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Macro Weekly

Week 14/2022

Harald Magnus Andreassen
Phone : (+47) 24 13 36 21
Mobile : (+47) 91 14 88 31
E-mail : hma@sb1markets.no

Tina Norden
Phone : (+47) 24 13 37 48
Mobile : (+47) 93 22 62 24
E-mail : tina.norden@sb1markets.no

SpareBank 1 Markets
Phone : (+47) 24 14 74 00
Visit address : Olav Vs gate 5, 0161 Oslo
Post address : PO Box 1398 Vika, 0114 Oslo

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Last week, part I

- **The War/Sanctions**
  - **No major news.** Peace negotiations are probably not moving much forward as both parties rather hope for success at the battle ground
  - No clarity on how Europe should pay for energy imports from Russia – in **roubles or EUR**. We cannot understand that this is an important question as payment for energy exports from Russia is not sanctioned, and Russia (Gazprom or the central bank) anyway will end up owning more foreign currency
  - **Commodity prices** mostly fell, including food prices which declined for the 4th week in row. Prices are just up 5 – 6% from before the war. Oil prices fell as US (and according to Biden, some 30 other countries) will release reserves from strategic oil reserves – the US more than ever before
- **The virus**
  - **Shanghai** is still partly closed down, and PMIs from China were much weaker than expected in February. China's zero tolerance strategy is obviously not a cost free (or probably not feasible)
  - In the **UK**, the number of new Covid cases has turned south again
- **Manufacturing PMI**
  - **The global manufacturing PMI** was significantly weaker than expected in March, due to weaker results in China and other Emerging Markets. The output index fell to 51.0, which signals growth below trend. The global output index at The war/sanctions have probably not influenced the March PMIs by much, except for **Russia**: Its PMI fell more than any other PMI, to the lowest level of all, to 44, signalling a sharp contraction in the manufacturing sector. The US ISM was weaker than expected but not weak at all, at 57.1. Global delivery times rose faster, as did prices – and most in the EMU – very likely influenced by the conflict, and (we assume) wide spread hoarding in most exposed commodity markets
- **USA**
  - **Employment** growth may be slowing somewhat (but March was in line with expectations, revisions included). **Unemployment** fell 0.2 pp to 3.6%, 0.1 below expectations and to just 0.1 pp above Fed's end of year estimate (which is 0.5 pp below NAIRU). The participation rate rose further, and is now trending up, but slower than employment, and less than suggested by the decline in workers who report they do not apply for work due to corona. Annual wage inflation was a tad higher than expected at 5.6%. Households report that it has never been **easier to get a job**, the no. of **unfilled vacancies** remained unchanged in February at close to ATH, and companies report that they are **not able to fill job openings** and that they therefore plan to lift wage further
  - **Household spending** fell in real terms in February, as did household **disposable income**. The **savings rate** is now below the pre-pandemic level. Goods spending fell sharply, spending on services rose – and is finally back to the pre-pandemic level. Goods consumption is 16% above – and will slow further. March **auto sales** fell further – due to lack of supply
  - Annual **PCE inflation** rose sharply, as expected, the total up to 6.4% y/y, the core up to 5.4%
  - The **corporate profit share** fell in Q4. Perhaps Q3 ATH will turn out to be that, at least for a long while?

Last week, part II

- **EMU**
  - » **HICP (CPI) inflation** was much higher than expected in March, the total up 7.5%, 0.8 pp higher than expected. Energy prices were the main culprit, which should have been known (given oil and gas prices). In the region, energy prices directly and indirectly explains all of the increase in the headline rate, as gas prices contribute much more than ever before. However, given future oil & gas prices, the peak is near, and annual inflation will slow sharply, also if energy prices do not decline from here
  - » **Unemployment** fell 0.1 pp in February, as expected, though form a 0.1 pp higher level than first reported in Jan. Still, the 6.8% rate is the lowest since 1981, and the vacancy rate is record high. Still, wage inflation remains at 2.00%
- **Norway**
  - » **3.7% wage growth in 2022**. At least that was the outcome of the wage negotiation in the manufacturing industry – which will be the norm for the other sectors. We never thought a conflict was likely, as the parties were very close before the negotiations started. There may be some challenges in public sector, but the unions arguments for a special treatment are far from rock solid. Norges Bank assumed 3.7% wage inflation in 2022, and will not have to revise its estimate up, now. We still the risk is at the upside, as the labour market is very tight
  - » **NAV open unemployment** fell by 0.2 pp to 1.9% in March, 0.1 pp less than expected – and to just 0.15 pp above the cycle low NoBa expects in 2023. This margin seems to be slim...
  - » **Retail sales** fell 1.1% in February, we expected a similar gain. Groceries & households goods (building mat) contributed at the downside
  - » **Credit growth** slowed 0.2 pp to 4.8% in February, we expected 4.9%. The corporate sector slowed more than we assumed. We are NOT witnessing a credit boom but the debt level is record high. The mortgage regulations (5 x income, 85% LTV) also keeps credit in check
  - » **OBOS co-op apartment prices** rose just 0.1% in March
  - » **Another crisis, another extra budget:** The government proposed a **refugee & security/defence package**, with at total cost at NOK 14.4 bn, or slightly less than 0.5% of Mainland GDP. Most of the money will be spent at home. Since the budget was decided last year, **corona measures** at NOK 25 bn, and **electricity subsidies** for household at NOK 20 bn have also been decided. The government promises to propose some tightening measures in the revised budget in early May. (The budget anyway will be strengthened substantially by higher taxes and dividends from the electricity sector. The far larger surge in public revenues from the oil and gas sector are transferred directly to the Oil Fund)
  - » **Norges Bank will sell** NOK 2 bn per day in the f/x market in April in order to transfer the extra oil- and gas revenues (mostly paid in NOK) to the Oil fund. Long term, the NOK is stronger the more the bank sells NOK for the Fund, as it always takes place when oil and gas prices are high. A Thursday, the NOK fell, as the Bank will sell more than the market expected (some NOK 1.5 bn, and more than anytime before). More important, the liquidity in the NOK money market will finally be eased. Thus, short term NIBOR/FRA rates nosedived, by up to 20 bps! Still, the FRA curve is significantly steeper than NoBa's interest rate path

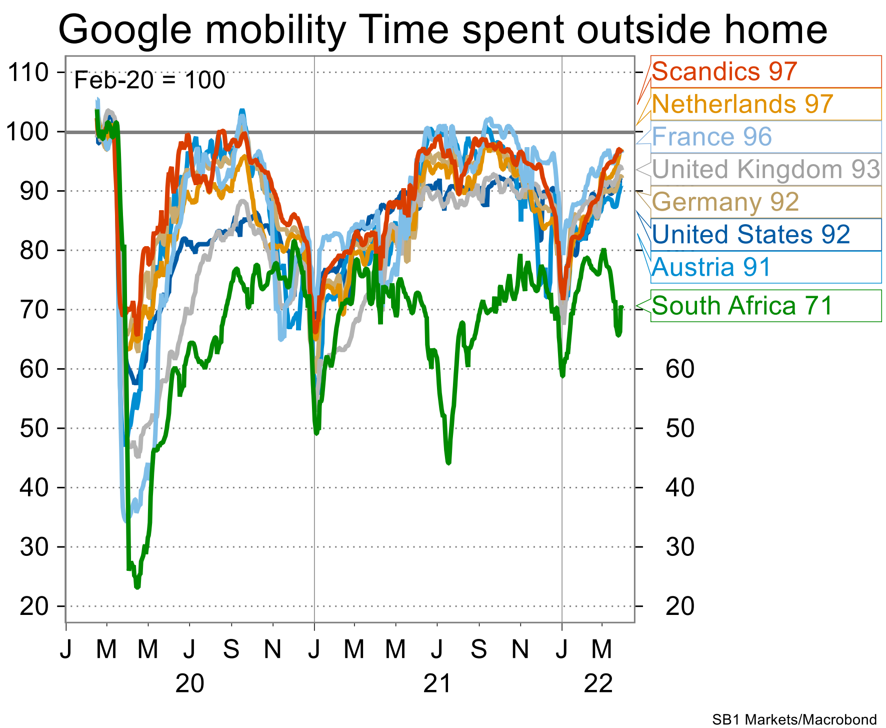
This week: Besides War, Sanctions, Commodity Prices: Global PMIs, Norw. GDP & house prices

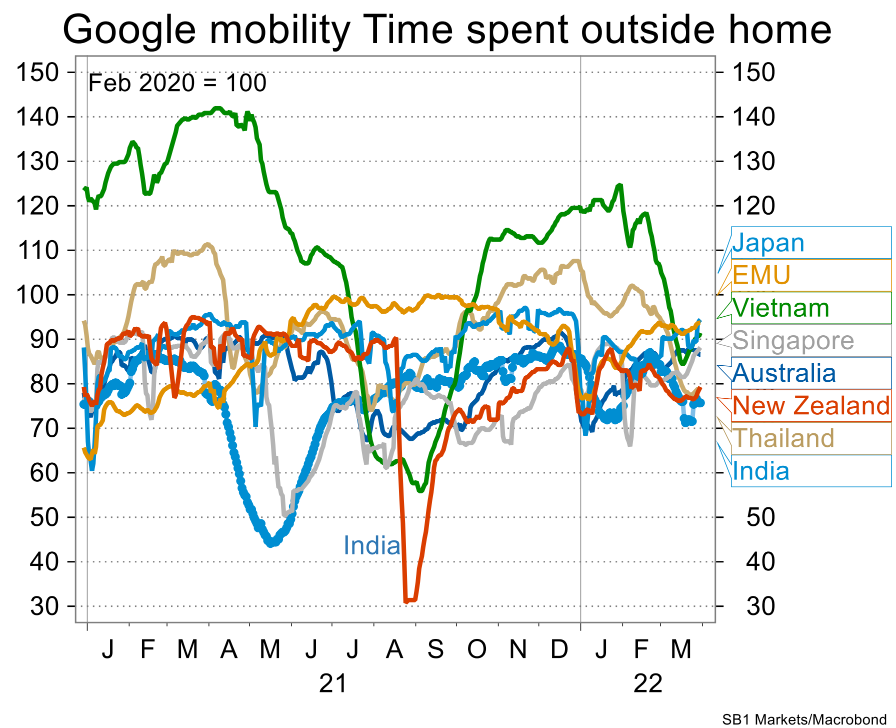
Time	Count.	Indicator	Period	Forecast	Prior
Monday April 4					
08:00	GE	Trade Balance	Feb	7.8b	3.5b
10:30	EU	Sentix Investor Confidence	Apr	-9.9	-7.0
Tuesday April 5					
08:30	SW	Services PMI	Mar		68
08:45	FR	Industrial Production MoM	Feb	-0.5%	1.6%
10:00	EU	Services PMI	Mar F	54.8	54.8
10:00	EU	Composite PMI	Mar F	54.5	54.5
10:30	UK	Services PMI	Mar F	61.0	61.0
11:00	**NO**	**House prices, SA MoM**	**Mar**	**(0.2%)**	**0.70%**
14:30	US	Trade Balance	Feb	-$88.5b	-$89.7b
15:45	US	Services PMI	Mar F	58.9	58.9
15:45	US	Composite PMI	Mar F		58.5
16:00	**US**	**ISM Services**	**Mar**	**58.6**	**56.5**
Wednesday April 6					
03:45	**CN**	**Composite PMI, Caixin**	**Mar**		**50.1**
03:45	**CN**	**Services PMI, Caixin**	**Mar**	**49.8**	**50.2**
08:00	GE	Factory Orders MoM	Feb	-0.1%	1.8%
08:00	SW	GDP Indicator SA MoM	Feb	0.5%	-0.3%
11:00	EU	PPI YoY	Feb	31.7%	30.6%
20:00	**US**	**FOMC Meeting Minutes**	**Mar-16**		
Thursday April 7					
08:00	GE	Industrial Production SA MoM	Feb	0.2%	2.7%
08:00	NO	Ind Prod Manufacturing MoM	Feb		3.3%
11:00	EU	Retail Sales MoM	Feb	0.6%	0.2%
14:30	US	Initial Jobless Claims	Apr-02	199k	202k
17:00	**WO**	**Composite PMI**			
Friday April 8					
08:00	NO	GDP MoM	Feb		-1.6%
08:00	**NO**	**GDP Mainland MoM**	**Feb**	**0.9%(1.0)**	**-0.9%**

- **March services & composite PMIs/ISM**
  - » The manufacturing PMIs surprised at the downside vs the preliminary results from the rich part of the world (which though were better than expected), and services in China hit a virus air pocket in March. The global composite PMI could still report a small increase in March, as services were strong, at least in the rich countries. The index level at close to 55 signals growth above trend. The US service sector ISM fell in February, and is expected up again in March
- **Global auto sales**
  - » US has reported another decline, and most global auto producers still report lack of components. Just China is reporting growth in sales and strong production.
- **USA**
  - » Can the minutes from the March 16 **FOMC meeting** be even more bearish than Powell 3 days after the meeting started to talk about the need for 50 bps hikes, which the market immediately discounted? Probably not
  - » Check out the **Atlanta Fed median wage tracker**, probably out Thursday or Friday. This may be the best gauge of wage inflation, and we have never before seen such a rapid acceleration as over the recent quarters
- **EMU**
  - » **Retail sales** are slowly on the way up - and not above a reasonable long term trend
  - » Industrial production from several countries will be reported during the week
- **Norway**
  - » **Mainland GDP** surprised at the downside in January, partly due to a decline if ocean fisheries (which is at part of the Mainland). A substantial increase in production in hotels, restaurants & transport should lift activity in February
  - » **House price** probably slowed substantially in March, following the 2.7% lift in Jan/Feb – which very likely was caused to reduced supply due to the new documentation requirements. Realtors report that supply of homes for sale are surging, and the bidding activity has slowed

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

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





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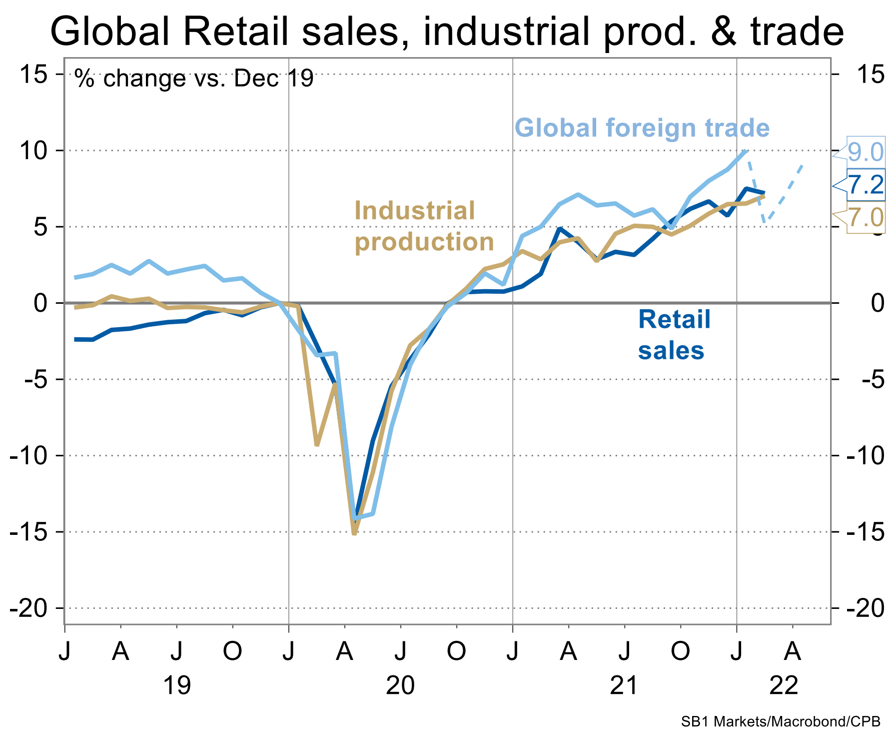
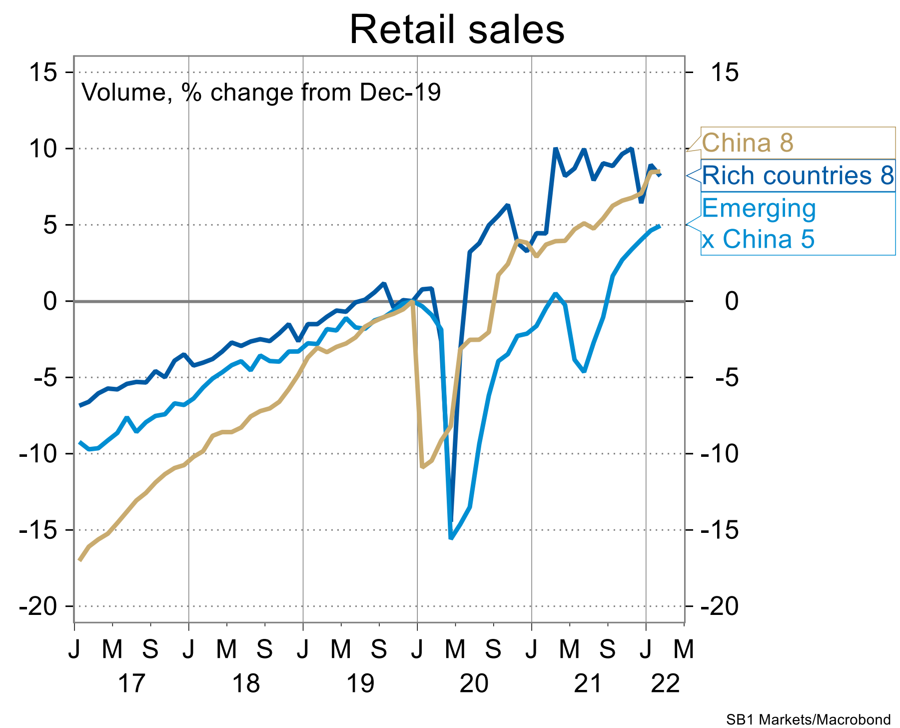
Global retail sales remained strong in February. Emerging markets on the way up

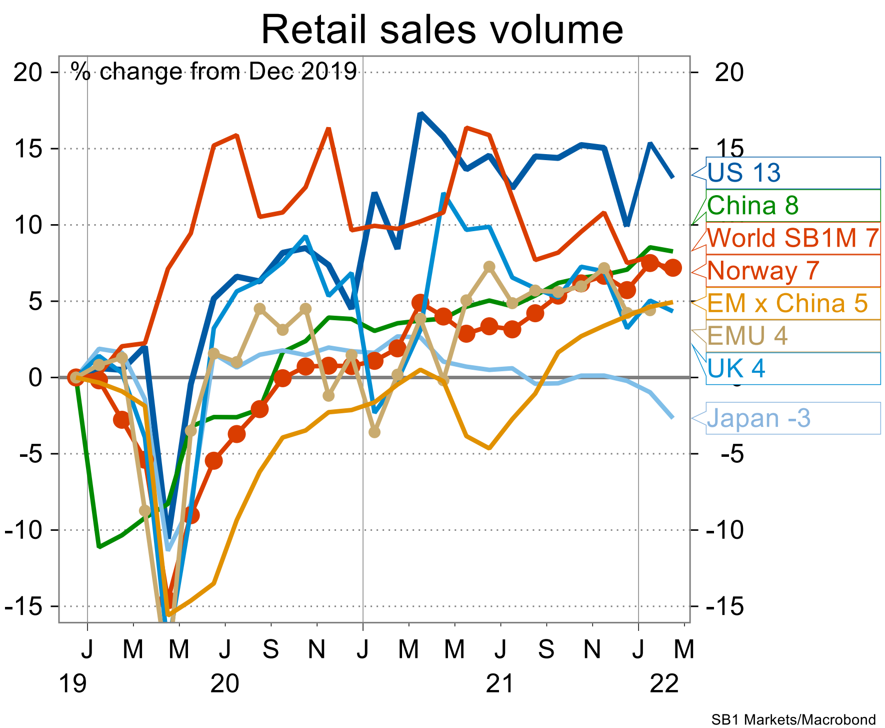
Industrial production on the right track too

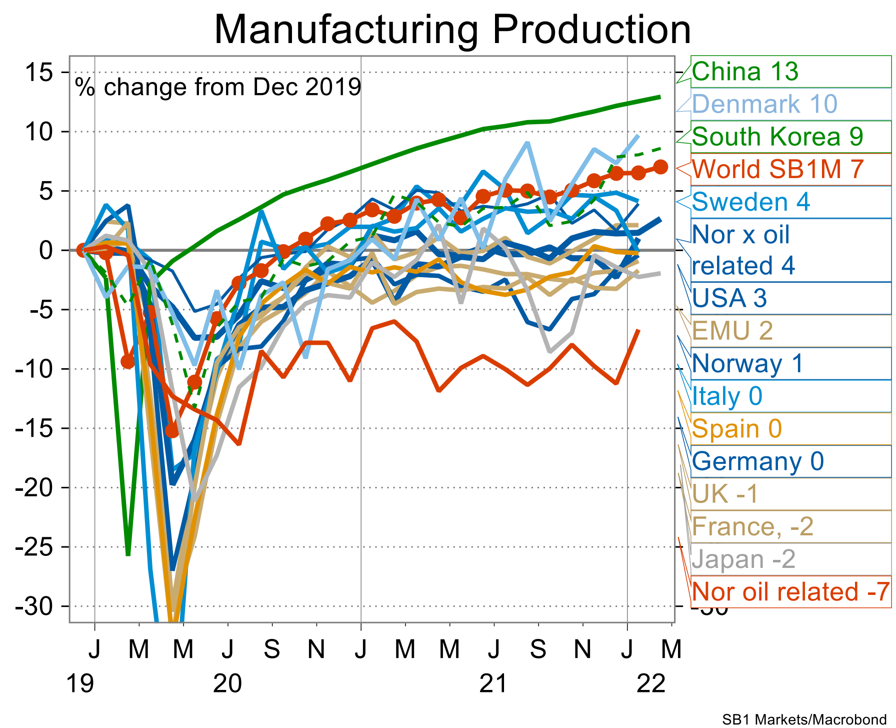




Retail sales are still trending up, thanks to EM, China included

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



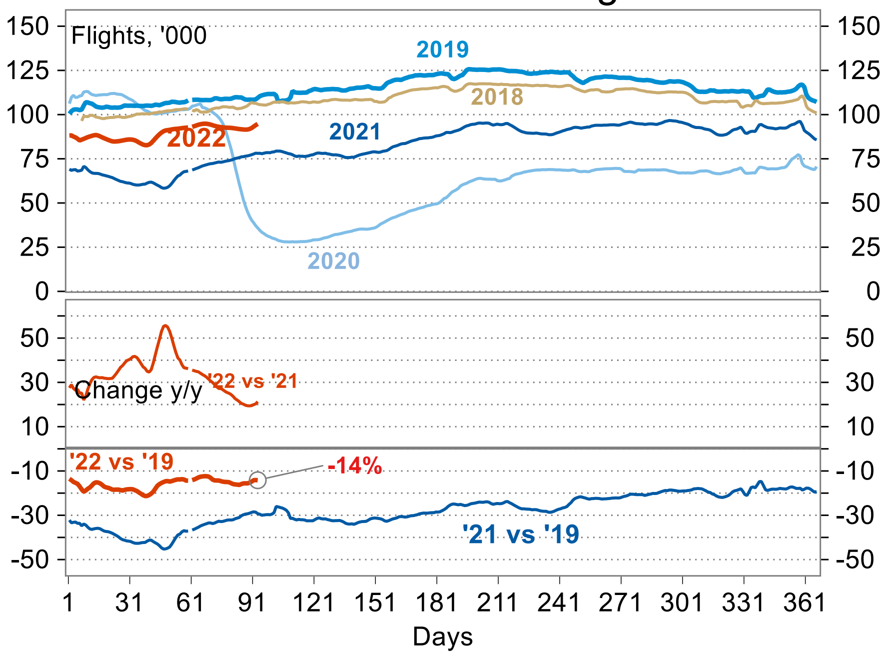


- **Retail sales** in Emerging Markets x China are recovering but is far below pre-pandemic trends
- **Manufacturing production** has been hampered by a deep decline in auto production. The manufacturing PMIs are down from the peak but aare still signalling growth above trend

Global airline traffic slightly up last week, still down 14 % vs 2019

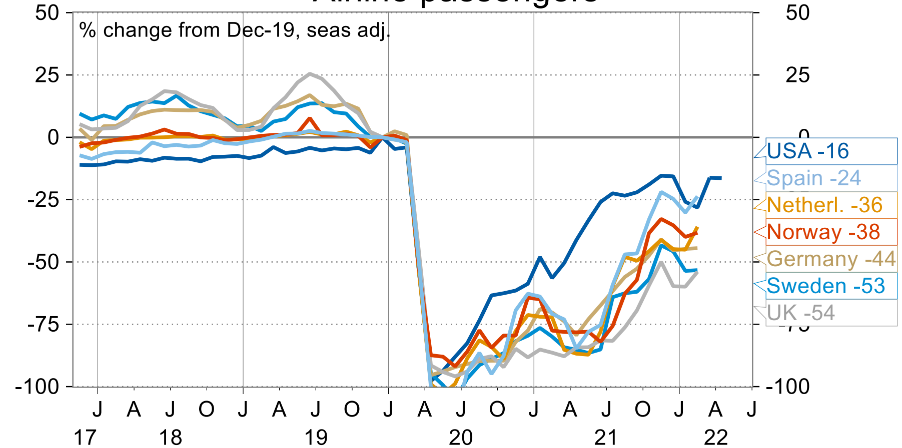
Traffic has flattened recent weeks. Some better European traffic data late last week

World Commercial flights



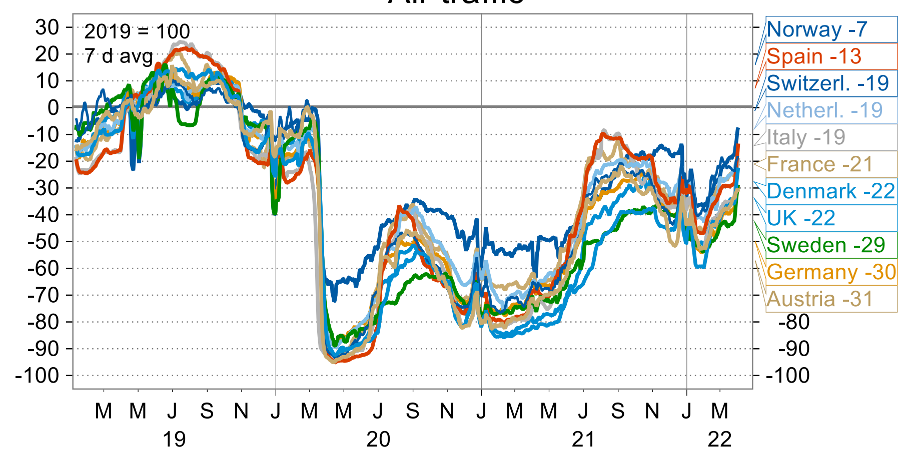
Flightradar24 SB1 Markets/Macrobond

Airline passengers



National authorities, SB1 Markets/Macrobond

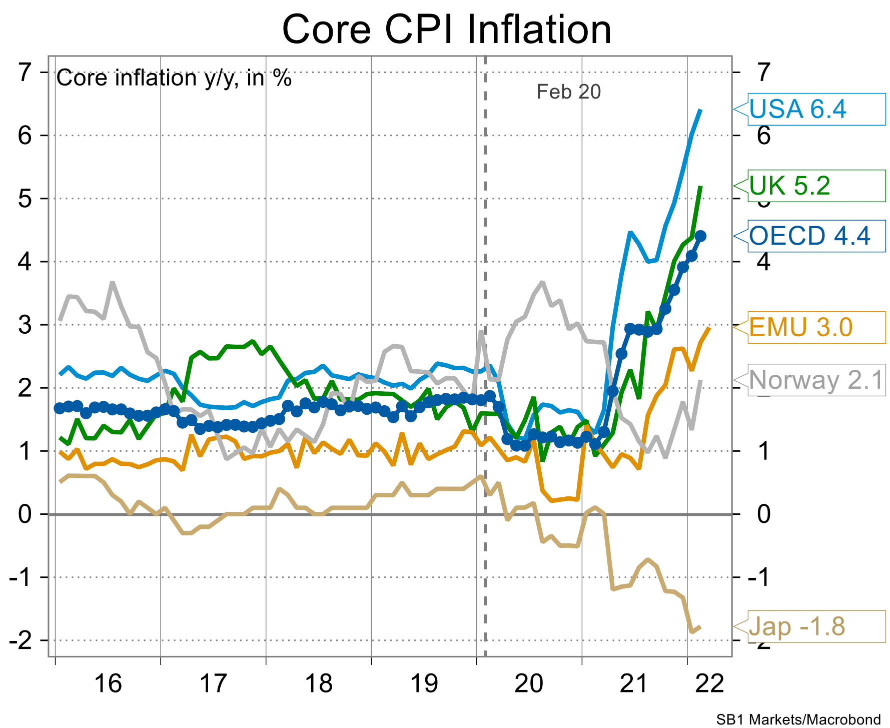
Air traffic

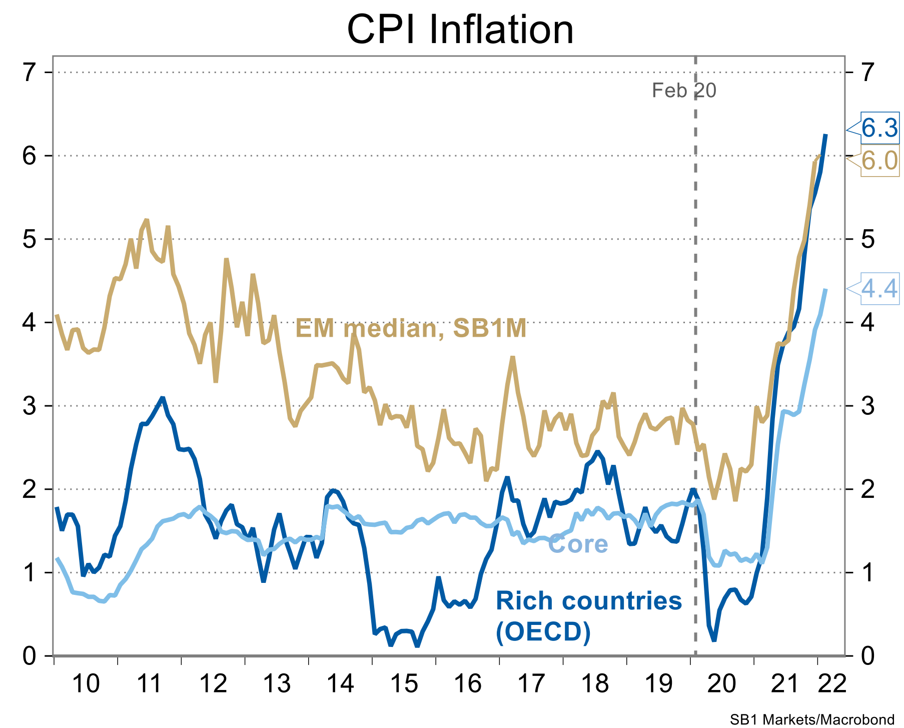


SB1 Markets/Macrobond

Inflation still rapidly on the way up

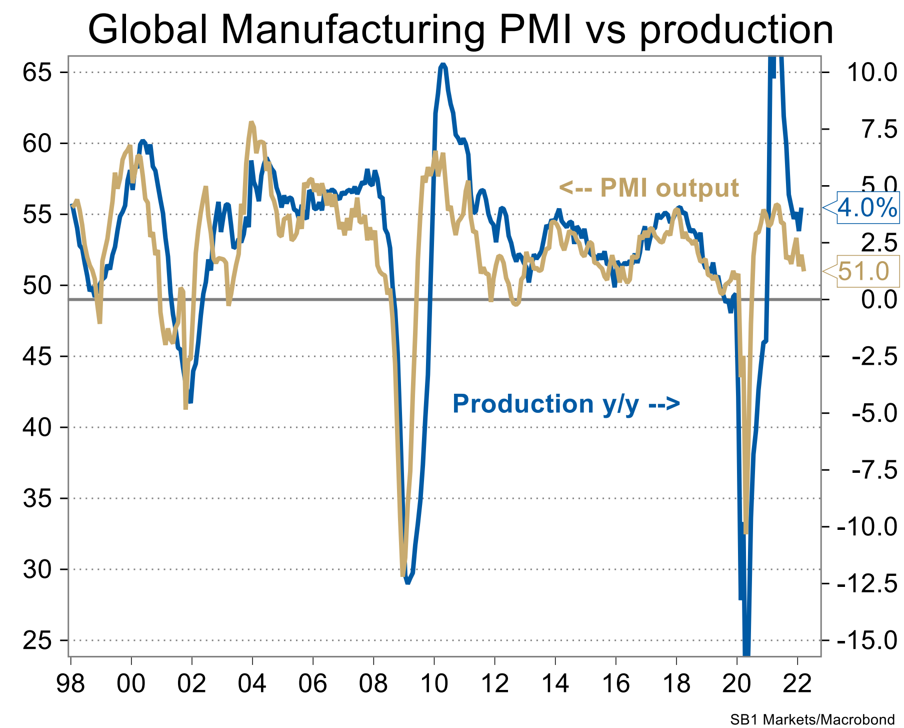
Energy prices the main culprit, but core inflation has turned up most places

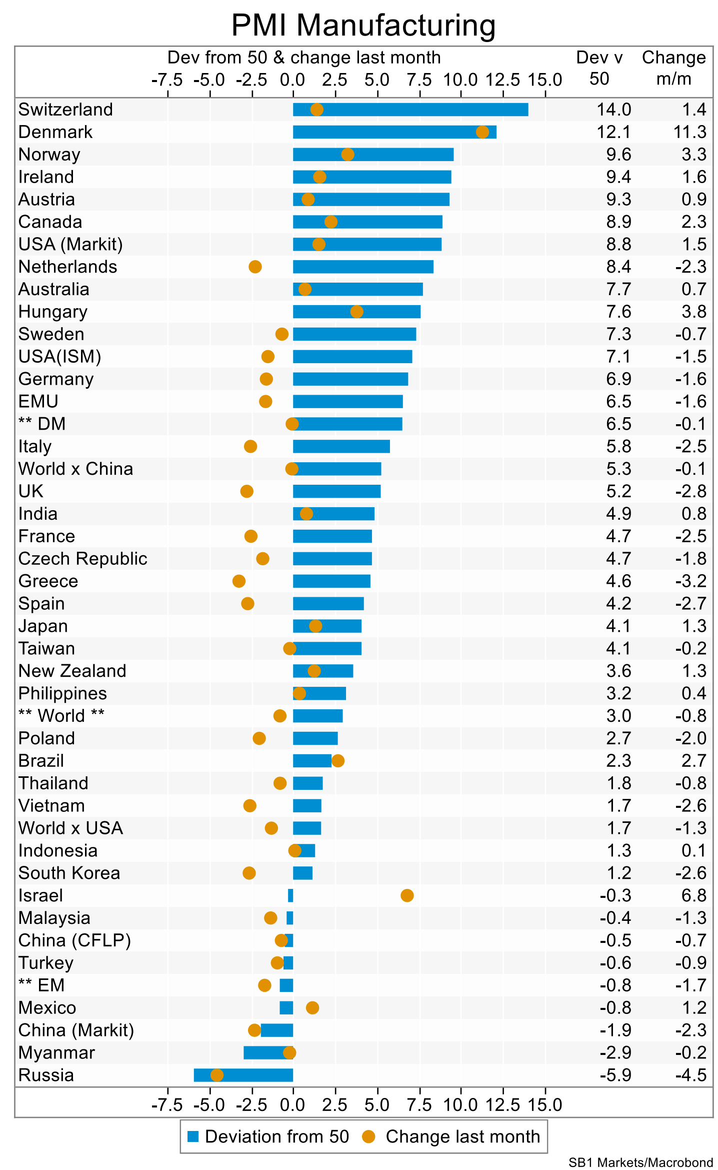




Manufacturing headline PMI down 0.8 p to 53.0, well below our expectations

9 of 43 surveys below the 50 line. Europe + ISM at the top. Russia at the bottom (already..)



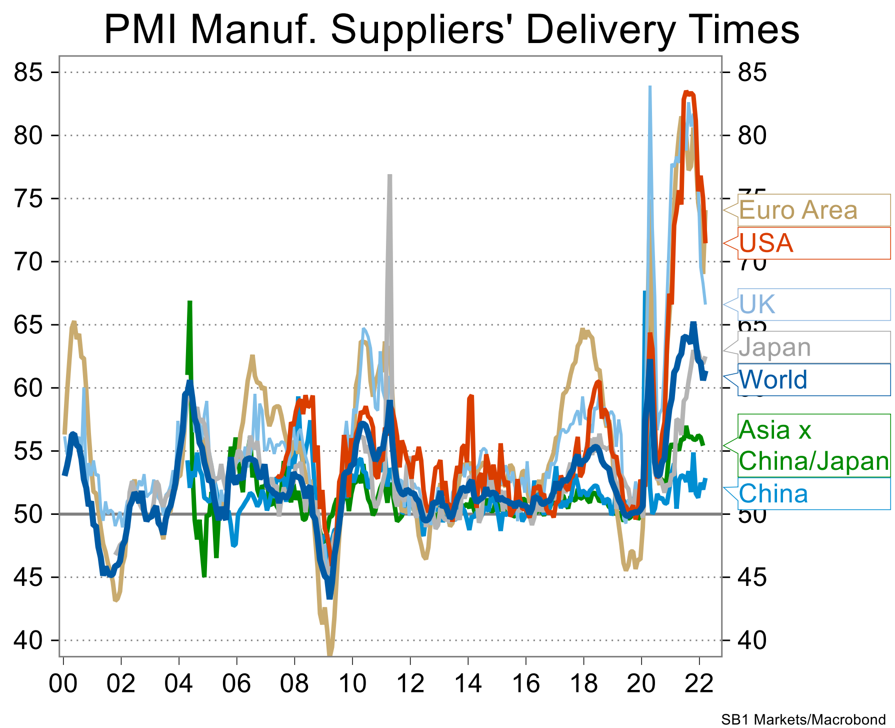


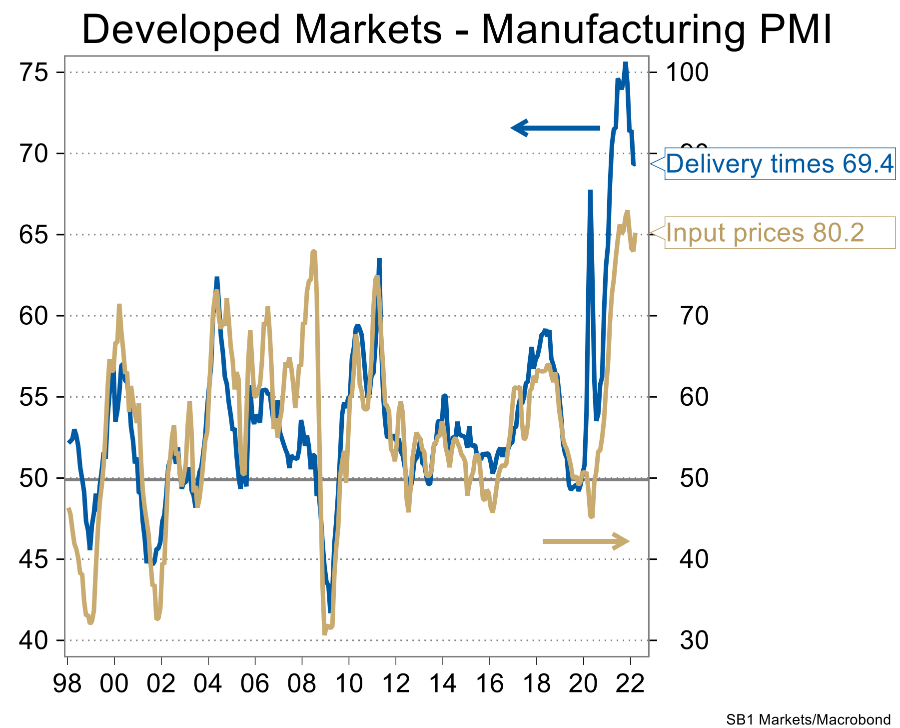
	Dev v 50	Change m/m
Switzerland	14.0	1.4
Denmark	12.1	11.3
Norway	9.6	3.3
Ireland	9.4	1.6
Austria	9.3	0.9
Canada	8.9	2.3
USA (Markit)	8.8	1.5
Netherlands	8.4	-2.3
Australia	7.7	0.7
Hungary	7.6	3.8
Sweden	7.3	-0.7
USA(ISM)	7.1	-1.5
Germany	6.9	-1.6
EMU	6.5	-1.6
** DM	6.5	-0.1
Italy	5.8	-2.5
World x China	5.3	-0.1
UK	5.2	-2.8
India	4.9	0.8
France	4.7	-2.5
Czech Republic	4.7	-1.8
Greece	4.6	-3.2
Spain	4.2	-2.7
Japan	4.1	1.3
Taiwan	4.1	-0.2
New Zealand	3.6	1.3
Philippines	3.2	0.4
** World **	3.0	-0.8
Poland	2.7	-2.0
Brazil	2.3	2.7
Thailand	1.8	-0.8
Vietnam	1.7	-2.6
World x USA	1.7	-1.3
Indonesia	1.3	0.1
South Korea	1.2	-2.6
Israel	-0.3	6.8
Malaysia	-0.4	-1.3
China (CFLP)	-0.5	-0.7
Turkey	-0.6	-0.9
** EM	-0.8	-1.7
Mexico	-0.8	1.2
China (Markit)	-1.9	-2.3
Myanmar	-2.9	-0.2
Russia	-5.9	-4.5

- The **output index** fell 1.2 p to 51.0, far below our forecast, based on the preliminary indicis from the rich part of the world
  - » The PMI was revised down by 0.5 p vs the first estimate, signalling some slowing in the latter part of the month, some more 'war' impacts? The US index was revised upwards. DM in total was close to unch in March (down 0.1 p), and the level is strong, at 56.5
  - » 35% of countries/regions reported higher total PMIs last month, down from 60% in Feb
  - » **European countries** still dominate the top of the list
  - » China and other EMs in Asia surprised at the downside, and the EM avg fell 1.7 p to 50.8
  - » **Norway** reported a minor decline – and the level is well above average

Delivery times up in EMU (war etc?), but down in UK, US

Still not any serious supply chain challenges in Emerging Markets

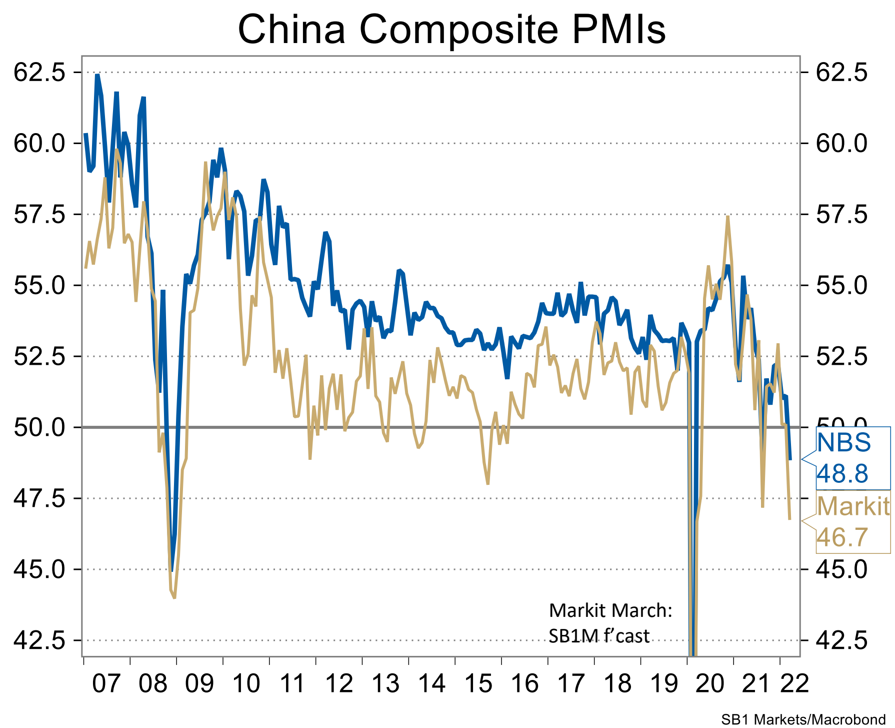


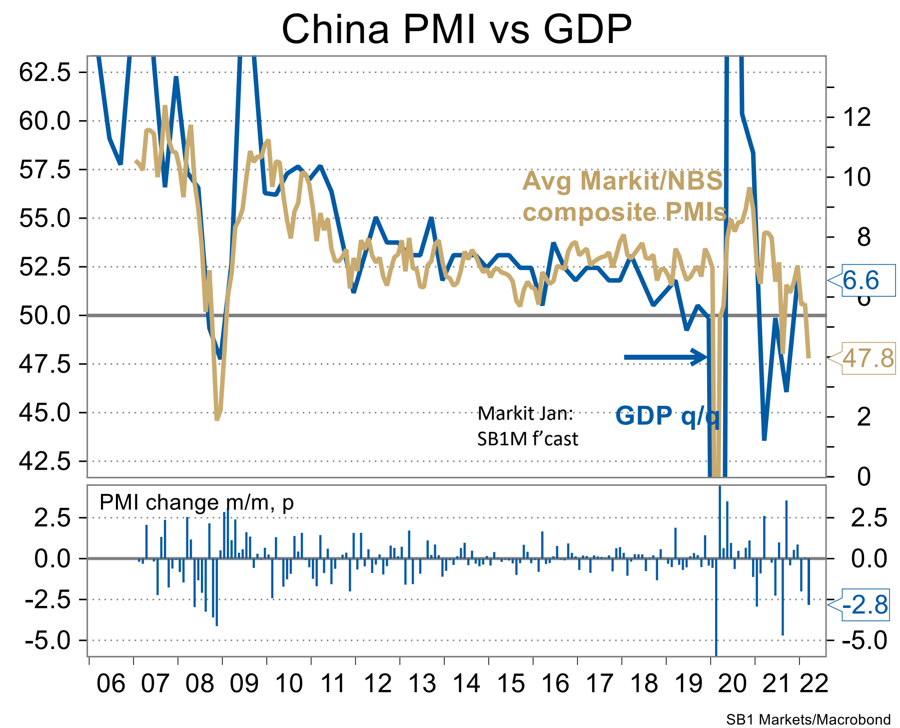


- The unprecedented increase in delivery times index in the rich part of the world ended in October (it was almost entirely rich man's problem). It remains at a high level and formally signals a continued rapid rise in delivery times – just a tad slower than at the peak
  - » However, this index has never been significantly below 50, and delivery times can impossibly not always have been increasing. Still, the current print is far above any reasonable 'real' 50-line (which would have been around 53 vs the current 62.5 level and 71 in the rich part of the world), and signalling a further very rapid increase in delivery times.
  - » We suspect many respondents rather than reporting if delivery times are increasing or decreasing (which they are asked to do), report if delivery times are 'long' or 'short'. If so, delivery times are now declining

China is struggling again, we hope due to the corona virus

The NBS composite survey sharply down, and most likely Markit's too

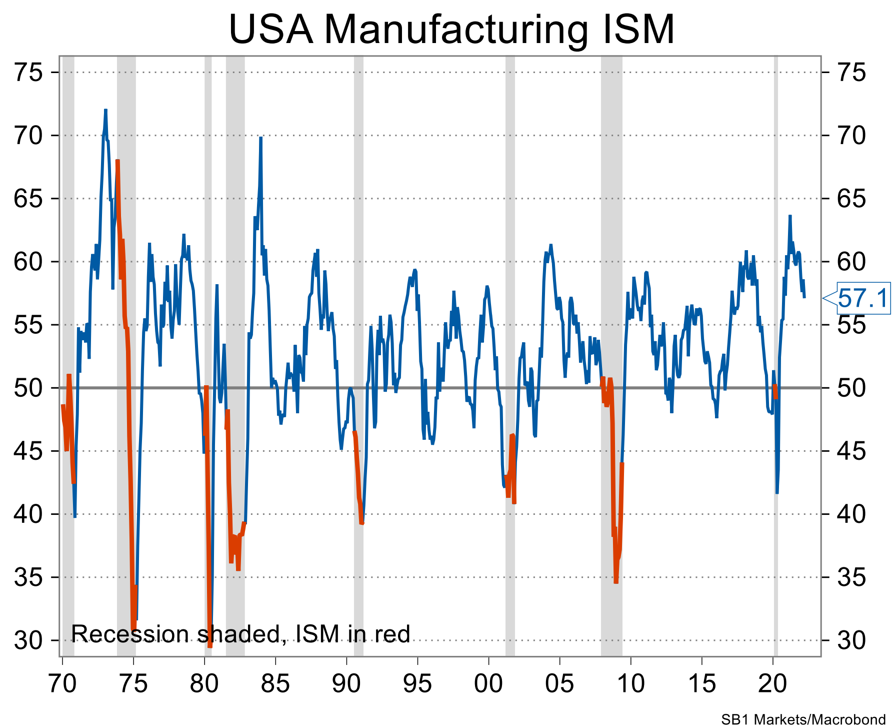


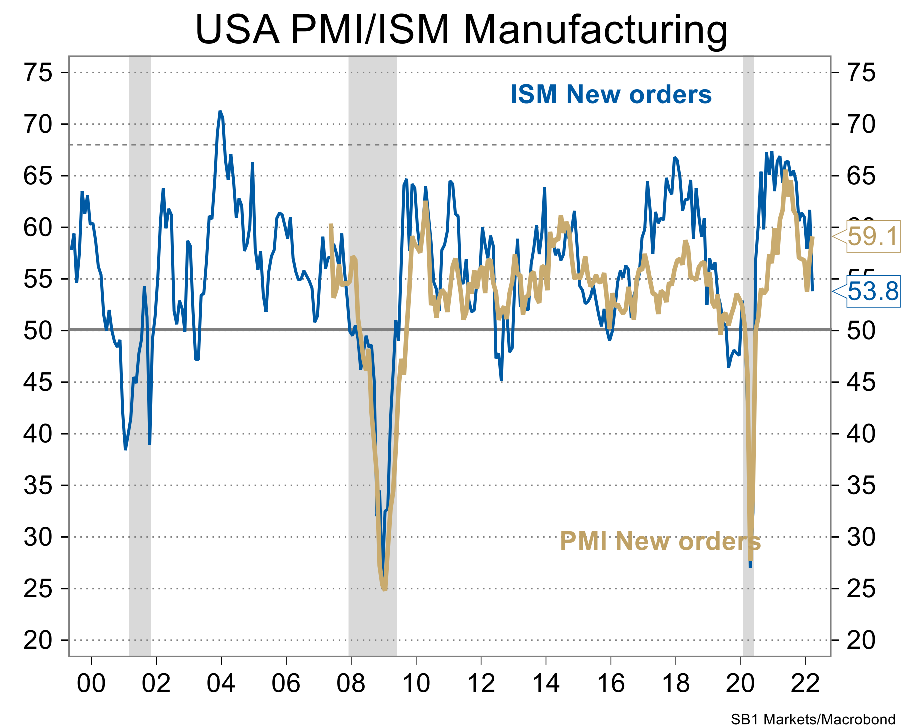


- The **CFLP/NBS composite PMI** fell by 2.3 p to 48.8, the lowest level since the start of the pandemic
- **Markit's composite PMI** very likely fell as well, also to the lowest level in 2 years. The manufacturing component was report straight down, and in the NBS survey, services fell sharply.
- **The average of the two PMI** data sets (with our estimate for Markit's index) is down 2.9 p to 47.8
- **What happened?** China's corona strategi has more or less failed. The Omicron variant is very contagious, and vaccines to not work well (and too few are vaccinated). The lockdowns will hurt the economy for a while – but probably not for too long as foreign vaccines may be taken into use
- **The construction sector** is not reporting a backlash – not in March either

Manufacturing ISM is heading down, still at high level

The total index fell 1.5 p to 57.1, expected up to 59. The index is the lowest since Sep-20

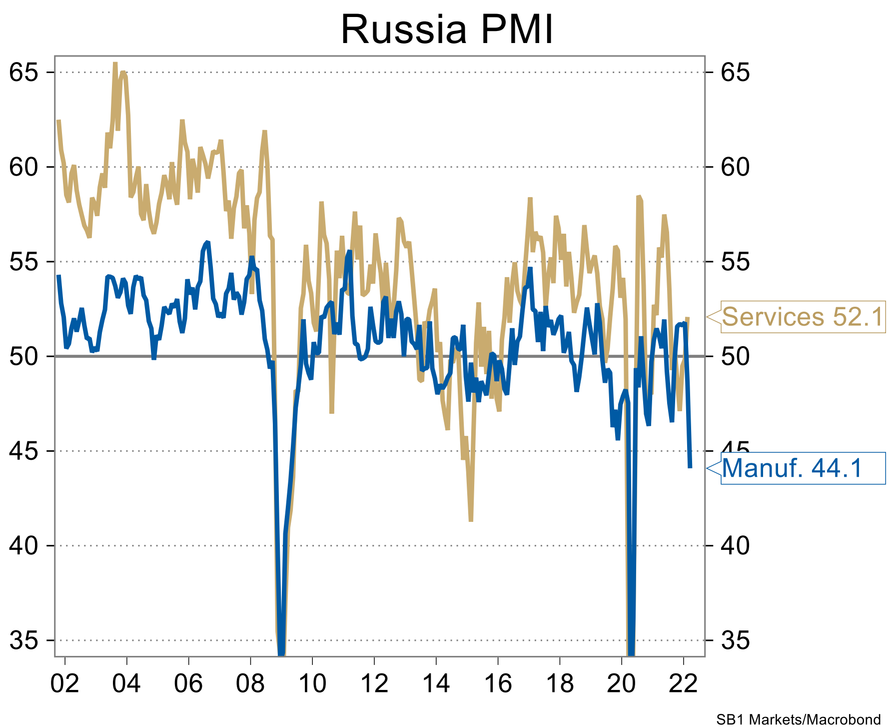




- The **ISM manufacturing index is trending down but the level remains far above average levels**
- Last month, 15 of 18 manufacturing sectors reported growth (16 the prev. month), 2 sectors reported a decline (wood products, petroleum), up from 1
    - » The **new orders** index fell sharply to 53.8 from 61.7 in Feb
- 43 commodities were up in **price** (from 33, at the peak 56 commodities). Just steel prices fell (from 7 types of materials in Feb)
- 24 commodities were reported in **short supply,** down from 11 (but still below the peak at 50 commodities a few months ago)
- **In their comments**, companies report more supply chain challenges, some referring to Russian/Ukrainian war

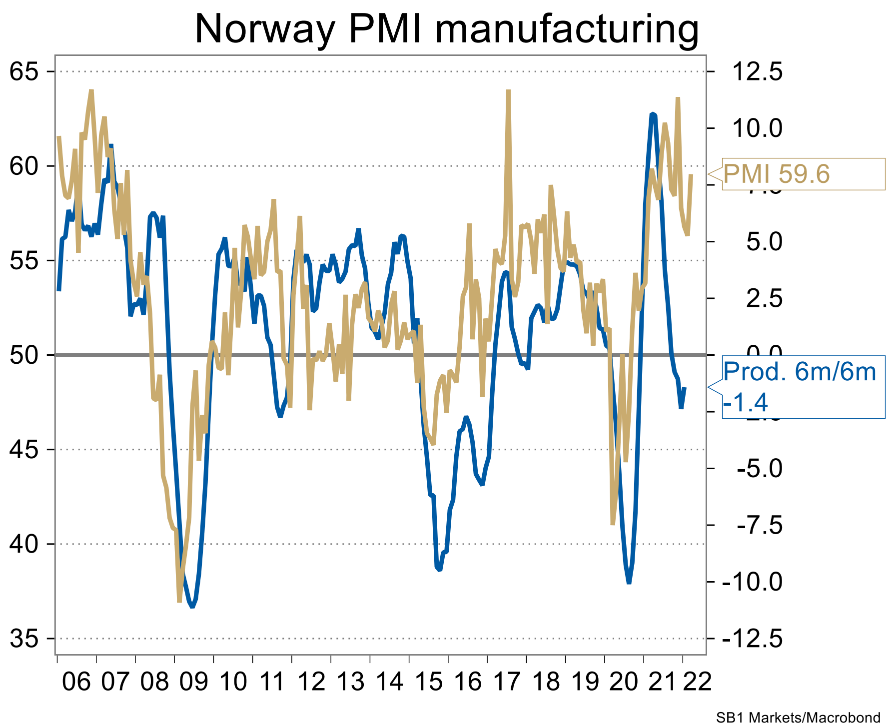
Suddenly: the largest decline, to the lowest level of all in March

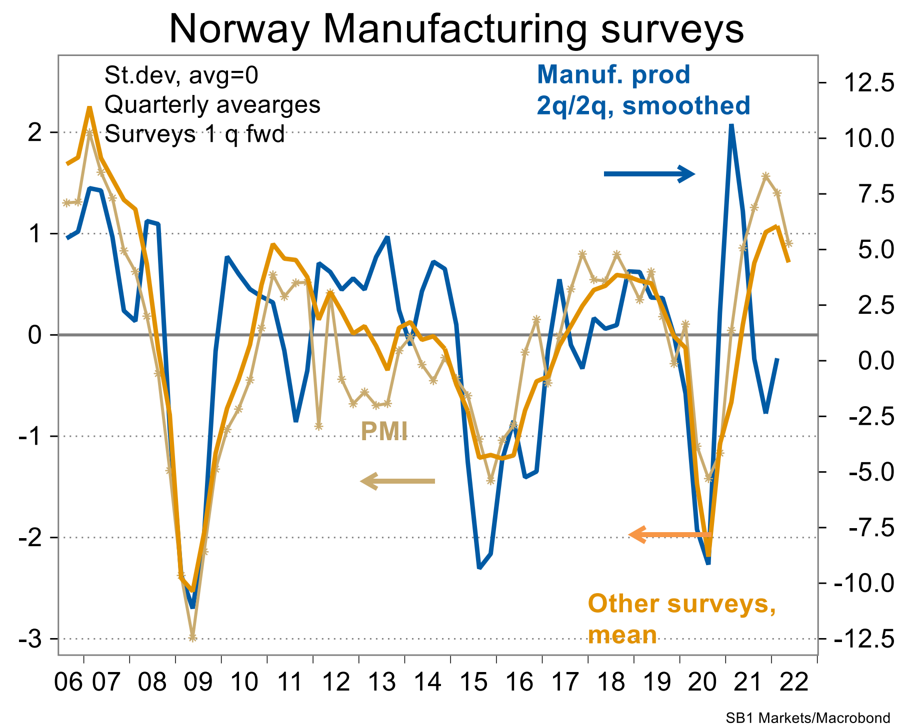
The index fell 4.5 p to 44.1, the weakest PMI in March. Services have not yet reported



The manufacturing PMI up 3.3 p to 59.6 in March, better than expected

Delivery times rose again but order & production sub-indices contributed more to the lift

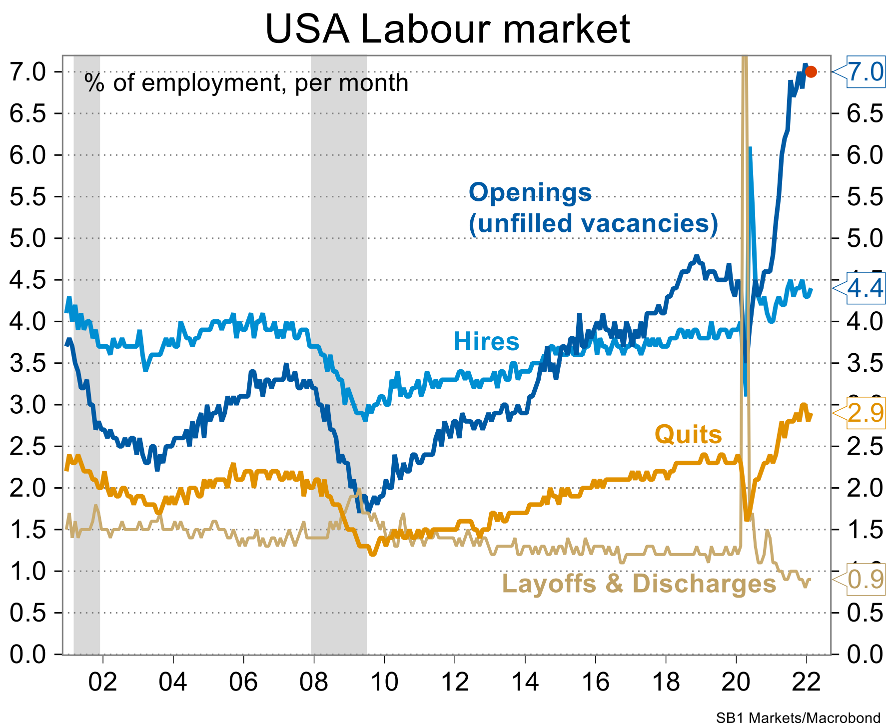




- The **manufacturing PMI index** rose after 3 months on the way down – and the 3 m average is still on the way down
- Other **manufacturing surveys** are marginally down too
- Even if surveys have been reporting growth, **actual production** has fallen slightly since last April

The vacancy rate remains at a record high level

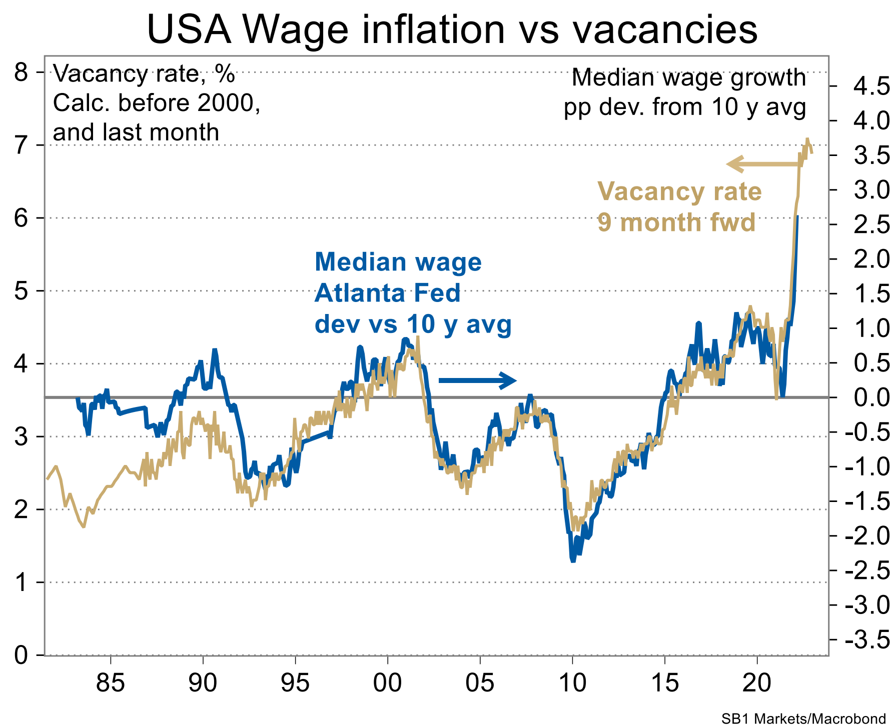
Hiring is brisk – many are quitting, and 'nobody' are laid off

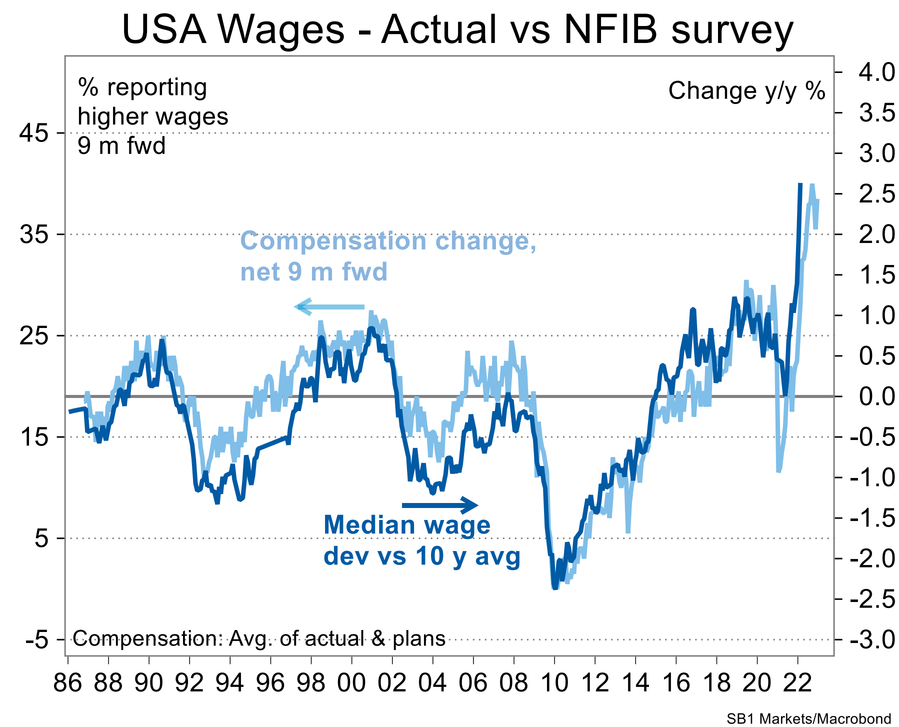


- The number of **unfilled vacancies** was unch at 11.3 mill in February, expected down to 11.0 mill. The rate was unch at 7.0%, down 0.1 pp from the Dec peak
  - » The highest print ever before the pandemic was 4.7%, and the rate was 4.5% just before the pandemic hit
  - » **The SMBs (NFIB survey)** reported a marginal decrease in the share companies that are able to fill open positions in March, but the level remains close to ATH. These two series are very closely correlated – and both have been at levels never seen before since early last year
- **New hires rose 0.2 mill to** was unchanged at 6.7 mill persons, equalling 4.3% of the employment level, an unusual high level
- The number of **voluntary quits** increased by 0.1 mill to 4.4 mill, or up 0.1 pp to 2.9% of the no. of employed, close to the peak at 2.9%. As with unfilled vacancies, quits are closely correlated to wage inflation – for obvious reasons
- **Layoffs** were unchanged at 0.9%, a very low level
- **In sum:** The report data confirm an extreme tight labour market

There seems to be a connection here??

The correlation between the vacancy rate and changes in median wage growth is <u>extremely</u> tight





- Our ‘Phillips curve’ signal a further increase in wage inflation the coming quarters, as the vacancy leads changes in wage inflation quite consistently by 3 quarters
- In addition, the correlation changes compensation plans (see previous page) and future actual wage growth is not that bad (again with a 3 quarter lead). These compensations plans <u>do not</u> suggest a further wage growth acceleration. However

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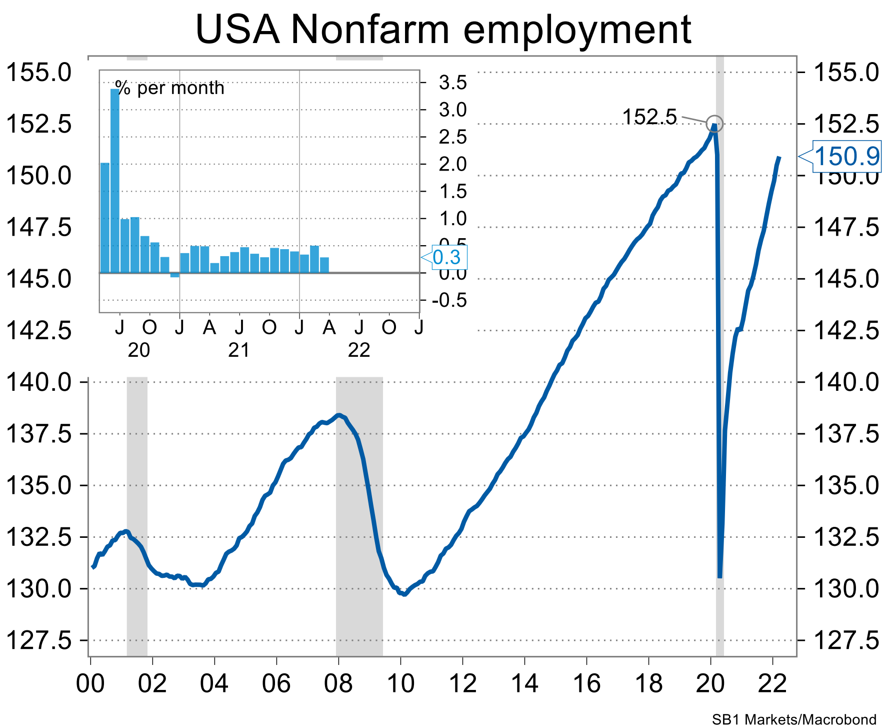
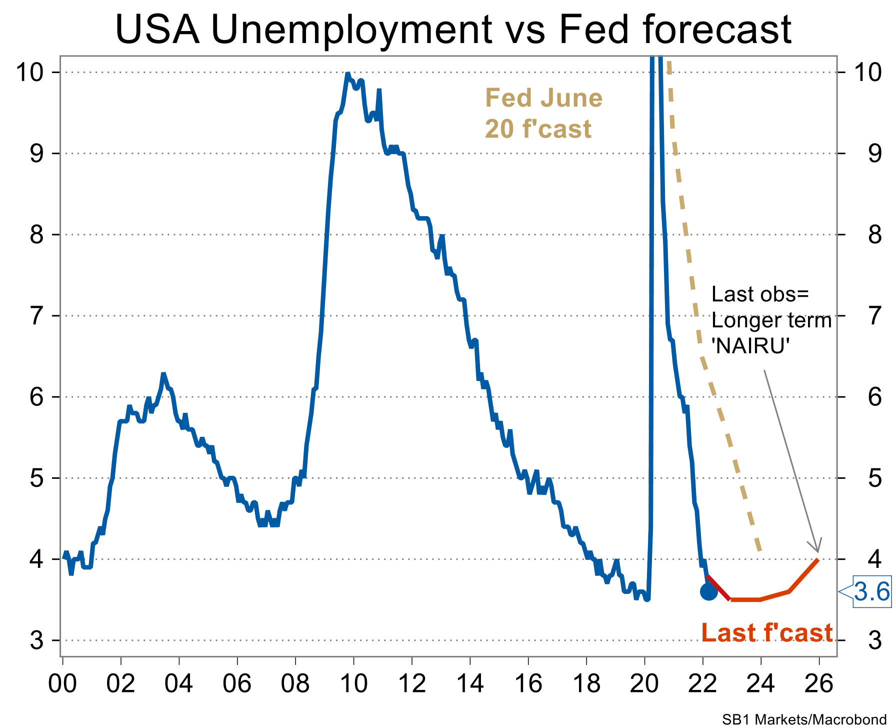
Growth in payrolls is slowly slowing, unemployment is falling rapidly

Participation on the way up but too slow. Wage inflation is too high to yield 2% CPI inflation over time

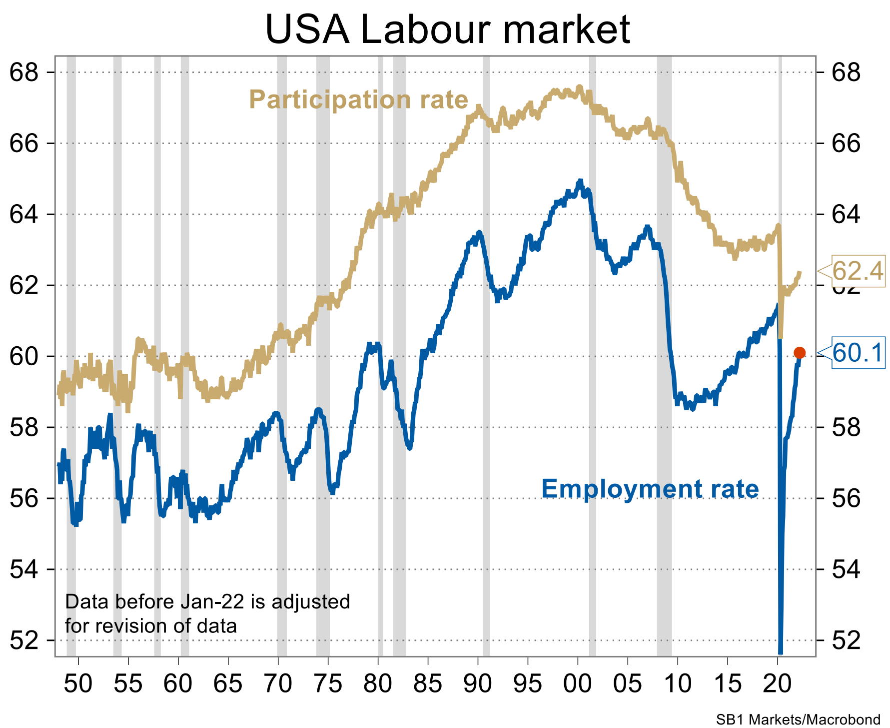


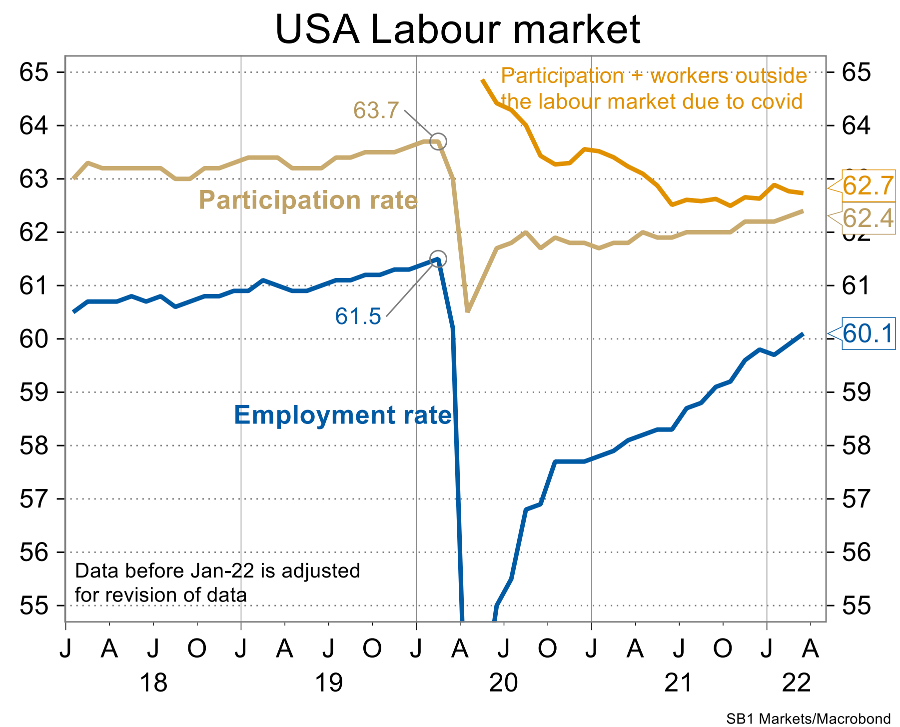


- **Nonfarm payrolls** rose by 431' in March, somewhat below the expected 490' but the past 2 months were revised up by 95'. Payrolls are still down 1.6 mill vs. Feb-20 or by 1.0%
- **The participation rate** rose 0.1 pp to 62.4%, highest level since before the pandemic. The trend is up too, a positive sign – the supply side is finally slowly responding to the strong demand for labour. The **employment rate** rose by 0.2%. The participation rate is
- **The unemployment rate** fell 0.2 p to 3.6%, 0.1 pp lower than expected. The rate is now just 0.1 pp above Fed's estimate end of '22 estimate – and 0.4 pp below Fed's estimate of the long term NAIRU. In February, the unfilled vacancies equalled 6.6% of the labour force
- **The average wage** rose 0.4%, as expected but Feb was revised up by 0.1 pp. Over the past 3 months wage inflation has slowed marginally but not significant. The underlying trend since last April is close to 6%, up from 3¼ before the pandemic – and not compatible with 2% CPI inflation over time
- **Maximum employment:** Even if the participation now may be trending slowly up, the supply side is obviously the bottleneck at the labour market. For the time being, maximum employment is reached

The participation rate up another 0.1 pp in March – and the trend is up!

... and the rate is the highest since before the pandemic. However, employment is climbing 3 x faster

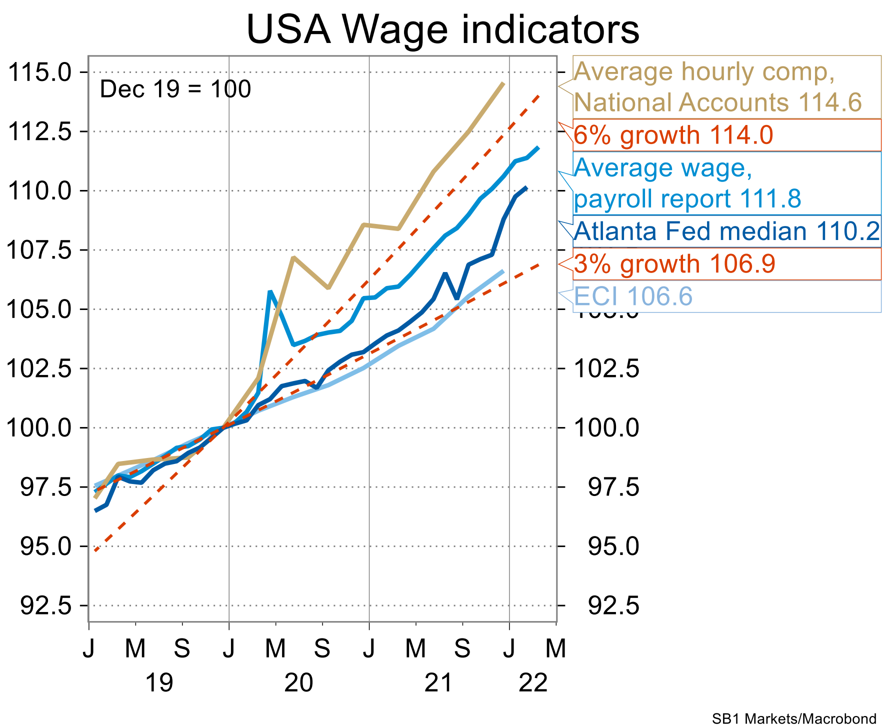


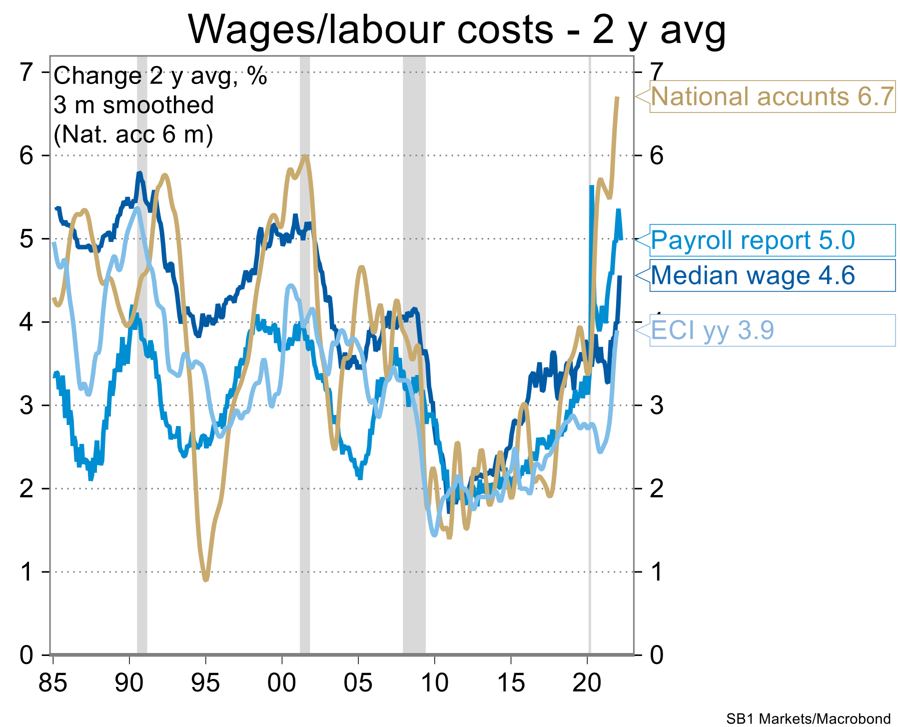


- **The labour force participation rate** gained 0.1 pp to 62.4% (of the working age population, 16 y +). The trend is slightly positive but not impressive given the increase in the employment rate (and the decline in the early part of the pandemic)
  - » The participation rate is down 1.3 pp (vs the working age population) vs the pre pandemic level, equalling 2.0% or 3.4 mill persons
  - » In March, 0.9 mill persons responded that they did not search for work (and thus were excluded from the work force) for Covid-19 related reasons, down from 1.2 mill in Feb (and 1.8 mill in Jan, 3.7 mill one year ago). Of the 0.9 mill, just 0.3 mill say they want a job. The reduction in no. of 'outsiders' has not led to an equivalent increase in the labour force. The 'covid outsider rate' has fallen by 1.1 pp (to just 0.3%) the past 12 months, while the participation rate has increased just 0.6 pp. This indicates that the reservoir of available labour supply is very limited
- **The employment rate** rose 0.2 pp to 60.1%. LFS employment rose by 736'. Over time, the payrolls stats and the LFS report the same growth rates, but they may differ substantially from month to month. The employment rate is down 1.4 pp vs. Feb 20, equalling 2.3% or 3.7 mill persons

Wage indicators agree: Growth has accelerated, to substantially > the 10y avg

… which yielded 2% inflation (or more). Productivity may have accelerated, but just marginally

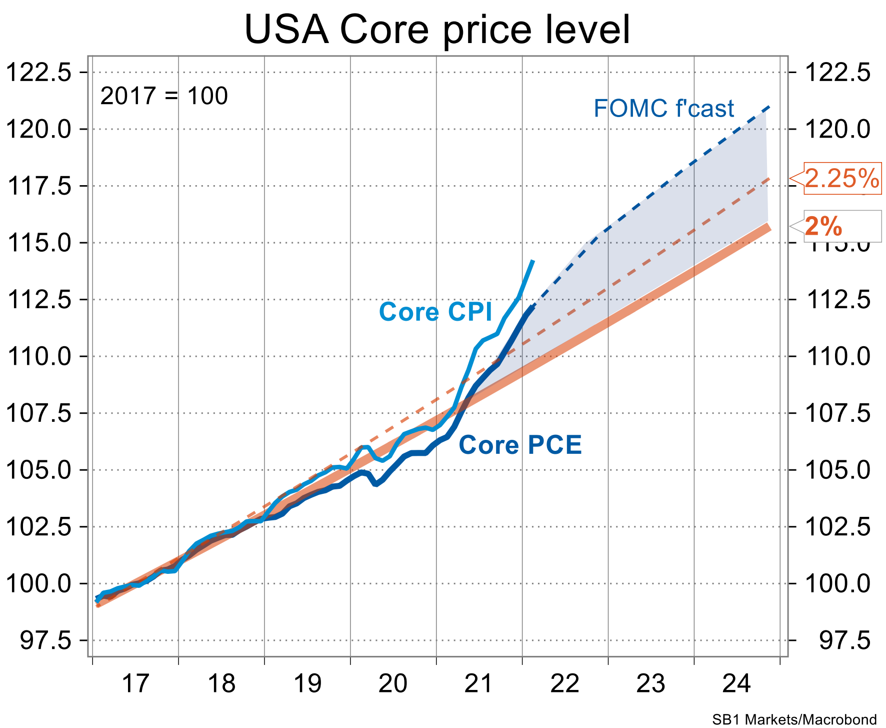


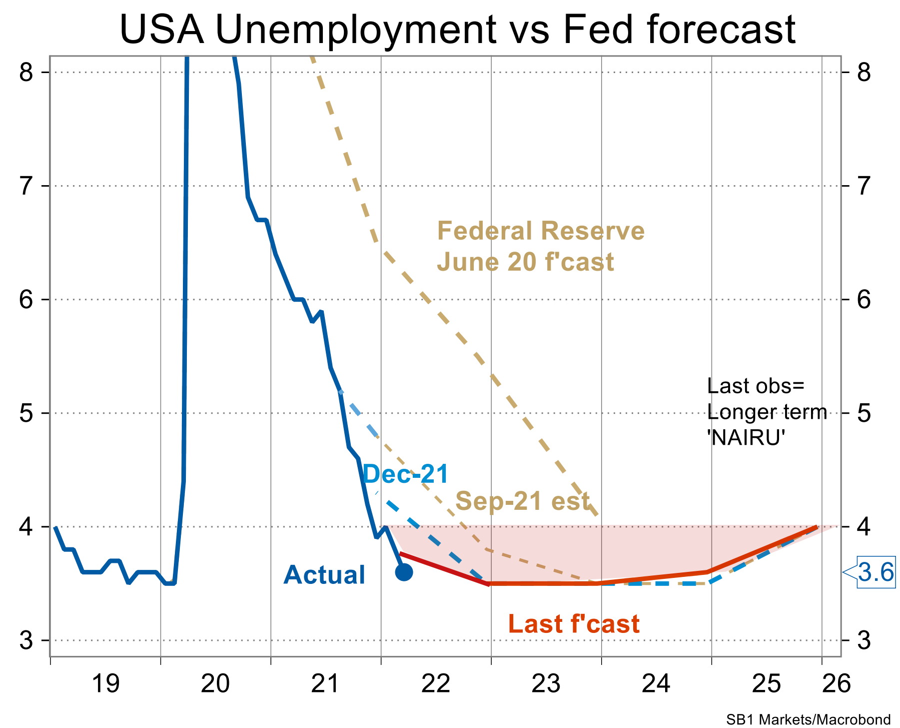


- **All wage indicators** are reporting faster wage growth, and all reporting wage growth well above the average recent years, also if we apply a 2-year average growth rate, to exclude the impact of changes during the first part of the pandemic (chart to the right)
- Growth in wage/earnings/compensation indicators are up 1.5 – 3.5 pp vs the their respective 10 y averages. There is an obvious risk that wage inflation will accelerate further (check the following pages) – probably until the next recession hits as the labour market is extremely tight
- Over the past 10 years, inflation has been close to 2%, and well above 2% if calculated over a shorter period
- It will be a 'challenge' to keep inflation at 2% if wage inflation remains at 5- 6 %. Productivity growth has not accelerated by much. Profit margins may take a beating – and they very likely will – but probably not sufficient to bring inflation down.

Fed's challenge: Neither the inflation target nor the employment target is met

Both inflation and employment are at too high levels, and are expected to remain too high

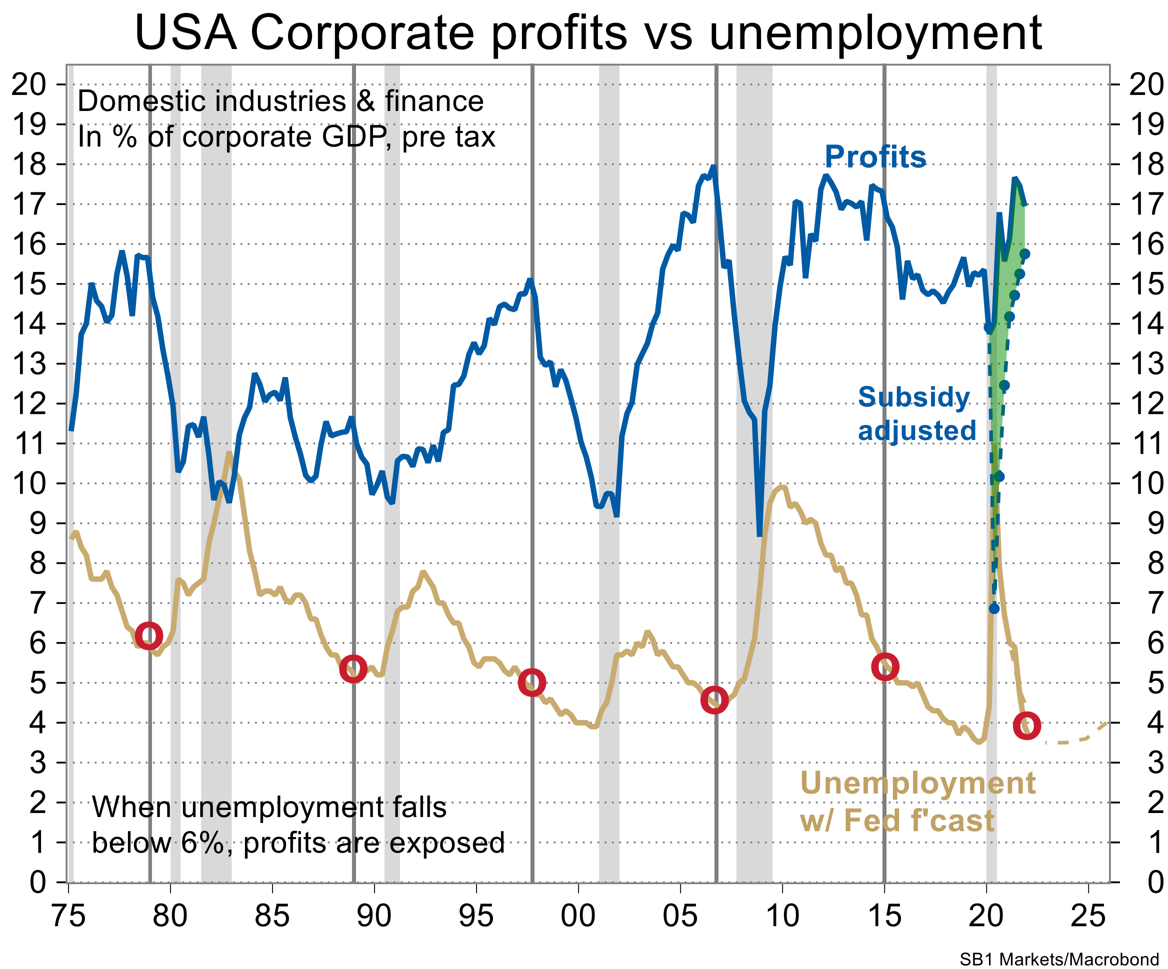




- The price level is expected to be 4.6% higher than implied by the 2%-over-time price-level path, 'promised' by the Federal Reserve
- At the same time, unemployment is expected to remain below the 4% assumed long term equilibrium rate the coming 3 years, at 3.5% from the end of 2022. The current unemployment rate is 3.6%
- To prevent the unemployment rate from falling further, GDP growth will have to slow sharply, NOW. A 0.25% signal rate (or 0.75% from May) may be sufficient to dampen growth, say to well below 2% (check next page). But probably not

The profit share has peaked?

The bottom line has always been hurt when the labour market becomes too tight

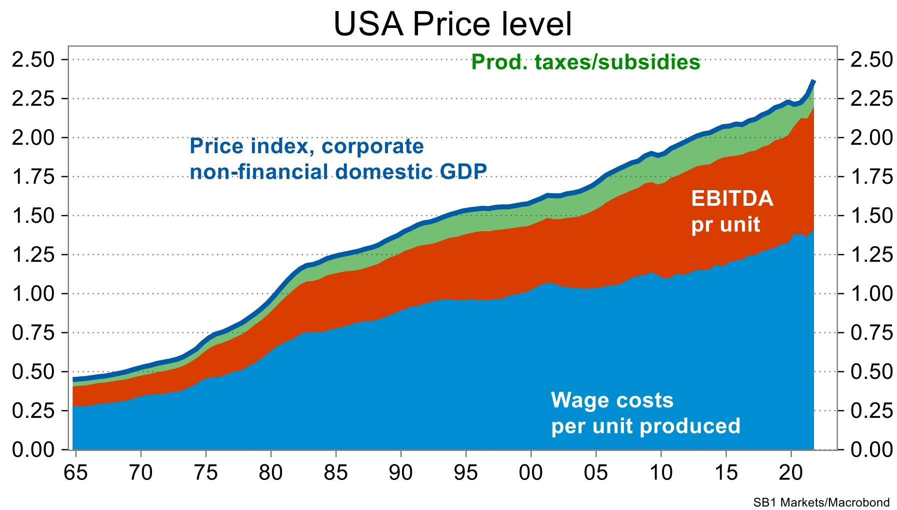


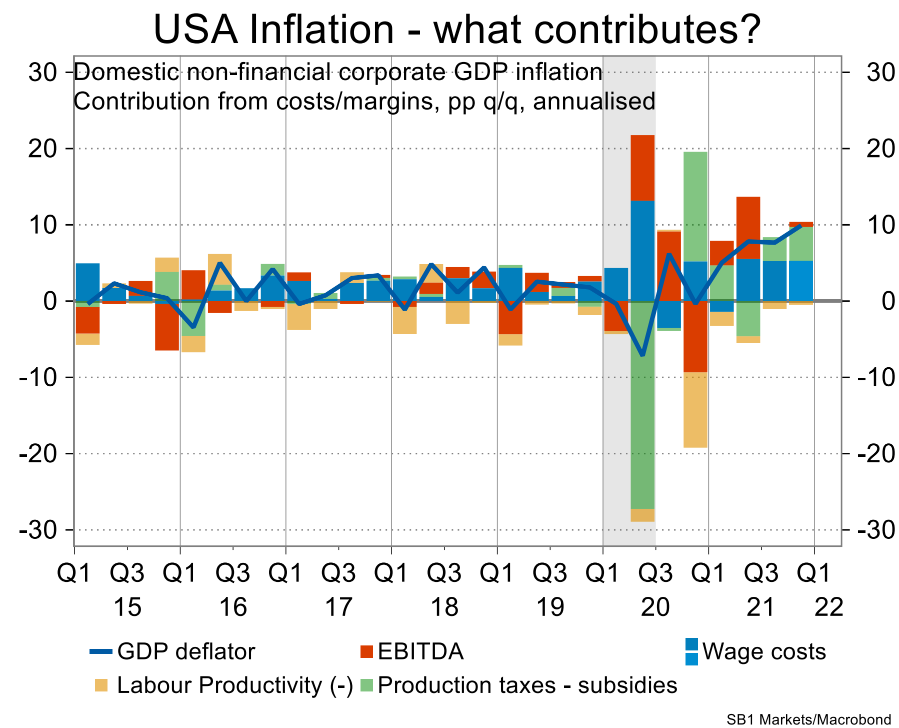
- Prices are increasing at an incredible pace but so are wage costs, and government support is on the way down
- When **unemployment** falls below 5% – 6% companies have normally been struggling to keep their share of value added – as their employees are getting the upper hand
  - » Unemployment is now at 3.6%, and it is falling rapidly as other indicators (especially vacancies) suggest that the labour market is even tighter than the 3.6% rate signals
- In addition, it is reasonable to expect the production taxes-subsidies to normalise the coming quarters.
  - » The impact is shown as the green area at the chart above
- <u>Thus, it is quite likely that the profit share is headed downwards from here</u>

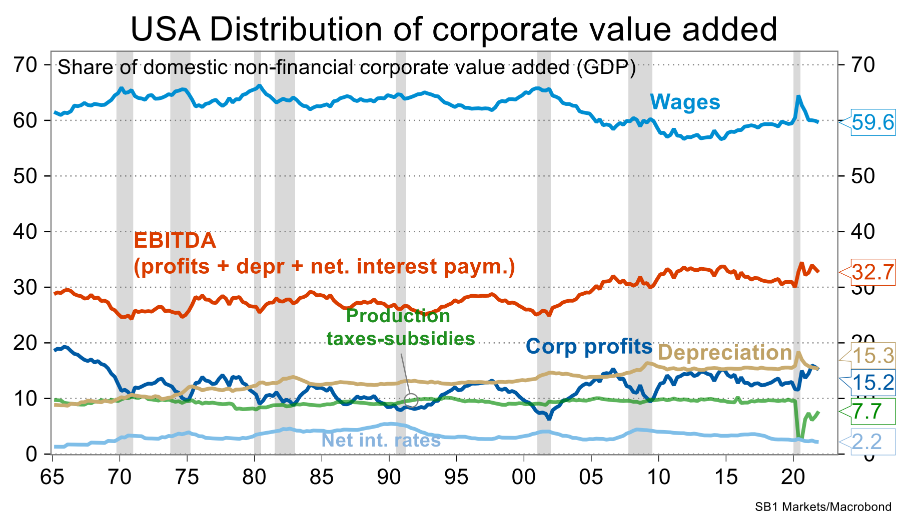
All data are not yet published, and the Q3 numbers is just our estimate

Why are prices on the way up? Less subsidies, and higher wages

Since the start of the pandemic, higher margins (profits) have been the main culprit



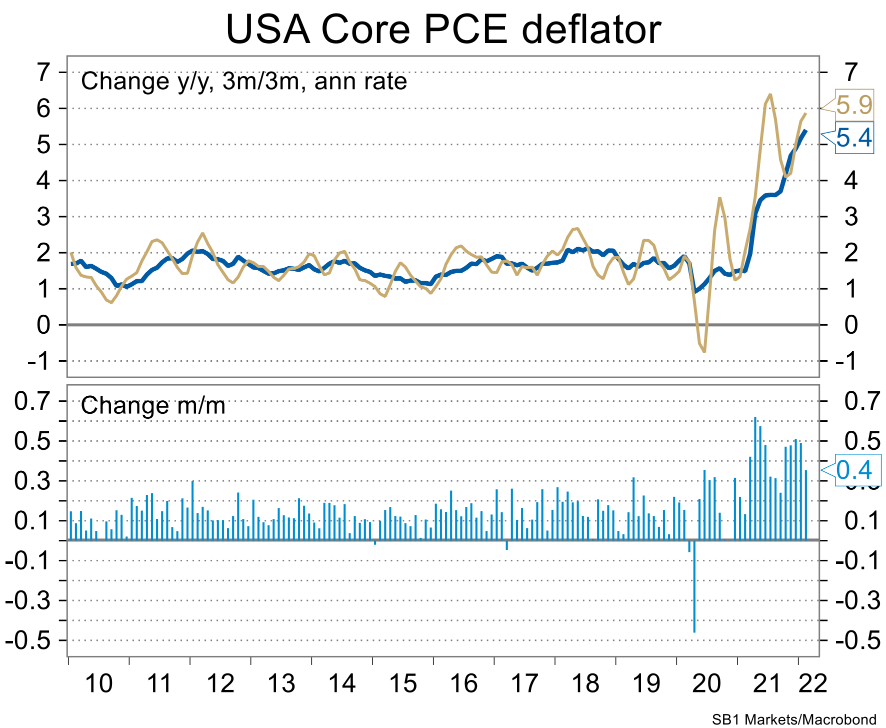


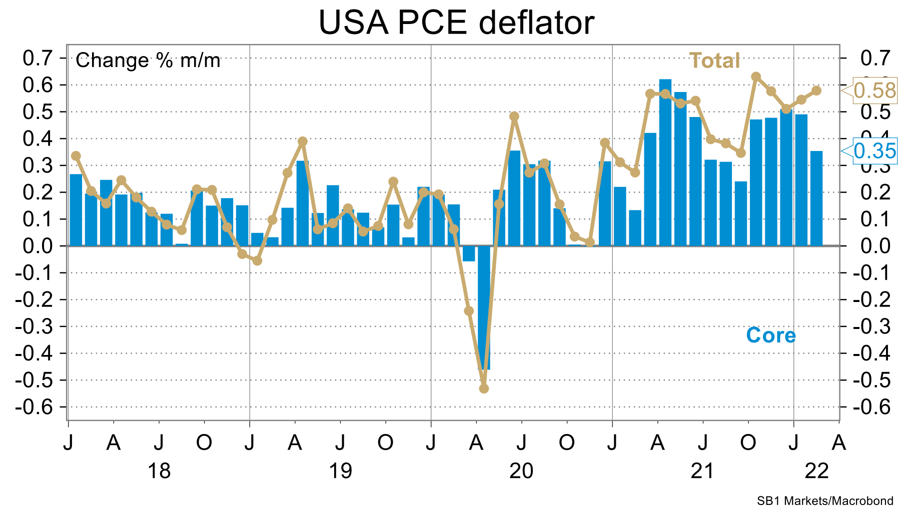


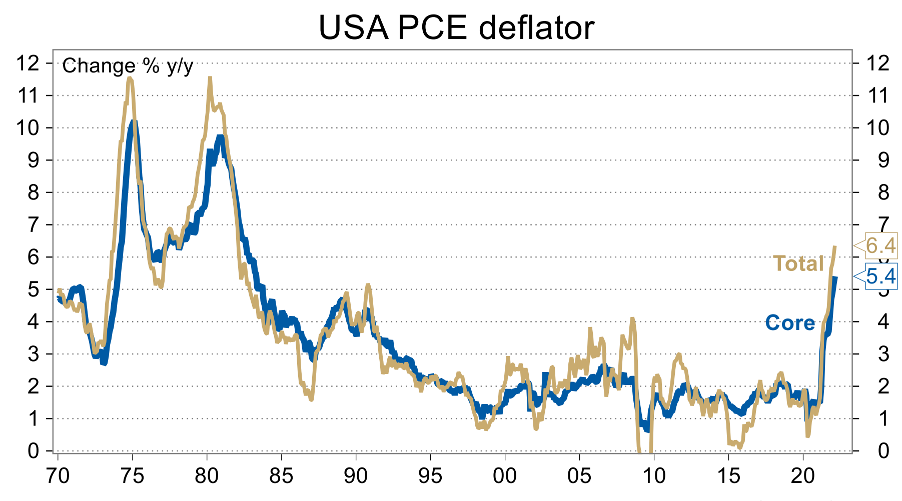
- 10% price inflation is probably not sustainable…
- So, something will have to yield, BIG TIME
- Profits are VERY exposed the coming quarters. After the Federal Reserve has hiked rates sufficient to dampen demand significantly profits are squeezed (as always before recessions!)
- Then, unemployment will start to increase, and wage inflation will come down too
- Then, profits can start increasing again, from a substantial lower level than today. As always

The core PCE consumption deflator slowed slightly in February

Still, the big picture is the opposite: Price inflation is way above Fed's target







- **The total PCE deflator** rose by 0.6% in Feb, as expected, and the annual rate accelerated 0.3 pp to 6.4%, the highest since 1982
- **The core PCE** rose by 0.4% m/m, also as expected. Measured y/y, the core gained 0.2 pp to 5.4% (expected 5.5%) - and has not been higher since 1983
  - » The 3m/3m rate is close to 6%
- **The price level** is far above Fed's 2% long term path target, and the FOMC members expect inflation to remain above until the end of 2024 – implying a price level that is 4.6% higher than 'promised' less than two years ago

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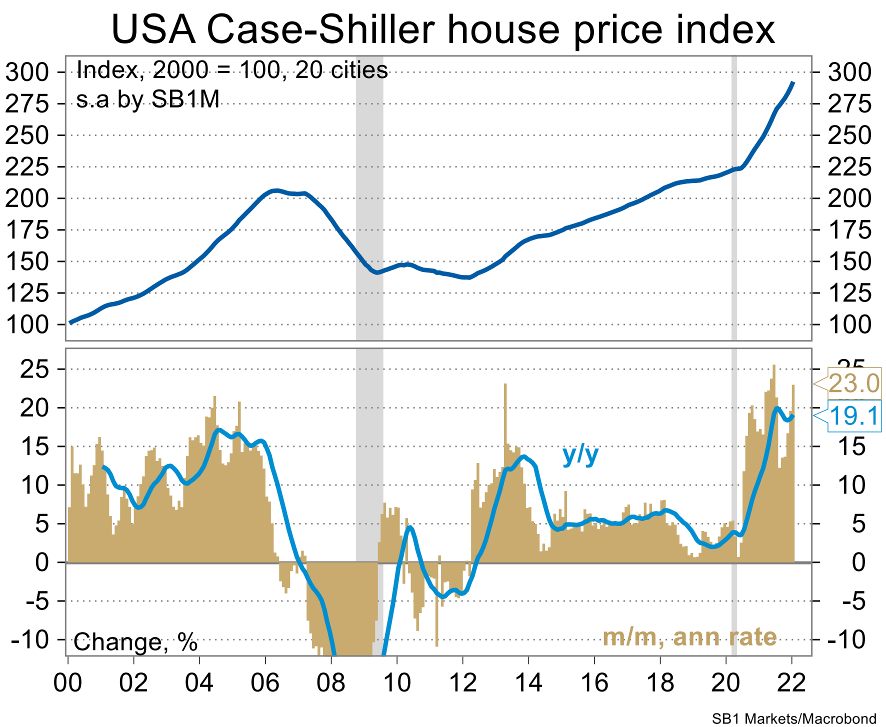
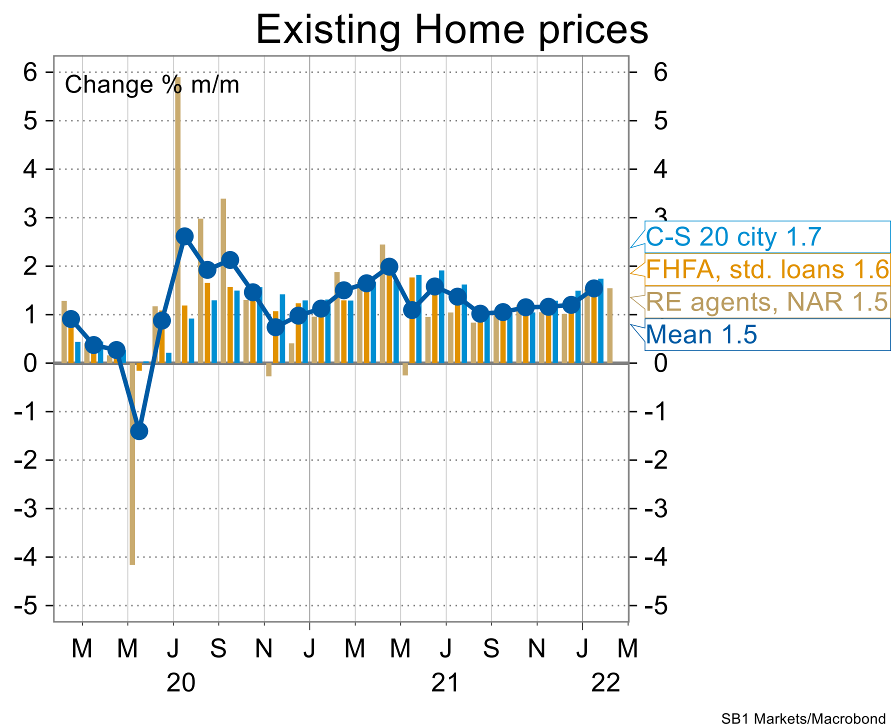
House prices inflation is accelerating again?! Prices up 1.7% m/m, 19.1% y/y

Which does NOT support the hypothesis that higher mortgage rates are starting to bite. But….

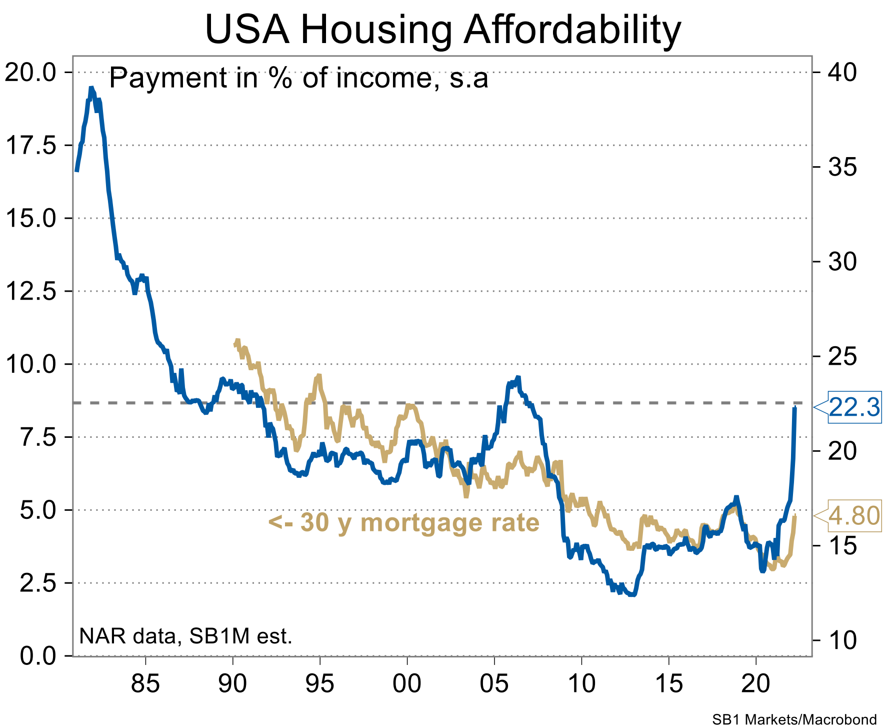


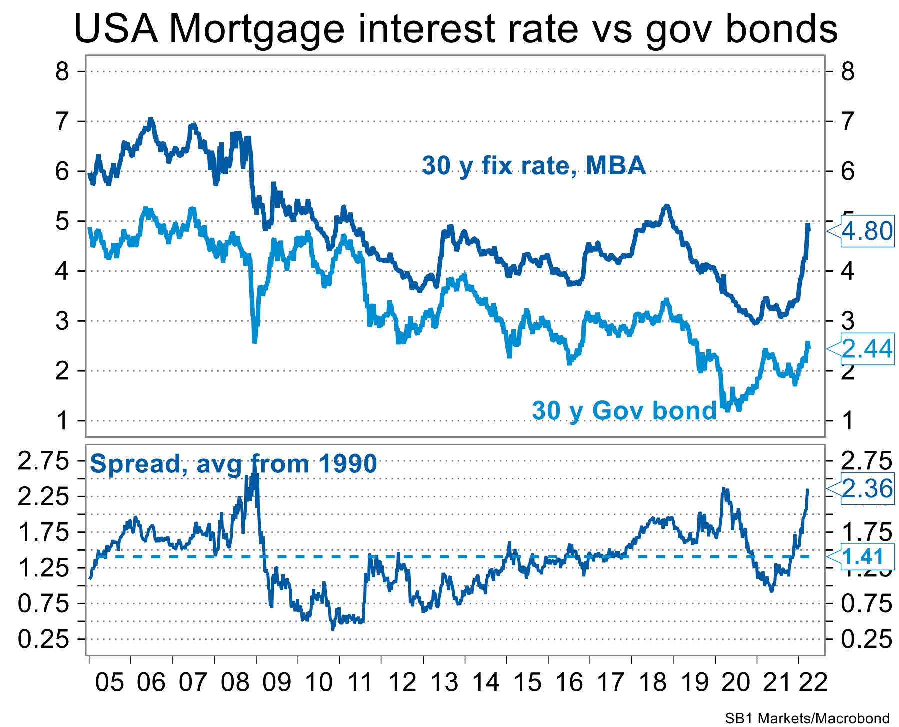


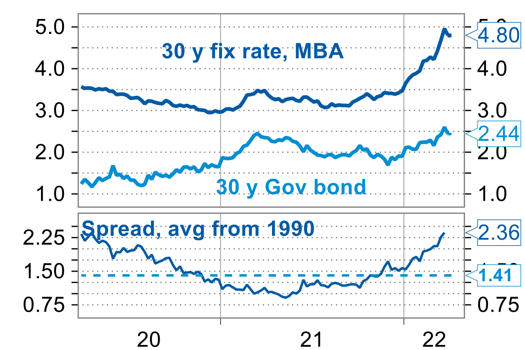
- **S&P's Case/Shiller's 20 cities** price index rose 1.7% m/m in Jan (Dec – Feb avg), expected 1.5%, equalling a 23% annualised pace. In last Oct, the rate was 0.9 m/m. The annual growth rate accelerated 0.5 pp to 19.1%, 0.5 pp higher than expected.
- **The FHFA** (Federal Housing Financing Agency) price index, which covers homes with loans guarantied by the government sponsored Fannie Mae or Freddie Mac ('Husbankene', has a countrywide coverage), rose 1.6% in Jan, and are up 18.1% y/y. The ATH annual rate before the pandemic surge was 11%, ahead of the housing crisis 15 years ago (chart next page)
- **Pending home sales** (transactions agreed, not yet necessarily executed) have declined 14% to February from November. The decline could be due to reduced demand due to the steep rise in mortgage rates. Last week's price stats do not confirm the slowdown story. **However, even if prices cover transactions closed in February, those deals were mostly agreed upon in January** (just as with the realtors strong Feb February price data) – and 'something might have happened in February and even more in March, when rates really shot up, and affordability has fallen to a lower level than since the bottom before the house market crashed in 2006

Prices are up 32% since before the pandemic, the mortgage rate is up 20%

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







- **The 30 y fixed mortgage rate** has climbed to 4.8% from 3.0% last summer, and from 4% in early 2020 (or by 20%)
  - » The mortgage rate has climbed MUCH faster than the 30 y Gov bond rate. The spread has widened to 244 bps from 91 at the bottom last spring and it is far above the 140 bps average – and among the highest in modern times
- The **Federal Reserve** has now probably not buying more mortgage backed bonds – and signals eagerness to reduce its holdings, which very likely explains the steep increase in the spread
  - » The central bank has funded most of the housing marked during the pandemic, at least until mortgage lending shot up through 2021

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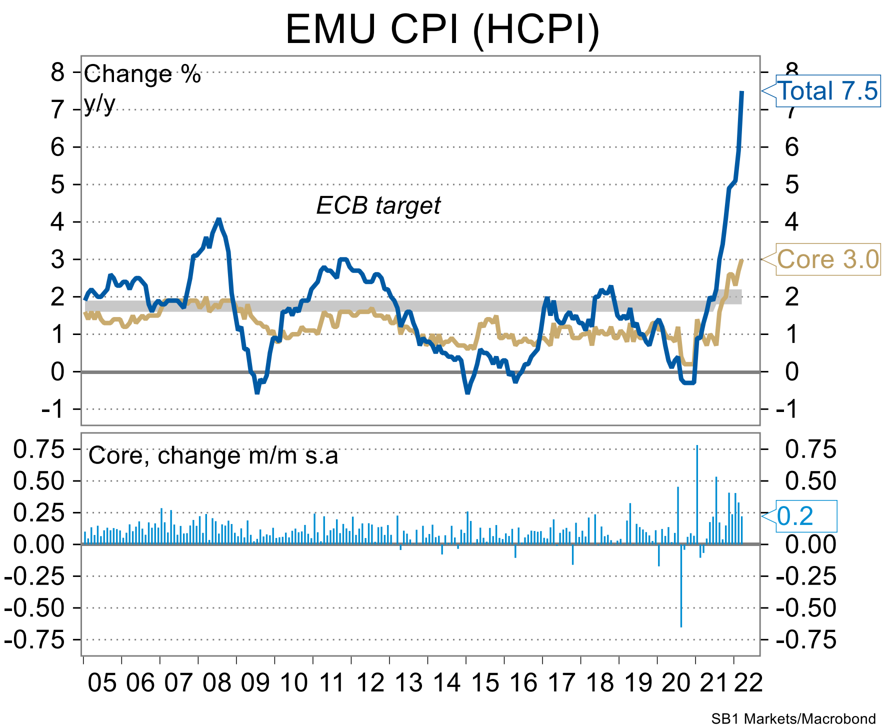
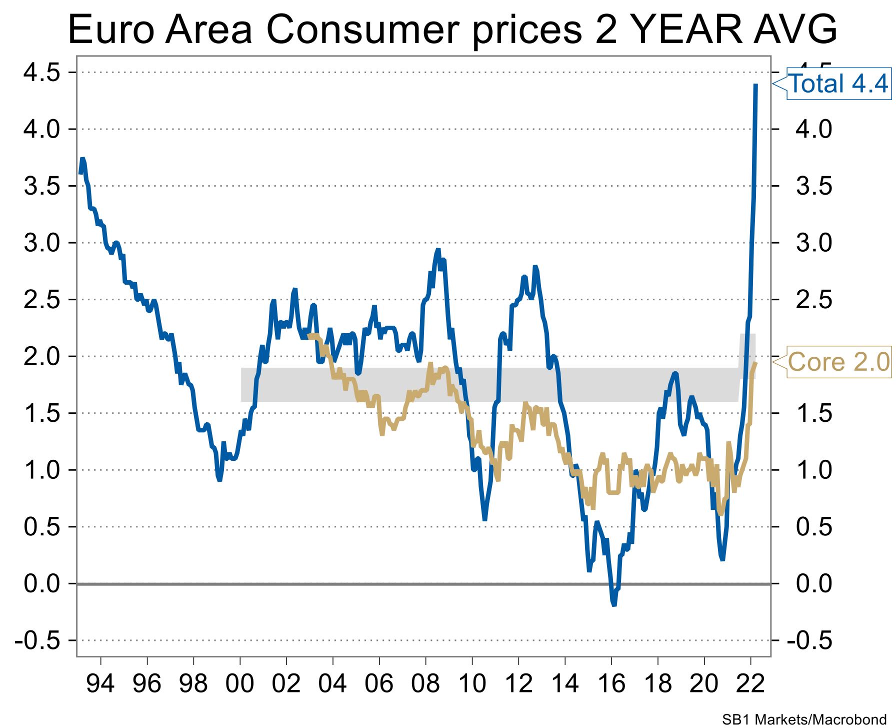
Inflation up to 7.5%, 0.8 pp above expectations. Because energy prices rose

Which should have not been that surprising? Core inflation up 0.3% m/m, 3.0% y/y, 0.1 less than exp.





- **The headline HICP** rose 1.8% m/m in March, pushing the annual rate up by 1.4 pp to 7.5%, 0.8 pp higher than expected (as Spanish and German CPIs had pre-warned before Eurostat released the data for the region at Friday). Energy prices rose 12% m/m, explaining most of the lift in headline rate. Food prices also contributed, but still rather limited
- **Core prices** rose 0.2% m/m, and the annual rate accelerated 0.3 pp to 3.0%, expected 3.1%. Over the past 2 years, the core is up 2.0%. However, underlying inflation the past 4 months is above 3% (annualised)
- Our CPI/energy model suggests that the lift in the HICP is entirely due to the increase in oil & gas prices. Based on future prices, the energy impact will peak in April – and then decline rapidly. If future prices will be delivered, this time
- **Wage inflation** is flat at 2.00%, but more unions are requesting compensation for the hike in consumer prices

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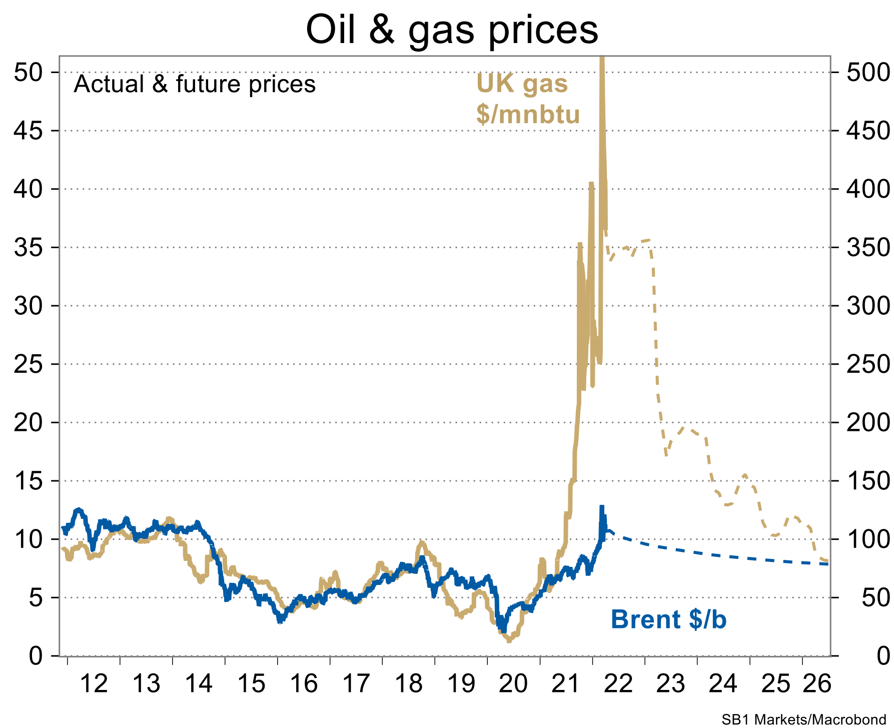
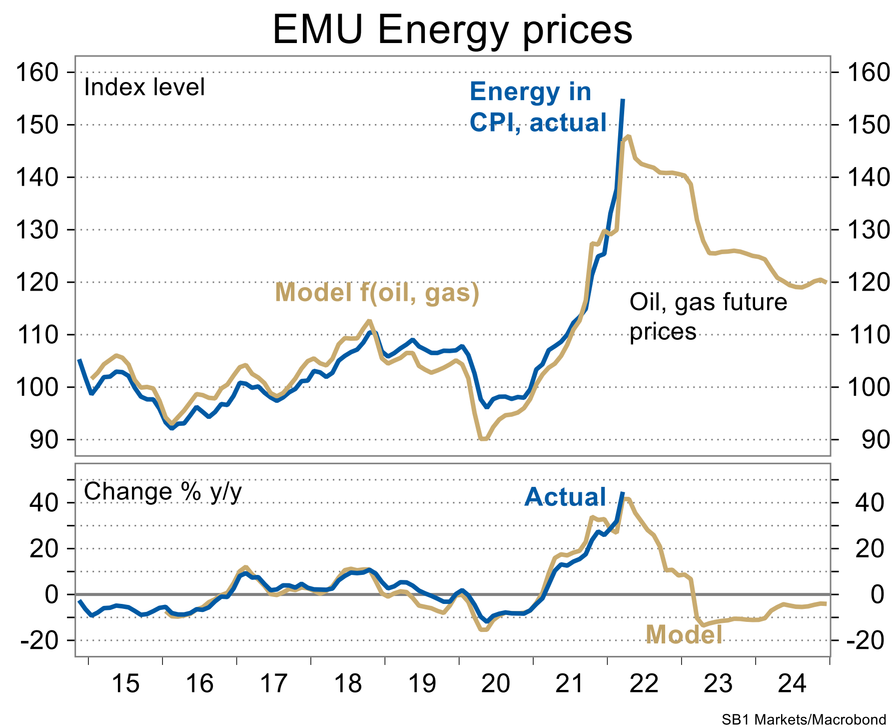
Gas, oil prices have lifted ‘energy CPI inflation’ up to 40% but….

if future markets are correct (this time…) , annual energy inflation will peak in April, and then decline





- Future prices are are heading downwards
- Early next year, energy prices will be down, measured y/y
- Gas and oil have contributed equally to the lift in energy prices measured at the consumer level, according to our models

In these models we incorporate all direct impacts from changes in the oil price – as well as the impact from other factors that influenced inflation which correlates to the oil price

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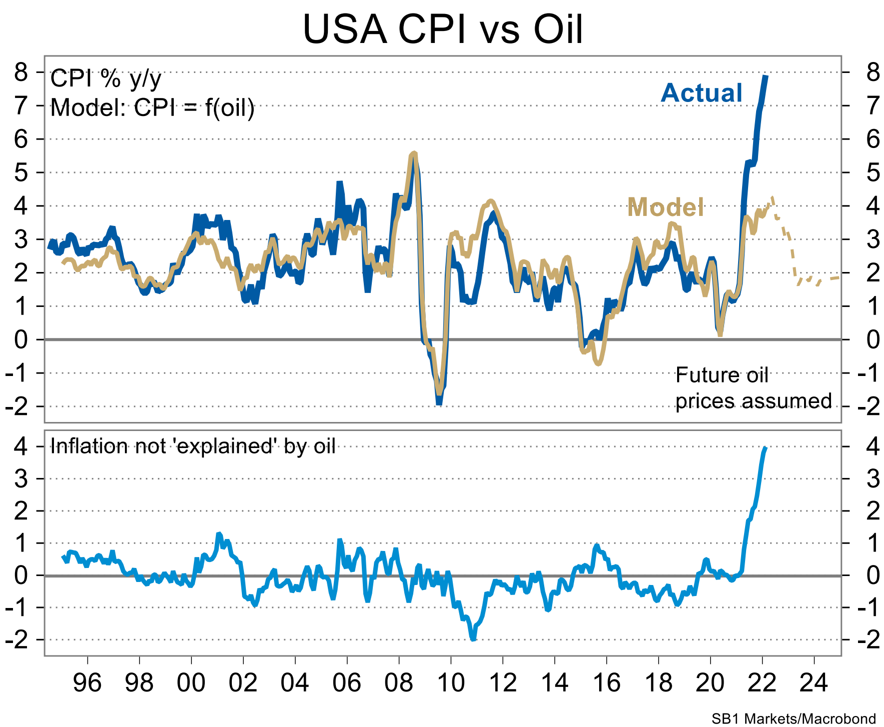
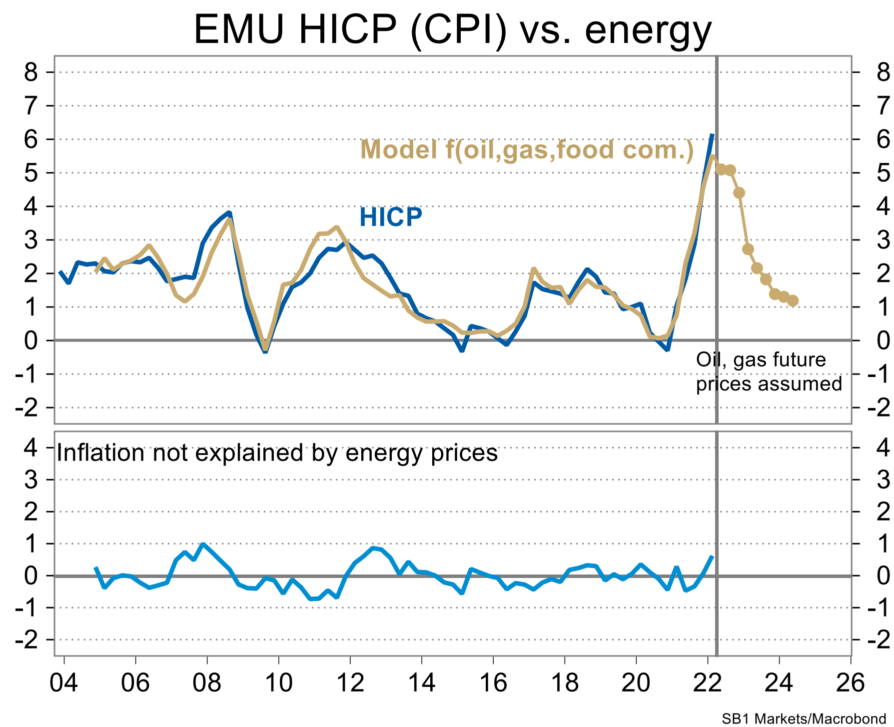
The tale of two different inflation regimes

The EMU inflation is fully explained by higher oil & gas prices, US inflation is not



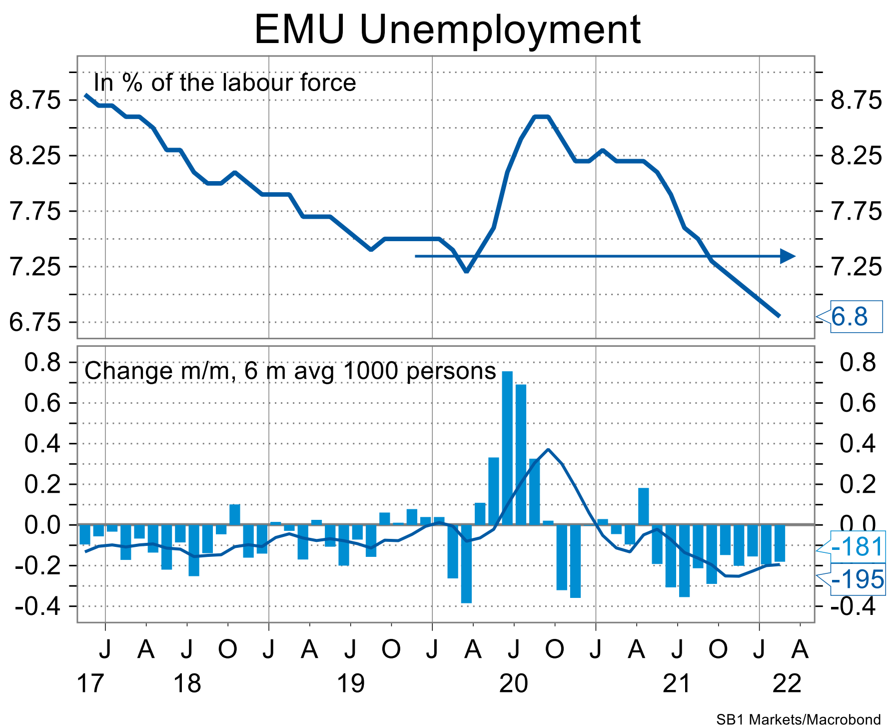


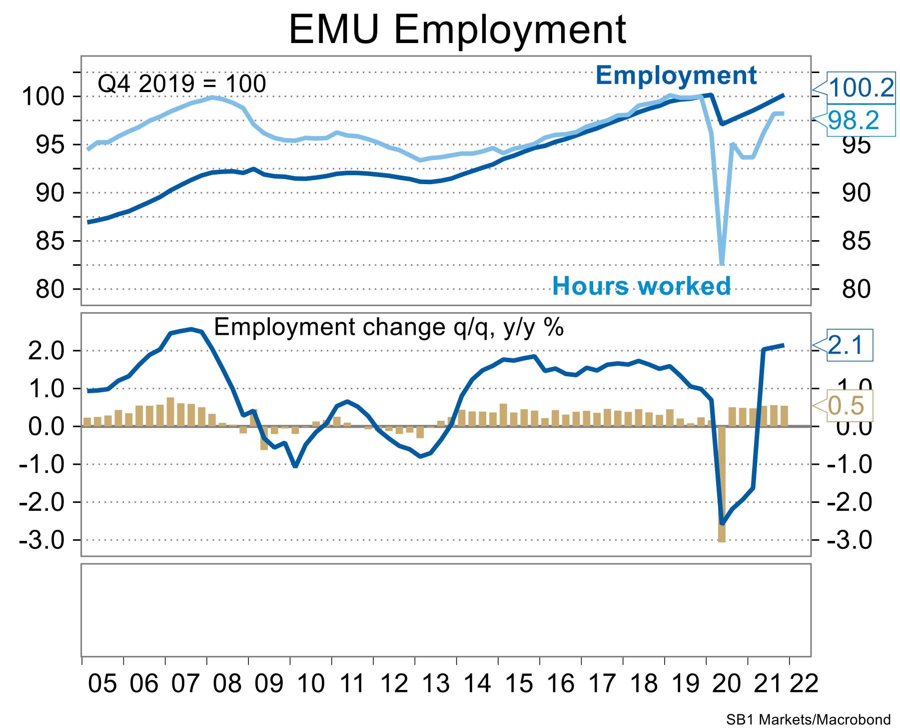
- **In the US, oil price cycles** have – for all practical purposes – explained all of the CPI cycles the past 30 years. Until 2021. The precent 4 pp discrepancy is unprecedented! The current/future oil price signals a decline in the annual CPI rate later this spring. The trouble is the 'gap' or the 8% starting point
- **In EMU**, the CPI acceleration recent so far can be fully explained by the increase in energy prices (with a small contribution also from food commodity price). If oil/natural gas prices follow the future prices from here, inflation is now close to the peak, and the annual growth rate will return to below 2% in early 2023. Had energy prices suddenly returned to a 'normal' level now, inflation would have collapsed!

In these models we incorporate all direct impacts from changes in the oil price – as well as the impact from other factors that influences inflation which correlates to the oil price

Unemployment on the way down, the rate is the lowest since 1981

The unemployment rate fell 0.1 pp to 6.8% (from an 0.1 pp upward level in January)

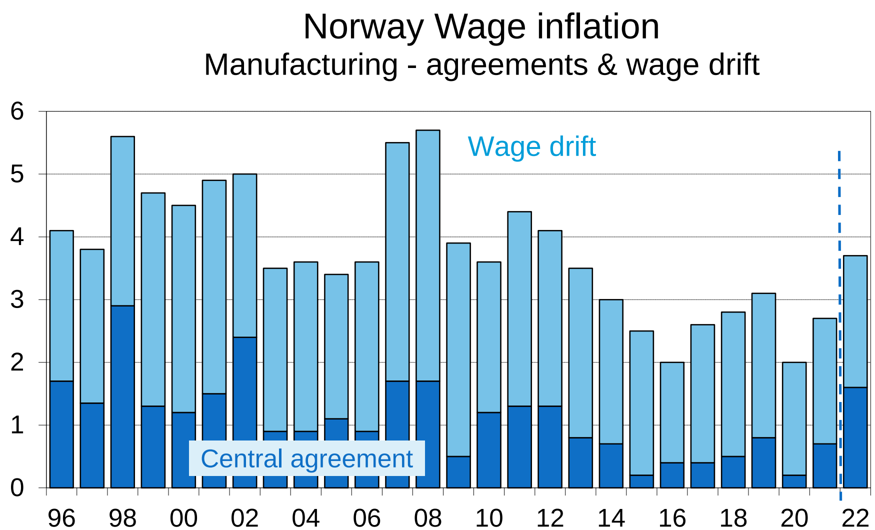


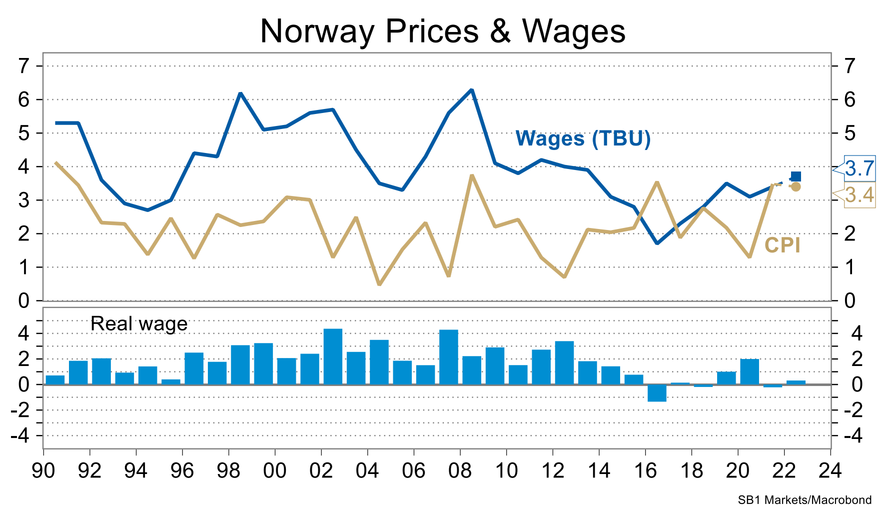


- **Unemployment** has been falling rapidly since last spring. In February, the unemployment level fell by 0.1 pp, as expected, but from an upward revised level in January
- **Employment** rose by 0.5% in Q4, as in the previous 4 quarters, and the level is 0.1% above the pre-pandemic level
  - » However, the best proxy for the real unemployment rate, at least vs. **demand for labour**, is the number of **hours worked**. In Q4, hours worked was unch, at were down 1.8% vs the pre-pandemic level, as average working hours have fallen
- The number of **unfilled vacancies** has soared to the highest level ever, by far

No strike – and the highest wage inflation in 10 years. Just as expected

The manufacturing sector agreed upon a 3.7% wage growth in 2022. Others will have to follow suit

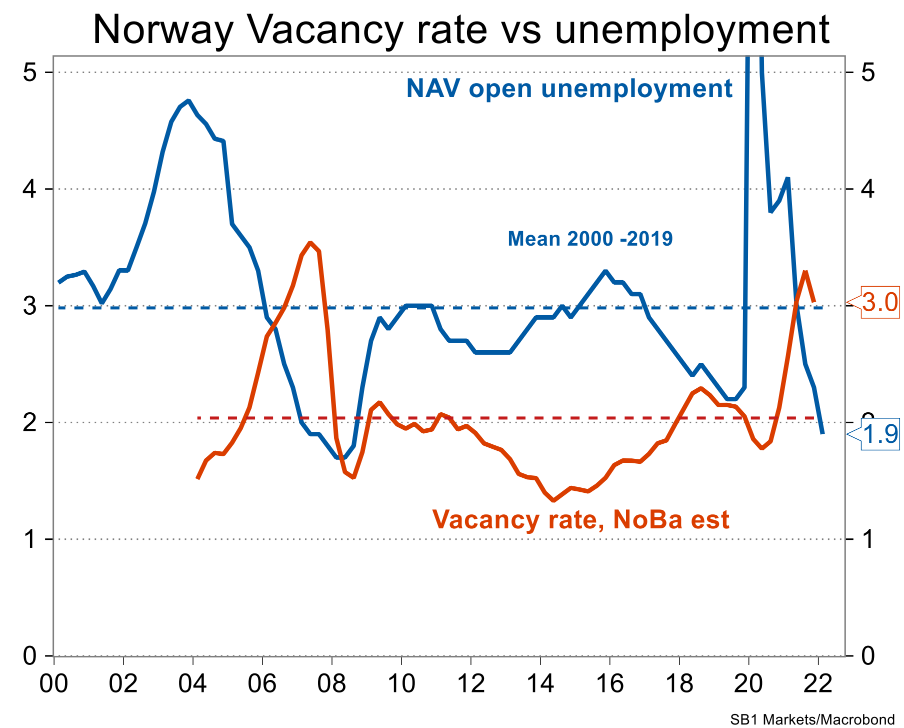


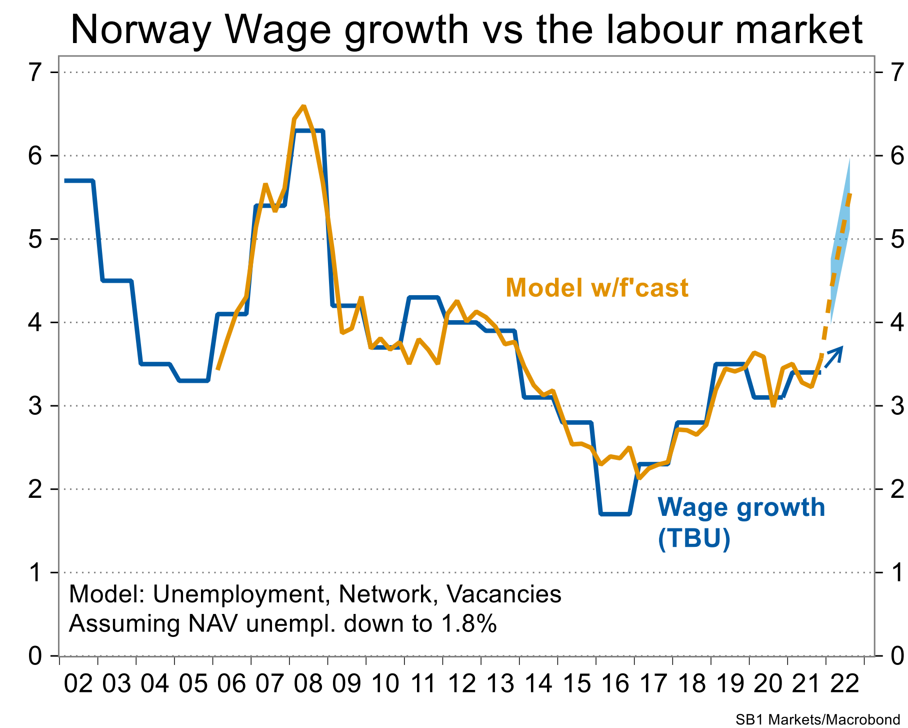


- After negotiating 36 hours on over time (same procedure as every second year…) the parties in the **wage negotiation in the manufacturing sector** finally agreed upon a 3.7% wage lift in 2022
  - » The centrally agreed wage increase will contribute to a 1.3 pp lift in 2022 wages, up from 0.7 pp in 2021
  - » Wage drift is assumed to contribute with 1.5 pp, up from 1.0 pp in 2021
  - » The carry over from last year is 0.9%
  - » If the carry over is excluded, the centrally agreed wage increases (in 2021/22) will lift wages by some 1.6%, while wage drift tops 2.0%
- **The outcome** was as we assume (and a conflict was anyway very unlikely) – and nobody else could have been surprised either
- **Norges Bank** assumed 3.7% wage inflation in 2022 in the MPR. If other sectors accept the 2022 wage norm (and in the end, most will have to, even in the public sector), the bank will not be in any immediate need for lifting its 2022 wage forecast further, following the 0.5 pp lift in the March MPR
  - » We think the tight labour market in the end will deliver wage inflation above 3.7%, but we will not know before long
- **Inflation** is assumed to be 3.3% in 2022 (NoBa said 3.4% last week) – and real wages will increase

Can wage inflation climb above 3.7% in 2022? Our simple model suggest so

The labour market is tight – and it is tightening rapdily





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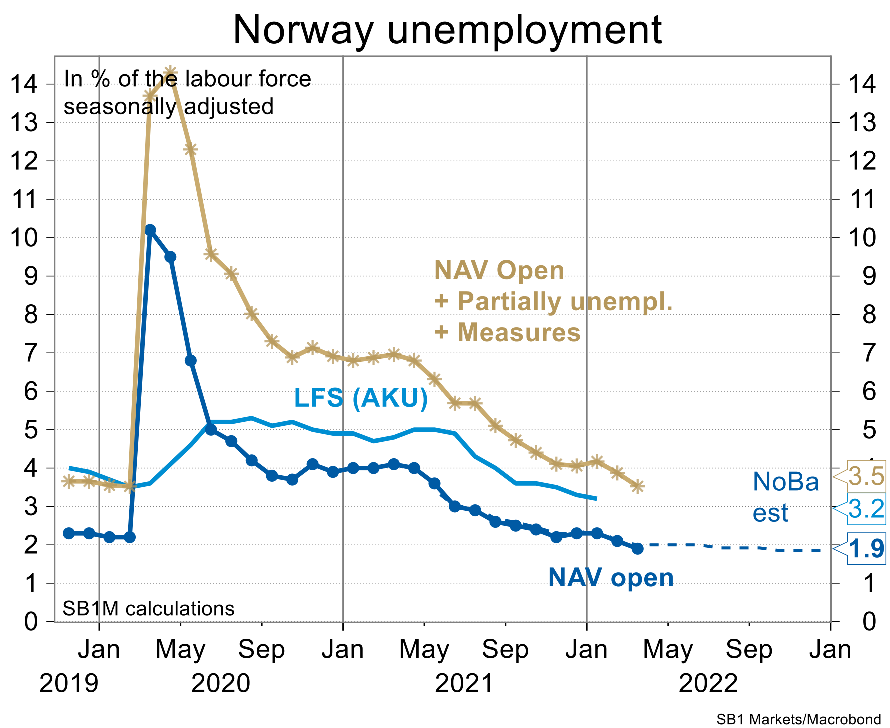
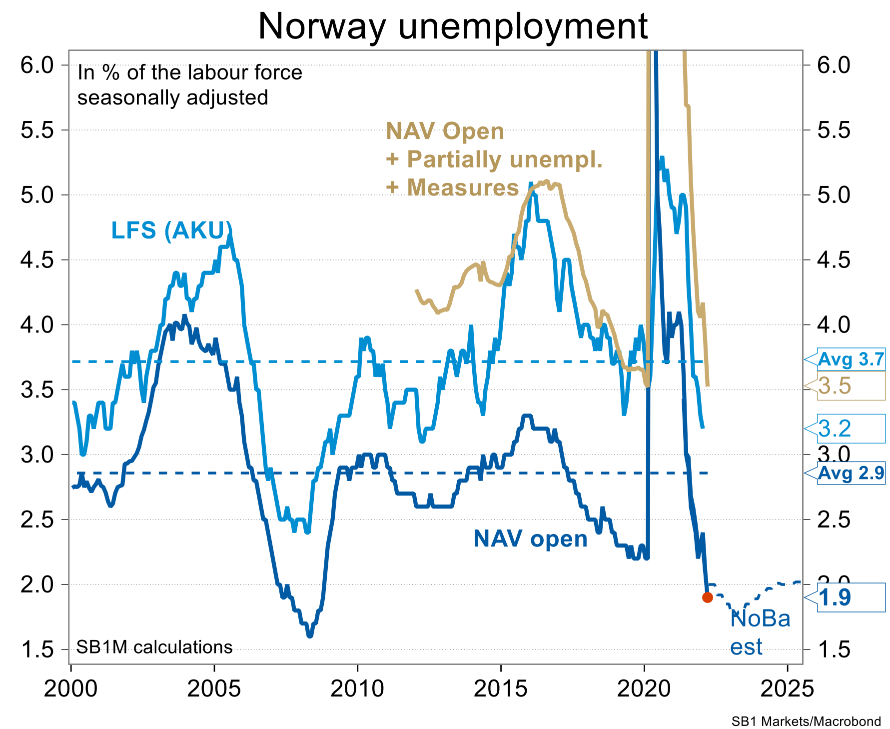
NAV unemployment further down, just 0.15 pp to go vs. NoBa's cycle low est.

NAV unemploym. fell by 0.2pp to 1.9%, we expected 2.0%. A very tight labour market

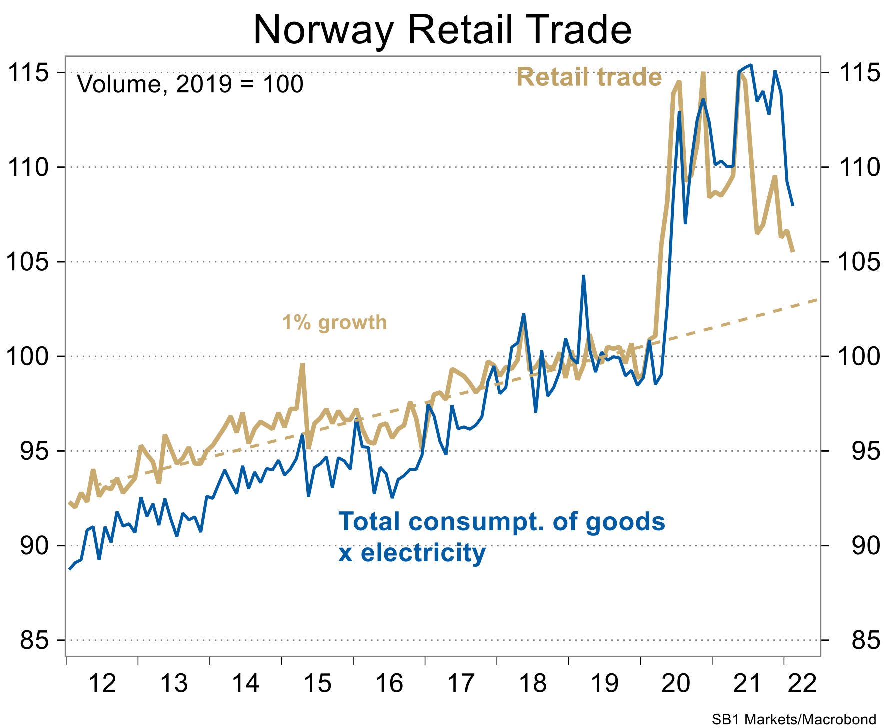


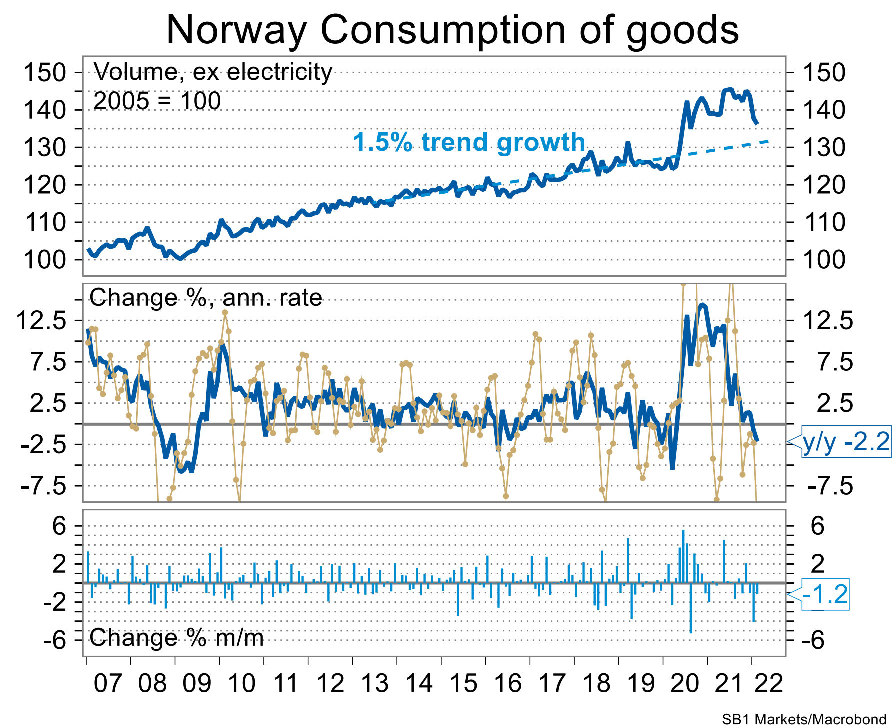


- **The 'full time' open NAV unemployment**, which includes furloughed workers, fell by 4.8' persons in March (seas. adj) to 56', marginally below our forecast, even if February was revised up by 3'. Unadjusted, the rate fell 0.2 pp to 2.1% , as expected. Seas. adj, the rate fell by 0.2 pp to 1.9%, 0.3 pp below the pre-pandemic level – and 0.3 pp above the 2008 trough – and 1 pp below average.
  - » Norges Bank revised its unemployment forecast down by 0.3- 0.4 pp in the March MPR, with a new bottom at 1.76% in Q1-23. We have just 0.15 pp left vs that estimate. We think the risk is at the downside, barring a geopolitical catastrophe
- The number of **partially unemployed** (not incl . in the ordinary unemployment no.) fell by 5' to 32', and including measures, the **total unemployment** fell by 10' to 102', close to the pre-pandemic level. The overall rate fell by 0.3 pp to 3.5%
- The inflow of **new job seekers** fell further in March, to ATL. The **inflow of new vacancies** fell marginally from the ATH in February
- **The LFS (AKU) unemployment rate** fell to 3.2% in Dec-Jan, from 3.3% a month earlier

Retail sales just down again in February, and approaching a reasonable trend?

Sales fell 1.1%, we expected +1%, consensus 0.1%

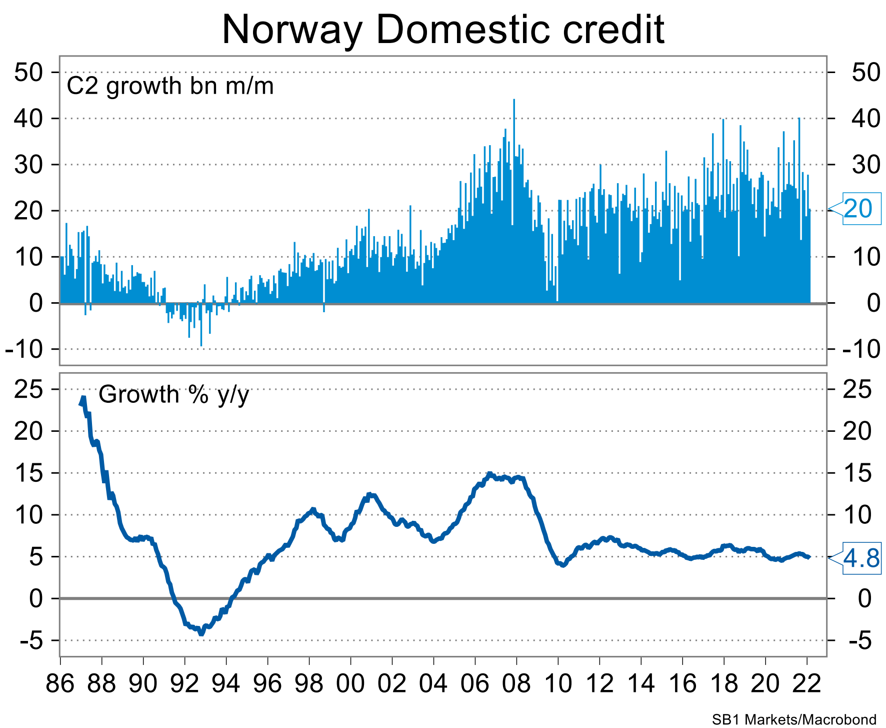


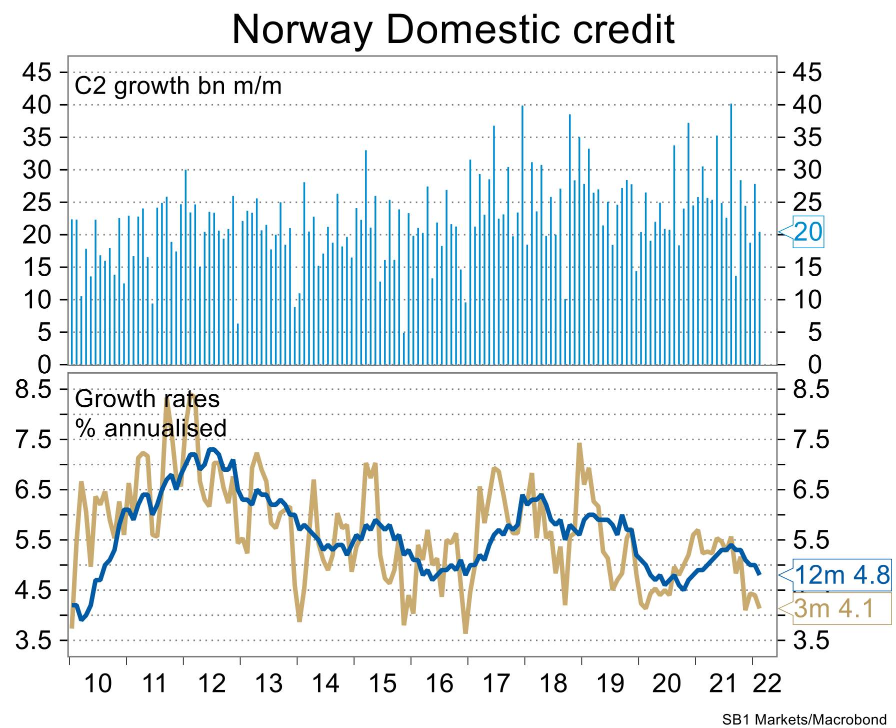


- **Retail sales** have been far more volatile than normal during the pandemic, and monthly data have been close to useless. Sales have been trending down through last year, from a very high level – and is now approaching the pre-pandemic trend, which was rather modest
- In February sales fell by 1.1%. Food sales fell 2% but the level is still above a normal level as spending abroad, especially in Sweden remains below par.
- **Total household consumption of goods** (x electricity) fell 1.2%, and consumption is some 4% above a pre-pandemic trend

Domestic credit growth (C2) down 0.2 pp to 4.8% in Feb, the trend is down

No credit boom but debt levels are high

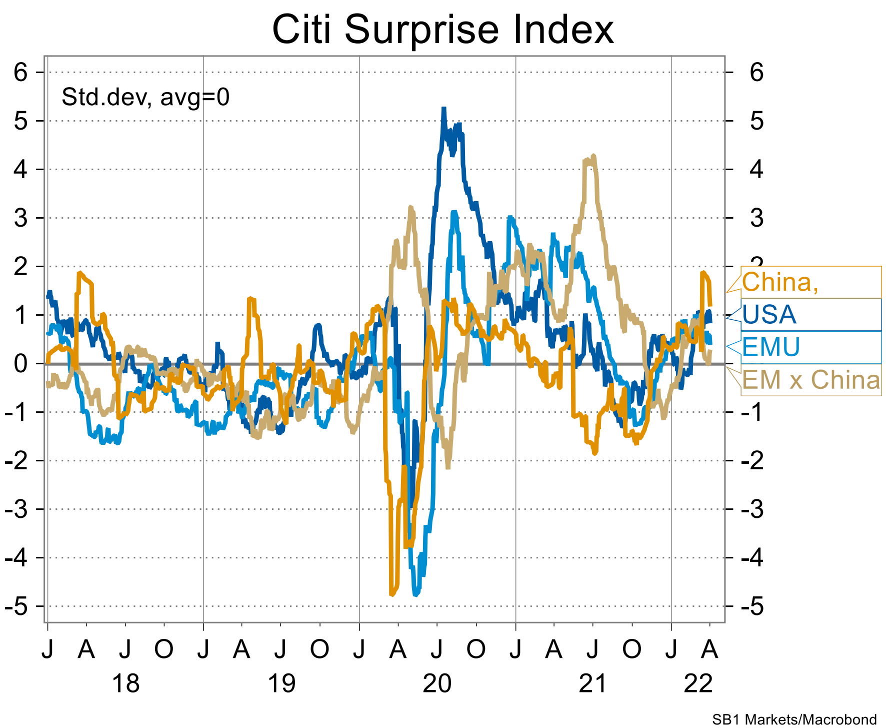


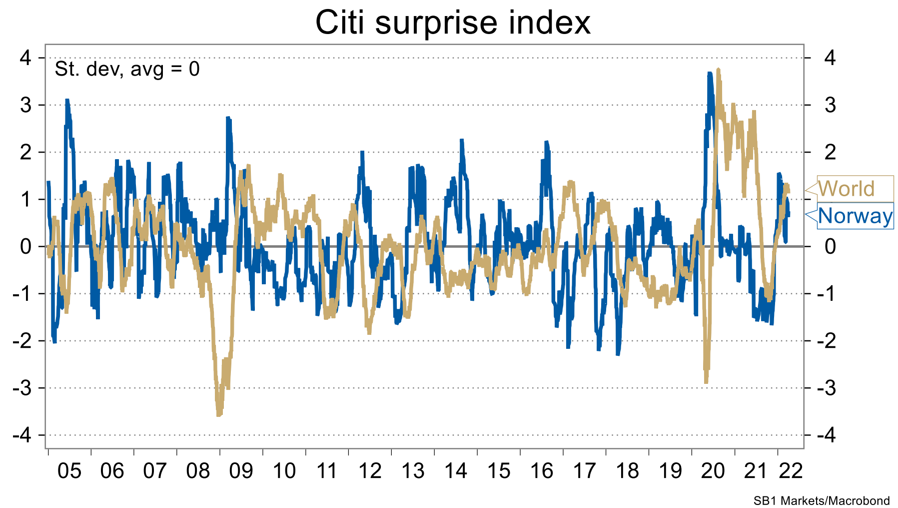


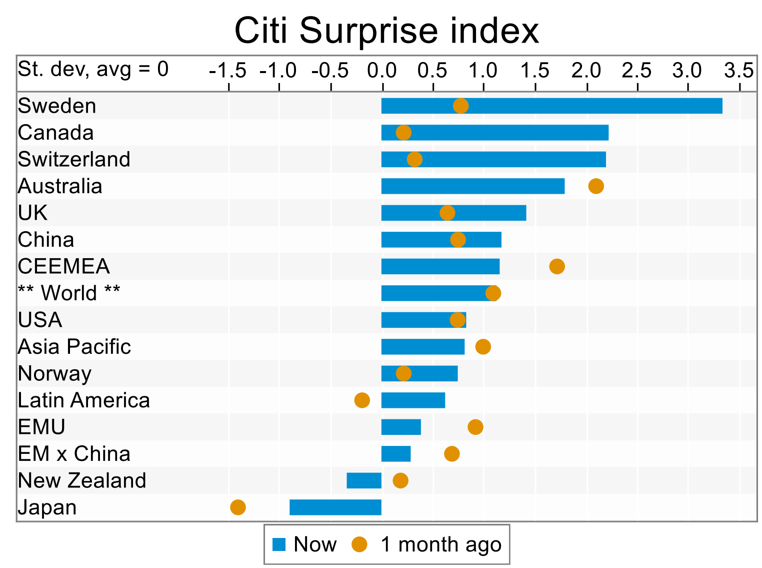
- **Total domestic debt** (C2) rose by NOK 20 bn in Feb, down from 28 bn in Jan, we expected 26 bn. The annual rate fell 0.2 pp to 4.8%, we expected 4.9%. The 3m/3m growth rate is at 4.1%. <u>We are not witnessing any credit boom. However, debt levels are high, especially for the household sector</u>
- **Household credit** <u>rose by NOK 15 bn</u> in Feb, we expected NOK 16 bn. The annual rate rose to 5.0% from 4.9%
- **Corporate C2 credit**, <u>rose by NOK 9 bn</u>, 8 bn less than in Jan, and 7 bn less than we expected. The annual growth rate fell 0.4 pp to 5.6%. **Mainland corporations** increased their debt by 5,4% y/y (-0.7 pp from Jan)
- **Local governments** added NOK 4 bn to their debt burden in Feb. The annual growth rate fell 0.1 pp to 5.9%

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

Just Japan (and New Zealand) at the downside vs expectations







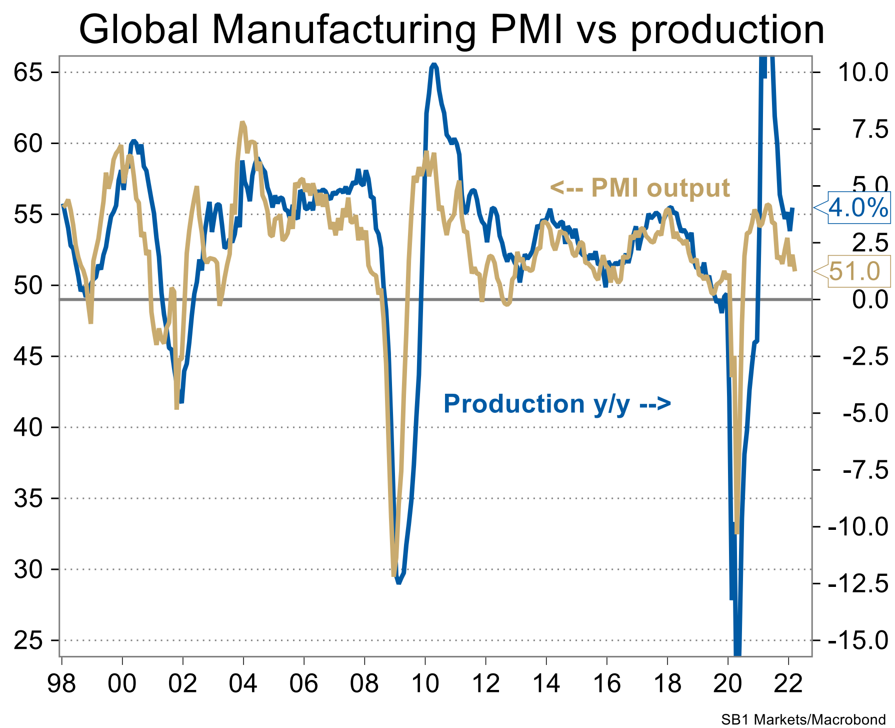
- **Norway** was surprising sharply on the downside through most of 2021, according to Citi. But in early December we crossed the zero line, and shot up in January – and we are still well above average

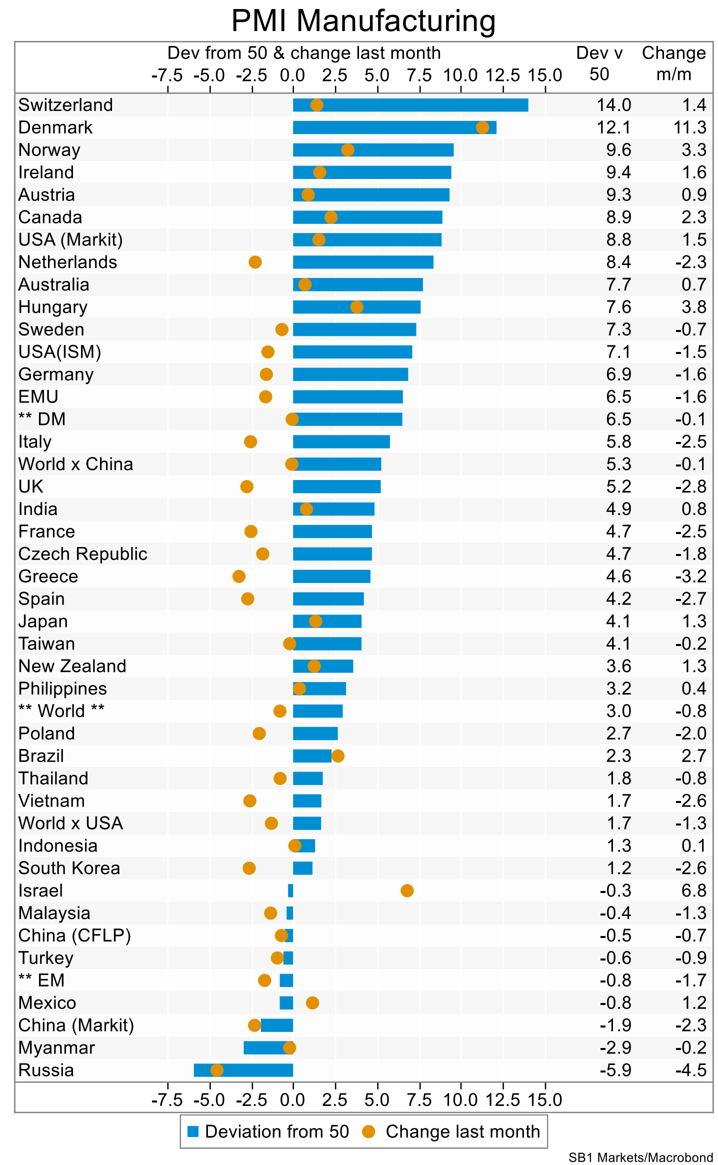
Surprise-indices measure the difference between economists' expectations and the actual outcome over a 3-month rolling window

- Highlights
- **The world around us**
- The Norwegian economy
- Market charts & comments

Manufacturing headline PMI down 0.8 p to 53.0, well below our expectations

9 of 43 surveys below the 50 line. <u>Europe + ISM at the top. Russia at the bottom (already..)</u>

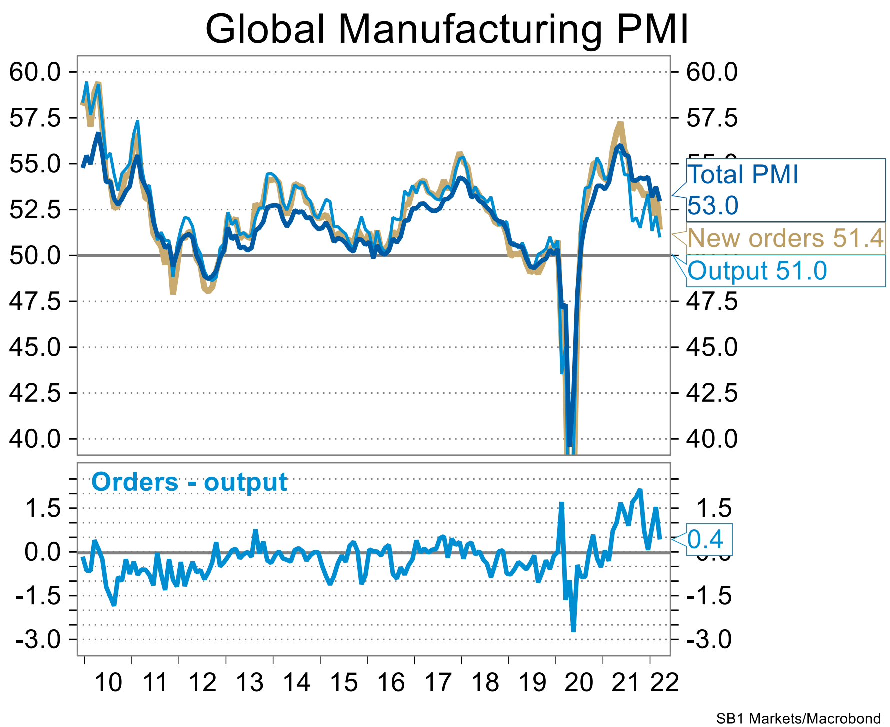


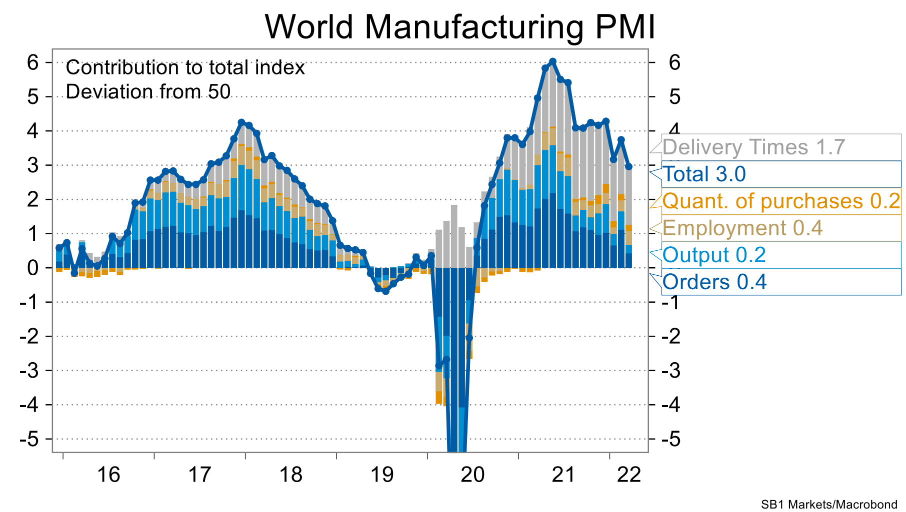


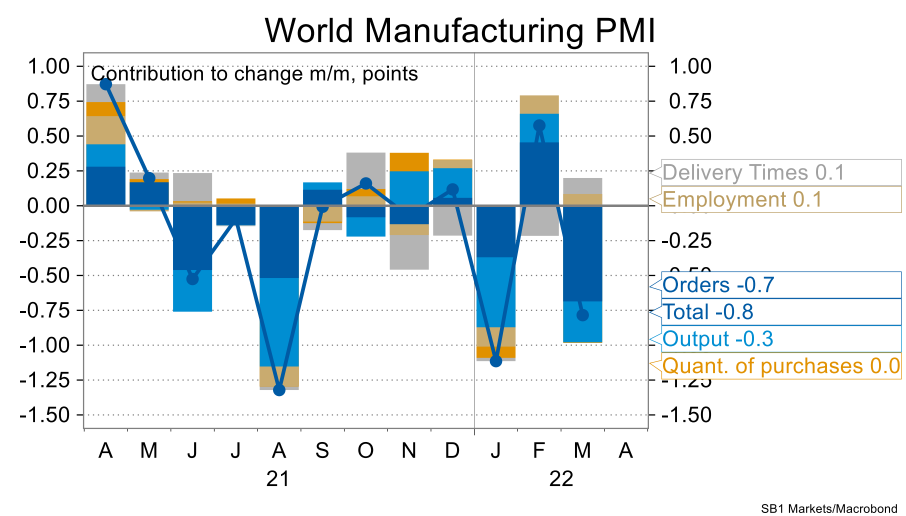
- The **output index** fell 1.2 p to 51.0, far below our forecast, based on the preliminary indicis from the rich part of the world
  - » The PMI was revised down by 0.5 p vs the first estimate, signalling some slowing in the latter part of the month, some more 'war' impacts? The US index was revised upwards. DM in total was close to unch in March (down 0.1 p), and the level is strong, at 56.5
  - » 35% of countries/regions reported higher total PMIs last month, down from 60% in Feb
  - » **European countries** still dominate the top of the list
  - » China and other EMs in Asia surprised at the downside, and the EM avg fell 1.7 p to 50.8
  - » **Norway** reported a minor decline – and the level is well above average

Delivery times up, other parts of the PMI down, both orders and output

Not a favourable mix. Both new orders and output indices are below average

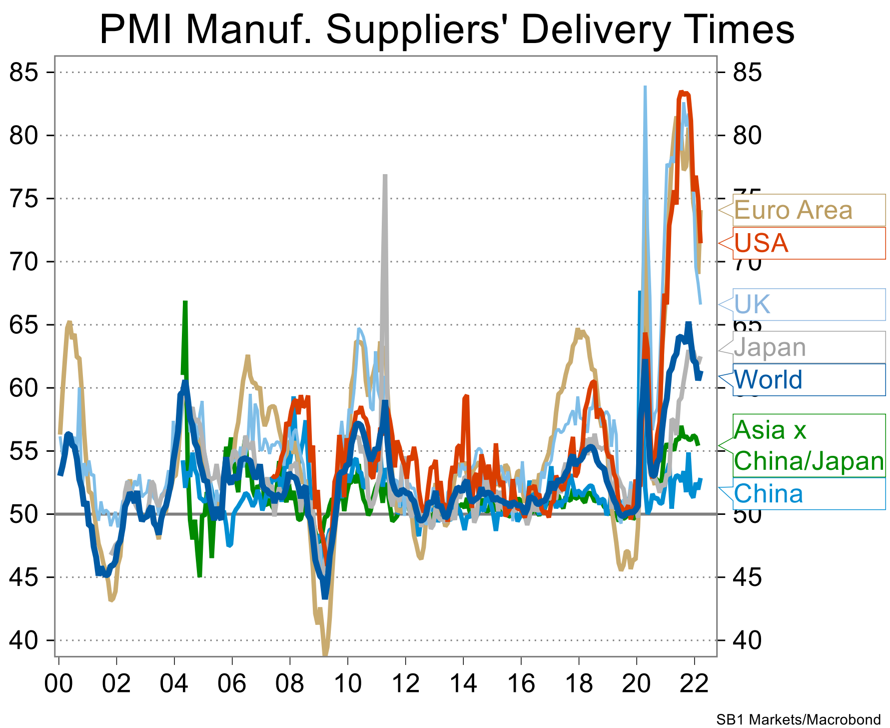


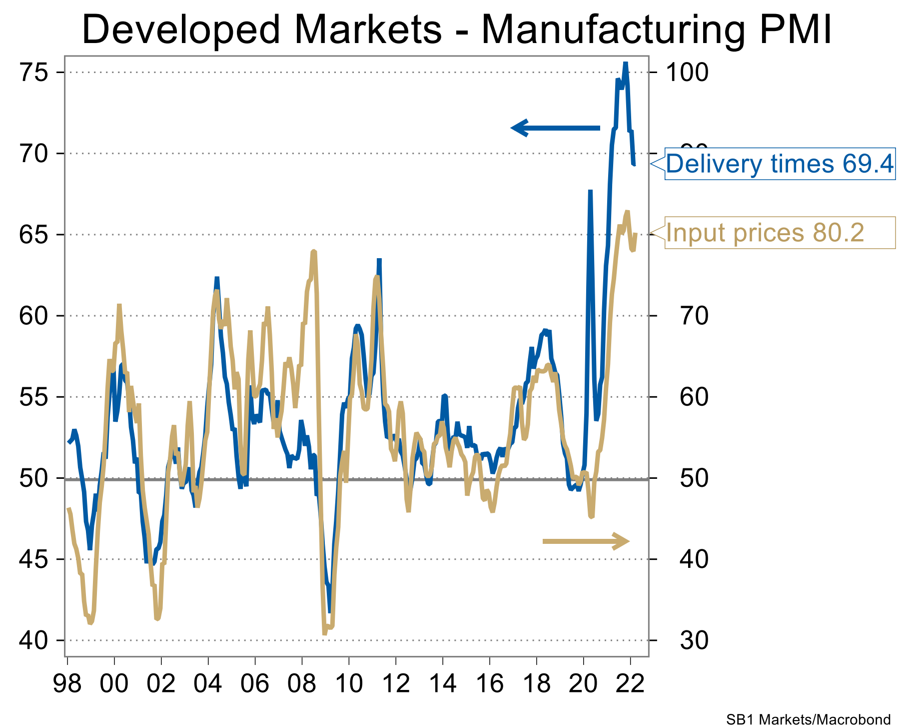




Delivery times up in EMU (war etc?), but down in UK, US

Still not any serious supply chain challenges in Emerging Markets

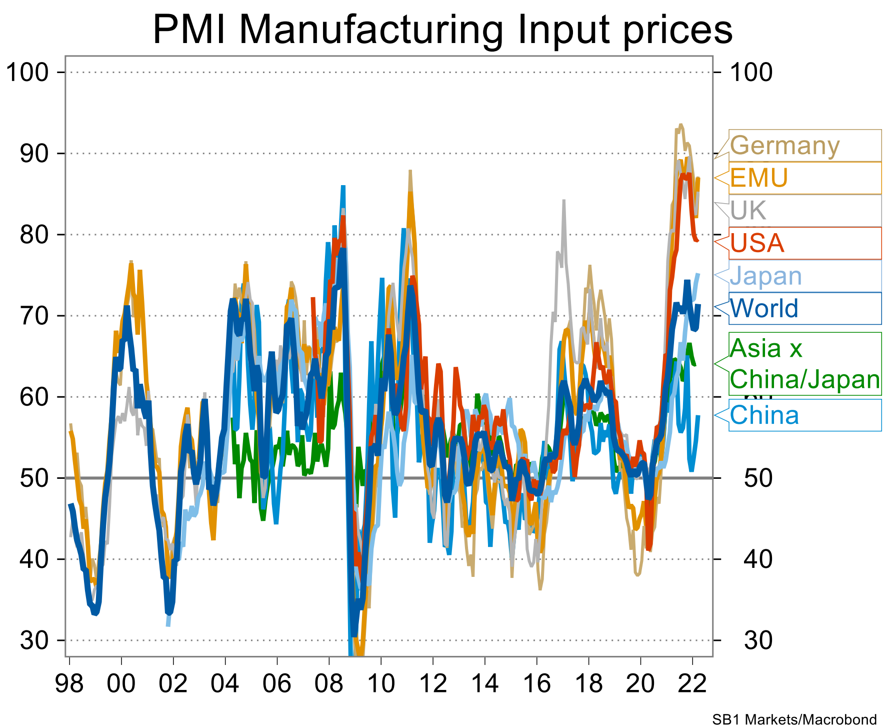


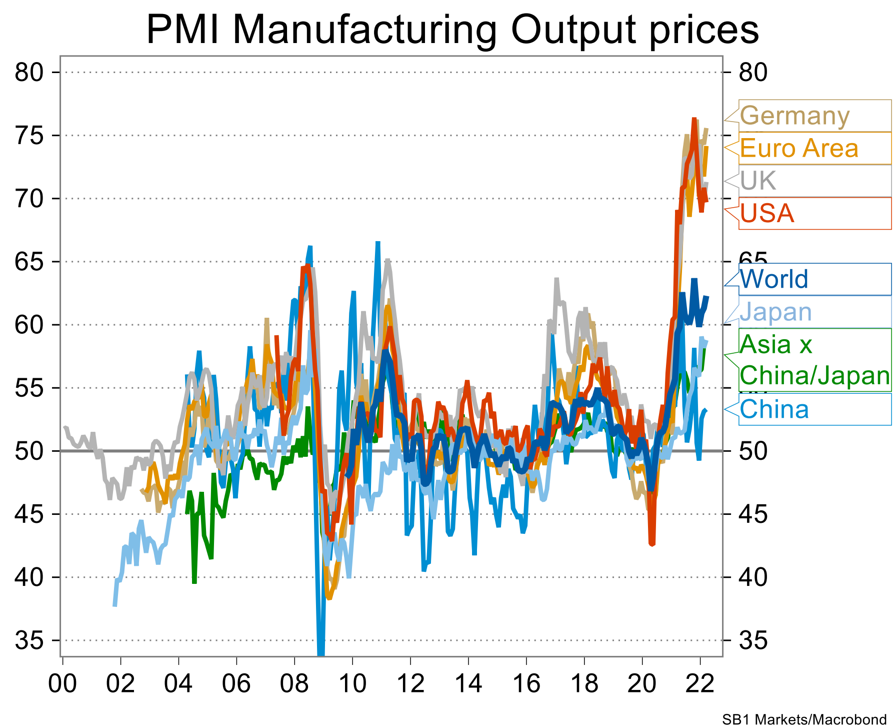


- The unprecedented increase in delivery times index in the rich part of the world ended in October (it was almost entirely rich man's problem). It remains at a high level and formally signals a continued rapid rise in delivery times – just a tad slower than at the peak
  - » However, this index has never been significantly below 50, and delivery times can impossibly not always have been increasing. Still, the current print is far above any reasonable 'real' 50-line (which would have been around 53 vs the current 62.5 level and 71 in the rich part of the world), and signalling a further very rapid increase in delivery times.
  - » We suspect many respondents rather than reporting if delivery times are increasing or decreasing (which they are asked to do), report if delivery times are 'long' or 'short'. If so, delivery times are now declining

Manufacturing prices rose faster in March (but not in the US)

Price increases have been the rich man's problem – because demand has been strong here

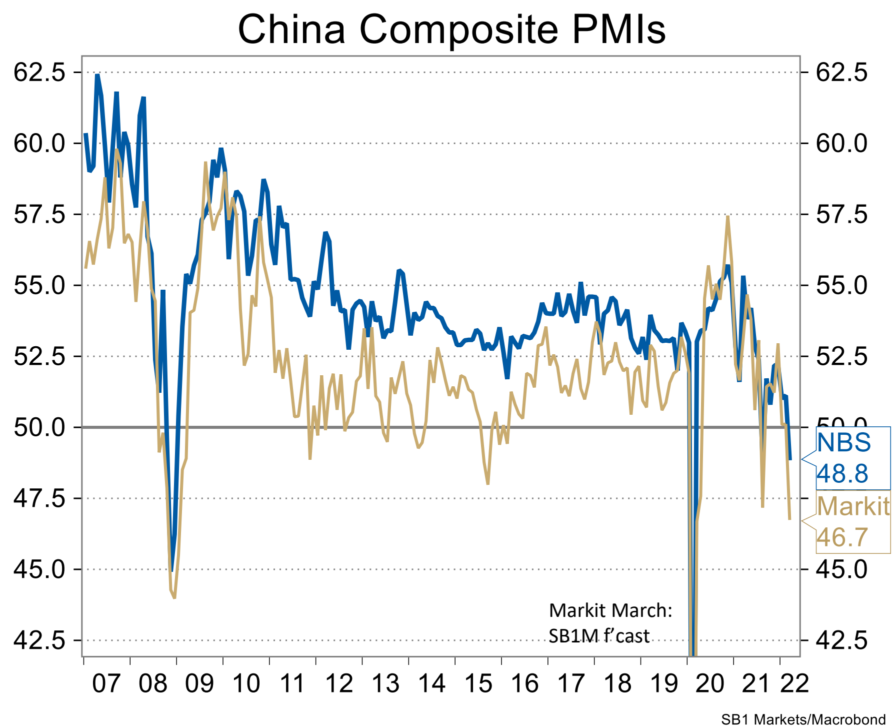


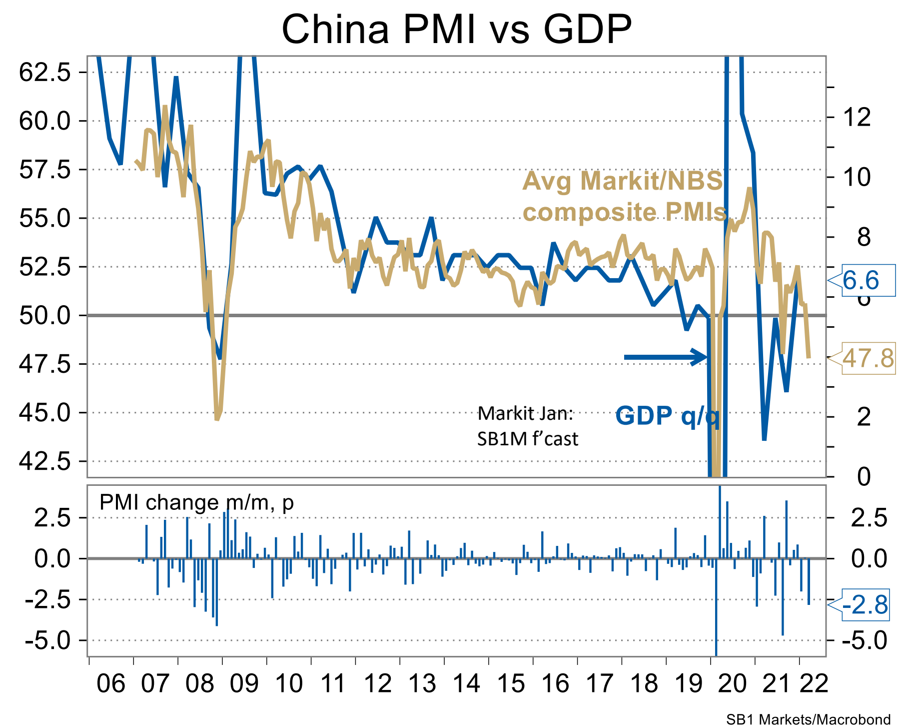


- Output prices rose faster in February

China is struggling again, we hope due to the corona virus

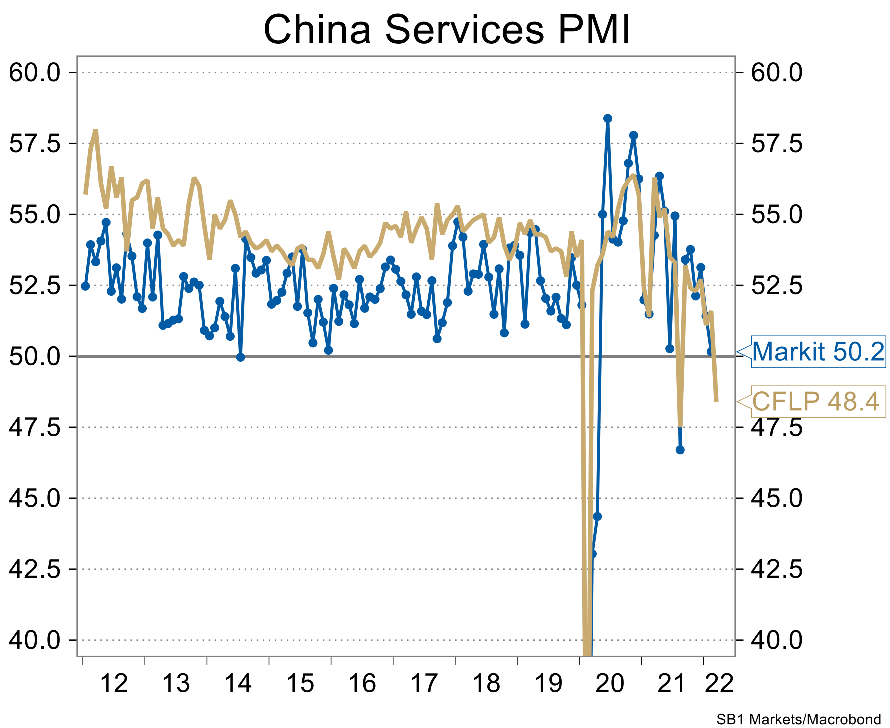
The NBS composite survey sharply down, and most likely Markit's too

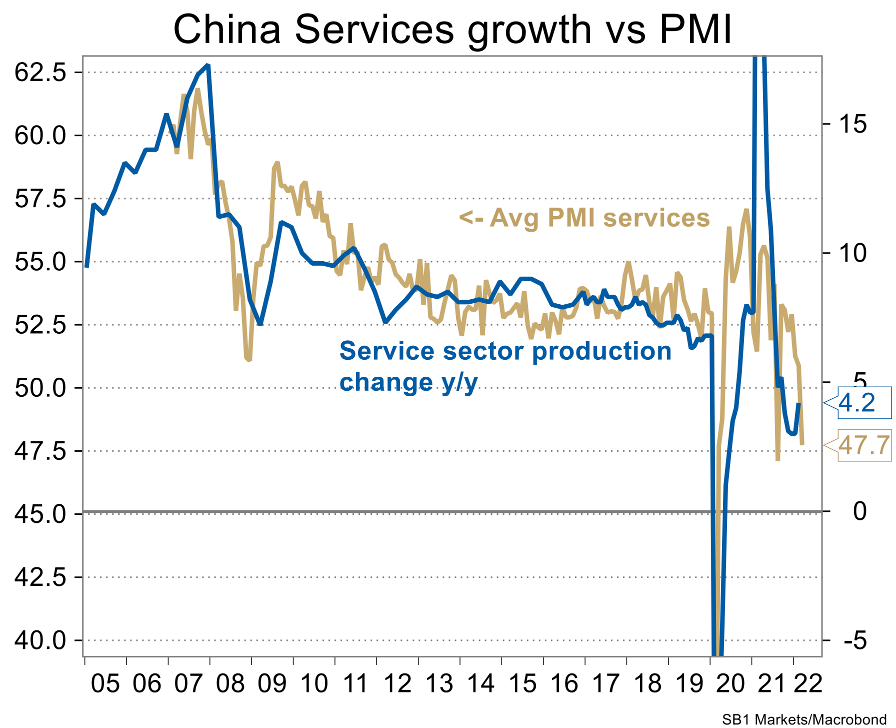




- The **CFLP/NBS composite PMI** fell by 2.3 p to 48.8, the lowest level since the start of the pandemic
- **Markit's composite PMI** very likely fell as well, also to the lowest level in 2 years. The manufacturing component was report straight down, and in the NBS survey, services fell sharply.
- **The average of the two PMI** data sets (with our estimate for Markit's index) is down 2.9 p to 47.8
- **What happened?** China's corona strategi has more or less failed. The Omicron variant is very contagious, and vaccines to not work well (and too few are vaccinated). The lockdowns will hurt the economy for a while – but probably not for too long as foreign vaccines may be taken into use
- **The construction sector** is not reporting a backlash – not in March either

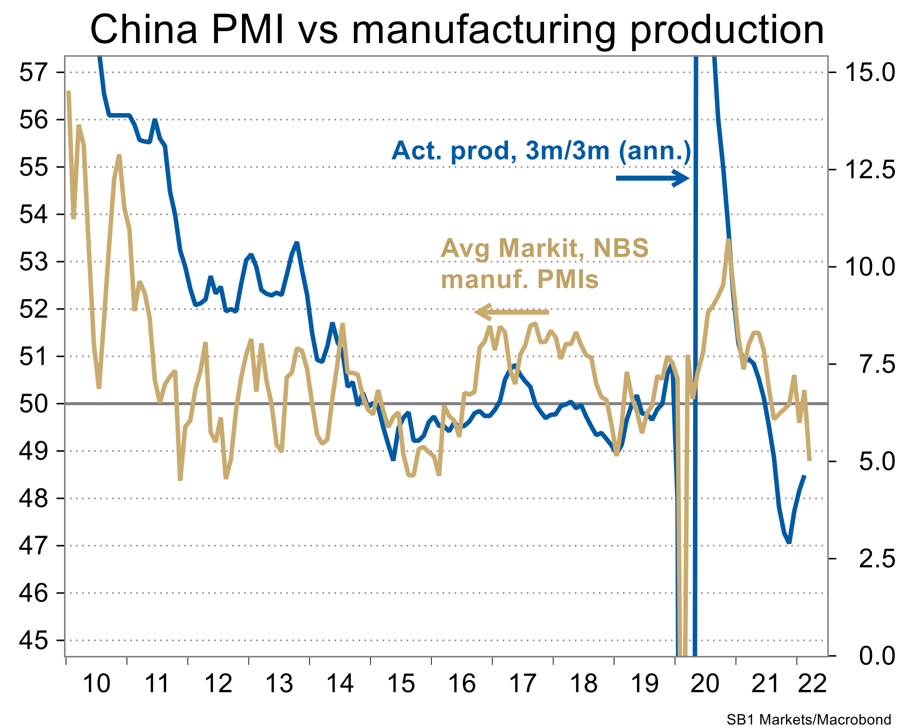
Markit's services sharply down in February as China fights a contagious variant





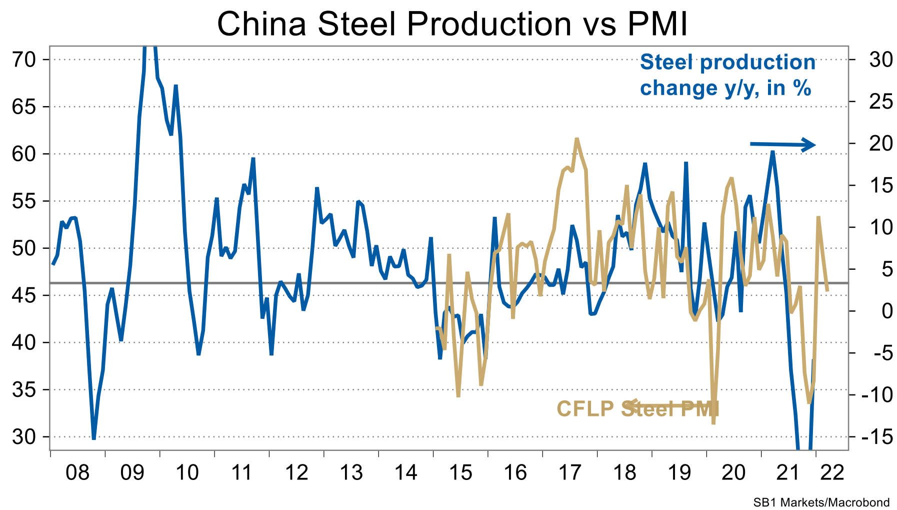
Both manufacturing PMIs down in March, Markit's to the lowest level since 2016

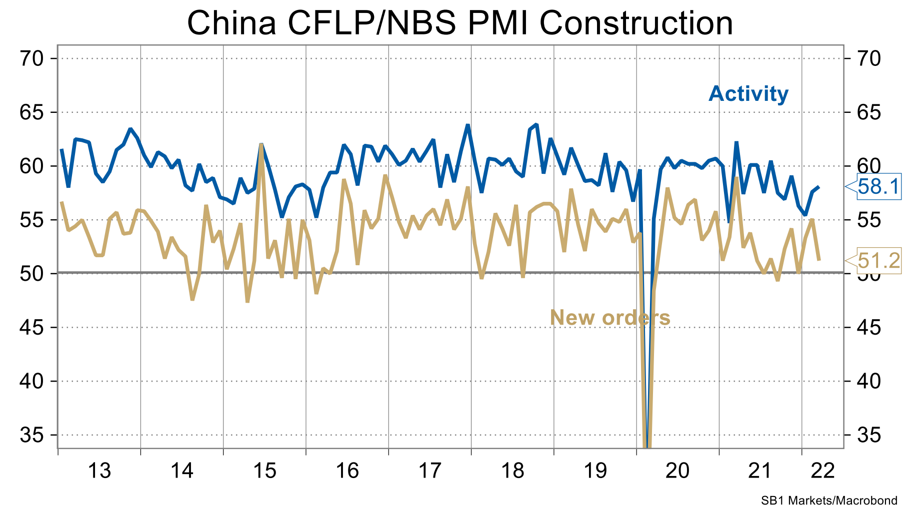
Not a positive growth signal



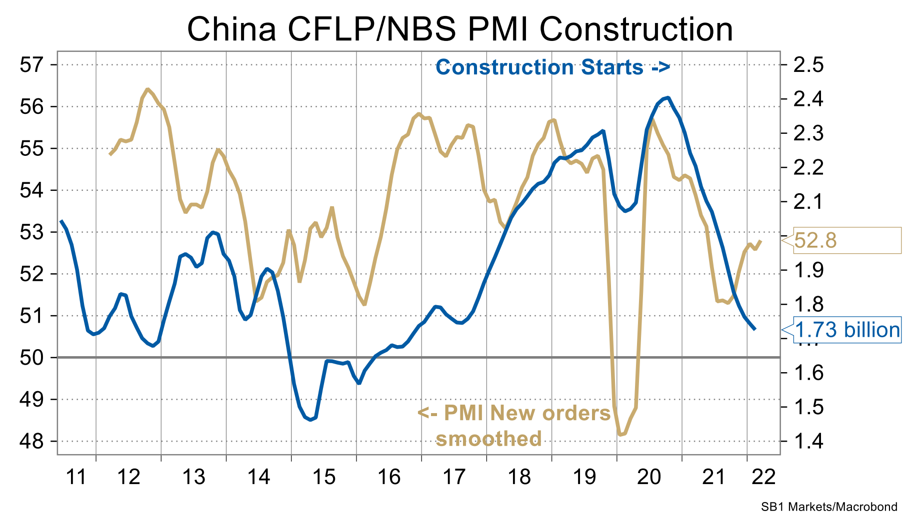
Steel & construction down in March but still not weak

The steel sector PMI is below 50 and well below average but not signal any contraction in the sector



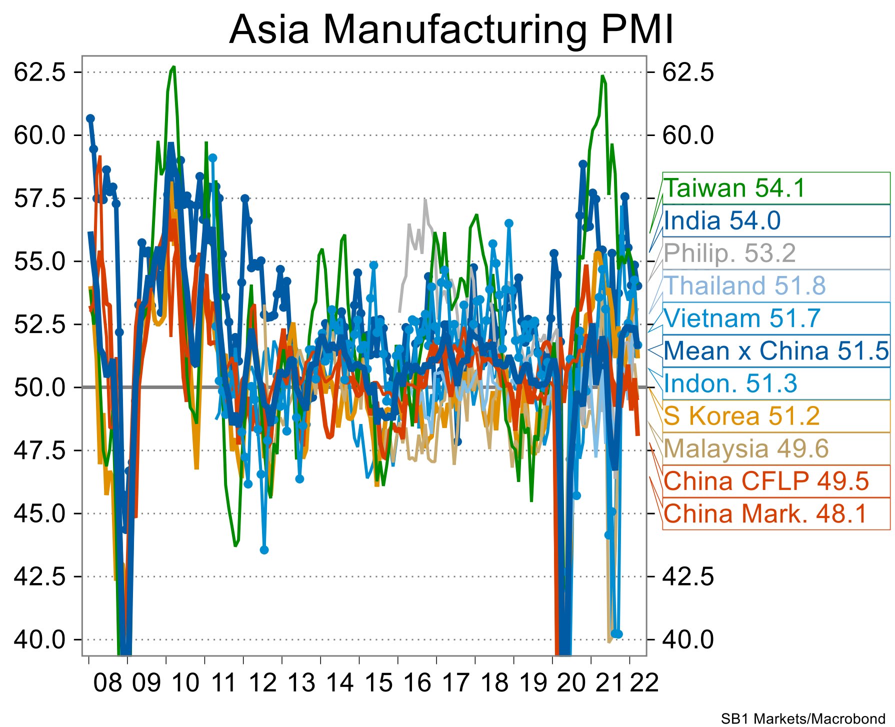


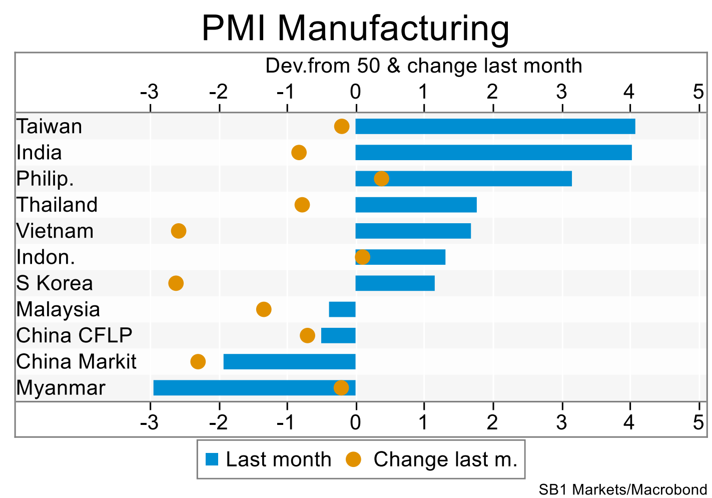
- The **Evergrande++** debacle (several builders are now struggling) has so far not led to a harsh setback in the overall Chinese construction industry, according to the construction PMI. Growth in orders slowed during H1 but gained pace again in H2, and into Q1, at least until February
  - » Regrettably, the correlation between PMI and actual construction starts is rather weak

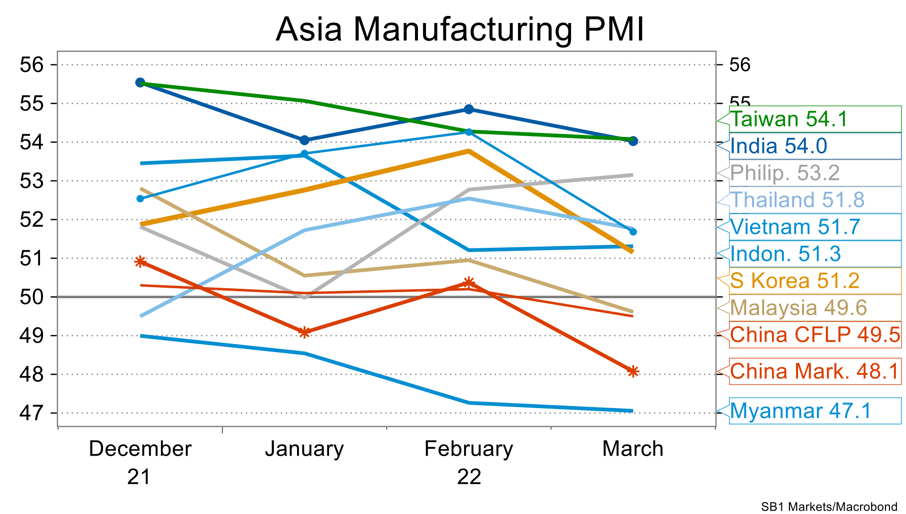


EM Asia: Most moved down in March

Still, 7 manufacturing PMIs are above the 50-line (from 8), 4 are below (of which the 2 Chinese PMIs)





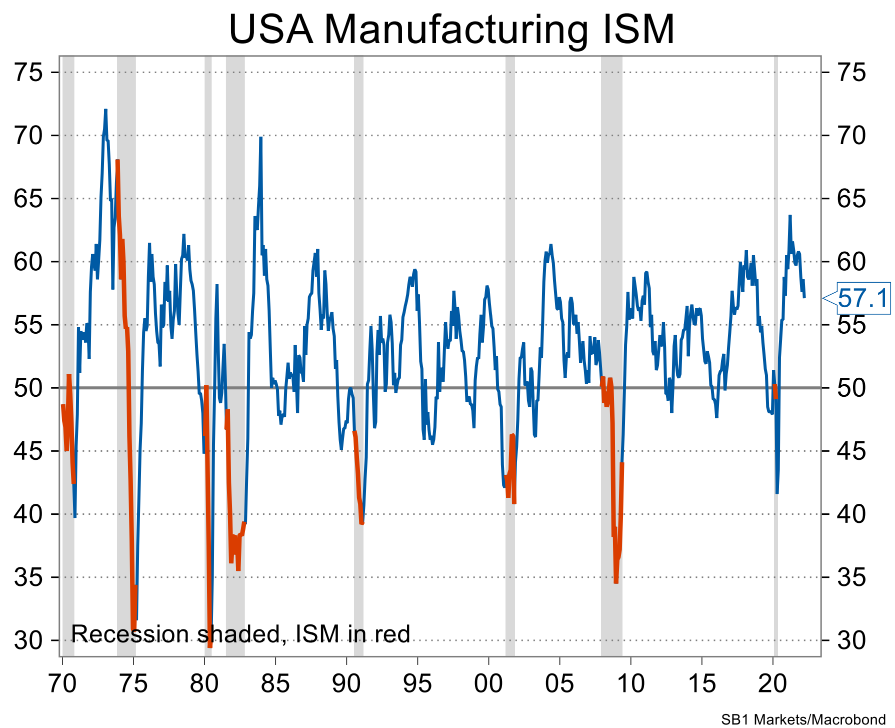


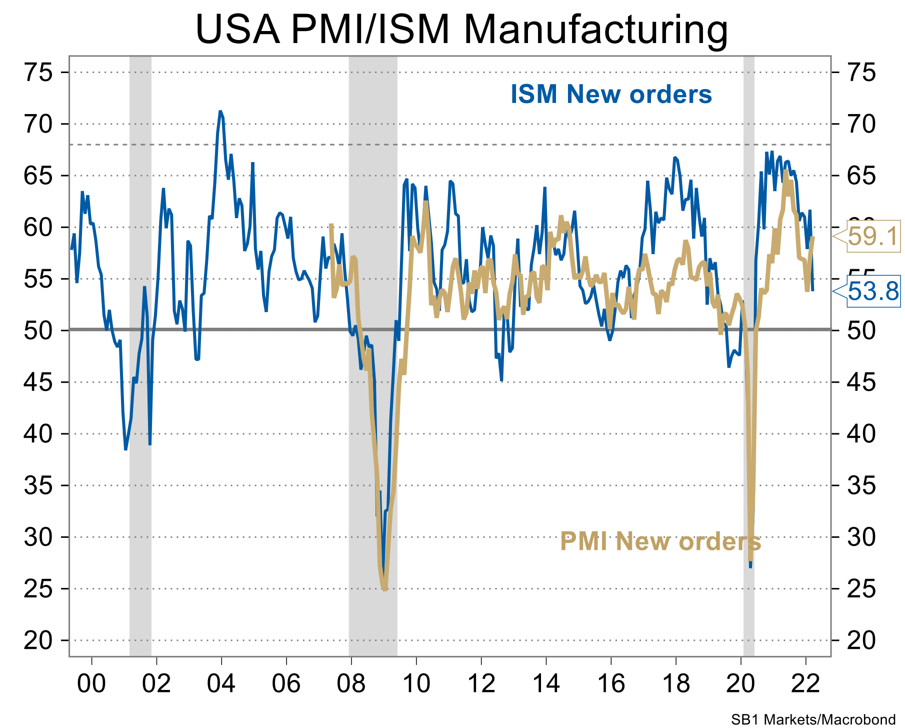
- South Korea reported much slower growth in March, the PMI fell by 2.6 p to 51.2
- Taiwan report continued growth above trend, the PMI at 54.1
- The Indian PMI fell but the level is still quite high, at 54.0

SpareBank 1 MARKETS

Manufacturing ISM is heading down, still at high level

The total index fell 1.5 p to 57.1, expected up to 59. The index is the lowest since Sep-20

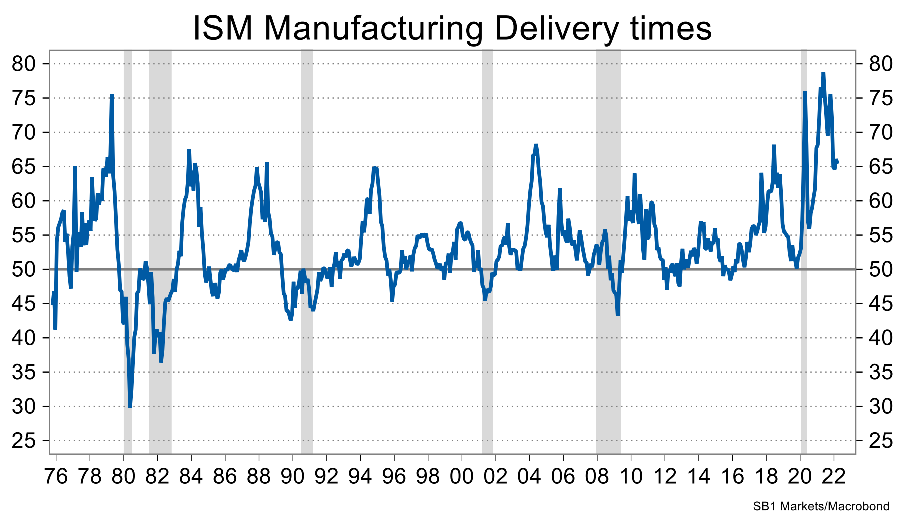


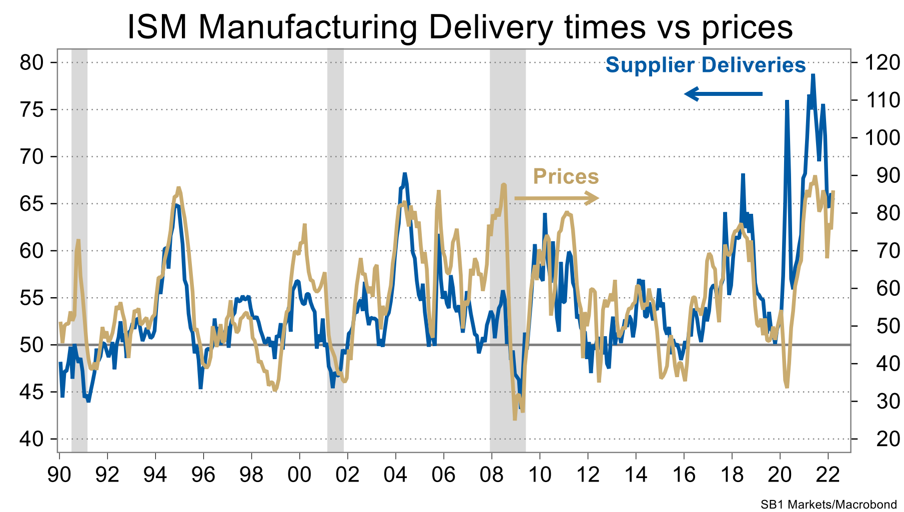


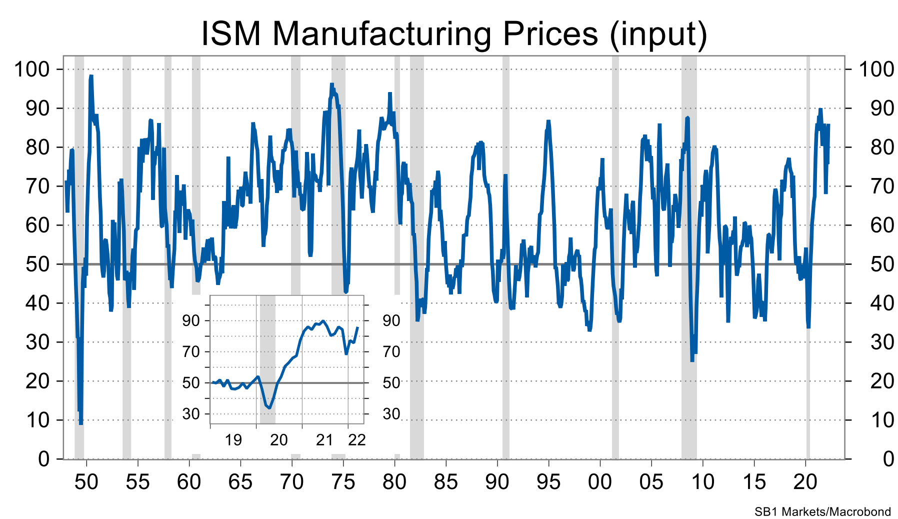
- The **ISM manufacturing index is trending down but the level remains far above average levels**
- Last month, 15 of 18 manufacturing sectors reported growth (16 the prev. month), 2 sectors reported a decline (wood products, petroleum), up from 1
  - » The **new orders** index fell sharply to 53.8 from 61.7 in Feb
- 43 commodities were up in **price** (from 33, at the peak 56 commodities). Just steel prices fell (from 7 types of materials in Feb)
- 24 commodities were reported in **short supply,** down from 11 (but still below the peak at 50 commodities a few months ago)
- **In their comments**, companies report more supply chain challenges, some referring to Russian/Ukrainian war

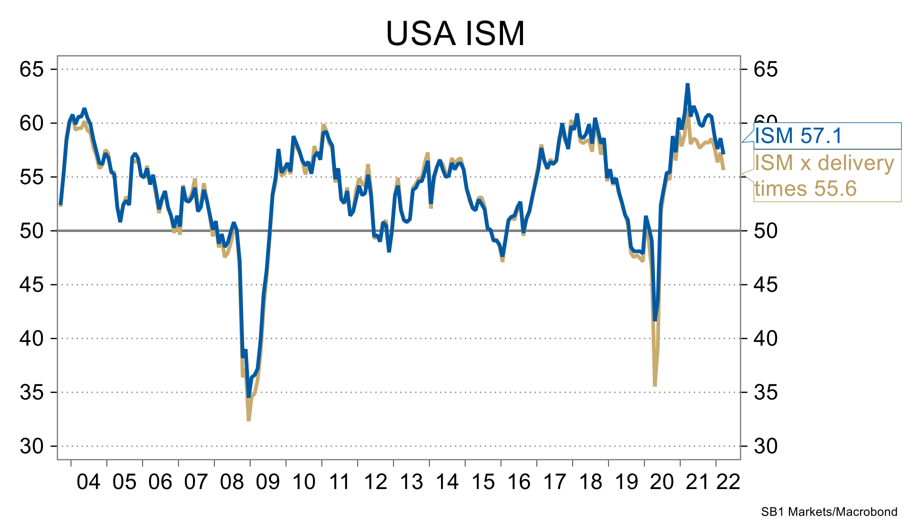
SpareBank 1 MARKETS

The delivery index still at a high level, and input prices rose much faster in March



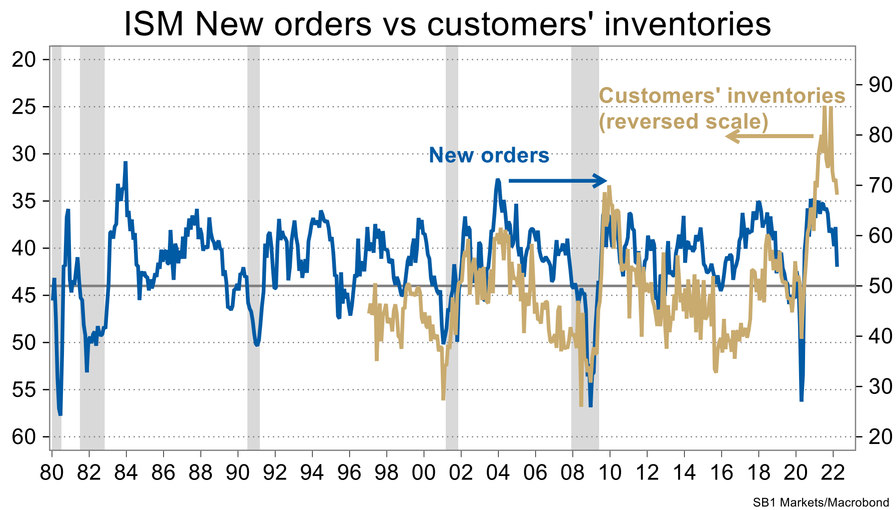


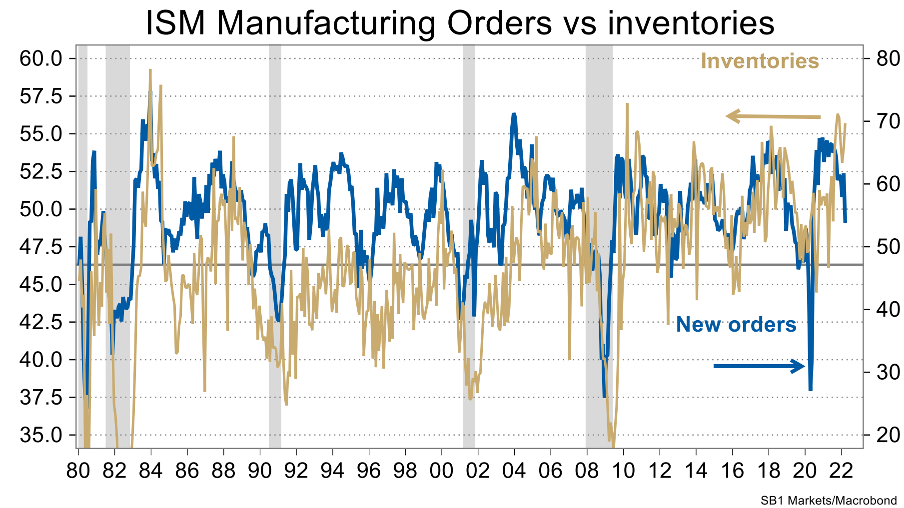


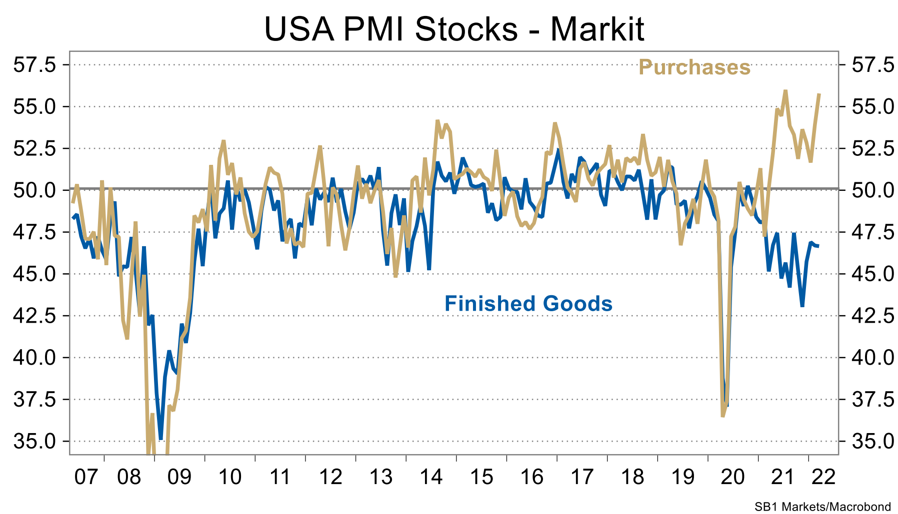


Growth in new orders are slowing, and inventories of purchases are growing

Signals a slowdown in activity the coming months





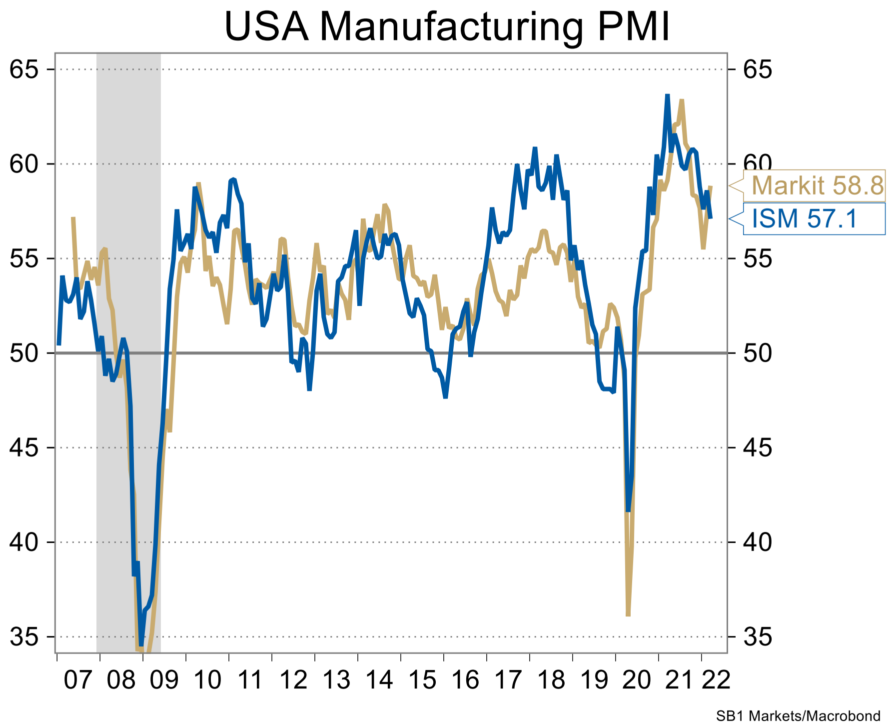


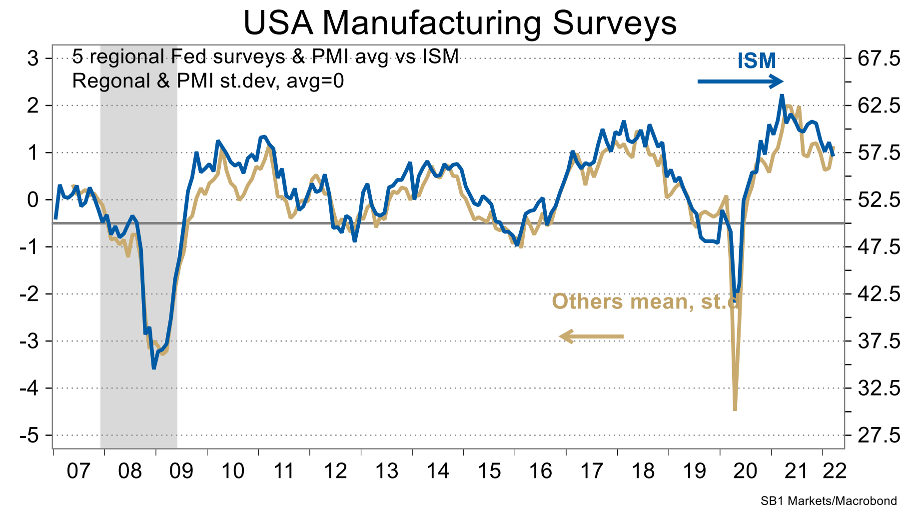
- Growth in manufacturers' **own inventories** (of purchases, not finished goods) are still higher than normal. Inventories must be pretty rich:
  1) Production is running slower than expected, due to weaker demand or due lack of some components, labour, transport services etc.
  2) Companies have been hoarding materials, just to be sure to have them at hand (and they will stop doing it soon)

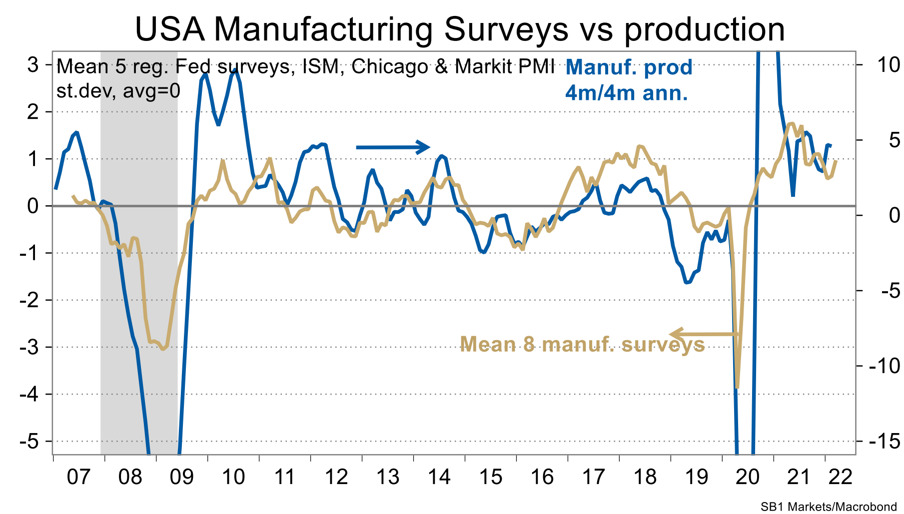
  Probably elements of both – but hoarding has probably been an element in the supply chain stress
- **Inventories of finished goods** (in Markit's report) are still on the way down, according to the PMI, which supports the hoarding explanation (which is good news vs the outlook)

Sum of manufacturing surveys: Up in March but the trend is down

Growth is still signalled to be well above trend – but growth is most likely slowing



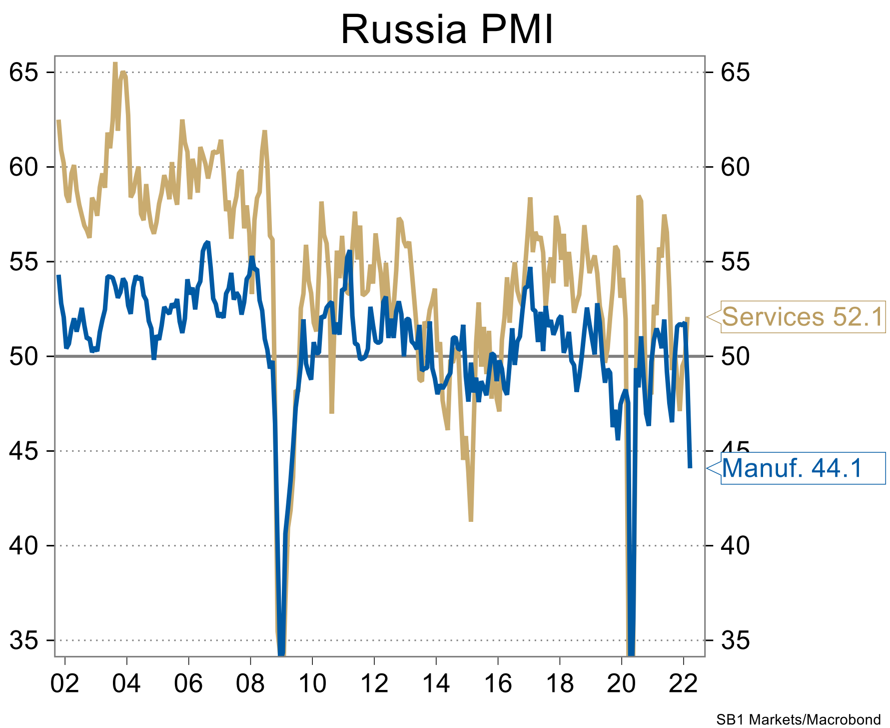




- Actual manufacturing production is on the recovery track and it is finally above the pre-pandemic level
- We expect a continued growth the coming months, but the pace to slow.
  - » Investments will probably climb further while goods consumption in the US will have to normalise at a lower level than the current

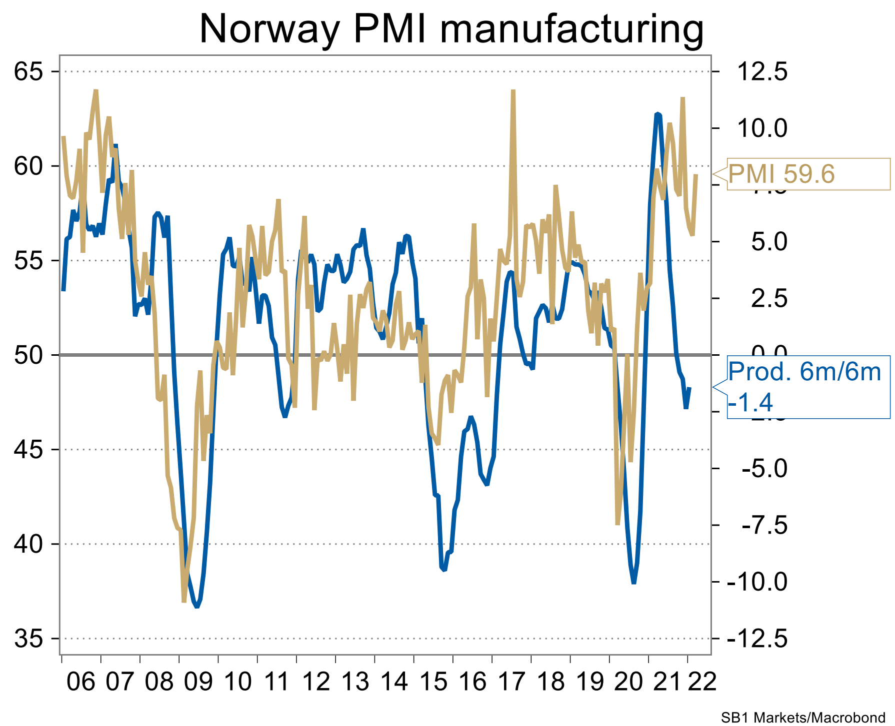
Suddenly: the largest decline, to the lowest level of all in March

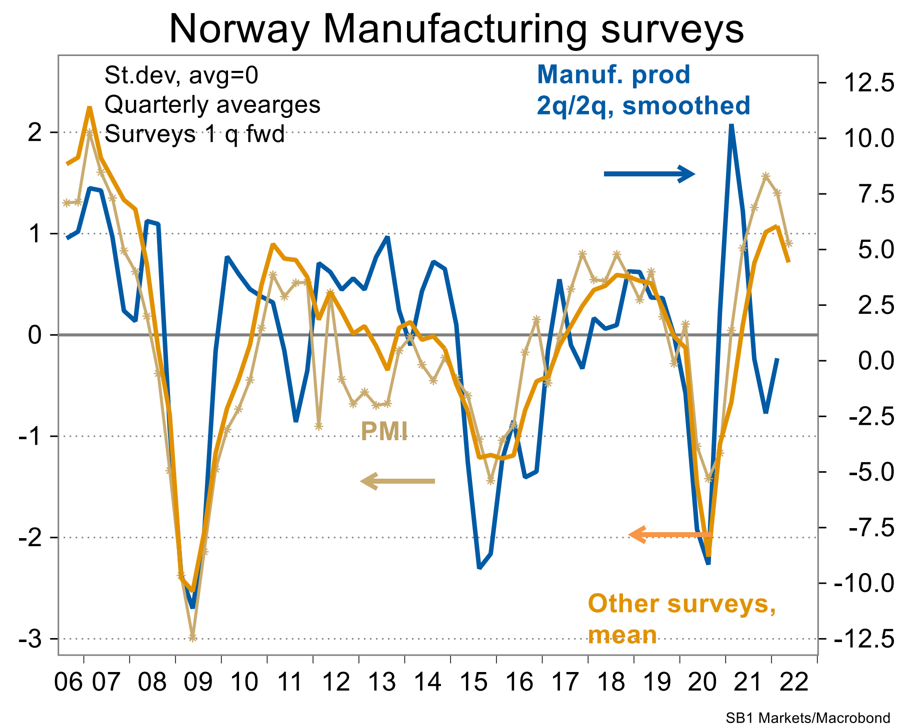
The index fell 4.5 p to 44.1, the weakest PMI in March. Services have not yet reported



The manufacturing PMI up 3.3 p to 59.6 in March, better than expected

Delivery times rose again but order & production sub-indices contributed more to the lift

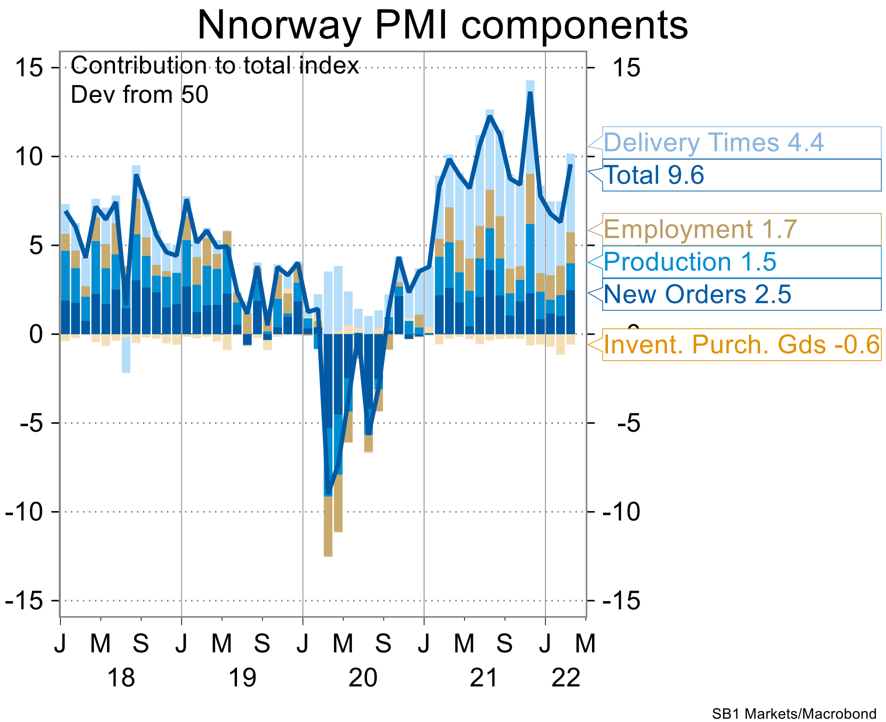


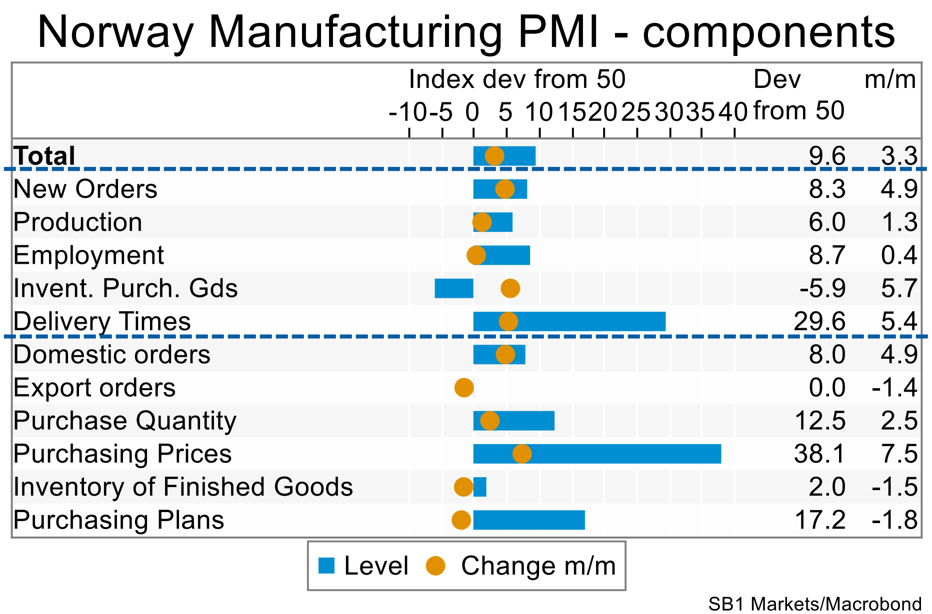


- The **manufacturing PMI index** rose after 3 months on the way down – and the 3 m average is still on the way down
- Other **manufacturing surveys** are marginally down too
- Even if surveys have been reporting growth, **actual production** has fallen slightly since last April

The delivery times index still lifts the headline PMI ‘artificially’

The declivery index lifts by 4.4 p - but other componets rose in March





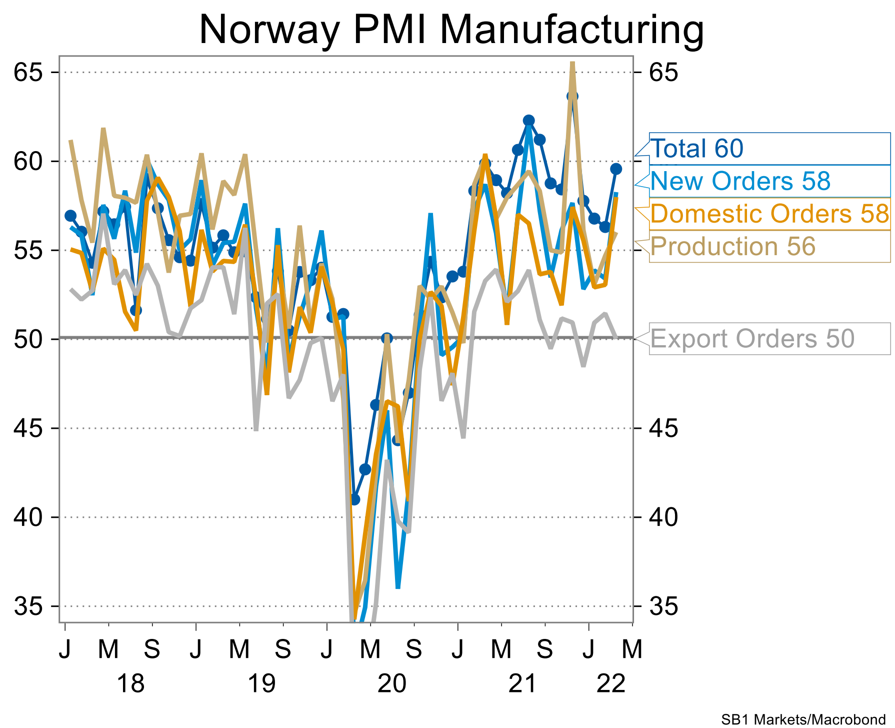
The total index is the average of the first 5 sub-indices

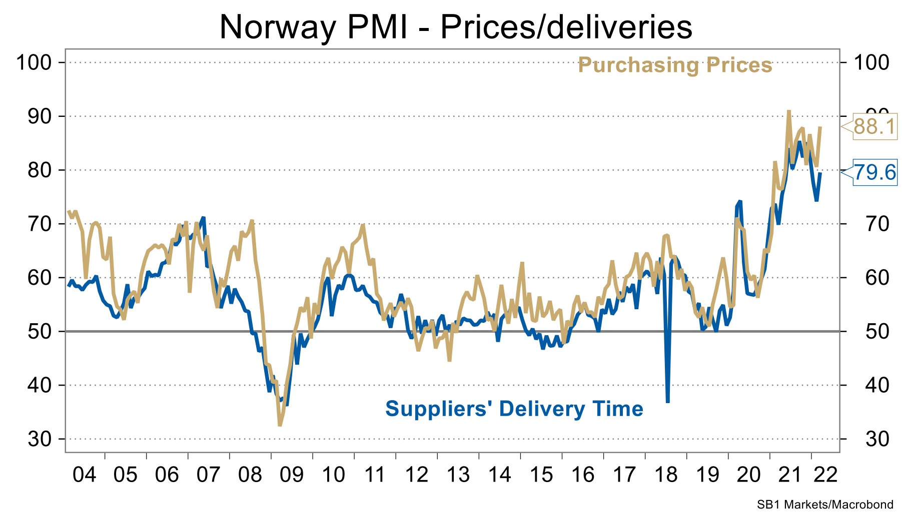
- Normally, the **delivery times index** has not had any significant impact on the total PMI index as the delivery times index has been quite closely correlated other components in the headline index. Now, it makes a substantial difference, by 4 pp to the total index
- **Prices** are still rising at a fast pace, albeit slower in Jan – the index shot up 7.5 p to 88.1!

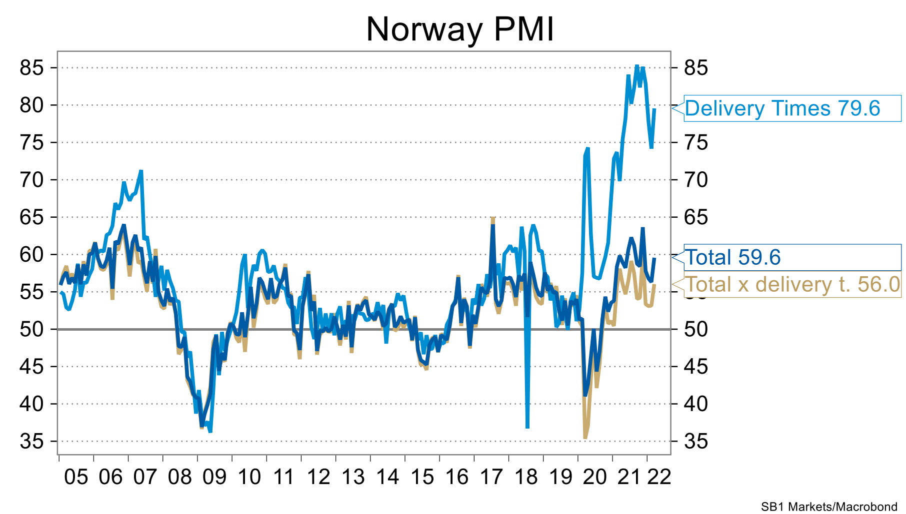
The total PMI index is a weighted index of new orders, production, employment, inventory of purchased goods, and delivery time. The 6 next sub indices at the table to the right are not included in the total index calculus

March a strong month, broad based. But delivery times up, prices even more

A total index ex. delivery times rose 2.8 p to 56.0, as ordres, production indices climbed sharply



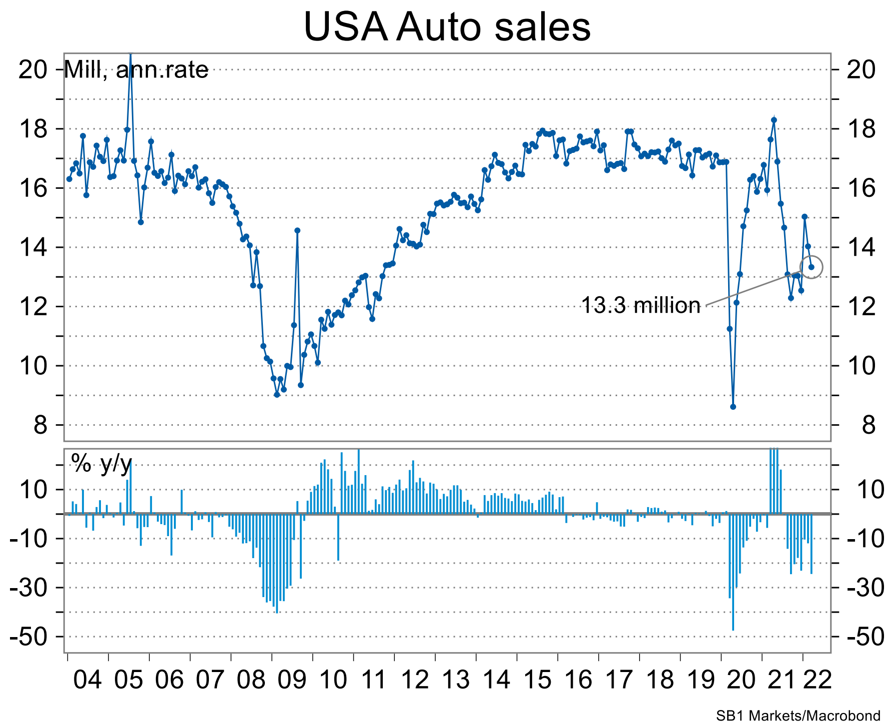


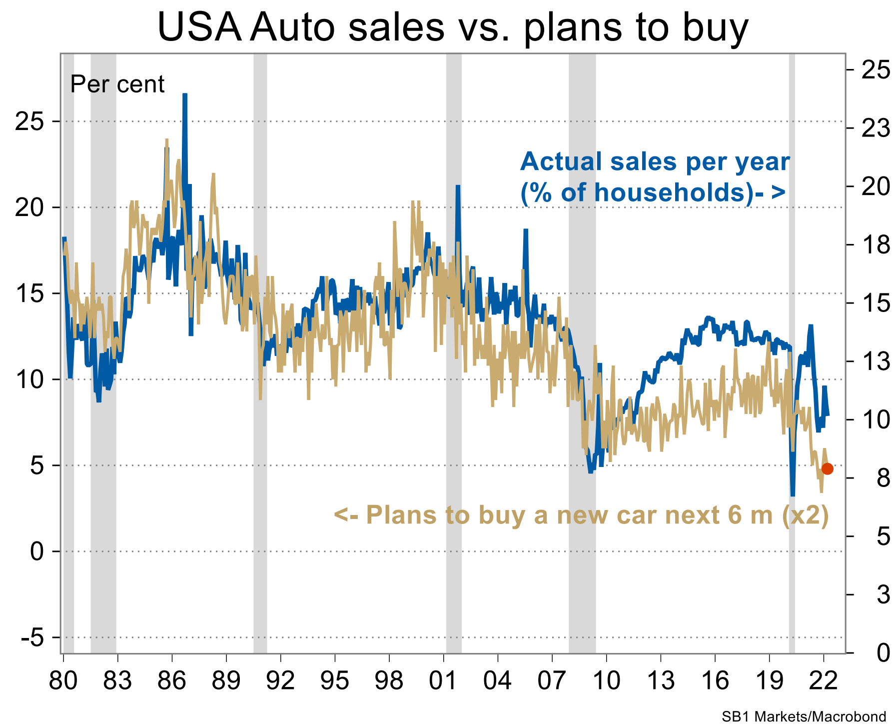


- **Prices** are still rising at a very fast pace

US auto sales down to 13.3 mill in March, from 14.1 mill, close to expectations

Sales are down 22% vs. the 2019 level, entirely due to lack of supply

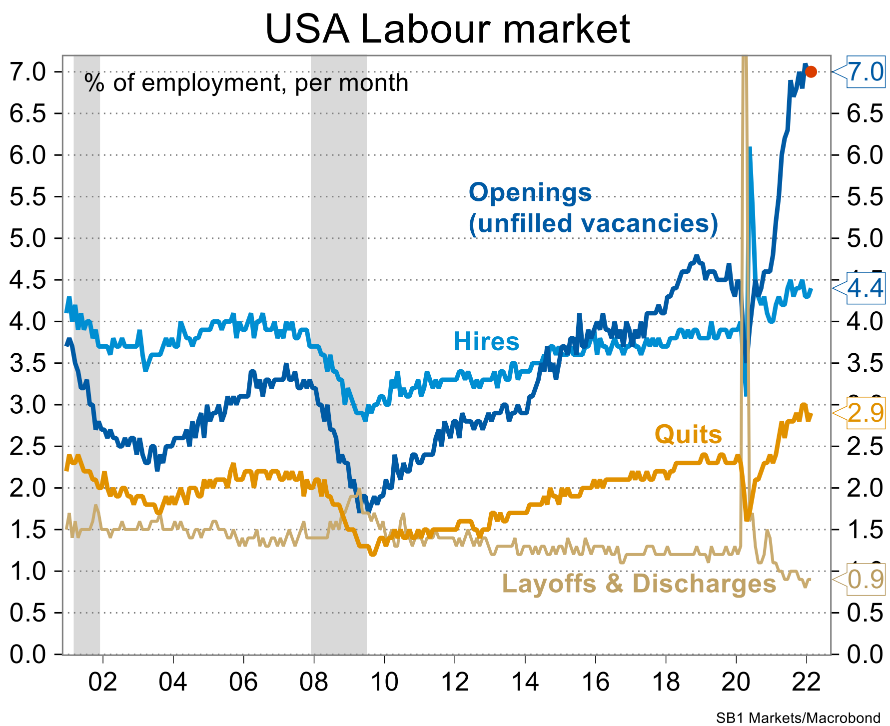




- Households revised down their **plans for buying a new car** substantially through last year as they probably have observed that there are delivery 'challenges'. In addition, prices are rising sharply (for identical cars), and more expensive models are prioritised by car producers (or rather cars with the highest margins
- **Demand for cars** is still strong, as the 2nd hand market is 'emptied', and used car prices have soared 50 – 60% (but prices fell slightly in February)

The vacancy rate remains at a record high level

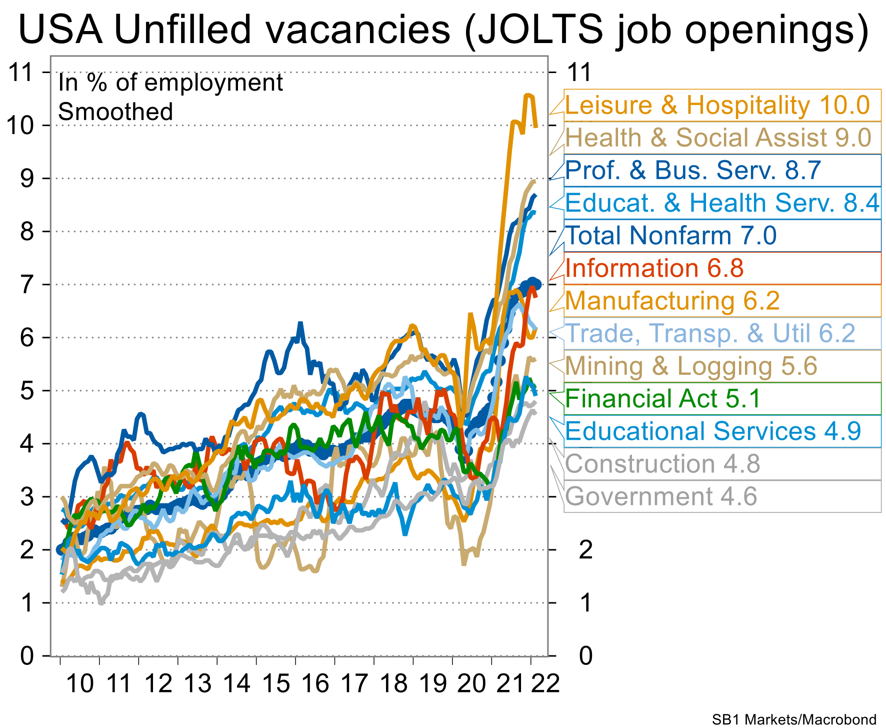
Hiring is brisk – many are quitting, and 'nobody' are laid off

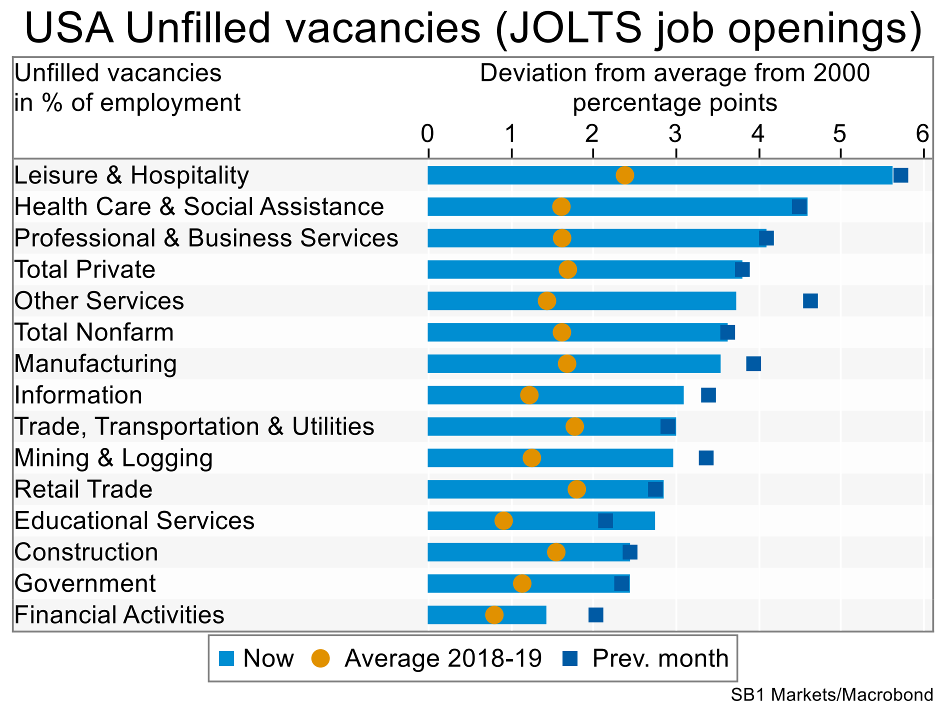


- The number of **unfilled vacancies** was unch at 11.3 mill in February, expected down to 11.0 mill. The rate was unch at 7.0%, down 0.1 pp from the Dec peak
  - » The highest print ever before the pandemic was 4.7%, and the rate was 4.5% just before the pandemic hit
  - » **The SMBs (NFIB survey)** reported a marginal decrease in the share companies that are able to fill open positions in March, but the level remains close to ATH. These two series are very closely correlated – and both have been at levels never seen before since early last year
- **New hires rose 0.2 mill to** was unchanged at 6.7 mill persons, equalling 4.3% of the employment level, an unusual high level
- The number of **voluntary quits** increased by 0.1 mill to 4.4 mill, or up 0.1 pp to 2.9% of the no. of employed, close to the peak at 2.9%. As with unfilled vacancies, quits are closely correlated to wage inflation – for obvious reasons
- **Layoffs** were unchanged at 0.9%, a very low level
- **In sum:** The report data confirm an extreme tight labour market

All sectors are reporting more vacancies than before the pandemic

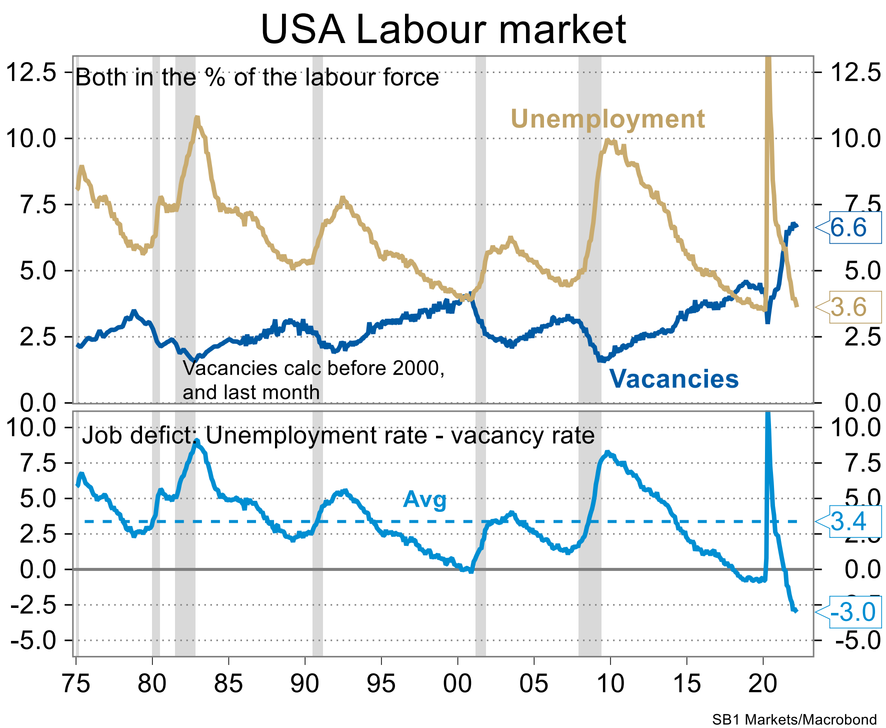
Mixed last month – finally down in leisure & hospitality, a good sign

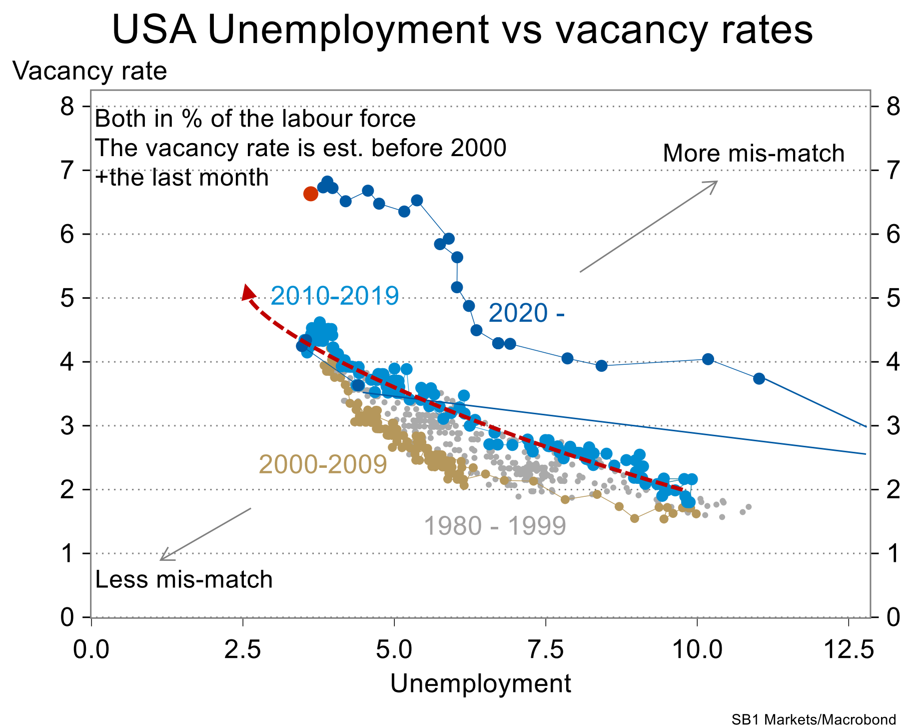




An unprecedented tight labour market – and still a large mis-match

6.3 mill were unemployed in Feb, and at the same time there were 11.3 mill unfilled job openings!

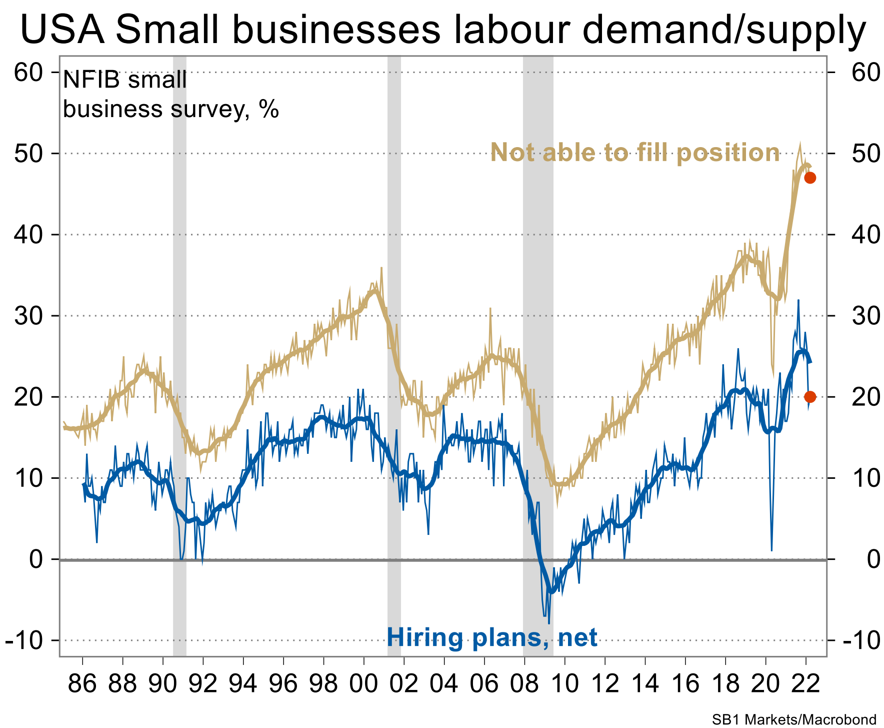


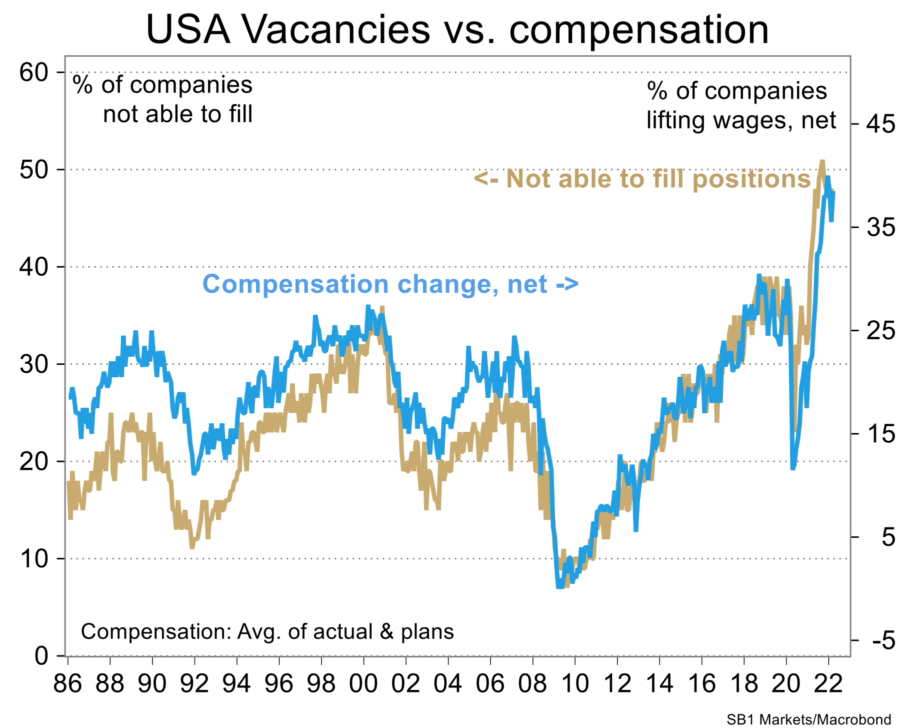


- We have never seen a gap like this before!
- **The Unemployment - Vacancy-curve** (UV, Beveridge curve) is still moving in the north-west direction, signalling a gradually tighter labour market. The only silver lining may be that unemployment is falling faster than the vacancy rate increases, signalling that the mismatch at the labour market may be easing somewhat

Hiring plans remain at a 'low' level – and still 'impossible' to fill vacant positions

In March, more companies reported the have lifted & plan to lift wages further

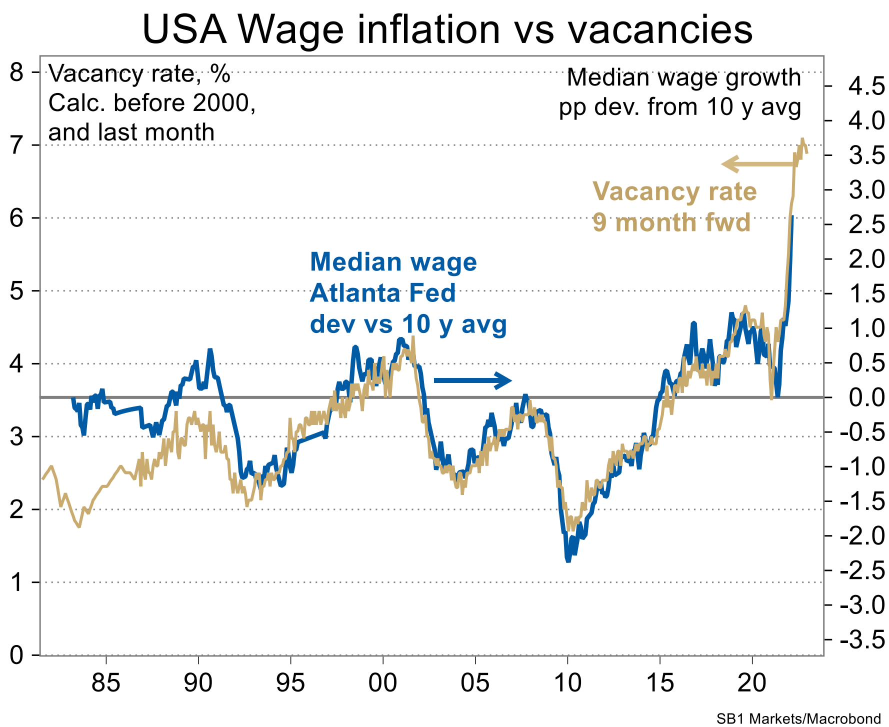


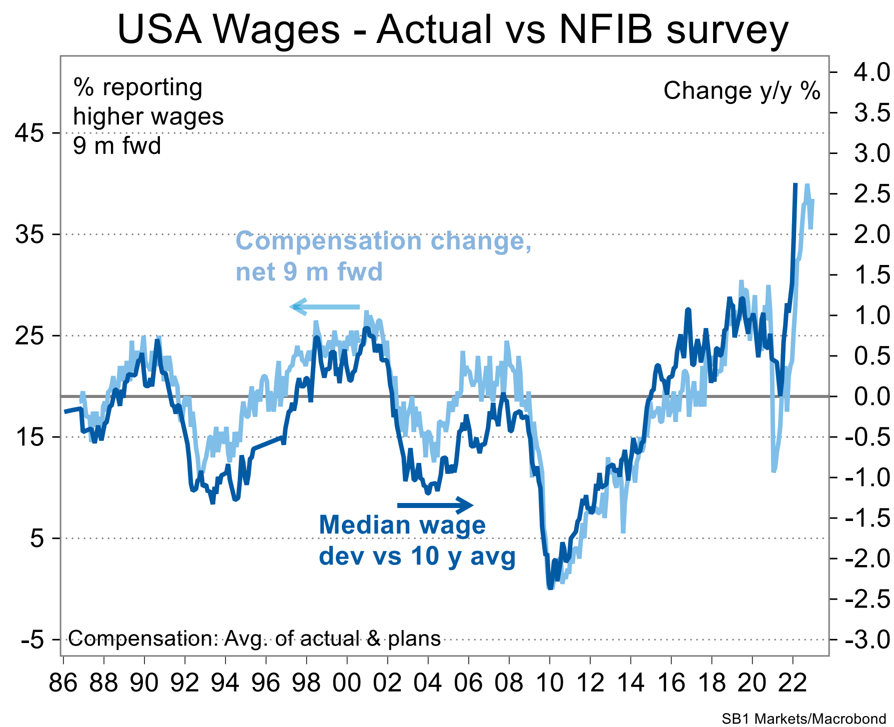


- **SMB's hiring plans** fell significantly in February and rose just slightly in March. The rate is still at the highest level seen, barring the 2021 peak
- The share of companies that reported **plans to lift compensation** rose in March, following a small decline in February. The level is close to at ATH
  - » The correlation to actual wage growth is pretty close, check the next page

There seems to be a connection here??

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

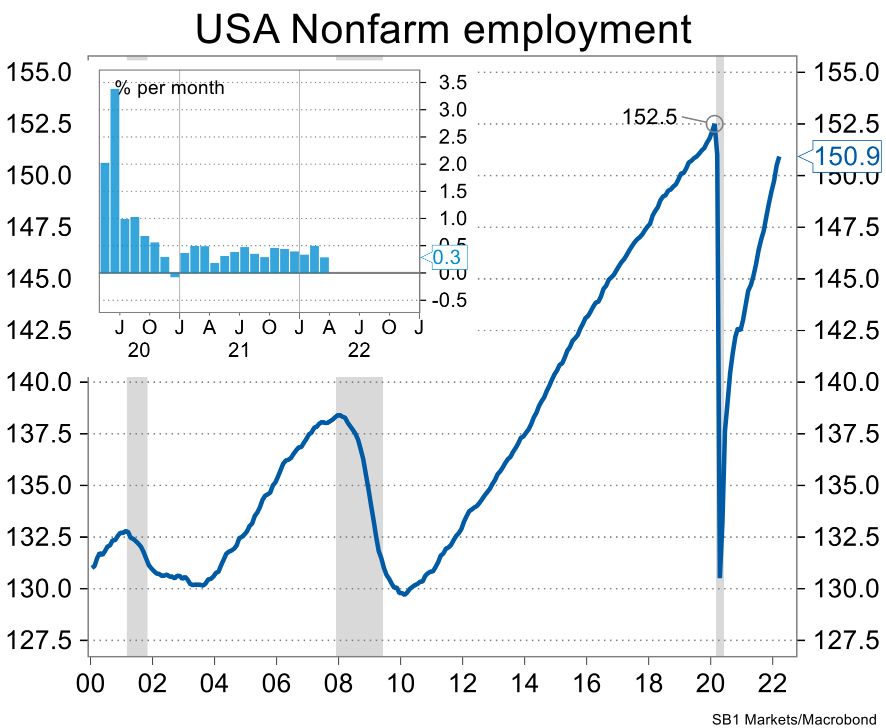


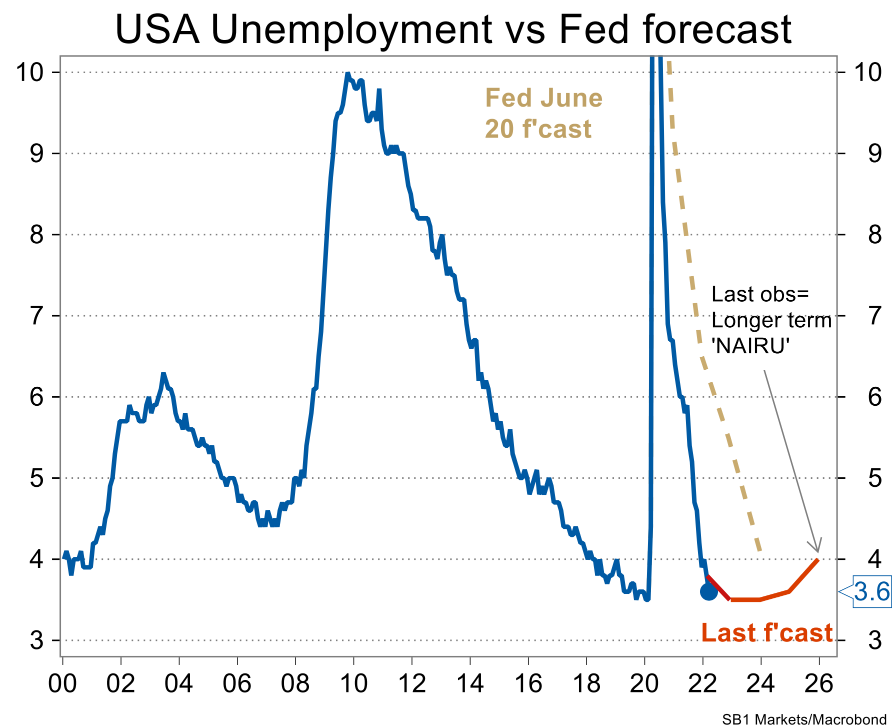


- Our ‘Phillips curve’ signal a further increase in wage inflation the coming quarters, as the vacancy leads changes in wage inflation quite consistently by 3 quarters
- In addition, the correlation changes compensation plans (see previous page) and future actual wage growth is not that bad (again with a 3 quarter lead). These compensations plans do not suggest a further wage growth acceleration. However

Growth in payrolls is slowly slowing, unemployment is falling rapidly

Participation on the way up but too slow. Wage inflation is too high to yield 2% CPI inflation over time

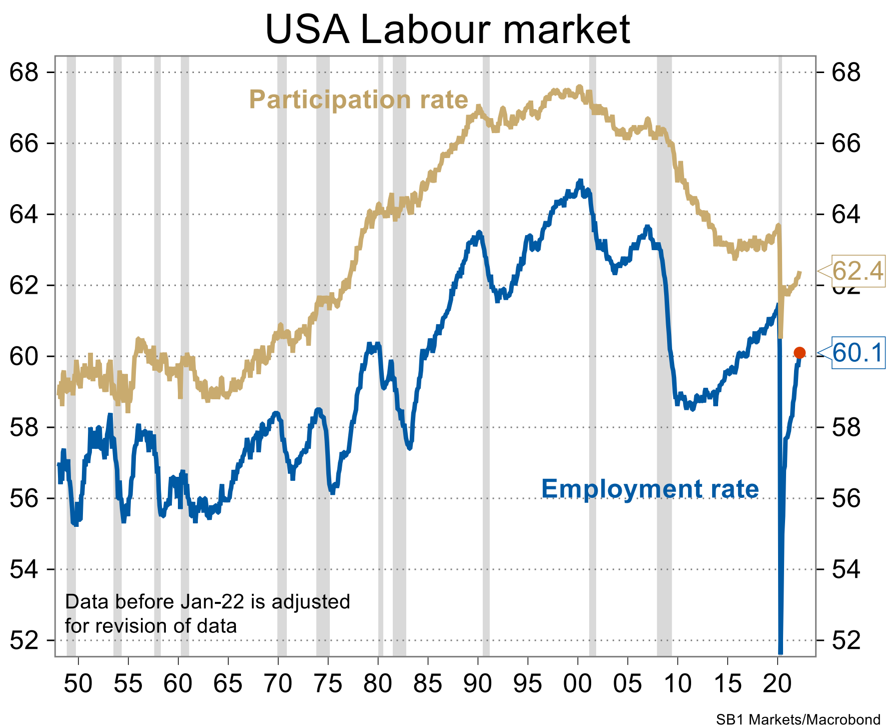


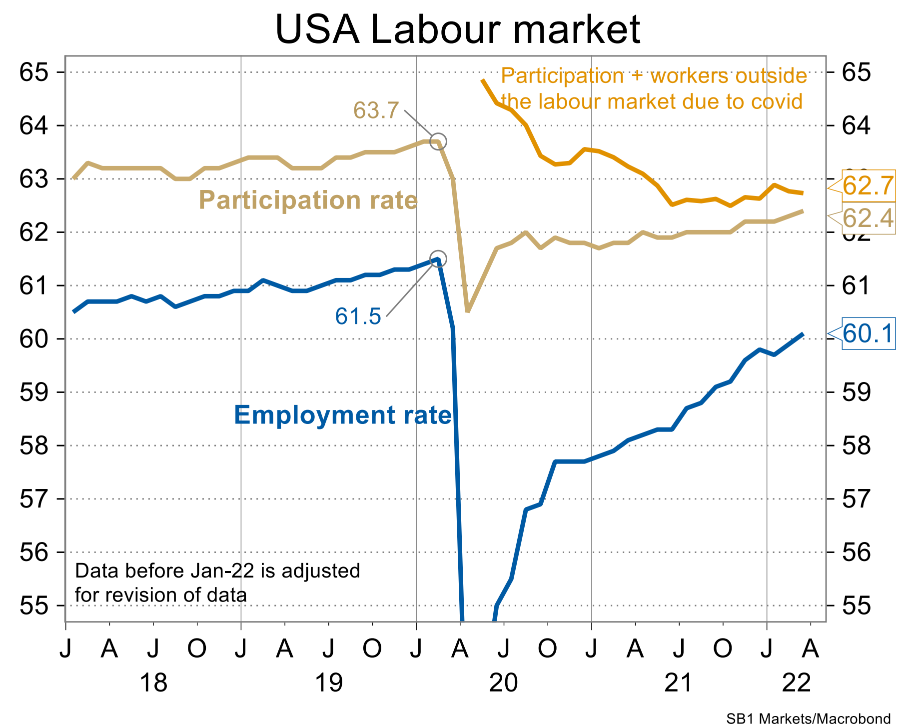


- **Nonfarm payrolls** rose by 431' in March, somewhat below the expected 490' but the past 2 months were revised up by 95'. Payrolls are still down 1.6 mill vs. Feb-20 or by 1.0%
- **The participation rate** rose 0.1 pp to 62.4%, highest level since before the pandemic. The trend is up too, a positive sign – the supply side is finally slowly responding to the strong demand for labour. The **employment rate** rose by 0.2%. The participation rate is
- **The unemployment rate** fell 0.2 p to 3.6%, 0.1 pp lower than expected. The rate is now just 0.1 pp above Fed's estimate end of '22 estimate – and 0.4 pp below Fed's estimate of the long term NAIRU. In February, the unfilled vacancies equalled 6.6% of the labour force
- **The average wage** rose 0.4%, as expected but Feb was revised up by 0.1 pp. Over the past 3 months wage inflation has slowed marginally but not significant. The underlying trend since last April is close to 6%, up from 3¼ before the pandemic – and not compatible with 2% CPI inflation over time
- **Maximum employment:** Even if the participation now may be trending slowly up, the supply side is obviously the bottleneck at the labour market. For the time being, maximum employment is reached

The participation rate up another 0.1 pp in March – and the trend is up!

… and the rate is the highest since before the pandemic. However, employment is climbing 3 x faster

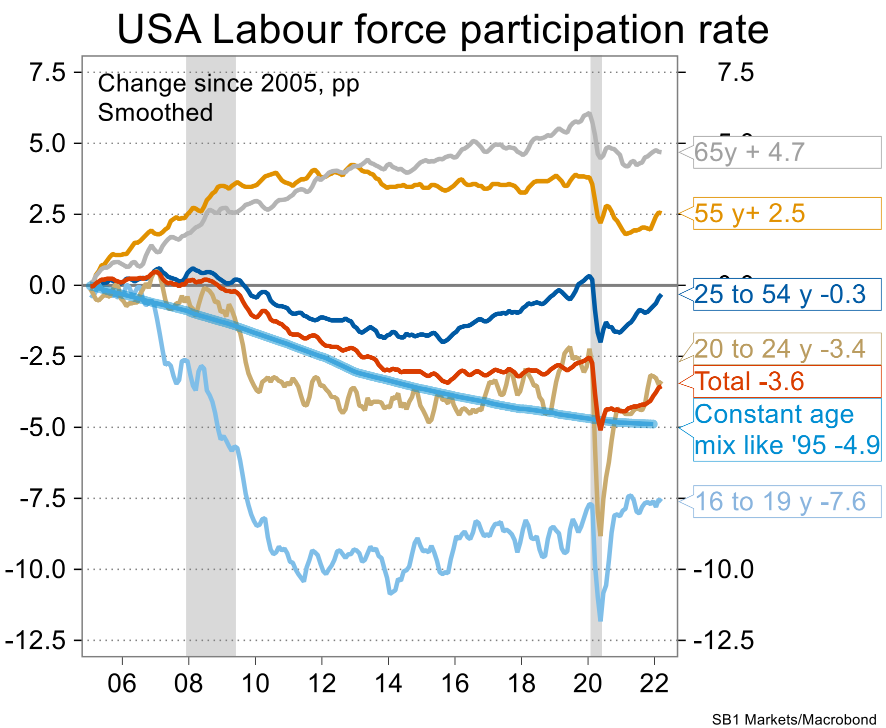


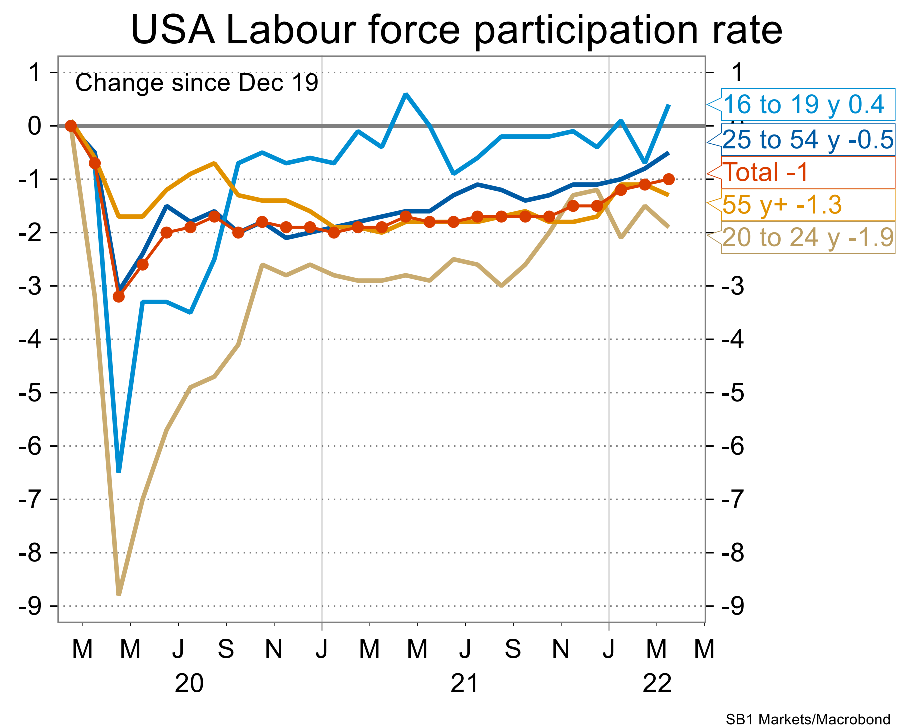


- **The labour force participation rate** gained 0.1 pp to 62.4% (of the working age population, 16 y +). The trend is slightly positive but not impressive given the increase in the employment rate (and the decline in the early part of the pandemic)
  - » The participation rate is down 1.3 pp (vs the working age population) vs the pre pandemic level, equalling 2.0% or 3.4 mill persons
  - » In March, 0.9 mill persons responded that they did not search for work (and thus were excluded from the work force) for Covid-19 related reasons, down from 1.2 mill in Feb (and 1.8 mill in Jan, 3.7 mill one year ago). Of the 0.9 mill, just 0.3 mill say they want a job. The reduction in no. of 'outsiders' has not led to an equivalent increase in the labour force. The 'covid outsider rate' has fallen by 1.1 pp (to just 0.3%) the past 12 months, while the participation rate has increased just 0.6 pp. This indicates that the reservoir of available labour supply is very limited
- **The employment rate** rose 0.2 pp to 60.1%. LFS employment rose by 736'. Over time, the payrolls stats and the LFS report the same growth rates, but they may differ substantially from month to month. The employment rate is down 1.4 pp vs. Feb 20, equalling 2.3% or 3.7 mill persons

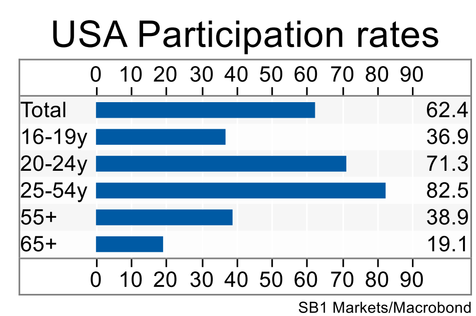
The potential: Core age groups soon back to pre-pand. & pre-Fin-Crisis levels

Encouraging data recently, but the reserve may be declining rapidly. The elderly hard to get back?



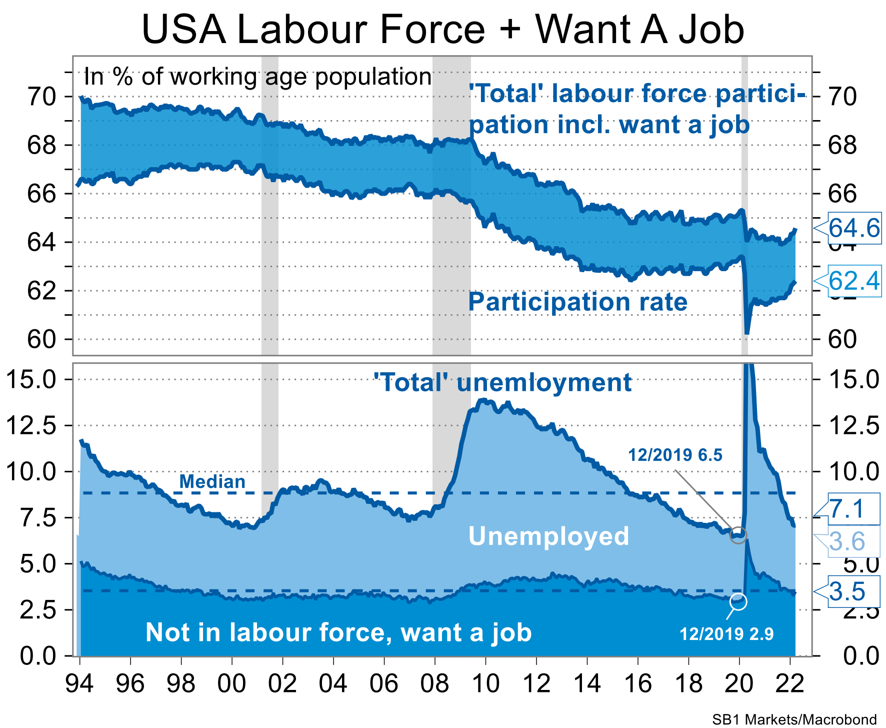


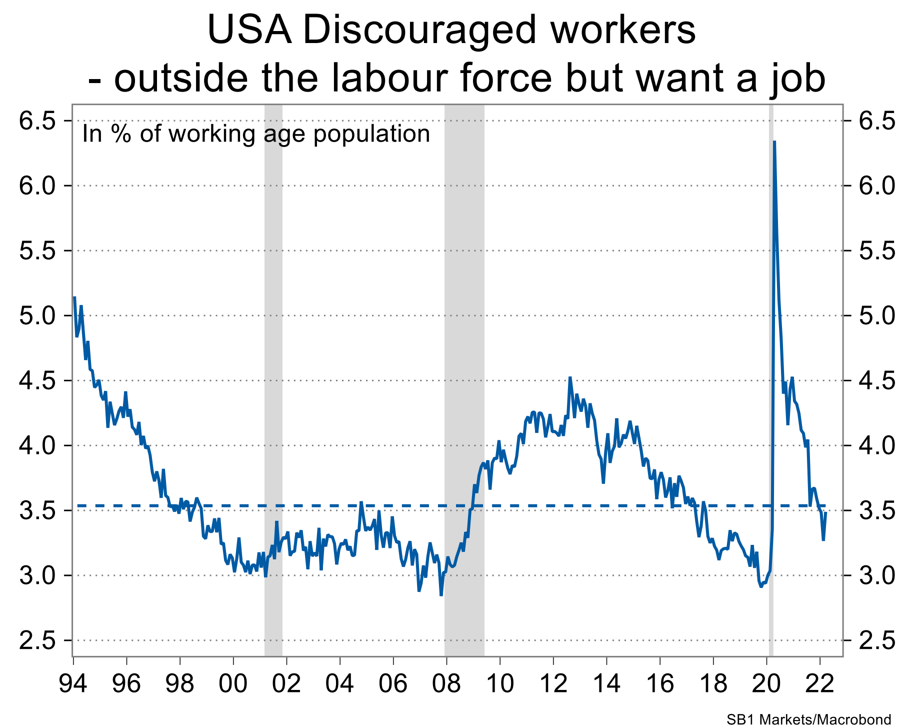
- As the US population is aging, a decline in the average participation rate <u>over time</u> is no surprise. The chart above illustrates the impact. The thick light blue line illustrates the participation rate if each group kept their participation rate at the 2005 level. The decline is due to the larger old cohorts



Not that many outside the labour force say they want a job

A small reserve is still left – perhaps the end of the pandemic will lure them out

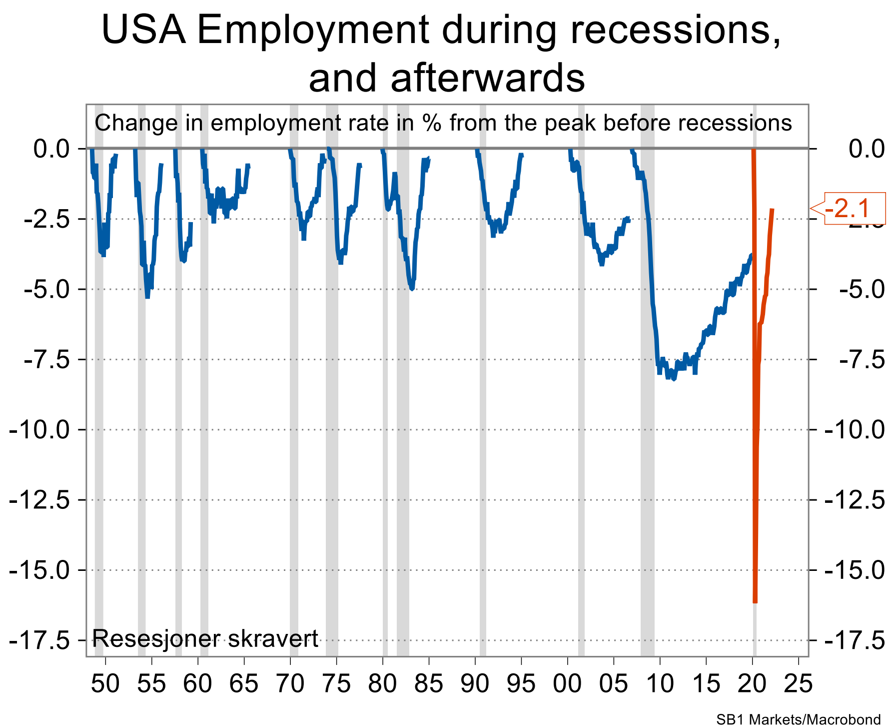


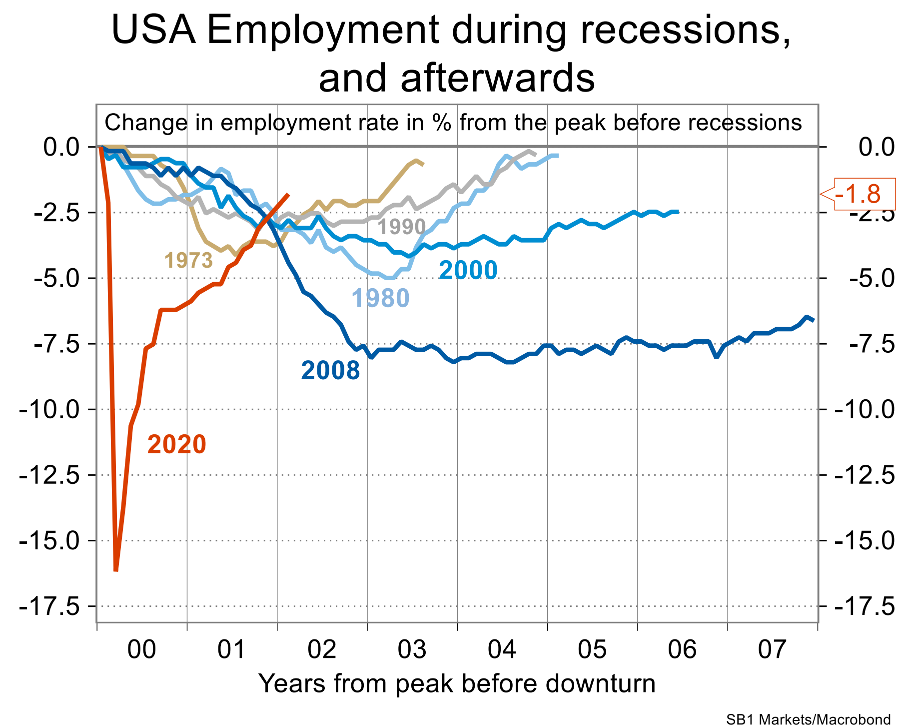


- Fewer than normal say they want a job without activity searching for one (they are not included the work force)
  - » Still – in really good times, the labour force may be increased by an additional 0.3 – 0.4 pp
- Covid related outsiders that say they want a job are included in these discouraged workers data

This was a special downturn

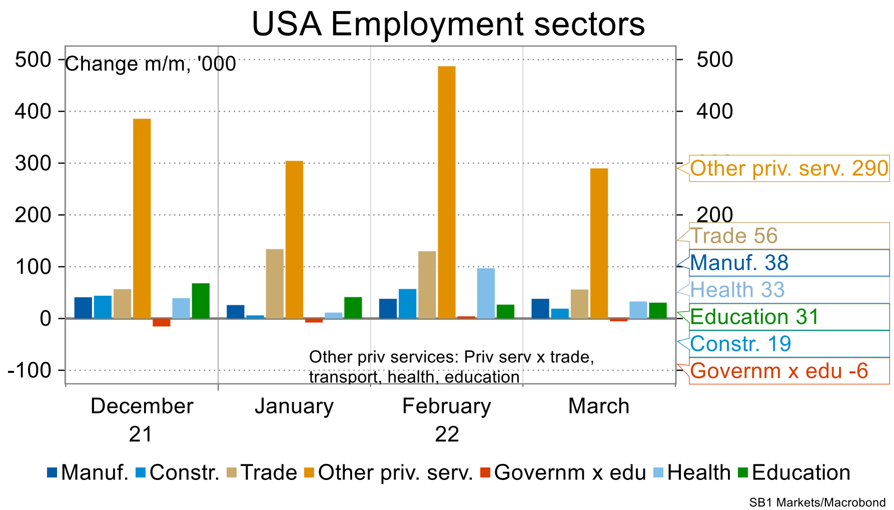
The employment rate is below the pre-pand. level but all other indicators signal a tight labour market



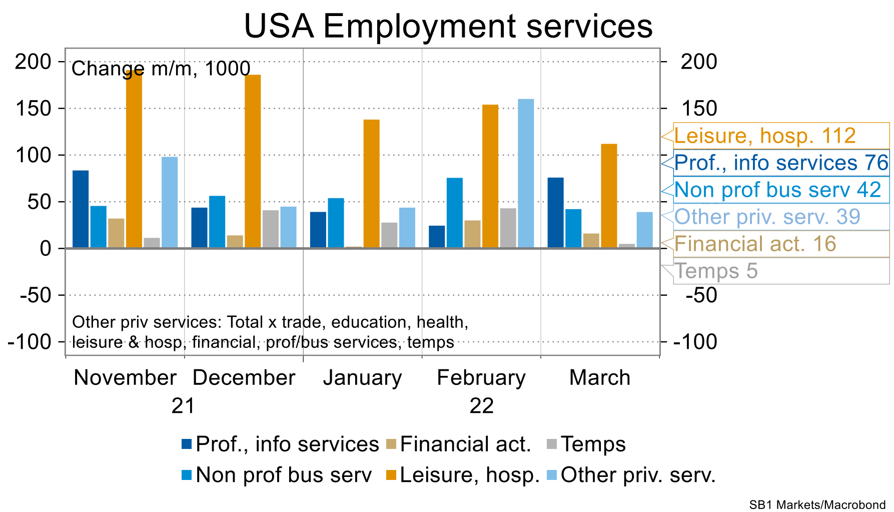


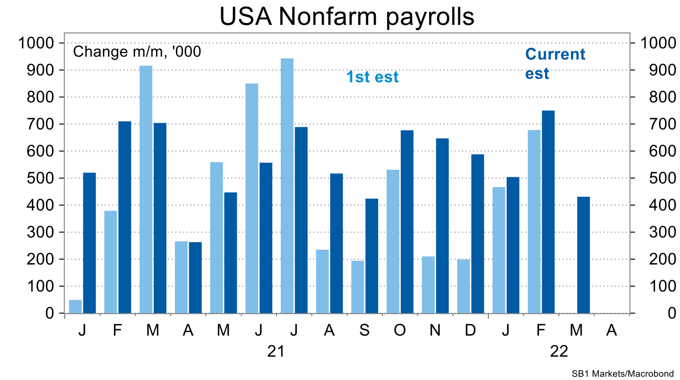
In Feb: Growth in all main sectors, services (leisure/hospitality) in the lead

Still, slower growth in most sectors in March



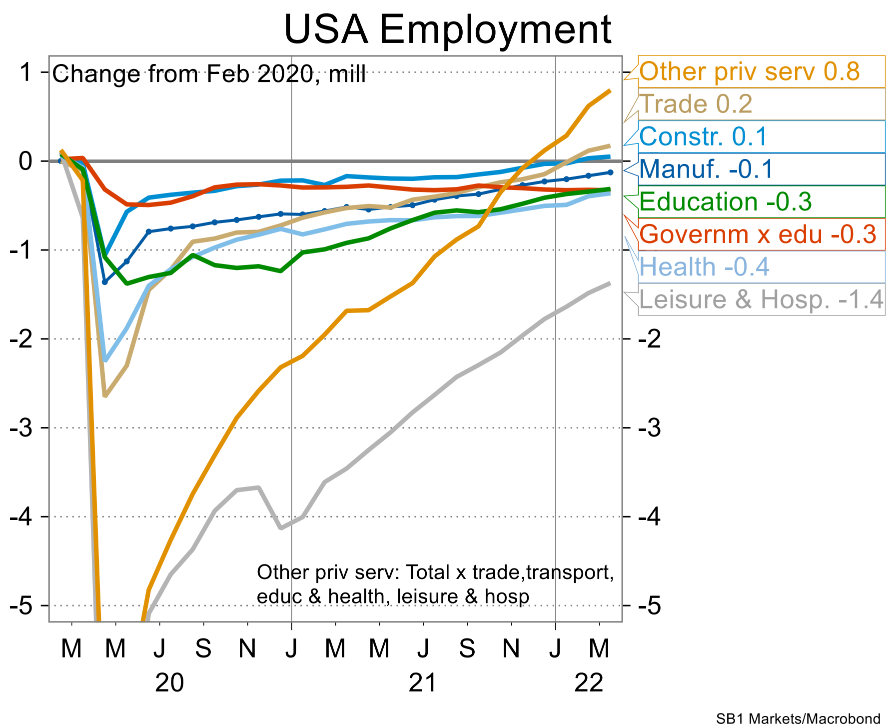
- **Last month:**
  - » **Leisure & hospitality** (restaurants ¾ of the total, hotels, parks, gambling, arts++) added 112’ jobs
  - » **Trade** added 56’ jobs – and the trend is steady upwards
  - » A broad increase in payrolls in other **private services**
  - » **Manufacturing** added 38’, on par
  - » **Construction** sector employment up by 19’, less than normal
  - » **Education** (private & public) up by 31’ (seas. adj.)
  - » Employment in **government** (ex education) down by 4’

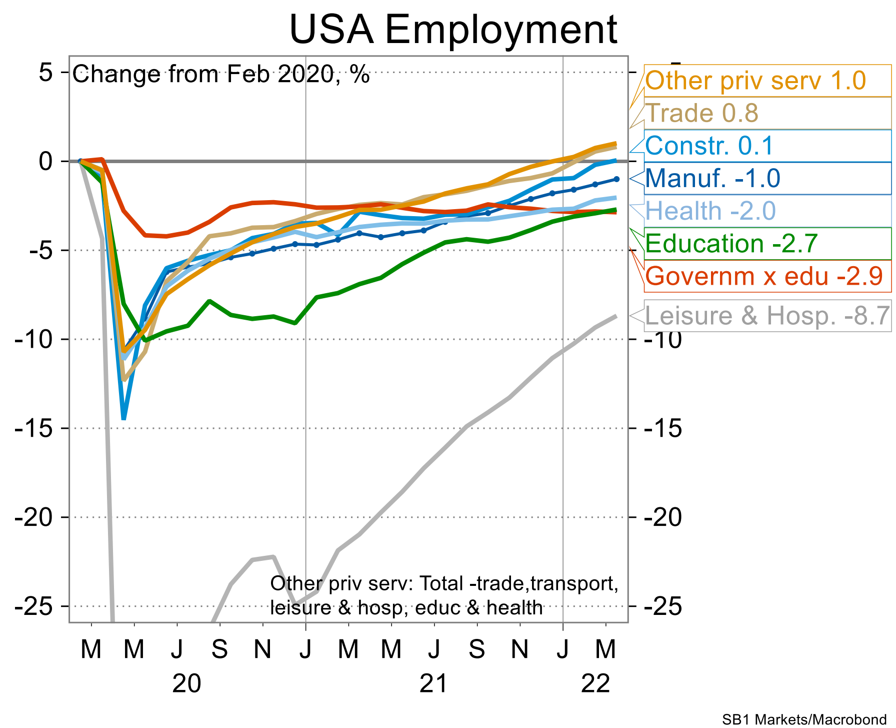




Vs. Feb-20: The gap is tightening, several private services above the starting point

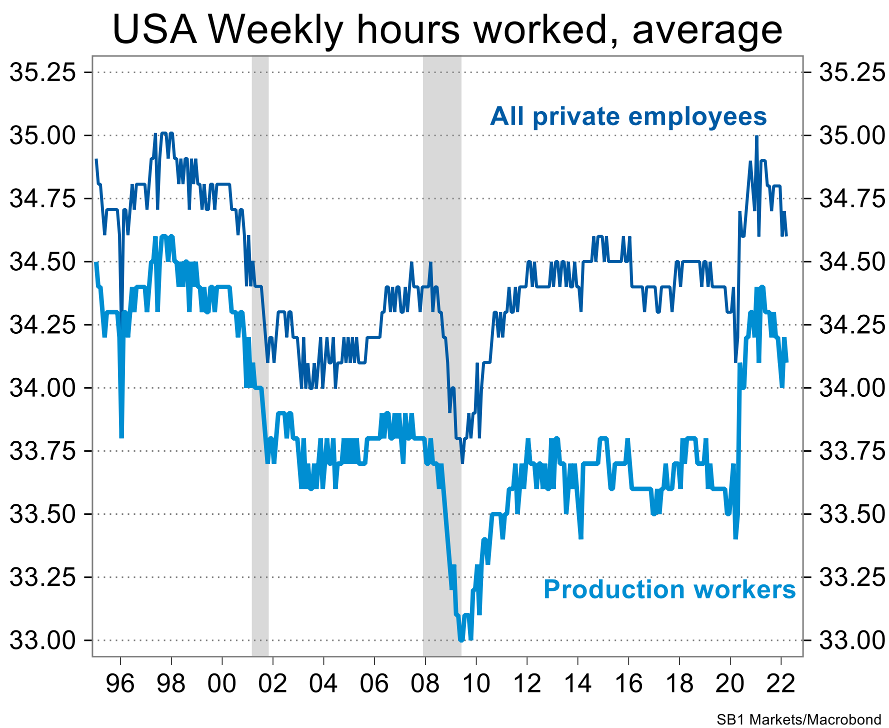
Leisure & hospitality still down 9% - but steadily climbing

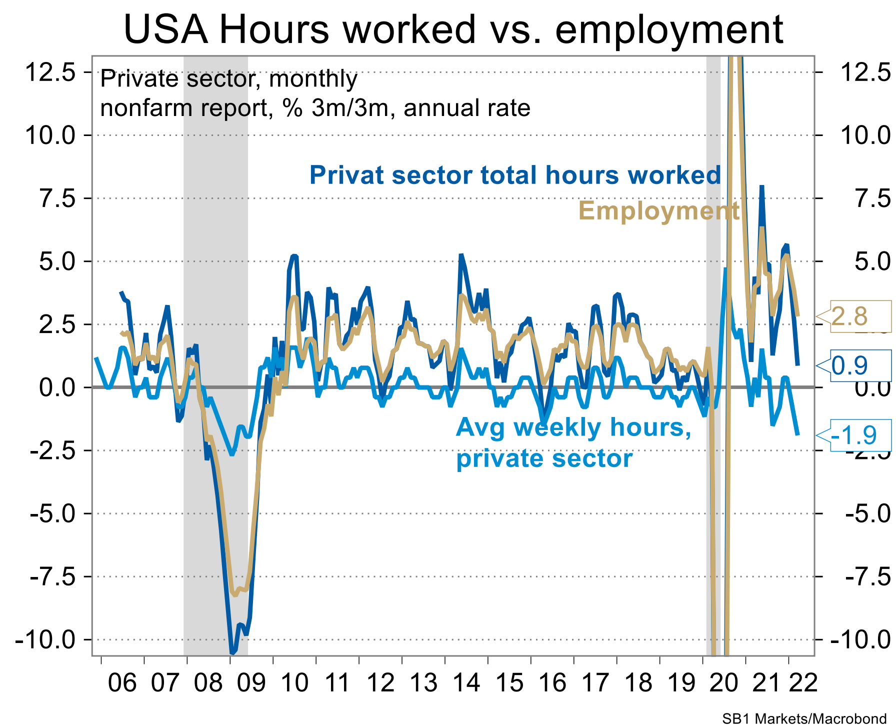




Average weekly hours down in March – and is heading down

Probably due to virus problems (sickness leave etc). Total hours worked up 0.9% in Q1

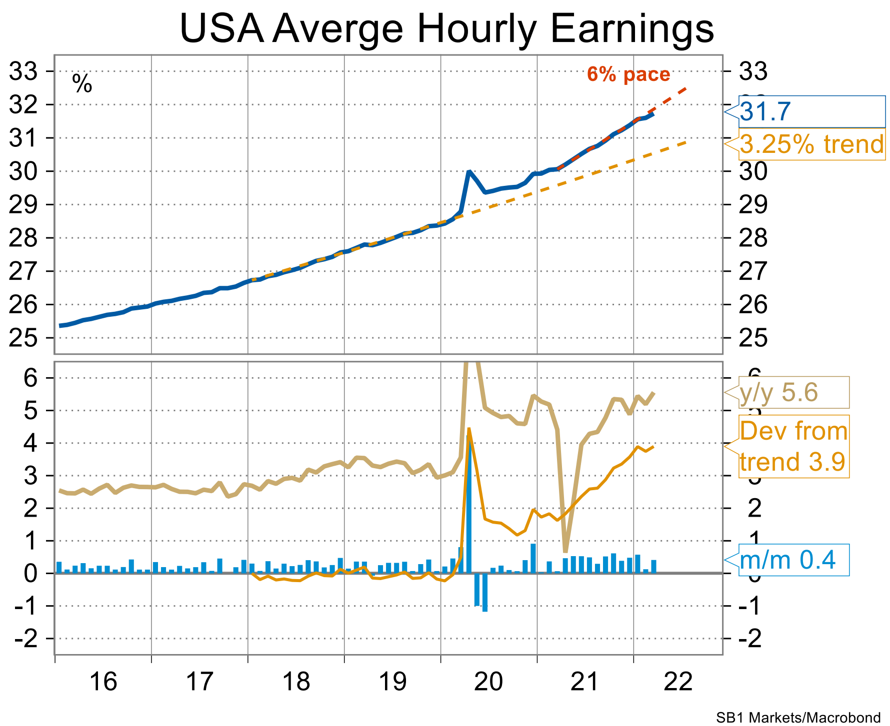




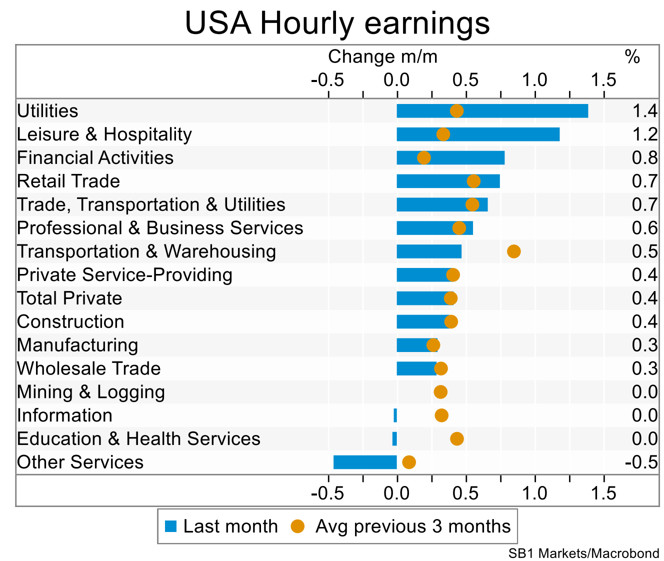
- 2.5 mill workers in the LFS reported that they have been unable to work or have worked fewer hours because the employer closed or lost business due to the pandemic – down from 4.5 mill in February

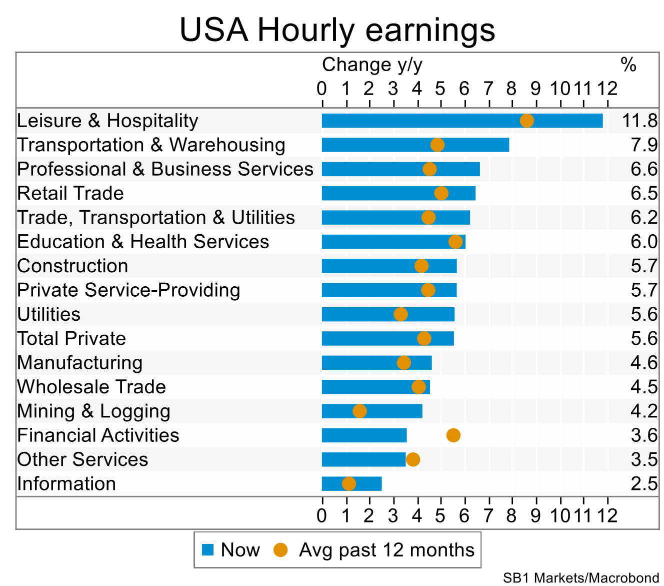
Is wage growth slowing? Wages up just up at a 4.5% pace through Q1

The decline is broad based but not significant given the normal volatility in monthly data



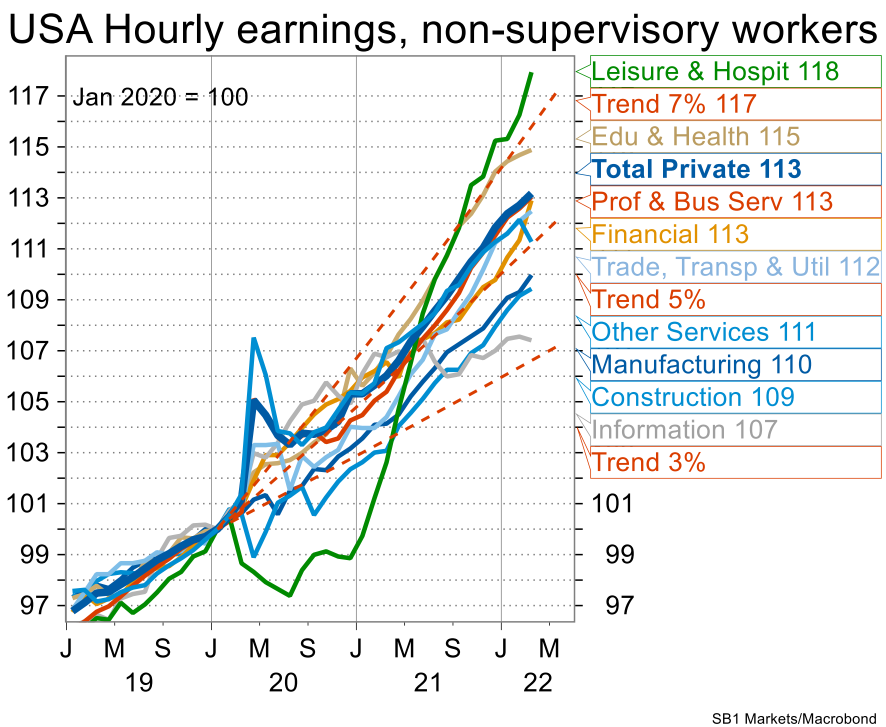
- The **average wage** rose 0.4% in March, as expected – and Feb was revised up 0.1 pp to 0.1%. **The annual rate** accelerated to 5.6% from 5.1%, also 0.1% more than expected
- Since last April, the underlying growth has equalled close to 6%, far above the pre-pandemic trend at 3.25%
- More sectors reported higher than lower m/m wage changes in March vs the previous 3 months in average. However, almost all sectors report higher annual inflation, than the average 12 m growth rate over the past year.





Wages are climbing at 4 – 7% growth pace, the average at 6%

… And well above the pre-pandemic growth path in all sectors

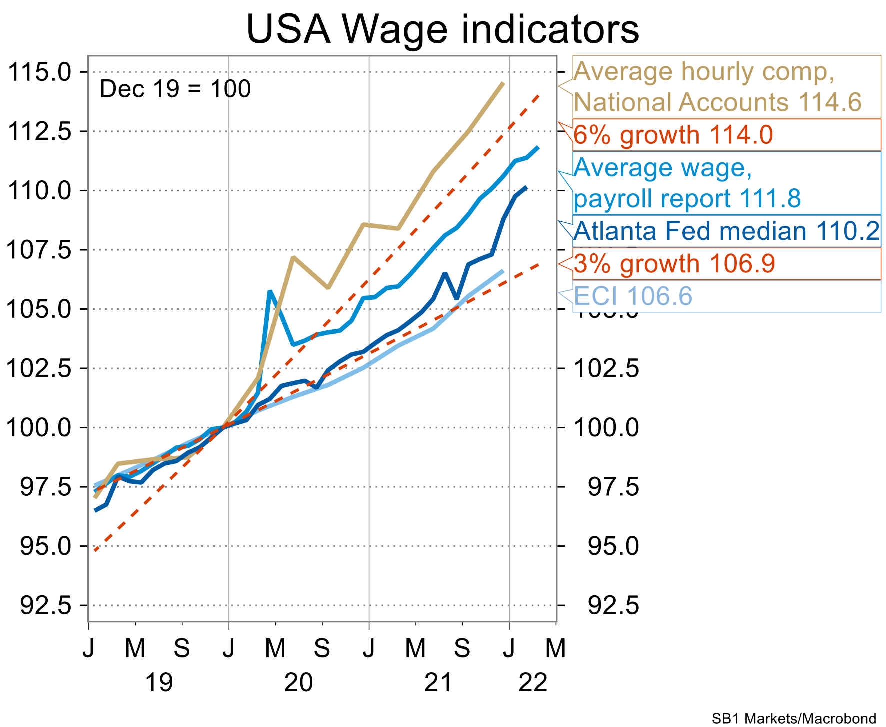


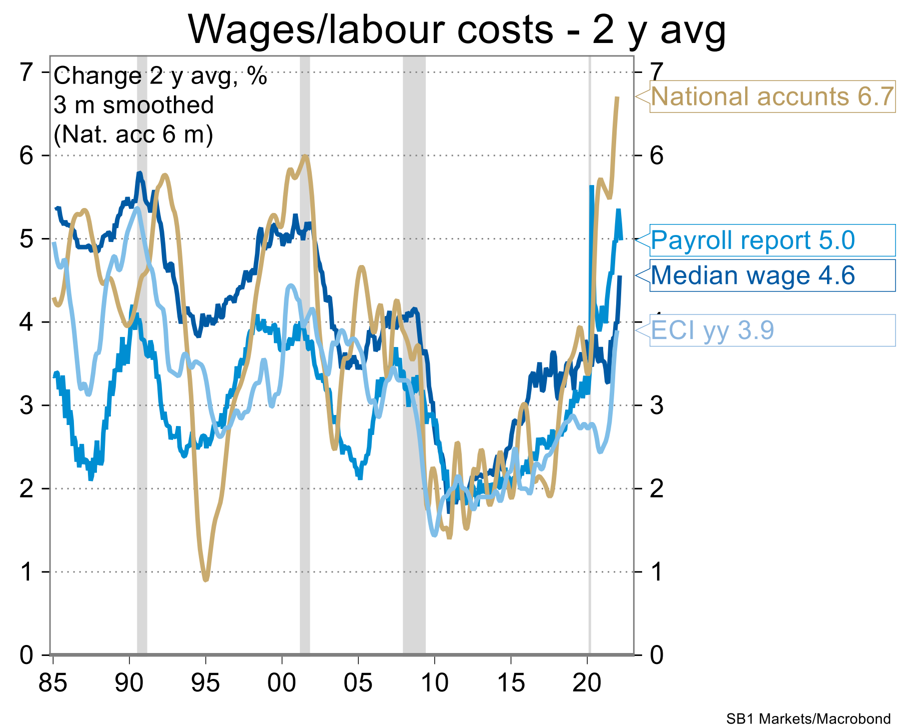
Memo: On the chart to the left above, wages for non-supervisory workers are shown. When all employees are included, growth is slightly lower in most sectors

SpareBank 1 MARKETS

Wage indicators agree: Growth has accelerated, to substantially > the 10y avg

… which yielded 2% inflation (or more). Productivity may have accelerated, but just marginally

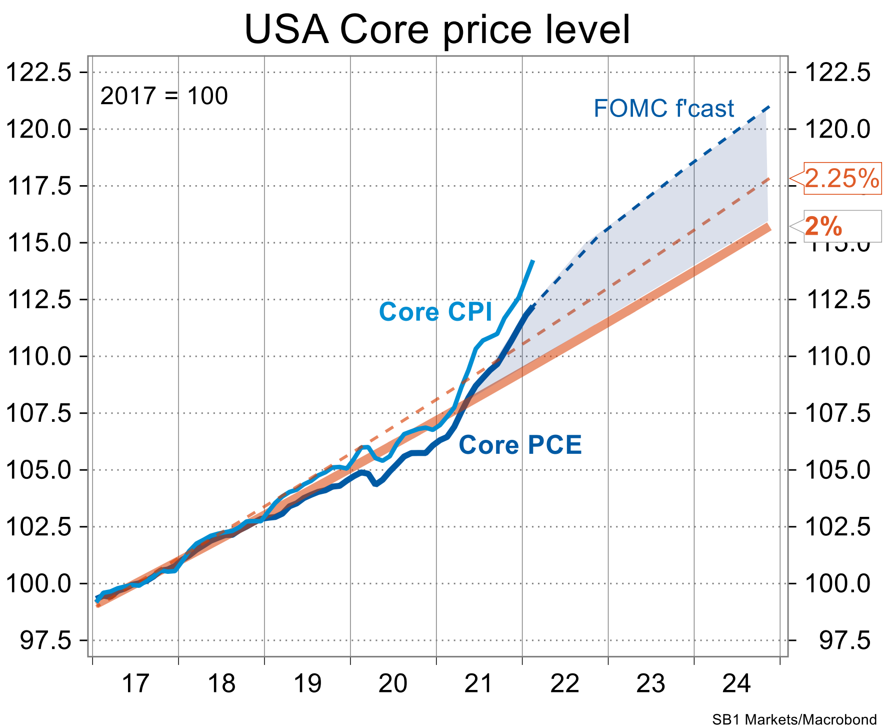


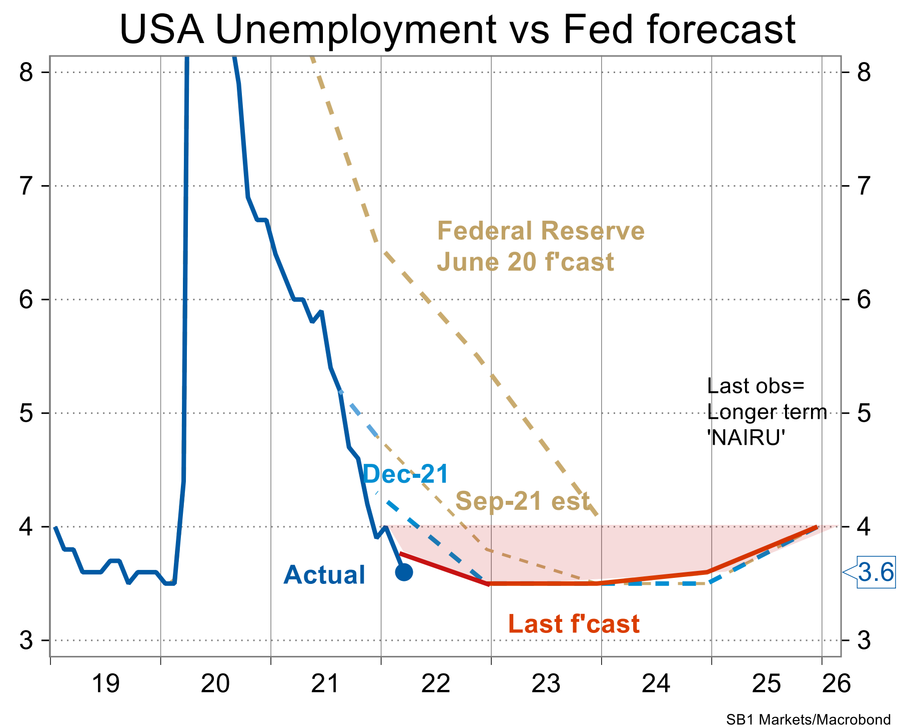


- **All wage indicators** are reporting faster wage growth, and all reporting wage growth well above the average recent years, also if we apply a 2-year average growth rate, to exclude the impact of changes during the first part of the pandemic (chart to the right)
- Growth in wage/earnings/compensation indicators are up 1.5 – 3.5 pp vs the their respective 10 y averages. There is an obvious risk that wage inflation will accelerate further (check the following pages) – probably until the next recession hits as the labour market is extremely tight
- Over the past 10 years, inflation has been close to 2%, and well above 2% if calculated over a shorter period
- It will be a 'challenge' to keep inflation at 2% if wage inflation remains at 5- 6 %. Productivity growth has not accelerated by much. Profit margins may take a beating – and they very likely will – but probably not sufficient to bring inflation down.

Fed's challenge: Neither the inflation target nor the employment target is met

Both inflation and employment are at too high levels, and are expected to remain too high

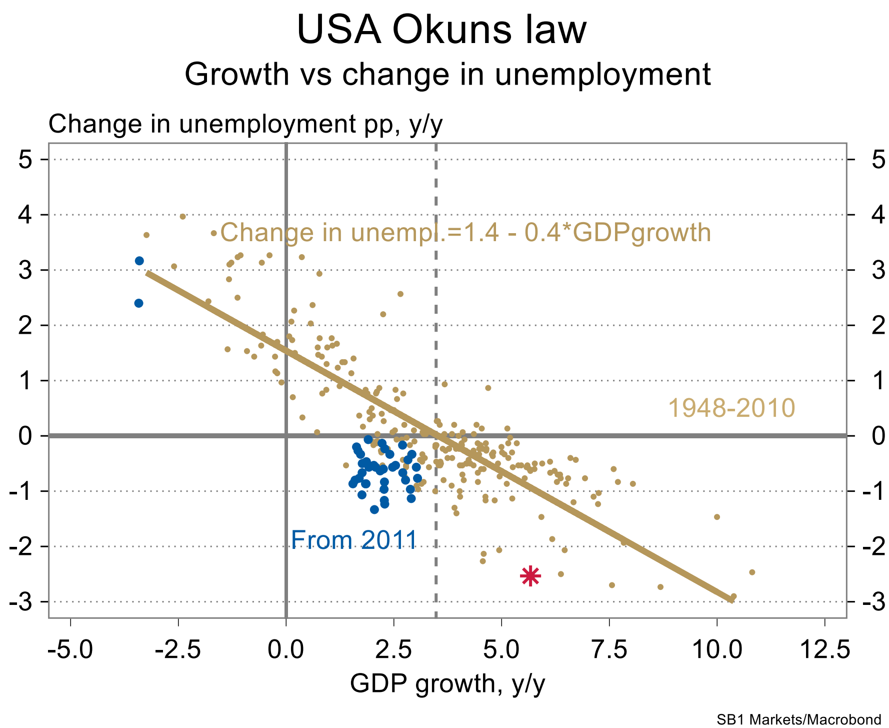




- The price level is expected to be 4.6% higher than implied by the 2%-over-time price-level path, 'promised' by the Federal Reserve
- At the same time, unemployment is expected to remain below the 4% assumed long term equilibrium rate the coming 3 years, at 3.5% from the end of 2022. The current unemployment rate is 3.6%
- To prevent the unemployment rate from falling further, GDP growth will have to slow sharply, NOW. A 0.25% signal rate (or 0.75% from May) may be sufficient to dampen growth, say to well below 2% (check next page). But probably not

Uemployment will not stop falling before growth slows substantially

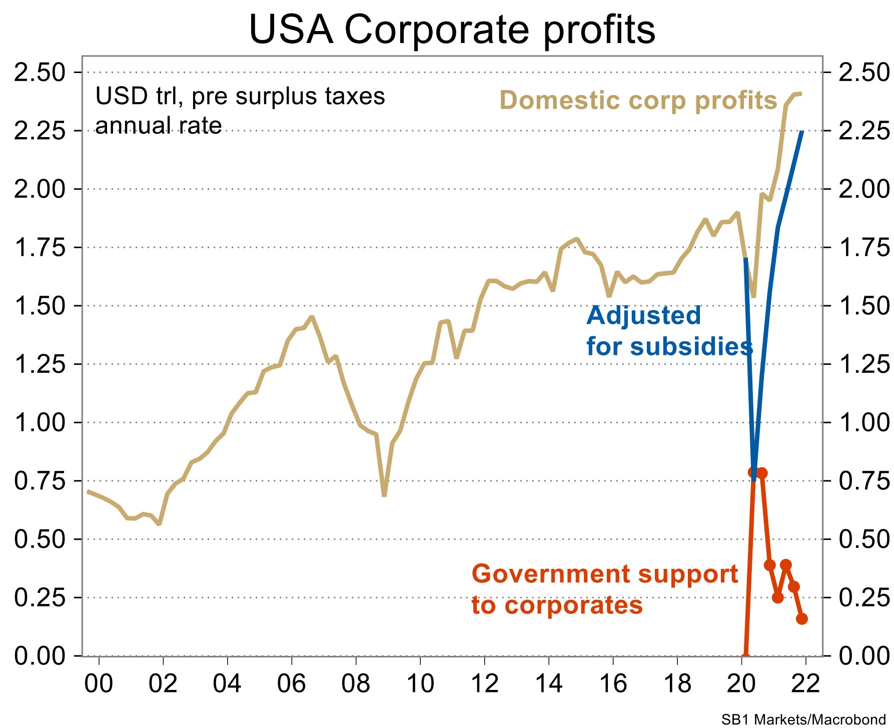
In the good ol' days, some 2.5 – 3% growth was sufficient to stabilise unemployment

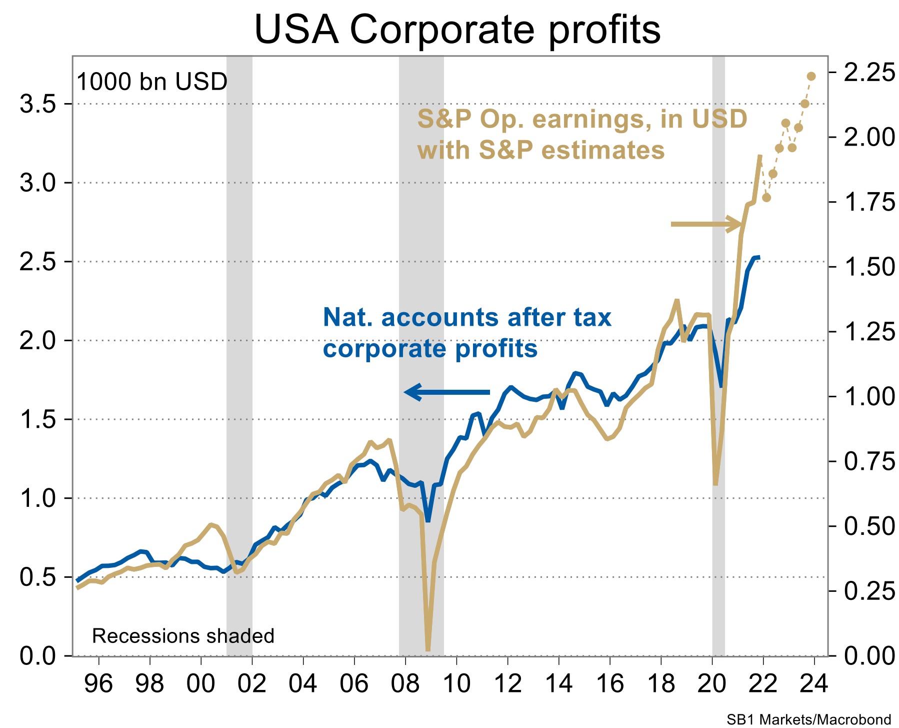


- Now, growth will probably have to slow well below 2% in order to get the unemployment rate down
  - » But we have not seen normal cycles recent years, from 2010 to 2019 a continious decline in the unemployment rate

Corporates' profits flattened in Q4

Pre subsidy profits rose rapidly

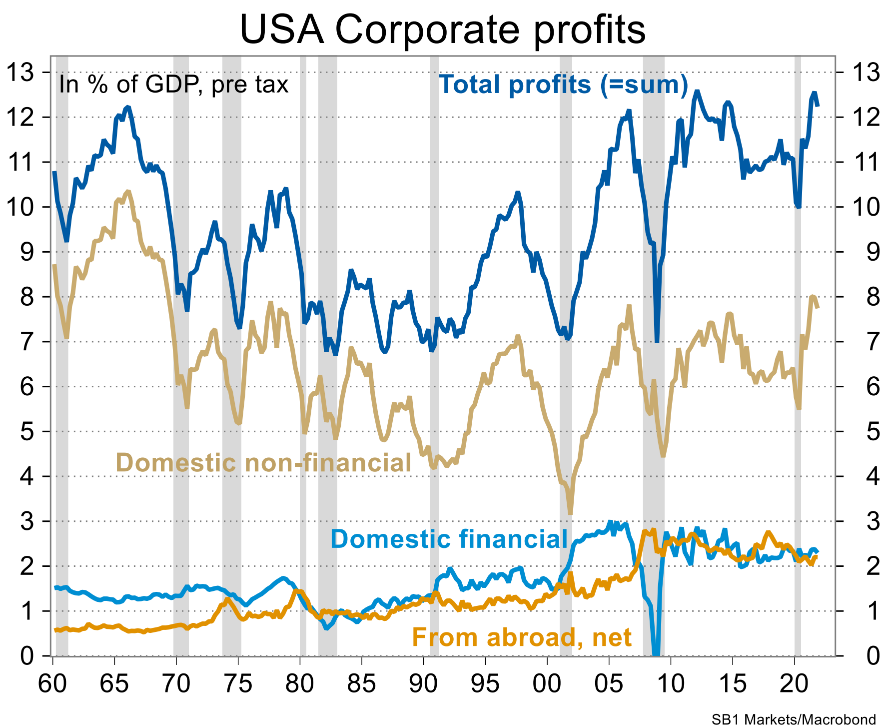


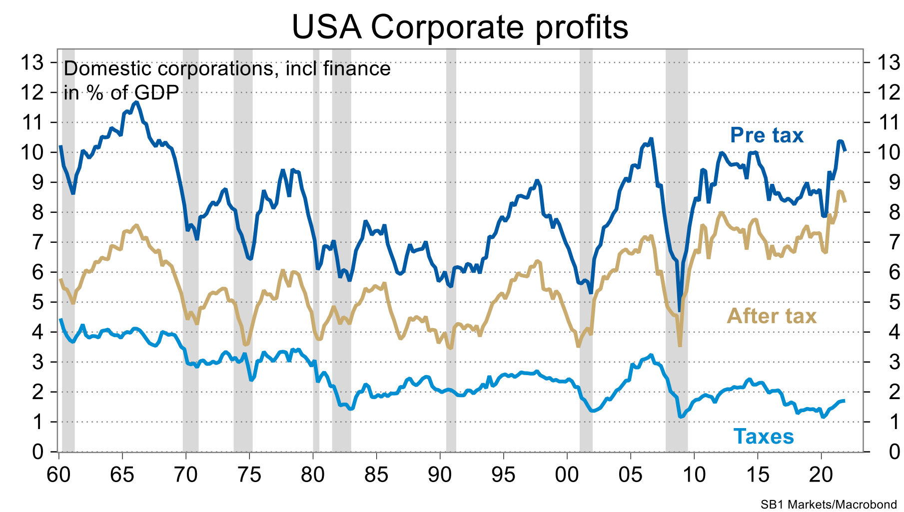


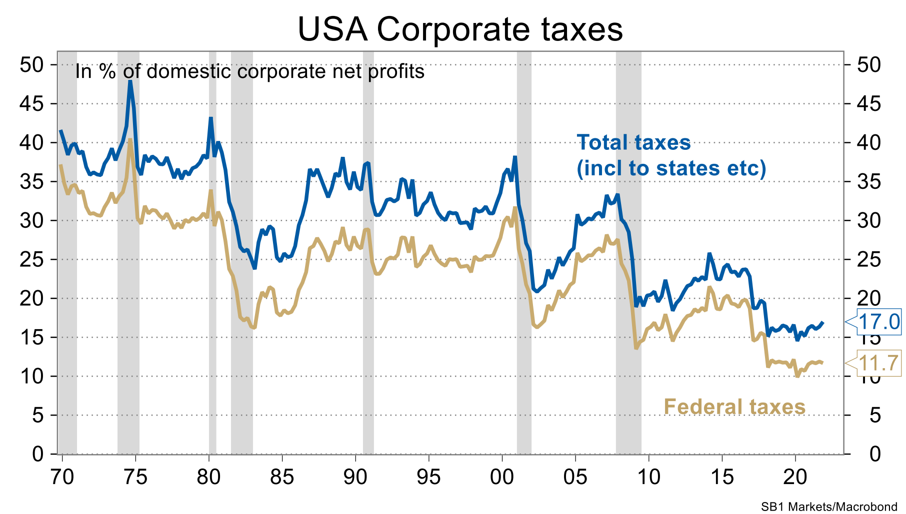
- **We assume domestic corporate profits** rose by approx. 6.5% in Q4, not annualised (28% annualised, and 31% y/y – even if the wage cost rose much faster than normal – and prices surged
  - » The wage bill rose by 10.5% (annualised) in Q4 (domestic corporate sector) but value added rose even faster, by a 17% pace, as companies were able to lift their prices at an 8% pace (domestic corp x finance), an incredible high number. And increasingly hard to swallow for the Federal Reserve…
  - » Government subsides (deviation from trend in indirect taxes – subsidies) were cut but still equals more than 1% of GDP
- The **S&P 500 companies** reported a further increase in profits in Q4 but at a rather slow pace, according to S&P estimates
- We think the profit outlook is muted. Wage inflation will not subside anytime soon given the super tight labour market – and a continued price inflation at the current pace cannot be tolerated by the Federal Reserve. Exciting times ahead

Profit shares have soared to record levels – but declined in Q4

The total pre tax profit share at 12.4% of GDP is among the best results ever. And after tax…



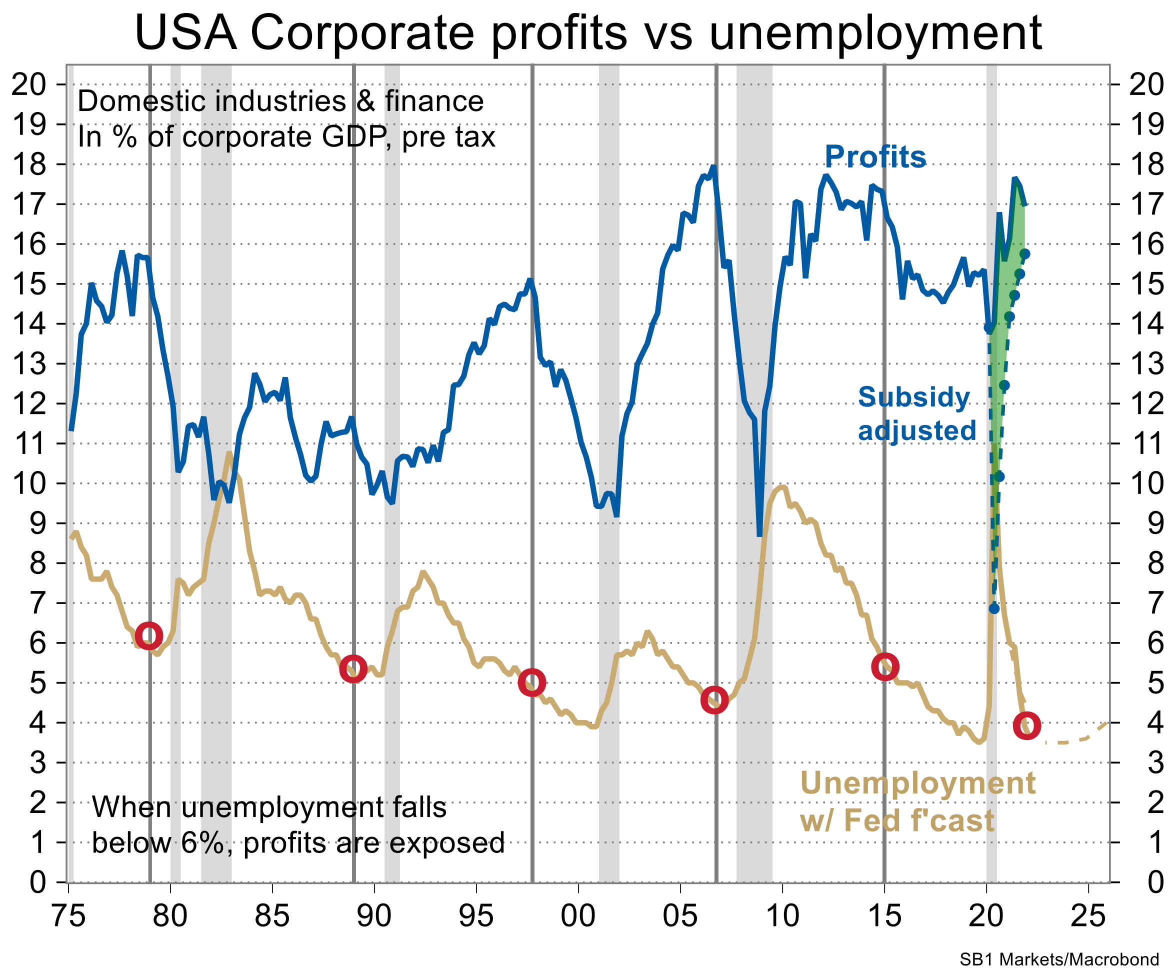




- The domestic corporate (both total and non-financial) profit rate are close to the highest since late 1960'ies
- The after tax profit rates are all time high, as corporate taxes have been cut several times, the last time in 2018. The effective tax rate on the corporate surplus is 17%, down from almost 25% 2014 - 2018

The profit share has peaked?

The bottom line has always been hurt when the labour market becomes too tight

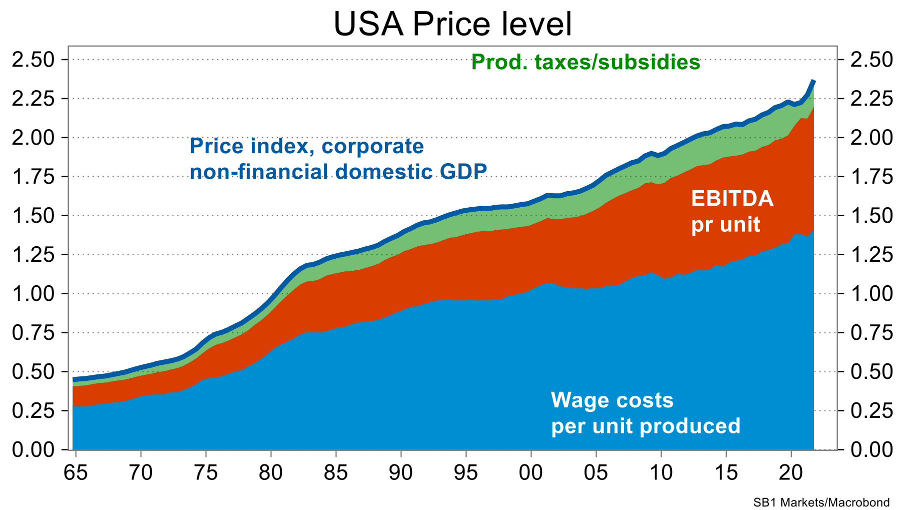


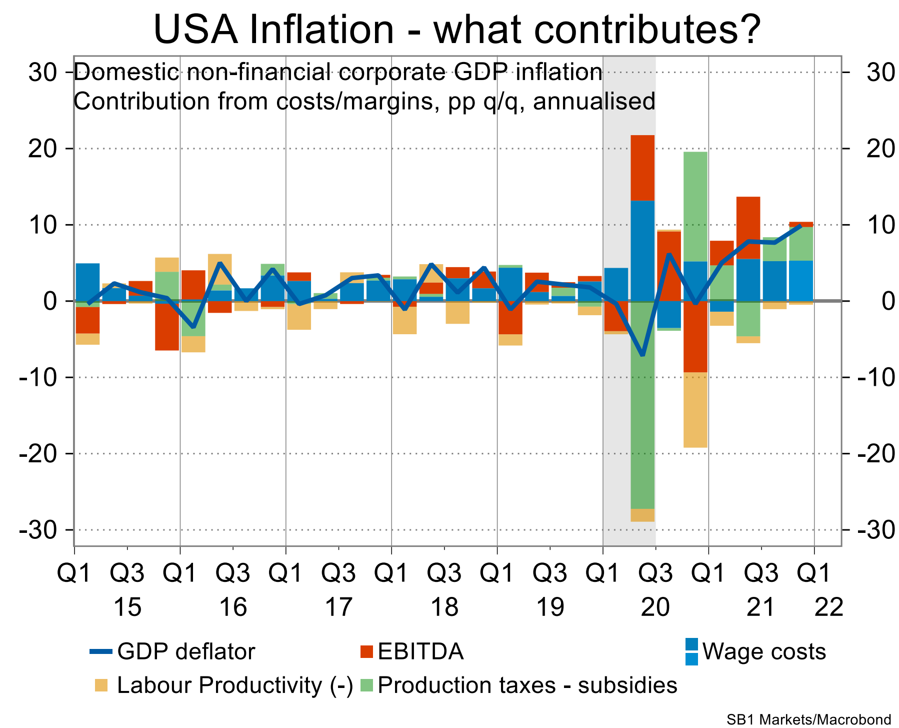
- Prices are increasing at an incredible pace but so are wage costs, and government support is on the way down
- When **unemployment** falls below 5% – 6% companies have normally been struggling to keep their share of value added – as their employees are getting the upper hand
  - » Unemployment is now at 3.6%, and it is falling rapidly as other indicators (especially vacancies) suggest that the labour market is even tighter than the 3.6% rate signals
- In addition, it is reasonable to expect the production taxes-subsidies to normalise the coming quarters.
  - » The impact is shown as the green area at the chart above
- Thus, it is quite likely that the profit share is headed downwards from here

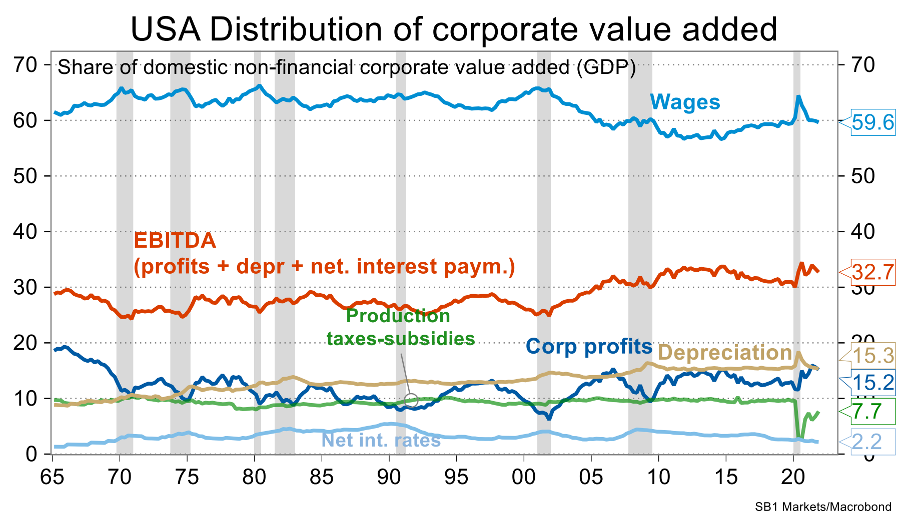
All data are not yet published, and the Q3 numbers is just our estimate

Why are prices on the way up? Less subsidies, and higher wages

Since the start of the pandemic, higher margins (profits) have been the main culprit



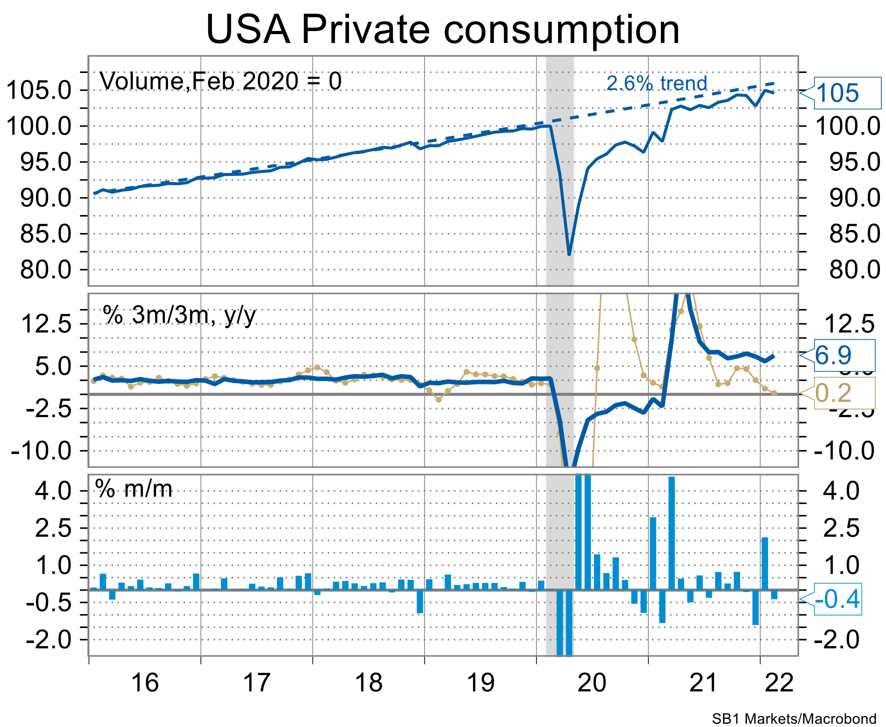


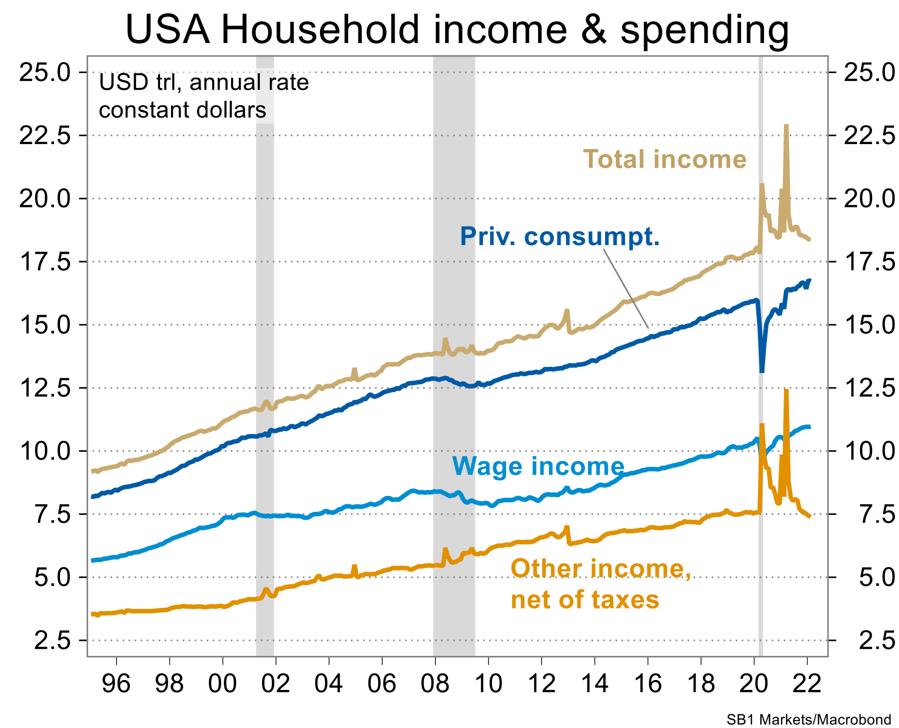


- 10% price inflation is probably not sustainable…
- So, something will have to yield, BIG TIME
- Profits are VERY exposed the coming quarters. After the Federal Reserve has hiked rates sufficient to dampen demand significantly profits are squeezed (as always before recessions!)
- Then, unemployment will start to increase, and wage inflation will come down too
- Then, profits can start increasing again, from a substantial lower level than today. As always

Real consumption down 0.4% in February, goods down 2.1%, services up 0.6¤

Real incomes fell by 0.2% - and the savings rate rose 0.2 pp to 6.3, below the pre-pandemic level

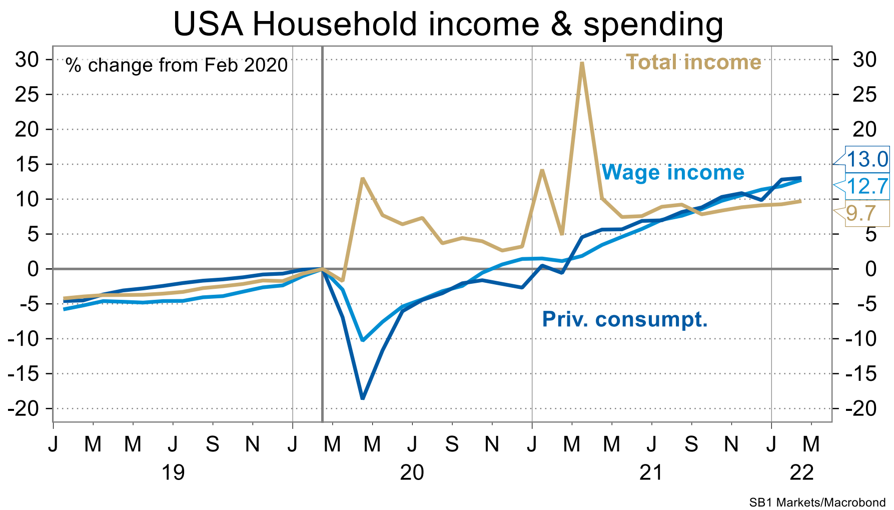


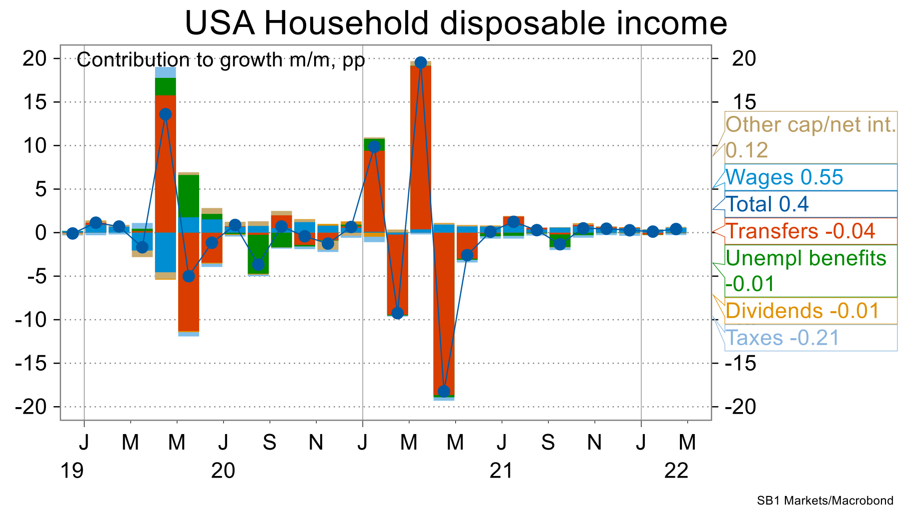


- **Private consumption** grew 0.2% in February, expected 0.5%. As prices rose 0.6% (as expected), spending fell 0.4% in real terms. January was revised sharply up, to +2.1% from 1.5%, as signalled by the revision in retail sales. Consumption is up 5% vs. Feb-20; Goods are 16% up, service are finally back to the starting point! No doubt, goods consumption slow, services will grow further the coming months
- **Personal disposable income** gained 0.4% in Feb, but fell 0.2% in real terms. Real household income has been falling recent months, due to the surge in inflation, and a normalisation of transfers/taxes. Real wage incomes are still trending upwards
- **The savings rate added 0.2** pp to 6.3%, from a 0.3 pp downward revised level in January. The savings rate is now below the pre-pandemic level. However, households have saved an extra amount equalling 13% of one year's disposable income during the pandemic and has ample capacity to keep consumption growth above income growth – in average, that is. Low income families spent their ordinary income + transfers from the government, high income familied increased their savings – and do perhaps not to spend the 'savings surplus', even if most has been invested in liquid assets like bank deposits

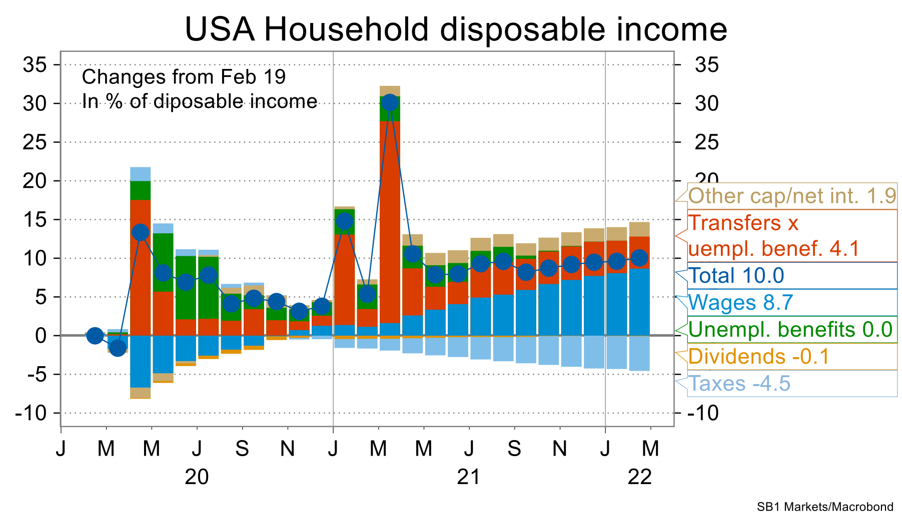
Income growth is normalising – total up 0.4% in March

Wage revenues are climbing rapidly. Transfers ex. unemployment benefits are back on trend



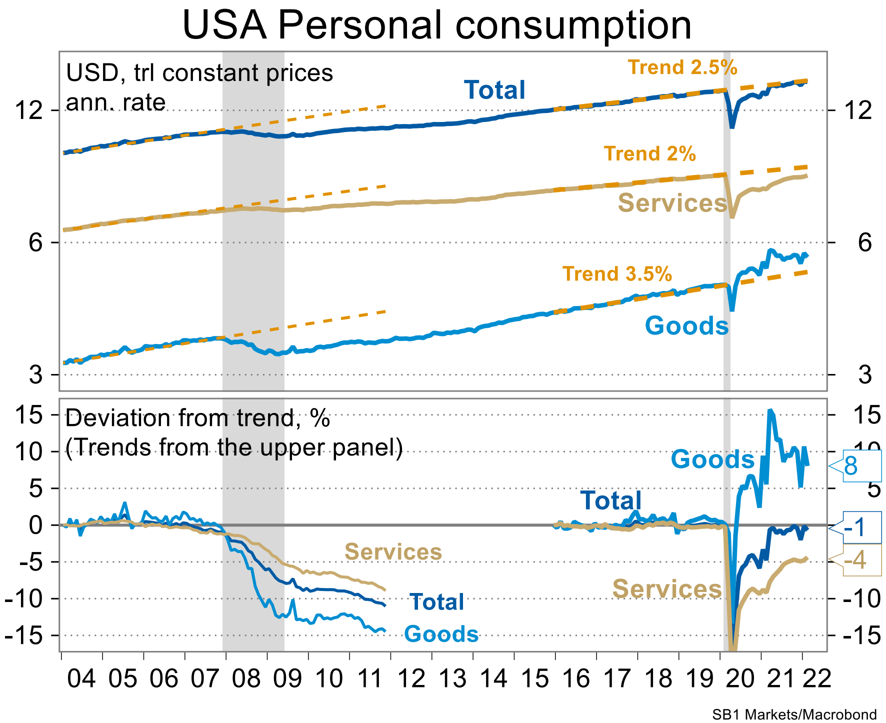


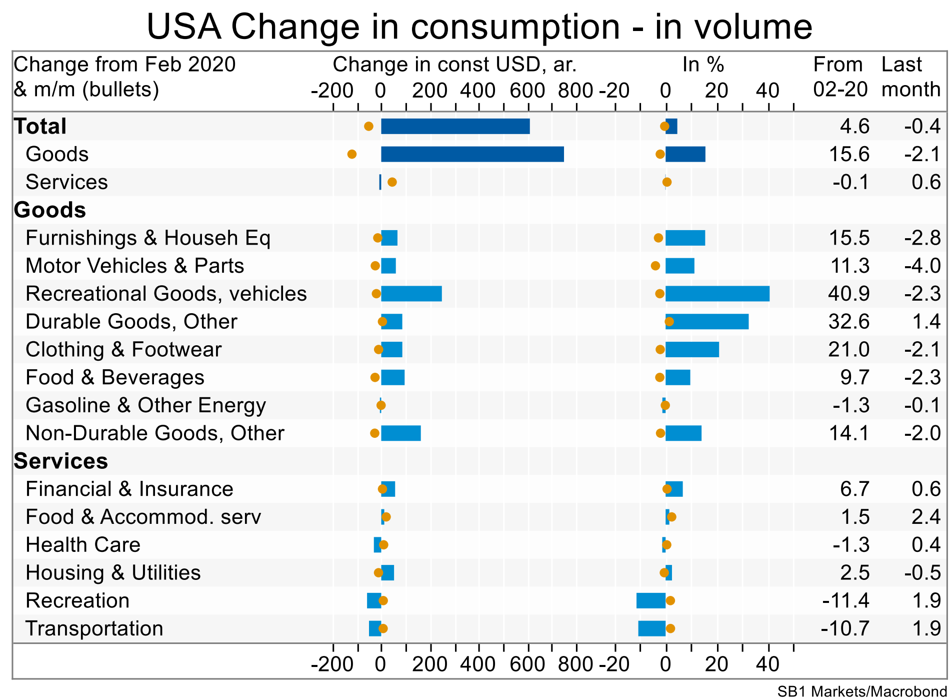
- **Total income has** flattened since the spring as ordinary public transfers and unemployment benefits have gradually normalised
- **Total wage income** is growing rapidly and are above the pre-pandemic growth path at 4.25%, even if employment & hours worked remain well below the pre-pandemic level. The reason is of course the sharp increase in wage inflation



Services almost back to the pre-pandemic level, goods are miles above

Spending on services is still ~~5~~ 4% below the pre-pandemic trend, spending on goods are ~~10~~ 8% above!

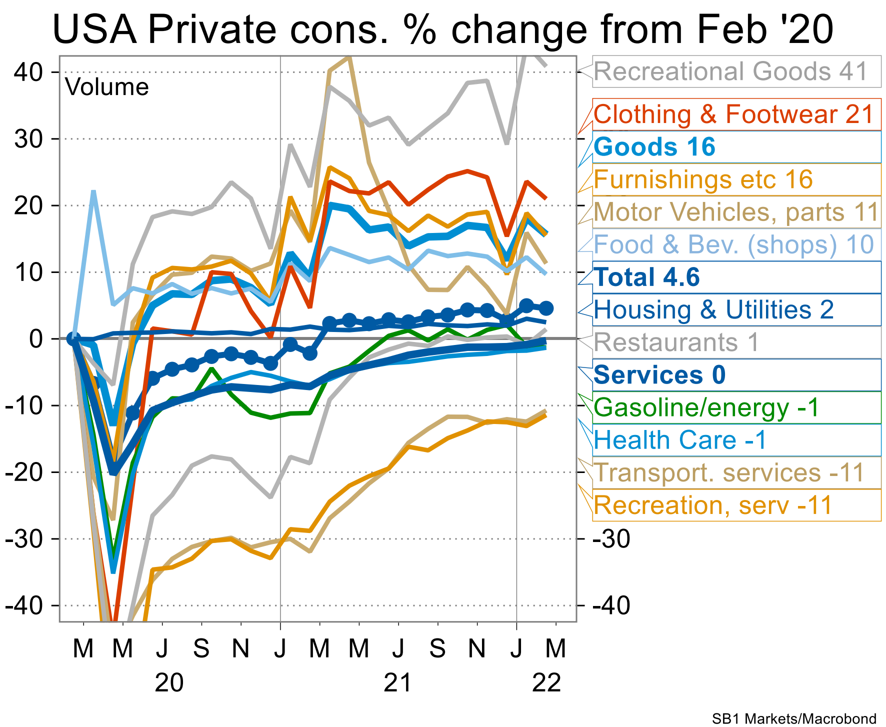




- **Consumption of goods** fell 2.1% m/m in February. The trend is flattish, at best. Spending is still well above the pre-pandemic trend, but the gaps is narrowing – still 8% above. A substantial downside risk
  - » Demand for **durable goods** are way above sustainable levels, we assume
- **Services** are recovering, and almost reached the Feb-20 level in March, after a 0.6% growth. Spending is 4% below the growth trend ahead of the pandemic
- Spot the differences between the 'never ending' Financial Crisis downturn and the 'V'-shaped the pandemic 'downturn'

There are some larger aggregating differentials than usual in the PCE accounts, and the sums do not add up to the total

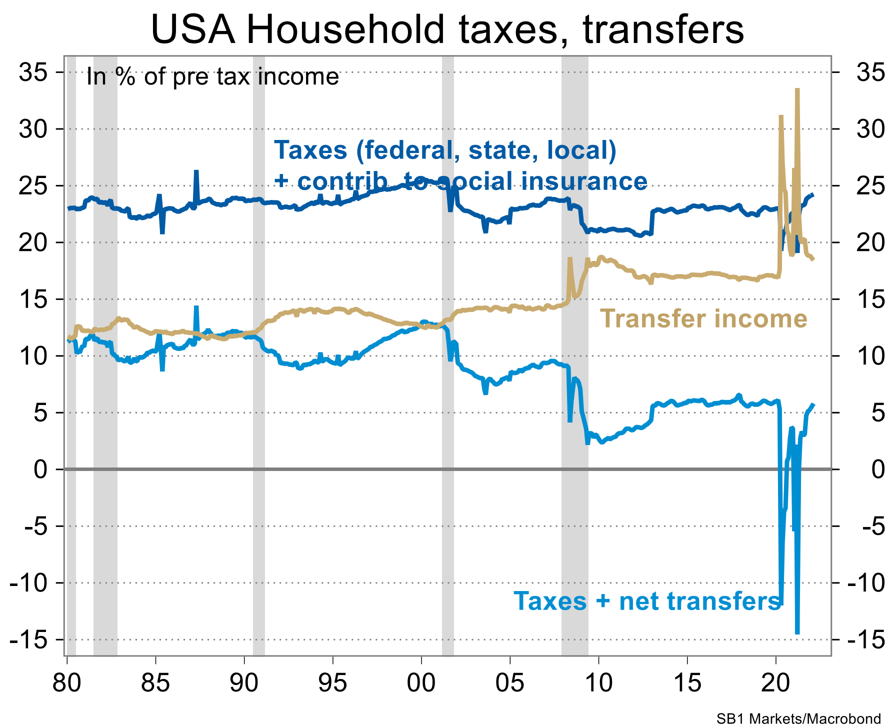
Most goods sectors down, services up

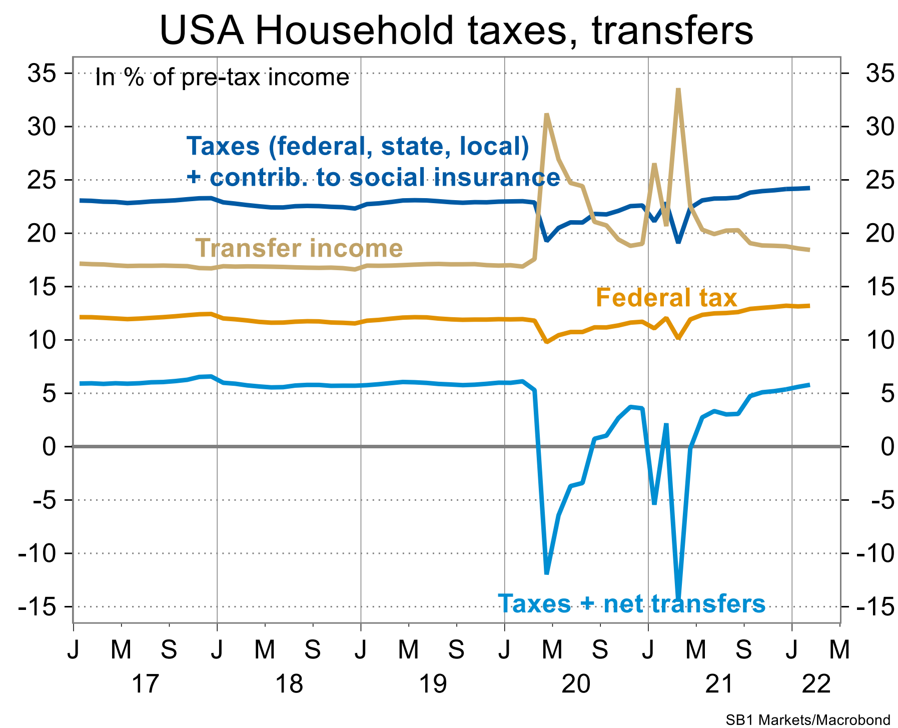


- **Consumption of goods** recovered from the Dec setback in January but yielded somewhat in February
- **Consumption of services** continued upwards in February, and the level is finally back to Feb-19.
  - » Restaurants, recreation & travel reported higher sales in January, and the trend is upwards. The level is still down 11%, in volume terms
- **Total consumption** is up 4.6% vs. Feb-20. Since last March, growth in spending has been muted, but consumption is still trending up – supporting GDP growth in Q1

Towards more normal times – but transfers are still above par

Net taxes close to 6% of pre-tax income, almost at the pre-p level – which though was too low

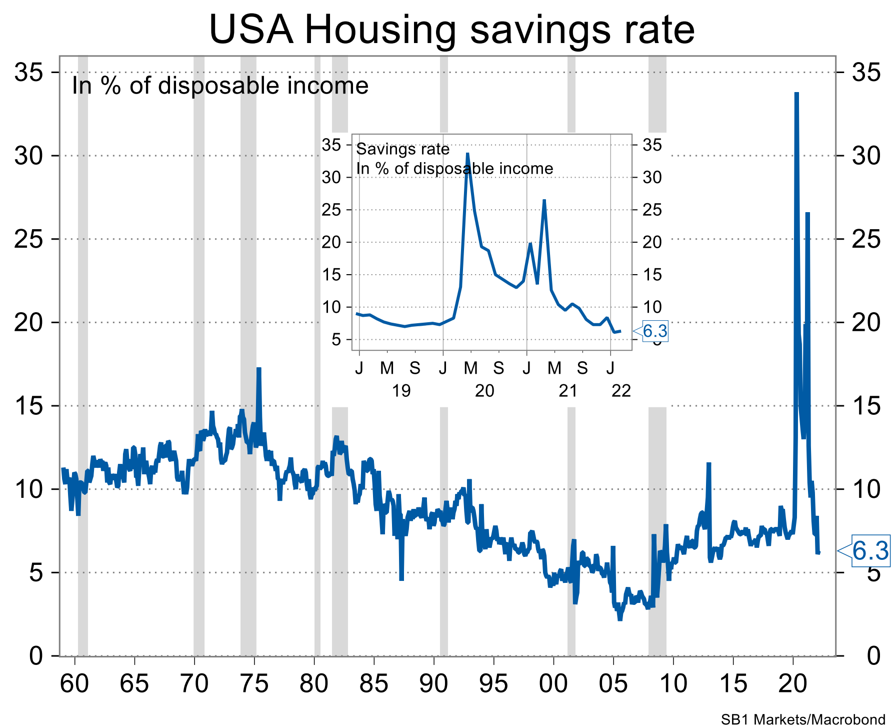


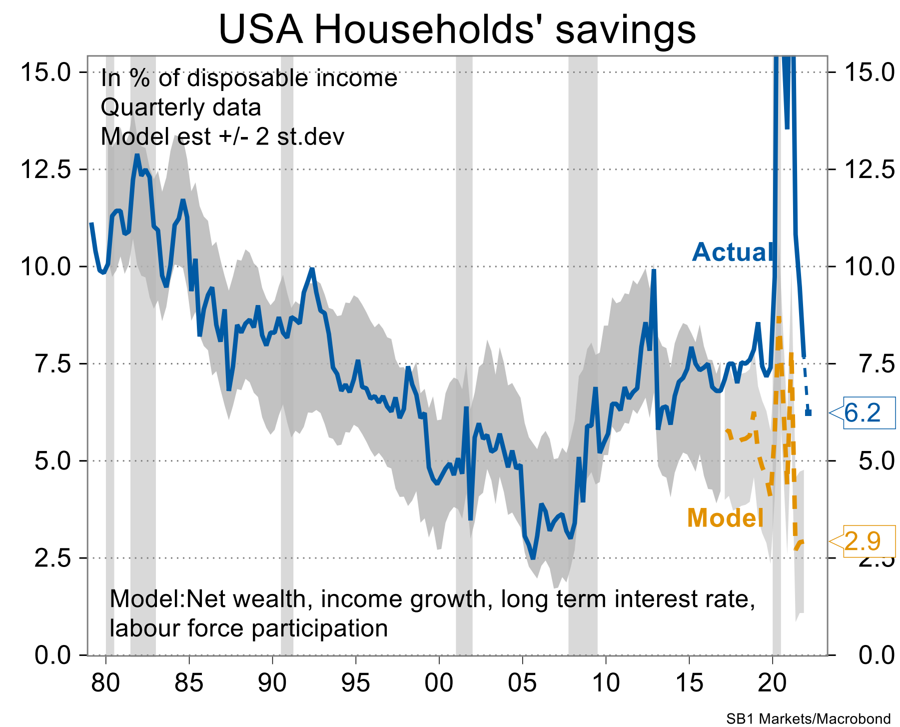


- The 'normal' net tax rate (taxes-transfers) implied a substantial government deficit – which was not sustainable
  - Before year 2000, the net payment to the federal government equalled 10% - 12% of pre-tax income .... and somewhat below 10% until the Financial crisis. Since 2012, the net tax rate has been some 6% of GDP, and now at 5%
  - Taxes are back to the pre-pandemic – or even a tad above – while transfers are

The savings rate below the pre-pandemic level

Will the savings rate stabilise at today's level? If so, income growth will decide consumption growth

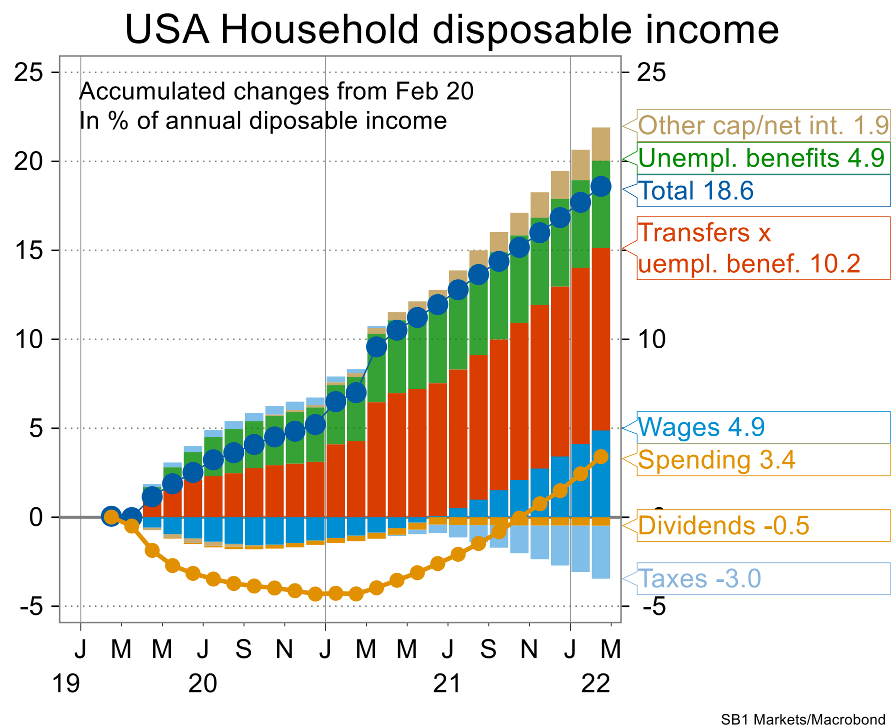


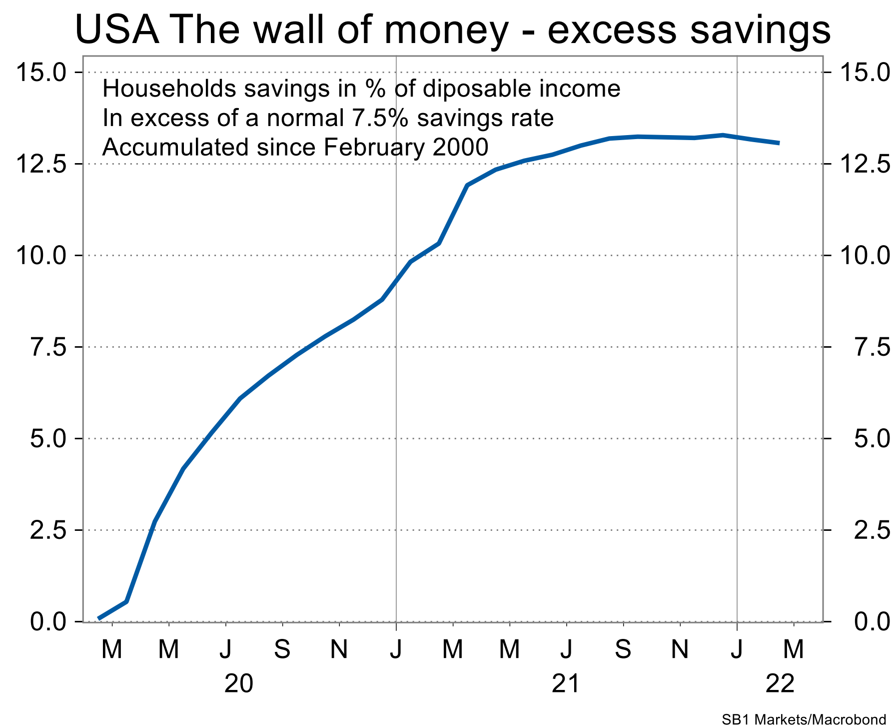


- The savings rate rose 0.2 pp to 6.3%, from an 0.3 pp downward revised level at 6.1% in January
- Our old savings model, yields a 3% savings rate in Q4. During the 2016 – 19 period our old model has underestimated the savings rate systematically by some 2 pp
- The gap is now much larger – and it has been so during the pandemic, of understandable reasons – spending was not possible
- A downside potential for the savings rate (and upside for spending): **the accumulated households excess savings** during the covid crisis amount to some 13% of annual disposable income – the 'Wall of Money', check next page

The Wall of Money is still intact

The sum of 'excess savings' through the pandemic is at some 13% of annual disposable income

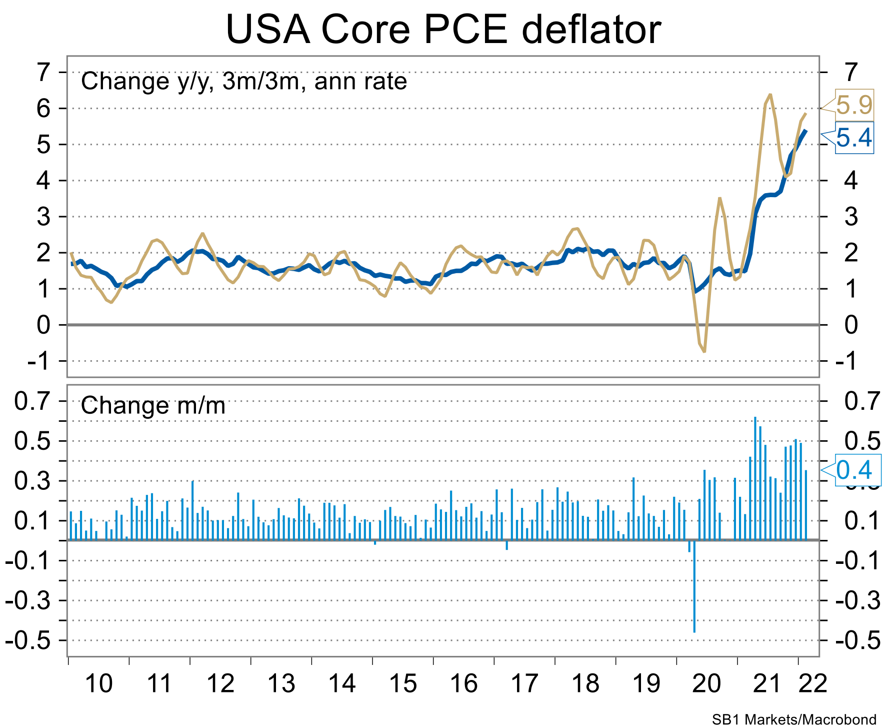


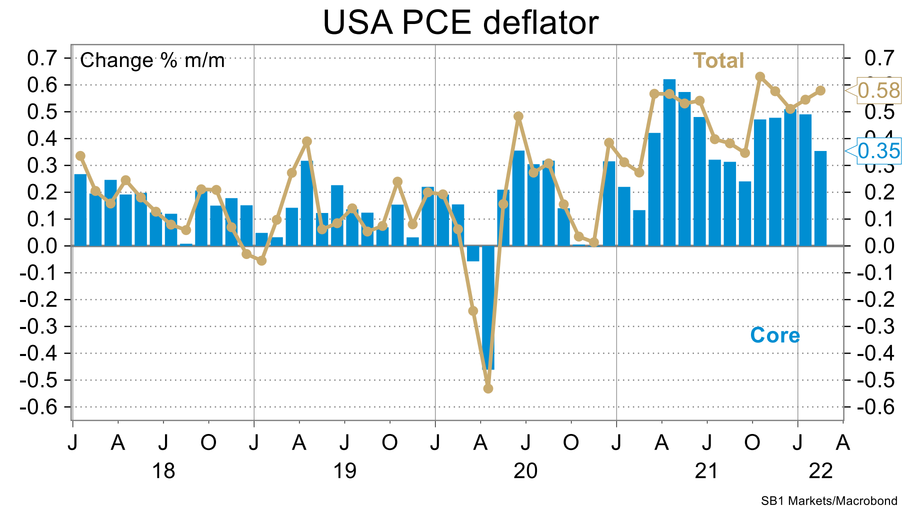


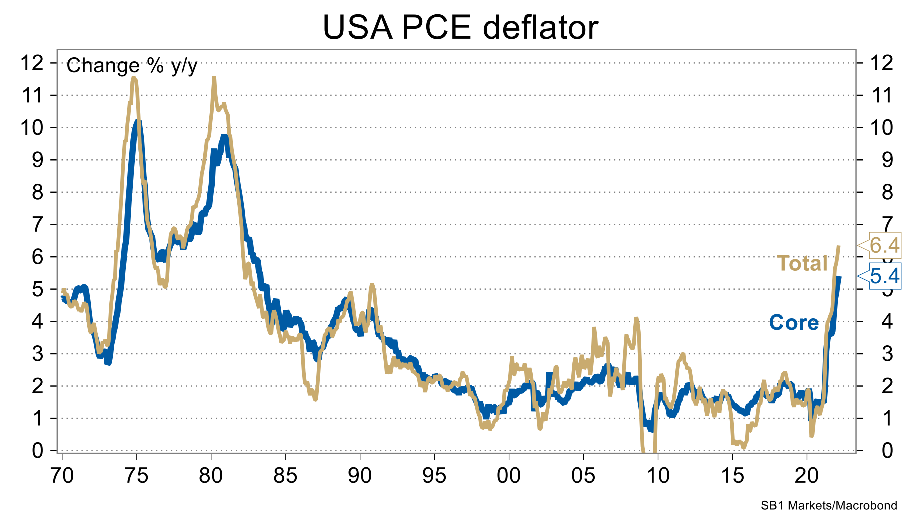
- Transfers from the government and low spending (on services) explained the lift in savings - but now spending is coming back, and the savings rate is now lower than before the pandemic

The core PCE consumption deflator slowed slightly in February

Still, the big picture is the opposite: Price inflation is way above Fed's target



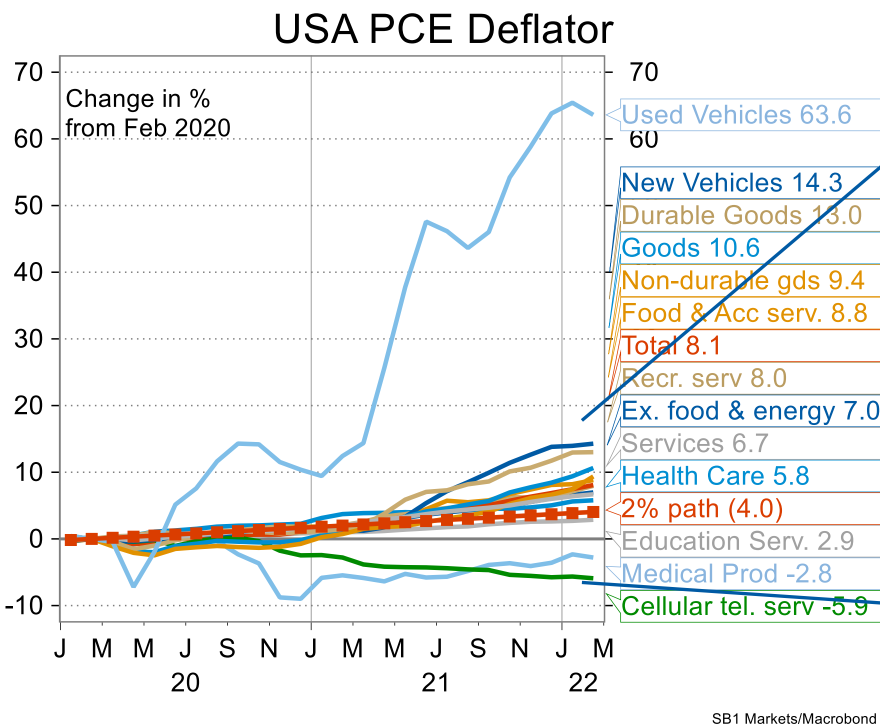


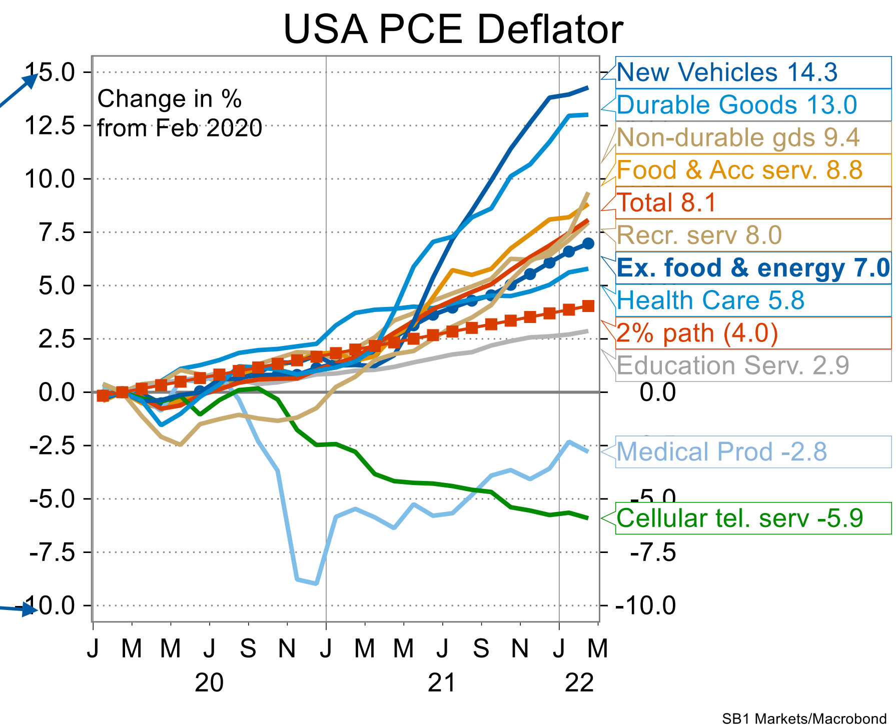


- **The total PCE deflator** rose by 0.6% in Feb, as expected, and the annual rate accelerated 0.3 pp to 6.4%, the highest since 1982
- **The core PCE** rose by 0.4% m/m, also as expected. Measured y/y, the core gained 0.2 pp to 5.4% (expected 5.5%) - and has not been higher since 1983
  - » The 3m/3m rate is close to 6%
- **The price level** is far above Fed's 2% long term path target, and the FOMC members expect inflation to remain above until the end of 2024 – implying a price level that is 4.6% higher than 'promised' less than two years ago

Most prices are up more than at a 2% pace since before the pandemic

Used car prices fell marginally in February – and the downside is of course huge



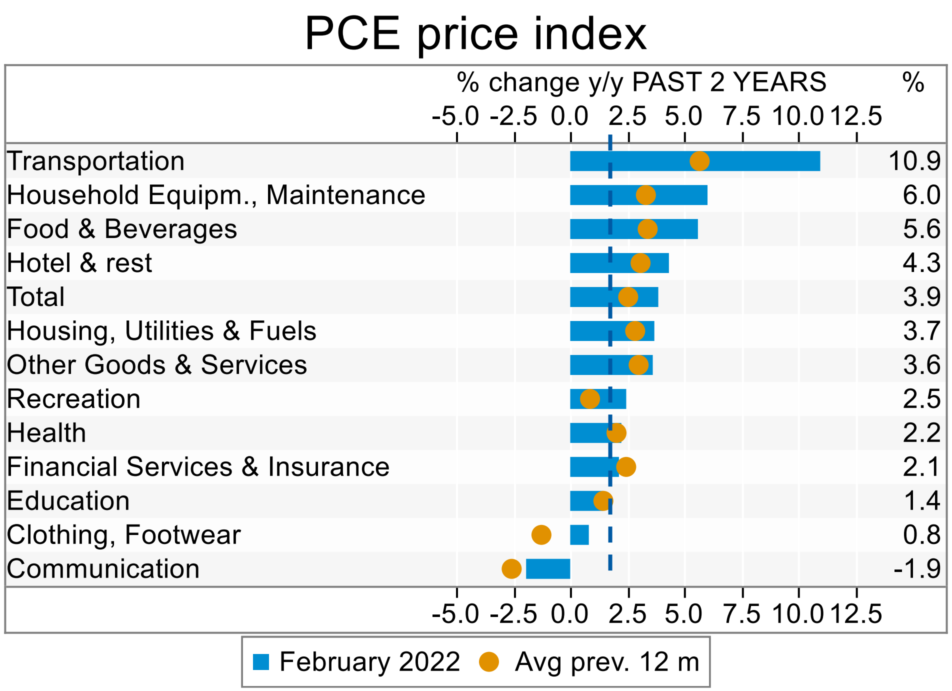


- **New car** prices are up 'just' 14% since Feb-20, 2nd hand cars are up 64%
- **Hotel & restaurant prices** are up 8.8% since Feb-20 (>4% per year)

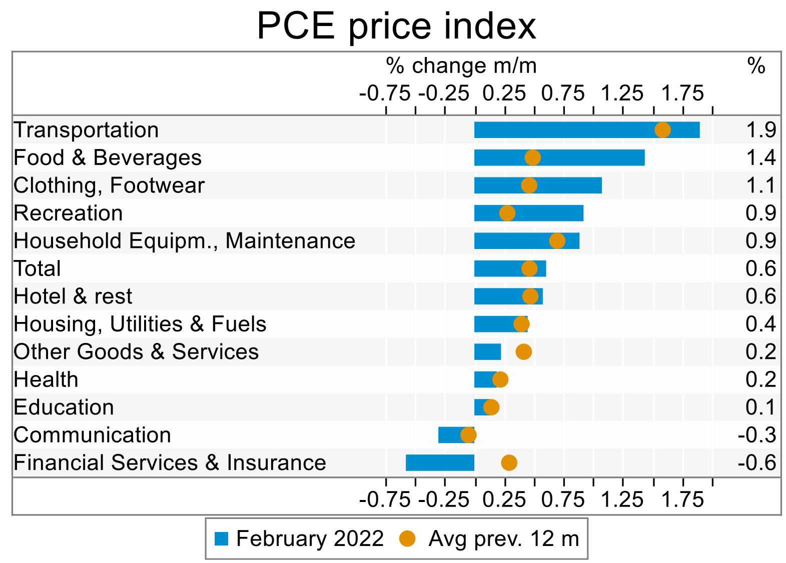
SpareBank 1 MARKETS

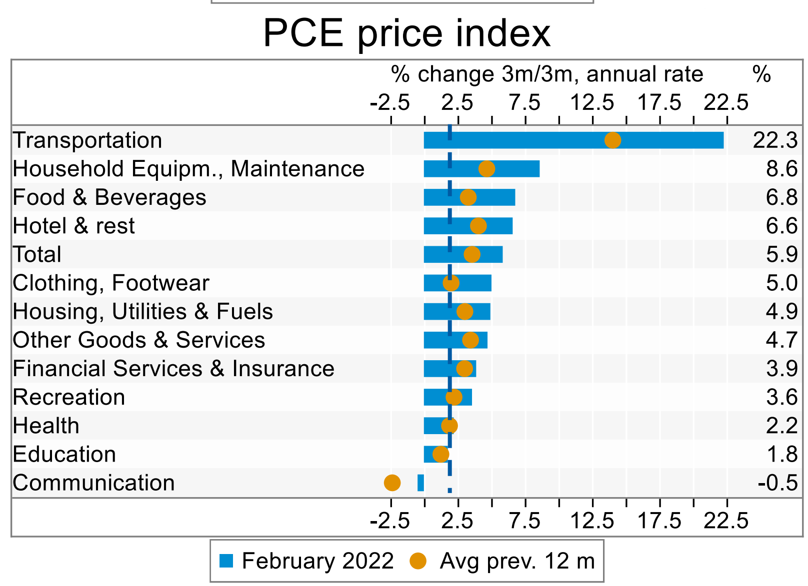
PCE by main sectors: All but 2 sectors report >2% growth past 2 years

... and all but 2 s are up more than 2% measured 3m/3m, the total is up 4.9%



SB1 Markets/Macrobond

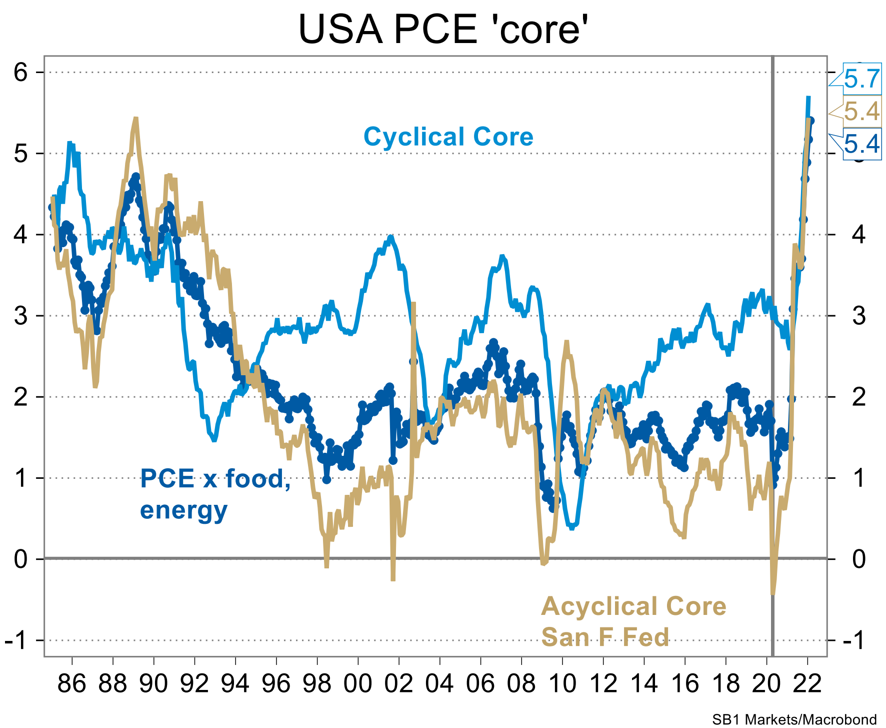


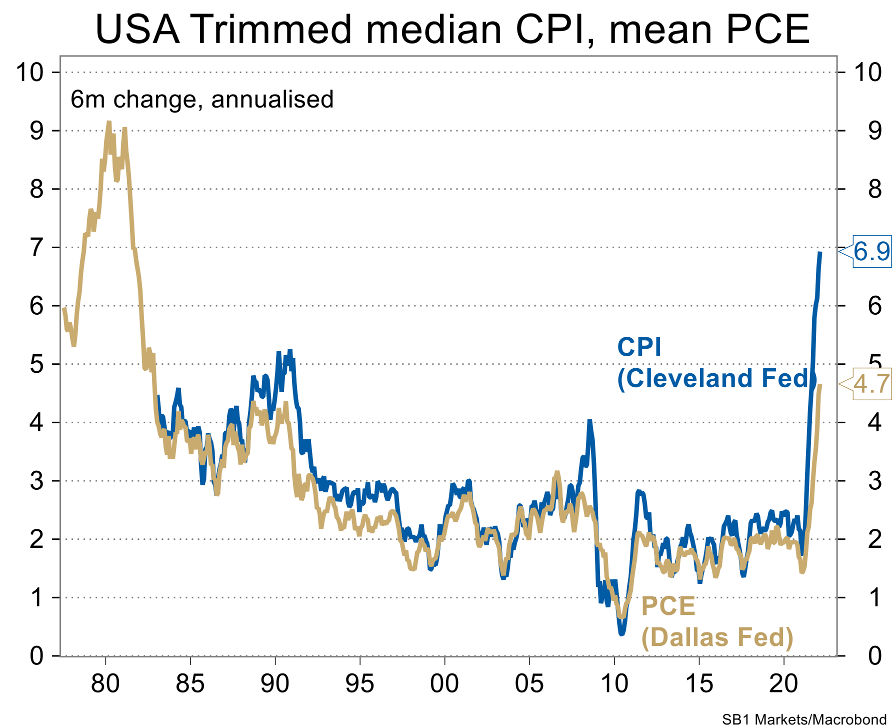


- Just clothing, and communication prices are up less than 2% on average over the past 2 years
- The momentum is still strong, almost sectors report accelerating price growth (the 3m/3m is above the annual rate)

Inflation broadens further, even more prices are climbing faster

All ‘underlying’ measures are at levels we have not seen in decades

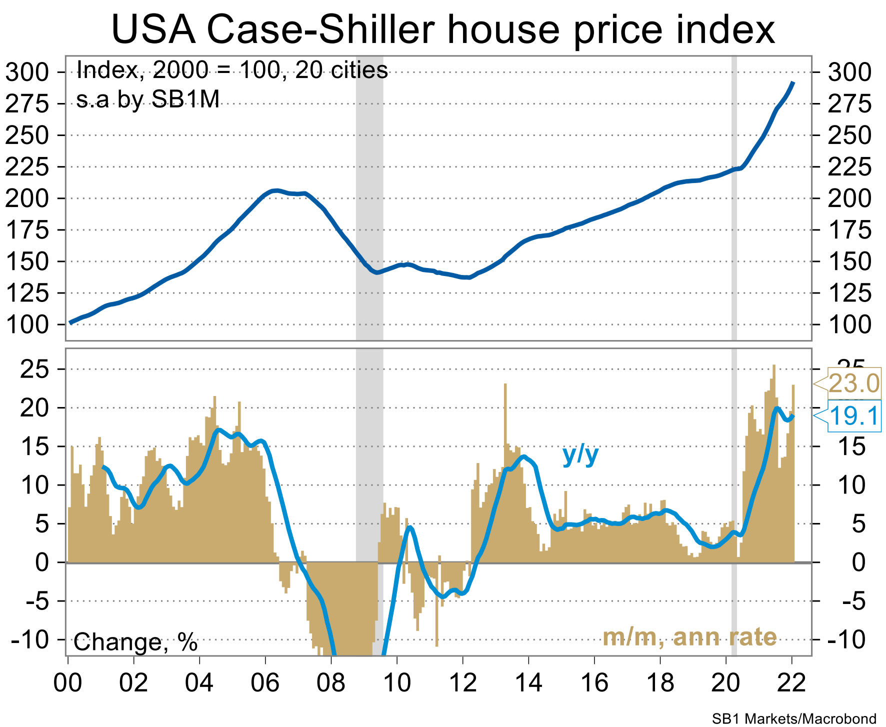


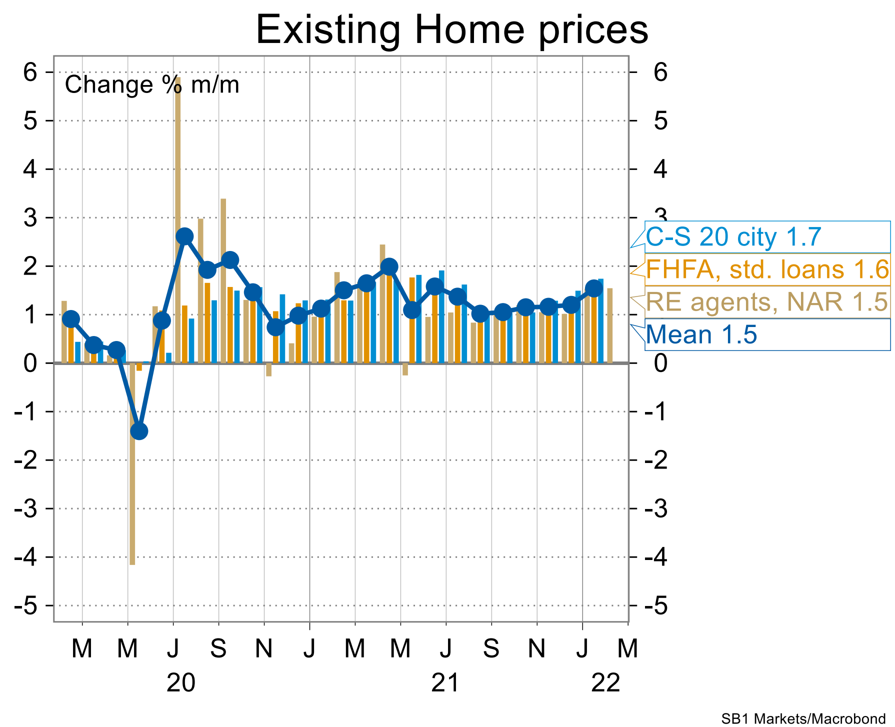


- The **trimmed PCE mean** (Dallas Fed) gained 0.1 pp to a 4.7% pace over the past 6 months, up from 2% ahead of the pandemic (and 3.6% in December). This indicator of underlying inflation has not been growing faster since 1983
- The trimmed median CPI (Cleveland Fed) is up 6.9% over the 6 months, the highest on record, data back to 1983
- Core cyclical and acyclical PCE prices are up 5.4 - 5.7%
- Other measures of underlying inflation are also at the highest levels in 30 years
- At that time – 30 to 40 years ago – the Fed funds policy rate was not at zero. It was 17.6%, though at the peak

House prices inflation is accelerating again?! Prices up 1.7% m/m, 19.1% y/y

Which does NOT support the hypothesis that higher mortgage rates are starting to bite. But….

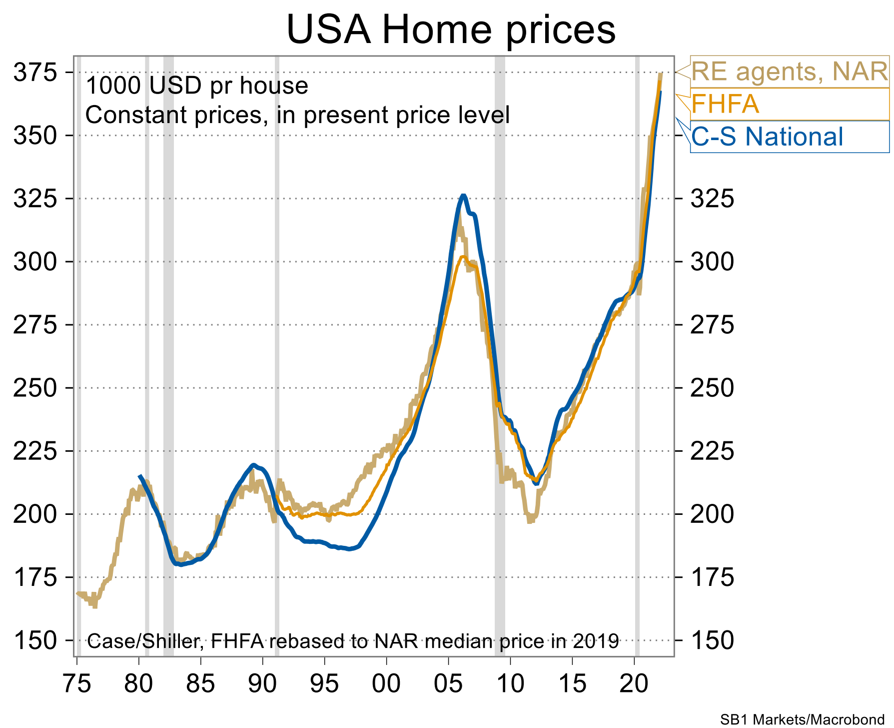


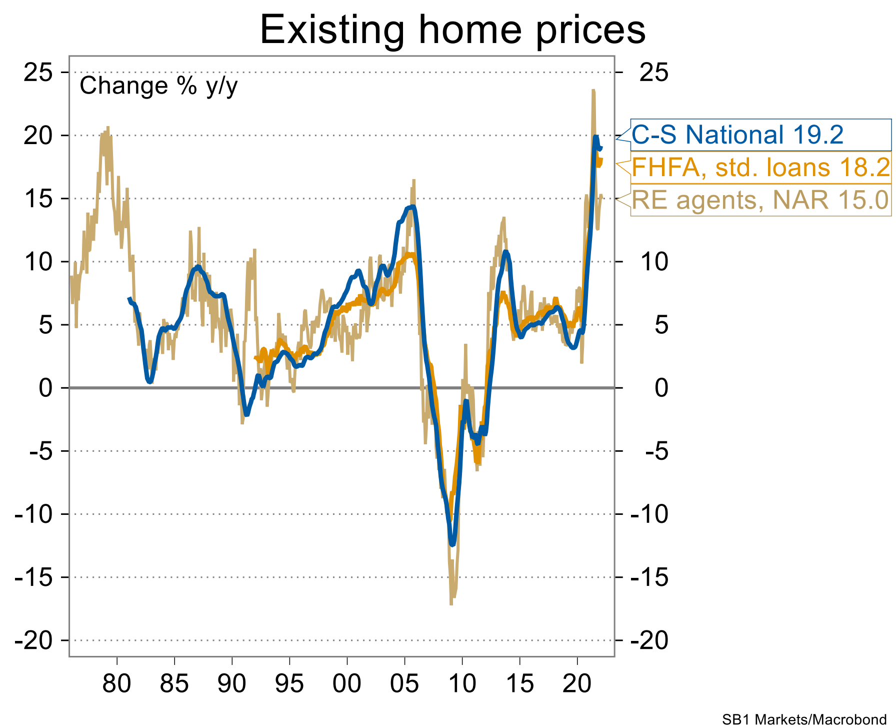


- **S&P's Case/Shiller's 20 cities** price index rose 1.7% m/m in Jan (Dec – Feb avg), expected 1.5%, equalling a 23% annualised pace. In last Oct, the rate was 0.9 m/m. The annual growth rate accelerated 0.5 pp to 19.1%, 0.5 pp higher than expected.
- **The FHFA** (Federal Housing Financing Agency) price index, which covers homes with loans guarantied by the government sponsored Fannie Mae or Freddie Mac ('Husbankene', has a countrywide coverage), rose 1.6% in Jan, and are up 18.1% y/y. The ATH annual rate before the pandemic surge was 11%, ahead of the housing crisis 15 years ago (chart next page)
- **Pending home sales** (transactions agreed, not yet necessarily executed) have declined 14% to February from November. The decline could be due to reduced demand due to the steep rise in mortgage rates. Last week's price stats do not confirm the slowdown story. **However, even if prices cover transactions closed in February, those deals were mostly agreed upon in January** (just as with the realtors strong Feb February price data) – and 'something might have happened in February and even more in March, when rates really shot up, and affordability has fallen to a lower level than since the bottom before the house market crashed in 2006

Some special house data – both measured y/y & the real price level

Real prices are 12 – 20% above the pre-financial crisis peak

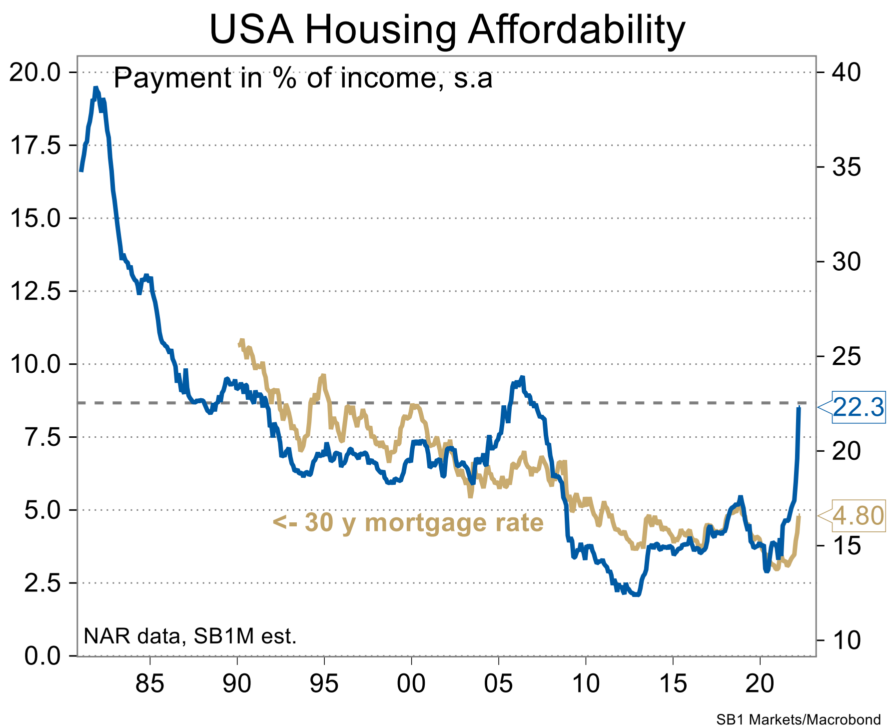


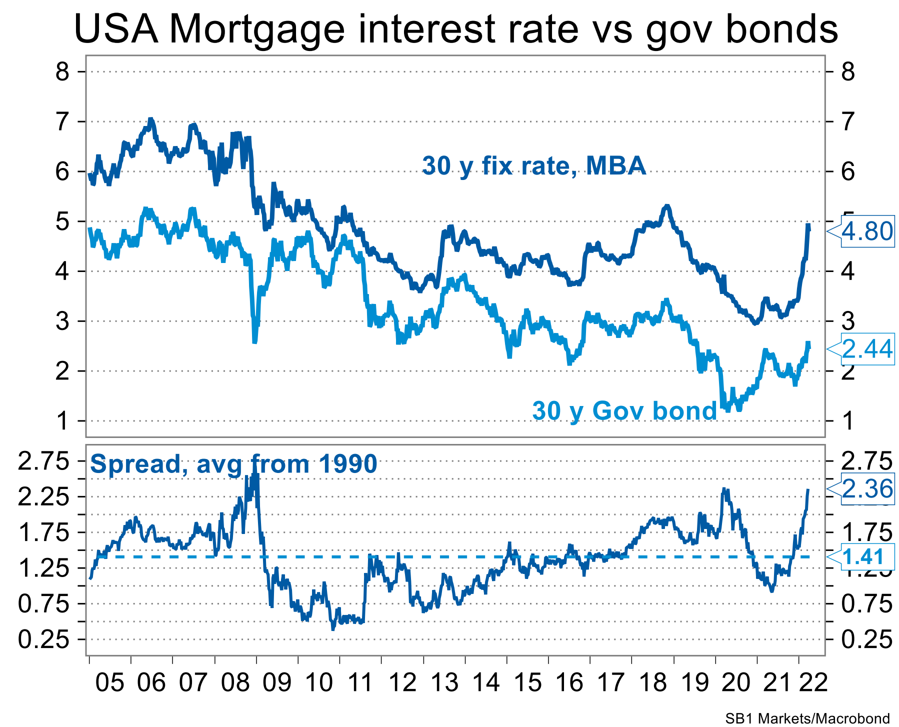


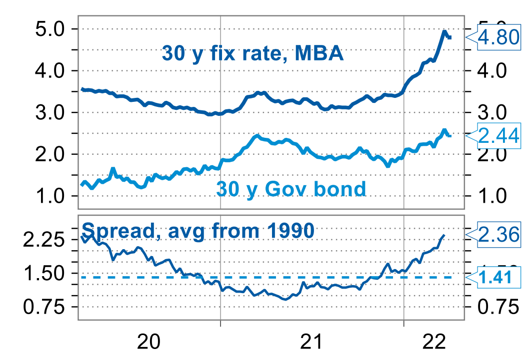
- Both the Case-Shiller National index, FHFA's index for homes with government sponsored mortgages (which includes most homes), and the realtors' price index reported the highest house price appreciation ever (or since 1948) during last year
- Real prices are far above the 2006 peak, by some 10 – 20%
- There are still some big differences vs the mid 2000 housing bubble
  - » **Housing starts** are at a lower level. The **inventory** of 2nd homes for sale is record low (vs high 15 – 16 years ago). However, the inventory of new homes for sale is climbing rapidly
  - » The **debt/income ratio** has fallen sharply since the peak before the financial crisis. However, credit growth has accelerated during the pandemic
  - » The **savings rate/net financial investments rate** has now fallen to below the pre-pandemic level– but the ratios are far above the level in 2005

Prices are up 32% since before the pandemic, the mortgage rate is up 20%

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



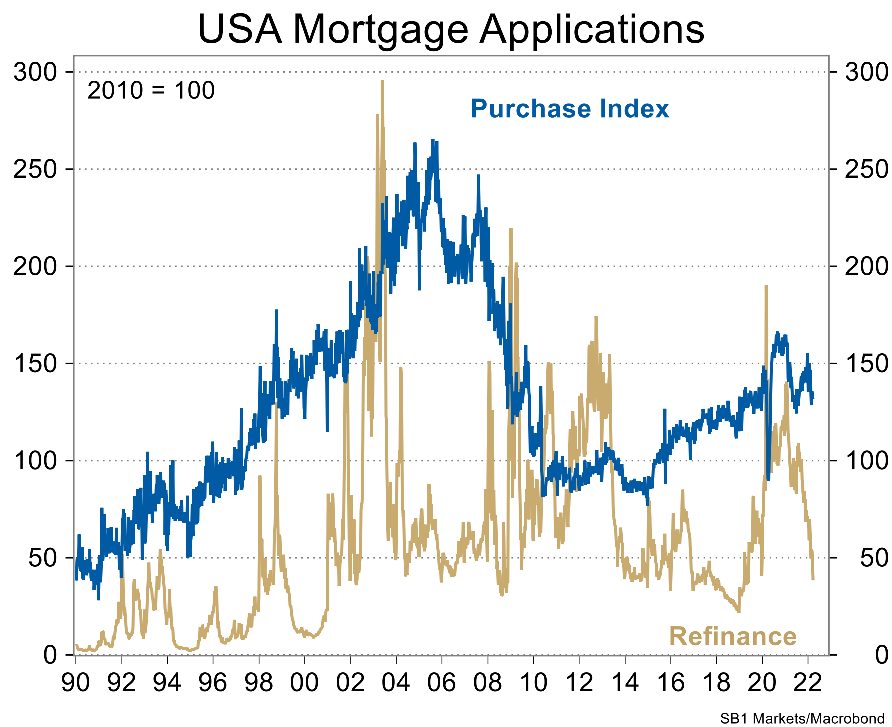


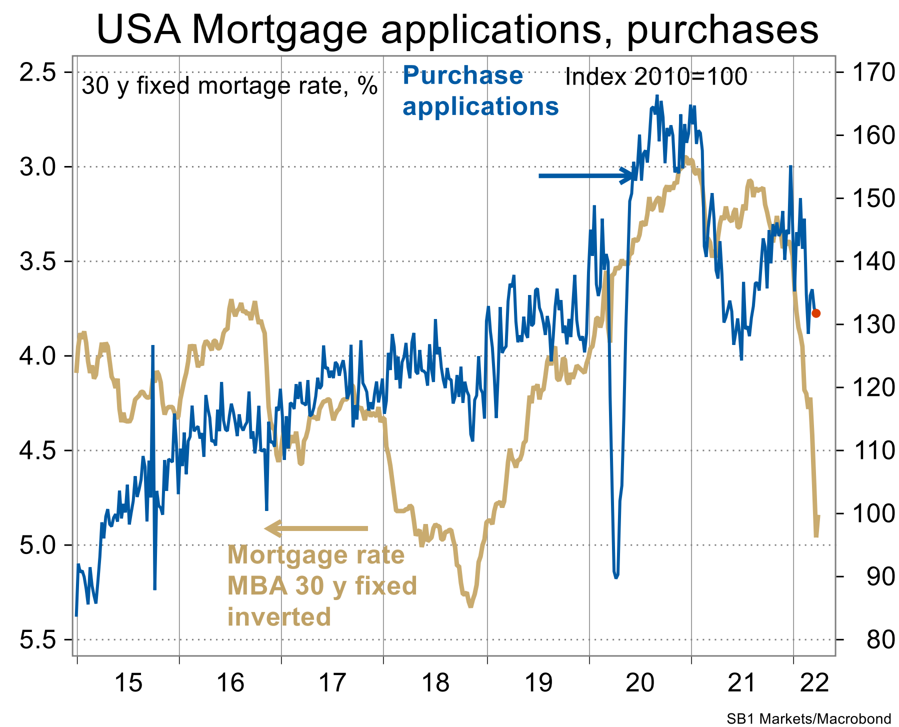


- **The 30 y fixed mortgage rate** has climbed to 4.8% from 3.0% last summer, and from 4% in early 2020 (or by 20%)
  - » The mortgage rate has climbed MUCH faster than the 30 y Gov bond rate. The spread has widened to 244 bps from 91 at the bottom last spring and it is far above the 140 bps average – and among the highest in modern times
- The **Federal Reserve** has now probably not buying more <u>mortgage backed bonds – and signals eagerness to reduce its holdings, which very likely explains the steep increase in the spread</u>
  - » The central bank has funded most of the housing marked during the pandemic, at least until mortgage lending shot up through 2021

Mortgage rates are up – but demand for new mortgages has not yielded by much

Demand for refinancing has fallen sharply but that is not a warning sign

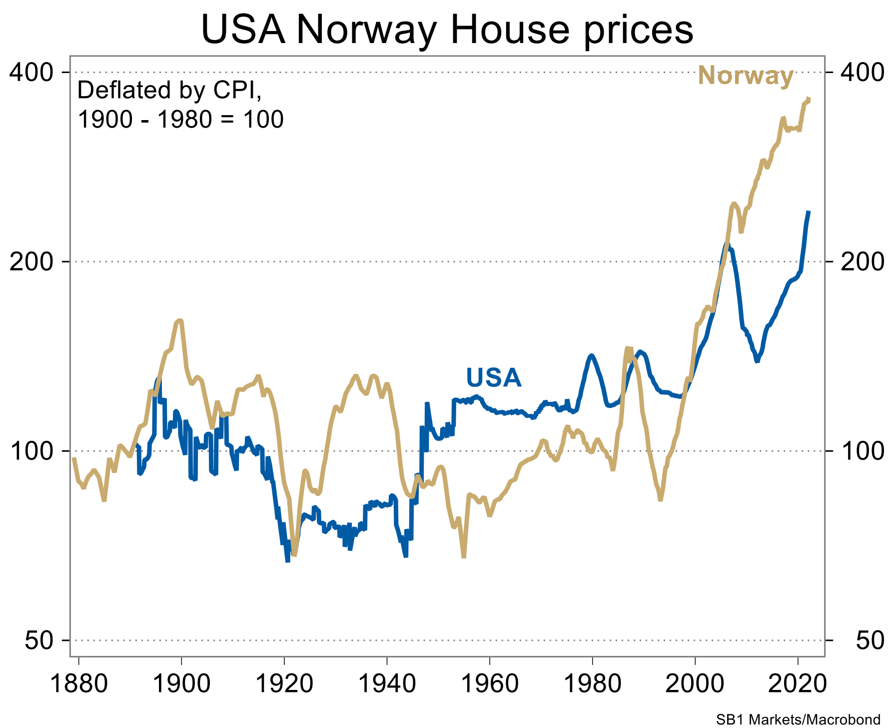


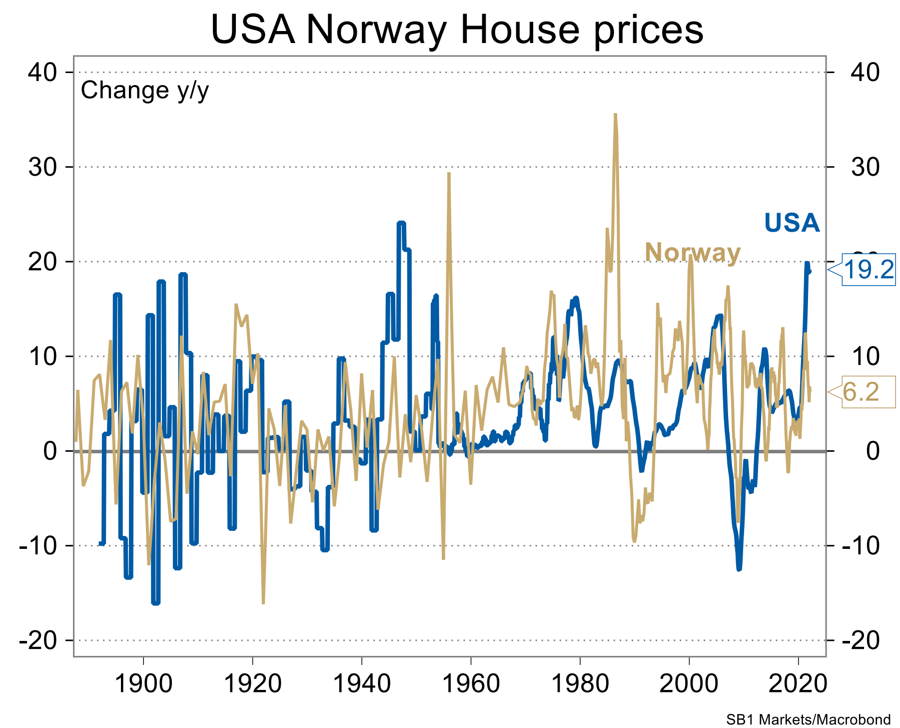


- The correlation between mortgage rates and existing home sales or prices are unstable

For the record

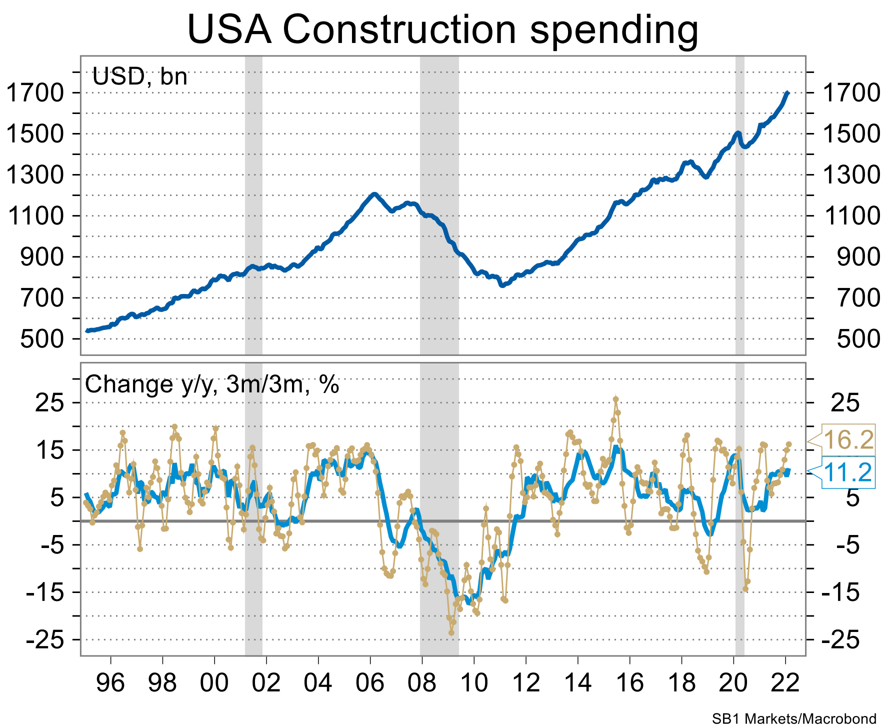
A couple of entertaining house price charts

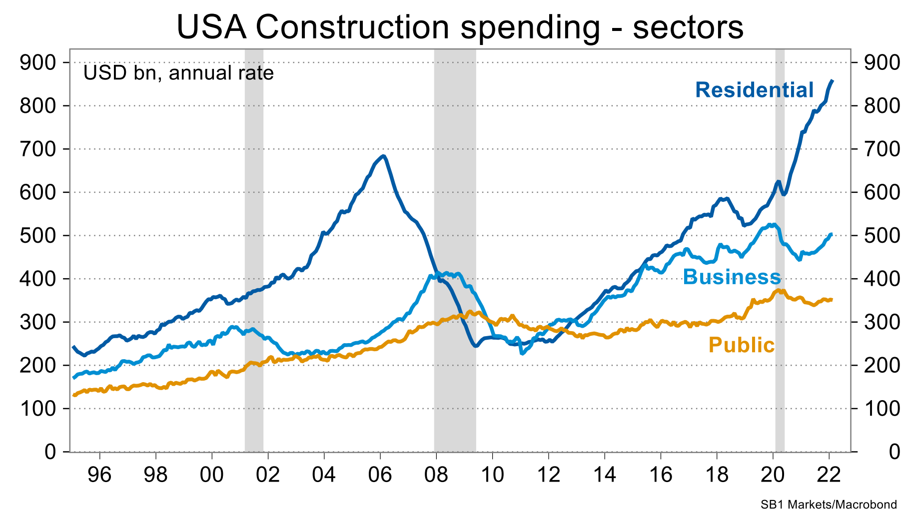


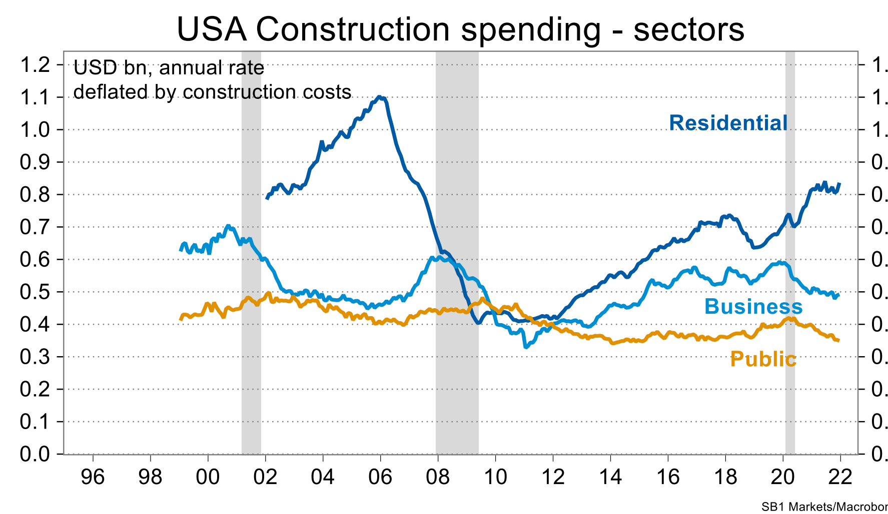


USA construction spending is growing rapidly, but just in nominal terms

Construction costs are climbing rapidly, construction volumes are flat or declining



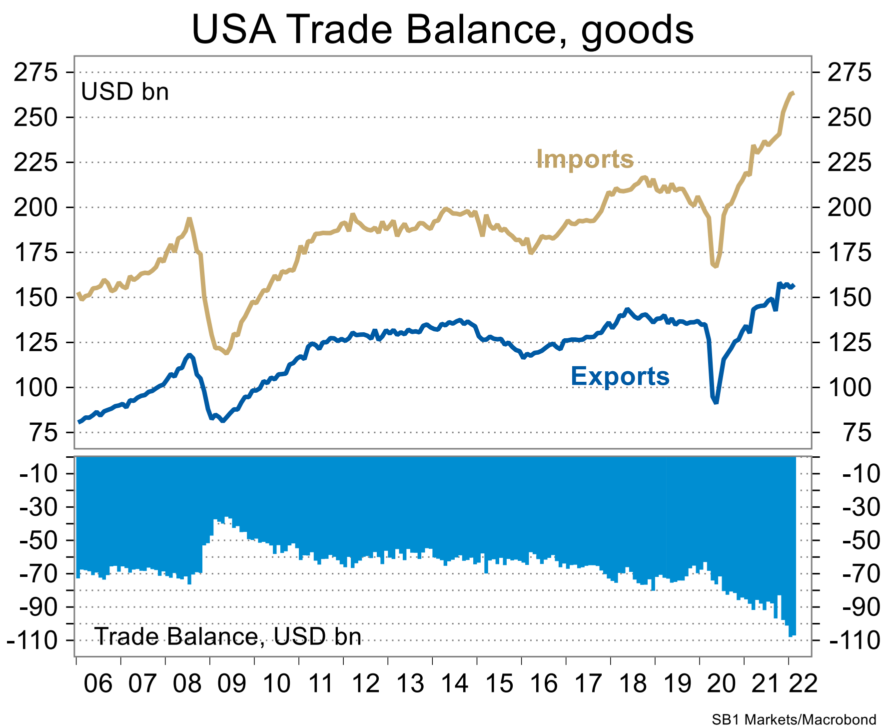


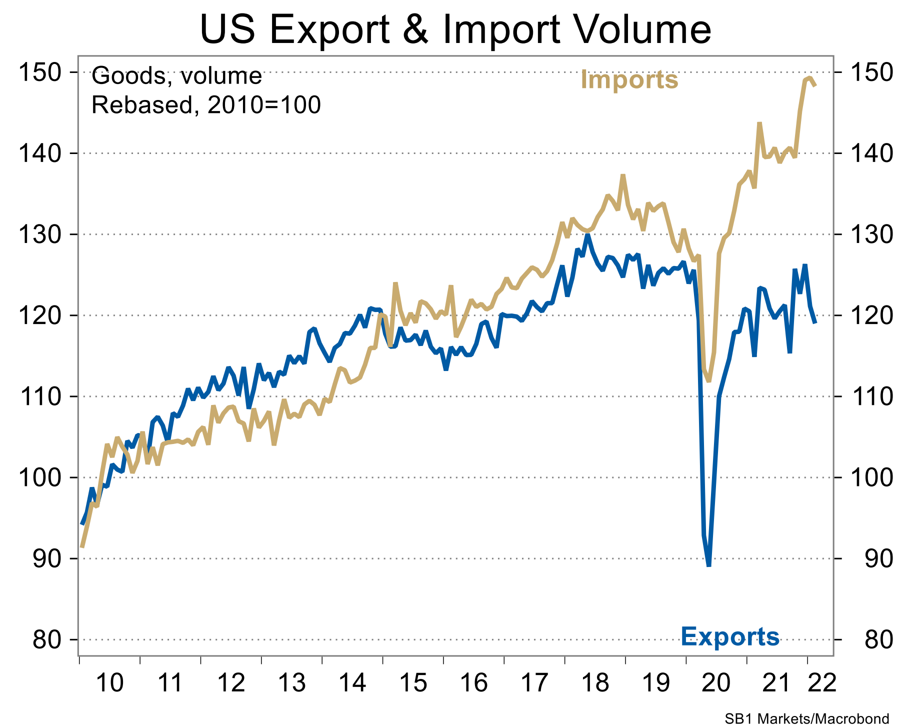


- Underlying growth some 16% in nominal terms recent months but construction cost inflation is even higher – and construction investments are declining, at least business & public sector investments . Housing investments may be flat

Weak trade data in Feb, at least volume-wise

The deficit remains close to ATH

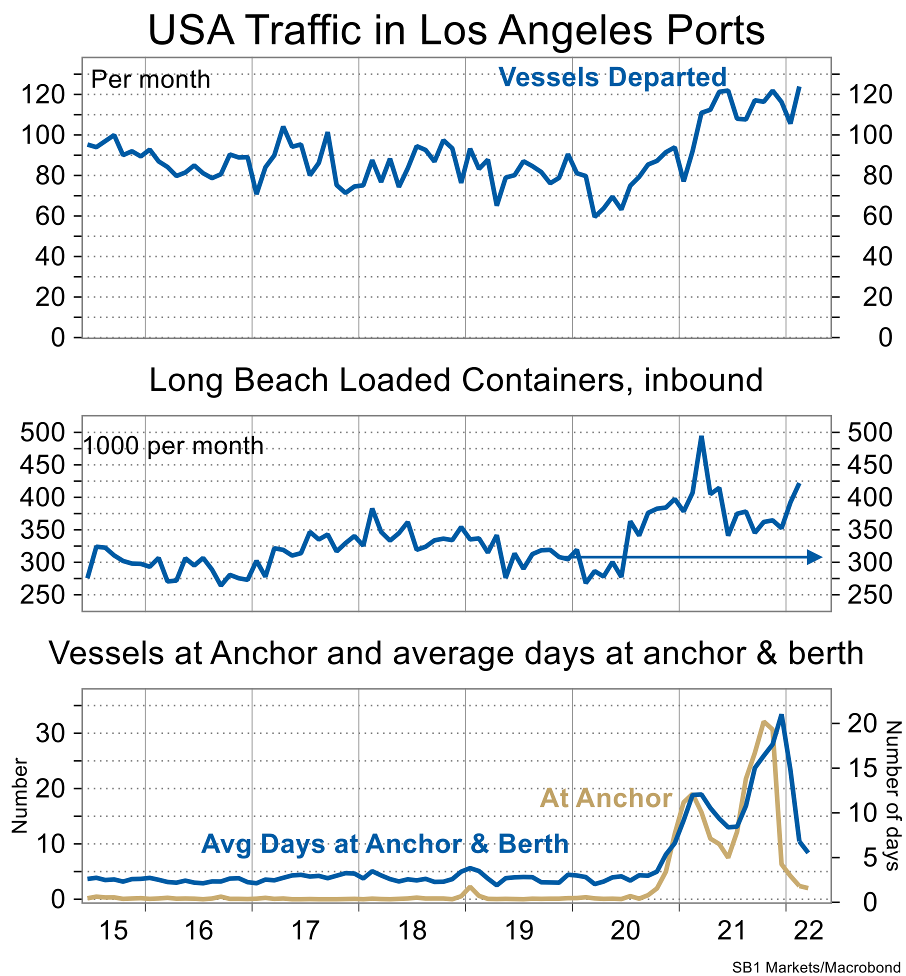




- **Imports** of goods rose by 0.3% in January, and are 30% above the Feb 2020 level, according to the advanced data
  - » **In volume terms** imports fell by 0.7% and are up 15% above the pre-pandemic level! Demand for goods has been strong during the pandemic, driving total imports up – even if auto imports have been low. We expect US households' demand for goods to slow the coming quarters, from the present very high level – dampening demand for imports too
- **Exports** of goods rose 1.2% m/m and are up 15% vs the Feb-20 leve
  - » Exports volumes fell 1.7% and volumes are 5% below the Feb-level. Strong domestic demand has reduced exports. Global export volumes are up 8% since before the pandemic!
- **The trade deficit** in goods fell 2 bn to 106bn, the 2nd largest ever

BTW, why have US harbours been so crowded?

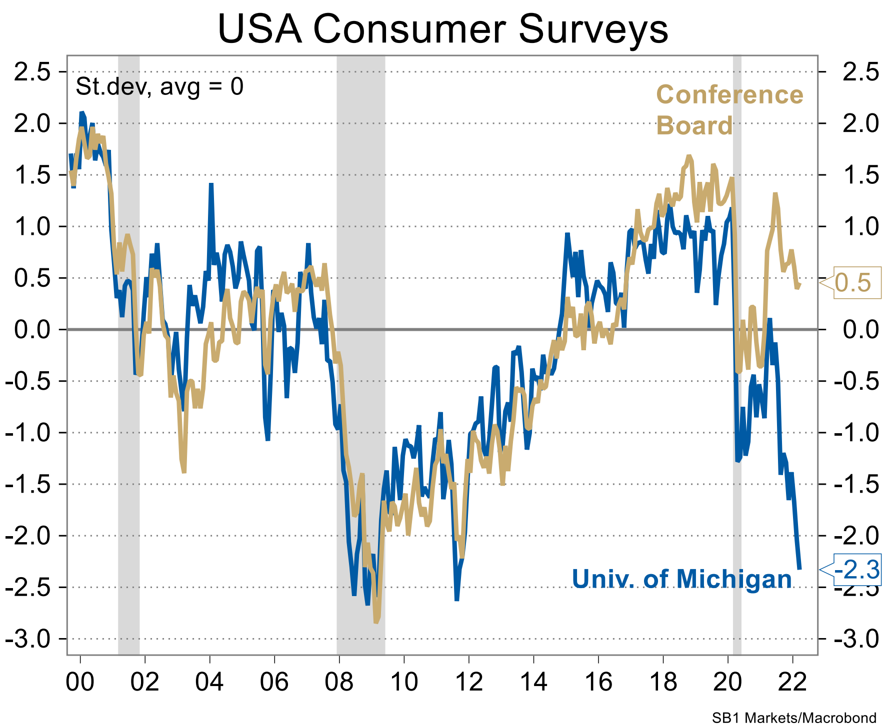
Because (inbound, of course) traffic has been much higher than ever before



- Sure, there have been some **capacity problems** due to the pandemic but the main challenges have been that harbours have been overwhelmed by many more ship arrivals and much more (inbound) cargo than normal!
- ... Because demand for goods has been far above a normal level through the pandemic
- Now, traffic is still terrific but there are not many ships at anchor, waiting for offloading their goods. The system has clearly 'learned' how to cope with a much higher flow of goods than before the pandemic

Conference Board's confidence slightly UP in March

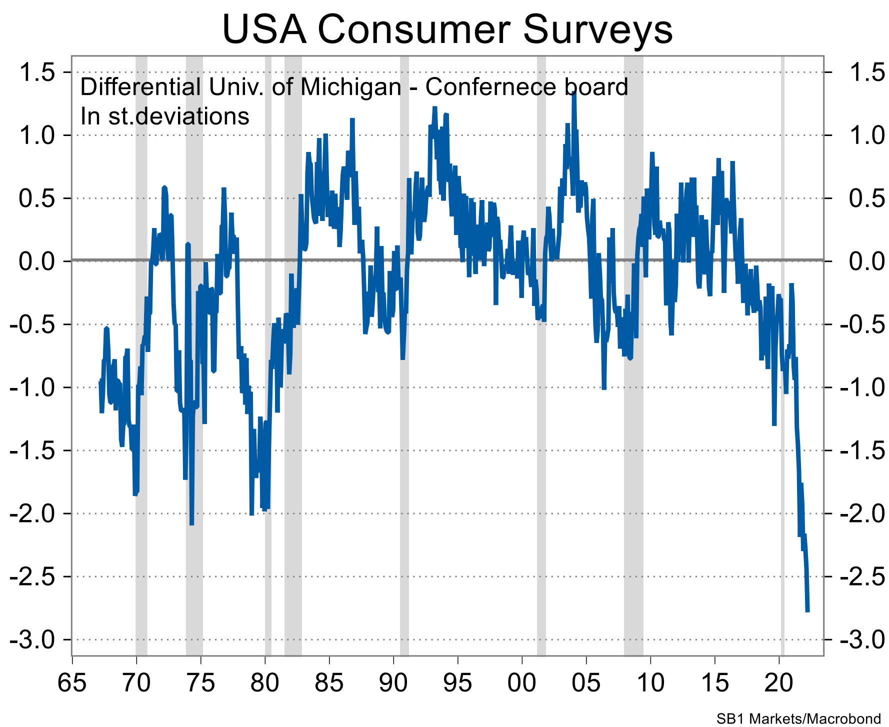
CB's index up 0.1 st.dev to +0.5 above avg, better than expected and miles above the UM sentiment

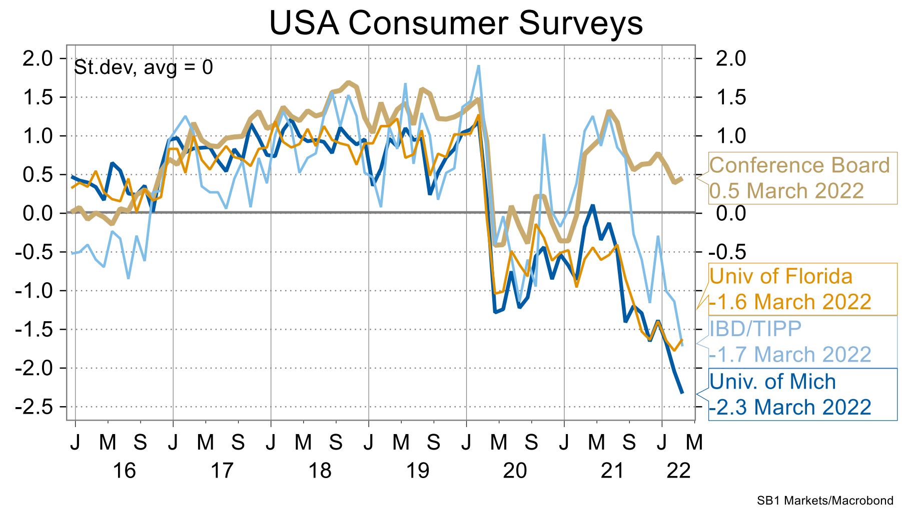


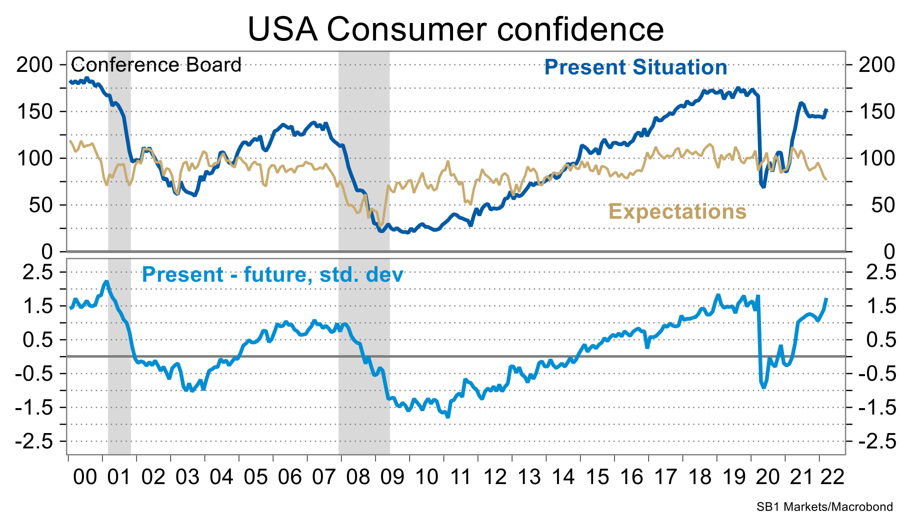
- The **Conference Board's consumer confidence** index rose by 1.5 p in March to 107.2
  - » February was revised down to 105.5 from 110.2 – and the index was expected down to 107.5. January was also revised down, by 4.3 p (reported one month ago)
  - » The index rose to 0.5 st.dev above average from 0.4 (originally reported 0.6)
- Households assessment of the current situation rose 0.3 st.dev to +1.2, while expectations fell further by 0.3 to -1.0
  - » Households report that jobs have never easier get
  - » Inflation expectations rose further – and spending plans are not that upbeat
- **Even if expectations are below average, this index is strong vs. other surveys**
  - » **University of Michigan's sentiment** is 2.3 st.dev below average, as if there were a catastrophe is the US economy these days
  - » The discrepancy has never been larger

The gap between consumer surveys remain frustratingly high!

Almost always, when UM grounded before CB yielded, UM was right. And the recession started



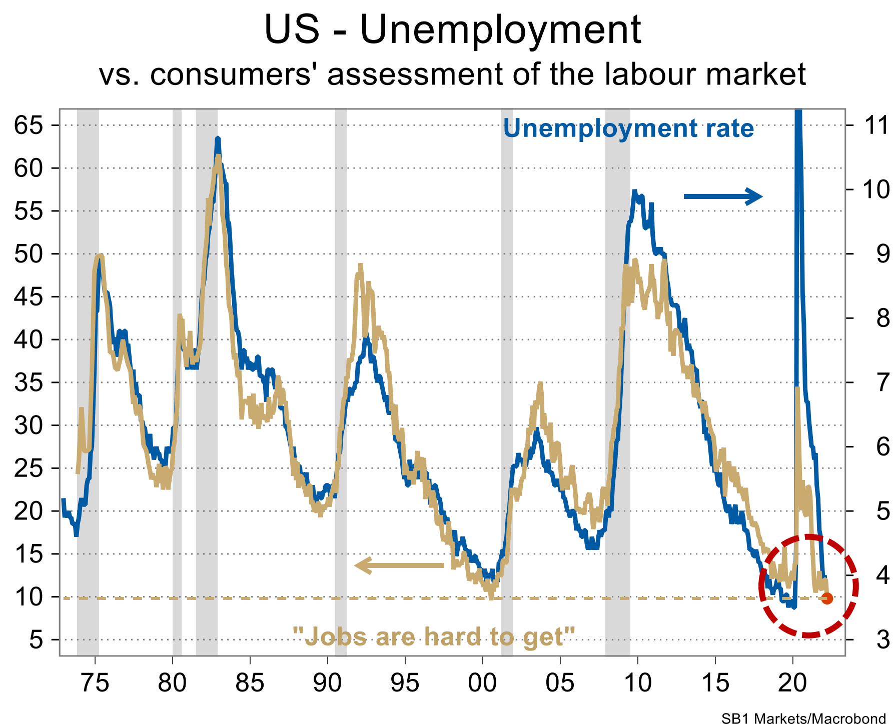


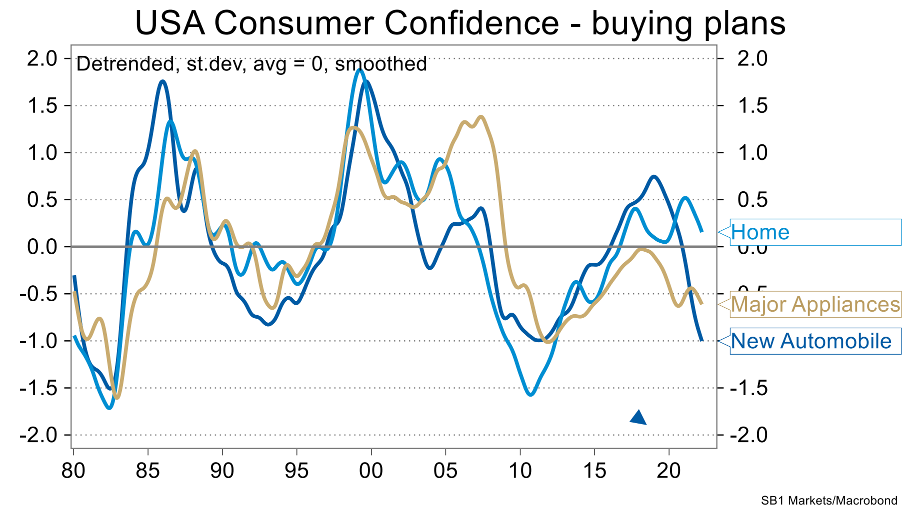


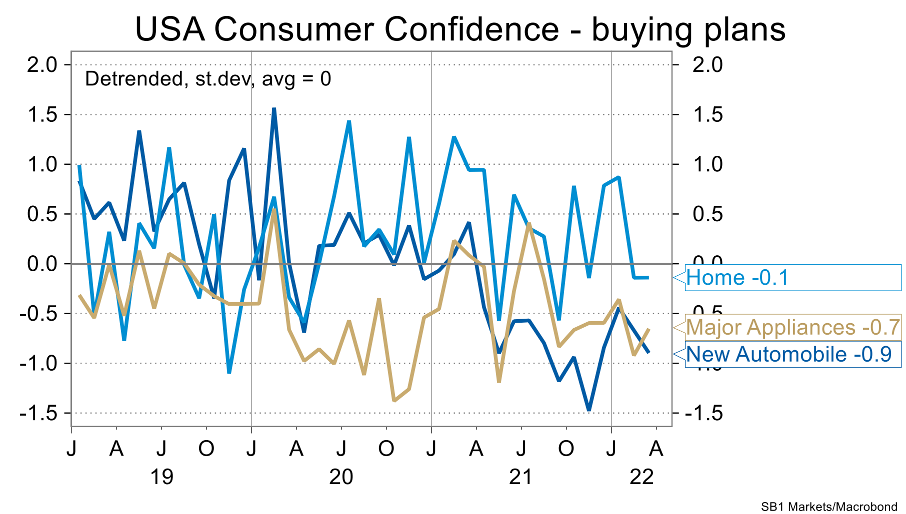
- All other surveys are down, and all but CB's survey have fallen to below average – and to far below average levels
- High inflation is normally not welcomed, but we have not been able to explain the drop in UM sentiment by the traditional factors (including inflation and inflation expectations but also including growth, unemployment, mortgage rates etc). In addition, the sentiment soured without any deterioration of the Covid-19 situation (the sentiment fell well before Omicron arrived, and now restrictions are gradually eased as the Omicron is on the retreat)
- Simply, we do not have good explanations! Actual behavior – so far – indicate that Conference Board's index is far closer to the ball vs the other indices

Never, ever before have jobs been so easy to get

Confirms an extremely tight labour market



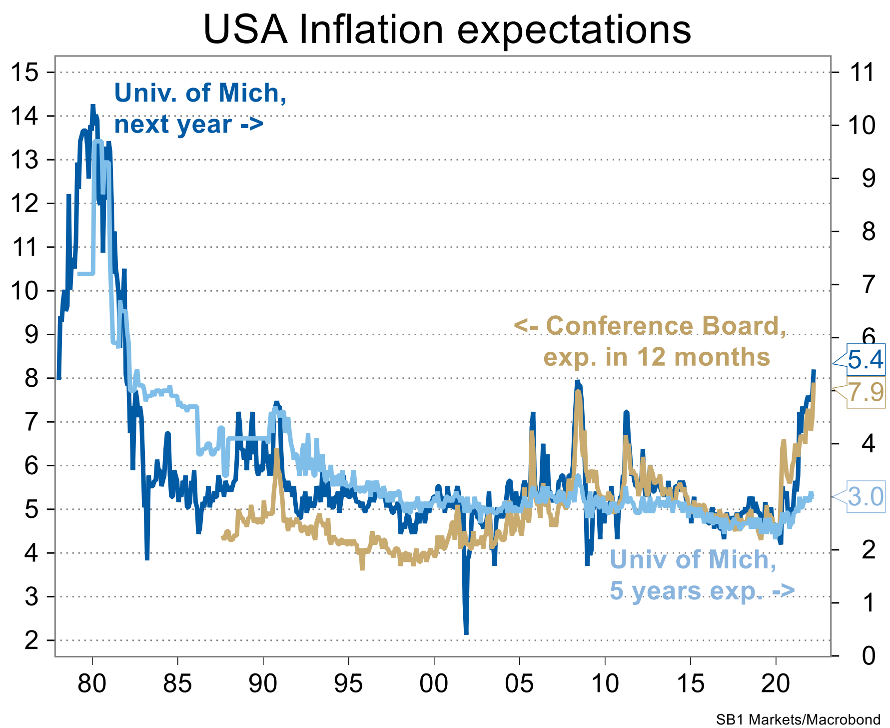




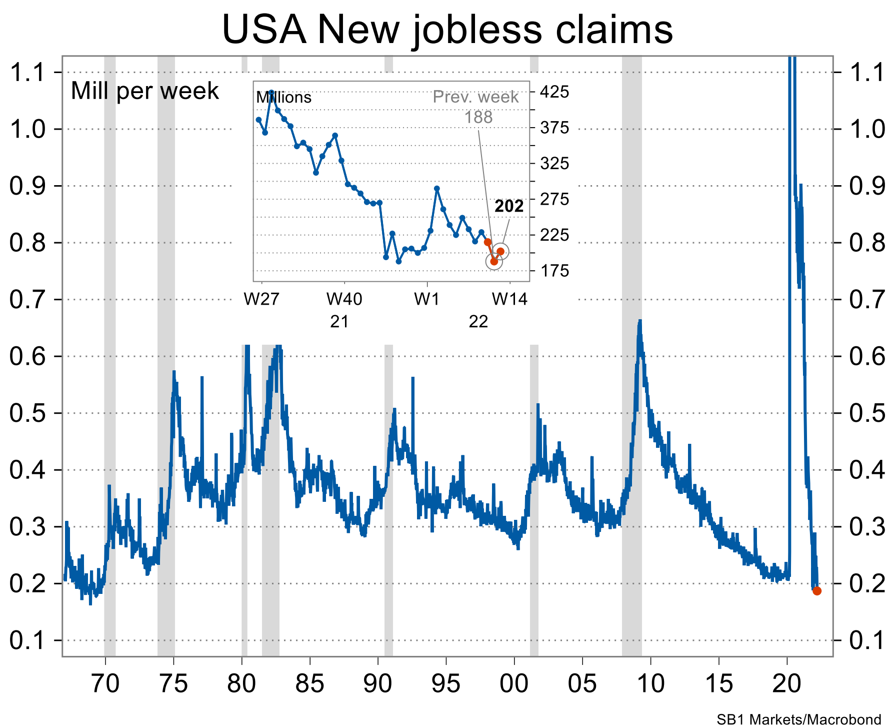
- **Household spending plans** are volatile, and in sum not aggressive – and even less so the recent months

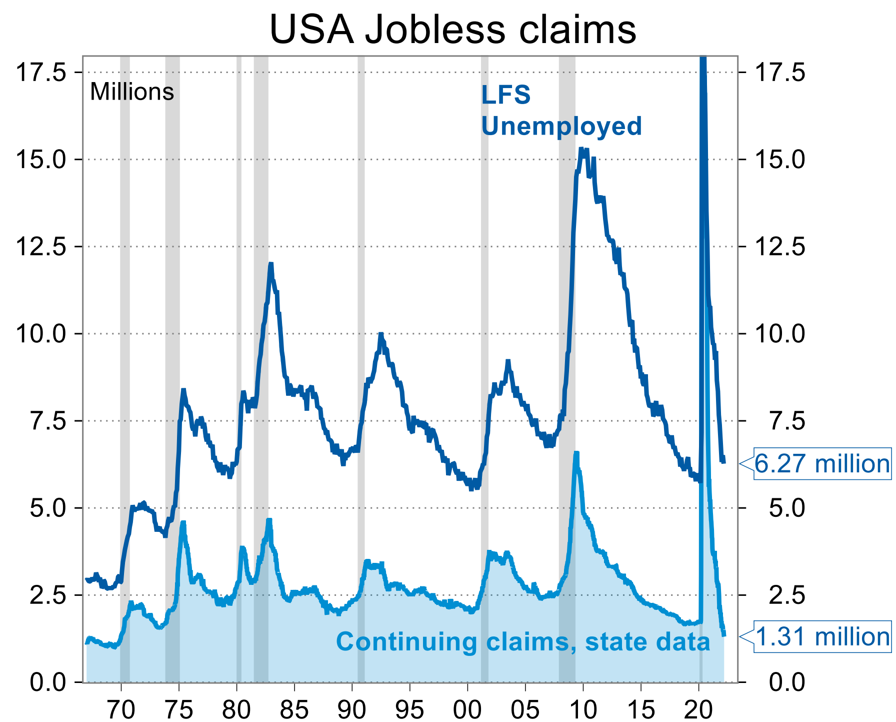
Inflation expectations further up, the Conf. Board's survey +0.5 pp to 7.9%

Long-term expectations have been climbing since 2020 bur are not that high



New jobless claims slightly up last week, still at a very low level

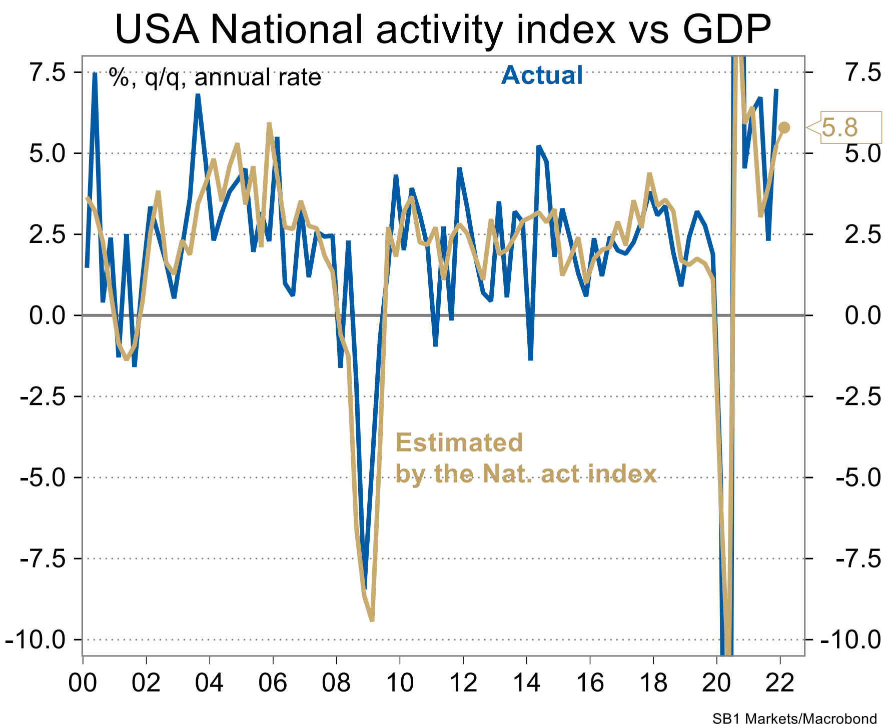


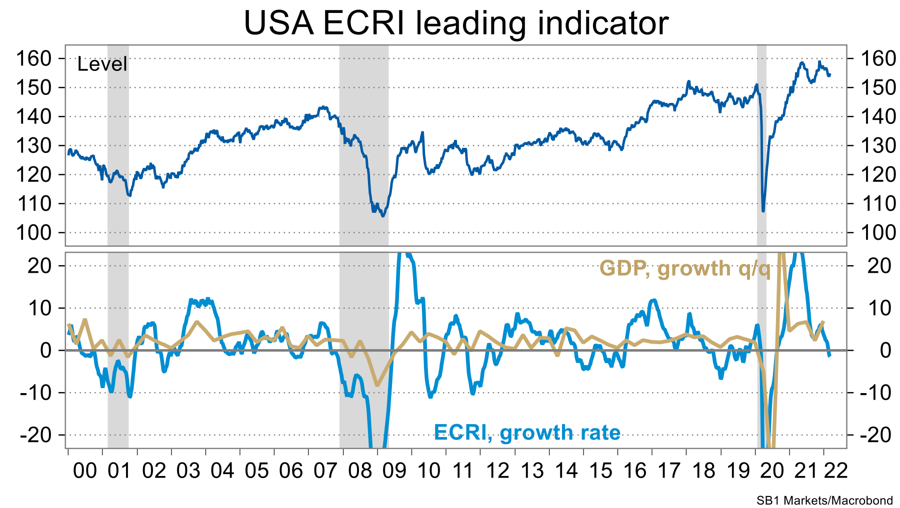


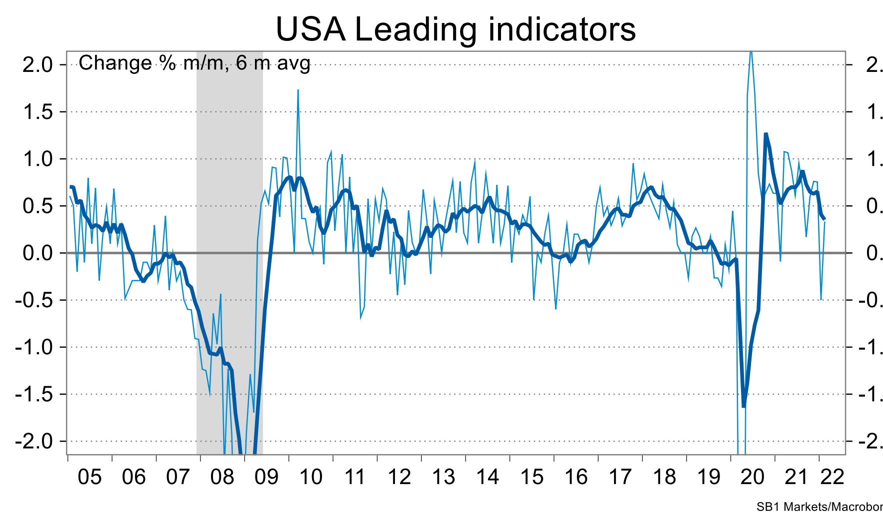
- **New jobless claims** fell 14' in week 12 to 202', close to the lowest inflow since late 1969 – where the labour force was 2 times larger than today
- **Ordinary continuing claims** fell 35' in week 11, to 1.31 mill, to the lowest level since Dec 1969, and as share of the labour force, the lowest ever, by far

The national activity index signals decent growth in Q1

Other nowcasters are weaker, the ECRU indicator report growth close to zero, LEI growth at trend



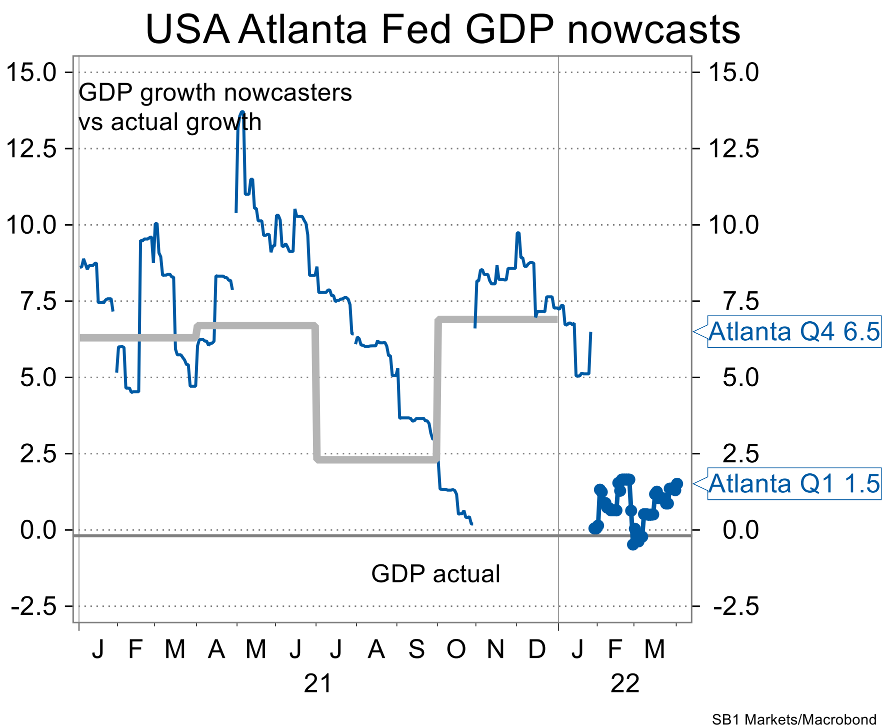


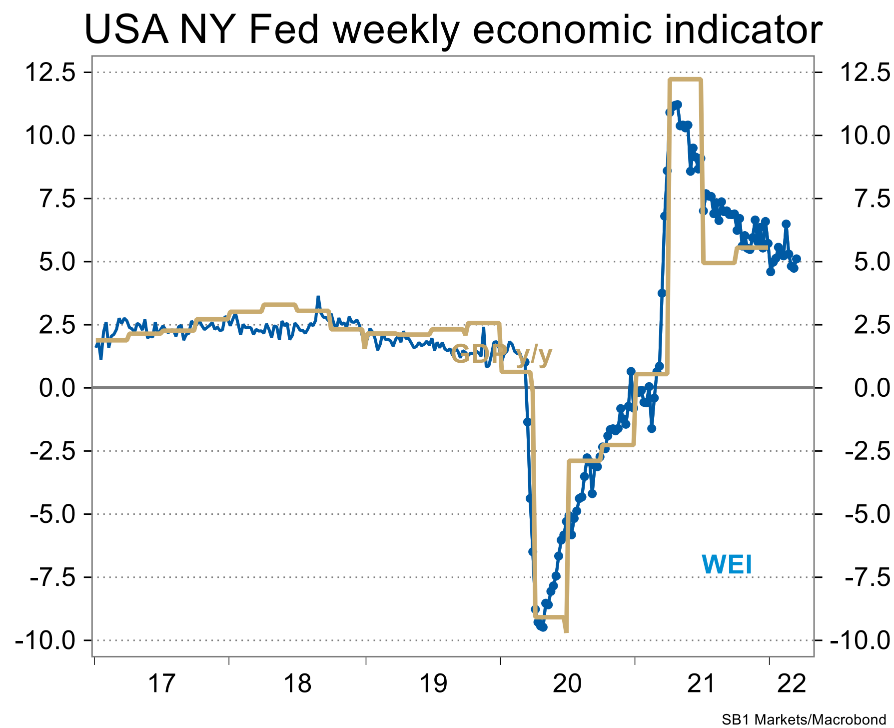


- The contrast to Atlanta Fed's nowcaster is unusual, check next page for the nowcaster

Atlanta Fed's nowcaster suggests 1.5% growth in Q1

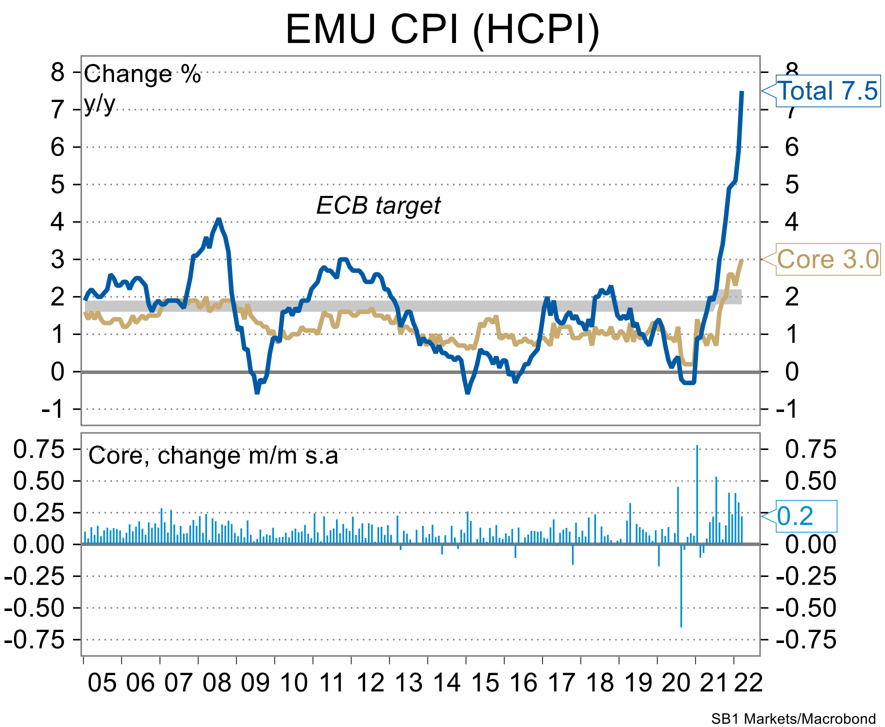
Net trade & inventories contributes at the downside, according to Atlanta Fed

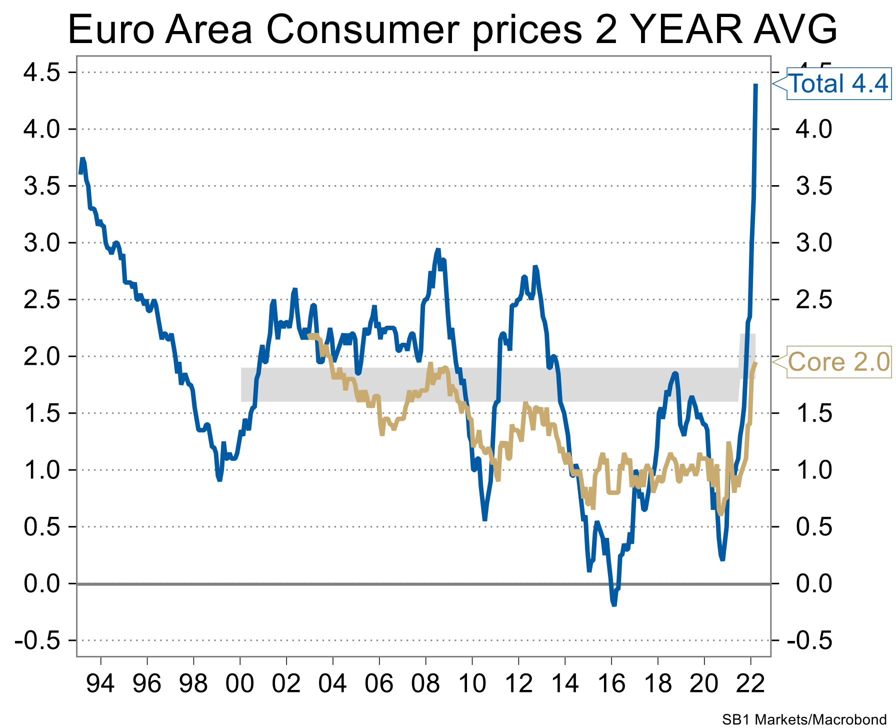




Inflation up to 7.5%, 0.8 pp above expectations. Because energy prices rose

Which should have not been that surprising? Core inflation up 0.3% m/m, 3.0% y/y, 0.1 less than exp.

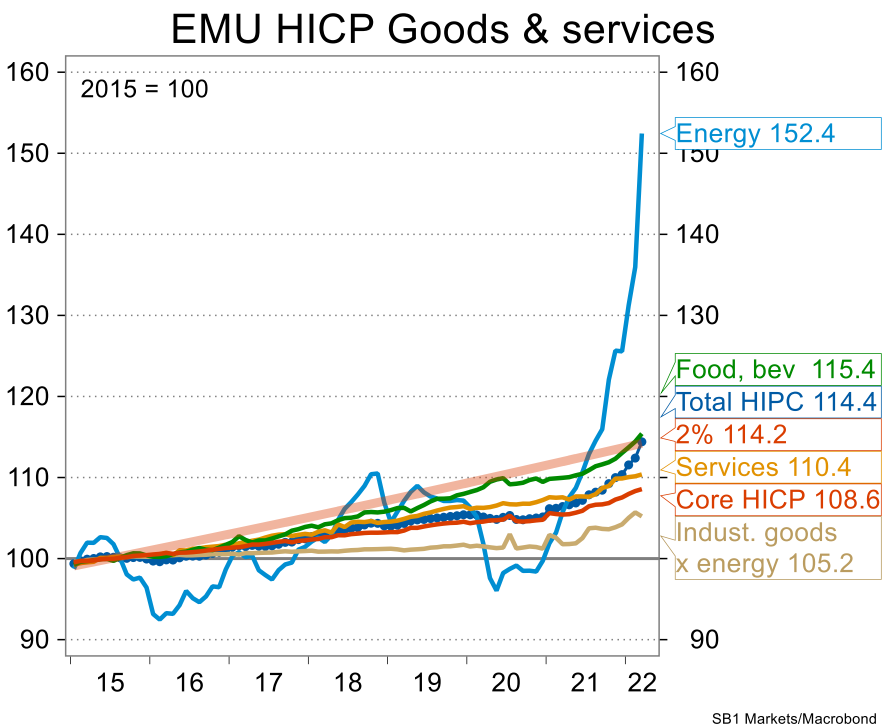


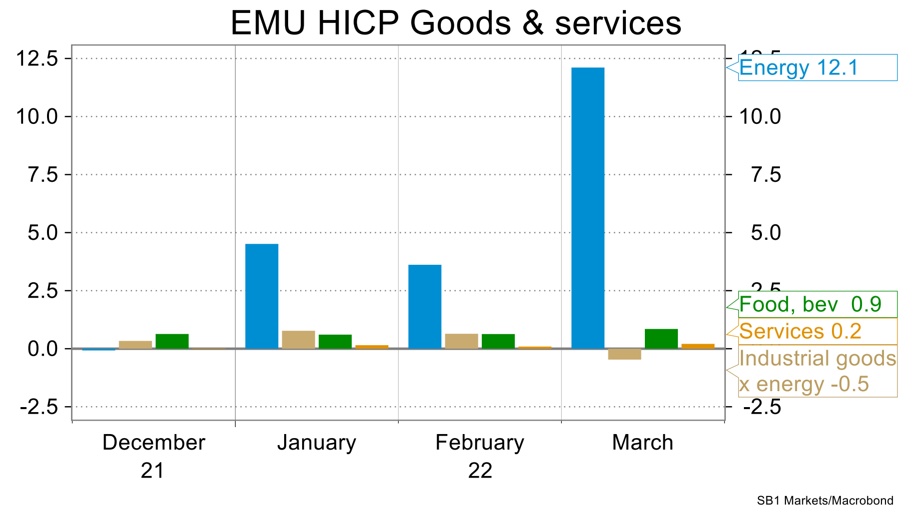


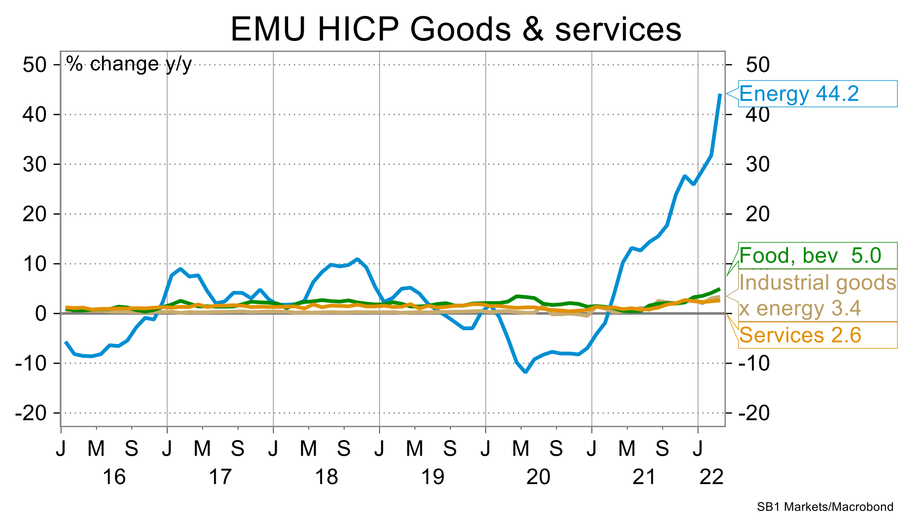
- **The headline HICP** rose 1.8% m/m in March, pushing the annual rate up by 1.4 pp to 7.5%, 0.8 pp higher than expected (as Spanish and German CPIs had pre-warned before Eurostat released the data for the region at Friday). Energy prices rose 12% m/m, explaining most of the lift in headline rate. Food prices also contributed, but still rather limited
- **Core prices** rose 0.2% m/m, and the annual rate accelerated 0.3 pp to 3.0%, expected 3.1%. Over the past 2 years, the core is up 2.0%. However, underlying inflation the past 4 months is above 3% (annualised)
- Our CPI/energy model suggests that the lift in the HICP is entirely due to the increase in oil & gas prices. Based on future prices, the energy impact will peak in April – and then decline rapidly. If future prices will be delivered, this time
- **Wage inflation** is flat at 2.00%, but more unions are requesting compensation for the hike in consumer prices

Inflation: It is somewhat more than energy

But energy is still the BIG story – and prices rose 12% m/m in February – and are up 44% y/y



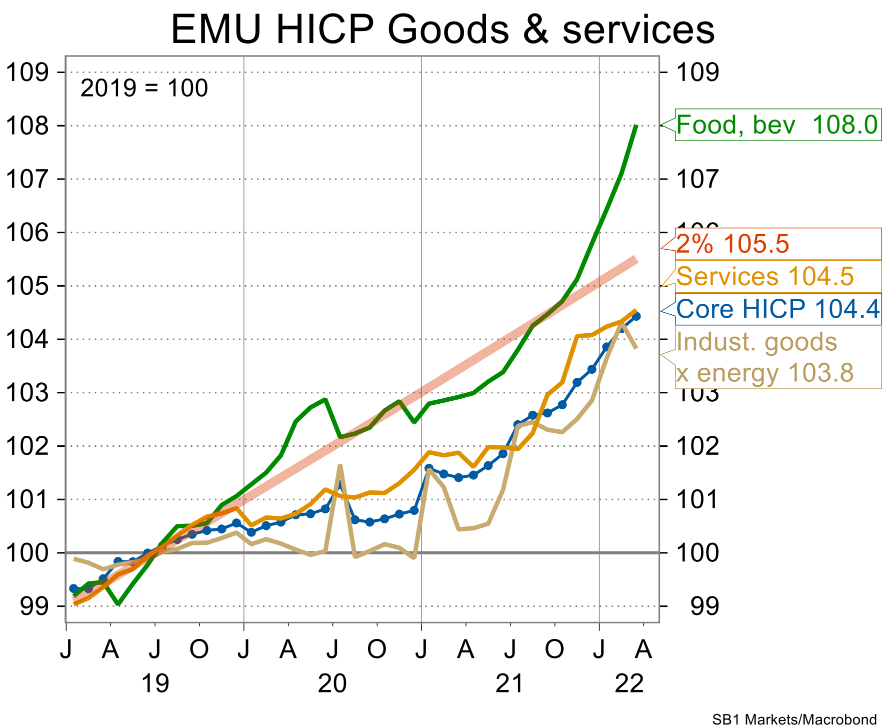


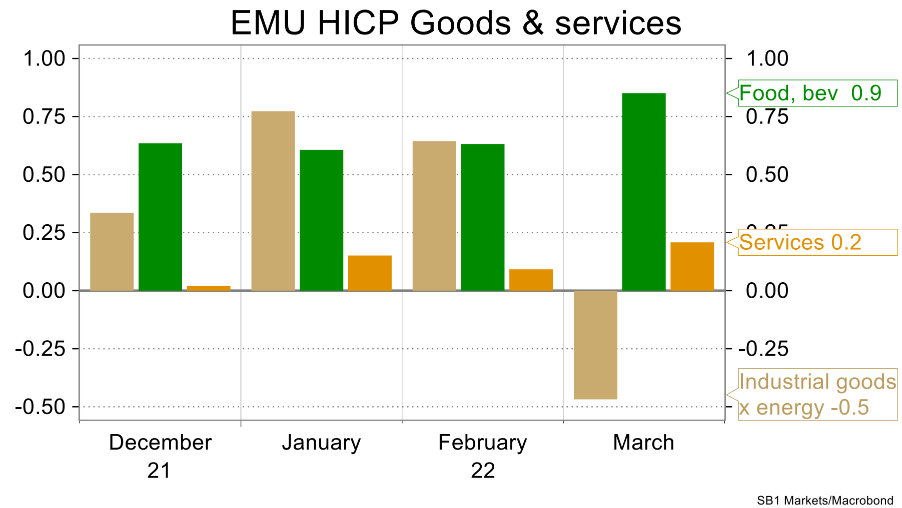


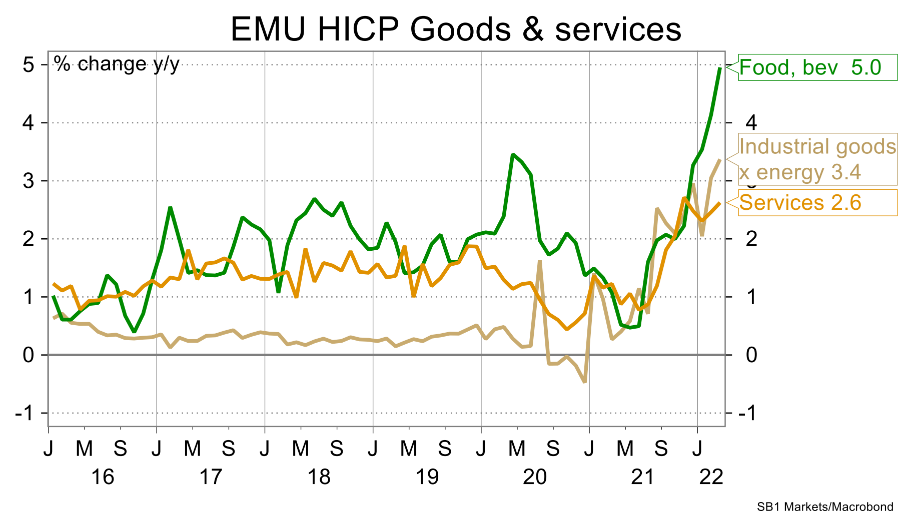
- At one stage, energy prices will turn south again

Inflation: It is somewhat more than energy

Food inflation at 5.0%, industrial goods x energy at 3.4%, and services 2.6%







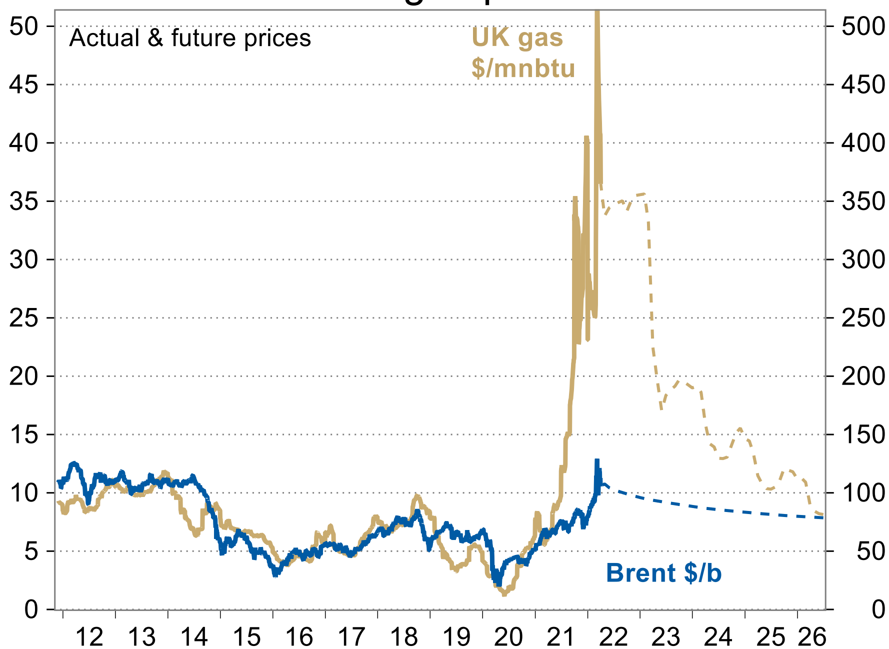
- Industrial goods prices fell by 0.5% m/m in March but prices are still up 3.4% y/y, following a steep rise to February from last October. Still, the prices are well below a 2% path since 2019
- Services prices rose 0.2% in Feb, and these prices are also clearly below a 2% path vs the 2019 level. Transport and hotels/restaurants have contributed on the upside last year (but no data for Feb yet)
- (No further details in the preliminary HICP report)

SpareBank 1 MARKETS

Gas, oil prices have lifted 'energy CPI inflation' up to 40% but….

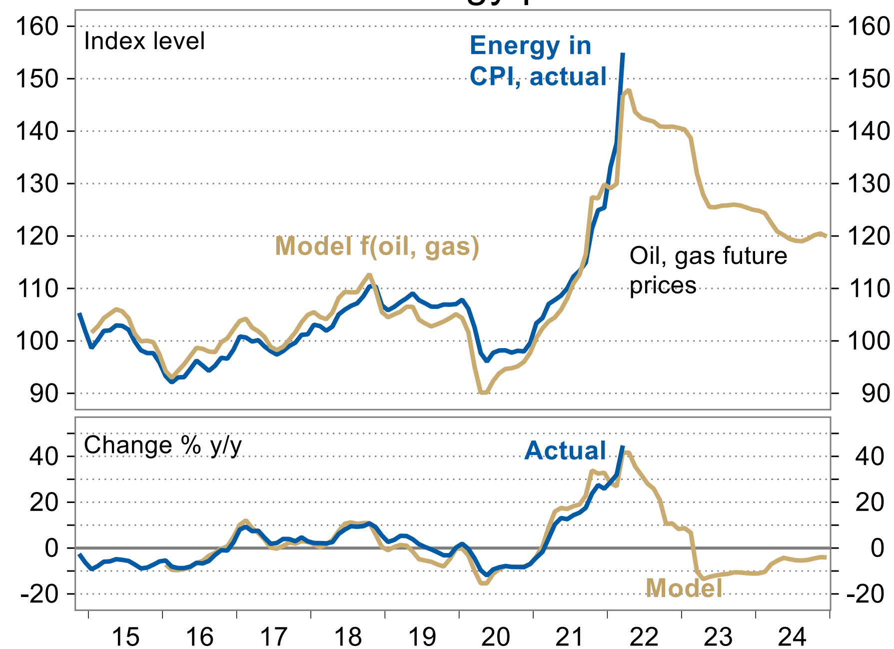
if future markets are correct (this time…) , annual energy inflation will peak in April, and then decline

Oil & gas prices



SB1 Markets/Macrobond

EMU Energy prices



SB1 Markets/Macrobond

- Future prices are are heading downwards
- Early next year, energy prices will be down, measured y/y
- Gas and oil have contributed equally to the lift in energy prices measured at the consumer level, according to our models

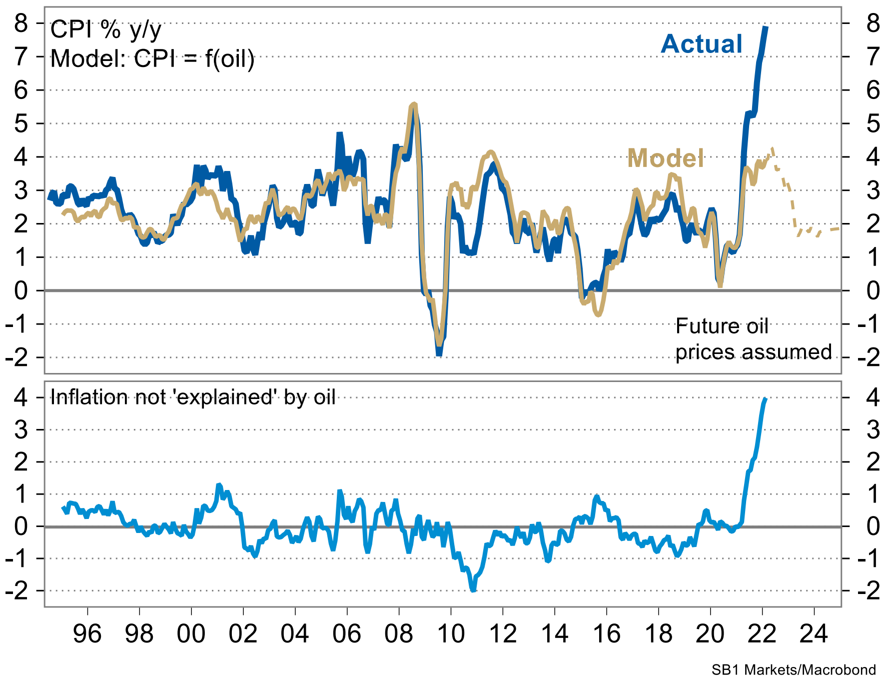
In these models we incorporate all direct impacts from changes in the oil price – as well as the impact from other factors that influenced inflation which correlates to the oil price

SpareBank 1 MARKETS

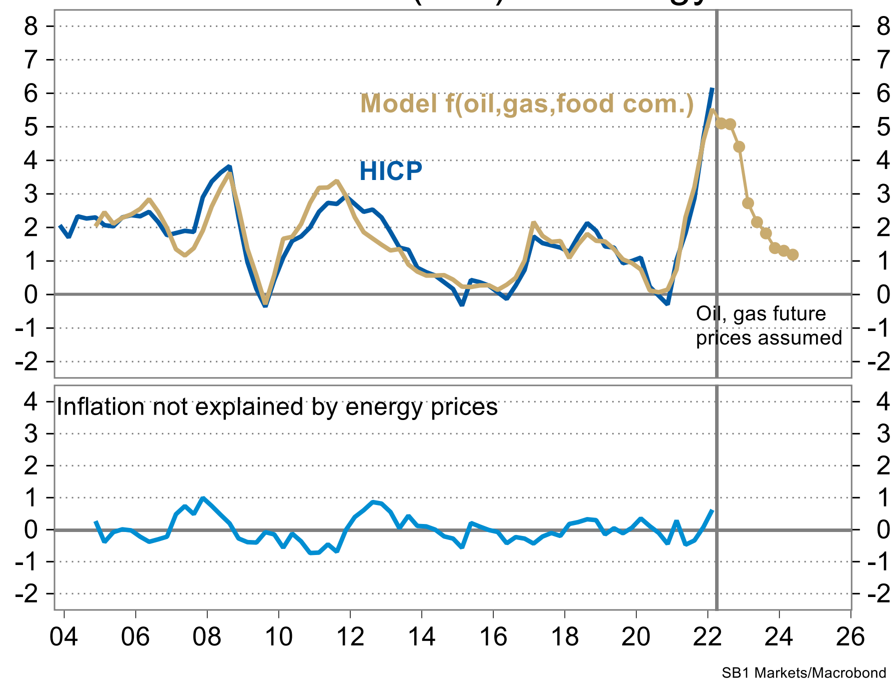
The tale of two different inflation regimes

The EMU inflation is fully explained by higher oil & gas prices, US inflation is not

USA CPI vs Oil



EMU HICP (CPI) vs. energy



- **In the US, oil price cycles** have – for all practical purposes – explained all of the CPI cycles the past 30 years. Until 2021. The precent 4 pp discrepancy is unprecedented! The current/future oil price signals a decline in the annual CPI rate later this spring. The trouble is the 'gap' or the 8% starting point
- **In EMU**, the CPI acceleration recent so far can be fully explained by the increase in energy prices (with a small contribution also from food commodity price). If oil/natural gas prices follow the future prices from here, inflation is now close to the peak, and the annual growth rate will return to below 2% in early 2023. Had energy prices suddenly returned to a 'normal' level now, inflation would have collapsed!

In these models we incorporate all direct impacts from changes in the oil price – as well as the impact from other factors that influences inflation which correlates to the oil price

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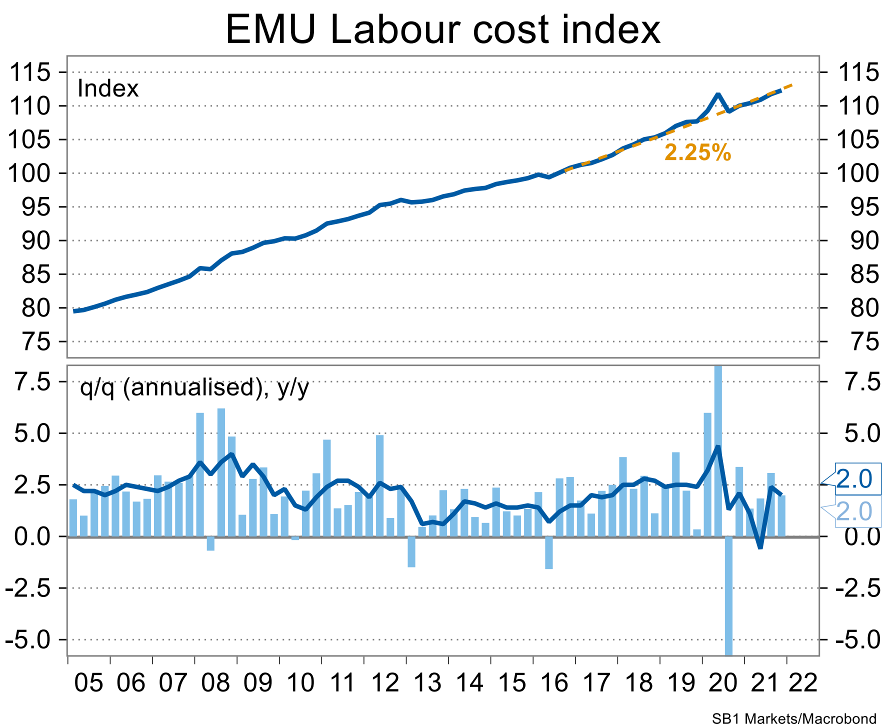
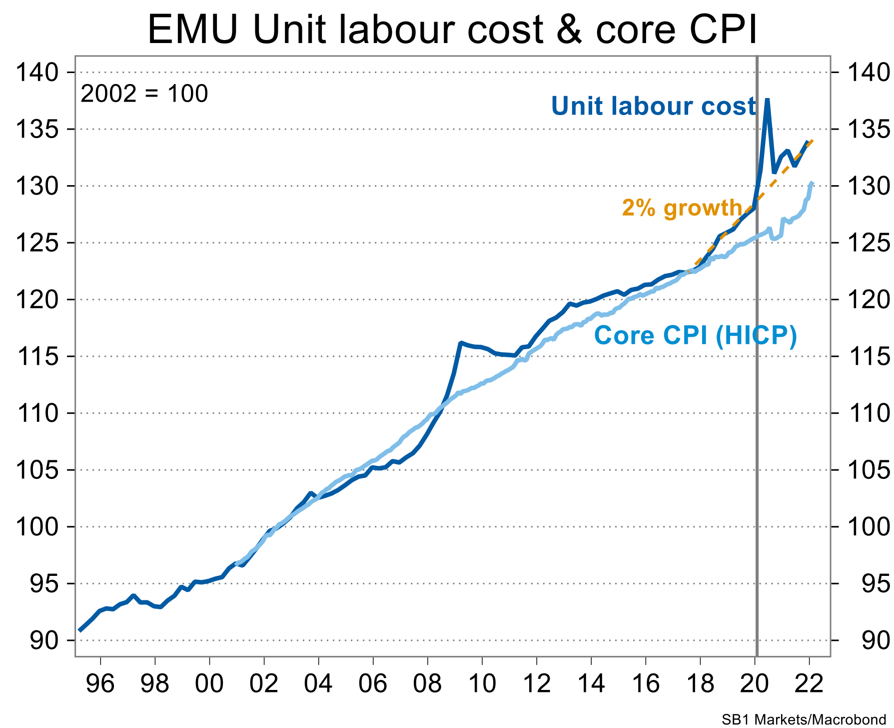
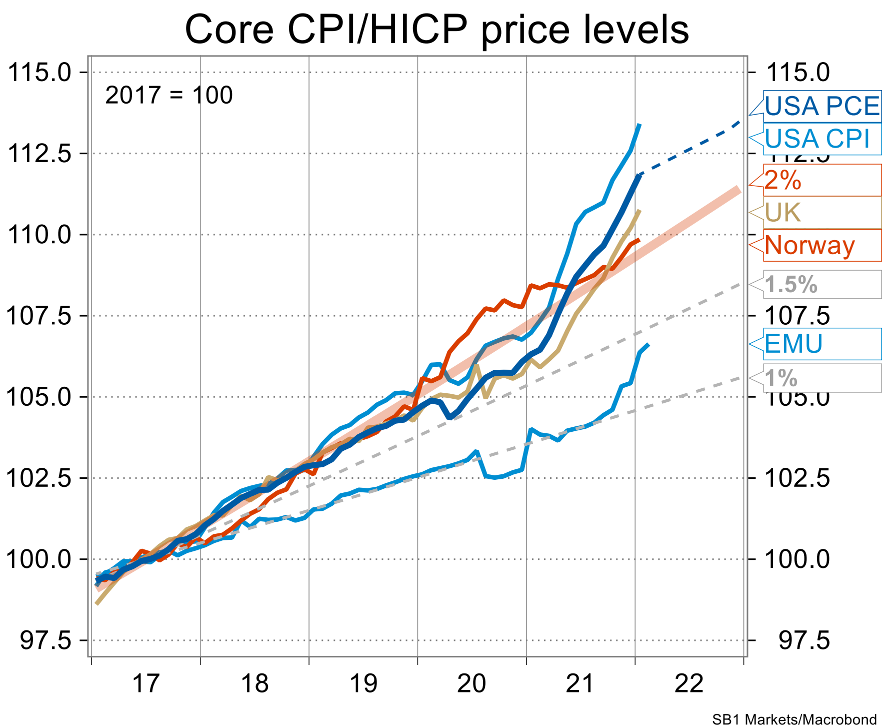
Just a reminder: No wage cost pressure in the EMU





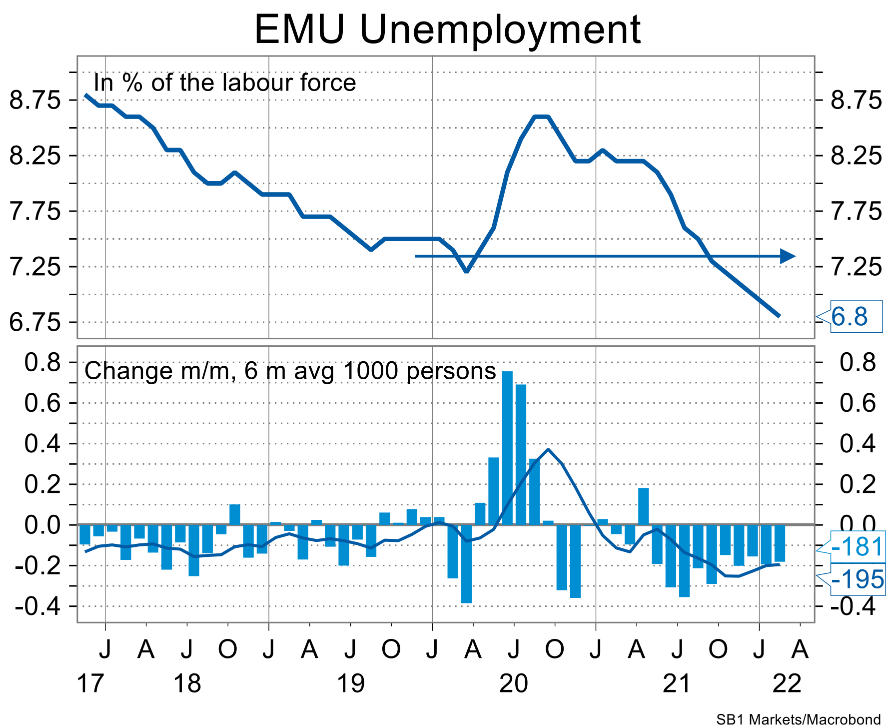
Core prices are climbing faster everwhere

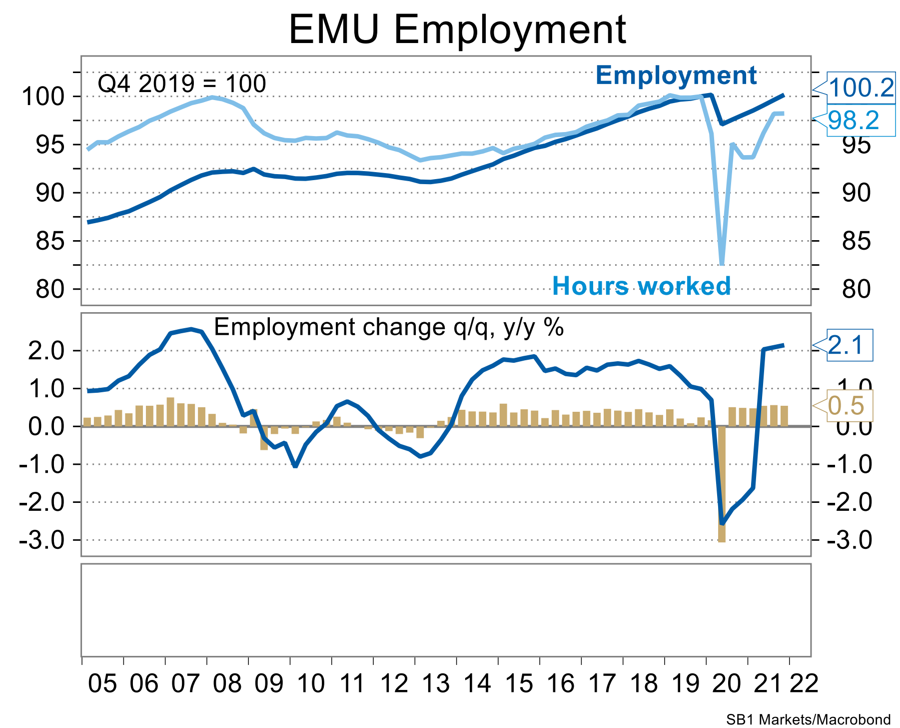


- EMU core CPI has shot up recent months but is still at ‘at low level’

Unemployment on the way down, the rate is the lowest since 1981

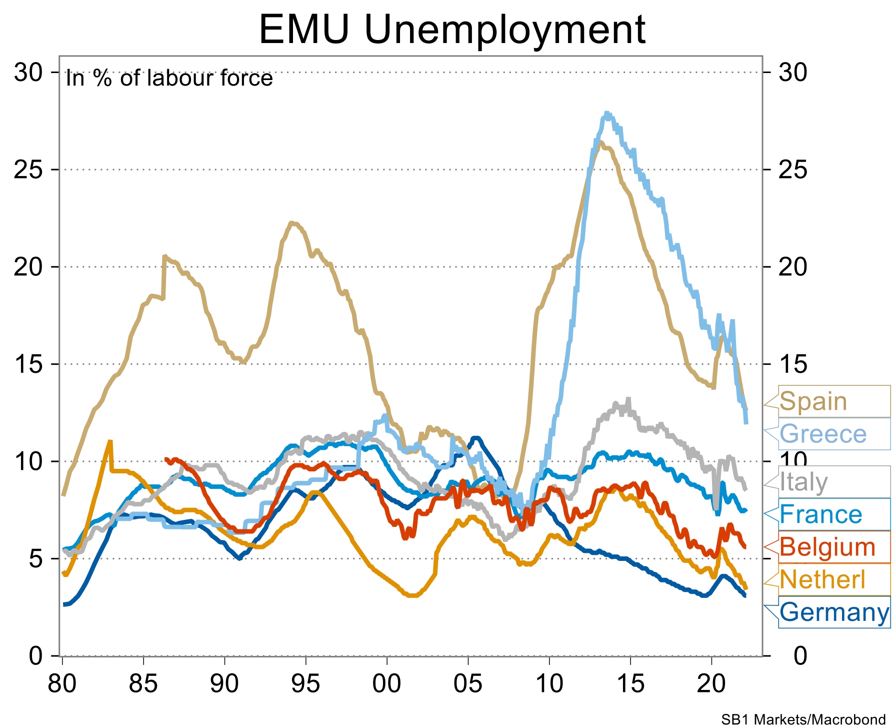
The unemployment rate fell 0.1 pp to 6.8% (from an 0.1 pp upward level in January)

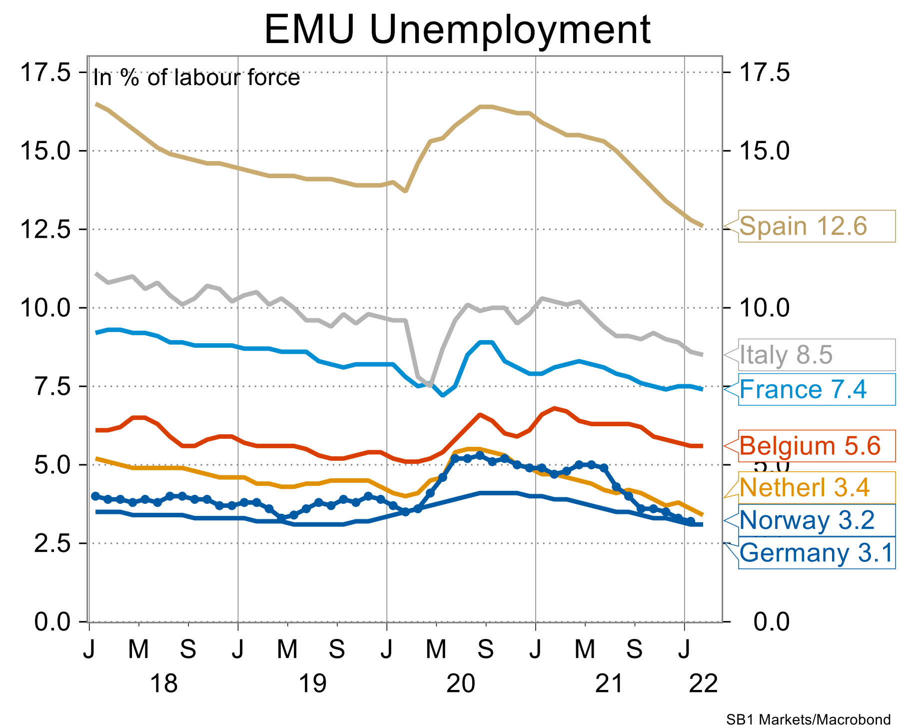




- **Unemployment** has been falling rapidly since last spring. In February, the unemployment level fell by 0.1 pp, as expected, but from an upward revised level in January
- **Employment** rose by 0.5% in Q4, as in the previous 4 quarters, and the level is 0.1% above the pre-pandemic level
  - » However, the best proxy for the real unemployment rate, at least vs. **demand for labour**, is the number of **hours worked**. In Q4, hours worked was unch, at were down 1.8% vs the pre-pandemic level, as average working hours have fallen
- The number of **unfilled vacancies** has soared to the highest level ever, by far

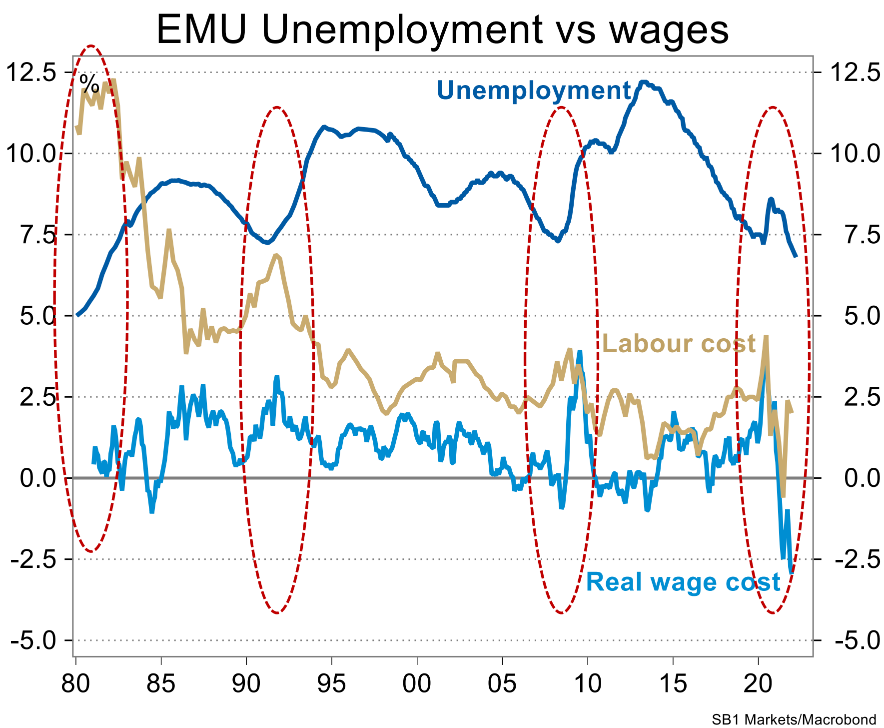
Unemployment is declining all over the region

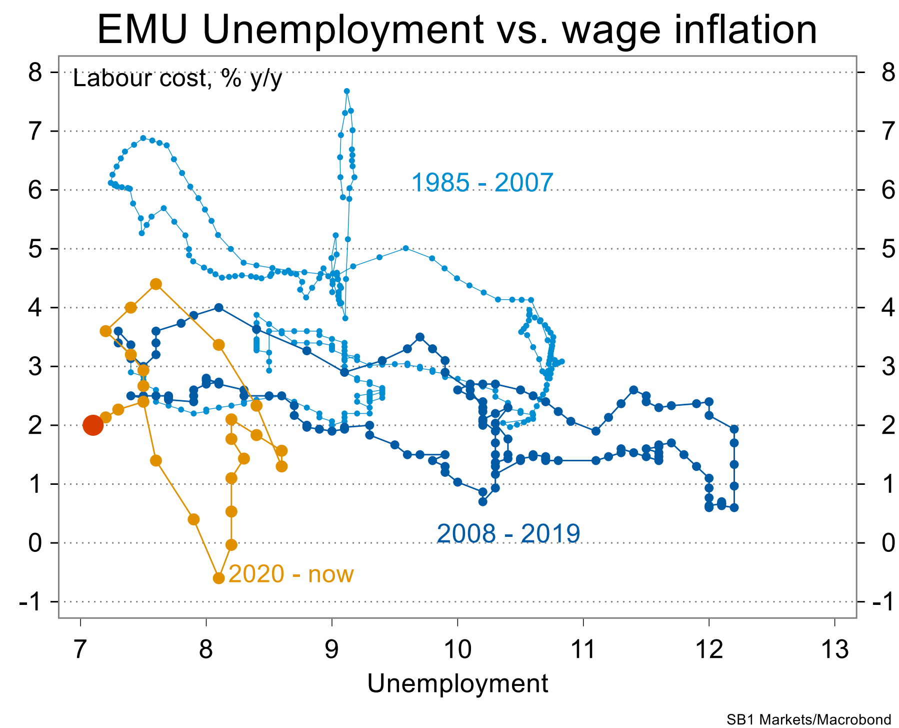




Unemployment is the lowest since 1981, vacancies are at ATH

There may be some wage inflation risk in the EMU too? So far, nothing is seen, wage inflation at 2.0%

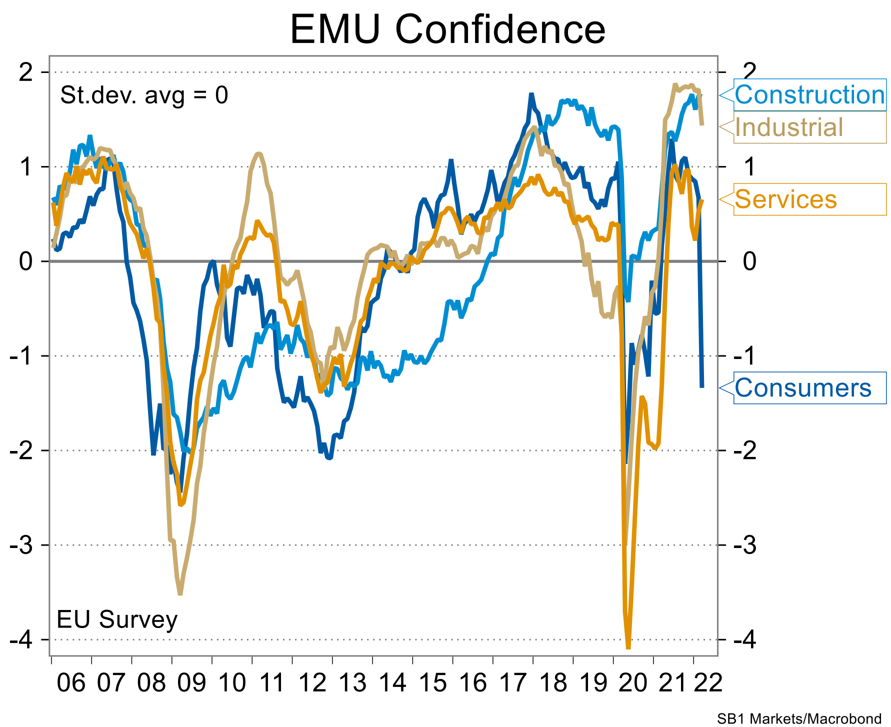


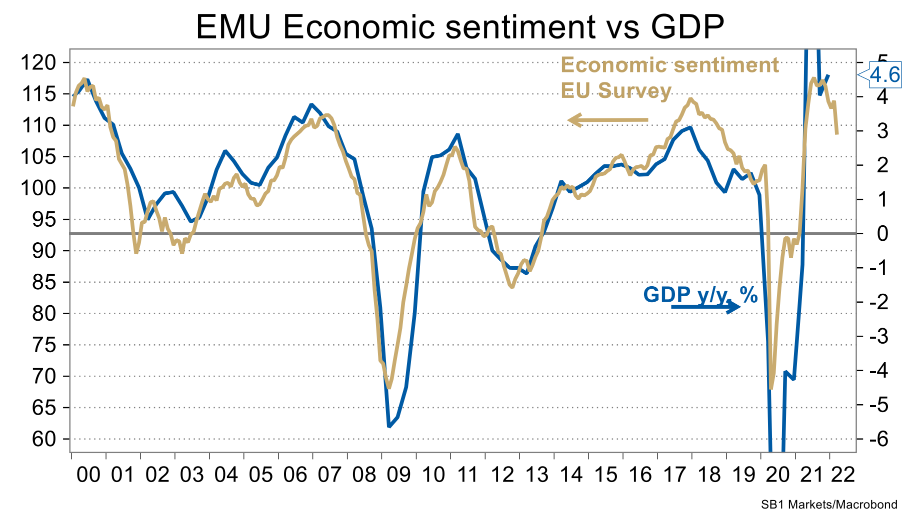


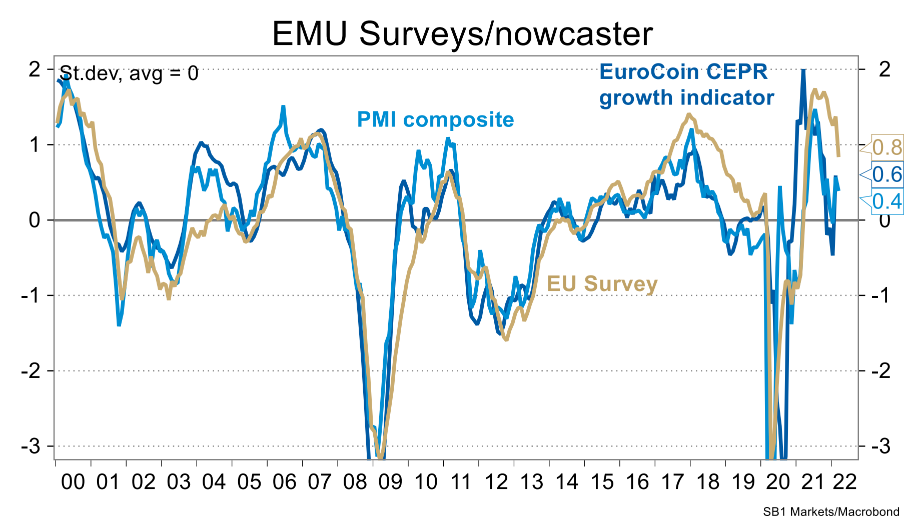
- A problem for the wage-earners: Wages are up 2%, while inflation is 7.5% - and real wages are collapsing

Households lost their faith in the future in March, businesses not in 'war'-month

EMU economic sentiment fell 0.5 st.dev, but remains 0.8 above avg, signalling 3% growth



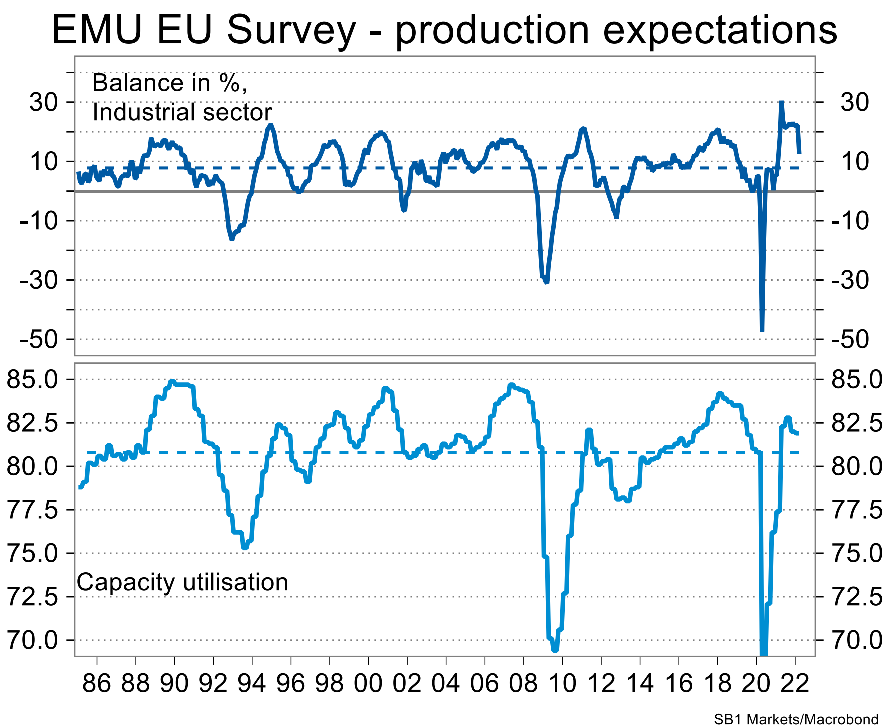


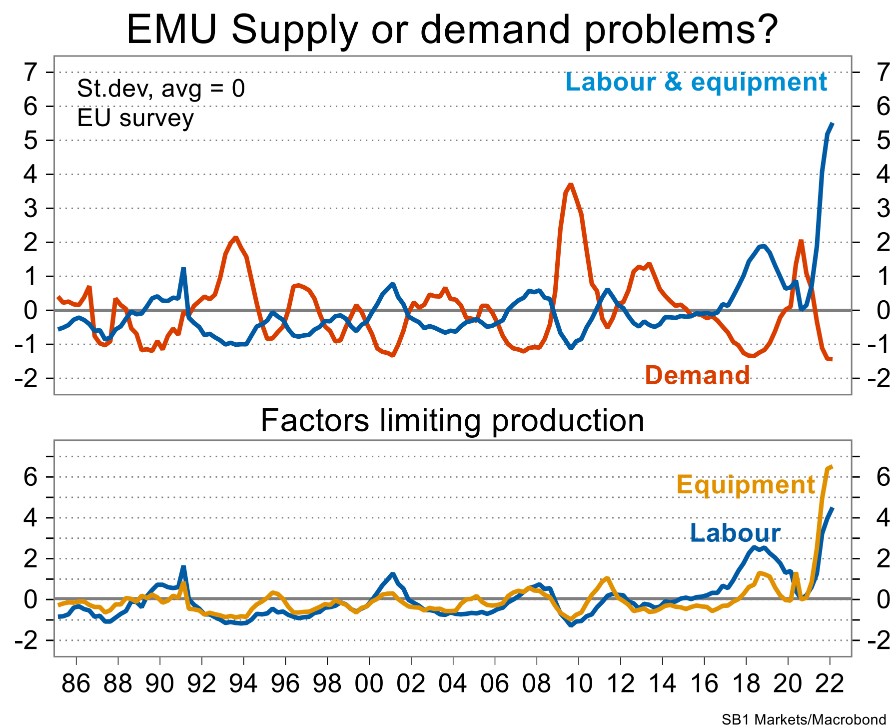


- **EU's confidence survey for the Euro area** declined 4.9 p to 108.5, expected down to 109.4. The level is 0.8 st.dev above average, signalling a GDP growth well above average, at some 3%
  - » **Household confidence** was confirmed more down than ever before
  - » **The industrial sector** reported a decline, but not that much, **construction** was unchanged, and **services** rose as virus problems eased
  - » Thus, war & sanctions have not yet scared businesses much at all
- **The EuroCOIN GDP nowcaster** signals far slower growth than EUs survey, as do the **PMI reports** – but they both signa growth above trend. However, the (usually) lagging EU survey has been heading down recent months

Production expectations down in March

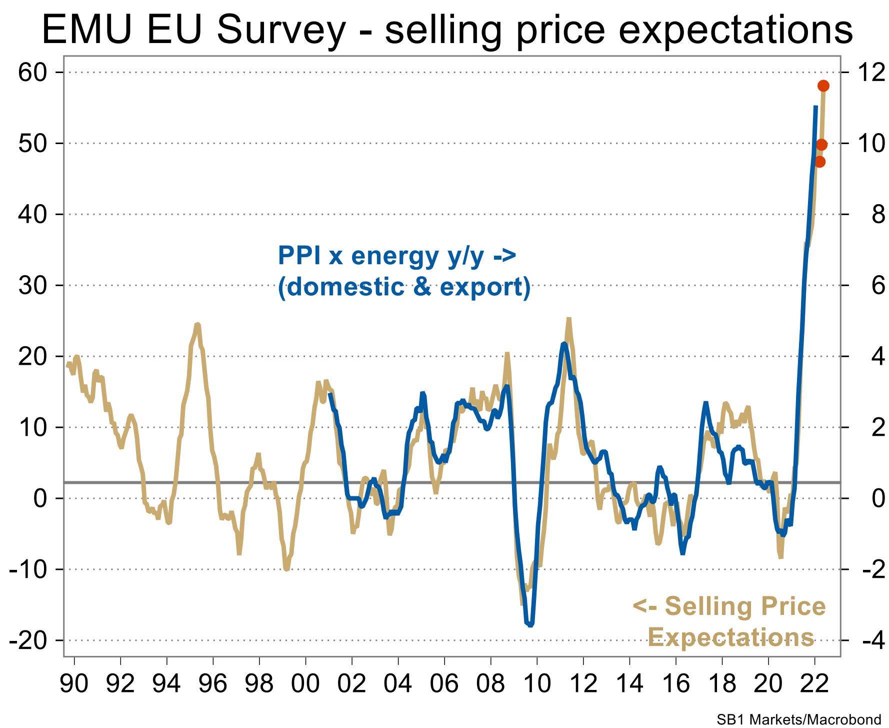
Before that: Capacity utilisation well above average – and 'nobody' says demand limits production





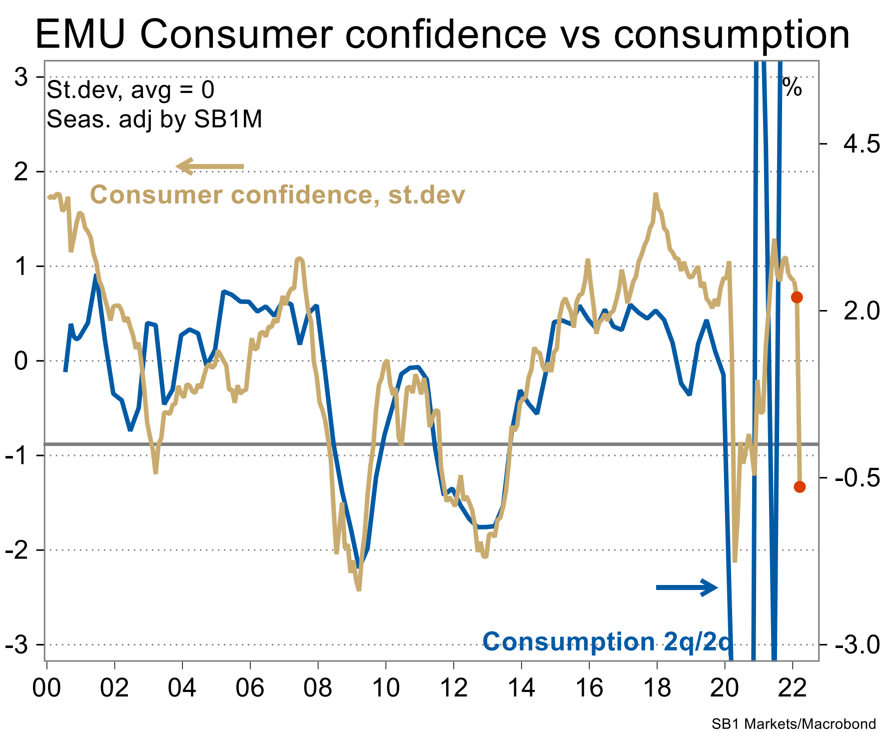
Companies report even steeper selling price increases

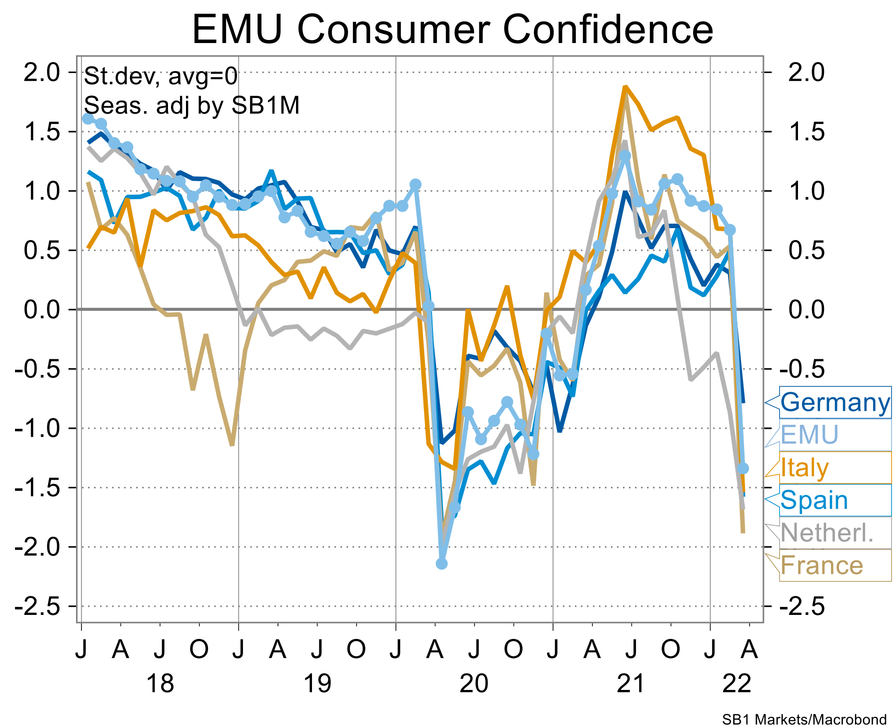
As cost pressures are building, and demand is still strong



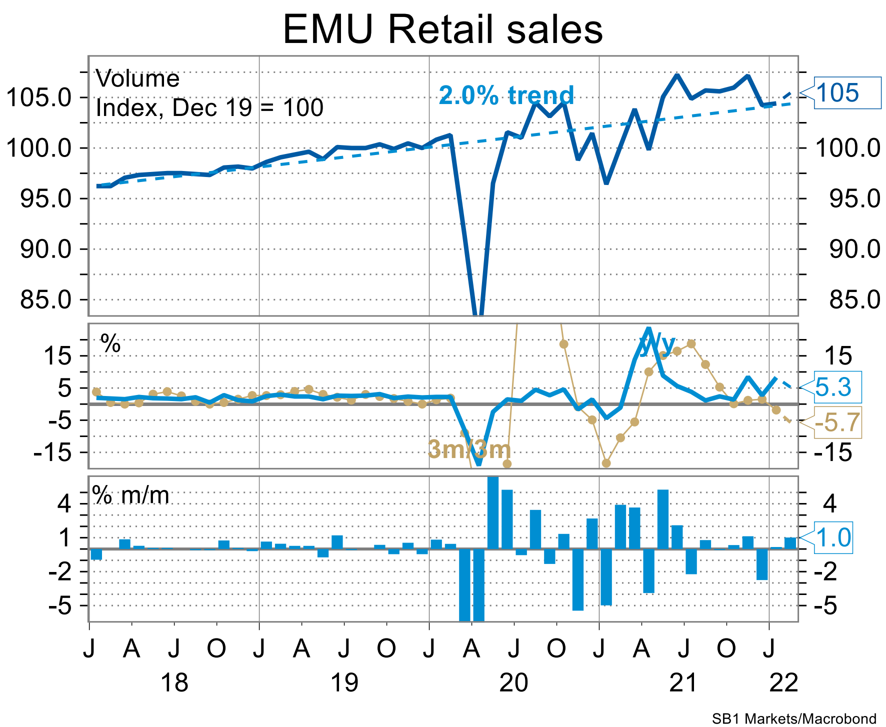
The steep decline in consumer confidence confirmed

France too the largest hit, Germany the smallest – rather surprising

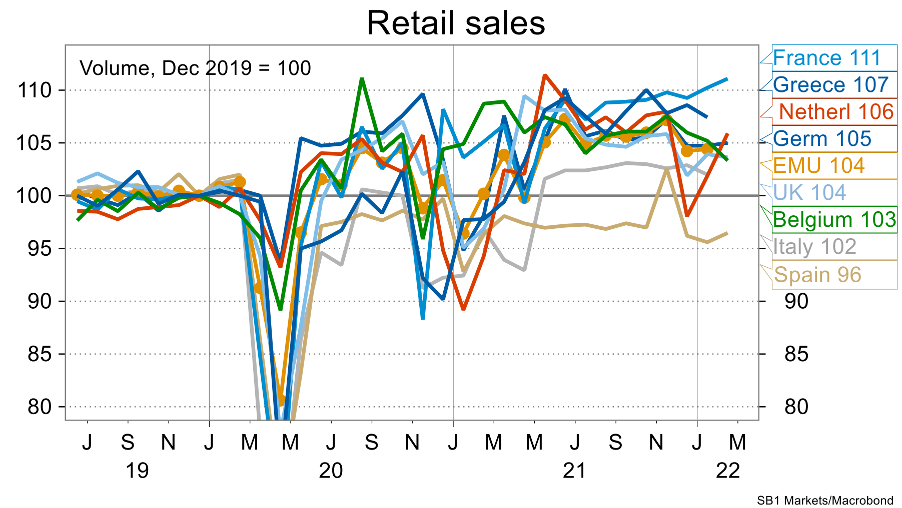




Retail sales probably up 1% in February, several countries have reported growth



- Since before the pandemic: Sales are up 5%, just marginally above to the pre-pandemic growth path – signalling a limited downside risk
- That is, that was in February. Something has happened since that

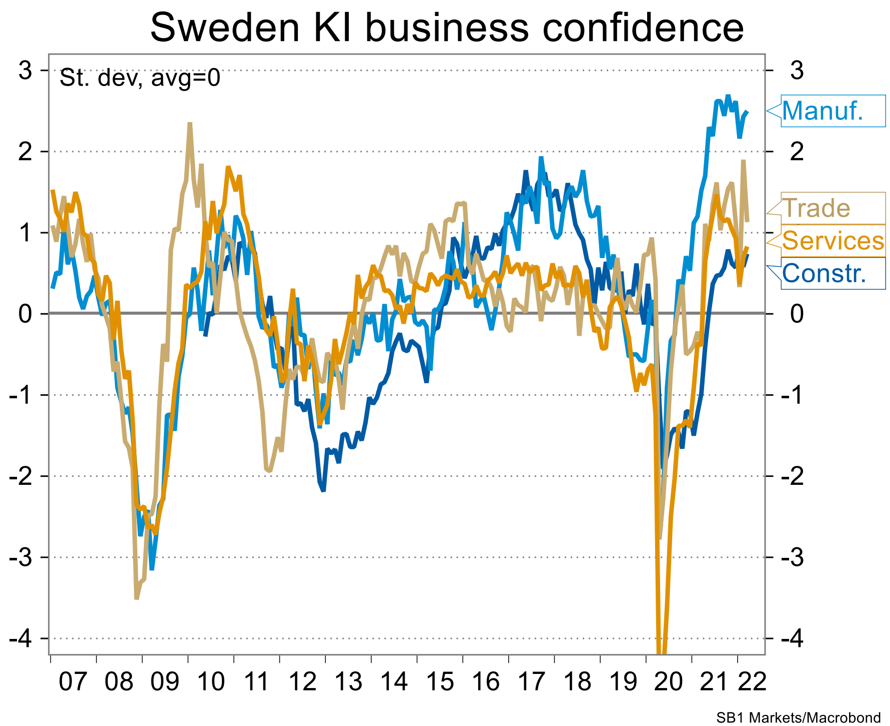


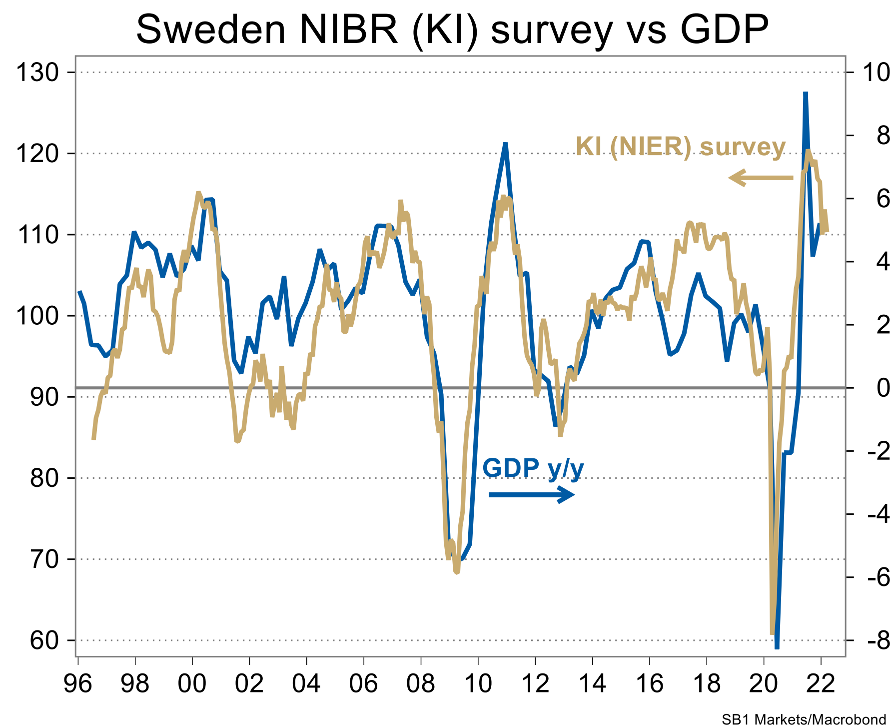
- Germany, France and Spain have reported growth in sales in February

SpareBank 1 MARKETS

No war angst among Swedish businesses in March

The confidence index fell slightly – but just due to a decline in retail trade, from a 'too high' Feb level

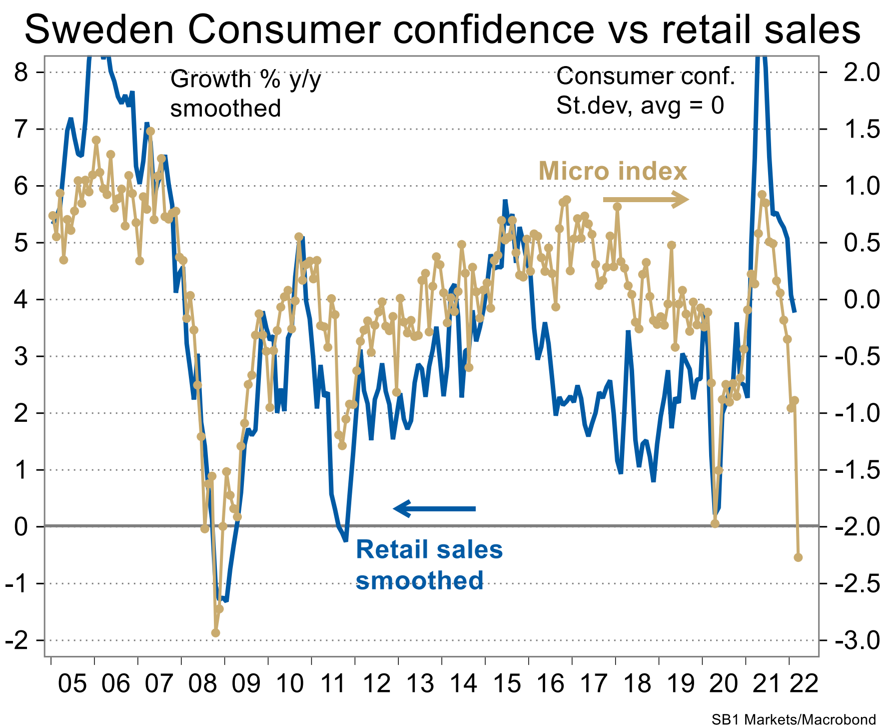


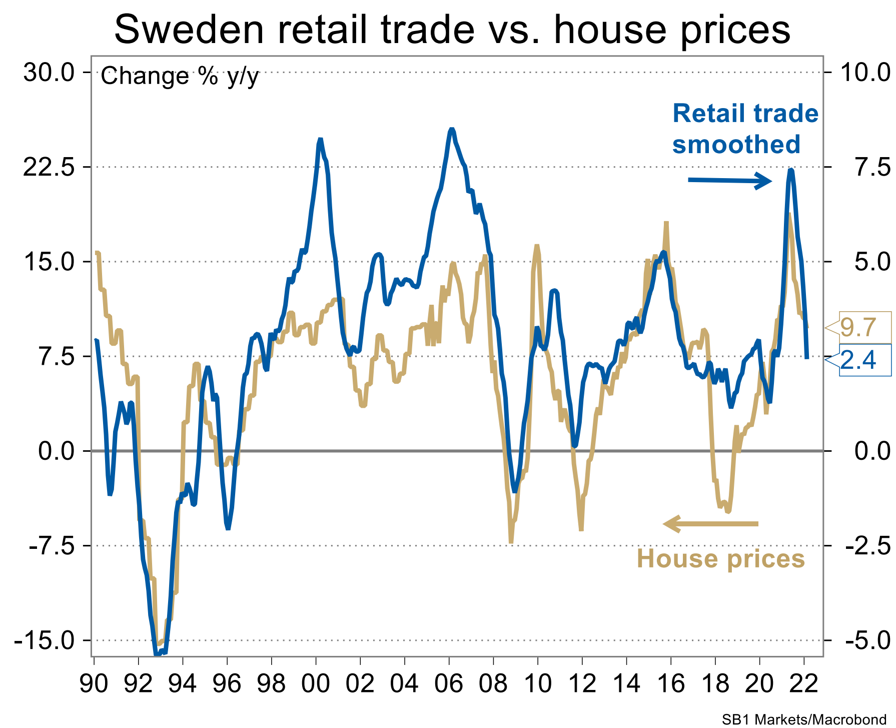


- **The composite index** fell to 110.3 from 113.1, as expected - or by 0.3 st.dev, down to 1 st.dev above average, the same level is January. The index signals a 6% GDP growth rate
- **All 4 main sub-sectors** are reporting growth far above average, and just retail trade index fell, from a 'too high' level in February
- The **Riksbank** is still concerned about the impacts of the corona crisis, and thinks it will keep the policy rate at zero until H2 2024. Until further notice, we would add

Cons. confidence straight down in March, below the worst pandemic levels!

Putin the only person on the earth to blame?

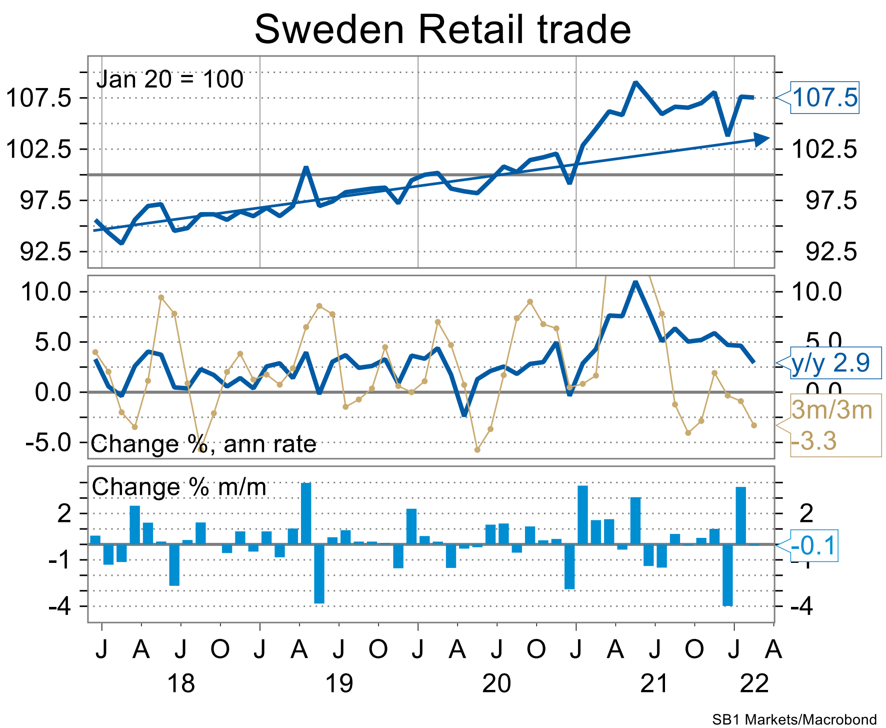


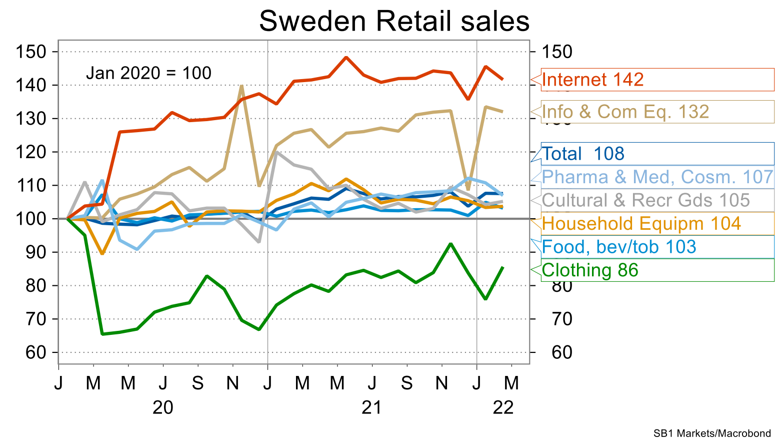


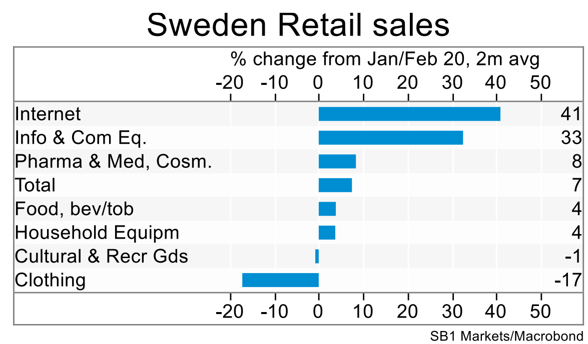
- **Consumer confidence** fell almost to the same levels as during the financial crisis (the pandemic was not as though as the fin. crisis)
- We are more than uncertain if the decline in sentiment signals deep cuts in household spending – even if higher CPI inflation hurts the Swedes too

Retail flat in February after the Jan recovery – and the trend is completely flat

Level is 8% higher than before the pandemic, some 4% below the pre-pandemic trend



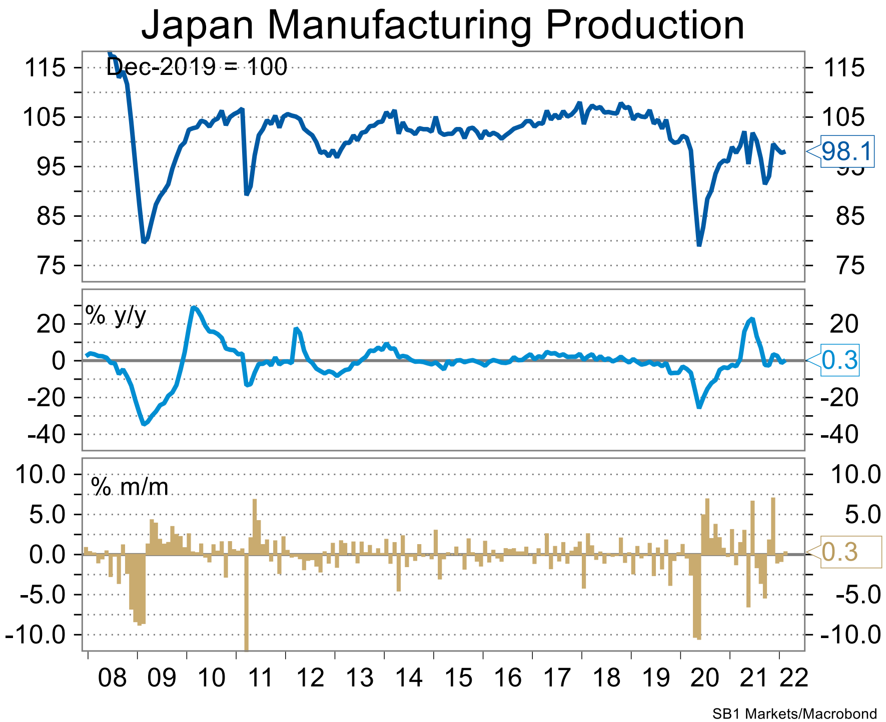


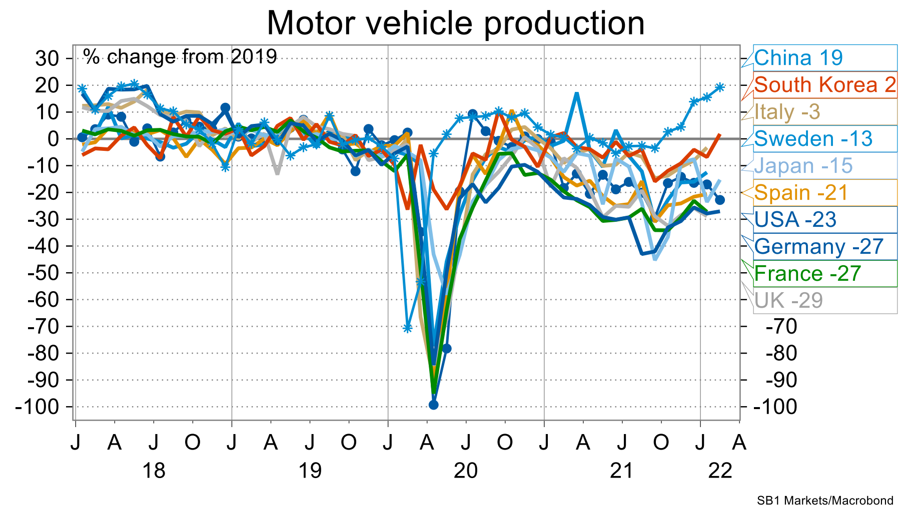


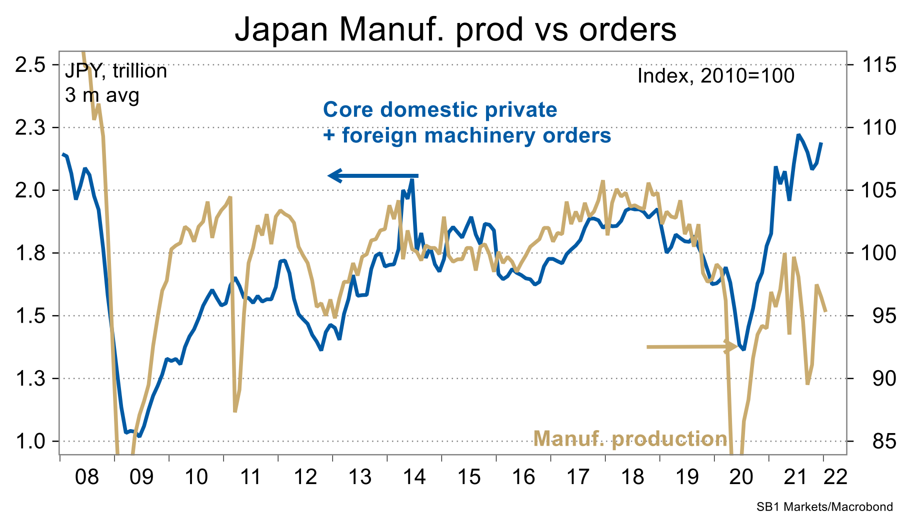
- Huge sectoral differences. Internet sales up 41 (here like in many other countries), info/communication +33%. Food sales are close to flat, which is strange, given far less activity at restaurants (and Norwegians do not normally buy that much in Sweden, do we??). Also, clothing sales are still down 17% vs Jan-20, rather incredible (has the net taken the market?)
- As for Norway and several other countries: Retail sales are very likely above a long-term trend - but the gap is now gradually closing!

Manufacturing production close to flat in Feb, level still 2% down vs. pre-pand

… and the pre–pandemic level was not that impressive



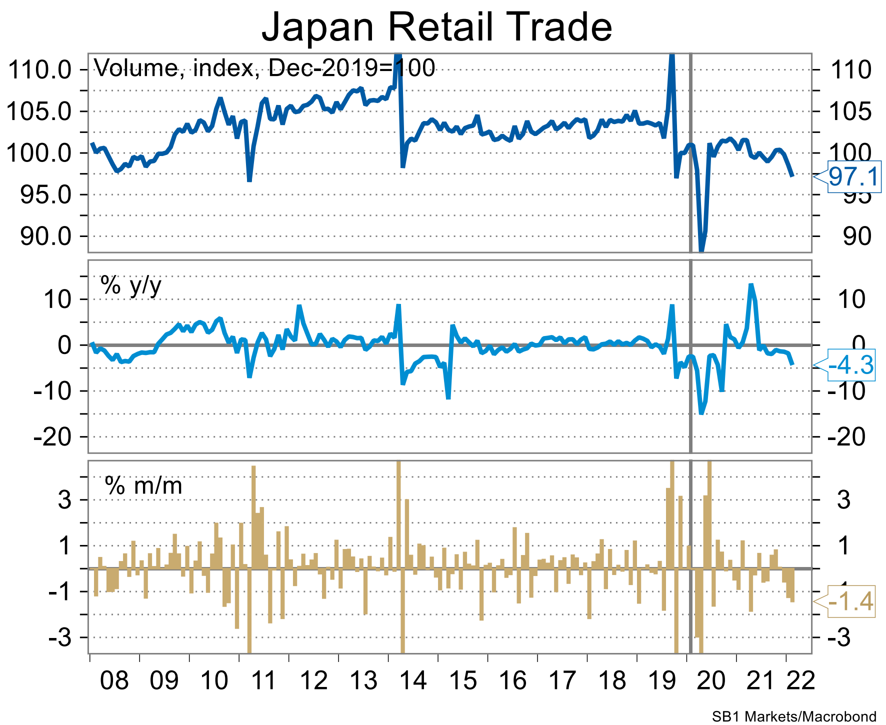


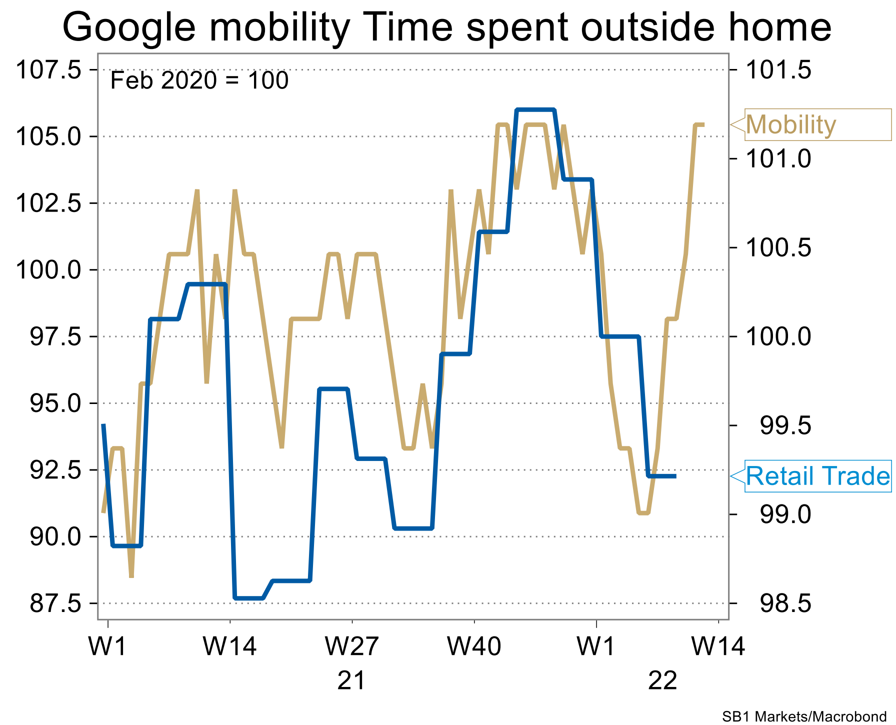


- **Production** grew by 0.3% in February, expected up 0.5%, following the 0.8% decline in Jan
- **Motor vehicle production** is still very volatile – and gained some speed in Feb, still down 15% vs the 2019 avg level
- **Overall order inflow** has strengthened substantially through 2021, and signals a much higher production level than the present

Retail further down in February but Jan not as was not as bad a initially reported

Sales 3% below a low level ahead of the pandemic. Mobility has surges in March, sales to follow?





- **Sales** fell 1.4% m/m in February, expected down 0.3%. Sales fell 1.3% in January – which was 1 pp less than reported last month
  - » The trend is anyway weak, and sales in Feb was the lowest since the initial lockdown in April/May 2020
- **Mobility** has fallen sharply recent months due to covid restrictions, and February was far weaker than January. However, March is back at full speed!

Highlights

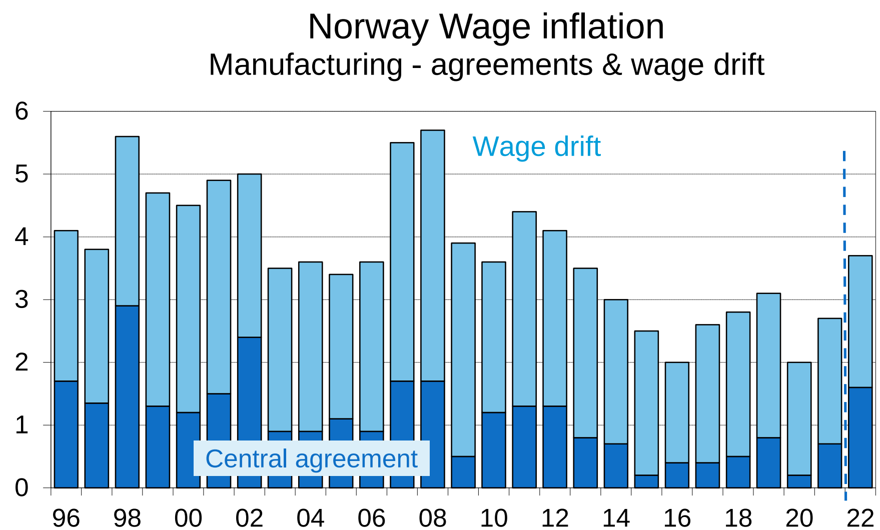
The world around us

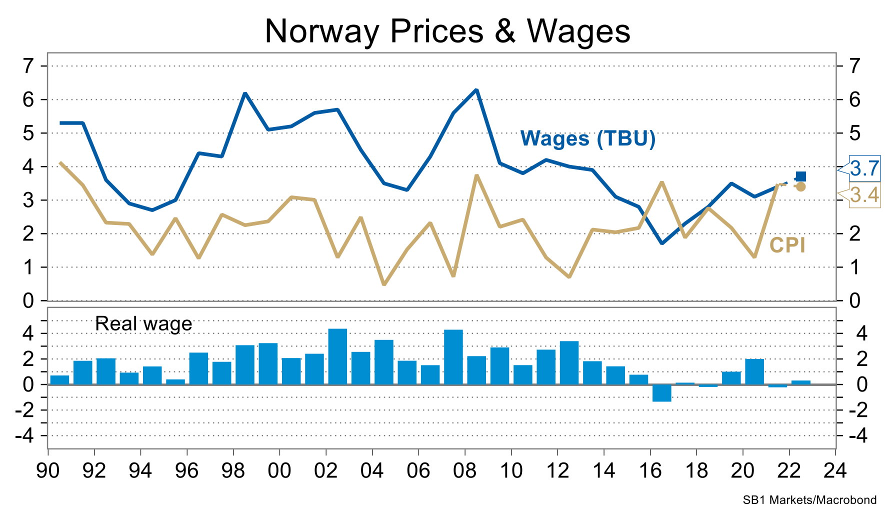
The Norwegian economy

Market charts & comments

No strike – and the highest wage inflation in 10 years. Just as expected

The manufacturing sector agreed upon a 3.7% wage growth in 2022. Others will have to follow suit

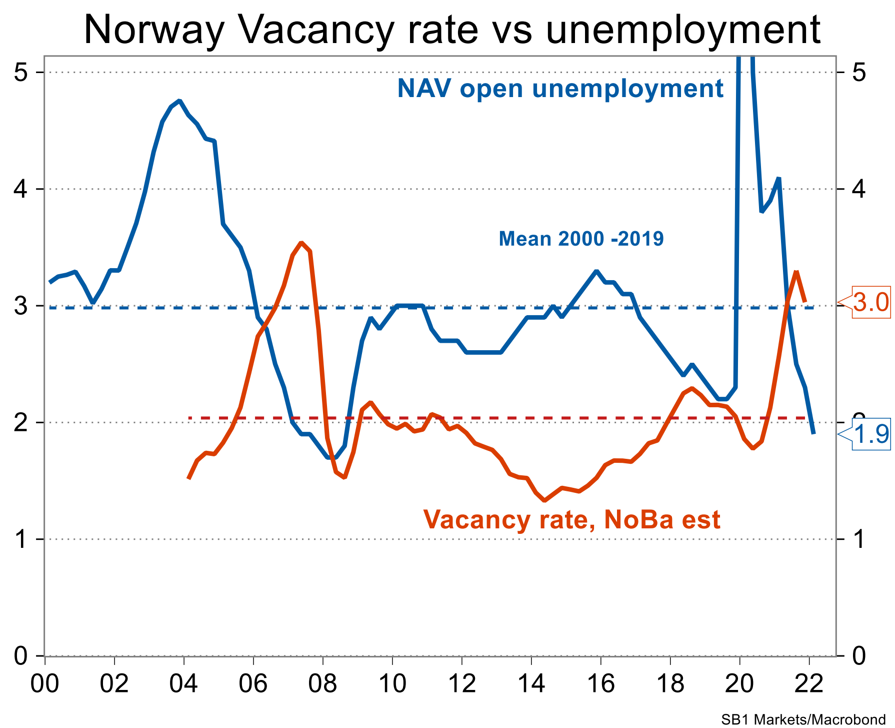


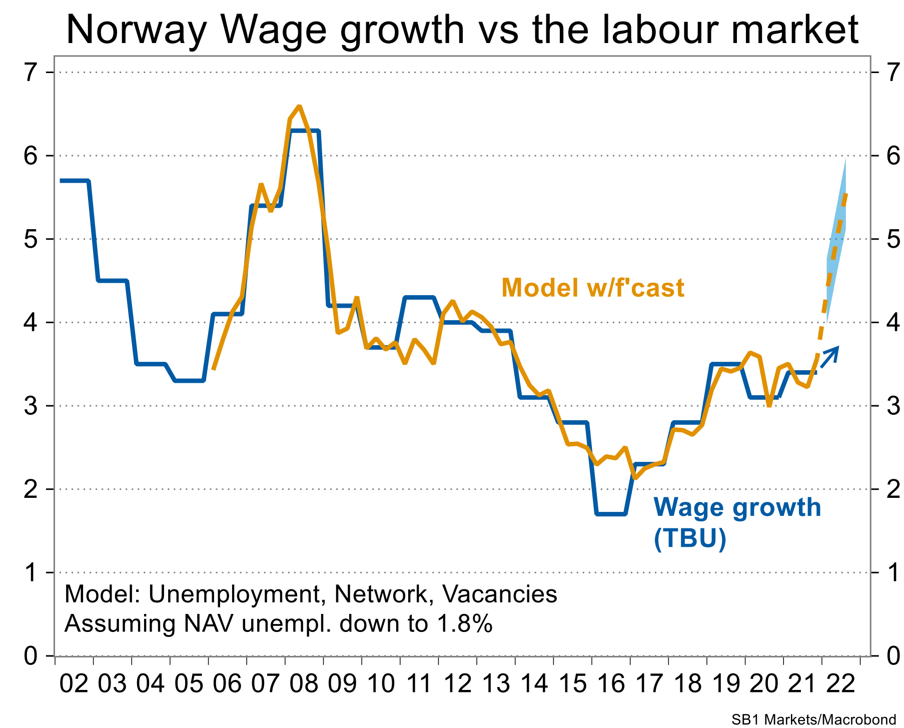


- After negotiating 36 hours on over time (same procedure as every second year…) the parties in the **wage negotiation in the manufacturing sector** finally agreed upon a 3.7% wage lift in 2022
  - » The centrally agreed wage increase will contribute to a 1.3 pp lift in 2022 wages, up from 0.7 pp in 2021
  - » Wage drift is assumed to contribute with 1.5 pp, up from 1.0 pp in 2021
  - » The carry over from last year is 0.9%
  - » If the carry over is excluded, the centrally agreed wage increases (in 2021/22) will lift wages by some 1.6%, while wage drift tops 2.0%
- **The outcome** was as we assume (and a conflict was anyway very unlikely) – and nobody else could have been surprised either
- **Norges Bank** assumed 3.7% wage inflation in 2022 in the MPR. If other sectors accept the 2022 wage norm (and in the end, most will have to, even in the public sector), the bank will not be in any immediate need for lifting its 2022 wage forecast further, following the 0.5 pp lift in the March MPR
  - » We think the tight labour market in the end will deliver wage inflation above 3.7%, but we will not know before long
- **Inflation** is assumed to be 3.3% in 2022 (NoBa said 3.4% last week) – and real wages will increase

Can wage inflation climb above 3.7% in 2022? Our simple model suggest so

The labour market is tight – and it is tightening rapdily

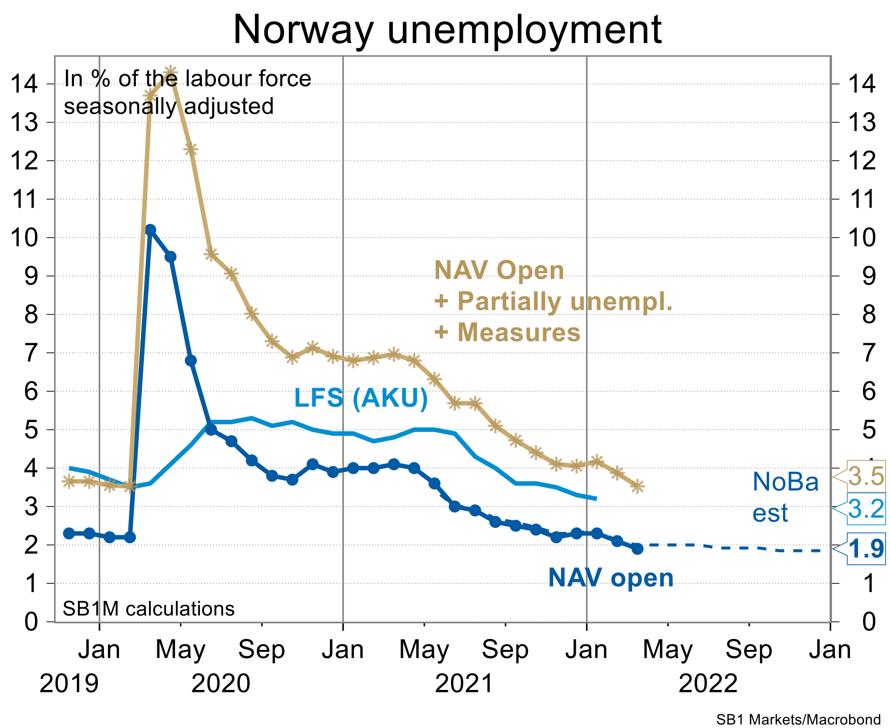


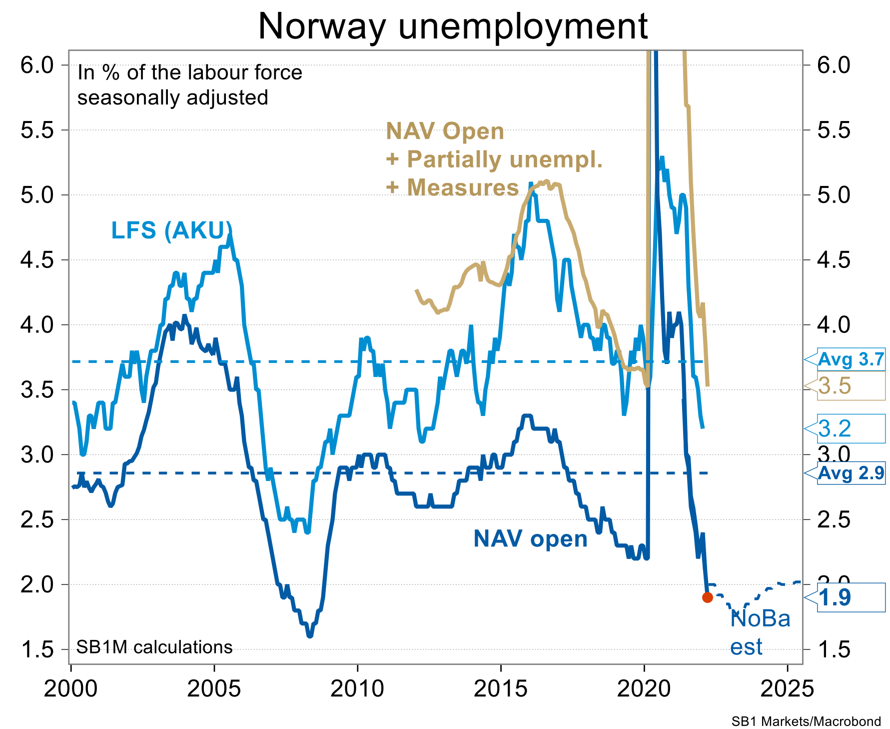


SpareBank 1 MARKETS

NAV unemployment further down, just 0.15 pp to go vs. NoBa's cycle low est.

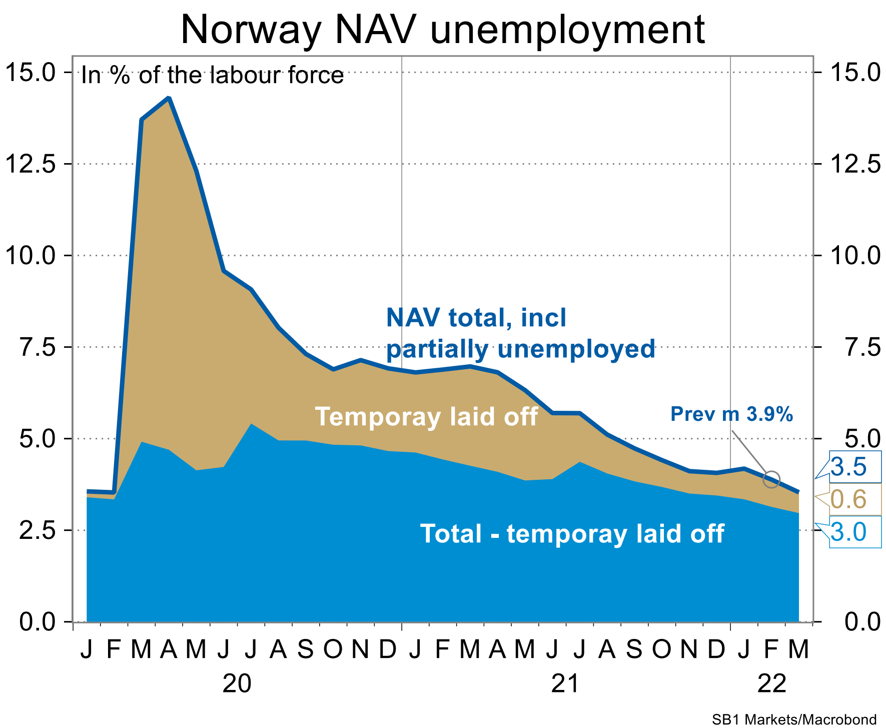
NAV unemploym. fell by 0.2pp to 1.9%, we expected 2.0%. A very tight labour market

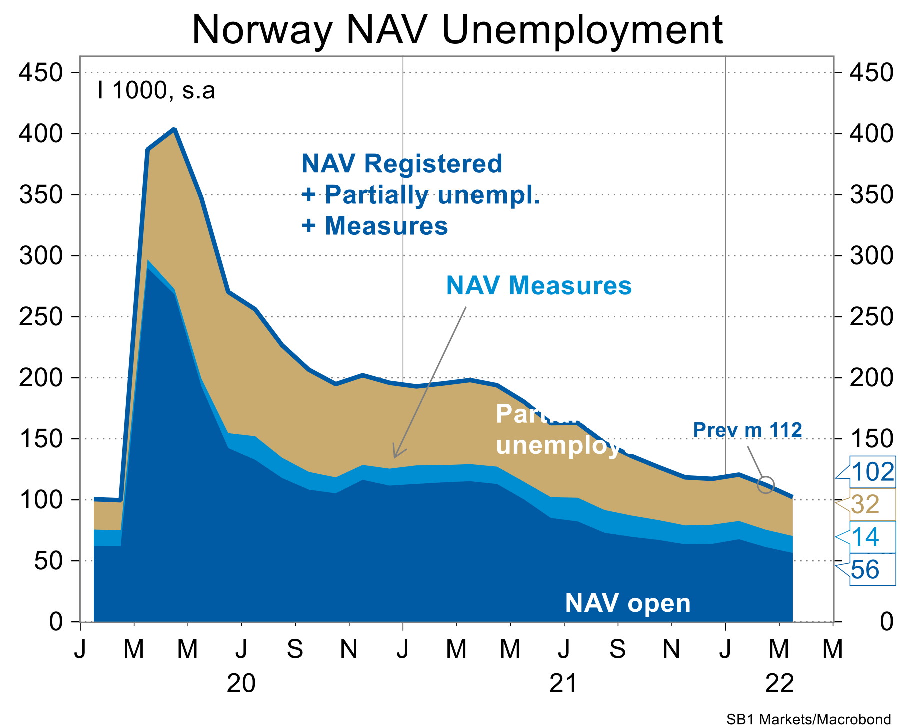




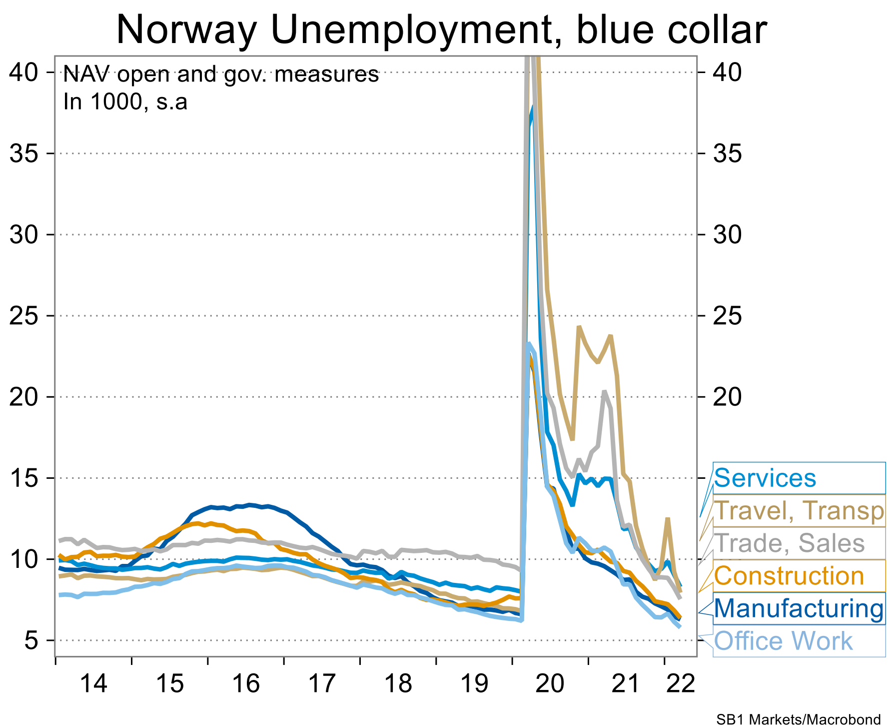
- **The 'full time' open NAV unemployment**, which includes furloughed workers, fell by 4.8' persons in March (seas. adj) to 56', marginally below our forecast, even if February was revised up by 3'. Unadjusted, the rate fell 0.2 pp to 2.1% , as expected. Seas. adj, the rate fell by 0.2 pp to 1.9%, 0.3 pp below the pre-pandemic level – and 0.3 pp above the 2008 trough – and 1 pp below average.
  - » Norges Bank revised its unemployment forecast down by 0.3- 0.4 pp in the March MPR, with a new bottom at 1.76% in Q1-23. We have just 0.15 pp left vs that estimate. We think the risk is at the downside, barring a geopolitical catastrophe
- The number of **partially unemployed** (not incl . in the ordinary unemployment no.) fell by 5' to 32', and including measures, the **total unemployment** fell by 10' to 102', close to the pre-pandemic level. The overall rate fell by 0.3 pp to 3.5%
- The inflow of **new job seekers** fell further in March, to ATL. The **inflow of new vacancies** fell marginally from the ATH in February
- **The LFS (AKU) unemployment rate** fell to 3.2% in Dec-Jan, from 3.3% a month earlier

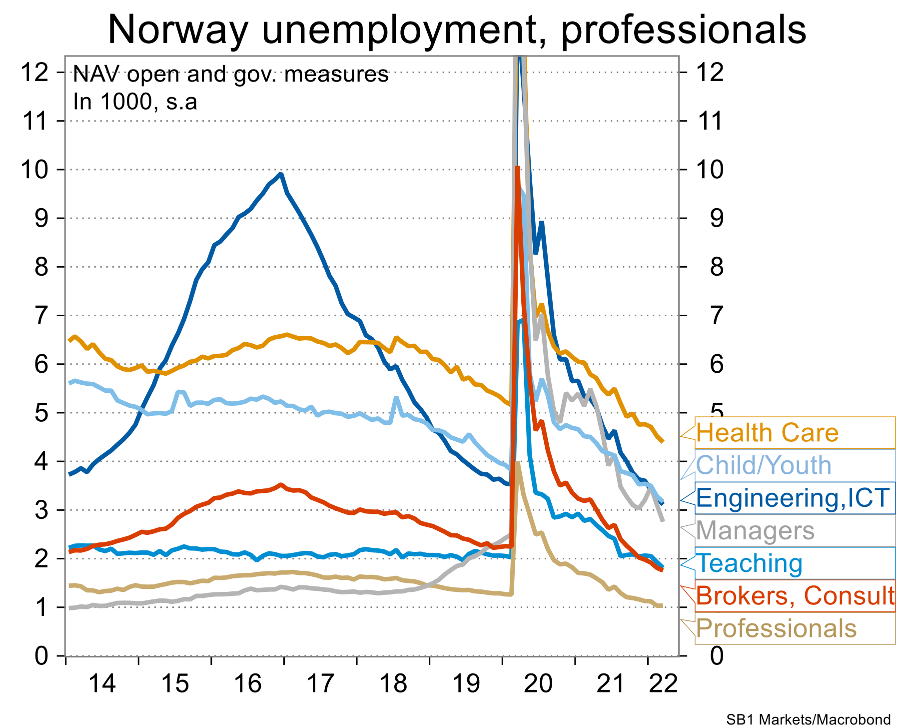
Down, down, down – whatever measure we apply





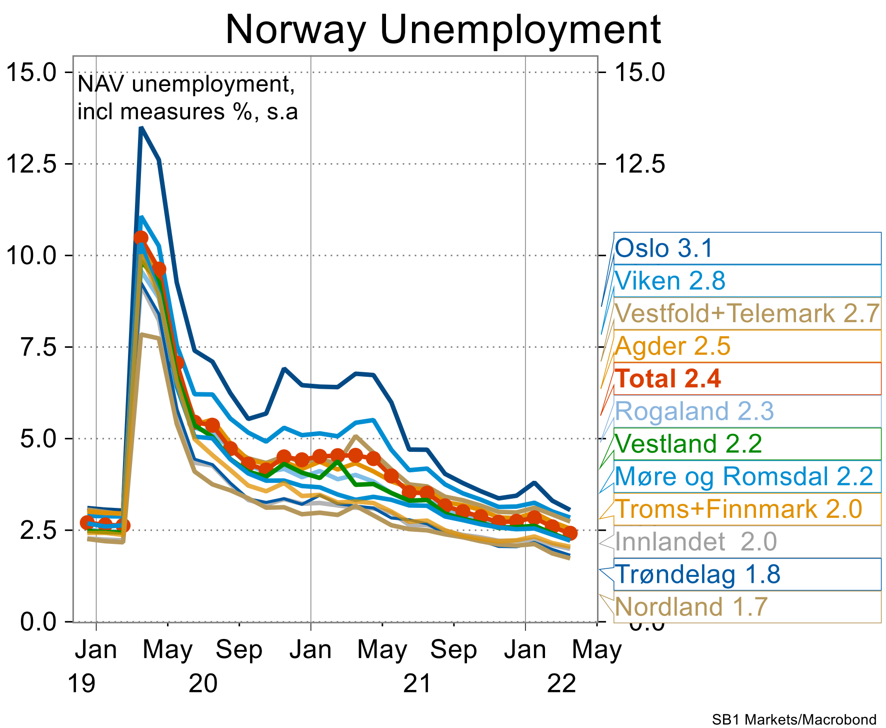
Unemployment is declining for all sorts of labour

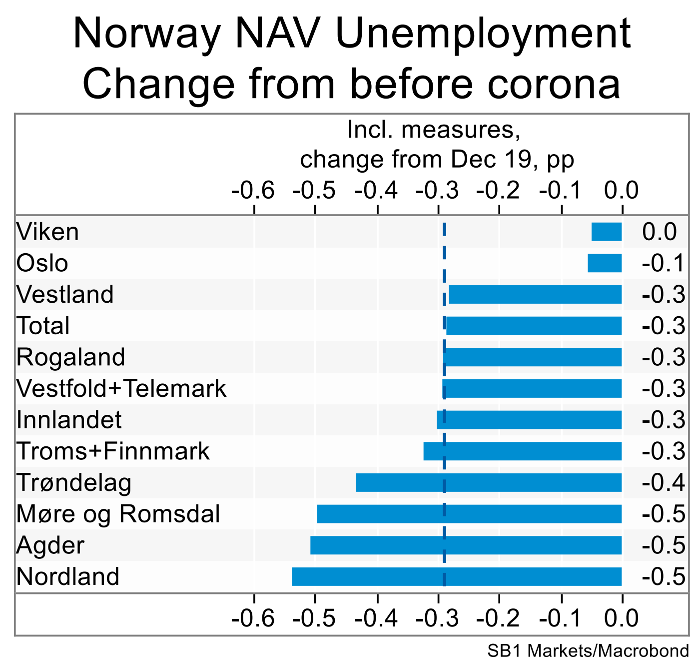




Unemployment (incl. measures) below the pre-pandemic level ~~almost~~ everywhere

Unemployment is falling in all regions – and is far below normal levels everywhere

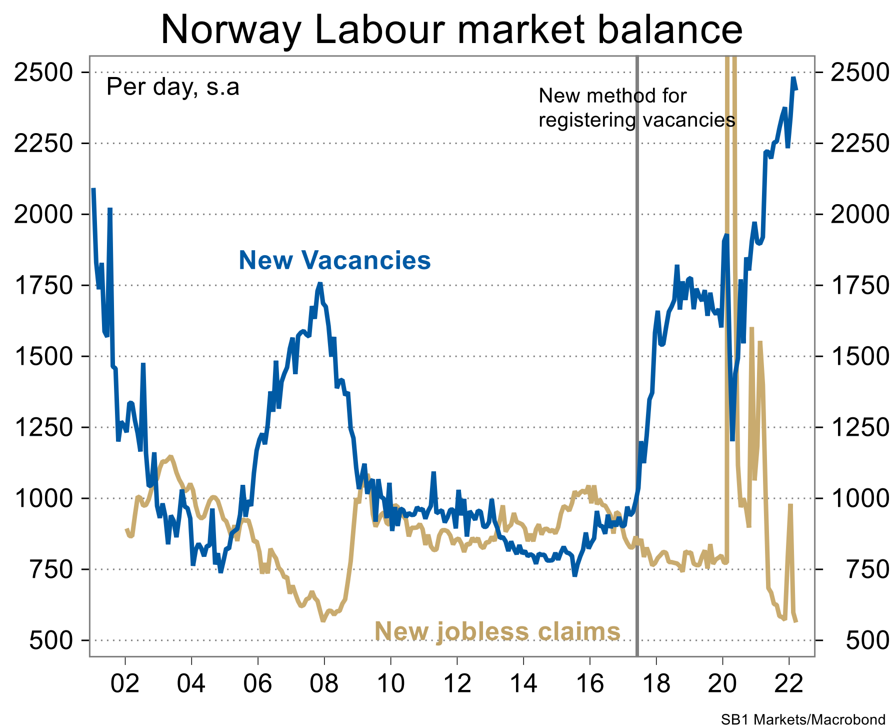


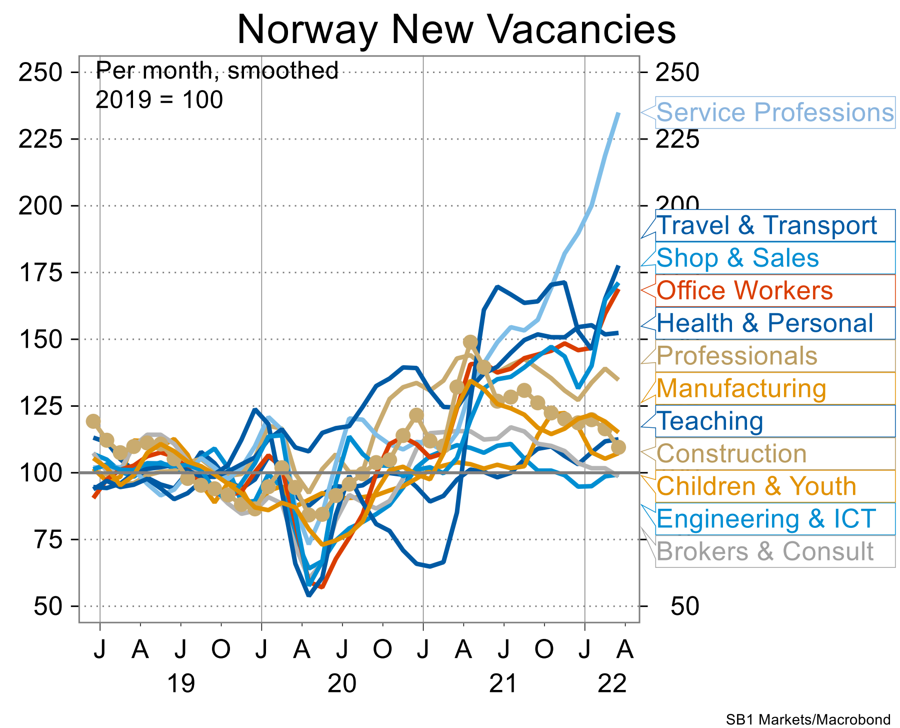


- Nordland and Trøndelag at the bottom – Oslo at the top, as usual

New jobless claims at a record low level

And new vacancies are at a record high level, both signalling a very tight labour market



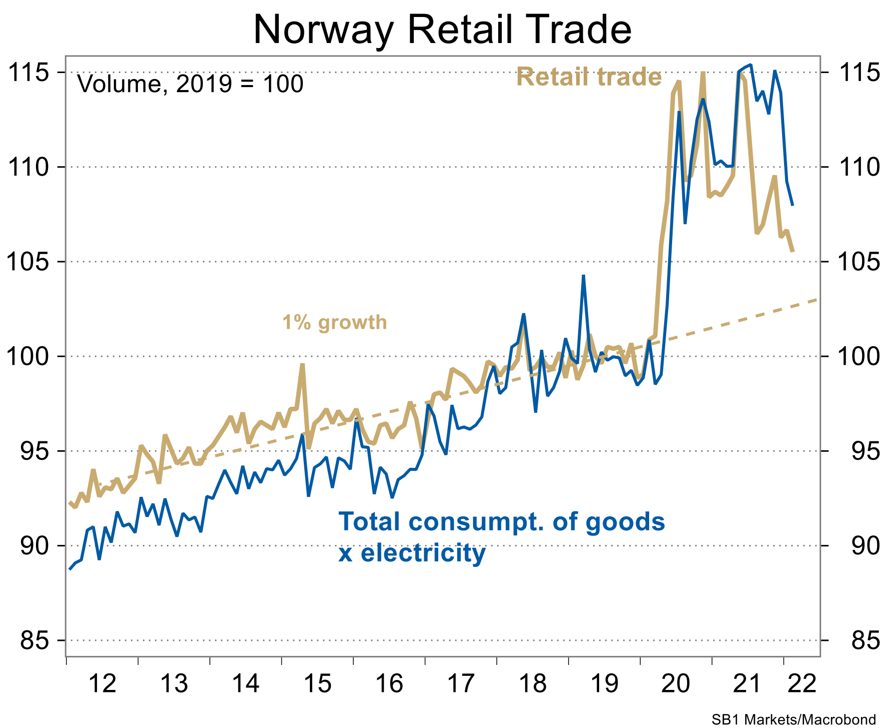


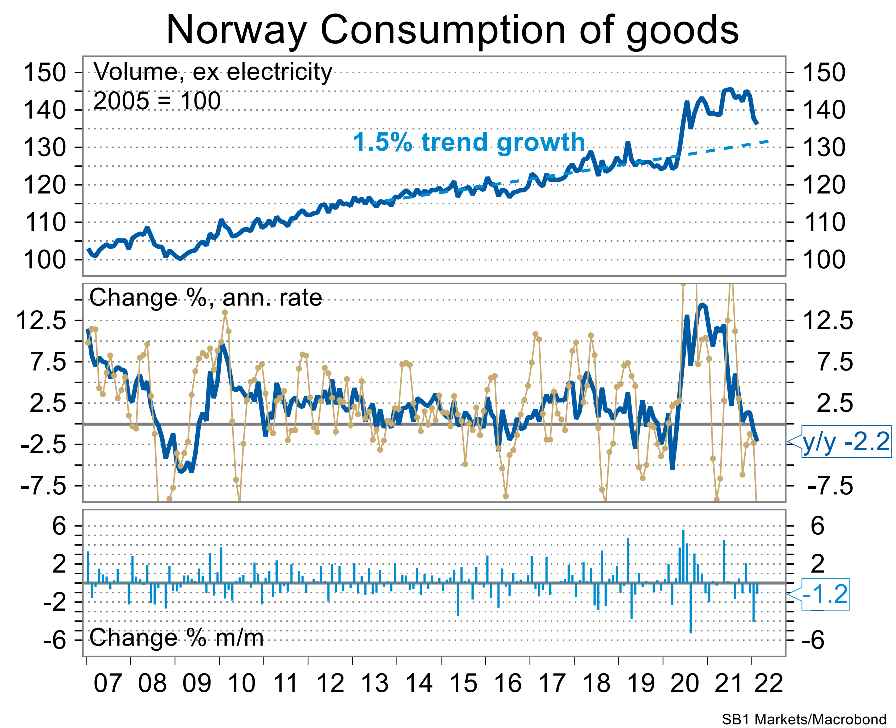
- Most sectors have announced more new vacancies, especially in service professions
- Some sectors are slowing down: Construction, engineering and brokers and consultants, still (mostly above the 2019 level

SpareBank 1 MARKETS

Retail sales just down again in February, and approaching a reasonable trend?

Sales fell 1.1%, we expected +1%, consensus 0.1%

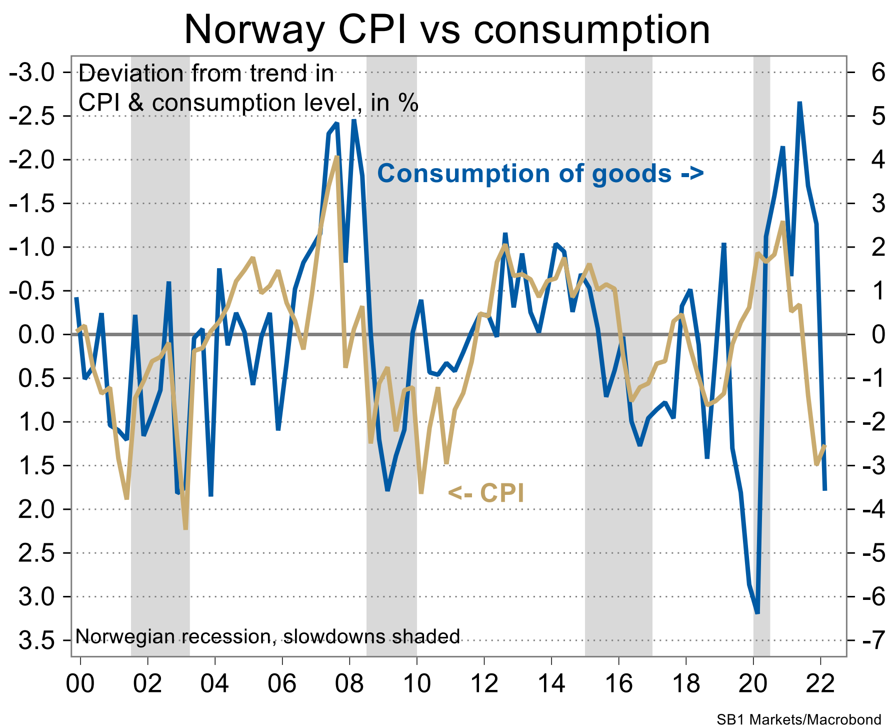




- **Retail sales** have been far more volatile than normal during the pandemic, and monthly data have been close to useless. Sales have been trending down through last year, from a very high level – and is now approaching the pre-pandemic trend, which was rather modest
- In February sales fell by 1.1%. Food sales fell 2% but the level is still above a normal level as spending abroad, especially in Sweden remains below par.
- **Total household consumption of goods** (x electricity) fell 1.2%, and consumption is some 4% above a pre-pandemic trend

Higher consumer (electricity) prices very likely dampens consumption

Consumption of goods (volume) are negatively correlated to changes in consumption prices

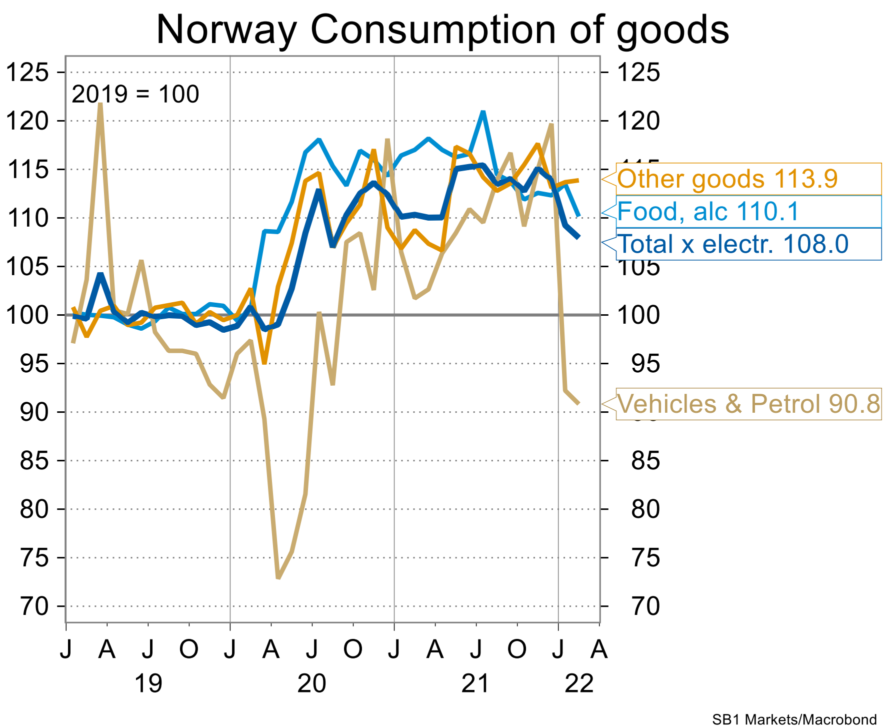


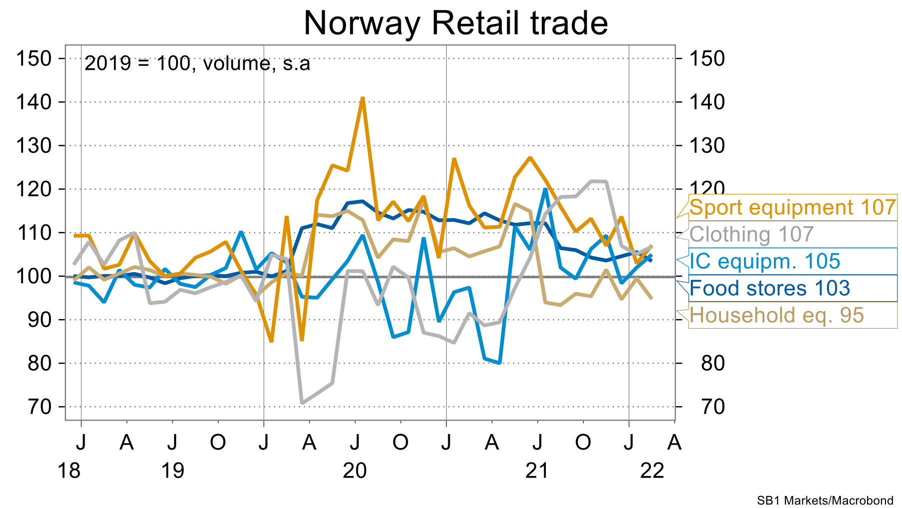
- The elasticity for consumption of goods vs. some -2, probably as consumption of services normally are more stable than goods – and because high prices normally are associated to a weak Norwegian economy (like oil prices down, NOK weaker, higher imported inflation

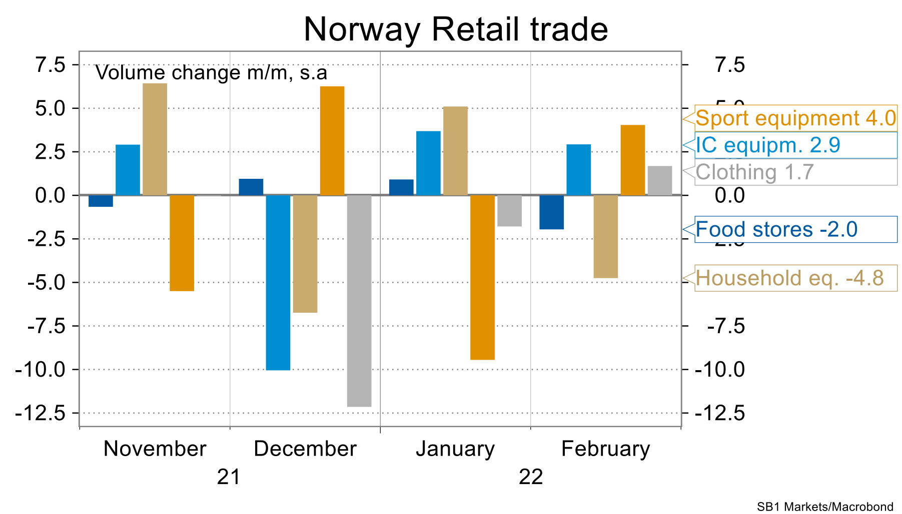
SpareBank 1 MARKETS

Food consumption down but is still well above a normal level

Other goods in sum flat: Sport equipment, clothing & IC equipment up; Household equipment down



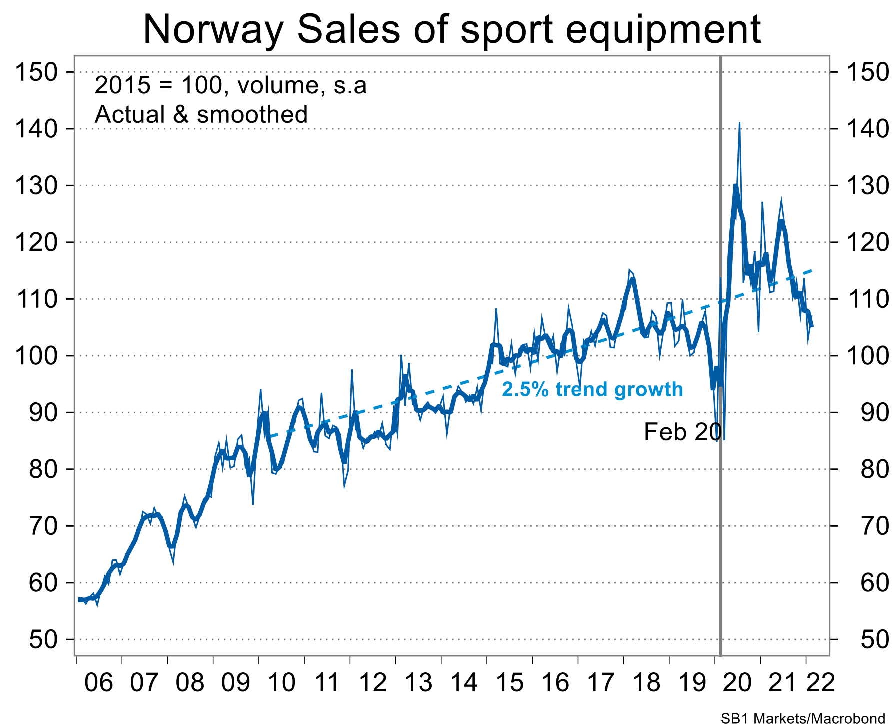




- The decline in sales of sport equipment in January was revised up from -16% to -9%

Sport equipment: Sales are trending down

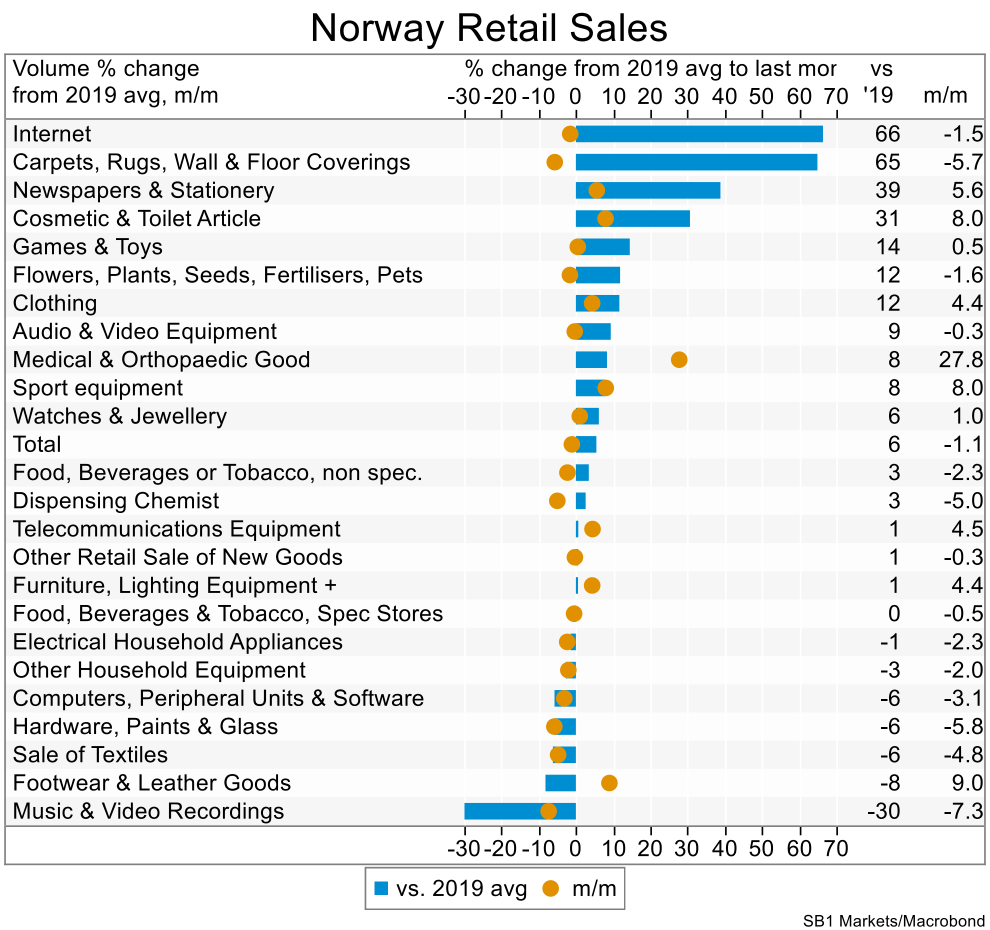
... and is well <u>below</u> the pre-pandemic trend

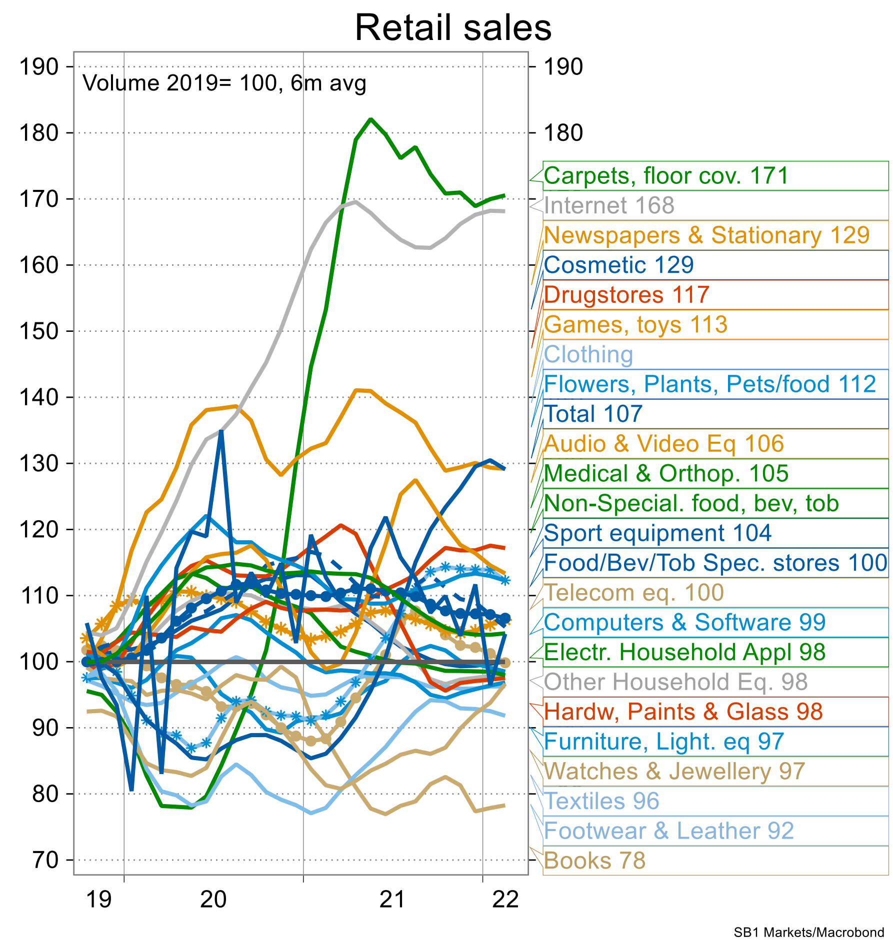


- Sales in January was revised up by

Since before the pandemic: Still huge sectoral differences in sale volumes

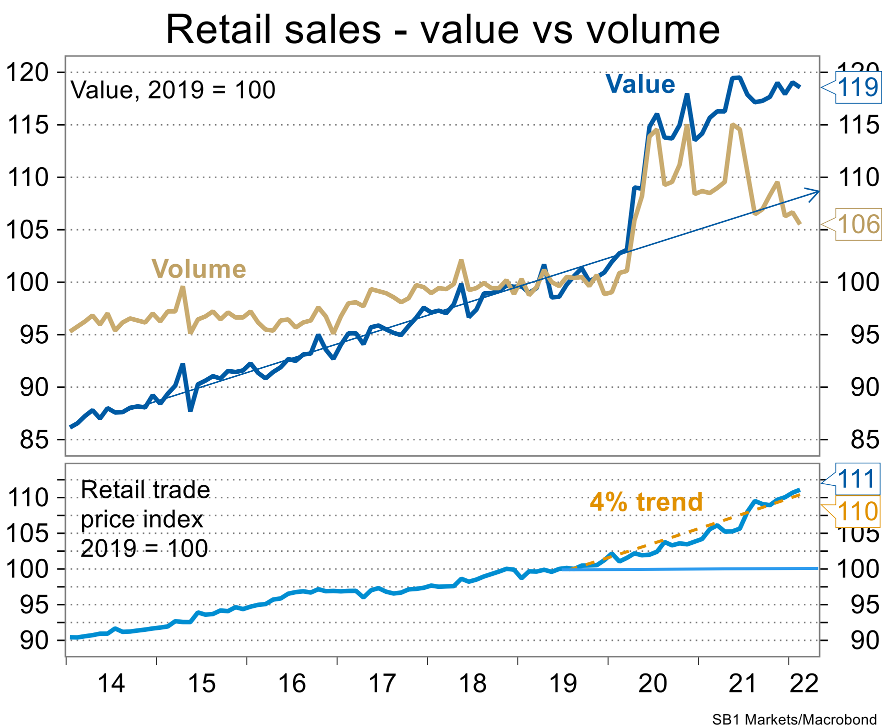
– net sales & home refurnishing at the top. The losers were mainly losers before the pandemic too

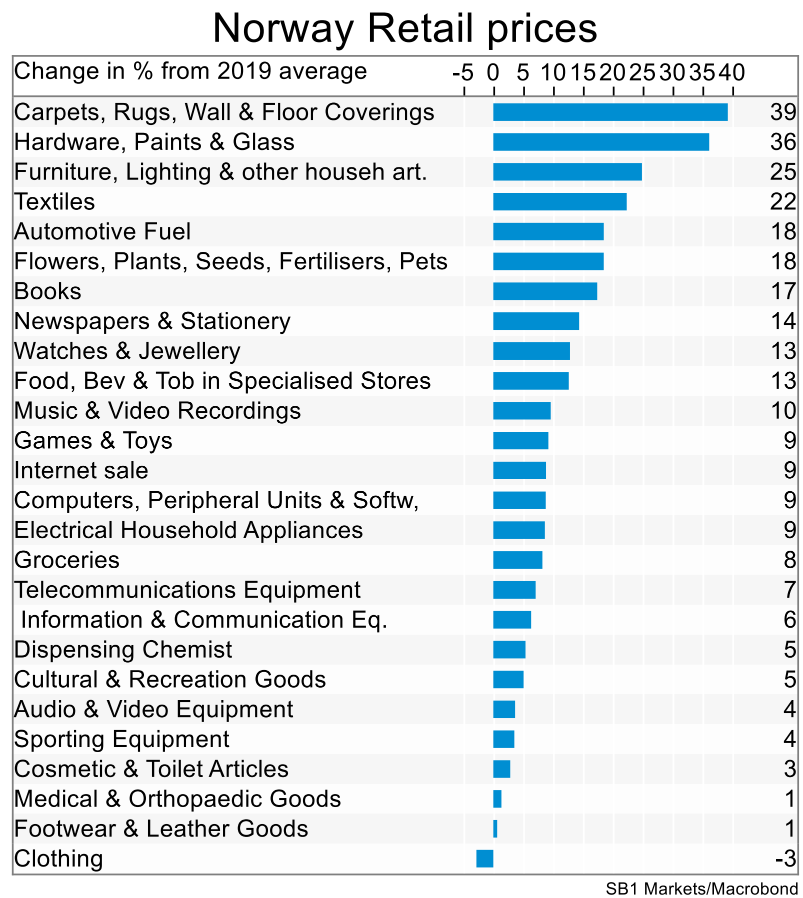




Retail sales value vs. volume – and what is between

Retail prices have been increasing at a 4% since 2019, in sum by 11%

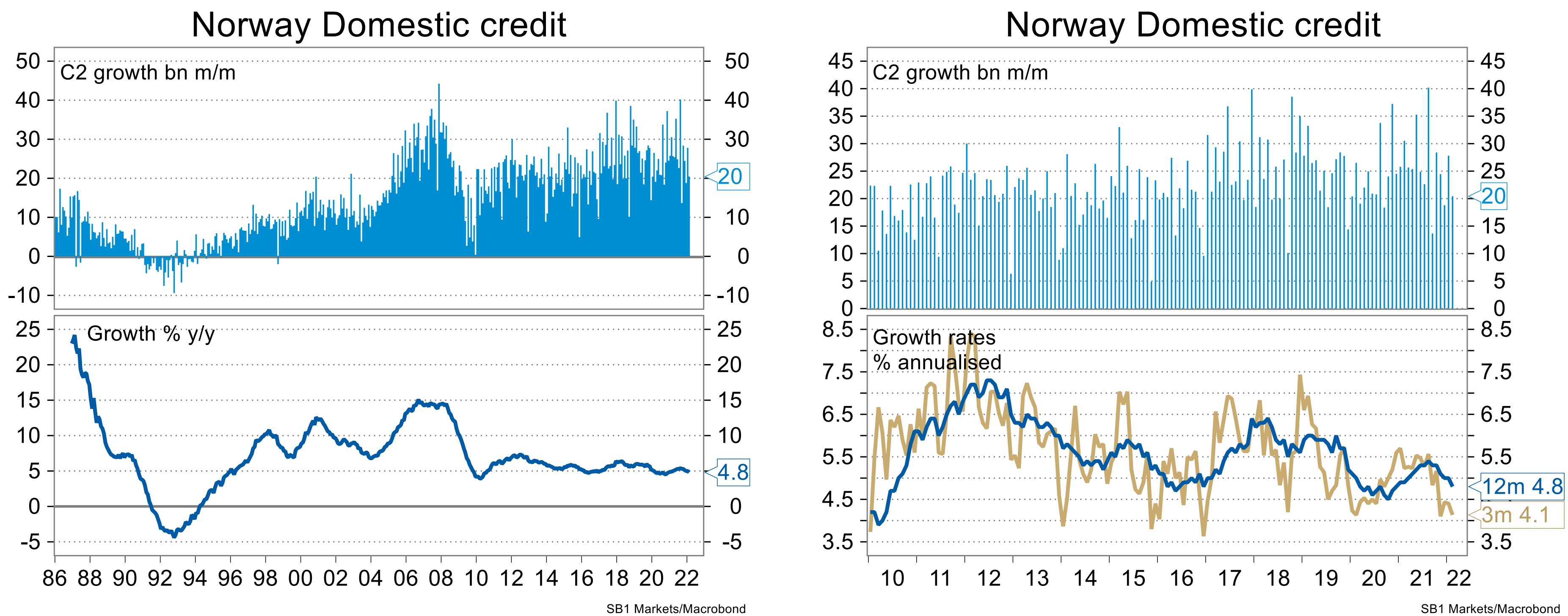




- Retail sales, measured in value terms, are 19% above the 2019 level and some 11% above the pre-pandemic trend
- Huge differences is price changes:
  - » Floor coverings, hardware (building materials) are up 36 – 39%, furniture 25%
  - » At the bottom of the list: Sport equipment is up 3% and clothing is down 3%!

Domestic credit growth (C2) down 0.2 pp to 4.8% in Feb, the trend is down

No credit boom but debt levels are high

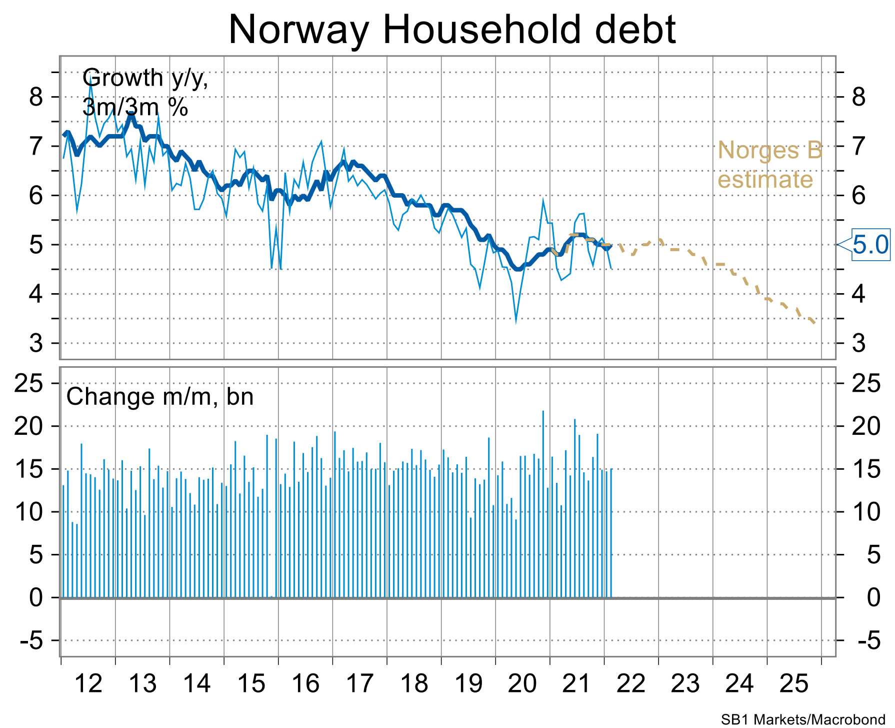


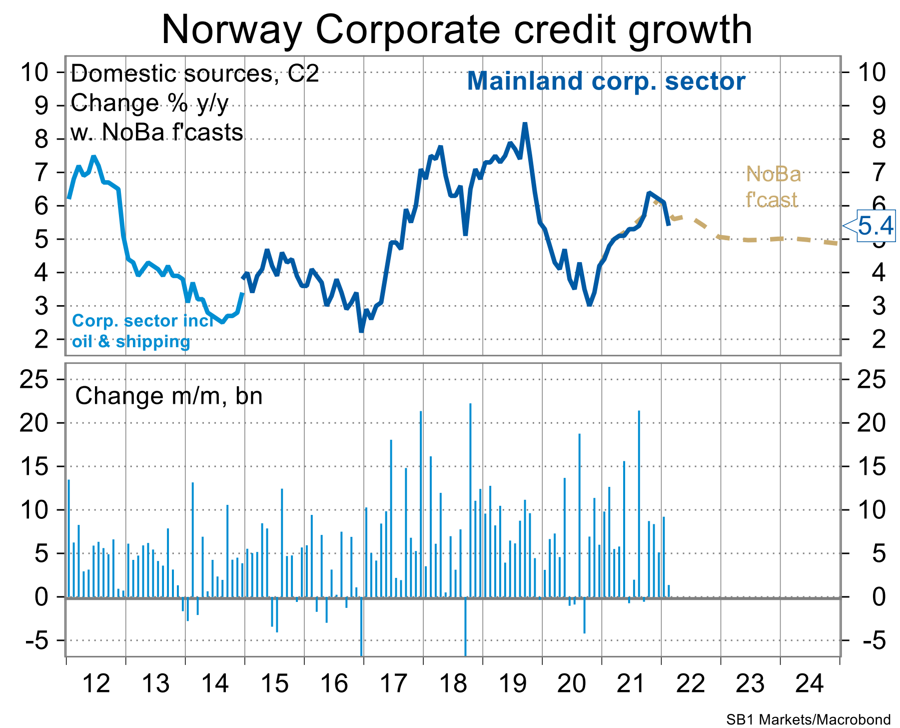
- **Total domestic debt** (C2) rose by NOK 20 bn in Feb, down from 28 bn in Jan, we expected 26 bn. The annual rate fell 0.2 pp to 4.8%, we expected 4.9%. The 3m/3m growth rate is at 4.1%. <u>We are not witnessing any credit boom. However, debt levels are high, especially for the household sector</u>
- **Household credit** <u>rose by NOK 15 bn</u> in Feb, we expected NOK 16 bn. The annual rate rose to 5.0% from 4.9%
- **Corporate C2 credit**, <u>rose by NOK 9 bn</u>, 8 bn less than in Jan, and 7 bn less than we expected. The annual growth rate fell 0.4 pp to 5.6%. **Mainland corporations** increased their debt by 5,4% y/y (-0.7 pp from Jan)
- **Local governments** added NOK 4 bn to their debt burden in Feb. The annual growth rate fell 0.1 pp to 5.9%

SpareBank 1 MARKETS

Corporate credit growth has been accelerating – but slows now?

Household debt up 5.0% (unch), underlying at 4.5%

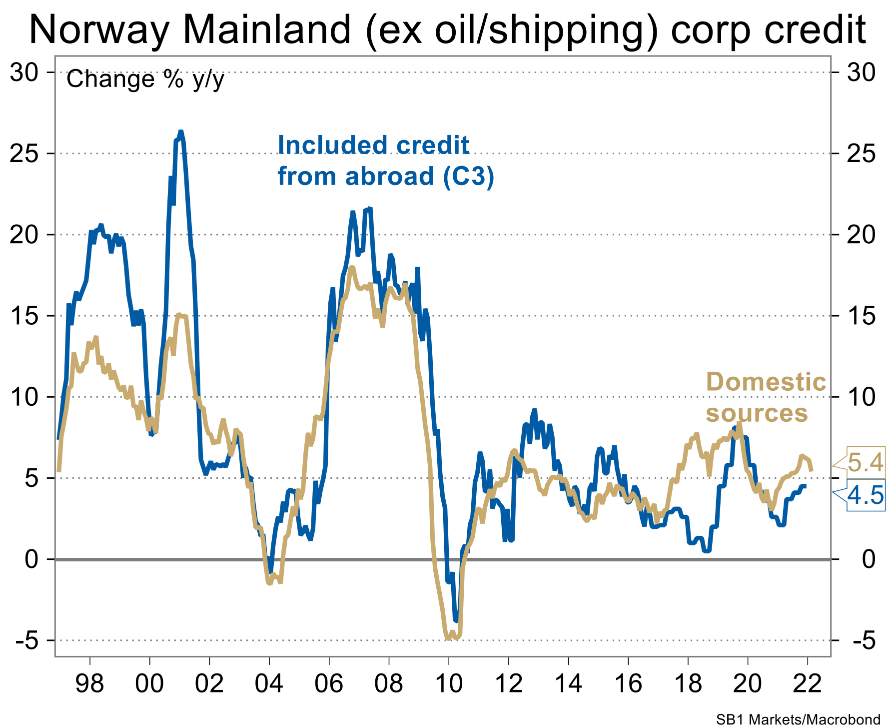


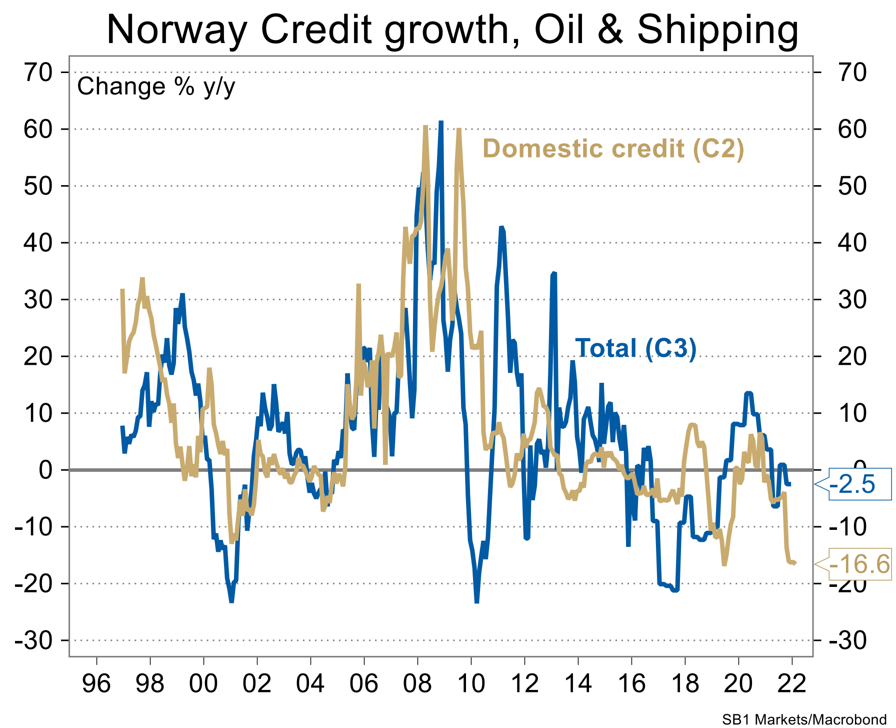


- **Household credit** growth has accelerated somewhat from the through in H1-20, though not by much. The annual rate was 5.0% in February, while the underlying 3m/3m rate has fallen to 4%. Norges Bank expect annual growth to slow from 2023, as interest rates move upwards. Some downside risk vs that forecast?
- Monthly growth in **corporate domestic credit** slowed through most of 2020 but accelerated during last year. The annual rate has climbed to 6.3% from 3.0% at the bottom – but has now retreated to 5.4 %. Norges Bank expects growth to slow (and the bank has done so as long as we can remember, but the forecast is less dovish than usual)

Mainland corporates are increasing total debt (including foreign credit) by 4.5%

… but by 5.4% from domestic sources (in C2)

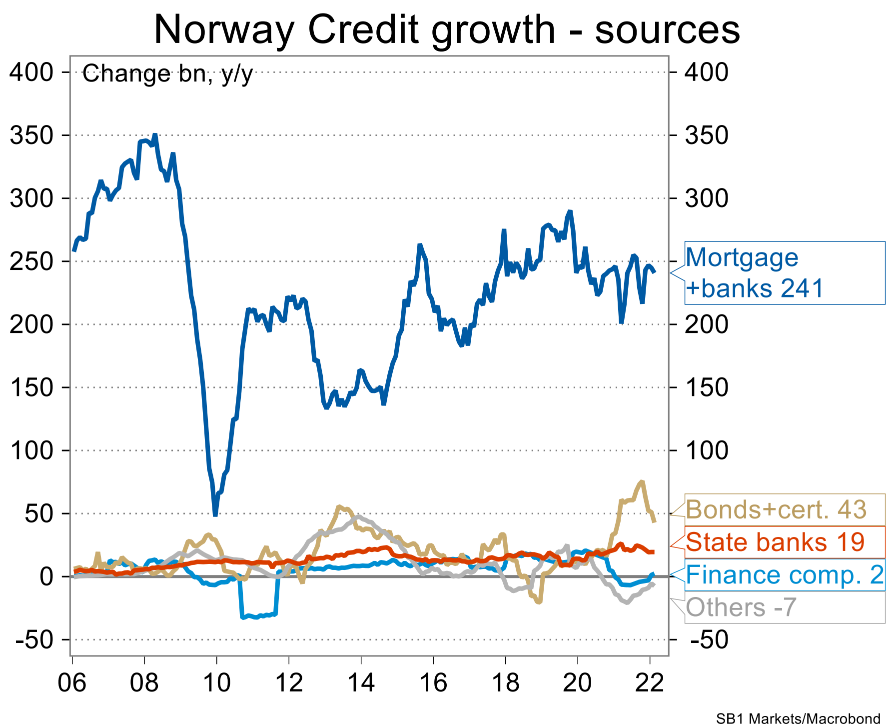


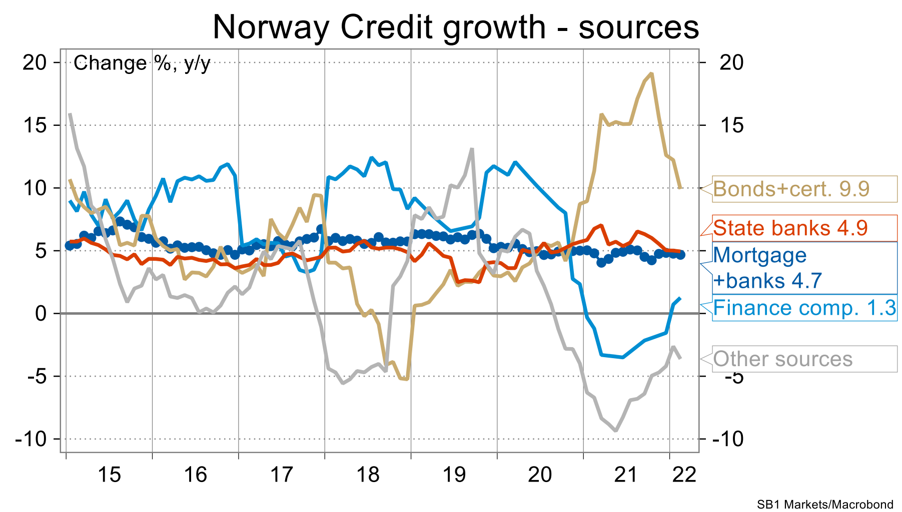


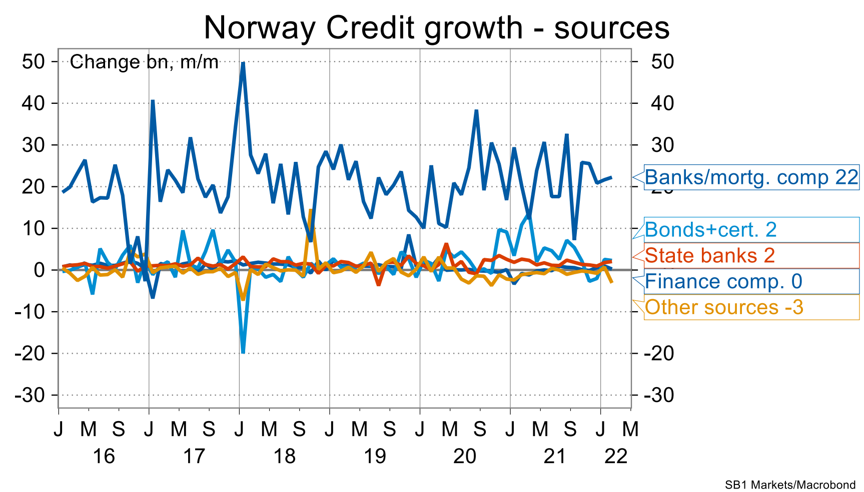
- Domestic credit supply to **Mainland businesses** has accelerated faster than their total debt, including credit from foreign sources
- **Oil and shipping** companies have been moving the opposite way, borrowing more abroad, paying down debt in Norway. The sum is down 2.5%, even if domestic debt is down 17% (via transactions, not including write-downs

Bond borrowing has peaked, steady growth in bank lending

Banks (including mortgage institutions) loans are totally dominating the domestic credit market



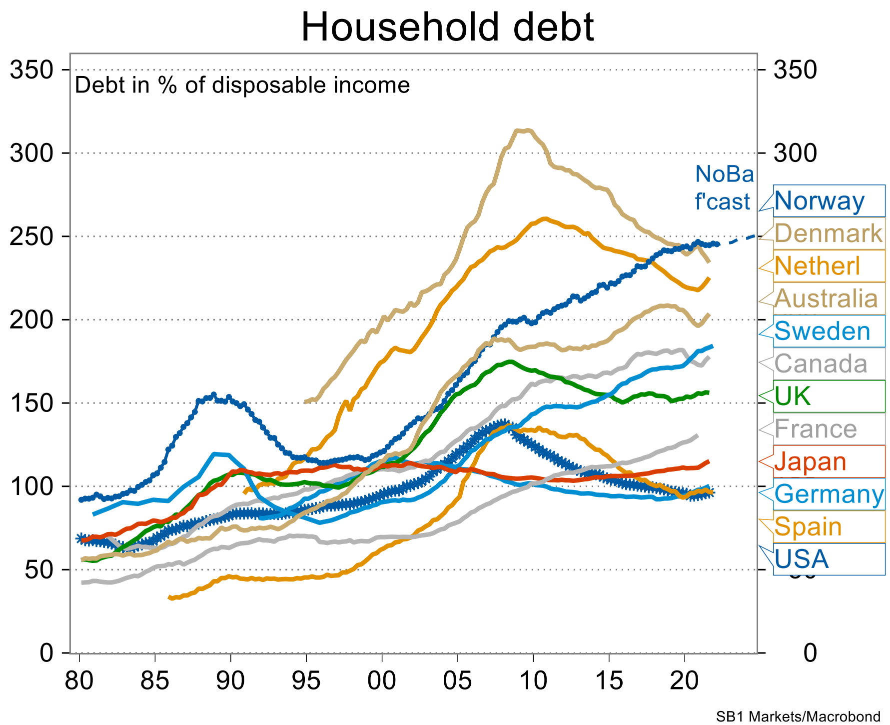


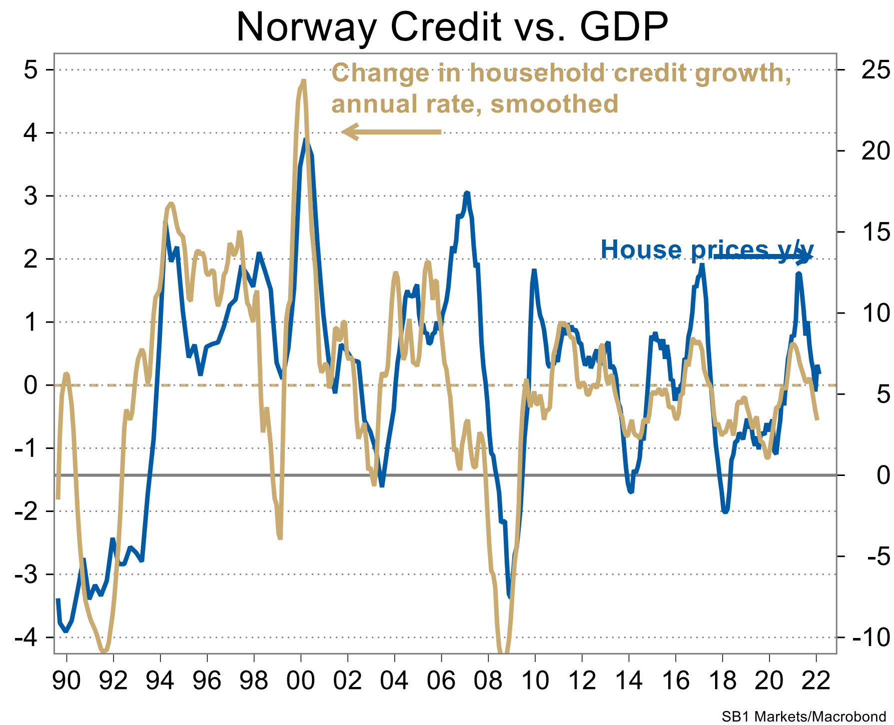


- Net issuance of bonds (to non-financial sector) is up NOK 43 bn (10%) y/y, unusual high growth rates but well down from the peak
- Banks/mortgage companies are up NOK 241 bn (4.7%) y/y
- Finance companies and 'others' have reduced their lending
  - » Both insurance/pension funds as well as Statens Lånekasse, Eksportkreditt are included in our residual 'others', but just the sum of SL & Eksportkreditt is down

The seasonally adjusted 'sum of the parts' credit supply do not exactly equal changes in the total C2 seasonally adjusted. Consumer banks are included in 'banks and mortgage companies'

Household debt/income: We are no. 1!



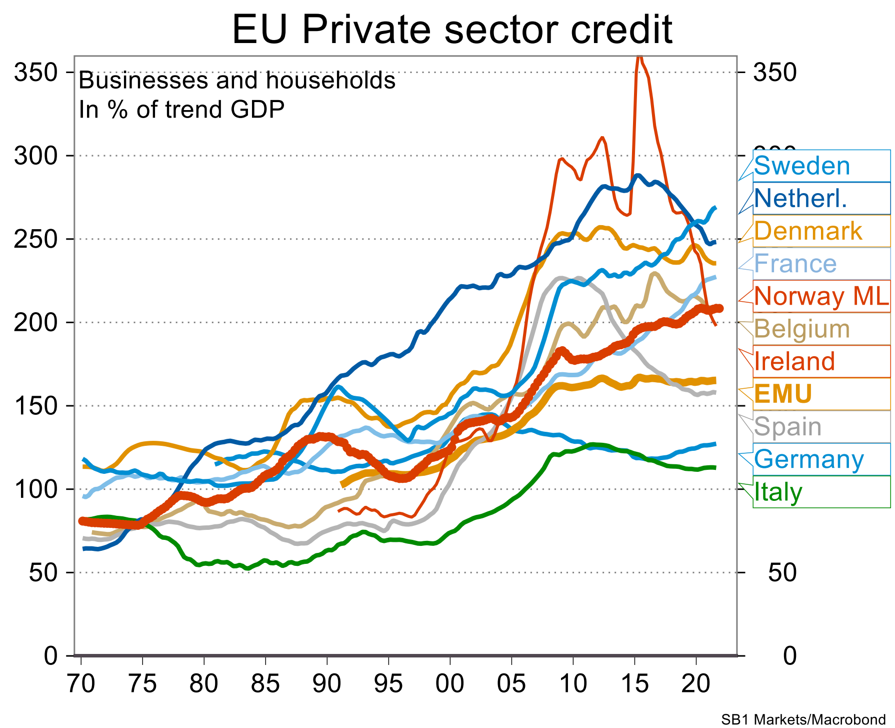


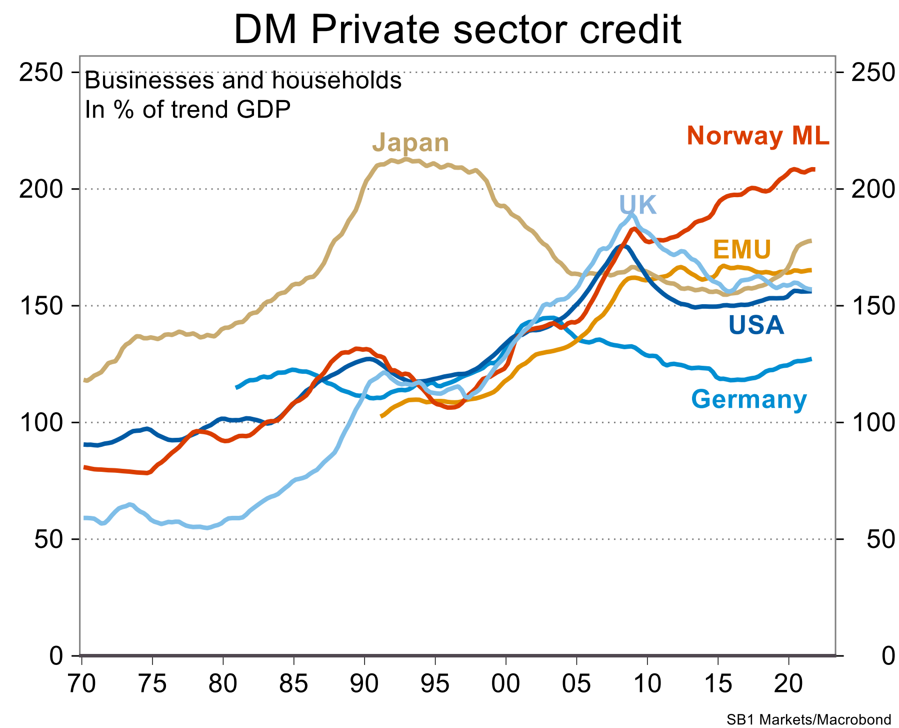
- **Norwegians households' debt** steady been growing faster than income but just marginally since early 2018
  - » Debt/income ratios in many countries have been influenced policy measures vs. households during the pandemic
- **Changes** in credit **growth** (the 2nd derivative) is usually correlated to economic growth, and asset markets – including growth (1st derivative) in house prices
  - » A slow retreat in the debt ratio will probably be healthy in the long run, and if it is gradual, it will not be too painful - even not for the housing market
  - » If credit growth slows less than 1 pp per year, that is – say from a 5% growth rate to 4% next year, and then down to 3% etc, house prices should just flatten

SpareBank 1 MARKETS

The private sector has mostly been deleveraging since the Financial crisis

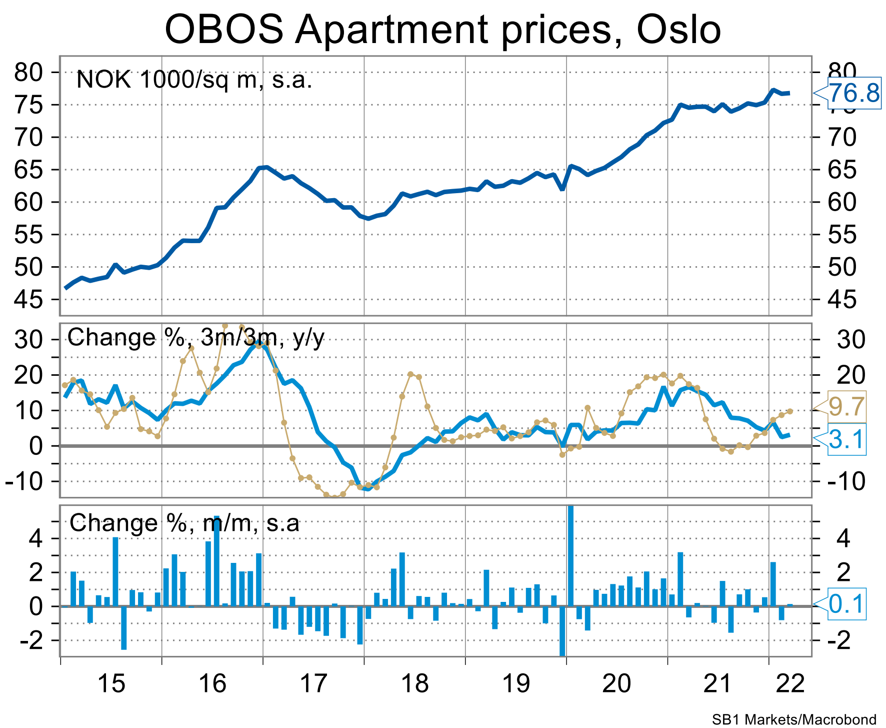
... and credit growth has been moderate during the pandemic, at least most places

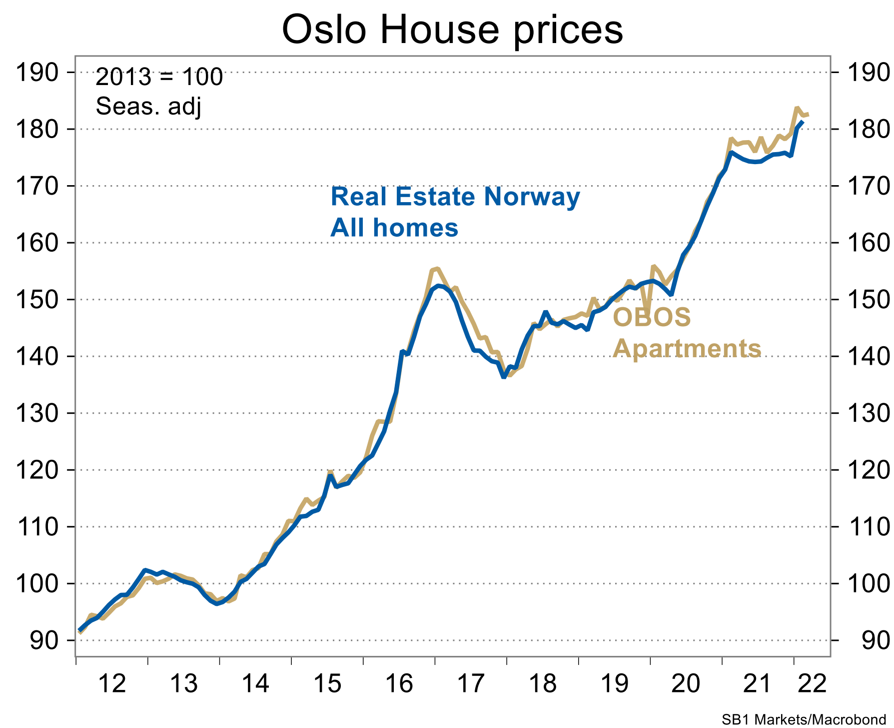




OBOS co-op apartment prices up 0.1% in March, still lower than in January

Prices shot up 2.6% in January, fell 0.8% in February, and are up 3.1% y/y





- The parallel change in both co-op & total house prices in Oslo signalled a turning point in the Oslo housing market in early 2021, the peak for both indices was in last February, and prices are down 1 – 2% since then. That is, until the 'special' January data
- Now, higher interest rates will calm down the market?

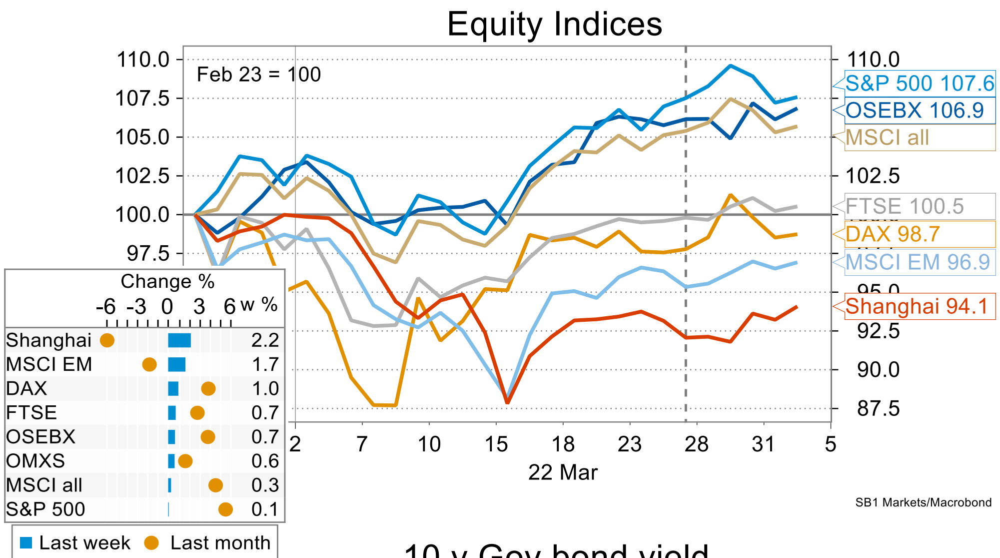
Co-op apartment prices follow the overall Oslo market quite closely, the average price level is somewhat lower than total Oslo market

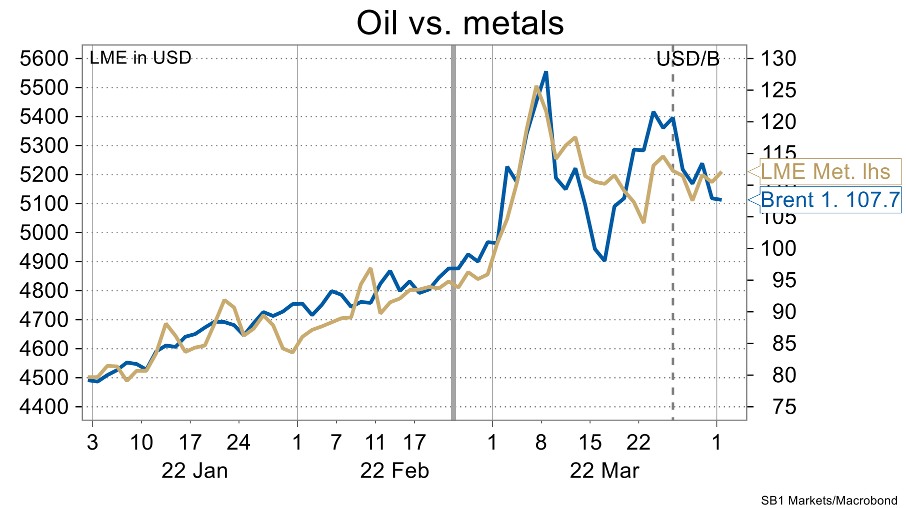
SpareBank 1 MARKETS

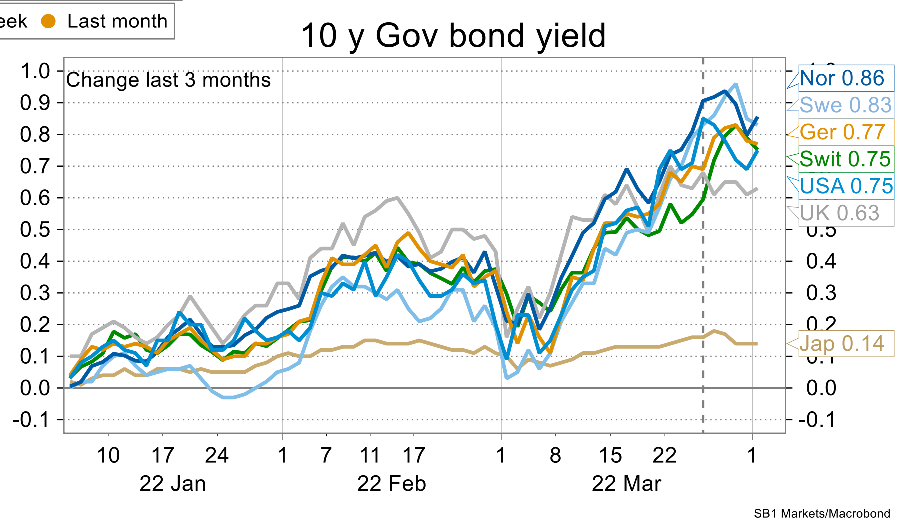
SpareBank 1 MARKETS

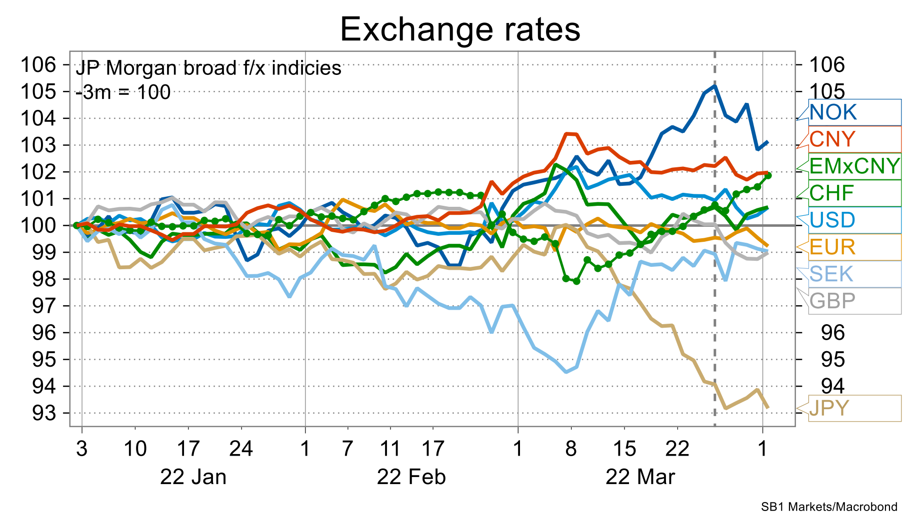
Equity markets further up but bond yields yielded, as oil, metals retreated

And NOK ~~won~~ lost the currency lottery last week





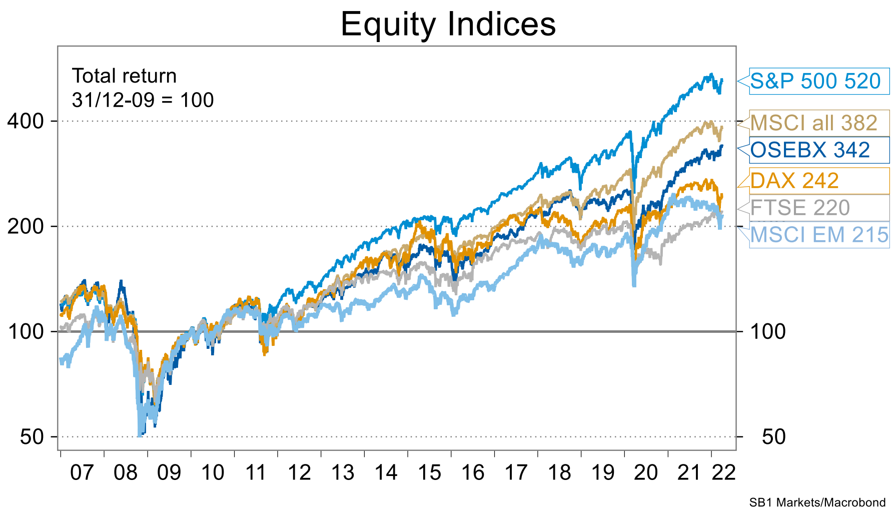


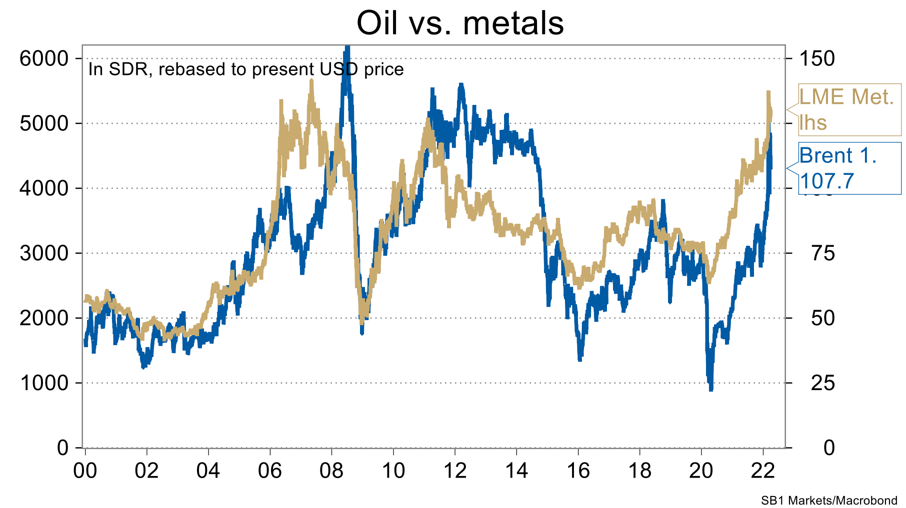


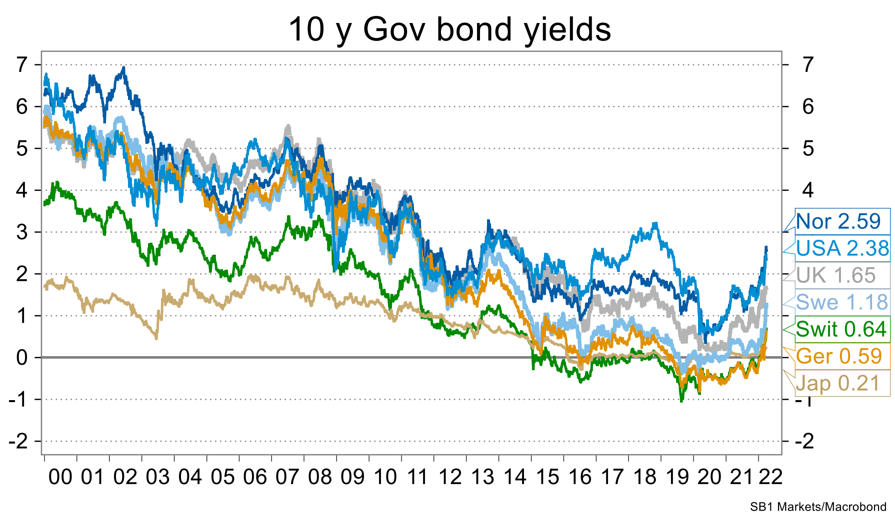
SpareBank 1 MARKETS

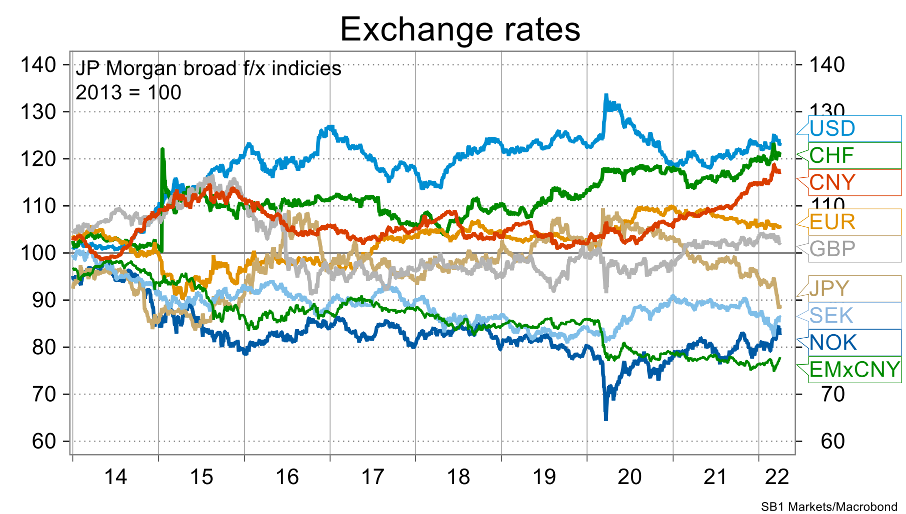
The big picture: Stock markets down (-OSEBX), bond yields up, commodities up

Commodities have taken a big step upwards



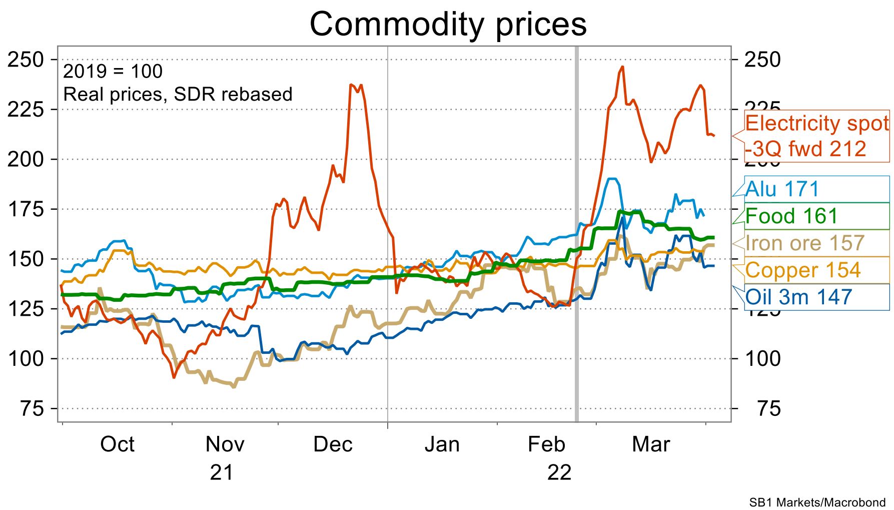


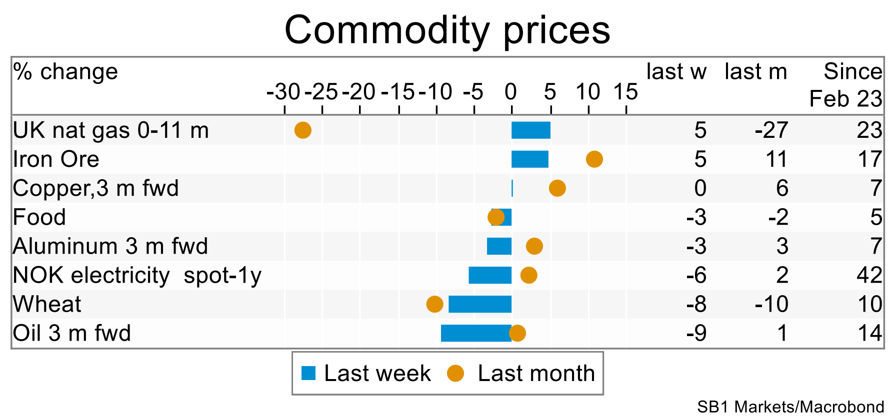


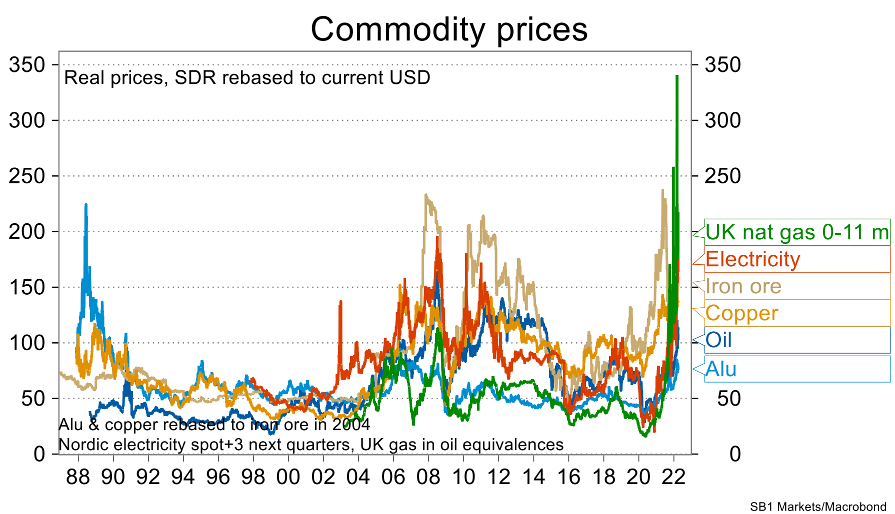


Most commodity prices down last week

Food prices fell for the 4th week in row. Less hoarding? All prices are up since before the invasion

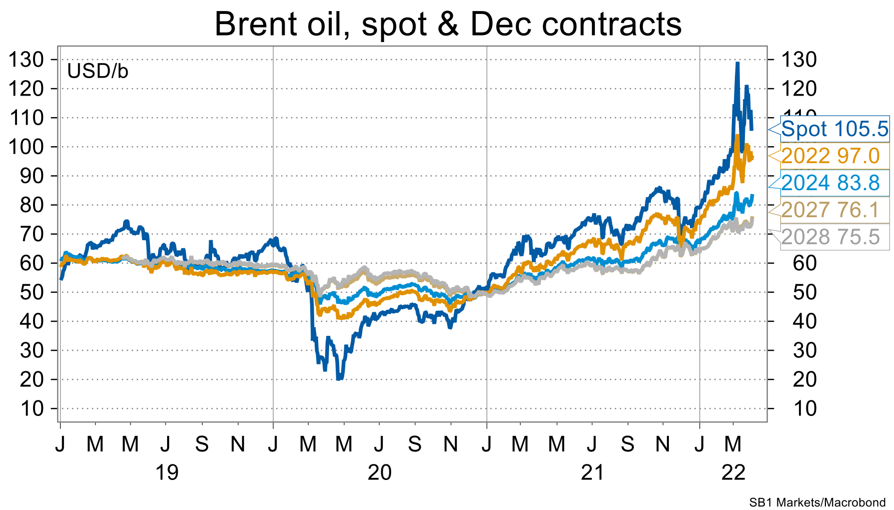


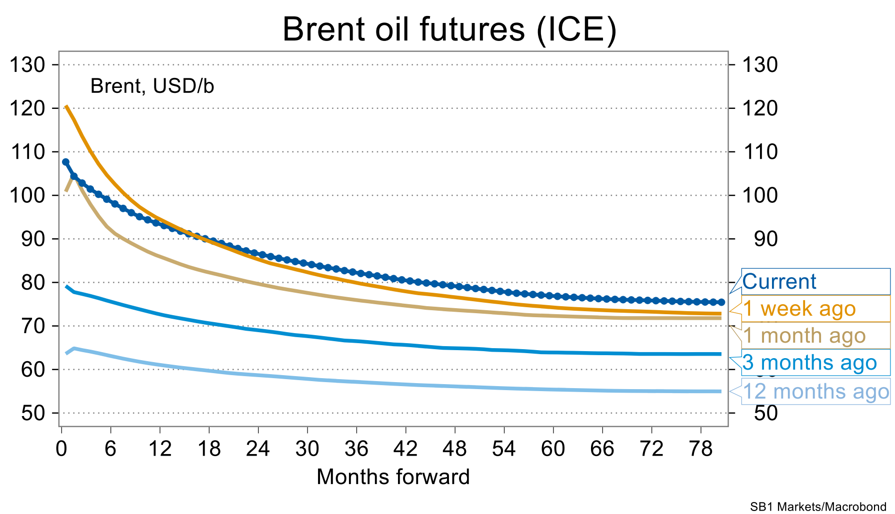


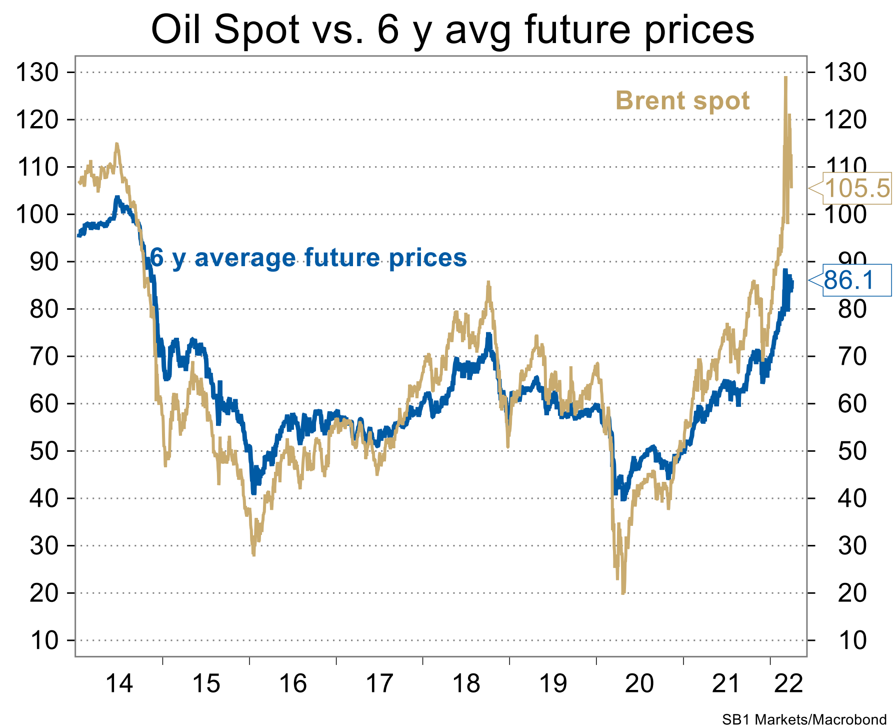


The oil price is still volatile – up to above USD 120 last week

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



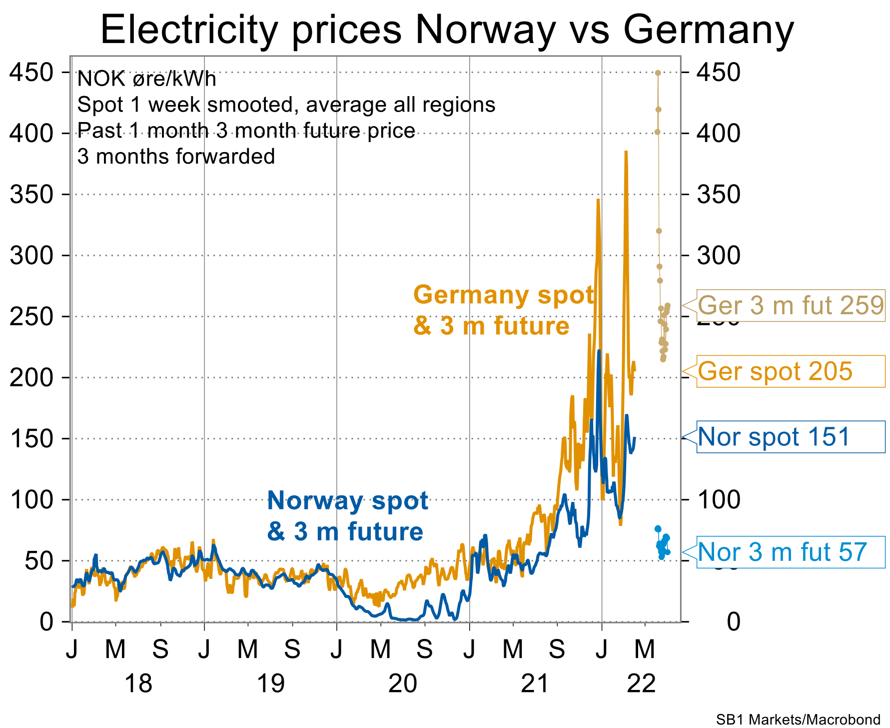


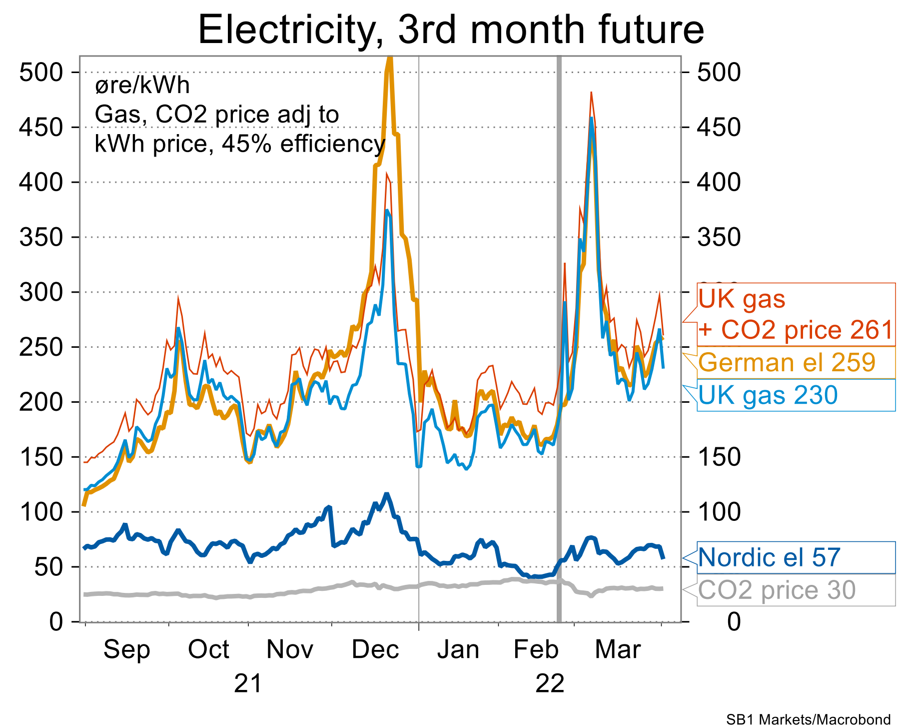


- Future prices have been lower than normal vs. the short end of the curve after the invasion – because markets assume that in the end, oil will flow

How to pay for the Russian gas? Or who should exchange EUR into roubles, where?

Russia is still supplying Europe with gas but a stupid discussion on how to pay for it may stop exports?

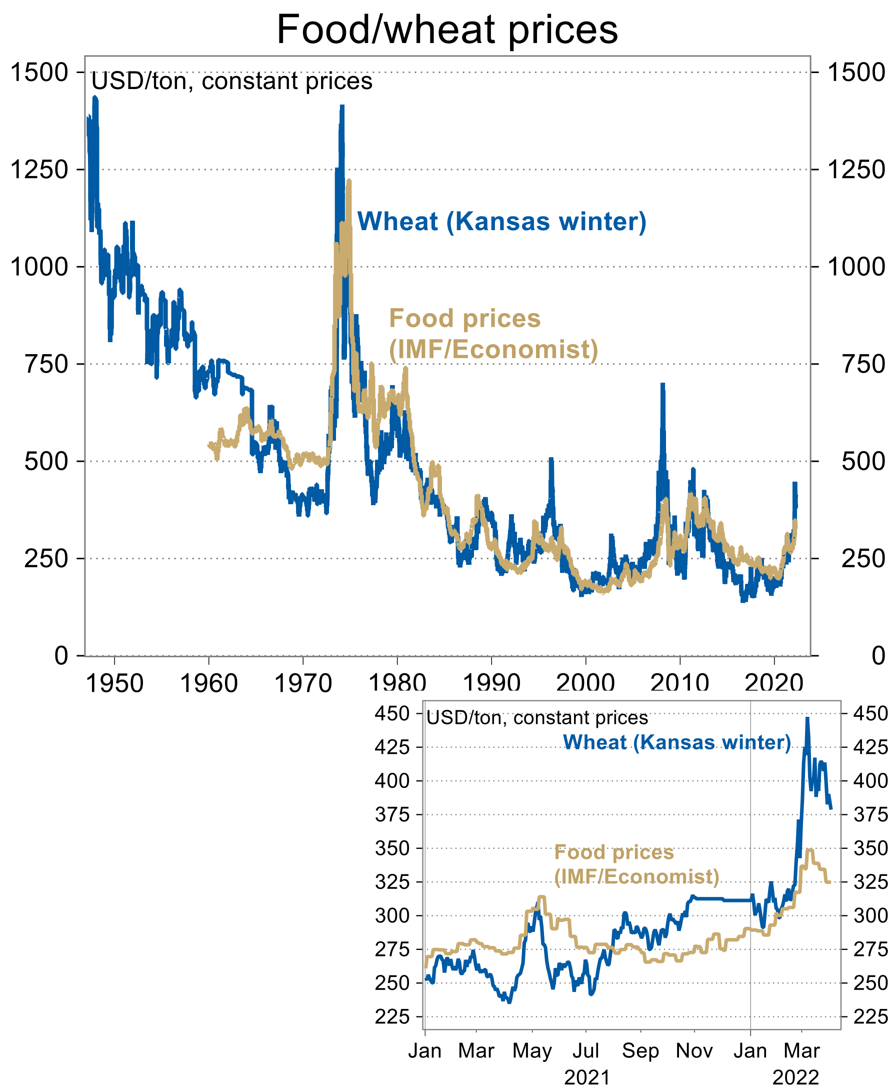




- We very much doubt – the Russians (Gazprom or the central bank) will anyway receive EUR or USD for Russia's oil exports.
  - » European importers may have to buy RUB somewhere (and in the end from the Russian central bank) if the Russians want to be paid in RUB, we suppose to the contract price agreed in EUR or USD
  - » Energy exports is not sanctioned, and payment are legal, and we suppose reserves that at accumulated from this exports will not be frozen by Western authorities
  - » The Russians are anyway not short of roubles, they can print them themselves. So why all this noise??
- European gas and electricity prices rose somewhat last week – even if the oil price fell, probably due to this possible f/x conflict

Food prices are on the way down again, for the 3rd week in row

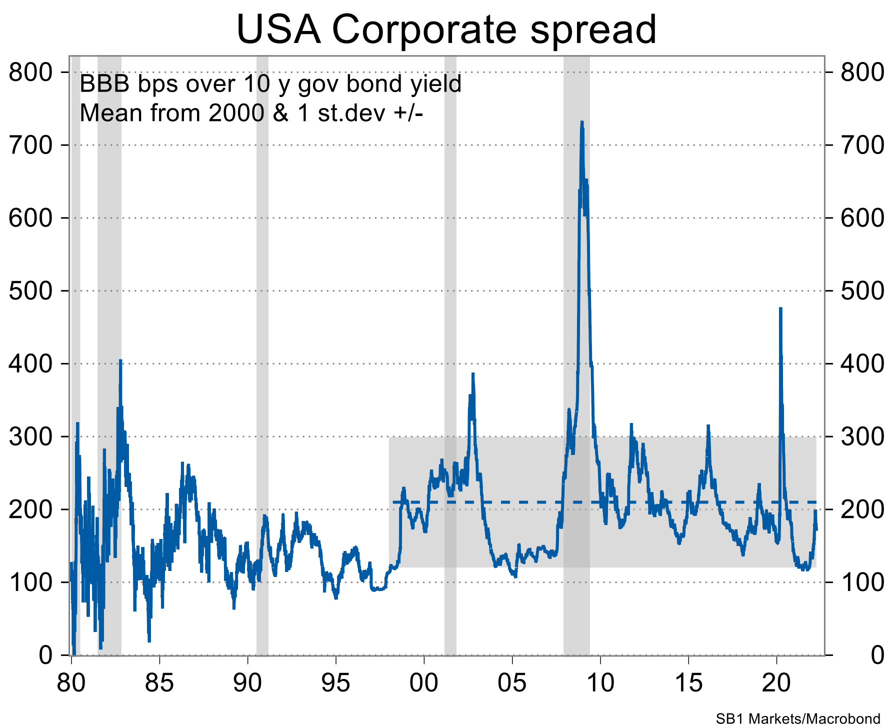
Half of the increase in wheat prices since the invation is reversed, prices are still up 16%

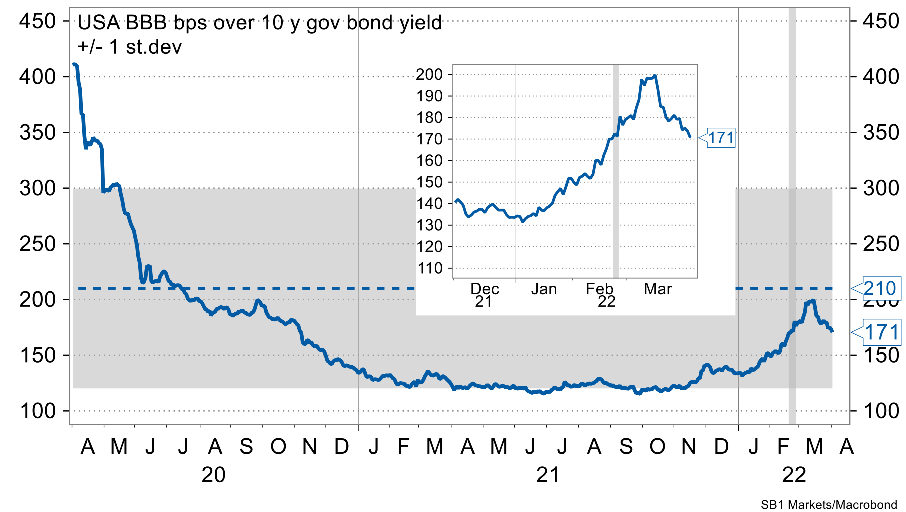


- **The Economist's broad food commodity index** is up just 6% vs the pre-invasion level following a 7% decline past 3 weeks – and prices are far from record high
  - » Is the impact of (a very likely) intense **hoarding** through the food value chain already fading?

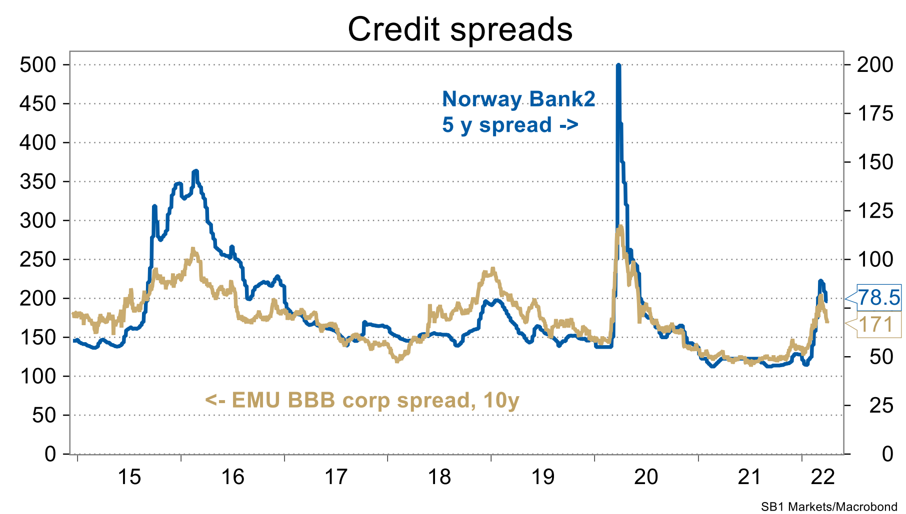
Credit spreads further down last week but remain well above the local bottom

Almost 2/5 of the lift in credit spreads since last autumn is reversed the past 3 weeks





- Norwegian bank spreads down too, as usual in tandem with spreads abroad



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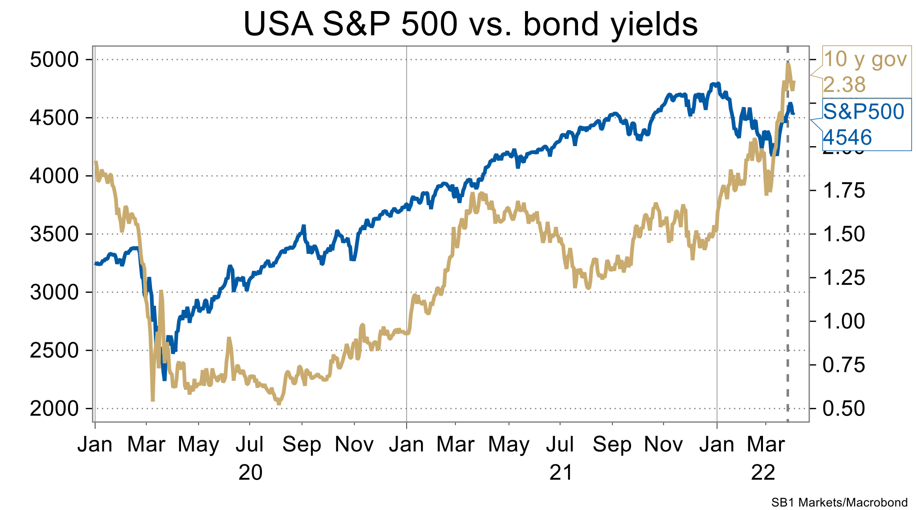
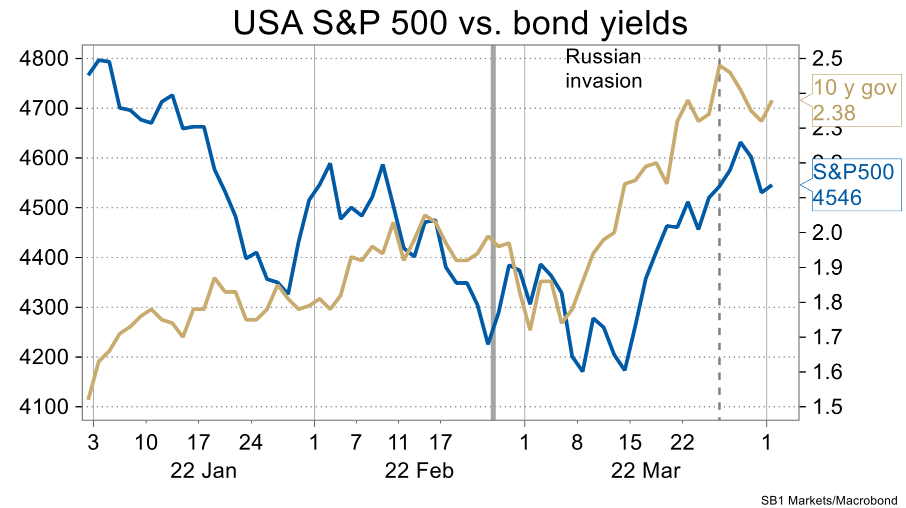
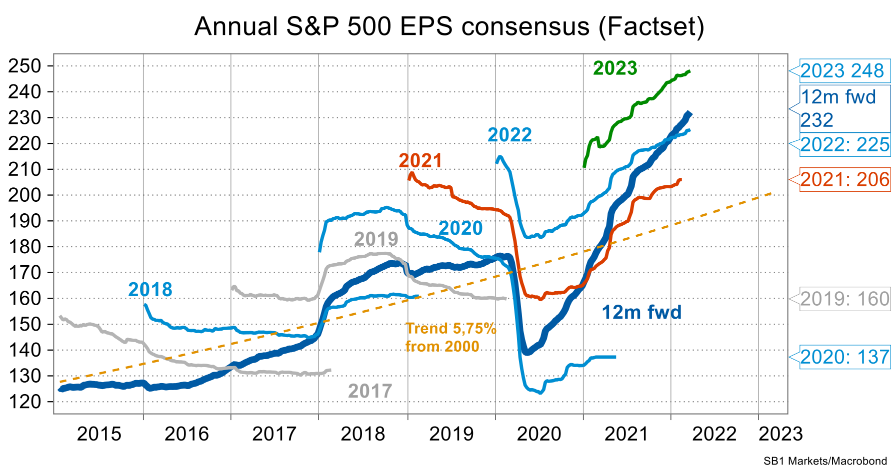
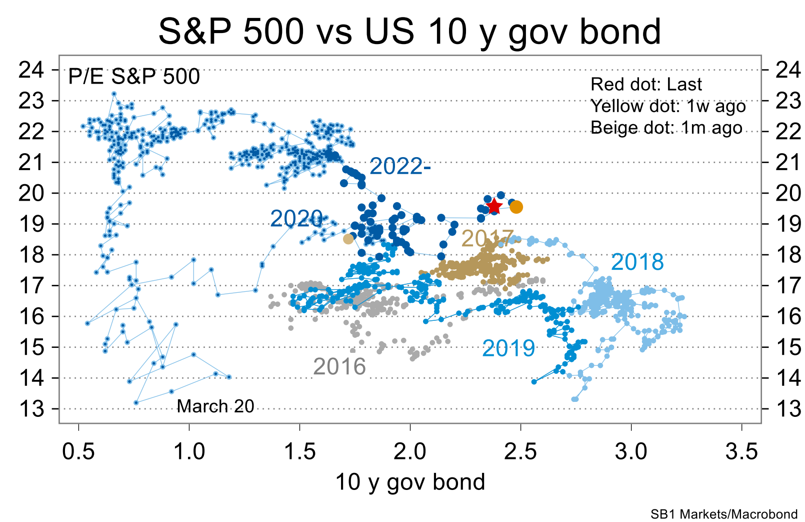
Bonds yields down last week as inflation expectations fell, the S&P marg. up

Expected earnings growth is still impressive – at a >20% pace! For how long can that last?



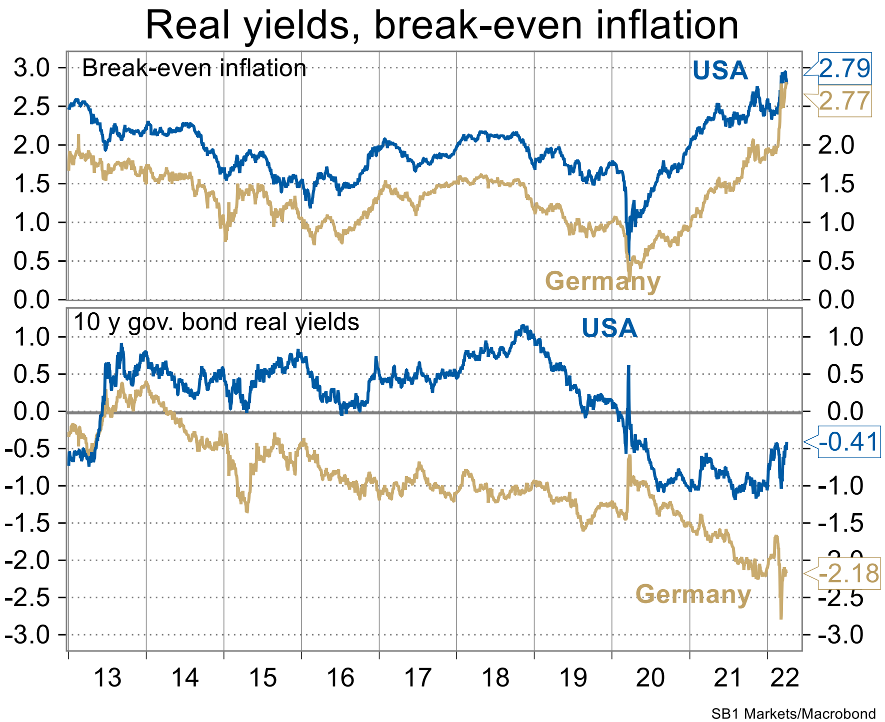


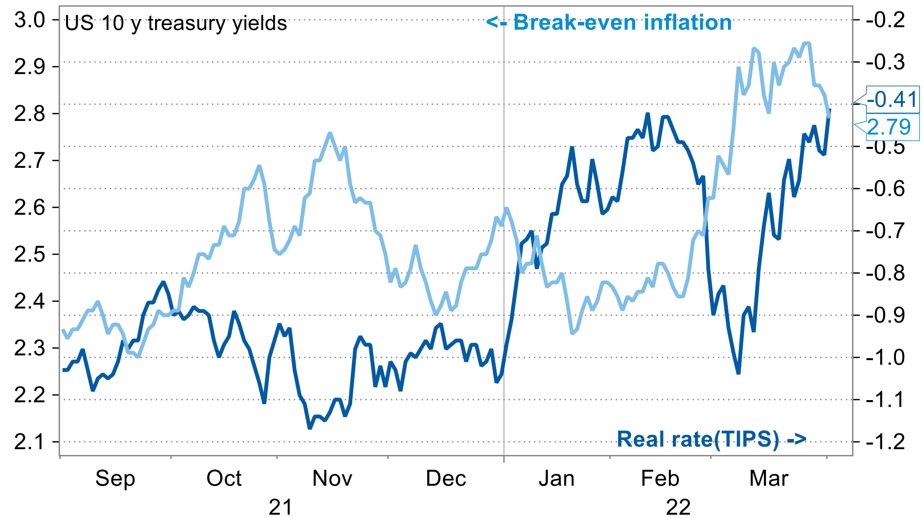




US inflation expectations down with the oil price but real rates further up

Real rates (10 y) the highest since June 2020, still just at -0.41%. German rates of all sorts slightly up





US & Germany 10 y Gov bond yield

	Yield	Change 1w	Change 1m	Since Feb 18	Min since April-20
USA nominal treasury	2.38	-0.10	0.66	0.46	0.52
.. break-even inflation	2.79	-0.16	0.17	0.38	1.06
.. TIPS real rate	-0.41	0.06	0.49	0.08	-1.19
Germany nominal bund	0.59	0.08	0.53	0.37	-0.65
.. break-even inflation	2.77	0.04	0.47	0.79	0.40
.. real rate	-2.18	0.04	0.06	-0.42	-2.80

SB1 Markets/Macrobond

- **Real rates** are still very low, at least if growth keeps up in the US – or do not totally collapse in the EMU
- **Inflation expectations** have climbed to levels that signals that markets are close to have lost confidence in central banks' promises
  - » 2.79% in the US
  - » 2.77% in Germany

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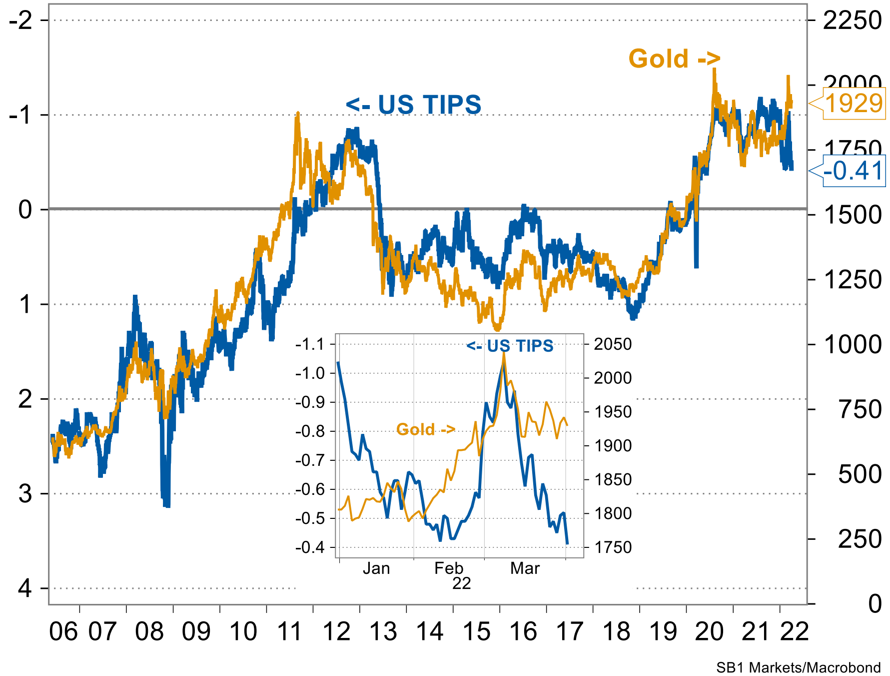
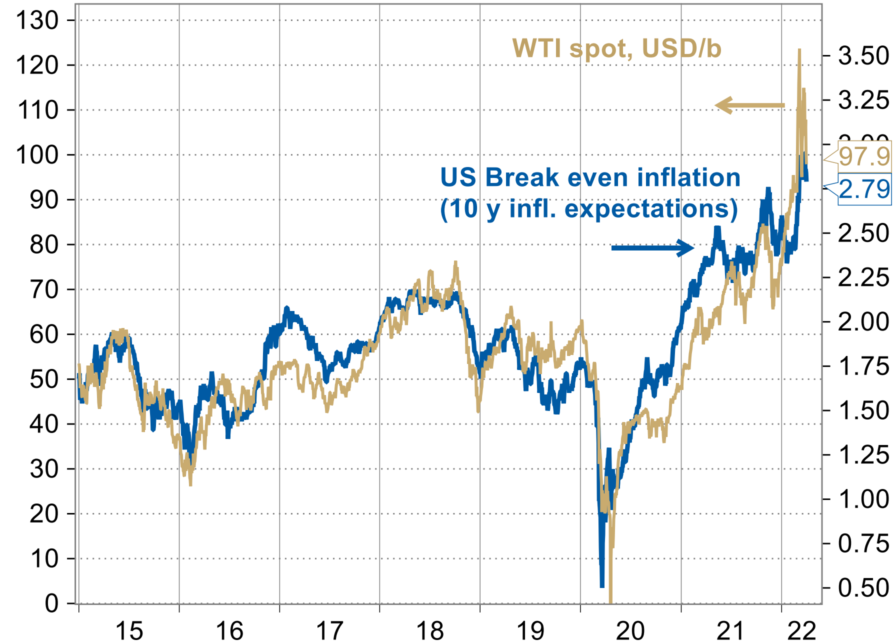
The normal relationships: Gold ⇔ –TIPS real rates. Oil ⇔ Inflation expectations

Last weeks: The gold prices has kept up even if US real rates has recovered. Oil & infl. expect. still corr.

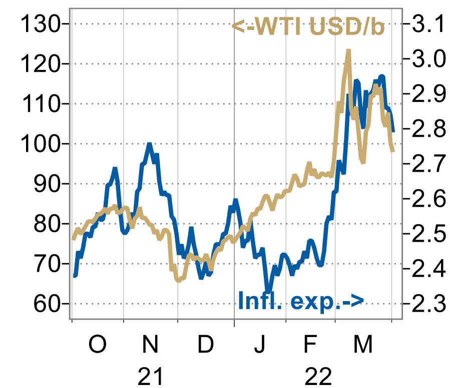
Gold vs. US TIPS (10 y real rate gov bonds)



USA Inflation expectations vs. the oil price



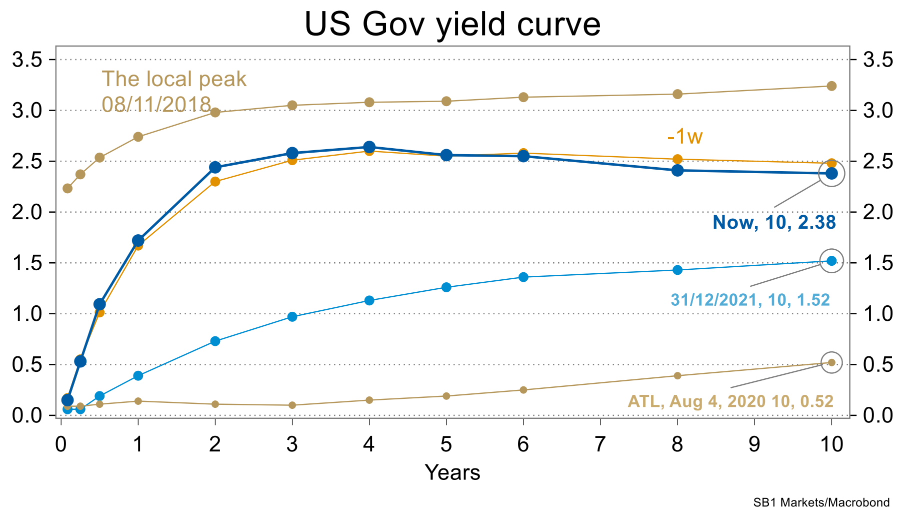
SB1 Markets/Macrobond

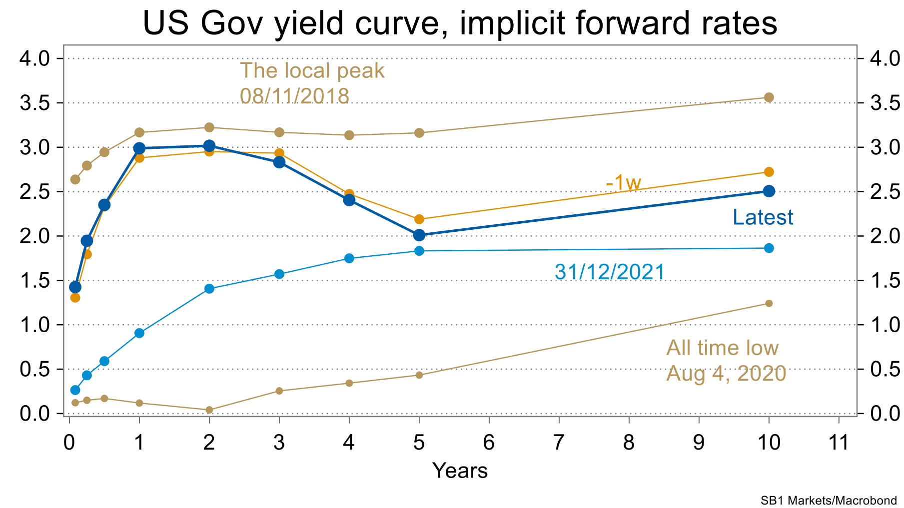


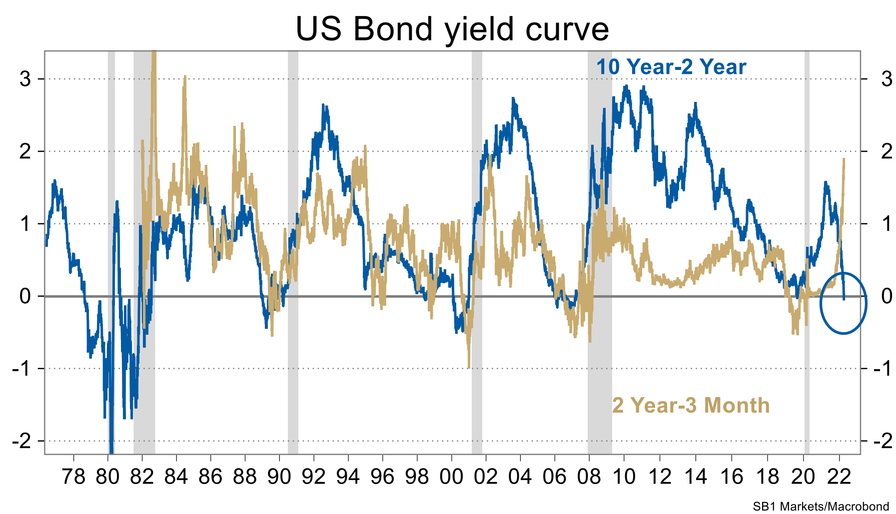
- Very likely a war premium in the gold price
- The 10 y inflation expectations in the US yield curve are rather closely correlated to the spot oil price – and both fell last week

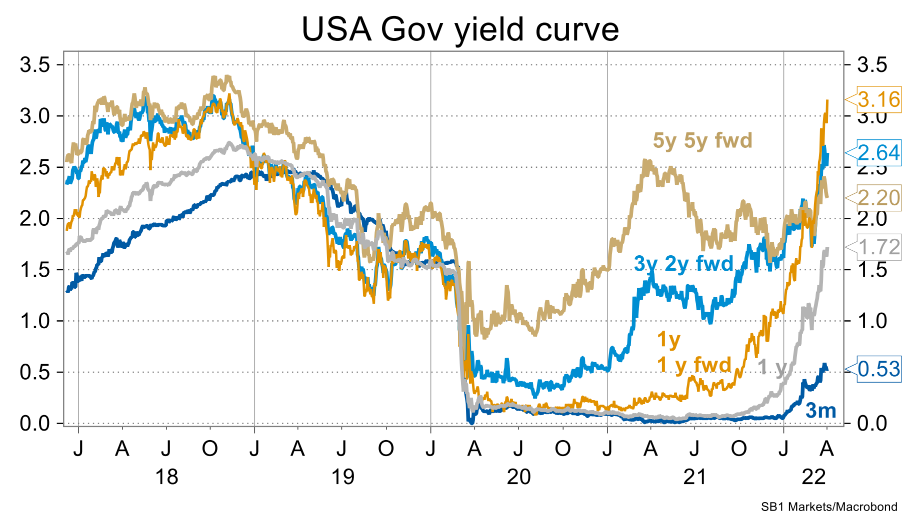
The US 10y – 2y yield curve has inverted – but the 2y – 3m is the steepest since '94

An inverted yield curve has been a reliable recession indicator, though without any timing properties



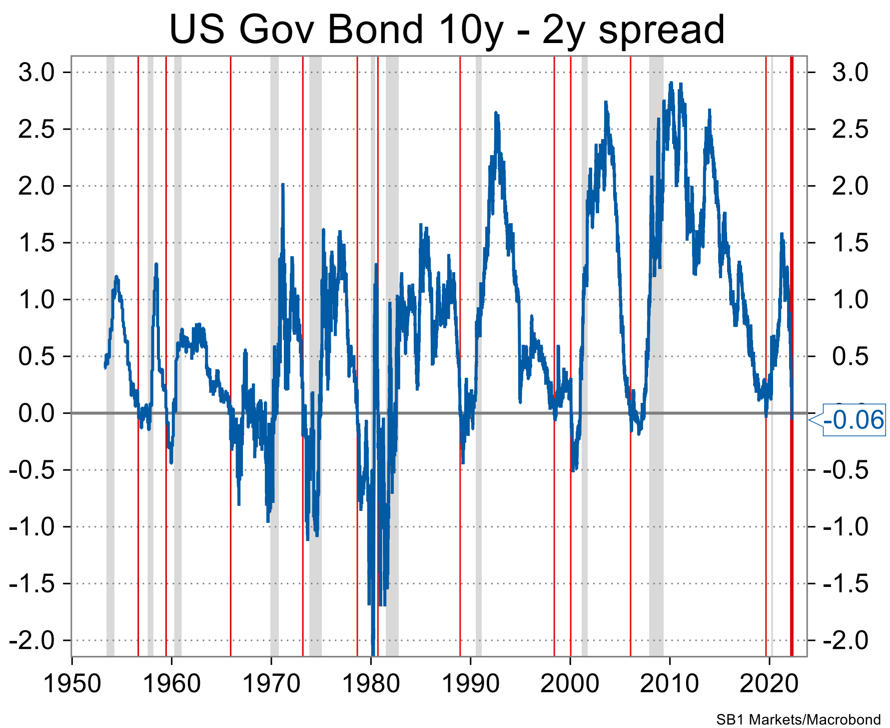


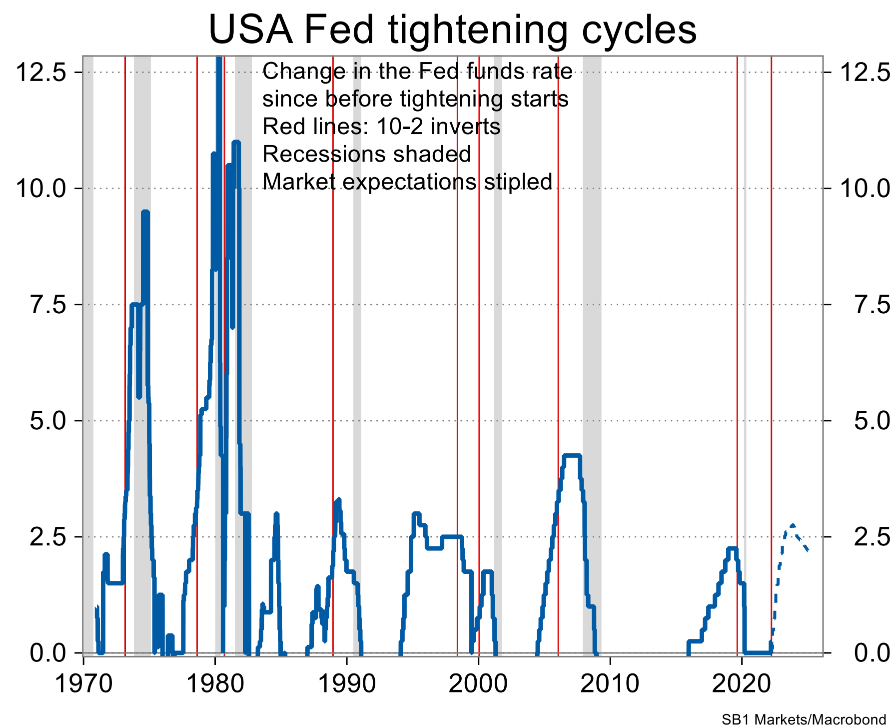




The curve flattens/inverts when the Fed tightens

– when growth has been too strong for too long. And not because long term interest rates fall

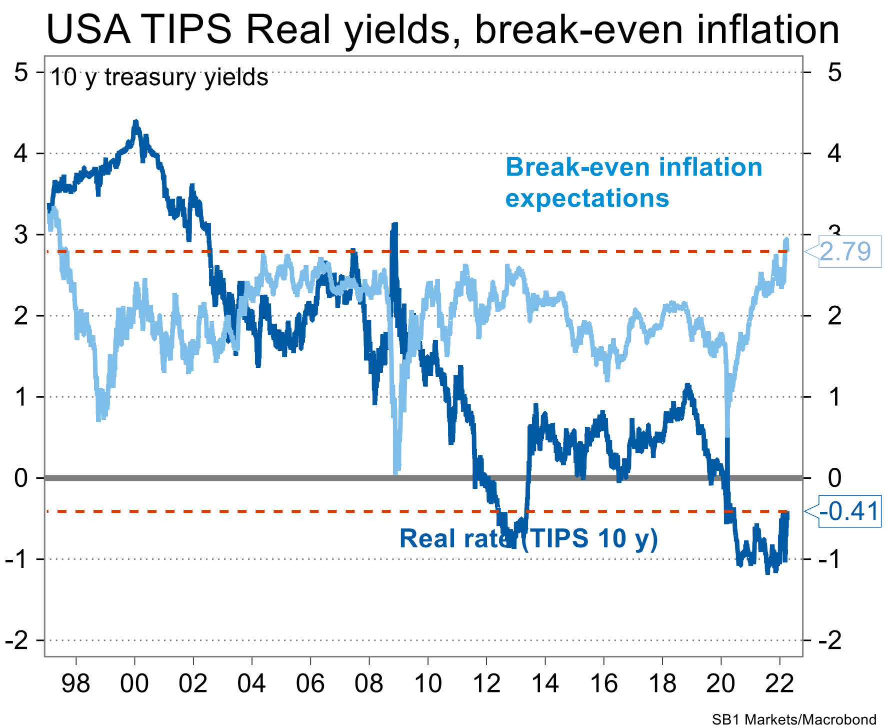


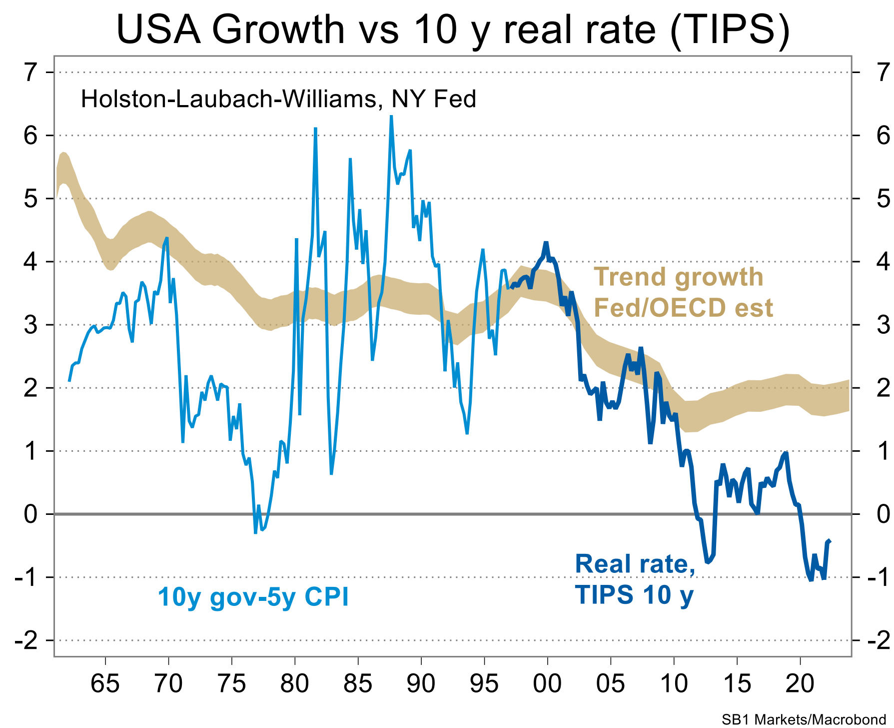


- Thereafter, normally a recession. Not because the curve had flattened but because growth had been too high for too long – and the Fed tried to calm the economy down – and succeeded somewhat too much
- Fed tightened in 1971, 1983 and in 1994 without 'creating' a recession but a recession was the outcome of the 6 other tightening campaigns

What is the growth outlook?

If inflation is at 3%, and the real rate is at -0.4%, *we assume it is because the growth outlook is weak*

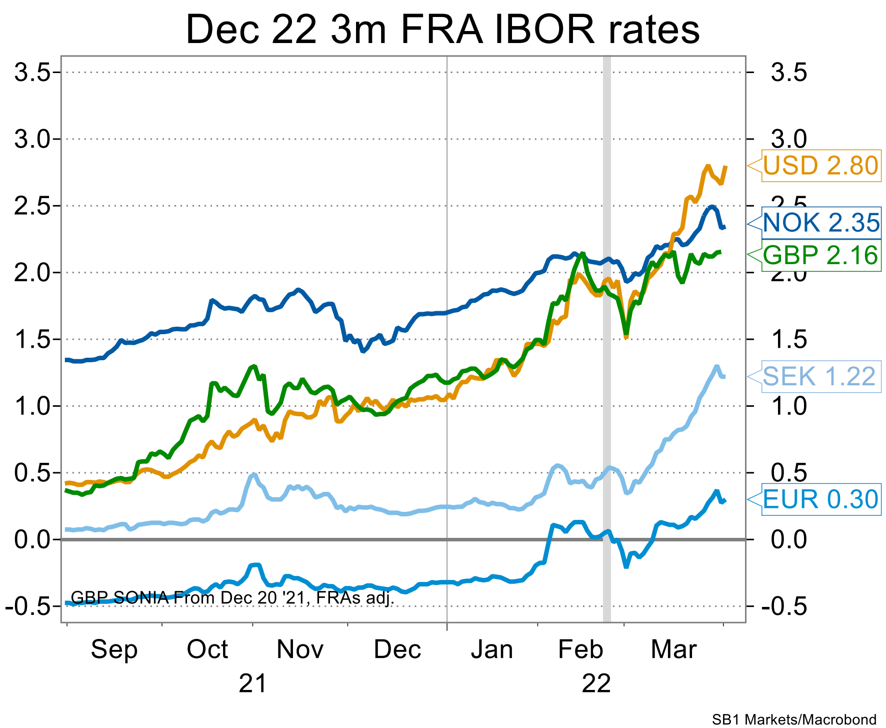


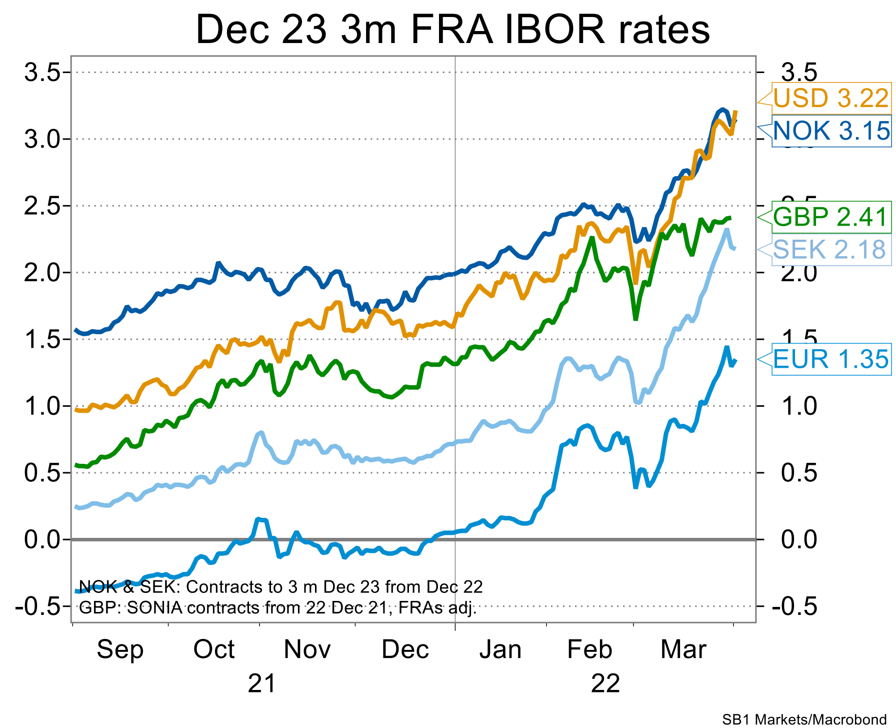


- If the economy is not really weak, we think central banks will tighten monetary policy by hiking rates, selling bonds in order to bring inflation down <u>by slowing the economy</u>
- The big question: Have other markets discounted the bleak growth outlook that seems to be discounted in the bond market?

All FRA-rates further up, except the very short end in Norway

Aggressive supply of NOK from NoBa lowered the short end

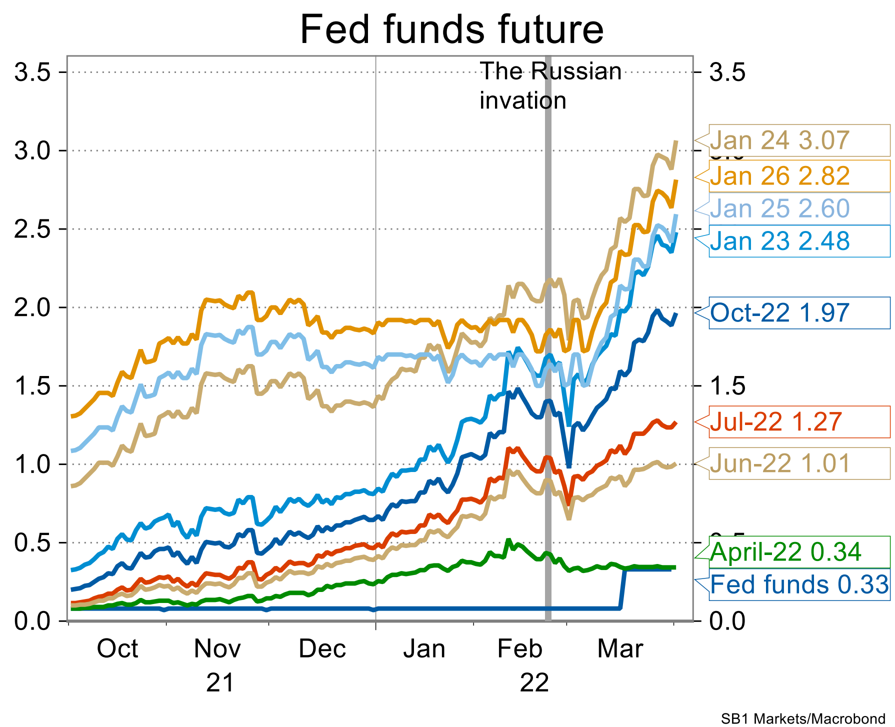


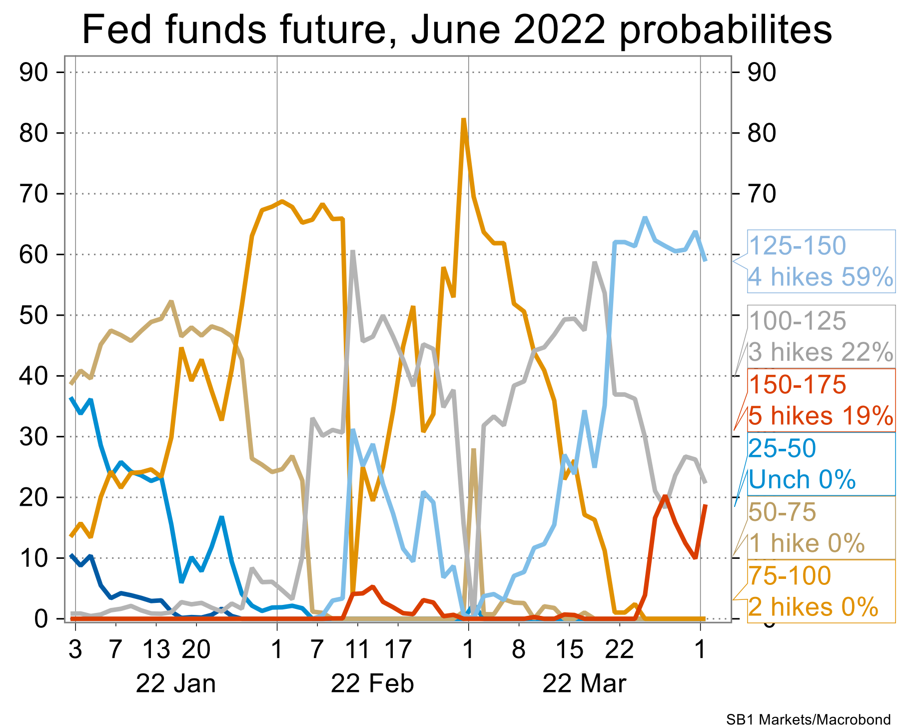


- Rate expectations surged further in EUR and SEK last week. The market expect 3 - 4 hikes in Sweden before Christmas
- And 3 x 25 bps in the Euro Area!

Fed funds future curve is steeping rapidly. +50 in May, and +50 in June is discount.

And rate expectations are still climbing further out on the curve

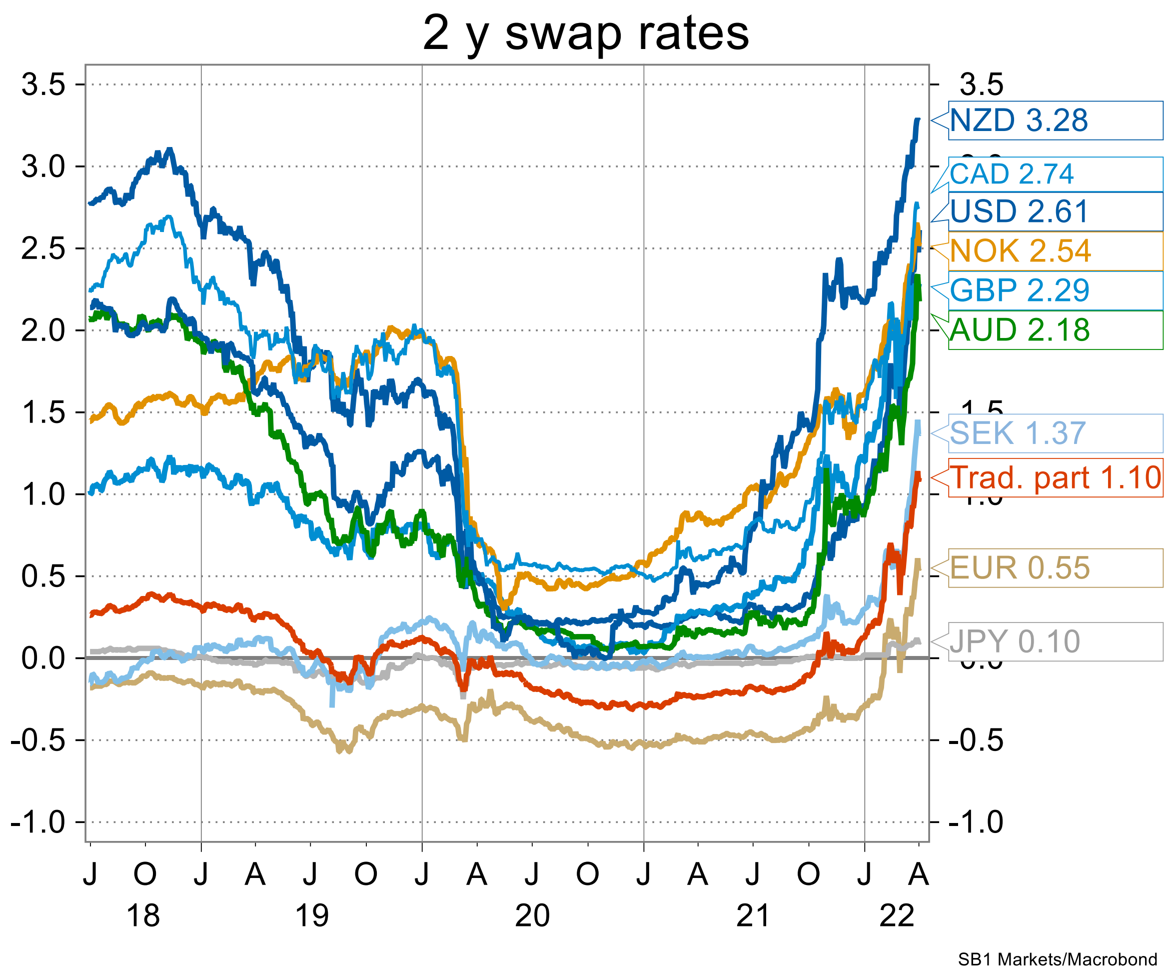


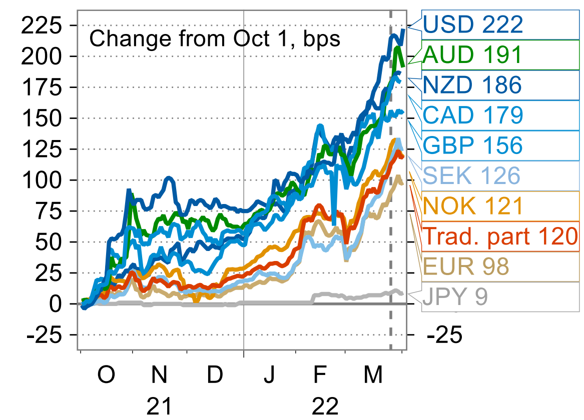


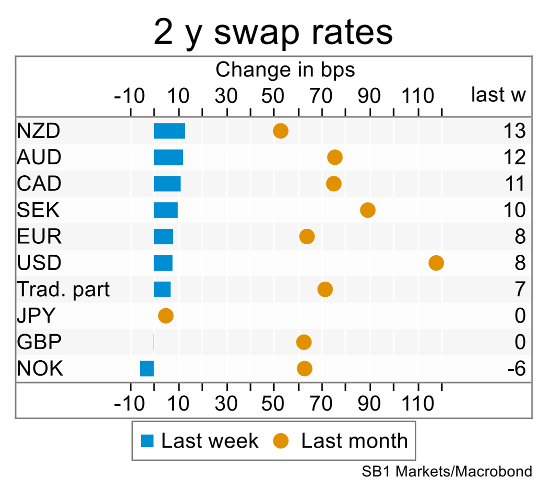
- Is the market going bananas? Well, the Fed has recognised that it is behind the curve, and the market expect the Fed to reach 1.25% in Q2 – which is still far below a neutral rate

The short end of the curve flat or up everywhere – but down in Norway

Just JPY rates are well anchored – and the JPY is rapidly losing ground







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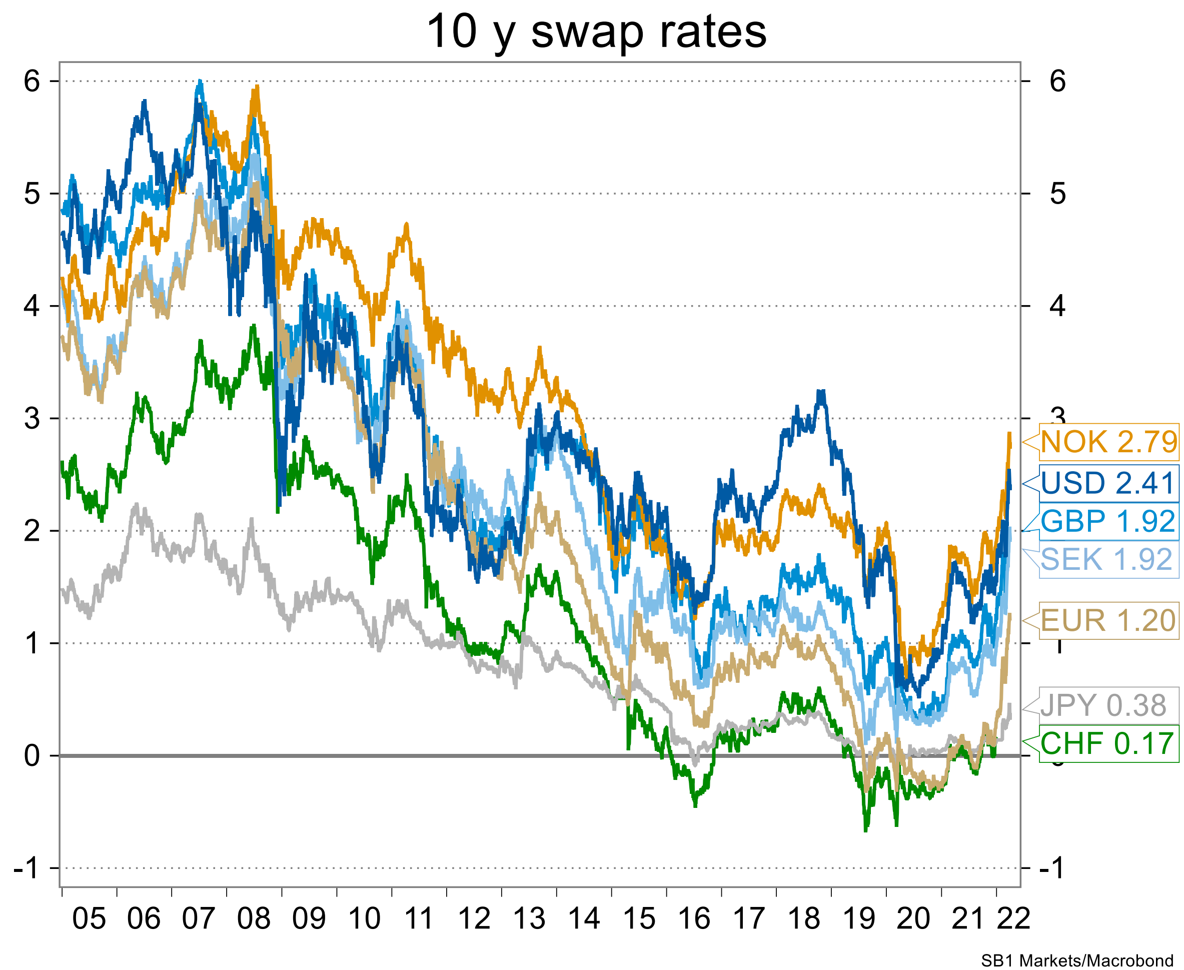
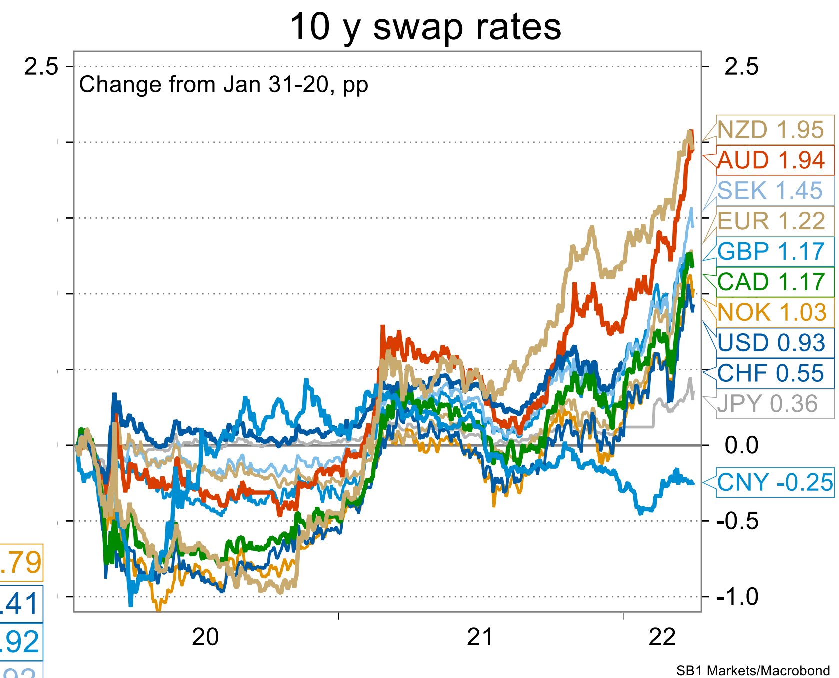
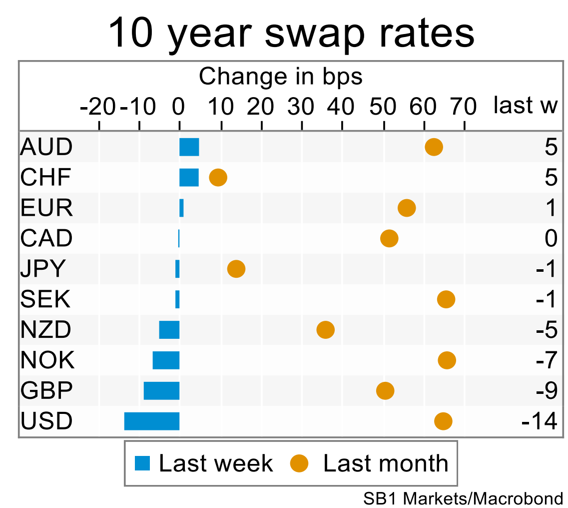
Mixed in the long end but more down than up – following the surge recent weeks







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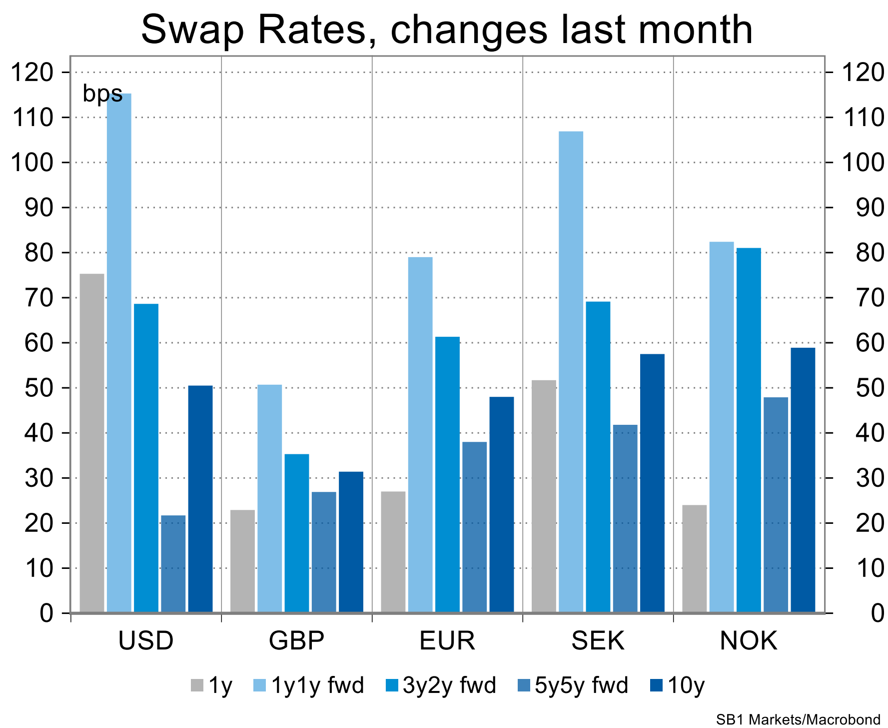
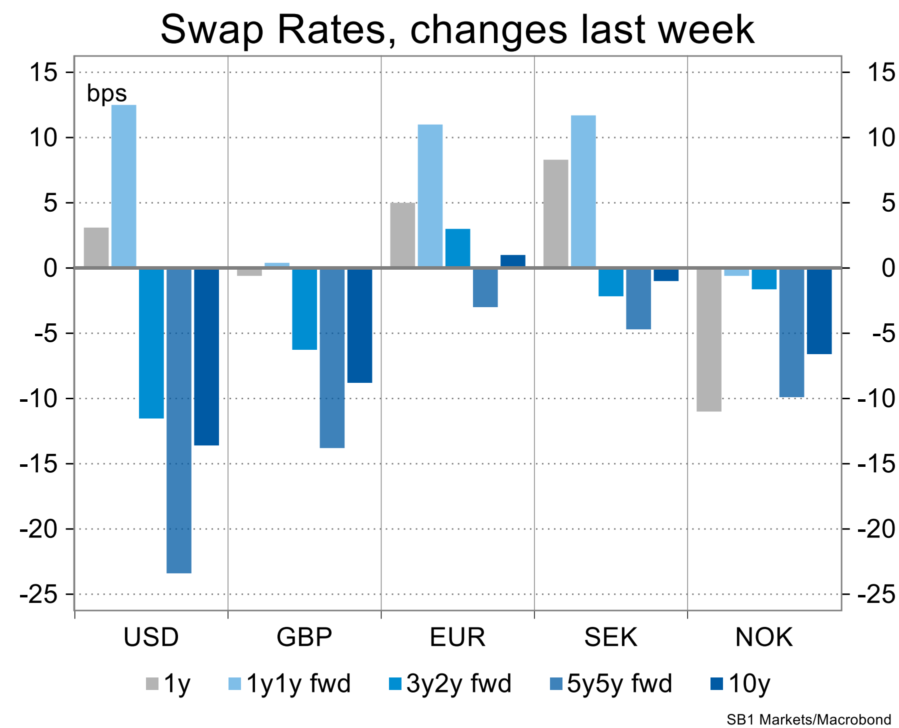
Short term rates up most places, but not in Norway

Norway between USD/GBP and EUR/SEK in the long end of the curve – and down





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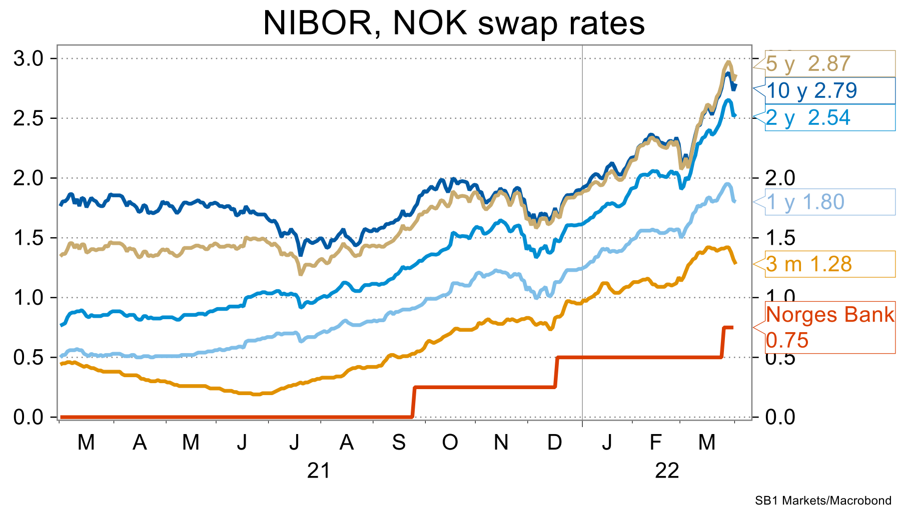
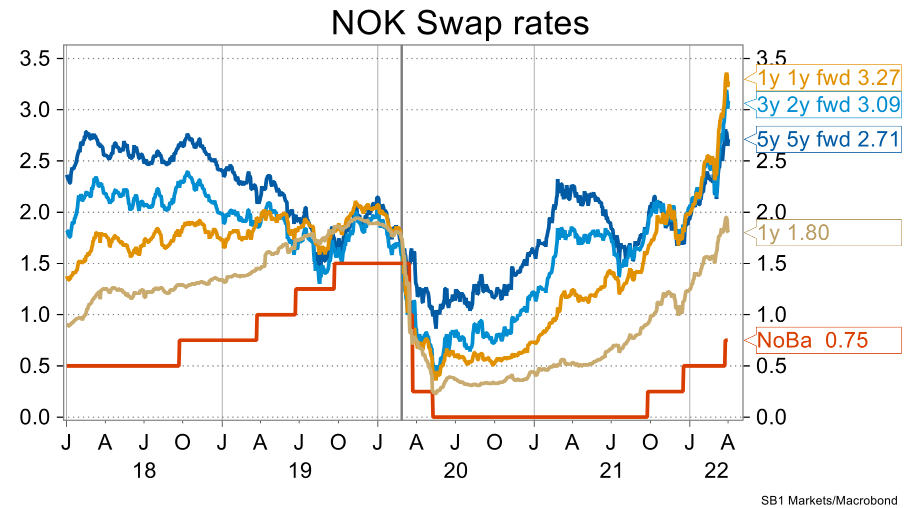
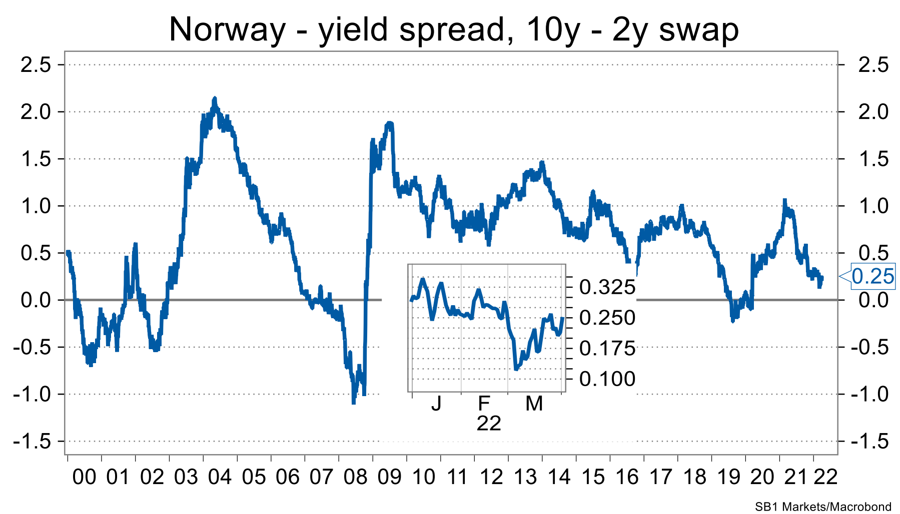
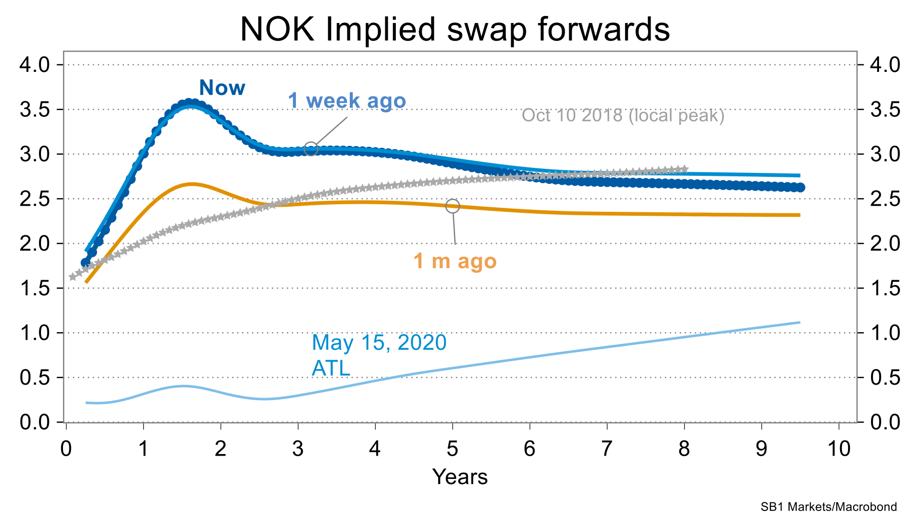
All rates down, most in the very short and the long end of the curve

Norges Bank eased the liquidity squeeze in the short end of the curve, will sell NOK

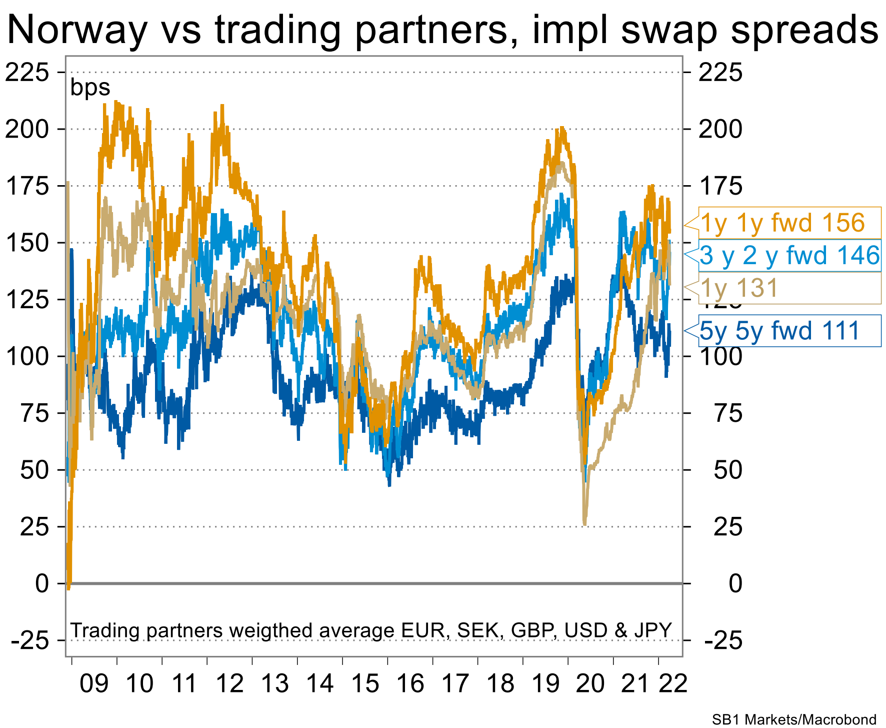


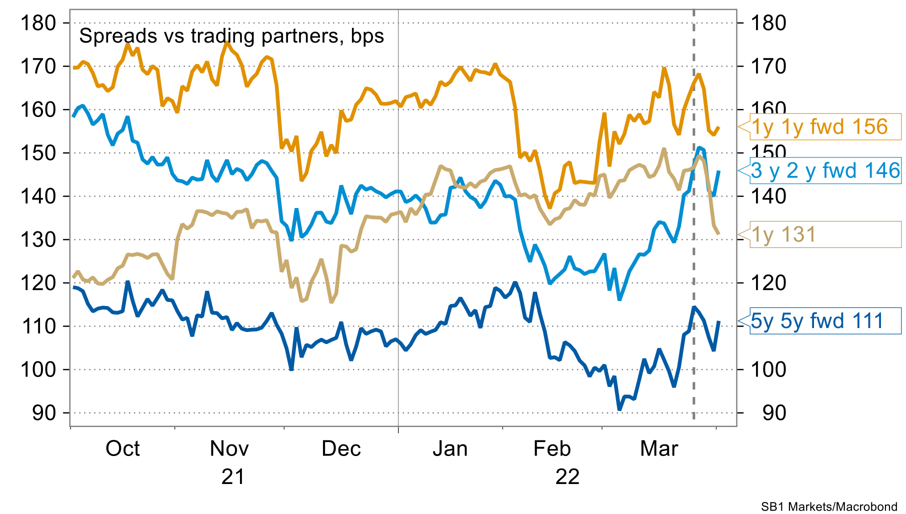


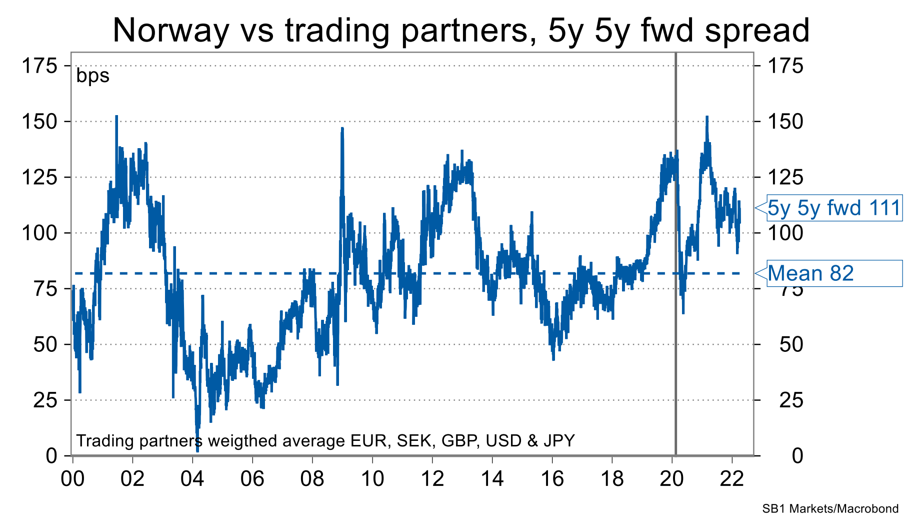




Spreads sharply down in the short end, by up to 18 bps

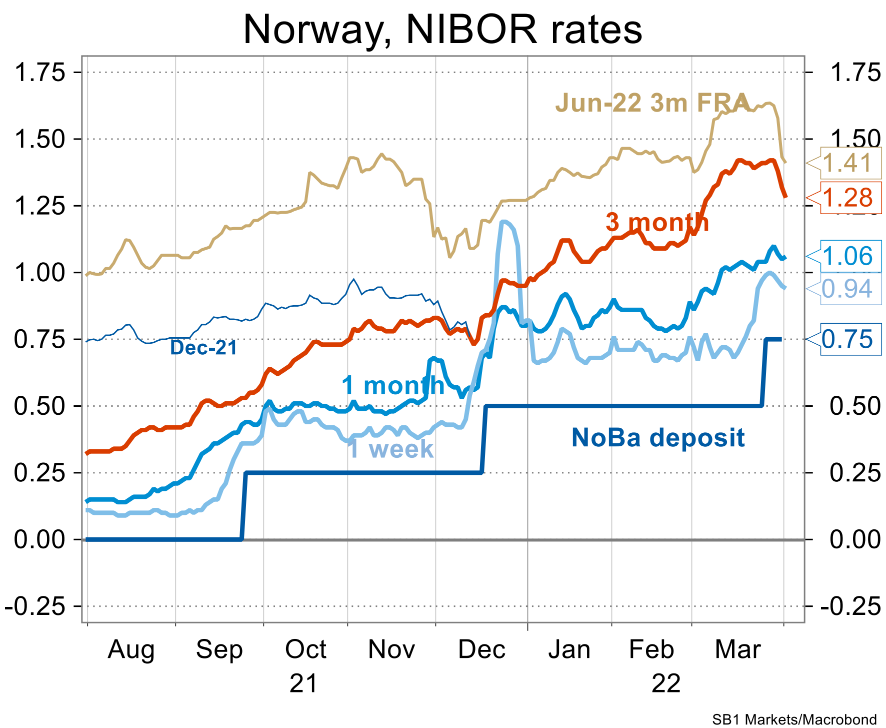


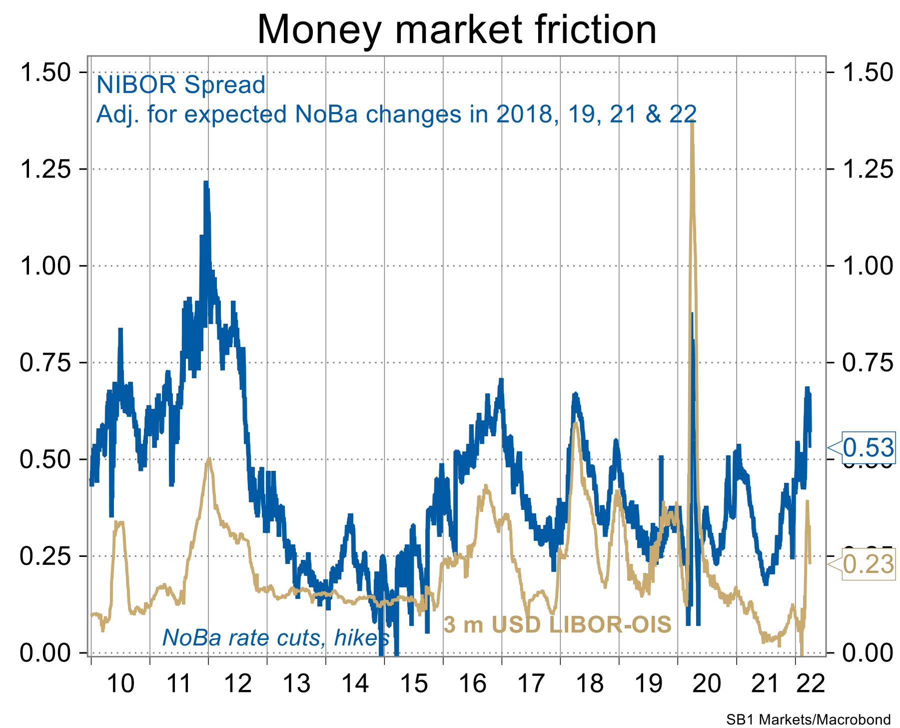




The 3m NIBOR down 13 bps, the NIBOR spread down to 13 bps to 53 bps

(of no hike in May). The LIBOR-OIS spread down 8 bps to 23 bps in the US





- More on Norges Bank's actions in the f/x market some few pages forward

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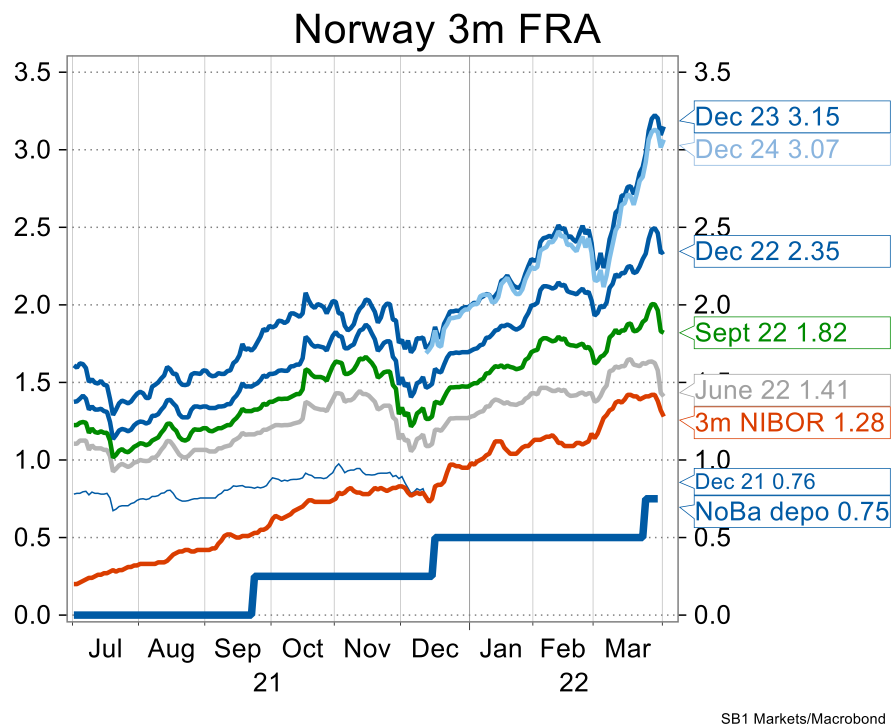
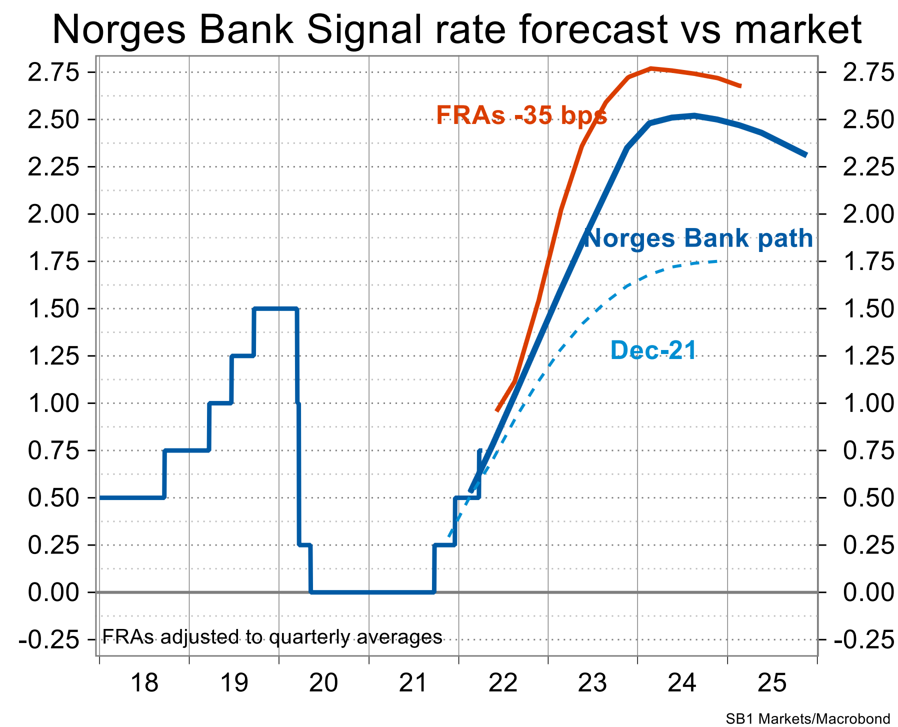
Finally, the 3 m NIBOR, and FRAs yielded, especially in the short end, June-22 -22 bps!!

Longer dated contracts flat or up

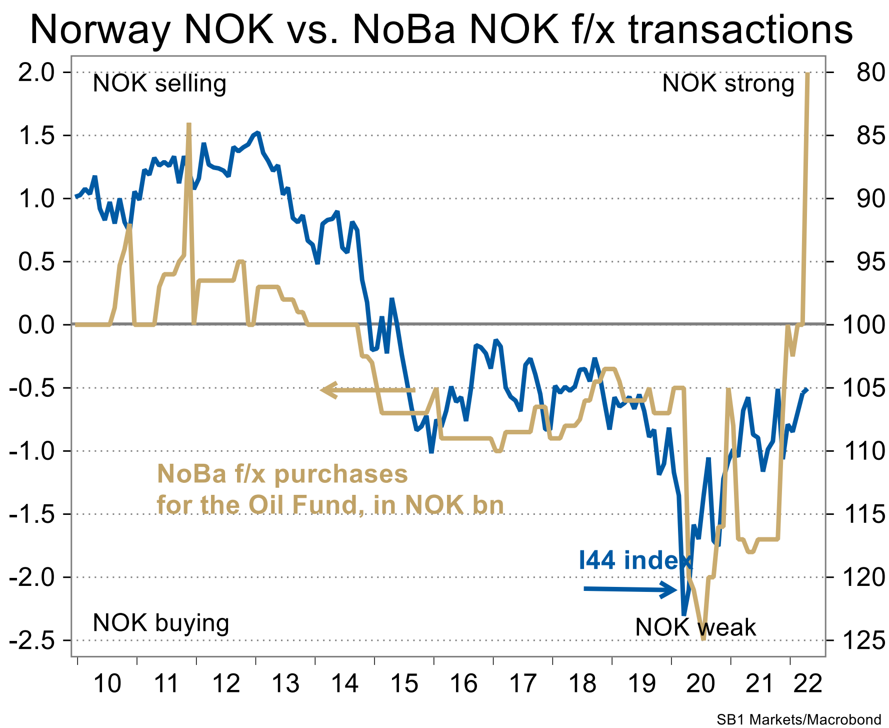


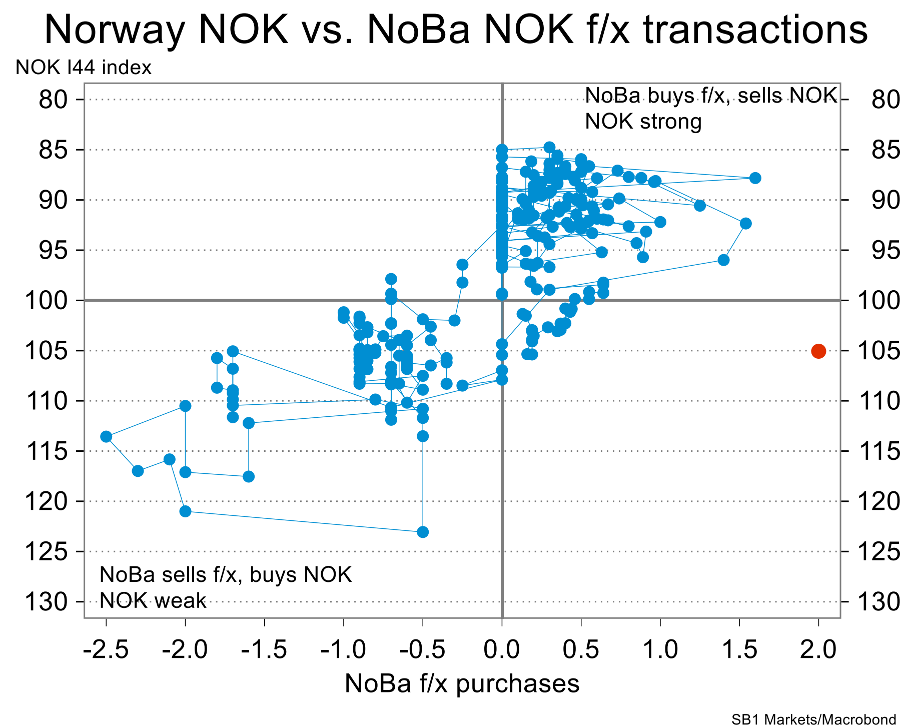


- The **June 3 m FRA** nosedived to 1.41% from 1.63% last week (due to better NOK liquidity, more next page), which implies
  - » A 100% probability for a 25 bp hike if the assumed Q3 NIBOR spread is 41 bps – which does not seems unreasonable
  - » A 50% probability for a 25 bp hike if the current 53 bps NIBOR spread remains in place
- The FRA market still discounts almost 4 hikes in H2 (in addition to the March hike, and the expected June hike), well above NoBa's interest rate path

NoBa will sell NOK 2 bn per day, due to larger f/x transfers to the Oil Fund

The NOK fell sharply, and short term interest rates collapsed. The NOK response is 'wrong'

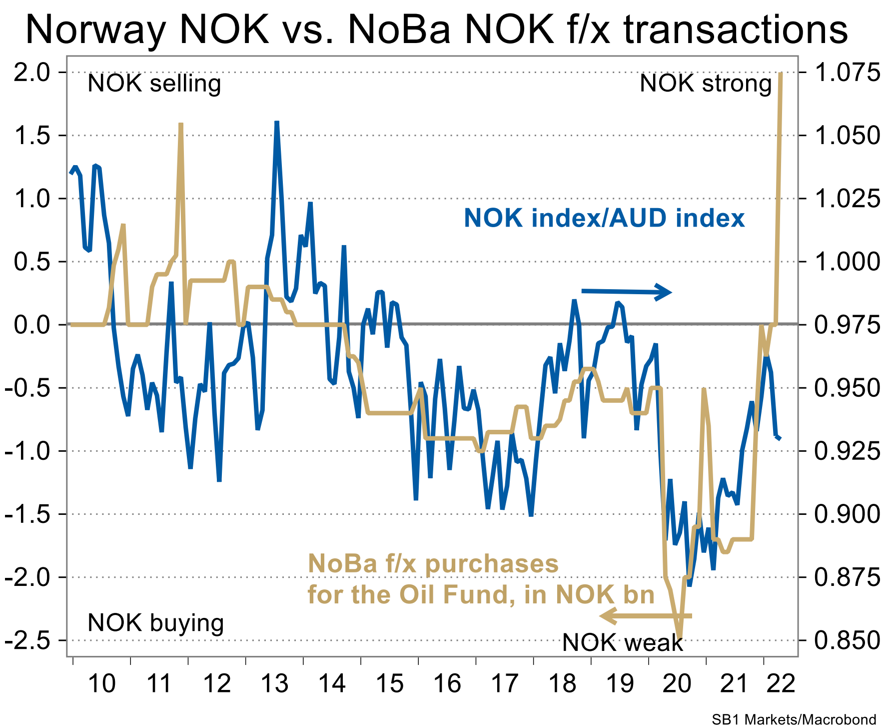


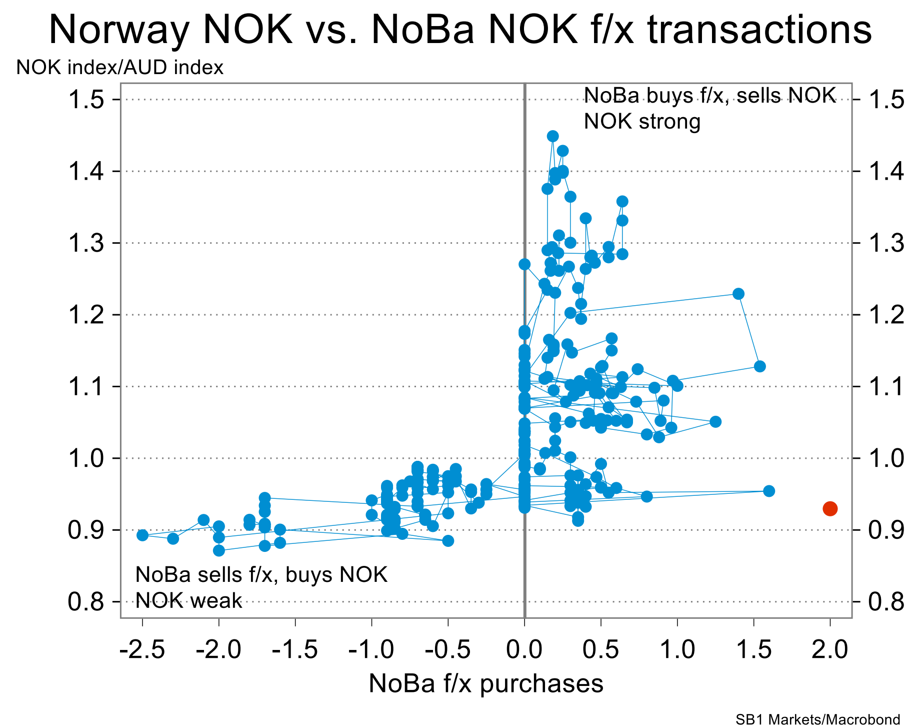


- Norges Bank at Thursday announced it will buy f/x equalling NOK 2 bn per day through April in order to transfer the large NOK surplus at the central government budget to f/x deposits in the Oil Fund. The amount is record high, and some 0.5 bill higher than expected. The oil and gas prices have been much higher than expected, and the government receives much more NOK tax revenues from the oil companies than expected. (The oil companies on their side, have to buy NOK in order to pay their large tax bills)
- The decline in NIBOR rates are justified, as liquidity in the money market will strengthen. The NIBOR (-NoBa) spread has been far above normal recent weeks – and a first part of a normalisation took place last Thursday
- The NOK weakening is just a very short term impact. The correlation between NoBa buying og selling NOK and the NOK exchange is the opposite. The NOK strengthen when NoBa has to sell NOK for the Oil Fund – because the oil price is high! Even in a full model, the partial effect of NOK transactions has the wrong sign!

NOK is weak vs the AUD when NoBa is buying NOK (and not selling)

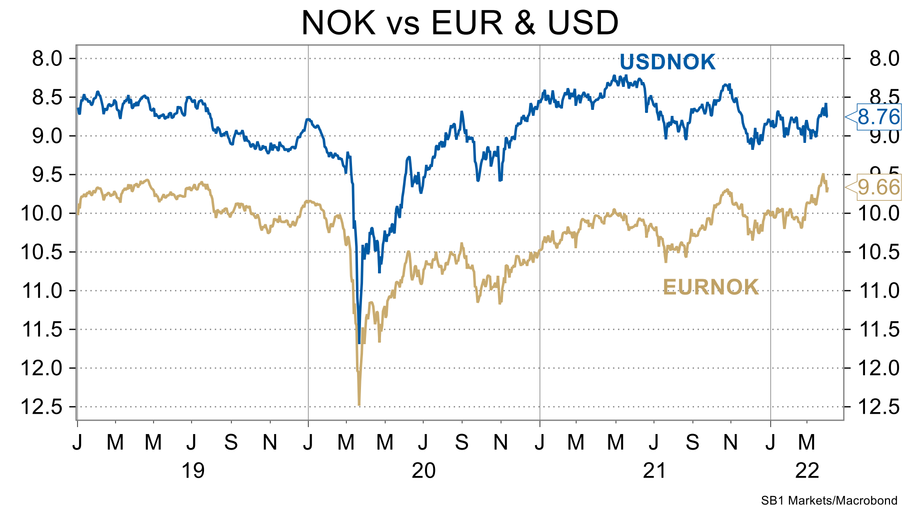
Because the NOK is strong vs AUD when the oil price is high (the AUD prefer higher metal prices)

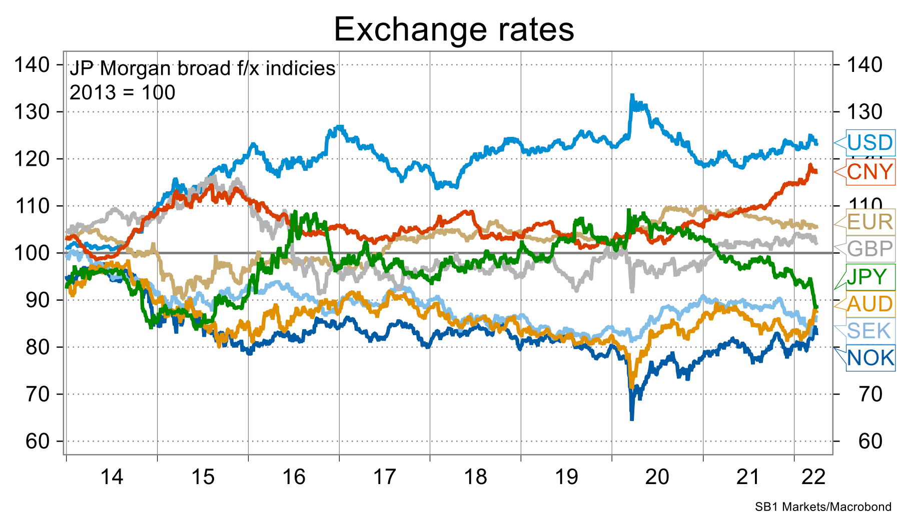


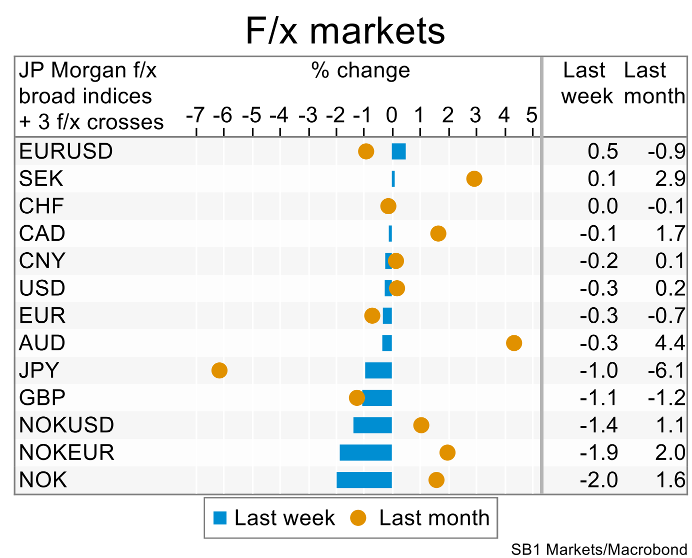


NOK last week's loser, still up 2% last month

The JPY last month's loser, down more than 6%, a rather unusual decline







JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
EURUSD	0.5	-0.9
SEK	0.1	2.9
CHF	0.0	-0.1
CAD	-0.1	1.7
CNY	-0.2	0.1
USD	-0.3	0.2
EUR	-0.3	-0.7
AUD	-0.3	4.4
JPY	-1.0	-6.1
GBP	-1.1	-1.2
NOKUSD	-1.4	1.1
NOKEUR	-1.9	2.0
NOK	-2.0	1.6

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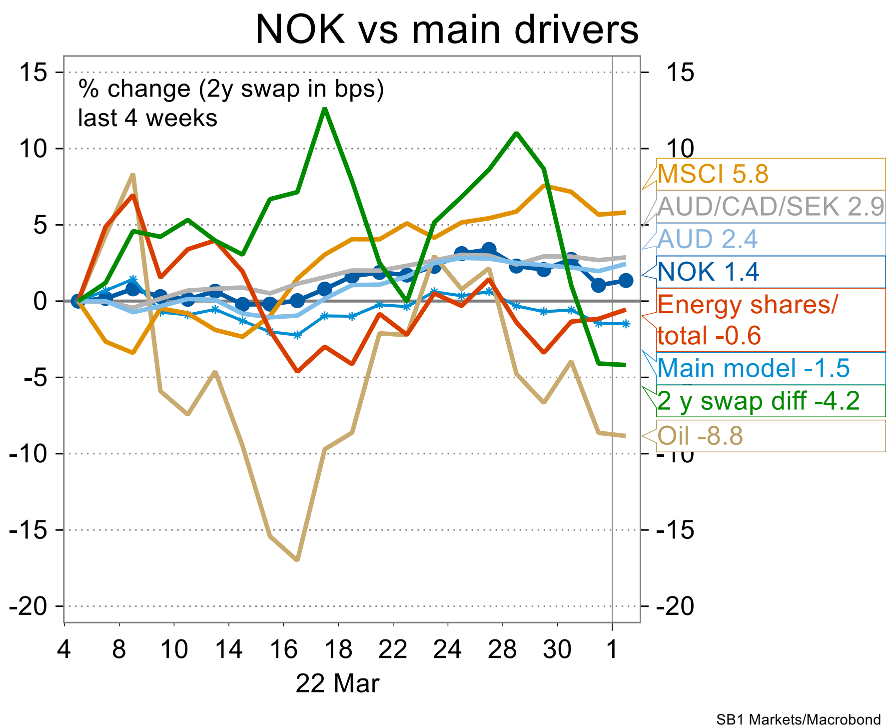
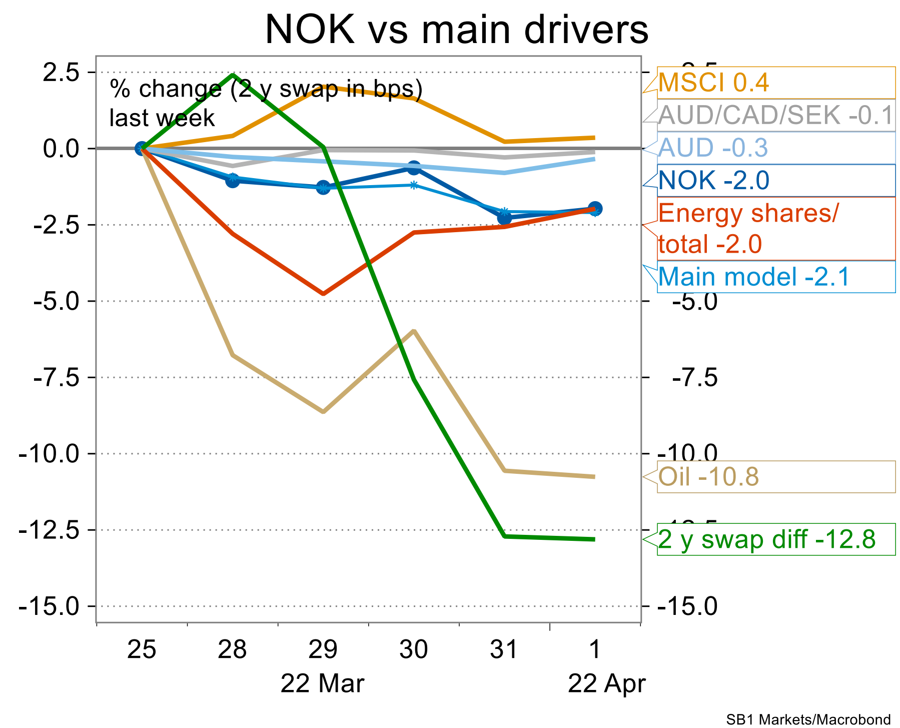
The oil price & NOK swap rates fell – and the NOK fell 2%

Our model suggested -2.1% - and no <u>direct</u> contribution from NoBa's daily 2 bn NOK sale 'needed'



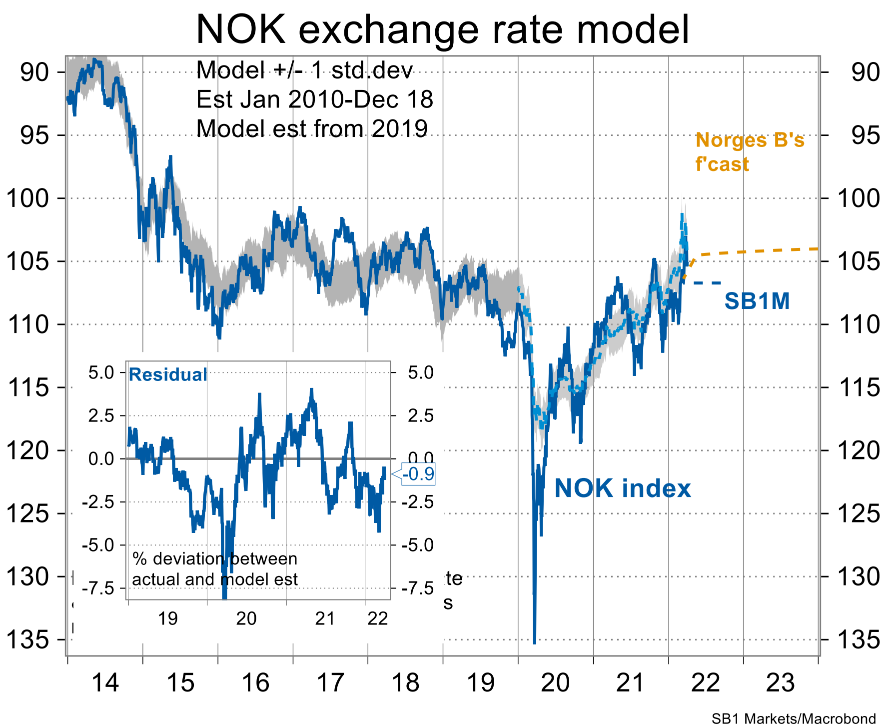


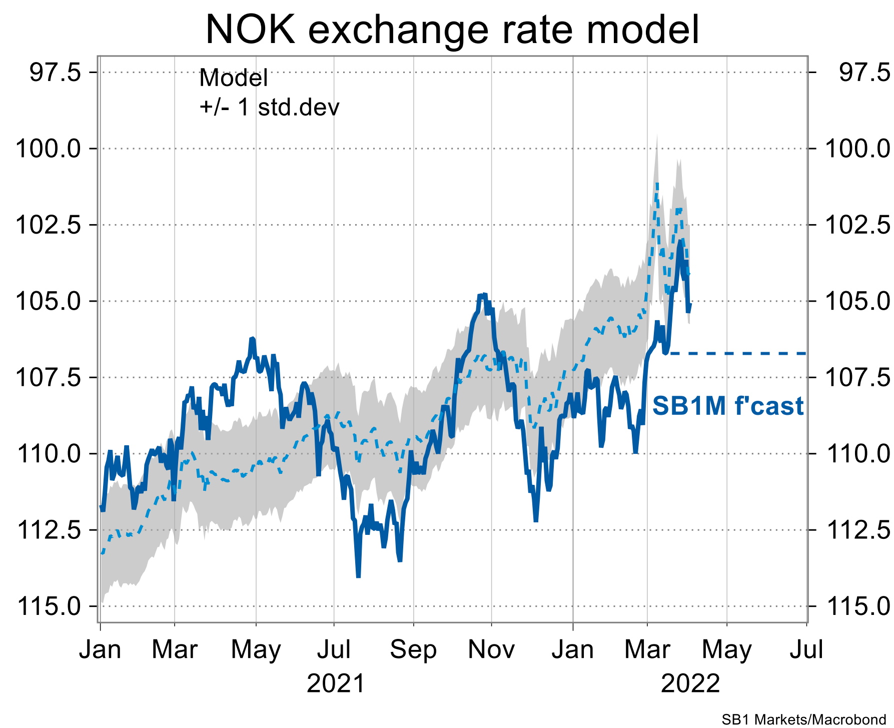
The status vs. the normal drivers:

- ***The NOK down 2.0% - and the NOK is still just 0.9% below the model est (from -1.1%)***
  - » NoBa's announcement on selling NOK 2 bn/day led to a sharp decline in NOK short terms rates – which in our model contributes to a minor (less than 0.5%) weakening of the NOK index. Thus, NoBa's decision had some impact on the NOK last week – even if the long term correlation is the opposite
- The NOK is 3.5% <u>weaker</u> than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts (from 2% - a NoBa)
- NOK is 5% <u>stronger</u> than a model which includes global energy companies equity prices (vs the global stock market) (unch)

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

NOK lags our model by just 0.9%, slightly less than one week ago

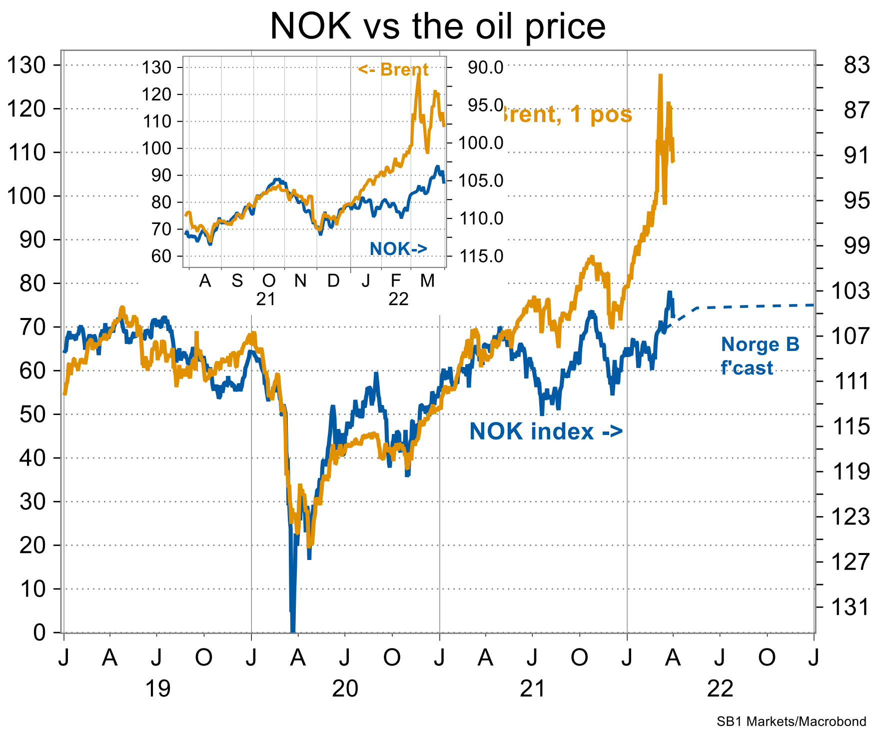


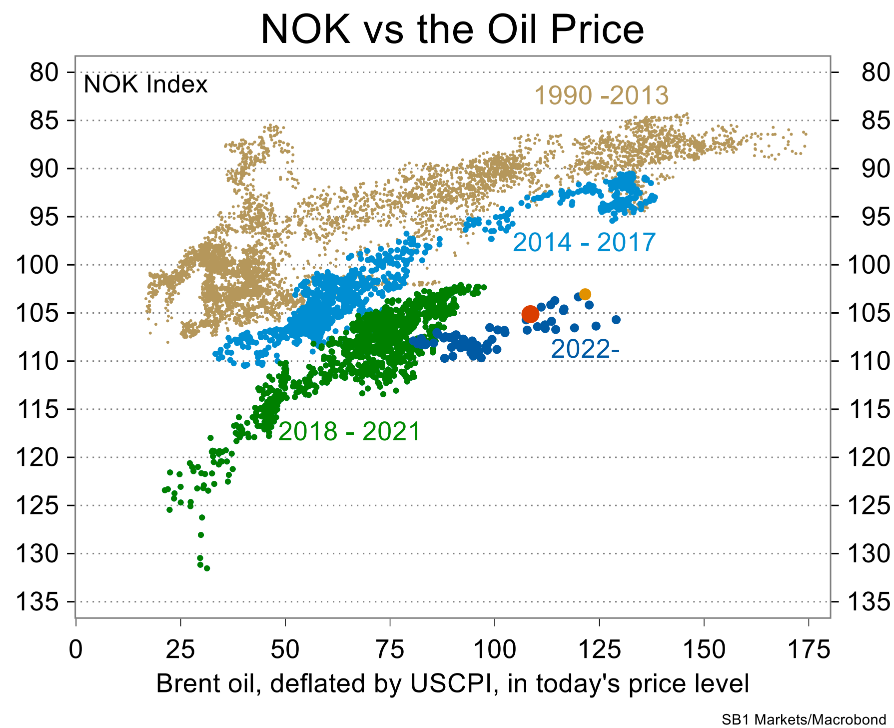


- Normally, the short end of the oil curve is most important for the NOK, not the 'hole' curve, which would have been more logic
- Gas prices are not included in our model either. Gas prices have been so closely correlated to the oil price, so it is not easy to estimate the impact of the gas price, historically

The NOK down as one should expect, given the decline in the oil price

NOK has <u>not</u> been particularly correlated to oil prices lately, at least not vs the short end of oil curve

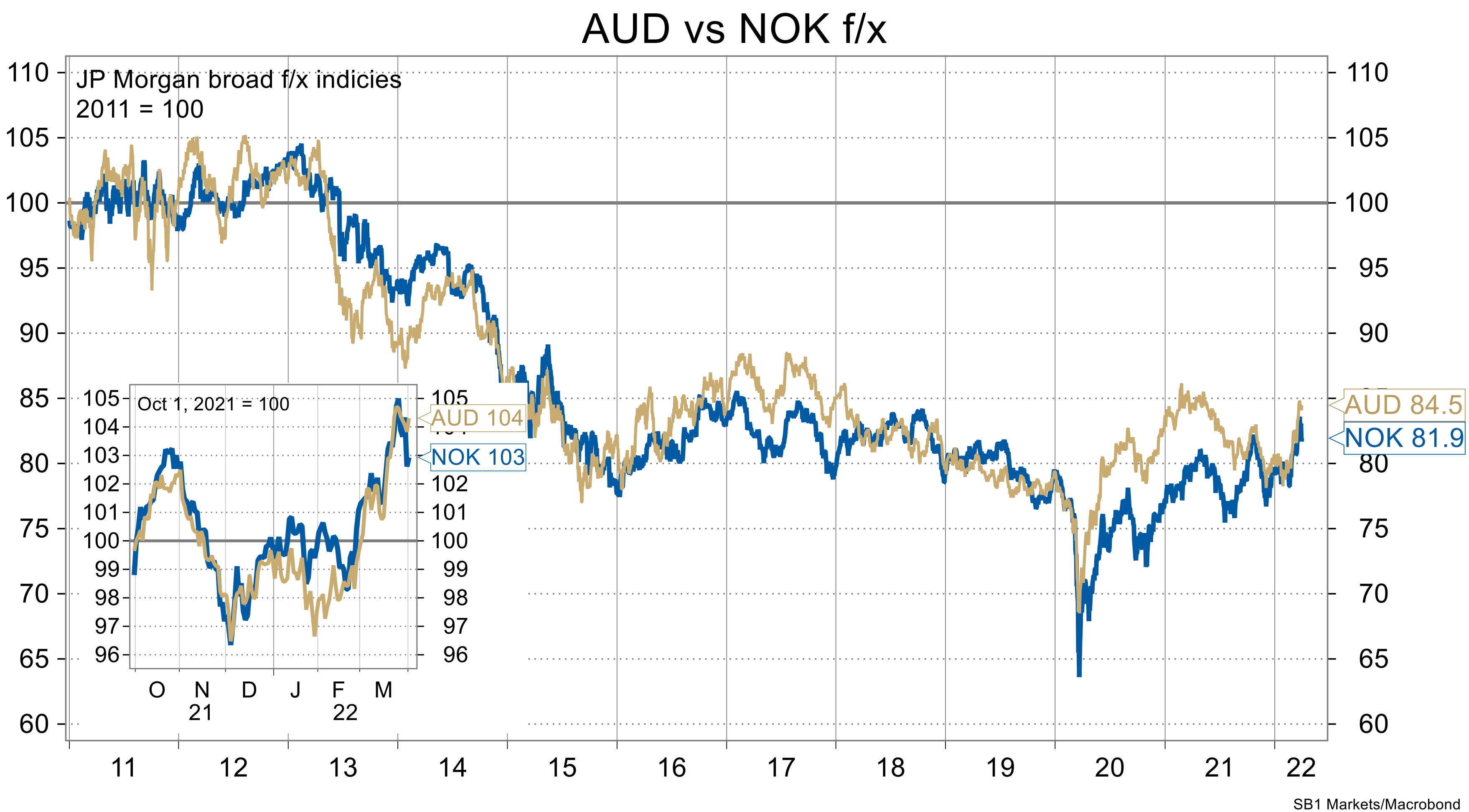




- NOK is normally correlating quite closely to the oil price but at a lower level than before 2018 – and now the NOK is weak even vs the past 3 years' (and now also the previous 6 month's relationship)
- A USD 10 drop in the oil price weakens the NOK by some 4%, as a partial effect. Within a broader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

NOK more down than the AUD due to NoBa's NOK selling

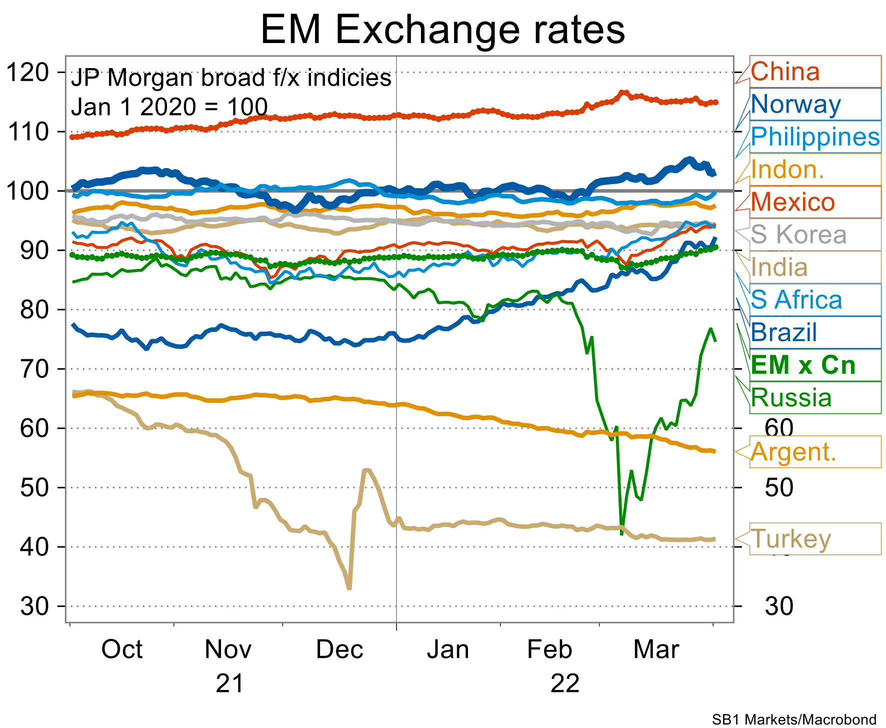
(even if that's a long term sign of NOK strength)

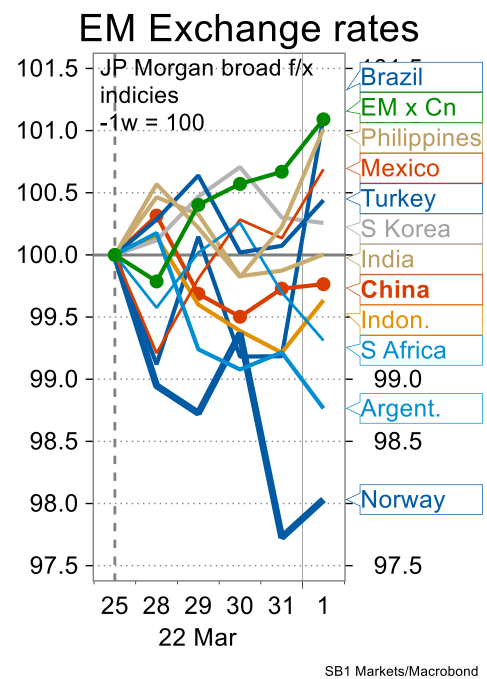


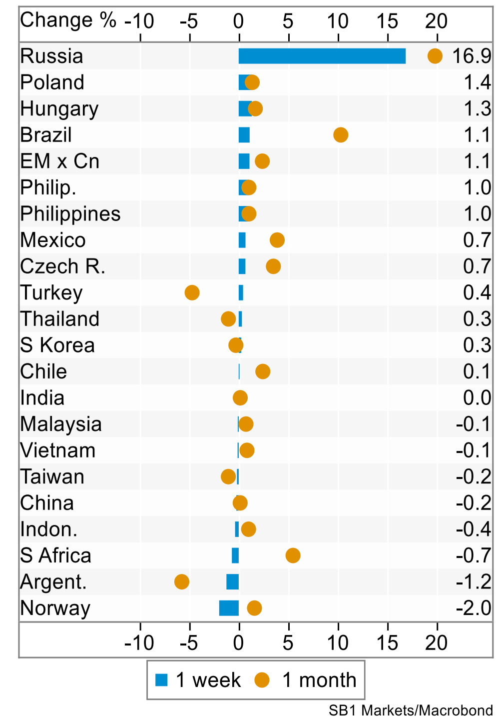
The two f/x indices are back to the 2011 parity (vs each other, from which they never since have deviated much)

The rouble recovered almost back to start, at a special market place

Most other EM currencies up too – but the strong CNY has been sagging since early march







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