.72	0.22	-0.23	-0.23	-1.19
Germany nominal bund	0.37	0.11	0.15	0.15	-0.65
.. break-even inflation	2.55	0.02	0.57	0.57	0.40
.. real rate	-2.18	0.09	-0.42	-0.42	-2.80

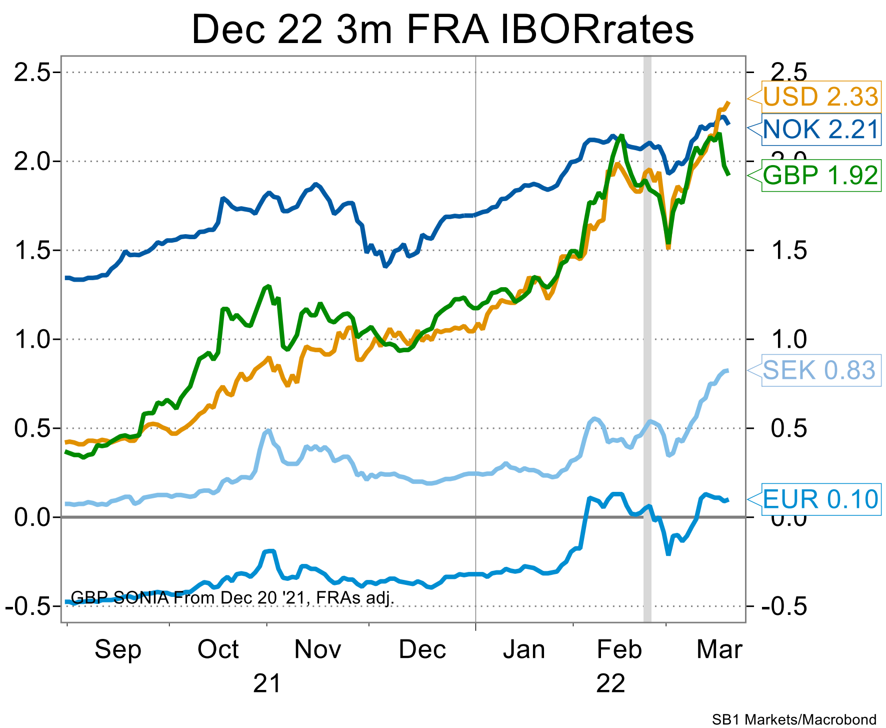
SB1 Markets/Macrobond

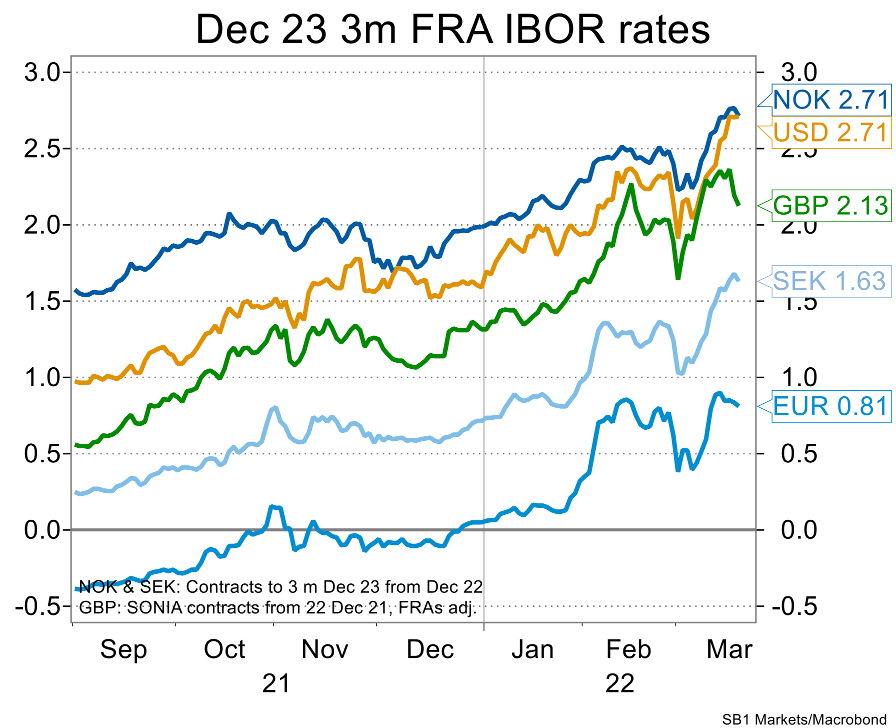
- **Is the the Fed** willing to more to fight inflation? Or is the **growth outlook** just better at energy prices fell last week?
  - » **Higher energy & raw material prices** due to the supply shock (if Russian energy & other raw materials are kept out of European/global markets) will push inflation further up – and growth will likely slow, due to reduced disposable incomes perhaps also due to increased geopolitical uncertainty. German 10 y inflation expectations at 2.55% are unprecedented
  - » **The sanction regime** is being tightened by the day, and we do not know how Putin's regime will respond, by cutting exports of energy, food & raw materials the West still (possibly) wants to buy
- **Real rates** are still extremely low, especially in Germany

SpareBank 1 MARKETS

The Fed pushed the short end of the curve further up, while BoE talked 'dovish'

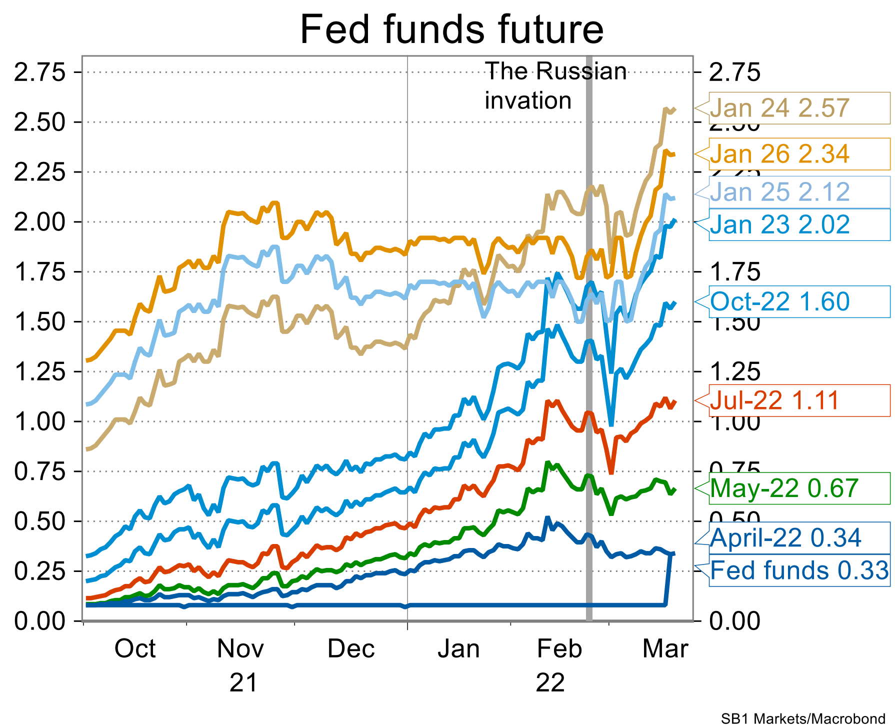
NOK & SEK FRA rates rose further, while EUR rates fell, from a 'high' level

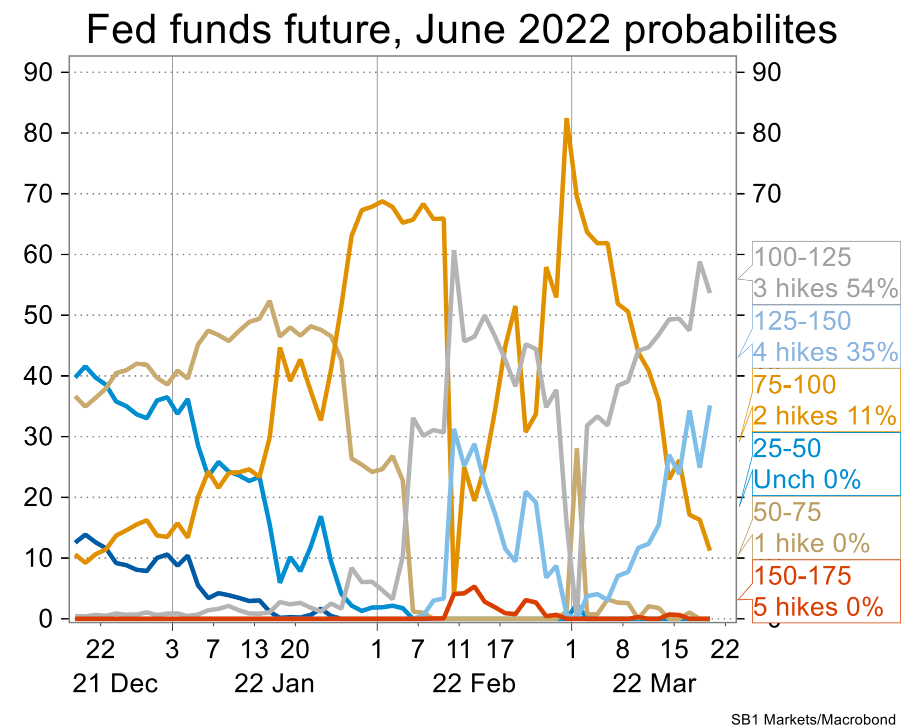




Fed funds future curve is steeping rapidly. 25 + 50 or 2 x 50 in May and June

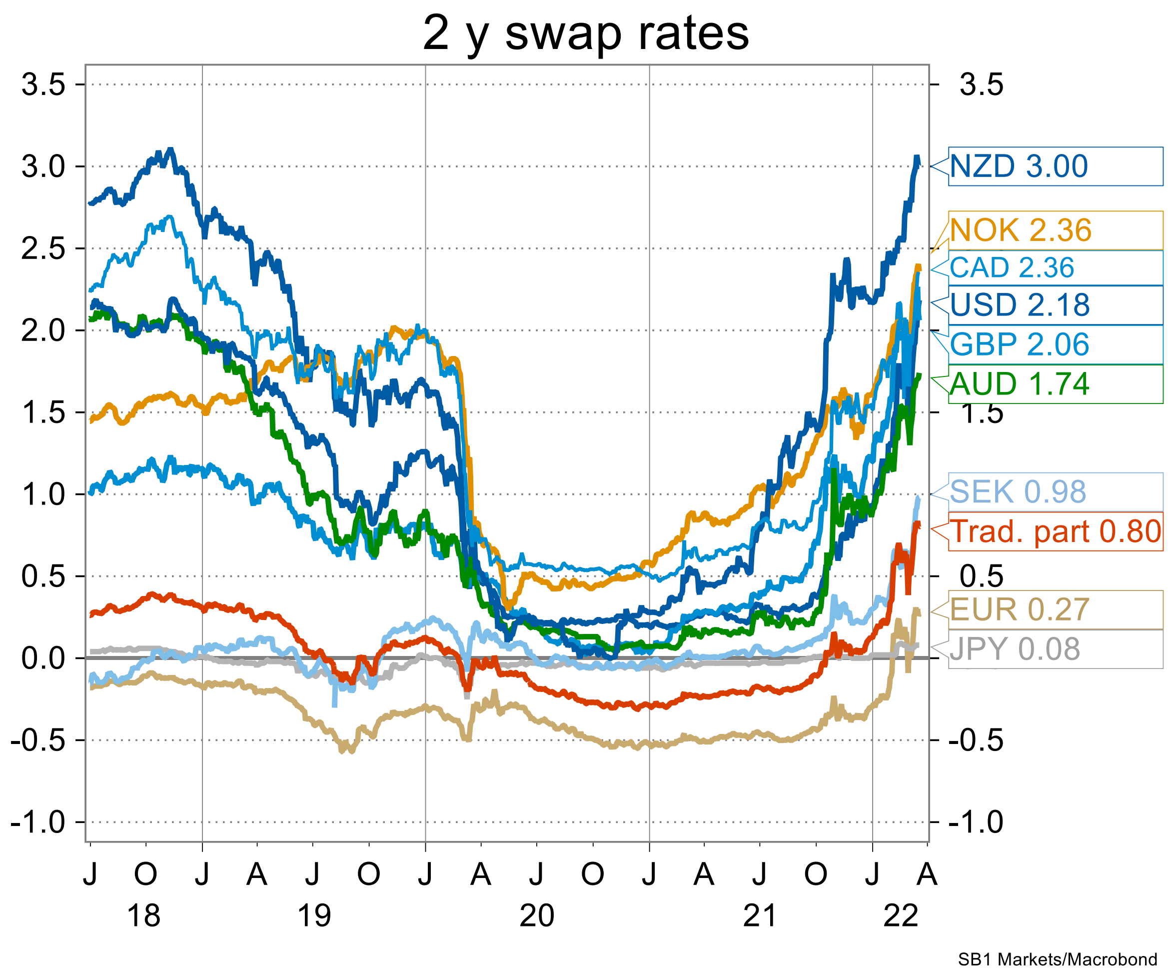
75 more bps during Q2 is deemed to be the most likely outcome. An 50+50 more likely than just 25+25

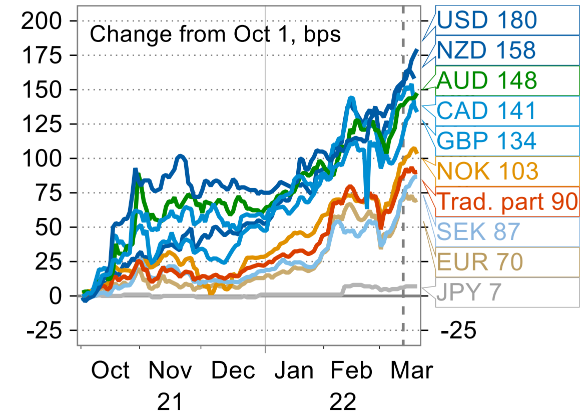


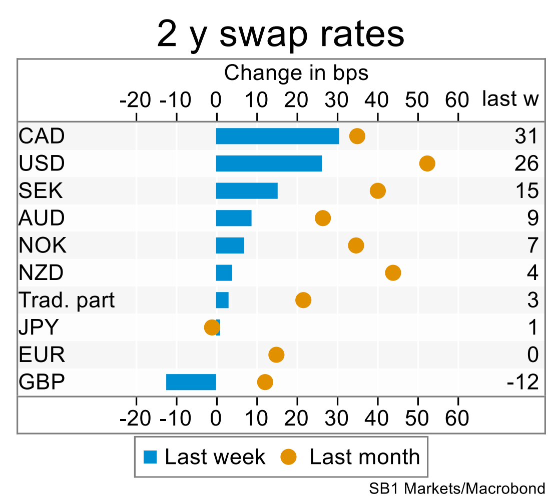


The short end of the USD curve sharply up (CAD even more)

The Fed will do more now. Will 'take care' of inflation. But what does that mean, in the economy?



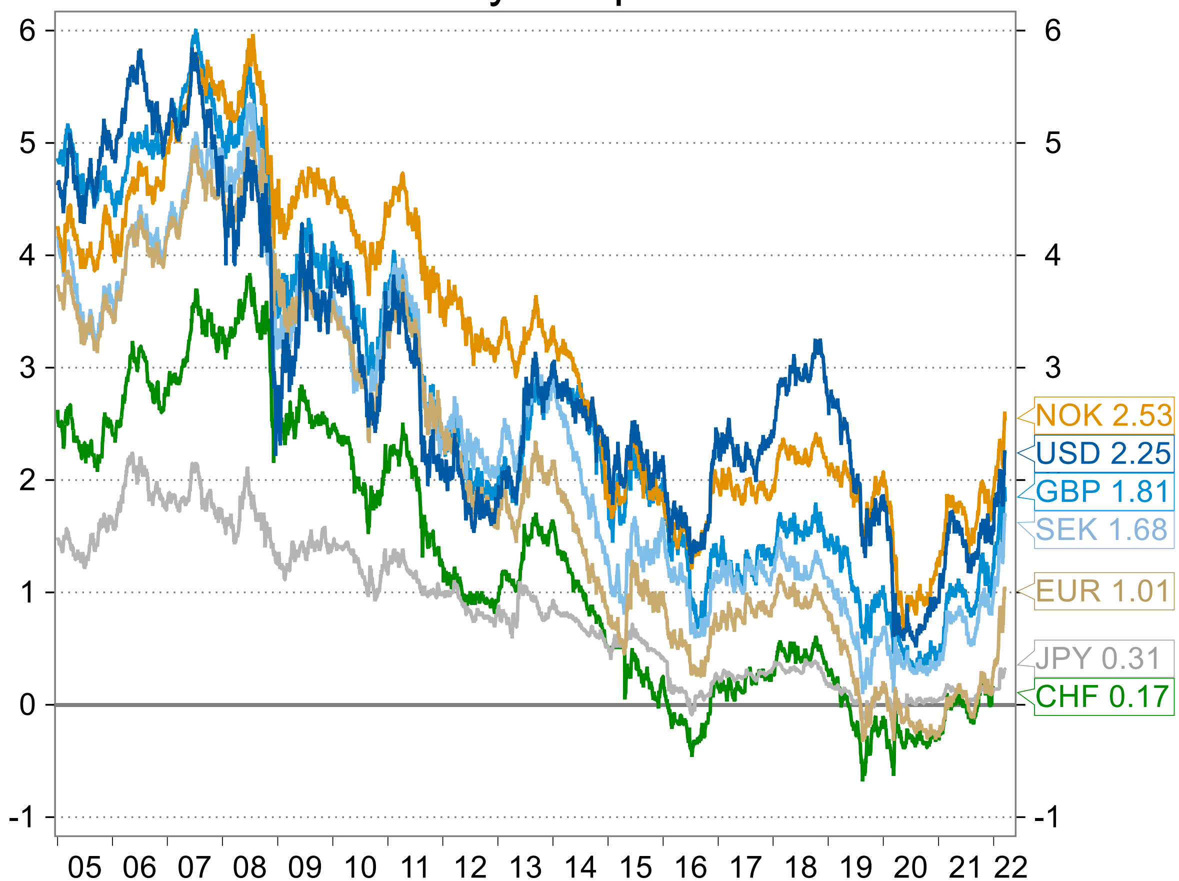




Most 10 y rates sharply up last week too

The US and the other Anglo Sachsen in the lead. EUR >1%!

10 y swap rates



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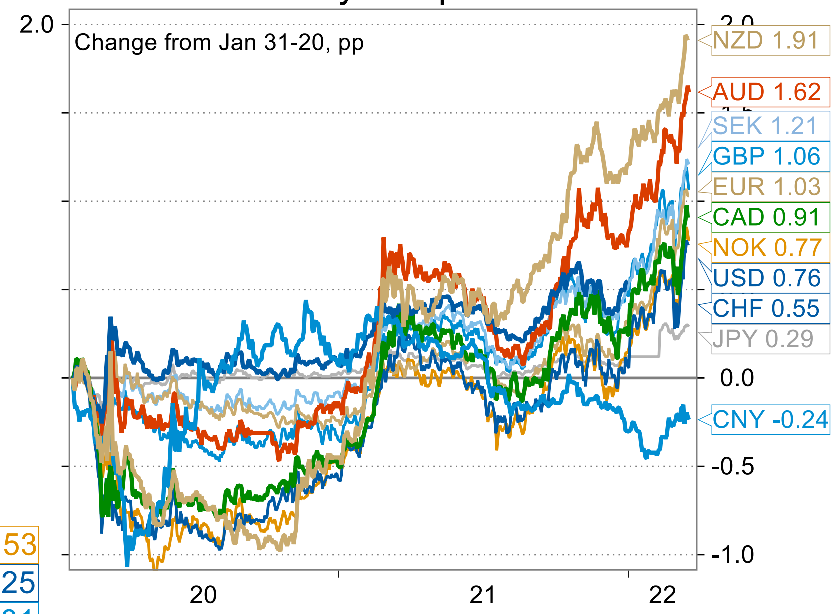
10 y swap rates



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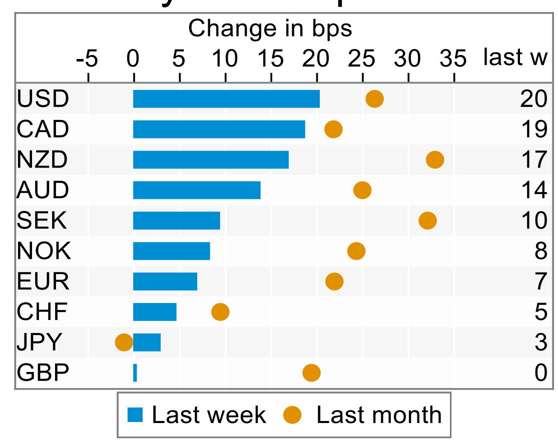
10 year swap rates



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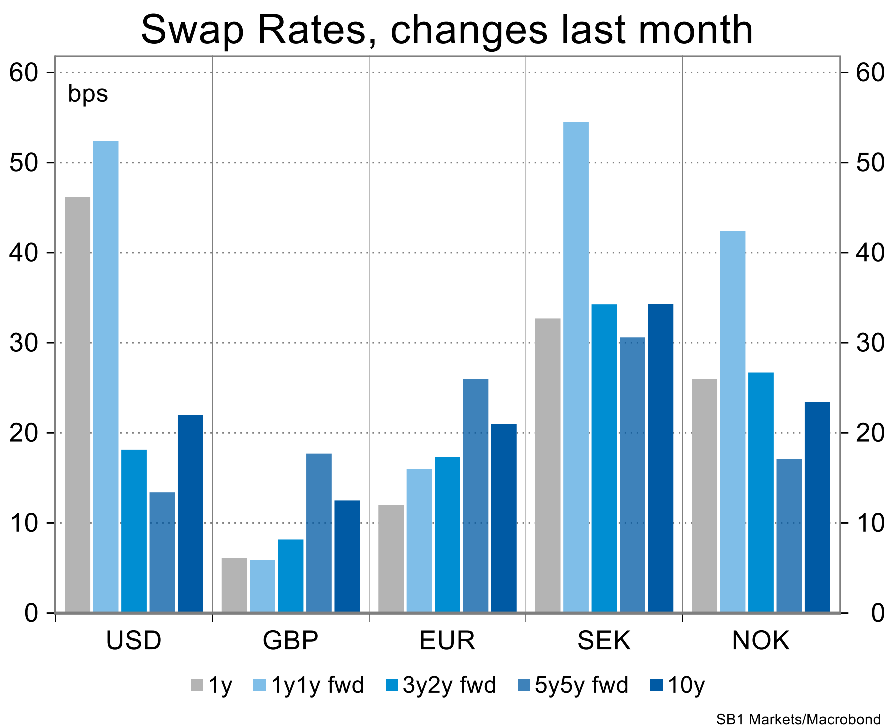
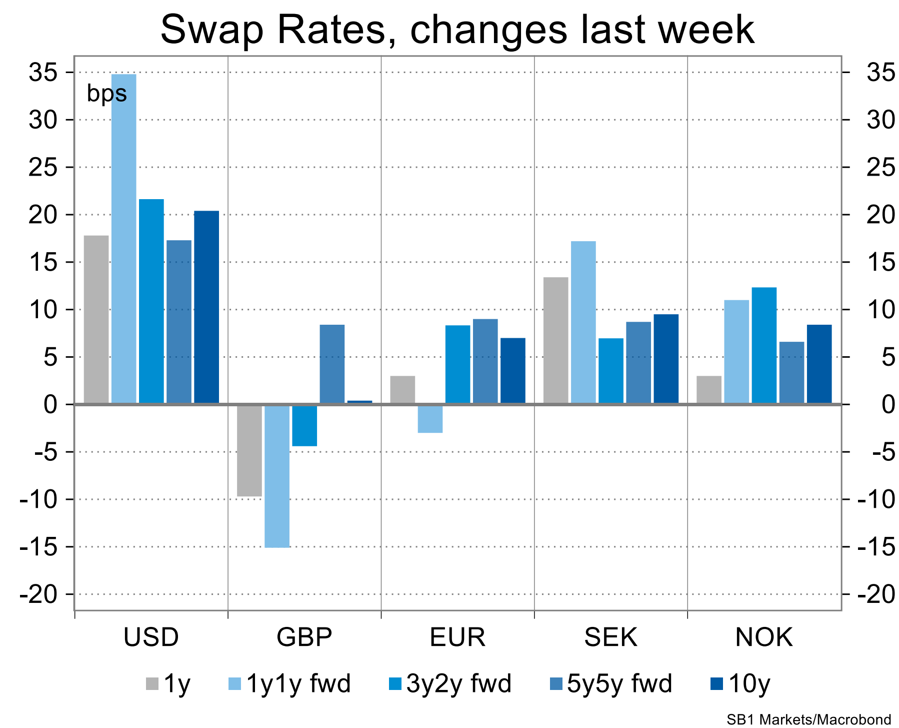
Rates mostly – except for the short end in EUR/GBP





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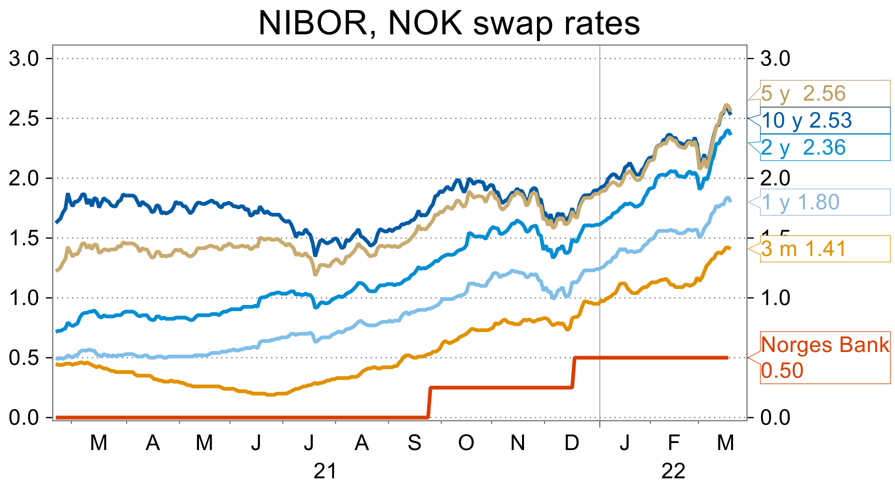
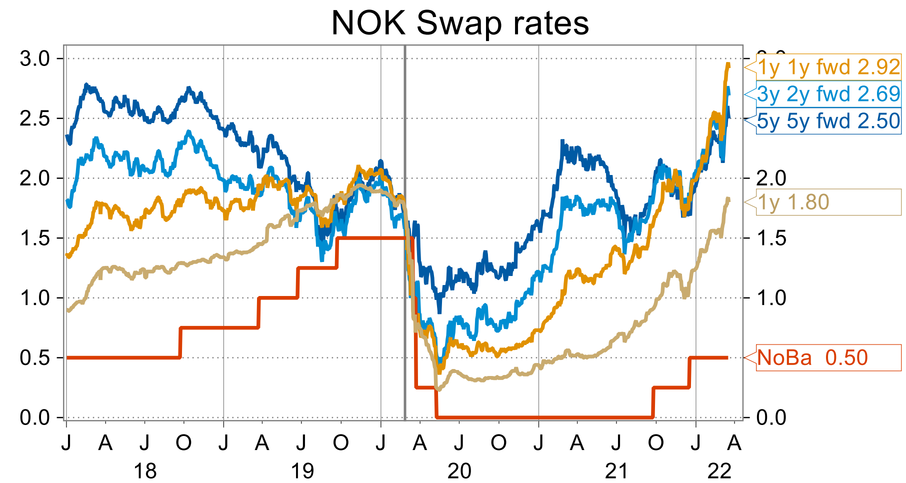
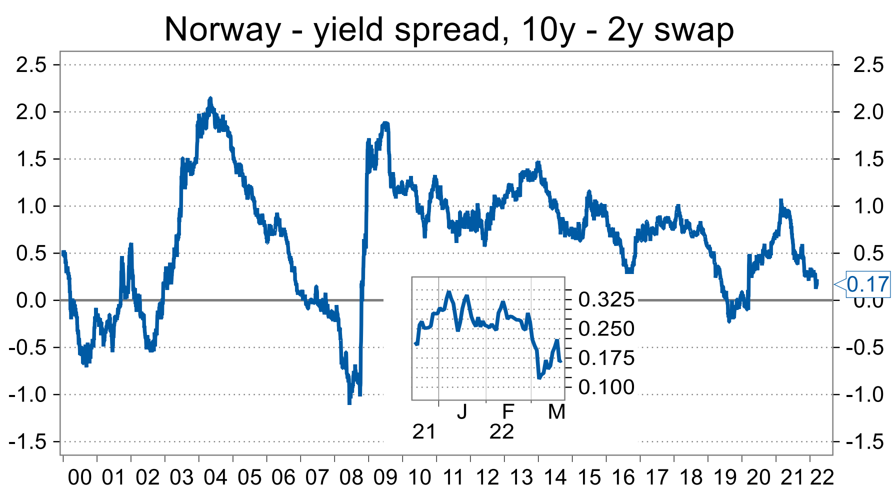
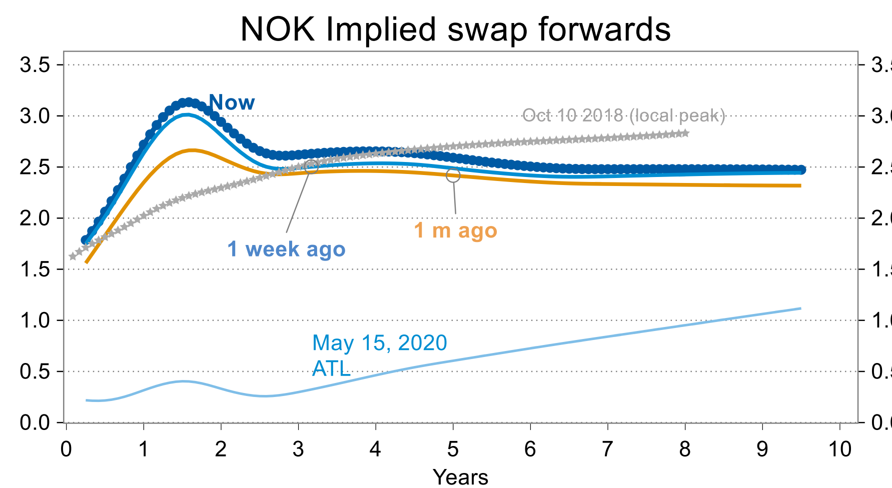
The whole curve continues upwards: the 10 y up 12 bps to 2.56%!

The forward curve peaks at 3% at 1.5 y









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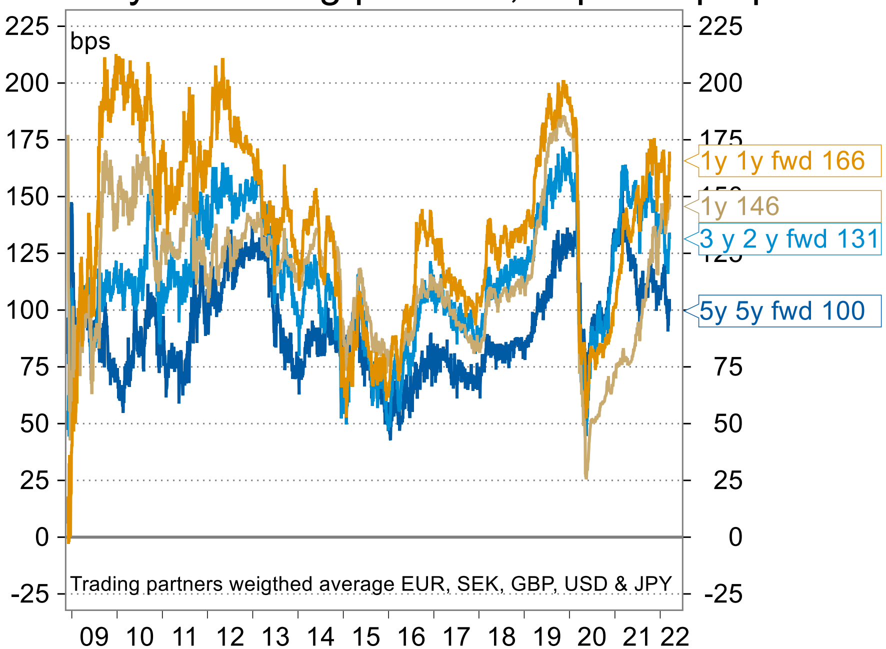
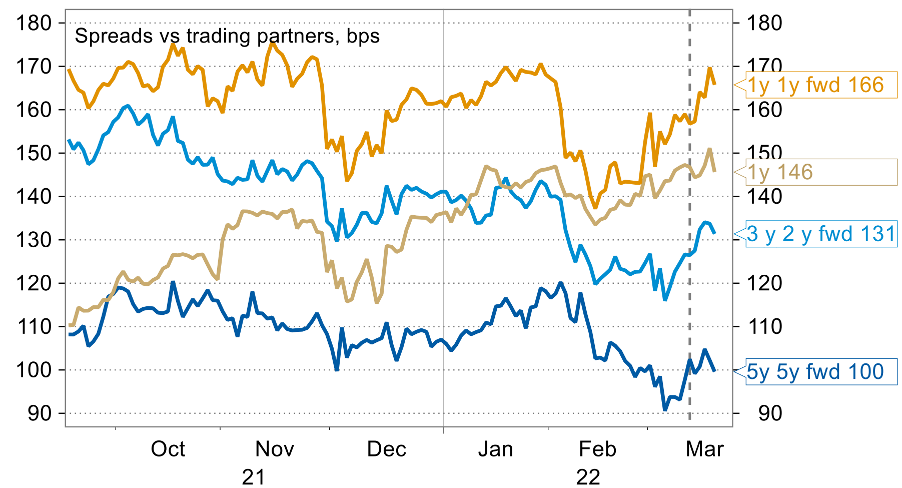
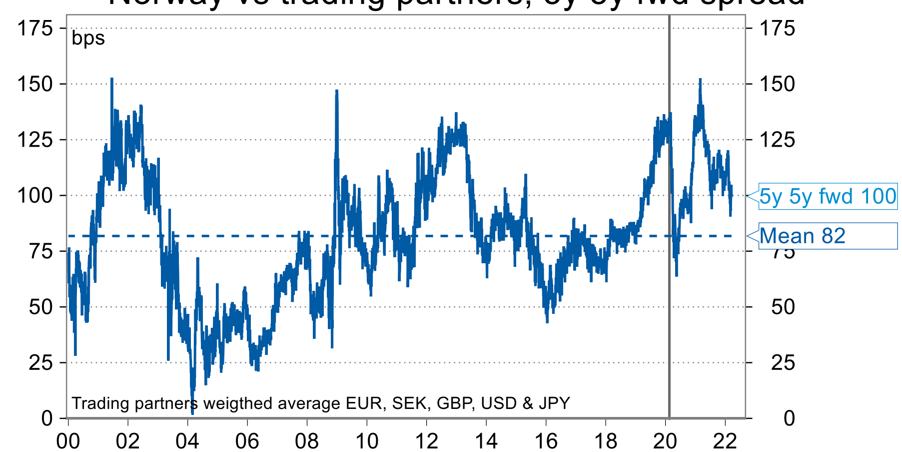
Spreads further up last week but not at the 5y 5y fwd segment

Norway vs trading partners, impl swap spreads



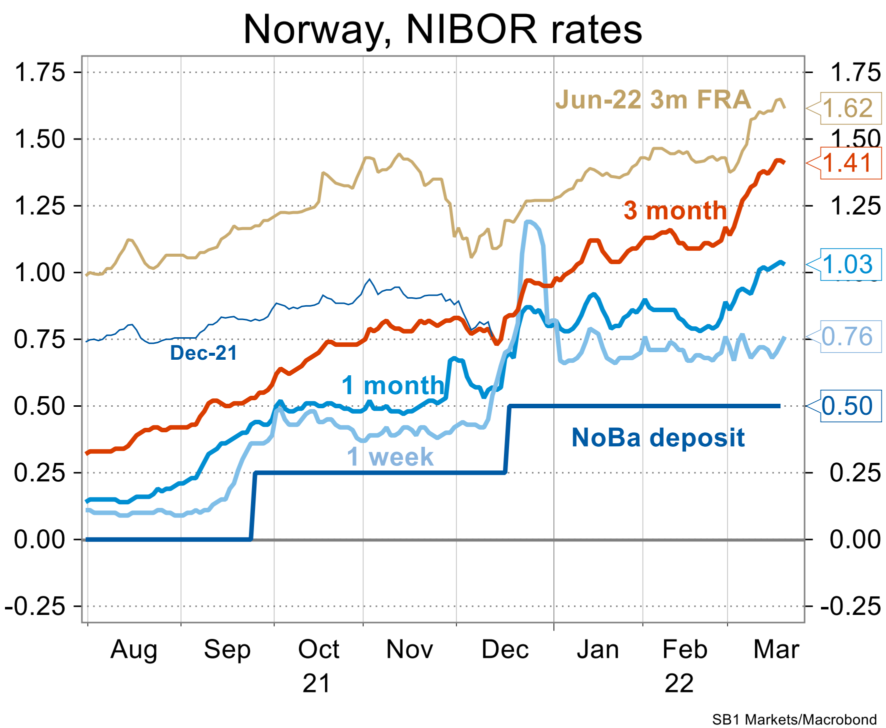


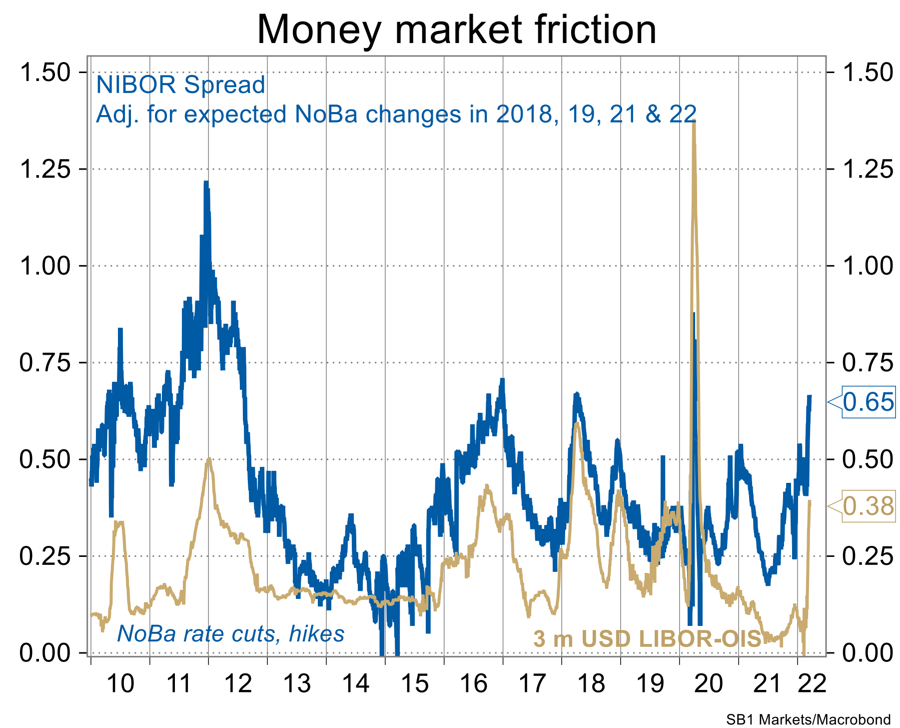
Norway vs trading partners, 5y 5y fwd spread



The 3m NIBOR up 3 bps to 1.41%, the NIBOR spread +1 bp to 65bps

… if NoBa does not hike in May too





- The **USD LIBOR-OIS spread** rose another 5 bps to 38 bps, after the 18 bps hike the previous week – and the spread is far above an average level. Some problems in the US money market?
- Liquidity issues may follow sanctions – but most likely not, and in Norway, Norges Bank will have no problem countering them by offering banks more liquidity

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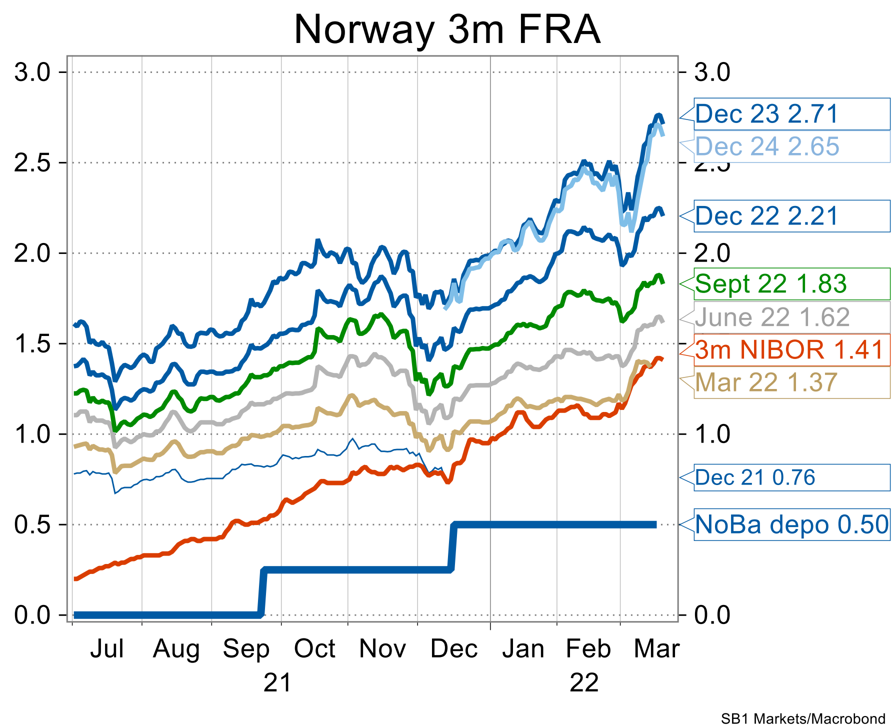
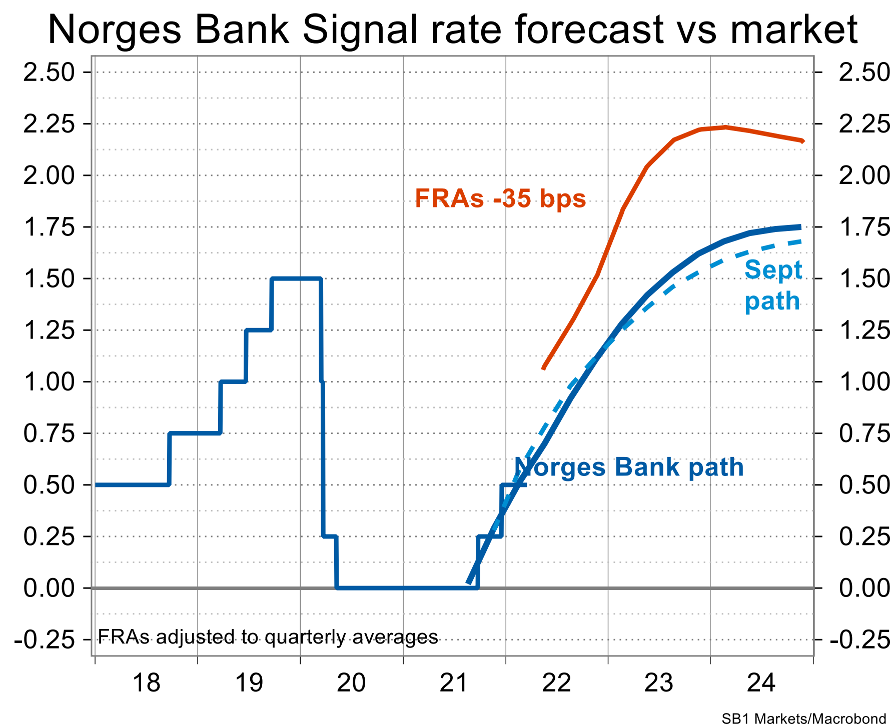
FRAs further up, the curve is up to 70 bps above NoBa's Dec path! (given normal NIBOR spreads)

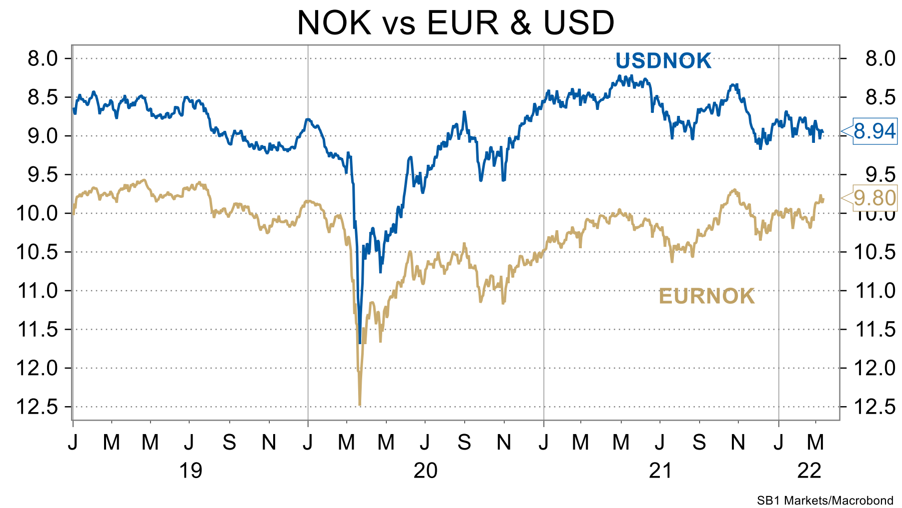
FRAs up by up to 13 bps last week, and the whole curve is well above the pre-invasion level

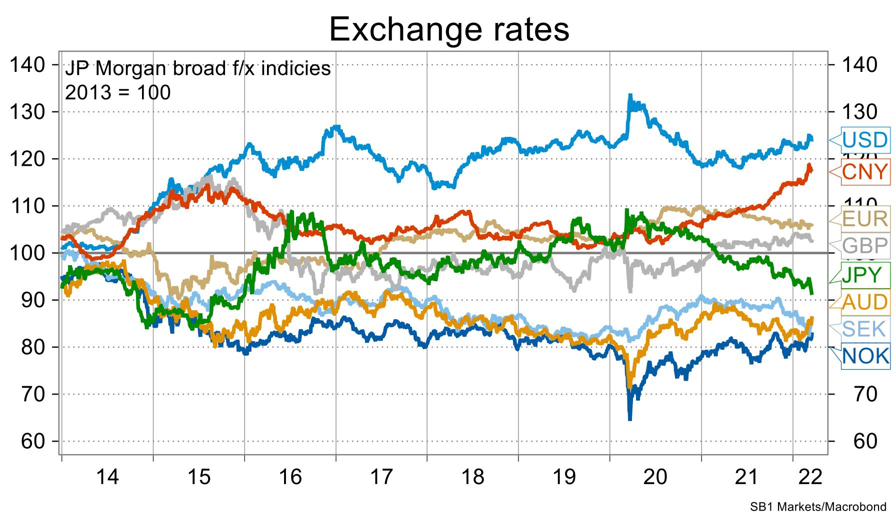




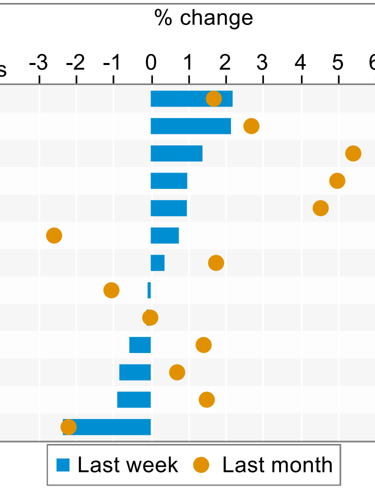
- If NoBa hikes March 24 (by 25 bps, and not in May), the average NoBa rate will be 0.73% in the March FRA period
- Thus, the current 3 m NIBOR at 1.41 implies 100% probability for a 25 bp hike to 0.75% even with a 66 bps NIBOR spread! The normal spread has been some 30 – 35 bps
- The June contract at 1.62% captures a lot of different scenarios, including a substantial probability for a June signal rate at 1.25%

SEK & NOK further up, the USD, CNY down last week





F/x markets



JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
SEK	2.2	1.7
USDNOK	2.1	2.7
NOKEUR	1.4	5.4
NOK	1.0	5.0
AUD	1.0	4.5
EURUSD	0.8	-2.6
CAD	0.4	1.7
GBP	-0.1	-1.1
EUR	-0.1	0.0
USD	-0.6	1.4
CHF	-0.8	0.7
CNY	-0.9	1.5
JPY	-2.4	-2.2

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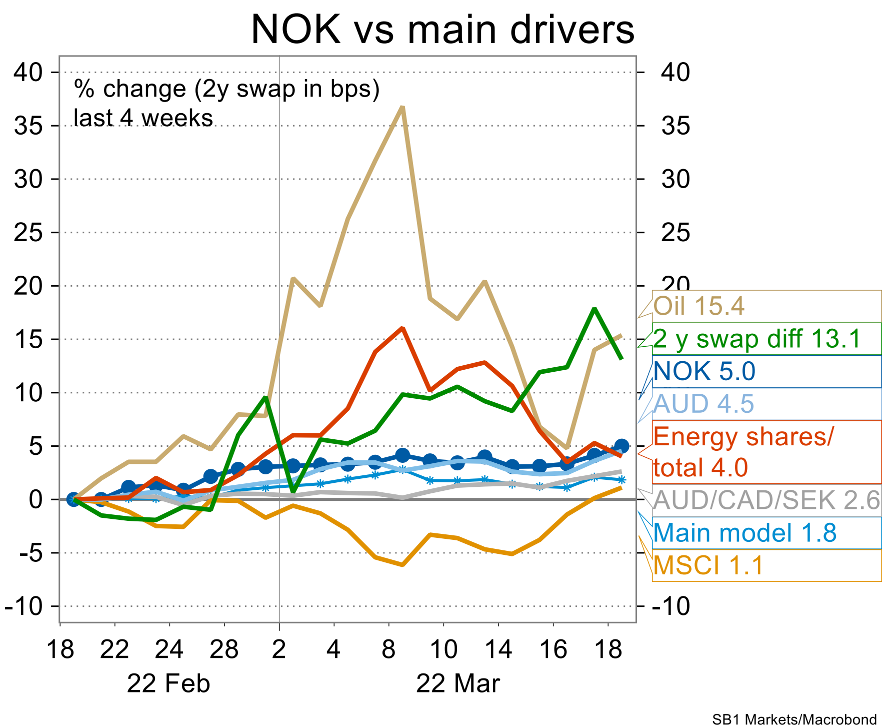
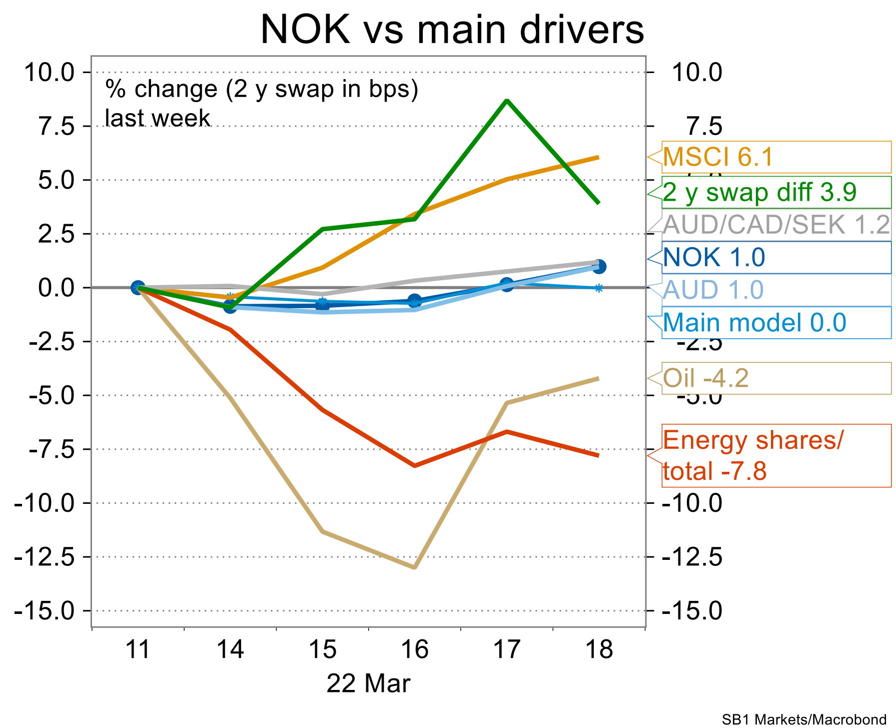
The oil prices ended down last week, the NOK still up 1.1%, from a 'low' level

Our model suggested an unchanged NOK





The status vs. the normal drivers:

- ***The NOK up 1.1% - and the NOK is just 1.1% below the model est (from -2.5%)***
- The NOK is 2% weaker than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts (unch)
- NOK is 5% stronger than a model which includes global energy companies equity prices (vs the global stock market), but less than last week (from 3%)

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

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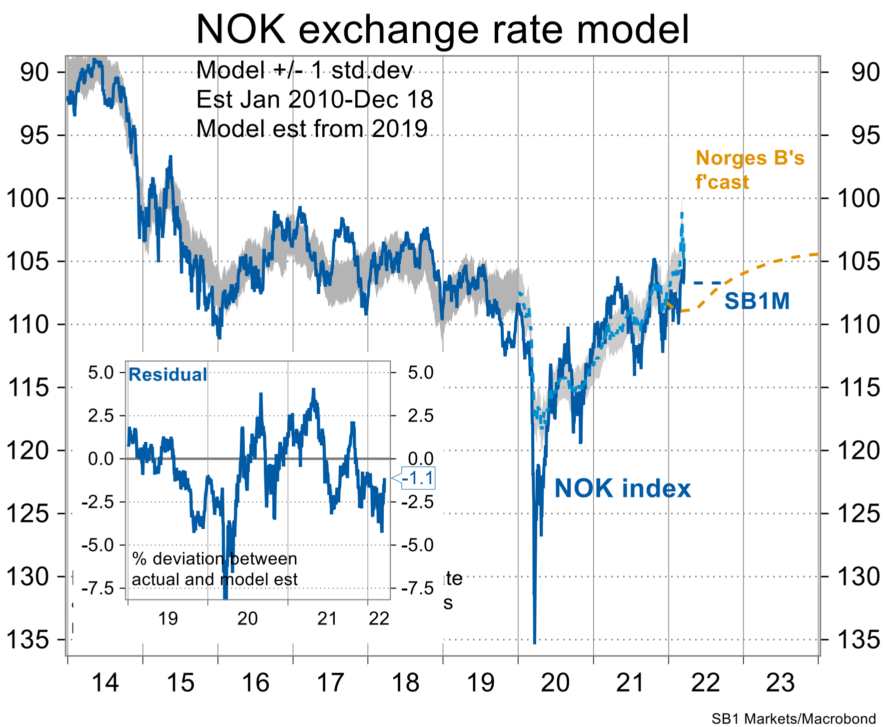
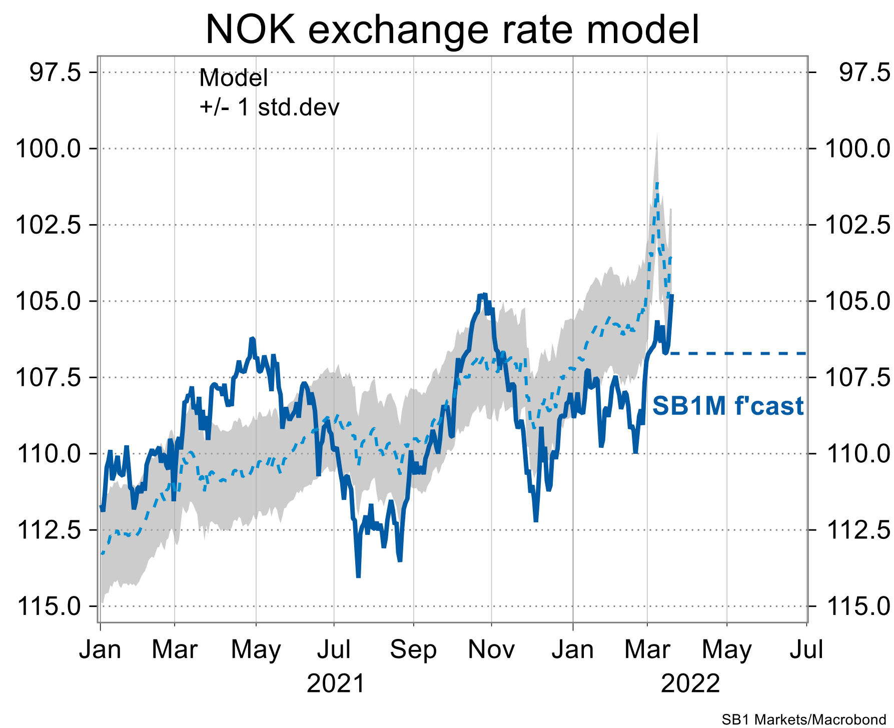
NOK lags our model by just 1.1% from 4% two weeks ago

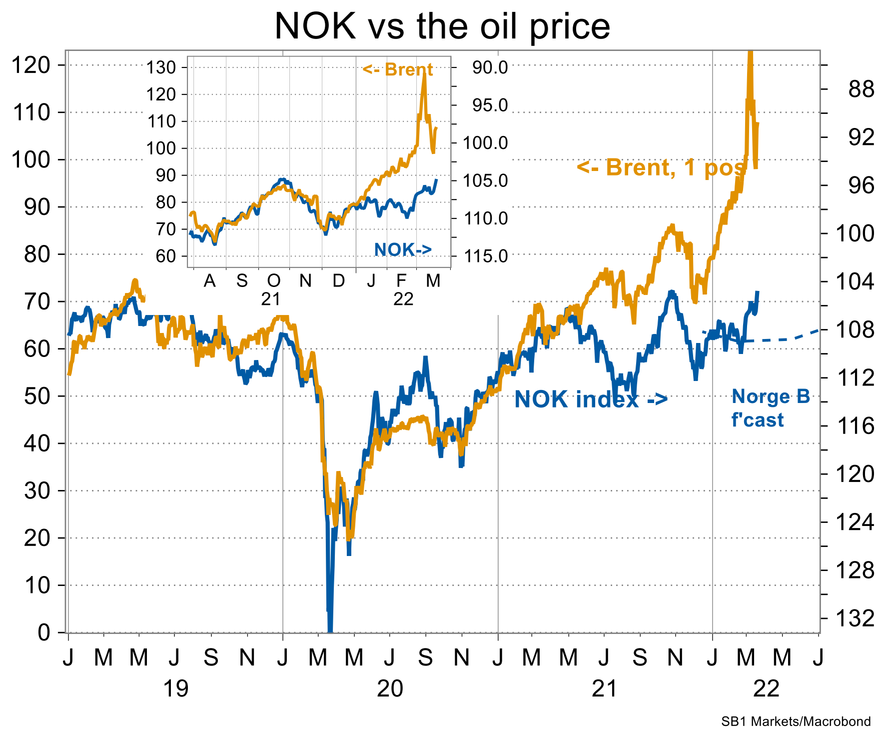


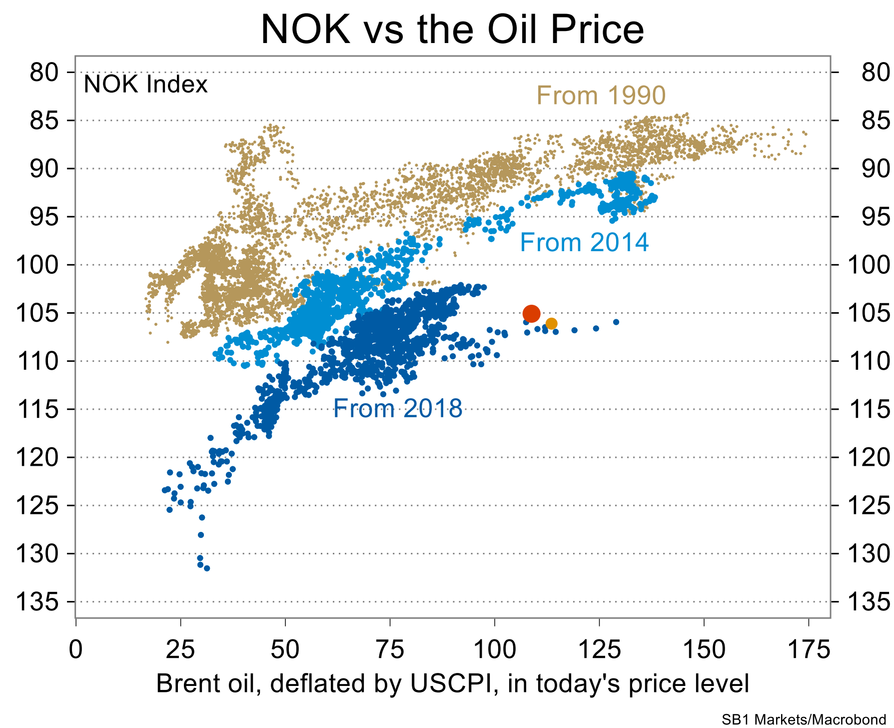


- Normally, the short end of the oil curve is most important for the NOK, not the 'whole' curve, which would have been more logic
- Gas prices are not included in our model either. Gas prices have been so closely correlated to the oil price, so it is not easy to estimate the impact of the gas price, historically

The oil price down last week but the NOK further – still weak vs. oil

NOK has not been particlary correlated to the oil price lately, at least not the short end of oil curve

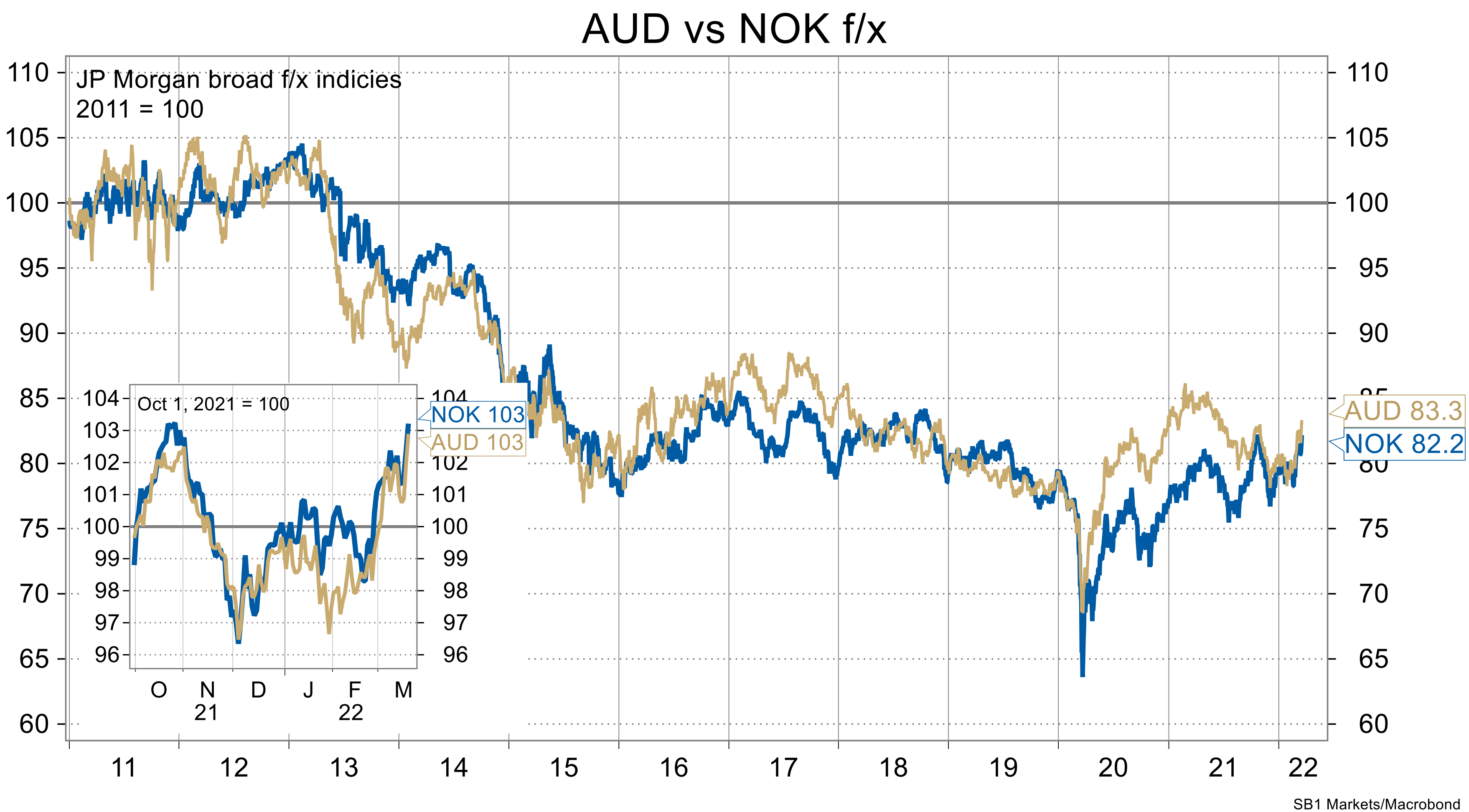




- NOK is normally correlating quite closely to the oil price but at a lower level than before 2018 – and now the NOK is weak even vs the past 3 years' (and now also the previous 6 month's relationship)
- A USD 10 drop in the oil price weakens the NOK by some 4%, as a partial effect.
  Within a broader model, the impact is substantially smaller

NOK is still dancing closely with the AUD

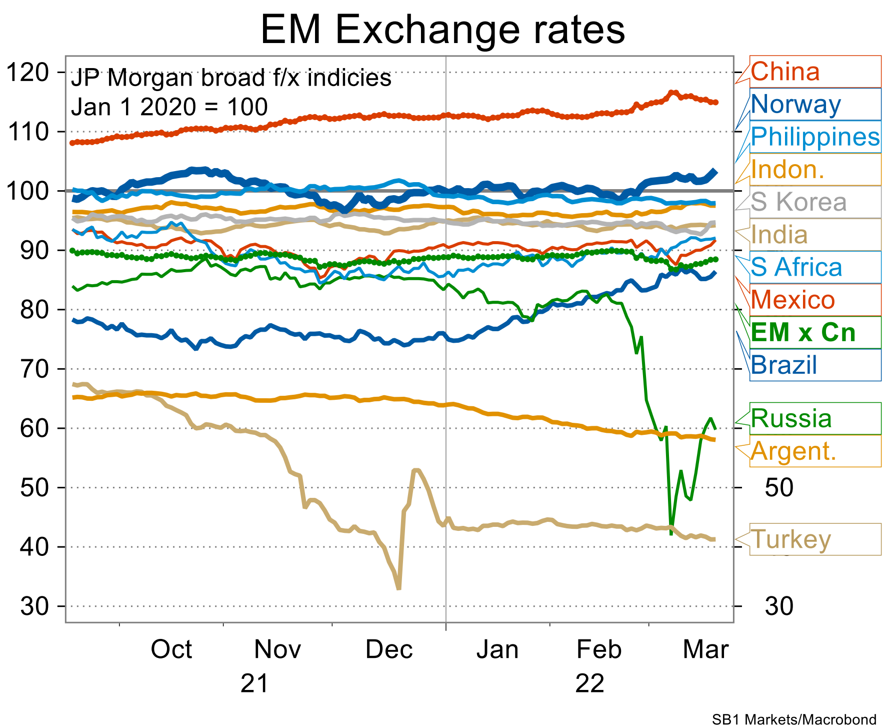
The surge in commodity prices is supporting both currencies

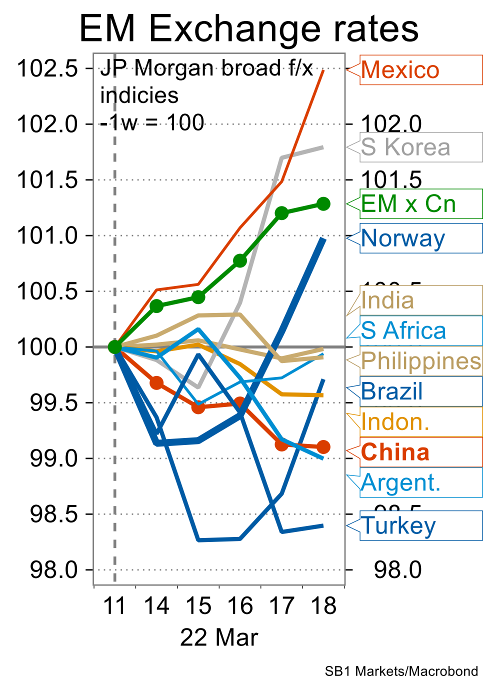


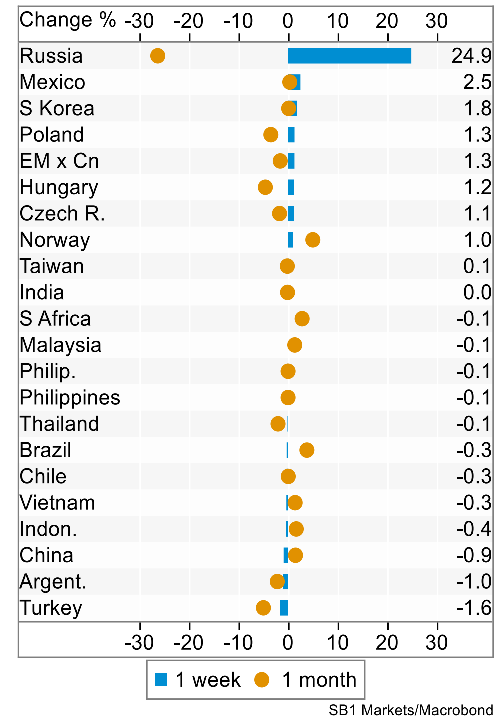
The two f/x indices are back to the 2011 parity (vs each other, from which they never since have deviated much)

The rouble recovered last week but is still down 27%

The CHY lost ground last week, even if the stock market recovered sharply. Most other EMs down too







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