22 March 2021

Macro Weekly

Week 12/2021

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

Highlights, corona update

The world around us

The Norwegian economy

Market charts & comments

Last week 1: The still challenging corona story. However, a Norwegian R at 1.2?

The virus

- **Most countries are still reporting more covid-19 cases:** However, growth is slowing, no doubt due to new restrictions which have reduced mobility in several countries, Norway included.
- **In Norway**, the 'R' may have fallen to 1.2 last week or even lower by the end of the week, from 1.5 at the peak. An 'R' at 1.1 would be acceptable as there is not that long before vaccines are arriving in much larger quantities. An R at 1.2 is a borderline case, an R at 1.4, which is still the official number, means we are just a very few weeks away from reaching serious hospital capacity constraints, even at a national level
  - » The Norwegian hospitalisation rate has increased, perhaps to 4%, even if the oldest segments of the population are already vaccinated. The more aggressive mutations are no doubt to blame
- **In the US & UK** the pace of vaccination is impressive, and in the US the no. of cases is not increasing, even if mobility now picks up
- **Vaccinations in both the EU & Norway** may be slowed down due to the blood clot incidents which are caused by AstraZeneca's vaccine. Luckily, other vendors will ramp up deliveries through April and May
- **The main risk going forward**: The vaccines are not able to cope will with the **new variants of the virus** and that the previously infected with other strains of the virus will not be immune vs. the new variants

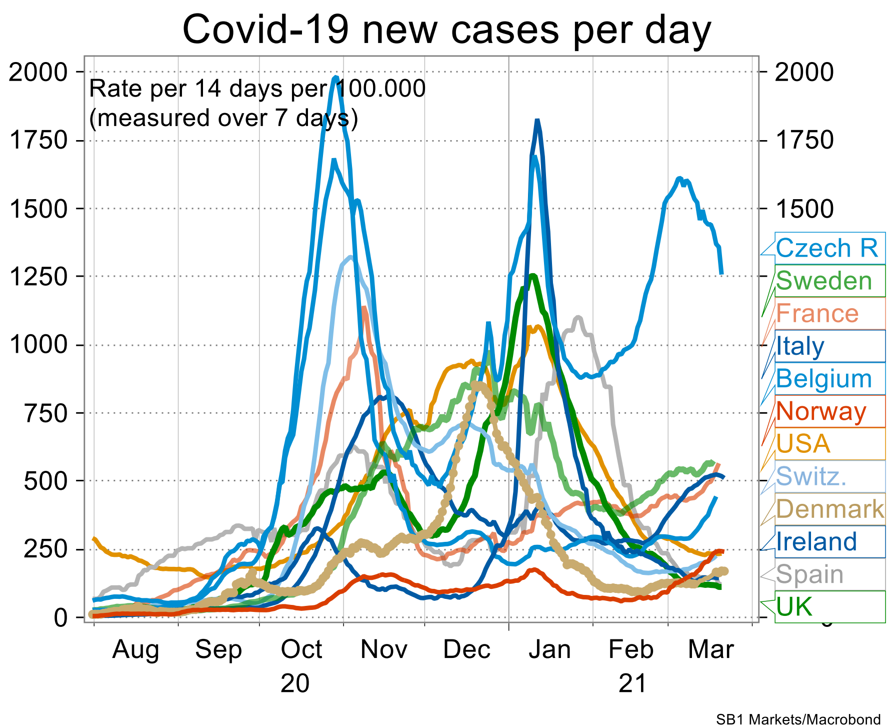
Last week: The economy

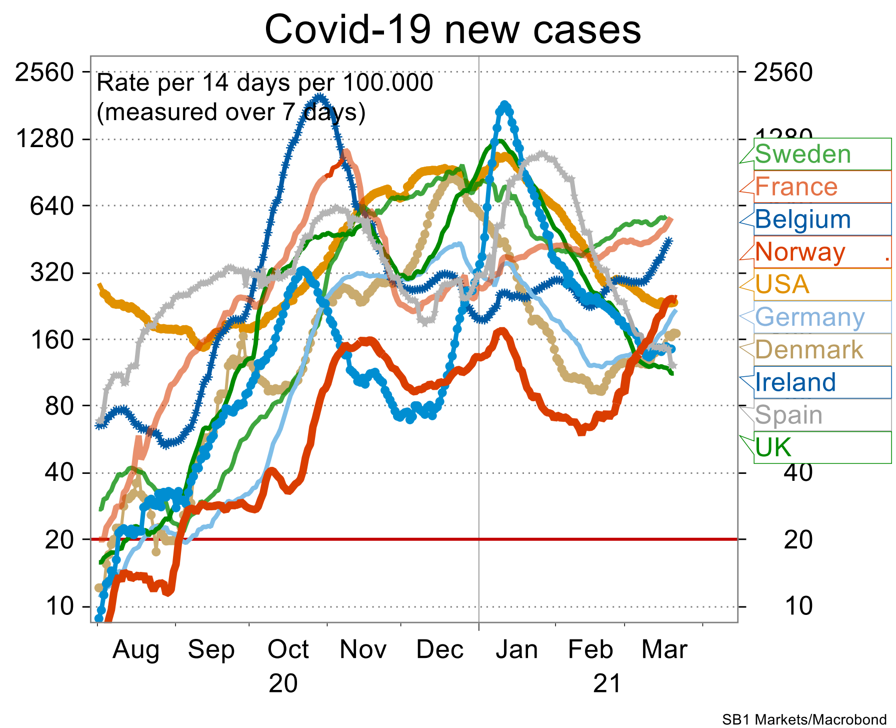
- **USA**
  - **The Federal Reserve** kept the signal rate unchanged at 0% – 0.25%. The Bank lifted its growth forecast as expected, by 2.3% to 6.5% y/y in Q4-21 vs the Dec forecast. Since last June, the GDP path has been revised by more than 5%! GDP will be back on the pre-pandemic path in Q4-21 (and not in Q1-24), and will be almost 2% above in Q4-23. Last June, the Fed assumed GDP would be 4% below. Unemployment is revised down, and inflation up, to above 2% the coming 3 years. So everything has changed? No, the Fed reiterated that the policy rate will be kept unchanged until 2024, the same forecast as last June (at least the median FOMC member forecast, some more members expect the policy rate to be lifted in ’22 or ‘23 (the average Q4-23 f’cast is 0.3%). Powell stressed that bank will not hike before actual inflation has reached 2%, and is expected to stay above for some time. The market questions the bank’s timing for that to happen. 1 hike is discounted in 2022, 3 by the end of ’23, 2 more than the market expected 3 months ago. Long gov’t bond yields surged further, the 10y to 1.74%, as both inflation expectations and real yields rose. The former at 2.31% is the highest since 2013. The 10y real yield at -0.57% is up 50 bps from the bottom, but is still extremely low. Is the Fed losing the market’s confidence? Partly, at least. The obvious risk: Higher bond yields, and an even more aggressive Fed, more QE/Yield curve control. If actual inflation at that stage turns up, all bets are off. For sure, stagflation is not our main scenario, but the risk is regrettably >0
  - **Retail sales** fell much more than expected (3%) in February, partly due the harsh winter weather but Jan was revised 2 pp up to 8% (core). No stimulus cheques in February but the USD 1,400/person support was distributed in early March. **Housing starts** fell, partly for the same reason but the decline was broad region wise, and permits fell too. Higher mortgage rates may be the culprit but the lag is normally longer **Homebuilders’ index** fell, and they blamed higher lumber prices but the index remains at a high level. **Manufacturing production** fell by 3%, far more than expected. However, given the strong manufacturing surveys, no reason to worry
  - **The Philadelphia Fed’s manufacturing survey** rose to the 2nd highest level ever in March, just March/April ’73 was better. Prices are surging as well. **NY Fed’s survey** rose too. In February, the ISM index was at the highest level since 2014, and the ‘young’ PMI was close to ATH
- **UK**
  - **Bank of England** still deems the outlook to be unusually uncertain, and policy was kept unchanged; the signal rate at 0.1% and the QE program at £894 bn
- **Norway**
  - **Norges Bank** kept the policy rate unchanged at 0%, and lifted the interest rate path by up to 27 bps, and is now signalling a 50% probability for a Sept hike (as we expected), and 25% a second hike in Dec (we expected 50%). The change lifted NoBa’s path close to the pre-meeting FRA rates until Q1-23, then NoBa yielded. In the long end of the curve, NoBa lifted its curve by up to 40 bps less than we expected, a 1.36% signal rate in Q4-24 is still a very low rate, we think, and the risk is still at the upside. The interest rate was lifted for the same reasons we assumed, vaccines are arriving earlier, global growth is revised up, rates abroad are up, the oil price is higher, domestic demand will strengthen, wage inflation will be higher. A stronger NOK, and substantial ‘judgement’ prevented the Bank for hiking in June. Market rates & the NOK rose just marginally, and the NOK fell later on Tuesday due to a decline in the oil price – and interest rates rose less than they declined the days before the NoBa meeting
  - **Mixed February housing data**; SSB reports high housing starts, Boligprodusentene far less. However sales are better, the homebuilders assoc. reports. Total construction starts is flat y/y, housing up, non-residential down

SpareBank 1 MARKETS

Mixed, most countries still on the way up – but not faster

As we expected, growth in Norway is now very likely slowing amid lower mobility





- Vaccines are no doubt keeping new cases down in the UK and the US
- In many other countries, the no. of cases is rising, in some places quite a bit
- In Norway growth has clearly slowed, the ‘R’ was 1.2 last week, and probably below that at the end of the week. An ‘R’ at 1.1 will be sufficient to keep the level of infections at a reasonable level until vaccines soon arrives in large quantities
- The no. of deaths is shrinking most places as the no. of new cases has been on the low side for a while, and the oldest inhabitants are vaccinated most places

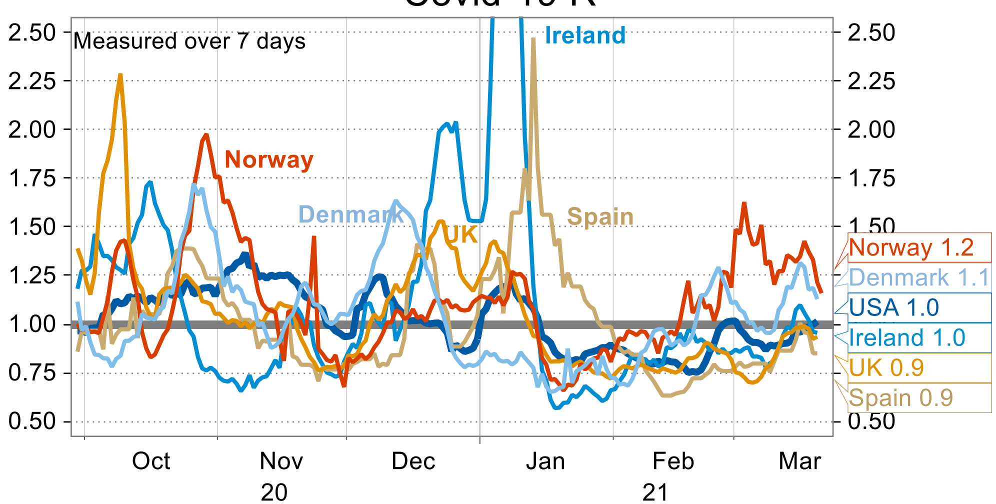
SpareBank 1 MARKETS

Still more countries on the way up than down

Few countries are reporting very high infection numbers, except some East European countries

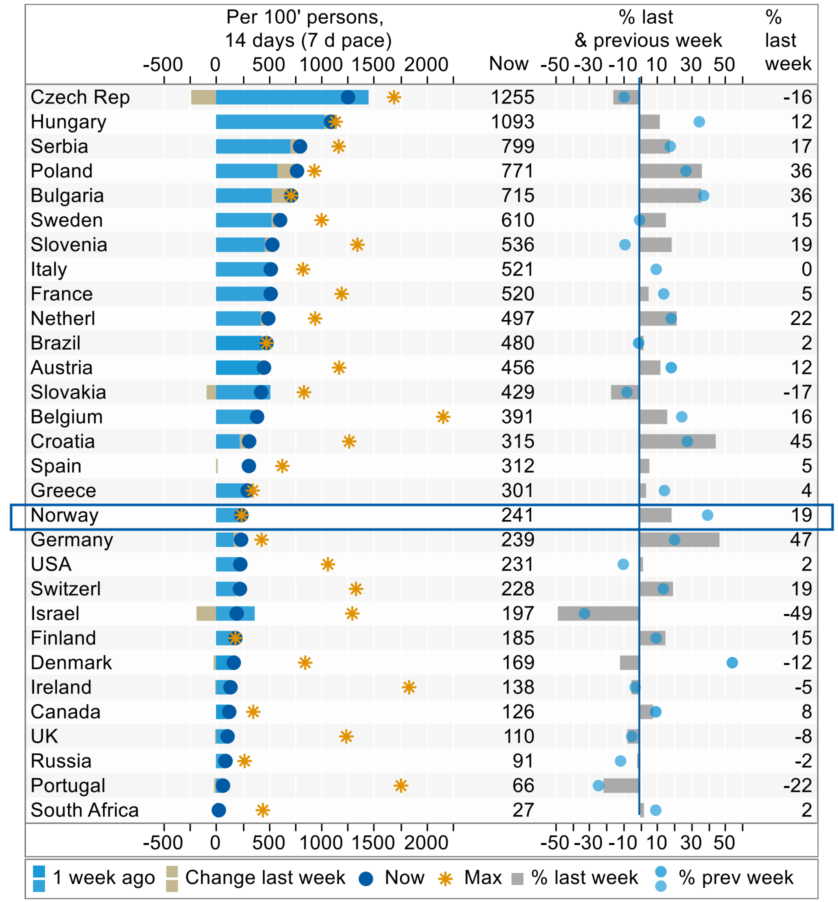
- **The Czech Rep.** is still at the top but has peaked
- **Norway** is still reporting a 25% growth rate last week, down from above to 50% per week, implying an 'R' at 1.2 - or even lower at the end of last week
  - » Several local restrictions are announced, and mobility is on the way down
- The no. of **hospitalised patients** and **deaths** are lagging, and are still down almost everywhere. In addition, we have already seen some impact on death rates of vaccination of the oldest/most exposed groups (also in Norway)
- **The mutated, and more infectious viruses** are taking market shares everywhere, and are now becoming dominant. Vaccines are still assumed to be quite effective against the mutated viruses, but some have some challenges vs. both the South African & the Brazilian versions. And new mutants may very well turn up

Covid-19 R



SB1 Markets/Macrobond

COVID-19, New Cases

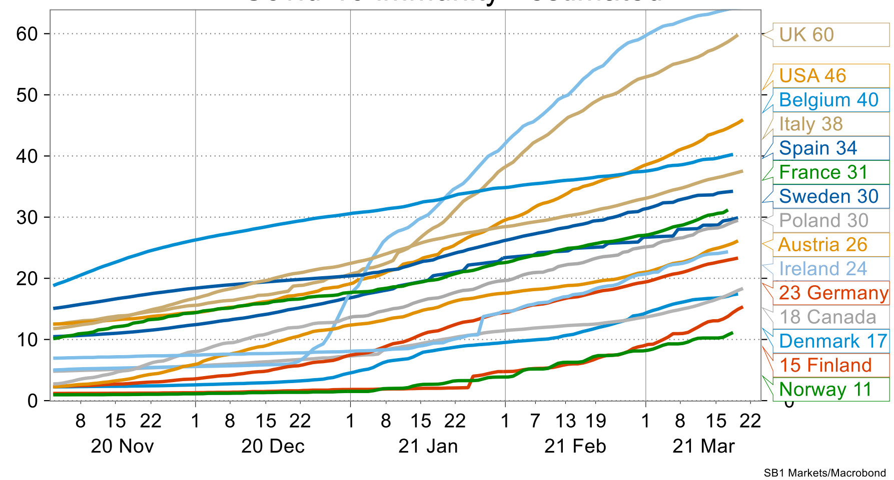


SB1 Markets/Macrobond

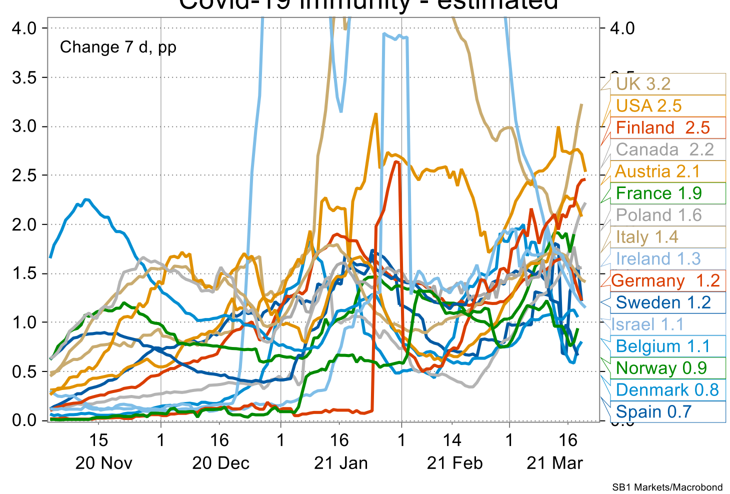
Vaccinations: EU is still lagging the UK & the US

But the US is now vaccinating at the fastest pace, 3% per week pace, and >40% are probably immune

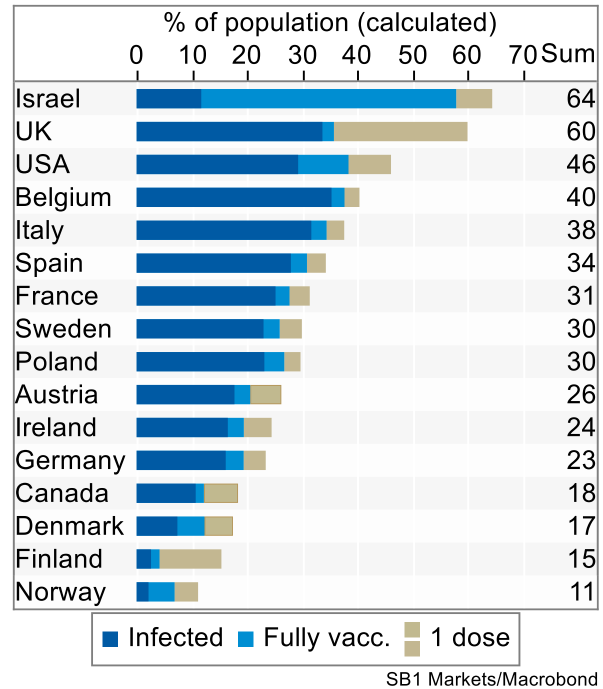
Covid-19 immunity - estimated



Covid-19 immunity - estimated

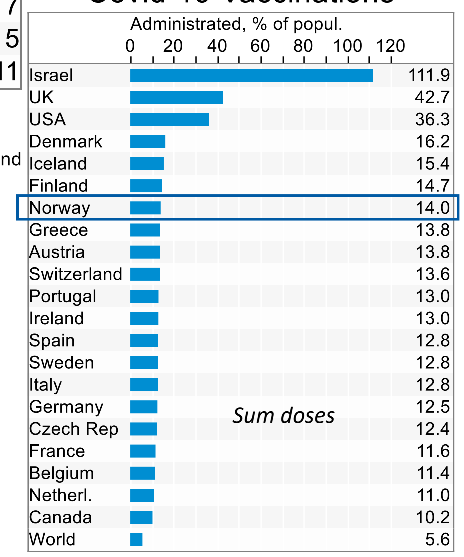


Covid-19 Immunity



And even more so in the UK

Covid-19 Vaccinations

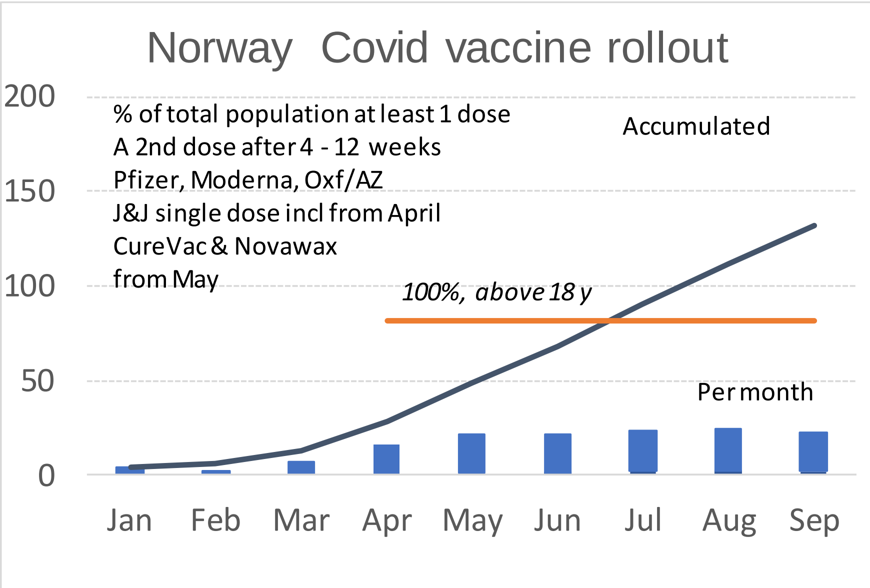


We calculate the infected rate by assuming a 0.5% infection fatality rate, and a 90% immunity from infection.
We assume those who have been infected are vaccinated in line with others

SpareBank 1 MARKETS

AstraZeneca is still not cleared for use in Norway, and in some other countries

That's not critical for the rollout but not positive. The big test: Will the April ramp-up happen?



- We have said it for a while: There is still substantial uncertainty vs. the availability of vaccines, both concerning global production volumes and the share EU/Norway will receive

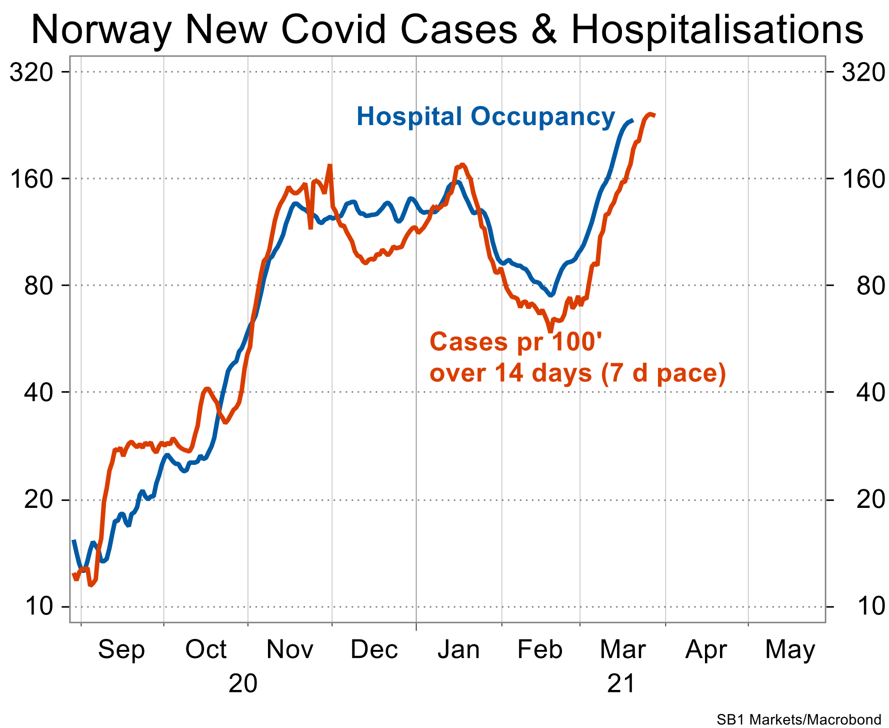
The first shot per week % of popul	
Jan	1
Feb	1
Mar	2
Apr	4
May	5
Jun	5
Jul	5
Aug	5
Sep	5

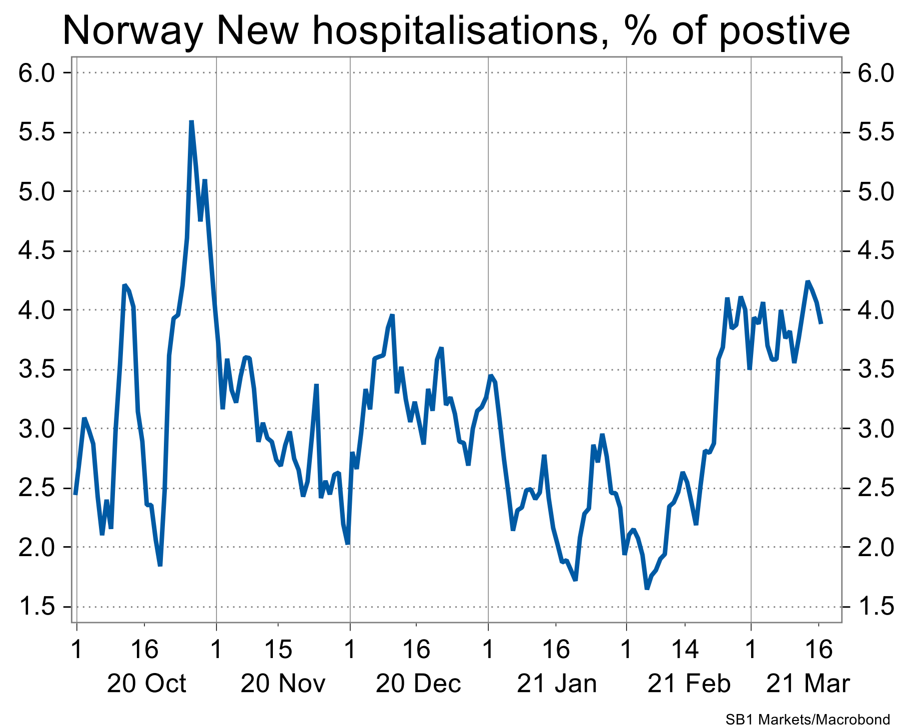
- Norway may reach a pace of vaccination at 4% of the population per week in April, which will reduce the 'R' (for a given social interaction) quickly

Data from FHI, VG, international media

Norway: The hospiltalisation rate has increased, probably due to the new viruses

Even if the oldest segment of the population is vaccinated

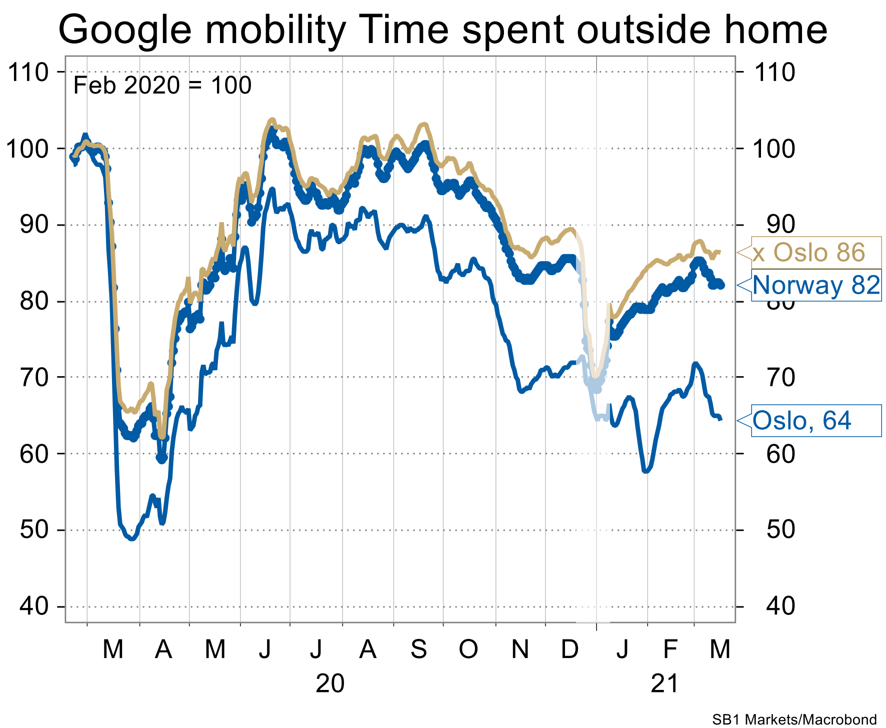




- The infection curve is hopefully now bending. If not…

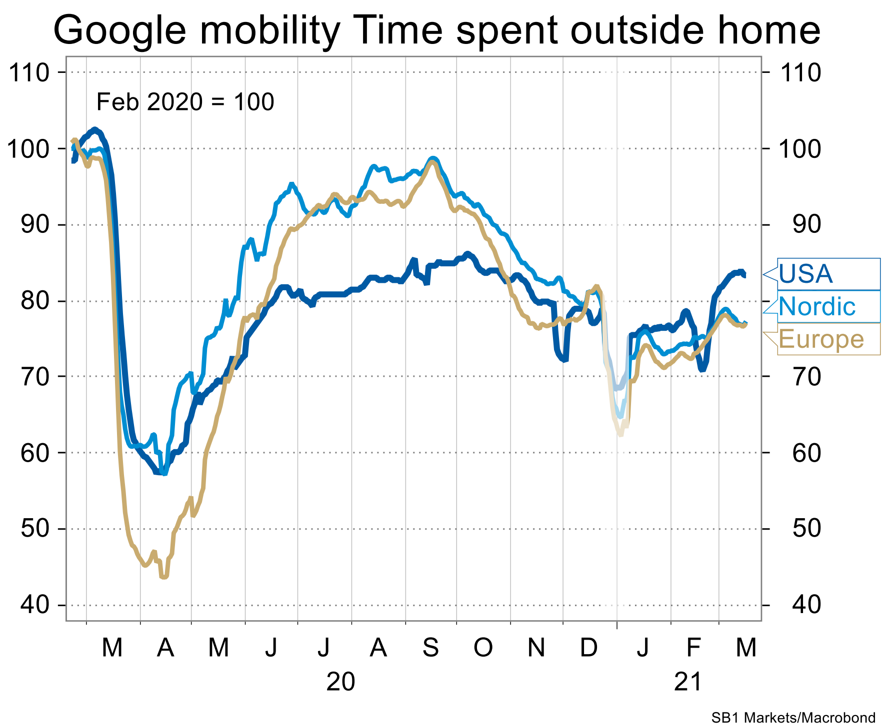
New restrictions lowers mobility in Norway, especially in Oslo

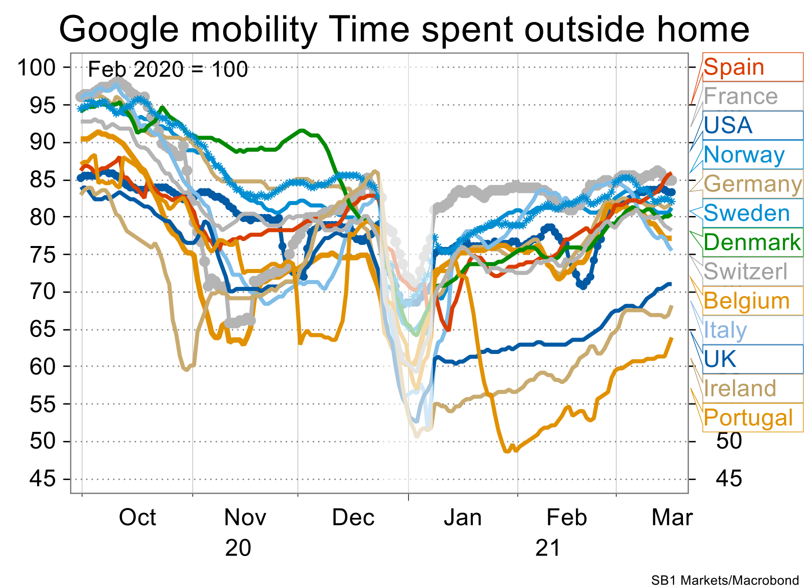
Most likely, mobility is now sufficiently reduced, the 'R' is coming down!

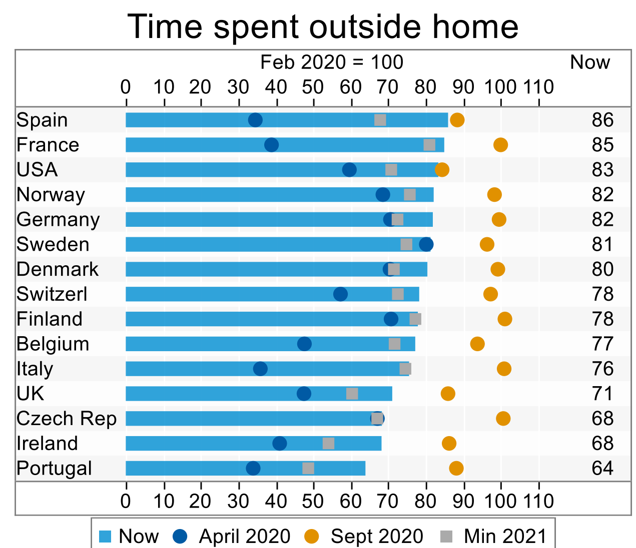


Curfew in Italy, while France, Belgium, Norway & others lowers mobility

On the other hand: the US is on the way up, as are Spain & UK. The virus still dictates





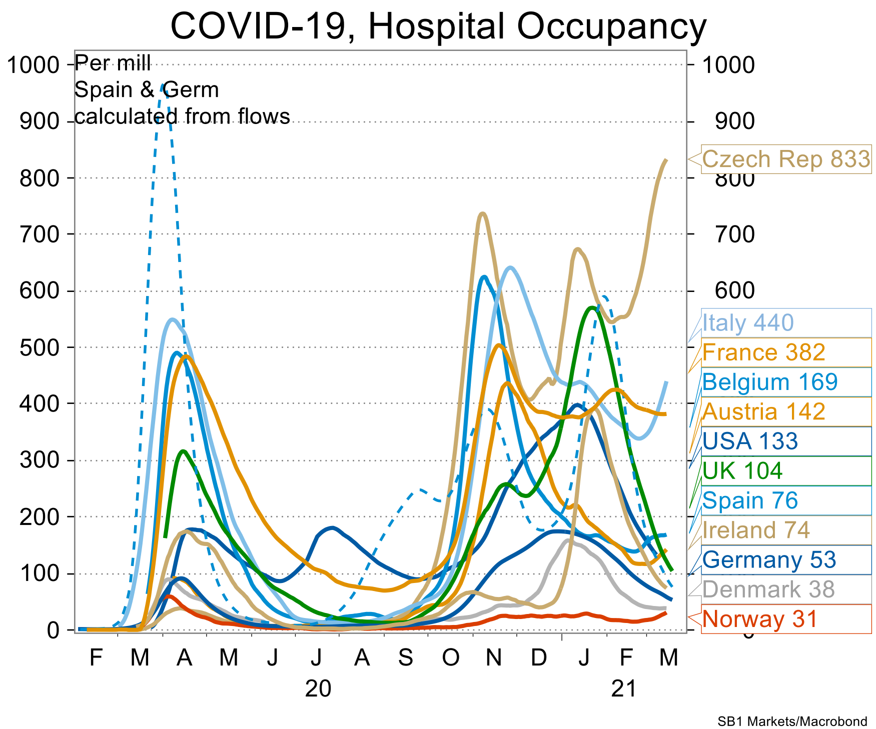


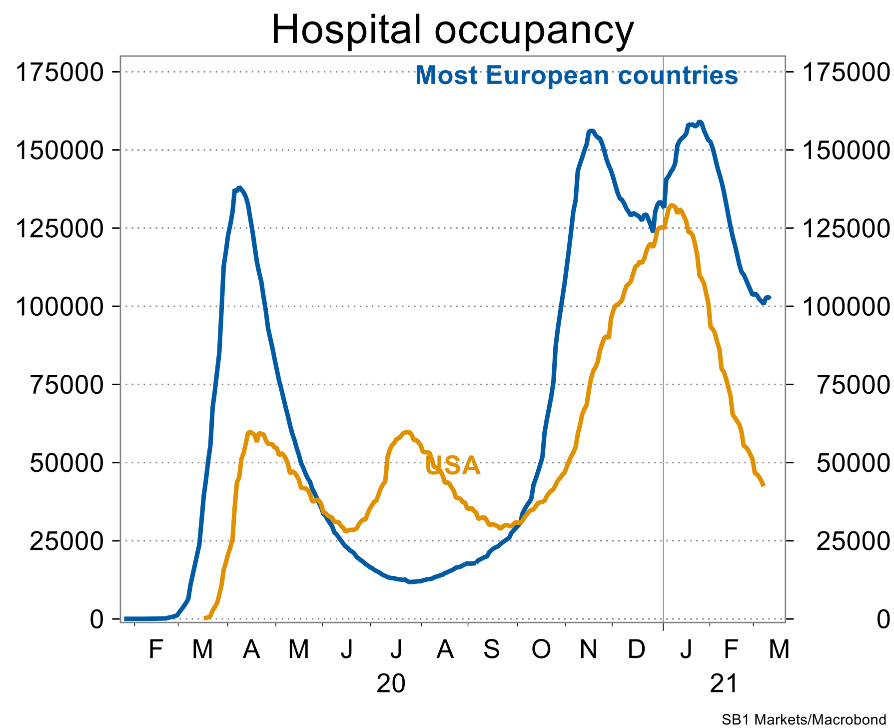
- Several European countries are still reporting low mobility, including UK, the Czech Rep, Ireland and Portugal

SpareBank 1 MARKETS

Hospitalisations on the way down almost everywhere, US down 70%!

Italy is the exception, and a new curfew is enacted. And of course the Czech Rep, at ATH (again)

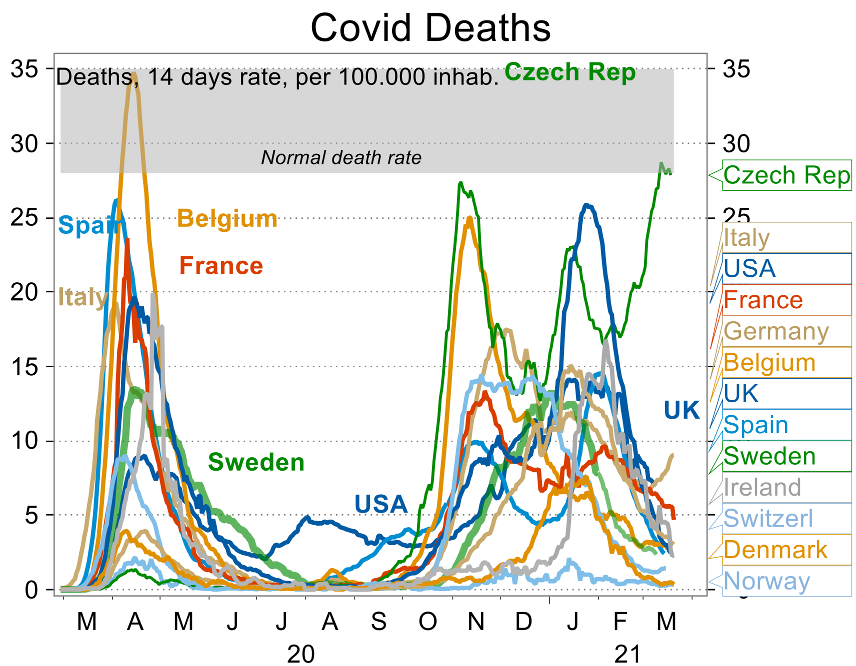




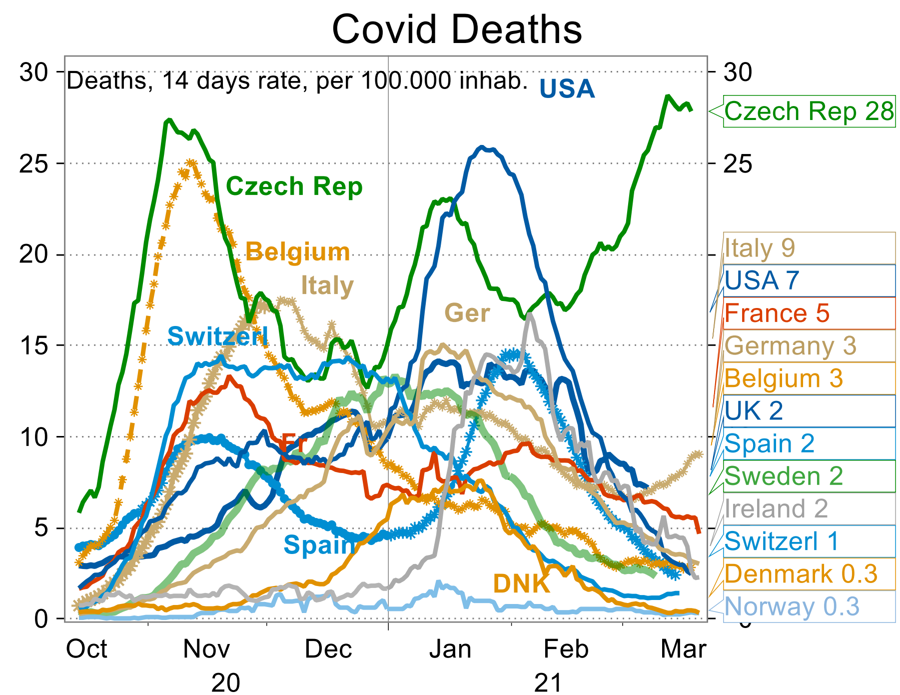
- Some increase in hospitalisations in Spain, Ireland too

The deaths: The Czech Rep has peaked, a sharp decline elsewhere

Except for Italy, where a curfew was introduced again



SB1 Markets/Macrobond

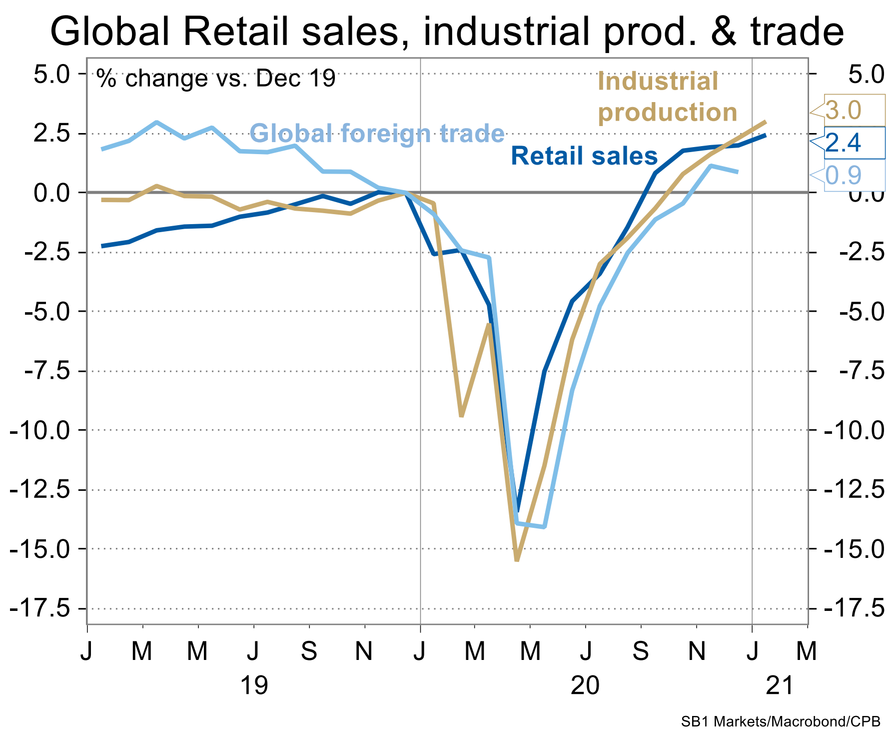


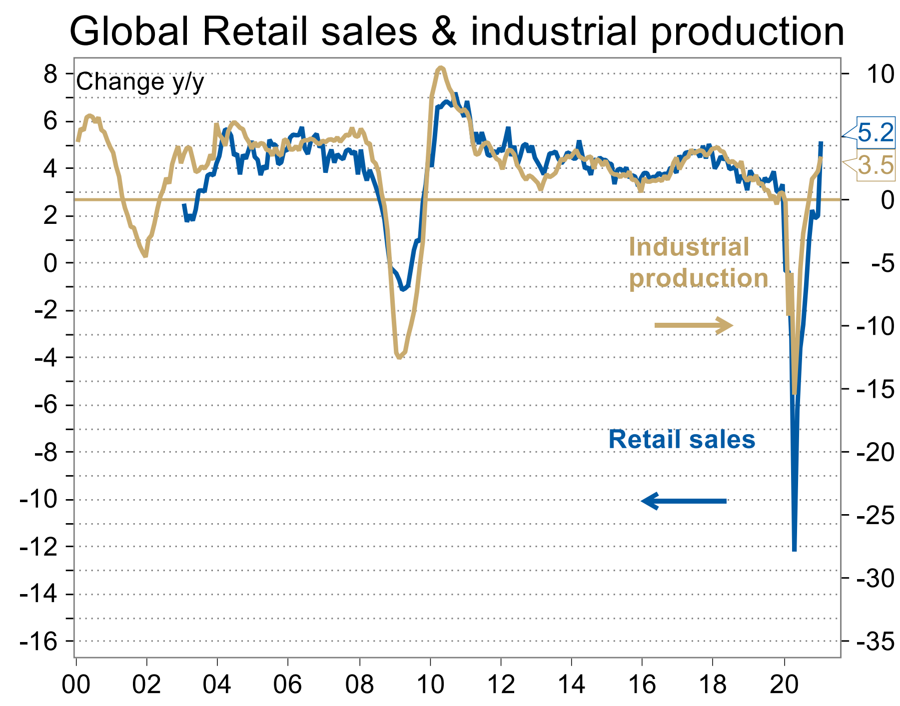
SB1 Markets/Macrobond

SpareBank 1 MARKETS

Jan retail sales, industrial production on the way up

Manufacturing production steady on the way up



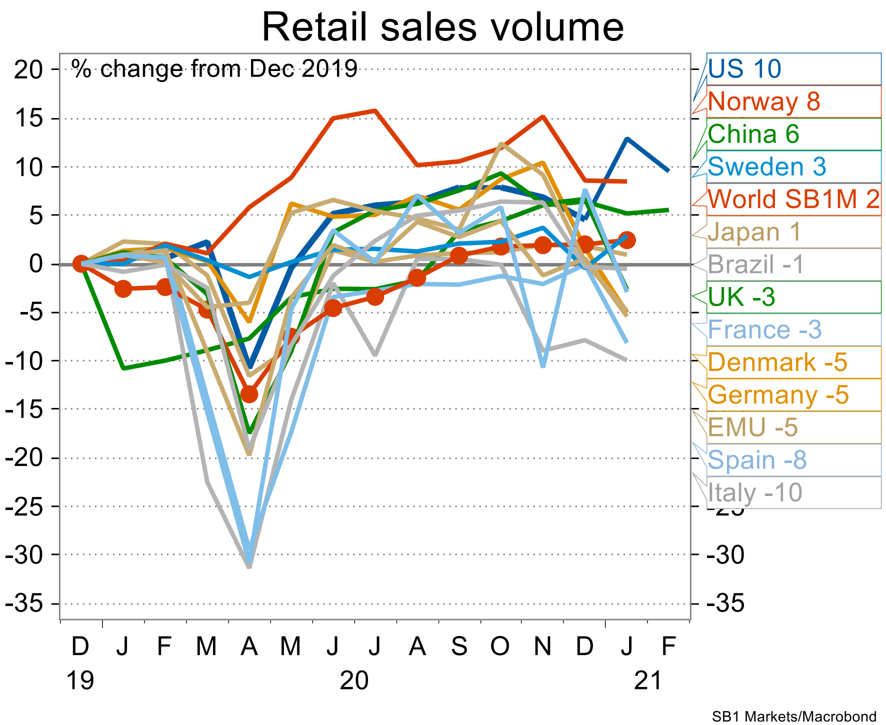


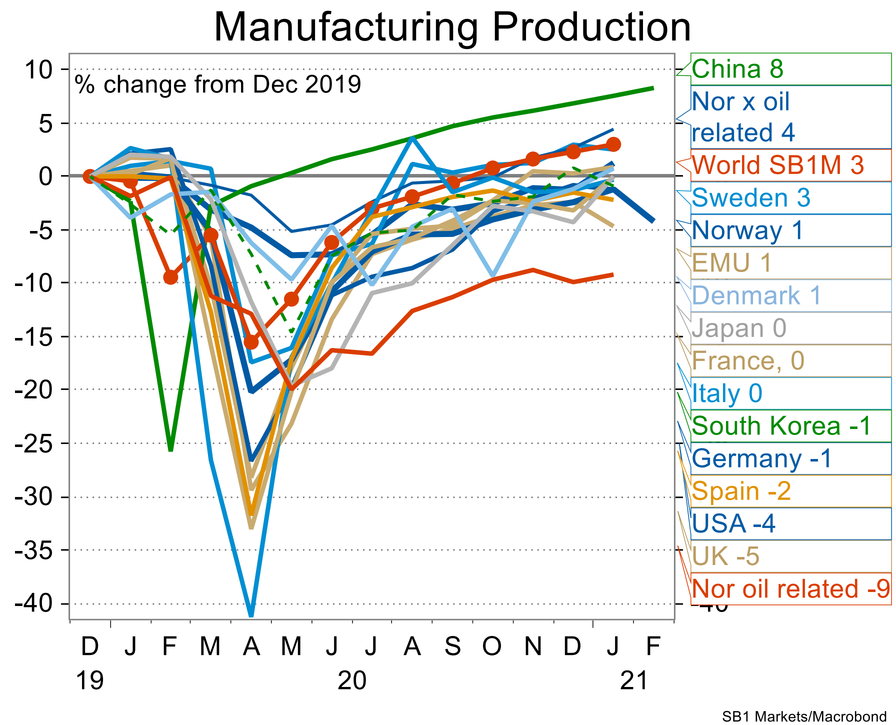
Memo: Keep in mind the different scales at the chart above

- **Retail sales** rose 0.4% in Jan even if sales in Europe collapsed, and Chinese sales fell significantly. An 8% US leap saved the day. Sales are 2.4% above the pre-corona level
- **Manufacturing production** probably climbed almost 1%, and is 3% above the pre-corona level, according to our estimates
- **Global foreign trade** fell a tad in Dec but is still 0.9% above the Dec '19 level

Volatile retail trade data, in sum a flattening recent months, during 2nd/3rd wave

Manufacturing production is still on the way up

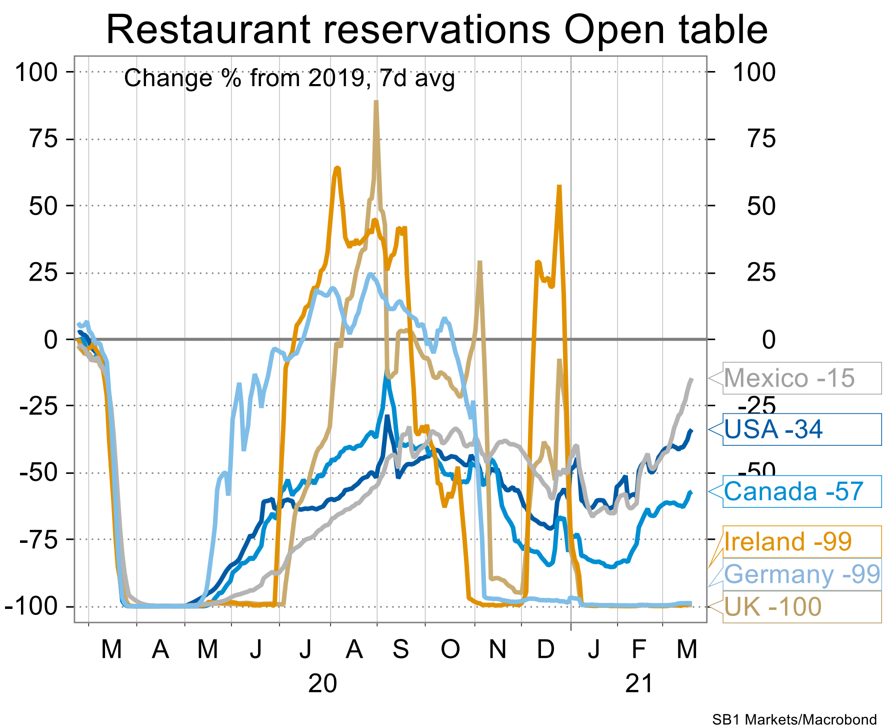


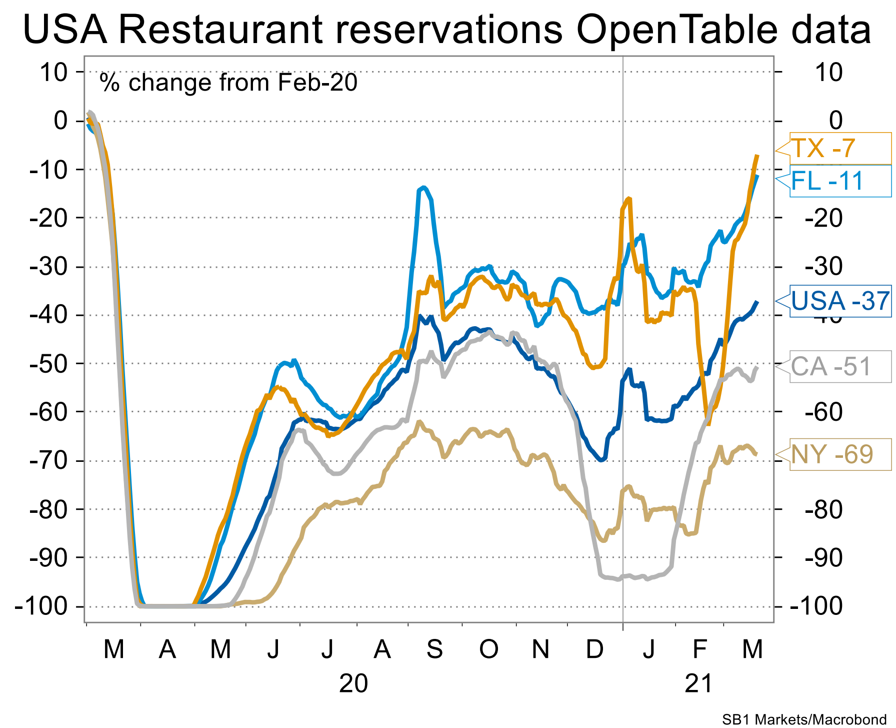


- Chinese retail sales were weaker than we expected in Jan, and lowered the outcome by almost 0.5 pp vs. our forecast. However, US sales were revised upwards, and global sales rose by 0.4%
- Global manufacturing production rose in January, but the February print may be the first with a negative sign since last April, as US production fell by 3% m/m. However, the strongest US manufacturing surveys in decades (Phil Fed the highest in almost 50 years!), and strong surveys in Europe and elsewhere signal a further trend upwards

European restaurants still locked down, while the Americas is opening up

Some US states not far below a normal level.



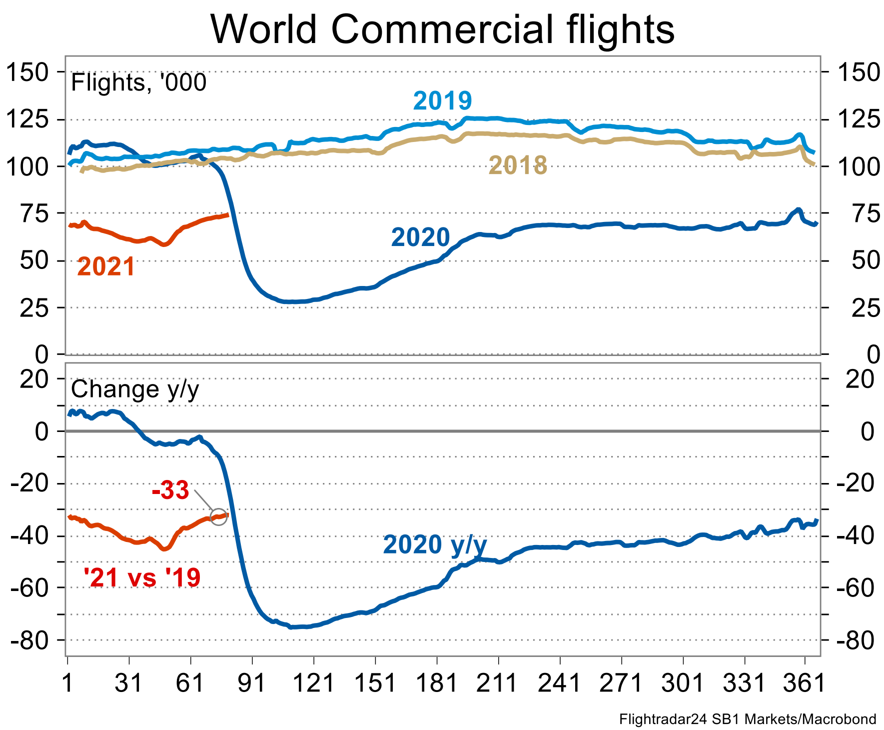


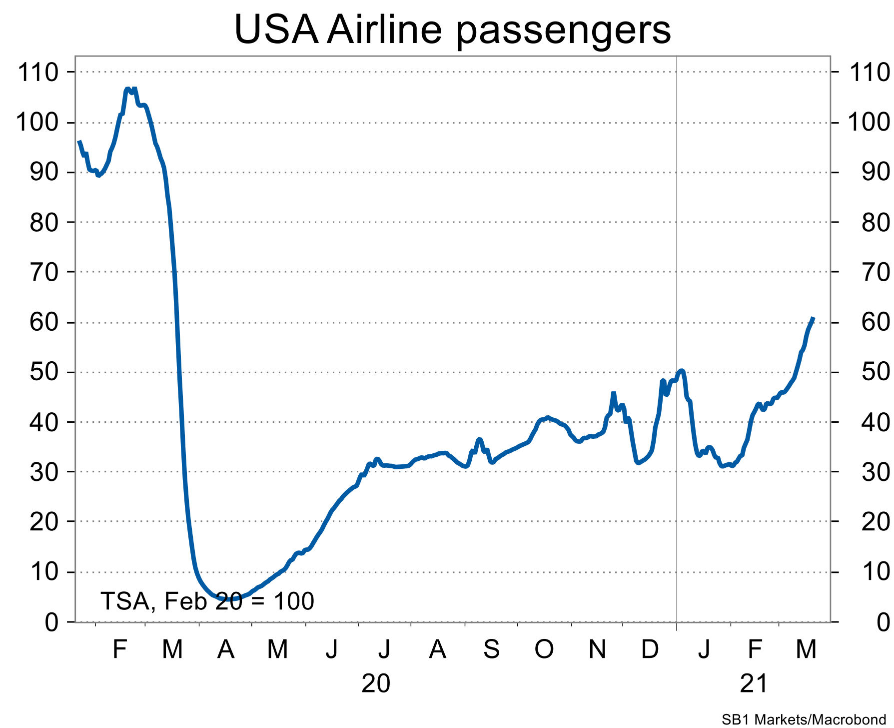
- Take-away and no-reservation US restaurants not included in Open-Table restaurant reservation data

SpareBank 1 MARKETS

Global airline traffic on the way up

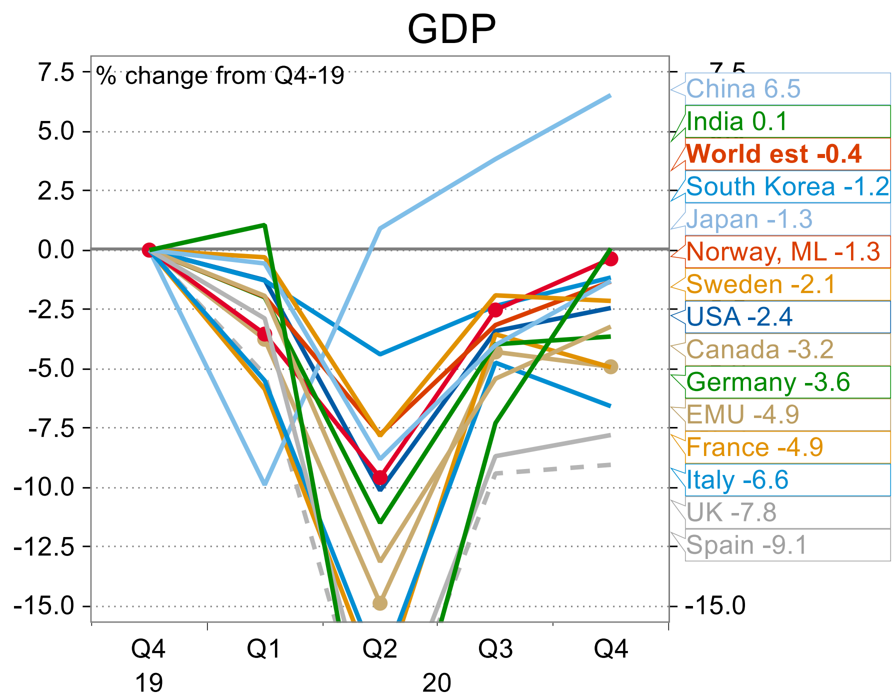
Still 33% down vs. the pre-pandemic (2019) level. US passenger traffic down 40%, but up 100% vs Jan



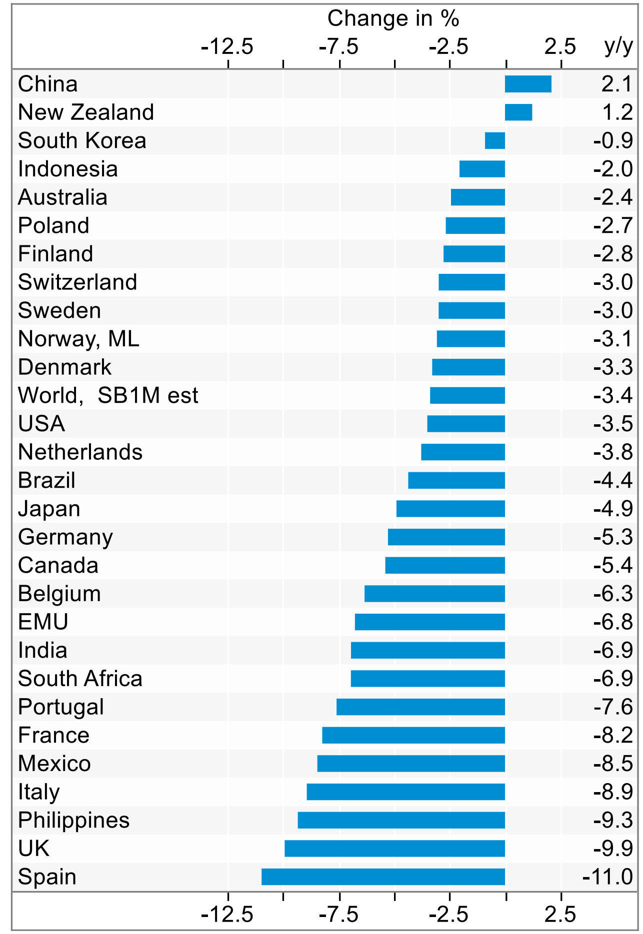


Q4 GDP growth even stronger than we assumed – India recovered sharply

GDP fell in EMU but most other countries/regions grew in Q4



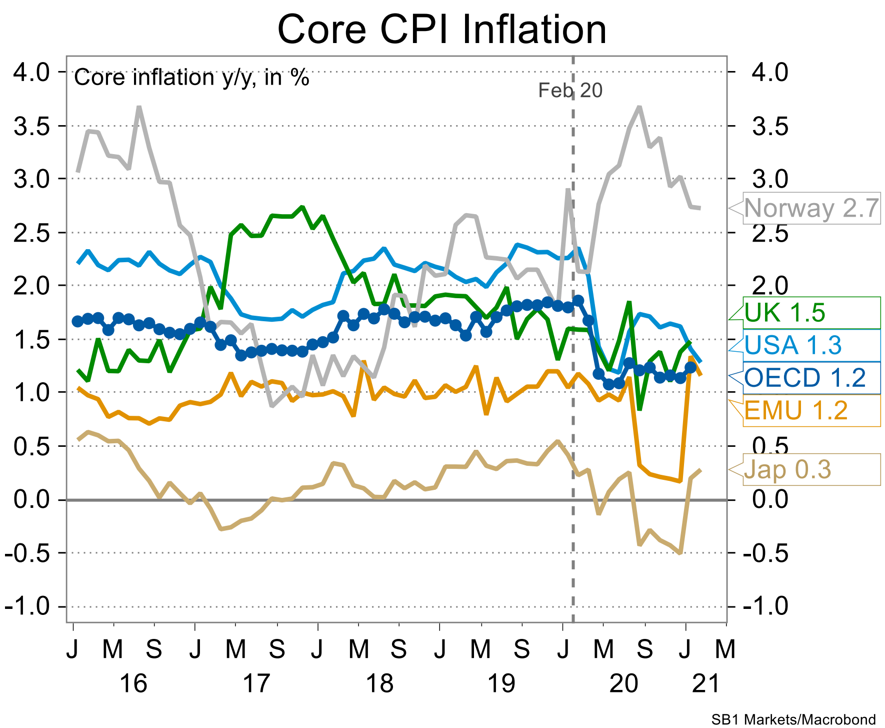
GDP 2020 vs. 2019

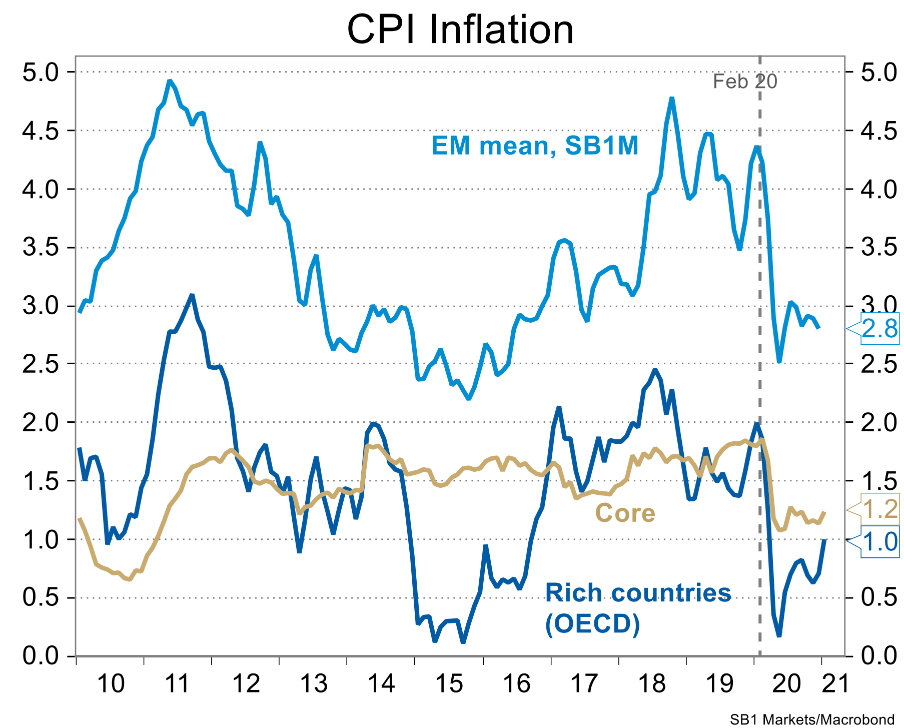


- We estimate that GDP grew by an 8% pace in Q4 – more than double of underlying trend growth, leaving global GDP down just 0.4% y/y. Last year GDP fell 3.4%
  - » China, India & the US have reported decent Q4 growth, alongside some Asian countries, UK & Norway – and most others. However, GDP fell in both France & Italy
- **In 2020,** China grew by 2.1%, New Zealand 0.2%, all others down
- Sweden -3%, Norway (Mainland) -3.1% and US -3.5%
- EMU contracted almost 7%, UK by 10% and Spain by 11%. What a year…

Inflation has bottomed

Inflation in the EMU shot up in January, and just not due to VAT hikes





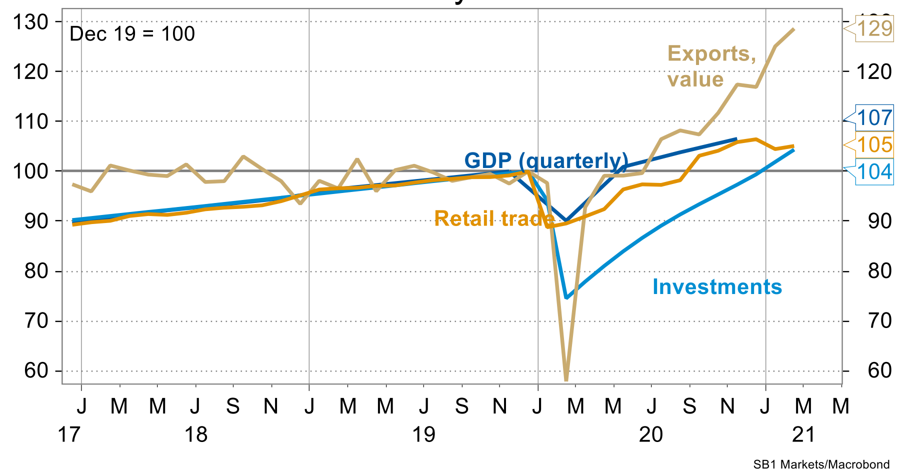
- **The PMI surveys** reports that the increase in raw material prices are pushing both total input and output prices upwards. The correlation to headline inflation is very close, and <u>a substantial lift in headline inflation is now inevitable</u>
- However, the **correlation to core (ex food, energy) inflation** is far weaker, and central banks should not and will not panic even if headline exceeds the inflation target for a while (and the Fed is explicit on this, as it is now targeting the price target)
- Should core inflation increase, which will likely happen the coming months, at least in the US, central banks will not panic, as long as they have a reasonable story for a moderate inflation outlook
- The **inflation outlook** depends on the banks' assessment of output gaps, growth and especially vs their assessment of the balance in the labour market and the outlook for wages
- So far, banks can afford to wait and see until the post-Covid recovery is well established. <u>However, that won't necessarily take that many months</u>

SpareBank 1 MARKETS

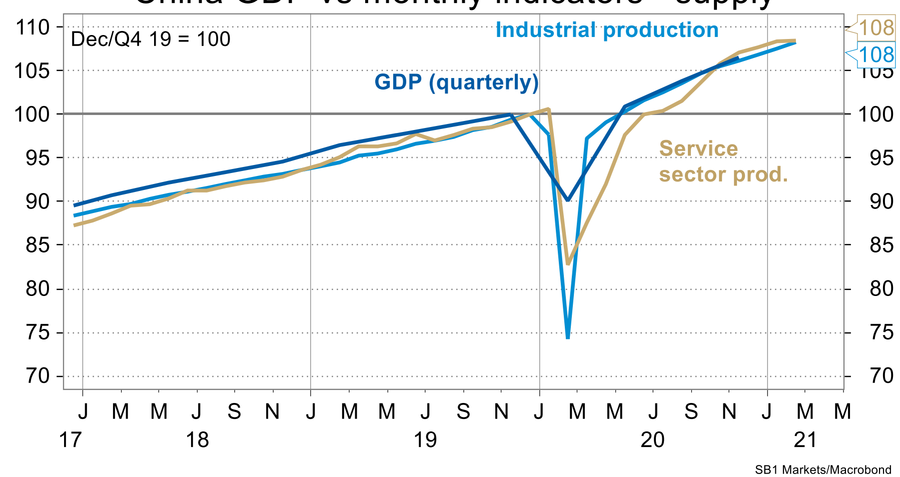
Covid measures dampened the Chinese economy in Jan/Feb, no reason to worry

No weakness in manufacturing or investments, just in retail sales & service sector production

China GDP vs monthly indicators - demand



China GDP vs monthly indicators - supply



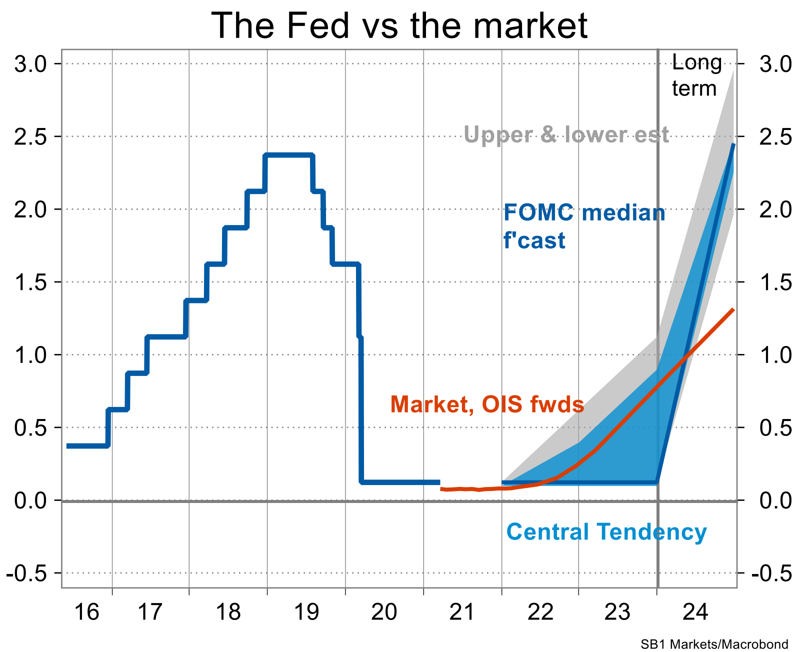
- **Industrial production** rose 0.7% in both Jan & Feb. Measured y/y, production is up 35%, expected 30% but these y/y data are now 'impossible' to calibrate. Production is well above the pre-corona trend path, and is growth faster. Growth will now most likely slow
- **Service sector production** grew by 0.6% in Jan, as in Dec, but slowed to 0.1% m/m in Feb, clearly due to the muted festive New Year season. Activity is anyway back to the pre-corona growth path
- **Retail sales volumes** fell by 1.9% m/m in Jan and grew by just 0.6% in Feb, according to our calc. We assume the Lunar New Year holiday is to blame for the weak start of the year. Still, measured y/y, sales were 1.8 pp above expectations
- **CPI inflation** has slowed sharply, and prices are down 0.2% y/y (from above +5% at the peak) as pork prices are heading down. Supportive for real household demand, of course. **Producer prices** rose further in February
- **Investments** rose 2.4% m/m in both Jan and Feb, faster than over the previous months. The gap vs. the pre-corona trend is almost closed. Measured y/y investments were 3 pp lower than expected
- **Credit growth** recovered in both Jan & Feb, no credit squeeze
- **Exports** were record very strong in Jan/Feb, and imports are more than OK

In sum: Covid measures held parts of the economy somewhat back during the festive season but no reason to expect further weakness

SpareBank 1 MARKETS

Growth up, unemployment down, inflation up. But zero interest rate until 2024

More FOMC members expect hike in 2022 (4 vs. 1 in Dec of 18), or in 2023 (7 vs 5 in Dec)



- The market is discounting the hike in Q4 2022. Following a steep lift in rates Thursday & Friday, the market is now discounting 3 hikes by the end of Q-2023, 2 more than what was expected in Dec-20!

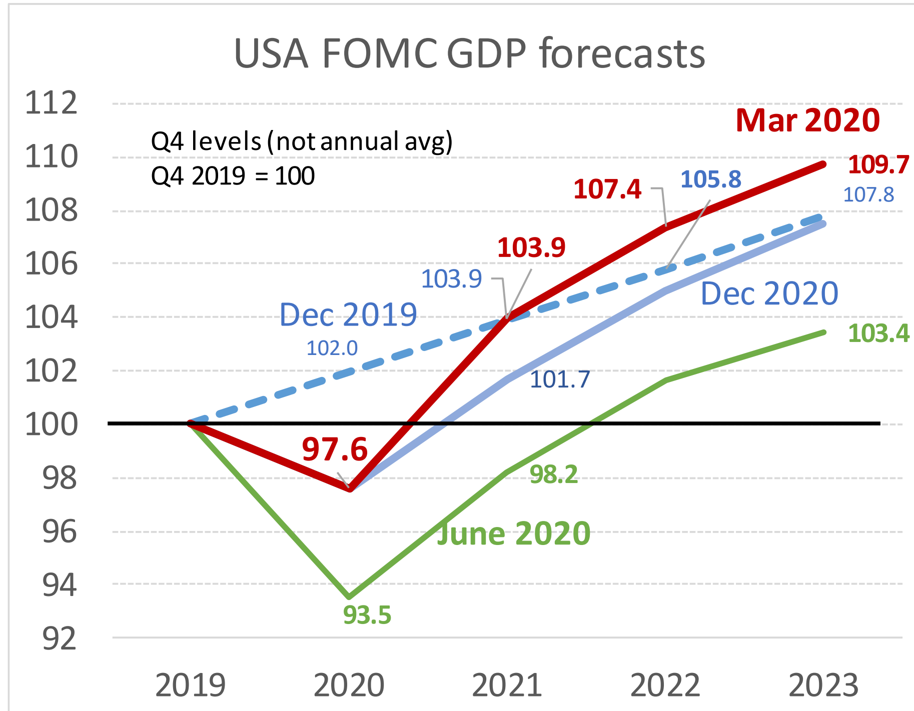
- The target rate was left unchanged at 0-0.25%, as expected, and the majority of FOMC members expects an unchanged signal rate at least trough 2023, like they did in Dec last year. No change on QE either, USD 120 bn per month in Treasury bonds (80 bn) and mortgage bonds (40 bn)
- The assessment of the current state of the economy was adjusted upwards, and growth projections were revised sharply upwards, unemployment down, and inflation up, check next page
- Powell reiterated that rates will not be hiked before inflation has reached 2%, and is expected to stay above 2%. He stressed the *«fundamental change in our framework means we're not going to act pre-emptively based on forecasts. We're going to wait to see actual data»*
- The individual FOMC members' interest rate path (the dot plot) reveals that the mood is gradually changing. 4 of 18 members assume a hike in 2002, up from 1 in Dec, and 7 assumes a hike in 2023, up from 5. In June, 2 more, and the median one tick up?
- Markets may have expected a somewhat less dovish signal from the FOMC or comments from J Powell. Interest rates fell marginally, and the equity marked surged – no hikes before 2024, at the earliest! However, interest rates surged both Thursday & Friday
- **The market does not believe in the Federal Reserve anymore** ***For good reasons, we think. Will confidence in the Fed erode further? No unlikely, and quite worrisome***

Big time revision of economic forecasts. GDP soon back on track (and then above)

Since last June the FOMC has lifted its GDP path by 5%. *Still NO change in its interest rate path*

Percent

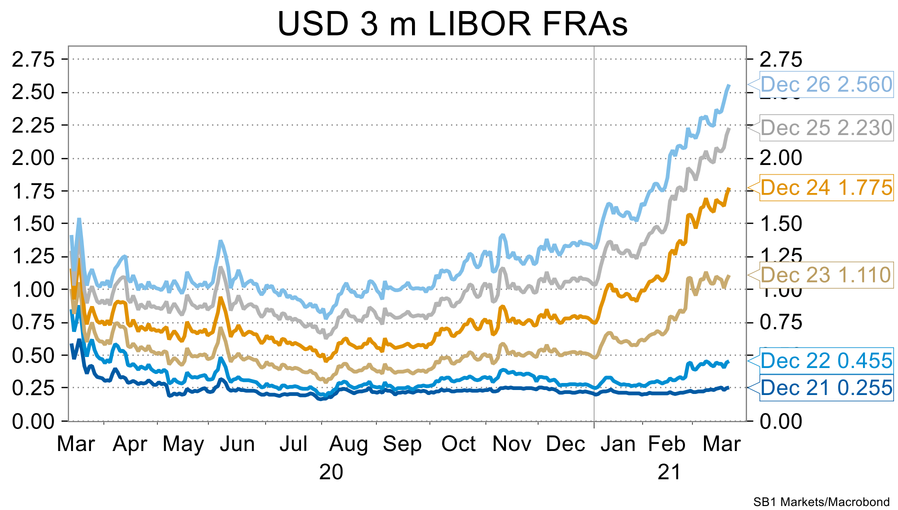
Variable	Median[1] 2021	2022	2023	Longer run
Change in real GDP	6.5	3.3	2.2	1.8
December projection	4.2	3.2	2.4	1.8
Unemployment rate	4.5	3.9	3.5	4.0
December projection	5.0	4.2	3.7	4.1
PCE inflation	2.4	2.0	2.1	2.0
December projection	1.8	1.9	2.0	2.0
Core PCE inflation[4]	2.2	2.0	2.1	
December projection	1.8	1.9	2.0	
Memo: Projected appropriate policy path				
Federal funds rate	0.1	0.1	0.1	2.5
December projection	0.1	0.1	0.1	2.5

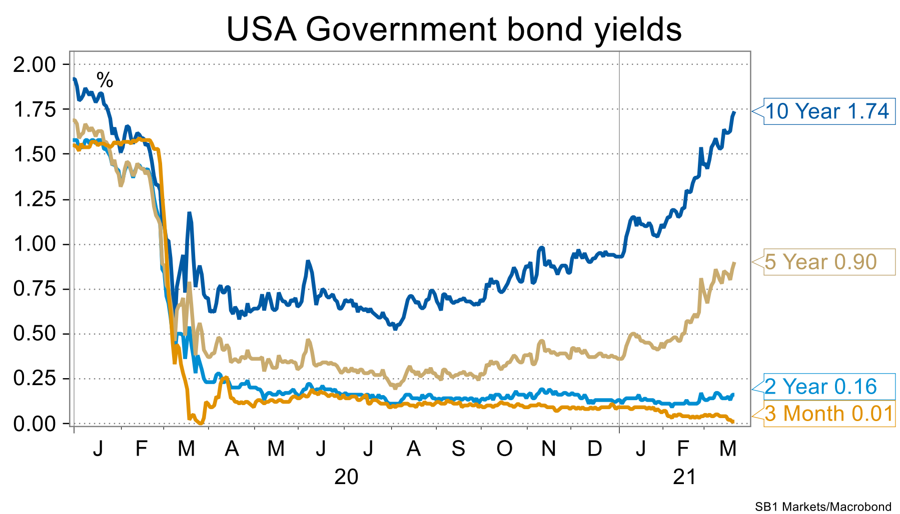


- The 2.3% upward revision of the **'21 GDP f'cast** was the second largest ever. GDP is expected to return to the pre-corona trend path in Q4-21, and not Q1-24, as implied by the Dec projection. From 2022 GDP is expected to stay above the p-c trend path. From last June, the path is revised up by 5%, and then the economy was expected to remain 4% below the p-c trend 'forever'. Now, the economy is expected to stay almost 2% above the p-c trend 'forever'
- **Unemployment** in Q4-21 was revised down by 0.5 pp 4.5%, and is expected to decline further to 3.5% 2023, lower than the assumed NAIRU at 4.0%
- **PCE core inflation** is expected accelerate to 2.2% by Q2-21, but then return to 2% in 2022, and then slightly up to 2.1% in 2023. These forecasts signal that the Fed is serious vs. its aim to average inflation at 2% over time, by allowing inflation to stay above 2%, if it has been below the target. In addition, Powell 'promises' not to hike on forecasts of higher inflation but will wait until actual inflation has come up to 2%, and is assumed to remain above 2%
- **The long term neutral Fed funds rate is assumed to be 2.5% (unch). Thus, the bank plans a substantial monetary stimulus the coming years**

Chairman Powell reiterated the Fed's dovish stance on monetary support…

…but markets just shrugged it off, once again. Is the Fed losing its grip?

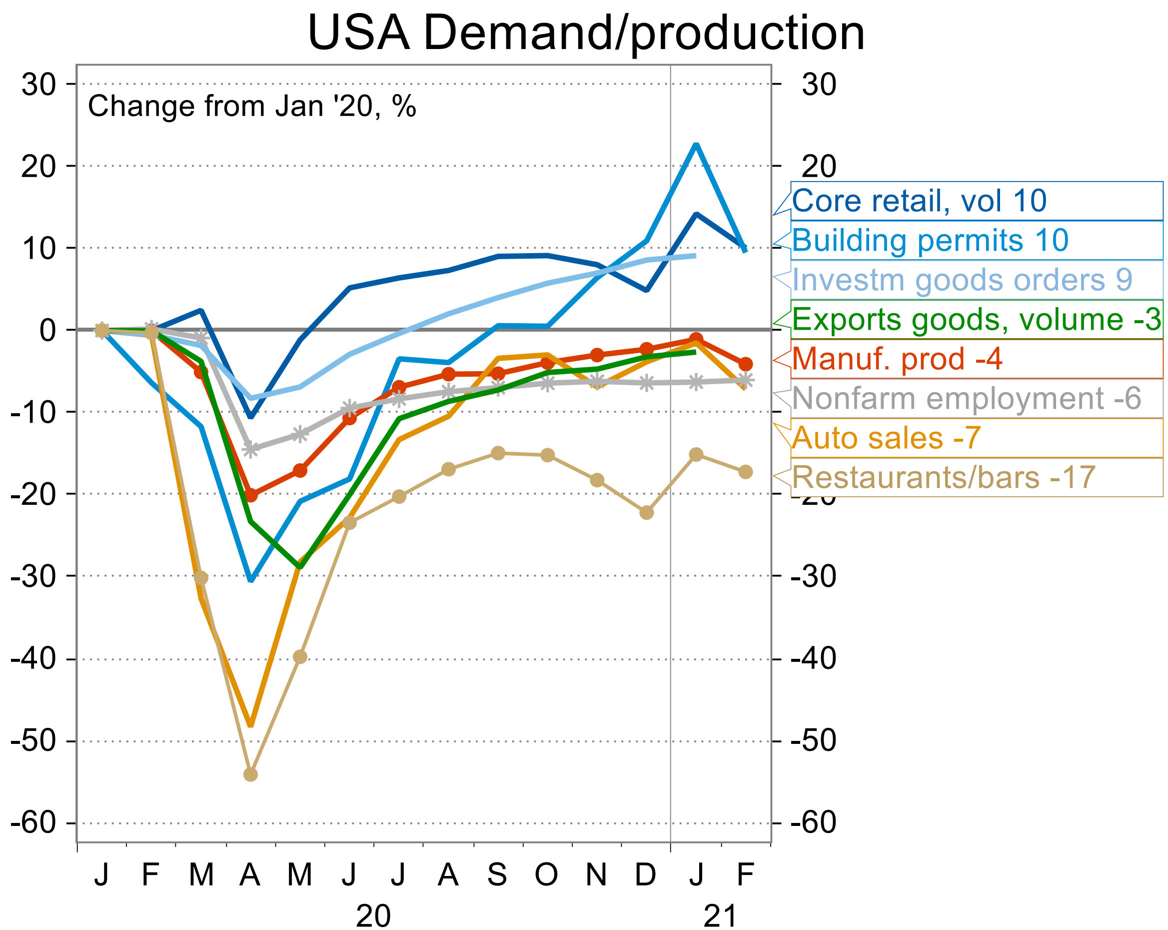




- Following the recent rise in yields, Fed chairman Jerome Powell tried to **reassure markets** that monetary support would be upheld and that the Fed "will be patient", even if the Fed conducts major revisions of its growth & unemployment forecast, and lifts its inflation forecasts
- However**, markets were not convinced**, not this time either. Market is discounting the Fed to hike in Q4 22, and not in 2024
- **Long term rates** rose sharply Thursday & Friday, the 10 y gov bond yield to 1.74%
- **Are we witnessing a lack of confidence** in Fed's policy stance? Close to, and this is not a good sign. Lack of confidence in Fed's commitment to keeping inflation low increases the risk for a further increase in long bond yields – and a higher risk for a stagflation scenario
- **Should that happen, all bets are off.** The Fed could wage a war on the market, increasing QE sharply in order to force long bond yields down
- If **inflation** at that stage picks up steam, even more bets are off. A 'Volker moment' cannot be ruled out as new hands at one stage will take the helm at the Fed. Under a president Trump??
- **The Fed should no doubt have lifted its interest rate forecast in order to strengthen its credibility.** Check more here on the implication for asset allocation

A tad colder in February but good reasons to expect a much hotter spring!

Most indicators surprised at the downside in February but the coming months will be strong

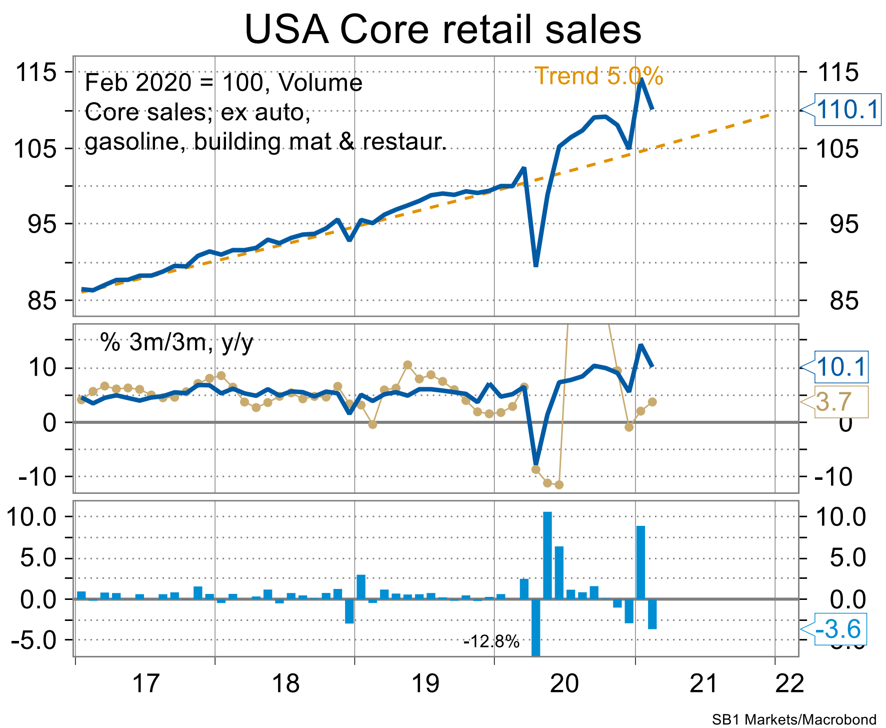


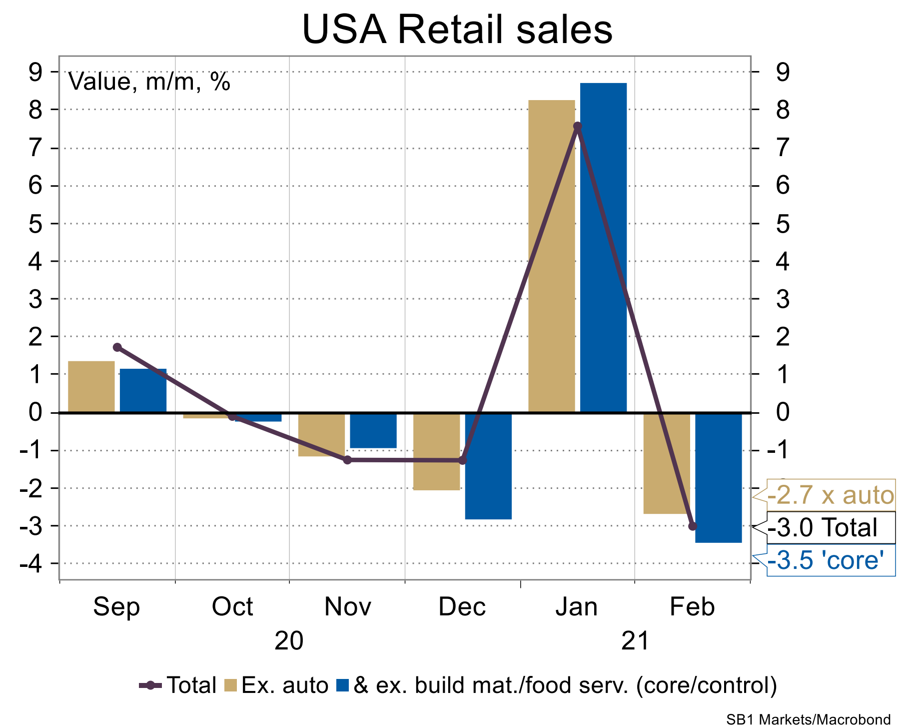
SB1 Markets/Macrobond

- **Retail sales** (goods) up almost 8 % in January, and fell 3% in Feb, at least partly due winter storms. The level is anyway OK
- **Building permits** fell 10%, still remaining at a high level
- **Investment orders** ex aircrafts/defence are up 8% vs last Jan, and flat including aircrafts. Feb data out this week
- **Exports** remain below par but are still on the way up, now just 3% below Jan last year, Feb data this week
- **Restaurant sales** are down 17% (in value terms), but will increase sharply the coming months
- **Employment** has flattened, and is still 6% below Jan 2020 level. The weakness is mostly due to a sharp contraction in employment in the hotel/restaurant sector but not a growth story elsewhere either
- **Nowcasters** are now signalling 6% growth (annualised) in Q1 – or up 1.5%. If so, GDP is almost back to the Q4 '19 level – still, of course, below the pre-corona growth path

Retail sales down 3% in February – but Jan sales revised up 2.2 pp to +7.6%!

Stimulus checks spent in Jan; bad weather curbed sales in Feb; new checks, new rebound in March?

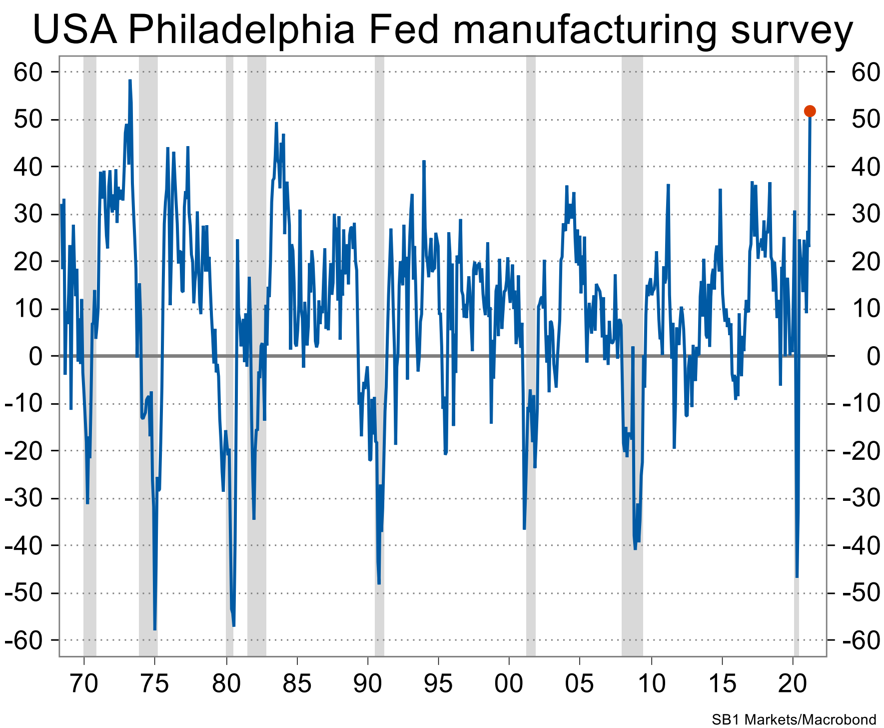


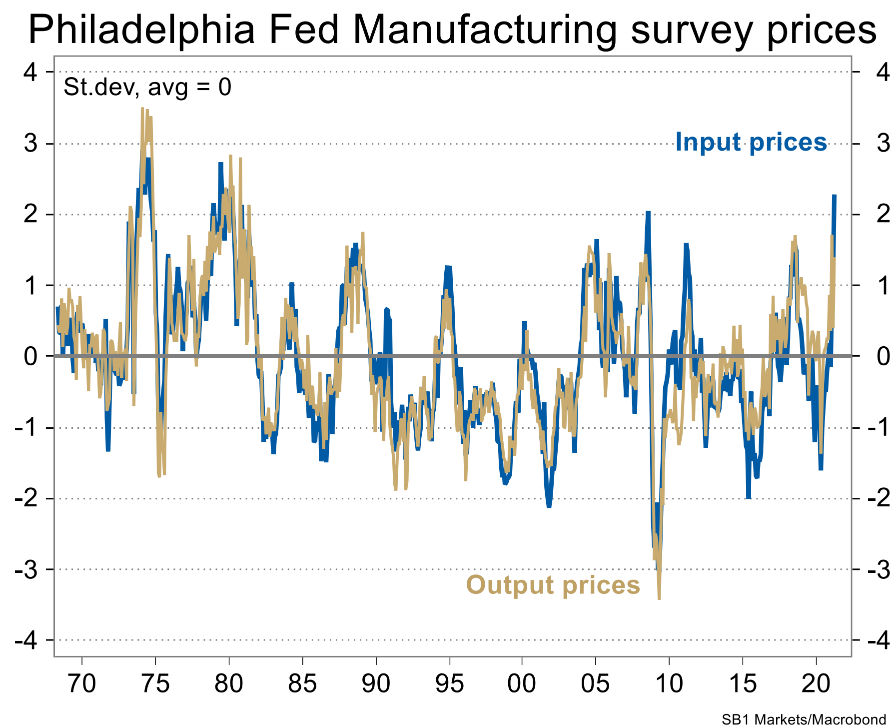


- **Total nominal sales** <u>fell by 3.0%</u>, expected -0.5% (No help from all big data – or are the economists just not in touch, just like in January?)
  - » The revision of Jan sales data is 'crazy'. Originally, economist expected 1% growth in Jan, now the figure is 7.6%
- **Core sales of goods** (=control group, excludes auto, gasoline, building materials & restaurants) in Jan rev. up to +8.7%, from 6%. The 3.5% setback in Feb is 'irrelevant', the level is sky high! 0
- Check details next page, sales were down everywhere but still huge discrepancies between sectors – restaurant (incl, in the total) is still down 17%
- *We expected the February number to come down somewhat after the surge in Jan, but the cold weather in Texas and across the Great Plains pulled the figure down even further*
  - » President Biden's USD 1,400 checks will be sent out in March (total of USD 400+ bn) – safe to say that could impact retail sales in the next couple of months

Please check this Phil Fed survey: Just March, April 1973 better than March 2021!

And input prices are rising faster than anytime since 1982. Output prices sharply up too

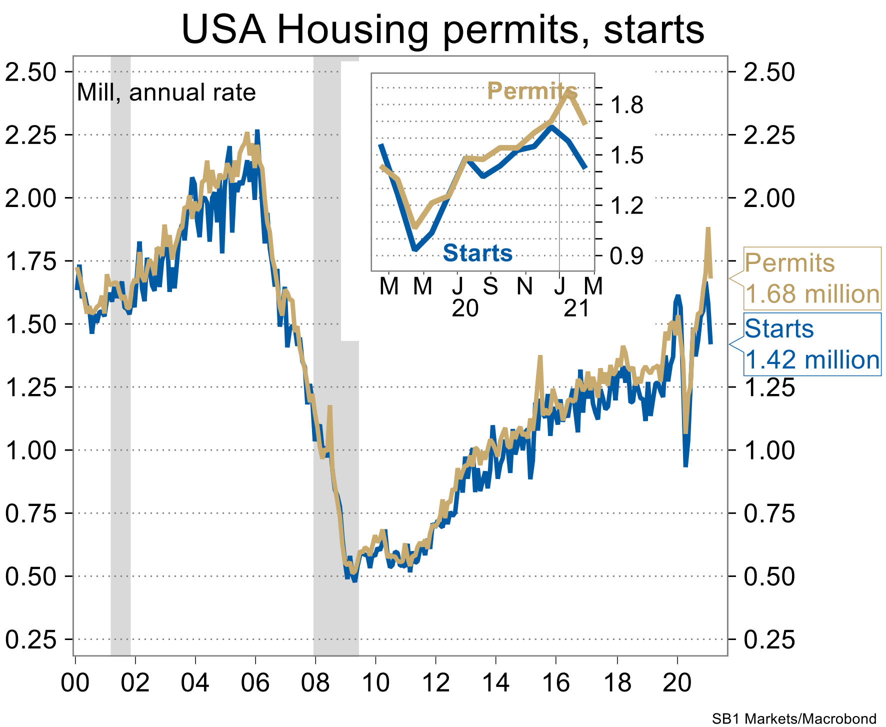


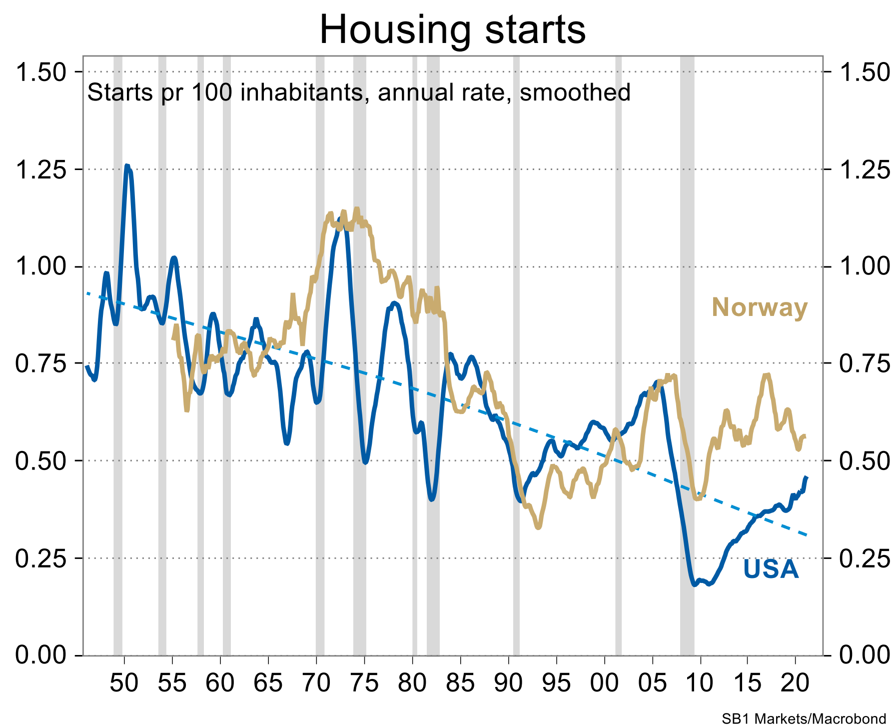


- So what is going on??
- Activity is rising from a level that is not low, neither are prices
- The main index shot up to 51.8, expected up to 23.2 from 23.1 (!). The level is…quite special.
  - » The average of the most relevant sub-indices are just as strong as the headline (general assessment)

Housing building permits down 10.8% in Feb, but still the 2nd best in 15 years

Starts also down 10.3% m/m, level still OK

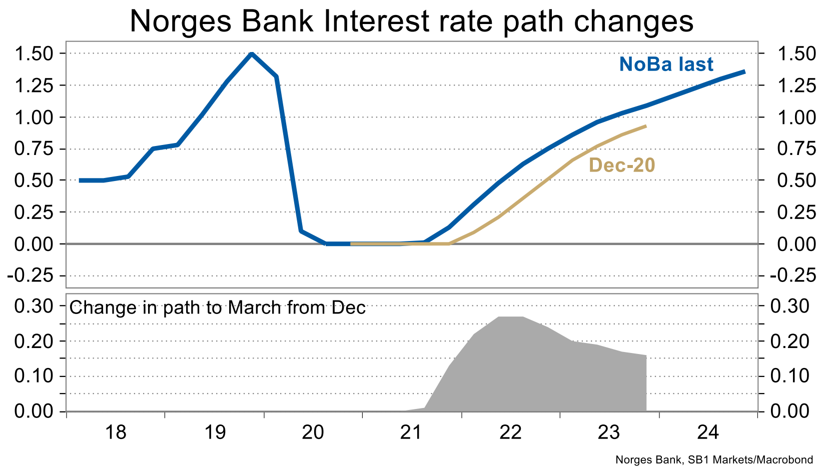




- Both **permits and starts** were slightly lower than expected. However, both are at high levels – and permits are at the highest since 2006 (but still below the late <u>2005</u> peak)
  - » <u>Starts are up 17% y/y</u>
  - » <u>Permits signal more starts</u>
- Housing starts are not at high level per capita vs. history. However, like in all other rich countries, as the 'country is built', at least in many cities, and population growth is slowing. <u>Housing starts have been trending downwards in most countries over several decades</u>
  - » However, not in Norway the past 30 years. Because we love our homes (and our low interest rates, vs our income expectations)

Norges Bank to lift rates 1-2 times in H2

50% chance of a hike in September, 25% for another hike in December



Interest rate paths

	Path 4-20	**Path 1-21**	Change bps	SB1M f'cast	Fair FRA *) @IMM, NoBa	FRA pre meet.	NoBa - FRA
Q1 21	0.00	**0.00**	**0.00**	0.00	0.42		
Q2 21	0.00	**0.00**	**0.00**	0.00	0.36	**0.35**	0.01
Q3 21	0.00	**0.01**	**0.01**	0.01	0.46	**0.44**	0.03
Q4 21	0.00	**0.13**	**0.13**	0.16	0.63	**0.62**	0.02
Q1 22	0.09	**0.31**	**0.22**	0.39	0.80	**0.79**	0.02
Q2 22	0.21	**0.48**	**0.27**	0.56	0.96	**0.95**	0.01
Q3 22	0.36	**0.63**	**0.27**	0.73	1.08	**1.09**	-0.00
Q4 22	0.51	**0.75**	**0.24**	0.90	1.19	**1.21**	-0.02
Q1 23	0.66	**0.86**	**0.20**	1.07	1.29	**1.33**	-0.03
Q2 23	0.77	**0.96**	**0.19**	1.24	1.37	**1.42**	-0.05
Q3 23	0.86	**1.03**	**0.17**	1.39	1.43	**1.50**	-0.07
Q4 23	0.93	**1.09**	**0.16**	1.51	1.50	**1.55**	-0.05
Q1 24		**1.16**			1.57	**1.61**	-0.04
Q2 24		**1.23**			1.64		
Q3 24		**1.30**			1.70		
Q4 24		**1.36**			1.76		

**) Assuming a 35 bps NIBOR spread from Q2-21*

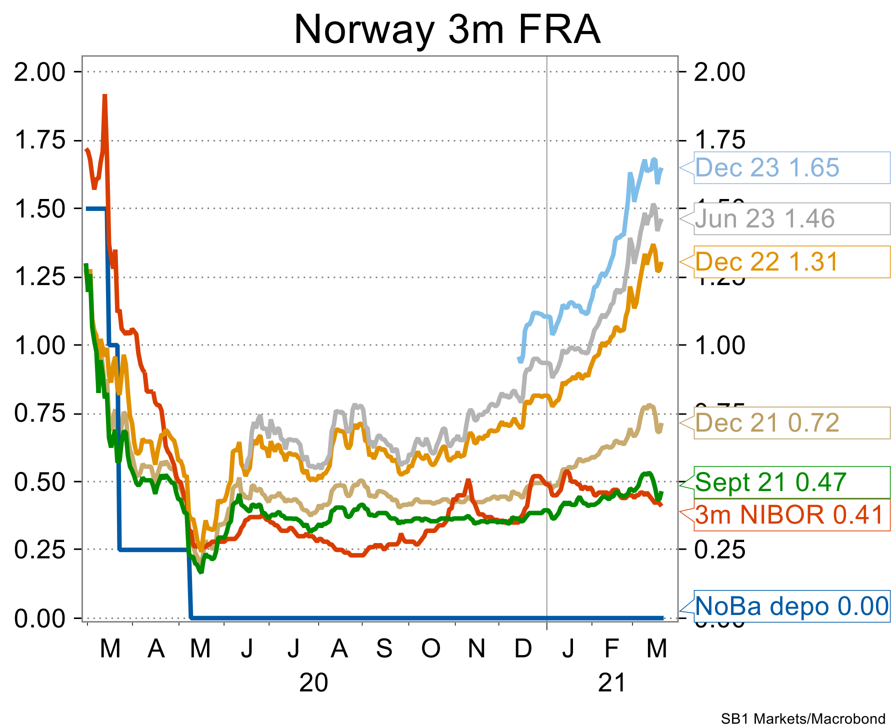
Q4 FRAs adjusted for liquidity prem

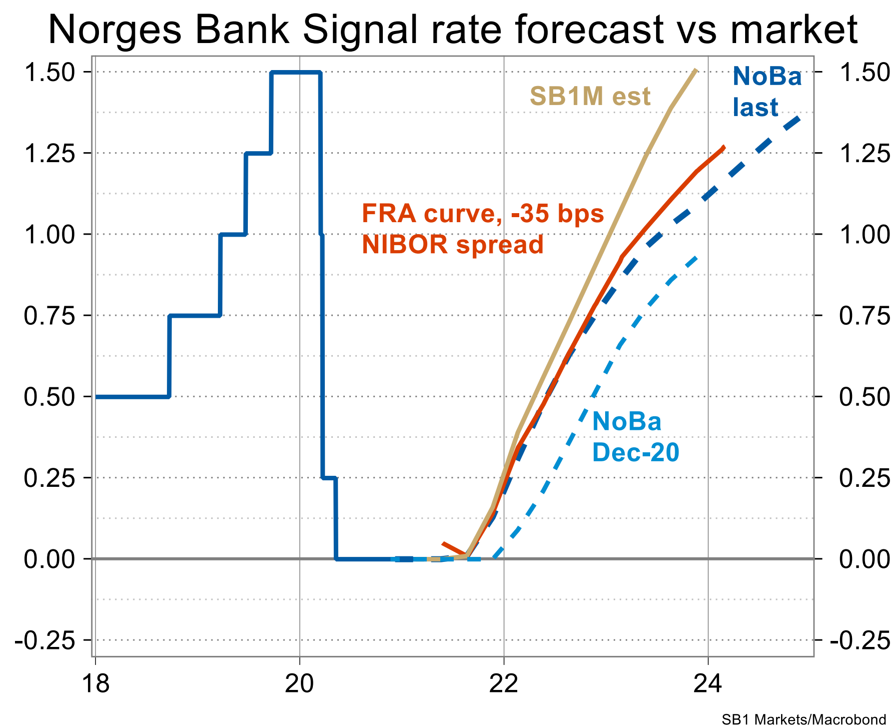
- Norges Bank kept the **key policy rate** unchanged at 0%, as expected. However, **the rate path** was significantly lifted once more, and pretty close to the FRA-curve (table to the lift, chart next page)
- The Dec MPR indicated the first rate hike in Q1 2022, the Bank now signals a 50% chance for a hike in Sept-21**,** and given a hike in Sept, a 25% chance of another hike in Dec. No hike in Sept will mean that a Dec hike is evident very likely, even a 50 bps is partly priced in
- **Vaccine** news, stronger growth of trading partners' economies (read: **US stimulus package**), a further rise in **house prices**, higher **prices and wages,** high savings rates (indicating future spending), as well as a significantly higher **oil price** contributed to the rate path adjustment. The output gap will be fully closed by end of Q4-21, and not in Q2-22, which also explain the change of timing of the first rate hike (more details next page)
  - » Norges Bank stresses the uncertainty regarding the vaccines and the impact on the economy
- Even if NoBa's path was very close to the FRA-curve, the FRAs rose by up to 2-5 bps & the NOK immediately appreciated some 0.6%. In the front end, our f'cast was close to NoBa's path but at the far end, NoBa was far more dovish than we expected. Our Q4-23 forecast was 42 bps too high! But wait and see…
- We expect domestic demand for services to 'explode' as soon as the virus is brought under sufficient control and restrictions eased, and **we therefore expect NoBa to raise the interest rate path further at their June meeting, eventually in September**
- Thus, there is still an **upside risk in the short end of the curve**

SpareBank 1 MARKETS

The new path spot on market FRAs but rates still rose margianally

FRAs up approx. 5 bps on rate decision, following a somewhat larger decline just before NoBa meeting



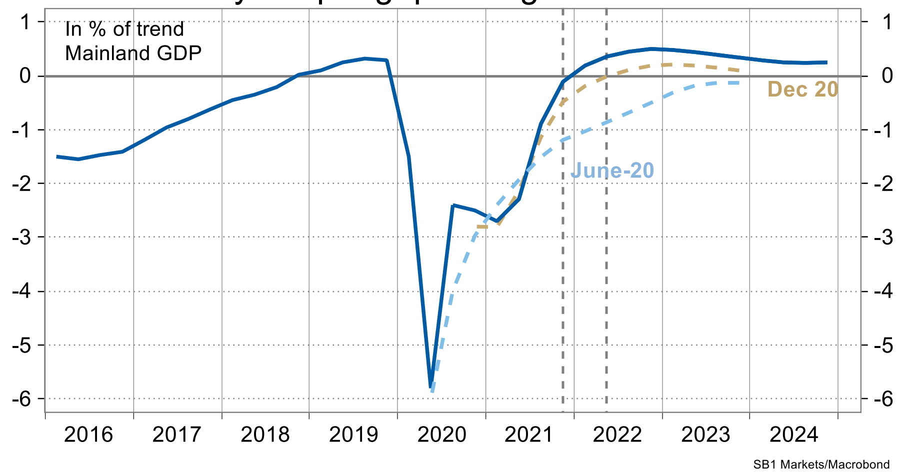


- The FRA curve had retreated somewhat in the week before the NoBa meeting, likely on the basis of increased spread of the virus in Norway along with über-dovish central banks among the trading partners. The Bank, however, was firm in its belief that the virus is at the end of the road
  - » FRAs rose by up to 5 bps, and the NOK rose slightly - before being dragged down by a lower oil price last later last Thursday
- We expect Norges Bank to start hiking in September, based on 3 assumptions
  1) A successful rollout of vaccines that makes it possible to reopen most of the service sector as the no. of hospitalisations and deaths are reduced during H1
  2) A rapid recovery in domestic demand for the re-opened services
  3) No meltdown abroad – no further vaccine complications

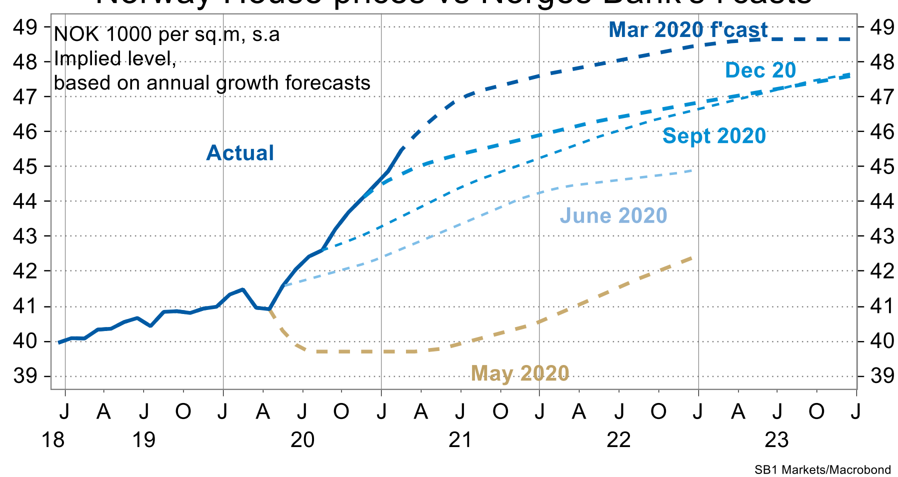
NoBa: The virus will be brought under control and growth is imminent

The output gap will be closed by the end of 2021, house prices will continue upwards

Norway Output gap - Norges Bank f'casts



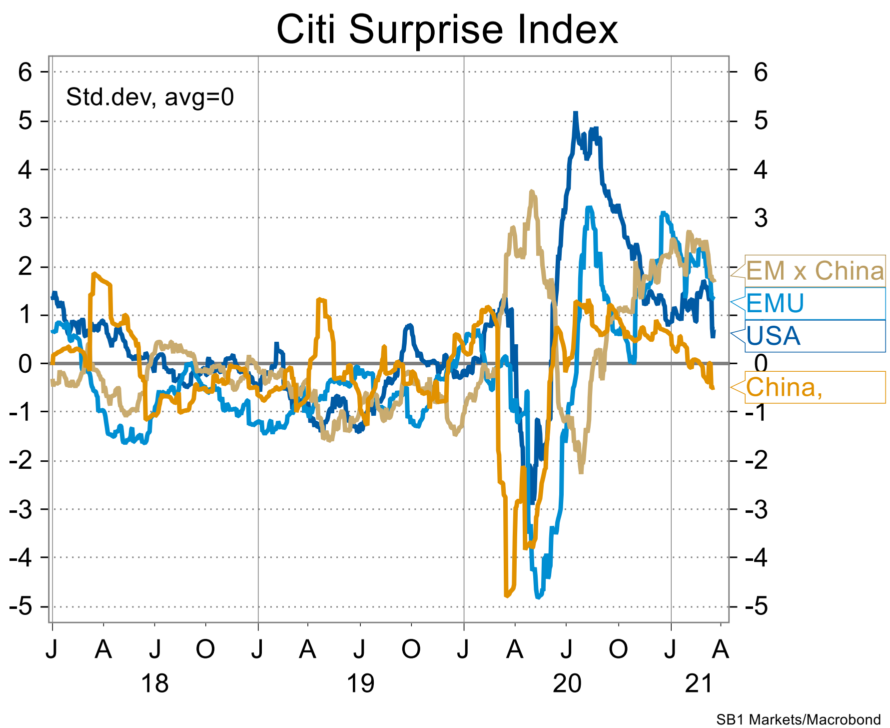
Norway House prices vs Norges Bank's f'casts

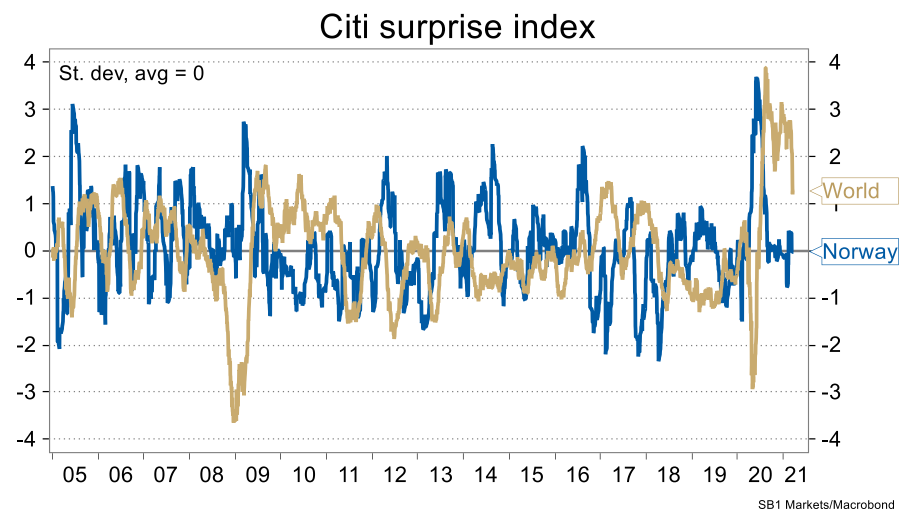


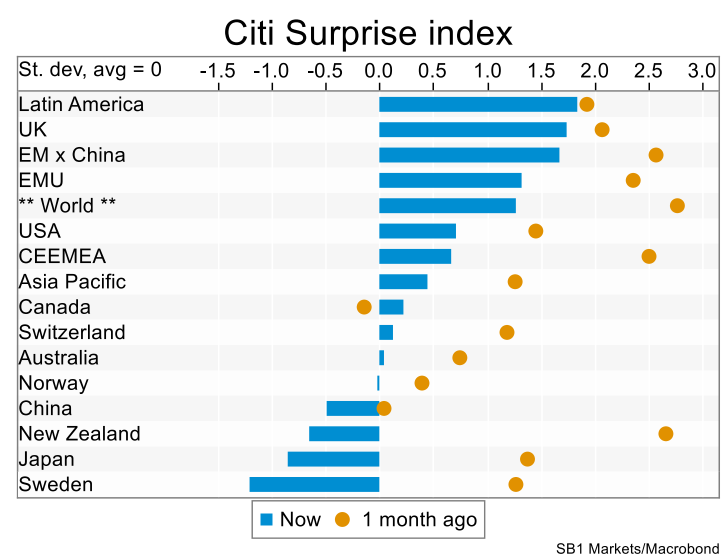
- **Mainland GDP** f'cast revised up 0.1% to 3.8% for 2021; f'cast for +0,3% to 3.4% in '22; and the f'cast for 2023 is revised down to 1.1% from 1.5%
- **Mainland business investments** were revised sharply up, as we expected. **Oil investments** are expected to decline less than indicated in the Dec. report. **Household consumption** is revised down in '21, up in '22
- The **unemployment** rate f'cast for 2022 was revised marginally down. A gradual decline to a normal unempl. level is expected by 2022
- **The output gap** is now expected to be closed by the end of **Q4-21**. In the Dec MPR the gap was forecasted to close in **Q2-2022**
- **Wage inflation** is expected at 2.4% in 2021 and 2.6% in 2022, up 0.3% and 0.4% respectively
- The NOK has appreciated and the forecast is lifted by 4.5%
- **Even if the output gap and wage inflation is revised up, core CPI inflation** is expected to slow faster than expected in the Dec MPR. The Bank argues that lower imported inflation will dampen inflation. We think this f'cast is the most uncertain in the report
- **House price inflation** is expected at 10.1% this year and will then subside to 3% next year, according to the bank, who had to substantially raise house price expectations for the fourth time
- The Bank expects **credit growth** to be somewhat higher than growth in disposable income. **Household savings** are expected down 9 pp the coming years, supporting a strong recovery in private consumption (almost entirely abroad, that is)

Oops, some weak data last week

A broad decline, and more than can be explained by cold weather in parts of US. The level still high







- **Barring Canada**, the surprise index is down everywhere last month – but the global average is still very strong, far above average
- **UK and EMU** is at the top of the list
- **Emerging markets x China still surprise on the upside**
- The **US** surprise index fell sharply due to weak housing, retail & manufacturing data
- **China (and Japan) at the bottom of the list**

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

The Calendar

March prelim. PMIs, US durable goods & personal spending, NAV unemployment

Time	Count.	Indicator	Period	Forecast	Prior
Monday Mar 22					
13:30	US	Chicago Fed Nat Activity Index	Feb	0.72	0.66
15:00	US	Existing Home Sales	Feb	6.50m	6.69m
Tuesday Mar 23					
08:00	UK	ILO Unemployment Rate 3Mths	Jan	5.2%	5.1%
13:30	US	Current Account Balance	4Q	-$188.8b	-$178.5b
15:00	US	New Home Sales	Feb	876k	923k
Wednesday Mar 24					
01:30	JN	PMI Manufacturing	Mar P		51.4
08:00	UK	CPI Core YoY	Feb	1.4%	1.4%
09:15	FR	PMI Manufacturing	Mar P	56.4	56.1
09:15	FR	PMI Services	Mar P	45.5	45.6
09:30	GE	PMI Manufacturing	Mar P	60.6	60.7
09:30	GE	PMI Services	Mar P	46.5	45.7
10:00	**EC**	**PMI Manufacturing**	**Mar P**	**57.9**	**57.9**
10:00	**EC**	**PMI Services**	**Mar P**	**46.0**	**45.7**
10:00	**EC**	**PMI Composte**	**Mar P**	**49.1**	**48.8**
10:30	UK	PMI Manufacturing	Mar P	55.0	55.1
10:30	UK	PMI Services	Mar P	51.0	49.5
13:30	US	GDP final est/details	4Q T	4.1%	4.1%
13:30	**US**	**Durable Goods Orders**	**Feb P**	**0.8%**	**3.4%**
13:30	US	Cap Goods Orders Nondef Ex Air	Feb P	0.6%	0.4%
14:45	US	PMI Manufacturing	Mar P	59.5	58.6
14:45	US	PMI Services	Mar P	60.1	59.8
16:00	EC	Consumer Confidence	Mar A	-14.5	-14.8
Thursday Mar 25					
13:30	US	Initial Jobless Claims	Mar-20	738k	770k
Friday Mar 26					
08:00	NO	Credit Indicator Growth YoY	Feb	(4.9)	4.90%
08:00	NO	Hotel guest nights	Feb		
08:00	UK	Retail Sales Inc Auto Fuel MoM	Feb	2.1%	-8.2%
09:30	SW	Retail Sales MoM	Feb		3.4%
10:00	GE	IFO Expectations	Mar	95.1	94.2
10:00	NO	Unemployment Rate	Mar	4%(4.1)	4.3%
10:00	**NO**	**Total unempl. '000**	**Mar**	**128.6**	**128.5**
13:30	US	Advance Goods Trade Balance	Feb	-$85.6b	-$83.7b
13:30	US	Personal Income	Feb	-7.0%	10.0%
13:30	**US**	**Personal Spending**	**Feb**	**-0.7%**	**2.4%**
13:30	**US**	**PCE Core Deflator YoY**	**Feb**	**1.5%**	**1.5%**

- **PMI**
  - The preliminary PMIs will return the first glimpse into global economic activity in March. We expect growth to remain strong in the US, where the Phil Fed index shot up to the highest level since 1973 (!), with price indices surging. European manufacturers are blooming, while services are struggling – and weak numbers are expected in March too. The global PMI rose sharply in February, and signal growth at least on trend
- **USA**
  - **Durable orders** have surprised on the upside recent months, especially investment goods orders that are far above the pre-pandemic level. At one stage growth will slow, but probably not the coming months
  - **Personal spending** shot up 2.4% in January, as some 20% of the USD 600 cheques distributed (stimulus bill no. 1) in early January were spent. Jan will be revised up (like retail trade), but spending very likely fell in February – but will still remain strong. The 2nd bill's USD 1.400 cheques are already distributed, and spending should get a boost in March. The savings rate is still far above normal level, ready to finance spending on re-opened services from Q2
- **Norway**
  - Even if some 40' persons more than normal has filed for jobless claims since November, **NAV unemployment** has remained flat, seasonally adjusted. Weekly continued claims data signal in March but the recent restrictions may have increased the inflow in the latter part of the month
  - **Credit growth** is accelerating but very slowly, we are not witnessing a credit boom even if interest rates are record low

Highlights

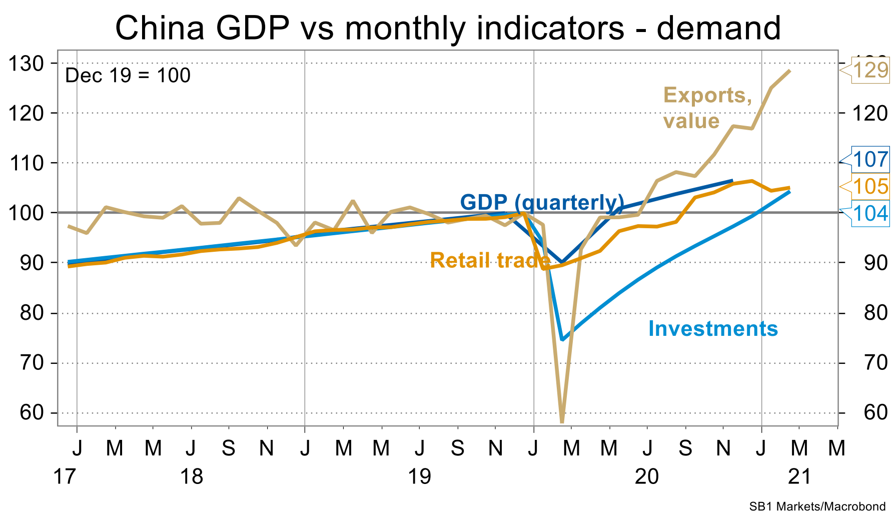
The world around us

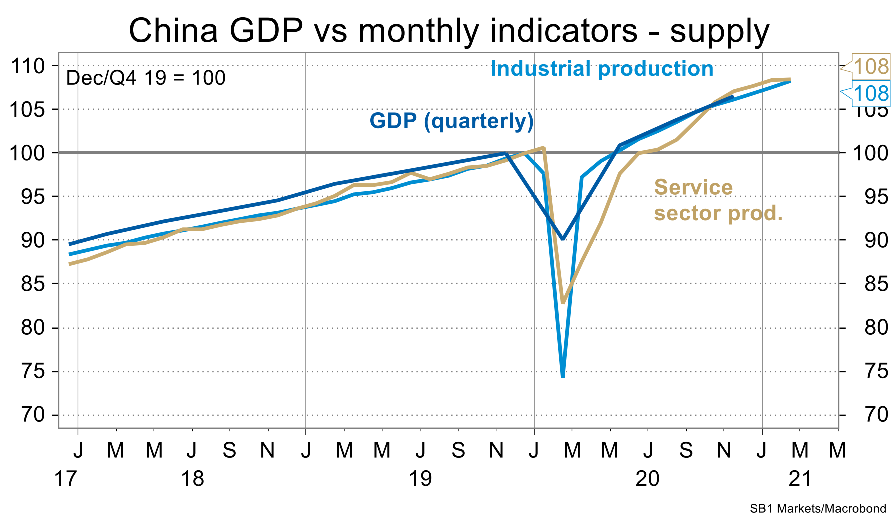
The Norwegian economy

Market charts & comments

Covid measures dampened the Chinese economy in Jan/Feb, no reason to worry

No weakness in manufacturing or investments, just in retail sales & service sector production

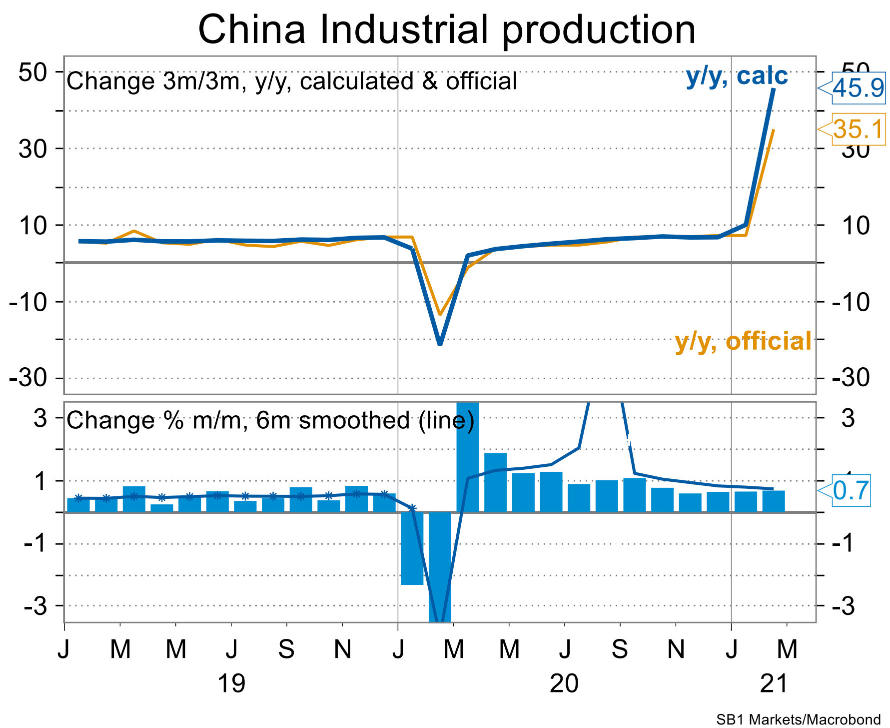


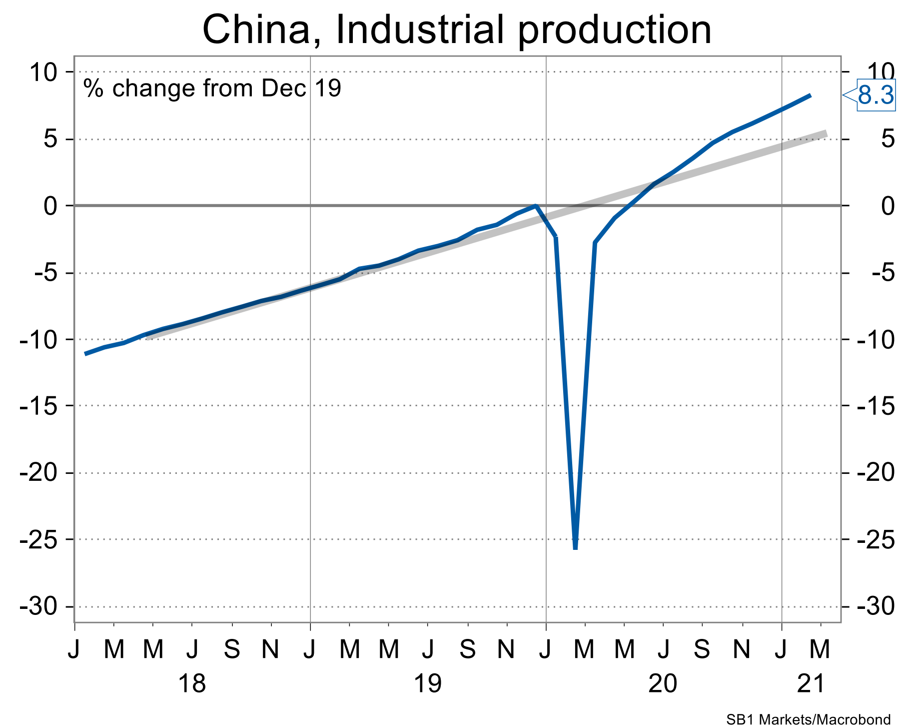


- **Industrial production** rose 0.7% in both Jan & Feb. Measured y/y, production is up 35%, expected 30% but these y/y data are now 'impossible' to calibrate. Production is well above the pre-corona trend path, and is growth faster. Growth will now most likely slow
- **Service sector production** grew by 0.6% in Jan, as in Dec, but slowed to 0.1% m/m in Feb, clearly due to the muted festive New Year season. Activity is anyway back to the pre-corona growth path
- **Retail sales volumes** fell by 1.9% m/m in Jan and grew by just 0.6% in Feb, according to our calc. We assume the Lunar New Year holiday is to blame for the weak start of the year. Still, measured y/y, sales were 1.8 pp above expectations
- **CPI inflation** has slowed sharply, and prices are down 0.2% y/y (from above +5% at the peak) as pork prices are heading down. Supportive for real household demand, of course. **Producer prices** rose further in February
- **Investments** rose 2.4% m/m in both Jan and Feb, faster than over the previous months. The gap vs. the pre-corona trend is almost closed. Measured y/y investments were 3 pp lower than expected
- **Credit growth** recovered in both Jan & Feb, no credit squeeze
- **Exports** were record very strong in Jan/Feb, and imports are more than OK

In sum: Covid measures held parts of the economy somewhat back during the festive season but no reason to expect further weakness

Industrial production up 0.7% in Feb, level 3.5% above the pre-corona trend

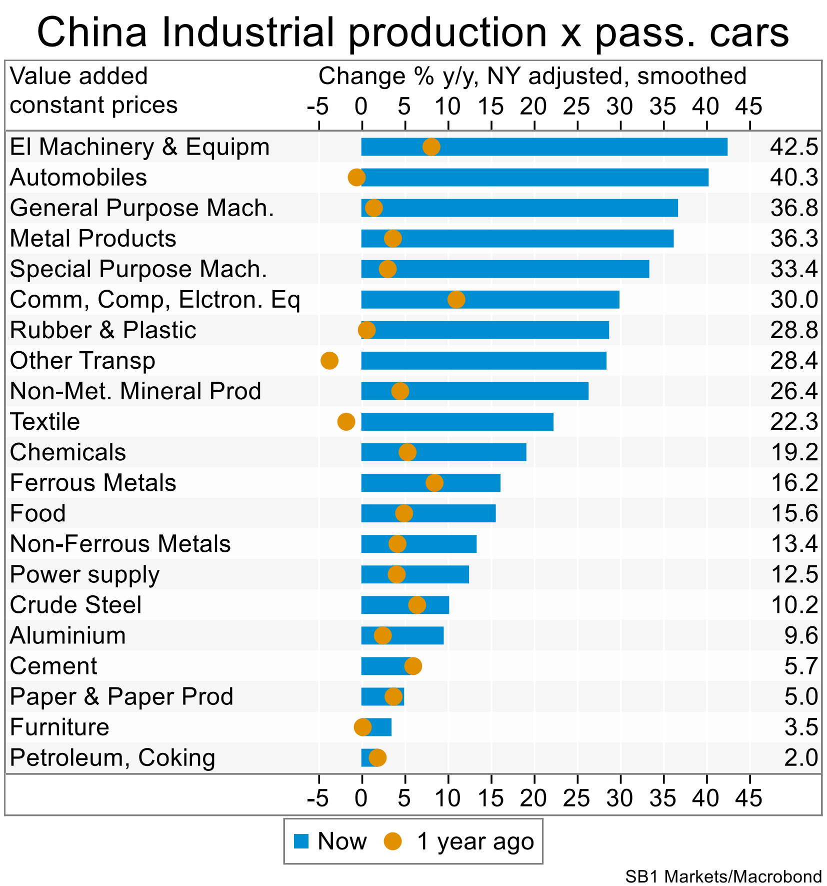




- Production is 8.3% above the Dec 19 level and some 3.5% above a reasonable pre-corona growth path. Rather impressive!
  - The officially reported growth was 35.1% y/y, while our calculated growth was 45.9% - once again ‘silly’ numbers
  - As the production level is above the pre-corona growth path we do not expect industrial production to keep growing faster than trend growth, at some 0.5% per month. Both supply and demand may be limiting factors

A good picture of the effects of last year's lockdown, but nothing more

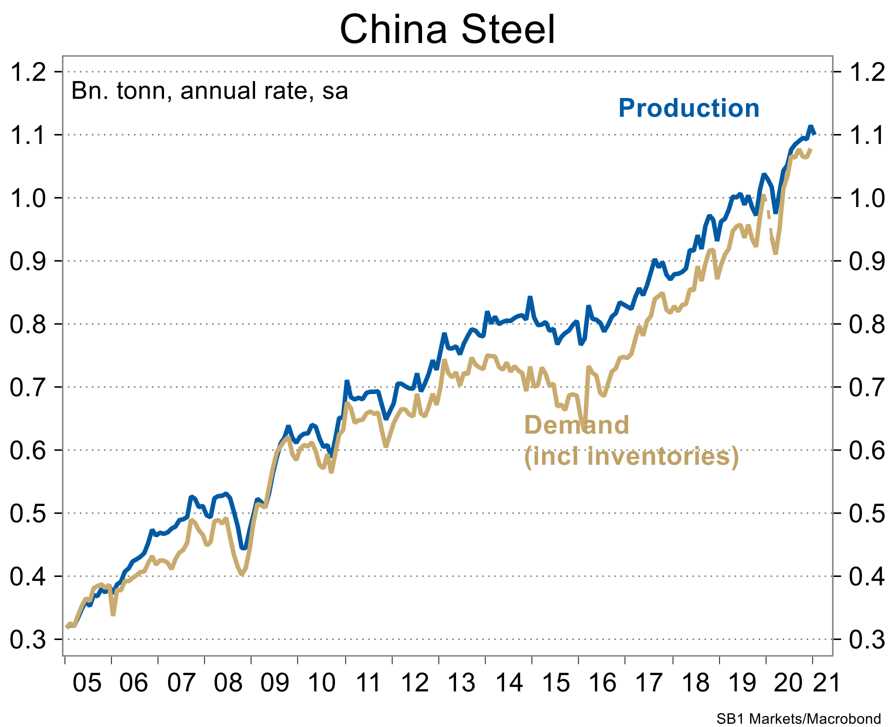
But the trend is reassuring



- All construction inputs are back at brisk pre-corona **growth paths** (plate glass a tad below)

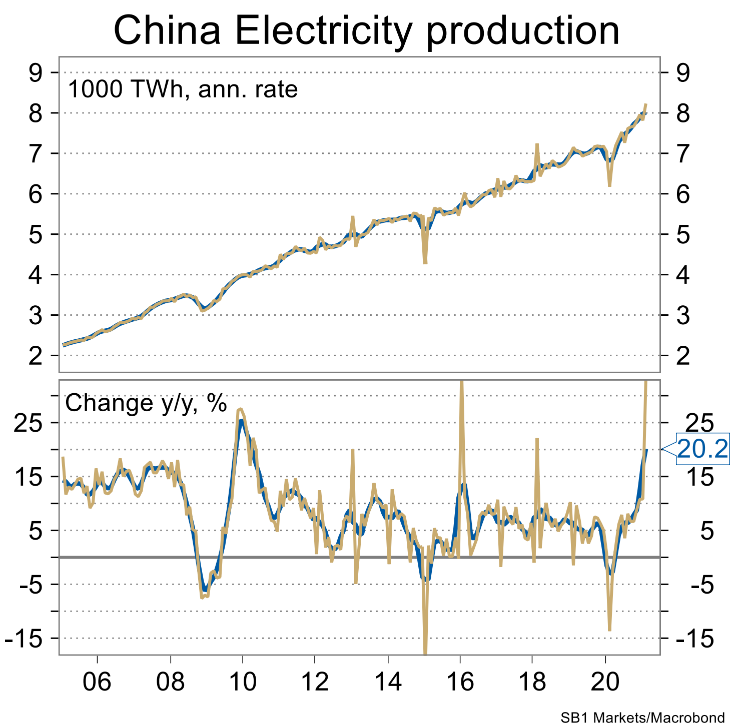
Construction record strong but may have plateaued

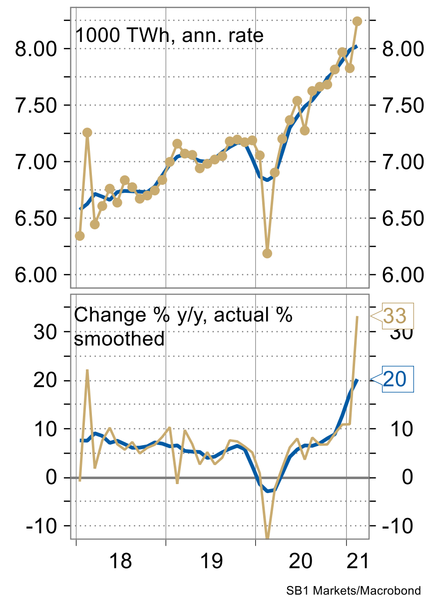
Demand for steel still strong

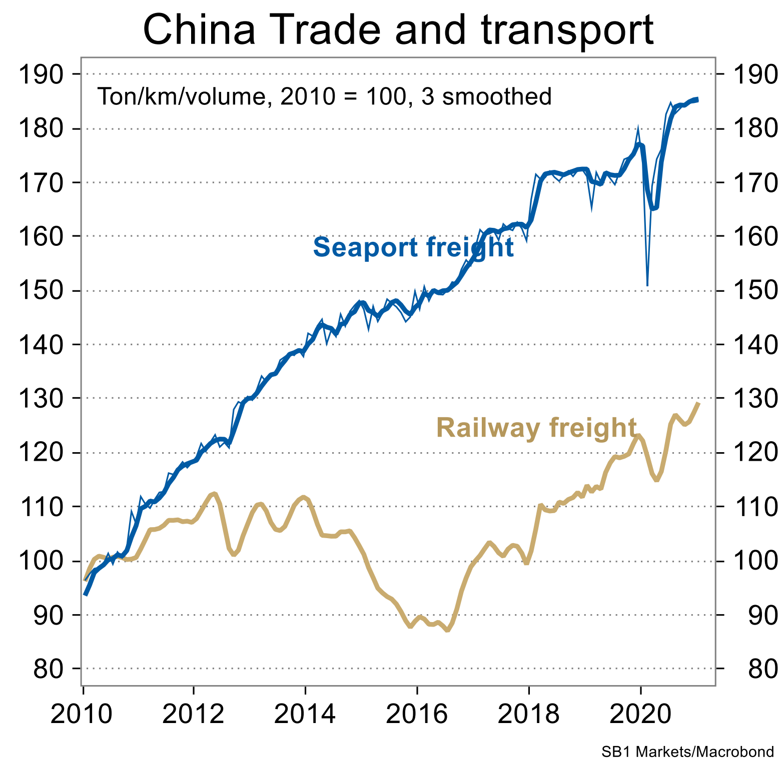


Electricity production & transport activity are both above pre-covid trend paths

Electricity production up 33% y/y in February, and not just due to the low base effect



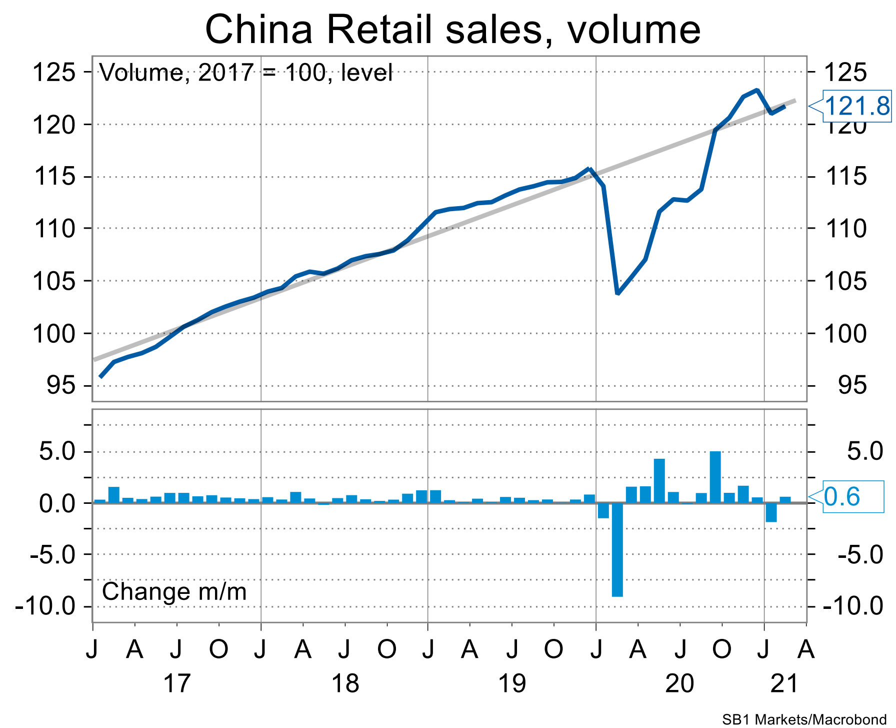




- Transport activity (goods - seaports & railway) has recovered too, both at ATHs

Retail sales down to trend in January, but rose in February

Sales fell by 1.9% in volume terms in Jan, from high level in Nov/Dec, up 0.6% in Jan – now on trend



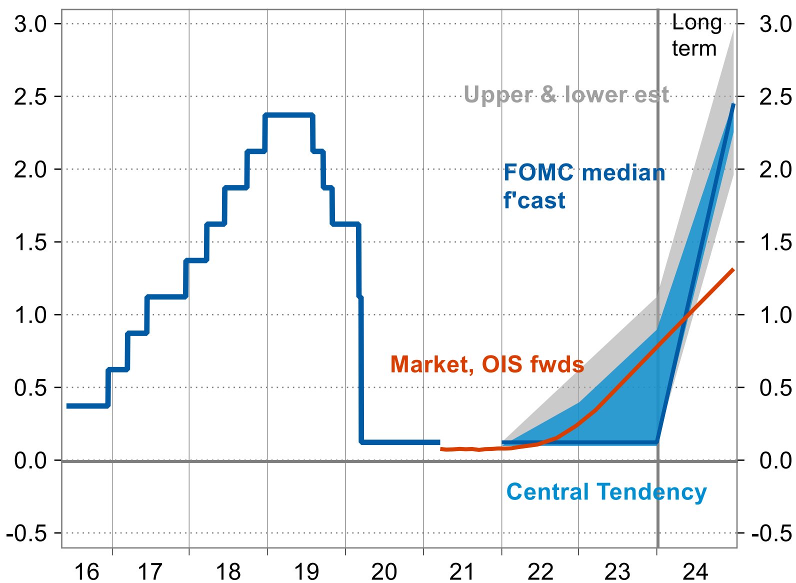
- The unusual decline in January (although nothing like the huge drop last February), was probably both due to a 'normalisation' of sales – from a high level in Nov/Dec, but possibly also lower activity due to the muted festive New Year season (covid restrictions on travel)
- Sale volumes grew by 0.6% in February, a normal growth rate. Sales are anyway now back on the pre-corona trend, and it is therefore not surprising that m/m growth slows somewhat
- The official annual sales (value) rose 33.8% y/y (not shown in the chart), 1.8 pp higher than expected. Our value growth estimate, based on published monthly seasonally adjusted growth rates is 16.8% - and our volume estimate is up 17.4% y/y.

SpareBank 1 MARKETS

Growth up, unemployment down, inflation up. But zero interest rate until 2024

More FOMC members expect hike in 2022 (4 vs. 1 in Dec of 18), or in 2023 (7 vs 5 in Dec)

The Fed vs the market



SB1 Markets/Macrobond

- The market is discounting the hike in Q4 2022. Following a steep lift in rates Thursday & Friday, the market is now discounting 3 hikes by the end of Q-2023, 2 more than what was expected in Dec-20!

- The target rate was left unchanged at 0-0.25%, as expected, and the majority of FOMC members expects an unchanged signal rate at least trough 2023, like they did in Dec last year. No change on QE either, USD 120 bn per month in Treasury bonds (80 bn) and mortgage bonds (40 bn)
- The assessment of the current state of the economy was adjusted upwards, and growth projections were revised sharply upwards, unemployment down, and inflation up, check next page
- Powell reiterated that rates will not be hiked before inflation has reached 2%, and is expected to stay above 2%. He stressed the *«fundamental change in our framework means we're not going to act pre-emptively based on forecasts. We're going to wait to see actual data»*
- The individual FOMC members' interest rate path (the dot plot) reveals that the mood is gradually changing. 4 of 18 members assume a hike in 2002, up from 1 in Dec, and 7 assumes a hike in 2023, up from 5. In June, 2 more, and the median one tick up?
- Markets may have expected a somewhat less dovish signal from the FOMC or comments from J Powell. Interest rates fell marginally, and the equity marked surged – no hikes before 2024, at the earliest! However, interest rates surged both Thursday & Friday
- **The market does not believe in the Federal Reserve anymore** ***For good reasons, we think. Will confidence in the Fed erode further? No unlikely, and quite worrisome***

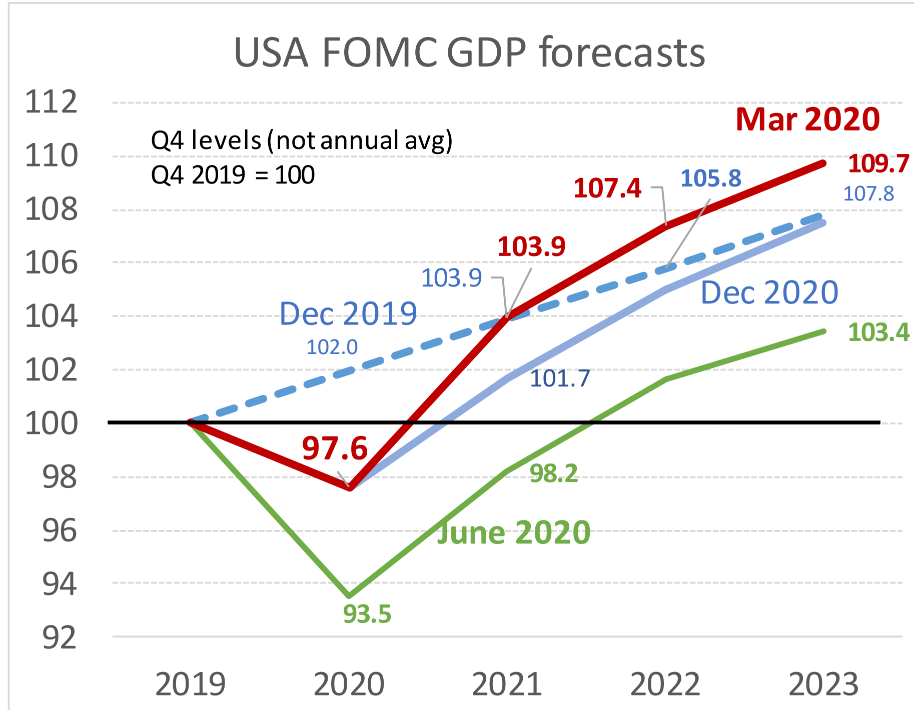
SpareBank 1 MARKETS

Big time revision of economic forecasts. GDP soon back on track (and then above)

Since last June the FOMC has lifted its GDP path by 5%. *Still NO change in its interest rate path*

Percent

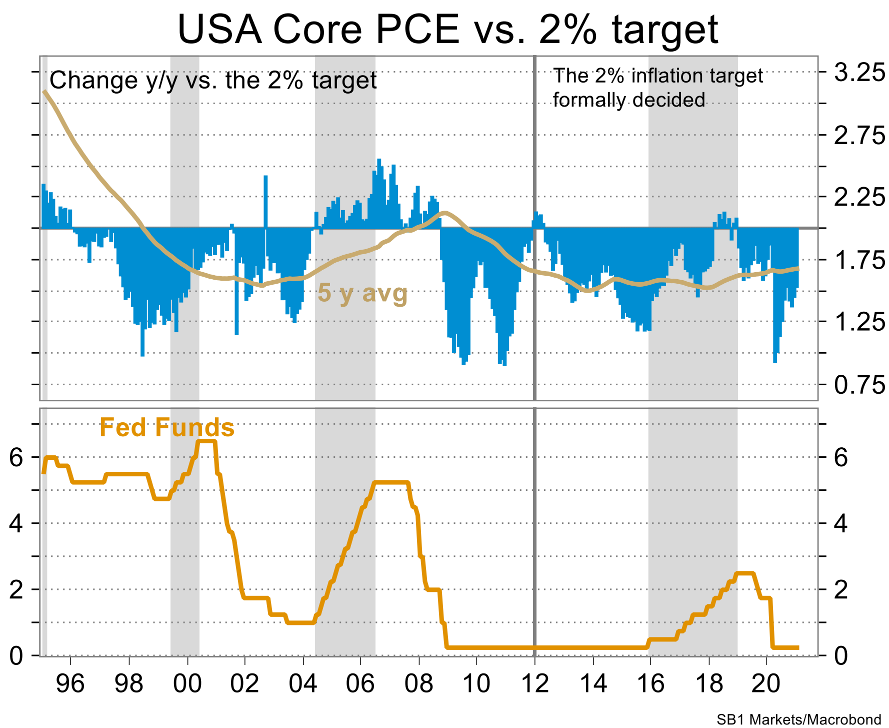
Variable	Median[1] 2021	2022	2023	Longer run
Change in real GDP	6.5	3.3	2.2	1.8
December projection	4.2	3.2	2.4	1.8
Unemployment rate	4.5	3.9	3.5	4.0
December projection	5.0	4.2	3.7	4.1
PCE inflation	2.4	2.0	2.1	2.0
December projection	1.8	1.9	2.0	2.0
Core PCE inflation[4]	2.2	2.0	2.1	
December projection	1.8	1.9	2.0	
Memo: Projected appropriate policy path				
Federal funds rate	0.1	0.1	0.1	2.5
December projection	0.1	0.1	0.1	2.5

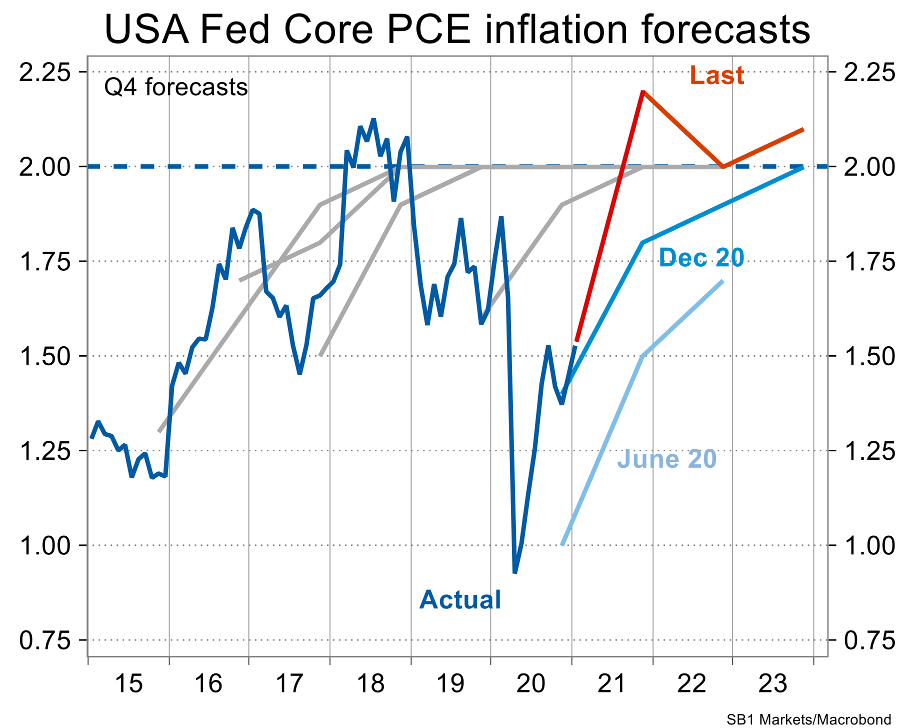


- The 2.3% upward revision of the **'21 GDP f'cast** was the second largest ever. GDP is expected to return to the pre-corona trend path in Q4-21, and not Q1-24, as implied by the Dec projection. From 2022 GDP is expected to stay above the p-c trend path. From last June, the path is revised up by 5%, and then the economy was expected to remain 4% below the p-c trend 'forever'. Now, the economy is expected to stay almost 2% above the p-c trend 'forever'
- **Unemployment** in Q4-21 was revised down by 0.5 pp 4.5%, and is expected to decline further to 3.5% 2023, lower than the assumed NAIRU at 4.0%
- **PCE core inflation** is expected accelerate to 2.2% by Q2-21, but then return to 2% in 2022, and then slightly up to 2.1% in 2023. These forecasts signal that the Fed is serious vs. its aim to average inflation at 2% over time, by allowing inflation to stay above 2%, if it has been below the target. In addition, Powell 'promises' not to hike on forecasts of higher inflation but will wait until actual inflation has come up to 2%, and is assumed to remain above 2%
- **The long term neutral Fed funds rate is assumed to be 2.5% (unch). Thus, the bank plans a substantial monetary stimulus the coming years**

Fed lifts inflation forecast to above 2% the coming 3 years

Q4-21 inflation expected to 2.2%, from the 1.8% estimate in Dec (and actual 1,5% now)

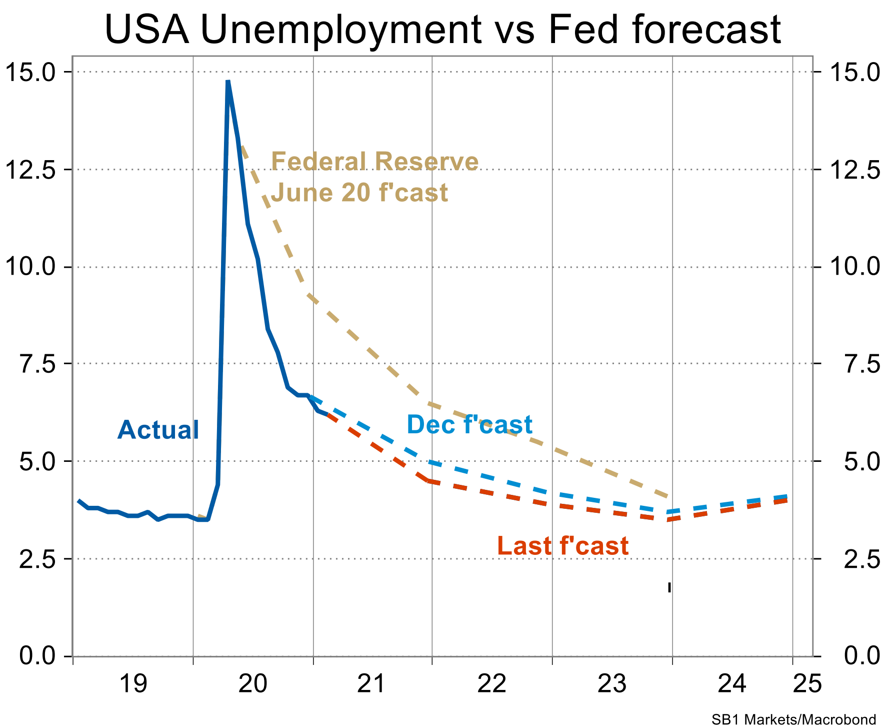




- Last year the FOMC introduced its new price level target. The bank aims to reach an <u>average rate of inflation</u> of 2% over time. If inflation has been below 2%, annual inflation should be allowed to stay above 2% in order lift the price level up to the long term 2% path
- For the first time since the new strategy was announced, the FOMC now expects core inflation to overshoot 2%, and is strongly signalling that it does not intend to hike rates as a result of that

Unemployment once more revised down, will reach the 'natural rate' in Q4-22

How come the unemployment Q4-23 est has been almost unch. since June, while GDP is up 5%?

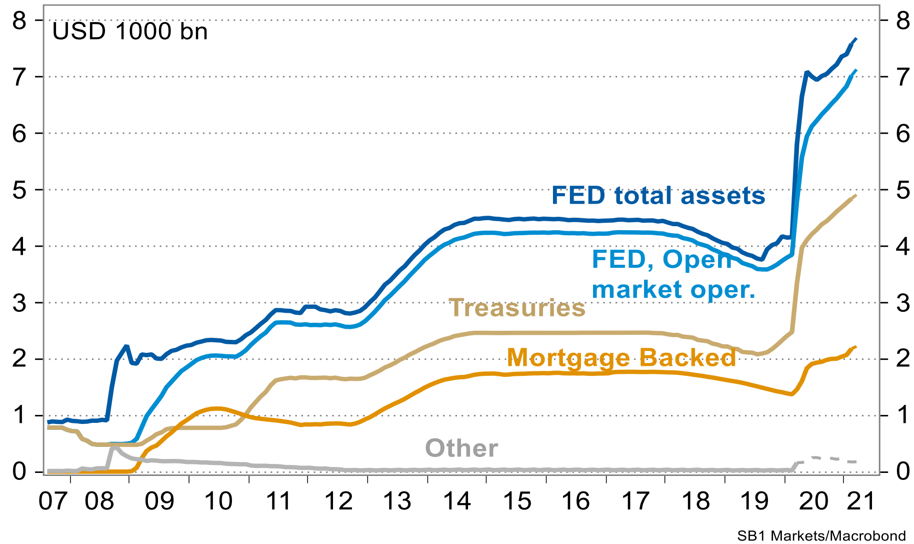


- Fed expects an unemployment rate at the end of 2021 at 4.5%, down from its 5% Dec projection
  - Last June, the bank assumed an Q4-21 unemployment rate at 6.5%
- The Q4-23 unemployment forecasts have been quite similar from June last year, even if the GDP forecast has been revised up by 5%. The longer run trend growth is still assumed the be the same, at 1.8% per year
  - Either the FOMC deems there is <u>much more spare capacity</u> in the US labour market than it thought last June (or in December)
  - or that **productivity growth** will surge the coming 3 years, by some 1.7% <u>more per year</u> than the bank assumed 9 months ago
  - <u>Or of course a combination of the two alternatives</u>
  - ***We think both alternatives are rather optimistic***

FOMC: QE ‘until substantial further progress is made’ towards target infl.

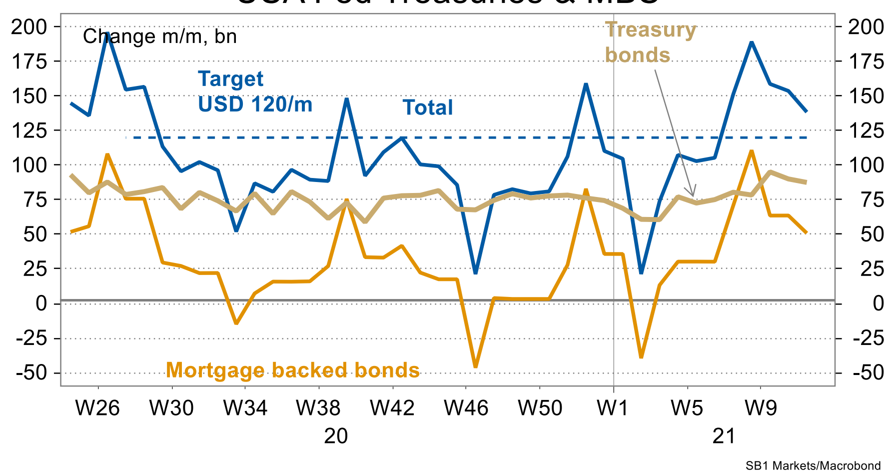
No yield curve control but the large QE program continues

USA Federal Reserve balance

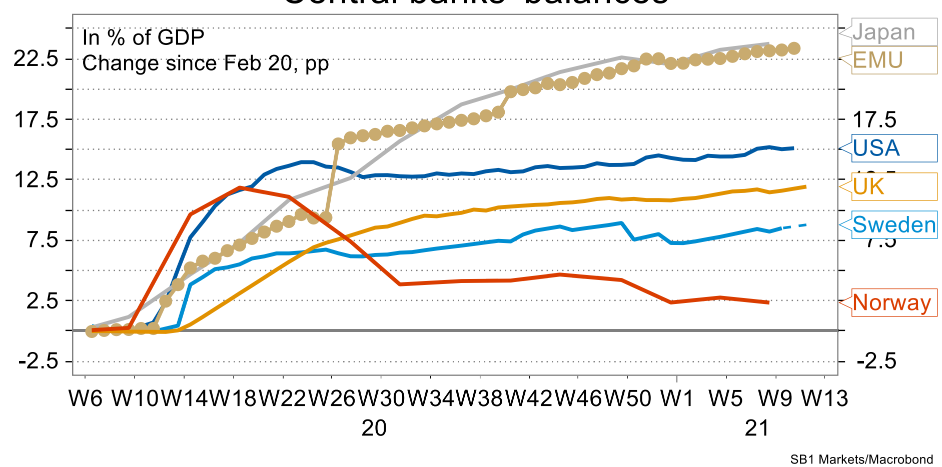


- Federal Reserve will increase its holdings of Treasury bonds and agency mortgage-backed bonds by USD 120 bn/month (80 + 40), which has been the pace so far in 2021
- USD 120 bn/month equals 7% of GDP per year, a substantial share of the net increase in government og mortgage-backed bonds. Since last February, the Fed’s balance sheet has increased by 15% of GDP (and now equals an unprecedented 35% of GDP)
  - » Just so you know: *In the land of the free, and home of the brave, it is the central bank that is securing funding of the housing market*
- The Fed is not too worried about the recent hike in long term government bond yields. Like on earlier occasions, they rather referred to supportive ‘financial conditions’ as a criteria for doing something

USA Fed Treasuries & MBS

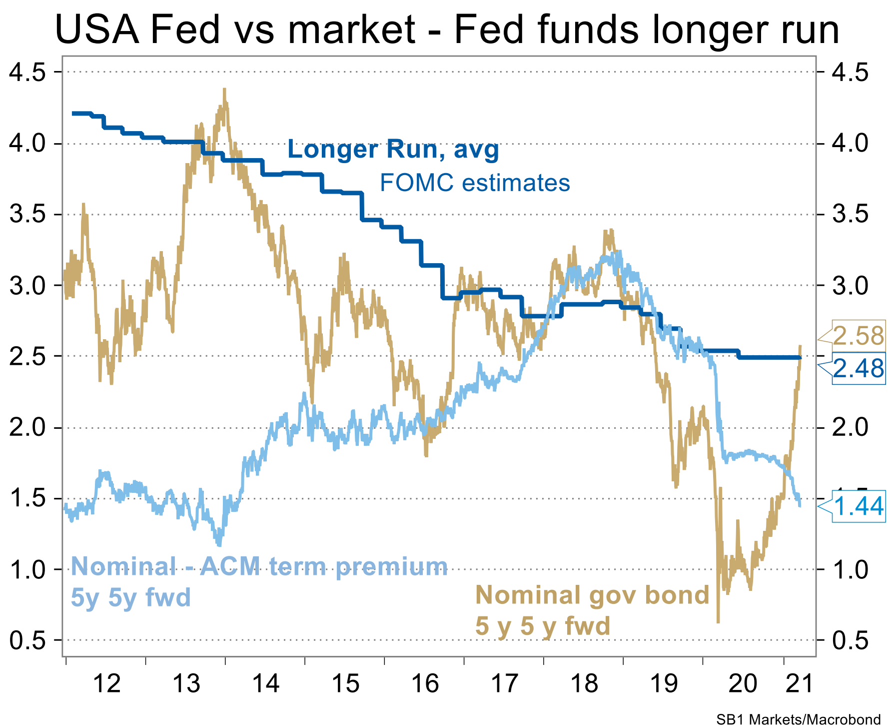


Central banks' balances



Long term, a 2.5% neutral nominal rate. At 2% inflation, a 0.5% real r*

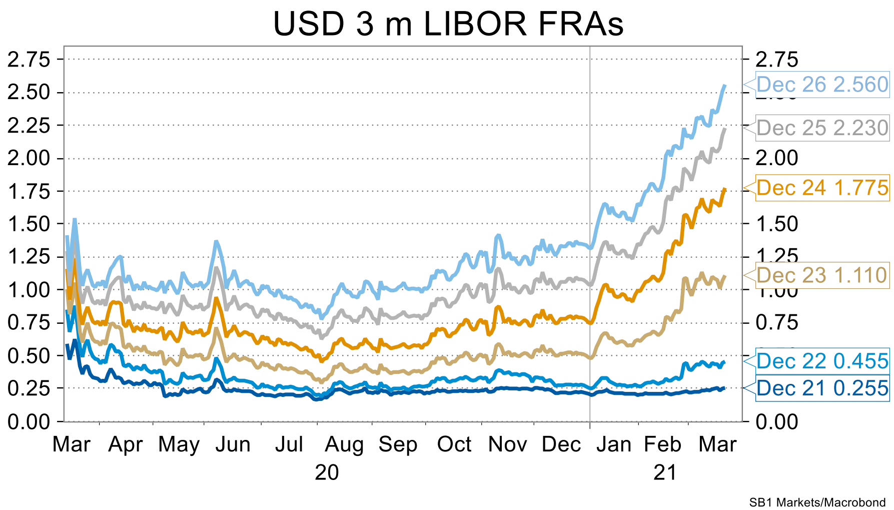
The 5y 5y fwd gov bond rate is at 2.58%, up from well below 1% last year

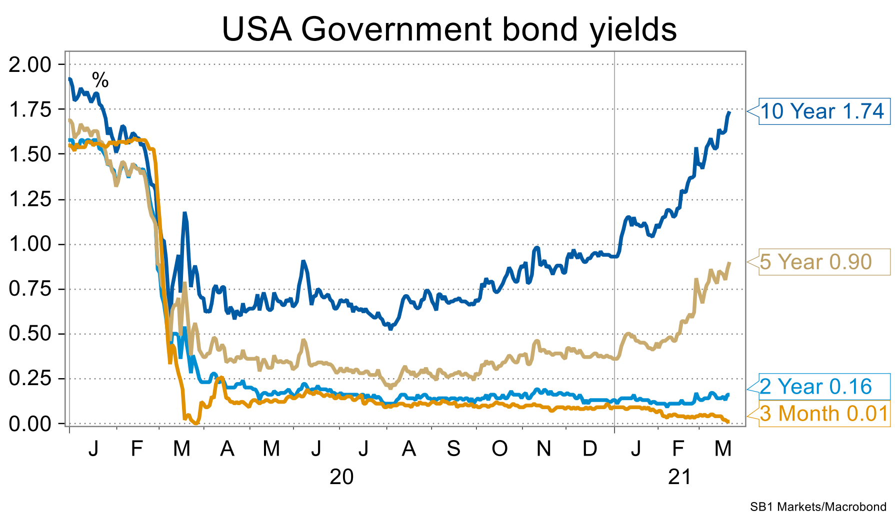


- The 5 y 5y fwd gov bond yield is at 2.56%, the real rate at -0.43%
- However, adjusted for various estimates of the term premium, the component of long term bond yields that is not decided by expectations of future short term interest rates, market rates are below the Fed's estimate of the natural rate (r*).
  - Deducting the ACM term premium, the 5y 5y rate at 1.44% is far below, following a steep increase in this premium
  - The unobservable term premium is calculated by decomposing the yield curve by different techniques
  - We are sceptical to the present ACM estimate. The 200 bps increase in the 5y 5y term premium over the recent months implies that more than the increase in bond yields is due a dramatic increase in the term premium, and that markets have lowered their estimate of the long term Fed funds rate. Of course, that may be possible. However term premia models yield opposite conclusions
- As the FOMC assumes a 2% long term inflation rate, the 2.5% long run Fed funds estimate implies an r* neutral real rate at +0.5%

Chairman Powell reiterated the Fed's dovish stance on monetary support…

…but markets just shrugged it off, once again. Is the Fed losing its grip?

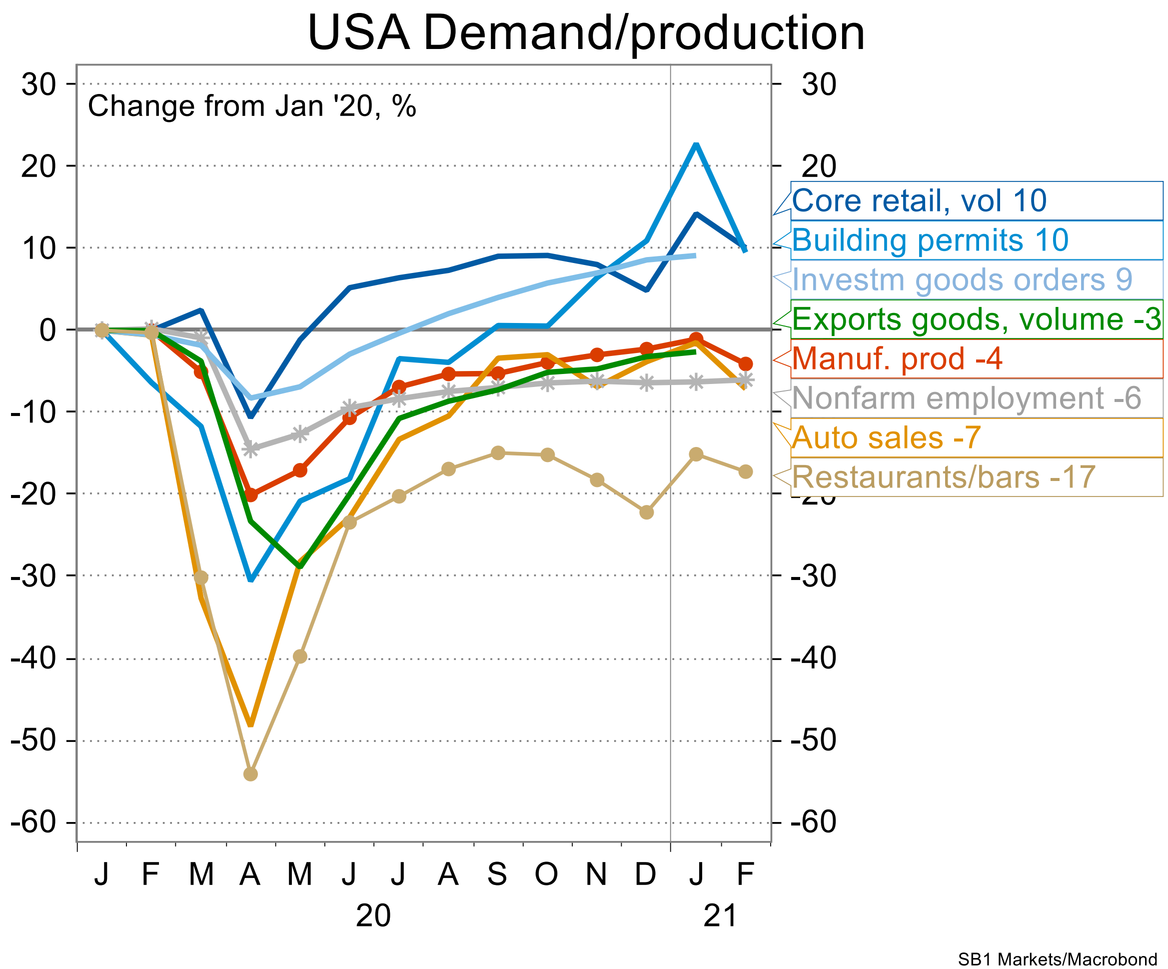




- Following the recent rise in yields, Fed chairman Jerome Powell tried to **reassure markets** that monetary support would be upheld and that the Fed "will be patient", even if the Fed conducts major revisions of its growth & unemployment forecast, and lifts its inflation forecasts
- However**, markets were not convinced**, not this time either. Market is discounting the Fed to hike in Q4 22, and not in 2024
- **Long term rates** rose sharply Thursday & Friday, the 10 y gov bond yield to 1.74%
- **Are we witnessing a lack of confidence** in Fed's policy stance? Close to, and this is not a good sign. Lack of confidence in Fed's commitment to keeping inflation low increases the risk for a further increase in long bond yields – and a higher risk for a stagflation scenario
- **Should that happen, all bets are off.** The Fed could wage a war on the market, increasing QE sharply in order to force long bond yields down
- If **inflation** at that stage picks up steam, even more bets are off. A 'Volker moment' cannot be ruled out as new hands at one stage will take the helm at the Fed. Under a president Trump??
- **The Fed should no doubt have lifted its interest rate forecast in order to strengthen its credibility.**
  Check more here on the implication for asset allocation

A tad colder in February but good reasons to expect a much hotter spring!

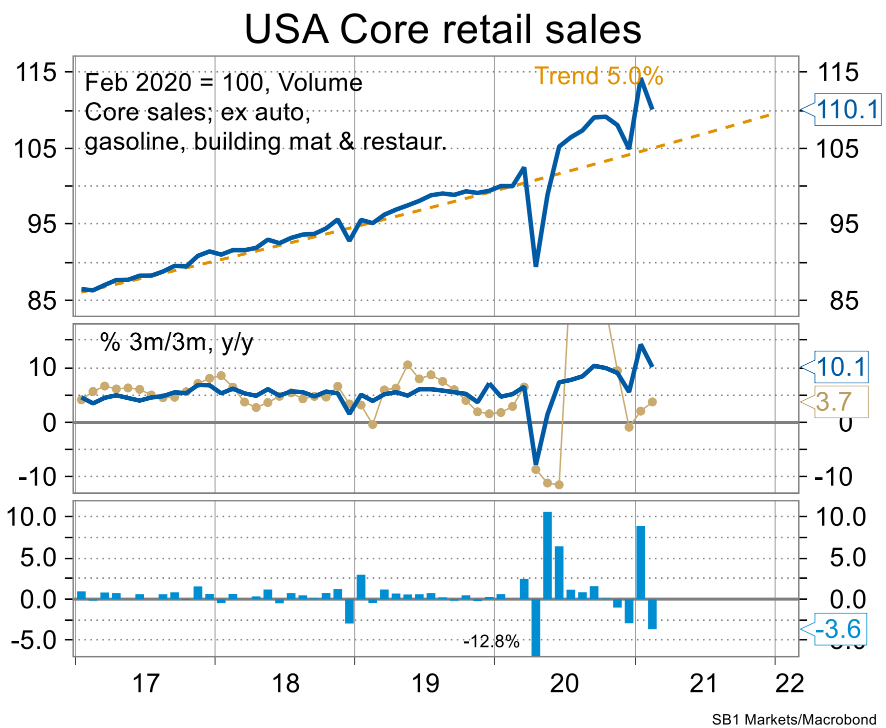
Most indicators surprised at the downside in February but the coming months will be strong

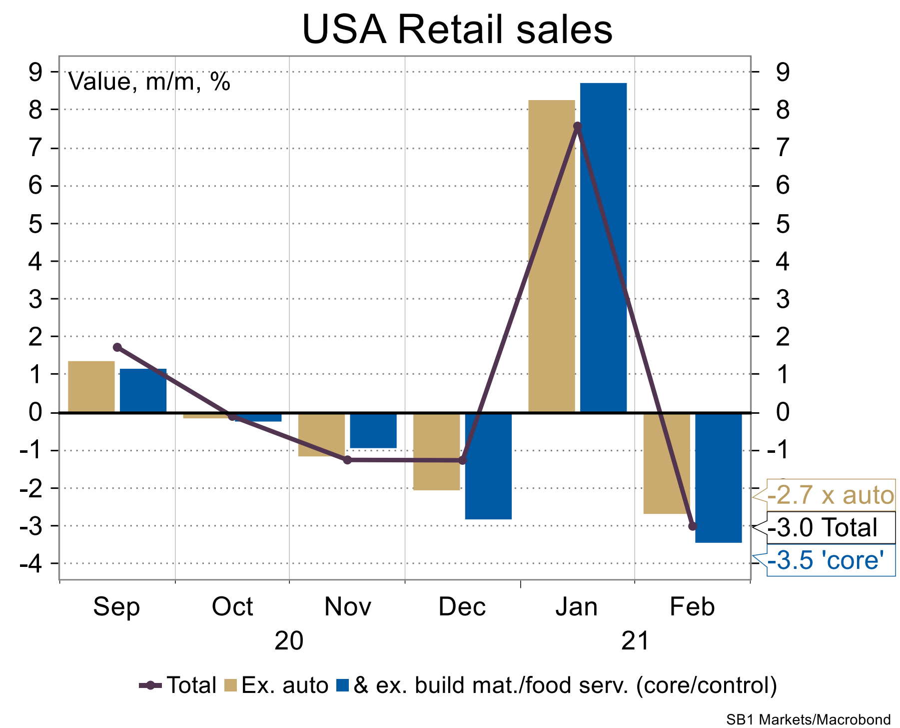


- **Retail sales** (goods) up almost 8 % in January, and fell 3% in Feb, at least partly due winter storms. The level is anyway OK
- **Building permits** fell 10%, still remaining at a high level
- **Investment orders** ex aircrafts/defence are up 8% vs last Jan, and flat including aircrafts. Feb data out this week
- **Exports** remain below par but are still on the way up, now just 3% below Jan last year, Feb data this week
- **Restaurant sales** are down 17% (in value terms), but will increase sharply the coming months
- **Employment** has flattened, and is still 6% below Jan 2020 level. The weakness is mostly due to a sharp contraction in employment in the hotel/restaurant sector but not a growth story elsewhere either
- **Nowcasters** are now signalling 6% growth (annualised) in Q1 – or up 1.5%. If so, GDP is almost back to the Q4 ‘19 level – still, of course, below the pre-corona growth path

Retail sales down 3% in February – but Jan sales revised up 2.2 pp to +7.6%!

Stimulus checks spent in Jan; bad weather curbed sales in Feb; new checks, new rebound in March?



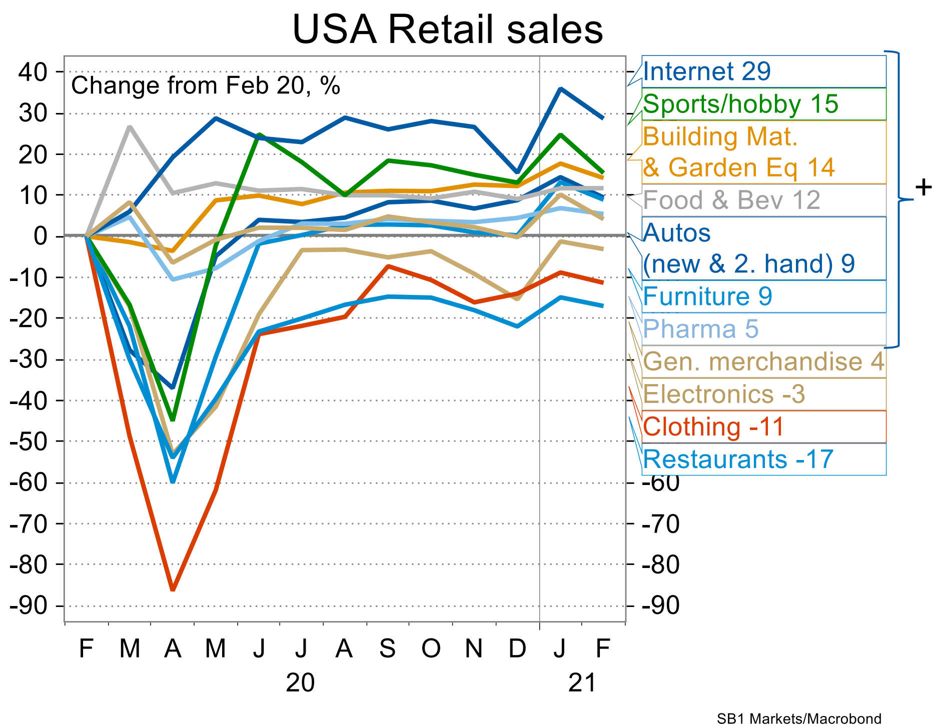


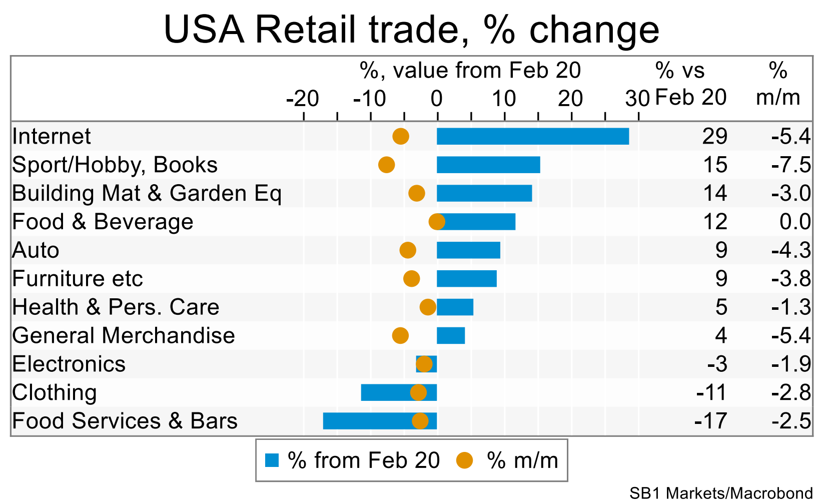
- **Total nominal sales** fell by 3.0%, expected -0.5% (No help from all big data – or are the economists just not in touch, just like in January?)
  - » The revision of Jan sales data is ‘crazy’. Originally, economist expected 1% growth in Jan, now the figure is 7.6%
- **Core sales of goods** (=control group, excludes auto, gasoline, building materials & restaurants) in Jan rev. up to +8.7%, from 6%. The 3.5% setback in Feb is ‘irrelevant’, the level is sky high! 0
- Check details next page, sales were down everywhere but still huge discrepancies between sectors – restaurant (incl, in the total) is still down 17%
- *We expected the February number to come down somewhat after the surge in Jan, but the cold weather in Texas and across the Great Plains pulled the figure down even further*
  - » President Biden’s USD 1,400 checks will be sent out in March (total of USD 400+ bn) – safe to say that could impact retail sales in the next couple of months

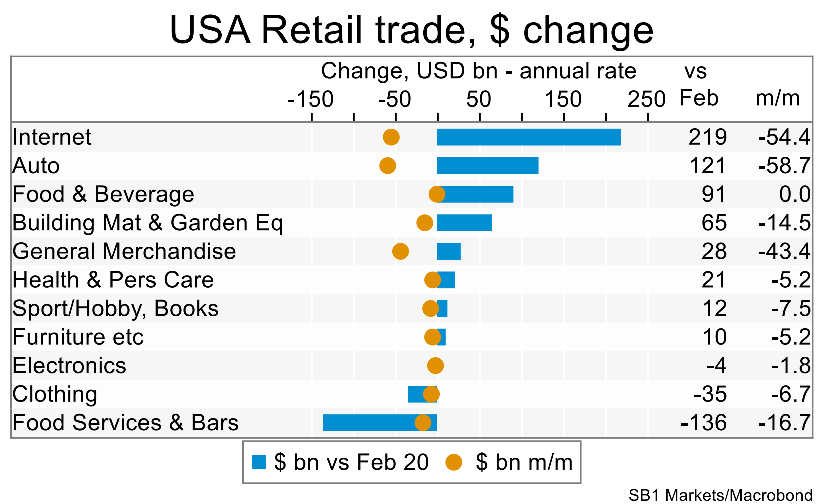
SpareBank 1 MARKETS

Still huge differences between sectors but all declined in February…

…all but food & beverages that is







February

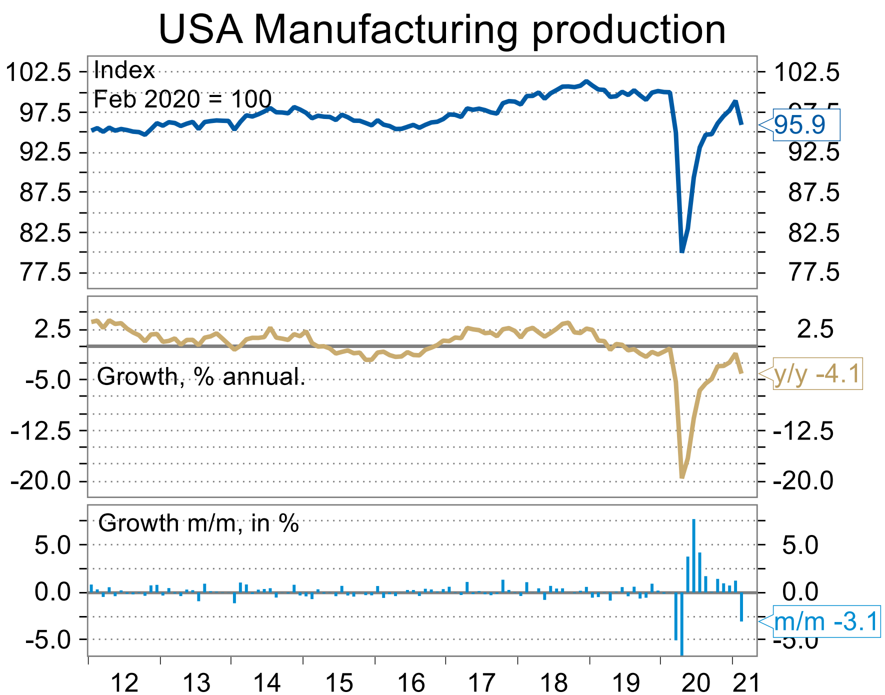
- 10 out of 11 main sectors reported a decline in February. Food & beverage (in shops) was flat (restaurants down)

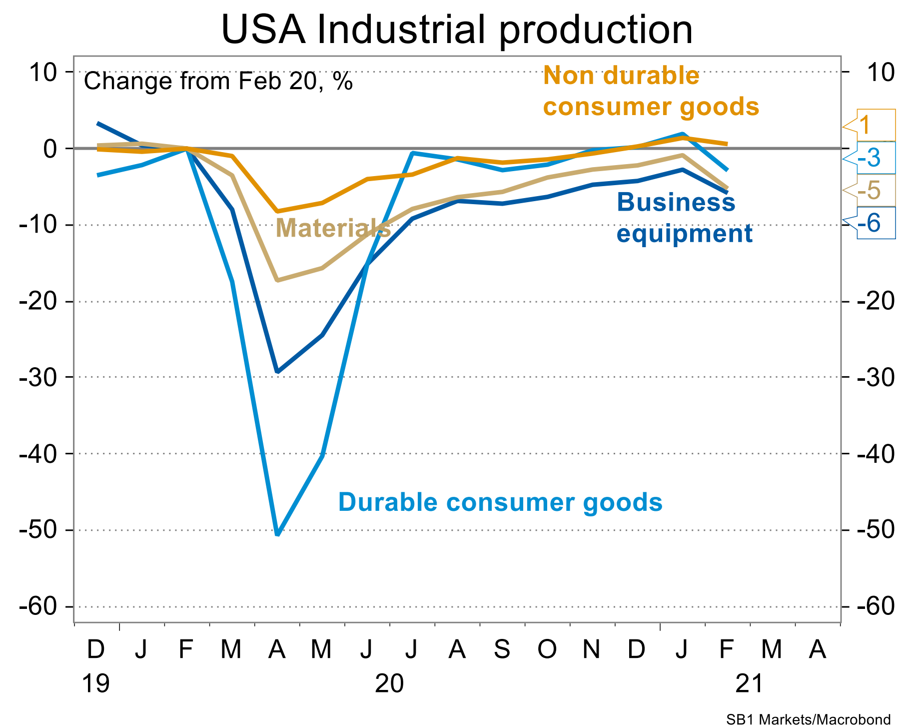
Since pre corona

- Internet has taken a substantial market share, to well above 10%
- Clothing is down, probably due to more time spent at home, less outside
- Gyms are partly closed, more sport equipment is bought
- Restaurants were up in Jan but down 2.5% in Feb, and is still down 17%
- But why are electronics still so weak?

Manufacturing also hit by the bad weather in February

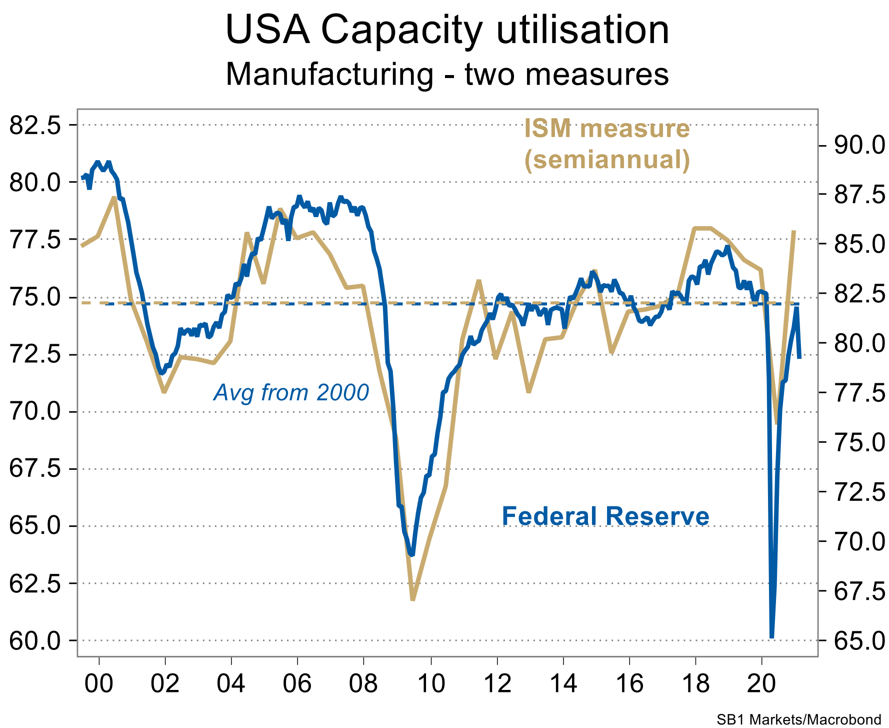
Manufacturing production declined 3.1% in Feb, far below expectations at -0.1%





- **Manufacturing production** fell for the first time since the through in April, and is down 4.4% y/y
  - » January figure was revised up to 1.2% m/m
  - » Production declined in all main categories in February. Consumer goods production still remains above the Feb '20 level
  - » According to the Fed, if we exclude the effects of the winter weather, Manuf. Prod would have fallen 0.5%
- **Total industrial production**, including utilities, mines/oil production, fell a tad less: down 2.2% in February (expect. +0.3%), due to utilities increasing 7.4% as people were trying to stay warm. Mining was down 5.4%
- **PMI/ISM and other surveys** signal a further recovery - even an extraordinarily strong one, according to the ISM

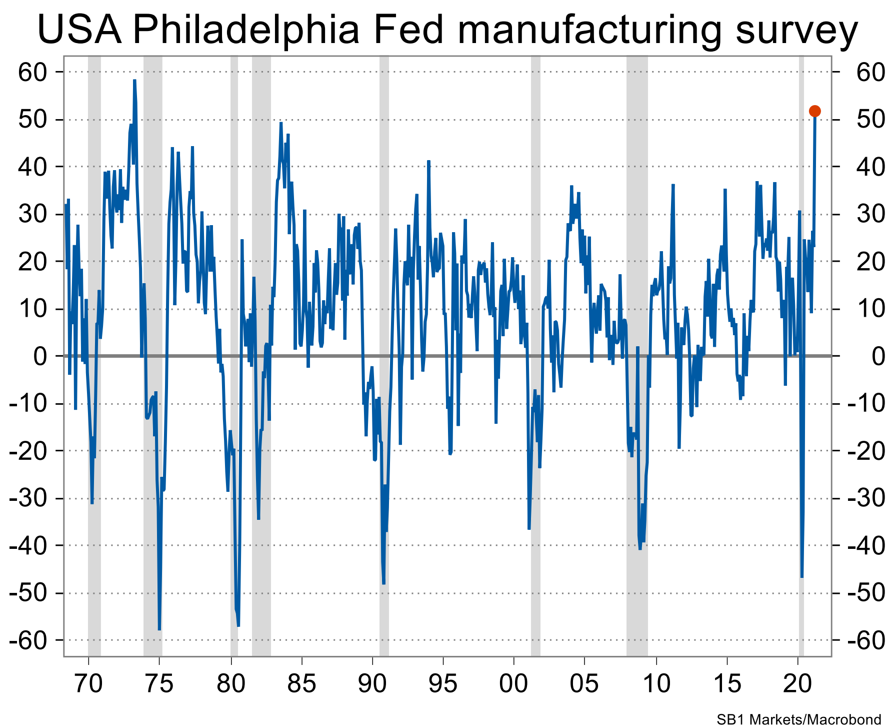
Is capacity utilisation at or above normal?

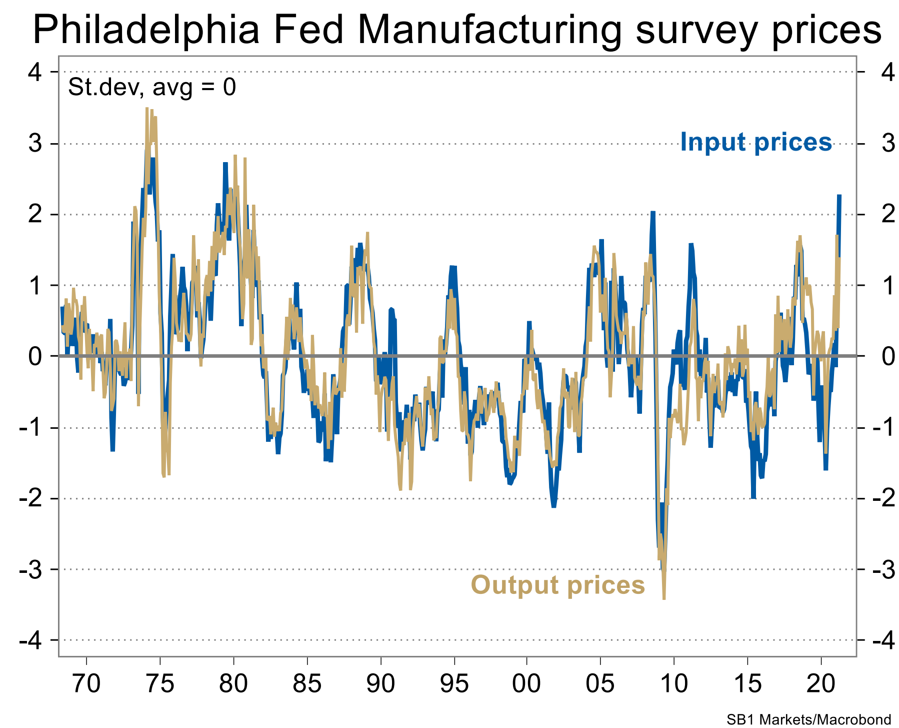


- **The Federal Reserve's** measure yields an average capacity utilisation, and slightly below the pre-corona level
- **ISM's semiannual** survey reported a close to record high utilisation rate

Please check this Phil Fed survey: Just March, April 1973 better than March 2021!

And input prices are rising faster than anytime since 1982. Output prices sharply up too

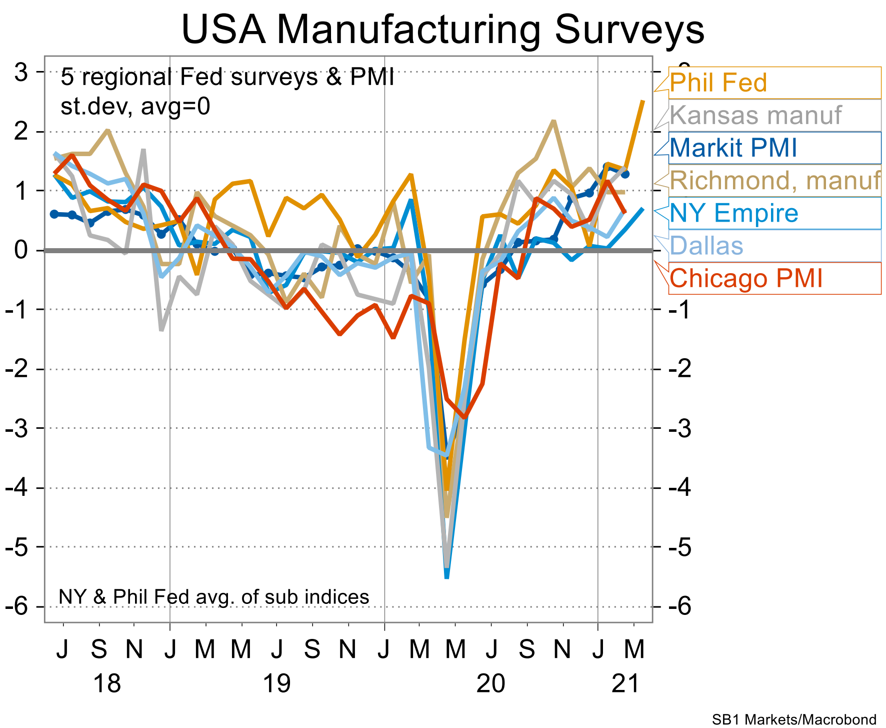


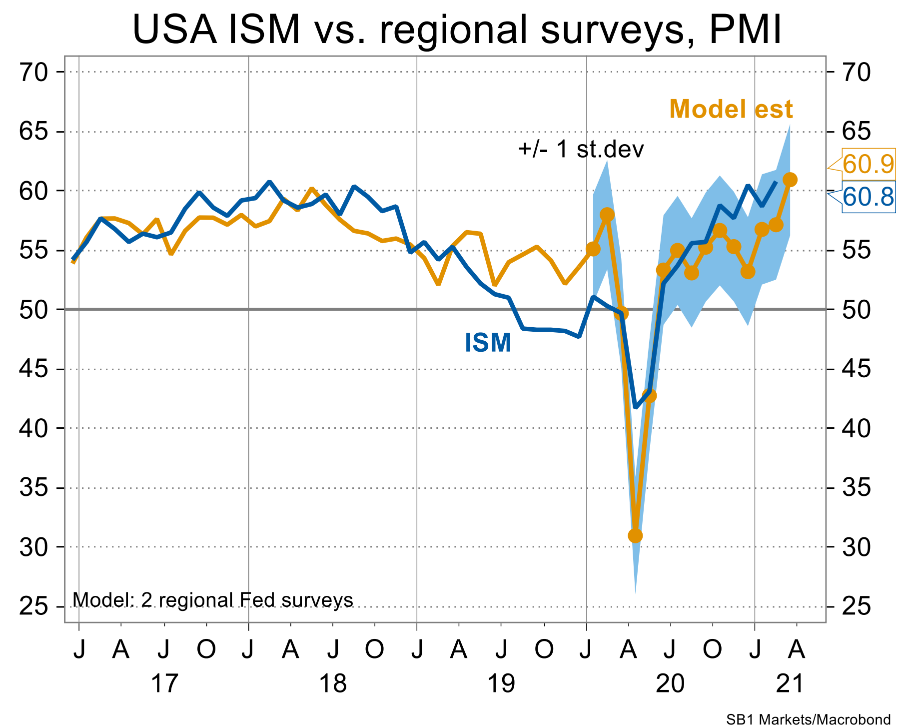


- So what is going on??
- Activity is rising from a level that is not low, neither are prices
- The main index shot up to 51.8, expected up to 23.2 from 23.1 (!). The level is…quite special.
  - » The average of the most relevant sub-indices are just as strong as the headline (general assessment)

The NY Fed manuf. survey is at the strong side too, if not comparable to Phil Fed's

Both better than expected, confirming the strong ISM in February

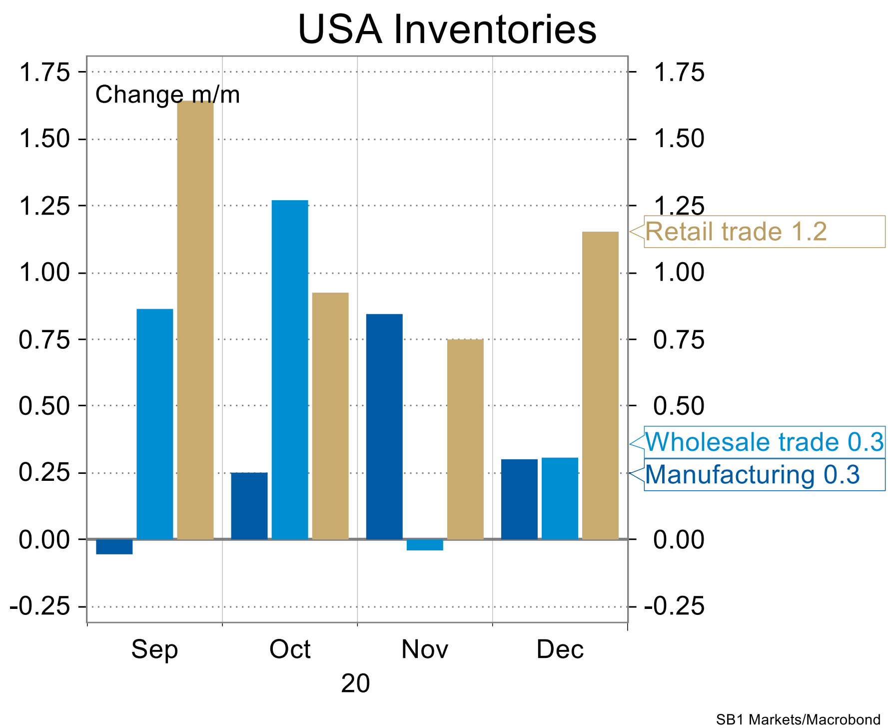


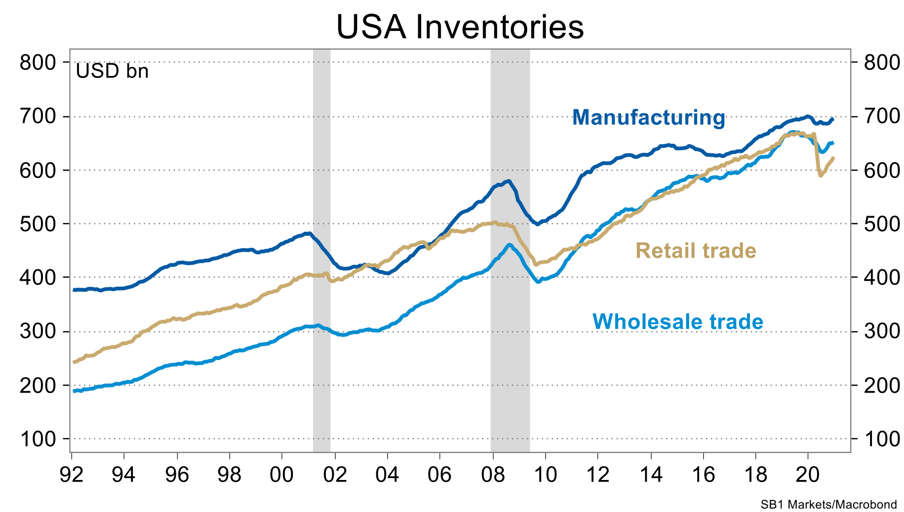


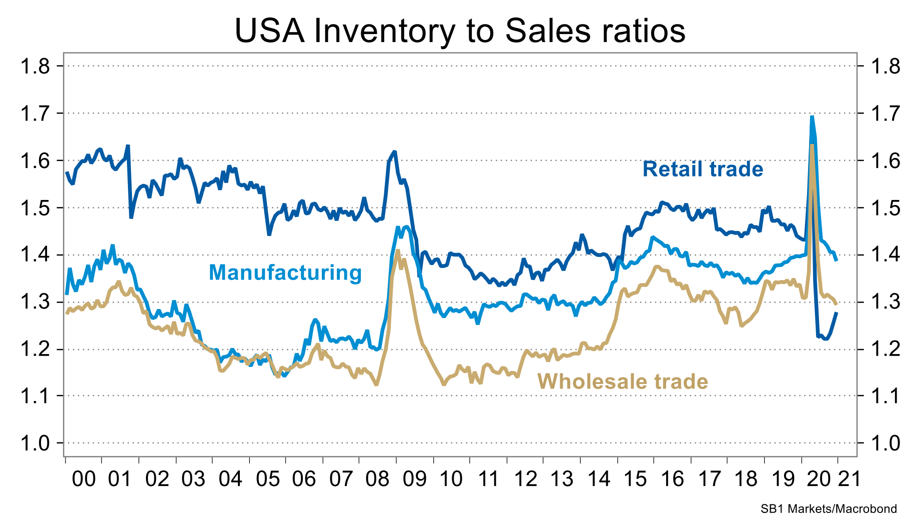
- NY Fed's manufacturing survey rose to 17.4 in February, from 12.1 expected 15. Phil Fed's leapfrogged to above 50, check the previous page.
- The surveys signal strong growth in manufacturing production

Inventories are being built up, but they are still low

… and they will very likely be filled further up the coming months (but not among retailers in Jan)



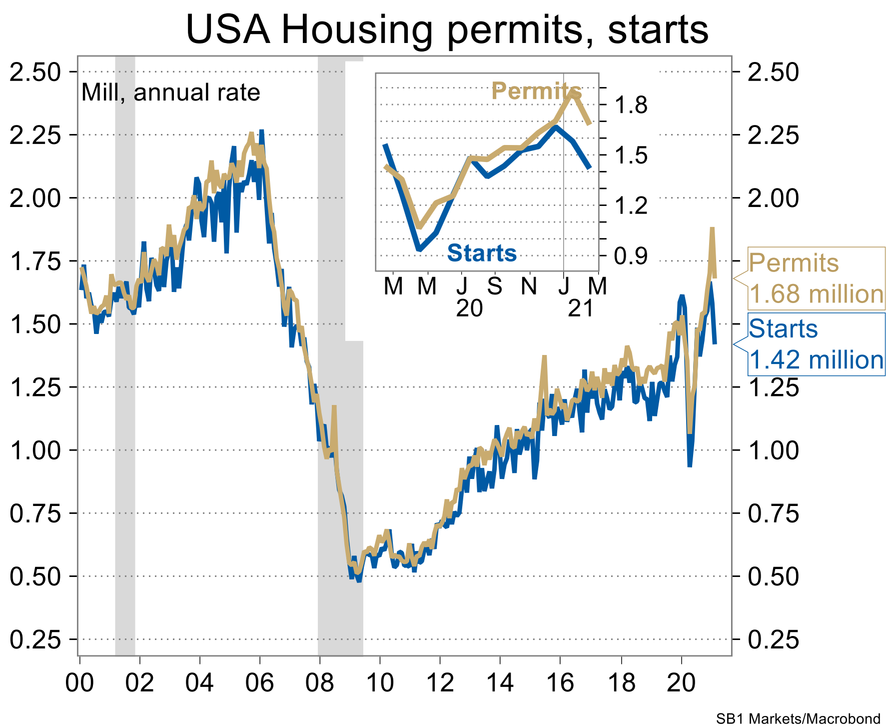


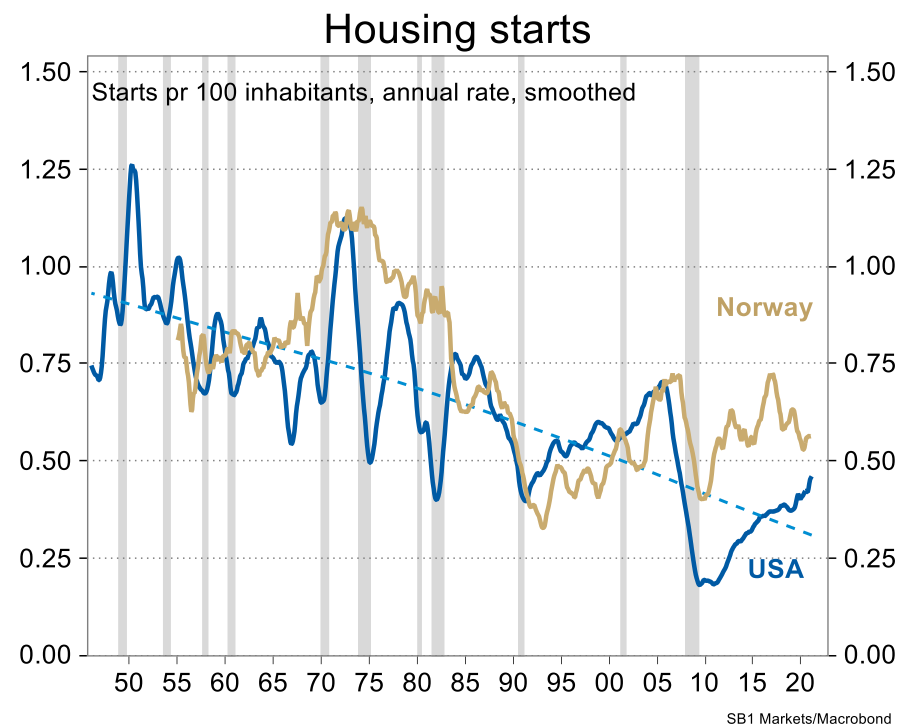


- Retail trade inventories fell sharply in April-June. Inventories are now on the way up, but levels are still very likely below a normal level
- Inventories are probably too low in wholesale trade
- Manufacturing inventories are probably close to a normal level, or somewhat below

Housing building permits down 10.8% in Feb, but still the 2nd best in 15 years

Starts also down 10.3% m/m, level still OK

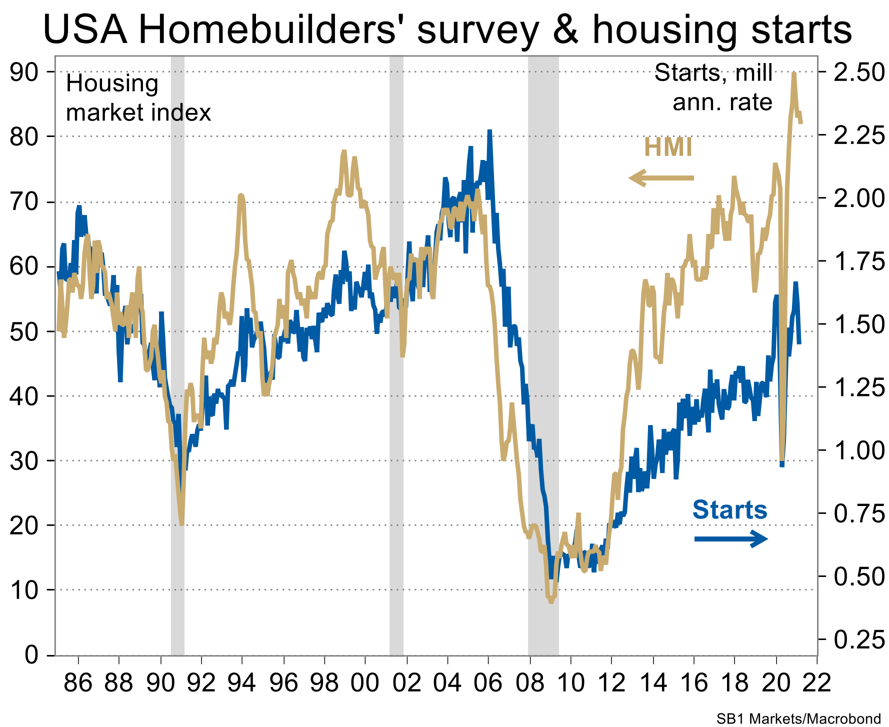


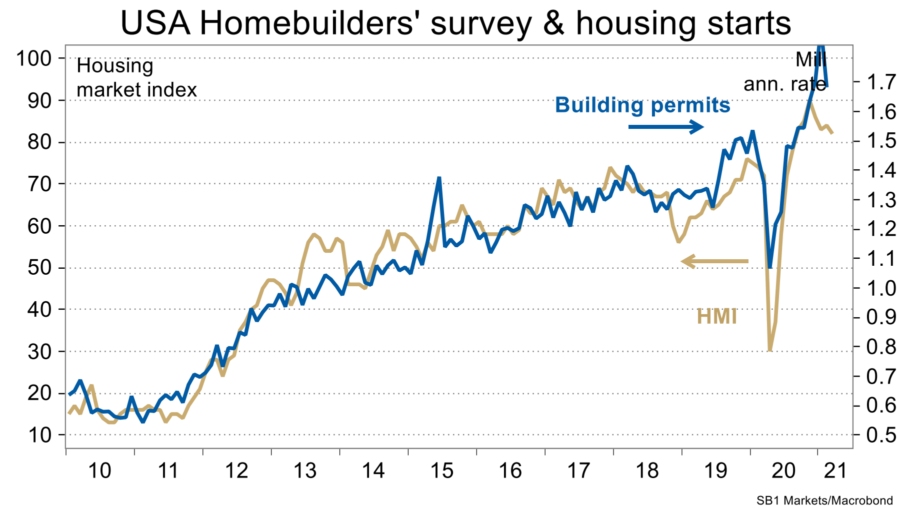


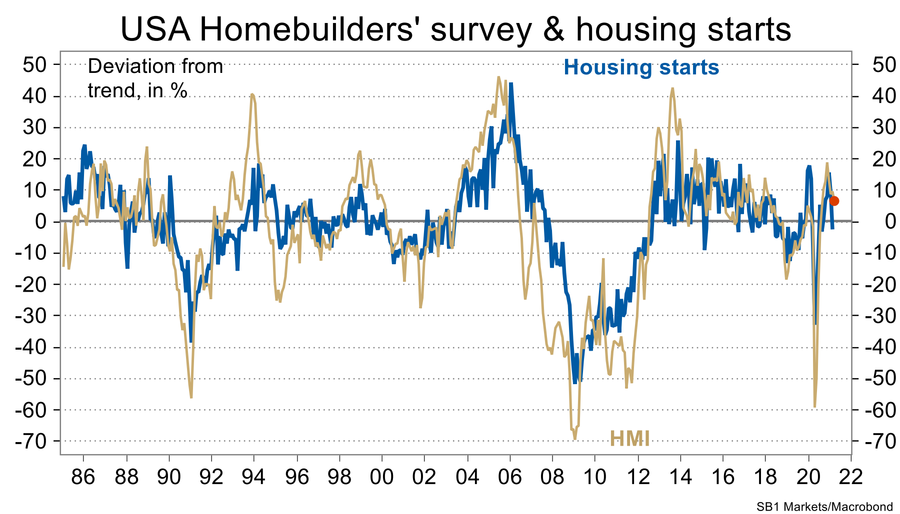
- Both **permits and starts** were slightly lower than expected. However, both are at high levels – and permits are at the highest since 2006 (but still below the late 2005 peak)
  - » Starts are up 17% y/y
  - » Permits signal more starts
- Housing starts are not at high level per capita vs. history. However, like in all other rich countries, as the 'country is built', at least in many cities, and population growth is slowing. Housing starts have been trending downwards in most countries over several decades
  - » However, not in Norway the past 30 years. Because we love our homes (and our low interest rates, vs our income expectations)

Homebuilders index dropped 2 p to 82 in March, still very high

Builders citing rising material (timber) costs as grounds for subdued optimism



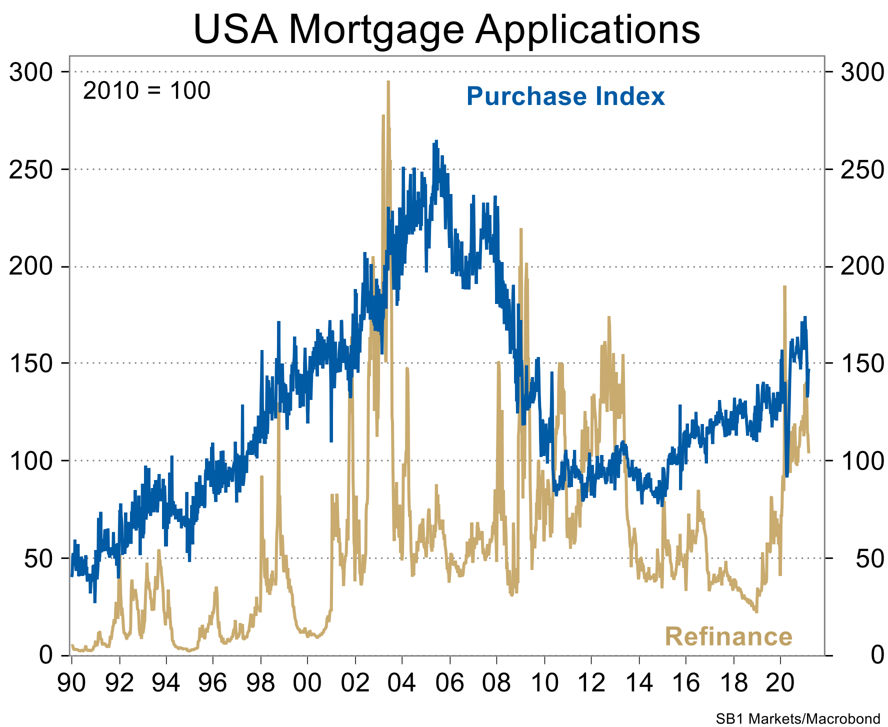


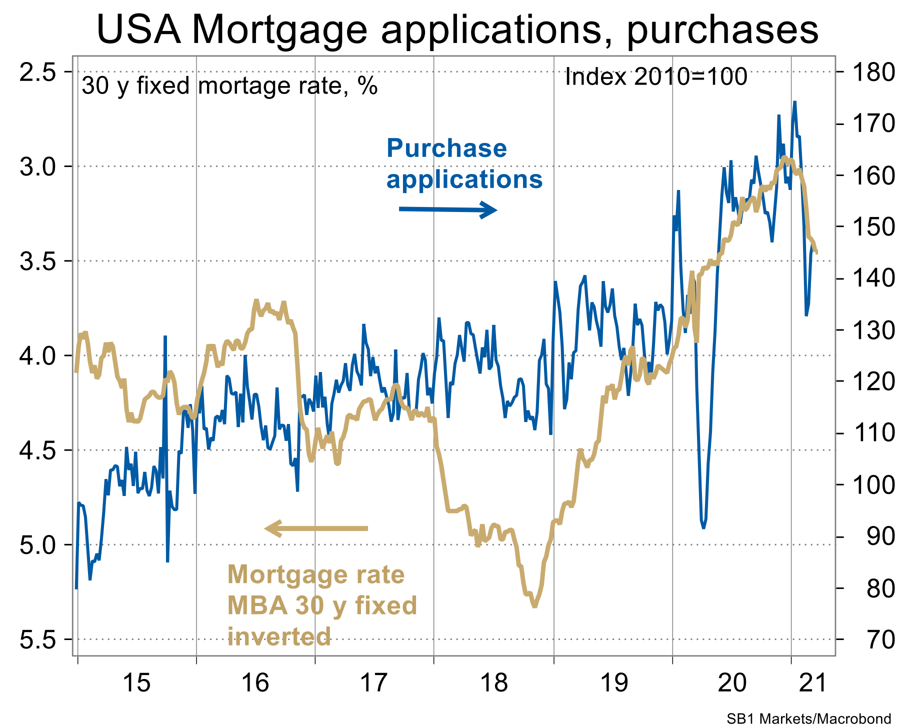


- **The Home Builders Housing Market Index declined** by 2 p to 82, expected unch. It is down from the Nov record level at 90 but we have never seen anything like this before
- The HMI is not an assessment of <u>growth</u> in housing stars nor the <u>level</u> of housing starts vs. a long term average. The best fit is vs. <u>deviation of starts from a more flexible trend</u>, check the difference between the chart above and the two to the right
- <u>Even if the level is very high, the HMI signals that the surge in starts is now over</u>

Mortgage applications down as mortgage rates move the other way

A good story but the correlation is not that close

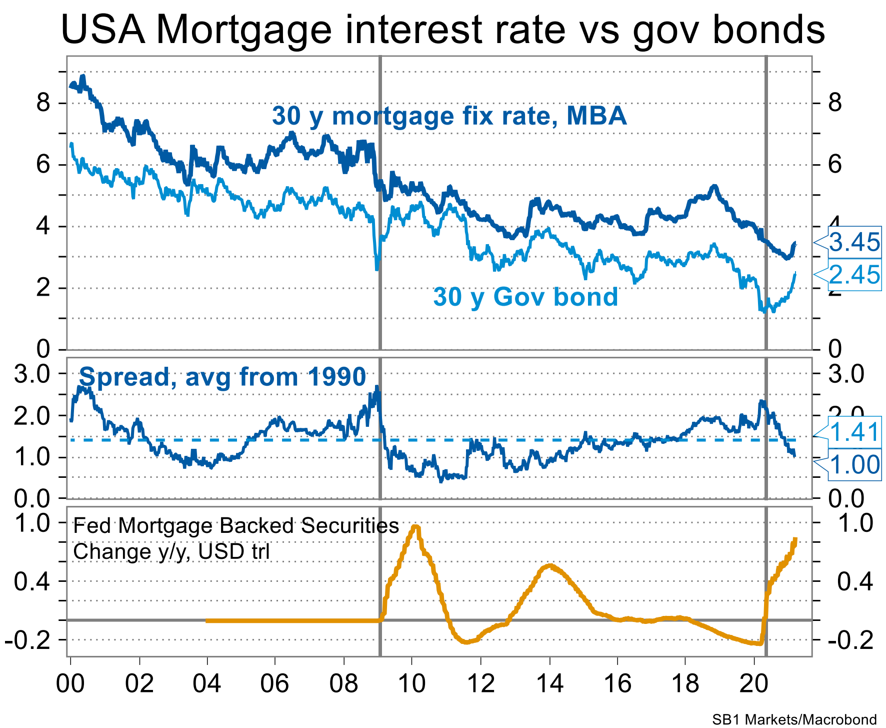


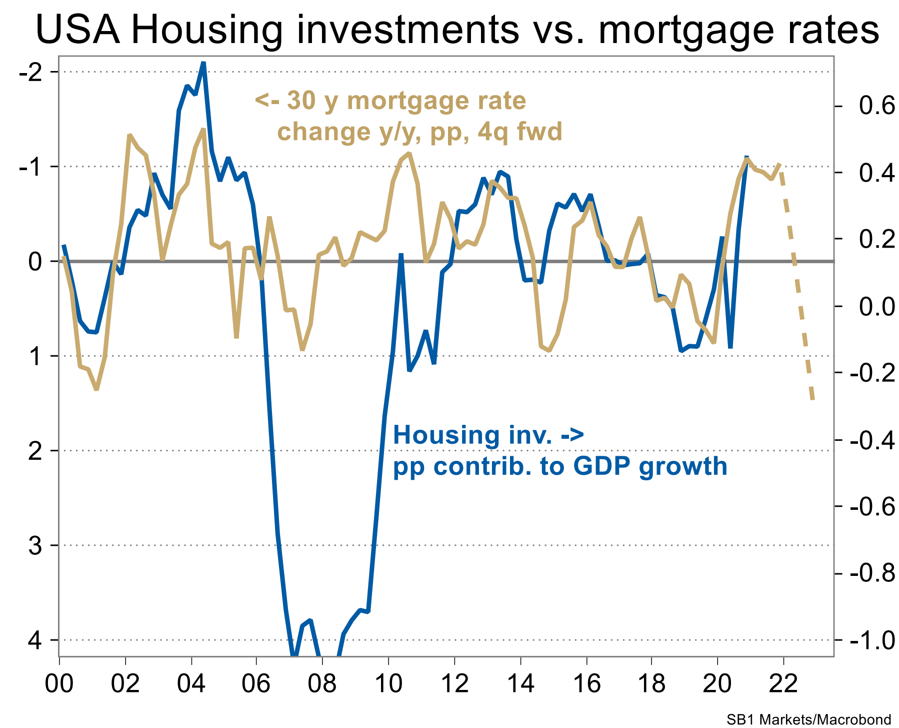


- No doubt, low mortgage rates have stimulated demand
- 30 y fixed mortgage rates have fallen to 3.0% from 5.25% in late 2018 via almost 4% at the end of 2019 (details next page)
- Disclaimer: Demand for new mortgages has not been a reliable leading indicator for the housing market. Still, strong demand for new mortgages cannot be a sign of weakness

Housing is interest rate sensitive. More often than not

Mortgage rates are on the way up. Will housing be hurt?

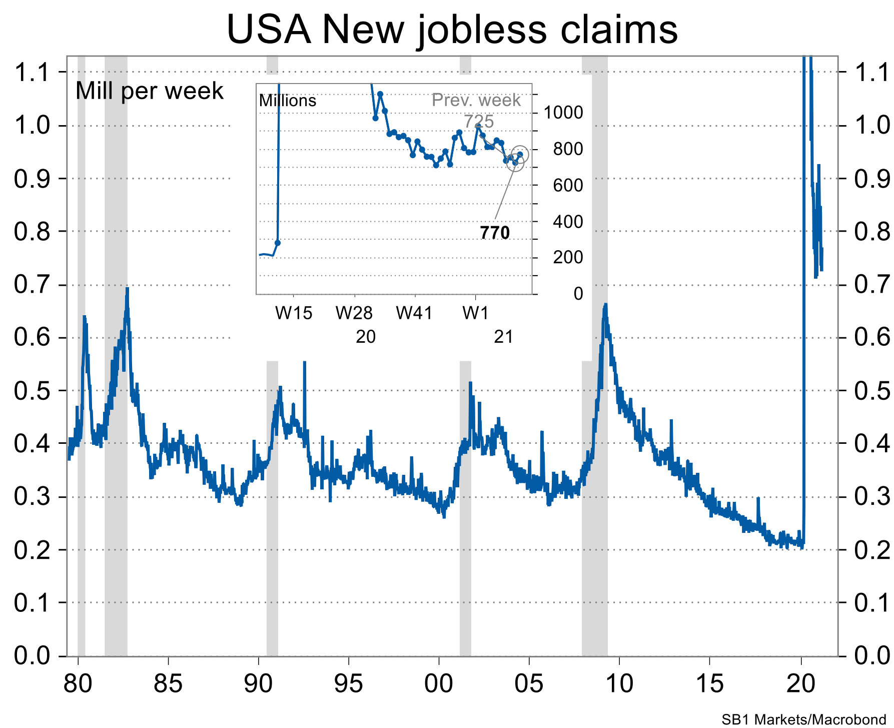


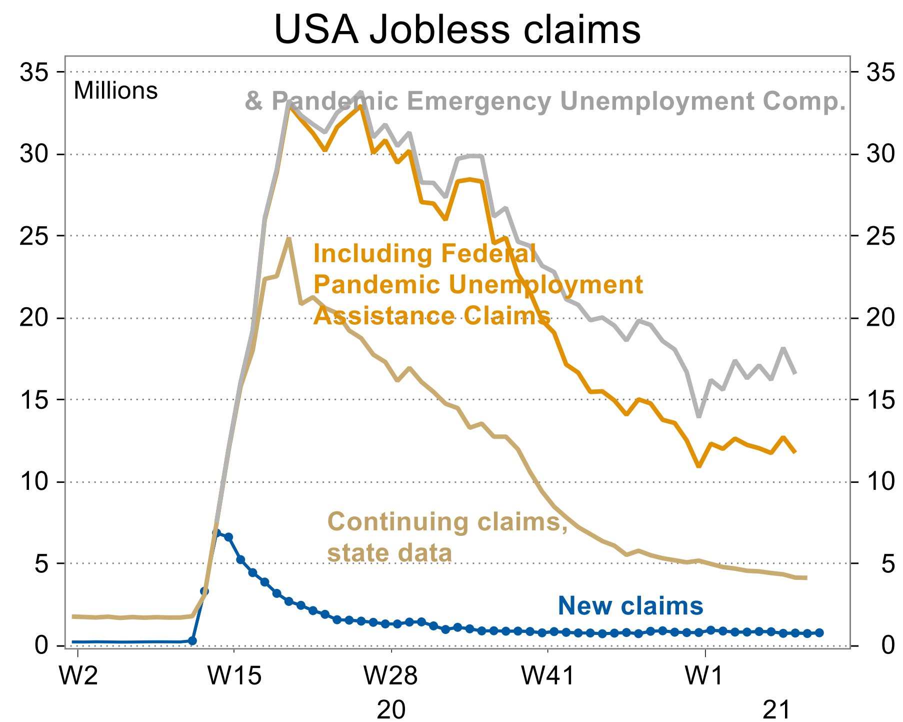


- The spread between mortgage rates and the 30 y gov bond rate has 'collapsed' over the past year, at least partly because the Federal Reserve has intervened in the market, by buying large quantities of government bonds

Jobless claims rose unexpectantly to 770'

Will it take longer before employment is back on track?



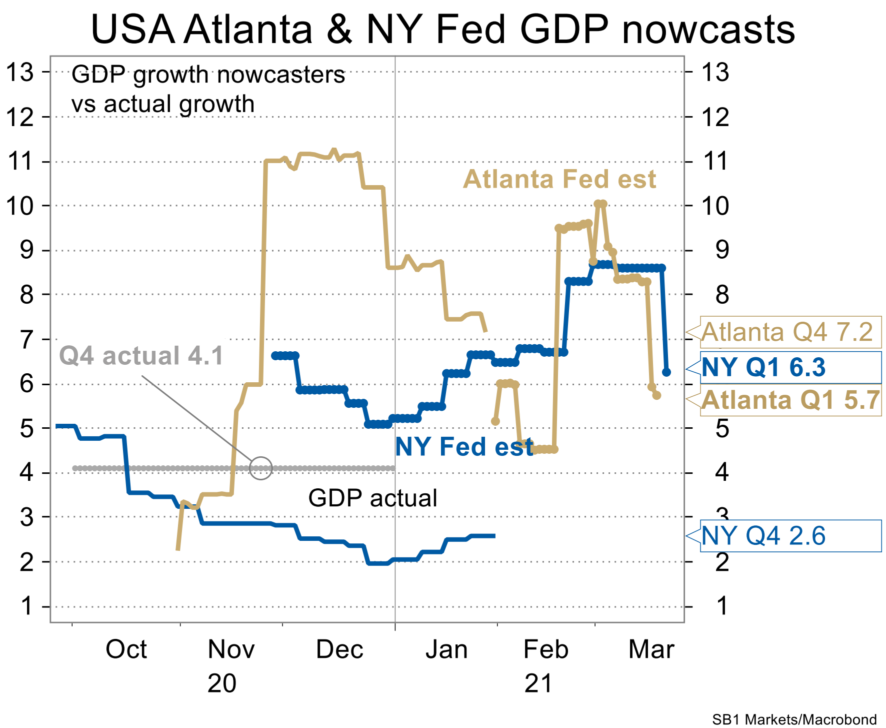


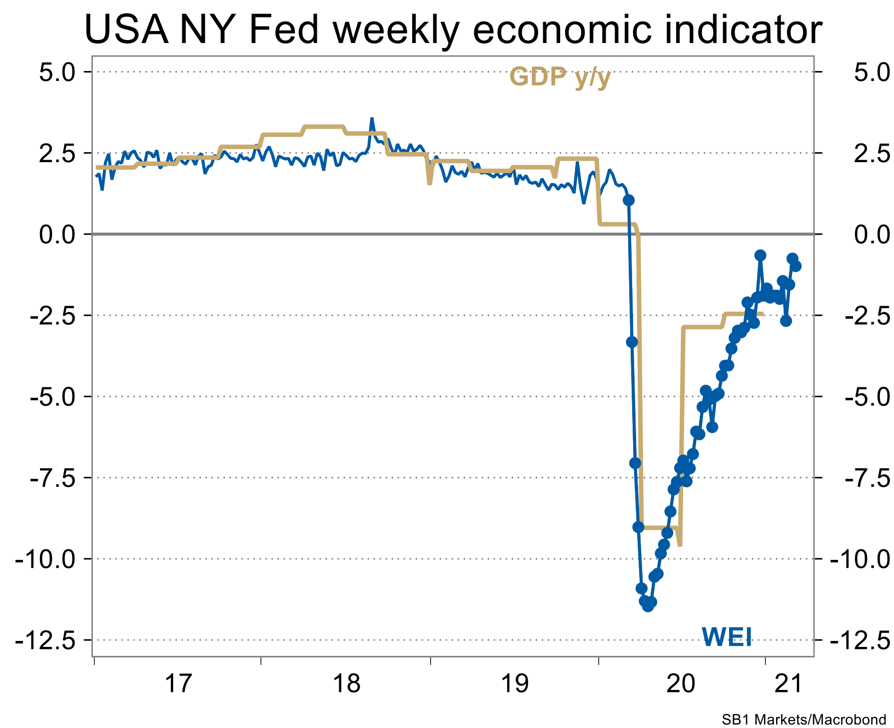
- New claims up to 770' last week from 725' the previous week (consensus was 700')
- Given
  - Decent growth in employment in February, as restaurants started to re-open
  - Small companies are reporting that they are more unable to fill vacancies than ever before!
  - Households reporting that jobs are quite easy to get
  - The unemployment rate is rather low at 6.2%

<u>It is somewhat strange that the flow of new jobless claims are far higher than ever before (except last spring). Are jobless benefits too attractive??</u>

Nowcasters down last week, due to modest data. Still, 6% growth is OK

The NY Fed's weekly model has recovered somewhat, still on the weak side, down 1.5% y/y(-0.9 q/q)

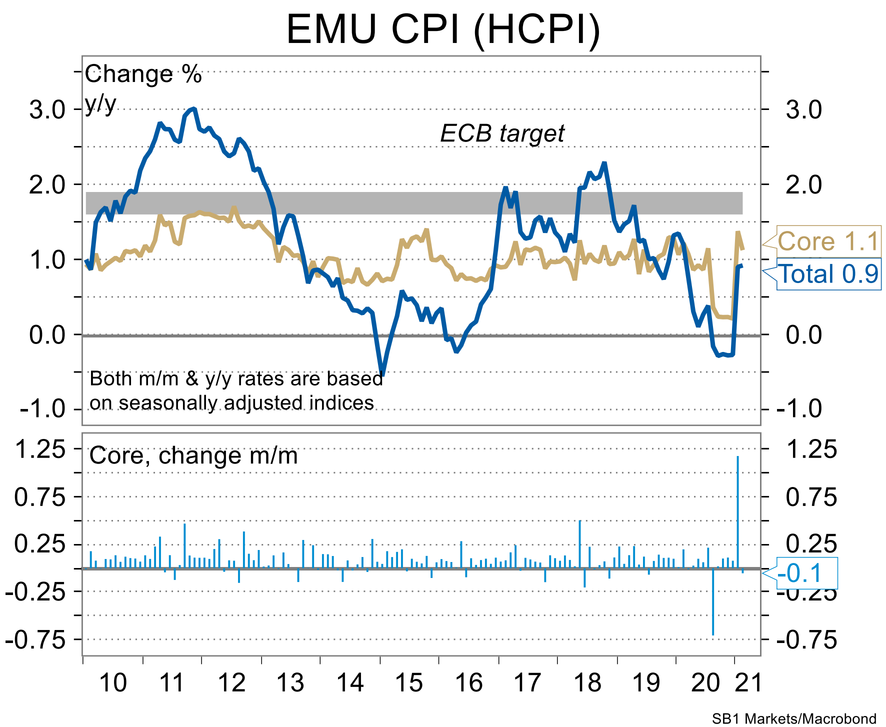


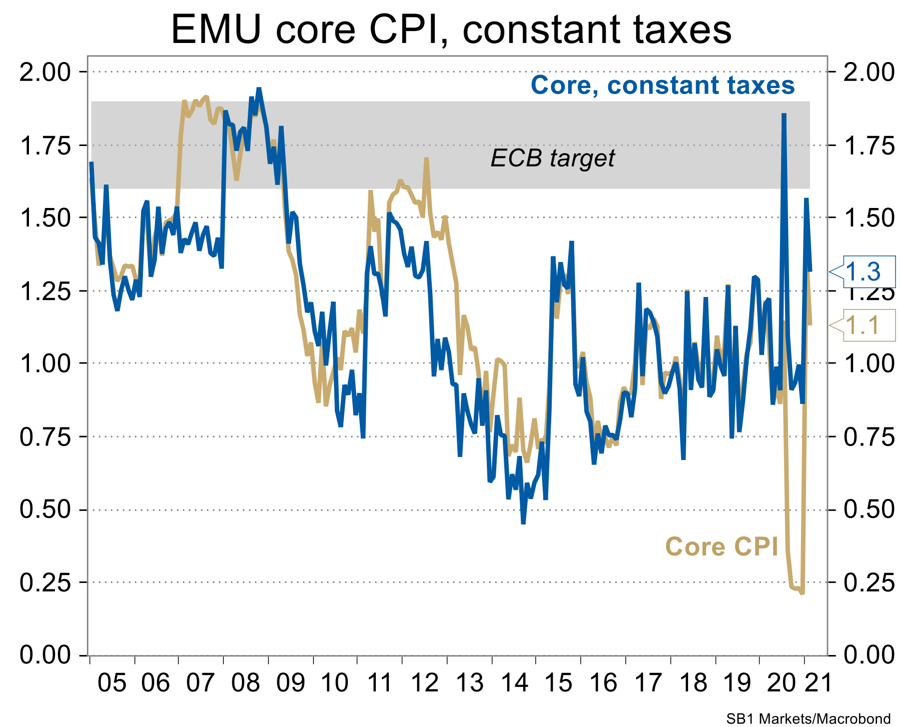


- Atlanta Fed overestimated growth in Q4, NY Fed underestimated the real outcome
- Alas, no model is perfect ☺

Core inflation confirmed -0.3 pp to 1.1%, while headline held steady at 0.9%

Inflation is still far below ECB's inflation target

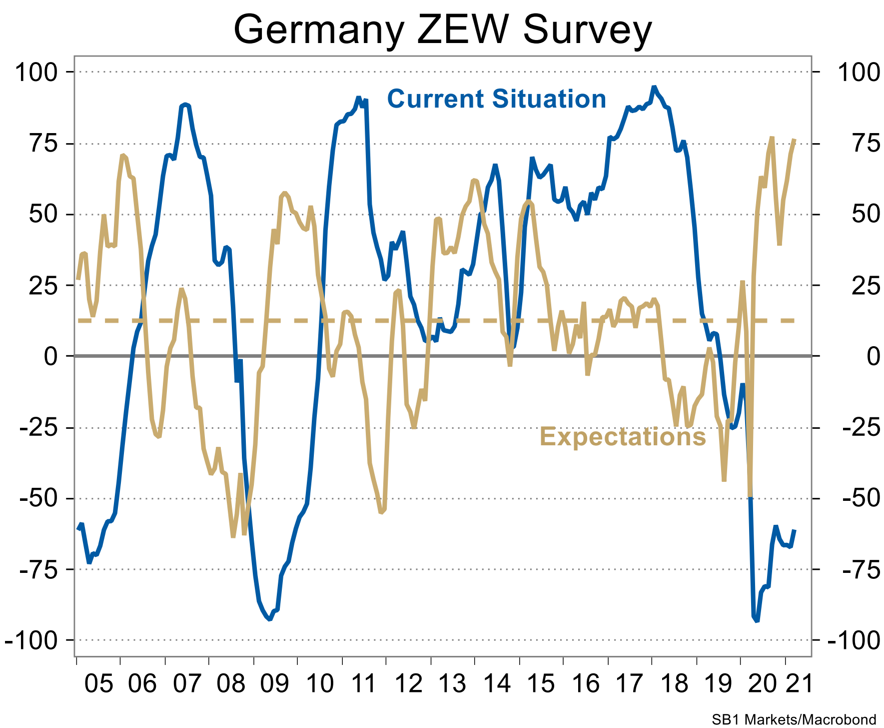


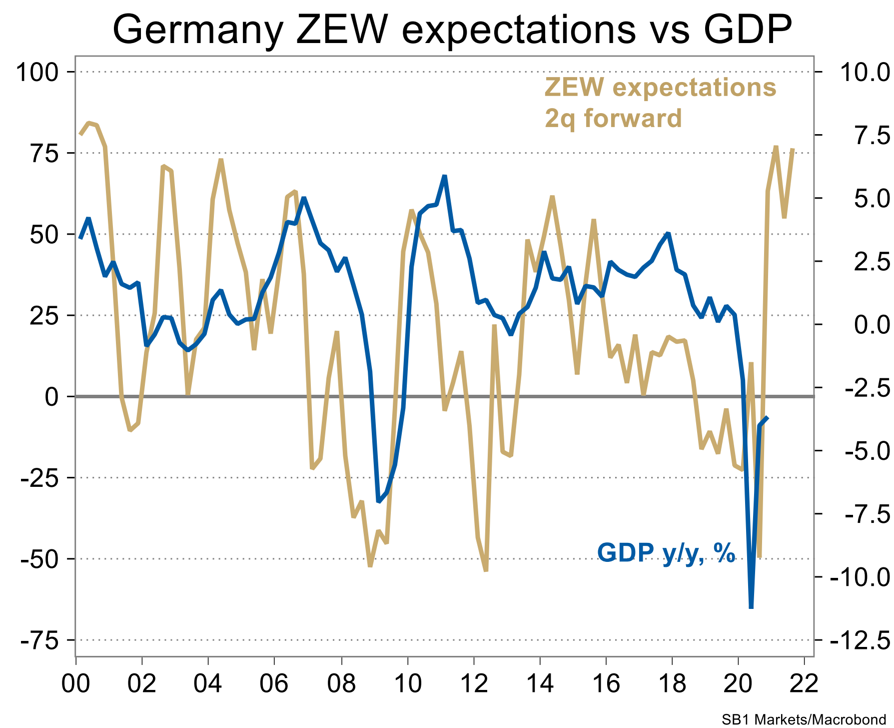


- In February, core prices fell by 0.1% m/m and the annual rate declined to 1.1% from 1.4%, equal to the preliminary estimate. Core inflation accelerated in most countries, the most in Germany and the Netherlands. Spain is the only major country where prices are dropping (-0.1% y/y). In EMU, core prices did not decline m/m last spring (as in the US), and there is no base effect that will lift prices this year
  - » The core, constant taxes CPI was 1.3% in February
- Headline HICP was unchanged at 0.9% y/y in February
- Energy prices still contributes at the downside, as these prices were down 1.7% y/y – even if prices rose 0.9% in Feb – taking the annual headline rate down by 0.16 pp. Soon, energy prices will change sign - and contribute positively to the headline. Perhaps the ECB enjoys that but households do not

ZEW analyst/investor sentiment improved for the 4th month, not far below ATH

Of course the outlook is positive, despite lengthy lockdown. _Vaccines are on the way_

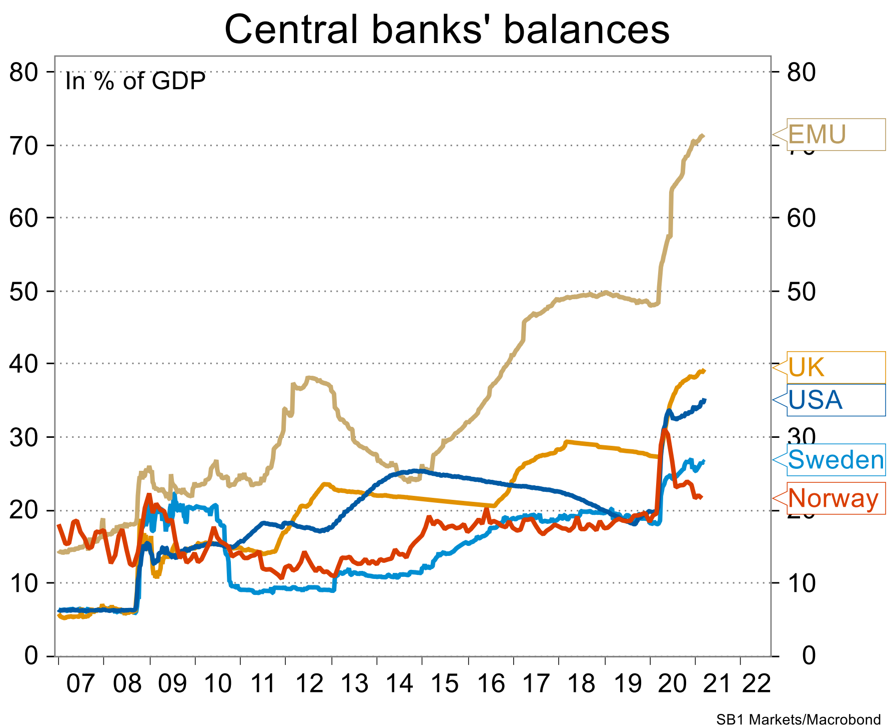




- The ZEW expectation index is close to the strongest level since 2000 - but can probably not be used to calibrate any precise GDP forecast
- Investors and analysts are just pretty sure that the economy will not remain in the basement (or below) forever. Which is reasonable
- Assessment of current situation also improved in March, as some restrictions have been lifted

A unanimous BoE leaves interest rate & asset purchase programme unch.

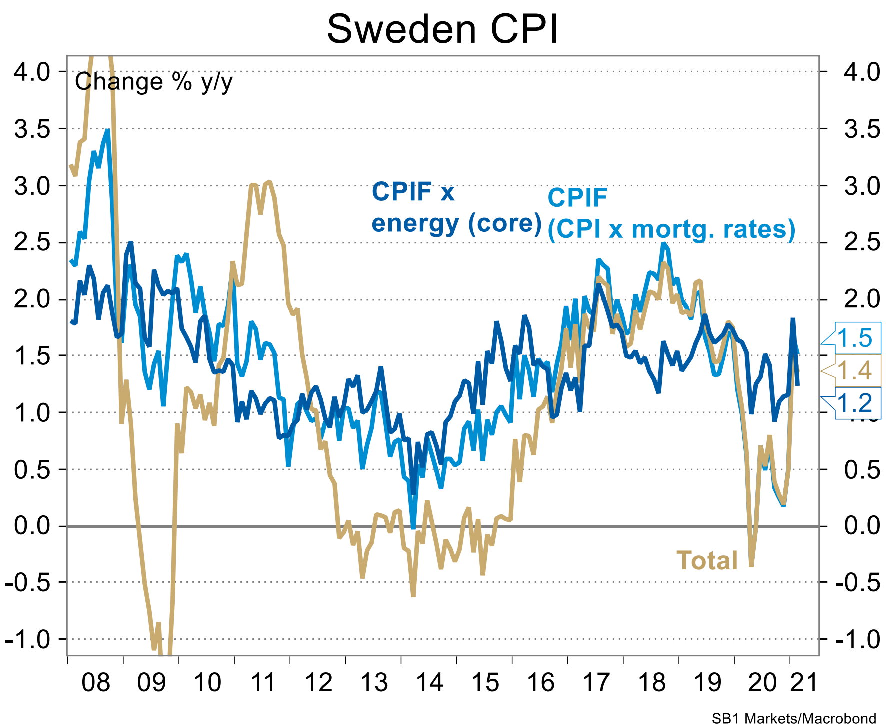
BoE does like the Fed, and makes no changes to its monetary policy stance

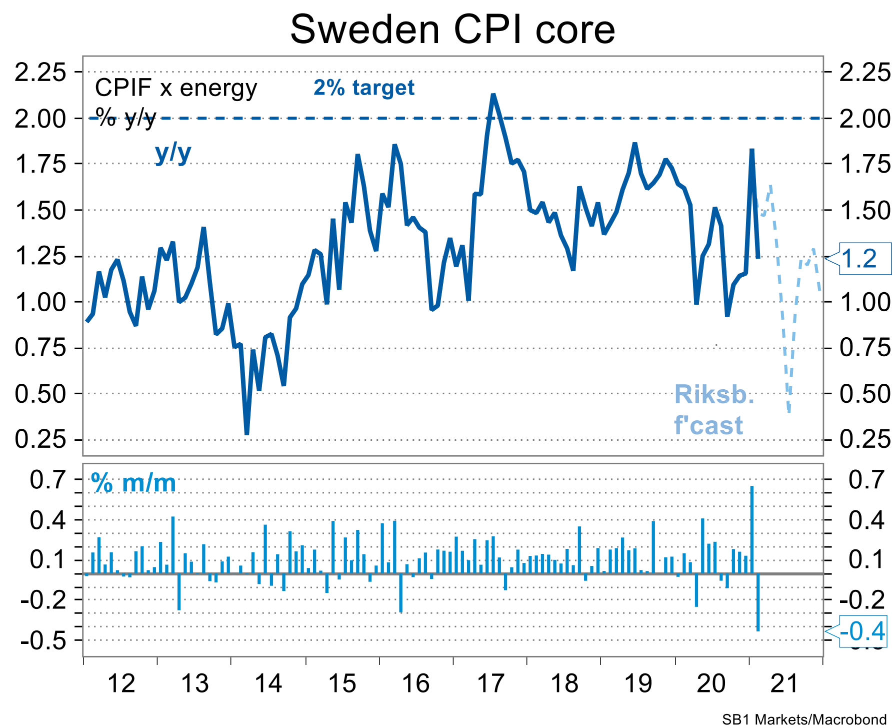


- The Bank left the **interest rate at 0.1%** and maintained the target for asset purchases at £895
- **Outlook slightly more positive**– vaccine news and size of U.S. stimulus package considered most important update since Feb
- *"The outlook for the economy, and particularly the relative movement in demand and supply during the recovery from the pandemic, remains unusually uncertain."*
- **Inflation** is expected to return swiftly towards the 2% target
- **Yields** of UK government bonds had risen notably since the last committee meeting, but the Bank did nothing to calm markets, and did not follow the ECB's example of front loading asset purchases

Core inflation down 0.4 pp to 1.2% in February – Riksbank had 1.5%

Riksbank expects core to remain low for long, and expects core CPI to dip from here until summer

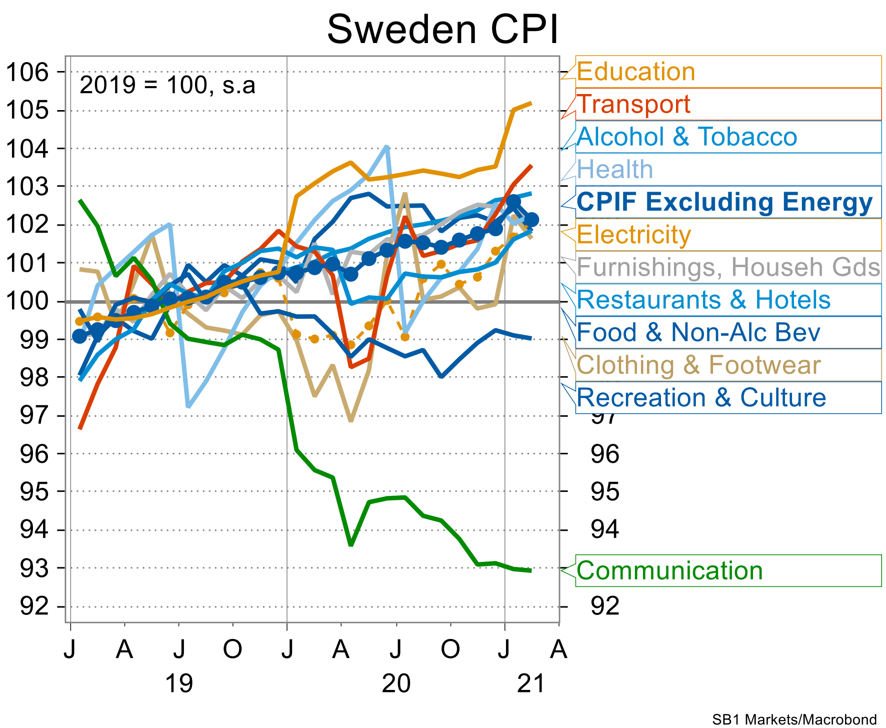


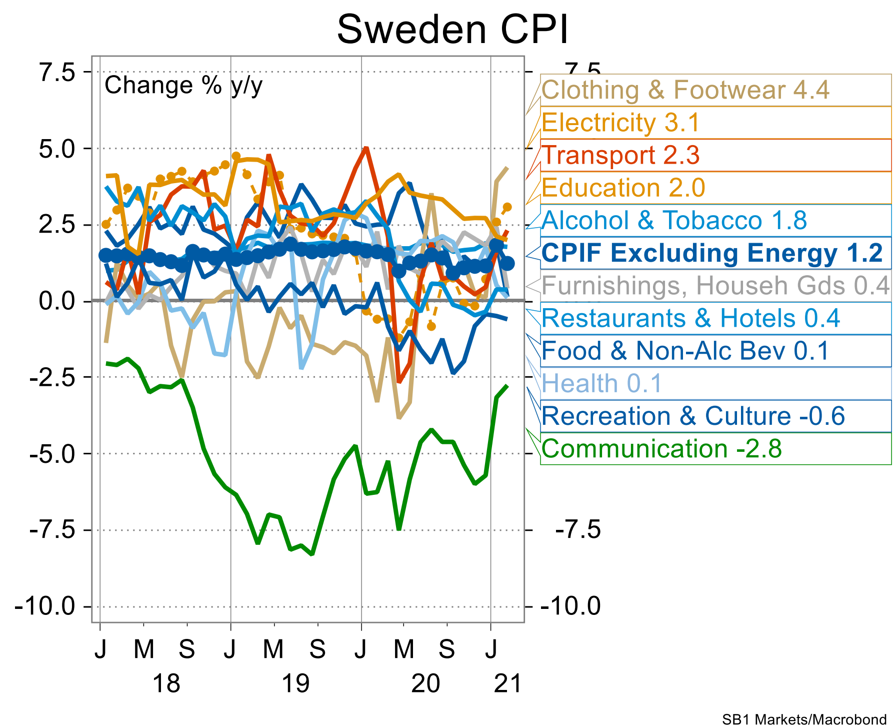


- The constant interest rate inflation (CPI-F x mortgate rates) was expected at 1.8%, but came in at 1.5%
- Core prices fell by an historical 0.4% m/m. A decline in the prices of food and furnishing were the biggest contributors on the downside
- Total inflation fell to 1.4% from 1.6%

Food and furnishing prices contributing to the decline in CPI

…and the majority of sectors are still reporting inflation below 2%

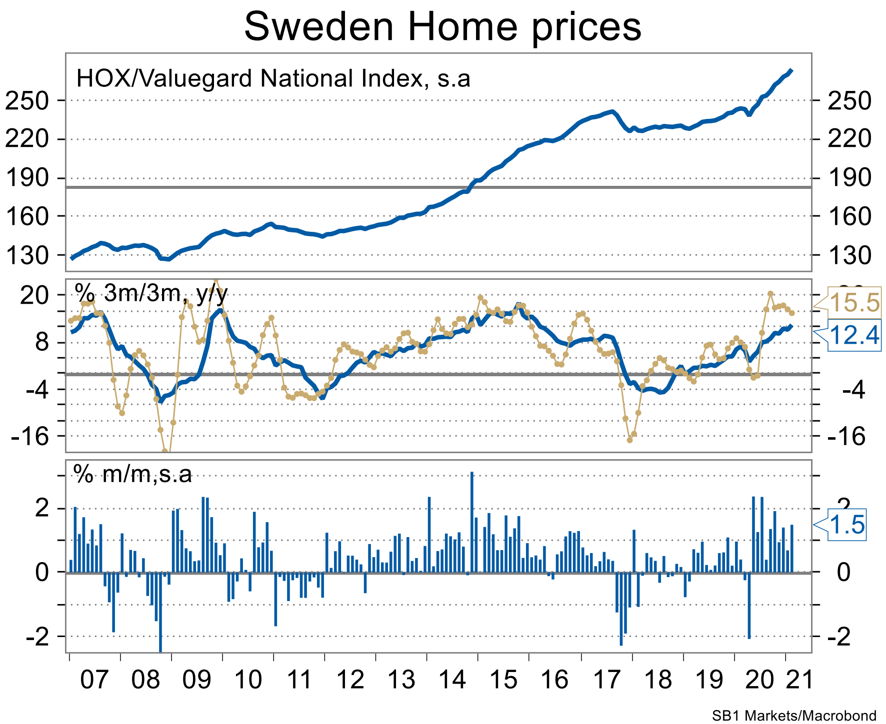


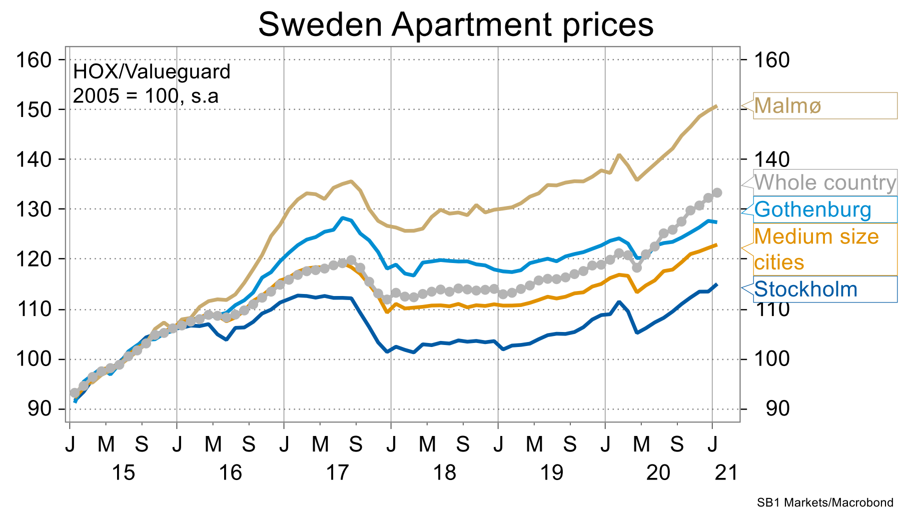


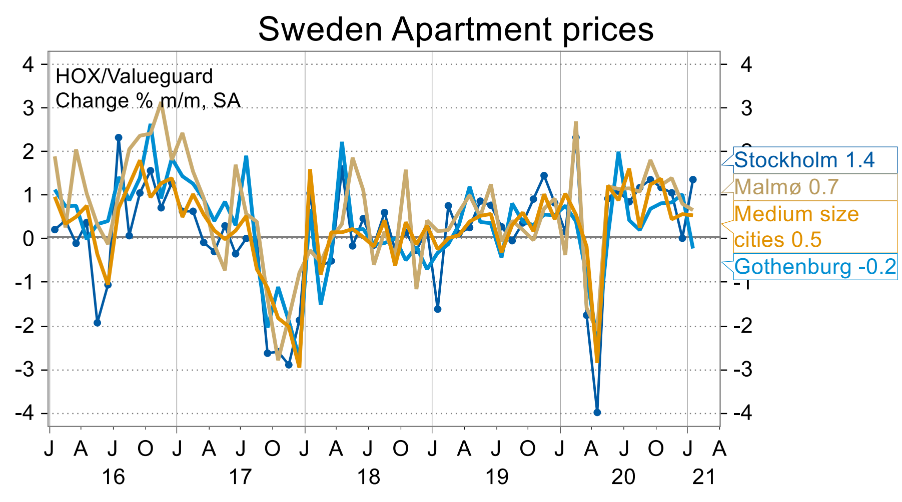
SpareBank 1 MARKETS

Swedish house prices up 1.5% in February, up 12.4% y/y!

Greatest increase in Stockholm (vs a decline in Jan) but the trend is quite strong everywhere



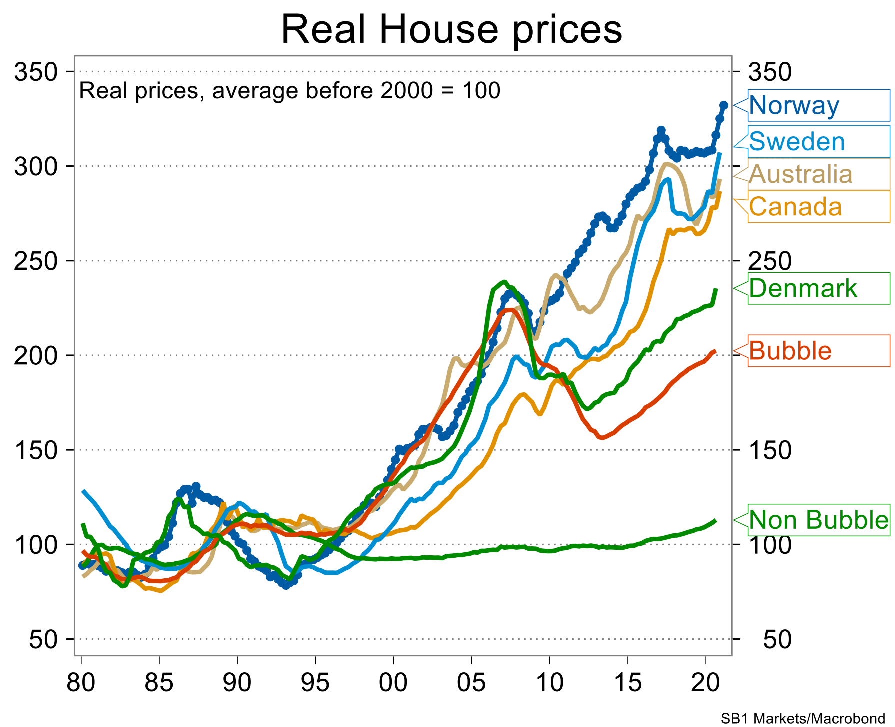


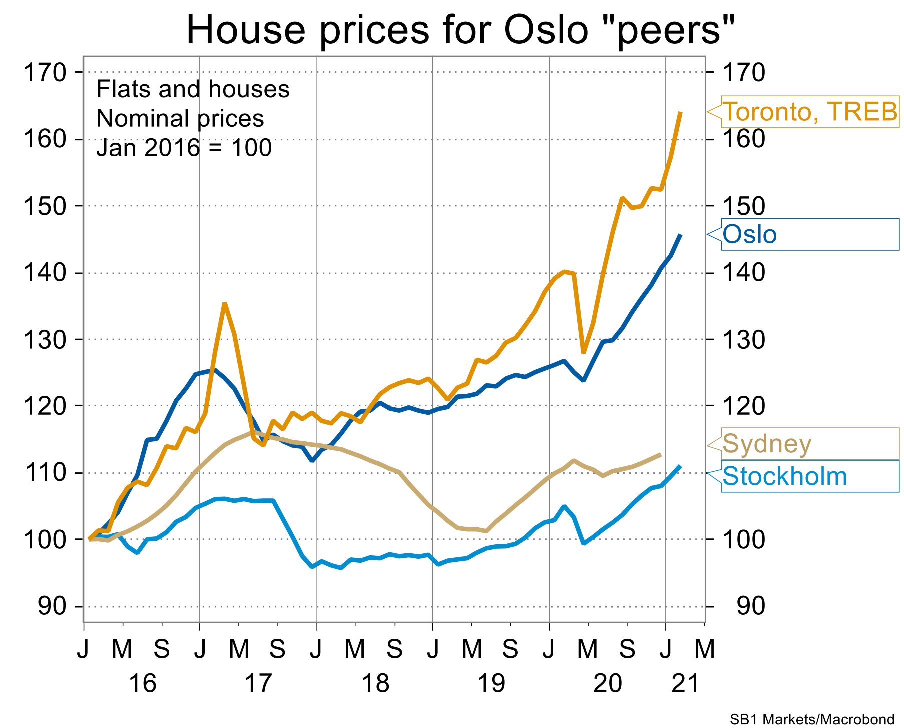


- Underlying price growth is (3m/3m) is slowing marginally, but is still at 15%, even higher than in Norway
- Prices are now increasing in all the major cities

Zero-interest rates are just wonderful!

Prices are soaring in many countries – with the 'supercycle' countries in the lead

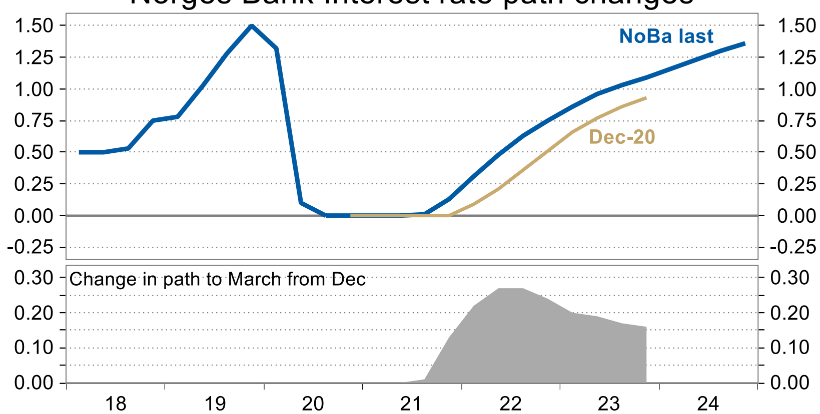




- Real house prices are at high levels in both Australia, Canada, Norway, and Sweden
- Almost all OECDs countries are reporting higher house prices over the previous years, just Ireland & Japan are in the downside

Norges Bank to lift rates 1-2 times in H2

50% chance of a hike in September, 25% for another hike in December



Interest rate paths

	Path 4-20	**Path 1-21**	Change **bps**	SB1M f'cast	Fair FRA *) @IMM, NoBa	FRA pre meet.	NoBa - FRA
Q1 21	0.00	**0.00**	**0.00**	0.00	0.42		
Q2 21	0.00	**0.00**	**0.00**	0.00	0.36	**0.35**	0.01
Q3 21	0.00	**0.01**	**0.01**	0.01	0.46	**0.44**	0.03
Q4 21	0.00	**0.13**	**0.13**	0.16	0.63	**0.62**	0.02
Q1 22	0.09	**0.31**	**0.22**	0.39	0.80	**0.79**	0.02
Q2 22	0.21	**0.48**	**0.27**	0.56	0.96	**0.95**	0.01
Q3 22	0.36	**0.63**	**0.27**	0.73	1.08	**1.09**	-0.00
Q4 22	0.51	**0.75**	**0.24**	0.90	1.19	**1.21**	-0.02
Q1 23	0.66	**0.86**	**0.20**	1.07	1.29	**1.33**	-0.03
Q2 23	0.77	**0.96**	**0.19**	1.24	1.37	**1.42**	-0.05
Q3 23	0.86	**1.03**	**0.17**	1.39	1.43	**1.50**	-0.07
Q4 23	0.93	**1.09**	**0.16**	1.51	1.50	**1.55**	-0.05
Q1 24		**1.16**			1.57	**1.61**	-0.04
Q2 24		**1.23**			1.64		
Q3 24		**1.30**			1.70		
Q4 24		**1.36**			1.76		

**) Assuming a 35 bps NIBOR spread from Q2-21*

Q4 FRAs adjusted for liquidity prem

- Norges Bank kept the **key policy rate** unchanged at 0%, as expected. However, **the rate path** was significantly lifted once more, and pretty close to the FRA-curve (table to the lift, chart next page)
- The Dec MPR indicated the first rate hike in Q1 2022, the Bank now signals a 50% chance for a hike in Sept-21**,** and given a hike in Sept, a 25% chance of another hike in Dec. No hike in Sept will mean that a Dec hike is evident very likely, even a 50 bps is partly priced in
- **Vaccine** news, stronger growth of trading partners' economies (read: **US stimulus package**), a further rise in **house prices**, higher **prices and wages,** high savings rates (indicating future spending), as well as a significantly higher **oil price** contributed to the rate path adjustment. The output gap will be fully closed by end of Q4-21, and not in Q2-22, which also explain the change of timing of the first rate hike (more details next page)
  - » Norges Bank stresses the uncertainty regarding the vaccines and the impact on the economy
- Even if NoBa's path was very close to the FRA-curve, the FRAs rose by up to 2-5 bps & the NOK immediately appreciated some 0.6%. In the front end, our f'cast was close to NoBa's path but at the far end, NoBa was far more dovish than we expected. Our Q4-23 forecast was 42 bps too high! But wait and see…
- We expect domestic demand for services to 'explode' as soon as the virus is brought under sufficient control and restrictions eased, and **we therefore expect NoBa to raise the interest rate path further at their June meeting, eventually in September**
- Thus, there is still an **upside risk in the short end of the curve**

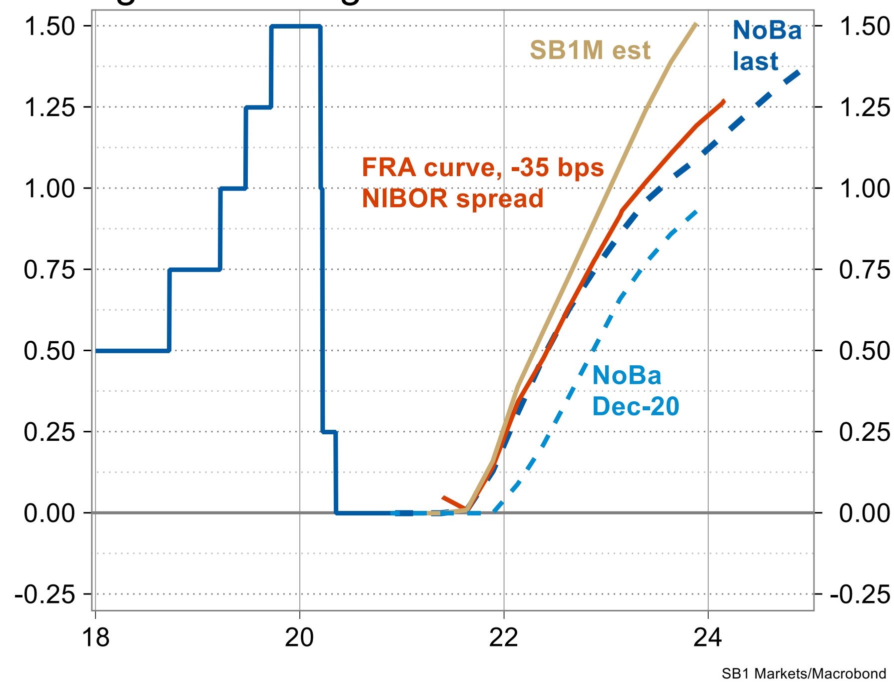
SpareBank 1 MARKETS

The new path spot on market FRAs but rates still rose margianally

FRAs up approx. 5 bps on rate decision, following a somewhat larger decline just before NoBa meeting

Norway 3m FRA

Norges Bank Signal rate forecast vs market



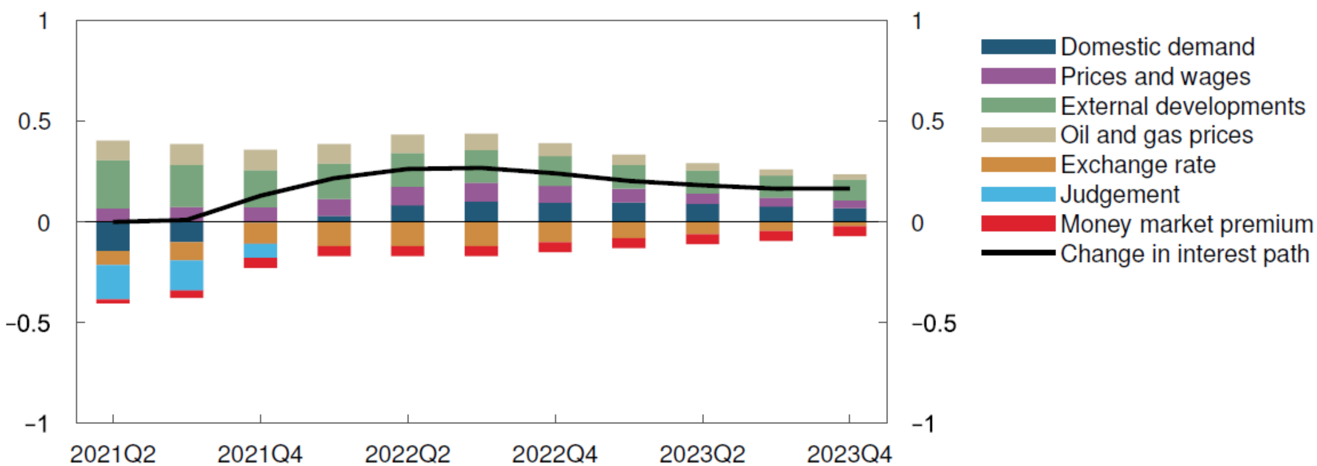
- The FRA curve had retreated somewhat in the week before the NoBa meeting, likely on the basis of increased spread of the virus in Norway along with über-dovish central banks among the trading partners. The Bank, however, was firm in its belief that the virus is at the end of the road
  - » FRAs rose by up to 5 bps, and the NOK rose slightly - before being dragged down by a lower oil price last later last Thursday
- We expect Norges Bank to start hiking in September, based on 3 assumptions
  1) A successful rollout of vaccines that makes it possible to reopen most of the service sector as the no. of hospitalisations and deaths are reduced during H1
  2) A rapid recovery in domestic demand for the re-opened services
  3) No meltdown abroad – no further vaccine complications

A stronger NOK and a 5 bps higher NIBOR spread on the downside

.. Other factors all on the upside, barring short term impact of recent restrictions

Chart 4.6 Slightly improved prospects pull up the interest rate path

Cumulative contribution. Percentage points



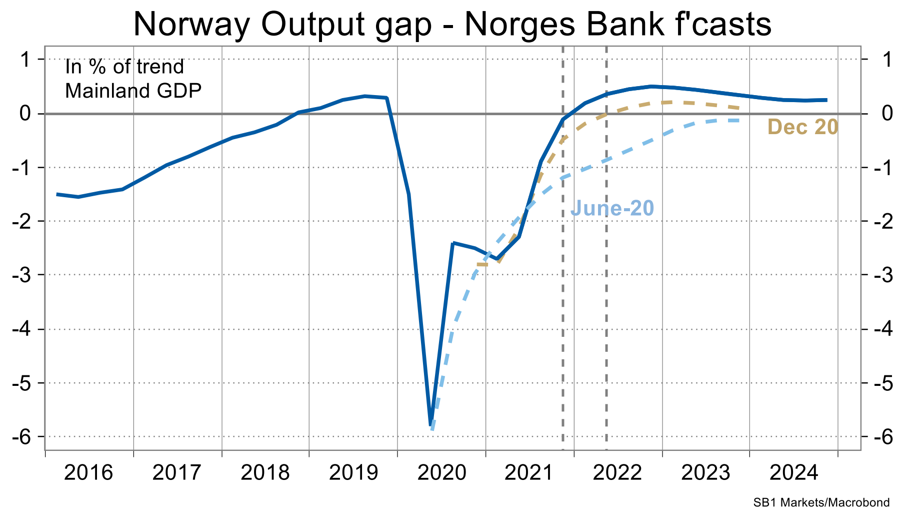
Source: Norges Bank

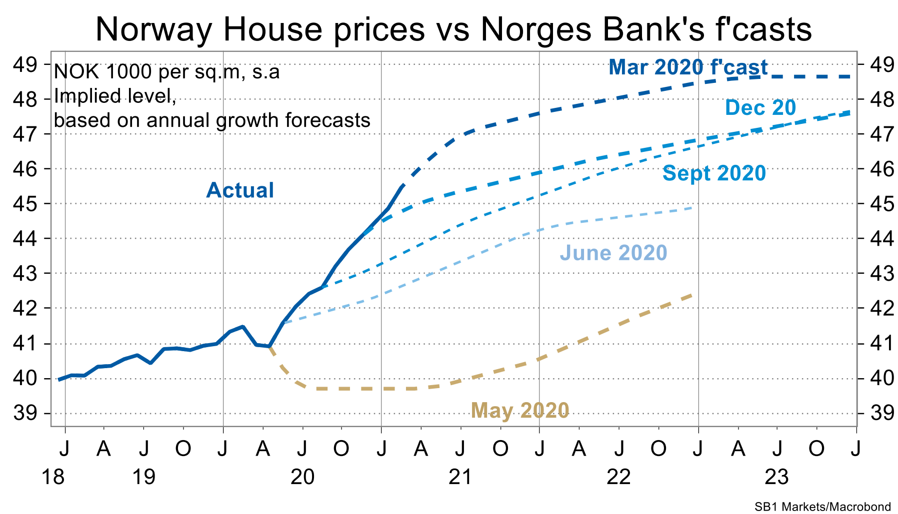
- .. And large negative judgement factor (almost 20 bps) in Q2, and a substantial negative drag in Q3 as well. In principle, this is the impact of new judgements made since Dec, and signals that 'the real factors' may have implied an earlier interest rate hike

SpareBank 1 MARKETS

NoBa: The virus will be brought under control and growth is imminent

The output gap will be closed by the end of 2021, house prices will continue upwards

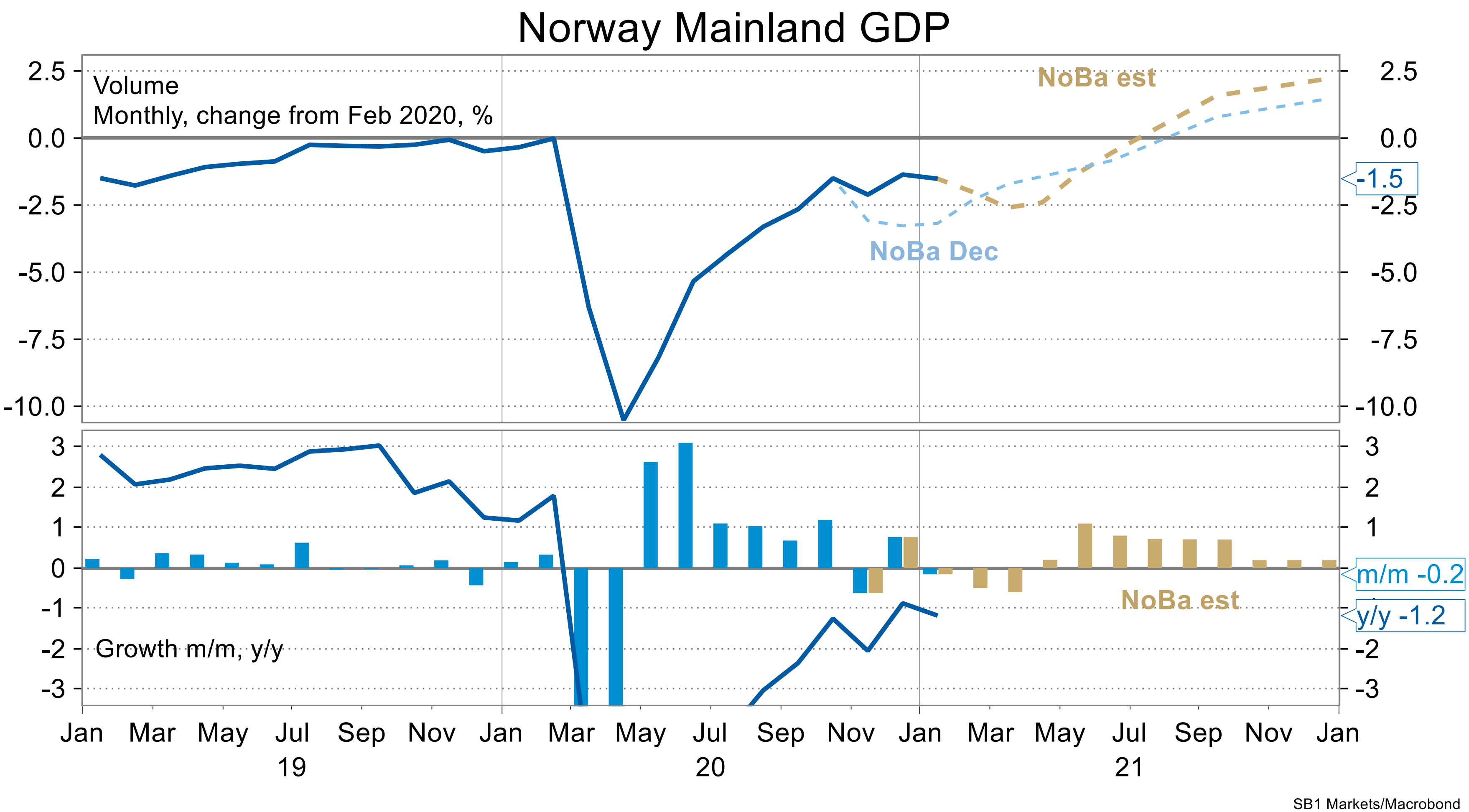




- **Mainland GDP** f'cast revised up 0.1% to 3.8% for 2021; f'cast for +0,3% to 3.4% in '22; and the f'cast for 2023 is revised down to 1.1% from 1.5%
- **Mainland business investments** were revised sharply up, as we expected. **Oil investments** are expected to decline less than indicated in the Dec. report. **Household consumption** is revised down in '21, up in '22
- The **unemployment** rate f'cast for 2022 was revised marginally down. A gradual decline to a normal unempl. level is expected by 2022
- **The output gap** is now expected to be closed by the end of **Q4-21**. In the Dec MPR the gap was forecasted to close in **Q2-2022**
- **Wage inflation** is expected at 2.4% in 2021 and 2.6% in 2022, up 0.3% and 0.4% respectively
- The NOK has appreciated and the forecast is lifted by 4.5%
- **Even if the output gap and wage inflation is revised up, core CPI inflation** is expected to slow faster than expected in the Dec MPR. The Bank argues that lower imported inflation will dampen inflation. <u>We think this f'cast is the most uncertain in the report</u>
- **House price inflation** is expected at 10.1% this year and will then subside to 3% next year, according to the bank, who had to substantially raise house price expectations for the <u>fourth</u> time
- The Bank expects **credit growth** to be somewhat higher than growth in disposable income. **Household savings** are expected down 9 pp the coming years, supporting a strong recovery in private consumption (almost entirely abroad, that is)

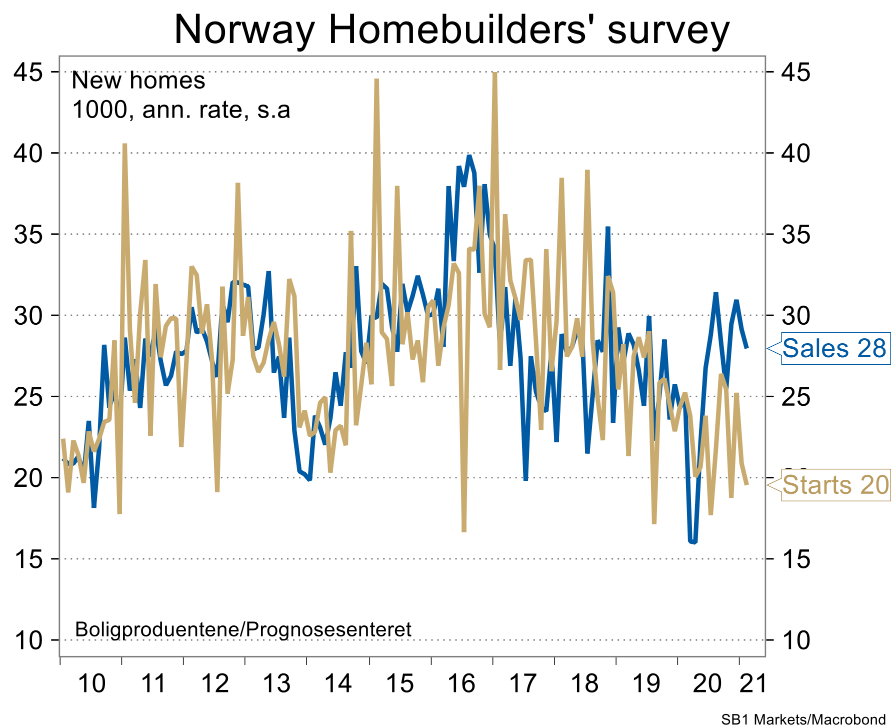
Just a mild downturn in Feb & March, and then...

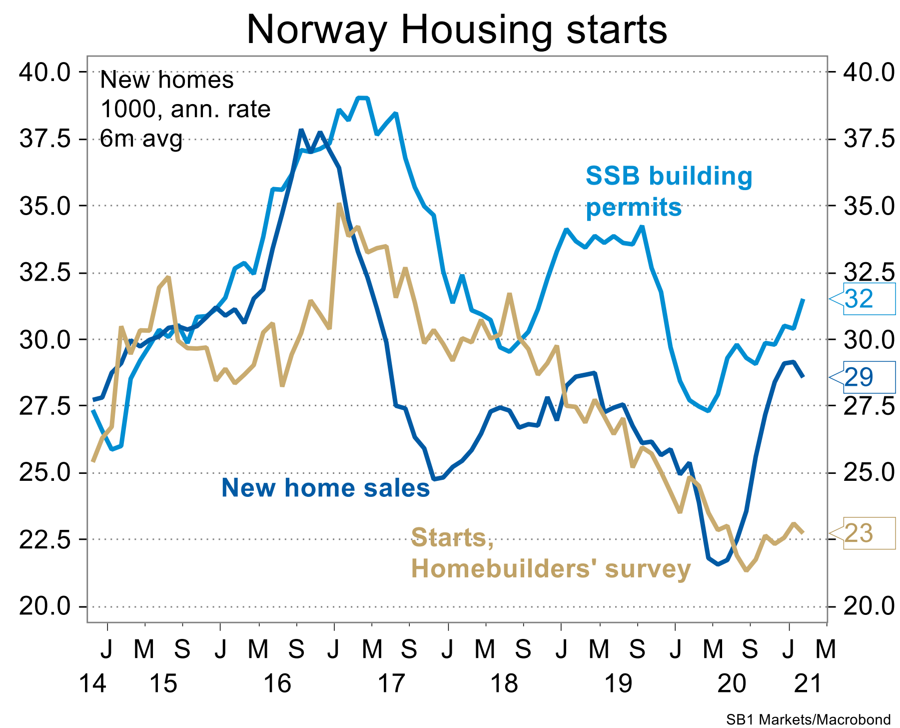
A 3.2% recovery (re-opening party) is expected May – August. *It may be even stronger*



No take-off in new home sales but a decent level. Starts far too low

... at least according to the Home builders. SSB reports far better housing starts data

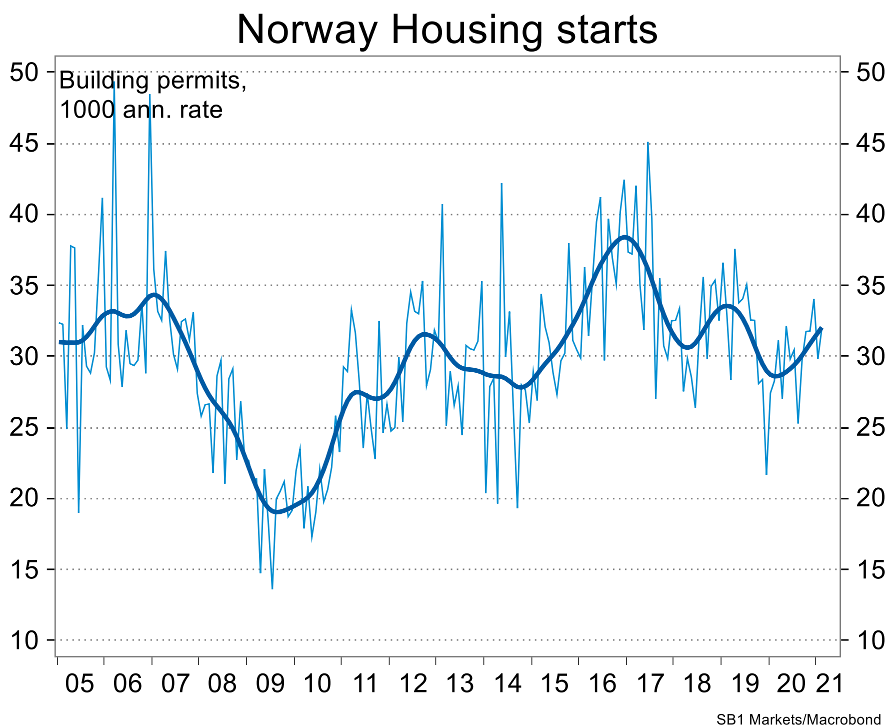


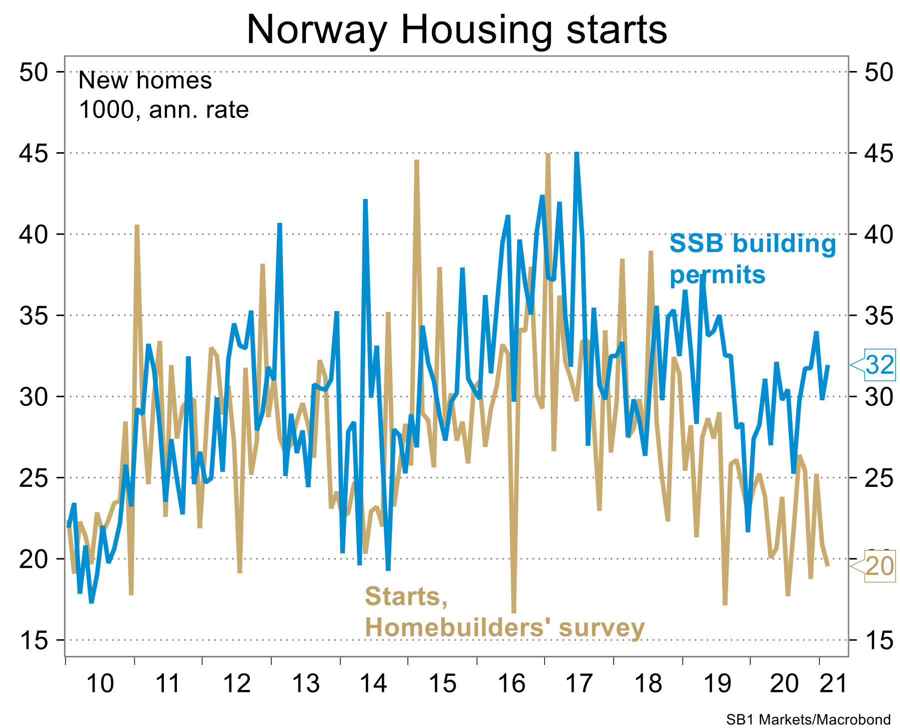


- **Home builders: New home sales** down 1' to 28' in February. Sales have stabilised around 30' recent months (annualised rate)
  - » **Starts** fell 1' to just 20' in Feb. Starts have been running far below since last June, on average by more than 6' per month (annualised), or in sum 5' 'missing' homes. The accumulated gap over these 9 months is unprecedented. Most likely starts will have climb sharply from the present level
- **SSB: Building permits** +2' to 32' in February, far above starts reported by the Home Builders Association
- **We assume** the strong existing home market will support new home sales & starts the coming months
- **Housing investments** (in National accounts) will continue to rise

SSB: Housing starts have already turned up

SSB reports starts (building permits) up 2' to 32' starts in Feb, and the trend is up

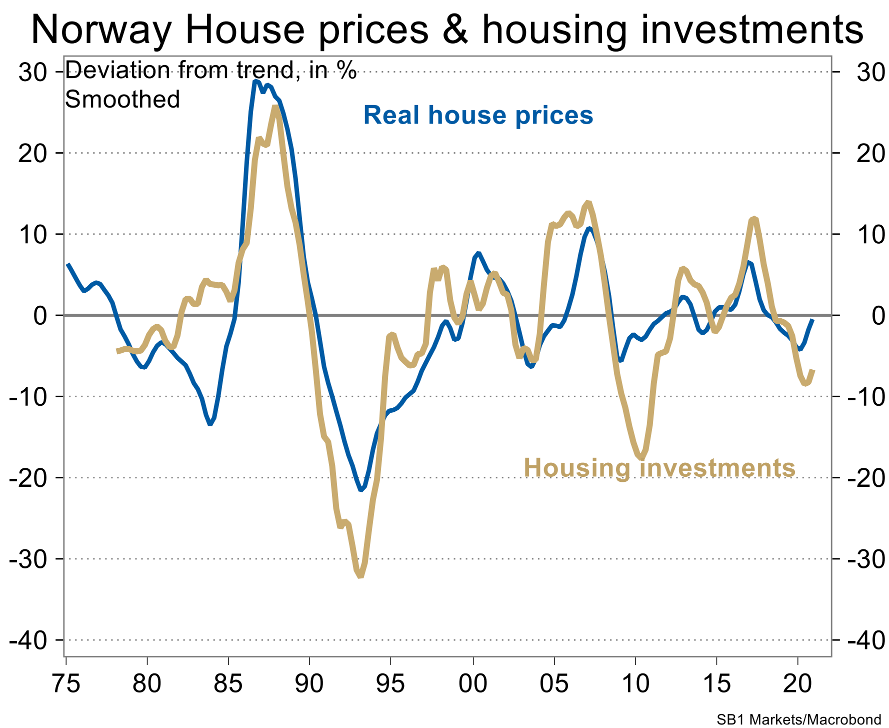


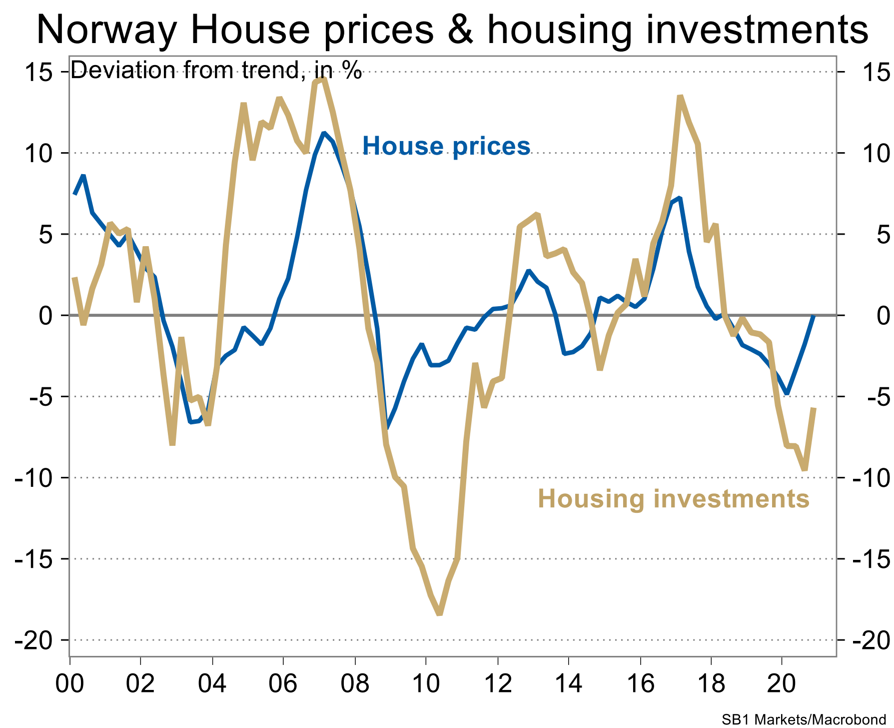


- Since mid 2018, Home Builders have reported far less starts than SSB's building permits. Student and nursing homes have explained some of the gap. We will review these data when detailed Q1 data are available

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

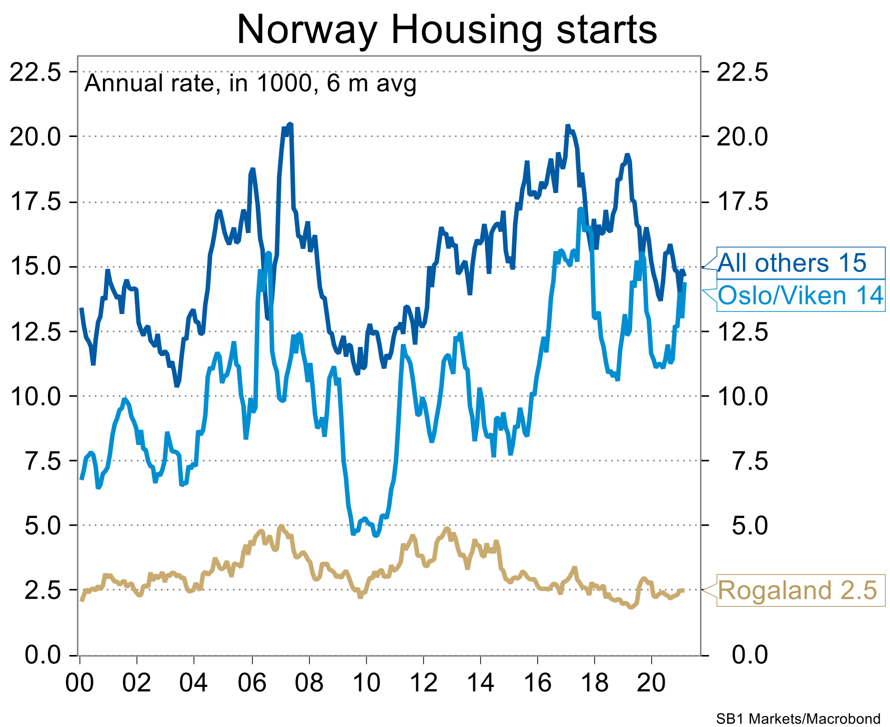
And now prices have turned sharply up; housing starts/housing investment will follow

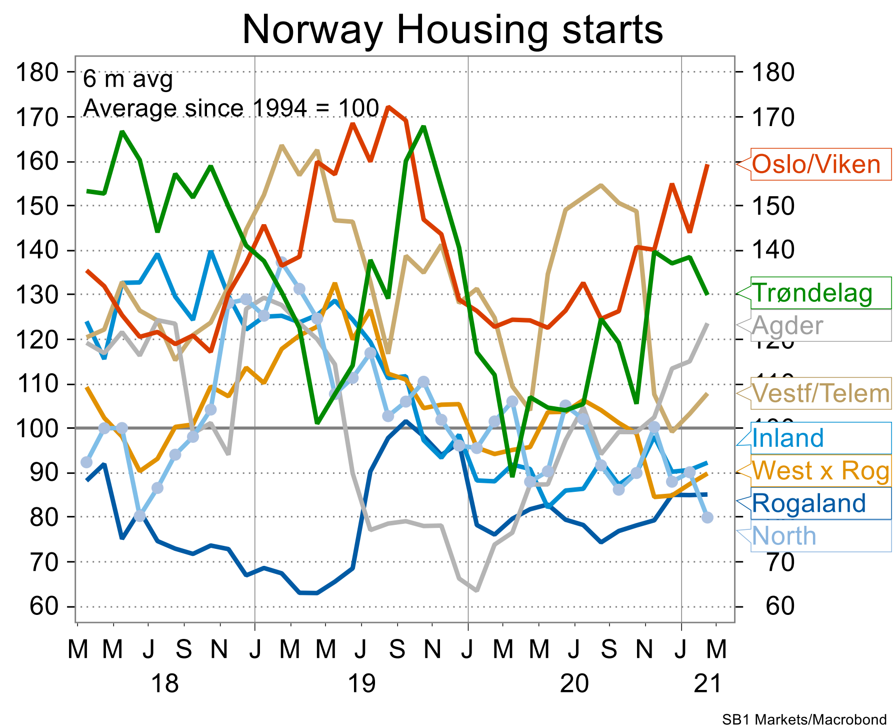




Starts are picking up speed in Oslo/Viken to 60% above the 25 y average

Starts up in Trøndelag too, and in Agder. Starts below par in Rogaland, Vestland, North & Innlandet

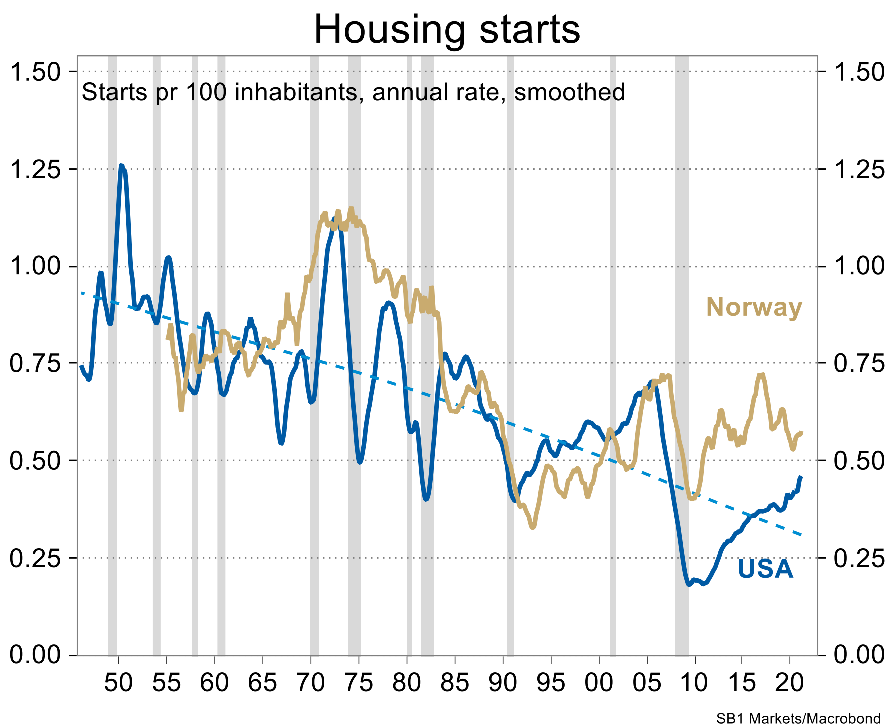


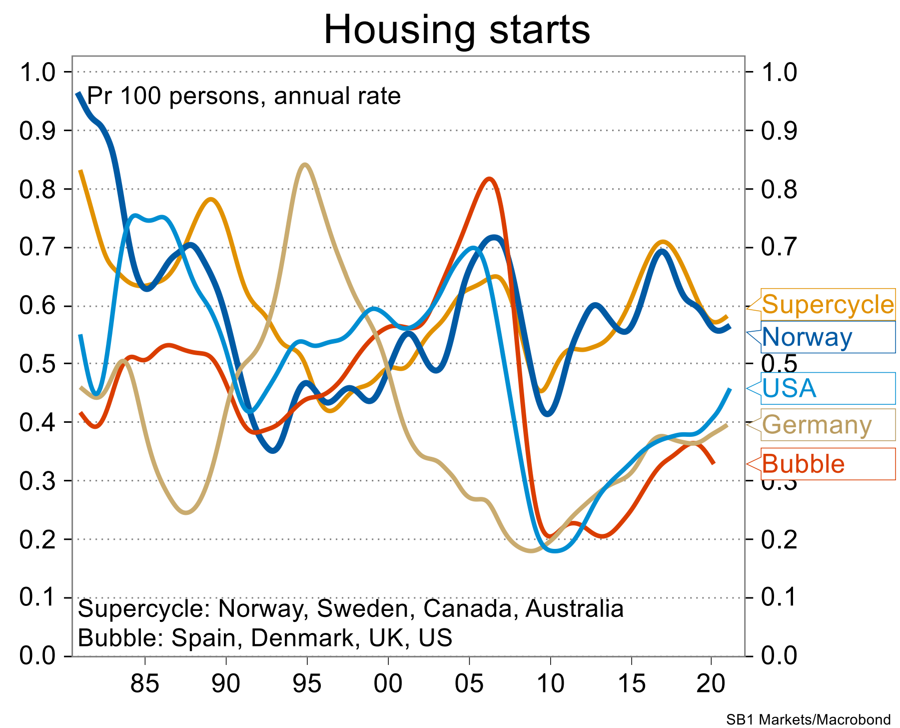


SpareBank 1 MARKETS

Home building in Norway has been high vs. most other countries

However, Norwegian housing starts are in line with other 'super-cycle' countries

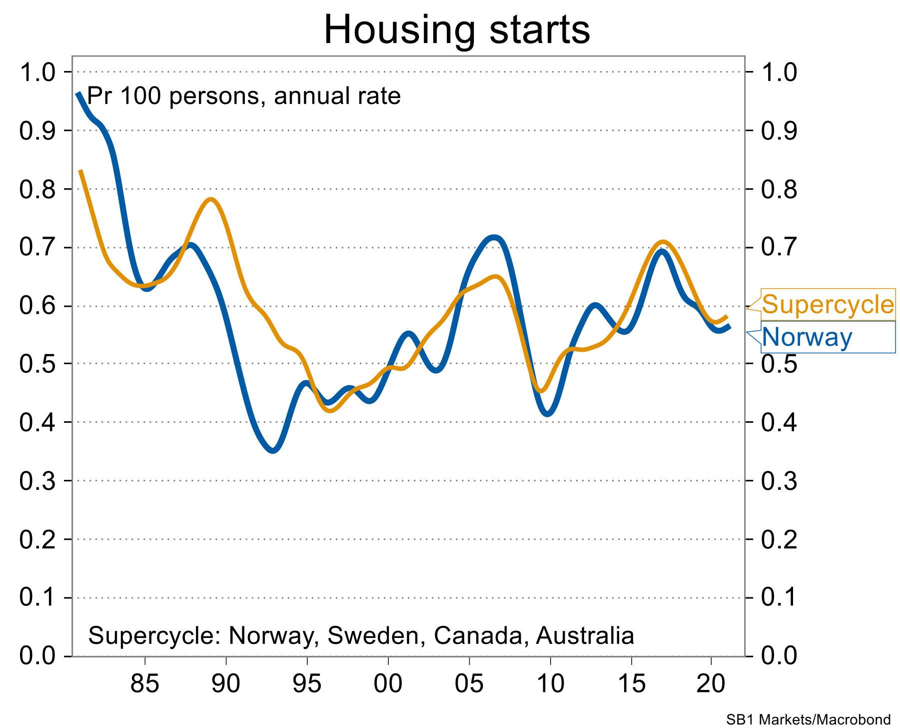




- The housing start cycles among the super-cyclicals (Australia, Canada, Norway, Sweden) have been closely correlated the past decades (for a better picture, flip to the next page). Since 2017, starts fell in both Australia, Sweden and Norway, and more modestly in Canada. We guess the boom in the 2nd hand house markets in these countries will stimulate new starts – which we just now are seeing
- House prices and debt inflation are higher and rental yields are lower in these super-cycle countries than other DMs. We guess it's because interest rates have been too low for too long, as rates fell more or less to the same level as in countries that actually needed a strong monetary stimulus after 2008 housing market/financial/real economy crisis

Check the brothers in arms!

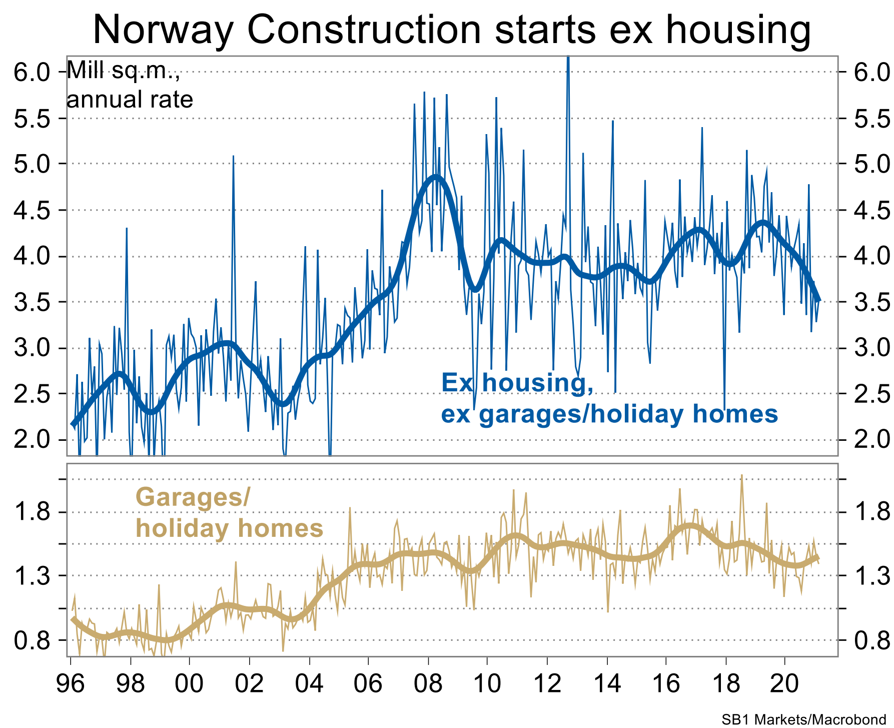
Seems improbable, doesn't it?

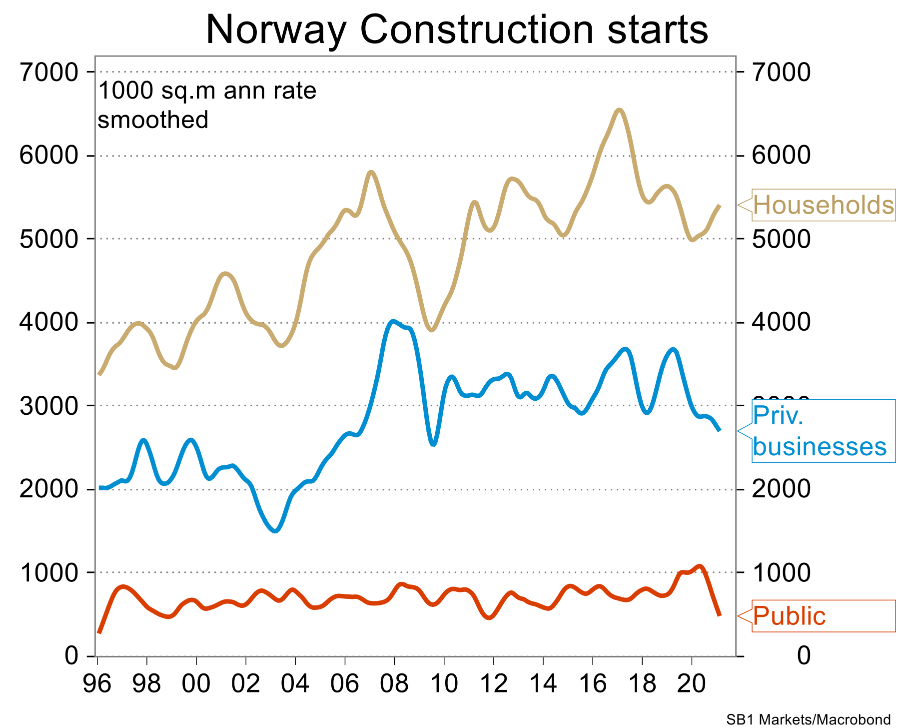


SpareBank 1 MARKETS

Construction ex. housing peaked in H1 2019, now down 20% (x garage/2.homes)

Both private businesses and public sector (incl. health/education) are headed down

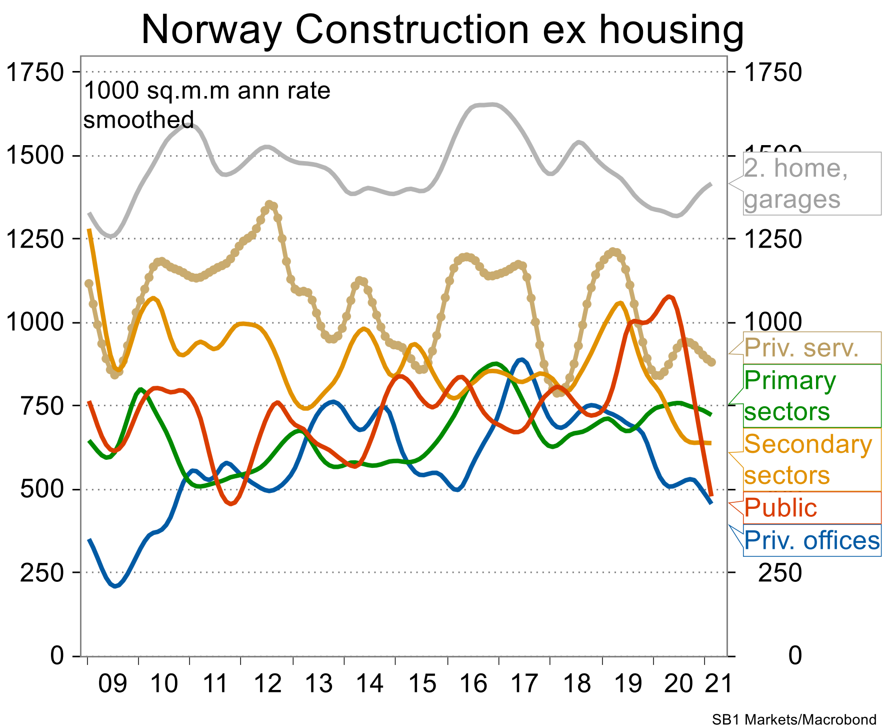


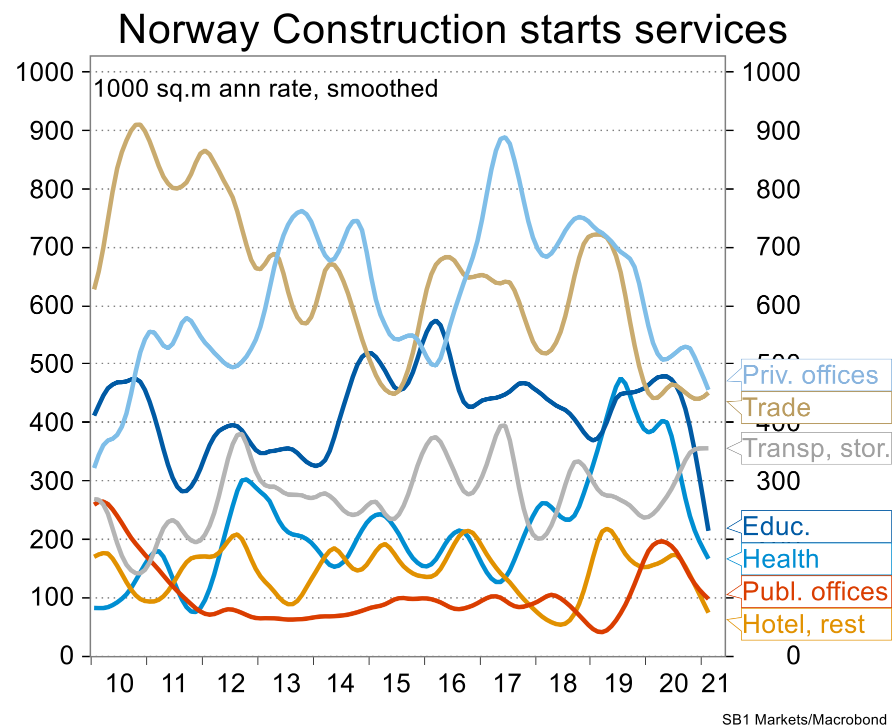


- **Construction starts ex housing & garages/cabins** peaked in early 2019, and is still sliding downwards
- **Private non-residential starts** are at the lowest level since 2009. The downturn started well before the corona crisis
- **Public sector construction starts** are heading down (from a peak, supported by a new hospital in Stavanger, and hospital & university buildings in Viken)
- **Construction starts of cabins/garages** is heading up, following a decline from the peak in 2016. Given the surge in demand for second homes, that's not surprising. The level is still below the past 10 y average

Volatile details: Most services have turned down, and offices since 2017

Public sector (health & education) construction sharply down, as are private sector offices and hotels





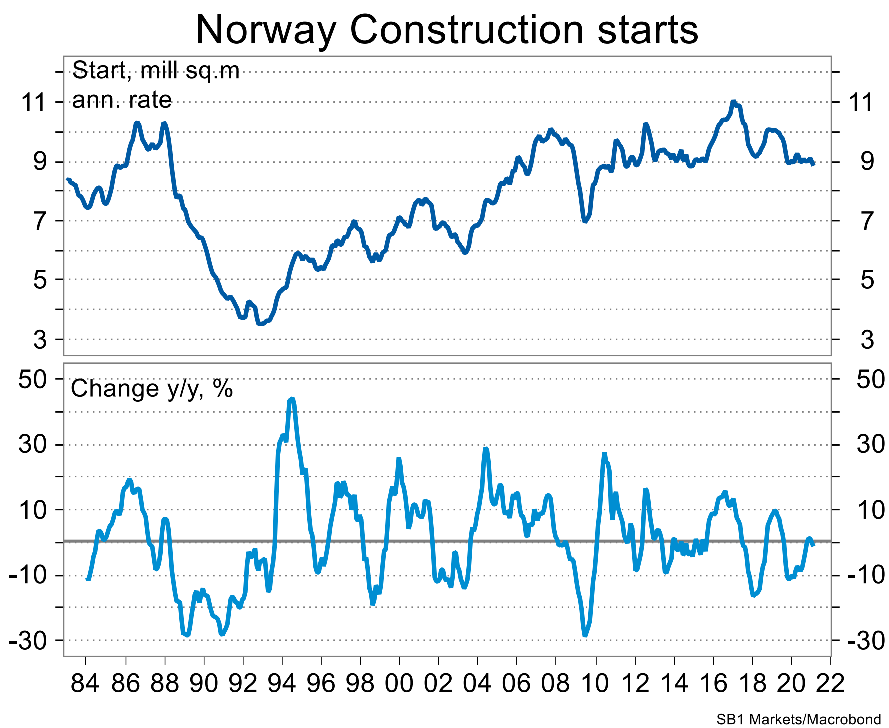
- Transport (incl storage) is on the way up. Manufacturing may be flattening

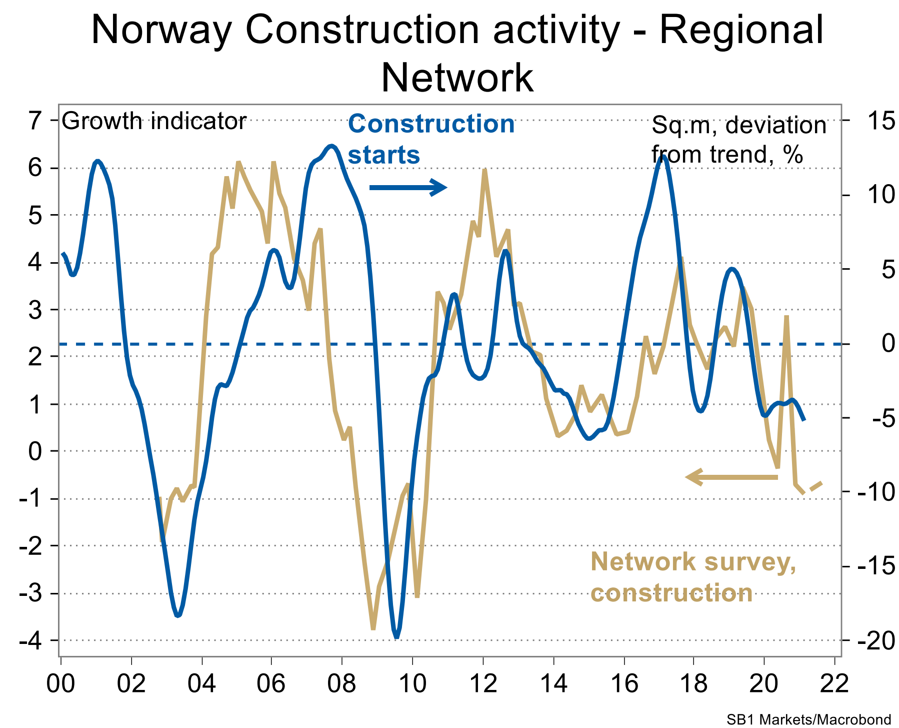
Public on the chart to the left, and at the previous page: Construction starts in public administration, education and health

SpareBank 1 MARKETS

The Q1 NoBa Regional Network signals weak construction activity

Network report/expect activity below par





- Actual starts are flat y/y, residential up, non-residential down. The level is below average over the past 15 years, and below our mechanical trend

Highlights

The world around us

The Norwegian economy

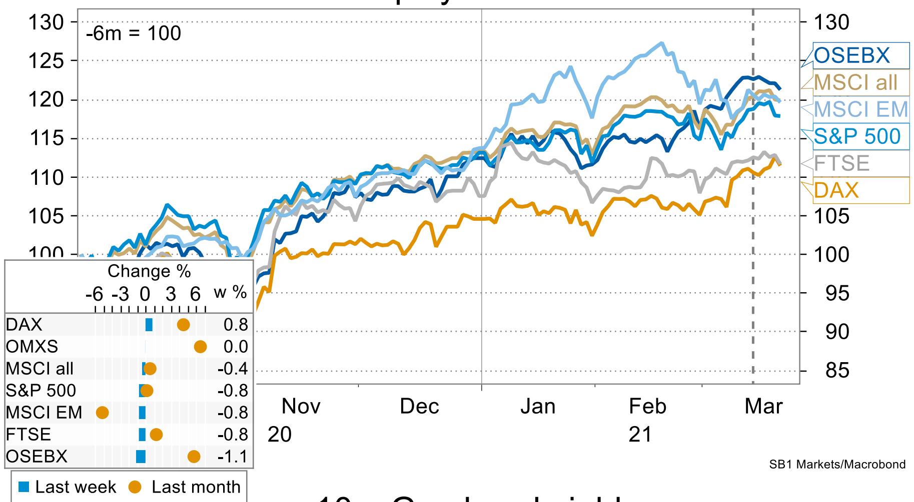
Market charts & comments

SpareBank 1 MARKETS

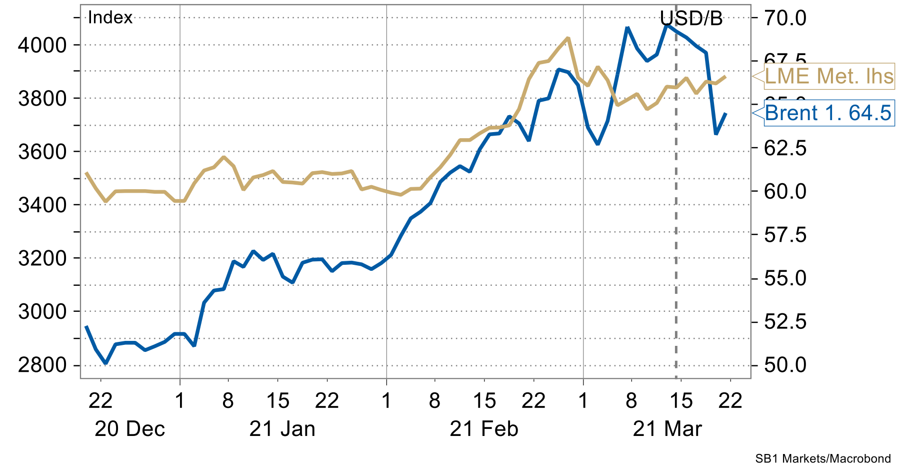
10 y US gov yield up to 1.74%, and stock soured, in the end

Bond yields up most places. The oil price down, and NOK fell too – but metals kept up

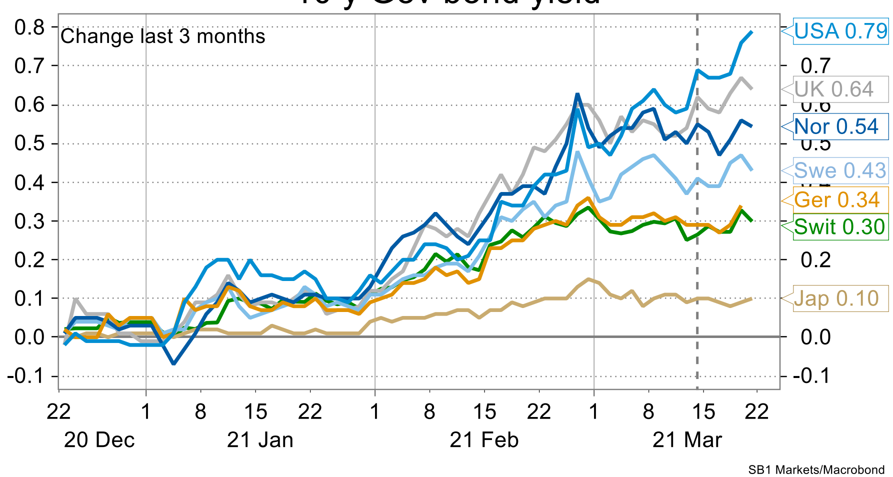
Equity Indices



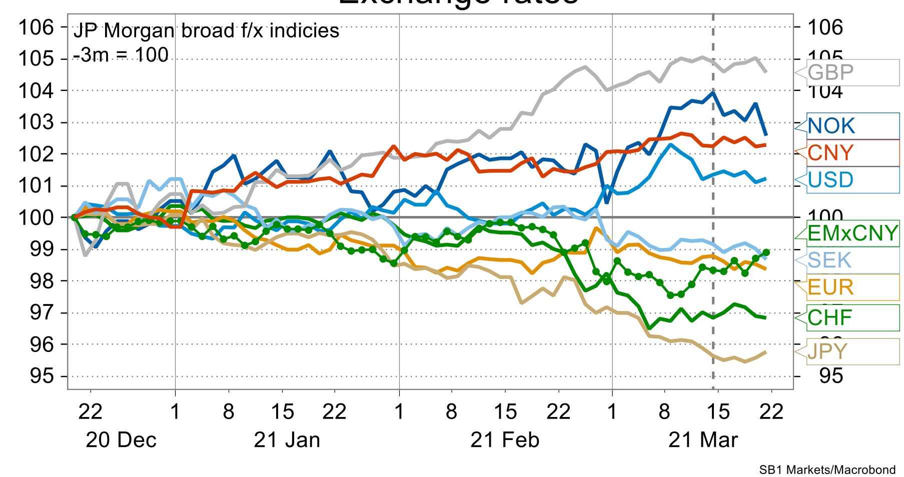
Oil vs. metals



10 y Gov bond yield

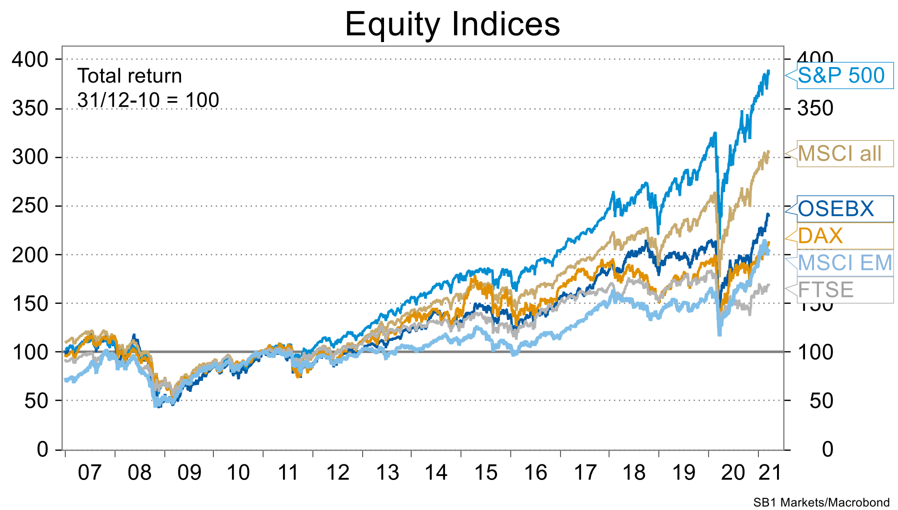


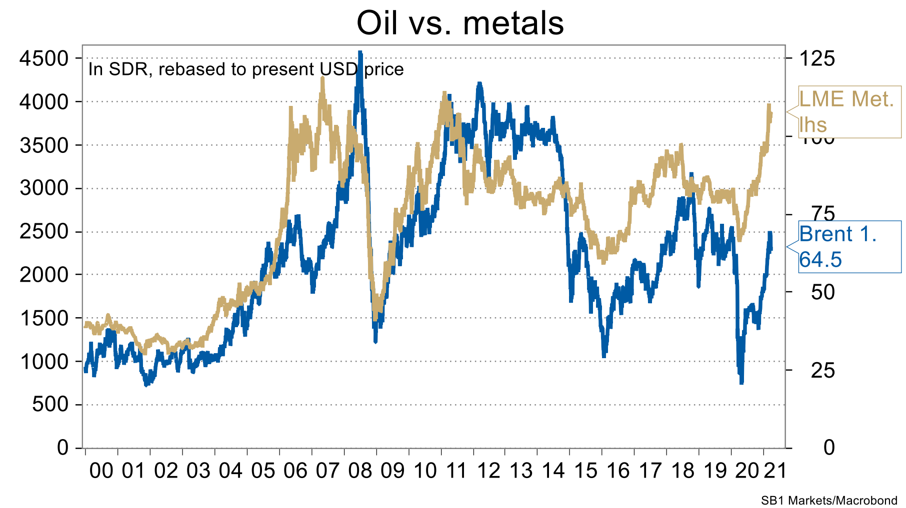
Exchange rates

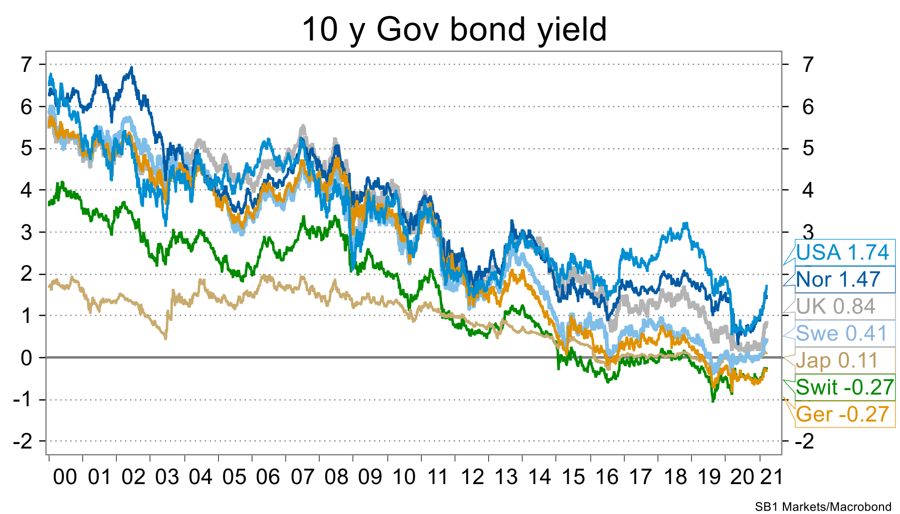


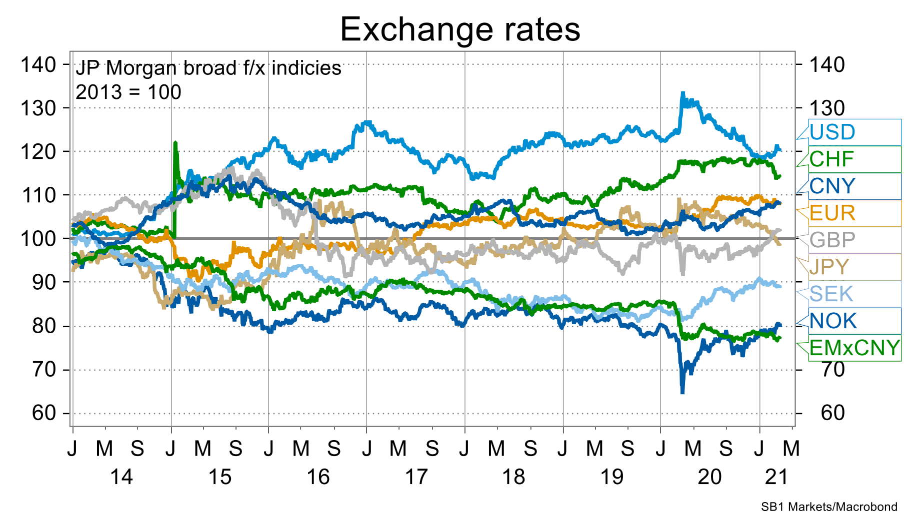
SpareBank 1 MARKETS

Positive growth expectations: the trend for longer yields and commodities is up





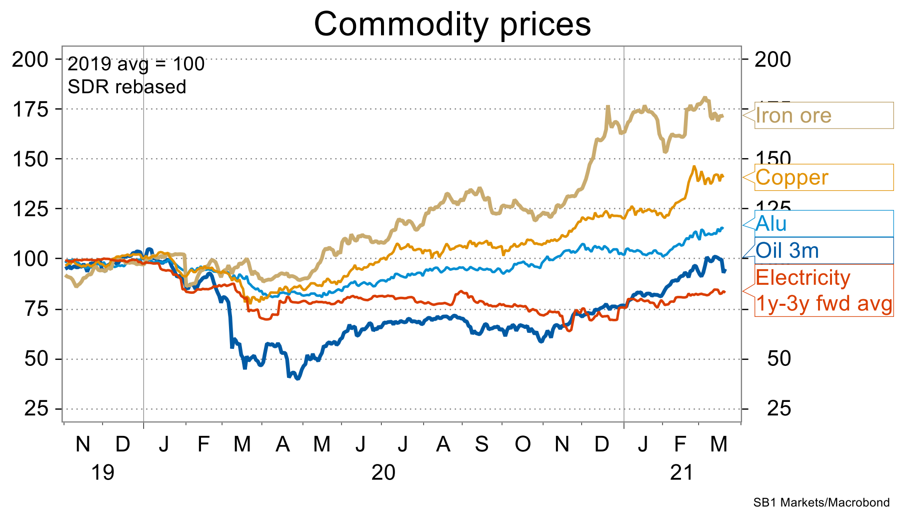


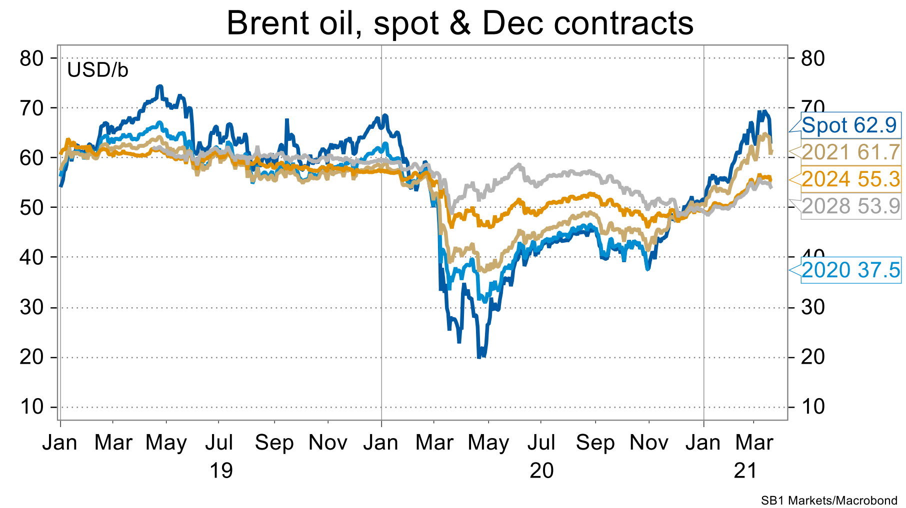


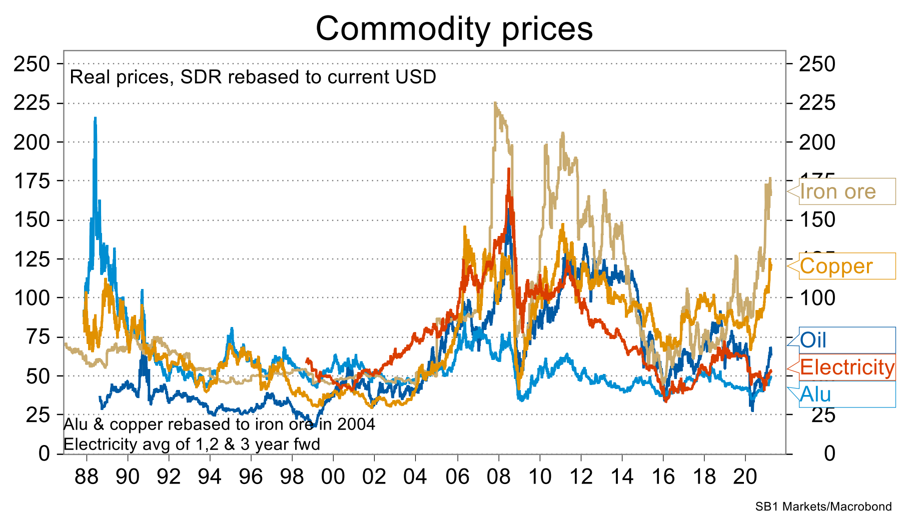
SpareBank 1 MARKETS

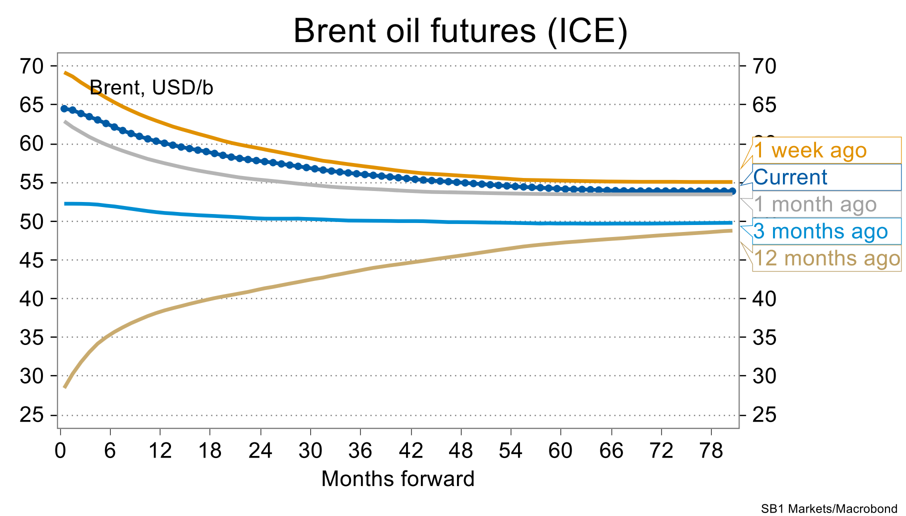
Commodities have flattened – and the oil price fell last week

Oil down to $64/b from $70/b the week before



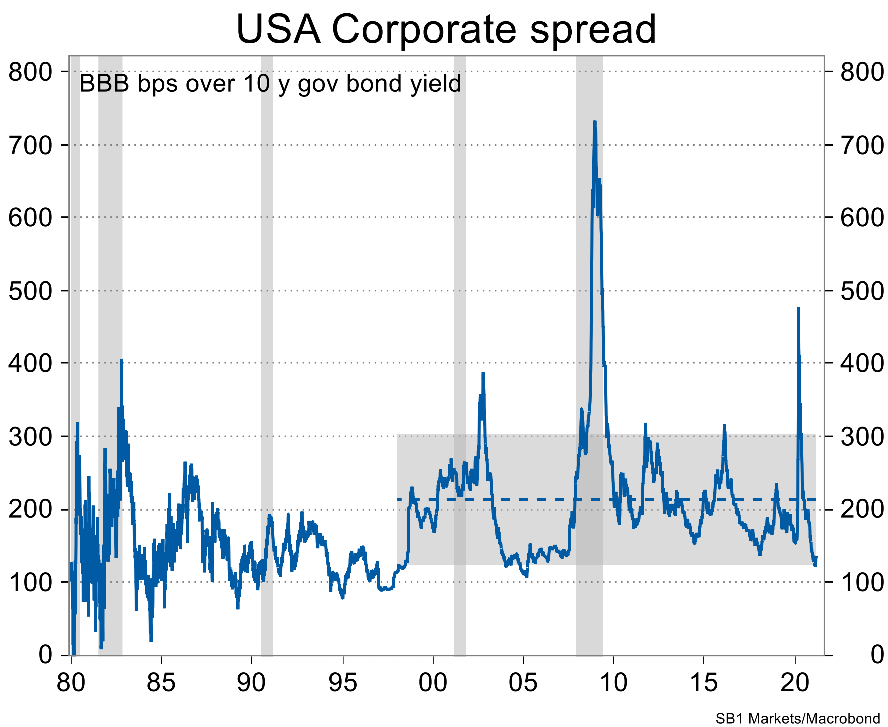


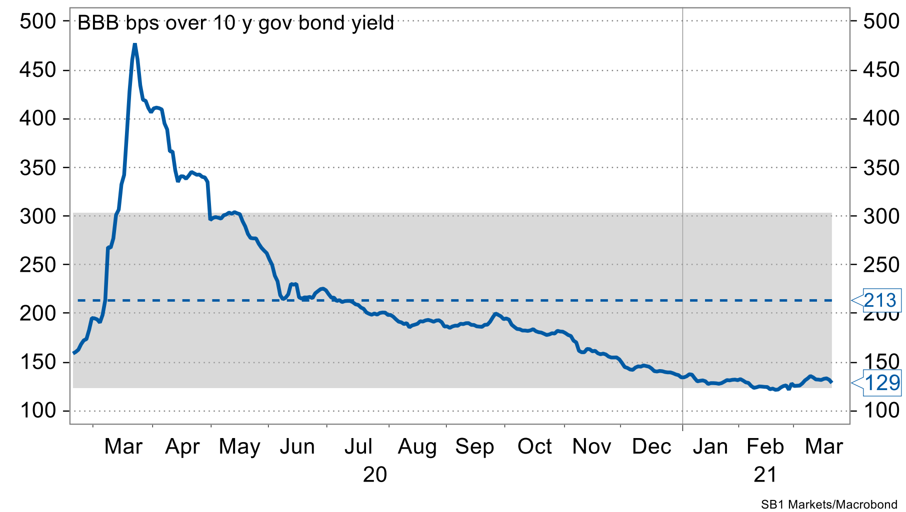


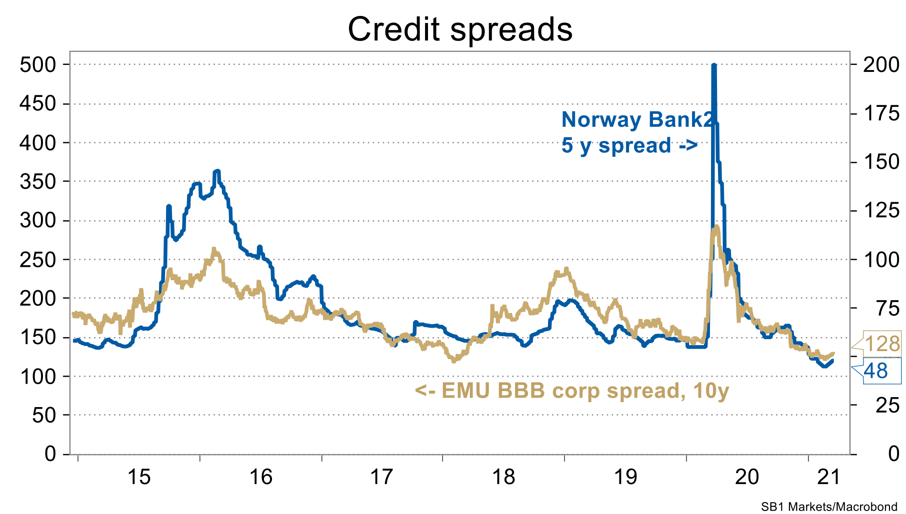


SpareBank 1 MARKETS

U.S. credit spreads (BBB) slightly down, European's slightly up



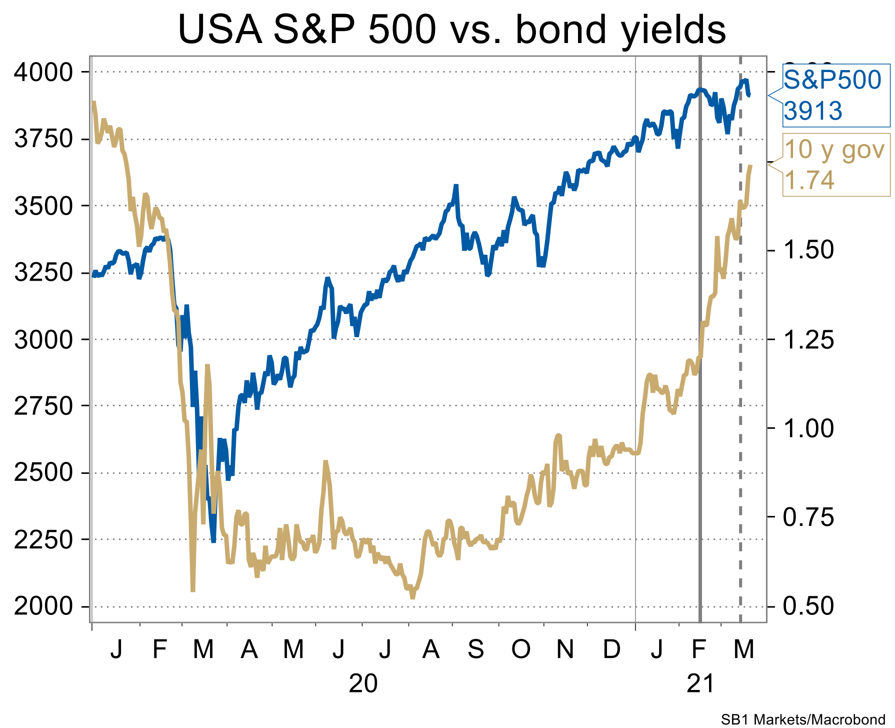


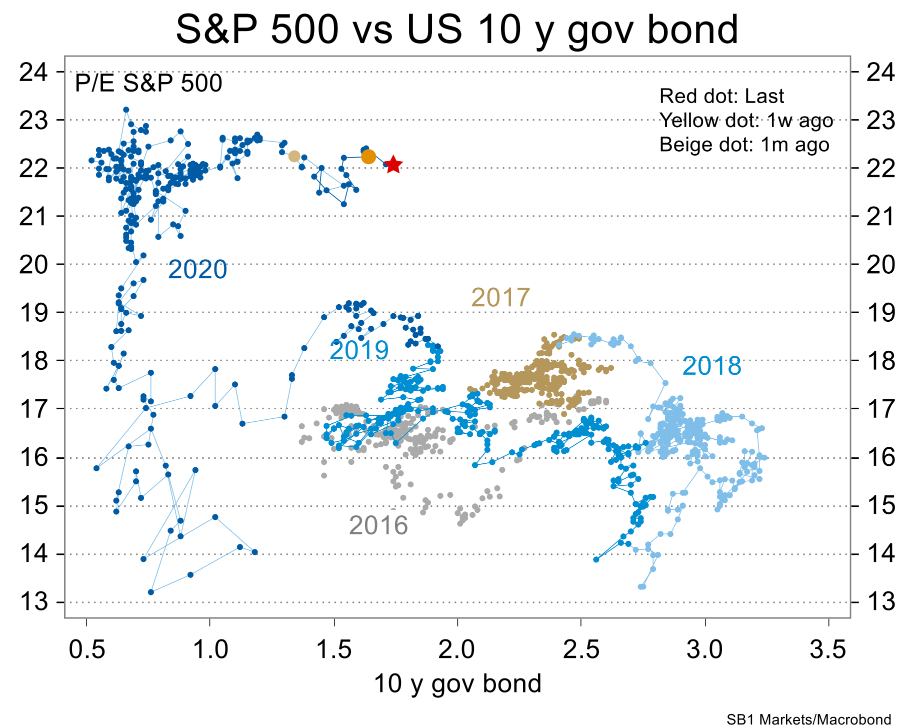


SpareBank 1 MARKETS

Again, yields are surging, the 10 y up 10 bps to 1.74%, S&P down 0.8%

An ultra-dovish Powell was welcomed by the stock market. But not at the bond market. And then…

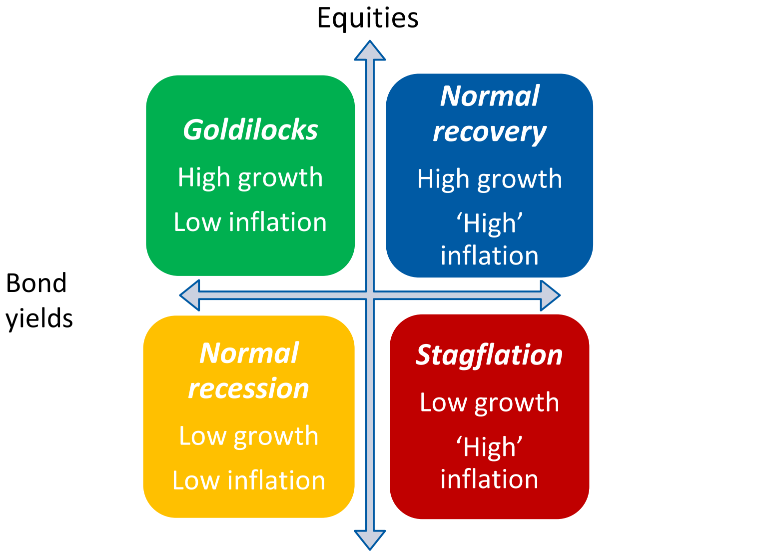


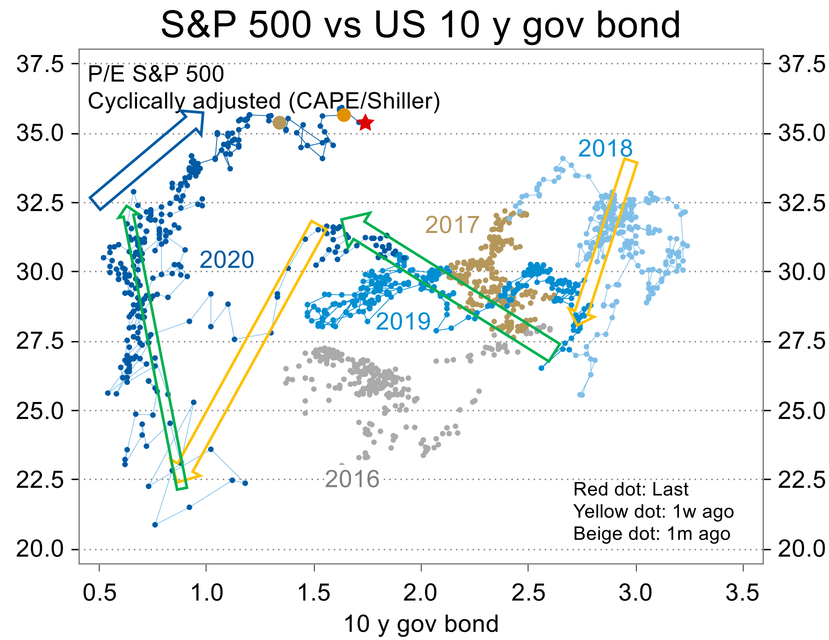


- Since the **through in yields** in early August, 125 bps ago (10 y gov), the stock market has climbed 18%. Higher bond yields are normally not a disaster for stocks. In fact, over the past 20+ year the correlation between bond and equity return have been quite consistent, the stock market has gained when yields rose and vice versa, because changes in growth expectations were dominant for both markets, not fears of too high inflation
- Why could this time be different? Perhaps because the starting point is so special, equities were strong even if yields were low because central banks were so eager to support growth an to get inflation back on track. **The main risk now: inflation turns upwards. *More on the next page***

A long term view: From the ‘Goldilocks corner’, where to go?

The stock market is still tolerating a steady increase in bond yields





SB1 Markets/Macrobond

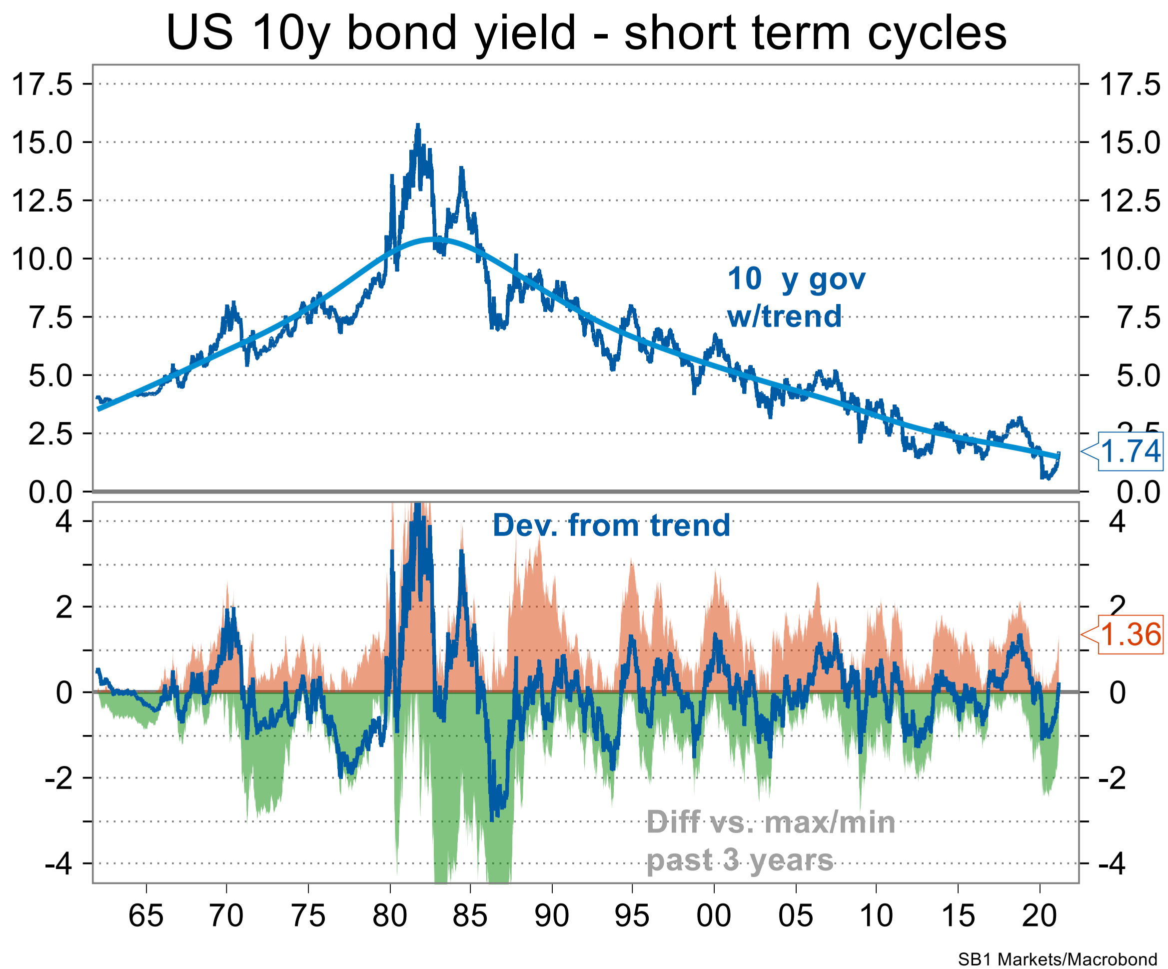
- Usually, we have associated drifts towards the ‘green corner’ - low inflation and solid growth at the same time - as a <u>temporary</u> sweet spot for markets

- **The FOMC/Powell** reiterated that the bank will not hike its signal rate before the economy has recovered, unemployment brought down, and inflation has increased to above 2% and was expected to remain above 2% for a while – and that the bank plans to keep the Fed funds rate at zero at least until 2024. A modest increase in bond yields in a such positive growth environment without the Fed hiking could be associated with a move towards the recovery corner, which is positive for stock markets too. If the starting point was in the normal recession (yellow) corned, low yields & cheap equities
- However, since H2 2018 bond yields have fallen, and the equity market has gained – and markets moved well into the ‘green corner’, as growth expectation have not fallen together with lower yields, as have been the norm, at least since 1998 (in the US), at least partly due to aggressive central bank actions
- Now, vaccines are underway, and fiscal policy is ‘running crazy’ (4+9% of GDP in budget stimulus). The Fed had to revise its growth forecast sharply. The equity market has for a long time discounted a rapid recovery – without having to take into account the normalisation of bond yields<u>, which is now taking place</u>
- Suddenly, there are alternatives (sorry, Tina) for investors, even if yields still are way below reasonable growth expectations. <u>Probably the best to hope for</u>, is unchanged equity market pricing (P/E-wise), but growing earnings will yield moderate returns even as yields increase. <u>The 2nd best alternative is ‘normal multiples’ and ‘normal’ rates.</u> Which is not a 22x 12m fwd P/E, or a 35x Shiller P/E – and not a 10 y bond rate at 1.74% - or even less a -0.55% 10 real TIPS bond yield
- <u>The 3rd alternative, which is not good at all: The stagflation scenario, the red corner.</u> At least, the probability has increased recent months. And the Fed did not calm these fears last week, by giving some nods to the market. Thus, markets may start to fear central banks are running crazy too. It has happened before

SpareBank 1 MARKETS

Some 'smaller' bond yield cycles: -200 bps/+200 bps vs recent peaks/troughs

We may be more than half-way through a 'normal' correction. And could something more happen?

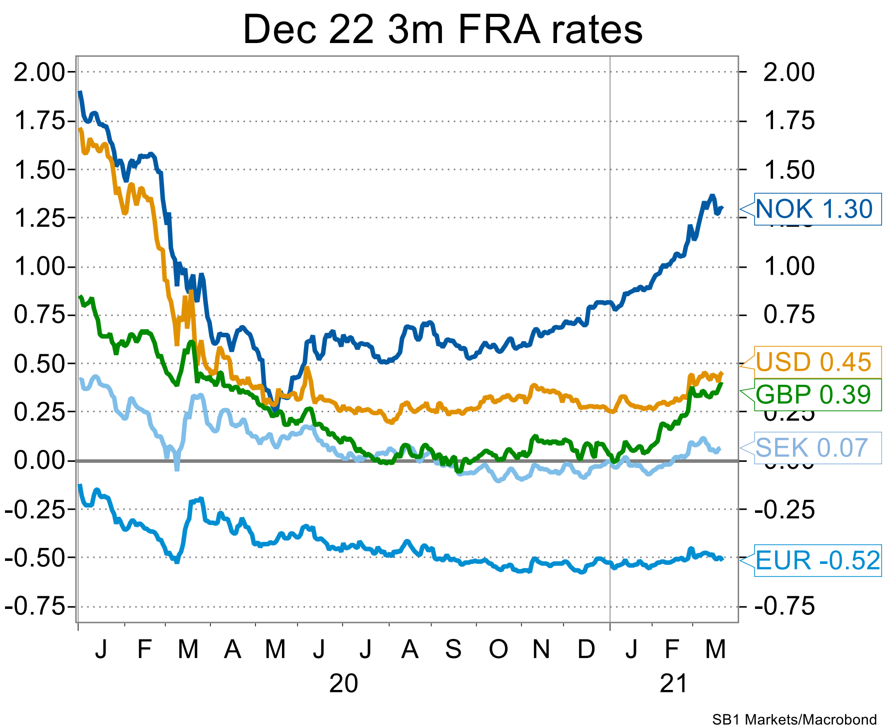


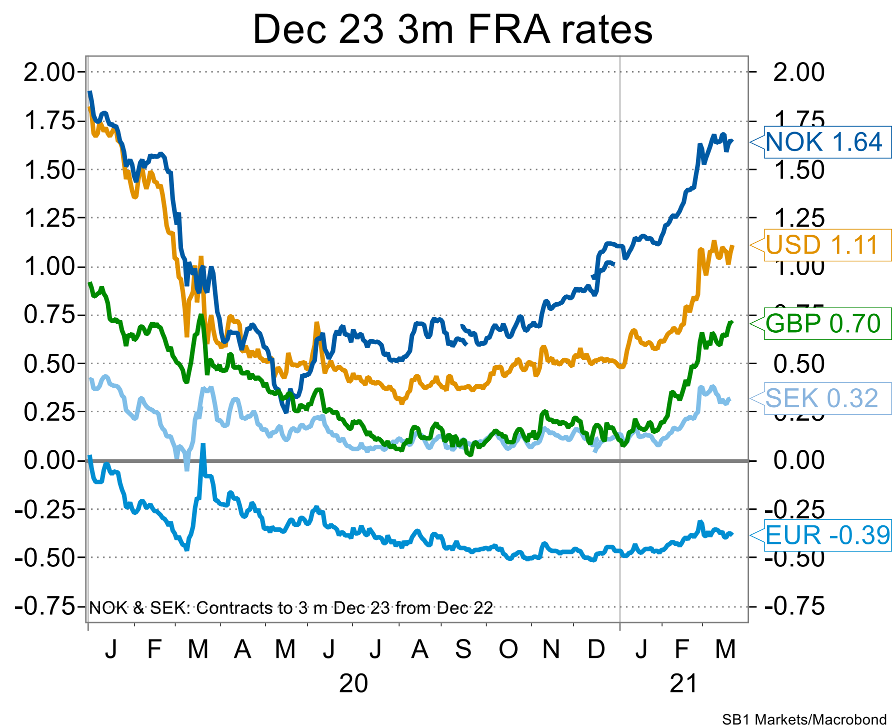
- … even within the current record low interest rate regime
- **The tail risk now:** Higher inflation following unprecedented fiscal stimulus in the US – and some elsewhere, and a very expansionary monetary policy everywhere
- … and confirmed last week. Federal Reserve has not revised its interest rate path (the Fed funds at 0.0 until 2024) from last June through the March meeting, while lifting the growth path by 5%, closing the gap to the Dec 19 growth path in Q4-21, vs. the June estimated 4.4% negative gap in Q4-23
  - » Normally, a 5% positive shift in the output gap would have resulted in a 2.5 pp lift in the interest rate path (in a standard Taylor rule framework)

SpareBank 1 MARKETS

Interest rate expectations: Norway in the lead – but others are following suit

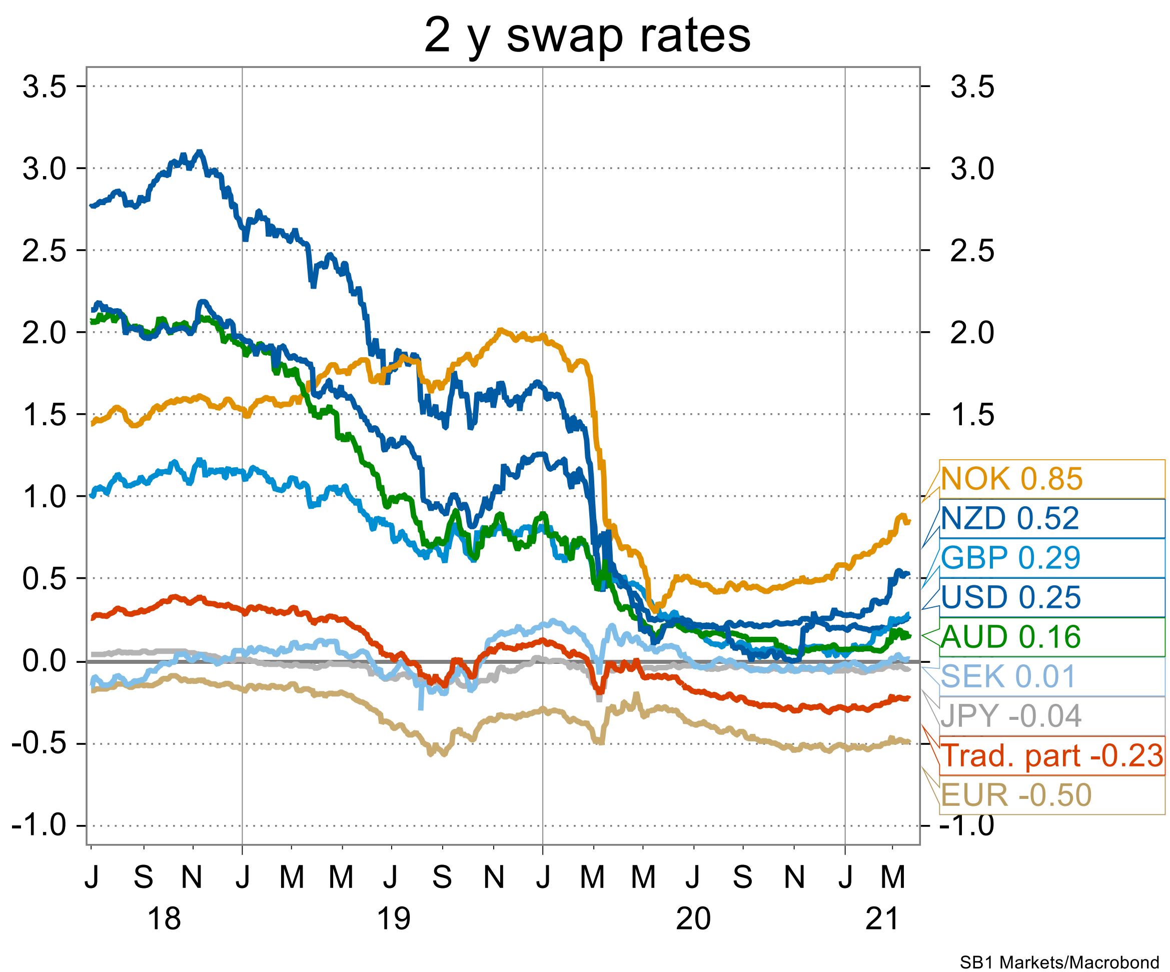
All ex. EUR

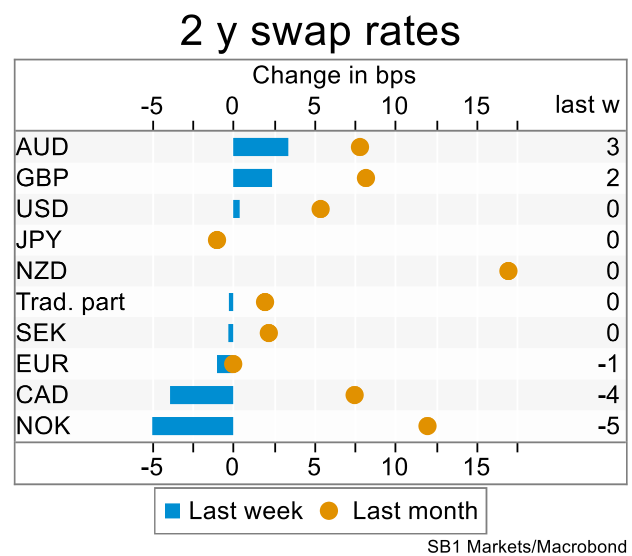




NOK rates down last week but still in the lead

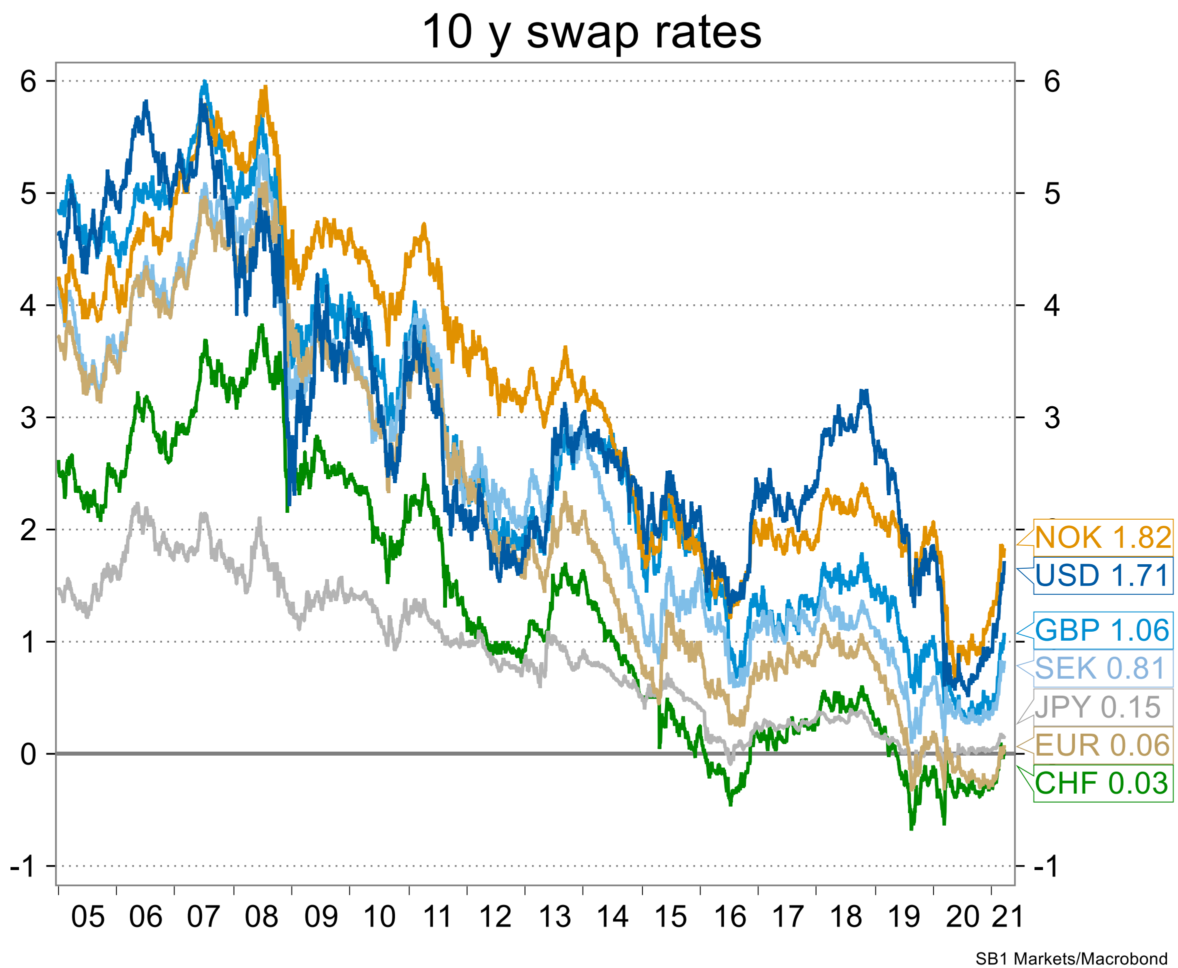
The trend is upwards everywhere, x EUR & JPY

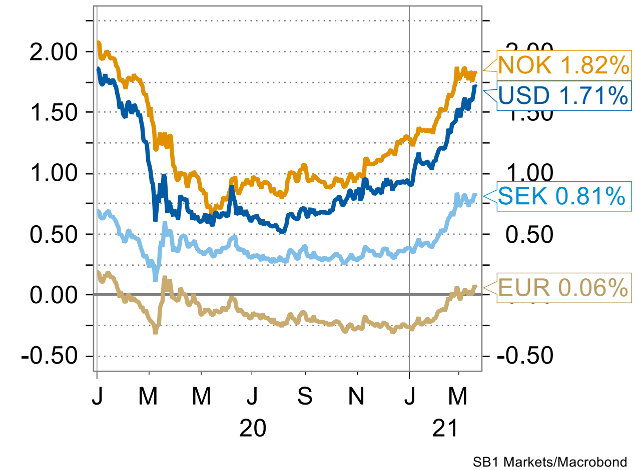


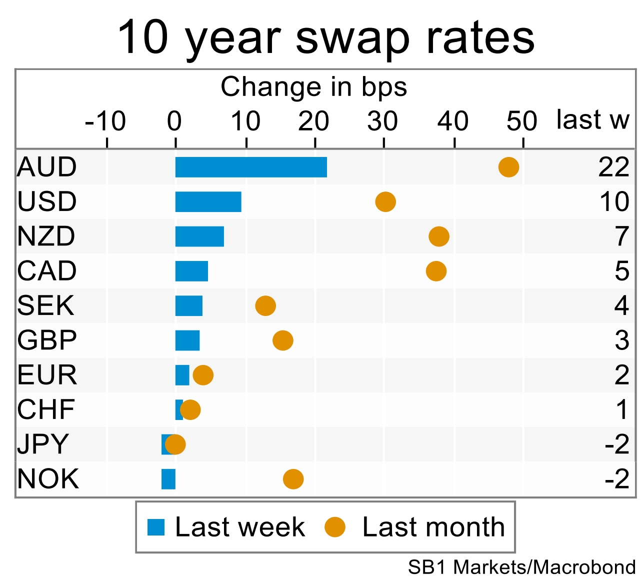


The NOK - USD 10 y swap spread is narrowing. Most 10 yr up last week, x NOK

The EUR rate has established itself at above zero the past two weeks

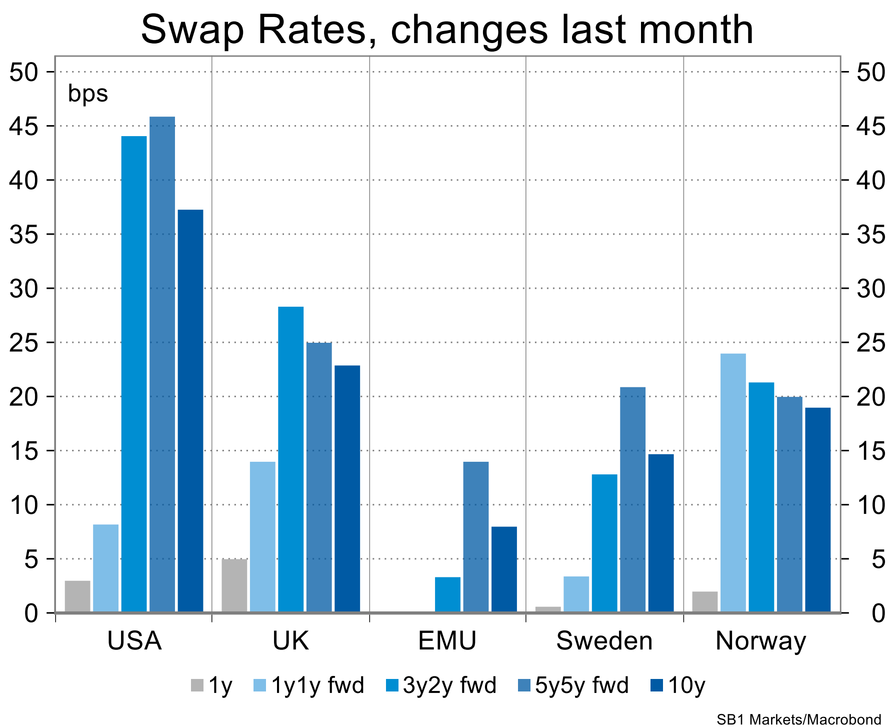


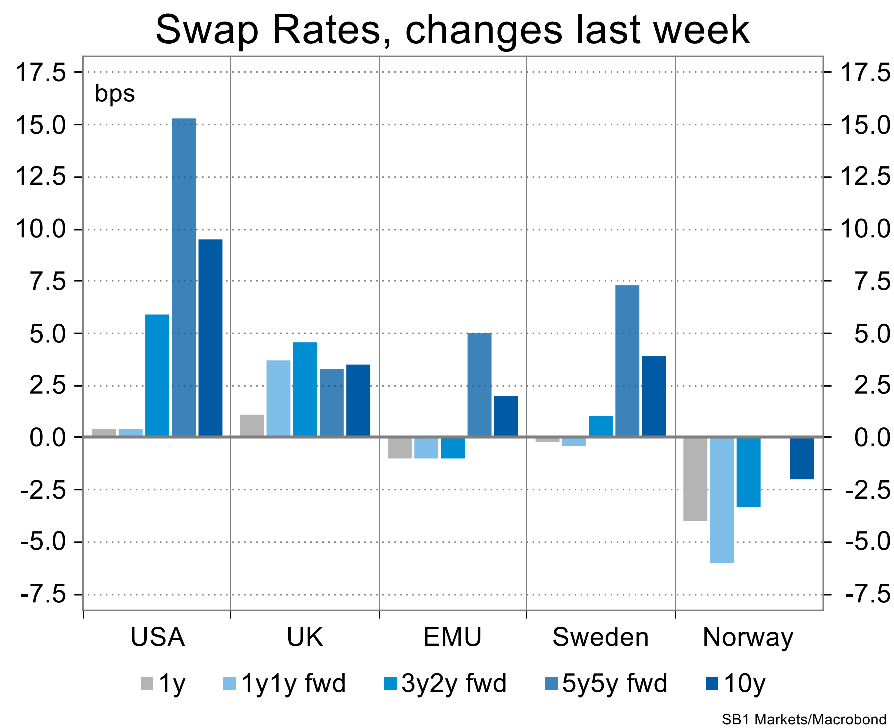




IRS: US in the lead last month & last week

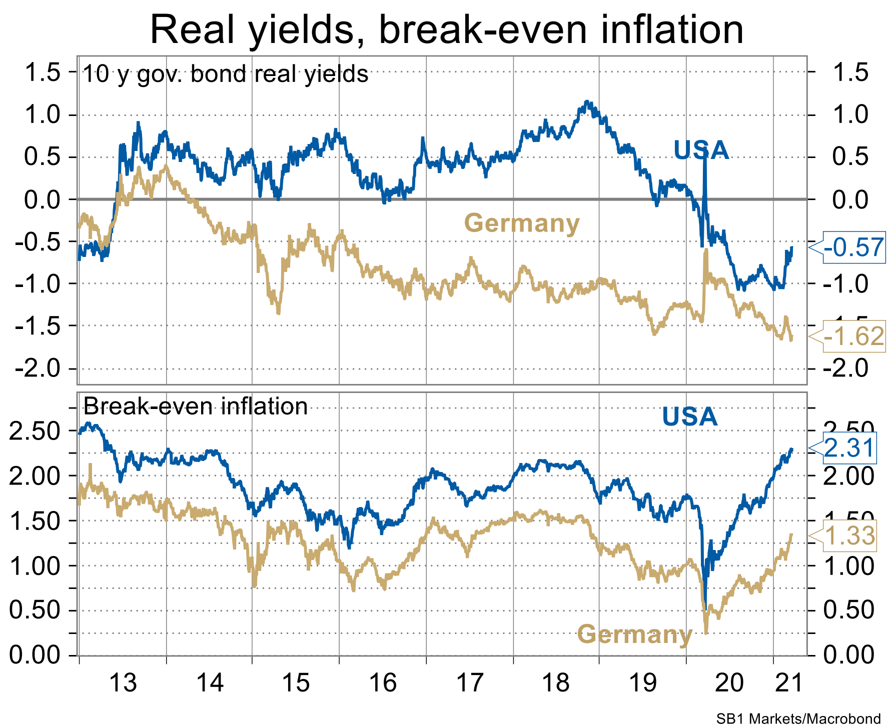
NOK rates fell last week, still sharply up last month

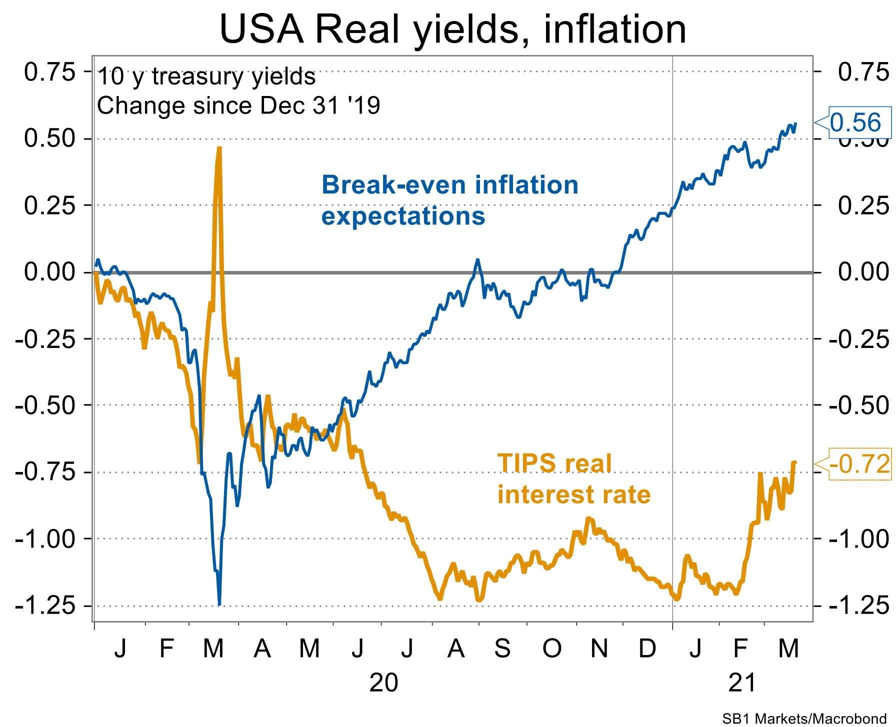




Yields continue upwards, most rapidly in the US

In the US, both inflation expectations & real rates rose – the former to the highest since 2013

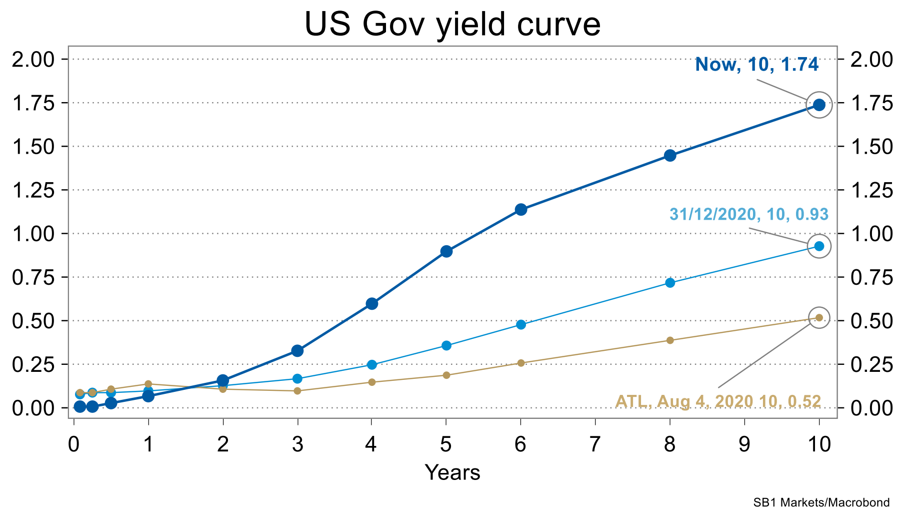


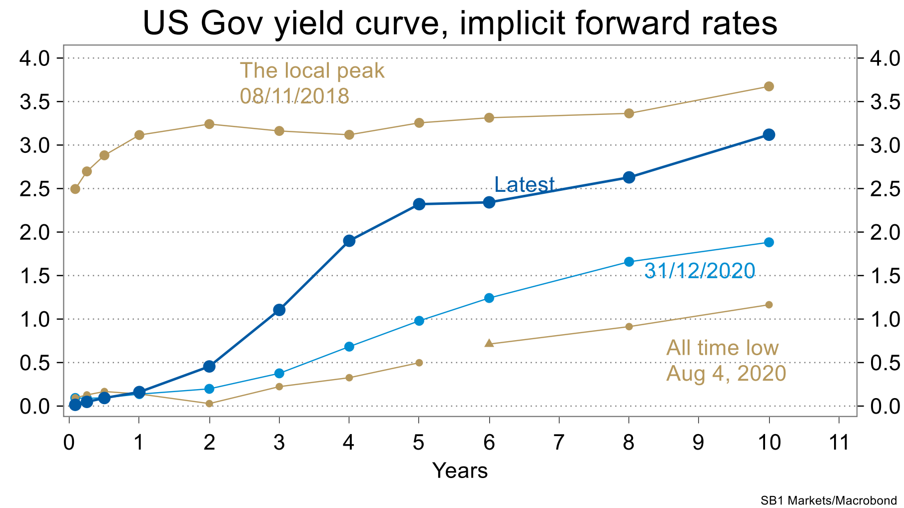


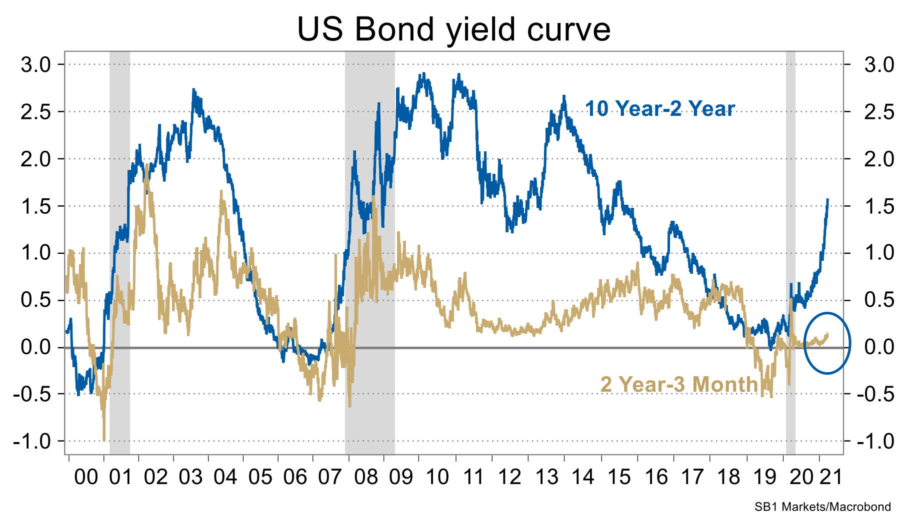
- **US 10 y <u>+10 bps to 1.74%</u>**
  - Inflation expectations +5 bp to 2.31%, **new high since 2013**
  - The TIPS real rate + 5 bps to -0.57 – **<u>and up by 50 bps since mid Feb</u>**
- **Germany <u>10y + 3 bps 0.30%</u>**
  - Inflation expectations +6 bps to 1.33%, highest since 2018
  - Real rate -3 bps -1.62%, at ATL

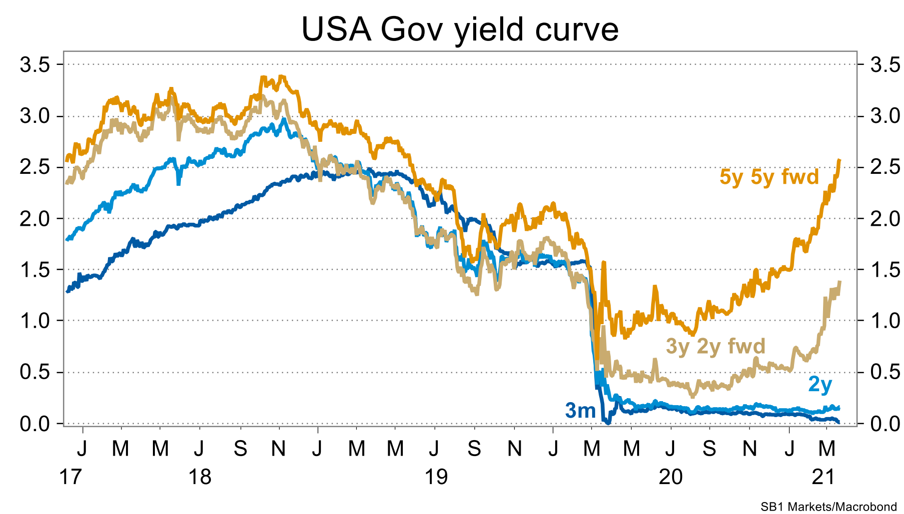
Powell still 'controls' the curve in the short end. But then…

From 2 years onward, the curve is steepening rapidly. The 5y 5y fwd at 2.54% highest since May-19



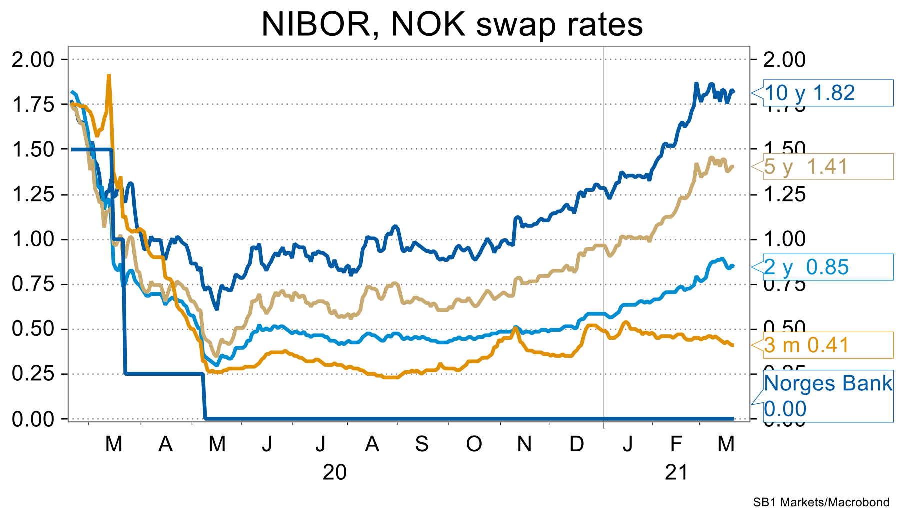




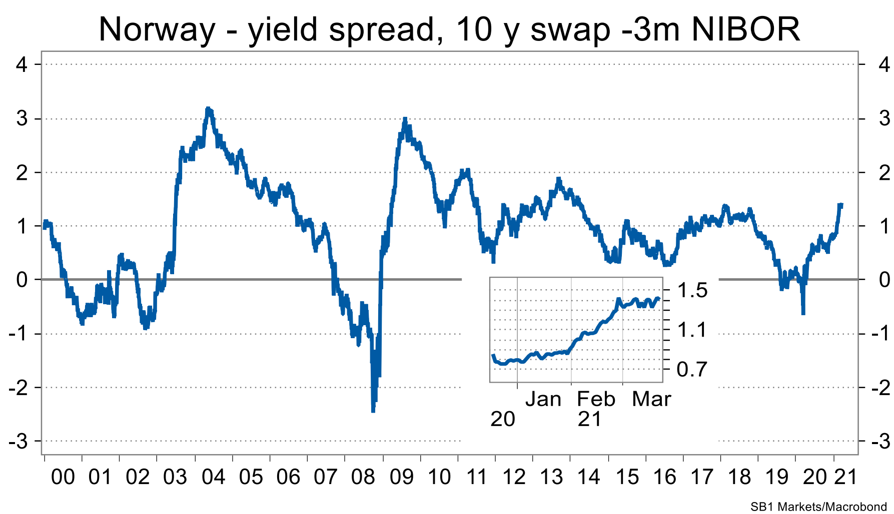


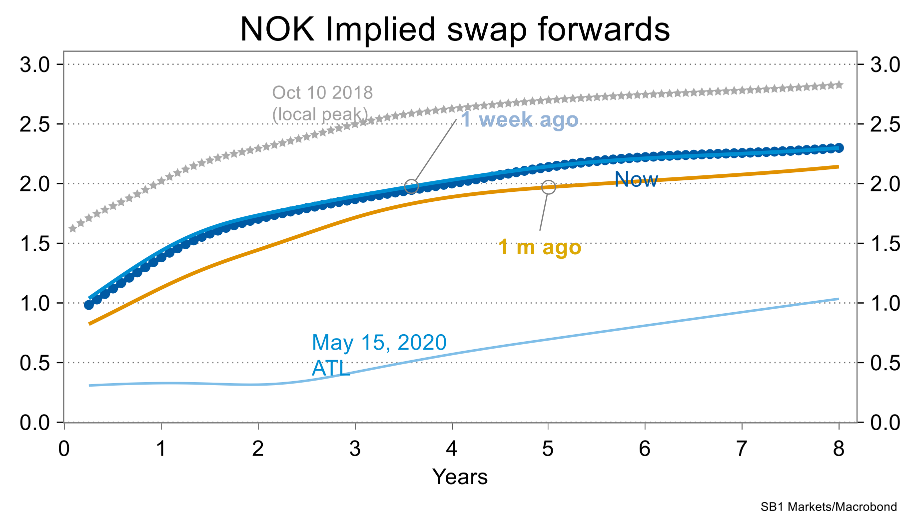
NOK rates down last week – the long has flattened?

Still, a NOK 10 y at 1.82%; up 132 bps vs May all time low



- The 10 y swap rate is now above the level in early 2020, before the corona virus hit, even if the first half of the curve is well below
- Last week, the mid segment of the curve rose the most

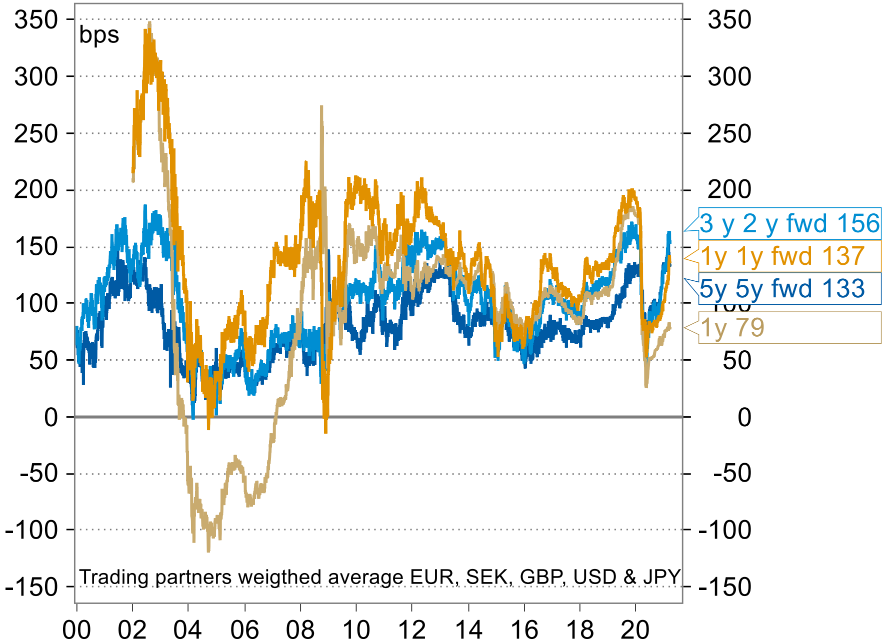




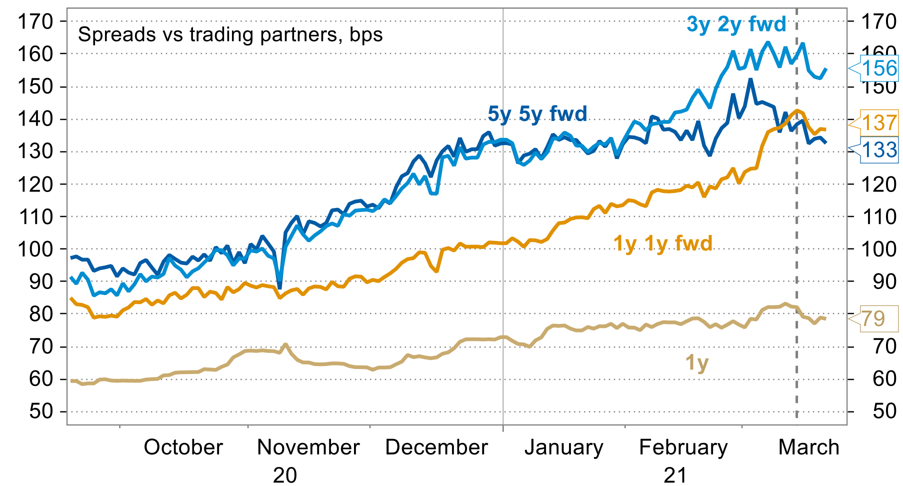
Forward spreads vs trading partners down all over the curve

Th 5 y 5y fwd spread at the same level as in late 2020, the 'cap' was hit, at the normal peak level

Norway vs trading partners, impl swap spreads



SB1 Markets/Macrobond



SB1 Markets/Macrobond

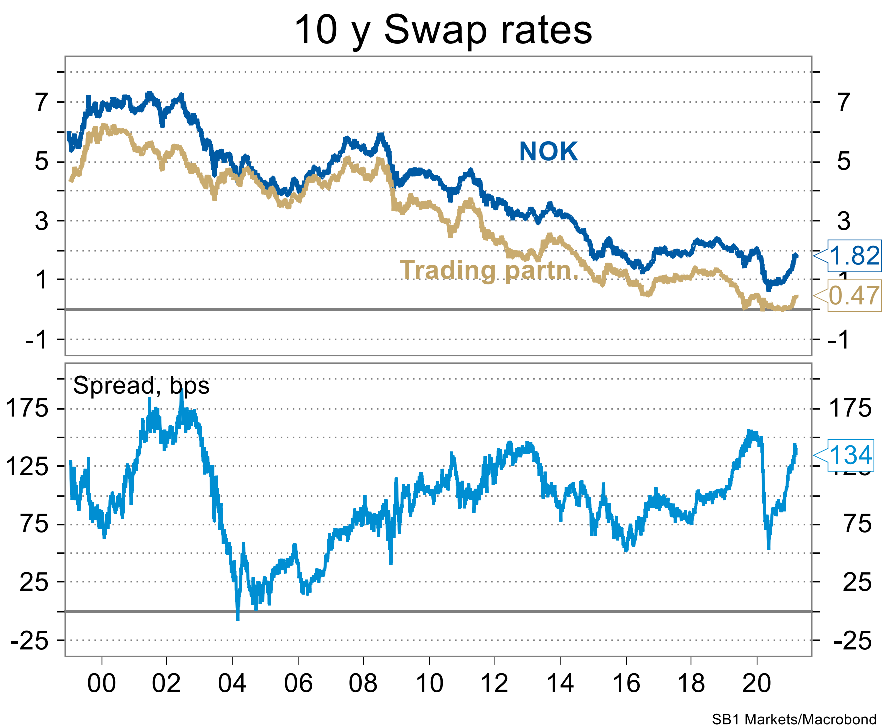
- However, at the long end of the curve, the spread is rather elevated, check next page too

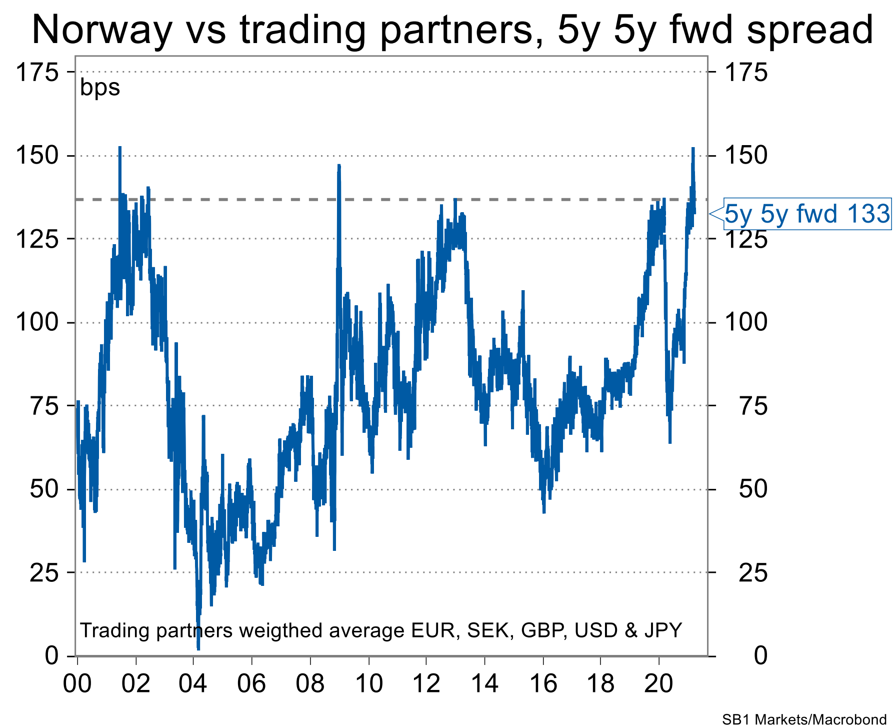
NOK Swap rates

SB1 Markets/Macrobond

The 5y 5y fwd spread further down last week, still at a high level

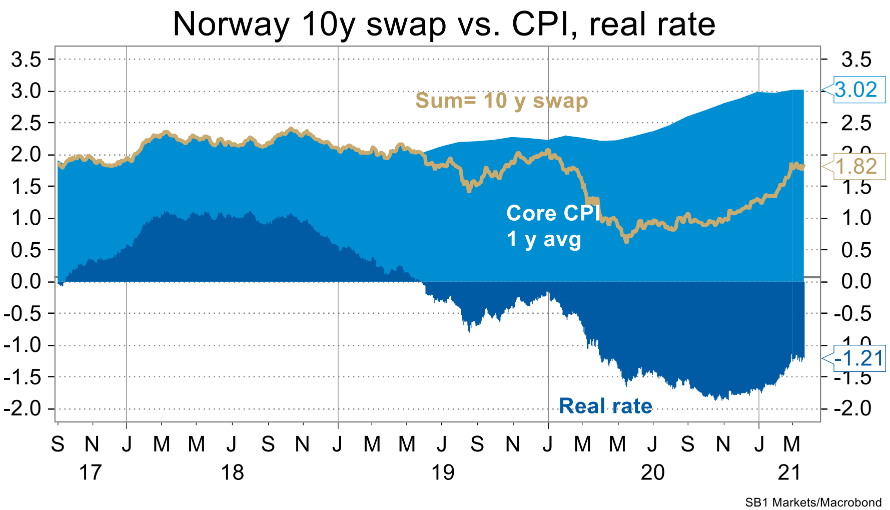
Even the 10y outright spread is at the high end





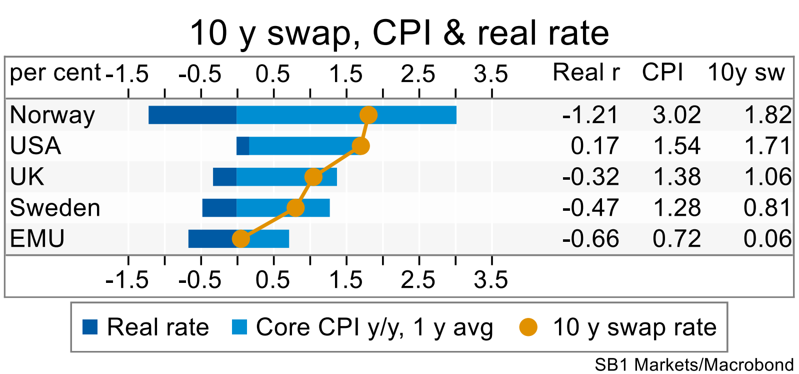
- How much inflation will Norway have, over time?
- How much faster growth will Norway deliver, over time?
- Thus, how much higher interest rates will Norway need, over time?

Negative (actual) real interest rates most places – NOK at the bottom



NOK 10 y swaps are drifting upwards

- The **10y NOK swap rate** has climbed by 130 bps since the bottom in May, to 1.82%, after a 2 bps decline last week
- **The real rate**, after deducting 3% average core CPI inflation over the 2 past years equals -1.21%
  - » However, if we use a longer CPI inflation average, the real rate is higher, as the average rate of inflation has been lower than the current 3%
  - » On the other hand, barring economists' in academia & finance, nobody else believe in the 2% inflation target. Other economists say 2.5%, business leaders 3.5% and households 3.8% (in 2 to 3 years' time)
  - » In seems unreasonable to assume an expected inflation below 2.5% - and in may in fact be that it is even higher than 3% among many decision makers



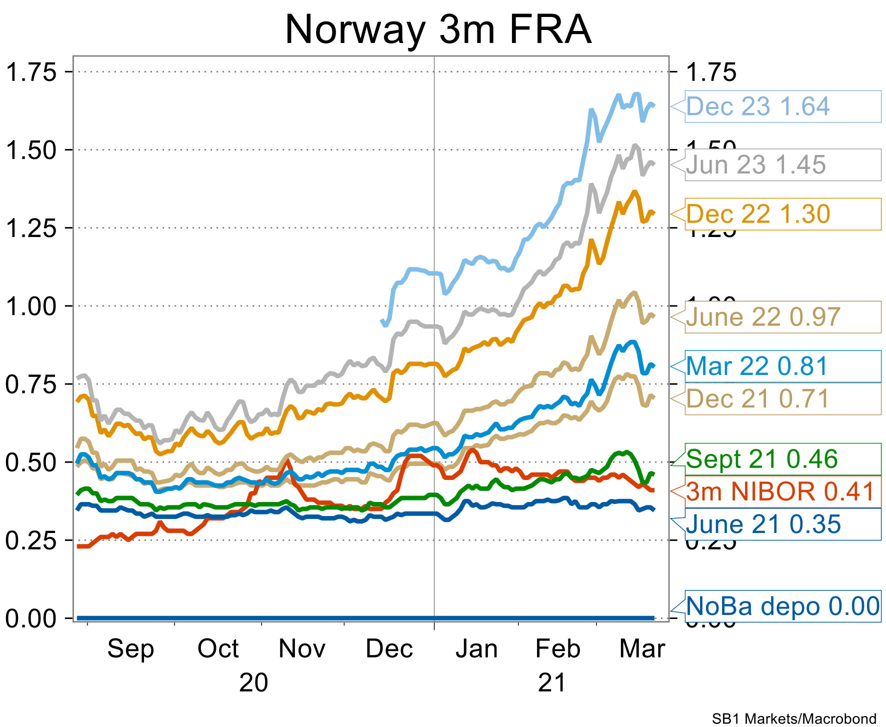
per cent	Real r	CPI	10y sw
Norway	-1.21	3.02	1.82
USA	0.17	1.54	1.71
UK	-0.32	1.38	1.06
Sweden	-0.47	1.28	0.81
EMU	-0.66	0.72	0.06

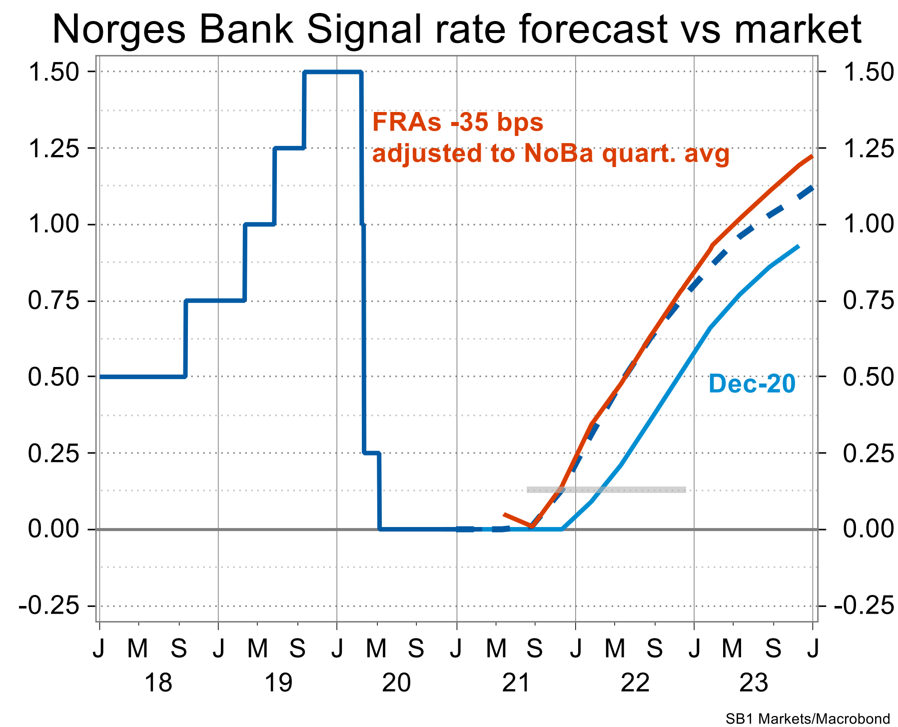
NOK real rates among the lowest, as inflation is at the top

- **Inflation** among Norway and our main trading partners varies between 0.72% to 3.02% (here again measured by actual annual core inflation, smoothed over 12 months). EMU at the bottom, Norway at the top, by far
  - » Other measures of inflation trends, looking backward or including forward expectations yields the same ranking
- **Real rates** are quite similar among our trading partners, at 0.08% to -0.68% measured vs. the 10 y swap rate and core inflation over the past two years
- **Thus, the Norwegian real rate at -1.21% is an outlier at the downside, even if the nominal rate is the highest**

FRA rates down ahead of NoBa, slightly up afterwards, down 5-8 bps w/w

The curve is identical to NoBa's new path. 50/50 for a Sept hike, +25% probability for a Dec hike

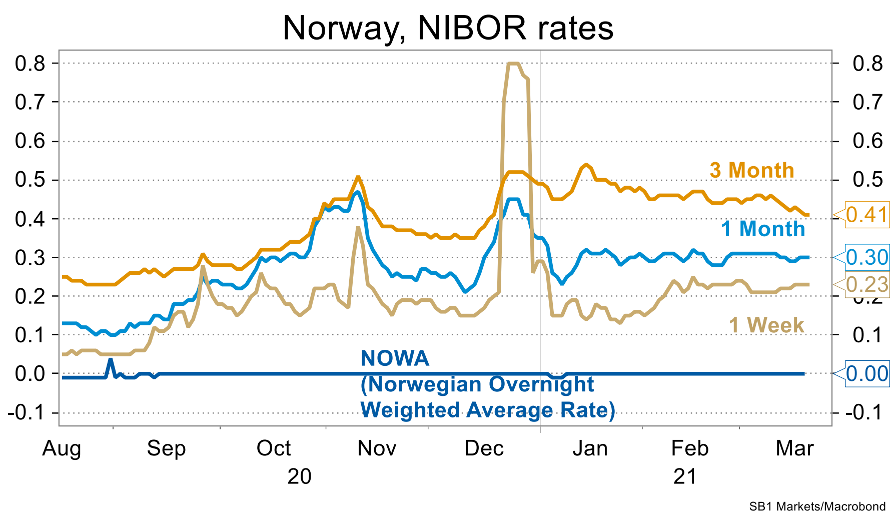


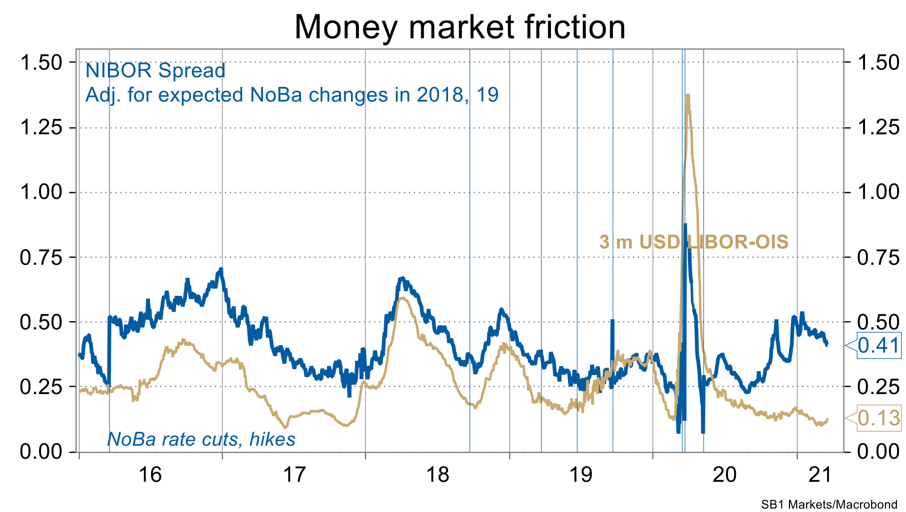


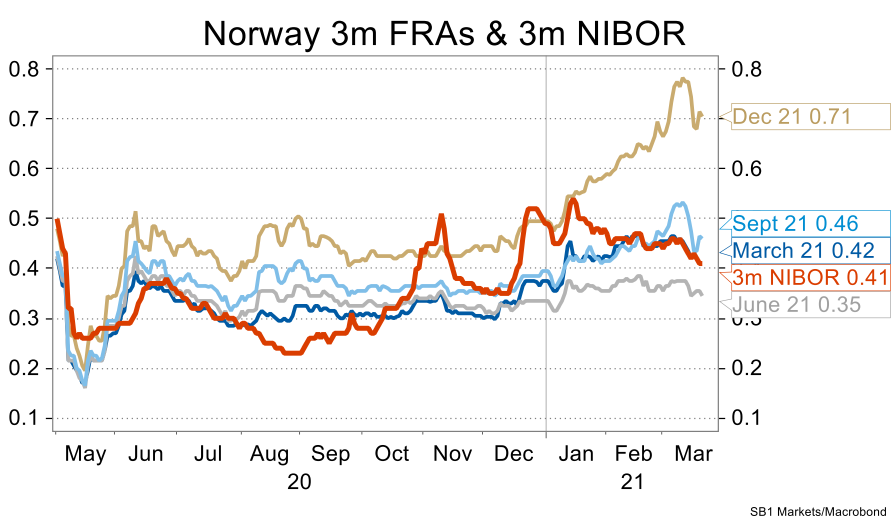
- The NoBa 23 Sept meeting is one weak after the Sept 3 m FRA IMM fixing date. If NoBa hikes to 0.25% on Sept 23, the average NoBa rate of the Sept 21 FRA contract period will be 0.23%. Assuming a 35 bps NIBOR spread, the actual 0.46% Sep FRA-rate equals a 0.11% NoBa deposit rate. If so, a 50% probability for a Sept hike is discounted, just what NoBa signalled in its new interest rate path
- The Dec 21 FRA at 0,71%, and a 35 bps NIBOR spread, yields a 0,36% NoBa rate. However, the Dec FRA is normally some 5 – 8 bps 'too high' due to year liquidity adjustments at banks. We deduct this extra liquidity premium, and assumes market's 'real' NoBa expectation at 0.30%. A implies a 20% probability for a 2nd hike in H2, again very close to NoBa's path. A second hike in March (if not in Dec) is almost fully discounted

The 3 m NIBOR rate continued downwards, now at 0.41%

The June FRA signals a further decline to 0.35%. The NIBOR spread is narrowing





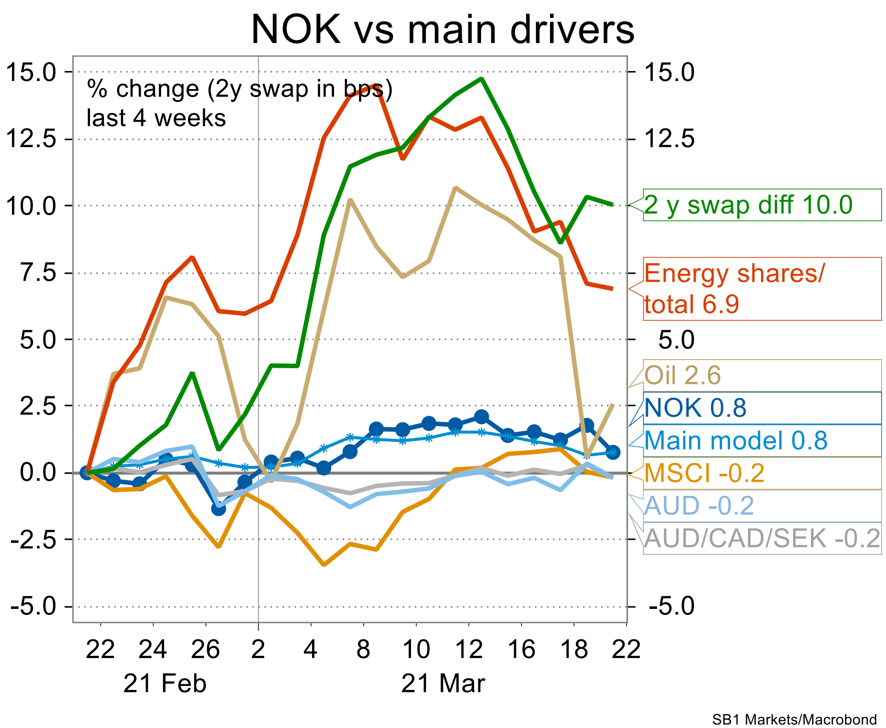


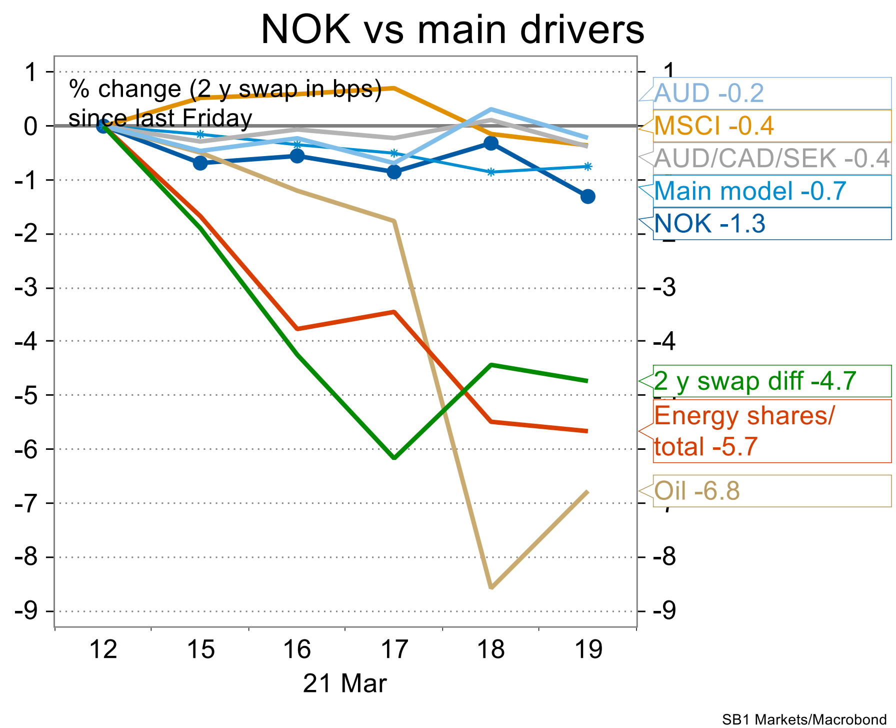
- As we expected, Norges Bank lifted its NIBOR spread assumption to 35 bps from 30 in the Dec MPR

NOK

NOK down 1.3% - still up 0.8% last 4 weeks

Oil down USD 5/b last Thursday; negative vaccine news, more oil from Libya, Iran is cheating+risk off





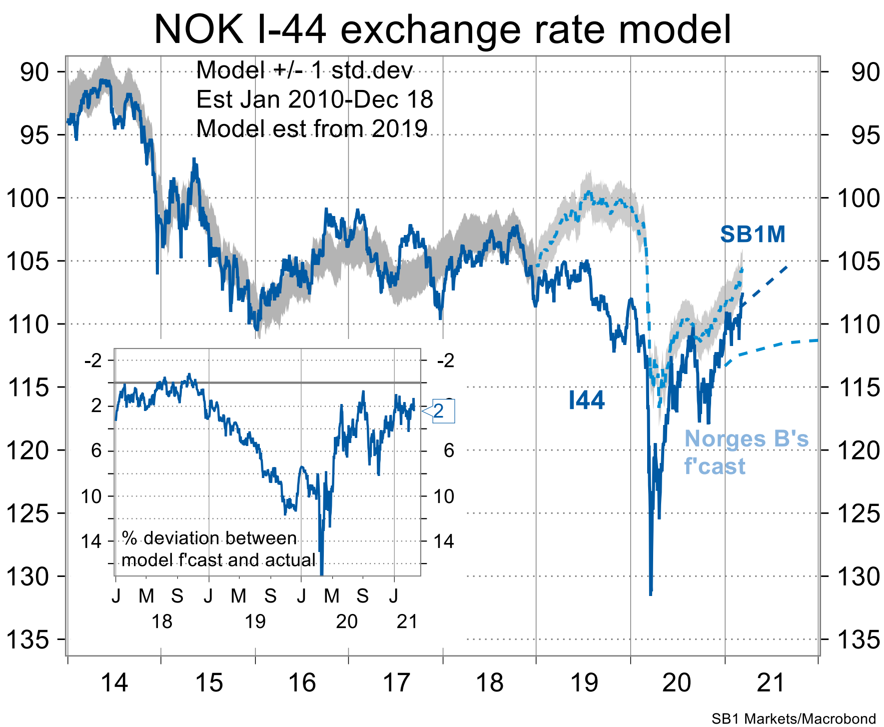
In sum, the NOK is still a buy:

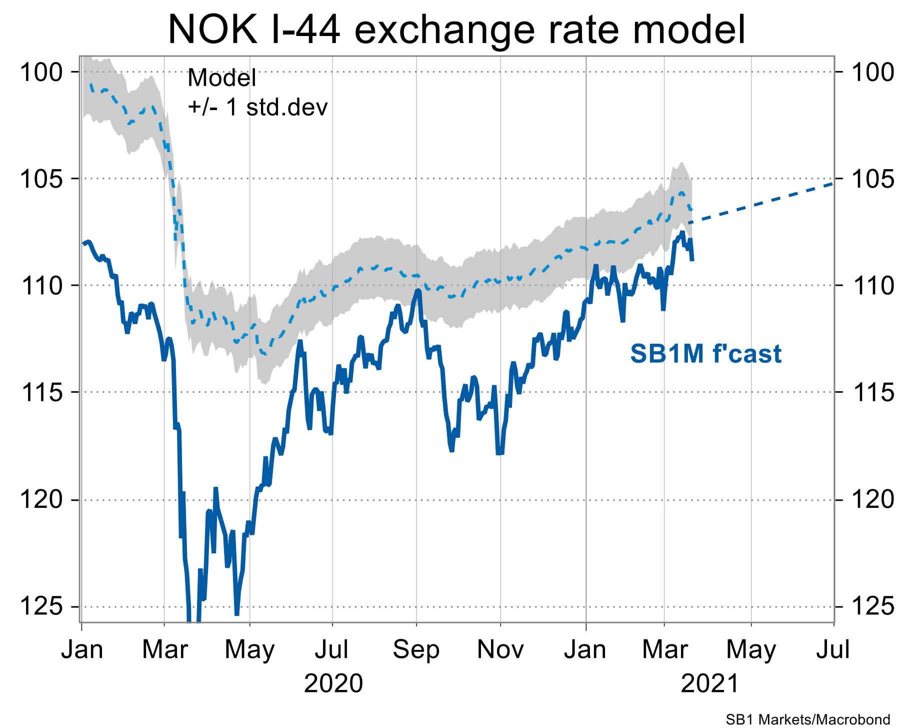
- The NOK is 3% weaker than suggested by our standard model (from 4% last week!)
- The NOK is 3% 'weaker' than the global stock market vs the correlation between the two in 2020
- The NOK is 8% weaker than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts
- On the other hand, the NOK is far (10%) stronger than a model which includes global energy companies equity prices (vs the global stock market)

At this and the following pages we have swapped Norges Bank's I44 index for JP Morgan's broad NOK index for the last 25 observations. The I44 has an earlier closing time than the 'official' closing time for fx crosses, which is the same as for JP Morgan's indices. Thus, JP Morgan's index correlates closer to the 'official' main NOK fx crosses. There are no substantial difference between these two indices over time. JPM ind. is used for other f/x too

NOK I44 down 1.2%, our model said -0.7%

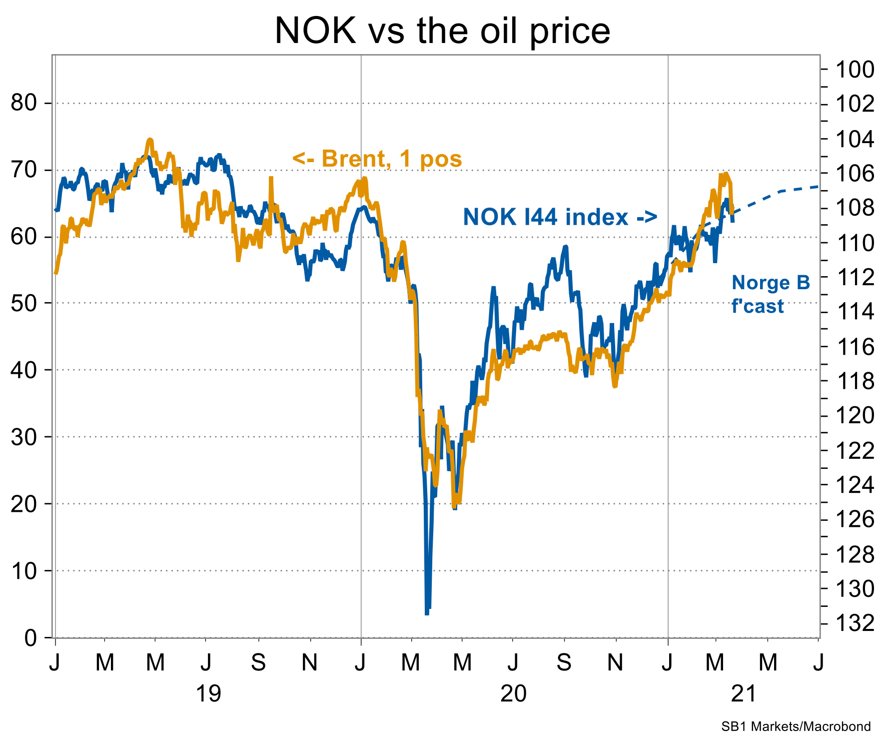
The NOK is 3% below our traditional NOK model forecast

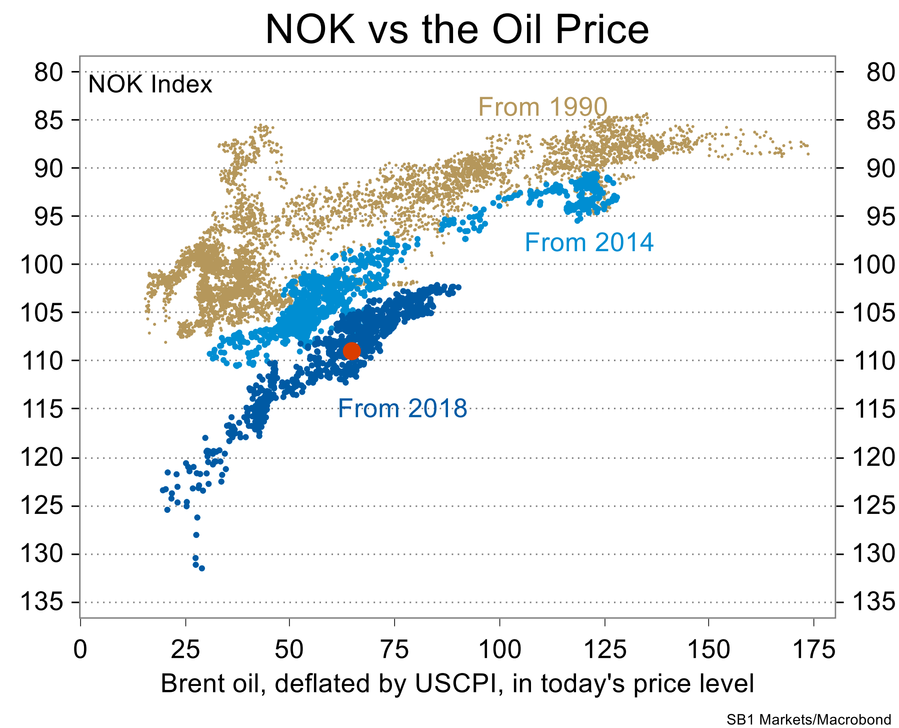




Oil down, NOK down

NOK is correlating quite closely to the oil price but at a lower level than before 2018

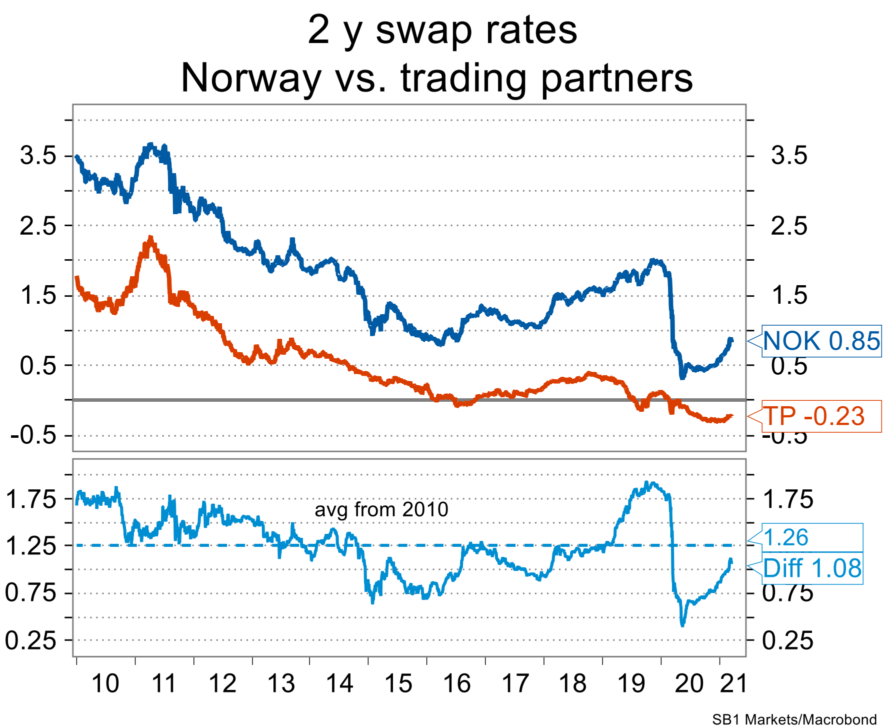


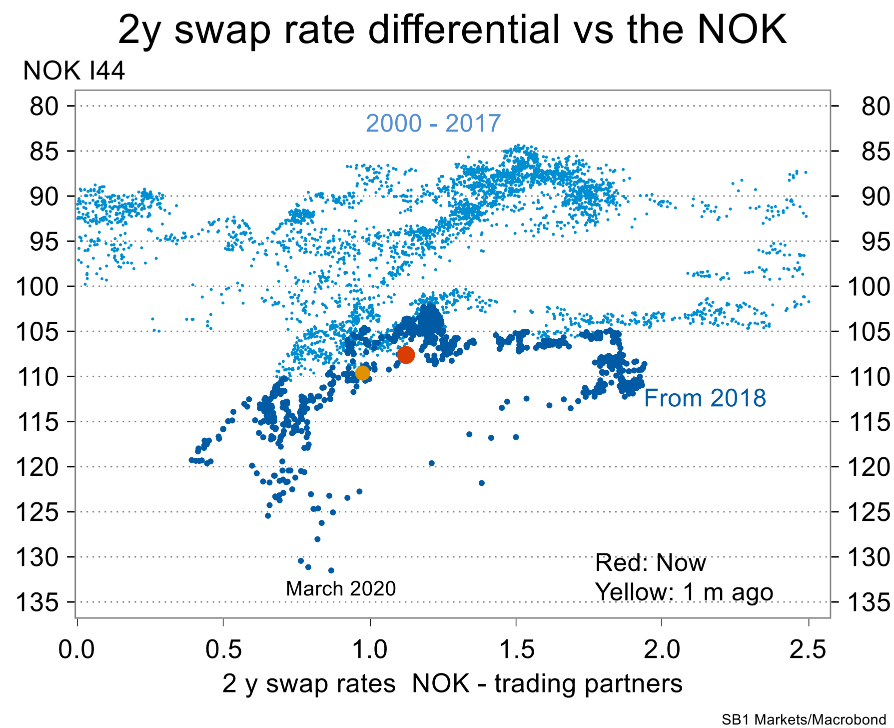


- A USD 10 drop in the oil price weakens the NOK by some 2.5%, as a partial effect. Within a broader model, the impact is somewhat smaller

Can Norges Bank walk the walk alone? Will the NOK become too strong?

In our models, a 2y swap 1 pp spread widening yields a 7% stronger NOK

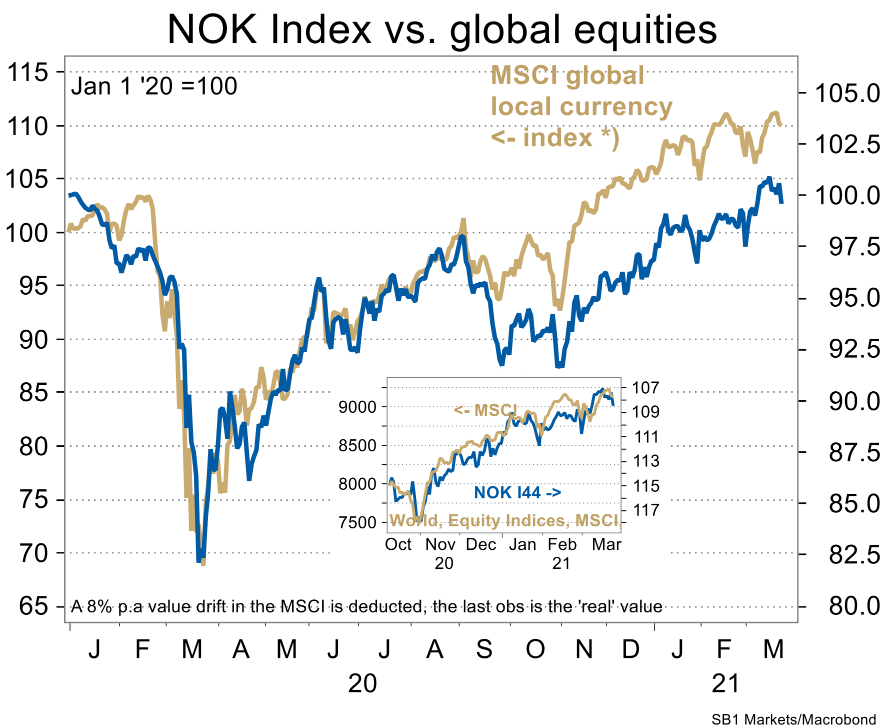


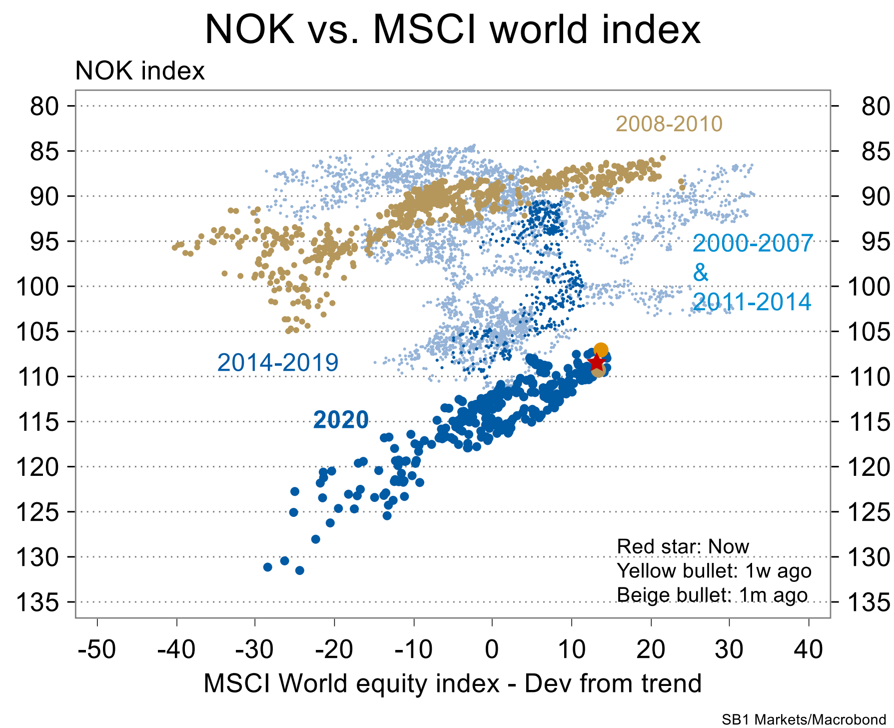


- However, the relationship is far from stable – and the oil price is usually much more important – and other factors are more important too, at least from time to time
- In addition, a 1 pp lift in the 2 y swap spread from the present level – where several NoBa hikes is discounted, is very unlikely

NOK down at tad 'more' than the stock market correlation still quite close

Except for Sept. NOK and global equities have walked in tandem last year. The 'gap' is now 3%

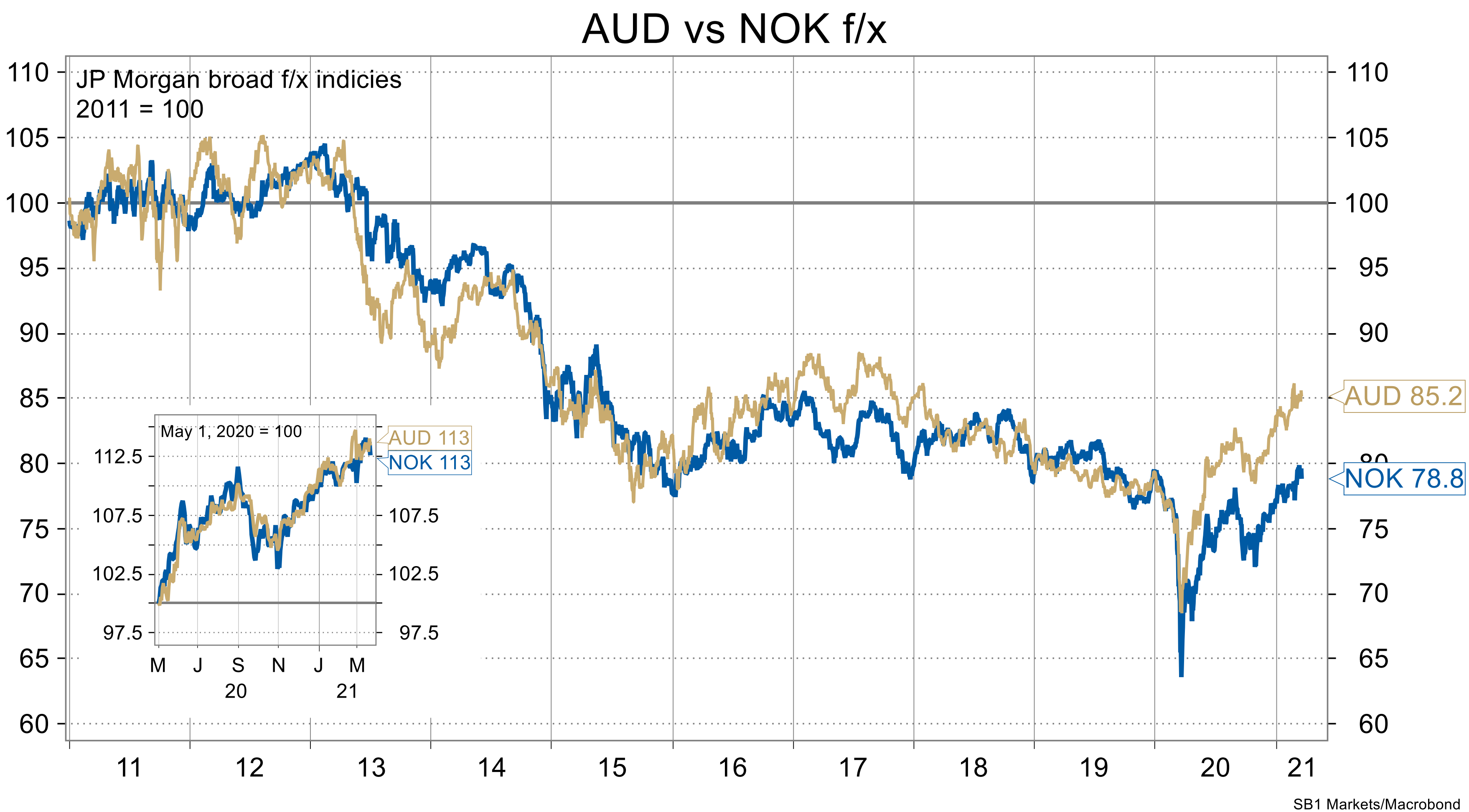




- Over time, there has not been a stable correlation between NOK and stock markets (the Oslo Stock Exchange, S&P 500 or the MSCI, the global equity index. (At the chart to the right, we have detrended the stock market as equities are drifting upwards, while NOK (hopefully) is stationary. However, the two has been pretty closely correlated from time to time
  - Now, the NOK is more than 4% weaker than 'normal' vs the stock market as the NOK lost ground in mid Sept, based on the link between the NOK and MSCI since Jan 2020). However, at one stage we will have to recalibrate the scales, as equities are trending upwards 6 – 8% per year
- We have long argued that global equity prices should be more important for the NOK than the oil price, as our global equity assets in the Oil fund are larger than the value of the remaining oil & gas reserves. Has the market 'finally' (and rather sudden) come to the same conclusion? We doubt. It's probably a "risk on, risk off" world, where many risky asses move in tandem, more than usually

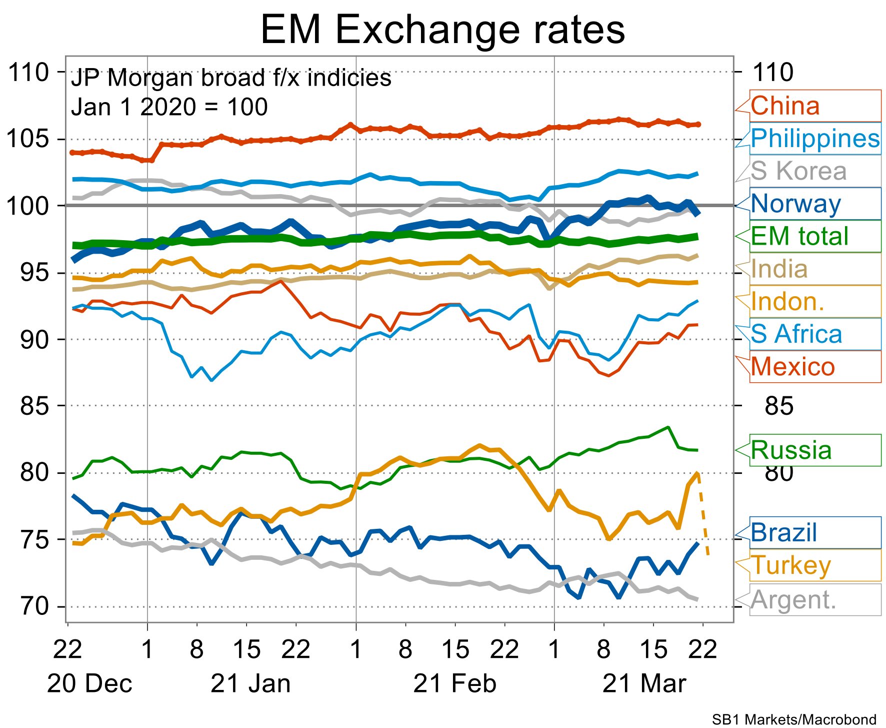
AUD & NOK still hand in hand – both down last week but NOK the most

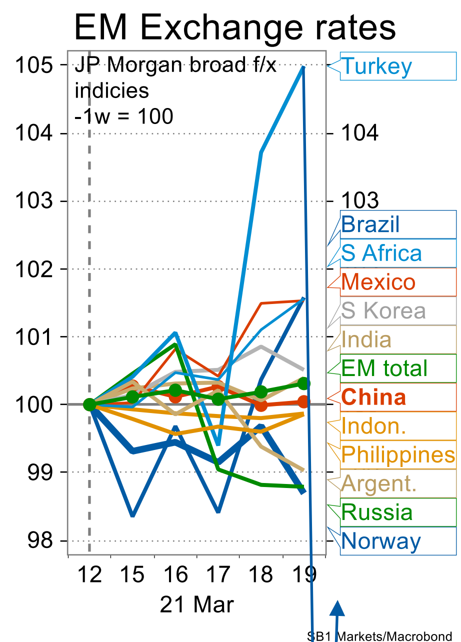
Both are up 13% since May 1 – but NOK has not recouped the 6% loss the occurred during March/Ap

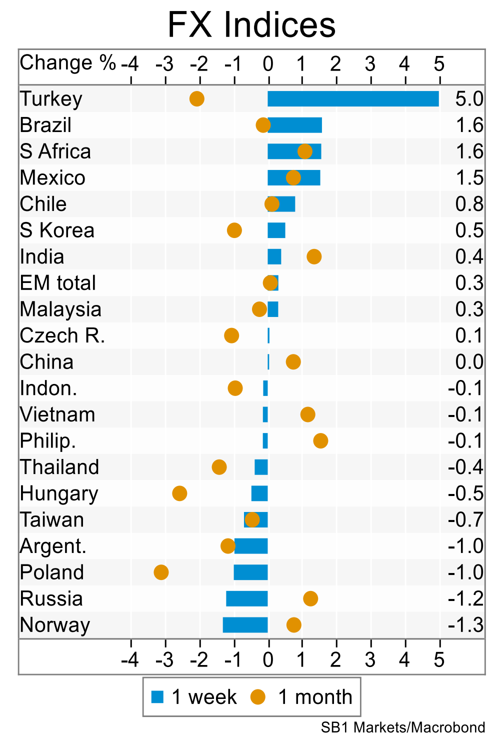


The Turkish lira straight up but then Erdogan ousted his xth central bank gov

.. out of the blue late Friday. The TRL fell 15% early Monday, but has now recovered half of the loss







- The CNY has flattened, others mixed

DISCLAIMER

DISCLAIMER

SpareBank 1 Markets AS ("SB1 Markets")

This report originates from SB1 Markets' research department. SB1 Markets is a limited liability company subject to the supervision of The Financial Supervisory Authority of Norway (Finanstilsynet). SB1 Markets complies with the standards issued by the Norwegian Securities Dealers Association (VPFF) and the Norwegian Society of Financial Analysts.

No investment recommendation

Any views and opinions relating to securities mentioned in this report should be interpreted as general market commentary, and not as investment recommendations within the meaning of section 3-10 of the Norwegian Securities Trading Act.

No personal recommendation

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

Research for the purposes of unbundling

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

Conflicts of interest

SB1 Markets, affiliates and staff may perform services for, solicit business from, hold long or short positions in, or otherwise be interested in the investments (including derivatives) in any stock mentioned in this publication. To mitigate possible conflicts of interest and counter the abuse of confidential information and insider knowledge, SB1 Markets has set up effective information barriers between divisions in possession of material, non-public information and other divisions of the firm. Our research team is well versed in the handling of confidential information and unpublished research material, contact with other divisions, and restrictions on personal account dealing. The views expressed in this report accurately reflect the analyst's personal views about the companies and the securities that are subject of the report, and no part of the research analyst's compensation is related to the specific recommendations or views expressed in this report.

Accuracy of sources

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

Risk information

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

Limitation of liability

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

Limitation on distribution

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